



**Torque Wrench Valve Replacement
DA5850190SR Repair Kit**

L2739 Rev. A 07/07

 **WARNING:** Disconnect electrical power before servicing pump. Be certain that all pressure is completely relieved and that pressure gauge indicates zero (0) PSI/BAR.

 **IMPORTANT:** Hydraulic equipment must only be serviced by a qualified hydraulic technician. For repair service, contact the Authorized ENERPAC Service Center in your area.

Introduction

A new valve body repair kit, DAQ5850190SR, is now available for selected Enerpac PME and PMU series torque wrench pumps.

The updated DC4920190 valve body included in the kit replaces “early” versions of the DC4920190 valve body and all versions of the DA5850190 valve body.

For pumps with 1/4 NPTF threaded connections, the couplers from the old valve body can be removed and reinstalled in the new valve body. For pumps with other thread size connections, new couplers must be ordered from Enerpac.

Refer to the *Coupler Installation* instructions on the following page for additional information.

IMPORTANT: Be sure to note the positions of the male and female couplers **before** removing them from the old valve body. Whether new or reused, the male and female couplers must be installed in the same port locations as on the old valve body.

Appearance of the couplers installed in the old valve body will vary, depending on pump model number and other factors. Some typical coupler arrangements are shown in figures 1, 2 and 3.

**Figure 1, Old Coupler Arrangement, Style A****Figure 2, Old Coupler Arrangement, Style B****Figure 3, Old Coupler Arrangement, Style C****Repair Kit Usage**

The DAQ5850190SR Repair Kit is designed for use only with the following pump models:

- **PMU10422Q, PMU10427Q** - Portable Electric Torque Wrench Pumps (10,000 PSI/700 BAR)
- **PME10422, PME10427** - Portable Electric Torque Wrench Pumps (11,600 PSI/800 BAR)
- **PMU10427, PMU10422** - Spartan Portable Electric Torque Wrench Pumps (11,600 PSI/800 BAR)

Coupler Installation - 10,000 PSI Pumps (Models PMU10422Q and PMU10427Q)

1. Disconnect electrical power from pump. Be sure that pressure gauge indicates 0 PSI/BAR.
2. Before beginning disassembly procedures, note the locations of the male and female couplers on the old valve body. The couplers must be installed in the same port locations for the new valve body.
3. Remove both couplers from the old valve body.
4. Remove any adapter fittings (if present) from the couplers. These fittings will not be reused and can be discarded.
5. Determine the coupler thread size:
 - Go to step 6 if the couplers have ¼ NPTF threads.
 - Go to step 7 if the couplers have different size threads, such as ¼ BSPP or ⅜ NPTF.
6. If the couplers have ¼ NPTF threads:
 - a. Remove plugs from the ports on the new valve body.
 - b. Apply sealing tape to the threads of the male and female couplers.
 - c. Install the male and female couplers directly into the ports of the new valve body, in the same port locations as installed in the old valve body. Torque each coupler to 28-34 ft-lbs. [38-46 Nm].
7. If the couplers DO NOT have ¼ NPTF threads:
 - a. Discard the old couplers. Couplers without ¼ NPTF threads cannot be reused in the new valve body.
 - b. Order a new female coupler (P/N U962148134-2) and a new male coupler (P/N DC6188022). A hex nipple (P/N CJ647096) will be included with the new male coupler.
 - c. Remove plugs from the ports on the new valve body.
 - d. Apply sealing tape to the threads of the female coupler (P/N U962148134-2).
 - e. Install the female coupler (P/N U962148134-2) directly into the new valve body, in the same port location as the old valve body. Torque the coupler to 28-34 ft-lbs. [38-46 Nm].
 - f. Apply sealing tape to the threads on both ends of the hex nipple (P/N CJ647096).
 - g. Assemble the hex nipple (P/N CJ647096) and the male coupler (P/N DC6188022). Torque these parts to 44-53 ft-lbs. [60-72 Nm]. Then, install these parts as an assembly into the other valve port of the new valve body. Torque this assembly to 28-34 ft-lbs. [38-46 Nm].

Coupler Installation - 11,600 PSI Pumps (Models PME10422, PME10427, PMU10422 and PMU10427)

1. Disconnect electrical power from pump. Be sure that pressure gauge indicates 0 PSI/BAR.
2. Before beginning disassembly procedures, note the locations of the male and female couplers on the old valve body. The couplers must be installed in the same port locations for the new valve body.
3. Remove both couplers from the old valve body.
4. Remove any adapter fittings (if present) from the couplers. These fittings will not be reused and can be discarded.
5. Determine the coupler thread size:
 - Go to step 6 if the couplers have ¼ NPTF threads.
 - Go to step 7 if the couplers have different size threads, such as ¼ BSPP or ⅜ NPTF.

6. If the couplers have ¼ NPTF threads:
 - a. Remove plugs from the ports on the new valve body.
 - b. Apply sealing tape to the threads of the male and female couplers.
 - c. Install the male and female couplers directly into the ports of the new valve body, in the same port locations as installed in the old valve body. Torque each coupler to 28-34 ft-lbs. [38-46 Nm].
7. If the couplers DO NOT have ¼ NPTF threads:
 - a. Discard the old couplers. Couplers without ¼ NPTF threads cannot be reused with the new valve body.
 - b. Order a new female coupler (P/N DC6431034) and a new male coupler (P/N DC6432034).
 - c. Remove plugs from the ports on the new valve body.
 - d. Apply sealing tape to the threads of the male and female couplers.
 - e. Install the male coupler (P/N DC6432034) directly into the new valve body, in the same port location as the male coupler was installed in the old valve body. Torque to 28-34 ft-lbs. [38-46 Nm].
 - f. Install the female coupler (P/N DC6431034) into the other valve port of the new valve body. Torque to 28-34 ft-lbs. [38-46 Nm].

Valve Body Replacement (All Models)

1. Install the couplers in the new valve body as described earlier in this document. Set the new valve body aside in a clean work area.
 2. Disconnect electrical power from pump. Be sure that pressure gauge indicates 0 PSI/BAR.
- Note:** During the following steps, refer to the pump repair parts sheet for assembly diagrams, torque specifications and additional instructions specific to your pump. A typical valve assembly is shown in Figure 7.
3. Disconnect electrical wiring from both poppet valves.
 4. Loosen capscrews and remove both poppet valves from the old valve body.
 5. Remove the pressure gauge assembly from the old valve body.
 6. Loosen capscrews and remove the old valve body from the pump.
 7. Position the new valve body on the pump. Be careful during installation: The two O-rings on the bottom of the valve body must remain in position. Secure the valve body with capscrews.
 8. Place the two poppet valves on the new valve body and secure them with capscrews. Be careful during installation: The three O-rings for each poppet valve must remain in position.
 9. Install the pressure gauge assembly on the new valve body.
 10. Reconnect electrical wiring to poppet valves.
 11. Start the pump. Check for leaks and verify proper operation.



Figure 4, Valve Body Assembly with Shipping Plugs



Figure 5, New 1/4 NPTF Couplers
(10,000 PSI/700 Bar Models)

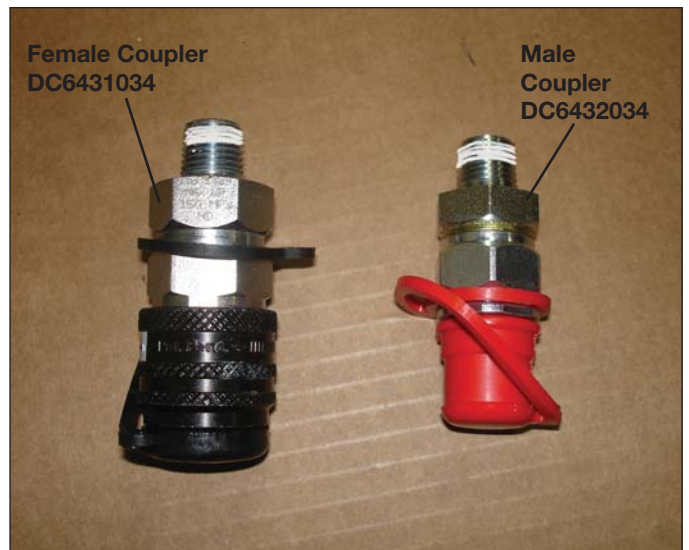


Figure 6, New 1/4 NPTF Couplers
(11,600 PSI/800 Bar Models)

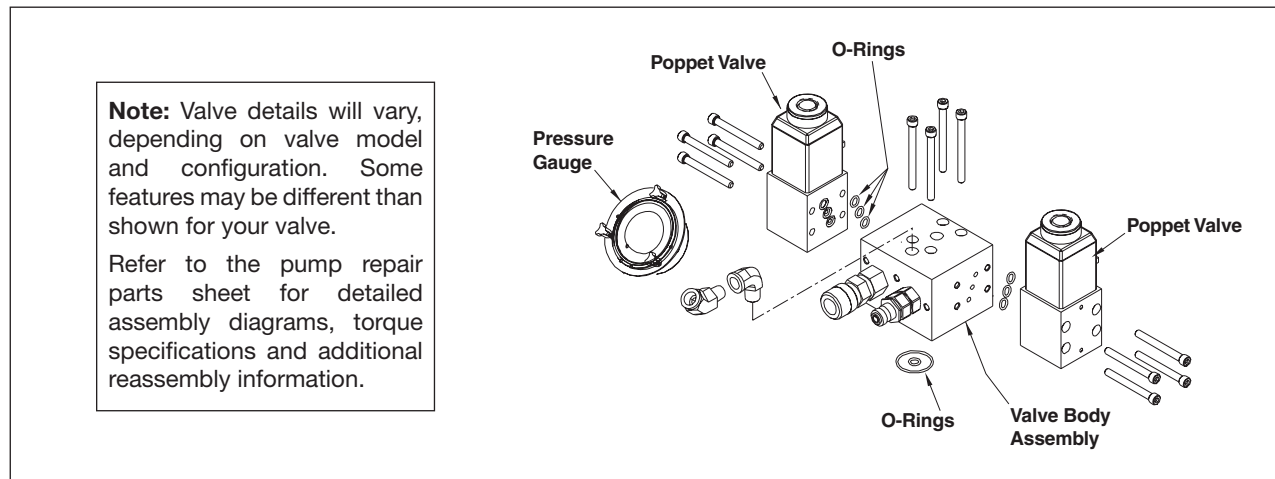


Figure 7, Valve Assembly (typical)

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