



RAPID RANGE SERVICING INSTRUCTIONS

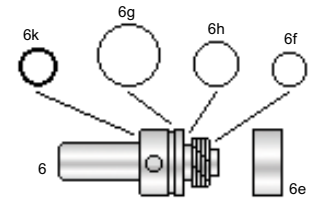
Servicing the Metal Valve



View showing the main seal tightening procedure for the metal valve using the collet and rod supplied with service kit.

The metal valve service kit has all of the tools and o-rings required to service the metal valve fitted in all Rapids up until January 1998. Black Acetal Valves are fitted in all current Rapids and over 90% produced since January 1998.

To replace the small main valve seal (Theoben 008) undo valve cap. This will also allow the second o-ring (BS 011) to be replaced. To fit replacement main seal check that the raised face on the seal is uppermost. Screw the cap down so that the raised face protrudes through the cap, thus creating an area for the valve to seal onto. Use the collet in a vice to grip the cap and use the rod as a lever in the valve body to achieve this. A small amount of grease on the seal will ensure no damage will occur during this procedure. Make sure there are no marks or blemishes on the sealing face. The valve assembly may be returned to Theoben for service/exchange if necessary.



This **service kit** contains everything necessary to do 2 services on your Rapid with a metal valve, including the special tools needed for the job.

This **o-ring kit** contains the basic items required to do 1 service on your Rapid with a metal valve.

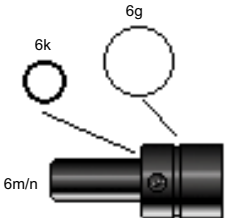
METAL VALVE SERVICE KIT

Molykote 33 Grease (pack)	Full Instructions
2 Theoben 008 white seal 6F	1 Allen key 3/16
4 111 o-ring (buddy bottle) 3G	1 Allen key 5/32
4 015 o-ring 6B	1 Allen key 1/8
2 013 o-ring 6G	1 Allen key 3/32
2 011 o-ring 6H	1 Allen key 1/16
2 4.1 x 1.6 o-ring 6K	1 Collet
2 607 o-ring 6L	1 Rod

METAL VALVE O-RING KIT

Full Instructions	
Molykote 33 Grease (pack)	
1 Theoben 008 white seal 6F	
2 111 o-ring (buddy bottle) 3G	
2 015 o-ring 6B	
1 013 o-ring 6G	1 607 o-ring 6L
1 011 o-ring 6H	1 Rod
1 4.1 x 1.6 o-ring 6K	1 Collet

Servicing the Black Acetal and Elan Valves



The black valve service kit has all of the tools and o-rings required to service the black acetal valve fitted in all current Rapids and over 90% produced since January 1998 and every Rapid Elan. These valve are easier to service and are more resistant to the type of damage that can cause failure. If your rifle needs servicing and you have never done it before, we recommend that you fit the new black valve even if your rifle is currently fitted with a metal valve.

Servicing the black acetal valve is a much easier process than servicing the old style metal valve. There are only two o-rings to check and/or replace if necessary. Make sure there are no marks or blemishes on the sealing face - this is the area where the valve stem seats and must make a perfect seal. The valve assembly may be returned to Theoben for service/exchange if necessary.

This **service kit** contains a completely new and ready to fit black valve & the necessary o-rings for 2 services, including the tools needed for the job.

This **o-ring kit** contains the basic items required to do 1 service of your black valve.

BLACK VALVE SERVICE KIT

Molykote 33 Grease (pack)	Full Instructions
1 Assembled Plastic Valve 6M	1 Allen key 3/16
4 111 o-ring (buddy bottle) 3G	1 Allen key 5/32
4 015 o-ring 6B	1 Allen key 1/8
1 + 1 013 o-ring 6G	1 Allen key 3/32
1 + 1 4.1 x 1.6 o-ring 6K	1 Allen key 1/16
2 607 o-ring 6L	

BLACK VALVE O-RING KIT

Full Instructions
Molykote 33 Grease (pack)
1 111 o-ring (buddy bottle) 3G
2 015 o-ring 6B
1 013 o-ring 6G
1 4.1 x 1.6 o-ring 6K
1 607 o-ring 6L

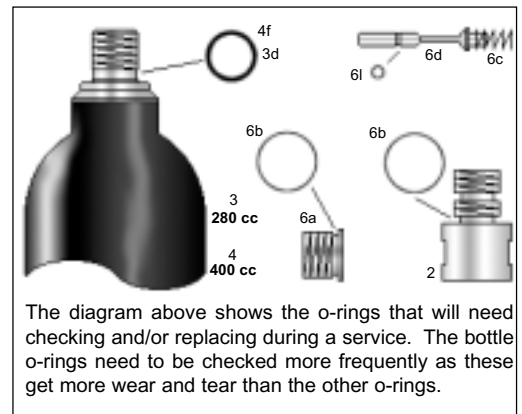
General Maintenance

- Theoben rifles are built for thousands of rounds of shooting with only minimal maintenance required.
- Store rifle in a moisture free climate. Wipe all black steel surfaces (barrel, silencer and trigger guard) with an oily cloth. Do not use SILICONE. Do not spray any substances directly onto or into the rifle or magazine.
- We recommend that the original bolt grease is not removed unless the correct grease can be obtained to replace it - Morris K62, Duckhams 05795 or a similar Molybdenum based grease. Under no circumstances should a petroleum based or silicone base grease or oil be used.
- If the hammer is removed ensure that it is re-assembled correctly. This should be assembled dry as oil or grease will cause the hammer to slow down resulting in power loss and inconsistency.
- If you see a deterioration in accuracy you may need to clean the barrel. Only the use of Napier cloth is recommended and is the safest way to clean your air rifle barrel without fear of damage to your rifling. Theoben can supply a complete barrel cleaning kit or a replacement Napier cloth pack.

SERVICING THE RAPID RANGE

It is only necessary to service your rifle after prolonged use or if it will not hold pressure.

- 1 Remove buddy bottle and magazine and ensure there is nothing loaded into the breech.
- 2 Remove stock by undoing two allen screws through the trigger guard. (5/32" and 1/8" allen key).
- 3 Remove stainless steel inlet adaptor and check o-ring (item 2b - 015)
- 4 Remove stainless steel blanking screw (3/16" key) located next to the inlet adaptor. Check o-ring (item 6b - 015).
- 5 **MOST IMPORTANT:** Completely remove the 4ba grub screw (item 6J) located through the side of the Rapid body (1/16" key).
- 6 Now the main valve assembly can be removed by simply cocking and firing the mechanism. Alternatively the hammer assembly may be removed and a suitable probe used to push out the valve assembly. **No undue force should be used on removal of this assembly.** Any burrs of sharp edges created by careless disassembly could result in scratching vital areas of the main body (item 1) making it necessary for this **expensive item to be replaced.**
- 7 Service or change the valve as instructed below.
- 8 Change and grease (use Molykote 33 as supplied by Theoben) all o-rings as necessary and rebuild in reverse order described above. **IMPORTANT:** The 4ba grub screw locates into the blind hole in the valve body. When fitting, screw the grub screw to the bottom of the hole, then back off half a turn. When fitting, **gently** screw the grub screw to the bottom of the hole, then back off half a turn. Screwing this screw in too hard may cause the valve stem (6d) to not move freely, thus causing the rifle to leak. We advise that after the grub screw is in place, the movement of the valve stem is checked.
- 9 Finally **check the rifle with a chronograph** and adjust the power setting using the rear cap (item 7B).



CHANGING THE HP SCHRADER VALVE IN THE 280cc BOTTLE (Not applicable to 400cc bottle)

With the buddy bottle completely empty, unscrew the special high pressure Schrader valve using a valve key available from any car accessory shop. DO NOT USE ANY OTHER VALVES OTHER THAN THOSE SUPPLIED BY THEOBEN. Screw in replacement valve until it seats. Do not over tighten, or screw in too far.

SERVICING 400cc BOTTLE

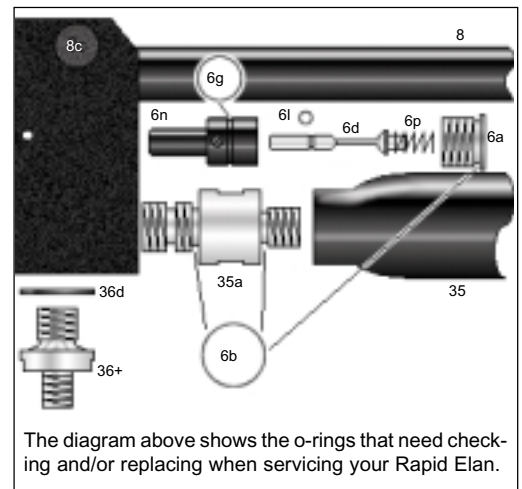
This type of bottle is fitted with a Tungsten Carbide ball valve. The valve is unlikely to wear but occasionally a leak may occur due to dirt becoming trapped between the valve and the seat. Charging the bottle rapidly i.e. from empty to full in 2 - 3 seconds can usually remove any dirt and so enable the ball to reset properly.

O-rings (item 4f and 3d - BS111) on the neck of both buddy bottles should be checked regularly and kept greased for easy removal from rifle.

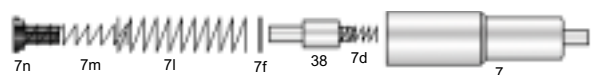
SERVICING THE ELAN

It is only necessary to service your rifle after prolonged use or if it will not hold pressure.

- 1 Remove magazine and check that the air is discharged from your rifle before you start. If there is still air in the rifle remove stock by undoing the two allen screws through the trigger guard (key sizes - 5/32" and 1/8"). Hold Elan body in a vice and unscrew the bottle. There will be a loud 'crack' as the air bursts passed the o-ring (item 6b - BS015) and slowly discharges.
- 3 Remove aluminium inlet adaptor (item 35a) using a 17mm open ended spanner. Check both of the o-rings - one on each end of the adaptor (item 6b - BS015).
- 4 Remove stainless steel valve blanking screw (6a) using a 3/16" key. This is located next to the inlet adaptor. Check o-ring (item 6b - BS015).
- 5 Only remove the charging union (36+) if it is leaking from this area. Using a 17mm open ended spanner, carefully unscrew. Check the dowty seal (36d).
- 6 **MOST IMPORTANT:** Totally remove the 4ba grub screw (item 6J) located through the side of the body using a 1/16" key.
- 7 Now the main valve assembly can be removed by simply cocking and firing the mechanism. Alternatively the hammer assembly may be removed and a suitable probe used to push out the valve assembly. **No undue force should be used on removal of this assembly.** Any burrs of sharp edges created by careless disassembly could result in scratching vital areas of the main body (item 1) making it necessary for this **expensive item to be replaced.**
- 8 Service or change the black valve as instructed over the page.
- 9 Change and grease (use Molykote 33 as supplied by Theoben) all o-rings as necessary and rebuild in reverse order described above. **IMPORTANT:** The 4ba grub screw locates into the blind hole in the valve body. When fitting, **gently** screw the grub screw to the bottom of the hole, then back off half a turn. Turning this screw in too hard may cause the valve stems (6d) movements to be restricted, thus causing the rifle to leak. We advise that after the grub screw is in place, the movement of the valve stem is checked.
- 10 Finally **check the rifle with a chronograph** and adjust the power setting using the rear cap (item 7B).



If you have a problem with setting up the power of your Elan the hammer is one place to check. Another is to ensure that the bottle has the correct pressure. Too much or too little can produce low power. Also see trouble shooting on our Rapid Technical Sheet.



Pictured above - the Elan hammer and spring set up

ELAN SERVICE KIT	Full Instructions	ELAN O-RING KIT
Molykote 33 Grease (pack)	1 Allen key 3/16	Full Instructions
1 Assembled Plastic Valve 6M	1 Allen key 5/32	Molykote 33 Grease (pack)
6 015 o-ring 6B	1 Allen key 1/8	3 015 o-ring 6B
1 + 1 013 o-ring 6G	1 Allen key 3/32	1 013 o-ring 6G
2 607 o-ring 6L	1 Allen key 1/16	1 607 o-ring 6L

This **service kit** contains a completely new and ready to fit black Elan valve and the necessary o-rings for 2 services, including the tools needed for the job.

This **o-ring kit** contains the basic items required to do 1 service of your black Elan valve.

WARNING - Changing the rifle from the manufacturers setting could take the rifle over the legal limit. This is an offence and could result in rifle confiscation or prosecution.