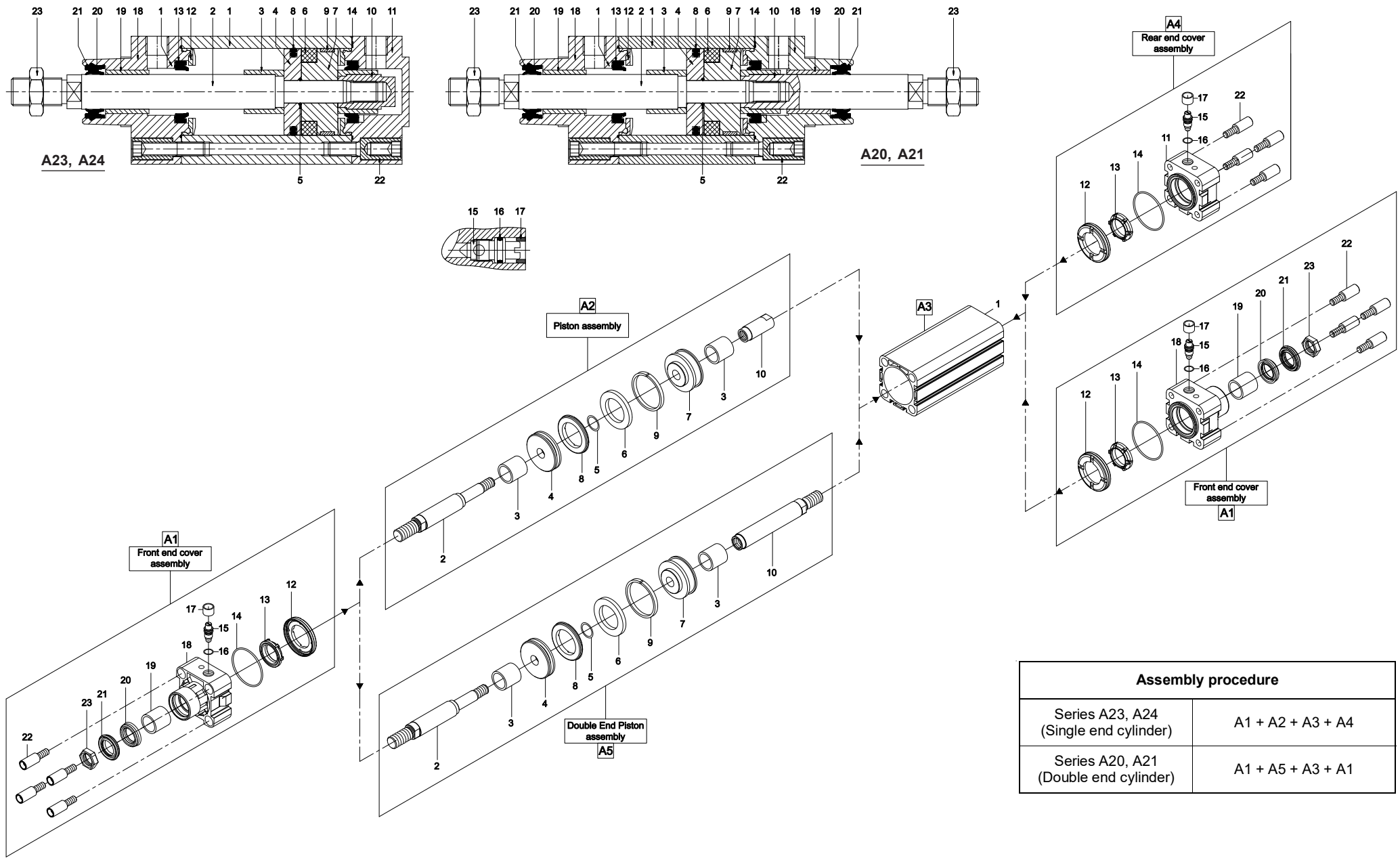


Assembly / Spare parts list
Air Cylinder Series A20, A21, A23, A24

JANATICS
Pneumatic

IS - A20, A21, A23, A24 - 01 - 01 - C



Assembly procedure	
Series A23, A24 (Single end cylinder)	A1 + A2 + A3 + A4
Series A20, A21 (Double end cylinder)	A1 + A5 + A3 + A1

Spare parts list
Air Cylinder Series A20, A21, A23, A24

JANATICS
Pneumatic

IS - A20, A21, A23, A24 - 01 - 01 - C

Ref No	No off		Part name	Ordering no. for					
	A20, A21	A23, A24		32 Ø	40 Ø	50 Ø	63 Ø	80 Ø	100 Ø
1	1		Cylinder barrel	-	-	-	-	-	-
2	1		Piston rod	-	-	-	-	-	-
3	2		Cushion piston	-	-	-	-	-	-
4	1		Piston-B	-	-	-	-	-	-
5	1		'O' ring	650005	650008	650010	650010	650012	650012
6	1		Magnet (Series A20, A23)	-	-	-	-	-	-
7	1		Piston A	-	-	-	-	-	-
8	1		Main seal (Type C)	641505	641506	641507	641508	641509	641510
9	1		Bearing strip	-	-	-	-	-	-
10	1		Cushion piston nut (Series A23, A24 only)	-	-	-	-	-	-
			Piston rod A (Series A20, A21 only)	-	-	-	-	-	-
11	1		Rear end cover	-	-	-	-	-	-
12	2		Cushion pad	770042	770038	770036	640036	640037	640038
13	2		Cushion seal	770081	770082	770084	770084	770083	770083
14	2		'O' ring	651030	651029	651028	651031	651114	651115
15	2		Needle	-	-	-	-	-	-
16	2		'O' ring	-	-	-	-	-	-
17	2		Bush	-	-	-	-	-	-
18	2	1	Front end cover	-	-	-	-	-	-
19	2	1	Bearing bush	-	-	-	-	-	-
20	2	1	Nutring	630034	630032	630031	630031	630035	630035
21	2	1	Wiper	770040	770039	770037	770037	770041	770041
22	8		End cover bolt	-	-	-	-	-	-
23	2	1	Lock nut	-	-	-	-	-	-

Dismantling and Assembling the Cylinder

1. Dismantle the Rear end cover (11) using appropriate tools
2. Remove the Cylinder barrel (1) and check for damages in the bore.
3. Remove the piston assembly along with the piston rod and check for dirt and damage.
4. Check the O ring, Cushion seal, Bearing strip, Wiper, Nutring and Cushion piston for any damages and scratches.
5. Clean all the elements thoroughly.
6. Replace the required necessary spares.
7. Apply general purpose grease on all the rubber seals, cylinder bore, bearing bush and piston rod.
8. Reassemble the complete cylinder.
9. Check the performance of the cylinder using a suitable valve.

How to order for spare parts

Mention the spare parts numbers as given in the tables.

Example :- Cushion seal for Series A23 - Ø125 cylinder: Ordering number: 610010

For further information contact our regional Marketing office or Registered office

JANATICS INDIA PRIVATE LIMITED

Regd. Office & Works : E - 25, SIDCO Industrial Estate, Kurichi, Coimbatore - 641 021, INDIA

Tel : + 91 422 2672800 Email : janatics@md2.vsnl.net.in

Fax : + 91 422 2672304 Web : www.janatics.com

Marketing Offices : Ahmedabad Bangalore Chennai Hyderabad Indore Kolkata Mumbai New Delhi Pune

Subject to change

Specification

Cylinder bore (mm)	Ø125
Cushion stroke (mm)	40
Standard stroke (mm)	50 80 100 125 160 200 250 300 320 400 500
Medium	Compressed air - filtered - lubricated
Medium temperature	5° - 60° C
Working pressure	0.5 - 10 bar
Materials of construction	Aluminium, Brass, Nitrile, Steel, Acetal, Polyurethane

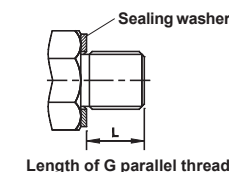
Important

Since this equipment is used in compressed air, proper precautions are to be taken for safety.

Installation Instruction

1. Install in clean / acid free atmosphere.
2. Before installation of the cylinder check whether the unit is as per the specifications.
3. Check for proper fittings to be used on to the cylinder. Use only (R) taper thread nipples with teflon tape.
4. When using (G) parallel thread nipples, use sealing washer and check the length of the thread as below.

Thread Size	Tightening torque Nm	Length (L) of thread
G1/2	30	10.5 mm Max.
R1/2	28 - 30	-



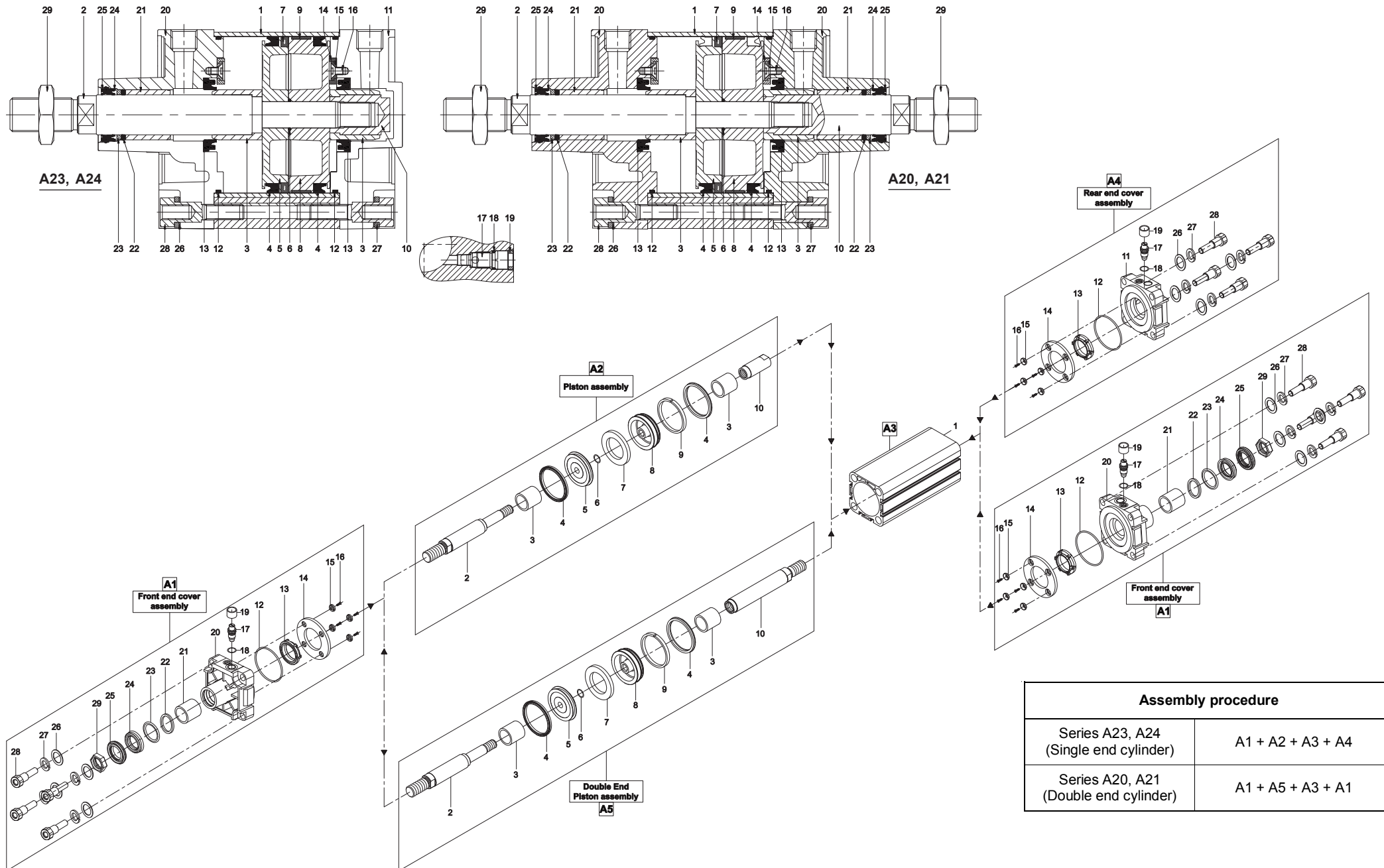
5. Tighten the pipings / nipples to the cylinder using proper tools. Do not give excess torque for tightening (See the above table for tightening torque)
6. Align the cylinder for your requirement such that no radial load is applied on the piston rod.
7. Ensure correct pressure and flow for proper functioning of the cylinder. Use correct size of tubings as required.
8. Adjust the cushioning needle as per requirement.

Maintenance Instructions

- a. Before dismantling the unit, exhaust the air in the cylinder completely.
- b. Remove the cylinder assembly from the machine and clean the assembly thoroughly.
- c. Test the cylinder for operation using a suitable valve.
- d. Note the problems / troubles and ascertain the probable causes and its remedies from the table on page 5.

Assembly / Spare parts list

IS - A20, A21, A23, A24 - 01 - 02 - C



Assembly / Spare parts list

Air Cylinder Series A20, A21, A23, A24

IS - A20, A21, A23, A24 - 01 - 02 - C

Ref No	No off		Part name	Ordering no. for Ø 125
	A20, A21	A23, A24		
1	1		Cylinder barrel	-
2	1		Piston rod	-
3	2		Cushion piston	-
4	2		Nutring	630036
5	1		Piston-B	-
6	1		'O' ring	650101
7	1		Magnet - (Series A20, A23 only)	-
8	1		Piston A	-
9	1		Bearing strip	-
10	1		Cushion piston nut - (Series A23, A24 only)	-
			Piston rod A - (Series A20, A21 only)	-
11	Nil	1	Rear end cover	-
12	2		'O' ring	650307
13	2		Cushion seal	610010
14	2		Spacer	-
15	8		Insert	-
16	8		Socket counter sunk head screw	-
17	2		Needle	-
18	2		'O' ring	-
19	2		Stop bush	-
20	2	1	Front end cover	-
21	2	1	Bearing bush	-
22	2	1	Seal	640054
23	2	1	Washer	-
24	2	1	Nutring	630050
25	2	1	Wiper	770058
26	8		Washer	-
27	8		Spring washer	-
28	8		End cover bolt	-
29	2	1	Lock nut	-

Spare parts list

Air Cylinder Series A20, A21, A23, A24

IS - A20, A21, A23, A24 - 01 - 02 - C

Though the ordering numbers have been given for individual seals, it is recommended to order as a **Seal kit** during major maintenance

Piston Ø		125
Seal kit Ordering no.	A23, A24	SK0172
	A20, A21	SK0153

Seal kit :

Series A23, A24

consists of the following :

Nutring (4) - 2 no's
'O' ring (6) - 1 no
'O' ring (12) - 2 no's
Cushion seal (13) - 2 no's
Seal (22) - 1 no
Nutring (24) - 1 no
Wiper (25) - 1 no

Series A20, A21

consists of the following :

Nutring (4) - 2 no's
'O' ring (6) - 1 no
'O' ring (12) - 2 no's
Cushion seal (13) - 2 no's
Seal (22) - 2 no's
Nutring (24) - 2 no's
Wiper (25) - 2 no's

Trouble shooting

Trouble	Cause	Remedy
1. Cylinder does not function	a. Low inlet pressure b. Leak through the piston seal c. Leak through Nutring (4) d. Leak through the end covers and the cylinder barrel.	a. Increase the inlet pressure b. Replace the 'O' ring (6) c. Replace Nutring (4) d. Replace 'O' ring (12)
2. Piston Jerks during forward stroke	a. Leak through Nutring (4)	b. Replace Nutring (4)
3. Piston Jerks during Reverse stroke	a. Leak through the piston seal b. Leak through Nutring (4)	a. Replace the 'O' ring (6) b. Replace Nutring (4)
4. Cushion adjustment does not function	a. Defective Cushion seal (13) b. Cushion piston damaged (3)	a. Replace Cushion seal (13) b. Replace Cushion piston (3)
5. Leak at piston rod end	a. Defective Nutring (24) b. Defective Wiper (25)	a. Replace Nutring (24) b. Check and replace Wiper (25)
6. Dust inside the front end cover	a. Defective Wiper (25)	a. Replace Wiper (25)