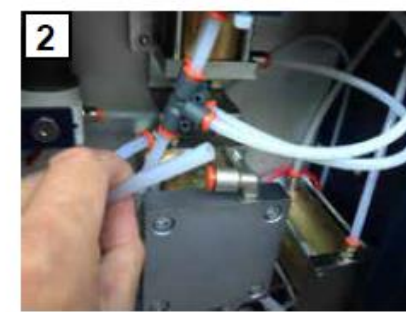


## Gasket/Hammer replacement on Alfa Underpinners

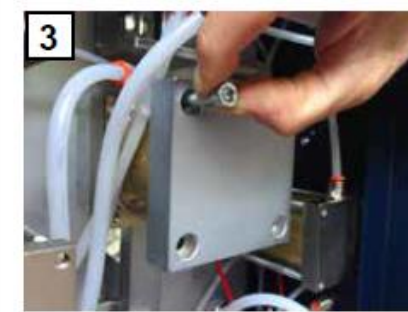
- Tilt stand for a better view and lock carriage in a place where you can clearly get to the main cylinder
- Remove the air supply to the underpinner
- Disconnect the bottom pipe to the cylinder.
- Remove the 4 bolts from the cylinder base these might be tight make sure hex key is in straight as to not to round them off
- Wiggle the cylinder off and extract the hammer then clean any debris with WD40 or similar and wipe clean.
- Replace the seals as in the pictures 4,5 and 6 remembering to keep the lip seals the right way round. Lip seal in 5 channel facing down, lip seal on hammer facing up
- When replacing the lip seal inside the machine pull out with needle nosed pliers or a screwdriver then grease the new one and put in with your finger smoothing the seal into position
- Grease all seals before putting them in, grease the inside of the cylinder walls
- Remove L block to make inserting the hammer easier, check that the high part of the hammer is towards the magazine like in image 9 on the next page
- Insert the hammer being careful to not damage the lip seal
- Replace the cylinder over the seals and screw the bolts back in tighten alternate sides making sure the cylinder goes in straight work around and tightened well.
- Replace L block and push against the hammer as in image 4 on the next page and tighten the bolts.
- Replace the hose to the bottom of the cylinder and test.



1. Slacken the locking handle on the stand to tilt the working bench backwards. Disconnect the air supply from the machine.



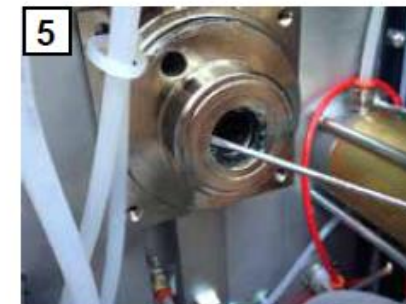
2. Disconnect the 2 pipes connected to the cylinder. Remove the 4 socket head screws which secure the pneumatic cylinder to the head.



3. Remove the pneumatic cylinder and extract the hammer if it is still inside it. Remove all traces of dirt, clean with degreaser, check for wear, grease all the internal surface.



4. Replace the external head seal with the aid of a screwdriver. Clean the seal seat thoroughly and grease.



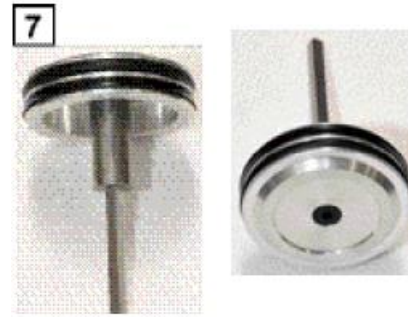
5. Replace the lip seal inside the head with the aid of a screwdriver. Clean the seat and the bush hole thoroughly and grease.



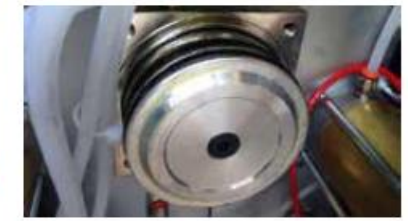
6. Remove the seals from the hammer, clean well and grease, check for wear or the presence of chips. Install the new seals making sure the lip seals are placed the right way round.

# Parts

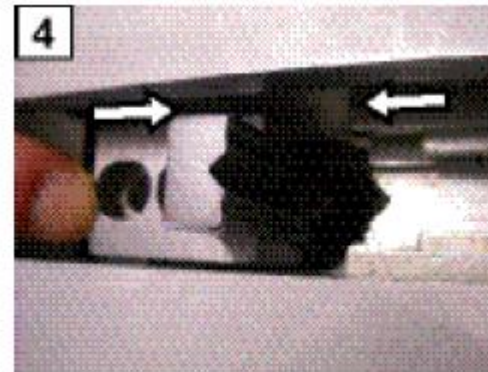
Underpinner	Description	Part number
All Alfa Underpinners	Gasket kit	ALF298390041
M3, M4, U200P, U300, U300P, U400	Piston and Hammer Complete with Lip seal	ALF298420040
MP and U500	Piston and Hammer Complete with Lip seal	ALF298420060
MC and U600	Piston and Hammer Complete with Lip seal	ALF298420120
M144 and U400	Piston and Hammer Complete with Lip seal	ALFM29100022
All Alfa Underpinners	Lip seal	ALF722320001



7. If the hammer is worn out or chipped, proceed to replace the whole piston. The raised ends of the hammer must have marked edges to ensure correct insertion of the V-nail.



8. Grease the hammer piston and the seals well then insert it in the special hole taking care not to pinch the lip seal. If insertion proves difficult, try removing the L-block support, head and V-nail loader.



9. Note: position the hammer so that the high part of the piston has the two raised edges pointing towards the magazine.



10. Replace the cylinder and move it well up against the head. Secure in place with the 4 screws and reconnect the air lines.

At the end of the operation check alignment of the V-nail firing head: magazine and head:  
reconnect the air supply to the machine and activate the hammer several times to make sure it moves correctly and that there are no mechanical hindrances.  
Insert the loader with the V-nails and fire several times to make sure the V-nails are correctly fired from the head.