

# ENGINE LUBRICATION CHART

NOTE: The symbols shown around the reference numbers on the illustrations indicate the intervals of lubrication.

## KEY TO LUBRICATION CHART

The specifications of the lubricants referred to are listed on the back of this chart. Paragraph numbers refer to corresponding numbers on illustrations.

### △—DAILY OR EVERY 10 HOURS OF OPERATION

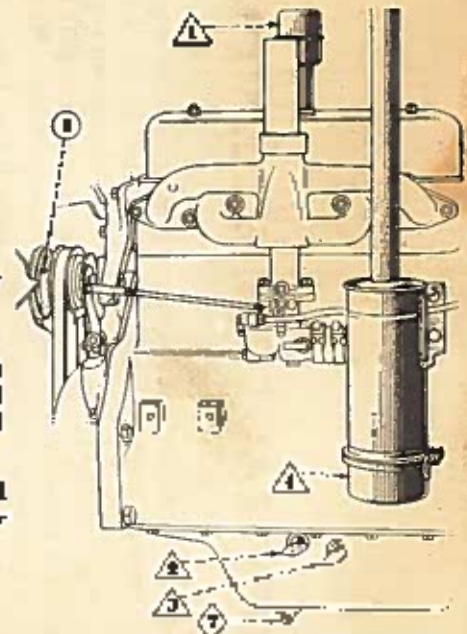
1. Oil Filler
2. Upper Oil Level Test Cock.
3. Lower Oil Level Test Cock.

**WHEN OPERATING ON GASOLINE:**  
Add sufficient new oil to bring oil up to level of upper test cock (2).

**WHEN OPERATING ON DISTILLATE:**  
Drain crankcase oil down to level of lower test cock (3) and add new oil to level of upper test cock (2). Oil level should not be checked while engine is running nor should the engine be run with oil below lower test cock.

4. Air Cleaner.....

Clean and refill oil cup to oil level bead with same new oil as used in engine crankcase (capacity  $\frac{1}{10}$  U.S. pint). Refer to page 15 for more information.



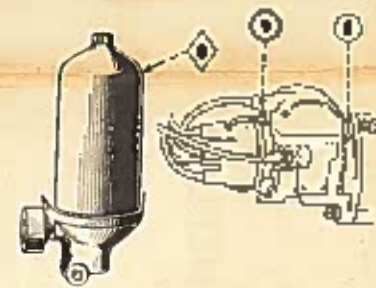
Left side of engine

### ○—WEEKLY OR EVERY 60 HOURS OF OPERATION

5. Fan Hub Filler Plug.....
6. Impulse Coupling.....

Remove plug and fill hub half full with engine oil and replace plug. To fill, set fan so plug is at left-hand horizontal position.

Use a light oil such as sewing machine or cream separator oil and oil liberally. Use kerosene when temperature is below 10°F.



Right side of engine

### ◇—EVERY 120 HOURS OF OPERATION

7. Crankcase Pan Oil Drain Plug.....
8. Oil Filter Element.....

Remove plug (7) and drain all oil from crankcase pan. Refill with new oil to level of upper test cock (2). Crankcase pan capacity is approximately 5 U.S. quarts. For the correct lubricating oil to use, refer to specifications listed on back of chart.

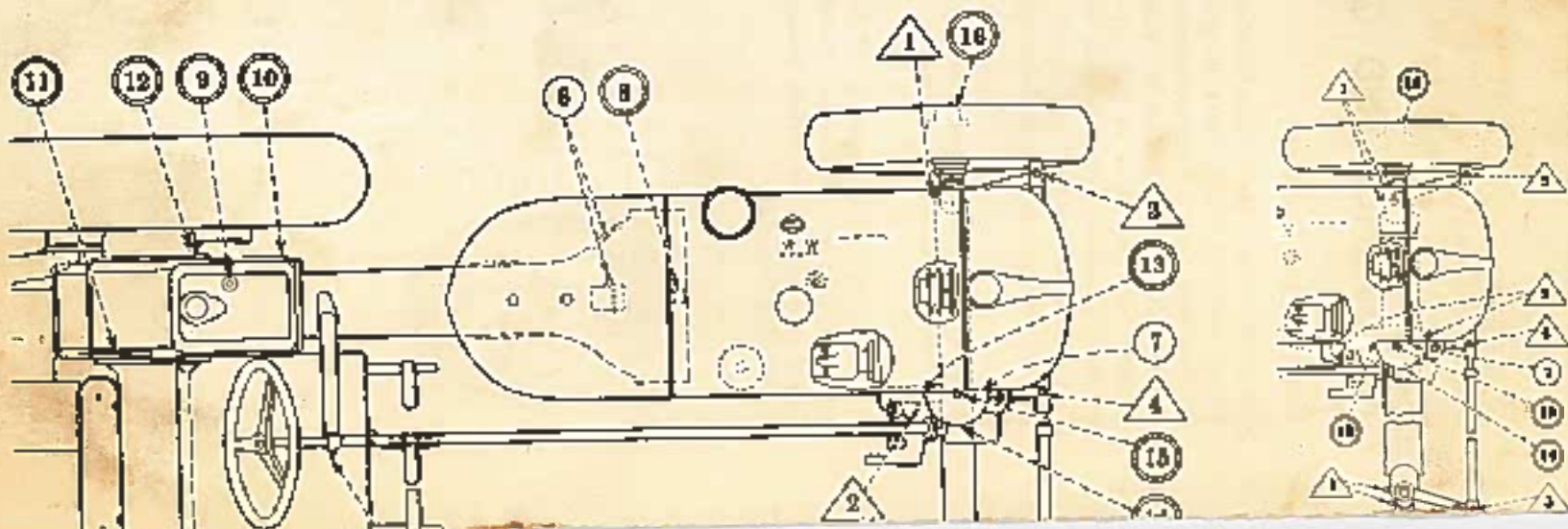
Replace oil filter element at the same time engine crankcase oil is changed. (See page 16.)

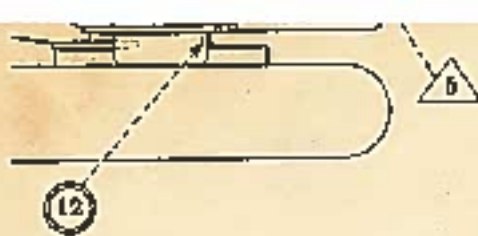
### ○—PERIODICAL

9. Magneto.....

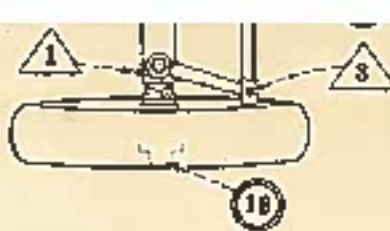
Every 500 hours of operation fill distributor bearing oil cup with very light cream separator or sewing machine oil. Refer to page 22 for complete information on magneto lubrication.

# CHASSIS LUBRICATION CHART





Top View of Tractor



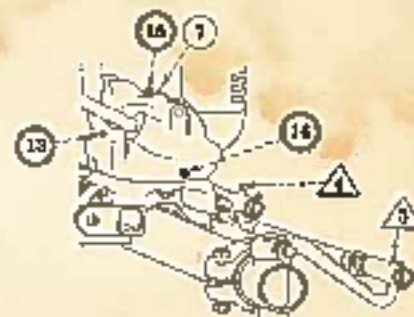
Front end of the Farmall-AV Tractor

NOTE: This illustration will apply for Farmall-A and Farmall-AV Tractors, except the front end, which is for Farmall-A Tractor only. For front end of Farmall-AV Tractor see adjoining illustration.

△—DAILY OR EVERY 10 HOURS OF OPERATION

1. Steering Knuckle Post for Farmall-A Tractor (2) Steering Knuckle Post for Farmall-AV Tractor (4)
2. Front Axle Pivot for Farmall-A Tractor (1) Front Axle Pivot for Farmall-AV Tractor (2)
3. Tie Rod (2)
4. Tie Rod Ball Seat (1)
5. Steering Shaft Support Bracket (1)

Use pressure gun grease (chassis lubricant) and apply 2 or 3 strokes of lubricator.



Front end of Tractor

○—WEEKLY OR EVERY 60 HOURS OF OPERATION

6. Clutch Release Bearing
7. Steering Worm Wheel Shaft Bearing
8. Clutch Pilot Bearing

Use pressure gun grease (chassis lubricant) and apply ten complete strokes of the lubricator. Fitting can be reached through hole in left-hand side of clutch housing.

Use pressure gun grease (chassis lubricant) and apply equivalent of two strokes of lubricator.

Does not require lubrication.



Clutch release bearing

Transmission and Differential.

9. Oil Filler Plug.
10. Oil Level Plug.
11. Oil Drain Plug.

Use approved lubricant. Keep lubricant up to level of plug (10) on left front side of transmission case. Check oil level periodically.

The oil in the transmission case should be changed at least once a year. However, do not run tractor more than 1,000 hours without changing oil in transmission case. If the oil in transmission case has been thinned with kerosene for operation in temperatures below zero, the oil should be changed before hot weather. Capacity 6 U.S. quarts.

12. Rear Axle Housing Oil Filler and Level Plug (2)

Check oil level periodically and keep lubricant up to level of filler plug. Use approved lubricant. The oil should be changed at least once a year. However, do not run tractor more than 1,000 hours without changing the oil. Drain and refill to level of plug (12). Capacity 3 U.S. pints on each side. To drain, remove rear axle housing pan. Clean the pan and replace it.

Steering Gear Housing.

13. Level Plug
14. Drain Plug.
15. Filler Plug.

Check periodically and add sufficient approved lubricant to level of plug (13).

The oil should be changed at least once a year. However, do not run tractor more than 1,000 hours without changing the oil.

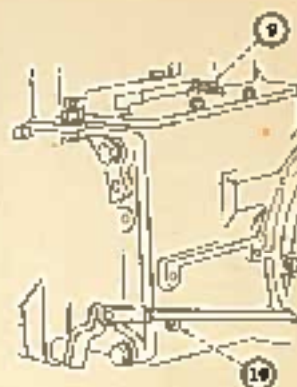
Drain by removing plug (14) and refill with new lubricant. Capacity 1 U.S. quart. To fill, remove filler plug (15) and fill to level plug.

16. Front Wheels

Once every 6 months, remove, clean, and repack front wheel bearings with pressure gun grease (chassis lubricant). Refer to page 20 for further instructions.

Miscellaneous Parts

Occasionally, put a few drops of engine oil on linkage or connections of control rods such as governor, radiator shutter, power take-off, etc.



# LUBRICATING OIL AND GREASE SPECIFICATIONS

## ENGINE LUBRICATING OILS

**NOTE:** Engine lubricating oil should be well-refined oil, free from water, sediment, acid, resin, or any other substance not derived from petroleum, and oil should not be such as to corrode any metal used in engine construction.

### VISCOSITY OF LUBRICATING OILS RECOMMENDED

Air Temperature	Engine Crankcase	Air Cleaner	Magneto and Impulse Coupling
Above 32°F.	SAE-30	SAE-30	Very light Cream Separator or Sewing Machine Oil
32°F. to 10°F.	20W	20W	Very light Cream Separator or Sewing Machine Oil
Below 10°F.	10W	10W	Very Light Cream Separator or Sewing Machine Oil (*)

(\*) Use kerosene in impulse coupling for temperatures below 10°F.  
Refer to special instructions for Cold Weather Operation on page 14.

To aid easier starting, the selection of crankcase lubricating oils should be based on the lowest anticipated temperature for the day. It is not necessary to change the crankcase oil every time the temperature rises or falls into another temperature range during some part of the 24-hour day. For example, SAE-30 may be used in temperatures below 32°F. if no starting trouble is experienced, and 20W oil can be used in temperatures around 30°F. 10W may be used up to 32°F. except when operating continuously on heavy loads. SAE-10 and SAE-20 oils may be substituted for 10W and 20W except if engine is difficult to crank.

### APPROVED LUBRICANT FOR TRANSMISSION, DIFFERENTIAL AND STEERING GEAR

Tractors are shipped from the factory with SAE-90 oil in the transmission, differential and steering gear.

For all temperatures above zero, use SAE-90 transmission lubricant. For temperatures below zero, use the same transmission lubricant as for above zero, but also pour one quart of kerosene into the transmission case.

Use a good grade mineral oil, free from solid materials. Use only high-quality lubricating oils and grease. For your own protection, select only oils and grease of recognized manufacture.

### LUBRICATOR FITTING GREASE

Use pressure-grease (chassis lubricant) for lubricator fittings on which hand lubricator is applied.

**IMPORTANT:** Keep the supply of lubricating oil absolutely clean and free from dust. Always use clean containers. Keep lubricator clean and wipe dirt from grease fittings before applying lubricator.