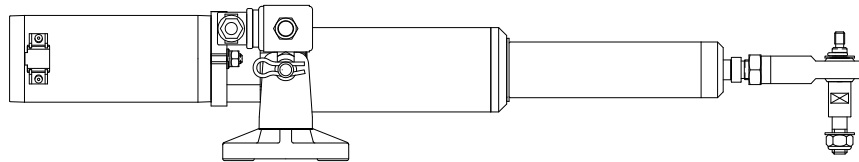


Hydraulic Projects Ltd.
Engineering Quality and Manufacturing Excellence

**FILLING AND BLEEDING
INSTRUCTIONS
FOR THE ML40
LINEAR ACTUATOR**



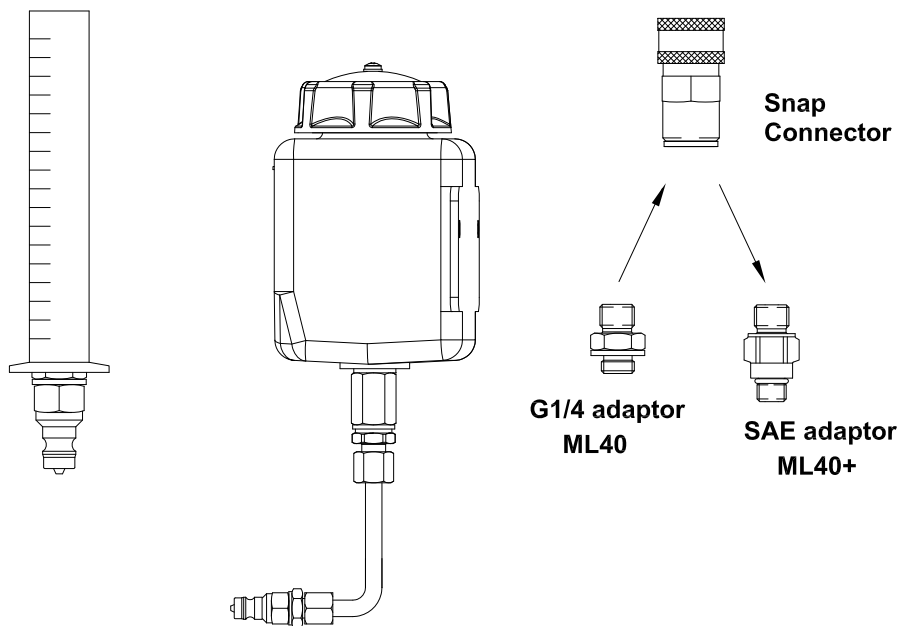
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The bleeding kit as supplied is set up for use with the ML+40 and ML40+.

For use with the ML40 the following changes are required using the parts supplied.

On the snap connector remove the SAE adaptor and O ring and replace it with the G $\frac{1}{4}$ adaptor - note the orientation of the long and short threads.

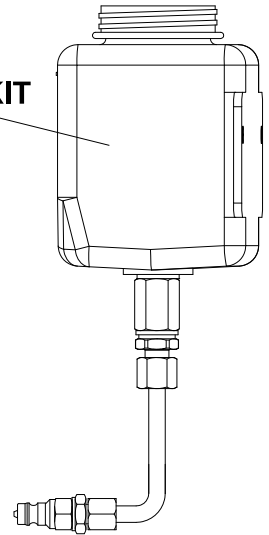


Before commencing ensure that the area that the unit is to be serviced in is clean and free of dirt. Take great care at all times to avoid damage to all components and clean them only in non-petroleum based degreasers. Use a vice with protective jaws and clamp only where indicated.

REMOVE CAP



FILLING KIT



Undo and remove the filler plug and withdraw the reservoir valve assembly from the unit.



FILLER PLUG

RESERVOIR VALVE ASSEMBLY

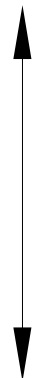
Screw the snap connector into the check valve housing.

Mount the unit vertically in a vice, holding only on the end cap. Plug in the filling kit and fill with oil. Slowly extend the rod to full stroke, wait for a few seconds and then fully retract it again. Note the air being expelled from the unit into the plastic reservoir bottle. Repeat this procedure until no air can be observed in the oil. Note also that it will be necessary to top up the oil during filling.

Oil: Use ISO VG 10 or equivalent

Once the unit is bled, fully retract the rod, then unplug the filling kit.

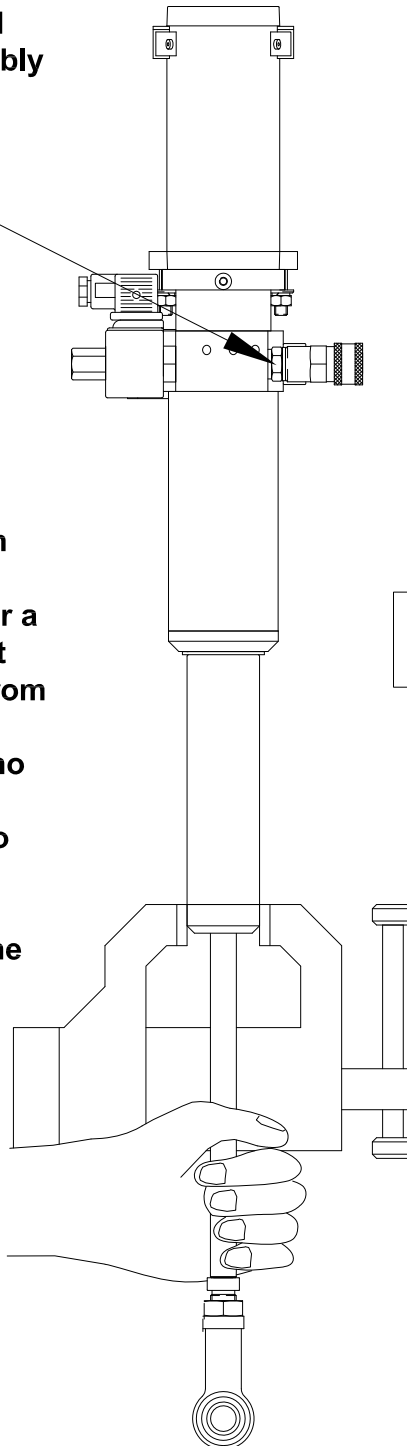
RETRACT



EXTEND

Filling kit Part No. R3681

A complete seal kit is available
Part No.: ML40-sk



Mount the unit horizontally in the vice. Hold only by the pump flange as shown, using only enough pressure on the vice to hold the unit steady.

DO NOT HOLD ON EITHER THE MOTOR OR CYLINDER CASINGS

Fully extend the rod. Fill the measure with 50cc of oil and plug it into the unit. Observe the amount of oil drawn into it. Slowly retract the rod until this amount, plus a further 20cc are expelled into the measure.

Unplug and remove the measure, then remove the snap connector. Fit the reservoir valve assembly, followed by the plug and bonded seal.

With the unit at mid stroke, connect the coil to a 12v or 24v DC power supply as appropriate. With the coil energised there should be not more than 1mm of movement in the rod. If the movement exceeds this amount, then repeat the procedure.

