OIL CAN HARRY'S OPERATIONS MANUAL

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OIL CAN HARRY'S
MISSION STATEMENT

I

To provide the most competent and professional preventive maintenance services available anywhere.

II

To provide that service with the highest level of personal attention, courtesy and respect for the customer.

III

To contribute to the community by providing jobs and a needed service in an attractive, well landscaped facility.

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The
Lubrication Technician
Creed

I
I will not lie, cheat or steal, nor tolerate those around me that do.

II
I will treat all customers with the respect and courtesy they deserve.

III
I will not sell a product or service to the customer that is not needed, nor will I fail to make a customer aware of services that are needed.

IV
I will maintain my personal appearance so as to be a credit to my organization and reflect the pride with which I work.

V
I will attempt no service procedure for which I am not fully qualified and knowledgeable.

VI
I will make every effort to accomplish my employers goals and contribute to the successful operation of our business.

VII
I will be responsible for every action I take and every job I perform. I will perform my assigned jobs completely, properly and in accordance with established procedures.

VIII
I will be loyal to my fellow team members, my supervisors and my employer and will cooperate fully to accomplish any endeavor for the common good of the team and the business.

IX
I will treat the customers car with the utmost respect, service it with a strong sense of integrity and perform to the best of my ability.

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HISTORY AND ORGANIZATION

About Oil Can Harry's

Oil Can Harry's Ten Minute Oil Change is owned and operated by Hollon Oil Company of Weslaco. Hollon Oil Company is a family owned and operated Business established in 1946 by Mr. Harry Hollon [Oil Can Harry] of Elsa. For over 50 years, Hollon Oil Company has been providing customers From Brownsville to Laredo with quality fuel and lubrication products. With A Pennzoil distributor as its parent company, Oil Can Harry's naturally Promotes Pennzoil as its featured, house oil. The GOAL for this business is to Make the Oil Can Harry's name synonymous with FAST, FRIENDLY SERVICE And CUSTOMER SATISFACTION throughout the ENTIRE Valley.

Welcome aboard!

OIL CAN HARRY'S is an Equal Opportunity Employer and does not discriminate on the basis of race, sex, creed, color, national origin, age, physical or mental handicaps. This policy is administered in all areas of employment including hiring, compensation, promotion, job assignment and discipline. In cases of mental or physical handicaps or limitations, applicants must meet minimum requirements to perform job responsibilities.

No discriminatory practice by another technician or OIL CAN HARRY'S employee will be tolerated. OIL CAN HARRY'S philosophy is that no one should be subjected to any form of physical harassment or discrimination in the workplace. Offenses should be reported directly to the General Manager.

We are happy to welcome you as a new member of the OIL CAN HARRY'S Team. We look for people who are ambitious, hard working, neat in appearance, willing to learn, have positive attitudes and work well with people. We believe you have these qualities and that is why you are now a member of the OIL CAN HARRY'S team.

You have successfully passed a thorough screening process in order to be hired by OIL CAN HARRY'S because each employee plays an important role in our success. This manual is designed to assist in your orientation and to make sure that you will know what is expected of you. It will introduce you to our goals, requirements, methods and procedures and is the text used during your training.

Our success is directly related to your progress. We hope that your association with us will be long, agreeable and mutually profitable.

OIL CAN HARRY'S was developed as an efficient way of providing the highest quality lubrication and inspection service available. The concept is to perform the service in a precise sequence by a well trained crew. Most fluids are dispensed through metered nozzles. The vehicle is serviced in a bi-level building that permits the OIL CAN HARRY'S team members to simultaneously work on both the upper and lower sides of the vehicle. Simply put, OIL CAN HARRY'S is the best place anywhere that the customer can go for oil change, vehicle inspection, lubrication and other preventive maintenance services. Our standards are high. We are the best. To be a member of the best, you must perform your duties in an efficient, systematic manner. There is simply no room for error or inattention. You must be able to work with a team. You are not an employee--you are a team member. How well you fit in will depend on your appearance, attitude and sense of ethics. Contribute to the efforts of the business and the business will contribute to your well being.

Again, welcome aboard! You belong to our family!

OIL CAN HARRY'S APPROACH TO BUSINESS

At OIL CAN HARRY'S, our goal is to operate profitable, professional preventive maintenance centers where customers receive high quality service in a clean, professional atmosphere. It is imperative that customer satisfaction be kept very high so that a customer will return to OIL CAN HARRY'S for future service and recommend us to others. OIL CAN HARRY'S has grown because customers keep coming back. Our business--and your livelihood--depends on the repeat customer.

Our service includes more than just an oil change. Therefore, we sell more than just an oil change. You must remember that the most important thing that you sell is actually the overall perception of OIL CAN HARRY'S itself. We accomplish this by meeting five important aspects of a sale:

NEED We identify and fulfill the needs and wants of the customer.

VALUE We perform an efficient, high quality, complete service at a reasonable price.

FAIRNESS We do everything we promise; we do not pressure or take advantage of a customer; and we stand behind our service.

ATTITUDE We are cheerful and pleasant with the customer and appreciate their business.

APPROACH We greet the customer and deal with them in a consistently professional and respectful manner.

Selling Your Image

Building a positive customer perception will sell OIL CAN HARRY'S to the customer and keep them coming back. "Perception" is the impression the customer has of OIL CAN HARRY'S and refers to the combination of inputs to the senses that results in making judgments. Simply put, if you look good, act good and sound good, the customer will make a judgment that you are good. You start selling OIL CAN HARRY'S the moment the customer drives onto the property. Making your customer comfortable, feeling welcome and putting them at ease is very important in how the customer views you and the company. The image you sell is made up of several factors--professionalism, attitude, eye contact, voice tone and posture. Each of these factors deserves special comment.

Professionalism.

This is a very important trust and confidence builder. You appear professional by looking like a part of a team, being in proper uniform, using proper communications and following standardized procedures. "Professional" is described in the dictionary as "One who has received extensive specialized training." You are a professional person and must project that fact.

The overall image created by the store and its staff plays a large role in customer satisfaction and loyalty to the store. The two most important aspects of a professional image are appearance and conduct. Keep your shirt tucked in and your shoes or work boots tied. Pant legs must be worn over the outside of your shoes, not tucked into them. Shirts should be buttoned up at all times. Be clean shaven when you report to work. Keep your hair neat and at a reasonable length. Jewelry--other than a wrist watch or ring--should not be worn at work. It can be hazardous as well as presenting a non-professional appearance.

The store appearance is as important as your own. It must be kept clean inside and out at all times. Your Team Leader has a cleaning and maintenance schedule. Individuals are usually assigned responsibility for a particular area for one month and then rotated to another. For

example, you might be assigned the maintenance and upkeep of the outside landscaping this month and the basement next month. Of course, some evolutions, such as the Saturday afternoon scrub-down is an "all-hands" job and the Team Leader will assign you chores as necessary to accomplish them.

Attitude.

Your attitude should project pride and commitment to your job and to OIL CAN HARRY'S. When you see a customer pull up to our bays, if the Team Leader is busy, greet them immediately. Smile before and during your conversation with them. Say, "Welcome to OIL CAN HARRY'S!" and find out their needs for this days visit. If you see the customer as they leave the building, remember to thank them for coming in. A positive attitude will show the customer that OIL CAN HARRY'S wants them as a customer. Every customer needs to know that his or her business is wanted and appreciated--by everyone on the team!

Always be courteous. Courtesy is a right that is expected by the customer. Remember to include "Sir", "Ma'am", "Thank You" or "Please", as appropriate, with every phrase spoken to the customer. Be sincere if complimenting a customer about his car. Never make derogatory remarks about the customer or their vehicle--it is an extension of their personality.

The parting exchange should be expressed such that the customer perceives appreciation and is reminded of the next service interval. For example, "Thanks for coming to OIL CAN HARRY'S, Mr. Johnson! See you in 3,000 miles!

Remember that the customer is what we are here for. Nothing is more important than serving them. If you are cleaning or stocking when the customer comes in, leave what you are doing and wait on the customer immediately!

Eye contact.

You must make enough eye contact with a person to show them that you believe in what you are saying. You may do everything right, but if a customer feels you cannot make eye contact with them, they will tend to lose trust in what you say or do. It is a characteristic of human behavior to shift the eyes away when a person is unsure of what they are saying or lying. Concentrate on looking the customer directly in the eye, especially if stating a fact or giving information.

Voice tone.

Outgoing, confident people may have a problem of being too loud and overpowering. Shy people tend to speak softly which customers' mistake for a lack of confidence. The goal is to speak in that midrange such that the customer perceives clarity and confidence, yet feels friendliness and comfort in the tone. The desired tone comes across almost automatically if you are smiling as you speak and have a sincere desire to serve the customer. Your attitude comes through in your voice.

Posture.

Proper posture says a lot about the way you feel about yourself and your job. Never slouch or lean on something when you talk to a customer. It makes you look tired or lazy. When you talk to a customer in their car, bend down or kneel so you are at their eye level. It's much less intimidating when the customer can converse with you without looking up and is a key move to put them at ease. Try to strike a balance of appearing relaxed without appearing sloppy or lazy. "Relaxed, friendly, receptive, understanding and ready-to-serve!" should be the message your posture projects. All of these elements are easy if you truly enjoy serving others. They will just come naturally.

PLAYING THE ROLE

The car requires our service about every 3,000 miles or three months, but the customer has a lot of choices as to where to take it. He will bring it here to OIL CAN HARRY'S if you do the best job--efficiently--and practice showmanship so that he knows you are doing the best job. By using advertising, we can get the customer in once. Whether he returns, however, is entirely up to you. It's been said that "All the world's a stage--and every man an actor." At OIL CAN HARRY'S, you are playing a role. Good showmanship is simply acting the role of the individual the customer wants to have working on his car. The most important characteristic you must have is a good positive mental attitude and the desire to play this role.

To be an actor requires an understanding of human nature--the way people act and think. People have pre-conceived ideas and prejudices which must be understood. It does no good to question or try to change these attitudes. The simple truth is that "the public" thinks a certain way and you must accept it. Your appearance forms impressions in a customer's mind that go far beyond just how you look. The customer will form certain attitudes about you the moment he sees you. Without you saying a word and with no questions asked, he will judge you to be responsible or irresponsible, intelligent or dumb, honest or dishonest, etc. Remember, it does no good to debate whether the customer is right or wrong in doing so, it is simply so.

Your appearance is especially important because it is the first impression when someone first comes into contact with you and the first impression is the most lasting impression. Actors are trained to dress for the part they play. If they are to portray a "bad guy" they wear eccentric sideburns or mustache, wear a wide leather watchband, have "jailhouse" tattoos, long dirty hair and a two-day beard. Just for the fun of it, tune your TV to an unfamiliar program and turn the volume all the way down. It's still very easy to tell the "good guy", the "bad guy", the politician, the weak, the strong, etc., isn't it?

Obviously as OIL CAN HARRY'S team member you play the role of not only the good guy; you also play the role of the friendly, honest, professional, reliable, intelligent lubrication technician. OIL CAN HARRY'S provides you with a sharp uniform to enhance your image as a

member of a trained team. A good portion of your training will be the development of a strong voice, a quick smile and development of a "dialogue" that will help you to convey the proper image to the customer. The following lists are common perceptions that will be generated by your appearance:

“GOOD GUY"

Clean shave or neat beard.
Moderate length hair.
Mustache, if thick and worn above the lip line.
Expansion or link watchband.
Good shoes. (shined if leather)
Doesn't smoke.
No tattoos other than patriotic tattoo on upper arm.
Has a quick and friendly smile.
Looks directly at others.
Has clean fingernails.

"BAD GUY'

Not shaven.
Long hair or eccentric sideburns.
Mustache below the lip line or scraggly.
Wide leather or studded band.
Worn shoes.
Smokes.
Tattoos, especially on hands, face or lower arm.
Rarely smiles.
Looks away while talking or observes out of side of eyes.
Dirty fingernails.
Body pierce jewelry.

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RESPONSIBLE PERSON

Clean clothes.

Minimum jewelry. Only a wedding band and watch at work.

Moderate length hair--clean.

Shined leather shoes. Dark socks.

Stands on both feet.

Faces facts. Accepts responsibility. Doesn't blame others.

IRRESPONSIBLE PERSON

Dirty clothes.

Gold necklaces, earrings, medallions, etc.

Extreme hair.

Leans on nearest object. Lies. Blames others.

INTELLIGENT PERSON

Tall, thin build.

Stands erect.

Walks erect and direct, leaning forward.

Hair moderate length parted on side or combed back.

Mouth closed if not speaking.

DUMB PERSON

Stoops leans on nearby objects.

Shuffles. Walks slower, leaning back.

Baseball hat sideways or backwards.

Mouth open.

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Once more, it may not be fair, it may not be true, but the customer will assume you are the type of person you appear to be. They would rather have their car serviced by a good guy who is responsible and intelligent. Play the role. Look the part.

Unfortunately—and perhaps unfairly—the public has developed a suspicious attitude toward all automotive aftermarket facilities. It is necessary to not only do a good job, you must do it such that the customer perceives that you are doing a good job. Your movements should be methodical and performed in a quiet and efficient manner. There should be no extra conversation while doing the job. You owe the customer your complete attention to the job at hand—servicing their car. Never argue with a team member or complain about his performance in the presence of a customer. Be in command of your work station. Don't hesitate to pleasantly enforce safety precautions where customers are concerned. They will understand and respect you for it. Be friendly with customers but don't let them interfere with your doing your job properly. Show the customer the respect he or she deserves. It takes no extra effort to add "Sir", "Ma'am". "Thank you" and "Please" to your instructions or conversations with the customer but it works two-way magic. The customer will respect you for knowing this should be done and you will feed the customer's ego. If you satisfy the customer's ego, they will be back. "Ego gratification" is worth further comment. Think about it! Why do we spend more on cosmetics than education? Why does a person spend $50,000 for a Corvette that only carries two people, gets terrible gas mileage, and rides like a truck? Why do you take your best girl to a "name" restaurant and pay $40 for food that would cost $10 elsewhere? There is absolutely nothing wrong with having our egos boosted. After food and water, it is the human being's strongest need. EVERY BUSINESS--INCLUDING OIL CAN HARRY'S --SELLS EGO GRATIFICATION ALONG WITH THE PRODUCT. The beauty of it is that it costs nothing, takes little time, absolutely no effort, but is more important to the customer than the tangible product. Our customer comes to OIL CAN HARRY'S because we are the best. Going to the best, whether it's a clothing store, restaurant or auto facility is a form of ego gratification. Give the customer what he is paying for. Smile. Treat him as if he is the most important person on earth, especially if his wife, girl friend, or family is with him. Enjoy performing for him. He is paying you your paycheck. The bookkeeper types it out, but the customer is the one who pays it.

Treat his car with respect and admiration. Whatever kind it is, he chose it. Treat it like a new Rolls-Royce. Address the customer by name. A simple "Good morning, Mr. Smith. How are you?" is recognition. We all like to be recognized, don't we. Put yourself in the customer's place. Don't you like to go to businesses that know you and address you by name?

To be effective, a compliment must be sincere. Phony flattery is insulting to intelligent people. Look for the positive side of the customer. Everyone has some good feature, ability, possession or other factor that he is proud of and likes to be told about. Every woman likes to be treated as a lady. Find the good points in people or their cars and recognize them verbally or by your actions. When directing customers forward into the service area, make them feel comfortable by giving smooth, clear signals. Talk to them. Praise them. Smile! Ego gratification, is the most important product we sell. Give the customer a 10 minute respite from "the world" where he is treated like a king; where he feels good throughout the process and we will never want for business.

CUSTOMER SERVICE

The single most important person is our customer. The customer is our very reason for existence. You must pride yourself on the proper treatment of customers.

Treating the customer with respect in a polite, professional manner is vital. To be truly successful at customer service means being pleasant even when you don't feel pleasant. Remember, it is not just what you say, but how you say it. Physical gestures tell a great deal about you and your attitude. Good positive body language includes:

1. Attentive eye contact--look the customer in the eye.

2. Open, relaxed facial expression. Smile! Be happy! The customer will respond in much the same way you come across to them. It's a lot more fun to work on happy, satisfied customer's cars. Make the customer aware that you are glad to be working on their car.

3. Listen. When the customer talks, listen and nod your head occasionally so that the customer knows you are listening and that you understand. There is an old saying that God gave us two ears and only one mouth for a reason. It especially applies to good customer relationships. Listen a lot and talk little.

4. Speak naturally. Talk at a natural pace, not too fast nor too slow and speak clearly with a confident and friendly tone.

Don't forget that your body language is continuously important, not just when you are face-to-face with a customer. The customer is very observant while visiting our lobby during service and will continue to judge OIL CAN HARRY'S by your behavior and posture. Focus on the customer. They deserve your full attention and efforts while they are in the building. Avoid idle chatter with other team members. The customer will perceive you aren't paying attention to their service. Be happy and courteous with your other team members. Your professional manner and relationship with each other will generate confidence in the customer's mind.

When greeting customers, be enthusiastic. Walk to their car quickly and confidently. Speak clearly. This is the customer's first impression of OIL CAN HARRY'S so make it a good one. The first impression is always the most lasting. Remember, the customer has chosen OIL CAN HARRY'S because we are the experts. We are better than everyone else, which means you are expected to perform better than anyone else. The customer should perceive by your actions that they will receive a quality oil change service and will be treated in a polite, businesslike manner with respect.

Some thoughts about the customer . . .

The customer is the most important person in our business. He is more important than the boss is because he is the boss's boss.

The customer is not dependent on us. We are dependent on him.

A customer is not the intruder of our work. He is the purpose of it.

A customer does us a favor when he comes in. He is not obligated to us. We are obligated to him.

The customer is the key part of our business, not an outsider.

A customer is not just "money in the till". He is a human being with feelings like our own.

A customer is someone who comes to us with his needs and wants. It's our job to fill them.

The customer is the life-blood of this business. He deserves our full attention and efforts--and the best treatment we can give.

The customer pays your salary. The boss just passes it out.

Without the customer, we would have to close our doors. Don't ever forget it . . . .

OIL CAN HARRY'S 'S MENU OF SERVICES

Our primary service is the OIL CAN HARRY'S complete 18 item preventive maintenance service and safety inspection. The customer need not make an appointment and receives the following services in just 10 minutes for one low price. It is an excellent value and includes:

1. Draining the old oil and replacing it with up to 5 quarts of a top quality, name brand oil.
2. Installation of a new oil filter.
3. Lubricate and inspect the suspension.
4. Check the fluid level in the transmission and bring to the proper level.
5. Fill the windshield washer bottle.
6. Check the power steering fluid and bring it to the proper level.
7. Check and add brake fluid if necessary--and desired by the customer.
8. Check and top-off the differential fluid.
9. Service the battery.
10. Check coolant resevoir and add if necessary.
11. Inspect the air filter.
12. Inspect the crankcase breather.
13. Inspect the PCV valve.
14. Inspect the wiper blades.
15. Inspect headlights, tail lights and turn signals.
16. Inspect the tires and inflate to proper pressure. (Including the spare!)
17. Inspect belts and hoses.
18. Wash the windshield and rear window.

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OIL CAN HARRY'S is in the business of providing total preventive maintenance services. We also perform the following: (Current prices are shown on the menu located in the appendix.)

1. Install air filters.
2. Install crankcase breathers.
3. Install PCV valves.
4. Install fuel filters.
5. Perform fuel system cleaning service.
6. Drain and refill of manual transmissions, differentials and transfer cases.
7. Automatic transmission service.
8. Coolant flush and fill.
9. Tire rotation.
10. Headlight and bulb replacement.
11. Turn and safety lamp replacement.
12. Serpentine belt replacement.
13. Install wiper blades.
14. State vehicle inspections.

Being aware of the full range of services offered and the price is, of course, very important. When you initially greet a customer, their first phrase spoken may well be, "How much is a . . .?" or "Do you all do . . .?" Be prepared to intelligently discuss what is involved in the service, how much it will cost and how long it will take.

THE PAY SYSTEM

OIL CAN HARRY'S uses a pay and bonus system that is designed to accomplish several objectives:

1. Adequately compensate team members for services performed.
2. Provide maximum earning potential for the individual team member.
3. Provide a positive incentive for the team to perform well and increase business.
4. Reduce absenteeism and tardiness to a minimum.
5. Provide for increased compensation as a team member advances to higher positions of leadership.
6. Provide for insurance coverage for on-the-job accidents.
7. Reward those top producers with additional bonus income.

TIME KEEPING

Accurately recording time worked is the responsibility of every nonexempt employee. Federal and State laws require Hollon Oil Company to keep an accurate record of time worked in order to Calculate employee pay and benefits. Time worked is all the time actually spent on the job performing assigned duties.

Nonexempt employees should accurately record the time they begin and end their work, as well as the beginning and ending time of each meal period. They should also record the beginning and ending time of any split shift or departure from work for personal reasons. Overtime work must always be approved before it is performed.

Altering, falsifying, tampering with time records, or recording time on another employee's time record may result in disciplinary action, up to and including termination of employment.

Nonexempt employees should report to work no more than 10 minutes prior to their scheduled starting time nor stay more than 10 minutes after their scheduled stop time without expressed, prior authorization from their supervisor.

If corrections or modifications are made to the time record, both the employee and the supervisor must verify the accuracy of the changes by initialing the time record.

PAYDAYS

All employees are paid biweekly on every other Friday. Each paycheck will include earnings for all work performed through the end of the previous payroll period.

In the event that a regularly scheduled payday falls on a day off such as a weekend or holiday, employees will receive pay on the last day of work before the regularly scheduled payday.

If a regular payday falls during an employee's vacation, the employee's paycheck will be available prior to their departure (providing adequate notice was given).

PAY ADVANCES

Oil Can Harry's does not provide pay advances on earned or unearned wages to employees.

ADMINISTRATIVE PAY CORRECTIONS

Oil Can Harry's takes all reasonable steps to ensure that employees receive the correct amount of pay in each paycheck and that employees are paid promptly on the scheduled payday.

In the unlikely event that there is an error in the amount of pay, the employee should promptly bring the discrepancy to the attention of the Payroll Manager so that corrections can be made as quickly as possible.

PAY DEDUCTIONS AND SETOFFS

The law requires that Oil Can Harry's make certain deductions from every employee's compensation. Among these are applicable federal, state, and local income taxes. Oil Can Harry's also must deduct Social Security taxes on each employee's earnings up to a specified limit that is called the Social Security "wage base". Oil Can Harry's matches the amount of Social Security taxes paid by each employee.

Pay setoffs are pay deductions taken by Oil Can Harry's, usually to help pay off a debt or obligation to Oil Can Harry's.

If you have questions concerning why deductions were made from your pay check or how they were calculated, your supervisor can assist in having your questions answered.

OVERTIME

When operating requirements or other needs cannot be met during regular working hours, employees may be scheduled to work overtime hours. When possible, advance notification of these mandatory assignments will be provided. All overtime work must receive the supervisor's prior authorization. Overtime assignments will be distributed as equitably as practical to all employees qualified to perform the required work.

Overtime compensation is paid to all nonexempt employees in accordance with federal and state wage and hour restrictions. Overtime pay is based on actual hours worked. Time off on sick leave, vacation leave, or any leave of absence will not be considered hours worked for purposes of performing overtime calculations.

Employees who work overtime without receiving prior authorization from the supervisor may be subject to disciplinary action, up to and including possible termination of employment.

EMERGENCY CLOSINGS

At times, emergencies such as severe weather, fires, power failures, earthquakes, can disrupt company operations. In extreme cases, these circumstances may require the closing of the facility.

When operations are officially closed due to emergency conditions, the time off from scheduled work will be paid.

In cases where an emergency closing is not authorized, employees who fail to report for work will not be paid for the time off.

WEEKLY COMMISSION

Oil Can Harry's weekly Commission Plan is a monetary reward system based on both weekly sales and performance, by which all the employees share the rewards of success as well as the expense of failure.

To be eligible for the store's weekly commission, you must first complete 1 month (4 full work weeks) of continuous employment.

You will not be eligible for the weekly commission if during the week you miss work 1 day un-excused or are late to work more than twice un-excused. Instead, your portion of that week's commission will be divided evenly among the other members of the team.

Should you quit work without providing at least a two week notice, you will not be eligible to receive a commission.

As with this manual, Oil Can Harry's at its option, may change, delete, suspend or discontinue any part or parts of this Commission system at any time without prior notice.

BONUS ELIGIBILITY

To receive any form of bonus pay, the team member must have worked the entire period for which the bonus is applicable and still be on the payroll as a routine employee at the time the bonus is actually paid.

Funds available from which to pay bonuses are generated by everyone on the team performing well. Bonuses are not guaranteed. Although every effort will be made to continue them, funds available will depend on OIL CAN HARRY'S 's profitability and the fiscal condition of the company may require adjustments at some future date.

TIPPING

Accepting tips is permitted provided it is earned, accepted graciously and appreciation expressed. Under no circumstances will a team member indicate to the customer that a tip is expected in order to receive excellent service, nor will an expense to OIL CAN HARRY'S be incurred to earn the tip. Tips will be divided equally among the three individuals servicing the vehicle.

UNIFORM POLICY

OIL CAN HARRY'S will issue uniforms to you through a uniform service. You will be measured for your uniforms during your first week of employment. Delivery typically takes two to three weeks. Full time employees are issued a total of 13 shirts and 13 pants.

Each week the uniforms are turned in to the uniform service to be cleaned. At the same time, a clean set of uniforms is dropped off at the store. The uniforms are the responsibility of the individual employee. ALL of the uniforms issued must be returned prior to receiving a final pay check. Employees will be charged for each item of clothing not returned at the termination of employment.

THE WORK SCHEDULE

Work schedules for employees vary throughout our organization. Supervisors will advise employees of their individual work schedules. Staffing needs and operational demands may necessitate variations in starting and ending times, as well as variations in the total hours that may be scheduled each day and week.

Punctuality.

Being at work during your scheduled shift is essential in a service oriented business. OIL CAN HARRY'S 's reputation as a professional business is destroyed when team members straggle in with customers waiting in line. Being late to work is the same as saying, "I don't care." To encourage promptness, team members pay time begins at the next even hour after arriving for work. For example, if arrival is at 7:59, pay time begins at 8:00. If arrival is at 8:01, pay time and the work schedule for the individual begins at 9:00.

Lunch Policy.

The nature of the fast lube business and our staffing require us to serve the customer whenever they arrive so it isn't possible to establish a specific time for lunch. However it is management's strong desire that each crew member get a break sometime for lunch. Crew members are expected to either bring their own lunch or have one individual make a lunch run for everyone. Crew members do not leave the premises for lunch except for the individual picking up for the team. **We do not put the customers on hold !!!**

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TEAM LEADER'S AUTHORITY AND RESPONSIBILITY

Each OIL CAN HARRY'S location is managed by a Team Leader. The Team Leader is totally responsible for everything that happens on the premises. He is accordingly given full authority to do anything he feels is in the best interests of OIL CAN HARRY'S. You must cooperate with the Team Leader and follow his instructions so long as they are not unsafe or illegal. He has proven himself and has been designated by the General Manager. You will not win an argument with him. You work for him. He works for the General Manager. When you advance to Team Leader and assume total responsibility, you will want--and be granted--the same authority. Respect his authority now and work with him for your success and the success of the business.

The Team Leader is responsible for the overall success of the facility. He--or she--is responsible for training and standardization of all OIL CAN HARRY'S personnel, maintaining warehouse inventory, effecting deliveries, handling customer complaints, maintenance and all other matters involved with the successful operation of the business.

The Assistant Team Leader assists the Team Leader as necessary and assumes the duties, responsibilities and authority of the Team Leader when the Team Leader is not present.

The "chain-of-command" therefore is Lube Technician--Assistant Team Leader--Team Leader—Area Manager---General Manager---Owner. The most senior person on the scene has authority and is duly responsible to the General Manager.

INSURANCE AND OTHER BENEFITS

Workers' Compensation insurance is provided to all employees. This insurance covers the cost of all medical expenses incurred due to accidents on the job. It is funded completely by the General Manager. Should medical attention be required, you must give the insurance company's name, address and our policy number to the attending facility. If transportation is required, it is expected to be provided by the Team Leader or another team member unless the injury is life-threatening in which case an ambulance should be summoned. An injured team member is normally paid for the time away from work while an injury is being treated. Pay is not normally received for days spent recuperating. Workers' compensation insurance provides for partial payment of wages lost due to long term injury recuperation.

Social Security (FICA) provides for retirement income and other benefits. 6.2% of the employee's pay is withheld and forwarded to the federal government. OIL CAN HARRY'S contributes a matching amount. Retirement benefits may be claimed as early as age 62. Disability and child care benefits may be available at an earlier age. Social Security is a program with numerous benefits and too complex to cover here, however it is strongly recommended that every employee visit with the Social Security Administration office and make the benefit package a part of their retirement and insurance planning.

Medicare is a federal program designed to provide medical care to those 65 years and older. 1.45% of the employee's pay is withheld for this program and it is matched by a 1.45% contribution from OIL CAN HARRY'S .

Unemployment insurance is a program operated by the state and federal government. There is no direct cost to the employee. It is funded by OIL CAN HARRY'S via a special unemployment tax. Unemployment insurance pays benefits for a limited time in the event an employee must be released because of lack of work or business shutdown. THOSE WHO QUIT OR GET TERMINATED DUE TO A VIOLATION OF COMPANY RULES ARE NOT ELIGIBLE FOR UNEMPLOYMENT BENEFITS.

OIL CAN HARRY'S employees are to receive a 50% discount off the price of all services at Oil Can Harry's. The discount applies to a limit of two vehicles and these vehicles must be owned by either the employee, their spouse or parent and be routinely driven to work.

HOLIDAYS AND VACATION POLICY

OIL CAN HARRY'S will grant holiday time off or holiday pay to all eligible employees on the holidays listed below:

*New Year's Day (January 1)

*Good Friday (Friday before Easter)

*Memorial Day (last Monday in May)

*Independence Day (July 4)

*Labor Day (first Monday in September)

*Thanksgiving Day (fourth Thursday in November)

*Christmas Day (December 25)

Oil Can Harry's will grant paid holiday time off or holiday pay to all eligible employees who have completed 90 calendar days of service in an eligible employment classification. Holiday pay will be calculated based on the employee's straight-time pay rate (as of the date of the holiday) times the number of hours the employee would otherwise have worked on that day (up to 8 hours). Eligible employee classification(s): *Regular full-time employees

To be eligible for holiday pay, employees must work the last scheduled day immediately proceeding and the first scheduled day immediately following the holiday.

A recognized holiday that falls on a Saturday will typically be observed on the proceeding Friday. A recognized holiday that falls on a Sunday will typically be observed on the following Monday.

If a recognized holiday falls during an eligible employee's paid absence (e.g., vacation, and sick leave), the employee will be ineligible for holiday pay.

If eligible nonexempt employees work on a recognized holiday, they will receive holiday pay plus wages at their straight-time rate for the hours worked on the holiday.

Paid time off for holidays will not be counted as hours worked for the purpose of determining overtime

VACATIONS

Vacation time off with pay is available to eligible employees to provide opportunities for rest, relaxation, and personal pursuits. Employees in the following classification(s) are eligible to earn and use vacation time as described in this policy: *Regular full-time employees

The amount of paid vacation time employees receive each year:

* After 1 year of eligible service the employee is entitled to 5 vacation days (40 hours) each year.
* After 2 years of eligible service the employee is entitled to 10 vacation days (80 hours a year).

The length of eligible service is calculated on the basis of a "benefit year". This is the 12-month period that begins when the employee starts to earn vacation time. An employee's benefit year may be extended for any significant leave of absence except military leave of absence. Military leave has no effect on this calculation. (See individual leave of absence policies in the Hollon Oil Company employee handbook for more information).

Once employees enter an eligible employment classification, they begin to earn paid vacation time according to the schedule. However, before vacation time can be used, a waiting period of 365 calendar days must be completed. After that time, employees can request use of earned vacation time including that accrued during the waiting period.

Paid vacation time can be used in minimum increments of one-half day. To take vacation time, employees should request advance approval from their supervisors. Requests will be reviewed based on a number of factors, including business needs and staffing requirements.

Vacation time off is paid at the employee's base pay rate at the time of vacation. It does not include overtime or any special forms of compensation such as incentives, commissions, bonuses, or shift differentials.

As stated above, employees are encouraged to use available paid vacation time for rest, relaxation, and personal pursuits. In the event that available vacation is not used by the end of the benefit year, employees may carry unused time forward to the next benefit year. If the total amount of unused vacation time reaches a "cap" equal to two times the annual vacation amount, further vacation accrual will stop. When the employee uses paid vacation time and brings the available

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amount below the cap, vacation accrual will begin again . Upon termination of employment, employees will be paid for unused vacation time that has been earned through the last day of work. However, if Oil Can Harry's (Hollon Oil Company), in its sole discretion, terminates employment for cause, forfeiture of unused vacation time may result.

WORK ENVIRONMENT POLICY

It is the desire, goal and intent of the General Manager to have a workplace free of discrimination or harassment of any type. An individual should expect to be treated fairly and be promoted solely on the basis of job performance and productivity. No harassment of subordinates based on physical stature, religious beliefs, race or sex will be tolerated. Any form of harassment adversely affects the goals of the company and, in general, displays the ignorance and lack of leadership ability by the instigator.

Sexual harassment is defined as unwelcome sexual advances, requests or demands for sexual favors and other unwelcome verbal or physical conduct of a sexual nature.

OIL CAN HARRY'S strictly prohibits sexual harassment of any OIL CAN HARRY'S employee or customer. OIL CAN HARRY'S encourages anyone who believes that they have been sexually harassed to report any incident directly to the General Manager.

Any complaint of sexual harassment will be promptly investigated through interviews with the complainant, alleged harasser and witnesses. If it is determined that any sexual harassment has occurred, the company will take immediate and appropriate disciplinary action.

Sexual harassment in employment settings violates federal and state law and may be actionable in a civil court. Records of complaints filed are kept by OIL CAN HARRY'S management for a period of five years after the complaint has been filed.

THE RULES

Every business has certain rules or operating procedures and OIL CAN HARRY'S is no exception. It has been said that "Rules are made for the guidance of wise and prudent men--and the blind obedience of fools." Understand why the rule exists and comply with the spirit intended. Of necessity, rules have a lot of "do-nots" written into them. If you have a positive mental attitude, desire to perform a good service for the customer, care about other people and are honest, you are a wise and prudent person and the following is presented as guidance:

1. Do not smoke or eat anything in the presence of a customer. Smoking is allowed only in the area designated by the Team Leader.

2. Both incoming and outgoing telephone calls must be limited to company business or emergency calls.

3. Working on personal projects while on company time is forbidden. Working on personal projects on company grounds is forbidden.

4. Stealing or attempting to steal company, customer or another employee's property is grounds for immediate dismissal and criminal charges may be filed.

5. Theft of company services under any circumstances is job misconduct and is grounds for dismissal.

6. Deliberate damaging of company, customer or another employee's property is grounds for immediate dismissal.

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7. Failure to report to work when scheduled may be considered a resignation of your position. If you must be out of work for more than one day, you must call in for each individual day that you will not be reporting for work.

8. Leaving the store without permission from your Team Leader may be considered a resignation of your position.

9. Use of foul, abusive or argumentative conversation must be avoided at all times. Use of foul or abusive language to another employee or while customers are on the premises may be grounds for dismissal.

10. Fighting by an employee is grounds for immediate dismissal.

11. Visitors are not allowed. They interfere with our duties and customer relations.

12. Insubordination or refusal to obey direction from a supervisor is grounds for dismissal. (The exception to this rule is that you are not required to perform anything that is unsafe or illegal. Should you be told to do so by a supervisor, immediately notify the General Manager.)

13. Closing a store prior to its designated closing time or opening a store later than its designated opening time without the General Manager's approval is grounds for dismissal.

14. Falsifying or altering any report, sales ticket or other paperwork having to do with money, expenses or working time records is grounds for dismissal.

15. No employee shall at any time withdraw funds from the cash register for personal use, either through cashing a check or using a credit card.

16. No employee shall either use or possess alcoholic beverages or firearms while on company property.

17. Tardiness, failure to be in uniform and ready to work at your scheduled time is job misconduct and is grounds for dismissal.

18. Poor job performance, displaying a negative attitude toward customers or refusal to correctly follow outlined procedures have a severe adverse effect on OIL CAN HARRY'S interests and, as such, constitute job misconduct and are grounds for dismissal.

19. No key involved with the operation is to be reproduced.

20. Employees are not to be on the premises outside normal working hours except for unusual circumstances known to the General Manager.

21. The opening and closing procedures and checklists will be followed precisely.

22. Any service began by a team member will be completed by that team member. A team member will never be called away and replaced in the middle of servicing a customer's car. Rotations for lunch, etc. will always be between cars and never shifted in the middle of a job.

23. No OIL CAN HARRY'S employee will solicit "sideline" business from any OIL CAN HARRY'S customer.

24. Moneys will be kept secure in a locked drawer other than preparing bank deposits or routine transport back and forth to the bank.

25. All moneys other than the change fund will be deposited nightly in the bank.

26. A work order will be written for <u>every</u> <u>car</u> that enters the building, regardless of the reason and whether or not money is collected. (Violation of this rule may result in immediate termination.)

DRUG AND ALCOHOL USE POLICY

An employer has the responsibility to provide a safe work place for employees. He has the responsibility for training of employees so that they are best prepared to accomplish a job satisfactorily. OIL CAN HARRY'S is responsible for the finished product and the safety of those who entrust their car to OIL CAN HARRY'S for service.

While on OIL CAN HARRY'S premises and while conducting business-related activities off OIL CAN HARRY'S premises, no employee may use, possess, distribute, sell, or be under the influence of alcohol or illegal drugs. The legal use of prescribed drugs is permitted on the job only if it does not impair an employee's ability to perform the essential functions of the job effectively and in a safe manner that does not endanger other individuals in the workplace.

Violations of this policy may lead to disciplinary action, up to and including immediate termination of employment. Such violations may also have legal consequences.

Drug abuse is an insidious problem because it is a "disease of denial". As with alcoholism, the drug abuser is the last to know he has a problem and that the problem is affecting his performance. Drug abusers are more prone to absenteeism, job errors and accidents. Attitude changes are the first symptoms. The drug abuser loses pride and self-esteem and denies the effects of the drug. His appearance declines and relationships with others have less importance. Subsequent heavy use results in a distortion of priorities. The drug becomes more important than family, friends, job and economic well being. Moral values decline. Trust, responsibility, ambition and caring about others become less and less important. Ultimately only the drug is a concern in the addict's life. He will lie, steal, betray and sacrifice all other values for the drug.

From an employer's standpoint, drug abuse is a serious problem. Unlike alcoholism, where the abuser has slurred speech, an erratic walk, facial flush and other obvious indications, the drug abuser may appear outwardly normal even though his brain and nervous system are not functioning

normally. Drug intake during off duty hours affects performance days later.

If injured on the job, the employer may require a drug test. A positive result or refusal to be tested may result in loss of eligibility for all workers' comp medical and indemnity benefits.

OIL CAN HARRY'S does not consider drug abuse--in and of itself--a criminal act nor a substantial breach of ethics. Abusers are terminated solely due to the requirement to provide a safe and secure environment for its employees and customers. "Getting clean" is strongly recommended and encouraged. Those who do so following discharge for drug abuse will be welcomed back "with opened arms" and renewed respect.

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GETTING ALONG WITH YOUR TEAM MEMBERS

The efficient operation of an OIL CAN HARRY'S location requires team members, not just employees. A good team is stronger or better than the total of the individual outputs within it. For example, if it takes one man an hour to do a particular job, a three-man team--if it is a good team--will do the same job in 15 minutes. Unfortunately, some groups actually become less efficient because the group doesn't work together.

Being a good team member requires discipline. There must be a leader to determine how a job is to be done. His job is to best utilize the talents of each member and coordinate those talents to most efficiently accomplish the goal. Once the goals are determined and the method of accomplishing the goal is set, a good team member follows the procedures and contributes to the effort. There is a time to recommend changes, place blame and introduce new ideas, but that time is not while the job is being done.

Working with a group requires some "give and take". No one is perfect. Everybody is different in some respect. Forgive the other guy's faults. He might forgive a few of yours. The most likable person on a team will be the one who helps everybody else look good--and does a bit more than his share.

Lubrication work is dirty work, but start the day clean. A uniform worn the second day stinks. People who stink are usually not popular in a group. Shave every day. Shower every night. Brush your teeth a couple times a day. Wear decent shoes.

Nobody likes a loser. Handle your money such that you don't have to borrow from your friends. Don't whine about your problems; listen to theirs. Be the one in the group that the others can count on.

You are a member of the OIL CAN HARRY'S team. It is your team. If it's not the best team, it's up to you to improve it. Nothing gets improved by complaining or creating problems.

Everything in life is not easy. Contribute to the hard parts. The place must be kept clean. The customers must be served. The trash must be dumped. The rest rooms must be cleaned. It's all part of the business. Accept the things that must be done and make the Team Leader's job easier by doing your share cheerfully.

Every single day, do something to make OIL CAN HARRY'S a better place--even if it's just pulling a weed or picking up a piece of trash. Every single day, do something to help a team member feel better--even if it's just sharing your french fries or telling your partner he did a good job. The more you accept responsibility for the welfare of your fellow team members and the less you dwell on yourself, the better the team will be.

Welcome aboard! You belong!

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CUSTOMER RELATIONS

To be able to change oil requires little talent. However to do it in the OIL CAN HARRY'S way that has the customer thinking "Wow!" as they depart requires practice, an understanding of customer expectations, a knowledge of sales techniques and the desire to excel. The following sections provide information that will help you to "fine tune" your skills and perform our services in a superlative manner.

OIL CAN HARRY'S is not an auto repair shop. We don't fix cars. Our business is preventive maintenance and courtesy services. We must compete with many others who offer similar services. A lot of research has been done to determine exactly why a person does business with a particular establishment. The bottom line of it all is that customers are won or lost primarily because of their perception of the way they are treated. It's more important than price. It's more important than quality. It's more important than location. To be successful in a service oriented business like ours, you must understand the importance of what is perceived by the customer.

It is critical that you understand "perception" and "perception transfer". Perception is the way that someone sees something. It's sensing something through one or more of the senses and then making a judgment based on what we have observed, heard or felt. Perception is usually strongly influenced by our past experiences and attitudes. What we perceive is not necessarily fact. When we watch the magician at work, we perceive he pulled a rabbit out of the hat or that the lady was sawed in half when in fact it never happened. The magician created an illusion to give you the perception that those things happened. As an OIL CAN HARRY'S technician, it's not necessary to create illusions but you must create favorable perceptions. Let's take an example. The customer is sitting in the car in the service area and the hood is up. You check the transmission fluid. You are doing a good job but the customer didn't perceive it because they couldn't see you do it with the hood up. To create the favorable perception you should show the customer the dipstick level and tell them you've checked it. Much of OIL CAN HARRY'S 's system of doing the job is designed to create favorable perceptions throughout the procedure and it's important that you follow them precisely.

Now let's consider "perception transfer". Perception transfer takes place when we perceive something that we know and then develop a judgment concerning something we don't know based on that perception. Everybody experiences perception transfer all the time. For example, the "Marlboro Man" is perceived as a healthy, rugged, masculine, free-spirit kind of dude. Madison Avenue is counting on your sense of perception transfer to feel that if you smoke Marlboros, you too will assume that personality. (Incidentally, the actor who played that role died at a young age of lung cancer.) Another example: You are having dinner with your best girl at a restaurant. The Maitre De makes fun of your choice of wine. You observe not one, but two roaches crawling up the wall! When you ask the waitress for ice water, she says "Get it yourself." Now the perception transfer question. How good is the cook in this establishment? Chances are you would assume he was as bad as everything else! That's perception transfer--making a judgment about the cook, which you don't know, based on other factors which you do know.

Now consider the typical OIL CAN HARRY'S customer. Do they know what is in the oil filter? Do they know what's in the oil? They can't even see the lower tech. Do they know what the PCV valve does? The breather? When you think about it, they know just about nothing about the products or what we are doing. But they definitely will make judgments about our performance--and that judgment will be based on perception transfer. If the coffee pot is dirty, they will assume the quality of the oil is poor. If the upper tech didn't shave this morning, they will assume the lower tech is not doing a good job. If there is trash on the floor, they will assume the quality of the oil filter is bad. The customer's determination of whether or not we did a good job is almost entirely through perception transfer!!!! It is therefore critical that we perform the service so that those things the customer does know is done perfectly so that the perception transfer of those things they don't know is favorable.

For the customer to perceive a high level of quality and competence, the water cooler must be clean, the crew's appearance proper, the level of courtesy and respect the highest, our movements crisp and precise, the tone of our voices professional and confident, the landscaping attractive, the coffee good, the ticket neat, the smile friendly and warm. We must create favorable perceptions.

The interesting thing is that all the things that attract and keep customers loyal don't cost anything, require no unusual effort and is really quite easy to administer. It's a matter of simply treating the customer the way we want to be treated when we are a paying customer at another

business. The following factors are basic to good customer relations:

1. Greet the customer and acknowledge his presence immediately. If a line exists, take a moment to walk down the line and at least say hello to everyone. Offer a newspaper or coffee. Let the customer know the expected waiting time.

2. Address the customer by name at least three times during the process. It's right there on the work order.

3. Include "Sir", "Ma'am", "Thank you" or "Please" with every phrase spoken to the customer.

4. Remember, the customer is paying us. We have an obligation in return to perform. Their obligation is simply to pay the bill. They have no obligation to behave in a certain pattern, but we do.

5. Request things are done. We work for them. No one wants to pay for top drawer service and then be yelled at.

6. When you give the customer their receipt and inspection results, mention the good things about their car before giving them the "bad news". We want them to drive away feeling good and that they are doing a good job taking care of their car by bringing it to us.

7. The customer should feel good about everything they experience while we do our show. That's why we place so much emphasis on personal service items such as cleaning the windshield, emptying ashtrays, complimentary coffee, checking the spare, a courtesy phone, etc. Lock this thought in your mind: The customer will happily pay much more for "feel good" than for an oil change.

8. Customers “read” your expression as a reflection of themself. Smile! They will feel better and respond with a smile. When you answer the phone, smile. You can definitely tell the difference on the other end of the line.

9. Customer complaints can produce the most loyal customers if handled right.

A. Listen to the entire complaint before responding.

B. Repeat back to the customer your understanding of his perception of the problem.

C. Remember that many customer complaints are due to mis-communications.

D. Concentrate now on good, clear communications.

E. Give the complainant highest priority if the complaint is valid.

F. Resolve the complaint immediately if possible.

G. Be aware that your tone of voice, facial expression and body language--the way you say things--are important as what you say. Sincerely try to think and understand from the customer's point of view.

H. Do not argue with the customer. If an impasse seems likely, simply ask the customer what they would like you to do. Many times, this simple step has a way of relaxing the customer and the request may not be unreasonable at all. If so, do it. If not, apologize and state simply, "I'm sorry, Sir. I can't do that." and offer an alternative.

I. Remember a customer may not always be right, but he is still the customer and deserves to be treated with all possible respect.

10. The customer chose the car he drives from a selection of many. He is proud of it. Respect it! Admire it!

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COMMUNICATIONS

At OIL CAN HARRY'S , we work as a team. More than one person must work on a car to complete the service properly. It is important that each member of the team knows what the others are doing. We accomplish this by talking to one another in a precise manner. We accomplish this by communicating.

Communication involves two people, a speaker and a listener. In order to communicate, only one person can talk at a time and at least one person must listen. All too often, two people end up talking at once or one person is talking and no one is paying attention. These situations lead to ineffective communication and are a waste of time.

It is very important to limit yourself to the specific phrases normally used. This accomplishes two important things. First, it makes everyone's job easier when the same system is used every time. Second, the system instills customer confidence and improves their perception of your work. As an OIL CAN HARRY'S trained technician, the quality of your work is second to none. The customer, however, needs to perceive that you have done a good job.

Proper communication makes a profound difference! The customer is listening and the rhythm of good, professional communications lets them know that knowledgeable, trained technicians are servicing it. Always acknowledge the other team member's call by "echoing" a response. For example, the upper tech calls out to the lower tech that the job will be a "Full Service." The lower tech responds with, "Full Service: Thank you, Sir!"

When performing the Service and Safety Check or Opening/Closing Checks, give a brief, crisp response and elaborate only when necessary.

Dialogue With the Customer.

What you say and how you say it is extremely important to creating favorable customer relationships. The customer is not always right, but they do always deserve the highest level of courtesy and respect. Never argue with a customer or find fault with their decisions, actions or attitudes. He is at our place of business--and he is giving us money--and that's all it takes.

Your voice should be strong enough to be heard and it should have a tinge of "authority" to it--at least enough to indicate that you are confident in what you are doing. When the customer asks a question, answer it in your own words if you are sure of the answer. If not sure, say so and indicate to the customer that if it's important to him, you will find out and call him back. Most all customers' questions could really be re-worded to; "Do you guys know what you are doing. Say something to give me some confidence." The customer almost always knows the answer to his question. He is just fishing to see if you do.

When a customer is in the building, stay with the script. This is not the time for idle chatter with other team members. You are on stage and doing your thing. Anything said outside the script will probably create adverse perceptions. Concentrate on doing the job quietly, methodically--and with your mouth closed.

For a typical "House Special" job, the dialogue should go something like this:

TL: " Good morning, Mr. Johnson. "Full Service" for you today?"

CU: "Yep."

TL: "Okay Sir. If you would please put the vehicle in park and turn off the ignition we will be getting to your vehicle as soon as possible. The last time you used your wipers how did they

perform for you? If you would please have a seat in the lobby and we will call you when your vehicle is ready (if it is a female customer open both the car door and lobby door for them).

TL: Pull the vehicle into the bay do the services that we offer with the Full Service oil change (noting any areas that need attention). When all the items have been checked return to the customer sitting in the lobby, (remembering to try and get down to eye level with the customer).

TL: Mr. Johnson we have checked out your vehicle and would like to cover the status of some of the different items that we check. Your brake fluid and power steering fluid were fine, your air filter-breather-pcv valve were all OK, according to our records you had them replaced on your last visit. There are a couple of areas that I would like to bring to your attention and those are the transmission fluid and your coolant/antifreeze (depends on the time of year) these items according to the manufacturers recommendations should be replaced every _____ miles. I do not know if you have had those services performed somewhere else or not but we do have those services available here at a cost of $59.95 for the transmission and $49.95 for the coolant/antifreeze. Would you like us to go ahead and get those taken care of for you today?
CU: "yeah go ahead".

TL: Thank You.

UT: Finish the additional services pull the vehicle out of the bay and around to the vehicle waiting area. Bring the keys to the office, to the team leader.

TL: Complete the invoice and inform Mr. Johnson that his vehicle is ready. O.K. Mr. Johnson that total is going to be $76.65 out of $100.00. Here is your change Mr. Johnson $77 $78 $79 $80 and $20.00 would be $100.00. I want to THANK YOU for your business and want you to have a GREAT DAY!!!!!!!!!!!!

Since pleasing the customer and offering superior service doesn't take any more time, nor any special effort and it doesn't cost anything, and since making the customer feel good is critical to our growth, profitability and the size of your paycheck, doesn't it just make good common sense to do it!

HOW TO CHECK AND INSTALL FLUIDS

Work in a 'U' shaped pattern starting at the driver's side at the rear of the engine compartment. Finish at the passenger's side rear of the engine compartment. It is very important that you only open one fluid reservoir at a time and seal it as soon as you are finished checking or filling that reservoir.

The following section details the proper techniques of finding the fluid reservoir, explaining when to add fluid and what type fluid to install. It is critical that the right fluid always goes in the right hole.

Automatic transmission fluid.

Automatic transmission fluid is a petroleum-based product that is formulated to lubricate, cool, clean and protect internal transmission parts. The four types of fluids are Dexron, Type F, Mercon and Mopar ATF+. OIL CAN HARRY'S 's automatic transmission fluid meets the requirements of both Dexron and Mercon. This fluid is dispensed from the console. Type F and Mopar ATF+ is kept in one-quart containers. Type F is used in some older Ford products and some import cars. Mopar ATF+ is used in certain late model Chrysler products. Dexron/Mercon fluid can be used to top off an ATF+ transmission but only ATF+ can be used in a transmission service. All automatic transmission fluid can be recognized by its distinctive red color.

When checking the ATF level, the selector lever should be in park except for Chrysler rear wheel drive vehicles, which should be checked in neutral. Normally the ATF level is checked with the engine running and at operating temperature, but there are some Japanese makes that are checked with the engine off, most notably, Hondas and Acura's. Follow the instructions on the dipstick.

On most rear wheel drive cars, the ATF dipstick is located on the passenger side in the rear of the engine compartment. On most front wheel drive cars, the ATF dipstick is located on the driver's side in the middle of the engine compartment. Usually the dipstick has a pull ring or 'T' handle on it and a cap on the top of the stick to cover the tube.

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Certain cars have unusual types or locations for the dipstick:

HONDA--Under the battery on the passenger side front. The dipstick screws out.

DODGE / MITSUBSHI (some)--A very short dipstick on the passenger's side front.

NISSAN--The dipstick has a small black rubber knob instead of a pull ring.

VOLVOS & MERCEDES--The dipstick is located in the driver's side rear of the engine compartment. Dipstick has a special release mechanism.

Remove the transmission dipstick and wipe it clean. Put the dipstick all the way into its tube, then remove it and make sure the fluid level is between the appropriate markings. There are many different styles of dipstick markings in use today. Some cars have "FULL" and "ADD" markings, some have "HIGH" and "LOW", some have etchings on the dipstick and others simply have a crosshatched area between two unmarked lines. In addition, some dipsticks are marked for both hot and cold levels. Make sure you select the correct graduations. The transmission fluid is low when the fluid level is less than halfway between the "FULL" and "ADD" marks.

If the transmission fluid is low or will be receiving transmission service, the Team Leader will indicate the amount and type of fluid to add on the sales ticket. Generally, the area between the "FULL" and "ADD" markings on the dipstick is approximately one pint.

CAUTION: Never overfill an automatic transmission. This can cause the fluid to foam, leading to a loss of pressure in the hydraulic systems and possible internal damage to the transmission.

Add to the automatic transmission when the level is halfway between the "ADD" and "FULL" marks or lower. As soon as you are finished checking or adding transmission fluid, return the dipstick to its proper place.

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Brake fluid.

NOTE: It is our policy to check the level and advise the customer but not normally add any brake fluid except on the customer's request. The fluid level is a direct indication of the amount of brake pad wear. If the fluid is low, either there is a leak or the pads need changing.

Brake fluid reservoirs may be a metal body with a single metal cover or made of plastic. Some of the plastic reservoirs are translucent permitting the brake fluid level to be checked without removing the cover. Plastic reservoirs may have screw tops or caps that snap into place. The brake fluid reservoir is normally located on the driver's side rear of the engine compartment.

To check the fluid level in a translucent reservoir, simply look through it and make sure the fluid level is at the "full" mark stamped into the reservoir. If the master cylinder has a black plastic reservoir, wipe away any dirt around the reservoir cap and unscrew the cap. Look down into the reservoir and make sure the fluid level is up to the bottom of the plastic ring or other level indicator inside the reservoir.

Plastic reservoirs are fragile. When replacing the rectangular caps on these units, use both hands to squeeze each corner into place. A distinct "click" can be felt as each corner pops into place.

To check the brake fluid level in a metal master cylinder, wipe away any dirt around the reservoir cover, and then use a screwdriver to unsnap the large wire clip holding down the cover. Remove the cover and check the fluid level. The rubber accordion seals may have extended as brake fluid flowed from the master cylinder to the wheel pistons. If they have, reshape them to their compressed position before putting the cover back on. When replacing this type cover, make sure the cap is properly seated and that the ends of the wire clip are in their detents.

You should know that brake fluid is "hygroscopic". That is, it will absorb moisture from the atmosphere. Brake fluid should always be sealed for this reason. The accordion seal discussed above serves just that function. It separates the fluid from the atmosphere yet permits venting of the chamber via a small hole in the cover.

Many brake fluid reservoirs are "sensored". That is, they have a float switch incorporated in them connected to a dash light that informs the driver when brake service is due. They are easily recognized by the wires going into either the reservoir cover or the bottom of the brake master cylinder itself. The fluid level in the reservoir is an indication of brake pad wear. As the pads wear, the fluid is permanently transferred from the reservoir to the wheel cylinders. When the fluid drops to a certain level, the float switch completes a circuit to the dash light. If you add fluid, either the designed warning system is being by-passed or you are masking a leak problem that should be repaired. Inspect the level but do not add. If the fluid is lower than the "MIN" indication, advise the customer to have the system inspected by their mechanic.

Conventional brake fluid is designated DOT-3 and DOT-4. Both are chemically similar with a polyglycol base. DOT-4 is superior in that it has a higher boiling point, hence more resistance to "fading" and of course, satisfies the lessor requirements of DOT-3. Ford specifies a special DOT-3 fluid with a 550-degree boiling point.

There are a few other types of brake fluid but they are rare and OIL CAN HARRY'S does not stock them. For example, there is a DOT-5 fluid, which is silicon based. Its advantages are that it has a higher boiling point, doesn't absorb moisture and hence better protects internal parts. Because it is very expensive, it will normally be found only on racecars, antique or exotic imports. Introduction of conventional polyglycol fluids into a system equipped with DOT-5 will not physically damage components, but will degrade the system so that it performs as if all the fluid was DOT-3 or 4. This is because the polyglycol is heavier and doesn't mix. Any amount added will migrate to the lower part of the brake system--the wheel cylinders. That's where the heat is so the system will perform the same as if all the fluid was DOT-3/4.

CAUTION: Extreme care must be used to insure that only brake fluid is used in a brake fluid master cylinder. Motor oil, transmission fluid, power steering fluid or any petroleum-based product will cause any rubber part of the brake system to soften and swell leading to total and potentially catastrophic loss of braking action. A major accident could result!

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CAUTION: It is very important that the brake reservoir cover be reinstalled properly. A loose cover will allow the fluid to leak out resulting in the loss of braking action.

CAUTION: Service only those systems calling for DOT-3 or DOT-4 fluids. We do not stock nor service DOT-5 systems.

CAUTION: Brake fluid is a paint remover. Use extreme care to avoid drips onto fenders or other painted surfaces. Should it occur, clean off immediately with soap and water.

Servicing the brake system properly is critical. The very lives of our customers are in your hands.

Hydraulic clutches.

Hydraulic clutches are serviced with brake fluid and ONLY brake fluid is used in them. The reservoir is usually located to the driver's right on the firewall. The proper fluid level is 1/4" from the top of the reservoir.

Power steering fluid.

The power steering fluid level is checked at the power steering fluid reservoir usually attached to the power steering pump. All cars except one drive the power steering pump with a fan belt, so to locate the pump just follow the belts. (The one exception is the Toyota MR-2 which has an electrically driven pump near the front, passenger side wheel well.)

The power steering reservoir will have a short dipstick built into the reservoir cap. To check the fluid level, remove the cap by pushing it down slightly and twisting it counter-clockwise. Pull the dipstick and make sure the level is between the "FULL" and "LOW" markings. Some dipsticks have "FULL HOT" and "FULL COLD" markings and some simply have "HOT" and "COLD".

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Some cars have a fluid reservoir mounted remotely from the pump but in such case, will have hoses connecting it to the pump. The proper fluid level in these systems may also be checked with a dipstick or they may have markings on a translucent reservoir. Some may need to have the cap removed to determine the fluid level.

The proper level is between the "FULL' and "LOW" markings. Some older cars have a power steering cap, but do not have a dipstick attached to it. In these cars, the fluid level should be about 1" below the top of the reservoir.

Power steering fluid should be added if it is lower than the halfway point between the full hot and full cold marks. Always put the cap back in place as soon as you are finished adding or checking the fluid.

Top off the reservoir to the "FULL" mark with the fluid specified in the Lubrication Guide. The power steering fluid used by OIL CAN HARRY'S is compatible with most all other fluids. Honda and a few other cars are exceptions, however, and require special power steering fluids. Always refer to the Lubrication Guide to determine the proper fluid.

CAUTION: Never leave more than one reservoir uncapped at a time.

Battery.

Batteries can be found in a number of different spots under the hood. Usually they are in the driver's side front corner or passenger's side front corner of the engine compartment. There are three basic battery types:

SEALED--These have non-removable vent caps.

MAINTENANCE FREE--These may have removable vent caps but normally does not require the addition of water.

STANDARD--These have removable vent caps and require the periodic addition of water.

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Many new batteries are sealed and do not require water to be added. If this is the case, you will mark "SEALED" on the Service & Safety checklist. Other sealed batteries have a round plastic hydrometer eye set into the battery. The "eye" will show green or blue if the battery charge is "OK" and the fluid level is proper. A black "eye" indicates discharged and amber indicates low electrolyte level. Never attempt to pry open the caps on a sealed battery. They break!

Even though a battery is labeled "maintenance-free", if the caps can be removed by hand, check the fluid level. Although designed to be maintenance-free, you will find some that are low due to an excessive charging rate. If a "maintenance-free" battery is found to require the addition of water, advise the customer. Some batteries state they are "maintenance-free" but stipulate periodic inspection and water addition might be necessary. Read the battery label to clarify.

If a "standard battery", check the fluid and add water if necessary. The proper level is about 3/8" above the plates, and an inch below the top. Some batteries have a "split ring" to indicate the proper level. Some have translucent cases and the fluid level can be seen without removing the vent caps.

CAUTION: An over-filled battery will tend to overflow electrolyte onto surrounding parts and can produce very expensive "come-backs". Excess water must be removed.

CAUTION: Never allow battery acid to go into the waste oil drain. It will end up at the bottom of the waste oil bulk tank and corrode a hole in it.

Coolant.

Most coolant reservoirs are made of translucent plastic with a screw-on or snap-on top. The cap will either be green or black in color. They are easily mistaken for windshield washer reservoirs. To confirm, look for the hose that runs to the radiator. Coolant reservoirs are usually located directly to one side of the radiator, however they may be located most anywhere under the hood.

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To check the coolant level, look through the reservoir. The coolant level should be between the hot and cold lines, which are normally stamped on the side of the reservoir.
CAUTION: Never leave more than one reservoir uncapped at a time.

CAUTION: Never open the cap to the radiator when the engine is hot. The coolant is under pressure, which causes it to stay in a liquid form at above the normal boiling point. When the cap is removed--venting the system to atmospheric pressure--all the coolant in the engine can immediately boil creating very high pressures, which can push the hot liquid in the radiator out through the cap opening with tremendous force. There is a potential for serious burns.

CAUTION: Use extreme caution when opening sealed system caps. These are systems where the pressure relief cap is on the coolant overflow bottle and there is a direct hose to the radiator body. Removing the cap on the overflow will have the same effect as removing the cap on the radiator. This type system is common on many makes of late model vehicles. The big clue is a complex cap on the overflow with a pressure relief valve built into it.

Windshield washer fluid.

Most windshield washer reservoirs are made of translucent plastic with an attached snap-on cap. They are located in different places under the hood depending on the make and model of the car. Mini-vans, Jeeps and utility trucks with rear wipers can have reservoirs under the hatchback.

To check the fluid level, look through the reservoir. The level should be about 1/2" below the bottom of the fill cap. Be careful not to spill or overfill the washer fluid reservoir. Always put the cap back in place as soon as you are done checking or adding fluid.

CAUTION: Anti-freeze will damage paint. Coolant overflow bottles and windshield washer reservoirs look very similar. Be careful not to confuse the two. If in doubt, the coolant overflow will have a small diameter rubber hose connected to the radiator near the radiator cap. On sealed

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systems, the hose will connect directly to the radiator body. If anti-freeze is accidentally put into a windshield washer reservoir, the car's paint could be severely damaged

Adding the oil and checking the dipstick.

Communication plays an important role during this section of the hood procedure. The Upper Tech calls out, "Clear to add oil?" Then the Lower Tech responds, "Clear to add oil" if the drain plug is in place. The Upper Tech then says, "Adding oil" with the Lower Tech responding, "Add it." This procedure insures the new oil isn't drained through an engine with no drain plug installed.

Hold the dispensing tip over the oil fill hole and unscrew the tip by turning it counter-clockwise. Dispense the oil by squeezing the trigger. Start slowly at first to make sure the oil is flowing freely. Increase the oil flow rate by completely depressing the trigger. The meter will register the quantity of oil added to the car in quarts. When it reaches the amount that the car requires, completely release the trigger and stop the oil flow. Close the screw tip while it is over the oil fill hole. Return the nozzle to the console.

Always put the oil cap back on as soon as you are done adding oil. After the quality control check is done and the car has been shut down, you will check the oil level and show it to the customer. To check the oil level, pull the oil dipstick out and wipe it off. Reinsert the dipstick and pull it out again. The dipstick will usually have at least two marks: LOW / HIGH, ADD / FULL, MIN / MAX, ADD / SAFE or LOW / FULL. Sometimes the dipstick will have two lines or two holes without any words. The distance between the pair of marks is one quart.

CAUTION: Some Ford dipsticks have an additional mark above the "full" line. It will either be a circle or a "MAX" line. This is not the normal oil level. It is the maximum level of oil that can be installed without damage to the engine.

When you hold the oil dipstick, make sure you hold it level so oil does not run toward the

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"FULL" mark. Holding the dipstick at an angle will give a false reading.

If the oil level is low, add oil to bring it to about 1/8" below the "FULL" mark. (The engine has just been running and some is still oozing down inside the engine. By setting the level just below the "FULL" mark, it will be "right on the money" after the car sits for several minutes.) After you add oil, always be sure to put the oil cap back on

If the oil level is high, wait about 15 seconds to allow the oil to flow down and check the dipstick level again. If the level is still high, determine why before proceeding. The Lubrication Guide may have been misread, some Cadillac's and Fords have erroneous dipsticks, the oil pan may be dented, someone may have changed the dipstick, the meter may have malfunctioned, etc. If the amount of oil must be reduced, advise the lower tech to do so and give an estimate of how much should be drained. Recheck for proper level.

THE JOB SEQUENCE

Performing the job in a precise, consistent sequence is absolutely essential. The first step in lube tech training is to memorize the sequence. If the job is done in the same sequence every time, an accident won't happen simply because an accident isn't in the sequence. If you deviate from the sequence however, you may find your hands in the wrong place at the wrong time, your eyes looking in the wrong direction, or your ears not tuned to what's happening. Occasionally there will be circumstances where you must deviate from the sequence. When you do, be especially alert, for almost all "foul-ups" or accidents occur during a phase where something is being done out of sequence.

Doing the job in consistent sequence will insure that all items promised are actually performed. Remember perception transfer? If the battery is not serviced, the customer will assume other steps were missed as well and be dissatisfied with the whole show. The sequence principle also applies to each individual portion of the job. For example, when installing the oil, always do it exactly the same:

1. Note the customer's preference.
2. Remove the fill cap.
3. Insert the nozzle.
4. Call "Clear to add oil on Bay ___?" and hear the response,"Clear to add oil."
5. Call "Adding oil." and hear the response, "Add it."
6. Dispense the proper amount.
7. Return the nozzle to the console.
9. Install the fill cap.

When the job is done in a precise sequence, it is most efficient--and you look good doing it. There is no rushing, or pondering, or looking, or hesitating. You simply progress in 1-2-3 order in a methodical manner until the job is done.

There is even a sequence for answering the phone:

1. Say hello.
2. State the business name.
3. Identify yourself.
4. Offer to serve.

(with a SMILE on your face)

Thank you for calling OIL CAN HARRY'S this is _____ speaking how may I help you.

Answering the telephone properly is very important because the potential customer on the other end of the line judges the overall quality of the operation by the way the telephone is answered. Remember perception transfer? Normally, the Team Leader should answer all incoming calls. Should it be necessary for a team member to answer it, inform the Team Leader of the call and what was said at the earliest opportunity.

TEAM LEADER SEQUENCE

1. Provide " Fast Friendly Service" to each and every customer
2. Greet every customer with a smile and **"Welcome to Oil Can Harry's, would you like our Full Service Oil Change today?"**
3. Never leave a customer sitting in their vehicle un-greeted. Even if you are swamped, get out and greet every customer with a smile, invite them to the waiting room and explain to them that we will get started on their vehicle as soon as possible.
4. Let the customer know that you will drive the car into the bay for them.
5. Roll down the driver's side-side window and ask customer for their keys and if they have a car alarm, kill-switch, or any code required to start the engine.
6. Give every customer a comment card and pen and ask that they please let us know how we are doing.
7. Determine the desired service and all specifics. Relay this information to the Upper Lube Technician."
8. Enter all customer and vehicle information into the computer.
9. Place work-order and reminder-sticker on car's windshield.
10. Help present add-on sales to customer, answer any questions, etc…
11. Help with tires, cleaning windshields, filling out stickers, work-orders, etc…
12. Ring up customer's invoice or deliver work-order to computer operator.
13. Drive customer's car around to the front of the store and take them their keys.
14. Thank every customer by name for giving us his or her business.

Write the ticket. Obtain the customer's mailing address. If it is a known "problem car" circle it on the ticket and verbally remind the appropriate technician. If the customer is a lady, enter "Ms" before the name. Every entry on the ticket must be legible. Use block letters and print all entries. Enter the method of payment in the lower left-hand corner. If it is a check, enter the check number.

If only a post office box address is entered on the check, ask to see the customer's driver's license and enter the street address on the check. It is OIL CAN HARRY'S 's policy to accept checks only written on local banks and from customers who are listed in the phone directory. Checks are accepted only for the amount of the sale. A door sticker should be installed on the air cleaner housing for all add-on services so you will know those services have been performed the next time the customer comes in. If an item on the ticket is in doubt, put a question mark to the right of the entry and circle it. The following are known "problem cars" and should be circled:

Ford manual transmissions (reverse gear linkage)
Volkswagen diesels (filter)
Post-'84 Fords (oil pans)
Renaults (filter)
Porsche 911 (oil reservoir)
Beretta/Corsica (hood and filter)
Volkswagen front wheel drive (TX fill plug location)
Japanese cars (oil pressure-sending unit)
Cadillac's/Olds with pad mounted filter (loss of prime)
Mercedes (round 'O' ring)
Peugeot/Renault (pressurized coolant)
Turbos (prefill)
Anti-lock brakes (special procedure)

Enter the model rather than the make. For example, do not enter "Ford", "Chevrolet" or "Toyota". Enter "F-150 pick-up", "Camaro" or "Tercel". If the customer opts for a service package, list the services individually, the total, the discount and the net amount. Enter all services on the appropriate line of the ticket.

Make change. Always state the charge amount and the amount given you. Then count--out loud--to that amount. Present the House Special customer with a gift. (Gifts are not to be given to partial service customers such as an "oil & filter only".) When presented to the customer, use the phrase, "Sir, here's a little gift for you. Want you to know that we really appreciate your business."

No car is to be directed forward without a ticket on the windshield. If the car is a "come-back", a full explanation of who, what, when and why should be entered on the ticket after the customer departs.

The customer has first priority over all other activities and will not be delayed.

The Team Leader should offer to drive the car forward for any customer who expresses apprehension about driving over the pit or for whatever reason the Team Leader suspects will have trouble doing so.

Both copies of all void tickets--with the reason for the void printed on them--must be included with the daily report.

Whoever begins the Team Leader sequence must finish the sequence. The job must never be turned over to someone else in the middle of the sequence. The upper tech will come forward and offer to empty the customer's ashtrays, clean the headlights and rearview mirrors and lubricate the doors for the first car of any group. Hood releases operated from inside the car must be released by the customer. Do not attempt to force a jammed hood release. If we break, we buy.

We do not remove wheel covers. If the vehicle does not have tire valve stems that are accessible, advise the customer that we do not remove wheel covers and recommend he have extensions installed to enable the tire pressures to be checked.

Always remember that we exist to serve the best interests of the customer. Treat the customer--and advise them--as if they were members of your own family. OIL CAN HARRY'S is successful because we are honest, sincerely desire to serve the customer and seek permanent, long term, regular customers through providing superior personal service.

UPPER TECHNICIAN SEQUENCE

Be alert and ready to direct the car forward immediately after the team leader has released it. A ticket must be under the wiper before the car can be directed forward. (On rainy days, the ticket may be placed on the dash.)

1. Drive the vehicle into the bay.
2. Shut off the engine when the car is in its proper position. Put the shift lever in "park" for automatic and "in gear" for manual transmissions. The parking brake should remain in the released position so that the lower tech can check for normal cable tension.
3. Roll down the driver's side window if not already.
4. Tell the lower tech the service requested. He should be told the job, the oil filter number and the transmission type. Listen for his echo response. You have no way of knowing the lower tech understood you unless he echoes the information back. If you don't get a response, always repeat the information in a louder voice until you get an echo reply. Example: "We have a Full Service, filter PZ9A, manual transmission. Caution on the check plug--Ford manual Transmission." The lower tech would respond, "Full Service oil change I have the caution."
5. Read the ticket closely. If a known problem area exists such as a Ford products manual transmission or Volkswagen diesel, pass the caution to the lower tech. If a question mark appears to the right of an entry, it indicates the Team Leader was unable to determine that information. For example, the car may have a non-standard oil pan or have some aftermarket modification not covered in the lubrication guide. In that case the upper tech must use some common sense in handling the situation. For an unknown oil capacity, just insert three quarts and check the dipstick. Keep adding and checking the dipstick until the oil is at the proper level. If the uncertainty involves which type of fluid to use, determine the proper fluid by sight and smell. Note the tire pressures to be set the brand of oil the customer requested and any special instructions entered.

6. Open the hood. Some Ford Ranger pick-ups have a jack handle that is easily confused for a hood support. The proper support is over the driver side fender and is about 18" in length. Many cars are equipped with nitrogen charged hood support. As these get old they lose pressure through leakage. Use caution as they sometimes come down a few minutes after the hood has been raised. Use the wooden hood prop rods if in doubt. There are many different types of hood releases. If the release is not found immediately, stoop down and visually locate it. The primary latch will normally already be released and if you look under the front edge of the hood, the secondary catch is usually easily located.

7. Set the tire pressures as indicated on the ticket. Always ask if the customer would like the spare checked. Do not remove the wheel covers. If unable to service without removing the wheel covers, recommend to the customer--politely--that they have extensions installed to permit service. Inspect the tires, as the pressures are set.

8. Place the fender cover over the left fender to protect the fender from the console hoses.

9. Lubricate the hood locks and hinges using the spray bottle provided. The red one is a light oil lubricant. The blue one contains rubber lube for bushings. Hold a shop towel behind the hinge when lubricating the hood hinges to prevent the oil spray from getting on the windshield. Use a small quantity and place the tip right against the pivot points.

10. Spray the bushings accessible under the hood with rubber lubricant. The rubber lubricant is to be used only on bushings.

11. Add coolant to the radiator coolant bottle if needed. CAUTION: Some Peugeots, Renault and many cars built after 1995 have coolant bottles that are under pressure. They can be recognized by the hard, thick construction of the bottle and pressure relief valve built into the cap. There is usually a high/low mark on the side and the coolant level is visible without removing the cap. If coolant must be added, cautiously remove the cap. Raise the cap only enough to permit moving to the side, leaving the pick-up tube in the bottle. This technique will prevent losing the gasket under the cap, which will result in the engine overheating. When the cap is released, be ready to immediately replace it if there is any indication the coolant will boil out. If the coolant is permitted to be lost, a special procedure involving venting the system may be required. If this procedure is not followed, the engine will overheat due to air locked in the cooling system.

12. Service the battery. Fill only to the "split ring", other fluid level indicator or 3/8" above the plates. Excess fluid must be removed. Do not put battery acid in the waste oil drain! Even though the battery decal states "maintenance free", if the caps can be removed by hand, do so and service to the proper level. In such case advise the customer that it would be a good idea to have their charging system checked. Although maintenance-free batteries theoretically don't need servicing, if the charging system is malfunctioning and delivering an overcharge to the battery, the fluid will be overheated and evaporate faster than the special vent caps can contain it. CAUTION: Battery acid removes paint and eats up uniforms. Use caution in handling it.

13. Top off the windshield washer bottle.

14. Inspect the brake fluid. As a generality, it is not a good idea to top off the brake fluid. The level of the fluid in the reservoir is an indication of the amount of puck wear. When the level is low, either the pucks are worn and due for a change or there is a leak. Either condition indicates repairs are needed. If the brake fluid is topped off, the customer no longer has this vital indication of brake condition. Advise the customer in event of a low brake fluid level, but do not add fluid unless the customer requests it or the level is dangerously low.

Insure the master cylinder cap is properly repositioned. This is the most important item under the hood. If not properly secured, all the fluid can be lost and a major accident occurs. Be especially careful that no dirt is allowed to enter the reservoir. If necessary to add fluid, use Castrol brake fluid (DOT-4) for all English built cars, Corvettes or others that specify DOT-4. Ford products require a special brake fluid with a 550-degree boiling point. Use the Quaker State--550 for those. On very rare occasions you may have a customer that has installed silicone brake fluid in his system. Although it will not damage the system if conventional brake fluid is added, the fluids do not mix. The heavier conventional fluid will flow to the bottom of the system--the wheel cylinders--and the braking effectiveness will be the same as if conventional brake fluid was used throughout. This, of course, negates the effect of installing the much more expensive silicone product. Do not service silicone-equipped systems.

Plastic reservoirs are fragile. When replacing the caps on these units, use both hands to squeeze each corner into place. A distinct "click" can be felt as each corner pops into place.

Hydraulic clutches also use brake fluid. Convertible tops and load leveling mechanisms use only a dealer provided special fluid. Do not service such systems.

CAUTION: Use extreme care to insure that no fluid other than brake fluid is introduced into the brake fluid or hydraulic clutch reservoirs. Petroleum based fluids such as power steering fluid, motor oil or transmission fluid will destroy the internal seals and cause sudden and unexpected brake failure. The swelling of the diaphragm seal in the master cylinder reservoir evidences such petroleum contamination.

Servicing the brake system properly is critical. The lives of our customers are in your hands.

15. Top off the power steering fluid. Although most cars take power steering fluid, some do not. Some require DEXRON, some TYPE F transmission fluid and others special fluids available only from the dealerships. Note carefully the proper fluid indicated on the sales ticket. The caps on the reservoir will normally have a dipstick with high-low markings and the fluid should be added or removed to place it at the proper level. The proper level varies with temperature and should be at the lower end of the range when the vehicle is "cold" and at the upper if "hot".

16. Add transmission fluid as indicated on the sales ticket if equipped with an automatic transmission. Note the type fluid and the quantity on the sales ticket.

17. Add the oil by first calling, "Clear to add oil?" After the lower tech responds, "Plug and filter in. Clear to add.” call, "Adding oil." The lower tech will respond, "Add it." Then add the appropriate type and quantity of oil as indicated on the sales ticket. Insert the nozzle into the opening before opening the valve. Hold a shop towel under the tip when removing the nozzle.

18. Upper ball joints. Assist the lower tech in lubricating the upper ball joints if requested. This will be necessary when the lube tech is short or on some four-wheel drive vehicles. The lower tech

will flip the end of the grease hose up to you. Locate the grease fitting and lock the coupler onto it. When ready say; "Shoot it."

19. Inspect the hoses and belts. Look for fraying, cracks or abnormal wear on the belts. Look for soft, swollen or leaking hoses.

20. Inspect the wiring. Look for loose wires, frayed insulation or loose connections. If a plug is disconnected, do not reconnect it without checking with the customer first. There may be a reason it is disconnected.

21. Inspect for loose nuts and bolts. Check for anything loose or abnormal under the hood. Any fuel leaks? Loose vacuum hoses? Loose ignition wires? Loose battery holddown? Fan shroud secure? Air filter clamps and bolts all secure?

22. Service and safety check. Note your discrepancies on the backside of the sales ticket and be ready

for the S & S check when the lower tech calls ready. The S & S check is performed in a challenge--response system with the upper tech calling out the item on the checklist and the lower tech responding with whatever action was taken or condition of an item being inspected. Of course, the items serviced by the upper tech will be simply stated such as, "Hood locks and hinges have been lubricated; battery was serviced", etc. If the inspected item was normal, place a check mark on the form. If abnormal, place an "X" in the blank and a brief comment of the problem. Use some judgment in describing a problem to a customer. It is normal for a ten-year-old car with 120,000 miles on it to seep a bit. Exhaust systems have condensation drain holes in them. When you perceive something on the vehicle that needs attention recommend they take it to their dealership or general auto repair shop and "have it checked out." Be very careful about telling a customer something is "bad". Let their mechanic make that determination. Give the customer some indication of the seriousness of the discrepancy. Is it something that should be taken care of immediately? Could it be checked the next time the car is tuned? Is it just something to "keep an eye on"?

23. Start the engine and check for an indication of oil pressure. CAUTION: If the vehicle is

equipped with a manual transmission, ask the customer to depress the clutch before starting.

24. Quality control checks. The Q/C check is the check performed after the engine is started and is primarily concerned with detecting a leaking plug or oil filter and to check for a possible exhaust system problem. With the engine running at a fast idle the lower tech will have difficulty hearing you. Direct your voice toward him (and not in the customer's ear) and speak loudly. Call for the exhaust system check first. The time lapse for that will insure that oil has reached the turbo, if so equipped, and that the oil filter is completely full. Then bring the engine RPM up to a speed that will give normal highway oil pressure--about 1,800 RPM. Call for the "filter--plug--gasket" check and expect to wait ten seconds for the lower tech's reply.

25. Bring the RPM back down to a normal idle and then shut the engine off.

26. Give the customer the sales receipt and inform him of anything abnormal. Always address the customer by name. Take time at this point to answer any questions, pay compliments, etc. Don't leave the customer until he indicates by word or eye contact that he is ready to continue

27. Remove the fender covers.

28. Check caps and dipsticks. Insure that the oil, power steering, coolant bottle, battery and windshield washer caps are secure and that the dipsticks are in place. Insure all tools and shop towels have been removed.

29. Call "Clear?" to insure the lower tech is clear of the vehicle.

30. Start the engine and pull the vehicle around slowly parking in the vehicle waiting area.

31. Return the keys to the customer or ticket writer

GENERAL COMMENTS:

The upper tech must always keep in mind that we are in the "people service" and not the auto repair business. The customer must be made to feel good about the experience. He must have confidence in what we do. He must receive a healthy ration of ego gratification with every job. The upper tech is on "center stage" throughout the process and plays a major role in impressing the customer favorably. Treat the customer with the highest level of courtesy and respect. Admire his car. Admire his grandchildren. Admire his mag wheels. Address him by name. Always offer to check the spare. Smile. He is generating your paycheck. Offer to take his empty coffee cup. Be cheerful. Enjoy serving the customers. They are our reason for being.

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LOWER TECHNICIAN SEQUENCE

1. Observe clearance as the car enters the service bay. Corvettes, Porsches, etc. are obvious clearance problems, but also watch for older cars with exhaust system clamps broken, etc.

2. Call out the number of drain plugs. If our brand filter is installed, call out "regular customer".

3. Note the job information. Do not start to drain the oil before the job is clearly understood. It might only be a lube.

4. Remove the oil drain plug. Use a six-point socket if the plug appears especially tight. Inform the customer immediately and before putting a wrench on it if the plug is "rounded". CAUTION: Some Lincoln's and Fords have two drain plugs. Some Saab Automatic transmission drains can be confused with oil drain plugs.

5. Remove the oil filter. If a canister type, note the sequence of parts as they are removed. Make sure all old gaskets are removed. Sometimes, previous service people will have failed to remove the gasket, especially when they fit in a groove. As many as four have been found to have been left from previous jobs. All Mercedes use a canister type filter and fat, round "O" ring seal. CAUTION: Use only the round "O" ring seal on a Mercedes. The flat gasket that is included with some aftermarket filters is not intended to be used on a Mercedes. The round "O" ring is reusable if in good condition.

Should the stud come out with a spin-on filter, it can be easily removed by placing a #7 "easy-out" in the stud. Hold the easy out with an open-end wrench and turn the filter with a filter wrench. Some General Motors studs have a 3/8" allen fitting inside them. Use the easy- out or allen wrench to reinstall the stud into the block.

The strongest point of the filter is close to the base so try to fit the wrench at that point wherever possible. The next best spot is at the fluted end using a cap type wrench. If the filter has been installed without coating the gasket with oil, it may be difficult to remove. Remember that it is the rubber gasket that is holding it, not friction at the threads. Hold steady pressure. Beating on

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it will accomplish nothing. Avoid crushing the filter. Once you recognize this one is going to be tough, use an appropriate wrench. The "coil spring" spreads the load without crushing. The "nylon strap" works well if the strap can be placed near the base. The "Plews claw" will bite into the metal and works great for removing a stubborn filter but should never be used for tightening it since it will tend to puncture the metal can.

6. Top off the differential. Insert the gun nozzle and add fluid until it runs out. A "finger check" is not sufficient. CAUTION: Some gearboxes of certain models specify a fluid level below the fill plug hole. Refer to the Quick-lube Guide.

7. Lubricate and inspect the universal joints.

8. Check the tension on the parking brake cable and put a dab of grease where the cable enters a guide tube or rubs on the chassis.

9. Top off the transmission if equipped with a manual transmission. Use the same technique as for differentials. CAUTION: Manual transmissions account for most serious comebacks. There are numerous engineering traps involved. They may use motor oil, ATF, gear oil or a special lubricant. Confirm the fluid in the transmission is the same as on the ticket by sight and smell. Most all fill/check plugs are pipe-thread, recessed type plugs. Do not remove a hex head check plug unless you absolutely know what you are doing. If any doubt exists, confer with the Team Leader before removing. It is a very expensive mistake to guess when removing plugs from manual transmissions. If you are not absolutely, positively sure what you are doing, call in the Team Leader. If he is not sure, pass on it.

Many manual transmissions do not have a fill/check plug. To check the fluid level on these transmissions requires the removal of the speedometer drive cable. OIL CAN HARRY'S does not service transmissions with this type installation. The customer should be informed of that fact and advised to have it checked the next time he has any other work done at a dealership or other general repair facility. The problem with this type vehicle is that the nylon speedometer drive gear is just pressed onto the speedometer drive cable. When the assembly is pulled from the hole, if the gear catches on the edge of the hole it is easily pulled off and falls into the transmission where it cannot

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be retrieved without dismantling the transmission.

On four-wheel drive vehicles, it will be necessary to check both the front and rear differentials, transmission and transfer case.

CAUTION: The aluminum plug on the aluminum case Ford transfer case is 10 MM, slightly larger than the standard 3/8". It is essential that the special 10MM tool be used, as the 3/8" drive will easily round out the plug.

10. Replace the oil drain plug. Inspect the plug and gasket seating surface closely. Install a new gasket. The gasket should fit the plug snugly with no looseness. Observe the gasket as you tighten the plug. It should be uniformly compressed under the drain plug head with no "bulge outs". Use care to avoid cross threading the plug as it is installed. The plug should thread in easily with only finger pressure. If difficulty is experienced in turning the plug in by hand, investigate why before proceeding further.

CAUTION: Ford plugs are easy to strip due to a large head (big wrench) but just a couple threads actually engaging the thin retainer tack welded to the inside of the pan. Use 15 foot lbs. torque.

11. Install the new oil filter. Compare the new filter with the old one. Same size? Same shape? Same thread hole size? Same size and thickness gasket? Lubricate the new gasket by rotating the old filter gasket around it. This will make it obvious if the gasket size is different. Insure that the gasket seat is clean and that there are no obstructions. Thread the filter on a couple turns and then "wobble check" the filter to determine that the threads are the proper size. Tighten the filter hand tight and then an additional 1/2 turn with a wrench.

CAUTION: Chevrolet S-10 pick-up trucks have a wire that will drop down and be easily caught under the filter gasket if care is not used.

CAUTION: Most all Japanese cars have the oil pressure sending unit located next to the oil filter

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and is easily damaged if careless.

CAUTION: Some Nissan pick-up trucks have the oil filter located right above the main battery to starter terminal. It is easy to make contact with this terminal while installing the filter. If contact is made, the filter immediately welds to the terminal and becomes red hot. Consider removing the battery ground cable on these vehicles if the terminal cover has been lost or removed.

CAUTION: Renaults have two different size oil filter studs. Always try the small hole filter first. Refer to "problem car" section for details.

CAUTION: Volkswagen diesel engines require a special heavy duty filter and must be tightened an additional 1/2 turn.

12. Call "Plug and filter on sealed and tight".

13. Lubricate and inspect the front suspension, clutch linkages and other parts that are lubricated by chassis lube. If the ball joints will be more accessible from the top, call "UPPERS" and pass the coupler to the upper tech. He will fit it and then call "Shoot it" when he is ready. Before condemning any front end part as being "bad", develop enough experience so that you know what is abnormal. It is normal for certain suspension parts to move a certain amount. Use chassis lube sparingly. Do not pump until grease comes oozing out. One shot per fitting is plenty. If a grease fitting will not "take" grease, remove it and install a new one. CAUTION: Chassis lube is dispensed at very high pressures--over 5,000 PSI. Always pick up and hold the needle tip lube gun pointed away from you.

14. Lubricate the upper ball joints with assistance from the upper tech as described above if needed.

15. Inspect the steering and suspension. Shock absorbers okay? Springs secure? Bushings? Support bars? Constant velocity joint covers intact?

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16. Inspect the belts and hoses as visible from the underside.

17. Inspect for loose or frayed wiring, broken or distorted supports.

18. Inspect for loose nuts and bolts or any component that is loose, damaged or abnormal.

19. Inspect the brake system. Look for leaks, cracked lines and the thickness of the pucks if visible. Check discs for scoring if visible.

20. Inspect the tires. Look for nails, cuts, tread separation and unusual wear. When a tire is worn the point where the "wear bars" show, it is due for replacement.

21. Inspect the fuel system. Look for leaks, cracked hoses or lines, bad tank support straps, corrosion or other abnormality.

22. Spray rubber bushings with rubber lubricant. Use sparingly. Place the tip right at the bushing. Do not direct toward brake drums or discs.

23. Spray linkages and rust prone areas with the lubricant spray. Use sparingly.

24. Call ready for check.

25. Service & Safety check. Perform the S & S checks with the upper lube technician. He will perform the first part of the check alone since he serviced those items. Your "cue" is "Belts and hoses". He will state "Good above" and you will respond "Good below", assuming of course that they are in good shape. The remainder of the check is a challenge--response format with the upper tech calling the item and you responding with its condition or service you performed.

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Some elements of the S & S check are critical with an exact procedure and dialogue to be followed. The "script" goes like this:

U/T: "Oil change. 4.75 quarts PENNZOIL10-30 installed.

L/T: "Plug is sealed and tight, 14 MM. (Wrench size)

U/T: "Oil filter?"

L/T: "PZ9A installed."

U/T: "PZ9A confirmed." (Flips ticket over and confirm that the 9A filter was the designated one on the sales ticket.)

U/T: "Differential?"

L/T: "Topped off. Plug in and sealed tight."

Similar dialogue is used for transfer case and manual transmission plugs.

26. Quality control checks. Wipe the plug and filter completely dry. After the Upper Tech engine, inspect the exhaust system for leaks. Most exhaust systems have small round holes at strategic locations for trapped water to flow out. This is normal. A rust hole will have an irregular shape. After the upper tech calls oil pressure up, inspect the drain plug and filter for leaks. Allow ten full seconds for a leak to show before responding, "Sealed and Tight." Allow extra time for any unusual conditions.

27. Observe clearance as the vehicle departs. If it appears the clearance will be close, advise the upper tech to direct the car out especially slow. If it is necessary to lube the "U" joints as the

vehicle exits, tell the upper tech well before he starts to direct the vehicle out so that the customer will be informed.

GENERAL COMMENTS:

The lower technician's job is a very responsible position and is usually performed by the more experienced members of the team. To function well in this position you must have a strong sense of integrity--doing the right thing and fulfilling our promises to the customer even if only you know. Sometimes there will be a temptation to "let something go" because it requires extra effort. Perhaps a
zerk that is not taking grease properly or a fill/check plug that is overly tight or difficult to get to. Fight the temptation. The customer pays us a fee for performing and he deserves those services to be performed.

VEHICLE INSPECTIONS AND ADD-ON SALES

The Inspection Report is a one page report of the condition of various items on the customer's car. It lists the items we recommend servicing and the items we believe do not need servicing. OIL CAN HARRY'S exists to serve the customer and it is our goal to always serve the best interests of the customer. Our duty is to inform the customer of services that are due and make recommendations. It is the customer's prerogative as to whether the service will be performed.

The Inspection Report is presented along with a display of the PCV valve, air filter, breather and fluid or other samples removed from the customer's vehicle. A "rolling tool tray" is used to display the parts and samples. The fluid samples are small drops placed on 4 inch smooth ceramic tiles.

The importance of the Inspection Report to the customer.

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Many customers believe we only change their car's oil and filter. Presenting the Inspection Report allows them to have someone talk to them about many vital elements of their car. The Inspection Report does four key things for the customer:

1. It adds value to our service. Customers want to know the condition of their vehicle and what components need servicing.

2. It educates the customer about when and why certain services should be performed on their car.

3. It lets the customer know what services are needed and what services are not. Customers will come to rely on us to let them know if their car needs additional service. If you don't let them know you are not fulfilling your duty to the customer and not providing the service for which they paid.

4. The customer is given the opportunity to see, talk with and be confident about the person that worked on the car and very desirable "relationship" is formed.

The importance of the Inspection Report to OIL CAN HARRY'S.

The Inspection Report is a very powerful tool, which was specifically designed to accomplish the following. These can only be achieved if the Inspection Report is used consistently and in the proper order.

1. Expand OIL CAN HARRY'S 's sales revenue by expanding the services offered.

2. Provide a guide for the Team Leader to discuss the items for which service may or may not be recommended.

3. Establish the Team Leader as an "advisor" rather than "salesman". Our job as

professionals is to make the customer aware of what needs to be done--as recommended by the vehicle's manufacturer. When the inspection Report is used properly, the customer will be so informed without the perception of "being sold" and the presenter is functioning as a professional advisor and not as a "salesman". The key to really effective salesmanship is not "having the gift of gab" or being able to "con" someone. It's truly desiring to serve the customer and doing what is best for them.

4. Demonstrate our ethics. The Inspection Report shows the customer that we sell a wide variety of services. Some services they need and some they don't. We show and discuss both those that are needed and those that aren't. We show our ethics by demonstrating to the customer that we are trying to satisfy their maintenance needs not our sales needs.

5. Build trust. When our customers become aware that we are concerned about their welfare and not just trying to make a sale, they will have trust in our recommendations. Our philosophy is that there is plenty of business to be had by following the manufacturers' recommendations exactly. There is no need to sell a customer an unneeded service.

Presenting the Inspection Report.

Before you read this section of the manual, look over the copy of the Inspection Report located in the appendix so you can refer to it. The Inspection Report includes the additional services and products we offer.

1. Transmission service.
2. Differential fluid service.
3. Chemical additives.
4. Air filter.
5. Breather element.
6. PCV valve.
7. Light bulb replacement.

8. Wiper blades.
9. Oil system cleaner.
10. Serpentine belts.
11. Tire rotation.
12. Radiator drain & fill.
13. Air conditioner recharge and inspection.
14. Fuel system service.

Take a moment and locate each item on the report. The report is broken down into three columns:

1. "Satisfactory condition.
2. "Replacement or service recommended."
3. "Not applicable."

After you decide whether a service is needed or not needed, check the correct box in the correct column. When an item falls into the "Replacement or service recommended" category, also enter the price so that you can refer to it during your presentation.

The back of the Inspection Report includes a brief description of our more complicated services such as the automatic transmission service, the radiator system service and the fuel system service. Because they are higher priced services, customers often ask what is included in the service. You can refer to these descriptions to answer these questions. The descriptions are written clear and concise so the customer can see that you have a high level of product knowledge.

How to complete the Inspection Report.

To fill out the Inspection Report, you must do product sampling and evaluation. Product sampling is covered in the next section of this manual. Sample evaluation is sometimes difficult for technicians to understand and perform correctly. The important issue to remember is that you are not working on your own car. You are working on a customer's car. You are trying to fulfill the customer's needs for preventive maintenance. Although you may enjoy spending a Sunday

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afternoon repairing a transmission, our customers typically don't and prefer to invest in preventive maintenance so they don't have to endure the inconvenience of roadside failures or unscheduled repairs. Many customers are downright particular about their car and want only the best for it.

The fluid samples are used to simply show the customer for their own awareness or to support a service recommendation based on mileage. The fact that the fluid is dark in color is not necessarily justification for changing it. OIL CAN HARRY'S makes recommendations for fluid change based only on odometer mileage as recommended by the manufacturer.

Image and the Inspection Report.

Your image is critical in giving a customer a proper perception of OIL CAN HARRY'S. Your image is also important in the presentation of the customer's maintenance report. Since an Inspection Report is given to every OIL CAN HARRY'S customer, here is your opportunity to demonstrate a positive image to the customer. Remember the five factors that make up image--professionalism, attitude, eye contact, voice tone and posture.

Always remember that we exist to serve the best interests of the customer. Treat the customer--and advise them--as if they were members of your own family. OIL CAN HARRY'S is successful because we are honest, sincerely desire to serve the customer and seek permanent, long term, regular customers through providing superior personal service.

Presenting the "All satisfactory" Inspection Report.

The "All satisfactory" Inspection Report is an opportunity to show the customer we do not try to sell everything to everybody. It is also an opportunity to educate the customer on our product line and recommended service intervals.

The dialogue for a typical "All satisfactory" Inspection Report might go like this:

"Hi Mr. Jones! My name is Joe and I'm the technician that worked on your car. I would

like to go over the inspection report with you. Everything looks good. The transmission fluid looks good, bright red. Radiator coolant is full, bright green and good to -34 F. The differential fluid is clean, no grit. The air filter and breather elements are pretty good. They've picked up a little but change is not recommended yet. The PCV valve is OK, it is not clogged and doesn't have any carbon build up. The headlights, taillights and signal lights are all functioning properly. The serpentine belt is OK. There are no cracks on it. How about your wiper blades? Were they doing a good job for you the last time you were in the rain?"

Depending on the vehicle's mileage, you can continue asking questions regarding the car's service history. "Has a fuel system service been performed in the last 15,000 to 25,000 miles? The fuel filter looks like the original. Has it been replaced in the last 15,000 miles? We now offer a tire rotation service. How about your tires, Have they been rotated in the last 6,000 miles?

This "All Satisfactory" presentation educates the customer by showing them what characteristics are used in evaluating each sample.

Presenting the "Service recommended" Report.

Since almost all of the twelve services are recommended at different mileage intervals, most cars will have some items that need service. Evaluate your samples and make an 'X' in the box on the Inspection Report, which shows whether the item is recommended for service or is in satisfactory condition.

Any time you must present items that need service, take a brief moment to review the Inspection Report. Think before speaking to the customer so that you know what you are going to present and in what order. Take the samples with you to the driver's side door displayed on the rolling cart tray. Address the customer by name and begin your presentation. Keep in mind that some customers, both men and women, can be intimidated by this presentation. Maintain a tone of voice, demeanor and attitude that indicates you are advising the customer, not selling. The positive image you project will help present the maintenance report and eliminate any feelings of intimidation that the customer may experience.

When you present the Inspection Report, you need to be pleasant, knowledgeable, clear and brief. You have a number of goals to accomplish and a short period of time to accomplish them. Keep in mind that even though time is short; you do not want the customer to feel rushed. An Inspection Report can be done completely and in an unhurried manner in about one minute.

Since the Inspection Report is new to many of our customers, you need to introduce yourself. "Hi Mr. Jones! My name is George and I'm the technician that's working on your car. We give each customer an Inspection Report that shows the items we checked and the condition of those items." Then proceed with your presentation.

Go over the items that are "Satisfactory" first and get them out of the way. Start at the top of the "Satisfactory" column and work your way down. Stay in this column all the way to the bottom. Do not jump over to the "needed" column. For example, "The transmission fluid looks good, bright red. The radiator coolant is full, bright green and good to - 34 F." This educates the customer and shows them you are knowledgeable and trustworthy.

Keep in mind that you need to be brief without being abrupt or rude. Don't get sidetracked or longwinded. If you feel this is happening, glance at the Inspection Report. Check which item you are on and which one you want to go to next and get back on track. Remember that the Inspection Report acts as your "guide".

After you have completed the "Satisfactory" column, move over to the "Service recommended" column. Start at the top and work your way down. When presenting items that need to be serviced, be truthful. If the air filter is very dirty, tell the customer the air filter is very dirty and we recommend replacing it.

When you present an item that is needed, identify the item by name and:

1. Say that it needs service.
2. Show the customer their sample.
3. Point out the "visible defect" or mileage that leads you to your recommendation.
4. Show them the sample and then point out the defect written on the maintenance report.
5. Tell them the price of the service.
6. Ask if they want to have the service done. (Always ask if they would like the service done for each item individually. (As an alternative, it might be appropriate to discuss one of the "package deals.)

Avoiding the pitfalls.

Potential pitfalls exist in any sales presentation. This section is designed to make you aware of what they are and to help you avoid them.

1. Some competitors misuse the sample presentation. When preparing a fluid sample, new fluid is put next to the customer's fluid. The customer is then told, "This is your fluid and this (pointing to the new fluid) is what it should look like". DO NOT USE THIS APPROACH. Most

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customers realize that their fluid will not look new after just a few miles of driving. The customer will "tune out" the rest of your presentation if they do not feel your statements are accurate or that you are just trying to sell them something without concern for their welfare. Instead, simply say, "This is your fluid and this is what new fluid looks like. The new fluid shows the contrast so you can see how your old fluid is doing." The appearance of the fluid may lead to further conversation but should never be the sole basis of recommending service.

2. Check the mileage on a car before you give an Inspection Report. Sometimes a sample will look bad before the service interval. City driving, rapid starts and stops, towing, dusty roads, short trips and other severe driving conditions mat cause a service to be needed before its normal interval.

3. Checking the mileage before giving the Inspection Report allows you to go into the presentation prepared. You can start by saying, "I realize your car has 12,000 miles. Normally I don't recommend the service until 15,000 miles, but your . . ." You are also ready for any questions and appear knowledgeable, instead of looking caught off guard.

4. Don't let your voice be flat or monotone with customers. Sometimes you say the same thing over and over, on twenty different Inspection Reports during the day. When you do this, it is easy to end up in a rut and sound like you are saying the same thing over and over. Customers can pick up on this. In order to avoid losing your customer's confidence, you need to vary your presentation somewhat from person to person. Keep your voice animated, psyche yourself up and work in something unique to this particular customer if possible. When you do these things, you put the customer more at ease because your presentation is more natural. Remember, although you have heard it many times, the customer hasn't.

5. We advertise that we provide an Inspection Report and the customer is paying for an Inspection Report. The surest way to lose a customer is to not deliver on something we have promised to do. Don't think you are too busy or don't have enough time to give an Inspection Report. It's as much a part of our service is installing the oil filter and presented properly, it should only take about a minute.

6. Don't miss-read the customer. You will never know how someone is going to respond to the Inspection Report until you do your presentation. Young, old, male, female, Mercedes or Yugos, **It's your duty to inform the customer.**

Collecting samples for the Inspection Report.

The air filter, breather, PCV valve and fluid samples are normally easy to remove or obtain. The concept is to show the customer all items whether good or bad so that we are informing them of the condition of items as opposed to just selling things.

PCV valve. The PCV (Positive Crankcase Ventilation) valve controls the amount of gases recycled into the engine combustion chambers. The PCV valve usually sits directly on the valve cover and is held in place by a rubber grommet. A small diameter black rubber hose goes from the top of the PCV valve to the intake manifold.

To check the PCV valve, just pull it out of the rubber grommet. Always check the rubber grommet as you pull the PCV valve out to make sure it doesn't tear. If it has carbon deposits or is blocked with sludge deposits it should be replaced. There are other clues to the need for replacement such as oil in the air filter housing or oil leaks at most every gasket or seal. Remove the inlet hose and set the PCV aside with the other samples.

It is not commonly known, but replacing the PCV valve can cure oil leaks. If the PCV valve is plugged, blow-by gases from the pistons flow backward towards the breather and the crankcase contaminants tend to rapidly clog the backside of the breather. Once the breather is also clogged, the blow-by gases have nowhere to go and build pressure inside the crankcase. Engine seals are not designed to hold back pressure and "oil leaks all over the place" is the result.

Automatic Transmission Fluid. The transmission fluid condition is checked near the end of the 'U' shaped hood procedure. The dipstick is pulled and the condition of the fluid is noted. Worn transmission fluid will turn brown and will have a burned odor. The more darker brown the fluid, the worse the condition.

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If any of these conditions exist, a fluid sample should be shown to the customer. A fluid sample is made by pulling the dipstick from the tube and holding the end of the dipstick over the white 4" square tile labeled TRANS. Allow the fluid to run off the dipstick onto the tile. The sample should be about the size of a dime. It may be necessary to put the dipstick back into the tube more than once to get enough fluid to generate a sample. After the car's sample is on the tile, place a sample of new transmission fluid next to it. The new sample should also be about the size of a dime.

Coolant. The coolant sample should be taken last, right before you give the customer the Inspection Report. The sample is taken using the test bulb, the same way the fluid was checked earlier in the procedure. Bring the test bulb with you when you give the Inspection Report. Weak antifreeze will show a low freeze or boiling point. Coolant that has lost its corrosion protection will begin to brown or show a rust color. (Late model GM anti-freeze is orange in color and should not be mixed with the older green formula.)

Differential, transfer case and manual transmission fluids. These fluid samples will be prepared by the Lower Technician and placed on the tiles marked "DIF", "TC" or "TRANS", as applicable, in the same manner as the transmission fluid sample.

Air filter. The air filter is found in the air filter housing. They come in various shapes and sizes and some vehicles are equipped with two. Air filter housings are normally found either on top of the carburetor in the center of the engine (older cars) or off to the side and connected to the carburetor with a large tube (newer cars). They are usually black metal or plastic and have a cover that is held down by wingnuts, clips or screws. Checking the air filter first requires the removal of these fasteners.

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Use caution as you remove the fasteners to insure that they don't fall into the engine compartment and become lost. Lift off the air filter cover and set it off to a safe spot under the hood or tilt it away if connected with a tube. Do not place the cover near any rotating part of the engine. Place the wingnuts, screws or clips either on the air filter cover, or if that isn't practical at a nearby safe location. Then remove the air filter.

CAUTION: When you put the cover back on the air filter housing, make sure it is aligned properly. Do not force anything. When installed properly everything will fit smoothly back together. If difficulty is encountered, back off and investigate why. Forcing plastic parts into place results in breakage and perhaps an expensive repair.

Crankcase breather. The crankcase breather's job is to filter air going from the atmosphere into the crankcase. It is an important filter and most manufacturers recommend replacement at the same interval as the air filter. Crankcase breathers are commonly located inside the air filter housing but on some vehicles will be connected to the engine via hoses. Some older cars have the breather incorporated into the oil fill cap.

Those breathers located in the air filter housing are removed by removing a spring clip that holds the breather in place and disconnecting the hose that connects the breather to the engine. Others are removed by disconnecting the hoses that attach to it.

The flow of air through the positive crankcase ventilation system is from the atmosphere through the breather to the crankcase where it picks up combustion by-products, unburned fuel, etc. The air then flows through the PCV valve which meters the flow on to the intake manifold. From there it goes on into the combustion chambers where the contaminants are burned. If the PCV valve becomes clogged, blow-by from the pistons will build pressure in the crankcase and the airflow will move in reverse back toward the air filter housing carrying an oily mist with it. If you find the backside of a breather is dirty or there is oil in the air filter housing, it is a sure clue that the PCV valve needs replacing.

SERVICE AND SAFETY CHECKS

The Service & Safety Check is a critical part of our service. It is the last chance we have to correct an error before the customer leaves. There are seven errors that can occur while changing oil, which will lead to a major quality control problem. It would be unrealistic to expect that they will never occur. They will. Technicians are human and humans make mistakes. But we must catch those errors before the customer gets out the door. They are:

1. The oil cap can be left off and all the oil can be spilled from the engine.

2. The oil drain plug can be left loose or improperly installed, causing loss of all oil and catastrophic failure of the engine.

3. The oil filter can be left loose resulting in loss of all oil.

4. The oil filter can be installed with two gaskets under it, the old and the new, resulting in the gasket blowing out and loss of all oil.

5. The wrong filter can be put on the car. The filter could become loose or not seat properly which will cause sudden loss of oil and severe engine damage.

6. The differential, manual transmission or transfer case check plug can be left out or loose, causing gear oil loss and catastrophic failure.

7. Adding the oil may be omitted causing the engine to seize.

1. Oil Drain Plug Check. The Lower Technician uses a torque wrench and applies pressure in the tightening direction until the wrench clicks, enabling the Upper Tech to confirm the plug is torqued properly. The socket size is noted. The dialogue:

UT: "Oil change--4.75 quarts of PENNZOIL 10-30 installed."

LT: "Old oil drained. Plug & gasket inspected, back in sealed and tight, 14mm." (The Upper Tech enters the drain plug size on the S & S checklist. Doing so documents that this check must have been performed because the socket must be placed on the plug in order to determine the size.)

UT: "Plug in and confirmed tight. 14mm." (This is stated with eye contact with the customer so the customer is aware that two people can attest to the fact that the drain plug was properly installed. The intent is to dissuade a customer contemplating fraud from doing so.)

2. Oil Filter Check. The Lower Technician uses an oil filter wrench and applies pressure in the tightening direction to verify to the Upper Tech that the oil filter is properly installed. The Lower Technician must use a wrench during the check. "Hand tight" is not acceptable. The dialogue:

UT: "Oil filter?"

LT: "PZ9A installed and tight."

UT: (Checks for PZ9A on the sales ticket.) "PZ9A confirmed.

4. Differential Plug Check. The Lower Technician puts the proper tool in the differential check plug and applies pressure in the tightening direction to verify the plug is tight. The dialogue:

UT: "Differential?"

LT: "Topped off. Plug in sealed and tight. 3/8 inch allen."

UT: "Plug in and confirmed tight. 3/8 allen."

Any plug that is removed needs to be checked in the same manner. The procedure and dialogue for the transfer case or manual transmission is the same that is used for the differential plug.

6. Final Oil Level Check. Wipe down the oil dipstick and check the level. It should be at the full mark or just slightly below. If not, adjust accordingly. The customer can then be shown the dipstick. If there are any problems with the dipstick, make sure the customer is notified and a comment is entered on the customer's copy of the sales ticket.

7. Cap Check. The Upper Tech touches every cap and dipstick and verifies that they are securely in place. Always double-check the oil cap and brake fluid cap before you close the hood. These caps are the highest liability caps under the hood!

SAFETY MATTERS

1. Be aware there are big holes in the floor. Don't fall in them. Do not walk backwards in the building.

2. The Lower Tech must be careful to keep his hands down while the car is being directed forward. Do not rest them on the safety rail. If you do, while you are watching the underside clearance, the car's front tires will be mangling your fingers.

3. The Lower Tech should not stand under the lower radiator hose just after the engine has been shut off. This is the most common time for a rotten lower radiator hose to split and can shower you with scalding coolant.

4. Cars should not be allowed in the building with a fuel leak.

5. Wipe up oil and grease spills immediately. They can not only cause falls; they will inevitably be tracked all over the building.

6. Should a car somehow drop a wheel into the pit opening, call a wrecker to lift it out. Attempts to get it out any other way will just cause damage.

7. Dirty shop towels should be stowed in the designated closed container.

8. No volatile liquids will be used in the basement.

9. Review locations of shut-off valves to the point that they are instinctively set in event of a hose rupture or other high volume leak.

10. Fire extinguishers and first aid kits should be inspected every morning as part of the opening check. Dry chemical extinguishers are not to be tested. Once the trigger is pulled--even for just a moment--the extinguisher must be recharged.

11. Cars will not be pushed without a driver behind the wheel and the door closed.

12. Engines will not be started without a driver behind the wheel and the door closed.

13. Be careful around exhaust pipes and turbo pipes. They are hot! Use the arm protector.

14. Never allow children in the work area. With diplomacy and tact, request the customer to keep children in the lobby.

15. After the job insure that the vehicle is driven out slowly.

16. Smoking is prohibited in the building or in the presence of customers.

19. The emergency phone number for police, medical or fire is 911.

20. If an accident should occur, remember the three-point first aid course:

A. Keep them breathing.
B. Stop the bleeding.
C. Make them comfortable.

21. Treat lawnmowers and other landscaping tools with respect and follow manufacturer's recommendations. When using electric hedge trimmers, keep the power cord behind you.

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22. Make sure the battery charger is turned off prior to connecting and disconnecting from the battery. If using jumper cables always make the ground connection last and make it to some point away from the battery such as the engine block or vehicle frame. Batteries produce explosive gases that may ignite from any spark produced near them.

23. Use common sense and engage the brain before engaging your hands, feet or mouth.

24. Do not do anything involving ladders or stepladders if you are the slightest bit uncomfortable.

25. While working as a lower tech, if the upper tech says something and you don't understand him, don't look up. He may be saying something like, "Battery acid coming down."

26. Finally, keep the customers safe. They are not familiar with the operation and are not aware of the hazards. Be polite and use diplomacy, but be firm. Be prepared for the customer to do strange things. They will put their hand down under the hood just as you close it; they will stick their fingers in the fan to point something out to you; they will step in the pit. They slip and fall on one drop of oil. You must take care of them.

EMERGENCY PROCEDURES

1. FIRE. The building and procedures have been designed to make a fire unlikely. However, in the event of a major fire, the first consideration is to get out. After you are out and have evaluated the situation, should you feel the fire could be extinguished, then re-enter keeping yourself between the fire and an exit. There are a number of methods to extinguish small fires. A handful of shop towels dipped into the squeegee bucket and plopped on the fire can be effective. The water nozzle at the console may be used. Use the fire extinguisher if those methods are not effective. If a vehicle is on fire and the fire cannot be extinguished put it in "neutral" and push it out the door if possible. Push it as far from the building as possible.

An electrical fire usually gives plenty of warning. If you smell insulation burning, immediately shut off the main power switch. Turn off all electrical circuits and shut off all circuit breakers. Then turn on the circuit breakers one at a time and observe the electric meter to determine the defective circuit. If an electrical fire is detected on a vehicle, disconnect the battery.

2. ARMED ROBBERY. Move slowly. Realize he is excited. Comply with any instructions. Tell him you are going to comply. Remain as calm as possible. Note specific items of description such as height, weight, hair color, eye color, dress, hair length, scars, race, speech characteristics, etc. Note the type of weapon and which way they departed. What kind of vehicle? What color? Call police and then call the General Manager. Your safety and well being is many times more important than the small amount of cash that OIL CAN HARRY'S normally has in the till. Let it go. **Do not be a hero!!!**

3. TORNADO. Get everyone in the basement. Park cars over the pit and shut off the electrical main if time permits. Lay on the basement floor against the wall. Expect windows or glass items to become shrapnel.

4. HURRICANE. Bring in all loose objects. Board up glass doors or "X over" with tape. Shut off all valves. Shut off water at outside cut-off. Shut off main electric switch. Release crew well ahead of expected arrival to allow time to evacuate family or make other preparations at home.

5. PERSONAL INJURY. Stop the bleeding. Keep the victim breathing. Make them comfortable. Call 911 for ambulance if needed.

6. CUSTOMER MEDICAL PROBLEM. Look for a "Medalert" medallion. Consider notifying relatives. Call ambulance if necessary. Make victim as comfortable as possible. Diabetics may enter what is known as insulin shock. They go through a stage that might be confused with drunkenness and then lapse into a coma. If a customer appears drunk but has no smell of alcohol, offer a soft drink or other product containing sugar.

7. ELECTRICAL FAILURE. Continue operations if sufficient air pressure available. Conserve air. Use oil from quart bottles if necessary. Keep a small supply of other fluids in bottles to be able to continue servicing vehicles.

8. COMPRESSOR FAILURE. Secure at circuit breaker box. Continue operation on the other compressor or rent a portable compressor if equipped with only one. Notify General Manager.

9. "LOST THE KEYS." Call General Manager immediately. If not available call a locksmith. If a locksmith is not available, get the building opened with minimum damage. The idea is that more will be lost with the building and crew sitting idle than the cost to replace a window or lock mechanism. Do whatever is necessary to get the business open and operating and then effect repairs as soon as practical.

10. BIG OIL LEAK. Immediately close applicable valves. Disconnect air line to pump if leak is downstream from the pump. If the leak is in a sight gauge line, shut off the valve at the base of each tank. If the leak is from a bulk tank, make every effort to direct the oil into the basement or into a retention swale if so equipped. The goal is to prevent the oil from reaching the ground outside. Shovel dirt to make a dam or direct the oil to the basement. Obtain 55-gallon drums or other containers and pump remaining oil into them if necessary. Use the vacuum system to remove oil wherever possible. Notify General Manager.

11. CAR IN PIT. Call a wrecker service. The wrecker can lift the car up and swing it back over the pit opening.

GENERAL CONSIDERATION. Do whatever is necessary to keep the business operating if possible. Take whatever action seems appropriate to minimize damage or assist others in difficulty. If a problem exists, it's better to do something rather than stand idly by. It is easiest to lead in an emergency since most people will readily follow instructions but hesitate to take the first action.

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TROUBLE SHOOTING

1. No oil pressure following service. If there actually is no oil pressure, the engine will be clattering and making loud, loose, rattling noises especially in the valve train. If so, shut the engine down. Check that oil was actually installed and that the level is proper. If so, the oil pump has lost its prime or is defective. It may be possible to regain prime by adding two to three quarts additional oil. Once prime is regained and oil pressure exists shut off the engine and remove the excess oil. It is possible to lubricate the engine between tries by injecting oil into the oil pressure stud with the dispensing nozzle.

2. Bad oil pressure sending unit. If the engine sounds normal but oil pressure is not indicated, the problem is probably a loose wire or bad sending unit. If equipped with a gauge, the sending unit normally completes a rheostat circuit to ground as it is activated by oil pressure.
Remove the wire from the sending unit and momentarily touch to ground. If the oil pressure needle swings all the way to the right, then the sending unit or connection at the sending unit is bad. If pressure is still not shown, the wire is broken or disconnected somewhere between the sending unit and the gauge or the gauge is bad. If equipped with an "idiot light", the sending unit is a switch that is normally closed completing the circuit to the light when the ignition switch is turned on. When opened by oil pressure acting on a diaphragm, the circuit is opened and the light goes out. Remove the wire from the sending unit while the engine is running. If the light goes out, the sending unit is bad. If it stays on, the wire is shorted to ground somewhere between the sender and the dash light.

3. Car runs rough and won't idle. Listen for a loose vacuum hose. Check the oil fill cap. On some cars, the idle mixture is dependent on a sealed engine. Leaving the oil fill cap loose allows air to enter and idle mixture is affected. Check the Mass AirFlow Sensor sometimes we may knock it loose while checking the air filter.

4. Car won't upshift out of low range. Vacuum line loose on modulator valve at transmission or at intake manifold. Might have cracks from aging. Disconnect at modulator valve with engine running and check for vacuum at the hose where it attaches to the transmission. Check fluid level. If a front wheel drive Saab with an automatic transmission, check to see if the lower tech

inadvertently drained the transmission instead of the oil.

5. Peugeot or Renault overheats. Gasket may have been dropped out of coolant bottle cap. This gasket is necessary for system integrity. No gasket, no pressure and the coolant boils away. (Many model cars after 1995 also have this arrangement.)

6. Saab won't shift out of low. Lower tech may have drained transmission instead of oil pan. Oil drain plug on front wheel drive Saabs with an automatic transmission is flush, higher than the transmission drain plug and hidden in a recessed area.

7. Starter won't turn over engine. There are numerous things that can cause the problem. Use the following sequence to isolate the cause: CAUTION: Insure the vehicle is in "park" or "neutral" with parking brake firmly set. Some of the procedures will start the car bypassing safety cutouts.

A. Complete circuit from battery post to terminal by holding a screwdriver blade firmly between them.

B. Turn on lights and blow horn. If lights are dim and horn volumes low, boost battery with battery charger.

C. If nothing electrical works, test for broken or disconnected main cables.

D. Some import cars have main fusible links for each major circuit. Locate fusible links and test with circuit tester. (Fusible links may be jumped with a piece of hook-up wire to get the vehicle going, but it should be replaced at the first opportunity.)

E. Use circuit tester to see if current is flowing to start terminal on solenoid when ignition switch is turned to the "start" position. If not, either the ignition switch, wiring or safety cutout switch is defective. Connect a jumper wire to the positive side of the battery and hold it to the "start" terminal to start the car.

F. "Jump" the solenoid main terminals with pliers or a heavy gauge wire if the solenoid is located under the hood. (Ford products)

G. Check to see if current is flowing to main input terminal on starter solenoid. If not, there is a broken or disconnected main cable.

H. Tap starter with hammer while starter switch is engaged. If the starter now operates, it indicates either stuck brushes, jammed drive or bad solenoid.

I. Wiggle main power cable to starter while "start" switch is engaged. If the starter now works there is a bad connection, sometimes inside the solenoid due to a stripped stud or broken housing.

J. Jump across the main solenoid terminals with a heavy gauge wire or screwdriver. (GM type starter. Starter will spin but not engage.) If starter motor spins but step E and H did nothing, the solenoid is bad and must be replaced.

K. Turn engine backward slightly by hand and then try routine start. If the car now starts the problem was a jammed starter drive.

L. Change the starter.

8. Excessive transmission fluid consumption. Seal leak. Pan leak. If car is smoking, fluid may be being sucked up through a bad vacuum modulator valve. Disconnect the vacuum modulator hose at the intake manifold and inspect for oily appearance inside hose.

9. Oil leaks. Oil may leak from the engine at several points. Since the oil drain plug is at the low point of the engine and most any oil leak will eventually leak from that point, the customer may assume it is a leaking drain plug. A drain plug leak will leak continuously whether the engine is

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running or not and will usually be evidenced by a large puddle of oil under the car that gets bigger and bigger even if the car is not driven. All other leaks will occur only when the engine is running. The most common leak point is the valve cover. A leak from this source will usually be toward the rear of the engine and will result in oil seeping down the side of the block. Another common leak point is the oil pressure-sending unit. These are the only leaks that can be economically repaired. Other leak points are the pan gasket, which will produce a wet pan but the block will still be dry; the front seal which will normally be obvious by oil on the front of the oil pan; and the rear seal where the oil will be seen dripping from below the flywheel cover. An oil filter leak is usually characterized by "oil all over the place" since the oil is under pressure at that point and will usually be spraying out in significant amounts. A pin hole oil filter leak is usually the culprit when a "big mystery" oil leak is encountered. What happens is that a very fine stream of oil will squirt a long distance--and that stream may not be visible. When you find an oil leak that appears to be coming out of the radiator, or from the alternator, etc., check for a pinhole leak at the oil filter.

The problem of isolating an oil leak is that an engine with substantial mileage on it will usually have a combination of leaks at some or all of the aforementioned points. However, the filter and drain plug gasket can be eliminated as possibilities quite easily. Simply thoroughly dry the area around them and operate the engine for a few minutes. Both should stay absolutely dry if not the source of the problem. Remember that only a minute amount of oil seeping from the drain plug will result in a big spot on the driveway after the car has sat for a day and may drain all the oil in a few weeks. The drain plug must be absolutely dry with absolutely no seepage. If faced with a persistent seep at the drain plug even though a new gasket has been installed, check for a defect in the gasket seat. If the defect is just a minor scratch, applying gasket shellac to both sides of the gasket may solve the problem. Some Toyota engines came off the assembly line with a very slight depression in the gasket seat. A Toyota gasket must be used if such defect is found. The additional thickness and "pillow" provided by this gasket will fill the depression.

10. Car smokes after service. Oil may have been introduced into the carburetor. Some vehicles, especially vans and motorhomes, vent the crankcase by a hose or pipe that runs from the oil fill pipe to the carburetor or intake manifold. When adding oil to this type vehicle, care must be used to slowly add the oil so that the oil doesn't back up in the fill pipe and run down into the intake

manifold.

Another common cause is worn valve guides. When oil is added, it normally goes first into the valve rocker area. The car may not normally smoke since only a small amount of oil is present at the valve stems. However when a gallon of oil is poured in and the valve stems are submerged in oil, the oil will run down a leaky valve seal into the combustion chamber. Simply run the engine in either case until the smoking stops.

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THE PRODUCTS

1. Motor oil. Motor oil performs five functions in the engine. It lubricates the moving parts, seals the piston rings, cools the cylinder and crankcase area, cleans the engine by picking up particles and holding them in suspension, and protects the engine against corrosion and acids. Modern, high quality oil is designated "SJ". The two-letter designation is just the latest and best the motor oil industry has to offer. Older oils were designated SD, SE, SF, SG, SH, etc. Oils specially formulated for diesels will also have a second set of letters--CD. The "weight" of oil is the indication of its viscosity, or thickness. 40-weight oil is thicker than 30-weight oil. Multi weight oils are suitable for use in a wide temperature range, however they are not recommended for use in diesels except in cold temperatures.

All oils are formulated with additives such as detergents, viscosity index improvers, anti-wear agents, corrosion and foam inhibitors, etc. Oil basically lasts forever. The additives don't. Oil becomes contaminated as it picks up dirt passing through the engine and combustion byproducts that escape past the piston rings. Oil should be changed at about 3,000-mile intervals when used the way a typical auto engine is operated. At about the 3,000 mile point, the filtering element is clogged to the point where the filter by-pass valve begins to open permitting unfiltered oil to pass on to the bearings and other internal components. An engine that sits for long periods and then is driven for only short trips will probably wear out faster than one driven regularly with twice the mileage. The reason is that rust forms on the cylinder walls and valves. After sitting for an extended period the protective oil film will drain from the cylinder walls and on start-up the piston will make several strokes on the dry, rusty surface before it becomes once again coated with oil. Every time a cold engine is started, up to a quart of water is condensed inside the crankcase. This water combines with the combustion by-products to form acids, which attack the internal parts in the engine. For these reasons, oil should be changed at three-month intervals even if driven less than 3,000 miles.

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The proper weight of oil to recommend to the customer is that shown in the General Manager's manual. 10W-30 is acceptable to most all manufacturers for cars driven in the "lower 48" throughout the year. Honda and some Fords are exceptions and specify 5W-30 year round. Diesel engines usually specify single weight oil or 15w40. Over the past ten years there has been a move toward lighter weight oils. Turbos are a popular option and the lighter weight oil gets to them sooner as well as reducing other component wear on start up. It has been found that the splash/spray of thinner oils coats the cylinder wall sooner and substantially reduces the wear during start-up. Lighter oil produces less internal friction and gives better gas mileage. It flows more easily reducing the depositing of contaminants inside the engine. **CAUTION:** Although many manufacturers consider 5W-30 oil "preferred", it frequently is recommended only when the temperature is below 69 degrees. Be careful in recommending 5W-30 --even though it is on the oil cap--without consulting the lube guide first.

2. Oil filters. The oil filter does just that--filters the oil. The oil goes into the filter via the small holes, goes through the filtering element and then exits via the single, large hole. As the filter does its thing and fills with contaminants, a by-pass valve begins to open to continue supplying the engine with oil. If the filter is not changed at the proper interval, the filter will clog completely and the by-pass valve will open fully to continue supplying the engine with oil, however it will be dirty oil and will result in rapid wear. A clogged oil filter cannot cause a substantial loss of or an increase in oil pressure. There will be a slight (about 2 PSI) pressure drop due to the loss of the pressure required to open the valve against spring tension. The only thing that can cause excessive oil pressure is a defective oil pressure relief valve located at the oil pump. If the filter is mounted "upside down" or at any angle other than straight up, it will have an anti-drainback valve. This is just a flapper valve that permits the oil to enter the filter but not flow out. Its purpose is to keep the filter full on shutdown so there will be no delay in oil getting to the bearings on the next start. The fact that an oil filter will screw on does not mean it is the proper filter. By-pass valve tension, gasket thickness and diameter, and other characteristics make every number different. THERE IS ONLY ONE FILTER NUMBER THAT FITS ANY PARTICULAR VEHICLE.

3. Chassis lubricant. Chassis lube is a petroleum-based product that is very thick and has additives to enhance its ability to provide lubrication to slow moving parts under significant pressure.

Chassis lube is lost through cracks in retaining boots and is washed out by water action as the car drives through heavy rain. It should be replaced at every oil change. When a new drum of chassis lube is set up, it is very important that the follower plate be removed from the old drum and placed on top of the new product. This follower plate pulls down as the product is consumed and prevents air pockets from forming.

4. Automatic transmission fluid. Automatic transmission fluid is a petroleum-based product that is formulated to lubricate, cool, clean and protect internal transmission parts. The three primary types of ATF are Dexron, Type F and Mercon. Some oil companies market an ATF that meets the requirements for both Dexron and Mercon. ATF is recognized by its distinctive red color.

Some Chrysler products use a special transmission fluid referred to as ATF PLUS. Some Volkswagens after 1984 specify a special ATF. Check the lube guide closely to insure the right fluid is inserted into the right hole.

When checking the transmission fluid level the engine should be running and the shift selector lever should be in "park" except for Chrysler rear-wheel drive cars—which should be checked in "neutral" and Hondas which are checked with the engine off. If the transmission has just been serviced, the shift lever should be moved through all gear positions, hesitating for a few seconds in each. The temperature of transmission fluid will affect the dipstick indication with almost an inch difference between "cold" and "hot". The reason for the substantial difference is that the dipstick is reading the fluid level in the pan—only a small portion of the total fluid in the transmission. It's similar to the action of a thermometer. A large quantity of fluid is expanding and that expansion is read in a small container.

If contaminated with water, ATF will look very much like a strawberry milkshake. The most probable cause is that the driver has driven through water deep enough to have submerged the vent. Another possibility is that there is a corrosion hole in the radiator between the ATF and coolant chambers.

5. Brake fluid. Brake fluid is not a petroleum-based product. Extreme care must be exercised to

insure nothing other than brake fluid is introduced into the brake system. Any petroleum-based product will cause the piston seals in the brake system to soften and leak with possible catastrophic results. Having similar looking cans of brake fluid and power steering fluid available to the upper technician is an invitation to disaster. Always dispense brake fluid from 12-ounce cans or a pressure dispenser especially designed for that purpose. Always promptly discard brake fluid cans when empty to preclude any possibility of some other fluid being placed in it and mistaken for brake fluid later on.

Conventional brake fluid is designated either DOT-3 or DOT-4; the primary difference being that DOT-4 has a higher boiling point. Ford products require a special type of DOT-3 that has a 550-degree boiling point. All English manufactured cars require DOT-4. Although brake fluid is combustible at very high temperatures, it does not produce vapors and is not flammable. (The difference between "combustible" and "flammable" has to do with flashpoint. Gasoline is flammable. Motor oil is combustible. The National Fire Protection Association has established a flashpoint of 110 degrees as the dividing point.)

An adverse characteristic of brake fluid is that it will absorb moisture if exposed to the atmosphere. Such absorption lowers the boiling point and causes brake fading or "sponginess". The function of the accordion rubber diaphragm in the master cylinder of many cars is to prevent an "air lock" and permit the brake fluid to flow freely in and out of the master cylinder reservoir. The cap is vented but the brake fluid is separated from the atmosphere by the rubber diaphragm.

Although rare, some cars may have silicone brake fluid (DOT-5) installed. Silicone fluid is superior in that it does not absorb moisture, has a higher boiling point and its use results in less corrosion and pitting of internal parts. Conventional and silicone fluids do not mix, but no physical damage will occur to the components if the inappropriate fluid is installed. What will happen is that the heavier conventional fluid will flow to the bottom of the system. That's where the wheel cylinders are located—as well as the heat—and system performance will be degraded to the lower quality conventional fluid. Since silicone fluid is expensive, it will normally be found only on antique, specialty or exotic cars.

Brake fluid is a paint remover and should never be allowed to drip onto painted surfaces. If such occurs, wash off immediately with mild soap and water.

Brake fluid is also used to service hydraulic clutches. Do not use in load leveling systems or convertible top mechanisms. These systems use a special hydraulic fluid and are usually referred to the dealer for service.

SPECIAL UPDATE. There is a growing industry consensus that brake fluid reservoirs should not be topped off as a routine practice. This is the logic: There should be no leaks whatsoever in the brake system. When the car leaves the factory the brake fluid is at the "high" mark. As the brake pads wear down fluid is transferred down from the master cylinder to the wheel cylinders. When the brake pads are worn down to the point the pads need to be changed, the master cylinder level will be at the "low" mark indicating to the General Manager that brake service is due. Some cars even have a float switch built into the master cylinder that causes a dash light to illuminate to indicate brake service is due. If brake fluid is added, this design feature is nullified. The first indication the driver will have that the pads are worn out is that noisy—and expensive—sound of metal on metal as the pad backing plate grinds into the rotors. So adding brake fluid may actually be a dis-service to the customer. If the fluid level is low, either a leak needs to be fixed or it's time for brake service. In either case the customer should be referred to the dealership or a brake specialist.

6. Power steering fluid. Power steering fluid is a petroleum-based fluid used in most vehicles' power steering systems. It is similar to ATF in appearance and viscosity. CAUTION: Many cars call for fluids other than the standard power steering fluid. Always check the lube guide closely.

7. Gear oil. Gear oil is 85-90 weight, high-performance gear lubricant suitable for differentials, manual transmissions and transfer cases where "GL-4" or "GL-5" is designated in the Lube Guide. The difference in the two is that "GL-4" is specially formulated for differentials and transmissions that incorporate bronze bushings. CAUTION: Many manual transmissions today use ATF, motor oil or special fluids.

8. Special fluids. There are several proprietary products that are required for certain vehicles and there are no substitutes for them. It is essential that the Lube Guide be consulted for every car.

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9. Air filters. An air filter is simply a pleated paper element with soft rubber gaskets that seal it in place so that airflow to the intake system passes through it. Typical recommended change interval is 10,000-15,000 miles. Assuming an oil change interval of 3,000, you should therefore be replacing air filters on about 20 to 30 percent of the vehicles serviced. Operation in dusty conditions such as dirt roads and in congested metropolitan areas may require more frequent change intervals, but the odometer mileage is generally the accepted method for recommending air filter changes. A simple test is to hold it up toward a light source. If light doesn't pass through, it is definitely past due. Operation of a vehicle with a clogged air filter will substantially reduce gas mileage and may cause rough idling and spark plug fouling.

10. Breathers. The crankcase breather is a small filter, typically located in the air filter housing, which filters the air from the atmosphere to the crankcase. It is normally recommended to be changed along with the main air filter. This filter is critical to the operation of the positive controlled ventilation system. If clogged, insufficient air will be drawn through the system resulting in a richer mixture and poor fuel economy.

11. PCV valves. PCV stands for positive crankcase ventilation. Years ago, crankcase vapors and blow-by gases were just vented overboard. This of course caused substantial contamination of the atmosphere. The PCV system was developed to pull the vapors into the combustion chamber where they would be burned. The PCV valve's job in this loop is to meter the amount of crankcase airflow into the intake manifold to keep the fuel/air mixture proper in the combustion chamber. If the valve sticks in the closed position, insufficient air will pass and the mixture will be overly rich--fouled plugs and poor gas mileage. If stuck in the open position, it will create an excessively lean mixture--rough idle, hesitation and stalling. The PCV valve also is a one-way safety checkvalve. In event of a backfire in the intake manifold, the pressure flowing backward toward the crankcase will slam the PCV valve shut so the flame from the backfire cannot travel into the crankcase where the vapors there might be ignited.

It is not commonly known but a clogged PCV valve can cause major oil leaks, a smoking exhaust and engine sludge. The flow of air through the PCV system is through the breather, then through the crankcase (where the blow-by from around the rings is picked up) then metered through

the PCV valve, then through the intake manifold into the combustion chambers where the vapors are burned. If the PCV valve is clogged, the blow-by along with the dirty, oily vapors flows backward through the breather into the air filter housing. The oily vapors settle out here and form a pool of liquid oil at the base of the air filter. When this oil builds up to a certain point, it is sucked into the carburetor and creates a smoking exhaust. Eventually the breather clogs up and now the blow-by has no place to go and builds pressure in the crankcase. The blow-by soot and combustion byproducts form sludge. Crankcase gaskets are not designed to hold backpressure (a properly functioning engine actually has a vacuum in the crankcase) and the result is leaks around the valve covers, oil pan and both front and rear seals. So if you have a customer with oil leaks "all over the place", oil in the air filter housing or clogged breather, check the PCV valve closely.

So the PCV valve is an important part. It is usually located in the valve cover--a pretty gooky place. It is a precision valve that when partially clogged with sludge can cause many problems. The simplicity of changing it and its low installed price makes it a solid recommendation for any vehicle that has over 20,000 miles since its last change.

12. Grease fittings. Commonly called "zerks", these are simply little one way check valves that allow grease to flow in but not back out. They come in "straight", 45 and 90 degrees. The metric version has 6-MM threads and the domestic type have 1/4--28 threads.

13. Engine cleaner. This is a solvent that is poured into the oil fill while the vehicle is in the prep area. The engine is then run for three to five minutes. The cleaner dissolves varnish and sludge, which is removed with the old oil when it is drained. It is especially recommended for vehicles that have more than 3,000 miles since the last oil change.

14. Fuel system cleaner. Most all late model cars are equipped with fuel injection systems. Varnish and other contaminants build up and can clog the very tiny orifices from which the fuel is sprayed. The fuel system cleaner is simply poured into the gas tank and cleans the injectors as it passes through with the gas. CAUTION: The fuel tank should not be near empty so that there is sufficient fuel to mix with the cleaner.

15. Service! Service is listed as a product to re-emphasize that service is the most important

product we sell. Or customers come to us to have the job done right and to be treated right. When you really think about it, the typical OIL CAN HARRY'S customer knows very little about the job we do on the car. They don't know what is in the oil filter. They don't know what is in the oil. When we pull out those hoses, they don't know what we're putting where. They really come to us on pure blind faith.

Perception transfer comes into play. They do know the facility should be clean. They do know that we should do what we promised in our advertising. They do know that coffee machines and water coolers should be immaculately clean. They do know that they and their vehicle should be treated with respect. They do know that if the team member has been trained how to do the job, he also would be trained on how to answer the telephone and address a lady. They do know that people who care maintain clean, pleasant surroundings and treat their customers with the highest level of courtesy and respect. When you think about it, the customer judges our performance on the car not by what we do on it, but rather by how he is treated and what he senses as the job is being performed.

Human behavior is based on a single underlying principle. Avoid pain and seek pleasure. There ain't no pleasure in a lube-oil-filter!!! You can't see the results. You can't feel the results. It does nothing for the ego. It's just something that must be done every three months or so and costs money while taking up time--about as much fun as paying quarterly income taxes.

Our challenge is to bring pleasure to the job. The customer is pleased by a compliment of his car--it is an extension of his personality. A hot cup of good coffee does bring pleasure to a coffee drinker. A gift presented brings pleasure. Expressing a caring attitude by thoroughly inspecting the vehicle brings pleasure because it eliminates the fear of "breaking down" away from home. A clean windshield and a new trash bag are visible. The convenience of drive-thru service brings pleasure because it allows time to do other things. A smile brings pleasure because the customer perceives it as a reflection of how he is coming across. The confidence of knowing that everything that should have been done has been done and the customer is properly caring for his car brings pleasure. A grandson admired brings pleasure to any grandparent. A rose brings pleasure to a lady. Having things brought to you or done for you is an ego boost and brings pleasure. A phone to chat with friends or relatives brings pleasure.

Those are the elements of our service that produce regular, repeat, and satisfied customers.

Those critical elements cost almost nil but they rest on your attitude and enjoyment of serving people. OIL CAN HARRY'S lube can market and advertise super personal service--but it is you that must deliver. A lube-oil-filter can be obtained at many competitors and for less than we charge. If that's all you give the customer don't expect him to come back. He is paying for--and deserves--special personal attention. Convenience, confidence and ego gratification must be installed on every customer just as surely as the oil filter is installed on the car.

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PROBLEM CARS AND ENGINEERING TRAPS

Certain cars have unusual characteristics or engineering "traps" built into them that require special care.

1. Ford products manual transmissions. The manual transmission fluid level inspection plug on smaller Ford products such as Mustangs, Capris and Broncos is located on the passenger side and is a pipe thread, recessed type plug. A hex head bolt on the driver's side about halfway up the transmission--right where you would expect to find the fill plug--is a bolt that extends through the case into the interior of the transmission on which the reverse gear linkage pivots. If removed, the transmission must be removed and disassembled to replace the linkage. This is a "classic" trap where the most competent mechanic will still go wrong unless he is aware of the specific problem. This particular engineering trap is the most common--and costly-- throughout the fast-lube industry.

2. Volkswagen diesels. This engine has a very high oil pressure, requiring a special filter that should be tightened an additional 1/2 turn more than the norm. If you don't recognize it's a diesel or misread the catalog and install the filter designed for the gasoline engine, it will almost certainly result in a destroyed engine because the higher pressure will either blow out the gasket or deform the filter's thinner base plate.

3. Renaults. Renault engines may have either a standard 3/4"-16 thread stud or a 20 MM X 1.5 metric stud for oil filter mounting. Paying close attention to the catalog is not sufficient because the engines may have been changed. If the slightly larger 20 MM X 1.5 thread filter is screwed onto the 3/4-16 stud, it will fit close enough to tighten up with no leaks and feel almost normal. However, once the engine heats up to normal operating temperature and the base plate expands, the filter will suddenly pop off with catastrophic results. Since there are only two filter stud sizes designated for Renaults, the solution to the problem is simple. Always try the small hole filter (3/4"-16) first. If it simply won't go on, then use the other (20 MM X 1.5) filter.

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4. Saabs, front wheel drive with automatic transmission. Some models have a transmission drain plug that may be confused with the oil drain plug. The "trap" is that there is a drain plug on the automatic transmission, which is not common. This drain plug is the lowest point of the engine/transmission assembly. The crankcase drain plug is several inches higher and is a recessed drive type plug that is not prominently exposed.

5. Ford oil pans. Ford oil pans after 1982 use a thin, hard piece of metal electrically welded to the inside of the oil pan to form the oil drain hole rather than the conventional welded nut. Since it only has about three threads, it is easy to strip drain plug threads (torque to 15 ft/lbs) and never attempt to use an oversize plug. The hard, thin metal only has about 1/8" of metal around the hole and will tend to crack as the wedge-shaped oversize plug is installed.

6. Audi turbo models. The Audi turbo may have two filters close together. One is relatively short and is mounted horizontally. This is a specially designed filter that will withstand the much higher oil pressure going to the turbo. The filter mounted vertically is the conventional oil filter. The trap is that both filters have the same stud size. If the conventional filter is mounted on the turbo stud, the higher oil pressures will unroll the lock seam of the filter resulting in complete oil loss--and engine failure.

7. Toyotas. Many Toyota engines came off the assembly line with a defect in the oil drain plug gasket seating area. It is a slight depression that can be recognized by simply rubbing your finger around the drain hole. If detected, use only the special Toyota gasket. It is thicker and more "rubbery" than the standard nylon gaskets. The additional "pillow" is sufficient to fill the depression.

8. Most Japanese cars. Nissans, Mazda's, Isuzu's, etc., frequently have the oil pressure-sending unit mounted near the oil filter. Use care to avoid damaging them when removing the oil filter.

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9. Nissan pick-ups. Some of these have the filter located directly above the starter terminal. It is very easy to make contact with this terminal while placing the wrench on the filter. If contact is made, the wrench instantly welds to the filter and becomes red-hot in seconds.

10. Ford products. Large Ford, Mercury and Lincoln vehicles may have two drain plugs. Both must be removed when changing the oil.

11. Volkswagen manual transaxles. The fluid level inspection and fill plug is a 17-MM female hex plug on the end of the transmission rather than on the side. The plastic threaded cap on the top of the transmission is not a fill plug. It is the access port for viewing the timing mark on the flywheel. The introduction of gear oil through this opening will saturate the clutch plate--an expensive repair job.

12. Volkswagen Vanagon. Brake master cylinder is located under the dash and requires removing the dash cover to service. Oil fill is under the license plate. Detailed instructions for removing the dash cover is in the General Manager's handbook. It involves pressing down on two indentions near the windshield and then pulling back on the cover to remove in one motion. It's easy once you do it. There are no screws or fasteners to remove.

13. Volkswagen Golf and Jetta models with manual transmissions. In 1987, this transmission was mounted such that the fill hole is completely below the proper fluid level. If the plug is removed allowing the fluid to drain out to the plug level, insufficient fluid will be retained to provide adequate lubrication. The only way to properly service this transmission is to drain the fluid and replace a measured amount through the top fill opening. OIL CAN HARRY'S does not service this type of installation.

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14. Volkswagen beetles. The oil drain plug is noticeably short. There is a reason. The oil pump pick-up tube is located directly above it. The aftermarket 14-MM plug will screw in fine, but its longer length is just enough to completely block the oil pick-up tube. USE ONLY A DEALER SUPPLIED OIL DRAIN PLUG ON THESE VEHICLES. Also, OIL CAN HARRY'S does not remove the oil screen on these vehicles.

15. Turbo equipped vehicles. Prefill the oil filter whenever possible. This will insure that oil flows to the turbo promptly. In years past, a common mechanic practice was to disconnect the "hot" wire to the coil and turn the engine over a few seconds to fill the oil passages prior to starting the car. This procedure is no longer recommended. Some cars ignition systems can be seriously damaged. The correct procedure is to simply treat turbo equipped cars as any other except to keep the engine at low idle for about 10 seconds after oil pressure is indicated to insure oil flow to the turbo before increasing engine speed to check for leaks.

16. Anti-skid brakes. If the brake master cylinder has a ball-shaped accumulator about the size of an orange attached to it, the vehicle is equipped with anti-skid brakes and the accumulator must be drained into the master cylinder reservoir before checking the brake fluid level. This is accomplished by pumping the brake pedal about 10 times with the engine off. After servicing, the brake pedal should be pumped 10 times with the engine running to restore the system to normal operation. The fluid should be precisely checked as indicated on the "high-low, stairstep" indicator inside the master cylinder reservoir.

17. Japanese manual transmissions. Many of these have special procedures for checking and topping off the transmission. Frequently it will be necessary to remove two plugs and pump fluid into one until it runs out the other. The Toyota Tercel four wheel drive wagon requires the removal of five plugs to properly drain and refill the system. Refer to the Gousha Gear Box Guide.

18. Porsche 911. This model Porsche has a separate oil reservoir on the passenger side, which must be drained in addition to the standard oil pan when changing the oil. The oil level in this vehicle is checked with the engine running.

19. Cadillac's/Oldsmobile's with pad mounted oil filter. These cars are prone to lose prime following oil change service. It is believed this is due to the length of the passages through which the oil must travel to the pump. The problem is avoided by simply prefilling the oil filter. Should the loss of prime still occur, the pump can be primed by adding another couple quarts of oil. The higher level reduces the vacuum required to pull the oil into the pump. Once prime is regained, extract the excess oil back to the normal level.

20. Mercedes. Mercedes uses a canister type filter with a replaceable cartridge. The cover seal is a big fat "O" ring. The trap is that some manufacturer's filters include a flat gasket packed with it. This flat gasket is for another application. USE ONLY THE BIG FAT "O" RING ON A MERCEDES. The old "O" ring may be re-used if in good condition.

21. Toyota Previa vans. This vehicle has an interesting feature--an automatic oil top-off system. When the oil level in the crankcase gets a bit low a sensor tells the reservoir under the hood to send down a few more ounces. The trap is that the reservoir looks like a windshield washer bottle. It is opaque plastic with a little motor on the bottom. Be careful that only motor oil goes in this reservoir. (The engine is under the driver's seat on this vehicle with the accessories under the hood.)

22. Toyota MR-2. This car has a mid-mounted engine similar to the Pontiac Fiero but the power steering pump is driven by an electric motor and the reservoir is located under the hood nowhere near the engine.

23. GMC trucks with 1.8-liter engines. The oil filter for these models is accessible only through the front wheel well. There is a rubber flap behind the tire on the driver's side. Use a cap type filter wrench and a long extension.

24. Ford four wheel drive transfer cases. Use only the special 10-MM tool on the check plug. Use of the 3/8" drive will round out the soft aluminum plug.

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25. Ford C-4 Automatic Transmissions. The filter has a tab on it, which holds the throttle limiter valve in place. This valve is small--only slightly larger than a BB--and has a spring behind it. When the filter is removed, use extreme care to insure the valve is not lost and is reinstalled properly.

26. Chevrolet Beretta/Corsica with four cylinders, 2.0 liter engines. The oil filter is very close to the clamp that holds the constant velocity joint boot in place. The amount of clearance must be closely inspected and if in doubt, the customer should be referred to the Chevrolet dealer to have the clamp replaced. These cars also have a very short hood prop rod and very flimsy hoods. If you forget the prop rod and pull down on the hood it will buckle.

Statistically, those 26 "problem cars" account for most all-expensive comebacks experienced by fastlube operators. The team should review them frequently. The cardinal rule to minimize your comeback rate and rack up maximum bonus money and customer satisfaction is that if you don't know--absolutely know what you are doing, call in the Team Leader for a second opinion. Acting on guesswork while servicing today's vehicles can result in several thousand-dollar losses and an adverse reputation. The very low net profit per car is just not worth taking chances. It's much better to pass on an exotic vehicle and lose a few dollars business than "take a shot" and incur very expensive repair bills.

Other Points to Ponder.

1. The double gasket. When the filter is changed, all old gaskets must be removed. Sometimes a car will come in that has been double gasketed in the past. It's not enough to insure the old gasket was removed with the filter. You must check the gasket seat. Look, feel and scratch (with your fingernail only) to insure there is not an old gasket still stuck on the seat.

2. Batteries. If the caps are removable--unless it says "maintenance-free" --check the water level. Use care when removing the cover plates. Replace with hand pressure only. Do not pound down with a screwdriver handle.

3. Master brake cylinder cap. This is the most important item the upper tech deals with. Feel the flat caps click into place. Use both hands to squeeze the cap into the detent. Most reservoirs are now made of plastic and are easily broken. Do not simply pound down on top of them.

4. Canister filters. Canister filters are no big problem, but they do require the right mental attitude and care. When the canister is removed, observe exactly the sequence of parts as they are removed. There may be springs, retainers and spacers. They must be re-installed in exactly the same order and direction. Wipe out the canister and clean it thoroughly. When installing, fit the canister into place. Hold it in the groove and tighten the through-bolt. The canister goes straight up. The bolt turns. Realize the bolt is pulling on the can as you tighten it. Normal torque is about 15 ft/lbs. The canister may be easily cracked if over-torqued.

5. External transmission filters. Some Saturn cars now have an external transmission filter that is a spin-on can that looks just like an oil filter. If it's on the transmission, it's not an oil filter.

6. Safety rail clearance. Obviously Corvettes and other sports cars with low clearance must be monitored, but watch out for full size cars with non standard exhaust systems. When directing the car out, stand close so that the driver is forced to exit slowly giving the lower tech time enough to stop the customer if clearance is in doubt. Before a vehicle is directed into the service bay, the lower tech must be in position to observe clearance.

7. Vehicle damage. If existing damage or something is missing on the customer's vehicle, inform them immediately before beginning work on the car. This applies especially to scratches and dents on the fenders. Sometimes a customer gets a ding in a parking lot, doesn't notice it, comes to OIL CAN HARRY'S and then goes home--where he does notice it. Of course we get the blame. . . .and usually pay the claim because it's impossible to defend ourselves. Check 'em close and let 'em know!!!!

8. Universal joints. Some large cars have a double "U" joint set up with a carrier between. The carrier has a "pin hole" grease fitting on it that should be serviced. Use the needle tip for these.

9. Get all the zerks. To avoid missing lube points, don't look for zerks. Look for pivot points or moving parts. Many zerk fittings are not visible. Sometimes they are buried in dirt or grease. You must feel for them. Don't forget clutch pedal pivots.

10. Don't break it! Late model cars are built lighter and thinner with a lot of plastic and must be handled tenderly. Don't force anything unless you know absolutely what you are doing. If you break the knob off while forcing a jammed hood release, we are obligated to pay for it. Be careful what you lean against. Do not remove wheel covers. Release hood supports before closing.

11. Filter fit. There are many different thread patterns for oil filters. Get to know the feel of a properly threading oil filter. Standard threaded filters will screw onto metric threaded studs and vice versa--but they won't hold. If the filter feels too loose or too tight as it goes on, investigate the possibility of having a mis-matched filter. Even though the filter is the one specified by the book, it is possible that the car has had the engine changed to a different model year engine, etc. Learn the feel. Do a "wobble check" every time.

12. Never attempt a job unless you know--absolutely know--what you are doing. OIL CAN HARRY'S is a high volume, low profit per job operation with a very high liability. We simply cannot afford a "try it and see" attitude while working on the customer's car.

13. Never release a car that you have any doubts about. Buying a new engine is $3,000 plus. A wrecker tow to the dealership is only about $30. If it's not right, don't let it out of your sight.

14. The oil cap. The most common mistake that new lube techs make is to leave the oil cap off. It usually occurs when additional oil needs to be added outside the normal procedure. It won't happen to you if you will make it a habit to close the hood in the following manner. Lower the hood to about 10" from the down position. Raise the hood back up and look at the oil fill cap. Then return the hood to about 10" above the closed position and let it fall into place. The physical motion of lowering and then raising the hood focuses the brain on the oil cap and it won't be left off.

15. Correcting overfills. Oil overfills are to be corrected by quietly advising the lower tech to drain out the surplus amount. Use only the rubber bulb syringe to evacuate battery acid. DO NOT PUT BATTERY ACID INTO THE WASTE OIL DRAIN. IT WILL GO TO THE BOTTOM OF THE TANK AND CORRODE A HOLE IN IT. Keep it in the glass container provided and use it for the next vehicle that needs additional fluid.

16. Erroneous dipsticks. Some dipsticks are faulty in that they don't indicate the correct amount even though the proper amount of oil was installed. Follow the Electronic Service Manual in the computer to correctly fill vehicles. Computer will have note on screen concerning problem oil dipsticks.

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TOOLS

A characteristic of good mechanics is that they use the right tools and use them properly. Use a box end wrench or six-point socket on drain plugs. Never use an open-end or crescent wrench. Vise grips pliers and pipe wrenches are used only to solve an incompetent's screw up. They should never be used for normal operations. Use SAE (standard) sockets and wrenches on SAE plugs and metric on metric. Ratchet extensions should be used only as extensions. If inserted into a fluid check plug, they will go in just enough to the weak point--the ball--is just outside the hole and it will shear. Use the special, solid steel tools provided. Use the eight-point sockets for square head, male fill plugs. Do not use a crescent or open-end wrench.

Ratchets are not designed for extreme torque. Use breaker bars to loosen stubborn plugs. Some Renaults and Fiats have an 8-MM square recessed plug. The custom tool used for these vehicles is similar to the 3/8" drive commonly used for differential plugs but is slightly smaller. If the 8-MM tool is used in a 3/8" hole, it will round it out. Be careful to recognize the difference between the two. The fill/check plug for some Ford four-wheel drive transfer cases is 10 MM--slightly larger than the standard 3/8" drive. This plug is aluminum and although the 3/8" drive will go in, it will be too loose and will definitely round out the soft aluminum plug.

The 1/4" drive air ratchet is useful for the removal of grease plugs and the installation of grease fittings. Lubricate it daily by squirting a shot of the lubricant spray into the air hose. The oil mist lubricates the moving parts as it passes through the air motor.

The hand impact driver is useful when removing the screw plugs on certain universal joints. To set for loosening, push both ends toward the center and rotate the top part counter-clockwise. This sets the cam inside so that when struck with a hammer, the bit will rotate counter-clockwise.

There are several small tools that are infrequently used but are absolutely essential when needed. They should be kept on a special board.

1. 1/2"-20 tap. Use it for restoring threads in most domestic car oil pans. Especially important on Fords.

2. T-55 Torx. Used for Merkur differential plugs.

3. Number 5 easy out. Used to remove oil filter studs that come out with the filter.

4. 10 MM square drive. Ford transfer case fill/check plug.

5. 8 MM square drive. Some Fiat, Renault and Peugeot drain plugs.

Several types of oil filter wrenches are available to enable service on any model car:

1. Flex handle standard. This wrench comes in three sizes and features a pivoting handle to enable the user to remove or tighten most filters. It is used most frequently.

2. Cap type. This wrench is simply a large socket that fits on the flutes at the end of the filter. It is useful when only the end of the filter is accessible. There are several flute patterns depending on the filter brand. The matching cap wrench must be used to get a good grip.

3. Chain type. This wrench is handy when the end of the filter is too close to other components to permit "getting on" with a conventional wrench. The chain can be wrapped around and then reattached to the handle.

4. 3/8" drive side mount. Handy when the filter is deeply recessed among other components and a cap wrench can't be used. To obtain the maximum torque--and avoid crushing the filter--the ratchet should be on the same side as the 3/8" drive fitting. Use 3/8" extensions if necessary.

5. Plews claw. This wrench is very useful for removing deformed or crushed filters since the claw will clamp onto irregular shapes. It must not be used for tightening filters because the "claws" will puncture the filter can.

6. The strap. This 1/2" drive wrench consists of a nylon strap, which wraps around a filter and "friction locks" as torque is applied to it. It is good for removing severely overtightened filters where sufficient room exists. It requires significant turning room for the strap to tighten up. Consider using long extensions to get the breaker bar handle out into the open.

7. The spring. Handy for removal only of overtightened filters due to its ability to spread the force all around the filter without crushing it. To install it, turn clockwise to spread the spring as it goes on the filter.

8. The big channellocks. Although not an oil filter wrench, it may be useful as a "last resort" if sufficient room exists.

9. The internal in-pan filter wrench. This is a special wrench used for in-pan filter covers when the center nut is rounded out. It grips the outside wall of the cover.

When using oil filter wrenches, try to get the wrench as close as possible to the gasket end of the filter. This is the filter's strongest point. Next best choice is the fluted end. The worst place to apply loosening torque is the middle for this is the weakest point on the filter and it may crush.

A certain amount of turn is required for the wrench to grip the filter. If space is very limited, consider slipping shims of wood chips or cardboard under the wrench after it is in place to reduce the amount of handle movement required.

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INSTALLING OVERSIZE DRAIN PLUGS.

Oversize drain plugs should be installed only when the pan threads are stripped. This is an unusual condition because the pan threads are a harder metal than the plug, so normally it's the plug threads that will strip first. Realize that oversize plugs are shaped like a wedge since they are self-tapping. Using the wrong oversize plug may split the nut inside the pan, creating a serious problem. To insure the new threads are tapped true, use a long extension on a ratchet. The long extension will make it easier to visually guide the plug in perpendicular to the pan opening. This is absolutely necessary if the plug is to seal. Once threads are formed improperly aligned, it is extremely difficult to correct. If necessary to push the plug to get it started, consider placing a small wad of paper in the socket so the socket doesn't "bottom out" over the plug.

CAUTION: BE VERY CAREFUL TO USE ONLY THE OVERSIZE NECESSARY. ALL THREE SIZES WILL START INTO A STANDARD HOLE. YOU MUST BE ABLE TO RECOGNIZE THE CORRECT ONE BY THE MARKINGS ON THE HEAD.

"1/2" is first oversize. Use to replace standard threads.
"1/2 O" is second oversize. Use to replace first oversize threads.
"1/2 X" is third oversize. Use to replace second oversize threads.

CAUTION: OVERSIZE PLUGS ARE NEVER, REPEAT NEVER TO BE USED ON FORD PANS.

HOW TIGHT TO TIGHTEN?

Tighten oil filters hand tight and then turn with a wrench an additional 1/2 turn. Tighten Volkswagen diesels hand tight and then an additional 3/4 turn with a wrench. Always thoroughly oil the filter gasket prior to installing. Oil on the gasket allows it to slide into place as the filter is tightened. A dry gasket will tend to "roll up" as it is being tightened, may be dragged out of the retention groove and will most definitely be difficult to remove at the next service.

Oil drain plugs should be tightened 15 foot pounds for Ford products and Honda 12 MM plugs and 20 foot pounds for most all others. Fill plugs should be tightened to 20 foot pounds. 20 foot-pounds is the torque applied by exerting 20 pounds of pull on a 12" wrench. The same torque would be applied by pulling 40 pounds on the end of a 6" wrench or 10 pound pull on a 24-inch wrench. A good mechanic will place his hand the same distance from the plug regardless of the wrench length so as to develop the right "feel". Examine drain plugs and the pan threads closely. Incompetents repeatedly strip drain plugs because they perceive, "It's a big nut and a big wrench, so torque that sucker." Close examination will show that although the head is relatively large, the threads are much smaller and the number of threads actually making contact are few. Learn the proper torque by using a torque wrench or comparing your idea of what is "just right" to that of an experienced mechanic. A six-inch ratchet is sufficient to exert the necessary torque on all drain plugs without straining. Long breaker bars should never be used for tightening. They are provided only to loosen an incompetent's mistake.

Recessed, pipe-thread type plugs seal all along their threaded surface instead of compressing a gasket under the head. The "feel" at the proper torque will be slightly different. A conventional straight thread plug will screw in easily all the way until the head makes contact and then the proper torque will be reached with perhaps one more full turn. Pipe threads, on the other hand, because of the increased friction of the wedge-shaped threads will begin to offer resistance after only a couple turns. This resistance will then gradually increase until the proper torque is reached. CAUTION: Pipe threads are, in effect, a wedge. Over- a steel pipe thread into an aluminum case may result in the case splitting.

"LAST RESORT" PROCEDURES.

1. Nut inside pan is broken loose. When this occurs, use the special "toggle bolt" last resort plug. It is installed in much the same way that a toggle bolt is installed. Fold the arm parallel to the bolt. Insert it into the hole and allow the arm to pop out. Tighten the external plug.

2. Oil drain plug will turn, but will not come out nor tighten up. Sometimes a plug's threads will strip and not come back out when turned counter-clockwise. If faced with a situation where it won't come out and won't tighten up, try this: Insert a screwdriver or similar wedge shaped tool under the plug. Lock the visegrips on the plug tightly and while prying down with the screwdriver, pull down on the visegrips firmly while turning in a counter-clockwise direction. The idea is to force the threads on that part of the plug that is inside the pan to bite into the drain plug opening and unscrew on out. Once removed, inspect the pan threads carefully and dress them with a thread chaser or proper size tap if necessary.

3. "Rounded" drain plug. Competent mechanics only use the right size wrench, torque properly and never have rounded drain plugs. It is impossible to round a drain plug in good condition if a six-point socket of the proper size is used. However, there will be times when you are faced with the necessity of removing a drain plug installed by others that has been rounded off due to using an improper tool. The first possible solution is to tap the next smaller size socket on it with a hammer. Try a metric if the plug is standard size and vice versa. Visegrips are a second alternative. Adjust them to get the tightest grip possible. The first try is your best shot. It will become more and more difficult the more rounded the plug becomes. If more torque is required and space is available, try a pipe wrench. The third possibility is to use a file, hacksaw or rotary air saw and cut the plug down to a flat shape. Then use an adjustable wrench to remove the plug. As a last resort, a nut can be welded onto the rounded plug and then remove it in the normal manner.

4. Rounded out internal drive inspection plugs. Try placing a piece of aluminum foil, such as that used on a gum wrapper, around the end of the tool being inserted into the plug. This will take up some space possibly permitting sufficient lock to remove the plug. Another possibility is to use an

"easy out". Normally an "easy out" will bottom out before engaging the sides of the recess. If so, grind the end of the easy out off until it makes good contact with the sides. After a rounded out plug is removed, always replace it with new.

5. Crushed oil filter. If a stubborn oil filter becomes completely destroyed, remove the can and try to get the wrench on the gasket plate. If the stud has an allen wrench fitting, consider using an allen wrench to remove the stud and filter plate as a unit. (Use an "easy out" if the inside of the stud is smooth.) If not practical, use a hammer and chisel to cut a notch in the outer part of the plate. Using a "cheater bar" or similar tool try prying against the notch if something solid is handy to use as a fulcrum. A tool can be made from an old 3/4" drive socket of the appropriate size if a chop saw is available. Cut the sides of the socket down leaving "tits" to fit inside the holes in the filter base plate.

The ultimate "last resort", of course, is to call a wrecker service. Maintain a good relationship with the nearest one. A good relationship should also be maintained with a full service auto repair shop that is properly equipped to "bail you out" when you get in over your head.

LUBRICATION GUIDES AND FILTER CATALOGS.

The following page is reproduced from a commonly used lubrication guide. Lubrication guides contain a significant amount of information. It is wise to read a newly issued guide in its entirety, especially the footnotes. To use the guide, first look at the top of the page to locate the category, then alphabetically to locate the make. Under the make, the various lubricants, viscosity's and capacities are given. Abbreviations are explained in the cover page of the guide.

In the "good old days", manual transmissions took gear oil and power steering pumps took Dexron. Not so anymore! Manual transmissions now may require Dexron, Mercon, Type F ATF, gear oil, motor oil or one of several new special products specified by the manufacturer. Power steering pumps may require Dexron, Type F, power steering fluid or a special fluid. Extreme care is required to properly service the wide range of vehicles on the road today.

Unfortunately, accurately reading the lube guide is not enough. In some cases, transmissions and other components may have been exchanged somewhere along the way. Existing fluids should be checked by sight and feel to confirm the proper fluid is being used.

For purposes of the workbook and examination questions, the abbreviations on the sample page are:

AF.....Dexron
FA.....Type F ATF
SH..... Motor oil
EP.....Gear oil
MA.....Mercon
GL-5.....Gear oil
HB.....DOT-3 brake fluid.
HBH.....special brake fluid
PS..... Power steering fluid.
* .....Limited slip additive

JOB DESCRIPTION, AREA MANAGER

1. The Area Manager is totally responsible for the overall performance of all operating units assigned to him. He works directly for the General Manager and has the authority to take any action to enhance the welfare of the business.

2. Primary responsibilities include:

A. Standardization. The Area Manager will normally also serve as the Standardization Officer. As such, he insures all locations are operating in accordance with the current Team Leader and Operations Manuals. The Standardization Officer is the final authority on job technique, procedure and dialogue. Wherever possible, he conducts the initial and refresher training of all team members.

B. Accomplish the General Manager's goals. Work closely with the General Manager to carry out the General Manager's goals by overall supervision of the activities of all units under his responsibility.

C. Training. Conduct refresher training in the shop and in the classroom as necessary to insure that all teams are competent to perform their assigned functions. Discuss and distribute new information such as technical bulletins, changes, General Manager's memorandums, etc., with all Store Team Leaders and maintain an administrative system to verify such communications.

D. Administrative. Maintain performance statistics, a current personnel file, and competition data and perform other administrative tasks as directed by the General Manager.

E. Supply. Keep each location properly stocked by delivering inventory, supplies, forms and other operational needs.

F. Repairs. Effect--or arrange--repairs to the building and equipment that is not within the capability of the location's Team Leader.

G. Inspection. Inspect each location for condition, cleanliness, personnel appearance and operating technique. Advise Team Leaders of actions to be taken and follow up on those actions.

H. Innovation. Submit new and better methods for all activities of the business to the General Manager for review and possible implementation.

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I. "Come-backs". Resolve off-premise "come-backs" by visiting the claimant, inspecting the vehicle and taking action as necessary to resolve the claim.

3. Specific duties include:

A. Determine and report the winner of competition bonuses to the General Manager.

B. Maintain records of each team member's training progress.

C. Design and administer qualifying exams for each position.

D. Carry out such other assignments as directed by the General Manager.

4. Organizational position.

A. The Area Manager is responsible directly to the General Manager.

B. All Team Leaders are responsible to the Area Manager.

JOB DESCRIPTION, TEAM LEADER.

1. The Team Leader is totally responsible for his or her unit's operation. They have authority to do anything that enhances the welfare of their location.

2. Primary responsibilities include:

A. Team training. The Team Leader is responsible for training the Assistant Team Leader to perform all functions of the Team Leader. Although the Area Manager will periodically work with each team member to insure standardization, the Team Leader is responsible for qualifying all team members on his team to perform all functions of a team member as soon as practical after a new team member joins the team and for refresher training thereafter.

B. Inspection. The Team Leader is responsible for inspecting the premises at frequent intervals to insure the equipment is in good working order, the facility clean, the inventory properly stocked and landscaping maintained.

C. Directing the team's activities. The Team Leader prepares the work schedule; assigns work positions, conducts opening and closing checks, directs cleaning, landscaping maintenance and overall upkeep and supervises the team in all activities involved with operating the business.

D. Reporting. The Team Leader makes routine daily reports to the Area Manager. Any event of an unusual nature should be passed to the Area Manager at the first opportunity.

3. Specific duties include:

A. Open the building in the morning and prepare for the opening procedure including an overall inspection of the facility.

B. Conduct the opening checks. Inspect the team's personal appearance. Reject any team member wearing an unclean uniform, inappropriate jewelry, improper shave or who might otherwise detract from the unit's professional operation.

C. Make bank deposit of that day's sales.

D. Complete the daily reports and prepare the paperwork.

E. Adjust work schedule as necessary.

F. Maintain a "needs-list" for weekly deliveries.

G. Meet with the team at the most frequent intervals possible to keep the team informed and review problem areas and their solutions. Review "problem cars", tools available and shop procedures at such meetings.

H. Maintain a file of changes, bulletins, memorandums and other printed material.

I. Maintain security of the daily receipts, keeping all moneys under lock-and-key or in personal possession enroute to or from the bank.

J. Make recommendations to the Area Manager concerning improvements in procedures, inventory stocking or personnel matters.

K. Conduct frequent checks of inventories on hand to insure that two weeks usage of all lubricants filters, supplies and forms are available.

L. Perform routine maintenance and repair within the team's capability.

M. Set the standards of personal appearance, integrity, enthusiasm and attitudes desired of the team to successfully operate the business.

N. Accept, inspect and confirm incoming shipments.

O. Crosscheck tire gauges monthly and so note on the daily report form on the first working day of the month.

P. Inspect the marquee sign daily and change it weekly.

Q. Post a printed work schedule, workers' comp poster, licenses, etc. for ready reference. Maintain a current list of all employees' addresses, phone numbers and emergency notification information.

R. Perform the closing check at the appropriate time and make the night bank deposit in accordance with the Team Leader Manual.

S. Insure compliance of all safety precautions, operating rules and procedures established by the General Manager or General Team Leader.

T. Brief the Assistant Team Leader prior to leaving the shop of all matters that may be of interest to him in running the shop.

U. Order inventory

V. Keep store clean

.

W. Notify Area Manager of absences.

4. Organizational position.

The Team Leader is responsible to the Area Manager and General Manager. The General Manager will resolve any disagreement between the Area Manager and Team Leader. In event the General Manager is not available, the Area Manager's authority shall stand and any decision made by the Area Manager shall override that of the Team Leader.

The Assistant Team Leader and all team members are responsible directly to the Team Leader. In the Team Leader's absence, the Assistant Team Leader assumes all responsibilities and authority of the Team Leader.

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JOB DESCRIPTION, ASSISTANT TEAM LEADER

1. In the absence of the Team Leader, the Assistant Team Leader shall function in the Team Leader capacity including the same responsibilities and authority normally assumed by the Team Leader.

2. Primary responsibilities include:

A. Support and assist the Team Leader in carrying out his primary responsibilities of training, inspecting and directing the team's actions.

B. Continually monitor the inventory of filters, fluids and supplies and make recommendations to the Team Leader.

C. Insure restrooms and workstations are properly stocked and equipped.

D. Inventory tool boards frequently and advises the Store Team Leader of shortages.

3. Specific duties:

A. Carry out those functions assigned by the Team Leader.

4. Organizational position.

A. The Assistant Team Leader is responsible to the Team Leader.

JOB DESCRIPTION, TECHNICIAN

1. The Technician is responsible for performing the OIL CAN HARRY'S job procedure in a competent and professional manner.

2. Primary responsibilities:

A. Perform Upper / Lower technician functions as qualified.

B. Perform Courtesy Technician duties as qualified.

3. Specific duties:

A. Assist the Team Leader during the opening / closing procedures.

B. Maintain landscaping, clean facility, restock inventory and perform other assignments as the Team Leader may direct.

C. Maintain a personal appearance and decorum that will reflect a high level of professionalism.

D. Perform any job assigned by the Team Leader that is not unsafe or illegal.

4. Organizational position:

A. The Technician is responsible directly to the Team Leader.

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OPENING AND CLOSING CHECKS

The method of opening and closing the business is a vital part of OIL CAN HARRY'S 's showmanship and sets the overall tone for the way we do business. The opening check is begun at precisely 7:50 am. The Team Leader arrives at 7:45. He inspects the building and grounds, sets up the Greeter's desk and records the bulk tank and meter readings. The front door is opened halfway so a waiting customer will know that we are preparing, but not yet open for business. He then sets the circuit breakers and prepares for the opening check.

At precisely 7:58 the door is fully raised--the curtain going up on our opening show. During the check, the Team Leader will call a particular item and the team member responsible for that item will respond. The response should be clear and sufficiently loud so that a waiting customer can clearly understand it. Remember perception transfer? If we open with precision and professionalism, a very favorable perception is created.

The checklists provide an efficient method of opening and closing. Making the business ready to serve the first customer promptly takes less than two minutes. At closing, the checklist insures the building and equipment are properly secured in minimum time so that the crew can be promptly released.

Preparation for closing should be started well before scheduled closing. Such things as emptying trash cans, re-filling spray bottles, and restocking shop towels should be done as time is available during the hour or so before scheduled closing.

Our policy is to accept any customer who arrives before our scheduled closing time. If he arrives at 5:29 and 59 seconds, do the job. If a line of cars exists as closing time approaches, determine which ones can be completed and place a traffic cone behind the last one to indicate that is the last car to be taken.

The opening/closing checklists will vary from store to store because of different plumbing or layout, etc. The following is a typical example:

OPENING CHECKLIST.

Team Leader Call: Technician Response:

Air Compressor?	"It's on. Oil level is good."
Condensate?	"Water is drained. Valve closed."
Main air valve?	"It's open. Pressure is up."
Computer & Cash Register?	"Both are on the line."
Coffee?	"It's hot. Ready to serve."
Street signs?	"They're out, Sir."
Service area & basement lights?	"All on and normal."
Air system?	"All secure. No leaks."
Fluid integrity check?	"All tight and dry. No leaks."
Vacuum pump?	"Checked clear. Tank is drained.
Fire extinguishers?	"Three in the green."
First aid kit?	"Fully stocked."
Exterior?	"Clean & neat."
Interior?	"Clean, stocked and ready."
Restrooms?	"Clean, stocked and ready."

Very well. Sign is on. (Technician), open the bay doors. We're open with 4.

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The emphasis on the closing check procedure is to insure that all valves are off; the shop is clean, stocked and ready to begin the next day's operations and everything is secured.

CLOSING CHECKLIST.

Team Leader call:	Technician response:
Restrooms?	"Clean, stocked and ready."
Interior?	"Clean, trash cans dumped."
Exterior?	"Clean. Everything in."
First aid kit?	"Fully stocked."
Fire extinguishers?	"Three in the green."
Oil pans?	"They're dumped."
Street signs?	"All in."
Coffee pot?	"It's off and cleaned."
Computer?	"It's off and secured."
Main air valve?	"It's closed."
Air compressor?	"It's off. Condensation draining."
Tools & towels?	"Clean, stocked and ready."
Landscaping tools?	"All inside."

Very well. We are closed at 5:30 p.m. sharp. Technician, close the doors. The open sign is off. Sign your hours. Car count is 67.

APPENDIX

This section contains copies of important bulletins, re-prints, forms used in the business and other pertinent data that is subject to change.

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MAINTENANCE ASSIGNMENTS

LANDSCAPING & EXTERIOR _____
BUILDING INTERIOR _____
INTERIOR BAY AREA _____
RESTROOMS _____

LANDSCAPING

Pick up all trash daily. As necessary, mow grass, edge driveways, pull weeds. Pull grass from around trees. Do not use weedeater around trees. Spread fertilizer. Trim shrubs. Pull or spray weeds that come up in driveway cracks. Edge driveways. Clean exterior windows. Replant plants as necessary.

BUILDING INTERIOR

Maintain cleanliness and condition of everything inside the building. Repair leaks. Clean interior windows. Make Team Leader aware of tool shortages at the end of each day. Clean out sump. Clean water cooler and coffee machine several times each day. Keep displays clean and attractive. Sweep floors. Dust displays. Make repairs within your capabilities. Notify Team Leader of any other repairs necessary.

INTERIOR BAY AREA

Maintain cleanliness and condition of everything inside the bay area. Clean bay windows. Clean barrel tops, oil dispensers, sweep and mop floors, organize tools, and organize stock. Make Team Leader aware of any shortages and inventory that needs to be ordered. Maintain shop area and stockroom in a clean and orderly fashion at all times.

RESTROOMS

Keep restrooms cleaned and stocked with toilet paper, paper towels and soap. Make repairs within your capability and notify the Team Leader of other repairs required. Empty trashcans.

Those evolutions requiring several people such as re-stocking, scrub-down, etc. will be assigned as needed by the Team Leader.

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Team Leader/Greeter

1. Greet customer.
2. Determine services needed.
3. Ask customers about wipers.
4. Invite customer to waiting area.
5. Roll down driver's side window.
6. Remove keys from ignition place in driver side door.
7. Enter customer and vehicle info into the computer.
8. Place work order and window sticker on vehicles windshield.
9. Help present add-on sales.
10. Help with tires, cleaning windshield, filling out work orders.
11. Drive customers' car around to vehicle waiting area.
12. Ring up customers' invoice.
13. Thank every customer by name.

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Upper Level Technician

1. Direct or pull customers' vehicle into service bay.
2. Shut off engine. ("PARK" or "IN GEAR", brake off.)
3. Tell lower tech job and pass down oil filter.
4. Open hood.
5. Clean windshield/windows.
6. Set tire pressures and inspect tires.
7. Lube the hood locks and hinges.
8. Service the battery.
9. Windshield washer.
10. Coolant.
11. Inspect brake fluid & hydraulic clutch.
12. Power steering.
13. Install ATF if indicated.
14. Install oil. (Confirm drain plug.)
15. Inspect hoses, belts & wiring.
16. Perform Service & Safety check.
17. Start engine & oil pressure check.
18. Post-start Quality Control checks.
19. Shut off engine.
20. Advise customer.
21. Present inspection report.
22. Check oil level & show customer.
23. Double check caps & dipsticks.
24. Close hood.
25. Thank the customer.
26. Start engine.

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Lower Level Technician

1. Observe clearance.
2. Determine job.
3. Remove oil drain plug.
4. Remove oil filter.
5. Top off differential.
6. Lube & inspect "U" joints.
7. Top off manual transmission.
8. Inspect drain plug & replace.
9. Install new oil filter.
10. Lubricate the chassis.
11. Inspect underside of vehicle.
12. Service & Safety Check.
13. Post-start Quality Control Check.
14. Check clearance as customer departs.

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INSPECTION REPORT

As a service to our customers, we inspect the vehicle thoroughly. This report is to make you aware of the condition of various components. Those things that are considered to be "preventive maintenance" should be performed on a regular basis at the mileage interval recommended by the manufacturer.

ITEM WE CHECKED	SATISFACTORY	REPLACE OR SERVICE RECOMMENDED	N/A
Transmission fluid	_____	_____	_____
Differential fluid	_____	_____	_____
Transfer case fluid	_____	_____	_____
Air filter	_____	_____	_____
Crankcase breather	_____	_____	_____
PCV Valve	_____	_____	_____
Wiper blades	_____	_____	_____
Belts & hoses	_____	_____	_____
Coolant	_____	_____	_____
Tires	_____	_____	_____
Lights	_____	_____	_____
Fuel system	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

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TOOL INVENTORY

The following tools should be at the lower technician's workstation;

_____ Set of SAE combination wrenches, 3/8" to 1".
_____ Set of METRIC combination wrenches, 8 MM to 17 MM.
_____ 1/2" ratchet.
_____ 3/8" ratchet.
_____ 1/4" ratchet.
_____ 1/4" air ratchet.
_____ Air cut off tool.
_____ 3/8" impact wrench.
_____ 1/2" breaker bar.
_____ 3/8" breaker bar.
_____ 1/2" extensions, 6"--4"--2"
_____ 3/8" extensions, 6"--4"--2"
_____ Set of 3/8" sockets, SAE 3/8" to 7/8".
_____ Set of 3/8" sockets, METRIC, 10MM to 19 MM
_____ Set of 1/2" sockets, SAE 7/16" to 1".
_____ Set of 1/2" sockets, METRIC, 11MM to 24MM.
_____ 27 MM sockets (Alfa Romeo).
_____ 30 MM socket (GM transfer case).
_____ 1/4" drive sockets, 7MM & 8MM.
_____ 1/4" drive extensions, 4" & 2".
_____ 12" adjustable wrench.
_____ 6" adjustable wrench.
_____ Large channelocks.
_____ Small channelocks.
_____ Visegrips.
_____ Regular pliers.
_____ Needle nose pliers.
_____ Allen wrenches, 8MM, 10MM, 12MM, 14MM, 17MM and 3/8".
_____ Small flex handle oil filter wrench.
_____ Large flex handle.
_____ Jumbo flex handle oil filter wrench.
_____ Small side mount oil filter wrench.
_____ Large side mount.
_____ Small center drive oil filter wrench.
_____ Small "Plews claw" oil filter wrench.

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_____ Large "Plews claw".
_____ Nylon strap oil filter wrench.
_____ Toyota "mini-claw" oil filter wrench.
_____ In-pan oil filter wrench.
_____ Chain type or adjustable oil filter wrench.
_____ 8 point sockets, 1/2", 9/16", 5/8" and 11/16".
_____ 3/8", 8MM and 10MM square drive tools.
_____ "Cheater bar".
_____ Lubricant and bushing spray bottles.
_____ Gasket pick.
_____ 1/2"--20 tap (Ford oil pans)
_____ Torx set. (Use T-55 for Merkurs)
_____ Hand grease gun.
_____ Large pipe wrench.
_____ Small pipe wrench.
_____ Hand impact driver & bits.
_____ Hacksaw & spare blade.
_____ Hammers, ball peen & claw.
_____ Screwdriver, flat & Phillips.

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The following tools should be at the Team Leader's station:

_____ Set of combination wrenches, SAE.
_____ Set of combination wrenches, METRIC.
_____ Complete screwdriver set.
_____ Complete nut driver set.
_____ Electric screwdriver.
_____ Dike cutters or electrician's pliers.
_____ Regular pliers.
_____ Small allen wrench set.
_____ Circuit tester.
_____ Tire valve extensions.
_____ "Easy-out" set.
_____ Inspection mirrors.
_____ Mechanical fingers or magnet pick-up tool.
_____ Punch & chisel set.
_____ Calculator.
_____ Stapler.
_____ Stamp pad.
_____ Bank stamp.
_____ Change fund bag.
_____ 3 bank bags.
_____ Paper weights.
_____ Clip board.
_____ Lube guide.
_____ Filter catalog.
_____ Quicklube Guide.
_____ Gear box locator.
_____ Menus.
_____ Memo file.

The following should be kept in the storeroom.

_____ Stepladder.
_____ Shovel.
_____ Mop.
_____ Broom.
_____ Rake.
_____ Dust pan.
_____ Floor scrub brush.

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The following should be at the console:

_____ Funnels, short & long.
_____ Windshield squeegee & bucket
_____ Screwdrivers, flat & phillips.
_____ Evacuator tube, short.
_____ Battery fluid pick-up tool & bottle.
_____ Evacuator tube, long for vans.
_____ Brake fluid pick-up.
_____ Clip boards, large & small.
_____ Spray bottles, lube & bushing spray.

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OIL CAN HARRY'S INSPECTION FORM

DATE _____ LOCATION _____

Overall exterior appearance _____
Overall interior appearance _____
Condition of grass _____
Driveways _____
Shrubbery _____
Trash picked up? _____
Condition of signs _____
Floors _____
Interior walls _____
Basement _____
Storage room _____
Lounge area _____
Equipment _____
First aid kit _____
Fire extinguishers _____
Tools _____
Cleaning gear _____
Supplies _____
Lights/electrical _____
Doors _____
T/L appearance _____
Crew appearance _____
Team Leader performance _____
Upper tech performance _____
Lower tech performance _____
Knowledge level _____
Building security _____
Inventory complete _____
Manuals _____
Cash Drawer _____
COMMENTS_____

Inspector _____

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DELIVERY LIST **Date _____Received_____**

_____ 5W-30 oil
_____ Trans Additive
_____ Type F
_____ Slick-50
_____ Brake fluid
_____ Oil system cleaner
_____ Fuel system cleaner
_____ P/S Fluid
_____ Honda P/S
_____ A.T.F. +
_____ Hand soap
_____ Floor soap
_____ Windex
_____ Door spray
_____ Spray soap
_____ Bowl Cleaner
_____ Pledge wax
_____ Roll towels
_____ Fold towels
_____ Toilet paper
_____ Rubber lube
_____ Promos
_____ Coffee
_____ W/W Fluid
_____ Coffee cups
_____ Sugar
_____ Creamer
_____ Stirrers
_____ Oil dry.
_____ Ball pens
_____ Drain plugs/gaskets
_____
_____

_____ Meter sheets
_____ Tools
_____ Staples
_____ Paper clips
_____ Daily reports
_____ _____
_____ _____
_____ _____

_____ Wipers _____
_____

_____ Oil Filters_____
_____
_____
_____
_____
_____
_____
_____

_____Air Filters_____
_____
_____
_____
_____
_____
_____
_____

_____ Breathers_____
_____
_____
_____

_____ PCV Valves _____
_____
_____
_____

_____Uniforms_____
_____

_____ Sales tickets _____
_____

_____ Deposit slips
_____ Landscaping tools
_____ Diplomas
_____ Serpentine belts.
_____ _____
_____ _____
_____ _____
_____ _____

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Joe Haggard's

OIL CAN HARRY'S
Fastlube Training Center

LUBE TECHNICIAN

EXAMINATION

OIL CAN HARRY'S Fastlube Training Center
625 E. Merritt Avenue
Merritt Island, FL 32953
(407) 453-6309

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1. Chassis lubrication pumps normally deliver chassis lube at pressures in the range of

a. 4,000 to 7,000 PSI.
b. 10 to 100 PSI.
c. 100 to 500 PSI.
d. 100 to 150 PSI assuming that is the pressure at which the air compressors are set.

2. An undesirable characteristic of brake fluid is that it

a. is highly flammable.
b. absorbs moisture from the atmosphere.
c. evaporates rapidly if exposed to the atmosphere.
d. deteriorates in storage and must be placed in service prior to the coded date on the label.

3. A bulging oil filter that has been obviously over-pressurized could only be caused by

a. a defect in the filter.
b. a sticking or defective oil pressure relief valve.
c. installation of an improper filter with the wrong relief valve setting.
d. a blockage of the main oil passage downstream from the filter.

4. Which of the following cars normally require a cartridge type oil filter that fits into a metal canister?

a. Audi Turbo Quatro 5000.
b. Jaguars.
c. Alfa Romeos.
d. Mercedes.

5. The proper torque for oil drain plugs using a fiber or nylon gasket is

a. 15 to 20 ft/lbs.
b. 15 to 20 in/lbs.
c. 150 to 200 in/lbs.
d. 20 ft/lbs for American cars, 30 ft/lbs for Japanese cars and 35 ft/lbs for all other makes.

6. Which car requires special care to install the proper filter due to its unusually high oil pressure?

a. Ford Strobe.
b. Mercedes.
c. Japanese built Chevrolets.
d. Volkswagen diesels.

7. Which car requires special care to avoid inadvertently draining the automatic transmission? (The car in question has an automatic transmission drain plug in plain sight at the lower part of the engine/transmission assembly and the oil drain is hidden in a recessed area several inches higher.)

a. Some model Saabs.
b. Mercedes 300 SL roadster.
c. Ford Ranger trucks with overdrive transmission.
d. Peugeots.

8. Which cars require special care to prevent cracking the oil drain plug fitting because it is thin metal rather than the conventional welded nut inside the pan?

a. Renaults.
b. Isuzus.
c. Fords.
d. American Motors products.

9. Automatic transmission fluid containing water contamination will most resemble

a. waste oil.
b. molasses.
c. watered down maple syrup.
d. a strawberry milkshake**.**

10. Oil filters may safely interchange if the thread pattern, gasket and pressure relief valve settings are the same.

a. True.
b. False.
c. True, but the manager's approval should be obtained.
d. True, except for some model Nissans which have a by-pass valve.

11. A lighter weight oil would be recommended for customers in northern climates because

a. the thinner oil will reach the bearings and coat the cylinder walls sooner.
b. it warms up faster.
c. it lubricates better after the engine is at operating temperature.
d. it produces higher oil pressures.

12. Certain cars require manual transmission fluid designated "GLS" in the lubrication guide.

a. This is a mis-print. It should say "GL-5".
b. GM "GLS" is similar in weight to 5W-30 motor oil but is a special lubricant available only from the dealership.
c. "GLS" is basically similar to 80-90 gear oil which may be used as a substitute.
d. "GLS" is the designation for the new multi-purpose transmission lubricant and is suitable for all American made cars.

13. Following routine service on a Mazda, the customer complains it won't idle and he must keep the RPM high to keep the engine running. The most probable cause is

a. The carburetor modulator control was bumped while changing the air filter.
b. the fuel injection idle sensor wire which runs near the oil filter was pulled loose.
c. the choke release was jammed while changing the air filter.
d. the oil fill cap was left off or a vacuum line was pulled loose.

14. The Audi Turbo Quatro 5000 uses two oil filters with the same catalog numbers.

a. True. It uses a dual by-pass oil system.
b. True. One is for the engine, the other filters transmission fluid.
c. False. One of the filters is the turbo filter and is definitely of a different design.
d. False. The second filter, mounted horizontally, is a fuel filter.

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15. The proper manual transmission fluid level check plug on a 1987 Mustang is a large hex head plug on the driver's side.

a. True.
b. False. It is on the driver's side but it is a 3/8" recessed type plug.
c. False. The check plug for this car is on the passenger side and the hex-head on the driver's side is the reverse gear linkage pivot bolt.
d. True. Care should be used to replace the special teflon seal.

16. A hard radiator coolant recovery bottle will normally be found on

a. Dodge colts.
b. cars equipped with a pressure relief valve on the bottle rather than the radiator cap.
c. motor homes and one ton pick-up trucks.
d. Porsches with rear mounted engines.

17. 25 millimeters is closest to

a. 1/2 yard.
b. one foot.
c. 2.5 inches.
d. one inch.

18. Automatic transmission fluid--as indicated on the dipstick--significantly changes with temperature because

a. only a small amount of the total expanding fluid is in the pan.
b. transmission fluid expands much more than motor oil.
c. of the heat of the radiator.
d. the transmission fluid passes through the radiator to assist in cooling the engine.

19. Oil should be changed at 3,000 mile intervals because

a. the General Manager's manuals of all production cars recommend this interval.
b. it becomes dirty and the filter begins to bypass the dirty oil under the conditions which most people drive at about that mileage.
c. the additives break down and no longer perform their functions even if most of the mileage is interstate driving.
d. this is the recommended interval for checking most other fluid levels.

20. When servicing batteries

a. the fluid level should be brought to within 1/4" of the cap.
b. the fluid should be brought to the "split ring" or other indicator and never filled to the top.
c. be sure to dump any acid removed from overfills into the waste oil drain.
d. the "red" clamp should be clamped to the positive post and the "black" clamp to the negative post when jump starting or charging the battery.

21. If the customer has no preference for tire pressure settings, you should

a. set to the pressures on the side of the tire.
b. set to the pressures given on the manufacturer's decal usually in the glove compartment or on the driver's door.
c. set 5 PSI higher than existing pressures since that will improve gas mileage.
d. leave the pressures set where they are.

22. The only places engine oil can leak under pressure are

a. the front main seal and oil filter.
b. oil filter and oil pressure sending unit.
c. rear main and front main seals.
d. valve covers and oil pressure sending unit.

23. The best tool to remove an overtightened drain plug in good condition is

a. a pair of good quality visegrips.
b. a six point socket and breaker bar.
c. large channelock pliers.
d. a crescent wrench adjusted tightly. Apply pressure in the loosening direction and then strike the handle smartly to break the plug loose.

24. While changing an oil filter, you accidentally break a nearby plastic support bracket supporting a bundle of wires. You should

a. inform the customer.
b. keep quiet. He will probably never notice and it will look bad for the business.
c. inform the customer if it is something he will be aware of that day.
d. inform the customer if it affects safety of the car.

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25. The by-pass valve in an oil filter

a. acts as a "fuse" and prevents damage to the oil filter in event of overpressure.
b. prevents the oil from flowing out of the filter when the engine is shut off.
c. remains closed until adequate pressure is built up by the oil pump.
d. opens when the filtering element becomes clogged.

26. Brake fluid is a petroleum based product and highly flammable but is excellent for removing oily finger prints from fenders

a. True.
b. False, except it is highly flammable.
c. False, except for being petroleum based.
d. False all the way.

27. Hydraulic clutches should be serviced with

a. Dexron.
b. special clutch hydraulic fluid.
c. brake fluid.
d. power steering fluid

28. The primary consideration for selling transmission or differential fluid changes is

a. the odometer mileage.
b. appearance of the fluid.
c. to sell every customer. They all need it.
d. to do so only when the customer requests it.

29. Most differentials use pipe thread plugs. It's important to know that a characteristic of pipe threads is that they

a. are tapered and may split the case if overtightened.
b. are easily stripped. Be careful to not overtorque them.
c. are always metric thread.
d. are self tapping and will make new threads if the old ones are stripped out.

30. Which car has a separate oil reservoir in addition to the oil pan that must be drained when changing the oil?

a. Volkswagen campers with air cooled engines.
b. Porsche 911.
c. Mercedes built in Germany not for export to the U. S.
169 d. Certain Volvo models.

31. The anti-drainback valve in an oil filter

a. prevents dirty oil stored in the filter from mixing with clean oil.
b. keeps oil flowing through the engine while the car is running up or down a hill.
c. prevents the oil in the filter from running back to the pan when the engine is turned off.
d. prevents an "air lock" from forming in the oil passages.

32. When a GM car is serviced equipped with an anti-skid brake system

a. it can be recognized by a spherical shaped accumulator on the master brake cylinder.
b. the brake pedal should be pumped 10 times with the engine off to empty the accumulator before checking the brake fluid level.
c. the brake pedal should be pumped 10 times with the engine running to restore normal operation following service.
d. all the above.

33. The oil filter gasket should be lubricated with clean motor oil

a. so that it won't "freeze" to the mount and be difficult to remove later.
b. to prevent "kink-up" or rolling of the gasket.
c. to prevent tearing the gasket or having the gasket pull out of the gasket retainer.
d. All the above.

34. When checking the automatic transmission fluid level, the engine should be running and the selector lever in "park" except for _____ which should be in "neutral" and _____ cars which should be checked with the engine off.

a. Ford/Japanese
b. Buicks/Mercedes
c. Chrysler RWD/Honda
d. Jaguar/Saturn

35. Most Japanese cars have the _____ located near the oil filter and special care must be exercised to avoid damaging it during removal and replacement of the oil filter.

a. oil pressure sending unit
b. transmission shifter linkage
c. computer circuit board relay
d. oxygen sensor wire to the fuel injection control unit

36. To survive and prosper over the long term, a business must

a. sell every job it can and offer every service it can do.
b. operate with integrity and give the customer more in perceived value than the price charged.
c. force competition out of business and offer discount coupons.
d. buy the lowest priced products and sell them at the highest possible price.

37. A customer complaint

a. if considered desirable "feedback" and if resolved promptly can result in a long term regular customer.
b. indicates that someone did not follow proper procedures.
c. should always be referred to the General Manager.
d. will never occur if proper techniques and procedures are used.

38. A lube technician's appearance is extremely important because

a. you just never know who might come in.
b. the boss will be favorably impressed.
c. the health department has specific requirements for anyone working in a commercial business.
d. the customer--through perception transfer--judges the quality of the work by his impression of the people performing that work.

39. There are

a. 8 pints in a gallon, 4 quarts in a gallon and 12 ounces in a pint.
b. 2 pints in a quart, 16 ounces in a pint and 4 quarts in a gallon.
c. 4 quarts in a gallon, 2 pints in a quart and 12 ounces in a pint.
d. None of the above.

40. Motor oil has several additives to improve its performance. Extreme pressure agents, one of these additives

a. helps to prevent corrosion.
b. form the "cushion" between internal engine parts that are pushed hard together such as the rod bearings and crankshaft.
c. keep the oil from boiling at the high temperatures inside the crankcase.
d. seals the oil filter gasket, the threads of the oil pressure sending unit and other possible leak points where the oil is under pressure.

41. Oil performs five functions in an engine. It cools, cleans, lubricates and seals. The "viscosity" of oil refers to its

a. density. A high viscosity oil weighs more per quart.
b. thickness. A high viscosity oil flows more like honey than water.
c. cleaning ability. A high viscosity oil cleans better.
d. lubricating ability. A high viscosity oil lubricates better than a low viscosity oil.

42. When removing a stubborn oil filter, if practical, a band type wrench should be placed

a. near the base plate (threaded end).
b. on the middle of the filter.
c. anywhere on the filter since it turns the same way regardless of where the wrench is placed.
d. on the fluted end for a better grip.

43. Gear oil designated GL-5 is normally suitable for all manual transmissions and differentials.

a. True.
b. False.

44. If the oil filter stud comes out with the filter, the best way to separate the two is to

a. use a 3/8" allen wrench (GM products) or easy out while holding the filter with a filter wrench.
b. hold the stud with visegrips and jam a large screwdriver through the filter for better leverage.
c. use a hacksaw to saw through the threaded plate to the stud and then drive a chisel into the crack to loosen the filter's hold on the stud.
d. clamp the stud in a vise and unscrew the filter with a filter wrench.

45. The car that has the power steering pump near the front, passenger side wheelwell and is driven by an electric motor is the

a. Rolls Royce Silver Cloud.
b. Peugeots and other French built cars.
c. Renaults.
d. Toyota MR-2.

46. 200 inch pounds of torque is approximately the same as

a. 20 ft/lbs.
b. 17 ft/lbs.
c. 2 ft/lbs.
d. 10 ft/lbs.

47. The person most likely to get you promoted to a higher position in your organization is

a. the General Manager.
b. the manager.
c. your fellow employees.
d. the person you see in the mirror.

48. The primary reason for wearing uniforms is

a. to avoid damaging good street clothes with oil and grease.
b. that the General Manager wants to provide you a fringe benefit saving you the expense of buying work clothes.
c. that it is required by OSHA regulation FL 443.1a, paragraph (2).
d. to show the public that you and your team are trained.

49. An eight-point socket is the best tool to remove

a. male square head transmission and differential plugs.
b. eight point torx fasteners.
c. Corvette differential plugs.
d. Subaru and Saab oil drain plugs.

50. On older Volkswagen beetles and campers equipped with drain plugs, the lube technician must be careful

a. to replace the oil drain plug only with a Volkswagen drain plug, since the longer aftermarket drain plug can cause the oil pick-up tube to be blocked.
b. to not overtorque the plug since it should only be installed hand tight plus 3/4 turn.
c. to tighten the plug to 35 ft/lbs since it has a steel gasket.
d. None of the above.

51. A pour-point depressant additive in motor oil helps the oil to

a. remain liquid in very cold temperatures.
b. adhere to bearing surfaces.
c. maintain proper viscosity at high temperatures.
d. Pour readily from a container without splashing.

52. A high viscosity oil

a. cleans an engine better than a low viscosity oil.
b. should be recommended for all cars built before 1979.
c. is thicker than a low viscosity oil.
d. is heavier than a low viscosity oil.

53. Oil should be changed

a. annually even if driven less than 6,000 miles.
b. when the oil level is a quart low or the oil pressure gets low.
c. at 3,000 miles or 3 months as an industry consensus.
d. when it looks dirty.

54. The by-pass valve in an oil filter

a. opens at 8 to 11 PSI pressure differential.
b. prevents an overpressure condition at the filter
c. allows the oil to drain out of the filter.
d. opens when the filtering element becomes clogged.

55. If an oil filter without an anti-drainback valve is mounted horizontally on an engine

a. the oil pump will probably lose prime on start.
b. the wrong filter has probably been selected.
c. the by-pass valve will become clogged.
d. filtering efficiency of the filter element will be lost.

56. Prior to removing a GM "in-pan" oil filter, the lube technician would be wise to

a. first bleed off residual pressure by loosening the access plate.
b. first drain the front portion of the pan.
c. disconnect the battery.
d. inspect the pan for dents or distortion.

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57. Mercon is a Ford product that is

a. a synthetic gear oil.
b. automatic transmission fluid.
c. useable in all four wheel drive transfer cases.
d. used in all 1989 to 1995 Ford differentials.

58. Brake fluid is

a. designated DOT-3, 4 or 5.
b. highly flammable and should be kept in a sealed container.
c. a petroleum based product.
d. all the above.

59. A crankcase breather

a. filters air from the atmosphere to the crankcase.
b. prevents cavitation of the oil pump due to air in the oil filter.
c. filters air going into the vacuum system.
d. filters gasoline vapors out of the fuel vent return line.

60. One function of the PCV valve is

a. to meter air flow for the fuel vapor return system.
b. to prevent backfires.
c. to prevent a crankcase explosion.
d. all the above.

61. A defective PCV valve causes the engine to stall or have a rough idle because

a. the fuel/air ratio going into the combustion chambers is affected.
b. oily vapors may be ingested into the combustion chambers.
c. back pressure in the PCV valve to air filter housing hose affects carburetor metering.
d. the mixture is enriched too much if the PCV valve is stuck in the open position.

62. The "CD" portion of an oil designated "SH-CD" indicates the oil is suitable for severe duty diesel engine service.

a. True.
b. False.

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63. If the oil pressure warning light does not come on when the ignition key is turned on

a. the wire may be disconnected from the sending unit.
b. the sending unit may be defective.
c. the light bulb may be burned out.
d. all the above are correct.

64. Air filters should be changed

a. at 10,000 mile intervals.
b. at the odometer mileage recommended in the General Manager's manual.
c. only when no light can be seen through the filter.
d. with every oil change.

65. The customer should be greeted.

a. immediately.
b. with a smile.
c. by name if known.
d. all the above.

66. Selling the customer an additional service that is recommended by the manufacturer

a. will produce an adverse reaction.
b. will increase his respect for you and he will have more confidence in your ability to properly service his car.
c. is time consuming and not recommended.
d. will probably cause you to lose business in the long run.

67. Oil in the air filter housing indicates

a. a defective intake manifold gasket.
b. loose vacuum line at the emission control filter.
c. excessive oil pressure.
d. the PCV valve may be clogged.

68. When making change

a. you should state the amount given to you
b. you should count--out loud--to that amount.
c. Neither of the above should be done because it insults the customer.
d. you should do both (a) and (b).

69. Personal service items, such as emptying ashtrays,

a. are a waste of time. The customer is there to get his oil changed.
b. may be done if no other customer is waiting.
c. builds a strong and loyal customer base.
d. should be individually priced so the customer can choose and only pay for the services he wants.

70. The best way to remove bugs and other road debris from windshields is to

a. ask the customer to activate his windshield washer.
b. use a water hose and pressure nozzle.
c. use a wetted piece of plastic indoor/outdoor carpet.
d. soften deposits with some brake fluid.

71. An over-inflated tire

a. will have excessive wear in the center of the tread.
b. will be prone to skid.
c. will produce a "harsher" ride.
d. All the above.

72. Even though a battery is labeled "maintenance-free", the fluid level should still be checked if possible.

a. True.
b. False.

73. During the winter, it is a good practice to add some radiator anti-freeze to the water put in windshield washer bottles to prevent freeze damage.

a. True.
b. False.

74. Care must be used to insure that the gasket under the cap of a glass or heavy, rigid plastic coolant recovery bottle is not inadvertently lost because

a. fluid leaks at this point may cause unsightly stains.
b. this gasket permits fluid to return to the radiator.
c. the bottle may over-pressurize and burst without it.
d. the engine may overheat without it.

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75. If a car has an expended or distorted rubber diaphragm seal in the brake master cylinder cap

a. the wrong DOT rating fluid has been installed.
b. it is probably due to the heat from having the engine steam cleaned.
c. it indicates probable brake fluid contamination by a petroleum product.
d. the customer should be sold a new one. This occurs naturally as rubber ages.

76. Modern power steering fluids are suitable for the power steering systems in all cars.

a. True.
b. False.

77. To inspect the fluid level in a Merkur differential, a _____ is required.

a. T-55 male TORX.
b. 10MM allen wrench.
c. speedometer drive removal tool.
d. 9/16" 8 point socket.

78. The best way to sell transmission and differential fluid changes is to show the customer a comparison of his old fluid with the new product and disregard the mileage since the last service.

a. True.
b. False.

79. A sure way to avoid having a double gasket situation at the oil filter is to

a. inspect the metal mating surface.
b. make sure the old gasket stayed on the old filter.
c. dab some gasket shellac under the oil filter gasket to insure it stays on the filter when removed.
d. scratch the metal mating surface with a pick or scribe to insure the new gasket is going against metal.

80. When removing a GM "in-pan" filter, care must be used to

a. insure the old "O" ring comes out.
b. prevent hand/arm burns due to hot oil.
c. inspect the pan for dents before attempting removal.
d. All the above.

81. Following service, a vehicle emits heavy clouds of white smoke. The problem may be

a. worn valve guides.
b. oil in the air filter canister.
c. a stuck choke.
d. either (a) or (b).

82. Which manual transmission fluid is difficult to identify by either sight, smell or touch?

a. Dexron.
b. Special lubricants. (GLS)
c. Gear oil.
d. All the above.

83. Closely selecting the proper fluid from the Lubrication Guide will guarantee that the proper fluid is installed in all transmissions, transfer cases and differentials.

a. True.
b. False.

84. Which vehicle may have the final drive fluid level checked with a dipstick under the spare tire?

a. Chevy Spectrum.
b. Ford Probe.
c. Honda.
d. Subaru.

85. Ford transfer case aluminum fill plugs are easily stripped because aluminum is relatively soft and

a. the square drive hole is 10MM, slightly larger than the conventional 3/8" drive.
b. they are torqued to 45 ft/lbs.
c. they are cemented in place at the factory.
d. All the above.

86. Following oil filter change service, the engine should be run

a. only a couple seconds at idle and then shut off.
b. only at idle but for at least 30 seconds during the leak check.
c. at "high idle" or an RPM sufficient to generate "highway" oil pressure.
d. --if turbo equipped--to an immediate fast idle to insure adequate oil pressure to the turbo.

87. When lubricating the chassis, grease should be applied until all the old grease has oozed out of the joint.

a. True.
b. False.

88. A leaking clamped joint in the exhaust system can be quickly and easily repaired by simply tightening the nuts on the clamp.

a. True.
b. False.

89. Regular, repeat customers are generated primarily by

a. having a good location.
b. the customer's perception of convenience, confidence and ego gratification that you provide.
c. having nationally known products.
d. doing a good job working on their car.

90. Which makes are prone to lose prime after oil change service?

a. BMW and Chevy Spectrums.
b. Subaru and Volvo.
c. All Ford trucks.
d. Some Cadillacs and Oldsmobiles.

91. To confirm a suspected bad oil pressure-sending unit for an oil pressure gauge equipped vehicle

a. disconnect the connecting wire at the oil pressure sending unit.
b. momentarily touch the connecting wire to ground.
c. touch the connecting wire to a "hot" terminal and hold it.
d. rap the sending unit with a hammer or heavy wrench.

92. When responding to a customer complaint, you should

a. first educate the customer so he will have a better understanding of his problem.
b. always apologize and pay whatever costs the customer has incurred.
c. listen to the entire complaint before responding.
d. realize the business is legally liable for all expenses a customer has paid out due to any problem if your shop is the last that worked on the car.

93. Which cars may require an oil drain plug gasket that is thicker than most and made with a tough "rubbery" construction that provides the additional "pillow" to fill the slight defect sometimes found on the drain plug gasket seating surface?

a. Toyotas.
b. Fords.
c. Peugeot diesels.
d. '87-'89 Volkswagen Golf and Jetta models.

94. A ratchet drive extension should not be used to remove differential plugs because

a. all differential plugs are 10MM.
b. the eight point female drive plugs will "round out".
c. most all differential plugs are 3/8" allen head.
d. it will tend to break.

95. Ego gratification as expressed in the Lubrication Technician Manual is

a. simply flattering the customer.
b. a basic human need.
c. taking care to keep the customer from waiting.
d. addressing the customer properly.

96. Vehicles equipped with limited slip differentials normally require differential fluid changes more often.

a. True.
b. False.

97. A turbo is a dual impeller wheel that forces additional air into the intake manifold. It is

a. powered by exhaust gases.
b. driven by the alternator belt.
c. energized when the driver applies 3/4 throttle.
d. none of the above.

98. Detergent-dispersant additives in a motor oil

a. help to prevent sludge and varnish build-up.
b. help to clean the engine internally.
c. permit contaminants to be removed by changing the oil.
d. All the above.

99. The big problem with an overfilled battery is

a. that the acid solution will be diluted.
b. possible acid corrosion to surrounding components.
c. the power output of the battery will be reduced.
d. the life of the battery is reduced.

100. When draining the oil, it is crucial that sufficient time be allowed for the last drop to drain out.

a. True.
b. False.

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LUBE TECH EXAM

NAME _____ DATE _____ SCORE _____

	a	b	c	d		a	b	c	d		a	b	c	d		a	b	c	d
1.	0	0	0	0	26.	0	0	0	0	51.	0	0	0	0	76.	0	0	0	0
2.	0	0	0	0	27.	0	0	0	0	52.	0	0	0	0	77.	0	0	0	0
3.	0	0	0	0	28.	0	0	0	0	53.	0	0	0	0	78.	0	0	0	0
4.	0	0	0	0	29.	0	0	0	0	54.	0	0	0	0	79.	0	0	0	0
5.	0	0	0	0	30.	0	0	0	0	55.	0	0	0	0	80.	0	0	0	0
6.	0	0	0	0	31.	0	0	0	0	56.	0	0	0	0	81.	0	0	0	0
7.	0	0	0	0	32.	0	0	0	0	57.	0	0	0	0	82.	0	0	0	0
8.	0	0	0	0	33.	0	0	0	0	58.	0	0	0	0	83.	0	0	0	0
9.	0	0	0	0	34.	0	0	0	0	59.	0	0	0	0	84.	0	0	0	0
10.	0	0	0	0	35.	0	0	0	0	60.	0	0	0	0	85.	0	0	0	0
11.	0	0	0	0	36.	0	0	0	0	61.	0	0	0	0	86.	0	0	0	0
12.	0	0	0	0	37.	0	0	0	0	62.	0	0	0	0	87.	0	0	0	0
13.	0	0	0	0	38.	0	0	0	0	63.	0	0	0	0	88.	0	0	0	0
14.	0	0	0	0	39.	0	0	0	0	64.	0	0	0	0	89.	0	0	0	0
15.	0	0	0	0	40.	0	0	0	0	65.	0	0	0	0	90.	0	0	0	0
16.	0	0	0	0	41.	0	0	0	0	66.	0	0	0	0	91.	0	0	0	0
17.	0	0	0	0	42.	0	0	0	0	67.	0	0	0	0	92.	0	0	0	0
18.	0	0	0	0	43.	0	0	0	0	68.	0	0	0	0	93.	0	0	0	0
19.	0	0	0	0	44.	0	0	0	0	69.	0	0	0	0	94.	0	0	0	0
20.	0	0	0	0	45.	0	0	0	0	70.	0	0	0	0	95.	0	0	0	0
21.	0	0	0	0	46.	0	0	0	0	71.	0	0	0	0	96.	0	0	0	0
22.	0	0	0	0	47.	0	0	0	0	72.	0	0	0	0	97.	0	0	0	0
23.	0	0	0	0	48.	0	0	0	0	73.	0	0	0	0	98.	0	0	0	0
24.	0	0	0	0	49.	0	0	0	0	74.	0	0	0	0	99.	0	0	0	0
25.	0	0	0	0	50.	0	0	0	0	75.	0	0	0	0	100.	0	0	0	0

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OIL CAN HARRY'S TEAM LEADER MANUAL

To the Team Leader. . . .

You have been chosen for your position. You are the most experienced, knowledgeable and trustworthy member of the team. If this were not so, you wouldn't have the job. Honor this trust. Operate the business as if it were yours. Every action you take or decision you make should enhance the business and further the General Manager's goals. Do so and you will be permitted maximum freedom to operate the business your way. Your supervision of the team should result in a happy and efficient crew. You can't have one without the other. You must have their respect. Gaining their respect involves a number of factors. These include:

1. A strong personal interest in each individual. Take the time to learn all you can about his goals and how he thinks. Know his name, where he lives and what his interests are. Is he married? Living with parents? Does he have special skills? Knowing the person helps to understand his problems and his attitude toward the job.

2. Serve your crew. Great leaders become so by serving others. Establish a mind-set that your job is to do everything you can to further the interests of those who work for you. If you take care of them, they will take care of you.

3. Keep the team informed. Make sure they understand the rules and why they are necessary. Keep them updated on new technical material as it becomes available. Discuss problem areas and listen to potential solutions. Review procedures and rules frequently.

4. Have the right priorities. They should be--after your immediate family--the customer, the business, the crew and then yourself. By locking those priorities in your mind, making decisions on routine day to day matters will be much easier.

5. Encourage mutual respect. Help each man to look good in the eyes of the other team members. Every individual will have some faults but they should feel themselves to be a part of the team--to belong and be supported by the group.

6. Train them! Don't expect a team member to perform well if he hasn't been trained. Don't assume he will remember every word you have said. The human brain retains only a small percentage of inputs. Repeat information and provide refresher training frequently. Explain why each function or portion of a job is performed.

7. Evaluate yourself. Remember that the team performs as a direct result of how well you are doing your job.

8. Be consistent. Don't carry your own personal problems to work. Your mood must be stable. Don't be lackadaisical about an infraction one day and "chew out" another man the next day for the same thing. Do not let a team member's personality affect your relationship with him as long as it doesn't affect the job. Tolerate irrelevant flaws and accept people as being different as long as the job or customer relationship is not affected.

9. Set the example. Every team member will automatically adjust to your standards. You don't shave and they won't shave. If you're honest, they'll be honest. If you think it's fun to put a mouse in one of their lunch boxes, they'll think it's fun to put a wasp nest in your cash drawer. If you play games, they'll play games. If you take the job seriously, they will.

10. Insist on rigid standardization. It is critical that the customer perceives the same experience every time he visits. As we grow, other units will be added. It may be necessary that team members be rotated to other units as Team Leader and Assistant Team Leader positions are opened. The OIL CAN HARRY'S Team Member must be able to join another team and immediately go to work. If you permit things to be done differently at your location, you will have guaranteed friction among your crew. What the crew experiences under your supervision must be the same as presented to him at the training center. Better solutions are eagerly solicited, however they must be evaluated and adapted by the entire OIL CAN HARRY'S system before being put into use.

11. Use authority properly and fairly. Never "use" a team member simply because you have authority over him. For example, a team member should not be used as a personal "gofer". Assign undesirable chores equitably.

12. Do use your authority. Insist on a high level of performance. Stay in charge. There are certain tools available to you short of terminating a team member. Put them to work. It's been said that, "Idle hands are the devil's workshop" and there is a lot of truth in it. If your crew sits around with nothing to do, they will find something to bitch about. Stop their pay time. Send a disruptive or non-cooperative team member home for the rest of the day. Tell him to come back when he is ready to be a part of a winning team. When you must take disciplinary action, be brief and don't argue. If anything, lower your voice. It will have more effect than arguing or nagging. OIL CAN HARRY'S policies are clear cut and if a team member chooses to be a part of our organization, he is expected to function under our rules. You are authorized to do anything necessary in furthering the General Manager's goals so long as it enhances the business and isn't illegal or unsafe. Obviously it is better to persuade a team member to be a productive member of the team, but if all efforts fail, it's better to be rid of him than have him break up the team or cause harm to the business.

13. Terminations: Nobody wins when a team member is fired. It costs money to train a replacement. His services are lost. The remaining members must work harder until a replacement is located and trained. The replacement is an unknown quantity that may be worse than the one let go. And of course, you lose bonus money. Termination should be considered a last resort to solve a problem. If you must terminate someone, never tell him ahead of time. Try to do it in private. Be brief. Be firm. Be calm. Tell him he is terminated. Give him the reasons for which he is terminated. Be definite in what you say. Say precisely, "You are terminated due to consistent tardiness.", for example. If a person quits, make sure he verbally states, "I quit." Under present law, this is a requirement. Otherwise the state may consider him "laid off" and increase the unemployment tax rate.

14. Accept responsibility. It is your show. If it goes well, feel proud because it is because of you. If things go sour, don't pass the blame. Accept it. Change. Improve. Re-train. Learn from it. But keep it your show. Once you have experience being in charge and you know what needs to be done, don't look to the General Manager to do your job for you. You are not a "messenger boy", you are the boss. Run the place!

15. Basic necessities. The team's requirements for the basic necessities of food, water--and ego gratification--should always come before your own needs. Never eat, drink, or accept a pat on the back until your team has received theirs.

16. Be fair. If a team member stayed late working on a customer's car, let him off early the next day. Don't blindly accuse without knowing all the facts. Don't assign the same person an undesirable chore every day simply because you know he won't complain.

What is your job? Simply put, it is to set an example, train your crew, inspect their performance, direct their activities and report the business activities to the General Manager. Do those five things while keeping the proper priorities in mind--customer--business--team--yourself--and you will do just great!

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THE GENERAL MANAGER'S GOALS

The General Manager has entrusted you with many thousands of dollars worth of property and equipment--as well as his reputation. You are responsible for running the shop, but he is truly responsible, because he is the one that must write the check. You job is to play the role of the "great white knight" and shield him from legal problems, "come-backs" and other events that adversely affect a business or its reputation. The General Manager would not have entrusted you with this if he didn't recognize you as a pretty special person. You are more responsible; you are more honest; you have an ability to get along with people; and you look good. These are valuable traits. The General Manager recognizes and appreciates them and depends on you to accomplish the business goals. What are these goals?

1. Make a profit. This is listed first not because he is greedy or places profit before people. His priorities are the same as yours--with the customer always first and his personal welfare last. Profit is listed as the number one goal simply because any business must produce a profit to survive. Profit is used to buy new equipment, build more locations and create jobs. Without profit, a business folds. When there is no profit, there is no future for your team--or yourself.

2. Provide a desired service for the motoring public in a unique setting. OIL CAN HARRY'S saves the customer time and money. Frequently, items found during the inspection sequence may prevent a serious accident. Our function is preventive maintenance. Every time we do our job, the customer is avoiding large repair bills later on. No one else does our function as well as OIL CAN HARRY'S . Be proud of the service you provide.

3. Create jobs. The General Manager sincerely desires to create jobs and provide work experience and advancement for you and your team.

4. Enhance and contribute to the overall community. A clean, well landscaped and efficient

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business is desirable in any community. The taxes paid by the business funds education, fire and police protection, street maintenance and other services on which the community depends.

Every decision you make and every action you take should be to further the above goals. Do so and you will earn the trust the General Manager has given you.

CONTROL SYSTEMS

Control systems exist in every business. They are simply the removal of temptations by using cross check systems to insure that the product that was ordered was actually delivered, subsequently installed on the customers' cars, and the money that the customer paid for the services actually made it to the bank. They insure that pilferage and "tapping the til", etc. simply do not exist. The General Manager will make you and your team aware of some of these checks. For example, consecutively numbered sales tickets are used and any missing ticket must be explained. Daily sales receipts are accurately counted and cross checked against the sales tickets. The quantity of waste oil produced is compared to the new oil sold. The initials on the sales tickets are compared to the hours worked on the daily report. All ordering data, consumption, payroll data, sales ticket information, bank statements etc. are programmed into a computer. The computer "massages" this data to seek out and pin point any irregularities.

The net, bottom line profit is relatively small compared to overall sales. After lease payments, payroll, taxes, insurance, utilities and the other expenses of operating a business is paid out, net profit is really quite small. One of the General Manager's obligations is to protect this "life blood" of the business. Make sure every one on the team understands that absolutely no pilferage, however small, will be tolerated. . . . .and the boss will know!

CUSTOMER RELATIONS

You are the first OIL CAN HARRY'S member the customer meets and people tend to judge most by first impressions, so it's especially important that you present a favorable one. Of course, your appearance should be the example of the team and all the factors affecting the customer's ego satisfaction applies. You have an additional job. You must radiate confidence and impart it to the customer. Promote the "House Special". Relax those customers who are a bit nervous about driving over the "pit". Complete the sales ticket accurately and efficiently. Be ready to make recommendations concerning oil grade, etc. Recognize customers in line and let them know how long the wait will be. Make the wait as pleasant as possible with coffee, a newspaper or magazine. Keep your desk organized so that data is readily available. Always answer the phone yourself so that you are personally aware of incoming messages, problems, etc. Anticipate problems your team members may encounter with a particular car and inform them. Check for fuel leaks before directing a car into the building. Inform the customer of any vehicle damage or missing parts before the car enters the building. (If you don't, the customer may be unaware of it and assume the problem or damage was caused here.) While inspecting lights, transmission level, etc., request the customer to perform each function. Have patience and keep smiling with the "little old lady" who doesn't know how to open her hood. Don't get into an argument with the "Bull of the woods" male customer who has suggestions on how you might better do your job. It's just quicker and more efficient to respond with, "Thanks for the input, Sir. I'll pass it on to the General Manager."

Make change in exactly the same sequence and the same manner each time. Use the words, "Sir", "Ma'am", "Please" and "Thank you" lavishly. Keep the customer's initial visual impression of the building a good one. Keep driveways trimmed, grass mowed, trash picked up and loose items stowed properly. ANYTHING IN THE BUILDING THAT IS NOT NECESSARY TO SERVICE THE CUSTOMER OR THEIR VEHICLE SHOULD BE KEPT OUT OF SIGHT.

Use direct eye contact with the customer. Look them squarely in the eyes while you are talking to them--especially if answering a question. Answer questions straight forward and to the

point. Most customer's questions are really just a way of finding out if you know what you are doing. Anticipate questions that customers are going to ask and be ready for them. Don't feel bad about answering, "I don't know, Sir". You do know the necessary information or you wouldn't have the job. If you don't know, it's probably not too important. Offer to obtain the answer for the customer. Be polite, but maintain control. Demonstrate that you do know what you are talking about by good eye contact and brief, to the point answers. 90% of customer's questions could be re-worded, I'm not sure you guys know what you're doing. Say something to give me confidence in you."

While doing all the above, supervise and assist your team members doing their jobs, complete the appropriate reports, take care of the money, enforce the rules, handle incoming shipments, clean and maintain the building and handle all phone calls.

It's a big job, isn't it? But then, that's why you were selected as Team Leader. You are the only one who can hack it all and do it well. The General Manager is depending on you.

TRAINING

Ordinarily, a new trainee will come from the training center fully qualified to perform the functions of lube technician. However, many times you will need to conduct refresher training or cover matters pertinent to your particular location. . .and there may be times when you may need to train someone "from scratch". To teach someone something usually requires five steps. These are:

1. Tell them how it's done.
2. Show them how it's done.
3. Watch them do it.
4. Correct them.
5. Let them practice under supervision.

Have patience. Everyone doesn't learn at the same rate. Don't forget what it was like the last time you were in a learning situation. Don't make training a demonstration of how good you are at the job. Concentrate on what the trainee needs to know. Pause occasionally to let the trainee ask questions. If he doesn't ask questions, you ask him. Sometimes a trainee has a way of nodding his head, but not really understanding the element that is being taught. Training is a step by step proposition. The trainee must understand step one or he will be lost on step two. When you "show" make sure the trainee can see what it is you are showing. If all he can see is your back, he is not really being shown. During the "show" phase, make sure the trainee understands why each step is done. Accept only the right performance during the "Correct him" phase. Re-explain why it must be done in a certain way. Praise when done well. That's the short version of how to teach. The following provides a more in-depth analysis of how and why people learn.

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The Laws of Learning

The ability to instruct others involves different aptitudes, talents and characteristics than those necessary to simply do a task well. Instructing involves an understanding of how people learn and the ability to apply that understanding.

Human beings are blessed with a wondrous brain that incorporates the ability to retain experiences and the judgment to apply that retention to current or future needs. In other words, human beings can teach themselves. Put a new employee in the basement of a fastlube and at some point in time, they will be able to perform all of the Lower Tech's duties. With the sensory inputs to the eyes, they will be able to observe others performing the job and be able to duplicate it. After touching a hot exhaust pipe through their sense of touch, their brain will convince them that is not good to do. Through the sense of hearing, they will--sooner or later--grasp the verbal portions of the quality control checks. Through trial and error they will learn not to remove Ford reverse gear linkage bolts or remove radiator caps when the engine is hot.

True. They could. But it would be time consuming and expensive and probably painful in spots. The roll of the instructor is to accelerate the learning process so that an individual can safely qualify--in minimal time-- to perform an assigned function. Learning is a change in behavior as a result of experience. It is the instructor's job to guide the trainee through the proper experiences so that appropriate behavior is the result.

There are certain laws of learning that apply just as surely as the laws of physics and the fastlube instructor should have a good understanding of them.

1. The Law of Readiness. Individuals learn best when they are ready and have a desire to learn. Motivating the trainee is one of the instructor's prime responsibilities. Little learning takes place if

the trainee sees no need for the material being covered or has no desire to absorb it. The law of readiness mandates that the "why" of any task and how it will benefit the trainee be clearly conveyed

2. The Law of Repetition. Those things most often repeated are best remembered. If it is critical the trainee remembers a certain fact, repeat it several times. It is the basis of practice and drill. Knowing how to do the Upper Tech's job just isn't enough. Before servicing a customer's car, the sequenced procedure must be practiced many times. Repetitively performing the sequence is necessary for meshing of the sensory inputs, the muscles and verbal communication.

3. The Law of Steps. Trainees will learn better when a complicated task is presented in steps. The instructor must assure that step 1 is known and understood before proceeding to step 2.

4. The Law of Primacy. The first information presented creates a strong, almost unshakable, impression. What is taught must be taught right the first time. It is very difficult to "unteach". For example, if a new employee has worked as a Lube Tech at another facility with different procedures, they may actually take longer to train because the old habits--and attitudes--will keep resurfacing.

5. The Law of Intensity. A vivid, dramatic or exciting learning experience teaches more than a routine or boring experience. For example, emergency procedures will be retained much more if practiced in a realistic drill than if simply covered in a classroom lecture.

6. The Law of Recency. Things most recently learned are best remembered. This law is the basis of refresher training. Critical needs of Lube Technicians such as the ability to recognize vehicles requiring special attention must be reviewed on a regular basis. Today, the trainee may clearly have in mind the special precautions that are required when installing an oil filter on a Renault. But if one doesn't come through the door for several months and there are no concrete reasons for remembering the procedure, they may well install the wrong filter simply because time has passed.

The forgetting process begins instantly after acquiring information and becomes more complete with time. The rate of forgetting involves a number of factors, especially motivation. The boss has no problem at all remembering a bulletin because he knows it can be expensive if he forgets. He must write the check when things don't go right. However if the Lube Tech has no such loss to suffer or other reason to remember, they must have refresher training.

7. The Law of Security. Effective learning does not normally take place when the trainee is hungry, thirsty, sick, in pain or in a state of fear. (There are exceptions where the Law of Readiness overrides this law. For example, if you are a passenger on an airliner that has just had both engines quit over the ocean, you would probably learn much more efficiently how to don the life jacket than when presented in the routine manner.)

The Learning Process

Initially, all learning comes from perceptions which are directed to the brain by one or more of the five senses--sight, hearing, touch, smell and taste. A "perception" is the understanding of the meaning of the inputs from the senses. Perceptions are the basis of all learning and a knowledge of the factors which affect the perceptual process is very important to the instructor.

Among the factors which affect a trainee's ability to perceive are the trainee's past history, goals, values, self concept, feeling of security, time and opportunity. The trainee's past history can distort perceptions. For example, a person from an inner city ghetto might perceive an event or statement substantially different from someone reared in a small town in Iowa.

The trainee's goals and values certainly affect perceptions. Spectators at a baseball game demonstrate this frequently. One fan may be absolutely certain in his mind that a player was out while an opposing fan will be equally sure that the player was safe. Both fans had the same sensory inputs, but their perceptions are markedly different.

Self concept is a powerful determining factor in an individual's ability to learn. "Winners" tend to continue winning. "Losers" feel predisposed to fail. The astute instructor will analyze the trainee's self concept and mold it into a positive image.

If a trainee is feeling apprehensive or insecure, whether because of physical danger, peer pressure or feelings of inferiority, little learning will take place. The instructor must of course cover the safety aspects of any job, but an equal emphasis should be placed on the fact that when proper procedures are followed, the trainee will be in a safe environment.

Sometimes social pressures can create the strongest sense of insecurity. A positive effort should be made to create "a level playing field" for all trainees. Encourage the sense of belonging to a team and the value of each trainee's actions in every evolution. A little extra encouragement for those who are hesitant will go a long way. Try to downplay differences in race, financial status, size or other factors which may contribute to a trainee's insecurity. Emphasize that regardless of the individual's background everyone now shares a common goal.

Time and opportunity must be given for the individual to perceive. Trying to demonstrate the installation of a PCV valve to 20 trainees at one time is pointless. Most of them will simply be unable to see the demonstration. Time and opportunity are the prime considerations in developing the schedule of events that lead the trainee to satisfactory qualification.

When scheduling the blocks of learning to take place, it is important to know that the sensory inputs that create the learning process do not contribute equally. 75% of acquired knowledge is acquired through sight, 13% through hearing, 6% through touch, 3% smell and 3% taste.

An awareness of this fact is of profound interest to the instructor and should be a continuous consideration. The brain thinks in "pictures", not "words". For example, think of "car". Did your

brain think C-A-R or did it conjure up a vision of that candy apple red Corvette convertible you've always wanted? Create mental pictures in the trainee's mind and retention will be dramatically enhanced.

One element that must be taught to all lube technicians is to perform the job in a precise sequence. One approach is to give them the printed list and say, "Memorize this." It will probably take several days. A much faster approach is to create mental pictures that incorporate the sequence number in them. The more outrageous, unusual or ludicrous the mental image formed, the faster it will be retained. For example, consider the following 5 steps in a typical upper tech sequence:

1. Direct customer into the service bay.
2. Have the customer shut the engine off.
3. Place the courtesy phone on the dash.
4. Inform the lower tech of the job to be done.
5. Raise the hood.

To rapidly lock this sequence into memory, form a mental picture of a lube tech directing a car in and the shape of the car is a huge number '1' with wheels on it. If this actually happened would it be remembered? You bet! 40 years from now, you could describe it to your grandchildren.

To lock in the second step, picture in your mind a huge 100 ton V-8 engine with a six foot ignition key stuck in the top of it. It's running down the highway, mysteriously held just a couple inches off the ground, with a 20 foot tall number '2'--with long legs--chasing it. If you actually saw that would you remember? It would be impossible not to have your brain register such a bizarre event.

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To remember that step number three is to place the courtesy phone, perhaps you could visualize the phone shaped as a '3', or three phones strapped together, or the phone with 333-3333 on its side.

Get the picture? Have the trainee form a bizarre, ludicrous picture in their mind that includes the event and its number in the sequence. The brain thinks in pictures and more easily retains bizarre or unusual inputs to the senses. This memory technique works best when the elements of the bizarre picture are drawn from the trainee's mind. This procedure will not only fix the sequence in the trainee's mind, they will be able to instantly answer such questions as, "What's number 17 in the sequence?", "What is done immediately after number 12 in the sequence?" and "Give me the sequence in reverse order."

The ability to answer such questions can be handy as an effective way to answer a customer's question, "Do these guys get any training before they work on my car?" The mental picture method is also very useful in connecting the specific problem with a "problem car". For example, the Renault has two sizes of oil filter stud. If the larger filter is placed on the smaller stud, it will fit well enough to tighten onto the stud. However, going down the road, the higher temperatures and pressure will cause the filter to pop off with catastrophic results. To mentally lock in this filter problem with a Renault, just visualize a Renault with two, three foot wide oil filters mounted on the roof of the car and the large letters R-E-N-A-U-L-T formed with $100 bills across the grill. (That will be about the cost if the wrong one is installed.)

Insights.

Insights involve the grouping of perceptions into meaningful wholes. Evoking these insights is the instructor's major responsibility. "Insights" have to do with correlating one perception with another. It could be called "grasping the big picture" or "developing judgment". For example, one perception from touch might be the exhaust pipe is hot. Another perception from sight might be the filter is located near the exhaust. "Insight" is putting on an arm protector.

As perceptions increase in number and are assembled into larger "blocks" of learning to become insights, learning becomes more meaningful and more permanent. The more "anchor points" the instructor points out to which one can tie insights the more permanent the learning will be. For example, if the instructor can draw on real world experiences to dramatize the need for proper torquing of drain plugs, anchor points are created that enhance the concept that it is important.

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Motivation.

Motivation is the dominant force which governs the trainee's progress and ability to learn. Motivations can be positive or negative. As a positive example, "Do the job right. Customers are happy. Business has more income. You get higher paycheck." A negative example might be, "Do the job right or you will be fired." Both work, but it is generally accepted that positive motivations work better. Negative motivations can be expected to produce only minimally acceptable results whereas positive motivations produce unlimited upside potential.

Motivating a trainee requires an understanding of something called the "pyramid of human needs". At the base of the pyramid are the physical needs that every one must have. We all must have air, food and water. If deprived, at a certain point nothing else matters. When in the survival instinct mode all motivation elements focus on staying alive and getting the physical needs satisfied.

The next need humans have, assuming the physical needs are met, is a need for safety and security. If in a threatening environment, the brain encourages us to move away or seek shelter. In the normal human environment the physical and security needs are routinely met, but the instructor must certainly be aware of them and the fact that they must be provided consistently. Learning doesn't take place if the trainee is hungry, thirsty or scared.

Next up the pyramid is the need for social interaction and acceptance by our peer group. An awareness of this need is an absolute necessity for providing good instruction. A good instructor does much more than pass information. A good instructor is a coach, counselor and psychologist rolled into one. The long term effects of good instructional techniques is unmeasurable. It can be a favorable turning point in the life of the trainee that may affect the lives of their family and others with whom they come in contact.

The writer's eighth grade English teacher was obsessed with our class fully understanding the diagramming of sentences. Every day in every way, she focused on the proper structuring of written communications. Right now, as I write this, my thoughts go back to that blackboard of 45 years ago. If you benefit from this book, thanks are due to Florence Huff, for without her I would have never had the confidence to write it.

The point of all this is that, as an instructor, your influence will go far beyond the obvious immediate need. You have the power to influence many, many lives in the future. While teaching a lube tech team the proper sequence, minds are in your hands that can be molded. The common denominator of winners is their attitude and if you can fulfill the individual's social needs, you open the door for them to rise to higher levels on the pyramid.

Design your training so that everyone participates. Bring fun into the equation. When things are done right, be generous with praise. Encourage teamwork. Try to get individuals to focus away from themselves and toward satisfying the needs of the other team members. We all have the need to be accepted, to be liked, to receive friendship and love. Getting the trainee to focus away from themselves and on the needs of the business and the other team members is a sure recipe for making them a likable and respected member of the team.

Here is one way to accomplish that. "John, I'm not too concerned with how you do on the exam, but if the other five all get a score above 95, If you will work with them and help them do that, I'll buy your dinner at the graduation party." Of course, you also tell this to Pete, Larry, Sue, Frank and George.

Your job as an instructor will be easy if every member of the team is working hard to make sure the other five absorb the information.

The fastlube instructor should understand--and apply where appropriate--the many forms of positive motivators since they are essential to true learning. The desire for group approval is probably the strongest motivator for the typical lube technician trainee. A fastlube operation is a team effort. Pointing out a trainee's good performance as a member of that team will motivate the trainee toward even better performance. Have many small prizes and awards for individual accomplishment and hold out the highest award for good team performance as a whole. Everyone likes to win and be a part of a winning team. Establish goals throughout the training process and when they are achieved consider it a "win". The desire for personal gain is a motivator in all employment training situations. "You get qualified, you get the job." or perhaps, "Learn the abilities required of a supervisor and you get a pay raise." Our compensation level certainly is a prime motivator in the business environment.

Trainees are like all other workers in wanting a tangible return for their efforts. When one puts forth effort and no reward is forthcoming that effort will diminish. The instructor must continuously reward proper behavior and effort.

The desire for personal comfort and security is a basic motivation based on the human needs pyramid. All trainees want secure, pleasant conditions. If the subject material promotes that objective, their interest is easier to attract and hold.

Everyone wants to be a hero. When instructing first aid, emergency procedures or using fire extinguishers point out that they may have an opportunity to be on the scene and be a hero if well prepared to take the required action. This is putting a positive slant on a subject where instructors usually use the negative motivation, "Learn it or you're going to die."

The desire for a favorable self image is present with all trainees. If a favorable self image is maintained throughout the process, learning is more efficient. The key to maintaining a positive self image is to organize the training into "building blocks" of learning and insure the trainee has the first step under control before proceeding to the next. Sometimes, it may be necessary to "fall back to the basics"--and review previous material covered before advancing further. When a trainee seems to digress, it may be a signal that remotivation is needed. Emphasize why the

material is needed and the benefits to be had by gaining the information.

Levels of Learning

Learning may be accomplished to any of several levels. The lowest level, "rote" learning is the ability to repeat back something which one has been taught without understanding or being able to apply what has been learned. Teaching you dog to roll over probably falls into this category. He has no comprehension of why you want him to do it or what good it does. But, what the hey, a quick flip gets him a dog biscuit so he is eager to do it again.

Progressively higher levels of learning are "understanding" what has been taught, achieving the "skill to apply" what has been learned and the highest level, "correlation" of what has been learned with other things previously learned or events that may occur in the future--the development of judgment.

Obviously the goal in training lube technicians is to bring them to the "correlation" level. At that level they not only can perform their duties, they know where to get information or appropriate action to take when events or circumstances arise not specifically covered in the training.

Teaching a Skill

There is a five step procedure for teaching any skill whether it be landing an airplane or performing the Lower Technician duties. These five steps are:

1. Explain the task to be performed.
2. Demonstrate how it is to be done.
3. Have the trainee perform the task.

4. Correct that performance.

5. Provide supervised practice.

The explanation should be clear and concise. It should be presented at a speed the trainee can comprehend and in verbiage the trainee understands.

The demonstration should be in full view. This is a common instructor failing. Concentrate on insuring the trainee can see, hear and touch every element of the demonstration. The demonstration should be at a reduced speed so that the trainee comprehends each step. To reach the correlation level of learning, explain the "why" of each step in the procedure. Repeat important points. Ask frequent questions to insure understanding.

Do not discuss exceptions at this stage. It will only create confusion. Always cover the five teaching steps and get the normal procedure down pat before introducing variations or exceptions.

Have the trainee perform the task. Assuming a reasonable effort, praise the elements done right. Emphasize the "why" of those elements done wrong. Belittling or threatening the trainee will accomplish nothing and will retard the learning process.

During the "correct the trainee" phase, it is imperative the instructor reflect back upon the laws of learning and the factors affecting perception. Have patience. Everyone doesn't learn at the same rate. Don't forget what it was like the last time you were in a learning situation. Don't make training a demonstration of how good you are at the job. Concentrate on what the trainee needs to know. Sometimes a trainee has a way of nodding his head, but not really understanding the element that is being taught. Training is a step by step proposition. The trainee must understand step one or they will be lost on step two. When you "show" make sure the trainee can see what it is you are showing. If all they can see is your back, are not really being shown. During the "show" phase, make sure the trainee understands why each step is done. Accept only the right performance

during the "Correct them" phase. Re-explain why it must be done in a certain way. Praise when done well.

The practice phase should be a continuation of praising the good and explaining the "why" when a step is done wrong. Once the trainee has practiced to the point of knowing what to do, why it is done and how to do it, instill an attitude of pride by accepting only perfection as a standard. Once the what, why and how are known, it's the trainee's attitude that must be fine tuned. Instilling an attitude of performing at the highest level--of being good at what one does--may be the most valuable training you can bring to the fastlube team.

Bring fun and competition into your methods. And a word of caution about speed. It should always be secondary to quality. If competing against the clock, disqualify any participant that did the task wrong even though they may have been the fastest.

The best motivation for speed--once the job is known--is competition. The prizes don't have to be tangible. Recognition is the key. "And the winner is . . . !!!" will usually be sufficient. Try to adjust competitions so that every trainee is a winner of some element of the job. If you are working with only one trainee, compete against the clock or an established quality standard.

Loading the Data Bank.

There is much material the trainee must know even though it won't be put to immediate use. Examples are how to use a fire extinguisher; servicing the "problem cars", some of which may not come in for months; first aid procedures; emergency procedures, etc. Motivation, repetition and the forming of mental pictures are the keys to imparting this type of knowledge for maximum retention.

In order to understand the retention of "data bank" information, it will help to explore why

people forget. There are three common reasons for forgetting--disuse, interference and repression.

A person forgets that which is not used. Can you still factor equations? Remember details of the Louisiana Purchase? The molecular structure of sodium chloride? During high school, those were simple facts. But once the finals were taken, unless you have used them along the way, they gradually faded from memory.

"Interference" causes us to forget because other experiences have overshadowed it or confused the details. Life's experiences have a way of muddying the waters. Attitudes change. Motivations change. The perception of events can change. Was that you or your big brother that suggested knocking the hornet's nest out of the tree would be fun?

One theory holds that our mental data bank will always have the information stored, the problem is just pulling it up to the conscious mind. Most any elderly person will confirm that although they may not remember events from only a week ago, they can vividly recall insignificant events in minute detail that happened 60 years before.

"Repression" is an individual's unconscious desire to submerge unpleasant experiences or those that create anxieties.

To enhance the remembering ability of the brain simply requires using techniques that are opposite of those conditions that cause forgetting. For example, you probably don't recall how to factor an equation, but go back another twelve years in your mental data bank. Can you complete this nursery rhyme? "Mary had a little lamb . . ." Even though it's been many years, "It's fleece was white as snow" probably immediately comes to mind. The reason is repetition. You heard it many times in a pleasant environment and were motivated by the gold star that the kindergarten teacher promised as well as Mama giving you a big hug when you showed off your new found knowledge.

Repetition is the primary factor in later recall. Information that is essential for use sometime in the future but will not be immediately used should be repeated, and repeated in as

many ways as possible. For example, information may be spoken, shown on the blackboard and presented on video or with photographs. When discussing "problem cars" approach it from both directions. For example, "What is the "problem" with this car?", then, "This is the problem. Which car has it?."

To counter "disuse", refresher training should be conducted at appropriate intervals. "Interference" will probably be a factor when trainees have past experience in other auto related fields or have worked for another fastlube that does the job differently.

To enhance the retention of learning, make the instruction memorable. Bring in as many of the senses as possible. The trainee should hear the information, see it, feel it and at times even smell it. For example, the odor of gear oil is memorable.

Praise lavishly. Responses which give a pleasurable return tend to be remembered. Connect information by association with the known. For example, red lights mean problems. Green lights mean proceed. Motivate the trainee to retain the data by explaining the need for retention and how it will benefit them later.

Provide mental "anchors"--words, phrases, poems, etc. that correlate to the information to be retained. Most any boater has locked onto "Red--Right--Returning to remember which colors mark a channel. Pilots use "East is least and West is best" to remember which way to correct for the earth's magnetic variation when plotting their course. Perhaps the first letters of the job sequence can be fashioned into poetry or a statement. Hopefully it's more basic than you will need to get with your trainees but, "Righty--tighty, lefty--loosey" is a mental anchor for remembering which way to turn a plug or filter to tighten it.

Habit Patterns.

The formation of proper habit patterns is essential in a fastlube. The law of primacy

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applies. The first training received is the most lasting. Studies have shown that airline pilots with 20,000 flight hours still operate an airplane based on their learning experiences during the first ten hours of basic flight instruction. The formation of correct habit patterns from the beginning of any learning process is essential to further learning and for correct performance after the completion of training. It is much easier to foster good habit patterns from the outset of training than break bad habits later.

Insist on only the correct procedures and techniques once the trainee is aware of what is to be done and how to do it. This is especially true for safety related factors. A good case can be made that most all accidents occur because someone developed a poor habit pattern.

Doing things in a specific sequence and in the same way on every car is the best enhancement to safe operations that an instructor can leave with the trainee. If the first car is serviced without an accident and every other car is serviced exactly the same way, then an accident should never occur.

The "Problem Trainee".

When a trainee is having a problem absorbing the information, there are certain "defense mechanisms" that kick in and the result is what some call a "problem" trainee. People use these defenses to soften feelings of failure, to alleviate feelings of guilt and to protect feelings of personal worth and adequacy. A good instructor will recognize them and take action to counter them. They are really simply a cry for help. Rather than say, "I can't grasp how to do this." which would indicate an inadequacy on the part of the trainee, they may commonly use one of four types of defense mechanisms. These are rationalization, flight, aggression and resignation.

Rationalization. If trainees cannot accept the real reasons for their behavior, they may rationalize. This device permits them to substitute excuses for reasons; moreover, they can make those excuses plausible and acceptable to themselves. Rationalization is a subconscious technique for justifying actions that otherwise be unacceptable. When true rationalization takes place,

individuals sincerely believe in their excuses. The excuses seem real and justifiable. Such statements as, "I didn't want this job anyway." or "The quiz questions were all on stuff that wasn't important, anyway." are sure clues that the trainee is using rationalization.

Flight. Trainees often escape from difficult circumstances by taking flight, physically or mentally. Most every fastlube has experienced the new hire that is so overwhelmed that he goes home for lunch and never comes back. Taking flight mentally is called "daydreaming". The trainee, to escape either difficult or boring circumstances may use daydreaming as a way to transport themself to a more favorable or less challenging environment.

Aggression. In the training environment, aggression is almost always very subtle. Due to not understanding the material, the trainee may ask irrelevant questions, refuse to participate in team activities or disrupt the activities of others.

Resignation. Trainees may become so frustrated that they lose interest and give up. They just accept defeat. The most obvious cause for this form of resignation takes place when, after completing the early phase without grasping the fundamentals, a trainee becomes bewildered and lost in the advanced phase. From that point on, learning is almost nil although the trainee may go through the motions of participating.

The instructor's job in all four cases is to recognize the symptoms and then take action to counter them as early in the process as possible. In all four cases, the solution is to fall back to the basics and review the material with the trainee until their confidence is regained and they are ready to proceed. All four defense mechanisms have one message--"Hold up. I'm not understanding the material. Go over that again for me."

The Teaching Process

The teaching of new material can be broken down into five steps:

1. Preparation.
2. Presentation.
3. Application.
4. Review.
5. Evaluation.

To prepare for each lesson or instructional period, the instructor must determine just what is to be covered. The best way to approach this is to determine the goal--just what is it you want the trainee to be able to do at the end of the period--and work backwards to develop the material to prepare the trainee to accomplish that goal.

Each instructional period should comprise a "block" of learning that will contribute to the overall goal of qualification and the order of presenting the blocks of learning should be such that they prepare the trainee for later information. The goal for the entire schedule is of course to have the trainee be able to competently perform the duties of either the Upper or Lower Lube Technician, be motivated to deliver their best performance, be able to handle problems as they arise and be able to contribute to the team's efforts in all phases of running the business.

That is the overall goal. To achieve it a training schedule should be prepared that incorporates the time and opportunity for the trainee to be taught the individual elements that will result in such qualification. It is the instructor's job to prepare a logical schedule so that the trainee advances from the basics through total qualification. Normally about 40 hours of instruction will be required. The early periods should focus on orientation, motivation and the basics such as proper use of hand tools
and the shop's equipment. An overview of the entire schedule should be given early in the program so the trainee has a good idea of what is to be accomplished and how it will be done.

The last two periods should be reserved for the review, exam and exam review. In between, several periods should be allocated to problem cars and practicing the job sequence. The dialogue will take a period to present and another to practice. Emergency procedures, customer relations and

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troubleshooting will warrant a period each. A typical schedule for training a new fastlube team might look like this.

		MON	TUE	WED	THU	FRI
8:00	8:50	Overview	Equip	Add'l Serv	Open / Close	Math
9:00	9:50	Motivate	Products	Add'l Serv	Trouble Sh	Cust Rel
10:00	10:50	Safety	Products	Job Seq	Job Drill	Job Drill
11:00	12:00	Tools	Dialogue	Job Seq	Job Drill	Competition
12:00	1:00	Lunch	Lunch	Lunch	Lunch	Lunch
1:00	1:50	Cust Percep	Ref Mat	Prob Cars	Prob cars	Prob Cars
2:00	2:50	Cust Service	Job Seq	Job Seq	Job Drill	Job Drill
3:00	3:50	Communica	Job Seq	Job Seq	Job Drill	Review
4:00	4:50	The Rules	Job Seq	Dialogue	Emerg Proc	Exam / Rev

The instructor should be prepared to deliver the required material in the time allotted. The training aids or training vehicle should be ready and it should be arranged so there are no distractions. Equipment and tools should be set up so that the trainee does the normal task in the normal way with the tools normally available. Preparation! It's the required first step in the teaching process.

The presentation is the physical act of transferring the knowledge or skill from you to the trainee. It might be in a lecture format, one-on-one discussion with an individual trainee or supervised drill. The success of the presentation usually is directly related to the level of preparation!

The application step is the student correctly answering questions to indicate they have absorbed the information and can apply the knowledge gained or perhaps actually performing a task that was to be learned.

The review is the summation of important points that were presented. The review can take the form of an oral quiz, a summation of the material covered or other means to solidify

information, procedures or skills in the trainees mind.

Evaluation, of course, is determining if the learning actually took place. This step is a check of the instructor's coverage as much as it is the trainee's absorption of the material. Evaluation can be done by oral quiz, written exams or demonstration of a skill. The best evaluation is that which determines if the trainee has reached the "correlation" level of learning. Can they use what they now know to handle a scenario to which they haven't been exposed. To regurgitate facts or statements only assures the instructor the trainee has reached the "rote" level. Pose judgment questions to determine if the trainee fully understands the material. For example, the procedure for handling a customer complaint has been covered. Now pose the scenario of a disgruntled Fire Chief that is concerned about a discharged fire extinguisher. If the trainee has reached the "correlation" level of learning, they will perceive the obvious similar procedure of handling the Fire Chief.

Workbooks, Quizzes and Examinations.

Workbooks, quizzes and examinations are all part of the evaluation step in teaching and each has a separate function. The function of a workbook is to force the trainee to delve into the text and locate information themself. The best form of workbook is a series of "fill in the blank" questions designed so that reference must be made to the text in order to fill in the proper words. Try to design the blanks so that even if the material is known, it will be necessary to refer to the text. The idea is not to test. It is to insure that the trainee reads the text and perceives what is in it. While looking for the proper words to fill in a blanks, the trainee will read several other paragraphs and it will be difficult for his attention to drift. While designing the questions, avoid those that are obvious or permit the trainee to answer without studying the textbook.

An example of an obvious question might be: To remove the oil _____, place the wrench near the base plate and turn in a _____ direction. The trainee need not read the text to answer that. A better approach is to design questions to direct the trainee to a given section of the text but word it so that the entire section must be read. For example, The PCV valve is an

important component and serves three functions. It _____ the air flow from the _____ to the _____ _____, prevents a _____ from causing a _____ _____ and indirectly _____ the _____.

The workbook should contain at least one question concerning each of the elements of knowledge that you feel is needed for qualification. About 100 should do the trick.

Quizzes are used throughout the teaching process and may be as simple as a one question check for understanding. They are designed to continuously check for understanding and progress of the trainee to that point in time. They should be brief and not time consuming for either the instructor or trainee. The most practical quiz is an oral one. It requires little preparation and no time is consumed in grading, etc. It also permits instant clarification or modification. Proper quizzing by the instructor can have a number of desirable results:

1. It reveals--instantly--the effectiveness of the instructor's training methods.

2. It checks for trainee retention.

3. It reviews material. (Repetition)

4. It stimulates thinking and requires the trainee to stay on track.

5. It identifies points which need more emphasis or which the trainee misunderstood.

6. It checks for comprehension when follow-up questions are used.

7. It promotes active trainee participation which is most desirable for

effective learning.

Effective oral quizzes focus on the major points of a procedure, are answered quickly and suitable for follow up questions. "Why" is one of the best follow up words to use in conducting an oral quiz. It determines understanding, not just knowledge. For example, "What weight oil would you recommend for a customer spending the winter in Wisconsin?" After the trainee responds with "10W-30", the follow up questions might be "Why?" Then you might ask, "Is that true in all cases? How about Honda?" or "How about synthetics? Would that be a good recommendation?" "Why?"

Avoid irrelevant questions. "How many items are there in the Lower Tech sequence?" might be great at a trivia party, but the trainee has been concentrating on what to do and has little concern for the number of items in the list. Irrelevant questions simply do not do what questions are supposed to do--evaluate the trainee's retention and understanding. A better question would be "How do we insure that the old oil filter gasket didn't stay stuck on the block?" Avoid "oversize" questions such as "Give me all sequences in order, the prices of all services and the dialogue the customer would hear during the entire service. Good oral questions center on one--and only one--concept, fact or idea. After that question is answered, certainly follow up questions are good, but they should all be answerable in a brief statement or two. Avoid the "toss-up" question that has no definite answer such as, "Would you rather service a Buick or a Ford?"

Oral quizzes should be a continuous part of the teaching process and the instructor should be prepared to question the trainee at any time it appears their interest is waning, their body language shows they may not be grasping the information or to confirm one block of learning before proceeding to the next.

Examinations are the formal determination of the instructor's effectiveness and the trainee's proof that the knowledge and skills were developed. Although there are many different types of examinations, from a practical standpoint, the multiple choice type of questions are the favored choice for fastlube training. It permits rapid grading by using an overlay with holes punched in it to

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correspond to the correct answers. It provides a numerical score for a precise determination of a cutoff point for qualification. It provides an opportunity to again review points of specific concern.

When preparing multiple choice questions there are several points to consider.

1. There should be only one right answer. Avoid detractors that are correct in certain circumstances. Avoid debatable words such as "always", "may", "all", "never" and "could". There will be debatable exceptions. Avoid opinion phrases in questions such as "The best way . . .", "Will most likely . . ." or "The hardest part . . .".

2. The detractors should all complete the question with proper grammar. For example, isn't it obvious that answer 'b' in the following question is not the right choice.

The car that has a thin metal piece that is easily cracked for an oil drain plug retainer is a

a. Ford.
b. Oldsmobile.

3. The detractors should be about the same length as the correct answer. It is common for exam preparers to pick short detractors for convenience.

4. The questions should reflect the material and attitudes presented in the text, the work book and by the instructor.

How long should the examination be? It has been found that there are approximately 100 things the Lube Technician needs to know to properly do their job. Logically then, 100 questions

should be about right with a score of 85% considered passing. The exam should be reviewed with the trainee immediately after taking it with the questions that were missed discussed in detail.

The satisfactory completion of the exam is a "closure" for the training process. The presentation of a diploma should be accompanied by some level of celebration, fanfare or recognition.

Training a Class of One.

It is important for the fastlube instructor to realize that the procedures and techniques of instruction are the same regardless of the number of trainees in the group. Training a single person still involves preparation, presentation, application, review and evaluation. The one-person class must still be motivated and have those elements at the base of the "human needs pyramid" reasonably satisfied if learning is to be effective. The laws of learning still apply. The five step procedure for teaching a skill still applies. A schedule should be prepared, a workbook completed, and an examination given. Whether a class of one or class of forty, from the trainee's perspective the same learning must take place. . . . And it's the fastlube instructor's job to deliver it!

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RECORD KEEPING

Business records must be accurate. Amounts, dates, phone numbers, etc., all must be legible. Use block print always. Inventories, bank deposits and all paperwork having to do with money must be precisely accurate. Take the time to re-read and double check. The General Manager gets very edgy when the numbers don't add up.

The Daily Report

The daily report is a summation of the business activity for a particular day. The first page includes a cross check of what the meters dispensed with what actually flowed from the bulk tanks. The "BEGIN" meter readings should be the same as the "END" readings from the previous day's report. You may carry forward those entries with an asterisk to the following day's report, however, they must be checked the following morning. Take the "BEGIN" readings and enter them on the daily report before the opening check. Then check the entries during the opening check. The "END" readings are taken after the pressure tanks are filled at the end of the day.

Normally the readings are taken at the appropriate time, but the totaling and completion of the report is done the following day during a slow traffic period. Subtract the "BEGIN" meter reading from the "END" reading to determine meter "USED". Then convert to gallons by dividing the oils by four and the ATF and gear oil by eight. Determine the sight gauge "USED" by subtracting the "END TODAY" from the "END YESTERDAY" to determine the amount that flowed from the bulk tanks.

Meter "USED" and sight gauge "USED" should, of course, be the same. But in fact, there will be slight differences simply because the sight gauges are not as precise. The "CARRYOVER" takes care of these minor differences. "BF" stands for brought forward. This number is taken from the "CU" entry of the previous day. "CU" stands for cumulative. "CU" is a running comparison of the meters and sight gauge indications. It is obtained by algebraically adding "BF" and "TC".

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"TC" stands for this check--the amount of difference between the meter reading and sight gauge on this particular day. The difference must be determined as a "plus" or "minus". If the amount that flowed from the bulk tanks is more than was metered, obviously we have a shortage so "this check" would be minus.

Now if it's been awhile since you have algebraically added something, here's a quick review. Consider a poker game. You win ten dollars the first hour and lose five the second. How much are you up or down? Algebraically, you had a plus ten and a minus five. The net result is up five (or plus five). Simple as that! Here are some other examples of adding algebraically:

+6	-5	+6	+$12.00	+1/2	-2.125	- .50	-3.50
-3	-4	+2	-$ 5.80	- 1/4	+3.625	+1.40	-2.00
+3	-9	+8	+$ 6.20	+1/4	+1.500	+ .90	-5.50

So to recap, the "CU" number is carried over to the next day's report as "BF". The difference between what was metered and what flowed out of the bulk tank is computed and then determined to be either plus or minus. That figure is entered as "TC". "BF" and "TC" are then algebraically added to determine "CU".

The crew's names and hours worked are entered in the indicated blanks at the lower left of the form and the team members initial your entry during the closing check indicating they concur with your calculation.

Total the gallons of oil, ATF and gear oil that was metered and enter this figure as "TOTAL GALLONS DISPENSED". the blank following "PUBLIC" is where you enter--for information only--the amount of waste oil that was brought in by outsiders. Then enter the waste oil sight

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gauge readings and subtract yesterday's from today's to determine "WASTE OIL PRODUCED TODAY". Then calculate the waste oil produced today as a percentage of new oil dispensed.

Enter anything that might be of interest to the General Manager under "REMARKS". The section at the lower right is used only by the bookkeeper. Do not enter anything here.

On the backside of page one is a worksheet for determining entries that will go on page three. Enter the amount of oil used on each car under the appropriate heading. At the upper right, enter the number of cars that took the particular brand. The total should be the same as #13, "CUST SERVED FM CONS" on page three. As you go through the sales tickets, make a "tic mark" in the space to the right of the items sold. This will simplify arriving at the totals to be entered on page three. The letters "A", "B", "C", etc., to the right of the totals are used for the monthly control data form prepared by the Area Manager and is of no concern to the Team Leader.

Line 21 is a cross check between the meters, sales tickets and bulk tank usage. The "ON METERS" total will usually be slightly more than the "ON SALES TICKETS" total because of "top-offs". However, that difference should never exceed 5%. If it does, either a mathematical error has been made or a drain through or other error has occurred. Review the sales tickets and meter sheets to isolate it and discuss it with the team member involved. Indicate "who", "what" and "why" in the spaces at the bottom of page three.

The Meter Sheet

The meter sheet is completed by the upper tech. Before the opening check, the upper tech should take the beginning meter readings and enter them on the first line of the form. He then reads them off to the Team Leader as the Team Leader requests them during the opening check. After every job, he indicates the meter reading for the oil that was used, the ATF and the gear oil. The last readings of all meters should be shown on the bottom line of the last meter sheet used for the day.

The following four pages are an example of a properly completed daily report form and meter sheet.

(Complete a daily report form in pen and ink and insert here.)

The Inventory Forms

Deliveries from the warehouse are normally made by the Area Manager on Wednesdays. The inventory forms are handy check lists to determine your needs for the deliveries. You should also keep a "want list" handy so as to note items that have dropped below a two-week supply. It is the Team Leader's responsibility to make up his order. The Area Manager will deliver whatever is needed, but cannot be expected to make additional deliveries because you forgot you needed something. Write it down as soon as the need becomes evident.

Keep displays, supplies and tools in a standard arrangement so that a shortage is obvious just by scanning the storage or display area.

Shipments and invoices.

Oils, ATF, gear oil, chassis lube and some other products will be delivered direct to your location by our suppliers. Inspect all incoming shipments to insure the quantity ordered is the quantity received. For a delivery of liquid product, note the before and after sight gauge reading and enter them on the delivery invoice. If a major discrepancy exists, try to resolve it with the driver. Make sure the numbers "gel". Roughly calculate the dollar amounts if given. Usually, when an error is made, it is a big one and is obvious by estimating the proper amounts. Note any damaged or missing items on the bill of lading and have the driver sign it attesting to the discrepancy. If the amount is paid from the til, make sure the ticket is marked "PAID" and signed by the driver. Insure the copy of all invoices, receipts, etc., are passed to the General Manager

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along with the daily report and sales ticket packet. Obtain a receipt for every expenditure, no matter how small. When waste oil is picked up, record the sight gauge reading before and after and enter both on the pick-up ticket. DO NOT PAY FOR ANY UNORDERED PRODUCT FROM THE TIL. IT'S A COMMON SCAM!

KEEPING THE GENERAL MANAGER INFORMED

Notify the General Manager when open for business in the morning and just before closing at night. (This is normally done by another person during the opening and closing check.) Inform him immediately in event of injuries, fires, accidents or other significant events. Use the daily report form to cover minor problems or other events not requiring immediate action. If you are doing your job properly, the General Manager will want you to follow the principle of "Take action now, then let me know when it's convenient." Let him know everything that occurs other than routine operations. General Managers hate surprises. Don't let an irate customer be the first to tell him. The more you keep the General Manager informed, the more he will trust you to run the business.

REFRESHER TRAINING

Spend time with the team at least once a week discussing procedures, sequence, problem areas and customer complaints. Have quizzes to insure the team is knowledgeable in all areas. This is a good time to smooth out frictions between members of the team, listen to better ways of doing things, inform of new bulletins and generally communicate all matters to the team.

Keep the refresher sessions under your control by preparing for them. Make a list of the subject matter you want to discuss and keep the crew on track. Lead the discussions. Don't let them degenerate into a "general bitch session".

HANDLING THE MONEY

Handling the daily receipts of the business is a serious matter for all concerned. The sales tickets total, less payouts, must equal the amount deposited. To have the "books" balance requires the Greeter/Cashier to use due care all day long. Take a good look at checks to insure they are completed with the right amount. Make change in exactly the same sequence each time. When the customer hands you money, state to the customer the amount given you. For example, "That will be $25.00. . . .out of $40.00. Thank you, Sir." When giving change, count it out by first stating the charged amount and then continuing on to the total amount given. For example, "Okay Sir, that was $25.00 out of $40.00. . . .30--40 dollars. Thank you, Sir." Saying the numbers out loud will prevent a misunderstanding with the customer and will frequently cause an error to become obvious. If distracted during the middle of a transaction, stop. Start over when the distraction is resolved.

At the end of the day all moneys collected is deposited in a night depository. All expense receipts are placed in an envelope and along with the sales tickets, incoming mail and cash drawer turnover slips are placed in a packet to be picked up by the Area Manager. The following day, the daily report is completed and added to the packet. Each packet should contain the deposit receipts, sales tickets, daily report, etc. for one particular day's business activity. The sales tickets are to be totaled.

The following day, during normal banking hours, the Team Leader picks up the money bag from the bank and makes the deposit to the business account. Both the copy from the Team Leader's deposit book and the receipt for the deposit given by the bank are included in the

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bookkeeper's packet for the previous day. The deposit slip from the deposit book should be dated the date the money was received, not the day it was deposited.

A $270.00 change fund is maintained. This fund is placed in a zippered bag and taken to the bank for safe keeping throughout the night. The money collected from the day's sales goes to the bank. **Period!**

The business money should be handled with a certain degree of "reverence". During the turnover of money both the person passing and the person receiving should count the amount in both persons presence. When a bank deposit is made, inspect the deposit receipt immediately to check that the amount of money on the receipt is the same as the amount deposited. When given cash at a bank teller's window, if it is in an envelope, take it out of the envelope and count it within sight of the teller. They want you to do so. Things get very sticky if you go back 10 minutes later and claim you were shorted.

Handling the money is an indication of the amount of trust the General Manager has in you. The ability to safeguard larger and larger sums of money is one of the requirements for advancement to higher and higher positions in any organization. Handling significant sums of money provides a temptation to present one's self with an unauthorized "raise". The risk is not worth the gain. When the "temptation demon" shows itself, balance the long term future income from your career against the short term slim chance of gain. Banking and accounting systems have dealt with the problem for decades. The computers, the control systems and the cross-checks make this type of theft almost impossible to carry out. It's tragic that many otherwise promising people are dumped by the wayside because they were so dumb as to think they could "tap the til" and nobody would know. Schemes using a "friend" to conduct a robbery, conveniently "losing" the money, etc., never work either. Control system cross-checks or the dumb accomplice usually blow the deal. It's just not the thing to do.

CLEANING AND MAINTENANCE SCHEDULES

The appearance of a OIL CAN HARRY'S operation is a very important factor in generating business volume. Your cleaning and maintenance schedule must be flexible since the work must be accomplished during periods of slow business. A good team leader will constantly observe the condition and cleanliness of the facility--and take corrective action at the first opportunity. The following schedule is given for guidance and for use as a check list.

Hourly	Weekly
Clean coffee machine.	Clean windows.
Clean water cooler.	Scrub floors.
Wipe up spills.	Mow and edge grass.
Clean restrooms.	Sweep driveways.
Pick up trash.	Check all light bulbs.
	Inventory tools, supplies, etc.

Daily	Monthly
Sweep floor.	Clean building exterior.
Wipe down console.	Trim shrubs.
Drain water from air system.	Repaint where necessary.
Check auto lubricators.	Change air compressor oil.
Clean mirrored surfaces.	Complete stock inventory.

Once a month a conscious effort must be made to bring the operation back to "like new".

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The Team Leader is authorized to purchase paint, cleaning gear and whatever else is necessary to maintain the building and grounds in an excellent condition. It must be viewed as an investment. It is well worthwhile to spend time and money in order to generate more money. The overall appearance of the operation is extremely important n this regard. The OIL CAN HARRY'S inspection form on the next page is a good checklist for the Team Leader to use during any period that business is slow and team members are available for odd jobs.

PASSING OF INFORMATION

Many things happen during the day to day operation of a business. The passing of information to and from the General Manager is of significant importance. When you are informed of a new procedure, bulletin, change of policy, etc., it is your job to insure your assistant and the team members "get the word". That word "insure" is underlined because it is important to follow up. For example, if a new policy has been established, it's not enough to simply tell the team. You should observe the team to make sure the new policy is actually taking place.

The General Manager is counting on you to convey information and policies in the same spirit as conveyed to you. Special emphasis should be made to keep your assistant informed. He can function well in your absence only if he is informed. The Team Leader and Assistant must inform each other of every significant event that occurs in the absence of the other. Such things include"

1. Customer complaints.
2. Promises made.
3. New accounts.
4. New procedures, policies, etc.
5. Incoming shipments.
6. Phone calls.
7. Equipment problems.
8. Personnel problems.

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9. Schedule changes.
10. Any matter on which a decision may need to be made.

ADVANCEMENT

Area managers are chosen from those Team Leaders who demonstrate loyalty, honesty, ability and the desire to advance. The Area Manager is responsible for the operation of several units and of necessity is generally in motion between them. He must have an exceptional ability to get along with people and motivate them toward their highest performance. Team leaders who aspire to become area managers should become aware of control systems, inspection techniques, principles of standardization, management techniques and market conditions. Because of the overall nature of his duties, the area manager must be a leader, repairman, plumber, bookkeeper, investigator, arbitrator and counselor all rolled into one. He should be familiar with government regulations, real estate matters, labor laws, and building techniques. He may be required to repair a pump, locate a new site, train a new team member, obtain a building permit and isolate a money shortage all in the same day. This obviously requires a wide ranging set of abilities and talents, many of which must be developed on the individual's own initiative. It requires self education. Real estate courses are taught at night. Repair books are available at the local library. Many OIL CAN HARRY'S customers work in the county courthouse and can provide information on licensing, zoning regulations, fire codes, etc. There is so much general knowledge required to be an area manager that it will be impossible for the General Manager to personally teach you. The knowledge must be sought out from daily experience and contact with those who have the information.

It is the General Manager's desire that you continue to advance from team leader through area manager and eventually own a OIL CAN HARRY'S unit. He will assist you wherever possible, but your ultimate level of accomplishment is entirely up to you.

GOOD LUCK!

On second thought, if you are the right man for the job, you won't need luck. You'll make your own

Only Actions matter. . .

Only results count!

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