Hy-ProDrive

Marine Steering Technology
By Hydraulic Projects Ltd.

# R4510-sk

Motor kit installation instructions for
PR+ Hydraulic Reversing Pumps and
ML+40 Hydraulic Linear Actuators

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## 1) BEFORE STARTING

i) The illustrations below show a PR+ pump but the instructions also apply to the ML+40 Linear Actuator.

ii) Removing and replacing the motor does not result in loss of oil or air ingress into the hydraulic system.

iii) Check that the voltage and wattage indicated on the body of the motor matches the one you are replacing.

iv) Isolate the power supply to the auto-pilot to prevent accidental operation.

v) Disconnect the motor power leads from the vessels wiring - note the polarity.

## 2) TOOLS REQUIRED

i) 5mm hex / Allen key

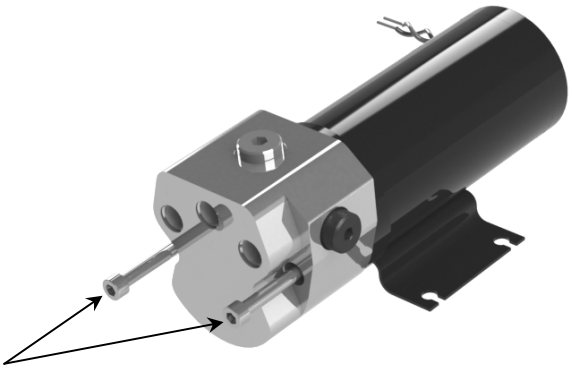
ii) Torque wrench

iii) Mobil XHP222 or equivalent grease

iv) Loctite 222 or equivalent medium strength engineering adhesive

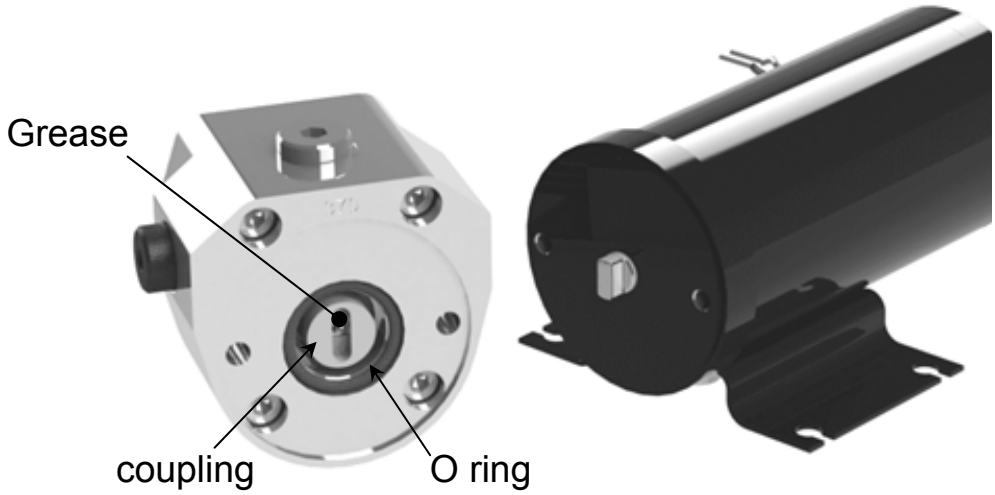
## 3) INSTRUCTIONS

i) Undo and remove the 2 socket head cap screws and withdraw the motor. Remove and discard the O ring and coupling.

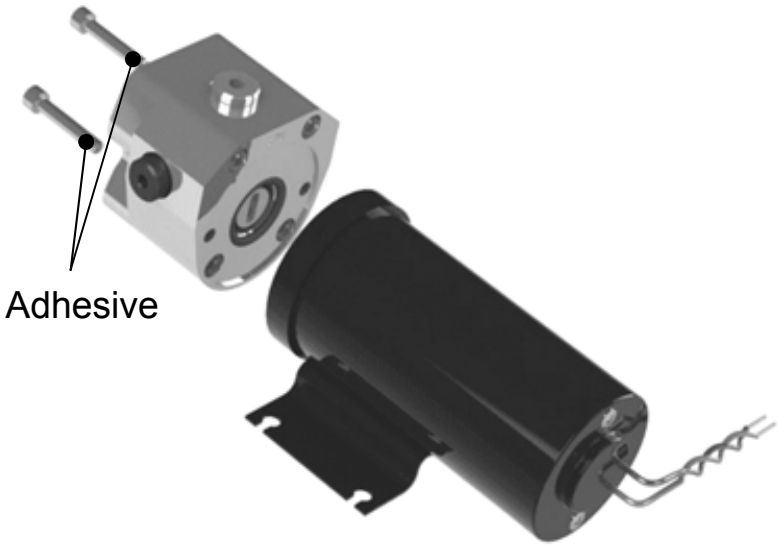


Cap screws

ii) Lightly grease and assemble the new coupling onto the drive tang in the pump body. Fit the o ring into its recess in the body.




iii) Carefully assemble the motor to the body ensuring that the motor drive tang is aligned with the slot in the coupling.




iv) Apply a small amount of adhesive onto the threads of the two cap screws and assemble. Torque to 8 Nm

v) Connect the new motor power leads observing correct polarity.

vi) Important! ⚠
Turn on the auto-pilot power supply and test it functions correctly with the new motor.

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