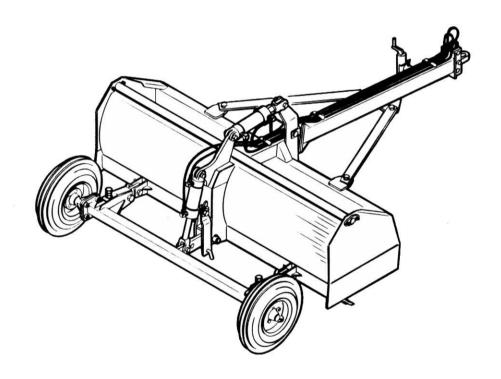


# LAND LEVELER 3050/3650

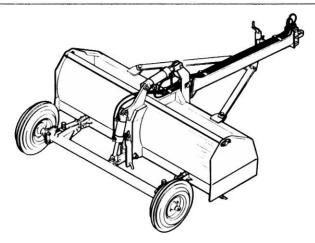


# ASSEMBLY MANUAL

142321 SEPT 90

farm implements

## INTRODUCTION



Follow the sequence of steps contained in this manual to assist in setting up machine. Use care and caution when handling components to prevent personal injury.



This Safety Alert Symbol identifies important Safety Messages. When you see this symbol, be alert to the possibility of personal injury and carefully read the message that follows.

"Right Hand" and "Left Hand" sides are determined by facing in the direction of forward travel.

This Manual contains both Imperial Units of measure (inches - in./feet - ft.) and SI Metric Units of measure (millimetres - mm/metres - m).

Before operating this machine, be sure to read and understand the OPERATOR'S MANUAL.

If you have any questions related to the assembly of this machine, please feel free to contact the manufacturer. Direct inquiries to:

#### DEGELMAN INDUSTRIES LTD.

P. O. Box 830 272 Industrial Drive Regina, Saskatchewan Canada S4P 3B1

Phone: (306) 543-4447 FAX: 543-2140

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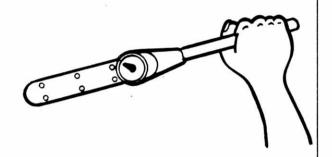
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## **BOLT TORQUE**

The table shown below gives the correct torque values for various bolts and cap screws. Tighten all bolts to the torque specified in chart unless otherwise noted.

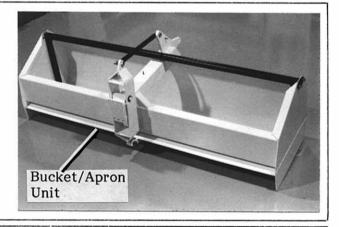
## IMPERIAL TORQUE SPECIFICATIONS

BOLT					BOLT TORQUE				
	DIAM	ETER		SAE 2		SAE 5		SAE 8	
		A	N.m	(1b-ft)	N.m	(lb-ft)	N.m	(lb-ft)	
	1/4	in.	8	[6]	12	[9]	16	[12]	
	5/16	in.	13	(10)	24	[18]	34	[25]	
	3/8	in.	27	[20]	41	(30)	51	(45)	
	7/16	in.	41	[30]	63	[50]	95	[70]	
	1/2	in.	61	[45]	101	[75]	149	[110]	
	9/16	in.	95	[70]	150	[110]	210	[155]	
	5/8	in.	128	(95)	210	[155]	290	[215]	
	3/4	in.	225	[185]	365	[270]	520	(385)	
	7/8	in.	230	[170]	590	(435)	840	[620]	
	1	in.	345	[255]	895	(660)	1250	(930)	

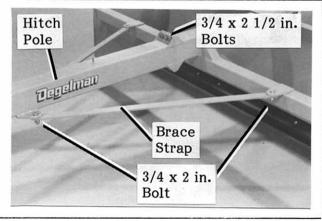




1. Locate bucket unit on a level surface and remove components from inside bucket.

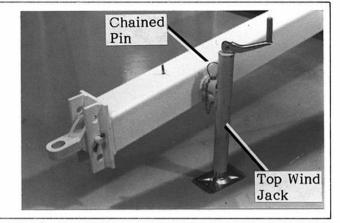


2. Mount hitch pole and brace straps to unit and secure with bolts, lockwashers, flatwashers and nuts shown.

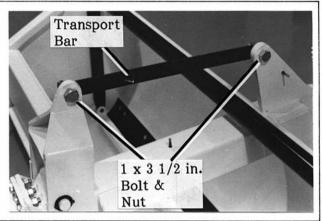


3. Mount the top wind jack onto hitch pole and secure with chained pin.

Crank jack handle to lower the pad to ground level.

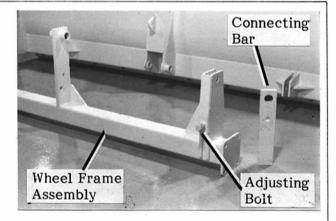


4. Remove and discard the transport bar (used for shipping purposes) and retain the bolts and nuts for use in the next step.



5. Position the wheel frame assembly at the back of machine in the manner shown and obtain both connecting bars and the two bushings shown.

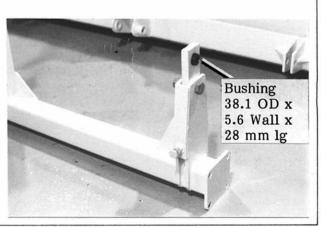
NOTE: Turn out the adjusting bolt on both sides to the maximum.



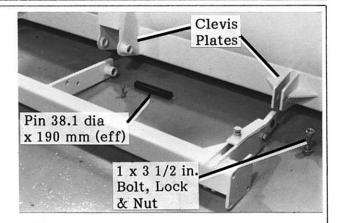
Install and secure the connecting bar between clevis plates using the bolts, nuts and lockwashers shown.

Locate bushings into position as shown.

Repeat on opposite side.

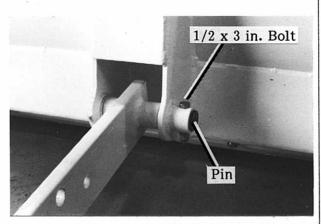


6. Lay the wheel frame assembly down and position between the clevis plates as illustrated.



Secure the centre location first using the pin, bolt, lockwasher and nut combination indicated.

Secure each outer location next using the bolt, lockwasher and nut as shown.



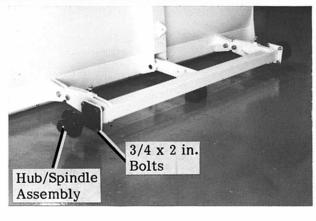
7. Mount a hub/spindle assembly to each side of wheel frame assembly using four bolts, lockwashers and nuts per side as shown.

NOTE: For 3650 (12 ft.) models, bolt the two extension frames at each end of wheel frames and then mount hub/spindle units.

Pump grease through grease fitting (back side of hub) until full.

Important: Clean out threaded holes in hub using a 9/16 in. UNF thread tap.

Repeat on opposite side.



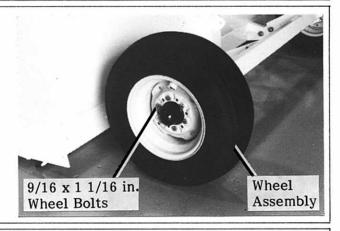


8. Inflate tires to 32 PSI (220 kPa).



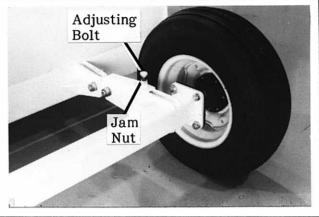
warning: Do not exceed recommended tire pressure. Use care and caution when inflating tires to prevent personal injury from blow-outs.

Mount tires to hubs (valve stem faces outward) using the wheel bolts shown. Torque bolts evenly to 90 ft. lbs.

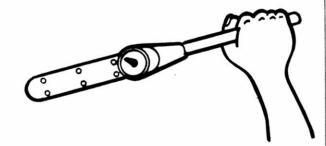


9. Turn down adjusting bolt on both sides until it makes contact with the connecting bar.

Secure this setting by tightening the jam nut.

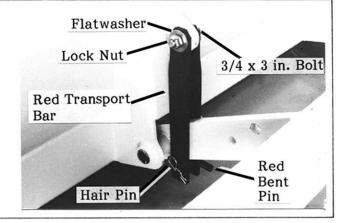


10. Tighten bolted connections assembled to this stage to torque values shown on Bolt Torque Chart on Page #1.



11. Assemble the red transport bar to lug using a bolt, two flatwashers and a lock nut combination as shown.

Install the red bent pin to the bottom end and secure with the hairpin shown.



12. The machine is now assembled and ready for installation of hydraulics.

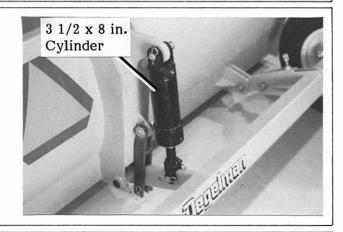
If the optional hydraulic kit was purchased, proceed to the next step.

If the customer is supplying the hydraulics, ensure the following recommendations are met and assemble hydraulics similarly as shown on the following pages.

- 1. The apron activating cylinder is to be a 2 1/2 x 8 in. or 3 x 8 in. (maximum).
- 2. The depth control cylinder is to be  $3 \frac{1}{2} \times 8$  in. (minimum)
- 3. The hoses are to be 2 wire braid construction 3/8 in. dia.

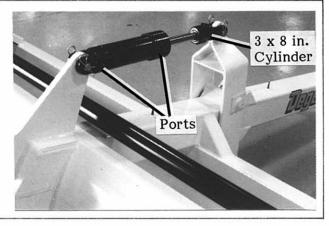
13. Mount the depth control cylinder to back of machine as shown.

NOTE: Face ports to the rear.



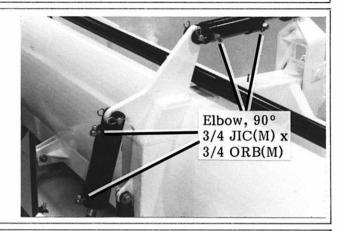
14. Mount the apron activating cylinder to the top of machine as shown.

NOTE: Face ports to the right.

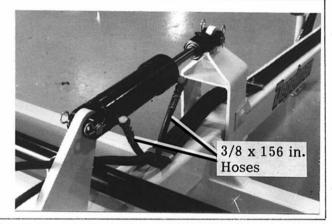


15. Install the four elbow fittings into the cylinder ports and face in direction shown.

NOTE: O-ring side of elbow fits into cylinder.

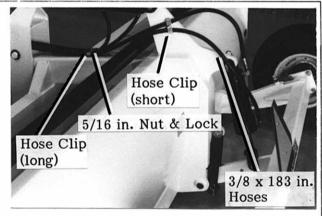


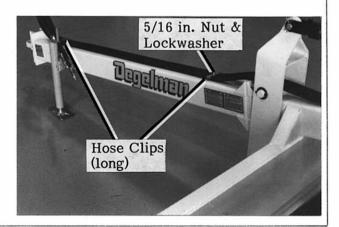
16. Install the appropriate hoses to fittings and route hoses along hitch pole as shown.



17. Install the hoses to fittings and route hoses similar to arrangement shown.

Secure hoses at threaded stud locations using the hose clips, lockwashers and nuts shown.

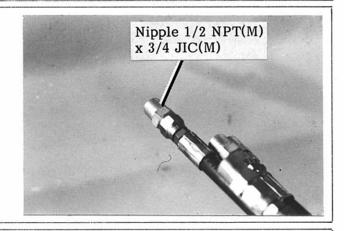




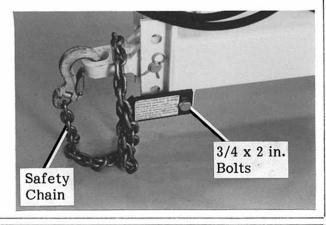
18. Install to the ends of all four hoses the nipple fittings indicated.

Install the appropriate quick couplers (not supplied) to match the tractor outlets.

Check to ensure all hydraulic connections have been tightened.



19. Install safety chain (if purchased) using the bolt, lockwasher and nut shown.



20. The machine is now fully assembled.

Check that all bolted connections have been properly torqued (refer to Bolt Torque Chart on Page #1).

Lubricate machine as outlined in the Service and Maintenance Section.



22. Read and understand the Operator's Manual before operating this machine.



# **NOTES**



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