DC10 Assembly

1) Burks wet end components: Adapter (1), impeller (1), casing cover (1), o-ring (1), seal (1), spring w/seal (1), imp. bolt & washer (1), bolts (8), data tag (1)



2) Rub a dab of grease on the wall were the seal seats. Grab the seal & press it into the adapter (press the seal in with the cardboard piece provided or use new clean gloves).





3) Slide the adapter onto the motor install 4 bolts.





4) Pull the seal apart from the spring.



5) Start the seal on the shaft & press it on with a 7/8" socket.

6) The seals should contact each other & install the spring. (For springless seals, slide them onto the shaft as well).





7) Screw the impeller onto the shaft. Stick a screw driver in the rear to stop the fan and keep the motor from rotating. Thread the bolt & washer into the shaft & tighten. (11mm)





8) Grease the o-ring & place in the casing cover & install.





9) Install & tighten the bolts to the casing cover.



10) DC10 water pump is now ready to be tested!



DC10 Disassembly Troubleshooting

- 1) Remove the 4 bolts from the casing cover & remove the casing cover. (May need to tap on the casing cover with a rubber mallet or brass hammer to remove).
- **2)** Place a flat head screw driver through the fan cover to keep The motor from rotating (if the fan feels like a blade is going to crack. Then remove the fan cover, snap ring and fan. Use a wrench to keep the motor from turning). Use an 11mm socket To remove the bolt & washer threaded into the shaft.
- 3) Keep the screw driver in place to unthread the impeller.
- 4) Remove the spring from the seal or slide off springless seal.
- **5)** Unbolt the 4 bolts from the adapter and use a puller removal tool to remove the adapter with the seal.

Side Notes & Tips

- -The adapter & casing cover may be rusted inside. It is recommended to remove the rust as best as possible. Removing the rust in the casing cover may allow it to slide over the impeller without a tight fit, so that it may turn freely.
 - -When the adapter & casing cover are removed from the motor & the o-ring and seal are removed, it is ok to sand blast them and repaint before installing again.
 - -Emery cloth may be used to clean up where the seal & o-ring sit.





-See the backside for disassembly instructions and tips.

- **-Leaks:** If water is leaking from the head of pump first locate where the leak is.
 - -Leaks from behind the adapter may be caused by a few things.
 - 1) A bad seal
 - 2) The seal is not properly seated
 - The spring or springless seal is not making contact with the other seal
 - -Leaks between the adapter & casing cover are usually due to a pinched o-ring or the bolts may not be tight enough
 -It's possible that either the adapter or casing cover may be cracked
- -Lower Performance: If the water pump has been in use for a while it's recommended to check the brushes in the motor (Refer to the Leeson teardown).
 - -The bearings maybe bad in the motor if the motor is running louder than usual or if the motor has seized. (Refer to the Leeson Motor teardown).
 - -The impeller may be cracked or worn.
 - -Check the rest of the system such as connections, hoses, etc...