Allis Chalmers

Operator's Manual

7010 Diesel

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AC-O-7010 D

7010

ALLIS-CHALMERS

OPERATOR'S MANUAL

DIESEL TRACTOR

CONTENTS

ENGINE SPEED VERSUS P.T.O. SPEED		
Engine RPM	Power Take-Off RPM	
	540	1000
Low Idle (750 - 800)	182 - 194	333 - 348
Rated Speed (2300)	557	1021
High Idle (2525 - 2575)	612 - 624	1120 - 1143

Wheel Tread	Minimum* Inches	(mm)	Maximum Inches	(mm)
Front:				
10.00 x 16 tires	60"	1524	90" with wheels reversed	2286
11.00 x 16 tires	62"	1575	90"	2286
14L x 16 tires	63"	1600	91"	2311
Rear (Non-Power Shift Wheels)				
24.5 x 32 tires - standard axle 92.6" (2352 mm)	70"	1778	101" with rims reversed	2565
30.5 x 32 tires - standard axle	77"	1956	107" with rims reversed	2718
23.1 x 30 tires - standard axle	69"	1753	89"	2260
20.8 x 34 tires - standard axle	66"	1676	89"	2260
18.4 x 38 tires - standard axle	64"	1626	89"	2260
20.8 x 38 tires - standard axle	66"	1676	89"	2260
18.4 x 42 tires - standard axle	64"	1626	89"	2260
24.5 x 32 tires - optional axle 118.7" (3015 mm)	70"	1778	127" with rims reversed	3225
30.5 x 32 tires - optional axle	77"	1956	133" with rims reversed	3378
23.1 x 30 tires - optional axle	69"	1753	115"	2921
18.4 x 38 tires - optional axle	64"	1626	115"	2921
20.8 x 38 tires - optional axle	66"	1676	115"	2921
18.4 x 42 tires - optional axle	64"	1626	115"	2921
Rear (Power Shift Wheels)				
16.9 x 38 tires - standard axle 92.6" (2352 mm)	62"	1575	97"	2463
18.4 x 38 tires - standard axle	64"	1626	97"	2463
20.8 x 38 tires - standard axle	66"	1676	97"	2463
18.4 x 38 tires - optional axle 118.7" (3015 mm)	64"	1626	123"	3124
20.8 x 38 tires - optional axle	66"	1676	123"	3124

	Inner Wheel Minimum*		Outer Wheel Maximum	
Rear - Dual (Non-Power Shift Wheels)				
18.4 x 38 tires - optional axle 118.7" (3015 mm)	64"	1626	115"	2921
20.8 x 38 tires - optional axle	66"	1676	115"	2921
Rear - Dual (Power Shift Wheels)				
18.4 x 38 tires - optional axle 118.7" (3015 mm)	64"	1626	123"	3124
20.8 x 38 tires - optional axle	66"	1676	123"	3124

*1. For minimum rear wheel tread, up to 3 inner wheel weights per 34" & 38" wheel can be used with power shift wheeled tractors equipped with cab, or protective frame.

*2. For minimum rear wheel tread, use up to 3 inner wheel weights per 34", 38" & 42" wheel can be used with non-power shift wheeled tractors equipped with cab or protective frame.

3. "In order to achieve maximum life from axles and axle bearings, it is recommended that, for heavy load operation, rear wheel treads be set at the minimum practical tread. This is important because axle stress and bearing loads increase as wheel tread is increased."

The Allis-Chalmers Corporation reserves the right to make changes in the above specifications or to add improvements at any time without notice or obligation.

FIGURE 12 - Batteries in Operating Position

FIGURE 13 - Batteries in Swing Out Position

WARNING: Keep all open flame away from batteries, as an explosive gas is liberated when battery is being charged. Use caution to prevent sparks caused from short circuiting when connecting or disconnecting booster cables.

In cold weather, add water to batteries only prior to operating the engine so that the charging will mix the electrolyte and water to prevent freezing. A fully charged battery will not freeze in cold temperature, but, if only partly charged, will freeze and be damaged, even at temperatures only slightly below freezing. Weekly readings of the specific gravity of each cell should be taken with a battery hydrometer. The specific gravity readings indicate the charge condition of the battery as follows:

1.255 Full Charge
1.210 Half Charge
1.150 Discharged

Return the electrolyte solution to the cell from which it was taken. Keep the battery and terminals clean. If the terminals become corroded, or if the battery becomes acid soaked, wash with a mixture of baking soda and water. The vent plugs must be in place when cleaning the batteries. Check the gas escape holes in vent caps to make sure they are open.

If batteries are removed from tractor, disconnect the negative ground cables from battery terminals first. Upon reinstalling batteries, connect the ground cables last and connect to negative terminal of batteries. The battery retainer should be in place and tightened snugly to prevent batteries from damage cause by vibration.

In the event the tractor is not being used for a long period of time, it is advisable to remove the batteries, have them fully charged and stored in a basement or some similar place where the temperature will be as low as possible, but above freezing.

DO NOT place batteries directly on the concrete floor during storage. Separate batteries from concrete floor with wood strips to prevent batteries from discharging.

CAUTION: When using a booster battery or auxiliary starting power as a starting aid, attach the cables as follows:

1. Attach the positive cable between the positive terminal of the discharged tractor battery and the positive terminal of the booster battery or auxiliary starting power.
2. Attach negative cable to negative terminal of the booster battery or auxiliary starting power. DO NOT CONNECT OTHER END OF NEGATIVE CABLE TO NEGATIVE TERMINAL OF DISCHARGED TRACTOR BATTERY.
3. Attach other end of negative cable to tractor frame or other good source of ground away from discharged batteries. This is a preventative measure to avoid a spark, which could cause a battery explosion.
4. Disconnect booster battery or auxiliary starting power cables in exact reverse order from steps above.

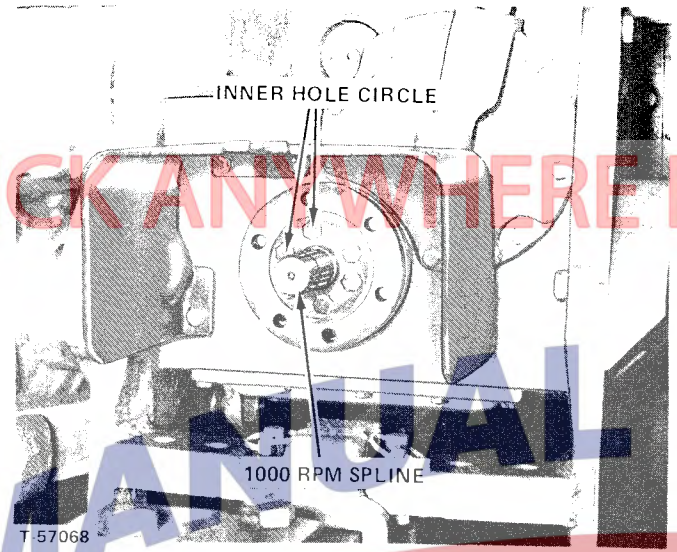

FIGURE 30

3. Align all 6 holes of the inner circle of the stub shaft with the tapped holes in the inner (1000 RPM flange. Insert the 6 capscrews. (Figure 30).

4. Rotate the stub shaft until one hole of the outer hole circle is aligned with a tapped hole of the outer (540 RPM) flange. Insert a 7/16" capscrew . Do not tighten it. Its purpose is to prevent the stub shaft from rotating while the 6 capscrews are torqued.

5. Torque the 6 capscrews in the inner circle to 75 ft.-lbs. (102 N · m).

6. Remove the capscrew from the outer hole circle.

7. Move drawbar to locate drawbar hitch hole 16" horizontally to rear of end of PTO shaft.

WARNING: Make sure the PTO shield is in place.

To Assemble the PTO Shaft for 540 PTO Speed Proceed as Follows:

1. Clean the stub shaft thoroughly. Clean the mating surfaces on the stub shaft and the outer flange (540 RPM).

2. Install the stub shaft with the 540 RPM spline out (Figure 31).

3. Align all 6 holes of the outer hole circle of the stub shaft with the 6 tapped holes in the outer (540 RPM) flange). Insert the 6 capscrews.

4. Rotate the stub shaft until one hole of the inner hole circle is aligned with a tapped hole of the inner (1000 RPM) flange. Insert a 7/16" capscrew. Do not tighten it. Its purpose is to prevent the stub shaft from rotating while the 6 capscrews are torqued.

5. Torque the 6 capscrews in the outer circle to 75 ft.-lbs. (102 N · m).

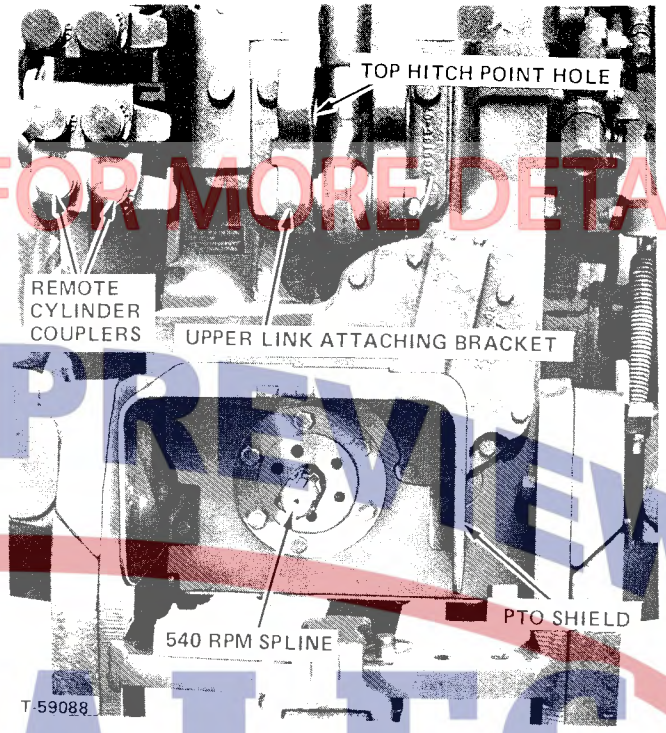

FIGURE 31

6. Remove the capscrew from the inner hole circle.

7. Move drawbar to locate drawbar hitch hole 14" (356 mm) horizontally to rear of end of PTO shaft.

WARNING: Make sure the PTO shield is in place.

NOTE: It is recommended that the top hitch point hole in the upper link attaching bracket be used for the upper link when operating fully mounted PTO driven equipment. This will provide the minimum change in drive line tilt when an implement is lifted, and the maximum clearance between the upper link and the dual speed PTO shield when implement is lowered. (Figure 31).

PTO OPERATING INSTRUCTIONS

1. When hitching to a 540 RPM power take-off implement, the tractor drawbar must be positioned with the hitch hole 14" (356 mm) horizontally to the rear of end of the PTO shaft. For a 1000 RPM implement the drawbar hitch hole must be 16" (406 mm) to rear of end of PTO shaft. Be sure that drawbar is positioned correctly for the particular speed used.

WARNING: NEVER ATTACH a 540 RPM implement when the tractor is set for 1000 RPM PTO operation.

2. Be sure the tractor engine is stopped before attempting to attach implement PTO front yoke to tractor PTO shaft. With engine stopped and PTO clutch lever in disengaged position the shaft can be turned by hand to align with spilines in yoke.