Value Creator IMAO

BJ370 Pneumatic Work Supports Maintenance Manual

IMAO CORPORATION

Malfunction

To perform this maintenance when the following malfunctions occur.

- The piston does not work properly.
- The piston does not move.
- The piston is not unlocked even when the air pressure is released.

Note:

In machining applications, use clean coolant without sludge to prevent trouble.

Maintenance parts

- **Piston**

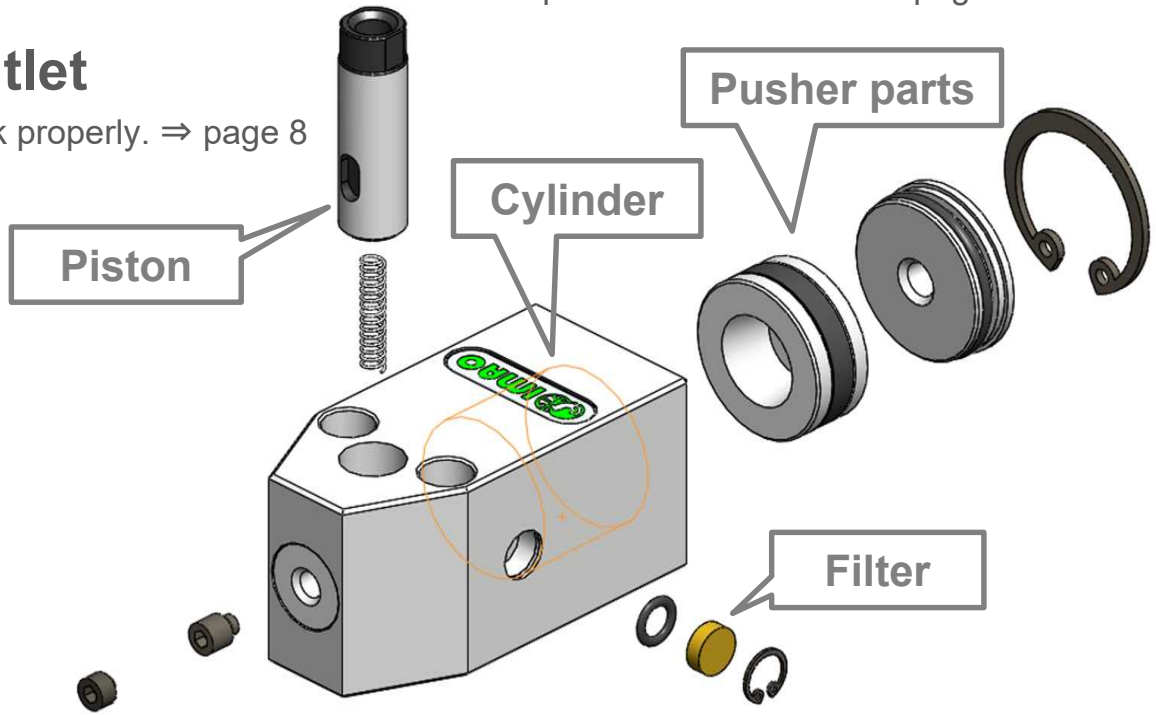
When the piston does not work properly / stops moving. ⇒ page 4&5

- **Pusher and Cylinder**

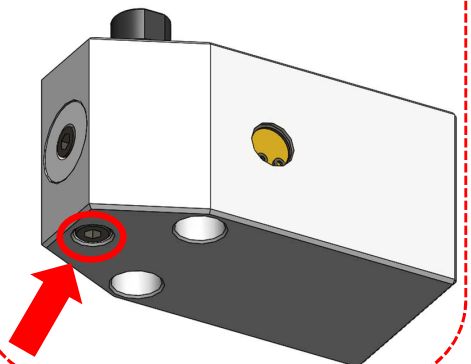
When the piston stops moving / is not unlocked even when the air pressure is released. ⇒ page 6&7

- **Filter for air outlet**

When the piston does not work properly. ⇒ page 8



Note:
Do not loosen the screw shown in the drawing below.



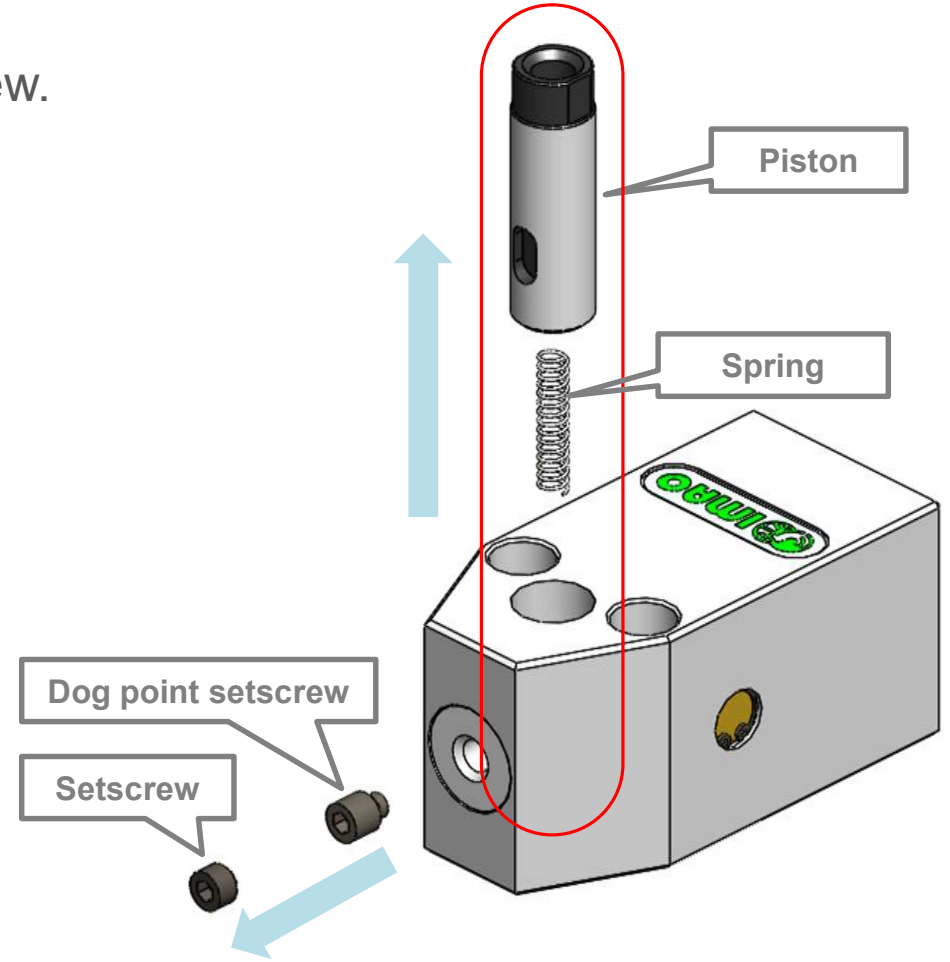
Piston (1)

Cleaning of pistion

1. Remove the setscrew and the dog point setscrew.
2. Remove the piston and the spring.
3. Remove any dirt of the piston,
   the spring and the hole (inside) for the piston.

Note:

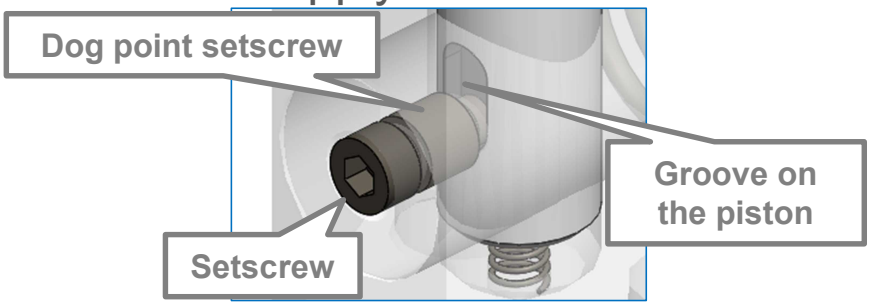
Do not friction or grind for hard cleaning.
It may cause reduced capacity or malfunction of pusher parts and cylinder.

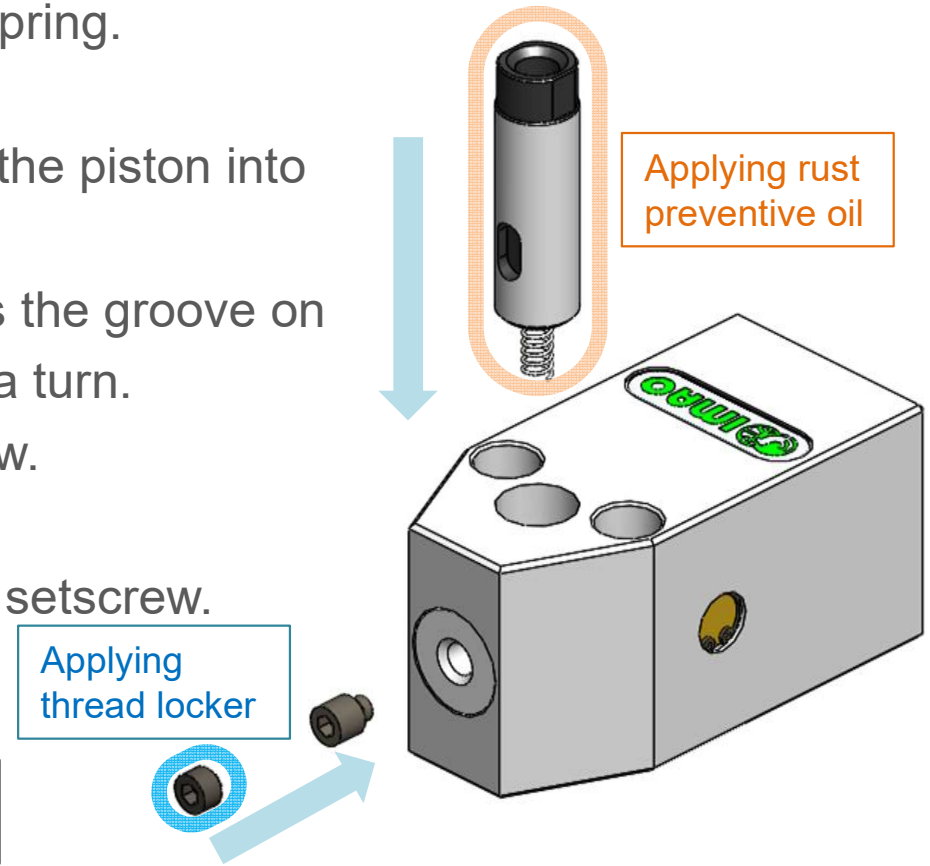


Piston (2)

Reassembly of piston

1. Applying rust preventive oil to the piston and the spring.
   * Please use low viscosity rust preventive oil.
2. Put the spring inside of the piston and then insert the piston into the hole on the body.
3. Screw the dog point setscrew until the tip contacts the groove on the side of the piston, then turn it back about half a turn.
4. Tighten the setscrew to lock the dog point setscrew.
   * Be careful not to rotate the dog point setscrew.
   * It is recommended to apply thread locker for the setscrew.





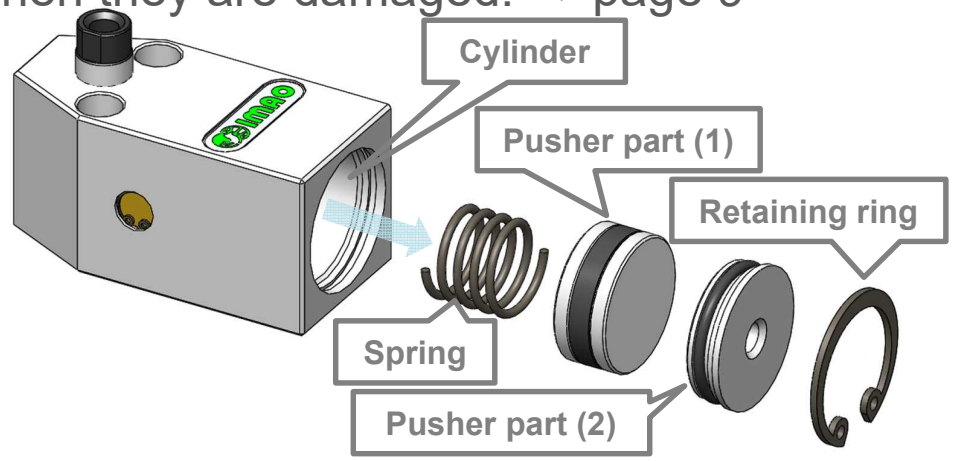
Pusher parts and cylinder (1)

Cleaning of pusher and cylinder (body)

1. Remove the retaining ring then take out the pusher parts (1) (2) and the spring.
   * When the parts are not taken out smoosly, you can blow air into the air outlet on the side of the body after removing the retaining ring.
   Please be careful each parts may fly out vigorously.
2. Remove any dirt of the pusher parts, the spring and the inside of the body.
   Remove dirty grease as well.
   Please replace the seal or O-ring of pusher parts when they are damaged. ⇒ page 9

Note:

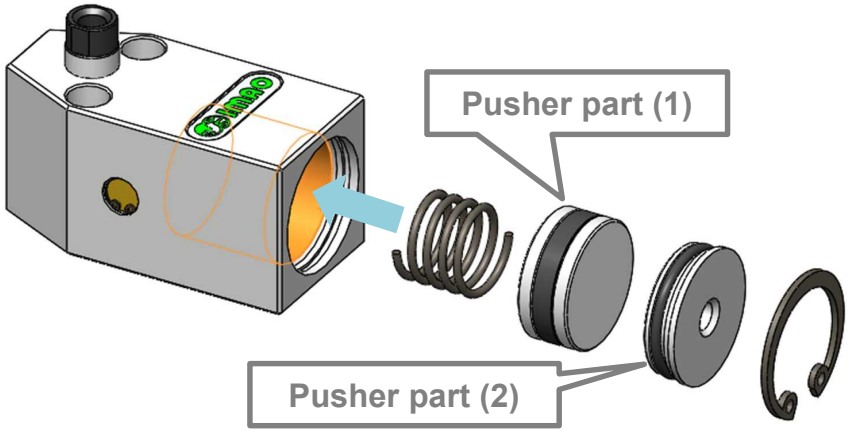
In machining applications,
use clean coolant without sludge to prevent trouble.

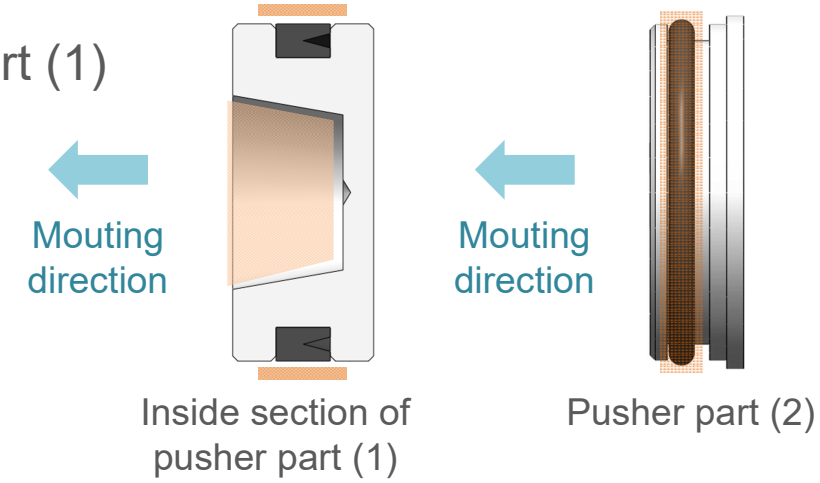


Pusher parts and cylinder (2)

Reassembly of piston and pusher parts

1. Applying grease to the inside of the body and the pusher parts.
2. Assemble the spring, the pusher part (1) as shown in the figure below.
   * See below for mouting direction.
3. Applying grease thinly to the O-ring of the pusher part (2) and press it into the hole in the body.
   * See below for mouting direction.
4. Assemble the retaining ring such that the pusher part (1) cannot be pushed back.





Area of applying grease

*** Grease should be with a consistency of No. 2 or less.**

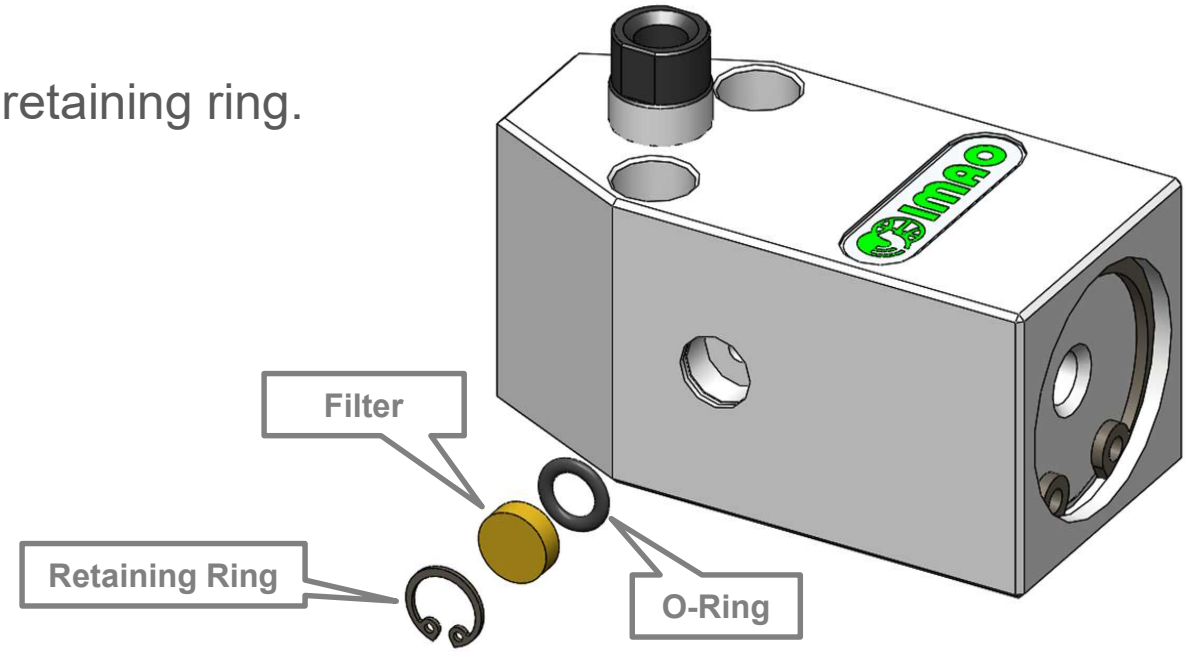
Air outlet

Cleaning of air outlet

1. Remove the retaining ring, the filter and the O-ring.
2. Remove any dirt from the filter and the O-ring. Blow out any dirt on the air outlet.
   Replace the parts when the filter can not be clearned. ⇒ page 9

Reassembly of filter

Reassemble the O-ring, the filter and the retaining ring.



Parts breakdown for maintenance

	Product Name	Part Number/Details	Manufacturer	Product
1	Seal	MYN-16	SAKAGAMI SEISAKUSHO LTD.	BJ370-05001
		MYN-21		BJ370-06001
2	O-ring	CS 1.5±0.1 /ID 17.5 Nitrile rubber	-	BJ370-05001
		CS 1.5±0.1 /ID 21.5 Nitrile rubber	-	BJ370-06001
3	Retaining ring	Bowed internal, dia 21	-	BJ370-05001
		Bowed internal, dia 26	-	BJ370-06001
4	Coil spring	CP1.20 14.0 16.0	Sotec Co. Ltd.	BJ370-05001
		CP1.60 18.0 20.0		BJ370-06001
5	Coil spring	WR3-15	Misumi	Both
6	Setscrew	M4x3	-	BJ370-05001
		M4x4	-	BJ370-06001
7	Dog point setscrew	M4x5	-	Both
8	O-ring	CS 1±0.07 /ID 4 Nitrile rubber	-	Both
9	Filter (Sintered Metal Element)	EBD-6-2-5	SMC Corporation	Both
10	Retaining ring	Bowed internal, dia 6	-	Both