

Riverflow electrical notes

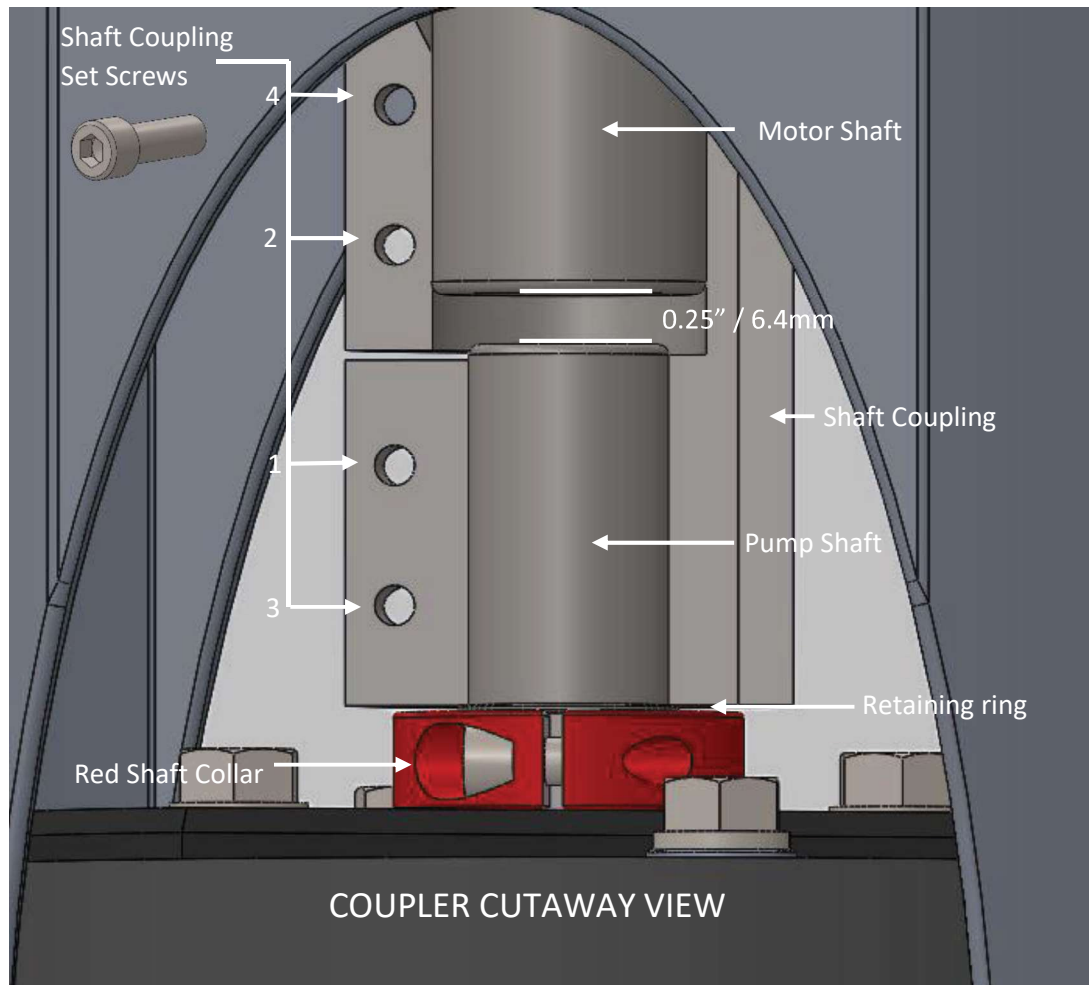
- The variable frequency drive (VFD) converts single-phase to three-phase power – The Riverflow™ Pump is driven by a three-phase industrial duty motor
- The VFD is rated for indoor installation, ventilated closet, garage, equipment room etc. If an outdoor installation is required, the VFD must be mounted in a properly sized outdoor enclosure
- Control wiring requires a shielded, 6 conductor, #18 or #20 gauge cable
- The Riverflow wired remote control box is weatherproof but should not be submerged in water

Warning

Do not start or change settings on VFD! Before contacting a certified startup technician at Current Systems Inc. PST (805) 339-9292 or EST 954-889-0311.

SWIM IN PLACE INSTALLATION GUIDE

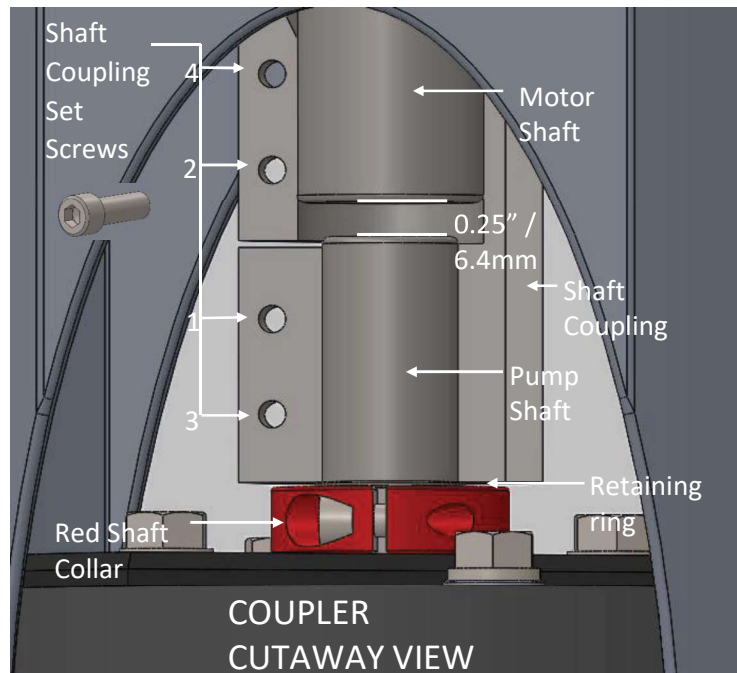
SHAFT COUPLER INSTALLATION INSTRUCTIONS



1. Cut away protective plastic wrap from pump and open the motor installation kit.
2. Use the provided "T-Handle" Allen wrench for the following operations.
3. Loosen all keyless coupling set screws by 1 full turn and slide shaft coupling down till it is resting on top of the retaining ring as illustrated in the above picture.
4. Remove wooden block from top of shaft coupling and set aside.
5. Remove motor shaft key and then clean the motor shaft of any grease or debris.
6. Leaving the shaft coupling in place on the pump shaft, carefully place the motor shaft into the shaft coupling so the motor face is fully seated into the motor mount register. (Shaft keys are not required)
7. Make sure shaft coupling, retaining ring, and red shaft collar are fully seated as illustrated in the above picture. If so, continue to the next step. If not, then adjust as needed.

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SHAFT COUPLER INSTALLATION INSTRUCTIONS



8. Tighten inner shaft coupling setscrew #1 to 15 FT-LBS, then tighten inner setscrew #2 to 15 FT-LBS. (See picture above)

9. Tighten outer shaft coupling setscrew #3 to 15 FT-LBS, then tighten outer setscrew #4 to 15 FT-LBS. (See picture above)

10. Check and re-tighten all shaft coupling setscrews to 15 FT-LBS in the same order as before (#1, #2, #3, #4) a minimum of 4 times. The supplied Allen Wrench will flex approximately a $\frac{1}{4}$ " turn.

WARNING

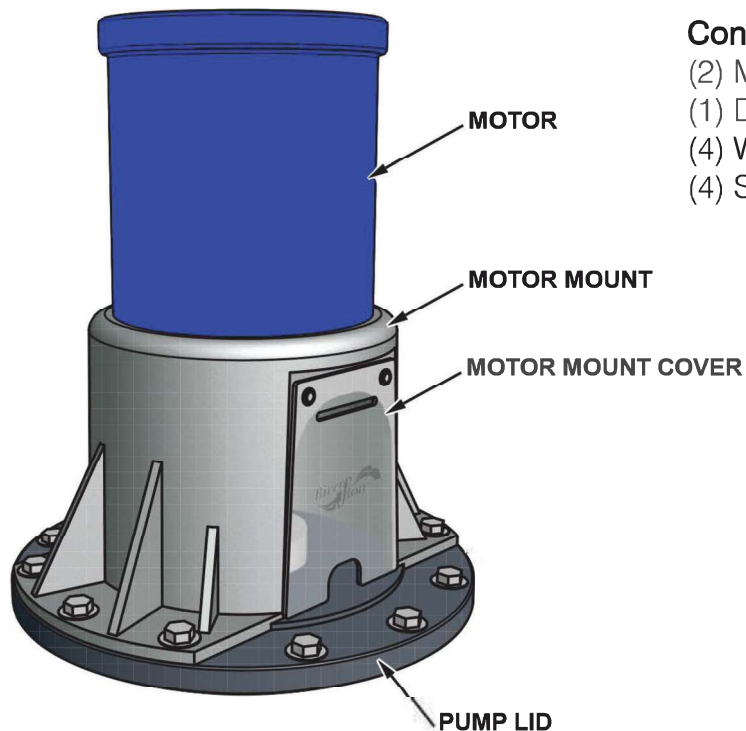
ALL MANUFACTURER'S WARRANTIES ARE VOID WHEN FAILING TO ENSURE THE SHAFT COUPLER AND SET SCREWS ARE NOT PROPERLY TIGHTENED AND SET TO 15 FT-LBS. THE TIGHTENING SEQUENCE MUST BE COMPLETED A MINIMUM OF 4 TIMES. NOT FOLLOWING THIS PROCEEDURE WILL RESULT IN SHAFT COUPLING FAILURE.

11. Remove red shaft collar from beneath the shaft coupling and retaining ring and save for future use.

12. Rotate the shaft coupling at least 360 degrees in both directions by hand.
If the shaft does not rotate freely call Current Systems Technical support

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RIVERFLOW SYSTEM MOTOR MOUNT COVER

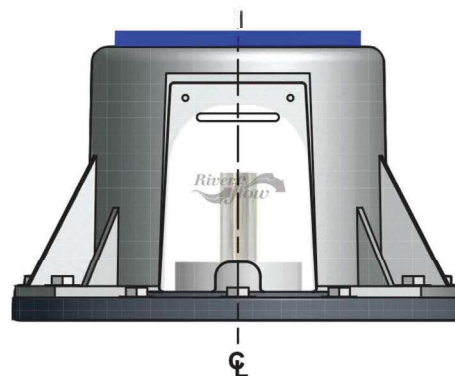


Contents of Kit:

- (2) Motor Mount Cover
- (1) Drill Bit
- (4) Washer, Plastic
- (4) Screw #10, Self tapping

Tools Required:

- Drill
- Philips Screwdriver
- Silicone



Step 1.

Center the Cover over the opening of the Motor Mount with the bottom resting of the Pump Lid.



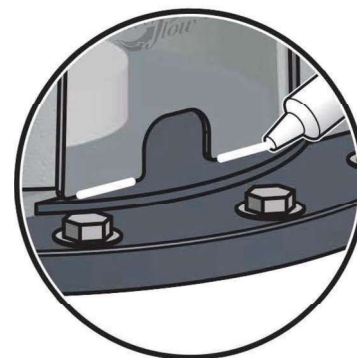
Step 2.

Using the holes in the Cover as a template, drill holes into the Motor Mount with the supplied drill bit.



Step 3.

Attach the Cover to the Motor Mount using the supplied washer and screw. Be careful not to over tighten the screws.



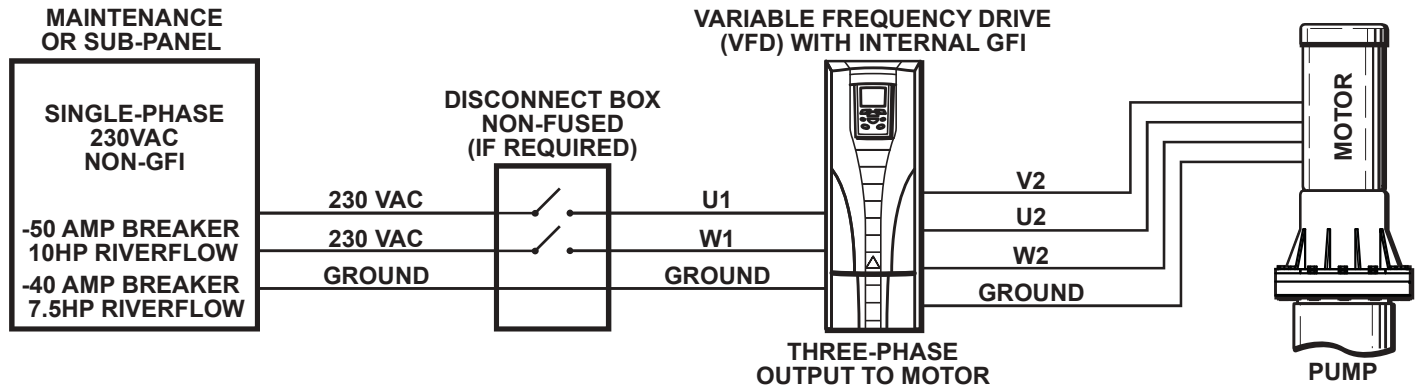
Step 4.

Apply a small amount of silicone to the bottom of the Cover and Lid.

Finished.

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ELECTRICAL INSTALLATION RIVERFLOW VFD & MOTOR WIRING

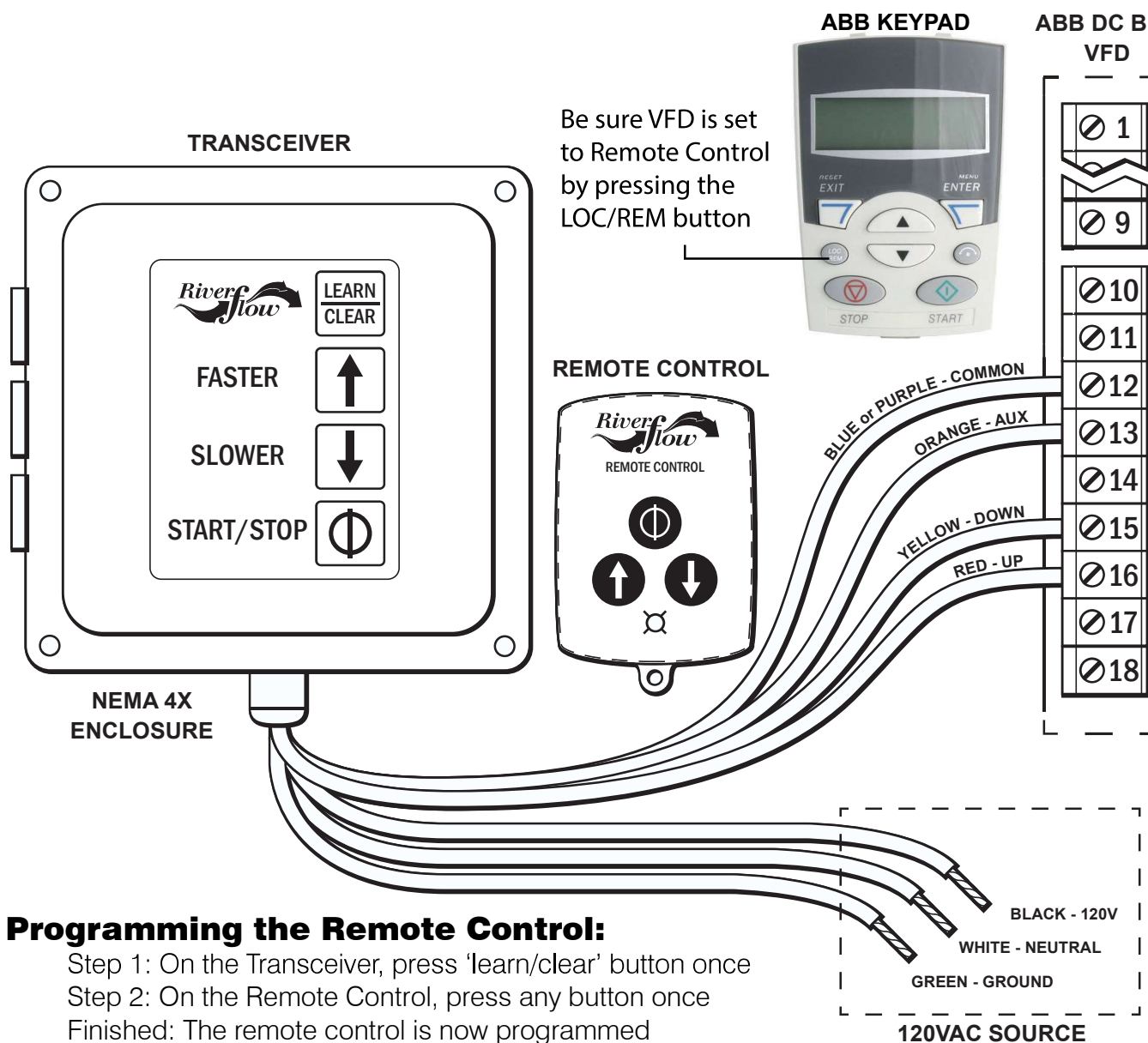


- Motor direction counter clockwise looking at the opposite shaft end of the motor.
- Refer to the wiring diagrams for complete wiring and operation instructions.
- If the motor is covered, allow adequate ventilation with at least 6-in. clearance around the motor. Open area of vents, top and bottom, on the enclosure must total at least 100-sq. in. each.



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ELECTRICAL INSTALLATION WIRELESS PUMP CONTROL



Programming the Remote Control:

Step 1: On the Transceiver, press 'learn/clear' button once

Step 2: On the Remote Control, press any button once

Finished: The remote control is now programmed

Controlling the pump speed:

Step 1: Press 'up arrow' to increase pump speed by 5% per push

Step 2: Press 'down arrow' to decrease pump speed by 5% per push

Remote Control care:

- Do not submerge
- Dry off after use
- Replace batteries with CR2032, Qty. 2

IMPORTANT:

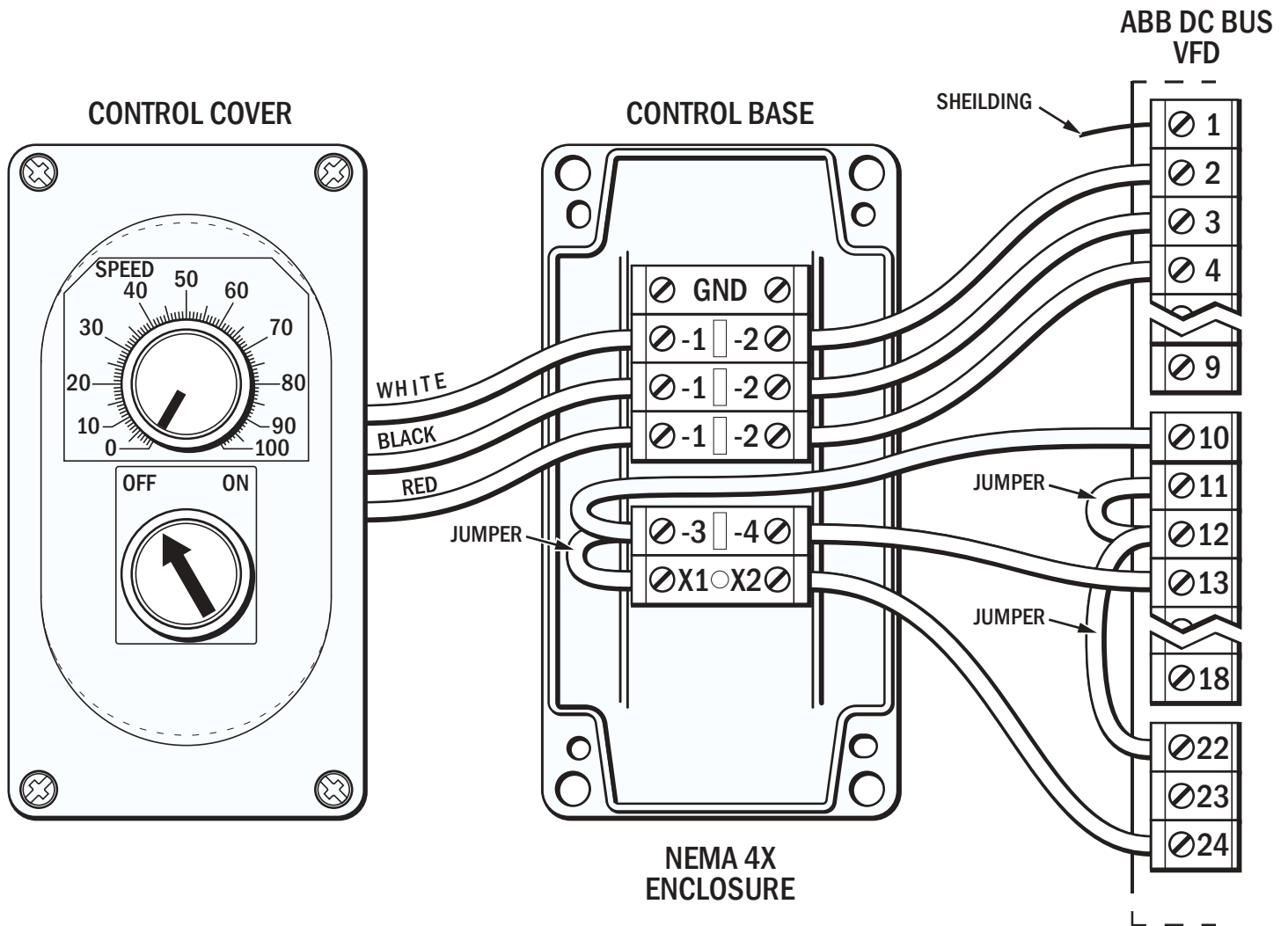
Parameters on ABB VFD must be set to:

1001 to DI 1

1103 to DI 3U, 4D

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ELECTRICAL INSTALLATION WIRED PUMP CONTROL



NOTE: USE 18-GAUGE SHIELDED 6-CONDUCTOR CABLE