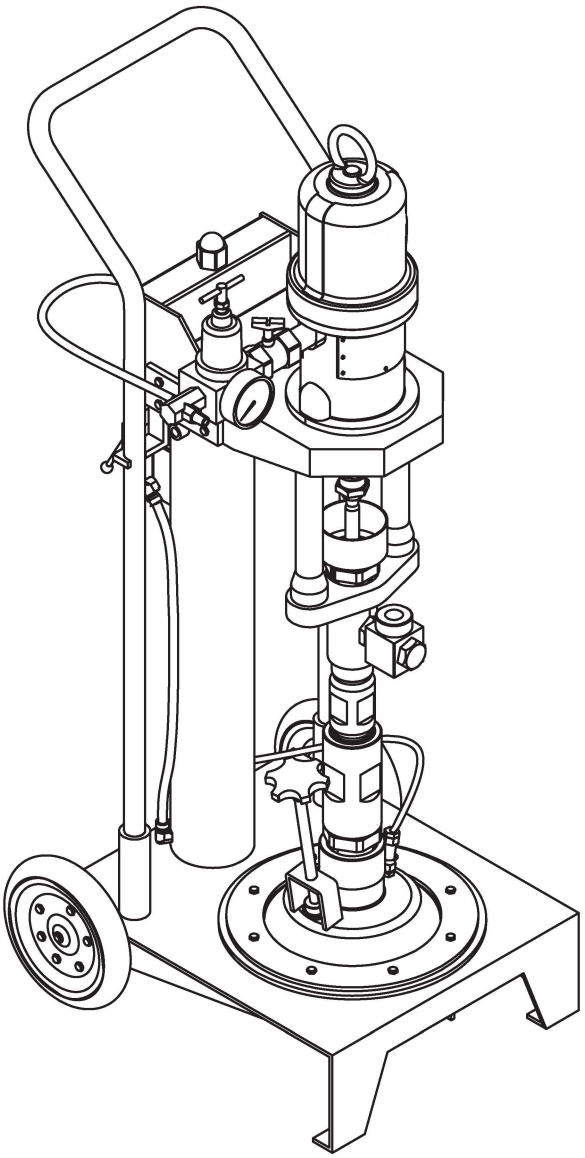
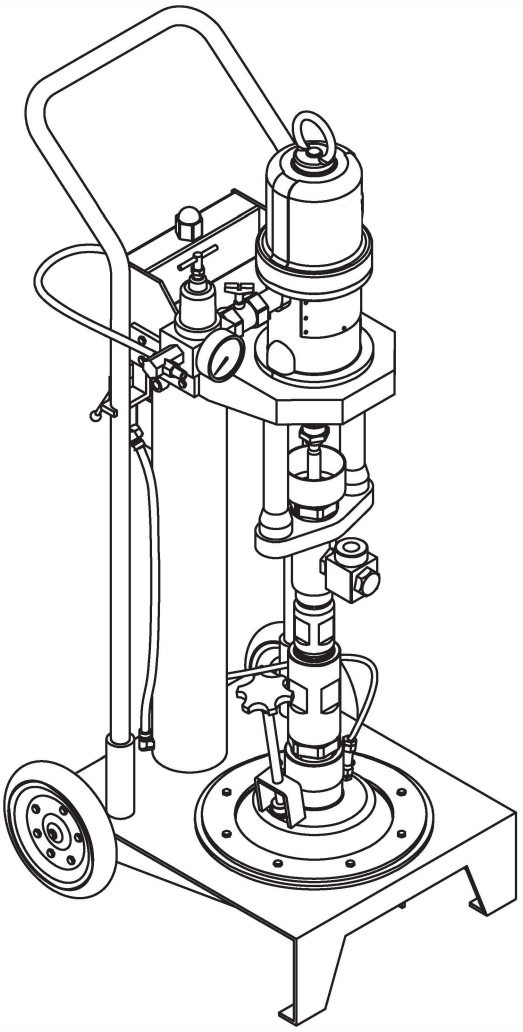
AIR POWERED EXTRUSION PUMP
OPERATING MANUAL



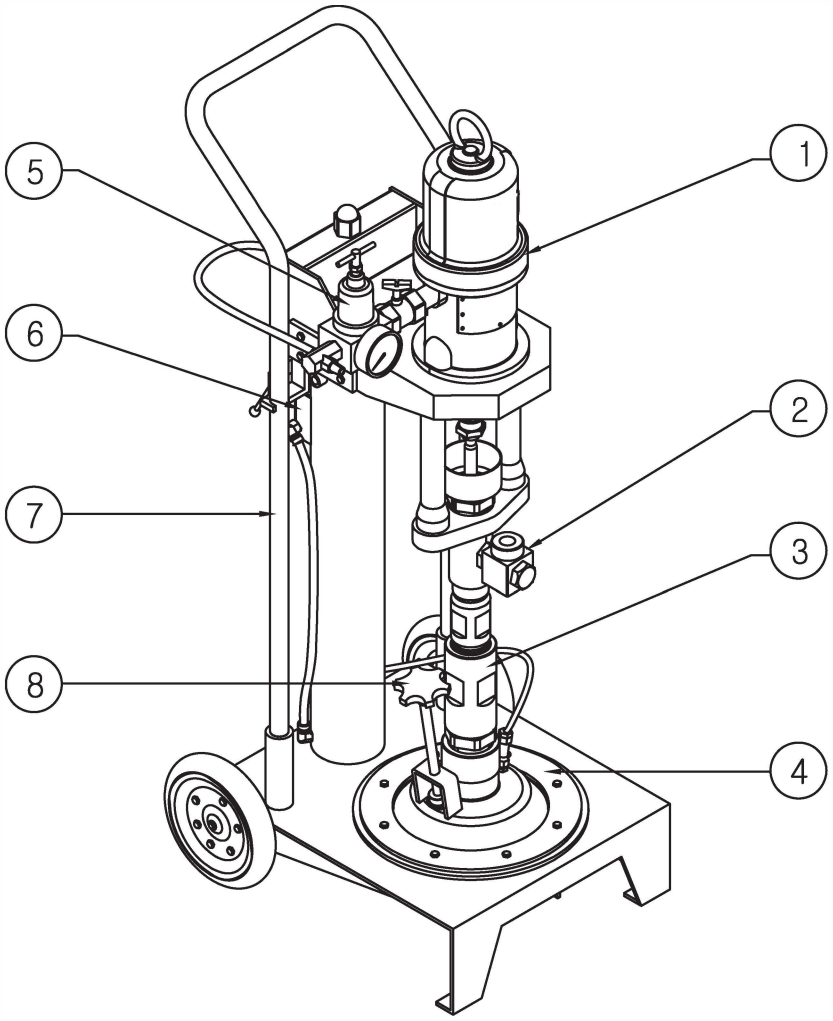
AIR POWERED EXTRUSION PUMP



SPECIFICATION

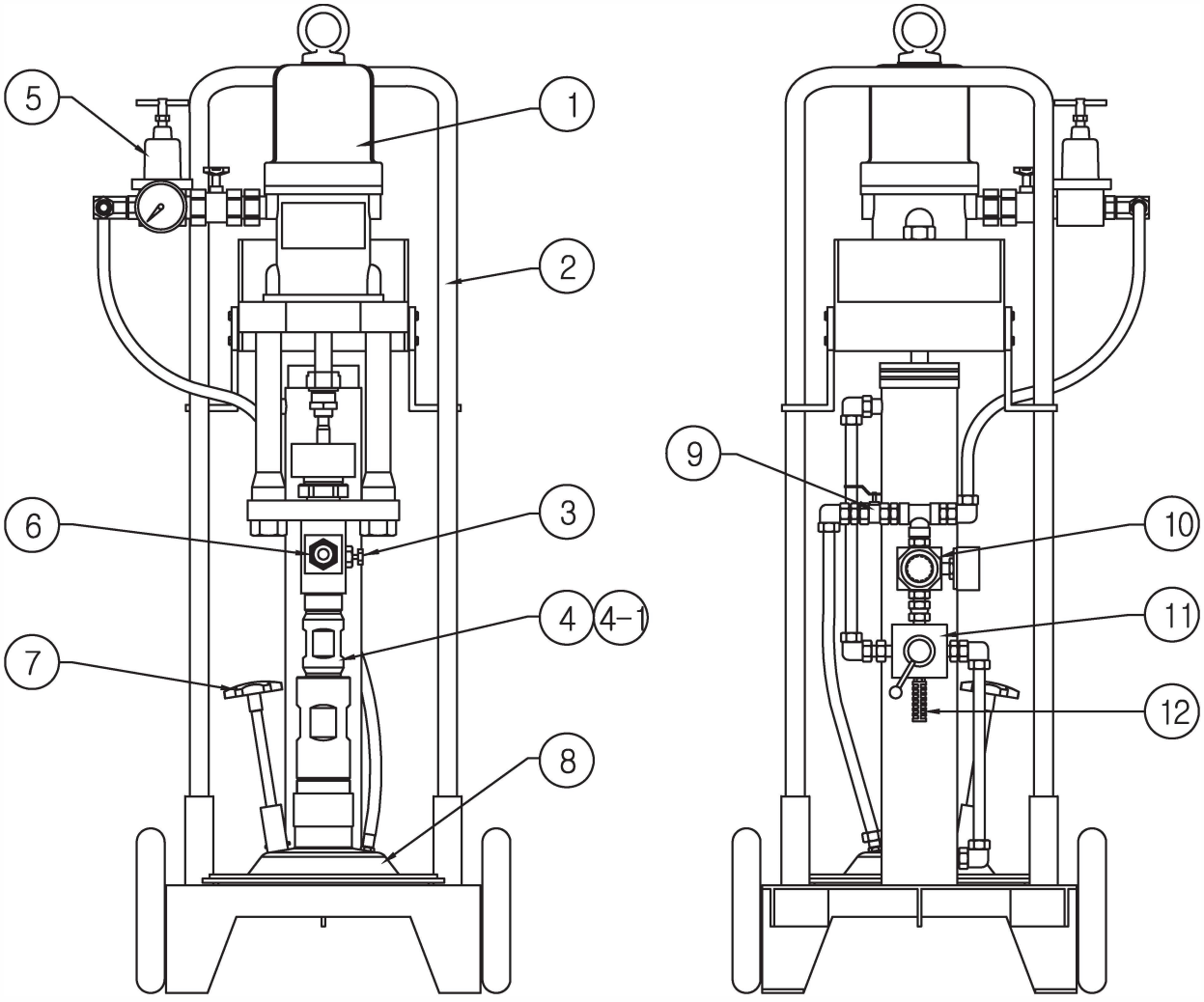
	XR-25	XR-50	UNIT
FLUID PRESSURE RATIO	25 : 1	50 : 1	
WORKING PRESSURE MAX.	175	350	bar
MAXIMUM PUMP SPEED	60	60	cycle/min
CYCLE PER LITER	15	60	cycle
CYCLE PER GALLON	60	240	cycle
AIR MOTOR EFFECTIVE DIAMETER	108	108	mm
STROKE	102	102	mm
AIR PRESSURE OPERATING RANGE	3~7	3~7	bar
AIR INLET	3/8	3/8	in. NPT
FLUID INLET	Priming	Priming	Priming piston
FLUID OUTLET	1	1	in. NPT
WEIGHT	67	67	Kg
DIMENSION	500x530x1150	500x530x1150	mm

AIR POWERED EXTRUSION PUMP
ASSEMBLY DRAWING



No	PART NO	DESCRIPTION	Q'TY
1	281-031	AIR MOTOR	1
2	521-150	CHECK VALVE	1
3	251-100	PUMP(25:1)	1
3-1	251-200	PUMP(50:1)	1
4	402-240	INDUCTOR PLATE	1
5	251-241	AIR REGULATOR	1
6	240-127	HAND VALVE	1
7	500-200	CART & RAM BASE	1
8	251-245	HANDLE	1

AIR POWERED EXTRUSION PUMP
ASSEMBLY DRAWING

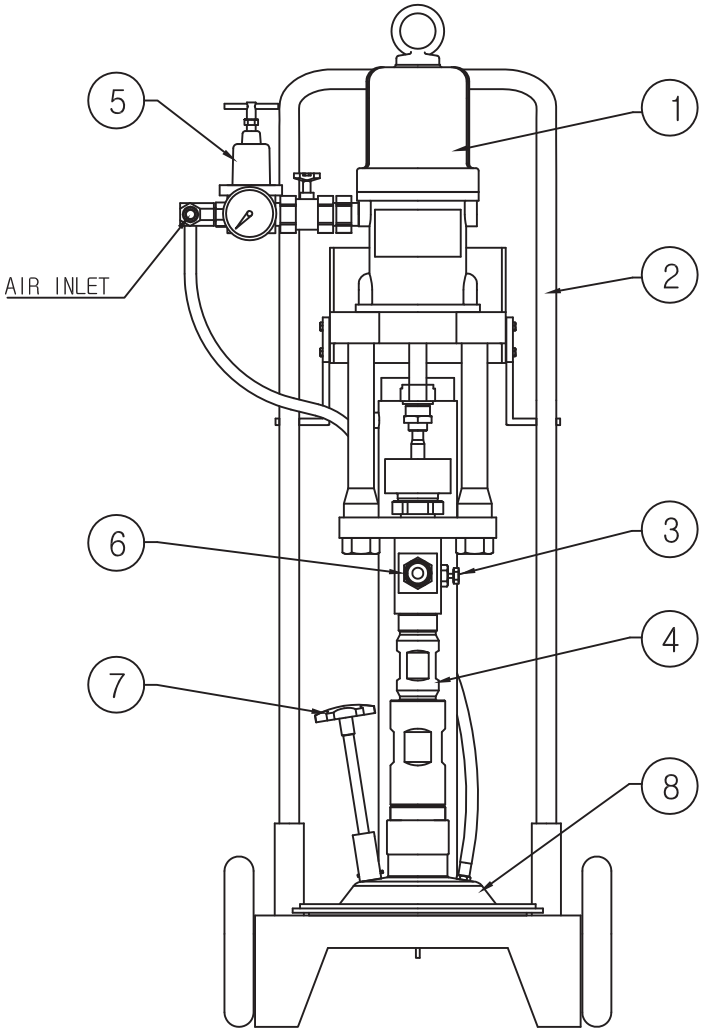


Front View

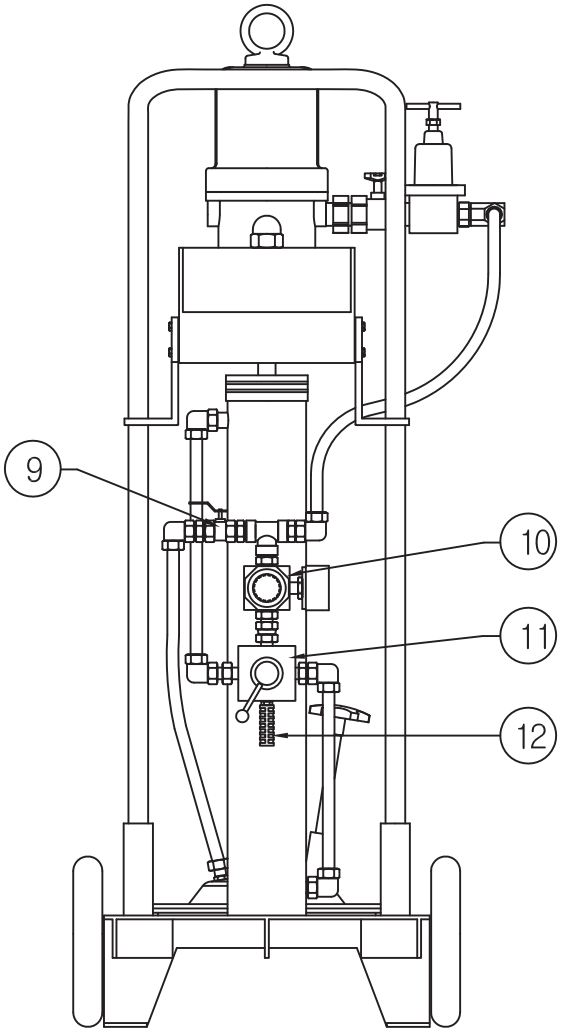
Back View

No	PART NO	DESCRIPTION	Q'TY
1	281-031	AIR MOTOR	1
2	500-200	CART & RAM BASE	1
3	521-153	BLEEDER VALVE	1
4	251-100	PUMP(25:1)	1
4-1	251-200	PUMP(50:1)	1
5	251-241	AIR REGULATOR	1
6	521-150	CHECK VALVE	1
7	251-245	HANDLE	1
8	402-240	INDUCTOR PLATE	1
9	240-120	BALL VALVE	1
10	240-124	REGULATOR	1
11	240-127	HAND VALVE	1
12	240-128	SILENCE	1

AIR POWERED EXTRUSION PUMP



Front View



Back View

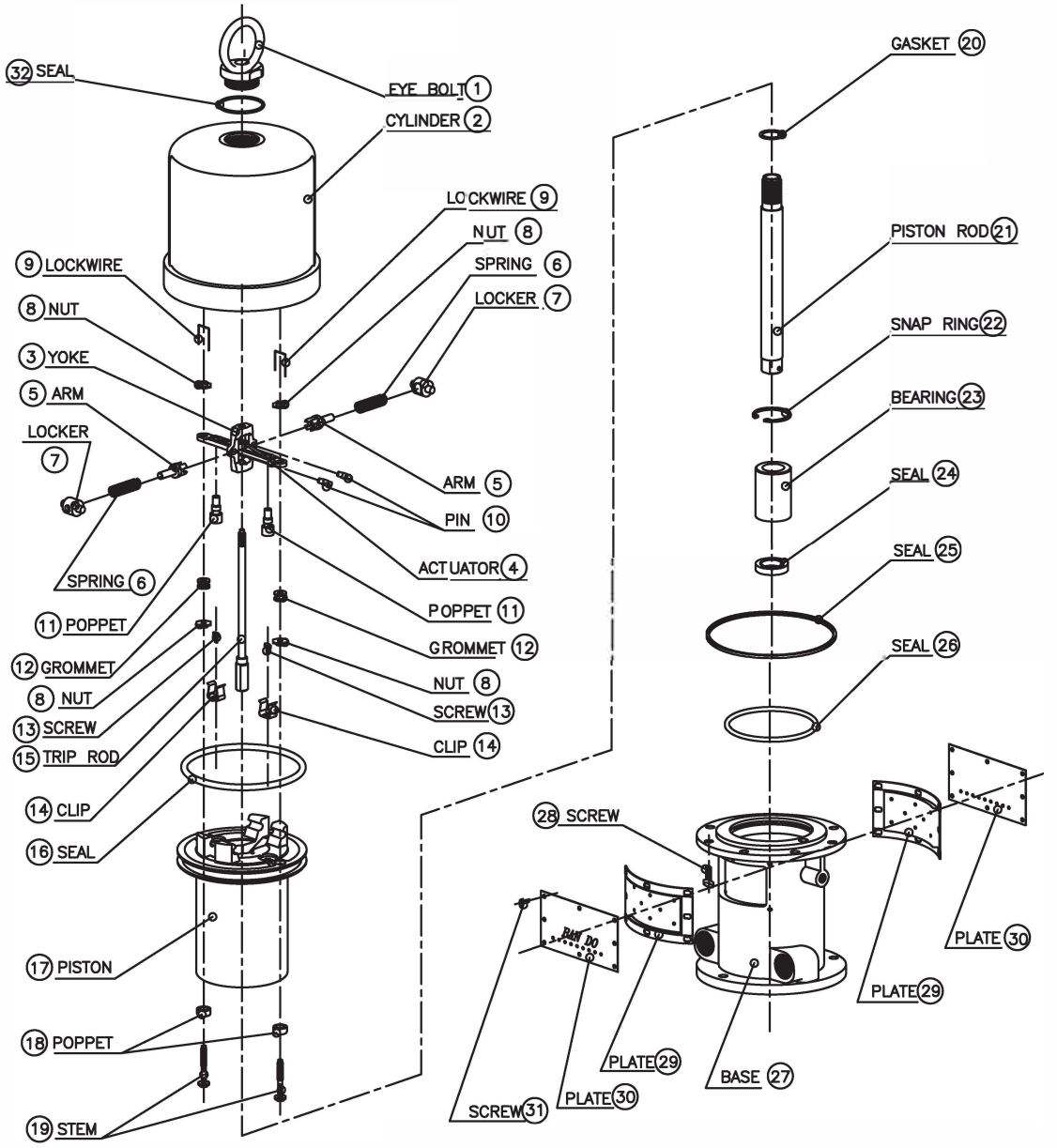
< OPERATION >

1. Connect AIR INLET to AIR HOSE
2. Move the LEVER (11) to the left side then the RAM will be risen.
   Move the LEVER (11) to the right side then the RAM will be down
3. Open the BALL VALVE (7) and deflate air. When material start to come out,
   close the BALL VALVE.
4. Open the DRAIN VALVE (3) and deflate air. When material start to come out
   close the DRAIN VALVE.
5. Adjust the pressure of AIR REGULATOR (5) according to the working condition.
6. When you replace the DRUM, turn the LEVER (11) to the left side then Air cylinder will
   be set UP position. You can easily disassemble DRUM as opening the BALL VALVE (9)
   and inserting the air

< WARING >

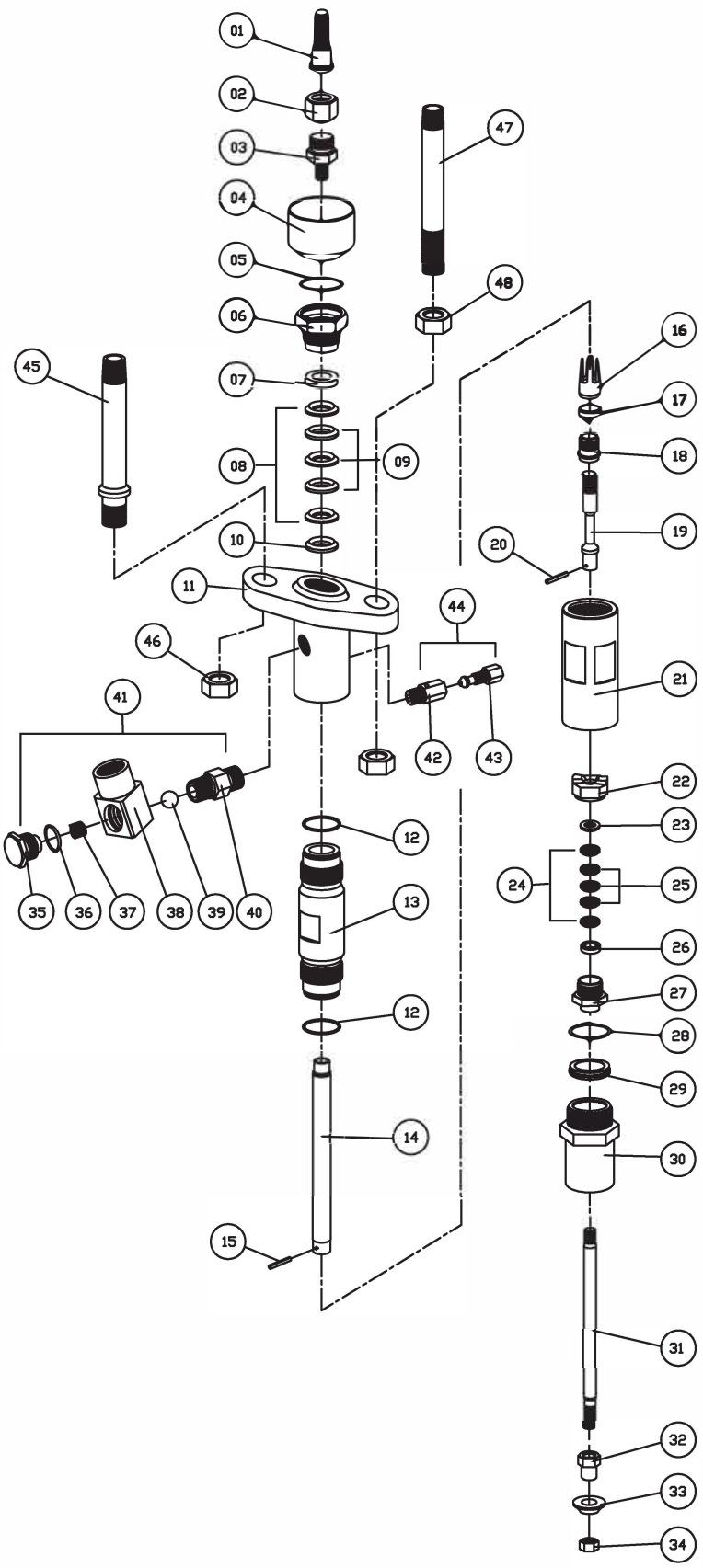
1. Make sure the you have to operate the pump after opening the BALL VALVE (9) and remove the air
   in side of inductor plate
2. To adjust the speed of up and down moving as controlling the pressure of AIR REGULATOR (5).
3. 2 Bar ~ 3 Bar is proper pressure. If you impose excessive pressure, material can be leaked
   between INDUCTOR PLATE and WIPER RING.
4. To reduce the risk of static sparking, ground all pump.

AIR MOTOR PART DRAWING



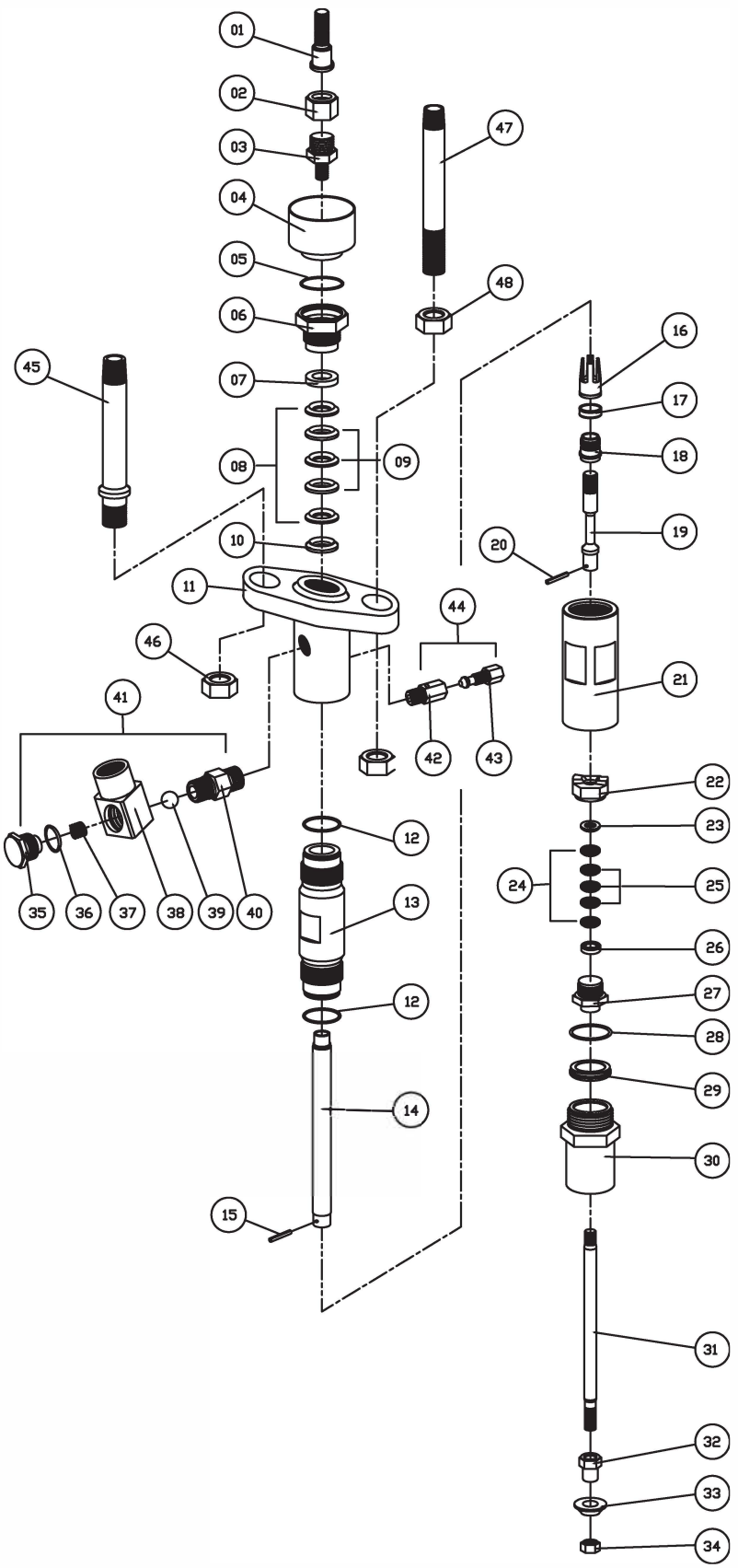
NO.	PART NO.	DESCRIPTION	Q'TY	NO.	PART NO.	DESCRIPTION	Q'TY
1	280-435	EYE BOLT	1	17	280-391	PISTON	1
2	280-619	CYLINDER	1	18	280-376	POPPET	2
3	280-360	YOKE	1	19	280-896	STEM	2
4	280-359	ACTUATOR	1	20	280-647	GASKET	1
5	280-623	ARM	2	21	280-235	PISTON ROD	1
6	280-585	SPRING	2	22	280-701	SNAP RING	1
7	280-364	LOCKER	2	23	280-526	BEARING	1
8	280-261	NUT	4	24	280-524	SEAL	1
9	280-618	LOCKWIRE	2	25	280-377	SEAL	1
10	280-362	PIN	2	26	280-379	SEAL	1
11	280-709	POPPET	2	27	031-027	BASE	1
12	280-708	GROMMET	2	28	280-578	SCREW	8
13	280-975	SCREW	2	29	280-720	PLATE	2
14	280-361	CLIP	2	30	280-844	PLATE	1
15	280-150	TRIP ROD	1	31	280-073	SCREW	16
16	280-378	SEAL	1	32	280-698	SEAL	1

PUMP HOUSING(XR-25)
PART DRAWING



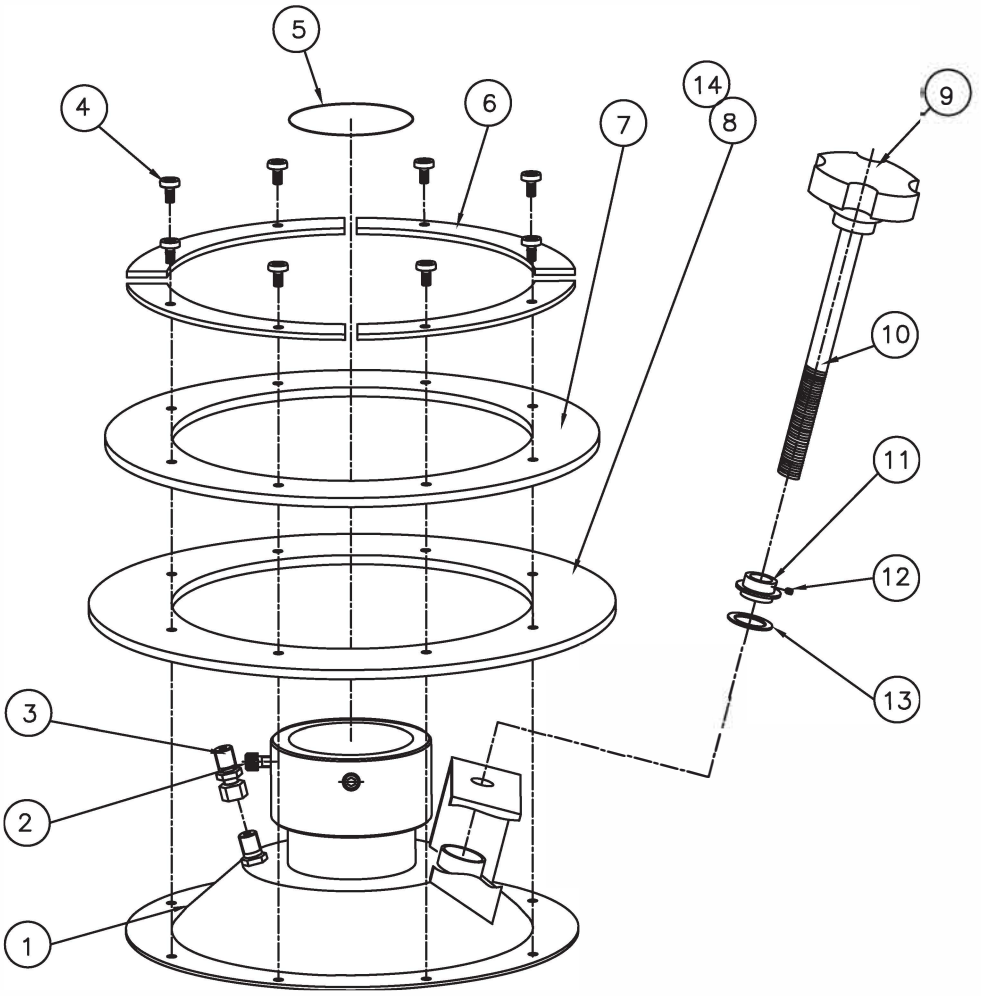
NO	DESCRIPTION	Q'TY	PART. NO.
01	ROD	1	521-110
02	NUT	1	521-111
03	STUD	1	521-112
04	CUP	1	521-113
05	O-RING	1	521-114
06	NUT	1	521-115
07	GLAND	1	251-316
08	PACKING(T)	2	251-317
09	PACKING(L)	3	251-318
10	GLAND	1	251-319
11	HOUSING	1	521-120
12	O-RING	2	521-121
13	SLEEVE	1	251-322
14	ROD	1	251-323
15	PIN	1	251-324
16	GUIDE	1	251-325
17	SEAL	1	251-326
18	SEAL	1	251-327
19	PISTON	1	521-128
20	PIN	1	521-129
21	HOUSING	1	521-130
22	PACKING HOUSING	1	521-131
23	GLAND	1	251-332
24	PACKING(T)	2	251-333
25	PACKING(L)	3	251-334
26	GLAND	1	251-335
27	VALVE BODY	1	521-136
28	O-RING	1	521-137
29	SEAL	1	521-138
30	CYLINDER	1	521-139
31	ROD	1	251-340
32	GUIDE	1	521-141
33	PISTON	1	521-142
34	NUT	1	521-143
35	PLUG	1	521-144
36	O-RING	1	521-145
37	SPRING	1	521-146
38	HOUSING	1	521-147
39	BALL(5/8")	1	521-148
40	SEAT	1	521-149
41	CHCK VALVE ASS'Y	1	521-150
42	BODY	1	521-151
43	PLUG	1	521-152
44	BLEEDER VALVE ASS'Y	1	521-153
45	.	1	521-154
46	NUT	1	521-155
47	.	1	521-156
48	NUT	2	521-157
49	REPAIR KIT 5,7,8,9,10,12,15,17, 20,23,24,25,26,28	1SET	251-360

PUMP HOUSING(XR-50)
PART DRAWING



NO	DESCRIPTION	Q'TY	PART. NO.
01	ROD	1	521-110
02	NUT	1	521-111
03	STUD	1	521-112
04	CUP	1	521-113
05	O-RING	1	521-114
06	NUT	1	521-115
07	GLAND	1	521-116
08	PACKING(T)	2	521-117
09	PACKING(L)	3	521-118
10	GLAND	1	521-119
11	HOUSING	1	521-120
12	O-RING	2	521-121
13	SLEEVE	1	521-122
14	ROD	1	521-123
15	PIN	1	521-124
16	GUIDE	1	521-125
17	SEAL	1	521-126
18	PISTON	1	521-127
19	PISTON ROD	1	521-128
20	PIN	1	521-129
21	HOUSING	1	521-130
22	PACKING HOUSING	1	521-131
23	GLAND	1	521-132
24	PACKING(T)	2	521-133
25	PACKING(L)	3	521-134
26	GLAND	1	521-135
27	VALVE BODY	1	521-136
28	O-RING	1	521-137
29	SEAL	1	521-138
30	CYLINDER	1	521-139
31	ROD	1	521-140
32	GUIDE	1	521-141
33	PISTON	1	521-142
34	NUT	1	521-143
35	PLUG	1	521-144
36	O-RING	1	521-145
37	SPRING	1	521-146
38	HOUSING	1	521-147
39	BALL(5/8")	1	521-148
40	SEAT	1	521-149
41	CHCK VALVE ASS'Y	1	521-150
42	BODY	1	521-151
43	PLUG	1	521-152
44	BLEEDER VALVE ASS'Y	1	521-153
45	.	1	521-154
46	NUT	1	521-155
47	.	1	521-156
48	NUT	2	521-157
45	REPAIR KIT 5,7,8,9,10,12,15,17, 20,23,24,25,26,28	1SET	521-160

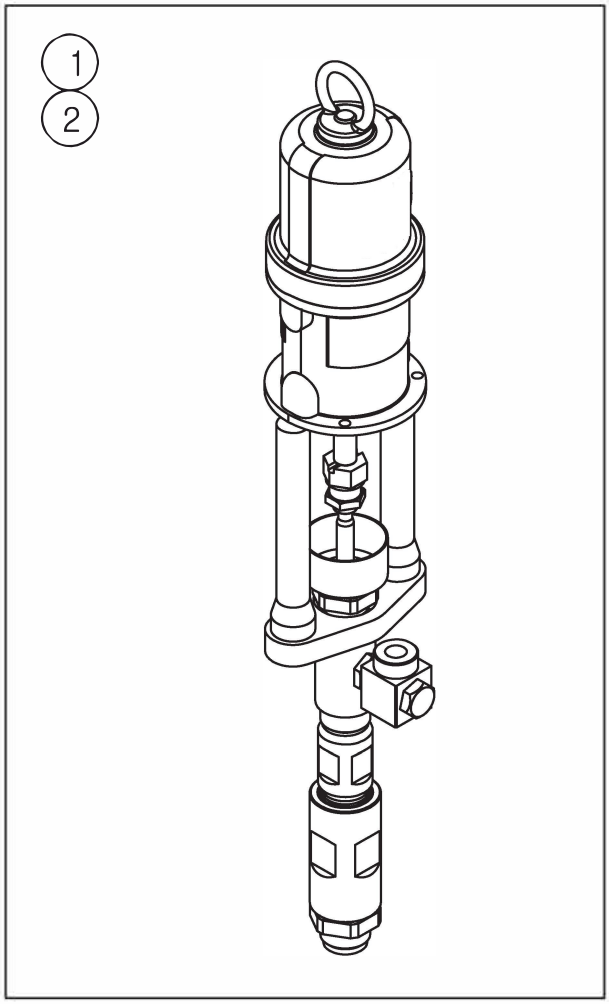
INDUCTOR PLATE PART DRAWING

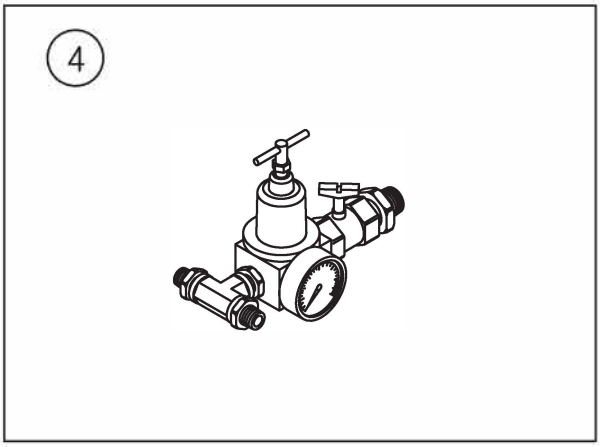


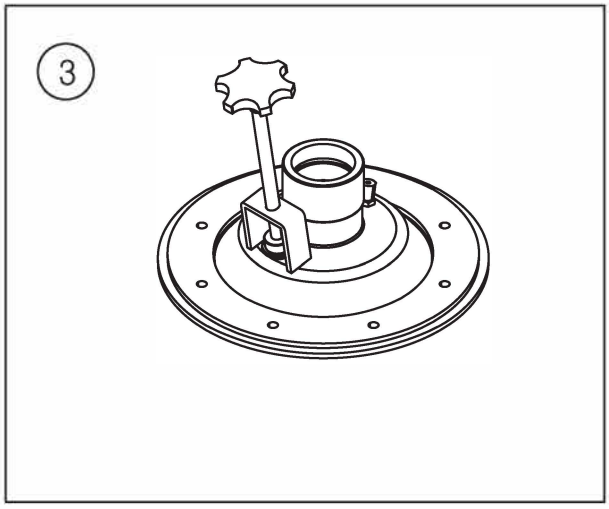
NO	PART NO.	DESCRIPTION	QT'Y	REMARK
1	240–100	DISK PLATE	1	
2	240–101	SCREW	2	
3	240–102	CHECK VALVE	1	
4	240–103	SCREW	8	
5	240–104	O–RING	1	
6	240–105	CLAMP	4	
7	240–106	WIPER SEAL (190x273)	1	
8	240–107	PLATEN SEAL (200x290)	1	
9	240–108	HANDLE	1	
10	240–109	ROOL PIN	1	
11	240–110	STEM	1	
12	240–111	SET SCREW	1	
13	240–112	SEAL	1	
14	240–305	WIPER SEAL (200x303)	1	

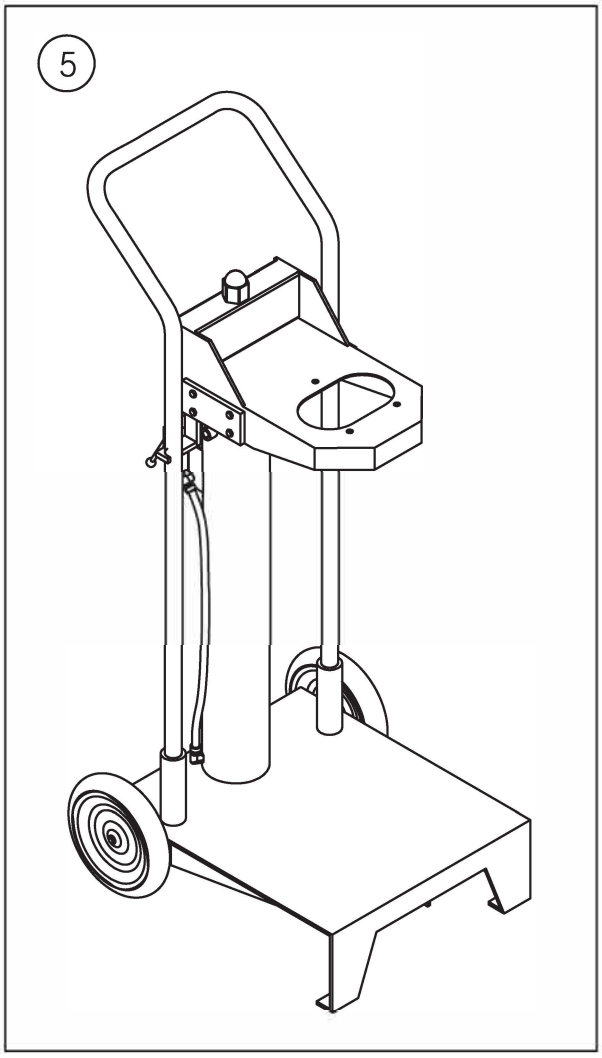
A. 402 – 240 : 56mm
B. 402 – 241 : 64.5mm
C. 402 – 242 : 78.5mm

AIR POWERED EXTRUSION PUMP
PART DRAWING (XR-25 XR-50)



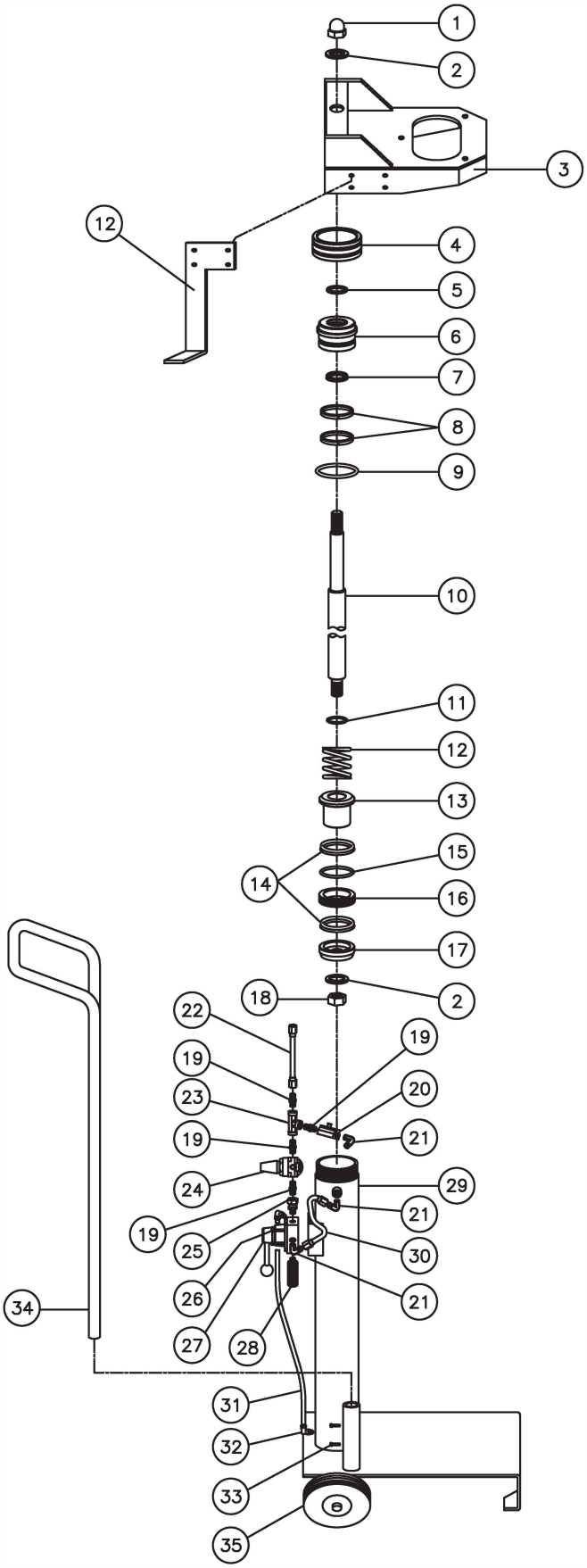






No	PART NO	DESCRIPTION	Q'TY	No	PART NO	DESCRIPTION	Q'TY
1	301-250	AIR MOTOR&PUMP ASS'Y (25:1)	1	4	251-441	AIR REGULATOR KIT	1
2	301-500	AIR MOTOR&PUMP ASS'Y (50:1)	1	5	500-200	CART&RAM BASE	1
3	402-240	INDUCTOR PLATE	1				

SINGLE POST(500-200) PART DRAWING



NO.	PART NO.	DESCRIPTION	Q'TY
1	240-101	CAP NUT	1
2	240-102	SPRING WASHER	2
3	250-103	PUMP BASE	1
4	240-104	CAP	1
5	240-105	SEAL	1
6	240-106	COVER	1
⑦	240-107	U-PACKING	1
⑧	240-108	WEAR RING	2
⑨	240-109	O-RING	1
10	240-110	PISTON ROD	1
⑪	250-111	WASHER	1
12	250-112	SUPPORT	2
13	240-113	PISTON	1
⑭	240-114	U-PACKING	2
⑮	240-115	O-RING	1
⑯	240-116	PISTON BUSH	1
17	240-117	PISTON CAP	1
18	240-118	NUT	1
19	240-119	NIPPLE	4
20	240-120	AIR VALVE	1
21	240-121	90° ADAPTER	3
22	240-122	HOSE & COUPLING	1
23	240-123	TEE	1
24	240-124	REGULATOR	1
25	240-125	UNION	1
26	240-126	HEX BOLT	4
27	240-127	HAND VALVE	1
28	240-128	SILENCE	1
29	250-129	RAM	1
30	240-130	HOSE & COUPLING	1
31	240-131	HOSE	1
32	240-132	ONE TOUCH	2
33	240-133	SET SCREW	4
34	240-134	HANDLE	1
35	250-345	CASTER	2
36	110-220	REPAIR KIT NO.	1

⑦⑧⑨⑪⑭⑮⑯

OPERATING SERVICE

OPERATION AND ADJUSTMENT

1. When the air is supplied, the pump start to operate depending on the Gun.

   If you open the gun, pump start to operate and if you close the gun, pump stop to operate.

2. To operate pump with minimum pressure that is used to discharge the material from Gun.

3. When the working is stopped, please cut off air and deflate air from hose opening the gun.

FLUSHING & OPERATING

1. Before you use this pump and also after you use it, please clean the pump with thinner.
2. If you use quick-dray material, please clean the pump with thinner several times.
   So solid state of material do not stick to inside of pump.
3. After working, please set the PISTON ROD to DOWN position.
   Otherwise inside of throat packing can be damaged by dried material.
4. When you stop operating the pump, deflate air and drain the material in side of pump.
   Or stop it at the state of filling in THINNER.

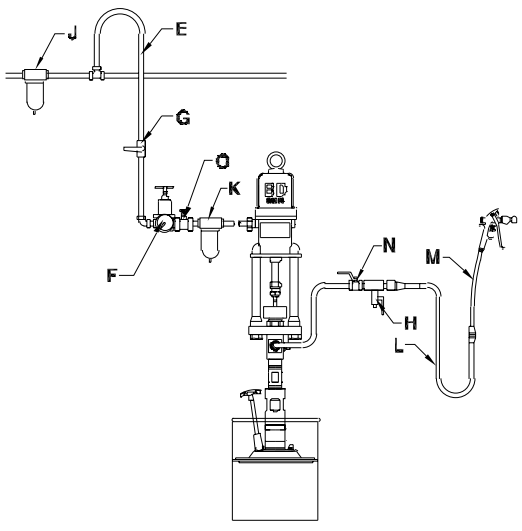
OPERATING METHOD

1. Use air 2.8 ~ 6.3 kg / ㎠
2. Increase the pressure slowly until proper pressure is found. When it's found, do SETTING using AIR REGULATOR.
3. Fill in proper oil in WET CUP. Exchange it once a week.
4. Always stop the pump in the position of DOWN state then cut off air and remove all pressure in side of LINE.

DRUM SETTING

1. When you replace DRUM, do not put unreasonable strength if possible and follow the replacement order.
2. Put the AIR CONTROL VALVE in UP position, insert air to the inductor plate as turning LEVER.
3. Slowly move induct plate down. Otherwise wiper ring can be damaged.
4. Slowly move DRUM down as opening COCK of AIR VENT, when the pump is on the CENTER position.
5. If WIPER RING is jammed tightly to DRUM, put GREASE on it and sway it to the right and left side .

TYPICAL INSTALLATION



KEY

E	Air Supply Line
F	Air Regulator
G	Bleed Type Master Air Valve
H	Drain Valve
J	Air Line Filter
K	Air Line Oiler
L	Fluid Hose
M	Whip Hose
N	Fluid Shut Off Valve
O	Air Shut Off Valve

MAINTENANCE SERVICE

CHECK POINT

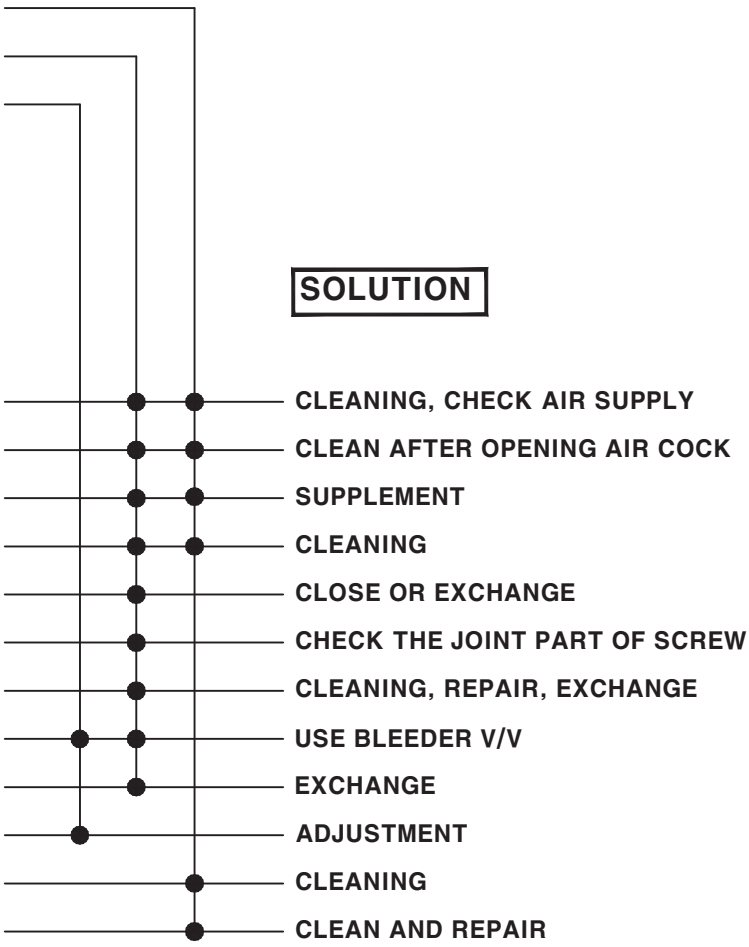
BREAKDOWN

- PUMP DON'T WORK
- PUMP WORK BUT PRESSURE AND FLUID FLOW IS NOT ENOUGH
- PUMP OPERATING SPEED IS TOO FAST

CAUSE

- SHORTAGE OF AIR PRESSURE. BLOCKAGE OF AIR PASSAGE.
- LEAK OF AIR, BLOCKAGE OF AIR COCK.
- MATER IS EMPTY
- BLOCKAGE OF PAINT HOSE AND GUN
- CHECK BLEEDER V/V
- AIR LEAKING TO INSIDE OF PASS OF MATERIAL
- CHECK THE VISCOSITY OF FLUID
- CHECK INTAKE V/V, CHECK V/V
- THROAT PACKING IS WORN OUT
- CHECK WHETHER CONNECTING ROD IS ON THE STRAIGHT LINE OR NOT. .
- CHECK WHETHER DRIED MATERIAL IS STICK TO THE INSIDE OF PISTON ROD.
- CHECK AIR MOTOR PARTS

SOLUTION



WARNING

1. Before disassemble the pump or repair it, please cut air supply and reflate air from it
2. When working the Pump, not coming out anything from the gun, you should open the BLEEDER VALVE a little bit. If coming out the material close the BLEEDER VALVE.
3. Use proper hose , fitting and gun that can endure the pressure supplied from pump