



Allis Chalmers

Operator's Manual

7060

Operator's Manual

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Lubrication and Service



WARNING: NEVER permit anyone to examine, clean, service, or adjust the tractor or any equipment operated by it until tractor engine is stopped, **RANGE TRANSMISSION SHIFT LEVER IS IN PARK**, PTO clutch is disengaged, and **ALL** moving parts have stopped.

The following section deals with lubricating and servicing your tractor. Be sure to follow the recommended time intervals and use the type of lubricants that are recommended.

The few dollars you save by using cheaper lubricants or not following the recommended change intervals may cost you many dollars later on.

In order for your tractor warranty to be valid the recommended time intervals must be followed and the recommended types of lubricants must be used!



FIGURE 23 - Rear View

OPERATOR'S SEAT (Deluxe) (Figures 23 & 23A)

By releasing the seat latch lever the seat can be moved forward and down and rearward and up on the seat mounting rails. Additional adjusting range can be obtained by relocating seat mounting rails in second set of holes in anchor plate.

The seat back can be pivoted forward or back by removing both seat back adjusting bolts, pivoting seat and reinstalling the bolts in another hole.

The seat back can be raised or lowered by removing the four seat-back capscrews, moving the back up or down and reinstalling capscrews.

The arm rests can be moved up one hole by removing the two lower seat-back capscrews and the arm-adjusting bolts and moving the arm rest brackets up.

To adjust the seat for the weight of the operator, loosen the wing nut on the shock absorber support bolt. Slide the support bolt forward in the slots, for heavier operators, and rearward for lighter operators. Tighten wing nut.

SAFETY BELT (Figure 23A)

A safety seat belt is supplied with cab and protective frame. It is attached to the seat frame.

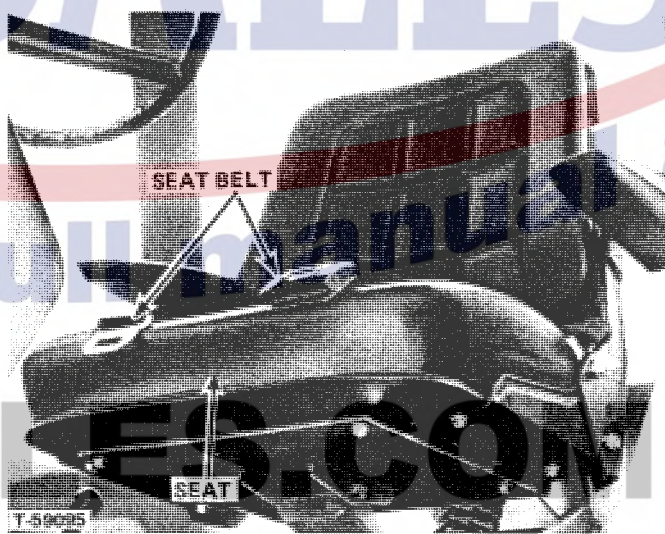


FIGURE 23A



WARNING: To take advantage of the additional protection afforded by cab or protective frame, the operator **SHOULD WEAR** the belt, properly adjusted, at all times. Use of seat belt without roll-over protection equipment is not recommended.

OPERATION

BREAK-IN PERIOD

The engine is assembled and tested at the factory to insure that it is ready for work; however, the engine must be properly broken in to obtain the peak performance and long life that is built into it. Proper break-in will increase the power and prolong engine life.

To properly break-in an engine merely means that the engine should be operated at reduced loads for a period of time (approximately 50 hours), long enough for the piston rings to seat in with the cylinder liners and form a lapped fit which would make a perfect seal between pistons and liners before the engine is used on rated load operations.

If an engine is operated at full load before it is broken in, the high pressures and temperatures created from the burning gases tend to escape between the piston rings and cylinder liner into the engine crankcase. This is called blow-by.

Blow-by tends to heat and collapse the piston rings which causes them to carbon up and stick to such extent that they will never seat to the cylinder liners. This causes the engine to have excessive oil consumption and a loss of power. The time required for proper break-in is well paid for in added fuel economy and top engine performance.

The original fill of engine oil should be used approximately the first 50 hours of operation during the break-in period and then drained. Any foreign material which might accumulate in a new engine will be drained out. Change all three engine oil filters at this time.

Refill the engine oil sump with oil as recommended in the Lubrication and Service Guide. The oil used should have a service classification of "CD" ("DS" Series 3) oil for the diesel engines. See Engine Oils under Lubrication and Service.

In breaking in an engine, it is necessary to maintain the proper operating temperature (between second mark and 210° F. mark on temperature gauge) to avoid the accumulation of condensation. This practice should also be continued after the break-in period. Condensation will damage and deteriorate the vital parts of an engine to complete destruction if allowed to accumulate for a period of time.

As the break-in period progresses, approximately after the first 25 hours of operation at reduced loads, the load should be increased at short intervals until at the end of approximately 50 hours the engine could be operated at rated loads. The load on the engine can be decreased or increased by selecting a lower or higher transmission speed.

An engine should never be used on a load that would cause it to lug. This would be considered an overload. The throttle should be in the full speed position on any load, during or after the break-in period. Reducing engine speed on light loads may create a lugging condition. Reduced engine speeds may be used to limit travel speed if lugging is avoided.

For long life of an engine, it should never be operated at its maximum power output on continuous loads such as fans, water pumps, or hammer mills. Only 80% of the maximum power output should be used.

During the break-in period the clutches and brakes should not be overloaded. Also, all external bolts should be checked for tightness.

For proper break-in, the following suggestions should be followed:

1. Make certain that all points of care and lubrication outlined under Lubrication and Service Guide have been serviced as specified.
2. Maintain engine speed slightly above rated 2300 RPM by selecting a gear to match the load for the first 50 hours of operation.
3. Maintain engine temperature between the second mark and the 210° F. mark on the temperature gauge.
4. Drain the break-in oil at the end of the first 50 hours of operation and refill with an oil of the recommended viscosity for the prevailing temperature. Change the three engine oil filters at this same time.

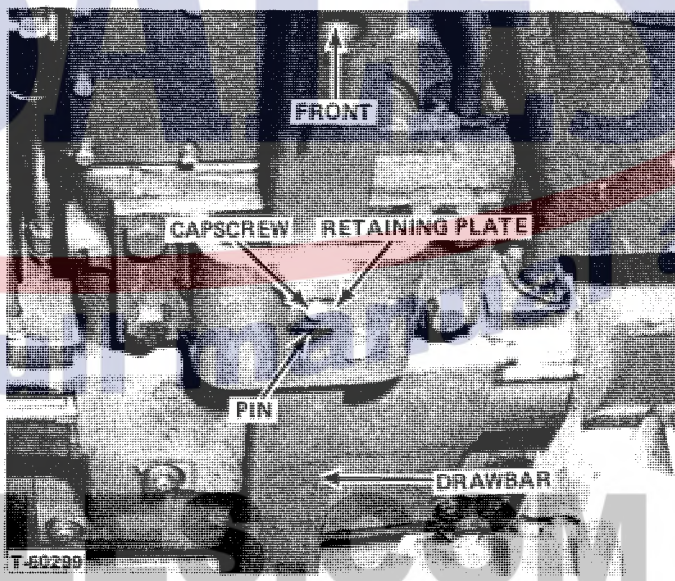


FIGURE 27 - Bottom View

DRAWBAR — THREE-POINT HITCH (Figure 28)

An extendable type drawbar is regular equipment with the three-point hitch. This drawbar may be moved forward out of the way when using the three-point hitch, or extended for regular drawbar use. To change position of drawbar, remove the capscREW and retaining plate and pin at front of drawbar, move drawbar to the desired position, and reinstall pin, retaining plate, and capscREW. Tighten capscREW to 30 ft.-lbs. (41 N · m) of torque (See Figure 27).



FIGURE 32 - Bottom View

TORSION BAR PRELOAD ADJUSTMENT

For proper Traction Booster operation the torsion bar preload must be kept in adjustment. Check periodically by pushing forward and pushing back on the draft arms. If any lost motion or looseness is felt, adjust the torsion bar as follows:

1. Remove all load from the draft arms by unhitching from the implement.
2. Loosen the jam nut on preload adjusting screws in lower side of right hand and left hand torsion bar arms. (See Figure 32). Turn screws in approximately two turns tightly against tractor frame.
3. Back screws out until they are just finger tight. Hold screws in this position and tighten jam nuts against face of torsion bar arms to wrench tight (1/8 to 1/4 turn).

TRACTION BOOSTER LINKAGE ADJUSTMENT (Figures 32, 33, and 34)

Before making any adjustments on Traction Booster linkage, unhitch the implement and make sure the torsion bar preload adjustment has been made.

1. Adjust the over-travel spring (Figure 33) to 6" (152 mm) long by turning locknut on lower end of spring rod.
2. Swing drawbar completely to one side.
3. Place range shift lever in "PARK" position and start engine. With engine set at 1000 RPM, place position "Control Lever" fully forward and "Traction Booster" lever fully to rear. (Figure 34)



FIGURE 33

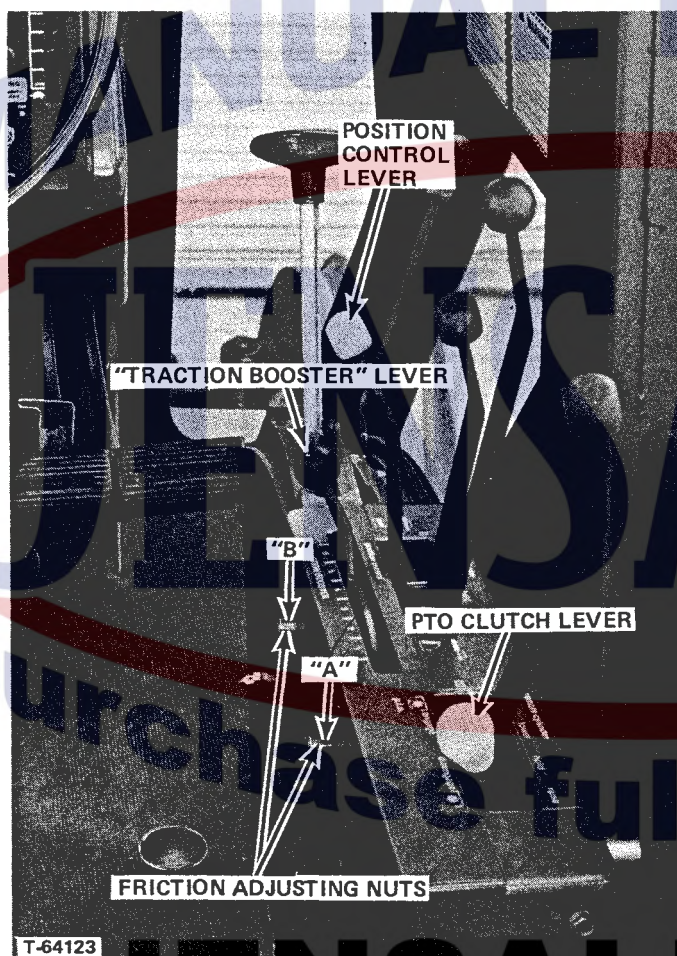
4. Stop engine and measure distance from lower side of drawbar to lift arm pin at outer end of lift arm (Figure 28). If distance is greater than 37" (940 mm) adjust nuts out. If distance is less than 35" (889 mm), adjust nuts in.
5. Repeat steps 3 and 4 until measurement taken in step 4 is between 35" to 37" (889 to 940 mm).



CAUTION: DO NOT make any adjustments with the engine running as unexpected movement of the 3-point hitch can result.

SENSITIVITY ADJUSTMENT (Figure 33)

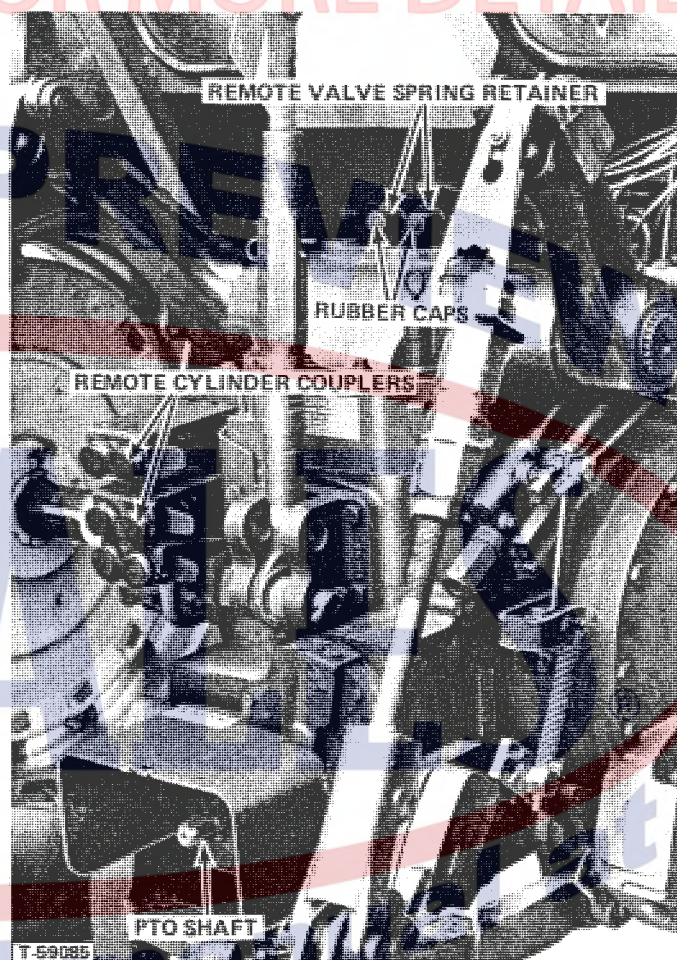
The sensing arm that is attached to torsion bar right hand arm has three holes to accept the rod guide. Figure 33 shows the rod guide in the center hole. This is position used for average draft loads. For heavy draft loads it may be desirable to place rod guide in hole closest to torsion bar. This reduces the amount of lift arm motion induced by the Traction Booster system as the draft load fluctuates. For light draft loads the rod guide can be moved to the outer hole to increase lift arm motion with less load fluctuation.

**FIGURE 34****HAND LEVER FRICTION ADJUSTMENT**

The Traction Booster lever friction should be adjusted until the lever will stay where it is placed while the tractor is in operation. To adjust, turn friction adjusting nut "A" in top left hand side of console. (See Figure 34).

The position control lever friction should be adjusted tightly enough to prevent the lever from moving forward from position in which it is placed as tractor operates. To adjust,

turn friction adjusting nut "B". If turning "B" fails to give ample friction, loosen the jam nut that is on the other end of shaft of nut "B" located between wheel guard cab or protective frame and the right hand side of console (not shown). Turn the shaft on which jam nut is located 1/4 turn to the rear. Tighten jam nut and readjust nut "B".

**FIGURE 35****PRESSURE RELEASE ADJUSTMENT**

If the remote control valve lever does not return to the "HOLD" position when the remote cylinder reaches the end of stroke, the remote valve spring must be adjusted as follows:

1. Place the range shift lever in "PARK" and stop the engine. Remove rubber cap at end of remote valve spring retainer (Figure 35) and use a small Allen wrench to turn the adjusting screw out 1/4 turn.
2. Start the engine and set it at rated RPM. Check if remote control lever returns to "HOLD" position when the remote cylinder reaches the end of its stroke.
3. If remote lever does not return to "HOLD", repeat steps 1 and 2 as necessary.