

SERVICE How To

Model Number:	Originator:	Topic
SD-1 Pump	Petro van Poppel	Transducer Replacement and Flag Adjustment

Replacing the Transducer Interface Board

You will need:

- Average sized Philips head screwdriver
- Transducer Interface Board

Procedure:

1. Remove the top cover.
2. Turn power off.
3. Disconnect the power cord.
4. Disconnect the two Transducer Cables between pump head and board J1 and J2 (**1** and **2**) and disconnect the multi colored ribbon cable; J6 (**3**).



5. Remove the four mounting screws and replace the Transducer Interface Board for the new one, without tightening the screws.

6. Pull the board all the way towards the back of the pump. Then tighten the four screws.



7. Re-connect the cables for J1, J2 and J6.

Adjusting the flags on the Thrust Housing Collet:

You will need:

- 1.5mm hex key
- Flag Setting Tool (can be acquired from all major service offices)

Procedure:

8. Turn on the power.
9. Remove pump heads and the top cover.
10. Install Flag set tool on pump head location 1 and secure with the screws from the pump head. Move the shaft of the collet anti-clockwise if the Flag Setting Tool cannot be properly installed

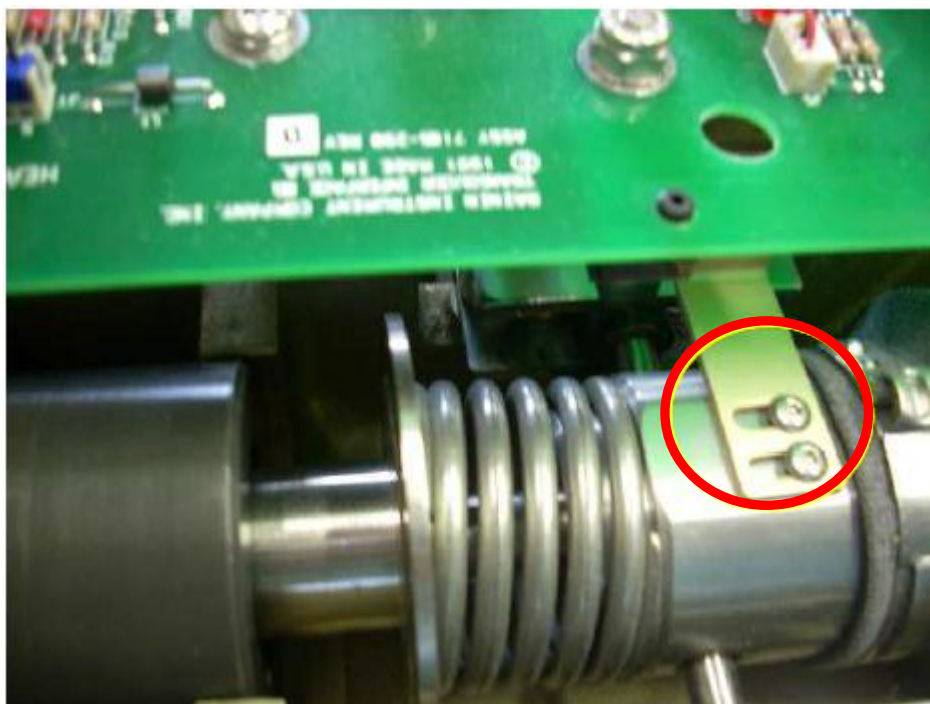


(**NOTE:** Do not press [Run], as energized motors cannot be turned)

11. Advance the shaft of the collet, by rotating the motor coupling. The collet sleeve will probably touch the Casting, but continue to advance the Shaft until the Tool Rod and the Collet Rod will not allow you to go any further.



12. Make sure there is no play in the Tool Rod.
13. Carefully loosen the screws on the flag and move flag forward to shorten the stroke for the pump head if too long.



14. The flag sensor light will turn red when the flag reaches the sensor.
15. Still holding the Shaft with your fingers, watch the LED light up.
16. When the LED has just lit, tighten the flag mounting screws without moving the Flags position.

(**NOTE:** both flag mounting screws must be tight as loose mounting screws will cause the flag to become misadjusted).
17. Check the Flag position by verifying that the Flag LED turns on at full extension and turns off immediately after the shaft leaves its fully extended position.
18. Repeat steps 10 to 17 for pump head location 2.
19. Install pump heads and the top cover, and check the flow rate.