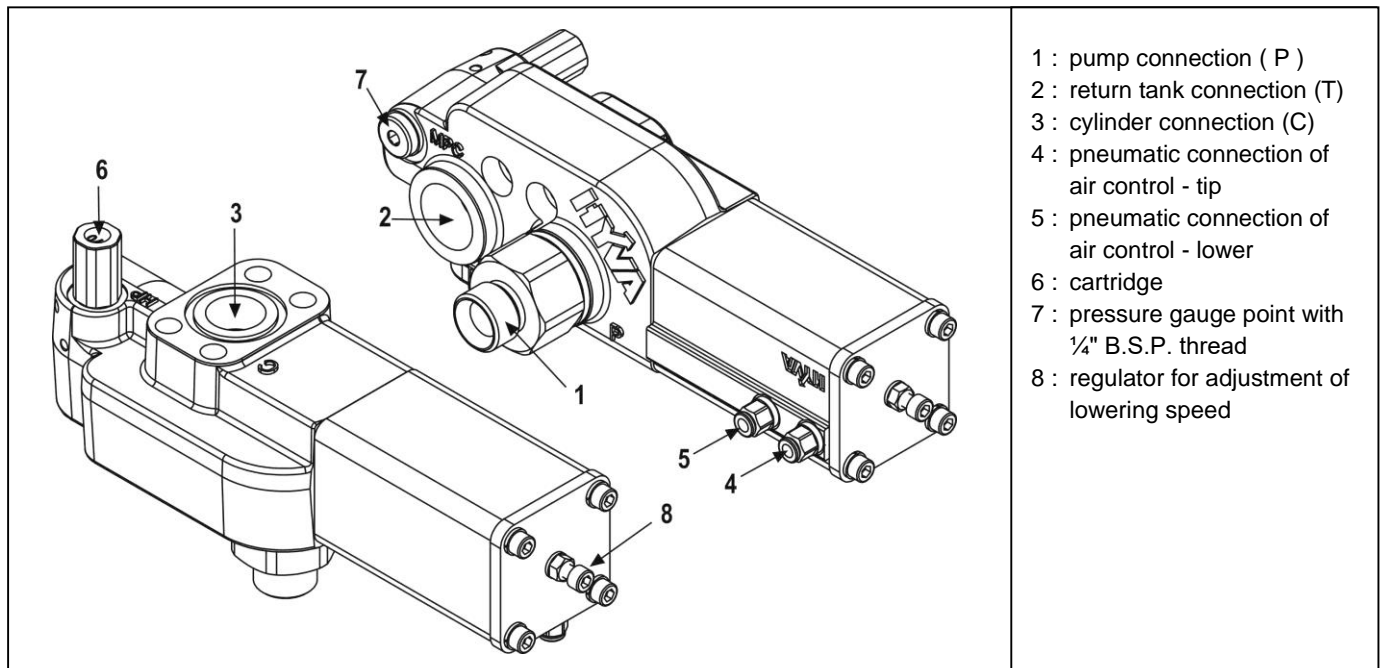


Repair Instructions

HT-Tipping valve Series

PRESSURE TEST INSTRUCTIONS



These instructions are applicable for the models:

- 1) HT-1150-TNK/SAE (old JT), HT-1220-TNK (old PT), HT-1220-QL (old PT) and HT-1220-SAE
- 2) HT-2220-TNK (old PT double pressure)

The picture above shows the HT-1220-SAE model, the working principal on all is the same.

Instructions

Hyva recommends that the hydraulic tipper circuit is to be tested on completion of fitting as well as for trouble shooting. This test is carried out in the following way.

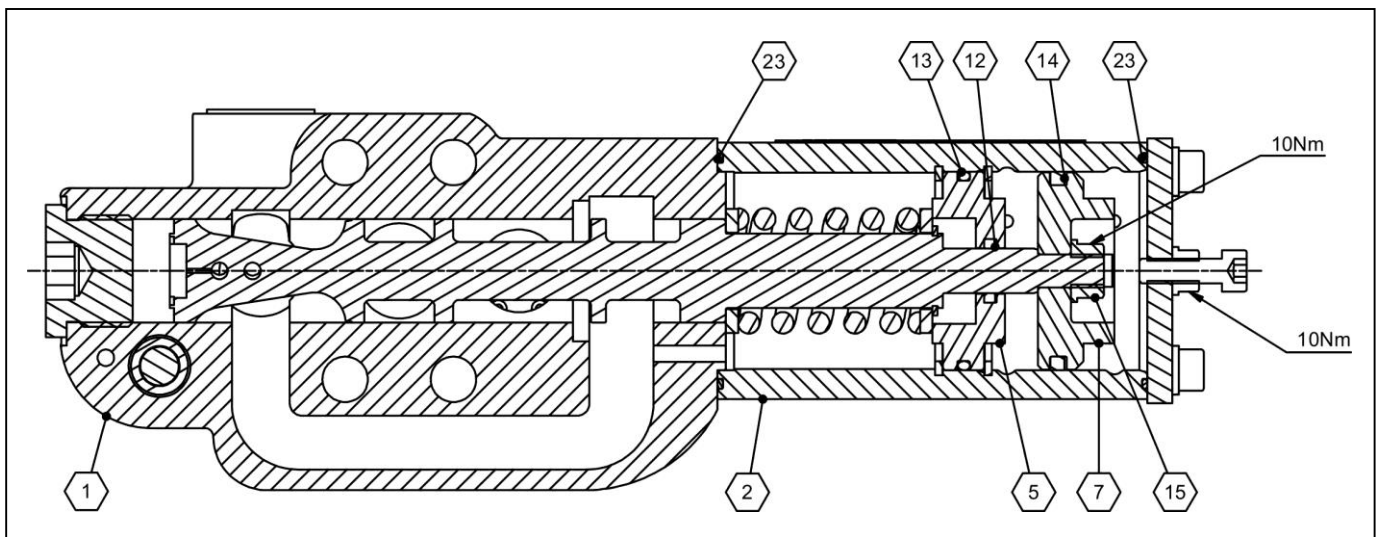
1. Make sure that the body is fully lowered and that the system is without pressure.
2. Connect a 1/4" B.S.P. threaded pressure gauge to the MPC-port (7) of the HT-Tipping valve.
3. Engage the P.T.O. and operate the system on tip.
4. Overload the system on full tip until the oil relieves to the tank. Hold this position for 3 to 4 minutes.
Note: when a Knock-off valve is fitted, this must be taken out of the circuit first (been bridged, so the air supply goes straight from the Air-(tipper) control to the HT-Tipping valve).
5. Check for leaks in the system and read the pressure gauge.

This technique can be used for all Hyva tippers and wet kits.

Repair Instructions

HT-Tipping valve Series

REPAIR OF THE AIR CYLINDER



General information

Make sure that you have a clean workbench and keep some clean rags at hand.
Let the valve drip out before you start dismantling it.

Dismantling

- Unscrew the 4 Allen bolts from the top cover plate of the air cylinder (2).
- Take the cover off and remove the O-ring (23).
- Pull the air cylinder complete with the main spool assembly from the valve block (1).
- Unscrew the hex nut (15) from the main spool.
- Remove the piston (7) and take the X-ring (14) off.
- Remove the main spool assembly carefully out of the separation piston (5) and put it aside in a clean and safe place.

For replacement of the O-ring and x-ring on the separation piston (5), see 'Replacement of O-ring and x-ring on separation piston' on the next page.

Assembly

- Push the main spool assembly through the x-ring of the separation piston (5) until it is stopped.
- Mount the X-ring on the piston (7) and lightly grease it with silicone grease.
- Assemble the piston (7) on the main spool and mount the nut (15) with a drop of Loctite.
- Place the main spool in a vice with aluminium protection plates over the jaws.
- Tighten the hex nut (15) to 10 Nm of torque.
- Place the O-ring (23) on the bottom side of the air cylinder (use a little grease).
- Assemble it (push main spool in) on the valve housing.
- Place the O-ring (23) on the top side of the air cylinder.
- Mount the cover plate and the 4 Allen bolts.
- Tighten the Allen bolts to 10 Nm of torque.

Hyva HT-valve repair kit

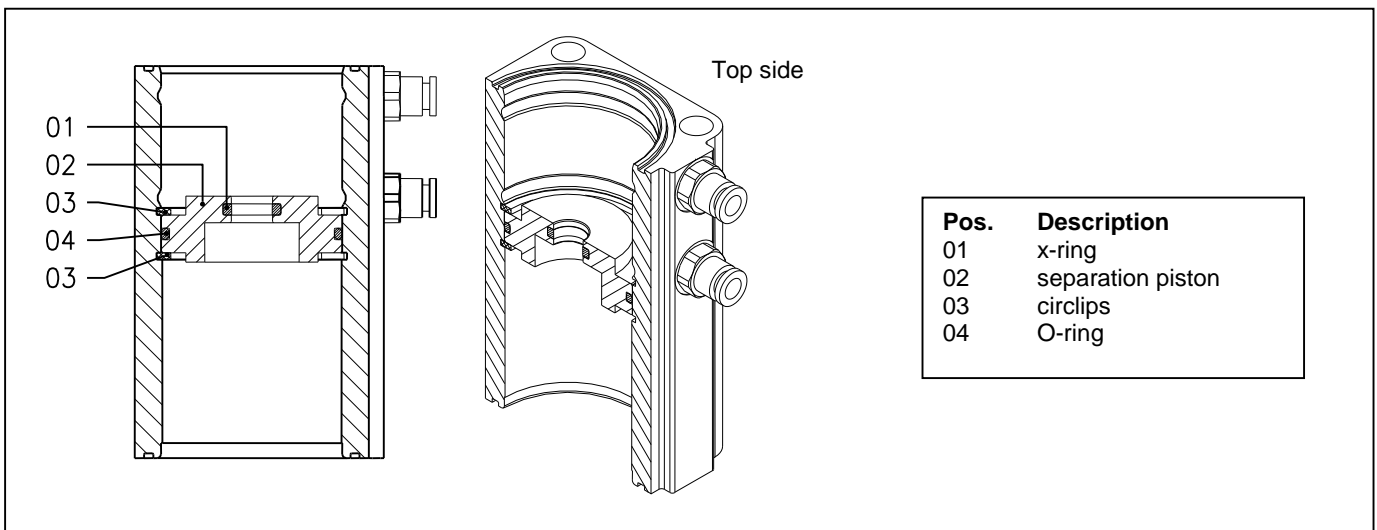
Hyva Partnumber: 148.44.010

Repair Instructions

HT-Tipping valve Series

This kit contains the following parts, as in the drawing:
O-rings (23), X-ring (14), x-ring (12) and O-ring (13).

REPLACEMENT OF O-RING and x-RING ON SEPARATION PISTON



Replacement instructions

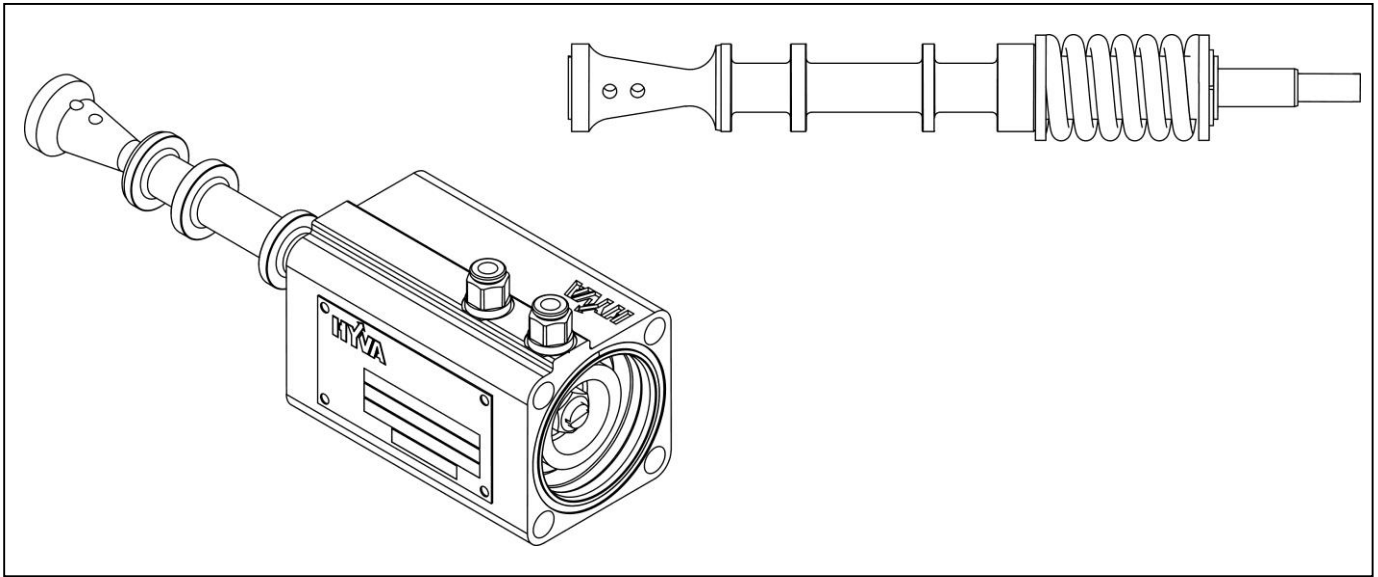
As the top side of the air cylinder is precision honed, great care must be taken to prevent damages to the cylinder wall.

- Carefully remove the circlips (03) from the air cylinder with a correct pliers (DIN5256C # 40).
 - Wear safety glasses during this action.
 - The separation piston (02) **can only be removed from the top side** of the air cylinder.
 - Lightly oil the inside of the air cylinder.
 - We strongly advise to make an adapter from metal bar 47 mm round, and to use a hand press to press out the separation piston. In this way, an even pressure can be applied. Using a hammer will lead to scratches or worse.
-
- Mount the x-ring (01) in the separation piston, this can only be done by folding it in half, and slipping it into place.
 - Mount outer O-ring (04) on the separation piston.
 - Mount bottom circlip (03) and from the top, carefully press the separation piston in the air cylinder until it bottoms on the circlip.
 - Mount upper circlip (03). Wear safety glasses during this action.

Repair Instructions

HT-Tipping valve Series

REPLACING THE MAIN SPOOL



Replacing main spool of HT-valve

The main spool assembly is complete with spring and washers.

The pos. nrs. given refer to the drawing on page 2.

- Unscrew the 4 Allen bolts on the top of the air cylinder (2).
- Take out the bolts with washers and remove the top cover. Be careful not to lose the O-ring.
- Now you can pull the air cylinder with main spool from the valve block (1).
- Be careful not to lose the O-ring on the other end. Keep it in a clean place.
- Unscrew the single nut (15) from the top of the main spool. Apply a screwdriver through the hole at the bottom end of the main spool to prevent it from turning.
- Now gently pull the main spool from the air cylinder assembly.

- Lightly oil the new main spool and carefully mount it. As the separation piston has the internal x-ring, so be careful not to damage it.
- Smear a little Loctite on the thread at the main spool end.
- Mount the top seal lock nut and torque it to 10 Nm. Again use a screwdriver to prevent the spool from turning.
- Replace the O-ring on the air cylinder assembly and mount it to the valve block by pushing the main spool in.
- Replace the O-ring on top of the air cylinder and mount the cover with the 4 Allen bolts with washers.
- Torque the Allen bolts to 10 Nm.

Hyva HT-valve main spool assembly

Hyva Partnumber: 148.45.075

Replacing double pressure switch

Repair Instructions

HT-Tipping valve Series

The double pressure switch assembly is complete with ... and

The pos. nrs. given refer to the drawing

- Unscrew the 4 Allen bolts on the top of the air cylinder (2).
- dfdsfd sdf fd sdfsd f sd sd
- fsd sd dcs sd sdfsd
- fsd sdfsd f ds s dfdsdf

Testing

After repairing the valve must be tested in its original, or a similar, application and installation on pressure and flow !