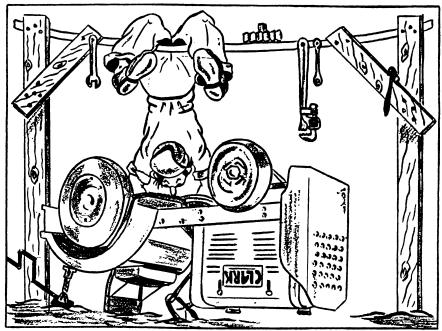
# SERVICE MANUAL

SECOND EDITION



There must be an easier way to do this - Wish I had a CLARK SERVICE MANUAL

# **CLARK TRUCTRACTOR**

Div. of Clark Equipment Co.

Battle Creek, Michigan, U. S. A.

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Note: (1) Serial Number of Engine is found on Right Hand Side Below the Manifold.

<sup>(2)</sup> Serial Number of Tractor is found on Name Plate on the Dash.
(3) Tools indicated by Number Throughout the Service Manual Can Be Purchased from the Miller Tool and Mfg. Co., Detroit, Michigan. A complete Catalog of Such Service Tools will be Supplied by the Miller Tool and Mfg. Company by request.

## **CLARKTOR "6"**



## DRIVING CONTROLS

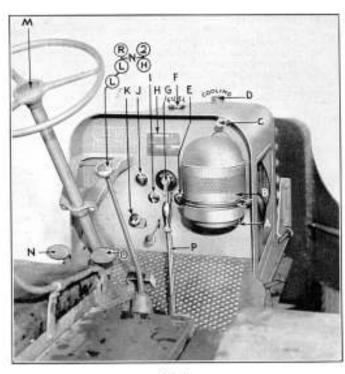
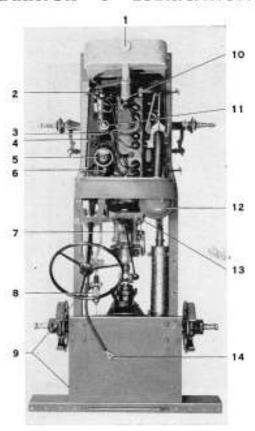


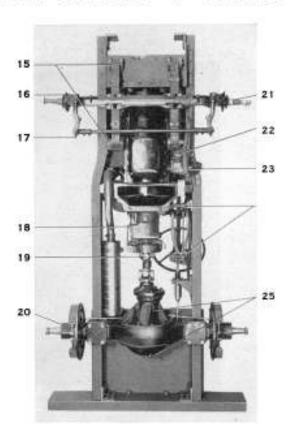
Fig. 1

- A Hand throttle
- B Air cleaner
- C -- Choke control
- D Radiator filler cap
- E Gasoline gauge
- F Gasoline filler cap
- G Ignition and light switch
- H Name plate and machine serial number. Always give machine serial number shown on this plate when ordering replacement parts.
- I Oil pressure gauge
- J Ammeter
- K Starter pedal
- L Gear shift lever and diagram
- M Horn button
- N Clutch pedal
- O Brake pedal
- P Hand brake lever

## CLARKTOR "6" LUBRICATION CHART FOR CLARKTOR "6" TRACTOR



- RADIATOR See Page 5 for Anti-Freeze Instruction, Capacity 20 Quarts.
- GENERATOR has oiler on front and back. Use few drops of SAE 10 oil weekly.
- OIL BAYONET Check oil in Crankcase Every Day. Capucity
  of Crankcase is 5 quarts. Change oil every 50 to 50 operating
  hours. Use SAE 10 or 20 in winter and SAE 30 or 40 in
  summer.
- DISTRIBUTOR Greene cup should be given one turn every week. Fill with No. 3 rup greene.
- OIL PILTER cartridge should be changed as often as necessary
   — every 350 to 500 operating hours or when transcase oil begins to darken. See page 26.
- STARTING MOTOR Oil with few drops of SAE 10 engine oil every week. 1 oiler.
- TRANSMISSION capacity is 2½ pints. Use SAE 90 lubricant. Drain every six months through plug at hottom. Refill with proper lubricant at oil level hole.
- BRAKE MASTER CYLINDER should be filled to '\(\frac{1}{2}\)" from top.
   Use hydraulic brake fluid. For complete instruction bleeding brake lines see pages 80 and 81.
- REAR SPRING SHACKLES are Zerk fitted (Total 4). Use a good grade chassis lubricant. Gresse weekly.
- WATER PUMP has two oilers. Use Water Pump Grease in rear bearing. In front bearing use chassis lubricant. Zerk Fitted — Total 2.
- OIL FILLER CAP Has metal mesh screen under cap. Remove and wash in kerosens once every 100 operating hours.
   Re-oil with fresh SAE 50 (Heavy) engine oil. See pages 26 and 27 (paragraphs 34 and 35) for complete instruction.
- OIL BATH AIR CLEANER should be serviced daily in extremely dusty conditions. For full instructions see page 8.
- 13. CLUTCH RELEASE BEARING is packed in grease and does not require further attention.



- 14. BATTERY (Not Shown) should be therked for water level every 100 operating hours. Keep plates covered %" with clean distilled water. See page 49 for full details on bettery care. Clean terminals with ammonia and rines with clear water, then coat with vassiins.
- FRONT SPRING SHACKLES are Zerk fitted and should be lubricated with charals lubricant weekly.
- STEERING SPINDLES are Zerk fitted Total 2. Use chansis lubricant, weekly.
- TIE ROD BALL JOINTS are Zerk fitted Total 2. Use chassis lubricant weekly.
- HAND BRAKE CONNECTIONS should be oiled weekly with few drops of SAE 10 oil.
- UNIVERSAL JOINT requires lubrication with universal joint grease. Use medium for summer and soft for winter. Sec name 74.
- REAR WHEEL BEARINGS should be packed with wheel bearing grease medium in summer and soft in winter. Wheels must be removed to do this. See page 78. Remove hub caps every week and tighten Axle Shaft Nuts.
- FRONT WHEEL BEARINGS should be repacked with wheel bearing medium grease in summer and soft in winter. Wheels must be removed to do this. Clean bearings before repacking.
- STEERING GEAR should be kept filled with SAE 110 fluid gear lubricust in winter and SAE 140 in summer.
- URAG LINK BALL JOINTS are Zerk fitted (Total 2) and should be labricated weekly with chassis jubricant.
- PEDALS AND CONNECTIONS require a few drops of SAE in oil weekly.
- REAR AXLE AND DIFFERENTIAL are filled at points indicated. For full instruction see pages 77 and 78. Use SAE 160 in summer and SAE 110 in winter.
- EVERY DAY: Check 1, 3, 12, and gasoline tank (Not Shown).
- EVERY WEEK: Check 2, 4, 6, 8, 9, 10, 11, 14, 15, 16, 17, 18, 19, 22, 23, 24 and other connections such as throatic, lights, etc. Check Tires.
- EVERY MONTH: Check 5, 7 and 25.
- EVERY SIX MONTHS: Check 20, 21 and change subricant in 7 and 25.

# CONDENSED INSTRUCTIONS FOR PUTTING TRACTOR INTO SERVICE

Make Record That Lead Seals on Louvers are Unbroken.

Close Radiator Draincock and Cylinder Block Plug.

Fill Radiator With Clean Water.

Test and Connect Battery.

Fill Gas Tank.

Turn Engine Over With Starter. (To Place Oil Film on Cylinder Walls.)

Turn on Ignition.

Release Brake.

## TO KEEP TRACTOR IN SERVICE:

- I ENGINE Use SAE 30 or SAE 40 in Summer; SAE 10 or SAE 20 in Winter.
- 2 AIR CLEANER Oil should be changed frequently. Perhaps several times daily in especially dusty operations.
  - Use same grade of oil as is used in crankcase.

# Read Detailed Instructions

## DETAILED INSTRUCTIONS

These instructions are written for the purpose of instructing owners and operators in regard important points on the lubrication and maintenance of the machine.

Before placing your new Tractor in service read the following description of the machine and have your driver and yourself get thoroughly acquainted with it.

It is important that all new machines be broken in gradually. Observance of this will be repaid by longer life and may prevent delays from burned out bearings, worn parts, etc.

Start use of tractor slowly, thus giving all working parts time to adjust themselves to other parts with which they work. Give particular attention to the oiling of the engine and make sure that transmission, universal joint, driving axle, and all other moving parts of the machine have the correct amount of lubrication at all times.

#### PUTTING THE TRACTOR INTO SERVICE

Before attempting to start the new Tractor make sure first that the engine has sufficient oil. The oil filler pipe, which also functions as a breather, is located on the left side of the engine.

The oil level gauge is of the dip stick or bayonet type and is also located on the left side toward the rear of the engine.

Fill the crankcase reservoir through the filler pipe to the proper level as indicated by the full mark on the dip stick. Never permit the oil level to fall to a point below the lower mark on the gauge.

CRANKCASE: Do not overfill the crankcase, as too much oil will bring the level high enough for the connecting rods to dip, thus causing excessive quantities of oil to be thrown to the cylinder walls, resulting in oil pumping, smoking, excessive carbon deposits and fouled spark plugs. The safest way is to keep the oil supply at the proper level at all times.

FILLER CAP: Never operate the engine with the filler cap removed, as the breathing action of the motor will draw dust and grit into the engine which, when mixed with the oil, forms an abrasive, resulting in rapid wear of the cylinder walls, piston rings and bearings. Always wipe off bayonet blade, before taking a reading. Never fill crankcase when engine is running.

RADIATOR: Make sure that the radiator and cylinder block drain cocks are closed and fill the radiator with clean water. In winter it is a good idea to use hot water. All new Tractors are shipped from the factory with the radiator and cooling system drained and this must not be overlooked. NEVER RUN THE ENGINE WITHOUT WATER IN THE COOLING SYSTEM. Make sure that the gear shift lever is in neutral before attempting to start the engine. See that tank is supplied with gas.

Insert key in switch and turn on, choke carburetor slightly and step on starter pedal. Engine should start at once the same as any truck engine.

## **CAPACITIES**

$\mathbf{p} \mathbf{A} \mathbf{D} \mathbf{I} \mathbf{A} \mathbf{T} \mathbf{O} \mathbf{p}$						61/4 Gallons 5 Quarts 31/2 Pints 7 Pounds 20 Quarts
The followin Alcohol Prestone	g anti-freeze 20° F. 3 qts. 4 qts.	e solutions and 10° F. 4 qts. 5 qts.	o° F. 6 qts. 7 qts.	ded for the to -10° F. 7 qts. 8 qts.	emperatures -20° F. 8 qts. 9 qts.	indicated: -30° F. 10 qts. 10 qts.

Tire Pressure 45 lbs.

Front

Rear

50 lbs.

## OIL BATH AIR CLEANER



## OPERATION AND CARE

The air cleaner is put on the engine to prolong its life and performance by preventing dirt and grit from getting into the engine, causing excessive wear on all operating parts. HOW-EVER, THE OPERATOR IS OF NECESSITY CHARGED WITH THE RESPONSIBILITY OF GIVING THE AIR CLEANER EQUIP-MENT REGULAR AND CONSTANT AT-TENTION IN ACCORDANCE WITH THE INSTRUCTIONS.

SERVICE AIR CLEANER WEEKLY—
MORE FREQUENTLY UNDER SEVERE
DUST CONDITIONS. Remove oil cup, empty
oil, scrape out dirt. Fill to oil level bead with
engine oil. Replace oil cup securely. NEVER
REMOVE OIL CUP WHILE ENGINE IS
RUNNING.

The oil cup should be kept filled as near as possible to the level indicated by the bead with FRESH OIL. WE RECOMMEND THE USE OF THE SAME GRADE OIL AS IS USED IN THE CRANKCASE.

The best performance of the air cleaner is obtained by keeping the oil level up to the bead on the cup (see illustration above). Raising the oil level above this point DOES NOT increase the efficiency and this practice should be avoided.

It is absolutely necessary to change oil and thoroughly clean the cup whenever (or before) the level of dirt accumulated in the bottom of the cup reaches ½", or the oil appears too thick or heavy to spray or circulate properly. The depth of dirt at the bottom can be measured with a stick, screw driver, or whatever is convenient. WEEKLY INSPECTION is necessary to enable the operator to see when any of these conditions have been reached.

Ordinarily, if the correct oil level is maintained with the proper grade of oil, the wire screen filtering element will need very little attention. However, the bottom of the screen element should be inspected whenever the cup is removed and any accumulation of heavy lint, chaff, leaves or straw removed.

All connections between the air cleaner and carburetor should be inspected at frequent intervals and must be kept tight.

Have You Checked Oil Filter and Air Cleaner