



PTNS1 Nutrunner Work Supports Maintenance Instructions

PTNS1-12
PTNS1-16

IMAO Technical Dept.

Inspection

1. Cleaning

Remove any chips or debris and clean the product thoroughly.

2. Visual Inspection (See Figures 1, 2, and 3)

• **Sliding Areas (Red Sections):**

Check for any scratches or damage on the sliding parts.

If scratches are found, verify whether they affect the product's operation.

If there is no impact on operation, the product may be used as is.

• **Dust Seals (Green Sections) at the base of Piston and hex head:**

Inspect for any damage or wear.

If the dust seals are damaged, please replace them.

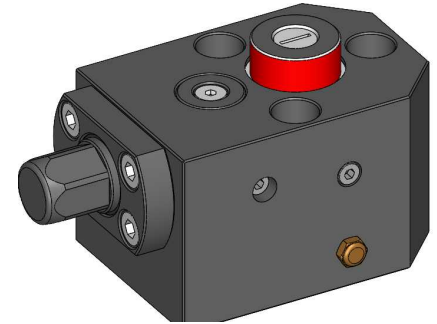


Figure 1

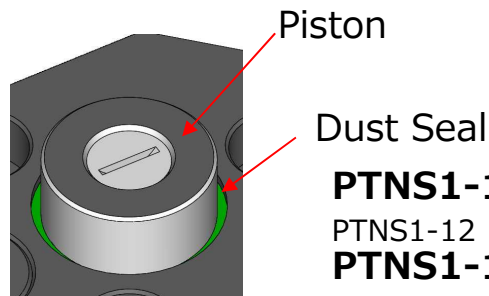


Figure 2

Dust Seal

PTNS1-12-06 for
PTNS1-12
PTNS1-16-06 for
PTNS1-16

* Dedicated parts.
Contact us for details.

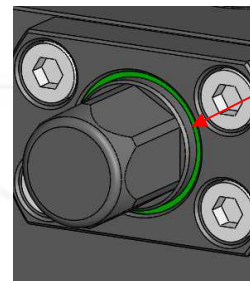


Figure 3

Rubber Seal

Rubber Packing Seals
from Sakagami

SER-22 for PTNS1-12

SER-30 for PTNS1-16

* Commercially available,
purchasable from Misumi and
other suppliers

Inspection

3. Operational Check (See Figure 4)

Using a wrench, ensure the hex operation part rotates smoothly.

- Turn the hex head counterclockwise to the end, and check:
 - The sliding section moves smoothly up and down.
 - The top of the piston aligns with the upper surface of the body.
- Then, turn the operation part clockwise and confirm if the piston stops at an intermediate position as expected.

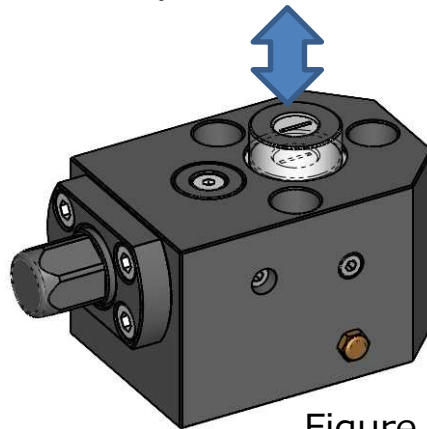


Figure 4

If no issues are found during inspection, the product may continue to be used.
If any resistance or stiffness is felt during the operational check, please refer to the Maintenance Procedure on the next page.

Maintenance

1. Disassembly (See Figures 1 and 2)

- With the operation part fully turned counterclockwise, remove the hex socket screw located above the filter at the side of the body. Then remove the piston and spring from the product.
 - Remove the screws to detach the holder.
- Turn the hex operation part clockwise, then remove the hex head and two metal washers.

2. Cleaning

- Remove any chips or debris adhering to the disassembled parts, bolts, or inside the product. Clean thoroughly before reassembly.

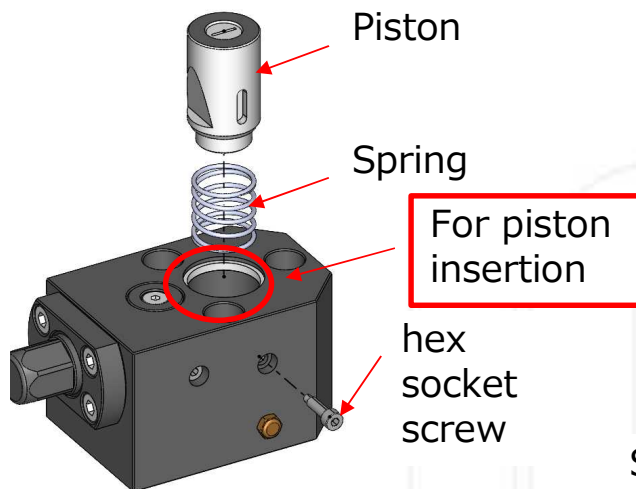


Figure 1

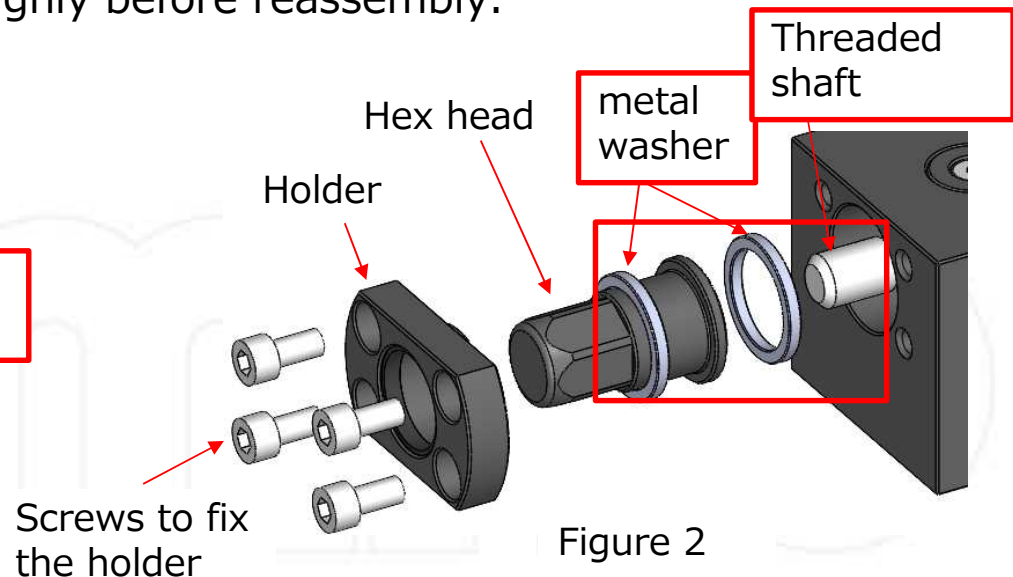


Figure 2

Maintenance

3. Movement Check

- Verify that the hex head can be screwed into the threaded section.
- Confirm that the piston moves smoothly up and down.

4. Lubrication (See Figures 1 and 2 on previous page)

- Apply lubricant to:
 - The hole where the piston was inserted
 - The metal washers
 - The threaded shaft
(see marked areas in red)

Use the specified lubricant:

- LUBROID lubricants from EARTH-TECH:
LE-1000 V68 Liquid / LS-1000 spray



Reassembly

1. Assembly (See Figures 1 and 2)

- Insert the spring and piston into the body.
- Secure with the hex socket screw, ensuring that the screw tip fits properly into the groove on the piston.
- Place one metal washer into the operating shaft hole of the product, then screw in the hex head counterclockwise until it reaches the end.
- Insert the second metal washer and fix the holder in place with the screws.

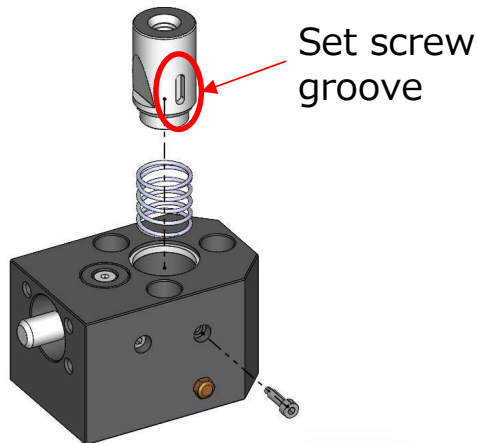


Figure 1

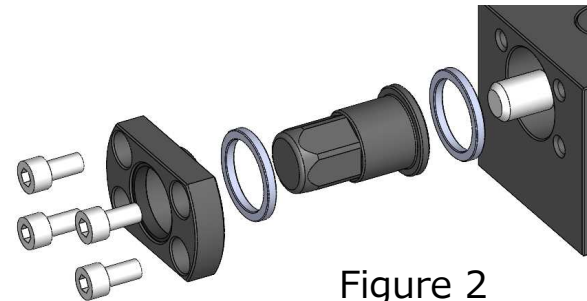


Figure 2

2. Operational Check (See Figure 4 on Page 3)

- Using a wrench, confirm that the operation part rotates smoothly.
- With the operation part turned fully counterclockwise, check that the sliding section moves smoothly up and down, and that it lowers to align with the top surface of the body.
- Turn the operation part clockwise and confirm that the piston stops at an intermediate position as expected.