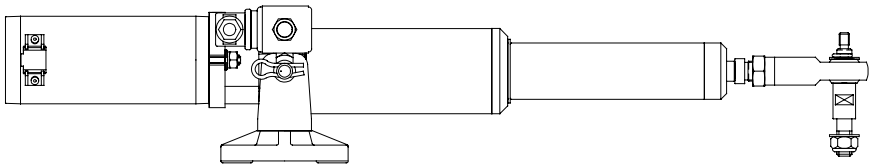
Hydraulic Projects Ltd.

Engineering Quality and Manufacturing Excellence

FILLING AND BLEEDING INSTRUCTIONS FOR THE ML40 LINEAR ACTUATOR



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R3800
Issue 2.
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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.

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

FILLER PLUG

RESERVOIR VALVE ASSEMBLY

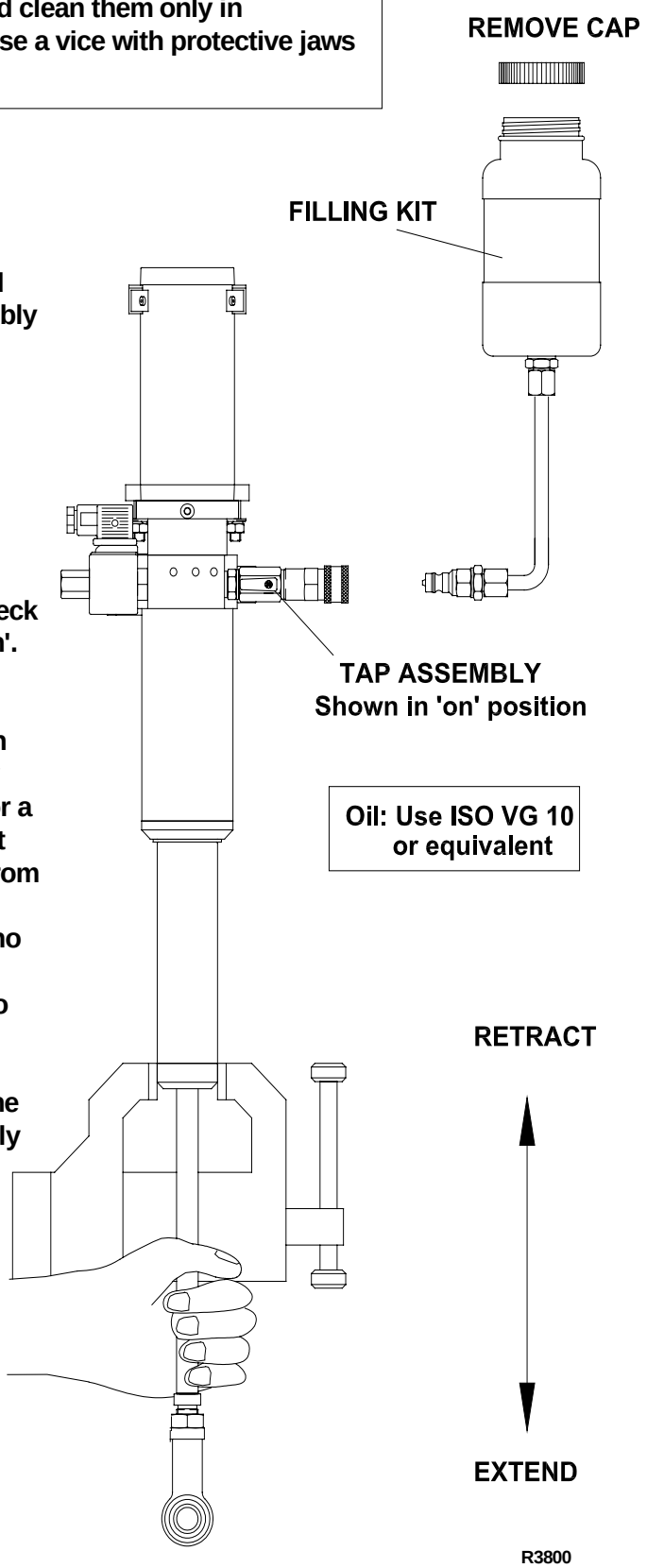
Screw the tap assembly into the check valve housing. Ensure the tap is 'on'.

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.

Once the unit is bled, fully retract the rod, turn the tap to 'off' and then fully extend it. Unplug the filling kit.

Filling kit Part No. R3681

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

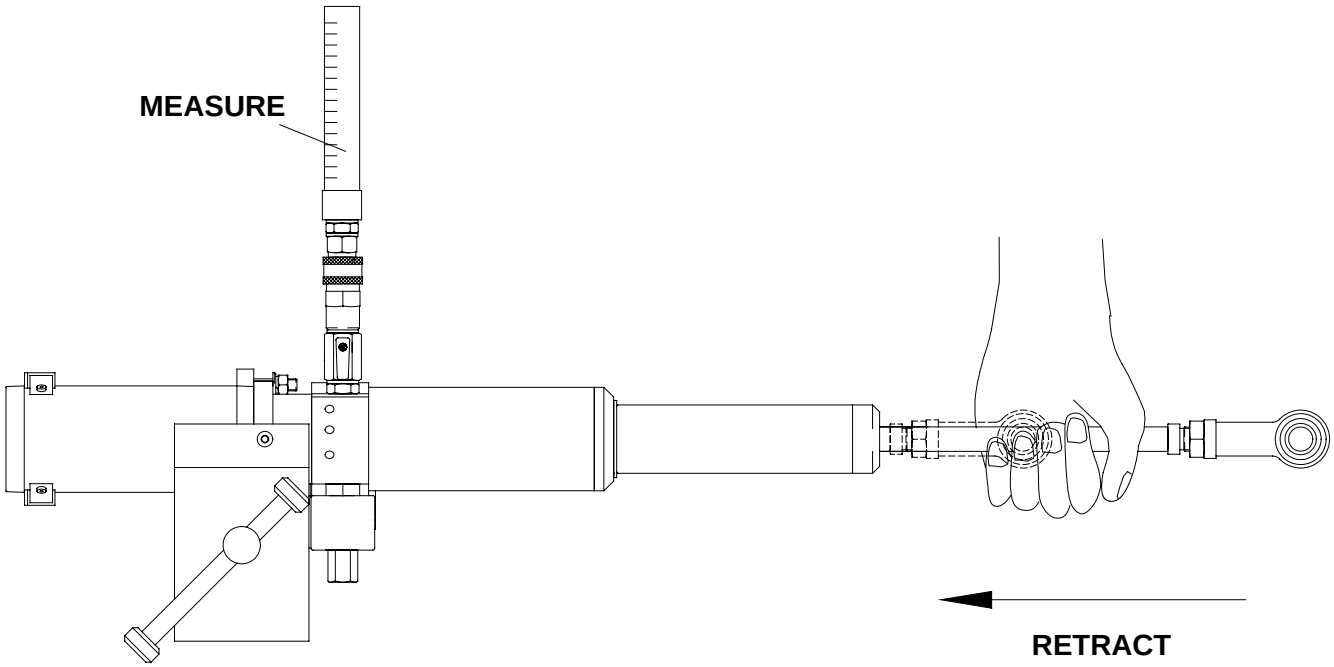


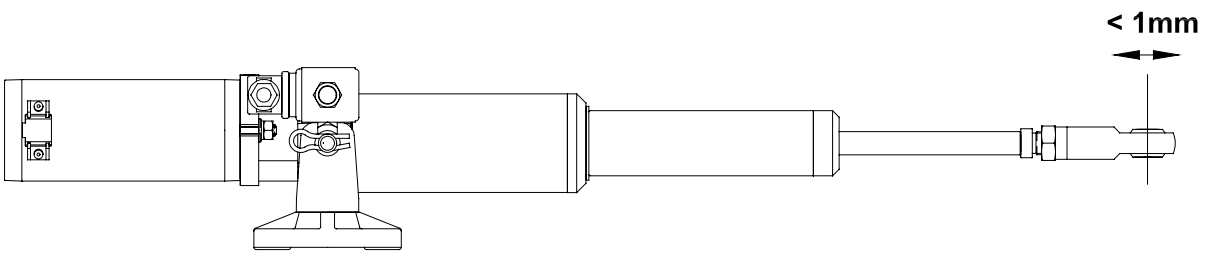
Mount the unit horizontally in the vice. Hold only by the pump flange as shown, using only enough pressure on the vice to hold the unit steady.

DO NOT HOLD ON EITHER THE MOTOR OR CYLINDER CASINGS

Plug in the measure and fill with 50cc of oil. Turn the tap 'on' and observe the amount of oil drawn into the unit. Slowly retract the rod until this amount, plus a further 20cc are expelled into the measure.
Unplug and remove the measure, then remove the tap assembly. 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.





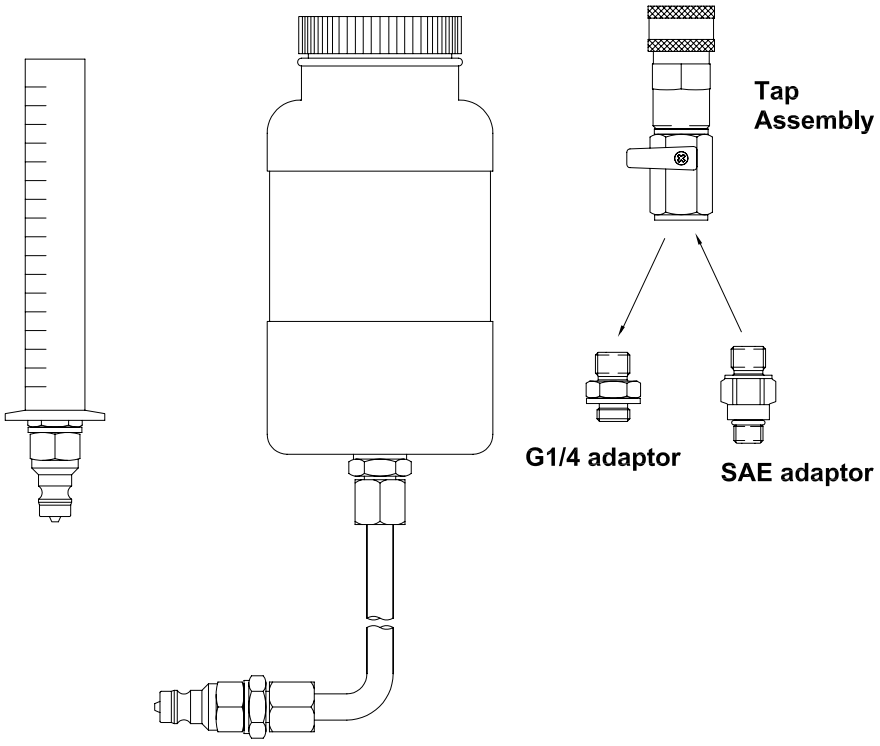
BLEEDING THE ML40+

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.

The bleeding kit as supplied is set up for use with the ML40.

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

On the tap assembly remove the G¼ adaptor and replace it with the SAE adaptor and O ring.



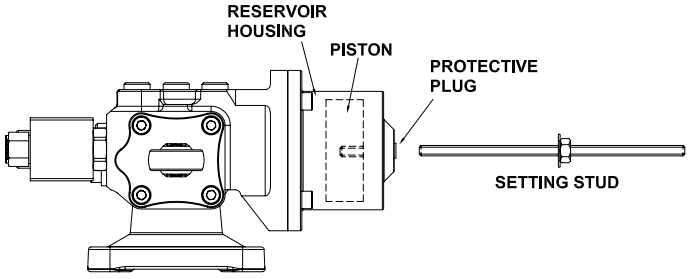
R3800 iss.2 Supplement

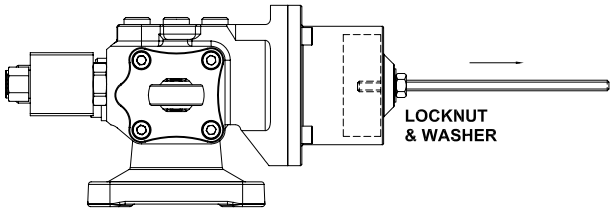
Mount the unit vertically in a vice, holding only on the end cap as shown. Fully retract the piston rod.

Remove the plug from the reservoir port and screw in the tap assembly. Ensure the tap is 'on'.

Remove the protective plug and screw the setting stud into the resevoir piston.

Pull the stud out as far as possible until the piston contacts the inside of the housing then screw the nut and washer down to lock it in position.

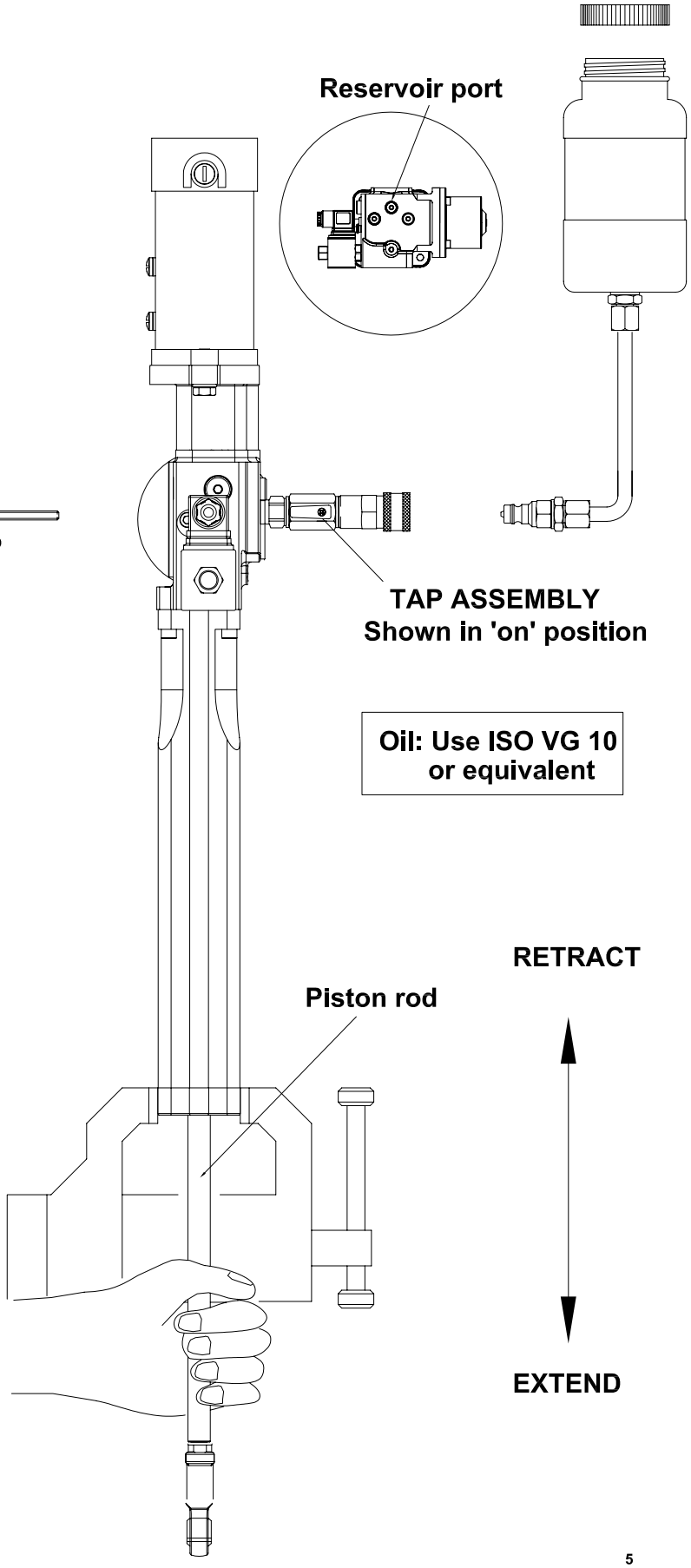




Plug in the filling kit and fill with oil. Slowly extend the rod to full stroke, wait for a few seconds and then fully retract it again. Note the air being expelled from the unit into the plastic reservoir bottle. Repeat this procedure until no air can be observed in the oil. Note also that it will be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

Once the unit is bled, fully retract the piston rod, turn the tap to 'off' and then fully extend it. Unplug the filling kit and remove the setting stud.

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



Remove the unit from the vice and mount it horizontally on the work bench.

Plug in the measure and fill with 50cc of oil. Turn the tap 'on' and observe the amount of oil drawn into the unit. Slowly retract the rod until this amount, plus a further 20cc are expelled into the measure.

Unplug and remove the measure, then remove the tap assembly and replace the reservoir plug.

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 when pushed and pulled by hand. If the movement exceeds this amount, then repeat the procedure.