Group 0
LUBRICATION AND MAINTENANCE

CONTENTS

DATA AND SPECIFICATIONS

Make	No. Cyl.	Model		Cooling System qt. (a)	Crank-case qt. (b)	Fuel Tank gallon	Transmission			Axle	Tires				Wheel
							Manual pint	Power-Flite pint	Torque-Flite pint	Rear pint	Size	No. Plies	Pressure		Width and Flange
											Standard Equipment		Front	Rear (c)	
DeSoto	V-8	PS1-L PS3-M	FireFlite Adventurer	16	5	23	2¾	22	21	3½	8.00 x 14 8.50 x 14 Optional	4	22	22	14 x 5.5K
Chrysler	V-8	PC1-L	Windsor				N/A	N/A			8.00 x 14	4	24	22	14 x 5.5K
			Town & Country			22					8.50 x 14	4	24	24	14 x 6K
		PC2-M	Saratoga			23					8.50 x 14	4	22	22	14 x 6K
		PC3-H	New Yorker								9.00 x 14	4	22	22	14 x 6.5K
			Town & Country			22					9.00 x 14	4	22	24	14 x 6.5K
Imperial	V-8	PY1-L	Custom			23					8.20 x 15	4	24	24	15 x 6L
		PY1-M	Crown												
		PY1-H	LeBaron												

(a) Add 1 quart for heater.

(b) Add 1 quart when filter or filter element is changed.

(c) Town and Country: 28 psi when fully loaded.

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Lubricants are classified and graded according to standards recommended by the Society of Automotive Engineers (SAE), the American Petroleum Institute (API) and the National Grease Institute (NLGI).

The SAE grade number indicates the viscosity or fluidity of the lubricant. (Example, SAE 30) engine oils may have a dual number, one of which is SAE 10W-30. This marking indicates that the oil is comparable to SAE 10W, SAE 20W and SAE 30 grades (see Paragraph 00).

The API designations relate to the type of service for which the engine oil is recommended. The three designations are "MS," "MM" and "ML." All 1960 car engines require the MS oils.

Both the SAE number and the MS designation should be marked on the container.

The National Lubricating Grease Institute (NLGI) makes the recommendations for greases by numbering them from 0 to 6. The numbers refer to the consistency (or stiffness) of the grease.

1. AIR CLEANERS

Engines require ventilation through the cylinder head covers and crankcase to remove combustion products. Air enters the engine through the oil filler cap, where any dust is trapped by the oil-soaked material in the cap (Fig. 1).

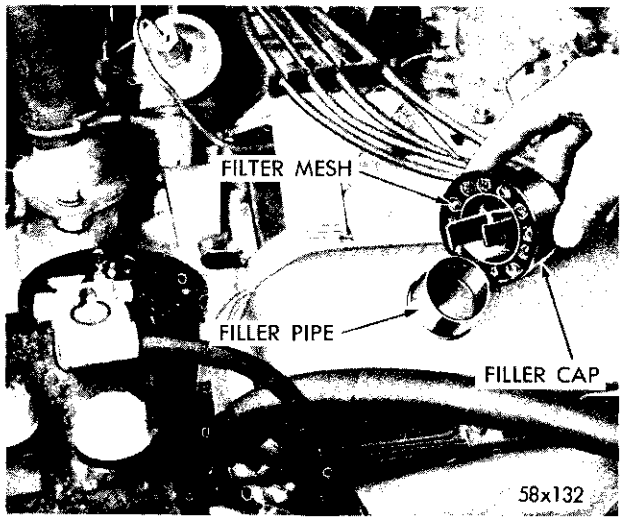

Fig. 1—Engine Ventilation Inlet Air Cleaner

The air cleaner should be cleaned in kerosene and reoiled with SAE 30 engine oil at each oil change period or oftener; in dusty areas as often as 500 miles; in extremely dusty areas daily.

The paper element carburetor air cleaner should be cleaned as often as conditions warrant but not to exceed 5,000 mile intervals; and a new element should be installed at 15,000 mile intervals (Fig. 2).

After removing the air cleaner from the carburetor, clean the housing and cover with compressed air. Using compressed air, gently clean the paper element by holding the air nozzle at least two inches from the inside screen. Examine the paper element for punctures. Discard an element that has as little as a pin-point puncture. Examine the soft plastic sealer on both sides of the element. These sealing surfaces must be smooth and uniform.

2. BODY

The following parts should be lubricated every 2,000 miles or two months, whichever occurs first.

Lubricate door hinge pins, inner and outer door lock rotors, tail gate hinges and other hard-to-lubricate places with dripless penetrating oil.

Lubricate door and tailgate lock striker plates and dovetail surfaces with stainless stick lubricant.

Use lubriplate on all bearing surfaces of the following parts: door checks, brake pedals and connections to power cylinder, foot operated parking brake, deck lid lock, torsion bar and hinges, tailgate locks and torsion bar roller cam and license plate panel,

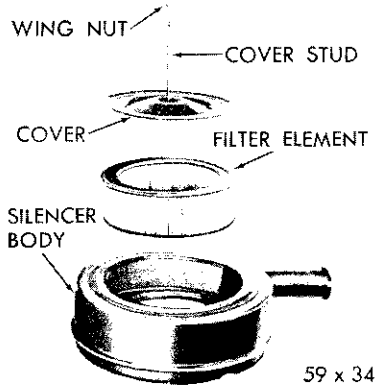

Fig. 2—Carburetor Air Cleaner

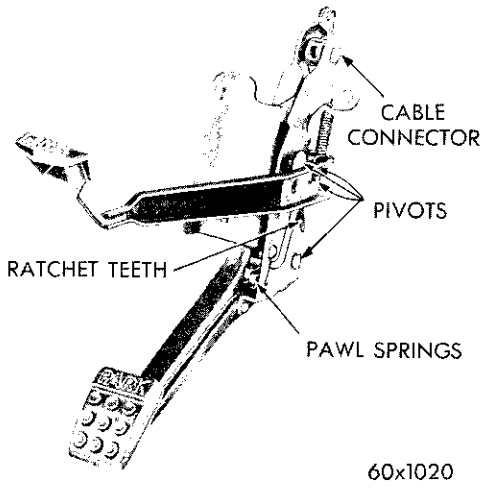

Fig. 3—Foot Operated Parking Brake Pedal

fuel tank access cover springs and pin and hinge and pin.

3. BRAKES

Adjustment for normal lining wear should be made when the pedal goes more than half-way to the floor in making normal stops. The foot-operated parking brake requires adjustment when the pedal travels more than 4½ inches.

Brake linings should be inspected for wear every 10,000 miles, when the front wheel bearings are lubricated.

4. HYDRAULIC SYSTEM

Check fluid in master cylinder at each lubrication period. Replenish with brake fluid.

5. FOOT-OPERATED PARKING BRAKE

Each time the vehicle is lubricated, apply a thin film of Lubriplate to the apply, release and pawl pivots, the pawl springs, the ratchet teeth and the cable connector (Fig. 3).

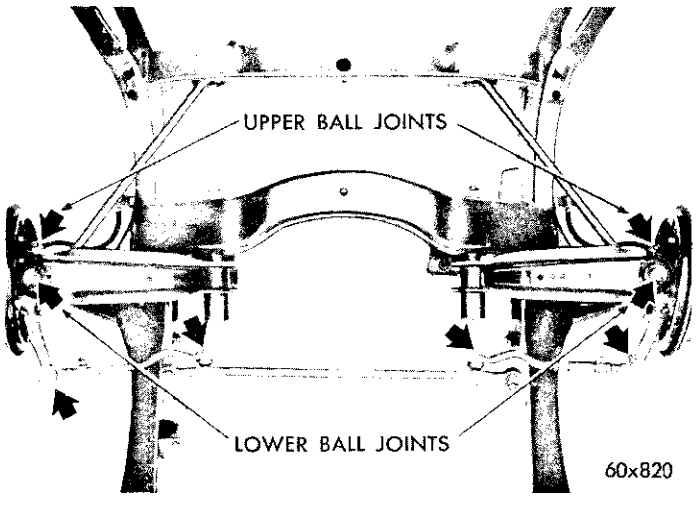

Fig. 4—Chassis Lubrication

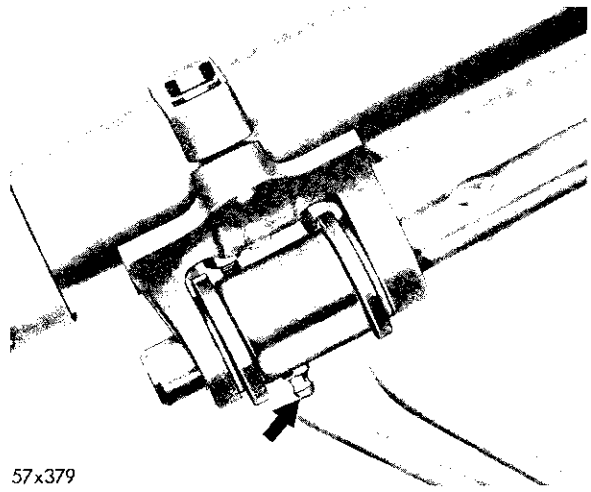

Fig. 5—Gearshift Tube and Lower Support Lubrication

6. SERVICE BRAKE

Each time the car is lubricated, apply a thin film of Lubriplate to the pivots and sliding contact surfaces in the brake pedal suspension mechanism and connections to power cylinder.

7. PARKING BRAKE LINKAGE (External Contracting Type)

Each time the car is lubricated the pivot points should be lubricated with engine oil.

8. CHASSIS LUBRICATION

Apply chassis lubricant to the following pressure fittings to force the old lubricant out and fill the part with fresh lubricant (Fig. 4).

Both upper ball joints.

Both lower ball joints.

Both ball ends of right tie rod.

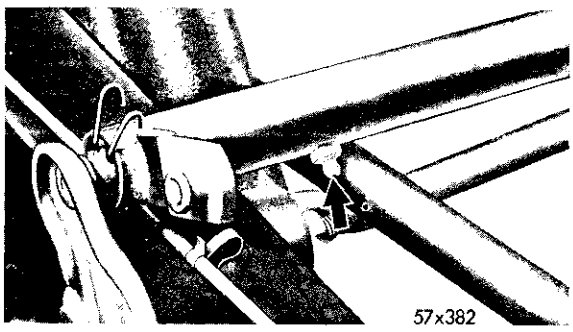

Fig. 6—Clutch Torque Shaft Lubrication

Both ball ends of left tie rod.

Gearshift tube and lower support assy. (Fig. 5).

Clutch torque shaft (Fig. 6).

9. COOLING SYSTEM

All models are equipped with a 180° thermostat. The cooling system should be drained and flushed in the spring and again in the fall.

Use clean water and corrosion inhibitor P/N 00 in the summer, if an ethylene-glycol antifreeze solution is not desired. The cooling system of cars equipped with heater-air conditioning systems must be protected to at least +15°F. at all times to avoid freezing the heater core.

Most antifreeze solutions contain a corrosion inhibitor. However, in order to provide proper protection against corrosion of the cooling system, a solution of at least 20% antifreeze must be used. A 20% solution will provide antifreeze protection of +15°F. for ethylene-glycol type antifreeze and +10°F. for methanol type. (If methanol type antifreeze is used a 160 degree thermostat must be installed.)

NOTE: In some areas the water available has a high mineral content. Such waters when added to the cooling system can cause corrosion and premature deterioration of the cooling system components unless adequate precautionary measures are taken.

10. DISTRIBUTOR

Each time the car is lubricated, put 5 to 10 drops of SAE 10W engine oil in the oil cup.

At 10,000 miles or one-year intervals apply SAE 10W oil to the felt wicking under the distributor rotor. Also apply cam lubricant to the rubbing block on the contact breaker arm.

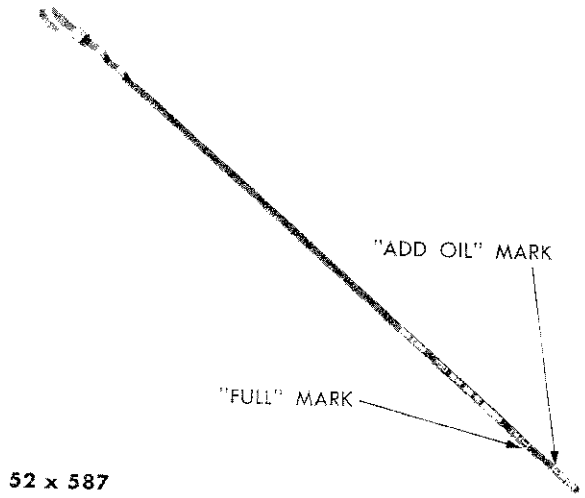

Fig. 7—Engine Oil Level Indicator (Dipstick)

11. ENGINE OIL

Original factory fill engine oil in new cars is especially compounded for new engines and should be used throughout the first 1,000 miles of operation.

The engine oil change period will vary widely depending upon the type of operation, weather conditions and other operating variables. Short trip driving in cold weather or driving on dusty roads can make oil changes advisable as frequently as every 500 miles, while cross-country driving day after day, with good oils, may permit 5,000 miles of operation between changes. As a general rule, average driving will indicate that the engine oil should be changed every two months or 2,000 miles, whichever occurs first.

The engine oil level should be checked each time the car is refueled. When the level drops below the "Add Oil" mark on the engine oil level indicator (dipstick) (Fig. 7) the addition of one quart of oil will usually bring the level within the running range.

When adding or changing engine oil, use lubricants which have both the SAE designation and the MS Service Classification printed on the container. High quality, well refined engine oils usually have both classifications on the containers. Choice of brands should include the reputation of the refiner and marketer.

Use oils for anticipated temperatures as follows:

	Recommended Viscosity No.	Multi-Grade Options
Above +32°F.	SAE 30	SAE 20W-40 SAE 10W-30
Above +10°F.	SAE 20W	SAE 20W-40 SAE 10W-30
Above −10°F.	SAE 10W	SAE 10W-30 SAE 5W-20
Below −10°F.	SAE 5W	SAE 5W-20

The capacity of the engine is 5 quarts. Engine oil additives are unnecessary for cars in normal use. However, the engines in cars which are used infrequently and in short trip driving are liable to rust. Additive oil contains an anti-rust material as well as an anti-scuff property. It should be used after a major reconditioning, during the break-in period.

12. ENGINE OIL FILTER

The engine oil filter (Fig. 8) protects the engine by trapping and holding foreign matter and abrasives

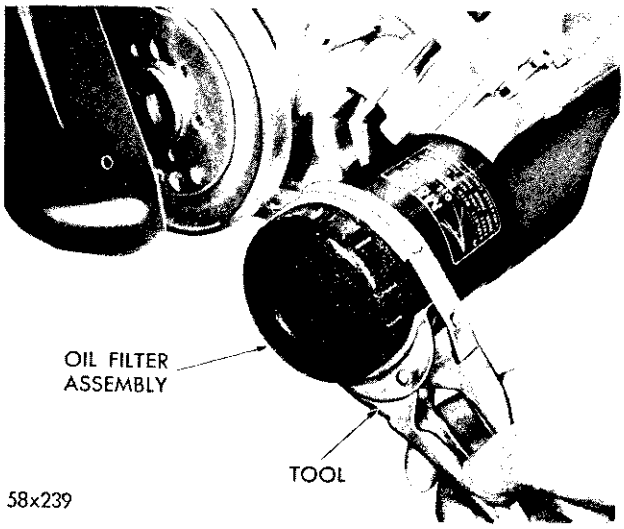

Fig. 8—Engine Oil Filter

which may be present in the oil before they can reach critical points in the lubrication system. The filter contains a by-pass valve which assures a full supply of oil to the oiling system in the event the filter becomes clogged.

Operation in dusty, smokey areas will require more frequent filter changes than the normal 4,000 mile or four-month usage.

Filter change should include an additional quart of oil and should coincide with an engine oil change.

13. GENERATOR

Each time the car is lubricated, put 5 to 10 drops of SAE 10W engine oil in each oil cup (Fig. 9).

14. MANIFOLD HEAT CONTROL VALVE

Each time the car is lubricated, apply Manifold Heat Control Valve Solvent, MoPar Part Number 1879318

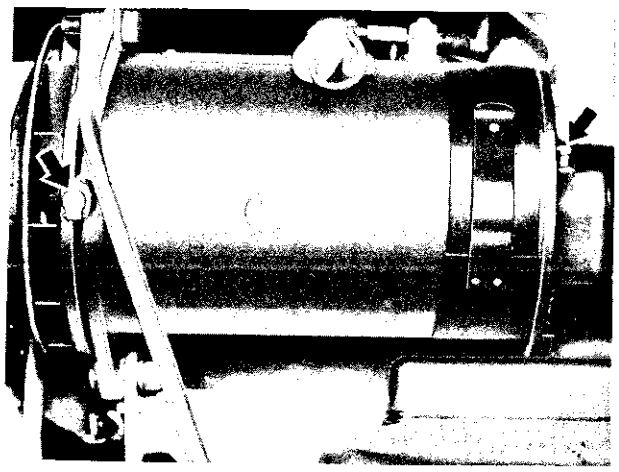

Fig. 9—Generator Lubrication

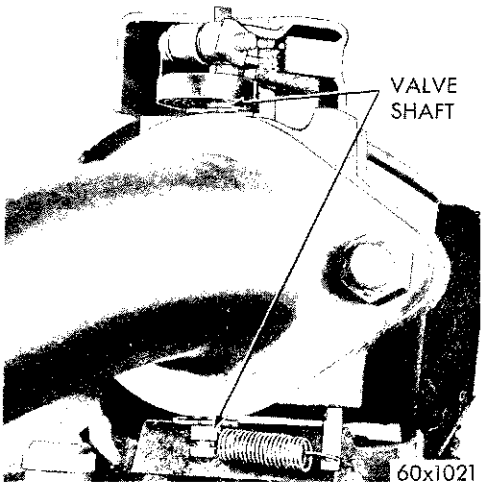

Fig. 10—Manifold Heat Control Valve

to each end of the valve shaft when the manifold is cool. Work the valve back and forth a few times to distribute the solvent and to be sure the valve is free (Fig. 10).

15. REAR AXLE

Check the lubricant level at 2,000 mile or 2 month intervals, each time the car is lubricated. Replenish when level is below the filler hole. Drain and refill every 20,000 miles or two years, whichever occurs first. Use Multi-Purpose Gear Lubricant: SAE 90 above –10°F.; SAE 80 below 10°F.; and SAE 75 below –30°F.

Sure grip differentials require replenishment with Sure Grip Lubricant MoPar Part Number 1879414 and a drain and refill at 20,000 miles or two year intervals. Refill is 3½ pints.

16. STEERING

a. Power Steering

Check the oil level in the reservoir (when oil is at operating temperature) each time the car is lubricated. Replenish to the full mark with power steering fluid, MoPar Part Number 2084329.

b. Manual Steering

Check the lubricant level each time the car is lubricated. Replenish when level is below the filler hole.

Use Multi-Purpose Gear Lubricant SAE 90 above –10°F.; SAE 80 below –10°F., and SAE 75 below –30°F.

17. 10,000 MILE OR ONCE A YEAR WHICHEVER OCCURS FIRST

a. Speedometer Cable

Disconnect the cable at the speedometer and remove the flexible drive shaft. Coat the shaft with all-

weather speedometer cable lubricant and reinstall. Remove excess lubricant from top 12 inches of cable and the ferrule before shaft is completely inserted in the cable.

b. Door Lock Cylinders

Apply Lubriplate sparingly.

c. Gearshift Lever (PS-1, PS-3 only)

Remove the rubber boot, pivot pin assembly and the gearshift lever. Lubricate the ball end and pivot pin areas generously with Lubriplate. Install the gearshift lever, pivot pin assembly and the rubber boot.

d. Front Suspension

Both ends of the torsion bar rear anchor and the rear end of the front anchor should have a sufficient amount of multi-purpose grease to prevent the entrance of water, dust and mud or other foreign matter.

e. Universal Joints

Universal joints should be removed, disassembled, cleaned, inspected, and lubricated with fresh lubricant. See Group 16.

f. Head Lamps

Check the aiming of all head lamps.

g. Tires

Tires should be examined for abnormal wear, unusual wear pattern, foreign material and lack of adequate air pressure each time the car is lubricated. Such conditions indicate that mechanical corrections are necessary or reflect unusual driving habits.

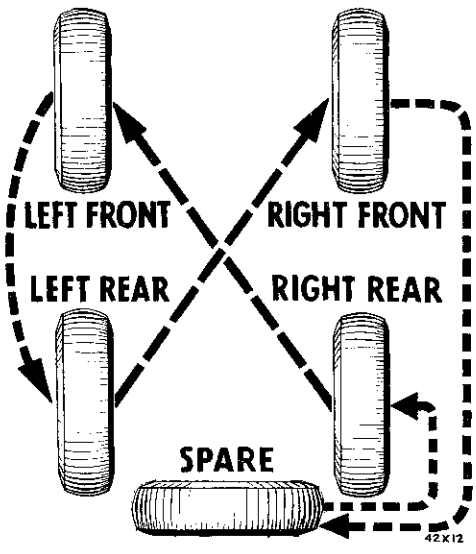

Fig. 11—Tire Rotation

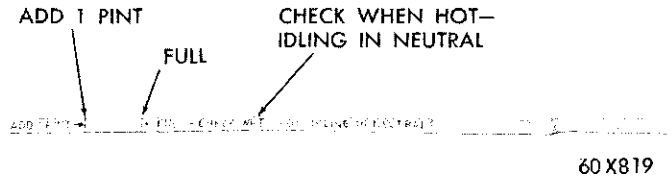

Fig. 12—Automatic Transmission Oil Level Indicator

Uniform wear and maximum tire life care may be obtained by rotating the five tires at regular intervals of 3,000 miles and every 6,000 miles thereafter (Fig. 11).

18. POWERFLITE AND TORQUEFLITE TRANSMISSION

a. Fluid Level

The fluid level should be checked every 1,000 miles or 2 months, whichever occurs first. When checking, the engine and transmission should be at normal operating temperature.

(1) With the parking brake on and the engine idling, depress each push button momentarily, ending with the "N" (Neutral) button pushed in.

(2) The fluid level should check at the full mark, or slightly below, but never above the "F" mark when the engine is at its normal warmed condition described above. Add or delete fluid as necessary to bring to this prescribed level (Fig. 12).

CAUTION

To prevent dirt from entering the transmission after checking or replenishing fluid, make certain that the dipstick cap is reseated properly onto the filler tube.

If it is necessary to check the fluid level when the transmission is cold, the fluid level should be at, or

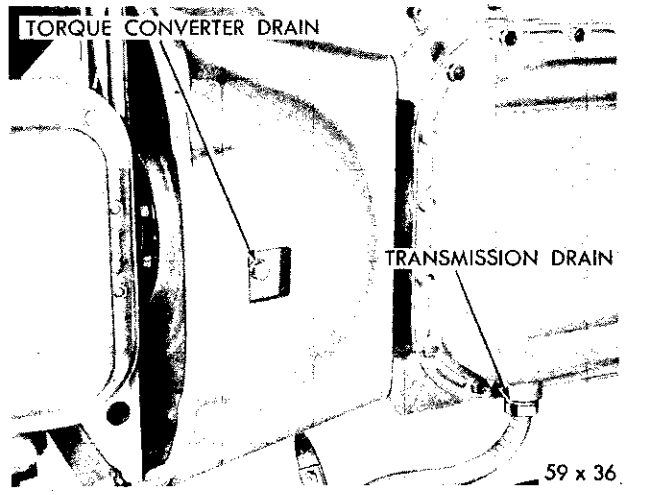

Fig. 13—Automatic Transmission Drain Points

slightly below the "Add One Pint" mark. If below, add one pint of fluid then recheck the level.

b. Periodic Maintenance

The following maintenance service should be performed every 10,000 miles of operation, or one year, whichever occurs first:

NOTE: For service operation such as; police cars, and cars which frequently tow trailers, operate in heavy traffic in hot weather or operate continuously with abnormal loads should have more frequent periodic maintenance. Automatic transmission should not be idled in gear for long periods.

(1) Remove filler tube from transmission oil pan and allow transmission to drain (Fig. 13).

(2) Remove flywheel access plate and remove the torque converter drain plug and allow to drain.

(3) Replace the torque converter drain plug.

(4) Remove transmission oil pan. Clean the intake screen and pan.

(5) Adjust the reverse band for PowerFlite or the low-reverse band for TorqueFlite. (See Group 21.)

(6) Adjust the kickdown band. (See Group 21.)

(7) Adjust the push button cable. (See Group 21.)

(8) Reinstall the intake screen, oil pan, and filler tube. Be sure to use a new gasket.

(9) Add five (5) quarts of Automatic Transmission Fluid, Type "A," Suffix "A" through the filler tube.

(10) Start engine and add approximately three (3) quarts more while the engine idles.

(11) Allow engine to idle for at least two (2) minutes.

(12) Operate all push buttons, pausing momentarily at each position, ending with the "N" (Neutral) button pushed in.

(13) Add sufficient fluid to bring the fluid level to the "Add One Pint" mark.

(14) Adjust line pressure to specifications outlined in Group 21.

(15) Adjust engine idle at 475 to 500 rpm in Neutral.

(16) Adjust the transmission and carburetor throttle linkage for proper shift pattern. (See Group 21.)

(17) Test car performance.

CAUTION

To prevent dirt from entering the transmission, make certain that the dipstick cap is replaced properly onto the filler tube.

(18) PowerFlite Only: If starting is difficult when average temperatures consistently range below −10°F., replace one (1) quart of fluid with refined kerosene. This service should be performed only once during the low-temperature season. Thereafter, necessary replenishment of PowerFlite should be with Automatic Transmission Fluid, Type "A," Suffix "A."

19. MANUAL TRANSMISSION (PS-1, PS-3 Only)

Check lubricant level at 2,000 miles or two month intervals, each time the car is lubricated. Replenish when level is below the filler hole.

Drain and refill at 20,000 mile or two year intervals, whichever occurs first.

Use Multi-Purpose Lubricant: SAE 80 for temperatures above −10°F., SAE 75 for temperatures below −10°F. In warm territories where SAE 80 is not available, SAE 90 may be used.

20. WHEEL BEARINGS

Rear wheel bearings are pre-lubricated and require lubrication only as the axle shafts are removed in conjunction with other operations.

Front wheel bearings should be checked every 10,000 miles or once a year, whichever occurs first. If the lubricant is emulsified, has hardened or is low in quantity, the bearings should be removed, cleaned, inspected and new short fiber wheel bearing grease (medium) installed. The hub and grease cap should be cleaned and the inner surfaces coated lightly with grease.

To adjust front wheel bearings:

(1) Tighten adjust nut to 180 inch pounds while wheel is turning.

(2) Place nut lock or nut with one set of slots aligned with cotter pin hole in spindle.

(3) Back off lock and nut 1½ slots. (Hole in spindle will be covered.)

(4) Remove nut lock (do not turn nut) and reposition lock so cotter pin can be installed.

(5) Install cotter pin and grease cap.

LUBRICATION RECOMMENDATIONS

KEY	
AA	Automatic Trans. Fluid Type "A" Suffix "A"
AF	Anti-Freeze
AP	Air Pressure
C	Check Condition of
CL	Chassis Lubricant
DCL	Distributor Cam Lubricant
EO	Engine Oil
HTF	High Temperature Brake Fluid
MCL	Speedometer Cable Lubricant
ML	Lubriplate
MP	Multi-Purpose Gear Lubricant
PDO	Penetrating Dripless Oil
PSF	Power Steering Fluid
RR	Rust Resistor
S	Manifold Heat Control Valve Solvent
SGL	Sure Grip Lubricant
SL	Stainless Stick Lubricant
UJ	Universal Joint Lubricant
WB	Wheel Bearing Lubricant–Medium

2,000 MILE — 2 MONTH INTERVALS	
Key	
EO	Change Engine Oil
EO	Engine Ventilation Inlet Air Cleaner
EO	Engine Ventilation Outlet Air Cleaner
AA	Automatic Transmission Oil Level
EO	Distributor Oil Cup
EO	Generator
S	Manifold Heat Control Valve
HTF	Master Cylinder Fluid Level
C	Brake Lines and Hoses
MP	Manual Steering Gear Level (PS-1, PS-3)
PSF	Power Steering Reservoir Level
ML	Hood Hinges and Lock
ML	Foot Operated Parking Brake Pedal
ML	Door Check
PDO	Hinges
PDO	Lock Rotors–Inner–Outer
ML	Lock Cylinders
ML	Deck Lid Lock, Hinges, Torsion Bars
ML	License Plate–Fuel Access Door
PDO	Tail Gate Hinges
ML	Locks
SL	Striker and Dovetails
ML	Torsion Bar Roller Cam
C	Tires–Air–Wear–Foreign Matter

Key	
MP	Manual Trans. Level (PS-1, PS-3 only)
MP	Rear Axle Level
SGL	Rear Axle Level (Sure Grip)
EO	External Contracting Parking Brake Linkage
CL	Upper Ball Joints (2)
CL	Lower Ball Joints (2)
CL	Tie Rod Ball Ends (4)
CL	Clutch Torque Shaft (1) (PS-1, PS-3 only)
CL	Gear Shift Tube and Lower Support (1) (PS-1, PS-3 only)

4,000 MILE — 4 MONTH INTERVALS	
	Change Engine Oil Filter
C	Service Brake Adjustment
C	Parking Brake Adjustment

6,000 MILE — 6 MONTH INTERVALS	
–	Rotate Tires
–	Clean Carburetor Air Cleaner

SEASONAL SERVICE	
AF-RR	Cooling System–Flush

10,000 MILE — YEARLY INTERVALS	
C	Brake Lining for Wear
WB	Front Wheel Bearings–Remove–Clean–Repack
AA	Automatic Transmission Maintenance
MCL	Speedometer Cable–Remove–Lubricate–Install
DCL	Distributor Cam
EO	Wick under Rotor
ML	Gearshift Lever Pivot–Remove–Lubricate–Install
C	Head Lamp Aim

15,000 MILE INTERVALS	
–	Install New Carburetor Air Cleaner Element

20,000 MILE — 2 YEAR INTERVALS	
MP	Manual Transmission Drain–Fill
UJI	Cross and Roller U/JTS–Disassemble–Clean
UJ2	Ball and Trunnion U/JTS–Disassemble–Clean
MP SGL	Rear Axle (Drain and Refill) (Sure Grip)
C	Front Suspension

23,000 MILE INTERVALS	
–	Install New Fuel Filter (Paper Element)