

Installation and Servicing

Installation and Servicing of Flat Type Safety Extractor Tubes

A-System type:
RS-AS, RS-ASH & RS-PAS

G-System type:
RS-GS & RS-PGS

W-System type:
RS-WS

Installation and Servicing

- The Micro Matic flat type safety extractor tube range is a conventional, durable multi-trip design to optimize both in-brewery and in-trade performance.
- The integral safety feature provides total operational safety, eliminating the risk of removal/ejection while the keg is pressurised.
- All product contact areas are manufactured in stainless steel and the construction allows simple in-brewery servicing.
- This manual has been prepared as a step by step guide through all procedures necessary for fitting, removal and servicing.
- The photographs used are type RS-AS, but the procedures apply to all flat type safety extractor tube designs.
- If at first the procedures appear complicated, experience shows that with minimal practice it is not (a complete assembly can be fitted in 45-50 seconds).
- There are, however, some do's and don't's, many of which are common sense and will become self explanatory as the tooling and components are used.

Safety Extractor Tube Installation and Operating Procedures



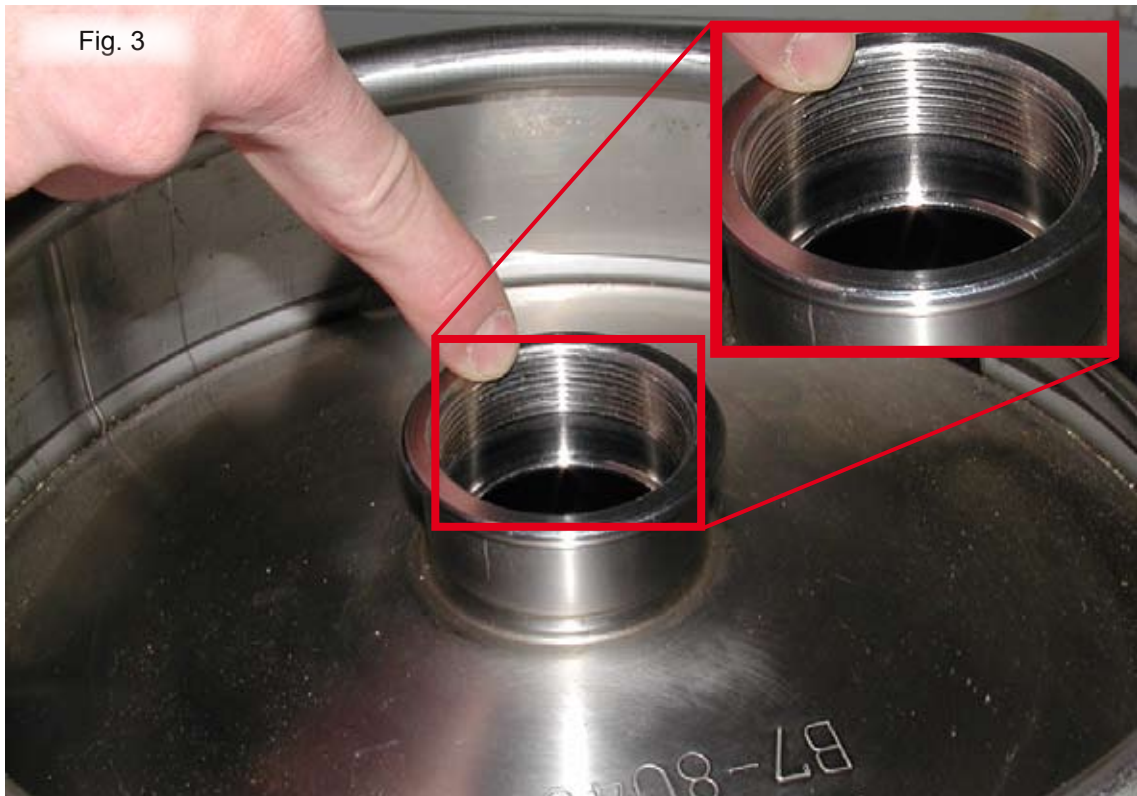
Type: RS-AS
RS-ASH
RS-PAS
RS-GS
RS-PGS
RS-WS

The Fitting Tools



	Part No.		Part No.
1 Hand Tool	741-031	Torque Wrench Adaptors	
2 Holder for Location Tool	741-039	5 A-type with hole	740-049
3 Location Tool		6 A-type without hole	740-040
RS-GS & RS-PGS	741-050	5 RS-GS & RS-PGS	740-029
RS-ACS	741-051	5 RS-WS with hole	740-066
RS-WS	741-053	6 RS-WS without hole	740-091
RS-AS, RS-ASH & RS-PAS	741-054	7 Decompression Key	
4 Torque Wrench	201-325	A-type with hole	741-012
		A-type without hole	740-031
		G-type	740-032
		W-type with hole	741-016
		W-type without hole	740-067

The Keg



Check condition of keg neck.

- Internally
- neck thread must be free of damage
 - sealing land must be clean and free of damage
 - neck must be free of weld splatter

Do not attempt to fit the assembly to damaged/poor quality necks.

Fit Safety Extractor Tube

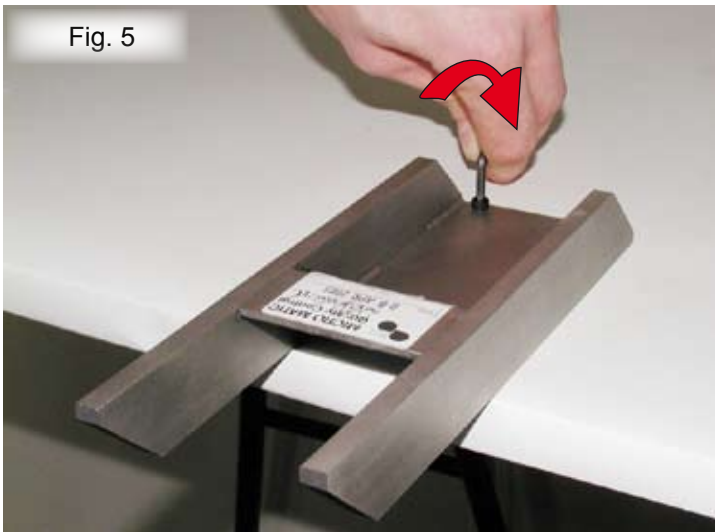
Fig. 4



Moisten the valve in 20°C water.

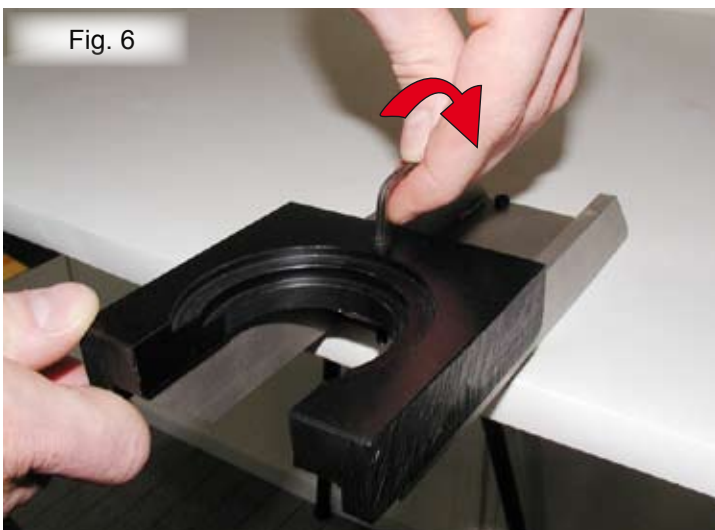
This provides lubrication to the rubber seals during initial fitting.

Fig. 5



Place tool No. 741-039 on a table.

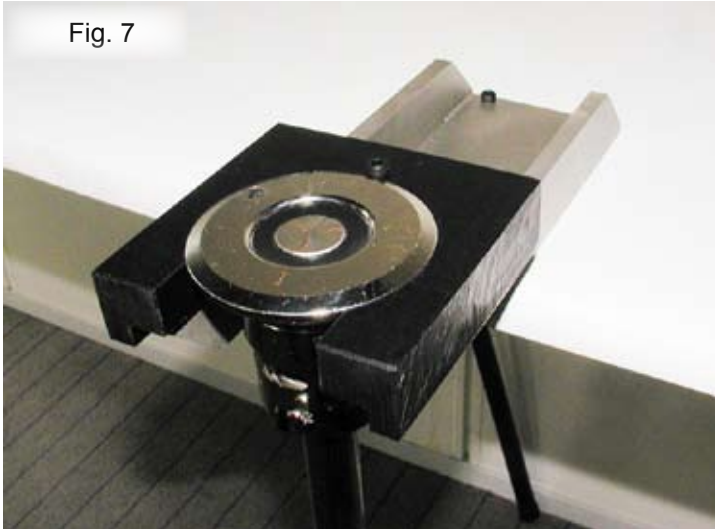
Fig. 6



Fit adaptor No. 741-054 for RS-AS,
RS-PAS & RS-ASH or
No. 741-053 for RS-WS or
No. 741-051 for RS-ACS or
No. 741-050 for RS-GS & RS-PGS.

Installation and Servicing

Fig. 7



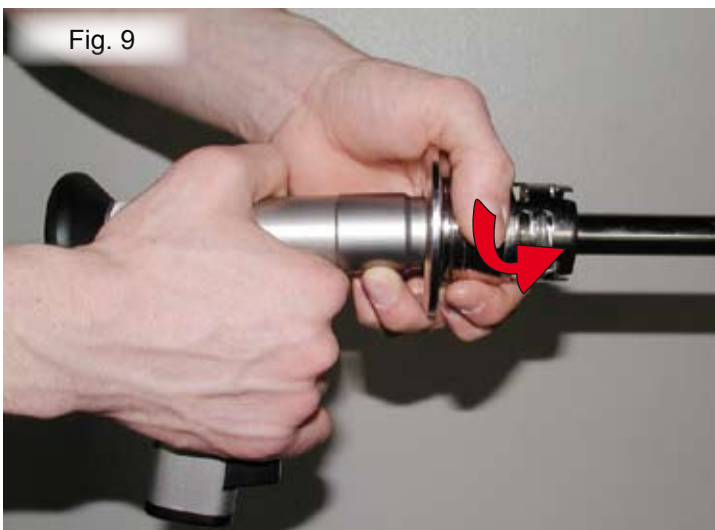
Place the extractor tube in the adaptor.

Fig. 8



Push tool No. 741-031 downwards over the extractor tube until it clicks.

Fig. 9



Disengage the body from the bayonet locks by turning.

Installation and Servicing

Insert into Keg

Fig. 10



Ensure correct position of sealing ring prior to insertion of extractor tube into neck.

Lift extractor tube valve body clear of valve.

Fig. 11



Angle the extractor tube through the keg neck.

Fig. 12



Allow the safety lug to pass below the sealing land of the keg neck.

DO NOT USE FORCE !!

There is no need for the extractor tube tip to touch the internal keg surface during this part of the assembly.

Installation and Servicing

Fig. 13



Push valve body downwards over the valve and turn it clockwise to loosely engage the threads into the keg neck.

Fig. 14



Lift the hand tool with extractor tube engaged upwards until contact is made between the welded plate on the stem assembly and the skirt of the valve body.

Fig. 15



Continue lifting the hand tool upwards and rotate it clockwise until a positive upward movement of the assembly occurs. This is the first stage of re-engagement of the 3 bayonet locks.

Installation and Servicing

WARNING !!!!

This is the Most Important Stage of Assembly



Continue lifting the hand tool upwards but now rotate it anticlockwise until the taps on the welded plate are completely in the bayonet locks in the valve body.



Press the “trigger” of the tool. Now the extractor tube has been assembled.



If the lines do not correspond or main gasket is not in position as above -

DO NOT USE

Go to fig. 24 (page 14) for initial removal from keg when necessary.

Then return to fig. 7 (page 7) and repeat all procedures.

Insert into Keg

Fig. 19



Screw extractor tube into neck by hand.

Fig. 20



Use correctly adjusted torque wrench part No. 201-325 together with Micro Matic adaptor:

A-type with hole	part No. 740-049
A-type without hole	part No. 740-040
W-type with hole	part No. 740-066
W-type without hole	part No. 740-091
G-type	part No. 740-029

Apply in-screw torque of 70-80 Nm

DO NOT OVER TORQUE

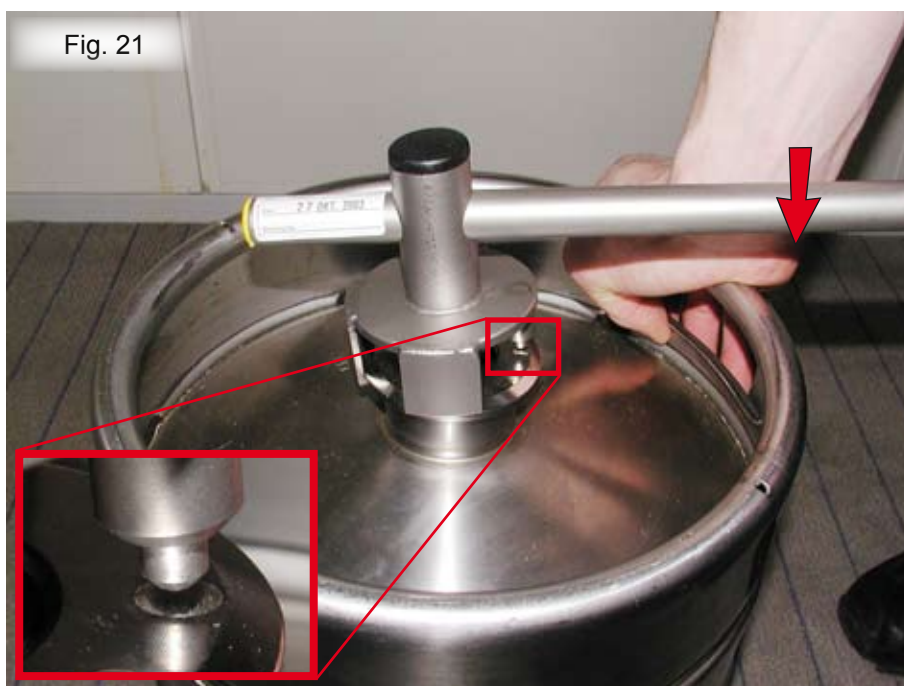
We recommend that a pressure test is carried out on the keg with extractor tube fitted. A low pressure test - 12 psi (0.8 bar) will highlight incorrect fitting of both main seal and keg seal before the keg reaches the filling line.

Installation and Servicing

Before Removal

Although the Micro Matic safety extractor tubes cannot eject from the keg, we strongly recommend that the keg is fully de-gassed before any work is carried out or removal is attempted.

A-type with hole	Tool No. 741-012
A-type without hole	Tool No. 740-031
G-type	Tool No. 740-032
W-type with hole	Tool No. 741-016
W-type without hole	Tool No. 740-067



The Micro Matic de-gas tool locates over the extractor tube flange. Downward pressure on the handle will fully de-gas the keg - safely and cleanly.

Installation and Servicing

Loosen Extractor Tube

WARNING - First De-gas keg.

Fig. 22



Use torque wrench and suitable adaptor (see page 14) to slightly out-screw the extractor tube.

Fig. 23



Extractor tube must be "raised" in neck.

Removal of Extractor Tube

Fig. 24



Place hand tool No. 741-031 in the middle of the extractor tube and press down until it clicks. The tool has now caught the beer valve top.

Fig. 25



By hand hold the body and turn tool No. 741-031 carefully without use of force clockwise until the tool and thus the tube can freely move through the flange part.

Fig. 26



Lift body upwards around the tool. Now the extractor tube can be angled out of the neck without use of force.

Installation and Servicing



Engage body in the bayonet locks by turning it clockwise.

Release handle and the extractor tube has been reassembled.

Extractor Tube Servicing

The design of the Micro Matic RS-AS extractor tube allows simple on site servicing.

The construction is robust and durable and unless deliberate damage has occurred, the only replaceable parts are the rubber components.

These rubber parts must be replaced each time an extractor tube is removed from a keg.

Dismantling procedure

Fig. 28



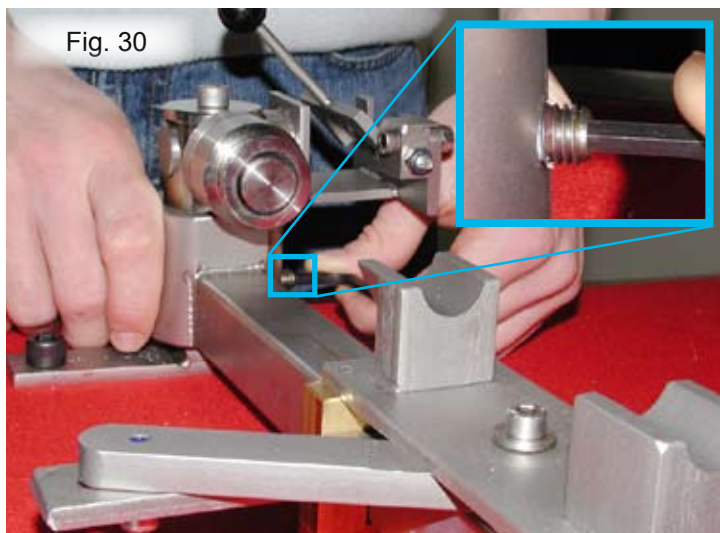
Mount tool No. 740-003 to a table or another object.

Fig. 29



Turn maintenance plunger into fixed groove section of bench tool...

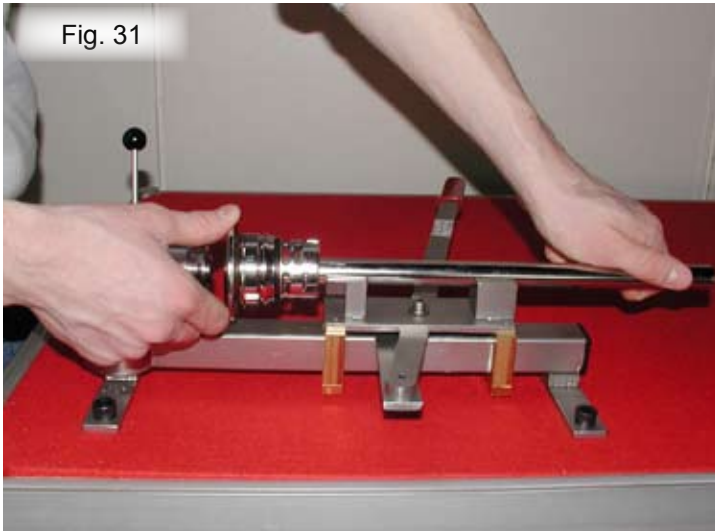
Fig. 30



...and tighten the screw so that the maintenance plunger doesn't move.

Installation and Servicing

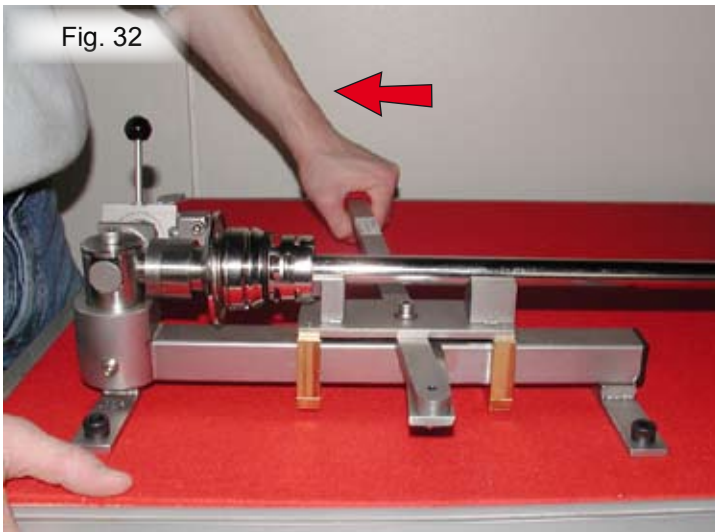
Fig. 31



Moisten the extractor tube in water

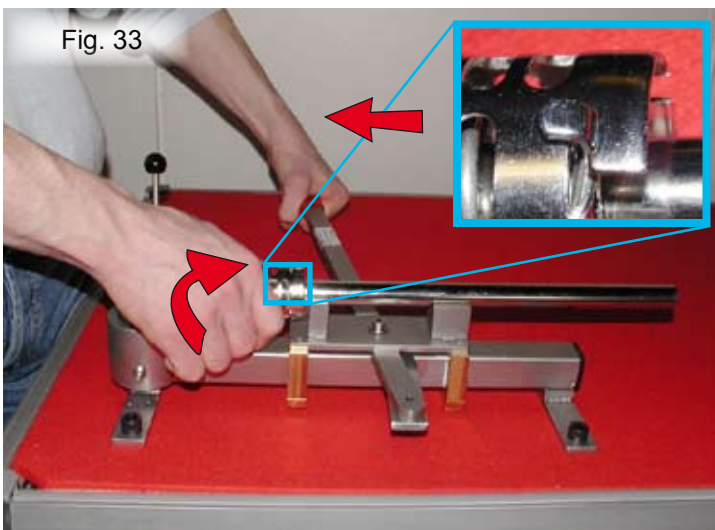
Place extractor tube into the grooved slide section of bench tool.

Fig. 32



Use lever of bench tool to move slide with extractor tube correctly located towards the maintenance plunger.

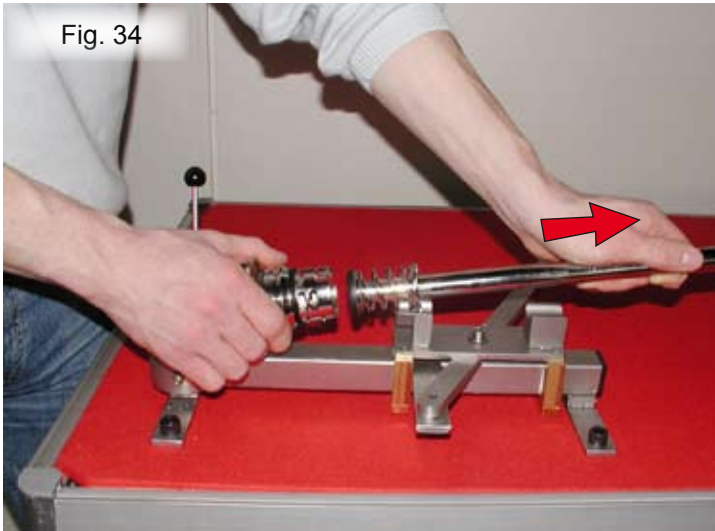
Fig. 33



Maintaining firm lever pressure, twist the valve body to disengage the three bayonet locks.

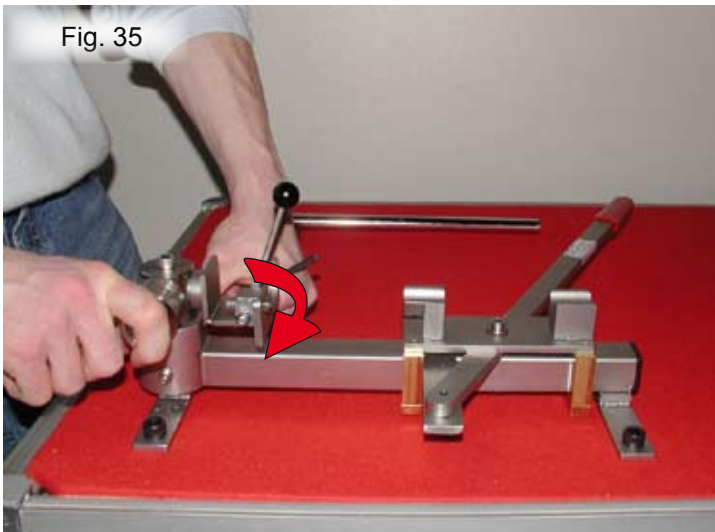
Installation and Servicing

Fig. 34



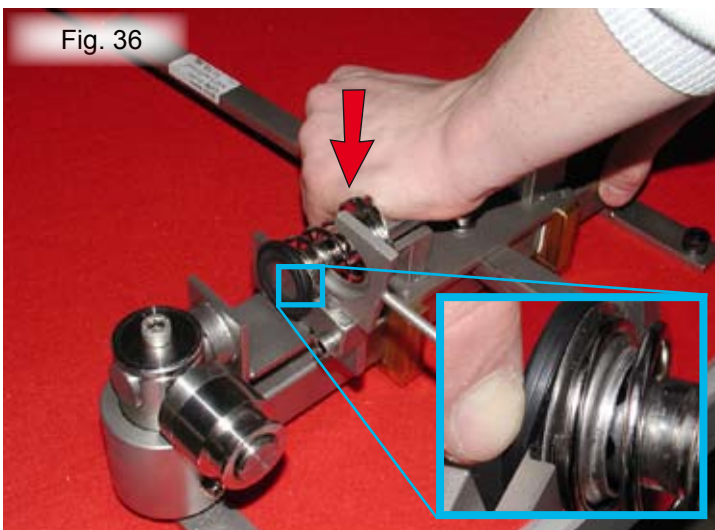
Remove assembly from bench tool.
Remove valve body.

Fig. 35



Turn maintenance plunger into fixed
groove section of bench tool

Fig. 36

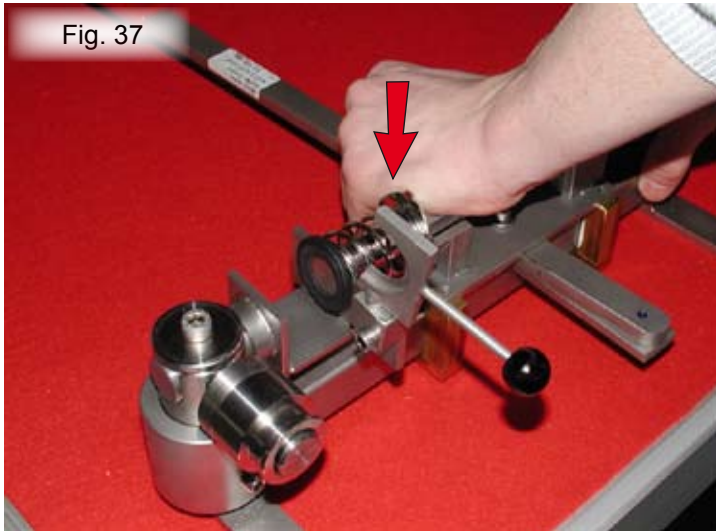


Place extractor tube assembly in the "U"
section of the bench tool.

**It is important that the main
gasket and the stainless steel
seating plate are positioned
on opposing sides of the "U"
section.**

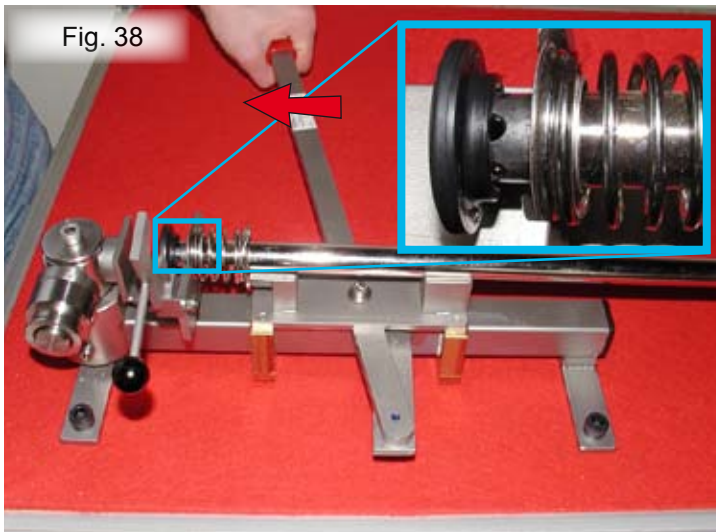
Installation and Servicing

Fig. 37



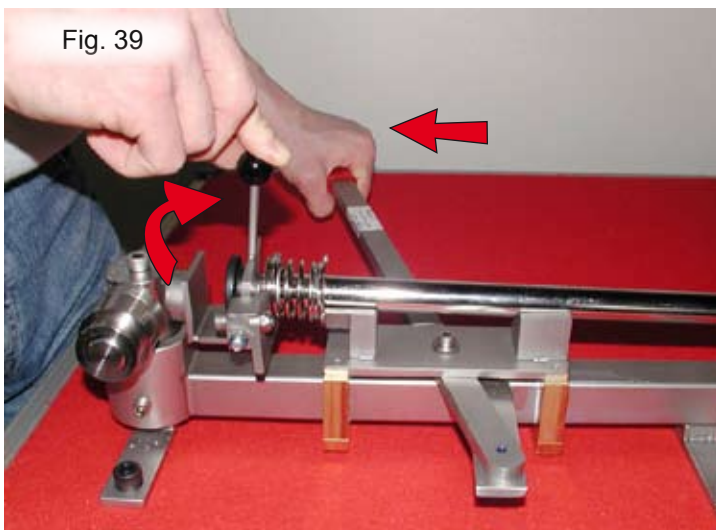
Press stem assembly fully down into the bottom of the "U" section.

Fig. 38



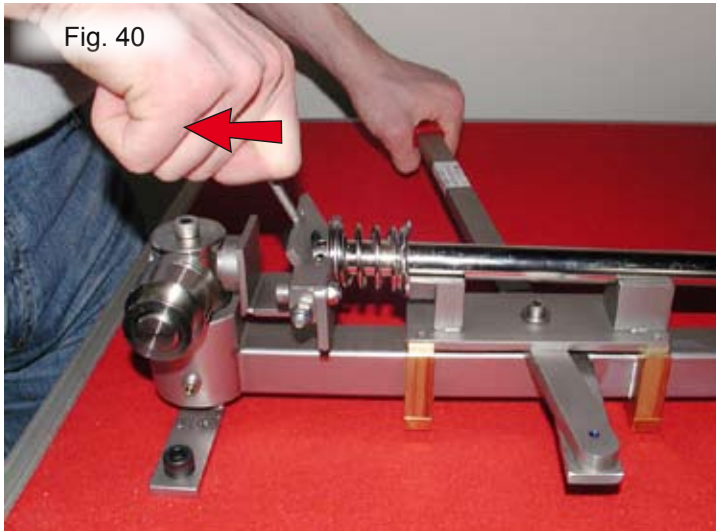
Move the handle in the direction of the arrow until there is a gap between gasket and washer.

Fig. 39

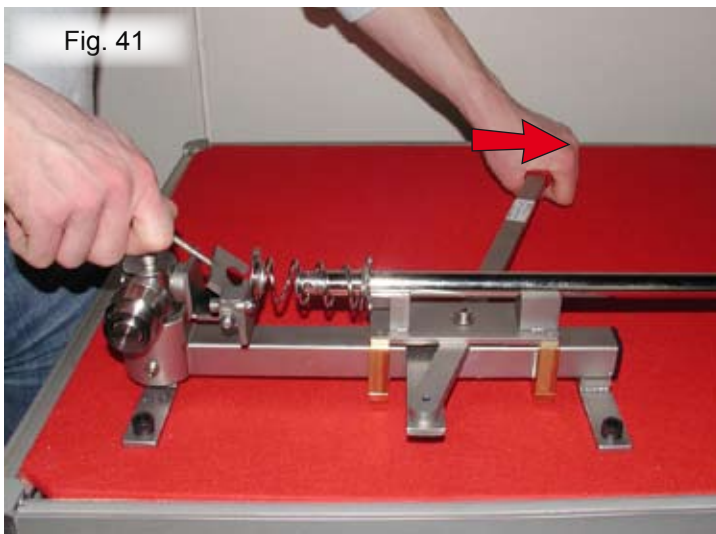


Place the fork into the gap.

Installation and Servicing



Twist the fork back to release the gasket from the beer valve.



Release handle and disassemble the remaining parts.

Installation and Servicing

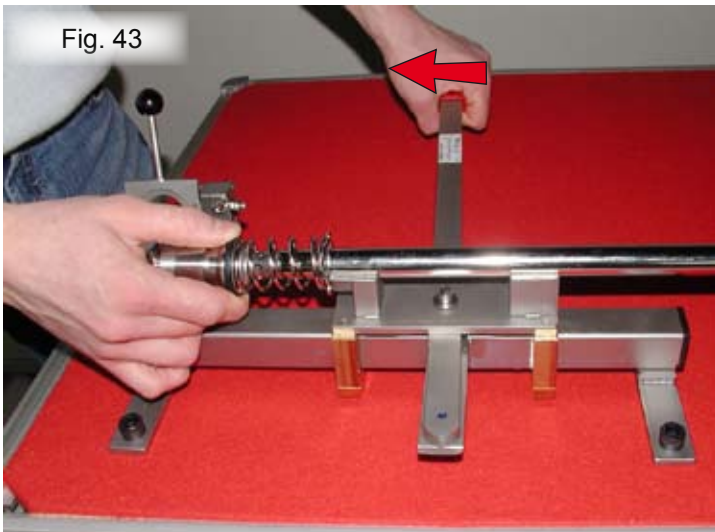
Re-assembly Procedure

Fig. 42



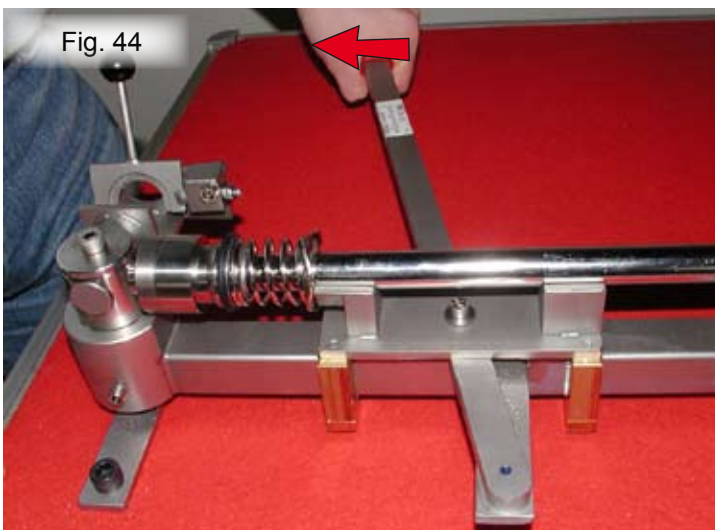
Use **new** main gaskets and container seals.
Moisten all parts in water.

Fig. 43



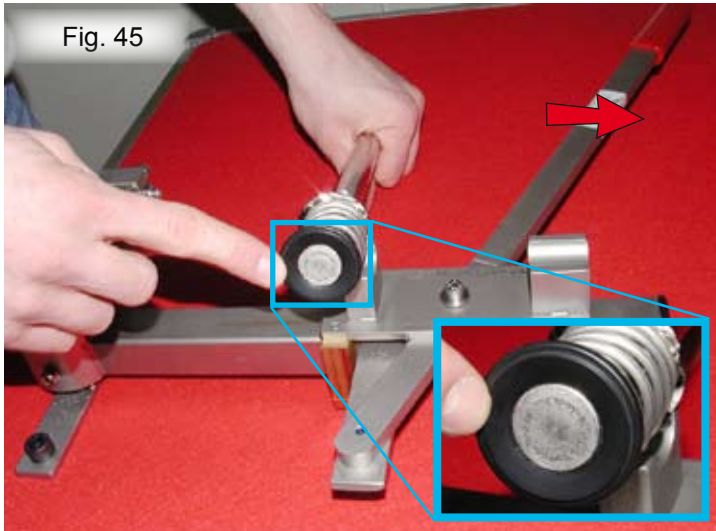
By hand, hold spring, seating plate and main gasket in position.
Place extractor tube stem into the slide section of bench tool, and move the lever to gently engage components against the maintenance plunger.

Fig. 44



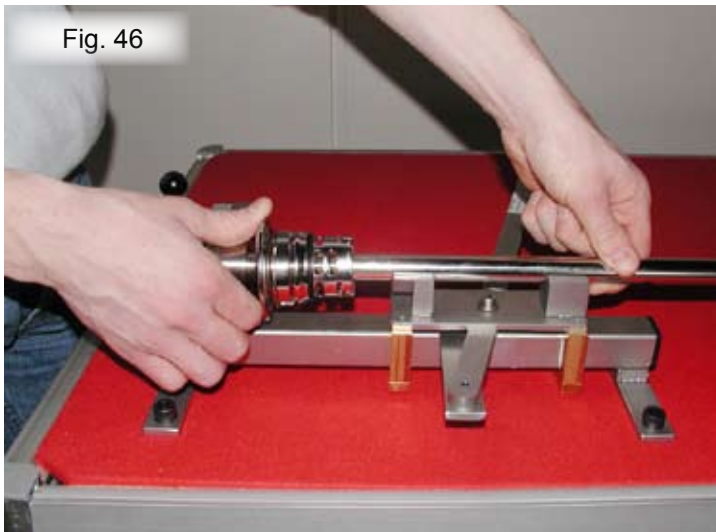
Using lever, apply sufficient pressure to push new main gasket over the machined stem head.

Installation and Servicing

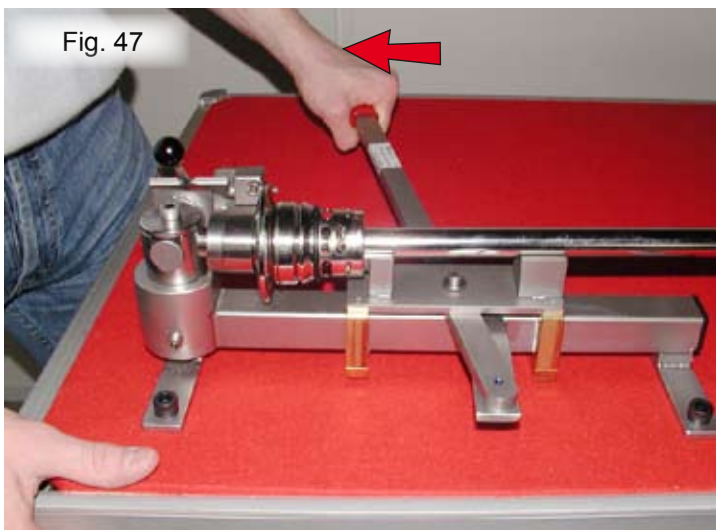


Release lever of bench tool.

Ensure main seal is correctly positioned and spring is central on locking plate.



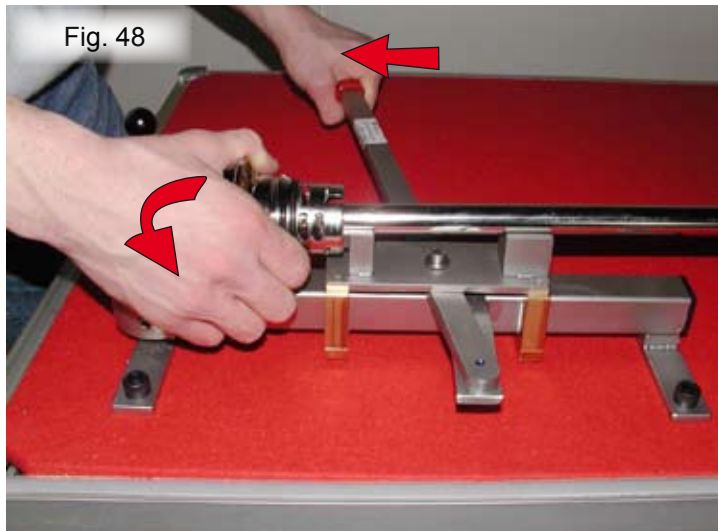
Fit **new** container seal to valve body.
Position valve body over stem assembly.



Use lever of bench tool to engage stem assembly against maintenance plunger.

Continue to apply pressure to depress main gasket.

Installation and Servicing



Twist valve body to re-engage bayonet locks between valve body and stem assembly.

The extractor tube is now serviced.

We recommend that all extractor tubes are fully pressure tested before being refitted into containers.

We recommend a low pressure test of 12 PSI (0.8 bar)

Micro Matic can provide a simple bench mounted pressure test rig if required.
(Tool no. 740-036)