



SPARE PARTS CATALOGUE

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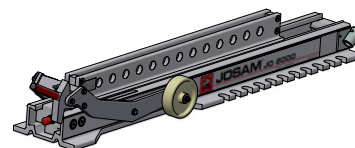
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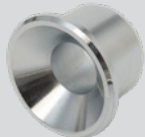
COLLISION REPAIR



Spare parts for press/pull trolley JO2000 (21505)

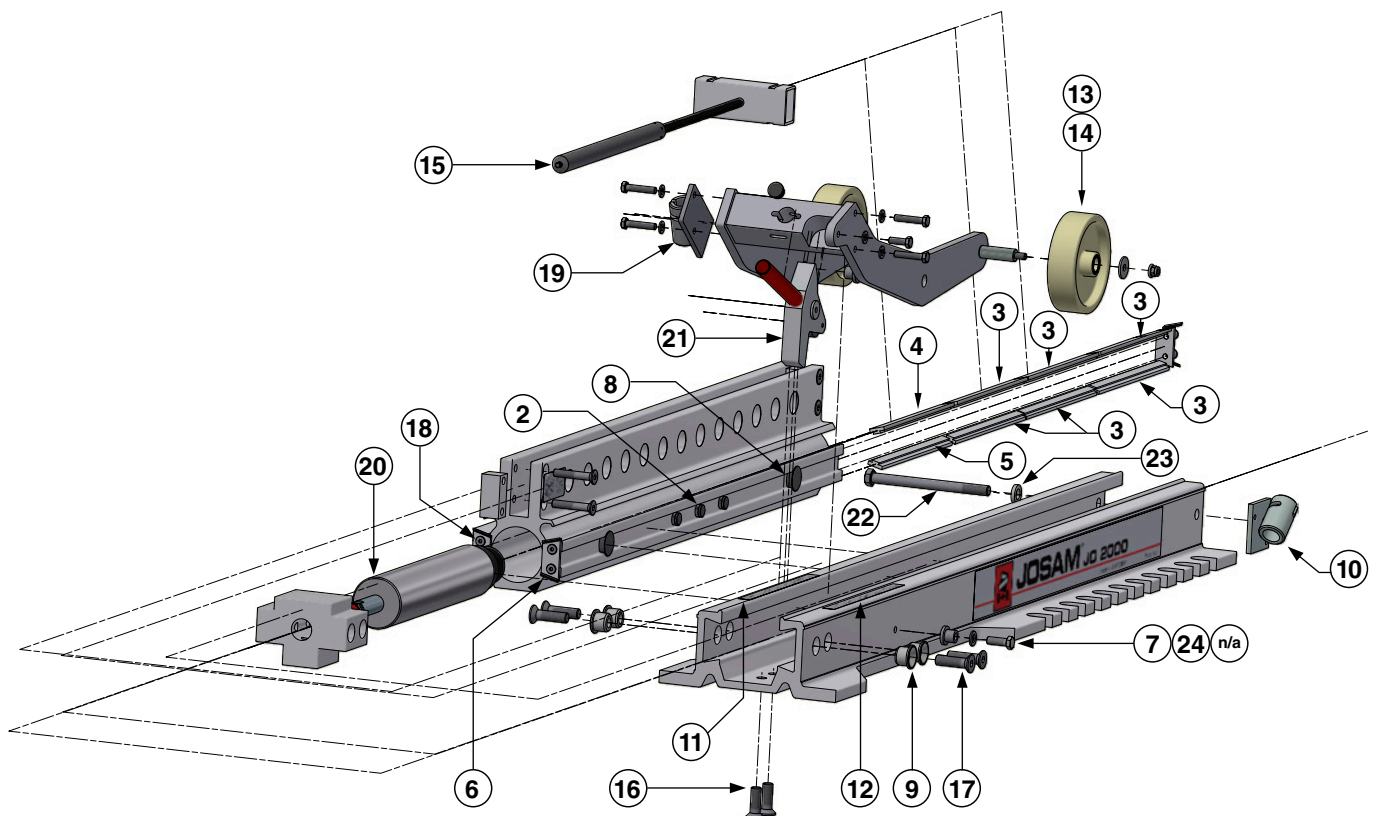
#	Article #	Order #	Description	
1	JO2599	21504	Repair kit wearing parts JO2000	
	AM415	10562	6 × Slip stud (Item #2)	
	JO1014-1	11221	14 × Slide rail (Item #3)	
	JO1014-2	11222	1 × Slide rail upper front left (Item #4)	
	JO1014-3	11223	1 × Slide rail upper front right (Item #5)	
	JO1062	11229	4 × Scraper (Item #6)	
	MF6S-8X20	12466	8 × Bolt MF6S-8 (Item #18)	
2	AM415	10562	Slip stud	
3	JO1014-1	11221	Slide rail	
4	JO1014-2	11222	Slide rail upper front left	
5	JO1014-3	11223	Slide rail upper front right	
6	JO1062	11229	Scraper	
7	JO1064	11230	Bearing sleeve	



#	Article #	Order #	Description	
8	JO1273	11279	Support Stud	
9	JO1348	11312	Socket	
10	JO2022	11411	Bracket for transport handle – trolley	
11	JO2311-1	11504	Graded Sticker, Right	
12	JO2311-2	11505	Graded Sticker, Left	
13	JO32	11655	Wheel 175 mm (before ≈2012)	
14	14747	14747	Wheel 160 mm (after ≈2012)	
Note: There are two generations of wheel sets. Before ordering any spare wheels, check which size is needed.				
15	JO34-1	11661	Gas spring	
16	MF6S-16X50	12450	Bolt MF6S-16×50	
17	MF6S-16X60	12451	Bolt MF6S-16×60	
18	MF6S-8X20	12466	Bolt MF6S-8×20	
19	JO2531	15001	Bracket for transport handle – wheel set	



#	Article #	Order #	Description
20	H1051	16542	Cylinder for press trolley Note: spare parts and repair kits for the cylinder is included in spare part sheet S01-05-06.
21	21399	21399	Handle for JO2000/JO2010, complete Note: only available as a complete spare part.
22	91266	31467	Screw M6S 16x200
23	31497	31497	Washer BRB 17x30x3
24	91320	31499	Washer BRB 13x24x2





Inner profile

Place the inner profile on a sturdy workbench.

Step 1

Remove old scrapers (11229) using M6 Allen key, and remove slide rails (11221, 11222 and 11223).

Step 2

Clean the profile if needed.

Step 3

Check for damages and possible overload. Holes must all still be round with a diameter of less than Ø40.0mm. The profile must be straight.

Step 4

Mount the slide rails (11221, 11222 and 11223).

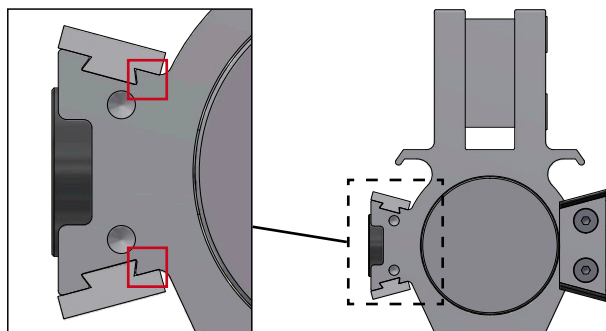
Note: The short side of the rail shall face inwards.



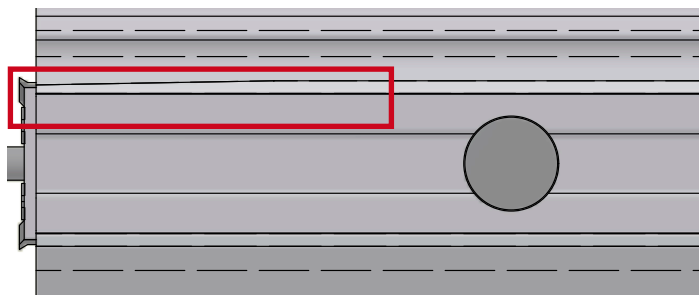
Scraper (11229)



Slide rails (11221, 11222 & 11223)

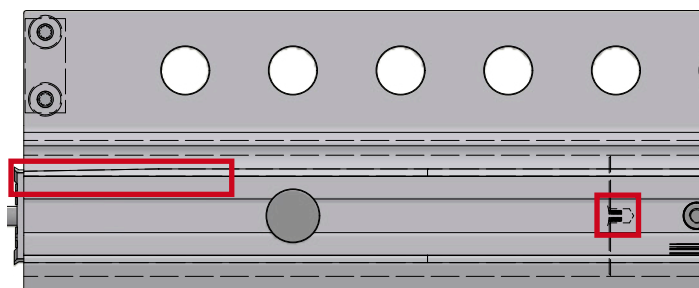


Short side inwards



On the bottom part of the profile, mount 4 pcs. non chamfered slide rails 11221 on each side. On the top part, mount 3 pcs. non chamfered slide rails 11221 on each side, plus a chamfered slide rail 11222 on the left side and 11223 on the right side.

Note: Chamfered parts must be on the same side as the hole in the center part. The hole is later used to center the gas spring.

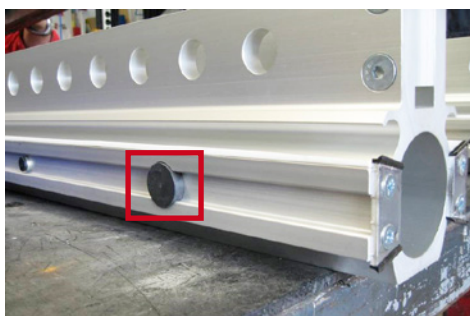


Lock the slide rails using 4 pcs. scrapers 11229 and 8 pcs. countersink screws MF6S-8x20 8.8 FZB. It is recommended to exchange the screws when changing the rails.



Step 5

Exchange small slip studs 10562 in steel pins if needed (total 6 pcs.)



Step 6

Ensure the 4 pcs. big slip studs 11279 are inserted.



Outer profile

Step 1

Clean the profile if needed. Check for damages and possible overload. Profile should still be straight.

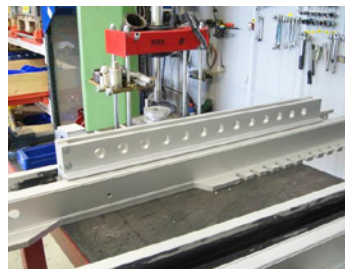
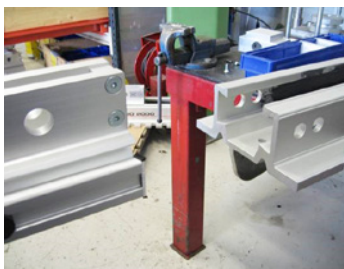


Step 2

Apply new dry graphite lubricant – we use Dupont Molicote BR2 Plus (to be purchased locally).

Step 3

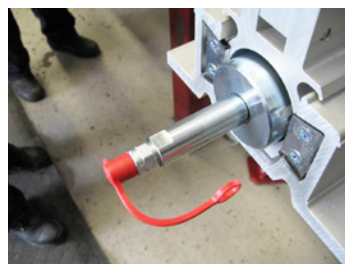
Slide the inner profile with the chamfered slide rails first into the outer profile from the rear side (the side with four 30 mm holes from the side).



Step 4

Slide in the cylinder in the inner profile.

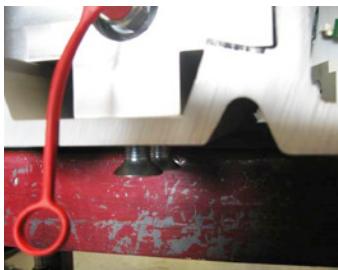
Note: Service cylinder if any leakage is detected. Use a complete, new cylinder 16542 or service parts – see spare part sheet S01-05-06.



Step 5

Slide the cylinder support into the outer profile and lock it with 2 pcs countersink screws (12450) MF6S-16x50 8.8 FZB from the bottom as well as 4 pcs. countersink screws (12451) MF6S-16x60 10.9 FZB with 4 pcs. conical spacer (11312).

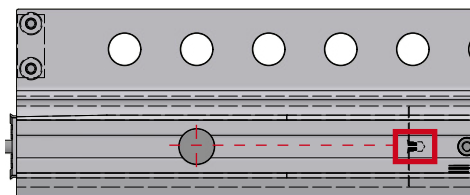
Note: do not tighten any screws until all 6 screws are mounted.





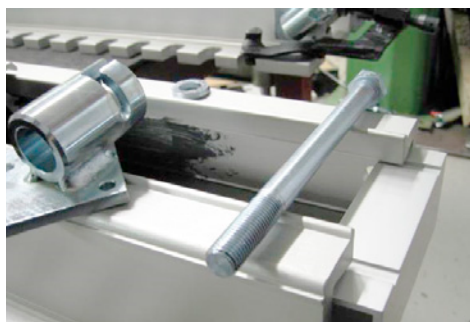
Step 7

Exchange gas spring 11661 if needed.



Step 8

Slide the gas spring into the inner profile and center it in the hole of the center part.



Step 9

Compress the gas spring and mount the handle bracket with a screw (31467) M6S 16x200 8.8 FZB and washer (31497) BRB 17x30x3 FZB.

Step 10

Add new ruler decals if needed.



Step 11

Remount wheel set using 2 pcs. bearing sleeve 11230 and 2 pcs. screw M6S 12x35 8.8 FZB and 2 pcs. washers BRB 13x24x2 FZB.



There are two generations wheel sets, old generation with 175 mm wheels and current generation with 160 mm wheels.

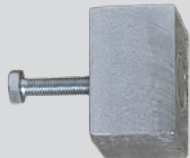
Before ordering any spare wheels, check which size is needed.



The wheel set handle has been manufactured in two versions. Since these differ, only a complete handle is available as spare part (21399).



Spare parts for 10 ton C-clamps (13498)

Article #	Order #	Description	
JO2430	11571	20 ton press head with magnet	
I-CF110C	10951	10 ton press cylinder 150 mm stroke Also replaces H1001/14545	
I-CF210	10954	10 ton press cylinder 200 mm stroke Also replaces H1002/14546	

Note: spare parts and repair kits for the cylinders are included in spare part sheet S01-05-04.



Spare parts for 20 ton C-clamps (13547)

Article #	Order #	Description	
JO1341	11308	20 ton press head	
JO2143	11473	Small press head	
JO2430	11571	20 ton press head with magnet	
JO2497	11628	Mandrel for bushing Scania	
JO2498	11629	Mandrel for bushing BPW	
JO2499	11630	Mandrel for bushing 60.5 mm	
JO437K	14189	Lifting eye with screw and washer	



Article #	Order #	Description
SR44	12671	Dolly 32 mm
		
I-CF220	10955	20 ton press cylinder 200 mm stroke
		
I-CF320	10958	20 ton press cylinder 300 mm stroke Also replaces H1005/14550
		

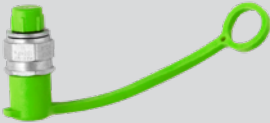
Note: spare parts and repair kits for the cylinders are included in spare part sheet S01-05-06.



Spare parts for 40 ton C-clamp (13499)

Article #	Order #	Description	
I-38117	10920	Valve for I-CG38120 K	
I-38525	10925	Repair kit for I-CG38120 K	
H1008 K	10966	40 ton cylinder 150 mm comp.	
JO437	11666	Lifting eye	
MC6S-M20x40	31417	Screw for lifting eye	
MC6S-M20x100	39776	Screw for lifting eye	
JO450	11670	Hook for turning C-clamp	



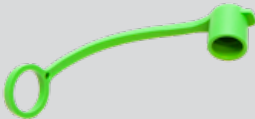
Article #	Order #	Description	
SR164	12611	Press head	
SR167	12612	Press head	
SR168	12613	Press head	
SR44	12671	Dolly 32 mm	
SR49	12672	Dolly 115 mm	
I-AQU8	10945	Snap-on coupling male 1/4" (includes dust protection and sealing washer)	
H1032	14611	Swivel coupling 1/4"	
R406B101K	15420	Seal kit for H1008 K	



Spare parts for 10 ton press cylinder (21281)

Article #	Order #	Description	Compatible with		
			NIKE/Rehobot	Enerpac	
I-17475	10890	Repair kit for CF110-310	☒	☐	
RC10K52	44883	Standard seal kit for H1001, H1002 and H1003	☐	☒	
RC10K72	44884	Premium seal kit for H1001, H1002 and H1003	☐	☒	
I-THR10	21271	Press head ribbed	☒	☐	
I-42967	13353	Tap CF110/CF210/CF310	☒	☒	
I-14828	13519	Locking ring 28.5x2.25	☒	☐	
I-AQU8	10945	Snap-on coupling male 1/4" (includes dust protection and sealing washer)	☒	☒	

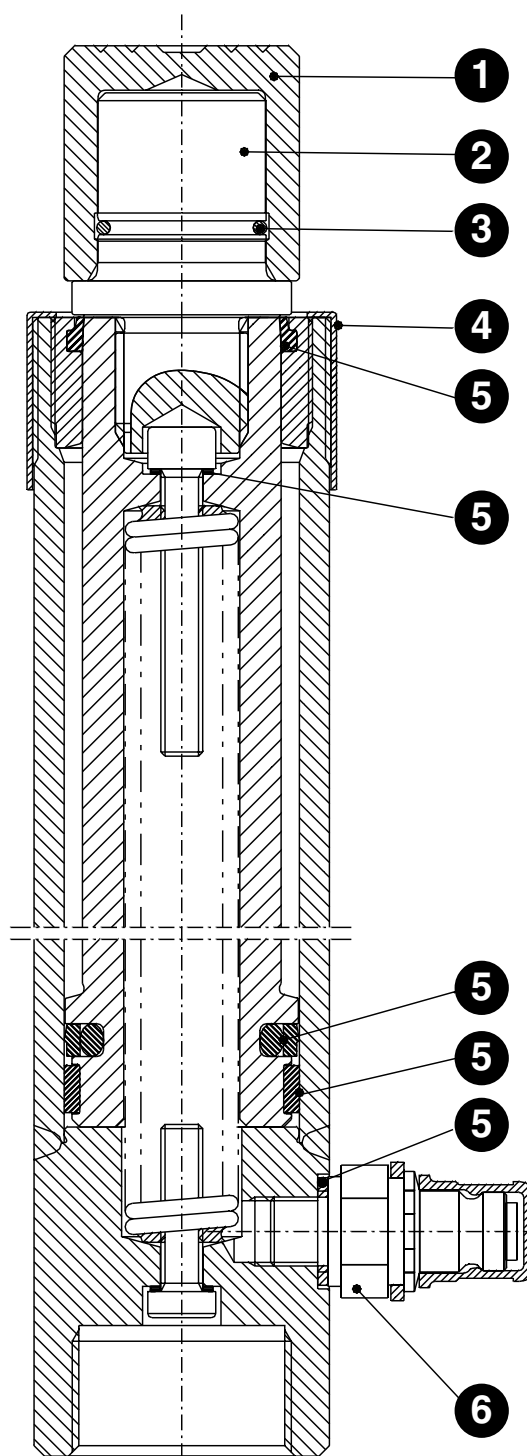


Article #	Order #	Description	Compatible with		
			NIKE/Rehobot	Enerpac	
I-39996	21272	Protective cover 57/27 thread protection	☒	☒	
I-38815303	21273	TDP23 dust protection male	☒	☐	
TREDO 1/4'	12695	Sealing washer	☒	☒	
JO30000221	12908	Hydraulic hose 200 mm including bolt	☒	☒	

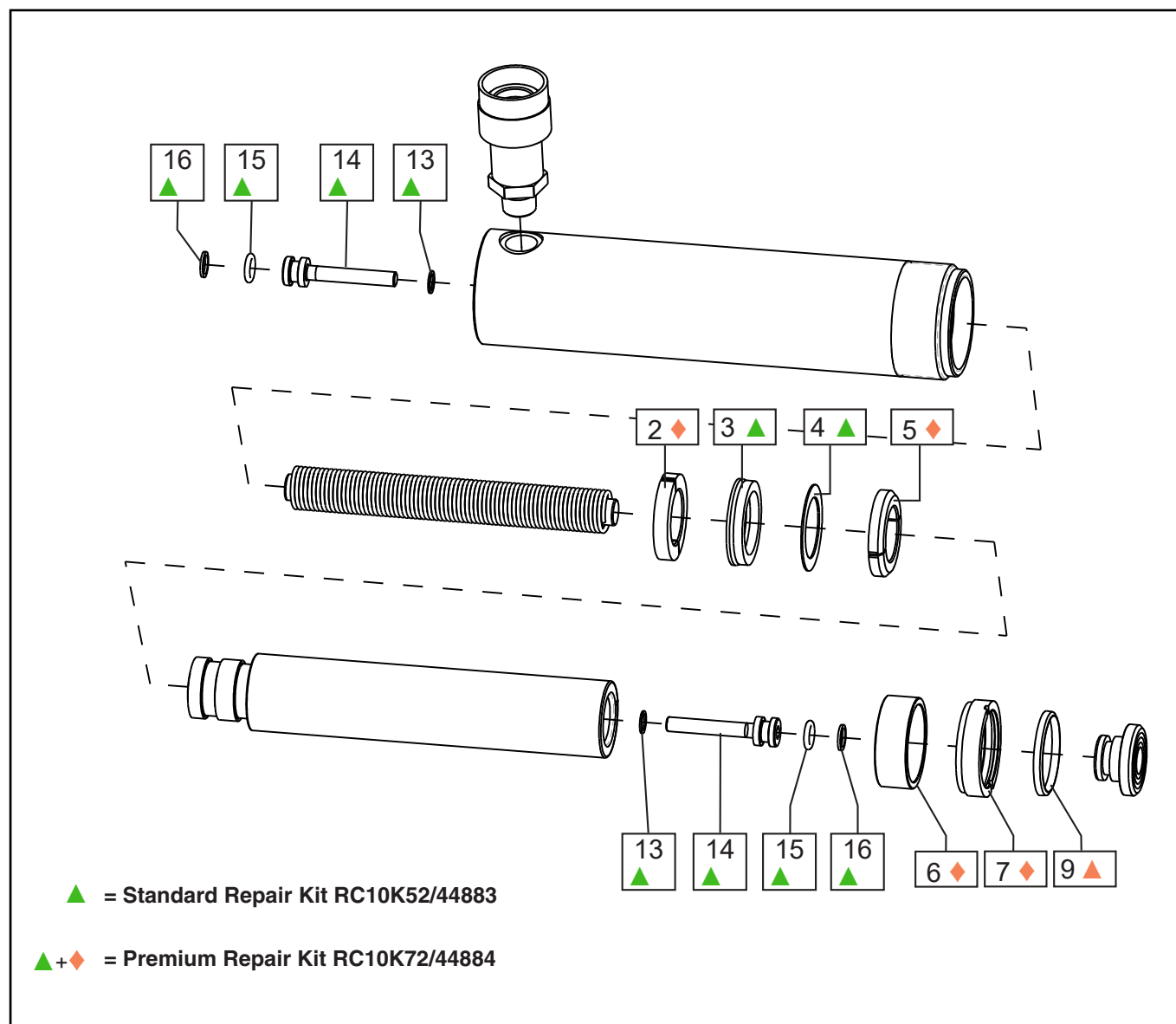


NIKE/Rehobot spare parts

1. Press head I-THR10/21271
2. Tap I-42967/13353
3. Locking ring I-14828/13519
4. Cover I-39996/21272
5. Repair kit I-17475/10890
6. Snap-on coupling I-AQU8/10945

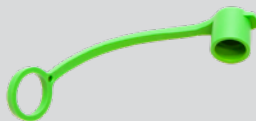


ENERPAC seal kits RC10K52/44883 and RC10K72/44884





Spare parts for 10 ton pull cylinder (21283)

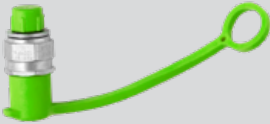
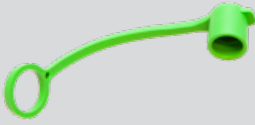
Article #	Order #	Description	Compatible with		
			NIKE/Rehobot	Enerpac	
I-27269	10910	Repair kit for CPF709/CPF809	☒	☐	
I-38891	10927	Repair kit for CPA110	☒	☐	
BRC106K	15422	Repair kit for H1009 & H1010	☐	☒	
I-AQU8	10945	Snap-on coupling male 1/4" (includes dust protection and sealing washer)	☒	☒	
I-38815303	21273	TDP23 dust protection male	☒	☐	
TREDO 1/4'	12695	Sealing washer	☒	☒	



Spare parts for 20 ton press cylinder (21282)

Article #	Order #	Description	Compatible with		
			NIKE/Rehobot	Enerpac	
I-19209	10897	Repair kit for 20 ton piston CF120-CF320	☒	☐	
RC25K52	44885	Standard seal kit for H1004, H1005 and H1006	☐	☒	
RC25K72	44886	Premium seal kit for H1004, H1005 and H1006	☐	☒	
I-THR20	21274	Press head ribbed	☒	☐	
I-32015	21275	Piston CF120	☒	☐	
I-32016	21276	Piston CF220	☒	☐	
I-32017	21277	Piston CF320	☒	☐	

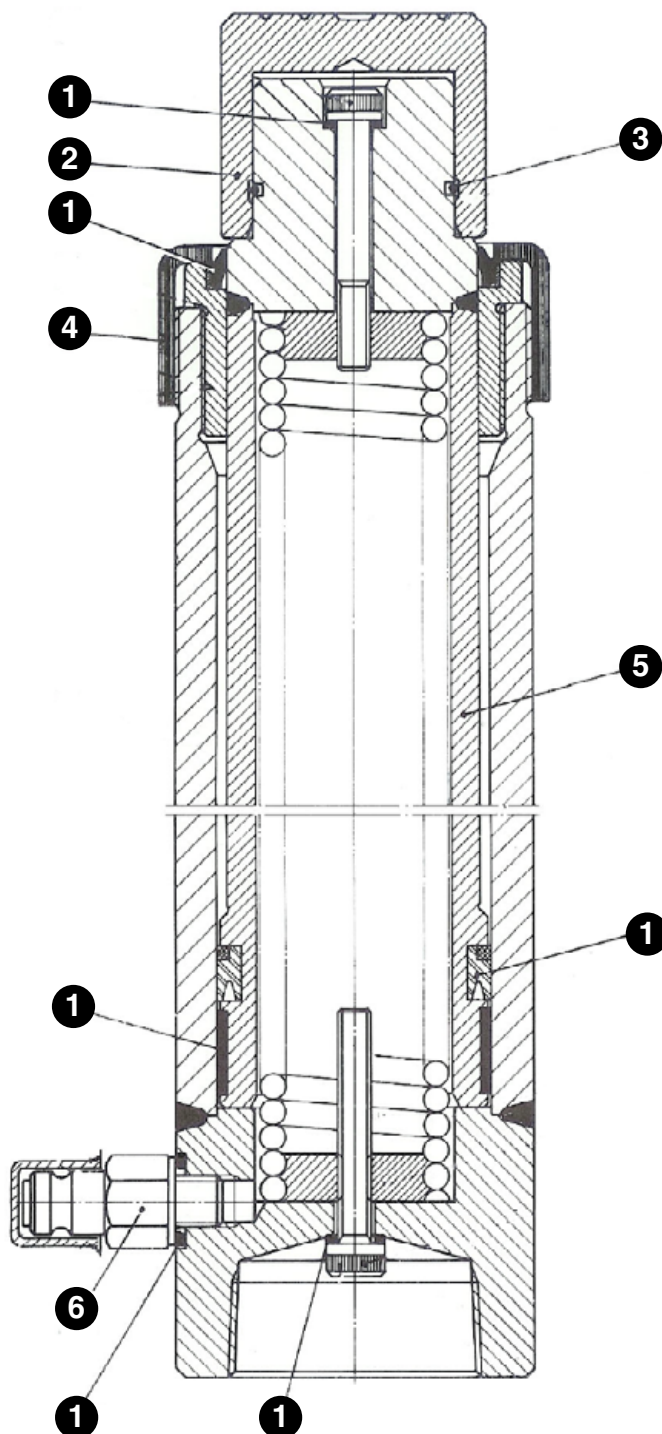


Article #	Order #	Description	Compatible with		
			NIKE/Rehobot	Enerpac	
I-15816	21278	Locking ring 46x2.25	☒	☐	
I-AQU8	10945	Snap-on coupling male 1/4" (includes dust protection and sealing washer)	☒	☒	
I-39998	21279	Protective cover 84/49 thread protection	☒	☒	
I-38815303	21273	TDP23 dust protection male	☒	☐	
TREDO 1/4'	12695	Sealing washer	☒	☒	



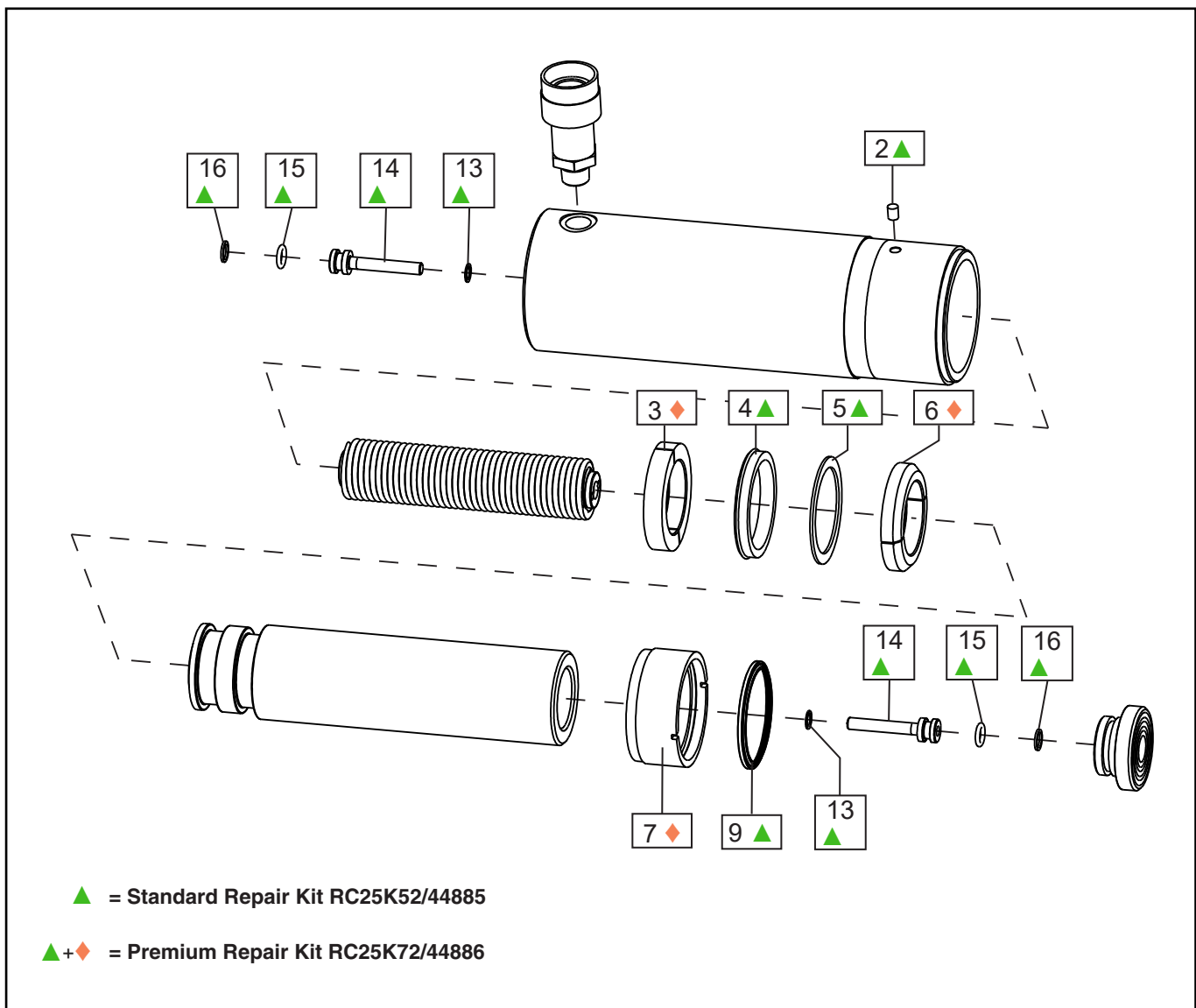
NIKE/Rehobot spare parts

- 1. Repair kit I-19209/10897
- 2. Press head I-THR20/21274
- 3. Locking ring I-15816/21278
- 4. Cover I-39998/21279
- 5. Piston CF120/CF220/CF320
- 6. Snap-on coupling I-AQU8/10945



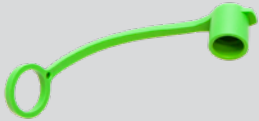


ENERPAC seal kits RC25K52/44885 and RC25K72/44886





Spare parts for hydraulic hoses (21284)

Article #	Order #	Description	
H1055	16546	Hydraulic hose 1/4", 4 m	
H1056	16547	Hydraulic hose 1/4", 6 m	
I-AQI7	10944	Snap-on coupling female 1/4" (includes dust protection and sealing washer)	
I-AQU8	10945	Snap-on coupling male 1/4" (includes dust protection and sealing washer)	
I-38815303	21273	TDP23 dust protection male	
I-38815804	21280	TDP26 dust protection female	
TREDO 1/4'	12695	Sealing washer	



Spare parts for air hydraulic pump H1039 (21550, introduced 2019-12)

Article #	Order #	Description	
I-423,95	10938	Low pressure piston complete	
I-AQI7	10944	Snap-on coupling female 1/4" (includes dust protection and sealing washer)	
I-AQU8	10945	Snap-on coupling male 1/4" (includes dust protection and sealing washer)	
JO1215	11263	Remote control	
TREDO 1/4'	12695	Grommet 1/4"	
H1055	16546	Hydraulic hose 1/4", 4 m	
H1056	16547	Hydraulic hose 1/4", 6 m	



Article #	Order #	Description
I-38815303	21273	TDP23 dust protection male
		
I-38815804	21280	TDP26 dust protection female
		
I-50031	21286	Seal kit H1054
		
—	21522	Repair kit air hoses Rehobot pump 2.5m
		
I-52430	21629	Release valve complete
		
I-19312	21631	Pressure gauge 100mm - G1/2"
		



Additional spare parts

Items in **bold** are available as spare parts. Contact JOSAM Support to inquire about other spare part items.

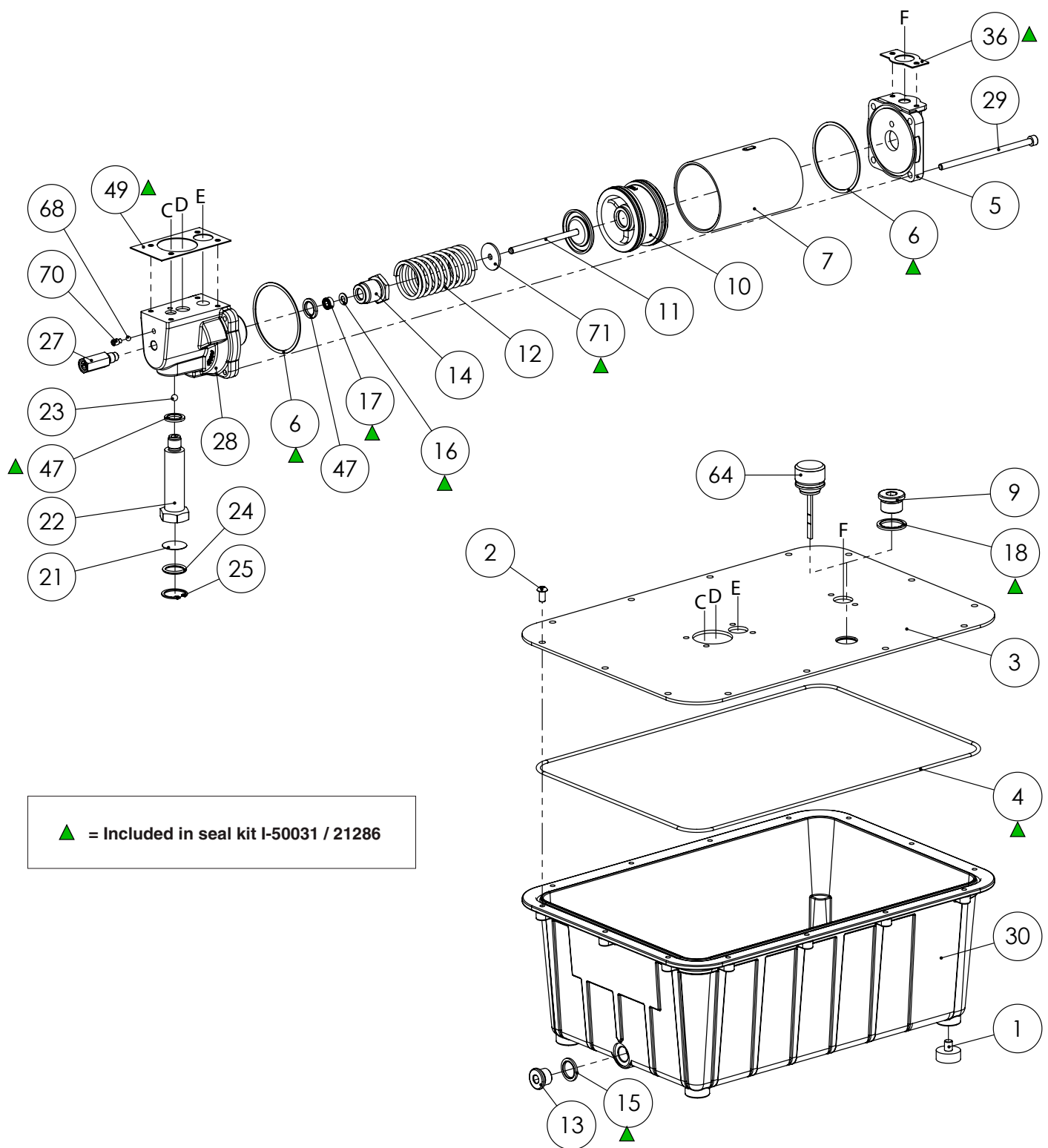
#	Art #	Pcs	Part
1		4	Rubber foot
2		14	Screw
3		1	Cover
4	*	1	O-ring
5		1	Housing
6	*	2	Packing
7		1	Cylinder tube
8		1	Track ring
9		1	Transport plug
10	10938	1	Air piston cpl
11		1	Piston cpl. PP70-
12		1	Spring
13		1	Plug
14		1	Bushing PP70-
15	*	1	Packing
16	*	1	Support ring PP70-
17	*	1	Packing PP70-
18	*	1	Packing
21		1	Strainer
22		1	Housing
23		1	Ball
24		1	O-ring
25		1	Track ring
27		1	PP70 safety valve
28		1	Valve housing
29		4	Screw
30		1	Container
31	*	2	O-ring
36	*	1	Packing
42		1	Filter
47	*	3	Packing
48		1	Valve plate PP70/80
49	*	1	Packing
50	*	2	O-ring
51	*	2	Support ring
52		1	Nipple
53		1	Spring
54		1	Ball
55	*	1	O-ring

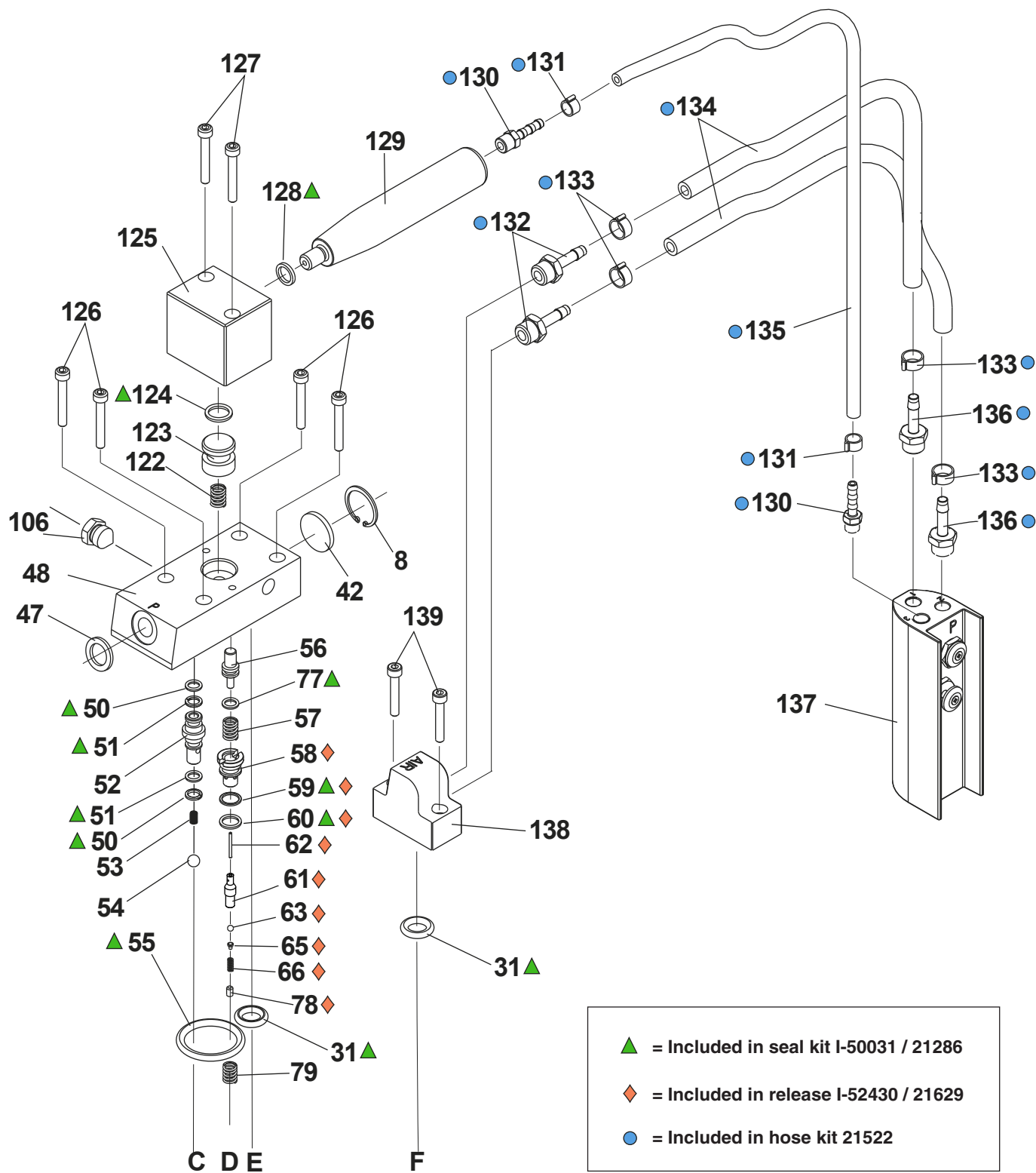
#	Art #	Pcs	Part
56		1	Release pin
57		1	Spring
58	**	1	Valve cartridge
59	* / **	1	Support ring
60	* / **	1	O-ring
61	**	1	Release valve
62	**	1	Release pin
63	**	1	Ball
64		1	Air vent plug
65	**	1	Guide
66	**	1	Spring
68		1	Ball
70		1	Screw
71	*	1	Damper
77	*	1	O-ring
78	**	1	Screw
79		1	Spring
106		1	Plug
122		1	Spring
123		1	Piston
124	*	1	O-ring
125		1	Cylinder
126		4	Screw
127		2	Screw
128	*	1	Packing
129		1	Handle
130	***	2	Hose connection
131	***	2	Hose clamp
132	***	2	Hose connection
133	***	4	Hose clamp
134	***	2	Hose
135	***	1	Hose
136	***	2	Hose connection
137	11263	1	Remote control cpl.
138		1	Connection block
139		2	Screw

* Included in seal kit I-50031 / 21286

** Included in release I-52430 / 21629

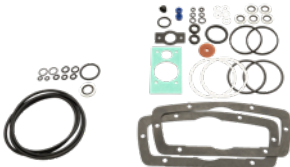
*** Included in hose kit 21522







Spare parts for air hydraulic pump H1053 (21548, introduced 2019-12)

Article #	Order #	Description	
I-423,95	10938	Low pressure piston complete	
I-AQ17	10944	Snap-on coupling female 1/4" (includes dust protection and sealing washer)	
TREDO 1/4'	12695	Grommet 1/4"	
H1055	16546	Hydraulic hose 1/4", 4 m	
I-38815804	21280	TDP26 dust protection female	
I-50031	21286	Seal kit H1054	
I-52430	21629	Release valve complete	



Article #	Order #	Description
I-40176	21630	Pressure gauge 63mm - G1/4"
		
–	49795	Protection for pressure gauge
		

Spare parts for air hydraulic pump H1057 (21549, introduced 2021-12)



Article #	Order #	Description
I-423,95	10938	Low pressure piston complete
		
I-AQ17	10944	Snap-on coupling female 1/4" (includes dust protection and sealing washer)
		
JO1215	11263	Remote control
		



Article #	Order #	Description	
TREDO 1/4'	12695	Grommet 1/4"	
H1055	16546	Hydraulic hose 1/4", 4 m	
I-38815804	21280	TDP26 dust protection female	
I-50031	21286	Seal kit H1053/H1054	
—	21522	Repair kit air hoses Rehobot pump 2.5m	
I-52430	21629	Release valve complete	
I-40176	21630	Pressure gauge 63mm - G1/4"	
—	49795	Protection for pressure gauge	



Additional spare parts

Items in **bold** are available as spare parts. Contact JOSAM Support to inquire about other spare part items.

#	Art #	Pcs	Part
1		1	Level gage
2		12	Screw
3		2	Housing
4	*	2	Packing
5		1	Housing
6	*	2	Packing
7		1	Cylinder tube
8		1	Track ring
9		1	Plug
10	10938	1	Air piston cpl
11		1	Piston cpl. PP70-
12		1	Spring
14		1	Bushing PP70-
16	*	1	Support ring PP70-
17	*	1	Packing PP70-
21		1	Strainer
22		1	Housing
23		1	Ball
24		1	O-ring
25		1	Track ring
27		1	PP70 safety valve
28		1	Valve housing
29		4	Screw
30		1	Container
31	*	2	O-ring
32		1	Spring
33		1	Screw
34		1	Holder
35	*	1	O-ring
36	*	1	Packing
38		1	Housing
39		1	Valve
40	*	1	O-ring
41		6	Screw
42		1	Filter
43		1	Pedal
44		2	Track ring
45		1	Axle

#	Art #	Pcs	Part
47	*	5	Packing
48		1	Valve plate PP70/80
49	*	1	Packing
50	*	2	O-ring
51	*	2	Support ring
52		1	Nipple
53		1	Spring
54		1	Ball
55	*	1	O-ring
56		1	Release pin
57		1	Spring
58	**	1	Valve cartridge
59	* / **	1	Support ring
60	* / **	1	O-ring
61	**	1	Release valve
62	**	1	Release pin
63	**	1	Ball
64		1	Air vent
65	**	1	Guide
66	**	1	Spring
67		1	Plug
68		1	Ball
70		1	Screw
71	*	1	Damper
77	*	1	O-ring
78	**	1	Screw
79		1	Spring
106		1	Plug
122		1	Spring
123		1	Piston
124	*	1	O-ring
125		1	Cylinder
126		4	Screw
127		2	Screw
128	*	1	Packing
129		1	Handle
130	***	2	Hose connection
131	***	2	Hose clamp



Additional spare parts

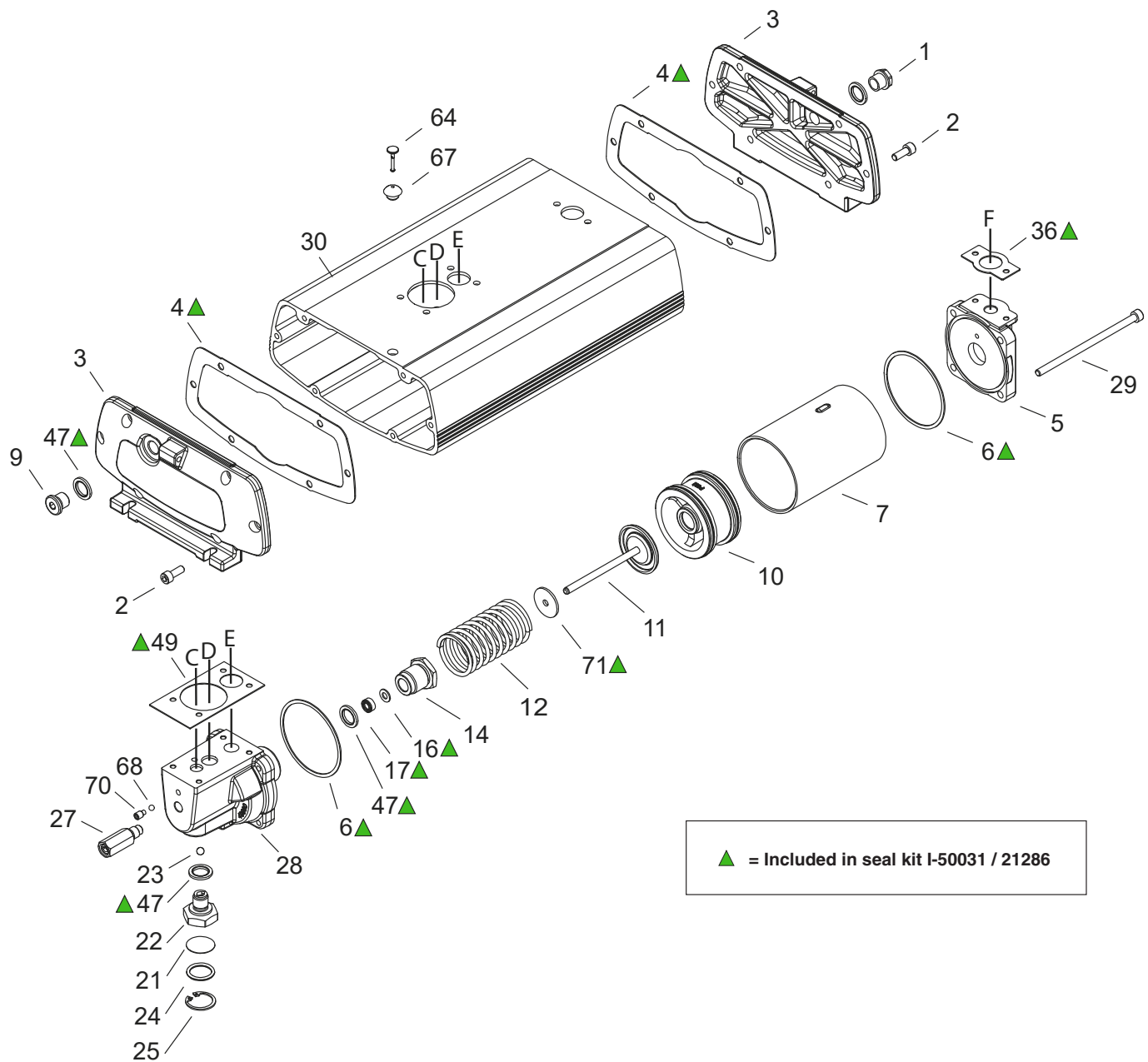
Items in **bold** are available as spare parts. Contact JOSAM Support to inquire about other spare part items.

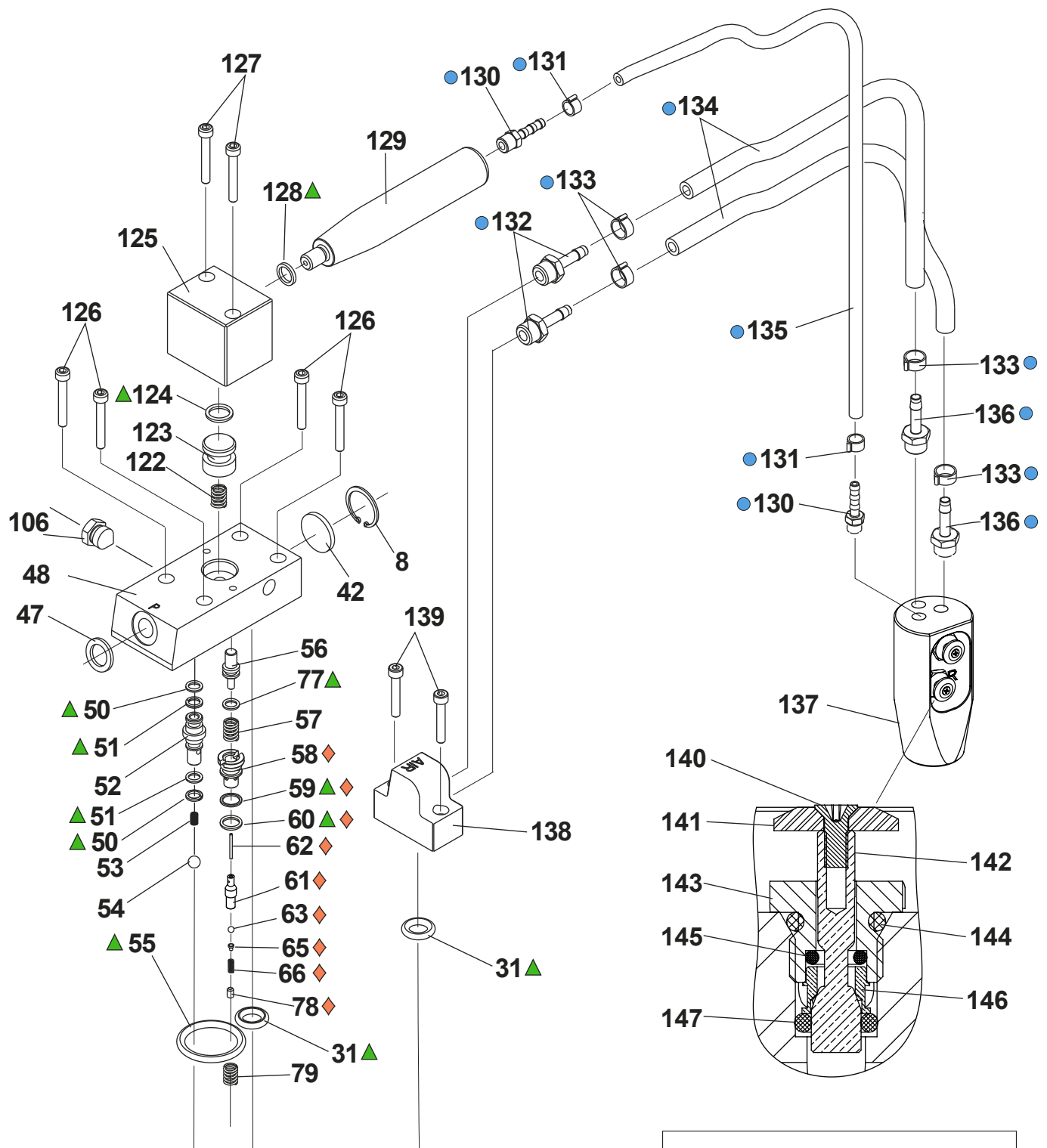
#	Art #	Pcs	Part
132	***	2	Hose connection
133	***	4	Hose clamp
134	***	2	Hose
135	***	1	Hose
136	***	2	Hose connection
137	11263	1	Remote control cpl.
138		1	Connection block
139		2	Screw
140		2	Screw
141		2	Button
142		2	Valve
143		2	Bushing
144		2	O-ring
145		2	O-ring
146		2	Bushing
147		2	O-ring

* Included in seal kit 21286 / I-50031

** Included in release 21629 / I-52430

*** Included in hose kit 21522

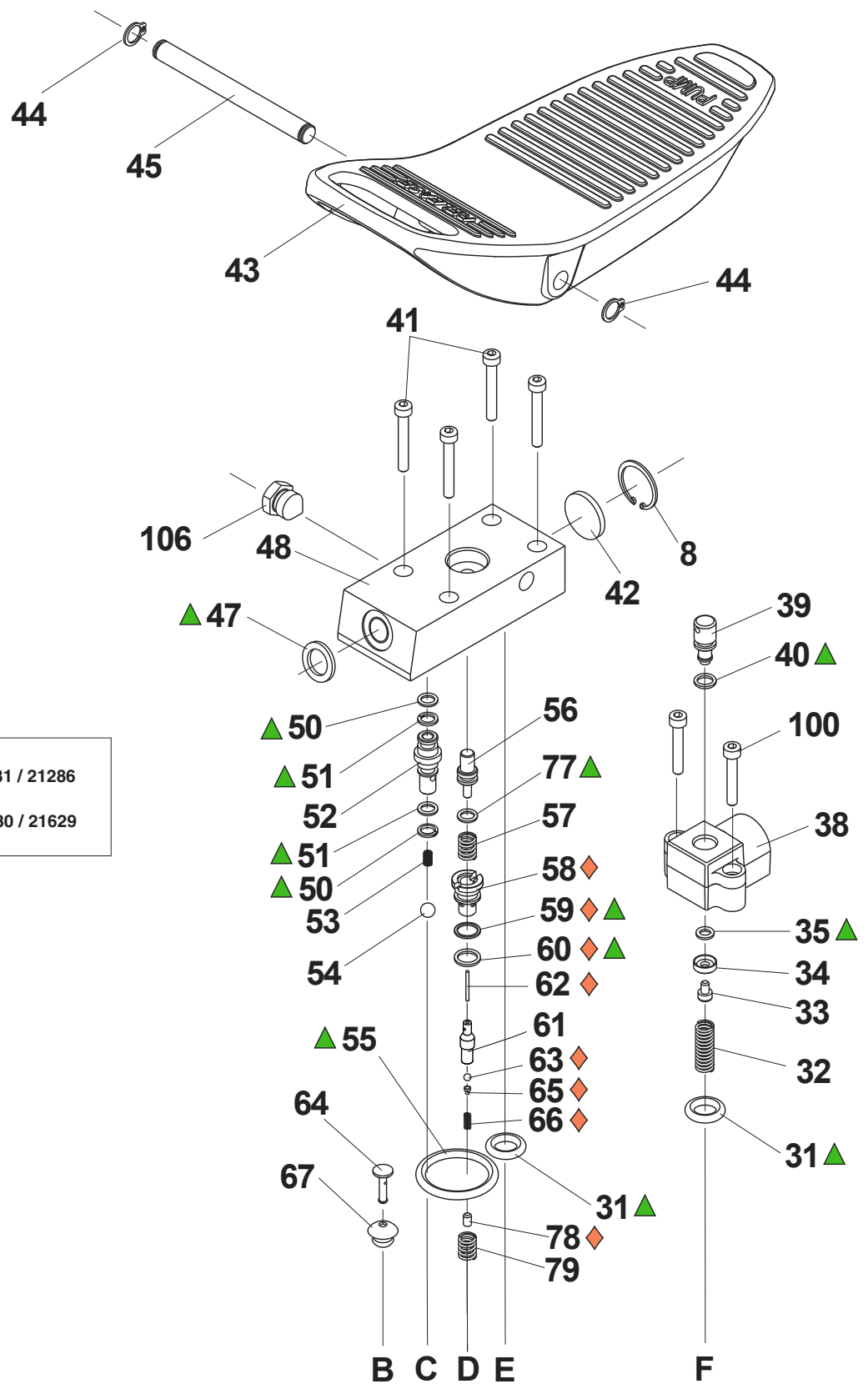




▲ = Included in seal kit I-50031 / 21286

◆ = Included in release I-52430 / 21629

● = Included in hose kit 21522

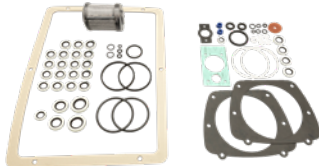




Spare parts for air hydraulic pump I-PP474550 (discontinued 2012-09)

Article #	Order #	Description	
I-423,95	10938	Low pressure piston complete	
I-AQI7	10944	Snap-on coupling female 1/4" (includes dust protection and sealing washer)	
I-AQU8	10945	Snap-on coupling male 1/4" (includes dust protection and sealing washer)	
JO1215	11263	Remote control	
TREDO 1/4'	12695	Grommet 1/4"	
H1055	16546	Hydraulic hose 1/4", 4 m	
H1056	16547	Hydraulic hose 1/4", 6 m	



Article #	Order #	Description
I-38815303	21273	TDP23 dust protection male
		
I-38815804	21280	TDP26 dust protection female
		
I-49387	14624	Seal kit for I-PP475550
		
—	21522	Repair kit air hoses Rehobot pump 2.5m
		
I-52430	21629	Release valve complete
		
I-19312	21631	Pressure gauge 100mm - G1/2"
		



Additional spare parts

Items in **bold** are available as spare parts. Contact JOSAM Support to inquire about other spare part items.

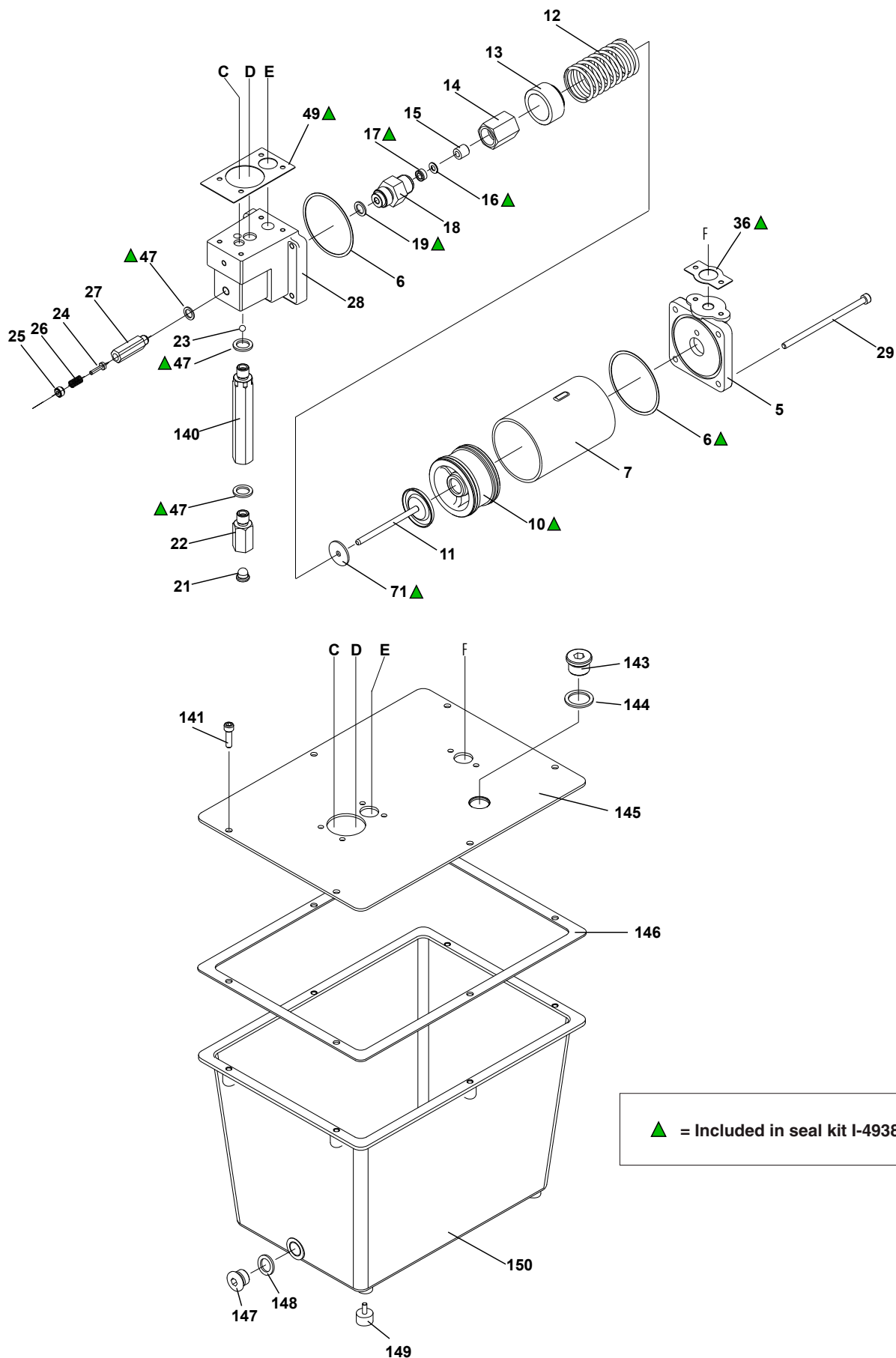
#	Art #	Pcs	Part
5		1	Housing
6	*	2	Packing
7		1	Cylinder tube
8		1	Track ring
10	10938	1	Air piston cpl
11		1	Piston cpl. PP70-
12		1	Spring
13		1	Bush
14		1	Bushing PP70-
15		1	Guide PP70-
16	*	1	Support ring PP70-
17	*	1	Packing PP70-
18		1	Pump housing PP70-
19	*	1	Packing
21		1	Strainer
22		1	Housing
23		1	Ball
24		1	Needle
25		1	Screw
26		1	Spring
27		1	Housing
28		1	Valve housing
29		4	Screw
31	*	2	O-ring
36	*	1	Packing
42		1	Filter
47	*	4	Packing
48		1	Valve plate
49	*	1	Packing
50	*	2	O-ring
51	*	2	Support ring
52		1	Nipple
53		1	Spring
54		1	Ball
55	*	1	O-ring
56		1	Release pin
57		1	Spring
58	**	1	Valve cartridge
59	* / **	1	Support ring
60	* / **	1	O-ring
61	**	1	Release valve

#	Art #	Pcs	Part
62	**	1	Release pin
63	**	1	Ball
65	**	1	Guide
66	**	1	Spring
71	*	1	Damper
77	*	1	O-ring
78	**	1	Screw
79		1	Spring
106		1	Plug
122		1	Spring
123		1	Piston
124	*	1	O-ring
125		1	Cylinder
126		4	Screw
127		2	Screw
128	*	1	Packing
129		1	Handle
130	***	2	Hose connection
131	***	2	Hose clamp
132	***	2	Hose connection
133	***	4	Hose clamp
134	***	2	Hose
135	***	1	Hose
136	***	2	Hose connection
137	11263	1	Remote control cpl.
138		1	Connection block
139		2	Screw
140		1	Suction pipe
141		6	Screw
143		1	Plug
144		1	Packing
145		1	Cover
146		1	Packing
147		1	Plug
148		1	Packing
149		4	Rubber foot
150		1	Oil container

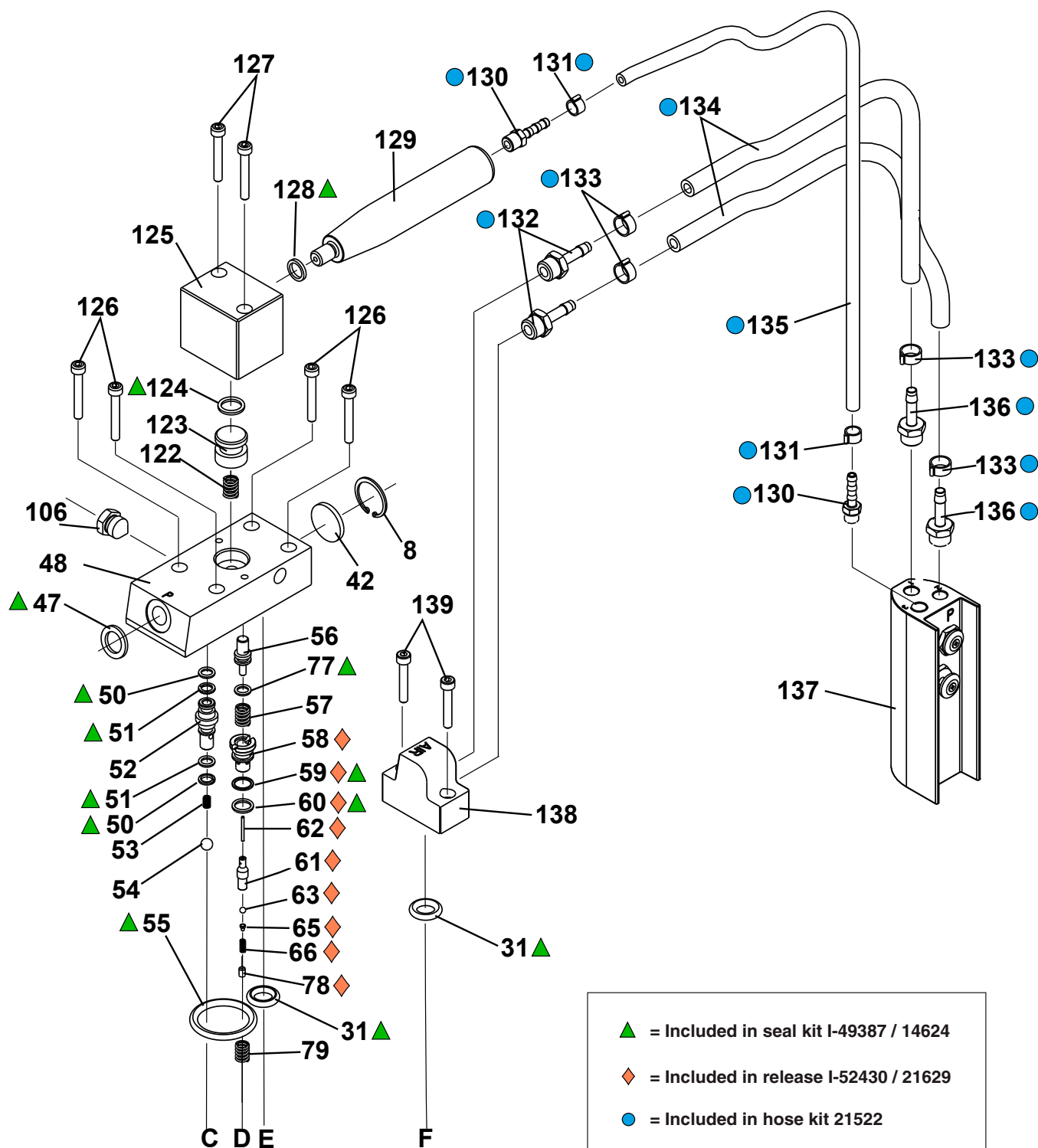
* Included in seal kit I-50031 / 21286

** Included in release I-52430 / 21629

*** Included in hose kit 21522



▲ = Included in seal kit I-49387 / 14624



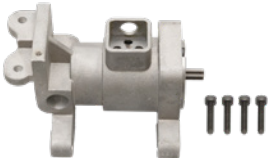


Spare parts for air hydraulic pumps H1017/14591 & H1017-2E/15985 (21553)

Sold between 2011 and 2019

Article #	Order #	Description	
I-AQ17	10944	Snap-on coupling female 1/4" (includes dust protection and sealing washer)	
TREDO 1/4'	12695	Grommet 1/4"	
XA1B2LK	15423	Repair kit for H1017	
V82K	15424	Valve kit	
H1055	16546	Hydraulic hose 1/4", 4 m	
I-38815804	21280	TDP26 dust protection female	



Article #	Order #	Description	
–	44887	Seal kit pump	
–	44888	Air motor assembly kit	
–	45023	Gauge kit	
–	RKTDC7315950	Valve repair kit	



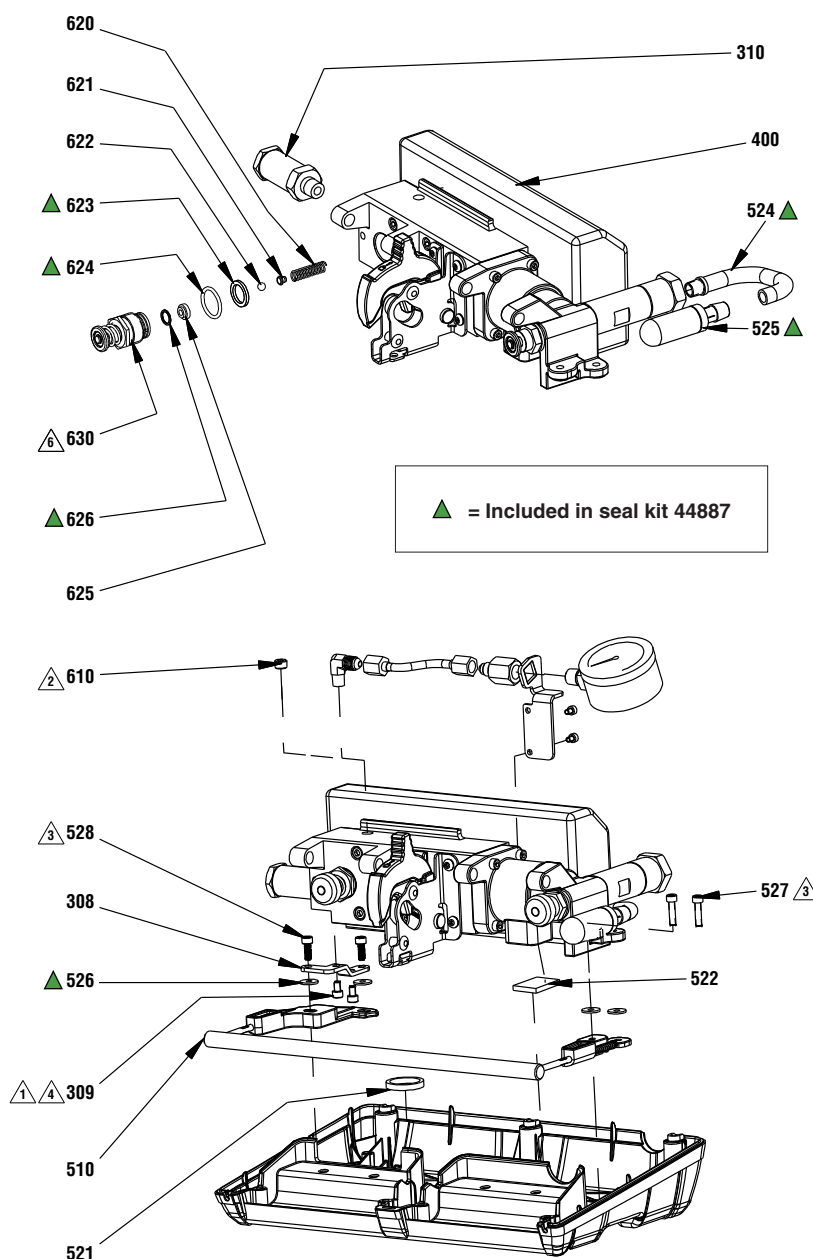
Additional spare parts

Main assembly

Items in **bold** are available as spare parts. Contact JOSAM Support to inquire about other spare part items.

#	Art #	Pcs	Part
308		1	Bracket
309		2	Screw, Socket Head
310		1	Adapter, Hydraulic Outlet
400		1	Assembly, Power Unit
510		1	Assembly, Handle
521		1	Gasket
522		6	Muffling Foam
524	*	1	Hose
525	*	1	Muffler
526	*	4	Vibration Damper
527		1	Screw, SCHS, M5 x 20
528		2	Screw, M5-14 mm, Zinc P
610		2	Plug (models w/o gauge)
620		1	Valve Spring, Release
621		1	Ball Guide
622		1	Ball
623	*	1	Gasket
624	*	1	O-Ring
625		1	Seat
626	*	1	Gasket
630		1	Assy, Rel. Valve

* Included in seal kit 44887



Notes:

▲1 Apply Loctite 277.

▲2 Torque to 22-25 Nm.
[16 to 19 ft-lbs]

▲3 Torque to 2.0-2.9 Nm.
[1.5 to 2.1 ft-lbs]

▲4 Torque to 4.8-5.3 Nm.
[3.5 to 3.9 ft-lbs]

▲6 Torque to 60-70 Nm.
[44 to 52 ft-lbs]



Pedal assembly

Items in **bold** are available as spare parts. Contact JOSAM Support to inquire about other spare part items.

#	Art #	Pcs	Part
528		A/R	Screw, M5-14 mm
529	*	A/R	Spring, Conical
530	*	A/R	Cap
531		1	Pedal (pressure)
532		A/R	Pedal (release)
533		1	Pedal Lock Pin
534		A/R	Pedal Hinge Pin
535		A/R	Pedal Tread

* Included in valve repair kit RKTDC7315950

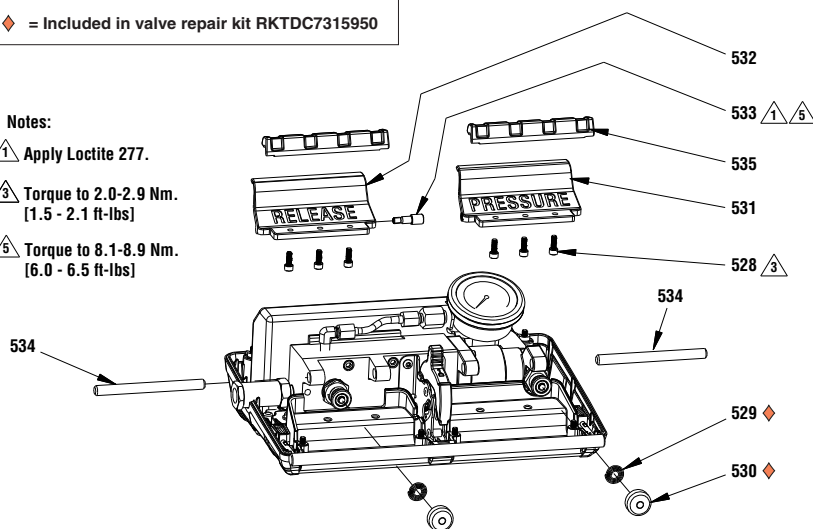
◆ = Included in valve repair kit RKTDC7315950

Notes:

1 Apply Loctite 277.

3 Torque to 2.0-2.9 Nm.
[1.5 - 2.1 ft-lbs]

5 Torque to 8.1-8.9 Nm.
[6.0 - 6.5 ft-lbs]

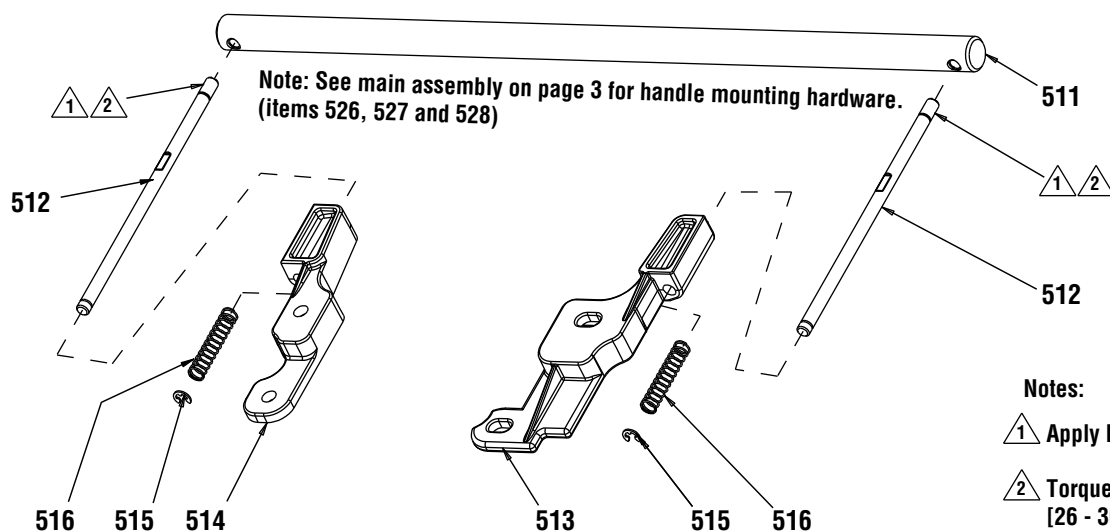


Handle assembly

Contact JOSAM Support to inquire about these spare part items.

#	Art #	Pcs	Part
511		1	Handle, Front
512		2	Extension, Front Handle
513		1	Handle Bracket, Left

#	Art #	Pcs	Part
514		1	Handle Bracket, Right
515		2	Ring, Retaining
516		2	Spring, Handle



Notes:

1 Apply Loctite 262

2 Torque to 2.94-3.39 Nm.
[26 - 30 in-lbs]



Power unit assembly

Items in **bold** are available as spare parts. Contact JOSAM Support to inquire about other spare part items.

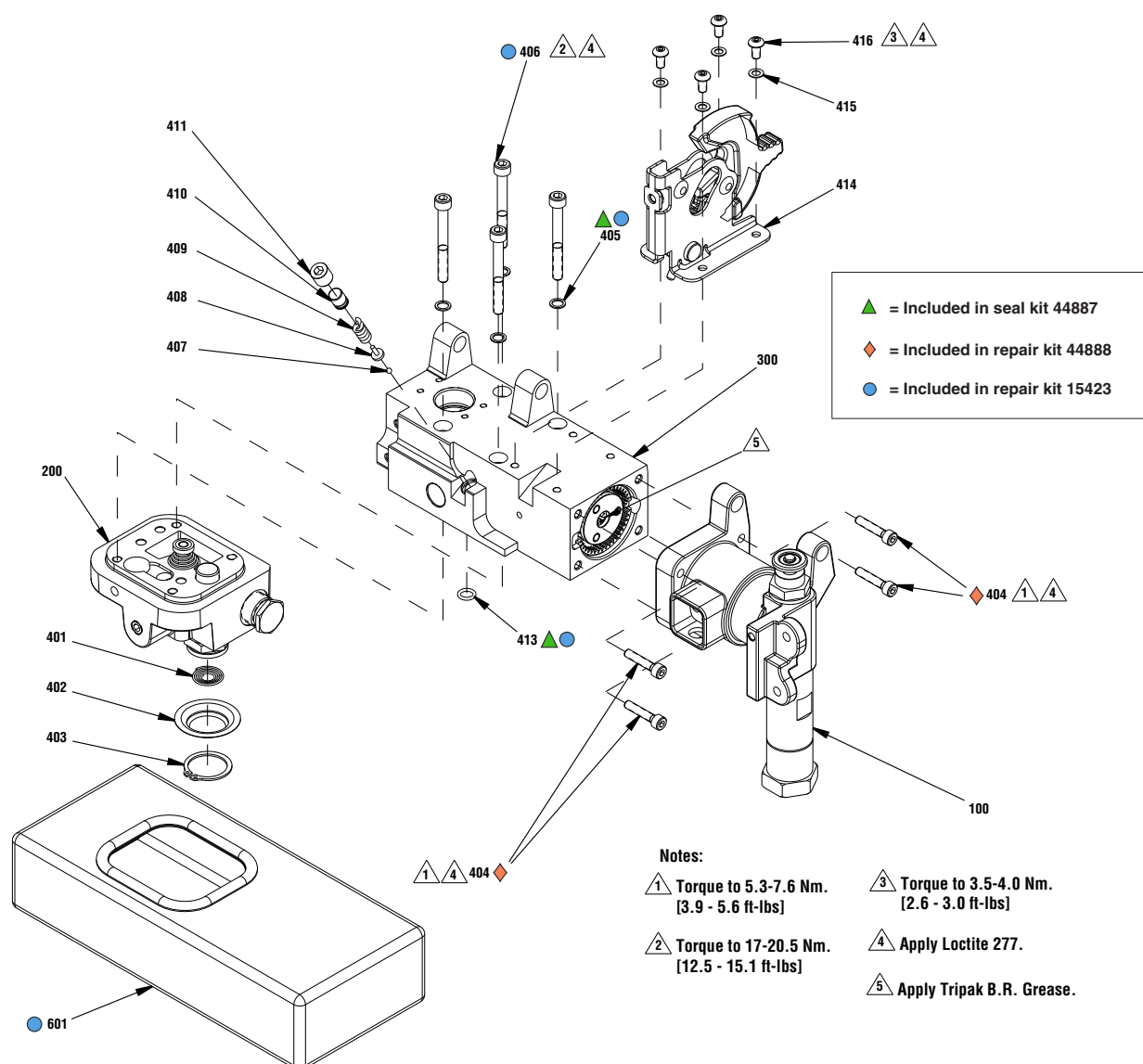
#	Art #	Pcs	Part
100		1	Assy, Air Motor and Valve
200		1	Assy, Pump Element
300		1	Assy, eccentric and housing
401		1	Spring, Conical
402		1	Screen
403		1	Ring, Retaining, 25 mm
404	*	4	SHCS, M5 x 25 mm LG
405	** / ***	4	Gasket, Copper
406	***	4	Bolt, SHCS, M6 x 55
407		1	Ball, 1/8" Diameter
408		2	Ball Cap

#	Art #	Pcs	Part
409		1	Spring
410		1	Subassembly, Plug & O-Ring
411		2	Set Screw, Cup Point
413	** / ***	2	O-Ring
414		1	Assembly, Lock
415		4	Washer, Star
416		4	Screw
601	***	1	Bladder, 1 Liter Bladder, 2 Liter

* Included in repair kit 44888

** Included in seal kit 44887

*** Included in repair kit 15423



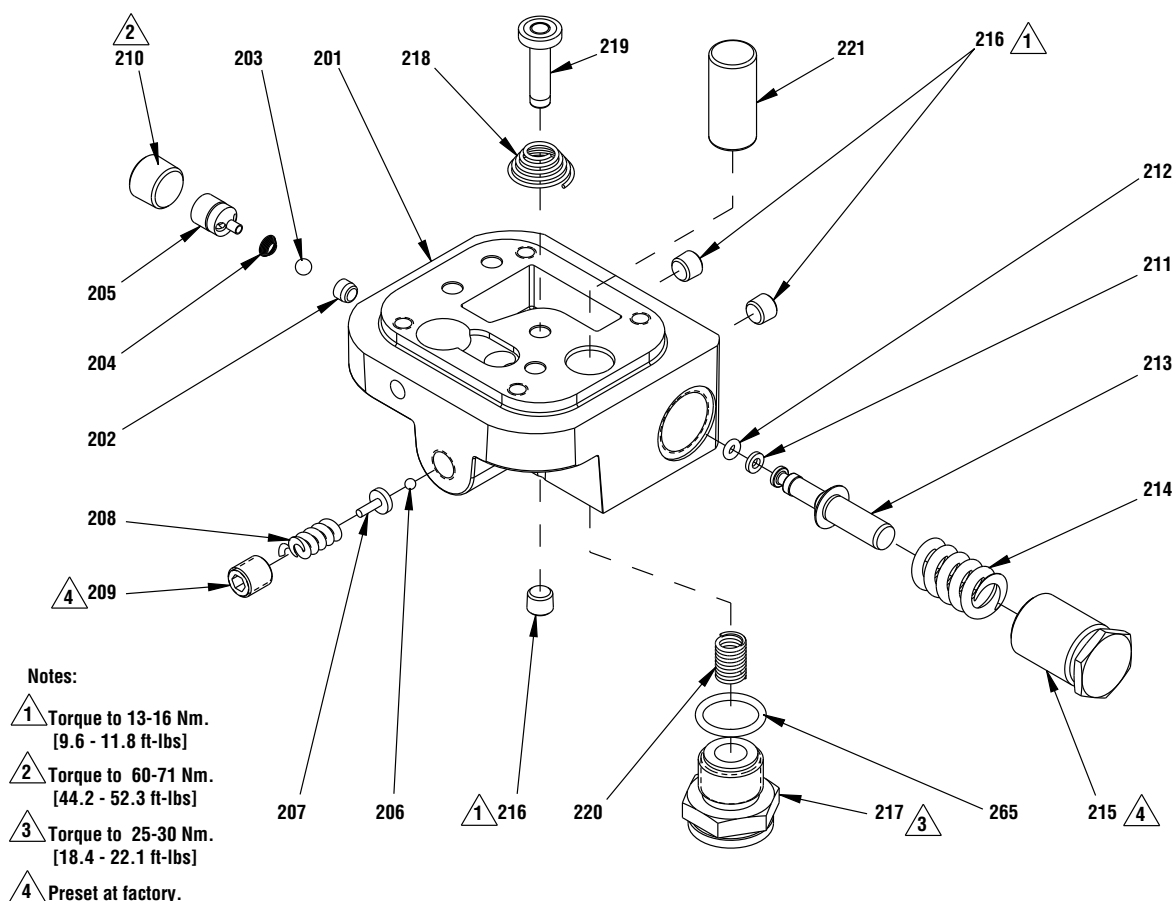


Element assembly

Contact JOSAM Support to inquire about these spare part items.

#	Art #	Pcs	Part
201		1	Body, Pump
202		1	Ball Seat, Inlet
203		1	Ball, 3/16" Dia.
204		1	Spring
205		1	Assy, Outlet Check
206		1	Ball, 1/8" Dia
207		1	Ball Cap
208		1	Spring
209		1	Set Screw, Soc. Hd. Hollow
210		1	Plug, NPTF 1/4"
211		1	Washer, B/U

#	Art #	Pcs	Part
212		1	O-Ring, 0.25" O.D.
213		1	Piston, Bypass
214		1	Spring, Bypass
215		1	End Cap, Bypass
216		3	Plug, Flush 1/16"
217		1	Assy, Inlet Chk
218		1	Spring, Conical
219		1	Piston, 6 mm Dia
220		1	Spring, Large Piston
221		1	Piston, 14 mm Dia
265		1	O-Ring



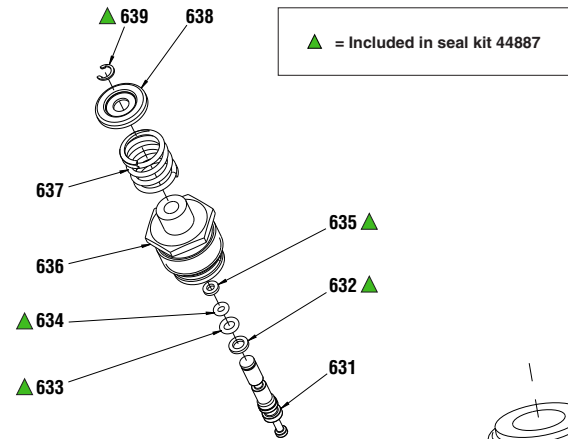


Release valve

Items in **bold** are available as spare parts. Contact JOSAM Support to inquire about other spare part items.

#	Art #	Pcs	Part
631		1	Plunger, Release Valve
632	**	1	Washer, Back-up
633	**	1	O-Ring
634	**	1	O-Ring
635	**	1	Washer, Back-up
636		1	Guide, Release
637		4	Release, Spring
638		4	Washer, Spring
639	**	1	Ring, Retaining

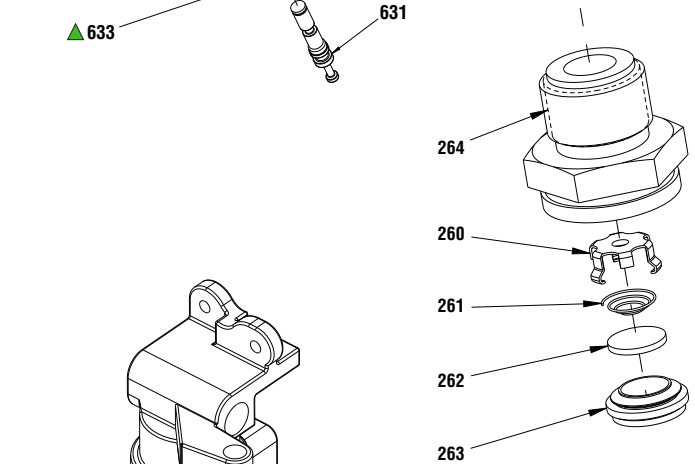
** Included in seal kit 44887



Inlet check valve assembly

Contact JOSAM Support to inquire about these spare part items.

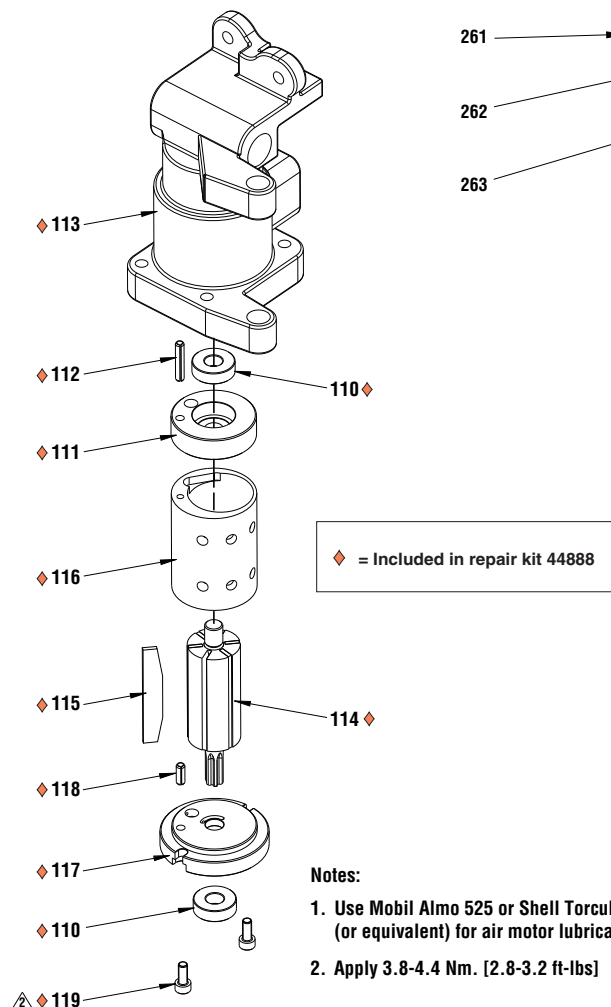
#	Art #	Pcs	Part
260		1	Clip, Spring
261		1	Spring, Inlet Check
262		1	Disc
263		1	Seat
264		1	Plug, Hex Head



Air motor assembly

#	Art #	Pcs	Part
110	*	2	Bearing, Ball
111	*	1	Plate, End
112	*	1	Pin, Spring
113	*	1	Housing, Airmotor
114	*	1	Rotor
115	*	6	Vane
116	*	2	Cylinder
117	*	1	Plate, Front
118	*	1	Pin, Spring
119	*	2	Bolt, M4

* Included in repair kit 44888



Notes:

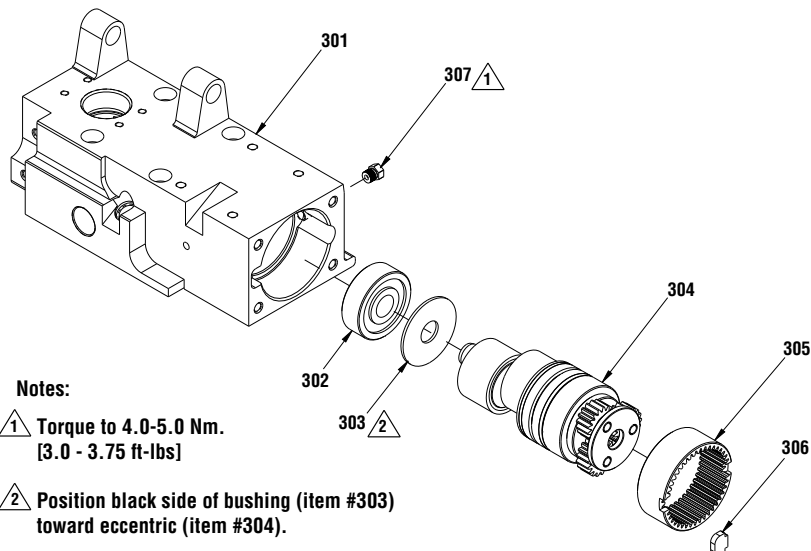
1. Use Mobil Almo 525 or Shell Torcula 32 (or equivalent) for air motor lubrication.
2. Apply 3.8-4.4 Nm. [2.8-3.2 ft-lbs]



Eccentric and housing assembly

Contact JOSAM Support to inquire about these spare part items.

#	Art #	Pcs	Part
301		1	Housing, Eccentric
302		1	Bearing
303		1	Bushing 12 x 7 x 1.5
304		1	Assy, Ecc Shaft
305		1	Gear Ring
306		1	Key, Gear Ring
307		1	Fitting, Grease

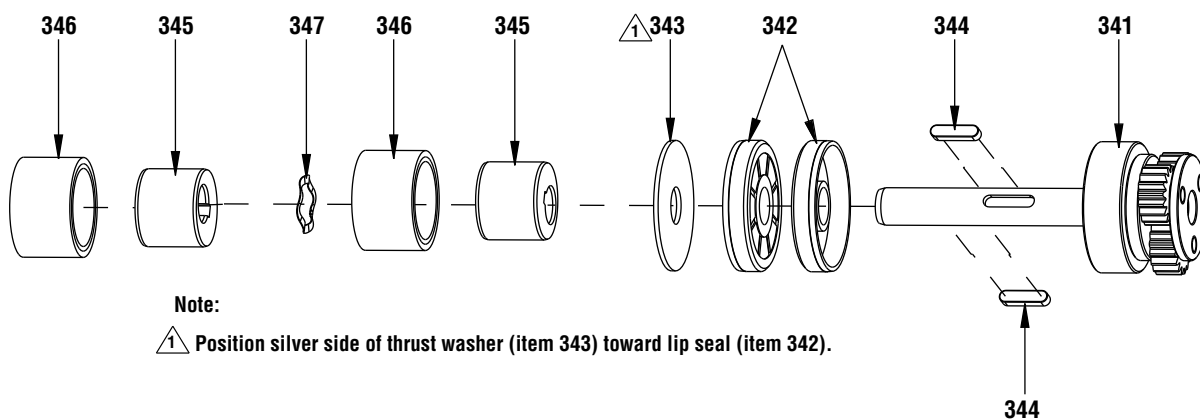


Eccentric shaft assembly

Contact JOSAM Support to inquire about these spare part items.

#	Art #	Pcs	Part
341		1	Subassembly, Eccentric Shaft
342		2	Lip Seal
343		1	Washer, Thrust
344		2	Key

#	Art #	Pcs	Part
345		2	Eccentric
346		2	Subassembly, Cam
347		1	Spring, Wave





Air motor and valve assembly

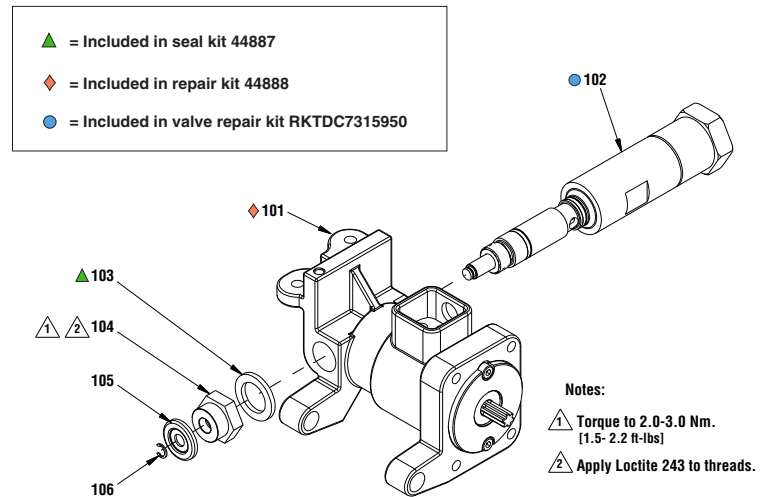
Items in **bold** are available as spare parts. Contact JOSAM Support to inquire about other spare part items.

#	Art #	Pcs	Part
101	**	1	Assy, Air Motor
102	***	1	Assy, Air Valve
103	*	1	Washer, Thrust
104		1	Spacer
105		1	Washer, Spring
106		1	Ring, Retaining

* Included in repair kit 44888

** Included in seal kit 44887

*** Included in valve repair kit RKTDC7315950

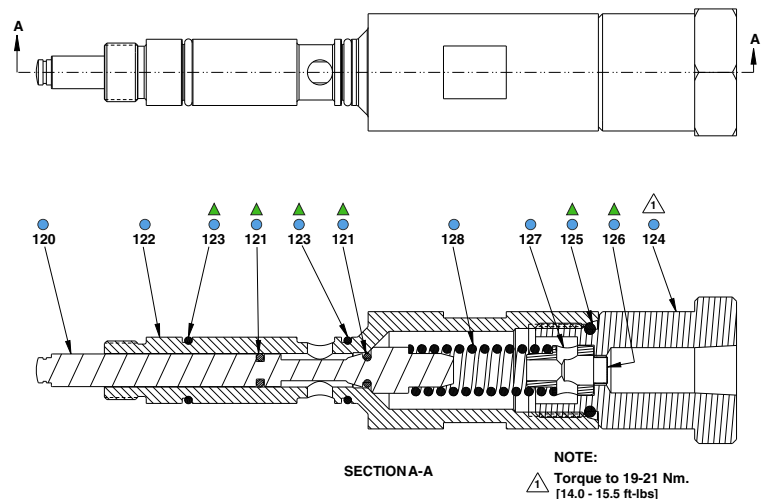


Air valve assembly

#	Art #	Pcs	Part
120	***	1	Rod, Valve
121	** / ***	2	O-Ring
122	**	1	Cartridge, Air Valve
123	** / ***	2	O-Ring
124	***	1	Cap, End
125	** / ***	1	O-Ring
126	** / ***	1	Screen, Filter
127	***	1	Spacer, Filter
128	***	1	Spring, Air Valve

** Included in seal kit 44887

*** Included in valve repair kit RKTDC7315950



Green triangle = Included in seal kit 44887
Blue circle = Included in valve repair kit RKTDC7315950

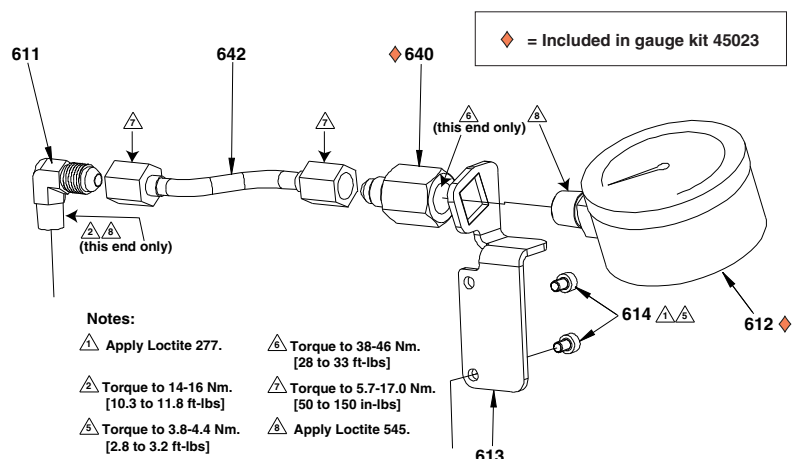


Gauge and bracket assembly

Items in **bold** are available as spare parts. Contact JOSAM Support to inquire about other spare part items.

#	Art #	Pcs	Part
611		1	Elbow, Gauge
612	*	1	Gauge
613		1	Bracket (XA11G and VG only) Bracket (XA12G and VG only)
614		1	Screw, SHCS M4 x 8 mm
640	*	1	Fitting, Straight, 1/4
642		1	Tube, Gauge, 1L SAP Tube, Gauge, 2L SAP

* Included in gauge kit 45023



Caps and decals

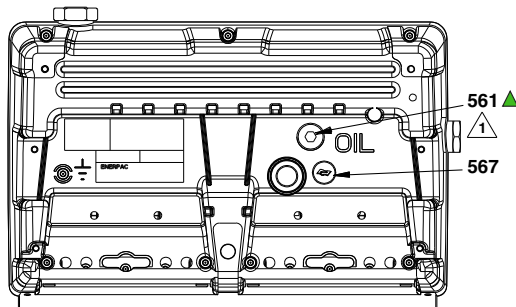
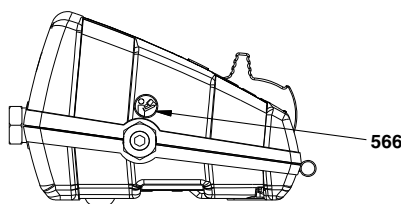
Items in **bold** are available as spare parts. Contact JOSAM Support to inquire about other spare part items.

#	Art #	Pcs	Part
561	*	1	Cap, Fill
566		1	Decal, Read Instructions
567		1	Decal, Service Tech

* Included in seal kit 44887

▲ Torque to 16-20 Nm.
[11.8 - 14.8 ft-lbs]

▲ = Included in seal kit 44887



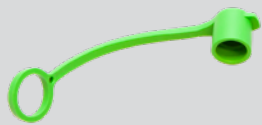
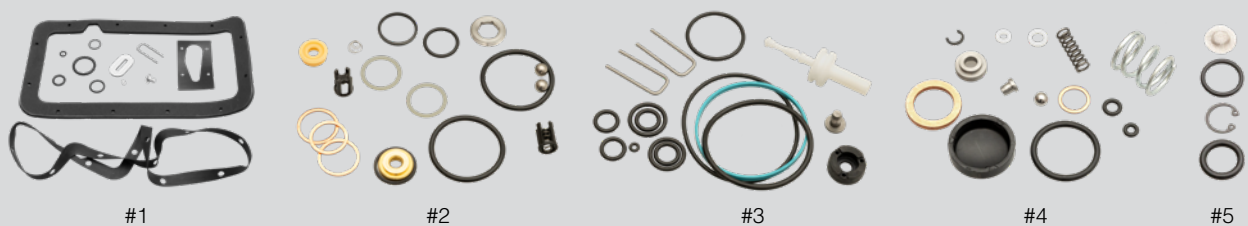


Spare parts for air hydraulic pumps H1018/14592 & H1019/14593 (21550)

Sold between 2011 and 2019

Article #	Order #	Description	
I-AQI7	10944	Snap-on coupling female 1/4" (includes dust protection and sealing washer)	
I-AQU8	10945	Snap-on coupling male 1/4" (includes dust protection and sealing washer)	
JO1215	11263	Remote control	
TREDO 1/4'	12695	Grommet 1/4"	
H1031	14610	Reducer NPT3/8" - G1/4"	
V82K	15424	Valve kit	



Article #	Order #	Description
H1055	16546	Hydraulic hose 1/4", 4 m
		
H1056	16547	Hydraulic hose 1/4", 6 m
		
I-38815303	21273	TDP23 dust protection male
		
I-38815804	21280	TDP26 dust protection female
		
—	44889	Repair kit
#1 Misc. pump parts #2 Pump kit 10 KSI #3 Air motor seal kit #4 Purge valve seal kit #5 Filter		
		



Additional spare parts

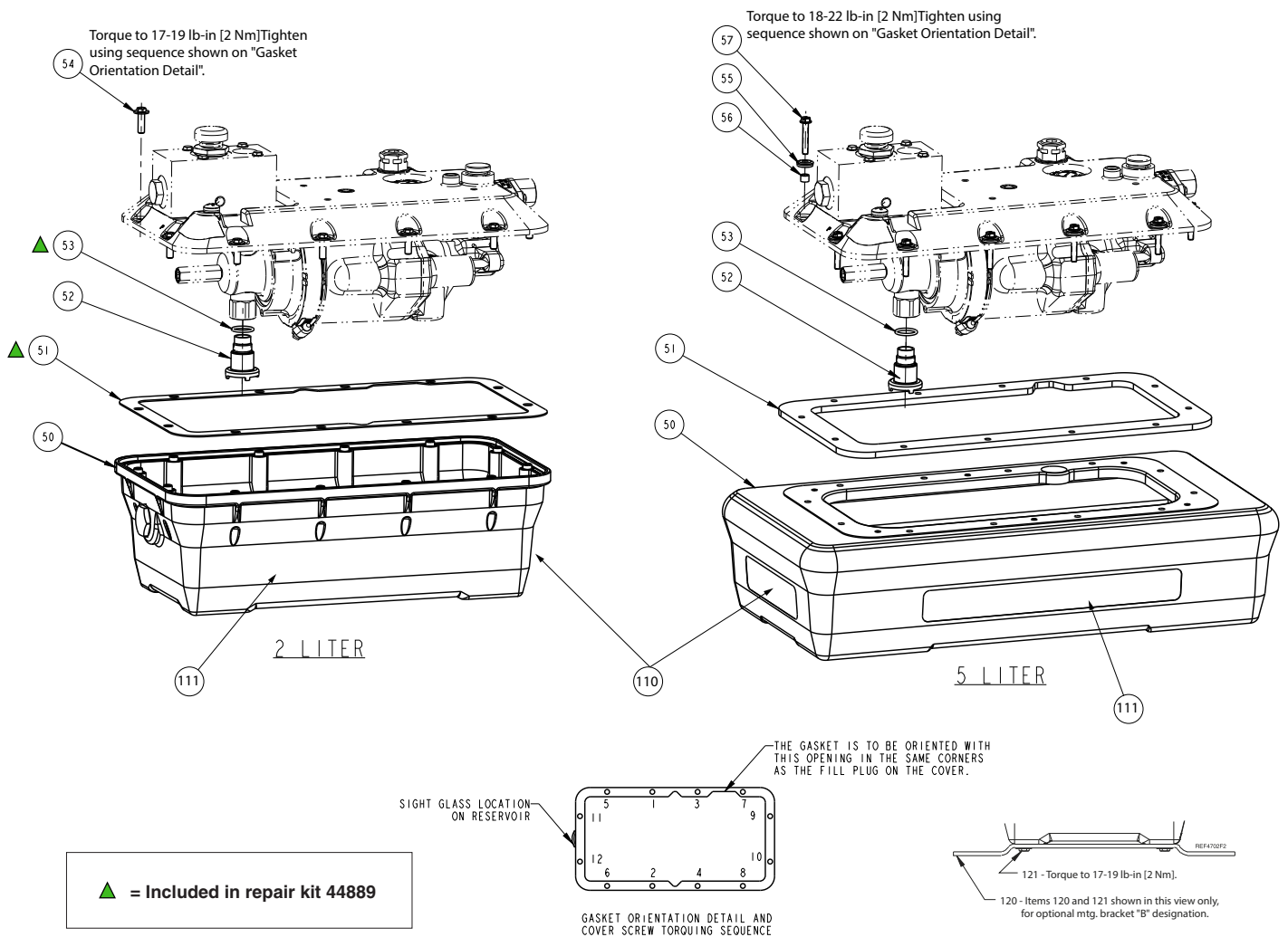
Reservoir

Items in **bold** are available as spare parts. Contact JOSAM Support to inquire about other spare part items.

#	Art #	Pcs	Part
50		1	Reservoir, 2 L, Yellow
		1	Reservoir, 2 L, Black
		1	Reservoir, 2 L, Red
		1	Reservoir, 5 L, Black
51	*	1	Reservoir Gasket, 2L
		1	Reservoir Gasket, 5L (foam)
52		1	Intake Tube Assy
53	*	1	O-Ring
54		12	Hi Lo Screw
55		12	Sealing washer

#	Art #	Pcs	Part
56		12	Nylon Spacer
57		12	Machine Screw Hex Head
110		1	Model No. Decal
111		2	Decal, Enerpac Turbo II Blk
		2	Decal, Enerpac Turbo II Wht
120		2	Mtg. Bracket
121		4	Hi Lo Screw, 2L Res.
		4	Screw, 5L Res

* Included in repair kit 44889

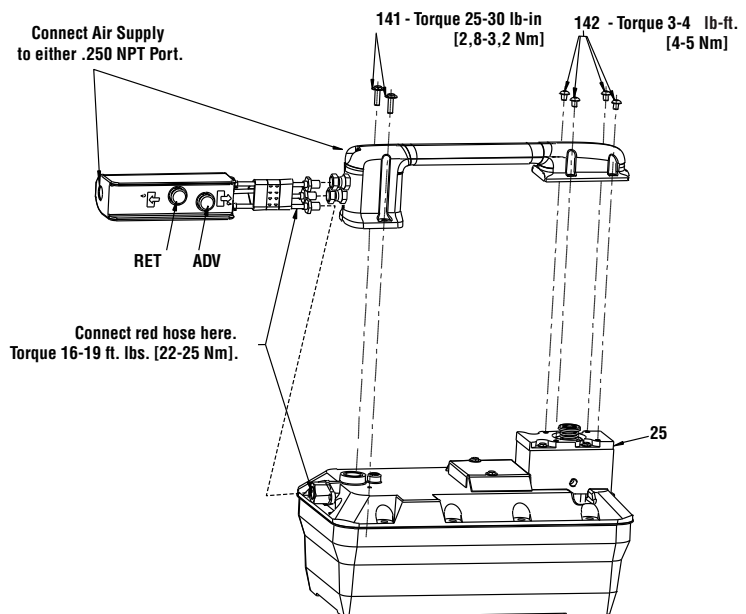




Remote pendant turbo pump assembly

Contact JOSAM Support to inquire about these spare part items.

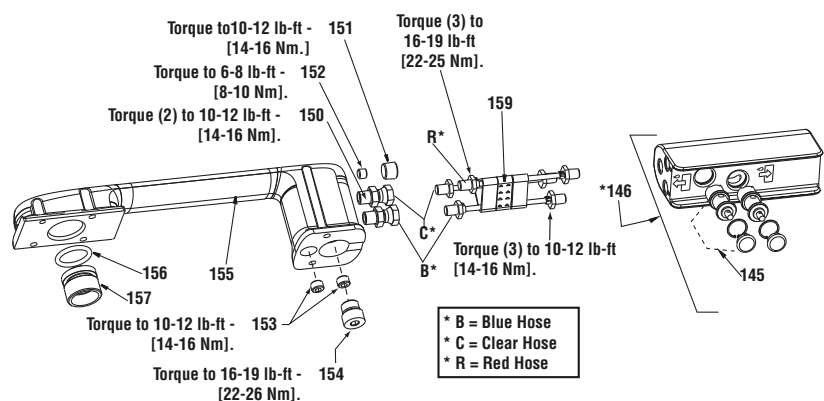
#	Art #	Pcs	Part
25		1	Valve Spacer
141		2	Hi Lo Screw
142		4	10-32 x .50 Screw



Pendant handle assembly

Items in **bold** are available as spare parts. Contact JOSAM Support to inquire about other spare part items.

#	Art #	Pcs	Part
145		2	Air cartridge valve
146	11263	1	Air pendant assy.
150		2	1/8" NPT swivel fitting
151		1	Hex plug
152		1	1/16 flush plug w/sealant
153		2	1/8 flush plug w/sealant
154		1	#6 SAE hex plug
155		1	Handle assembly
156		1	O-ring 70 DUPR-213
157		1	Pneumatic dump piston
159		1	Hose assembly



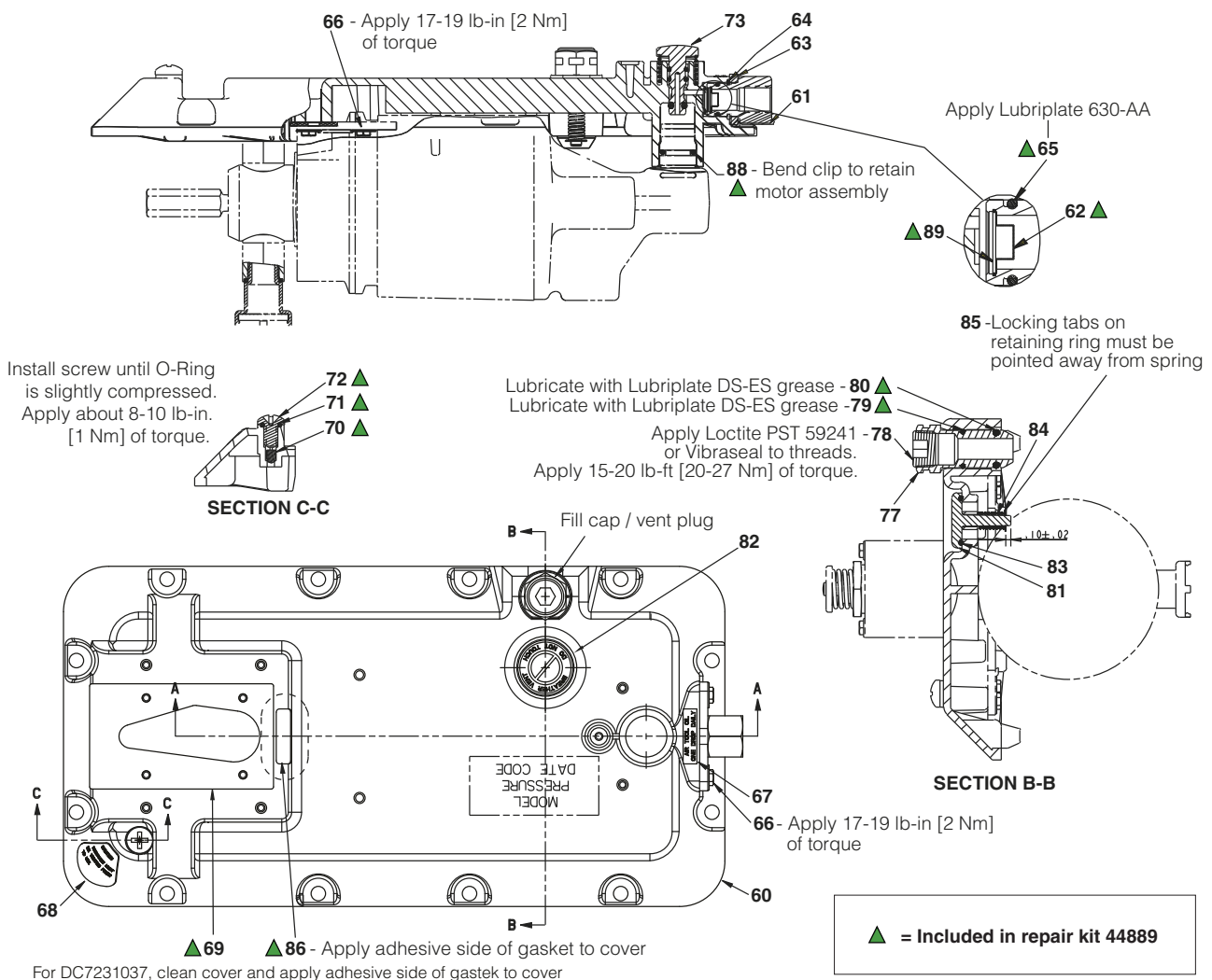
Cover assembly

Items in bold are available as spare parts. Contact JOSAM Support to inquire about other spare part items.

#	Art #	Pcs	Part
60		1	Blk/Red Cover Assy
61		1	Swivel Coupler
62	*	1	Filter
63		1	Stamped Bracket
64		1	Ret. Ring
65	*	1	O Ring
66		6	Hi Lo Screw
67		1	Air Tool Oil Decal
68		1	Caution Decal
69	*	1	Gasket Set
70	*	1	Filter
71	*	1	O Ring
72	*	1	1/4 x 3/8" Hi Lo Screw

#	Art #	Pcs	Part
73		1	Air Button
77		1	Breather
78		1	3/8 Flush Plug W/Sealant
79	*	1	O Ring (Wear Coated)
80	*	1	O Ring
81		1	Poppet
82		1	Breather Vent Decal
83		1	O Ring
84		1	Compression Spring
85		1	3/16" Retainer
86	*	1	Gasket
88	*	1	Retaining Pin
89	*	1	Retaining Ring

* Included in repair kit 44889





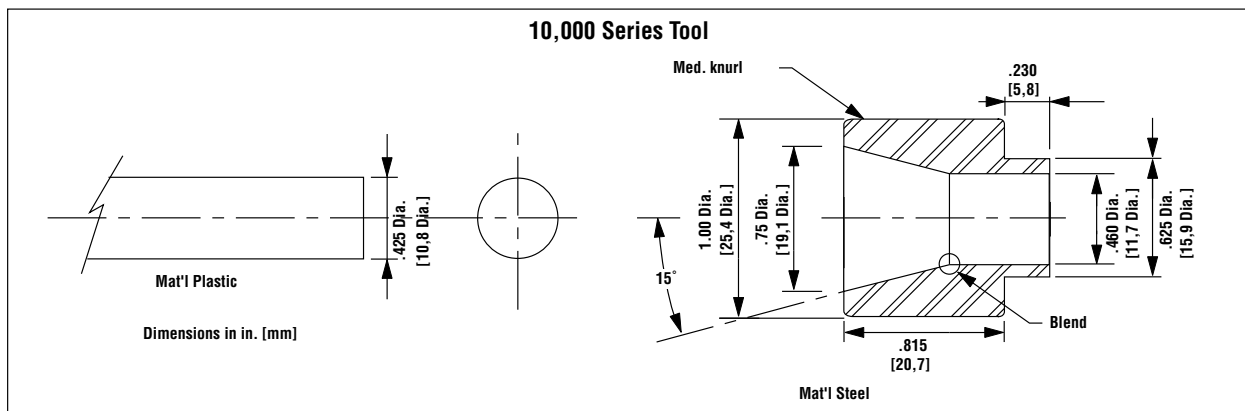
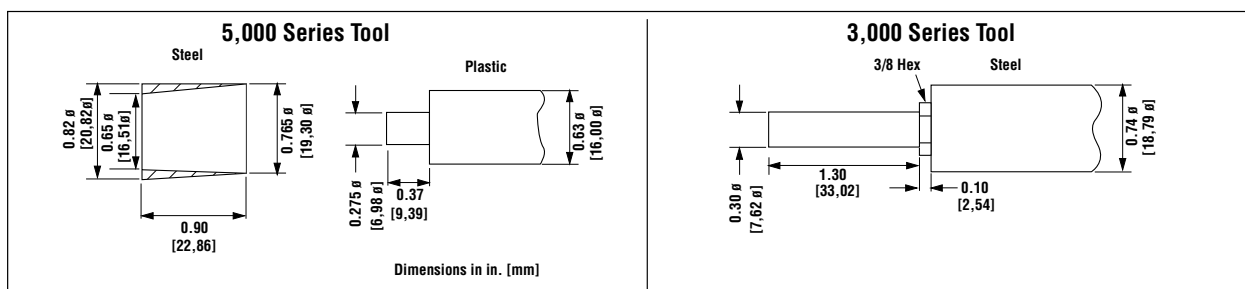
Hydraulic section

Items in **bold** are available as spare parts. Contact JOSAM Support to inquire about other spare part items.

#	Art #	Pcs	Part
1		1 1 1	Hyd. Cylinder, Turbo 3 KSI Hyd. Cylinder, Turbo 5 KSI Hyd. Cylinder, Turbo 10 KSI
2		1	Washer
3	*	2	O-Ring
4		1	Mtg. Bracket
5		1	Bowed Ret. Ring
6		1	Relief Valve Assy
7	*	2	Copper Gasket
8		2	Seat
9	*	2	1/4" Dia. Ball
10	*	1	Conical Spring
11	*	2	Ball Guide
12	*	1	Copper Gasket
13	*	1	Pressure Tube 10 KSI
14	*	2	Backup Ring
15	*	2	O-Ring – Global
16	* * * * *	1 1 1 1 1	Step Seal 3 KSI U-Cup 3 KSI U-Cup 5 KSI Step Seal 5 KSI U-Cup 10 KSI

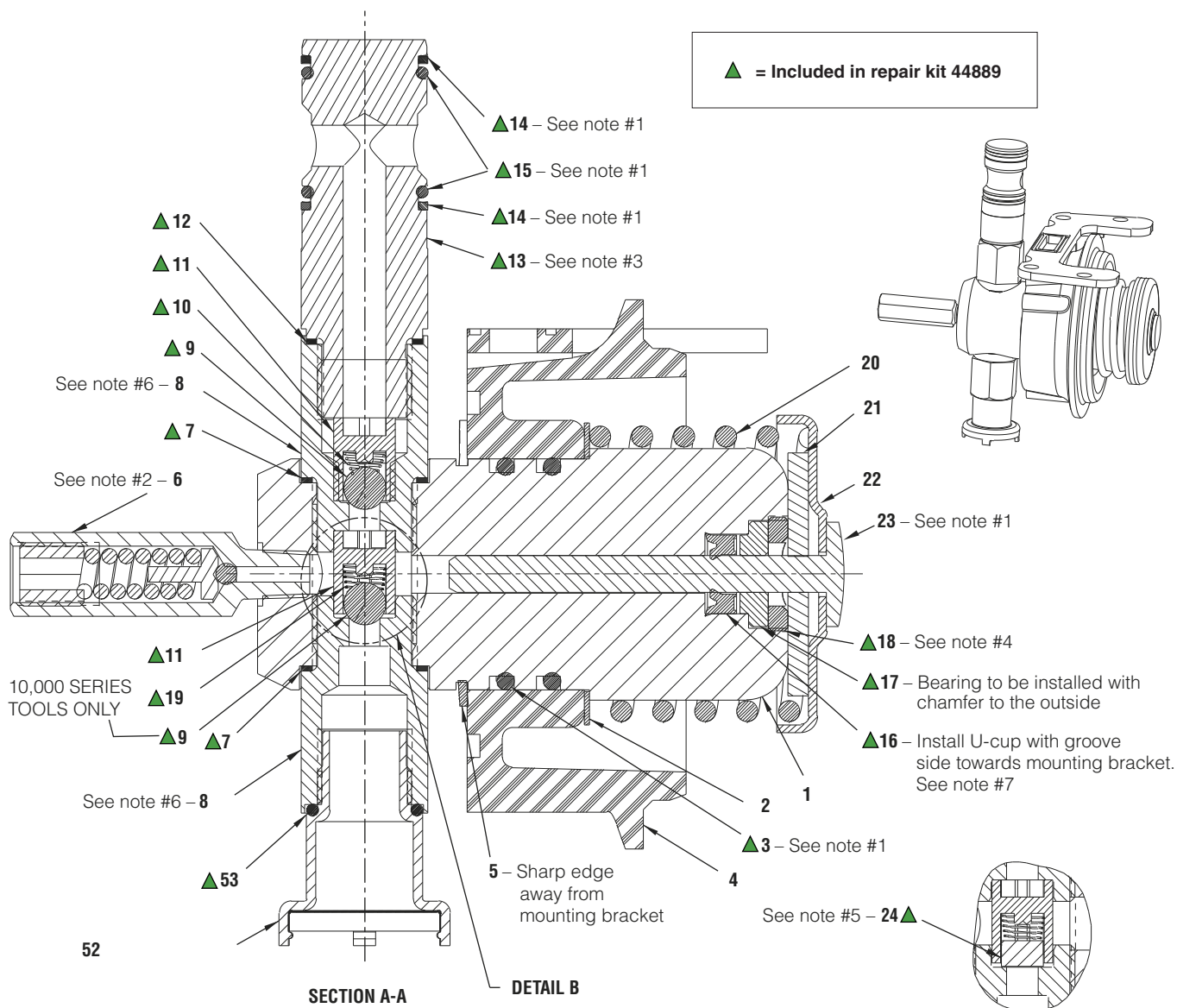
#	Art #	Pcs	Part
17	* * *	1 1 1	Bearing 3 KSI Bearing 5 KSI Bearing 10 KSI
18	* * *	1 1 1	Bearing Retainer 3 KSI Bearing Retainer 5 KSI Bearing Retainer 10 KSI
19	*	1	Conical Spring
20		1	Spring
21		1 1 1	Rubber Washer 3 KSI Rubber Washer 5 KSI Rubber Washer 10 KSI
22		1 1 1	Spring Washer, Turbo, 3 KSI Spring Washer, Turbo, 5 KSI Spring Washer, Turbo, 10 KSI
23		1 1 1	Plunger, 3 KSI Plunger, 5 KSI Plunger, 10 KSI
24	*	1	Poppet
52		1	Intake Tube Assy
53	*	1	O-Ring

* Included in repair kit 44889





Hydraulic section



SECTION A-A

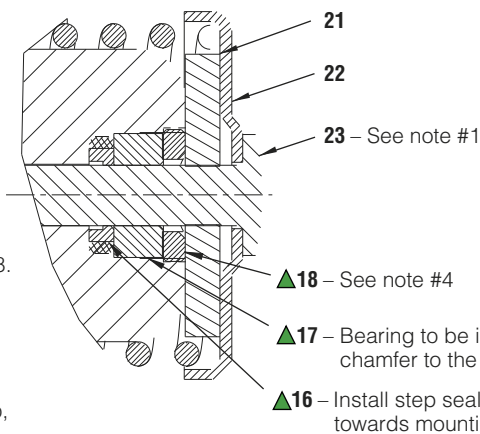
10,000 SERIES
TOOLS ONLY

DETAIL B

3,000 AND 5,000 SERIES
TOOLS ONLY

Notes:

1. Lubricate seals with moderate amount of DS-ES grease.
2. Apply Loctite 545 on threads, and apply 10-12 lb-ft [14-16 Nm] of torque to item #6.
3. Apply a 1/2 bead of Loctite 243 on threads and apply 34-41 lb-ft [46-55 Nm] of torque to item #13.
4. Apply one drop of Loctite 242 on threads, and apply 10-12 lb-ft [13,6-16,3 Nm] of torque to item #18.
5. Items #24 and #25 are installed finger tight.
6. Apply a 1/2 bead of Loctite 243 on threads and apply 38-45 lb-ft [51,5-61 Nm] of torque to item #8.
7. If the pump comes with a step seal, a step seal should be used for replacement. If the pump comes with a u-cup, it should be replaced with a u-cup.



SECTION A-A

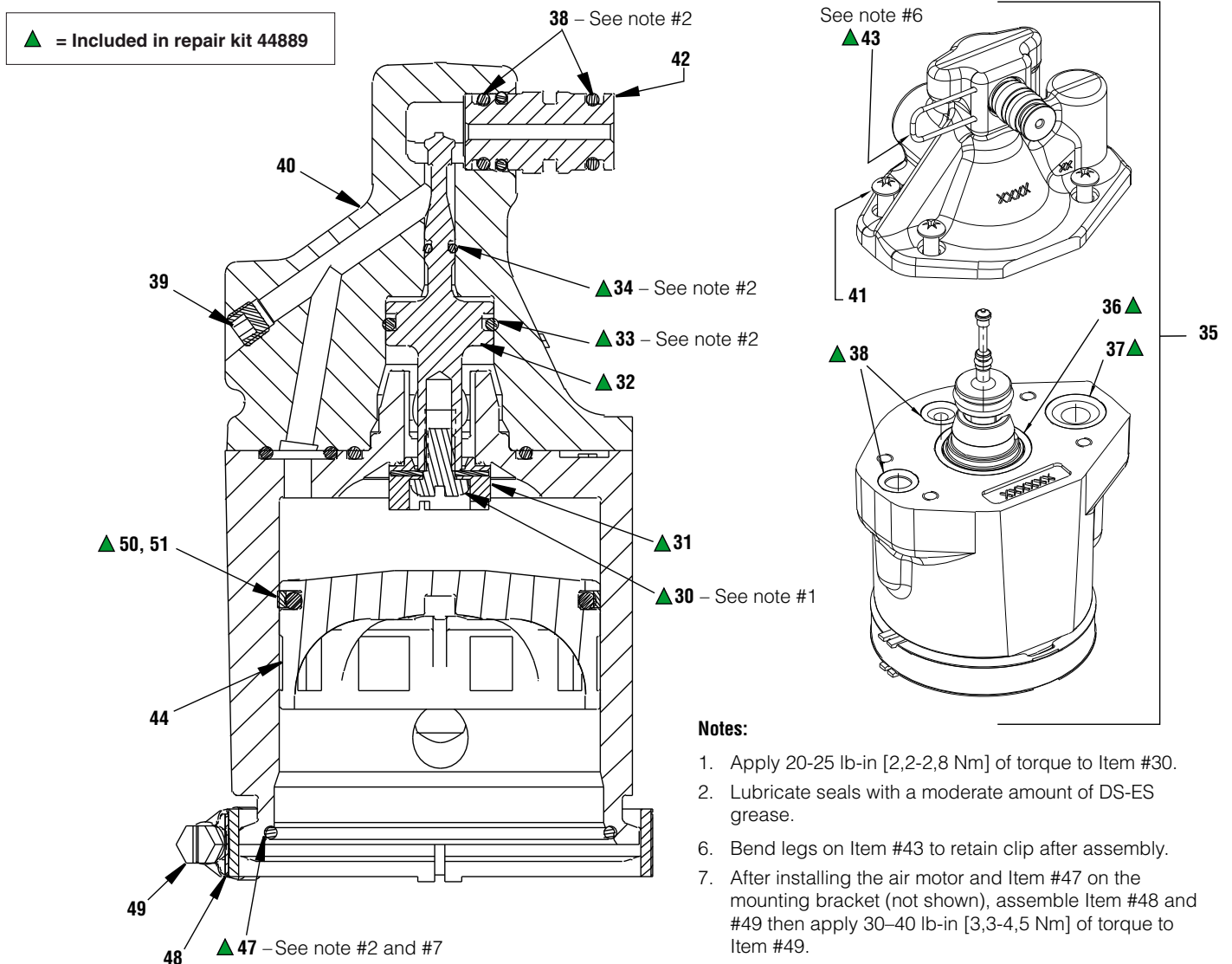
Air motor assembly

Items in bold are available as spare parts. Contact JOSAM Support to inquire about other spare part items.

#	Art #	Pcs	Part
30	*	1	Screw – .250-20 Special
31	*	1	Washer
32	*	1	Piston
33	*	1	O-Ring
34	*	1	O-Ring
35		1	Air Motor, Complete
36	*	1	O-Ring
37	*	1	O-Ring
38	*	4	O-Ring
39		1	1/16 Flush Plug w/Sealant

#	Art #	Pcs	Part
40		1	Casting Air Motor Manifold
41		1	Screw, Torx
42		1	Extension Fitting, Air Motor
43	*	1	Retaining Pin
44		1	Air Motor Piston
47	*	1	O-Ring
48		1	Clamp Brk
49		1	Hose Clamp
50	*	1	O-ring
51	*	1	Glyde Ring

* Included in repair kit 44889



Release valve

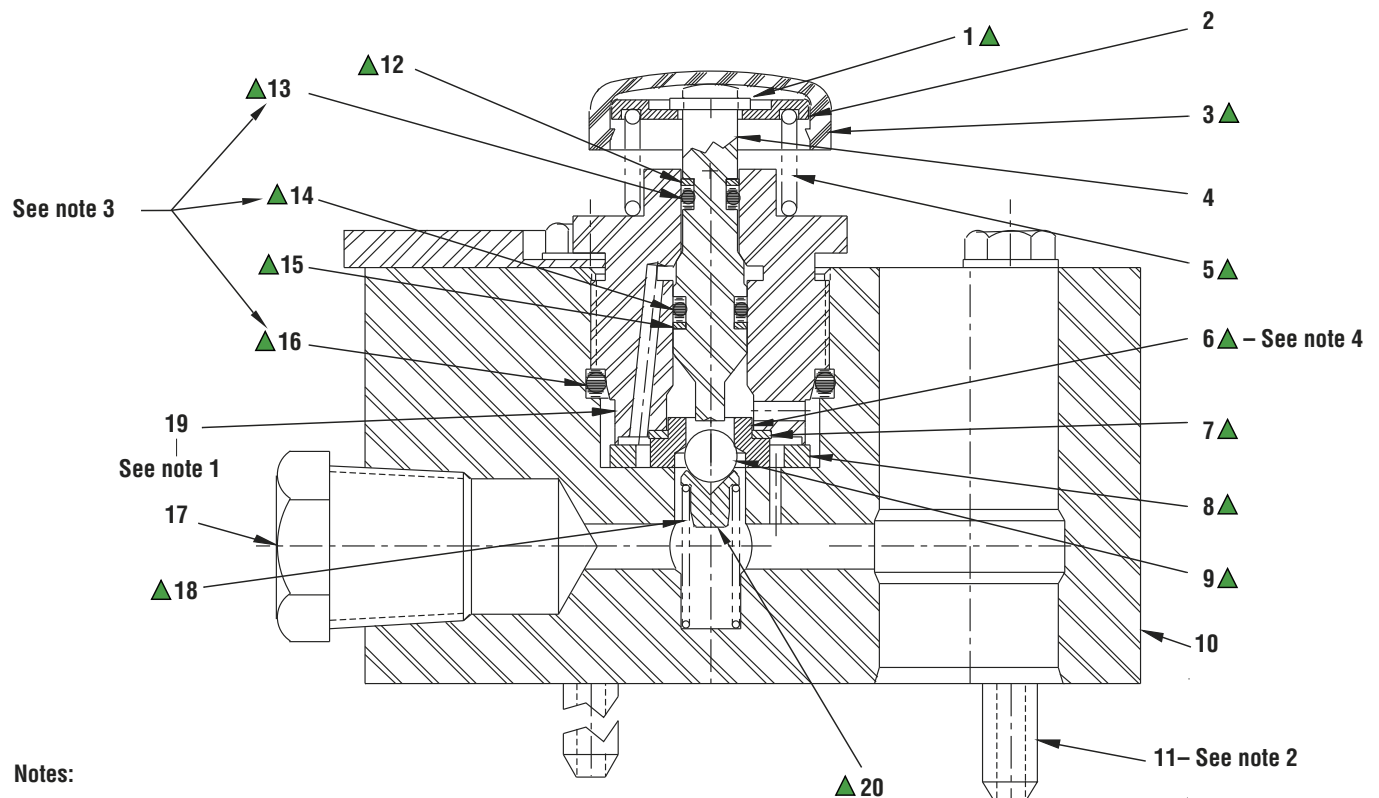
Items in bold are available as spare parts. Contact JOSAM Support to inquire about other spare part items.

#	Art #	Pcs	Part
1	*	1	Ret. Ring
2		1	Spring Washer
3	*	1	Cap
4		1	Release Plunger
5	*	1	Spring
6	*	1	Ball Seat
7	*	1	Gasket
8	*	1	Gasket
9	*	1	7/32" Dia. Ball
10		1	Manifold

#	Art #	Pcs	Part
11		4	Thd. Form Screw
12	*	1	B/U Washer
13	*	1	O-Ring (.12 x .25 x .06)
14	*	1	O-Ring
15	*	1	Back-up Washer
16	*	1	O-Ring
17		1	Plug
18	*	1	Spring
19		1	Release Guide
20	*	1	Ball Guide

* Included in repair kit 44889

 = Included in repair kit 44889



Notes:

1. Torque Item #19 to 72–78 lb-ft [98-105 Nm] with threads lubricated.
2. Torque Item #11 to 17–19 lb-in [1,9-2,1 Nm].
3. Lubricate all seals and mating surfaces w/DS-ES Grease prior to assembly unless otherwise noted.
4. Prior to assembling Item #6 seat, coin seat with a $\varnothing$.219 ball to a force of 95–105 lbs. [444 N].



Spare parts for air hydraulic pump I-PP40 K (Discontinued 2012)



Article #	Order #	Description	
I-423,95	10938	Low pressure piston complete	
–	10940	Seal kit	
I-AQI7	10944	Snap-on coupling female 1/4" (includes dust protection and sealing washer)	
I-AQU8	10945	Snap-on coupling male 1/4" (includes dust protection and sealing washer)	
JO1215	11263	Remote control	
TREDO 1/4'	12695	Grommet 1/4"	
H1055	16546	Hydraulic hose 1/4", 4 m	



Article #	Order #	Description	
I-38815303	21273	TDP23 dust protection male	
I-38815804	21280	TDP26 dust protection female	
–	21522	Repair kit air hoses Rehobot pump 2.5m	
I-52430	21629	Release valve complete	
I-40176	21630	Pressure gauge 63mm - G1/4"	
–	49795	Protection for pressure gauge	



Additional spare parts

Items in **bold** are available as spare parts. Contact JOSAM Support to inquire about other spare part items.

#	Art #	Pcs	Part
1		1	Level gage
2		12	Screw
3		2	Housing
4	*	2	Packing
5		1	Housing
6	*	2	Packing
7		1	Cylinder tube
8		1	Track ring
9		1	Plug
10	10938	1	Air piston cpl
11		1	Piston cpl. PP70-
12		1	Spring
13		1	Bush
14		1	Bushing PP70-
15		1	Guide PP70-
16	*	1	Support ring PP70-
17	*	1	Packing PP70-
18		1	Pump housing PP70-
19	*	1	Packing
21		1	Strainer
22		1	Housing
23		1	Ball
24		1	Needle
25		1	Screw
26		1	Spring
27		1	Housing
28		1	Valve housing
29		4	Screw
30		1	Container
31	*	2	O-ring
36	*	1	Packing
42		1	Filter
46		1	Plug
47	*	4	Packing
49	*	1	Packing
50	*	2	O-ring
51	*	2	Support ring
52		1	Nipple

	Art #		
53		1	Spring
54		1	Ball
55	*	1	O-ring
56		1	Release pin
57		1	Spring
58		1	Valve cartridge
59	*/ **	1	Support ring
60	*/ **	1	O-ring
61	**	1	Release valve
62	**	1	Release pin
63	**	1	Ball
64		1	Air vent
65	**	1	Guide
66	**	1	Spring
67		1	Plug
71	*	1	Damper
77	*	1	O-ring
78	**	1	Screw
79		1	Spring
101		1	Valve block
102		1	Cylinder
103		1	Piston
104	*	1	O-ring
105		1	Spring
106		2	
107	*	1	Packing
108		1	Handle
109	***	2	Hose connection
110		1	Connection block
111	***	2	Hose connection
113	11263	1	Remote control cpl.
114	***	2	Hose connection
115	***	2	Hose
116	***	4	Hose clamp
117	***	1	Hose
118	***	2	Hose clamp
120	21630	1	Pressure gauge
121	49795	1	Pressure gauge protection



Additional spare parts

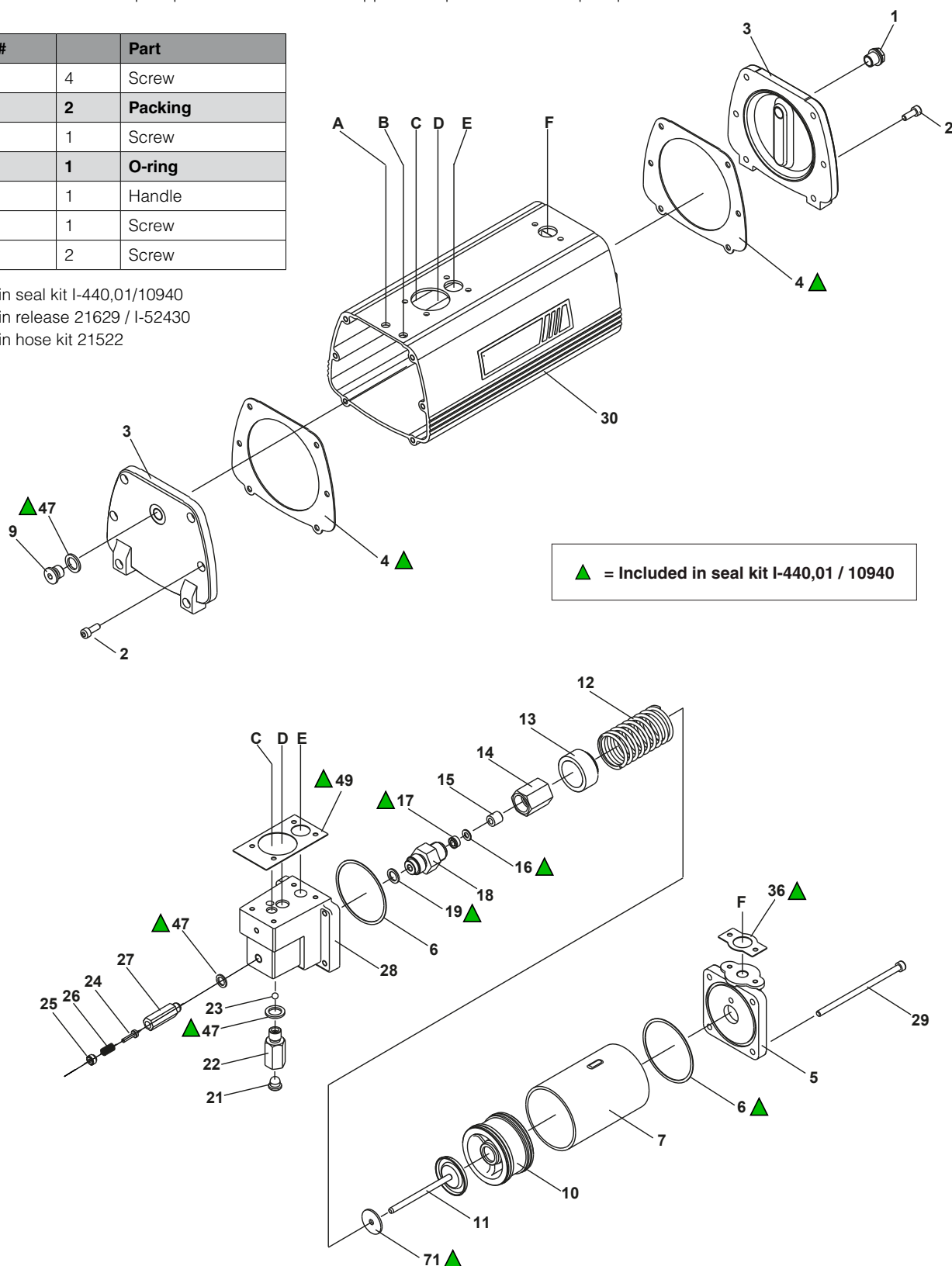
Items in **bold** are available as spare parts. Contact JOSAM Support to inquire about other spare part items.

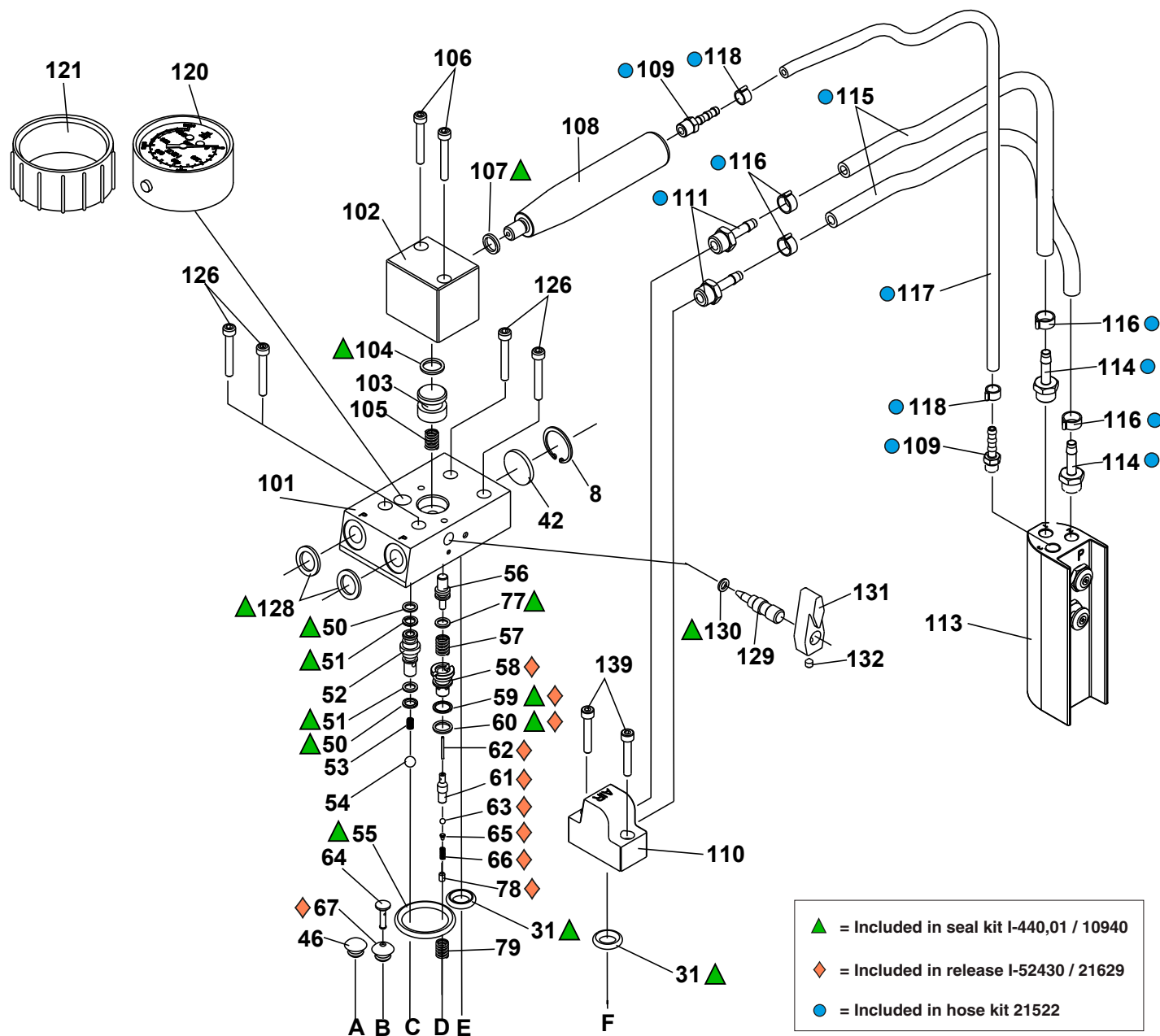
	Art #		Part
126		4	Screw
128	*	2	Packing
129		1	Screw
130	*	1	O-ring
131		1	Handle
132		1	Screw
139		2	Screw

* Included in seal kit I-440,01/10940

** Included in release 21629 / I-52430

*** Included in hose kit 21522





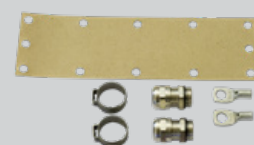


INDUCTION HEATING



Spare parts for induction heater JO960 (13546)

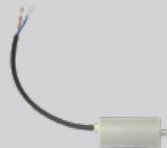
Article #	Order #	Description
AL10015	10112	Water flow sensor
AL10008	10106	Button
ALJO2253	10142	Button holder
	13405	Helicoil kit
JO961 B	12811	Inductor, with screws L=280 mm
JO963 B	13202	Inductor short, with screws, L=200 mm
AL10783	10141	Mounting kit for hose package



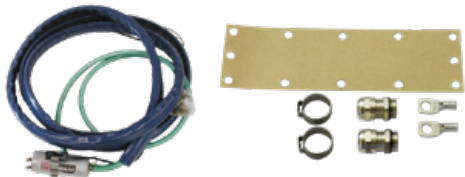
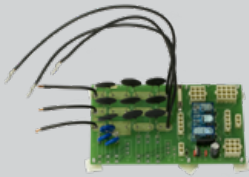


Spare parts being phased out

The following items will be discontinued when the current stock is emptied. Please contact order@josam.se to confirm availability.

Article #	Order #	Description
AL10205	10137	Impedance coil
		
		 Being phased out
AL10009	10107	Capacitor, 6 µF
		
		 Being phased out
AL10010	10108	Rectifier
		
		 Being phased out
AL10012	10110	Main filter
		
		 Being phased out
AL10071	10122	Temperature sensor
		
		 Being phased out
AL10017	13403	Capacitor for cooling fan
		
		 Being phased out
AL10206	10138	Capacitor bank
		
		 Being phased out
AL10018	10115	Capacitor for compressor
		
		 Being phased out



Article #	Order #	Description	
AL10548	10140	Low pressure pressostat	
		 Being phased out	
AL10192	10134	Light bulb for reset button	
		 Being phased out	
JO962	11711	Hose package with mounting kit	
		 Being phased out	
AL10011	10109	Soft start PCB	
		 Being phased out	

Discontinued/obsolete spare parts

Article #	Order #	Description	
AL10062	10120	Power module	
		 Discontinued	
AL10016R	10114	Thermostat	
		 Discontinued	
AL10013	10111	Water pump	
		 Discontinued	

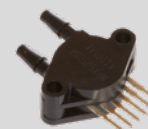


Article #	Order #	Description	
AL10158	13404	Wheel, turnable  <i>Discontinued</i>	
AL10159	10127	Wheel, large  <i>Discontinued</i>	
AL10021	10118	Relay  <i>Discontinued</i>	
AL10204	10135	O-transformator  <i>Discontinued</i>	
AL10543	13402	High pressure pressostat  <i>Discontinued</i>	
AL10075	10124	Cover plate  <i>Discontinued</i>	



Spare parts for induction heater JH400 (14713)

Article #	Order #	Description
1210103133	36485	Power board
1210103132	36484	Controller board
1131450	33330	Flow sensor
1210103306	36561	Front panel complete
1210103117	36462	Plastic cover
–	39961	Water pump kit, complete
121010304	36433	Hose kit including angled inductor head



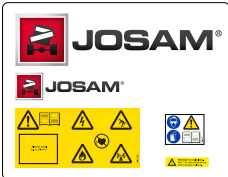


Article #	Order #	Description	
21188	21188	Insulation for handle JH400	
AL10008	10106	Button	
1210139588	39588	Button holder	
1210139569	39569	Heating tip holder	
1410910108	36625	Cable holder	
99070	31719	Wheel	
99081	34158	Turnable wheel	
91360	36514	Hub cap	



Article #	Order #	Description	
JH401	39595	Angled inductor head	
JH403	39591	Straight inductor head	
JH402	39498	Repair kit, field effect amplifier for angled inductor head	
JH404	39947	Repair kit, field effect amplifier for straight inductor head	
1210139592	39592	Guard hood for tip JH401	
1210139499	14556	Spare part kit for JH401 and JH403	
JH405	33944	High tech fluid, 3 litres concentrate 1 pcs for JH400	
1210103122	36467	Corner protection, front right	



Article #	Order #	Description
1210103124	36469	Corner protection, front left
		
1210103121	36466	Corner protection, rear
		
13476	Decal kit, JH400	



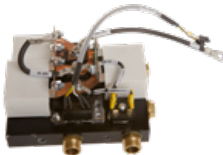
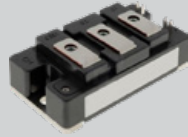
Spare parts for induction heater JH800/JH1000 (14714)

Article #	Order #	Description	
JH13000108	11051	Transformer	
JH13000114	11059	Transformer fuse	
JH13000112-1	11057	Phase changer 200V	
JH13000112-2	14564	Phase changer 400V	
JH130001260701	11075	Main circuit breaker, 400V / 200V	
JH13000126070101	15431	Switch for main circuit breaker 200V / 400V	
	15700	Main circuit breaker 400 V, 32 A	

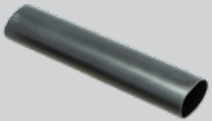
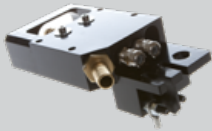


Article #	Order #	Description	
JH1300010202-2	11028	Power board 200V	
JH1300010202	11027	Power board 400V	
JH10000513	14800	Controller board for JH1000	
JH10000520	14799	Rectifier JH800 / JH1000, 200V / 400V Note: use heat conducting paste between rectifier and cooling block	
JH8000515	14527	Current sensor 100A	
JH8000501	14526	Current sensor 25A	
JH1300010303	11033	Snubber capacitor 0.33 μ F	
JH1300010304	11034	Capacitor 10 μ F	
JH10000519	14798	Resonance capacitor JH1000, 4 μ F	



Article #	Order #	Description	
JH10000504-1	14801	Power module JH800 / JH1000, 400V	
JH10000504-2	14817	Power module JH800 / JH1000, 200V	
JH1300010322	14523	Power module temp sensor	
JH13000205	11084	Water tank temp sensor	
JH800050401	13664	Cooling block JH800/JH1000 excl. couplings Note: use heat conducting paste on rectifier and IGBT before mounting	
JH1300010302	11032	IGBT JH800/JH1000 Note: use heat conducting paste between IGBT and cooling block	
1210103306	36561	Front panel	
JH8000301	13524	Plastic cover	

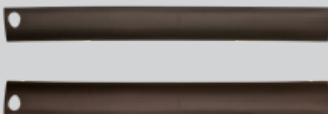
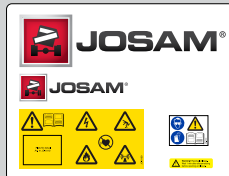


Article #	Order #	Description	
JH800011101	13709	Heating tip holder	
KS1510	13601	Cable holder	
	16646	Water pump	
AL10015	10112	Water flow sensor	
JH130003	11086	Hose kit	
21184	21184	Insulation for handle	
21185	21185	Protective cover for hose kit	
JH13000302-01	14716	Connection block complete	



Article #	Order #	Description	
AL10008	10106	Button	
ALJO2253	10142	Button holder	
761326	14529	Wheel	
352490	14530	Turnable wheel	
JH800020104	14531	Hub cap	
JH800020105	14532	Lock washer	
	13405	Helicoil kit	
JO961 B	12811	Inductor, with screws, L=280 mm	



Article #	Order #	Description	
JO963 B	13202	Inductor short, with screws, L=200 mm	
JH1301	11096	Inductor, with screws, L=250 mm	
JH1504	16567	Inductor 90° L=215 mm, W=50 mm	
JH 130102 K	11021	Repair kit for JH1301	
JH405	33944	High tech fluid, 3 litres concentrate 2 pcs for JH800 3 pcs for JH1000* * Important: Only to be used with JH1000 machines with serial numbers lower than 22041 (200V version) and 43490 (400V version). For newer machines, Propylene Glycol should be used. Never mix High Tech Fluid with Propylene Glycol.	
JH15000115-1K	15751	Corner protection, front left	
JH15000115-2K	15752	Corner protection, front right	
JH15000115-3K	15753	Corner protection, rear	
	14808	Decal kit JH1000	



Article #	Order #	Description
	21177	Heat conducting paste



Spare parts being phased out

The following items will be discontinued when the current stock is emptied. Please contact order@josam.se to confirm availability.

Article #	Order #	Description
AL10009	10107	Resonance capacitor JH800, 6 µF
		 Being phased out
JH8000513-1	14537-1	Controller board
JH8000513-2	14537-2	Controller board
		Note: the phase changer type determines the software version on the JH800 controller board. Please specify type 1 or type 2 when ordering. Produced on order, contact support@josam.se
		 Being phased out



Type 1 Type 2

Discontinued/obsolete spare parts

Article #	Order #	Description
JH8000510	14524	Phase changer relay
		 Discontinued





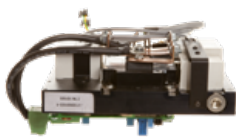
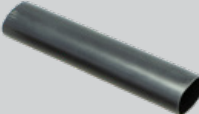
Spare parts for induction heater JH1300 (14715)

Article #	Order #	Description	
JH13000108	11051	Transformer	
JH13000114	11059	Transformer fuse	
JH13000112-1	11057	Phase changer 200V	
JH13000112-2	14564	Phase changer 400V	
JH130001260702	11076	Main circuit breaker 200V, 63A	
JH130001260701	11075	Main circuit breaker, 400V, 32A	
JH13000126070101	15431	Switch for main circuit breaker 200 V / 400 V	

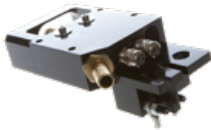


Article #	Order #	Description
JH1300010202-2	11028	Power board 200V
		
JH1300010202	11027	Power board 400V
		
JH1300010201	11026	Controller board
		
JH1300010306-2	15427	Rectifier board complete with rectifier, 200 V
JH1300010306-1	15426	Rectifier board complete with rectifier, 400 V
		
Note: use heat conducting paste between rectifier and cooling block		
JH1300010317	11045	IGBT JH1300/JH1500
Note: use heat conducting paste between IGBT and cooling block		
		
JH1300010326	14565	Current sensor 100A
		
JH13000120	11063	Resonance capacitor, 3.5 µF
		
JH1300010303	11033	Snubber capacitor 0.33 µF
JH1300010304	11034	Capacitor 10 µF
		



Article #	Order #	Description	
JH15000504	15341	Power module JH1300/JH1500, 400 V Important: needs to be modified according to service instruction RM33 before being used.	
JH1300010322	14523	Power module temp sensor	
JH13000205	11084	Water tank temp sensor	
–	16646	Water pump	
AL10015	10112	Water flow sensor	
JH130003	11086	Hose kit	
21185	21185	Protective cover for hose kit	
21184	21184	Insulation for hose kit	



Article #	Order #	Description	
JH13000302-01	14716	Connection block complete	
AL10008	10106	Button	
ALJO2253	10142	Button holder	
—	13405	Helicoil kit	
JH1303	12810	Inductor, with screws, L=260 mm	
JH1301	11096	Inductor, with screws, L=275 mm	
JH1504	16567	Inductor 90° round	
JH 130102 K	11021	Repair kit for JH1301	



Article #	Order #	Description
–	21177	Heat conducting paste



Spare parts being phased out

The following items will be discontinued when the current stock is emptied. Please contact order@josam.se to confirm availability.

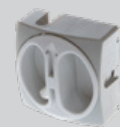
Article #	Order #	Description
JH1300012604	11069	Panel button
		
		 Being phased out
JH1300012605	11072	Thermostat knob
		
		 Being phased out

Discontinued/obsolete spare parts

Article #	Order #	Description
JH13000103-2	14563	Power module 200V
		
		 Discontinued
JH13000215	14568	Turnable wheel
		
		 Discontinued
JH13000216	14569	Fixed wheel
		
		 Discontinued



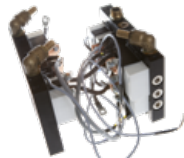
Spare parts for induction heater JH1500 (15827)

Article #	Order #	Description	
JH13000108	11051	Transformer	
JH13000114	11059	Transformer fuse	
JH13000112-1	11057	Phase changer 200V	
JH13000112-2	14564	Phase changer 400V	
JH130001260702	11076	Main circuit breaker 200 V, 63 A	
JH130001260701	11075	Main circuit breaker 400 V, 32 A	
JH13000126070101	15431	Switch for main circuit breaker 200 V / 400 V	

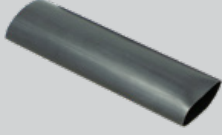


Article #	Order #	Description	
	15699	Main circuit breaker 200 V, 63 A	
	15700	Main circuit breaker 400 V, 32 A	
JH1300010202-2	11028	Power board 200V	
JH1300010202	11027	Power board 400V	
JH1500010201	15425	Controller board	
JH1300010306-2	15427	Rectifier board complete with rectifier, 200 V	
JH1300010306-1	15426	Rectifier board complete with rectifier, 400 V	
		Note: use heat conducting paste between rectifier and cooling block	
JH1300010317	11045	IGBT JH1300/JH1500	
		Note: use heat conducting paste between IGBT and cooling block	
JH1300010326	14565	Current sensor 100A	

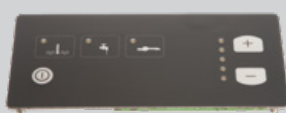
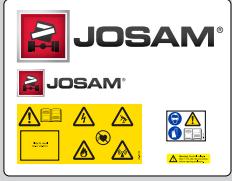


Article #	Order #	Description	
JH13000120	11063	Resonance capacitor 3.5 μ F	
JH1300010303	11033	Snubber capacitor 0.33 μ F	
JH1300010304	11034	Capacitor 10 μ F	
JH15000504-200	15428	Power module 200 V	
JH15000504	15341	Power module 400 V	
JH1300010322	14523	Power module temp sensor	
	16646	Water pump	
AL10015	10112	Water flow sensor	
JH130003	11086	Hose kit	



Article #	Order #	Description	
21185	21185	Protective cover for hose kit	
21184	21184	Insulation for hose kit	
JH13000302-01	14716	Connection block complete	
AL10008	10106	Button	
ALJO2253	10142	Button holder	
	13405	Helicoil kit	
JH1303	12810	Inductor, with screws, L=260 mm	
JH1301	11096	Inductor, with screws, L=250 mm	



Article #	Order #	Description	
JH1504	16567	Inductor 90° round	
	21177	Heat conducting paste	
JH 130102 K	11021	Repair kit for JH1301	
1210103306	36561	Control panel	
JH15000115-1K	15751	Corner protection, front left	 
JH15000115-2K	15752	Corner protection, front right	
	15403	Decal kit	
JH15000301	15098	Plastic cover	
JH800011101	13709	Heating tip holder	



Article #	Order #	Description	
	15316	Turnable wheel	
	15318	Wheel	



Spare parts for induction heater H4PRO (21547)

INDUCTOR SPARE PARTS

Article #	Order #	Description	
JH401	39595	Angled inductor head	
JH403	39591	Straight inductor head	
JH402	39498	Repair kit, field effect amplifier for angled inductor head	
JH404	39947	Repair kit, field effect amplifier for straight inductor head	
1210139592	39592	Guard hood for tip JH401	
AL10008	10106	Button	
1210139499	14556	Spare part kit for JH401 and JH403	

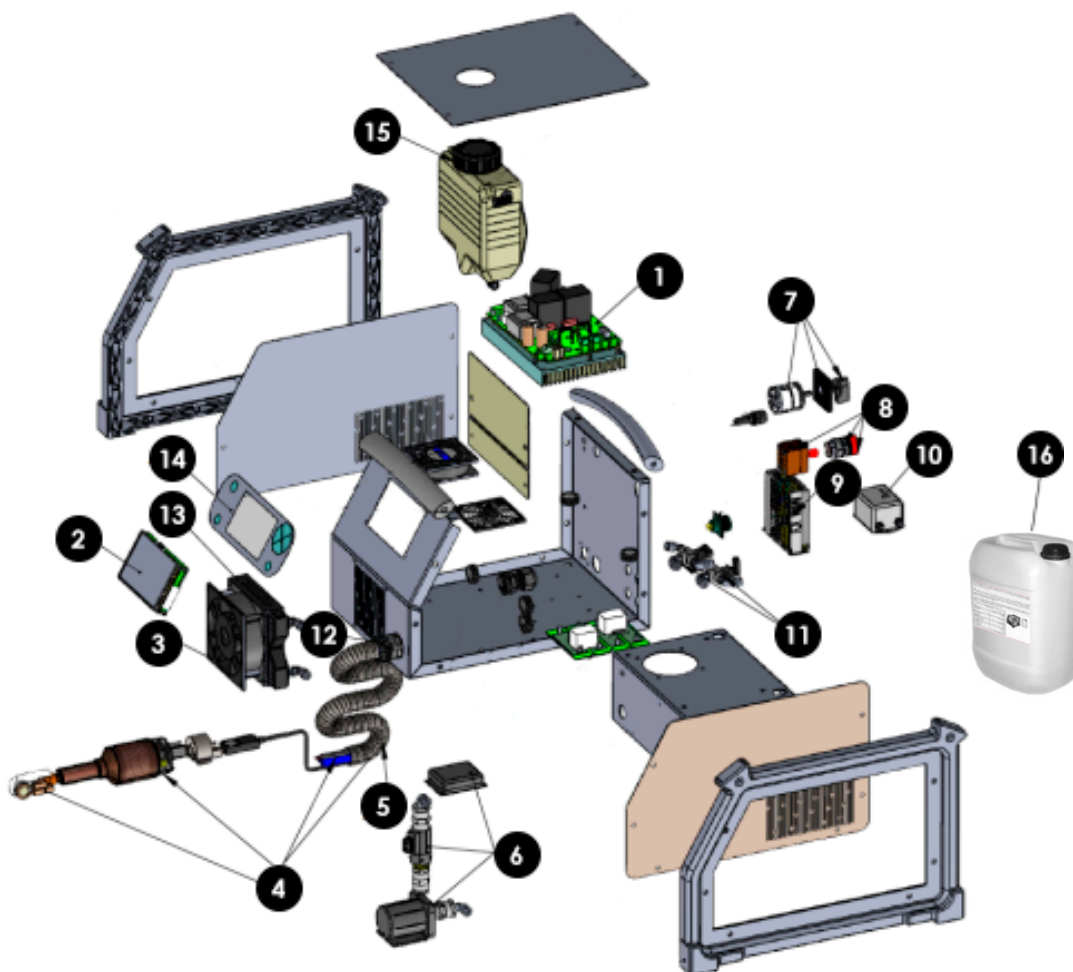


Article #	Order #	Description	
43259	43259	O-ring, seal between head and handle	
39588	39588	Button holder	



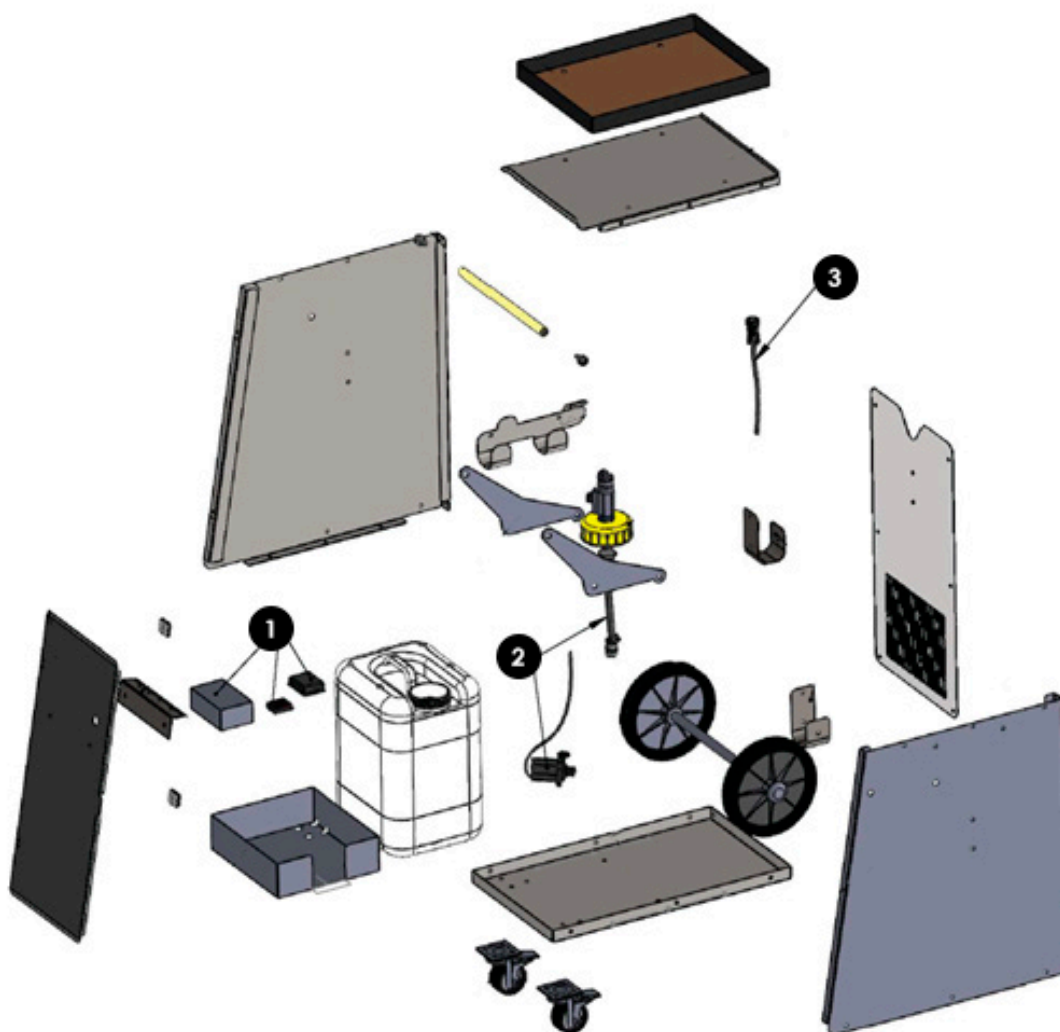
INDUCTION HEATER SPARE PARTS

Pos.	Article #	Order #	Description
1	51307	51307	COL35 Power board
2	51305	51305	Display+pcb board
3	51310	51310	Front fan
4+5	51312	51312	Hose package, H4PRO W/o induction head
5	51325	51325	Bossard pipe, 2,5 m
6	51311	51311	Pump, flowmeter, fittings
7	51324	51324	16 Amp On/Off Switch
8	51568	51568	Electric pump switch
9	51322	51322	Power pack 24v
10	51323	51323	Filter
11	51570	51570	Water valves H4PRO
12	51569	51569	Quick connector, hose package
13	51309	51309	Radiator
14	51306	51306	Keypad
15	51319	51319	Tap gasket
16	51376	51376	Coolant LRA5 – 5 litres



TROLLEY SPARE PARTS

Pos.	Article #	Order #	Description
1	51295	51295	Flowmeter
2	51296	51296	Pump (8 mm fitting)
3	51321	51321	Male 4 pin connector w/cable

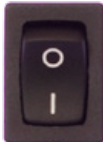




WHEEL ALIGNMENT



Spare parts for radio measuring head JT601 (14317)

Article #	Order #	Description	
JT601010704	12054	Stud	
		 Being phased out	
JT601010705	12055	Knob	
		 Being phased out	
JT6010202	12062	Battery	
		 Discontinued	
JT60111	12078	Antenna	
		 Discontinued	
JT603	12135	Charger	
			
JT6010211	14011	Switch	
		 Discontinued	



Spare parts for handheld radio measuring unit JT602 (14318)

Article #	Order #	Description	
JT106	11895	Charger	
		<i>Discontinued</i>	
JT60108	12076	Radio card	
		<i>Being phased out</i>	
JT60110	12077	Antenna cable	
		<i>Discontinued</i>	
JT60111	12078	Antenna	
		<i>Discontinued</i>	
JT6020308	12093	Button, black	
		<i>Being phased out</i>	
JT6020309	12094	Button, white	
		<i>Being phased out</i>	
JT6020311	12096	Key card cable	
		<i>Being phased out</i>	



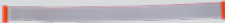
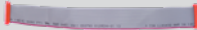
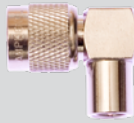
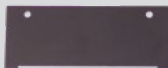
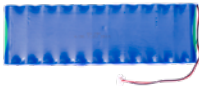
Article #	Order #	Description	
JT6020313	12097	Inverter cable	
		 <i>Being phased out</i>	
JT6020314	12098	Panel cable	
		 <i>Being phased out</i>	
JT6020315	12099	Display cable	
		 <i>Being phased out</i>	
JT6020316	12100	Inverter card	
		 <i>Discontinued</i>	
JT6020317	12101	Display	
		 <i>Discontinued</i>	
JT6020324	12102	Radio cable	
		 <i>Discontinued</i>	
JT6021101	12105	Side protection, right	
		 <i>Discontinued</i>	
JT602110302	12109	L-square for antenna	
		 <i>Being phased out</i>	

Table continues on next page



Article #	Order #	Description	
JT6021201	12112	Side protection, left  <i>Being phased out</i>	
JT6021203	12115	Hatch  <i>Being phased out</i>	
JT6021204	12116	Handle  <i>Being phased out</i>	
JT6021205	12117	Spring  <i>Being phased out</i>	
JT6021301	12118	Motherboard  <i>Being phased out</i>	
JT6021305	12122	Bitsy card  <i>Discontinued</i>	
JT60227	12133	Battery	
JT60228	12134	Battery	



Article #	Order #	Description	
JT908	12294	Charger plug	
		 <i>Discontinued</i>	
JT61215	12795	Battery protection	
		 <i>Discontinued</i>	

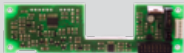


Spare parts for measuring head JT611 and JT631 (Bluetooth)

Article #	Order #	Description	Compatible measuring head		
			JT611	JT631/JT691 A/JT691 B	
JT601010704	12054	Stud Being phased out			
JT601010705	12055	Knob Being phased out			
JT6010202	12062	Battery Discontinued			
JT603	12135	Charger			
JT6111403	12157	Bluetooth cover			
JT6111404	12158	Bluetooth adapter			
JT6111405	12159	Bluetooth module			

Table continues on next page



Article #	Order #	Description	Compatible measuring head	
			JT611	JT631/JT691 A/JT691 B
JT6310202	12290	Battery		 
JT6310203	12291	Charger card		 
JT6010211	14011	Switch  <i>Discontinued</i>		 



Spare parts for handheld measuring unit JT612 (Bluetooth)

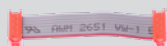
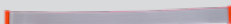
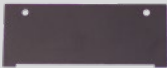
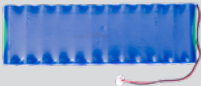
Article #	Order #	Description	
JT6020308	12093	Button, black	
		 Being phased out	
JT6020309	12094	Button, white	
		 Being phased out	
JT6020311	12096	Key card cable	
		 Being phased out	
JT6020313	12097	Inverter cable	
		 Being phased out	
JT6020314	12098	Panel cable	
		 Being phased out	
JT6020316	12100	Inverter card	
		 Discontinued	
JT6020317	12101	Display	
		 Discontinued	

Table continues on next page



Article #	Order #	Description	
JT6021201	12112	Side protection, left  <i>Being phased out</i>	
JT6021203	12115	Hatch  <i>Being phased out</i>	
JT6021204	12116	Handle  <i>Being phased out</i>	
JT6021205	12117	Spring  <i>Being phased out</i>	
JT6021305	12122	Bitsy card  <i>Discontinued</i>	
JT60227	12133	Battery	
JT60228	12134	Battery	
JT6111403	12157	Bluetooth cover	



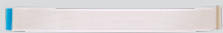
Article #	Order #	Description	
JT6111404	12158	Bluetooth adapter	
JT6120315	12163	Display cable  <i>Being phased out</i>	
JT6121101	12165	Side protection, right  <i>Being phased out</i>	
JT61213	12166	Motherboard  <i>Being phased out</i>	
JT6121405	12168	Bluetooth module	
JT6121404	12169	Bluetooth cable  <i>Being phased out</i>	
JT61301	12176	Charger	
JT61215	12795	Battery protection  <i>Discontinued</i>	

 Table continues on next page

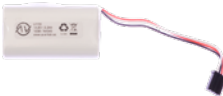
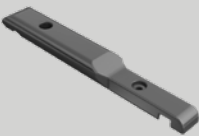


Article #	Order #	Description
JT6121102	13411	Charger plug
		 <i>Being phased out</i>





Spare parts for measuring head JT731 (15888)

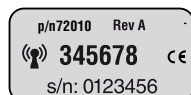
Article #	Order #	Description	
JT603	12135	Charger	
JT6310202	12290	Battery	
Note: when ordering a battery, also order foam tape 16349			
JT73116	16346	Grip	
JT73117	16348	Locking excenter	



Spare parts for Cam-aligner, camera and wireless server (21288)



Make sure to check which generation of camera or wireless server you are ordering spare parts for, since not all components are backwards compatible. This can be seen on the nameplate.



Generation 1: No marking

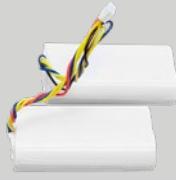
Generation 2: Marked with a **ring** in the top right corner

Generation 3: Marked with a **dot** in the top right corner

Maintenance instructions

Changing battery pack/battery holder	Page 5
Battery discharging/charging	Page 7
Checking battery time	Page 9
Changing camera antenna	Page 10
Changing backplane PCB	Page 11
Changing wireless server antenna	Page 14

Camera spare parts

Article #	Order #	Description	
TC-18368	70120	Support pin (camera)	
TC-250-10	70160	Securing screw (camera)	
TC-382	70165	Battery pack TC2 & Inclinator Gen 2  Do not keep batteries in stock for more than 6 months. The battery life will deteriorate over time if batteries are not charged.	
TC-12272	70472	Antenna (camera)	



Article #	Order #	Description	
CA1010	72010	Camera sensor JOSAM, generation 1  Camera obsolete, repairs are still possible. Please contact global support.	
CA1010A	75640	Camera sensor JOSAM, generation 2  Camera obsolete, repairs are still possible. Please contact global support.	
CA1010B	78453	Camera sensor JOSAM, generation 3	
CA VOLVO	72251	Camera sensor JOSAM, Volvo Group generation 1  Camera obsolete, repairs are still possible. Please contact global support.	
CA VOLVO A	75641	Camera sensor JOSAM, Volvo Group generation 2  Camera obsolete, repairs are still possible. Please contact global support.	
76979	76979	Battery isolation cameras	
TC-11508	70390	Back plane board generation 1 & 2 (cradle charging)	
TC-11509	70391	On/Off back plane sticker	



Article #	Order #	Description	
TC-17025	70936	Back plane board generation 1 & 2 (plug charging)	
76482	76482	Back plane board generation 3	
76850	76850	Battery camera generation 3  Do not keep batteries in stock for more than 6 months. The battery life will deteriorate over time if batteries are not charged.	



Wireless server spare parts

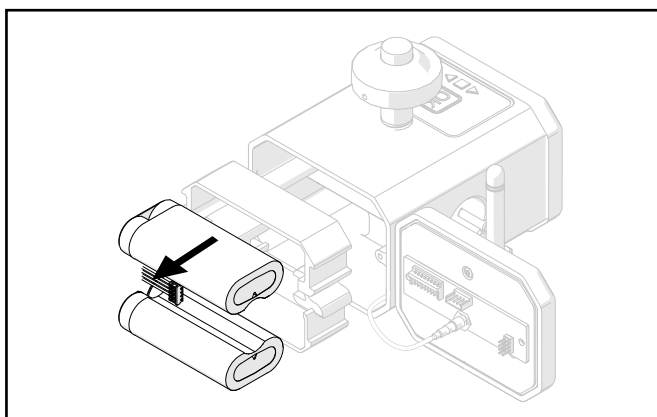
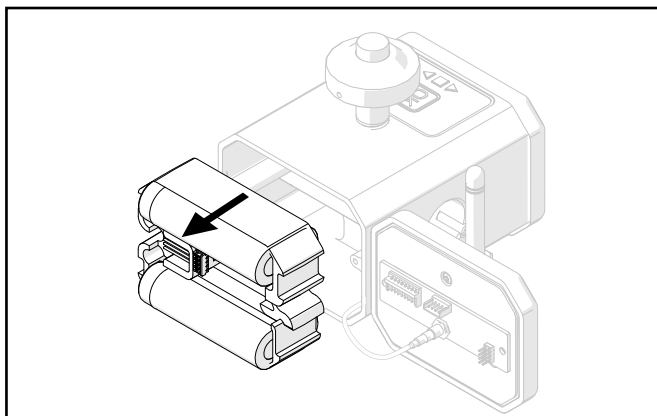
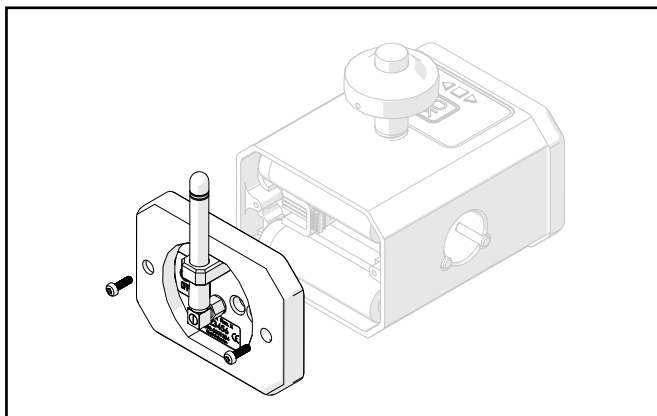
Article #	Order #	Description	
TC-12271	70471	Coaxial cable WIT (server)	
TC-13085	70589	Antenna short (server)	
CA1009	72009	Communication module JOSAM, generation 1  <i>Module obsolete, repairs are still possible. Please contact global support.</i>	
CA1009A	75642	Communication module JOSAM, generation 2-3	
TC-361	70009	USB cable	



Do not touch the circuit board on the back lid!



Electrostatic sensitive device. Observe ESD precautions before handling.



Change of battery pack / battery holder

Required tools:

- Torx 10 screw driver

Step 1

Remove the 2 screws that secure the back lid.

Gently remove the back lid. Disconnect two connectors from the back lid pcb. There is no need of disconnecting the antenna coaxial cable.



Handle the antenna coaxial cable with care.

Step 2

Place the camera house and back lid according to illustration on a flat surface.

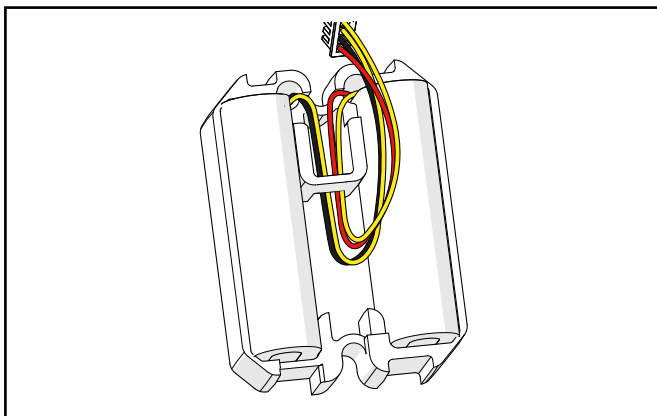
Using no tool, remove the battery assembly from the housing.

Step 3

Using no tool, slide the batteries out from the holder.

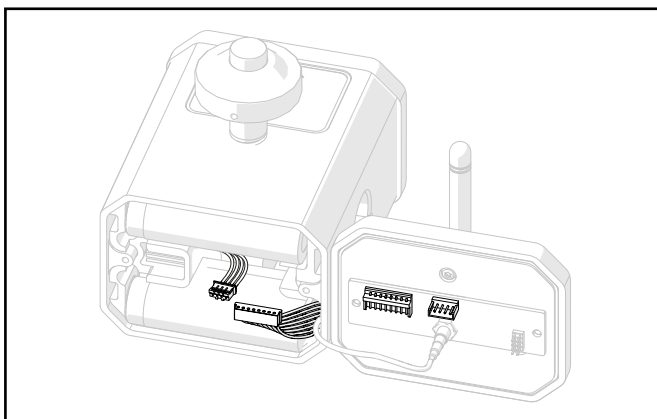
Check the status of the battery pack. If the plastic coating is worn, replace the entire battery pack.





Step 4

Place batteries in the holder. Route the cable according to the illustration.



Step 5

Route the 7-pin cable and coaxial cable on the side of the battery-holder according to the illustration.

Replace the battery holder.

Replace 2 connectors to the back lid PCB.

Replace the back lid to the camera house.



Make sure not to get any cable caught between battery-holder, lid and housing.



Make sure the antenna support screw fits inside the hole in the back lid.

If the screw head sits too high, there might be a washer placed behind it. In such case, remove the washer and refit the screw.



Some camera models require a discharge/recharge procedure to be performed, when the battery pack has been replaced.

This procedure is explained on page 6.





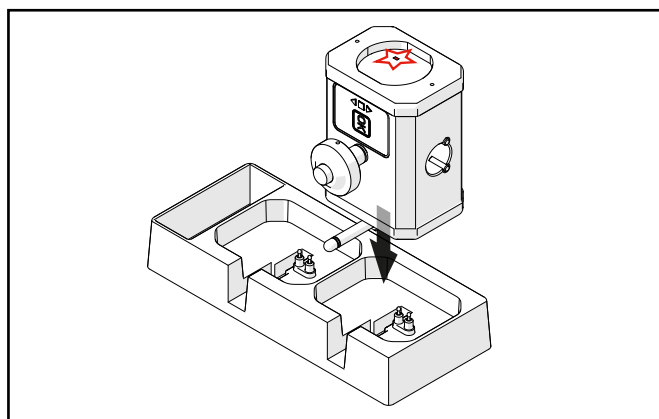
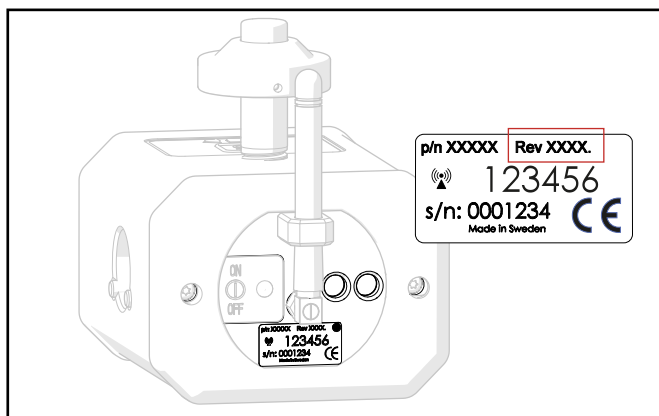
Discharging and recharging the battery pack

When the battery pack has been replaced you will need to perform a discharging/recharging procedure on some camera models.

Note: discharging and recharging is not needed for cameras with firmware 101K and later. See the marking "Rev. xxxx" on the name plate.

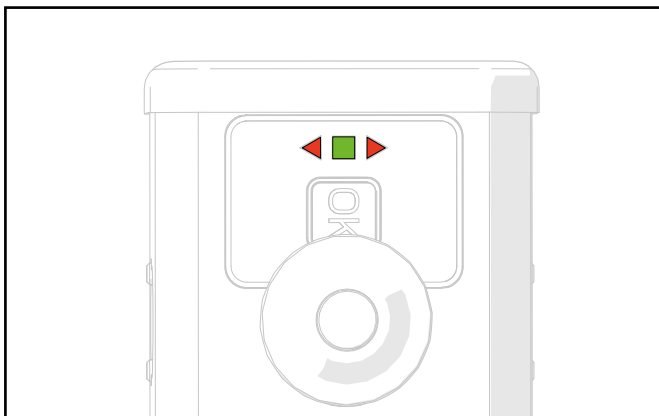
Conditions for discharging/recharging procedure:

- 20-26 degrees ambient temperature during the whole procedure.
- Uninterrupted power supply during to complete process.
- The battery cycling consists of a discharging and a charging phase. The total cycle takes about 20 hours to complete. If power supply trips during the cycle, the complete process needs to be repeated.



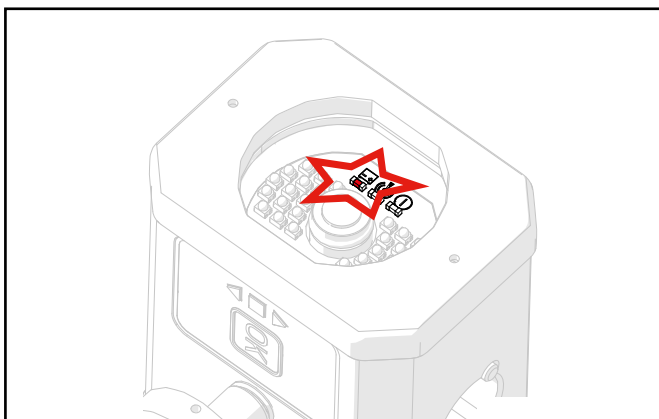
Step 1

Place the camera in the battery charger, or plug the charger into the camera.



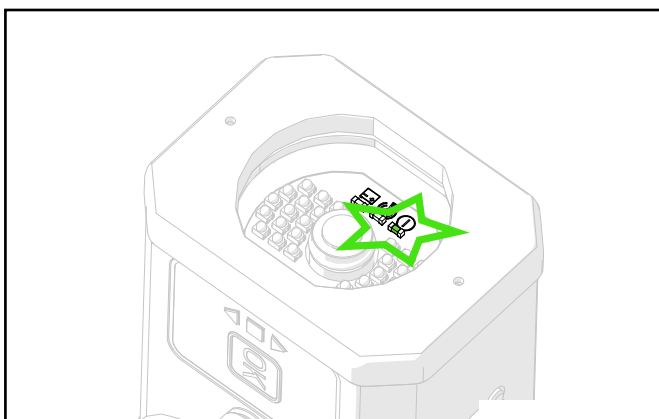
Step 2

Hold the OK button on the opposite side of the locking-knob for 8 seconds until the 3 LEDs on each OK button will start to blink indicating the battery cycling (discharge phase).



Step 3

After the discharging phase the camera starts to charge the battery. The red LED in the front of the camera sensor will illuminate.

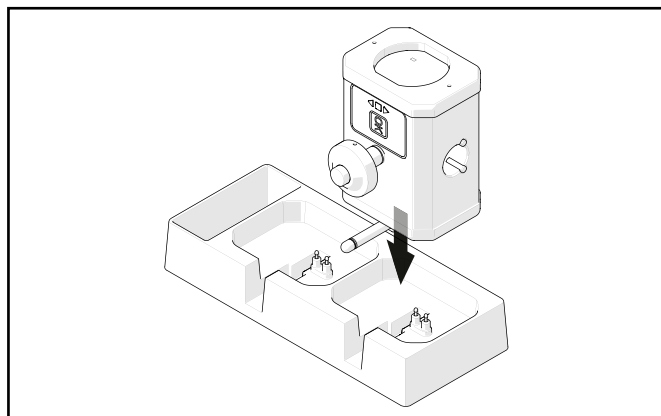


Step 4

When the charging phase is finished the battery capacity is updated. The red LED in the front of the camera sensor will darken and the green LED will illuminate.



Checking battery time



The battery time can be checked when the camera sits in the charger. Hold the OK button (the one on the same side as the knob) for 8 seconds.

The LEDs on the flash board indicates the battery time in hours. The number of blinks corresponds to the approximate battery time in hours; e.g. 13 blinks corresponds to 13 hours.



For cameras with radio module "DNT", you can only check the battery time directly after the battery conditioning has been performed.

If you remove the camera from the charger it will not be possible to check this anymore.



Replacing camera antenna

Required tools:

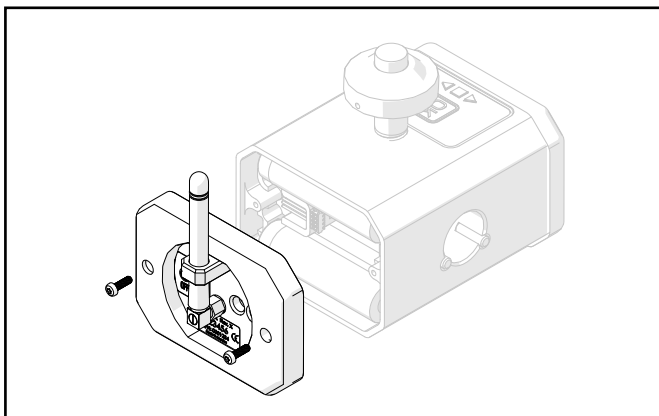
- *Torx 10 screw driver*
- *Two open-ended spanners, size 8*



Electrostatic sensitive device. Observe ESD precautions before handling.

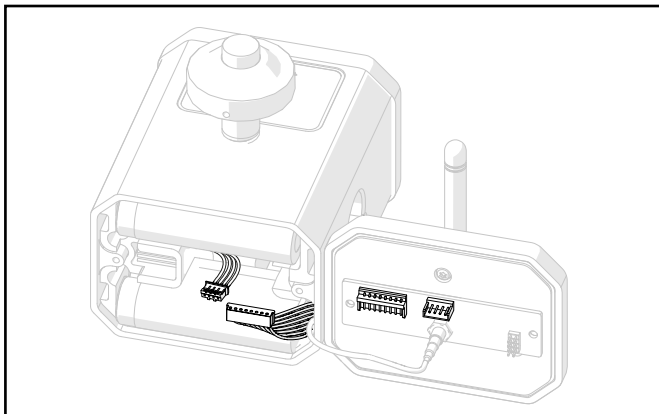
Step 1

Remove the 2 screws that secure the back lid.



Step 2

Disconnect 2 connectors from the back lid.

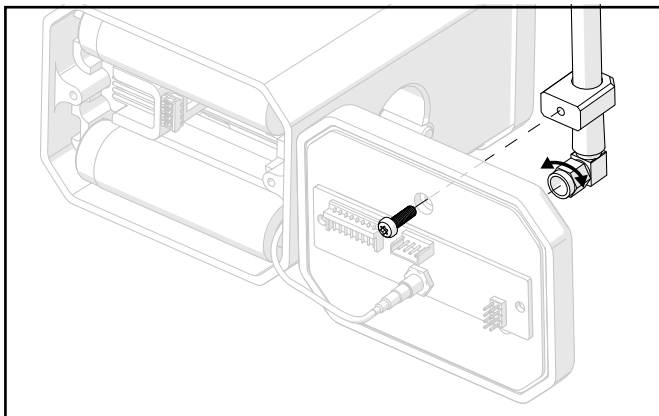


Step 3

Remove the screw that holds the antenna support. Use 2 spanners to gently loosen the antenna. The spanner on the coaxial cable side is only used for support.

Replace the antenna and antenna-support onto the back lid of the camera.

Replace the 2 connectors and the back lid.





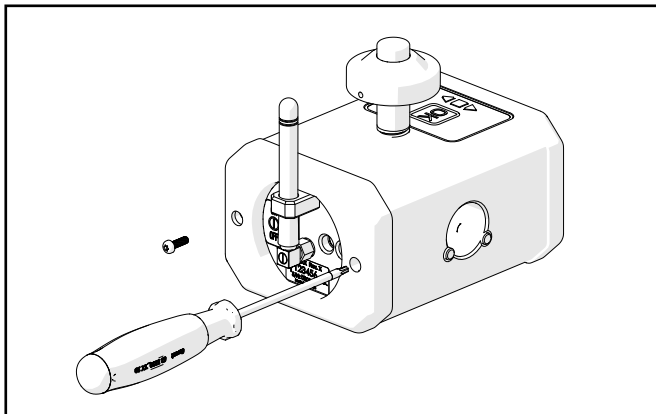
Replacing backplane PCB

Required tools:

- *Torx 10 screw driver*
- *Two open-ended spanners, size 8*

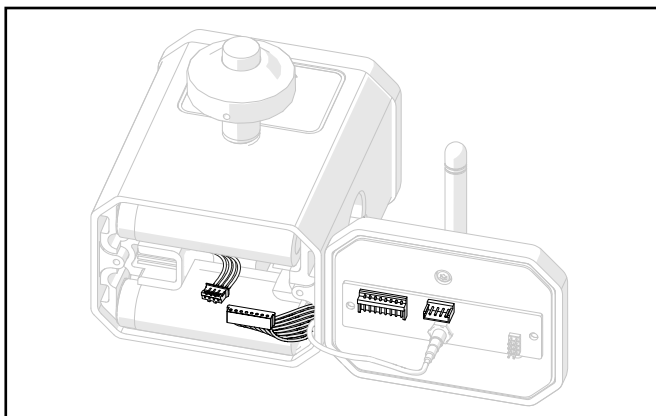


Electrostatic sensitive device. Observe ESD precautions before handling.



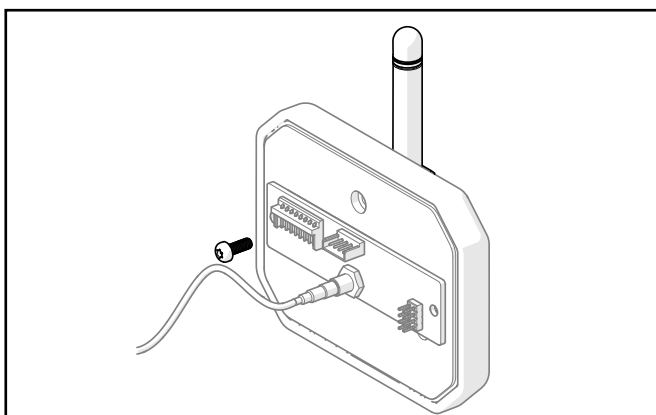
Step 1

Remove the rear cover; the two screws are hidden beneath the rubber case. Use a T10 screwdriver.



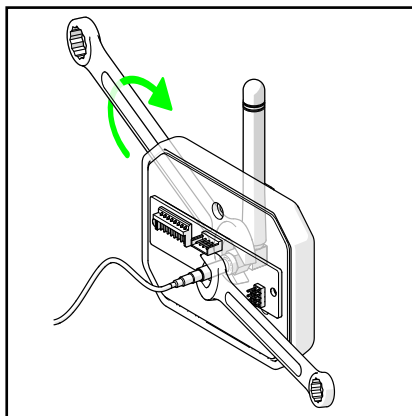
Step 2

Carefully fold out the back cover and remove the two cables from the back cover pcb.



Step 3

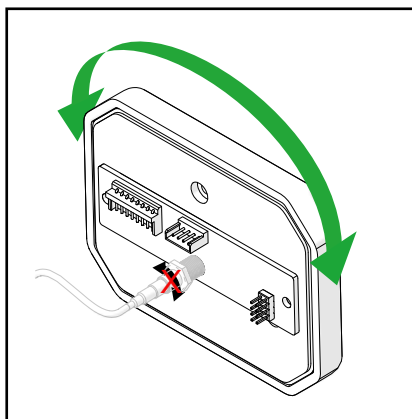
Loosen and remove the screw that holds the antenna holder.



Step 4

Remove the co-axial cable from PCB, and the antenna. Be very careful when loosening the antenna nut, the spanner on the PCB side is only for support.

Make sure not to break the electronic parts while rotating the spanner.



Step 5

Remove the coaxial cable from the back cover by turning the entire back cover.

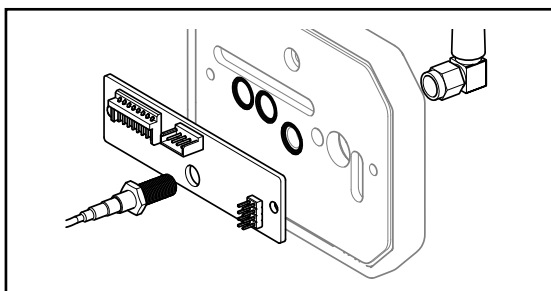
Do not turn the coaxial cable.

Step 6

Inspect for damages; broken wire, loose connection, broken antenna, etc. Replace the part if damaged.



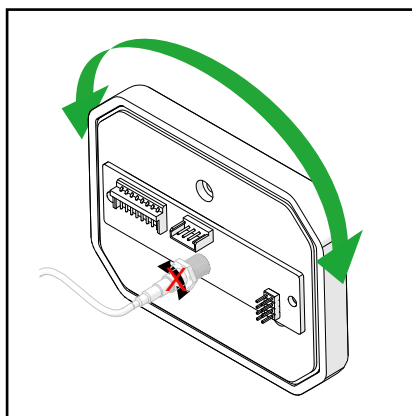
The camera must be sent to JOSAM for repair if the coaxial cable is damaged. Changing the coaxial cable requires a recalibration of the camera CPU.



Step 7

Make sure the three O-rings are still in position (O-ring part number 75694).

Place the PCB so that mating surfaces are centered against each of the O-rings and fit into the slots of the back cover.



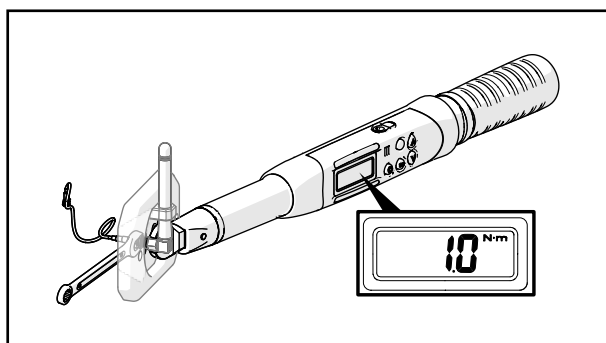
Step 8

Reassemble the co-axial cable to the pcb and back cover by turning the back cover

Do not turn the coaxial cable.

Be very careful.

Make sure not to break the electronic parts while rotating the back cover.



Step 9

Reassemble the antenna and the antenna holder to the back of the back cover and tighten the antenna nut with a torque wrench (Torque 1 Nm).

Use a spanner as support on the PCB side so the coaxial cable does not turn.

Step 10

Tighten the screw to the antenna holder.

Step 11

Reconnect the flat-cable connectors to the PCB.

Step 12

Reassemble the back cover and make sure of that the cables not are pinched between the housing and the back cover.



Replacing server antenna

Required tools:

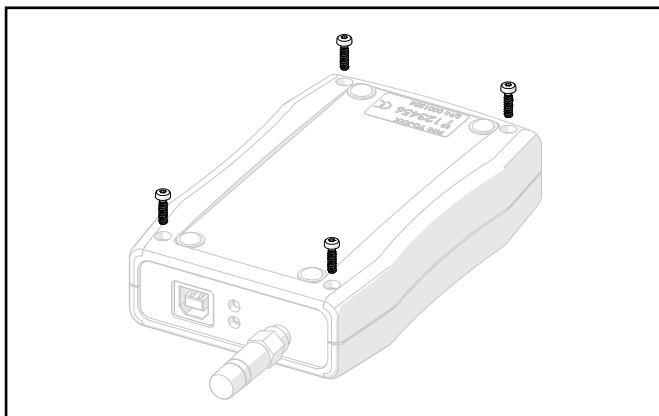
- 2 open ended spanner size 8
- 1 Phillips screw driver #0



Electrostatic sensitive device. Observe ESD precautions before handling.

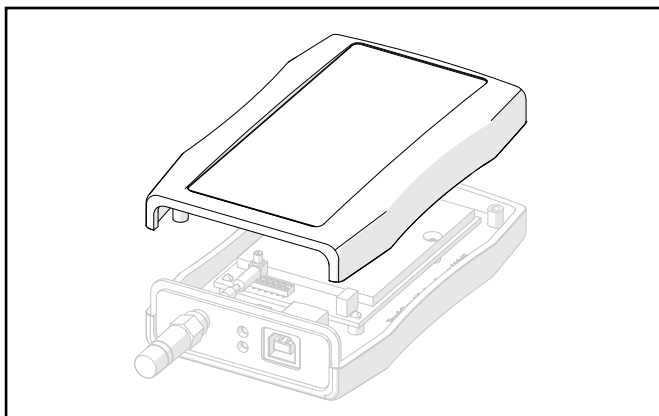
Step 1

Use a Philips screw driver #0 to remove the four screws in the bottom of the server box.



Step 2

Turn the housing around and remove the top lid.



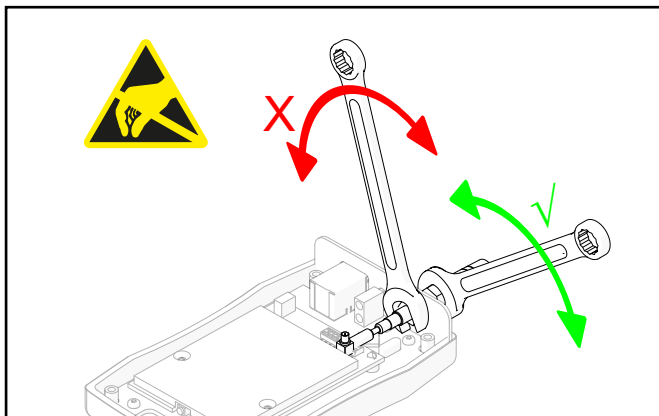
Step 3

In order to not twist the coaxial cable, use a spanner to support the coaxial connector nut on the inside of the server box. Remove the antenna by using the spanner on the antenna side only.

Change the antenna.

Support the coaxial connector. Use a spanner on the antenna side to replace the antenna.

Replace the server box top lid.





Spare parts for Cam-aligner reflective targets (21289)

Article #	Order #	Description	
TC-216-10	70003	Reflective target FL	
TC-216-20	70004	Reflective target FR	
TC-216-30	70005	Reflective target RL	
TC-216-40	70006	Reflective target RR	
TC-233-10	70032	Reflective Target FL	
TC-233-20	70033	Reflective Target FR	
TC-233-30	70034	Reflective Target RL	
TC-233-40	70035	Reflective Target RR	



Article #	Order #	Description	
TC-14011	70055	Marker 100% FL	
TC-14012	70056	Marker 100% FR	
TC-14013	70057	Marker 100% RL	
TC-14014	70058	Marker 100% RR	
TC-14021	71381	Marker 42% FL	
TC-14022	71382	Marker 42% FR	
TC-14023	71383	Marker 42% RL	
TC-14024	71384	Marker 42% RR	



Replacement instruction

Required tools:

- *Cleaning cloths*
- *Guide pins*

a) Inspect all 4 target boards for damages. Replace the part if it is damaged.

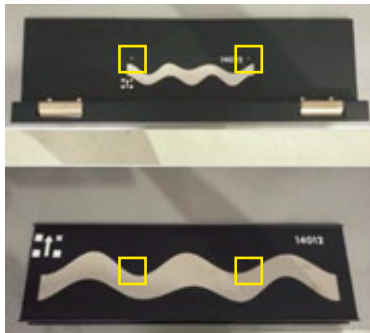
b) Inspect all the target markers (decals); dirt, scratches, damages.

c) Clean the target marker with mild soapy water, to remove any dirt. Wipe the marker dry with a soft cloth

d) If the marker should be replaced. Use guide pins. Remove the old marker and clean the target board surface thoroughly, make sure there are no dirt. Use the 2 holes as reference, use the guide pins and align and paste it on the target board.

Note: If you exchange the small marker, you must also exchange the big one since the guide pins goes into the big marker. (It's possible though to change the big one without having to change the small one.)

Align decal with the holes



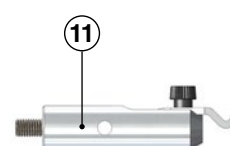
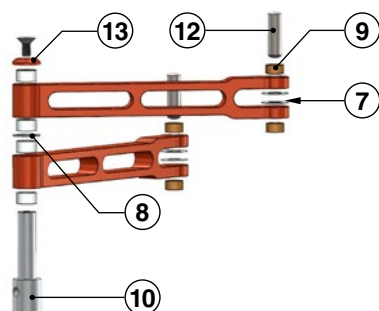
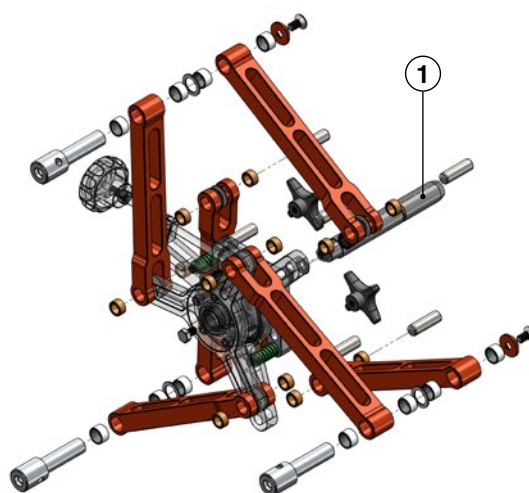
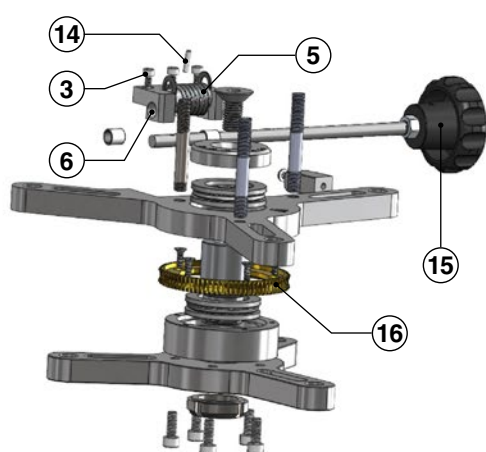
Align decal with the holes

d)



Spare parts for Spider wheel adapter (21291)

#	Article #	Order #	Description
1	TC-12189	70075	Reference axle
2	TC-15905	70107	Gripping hook
3	MC6S-M4x12 fzb	70130	Screw MC6S M4x12
4	TC-13086	70590	Knob for gripping hook spider
5	TC-15807	70755	Worm gear
6	TC-15814	70756	Snail gear bracket Spider
7	TC-16288	70808	Shims 12x24x0,5
8	TC-16289	70809	Shim PS-17x24x1
9	TC-16290	70810	Sliding bushing 12-16x8
10	TC-16296	70812	Short leg Spider
11	TC-16482	70846	Leg for spider with standard hook
12	CP 12x36	71238	Cylindrical pin RF 12x36
13	72002	72002	Washer for Spider
14	74695	74695	FRP A2 3x16 Spring pin stainless
15	74931	74931	Knob complete spider
16	75045	75045	Gear assembly





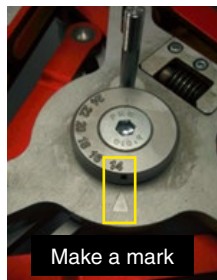
a)



b)



c)



d)

Step 1

Required tools:

- Allen Key 4mm
- Spanner 13mm

a) Remove the long leg and check for damages.

b) Remove the knobs, nut and reference block.

c) Remove spindle assembly.

d) Make a mark where the arrow points, when the spider adapter is in its innermost position.



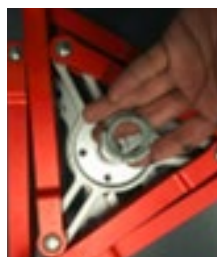
a)



a)



b)



b)



c)



c)

Step 2

Required tools:

- Allen Key 5mm
- No.05 (M25) socket
- Allen Key 8mm
- Screwdriver

a) Release the screws on the rotating hub.

b) Release the nut on the rotating hub; use No.05 (M25) socket.

c) Remove the leg assembly.



a)



a)



b)



c)

Step 3

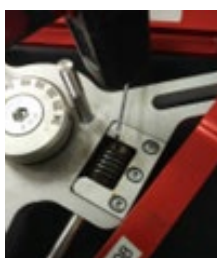
Required tools:

- *Plastic mallet*

a) Lift and separate the frames.

b) Remove the gear assembly.

c) Gently knock on main screw to release the bearings.



a)



a)



b)



c)

Step 4

Required tools:

- *Plastic mallet*
- *Pin Punch 2mm*
- *Allen key 3mm*

a) Remove the locking pin from the snail gear; you can use a 2mm pin punch or Allen key.

b) Pull out the knob assembly and remove the snail gear from the bracket.

c) Remove the snail gear bracket.

d) Inspect all parts for damages from start 1 to 4. Replace the part if it is damaged.

e) Clean and degrease all parts from step 1 to 4.





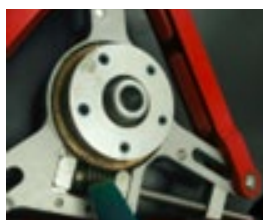
a)



b)



b)



b)



b)



a)



a)



b), c)

Step 5

Required tools:

- Allen Key 3mm

a) Reassemble the snail gear, bracket and knob assembly into to the frame;

b) Reassemble the bearings and main screw

c) Install the gear assembly. Grease the gear assembly and snail gear.

d) Place the 2 frames together; make sure the screw holes are aligned.

Step 6

Required tools:

- Screwdriver
- Allen Key 5mm
- Loctite 2400
- Plastic mallet
- No.05 (M25) socket
- Allen Key 8mm

a) Reassemble all the leg assembly; use Loctite 2400.

b) Gently knock the main screw and ball bearings; make sure they are sitting probably in position.

c) Adjust the main screw; Arrow must be pointing at the mark.

Instruction continues ->



d)



d)



e)



e)

Step 6 (continued)

d) Tighten the main screw. Use Loctite 2400. If the mark is moved, you can still adjust it.

e) Install the screws onto the rotating hub. Use Loctite 2400.



a)



b)



c)



d)

Step 7

Required tools:

- Spanner 13mm
- Allen Key 3mm

a) Reassemble the spindle assembly.

b) Install the knobs, nut and reference block; Use Loctite 2400 for the nut and reference block screws.

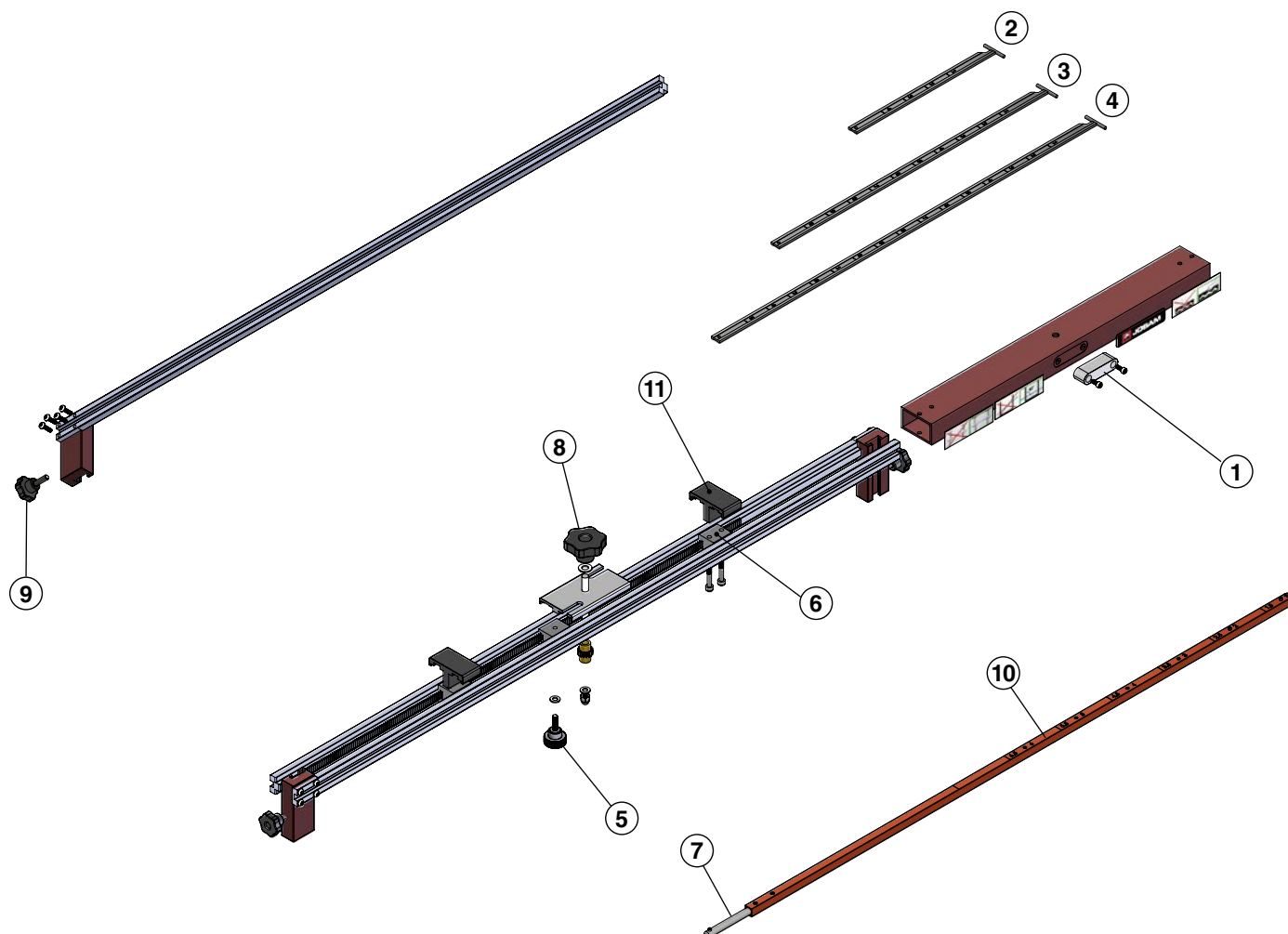
c) Adjust the snail screw bracket. Make sure the contact between the snail screw and gear assembly is good; Apply Loctite 2400 on the screws.

d) Install the long legs.



Spare parts for compact frame gauges (21325)

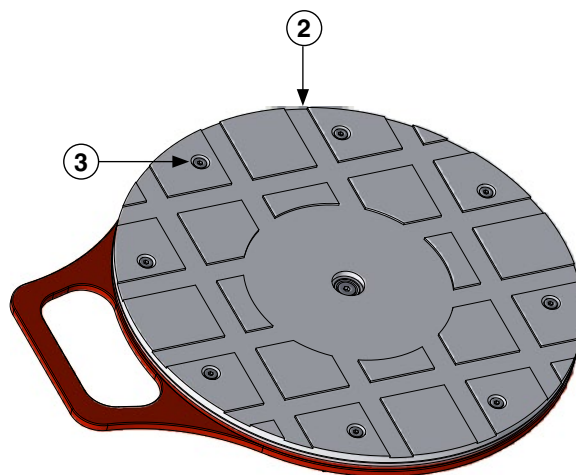
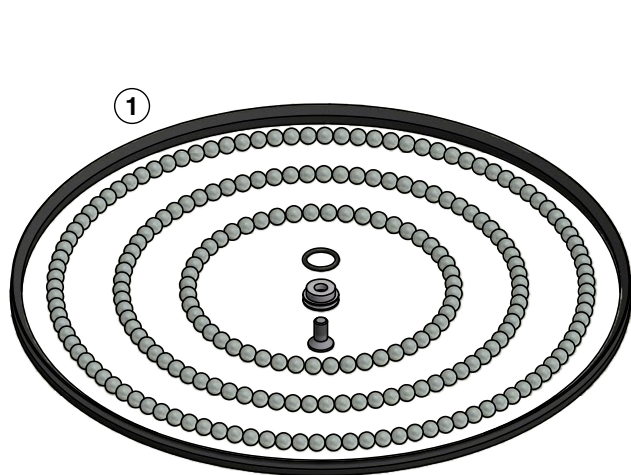
#	Article #	Order #	Description
1	AM353	10546	Bubble
2	JT5-3	12036	Hanger 320mm
3	JT5-6	12040	Hanger 620mm
4	JT5-8	12046	Hanger 870mm
5	TC-10666	70282	Knob M6x20
6	TC-15915	70767	Guide piece for geared ruler - compact
7	TC-16279	70804	Axle for extender
8	TC-WN175 D 80-M8	71473	Knob D80 mm-M8
9	TC-10667	71495	Knob M6x32
10	CA1026	72026	Gauge extension - compact
11	72032	72032	Guide piece for gauge extensions





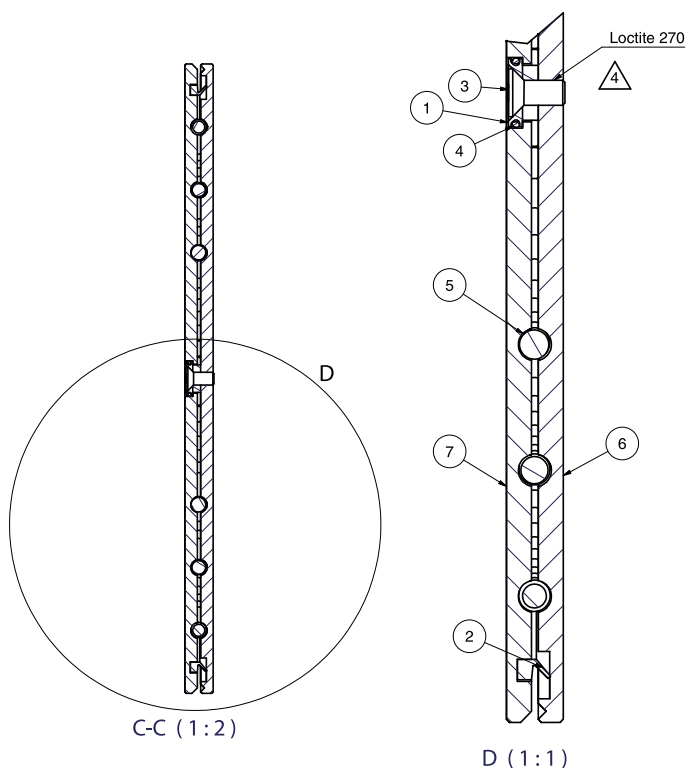
Spare parts for non-friction plates (21448)

#	Article #	Order #	Pcs.	Description
1	AM268A spareparts	15907	1	Spare part kit for AM268A, JT295 A and AM585 A
			225	Ball, 10 mm
			1	O-ring Ø17.3×2.4
			1	Screw MF6S M8×18
			1	V-rail type VL
			1	Seat
2	JT263	11968	1	Slide rail for JT295 A
3	MF6S-6X12	12460	8	Bolt MF6S-6x12 for JT295 A





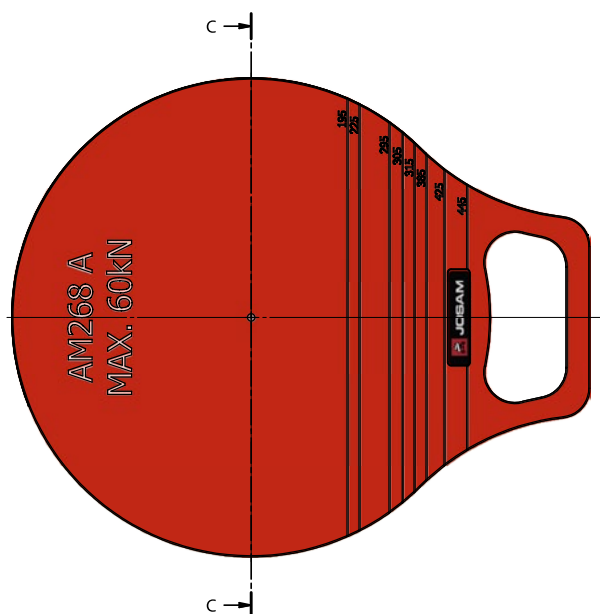
Assembly instruction



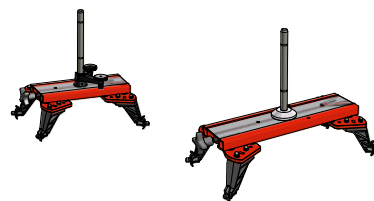
1. Apply grease¹ in rails for balls at lower turn table (item 7).
2. Put balls (item 5) in rails at lower turn table (item 7).
3. Fasten V-rail (item 2) in outer rail at lower turn table (item 7) with glue².
4. Put upper turn table (item 6) on lower turn table (item 7) and fasten seat (item 1) and O-ring (item 4) with screw MF6S - M8x18 fzb (item 3). Use Loctite 270 between screw and upper turn table.

¹ Grease: Q8 Rembrandt EP2 for balls and V-rail, or APS2 for balls and Castrol Rubber Grease for V-rail.

² Glue: Sylmasta Cyanoakrylat CAE120 (medium viscosity) or Loctite 406.



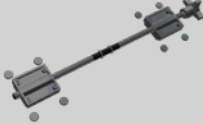
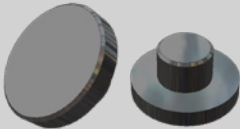
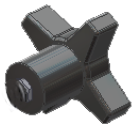
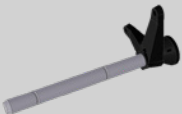
#	Description
1	Seat
2	V-rail type VL
3	Screw MF6S M8x18
4	O-ring Ø17.3x2.4
5	Ball, 10 mm
6	Turn table, upper
7	Turn table, lower



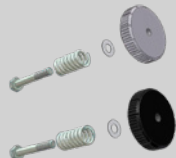
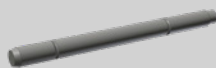
Spare parts for classic wheel adapters (13492)

Article #	Order #	Descriptiown	
AM 425A K	13480	Short gripping hook set	
AM 425A	10567	Short gripping hook	
AM 425 K	13481	Standard gripping hook set	
AM425	10566	Standard gripping hook	
AM 420 K	13561	Locking screw kit	
AM1542	10326	Foot, complete with standard gripping hook	
AM1434	10279	Foot	



Article #	Order #	Descriptiown	
AM1536	10323	Complete base profile for AM10 A, AM10 B, JT140 A and JT636	
AM 404 K	13562	Base profile service kit for AM10 A, AM10 B, JT140 A and JT636	
AM1435	10280	Base plate	
AM 415 K	13614	Slip stud, 50 pcs	
AM424	10565	Knob	
JT493	12022	Complete base profile for AM8 A, AM8 B, JT222 A and JT637	
AM 405 K	13563	Base profile service kit for AM8 A, AM8 B, JT222 A and JT637	
AM511 B	14285	Complete axle for laser AM and truckaligner II, NO knobs	



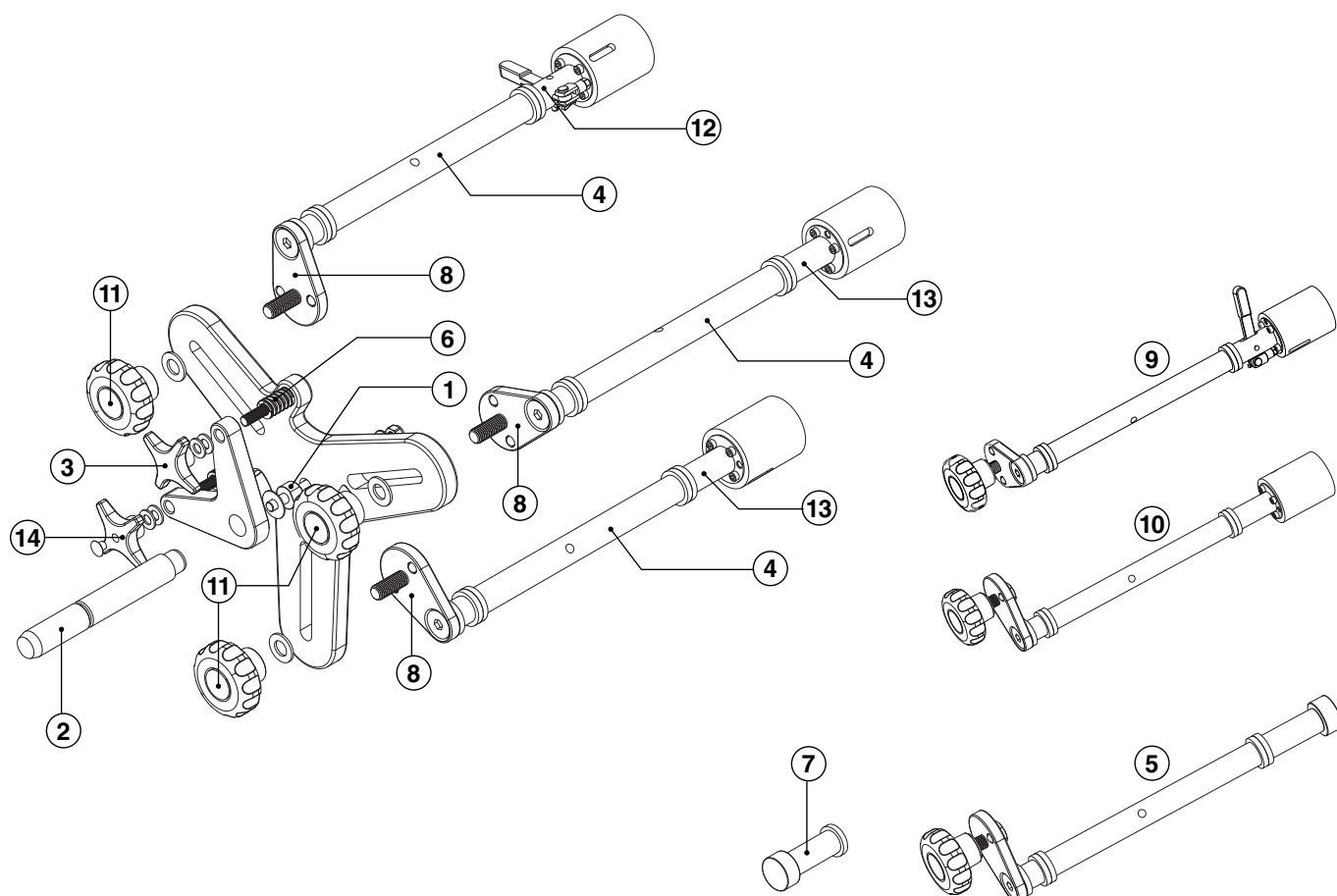
Article #	Order #	Descriptiown	
AM1541 B	14286	Complete axle for laser AM and truckaligner II, WITH knobs	
AM 979 K	13491	Knob kit	
JT63604	13716	Complete axle for truckaligner 180 and i-track	
JT689 A	15397	Steel axle for laser AM, truckaligner II, truckaligner 180 and i-track Note: to ensure measuring accuracy, apply Loctite 638 on shaft and tighten M8 screw and washer to 25 Nm.	
CVA1013	15492	Complete axle for cam-aligner, WITH knobs	
JT74106	16428	Complete axle for I-track II	
CVA1024	15458	Short steel axle for I-track II (15894) and Cam-aligner (15492) Note: to ensure measuring accuracy, apply Loctite 638 on shaft and tighten M8 screw and washer to 25 Nm.	

Note: always use the same type of axles on all wheel adapters. Combining different axle types can affect measurement readings. This is especially important for all I-track systems.



Spare parts for magnetic wheel adapter CA1006/TC-142 (21398)

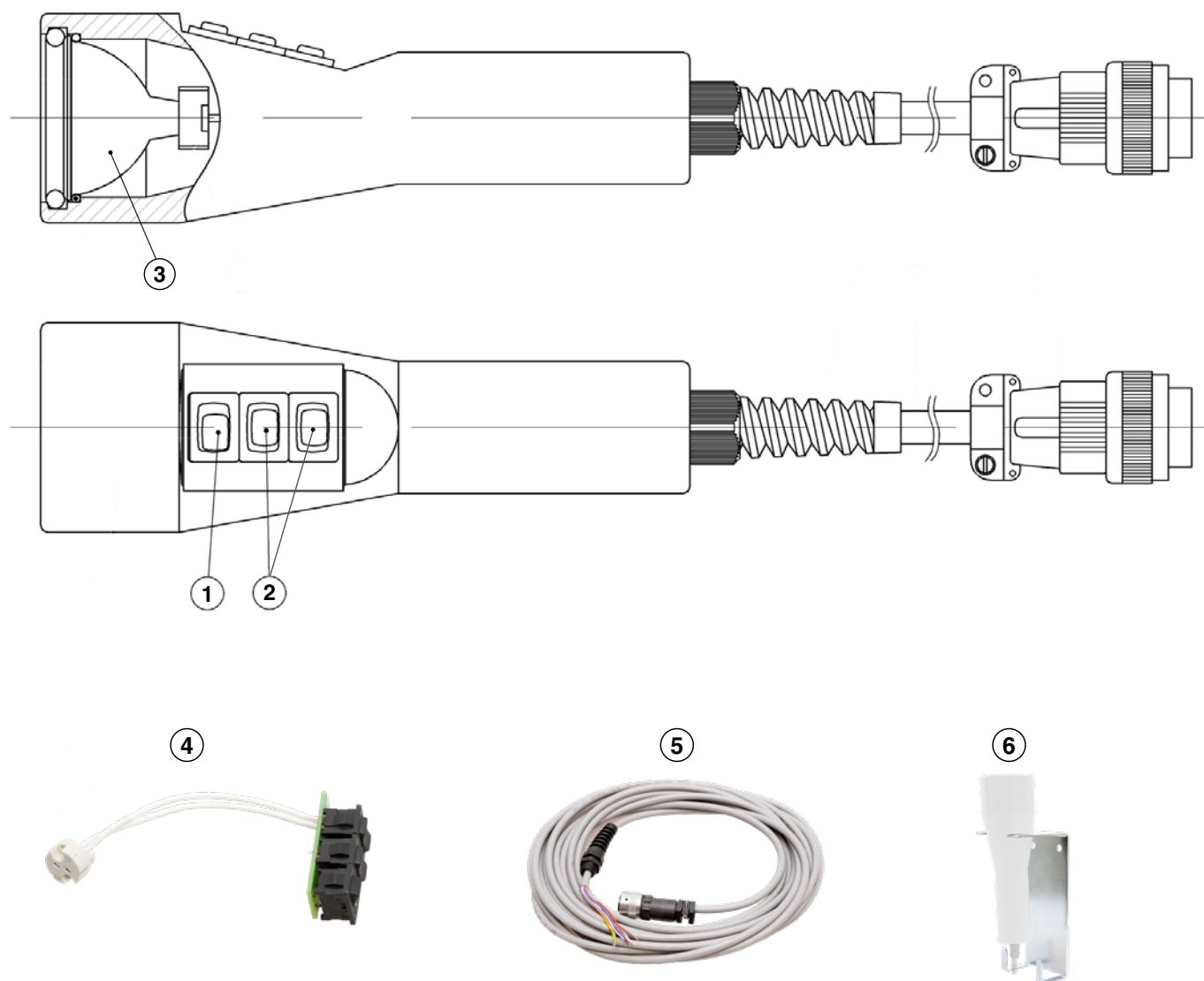
#	Article #	Order #	Description
1	AM426	10568	Disc spring 23x8.2x0.9
2	TC-12189	70075	Reference axle
3	TC-10357	70234	Knob (black)
4	TC-15761	70747	Extension leg CA1006
5	TC-16121	70789	Magnet leg complete för CA1006 (flat)
6	TC-5109	71202	Spring
7	TC-16118	71550	Flat magnet foot för CA1006
8	72021	72021	Joint plate for magnet leg (Note: includes knob 74623 and washer)
9	72058	72058	Magnet leg with release
10	72059	72059	Magnet leg without release
11	74623	74623	Knob M12 - CA1006/TC-142
12	76414	76414	Magnet bracket assembly with release
13	76415	76415	Magnet bracket assembly
14	TC-15594	78969	Knob (white)





Spare parts for remote control AM905

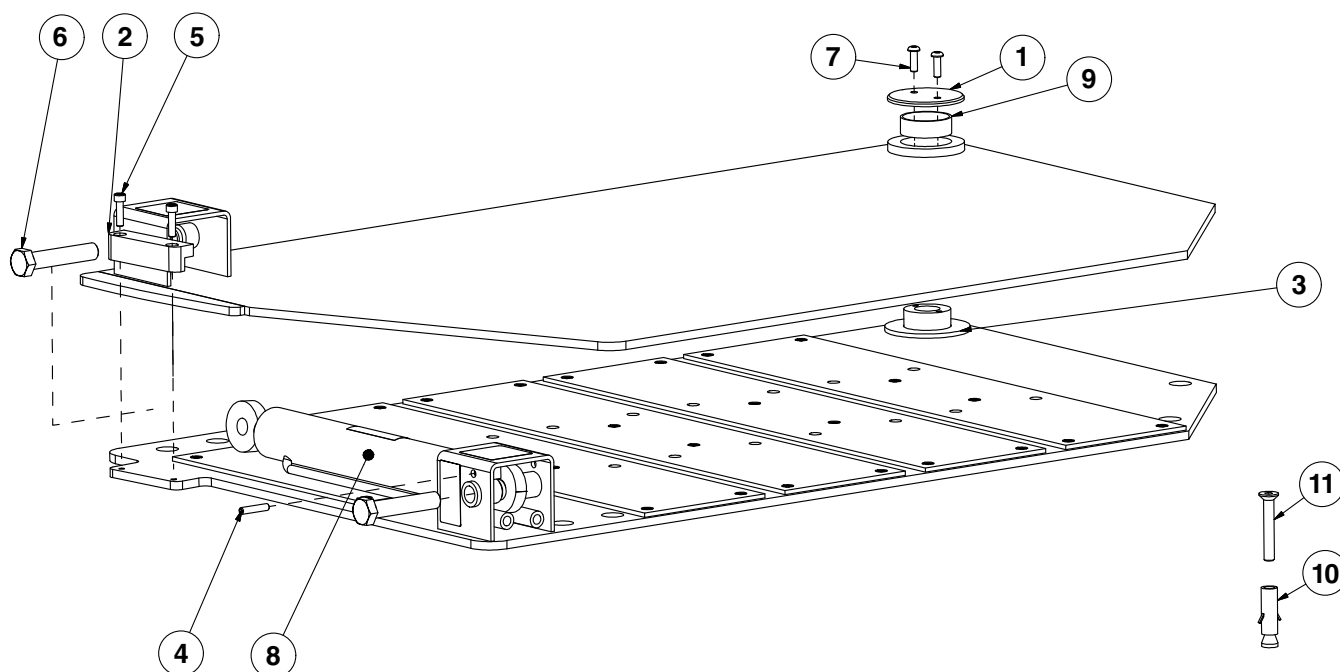
#	Article #	Order #	Qty.	Description
1	AM921	10669	1	ON/OFF switch
2	AM906	10664	1	Control switch
3	AM924-12	10672	1	Halogen lamp
4	-	15994	1	Button board, complete
5	-	15993	1	Cable for AM905, complete
6	AM1759	10418	1	Bracket for remote control AM905





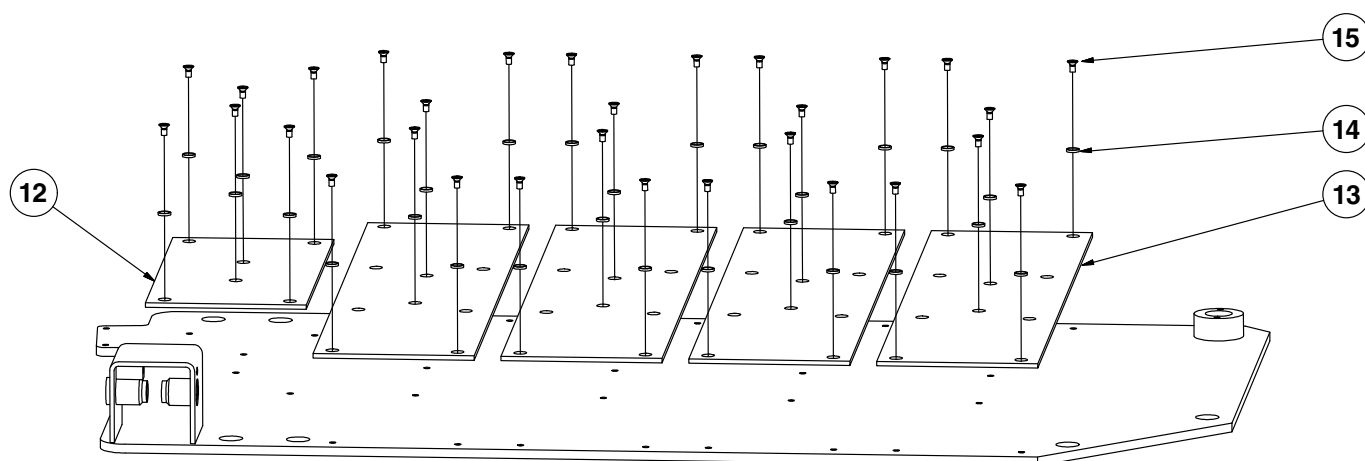
Spare parts for play detectors AM800-1 & AM800-2

#	Article #	Order #	Qty.	Description
1	AM877	10653	1	Cover
2	AM1767	10425	1	Grip
3	AM1654	10382	1	Plastic washer
4	MP6SS - M8 x 40 - ob.	12498	1	Set screw MP6SS - M8 x 40 - ob.
5	MC6S - M8 x 30 - fzb.	12441	1	Screw MC6S - M8 x 30 - fzb. (2 pcs. per play detector)
6	M6S - M20 x 100 - fzb.	12376	1	Screw M6S - M20 x 100 - fzb.
7	MK6S - M8x16 - fzb.	13186	1	Screw MK6S - M8x16 - fzb. (2 pcs. per play detector)
8	AM886	10658	1	Cylinder
9	PM5520 DX	12523	1	Bushing
10	Sleeve Anchor HAM M12	-	1	Sleeve anchor (4 pcs. per play detector)
11	MF6S - M12 x 80 - fzb.	-	1	Screw MF6S - M12 x 80 - fzb. (4 pcs. per play detector)





#	Article #	Order #	Qty.	Description
12	AM1770	10429	1	Friction plate (1 pc. per play detector)
13	AM1649	10377	1	Friction plate (4 pcs. per play detector)
14	AM1656	10383	1	Washer (30 pcs. per play detector)
15	MFX - 6x12 A4	12470	1	Screw MFX - M6x12 A4 (30 pcs. per play detector)
16	AM1049	10186	1	Repair kit for cylinder AM886

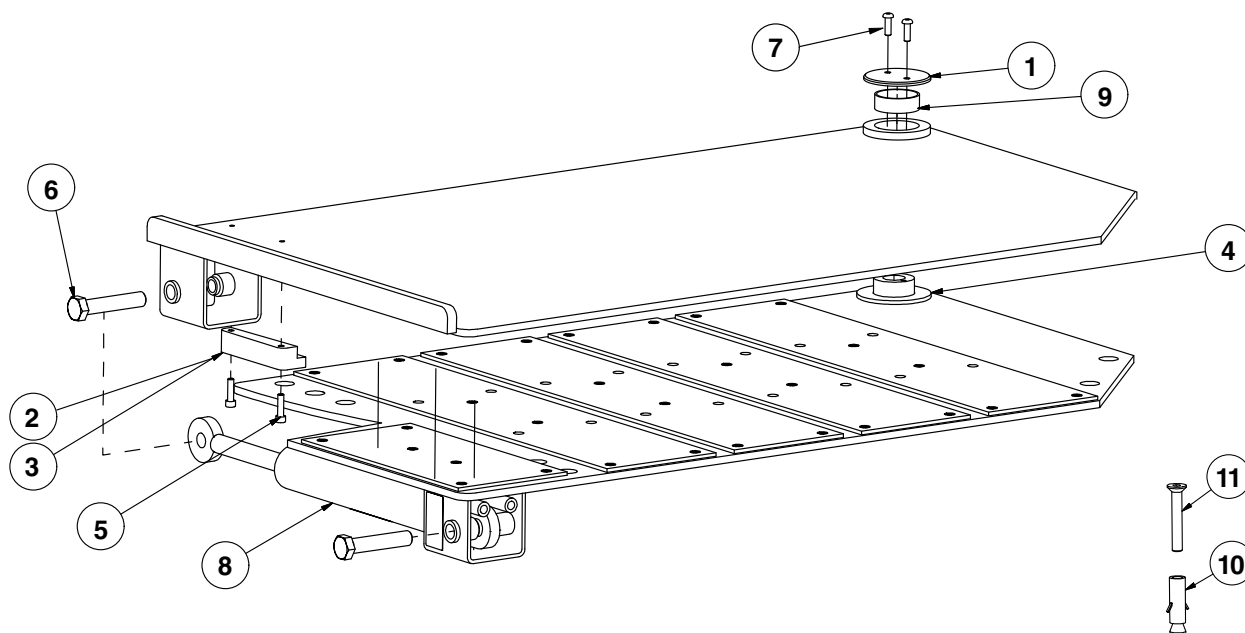


Note: it is recommended to replace all five friction plates AM1770 & AM1649 instead of replacing single plates.



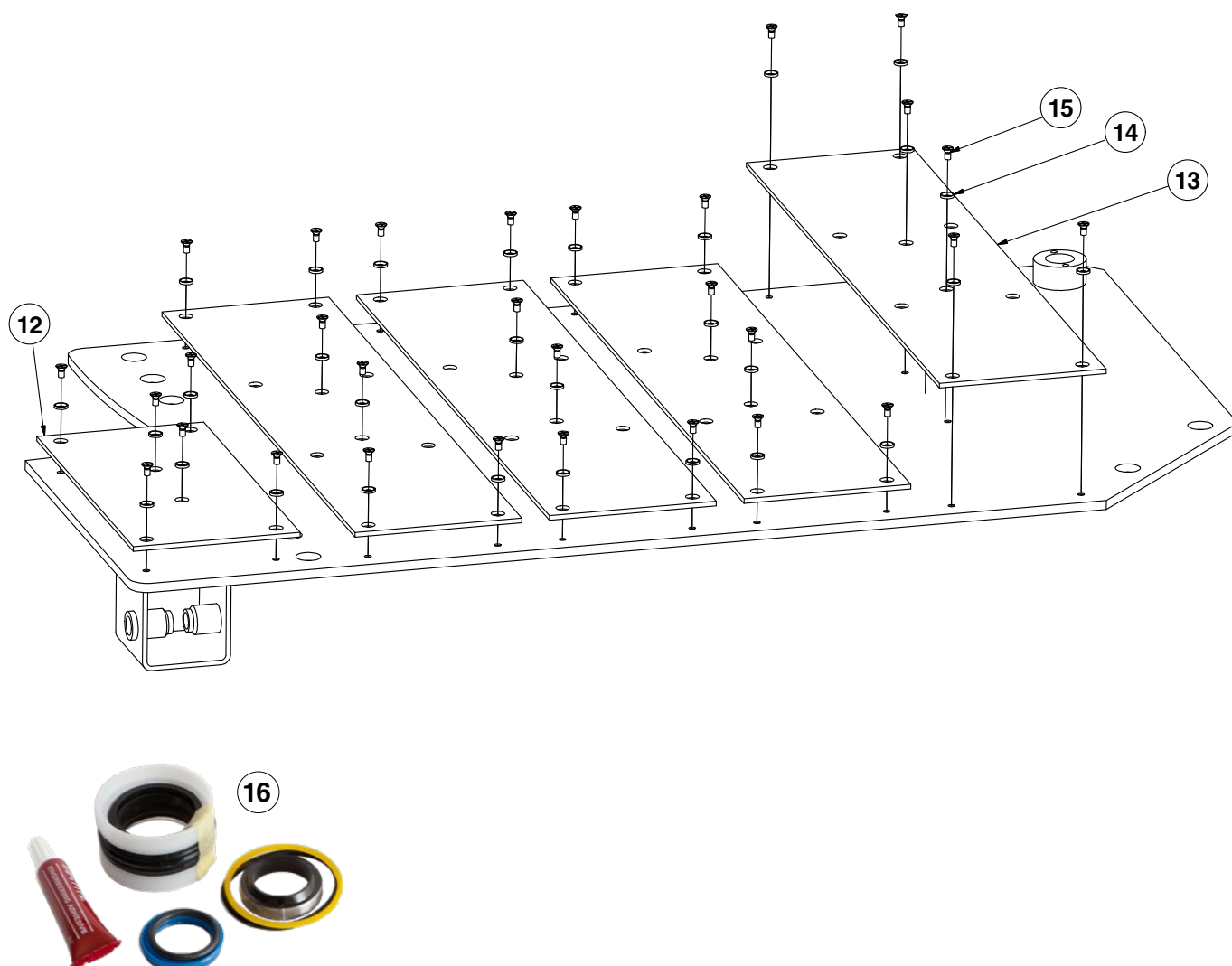
Spare parts for play detectors AM900-1 & AM900-2

#	Article #	Order #	Qty.	Description
1	AM877	10653	1	Cover
2	AM1768-1	10426	1	Grip, right plate
3	AM1768-2	10427	1	Grip, left plate
4	AM1654	10382	1	Plastic washer
5	MC6S - M8 x 30 - fzb.	12441	1	Screw MC6S - M8 x 30 - fzb. (2 pcs. per play detector)
6	M6S - M20 x 100 - fzb.	12376	1	Screw M6S - M20 x 100 - fzb.
7	MK6S - M8x20 - 10.9	12300	1	Screw MK6S - M8x20- 10.9 (2 pcs. per play detector)
8	AM886	10658	1	Cylinder
9	PM5520 DX	12523	1	Bushing
10	Sleeve Anchor HAM M12	-	1	Sleeve anchor (4 pcs. per play detector)
11	MF6S - M12 x 80 - fzb.	-	1	Screw MF6S - M12 x 80 - fzb. (4 pcs. per play detector)





#	Article #	Order #	Qty.	Description
12	AM1770	10429	1	Friction plate (1 pc. per play detector)
13	AM1649	10377	1	Friction plate (4 pcs. per play detector)
14	AM1656	10383	1	Washer (30 pcs. per play detector)
15	MFX - 6x12 A4	12470	1	Screw MFX - M6x12 A4 (30 pcs. per play detector)
16	AM1049	10186	1	Repair kit for cylinder AM886



Note: it is recommended to replace all five friction plates AM1770 & AM1649 instead of replacing single plates.

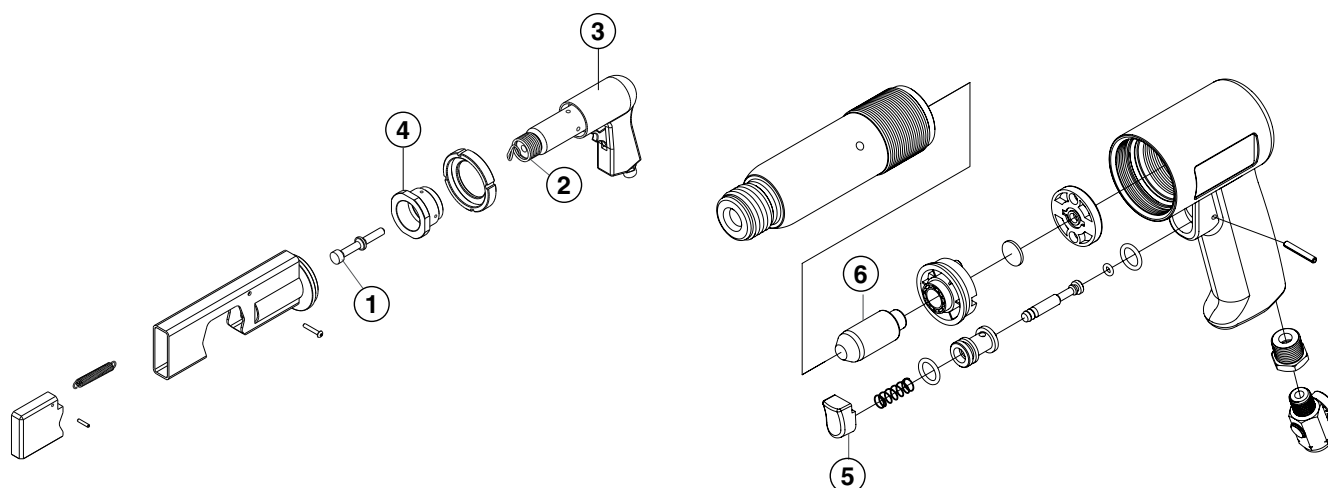


Spare parts for air impact hammer and tie-rod hand tool (21285)

Spare parts for tie-rod hand tool 2MB-KEY/15071



Article #	Order #	Description
16352	16352	Screw for tie-rod hand tool 2MB-KEY



Spare parts for air impact hammer BAT-TRUCK/15072 and BAT-TRUCK EVO/21229

#	Article #	Order #	Description
1	PNE-9/13	16350	Knocker



2	BAT-03	16351	Retainer spring
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Spare parts for air impact hammer BAT-TRUCK EVO/21229

#	Article #	Order #	Description	
3	BAT-EVO	21428	Impact hammer, EVO  To replace air hammer in BAT-TRUCK/15072, purchase this item together with screw flange 21429.	
4	BAT-EVO-10	21429	Screw flange, EVO	

Spare parts for air impact hammer BAT-TRUCK/15072

#	Article #	Order #	Description	
5	PNE-R41221-07	21249	Throttle button  Being phased out	
—	PNE-41221-10	21250	Lid valve  Discontinued	
—	PNE-41221-11	21251	Disc valve  Discontinued	



#	Article #	Order #	Description
—	PNE-41221-12	21252	Case valve  <i>Discontinued</i>
			
6	PNE-41221-13	21253	Piston  <i>Being phased out</i>
			
—	PNE-017	21254	Regulator kit  <i>Discontinued</i>
			