

Instruction Manual

BS Series



NOTE: Owner/Operator must read and understand this instruction manual before using the lift table.

Operation and Service Manual

BEFORE OPERATING THE LIFT TABLE, READ THIS MANUAL CAREFULLY AND UNDERSTAND COMPLETELY. KEEP THIS MANUAL ON FILE FOR FUTURE REFERENCE. IF THIS IS LOST, PLEASE CONTACT YOUR LOCAL SUPPLIER FOR A NEW COPY. ALSO, IF THE WARNING/CAUTION DECAL ON THE UNIT IS LOST, PLEASE CONTACT YOUR LOCAL SUPPLIER FOR A NEW DECAL.

NOTE: On this manual, WARNING means the danger which can lead to death or serious injury. CAUTION means the danger which can lead to slight injury or property damage.

1. WARNING

- 1.DO NOT put foot or hand in scissors mechanism.
- 2.DO NOT allow other person to stand in front of or behind lift table when it is moving.
- 3.DO NOT move lift table when table is in raised position. Load could fall down.
- 4.DO NOT enter under table.
- 5.DO NOT overload lift table.
- 6.DO NOT put foot in front of rolling wheels. Injury could result.
- 7.WATCH difference and hardness of floor level when moving lift table. Load could fall down.
- 8.DO NOT use lift table on slope or inclined surface, lift table may become uncontrollable and create danger.
- 9.DO NOT lift people. People could fall down and suffer severe injury.

2. CAUTION

- 1.Read this operation manual carefully and understand completely operating lift table. Improper operation could create danger.
- 2.This lift table is a movable lifter designed to lift or lower rated load on table. NO NOT use lift table for other purpose than its intended use.
- 3.DO NOT allow person to operate lift table who does not understand its operation.
- 4.DO NOT lower table too fast. Load could fall down and create danger.
- 5.KEEP watching the condition of load. Stop operating lift table if load becomes unstable.
- 6.Byake lift table when sliding load on of off table.
- 7.DO NOT side or end load. Load must be distributed on at least 80%of table area.
- 8.DO NOT use lift table with unstable, unbalanced loosely stacked load.
- 9.Practice maintenance work according to service instructions.
10. DO NOT modify lift table without manufacturer's written consent.
11. REMOVE load from table and use safety stopper to prevent table from lowering when servicing lift table.
12. This lift table is not designed to be water resistant. Use lift table under dry condition.

3. DAILY INSPECTION

Daily inspection is effective to find the malfunction or fault on lift table. Check lift table on the following points before operation.

CAUTION

DO NOT use lift table if any malfunction or fault is found.

- (1) Check for scratch, bending or cracking on the lift table.
- (2) Check if there is any oil leakage from the cylinder.
- (3) Check the vertical creep of the table.
- (4) Check the smooth movement of the wheel.
- (5) Check the function of brake.
- (6) Check if all the bolt and nuts are tightened firmly.

4. OPERATING LIFTTABLE

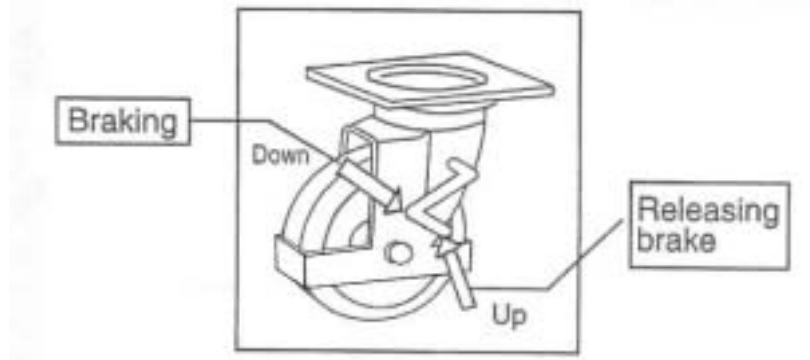
4-1. How to use the brake.

CAUTION

Brake lift table when not moving it in order to prevent sudden movement.

The brake is equipped with the swivel caster on the right side.

- (1) Braking the wheel, press the brake pedal.
- (2) Releasing the brake, lift up the brake pedal.



4-2 Lifting the table

WARNING

1. DO NOT overload lift table, stay within its rated capacity.
2. DO NOT side end load must be distributed on at least 80% of table area.

Press the lifting pedal several times until the table reaches the desired position.

The table does not elevate after reaching the highest position even if the lifting pedal is pressed.

The table lowers slightly after reaching the highest position.

MAXIMUM CAPACITY OF TABLE

BS15	BS25	BS50	BS75	BS100	BS30D	BS50D	BS80D
150KG	250KG	500KG	750KG	1000KG	300KG	500KG	800KG

NOTE:

The hydraulic cylinder is designed to hold table. As is the nature of the hydraulic system, table lowers very slowly over an extended period of time, Please note the table does not stay at the same position indefinitely.

4-3. Lowering table

WARNING

DO NOT put foot or hand in scissors mechanism.

Pull the lowering down and table lowers.

5. Specifications

Model	Capacity (kg)	Table (mm)	Table Height(mm)	Stroke	L x W x H (mm)	Pedal to top. (approx. times)	Wheel (mm)	Weight (kg)
BS15	150	700 x 450	225-760	535	1000 x 450 x 950	16	100	41
BS25	250	830 x 500	335-915	580	1100 x 500 x 1010	25	125	78
BS50	500	1010 x 520	430-1000	570	1130 x 520 x 1185	44	150	118
BS75	750	1010 x 520	432-1000	568	1130 x 520 x 1260	55	150	120
BS100	1000	1010 x 520	440-960	520	1130 x 520 x 1260	68	150	137
BS30D	300	1010 x 520	435-1585	1150	1130 x 520 x 1260	53	150	150
BS50D	500	1010 x 520	435-1585	1150	1130 x 520 x 1260	68	150	168
BS80D	800	1010 x 520	490-1400	910	1130 x 520 x 1275	95	150	165

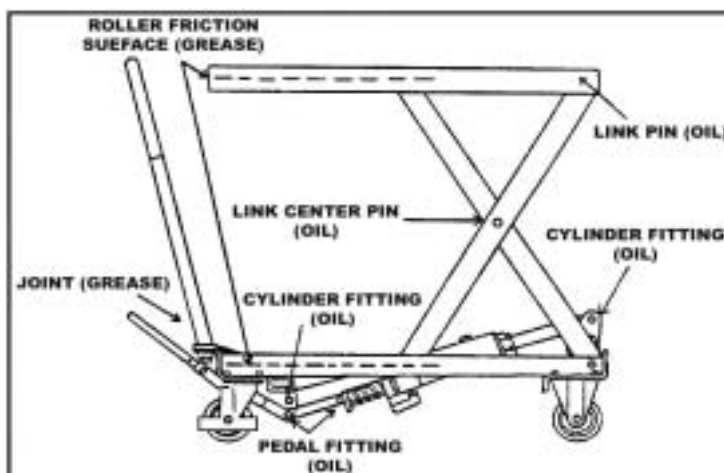
6. Service instruction

6.1-1. Lubricate each point described below every month:

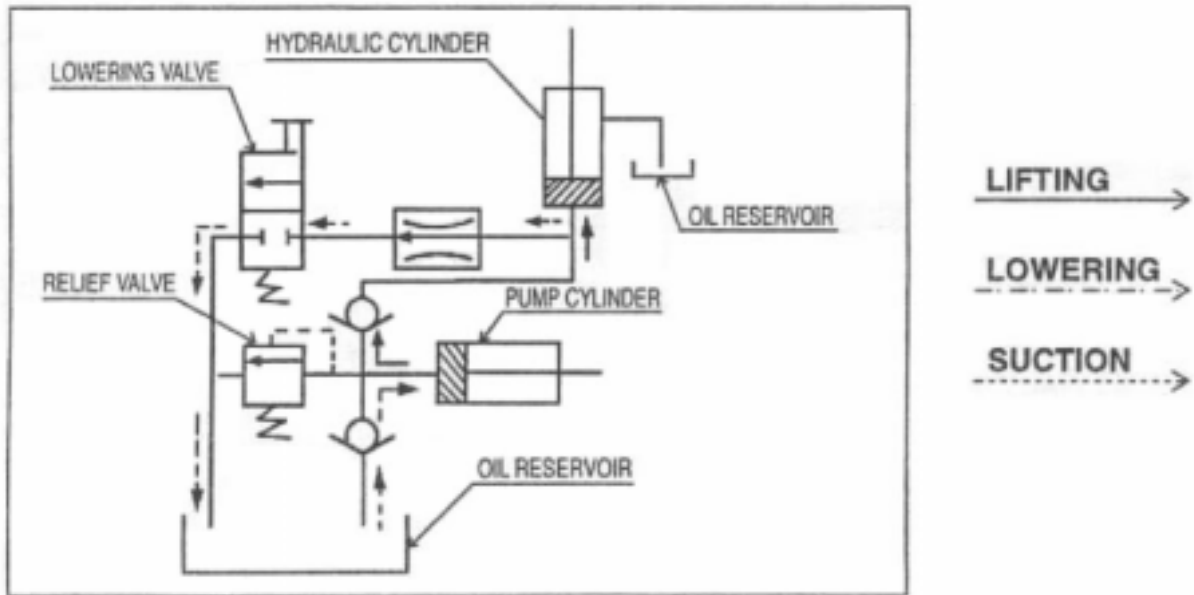
6.2. Change hydraulic oil every 12 months.

Lubricating Points

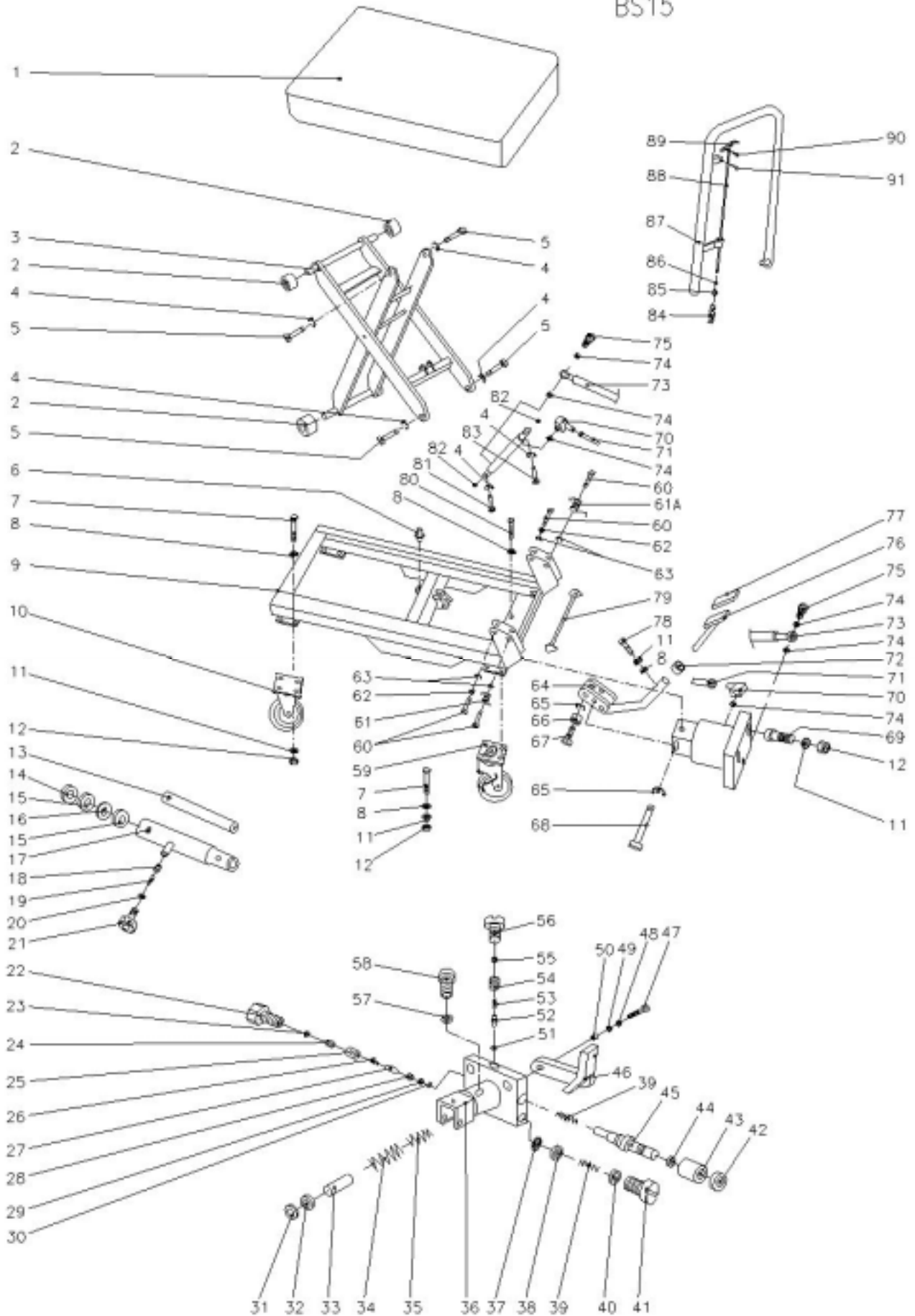
- (1) Fitting of cylinder.....Oil
- (2) Roller friction surface.....Grease
- (3) Link PinOil
- (4) Pedal fitting point.....Oil
- (5) Link center pin.....Oil
- (6) Joint.....Grease
- (7) Grease nipple.....Grease
- (8) Hydraulic circuit



7. Hydraulic Circuit



BS15



ASSEMBLY LIST

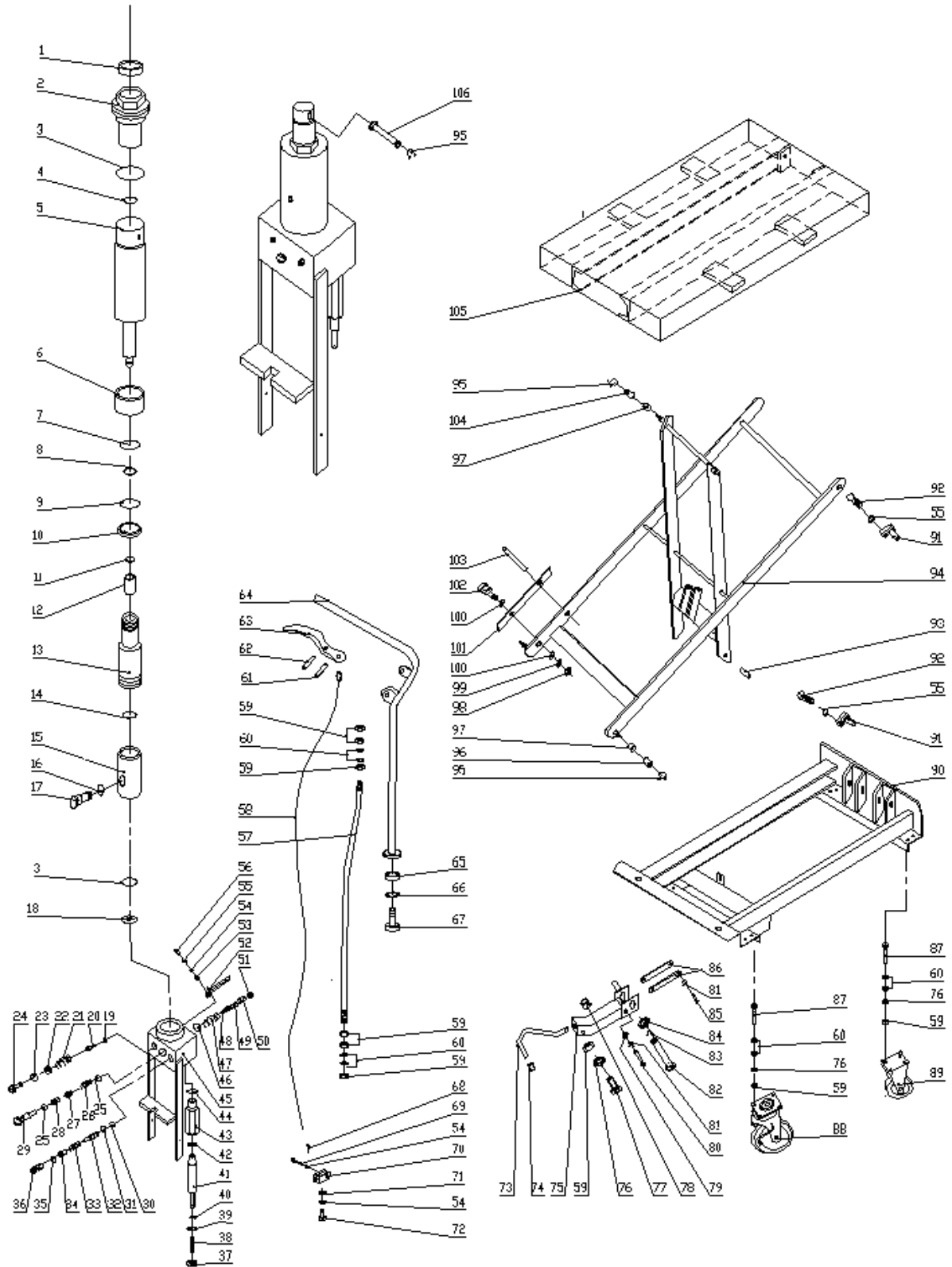
DESCRIPTION	Quantity	PARTS ILLUSTRATION BEING INCLUDED
Cylinder Assembly	1	13-21
Pump Unit Assembly	1	64-78
Pump Unit Sub Assembly	1	22-58
Handle Assembly	1	84-91
Pedal Assembly	1	76-77

PARTS LIST

Item	Description	Qty.	Item	Description	Qty.
1.	Table pair	1	22.	Flow control joint	1
2.	Guide roller	4	23.	O ring	1
3.	Scissors	1	24.	Adjust casing	1
4.	Snap ring	6	25.	Spring seat	1
5.	Link pin	4	26.	Valve spring	1
6.	Safety pin	1	27.	Conical valve	1
7.	Hex bolt	16	28.	Valve seat	1
8.	Washer	18	29.	O ring	1
9.	Frame pair	1	30.	Busing	1
10.	Front wheel	2	31.	Dust seal	1
11.	Spring washer	19	32.	Y ring	1
12.	Hex. nut	18	33.	Plunger	1
13.	Piston rod	1	34.	Pump spring B	1
14.	Dust seal	1	35.	Pump spring A	1
15.	O ring	2	36.	Pump base	1
16.	Back up ring	1	37.	Net	1
17.	Cylinder pair	1	38.	Washer	1
18.	Spring seat	1	39.	Back valve spring	1
19.	Spring	1	40.	O-ring	1
20.	Seal ring	1	41.	Plug	1
21.	Joint	1	42.	O ring	1

Item	Description	Qty.	Item	Description	Qty.
43.	Steering bush	1	67.	Pressure roller pin	1
44.	O ring	1	68.	Pedal Pivot Pin	1
45.	Discharge lever	1	69.	Hex. bolt	2
46.	Valve arm	1	70.	Elbow	2
47.	Socket head screw	1	71.	Oil return hose	1
48.	Spring washer	1	72.	Rubber bushing	1
49.	Washer	1	73.	High pressure hose	1
50.	Bushing	1	74.	Seal ring	6
51.	Steel ball	1	75.	Adaptor	2
52.	Steel ball holder	1	76.	Pedal Pair	1
53.	Relief spring	1	77.	Pedal rubber	2
54.	Regulating pressure plug	1	78.	Hex bolt	1
55.	O ring	1	79.	Lock bar	1
56.	Relief plug	1	80.	Hex. bolt	1
57.	O ring	1	81.	Cylinder pivot pin	1
58.	Plug	1	82.	Grease fitting	2
59.	Rear wheel	2	83.	Piston head pin	1
60.	Handle pin	4	84.	Roller chain	1
61.	Handle lock spring L	1	85.	Valve rod	1
61A.	Handle lock spring R	1	86.	Nut M6	1
62.	Bushing	2	87.	Handle pair	1
63.	Snap ring	4	88.	Valve rod	1
64.	Pedal holder	1	89.	Control link	1
65.	Snap ring	2	90.	Roll pin	1
66.	Pressure roller	1	91.	Roll pin	1

BS25

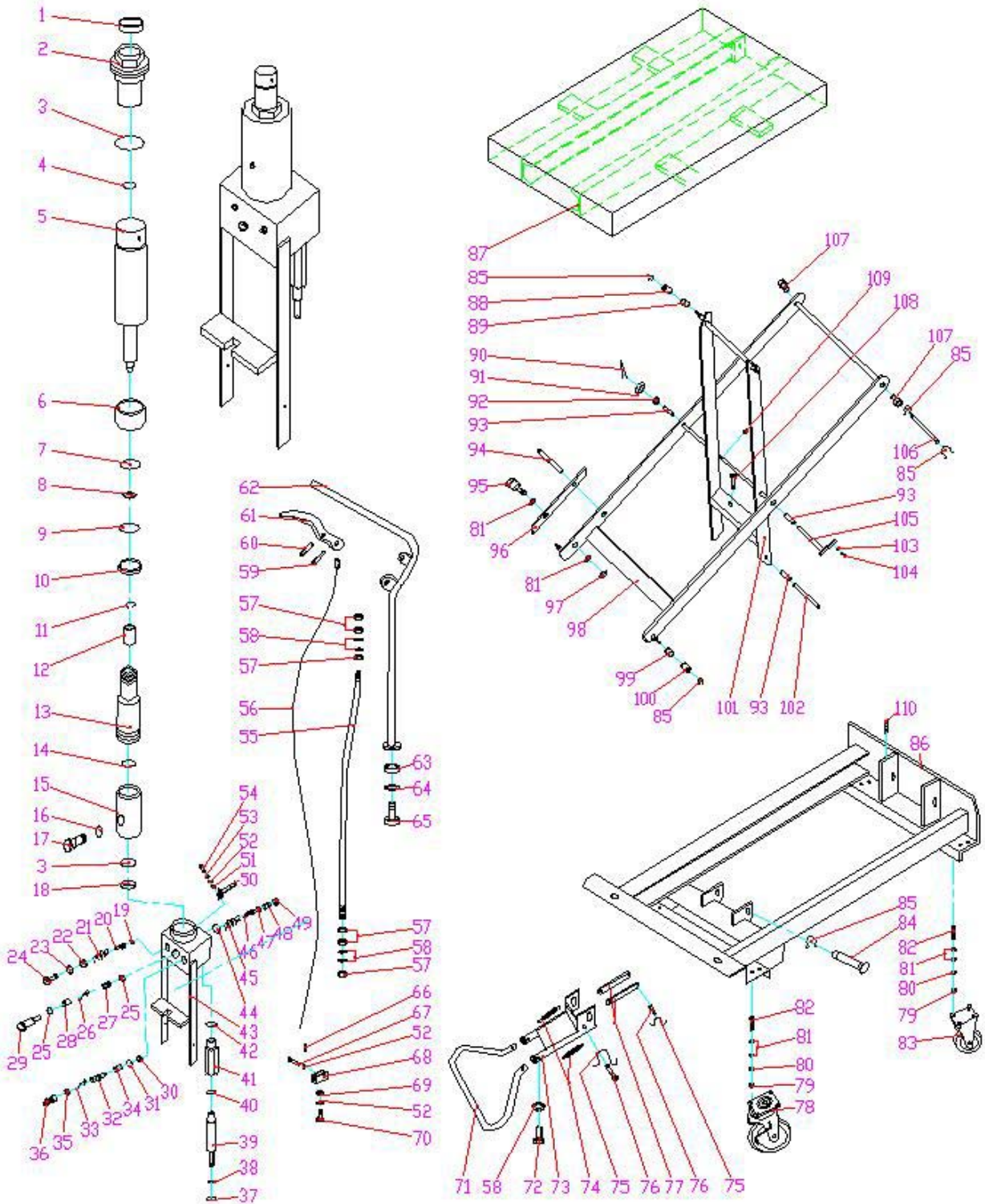


NO.	DESCRIPTION	Qty	NO.	DESCRIPTION	Qty
1.	Seal cover d30xD42x7	1	56.	Hex soch screw M6x16	1
2.	Cylinder cover	1	57.	Tube for steel wire	1
3.	O-ring d63x2.65	2	58.	Steel wire	1
4.	O-ring d30x3.55	1	59.	Nut M8	24
5.	Piston rod	1	60.	Washer 8	36
6.	Spacing casing	1	61.	Spring pin	1
7.	Guide ring 1.5x15	1	62.	Spring pin	1
8.	O-ring D20x2.4	1	63.	Control link	1
9.	Seal ring d34xD40x4.5	1	64.	Handle	1
10.	Piston rod retainer	1	65.	Spacing casing	2
11.	Retaining ring	6	66.	Spring washer 12	2
12.	Piston	1	67.	Hexagon head stud M12x40	2
13.	Cylinder	1	68.	Split pin	1
14.	Cylinder washer	1	69.	Pin	1
15.	Reservior	1	70.	U-fork	1
16.	O-ring d10x2.65	1	71.	Nut M6	1
17.	Filler screw	1	72.	Bolt	1
18.	Washer for reservior	1	73.	Pedal bent pipe	1
19.	Steel ball 5	1	74.	Pedal rubber	1
20.	Spring base	1	75.	Shake link	1
21.	Regulating pressure spring	1	76.	Spring washer 8	17
22.	Regulating pressure screw	1	77.	Hex soch screw	1
23.	O-ring d7.1x1.8	1	78.	Buffer mat	1
24.	End cover	1	79.	Partition set	1
25.	O-ring d15x2.65	2	80.	Pin axle	1
26.	Regulating speed spring	1	81.	Retainer 10	2
27.	Regulating speed slide valve	1	82.	Pin axle	1
28.	Regulating speed spring casing	1	83.	Retainer 20	1
29.	Regulating speed valve casing	1	84.	Washer	1
30.	Steel ball 7	1	85.	Pin axle	1
31.	O-ring d6.9x1.8	1	86.	Link	2
32.	Conical valve	1	87.	Hex soch screw M8x20	16
33.	Check valve spring	1	88.	Wheel	2
34.	Check valve casing	1	89.	Wheel	2
35.	O-ring d10x1.8	1	90.	Chassis	1
36.	Check valve screw	1	91.	Pin axle	4
37.	Spring base	1	92.	Hex screw M6x12	4
38.	Spring	1	93.	Bushing	4
39.	Seal cover d18xD25x4.5	1	94.	Scissors lever	1

40.	O-ring d18x2.65	1	95.	Retainer 16	5
41.	Pump plunger	1	96.	Roller for chassis	2
42.	Y-ring	1	97.	Bushing	4
43.	Pump body for plunger	1	98.	Nut M10	2
44.	O-ring d28x3.1	1	99.	Spring washer 10	4
45.	Pump body	1	100.	Washer 10	8
46.	O-ring d10.6x2.65	1	101.	Safety rod	2
47.	Spring	1	102.	Screw bolt M10x40	2
48.	Reflux rod	1	103.	Spring pin 8x40	2
49.	O-ring d4x1.8	1	104.	Roller for table	2
50.	Guide casing	1	105.	table	1
51.	Protect casing	1	106.	Pin axle	1
52.	Lever	1	A	Pump ass'y	1 ~ 51
53.	Lever bushing	1	B	Swivel wheel ass'y	89
54.	Washer 6	2	C	Front wheel ass'y	88
55.	Spring washer 6	5	D	Seal kit ass'y 1,3,4,7,8,9,16,23, 25,31,35,39,40,42,44,46,49	
			E	Handle ass'y 54,57 ~ 64,68 ~ 72	

BS50 & BS75

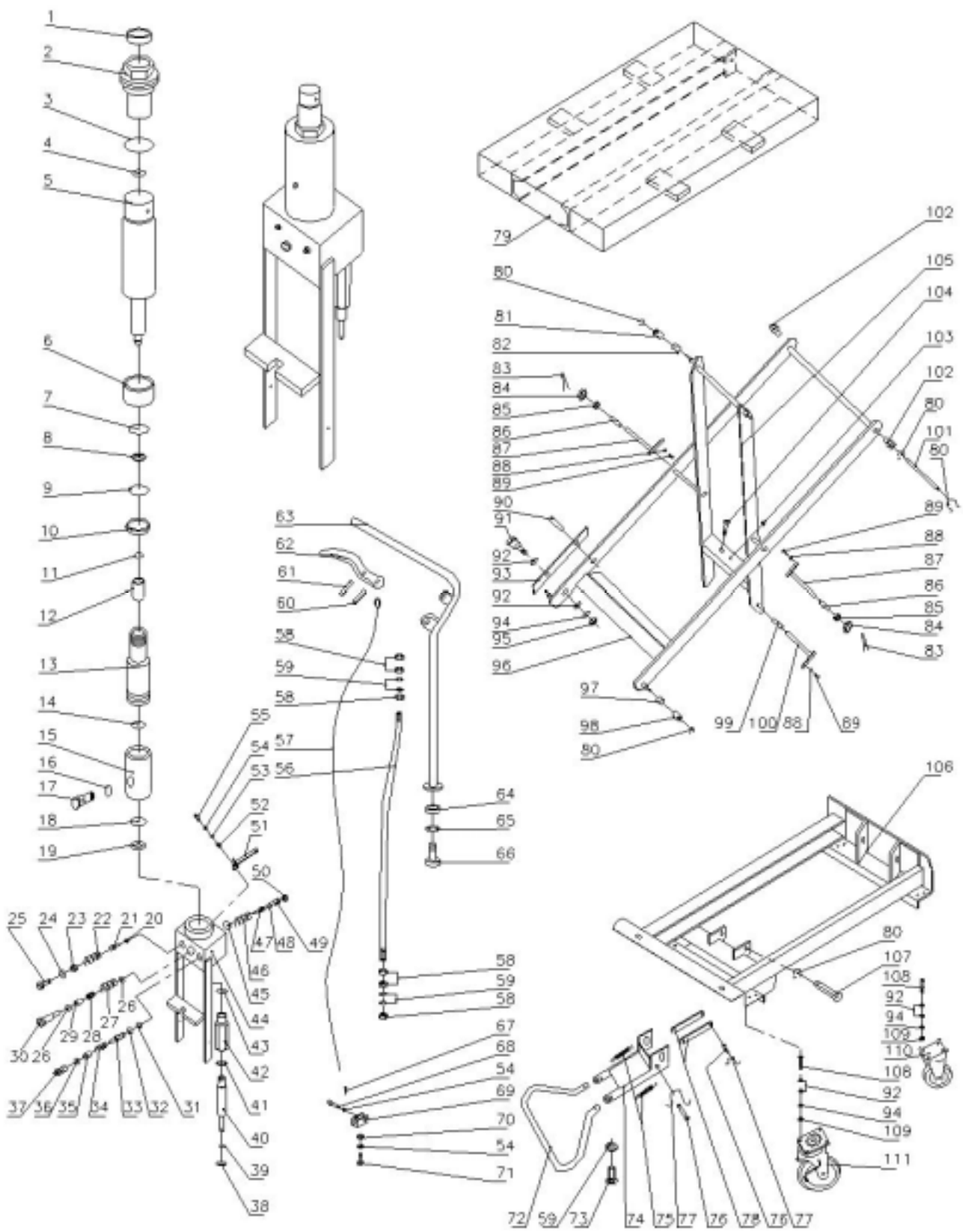
BS50 BS75



NO.	DESCRIPTION	Qty	NO.	DESCRIPTION	Qty
1.	Seal cover d30xD42x7	1	56.	Steel wire	1
2.	Cylinder cover	1	57.	Nut M8	24
3.	O-ring d63x2.65	2	58.	Washer 8	38
4.	O-ring d30x3.55	1	59.	Spring pin	1
5.	Piston Rod	1	60.	Spring pin	1
6.	Spacing casing	1	61.	Control link	1
7.	Guide ring 1.5x15	1	62.	Handle	1
8.	O-ring D20x2.4	1	63.	Spacing casing	2
9.	Seal ring d34xD40x4.5	1	64.	Spring washer 12	2
10.	Retainer for piston rod	1	65.	Hex screw M12x40	2
11.	Spacing retainer 18	6	66.	Split pin 2x15	1
12.	Piston	1	67.	Pin	1
13.	Cylinder	1	68.	U- fork	1
14.	Washer for cylinder	1	69.	Nut M6	1
15.	Reservior	1	70.	Bolt	1
16.	O-ring d10x2.65	1	71.	Pedal bent pipe	1
17.	Filler screw	1	72.	Hex soch screw M8x20	2
18.	Washer for reservior	1	73.	Shake link	1
19.	Steel ball 5	1	74.	Spring	2
20.	Spring base	1	75.	Retainer 10	2
21.	Regulating pressure spring	1	76.	Pin axle	2
22.	Regulating pressure screw	1	77.	Link	2
23.	O-ring d7.1x1.8	1	78.	Wheel	2
24.	End cover	1	79.	Nut M10	16
25.	O-ring d15x2.65	2	80.	Spring washer 10	16
26.	Regulating speed spring	1	81.	Washer 10	36
27.	Regulating slide-valve	1	82.	Hex soch screw M10x25	16
28.	Regulating speed spring casing	1	83.	Wheel	2
29.	Regulating speed slide-casing	1	84.	axle	1
30.	Steel ball 7	1	85.	Retainer 20	4
31.	O-ring d6.9x1.8	1	86.	Chassis	1
32.	Conical valve	1	87.	Table	1
33.	Spring	1	88.	Roller for table	2
34.	Check valve casing	1	89.	Bushing	2

35.	O-ring d10x1.8	1	90.	Split pin 3.2x26	2
36.	Check valve screw	1	91.	Nut M16	1
37.	Seal cover d18xD25x4.5	1	92.	Washing	1
38.	O-ring d18x2.65	1	93.	Bushing	2
39.	Pump plunger	1	94.	Spring pin 8x40	2
40.	Y-ring	1	95.	Screw bolt M10x40	2
41.	Pump body for plunger	1	96.	Safety rod	2
42.	O-ring D28x3.1	1	97.	Nut M10	2
43.	Pump body	1	98.	External scissors lever	1
44.	O-ring d10.6x2.65	1	99.	Bushing	2
45.	Spring	1	100.	Roller for chassis	2
46.	Reflux rod	1	101.	Internal scissors lever	1
47.	O-ring d4x1.8	1	102.	Pin axle for chassis	1
48.	Guide casing	1	103.	Spring washer 8	2
49.	Protect casing	1	104.	Hex screw M8x16	2
50.	Lever	1	105.	Pin axle for scissors	1
51.	Lever bushing	1	106.	Pin axle for table	1
52.	Washer 6	2	107.	Bushing	2
53.	Spring washer 6	5	108.	Bolt M8x12	1
54.	Hex soch screw M6x16	1	109.	Oil cup	2
55.	Tube for steel wire	1	110.	Screw M6	1

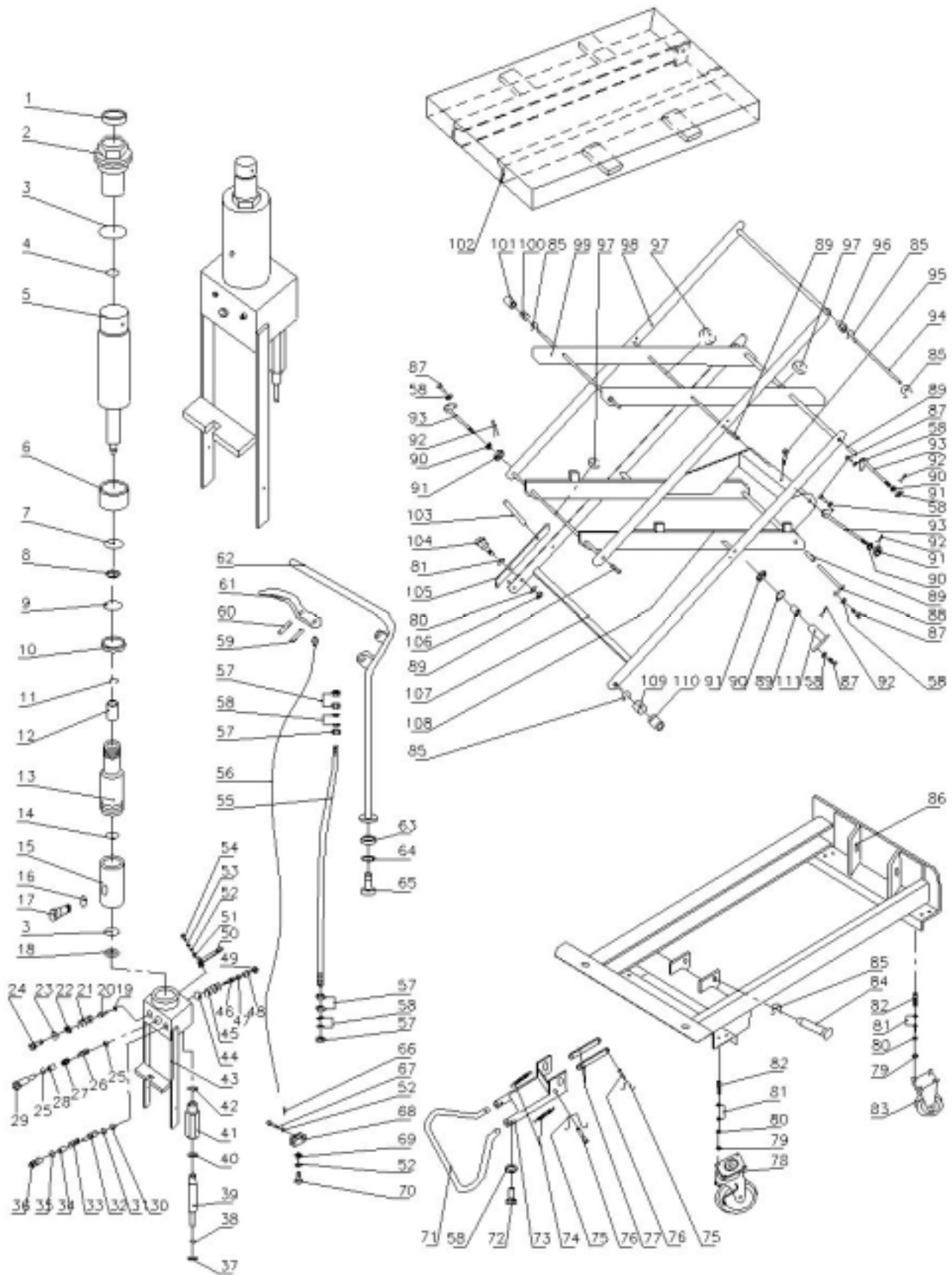
BS100



NO.	DESCRIPTION	Qty's	NO.	DESCRIPTION	Qty's
1.	Seal cover d35xD43.5x5	1	57.	Steel wire	1
2.	Cylinder cover	1	58.	Nut M8	24
3.	O-ring d75x3.55	1	59.	Washer 8	38
4.	O-ring d35.5x3.55	1	60.	Spring pin	1
5.	Piston Rod	5	61.	Spring pin	1
6.	Spacing casing	1	62.	Control link	1
7.	Guiding 2x15	1	63.	Handle	1
8.	O-ring D20x2.4	1	64.	Spacing casing	2
9.	Seal ring d39xD45x4.5	1	65.	Spring washer 12	2
10.	Retainer for piston rod	1	66.	Hex screw M12x40	2
11.	Spacing retainer 18	6	67.	Split pin 2x15	1
12.	Piston	1	68.	Pin	1
13.	Cylinder	1	69.	U- fork	1
14.	Washer for cylinder	1	70.	Nut M6	1
15.	Reservior	1	71.	Bolt	1
16.	O-ring d10x2.65	1	72.	Pedal bent pipe	1
17.	Filler screw	1	73.	Hex screw M8x20	2
18.	O-ring d75x2.65	1	74.	Shake link	1
19.	Washer for reservior	1	75.	Spring	2
20.	Steel ball 5	1	76.	Pin axle	2
21.	Spring base	1	77.	Retainer 10	2
22.	Regulating pressure spring	1	78.	Link	2
23.	Regulating pressure screw	1	79.	Table	1
24.	O-ring d7.1x1.8	1	80.	Retainer 20	4
25.	End cover	1	81.	Roller for table	2
26.	O-ring d15x2.65	2	82.	Bushing	2
27.	Regulating speed spring	1	83.	Split pin 3.2x26	2
28.	Regulating slide-valve	1	84.	Nut M16	2
29.	Regulating speed spring casing	1	85.	Washing	2
30.	Regulating speed slide-casing	1	86.	Bushing	2
31.	Steel ball 7	1	87.	Pin axle for scissors	2
32.	O-ring d6.9x1.8	1	88.	Spring washer 8	3
33.	Conical valve	1	89.	Hex screw M8x10	3
34.	Spring	1	90.	Spring pin 8x40	2
35.	Check valve casing	1	91.	Screw bolt M10x40	2

36.	O-ring d10x1.8	1	92.	Washer 10	34
37.	Check valve screw	1	93.	Safety rod	2
38.	Seal cover d18xD25x4.5	1	94.	Spring washer 10	34
39.	O-ring d18x2.65	1	95.	Nut M10	2
40.	Pump plunger	1	96.	External scissors lever	1
41.	Y-ring d10xD18x6	1	97.	Bushing	2
42.	Pump body for plunger	1	98.	Roller for chassis	2
43.	O-ring D28x3.1	1	99.	Bushing	2
44.	Pump body	1	100.	Pin axle for chassis	1
45.	O-ring d10.6x2.65	1	101.	Pin axle for table	1
46.	Spring	1	102.	Bushing	2
47.	Reflux rod	1	103.	Oil cup	2
48.	O-ring d4x1.8	1	104.	Bolt M8x12	1
49.	Guide casing	1	105.	Internal scissors lever	1
50.	Protect casing	1	106.	Chassis	1
51.	Lever	1	107.	axle	1
52.	Lever bushing	1	108.	Hex soch screw M10x25	16
53.	Washer 6	2	109.	Nut M10	16
54.	Spring washer 6	5	110.	Wheel	2
55.	Hex soch screw M6x16	1	111.	Wheel	2
56.	Tube for steel wire	1			

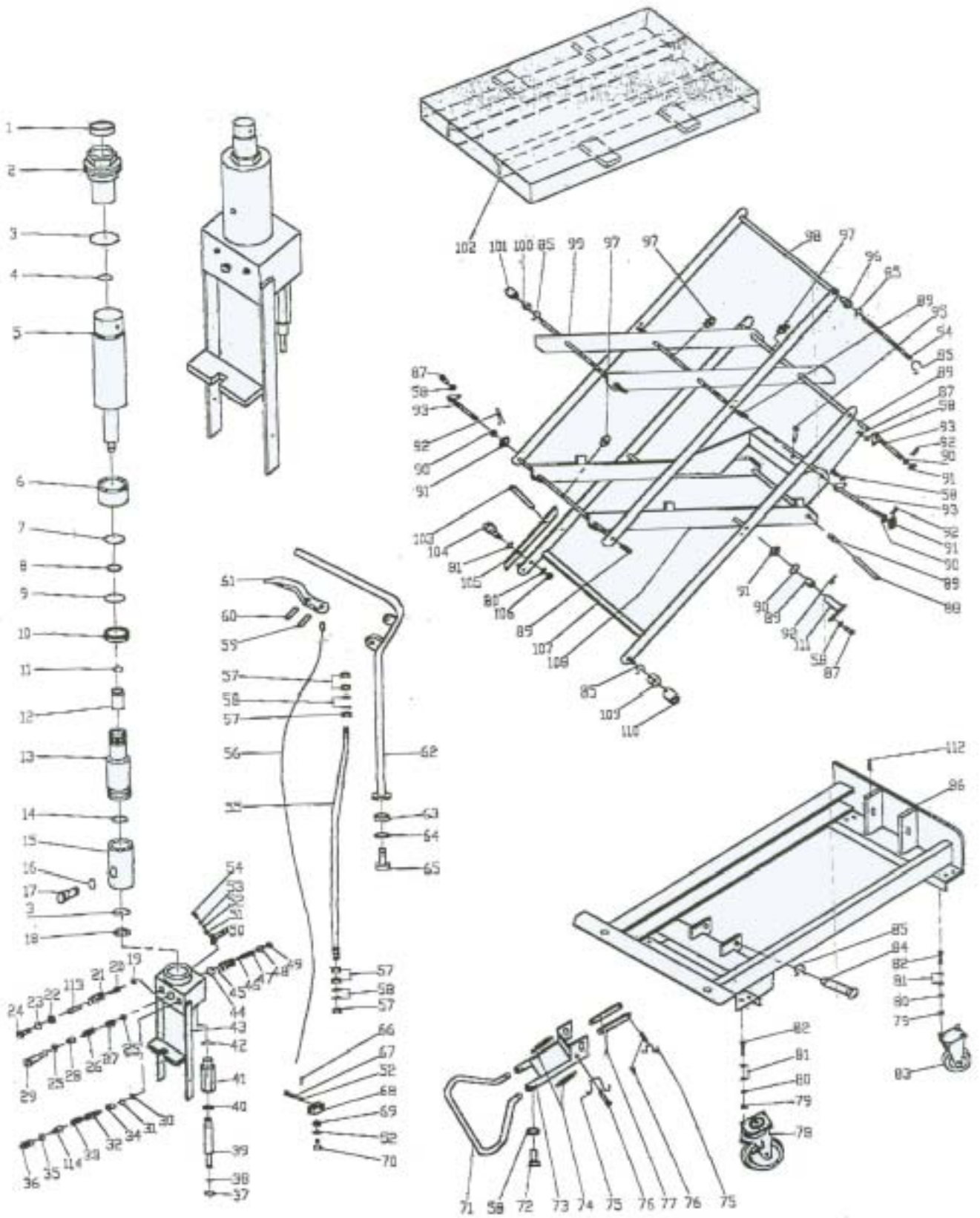
BS30D



NO.	DESCRIPTION	NO.	DESCRIPTION
1.	Seal cover d30xD42x7	57.	Nut M8
2.	Cylinder cover	58.	Washer 8
3.	O-ring d63x2.65	59.	Spring pin
4.	O-ring d30x3.55	60.	Spring pin
5.	Piston Rod	61.	Control link
6.	Spacing casing	62.	Handle
7.	Guiding 1.5x15	63.	Spacing casing
8.	O-ring D20x2.4	64.	Spring washer 12
9.	Seal ring d34xD40x4.5	65.	Hex screw M12x40
10.	Retainer for piston rod	66.	Spcit pin
11.	Spacing retainer 18	67.	Pin
12.	Piston	68.	U- fork
13.	Cylinder	69.	Nut M6
14.	Washer for cylinder	70.	Bolt
15.	Reservior	71.	Pedal bent pipe
16.	O-ring d10x2.65	72.	Hex headed bolt
17.	Filler screw	73.	Shake link
18.	Washer for reservior	74.	Spring
19.	Steel ball 5	75.	Retainer ring for axle 10
20.	Spring base	76.	Pin axle
21.	Regulating pressure spring	77.	Link
22.	Regulating pressure screw	78.	Wheel
23.	O-ring d7.1x1.8	79.	Nut M10
24.	End cover	80.	Spring washer 10
25.	O-ring d15x2.65	81.	Washer 10
26.	Regulating speed spring	82.	Hex soch screw M10x25
27.	Regulating slide-valve	83.	Wheel
28.	Regulating speed spring casing	84.	Pin axle
29.	Regulating speed slide-casing	85.	Retaining ring for axle 20
30.	Steel ball 7	86.	Chassis
31.	O-ring d6.9x1.8	87.	Hex socket screw Bolt M8x16
32.	Conical valve	88.	Pin axle
33.	Spring	89.	Bushing
34.	Check valve casing	90.	Washer
35.	O-ring d10x1.8	91.	Slotting nut M16x1.5
36.	Check valve screw	92.	Split pin
37.	Seal cover d18xD25x4.5	93.	Pin axle

38.	O-ring d18x2.65	94.	Pin axle
39.	Pump plunger	95.	Hex socket set screw M8x12
40.	Y-ring	96.	Bushing
41.	Pump body for plunger	97.	Oil cup
42.	O-ring D28x3.1	98.	External scissors lever for table
43.	Pump body	99.	Internal scissors lever for table
44.	O-ring d10.6x2.65	100.	Bushing
45.	Spring	101.	Roller for table
46.	Reflux rod	102.	Table
47.	O-ring d4x1.8	103.	Pin 8x40
48.	Guide casing	104.	Hex headed screw bolt M10x40
49.	Protect casing	105.	Safety rod
50.	Lever	106.	Nut M10
51.	Lever bushing	107.	External scissors lever for chassis
52.	Washer 6	108.	Internal scissors lever for chassis
53.	Spring washer 6	109.	Bushing
54.	Hex soch screw M6x16	110.	Roller for chassis
55.	Tube for steel	111.	Pin axle
56.	Steel wire		

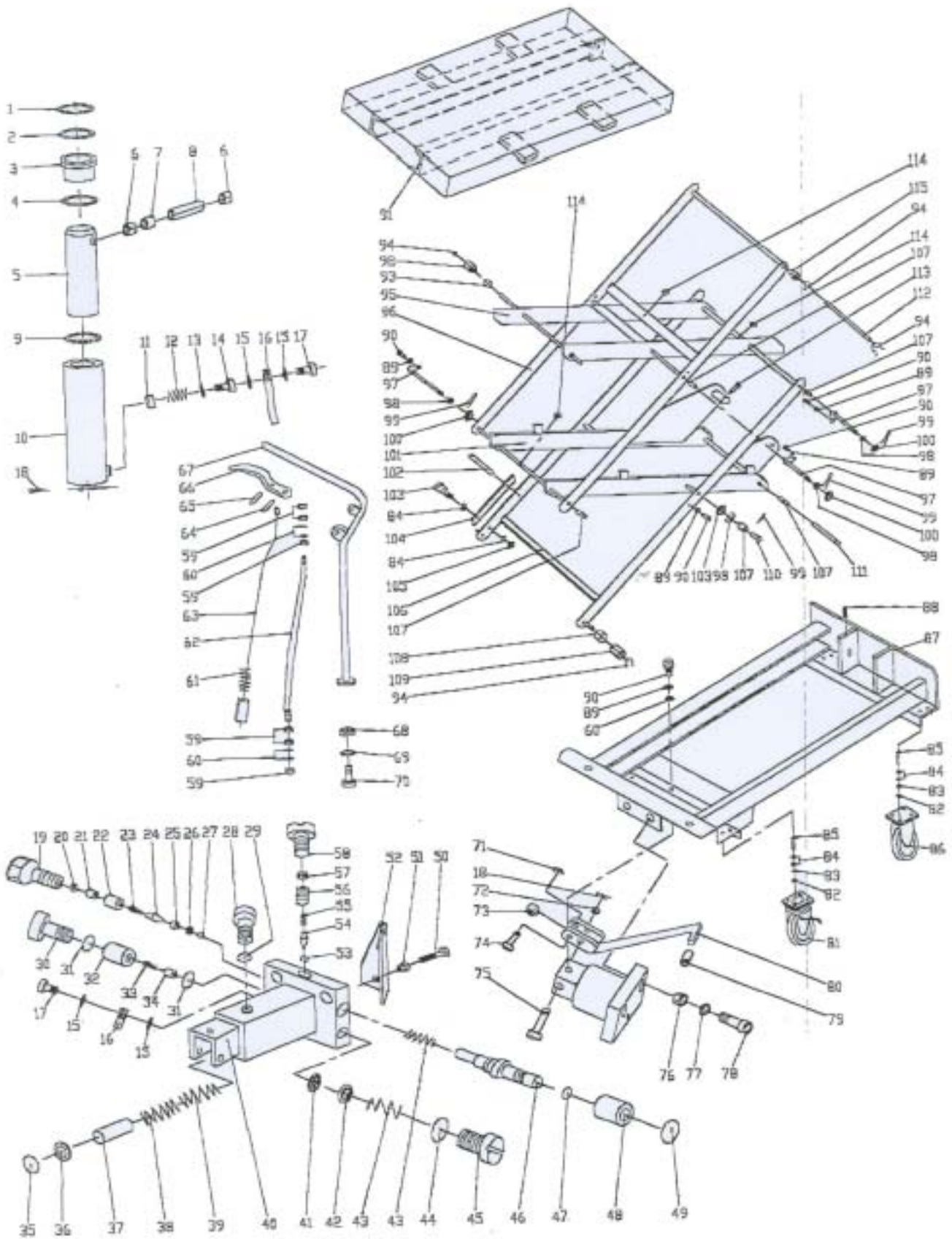
BS 50D



Item No.	Description	Item No.	Description
1	Seal cover d35xD43.5x5	59	Spring pin
2	Cylinder cover	60	Spring pin
3	O-ring d75x3.55	61	Control link
4	O-ring d35.5x3.55	62	Handle
5	Piston Rod	63	Spacing casing
6	Spacing casing	64	Spring washer 12
7	Guiding 2x15	65	Hex screw M12x40
8	O-ring D20x2.4	66	Spcit pin
9	Seal ring d39xD40x4.5	67	Pin
10	Retainer for piston rod	68	U- fork
11	Spacing retainer 18	69	Nut M6
12	Piston	70	Bolt
13	Cylinder	71	Pedal bent pipe
14	Washer for cylinder	72	Hex headed bolt
15	Reservior	73	Shake link
16	O-ring d10x2.65	74	Spring
17	Filler screw	75	Retainer ring for axle 10
18	Washer for reservior	76	Pin axle
19	Steel ball 5	77	Link
20	Spring base	78	Wheel
21	Regulating pressure spring	79	Nut M10
22	Regulating pressure screw	80	Spring washer 10
23	O-ring d7.1x1.8	81	Washer 10
24	End cover	82	Hex soch screw M10x25
25	O-ring d15x2.65	83	Wheel
26	Regulating speed spring	84	Pin axle
27	Regulating slide-valve	85	Retaining ring for axle 20
28	Regulating speed spring casing	86	Chassis
29	Regulating speed slide-casing	87	Hex socket screw Bolt M8x16
30	Steel ball 7	88	Pin axle
31	O-ring d6.9x1.8	89	Bushing
32	Conical valve	90	Washer
33	Spring	91	Slotting nut M16x1.5
34	Check valve casing	92	Split pin
35	O-ring d10x1.8	93	Pin axle
36	Check valve screw	94	Pin axle
37	Seal cover d18xD25x4.5	95	Hex socket set screw M8x12
38	O-ring d18x2.65	96	Bushing
39	Pump plunger	97	Oil cup
40	Y-ring	98	External scissors lever for table
41	Pump body for plunger	99	Internal scissors lever for table

42	O-ring D28x3.1	100	Bushing
43	Pump body	101	Roller for table
44	O-ring d10.6x2.65	102	Table
45	Spring	103	Pin 8x40
46	Reflux rod	104	Hex headed screw bolt M10x40
47	O-ring d4x1.8	105	Safety rod
48	Guide casing	106	Nut M10
49	Protect casing	107	External scissors lever for chassis
50	Lever	108	Internal scissors lever for chassis
51	Lever bushing	109	Bushing
52	Washer 6	110	Roller for chassis
53	Spring washer 6	111	Pin axle
54	Hex soch screw M6x16	112	Bolt M6 x 8
55	Tube for steel	A	Pump ass'y 1 ~ 49
56	Steel wire	B	Swivel wheel ass'y 83
57	Nut M8	C	Front wheel ass'y 78
58	Washer 8	D	Seal kit ass'y 1,3,4,7,8,9,16,23, 25,31,35,37,38,,40,42,44,47
		E	Handle ass'y 52,55 ~ 62,66 ~ 70

BS80D



NO.	DESCRIPTION	Qty's	NO.	DESCRIPTION	Qty's
1.	Seal cover d50xD58x5	1	59.	Nut M8	6
2.	Y-ring d50xD58x8.2	1	60.	Washer 8	5
3.	Cylinder cover	1	61.	Spring	1
4.	O-ring d56x2.65	1	62.	Tube for steel wire	1
5.	Piston Rod	1	63.	Steel wire	1
6.	Bushing	2	64.	Spring pin	1
7.	Bushing	1	65.	Spring pin	1
8.	Pin axle	1	66.	Control link	1
9.	Snap Ring 50	1	67.	Handle	1
10.	Cylinder	1	68.	Spacing casing	2
11.	Prevent burst valve	1	69.	Spring washing 12	2
12.	Spring	1	70.	Hex screw M12x40	2
13.	Seal ring 18	1	71.	Snap ring	2
14.	Prevent burst joint	1	72.	Spacing casing	1
15.	Seal ring 14	4	73.	Pressure roller	1
16.	High pressure Hose	1	74.	Pressure roller pin	1
17.	Joint	2	75.	Pedal pivot pin	1
18.	Split pin	1	76.	Nut M6	2
19.	Adjust casing seat	1	77.	Spring washer 6	2
20.	O-ring d18x2.4	1	78.	Hex socket screw bolt M6x50	2
21.	Adjust casing	1	79.	Pedal rubber	1
22.	Spring seat	1	80.	Pedal holder	1
23.	Spring	1	81.	Wheel	2
24.	Conical valve	1	82.	Nut M10	16
25.	Check valve casing	1	83.	Spring washer 10	16
26.	O-ring d6.9x1.8	1	84.	Washer 10	32
27.	Steel ball	2	85.	Hex socket screw M10	16
28.	Plug	1	86.	Wheel	2
29.	O-ring d10x2.65	2	87.	Chassis	1
30.	Regulating speed valve casing	1	88.	Bolt M6 x 8	1
31.	O-ring d15x2.65	2	89.	Spring washer 8	1
32.	Regulating speed spring seat	1	90.	Hex socket screw bolt M8x16	1
33.	Regulating speed spring	1	91.	Table	1
34.	Regulating speed slide-valve	1	92.	Roller for table	2

35.	O-ring d20×2.65	1	93.	Bushing	2
36.	Y-ring d20×D28×5	1	94.	Retaining ring for axle 20	6
37.	Pump plunger	1	95.	Internal scissors lever for table	1
38.	Spring	1	96.	External scissors lever for table	1
39.	Spring	1	97.	Pin axle	3
40.	Pump body	1	98.	Washer	5
41.	Mesh	1	99.	Split Pin	5
42.	Washer D5	1	100.	Slotting nut M16×1.5	5
43.	Discharge spring	2	101.	Internal scissors lever for chassis	1
44.	O-ring d14×2.4	1	102.	Pin 8×40	2
45.	Plug	1	103.	Hex headed screw bolt M8×40	2
46.	Discharge lever	1	104.	Safety rod	2
47.	O-ring d4×1.8	1	105.	Nut M10	2
48.	Discharge lever bushing	1	106.	External scissors lever for chassis	1
49.	O-ring d10.6×2.65	1	107.	Bushing	10
50.	Hex socket screw bolt M6×16	1	108.	Bushing	2
51.	Bushing	1	109.	Roller for chassis	2
52.	Discharge lever	1	110.	Pin axle	2
53.	Steel ball	1	111.	Pin axle	1
54.	Spring seat assembly	1	112.	Pin axle	1
55.	Regulating pressure spring	1	113.	Hex socket set screw M8×12	2
56.	Regulating pressure nut	1	114.	Oil cup	3
57.	O-ring d8×1.8	1	115.	Bushing	2
58.	Screw	1			