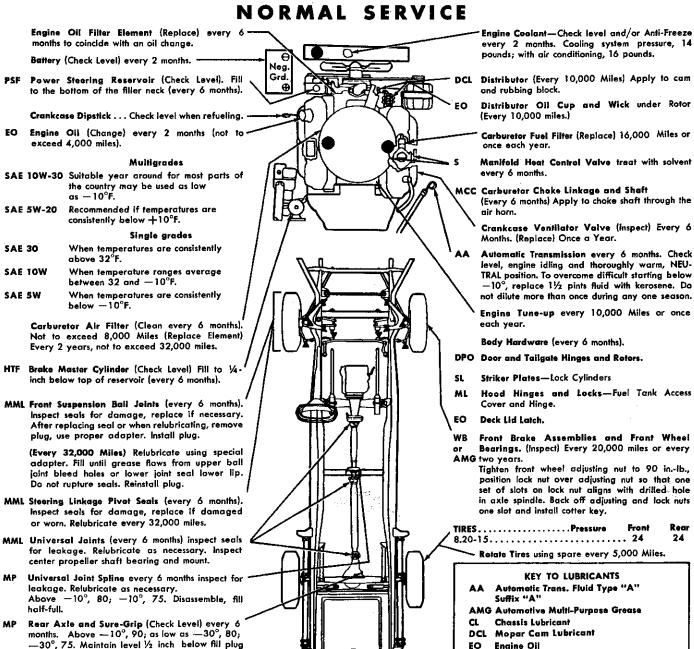
Rear

24

## LUBRICATION AND MAINTENANCE CHART



hole. MHL can also be used on all axles.

CAPACITIES	
Engine Oil (Add 1 qt. when replacing filte	5 qts. er element)
Cooling System (Add 1 qt. for heater)	16 qts.
Rear Axle	4 pts.
Transmission (refi!!) TorqueFlite	20 pts.

▲ Prepacked bearing

Cooling system drain

Fig. 1—Imperial V-8 Lubrication Chart

High Temperature Brake Fluid HTF

MCL Speedometer Cable Lubricant

MHL MoPor Hypoid Lubricant

ML

MML MoPar Multi-Mileage Lubricant

Multi-Purpose Gear Lubricant MP

**DPO** Dripless Penetrating Oil

**PSF** Power Steering Fluid

Manifold Heat Control Valve Solvent

Stainless Stick Lubricant

Wheel Bearing Lubricant-Medium

MMC Mopar Carburetor Cleaner

### MAINTENANCE CHART LUBRICATION

### NORMAL SERVICE

300, Newport, New Yorker

Engine Oil Filter Element (Replace) every 6 months to coincide with an oil change.

Battery (Check Level) every 2 months.

PSF Power Steering Reservoir (Check Level). Fill to the bottom of the filler neck (every 6 months).

Crankcase Diestick . . . Check level when refueling

EO Engine Oit (Change) every 2 months (not to exceed 4,000 miles).

#### Multigrades

SAE 10W-30 Suitable year around for most parts of the country may be used as low as  $-10^{\circ}$ F.

SAE 5W-20 Recommended if temperatures are

consistently below +10°F.

### Single grades

**SAE 30** When temperatures are consistently

above 32°F.

When temperature ranges average SAE 10W

between 32 and -10°F.

SAE 5W When temperatures are consistently below - 10°F.

Carburetor Air Filter (Clean every 6 months). Not to exceed 8,000 Miles (Replace Element) Every 2 years, not to exceed 32,000 miles.

MP Manual Steering Gear (Check Level) Above --30° 80; below -30°, 75 (every 6 months).

HTF Brake Master Cylinder (Check Level) Fill to 1/4. inch below top of reservoir (every 6 months).

MML Front Suspension Ball Joints (every 6 months). Inspect seals for damage, replace if necessary. After replacing seal or when relubricating, remove plug, use proper adapter. Install plug.

> (Every 32,000 Miles) Relubricate using special adapter. Fill until grease flows from upper ball joint bleed holes or lower joint seal lower lip. Do not rupture seals. Reinstall plug.

MML Steering Linkage Pivot Seals (every 6 months). Inspect seals for damage, replace if damaged or worn. Relubricate every 32,000 miles.

AMG Clutch Torque Shaft (every 32,000 Miles). Relubricate shaft bearings and release fork.

AMG Clutch Release Fork Swivel Clean swivel and swivel socket and Clutch release fork and lubricate when disassembling.

AA Manual Transmission (Check Level) every months. Maintain level to fill plug hole. Use MP for Heavy Duty Manual Transmission.

EO Gearshift Lever (every 6 months) . rubber boot from floor panel, apply lubricant to pivot points and yoke selector mechanism.

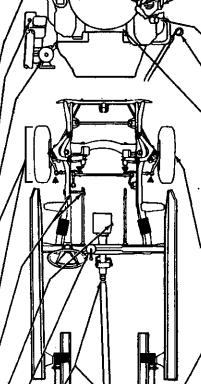
MML Universal Joints every 6 months, inspect seals for leakage. Relubricate as necessary.

Rear Axie and Sure-Grip (Check Level) every 6 months. Above  $-10^\circ$ , 90; as low as  $-30^\circ$ , 80; below  $-30^\circ$ , 75. Maintain level ½-inch below fill plug hole. (MHL can also be used on all axles.)

CAPACITIES	
Engine Oil Add I at when replacing filter	5 qts.
. (Add i di: wileli repidcità lillei i	
Cooling System	16 qts.
(Add 1 gt. for heater)	

Rear Axie 4 pts. Transmission (refill)

20 pts. **TorqueFlite** Manual - 3-Speed 41/2 pts. 7 pts. 4-Speed



Position for lift adapter

Prepacked bearing

Cooling system drain

## CHRYSLER

Fig. 2-Chrysler V-8 Lubrication Chart Engine Coolant—Check level and/or Anti-Freeze every 2 months. Cooling system pressure, 14 pounds; with air conditioning, 16 pounds.

DCL Distributor (Every 10,000 Miles) Apply to cam and rubbing block.

Distributor Oil Cup and Wick under Rotor (Every 10,000 miles.)

Carburetor Fuel Filter (Replace) 16,000 Miles or once each year.

Manifold Heat Control Valve treat with solvent

MCC Carburetor Choke Linkage and Shaft (Every 6 months) Apply to choke shaft through the

> Crankcase Ventilator Valve (Inspect) Every 6 Months. (Replace) Once a Year.

> Automatic Transmission every 6 months. Check level, engine idling and thoroughly warm, NEU-TRAL position. To overcome difficult starting below -10°, replace 1½ pints fluid with kerosene. Do not dilute more than once during any one season.

> Engine Tune-up every 10,000 Miles or once each year.

Body Hardware (every 6 months).

DPO Door and Tailgate Hinges and Rotors.

Striker Plates and Torsion Bar Roller Cams.

Hood Hinges and Locks-Fuel Tank Cover ML

EO Deck Lid Latch.

Front Brake Assemblies and Front Wheel WB Bearings, (Inspect) Every 20,000 miles or every AMG two years.

Tighten front wheel adjusting nut to 90 in.-lb., position lock nut over adjusting nut so that one set of slots on lock nut aligns with drilled hole in axle spindle. Back off adjusting and lock nuts one slot and install cotter key.

	TIRESPressu	re Front	Rear
1	/ 8.00x14 Newport	24	22
	8.00x14 300	24	22
	8.00x14 Newport, Town	& Country 24	26*
	8.50x14 New Yorker	. , , 24	22
	9.00x14 New Yorker Sale	on 22	20
	8.50x14 New Yorker, Tov	vn & Country 24	26*
`	Increase the rear tire pre	ssure 4 lbs. when fully	loaded.

Rotate Tirés using spare every 5,000 Miles.

#### KEY TO LUBRICANTS

Automatic Trans. Fluid Type "A" Suffix "A"

AMG Automotive Multi-Purpose Grouse

Chassis Lubricant

DCL Mopar Cam Lubricant

EO Engine Oil

High Temperature Brake Fluid HTF

MCL Speedometer Cable Lubricant

MHL MoPar Hypoid Lubricant

ML Lubriplate

MML MoPar Multi-Mileage Lubricant

MP Multi-Purpose Gear Lubricant

**DPO Dripless Penetrating Oil** 

PSF Power Steering Fluid

Manifold Heat Control Valve Solvent

Stainless Stick Lubricant

Wheel Bearing Lubricant—Medium

MMC Mopar Carburetor Cleaner

### LUBRICATION AND MAINTENANCE SERVICE

Service Interval	ltem	Replace	Inspect Fluid Level	Service Inspect and/or Cléan	Lubricate	Service
2 Months	Engine crankcase oil (not to exceed 4,000 Miles)	х				
6 Months	Engine oil filter Oil filler air cleaner Manifold heat control valve Crankcase ventilator valve Carburetor choke shaft & linkage Transmission Rear Axle Steering gear Steering ginkage Universal joint Prop. shaft spline Brake master cylinder Brake hoses Carburetor air cleaner (not to exceed 8,000 Miles)	X	x x x	x x x x x	×	
1 Year	Engine Performance Evaluation (not to exceed 10,000 Miles) Fuel filter (not to exceed 16,000 Miles)	x				х
2 Years	Brake linings (not to exceed 20,000 Miles) Carburetor air cleaner (not to exceed 32,000 Miles)	x		x		
32,000 Miles	Ball joints, front suspension & steering linkage Clutch release fork pivot Clutch torque shaft bearings				x x x	
When Necessary	Body mechanisms Speedometer cable Manual gearshift linkage Front wheel bearing (with brake service) Parking brakes Clutch linkage & pressure plate drive lugs			X	X X X X	X

### **CAPACITIES CHART**

		Model	Cooling System Qt. (a)		Tank	TRANSMISSION					TIRES			
Make	No. Cyl.			Crank- case Qt. (b)		Manual Pint 3-Speed	Manual Pint 4-Speed	Torque Flite Pts.	Axle Rear Pt.	Size Standard Equipment	No. Plies	Front	Rear (c)	Wheel Size and Type
Chrysler	8	VC-1 Newport	16	5	23	5	71/2	20	4	8.00x14	4	24	22	14x5½K
Chrysler	8	VC-1 Newport Town and Country	16	5	21	5	71/2	20	4	8.00x14	4	24	26	14x6K
Chrysler	8	VC-2 300 (*)	16	5	23	5	71/2	20	4	8.00x14(*)	4	24	22(*)	14x6K(*)
Chrysler	8	VC-3 New Yorker	16	5	23	NA	NA	20	4	8.50×14	4	24	22	14x6K
Chrysler	8	VC-3 New Yorker Town and Country	16	5	21	NA	NA	20	4	8.50x14	4	24	26	14x61/2K
Imperial	8	VY-1 Custom	16	5	23	NA	NA	20	4	8.20x15	4	24	24	15x6L
Imperial	8	VY-1 Crown	16	5	23	NA	NA	20	4	8.20x15	4	24	24	15x6L
Imperial	8	VY-1 LeBaron	16	5	23	NA	NA	20	4	8.20×15	4	24	24	15x6L

<sup>(</sup>a) Add 1 quart for the heater

<sup>(</sup>b) Add 1 quart when the filter is changed

<sup>(</sup>c) With the Town and Country fully loaded, increase tire COLD pressure to 30 pounds

<sup>(\*) 300</sup>K—15x6K wheel, Tire pressure 24 psi front and rear; (used with 413 cubic inch high performance engine)

### **GROUP 0**

### LUBRICATION AND MAINTENANCE

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### SUMMARY OF LUBRICATION AND MAINTENANCE SERVICES

Maintenance and lubrication service recommendations for the 1964 Chrysler Corporation cars have been compiled (designed etc.) to provide maximum protection to vehicle owners against all types of driving conditions. These, as well as driving habits, are so varied that to prescribe the lubrication and maintenance services on a mileage basis only, did not take care of those who drove fewer miles during equal length time periods, especially during adverse weather conditions.

These recommendations, therefore, have been related to the best of our ability to time intervals, yet limited by mileage where necessary. In general, semi-annual lubrication and maintenance services have been prescribed for most items. Exceptions to this include two month intervals between engine oil changes (not to exceed 4,000 miles) opposed to the front suspension lubrication every 32,000 miles.

### CERTIFIED CAR CARE

Certified Car Care is a thorough servicing program that helps make sure the vehicles you sell get the regular attention you know they need.

Certified Car Care helps build business for you in the surest way known—through customer satisfaction, not to mention the extra profits from the service department. Tell your owner that the best approach to trouble-free driving is Certified Car Care...

A practical plan to build sales and service for you, providing for regular customer service at your dealerships.

#### 1. ENGINE OIL

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

The SAE grade number indicates the viscosity 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.

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

Complete information pertaining to the lubrication points, is shown in Figures 1 and 2, for Imperial and Chrysler Models.

#### 2. SELECTION OF LUBRICANT

For best performance and to provide for maximum protection of all engines, for all types of operation, only those lubricants should be selected which; conform to the requirements of the API Classification "For Service MS". Straight mineral or non-detergent oils never should be used.

Have the proper SAE grade number for the anticipated temperature range.

Although all viscosity grades can be used safely at nearly all temperatures, light oils SAE 5W and 10W increase oil consumption at high temperatures and heavy oils SAE 30 make engine starting more difficult in cold weather. The recommended viscosity grades are:

Multigrades—SAE 10W-30 Suitable year around for most parts of the country may be used as low as -10° F. **SAE 5W-20** Recommended if temperatures are consistently below  $+10^{\circ}$  F. Single grades SAE 30 When temperatures are consistently above 32° F. SAE 10W When temperature ranges average between 32 and  $-10^{\circ}$  F. SAE 5W When temperatures are consistently below -10°

Lubricants which do not have both an SAE designation and an MS service classification shown on the container should not be used. The proper viscosity number should be selected based on the lowest temperature expected during the coming period of usage.

F.

### 3. FREQUENCY OF OIL CHANGES

Chrysler Corporation recommends that engine oil be changed at least every two months. Cars driven more than 2,000 miles per month should have the engine oil changed at a maximum of 4,000 miles. If the cars are operated under unusual conditions, the owner should consult the local dealer's Service Manager to determine the best program to follow.

The two most important factors which effect oil life, aside from oil quality, are: Engine temperature and type of driving.

At low engine temperatures harmful condensation and sludge-forming impurities accumulate in the engine oil. These cause corrosion of vital engine parts and harmful deposits. Highway driving produces higher engine temperatures which dissipate these impurities. Short trip driving at slower speeds does not warm the oil sufficiently to drive off these contaminants. Therefore, short trip driving at lower temperatures decreases the effective life of the oil while highway driving extends the effective lubricant life.

For example, highway driving, and longer trips permit oil changes at 4,000 mile intervals. Short trips (less than 10 miles) and slow speeds, such as to the store, school, work etc, and home again before the oil warms up causes harmful condensation and sludge formation. This is typical of most city operation. Oil changes should be made at intervals no longer than every two months.

Severe operating conditions such as frequent driving on dusty roads or in sandy geographic areas or unusually short trips in cold weather will require more frequent service.

During Break-In—The oil added to the engine at the factory is a high quality lubricant, classified for "Service MS". It should be retained for two months or 4,000 miles, whichever comes first. If it becomes necessary to add oil during this initial period, an oil for Service MS and of the proper viscosity grade should be used. "Non-Detergent" or "Straight mineral" oils should not be used during the break-in period.

Frequently a new engine will consume some oil during its first few thousand miles of operation. This should be considered as a normal part of the breakin, and not interpreted as an indication of difficulty.

### 4. AIR CLEANERS

### Oil Filler Cap

Engines require ventilation through the crankcase to remove combustion products. Air enters the engine through the oil filler pipe which is equipped with a combination cap and air cleaner to protect the engine

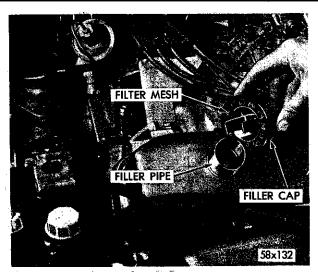


Fig. 3-Engine Oil Filler Cap Air Cleaner

from dustladen air (Fig. 3). The oil filler cap should be washed in kerosene and re-lubricated with SAE 30 engine oil every 6 months. Vehicles which are operated in extremely dusty areas should be serviced more frequently.

### **Carburetor Air Cleaner**

The paper element carburetor air cleaner should be inspected every 6 months, not to exceed 8,000 miles and cleaned as often as conditions warrant and a new element should be installed every 2 years not to exceed 32,000 miles (Fig. 4).

After removing the air cleaner from the carburetor, remove the cover and the filter element, 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 a little as a pinpoint puncture. Examine the soft plastic sealer on both sides of the element. These sealing surfaces must be smooth and uniform. Refer to Paragraph "Carburetor Choke Linkage and Shaft" for servicing at this time.

### 5. CARBURETOR CHOKE LINKAGE AND SHAFT

Every 6 months apply MoPar Carburetor Cleaner, Part Number 1643273 to prevent the choke sticking from gum deposits on the choke shaft.

Remove the air cleaner and apply the cleaner while moving the choke blade back and forth until gum formation is flushed out. Apply the cleaner to the choke shaft where it rotates in the air horn to remove gum and dirt from these surfaces.



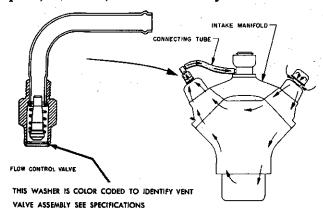
Fig. 4—Carburetor Air Cleaner

Run the engine at idle to clean out any excess from the system. Refer to Paragraph "Carburetor Air Cleaner" for servicing at this time.

### 6. CRANKCASE VENTILATOR VALVE

All models are equipped with a positive crankcase ventilating system. This system is similar, but not identical, to systems used on the previous models (Fig. 5).

The system must be kept clean to maintain good engine performance and durability as deposits will accumulate in the valve, hoses and the carburetor parts, therefore, the ventilation system should be in-



v-s ENGINES 64 x 307
Fig. 5—Closed Crankcase Ventilator Valve
Schematic

spected at least every six months and the valve replaced once a year preferable to coincide with the annual engine performance evaluation. This service will be required more frequently if the vehicle is used extensively for short trips - driving less than 10 miles —with frequent idling, such as city traffic.

With the engine running at idle, remove the ventilator valve and cap assembly from the rocker cover. If the valve is not plugged, a hissing noise will usually be heard as air passes through the valve and a strong vacuum should be felt when a finger is placed over the valve inlet. Replace the ventilator valve and cap assembly and remove the inlet breather cap. With the engine still running at idle, loosely hold a piece of stiff paper or a parts tag over the oil fill pipe. It should be sucked against the oil fill pipe within a few seconds with a holding force. If this occurs, a final check should be made to be certain the valve shuttle is free. A clicking noise should be heard when the valve is shaken (engine not running). If the noise is heard, the unit is satisfactory and no further service is necessary.

If the valve does not click when shaken or if the paper is not sucked against the fill pipe, the valve should be replaced and the system retested. (Do not attempt to clean the valve.) On all engines, use MoPar Ventilator Valve, identified by a letter "H" stamped on the end, a flat end or a black end washer. With a new valve installed, if the vacuum can be felt with the engine idling, the system is satisfactory. If the vacuum cannot be felt, it will be necessary to clean the ventilator hose and the passages in the lower part of the carburetor. The carburetor must be removed and cleaned by dipping the lower part of the carburetor in solvent. A pipe cleaner or small wire may be used in cleaning the passages. It is not necessary to disassemble the carburetor for this service.

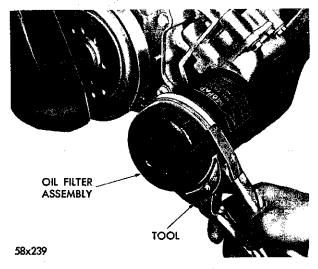


Fig. 6-Engine Oil Filter



Fig. 7—Fuel Filter Installed

### 7. ENGINE OIL FILTER

Efficient filtering of the engine oil is very important to provide good engine protection (Fig. 6). The oil filter should be changed every 6 months to coincide with an engine oil change. Short trips, stop and go operation, or operation in dusty areas may require more frequent filter changes. All engines are equipped with a full-flow oil filter. Filters vary widely in quality, and it is recommended that MoPar Engine Oil Filter, Part Number 1851658 be used, to assure the most efficient service.

### 8. FUEL FILTER

The fuel filter (Fig. 7) should be replaced at least every 16,000 miles or once each year. Loss of performance may occur if the filter traps an unusually large quantity of foreign matter due either to operating conditions or contaminated fuel, restricting the flow of fuel to the carburetor. If this occurs the filter should be replaced as required.

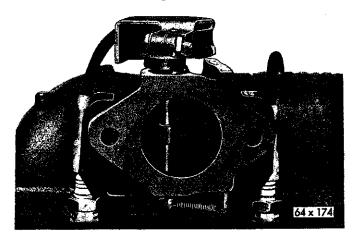


Fig. 8—Manifold Heat Control Valve

### 9. MANIFOLD HEAT CONTROL VALVE

Every 6 months or more often under adverse conditions, apply Manifold Heat Control Valve Solvent, Part Number 1879318 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 to make sure the lead deposits are dissolved (Fig. 8).

NOTE: Apply manifold heat control solvent only when the exhaust manifold is COOL.

### 10. ALTERNATOR

The alternator is equipped with pre-lubricated bearings, which require no periodic lubrication servicing.

The outside of the alternator should be wiped clean and the ventilating holes inspected for an accumulation of dirt which would obstruct the flow of air. (Servicing the Alternator, Refer to "Electrical" Group 8, for complete servicing of the Alternator.)

### 11. BATTERY

Refill the battery as necessary with distilled water and test the specific gravity. Clean and tighten the battery cable, terminals and the battery posts. Refer to "Electrical" Group 8 for complete servicing.

### 12. BODY MAINTENANCE

To maintain ease of operation and protection against rust and wear, the body mechanism and throttle linkages will require lubrication every 6 months. Prior to applying any lubricants, the parts should be wiped clean to remove dust and grit. The excess oil or lubricant should be removed.

Particular attention should be given to external lock cylinders during fall and winter months to insure protection from water and ice.

Lubricate the following:

Item	Type of Lubricant	Remarks
All external lock cylinders	Mopar Lubriplate	Apply directly.
Door Check Arms, hood hinges and lock	Mopar Lubriplate	Apply directly, use sparingly.
Door lock, vacuum intrusion guard	Mopar Lubriplate	Remove the front door trim panel, apply lubricant to pivots, inspect tubing (except Imperial Models.)
Fuel tank access cover hinge and pin	Mopar Lubriplate	Apply directly, use sparingly.
Parking brake mechanism	Mopar Lubriplate	Apply a light film directly.
Tailgate locks	Mopar Lubriplate	Apply to inner surfaces through access hole, use sparingly.
Tailgate torsion bar roller cam	Mopar Lubriplate	Apply to contact surfaces, use sparingly.
Throttle control bellcrank passenger side of firewall	Mopar Lubriplate	Apply directly to bearing surfaces (Imperial only.)
Throttle control bellcrank engine side of firewall.	Mopar Lubriplate	Apply directly to bearing surfaces.
Deck lid latch	Engine oil	Apply to inner surfaces, use sparingly.
Door hinges and other hard to lubricate places	Engine oil	Apply directly. Do not apply to ramp or outside of roller.

Îtem	Type of Lubricant	Remarks
Door latch rotor	Engine oil	Apply 2 or 3 drops to outside and inside rotor bearing surface.
Tailgate hinges	Engine oil	Apply directly, use sparingly.
Door lock striker plates	Mopar Stainless stick lubricant	Apply directly to upper edge of plate on door frame.
Tailgate lock striker plates and dovetail surfaces	Mopar Stainless stick lubricant	Apply directly.

### 13. BRAKES

All Models have self adjusting brakes so that major brake adjustments are unnecessary.

Brake linings should be inspected for wear every 20,000 miles or every 2 years or more frequently if severe brake use is experienced. At the time of brake lining inspection, the contact area of the brake shoes to brake backing plate should be lubricated with a very thin film of MoPar Sylglyde, Part Number 1881923. For this operation, the brake shoes must be removed, and the contact areas cleaned and smoothed with sandpaper before applying lubricant.

Brake hoses should be inspected for cracking, abrasions, cuts or tears in the outer covering every 6 months.

### Hydraulic Brake System Master Cylinder (Fig. 9)

Inspect the fluid level in the master cylinder every six months. Replenish with MoPar Hi-Temp Brake Fluid for the best performance. Bring the level up to within ¼ inch of the top of the reservoir.

### Parking Brake Mechanism

Apply a light film of lubriplate directly to the activating and the release mechanism (Figs. 10 and 11). When the foot lever can be depressed more than four and one-half inches the cable should be adjusted. Refer to "Brakes" Group 5 for the adjusting procedures.

### 14. FRONT SUSPENSION BALL JOINTS

The front suspension ball joints should be inspected every 6 months or whenever a vehicle is serviced.

The ball joints are semi-permanently lubricated with a special lubricant at the factory. They should be

relubricated every 32,000 miles with MoPar Multi-Mileage Lubricant Part Number 2298947. Clean the accumulated dirt and grease from the outside surface of the seal to permit complete inspection. Remove the threaded plug from each ball joint. Insert a standard grease fitting, however, if high pressure dispensing equipment is used, care must be taken to fill and flush the ball joint slowly to avoid damaging the seal. If no grease fitting is used, an adapter will be necessary on the grease dispenser to ensure proper filling and flushing of the units. Stop filling when the lubricant begins to flow freely from the bleed areas at the base of the seal or if the seals begin to balloon. Reinstall the plugs.

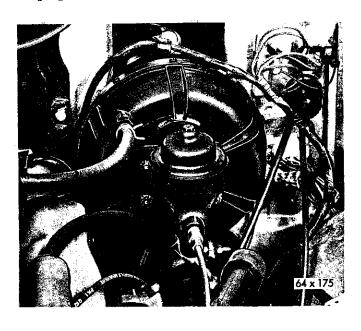


Fig. 9-Master Cylinder

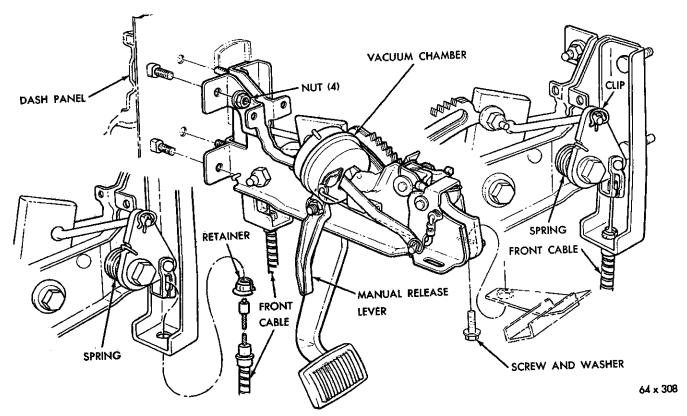


Fig. 10—Foot Operated Parking Brake (Imperial) (Disassembled)

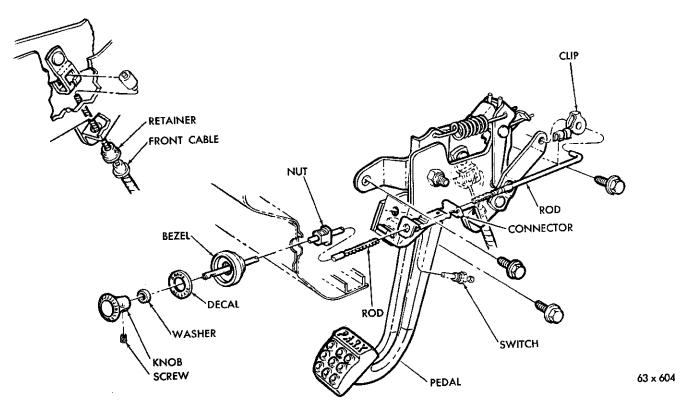


Fig. 11—Foot Operated Parking Brake (Chrysler) (Disassembled)

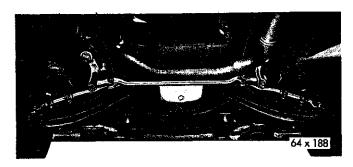


Fig. 12—Steering Linkage Location of Lubrication Fitting

### Steering Linkage Ball Joints

The steering linkage ball joints should be inspected every 6 months or whenever the vehicle is serviced (Figs. 12 and 13).

Damaged joints or seals should be replaced to prevent contamination of the grease or failure of the component.

semi-permanently lubricated with a special lubricant at the factory. All ball joints should be relubricated every 32,000 miles with MoPar Multi-Mileage Lubricant Part Number 2298947. Clean any accumulated dirt or grease from the outside surface of the seal to permit complete inspection. Remove the threaded plug from the ball joint. A standard grease fitting may be screwed into the hole. If not used, an adapter is necessary to correctly fill and flush the unit. MoPar Multi-Mileage lubricant should be injected into each unit until the grease flows freely from the seal bleed area, at the base of the seal. High pressure dispensing equipment may be used to flush and fill the unit. Reinstall the plugs.

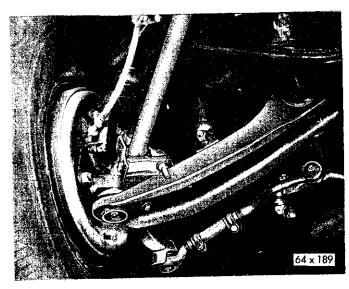


Fig. 13—Upper and Lower Ball Joints

### 15. CLUTCH AND GEARSHIFT LINKAGES— (Manual Transmission)

Clutch Torque Shaft—Every 32,000 miles, relubricate the clutch torque shaft bearings on the clutch release fork, with MoPar Multi-Mileage Lubricant, Part Number 2298947 (Fig. 14).

Clutch Release Fork Swivel—When disassembling the clutch torque shaft, clean the swivel and swivel socket on the clutch release fork and lubricate with Automotive Multipurpose Grease, NLGI 2 at the time of reassembly.

### Floor-Mounted Gearshift Lever

Whenever the operation of the lever indicates that lubrication is needed, remove the rubber boot from the floor panel and apply engine oil to the pivots point and yoke selector mechanism.

### Clutch Drive Lugs, Release Bearing Sleeve, Fork Fingers and Fork Pivots

If the effort required to depress the clutch pedal becomes excessive, the inspection plate on the bottom of the clutch housing and the fork boot should be removed to allow lubrication. Apply Automotive Multi-purpose Lubricant or MoPar Multi-Mileage Lubricant, Part number 2298947 to the points of contact and relative motion on the clutch drive lugs, fork fingers and fork points. Care must be taken to avoid application of lubricant to the clutch disc and pressure plate.

### 16. COOLING SYSTEM

Inspect the level of the cooling system every 2 months. The cooling system should be drained, flushed and refilled with the proper coolant in the spring and again in the fall. When necessary to remove accumulations of rust and other deposits, maximum cleanliness can be restored by using Cooling System Cleaner according to the directions listed on the con-

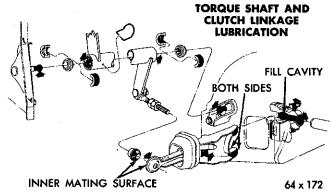


Fig. 14—Clutch Linkage and Torque Shaft Lubrication

tainer. Always discard any old solutions removed. When ready for refilling refill with water and protect against corrosion by adding MoPar Rust Resistor, or refill with MoPar anti-freeze and water, depending upon the season.

When draining the system both plugs on the V-8 engine should be opened, and the drain cock at the bottom of the radiator opened.

Sufficient permanent type anti-freeze should be used in the cooling system at all times to prevent freezing in the heater core on vehicles equipped with air conditioning. The coolant solution must contain 20% glycol-type antifreeze during the summer months to provide for protection against temperatures down to + 15°F. at the heater core. In the winter, protect for the lowest anticipated temperature range, but never use less than 20% glycol-type anti-freeze to ensure adequate protection against corrosion.

All models are equipped with a 180° thermostat. With this thermostat, permanent type anti-freeze must be used. Should an alcohol-type anti-freeze be used, a 160° thermostat must be installed.

CAUTION: Chrysler Corporation does not recommend the use of a 160° thermostat for vehicles equipped with air conditioning.

### 17. DISTRIBUTORS

Every 10,000 miles or once each year apply three drops of light engine oil to the felt rotor wick (Fig. 15). Apply 5 to 10 drops of light engine oil in the coil cup. Apply MoPar Cam Lubricant to the cam and rubbing block.

Two or three drops of light engine oil in the felt wick are required. Apply a thin coat of MoPar Cam Lubricant in the cam and rubbing block after the old lubricant has been wiped off.



Fig. 15—Distributor Lubrication Points

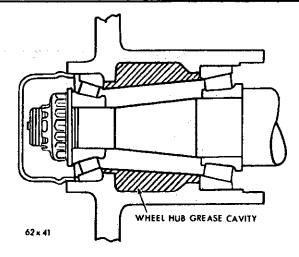


Fig. 16—Wheel Bearing Packed (Schematic)

#### 18. FRONT WHEEL BEARINGS

The front wheel bearings should be cleaned and repacked with Wheel Bearing or Automotive Multipurpose Lubricating grease whenever the brake linings are replaced or the brake drums are resurfaced.

The lubricant in the wheel bearings should be inspected whenever the wheels are removed to inspect or service the brake system. Do not repack the bearings if the grease is adequate in quantity and in good condition.

If the lubricant is low in quantity, contains dirt, or has been contaminated with water to produce a milky appearance, the old lubricant should be removed, the bearings cleaned and relubricated with Wheel Bearing Lubricant, or Multi-purpose Lubricating grease. DO NOT ADD LUBRICANT TO THE WHEEL BEARINGS.

Clean out the old lubricant thoroughly from the bearings and the hubs and repack with the new lubricant. The annular groove of the wheel inner hubs should be filled with lubricant (Fig. 16).

To adjust the front wheel bearings.

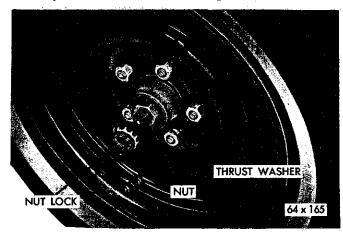


Fig. 17—Front Wheel Bearing Installation

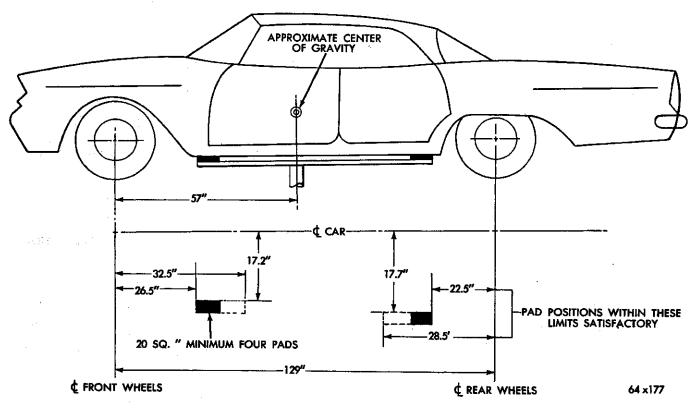


Fig. 18—Support Location for Frame Contact Hoisting (Imperial)

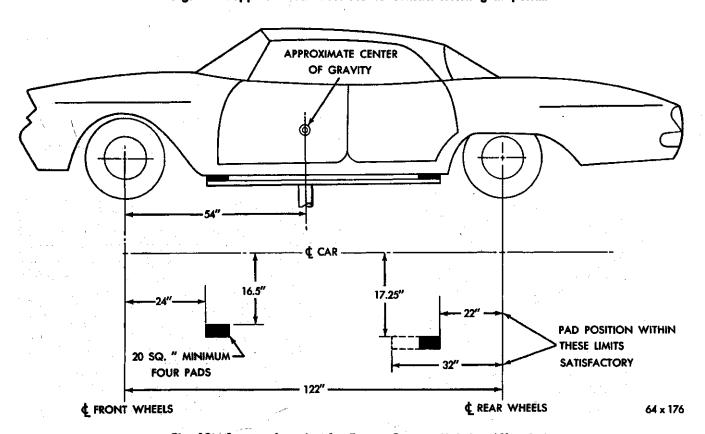


Fig. 19—Support Location for Frame Contact Hoisting (Chrysler)

- (1) Tighten the wheel bearing adjusting nut to 90 inch-pounds torque while rotating the wheel.
- (2) Position the nut lock on the adjusting nut so one pair of the cotterpin slots aligns with the hole in the spindle (Fig. 17).
- (3) Back off the adjusting nut and lock assembly to the next slot, and install the cotterpin.
- (4) Clean the lubricant cap, coat the inside with wheel bearing lubricant (do not fill) and install the cap.
- (5) Install the wheel, tighten the wheel nuts to 65 foot-pounds torque and install the wheel cover.

### 19. HEADLAMPS

One of the most important contributions to automotive safety, is the correct adjustment of the headlamp beams. Suspension geometry changes, or heavy loading often will change the headlamp beam pattern and cause unsafe driving conditions. If a vehicle is to be loaded abnormally, such as on a vacation trip, or a salesman's vehicle loaded with his products, the headlamps should be adjusted. Refer to Group 8 "Electrical" for service procedures.

### 20. HOISTING

Special care should be taken when raising the vehicle on a frame contact type hoist. The hoist must be equipped with the proper adapters in order that the vehicle will be supported in the correct location, as shown in Figures 18 and 19.

Conventional hydraulic hoists may be used after determining that the adapter plates will make firm contact with the lower control arms and the rear axle housing.

A regular floor jack may be used under the rear axle housing, or under the front suspension lower control arms, however, a floor jack must never be used on any other parts of the underbody.

CAUTION: Do not attempt to raise one entire side of the vehicle by placing a jack midway between a front and rear wheel. This procedure may result in permanent damage to the body.

The bumpers are designed to accept a bumper jack in an emergency, if it becomes necessary to change a tire on the road. Notches are provided in the bumpers for the purpose of raising the vehicle with the bumper jack.

### 21. PARTS REQUIRING NO LUBRICATION

There are many points that should not be lubricated some because they are permanently lubricated, some because lubricants will be detrimental to their opera-

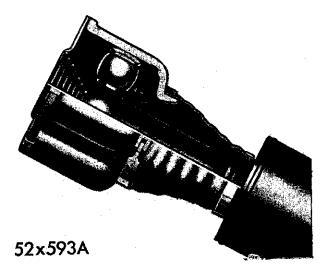


Fig. 20—Universal Joint Ball and Trunnion

ting characteristics, and some because lubricants will cause component failures. In any event, rubber bushings should not be lubricated, not only because lubricants will cause rubber to fail, but also will destroy their necessary friction characteristics. The following parts should not be lubricated:

Accelerator Pedal
All Rubber Bushings
Alternator Bearings
Brake Linkages (Passenger side of Dash Panel)
Carburetor Air Cleaner

Clutch Pedal Push Rod Ends Clutch Release Bearings Drive Belts Fan Belt Idler Pulley
(With Air Conditioning)
Rear Springs
Rear Wheel Bearings
Starter Bearing
Steering Gear Arm Pivot
Upper and Lower Control
Arm Bushings

### 22. PROPELLER SHAFTS AND UNIVERSAL JOINTS

Every 6 months inspect for external leakage. The universal joints should not be disassembled or relubricated unless external leakage is noted.

Relubrication of the universal joint is not required for normal vehicle usage. If the vehicle operation is similar to any of the following, it is recommended that the universal joints be disassembled, cleaned, and relubricated every 32,000 miles (Figs. 20 and 21).

- 1. Police vehicles.
- 2. Taxicab operation.
- 3. Frequent towing of trailers.
- Continuous operation at higher than normal loading.

The universal joints should be relubricated with MoPar Multi-Mileage Lubricant, Part No. 2298947 as follows:

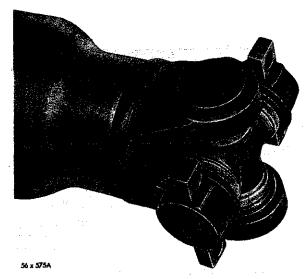


Fig. 21—Universal Joint Cross and Roller

- Ball and Trunnion Repack with two (2) ounces lubricant.
- 2. Cross and Roller Repack.
- Spline Refill approximately one-half full. Use Multi-purpose lubricant with 10% molybdenum disulfide powder added.

### 23. REAR AXLE AND SURE GRIP

Multipurpose Gear Lubricant as defined by MIL-L-2105B should be used in all rear axles. MoPar Hypoid Lubricant Part Number 1879414 is an oil of this type recommended.

### Frequency of Oil Change

The changing of the rear axle lubricant is not rec-



Fig. 22—Removing the Lubricant Using a Suction Tube

ommended for vehicles used in normal service, except when the axle oil has been contaminated with water or to provide the correct viscosity grade for the anticipated temperature range as indicated by the following table:

Anticipated Temperature Range	Viscosity Grade
Above $-10$ °F.	<b>SAE 90</b>
As low as $-30$ °F.	<b>SAE 80</b>
Below $-30$ °F.	SAE 75

The lubricant level should be inspected every 6 months with the vehicle in a level position and supported on a wheel or axle type hoist. The lubricant level should be between the bottom of the filler plug hole to  $\frac{1}{2}$  inch below (Fig. 22).

### **Trailer Towing Service**

The drive line components on passenger vehicles used to pull trailers or similar heavy duty usage will require more frequent inspection and service than those used in normal passenger vehicles. See "Passenger Car Special Towing Recommendations".

#### 24. SPEEDOMETER CABLE

The speedometer cable should be removed, cleaned and relubricated with MoPar All-Weather Speedometer Lubricant, Part Number 1243632 if the operation becomes noisy or erratic.

Disconnect the cable at the speedometer housing, and remove the shaft. Clean the shaft and coat with a very thin film of lubricant and reinstall the shaft. Clean the excess lubricant from the top one-foot of core and from the ferrule before the shaft is inserted completely.

CAUTION: Excessive lubricant may cause speedometer malfunction.

### 25. STEERING

### Manual Steering

Every 6 months the lubricant level of the fluid should be checked and if necessary replenish to the level of the filler hole with Multipurpose Gear Lubricant as defined by MIL-L-2105B. Use SAE 80 for temperatures ranging above —30°F. and SAE 75° for temperatures below —30°F. If SAE 80 is not available SAE 90 may be used (Fig. 23).

CAUTION: Do not use a pressure gun.

### Power Steering

Inspect the level of the power steering pump reservoir every six months (Fig. 24). If necessary, replenish

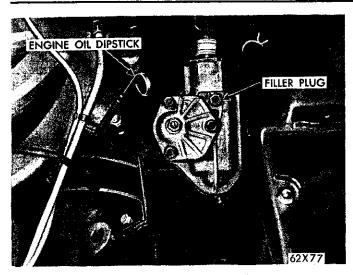


Fig 23—Manual Steering Gear Lubrication

to the bottom of the filler neck with MoPar Power Steering Fluid, Part Number 2084329.

### 26. TIRES

Tires should be rotated including the spare (Fig. 25) every 5,000 miles to provide long tire life, uniform wear, and to retain comfortable riding qualities.

The spare should be used so that all the tires will wear at approximately the same rate.

The tires should be examined for unusual wear patterns, foreign material and proper inflation pressure, each time the engine oil is changed. Such conditions, may reflect unusual driving habits or indicate mechanical corrections may be necessary.

See the capacities page for the recommended inflation pressures.

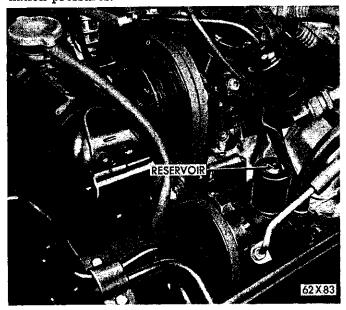


Fig. 24-Power Steering Reservoir

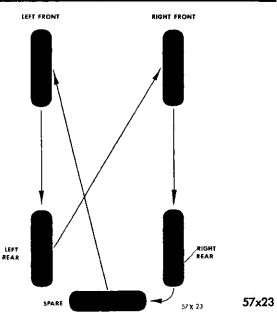


Fig. 25—Tire Rotation

### 27. TRANSMISSION

### **Manual Transmission**

Every 6 months, remove the filler plug and inspect the fluid level, and if necessary replenish to the level of the filler hole. Use Automatic Transmission Fluid, Type "A", Suffix "A" for 3-speed and 4-speed manual transmissions for all anticipated temperature ranges. Multipurpose Gear Lubricant SAE 90 or SAE 140 may be used in warm climates. Use Multipurpose Gear Lubricant SAE 80 with the 3-speed Warner T-85 heavy duty manual transmission for temperatures ranging above  $+32^{\circ}$ F. SAE 90 may be used if SAE 80 is not available. Automatic Transmission Fluid Type "A", Suffix "A" should be used when the temperature drops below  $+32^{\circ}$ F.

Frequency of oil change—No change is recommended for vehicles used in normal service.

### **Trailer Towing Service**

Drive line components on passenger vehicles used to pull trailers or similar heavy duty usage will require more frequent inspection and service than those used in normal passenger vehicles. See "Passenger Car Special Towing Recommendations".

### **Automatic Transmission**

Inspect the fluid level every 6 months with the engine and transmission at normal operating temperature

- (1) With the parking brake on and the engine idling, depress each button momentarily, ending with the "N" (Neutral) button pushed in.
  - (2) The fluid level should be slightly below the full

mark, but never above the "F" mark when the engine is at its normal warmed condition described above. Add or remove the fluid as necessary to bring to this level.

CAUTION: To prevent dirt from entering the transmission make certain that the dip stick cap is reseated properly onto the filler tube.

If it is necessary to inspect the fluid level when the transmission is cold, the fluid should be at, or slightly below the "Add One Pint" mark. If below the mark, add one pint of fluid then recheck the level.

Chrysler Corporation does not recommend the addition of any fluids to the transmission other than Automatic Transmission Fluid, Type "A" Suffix "A". The only exception to this policy are the uses of refined kerosene to aid starting in very cold weather, the use of special dyes to aid in detecting fluid leaks and the use of MoPar Automatic Transmission Sealer, Part Number 2298923, in high mileage vehicles. If starting is difficult when the average temperature consistently ranges below —10°F., drain 1½ pints of transmission fluid and replace with refined kerosene. This service should be performed only once during the low-temperature season. Thereafter, any replenishment should be with Automatic Transmission Fluid, Type "A", Suffix "A".

### Frequency of Lubrication

The transmission fluid and oil filter will provide satisfactory lubrication and protection to the automatic transmission, therefore regularly scheduled oil changes will not be required in vehicles used in normal service. Therefore, the oil changes will not be required except when the service is severe as described below. If the regular operation of the vehicle is similar to any of the following, the transmission should be adjusted and the oil and filter changed approximately every 32,000 miles. For extreme severe service, it may be necessary to change the fluid more frequently (Fig. 26).

1. Police vehicles.

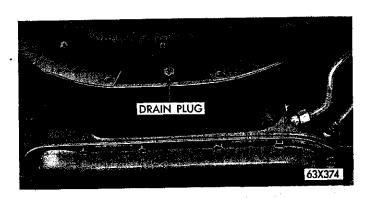


Fig. 26-Converter Drain Plug

- 2. Taxicab operation.
- 3. Frequent towing of trailers.
- 4. Continuous operation at higher than normal loading.

Refer to Group 21, "Transmission" for the oil change procedure.

### 28. WINDSHIELD WIPERS

If the windshield wipers are smearing or in general poor wiping of the windshields, the rubber blade should be replaced with a new one.

Depress the release on the top of the blade and the rubber blade will slide off. Replace with the new rubber blade. Slide the blade into the catch to fasten. Refer to MoPar Parts list for correct blade.

### 29. HOOD LATCH (Lock Striker Plate) (All Models)

Lubrication of the Hood lock assembly is of vital importance to prevent any possibility of a binding or frozen lock or safety latch.

Every 6 months apply Automotive Multi-purpose lubricant to all pivot points, springs and rubbing surfaces. Work the lubricant in the latch mechanism until all functional areas are covered.

### PASSENGER CAR MAINTENANCE SCHEDULE FOR CERTIFIED CAR CARE

### Service and/or Certification Interval

	Maintenance	6 Mos.	12 Mos.	18 Mos.	24 Mos.	30 Mos.	36 Mos.	42 Mos.	48 Mos.	54 Mos.	60 Mos.
	Change engine oil—every 2 months, not to exceed 4,000 miles	х	·x	х	х	х	X	х	х	х	х
	Change engine oil filter—every 6 months	X	Х	Х	Х	X	Х	X	X	X	X
QUIRED	Clean and inspect carburetor air filter—every 6 months not to exceed 8,000 miles	х	х	х		х	Х	х		х	х
CERTIFICATION REQUIRED	Replace carburetor air filter—every 2 years, not to exceed 32,000 miles			!	x				х	i	
FICA	Inspect fluid level—transmission and rear axle	х	х	х	х	х	Х	х	х	х	х
CERT	Inspect and lubricate manifold heat control valve	Х	х	Х	Х	х	х	х	Х	х	х
DEALER	Inspect universal joint seals	Х	х	х	х	Х	х	х	Х	Х	х
DEA	Clean oil filler cap and inspect crankcase ventilator valve	Х	<u> </u>	Х		x		х		Х	
	Clean oil filler cap and replace crankcase ventilator valve		х		x		х		x		х
	Cooling system—flush and refill		Х		x		х		х	:	Х
WICES	Inspect fluid level in steering gear and brake master cylinder reservoir	X	x	x	X	x	·x	x	x	x	x
RECOMMENDED SERVICES	Inspect seals at suspension ball-joints and all steering linkage pivots	X	x	x	×	x	×	x	x	X	x
COMME	Lubricate body mechanisms (door hinges and latches, hood and trunk latches, etc.)	x	X	x	X	х	х	x	х	х	х
æ	Lubricate choke linkage and shaft	Х	Х	x	X	х	х	х	х	x	х

### RECOMMENDED SERVICES AT MILEAGE INTERVALS

Rotate tires—inspect for wear

Engine performance evaluation and tune-up, if necessary

Inspect front brake assemblies and front wheel bearings

Replace fuel filter

Lubricate front suspension ball-joints, tie rod ends and

clutch torque shaft (Manual trans.)

Every 5,000 miles

Every 10,000 miles or once each year

Every 20,000 miles or every two years

Every 16,000 miles or once each year

Fverv 32.000 miles

### PASSENGER CAR TRAILER-TOWING SERVICE RECOMMENDATIONS

TRAILER TOWING SERVICE—The drive line components on passenger vehicles used to pull trailers or similar heavy duty usage will require more frequent inspection and service than those used in normal operation. The recommended service intervals are as follows:

Models	Normal recommended service interval	Lt. duty—occasional trailer-towing	Med. duty—frequent trailer-towing	Hvy. duty—cont. or prolonged trailer-towing		
Imperial and Chrysler—Combined weight limits (	Trailer and load)	Up to 2500 lbs.	Up to 2500 lbs.	2500 to 5500 lbs.		
Maintenance						
Change transmission fluid	(Not required)	32,000 miles	32,000 miles	10,000 miles		
Replace transmission oil filter (Auto. trans.)	(Not required)	32,000 miles	32,000 miles	10,000 miles		
*Change rear axle lubricant	(Not required)	32,000 miles	32,000 miles	32,000 miles		
Inspect universal joints and fluid level in transmission and rear axle	Every 6 months	Every 6 months	Every 2 months, not to exceed 4,000 miles	Every 2 months, not to exceed 4,000 miles		
Inspect front brake assemblies and front wheel bearings	20,000 miles	20,000 miles	20,000 miles	10,000 miles		

<sup>\*</sup>Contamination of the rear axle lubricant with water is possible by submerging the rear axle in water, allowing water to enter the axle vent. Boat-launching ramps are sometimes located to permit the submersion of the car axle. If contamination by water is evident or suspected, rear axle lubricant must be changed immediately, or axle failure will result.

# CERTIFIED CAR CARE—ENGINE PERFORMANCE EVALUATION EVERY 10,000 MILES OR ONCE EACH YEAR

- 1. **Spark Plugs** usually can be cleaned, adjusted and re-used for 20,000 miles. They should be replaced whenever obvious physical deterioration is apparent or when a test indicates sub-standard performance.
- 2. Distributor—Remove the distributor cap and rotor, clean and inspect. Inspect the ignition breaker points for pitting, bluing, and misalignment and adjust (lubricate cam cup and wick). Make sure that all distributor secondary wires and tower caps are clean and seated properly at all connections. Set ignition timing as necessary for high altitudes or the use of higher fuels without spark detonation.
- 3. Carburetor—Remove the air cleaner filter and clean properly. Check the fast idle speed at cam index. Adjust the carburetor idle mixture and fast idle speed to proper settings. Tighten the carburetor air horn to manifold nuts, also, clean the crankcase ventilator valve. Be assured that the manifold heat control valve and the carburetor choke piston are operating properly and are each re-treated with their specified solvent.
- 4. **Electrical**—Inspect the battery specific gravity. Clean and tighten the battery terminals and connections. Test the battery line voltage at the starter. Test the starter cranking ability.

### CERTIFIED CAR CARE-SEMI-ANNUAL MAINTENANCE SERVICE

Replace—Engine Oil Filter element.

Lubricate—Manifold Heat Control Valve with special MoPar solvent, carburetor choke shaft and throttle linkage.

Wipe clean and Lubricate, if necessary—Door Hinges and other Hard-to-lubricate places, Door Latch Rotor, Door Lock Striker Plates, Door Check Arms, Hood Hinges and Lock, All External Lock Cylinders, Parking Brake Mechanism, Door Lock - Vacuum instrusion guard, Deck Lid Latch, Fuel Tank Access Cover, Hinge and Pin, Throttle Control Bellcrank

(Engine and passenger side of firewall). All Town and Country Models: Tail Gate Hinges, Tail Gate Locks, Tail Gate Lock Striker Plates and Dovetail Surfaces, Tailgate Torsion Bar Roller Cam.

Check Levels and Add Fluids, if Necessary—Transmission - (conventional or automatic), Rear Axle Differential, Steering Gear Pump (Power Steering), Manual Steering Gear, Engine Coolant - Check Anti-Freeze Brake Master Cylinder, Battery.

**Inspect**—Condition of ball joints and steering linkage pivot and the ventilation valve.

# CERTIFIED CAR CARE—BRAKE SYSTEM MAINTENANCE SERVICE EVERY 20,000 MILES OR EVERY TWO YEARS

1. Remove both front wheel, tire and drum assemblies.

NOTE: Front brakes do 60% of the braking. The condition of the front brakes will serve as an indicator of the condition of the rear brakes.

- 2. Blow out any accumulated dust or dirt.
- 3. Inspect lining wear pattern and determine remaining lining life.
- 4. Inspect condition of shoe return springs, inspect freedom of shoe movement, wheel cylinders, dust boots and backing plates.

- 5. Inspect the brake drums for excessive out of round, score marks, hard spots, and spider webbing.
- 6. Safety inspect all brake lines, brake tees and hoses. Safety check all conditions. Inspect the lower outside portion of the rear brake backing plates, leakage inside will usually show at this point.
  - 7. Fill master cylinder reservoir to the proper level.
- 8. Adjust service brakes on Models without automatic brake adjusters.
- 9. Inspect and, if necessary, adjust the parking brake.

### CERTIFIED CAR CARE-FRONT SUSPENSION ALIGNMENT

- 1. Determine if vehicle needs the front suspension system aligned. Three important reasons can indicate this need:
  - a. Tire wear pattern and/or
  - b. Car pulls in one direction on brake application and/or
  - c. Car leads, left or right, in normal driving.
  - 2. Inflate all tires to the specified pressure.

- 3. Inspect, if necessary, adjust front suspension height at torsion bars.
- 4. Inspect, if necessary, adjust camber, caster, and toe-in.
- 5. Inspect the condition of the steering linkage and inspect the seal condition of suspension parts.
  - 6. Inspect the steering gear lubricant level.
  - 7. Aim all headlights.

