

Section XV

LUBRICATION

1. ENGINE OIL RECOMMENDATIONS

The use of a good quality engine oil is recommended. In selecting an engine crankcase oil for Chrysler Corporation cars, it is important that the owner obtain a lubricant of good quality from a reputable refiner, and that it has the proper viscosity for the prevailing temperature. The proper viscosity of oil used should be according to the anticipated temperature range as follows:

Anticipated Lowest Atmospheric Temperature	Recommended SAE Viscosity Number	Recommended Viscosity Range—if Multi-Viscosity Oils Are Used
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

2. A.P.I. ENGINE OIL CLASSIFICATIONS

So that the car owner can select an engine oil that is best suited for his particular type of driving, the American Petroleum Institute (A.P.I.) has grouped all types of driving conditions into three classifications of service—MS, severe service; MM, moderate service, and ML, light service. From the explanation of these classifications of service given at a, b, and c, it is apparent that oils for Service MS will most nearly suit the average driver.

NOTE

The A.P.I. classification system does not replace the SAE grade number of the engine oil, which indicates the viscosity of the oil recommended. Instead, it is an additional classification designed to guide the owner in selecting the proper grade of engine oil. Refer to Paragraph 1 for the proper SAE grade numbers required for anticipated atmospheric temperatures.

CAPACITIES (U. S. MEASURE)

ENGINE CRANKCASE (REFILL)

C-67, C-68, C-69, C-70..... 5 qts.*

*Add one additional quart when replacing filter element.

COOLING SYSTEM

C-67 24 qts.*

C-68, C-69, C-70..... 25 qts.*

*Add one additional quart if equipped with heater.

TRANSMISSION

Conventional, 3-Speed 2¾ pts.

PowerFlite (C-67) 10 qts.

(C-68, C-69, C-70) 11 qts.

REAR AXLE

C-67 (Including Town and Country Wagon) 3¼ pts.

C-68, Including Town and Country Wagon, C-69..... 3½ pts.

C-70 5 pts.

POWER STEERING

Fluid Capacity of System (approx.) 3 pts.

FUEL TANK

All Models (Except Town and
Country Wagons) 20 gals.

Town and Country Wagons 18½ gals.

The three classifications of driving conditions and their designations are as follows:

a. Service MS (Severe Service)

- (1) Continuous high speed, highway driving where the oil becomes unusually hot, such as summer vacation trips.
- (2) Heavy load operation, such as towing a house trailer in hilly country.
- (3) Driving in areas where temperatures below 0 degrees F. are encountered for extended periods.
- (4) Driving in moderately cold climates where most of the operation consists of short neighborhood trips, and where the engine never has a chance to warm up.

b. Service MM (Moderate Service)

- (1) High speed operation for short periods of time.
- (2) Long trips at moderate speeds and summer temperatures.
- (3) Operation in moderately cold air temperatures where frequent long trips, as well as short trips, are included.

c. Service ML (Light Service)

Operation at moderate speeds where the majority of trips are more than 10 miles and where no extremely cold or hot temperatures are encountered.

3. MULTI-VISCOSITY OILS

When using multi-viscosity oils, be sure that the SAE weight range coincides with the atmospheric temperature chart shown in Paragraph 1.

4. ENGINE OIL CHANGE PERIODS

To insure smooth break-in of Chrysler Engines, an Anti-Scuff additive is used with the initial factory fill of oil. **This oil mixture should be left in the engine during the first 500 miles.** If it is necessary to add oil during this initial period, use SAE 10W Engine Oil for all temperature ranges above 10 degrees F. For temperatures below 10 degrees F., use SAE 5W Engine Oil.

After an engine has had internal repairs, such as replacement of bearings, tappets, camshaft or rings, one quart of MOPAR Oil with Anti-Scuff Additive, Part Number 1643234, should be added to the engine oil. The oil mixture should be left in the engine for a minimum of 500 miles.

At the end of the first 1,000 miles, drain the oil pan and refill with the proper viscosity oil for the prevailing atmospheric conditions, as indicated in Paragraph 1, Engine Oil Recommendations.

Subsequent oil changes, under normal driving conditions, should be made every 5,000 miles. The oil filter element should be changed regularly at 5,000 mile intervals, also, to coincide with the oil change. Six quarts of engine oil are required for refill when the oil and filter element are changed. The oil level indicator is located on the left side of the engine **on all Models.**

5. UNUSUAL CONDITIONS

Under certain conditions, more than usual care is advisable to order to keep the engine operating smoothly. In cold weather, for example, the car should be driven at moderate speeds until the engine reaches normal operating temperature. If there are long periods of time during which the car is not driven a sufficient distance to reach normal operating temperature, the danger of condensation forming in the crankcase is present. Better protection from this condition can be had by changing the oil filter cartridge and the engine more frequently. If the car is driven over dusty roads, it should be lubricated at shorter intervals than usual; and more care should be given to the carburetor air cleaner, the oil filler pipe cap air cleaner and the crankcase ventilator air cleaner.

GENERAL RECOMMENDATIONS

6. ENGINE OIL LEVEL INDICATOR

The engine oil level should be checked each time the car is refueled. The engine oil level indicator has two markings: "Full" and "Add Oil." If the oil level is between the "Full" and "Add Oil" marks, it is not necessary to add oil. If the oil level drops to the "Add Oil" mark, or slightly below it, not more than one quart of oil should be added (Fig. 1).

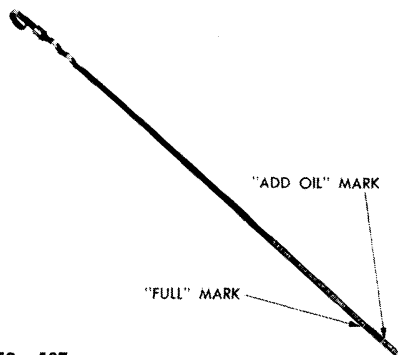
7. CARBURETOR AIR CLEANER

The carburetor air cleaner (Fig. 2) is the heavy duty, oil bath type and should be checked every 1,000 miles.

If the sump contains a semi-solid mixture of dirt and oil up to the lower offset in the reservoir, the air cleaner should be removed and thoroughly cleaned. Remove cover and filter element, rinse in kerosene, and drain. Empty the dirty oil from the reservoir, clean out the sump, and refill to indicated level with the proper grade of engine oil for the anticipated temperature. Refer to Recommendations, Paragraph 10. **If the car is operated in dusty areas, the air cleaner may require more frequent servicing.**

8. FRONT WHEEL BEARINGS

Examine the front wheel bearings every 10,000 miles. If the grease is in good condition do not remove. If the grease is not in good condition,



52 x 587

Fig. 1—Typical Engine Oil Level Indicator

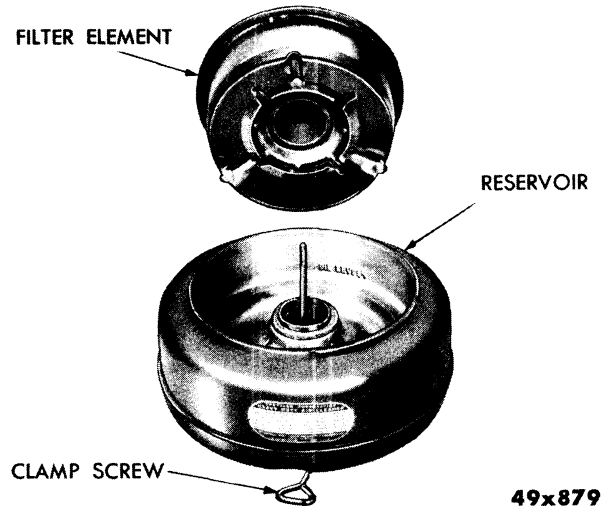


Fig. 2—Typical Carburetor Air Cleaner

clean and repack the bearings with Short Fiber Wheel Bearing Grease as shown in Figure 3. Add 2½ ounces of grease to the inner surface of the hub on Models C-67 and C-68 except the Town and Country Wagons. Add 5 ounces of grease to Model C-69 and Town and Country Wagons, and 3 ounces of grease on Model C-70.

9. OILITE BEARINGS

"Oilite" bearings are, to a great extent, self-

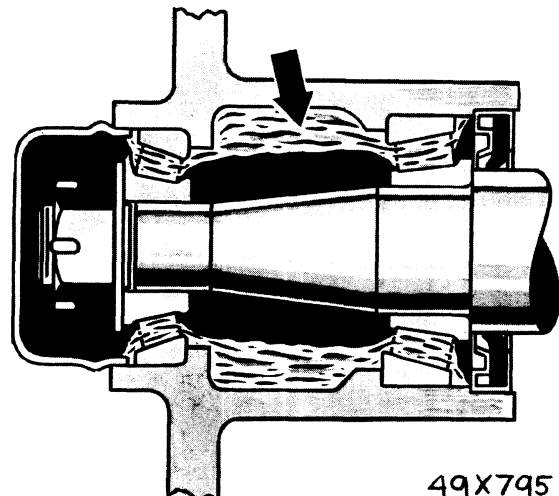


Fig. 3—Front Wheel Bearing Lubrication

lubricating and are, for this reason, ideal for use in locations where lubrication is difficult to maintain. They contain copper, tin, solid lubricants, and lubricating oil of different proportions and characteristics, depending upon the requirements of the bearings.

“Oilite” bronze appears to be the same as ordinary bronze, but when subjected to heat or pressure, oil comes to the surface in a quantity sufficient to supply a constant thin coating, which is often sufficient for the lifetime lubrication requirements of the bearings.

Replacement, if ever necessary, should be made only with another “Oilite” bearing of the same size as the bearing being replaced. “Oilite”

bearings should preferably not be reamed, filed, or otherwise cut to size, although they may be burnished to a final running fit. Cutting an “Oilite” bearing tends to seal up the pores of the metal, which prevents the seepage of the oil necessary for lubrication.

If machining is necessary, follow the instructions below:

Machine like cast bronze. Apply no coolant. After machining, soak in a good grade of SAE 30 Engine Oil. For finishing surfaces where lubrication is necessary, use a diamond point shaped tool ($\frac{1}{64}$ inch radius), dead sharp of diamond, or tungsten carbide, taking very light cut, .002 to .004 inch on the diameter, with fine feed and high speed.

LUBRICATION RECOMMENDATIONS EVERY 1,000 MILES

Models	Location	Lubricant	Lubrication Information
All	Carburetor Air Cleaner	SAE 50 Engine Oil (Above 32 Deg. F.), SAE 20 W Engine Oil (Below 32 Deg. F.)	Clean, drain and refill. Refer to Paragraph 7.
All	Upper Control Arms	Chassis Lubricant	Six lubricant fittings: four pivot bushings (two on each side), and two steering knuckle support bushings (one on each side).
All	Lower Control Arms	Chassis Lubricant	Six lubricant fittings: four pivot bushings (two on each side), and two steering knuckle support bushings (one on each side).
All	Tie Rod Ball Joints	Chassis Lubricant	Four lubricant fittings.
All	Steering Gear Arm	Chassis Lubricant	One lubricant fitting.
All	Steering Knuckle Pivot Pin Bearings	Chassis Lubricant	Four lubricant fittings; two on each side.
All	Idler Arm	Chassis Lubricant	Two lubricant fittings.

EVERY 1,000 MILES (Cont'd)

Models	Location	Lubricant	Lubrication Information
C-67, C-68 C-69 (When so equipped)	Steering Gear (Manual Type)	SAE 90 Fluid Gear Lubricant	Check lubricant level. Replenish when level is below filler hole. Do Not Use Pressure Gun! In extremely cold weather, use SAE 80 or dilute SAE 90 with small amount of SAE 10W Engine Oil to ease steering.
C-67 (When so equipped)	Clutch Torque Shaft	Chassis Lubricant	One lubricant fitting. This linkage is not used when car is equipped with Power-Flite Transmission.
C-67 (When so equipped)	Gearshift Control Bellcrank	Chassis Lubricant	One lubricant fitting. This linkage is not used when car is equipped with Power-Flite Transmission.
All (When so equipped)	Power Steering (Coaxial Type)	Automatic Transmission Fluid, Type "A"	Check fluid level in reservoir behind generator. The level of fluid should be just above filter element. If reservoir is tilted, the level should be above highest point of filter element. Maintain level as recommended and replenish as necessary with specified lubricant. See Caution and Note.

CAUTION

Extreme care should be taken to prevent dirt from entering reservoir while cover is removed. Do not disturb filter element as periodic changes of this unit are not required.

NOTE

It is not necessary to change this fluid for cold weather operation!

All	Parking Brake Linkage (External Contracting Type Only)	Engine Oil	Apply directly to pivot points.
All	Rear Axle	Multi-Purpose Hypoid Gear Lubricant— SAE 90 for Summer and Winter Above —10 Deg. F., SAE 80 for Extreme Winter Below —10 Deg. F.	Remove filler plug and check level. Replenish to level of filler plug hole. Do not overfill!
All (When so equipped)	3-Speed Transmission	SAE 10W Engine Oil	Remove filler plug and check lubricant level. Replenish to level of filler plug hole.

EVERY 1,000 MILES (Cont'd)

Models	Location	Lubricant	Lubrication Information
C-68, C-69 C-70 (C-67 When so equipped)	PowerFlite Transmission	Automatic Transmission Fluid, Type "A"	Check fluid level as outlined below.

CHECKING FLUID LEVEL

Apply parking brakes. Run engine at idle speed and operate the drive selector lever through all ranges and return to Neutral (N). Check level at transmission dipstick. Replenish to "L" mark if level is below the "L" mark when engine and transmission are cold; if, after operating the car for several miles, the level is below the "F" mark, replenish to the "F" mark.

SPECIAL LOW TEMPERATURE RECOMMENDATION—If it is anticipated that the average temperature range will be below -10 F., replace one quart of fluid with **refined kerosene**. This service need be performed once at the beginning of the low temperature season. Thereafter, necessary replenishment of PowerFlite should be with Automatic Transmission Fluid, Type "A," until the next seasonal dilution or the 20,000 mile oil change.

CAUTION

To prevent dirt from entering the transmission, make sure the oil level indicator is properly seated in the filler tube.

All	Distributor	Light Engine Oil	Five to 10 drops in oil cup.
All	Generator	Light Engine Oil	Two oil cups. Five to 10 drops in each cup.
All	Door Hinges, Door Springs, and Hood Latch	MoPar Dripless Penetrating Oil	Apply directly.
All	Door Striker Plates, Dovetails, and Rotor Wheels	Stainless Stick Lubricant	Apply directly.

EVERY 5,000 MILES

Models	Location	Lubricant	Lubrication Information
All	Crankcase	Engine Oil as per Seasonal Recommendation	Drain and refill. Refer to Paragraph 1.
All	Full-Flow Oil Filter		Change replaceable cartridges at this mileage to coincide with an oil change.
All	Intake Pipe Cap Air Cleaner	SAE 50 Engine Oil	Wash with kerosene and re-oil. If the car is operated in dusty areas, the air cleaner may require more frequent servicing.

EVERY 5,000 MILES (Cont'd)

Models	Location	Lubricant	Lubrication Information
Models so equipped	Crankcase Ventilation Outlet Pipe Air Cleaner	SAE 50 Engine Oil	Wash with kerosene and re-oil. If the car is operated in dusty areas, the air cleaner may require more frequent servicing.

EVERY 10,000 MILES

All	Front Wheel Bearings	Short Fiber Wheel Bearing Grease— Medium	Check quality and quantity. Refer to Paragraph 8.
All	Speedometer	MoPar Speedometer Oil	Unscrew and remove oil tube with wick from speedometer housing (above speedometer cable flange). Saturate wick with oil and replace.
All	Speedometer Cable	MoPar All-Weather Speedometer Cable Lubricant	Disconnect cable at speedometer housing and remove shaft. Coat shaft with lubricant and install.
All	Distributor	Light Engine Oil and MoPar Cam Lubricant	Remove distributor rotor and apply two or three drops of light engine oil to felt wick in top of cam. When replacing contact points, apply MOPAR Cam Lubricant to bumper block on distributor contact arm. Do not permit oil or lubricant to get on contact points!
All	Door Lock Cylinders	MoPar Lubriplate or similar lubricant	Apply directly and use sparingly.

EVERY 20,000 MILES

All	Rear Wheel Bearings	Short Fiber Wheel Bearing Grease— Medium	Remove plug and lubricate with 1/2 oz. of grease, using a low pressure gun. Do not over-lubricate!
C-67, C-68 C-69	Universal Joints (Ball and Trunion Type Only)	Heavy Fiber Universal Joint Grease	Disassemble, clean and repack. Use 2 1/2 ounces of lubricant per Universal Joint on all Models.
C-70	Propeller Shaft Spline Joint	Multi-Purpose Rear Axle Oil	Disassemble, clean and refill approximately 1/2 full.
C-67 (When so equipped)	3-Speed Transmission	SAE 10W Engine Oil	Drain and refill. Keep level at bottom of filler plug hole. In warm areas where SAE 10W is not available SAE 20W may be used.

EVERY 20,000 MILES (Cont'd)

Models	Location	Lubricant	Lubrication Information
C-68, C-69 C-70 (C-67 When so equipped)	PowerFlite Transmission	Automatic Transmission Fluid, Type "A"	Drain and refill as outlined below.

DRAINING

Remove transmission oil pan drain plug and allow transmission to drain. Remove flywheel access plate and rotate torque converter until the drain plugs are accessible. Remove torque converter drain plugs and allow to drain. Replace all three plugs and access plate. (See Fig. 4.)

REFILLING

Add five quarts of oil through transmission oil pan filler tube. Start engine and add approximately four quarts more while engine is running. Allow engine to idle for two minutes. Operate the drive selector lever through all ranges and return to neutral (N). Add sufficient oil to bring level to "L" mark on transmission dipstick (approximately one quart).

NOTE

Special low temperature recommendation:

If it is anticipated that the average temperature range will be below -10°F ., replace one quart of fluid with refined kerosene. This service need be performed once at the beginning of the low temperature season. Thereafter, necessary replenishment of PowerFlite should be with Automatic

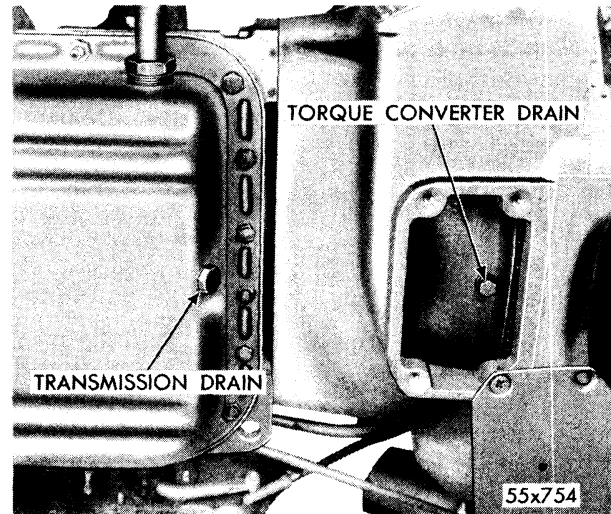


Fig. 4—PowerFlite Transmission and Torque Converter Drain Points

Transmission Fluid, Type "A," until the next seasonal dilution or the 20,000 mile oil change.

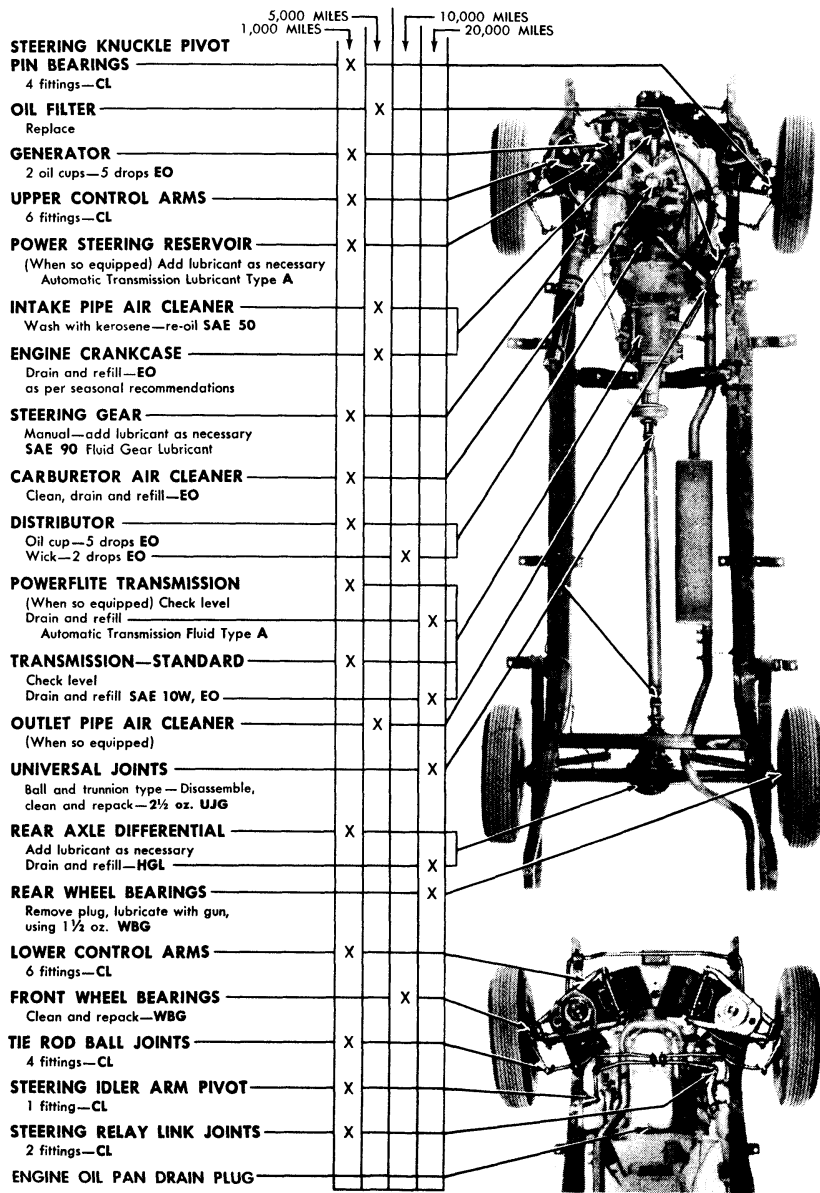
CAUTION

To prevent dirt from entering the transmission, make sure the oil level indicator is properly seated in the filler tube.

POINTS REQUIRING NO LUBRICATION

Clutch Release Bearing	Automatic Choke
Carburetor Linkage	Fan Belt Idler Pulley
Gearshift and Selector Lever Linkage	Rear Springs, Bolts, and Shackles
Brake and Clutch Pedals and Linkage	Starting Motor
Accelerator Pedal	Water Pump
Propeller Shaft Center Bearing (on long wheelbase models)	All Rubber Bushings

The rubber bushings used on Chrysler cars are designed to grip the contacting metal parts and operate as a flexible medium between these parts. The use of any lubricant will destroy the necessary friction and cause premature failure of the rubber parts.



KEY TO LUBRICANTS

- CL—Chassis Lubricant
- EO—Engine Oil
- UJG—Universal Joint Grease
- HGL—Hypoid Gear Lubricant
- WBG—Wheel Bearing Grease

SPECIAL ATTENTION

Recommended lubricants are based on average driving conditions. A car driven in extreme dusty, cold, or high humidity climate will require more frequent lubrication and maintenance. Replace oil filter cartridge after 5-thousand miles of operation. Wash air cleaner in kerosene and recoil with SAE 50 at each oil change. Multi-grade engine oils should carry SAE numbers that are recommended for local temperature ranges.

THESE POINTS REQUIRE NO LUBRICATION

- Clutch release bearing (C-67 when so equipped).
- Starting motor.
- Rear spring bolt and shackles.
- Foot accelerator and brake pedal.
- Propeller shaft center bearing (on long wheelbase models).
- Carburetor linkage and automatic choke.
- Rubber parts (pads, bushings, seals).
- Water pump and fan belt idler pulley.

ADDITIONAL LUBRICATION POINTS

1,000 Miles—Clutch torque shaft and gearshift control bellcrank, 2 fittings (C-67 when so equipped), CL; Parking brake linkage, EO; Door hinges and springs, hood clamps etc., MoPar Dripless Penetrating Oil; Door striker plates, dovetails and rotor wheels, Stainless Stick Lubricant.

10,000 Miles—Speedometer wick, MoPar Speedometer Oil; Speedometer cable shaft, MoPar All-Weather Speedometer Cable Lubricant; Door lock cylinders, MoPar Lubriplate. Also check fluid level in power cylinder reservoir of convertible top mechanism. If necessary, add MoPar Super Brake Fluid. Do not overfill.

20,000 Miles—Propeller shaft splines (C-70), clean and fill half full with Multi-purpose Rear Axle Oil.

RECOMMENDED TIRE PRESSURES

Starting Pressure (tires cold) 24 lbs.
 After driving (tires warm) 27 lbs.
A pressure build-up of at least 3 pounds over starting pressure is normal, otherwise tires are underinflated.
 After fast driving (tires hot) 29 lbs.
A pressure build-up of at least 5 pounds over starting pressure is normal, otherwise tires are underinflated.

NEVER REDUCE OR "BLEED" BUILT-IN PRESSURE IN TIRES

ENGINE OIL RECOMMENDATIONS

The following viscosity designations will indicate the correct engine oil to use at any anticipated atmospheric temperature.

Atmospheric Temperature	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

Retain original factory oil in crankcase during first 500 miles of operation.

If necessary to add oil during initial period, use recommended viscosity oil shown above for lowest anticipated temperature.

CAPACITIES

Engine Oil.....	5 qts.
(add 1 qt. when replacing filter element)	
Cooling System—New Yorker and Imperial.....	25 qts.
—Windsor.....	24 qts.
PowerFlite Transmission (refill)	
New Yorker and Imperial.....	11 qts.
Windsor.....	10 qts.
Transmission—Standard Shift	
3-Speed.....	2½ pts.
Rear Axle Differential	
Windsor including Town & Country.....	3¼ pts.
New Yorker, Town & Country and Imperial.....	3½ pts.
Crown Imperial.....	5 pts.
Fuel Tank (except Town & Country).....	20 gals.
Town & Country.....	18½ gals.

Fig. 5—Chrysler Engineered Lubrication