

MAXPRO200 ***Pump Motor Replacement***

Field Service Bulletin

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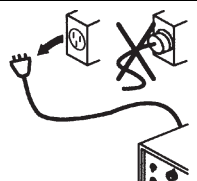
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		DANGER! ELECTRIC SHOCK CAN KILL
 Disconnect electrical power before performing any maintenance. All work requiring removal of the power supply cover must be performed by a qualified technician. See the <i>Safety</i> section of the system's manual for more safety precautions.		

Purpose

This Field Service Bulletin explains how to replace the coolant pump motor in the MAXPRO200.

Kit contents – 428039

Part Number	Description	Quantity
031122	Pump-motor coupler	1
031151	Motor	1
129348	Pump motor wire	1
129471	Pump-motor clamp	1

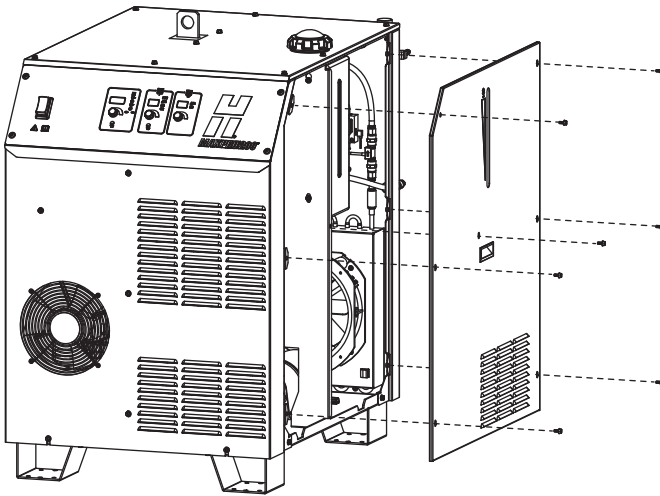
Required tools and materials

- 3/8 inch wrench
- Number 2 phillips screwdriver

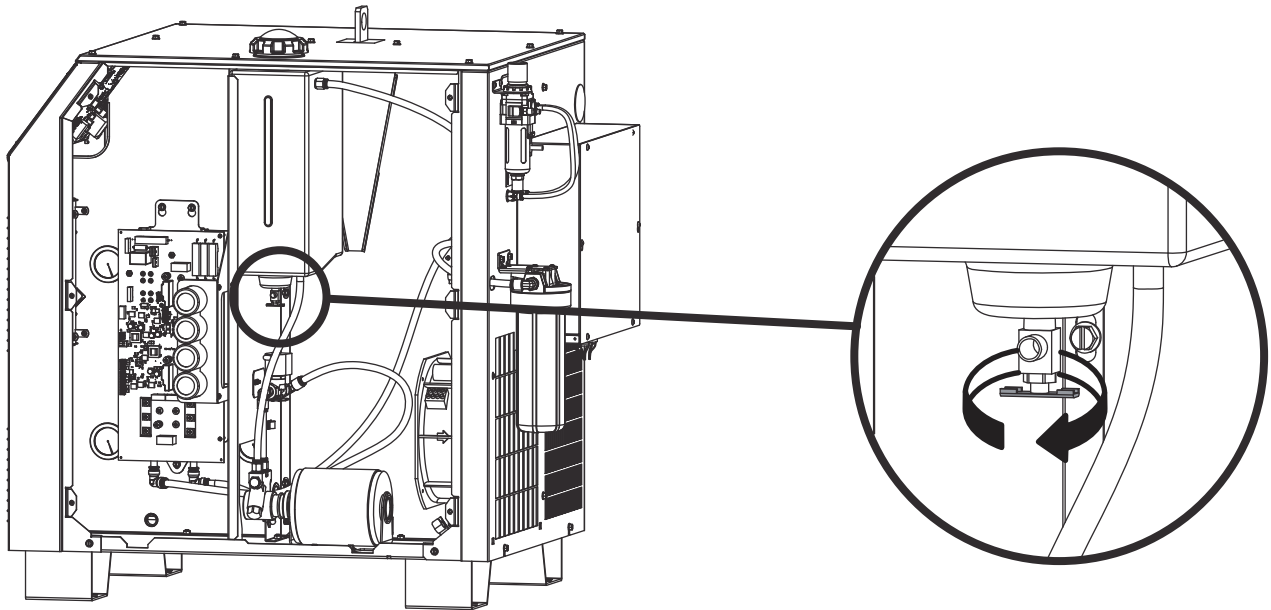
Pump Motor Replacement

Draining the coolant system

1. Turn OFF the power and remove the right side panel from the power supply.



2. Locate the coolant drain valve and use a 20 liter (5 gallon) container to catch the coolant. Coolant will flow as soon as the drain is opened. Close the drain valve when the coolant stops flowing. Always dispose of coolant according to local and national codes.

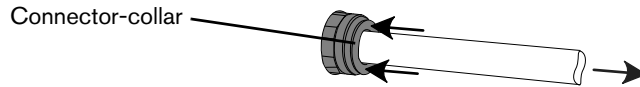


Note: If the coolant does not contain any dirt or particulates, you can reserve it for refilling the coolant system.

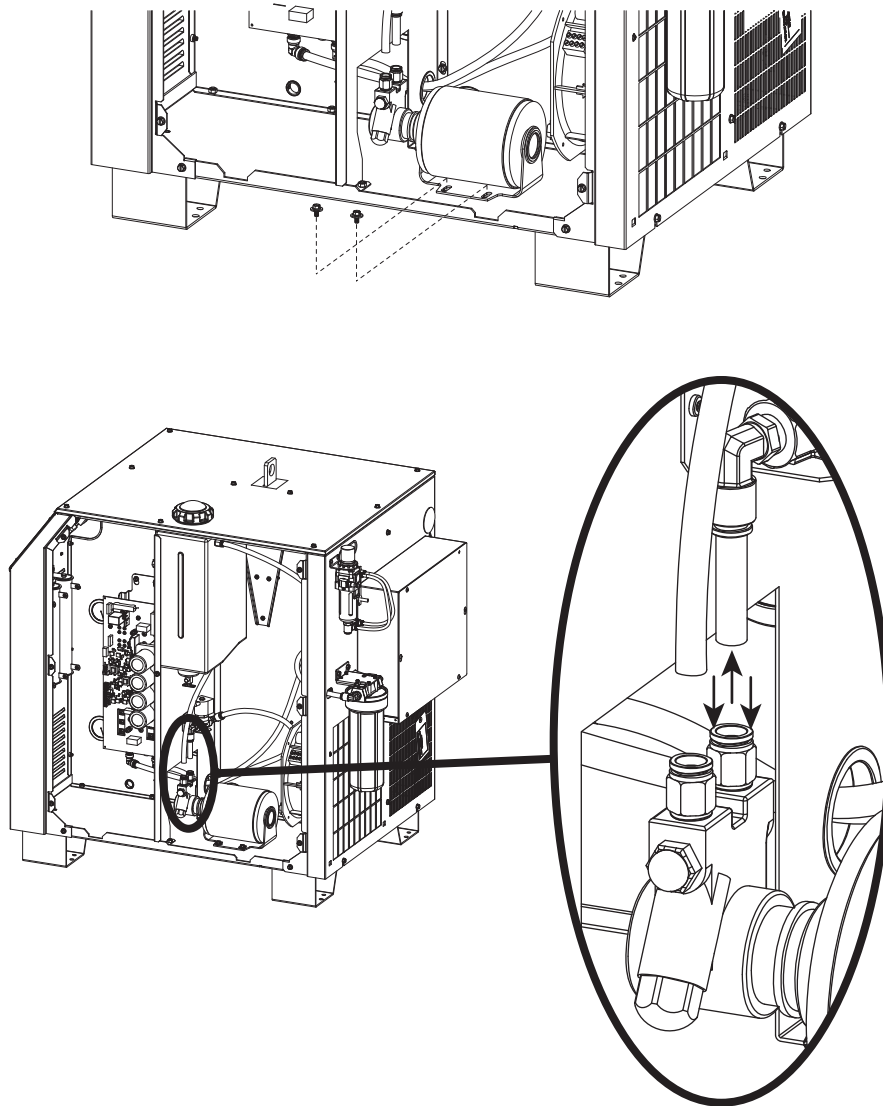
Remove the existing pump motor

Push-to-Connect fittings

The coolant hose connections use push-to-connect fittings. To disconnect a fitting, push the connector-collar toward the fitting, hold the collar in place and pull the hose away from the fitting.



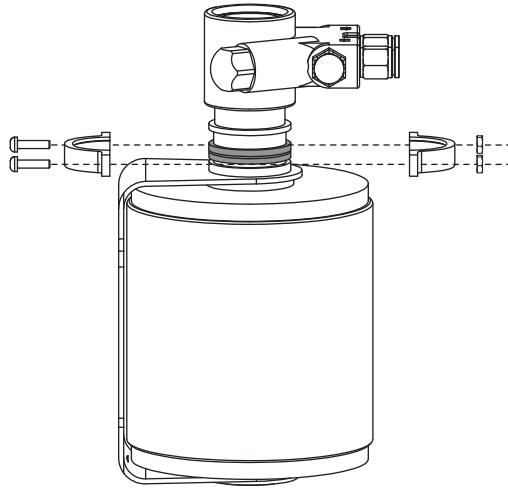
1. Remove the screws (2) that secure the pump/motor assembly to the floor of the power supply and slide the pump/motor assembly toward you until the tab on the back side of the motor mounting bracket clears the slot in the floor of the power supply. This will allow the pump/motor assembly to move enough to disconnect the hoses as shown.



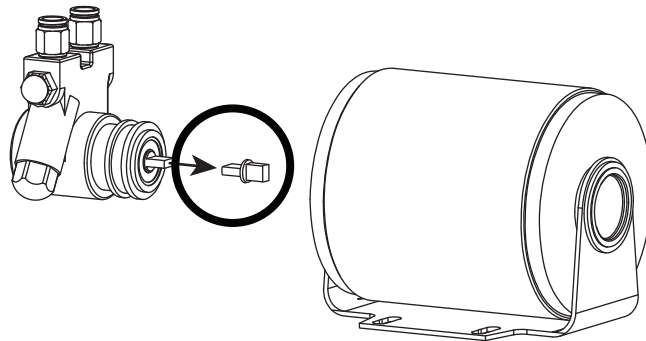
2. Disconnect the pump motor wire marked 21 from the power supply wire harness at connector J15.

Pump Motor Replacement

3. Use a number 2 phillips screwdriver to remove the screws from the clamp that secures the pump to the motor. Discard the old clamp.



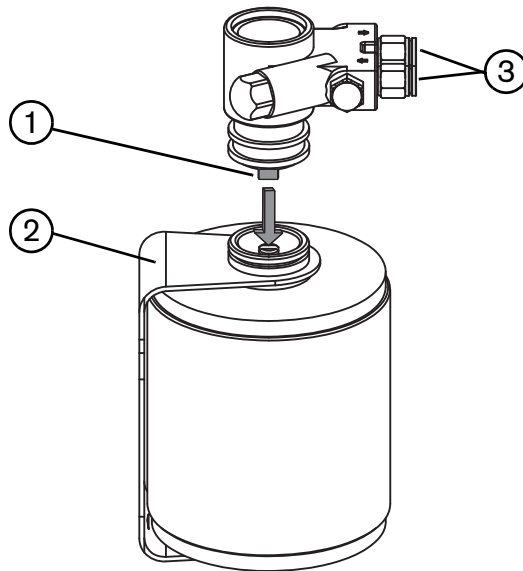
4. Pull the pump from the motor and remove the brass coupler that is between the shaft of the motor and the pump. Discard the brass coupler.



5. Insert the new brass coupler included in this kit into the motor shaft of the new pump.

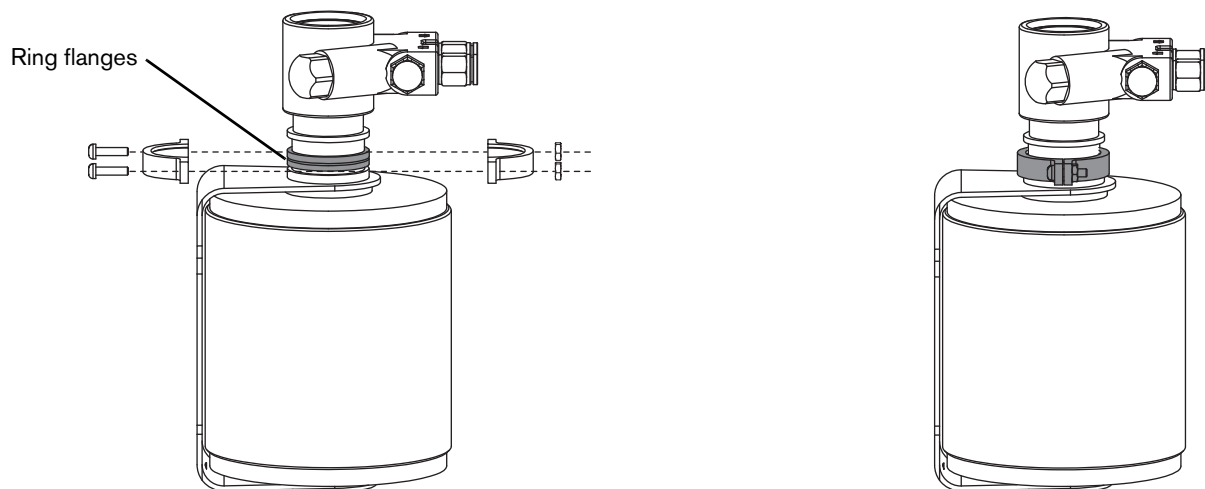
Note: the new motor should be vertical when you attach the pump. This will help assure that the pump and motor flanges are flush against each other. If the pump and motor are attached when they are horizontal, the alignment may be off. This will cause excessive vibration and shorten the life of the pump and motor.

- Align the brass coupler with the slot in shaft of the motor. Install the pump while making sure the brass coupler fits into the slot in the motor's shaft. Orient the pump as shown below. The coolant IN and OUT ports on the pump should be facing the opposite direction of the motor mounting bracket.



1	Brass coupler
2	Motor mounting bracket
3	Coolant In and OUT ports

- Make sure that the ring flange on the pump and the motor are flush against each other and attach the 129471 clamp around the entire circumference of the pump and motor flanges. Secure the clamp bolts using 3.3 N-m (29 inch-pounds) of torque.



- Reinstall the pump/motor assembly into the power supply. Torque the pump/motor assembly mounting screws to 9.6 N-m (85 inch pounds).
- Reconnect the coolant hoses.

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10. Reconnect the pump motor wire marked 21 to the power supply wire harness at connector J15.
11. After filling the power supply with coolant as shown below, turn on the power to the system and check the coolant hoses for leaks before you replace the right side panel to complete the installation.

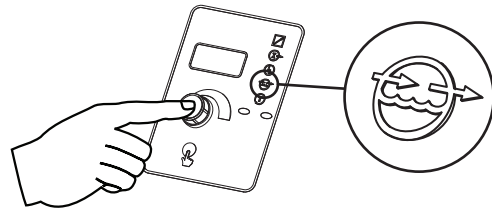
Fill the power supply with coolant

The system will take 14.2 liters to 17.0 liters (3.75 to 4.5 gallons) of coolant depending on the length of the torch leads.

1. Add coolant to the power supply until the tank is full.



2. Turn ON the power supply, then press and release the amps selector knob as many times as needed until the flow symbol is selected. The flow rate will be shown in the three digit display. There is a 45 second delay before the system will report a low coolant flow error. If the flow rate has not reached 1.9 liters per minute (lpm) (0.5 gallons per minute [gpm]) the system will turn off the pump.



3. If the system displays an error, turn OFF the power to the system and add coolant to the tank until it is full again. Repeat steps 2 and 3 until no error is displayed.
4. Add coolant to the power supply until the tank is full and replace the filler cap.

