



Head Assembly Cleaning Guide



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Thank you for your purchase of an AIS O-Ring Installation Machine. With regular cleaning your machine will provide years of reliable and trouble free service. This guide will instruct you on how to clean your machine to help keep it in optimum running condition.

Required Materials

Allen Wrenches: 3/16"
9/64" (5/32" for ASP-2)

Cleaning Solvent

Maintenance Kit

Small Screwdriver or Plastic Pick Tool

Shop Rags

Head Removal and Disassembly

- 1) Shut off power and air to machine.
- 2) Remove Mandrel from Stripper Jaws. On machines running oil for lubrication, the Mandrel may be slippery. Wipe off excess oil and set aside.
(Fig. 1 page 11)



- 3) Remove Lubricator from top of Head Assembly by pulling straight up. *(Fig. 1 page 11)*
- 4) For machines equipped with O.D. Lube, disconnect Auxiliary Lubricant Lines using the quick disconnect. To prevent lube from leaking from the lines insert red plug (provided in Maintenance Kit) into the connector. Remove O.D. Lube Plate from nose of Stripper Jaws by removing the 2 screws on the plate. *(Fig. 2 page 12)*
- 5) Disconnect the 2 Photoelectric Sensor Cables from the Magazine by loosening the small thumb screws located on the Mounting Brackets. *(Fig. 1 page 11)*
- 6) For machines equipped with O-Ring Detection, unscrew the Proximity Sensor located on the side of the Stripper Jaws. *(Fig. 2 page 12)*
- 7) For machines with Air Assists or Escapements, disconnect the air lines on the back of the Magazine using the quick disconnects. *(Fig. 1 page 11)*



- 8) Using a 3/16" Allen wrench, remove the 2 Cap Screws (4 Cap Screws for ASP-2 machines) that bolt the Head Assembly to the Chassis. Pull the Head Assembly straight up to remove from the machine (*Fig. 1 page 11*)

Remove and discard any O-rings that may have fallen behind the Head Assembly. Wipe off any excess lubricant from Chassis.

Dump out O-Rings left in the magazine. These can be put back the Feeder Bowl provided they are clean and dry. Move the Head Assembly to work table to complete cleaning procedure.

- 9) Remove the Stripper Jaw Springs by unscrewing the 2 Spring Retainers on each side of the Head Assembly. (*Fig. 3 page 13*) (*NOTE: ASP-2 machines have 4 Spring Retainer Assemblies.*)



- 10) Remove the Cover Plate by unscrewing the 4 Thumb Screws on the front of the Head Assembly. Slide Stripper Jaws out of the Head Assembly. Remove the O-ring that holds the Stripper Jaws together. *(Fig. 3 page 13)*

- 11) Remove the Magazine Cover by loosening the 2 thumb screws. *(Fig. 3 page 13)*

- 12) Remove the 2 Horizontal Jaw Spring Retainer Assemblies by loosening the Plunger Body on each side of the Head Assembly. Note how the large end of the Spring Pin fits against the Spring. *(Fig. 4 page 14)*

- 13) Remove the 4 Cap Screws located on the sides of the Head Assembly using a 9/64" (5/32" for ASP-2 machines) Allen wrench. Slide the Internal Assembly out of the back of the Head Assembly. *(Fig. 4 page 14)* (Note: The Internals fit very tightly.) Lay the Internals on a flat surface with the Back Up Plate on the top. *(Fig. 5a page 15)*



- 14) Remove the Back Up Plate from the Internal Assembly. *(Fig. 5b page 15)*

- 15) Remove the Left and Right Horizontal Slide Jaws by sliding them out from under the Vertical Slide Jaws. *(Fig. 5c & 5d page 16)*

- 16) Remove the Top and Bottom Vertical Slide Jaws and the 4 Vertical Slide Jaw Springs from the Jaw Gib. *(Fig 5e & 5f page 17)*

- 17) Clean all parts with solvent and let dry. Inspect components for damage or wear. Replace if necessary.

Head Reassembly

- 1) Lay the Jaw Gib on a flat surface. Replace the Left and Right Horizontal Slide Jaws. *(Fig. 6a & 6b page 18)*



- 2) Replace the Top and Bottom Vertical Slide Jaws by sliding each in from the sides. Insert each Vertical Jaw Spring (4 total) by compressing it into the slot. (*Fig. 6c & 6d page 19*)

Tip: Press the bottom of the Spring into the slot and use a small screwdriver to compress it until it snaps into place.

- 3) Replace the Backup Plate to complete the Internal Assembly. (*Fig. 6e & 6f page 20*)
- 4) Check the Internal Assembly for proper assembly. Move the Vertical and Horizontal Jaws manually by inserting a small screwdriver or pick through the hold in the center. They should slide freely. (Note: The Vertical Jaws will have tension, but the Horizontal Jaws will not.) An O-ring should be able to drop through the slot on the top of the Assembly and be seen through the hole in the center.



- 5) Reinsert the Internal Assembly into the Loading Frame through the back of the Head Assembly. (Note: The Internal Assembly fits into the Loading Frame very tightly and must be perfectly square with the Frame for insertion.) *(Fig. 4 page 14)*

Tip: Lay the Steel Internal Assembly on a flat surface and slide the Loading Frame over it.

Replace the 4 Cap Screws located on the sides of the Head Assembly using a 9/64" (5/32" for ASP-2 machines) Allen wrench. *(Fig. 4 page 14)*

- 6) Replace the Horizontal Jaw Spring Retainer Assemblies. The large end of the Spring Pin should be against the Spring. (Note: The Plunger Body should be finger tight.) *(Fig. 4 page 14)*
- 7) Replace the Magazine Cover using 2 thumb screws. *(Fig. 3 page 13)*
- 8) Replace the O-Ring onto the nose of the Stripper Jaws. *(Fig. 3 page 13)*



For machines with O.D. Lube, replace the O.D. Lube Plate using the 2 screws. Note: Do not overtighten the screws. The Plate should be able to move from side to side and there should be a small gap between the Plate and the nose of the Stripper Jaws. *(Fig. 2 page 12)*

Slide the Stripper Jaws back into the Head Assembly. *(Fig. 3 page 13)*

- 9) Replace the Stripper Jaw Springs and secure using the Spring Retainers. (Note: The Nuts should be finger tight.) *(Fig. 3 page 13)*
- 10) Replace the Cover Plate using 4 Thumb Screws. *(Fig. 3 page 13)*
- 11) Set the Head Assembly back on the Chassis. Replace the 2 Cap Screws (4 Cap Screws for ASP-2 machines) using a 3/16" Allen wrench. *(Fig. 1 page 11)*
- 12) Reconnect all Air and Lubrication Lines. *(Fig. 1&2 pages 11&12)*



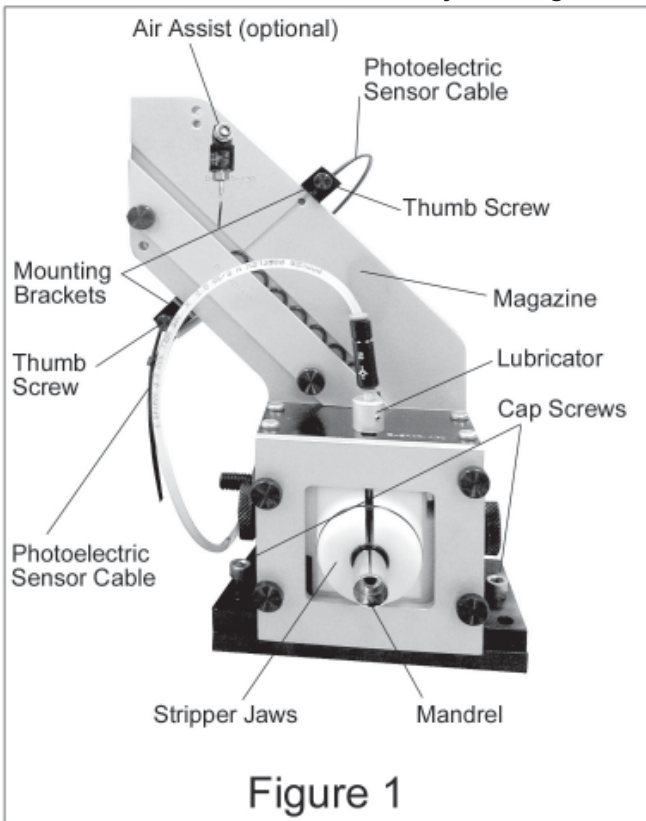
- 13) For machines equipped with O-Ring Detection, reconnect the Proximity Sensor to the side of the Stripper Jaws. (*Fig. 2 page 12*)
- 14) Replace the Photoelectric Sensor Cables and secure by tightening the Thumb Screws. (*Fig. 1 page 11*)
- 15) Replace the Mandrel into the Stripper Jaws. (*Fig. 1 page 11*)

Note: Do not use cracked or broken Mandrels as they can damage the Stripper Jaws or cut O-rings during operation.

- 16) Turn Power and Air back on.
- 17) Manually cycle the machine several times to relubricate the Mandrel. Roll the Mandrel around inside the Stripper Jaws to ensure 360° coverage.



Head Assembly Cleaning Guide





Head Assembly Cleaning Guide

ASP-1 with O.D. Lube & O-Ring Detection Options

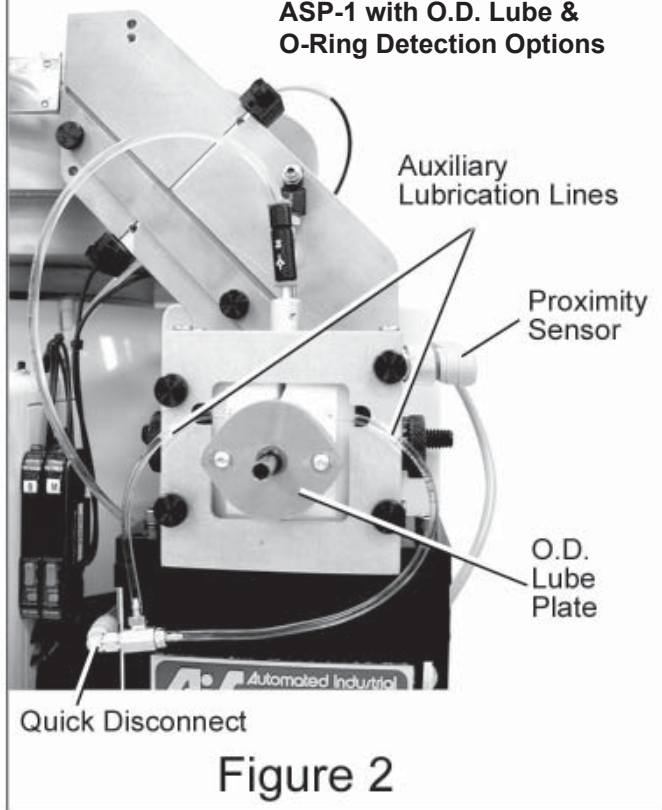


Figure 2

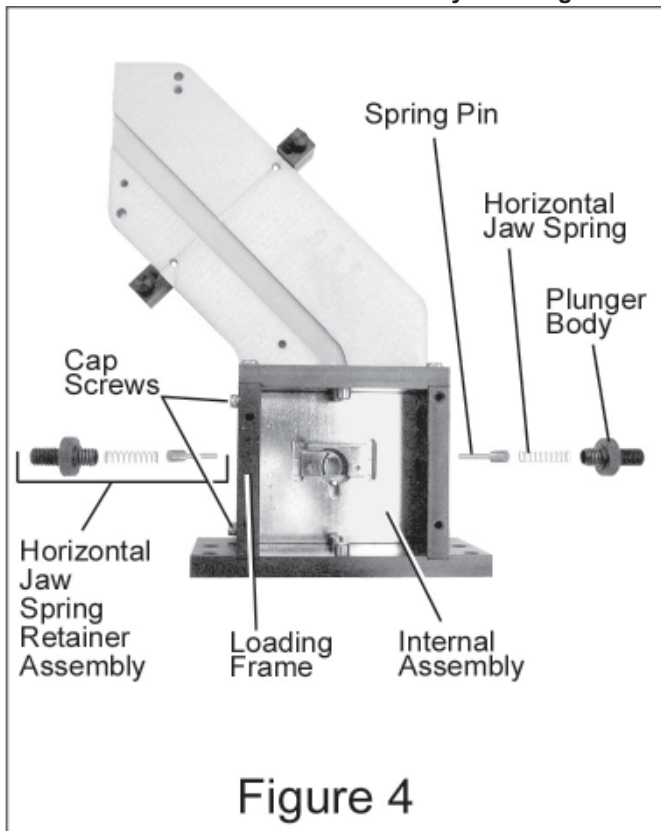


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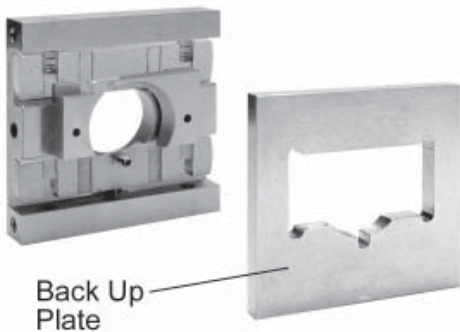


Head Assembly Cleaning Guide



Internal
Assembly

Figure 5a



Back Up
Plate

Figure 5b

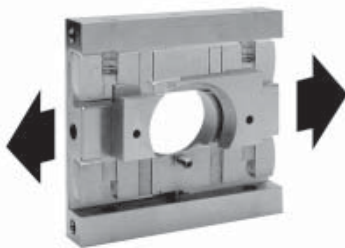


Figure 5c

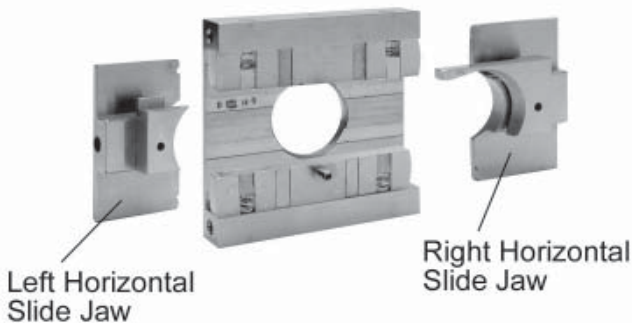


Figure 5d



Head Assembly Cleaning Guide



Figure 5e

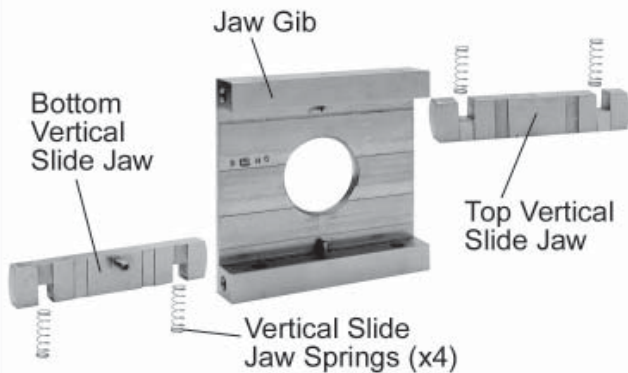


Figure 5f



Head Assembly Cleaning Guide

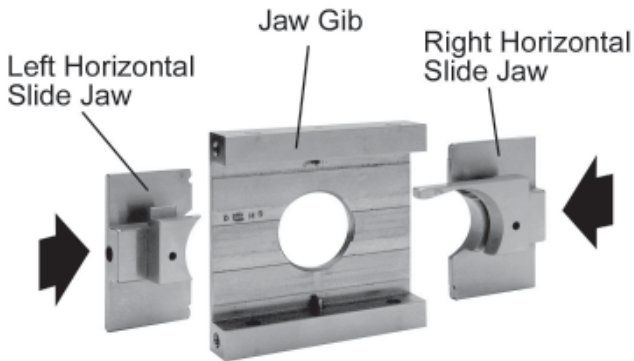


Figure 6a

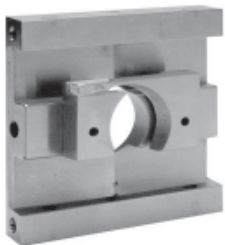


Figure 6b



Head Assembly Cleaning Guide

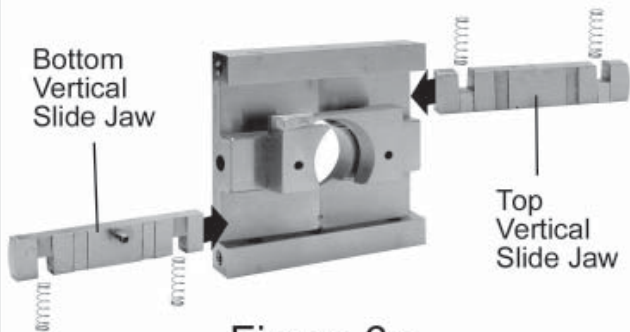


Figure 6c



Figure 6d

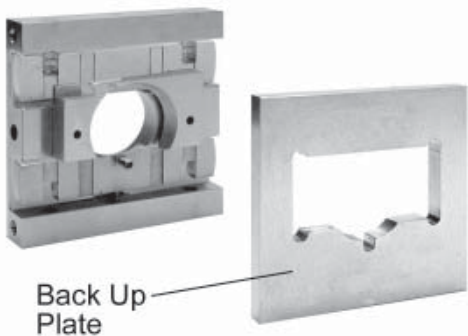


Figure 6e



Figure 6f