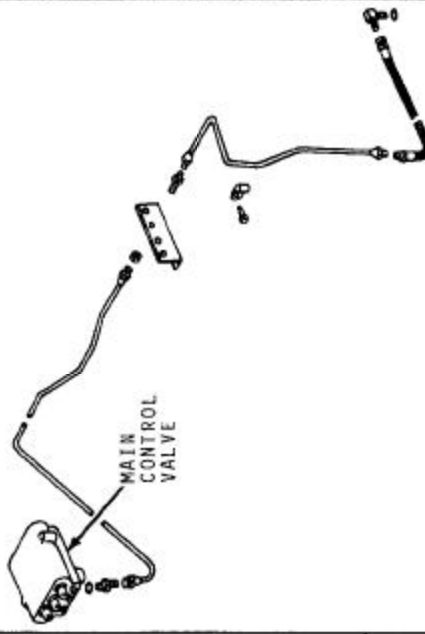



POSI-TORQ GROUND DRIVE WILL NOT MAINTAIN A CONSTANT SPEED

STEP	INSTRUCTIONS	LOCATION	RESULT
<p>1</p>	<p>Shut off engine and inspect for external oil leakage around connections and components.</p>	 <p>Diagram showing the hydraulic system components, including the MAIN CONTROL VALVE, hoses, and connections.</p>	<p>No leakage noted . . .</p> <p style="text-align: right;">GO TO STEP 3</p> <p>Leakage noted . . .</p> <p style="text-align: right;">GO TO STEP 2</p>
<p>2</p>	<p>Repair oil leaks.</p>		<p>Drive will maintain a constant speed . . .</p> <p style="text-align: right;">END OF TEST</p> <p>Drive will not maintain a constant speed . . .</p> <p style="text-align: right;">GO TO STEP 3</p>

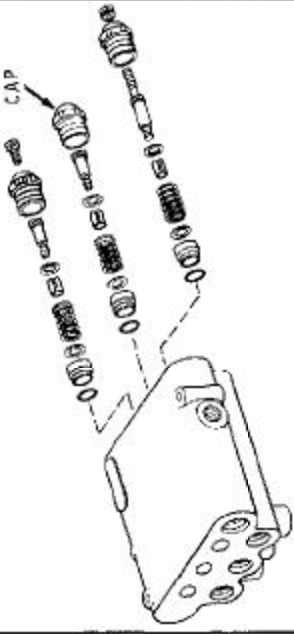
H29453

POSI-TORQ GROUND DRIVE WILL NOT MAINTAIN A CONSTANT SPEED — Continued

STEP	INSTRUCTIONS	LOCATION	RESULT
<p>3</p>	<p>Remove cotter pin and drilled pin to disconnect linkage at spool in main control valve. Push in on spool and then release. Spool should return to neutral position with end of spool approximately 1-inch (25 mm) from the valve casting. Pull out on spool and then release. Spool should again return to the same neutral position.</p>		<p>Spool returns to correct neutral position . . .</p> <p style="text-align: right;">GO TO STEP 4</p> <p>Spool does not return to correct neutral position . . .</p> <p style="text-align: right;">GO TO STEP 7</p>
<p>4</p>	<p>Connect linkage to spool and use lever in cab to move spool in both directions. Repeat procedure with tilt steering column in all four positions.</p>		<p>Spool returns to correct neutral position . . .</p> <p style="text-align: right;">GO TO STEP 5</p> <p>Spool does not return to correct neutral position — refer to ADJUSTING MAIN CONTROL VALVE LINKAGE AND SPOOLS, page 70-15-14. If adjusting linkage does not correct spool to neutral position . . .</p> <p style="text-align: right;">GO TO STEP 7</p>


H30532

POSI-TORQUE GROUND DRIVE WILL NOT MAINTAIN A CONSTANT SPEED—Continued

STEP	INSTRUCTIONS	LOCATION	RESULT
<p>5</p>	<p>Inspect cap in main control valve to determine if it has backed out.</p>	 <p>The diagram shows a perspective view of a hydraulic control valve assembly. A dashed line points from the word 'CAP' to a specific port on the top surface of the valve body.</p>	<p>Cap has not backed out... GO TO STEP 1</p> <p>Cap has backed out... GO TO STEP 6</p>
<p>6</p>	<p>Install cap and tighten to 35 ft-lbs (45 Nm) torque.</p>		<p>Drive will maintain a constant speed... END OF TEST</p> <p>Drive will not maintain a constant speed... GO TO STEP 3</p>
<p>7</p>	<p>Remove cap and inspect centering spring. Replace centering spring if necessary. Install cap and tighten to 35 ft-lbs (45 Nm) torque.</p>		<p>Drive will maintain a constant speed... END OF TEST</p> <p>Drive will not maintain a constant speed... GO TO STEP 3</p>

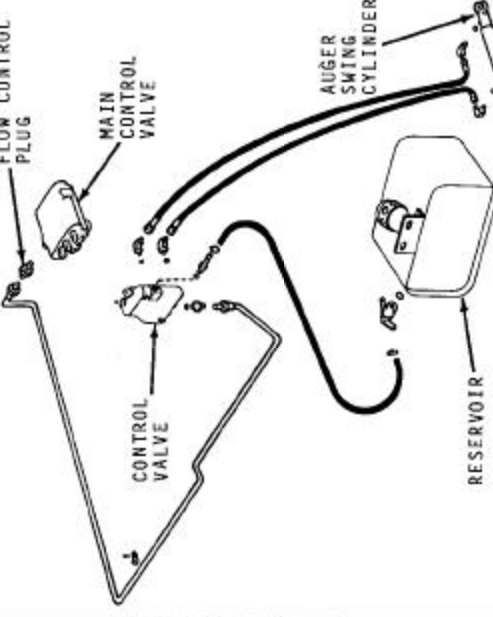
H29455

POSI-TORQ GROUND DRIVE WILL NOT MAINTAIN A CONSTANT SPEED – Continued

STEP	INSTRUCTIONS	LOCATION	RESULT
8	Clean orifice in main control valve.		<p>Drive will maintain a constant speed ...</p> <p style="text-align: center;">END OF TEST</p> <p>Drive will not maintain a constant speed ...</p> <p style="text-align: center;">GO TO STEP 9</p>
9	Refer to Section 70, Group 15 and repair main control valve.		<p>Drive will maintain a constant speed ...</p> <p style="text-align: center;">END OF TEST</p> <p>Drive will not maintain a constant speed ...</p> <p style="text-align: center;">GO TO STEP 10</p>
10	Refer to Section 50 Group 35 and repair upper Posi-Torq unit.		<p style="text-align: center;">END OF TEST</p>

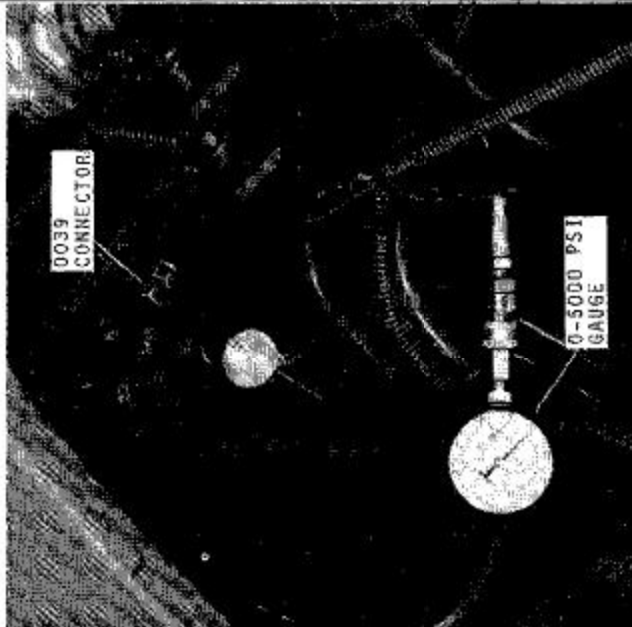

H30533

UNLOADING AUGER WILL NOT SWING IN OR OUT

STEP	INSTRUCTIONS	LOCATION	RESULT
<p>1</p>	<p>Shut off engine and inspect for external oil leakage around connections and components.</p>	 <p>The diagram illustrates the hydraulic circuit for the auger swing cylinder. It includes a reservoir at the bottom right, a control valve, a main control valve, a flow control plug, and the auger swing cylinder itself. Lines represent the hydraulic hoses connecting these components.</p>	<p>No leakage noted ...</p> <p>Leakage noted ...</p> <p>GO TO STEP 3</p> <p>GO TO STEP 2</p>
<p>2</p>	<p>Refer to Section 70, Groups 15 and 20 and repair oil leaks.</p>		<p>Auger swings ...</p> <p>Auger will not swing ...</p> <p>END OF TEST</p> <p>GO TO STEP 3</p>

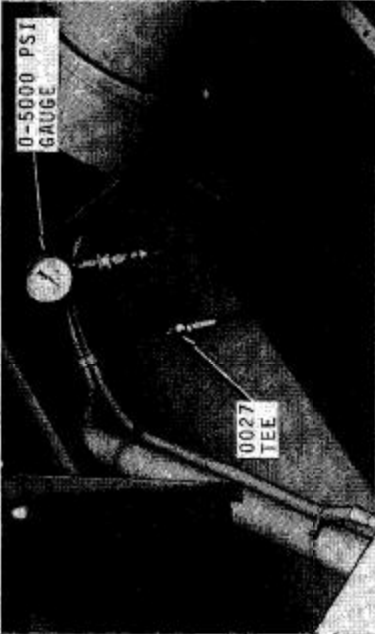
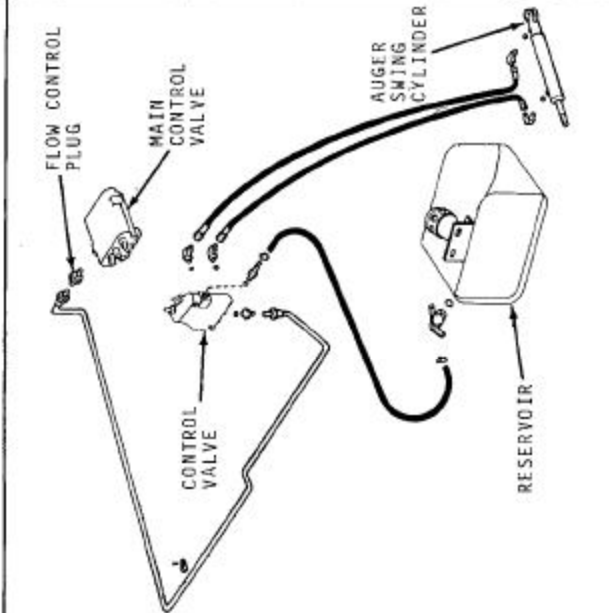
H31328

UNLOADING AUGER WILL NOT SWING IN OR OUT – Continued

STEP	INSTRUCTIONS	LOCATION	RESULT
<p>3</p> <p>Install 0-5000 psi (0-400 bar) pressure gauge on main control valve. With engine at fast idle, swing auger out. Compare reading on gauge with main system relief pressure.</p>		<p>Pressure is to specs... GO TO STEP 5</p> <p>Pressure is not to specs... GO TO STEP 4</p>	
<p>4</p> <p>Remove and inspect flow control plug in main control valve. Clean or replace plug as necessary.</p>		<p>Auger swings... END OF TEST</p> <p>Auger will not swing... GO TO STEP 5</p>	

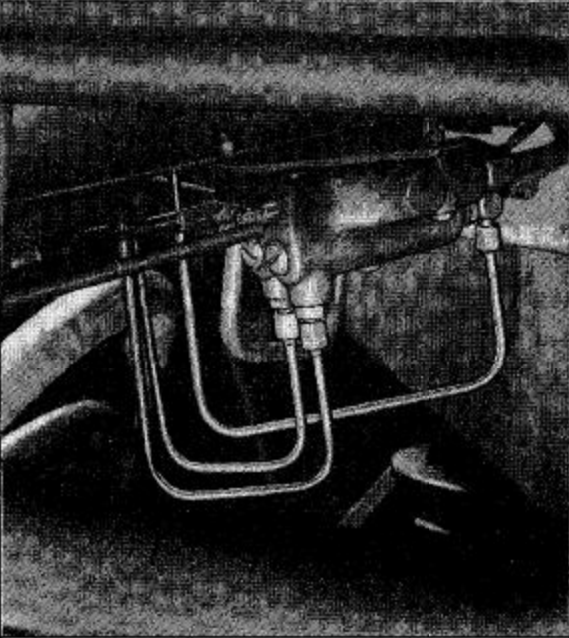

H30535

UNLOADING AUGER WILL NOT SWING IN OR OUT – Continued

STEP	INSTRUCTIONS	LOCATIONS	RESULT
5	<p>Install 0-5000 psi (0-400 bar) pressure gauge at rod end port in the swing cylinder. Pull up on auger swing control.</p> <p>IMPORTANT: Do not push down on control lever with gauge connected or an incorrect gauge reading will result. Compare reading on gauge with main system relief pressure.</p>		<p>Pressure is to specs... GO TO STEP 8</p> <p>Pressure is not to specs... GO TO STEP 6</p>
6	<p>Check hydraulic hoses for restrictions and clean or replace as necessary.</p>		<p>Pressure is to spec... GO TO STEP 5</p> <p>END OF TEST</p> <p>Pressure is not to spec... GO TO STEP 7</p>

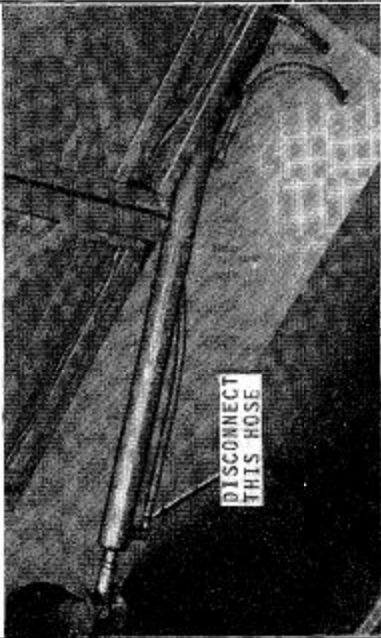
H30536

UNLOADING AUGER WILL NOT SWING IN OR OUT – Continued

STEP	INSTRUCTIONS	LOCATION	RESULT
<p>7</p>	<p>Refer to Section 70, Group 15 and repair auger swing control valve.</p>		<p>Auger swings ...</p> <p style="text-align: right;">END OF TEST</p> <p>Auger will not swing ...</p> <p style="text-align: right;">GO TO STEP 8</p>
<p>8</p>	<p>Inspect and clean if necessary, the orifices in the swing cylinder barrel.</p>		<p>Auger swings ...</p> <p style="text-align: right;">END OF TEST</p> <p>Auger will not swing ...</p> <p style="text-align: right;">GO TO STEP 9</p>

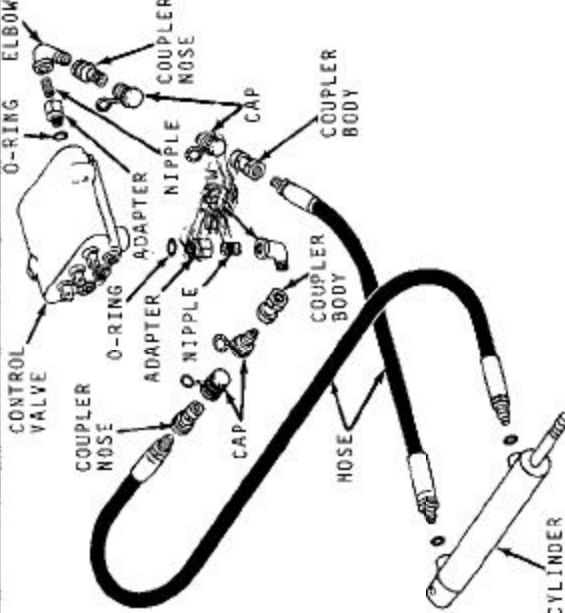
H31329

UNLOADING AUGER WILL NOT SWING IN OR OUT – Continued

STEP	INSTRUCTIONS	LOCATION	RESULT
<p>9</p>	<p>Disconnect hydraulic hose at rod end of swing cylinder. Start engine and push DOWN on control knob. IMPORTANT: Do not pull up on knob or unnecessary oil spillage will result.</p>		<p>Steady stream of oil flows ...</p> <p style="text-align: right;">GO TO STEP 10</p> <p>An occasional drop of oil flows from cylinder port ...</p> <p style="text-align: right;">GO TO STEP 11</p>
<p>10</p>	<p>Refer to Section 70, Group 20 and repair swing cylinder.</p>		<p>Auger swings ...</p> <p style="text-align: right;">END OF TEST</p> <p>Auger will not swing ...</p> <p style="text-align: right;">GO TO STEP 11</p>
<p>11</p>	<p>Refer to Section 70, Group 15 and repair main control valve.</p>		<p style="text-align: right;">END OF TEST</p>

H30538

**VARIABLE SPEED FEEDER HOUSE WILL NOT MAINTAIN A CONSTANT SPEED
SIDEHILL 6620 ONLY**

STEP	INSTRUCTIONS	LOCATION	RESULT
<p>1</p>	<p>Shut off engine and inspect for external oil leakage around line connections and components.</p>	 <p>The diagram shows a hydraulic hose assembly. On the left, a control valve is connected to a coupler nose. This is followed by an adapter, a nipple, and another coupler nose. A cap is shown covering a connection. The main hose is connected to a coupler body, which is further connected to another coupler body. The hose ends in a cylinder. Labels include: CONTROL VALVE, COUPLER NOSE, ADAPTER, O-RING, NIPPLE, CAP, HOSE, COUPLER BODY, and CYLINDER.</p>	<p>No leakage noted ... GO TO STEP 3</p> <p>Leakage noted ... GO TO STEP 2</p>
<p>2</p>	<p>Refer to Section 70, Group 20 and repair oil leaks.</p>		<p>Feeder house maintains a constant speed ... END OF TEST</p> <p>Feeder house will not maintain a constant speed ... GO TO STEP 3</p>


H30539

**VARIABLE SPEED FEEDER HOUSE WILL NOT MAINTAIN A CONSTANT SPEED — Continued
SIDEHILL 6620 ONLY**

STEP	INSTRUCTIONS	LOCATION	RESULT
3	<p>To check cylinder seals, fully retract cylinder by decreasing feeder house speed. Shut off engine and disconnect variable speed feeder house hydraulic line with the female quick coupler. Start engine and pull control lever back slightly.</p> <p>IMPORTANT: Do not move lever forward or unnecessary oil spillage will result.</p>		<p>Oil does not flow from hose ... GO TO STEP 5</p> <p>Oil flows from hose ... GO TO STEP 4</p>
4	<p>Refer to Section 70, Group 20 and repair cylinder.</p>		<p>Feeder house maintains a constant speed ... END OF TEST</p> <p>Feeder house will not maintain a constant speed ... GO TO STEP 5</p>


H30540

VARIABLE SPEED FEEDER HOUSE WILL NOT MAINTAIN A CONSTANT SPEED – Continued
SIDEHILL 6620 ONLY

STEP	INSTRUCTIONS	LOCATION	RESULT
5	<p>Connect hose disconnected in Step 3 and install 0-5000 psi (0-400 bar) pressure gauge on main control valve. With engine at fast idle, move control lever in both directions. Compare reading on gauge with main system relief pressure.</p>		<p>Pressure is to specs ...</p> <p style="text-align: right;">GO TO STEP 11</p> <p>Pressure is not to specs ...</p> <p style="text-align: right;">GO TO STEP 6</p>


H30541

**VARIABLE SPEED FEEDER HOUSE WILL NOT MAINTAIN A CONSTANT SPEED — Continued
SIDEHILL 6620 ONLY**

STEP	INSTRUCTIONS	LOCATION	RESULT
6	<p>Remove cotter pin and drilled pin to disconnect linkage at spool in main control valve. Push in on spool and then release. Spool should return to neutral position with end of spool approximately 1-inch (25 mm) from the valve casting. Pull out on spool and then release. Spool should again return to the same neutral position.</p>		<p>Spool returns to correct neutral position ...</p> <p style="text-align: right;">GO TO STEP 7</p> <p>Spool does not return to correct neutral position ...</p> <p style="text-align: right;">GO TO STEP 10</p>
7	<p>Connect linkage to spool and use lever in cab to move spool in both directions. Repeat procedure with tilt steering column in all four positions.</p>		<p>Spool returns to correct neutral position ...</p> <p style="text-align: right;">GO TO STEP 11</p> <p>Spool does not return to correct neutral position — refer to ADJUSTING MAIN CONTROL VALVE LINKAGE AND SPOOLS, page 70-15-4. If adjusting linkage does not correct spool to neutral position ...</p> <p style="text-align: right;">GO TO STEP 10</p>


H30542

VARIABLE SPEED FEEDER HOUSE WILL NOT MAINTAIN A CONSTANT SPEED — Continued
SIDEHILL 6620 ONLY

STEP	INSTRUCTIONS	LOCATION	RESULT
8	Inspect cap in main control valve to determine if it has backed out.		<p>Cap has not backed out . . .</p> <p>GO TO STEP 10</p> <p>Cap has backed out . . .</p> <p>GO TO STEP 9</p>
9	Install cap and tighten to 35 ft-lbs (45 Nm) torque.		GO TO STEP 7
10	Remove cap and inspect centering spring. Replace centering spring if necessary. Install cap and tighten to 35 ft-lbs (45 Nm) torque. Repeat step 6 and refer to the right for further steps.		<p>Pressure is to spec . . .</p> <p>END OF TEST</p> <p>Pressure is not to spec . . .</p> <p>GO TO STEP 12</p>

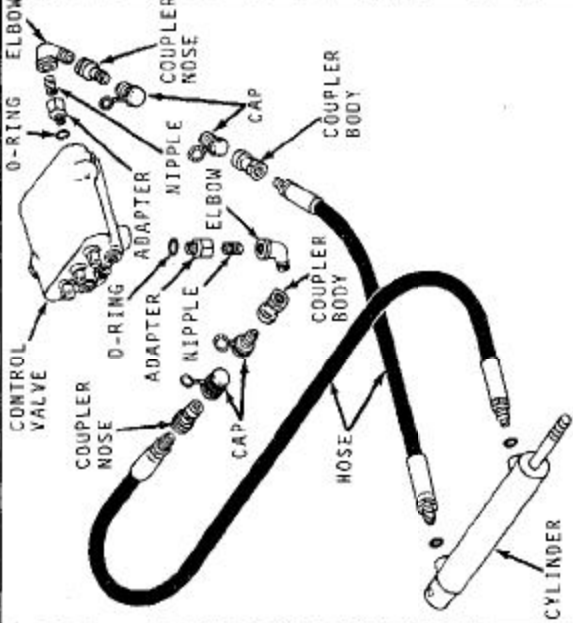
H30543

VARIABLE SPEED FEEDER HOUSE WILL NOT MAINTAIN A CONSTANT SPEED – Continued
SIDEHILL 6620 ONLY

STEP	INSTRUCTIONS	LOCATION	RESULT
11	Clean orifice in main control valve.	 <p>ORIFICE</p>	<p>Feeder house maintains a constant speed . . .</p> <p>Feeder house will not maintain a constant speed . . .</p> <p>END OF TEST</p> <p>GO TO STEP 12</p>
12	Refer to Section 70, Group 15 and repair main control valve.		END OF TEST

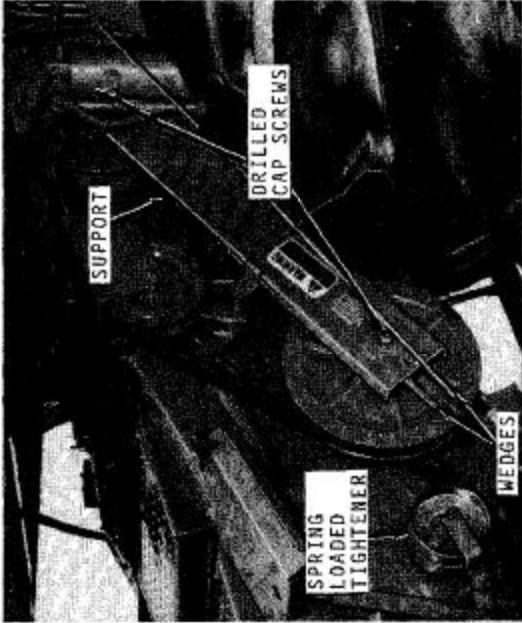
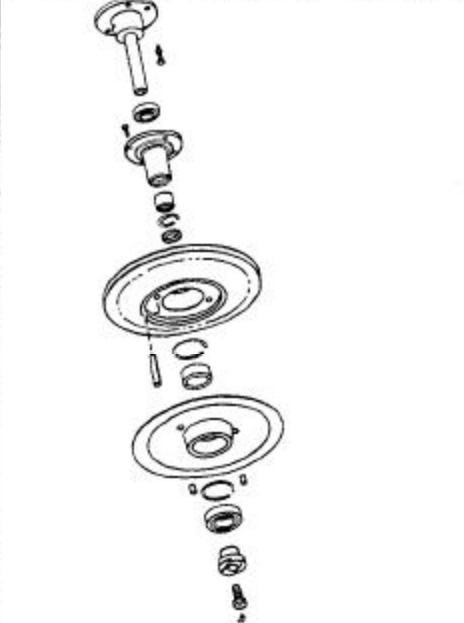
H30544

**VARIABLE SPEED FEEDER HOUSE WILL NOT CHANGE SPEED
SIDEHILL 6620 ONLY**

STEP	INSTRUCTIONS	LOCATION	RESULT
<p>1</p>	<p>Shut off engine and inspect for external oil leakage around line connections and components.</p>		<p>No leakage noted ... GO TO STEP 3</p> <p>Leakage noted ... GO TO STEP 2</p>
<p>2</p>	<p>Refer to Section 70, Group 20 and repair oil leaks.</p>		<p>Feeder house will change speed ... END OF TEST</p> <p>Feeder house will not change speed ... GO TO STEP 3</p>

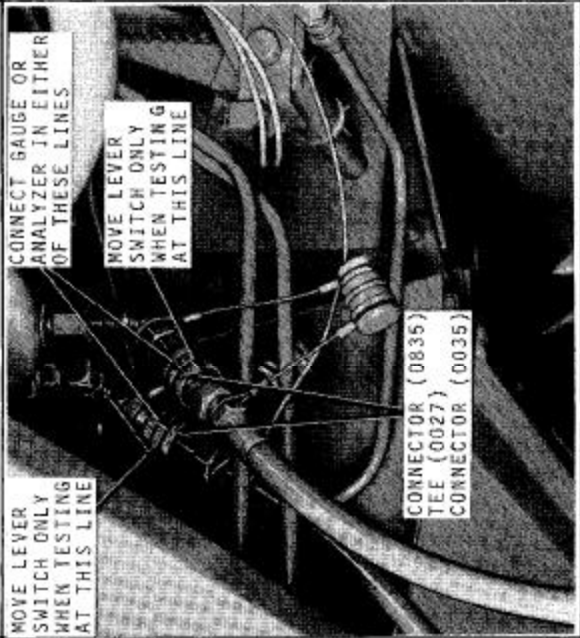
H30545

VARIABLE SPEED FEEDER HOUSE WILL NOT CHANGE SPEED — Continued
SIDEHILL 6620 ONLY

STEP	INSTRUCTIONS	LOCATION	RESULT
<p>3</p>	<p>Remove lower drive belts from spring loaded tightener. Remove two drilled cap screws and lift off support with tubes, cylinder, and hoses. Disengage feeder house with electric clutch. Start engine and activate variable speed feeder house cylinder. Cylinder should move wedges back and forth.</p>		<p>Wedges move back and forth ...</p> <p>Wedges will not move back and forth ...</p> <p>GO TO STEP 4</p> <p>GO TO STEP 5</p>
<p>4</p>	<p>Inspect countershaft and related parts for binding and repair. Refer to Section 110.</p>		<p>Feeder house will change speed ...</p> <p>Feeder house will not change speed ...</p> <p>END OF TEST</p> <p>GO TO STEP 5</p>

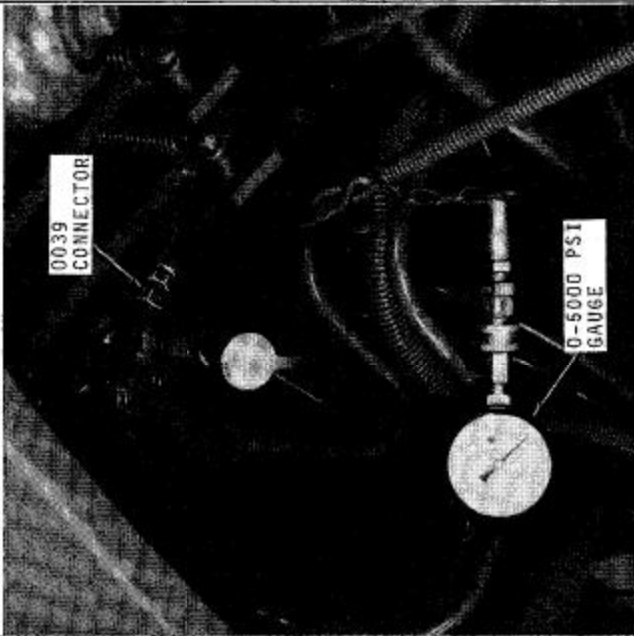
H30546

VARIABLE SPEED FEEDER HOUSE WILL NOT CHANGE SPEED – Continued
SIDEHILL 6620 ONLY

STEP	INSTRUCTIONS	LOCATION	RESULT
<p>5</p>	<p>Install 0-5000 psi (0-400 bar) pressure gauge at coupler for hydraulic hoses. With engine at fast idle, move control lever in correct direction.</p> <p>IMPORTANT: When checking feeder house variable speed control circuit, move lever in one direction only. If test equipment is connected to line at head end of hydraulic cylinder, move lever forward only. If test equipment is connected to line at rod end of hydraulic cylinder, move lever rearward only. Do NOT move lever in opposite direction or zero pressure will be indicated. Compare reading on gauge with main system relief pressure.</p>		<p>Pressure is to specs ... GO TO STEP 6</p> <p>Pressure is not to specs ... GO TO STEP 8</p>
<p>6</p>	<p>Fully retract cylinder by decreasing feeder house speed. Disconnect variable speed feeder house hydraulic line with the female quick coupler. Pull control lever back slightly. Do not push lever forward or oil spillage will result. If cylinder cannot be retracted, remove hose and allow oil to drain from cylinder.</p>		<p>Oil does not flow from hose ... GO TO STEP 8</p> <p>Oil flows from hose ... GO TO STEP 7</p>


H30547

**VARIABLE SPEED FEEDER HOUSE WILL NOT CHANGE SPEED – Continued
SIDEHILL 6620 ONLY**

STEP	INSTRUCTIONS	LOCATION	RESULT
7	Refer to Section 70, Group 20 and repair cylinder.		<div data-bbox="516 212 597 317" style="border: 1px solid black; padding: 2px; display: inline-block;">END OF TEST</div>
8	Connect hose disconnected in Step 6 and install 0-5000 psi (0-400 bar) pressure gauge on main control valve. With engine at fast idle, move control lever in both directions. Compare reading on gauge with main system relief pressure.		<p>Pressure is to specs ...</p> <div data-bbox="675 212 756 317" style="border: 1px solid black; padding: 2px; display: inline-block;">GO TO STEP 16</div> <p>Pressure is not to specs ...</p> <div data-bbox="837 212 919 317" style="border: 1px solid black; padding: 2px; display: inline-block;">GO TO STEP 9</div>

H30548

**VARIABLE SPEED FEEDER HOUSE WILL NOT CHANGE SPEED – Continued
SIDEHILL 6620 ONLY**

STEP	INSTRUCTIONS	LOCATION	RESULT
9	Remove cotter pin and drilled pin to disconnect linkage at spool in main control valve. Push in on spool and then release. Spool should return to neutral position with end of spool approximately 1-inch (25 mm) from the valve casting. Pull out on spool and then release. Spool should again return to the same neutral position.		<p>Spool returns to correct neutral position . . .</p> <p style="text-align: right;">GO TO STEP 10</p> <p>Spool does not return to correct neutral position . . .</p> <p style="text-align: right;">GO TO STEP 11</p>
10	Connect linkage to spool and use lever in cab to move spool in both directions. Repeat procedure with tilt steering column in all four positions.		<p>Spool returns to correct neutral position . . .</p> <p style="text-align: right;">GO TO STEP 11</p> <p>Spool does not return to correct neutral position – refer to adjusting main control valve linkage and spools, page 70-15-4. If adjusting linkage does not correct spool to neutral position . . .</p> <p style="text-align: right;">GO TO STEP 13</p>

H31330