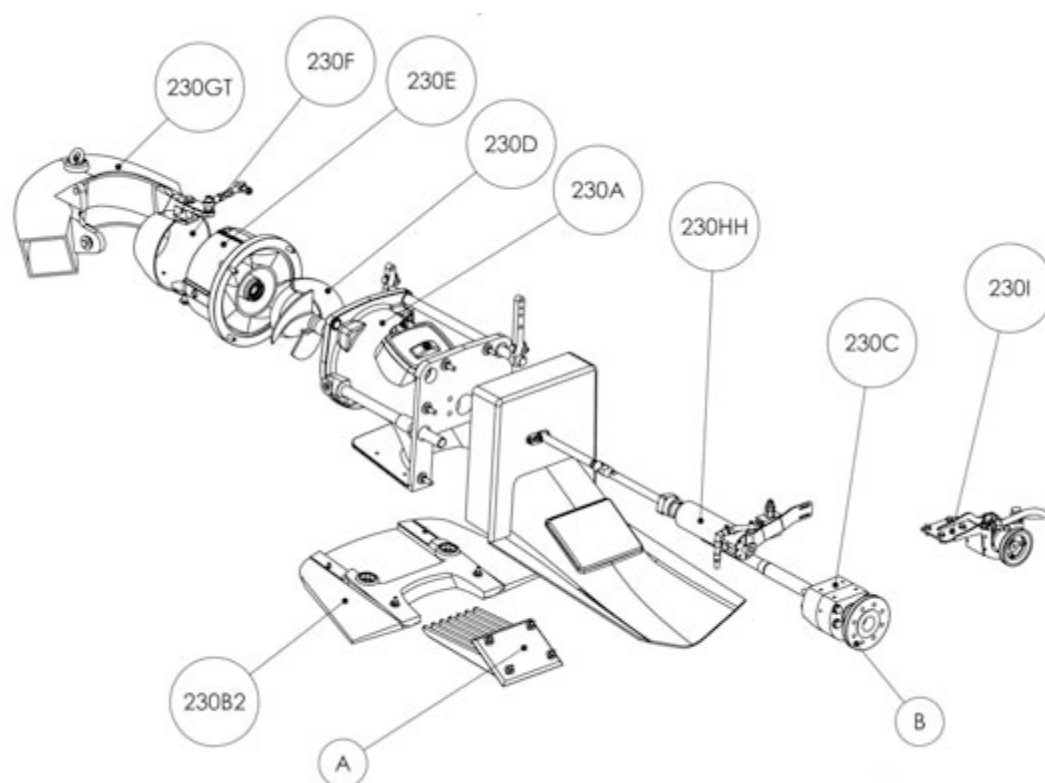


1. Main structure

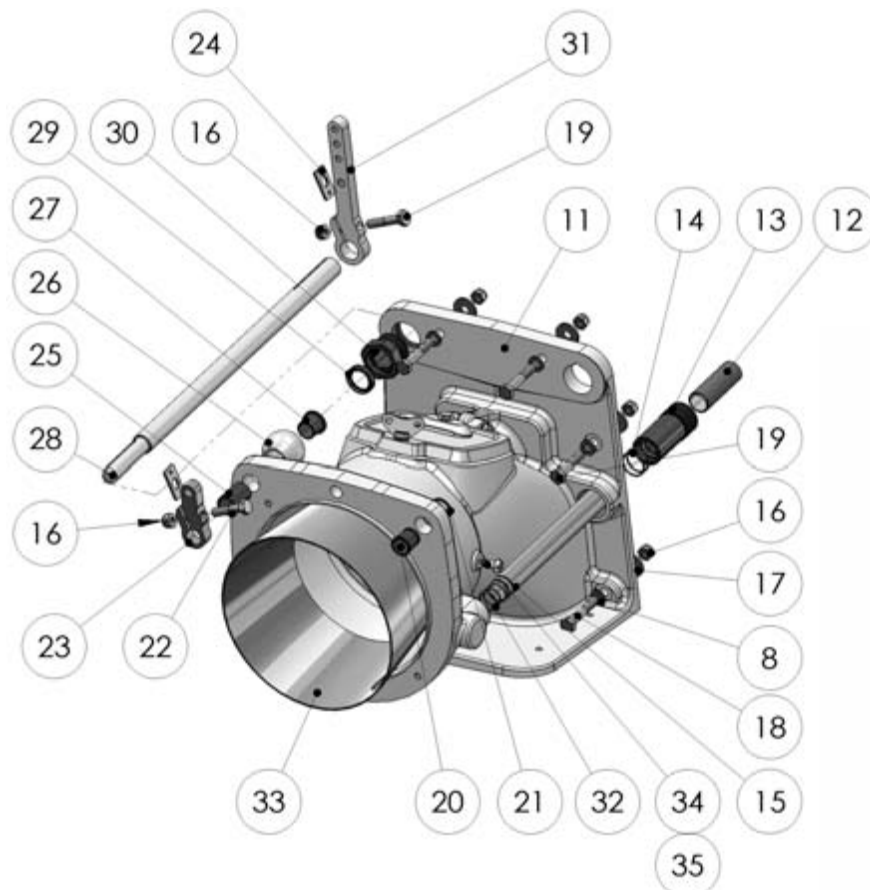
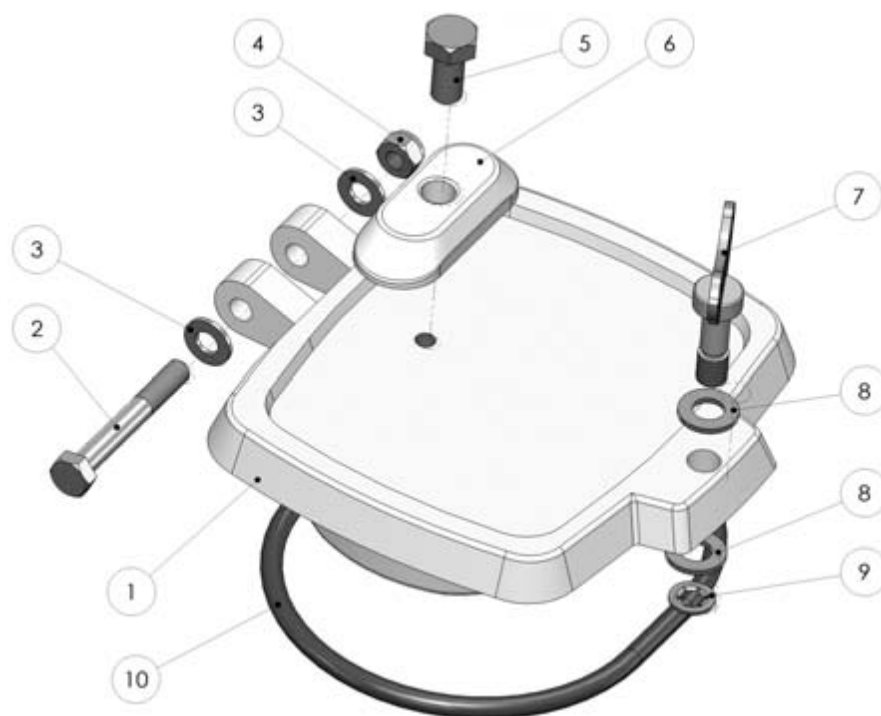


230A	Frame	230F	Steering nozzle
230C	Bearing and main shaft	230GT	Reversing deflector*
230D	Impeller	230HH	Actuating cylinder
230E	Stator	230I	Hydraulic pump
230B	Cavitation Plate	A	Grass rake
B	Coupling flange		

* The figure shows a tube-type reversing deflector. In the AJ 230, a round-type reversing deflector can also be used.

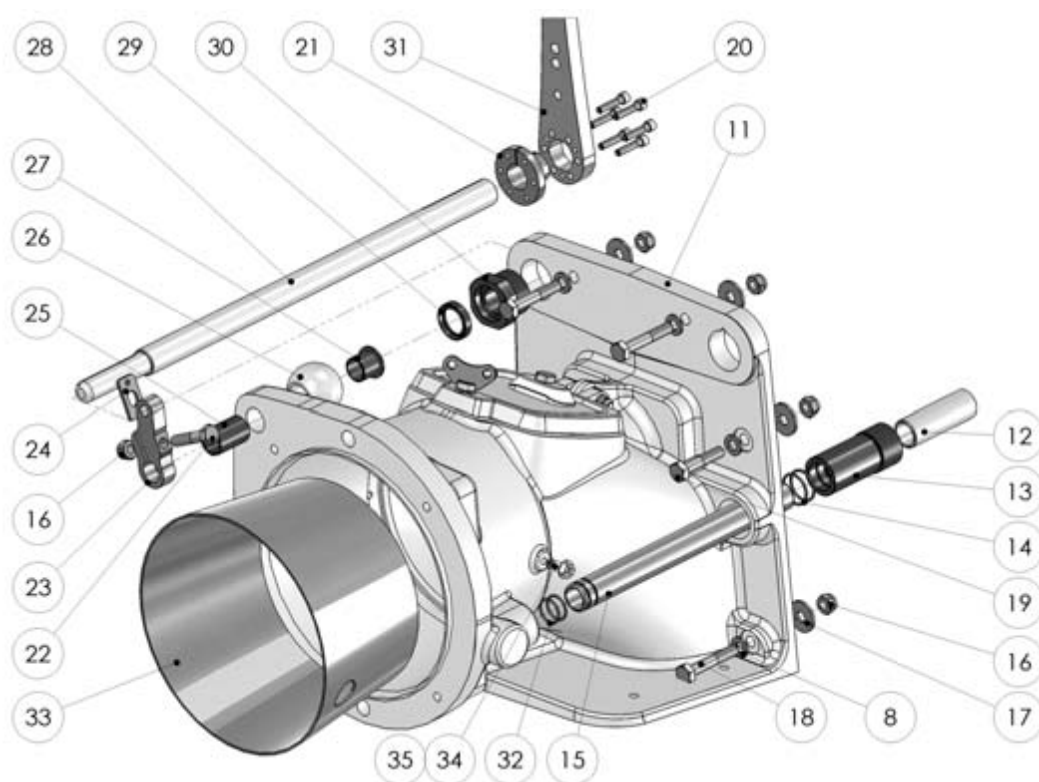
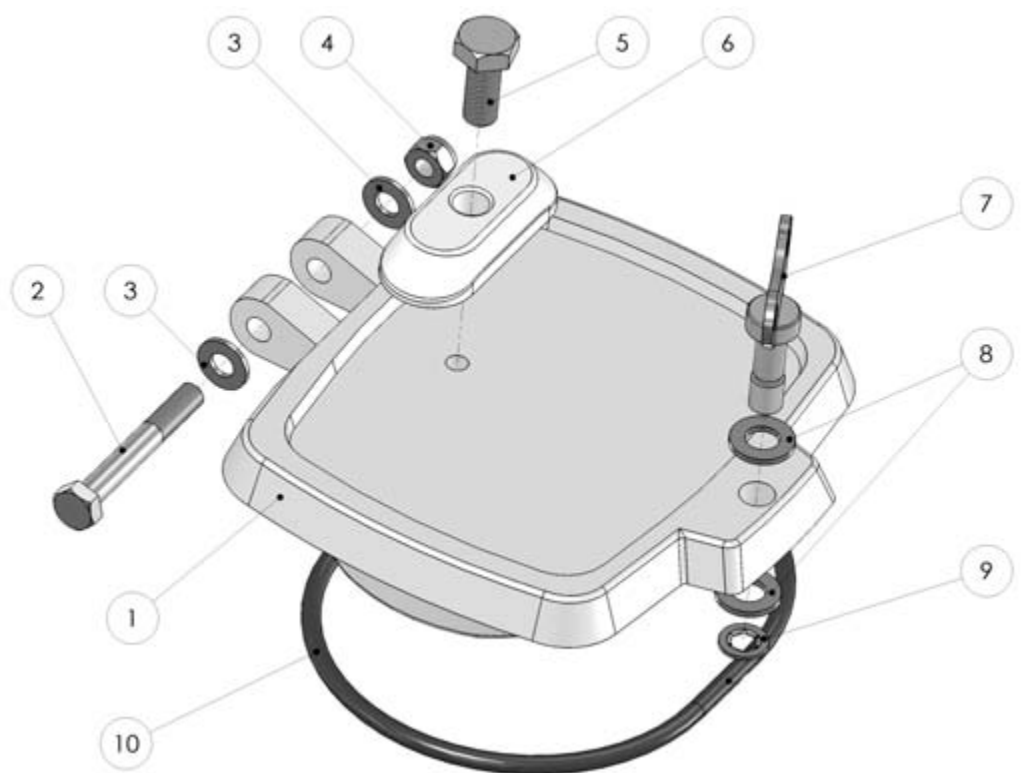
2. 230A Frame

2.1. 230A13



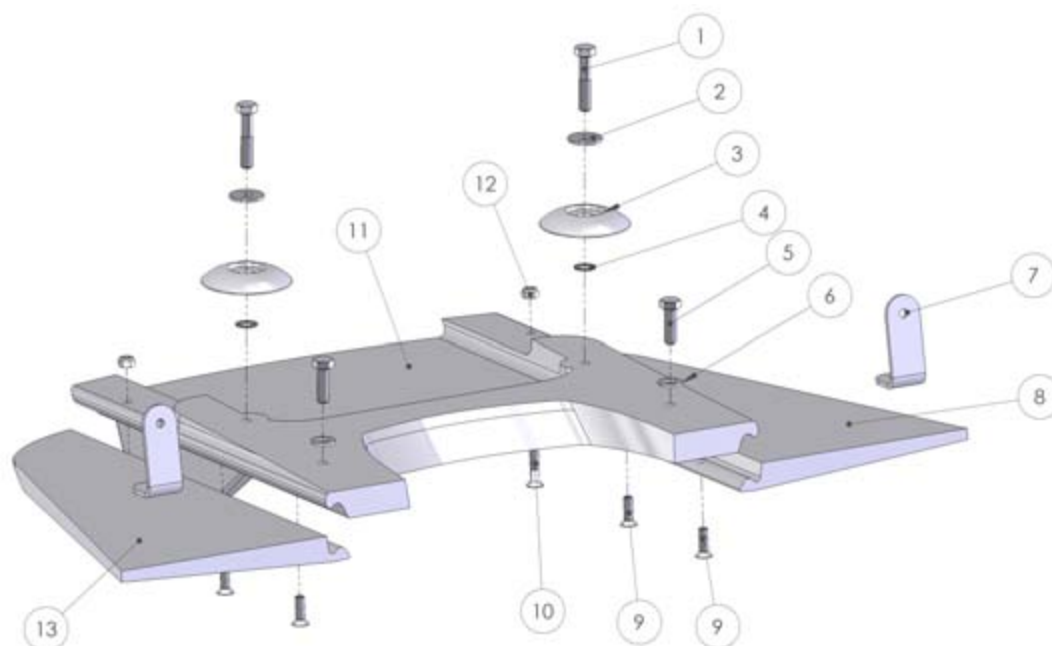
Pos.	Description	Code	Pcs
1	Inspection hatch	10051	1
2	Hex screw M8	R04080602-1	1
3	Washer M8	R10080002	2
4	Locking nut M8	R31080002	1
5	Hex screw M10	R04100202	1
6	Anode	10053	1
7	Wing screw	10089	1
8	Washer M10	R10100002	8
9	Locking plate	L0403	1
10	Inspection hatch seal	T0000122	1
11	Frame	11200	1
12	Raw water fitting	10095	1
13	Bushing	10033	1
14	O-ring	T0000027	2
15	Raw water pipe	10757	1
16	Locking nut M10	R31100002	8
17	LOD washer M10	R11100002	6
18	Hex screw M10	R04100602	4
19	Hex screw M10	R04100502	3
20	Bushing	10090	1
21	Retaining ring	L0404	1
22	Hex screw M10	R04100452	1
23	Lever	10021	1
24	Key	10022	2
25	Sleeve	10034	1
26	Anode	K0537	1
27	Compound bearing	H0403	1
28	Steering shaft	10014	1
29	Shaft seal	T9900020	1
30	Bushing	10023	1
31	Steering lever	10019	1
32	O-ring	T0000022	2
33	Cone	10725	1
34	Plastic plug	11038	2
35	O-ring	T0000008	2

2.2. 2230A13B



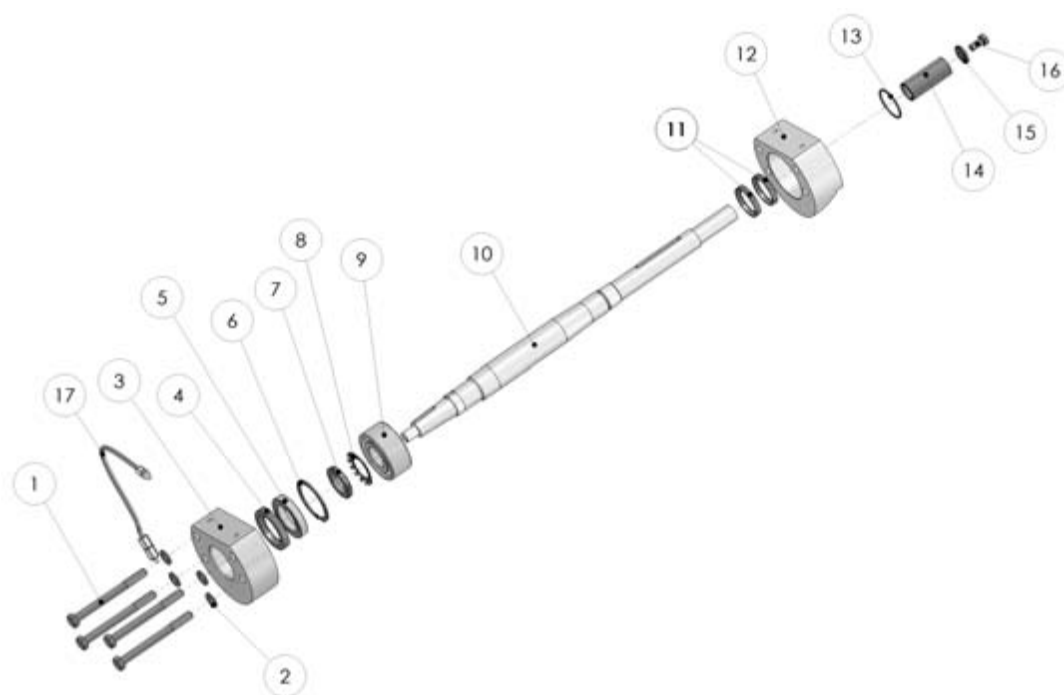
Pos.	Description	Code	Pcs
1	Inspection hatch	10051	1
2	Hex screw M8	R04080602-1	1
3	Washer M8	R10080002	2
4	Locking nut M8	R31080002	1
5	Hex screw M10	R04100252	1
6	Anode	10053	1
7	Wing screw	10089	1
8	Washer M10	R10100002	8
9	Locking plate	L0403	1
10	Inspection hatch seal ring	T0000120	1
11	Frame	11237	1
12	Raw water fitting	10095	1
13	Bushing	10033	1
14	O-ring	T0000027	2
15	Raw water pipe	10757	1
16	Locking nut M10	R31100002	7
17	LOD washer M10	R11100002	6
18	Hex screw M10	R04100602	4
19	Hex screw M10	R04100502	2
20	Hex socket screw M6	R01060302	6
21	Cone sleeve inner ring	10499	1
22	Hex screw M10	R04100452	1
23	Lever	10021	1
24	Key	10022	1
25	Sleeve	10034	1
26	Anode	K0537	1
27	Compound bearing	H0403	1
28	Steering shaft	10014	1
29	Shaft seal	T9900020	1
30	Bushing	10023	1
31	Control lever	10498	1
32	O-ring	T0000022	2
33	Cone	10725	1
34	Plastic plug	11038	2
35	O-ring	T0000008	2

3. 230B2 Cavitation plate



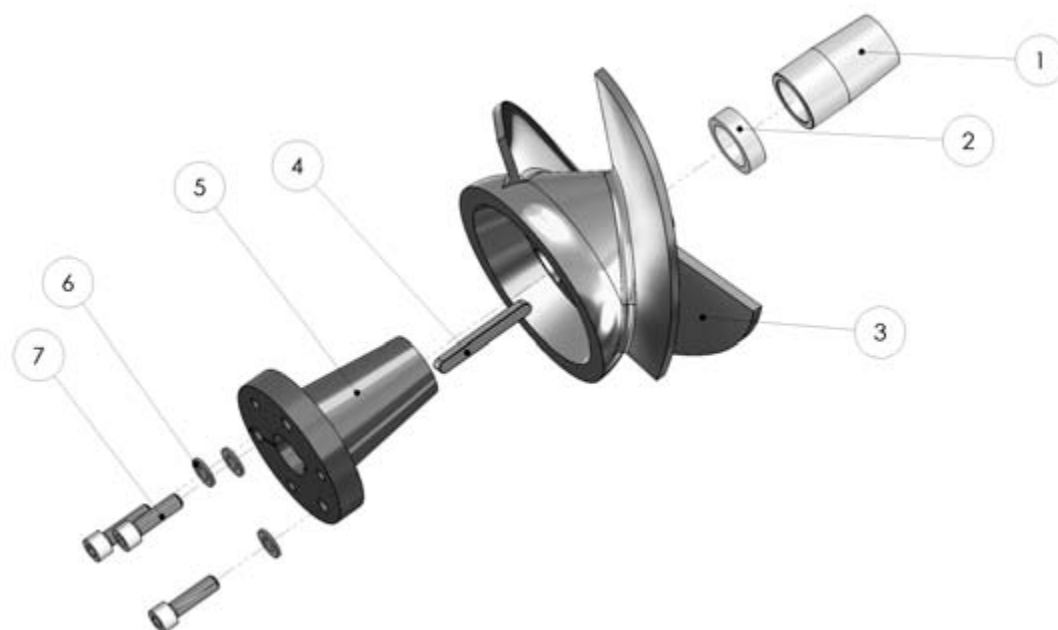
Pos.	Description	Code	Pcs
1	Hex screw M8	R04080402	2
2	LOD washer M8	R11080002	2
3	Anode	10054	2
4	SL washer M8	R12080002	2
5	Hex screw M8	R04080252	2
6	Washer M8	R10080002	2
7	Support plate	10128	2
8	Cavitation plate blade left	10106	1
9	Hex socket countersunk screw M6	R02060202	4
10	Hex socket countersunk screw M6	R02060302	2
11	Cavitation plate	10103	1
12	Locking nut M6	R31060002	2
13	Cavitation plate blade right	10104	1

4. 230C-D40 Main shaft and bearings



Pos.	Description	Code	Pcs
1	Hex screw M12	R04121303	4
2	Washer M12	R10120002	4
3	Support bearing housing	10117	1
4	Shaft seal	T456810A	1
5	Bearing	L0101	1
6	Retaining ring	L0450	1
7	Shaft nut	L0207	1
8	Lock washer	L0307	1
9	Bearing	L0122	1
10	Shaft	10119	1
11	Shaft seal	T9900041	2
12	Bearing housing	10118	1
13	O-ring	T0000040	1
14	Shaft sleeve	10052	1
15	Locking plate	10056	1
16	Hex screw M10	R04100202	1
17	Lubrication hose	P9901	1

5. 230D Impeller



Pos.	Description	Code	Pcs
1	Adjuster sleeve	*	*
2	Adjuster sleeve extension	*	*
3	Impeller	**	**
4	Key	K0202	1
5	Impeller mounting cone	10102	1
6	Washer M10	R10100002	3
7	Hex socket screw M10	R01100352	3

* Depends on impeller used.

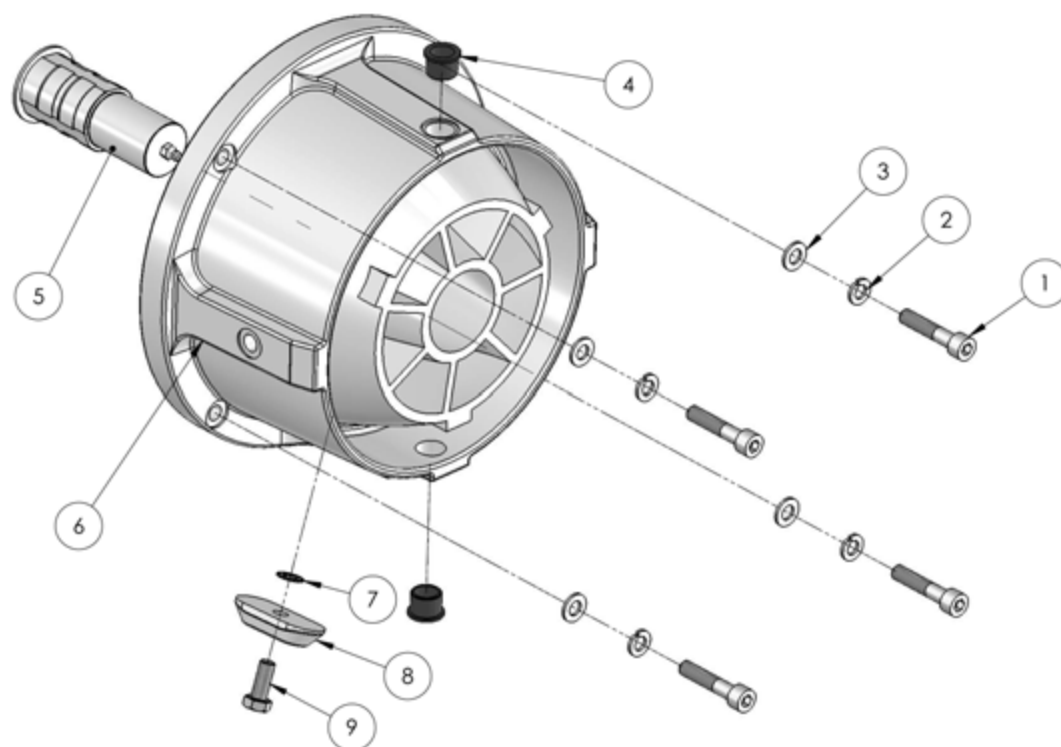
** Depends on engine power and torque profile.

Table 1. Most common impeller types

Type	Code	Compatible engines	Adjuster sleeves used
9" 0	5204-0	Steyr MO144M38, Steyr MO164M40, FNM HPE150, FNM HPE 170	10057
9" 00A+	5204-00A +	FNM HPE190, Volvo D3-200	10057
9"00B	5204-00B	Steyr MO236K43	10058
9" BC	5204-00BC	Volvo D3-220, Steyr MO236K42	10058+10050
9" 00C	5204-00C	SeasAll D170J, SeasAll S250J, FNM HPE250, VW TDI 265-6, Steyr MO256K43	10058+10050
10" 000	5212	Yanmar 4LHA-HHTTP	10058+10050

Type	Code	Compatible engines	Adjuster sleeves used
11,5"	5211	Yanmar 4LHA-DTP	10058+10050
14"	5213	Yanmar 4LHA-STP	10058+10050

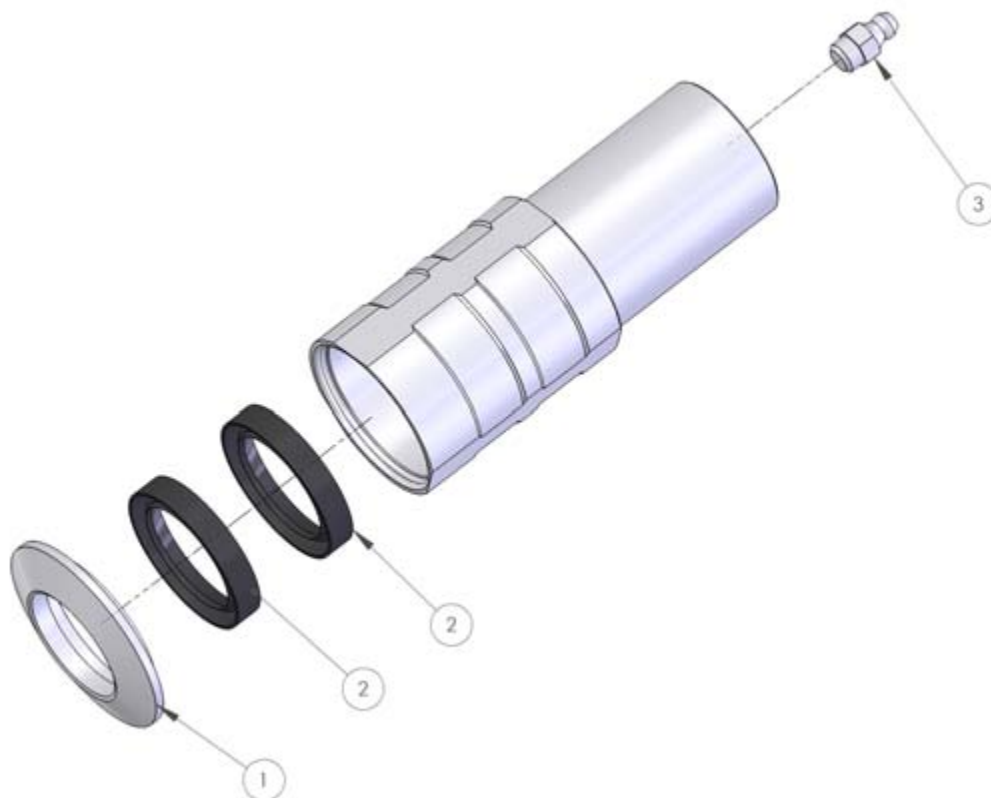
6. 230E & 230E2 Stator



Pos.	Description	Code	Pcs
1	Hex socket screw M10	R01100452	4
2	Spring washer M10	R13100002	4
3	Washer M10	R10100002	4
4	Compound bearing	H0401	2
5	Rear bearing housing	10160	1
6	Stator	10000	1
	Stator *	10381	1
7	SL washer M10 **	R12100002	1
8	Anode **	10053	1
9	Hex screw M10 **	R04100252	1

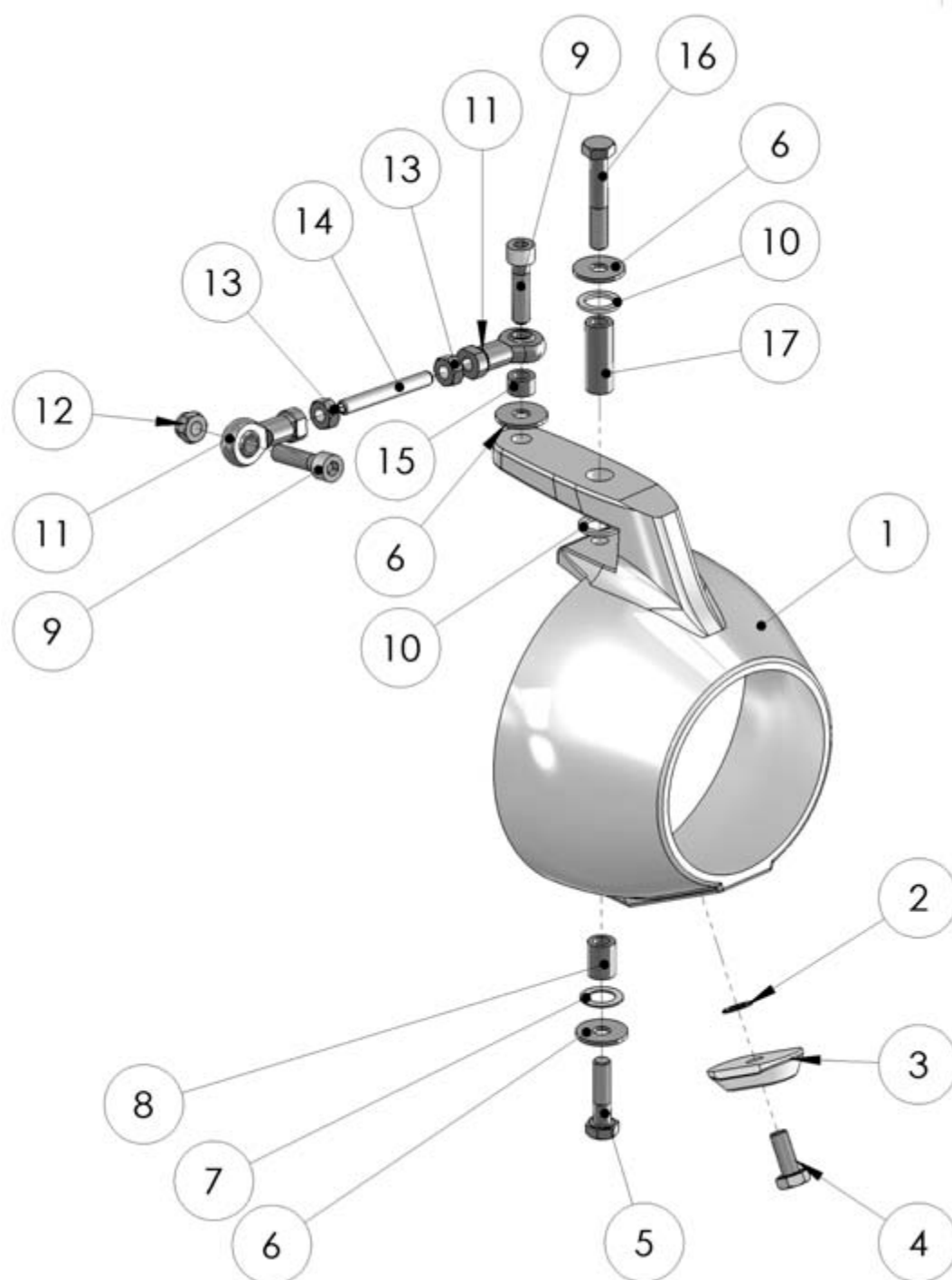
* Included in the 230E2 assembly, AJ 230 (2303-----) units

** Not included in the 230E2 assembly, AJ 230 (2303-----) units

6.1. 10160 Rear bearing housing

Pos.	Description	Code	Pcs
1	Cover	10370	1
2	Shaft seal	T9900030	2
3	Grease nipple	P0402	1

7. 230F Steering nozzle

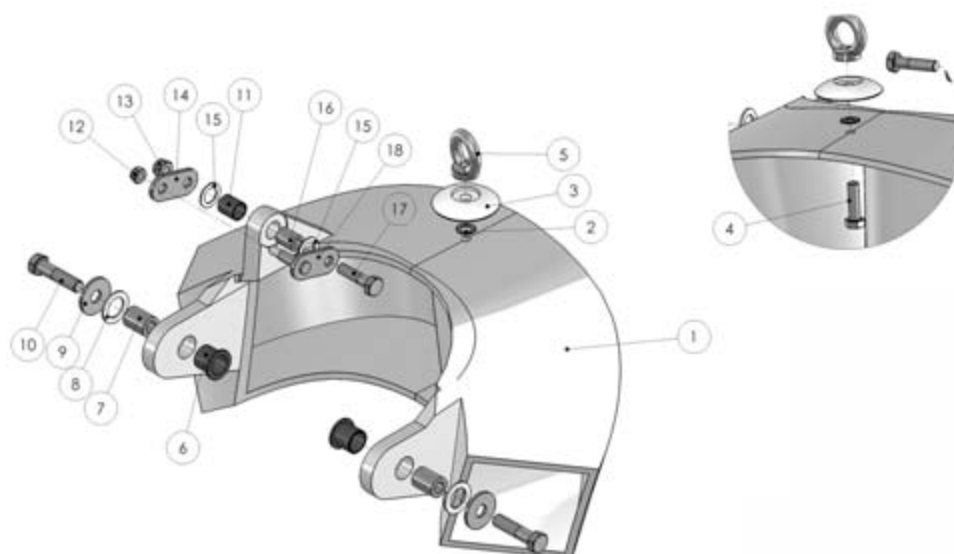


Pos.	Description	Code	Pcs
1	Steering nozzle	10049	1
2	SL washer M10	R12100002	1
3	Anode	10053	1
4	Hex screw M10	R04100252	1
5	Hex screw M10	R04100402	1
6	LOD washer M10	R11100002	3

Pos.	Description	Code	Pcs
7	Plastic spacer	H0303	1
8	Sleeve	10026	1
9	Hex socket screw M10	R01100402	2
10	Plastic spacer	H0301	2
11	Rodbal joint	RF10SEJR316	2
12	Locking nut M10	R31100002	1
13	Nut M10	R30100002	2
14	Set screw M10	R05100702	1
15	Sleeve	10025	1
16	Hex screw M10	R04100602	1
17	Sleeve	10030	1

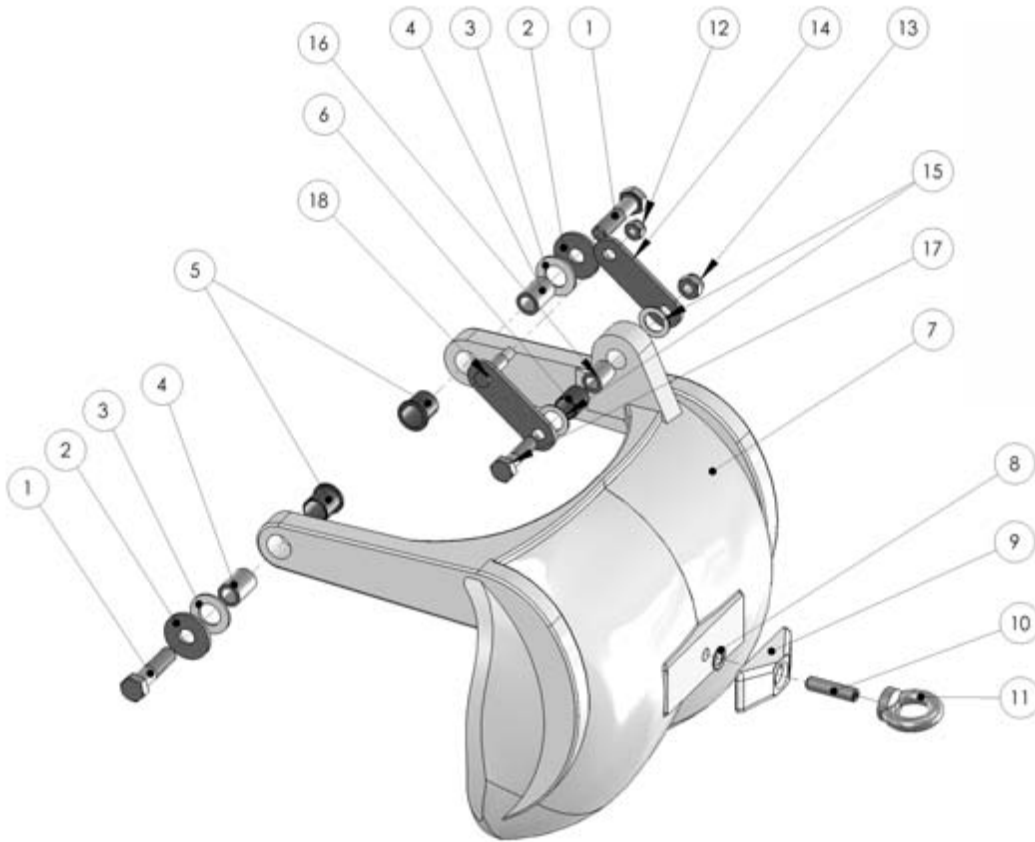
8. 230G Reversing deflector

8.1. 230GT Tube-type reversing deflector



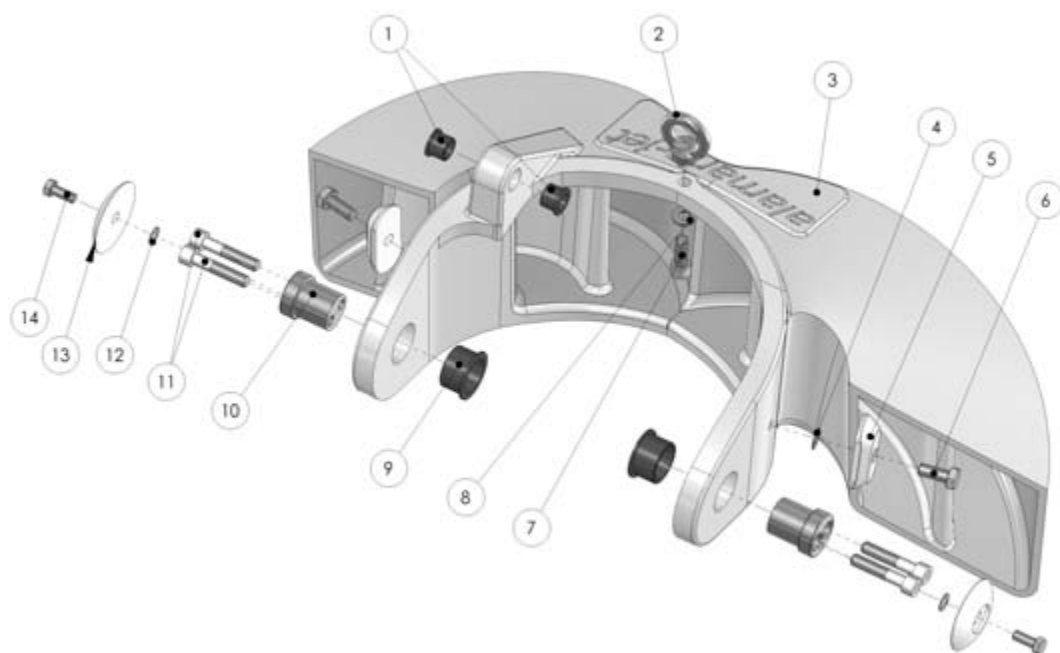
Pos.	Description	Code	Pcs
1	Reversing deflector	10096	1
2	SL washer M10	R12100002	1
3	Anode	10054	1
4	Hex screw M10	R04100352	1
5	Lifting loop	R60100002	1
6	Compound bearing	H0403	2
7	Sleeve	10116	2
8	Plastic spacer	H0305	2
9	LOD washer M12	R11120002	2
10	Hex screw M12	R04120502	2
11	Compound bearing	H0102	1
12	Locking nut M8	R31080002	1
13	Locking nut M10	R31100002	1
14	Joint plate	10097	1
15	Plastic spacer	H0303	2
16	Sleeve	10026	1
17	Hex screw M10	R04100402	1
18	Joint plate with pivot	10101	1

8.2. 230GK Round-type reversing deflector



Pos.	Description	Code	Pcs
1	Hex screw M12	R04120502	2
2	LOD washer M12	R11120002	2
3	Plastic spacer	H0306	2
4	Sleeve	10078	2
5	Compound bearing	H0402	2
6	Compound bearing	H0102	1
7	Reversing deflector	10189	1
8	SL washer M10	R12100002	1
9	Anode	10053	1
10	Set screw M10	R05100402	1
11	Lifting loop	R60100002	1
12	Locking nut M8	R31080002	1
13	Locking nut M10	R31100002	1
14	Joint plate	10098	1
15	Plastic spacer	H0303	2
16	Sleeve	10026	1
17	Hex screw M10	R04100402	1
18	Joint plate with pivot	10100	1

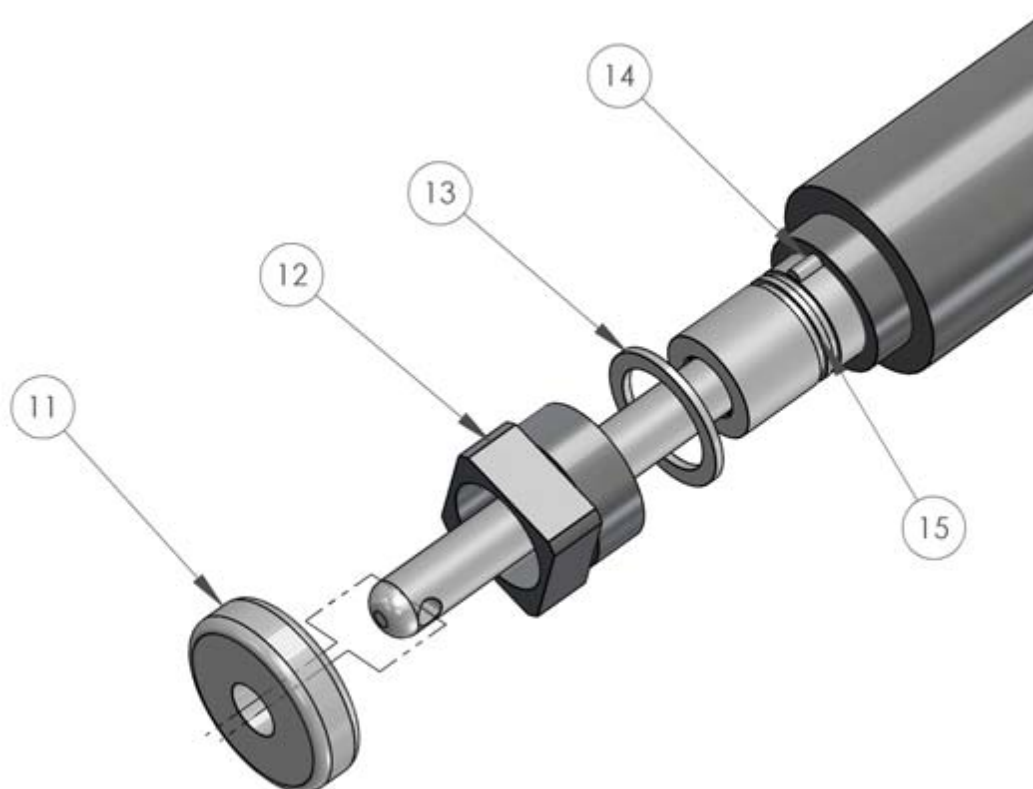
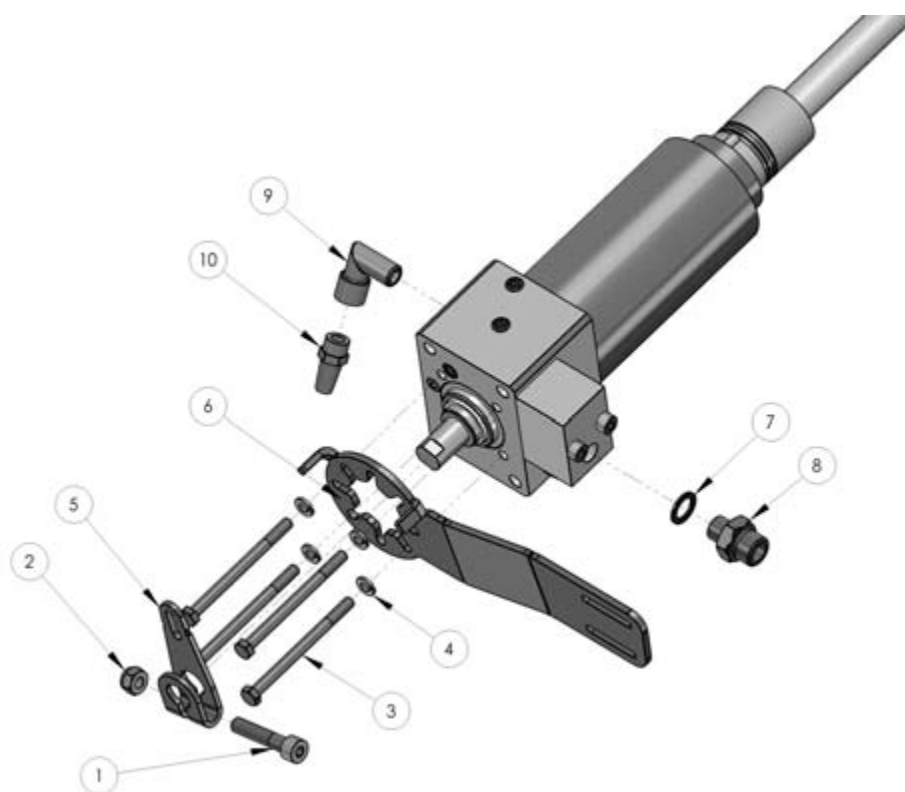
8.3. 230GT2 Tube-type reversing deflector



Pos.	Description	Code	Pcs
1	Compound bearing	H0401	2
2	Lifting loop	R60100002	1
3	Reversing deflector	10382	1
4	SL washer M10	R12100002	2
5	Anode	10053	2
6	Hex screw M10	R04100252	2
7	Hex socket screw M10	R01100302	1
8	Washer M10	R10100002	1
9	Compound bearing	H0404	2
10	Joint pin	10383	2
11	Hex socket screw M10	R01100502	4
12	SL washer M8	R12080002	2
13	Anode	10054	2
14	Hex screw M8	R04080202	2

9. 230HH Hydraulic cylinder

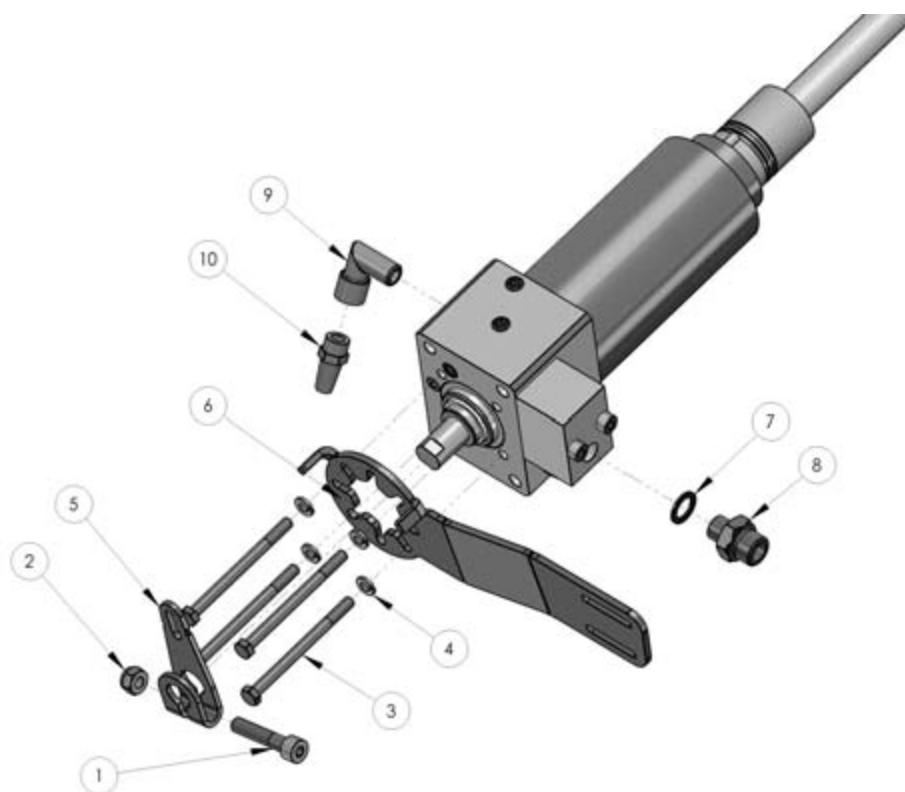
9.1. 230HH3



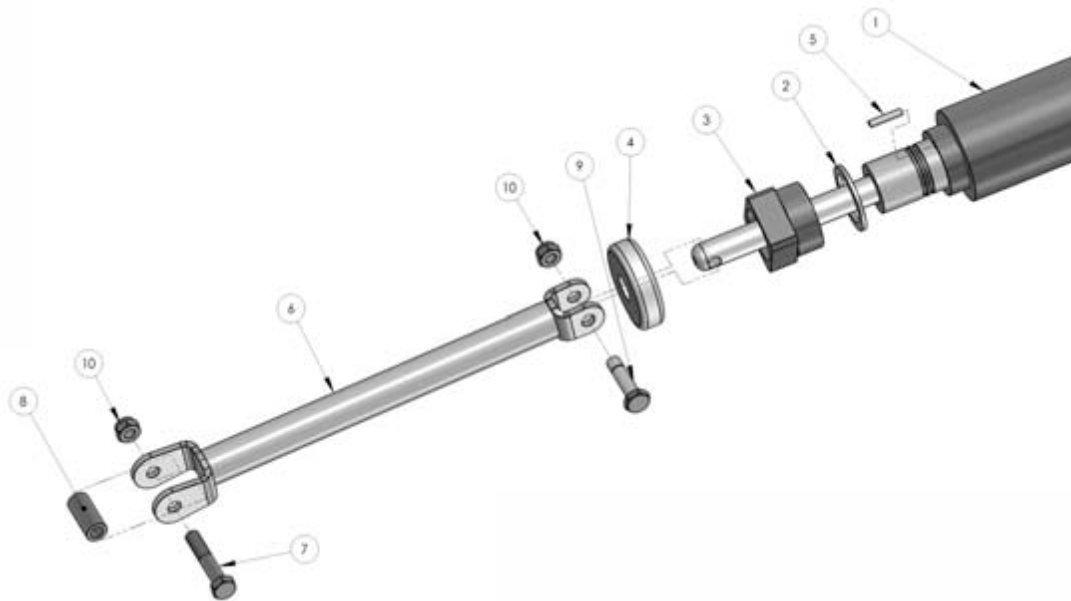
Pos.	Description	Code	Pcs
1	Hex socket screw M8	R01080402	1
2	Locking nut M8	R31080002	1
3	Hex screw M6	R04060802	4
4	Spring washer	R13060002	4
5	Lever	10310	1
6	Cable bracket	10208	1
7	Copper seal	P0372	1
8	Reduction fitting	P0367	1
9	Angle fitting	P0302	1
10	Hose fitting	P0307	1
11	Anode	K0538	1
12	Nut	10091	1
13	Plastic spacer	H0304	2
14	Key	10929	2
15	O-ring	T0000028	2

The product code for hydraulic cylinder sealing and bearing set is P9904. The set includes all the seals and bearings needed for cylinder maintenance.

9.2. 230HH3B



Pos.	Description	Code	Pcs
1	Hex socket screw M8	R01080402	1
2	Locking nut M8	R31080002	1
3	Hex screw M6	R04060802	4
4	Spring washer	R13060002	4
5	Lever	10310	1
6	Cable bracket	10208	1
7	Copper seal	P0372	1
8	Reduction fitting	P0367	1
9	Angle fitting	P0302	1
10	Hose fitting	P0307	1

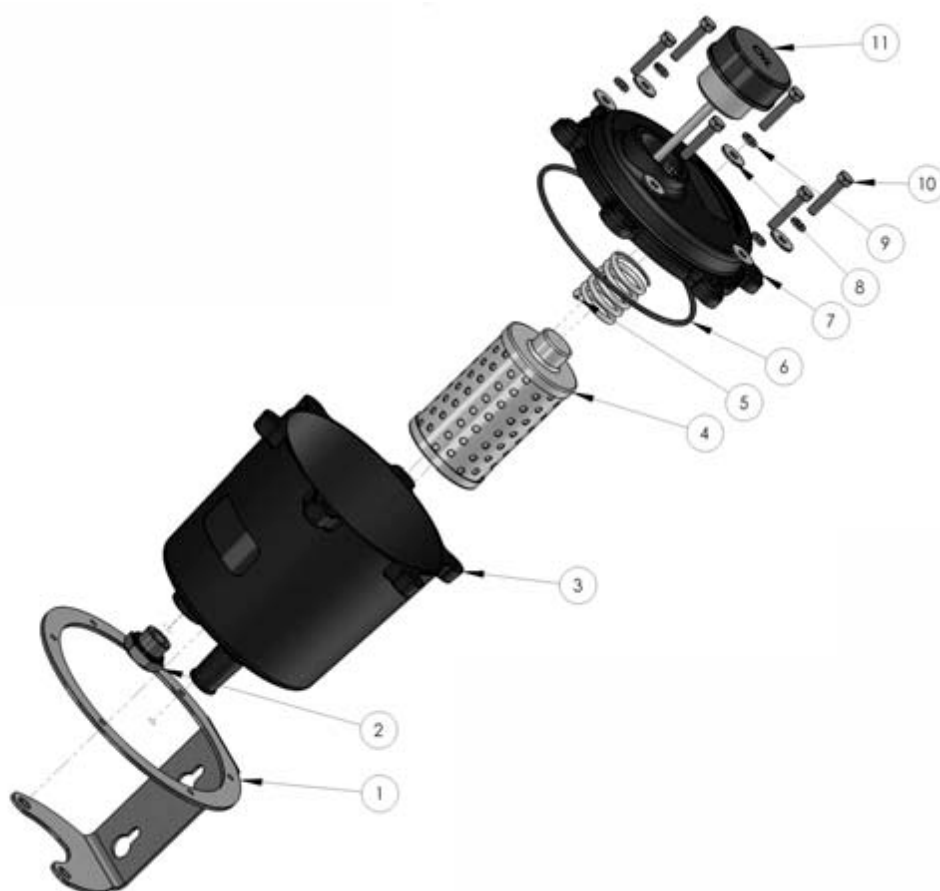


Pos.	Description	Code	Pcs
1	Hydraulic cylinder	10295	1
2	Plastic spacer	H0304	1
3	Nut	10091	1
4	Shaft anode	K0538	1
5	Key	10429	1
6	Connecting rod	10427	1
7	Hex screw M10	R04100552	1
8	Sleeve	10028	1
9	Joint screw	10436	1
10	Locking nut M10	R31100002	2

The product code for hydraulic cylinder sealing and bearing set is P9904. The set includes all the seals and bearings needed for cylinder maintenance.

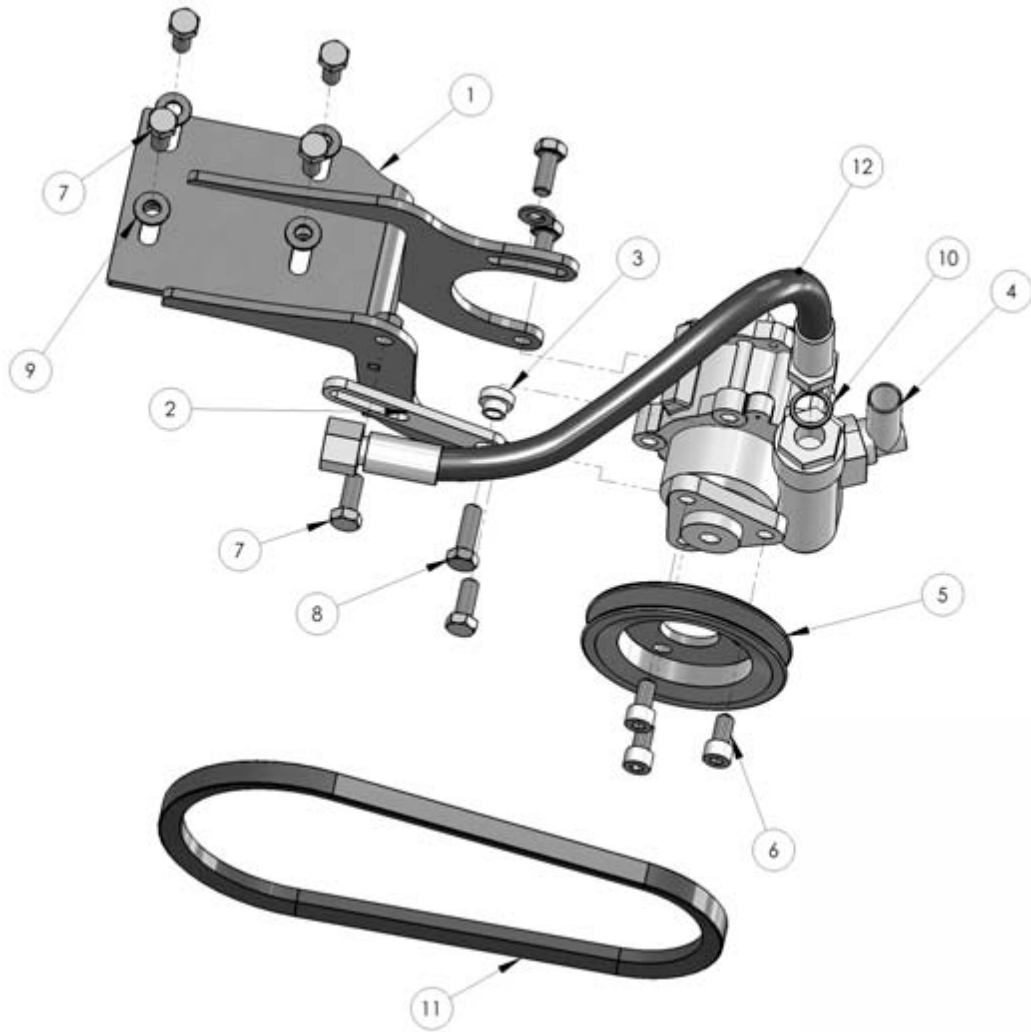
10. 230I3 Hydraulic pump

10.1. 10537 Oil reservoir



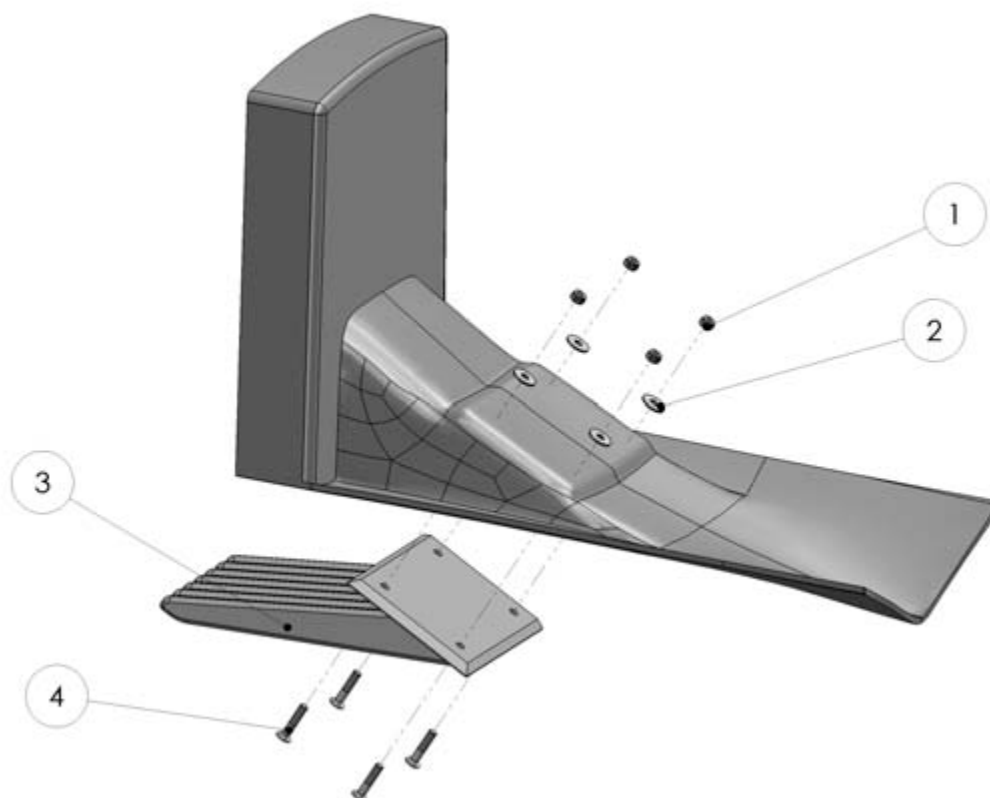
Pos.	Description	Code	Pcs
1	Oil reservoir bracket	10543	1
2	Oil plug	P0380	1
3	Oil reservoir	10535	1
4	Oil filter	10560	1
5	Spring	K0703	1
6	O-ring	T0000124	1
7	Oil reservoir cover	10536	1
8	LOD washer M5	R11050002	6
9	Spring washer M5	R13050002	6
10	Hex screw M5	R04050252	6
11	Cap	P0345	1

10.2. 10715 Hydraulic pump



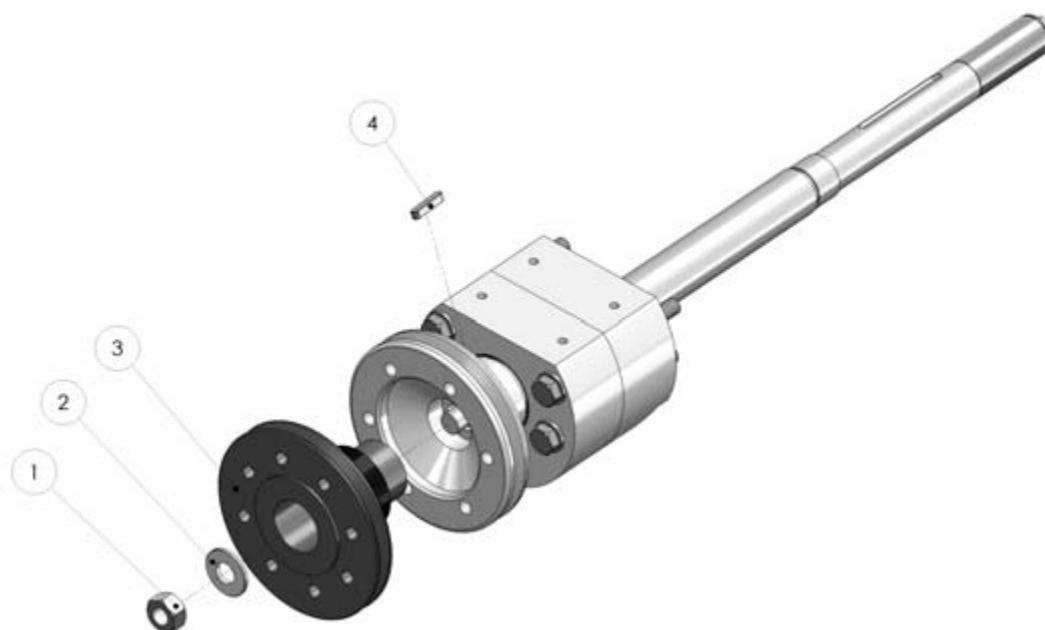
Pos.	Description	Code	Pcs
1	Oil pump rack	10138	1
2	Tightening plate	10136	1
3	Sleeve	10137	1
4	Hydraulic pump	5715	1
5	Belt pulley	10093	1
6	Hex socket screw M8	R01080162	3
7	Hex screw M8	R04080202	8
8	Hex screw M8	R04080252	1
9	Washer M8	R10080002	6
10	Copper seal	P0341	1
11	V-belt	5717	1
12	Pressure hose	P0115	1

11. (A) Grass rake



Pos.	Description	Code	Pcs
1	Locking nut M8	R31080002	4
2	LOD washer M8	R11080002	4
3	Grass rake	10108	1
4	Hex socket countersunk screw M8	R02080402	4

12. (B) Coupling flange



Pos.	Description	Code	Pcs
1	Nut M16	R30160002	1
2	Washer	R11361632	1
3	Coupling flange	*	1
4	Key	K0201	1

* The coupling flange is always selected based on the intermediate shaft.

Table 2. Most commonly used coupling flange types

Type	Code	Intermediate shaft
DIN-120	10122	Cardan shaft
CV-15	10192	Constant velocity shaft
CV-21	10123	Constant velocity shaft
SAE-1410	10571	Cardan shaft
R&D	10281	Flexible coupling

Other intermediate shaft types can also be used, but then an adapter flange must be installed.

