SERVICE MANUAL

DuraSwath™ 425HB
DuraSwath™ 430HB
DuraSwath™ 436HB
DuraSwath™ 440HB

Draper Header

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NEW HOLLAND AGRICULTURE

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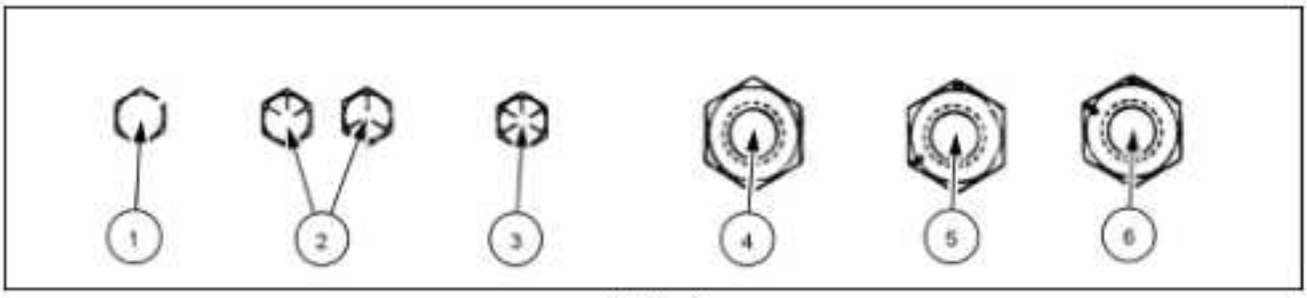
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Inch flanged hardware

Nominal size	SAE Grade 5 bolt and nut		SAE Grade 8 bolt and nut		Lock nut Grade F with Grade 5 bolt	Lock nut Grade G with Grade 8 bolt
	Unplated or plated Silver	Plated with ZnCr Gold	Unplated or plated Silver	Plated with ZnCr Gold		
1/4	9 N·m (80 lb in)	12 N·m (106 lb in)	13 N·m (115 lb in)	17 N·m (150 lb in)	8 N·m (71 lb in)	12 N·m (106 lb in)
5/16	19 N·m (168 lb in)	25 N·m (221 lb in)	26 N·m (230 lb in)	35 N·m (310 lb in)	17 N·m (150 lb in)	24 N·m (212 lb in)
3/8	33 N·m (25 lb ft)	44 N·m (33 lb ft)	47 N·m (35 lb ft)	63 N·m (46 lb ft)	30 N·m (22 lb ft)	43 N·m (32 lb ft)
7/16	53 N·m (39 lb ft)	71 N·m (52 lb ft)	75 N·m (55 lb ft)	100 N·m (74 lb ft)	48 N·m (35 lb ft)	68 N·m (50 lb ft)
1/2	81 N·m (60 lb ft)	108 N·m (80 lb ft)	115 N·m (85 lb ft)	153 N·m (113 lb ft)	74 N·m (55 lb ft)	104 N·m (77 lb ft)
9/16	117 N·m (86 lb ft)	156 N·m (115 lb ft)	165 N·m (122 lb ft)	221 N·m (163 lb ft)	106 N·m (78 lb ft)	157 N·m (116 lb ft)
5/8	162 N·m (119 lb ft)	216 N·m (159 lb ft)	228 N·m (168 lb ft)	304 N·m (225 lb ft)	147 N·m (108 lb ft)	207 N·m (153 lb ft)
3/4	287 N·m (212 lb ft)	383 N·m (282 lb ft)	405 N·m (299 lb ft)	541 N·m (399 lb ft)	261 N·m (193 lb ft)	369 N·m (272 lb ft)
7/8	462 N·m (341 lb ft)	617 N·m (455 lb ft)	653 N·m (482 lb ft)	871 N·m (642 lb ft)	421 N·m (311 lb ft)	594 N·m (438 lb ft)
1	693 N·m (512 lb ft)	925 N·m (682 lb ft)	979 N·m (722 lb ft)	1305 N·m (963 lb ft)	631 N·m (465 lb ft)	890 N·m (656 lb ft)

Identification

Inch bolts and free-spinning nuts



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Grade marking examples

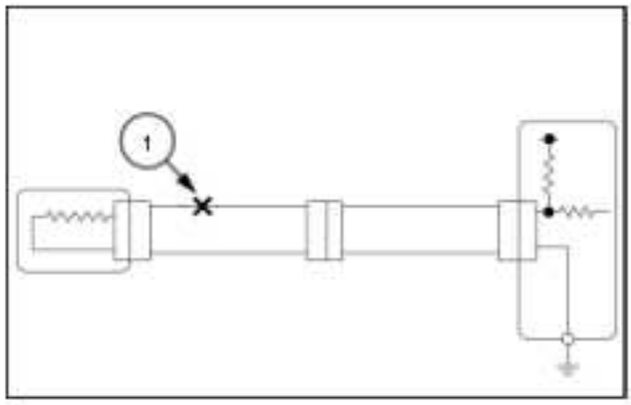
SAE grade identification			
1	Grade 2 - no marks	4	Grade 2 nut - no marks
2	Grade 5 - three marks	5	Grade 5 nut - marks **120 °** apart
3	Grade 8 - five marks	6	Grade 8 nut - marks **60 °** apart

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Electrical system - Electrical test - How to check for an open circuit (continuity / resistance method)

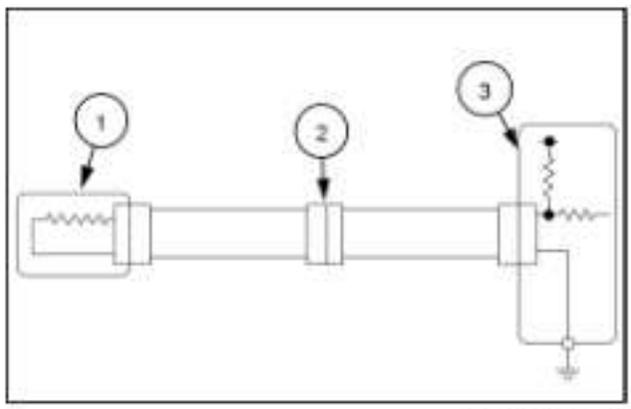
NOTE: *This method isolates the circuit completely.*

An electrical circuit with no continuity and/or high resistance is termed an open (incomplete) circuit.



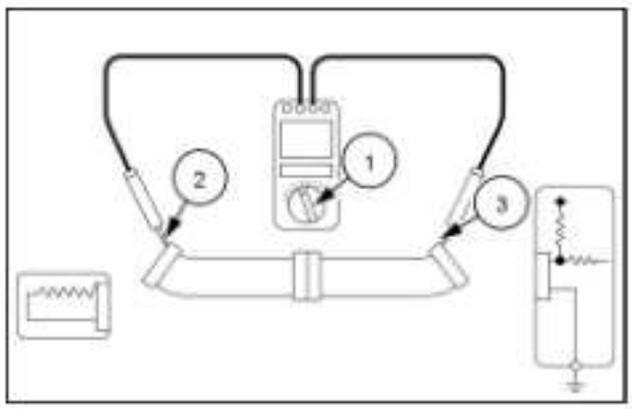
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1. Place the ignition (key) switch OFF.
2. Disconnect the electrical connections from the relevant component **(1)** and control module **(3)**. Any in-line connections **(2)** must stay connected.



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3. Set the function switch **(1)** on the digital multimeter to the continuity or resistance ohm (Ω) setting.
   - Connect one lead **(2)** of the multimeter to one end of the circuit.
   - Connect the other lead **(3)** of the multimeter to the other end of the circuit.



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Multimeter setting	Result	Other result
Resistance setting.	If the circuit is complete, there should be less than **1.0 Ω**.	If the reading is high, there is an open circuit and/or no continuity.
Continuity setting.	If the circuit is complete, there should be an audible sound.	If there is no sound, there is an open circuit and/or no continuity.

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Attachment/Header reel - Troubleshooting

Problem	Possible Cause	Correction
Reel will not hold height.	Leaking hose or fitting.	Repair or replace.
	Valve in windrower leaking.	See Windrower's Repair Manual.
Reel will not hold level.	Leaking hose or fitting.	Repair or replace.
	Air in system.	Bleed slave cylinder.
	Faulty master cylinder.	Repair or replace.
	Leaking cylinder seal.	Replace seal.
Reel raises or lowers erratically and/or reel will not raise.	Reel cylinders binding.	Replace cylinder.
	Arms bent or binding.	Repair or replace.
	Low hydraulic oil.	See Windrower's Repair Manual.
	Hydraulic couplers don't match.	Install correct couplers.
	Hydraulic couplers not engaged.	Re-couple properly.
	Faulty hydraulics.	See Windrower's Repair Manual.
Reel raises slowly.	Elbow in master cylinder too tight.	Loosen fitting.
Damage to center of reel.	Reel set too low.	Adjust height.
Reel hitting at end.	Reel not centered.	Adjust centering.
Reel will not turn or turns erratically.	Flow control set too low.	Advance setting.
	Faulty relief valve.	Clean or replace.
	Seized bearing(s).	Replace bearing(s).
	Faulty drive motor.	Replace motor.
	Reel tied down.	Release reel.
	Hydraulic couplers not engaged.	Re-couple properly.
Reel speed cannot be adjusted. - Header driven reel.	Poor connection in electrical wires or cable.	Check connections and cable.
	Defective reel speed motor.	Replace motor.
	Faulty flow control.	Replace flow control valve.

Attachment/Header reel - Troubleshooting - Single reel

Problem	Possible Cause	Correction
Reel does not raise level.	Air in system.	Bleed slave cylinder.
Right side goes up slow.	Air in system.	Bleed slave cylinder.
	Restricted hydraulic hose.	Replace hose.
Right side will not raise.	Leaking hose, fitting, or cylinder.	Repair or replace.
Left side goes up slow.	Faulty piston seal.	Replace seals.
Left side will not raise.	Faulty cylinder.	Replace cylinder.
	Faulty bypass port.	Replace cylinder.
	Faulty piston seal.	Replace seals.

Attachment/Header reel - Troubleshooting - Double reel

Problem	Possible Cause	Correction
Reel does not raise level.	Air in system.	Bleed slave cylinder.
Right side cylinder does not fully extend.	Air in system.	Bleed slave cylinder.
	Lift cylinders out of phase.	Install spacer inside center master cylinder.
Ends lift before center.	Center master cylinder O-ring damaged.	Replace seal.
Right-hand reel goes out of phase.	Air in system.	Bleed slave cylinder.
	System loses residual pressure.	Install spacer inside center master cylinder.

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