W7 Loader

SN 9801417 & After

Operators Manual

9-1711

Reprinted

CASE

STANDARD BUCKET

Heaped Capacity ---------- 1-1/4 cu. yd.
Struck Capacity ---------- 1 cu. yd.
Width Outside ---------- 81-3/4"
Height to Center of Hinge Pin ---------- 10'5"
Tip Back - Ground Level ---------- 40°
Tip Back at 3'0" Carry Position ---------- 40°
Raising Time ---------- 6.5 Sec.
Lowering Time ---------- 4.8 Sec.
Maximum Dumping Clearance at 45° Dump ---------- 8' 3"
Reach to Tire at Max. Height and 45° Dump ---------- 27-1/2"
Reach to Tire at Max. Height and Max. Dump ---------- 25-1/4"
Angle of Dump at Max. Height ---------- 50°
Digging Depth ---------- 9" at 15°
Lift Capacity 0-MPH ---------- 6000 Lbs.
Carry Capacity 4-MPH ---------- 3500 Lbs.
Pallet Fork Max. Lift at 24" Center ---------- 3000 Lbs.
Pallet Fork Max. Height ---------- 10' 2"

OVERALL MEASUREMENTS

Height over Air Cleaner ---------- 84"
Width over Tires ---------- 81-1/2"
Width over Hubs ---------- 81-1/2"
Length - Bucket on Ground ---------- 16' 9-3/4"
Length - Bucket at Carry Position ---------- 17' 4-1/2"
Wheel Base ---------- 80"
Ground Clearance ---------- 16-1/4"
Approximate Weight ---------- 12,300 Pounds
Thread - Front & Rear ---------- 67"

TURNING RADIUS

Outside Corner of Bucket
At Carry Position ---------- 20'
Outside Rear Hub ---------- 20' 7"

TIRE EQUIPMENT

TIRE SIZE	PLY	TYPE TREAD	TIRE PRESSURES
12.00-24	8	Road Grader	50 PSI
13.00-24	8	Road Grader	40 PSI
12.5-24	8	Road Grader	40 PSI
15.5-24	10	Road Grader	40 PSI
15.5-24	12	Road Grader	40 PSI

ENGINE OIL CHANGE

Run-In-Oil

Drain the special "run-in" oil after the first 20 hoursof operation and replace with fresh oil. Drain and refill the crankcase at least every 120 hours of operation thereafter.

Regular Oil Change

Drain and refill the crankcase at least every 120 hours of operation.

If the engine service is severe - (frequent stopping and starting, high or low operating temperature) - the crankcase should be drained more often to prevent the formation of sludge or harmful deposits in the engine.

NOTE You cannot determine the condition of a detergent (heavy duty) oil by its color. Detergent type oil will become much darker in color within a short period of operation. This is caused by the oil's ability to hold carbon in suspension.

Crankcase Oil Refill

IMPORTANT

1. When just the crankcase is drained, always refill with 8 measured U.S.quarts of oil. Do not refill using the dipstick as a guide.

2. If you have drained the crankcase and replaced the oil filter element, pour in 9 measured U. S. quarts, operate the engine for a few minutes to fill the filter body; then check the oil level with the dipstick.

   Be sure to allow sufficient time for the oil to run down off the engine parts.

3. By following the above procedure, you will prevent overfilling or underfilling the crankcase, either of which can be detrimental to the engine service life and will give you false oil consumption records.

BRAKE SYSTEM BREATHER

Cleaning Interval --- 60 Hours
Change Interval --- 1000 Hours

Remove the breather from the loader and disassemble, refer to Figure 18, by removing the screen retainer, screen and hair. Clean parts in diesel fuel and let dry. Lubricate hair by dipping in clean engine oil and let excess oil drain off. Reassemble and install in loader.

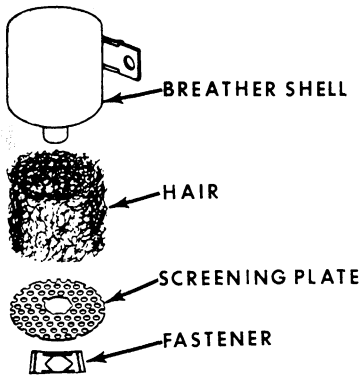

Figure 18

BRAKE SYSTEM FILTER

Cleaning Interval ---- 500 Hours
Change Interval ---- 1000 Hours

Remove filter assembly from loader and disassemble, refer to Figure 19, by removing the six nuts, lockwashers and screws. Separate the two filter halves and remove the hair, gasket and screens. Clean all parts in diesel fuel and let dry. Lubricate by dipping in clean engine oil and let excessive oil drain off. Reassemble and install in loader.

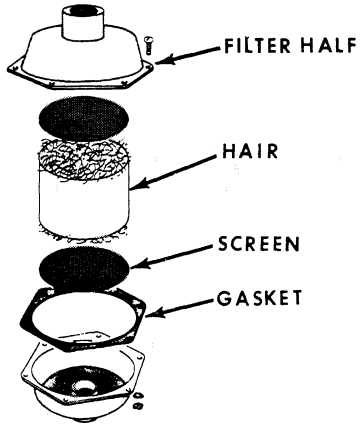

Figure 19

HYDROVAC CYLINDER LUBRICATION

Lubrication Interval -- 500 Hours

CAUTION Engine must not be running and brakes must not be applied. Remove the 1/8" pipe plug located in the lower end of the hydrovac cylinder , Figure 20. Install one ounce of Case Tch oil into the hole where the pipe plug has been removed. Reinstall pipe plug.

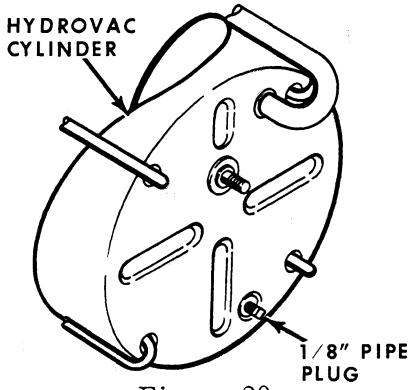

Figure 20

(Refer to Figure 23)

1. BUCKET LIFT CONTROL LEVER - Push the control lever forward to lower the bucket. Pull the control lever rearward to raise the bucket. The raise and float positions are retained. The control lever must be manually moved from the raise and float positions. The control lever automatically returns to neutral from the lower position when released. Refer to Pages 42 and 43.

2. BUCKET TILT CONTROL LEVER - Push the tilt control lever forward to tilt the bucket down. Pull the tilt control lever rearward to tilt the bucket up. The tilt control lever automatically returns to neutral when released, stopping and holding the bucket in any position. Refer to Page 44.

3. BUCKET AUXILIARY CONTROL LEVER - Push lever forward opens segmented type bucket. Pulling lever rearward closes segmented type bucket. Refer to Page 44.

4. POWER RANGE SELECTOR LEVER - Push selector lever forward for low range and pull selector lever rearward for high range.

5. MECHANICAL RANGE SELECTOR LEVER - Move lever up for low range and down for high range.

NOTE Loader must be stopped and direction selector in neutral when this is done.

6. DIRECTION SELECTOR LEVER - Push direction selector forward to move the Loader in a forward direction. Pull the direction selector rearward to move the Loader in a rearward direction.

7. FUEL STOP LEVER - Pull lever up and release accelerator pedal to stop engine.

CAUTION

NEVER IDLE THE ENGINE FOR PROLONGED PERIODS OF TIME!

DURING EXTREMELY COLD WEATHER, WATCH THE COOLANT TEMPERATURE CAREFULLY AND NEVER OPERATE THE ENGINE FOR PROLONGED PERIODS BELOW THE RECOMMENDED COOLANT TEMPERATURE (WORK ZONE ON THE TEMPERATURE GAUGE).

During extremely cold temperatures, the engine will not warm up to, or maintain the operating temperature at low engine speeds. Low idling speeds during extremely cold temperatures will result in incomplete combustion, heavy formations on the valve system and possible serious damage to the engine.

1. ENGINE WARM UP PROCEDURE

A. Close the radiator shutters (if so equipped) or cover the radiator.

B. Start the engine as described on the previous pages and allow it to run at a reduced speed just long enough for the oil to circulate through the engine. (Not over one or two minutes).

C. Place throttle control lever 2/3 open (Approximately 1500 RPM) and allow engine to warm up.

2. MAINTAIN ENGINE OPERATING TEMPERATURE

When the engine is not operating under load, but the operator wishes to keep the engine running due to the extremely cold temperatures.

A. Keep the hood sides in place on the Loader.

B. Keep the radiator shutters closed sufficiently to maintain temperature in the Work Zone on the temperature gauge.

C. DO NOT IDLE THE ENGINE.

Emptying the Bucket

A. It is not necessary to use the brakes when emptying the bucket. Use the direction selector and accelerator pedal to control the Loader. Approach the dump area with the bucket at properdumping height, decelerate, push the tilt control forward and pull both the range and direction levers rearward, accelerate. This will "throw" the load out of the bucket. Use extreme care and plenty of practice to perfect this method of emptying the bucket.
B. If sticky material packs in bucket corners, raise bucket to full height and rapidly move the tilt lever back and forth to rap the bucket against the bucket stops and jar the packed material out.

Truck Loading

A. Keep the wind to your back for dumping into a truck. This eliminates chance of dust and loose material blowing into your face and impairing visibility. This also reduces engine air cleaner maintenance.
B. Start raising the bucket so it will just reach dumping height at the time you arrive at the dump area.
C. If one side of the truck is lower than the other, try to spot the truck so you dump over the low side. This improves reach and distribution of the load in the truck.
D. Reach over and dump into the far side of the truck first. Fill the truck gradually from the far side to the near side in order to distribute the load in the truck properly.

General

A. Keep the Loader serviced and in top running condition at all times. A few minutes of preventive maintenance will save hours of down time.
B. Use the proper attachments and extra equipment available for specialized applications.
C. Know your Loader thoroughly.

TOWING

IMPORTANT The loader can be towed at slow speeds for a distance not greater than 1/2 mile. If loader is to be towed in excess of 1/2 mile the front drive shaft must be disconnected and the rear axle "shifted out" (Refer to page 40). The reason for disconnecting the transmission from the drive line is to prevent damage to the upper bearings and shafts that do not receive lubrication when the engine, converter and charging pumps are inoperative. USE A RIGID TYPE COUPLER WHEN TOWING.

DIESEL FUEL SYSTEM

The fuel system on your Case Diesel Loader consists of a fuel supply tank, fuel filters and the fuel injection equipment. The service life of the fuel injection equipment on your Diesel engine is wholly dependent upon the cleanliness of the fuel. If abrasives or water are permitted to reach the highly precision moving parts in the injection equipment, rapid wear will result and poor performance may be expected. To prevent abrasives or water from reaching the injection equipment, it is important that you use clean fuel and regularly service the filters and water trap as described in this manual.

PROTECT YOUR FUEL SYSTEM!

BUY CLEAN FUEL

AND

KEEP IT CLEAN

Adjusting the Distributor Points

1. Remove the distributor cap, pull the rotor from the shaft and remove the dust shield.
2. Remove any roughness from the surfaces of the points with a small file or hone before checking the point gap with a feeler gauge. This roughness is caused by a normal transfer of metal from one point to the other due to the passage of electrical current across the points.
3. Crank the engine over slowly until the block on the movable distributor point is in contact with the peak of the lobe on the distributor cam, Figure 62.

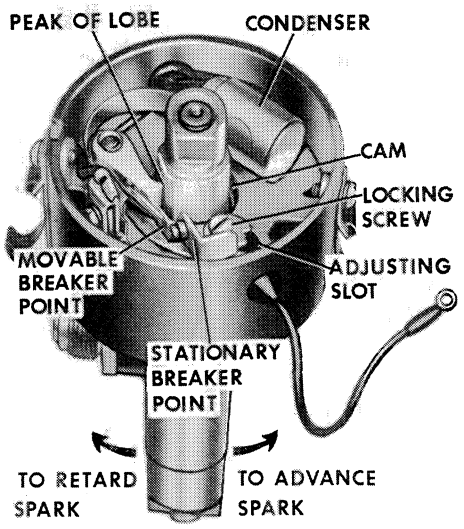

Figure 62

4. Check the distance between the two distributor points with a feeler gauge; the correct point gap is .020 inch. To increase point gap, loosen the lockscrew, insert screwdriver in the adjusting slot and move stationary point away from the movable point. To decrease point gap. Loosen the lockscrew, insert screwdriver in the adjusting slot and move the stationary point toward the movable point.
5. When the correct point gap of .020 inch is obtained, tighten the lockscrew, then replace the dust shield, rotor and distributor cap

NOTE The distributor rotor and cam drive are designed so the rotor can only be installed in one position.

STORAGE BATTERY

When working around a storage battery/s, remember all of its exposed metal parts are "live". Never lay a metal object across the terminals as spark or short circuit may result. Sparks, lighted matches and exposed flames must be kept away from the battery due to the presence of explosive gas in the battery.

The liquid in battery/s is acid. Use care not to spill it on hands or clothing.

Rules for Battery Care

1. Add pure or distilled water, as needed, to keep the separators covered. Check every 60 hours or weekly. Normal water consumption would be approximately 1 oz. every 60 hours of operation. If it is greater, either the case is leaking or the regulator is overcharging and must be adjusted.

2. Keep the battery's in a healthy state of charge as shown by hydrometer readings.

3. Make sure the battery's are securely fastened in position. Cables leading from the battery should not touch cell connectors or lay on the battery container.

4. Keep the battery's clean and dry.

If a battery will not hold a charge, replace it with a new one meeting the specifications as listed in the specification section.

Each week, and before adding water, take a hydrometer reading from every cell. The gravity reading from each cell should show full charge.

NOTE The full charge gravity reading will usually be indicated on the battery. A battery having a reading of 1.175 will freeze at approximately zero degrees Fahrenheit temperature.