

## Extruder service and maintenance.

1. Heat up equipment, for medium temperature. (apr.150 c)
2. Material damper on the material tank is closed, and thermoplastic drained out of extruder. As much as possible through the dampers/shutters.
3. Control air for damper is set to 0 bars (shutters / guns) or tubes removed/machine and compressor off. (pictures)
4. Bead guns and "boom" can be removed for better access.
5. Damper cylinders removed from dampers. (picture)
6. Shaft of the shutters is pulled out. (pictures)
7. The heat transfer oil connections for extruder closed. (pictures)
8. Heat transfer oil connections to dampers removed. (picture)
9. Clean dampers, heater and cleaner (diesel or similar) may be used.  
Remember order of the shutters (pictures)
10. Remove Teflon rope/sealing of damper and clean the extruder. (pictures)
11. Bottom rail and damper checked for wear. (pictures new and worn)
12. A damper and damper shaft is used to control the return plate. (Pictures and drawing with measures)

It will be good to have some of the following spare parts ready, in case replacement is needed.

Check the specific size for the parts.

- Cylinder for standard shutters (500627)



- Teflon hoses for standard shutters (500889)



### **Teflon seal on shutters**

- 300 mm (504842)
- 400 mm (504841)
- 450 mm (504840)
- 500 mm (504838)
- 600 mm (615 mm) (510864)

**Insulation plate**

- 300 mm (106304)
- 400 mm (106305)
- 450 mm (108021)
- 500 mm (106306)
- 600 mm (107701)



**Tin for insulation plate (remember screws)**

- 300 mm (OKK012K)
- 400 mm (OKK01NJ)
- 450 mm (105003)
- 500 mm (OKK012J)
- 600 mm (107706)



**Shutters. Standard HSS  $\varnothing$ 40**

- 25 mm (no heat transfer oil connection) (102057)
- 40 mm (only to be used with holding tool) (113278)
- 45 mm (109751)
- 50 mm (109753)
- 60 mm (109746)
- 70 mm (109748)
- 80 mm (109734)
- 100 mm (not recommendable) (109755)



**Bottom line**

- 300 mm (106924)
- 400 mm (110355)
- 450 mm (107379)
- 500 mm (108873)
- 600 mm (108576)



**Distance sleeves**

- 4.4 mm (101549)
- 4.6 mm (101548)
- 4.8 mm (101547)
- 5.0 mm (101546)
- 5.1 mm (101551)
- 5.2 mm (101545)
- 5.3 mm (101542)
- 5.4 mm (101553)
- 5.45 mm (111276)
- 5.6 mm (101554)
- 5.8 mm (101555)



**Shaft for shutters**

- 300 mm (110352)
- 400 mm (110351)
- 450 mm (110350)
- 500 mm (110348)
- 600 mm (110349)



## Pictures for service

3.



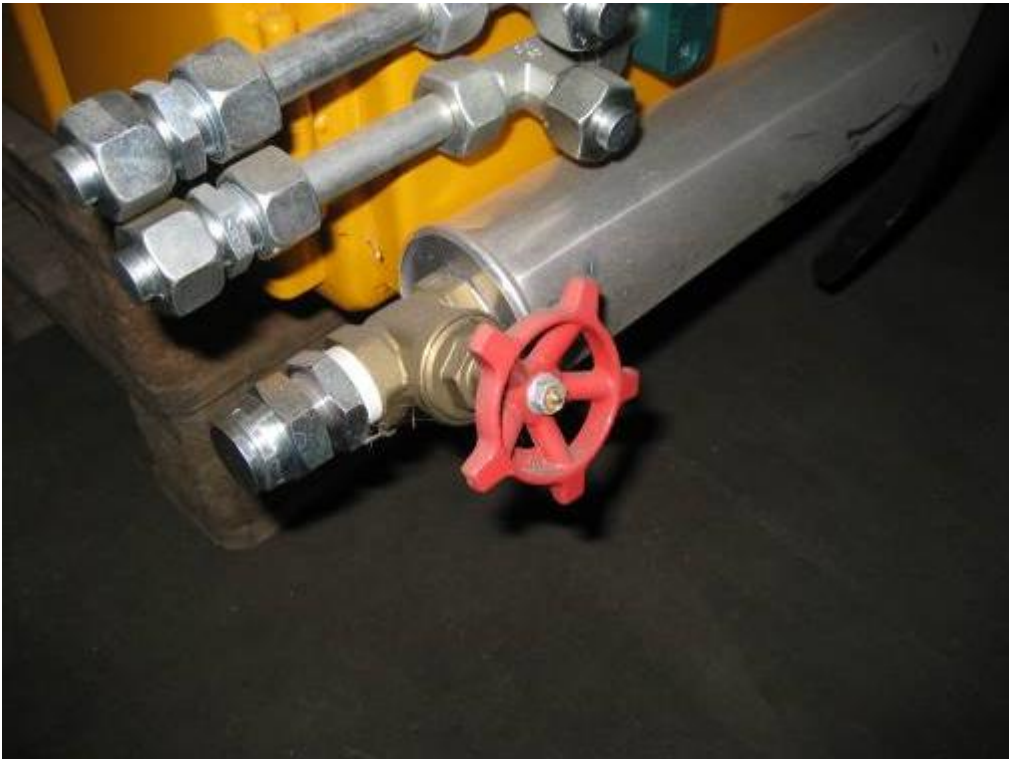
5.



6.

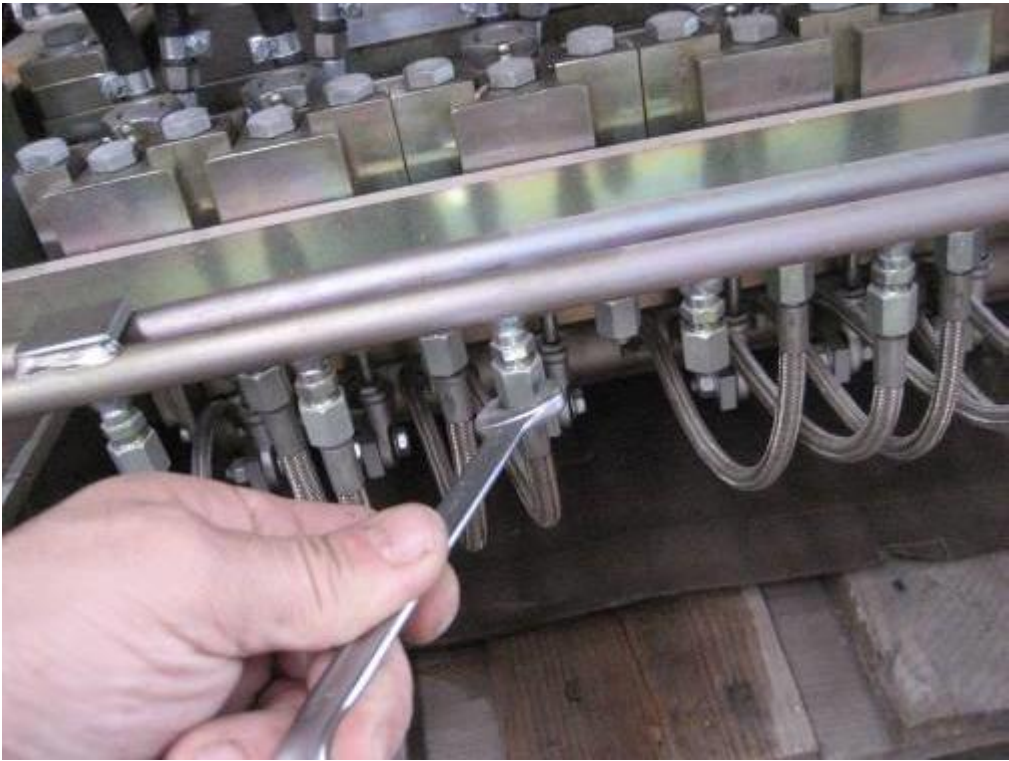


7.

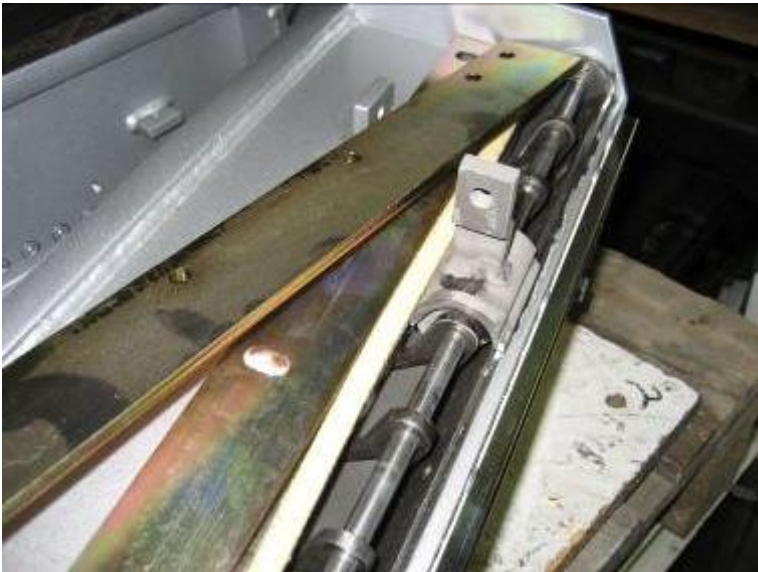




8.



10.



11.  
New and worn bottom rail

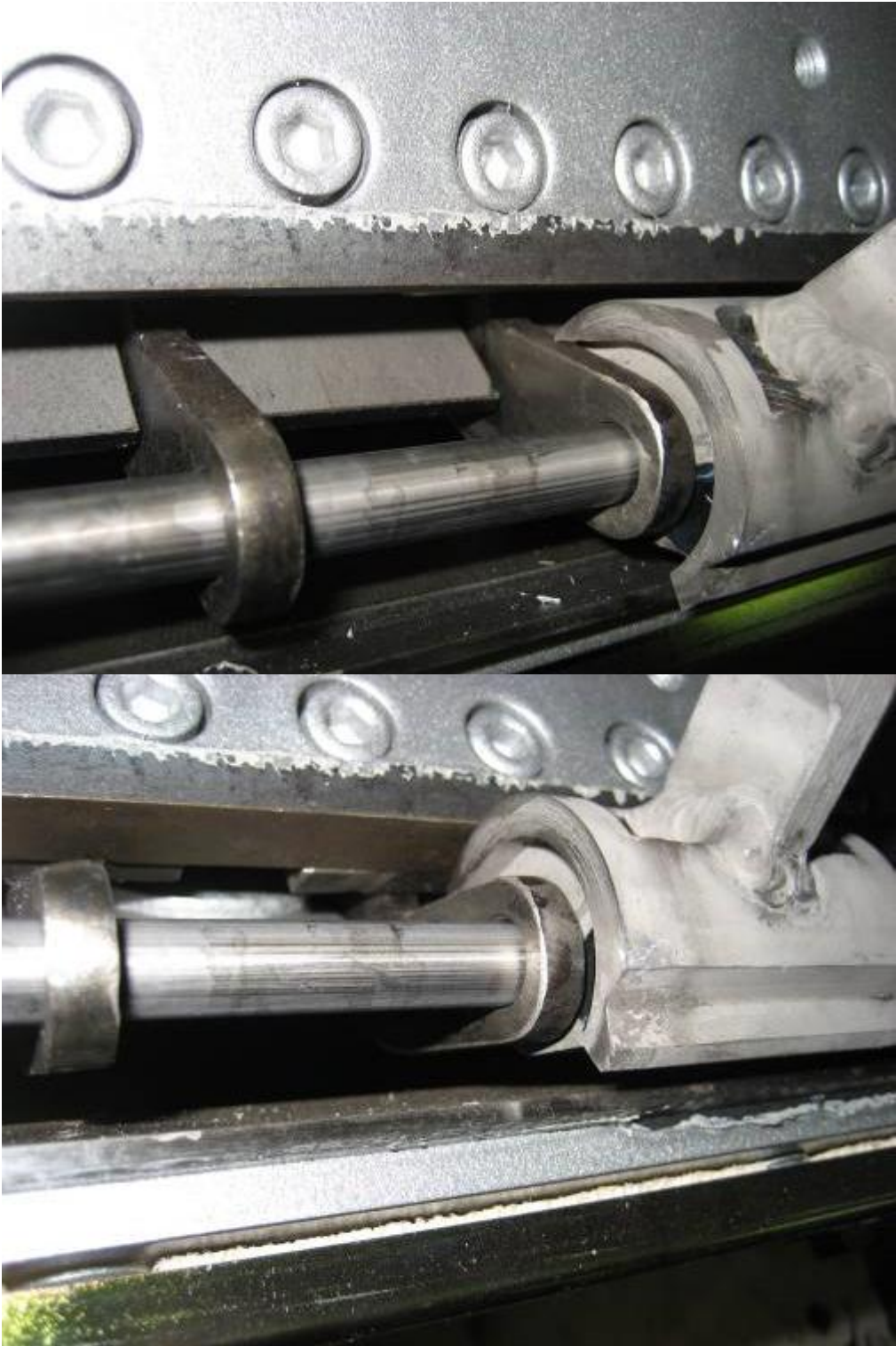


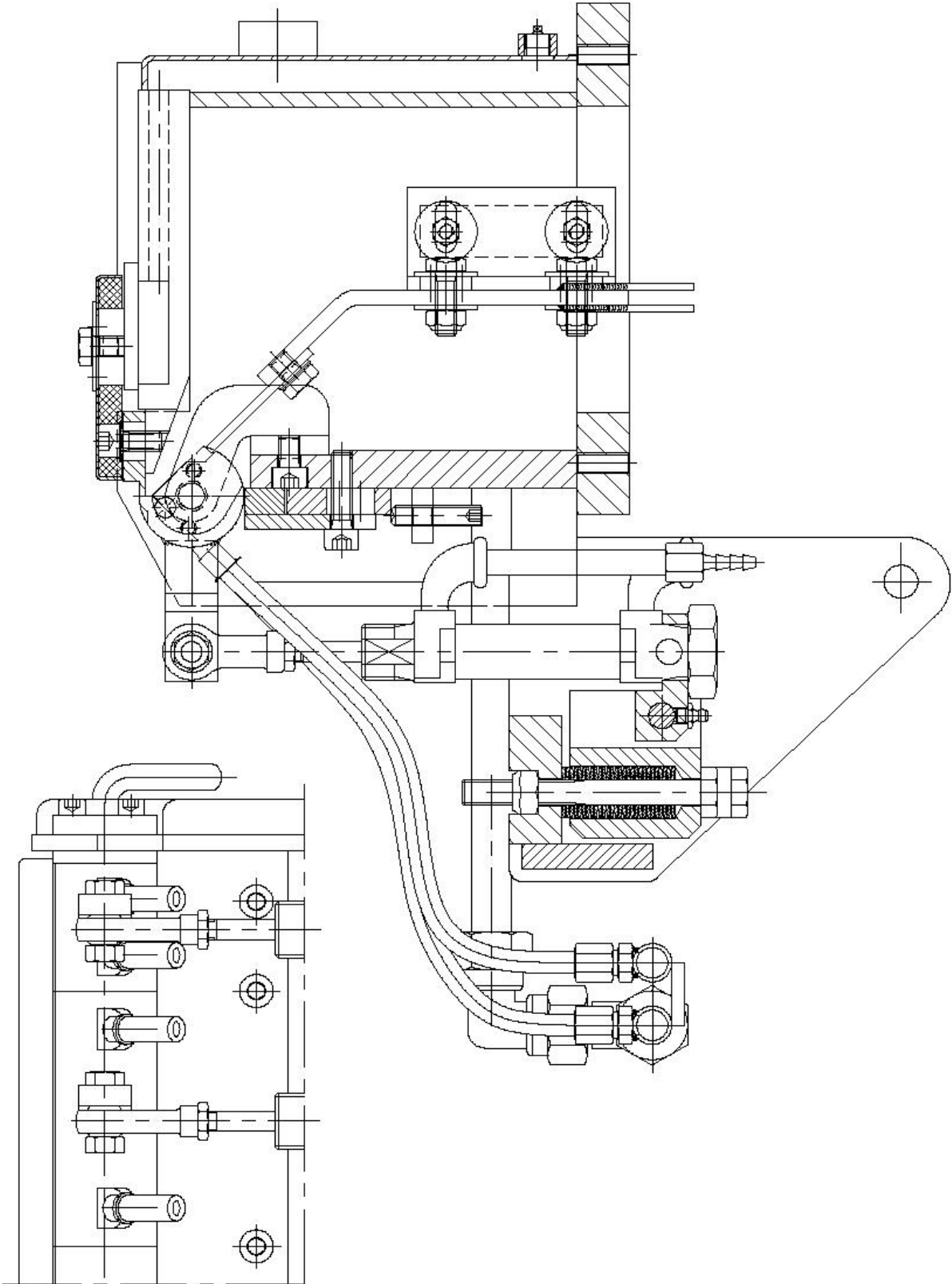
New and worn shutter/damper

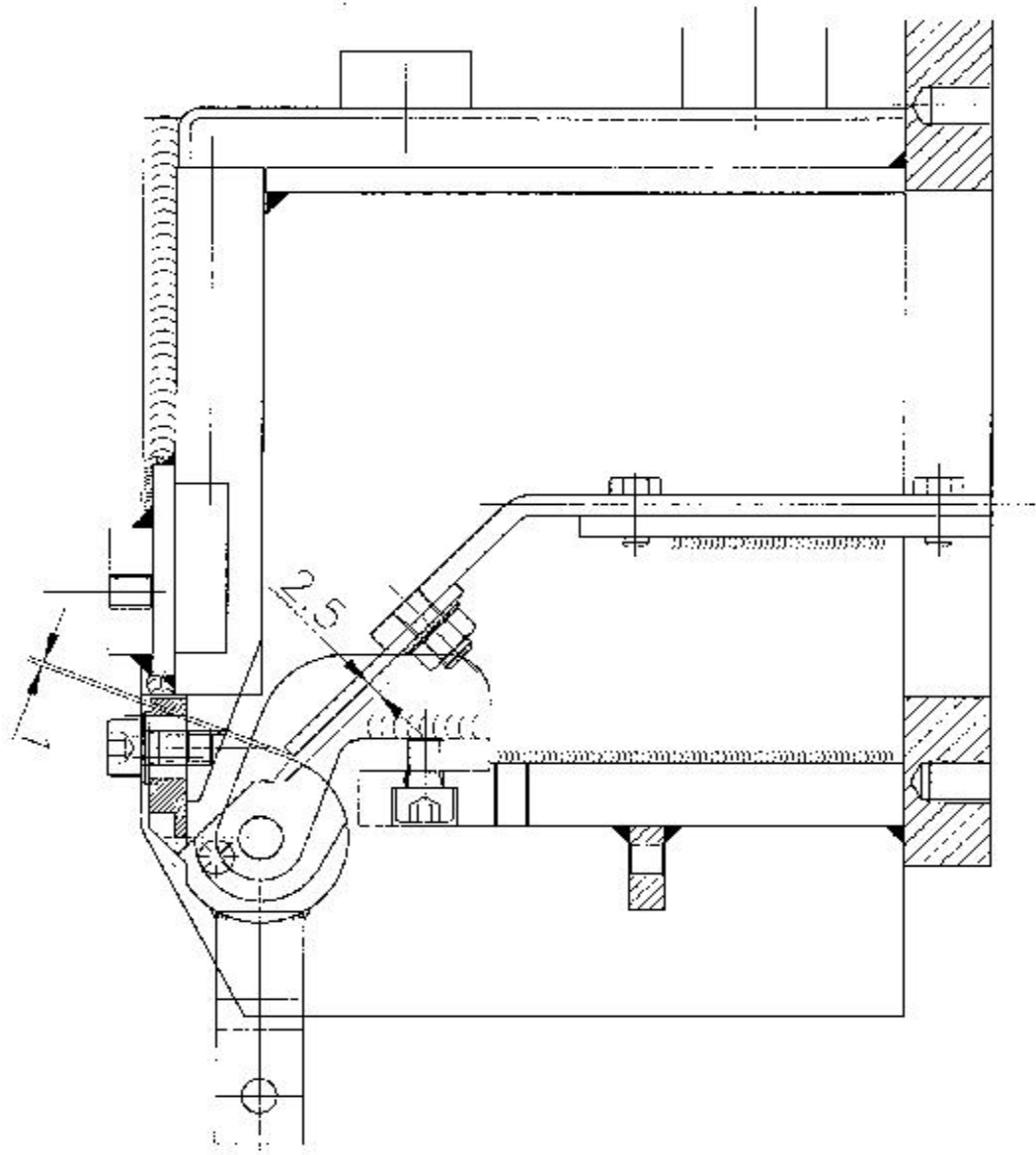




12.







Wear plate/distance sleeve



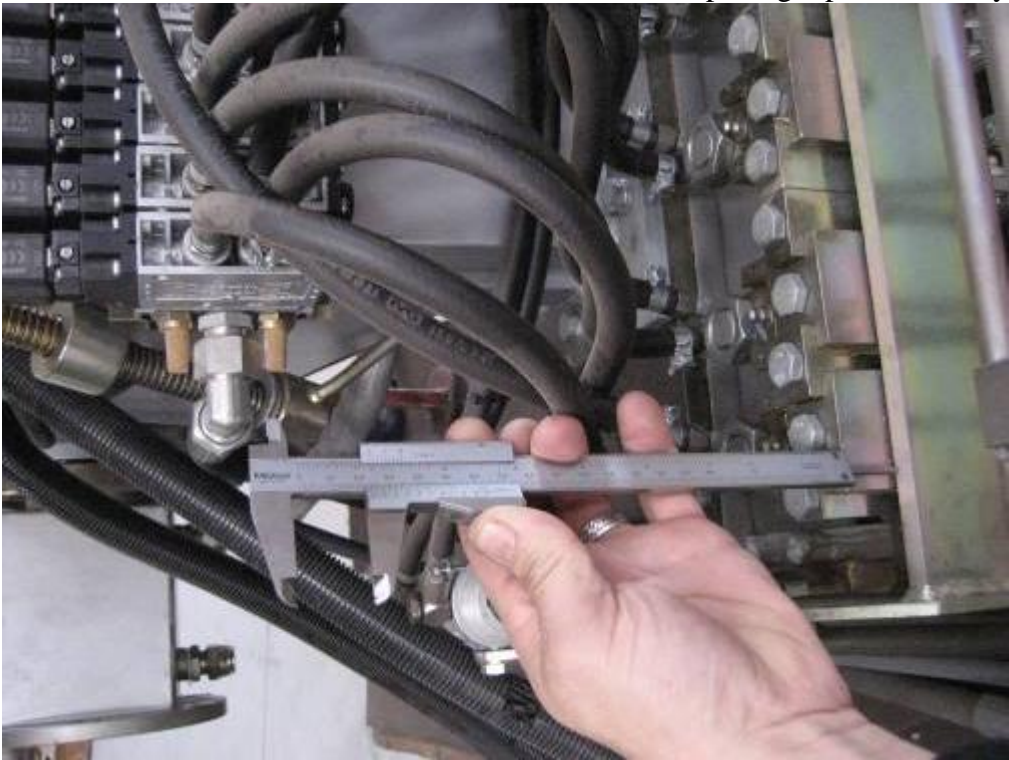
Shutter opening, 70-90 % of line thickness



Tightening of Teflon rope/damper sealing

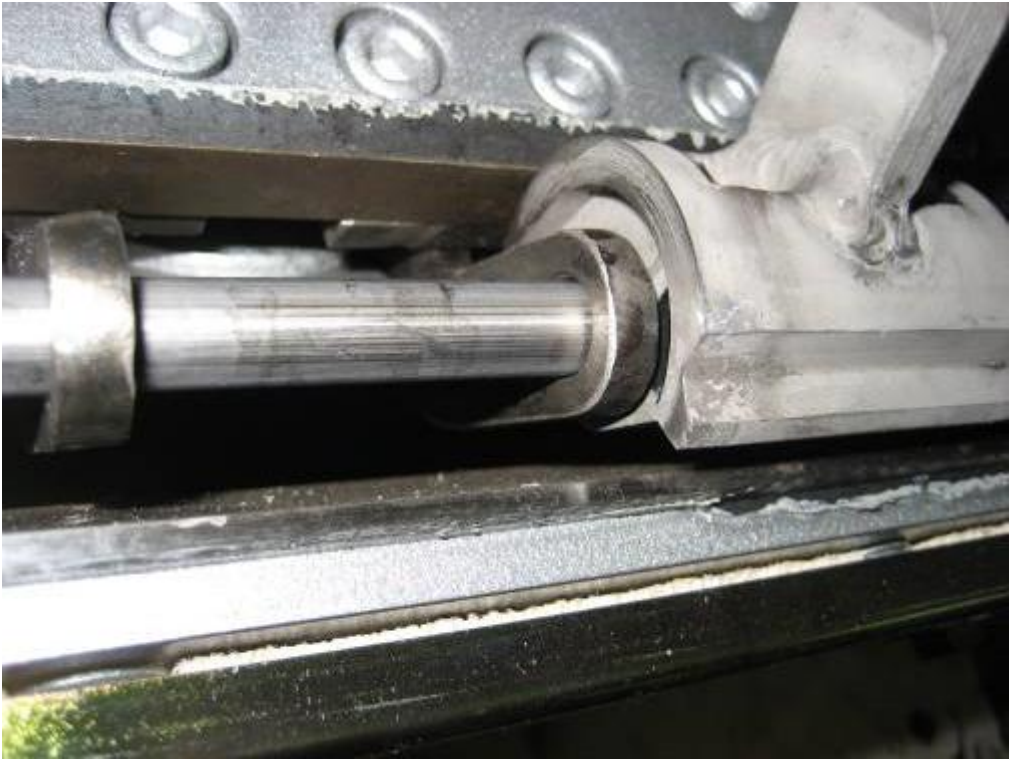
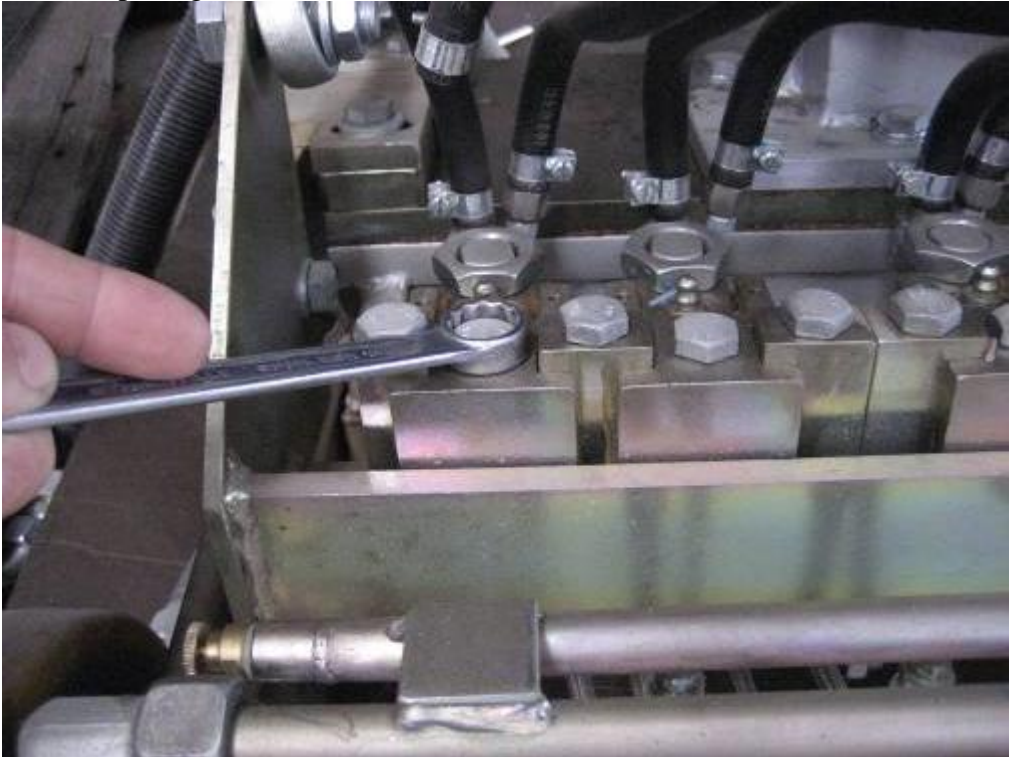


New shutters and bottom rail - 24mm at 3mm shutter opening – pressure on system





Shutter opening 2-4mm ccw increase – cw decrease





Worn parts





Clearance between dampers approx 0,2mm





