

MG TF LUBRICATION & MAINTENANCE

Lonnie Cook - rev 28-Apr-2025

Most information applies to TDs

Capacities:			
Fuel tank	...	...	12 gallons (14.4 U.S. gallons—54 litres)
Fuel tank—reserve			2 gallons (2.4 U.S. gallons—9 litres)
Cooling system	...	...	10½ pints (12.25 U.S. pints—5.7 litres)
Engine sump	...	...	10½ pints (12.6 U.S. pints—6 litres)
Gearbox	...	...	1½ pints (1.5 U.S. pints—7 litre)
Rear axle	...	...	2½ pints (2.7 U.S. pints—1.28 litres)

NOTE - Prior to TD engine XPA/214948 in March 1952:
Engine sump = 9 U.K. pints (10.8 U.S. pints – 5.1 litres)

• MOTOR OIL

- I use high ZDDP conventional mineral oil Valvoline VR-1 20w50 "Racing Oil" 1400 ppm Zinc; 1300 ppm Phosphorous
- John Twist recommends Brad Penn motor oil. He also recommends Valvoline VR-1.

• OIL FILTER

- Purolator oil filter canisters are on my TFs.
 - Originally, a Purolator M.F.21 filter was in the TF Purolator canister.
 - Modern equivalents: NAPA Gold 1300, Wix 51300, Purolator L20021, Moss 950-530 (*I recommend NAPA and WIX*)
 - Be sure to **remove the old rubber gasket before installing the new filter**. Three gaskets usually come with the filter. Choose the one that fits best in the groove in the base of the oil pump, usually the middle-size of three gaskets supplied with the filter.
Approx. measurement = .173" tall X .087" inside to outside. The cross section is rectangular.
- Some TFs may have a Tecalemit filter canister. Some TDs have vertical filter canisters. Some MGs may have aftermarket filter conversions. Investigate before buying filters for Tecalemit, vertical, or aftermarket.

• GEARBOX

- I use Redline MT-90 synthetic (GL-4). Must use GL-4 to avoid damaging brass/bronze parts in the gearbox.

• DIFFERENTIAL

- GL-4 90W Hypoid Gear Oil
 - Few GL-4 90W hypoid gear oils are still available.
 - Bronze / "yellow metal" parts in diff may deteriorate with GL-5 gear oil.
 - Some synthetic GL-5 hypoid gear oils with "1b" copper corrosion test ratings cause less damage to yellow metals than conventional GL-5 gear oil. The range is "1a" to "4c". No GL-5 gear oils are "1a".
 - GL-4 Hypoid Conventional Mineral Oil: *Castrol Classic EP 90 Gear Oil (UK)*; *Dynolite SAE 90 Gear Oil (UK)*; *Penrite Mild EP Gear Oil SAE 110 (AU)*
 - GL-5 Hypoid "1b" Synthetic: *Redline 75w90 Gear Oil (US)*
 - I use Redline 75w90 gear oil in TF681 and conventional mineral oil GL-4 hypoid gear oil in TF7211.

• CHASSIS LUBE

- I use Lucas Red "N" Tacky Grease NLGI #2 Grade GC-LB Calcium Sulfonate Complex EP Grease.
- Equally good: Valvoline Multi-Vehicle High Temperature Red Grease NLGI #2 GC-LB Lithium Complex EP. Wheel bearings, suspension systems, universal joints, steering linkages, and chassis.

• PEDAL SHAFT (This is not on the lube chart)

- Chassis grease into fitting under left front wing. I use Lucas Red "N" Tacky. Also, Valvoline Multi-Vehicle.
- RHD TFs do not have a grease fitting for the pedal shaft.

• WHEEL BEARINGS

- I pack them with Lucas Red "N" Tacky or Valvoline Multi-Vehicle.

- **STEERING RACK** *(Replace steering rack seals [gaiters] if leaking.)*
 - MG specified the same gear oil that is used in the diff.
Do not use chassis grease. See info in Workshop Manual.
 - The steering rack in TF7211 is an aftermarket Moss rack. Does not require lube.
- **SHOCK FLUID** *(Do not overfill. Should not run out of the filler hole.)*
 - AWE68 or AW68 Hydraulic Fluid (Recommended by Peter Caldwell, MG lever shock rebuilder)
 - Moss Hydraulic Shock Absorber Oil, #220-306
 - Motorcycle Fork Fluid 20w (e.g., Harley Davidson Fork Oil Type E, 20w)
- **WATER PUMP**
 - Lucas or Valvoline grease in nipple on water pump. Modern replacement pumps may not have a grease nipple.
- **CARBURETOR DAMPERS**
 - I use 3-IN-ONE SAE 20 Motor Oil in TF7211, blue and white plastic bottle, because the WSM specifies 20W oil.
 - I use 90W GL-4 gear oil in carb dampers in TF681. John Twist says it gives richer mixture on acceleration.
 - There are many opinions.
- **AIR CLEANERS**
 - Wash the filter element in gasoline or kerosene and allow to dry.
 - Re-oil the element with 20W or 20w50 engine oil and allow to drain before reassembling.
 - TF: "Element, Air Cleaner" Moss #372-176. "FELT PAD (pair)" Moss #372-185.
 - TD: Element not available. Replace element with a stainless steel scouring pad. Scotch-Brite or Chore Boy.
 - TD: In addition to the element, clean out the filter oil base and fill with engine oil to the level indicated.
- **DISTRIBUTOR**
 - 20W oil or engine oil: distributor cam bearing, timing control, contact breaker pivot.
 - Grease or "Standard Motor Lubricam SL-2, Silicone, Distributor Points Cam Grease": distributor cam.
 - See Operation Manual.
- **GENERATOR FELT IN BRASS HOUSING**
 - Chassis grease. Lucas Red "N" Tacky or Valvoline Multi-Vehicle.
- **TACHOMETER GEARBOX ON GENERATOR** *(Operation Manual and WSM recommend different lubes)*
 - Operation Manual: Same gear oil as in diff. Use grease gun filled with oil, or remove fitting to fill with a syringe.
 - Workshop Manual: Chassis grease. Do not pump too much grease or the case will swell and damage the joint between the two halves causing it to leak.
- **WIRE WHEEL SPLINES** *(This is not in the Workshop Manual or Operation Manual)*
 - Remove old grease from wheel and hub splines with solvent and a brush.
 - Lightly lubricate the wheel splines with anti-seize, high temperature grease, or Lucas R'n'T or Valvoline MV.
 - Lightly lube the hub splines, then wipe clean with a cloth.
 - Very lightly lubricate the tapered face of the hub & matching face of the wheel to prevent corrosion.
Wipe clean with a cloth.
 - Lubricate the threads of the winged hub nut and matching threads on the hub.
 - Lubricate the inside lip of the winged hub nut and the outer lip of the wheel.
 - Do not position a spoke over the brake adjuster hole in brake drum.
- **OTHER PARTS TO LUBRICATE**
 - Lubricate just about any non-electric metal-to-metal that moves, e.g., door hinges and carburetor linkage.
 - See Workshop Manual and Operation Manual.

OTHER MG TF MAINTENANCE ITEMS

• BRAKE FLUID

- Most MG-Ts use DOT 3 glycol-based brake fluid. Sometimes labeled "Synthetic."

<u>Brake Fluid</u>	<u>Low Water Absorption</u>	<u>High Boiling Point</u>	<u>Base</u>
DOT 5	☆☆☆☆☆ (best)	☆☆☆☆☆ (best)	Silicone
DOT 3	☆☆☆	☆☆ (worst)	Glycol
DOT 4	☆☆	☆☆☆	Glycol
DOT 5.1	☆☆ (worst)	☆☆☆☆☆ (best, equal to DOT 5)	Glycol

- DOT 5 doesn't damage paint. May be difficult to remove air when bleeding. Investigate before using DOT 5
- DOT 5 is not compatible with DOT 3, DOT 4, or DOT 5.1 Use ONLY in system cleaned and prepared for DOT5
- Here's how to test whether glycol or silicone brake fluid is in your car ...
 1. Withdraw some fluid from the master cylinder with a dropper.
 2. Put it into a glass jar and then add some clean water to the fluid.
 3. Now put the lid on the jar, shake it well, and let it stand for a few minutes.
 4. If the water and the fluid have mixed thoroughly and cannot be separately identified, then you have DOT 3, DOT 4, or DOT 5.1 glycol-based brake fluid.
 5. However, if the water and the fluid have not mixed, or have formed blobs or layers, then you have DOT 5 silicone brake fluid.

• BRAKE HOSES

- "BRAKE HOSE, front & rear, Lockheed" - Moss #180-840
- "BRAKE HOSE, front & rear, aftermarket" - Moss #180-841

• FAN BELT

- Adjust to have ONE INCH of slack between the generator and the water pump.
 - Gates Green Stripe II TR22392, truck & bus series, 11/16" x 39 3/4" (17mm X 1010mm), 36-deg angle.
 - Gates Green Stripe II TR22386, 11/16" x 39-1/8" (17mm X 993mm), 36-deg if TR22392 is too long.
 - NAPA #NBH 2522392, 11/16" X 39.77" (17mm X 1010mm)

• RADIATOR HOSES and CLAMPS

- TF: "RADIATOR HOSE, top" Moss #434-420
- TF: "HOSE SET, lower (3 hoses)" Moss #434-448
- TF: "HOSE CLAMP SET (8 clamps)" Moss #326-398
- TC/TD: "RADIATOR HOSE, top" Moss #434-410
- TC/TD: "HOSE SET, lower (3 hoses)" Moss #434-438
- TC/TD: "HOSE CLAMP SET (8 clamps)" Moss #326-388
- ALL WIRE HOSE CLAMPS:** Search Moss for "Wire-Type Hose Clamps" all sizes of individual clamps.

• ANTIFREEZE

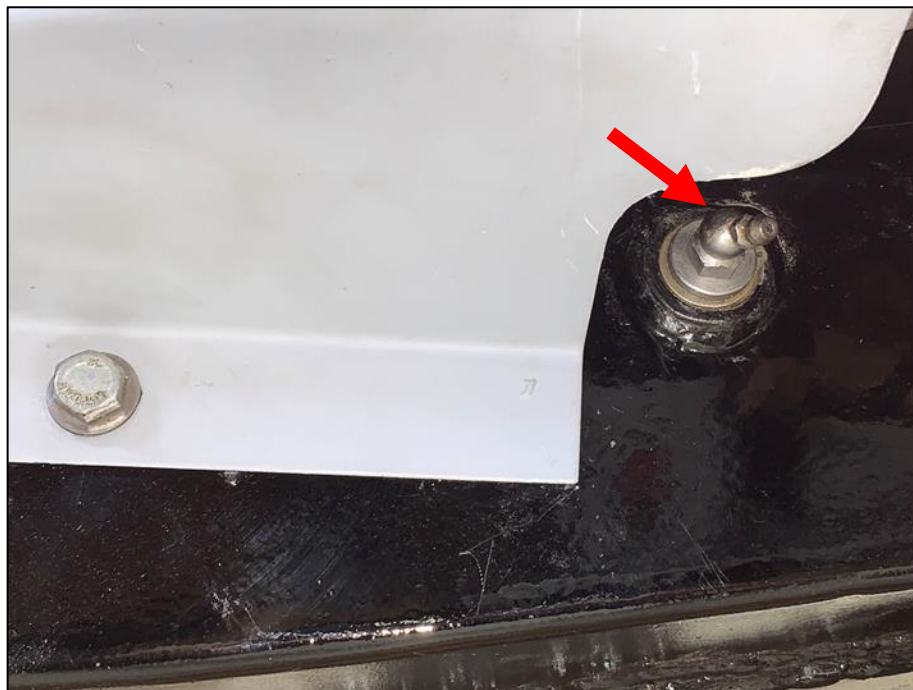
- Prestone All Vehicles Antifreeze Concentrate
 - Open the drain valves to drain the radiator and block. May need to clear the drain valves with a wire or compressed air. Fill with distilled water. Drive the car to operating temp for a while, and drain again. Repeat until clear. Some distilled water will remain in the block and radiator. Add antifreeze @ half of total volume of the cooling system, then finish filling with distilled water
 - TF cooling system holds 12.25 US Pints (196oz - a little over 1.5 gal)
 - 50:50 Mix of Antifreeze:
 - Antifreeze = 98 oz, a little over 3/4 gal
 - Fresh water + water in block = 98 oz
 - Total = 196 oz

TF (TD) LUBE & MAINTENANCE SCHEDULE

<input checked="" type="checkbox"/>	ILLUSTRATION	TASK	LUBRICANT (See Text)	FREQUENCY <i>Driven less than 3,000 mi/yr (Lonnie Cook)</i>	FREQUENCY <i>Operation Man Workshop Man</i>
		Visual check top and bottom		Every drive	
	CE	Check engine oil level	20W50 High Zinc	Every drive	250 mi
	G	Check and fill coolant	Distilled H ₂ O	Every drive	500 mi
		Check tire pressure		Every drive	500 mi
	A	Lube Pedal Shaft (1 zerk)	Lithium EP Grease	6 months	500 mi
	MO	Lube tie rod ends and swivel pins (6 zerks)	Lithium EP Grease	6 months	500 mi
	KL	Lube drive shaft - front & rear (3 zerks)	Lithium EP Grease	6 months	1,000 mi
	Q	Lube water pump (1 zerk)	Lithium EP Grease	6 months	1,000 mi
		Lube bonnet catches	Chassis lube	6 months	1,000 mi
		Lube door latches	Chassis lube	6 months	1,000 mi
		Oil door hinges	20w motor oil or engine oil	6 months	1,000 mi
		Oil bonnet hinge	20w motor oil or engine oil	6 months	1,000 mi
		Oil carb linkage	20w motor oil or engine oil	6 months	1,000 mi
	R	Check and fill carb dash pots	20w motor oil	6 months	1,000 mi
		Check and fill brake fluid. Check hoses.	Same type brake fluid	6 months	1,000 mi
	H	Check and fill gearbox gear oil	GL-4 90W hypoid gear oil	6 months	1,000 mi
	J	Check and fill diff gear oil	GL-4 90W hypoid gear oil	6 months	1,000 mi
		Check and fill battery. Clean terminals.	Distilled H ₂ O	6 months	1,000 mi
	N	Check and fill steering rack	Diff gear oil	6 months	3,000 mi
		Check condition of fan belt, hoses, and clamps.		6 months	3,000 mi
		Check and tighten all fasteners		6 months	6,000 mi
	B	Remove and lube wire wheels	Chassis lube or anti seize	12 months	
		Adjust brakes		12 months	1,000 mi
	CDES	Drain (warm) and fill engine oil. Replace filter.	20W50 High Zinc	12 months	3,000 mi
	UVW	Oil distributor bearing, advance, breaker pivot	20w motor oil	12 months	3,000 mi
	T	Lube distributor cam	Chassis lube	12 months	3,000 mi
	X	Lube generator felt pad	Chassis lube	12 months	3,000 mi
	F	Clean and oil air filters	Engine oil	12 months	3,000 mi
	X	Lube tachometer gearbox	20w motor oil or chass lube	12 months	6,000 mi
		Adjust clutch and brake linkage.		12 months	12,000 mi
		Check and fill front and rear shocks (4 shocks)	Hydraulic fluid	If leak or 12 mo	12,000 mi
		Flush brake lines (<i>Glycol brake fluid</i>)	Same type brake fluid	1 or 2 years	as needed
		Lube seat rails	Chassis lube	1 or 2 years	3,000 mi
		Check tappet clearance		1 or 2 years	6,000 mi
	P	Pack front wheel bearings	Lithium EP Grease	2 or 4 years	6,000 mi
	HI	Drain and fill gearbox gear oil	GL-4 90W hypoid gear oil	2 or 4 years	6,000 mi
	J	Drain and fill diff gear oil	GL-4 90W hypoid gear oil	2 or 4 years	6,000 mi
	G	Drain and flush cooling system.	Concentrate + Distilled H ₂ O	2 or 4 years	12,000 mi
		Flush brake lines (<i>Silicone brake fluid</i>)	Same type brake fluid	4 years	as needed

LUBRICATION NOT IN WSM or OPERATION MANUAL

A PEDAL SHAFT



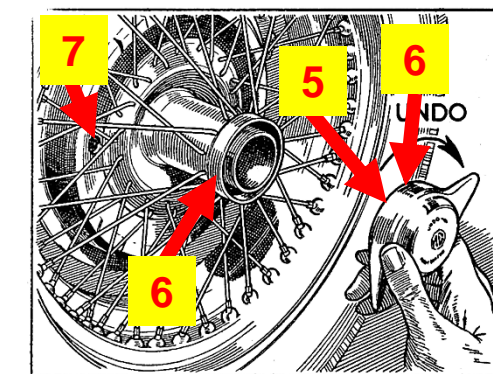
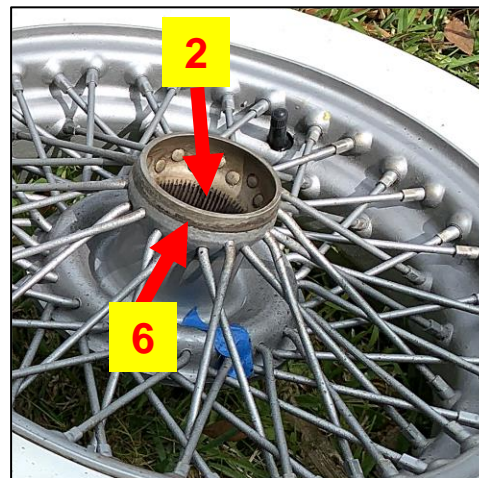
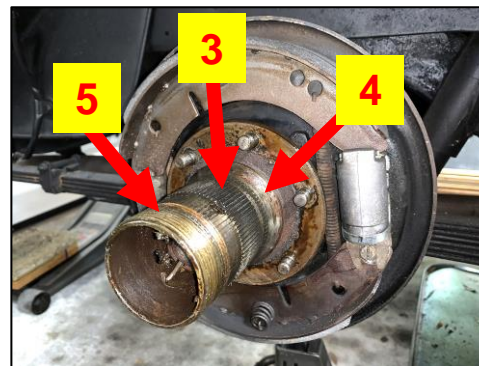
The brake pedal pivots on the pedal shaft with a bushing between the pedal and the shaft. The shaft is attached to the left chassis (LHD). A grease nipple for the shaft can be seen in a recess at the rear of the left engine side panel below the left front wing.

Grease the pedal shaft nipple every 500 miles with chassis grease.

RHD TFs do not have a grease fitting for the pedal shaft.

The grease nipple is not shown on factory lubrication charts.

B WIRE WHEELS & HUBS



1. Remove old grease on wheel and hub splines with solvent and a brush.
2. Lightly lubricate the wheel splines with anti-seize, high temperature grease, or chassis grease.
3. Lightly lube the hub splines, then wipe clean with a cloth.
4. Very lightly lubricate the tapered face of the hub & matching face of the wheel to prevent corrosion. Wipe clean with a cloth.
5. Lubricate the threads of the winged hub nut and matching threads on the hub.
6. Lubricate the inside lip of the winged hub nut and the outer lip of the wheel.
7. Do not position a spoke over the brake adjuster hole in brake drum.

LUBRICATION (Engine)

Oil Pressures • Engine Drain Plug Replenishing Engine Sump

ENGINE LUBRICATION

The oil supply is carried in the sump below the cylinder block and is drawn through a gauze internal filter and renewable external filter before circulation through the engine. It will be found on first starting the engine from cold that a high-pressure reading will be obtained on the oil gauge. This will gradually drop as the engine warms up and the oil becomes more fluid, until a normal pressure of approximately 25 to 40 lb./sq. in. (1.75 to 2.8 kg./cm.²) is indicated. Avoid racing the engine when first starting up while the oil is cold. On the other hand, do not let it idle too slowly. It should be allowed to rotate at approximately 1,000 r.p.m., an engine speed equivalent to 15 m.p.h. (24 km.p.h.) in top gear.

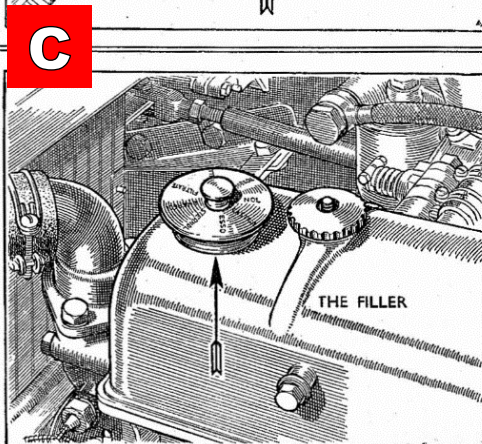
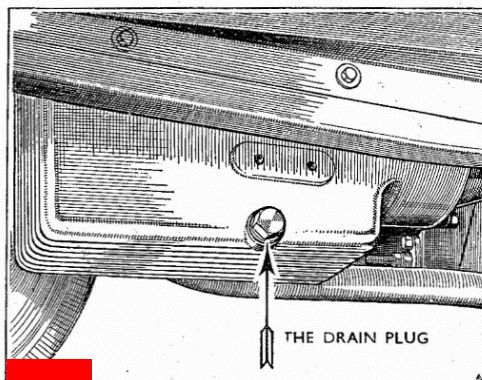
Instructions for checking the quantity of oil in the sump and replenishment are given on page 6.

Only oils of the recommended makes and grades should be used.

DRAINING THE SUMP (A)

We recommend that when the car has completed the first 500 miles (800 km.) the oil in the sump should be drained to clear the sump from any impurities that may have accumulated during the initial running-in period. After the first 500 miles (800 km.) we recommend that the sump should be drained every 3,000 miles (5,000 km.) and refilled with the recommended lubricant. This operation is best carried out immediately the car returns from a journey, while the oil is still warm and fluid.

On the left side of the engine will be found a brass drain plug. Removal of this plug will release the contents of the sump. After carefully cleaning the drain plug, which will probably have an accumulation of dirt in its hollow centre, it should be replaced and screwed up tightly. When the sump has been drained completely, approximately 10½ pints (6 litres) are required to fill it.



P LUBRICATION

Section P.12

PRIMING THE ENGINE OIL PUMP

To facilitate priming of the oil pump, which is necessary after oil drainage, a priming plug was introduced on the oil pump body at Engine No. XPAG/TD2/20972.

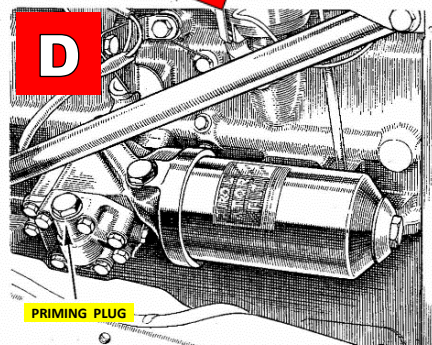


Fig. P.22.

The location of the priming plug on engines subsequent to No. XPAG/TD2/20972.

When engines so equipped are started up after an oil change or after having remained stationary for a long period, this plug should be removed and the engine run at 1,500 to 2,000 r.p.m. without load until oil appears at the plug orifice.

Using this procedure there is no actual need to prime the pump, but it must be understood that

failure to remove the plug may prevent the pump from operating due to the formation of an air lock.

The later pumps fitted from Engine No. XPAG/TF/31263 are provided with an additional air release hole in the pump body which renders the pump self-priming, and these engines require no special priming attention.

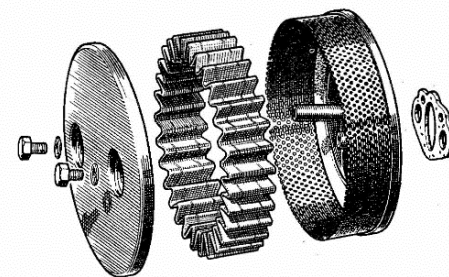


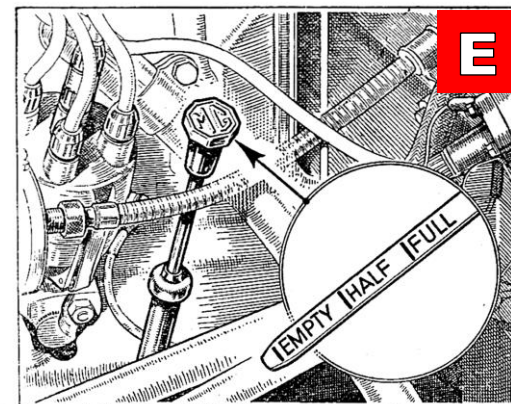
Fig. P.23.

The component parts of the dry-type air cleaners fitted to each individual carburettor of the M.G. Midget (Series "TF") cars.

It is important to remember that proper functioning of the pump is dependent on the air-tightness of the suction circuit, particularly at the joint between the pipe from the internal suction filter and the sump. The pipe is of sturdy construction, and if there is any fault in its alignment it is unlikely that it can be tightened onto its seating evenly by the relatively small retaining nuts. The pipe should carefully be set so that the joint gasket is nipped evenly over the whole area of the joint.

CHECKING ENGINE OIL LEVEL

Check the supply of oil in the sump by withdrawing the dipstick on the left-hand side of the cylinder block. Wipe the lower portion of the rod, re-insert it and withdraw it again. Oil will cling to the rod and show the actual quantity present in the sump. The normal oil level is indicated by the 'FULL' mark on the dipstick. The engine must not be run for long periods when the oil level has dropped below the 'HALF' mark.

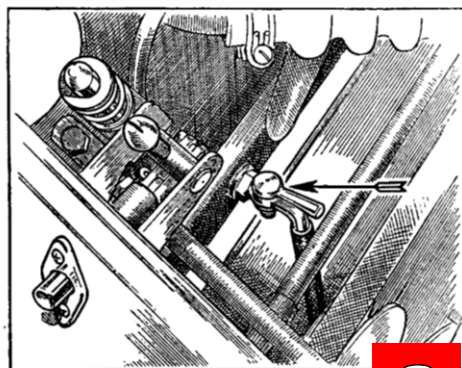
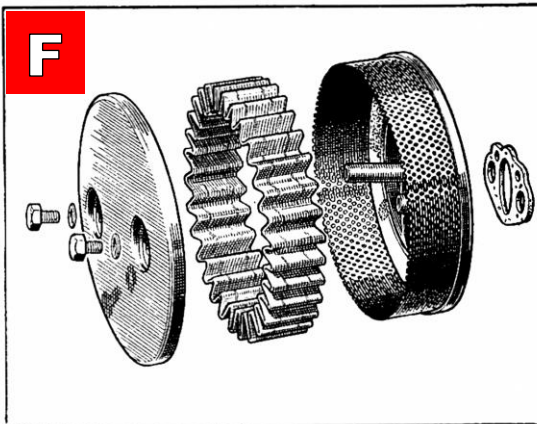


AIR CLEANER & COOLING SYSEM

AIR CLEANER (A)

Every 3,000 miles (5000 km.) wash the filter element in petrol (gasoline) and allow to dry. Re-oil the element with S.A.E. 20 engine oil and allow to drain before re-assembling.

When servicing, it is only necessary to withdraw the two hexagon-headed screws and lift off the outer cover to release the corrugated element. Reassemble the front element with the corrugations clear of the breather spigot in the main filter case.



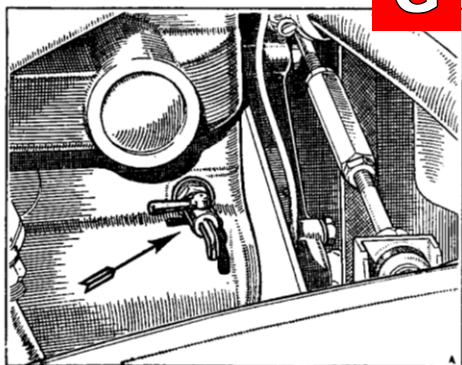
DRAINING THE COOLING SYSTEM

The radiator drain tap is fitted on the left-hand side of the radiator bottom tank, as indicated by the arrow in the top illustration.

Owing to the location of the water pump a certain amount of water is trapped in the cylinder block and cannot be drained from the radiator.

A second drain tap is therefore fitted on the right-hand side of the engine at the lowest point of the cooling passages, as indicated by the arrow in the bottom illustration.

It is essential to open this tap to drain the system completely.



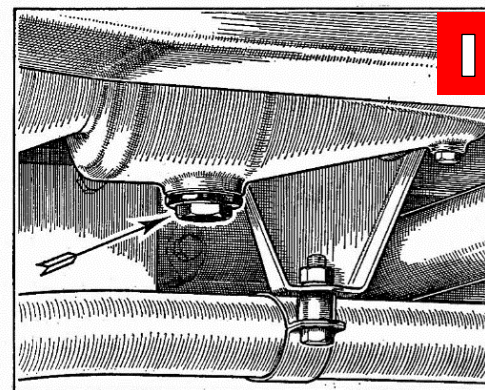
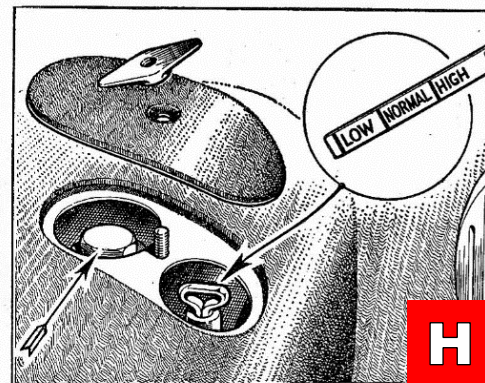
LUBRICATION (Gearbox)

Draining the Gearbox • Refilling the Gearbox • Gearbox Replenishments

GEARBOX (B)

The filler cap is located on the top of the gearbox; a dipstick is provided on the right-hand side of the box; they are accessible when the inspection cover has been removed.

Replenishments should take place at intervals of 1,000 miles (1600 km.), care being taken to ensure that the gearbox is not filled above the 'HIGH' mark on the dipper rod. If the level is too high, oil may get into the clutch case and cause clutch slip.



DRAINING THE GEARBOX

The gearbox should be drained after the first 500 miles (800 km.) and filled with the correct amount of the recommended lubricant. Ensure that the hollow centre of the drain plug has been cleaned thoroughly before it is replaced and tightened.

REFILLING THE GEARBOX (B)

When the gearbox has been drained completely through the plug indicated, 1½ pints (.7 litre) of oil are required to fill it. The oil should be poured in through the filler plug shown above until it reaches the 'HIGH' mark on the dipstick. After the first 500 miles (800 km.) the gearbox should be drained and then filled with fresh oil and subsequently every 6,000 miles (10000 km.).

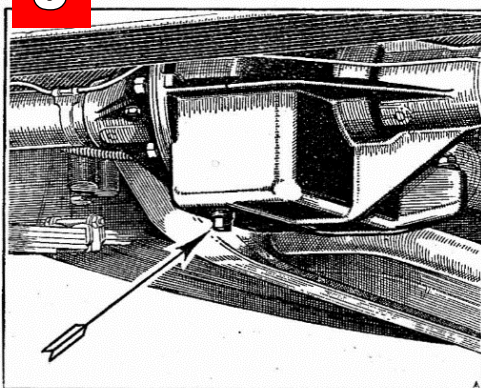
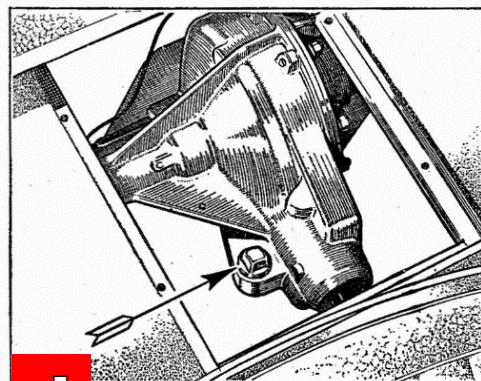
Use one of the oils recommended on page 64.

LUBRICATION (Rear Axle)

Rear Axle Filler and Level Plug • Rear Axle Drain Plug • Propeller Shaft Lubrication

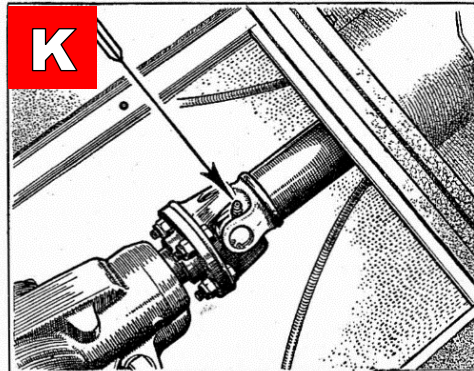
REAR AXLE (B)

Access to the square-headed filler plug is gained when the centre section of the sidescreen stowage compartment floor has been removed. Undo the screws to lift the floor. A square-headed drain plug is fitted in the base of the differential housing and its hollow centre must be cleaned before it is replaced and tightened. The oil should be drained from the rear axle after the first 500 miles (800 km.). The axle must then be filled with one of the oils to Ref. B, page 64, to the level of the filler plug. Approximately 2½ pints (1.3 litres) of oil are required to refill the axle. Topping up should take place at intervals of 1,000 miles (1600 km.). The axle should be completely drained and then refilled with fresh lubricant of the correct grade every 6,000 miles (10000 km.).



PROPELLER SHAFT (D)

The sliding joint and the two needle-type universal joints should receive grease gun attention every 1,000 miles (1600 km.). The recommended lubricants are indicated under Ref. D on page 64. Access to the rear universal joint nipple may be gained by lifting the centre section of the sidescreen stowage compartment floor. The front universal joint must be lubricated from the under side of the car. (See page 35.)

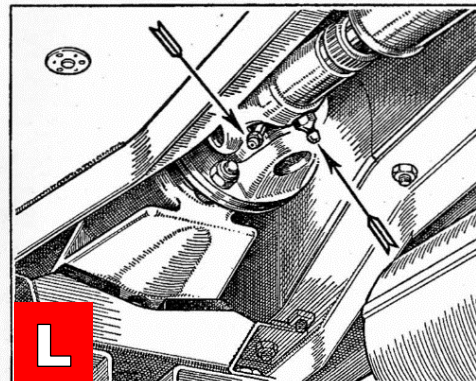


LUBRICATION

Propeller Shaft Sliding Joint Swivel Pin • Steering Gearbox

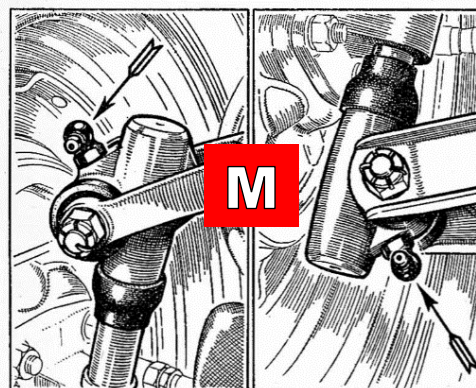
FRONT UNIVERSAL JOINT AND PROPELLER SHAFT SLIDING JOINT (D)

The lubricator for the sliding joint is indicated by the right-hand arrow. The grease gun, filled with grease to Ref. D (page 64), should be applied every 1,000 miles (1600 km.) and given three or four strokes. The grease gun should also be applied to the universal joint greaser, shown by the left-hand arrow, at the same time and given three or four strokes.



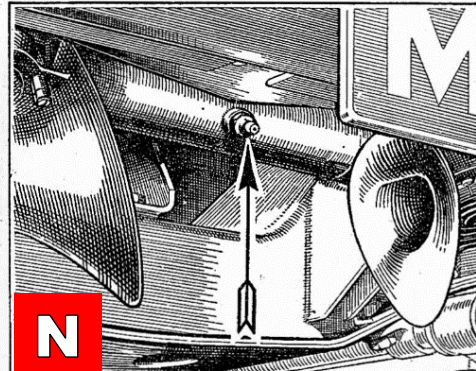
STEERING GEAR (D)

Grease nipples are provided at the top and bottom of each swivel pin. The grease gun should be filled with grease to Ref. D (page 64) and applied to the nipples every 500 miles (800 km.). Three or four strokes of the gun should be given.



STEERING GEARBOX (B)

A greaser is provided on the rack housing, and this is accessible underneath the front of the car. The nipple should be used to replenish the rack assembly with oil to Ref. B (page 64) every 3,000 miles (5000 km.). Avoid overfilling the steering gearbox. Give no more than 10 strokes of the hand gun.

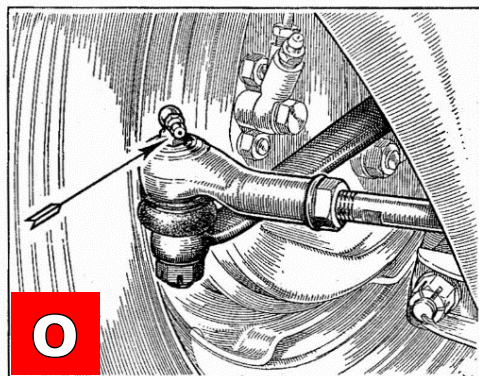


LUBRICATION

Tie-rods • Front Hubs • Rear Hubs

TIE-ROD LUBRICATION (D)

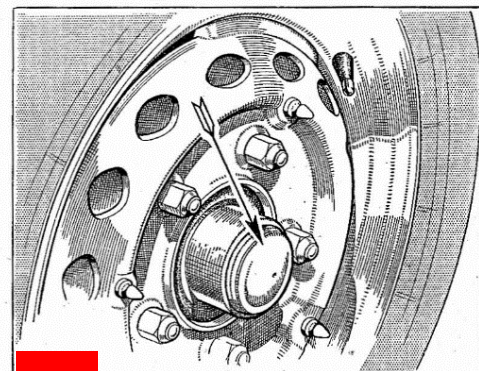
Every 500 miles (800 km.) the grease gun should be applied to the nipple on the outer ends of the steering tie-rods and given three or four strokes. The inner ball joints of the tie-rod (those within the rubber bellows) are automatically lubricated from the steering gearbox housing.



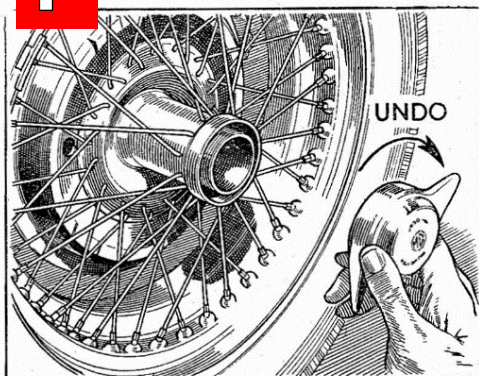
WHEEL HUBS

Front hubs (C). Every 6,000 miles (10,000 km.) the front wheel hub covers should be removed and the grease-retaining cap carefully prised off the end of the hub, refilled with grease to Ref. C (page 64), and replaced.

To lubricate the front hubs on cars fitted with wire wheels, the wheel retaining nuts must be unscrewed with the copper hammer in the tool kit and the hubs packed with grease to Ref. C every 6,000 miles (10,000 km.).



Rear hubs. The rear hubs are automatically lubricated from the rear axle lubrication system and need no separate lubrication attention.



A right-hand wheel is illustrated. The nuts undo in the opposite direction on the left-hand side.

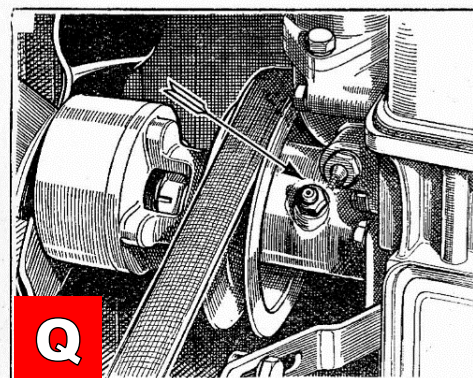
LUBRICATION

Fan and Water Pump • Carburetter Dampers • Oil Filter

FAN AND WATER PUMP

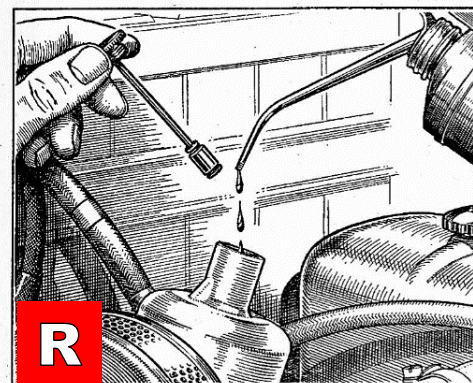
Every 1,000 miles (1,600 km.) apply grease gun, filled with grease to Ref. C, to lubricating nipple for fan and water pump spindle and give two strokes.

Most modern replacement water pumps have sealed bearings and do not have a grease fitting. Some have a non-operative fitting to preserve the original look.



CARBURETTER DAMPERS

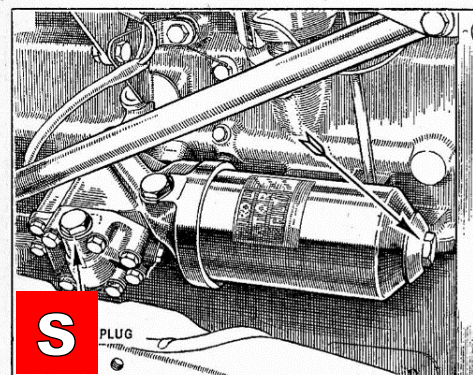
Every 1,000 miles (1,600 km.) unscrew the oil cap at the top of each carburetter suction chamber, pour in a small quantity of engine oil to Ref. F (page 64) and replace the cap. **Under no circumstance should a heavy-bodied oil be used.** Failure to lubricate the dampers will impair the performance and reduce acceleration.



OIL FILTER

The main oil filter renewable element must be renewed every 6,000 miles (10,000 km.). The filter is released by undoing the central bolt connecting the filter body to the filter head on the oil pump. When fitting the new element, make sure that the seating washer for the filter body is in good condition and that the body is correctly fitted.

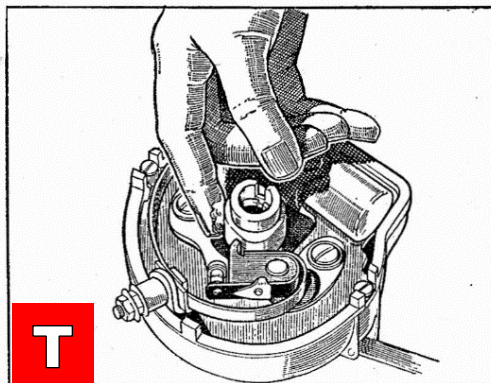
The element is either a Purolator M.F.21 or a Tecaletit F.P.3301.



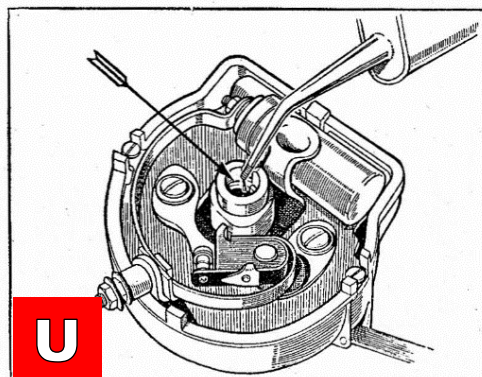
LUBRICATION

Distributor Cam • Distributor Cam Bearing Distributor Automatic Timing Control

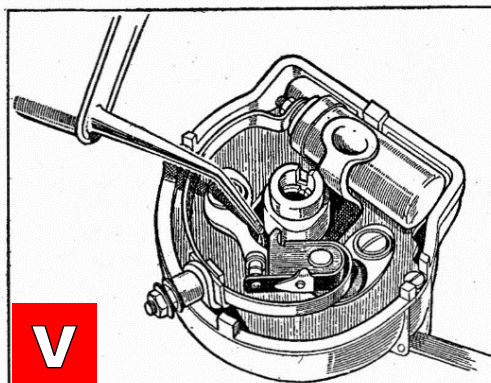
EVERY 3,000 MILES (5000 Km.) (D)
Distributor cam. Lightly smear the cam with a very small amount of grease to Ref. D (page 64), or if this is not available, clean engine oil can be used.



EVERY 3,000 MILES (5000 Km.) (F)
Distributor cam bearing. Lift the rotor off the top of the spindle by pulling it off squarely and add a few drops of thin engine oil (Ref. F, page 64) to the central opening. Do not remove the screw which is exposed. There is a clearance between the screw and the inner face of the spindle for the oil to pass. Replace the rotor with its drive lug correctly engaging the spindle slot and push it onto the shaft as far as it will go.

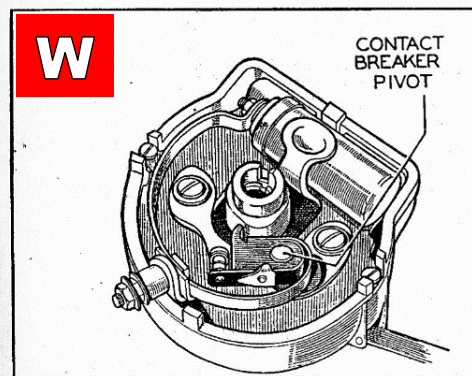


EVERY 3,000 MILES (5000 Km.) (F)
Automatic timing control. Carefully add a few drops of thin engine oil to Ref. F, page 64, through the hole in the contact breaker base through which the cam passes. Do not allow any oil to get on or near the contacts.

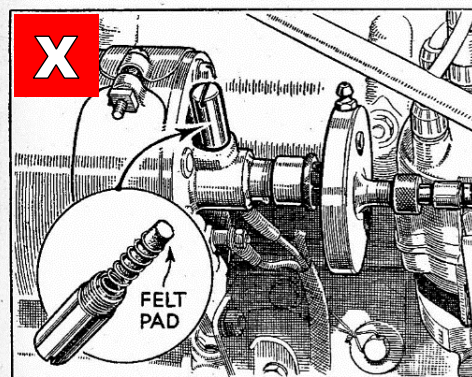


LUBRICATION

Contact Breaker Pivot Dynamo • Grease Gun



EVERY 3,000 MILES (5000 Km.) (F)
Contact breaker pivot. Place a small amount of clean engine oil to Ref. F (page 64) on the pivot on which the contact breaker lever works. Do not allow oil or grease to get on the contacts.



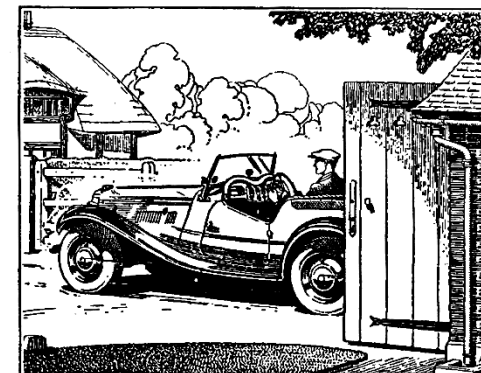
EVERY 3,000 MILES (5000 Km.) (C)
Dynamo lubrication. Unscrew the lubricator fitted at the commutator end, lift out the felt pad and spring and half-fill the lubricator with high-melting-point grease to Ref. C (page 64). Replace the spring and felt pad and screw the lubricator into position.

EVERY 6,000 MILES (10000 Km.) (B)
Apply a grease gun filled with oil to Ref. B (page 64) to revolution indicator gearbox on dynamo.

(Workshop Manual says to use chassis grease in the tach gearbox)

WARMING UP

It is extremely bad practice to allow the engine to warm up from cold by letting it idle slowly. The correct procedure is to let the engine turn over fairly fast (approximately 1,000 r.p.m., corresponding to a speed of 15 m.p.h. or 24 km.p.h. in top gear), so that it attains its correct working temperature as quickly as possible.



M.G. MIDGET (Series TF and TF1500)

LUBRICATION CHART

EVERY 250 MILES (400 Km.)

- (1) ENGINE. Check the oil level with the dipstick, and top up if necessary with oil to Ref. A.

EVERY 500 MILES (800 Km.)

- (2) STEERING JOINT NIPPLES. Give three or four strokes of the grease gun filled with oil to Ref. D.

AFTER THE FIRST 500 MILES (800 Km.)

- (3) ENGINE. Drain off the old oil and refill with fresh oil to Ref. A.
(4) GEARBOX. Drain off the old oil and refill with fresh oil to Ref. B.
(5) REAR AXLE. Drain off the old oil and refill with fresh oil to Ref. B.

EVERY 1,000 MILES (1600 Km.)

- (6) GEARBOX. Inspect the oil level with the dipstick, and top up as necessary with oil to Ref. B.
(7) REAR AXLE. Inspect the oil level through the filler, and top up as necessary with oil to Ref. B.
(8) PROPELLER SHAFT NIPPLES. Give three or four strokes of the grease gun filled with grease to Ref. D.
(9) CARBURETTORS. Remove the brass caps from the tops of the suction chambers and add a teaspoonful of engine oil to Ref. F.
(10) WATER PUMP. Give two strokes of the grease gun filled with grease to Ref. C.
(11) MASTER CYLINDER. Inspect the fluid level and top up with Lockheed Genuine Brake Fluid. DOOR LOCKS, CONTROL JOINTS, ETC. Lubricate with oil to Ref. F.

EVERY 3,000 MILES (5000 Km.)

- (12) ENGINE. Drain off the old oil and refill with oil to Ref. A.

- (13) DISTRIBUTOR. Withdraw the rotor and add a few drops of thin oil to Ref. F to the advance mechanism through the gap around the cam spindle and to the spindle through the cam securing screw duct. Smear the cam and the contact breaker pivot lightly with grease to Ref. D.

- (14) DYNAMO. Remove the grease cap and refill with grease to Ref. C. AIR CLEANER. Clean and re-oil.

EVERY 6,000 MILES (10000 Km.)

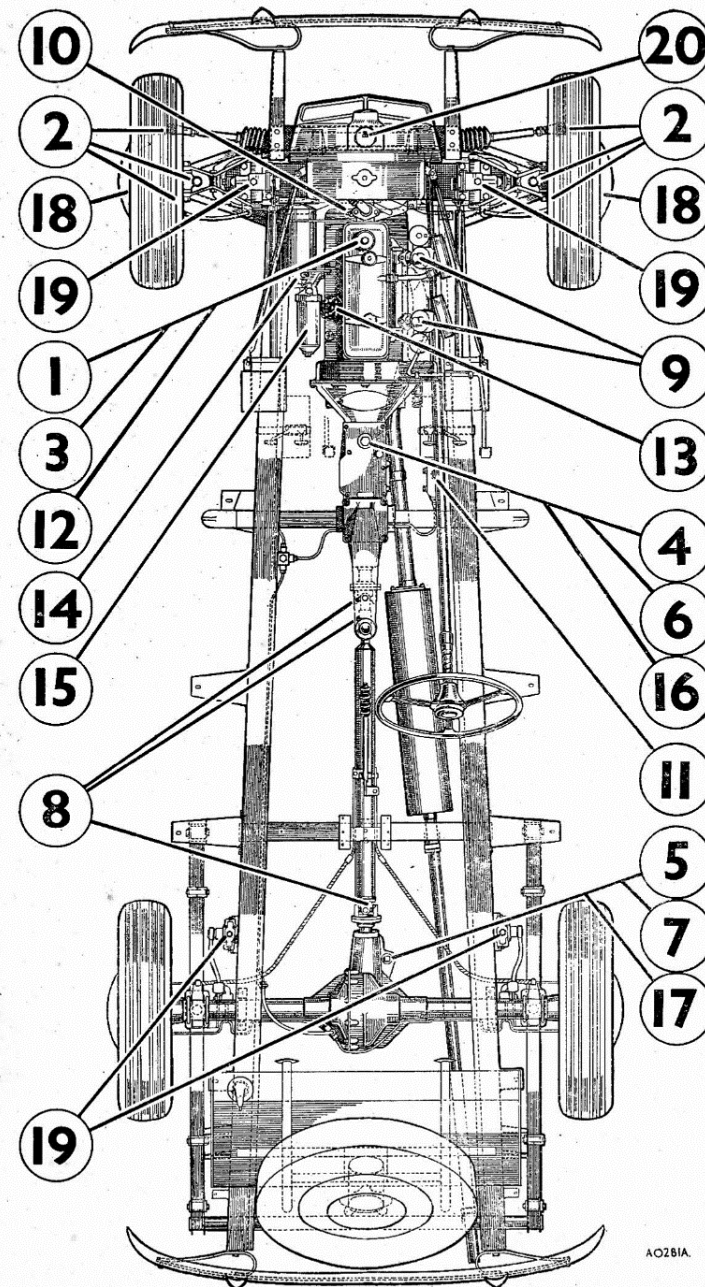
- (15) EXTERNAL OIL FILTER. Fit a new filter (throw-away type). Fit a new filter element (renewable-element type).
(16) GEARBOX. Drain off the old oil and refill with oil to Ref. B.
(17) REAR AXLE. Drain off the old oil and refill with oil to Ref. B.
(18) FRONT WHEEL BEARINGS. Remove the hub and grease caps and fill the caps with grease to Ref. C. REVOLUTION INDICATOR GEARBOX. Give two strokes of the grease gun with grease to Ref. B.

EVERY 12,000 MILES (20000 Km.)

- (19) HYDRAULIC DAMPERS. Remove, clean, and inspect the fluid level. Top up with the recommended fluid.
(20) STEERING RACK. Give up to 10 strokes (not more) of the grease gun filled with oil to Ref. B to the nipple on the steering rack.

MULTIGRADE MOTOR OILS

In addition to the recommended lubricants listed in the Manual we approve the use of these new motor oils, as produced by the oil companies shown in our Manuals, for all climatic temperatures unless the engine is old and in poor mechanical condition. Some are more expensive than the recommended motor oils because of their special properties and greater fluidity at low temperatures.



LUBRICATION

The following is a list of lubricants recommended :—

A ENGINE AND AIR CLEANER								
<i>Climatic Conditions</i>	BP Energol	Filtrate	Sternol	Duckham's	Castrol	Esso	Mobil	Shell
Tropical and Temperate down to 32° F. (0° C.)	Energol S.A.E. 30	Medium Filtrate 30	Sternol W.W. 30	Duckham's NOL Thirty	Castrol X.L.	Esso Extra Motor Oil 20W/30	Mobiloil A	Shell X—100 30
Cold and extreme cold down to 0° F. (—18° C.)	Energol S.A.E. 20W	Zero Filtrate 20	Sternol W.W. 20	Duckham's NOL Twenty	Castrolite	Esso Extra Motor Oil 20W/30	Mobiloil Arctic	Shell X—100 20/20W
Arctic—below 0° F. (—18° C.)	Energol S.A.E. 10W	Sub-Zero Filtrate 10	Sternol W.W. 10	Duckham's NOL Ten	Castrol Z	Essolube 10	Mobiloil 10W	Shell X—100 10W
B GEARBOX, STEERING GEARBOX AND REAR AXLE (HYPOID GEARS)								
Tropical and Temperate down to 10° F. (—12° C.)	Energol E.P. S.A.E. 90	Hypoid Filtrate Gear 90	Ambroluum E.P. 90	Duckham's Hypoid 90	Castrol Hypoy	Esso Expee Compound 90	Mobilube G.X. 90	Shell Spirax 90 E.P.
Extreme cold below 10° F. (—12° C.)	Energol E.P. S.A.E. 80	Hypoid Filtrate Gear 80	Ambroluum E.P. 80	Duckham's Hypoid 80	Castrol Hypoy 80	Esso Expee Compound 80	Mobilube G.X. 80	Shell Spirax 80 E.P.
C WHEEL HUBS AND FAN BEARINGS								
All conditions	Energol L. 3	Filtrate Super Lithium Grease	Ambroluum L.H.T. Grease	Duckham's L.B. 10 Grease	Castrol L.M.	Esso Multi-purpose Grease H	Mobilgrease M.P.	Shell Retinax A
D STEERING CONNECTIONS, KING-PINS, PROPELLER SHAFT, CLEVIS PINS AND LEVER FULCRUMS								
All conditions	Energol L. 3	Filtrate Super Lithium Grease	Ambroluum L.H.T. Grease	Duckham's L.B. 10 Grease	Castrol L.M.	Esso Multi-purpose Grease H	Mobilgrease M.P.	Shell Retinax A
E CABLES AND VITAL CONTROL JOINTS								
All conditions	Energol L. 3	Filtrate Super Lithium Grease	Ambroluum L.H.T. Grease	Duckham's L.B. 10 Grease	Castrol L.M.	Esso Multi-purpose Grease H	Mobilgrease M.P.	Shell Retinax A
F UTILITY LUBRICANT, S.U. CARBURETTOR DASHPOT OILCAN POINTS, ETC.								
All conditions	Energol S.A.E. 20W	Zero Filtrate 20	Sternol W.W. 20	Duckham's NOL Twenty	Castrolite	Esso Extra Motor Oil 20W/30	Mobiloil Arctic	Shell X—100 20/20W

EXTREME COLD CONDITIONS

Where a car is operated in temperatures which* are consistently below 0° F. (-18° C.) the use of an oil of lower viscosity than that recommended for normal use is desirable, and under such conditions the use of engine oil of the grades indicated in the appropriate temperature range is recommended.

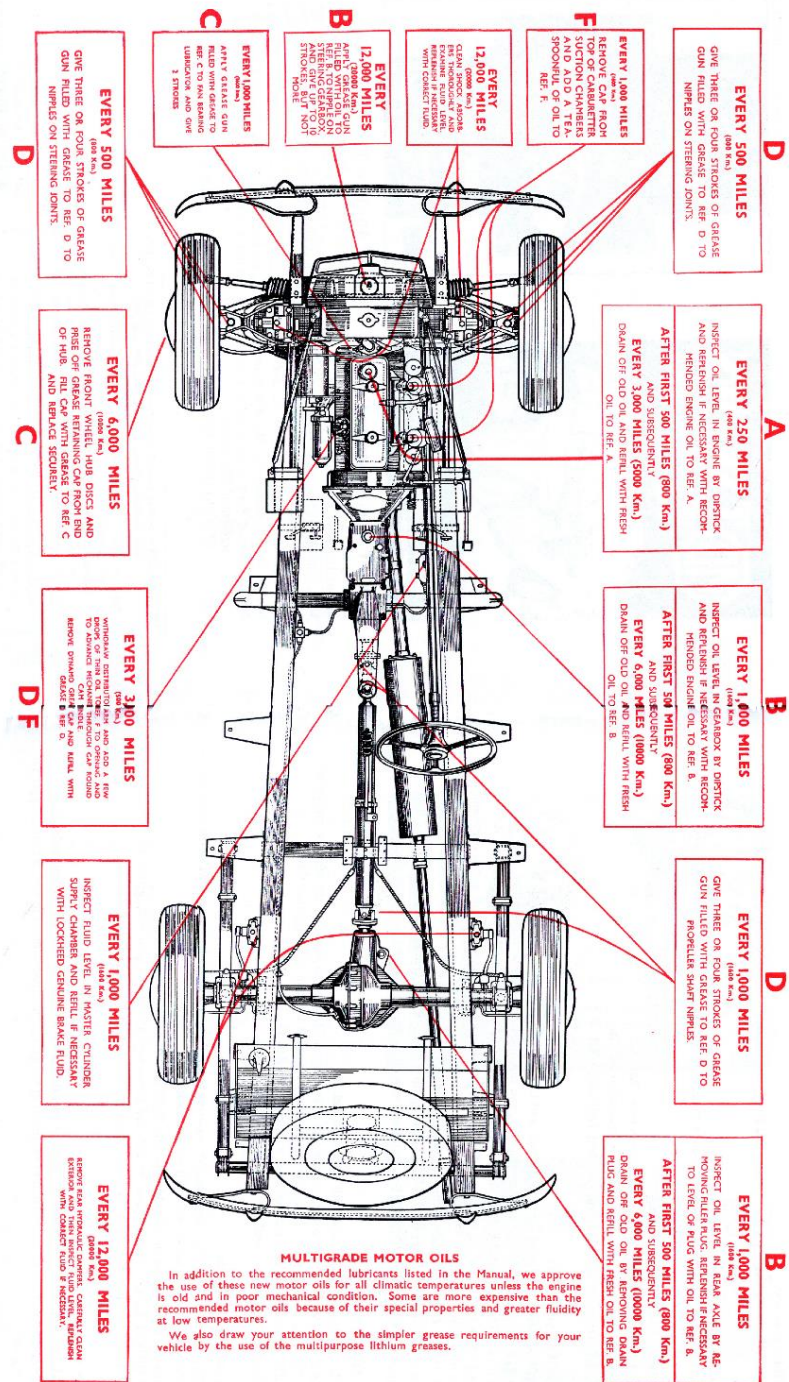
Similar considerations apply in the case of the gearbox, rear axle and steering gearbox.

MIXING LUBRICANTS

Note.—It is a bad practice to mix lubricants, particularly the high-pressure types now in use for rear axles, as they differ considerably in their composition. It is therefore dangerous to replenish the axle with a different make of oil from that in use without first draining off the axle. It is also advisable to carry out a similar procedure in the case of the other components.

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EVERY 1,000 MILES (1600 KM.), USE OLICAN FILLED WITH OIL TO REF. F ON ALL CONTROL JOINTS, DOOR LOCKS, HINGES, ETC.
EVERY 5,000 MILES (8000 KM.), APPLY GREASE GUN FILLED WITH GREASE TONE. D TO REVOLUTION INDICATOR GEARBOX AND GIVE TWO STROKES
EVERY 10,000 MILES (16000 KM.), FIT NEW EXTERNAL OIL FILTER ELEMENT.



PERIODICAL ATTENTION

After first 500 miles (800 km.). Drain old oil from engine ; **do not wash with paraffin** but merely fill with fresh oil. Examine valve rocker clearance and adjust if inadequate. Tighten cylinder head stud nuts. Drain old oil from gearbox and rear axle and replenish with fresh oil.

NOTE.—This service is free under the M.G. 500 Miles Free Service Scheme (see page 43).

Every 250 miles (500 km.). Inspect oil level in crankcase. Refill if necessary. (See page 6.)

Every 500 miles (800 km.). Attach grease gun to the following grease nipples and give pump three or four strokes. These nipples are situated as under :

2 on steering tie-rods, 4 on steering knuckles. (On L.H.D. models there is one on the clutch and brake pedal shaft in addition.)

Every 1,000 miles (1600 km.). Oil door lock bolts. Oil door hinges. Examine oil level in gearbox and rear axle ; replenish if necessary. Apply grease gun filled with grease to Ref. D (page 64) to the three grease nipples on the propeller shaft and give three or four strokes. Examine fluid level in hydraulic brake gear supply tank and replenish if necessary. The tank should never be allowed to be less than half-full of fluid or more than three-quarters full. **Use only Lockheed Genuine Fluid.**

Top up battery with distilled water. (See page 49.)

Apply grease gun filled with grease to Ref. C (page 64) to grease nipple on water pump spindle, giving two strokes.

Check tightness of wheel securing nuts.

Replenish oil in carburettor piston dashpots. (See page 37.)

Every 3,000 miles (5000 km.). Drain engine. Refill with fresh oil. (See page 32.) Give distributor rotating cam a slight smear of grease to Ref. D (page 64).

Clean and re-oil air filters (see page 44).

Remove distributor rotor and add a few drops of thin machine oil in opening. (See page 38.)

Add two drops of thin machine oil to opening round distributor rotating arm. (See page 38.)

Smear contact breaker rocker arm pivot with engine oil to Ref. F (page 64). Check contact breaker gap (page 48).

Check and clean sparking plugs (page 44).

Remove dynamo lubricator cap and refill with grease to Ref. C (page 64). Check tension of dynamo driving belt and adjust if necessary. (See page 50.) Clean fuel pump points. Clean and re-oil air cleaner.

Apply oil gun filled with oil to Ref. B (page 64) to steering gearbox grease nipple and give 10 strokes.

Every 6,000 miles (10000 km.). Drain gearbox and rear axle, refill with fresh oil. Fit new filter element to external oil filter. (See page 37.) Tighten door hinge fixing screws. Tighten rear road spring seat bolts. Clean fuel filters at carburettor and fuel pump.

Remove grease-retaining cap from front wheels, or wheel-retaining nut on models fitted with wire wheels, and replenish with grease to Ref. C.

PERIODICAL ATTENTION

Examine the gaps of the sparking plugs and make sure that they are not too wide ; they should be .020 to .022 in. (.5 to .56 mm.). Apply grease gun filled with oil to Ref. B (page 64) to nipple on revolution indicator gearbox on dynamo. Check valve tappet clearance.

Every 12,000 miles (20000 km.). Remove sump and clean oil filter. Check fluid level in shock absorbers, refill if necessary with recommended fluid (see page 18). Replace sparking plugs with new ones. Adjust clutch pedal clearance. Check dynamo and starter brushes.

USE OF OILCAN

The owner is advised to keep an oilcan filled with a light oil to Ref. F (page 64) to apply to the bonnet lock and prop mechanism and the door locks and hinges, etc., at frequent intervals. Attention to such details ensures trouble-free action and prevents undue wear. Make sure that all points receive attention.

**Also, see TD/TF Workshop Manual
"MAINTENANCE ATTENTION" pp 15-16.**

MG MANUALS

Lonnie Cook – rev. 9-Mar-2025

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When the file opens, click the "download" icon: a downward pointing arrow with a bar across the tip.

[TD / TF WORKSHOP MANUAL](#)

[TF / TF-1500 OPERATION MANUAL](#)

[1952 TD OPERATION MANUAL](#)

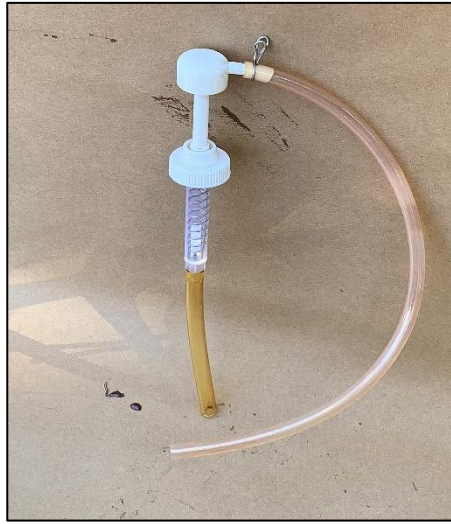
LUBRICATION TOOLS

Lonnie Cook - rev. 9-Mar-2025



PISTOL GRIP GREASE GUN

For 14 ounce grease tubes.



GEAR OIL PUMP

Bottle pump available at most auto parts stores. Top screws into most bottles.



GEARBOX OIL

"Ketchup" bottle with hose. Squeeze gear oil into gearbox. Check dip stick for correct level. Don't lose the copper washer on the fill plug.



SHOCK OIL BOTTLE

3"-4" squeeze bottle from hobby store. Glue washer onto spout. About 1/2" of spout above washer. Insert spout into shock and rest washer on top. Squeeze until oil runs out of shock. Release bottle. Bottle will suck out excess oil to leave required 1/2" space in shock.



BRAKE BLEEDER JAR

Plastic jar with clear hose pushed to the bottom of the jar. Pour an inch of brake fluid into jar to prevent air from being sucked into brake line. Slip end of hose over bleeder.



DRAIN PLUG PROTECTOR

1 1/2" thick piece of scrap wood approx 7"x7" with a 1" hole to accept end of drain plug in diff when jack is placed under the diff. Can also be used when jack is placed under front cross member. Padding optional.