



Allis Chalmers

Operator's Manual

7020

Operator's Manual

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AC-O-7020



THE ALLIS-CHALMERS NEW EQUIPMENT BATTERY SERVICE ADJUSTMENT POLICY

1. If within a period of 90 DAYS after day of sale to the original user, an Allis-Chalmers new equipment battery becomes unserviceable (not merely discharged) in normal use, due to defective material or workmanship, the Allis-Chalmers Corporation will replace it with an equivalent new Allis-Chalmers battery, without charge, to the original user.
2. If after the expiration of such 90 DAYS but before the expiration of 24 months from date of sale to the original user (each such month being designated herein as a unit of service) an Allis-Chalmers new equipment battery becomes unserviceable (not merely discharged) in normal use, due to defective material or workmanship, it will be replaced for the original user, in exchange for the unserviceable battery, with an equivalent new Allis-Chalmers battery at an adjusted price. This adjusted price shall be determined by applying to the then current retail price of the new battery, the percentage of the maximum (24) units of service which was received from the unserviceable battery.

LIMITATIONS

No-charge replacements or adjustments under this policy may be made by any authorized Allis-Chalmers Agricultural Equipment dealer.

This policy does not cover the following:

1. Unserviceability due to abuse or neglect, failure to maintain recommended electrolyte level, fire wreckage, explosion, freezing, the addition to the battery of any chemical or solution other than approved water or battery grade sulfuric acid of proper gravity, the use of a group size smaller than the group size of the original equipment battery, or continued operation of the battery in an undercharged condition (below half charge — 1.190 sp. gr.).
2. Breakage of containers, covers or posts.
3. The cost of transportation, service calls, recharges or the use of rental batteries.

Proof of date of purchase is required for all claims. This policy is void if the date coding on the battery is removed or destroyed.

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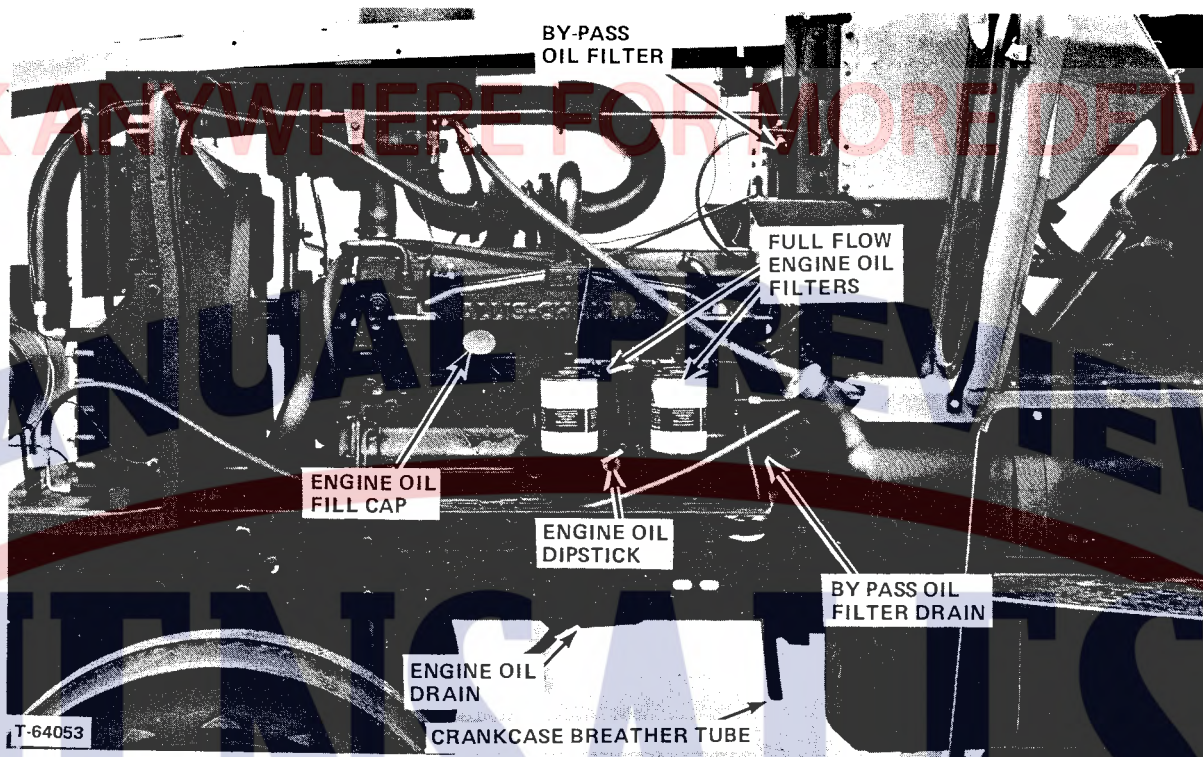


FIGURE 2 - L.H. Side

ENGINE OIL (Figure 2)

Check the engine oil level daily (10 hours), preferably in the morning before starting engine. If checking just after engine has been running, wait at least five (5) minutes for the oil to drain down if the engine is warm. If engine is cold, wait longer to permit oil to drain down into crankcase. Fill crankcase to "full" mark on engine oil dipstick. **DO NOT** overfill. Use oils of the "CD" ("DS" Series 3) service classification only. Use the following oil viscosities for the lowest expected temperature during time oil will be in crankcase.

DO NOT use multi-viscosity oils in Allis-Chalmers diesel engines.

Above 32° F. (0° C.)	SAE 30
0° F. to 32° (-18° to 0° C.)	SAE 20-20W
0° F. and Below (-18° C. and below)	SAE 10W

*For below -20° (-29° C.) temperature, a means of warming the engine is recommended.

Crankcase capacity is approximately 16 quarts (15 litres) when changing both oil filters.

Drain and refill the crankcase after the first 50 hours of operation. After that, every 150 hours. Engine oil drain plugs are located on lower L.H. and R.H. side of oil sump. Either engine oil drain plug can be used to drain crankcase. When breaking in a new or rebuilt engine, one grade lighter oil should be used than shown above.

ENGINE OIL FILTERS (Figures 2, 3 and 4)

There are three (3) engine oil filters on the tractor. There are two full-flow filters on the left hand side of engine (Figure 2). The third filter is a by-pass type filter and is located above and behind the engine (Figure 3).

CAUTION: Make certain oil filter gaskets are removed from filter base of full-flow system before new gaskets and filters are installed.

Replace the two full-flow filters and change the element in the by-pass filter at the first 50 hours of operation when engine oil is changed. Thereafter change the 2 full-flow filters every 150 hours and the by-pass filter every 300 hours. Use only **ALLIS-CHALMERS** filters and elements provided specifically for your engine. Always change engine oil when you replace filters.

To replace the element in the by-pass filter, remove the rear cowl cover (Figure 3). Thoroughly clean the filter cover and surrounding area.

The by-pass filter drain tube is located on the L.H. side at the rear of engine with a plug in the end of the tube (Figure 2), place oil container under it, and remove drain plug on end of tube. Loosen vent screw in top of by-pass filter (Figure 3) to permit oil to drain. When oil has drained, remove clamp ring and filter top. Lift out filter element, wipe inside of filter housing clean, install new element, and replace filter top and tighten securely with clamp ring. Replace drain plug in end of filter drain tube. Leave vent plug loose.

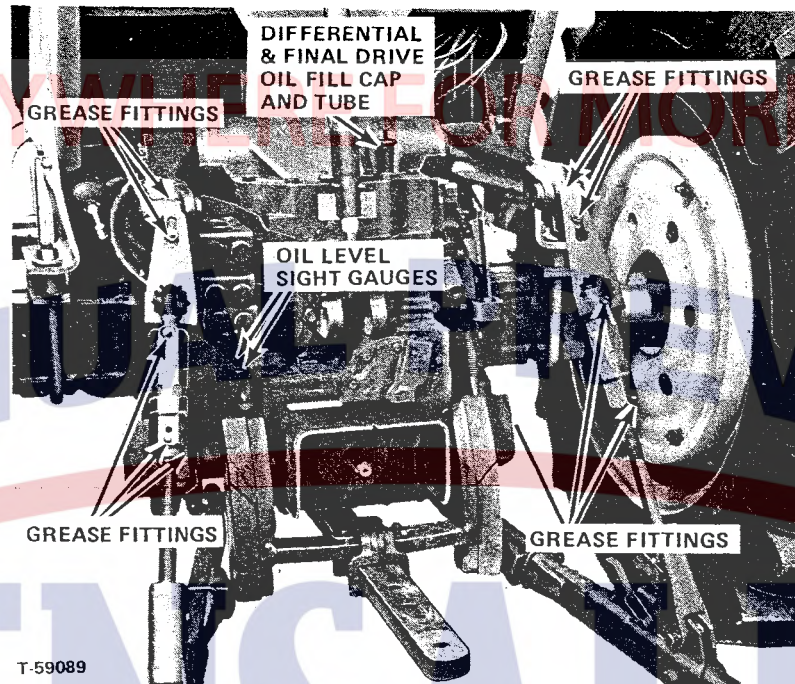


FIGURE 7

DIFFERENTIAL AND FINAL DRIVE OIL (Figure 7)

The differential and final drive oil is also used to operate much of the hydraulic system of the tractor. It should be kept clean and up to level at all times.

There are two oil level sight gauges on the L.H. side at rear of differential housing (Figure 7). Maintain the oil level between sight gauges. If oil appears in lower sight gauge, oil level is satisfactory; if oil appears in upper sight gauge, oil level is higher than necessary and will result in increased power loss and high operating temperature. Check oil level every 10 hours or daily when tractor engine has been stopped for at least fifteen (15) minutes and lift arms are in lowered position. **NOTE:** Tractor must be parked on level ground before checking the oil.

The oil fill cap and tube are on the right hand upper side of lift arm housing (Figure 7). Fill with Allis-Chalmers Power Fluid 821.

NOTE: Oil runs down to level sight gauges slowly. When topping off to operating level, add oil only a quart at a time and wait several minutes to check gauges before adding more. **DO NOT** overfill.

The differential and final drive should be drained and refilled with new oil every 2000 hours or two years, whichever comes first. To drain differential and final drive oil:

1. Remove and drain oil from the differential drain plug, and the R.H. and L.H. final drive drain plugs (Figures 6 and 8).

Approximately 16.7 gallons (63 litres) of oil, total, will be drained after removing the three (3) plugs.

2. After the differential and final drive oil is drained remove the R.H. and L.H. filters and replace with new elements as outlined in section Differential and Final Drive Oil Filters, below.
3. With filter caps replaced and the three drain plugs tight, add 16 gallons (61 litres) of Allis-Chalmers Power Fluid 821 to the oil fill tube.
4. Run engine for several minutes to fill oil cooler and distribute the oil to the various compartments. Lower lift arms, stop engine, and after fifteen minutes, check oil level in sight gauges. If no oil is visible, put in two quarts and wait five minutes more to check sight gauges. If oil level is not centered between the two sight gauges, add a quart or less at a time to bring oil up to that level.

DIFFERENTIAL AND FINAL DRIVE OIL FILTERS

The differential and final drive housing serves as a common reservoir for the hydraulic fluid used by the piston pump and the gear pump of the hydraulic system. Filters for these pumps are located in the lower front part of the differential housing. One filter on the R.H. side (Figure 6), and one filter is on the L.H. side (Figure 8).

Both filters should be replaced after the first 50 hours, and after that, at intervals not to exceed 1000 hours. There is also a red warning light labeled "Hydraulic Oil Filter" on the instrument panel to indicate the condition of the two filters. If it glows red with the oil at operating temperature, the engine at rated speed, and the lift valves in "Hold" position, both filters should be replaced.

The filters should always be replaced at each 2000-hour differential oil change period.



FIGURE 16A - Operating Controls for Tractor with Power Shift Transmission

- | | |
|---|--|
| 1. Fuel Shutoff Knob | 10. Steering Wheel |
| 2. Light Switch | 11. Optional push button to extend or retract Steering Wheel |
| 3. Warning Light Switch | 12. Ether Injection Button |
| 4. Foot Clutch and Transmission Brake Pedal | 13. Throttle Lever |
| 5. Differential Lock Pedal | 14. Starter Button |
| 6. Brake Pedals | 15. Key Switch |
| 7. Foot Throttle (Optional) | 16. Transmission Gear Shift Lever |
| 8. Brake Lock Tab | 17. Range Transmission Shift Lever |
| 9. Steering Wheel Tilt Lever | |

TEMPERATURE AND FUEL GAUGE (Figure 16A Item A)

This dual purpose electric gauge, located on upper left hand corner of instrument panel, records the temperature of the engine cooling solution between 100° and 250° F. (38° and 121° C.) with one needle and the level of fuel in fuel tank between "empty" and "full" with a second needle. Normal operating temperature is from 160° to 220° (71° to 104° C.). Both parts of the gauge are actuated when key switch is turned to "Run".

ALTERNATOR WARNING LIGHT (Figure 16A, Item B)

The alternator warning light is located at the upper L.H. corner of the Legend panel. It will light whenever the alternator is not charging. The light will glow as soon as key is turned to run and should go out after engine starts. If it does not, stop engine and determine cause and correct.



FIGURE 24 - Luxury Seat



FIGURE 24A - Luxury Seat

LUXURY SEAT ADJUSTMENTS (Figures 24 & 24A)

1. Seat Belt
2. Cushion Angle
3. Weight
4. Swivel
5. Vertical
6. Back Tilt
7. L.H. Arm Rest (Vertical)
8. Fore & Aft
9. R.H. Arm Rest (Vertical)
10. Back Height
11. Lumbar

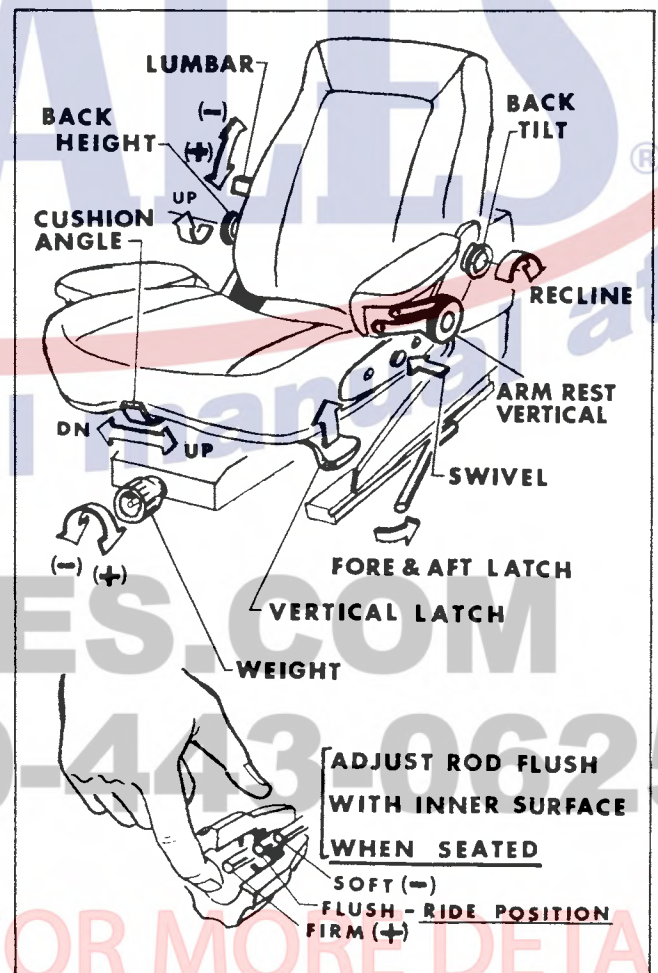


FIGURE 25