

DUMP CYLINDER CHARGE PUMP PRESSURE TEST

The following instructions are for testing the charge pump's output pressure of both Eaton and (Hydregear July 2023 / S/N:1P0701~) pumps. The charge pump's oil output is utilized to operate the tub's hydraulic cylinder in lifting and lowering the tub. The charge pump pressure is checked at the directional/dump valve.

IMPORTANT: Prior to testing the hydraulic system, ensure the engine is running at the proper speed and is at operating temperature.

Buggy Specifications

- Engine Maximum Speed (3,600 RPM)
- Charge Pump – Pressure Range (1,000~1,150 PSI)
- Hydraulic oil - Operating Temperature (100° F)

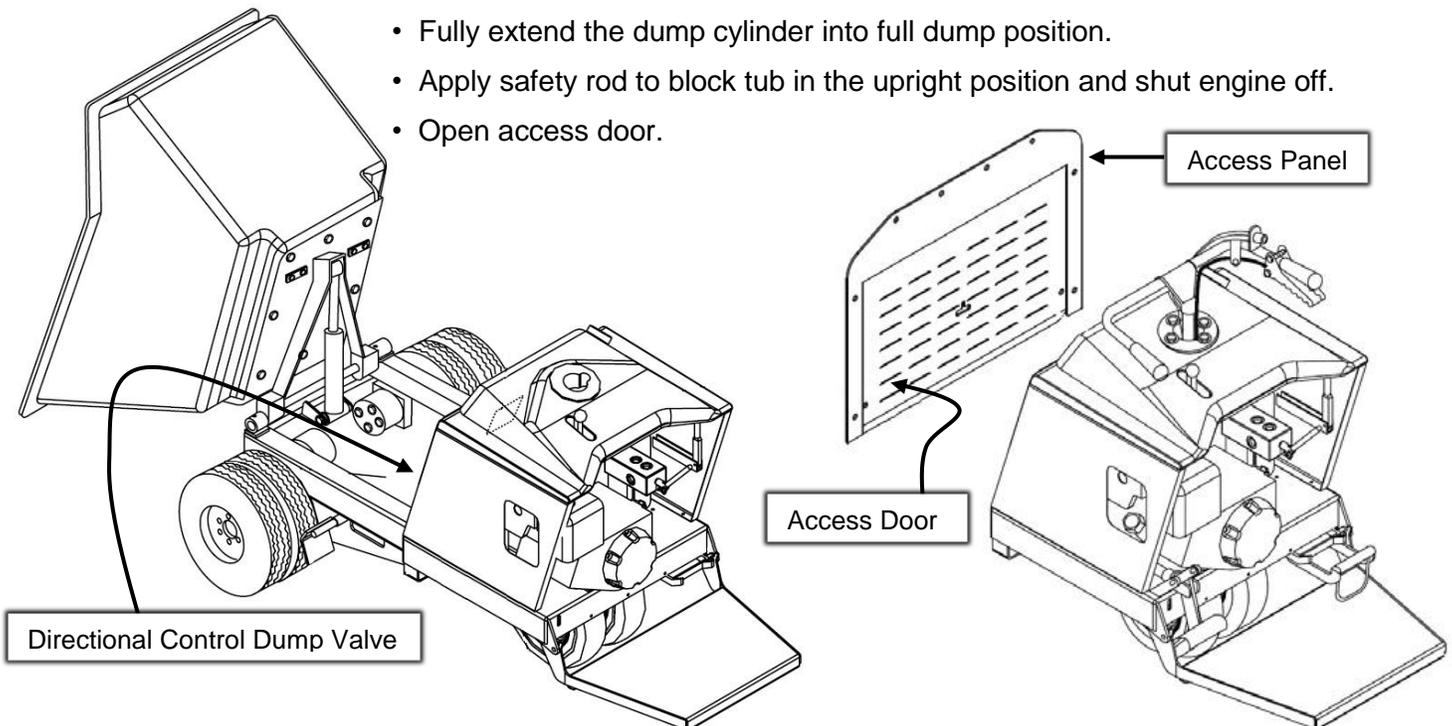


WARNING: The following should only be done by qualified experienced service technicians. For your safety and the safety of others carefully read, understand and observe all instructions.

DIRECTIONAL CONTROL DUMP VALVE LOCATION

The valve is mounted on the chassis and is located behind the left panel. To access the valve you will need to open access/service panel.

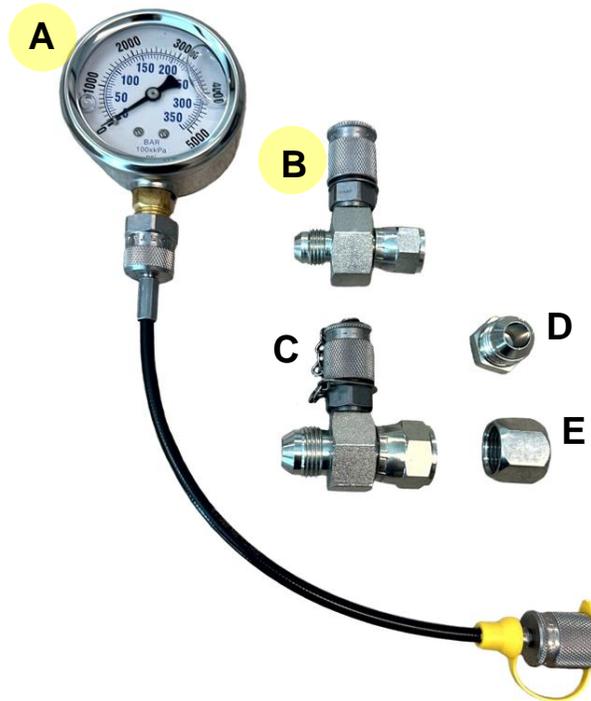
- Position buggy on a flat surface, apply parking brake, start engine.
- Fully extend the dump cylinder into full dump position.
- Apply safety rod to block tub in the upright position and shut engine off.
- Open access door.



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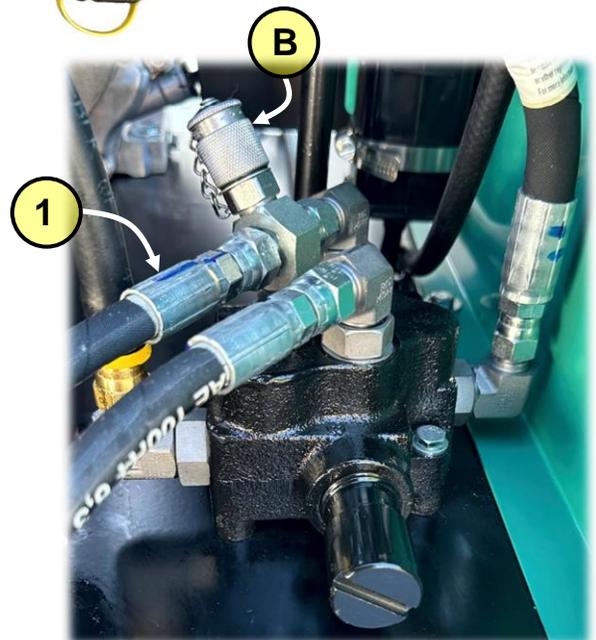
For convenience the pressure test kit part number MQ34723 is available containing the hardware needed to perform this dump cylinder charge pressure test. For this test, the following items A & B will be needed from the kit. Following are instruction on test hardware installation and test procedure.

Pressure Test Kit part #MQ34723



Installing Test Port Adaptor "B"

- 1) Disconnect hydraulic hose "1" from port # of the directional control/dump valve.
- 2) Install test port adaptor "B" to 90° fitting that hose "1" was disconnected from. Ensure the test port is in the upward position easily accessible for connecting the pressure test gauge "A" connector.
- 3) Connect hose "1" onto the end of test port adaptor "B".



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The following should be done with extreme caution as high Pressure hydraulic oil can spray during this test.

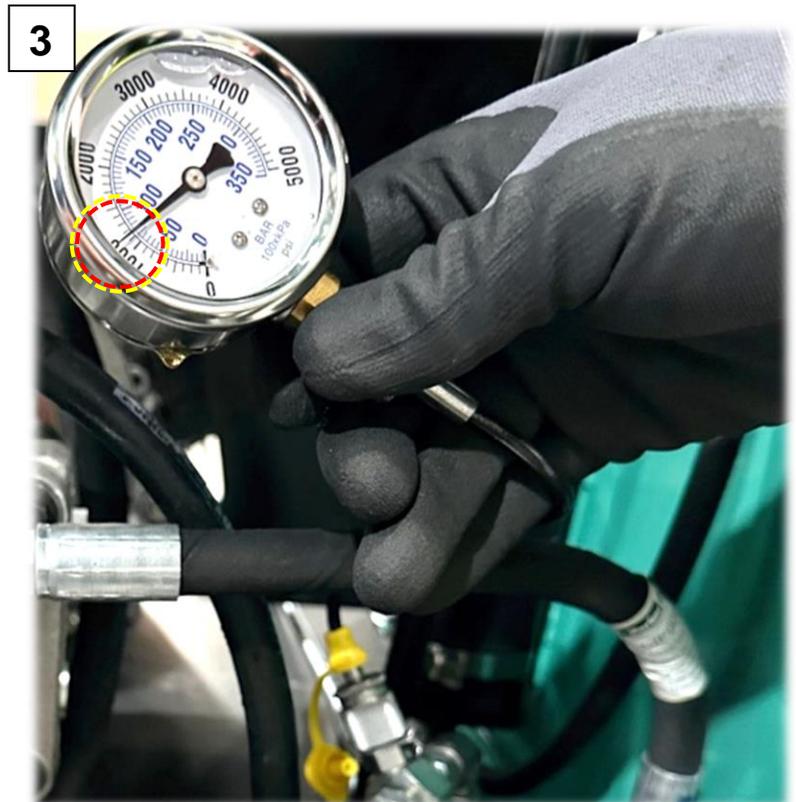


Pressure Test Procedure

REMINDER: Ensure the engine is running at the proper speed and at operating temperature.

• ENGINE MAXIMUM SPEED SPECIFICATION • 3,600 RPM •

- 1) Start and run the engine and inspect for any oil leaks that may be present at test area before testing, stop and start the engine as needed to correct any visible leak(s).
- 2) Start and run the engine at full speed for about 10+ minutes to bring the hydraulic oil to operating temperature of 100° F.
- 3) Remove protector cap from the test port adaptor and connect the pressure gauge “A” from the kit onto the test port. Ref. Fig. 1.
- 4) Push the dump control lever to the dump position for about 1~2 seconds to register the maximum PSI reading on the gauge. • Maximum pressure should be set to 1,000~1,150 PSI •. Ref. Fig. 2 & 3



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RELIEF VALVE ADJUSTMENT PROCEDURE

Locate the relief valve on the dump/directional control valve and remove the acorn nut from the end of the relief valve. Loosen the jam nut of the pressure adjustment screw and adjust the pressure adjustment screw clockwise to increase pressure or counterclockwise to decrease pressure. Tighten the jam nut once adjustment is complete and install the acorn nut back in place and tighten.

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