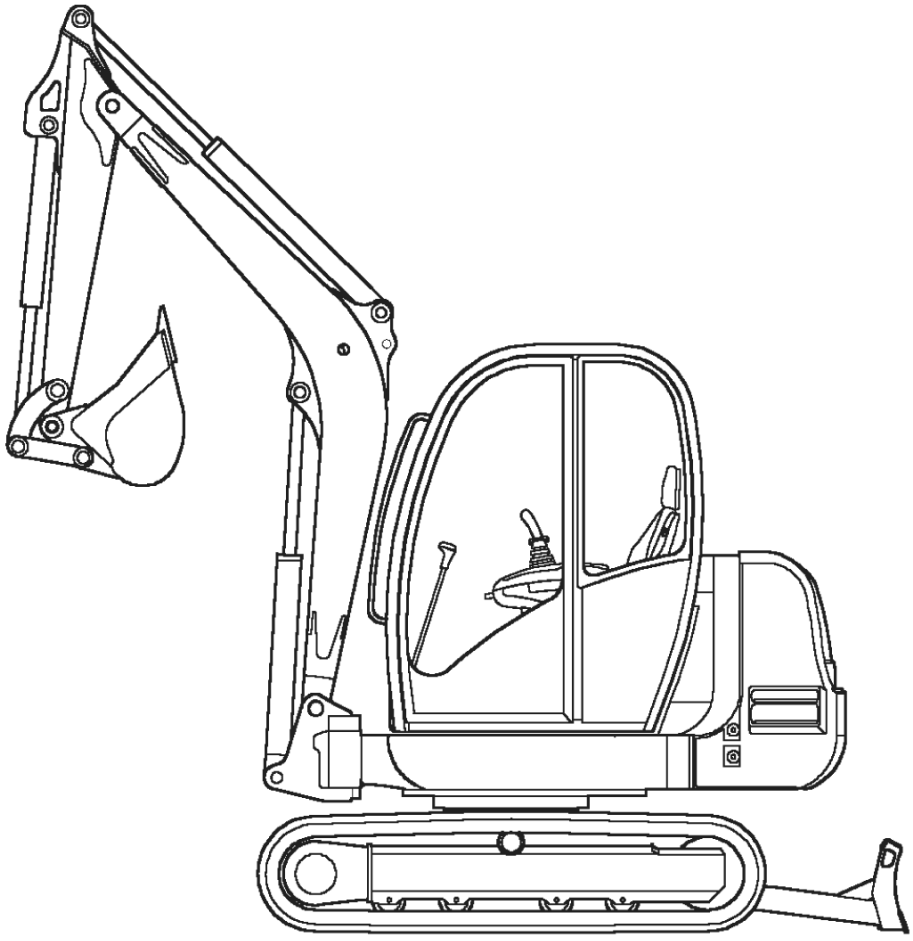
Form No.
918036
Revision B

193-223
Compact Excavators

Beginning Serial Number: AD00454



PARTS MANUAL

GEHL®

Introduction

When ordering service parts, specify the correct part number, full description, quantity required, the unit model number and serial number. For your safety and continued proper operation, use only genuine GEHL service parts.

The model and serial number for this unit are on a tag located on a panel on the front of the cabin.

''Right'' and ''left'' are determined from a position sitting on the seat and facing forward. From this position, the cab is on the ''left'' and the hydraulic valve compartment is on the ''right''.

GEHL Company reserves the right to make changes or improvements in the design or construction of any part of the unit without incurring the obligation to install such changes on any previously delivered units.

Refer to the abbreviations table located on this page for the various fastener descriptions. Standard attaching hardware torque values are also provided on the inside back cover. Metric torque values shown in the illustrations are in Newton-meters and can be converted to Foot-pounds by multiplying by 0.738.

In the exploded view parts list, additional information may follow the Reference Number.

Serial Number breaks are indicated as follows:

(SN → XXXXX) - indicates Serial Numbers up to and including XXXXX.

(SN YYYYY →) - indicates Serial Numbers YYYYY and after.

Unless otherwise specified, all cap screws or bolts are Grade 5, cadmium or zinc plated; hexagon nuts for Grade 5 screws or bolts are Grade B; hexagon nuts for other screws or bolts are Grade A.

NOTE: *The following abbreviations may be used herein:*

ASSD	- Assembled
ASSY	- Assembly
CB	- Carriage Bolt
CP	- Cotter Pin
CS	- Cap Screw (Hexagon Head)
FHCS	- Flat Head Cap Screw
GR	- Grade
HB	- Hex Bolt
HLN	- Hex Lock Nut
HN	- Hex Nut
HP	- High Pressure
INS	- Insert
LN	- Lock Nut
LT	- Left Hand
LW	- Lock Washer
M	- Metric
MM/mm	- Millimeter
RT	- Right
SHCS	- Socket Head Cap Screw
SLTD	- Slotted
SN	- Serial Number or Slotted Nut

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DECAL LOCATIONS

GENERAL INFORMATION

Decal location information is provided to assist in the proper selection and application of new decals, in the event the original decals become damaged or the machine is repainted. Refer to the listing for the illustration reference number, part number, description and quantity of each decal provided in the kit. Refer to the appropriate illustrations for replacement locations.

To ensure proper selection of the correct replacement decals, compare all of the various closeup location drawings to your machine before starting to refinish the unit. Then circle each shown decal (applicable to your machine) while checking off its part number in the listing. After you have verified all the decals needed for replacement, place any extra unnecessary decals aside for disposal.

NOTE: *Refer to the SAFETY chapter of the Operator's Manual for the specific information provided on all of the various safety decals furnished in the decal kit(s).*

NEW DECAL APPLICATION

Surfaces MUST be free from dirt, dust, grease and other foreign material before applying the new decal. To apply, remove the smaller portion of the decal backing paper and apply this part of the exposed adhesive backing to the clean surface while maintaining proper position and alignment. Peel the other portion of the backing paper off slowly while applying hand pressure to smooth out the decal surface.

CAUTION

ALWAYS follow safety precautions on decals. Replace the decals if they are damaged, or if the unit is repainted. If repainting, BE SURE all applicable decals are affixed to your unit.

PAINT NOTICE

Use this list to order paint for refinishing:

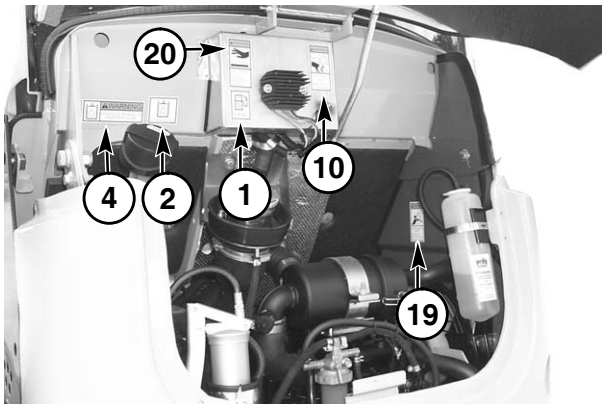
906213	**One Gal. Construction Yellow**
906323	**One Qt. Charcoal Grey**
906317	**One Gal. Charcoal Grey**
906214	**6 (12 oz. Spray Cans) Yellow**
906318	**6 (12 oz. Spray Cans) Grey**

Most of the decals are common to both models. Any differences are called out using asterisks. The decal kits for the model 193/223 Compact Excavators are listed below:

Ref. No.	Part No.	Description & Quantity
	165992	Decal Kit - **193**
	165993	Decal Kit - **223**
1	161965	Diesel Fuel
2	161966	Hydraulic Oil
3	161967	Lubrication
4	161969	WARNING - Hydraulic Reservoir
5	161970	Arrow (2 places)
6	161981	Lift Point (4 places)
7	161982	Tiedown Point (2 places)
8	161985	WARNING - Keep Away (2 places)
9	161986	WARNING - Read Manual
10	161987	WARNING - Rotating Fan (2 places)
11	162449	Dozer Blade - Up and Down
12	162450	Travel - Left
13	162451	Travel - Right
14	162452	Right Joystick Control
15	162453	Left Joystick Control
16	163973	WARNING - Mandatory Shutdown
17	163975	WARNING - Avoid Injury (2 places)
18	163976	WARNING - Avoid Injury
19	163977	WARNING - Entanglement Hazard
20	163978	WARNING - Hot Surface
22	164854	WARNING - Avoid Injury (cabin models only)
23	163974	Manual Throttle
24	183935	GEHL
25	183963	GEHL (2 places)
26	170179*	223 (2 places)
	170178**	193 (2 places)
27	179711	Lifting Capacity
28	9705488G	Swing Lock
29	9705282G	Track Speed
30	162458*	Cabin Tilt
31	9705489G	Return Flow Control
32	9705501G	ISO-SAE Valve
33	9705366G	Heater (Cabin models only)
34	9705502G	WARNING - Rollover Protection
35	9705523G	Cabin Support
36	184305	GEHL
Not Illustrated:		
NA	179688	Sticker (2 places)
NA	165910	Sticker
NA	164853	Engine Compartment Latch

* Decal used on 223 only.

** Decal used on 193 only.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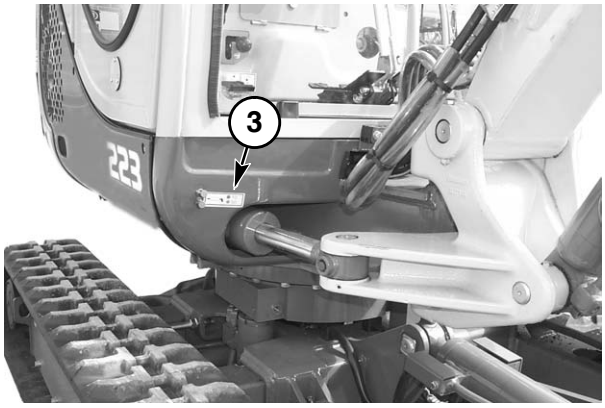
4
2
1
10
19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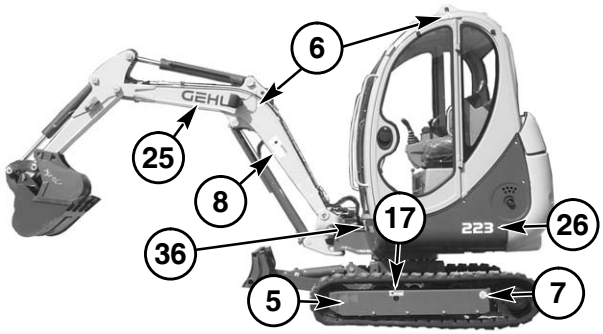
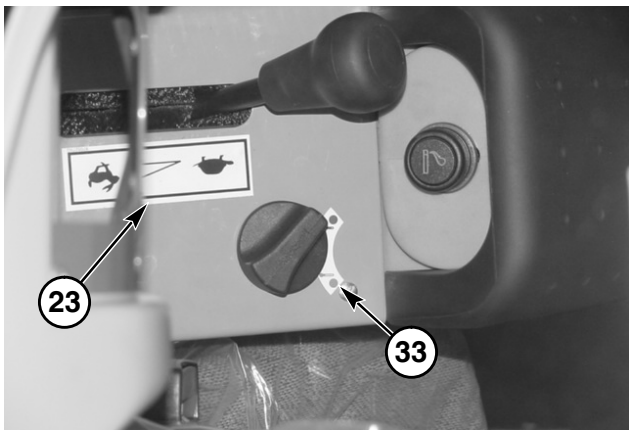

6
GEHL
25
8
17
223
26
36
5
7

Both Sides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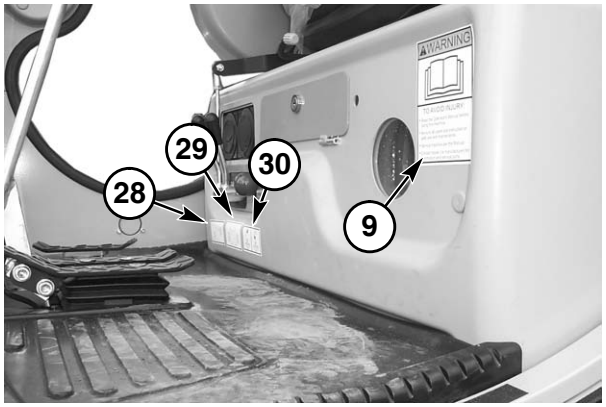
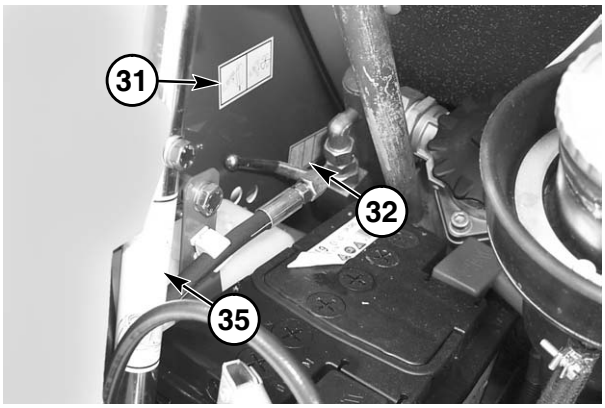

WARNING
29
30
28
9

GEHL
24
10


31
32
35

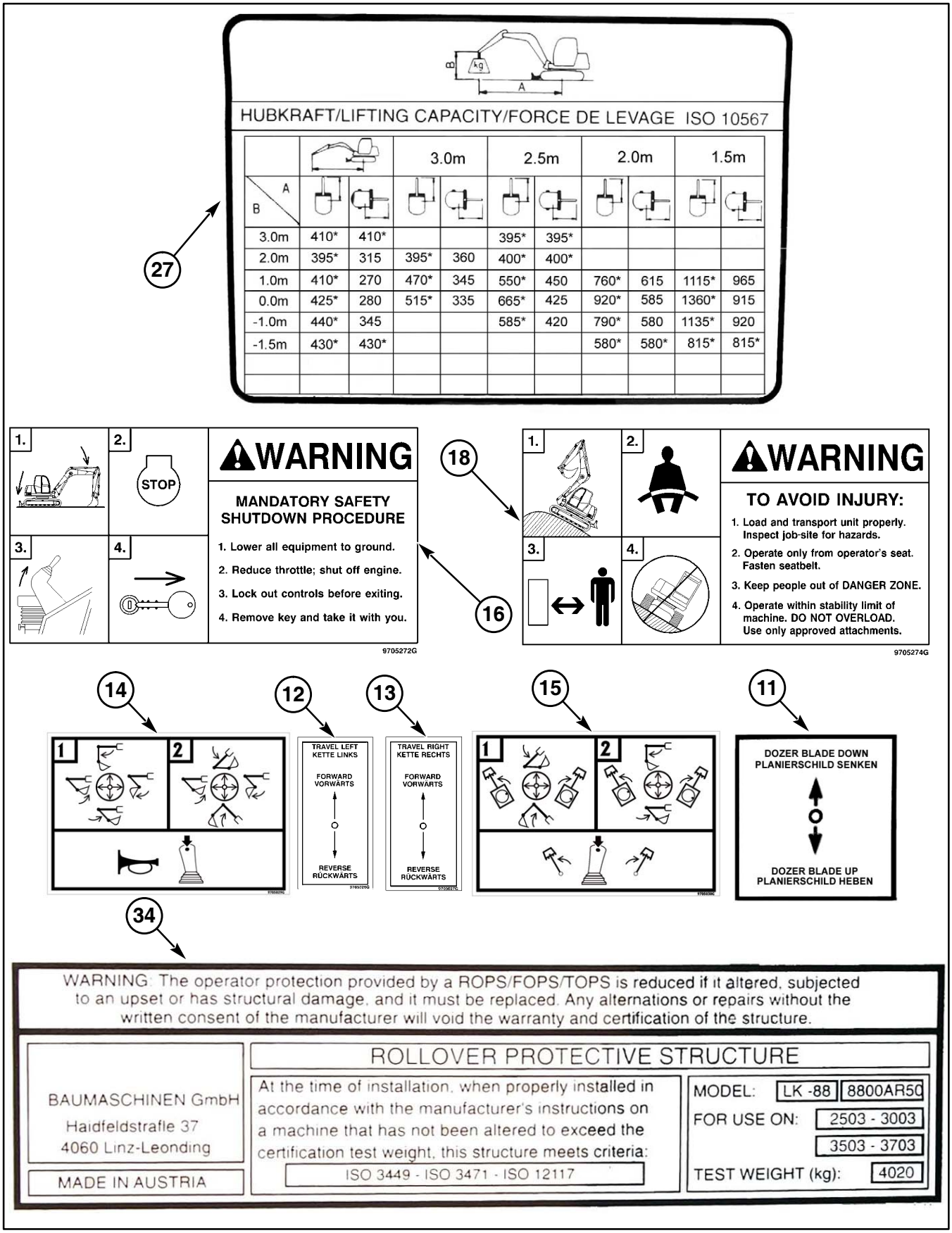
The decal listing has been repeated for your convenience.

Ref. No.	Part No.	Description & Quantity
	165992	Decal Kit - **193**
	165993	Decal Kit - **223**
1	161965	Diesel Fuel
2	161966	Hydraulic Oil
3	161967	Lubrication
4	161969	WARNING - Hydraulic Reservoir
5	161970	Arrow (2 places)
6	161981	Lift Point (4 places)
7	161982	Tiedown Point (2 places)
8	161985	WARNING - Keep Away (2 places)
9	161986	WARNING - Read Manual
10	161987	WARNING - Rotating Fan (2 places)
11	162449	Dozer Blade - Up and Down
12	162450	Travel - Left
13	162451	Travel - Right
14	162452	Right Joystick Control
15	162453	Left Joystick Control
16	163973	WARNING - Mandatory Shutdown
17	163975	WARNING - Avoid Injury (2 places)
18	163976	WARNING - Avoid Injury
19	163977	WARNING - Entanglement Hazard
20	163978	WARNING - Hot Surface
22	164854	WARNING - Avoid Injury (cabin models only)
23	163974	Manual Throttle
24	183935	GEHL
25	183963	GEHL (2 places)
26	170179*	223 (2 places)
	170178**	193 (2 places)
27	179711	Lifting Capacity
28	9705488G	Swing Lock
29	9705282G	Track Speed
30	162458*	Cabin Tilt
31	9705489G	Return Flow Control
32	9705501G	ISO-SAE Valve
33	9705366G	Heater (Cabin models only)
34	9705502G	WARNING - Rollover Protection
35	9705523G	Cabin Support
36	184305	GEHL
Not Illustrated:		
NA	179688	Sticker (2 places)
NA	165910	Sticker
NA	164853	Engine Compartment Latch

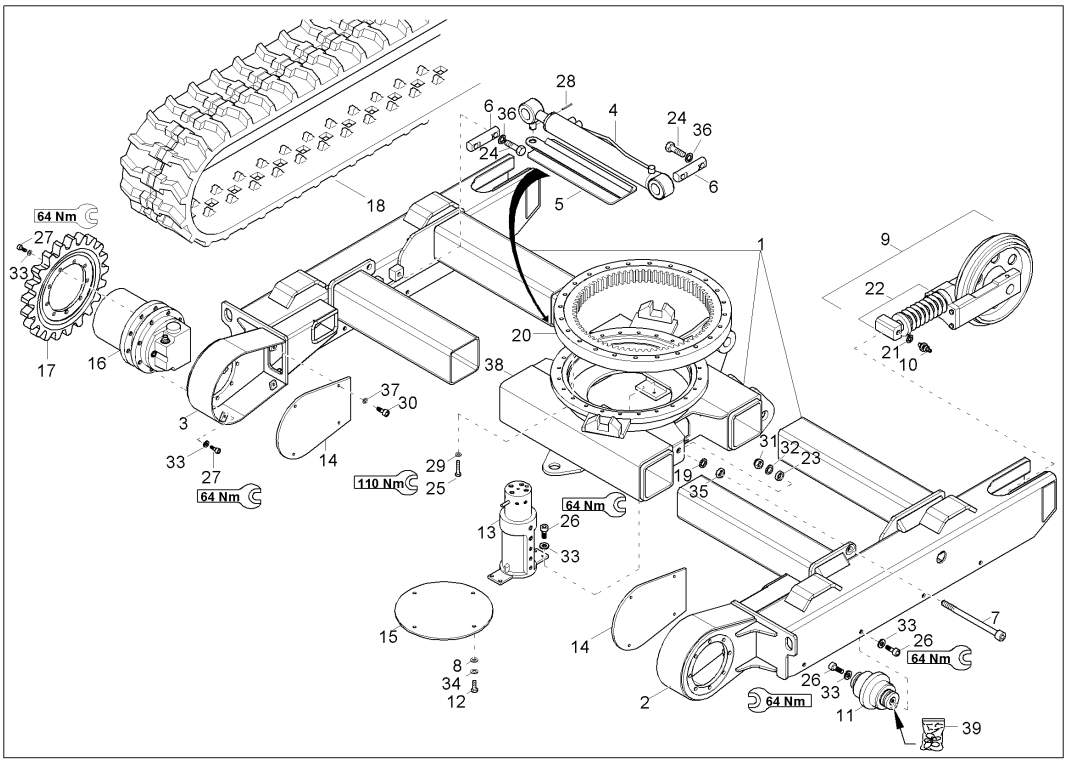
* Decal used on 223 only.

** Decal used on 193 only.

Overhead Panel Decals - positioning may vary by model and cabin style

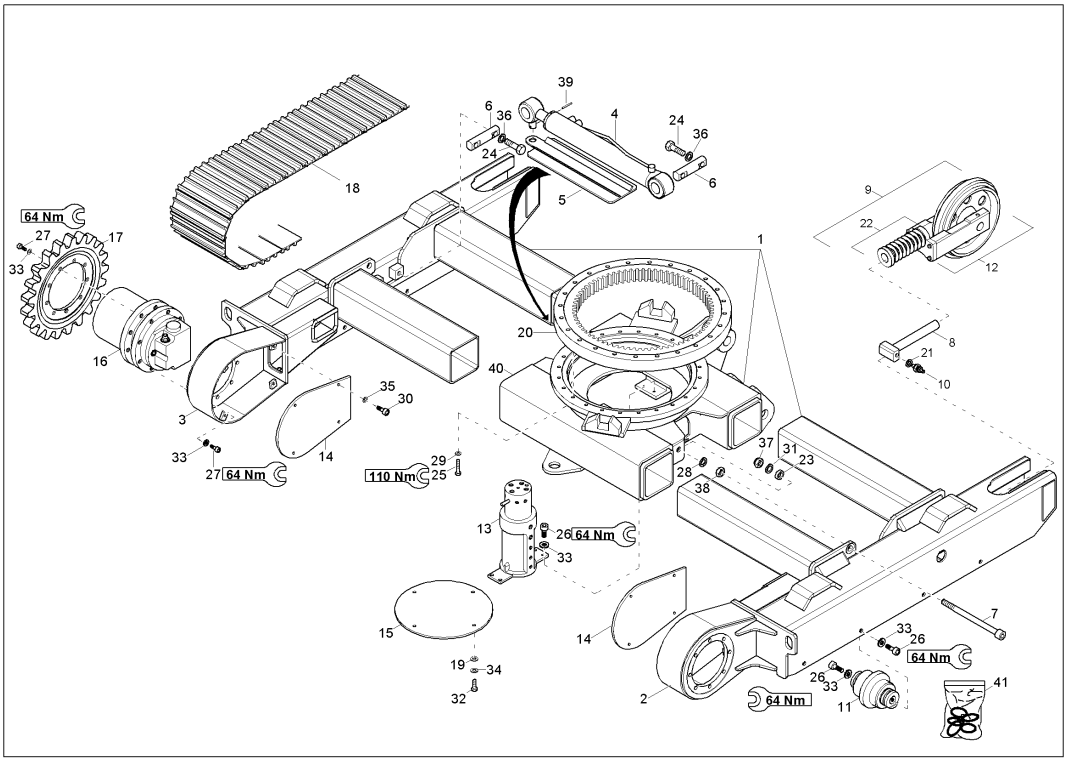


193 - UNDERCARRIAGE, RUBBER TRACK ET1940100



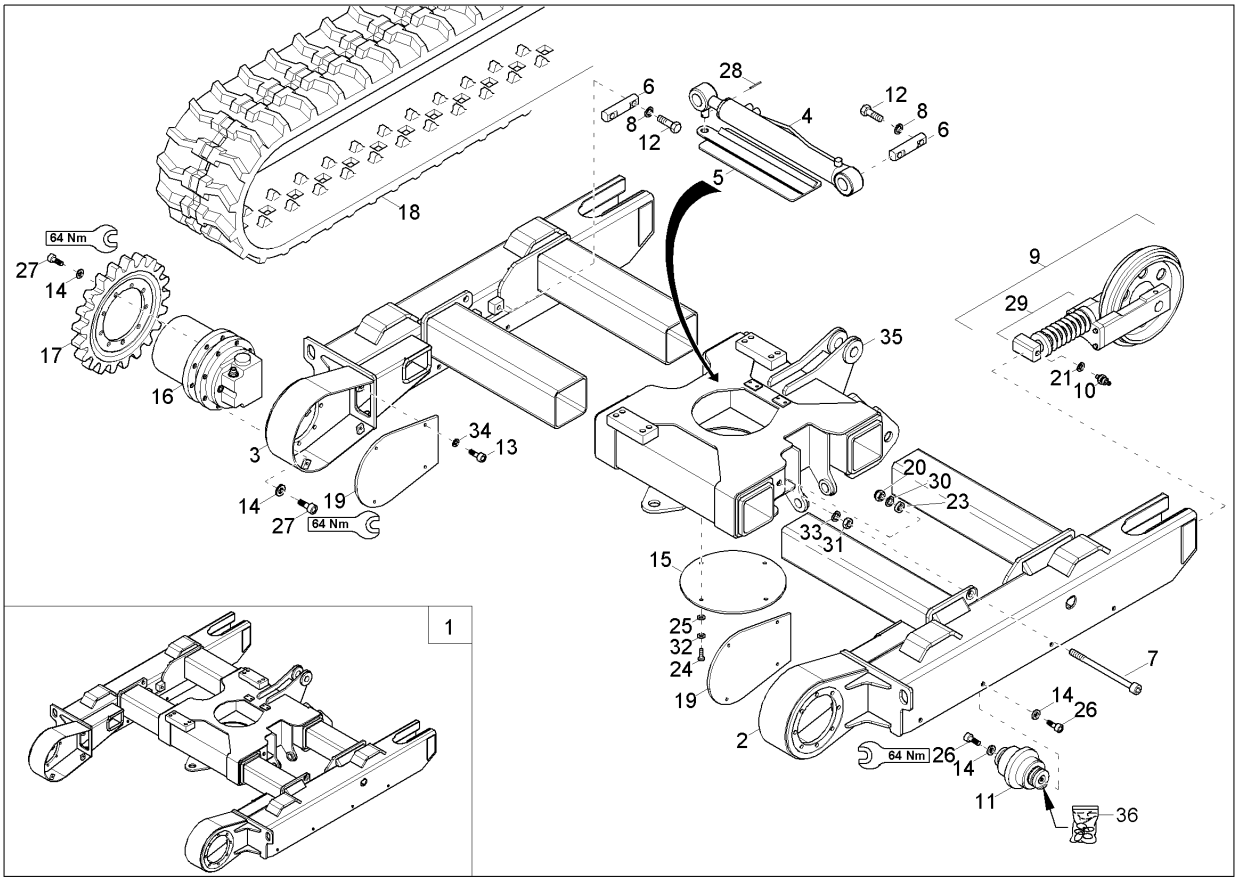
Ref. No.	Part No.	Description	Qty. Req.
1	178469	UNDERCARRIAGE	1
2	178470	FRAME RIGHT	1
3	178471	FRAME LEFT	1
4	2228006G	TELESCOPIC CYLINDER	1
	See page 99 for individual components.		
5	160616	SHIELD	1
6	160622	PIN	2
7	161399	SCREW	2
8	161640	WASHER/GR A 10.5	4
9	160516	TRACK TENSION	2
	See page 12 for individual components.		
10	160638	VALVE	2
11	160517	ROLLER	8
12	651391	CS M10-1.5 X 20 C 8.8 ZO	4
13	161920	SWIVEL JOINT	1
	See page 75 for individual components.		
14	178472	COVER	2
15	162094	COVER	1
16	160636	DRIVE MOTOR	2
	See page 72 for individual components.		
17	160634	SPROCKET	2

Ref. No.	Part No.	Description	Qty. Req.
18	1922401G	RUBBER TRACK	2
19	163645	WASHER	2
20	161724	TURNTABLE	1
21	160865	SCREW SEAL	2
22	1402306G	TENSION CYLINDER	2
23	161915	TUBE	2
24	651412	CS M14-2.0 X 50 C 10.9 ZO	4
25	651408	CS M12-1.7 X 40 C 10.9 ZO	24
26	651474	SHCS M10-1.2 X 25 10.9 ZO	20
27	162022	SCREW	34
28	651468	PIN/SPRING M8	1
29	161643	WASHER/ROUND HI-TENS	24
30	651515	SHCS M8-1.2 X 20 8.8 ZO	8
31	651451	HLN INS M16-2.0 ZO	2
32	161649	WASHER/GR A 18 ZO DIN7989	2
33	163641	WASHER	54
34	161669	RING/SNAP S10	4
35	656052	NUT/HEX M16-2.00 D934 PC1	2
36	161671	RING/SNAP S14	4
37	163670	WASHER	8
38	178468	BRACKET	1
39	165146	SEAL KIT	8



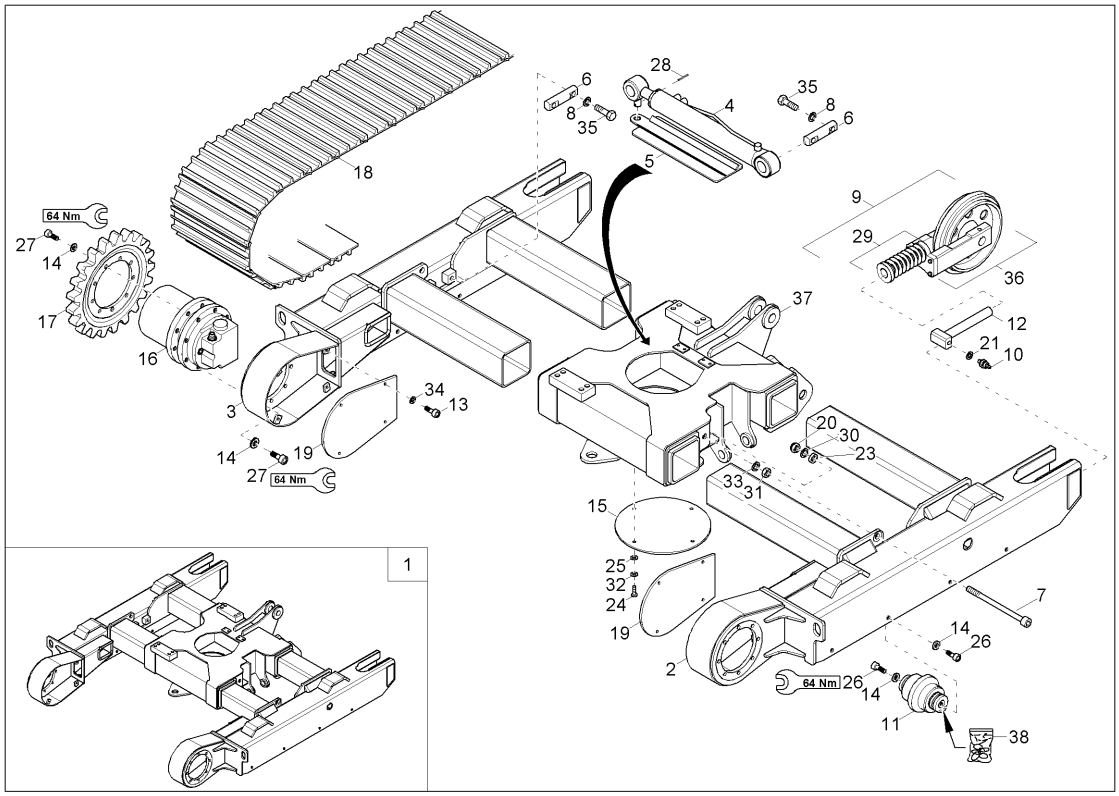
Ref. No.	Part No.	Description	Qty. Req.
1	178469	UNDERCARRIAGE	1
2	178470	FRAME RIGHT	1
3	178471	FRAME LEFT	1
4	2228006G	TELESCOPIC CYLINDER	1
	See page 99 for individual components.		
5	160616	SHIELD	1
6	160622	PIN	2
7	161399	SCREW	2
8	178679	PISTON	2
9	178837	TENSION WHEEL	2
	See page 13 for individual components.		
10	160638	VALVE	2
11	178838	BOTTOM ROLLER (STEEL TRACK)	8
12	178684	TENSION WHEEL	2
13	161920	SWIVEL JOINT	1
	See page 75 for individual components.		
14	178472	COVER	2
15	162094	COVER	1
16	160636	DRIVE MOTOR	2
	See page 72 for individual components.		
17	178839	SPROCKET	2
18	178820	STEEL TRACK	2

Ref. No.	Part No.	Description	Qty. Req.
19	161640	WASHER/GR A 10.5	4
20	161724	TURNTABLE	1
21	160865	SCREW SEAL	2
22	178685	SPRING ASSEMBLY	2
23	161915	TUBE	2
24	651412	CS M14-2.0 X 50 C 10.9 ZO	4
25	651408	CS M12-1.7 X 40 C 10.9 ZO	24
26	651474	SHCS M10-1.2 X 25 10.9 ZO	20
27	162022	SCREW	34
28	163645	WASHER	2
29	161643	WASHER/ROUND HI-TENS	24
30	651515	SHCS M8-1.2 X 20 8.8 ZO	8
31	161649	WASHER/GR A 18 ZO DIN7989	2
32	651391	CS M10-1.5 X 20 C 8.8 ZO	4
33	163641	WASHER	54
34	161669	RING/SNAP S10	4
35	163670	WASHER	8
36	161671	RING/SNAP S14	4
37	651451	HLN INS M16-2.0 ZO	2
38	656052	NUT/HEX M16-2.00 D934 PC1	2
39	651468	PIN/SPRING M8	1
40	178468	BRACKET	1
41	165146	SEAL KIT	8



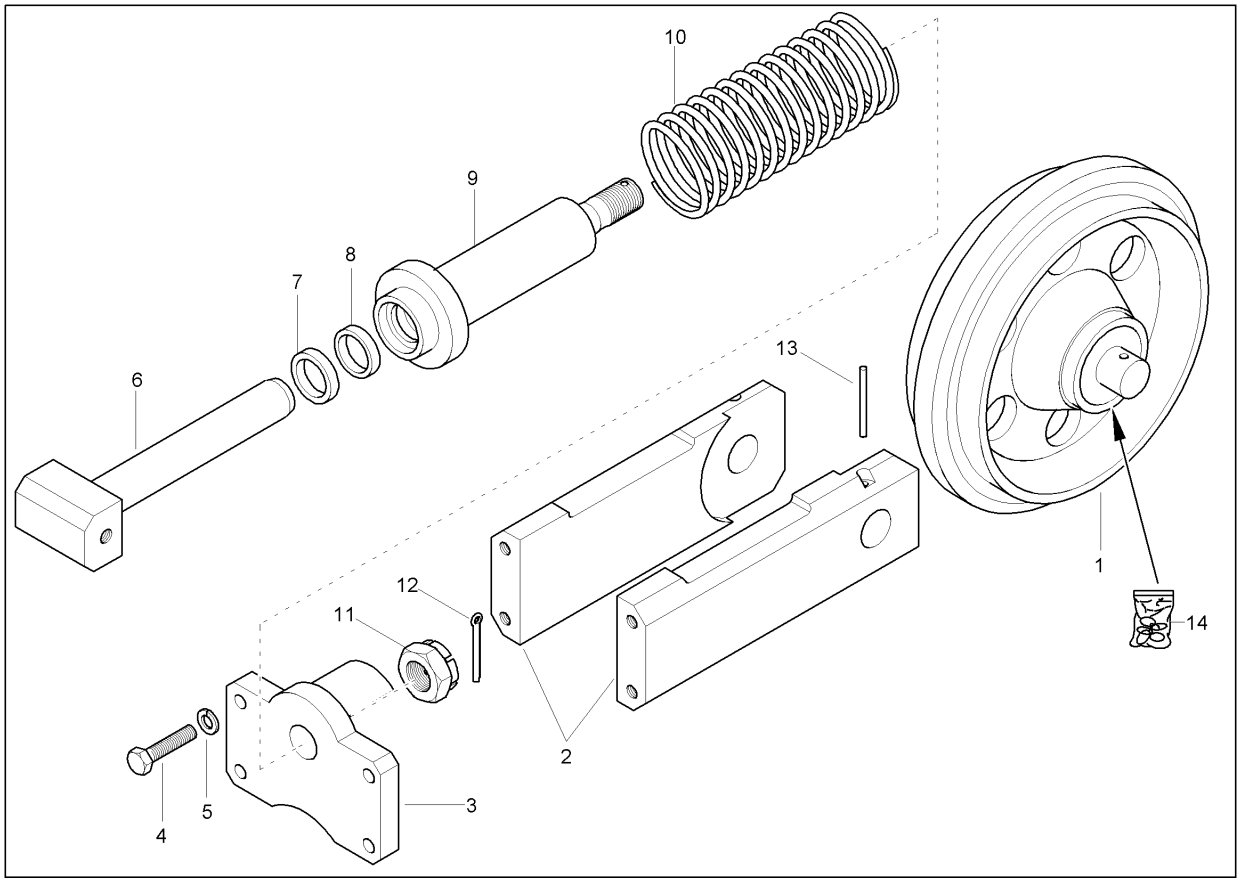
Ref. No.	Part No.	Description	Qty. Req.
1	178485	UNDERCARRIAGE	1
2	178470	FRAME RIGHT	1
3	178471	FRAME LEFT	1
4	2228006G	TELESCOPIC CYLINDER	1
		See page 99 for individual components.	
5	160616	SHIELD	1
6	160622	PIN	2
7	161399	SCREW	2
8	161671	RING/SNAP S14	4
9	160516	TRACK TENSION	2
		See page 12 for individual components.	
10	160638	VALVE	2
11	160517	ROLLER	8
12	651412	CS M14-2.0 X 50 C 10.9 ZO	4
13	651515	SHCS M8-1.2 X 20 8.8 ZO	8
14	163641	WASHER	50
15	162094	COVER	1
16	160636	DRIVE MOTOR	2
		See page 72 for individual components.	

Ref. No.	Part No.	Description	Qty. Req.
17	160634	SPROCKET	2
18	1922401G	RUBBER TRACK	2
19	178472	COVER	2
20	651451	HLN INS M16-2.0 ZO	2
21	160865	SCREW SEAL	2
22	656105	CS M 8-1.25 X 25 C8.8 ZO	2
23	161915	TUBE	2
24	651391	CS M10-1.5 X 20 C 8.8 ZO	4
25	161640	WASHER/GR A 10.5	4
26	651474	SHCS M10-1.2 X 25 10.9 ZO	16
27	162022	SCREW	34
28	651468	PIN/SPRING M8	1
29	1402306G	TENSION CYLINDER	2
30	161649	WASHER/GR A 18 ZO DIN7989	2
31	656052	NUT/HEX M16-2.00 D934 PC1	2
32	161669	RING/SNAP S10	4
33	163645	WASHER	2
34	163670	WASHER	8
35	178484	BRACKET	1
36	165146	SEAL KIT	8

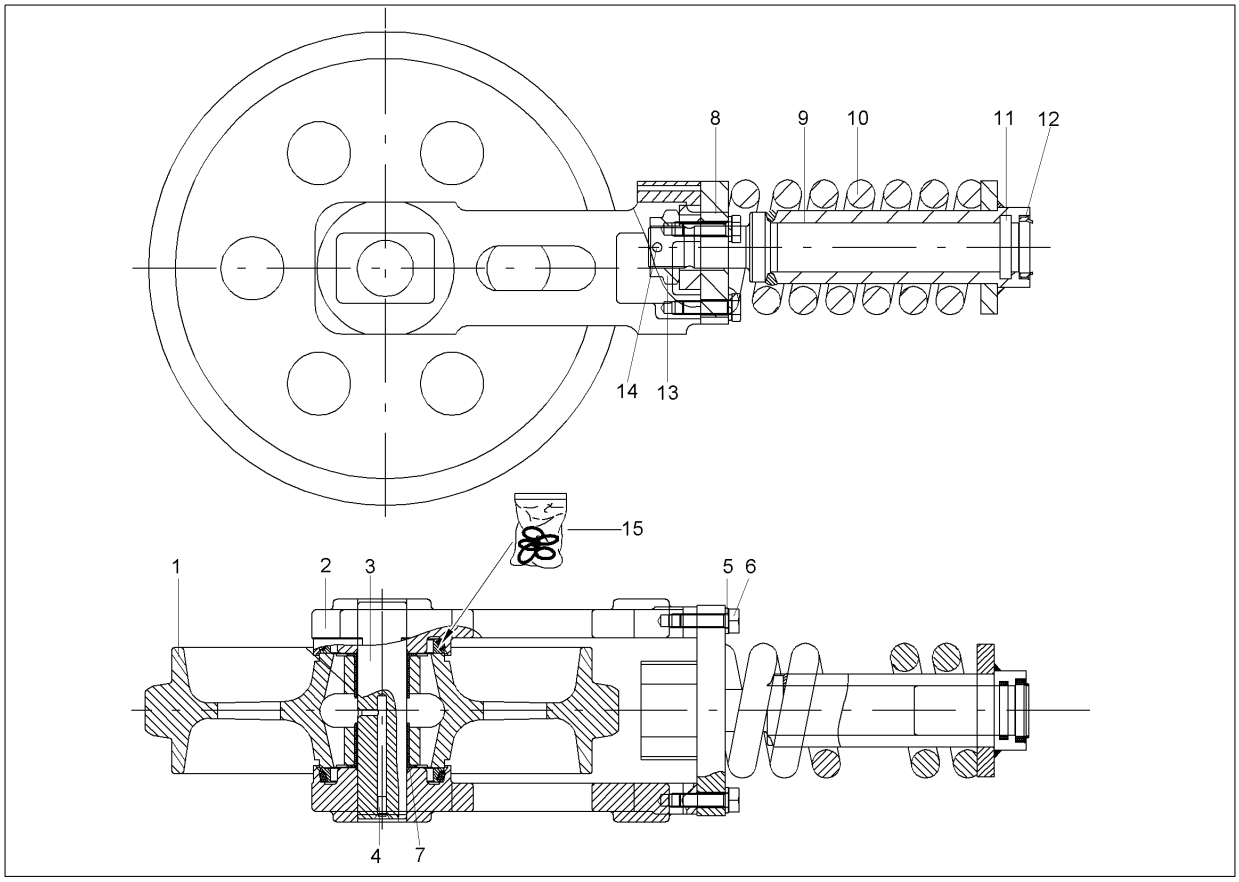


Ref. No.	Part No.	Description	Qty. Req.
1	178485	UNDERCARRIAGE	1
2	178470	FRAME RIGHT	1
3	178471	FRAME LEFT	1
4	2228006G	TELESCOPIC CYLINDER	1
	See page 99 for individual components.		
5	160616	SHIELD	1
6	160622	PIN	2
7	161399	SCREW	2
8	161671	RING/SNAP S14	4
9	178837	TENSION WHEEL	2
	See page 13 for individual components.		
10	160638	VALVE	2
11	178838	BOTTOM ROLLER (STEEL TRACK)	8
12	178679	PISTON	2
13	651515	SHCS M8-1.2 X 20 8.8 ZO	8
14	163641	WASHER	50
15	162094	COVER	1
16	160636	DRIVE MOTOR	2
	See page 72 for individual components.		
17	178839	SPROCKET	2
18	1922401G	RUBBER TRACK	2
19	178472	COVER	2
20	651451	HLN INS M16-2.0 ZO	2
21	160865	SCREW SEAL	2
22	656105	CS M 8-1.25 X 25 C8.8 ZO	2
23	161915	TUBE	2
24	651391	CS M10-1.5 X 20 C 8.8 ZO	4
25	161640	WASHER/GR A 10.5	4
26	651474	SHCS M10-1.2 X 25 10.9 ZO	16
27	162022	SCREW	34
28	651468	PIN/SPRING M8	1
29	178685	SPRING ASSEMBLY	2
30	161649	WASHER/GR A 18 ZO DIN7989	2
31	656052	NUT/HEX M16-2.00 D934 PC1	2
32	161669	RING/SNAP S10	4
33	163645	WASHER	2
34	163670	WASHER	8
35	651412	CS M14-2.0 X 50 C 10.9 ZO	4
36	178684	TENSION WHEEL	2
37	178484	BRACKET	1
38	165146	SEAL KIT	8

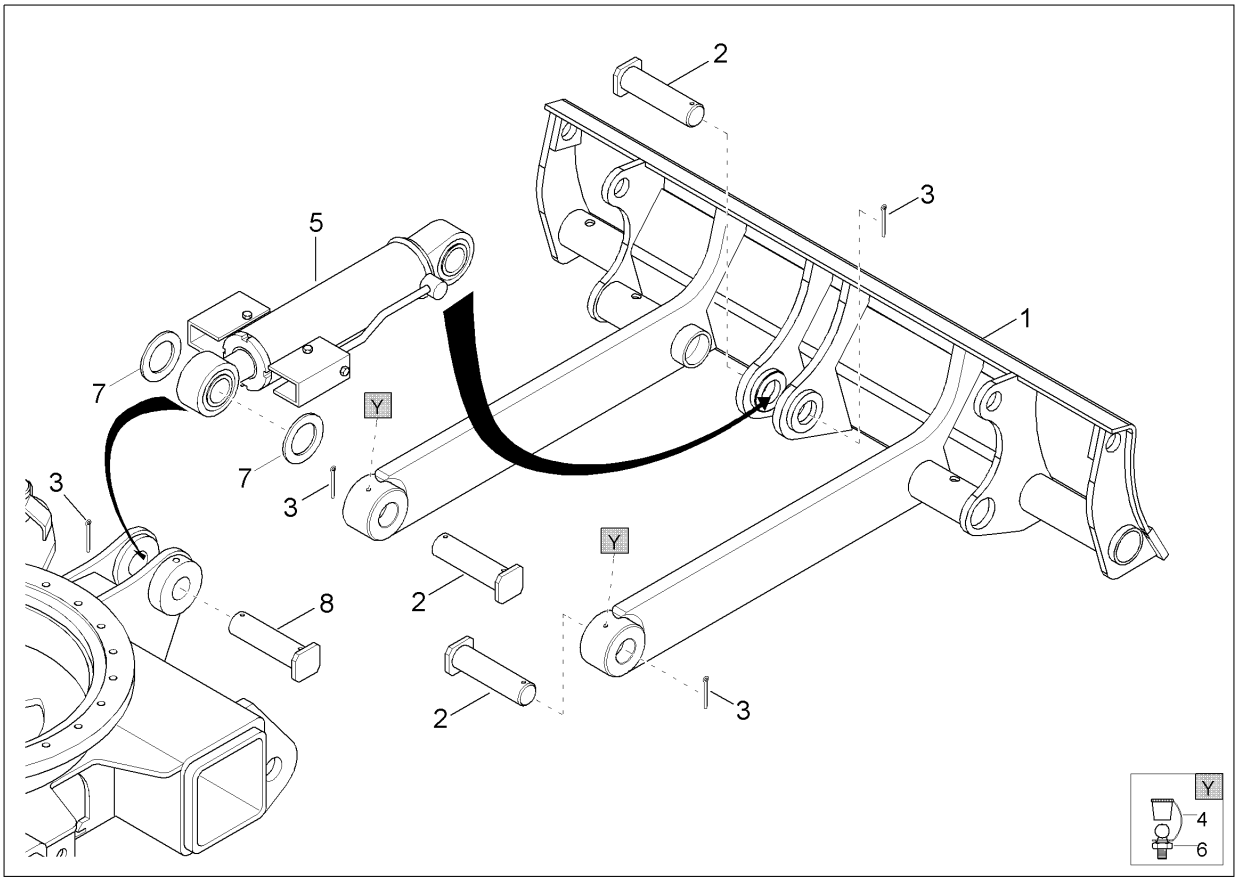
193/223 - TRACK TENSION (RUBBER TRACK) ET1940120



Ref. No.	Part No.	Description	Qty. Req.	Ref. No.	Part No.	Description	Qty. Req.
1	1902233G	ROLLER COMPLETE	1	8	161561	SEAL	1
2	160518	GUIDE	2	9	160521	CYLINDER	1
3	161829	BRACKET	1	10	160523	SPRING	1
4	651398	CS M10-1.5 X 35 C 10.9 ZO	4	11	162049	NUT	1
5	161623	LW SPRING B10 DIN7981	4	12	162053	COTTERPIN	1
6	160520	PISTON	1	13	9905074G	DOWEL PIN 6 X 70	2
7	161564	SEAL	1	14	165146	SEAL KIT	1

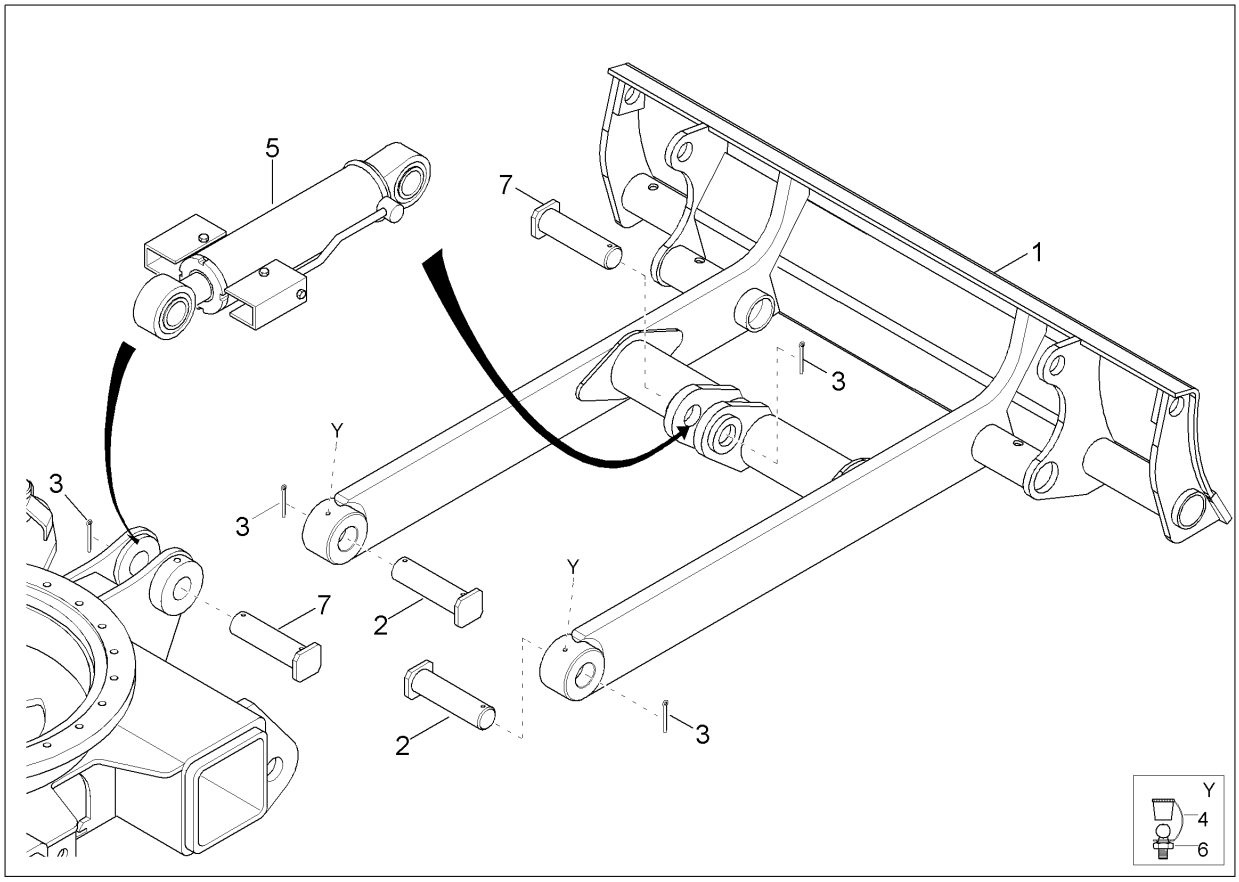


Ref. No.	Part No.	Description	Qty. Req.
1	178680	TENSION WHEEL	1
2	178681	CONSOLE	2
3	160522	SHAFT	1
4	163859	SCREW	1
5	165135	SPRING	4
6	651398	CS M10-1.5 X 35 C 10.9 ZO	4
7	165145	BUSHING	2
8	161829	BRACKET	1
9	178682	TENSION CYLINDER	1
10	178683	SPRING	1
11	178841	SEAL	1
12	178840	SEAL	1
13	162049	NUT	1
14	162053	COTTERPIN	1
15	165146	SEAL KIT	1



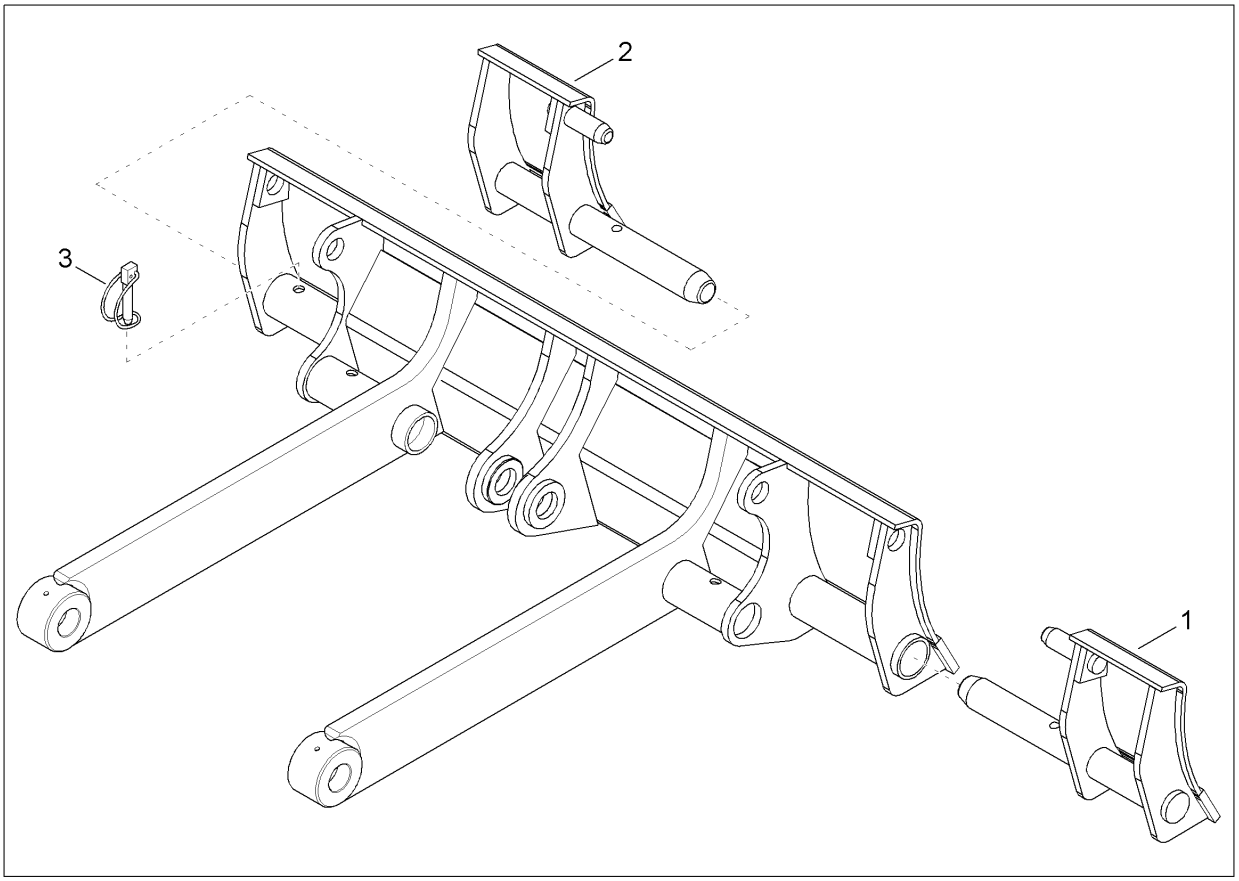
Ref. No.	Part No.	Description	Qty. Req.
1	178465	DOZER BLADE	1
2	178459	PIN	3
3	161681	PIN/SPLIT 6.3 X 50 ZO D94	4
4	161416	PROTECTION CAP	2
5	1428005G	DOZER BLADE CYLINDER	1
6	161411	NIPPLE	2
7	1522078G	SPACER	2
8	178460	PIN	1

See page 96 for individual components.

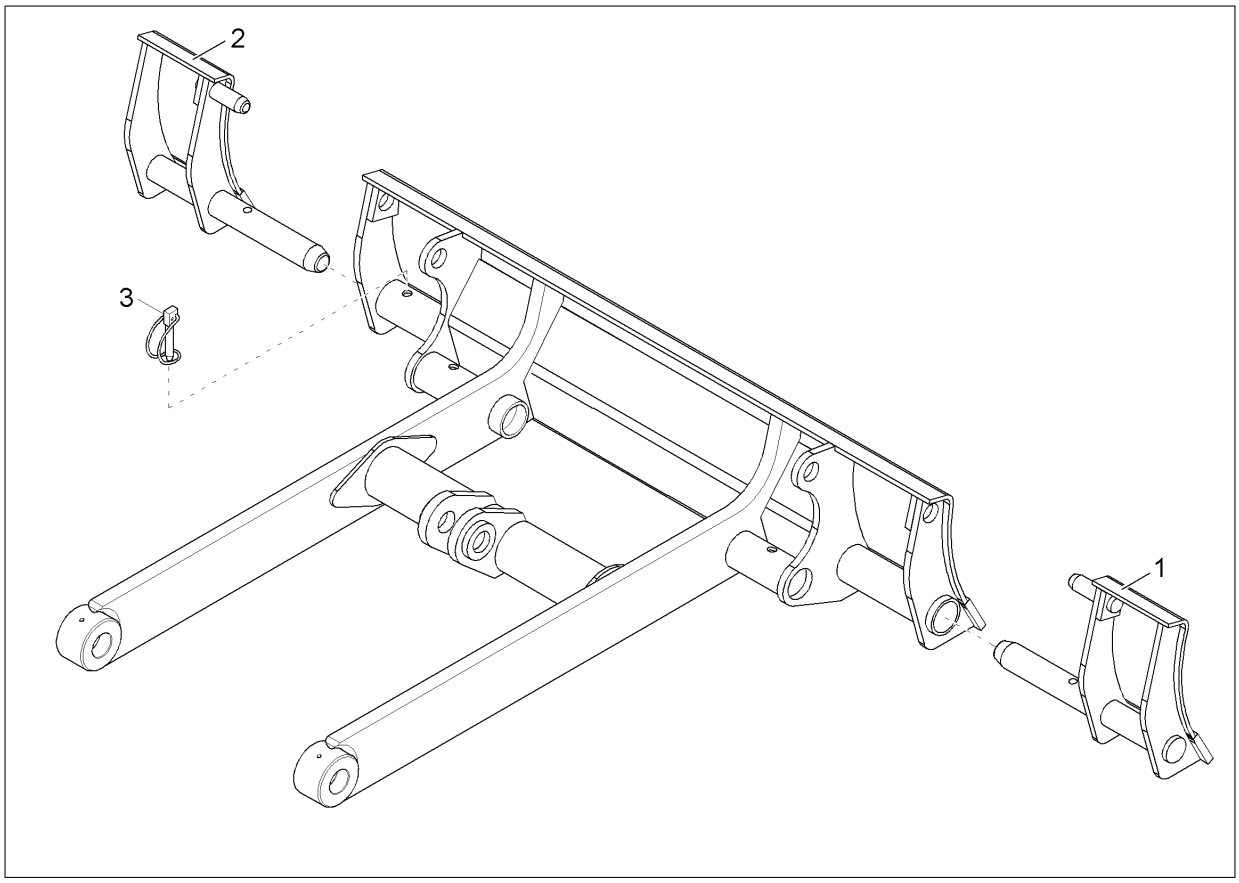


Ref. No.	Part No.	Description	Qty. Req.
1	178466	DOZER BLADE LONG	1
2	178459	PIN	2
3	161681	PIN/SPLIT 6.3 X 50 ZO D94	4
4	161416	PROTECTION CAP	2
5	1528005G	DOZER BLADE CYLINDER	1
6	161411	GREASE ZERK	2
7	178460	PIN	2

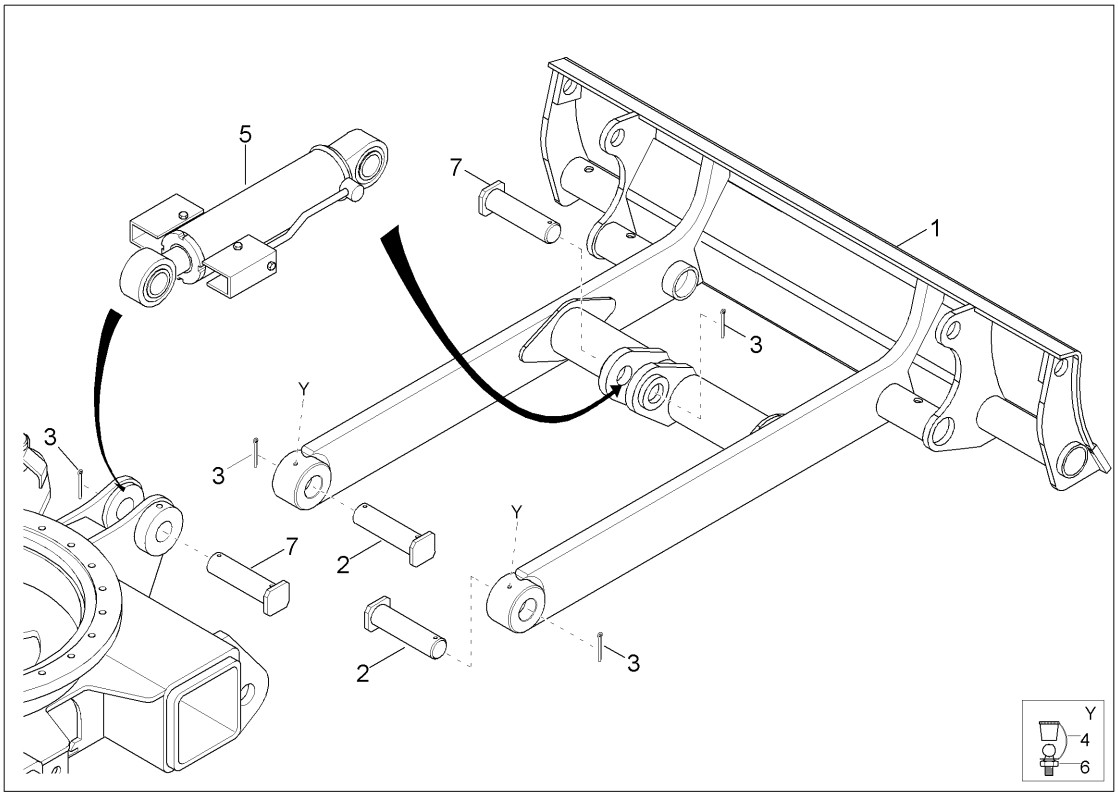
See page 98 for individual components.



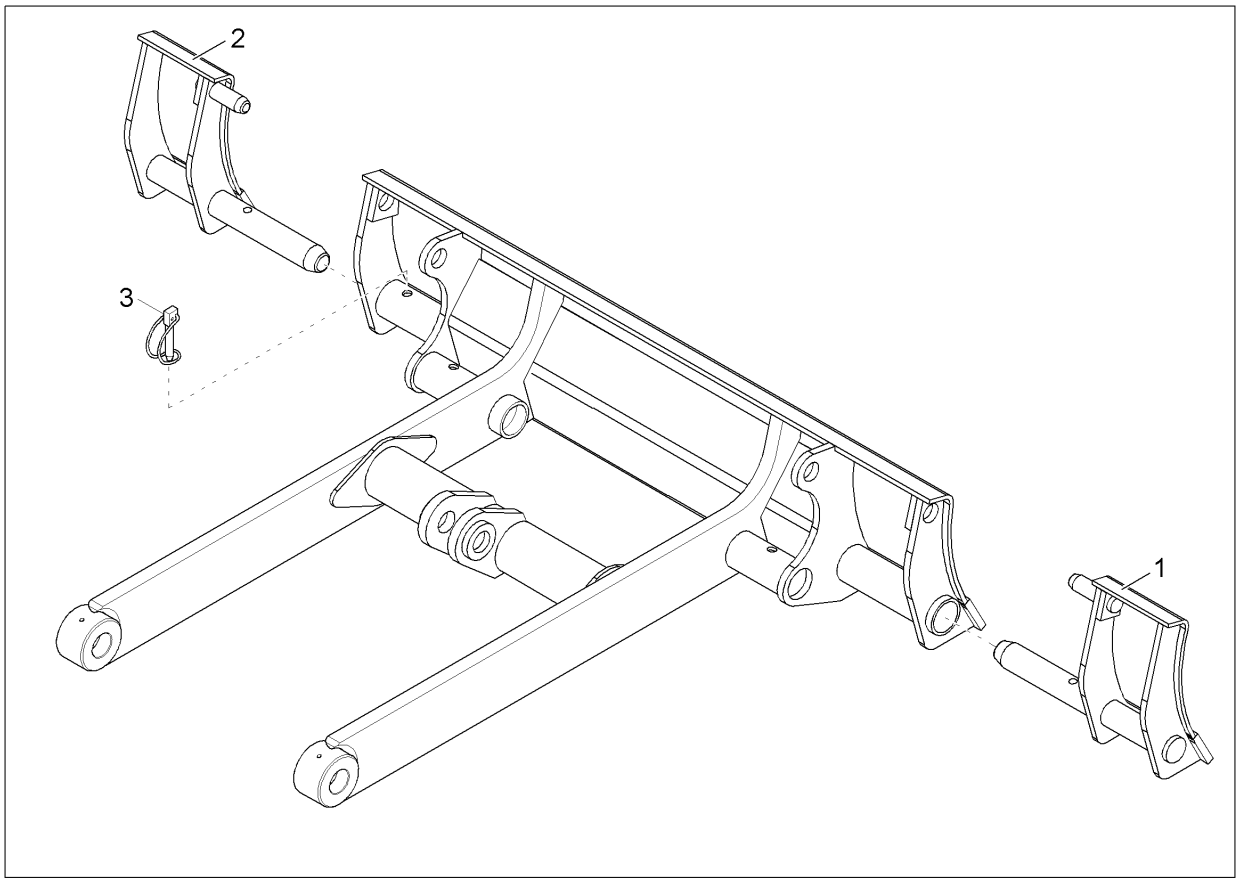
Ref. No.	Part No.	Description	Qty. Req.	Ref. No.	Part No.	Description	Qty. Req.
1	1522068G	DOZER BLADE EXTENSION	1	3	9905073G	LATCH PIN	2
2	1522069G	DOZER BLADE EXTENSION	1				



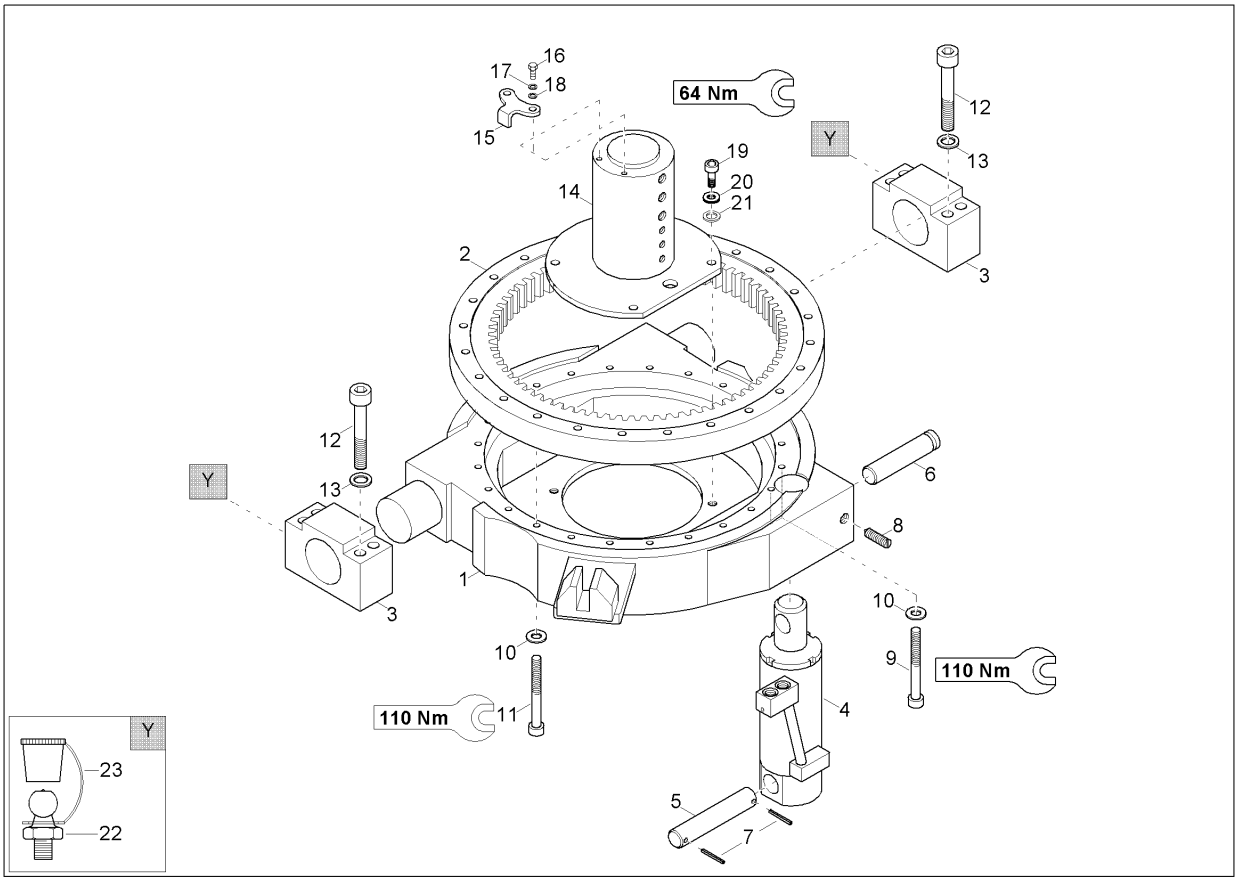
Ref. No.	Part No.	Description	Qty. Req.	Ref. No.	Part No.	Description	Qty. Req.
1	1522050G	DOZER EXTENSION RIGHT	1	3	9905073G	LATCH PIN	2
2	1522042G	DOZER EXTENSION LEFT	1				



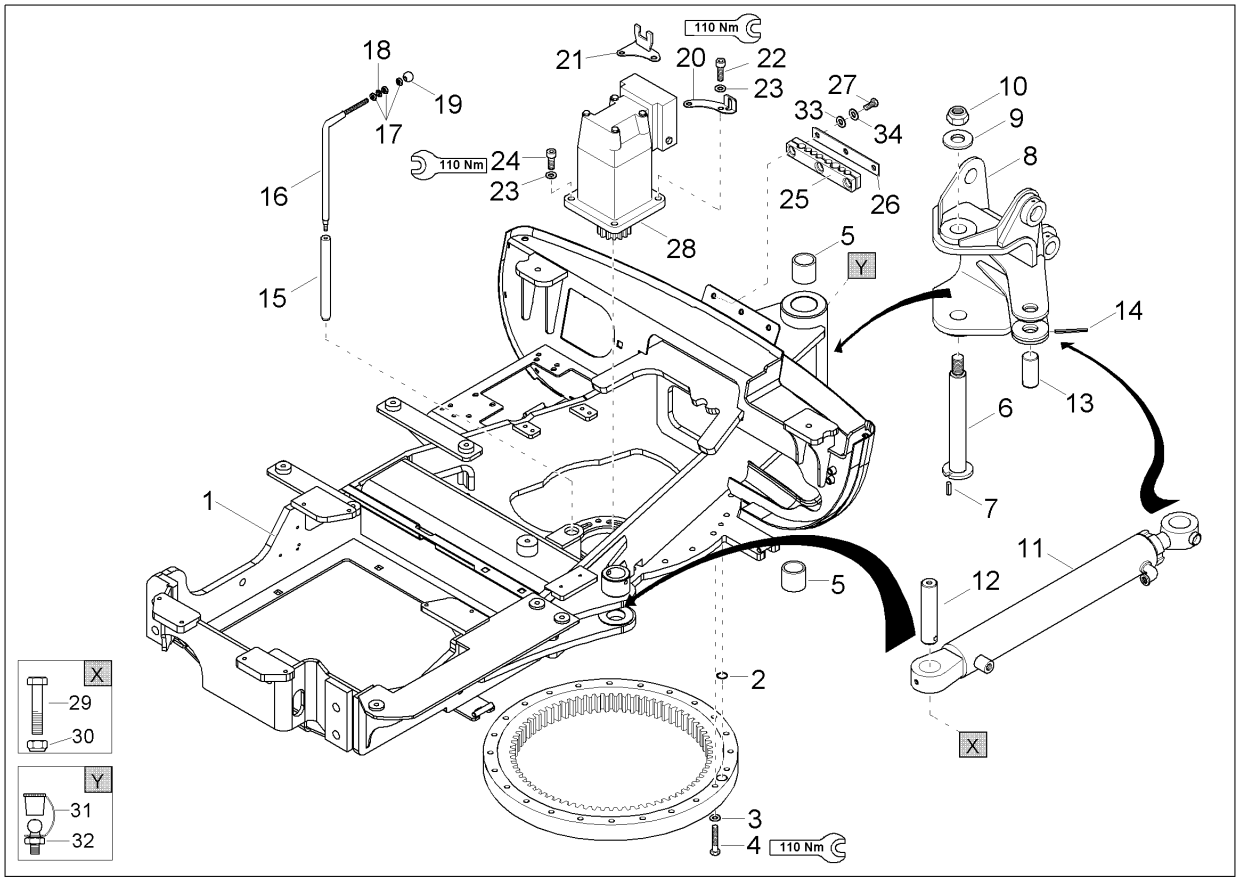
Ref. No.	Part No.	Description	Qty. Req.
1	178466	DOZER BLADE LONG	1
2	178459	PIN	2
3	161681	PIN/SPLIT 6.3 X 50 ZO D94	4
4	161416	PROTECTION CAP	2
5	1528005G	DOZER BLADE CYLINDER	1
		See page 98 for individual components.	
6	161411	GREASE ZERK	2
7	178460	PIN	2



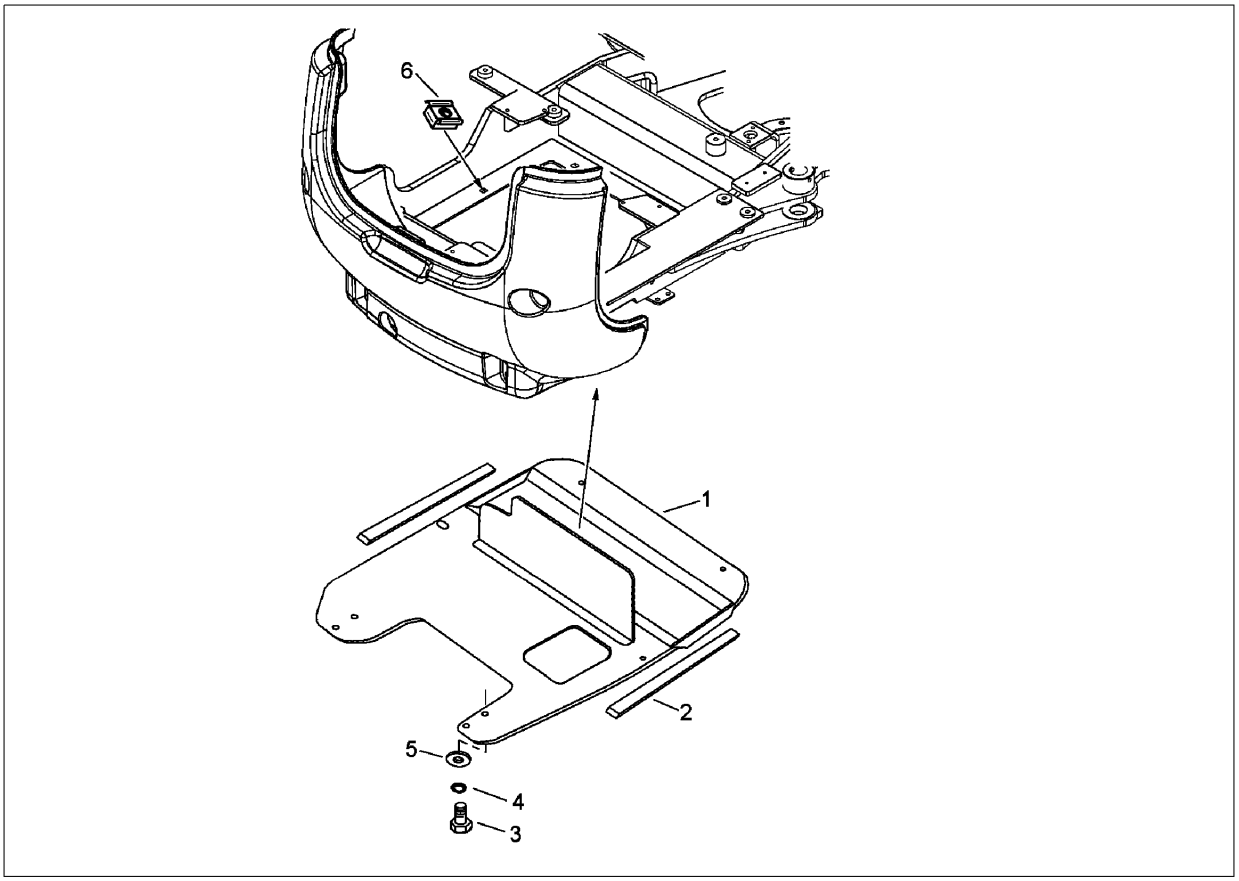
Ref. No.	Part No.	Description	Qty. Req.	Ref. No.	Part No.	Description	Qty. Req.
1	1522050G	DOZER EXTENSION RIGHT	1	3	9905073G	LATCH PIN	2
2	1522042G	DOZER EXTENSION LEFT	1				



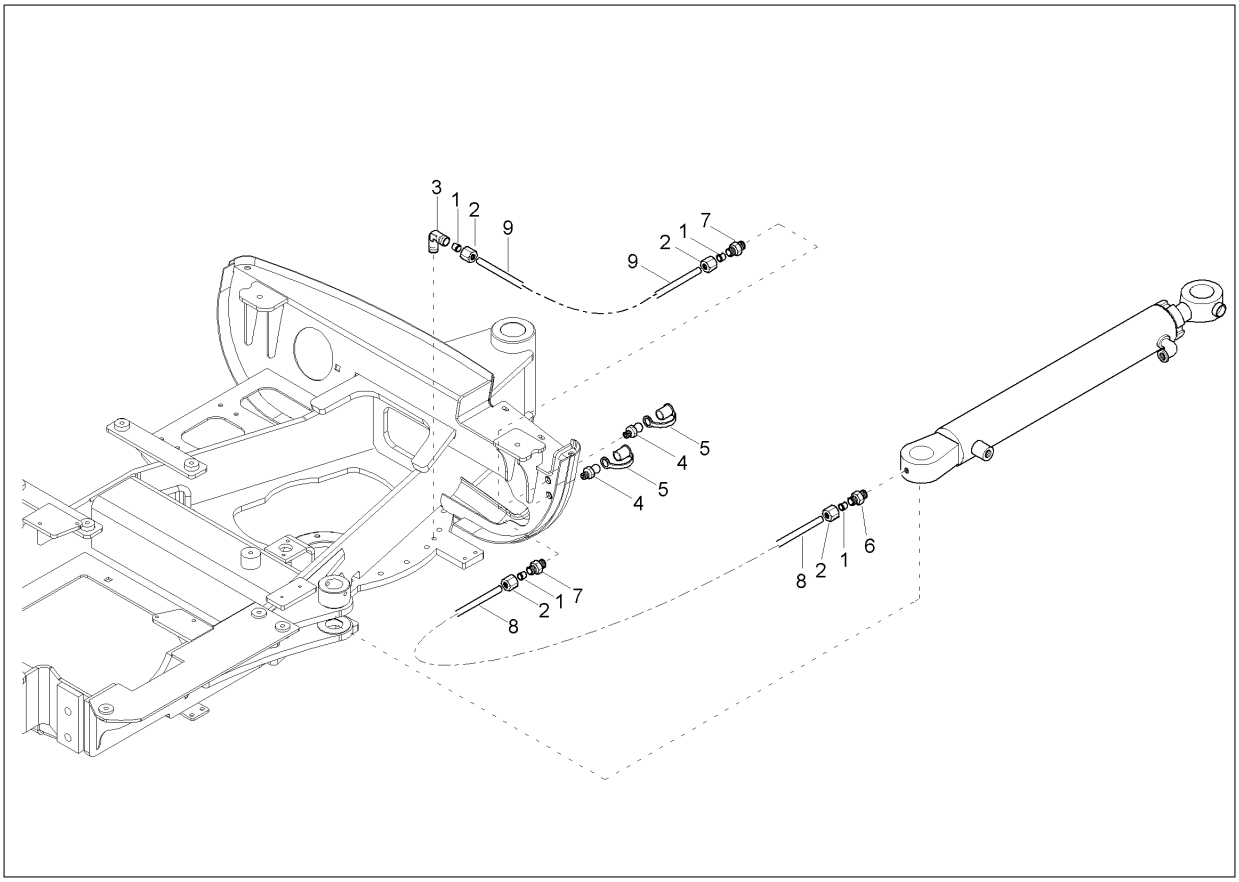
Ref. No.	Part No.	Description	Qty. Req.
1	2222015G	BRACKET	1
2	161724	TURNTABLE	1
3	2222018G	BLOCK	2
4	2228013G	TILT CYLINDER	1
	See page 100 for individual components.		
5	160779	PIN	1
6	160780	PIN	1
7	162124	COTTERPIN	2
8	651445	SHSS DP M10X16 45H	1
9	9901427G	SCREW	2
10	161643	WASHER/ROUND HI-TENS	23
11	162122	SCREW	21
12	9901345G	SCREW	8
13	161672	SNAP RING S16	8
14	162115	SWIVEL JOINT	1
	See page 76 for individual components.		
15	2221001G	BRACKET II	1
16	656105	CS M 8-1.25 X 25 C8.8 ZO	2
17	163670	WASHER	14
18	163634	WASHER	6
19	651474	SHCS M10-1.2 X 25 10.9 ZO	20
20	163641	WASHER	54
21	161640	WASHER/GR A 10.5	16
22	161412	GREASE ZERK	2
23	161416	PROTECTION CAP	2



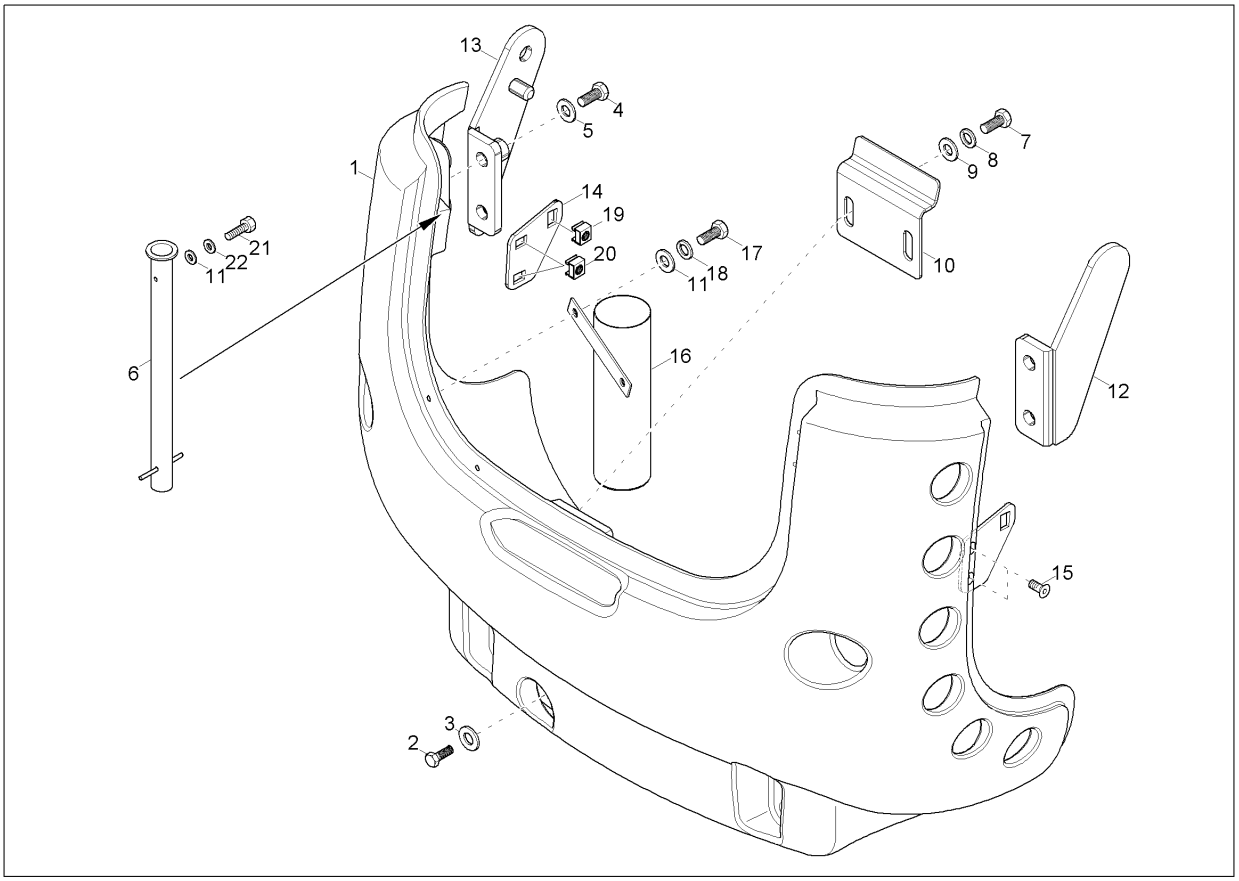
Ref. No.	Part No.	Description	Qty. Req.
1	178467	CHASSIS	1
2	161570	O-RING	1
3	161643	WASHER/ROUND HI-TENS	24
4	651411	HB M12-1.7X 60 C 10.9 ZO	24
5	161541	BUSHING	2
6	160697	PIN	1
7	165954	GRUB SCREW	1
8	165439	SWING BRACKET	1
9	161656	WASHER/ROUND HI-TENS 28	1
10	651454	HLN INS M27-3 ZO	1
11	1528002G	BOOM OFFSET CYLINDER	1
	See page 95 for individual components.		
12	160732	PIN	1
13	160691	PIN	1
14	651469	PIN/SPRING M8 X 70 D1481	1
15	1429104G	LOCKING PISTON	1
16	1429106G	LEVER	1
17	9902111G	HEXAGON NUT	3
18	163642	WASHER	1
19	161631	KNOB/BALL D40MM W/HOLE	1
20	1521001G	BRACKET	1
21	2221002G	BRACKET I	1
22	656148	SHCS M12-1.75X40 10.9 ZO	2
23	161636	WASHER/NORD-LOCK NL 12	4
24	651480	SHCS M12-1.7 X 30 10.9 ZO	2
25	178435	CLAMP	1
26	178436	COVER PLATE	1
27	651433	HB M8-1.2 X 40 C 8.8 ZO	3
28	160595	MOTOR/HYDRAULIC	1
	See page 77 for individual components.		
29	651438	HB M8-1.2 X 70 C 8.8 ZO	1
30	651458	HLN INS M8-1.2 8 ZO	1
31	161422	PROTECTION CAP	1
32	161411	GREASE ZERK	1
33	163670	WASHER	3
34	163634	WASHER	3



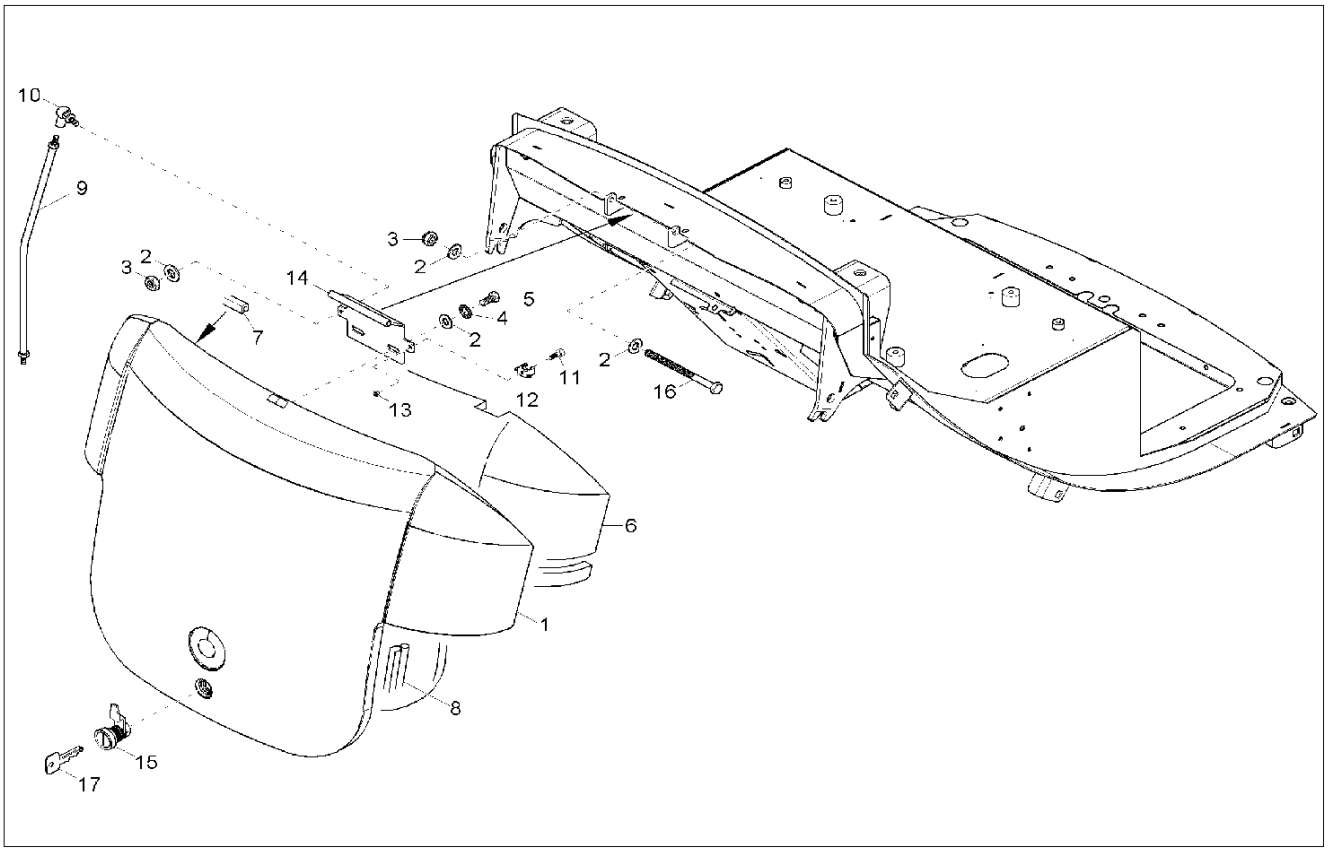
Ref. No.	Part No.	Description	Qty. Req.	Ref. No.	Part No.	Description	Qty. Req.
1	1521009G	SCREW JOINT	1	4	163670	WASHER	6
2	165920	RUBBER SEAL - 1.1m	1	5	161667	WASHER/GR A 8.4 ZO	6
3	656001	CS M 8-1.25 X 20 C8.8 ZO	6	6	161616	NUT/CAGE M8	6



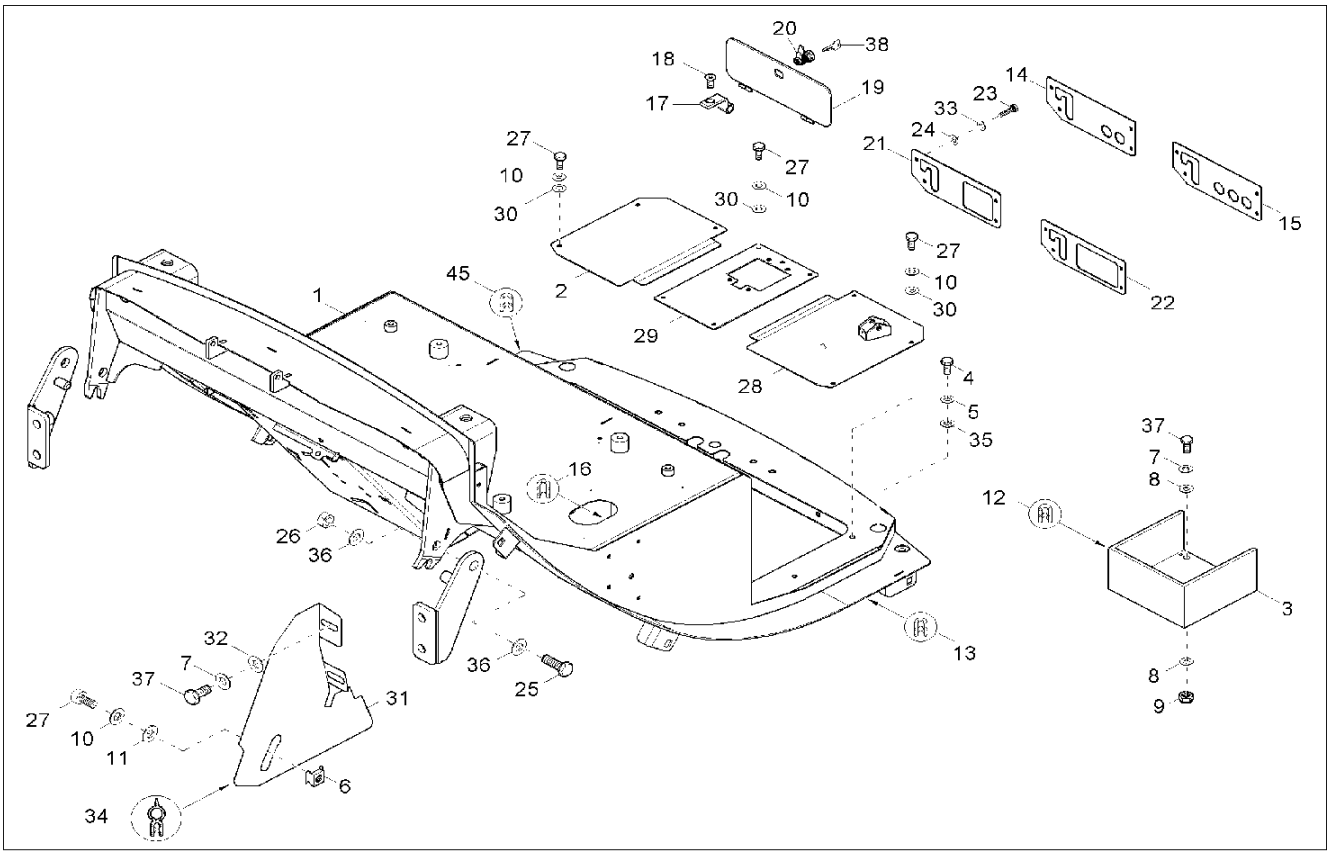
Ref. No.	Part No.	Description	Qty. Req.	Ref. No.	Part No.	Description	Qty. Req.
1	161469	WASHER	4	6	161461	SCREW JOINT	2
2	161468	NUT	4	7	9910598G	SCREW JOINT	2
3	165964	ELBOW	1	8	165916	LUBRICATION TUBE - 0.9m	1
4	9909039G	GREASE ZERK	2	9	165916	LUBRICATION TUBE - 0.4m	1
5	161416	PROTECTION CAP	2				



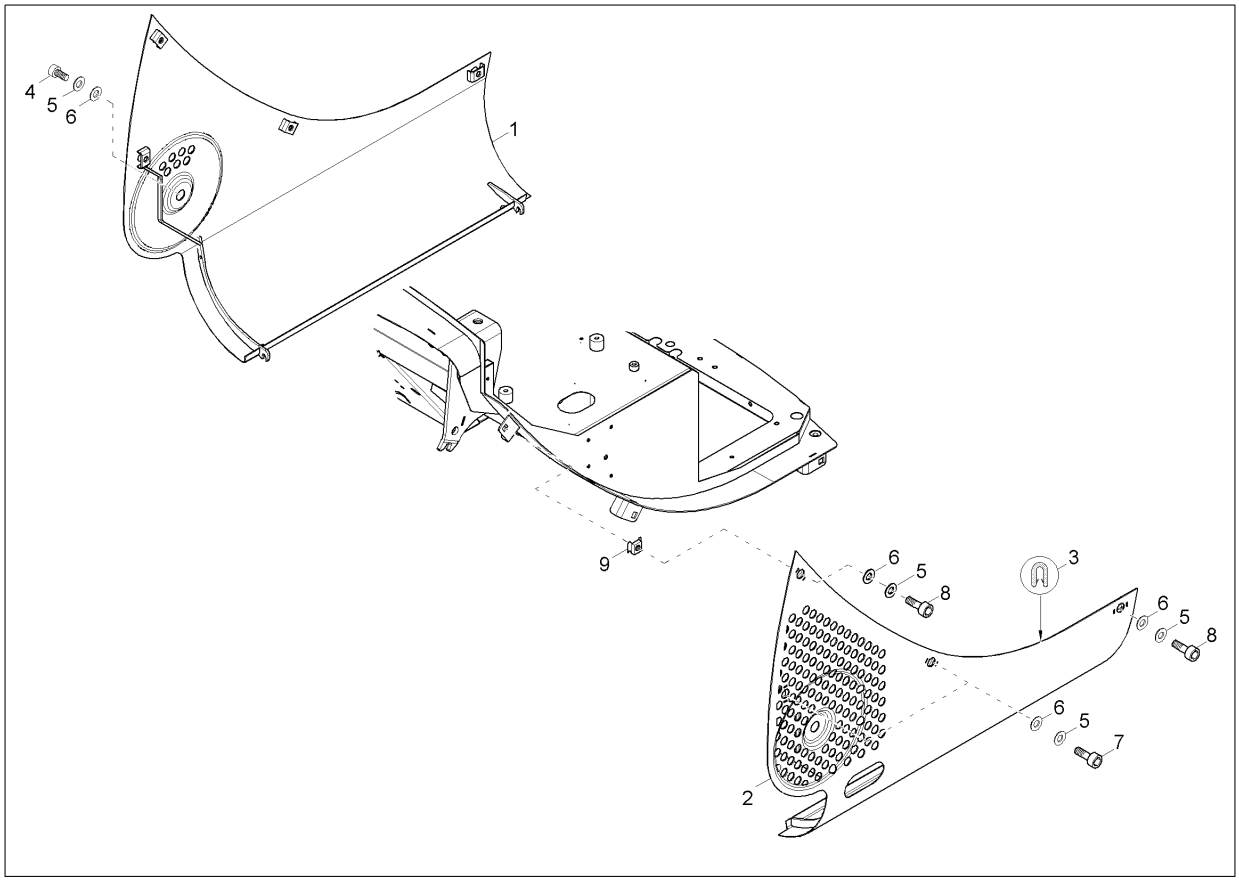
Ref. No.	Part No.	Description	Qty. Req.	Ref. No.	Part No.	Description	Qty. Req.
1	1521150SKG	FENDER	1	12	1421158G	BRACKET	1
2	9901115G	SCREW	4	13	1421156G	BRACKET	1
3	161653	WASHER/ROUND HI-TENS 21	4	14	1421213G	MOUNTING LINK	2
4	9901732G	HEX HEAD SCREW	4	15	651466	SCREW FCHC HS M8-1.2X20	4
5	163645	WASHER	4	16	1421036G	GREASE GUN BRACKET	1
6	1423011G	SUPPORT	1	17	656093	CS M 8-1.25 X 16 C8.8 ZO	2
7	656090	CS M10-1.50 X 16 C8.8 ZO	2	18	163670	WASHER	2
8	161669	RING/SNAP S10	2	19	161610	NUT/CAGE M10	2
9	161663	WASHER/GR A 10.5 ZO	2	20	161616	NUT/CAGE M8	4
10	178432	SHEET METAL	1	21	651432	CS M8-1.2 X 35 C 8.8 ZO	1
11	163634	WASHER	3	22	656110	LW M8 Z PHEOLL KB	1



Ref. No.	Part No.	Description	Qty. Req.
1	178429	HOOD	1
2	163634	WASHER	5
3	651458	HLN INS M8-1.2 8 ZO	2
4	163670	WASHER	2
5	656094	CS M 8-1.25 X 30 C8.8 ZO	2
6	178458	ISOLATION MAT	1
7	9711076G	RUBBER PROFILE - 1.3m	1
8	165921	RUBBER PROFILE - 2.0m	1
9	178437	BRACKET	1
10	162072	BALL AND SOCKET	1
11	651460	FHSCS M5-0.8 X 16 8.8 ZO	1
12	162389	CLAMP	1
13	651456	HLN INS M5-.8 8 ZO	1
14	178464	HINGE	1
15	2529457G	LOCK	1
16	178525	SCREW	1
17	160713	KEY/FUEL CAP	1

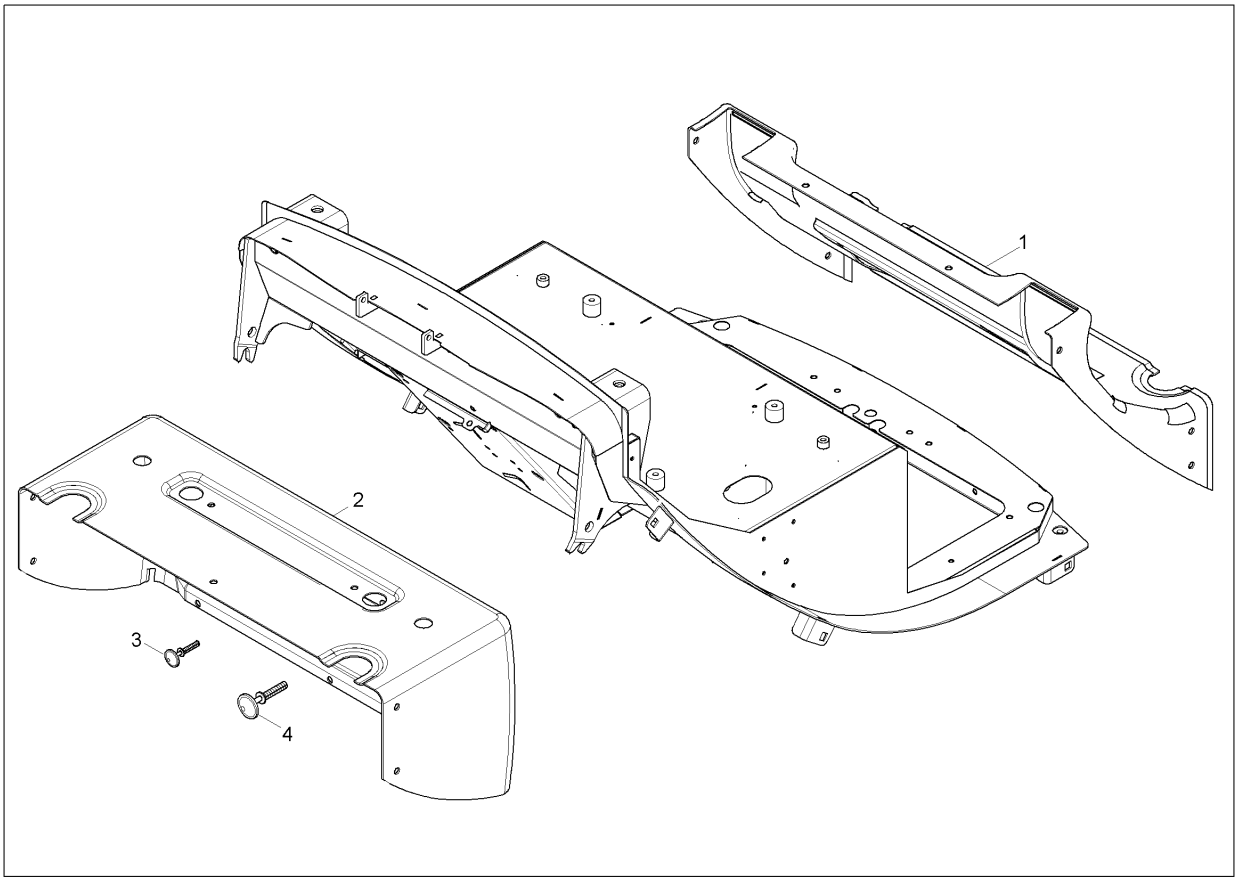


Ref. No.	Part No.	Description	Qty. Req.
1	178462	SEAT CONSOLE	1
2	178801	BOTTOM COVER LEFT	1
3	1423018G	STORAGE BOX	1
4	651480	SHCS M12-1.7 X 30 10.9 ZO	2
5	163651	WASHER	2
6	161615	NUT/CAGE M8	1
7	161675	RING/SNAP S6	5
8	161660	WASHER GR A6.4 ZO DIN 125	6
9	656047	HN M6-1.0 D934 Z F-Z0 PHEOL	3
10	163670	WASHER	14
11	161667	WASHER/GR A 8.4 ZO	5
12	165587	PVC-EDGE PROTECTION - 0.6m	1
13	9711076G	RUBBER PROFILE - 2.8m	1
14	1529004G	COVER	1
15	2229004G	COVER	1
16	165587	PVC-EDGE PROTECTION - 0.6m	1
17	1421033G	HINGE	2
18	651460	FHSCS M5-0.8 X 16 8.8 ZO	2
19	1421034G	COVER-CABIN MODEL	1
20	2529457G	LOCK	1
21	1521185G	COVER	1
22	2221003G	COVER	1
23	651504	SHCS M5-0.8 X 16 8.8 ZO	4
24	161665	WASHER/GR A 5.3 ZO	4
25	651414	CS M16-2.0 X 40 C 10.9 ZO	2
26	656052	NUT/HEX M16-2.00 D934 PC1	2
27	656001	CS M 8-1.25 X 20 C8.8 ZO	11
28	178799	BOTTOM COVER	1
29	178800	BOTTOM COVER	1
30	163634	WASHER	10
31	1425024G	AIR GUIDING PLATE	1
32	161666	WASHER/GR A 6.4 ZO	2
33	161674	RING/SNAP S16	4
34	165819	RUBBER PROFILE - 0.3m	1
35	161642	WASHER/GR A 13	2
36	163645	WASHER	4
37	656149	CS M 6-1.0X16 C 8.8 ZO	5
38	160713	KEY/FUEL CAP	1

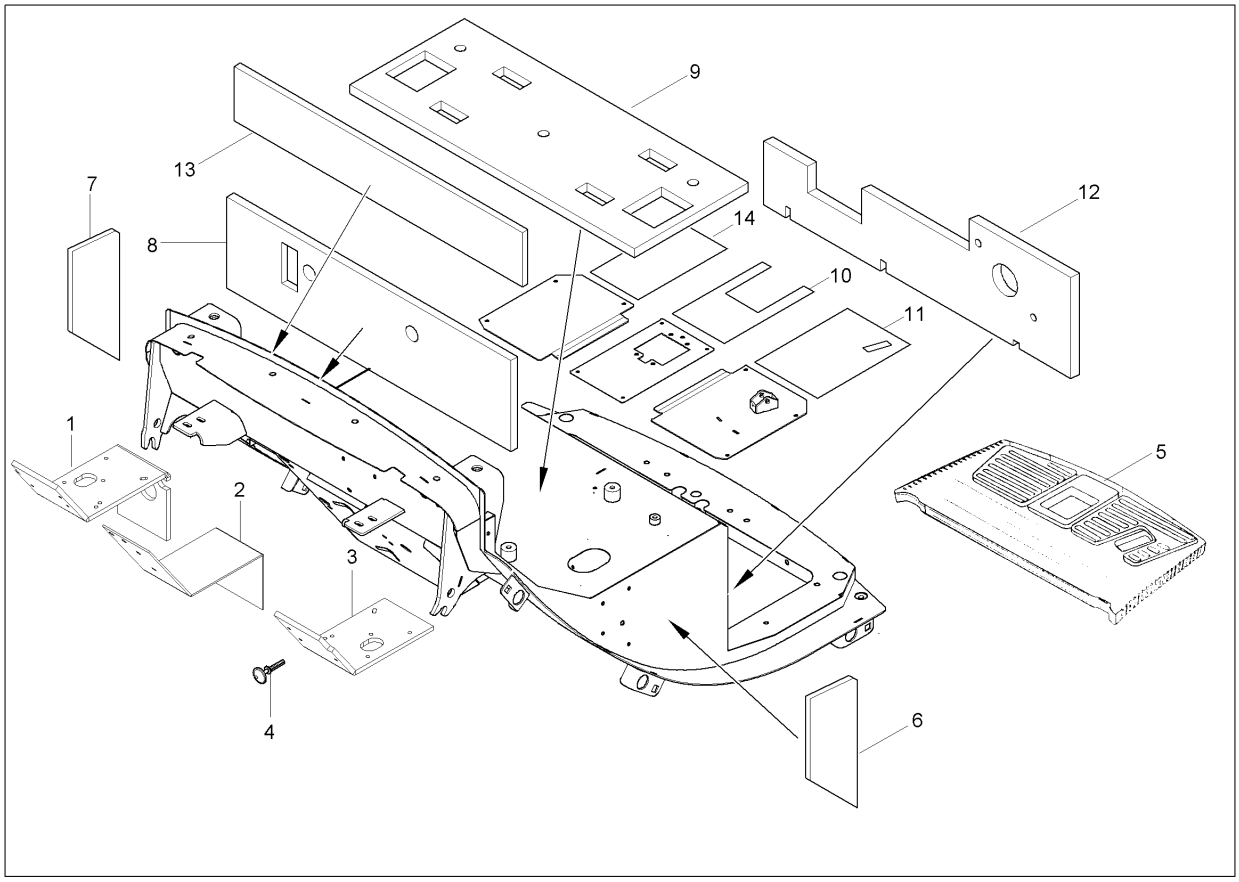


Ref. No.	Part No.	Description	Qty. Req.	Ref. No.	Part No.	Description	Qty. Req.
1	178433	SIDE WALL LEFT	1	6	161640	WASHER/GR A 10.5	8
2	178434	SIDE WALL RIGHT	1	7	651473	SHCS M10-1.2 X 25 8.8 ZO	3
3	9711076G	RUBBER PROFILE - 6.0m	1	8	651475	SHCS M10-1.2 X 30 8.8 ZO	4
4	9901346G	SCREW	1	9	161610	NUT/CAGE M10	6
5	161669	RING/SNAP S10	8				

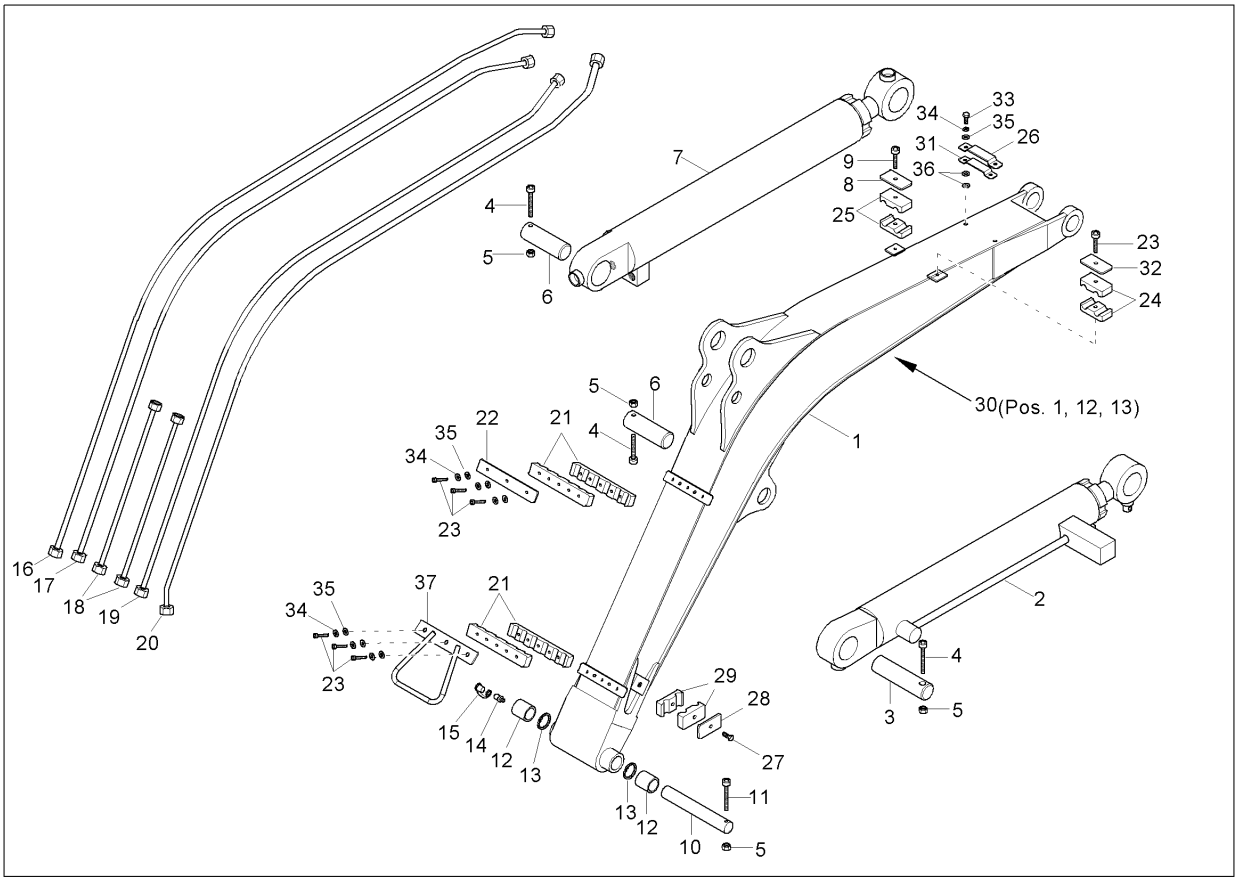
193/223 - COVER, SEAT CONSOLE ET1940235



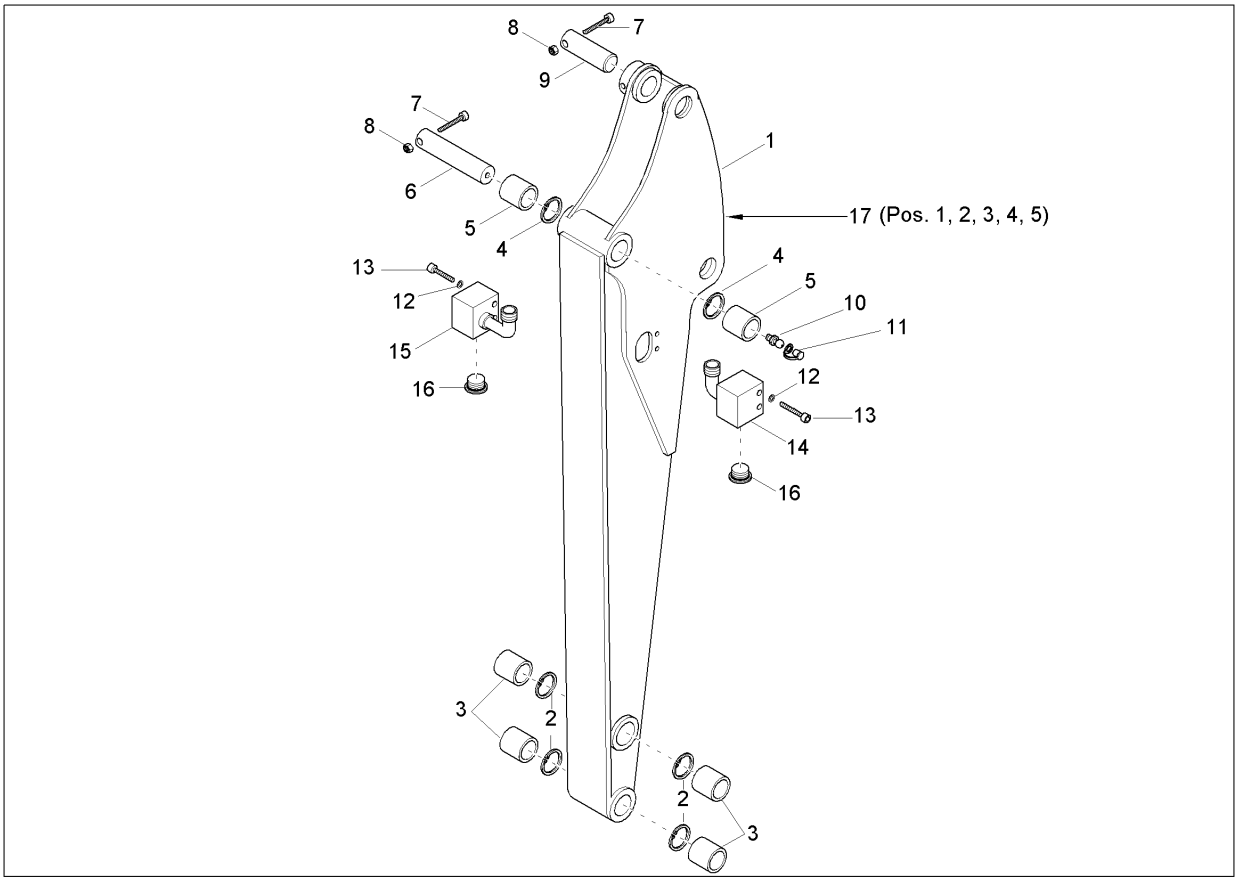
Ref. No.	Part No.	Description	Qty. Req.	Ref. No.	Part No.	Description	Qty. Req.
1	1423103G	COVER	1	3	164689	RIVET 11MM	7
2	1423104G	COVER	1	4	164754	RIVET 20MM	16



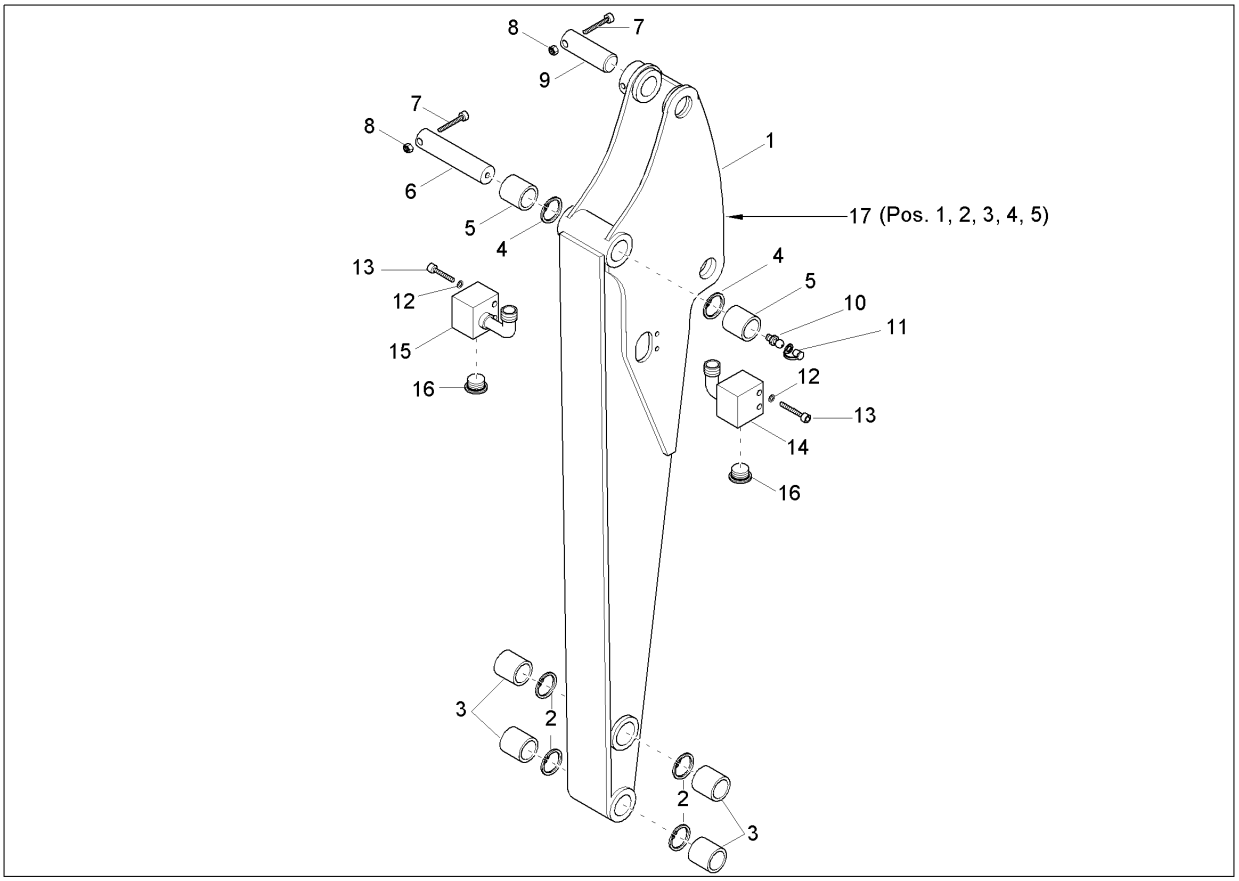
Ref. No.	Part No.	Description	Qty. Req.	Ref. No.	Part No.	Description	Qty. Req.
1	1429107G	ISOLATION MAT	1	8	1429018G	ISOLATION MAT	1
2	1429109G	ISOLATION MAT	1	9	1429020G	ISOLATION MAT	1
3	1429108G	ISOLATION MAT	1	10	178794	ISOLATION MAT	1
4	1423454G	LOCK/RIGHT	14	11	178457	ISOLATION MAT	1
5	1423115G	FOOT MAT	1	12	1429019G	ISOLATION MAT	1
6	1429017G	ISOLATION MAT RIGHT	1	13	1429024G	ISOLATION MAT	2
7	1429021G	ISOLATION MAT	1	14	178793	ISOLATION MAT	1



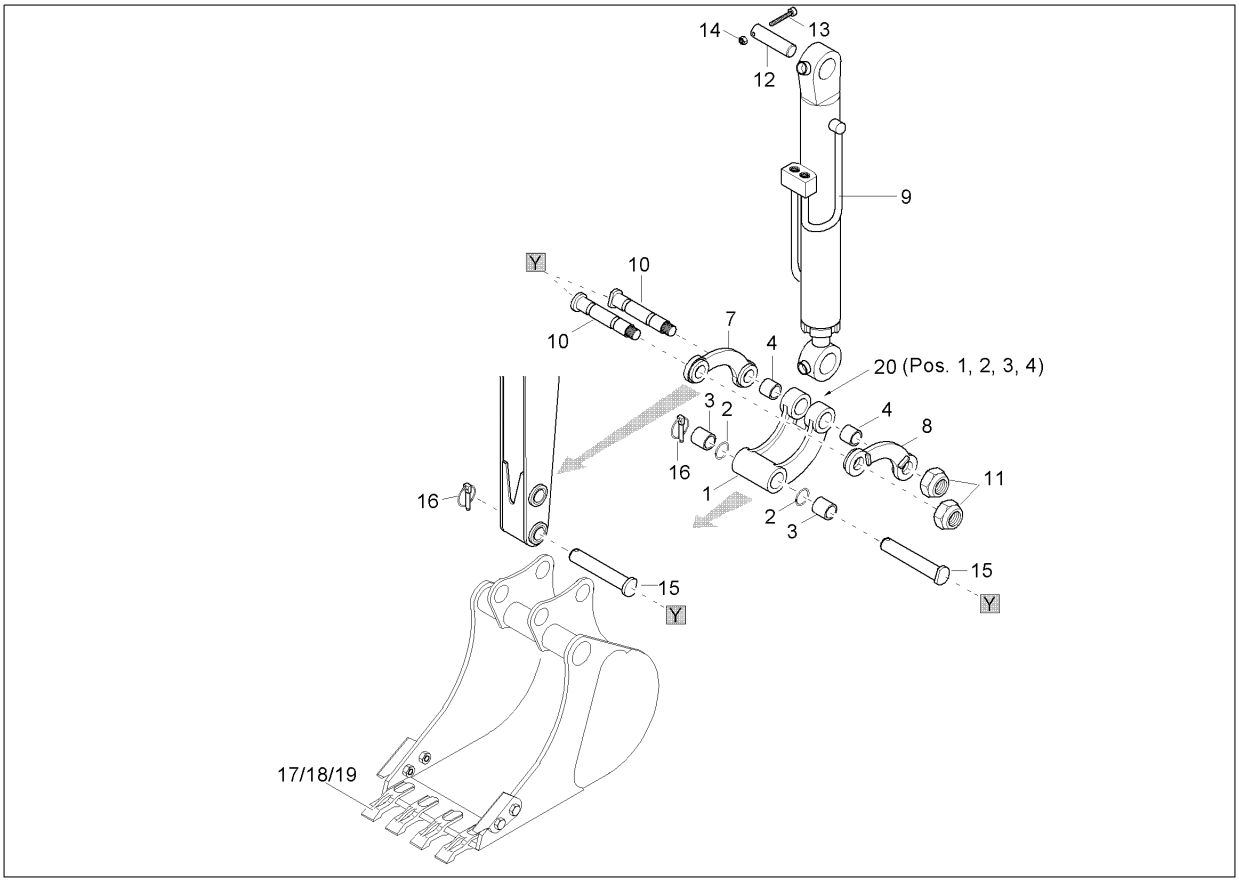
Ref. No.	Part No.	Description	Qty. Req.
1	178473	LIFTING BOOM	1
2	165444	BOOM CYLINDER	1
	See page 89 for individual components.		
3	165546	PIN DM=32X168	1
4	651439	HB M8-1.2 X 80 C 8.8 ZO	3
5	651458	HLN INS M8-1.2 8 ZO	4
6	165545	PIN DM=32X118	2
7	165445	DIPPER ARM CYLINDER	1
	See page 91 for individual components.		
8	162070	COVER	1
9	651426	CS M6-1.0 X 35 C 8.8 ZO	1
10	1929004G	PIN DM=36X269	1
11	651440	HB M8-1.2 X 90 C 8.8 ZO	1
12	161539	BUSHING	2
13	161685	RING/SNAP B45 D7993	2
14	161411	GREASE ZERK	1
15	161422	PROTECTION CAP	1
16	178478	TUBE	1
17	178477	TUBE	1
18	178475	TUBE	2
19	178476	TUBE	1
20	178479	TUBE	1
21	1927029G	PIPE CLAMP	2
22	1927023G	COVER	1
23	651432	CS M8-1.2 X 35 C 8.8 ZO	7
24	9914015G	CLAMP	2
25	161552	CLAMP	2
26	1927022G	CLAMP	1
27	651432	CS M8-1.2 X 35 C 8.8 ZO	1
28	162069	COVER	1
29	161556	CLAMP	2
30	178474	PRE-ASSEMBLED BOOM	1
31	1427028G	RUBBER	1
32	162069	COVER	1
33	656001	CS M 8-1.25 X 20 C8.8 ZO	2
34	161675	RING/SNAP S6	8
35	163634	WASHER	8
36	161667	WASHER/GR A 8.4 ZO	4
37	178452	BRACKET	1



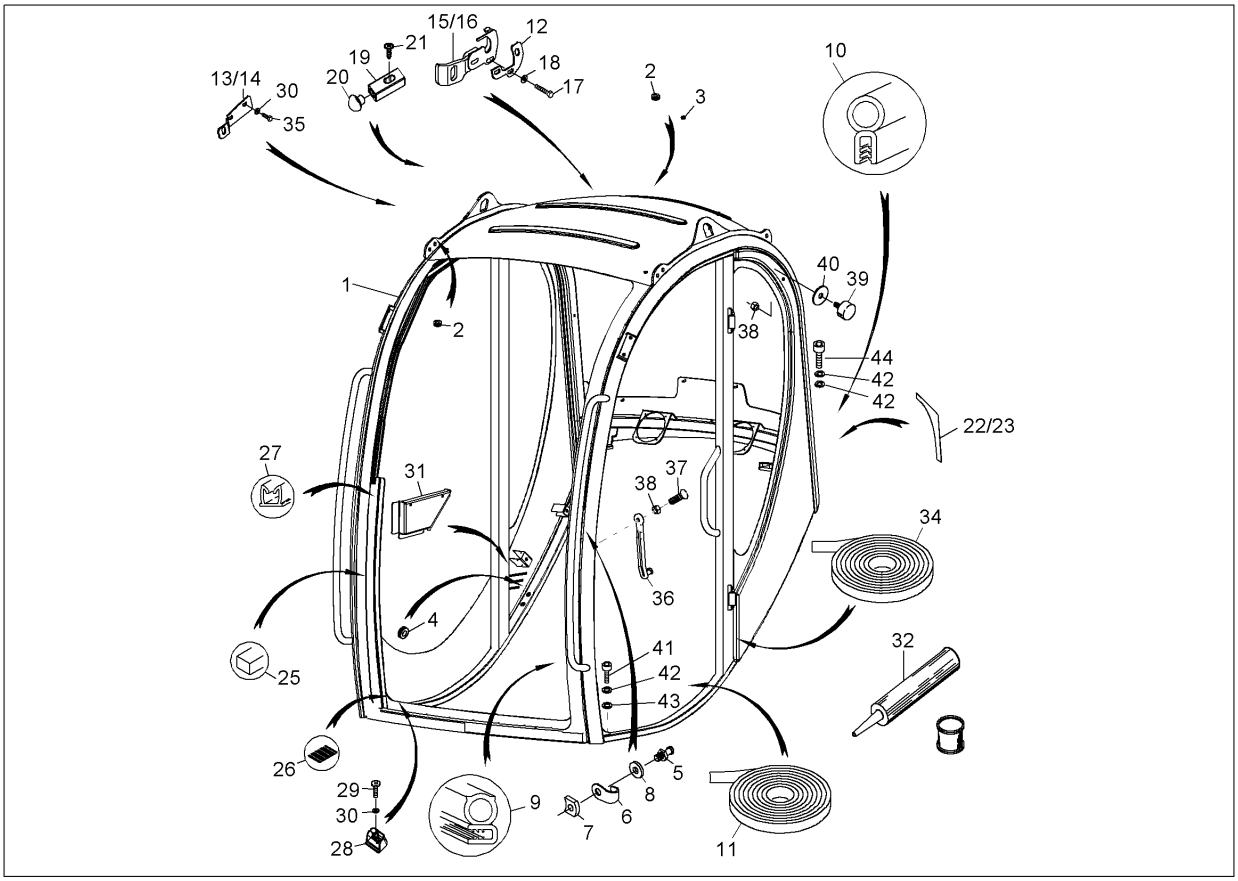
Ref. No.	Part No.	Description	Qty. Req.
1	178823	DIPPER ARM	1
2	161684	RING/SNAP B38 D7993	4
3	161543	BUSHING	4
4	161685	RING/SNAP B45 D7993	2
5	161539	BUSHING	2
6	165050	PIN DM=36X241	1
7	651438	HB M8-1.2 X 70 C 8.8 ZO	2
8	651458	HLN INS M8-1.2 8 ZO	2
9	1929003G	PIN DM=32X137	1
10	161411	GREASE ZERK	1
11	161422	PROTECTION CAP	1
12	163670	WASHER	4
13	9901617G	SCREW	4
14	1428413G	BLOCK	1
15	1428412G	BLOCK	1
16	178527	SCREW	2
17	1927401G	PRE-ASSEMBLED DIPPER ARM	1



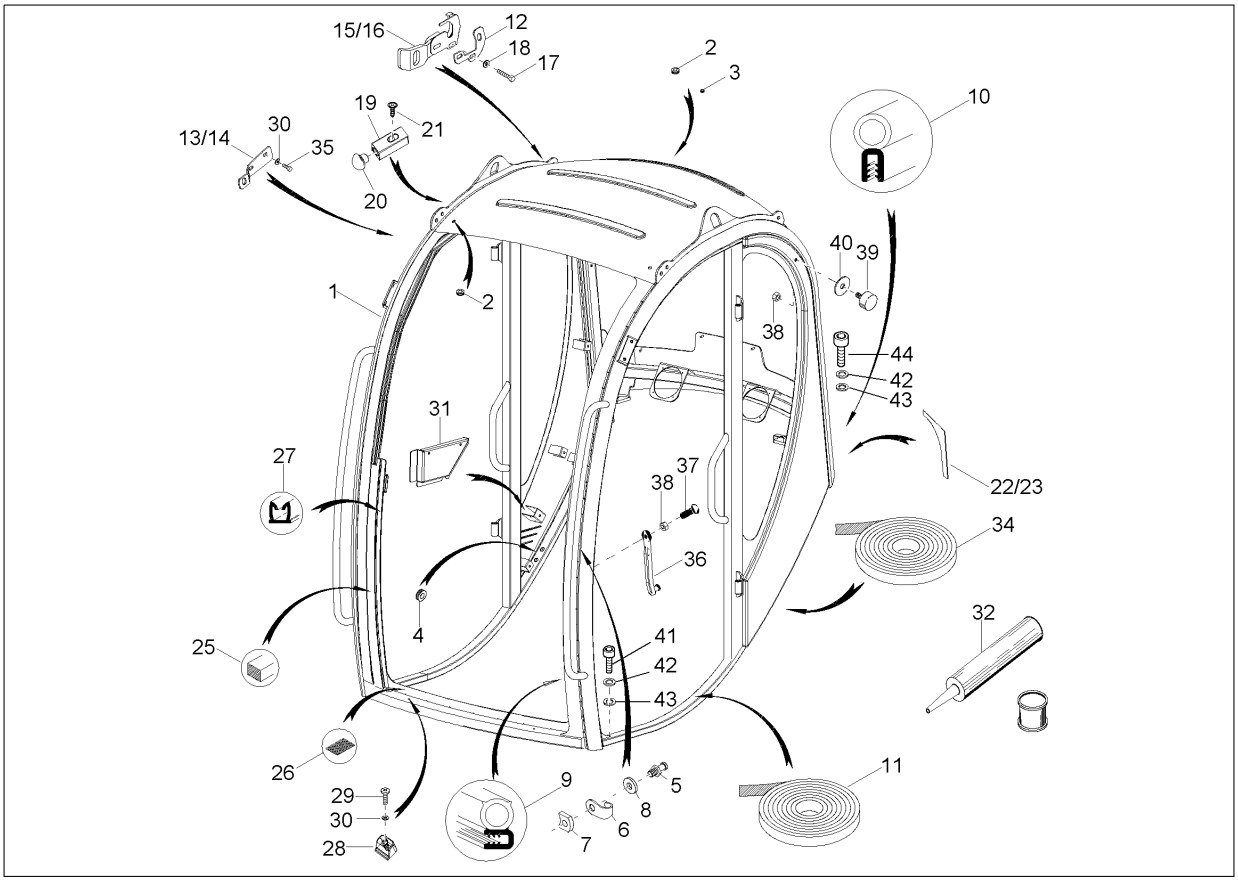
Ref. No.	Part No.	Description	Qty. Req.
1	178822	DIPPER ARM	1
2	161684	RING/SNAP B38 D7993	4
3	161543	BUSHING	4
4	161685	RING/SNAP B45 D7993	2
5	161539	BUSHING	2
6	165050	PIN DM=36X241	1
7	651438	HB M8-1.2 X 70 C 8.8 ZO	2
8	651458	HLN INS M8-1.2 8 ZO	2
9	1929003G	PIN DM=32X137	1
10	161411	GREASE ZERK	1
11	161422	PROTECTION CAP	1
12	163670	WASHER	4
13	9901617G	SCREW	4
14	1428413G	BLOCK	1
15	1428412G	BLOCK	1
16	178527	SCREW	2
17	1927403G	PRE-ASSEMBLED DIPPER ARM LONG	1



Ref. No.	Part No.	Description	Qty. Req.
1	165437	CONNECTING LINK	1
2	161684	RING/SNAP B38 D7993	2
3	161543	BUSHING	2
4	161540	BUSHING	2
7	160662	CONNECTING LINK	1
8	160663	CONNECTING LINK	1
9	1928003G	BUCKET CYLINDER	1
	See page 94 for individual components.		
10	160696	PIN	2
11	651454	HLN INS M27-3 ZO	2
12	1929003G	PIN DM=32X137	1
13	651438	HB M8-1.2 X 70 C 8.8 ZO	1
14	651458	HLN INS M8-1.2 8 ZO	1
15	165051	PIN DM=32X190	2
16	161405	COTTER PIN	2
17	161927	TOOTH/BUCKET	3
18	162024	SCREW/CAP	6
19	656050	HEX NUT M12 - 1.7	6
20	1927402G	PRE-ASSEMBLED CONNECTOR LINK	1

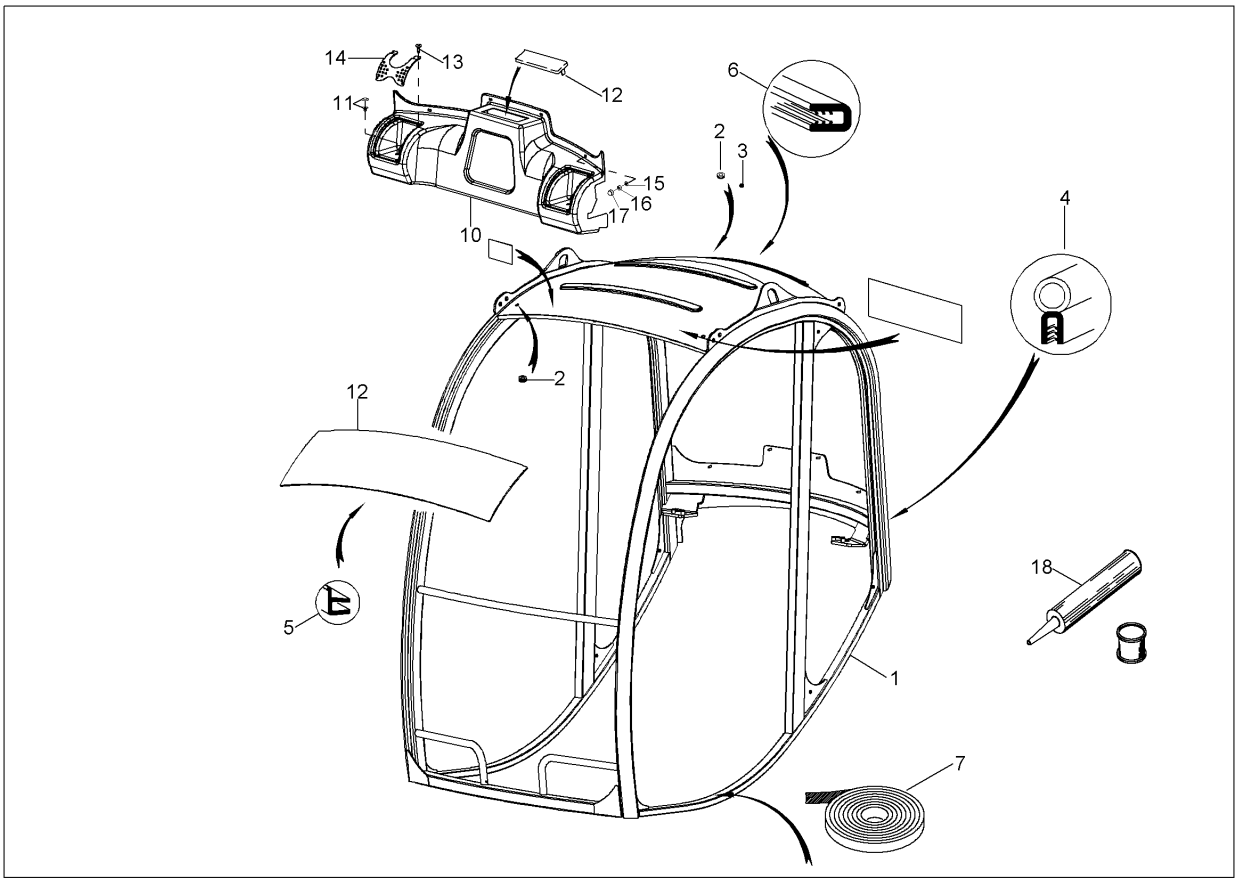


Ref. No.	Part No.	Description	Qty. Req.
1	178444	CABIN FRAME	1
2	162797	PLUG	5
3	164677	PLUG	2
4	1424420G	RUBBER BUSHING	8
5	161921	PIN	1
6	164771	BRACKET	1
7	164678	PLATE	1
8	161923	WASHER	1
9	165922	RUBBER PROFILE - 3.9m	1
10	165818	RUBBER PROFILE - 1.1m	1
11	165034	NON-SKIDDING - 0.3m	1
12	1423433G	LOCK	1
13	1424453G	LOCK	1
14	1424454G	LOCK	1
15	164679	BRACKET	1
16	164680	BRACKET	1
17	651425	CS M6-1.0 X 30 C 8.8 ZO	4
18	162924	WASHER	4
19	164681	RESILIENT PAD	2
20	164686	RUBBER PLUG	2
21	164907	SCREW	2
22	1423409G	FOIL LEFT	1
23	1423410G	FOIL RIGHT	1
25	1423411G	CELLULAR RUBBER - 1.5m	1
26	1423412G	SEAL - 0.8m	1
27	1423413G	SEAL - 1.5m	1
28	1423414G	COLLAR	2
29	162862	SCREW	2
30	162925	WASHER	6
31	1423415G	BRACKET	1
32	165035	GLUE	1
34	178711	STRIP OF GUM - 3.0m	1
35	651521	CS M5-0.8 X 16 C 8.8 ZO	4
36	2003018G	LATCH POST EXTENSION	1
37	9901392G	SCREW	1
38	656048	NUT/HEX M8 1.25 D934 PC8 F-ZO	2
39	1423449G	RUBBER BUFFER	1
40	160639	RUBBER WASHER	1
41	651483	SHCS M12-1.7 X 35 10.9 ZO	2
42	163651	WASHER	4
43	161645	WASHER/GR A 13 DIN7349	4
44	656148	SHCS M12-1.75X40 10.9 ZO	2

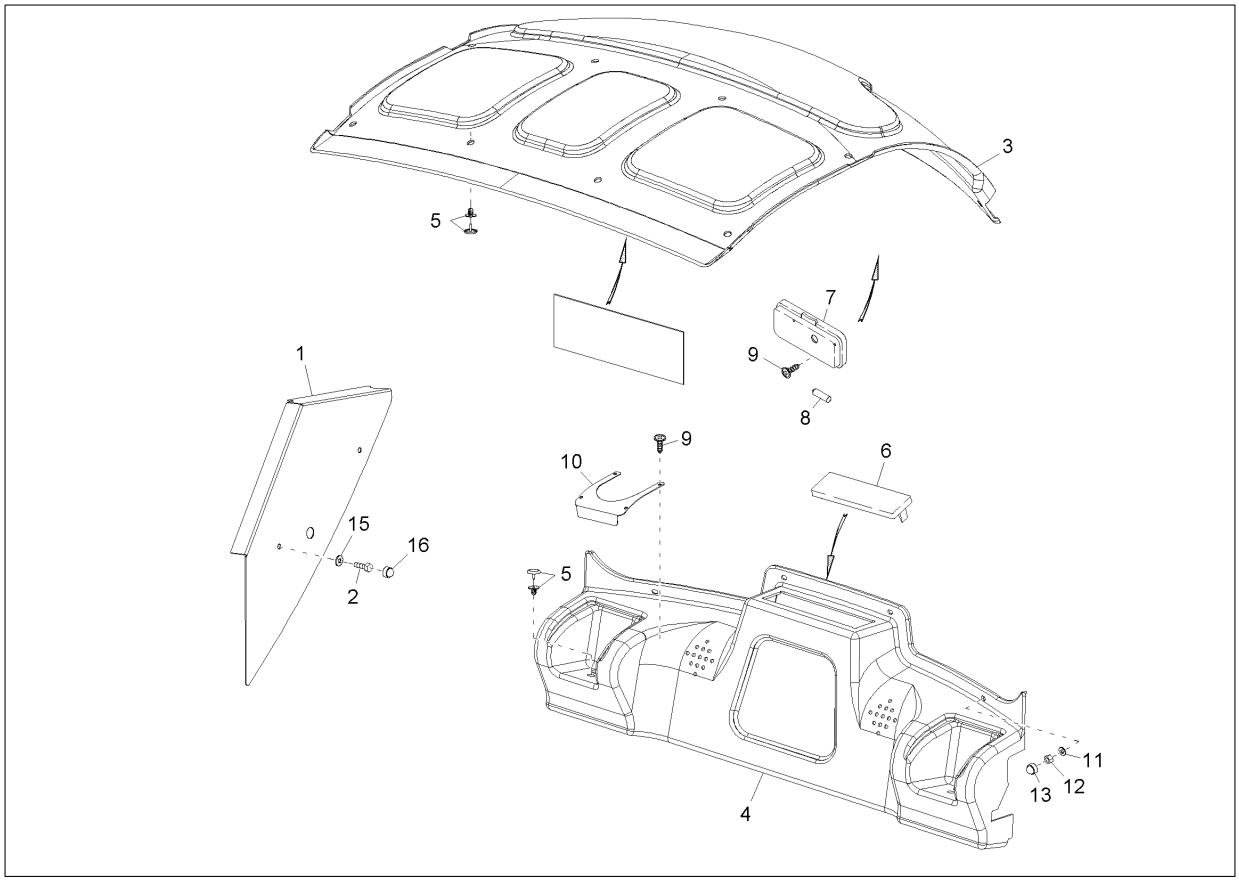


Ref. No.	Part No.	Description	Qty. Req.
1	178445	CABIN FRAME	1
2	162797	PLUG	5
3	164677	PLUG	2
4	1424420G	RUBBER BUSHING	8
5	161921	PIN	2
6	164771	BRACKET	2
7	164678	PLATE	2
8	161923	WASHER	2
9	165922	RUBBER PROFILE - 3.9m	1
10	165818	RUBBER PROFILE - 1.1m	1
11	165034	NON-SKIDDING - 0.3m	1
12	1423433G	LOCK	1
13	1423434G	LOCK	1
14	1423435G	LOCK	1
15	164679	BRACKET	1
16	164680	BRACKET	1
17	651425	CS M6-1.0 X 30 C 8.8 ZO	4
18	162924	WASHER	4
19	164681	RESILIENT PAD	2
20	164686	RUBBER PLUG	2
21	164907	SCREW	2
22	1423409G	FOIL LEFT	1
23	1423410G	FOIL RIGHT	1
25	1423411G	CELLULAR RUBBER - 1.5m	1
26	1423412G	SEAL - 0.8m	1
27	1423413G	SEAL - 1.5m	1
28	1423414G	COLLAR	2
29	162862	SCREW	2
30	162925	WASHER	6
31	1423415G	BRACKET	1
32	165035	GLUE	1
34	178711	STRIP OF GUM - 3.0m	1
35	651521	CS M5-0.8 X 16 C 8.8 ZO	4
36	2003018G	LATCH POST EXTENSION	2
37	9901392G	SCREW	2
38	656048	NUT/HEX M8 1.25 D934 PC8 F-ZO	4
39	1423449G	RUBBER BUFFER	1
40	160639	RUBBER WASHER	1
41	651483	SHCS M12-1.7 X 35 10.9 ZO	2
42	163651	WASHER	4
43	161645	WASHER/GR A 13 DIN7349	4
44	656148	SHCS M12-1.75X40 10.9 ZO	2

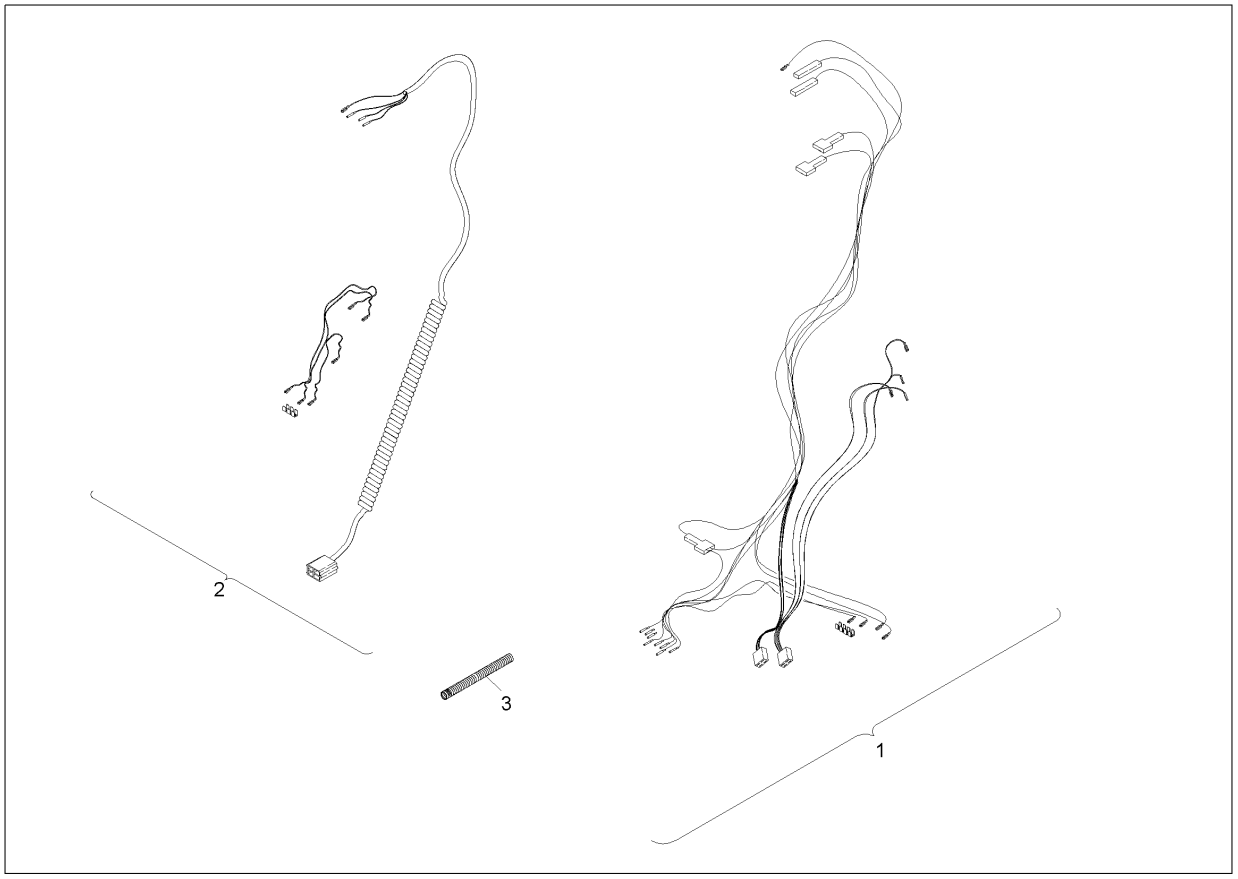
193/223 - CABIN FRAME CANOPY ET1940410



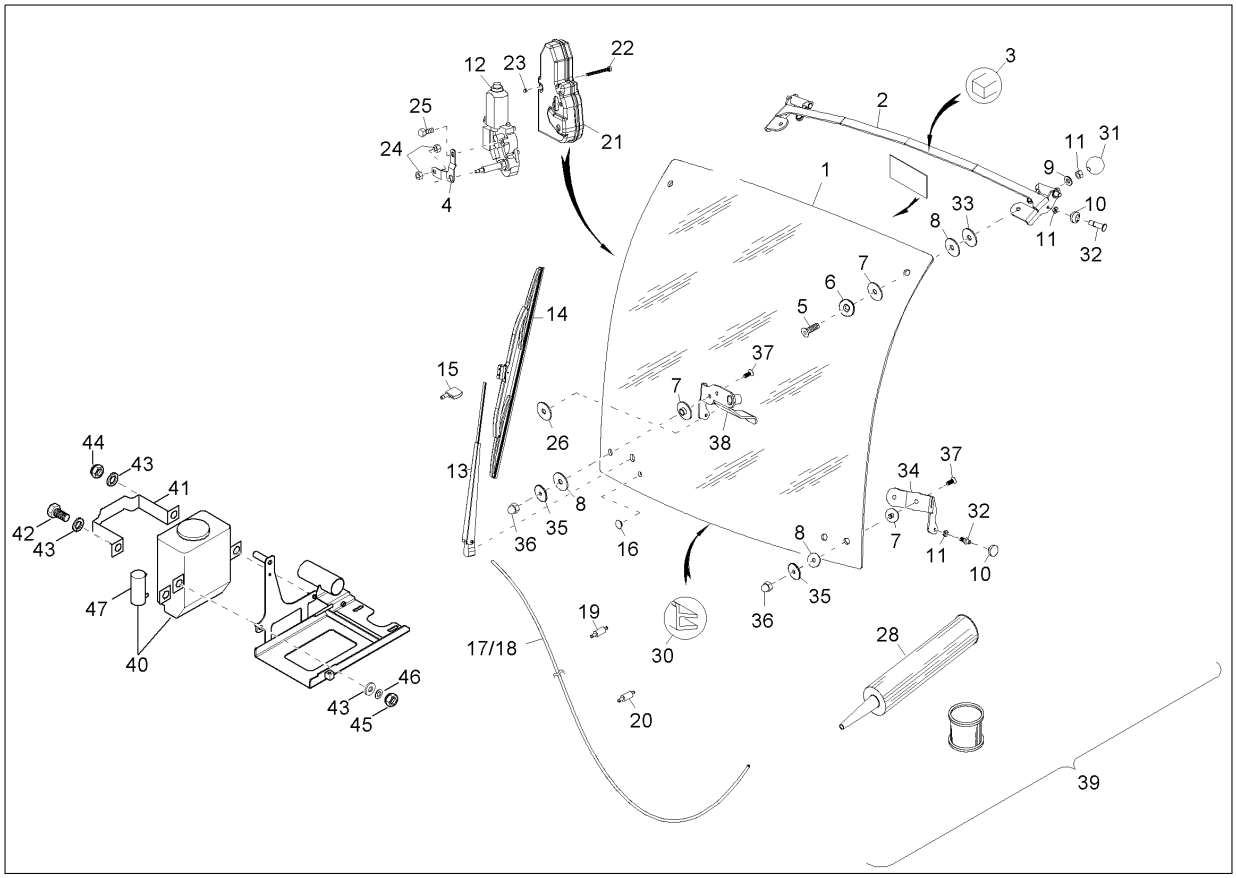
Ref. No.	Part No.	Description	Qty. Req.	Ref. No.	Part No.	Description	Qty. Req.
1	1423422G	CANOPY CABIN FRAME	1	11	164689	RIVET 11MM	2
2	162797	PLUG	5	12	1423423G	WINDOW	1
3	164677	PLUG	2	13	164894	SCREW	4
4	165818	RUBBER PROFILE - 1.1m	1	14	1423453G	COVER	2
5	1423424G	BRACKET	1	15	162925	WASHER	4
6	165047	EDGE PROTECTION - 1.0m	1	16	651456	HLN INS M5-.8 8 ZO	4
7	165034	NON-SKIDDING - 0.6m	1	17	165214	CAP D=5MM	4
10	178701	STORAGE BOX	1	18	165035	GLUE	1



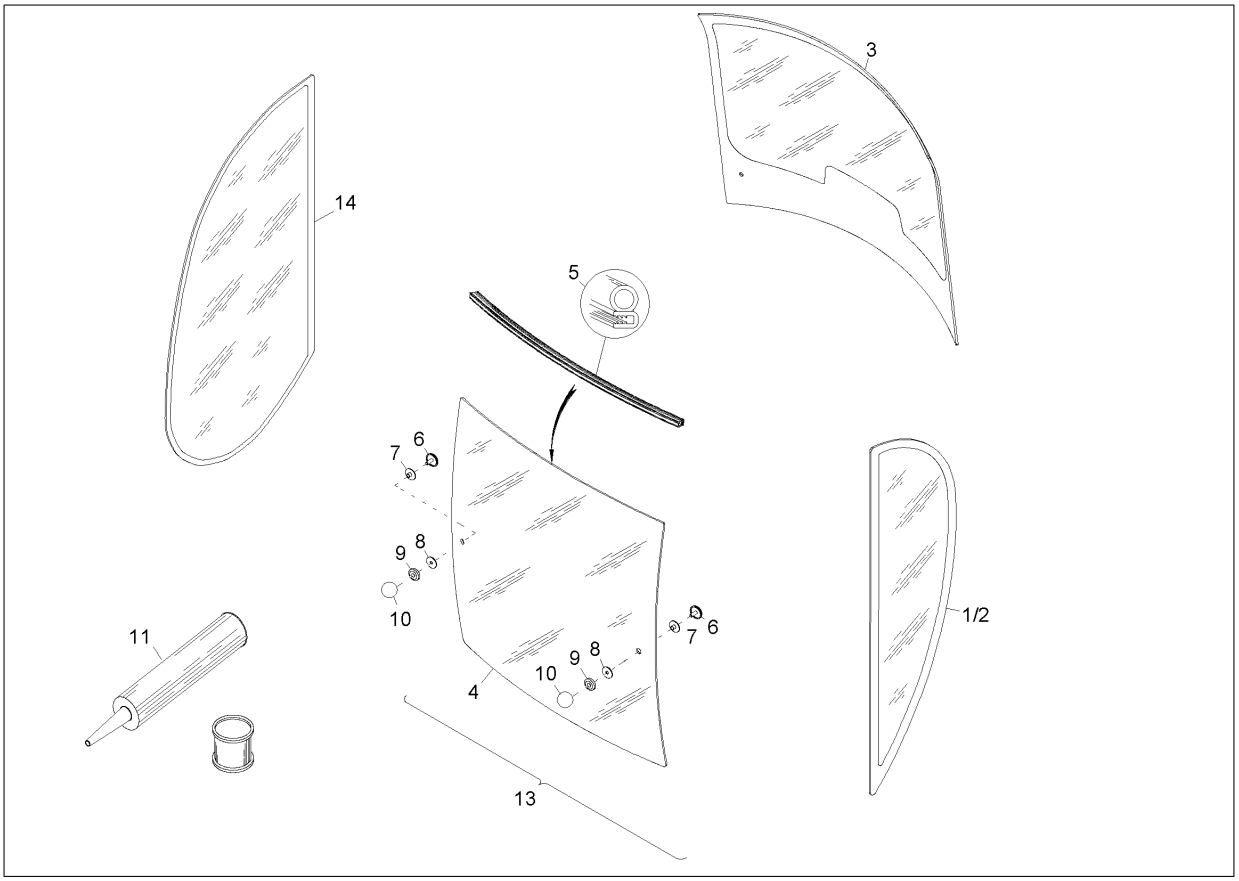
Ref. No.	Part No.	Description	Qty. Req.
1	178447	COVER	1
2	656092	CS M 6-1.00 X 12 C8.8 ZO	2
3	1423107G	COVER	1
4	1423116G	COVER	1
5	164689	RIVET 11MM	14
6	165195	COVER	1
7	160488	ILLUMINATION	1
8	164182	LAMP	1
9	162035	SCREW	10
10	1423453G	COVER	2
11	162925	WASHER	4
12	651456	HLN INS M5-.8 8 ZO	4
13	165214	CAP D=5MM	4
15	162924	WASHER	2
16	162737	COVER	2



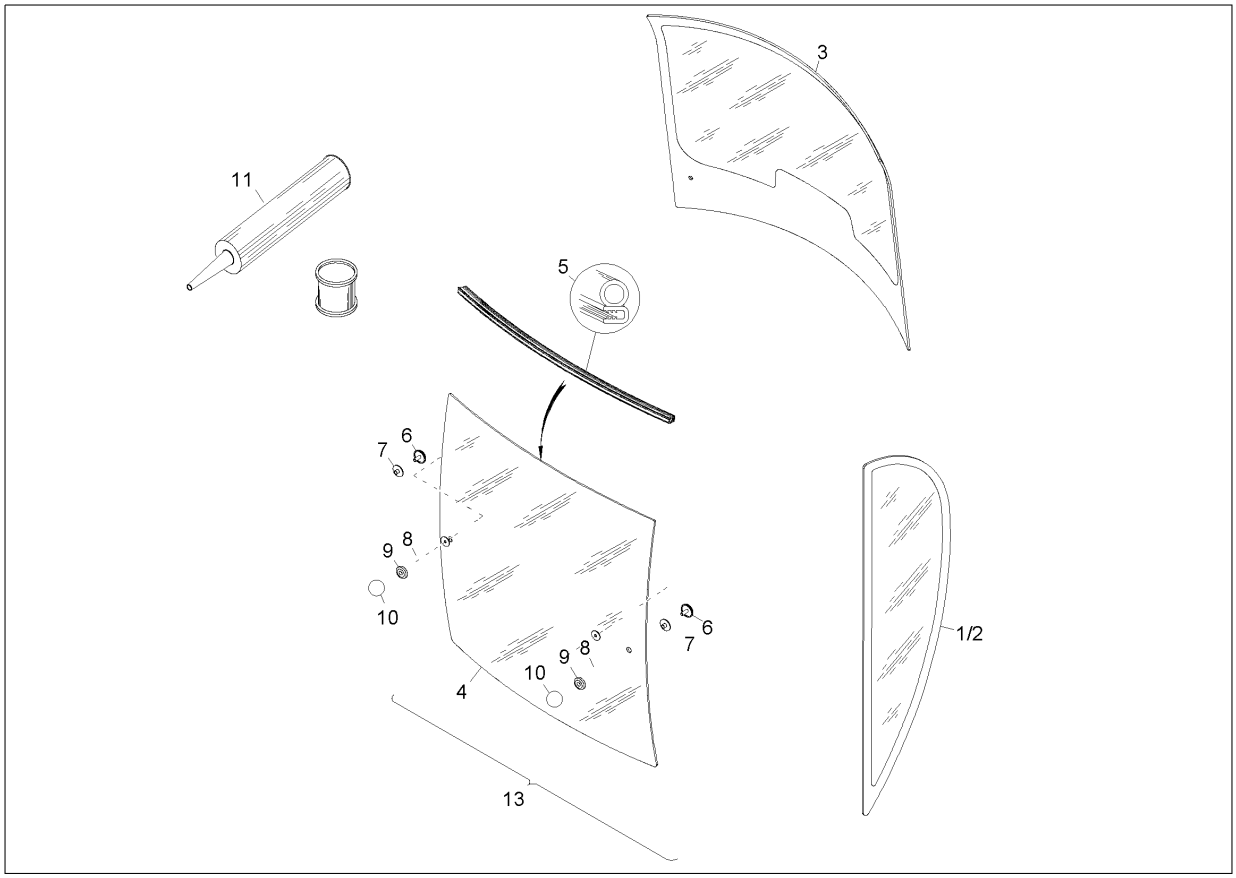
Ref. No.	Part No.	Description	Qty. Req.	Ref. No.	Part No.	Description	Qty. Req.
1	1424410G	HARNESS	1	3	164687	SLOTTED INSULATING TUBE - 0.2m	1
2	1424411G	HARNESS	1				



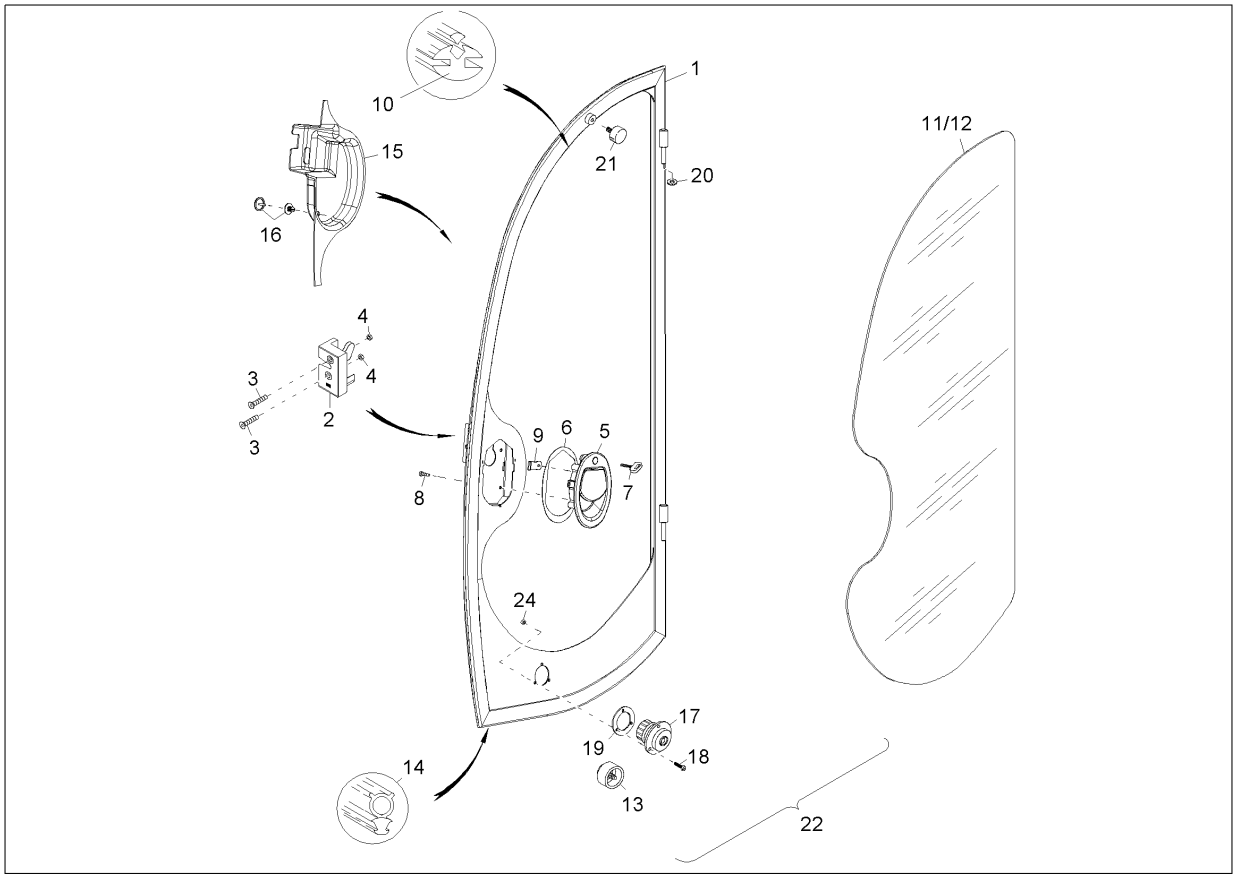
Ref. No.	Part No.	Description	Qty. Req.
1	1424414G	FRONT WINDOW	1
2	1423439G	BRACKET ABOVE	1
3	1423432G	STRAP - 0.85m	1
4	165168	BAR LOCK	1
5	9901417G	SCREW	2
6	1423440G	WASHER	2
7	160640	RUBBER WASHER	5
8	160639	RUBBER WASHER	4
9	161668	WASHER/GR A 8.4 ZO DIN134	2
10	178713	PVC-ROLLER	4
11	9901152G	NUT	6
12	165206	MOTOR/WINDSHIELD WASHER	1
13	1424418G	BRUSH HOLDER	1
14	1424419G	WIPER BLADE	1
15	161087	NOZZLE	1
16	1424420G	RUBBER BUSHING	1
17	165826	WATER HOSE - 0.85m	1
18	164181	WATER HOSE - 2.3m	1
19	164673	NON RETURN VALVE	1
20	161847	CONNECTION	1
21	165159	COVER	1
22	165048	SCREW	2
23	165948	NUT	2
24	656048	NUT/HEX M8 1.25 D934 PC8 F-ZO	2
25	651430	CS M8-1.2 X 12 C 8.8 ZO	1
26	160639	RUBBER WASHER	1
28	165035	GLUE	1
30	1423419G	PVC-PROFILE	1
31	1424423G	BALL KNOB	2
32	178712	PLUG	4
33	1423450G	SQUARE NUT	2
34	1424450G	BRACKET LEFT	1
35	1423443G	WASHER	3
36	161618	NUT/HEX DOMED CAP M8	3
37	165925	SCREW	3
38	1423445G	BRACKET RIGHT	1
39	178718	FRONT WINDOW COMPLETE	1
40	164690	WINDSHIELD WASHING TANK	1
41	164668	CLAMP	1
42	651521	CS M5-0.8 X 16 C 8.8 ZO	1
43	161659	WASHER/GR A 5.3 ZO DIN125	3
44	651456	HLN INS M5-.8 8 ZO	1
45	656100	HN M5-.8 GR8 Z	1
46	161674	RING/SNAP S16	1
47	178891	PUMP	1



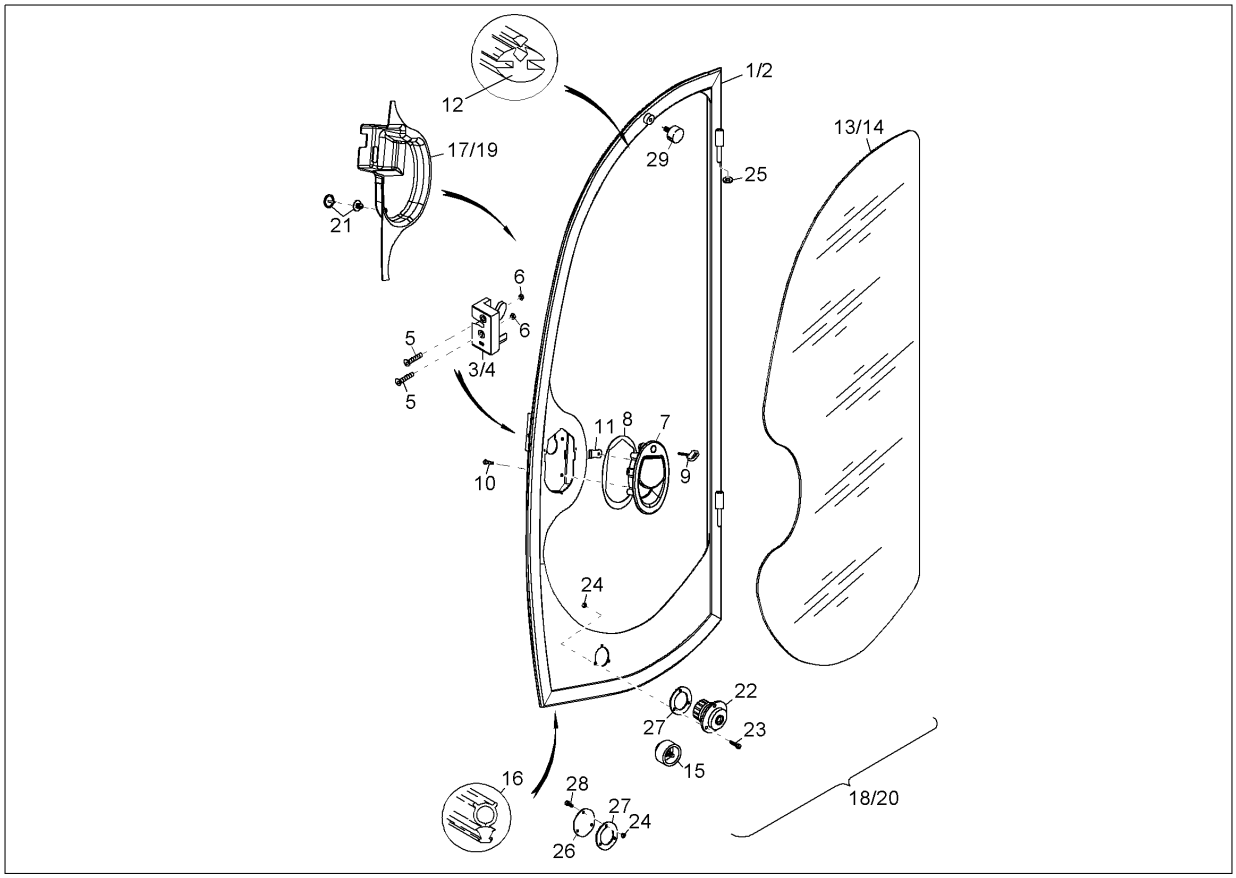
Ref. No.	Part No.	Description	Qty. Req.
1	1424424G	SIDE PANE LEFT	1
	178726	SIDE PANE LEFT TONED (OPTION)	1
2	1424425G	SIDE PANE RIGHT	1
	178727	SIDE PANE RIGHT TONED (OPTION)	1
3	1424426G	REAR WINDOW	1
	178725	REAR WINDOW TONED (OPTION)	1
4	1424427G	LOWER WINDSHIELD	1
	178724	FRONT WNDSHLD TONED (OPTION)	1
5	164675	PROFILE - 1.0m	1
6	164671	PVC-WASHER	2
7	160640	RUBBER WASHER	2
8	160639	RUBBER WASHER	2
9	160641	PVC-WASHER	2
10	1424423G	BALL KNOB	2
11	165035	GLUE	1
13	178717	LOWER WINDSHIELD COMPLETE	1
14	178446	SIDE PANE RIGHT	1



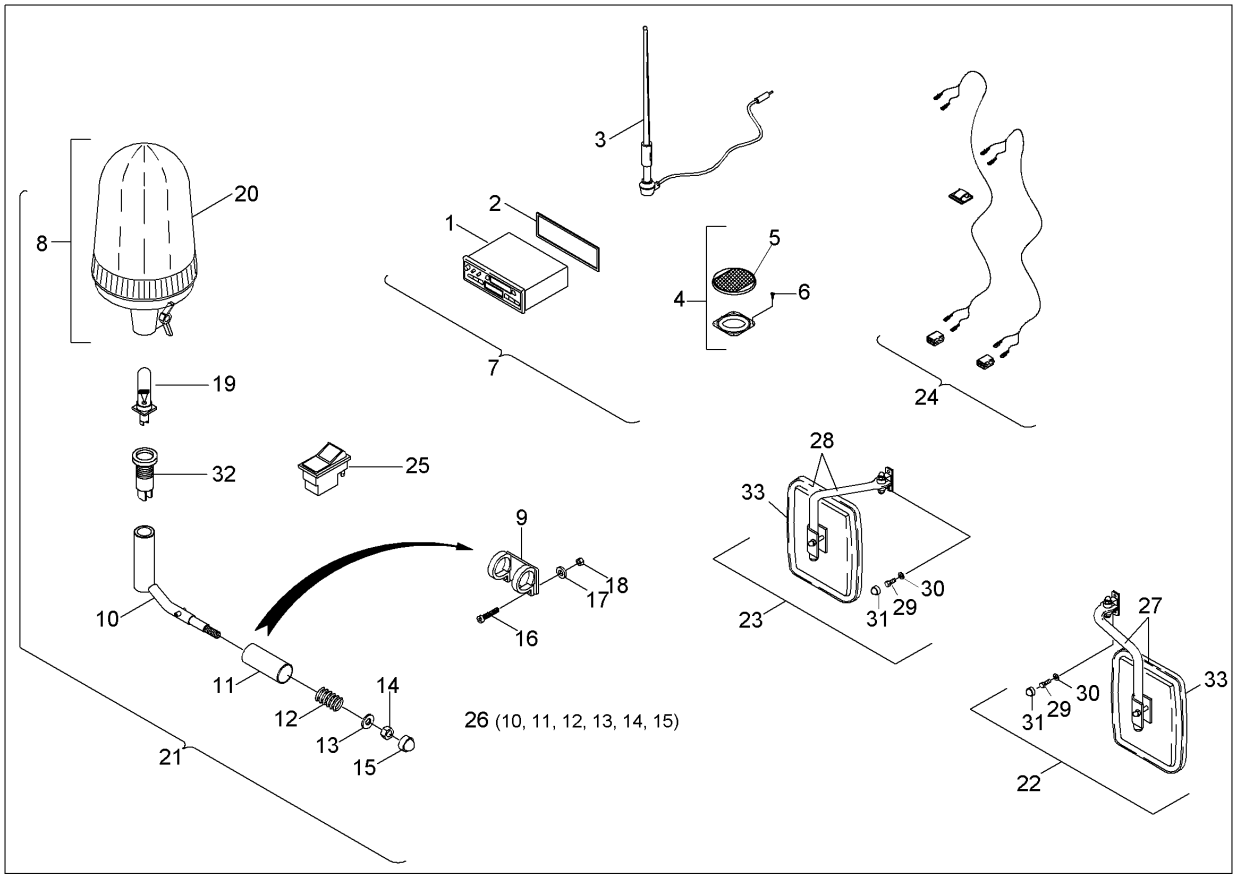
Ref. No.	Part No.	Description	Qty. Req.
1	1424424G	SIDE PANE LEFT	1
	178726	SIDE PANE LEFT TONED (OPTION)	1
2	1424425G	SIDE PANE RIGHT	1
	178727	SIDE PANE RIGHT TONED (OPTION)	1
3	1424426G	REAR WINDOW	1
	178725	REAR WINDOW TONED (OPTION)	1
4	1424427G	LOWER WINDSHIELD	1
	178724	FRONT WNDSHLD TONED (OPTION)	1
5	164675	PROFILE - 1.0m	1
6	164671	PVC-WASHER	2
7	160640	RUBBER WASHER	2
8	160639	RUBBER WASHER	2
9	160641	PVC-WASHER	2
10	1424423G	BALL KNOB	2
11	165035	GLUE	1
13	178717	LOWER WINDSHIELD COMPLETE	1



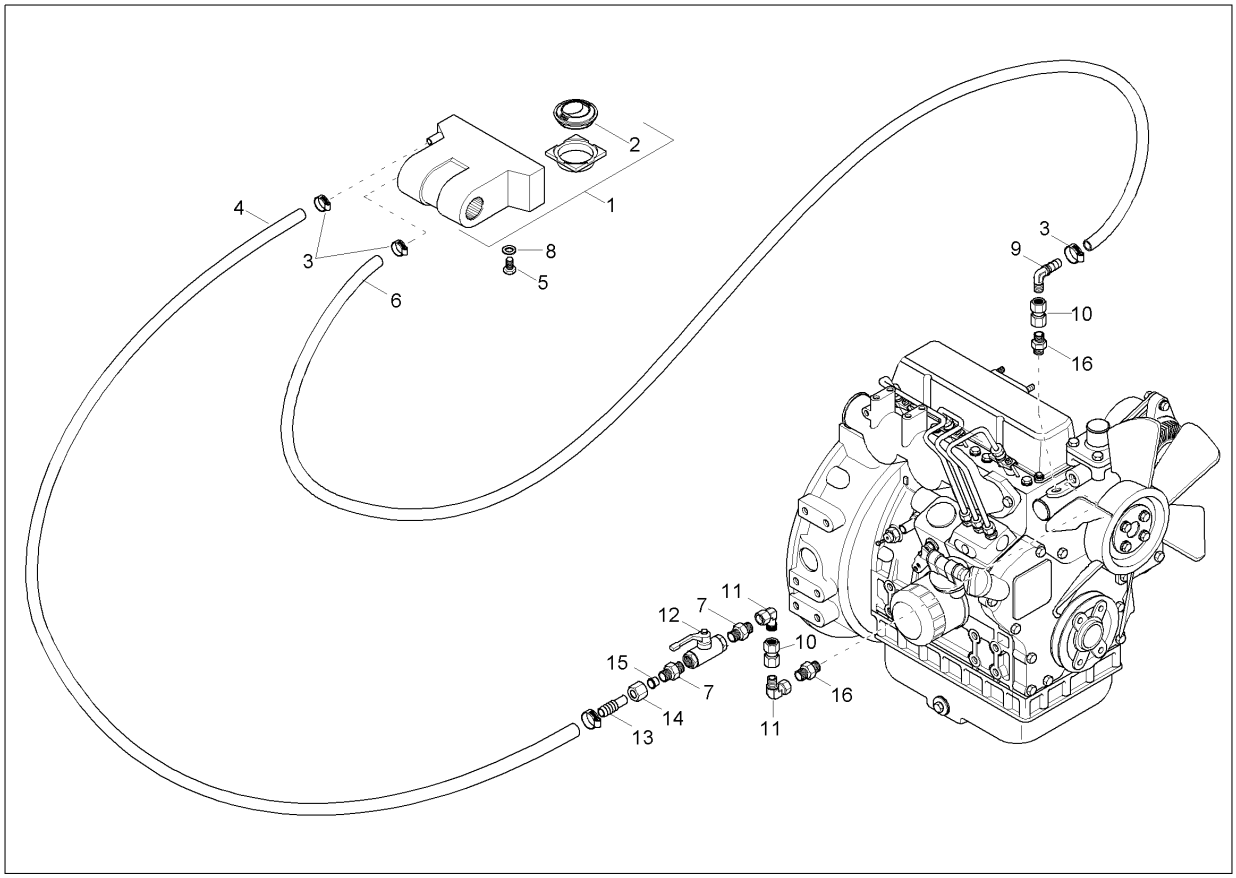
Ref. No.	Part No.	Description	Qty. Req.	Ref. No.	Part No.	Description	Qty. Req.
1	178448	DOOR FRAME LEFT	1	12	178728	DOOR PANE TONED (OPTION)	1
2	160525	LOCK L	1	13	1424446G	DOOR LOCK	1
3	162864	SCREW	2	14	165176	SEAL - 3.8m	1
4	651458	HLN INS M8-1.2 8 ZO	2	15	1423108G	COVER	1
5	1424431G	HANDLE	1	16	164689	RIVET 11MM	1
6	1424432G	SHIM	1	17	1424447G	DOOR LOCK	1
7	160713	KEY/FUEL CAP	2	18	9901666G	SCREW	3
8	656092	CS M 6-1.00 X 12 C8.8 ZO	4	19	651456	HLN INS M5-.8 8 ZO	3
9	1424433G	KEY BUTTON	1	20	164688	WASHER	2
10	165923	RUBBER PROFILE - 3.3m	1	21	1423449G	RUBBER BUFFER	1
11	1424434G	DOOR WINDOW	1	22	178449	CABIN DOOR LEFT COMPLETE	1



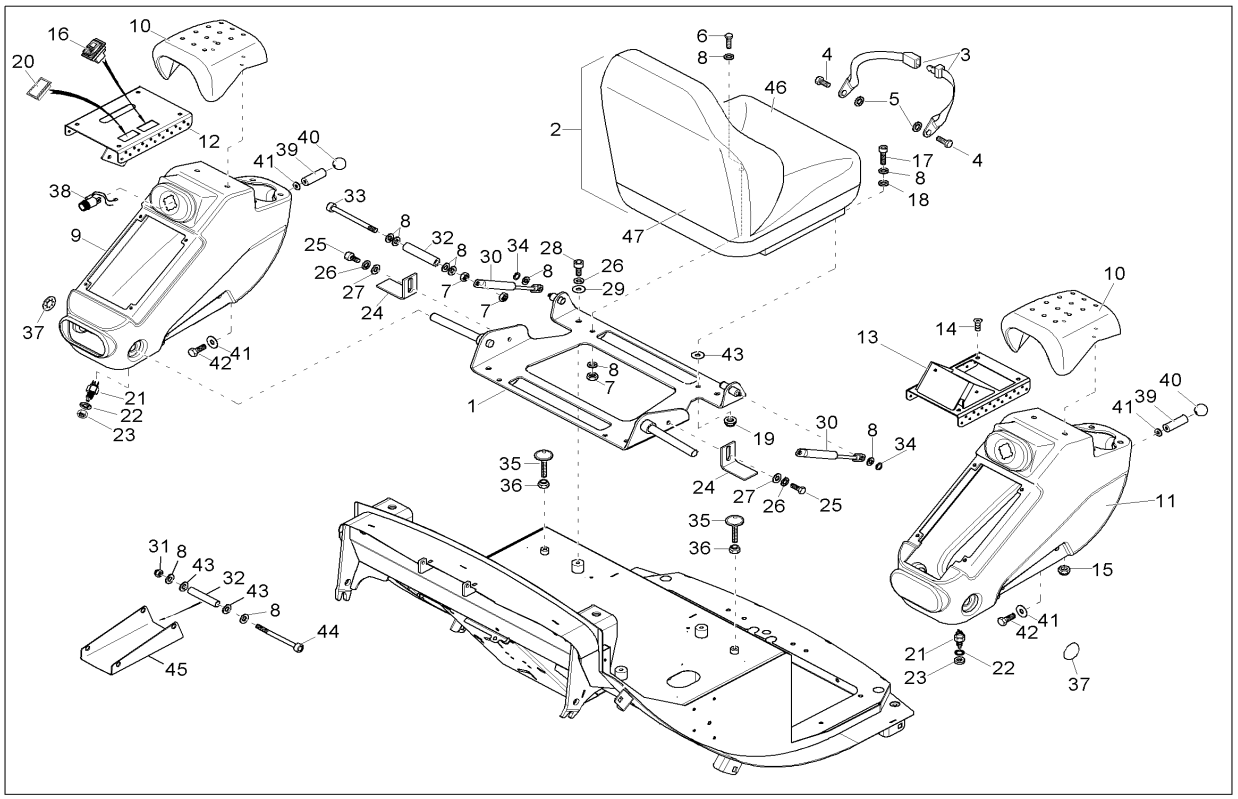
Ref. No.	Part No.	Description	Qty. Req.
1	178448	DOOR FRAME LEFT	1
2	178450	DOOR FRAME RIGHT	1
3	160525	LOCK L	1
4	160490	TRAP LOCK/RT	1
5	162864	SCREW	4
6	651458	HLN INS M8-1.2 8 ZO	4
7	1424431G	HANDLE	2
8	1424432G	SHIM	2
9	160713	KEY/FUEL CAP	2
10	656092	CS M 6-1.00 X 12 C8.8 ZO	8
11	1424433G	KEY BUTTON	2
12	165923	RUBBER PROFILE - 6.6m	1
13	1424434G	DOOR WINDOW	2
14	178728	DOOR PANE TONED (OPTION)	2
15	1424446G	DOOR LOCK	1
16	165176	SEAL - 7.6m	1
17	1423108G	COVER	1
18	178449	CABIN DOOR LEFT COMPLETE	1
19	1423109G	COVER	1
20	178451	CABIN DOOR RIGHT COMPLETE	1
21	164689	RIVET 11MM	8
22	1424447G	DOOR LOCK	1
23	9901666G	SCREW	3
24	651456	HLN INS M5-.8 8 ZO	6
25	164688	WASHER	2
26	1423446G	COVER PLATE	1
27	1423447G	RUBBER WASHER	1
28	9901673G	SCREW	3
29	1423449G	RUBBER BUFFER	1



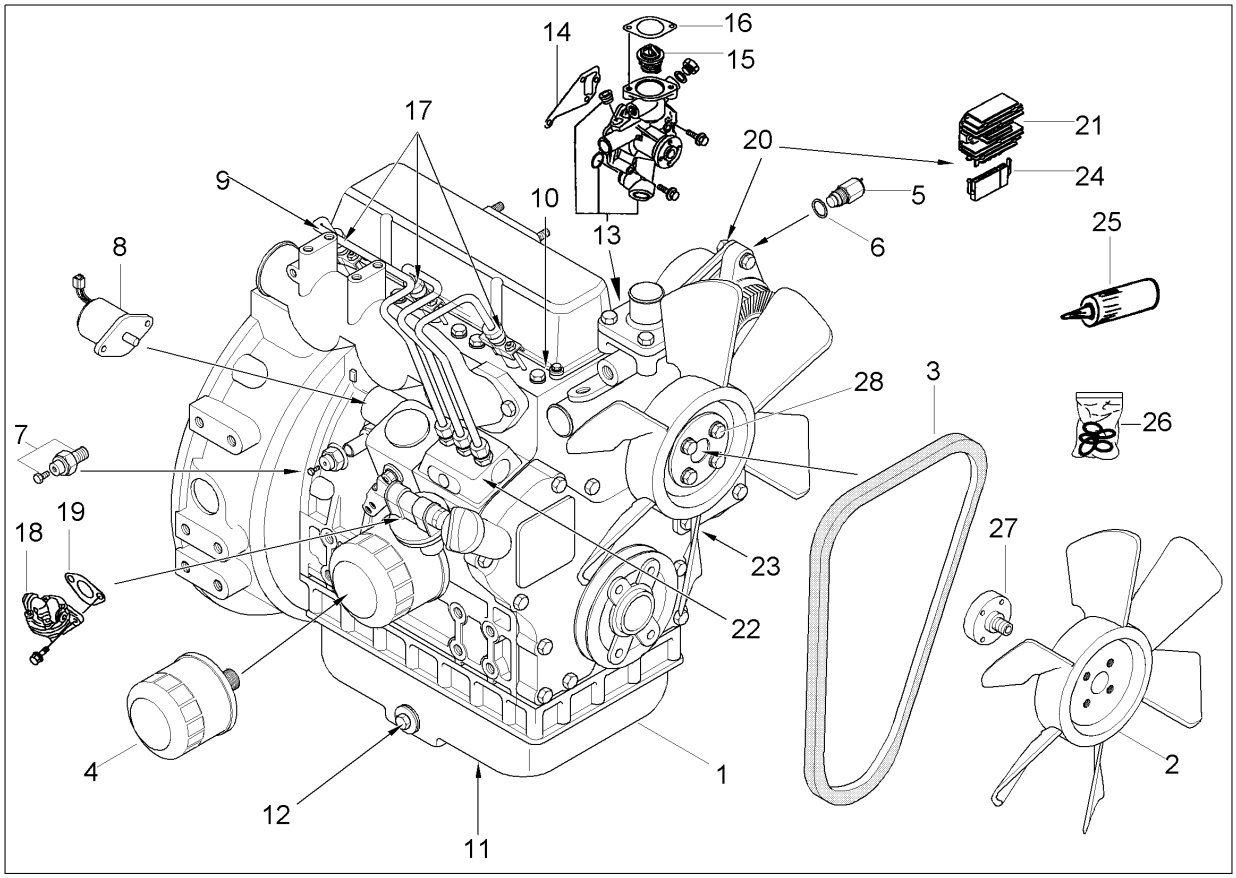
Ref. No.	Part No.	Description	Qty. Req.
1	162006	AM - FM RADIO	1
2	164187	FRAME	1
3	162839	ANTENNA	1
4	165204	SPEAKERS	1
5	165205	SPEAKERS COVER	2
6	164894	SCREW	8
7	165198	RETROFIT KIT	1
8	165199	LAMP COMPLETE	1
9	165200	BRACKET	1
10	165201	BASE	1
11	165202	SLEEVE	1
12	165053	SPRING	1
13	161668	WASHER/GR A 8.4 ZO DIN134	1
14	651458	HLN INS M8-1.2 8 ZO	1
15	165052	COVER	1
16	165941	SCREW	2
17	162925	WASHER	2
18	651456	HLN INS M5-.8 8 ZO	2
19	179740	HALOGEN LAMP	1
20	165207	GLASS/LAMP	1
21	165203	RETROFIT KIT-LAMP	1
22	165197	RETROFIT KIT EXT. MIRROR	1
23	178889	RETROFIT KIT MIRROR RIGHT	1
24	178707	CABLE	1
25	165240	SWITCH	1
26	165208	LAMP ATTACHMENT	1
27	162607	MIRROR STANDARD L.H.	1
28	163213	MIRROR	1
29	656149	CS M 6-1.0X16 C 8.8 ZO	4
30	162924	WASHER	8
31	162737	COVER	4
32	178892	INSERT ROTATING BEACON	1
33	178890	MIRROR	2



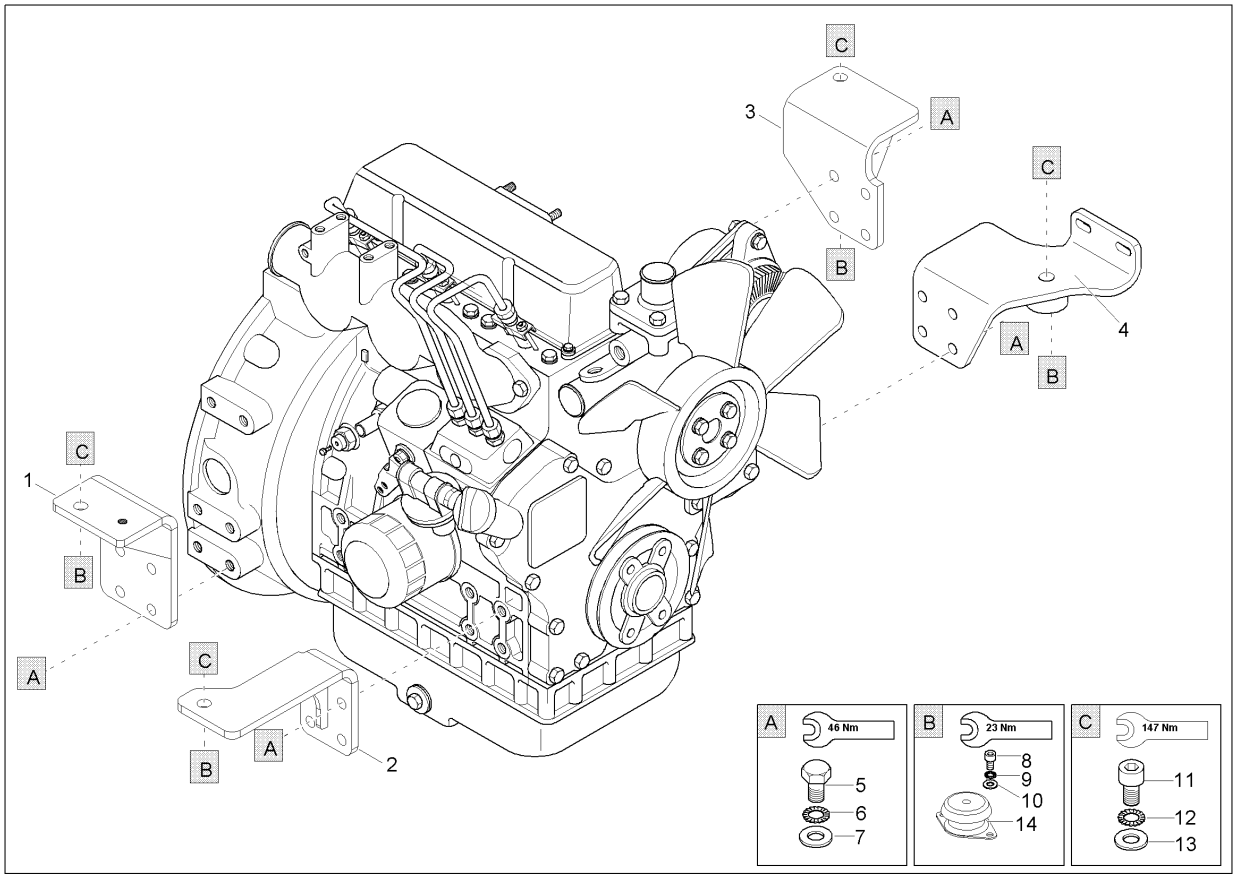
Ref. No.	Part No.	Description	Qty. Req.	Ref. No.	Part No.	Description	Qty. Req.
1	178275	CAB HEATER	1	9	165501	CONNECTION PIECE	2
2	161853	BRACKET	2	10	9910513G	SCREW JOINT	2
3	162064	CLAMP	4	11	161445	ANGLE	2
4	165914	HOSE - 0.9m	1	12	160950	BALL VALVE	1
5	161630	SCREW/HEX HD TAP B5.5X19	3	13	160860	HOSE COVER	1
6	165914	HOSE - 0.9m	1	14	161423	NUT	1
7	161476	SCREW JOINT	2	15	161424	WASHER	1
8	161666	WASHER/GR A 6.4 ZO	3	16	161436	SCREW JOINT	2



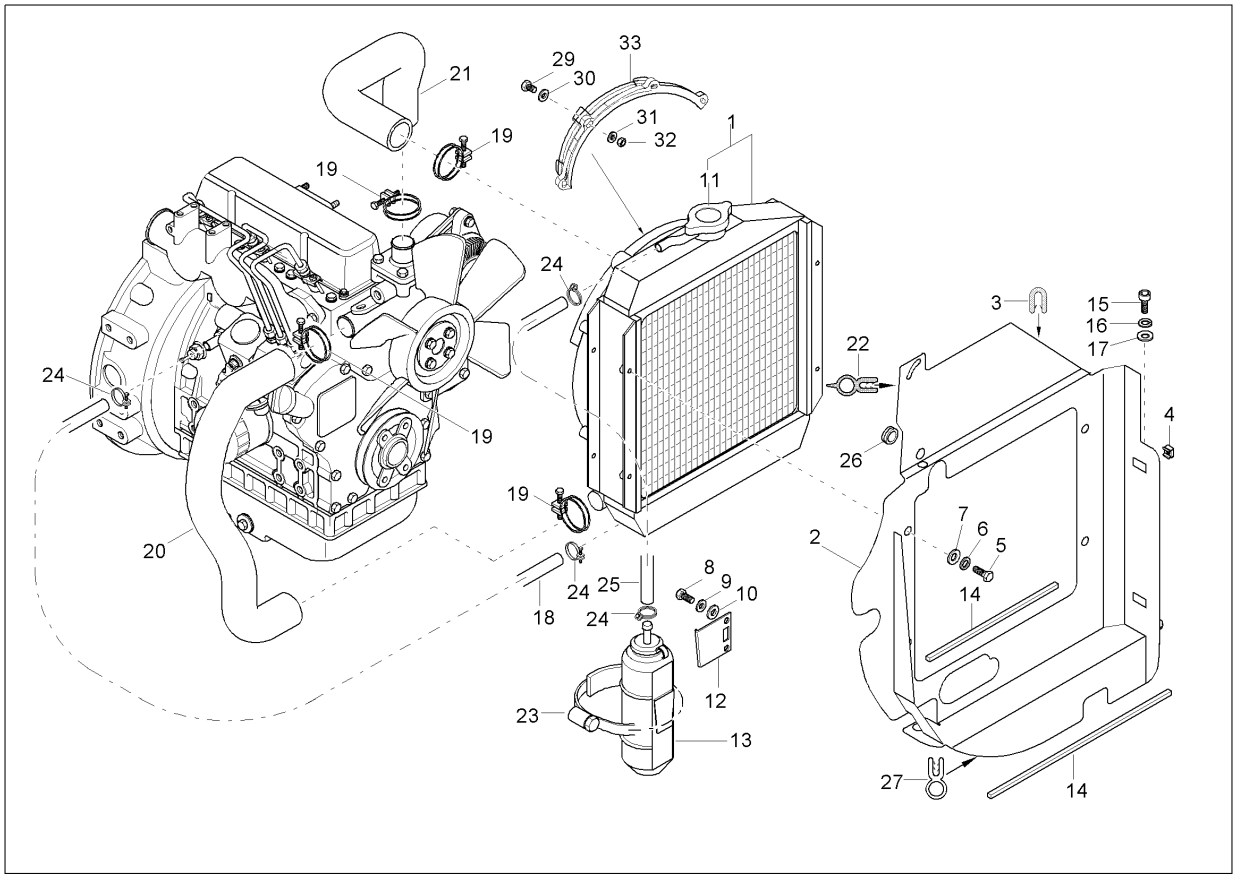
Ref. No.	Part No.	Description	Qty. Req.
1	1423021G	CONSOLE	1
2	178439	OPERATOR SEAT (LEATHER) (OPTION)	1
2	1423401G	OPERATOR SEAT	1
3	161728	SEAT BELT	1
4	162026	SCREW	2
5	161642	WASHER/GR A 13	2
6	656105	CS M 8-1.25 X 25 C8.8 ZO	4
7	651458	HLN INS M8-1.2 8 ZO	7
8	163634	WASHER	21
9	178703	CONSOLE-CONTROL LEVERS LEFT	1
10	178873	ARMREST	2
11	178704	CONSOLE-CONTROL LEVERS RIGHT	1
12	178438	CONSOLE FOR DASHBOARD LEFT	1
13	178700	CONSOLE FOR DASHBORD RIGHT	1
14	161634	SCREW/C'SUNK HD M5X16	8
15	165952	NUT	8
16	165237	SWITCH FAST SPEED	1
17	651424	CS M6-1.0 X 20 C 8.8 ZO	1
18	161675	RING/SNAP S6	1
19	161666	WASHER/GR A 6.4 ZO	1
20	162469	COVER	1
21	164980	MICROSWITCH	2
22	164982	WASHER	2
23	164981	NUT	2
24	1423003G	BRACKET	2
25	656090	CS M10-1.50 X 16 C8.8 ZO	2
26	161669	RING/SNAP S10	6
27	161663	WASHER/GR A 10.5 ZO	2
28	651393	CS M10-1.5 X 25 C 8.8 ZO	4
29	161640	WASHER/GR A 10.5	4
30	160611	SPRING	2
31	161618	NUT/HEX DOMED CAP M8	2
32	178876	TUBE	4
33	179782	SCREW	2
34	161848	SNAP RING	2
35	1429414G	ELEVATION ADJUSTMENT	2
36	656102	HN M10-1.25 8 Z PHEOLL KB	2
37	161730	PLUG	2
38	164696	IGNITER	1
39	161868	TUBE	2
40	161631	KNOB/BALL D40MM W/HOLE	2
41	161651	WASHER 20	4
42	651390	HB M10-1.5 X 120 C 8.8 ZO	2
43	161667	WASHER/GR A 8.4 ZO	5
44	651519	SHCS M8-1.2 X 90 8.8 ZO	2
45	178875	SHEET METAL	2
46	178442	SEAT UPHOLSTERY	1
	178440	SEAT UPHLSTRY (LEATHER OPTION)	1
47	178443	BACK OF A SEAT	1
	178441	BACK OF A SEAT (LEATHER OPTION)	1



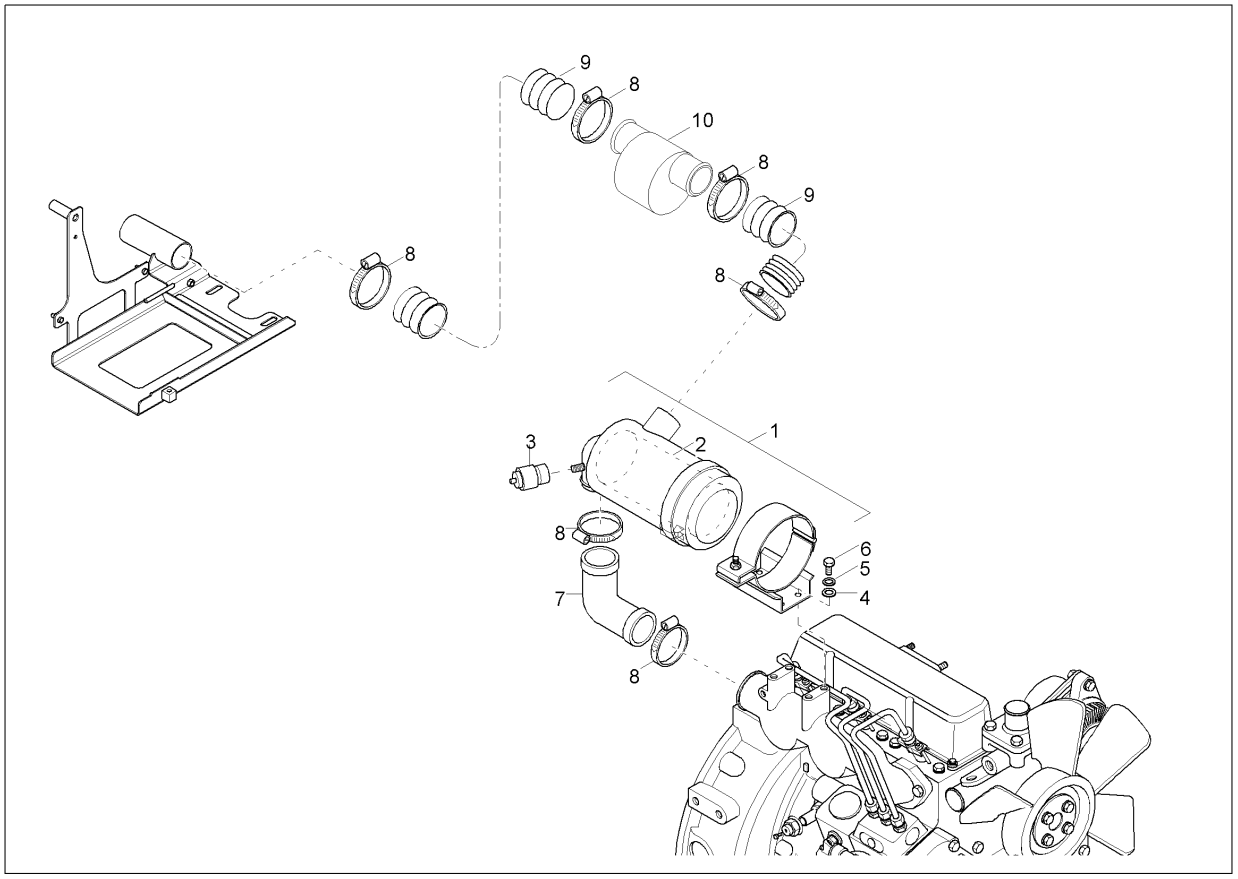
Ref. No.	Part No.	Description	Qty. Req.
1	1405426G	DIESEL ENGINE	1
2	1425403G	FAN	1
3	425-36141	BELT/FAN	1
4	178677	OIL FILTER	1
5	425-34683	SWITCH/THERMOSTAT 110 DEG C	1
6	425-34707	PACKING 16	1
7	425-36085	SENDER/OIL PRESSURE	1
8	425-35925	SOLENOID STOP	1
9	425-36144	GASKET/CYLINDER HEAD	1
10	425-35207	GASKET/HOOD	1
11	425-36145	SUMP ASSY/LUB OIL	1
	See page 55 for individual components.		
12	425-34753	PLUG/OIL DRAIN	1
13	425-35264	WATER PUMP ASSEMBLY	1
	See page 64 for individual components.		
14	425-35265	GASKET/WATER PUMP	1
15	425-35269	THERMOSTAT	1
16	425-36142	GASKET	1
17	178688	INJECTION NOZZLE	3
18	425-35318	FUEL PUMP ASSEMBLY	1
19	425-35317	GASKET/FUEL PUMP	1
20	425-36147	GENERATOR	1
21	425-36148	REGULATOR	1
22	178687	INJECTION PUMP	1
	See pages 65 and 68 for individual components.		
23	425-35376	STARTER	1
24	425-36149	COUPLER/REGULATOR	1
25	161737	SEAL	1
26	1405422G	SEAL KIT	1
	See page 67 for individual components.		
27	1425428G	FAN SPACER	1
28	162025	SCREW	4



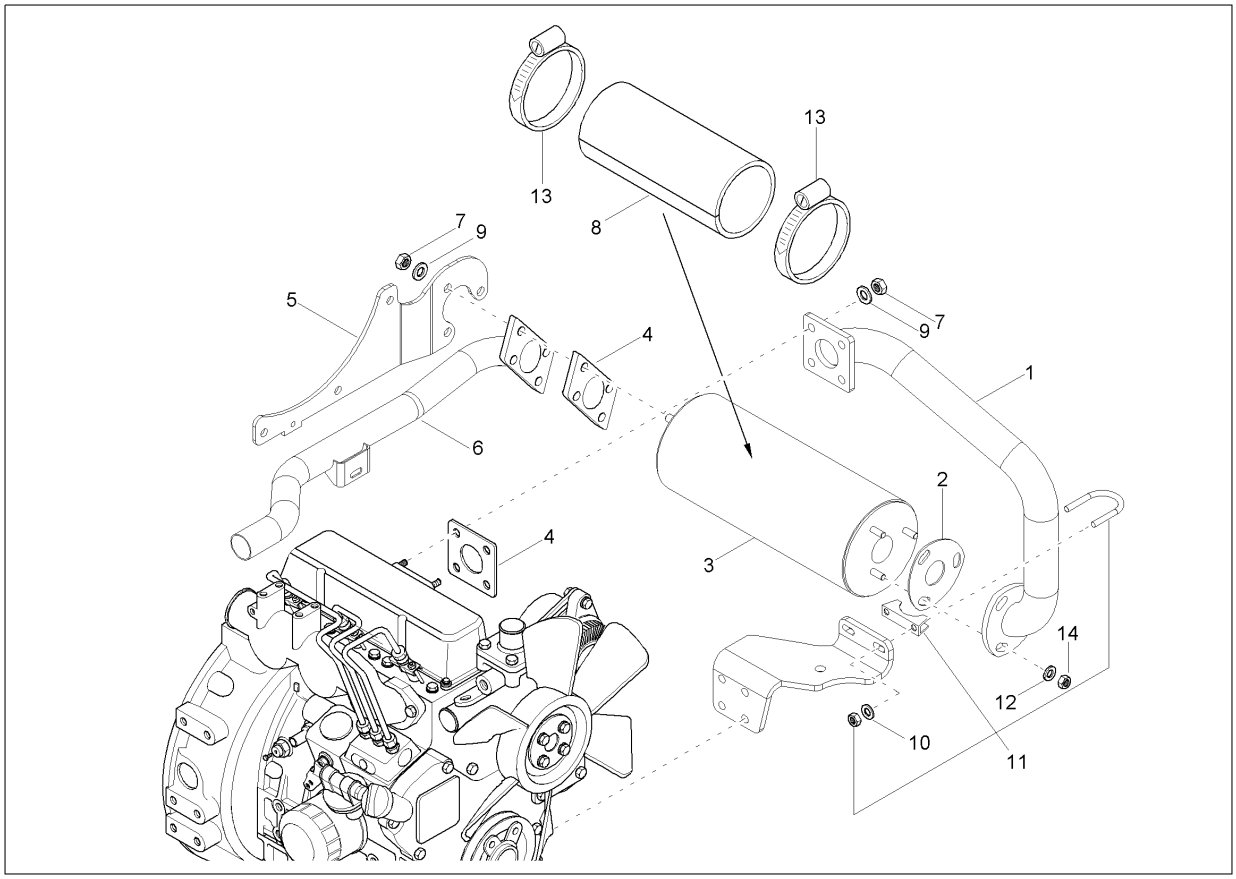
Ref. No.	Part No.	Description	Qty. Req.	Ref. No.	Part No.	Description	Qty. Req.
1	1425001G	ENGINE MOUNT PUMP SIDE	1	8	9901277G	SCREW	8
2	1425011G	ENGINE MOUNT COOLER SIDE	1	9	163670	WASHER	8
3	1425010G	ENGINE MOUNT PUMP SIDE	1	10	163634	WASHER	8
4	1425002G	ENGINE MOUNT COOLER SIDE	1	11	656148	SHCS M12-1.75X40 10.9 ZO	4
5	651393	CS M10-1.5 X 25 C 8.8 ZO	16	12	163651	WASHER	4
6	161669	RING/SNAP S10	16	13	161644	WASHER/GR A 13 DIN134	4
7	161640	WASHER/GR A 10.5	16	14	1425406G	VIBRATION MOUNT	4



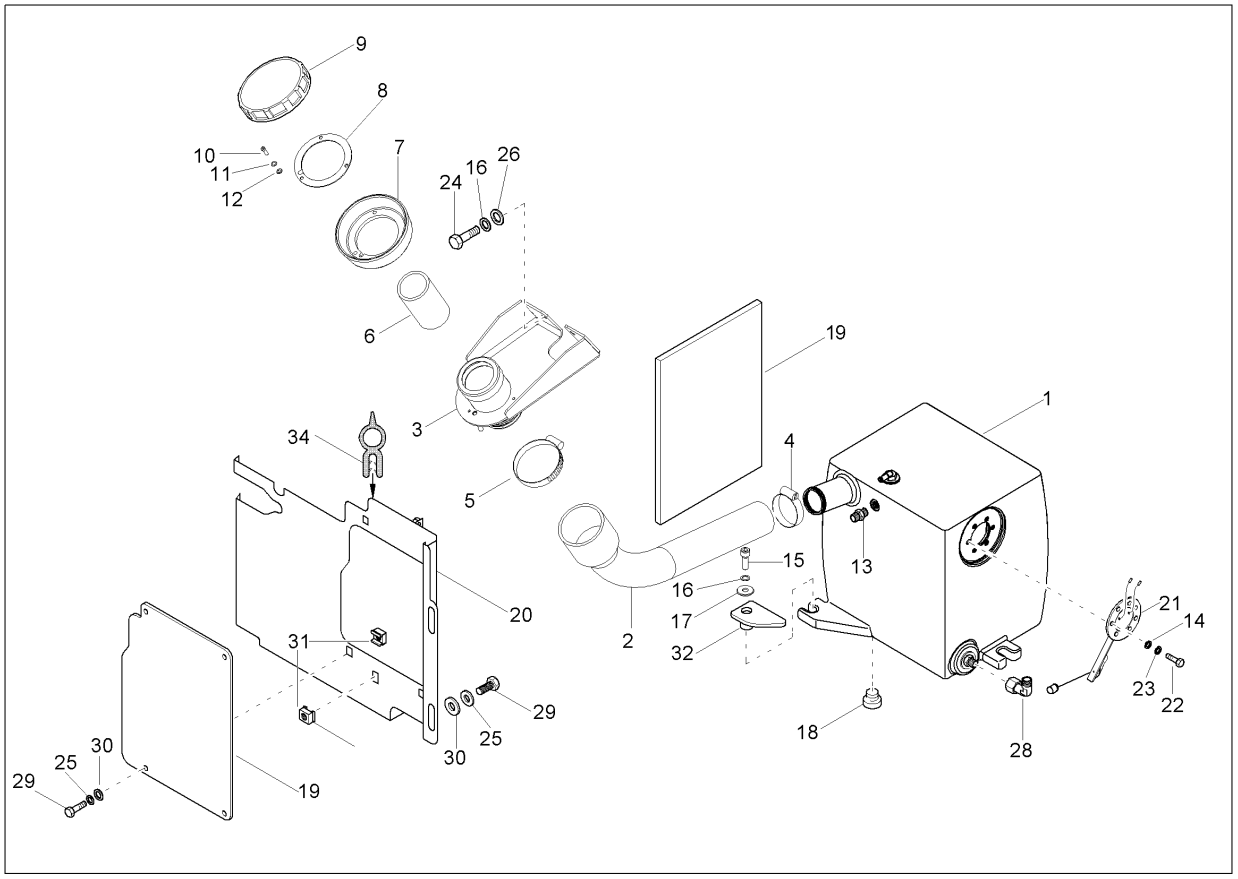
Ref. No.	Part No.	Description	Qty. Req.
1	1425407G	RADIATOR	1
2	1925005G	BRACKET	1
3	9711076G	RUBBER PROFILE - 0.4m	1
4	161615	NUT/CAGE M8	2
5	656093	CS M 8-1.25 X 16 C8.8 ZO	4
6	163670	WASHER	4
7	161667	WASHER/GR A 8.4 ZO	4
8	656092	CS M 6-1.00 X 12 C8.8 ZO	2
9	161675	RING/SNAP S6	2
10	161666	WASHER/GR A 6.4 ZO	2
11	160424	COVER	1
12	425-36152	BRACKET/SUB-TANK	1
13	425-36167	EXPANSION TANK ASSY	1
14	3811016G	SEAL - 1.0m	2
15	162022	SCREW	3
16	161669	RING/SNAP S10	3
17	163642	WASHER	3
18	165915	HOSE - 0.6m	1
19	425-34853	CLAMP 38	4
20	161794	COOLING WATER HOSE	1
21	161795	COOLING WATER HOSE	1
22	162016	RUBBER SEAL - 0.9m	1
23	161856	CLAMP	1
24	162504	CLAMP	4
25	165915	HOSE - 0.3m	1
26	9709266G	RUBBER BUSHING	1
27	165921	RUBBER PROFILE - 0.5m	1
29	651430	CS M8-1.2 X 12 C 8.8 ZO	4
30	163634	WASHER	4
31	656110	LW M8 Z PHEOLL KB	4
32	656048	NUT/HEX M8 1.25 D934 PC8 F-ZO	4
33	1425021G	GUARD	1



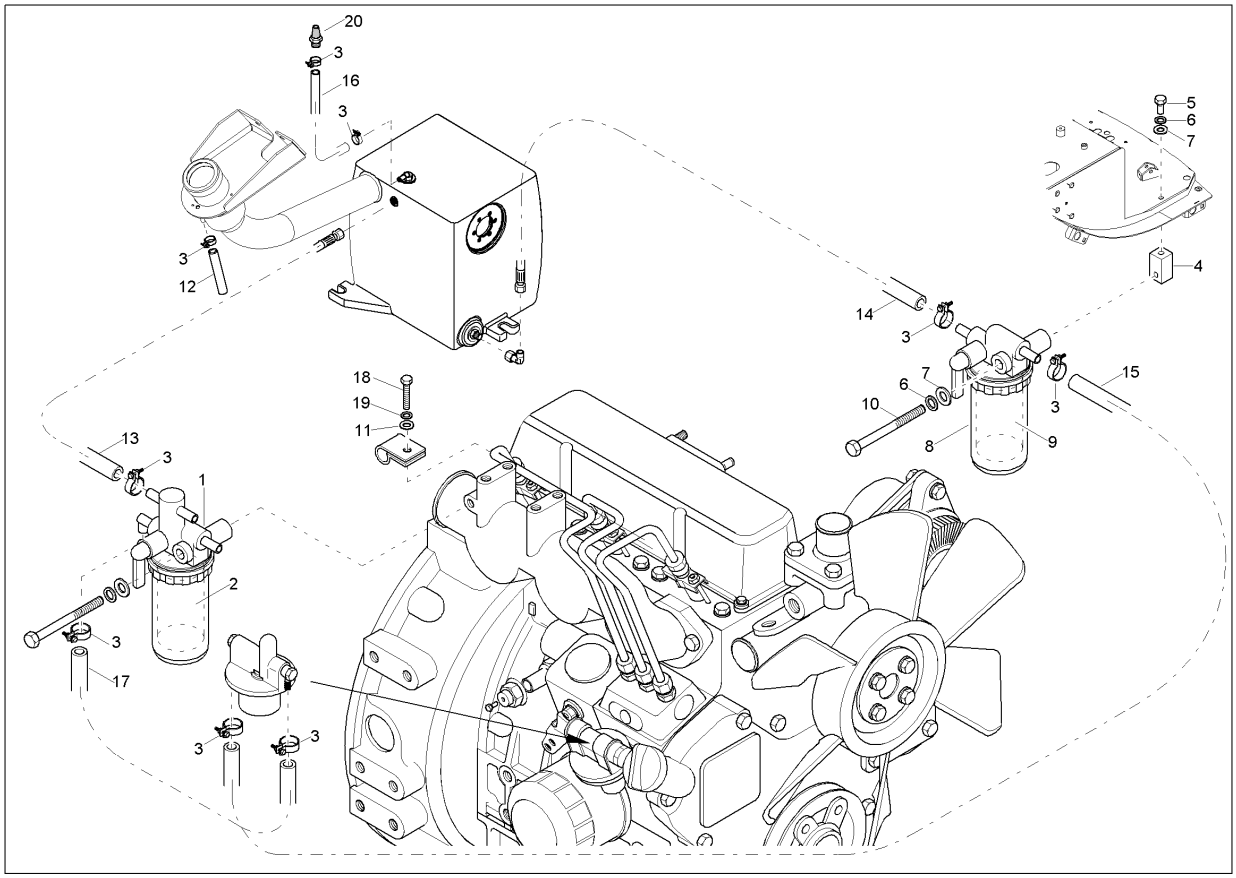
Ref. No.	Part No.	Description	Qty. Req.	Ref. No.	Part No.	Description	Qty. Req.
1	425-36153	AIR CLEANER ASSY	1	6	651430	CS M8-1.2 X 12 C 8.8 ZO	4
2	425-36154	ELEMENT/AIR CLEANER	1	7	425-36158	SUCTION PIPE	1
3	425-36155	INDICATOR	1	8	162611	CLAMP	6
4	163634	WASHER	4	9	9710003G	PROTECTION HOSE - 1.0m	2
5	163670	WASHER	4	10	425-36101	MUFFLER/INLET	1



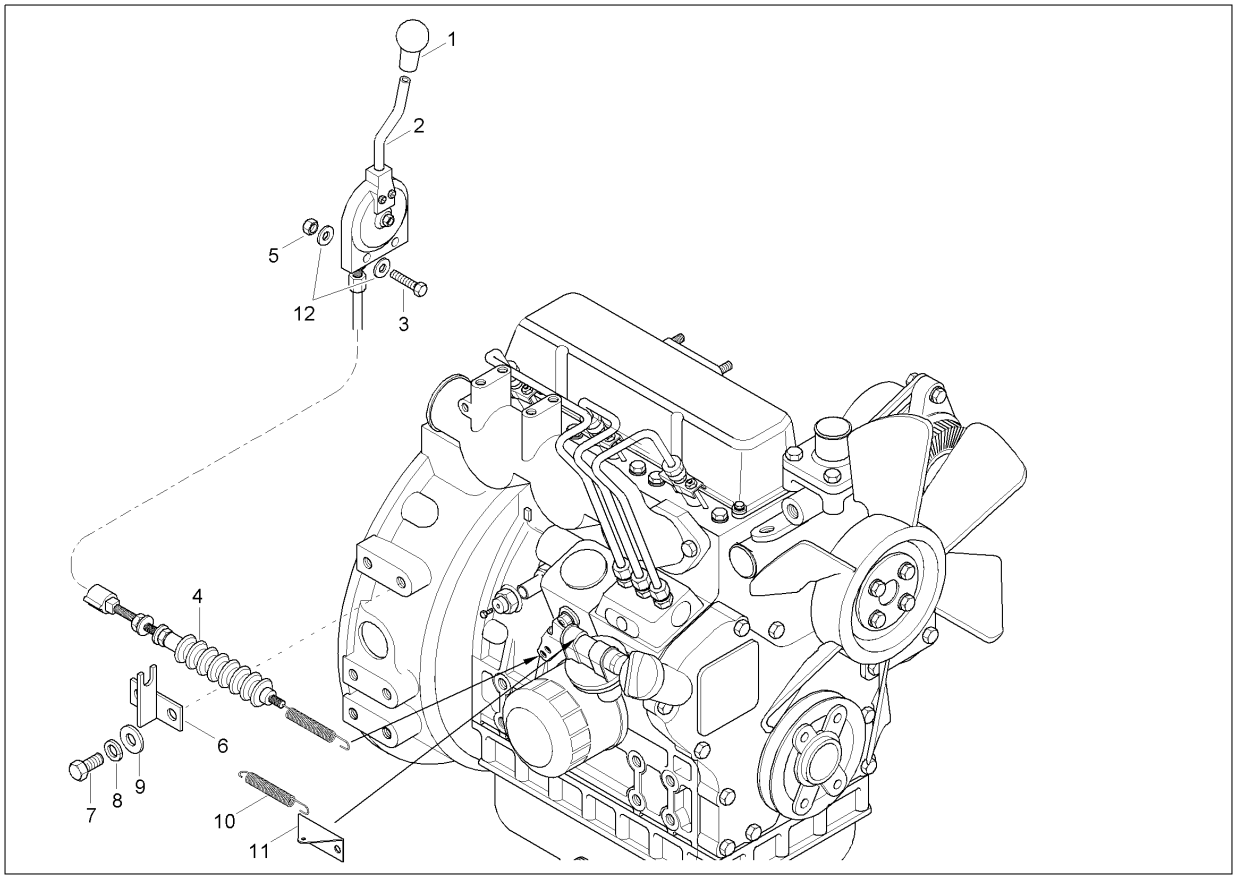
Ref. No.	Part No.	Description	Qty. Req.	Ref. No.	Part No.	Description	Qty. Req.
1	1925104G	TUBE	1	8	1429015G	ISOLATION MAT	1
2	1405428G	SEAL	1	9	163634	WASHER	8
3	1405427G	MUFFLER	1	10	161667	WASHER/GR A 8.4 ZO	2
4	160646	SEAL	2	11	165822	CLAMP	1
5	1925105G	EXHAUST BRACKET	1	12	161640	WASHER/GR A 10.5	3
6	1925103G	EXHAUST TUBE	1	13	9914140G	HOSE CLAMP	3
7	656048	NUT/HEX M8 1.25 D934 PC8 F-ZO	8	14	656102	HN M10-1.25 8 Z PHEOLL KB	3



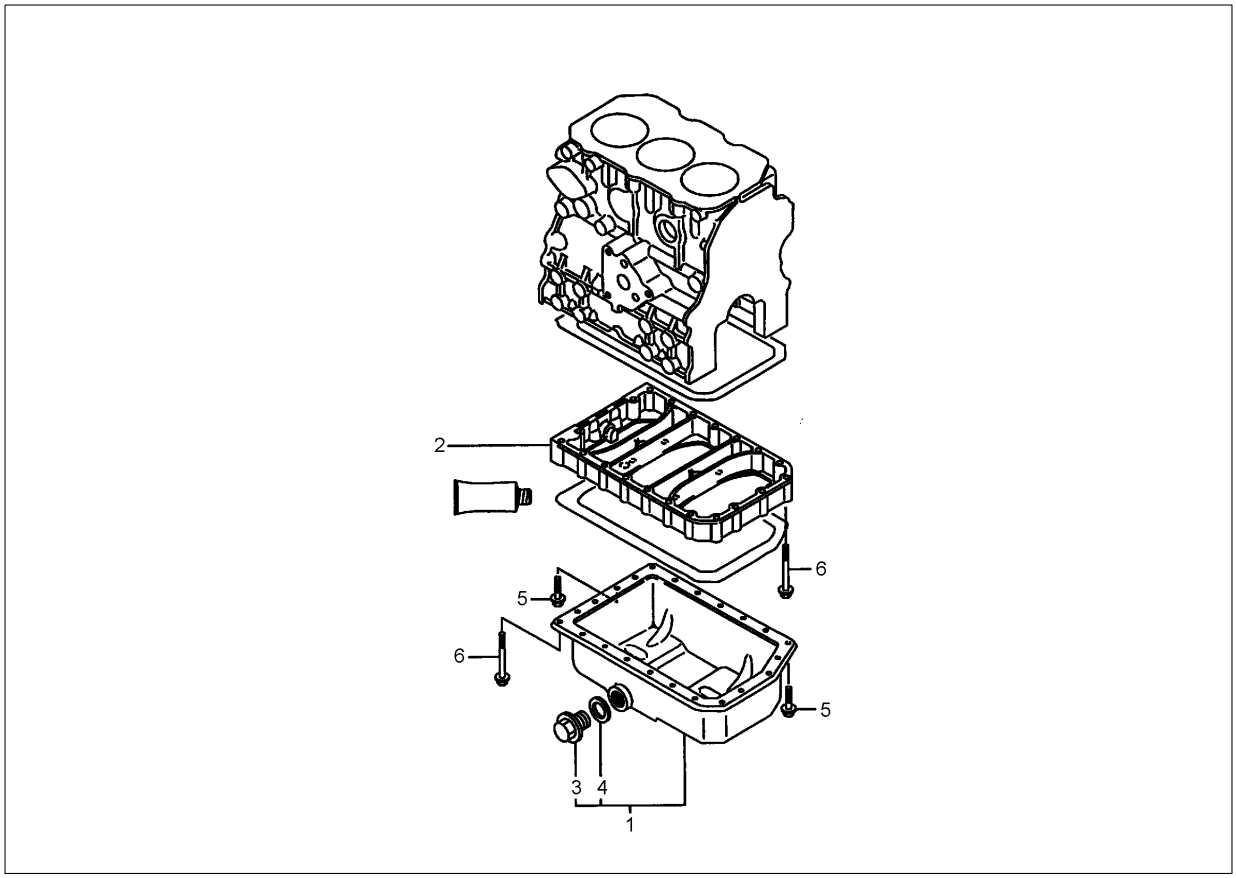
Ref. No.	Part No.	Description	Qty. Req.
1	1421400G	FUEL TANK	1
2	1425100G	DIESEL HOSE	1
3	1421137G	FILLER NECK	1
4	162611	CLAMP	1
5	164964	CLAMP	1
6	160436	STRAINER/FUEL TANK	1
7	165072	RUBBER	1
8	165073	BRACKET	1
9	165110	TANK COVER	1
10	651504	SHCS M5-0.8 X 16 8.8 ZO	3
11	161674	RING/SNAP S16	3
12	161659	WASHER/GR A 5.3 ZO DIN125	3
13	161426	SCREW JOINT	1
14	161658	WASHER/GR A 4.3 ZO DIN125	1
15	164897	SCREW	3
16	161669	RING/SNAP S10	5
17	163642	WASHER	3
18	161415	PLUG	1
19	1429026G	ISOLATION MAT	1
20	178695	STOP SOLENOID	1
21	1424404G	TRANSMITTER	1
22	651421	CS M4- X 16 C 8.8 ZO	6
23	161673	RING/SNAP S4	6
24	651393	CS M10-1.5 X 25 C 8.8 ZO	2
25	163670	WASHER	6
26	161640	WASHER/GR A 10.5	2
28	161443	ANGLE	1
29	656001	CS M 8-1.25 X 20 C8.8 ZO	6
30	161667	WASHER/GR A 8.4 ZO	6
31	161615	NUT/CAGE M8	2
32	178694	PLATE	1
34	162016	RUBBER SEAL - 0.7m	1



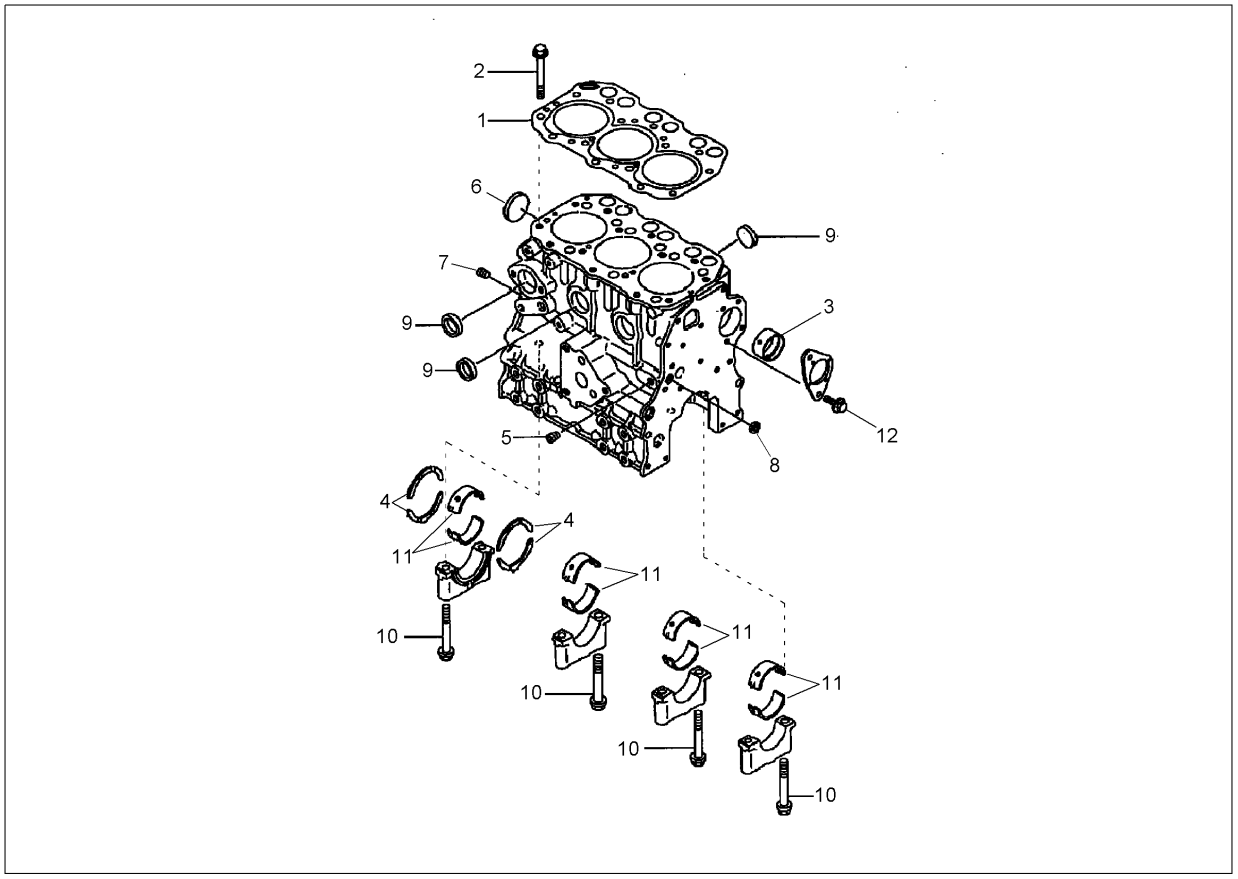
Ref. No.	Part No.	Description	Qty. Req.	Ref. No.	Part No.	Description	Qty. Req.
1	162077	FILTER HOUSING 3TNE74-NSR	1	11	162608	COLLAR	1
2	425-35326	ELEMENT/FUEL STRAINER	1	12	165915	HOSE - 0.7m	1
3	162504	CLAMP	9	13	1425404G	DIESEL SUCTION TUBE	1
4	1425125G	BRACKET	1	14	165274	TUBE	1
5	656001	CS M 8-1.25 X 20 C8.8 ZO	1	15	165915	HOSE - 2.1m	1
6	163670	WASHER	2	16	165915	HOSE - 0.9m	1
7	163634	WASHER	2	17	165915	HOSE - 0.45m	1
8	425-35973	STRAINER ASSY/FUEL	1	18	651391	CS M10-1.5 X 20 C 8.8 ZO	1
9	425-36091	SCREEN/WATER TRAP	1	19	161640	WASHER/GR A 10.5	1
10	651438	HB M8-1.2 X 70 C 8.8 ZO	1	20	178965	FILTER	1



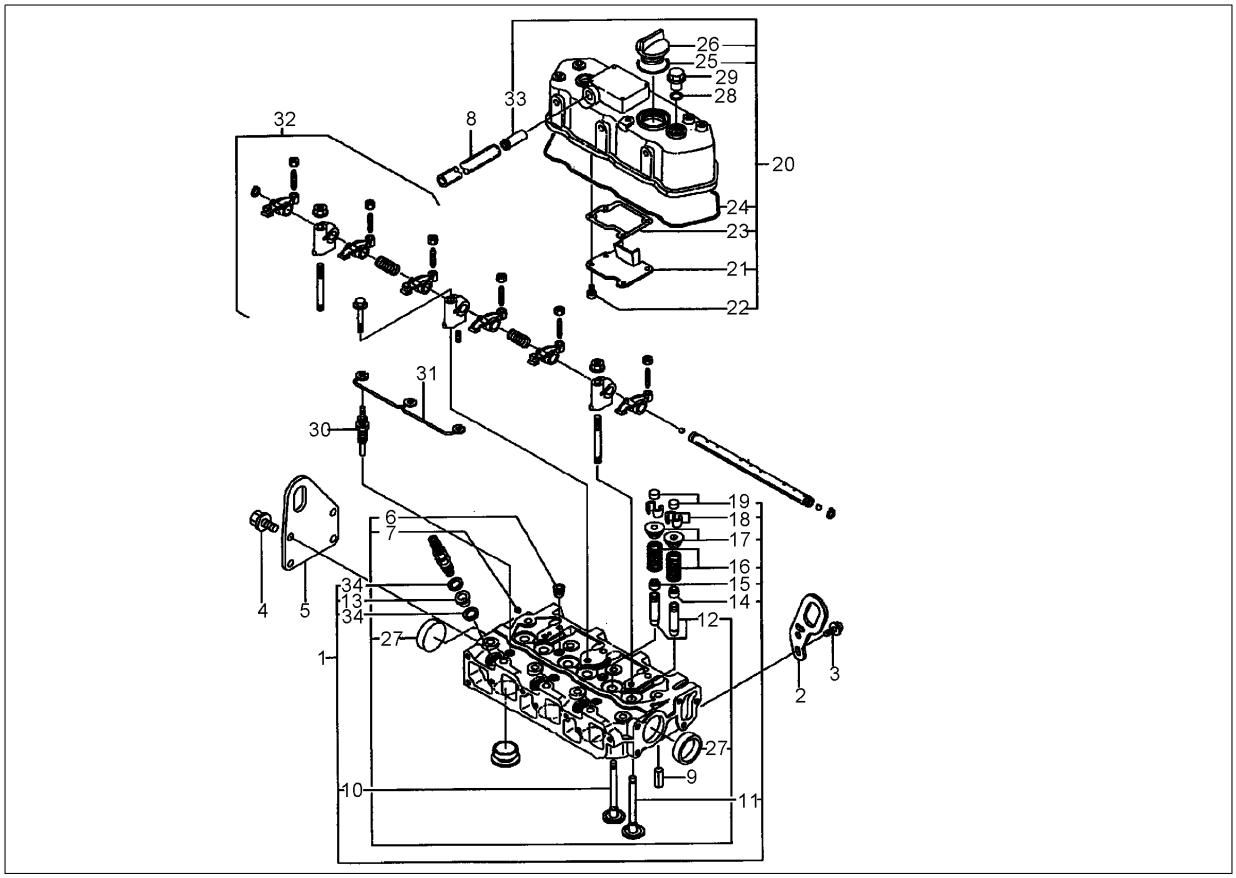
Ref. No.	Part No.	Description	Qty. Req.	Ref. No.	Part No.	Description	Qty. Req.
1	162398	HANDLE	1	7	656001	CS M 8-1.25 X 20 C8.8 ZO	2
2	1410401G	HAND LEVER	1	8	163670	WASHER	2
3	651425	CS M6-1.0 X 30 C 8.8 ZO	2	9	163634	WASHER	2
4	1420403G	CABLE, THROTTLE	1	10	160480	SPRING	1
5	161678	HN M6-1.0 8 ZO ALL METAL	2	11	161734	BRACKET	1
6	161733	BRACKET	1	12	161660	WASHER GR A6.4 ZO DIN 125	4



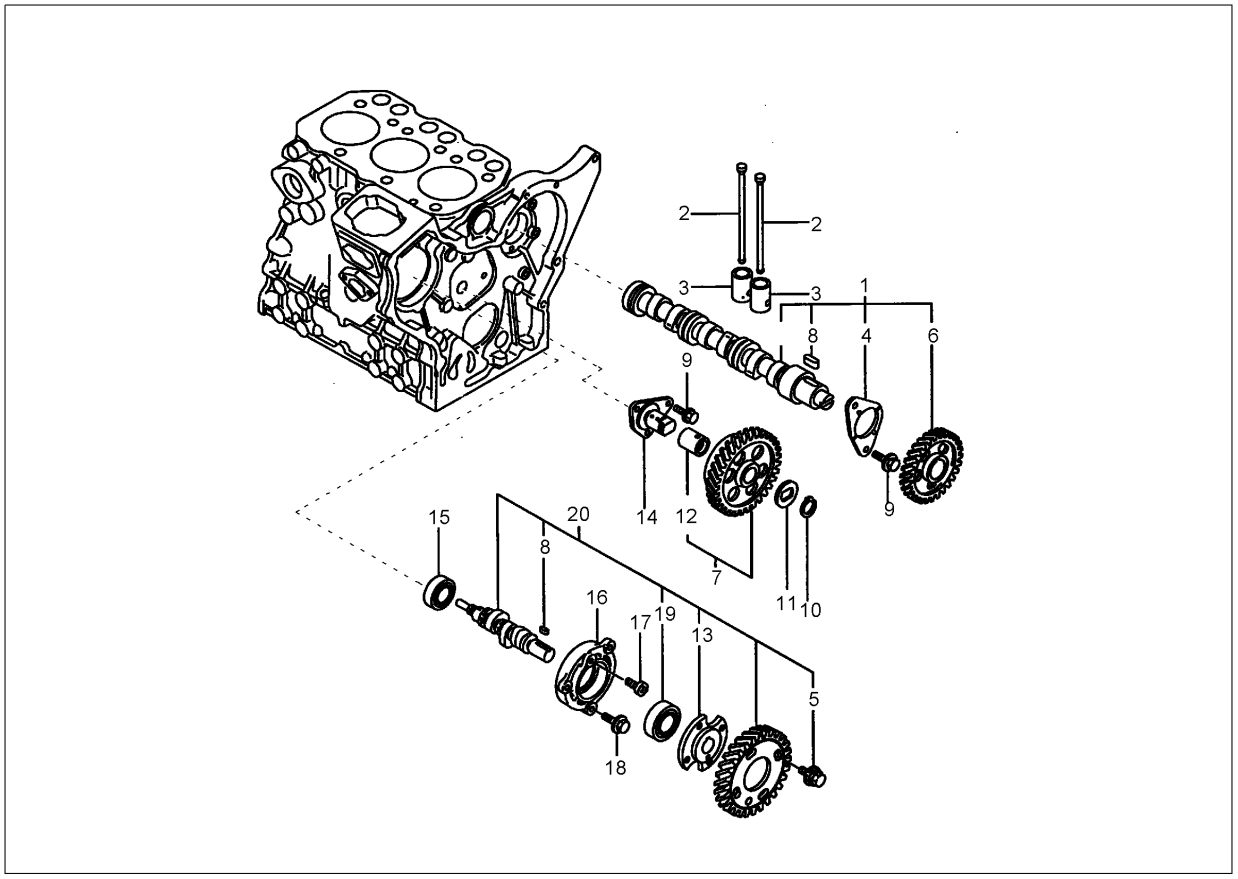
Ref. No.	Part No.	Description	Qty. Req.	Ref. No.	Part No.	Description	Qty. Req.
1	425-36145	SUMP ASSY/LUB OIL	1	4	164719	SEAL	1
2	178318	INTERMEDIATE PIECE	1	5	178319	SCREW	3
3	425-36121	PLUG/DRAIN	1	6	178320	SCREW	20



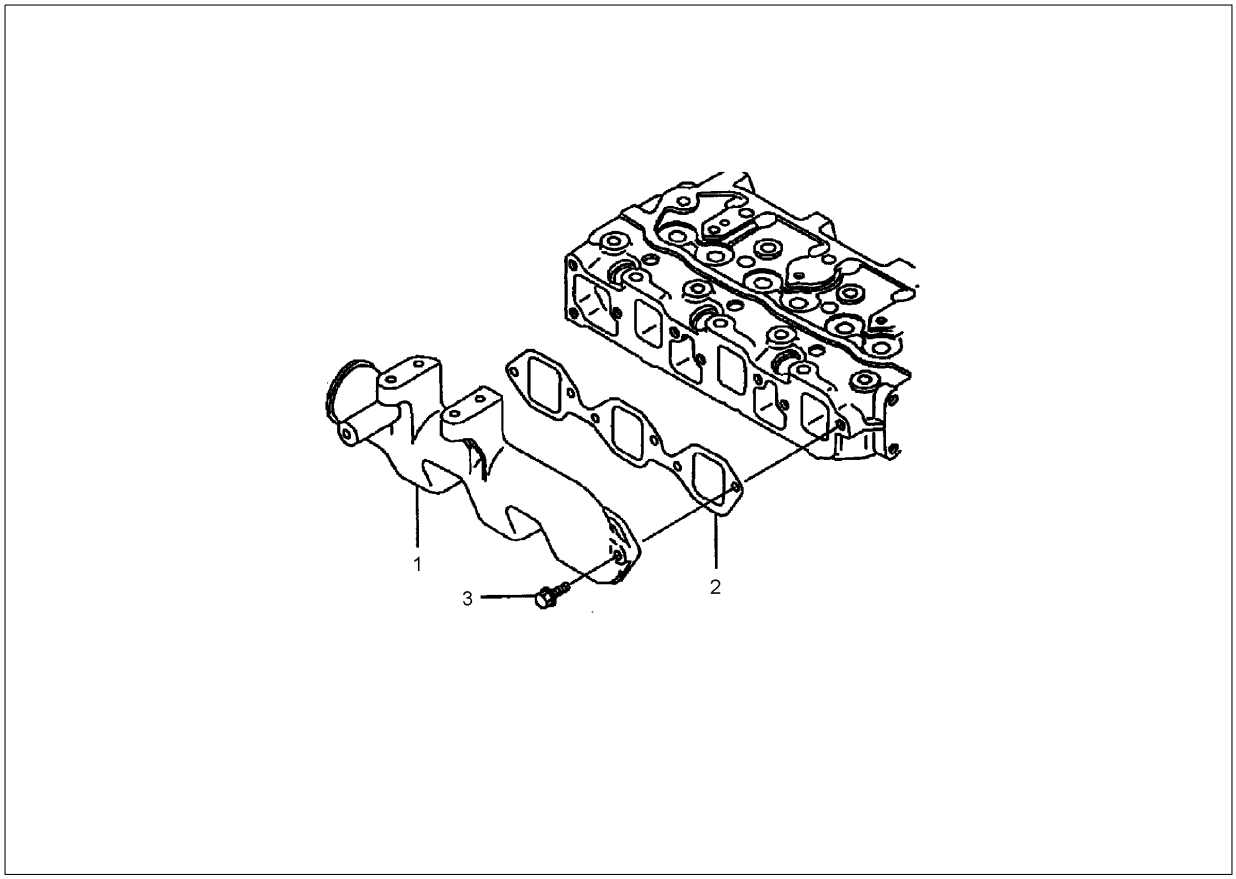
Ref. No.	Part No.	Description	Qty. Req.	Ref. No.	Part No.	Description	Qty. Req.
1	178321	CYLINDER HEAD SEAL	1	7	178493	PLUG	1
2	178416	SCREW	14	8	178491	PLUG	1
3	178428	BEARING	1	9	178492	PLUG	6
4	178423	WASHER	2	10	178323	SCREW	8
5	178509	PLUG	1	11	178301	CRANKSHAFT BEARING	4
6	178322	PLUG	1	12	178319	SCREW	2



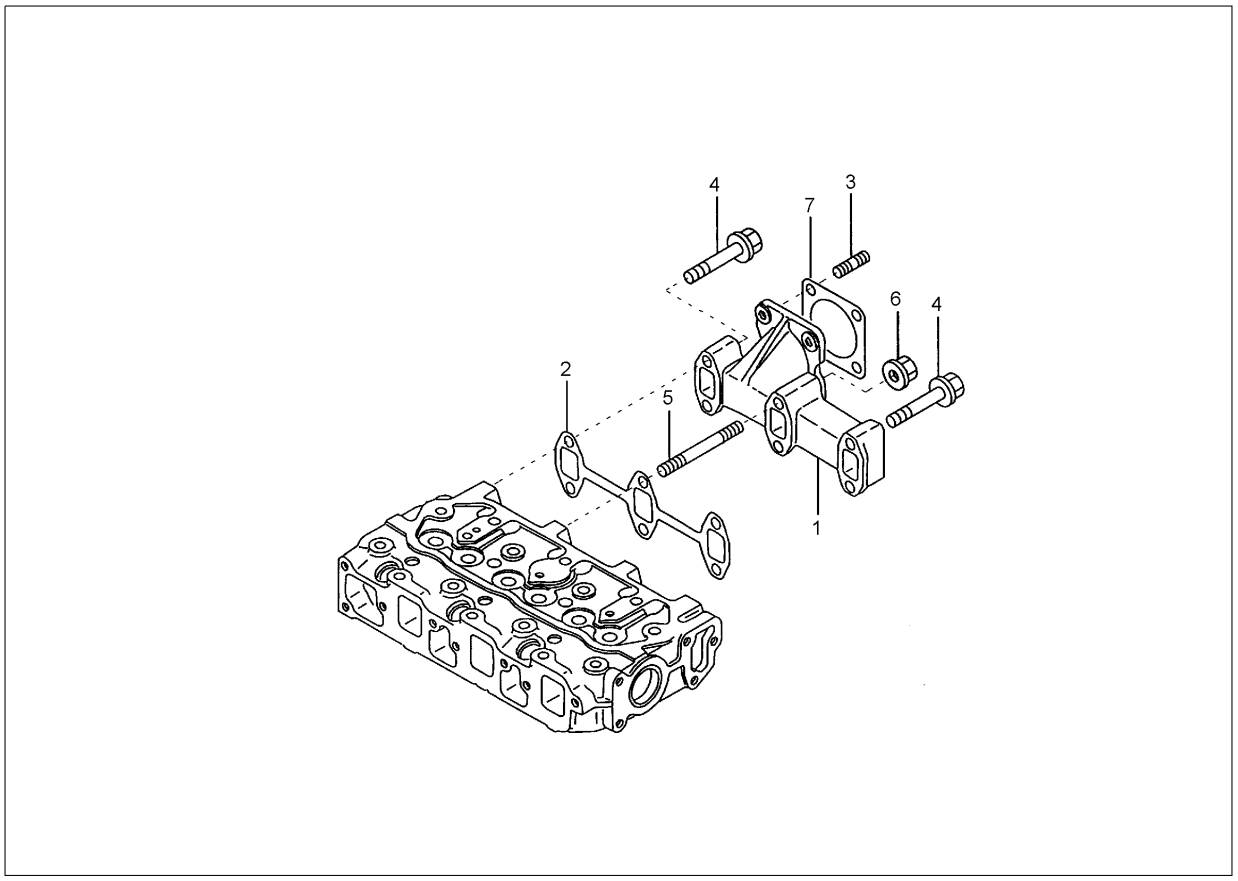
Ref. No.	Part No.	Description	Qty. Req.
1	178324	CYLINDER HEAD	1
2	178325	CONNECTING LINK	1
3	178489	SCREW	1
4	178319	SCREW	4
5	178326	CONNECTING LINK	1
6	178327	PLUG	2
7	178328	PLUG	1
8	178306	HOSE	1
9	178497	DOWEL PIN	2
10	178304	VALVE	3
11	178329	INLET VALVE	3
12	178330	GUIDE	6
13	178292	INJECTION NOZZLE	3
14	178307	SEAL	3
15	178483	SEAL	3
16	178331	SPRING	6
17	178332	WASHER	6
18	178333	CLAMP	6
19	178309	CAP	6
20	178305	COVER	1
21	178334	PLATE	1
22	178498	SCREW	4
23	178335	SEAL	1
24	425-35207	GASKET/HOOD	1
25	164319	O-RING	1
26	164662	OIL COVER	1
27	178488	PLUG	2
28	164666	O-RING	2
29	178499	PLUG	2
30	178278	GLOW PIN	3
31	178281	GLOW PLUG CONNECTION	1
32	178312	ROCKER ARM SHAFT	1
33	178336	SHAFT	1
34	178294	SEAL	6



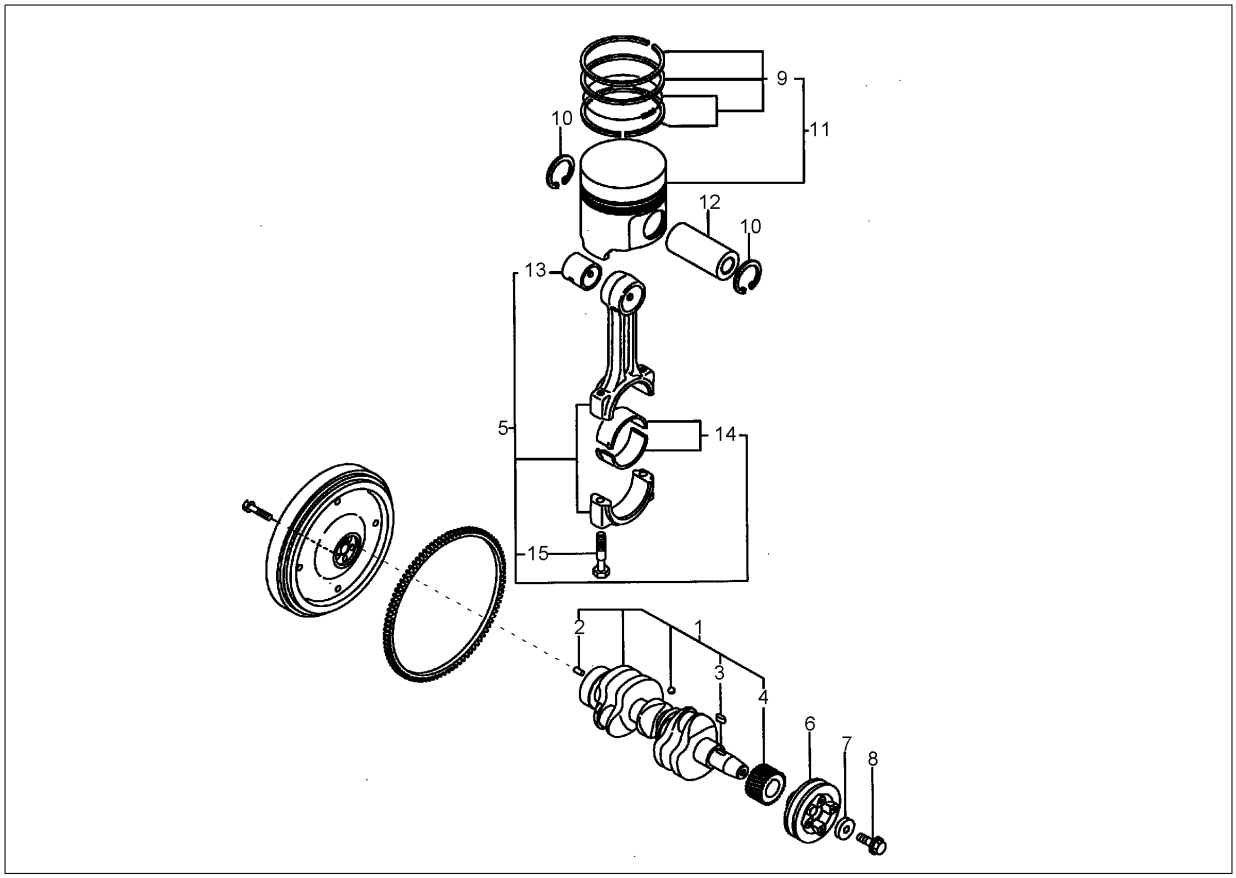
Ref. No.	Part No.	Description	Qty. Req.	Ref. No.	Part No.	Description	Qty. Req.
1	178338	CAMSHAFT	1	11	178345	WASHER	1
2	178421	PUSH ROD	6	12	178346	BUSHING	1
3	178337	PLUNGER	6	13	178352	FLANGE	1
4	178339	CAMSHAFT BEARING	1	14	178347	SHAFT	1
5	178340	SCREW	4	15	178348	BEARING	1
6	178341	TOOTHED GEAR	1	16	178349	BEARING	1
7	178342	TOOTHED GEAR	1	17	178350	SCREW	1
8	178343	PARALLEL KEY	2	18	178503	SCREW	3
9	178319	SCREW	5	19	178351	BEARING	1
10	178344	WASHER	1	20	178353	SHAFT COMPLETE	1



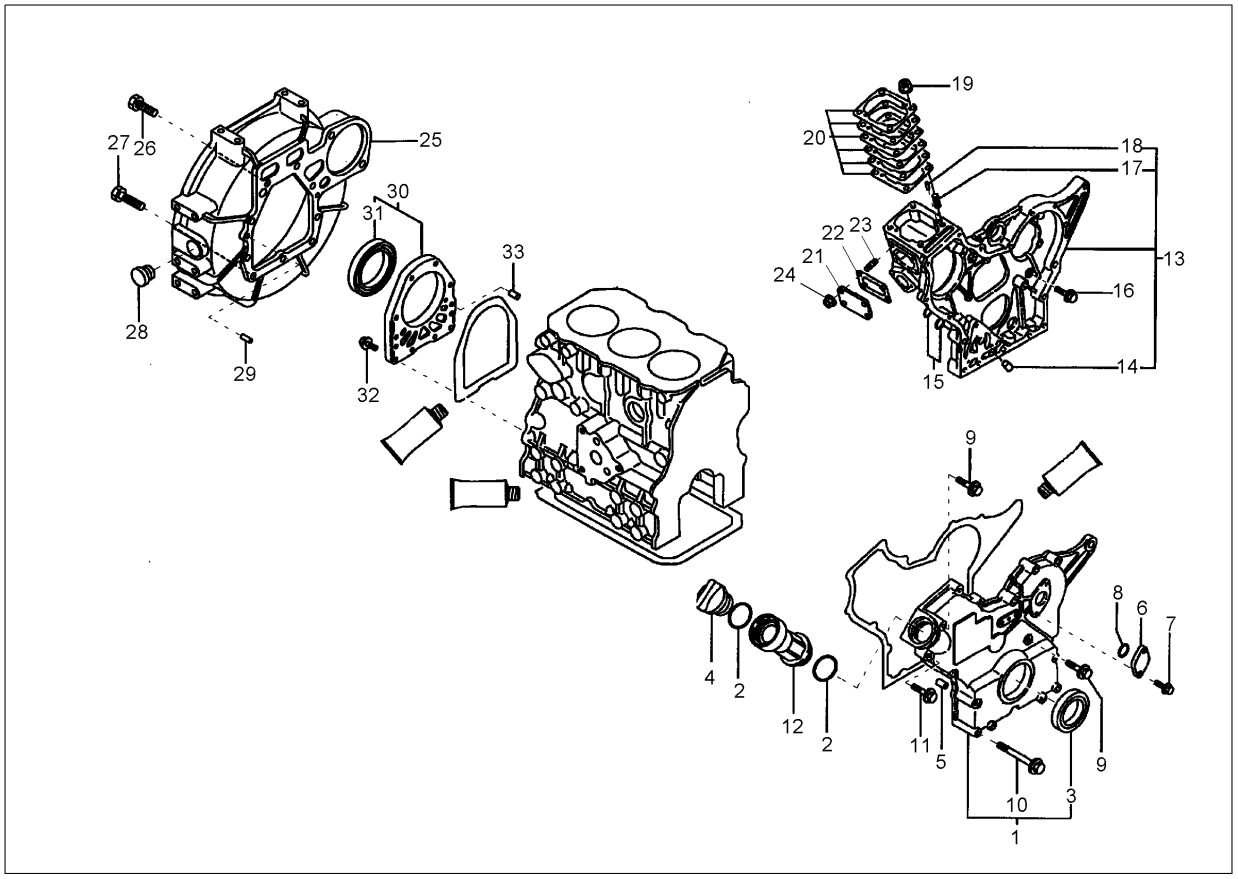
Ref. No.	Part No.	Description	Qty. Req.	Ref. No.	Part No.	Description	Qty. Req.
1	178290	INTAKE MANIFOLD	1	3	178354	SCREW	6
2	178285	SEAL	1				



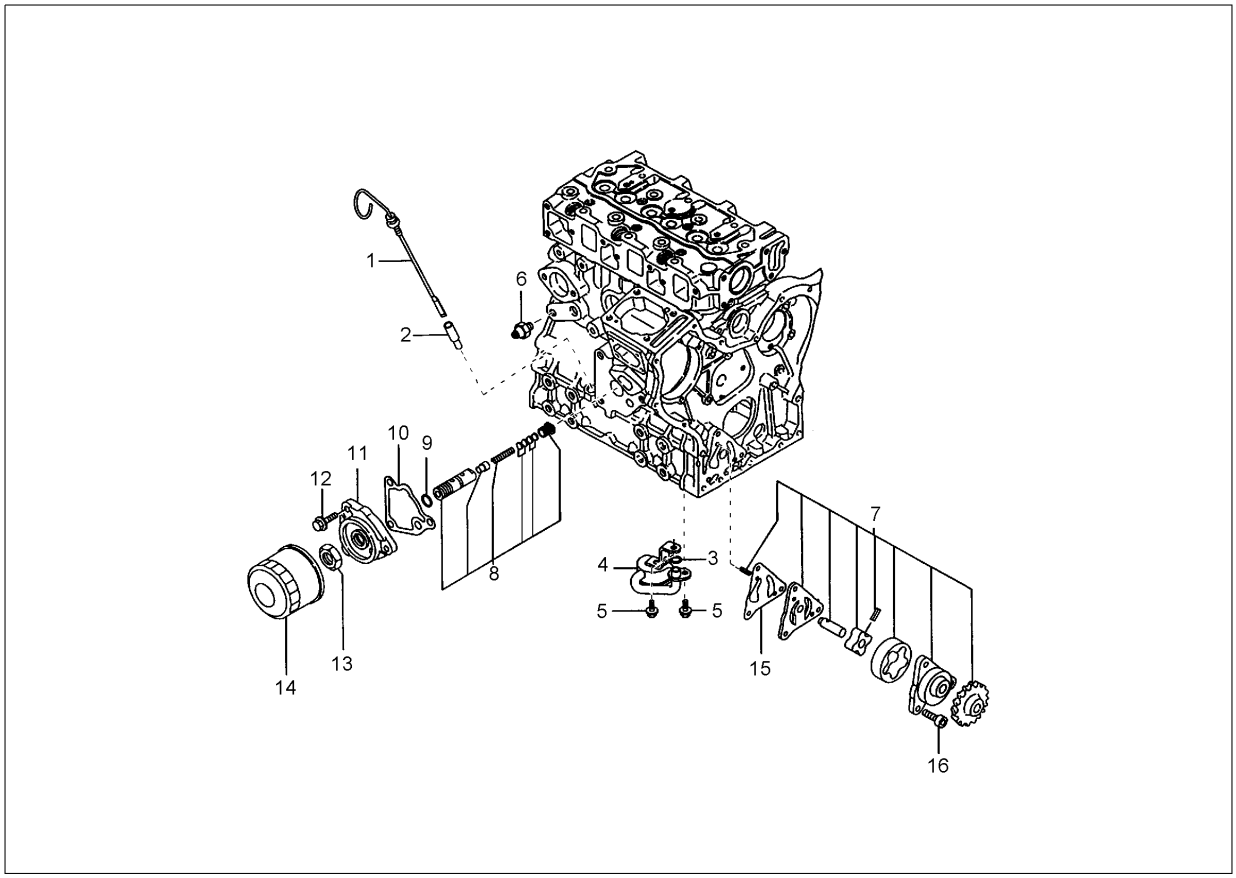
Ref. No.	Part No.	Description	Qty. Req.	Ref. No.	Part No.	Description	Qty. Req.
1	178283	EXHAUST MANIFOLD	1	5	178355	STUD BOLT	2
2	178284	SEAL	1	6	164345	NUT	2
3	178500	STUD BOLT	4	7	160646	SEAL	1
4	178310	SCREW	4				



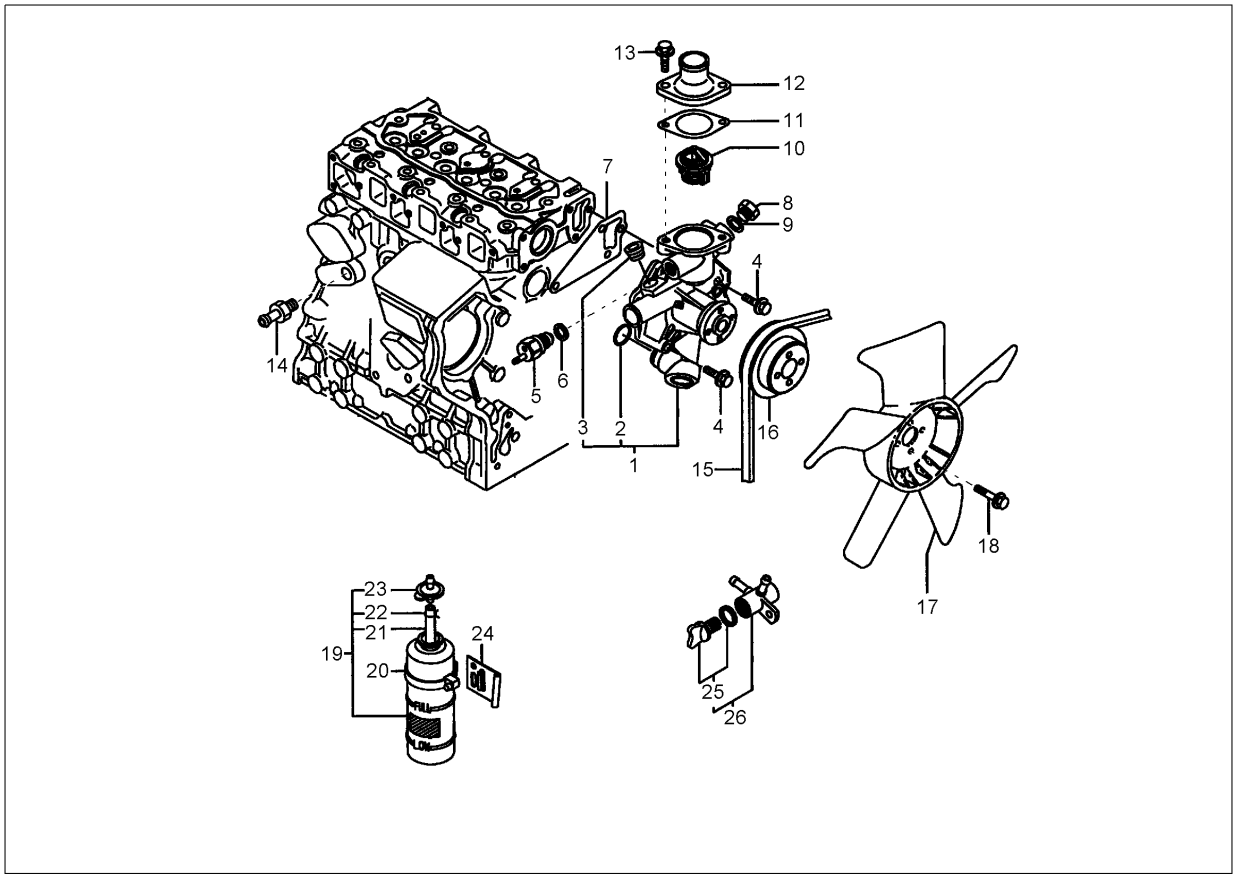
Ref. No.	Part No.	Description	Qty. Req.
1	178420	CRANKSHAFT	1
2	178501	GRUB SCREW	1
3	178343	PARALLEL KEY	1
4	178356	GEAR	1
5	178414	CONNECTING ROD	3
6	178280	BELT DISC	1
7	178426	WASHER	1
8	178425	SCREW	1
9	178422	SET OF BACKUP RINGS	3
10	178415	WASHER	6
11	178357	PISTON	3
12	178358	PIN	3
13	178311	BUSHING	3
14	178482	CONNECTING ROD CAMP	3
15	178308	SCREW	6



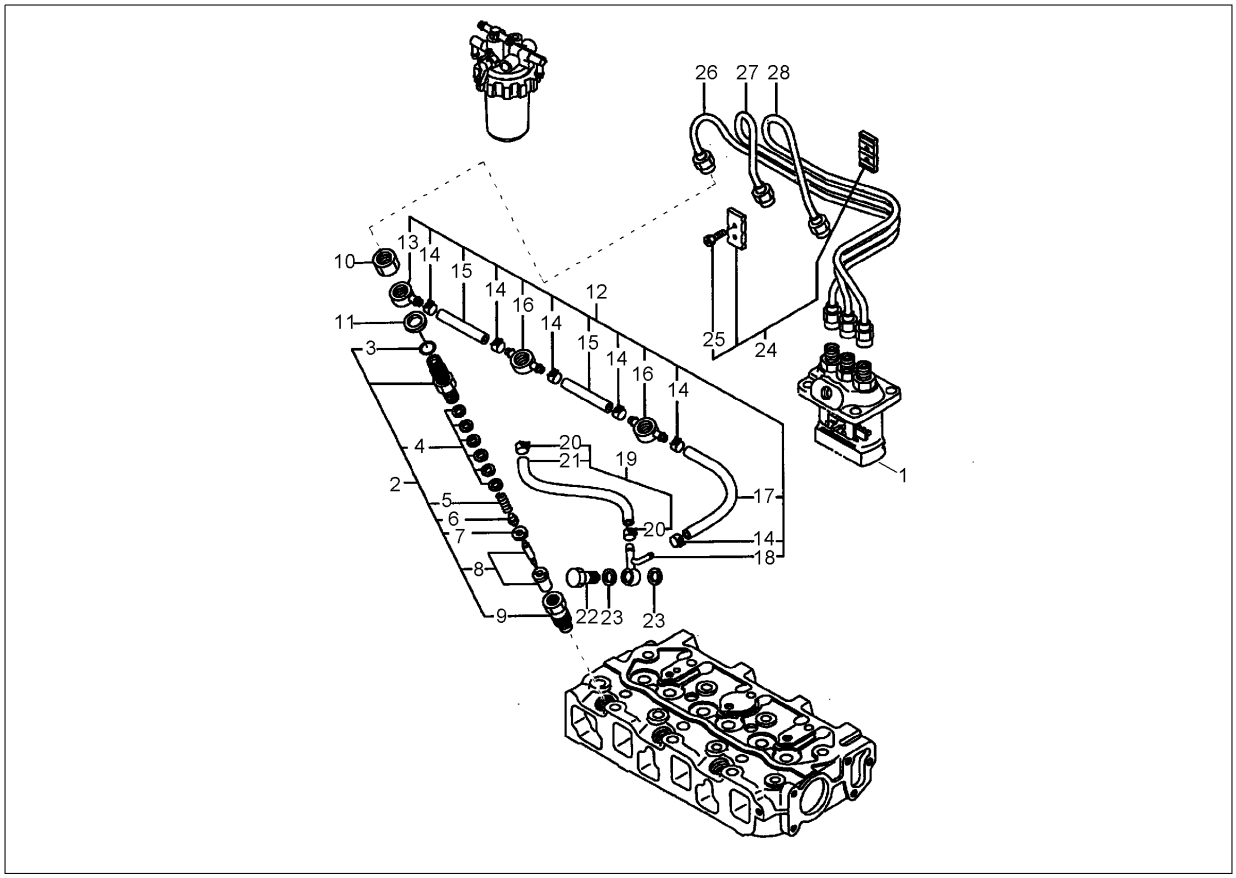
Ref. No.	Part No.	Description	Qty. Req.
1	178399	COVER	1
2	164319	O-RING	2
3	178286	SEAL	1
4	164662	OIL COVER	1
5	178400	TUBE	4
6	178502	COVER	1
7	178503	SCREW	2
8	164779	0-RING	1
9	178401	SCREW	4
10	178402	SCREW	6
11	178397	SCREW	8
12	178412	OIL FILLER NECK	1
13	178403	GEAR BOX	1
14	178404	PLUG	1
15	178370	O-RING	2
16	178503	SCREW	7
17	178405	STUD BOLT	4
18	178406	GRUB SCREW	2
19	178407	NUT	4
20	178313	SEAL	1
21	178408	COVER	1
22	178364	SEAL	1
23	178317	STUD BOLT	4
24	178505	NUT	4
25	178424	FLYWHEEL HOUSING	1
26	178504	SCREW	6
27	178398	SCREW	3
28	178282	PLUG	1
29	178501	GRUB SCREW	2
30	178288	HOUSING	1
31	178287	SEAL	1
32	178396	SCREW	10
33	178409	GRUB SCREW	2



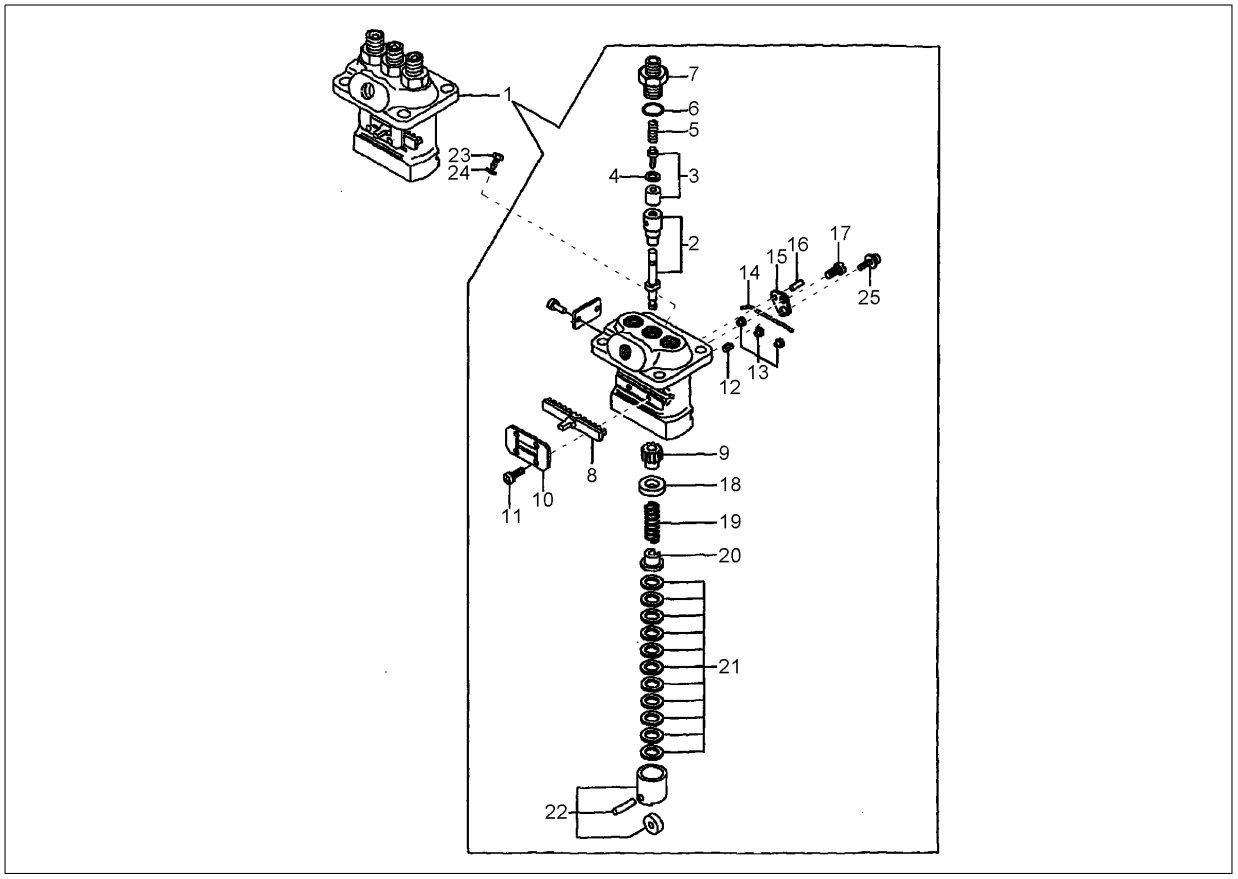
Ref. No.	Part No.	Description	Qty. Req.	Ref. No.	Part No.	Description	Qty. Req.
1	178279	DIPSTICK	1	9	178276	O-RING	1
2	164359	GUIDE	1	10	178413	SEAL	1
3	178365	O-RING	1	11	178295	HOUSING	1
4	178366	TUBE	1	12	178486	SCREW	3
5	164381	SCREW	2	13	178487	NUT	1
6	425-36085	SENDER/OIL PRESSURE	1	14	178677	OIL FILTER	1
7	178300	OIL PUMP	1	15	178299	SEAL	1
8	178315	PRESSURE LIMITING VALVE	1	16	178367	SCREW	3



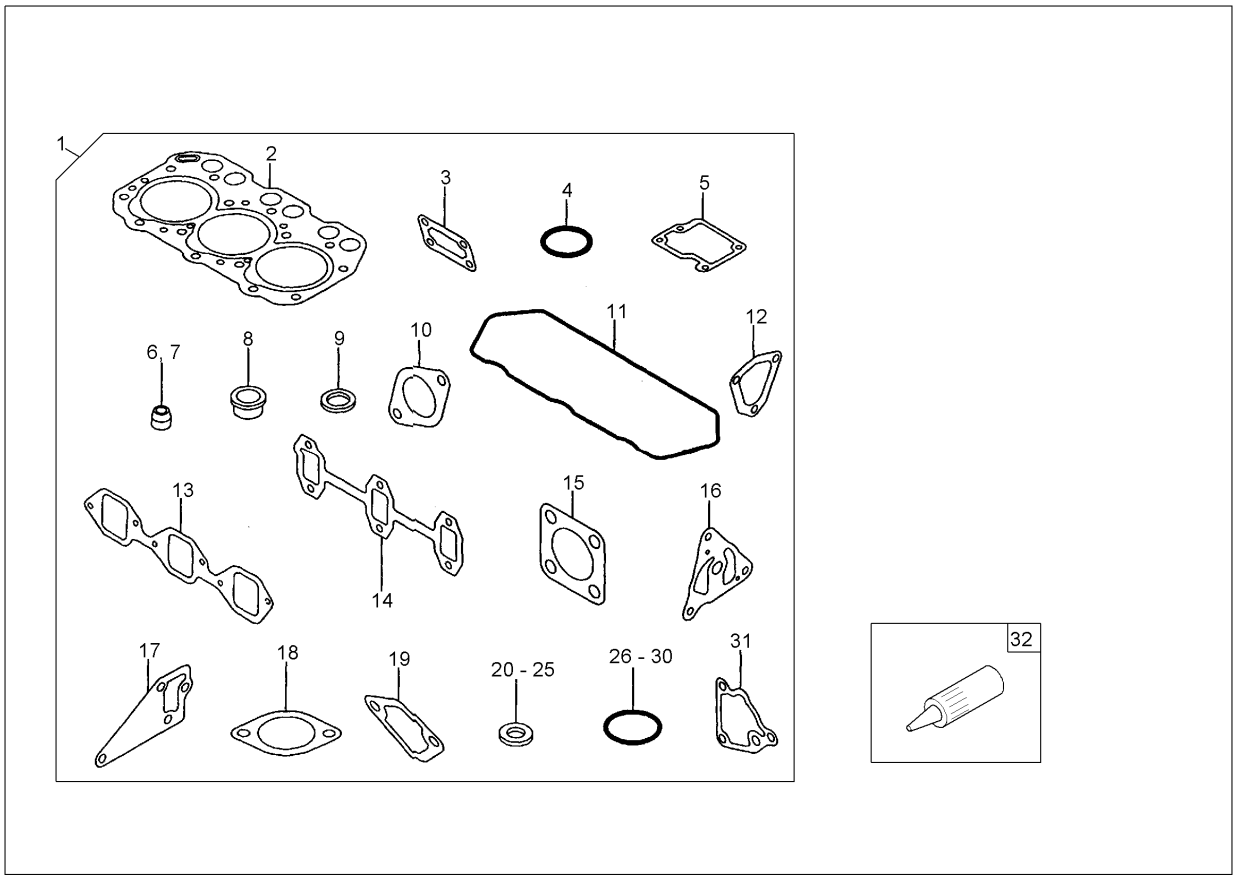
Ref. No.	Part No.	Description	Qty. Req.
1	425-35264	WATER PUMP ASSEMBLY	1
2	178359	O-RING	1
3	164436	PLUG	1
4	178494	SCREW	4
5	425-34683	SWITCH/THERMOSTAT 110 DEG C	1
6	160427	SEAL	1
7	425-35265	GASKET/WATER PUMP	1
8	164441	PLUG	1
9	160427	SEAL	1
10	425-35269	THERMOSTAT	1
11	425-36142	GASKET	1
12	178490	THERMOSTAT COVER	1
13	178486	SCREW	2
14	178417	CONNECTION	1
15	425-36141	BELT/FAN	1
16	178291	BELT DISC	1
17	1425403G	FAN	1
18	178427	SCREW	4
19	425-36167	EXPANSION TANK ASSY	1
20	161856	COLLAR	1
21	178507	TUBE	1
22	178508	COLLAR	1
23	178506	PLUG	1
24	425-36152	BRACKET/SUB-TANK	1
25	178360	DRAIN COCK	1
26	178361	DRAIN COCK COMPLETE	1



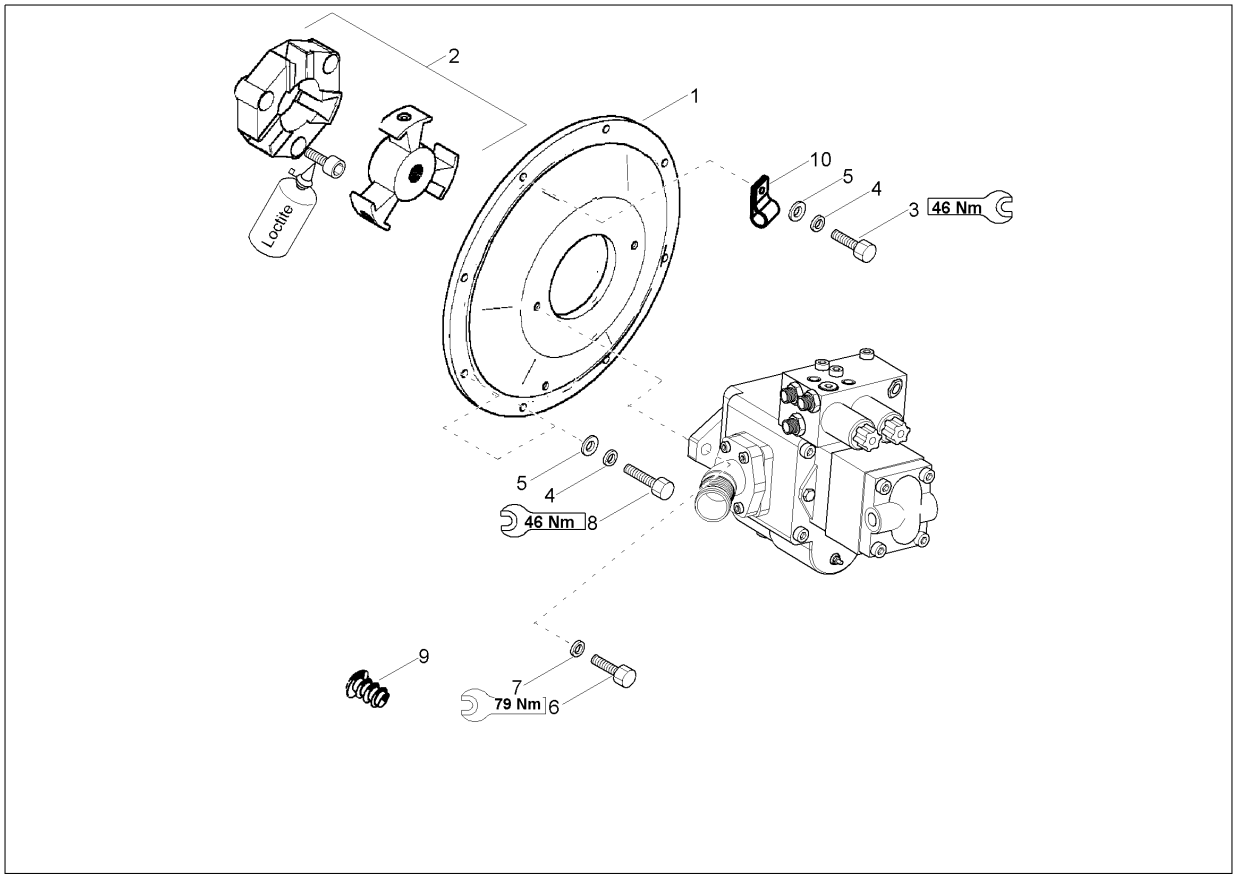
Ref. No.	Part No.	Description	Qty. Req.	Ref. No.	Part No.	Description	Qty. Req.
1	178687	INJECTION PUMP	1	15	178391	PIPE	2
2	178688	INJECTION NOZZLE	3	16	178293	INJECTION COUPLING	2
3	178314	O-RING	3	17	178392	PIPE	1
4	164663	ADJUSTING WASHER	3	18	178393	LUBRICATION NIPPLE	1
5	178362	SPRING	3	19	178394	PIPE COMPLETE	1
6	164371	SEAT - NOZZLE SPRING	3	20	164406	CLAMP 12	2
7	178363	WASHER	3	21	178395	PIPE	1
8	178289	INJECTION VALVE	3	22	178411	SCREW	1
9	178389	SCREW JOINT	3	23	164392	SEAL	2
10	178530	CONICAL NIPPLE	1	24	178496	CLIP	1
11	164716	SEAL	3	25	178495	SCREW	2
12	178390	PIPE	1	26	178296	HP TUBE	1
13	178302	INJECTION COUPLING	1	27	178297	HP TUBE	1
14	164414	CLAMP 8	6	28	178298	HP TUBE	1



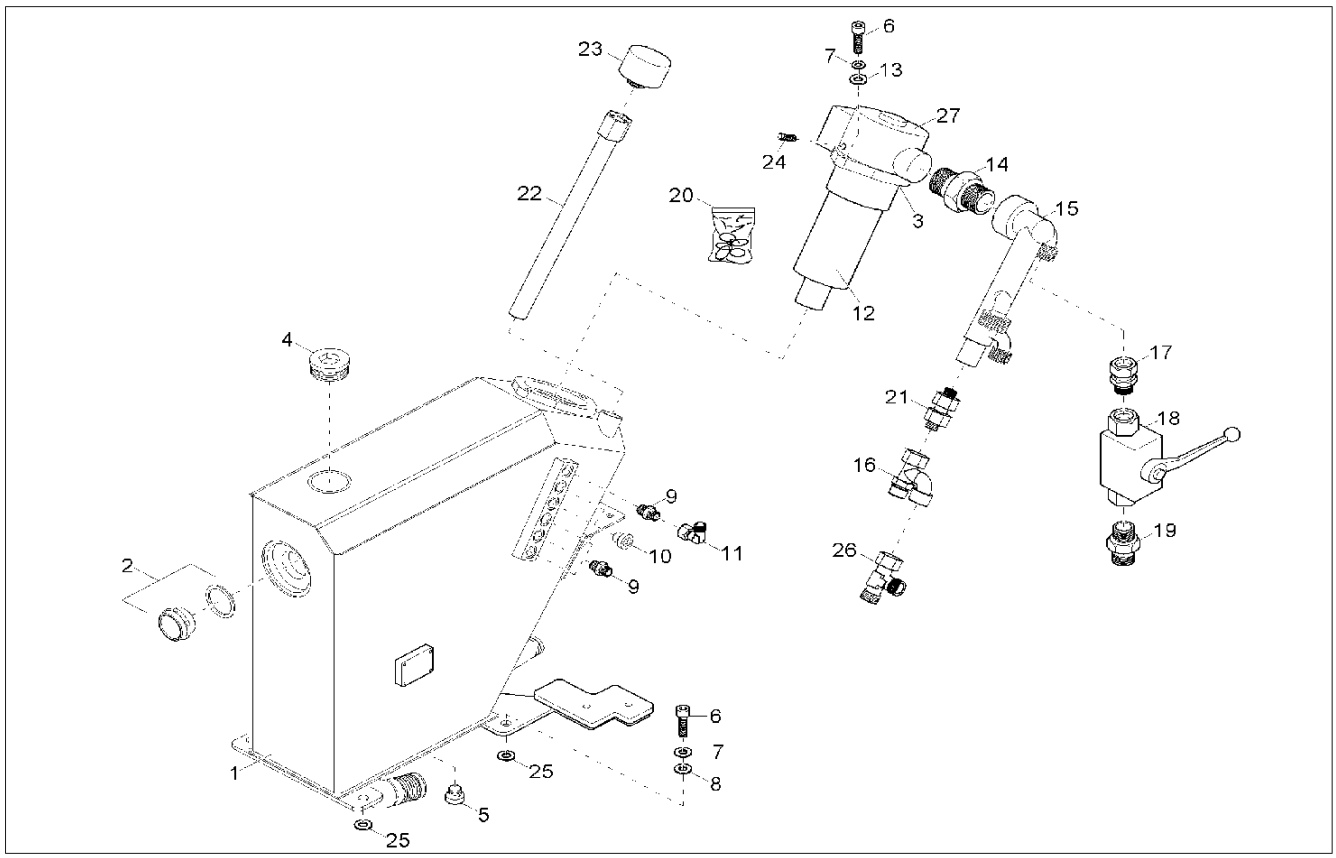
Ref. No.	Part No.	Description	Qty. Req.
1	178687	INJECTION PUMP	1
2	178277	HYDRAULIC PUMP ELEMENT	3
3	178303	NON RETURN VALVE	3
4	178419	CONICAL NIPPLE	3
5	178371	SPRING	3
6	178418	O-RING	3
7	178372	BRACKET	3
8	178373	RACK	1
9	178374	PINION	3
10	178375	BRACKET	1
11	178376	SCREW	4
12	178377	PIN	1
13	178378	GUIDE	3
14	178379	PIN	1
15	178380	PLATE	2
16	178381	PIN	2
17	178382	SCREW	2
18	178383	WASHER	3
19	178384	SPRING	3
20	178385	BRACKET	3
21	178386	WASHER KIT	3
22	178387	PLUNGER	3
23	178388	SCREW	1
24	164392	SEAL	1
25	178316	SCREW	2



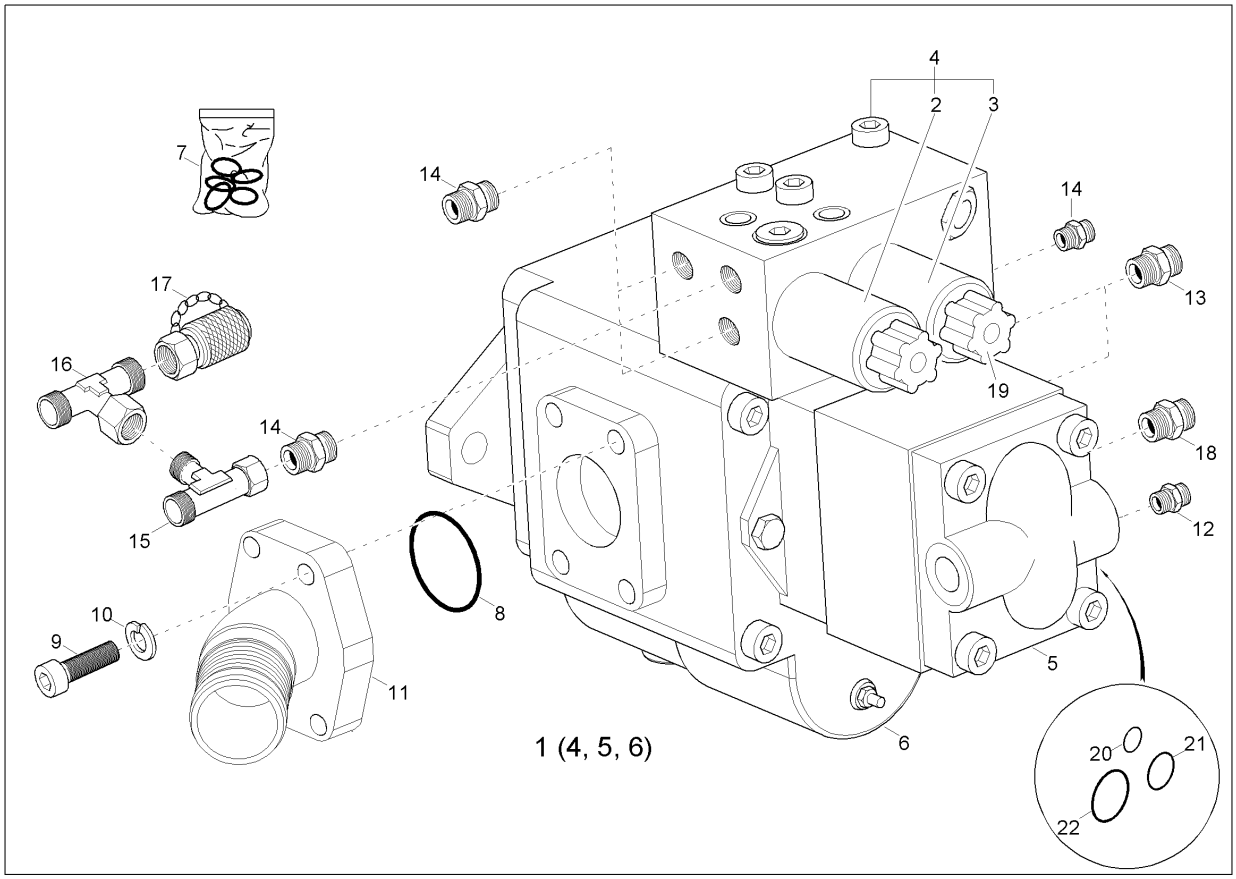
Ref. No.	Part No.	Description	Qty. Req.
1	1405422G	GASKET KIT	1
2	178321	CYLINDER HEAD SEAL	1
3	178364	SEAL	1
4	164319	O-RING	3
5	178335	SEAL	1
6	178483	SEAL	3
7	178307	SEAL	3
8	178292	INJECTION NOZZLE	3
9	178294	SEAL	6
10	178410	FLANGE SEAL	1
11	425-35207	GASKET/HOOD	1
12	178368	SEAL	1
13	178285	SEAL	1
14	178284	SEAL	1
15	160646	SEAL	1
16	178299	SEAL	1
17	425-35265	GASKET/WATER PUMP	1
18	425-36142	GASKET	1
19	425-35317	GASKET/FUEL PUMP	1
20	160427	SEAL	2
21	164393	SEAL	4
22	164716	SEAL	3
23	164392	SEAL	7
24	178369	SEAL RING	2
25	164719	SEAL	1
26	178370	O-RING	2
27	164666	O-RING	2
28	178276	O-RING	1
29	164779	O-RING	1
30	178365	O-RING	1
31	178413	SEAL	1
32	164317	LIQUID SEAL	1



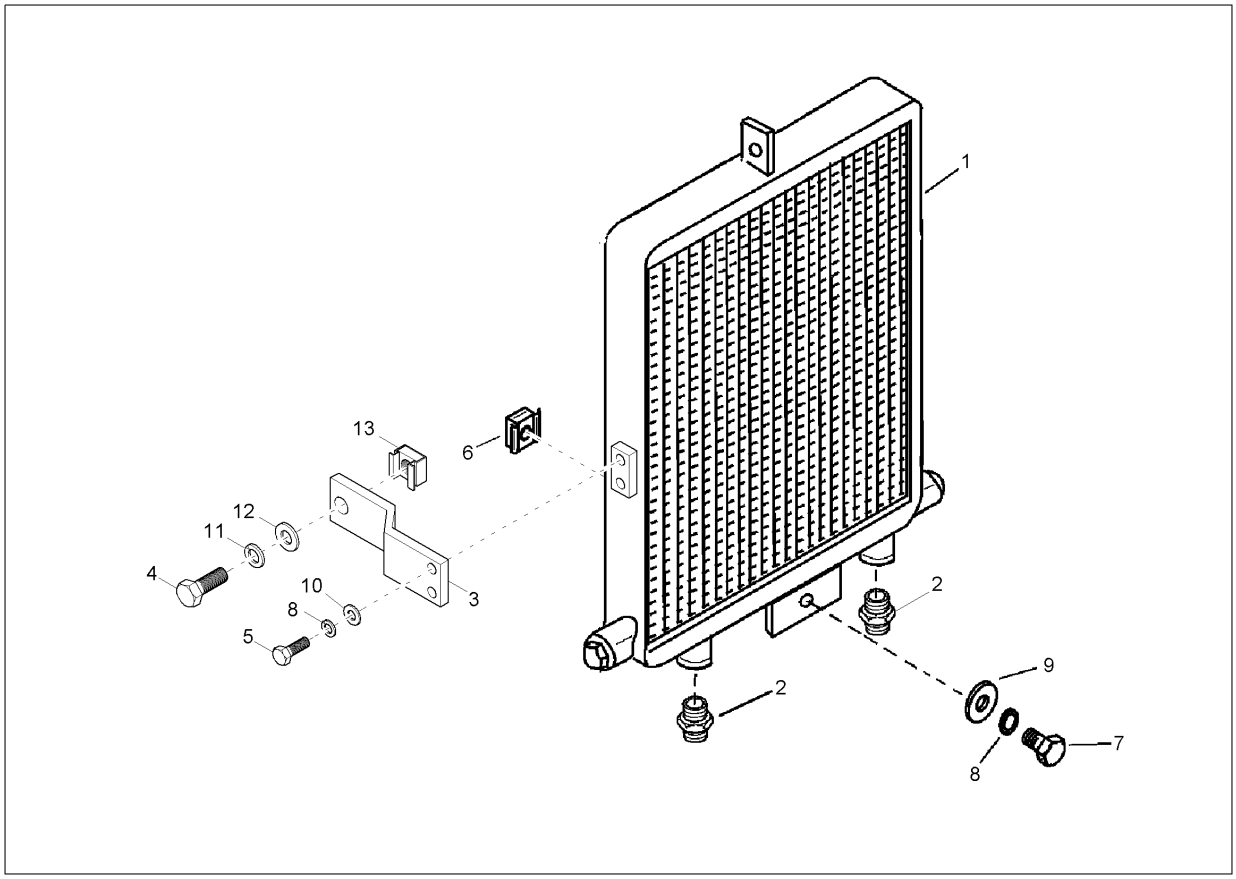
Ref. No.	Part No.	Description	Qty. Req.	Ref. No.	Part No.	Description	Qty. Req.
1	1528403G	PUMP CARRIER	1	6	651480	SHCS M12-1.7 X 30 10.9 ZO	2
2	1528402G	COUPLER	1	7	163651	WASHER	2
3	651396	CS M10-1.50 X 30 C 8.8 ZO	6	8	651397	CS M10-1.5 X 35 C 8.8 ZO	2
4	161669	RING/SNAP S10	8	9	164928	PLUG	1
5	161640	WASHER/GR A 10.5	8	10	162608	COLLAR	1



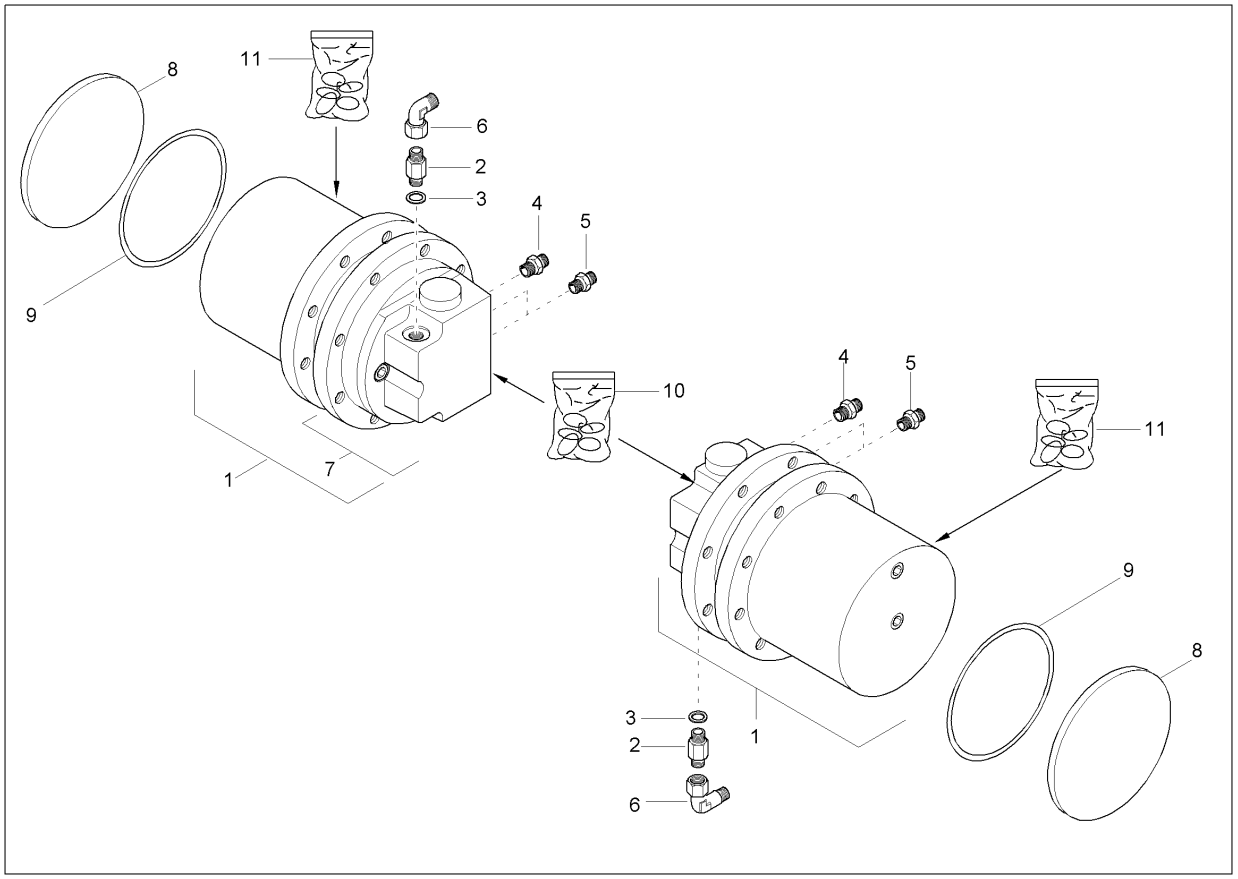
Ref. No.	Part No.	Description	Qty. Req.
1	178430	HYDRAULIC OIL TANK	1
2	160439	OIL LEVEL GLASS	1
3	165108	HYD OIL FILTER COMP.	1
4	9909013G	SCREW	1
5	161415	PLUG	1
6	651475	SHCS M10-1.2 X 30 8.8 ZO	6
7	161669	RING/SNAP S10	6
8	163642	WASHER	4
9	161426	SCREW JOINT	5
10	161414	SCREW	1
11	161443	ANGLE	1
12	165111	HYDRAULIC OIL FILTER	1
13	161640	WASHER/GR A 10.5	2
14	161490	SCREW JOINT	1
15	178453	TUBE	1
16	1428047G	DISTRIBUTION PIECE	1
17	162495	SCREW JOINT	1
18	160972	BALL VALVE	1
19	161431	SCREW JOINT	1
20	165113	SEAL KIT/HYD FILTER	1
21	9911064G	NON RETURN VALVE	1
22	178431	TUBE	1
23	1528425G	BREATHER	1
24	163859	SCREW	1
25	161663	WASHER/GR A 10.5 ZO	2
26	162062	ELBOW	1
27	178268	COVER	1



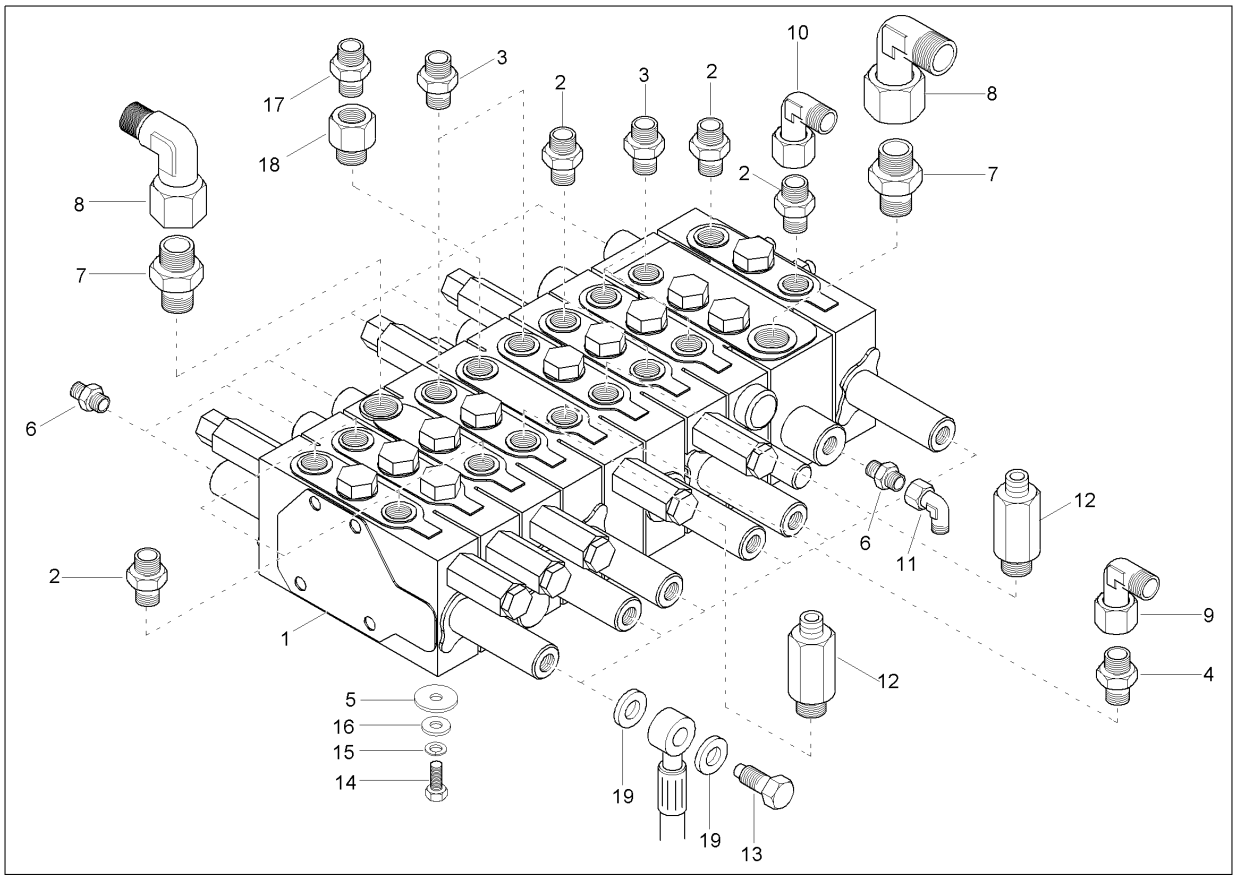
Ref. No.	Part No.	Description	Qty. Req.	Ref. No.	Part No.	Description	Qty. Req.
1	1928401G	VARIABLE PUMP + GEAR PUMP	1	12	165970	SCREW JOINT	1
2	1528406G	SOLENOID SWITCH	1	13	165965	SCREW JOINT	2
3	1528407G	SOLENOID SWITCH	1	14	164945	SCREW JOINT	4
4	1528405G	PILOT OIL SUPPLY UNIT	1	15	161448	ELBOW	1
5	1528404G	GEAR PUMP	1	16	161450	TEE	1
6	1928402G	VARIABLE DISPLACEMENT PUMP	1	17	161514	MEASURE JOINT	1
7	1529401G	SEAL KIT	1	18	165971	SCREW JOINT	1
8	161565	O-RING	1	19	178811	SCREW	2
9	163344	SCREW	4	20	179135	O-RING	1
10	161669	RING/SNAP S10	4	21	179873	O-RING	1
11	1428200G	FLANGE	1	22	178812	O-RING	1



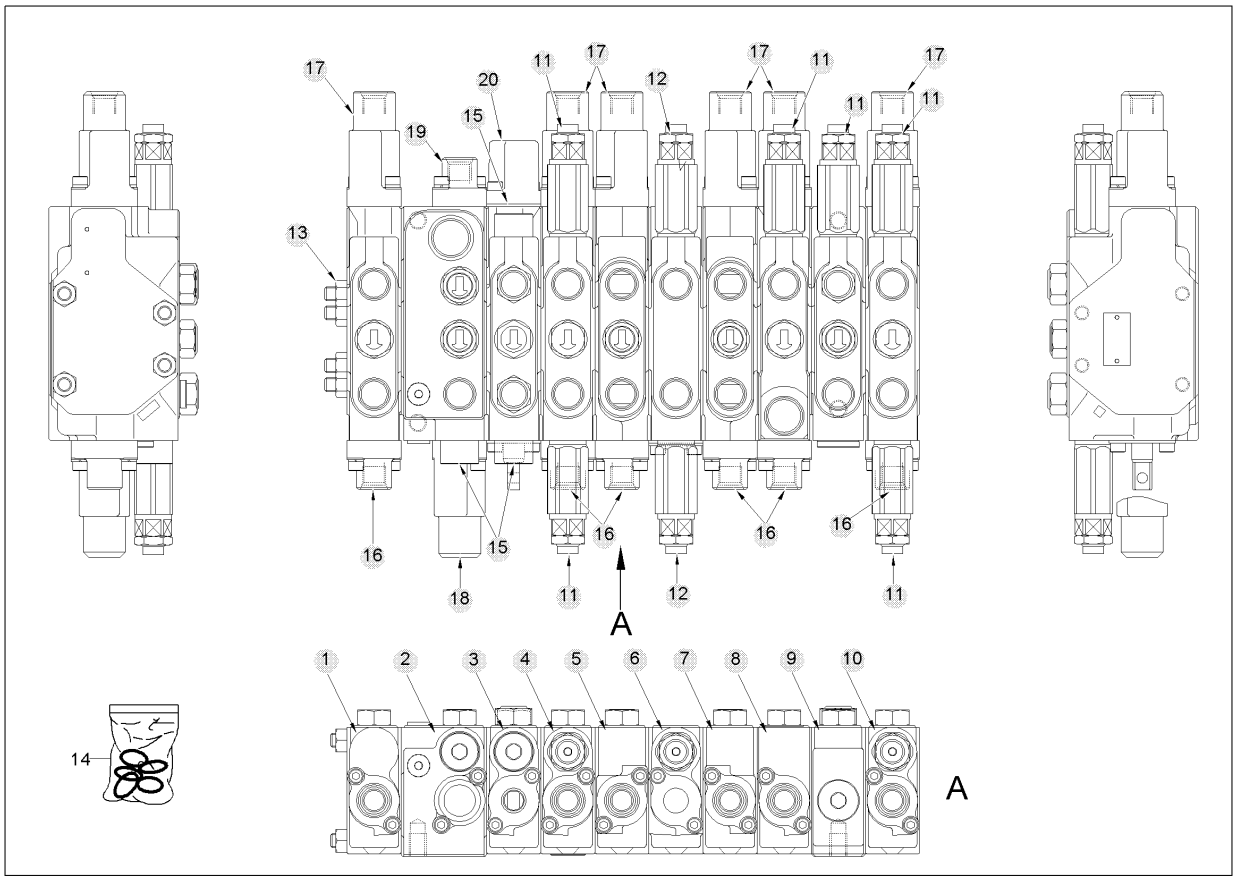
Ref. No.	Part No.	Description	Qty. Req.
1	1428418G	HYDRALIC OIL COOLER	1
2	9910346G	SCREW JOINT	2
3	178796	BRACKET	1
4	651393	CS M10-1.5 X 25 C 8.8 ZO	1
5	656093	CS M 8-1.25 X 16 C8.8 ZO	2
6	161616	NUT/CAGE M8	1
7	656094	CS M 8-1.25 X 30 C8.8 ZO	1
8	163670	WASHER	3
9	161667	WASHER/GR A 8.4 ZO	1
10	163634	WASHER	2
11	161669	RING/SNAP S10	1
12	161640	WASHER/GR A 10.5	1
13	161610	NUT/CAGE M10	1



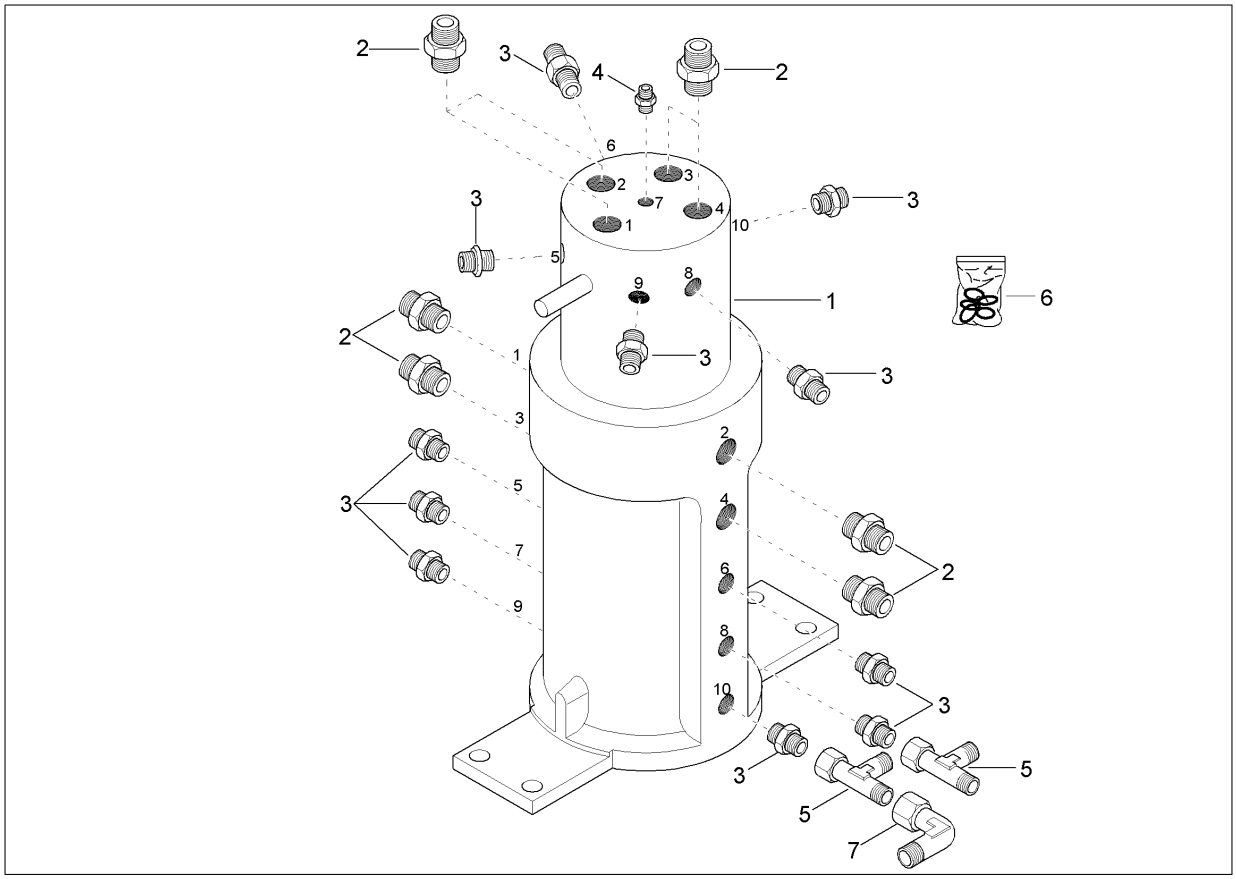
Ref. No.	Part No.	Description	Qty. Req.
1	160636	DRIVE MOTOR	2
2	9910286G	SCREW JOINT	2
3	161574	O-RING	2
4	164945	SCREW JOINT	2
5	165966	SCREW JOINT	4
6	161443	ANGLE (223)	2
7	1908603G	MOTOR COMPLETE	2
8	1908604G	COVER	2
9	179863	O-RING	2
10	1908601G	SEAL KIT - HYDRAULIC MOTOR	2
11	1908605G	SEAL KIT	2



Ref. No.	Part No.	Description	Qty. Req.
1	178810	CONTROL VALVE	1
2	165972	SCREW JOINT	8
3	165966	SCREW JOINT	5
4	165971	SCREW JOINT	1
5	160887	CORK WASHER	3
6	164945	SCREW JOINT	7
7	9910340G	SCREW JOINT	2
8	161447	ANGLE	2
9	161446	ANGLE	1
10	161444	ANGLE	1
11	161443	ANGLE	1
12	165505	SCREW JOINT	2
13	163124	VALVE	6
14	651391	CS M10-1.5 X 20 C 8.8 ZO	3
15	161669	RING/SNAP S10	3
16	161640	WASHER/GR A 10.5	3
17	161463	SCREW JOINT	1
18	160560	SCREW JOINT	2
19	179866	WASHER	12

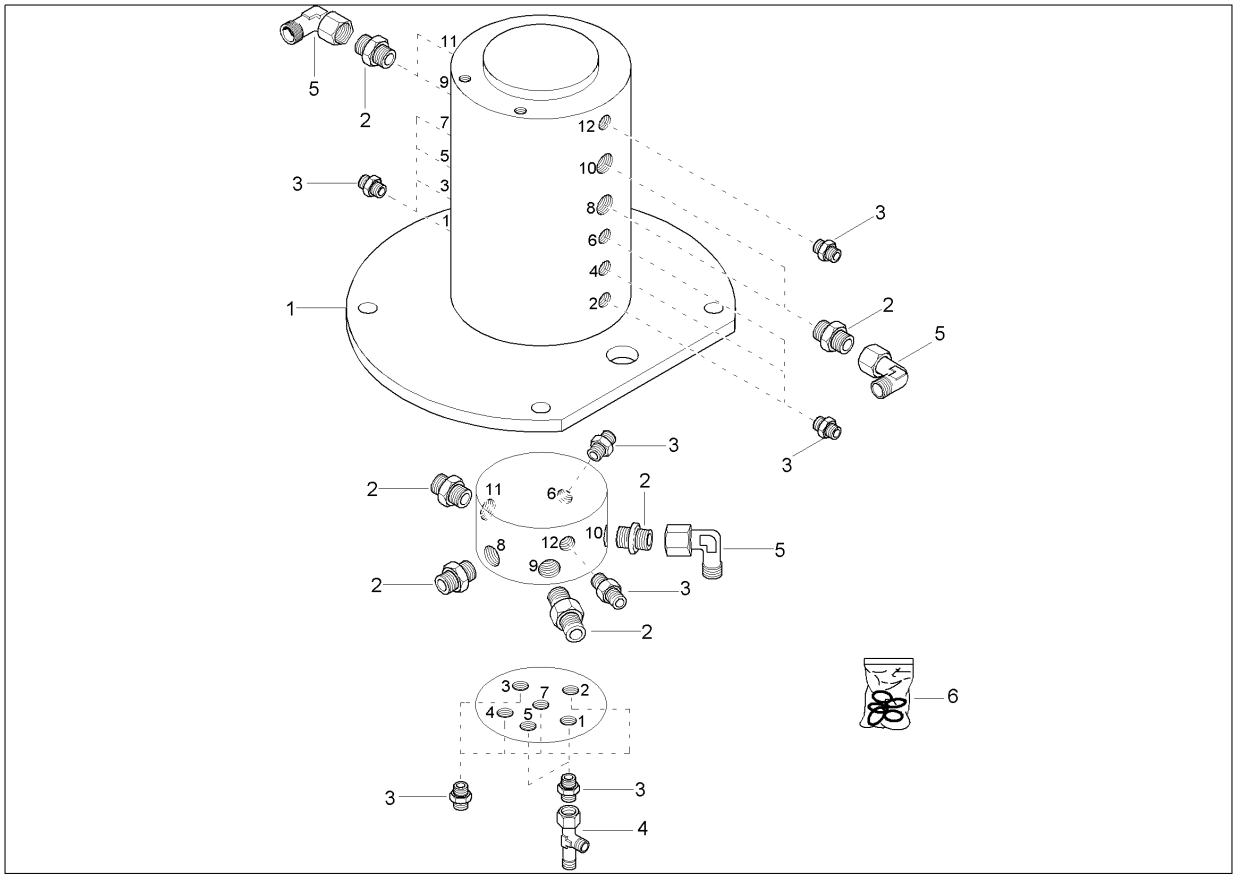


Ref. No.	Part No.	Description	Qty. Req.
1	1528410G	SWING	1
2	1528411G	PILOT SUPPLY PORT	1
3	1528412G	AUXILIARY SECTION	1
4	1528413G	DIPPER	1
5	1528414G	TRAVEL LEFT	1
6	1528415G	INLET SECTION	1
7	1528416G	TRAVEL RIGHT	1
8	1528417G	BOOM 1	1
9	1528418G	BOOM 2	1
10	1528419G	BUCKET	1
11	1528420G	PRESSURE LIMITING VALVE	6
12	1528421G	PRESSURE LIMITING VALVE	2
13	1528422G	TIE ROD	4
14	1528423G	SEAL KIT	1
15	1528440G	VENT PLUG	3
16	178815	PILOT CONTROL CAP 1	6
17	178816	PILOT CONTROL CAP 2	6
18	178817	SEGMENT 1	1
19	178818	SEGMENT 2	1
20	178819	SEGMENT	1

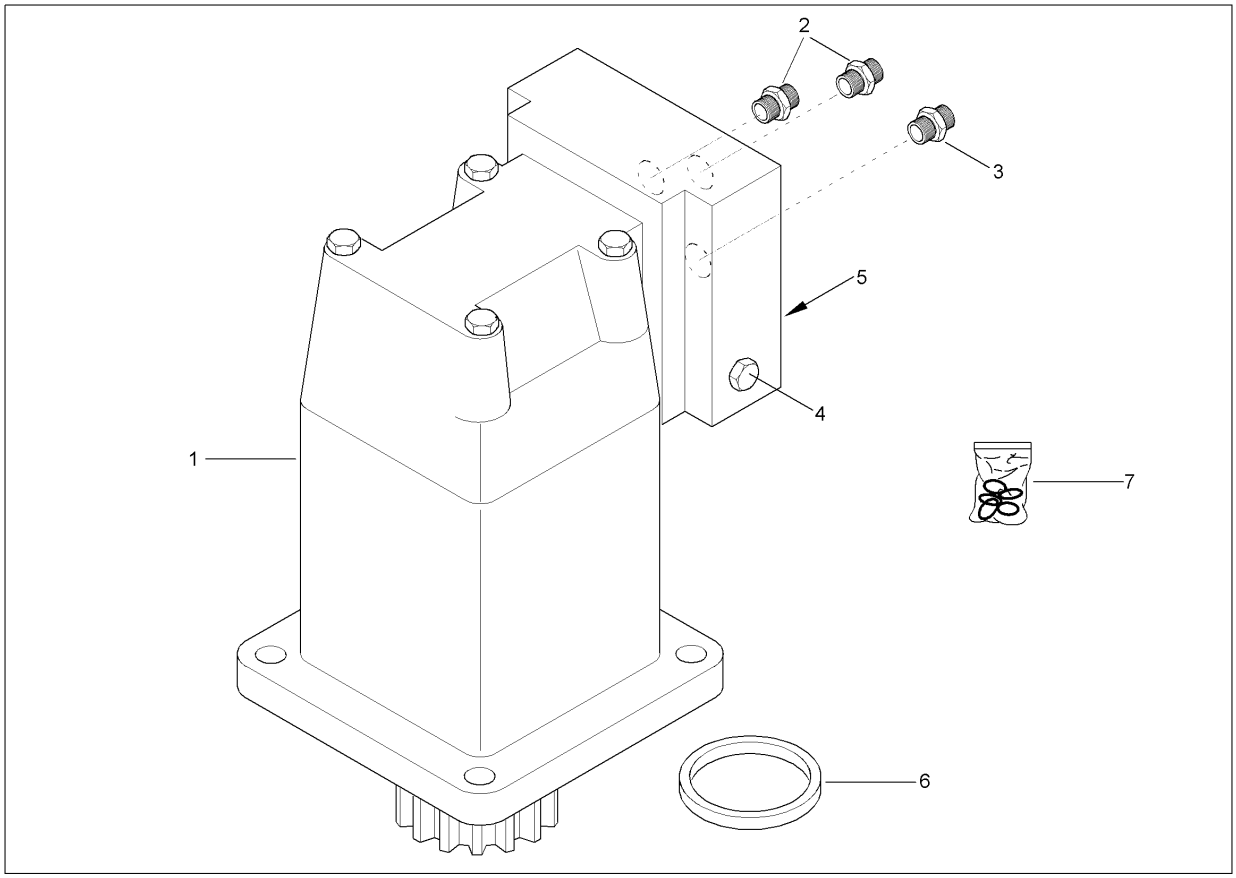


Ref. No.	Part No.	Description	Qty. Req.	Ref. No.	Part No.	Description	Qty. Req.
1	161920	SWIVEL JOINT	1	5	161448	ELBOW	2
2	161429	SCREW JOINT	8	6	178127	KIT/SWIVEL JOINT SEAL COMPLETE	1
3	161426	SCREW JOINT	11	7	161443	ANGLE	1
4	161458	SCREW JOINT	1				

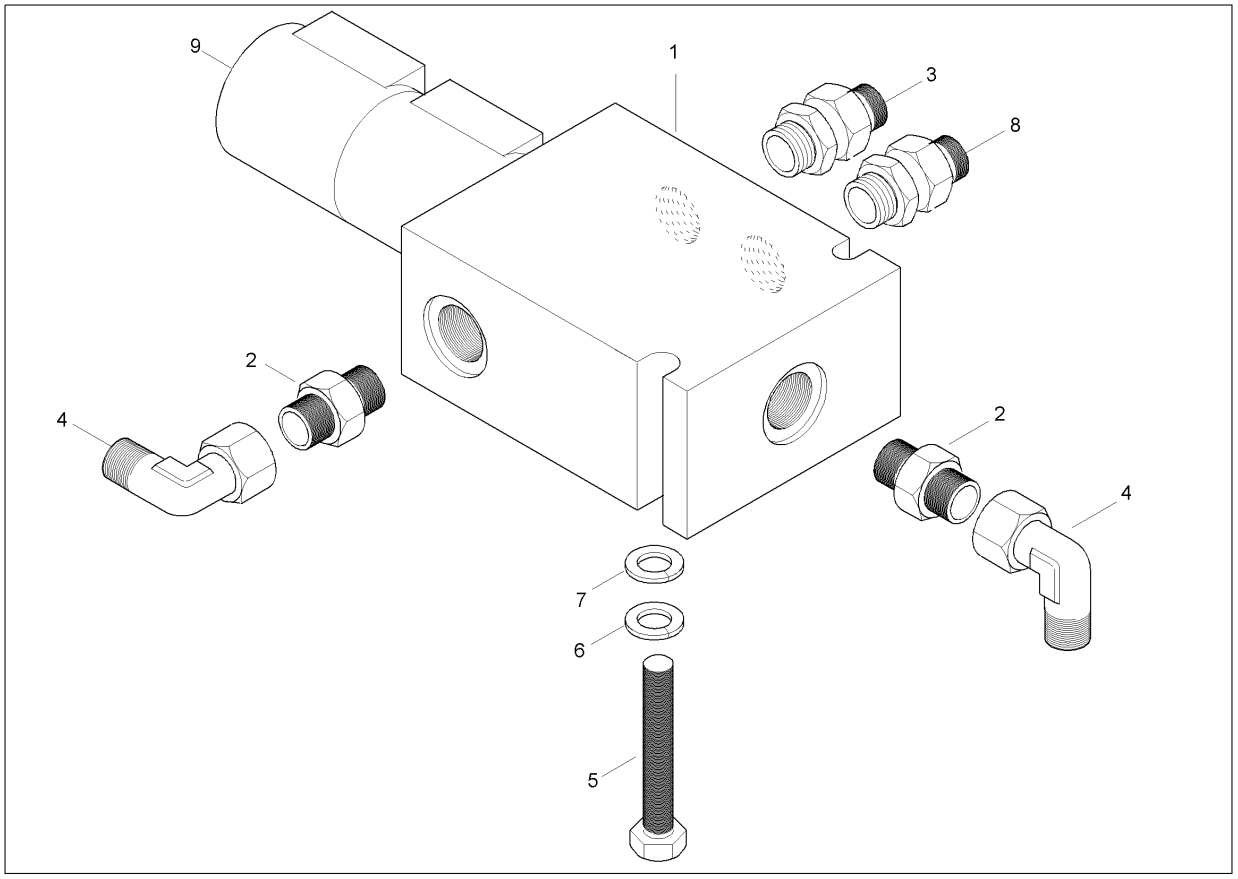
223 - SWIVEL JOINT LEADTHROUGH ET1940635



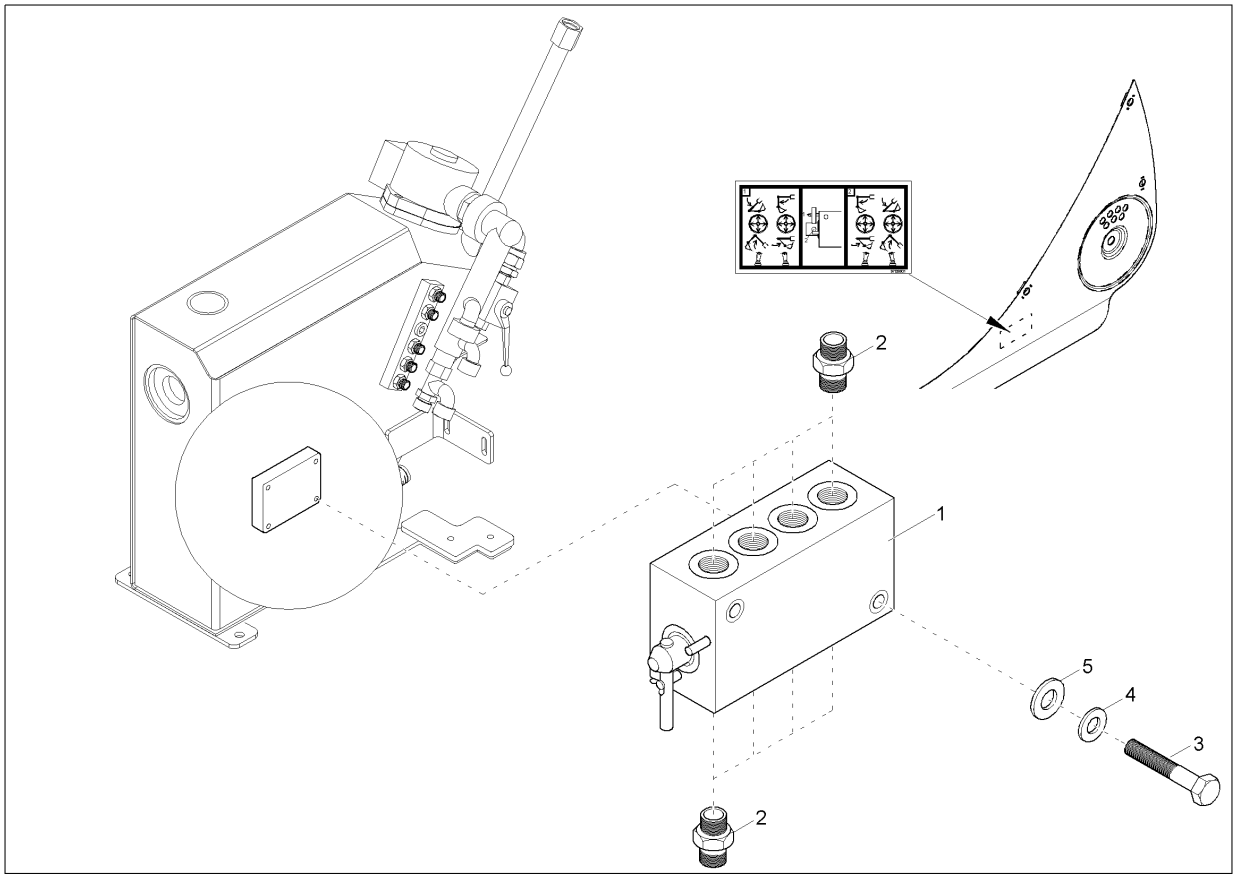
Ref. No.	Part No.	Description	Qty. Req.	Ref. No.	Part No.	Description	Qty. Req.
1	162115	SWIVEL JOINT	1	4	161448	ELBOW	2
2	161429	SCREW JOINT	8	5	161445	ANGLE	5
3	161426	SCREW JOINT	16	6	178128	KIT/SWIVEL JOINT SEAL COMPLETE	1



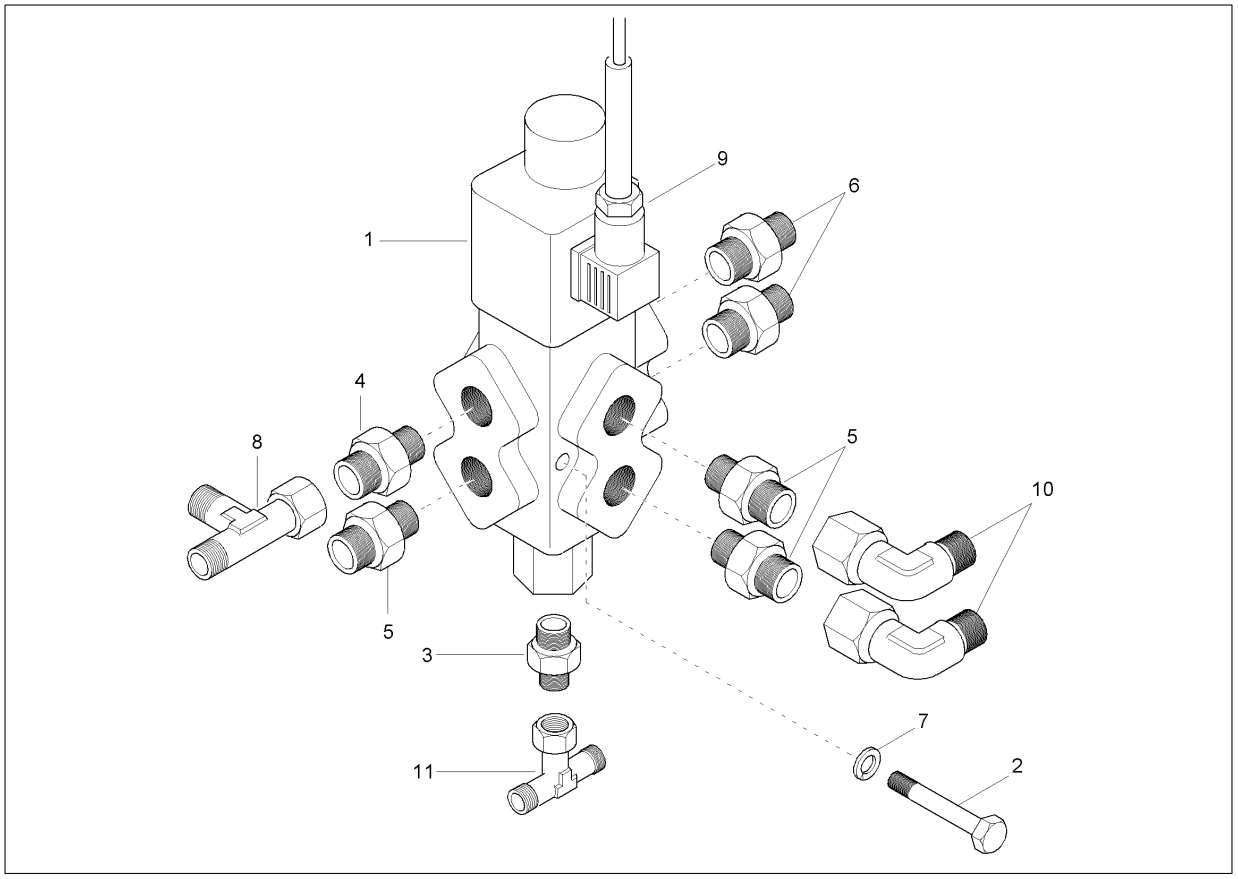
Ref. No.	Part No.	Description	Qty. Req.	Ref. No.	Part No.	Description	Qty. Req.
1	160595	MOTOR/HYDRAULIC	1	5	160567	VALVE/SHOCK	1
2	165972	SCREW JOINT	2	6	160570	SEAL	1
3	165966	SCREW JOINT	1	7	160604	SEAL KIT	1
4	160569	VALVE/PRESSURE LIMITING	1				



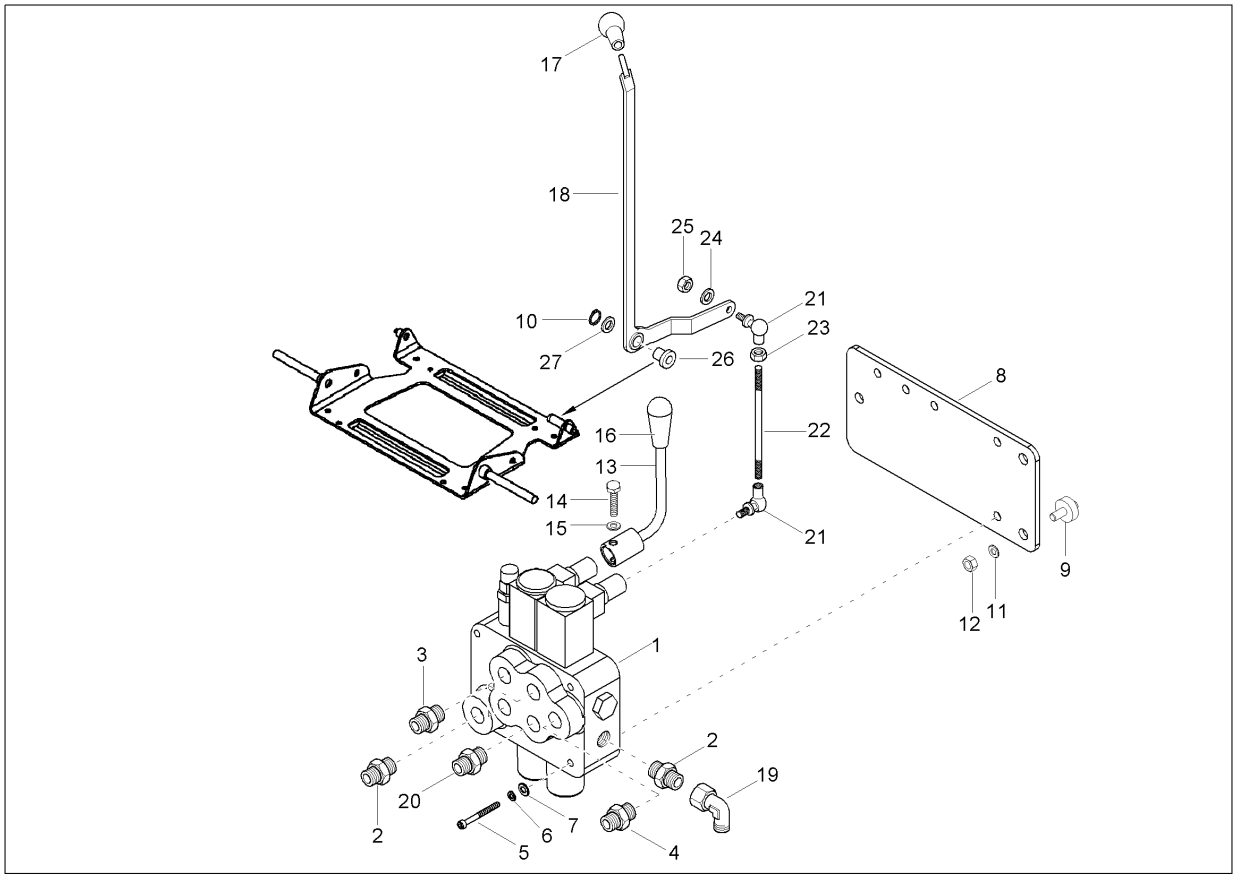
Ref. No.	Part No.	Description	Qty. Req.	Ref. No.	Part No.	Description	Qty. Req.
1	165827	4/3 VALVE	1	6	161675	RING/SNAP S6	2
2	161426	SCREW JOINT	2	7	161666	WASHER/GR A 6.4 ZO	2
3	165976	RESTRICTOR	1	8	179850	RESTRUCTOR	1
4	161443	ANGLE	2	9	178171	SOLENOID/STOP 4/3 VALVE	1
5	165939	SCREW	2				



Ref. No.	Part No.	Description	Qty. Req.	Ref. No.	Part No.	Description	Qty. Req.
1	1408450G	ISO/SAE VALVE	1	4	161675	RING/SNAP S6	2
2	161426	SCREW JOINT	8	5	161660	WASHER GR A6.4 ZO DIN 125	2
3	165946	SCREW	2				

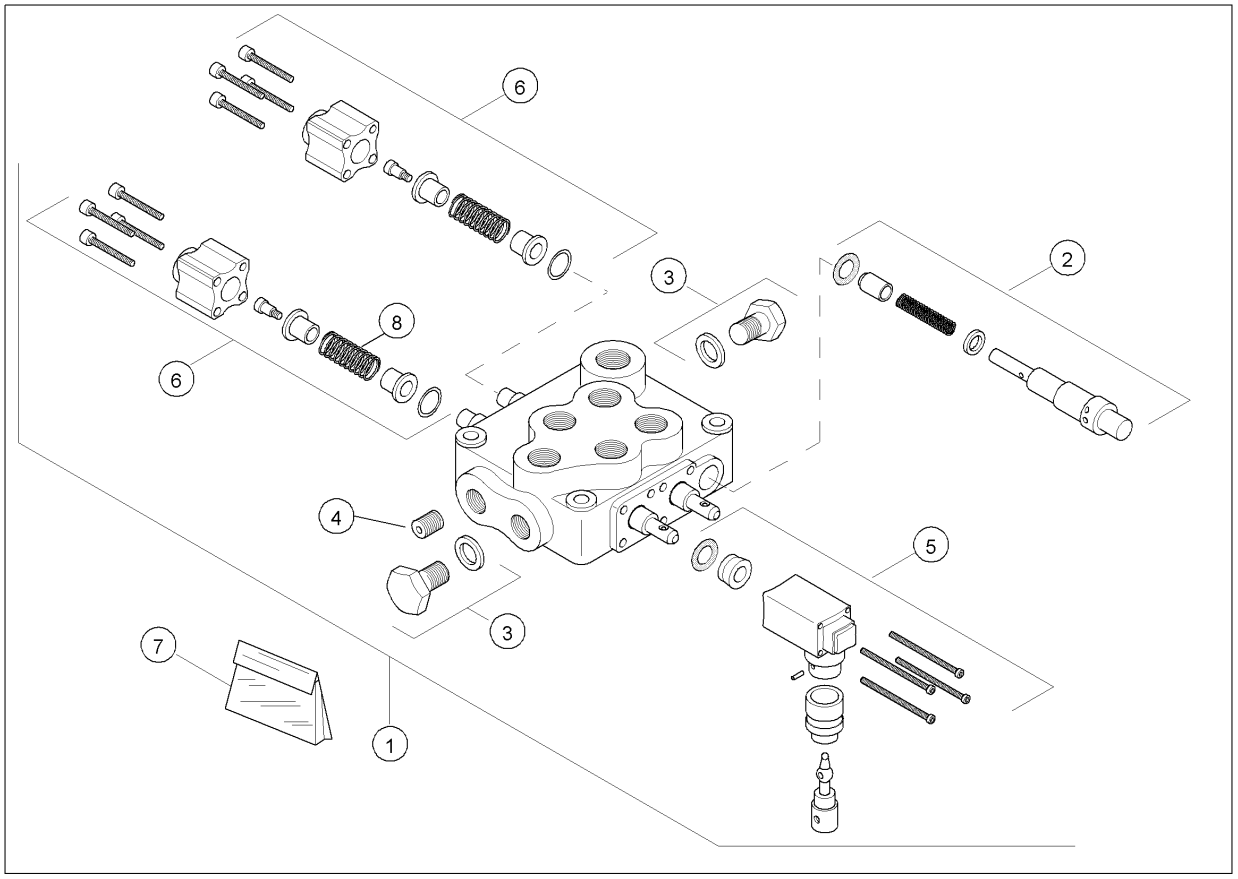


Ref. No.	Part No.	Description	Qty. Req.
1	160568	VALVE/SELECTION	1
2	651428	CS M6-1.0 X 50 C 8.8 ZO	2
3	161426	SCREW JOINT	1
4	161463	SCREW JOINT	1
5	161429	SCREW JOINT	3
6	161427	SCREW JOINT	2
7	161675	RING/SNAP S6	2
8	161471	ELBOW	1
9	160438	PLUG	1
10	161446	ANGLE	2
11	161450	TEE	1

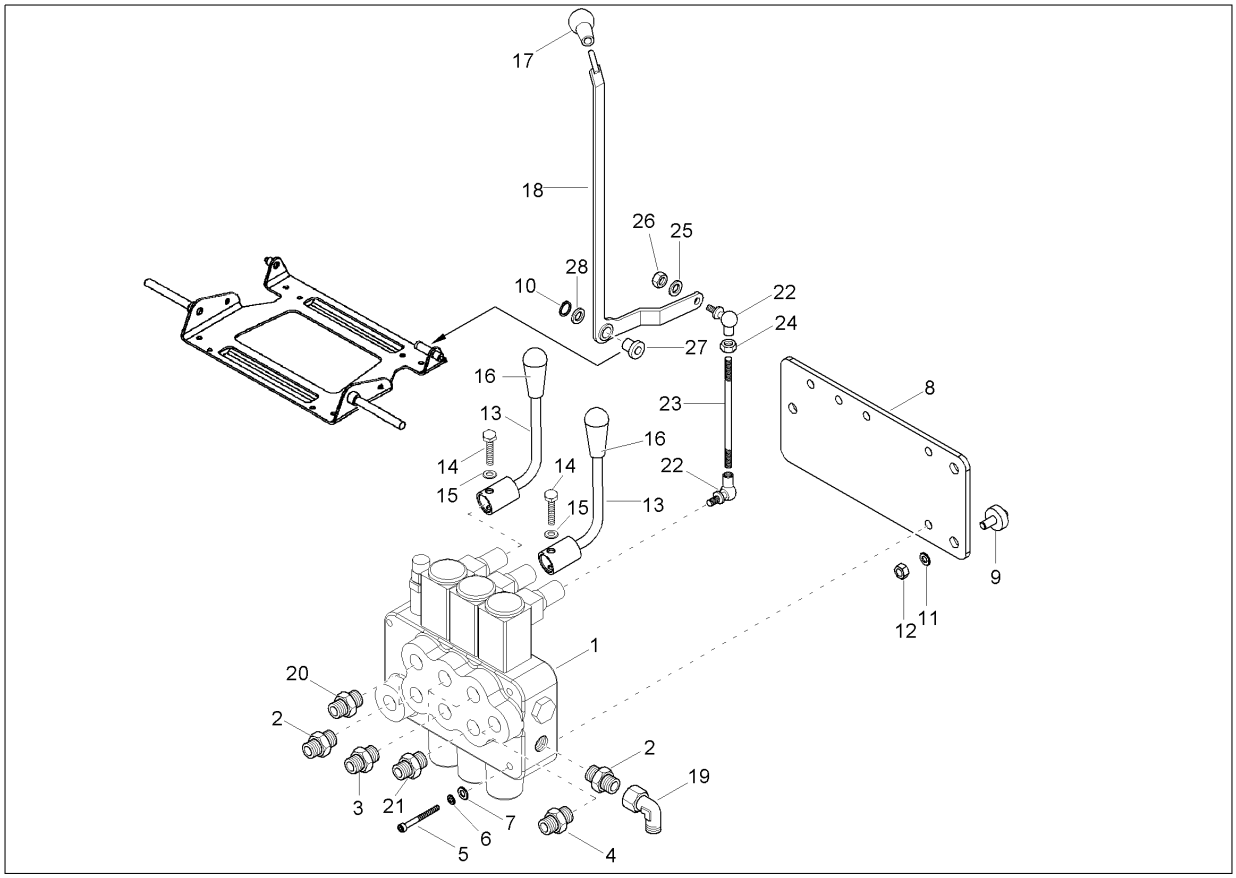


Ref. No.	Part No.	Description	Qty. Req.
1	178831	DOZER BLADE VALVE	1
	See page 82 for individual components.		
2	161429	SCREW JOINT	2
3	161426	SCREW JOINT	3
4	161463	SCREW JOINT	1
5	651429	CS M6-1.0 X 60 C 8.8 ZO	3
6	161675	RING/SNAP S6	3
7	161660	WASHER GR A6.4 ZO DIN 125	3
8	1521183G	PLATE	1
9	165566	RUBBER-METAL-BUFFER	3
10	9908057G	WASHER	1
11	161669	RING/SNAP S10	3
12	656102	HN M10-1.25 8 Z PHEOLL KB	3
13	1423012G	LEVER	1
14	656105	CS M 8-1.25 X 25 C8.8 ZO	1
15	163670	WASHER	1
16	161903	HANDLE	1
17	162398	HANDLE	1
18	1423024G	LEVER	1
19	161445	ANGLE	1
20	9910612G	SCREW JOINT	1
21	162072	BALL AND SOCKET	2
22	1423025G	THREADED ROD	1
23	656048	NUT/HEX M8 1.25 D934 PC8 F-ZO	1
24	163634	WASHER	1
25	651458	HLN INS M8-1.2 8 ZO	1
26	1428451G	BEARING	1
27	162486	WASHER	1

193 - DOZER BLADE VALVE (DOUBLE) - DISASSEMBLED_____ET1940665

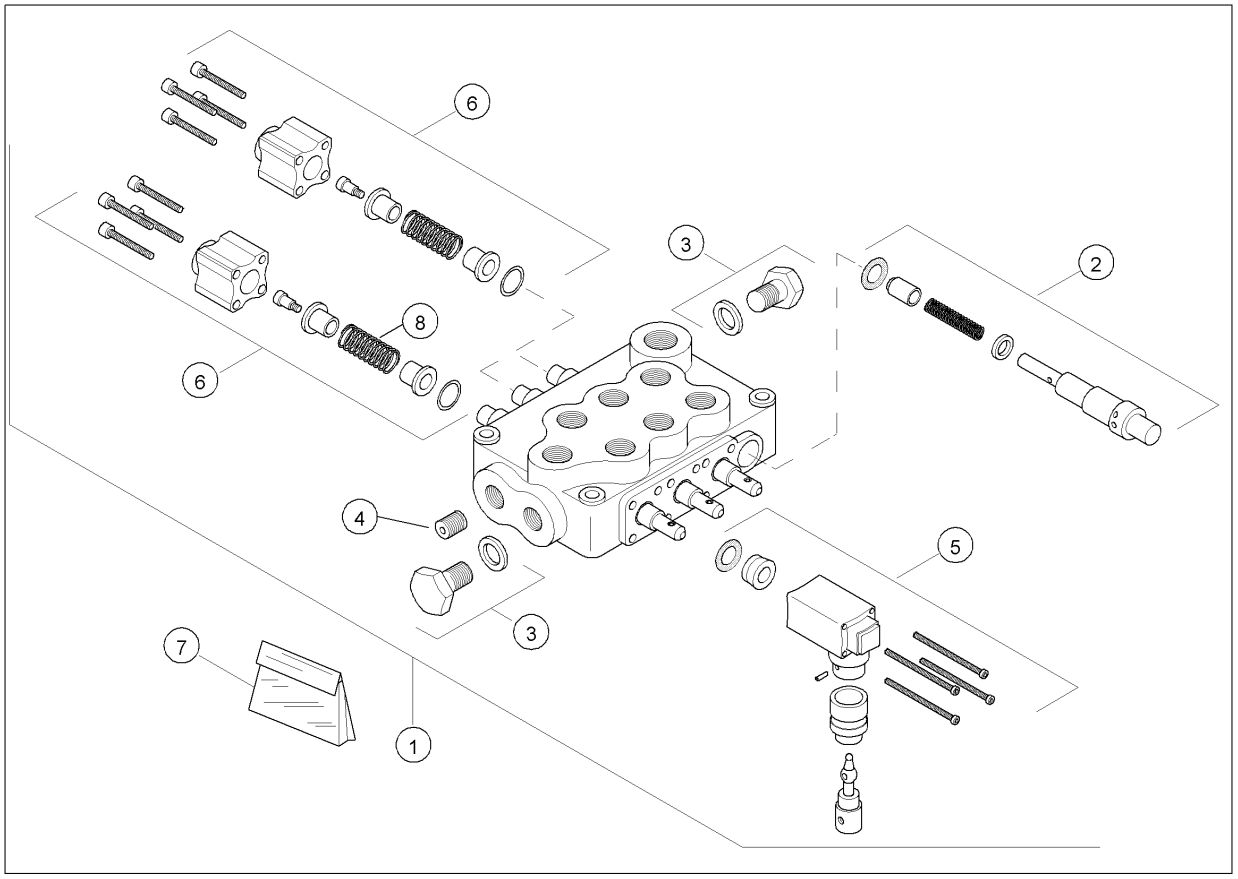


Ref. No.	Part No.	Description	Qty. Req.	Ref. No.	Part No.	Description	Qty. Req.
1	178831	DOZER BLADE VALVE	1	5	1428424G	KIT	2
2	1428421G	PRESSURE LIMITING VALVE	1	6	1428425G	KIT	2
3	1428422G	PLUG	2	7	1928406G	SEAL KIT	1
4	1428423G	PLUG	1	8	178706	SPRING	1

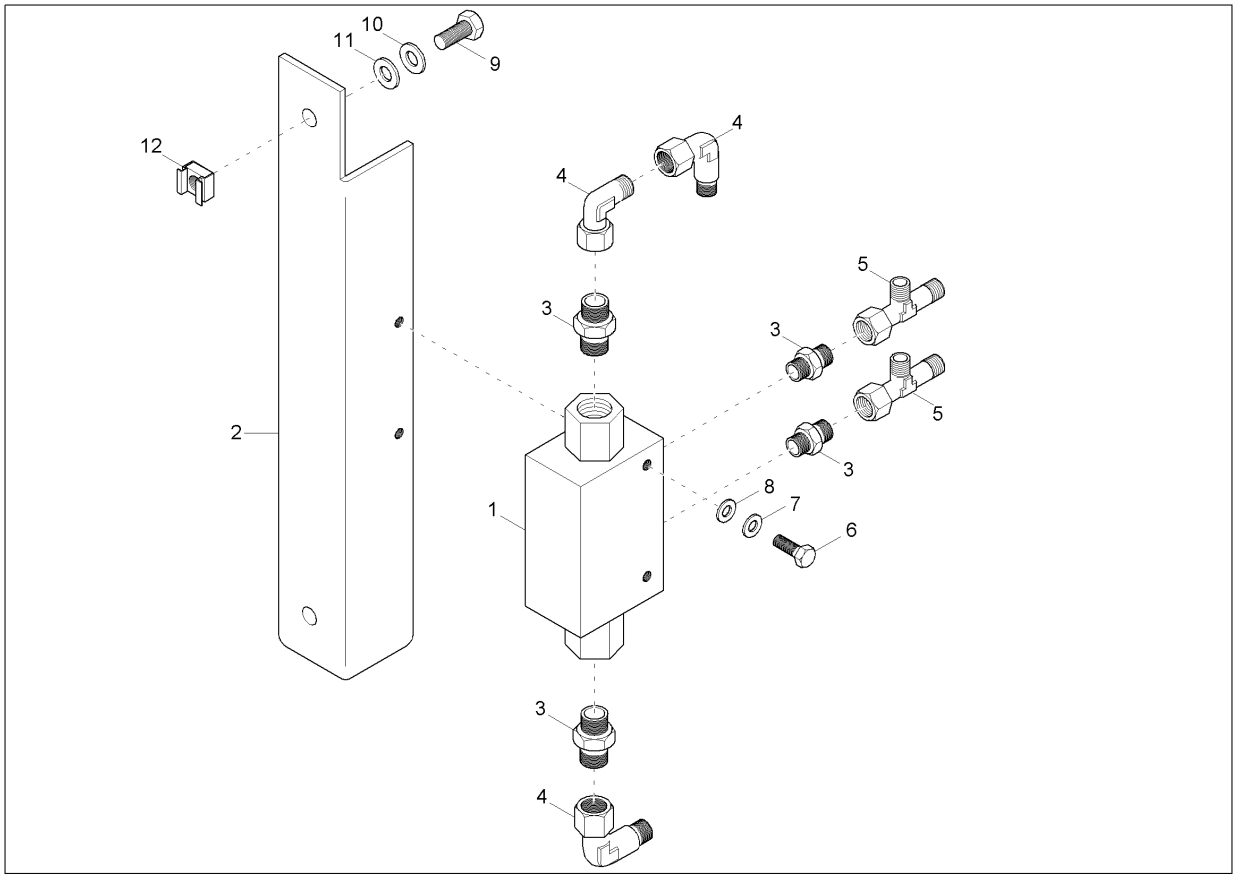


Ref. No.	Part No.	Description	Qty. Req.
1	178843	DOZER BLADE VALVE	1
	See page 84 for individual components.		
2	161429	SCREW JOINT	2
3	161426	SCREW JOINT	3
4	161463	SCREW JOINT	1
5	651429	CS M6-1.0 X 60 C 8.8 ZO	3
6	161675	RING/SNAP S6	3
7	161660	WASHER GR A6.4 ZO DIN 125	3
8	1521183G	PLATE	1
9	165566	RUBBER-METAL-BUFFER	3
10	9908057G	WASHER	1
11	161669	RING/SNAP S10	3
12	656102	HN M10-1.25 8 Z PHEOLL KB	3
13	1423012G	LEVER	2
14	656105	CS M 8-1.25 X 25 C8.8 ZO	2
15	163670	WASHER	2
16	161903	HANDLE	2
17	162398	HANDLE	1
18	1423024G	LEVER	1
19	161445	ANGLE	1
20	9910617G	SCREW JOINT	2
21	9910612G	SCREW JOINT	1
22	162072	BALL AND SOCKET	2
23	1423025G	THREADED ROD	1
24	656048	NUT/HEX M8 1.25 D934 PC8 F-ZO	1
25	163634	WASHER	1
26	651458	HLN INS M8-1.2 8 ZO	1
27	1428451G	BEARING	1
28	162486	WASHER	1

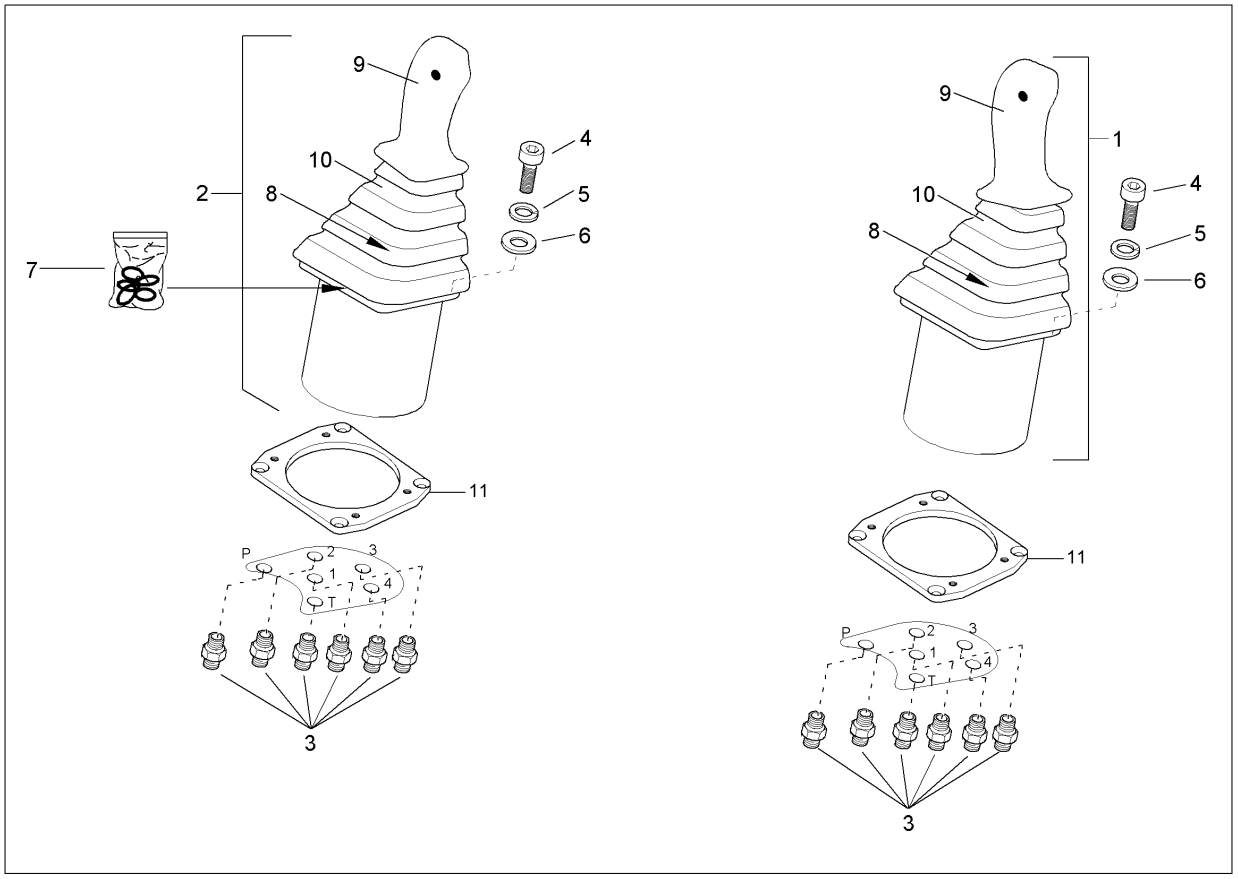
223 - DOZER BLADE VALVE (TRIPLE) - DISASSEMBLED _____ ET1940675



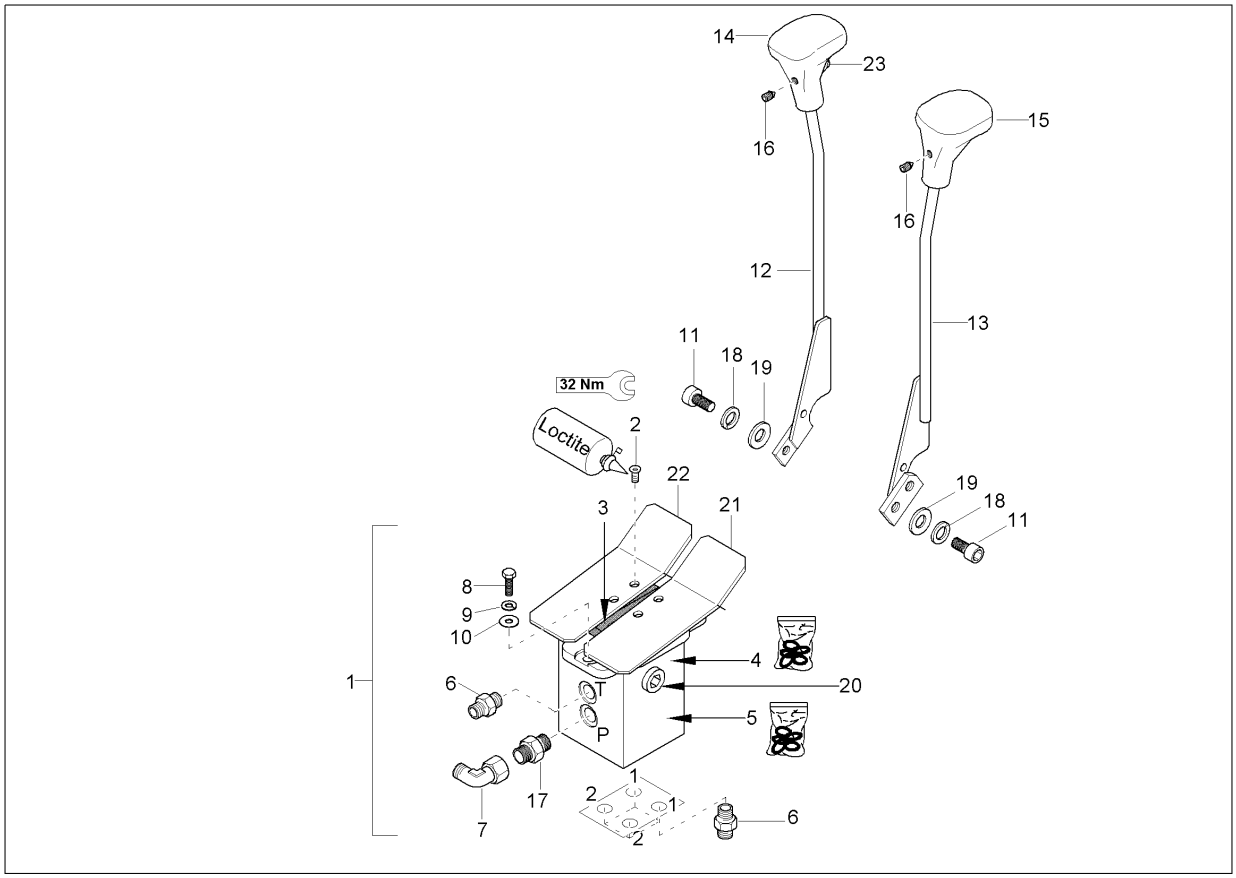
Ref. No.	Part No.	Description	Qty. Req.	Ref. No.	Part No.	Description	Qty. Req.
1	178843	DOZER BLADE VALVE	1	5	1428424G	KIT	3
2	1428421G	PRESSURE LIMITING VALVE	1	6	1428425G	KIT	3
3	1428422G	PLUG	2	7	2228406G	SEAL KIT	1
4	1428423G	PLUG	1	8	178706	SPRING	1



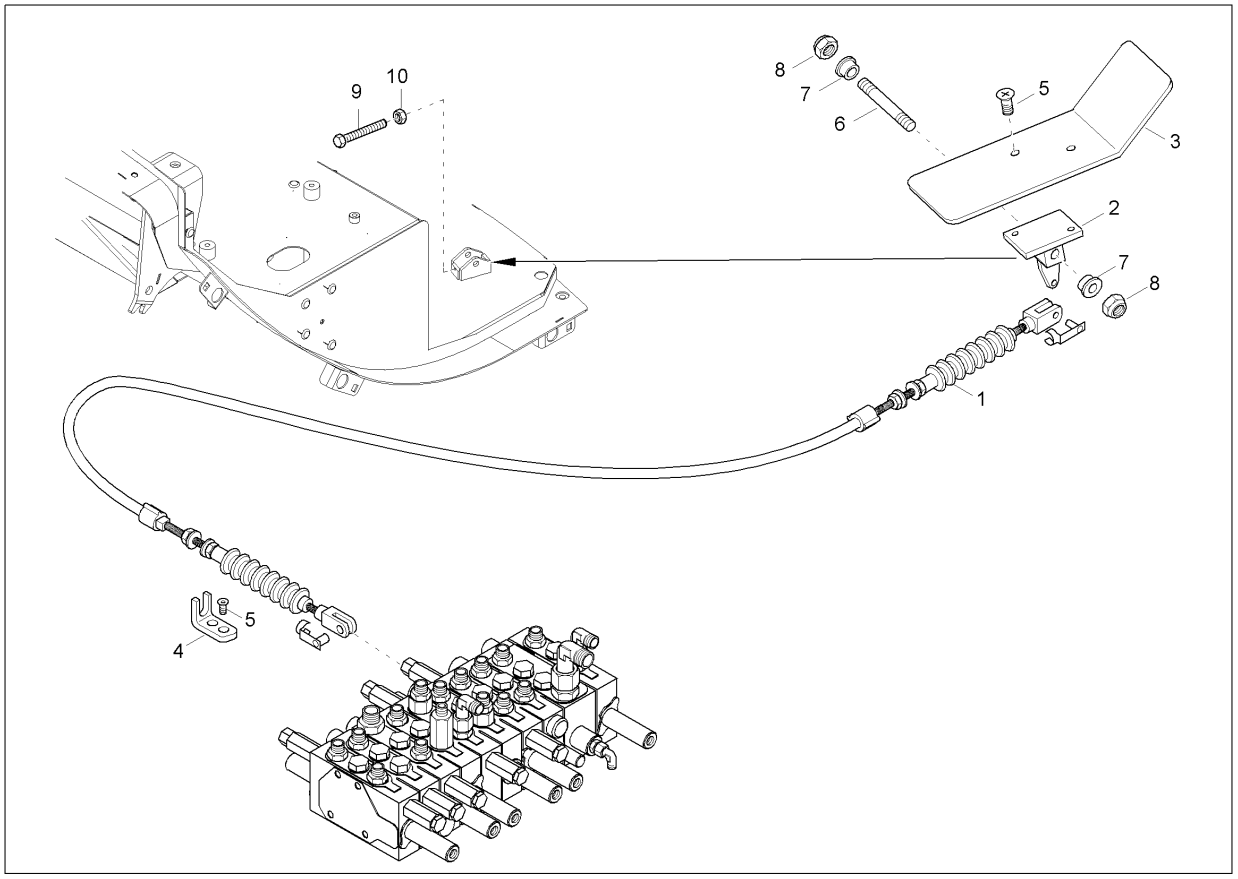
Ref. No.	Part No.	Description	Qty. Req.	Ref. No.	Part No.	Description	Qty. Req.
1	160667	NON RETURN VALVE	1	7	161675	RING/SNAP S6	2
2	178836	ANGLE	1	8	161660	WASHER GR A6.4 ZO DIN 125	2
3	161426	SCREW JOINT	4	9	656001	CS M 8-1.25 X 20 C8.8 ZO	2
4	161443	ANGLE	3	10	163670	WASHER	2
5	179067	SCREW JOINT	2	11	161667	WASHER/GR A 8.4 ZO	2
6	165939	SCREW	2	12	161615	NUT/CAGE M8	2



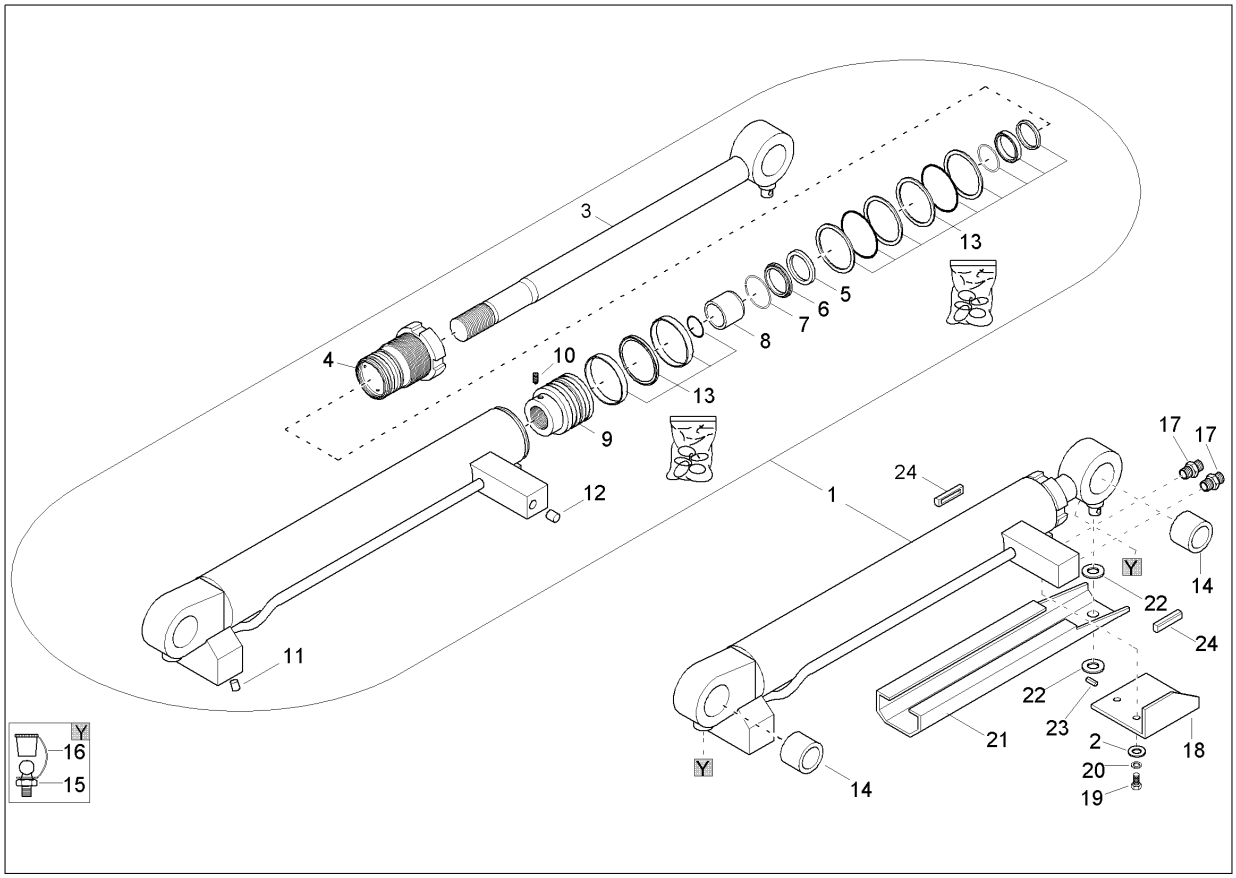
Ref. No.	Part No.	Description	Qty. Req.
1	178770	CONTROL LEVER RIGHT COMPLETE	1
2	178769	CONTROL LEVER LEFT COMPLETE	1
3	161426	SCREW JOINT	12
4	651508	SHCS M6-1 X 25 8.8 ZO	8
5	161675	RING/SNAP S6	8
6	161660	WASHER GR A6.4 ZO DIN 125	8
7	165040	SEAL KIT II	2
8	165037	UNIVERSAL JOINT	2
9	165039	HANDLE	2
10	165038	BELLOWS	2
11	178874	PLATE	2



Ref. No.	Part No.	Description	Qty. Req.
1	178947	CONTROL LEVER	1
2	179775	SCREW	4
3	165522	BELLOWS	1
4	165521	SEAL KIT LT/RT	1
5	165520	SEAL KIT	1
6	161426	SCREW JOINT	6
7	161443	ANGLE	6
8	656001	CS M 8-1.25 X 20 C8.8 ZO	4
9	163670	WASHER	4
10	163634	WASHER	4
11	651472	SHCS M10-1.2 X 20 8.8 ZO	4
12	1423029G	HAND LEVER TRAVELING LEFT	1
13	1423030G	HAND LEVER TRAVELING RIGHT	1
14	160658	KNOB W/RED SWITCH	1
15	161764	KNOB	1
16	162027	SCREW MOUNT	2
17	164535	PILOT CONTROL FILTER	1
18	161669	RING/SNAP S10	4
19	161640	WASHER/GR A 10.5	4
20	165514	SCREW	2
21	178764	ACCELERATOR PEDAL RT	1
22	178763	ACCELERATOR PEDAL LT	1
23	161363	SWITCH	1

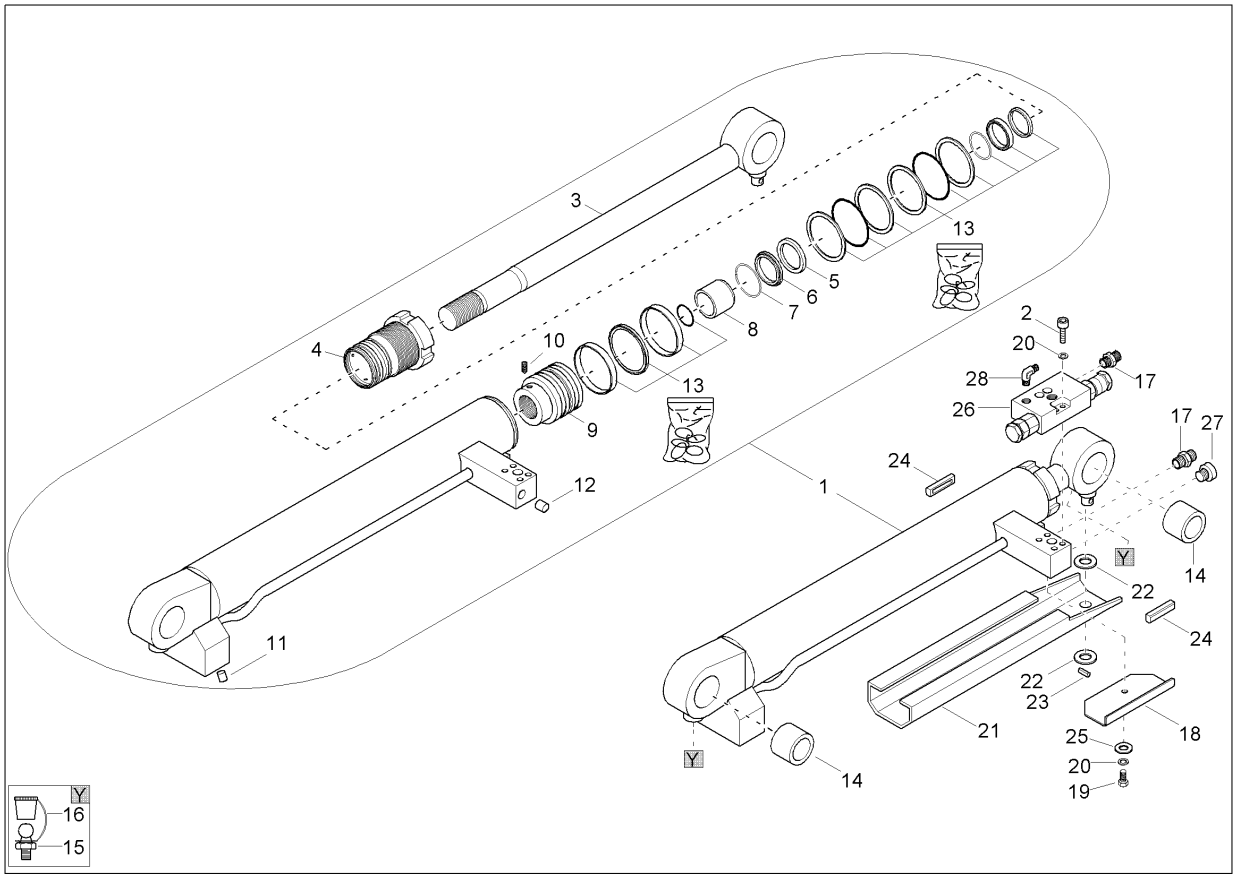


Ref. No.	Part No.	Description	Qty. Req.	Ref. No.	Part No.	Description	Qty. Req.
1	1420402G	CABLE	1	6	165550	PIN	1
2	165548	LEVER	1	7	165567	BEARING	2
3	178765	PEDAL FOR AUXILIARY HYDRAULICS	1	8	179793	NUT	2
4	1921110G	BRACKET	1	9	162021	SCREW	2
5	651465	FHSCS M8-1.2 X 16 8.8 ZO	4	10	656100	HN M5-.8 GR8 Z	2

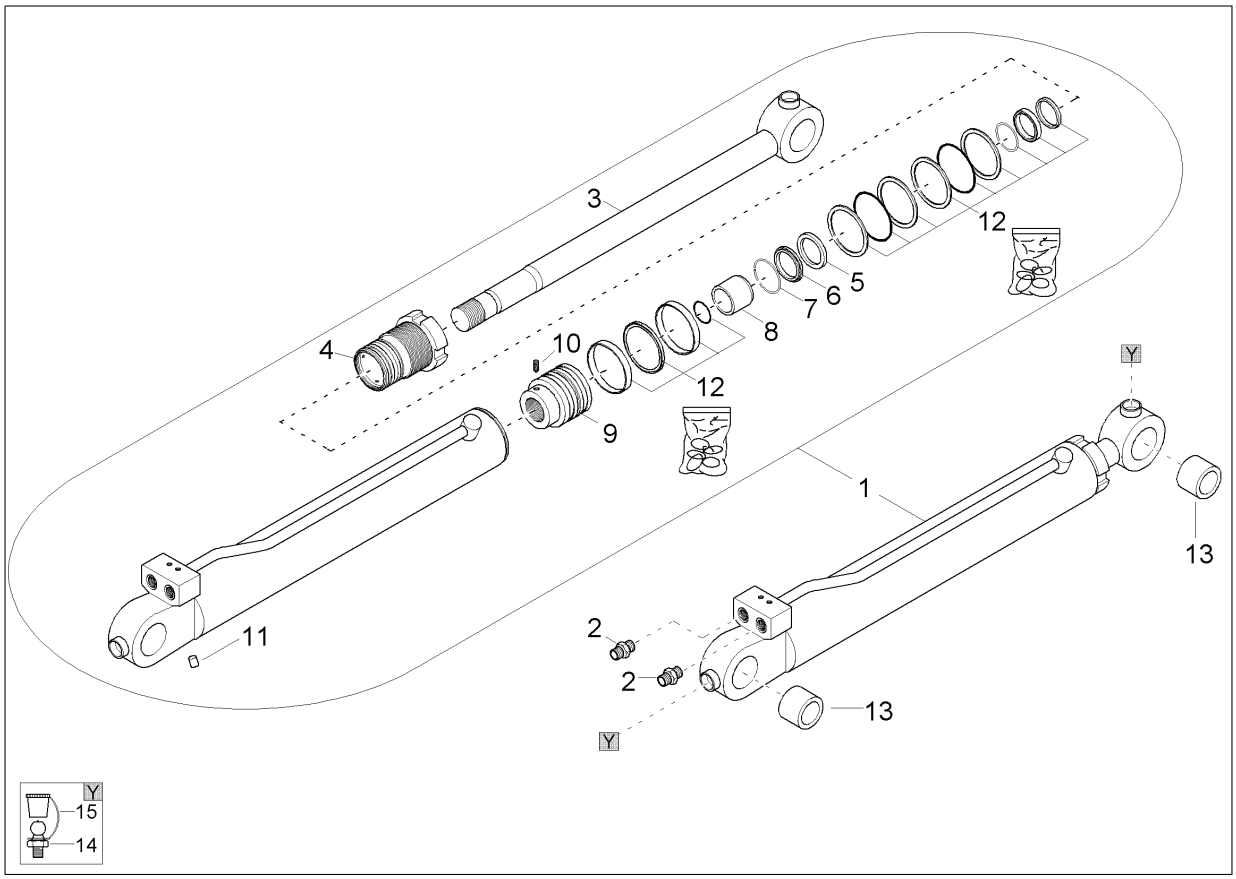


Ref. No.	Part No.	Description	Qty. Req.
1	165444	BOOM CYLINDER	1
2	163634	WASHER	2
3	165454	PISTON ROD	1
4	165448	GLAND	1
5	160464	RING	1
6	160465	RING	1
7	161408	WASHER	1
8	165055	BUSHING	1
9	165449	PISTON	1
10	161400	SCREW MOUNT	1
11	165959	BALL EXPANDER	1
12	162060	BALL EXPANDER	1
13	165570	SEAL KIT	2
14	161544	BUSHING	2
15	161411	GREASE ZERK	2
16	161422	PROTECTION CAP	2
17	161428	SCREW JOINT	2
18	161754	PROTECTION	1
19	656093	CS M 8-1.25 X 16 C8.8 ZO	2
20	163670	WASHER	2
21	165482	PROTECTION	1
22	161650	WASHER/GR A 19 ZO DIN125	1
23	651468	PIN/SPRING M8	1
24	161205	SEAL	2

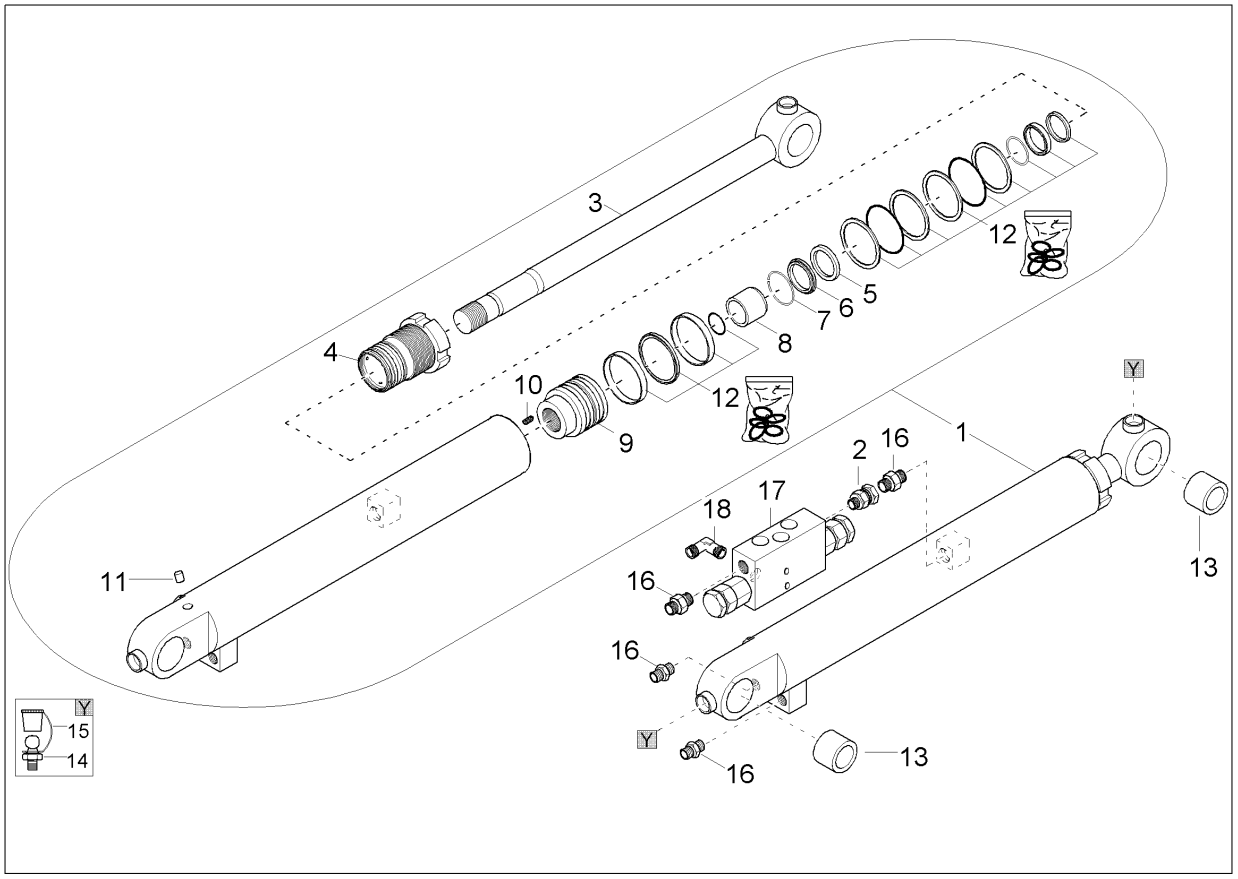
193/223 - LIFTING BOOM CYLINDER (OPTION) ET1940705



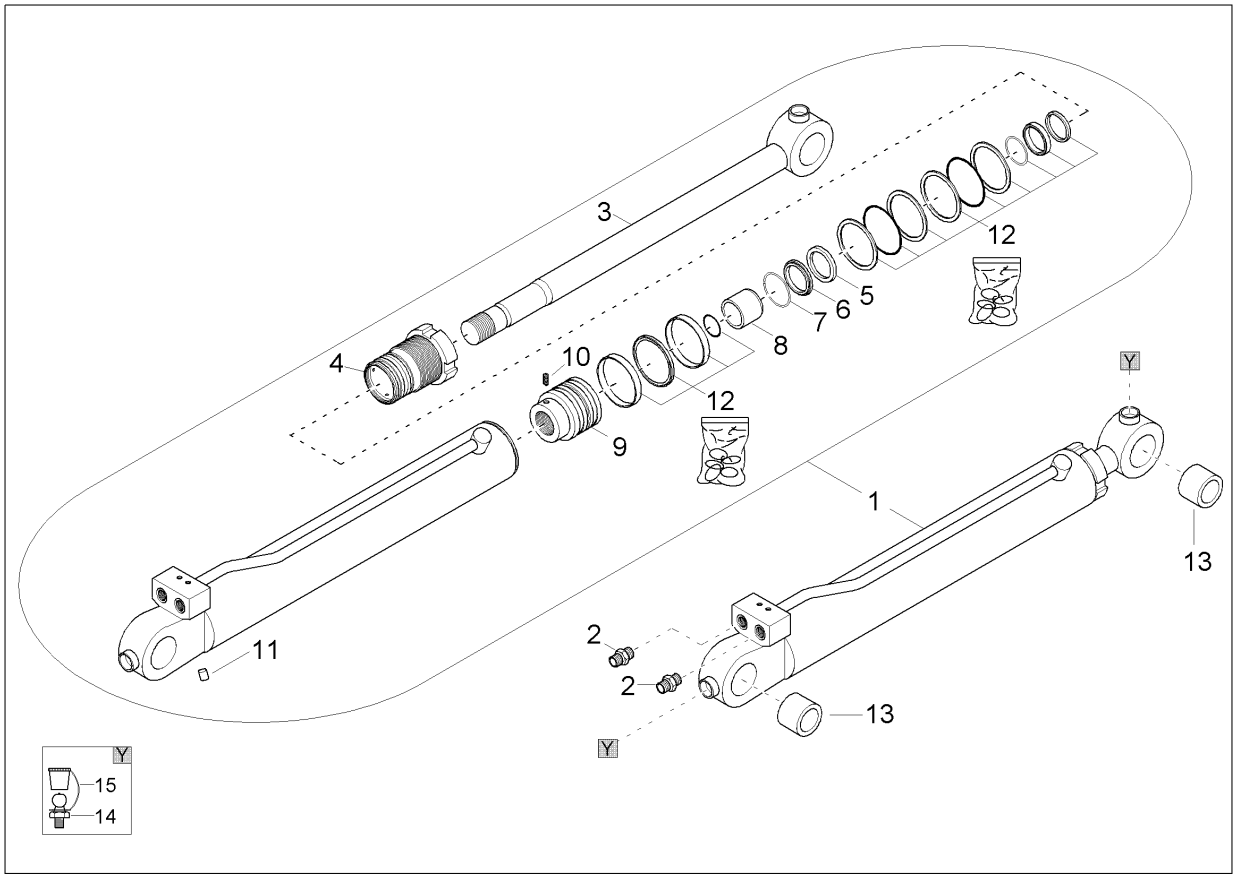
Ref. No.	Part No.	Description	Qty. Req.
1	178935	BOOM CYLINDER	1
2	164911	SCREW	4
3	165454	PISTON ROD	1
4	165448	GLAND	1
5	160464	RING	1
6	160465	RING	1
7	161408	WASHER	1
8	2528024G	BUSHING	1
9	165449	PISTON	1
10	161400	SCREW MOUNT	1
11	165959	BALL EXPANDER	1
12	162060	BALL EXPANDER	1
13	165570	SEAL KIT	2
14	161544	BUSHING	2
15	161411	GREASE ZERK	2
16	161422	PROTECTION CAP	2
17	161428	SCREW JOINT	2
18	178749	PROTECTION	1
19	656093	CS M 8-1.25 X 16 C8.8 ZO	2
20	163670	WASHER	6
21	165482	PROTECTION	1
22	161650	WASHER/GR A 19 ZO DIN125	2
23	651468	PIN/SPRING M8	1
24	161205	SEAL	2
25	163634	WASHER	2
26	178813	HOSE BURST PROTECTION VALVE	1
27	161415	PLUG	1
28	161439	ELBOW	1



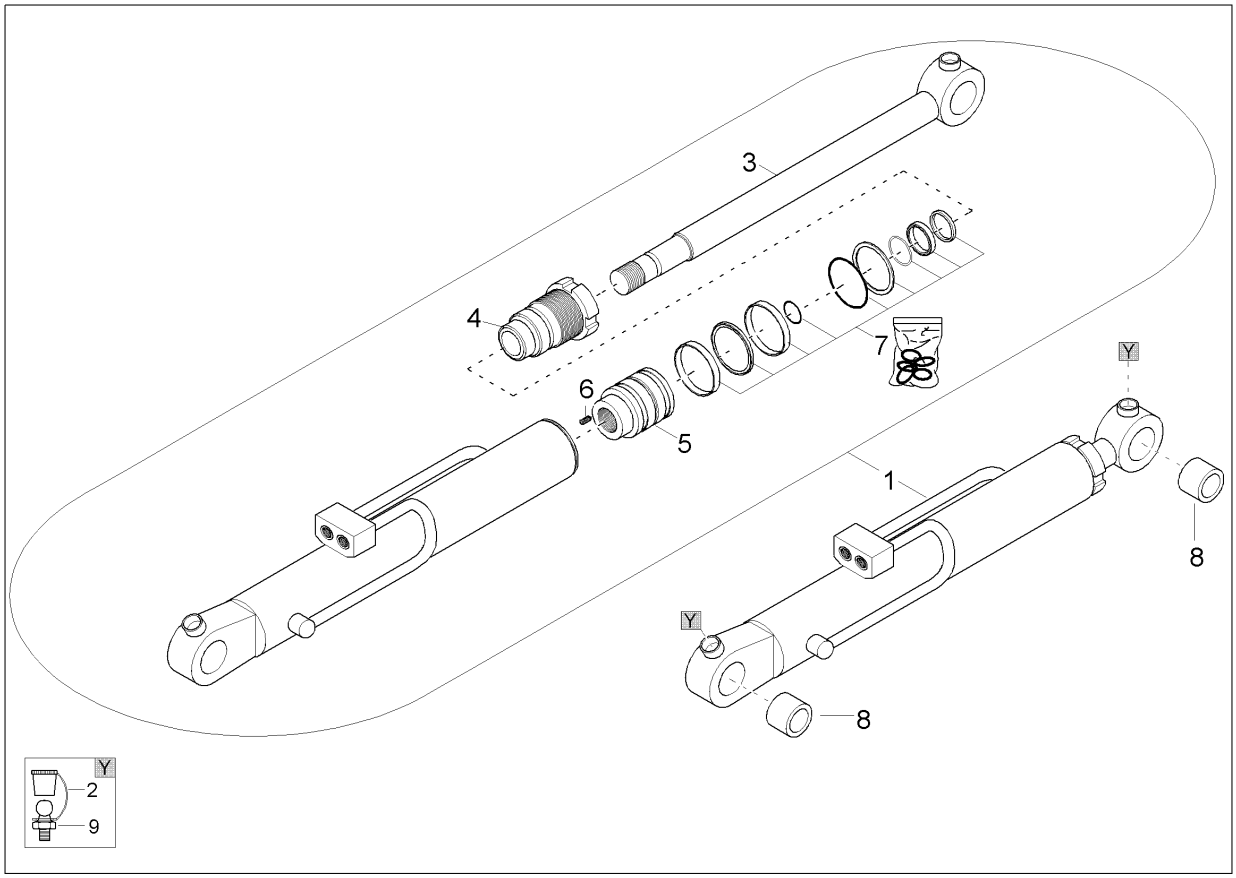
Ref. No.	Part No.	Description	Qty. Req.
1	165445	DIPPER ARM CYLINDER	1
2	161429	SCREW JOINT	2
3	165451	PISTON ROD	1
4	165448	GLAND	1
5	160464	RING	1
6	160465	RING	1
7	161408	WASHER	1
8	2528024G	BUSHING	1
9	165449	PISTON	1
10	161400	SCREW MOUNT	1
11	165959	BALL EXPANDER	1
12	165570	SEAL KIT	2
13	161544	BUSHING	2
14	161411	GREASE ZERK	2
15	161422	PROTECTION CAP	2



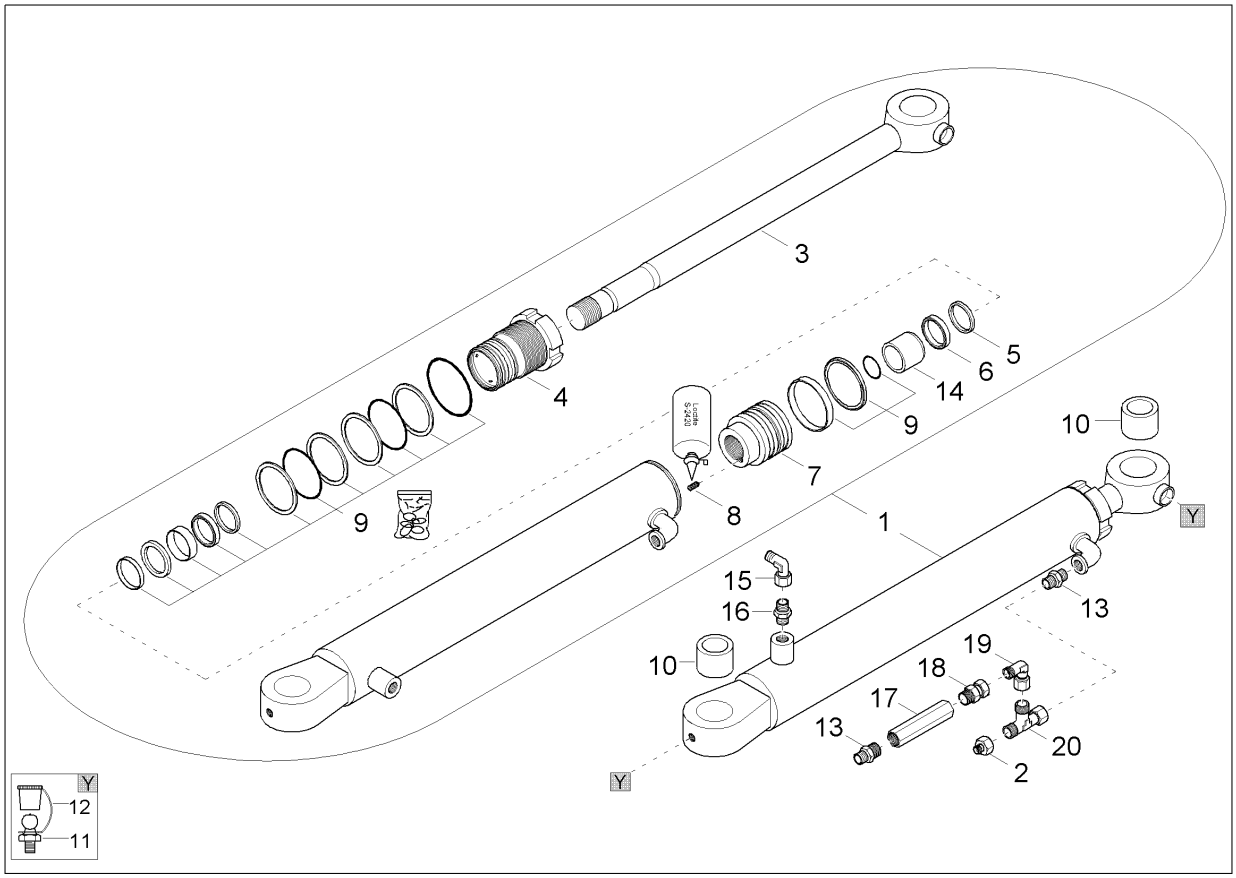
Ref. No.	Part No.	Description	Qty. Req.	Ref. No.	Part No.	Description	Qty. Req.
1	178937	DIPPER ARM CYLINDER	1	10	161400	SCREW MOUNT	1
2	162063	SCREW JOINT	1	11	165959	BALL EXPANDER	1
3	165451	PISTON ROD	1	12	165570	SEAL KIT	2
4	165448	GLAND	1	13	161544	BUSHING	2
5	160464	RING	1	14	161411	GREASE ZERK	2
6	160465	RING	1	15	161422	PROTECTION CAP	2
7	161408	WASHER	1	16	161429	SCREW JOINT	4
8	2528024G	BUSHING	1	17	178814	HOSE BURST PROTECTION VALVE	1
9	165449	PISTON	1	18	161439	ELBOW	1



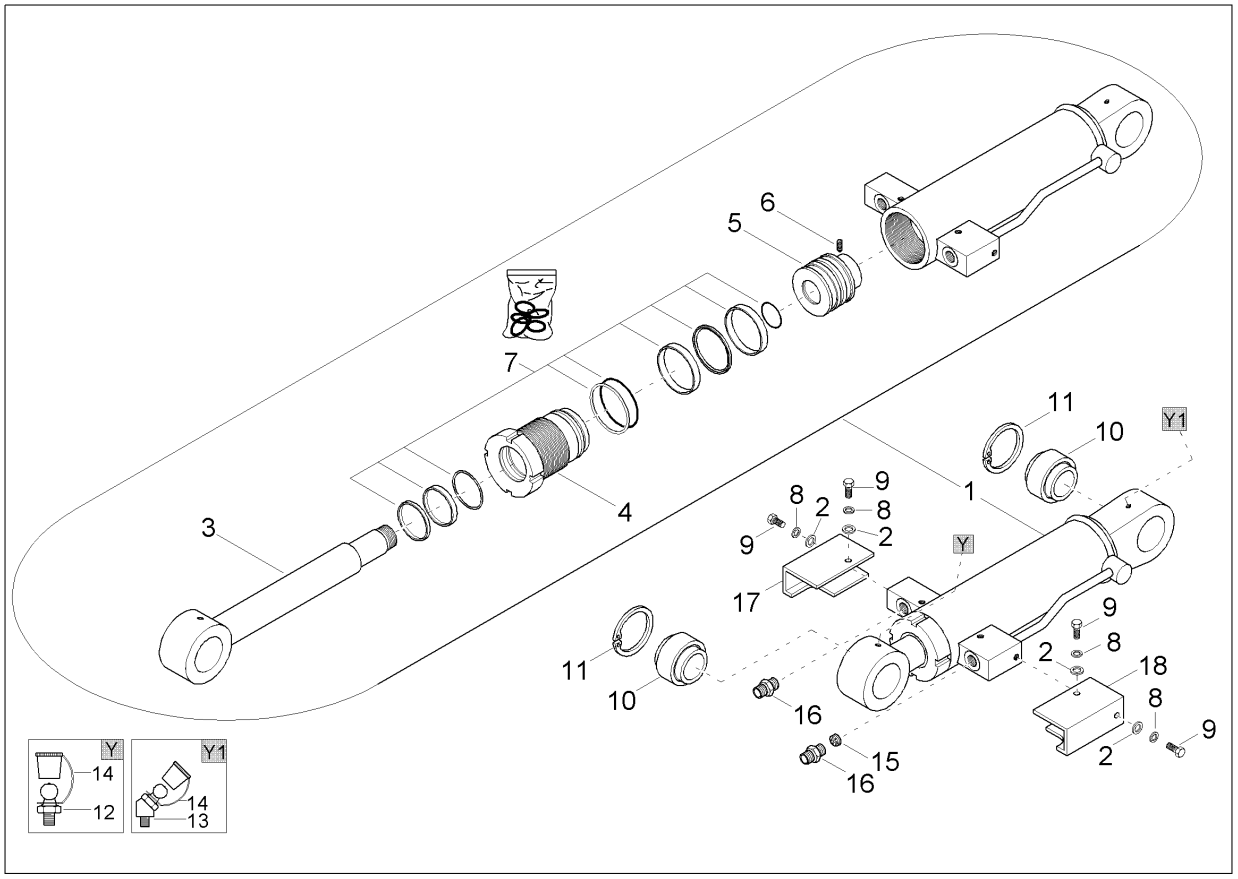
Ref. No.	Part No.	Description	Qty. Req.
1	178830	BUCKET CYLINDER	1
2	161429	SCREW JOINT	2
3	165451	PISTON ROD	1
4	160676	GLAND	1
5	160464	RING	1
6	160465	RING	1
7	161408	WASHER	1
8	2528024G	BUSHING	1
9	160675	PISTON	1
10	161400	SCREW MOUNT	1
11	165959	BALL EXPANDER	1
12	160702	SEAL KIT	2
13	161544	BUSHING	2
14	161411	GREASE ZERK	2
15	161422	PROTECTION CAP	2



Ref. No.	Part No.	Description	Qty. Req.	Ref. No.	Part No.	Description	Qty. Req.
1	1928003G	BUCKET CYLINDER	1	6	161400	SCREW MOUNT	1
2	161422	PROTECTION CAP	2	7	165570	SEAL KIT	1
3	165453	PISTON ROD	1	8	161544	BUSHING	2
4	165452	GLAND	1	9	161411	GREASE ZERK	2
5	165449	PISTON	1				



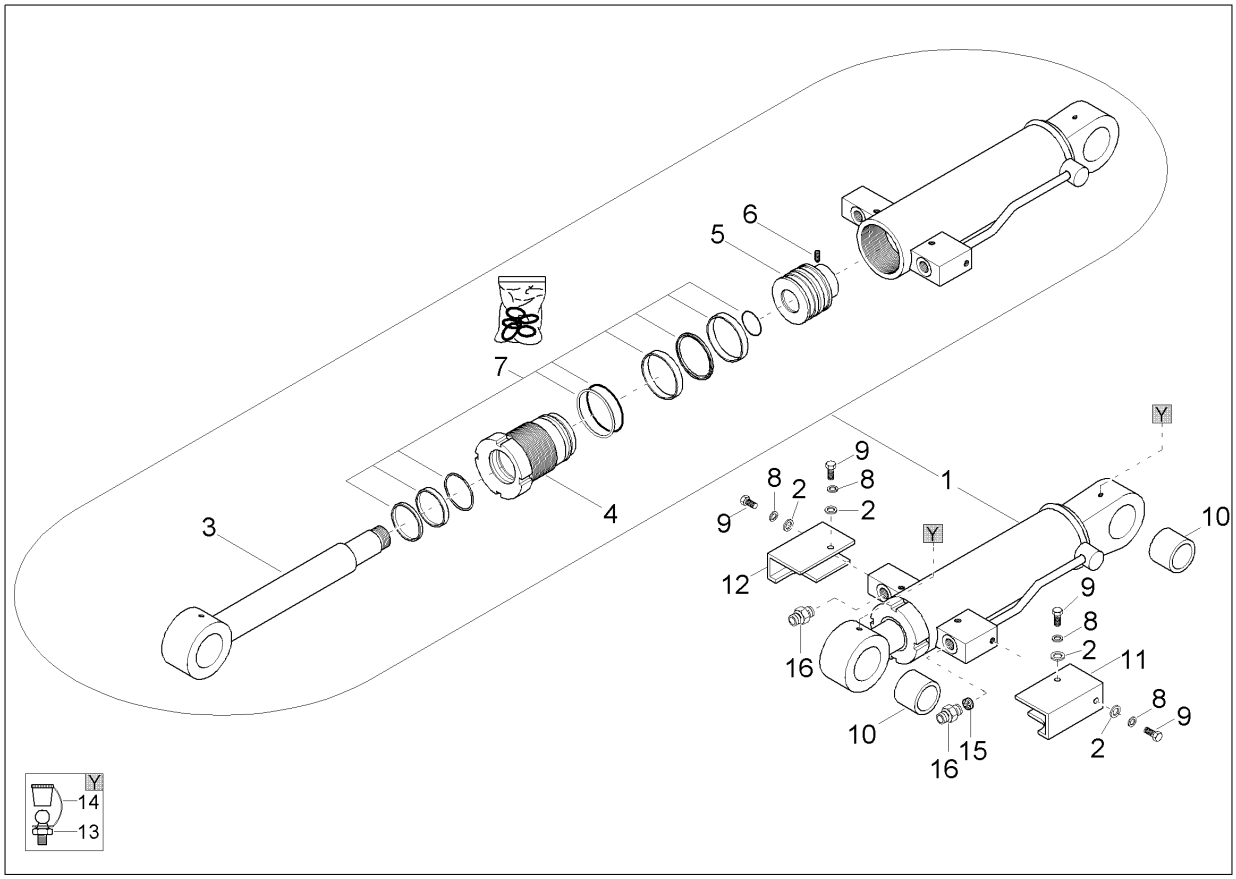
Ref. No.	Part No.	Description	Qty. Req.	Ref. No.	Part No.	Description	Qty. Req.
1	1528002G	BOOM OFFSET CYLINDER	1	11	161411	GREASE ZERK	1
2	163116	REDUCTION JOINT	1	12	161422	PROTECTION CAP	1
3	1528015G	PISTON ROD	1	13	161429	SCREW JOINT	2
4	160681	GLAND	1	14	160685	PISTON	1
5	160682	RING	1	15	161443	ANGLE	1
6	160683	RING	1	16	161427	SCREW JOINT	1
7	1528017G	PISTON	1	17	178456	NONRETURN VALVE	1
8	161400	SCREW MOUNT	1	18	162063	SCREW JOINT	1
9	1529425G	SEAL KIT	1	19	161445	ANGLE	1
10	161545	BUSHING	2	20	162062	ELBOW	1



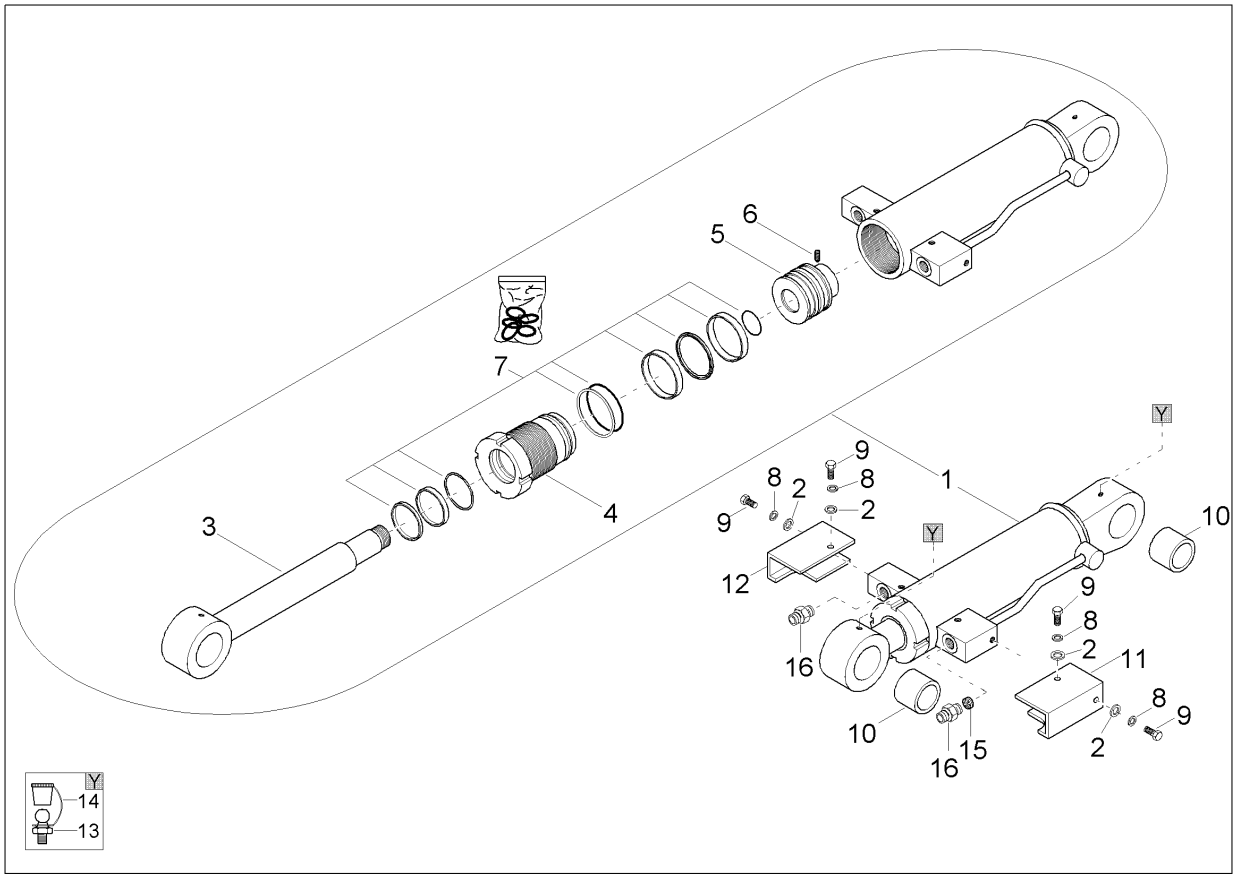
Ref. No.	Part No.	Description	Qty. Req.
1	1428005G	DOZER BLADE CYLINDER	1
2	163634	WASHER	4
3	160666	PISTON ROD	1
4	160558	GLAND	1
5	160556	PISTON	1
6	161400	SCREW MOUNT	1
7	160703	SEAL KIT	1
8	163670	WASHER	4
9	651430	CS M8-1.2 X 12 C 8.8 ZO	4
10	161558	ANGLE BEARING	2
11	162059	WASHER	2
12	161411	GREASE ZERK	1
13	161413	GREASE ZERK	1
14	161416	PROTECTION CAP	2
15	1428449G	TUBE BURST PROTECTION	1
16	161427	SCREW JOINT	2
17	161756	PROTECTION	1
18	161757	PROTECTION	1

193 - DOZER BLADE CYLINDER (OPTION, DOZER BLADE LONG)

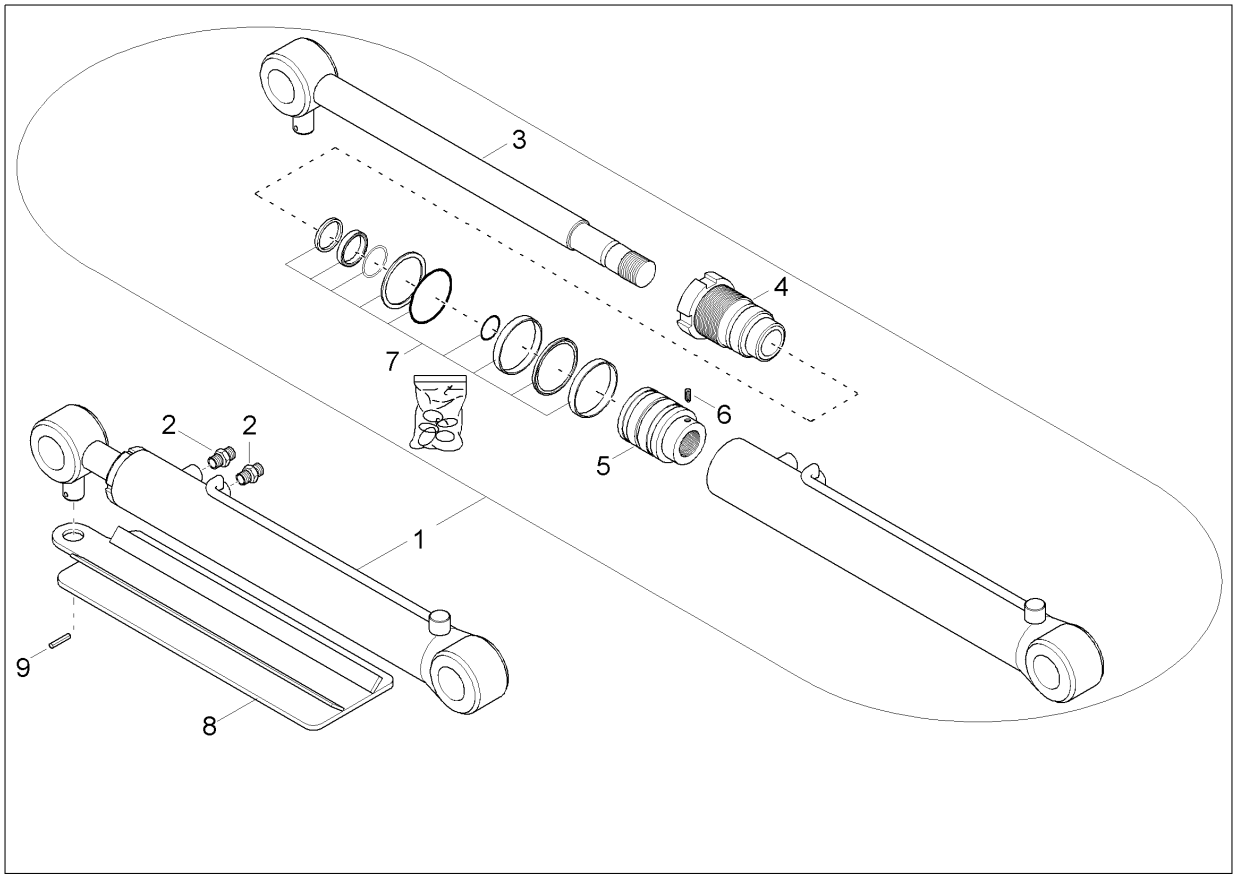
ET1940740



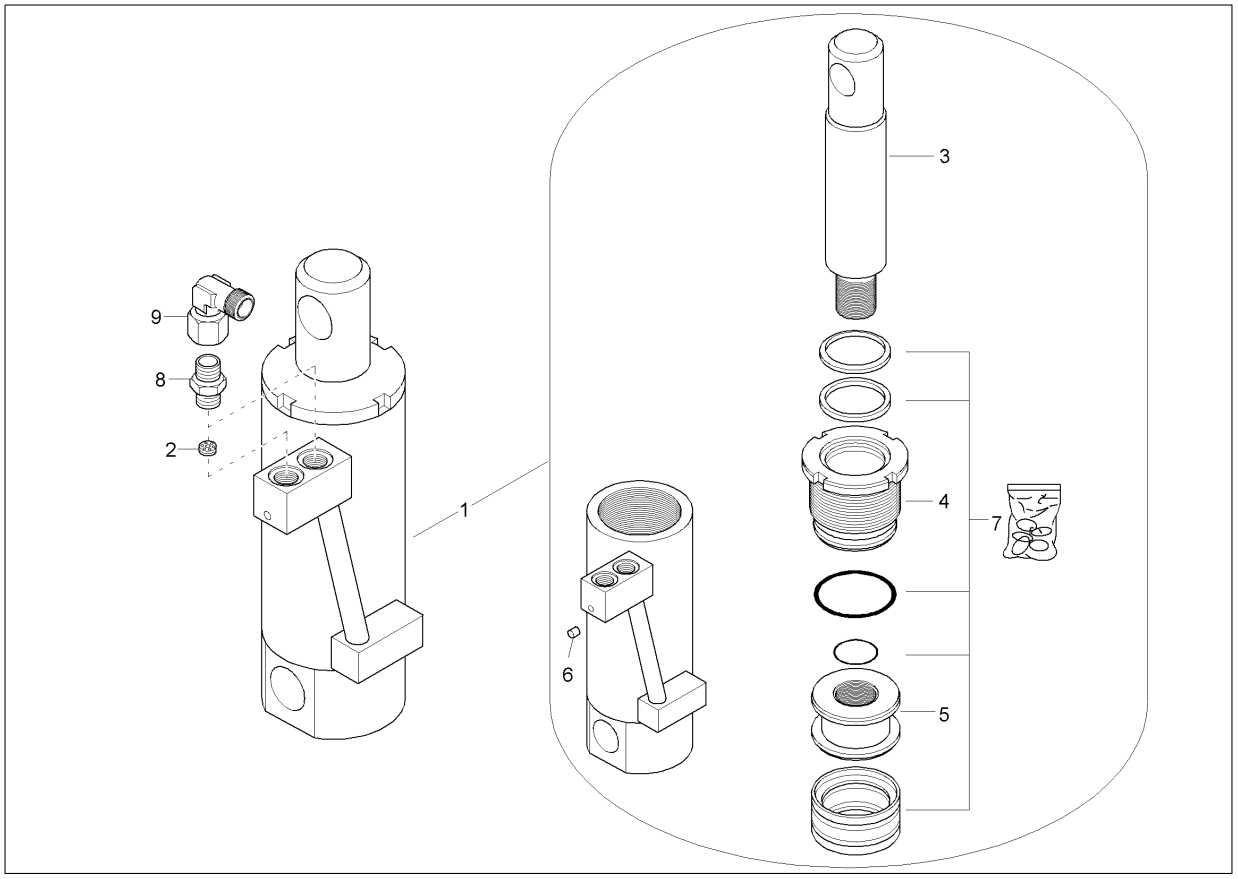
Ref. No.	Part No.	Description	Qty. Req.	Ref. No.	Part No.	Description	Qty. Req.
1	1528005G	DOZER BLADE CYLINDER	1	9	651430	CS M8-1.2 X 12 C 8.8 ZO	4
2	163634	WASHER	4	10	161544	BUSHING	2
3	1528059G	PISTON ROD	1	11	161757	PROTECTION	1
4	1528050G	GLAND	1	12	161756	PROTECTION	1
5	1528051G	PISTON	1	13	161411	GREASE ZERK	2
6	161400	SCREW MOUNT	1	14	161416	PROTECTION CAP	2
7	1529424G	SEAL KIT	1	15	1428449G	TUBE BURST PROTECTION	1
8	163670	WASHER	4	16	161427	SCREW JOINT	2



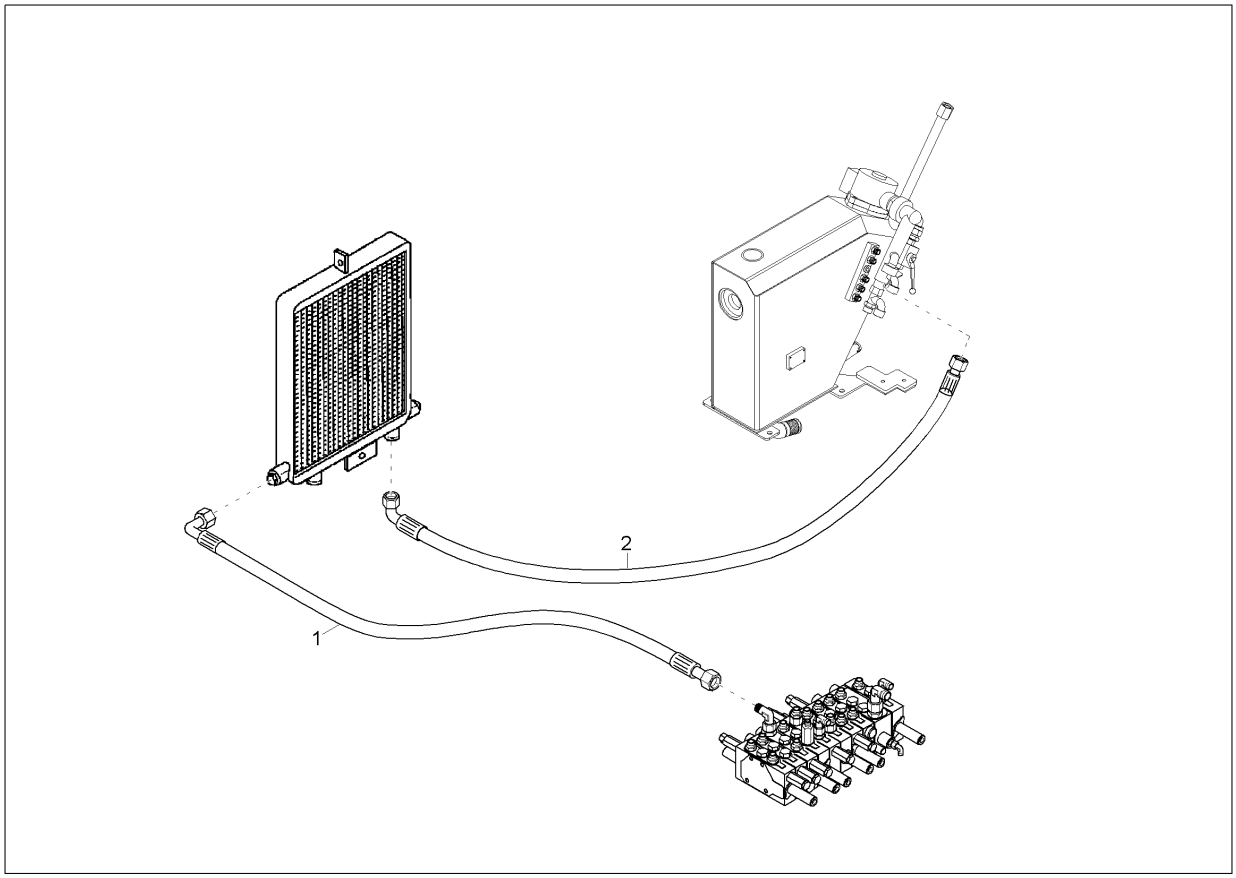
Ref. No.	Part No.	Description	Qty. Req.	Ref. No.	Part No.	Description	Qty. Req.
1	1528005G	DOZER BLADE CYLINDER	1	9	651430	CS M8-1.2 X 12 C 8.8 ZO	4
2	163634	WASHER	4	10	161544	BUSHING	2
3	1528059G	PISTON ROD	1	11	161757	PROTECTION	1
4	1528050G	GLAND	1	12	161756	PROTECTION	1
5	1528051G	PISTON	1	13	161411	GREASE ZERK	2
6	161400	SCREW MOUNT	1	14	161416	PROTECTION CAP	2
7	1529424G	SEAL KIT	1	15	1428449G	TUBE BURST PROTECTION	1
8	163670	WASHER	4	16	161427	SCREW JOINT	2



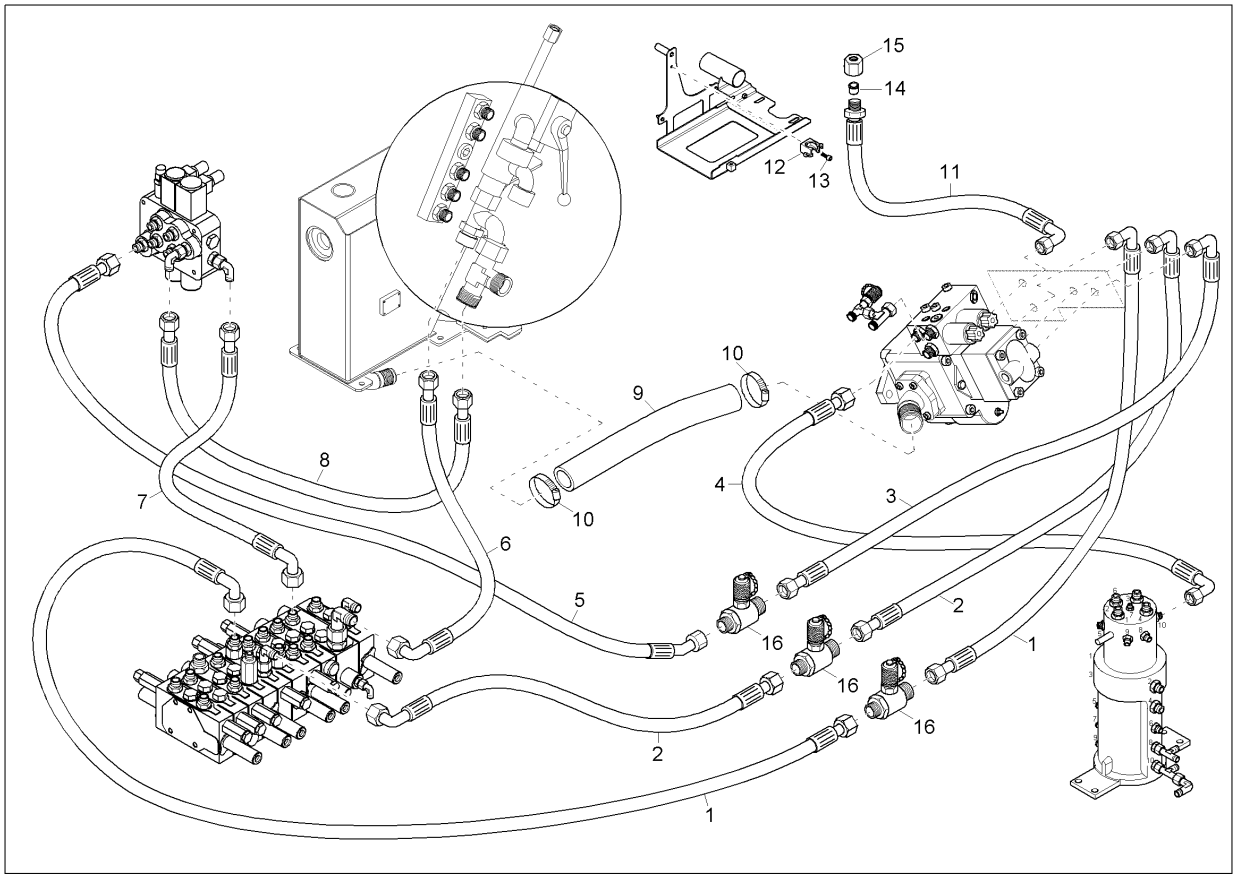
Ref. No.	Part No.	Description	Qty. Req.	Ref. No.	Part No.	Description	Qty. Req.
1	2228006G	TELESCOPIC CYLINDER	1	6	161401	SCREW MOUNT	1
2	161427	SCREW JOINT	2	7	1929411G	SEAL KIT	1
3	2228010G	PISTON ROD	1	8	160616	PROTECTION	1
4	2228011G	GLAND	1	9	651468	PIN/SPRING M8	1
5	160620	PISTON	1				



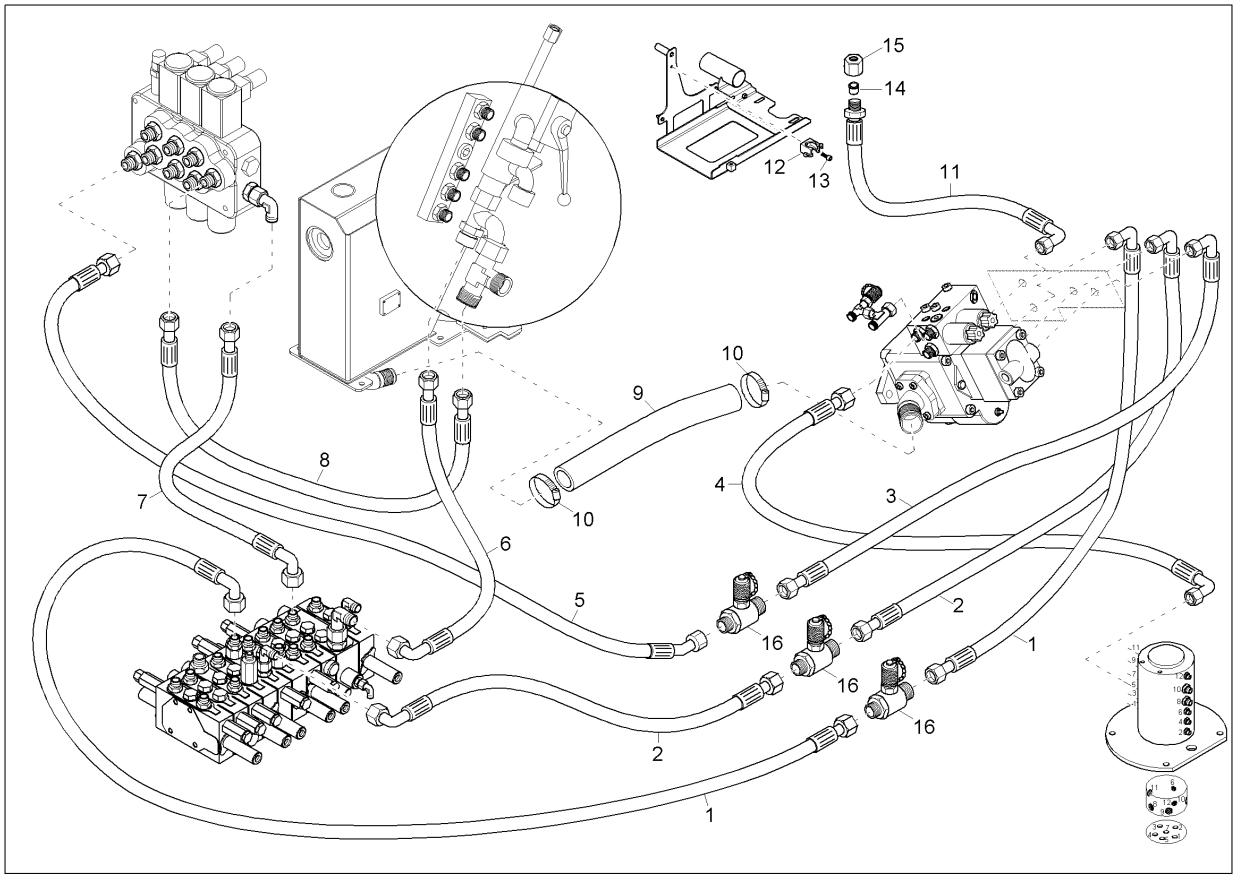
Ref. No.	Part No.	Description	Qty. Req.	Ref. No.	Part No.	Description	Qty. Req.
1	2228013G	TILT CYLINDER	1	6	162060	BALL EXPANDER	1
2	2208301G	TUBE BURST PROTECTION	1	7	160699	SEAL KIT	1
3	160664	PISTON ROD	1	8	161426	SCREW JOINT	2
4	2228014G	GLAND	1	9	161443	ANGLE	2
5	160787	PISTON	1				



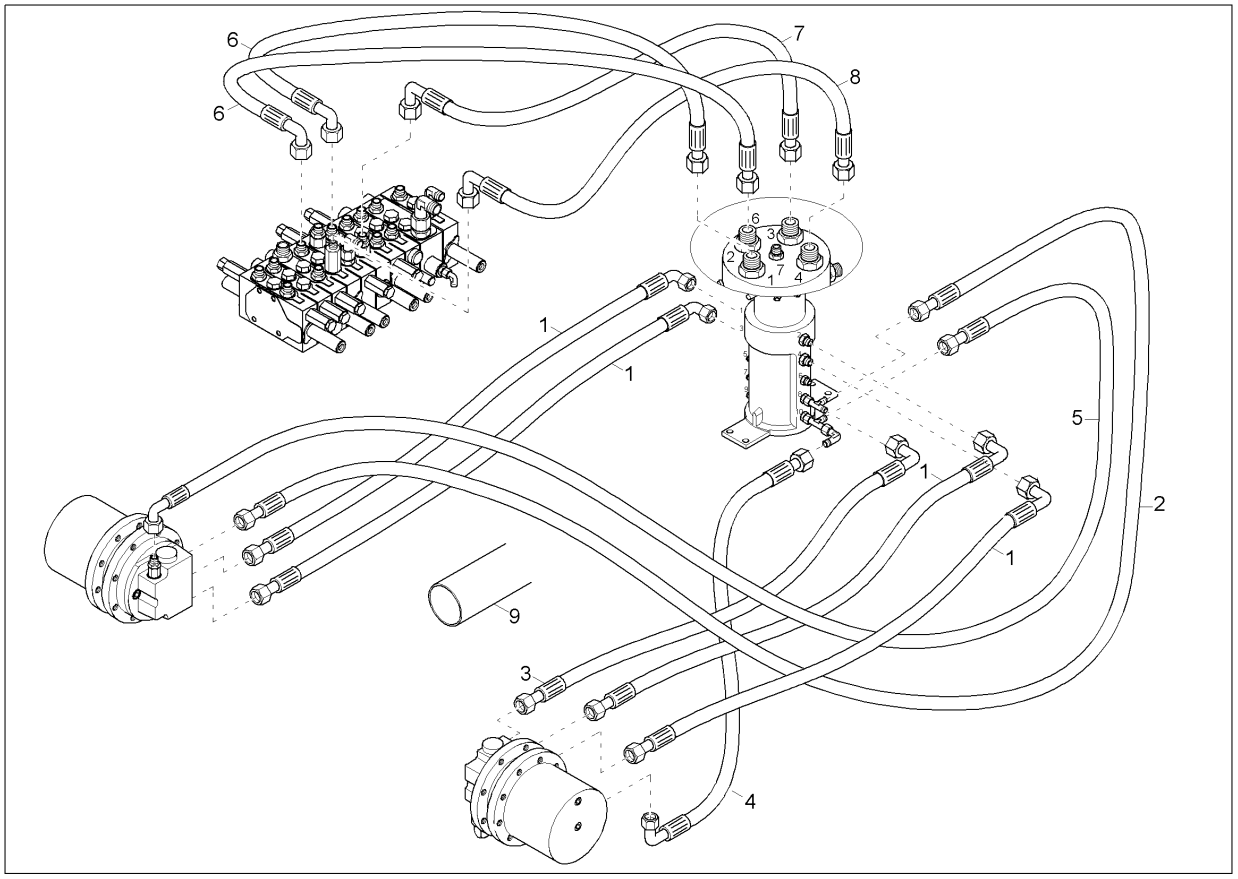
Ref. No.	Part No.	Description	Qty. Req.	Ref. No.	Part No.	Description	Qty. Req.
1	8006005G	HIGH PRESSURE HOSE	1	2	178524	HIGH PRESSURE HOSE	1



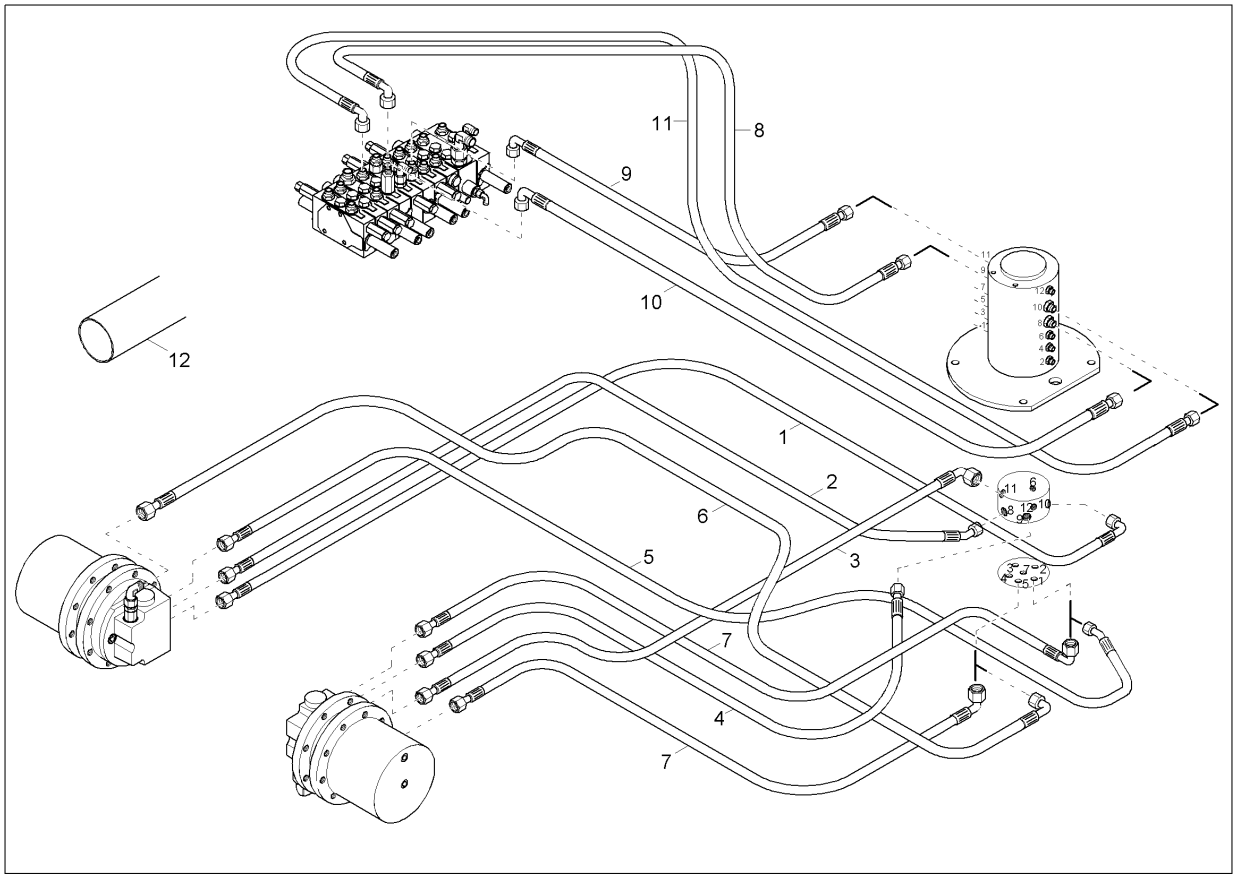
Ref. No.	Part No.	Description	Qty. Req.	Ref. No.	Part No.	Description	Qty. Req.
1	178522	HIGH PRESSURE HOSE	2	9	160566	HOSE	1
2	8005276G	HIGH PRESSURE HOSE	2	10	162071	COLLAR	2
3	8005277G	HIGH PRESSURE HOSE	1	11	8002331G	HIGH PRESSURE HOSE	1
4	162447	HP HOSE	1	12	162389	CLAMP	1
5	8005284G	HIGH PRESSURE HOSE	1	13	162035	SCREW	1
6	8006247G	HIGH PRESSURE HOSE	1	14	164927	PLUG	1
7	161297	HIGH PRESSURE HOSE	1	15	164929	NUT	1
8	8004368G	HIGH PRESSURE HOSE	1	16	178528	SCREW JOINT	3



Ref. No.	Part No.	Description	Qty. Req.	Ref. No.	Part No.	Description	Qty. Req.
1	178522	HIGH PRESSURE HOSE	2	9	160566	HOSE	1
2	8005276G	HIGH PRESSURE HOSE	2	10	162071	COLLAR	2
3	8005277G	HIGH PRESSURE HOSE	1	11	8002331G	HIGH PRESSURE HOSE	1
4	162957	HP HOSE	1	12	162389	CLAMP	1
5	8005284G	HIGH PRESSURE HOSE	1	13	162035	SCREW	1
6	8006247G	HIGH PRESSURE HOSE	1	14	164927	PLUG	1
7	161297	HIGH PRESSURE HOSE	1	15	164929	NUT	1
8	8004368G	HIGH PRESSURE HOSE	1	16	178528	SCREW JOINT	3

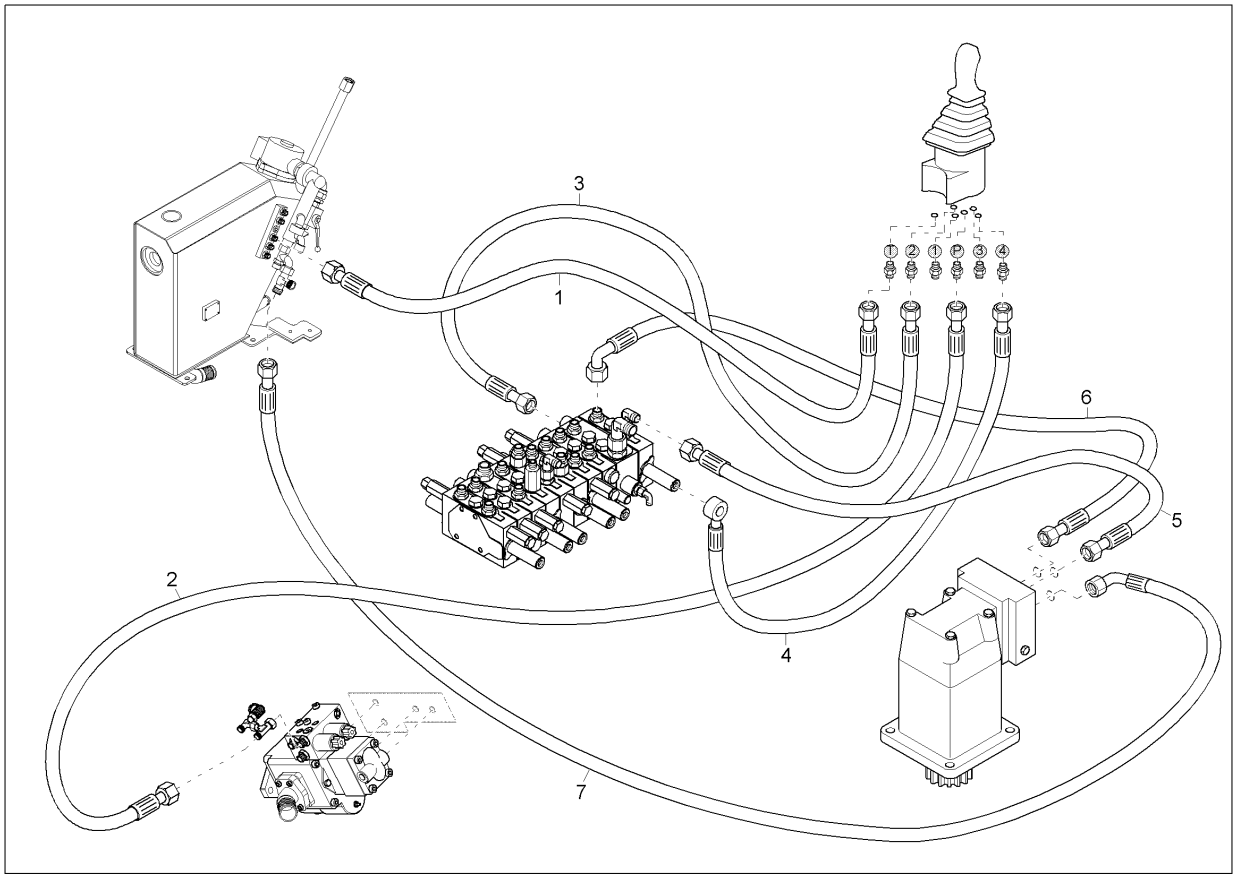


Ref. No.	Part No.	Description	Qty. Req.	Ref. No.	Part No.	Description	Qty. Req.
1	8004146G	HIGH PRESSURE HOSE	4	6	8004364G	HIGH PRESSURE HOSE	2
2	161263	HIGH PRESSURE HOSE	1	7	8004365G	HIGH PRESSURE HOSE	1
3	161252	HIGH PRESSURE HOSE	1	8	8004361G	HIGH PRESSURE HOSE	1
4	161245	HIGH PRESSURE HOSE	1	9	9710041G	HOSE PROTECTION	2
5	161229	HIGH PRESSURE HOSE	1				

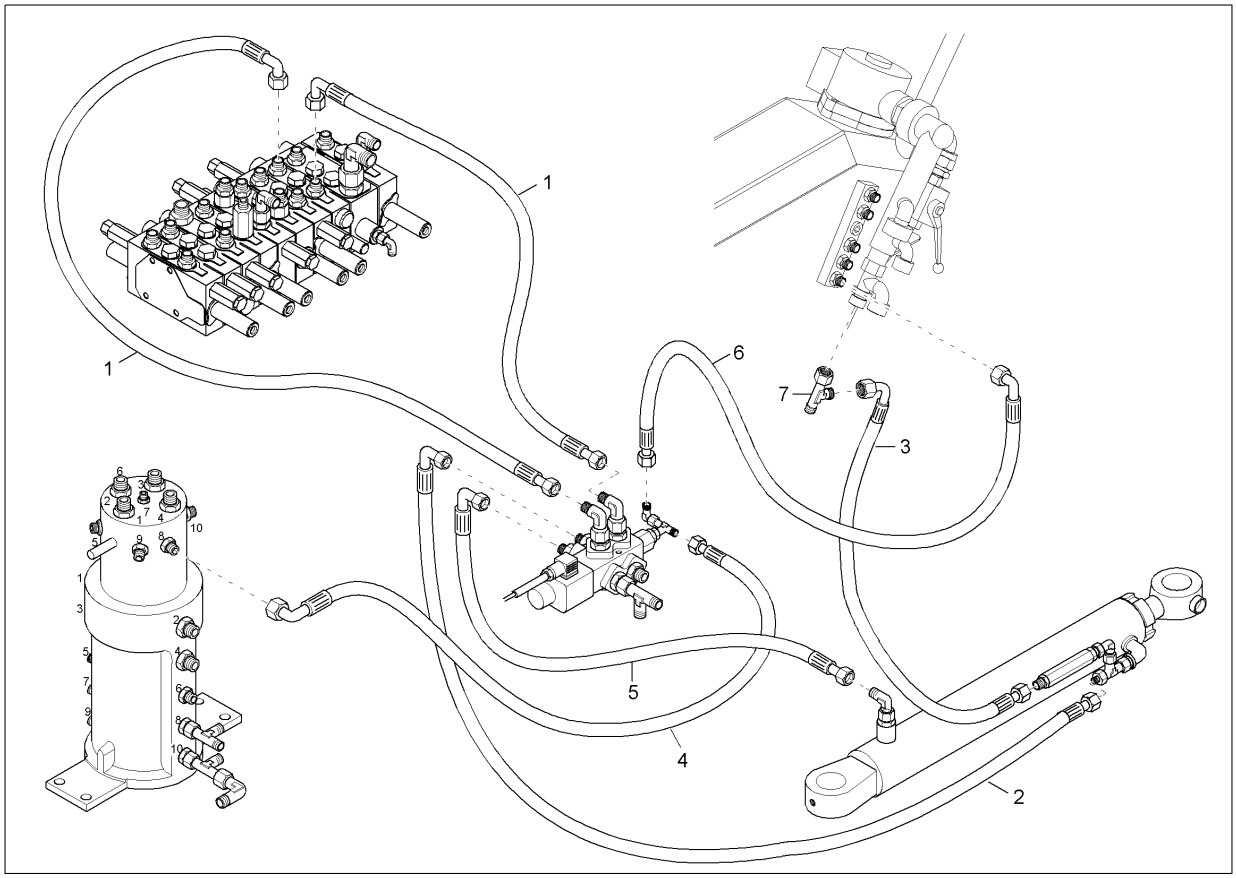


Ref. No.	Part No.	Description	Qty. Req.	Ref. No.	Part No.	Description	Qty. Req.
1	162970	HP HOSE	1	7	165832	HP HOSE	2
2	8004369G	HIGH PRESSURE HOSE	1	8	8004373G	HIGH PRESSURE HOSE	1
3	8004102G	HIGH PRESSURE HOSE	1	9	8004364G	HIGH PRESSURE HOSE	1
4	161308	HIGH PRESSURE HOSE	1	10	8004164G	HIGH PRESSURE HOSE	1
5	161288	HIGH PRESSURE HOSE	1	11	8004365G	HIGH PRESSURE HOSE	1
6	161245	HIGH PRESSURE HOSE	1	12	9710041G	HOSE PROTECTION	2

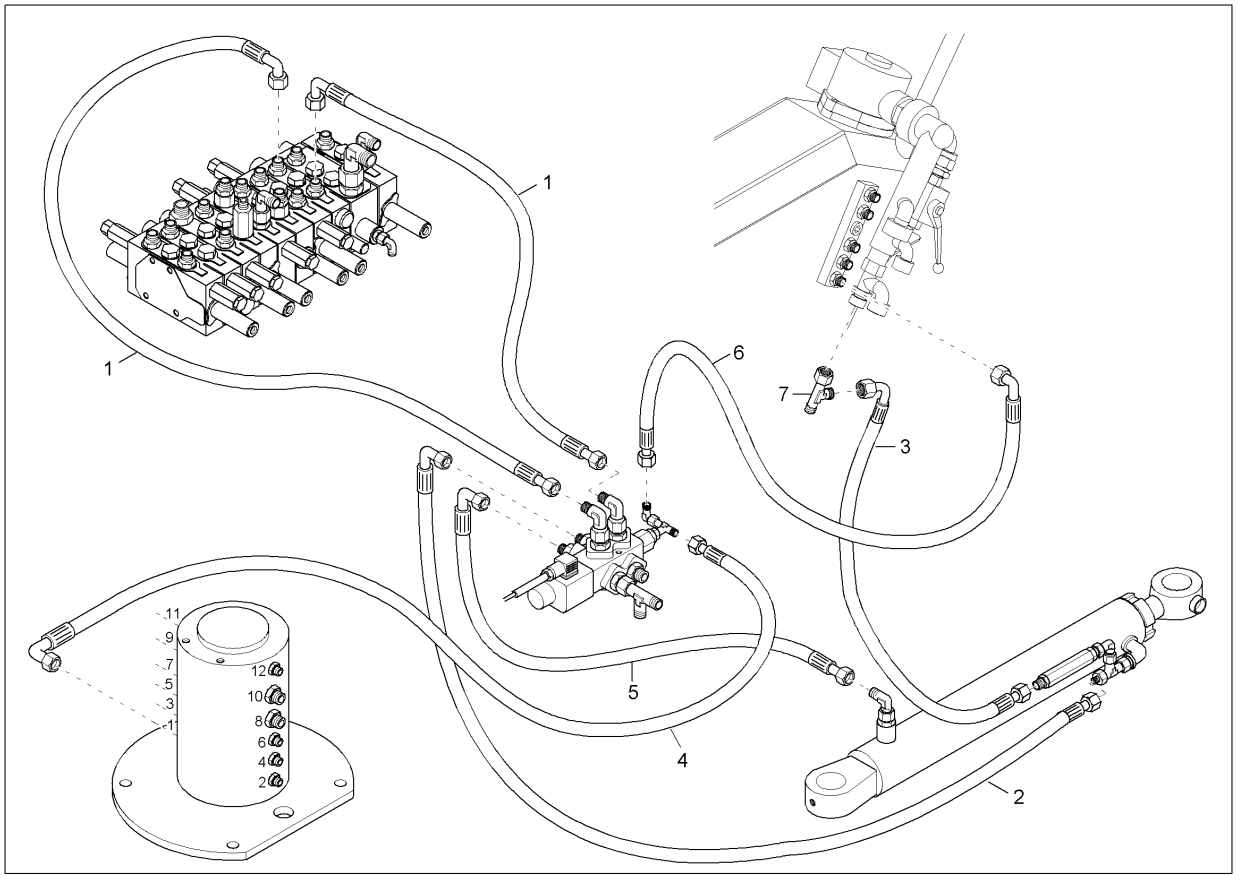
193/223 - TURNTABLE DRIVE UNIT INSTALLATION ET1940825



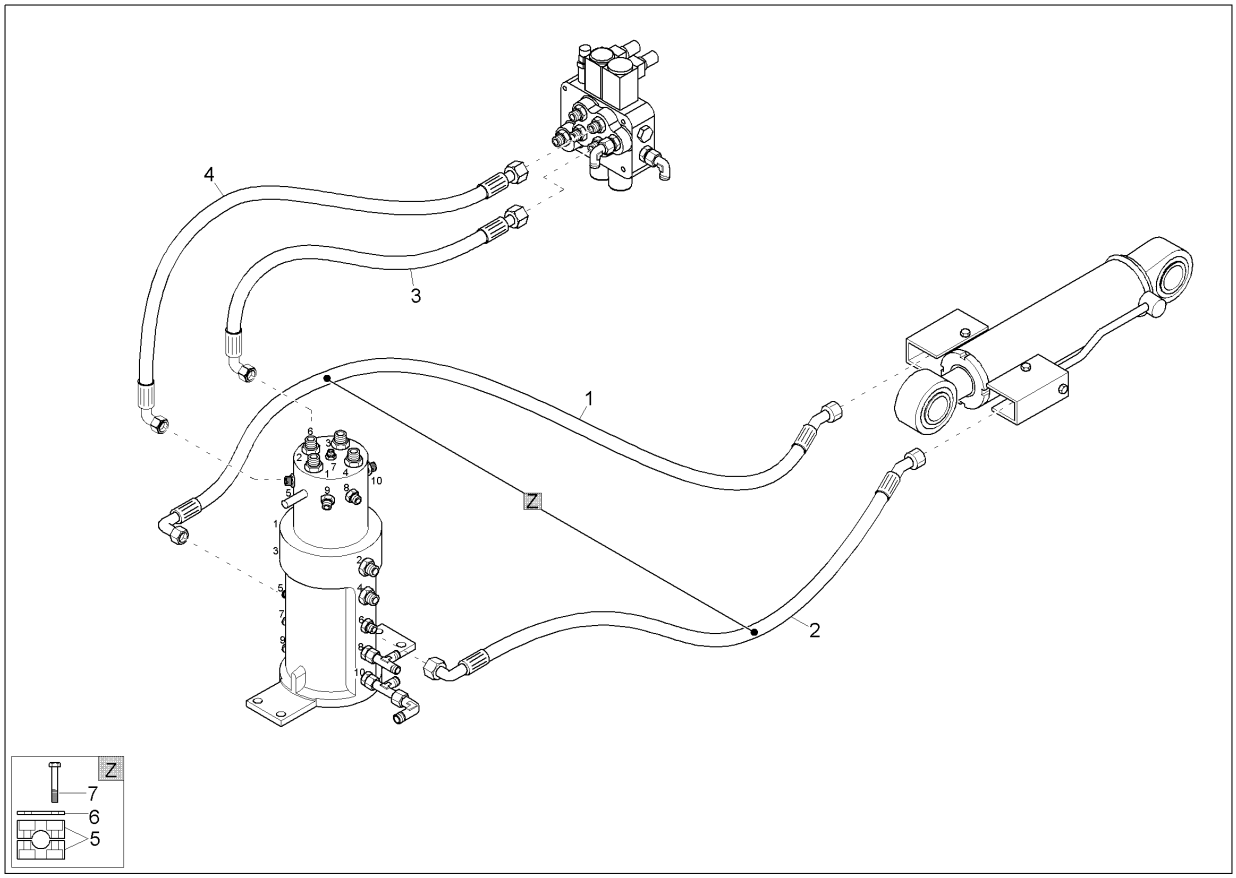
Ref. No.	Part No.	Description	Qty. Req.	Ref. No.	Part No.	Description	Qty. Req.
1	162447	HP HOSE	1	5	8004374G	HIGH PRESSURE HOSE	1
2	163288	HP HOSE	1	6	8003132G	HIGH PRESSURE HOSE	1
3	179544	HIGH PRESSURE HOSE	1	7	8004371G	HIGH PRESSURE HOSE	1
4	178516	HIGH PRESSURE HOSE	1				



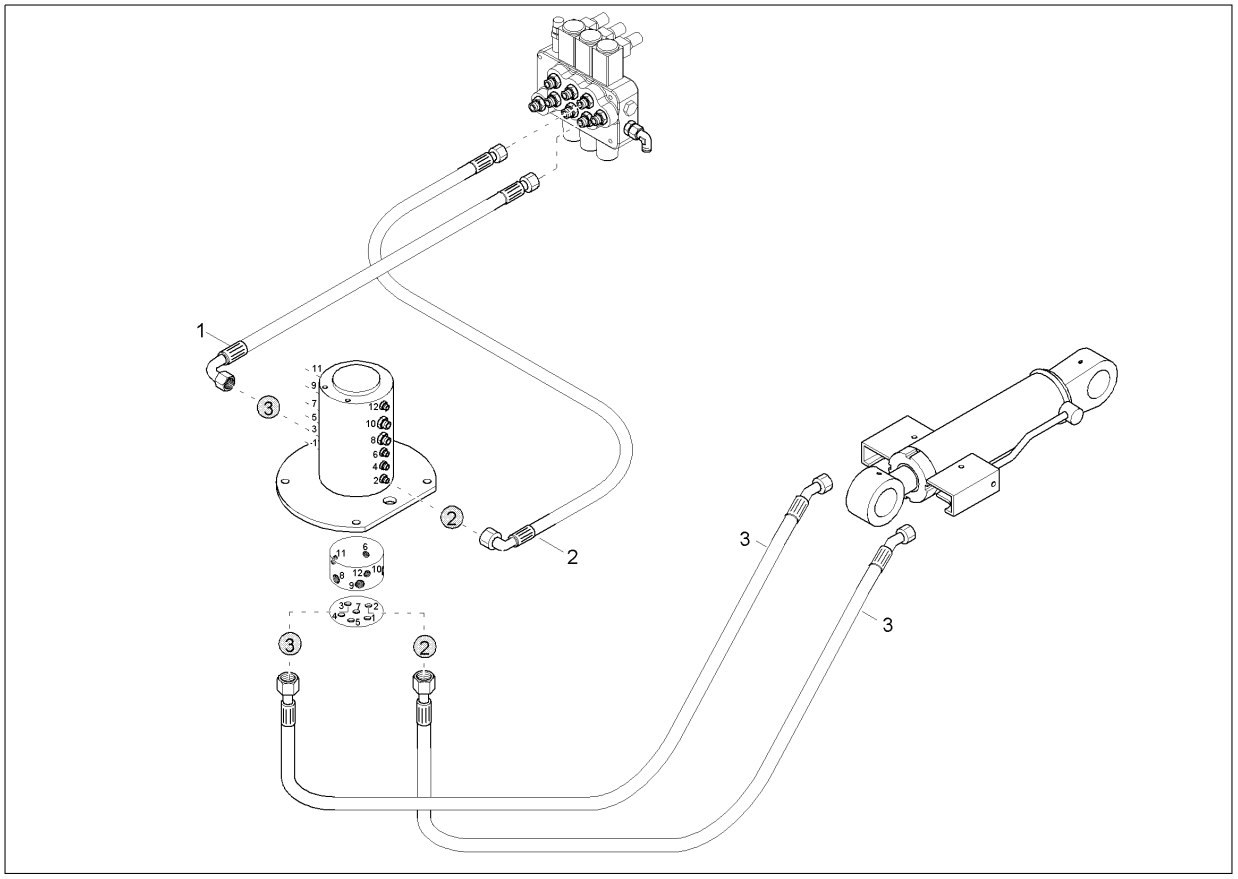
Ref. No.	Part No.	Description	Qty. Req.	Ref. No.	Part No.	Description	Qty. Req.
1	8004355G	HIGH PRESSURE HOSE	2	5	8002323G	HIGH PRESSURE HOSE	1
2	178513	HIGH PRESSURE HOSE	1	6	161225	HIGH PRESSURE HOSE	1
3	161309	HIGH PRESSURE HOSE	1	7	162062	ELBOW	1
4	164800	HIGH PRESSURE HOSE	1				



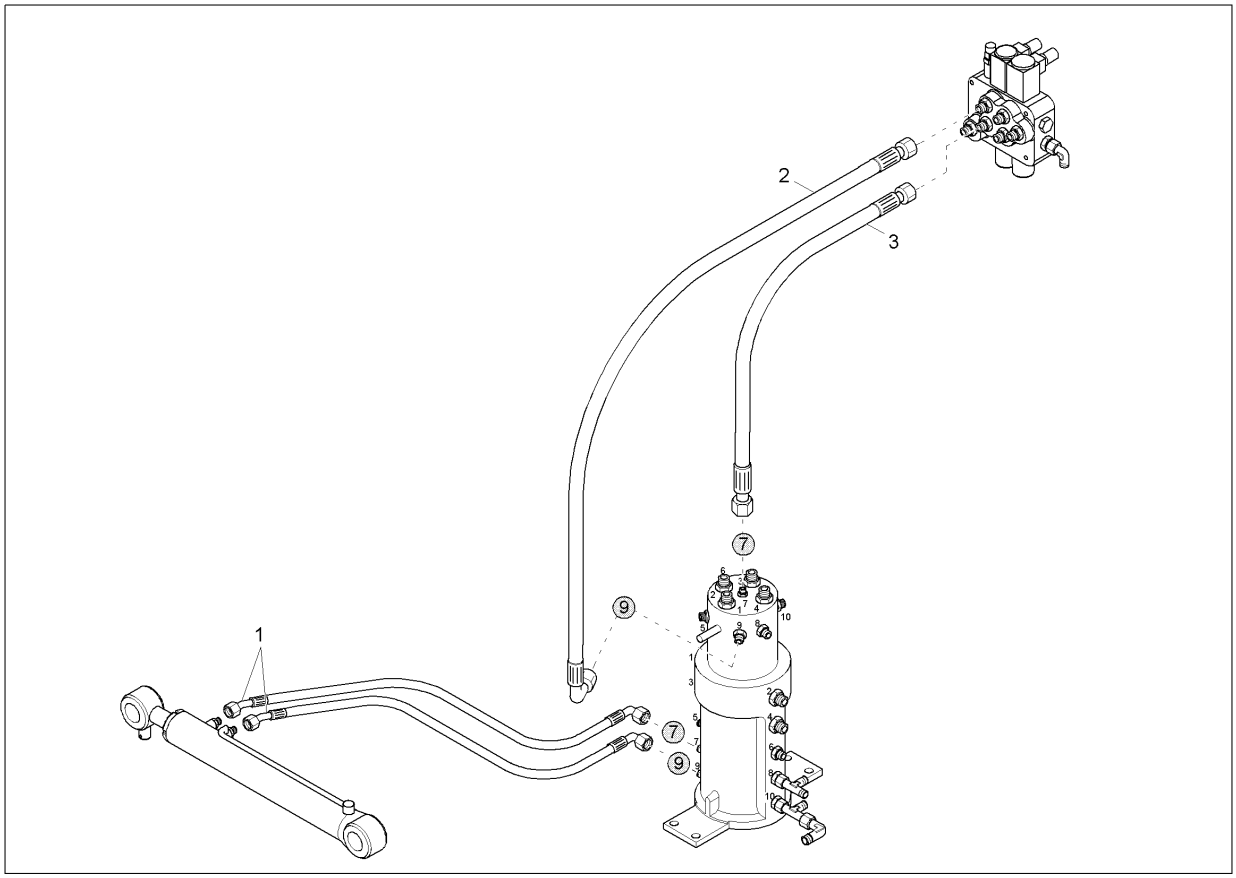
Ref. No.	Part No.	Description	Qty. Req.	Ref. No.	Part No.	Description	Qty. Req.
1	8004355G	HIGH PRESSURE HOSE	2	5	8002323G	HIGH PRESSURE HOSE	1
2	178513	HIGH PRESSURE HOSE	1	6	161225	HIGH PRESSURE HOSE	1
3	161309	HIGH PRESSURE HOSE	1	7	162062	ELBOW	1
4	161223	HIGH PRESSURE HOSE	1				



Ref. No.	Part No.	Description	Qty. Req.	Ref. No.	Part No.	Description	Qty. Req.
1	160550	HOSE	1	5	178529	CLAMP	2
2	163921	HP HOSE	1	6	162066	COVER	2
3	161260	HIGH PRESSURE HOSE	1	7	651508	SHCS M6-1 X 25 8.8 ZO	4
4	165845	HIGH PRESSURE HOSE	1				

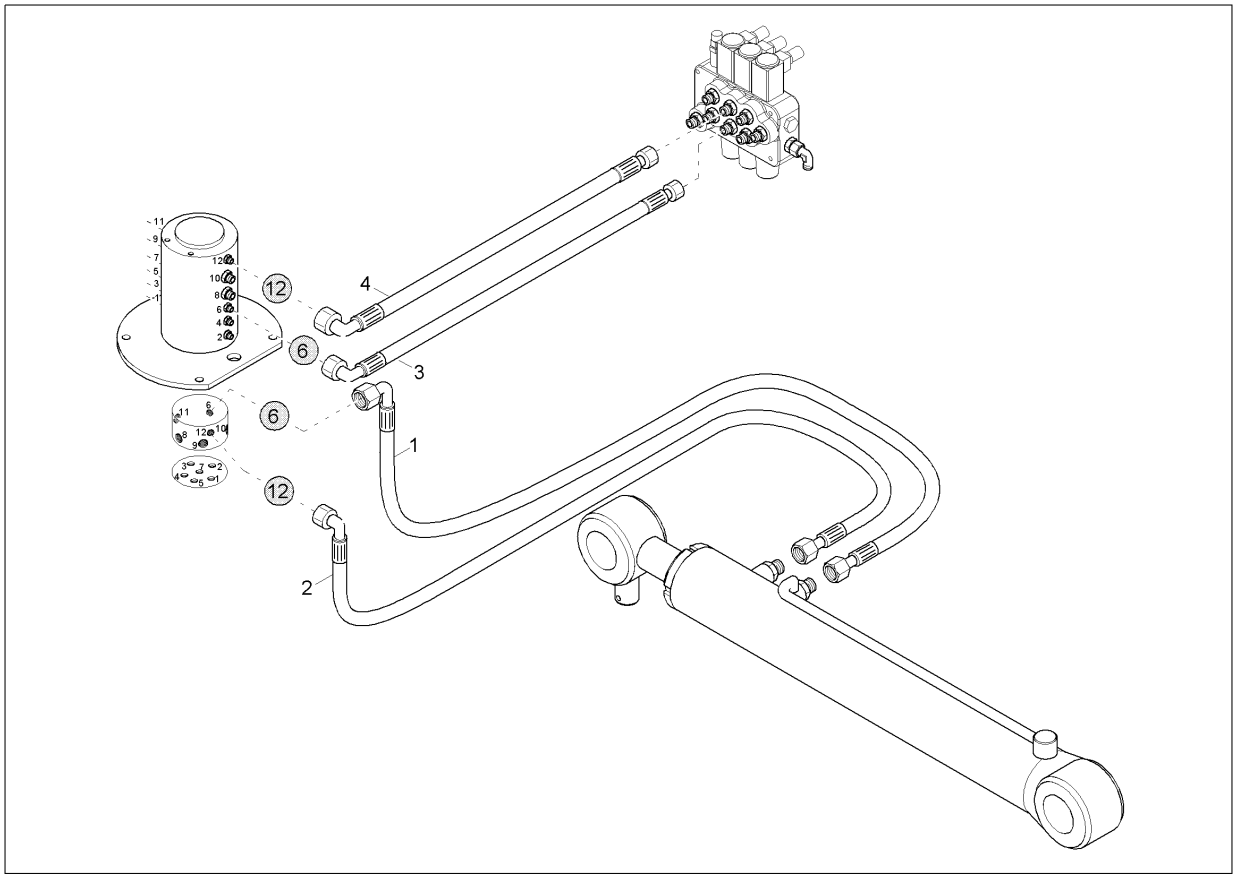


Ref. No.	Part No.	Description	Qty. Req.	Ref. No.	Part No.	Description	Qty. Req.
1	8002315G	HIGH PRESSURE HOSE	1	3	161249	HOSE	2
2	161261	HIGH PRESSURE HOSE	1				

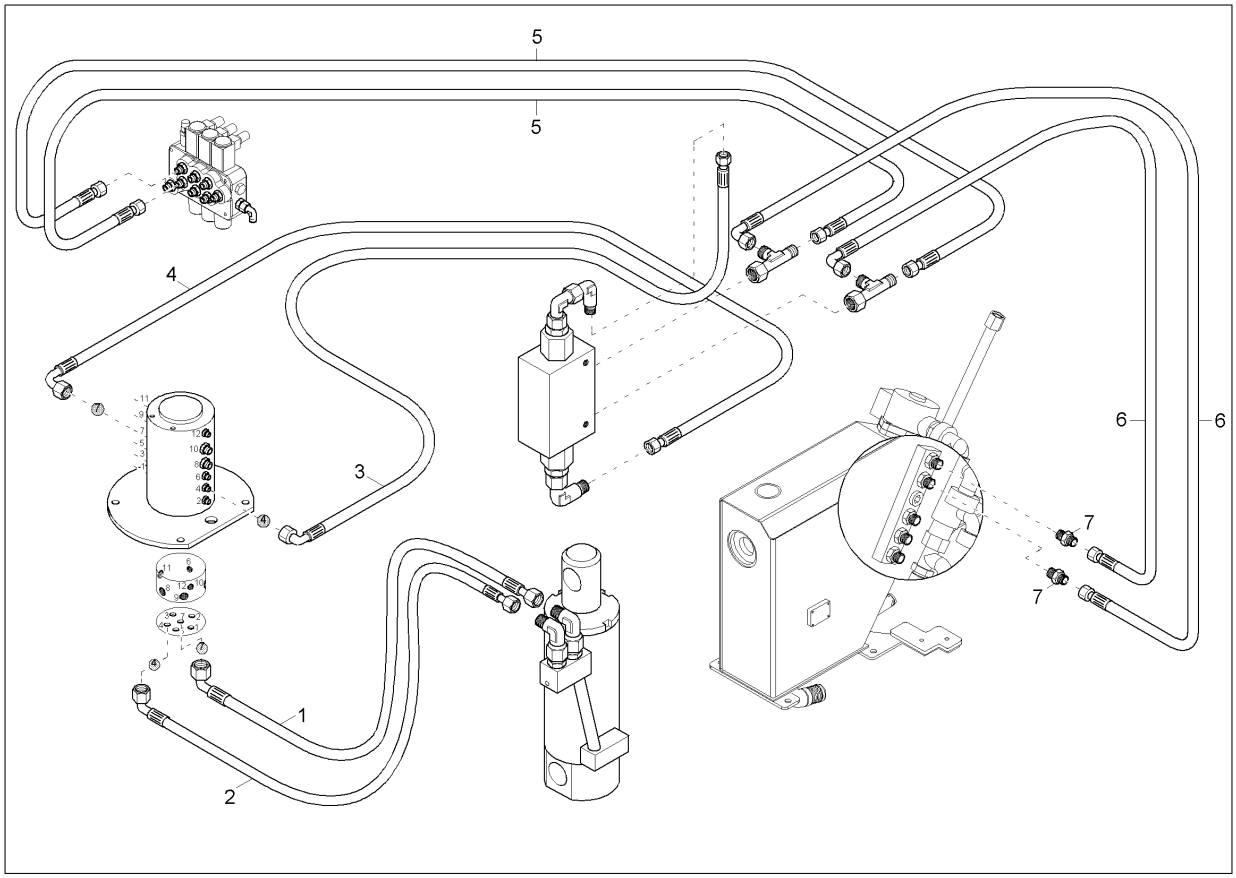


Ref. No.	Part No.	Description	Qty. Req.	Ref. No.	Part No.	Description	Qty. Req.
1	161243	HIGH PRESSURE HOSE	2	3	8002124G	HIGH PRESSURE HOSE	1
2	161257	HIGH PRESSURE HOSE	1				

223 - TELESCOPIC CYLINDER INSTALLATION ET1940855

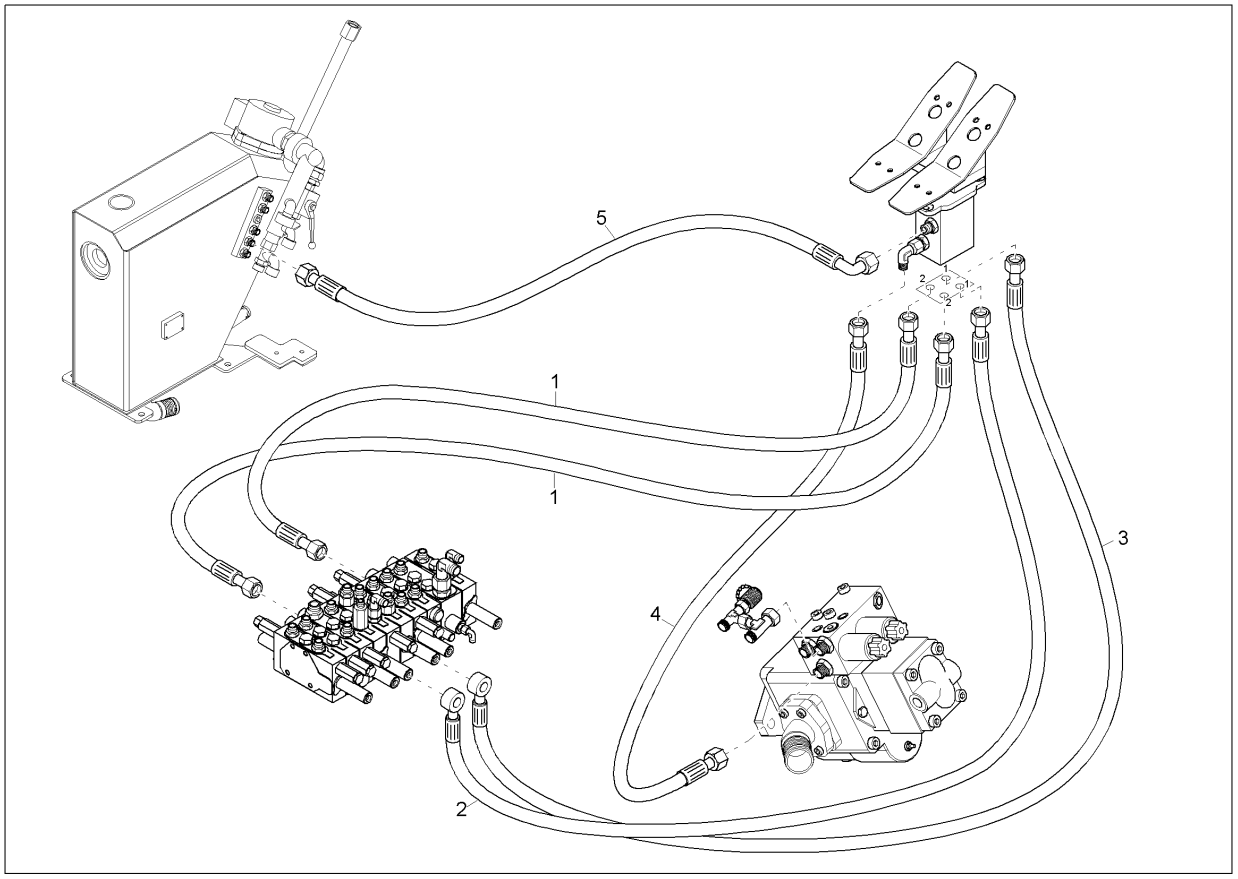


Ref. No.	Part No.	Description	Qty. Req.	Ref. No.	Part No.	Description	Qty. Req.
1	161232	HIGH PRESSURE HOSE	1	3	8002315G	HIGH PRESSURE HOSE	1
2	161234	HIGH PRESSURE HOSE	1	4	161257	HIGH PRESSURE HOSE	1



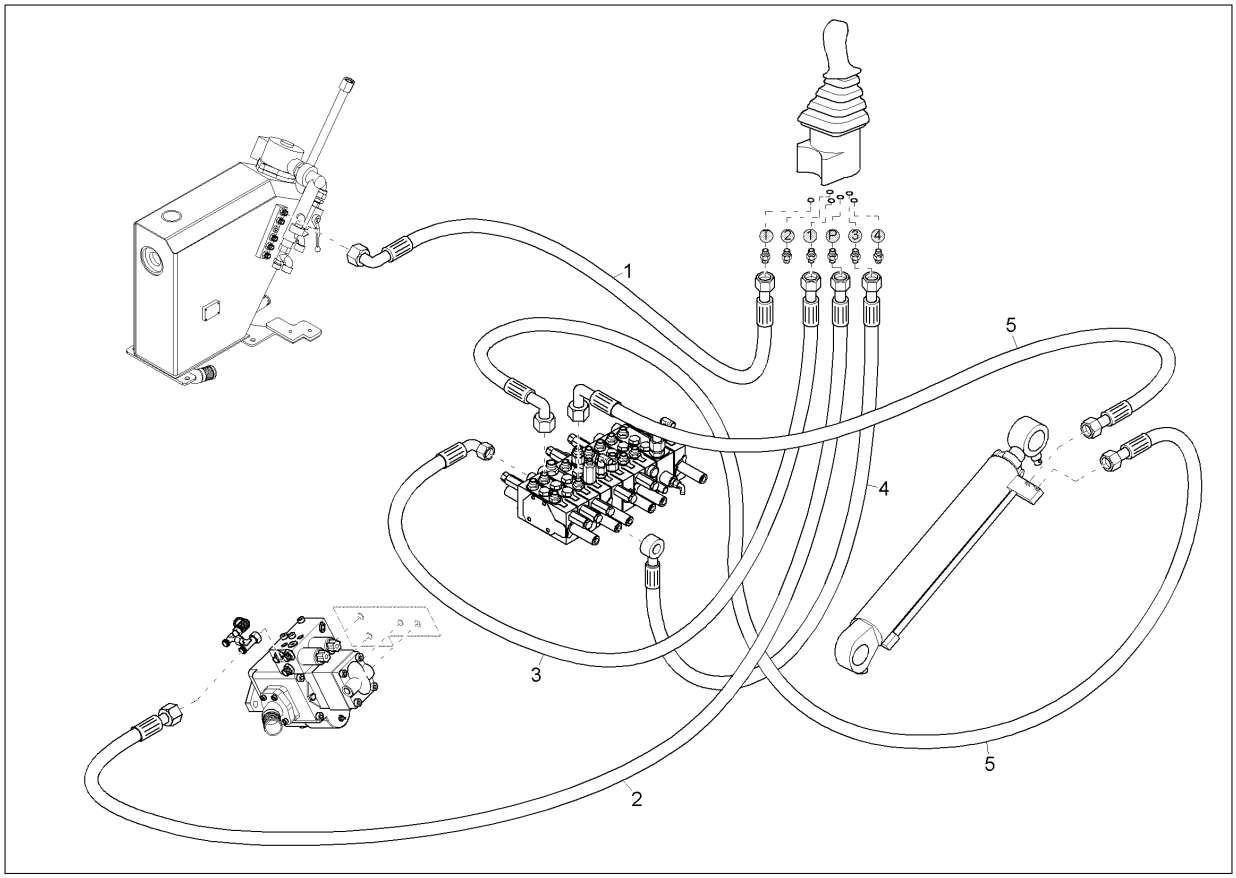
Ref. No.	Part No.	Description	Qty. Req.	Ref. No.	Part No.	Description	Qty. Req.
1	161247	HIGH PRESSURE HOSE	1	5	179531	HP HOSE	2
2	161234	HIGH PRESSURE HOSE	1	6	161256	HIGH PRESSURE HOSE	2
3	161261	HIGH PRESSURE HOSE	1	7	161426	SCREW JOINT	2
4	8002315G	HIGH PRESSURE HOSE	1				

193/223 - TRAVELING VALVE INSTALLATION ET1940865



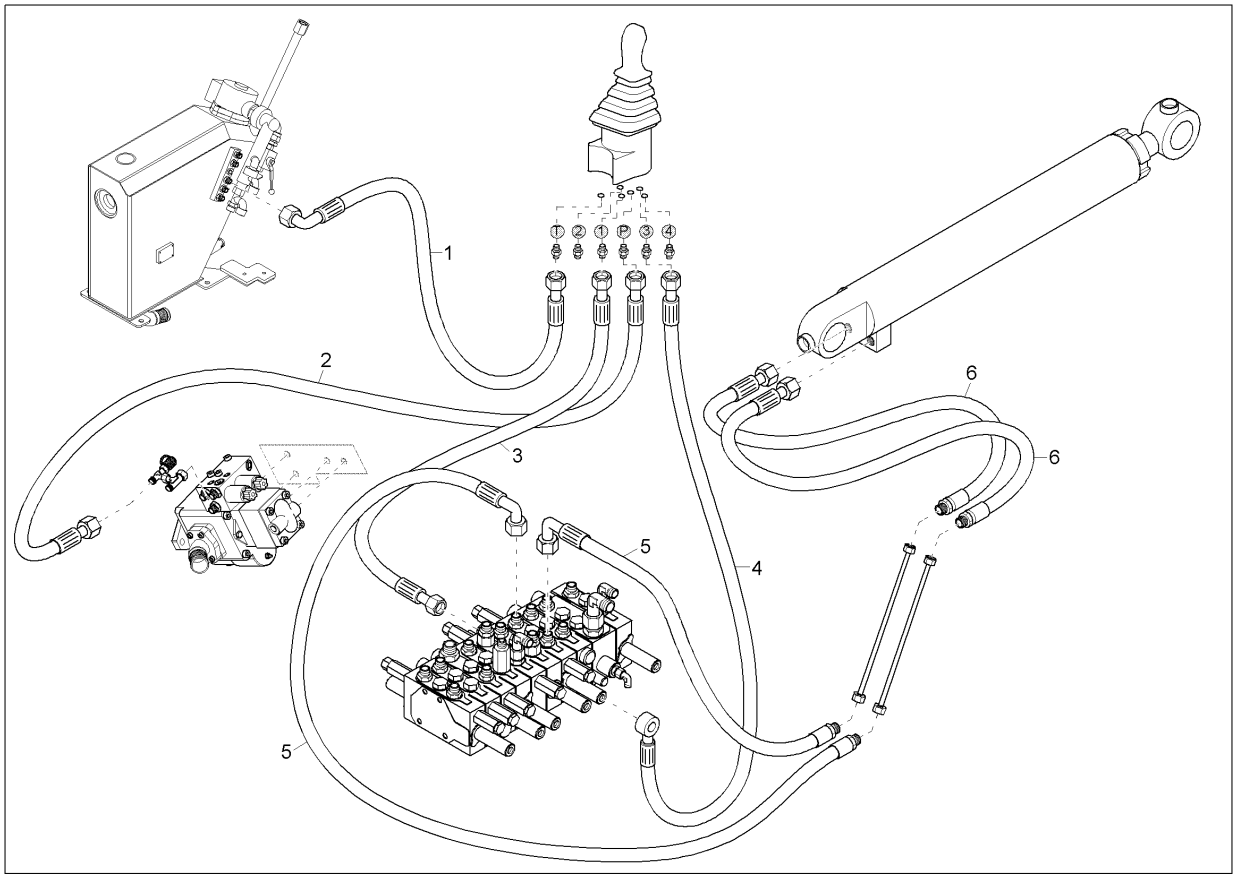
Ref. No.	Part No.	Description	Qty. Req.	Ref. No.	Part No.	Description	Qty. Req.
1	8001851G	HIGH PRESSURE HOSE	2	4	161224	HOSE	1
2	8002310G	HIGH PRESSURE HOSE	1	5	162403	HP HOSE	1
3	8002311G	HIGH PRESSURE HOSE	1				

ET1940870 ___193/223 - LIFTING BOOM OPERATION HOSE INSTALLATION

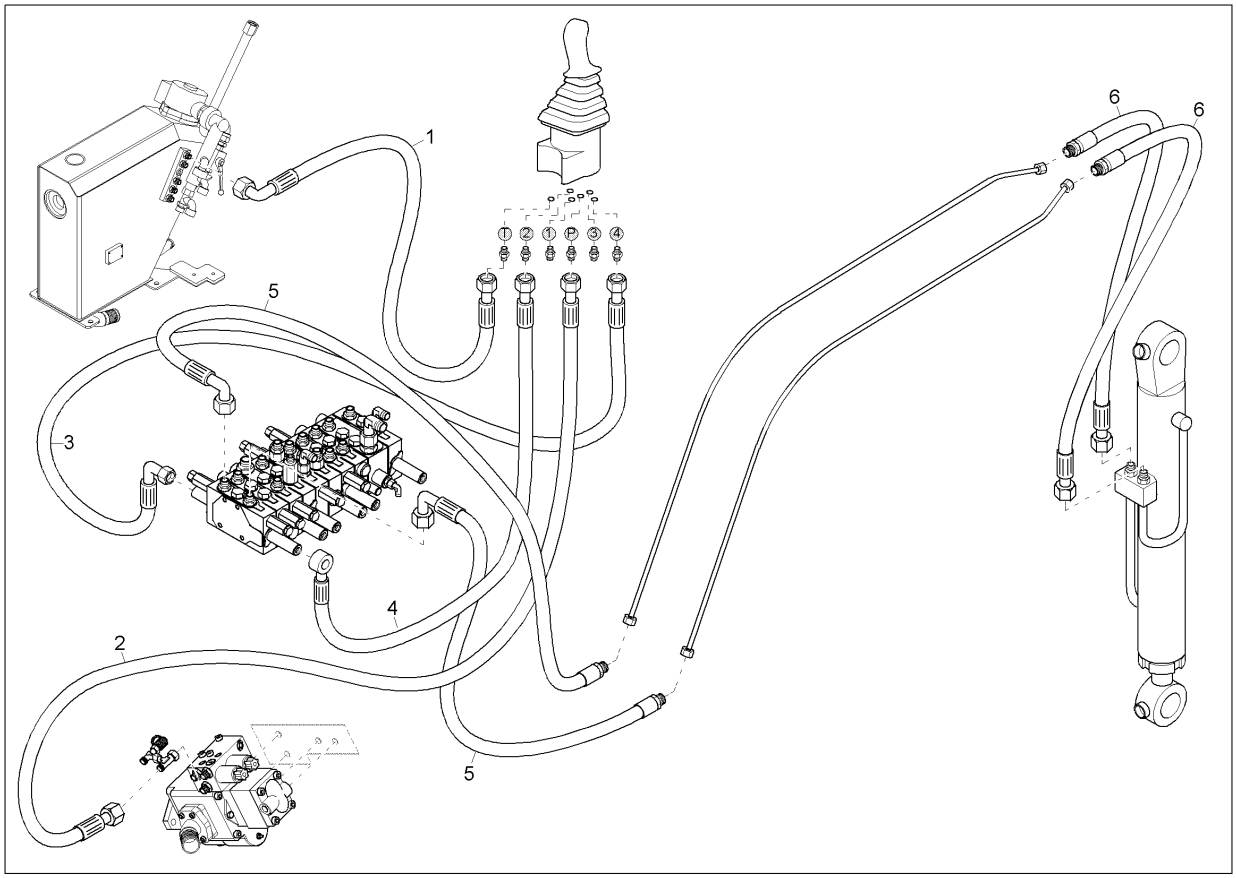


Ref. No.	Part No.	Description	Qty. Req.	Ref. No.	Part No.	Description	Qty. Req.
1	161220	HIGH PRESSURE HOSE	1	4	178514	HIGH PRESSURE HOSE	1
2	163291	HP HOSE	1	5	178520	HIGH PRESSURE HOSE	2
3	178517	HIGH PRESSURE HOSE	1				

193/223 - DIPPER ARM OPERATION HOSE INSTALLATION____ET1940872

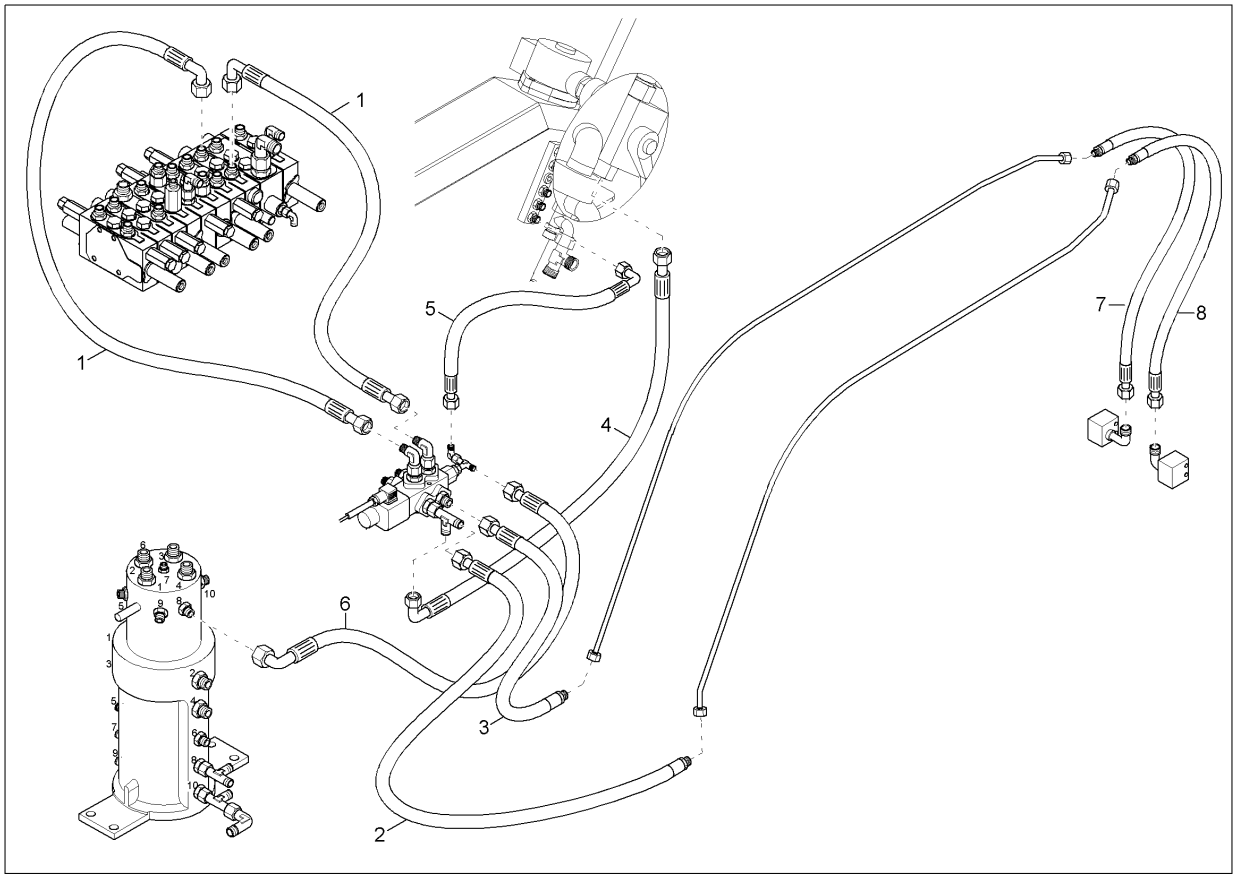


Ref. No.	Part No.	Description	Qty. Req.	Ref. No.	Part No.	Description	Qty. Req.
1	162447	HP HOSE	1	4	178515	HIGH PRESSURE HOSE	1
2	163288	HP HOSE	1	5	178519	HIGH PRESSURE HOSE	2
3	179544	HIGH PRESSURE HOSE	1	6	8004359G	HIGH PRESSURE HOSE	2



Ref. No.	Part No.	Description	Qty. Req.	Ref. No.	Part No.	Description	Qty. Req.
1	161220	HIGH PRESSURE HOSE	1	4	178514	HIGH PRESSURE HOSE	1
2	163291	HP HOSE	1	5	178518	HIGH PRESSURE HOSE	2
3	178517	HIGH PRESSURE HOSE	1	6	8003137G	HIGH PRESSURE HOSE	2

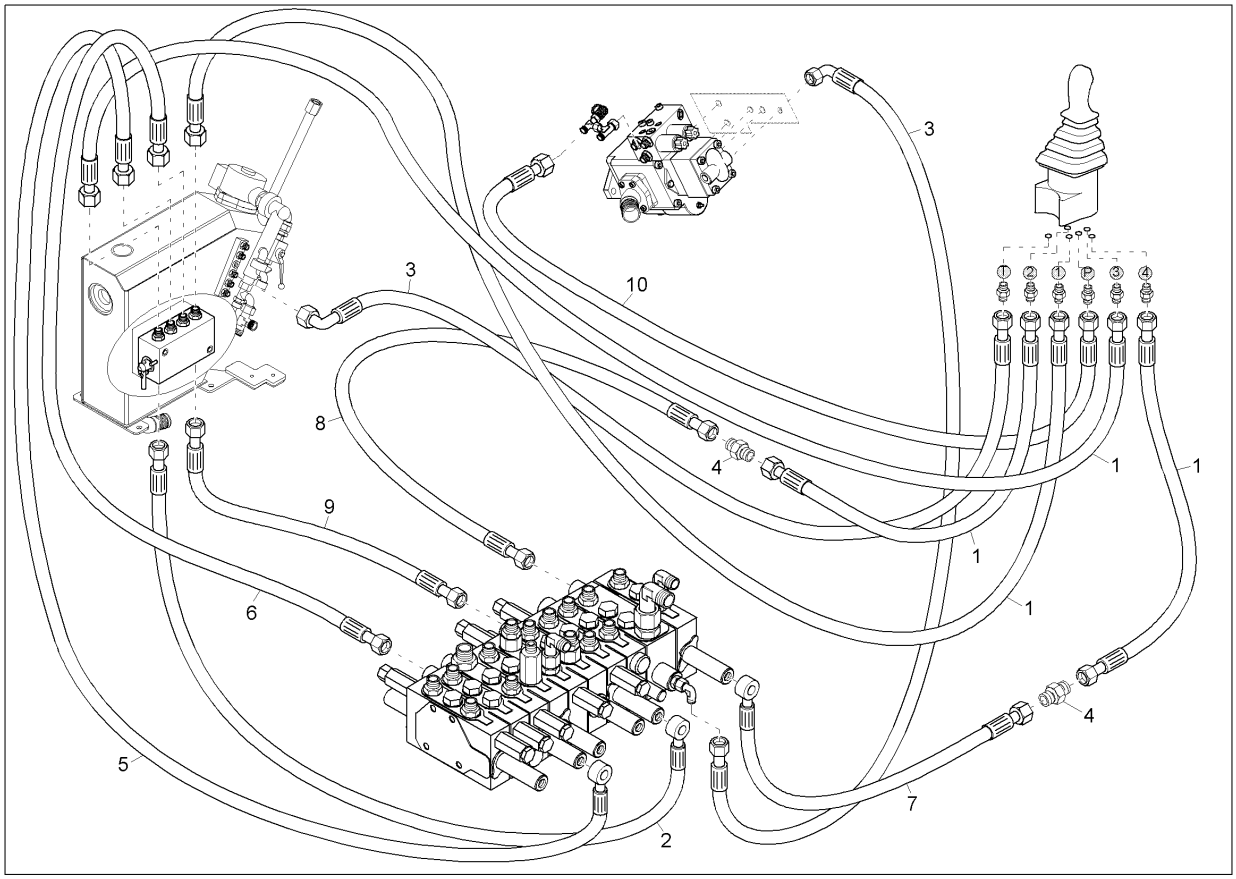
193 - AUXILIARY FUNCTION HOSE INSTALLATION ET1940876



Ref. No.	Part No.	Description	Qty. Req.	Ref. No.	Part No.	Description	Qty. Req.
1	8004355G	HIGH PRESSURE HOSE	2	5	161225	HIGH PRESSURE HOSE	1
2	178523	HIGH PRESSURE HOSE	1	6	164800	HIGH PRESSURE HOSE	1
3	178521	HIGH PRESSURE HOSE	1	7	8004360G	HIGH PRESSURE HOSE	1
4	162426	HP HOSE	1	8	8005278G	HIGH PRESSURE HOSE	1

193/223 - HAND LEVERS, LEFT HOSE INST. (OPTIONAL 8/2 VALVE)

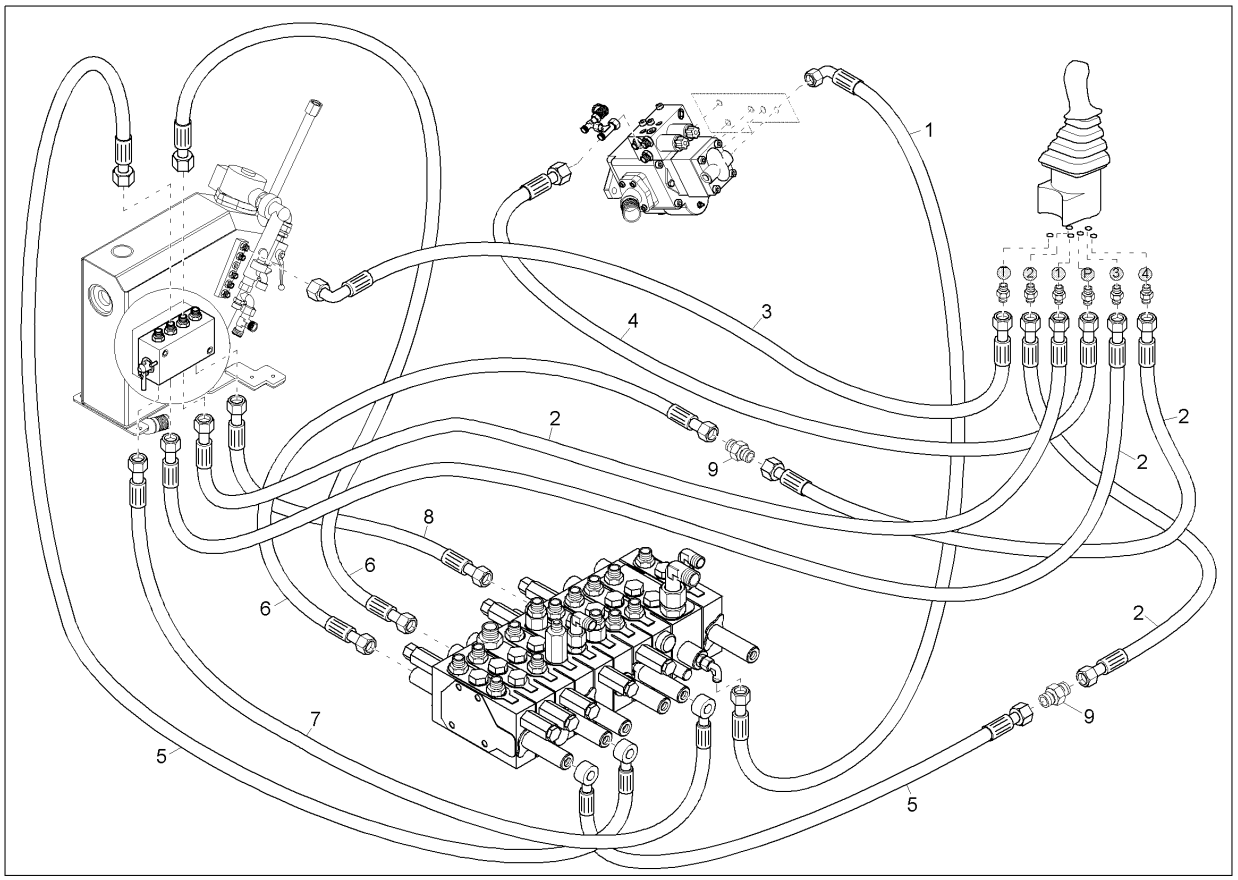
ET1940878



Ref. No.	Part No.	Description	Qty. Req.	Ref. No.	Part No.	Description	Qty. Req.
1	8009010G	HIGH PRESSURE HOSE	4	6	161227	HIGH PRESSURE HOSE	1
2	8001863G	HIGH PRESSURE HOSE	1	7	8002309G	HIGH PRESSURE HOSE	1
3	162447	HP HOSE	2	8	8002308G	HIGH PRESSURE HOSE	1
4	161479	SCREW JOINT	2	9	8002307G	HIGH PRESSURE HOSE	1
5	8002312G	HIGH PRESSURE HOSE	1	10	163288	HP HOSE	1

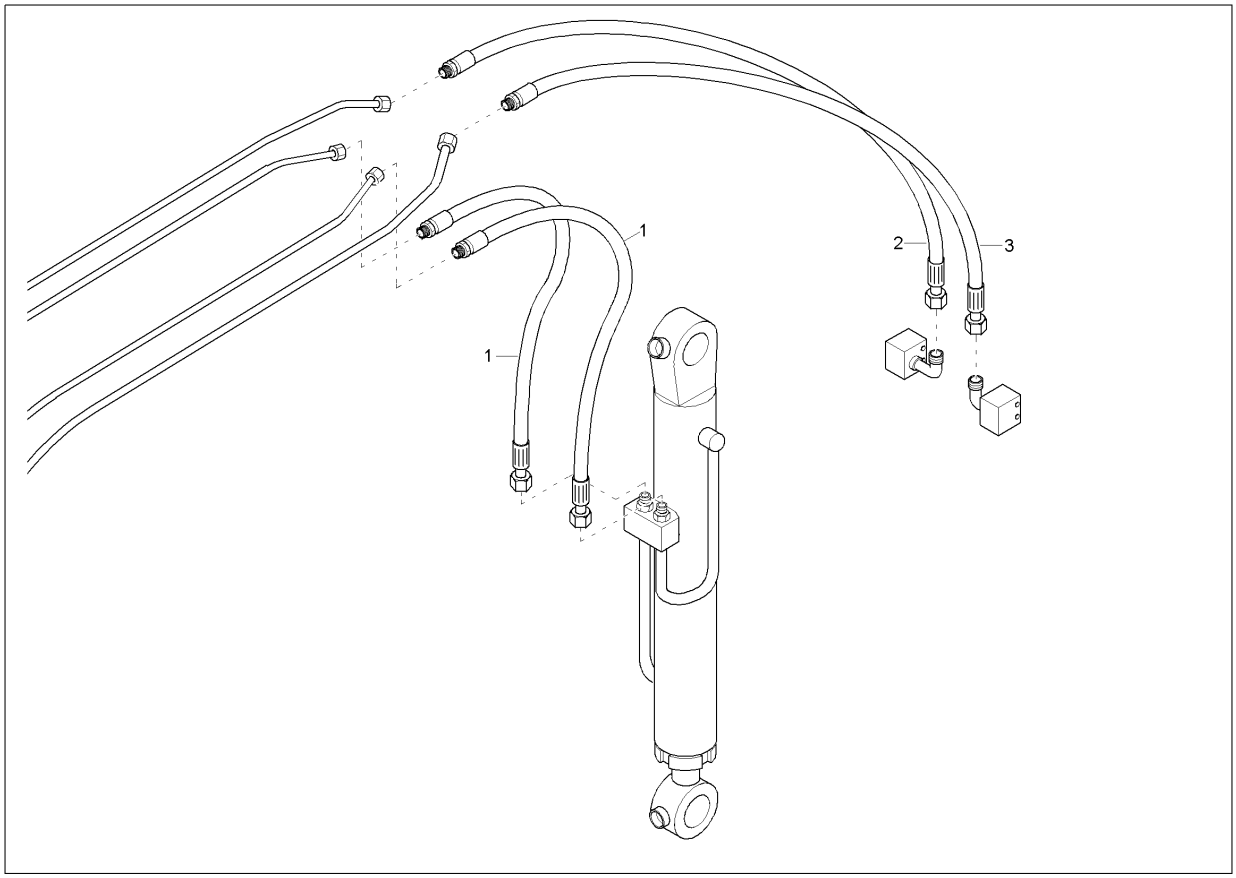
193/223 - HAND LEVERS, RIGHT HOSE INST. (OPTIONAL 8/2 VALVE)___

ET1940880



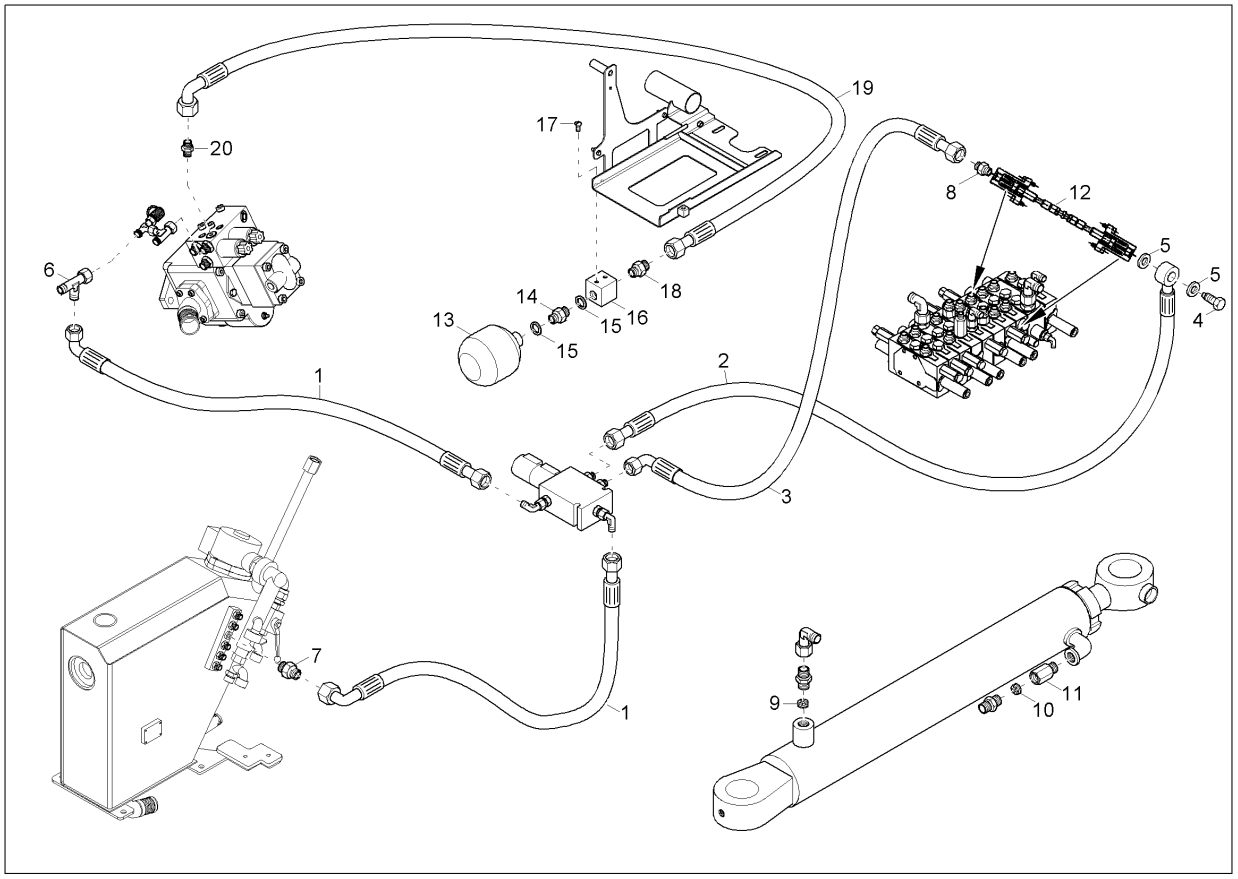
Ref. No.	Part No.	Description	Qty. Req.
1	162447	HP HOSE	1
2	164799	HP HOSE	4
3	161220	HIGH PRESSURE HOSE	1
4	163291	HP HOSE	1
5	8002312G	HIGH PRESSURE HOSE	2
6	161227	HIGH PRESSURE HOSE	2
7	8001863G	HIGH PRESSURE HOSE	1
8	8002307G	HIGH PRESSURE HOSE	1
9	161479	SCREW JOINT	2

ET1940882_193/223 - DIPPER ARM, LONG HOSE INSTALLATION (OPTION)

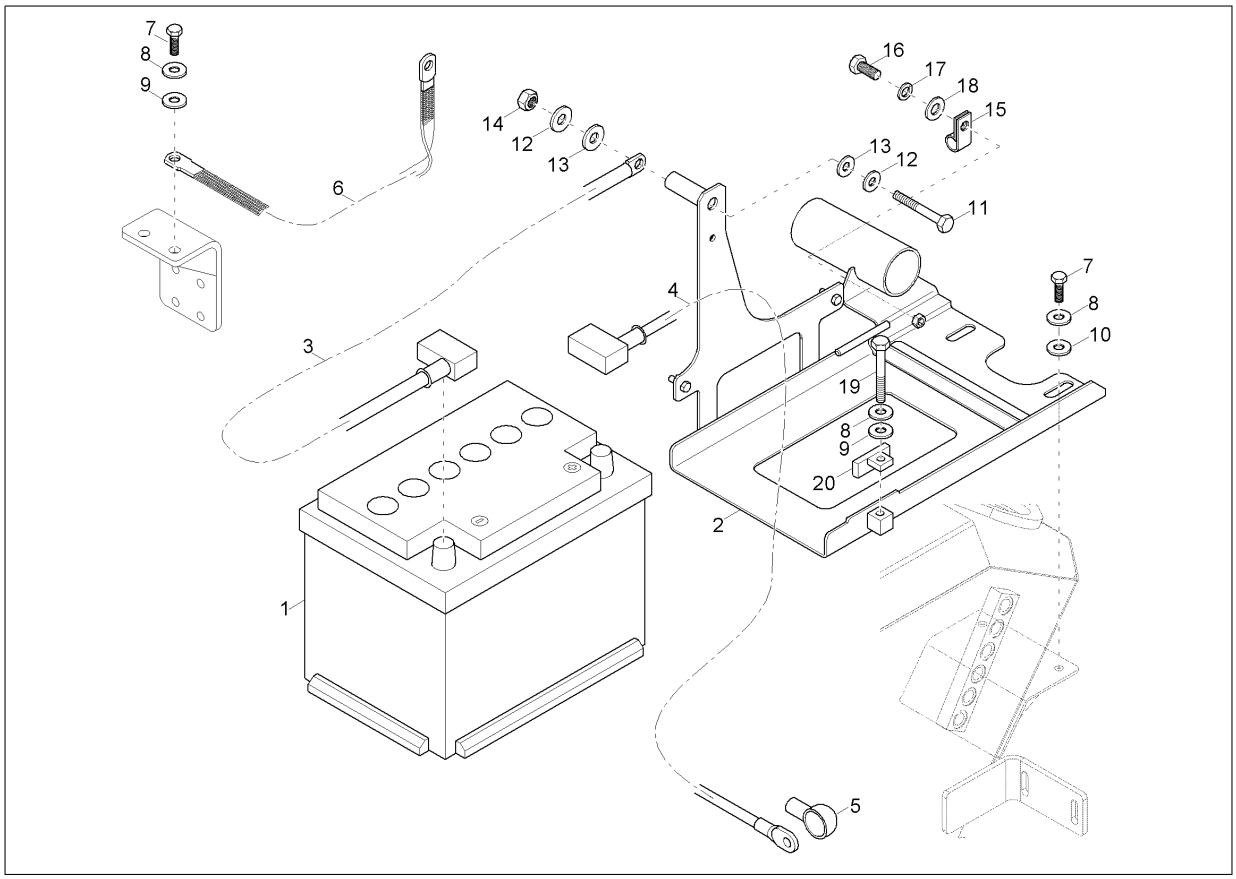


Ref. No.	Part No.	Description	Qty. Req.	Ref. No.	Part No.	Description	Qty. Req.
1	8003037G	HIGH PRESSURE HOSE	1	3	8005091G	HIGH PRESSURE HOSE	1
2	8004375G	HIGH PRESSURE HOSE	1				

193/223 - ELECTRICAL AUXILIARY FUNCTION (OPTION)_____ET1940888

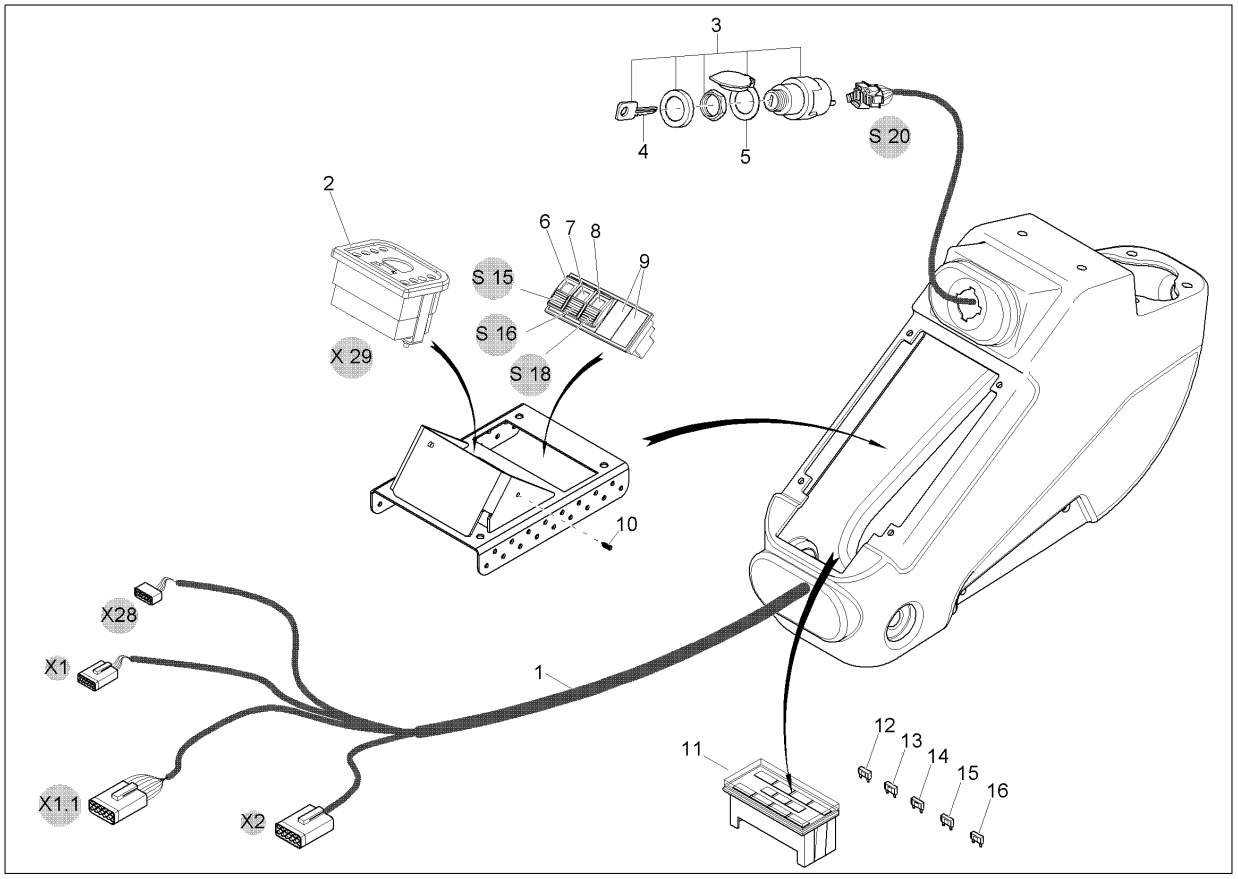


Ref. No.	Part No.	Description	Qty. Req.	Ref. No.	Part No.	Description	Qty. Req.
1	162447	HP HOSE	2	11	161357	CONNECTOR	1
2	8002309G	HIGH PRESSURE HOSE	1	12	178809	ALTERATION SET	1
3	161236	HIGH PRESSURE HOSE	1	13	160437	ACCUMULATOR	1
4	163124	SCREW	1	14	179827	ADAPTER	1
5	163130	WASHER	2	15	179076	SCREW SEAL USIT	2
6	161448	ELBOW	1	16	178762	BRACKET	1
7	161426	SCREW JOINT	1	17	651461	FHSCS M6-1.0 X 12 8.8 ZO	2
8	164945	SCREW JOINT	1	18	165961	SCREW JOINT	1
9	160651	THROTTLE	1	19	161290	HIGH PRESSURE HOSE	1
10	165896	THROTTLE	1	20	165972	SCREW JOINT	1

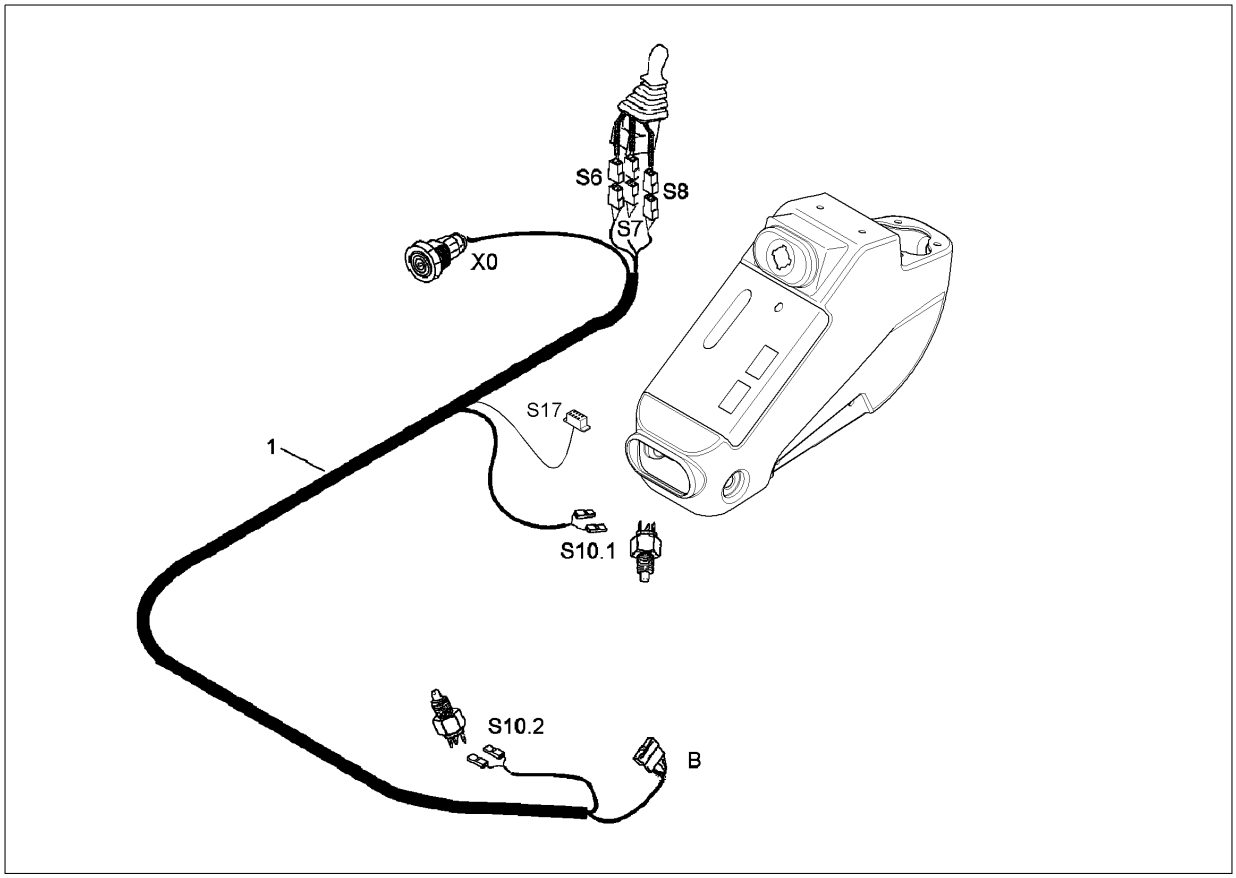


Ref. No.	Part No.	Description	Qty. Req.	Ref. No.	Part No.	Description	Qty. Req.
1	161993	BATTERY	1	11	9901348G	SCREW	1
2	178461	BATTERY CARRIER	1	12	161669	RING/SNAP S10	2
3	161850	CABLE	1	13	161640	WASHER/GR A 10.5	2
4	161851	CABLE	1	14	656102	HN M10-1.25 8 Z PHEOLL KB	1
5	161994	PROTECTION CAP	1	15	165114	CLAMP	1
6	162008	GROUND STRAP	1	16	651424	CS M6-1.0 X 20 C 8.8 ZO	1
7	656001	CS M 8-1.25 X 20 C8.8 ZO	3	17	161675	RING/SNAP S6	1
8	163670	WASHER	3	18	161660	WASHER GR A6.4 ZO DIN 125	1
9	163634	WASHER	2	19	178526	SCREW	1
10	161667	WASHER/GR A 8.4 ZO	2	20	178463	CARRIER	1

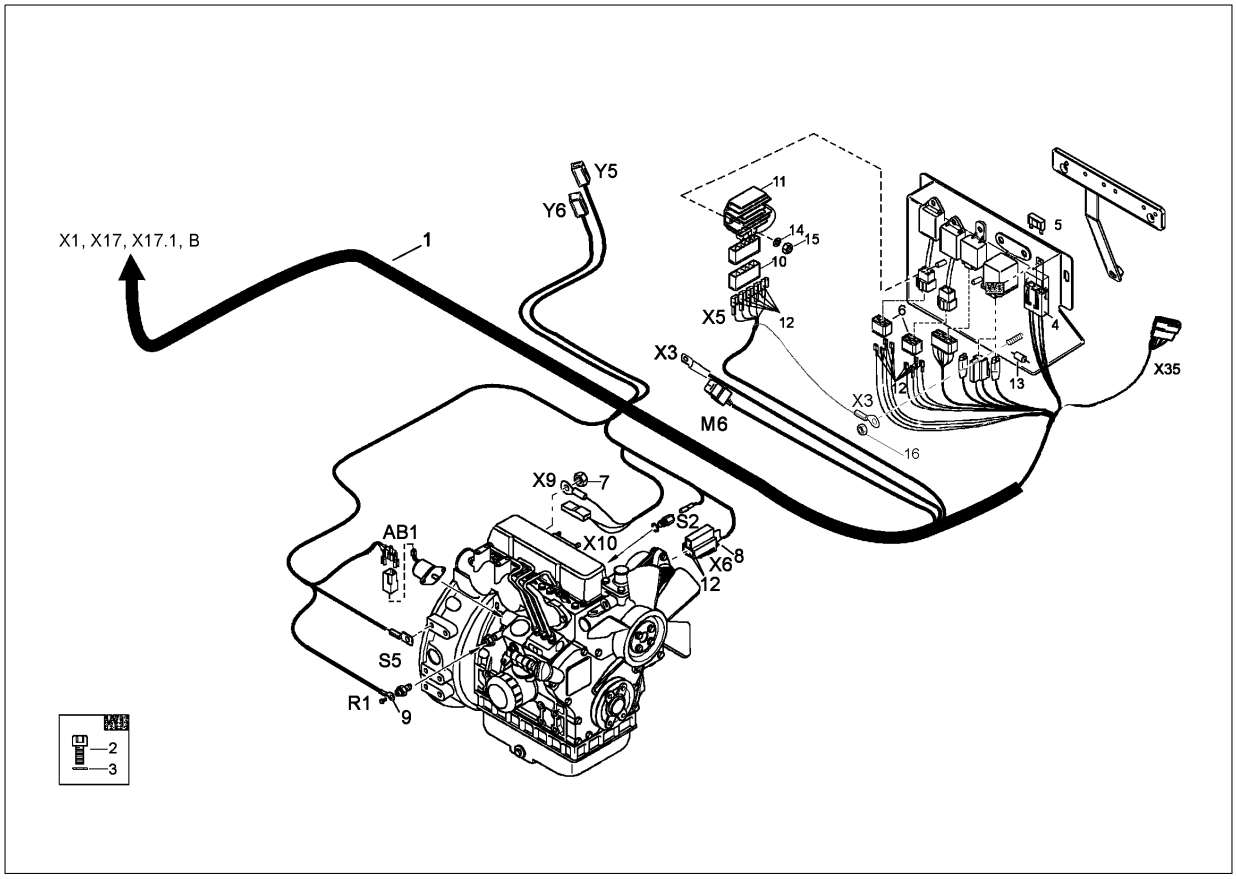
193/223 - ARMREST WIRE HARNESS, RIGHT ET1940905



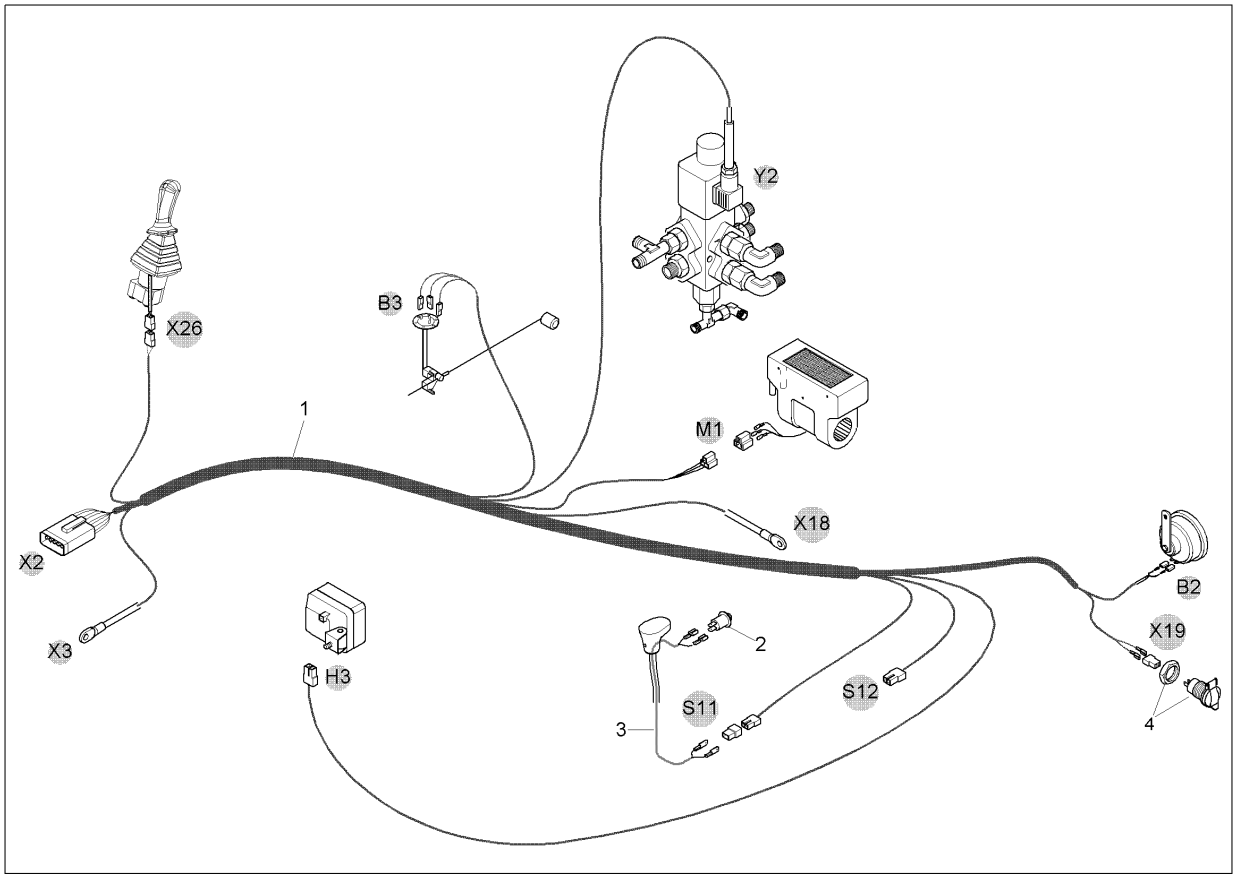
Ref. No.	Part No.	Description	Qty. Req.	Ref. No.	Part No.	Description	Qty. Req.
1	178722	WIRE HARNESS ARMREST	1	9	162469	COVER	2
2	1424401G	DISPLAY UNIT	1	10	179777	SET SCREW	2
3	161380	IGNITION SWITCH	1	11	161364	FUSE BOX	1
4	160713	KEY/FUEL CAP	1	12	161376	FUSE 7.5 AMP.	1
5	161368	COVER	1	13	161374	FUSE 10 AMP.	1
6	165235	SWITCH WINDSHIELD WIPER	1	14	161375	FUSE 15 AMP.	1
7	165236	SWITCH HEATER	1	15	162836	FUSE 30 AMP.	1
8	165238	SWITCH ARM LIGHT	1	16	164868	FUSE 20 AMP.	1



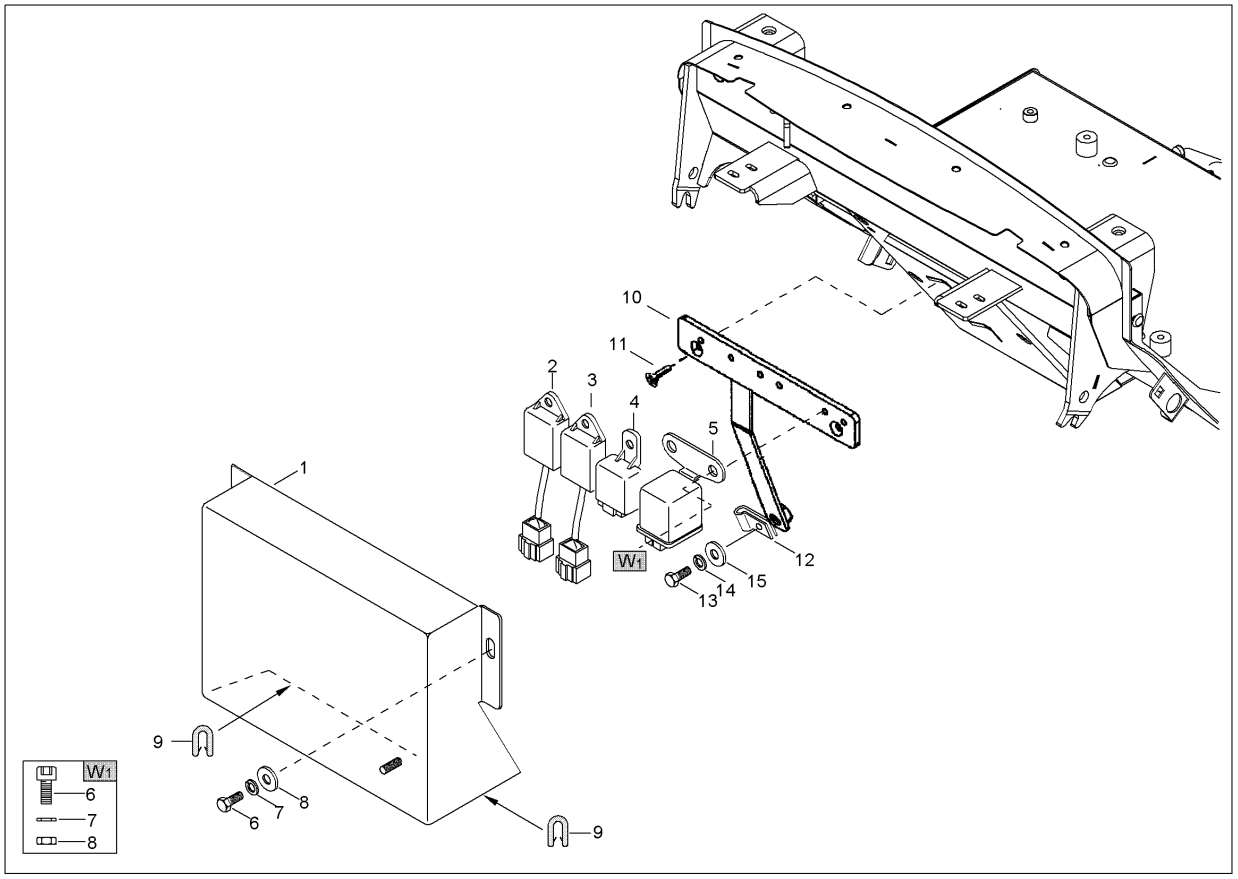
Ref. No.	Part No.	Description	Qty. Req.	Ref. No.	Part No.	Description	Qty. Req.
1	178721	WIRE HARNESS ARMREST	1				



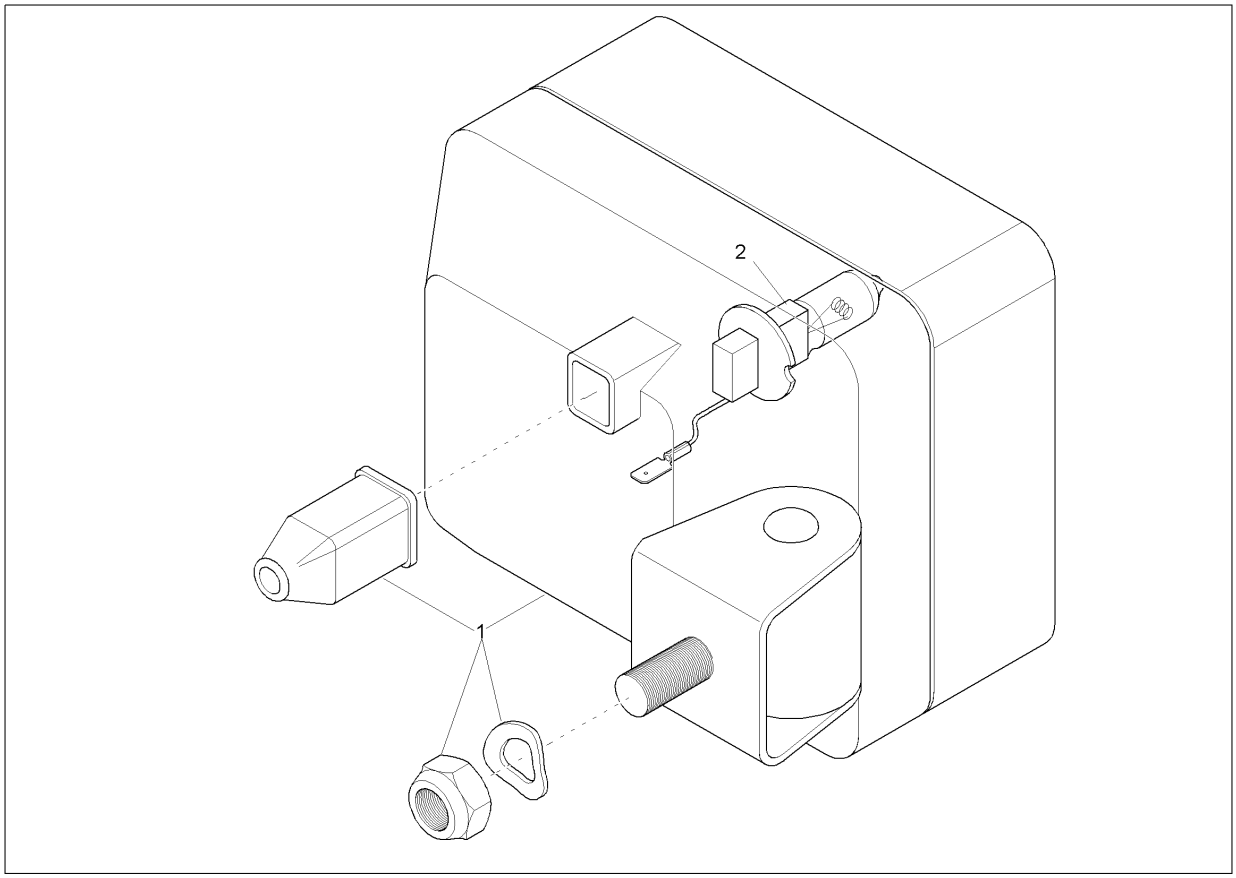
Ref. No.	Part No.	Description	Qty. Req.	Ref. No.	Part No.	Description	Qty. Req.
1	178719	WIRE HARNESS ENGINE	1	9	162004	PLUG	1
2	651502	SHCS M5-0.8 X 10 8.8 ZO	1	10	425-36149	COUPLER/REGULATOR	1
3	161659	WASHER/GR A 5.3 ZO DIN125	1	11	425-36148	REGULATOR	1
4	161858	FUSE HOUSING	1	12	162470	PLUG	20
5	161998	FUSE	1	13	161355	DIODE FOR RELAY	1
6	162003	PLUG	2	14	161665	WASHER/GR A 5.3 ZO	2
7	656048	NUT/HEX M8 1.25 D934 PC8 F-ZO	1	15	656100	HN M5-.8 GR8 Z	2
8	162001	PLUG	2	16	161678	HN M6-1.0 8 ZO ALL METAL	1



Ref. No.	Part No.	Description	Qty. Req.	Ref. No.	Part No.	Description	Qty. Req.
1	178720	WIRE HARNESS CHASSIS	1	3	164284	CABLE	1
2	161363	SWITCH	1	4	161732	SOCKET	1

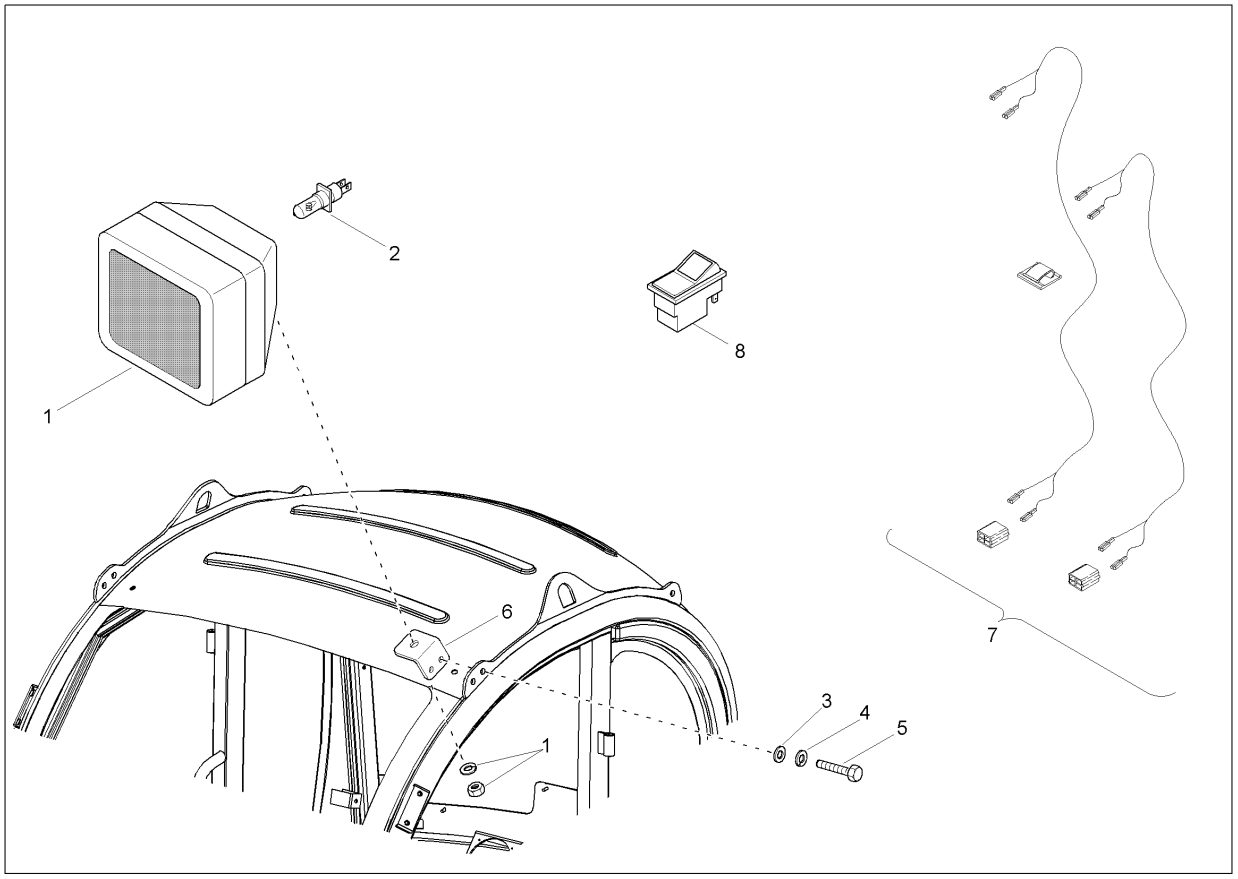


Ref. No.	Part No.	Description	Qty. Req.
1	1421032G	RELAY BOX	1
2	160821	PRE-HEATING TIME RELAY (FOR PILOT LAMP 15-18 SECONDS)	1
3	160891	TIME RELAY FOR PULLING CONTACT (1.5 SECONDS)	1
4	160890	STARTING RELAY	1
5	160889	SWITCHING RELAY FOR PULLING CONTACT	1
6	651502	SHCS M5-0.8 X 10 8.8 ZO	7
7	161674	RING/SNAP S16	7
8	161659	WASHER/GR A 5.3 ZO DIN125	7
9	165587	PVC-EDGE PROTECTION - 0.6m	1
10	1421035G	BRACKET	1
11	651460	FHSCS M5-0.8 X 16 8.8 ZO	2
12	179855	HOSE COLLAR	1
13	656093	CS M 8-1.25 X 16 C8.8 ZO	1
14	163670	WASHER	1
15	163634	WASHER	1

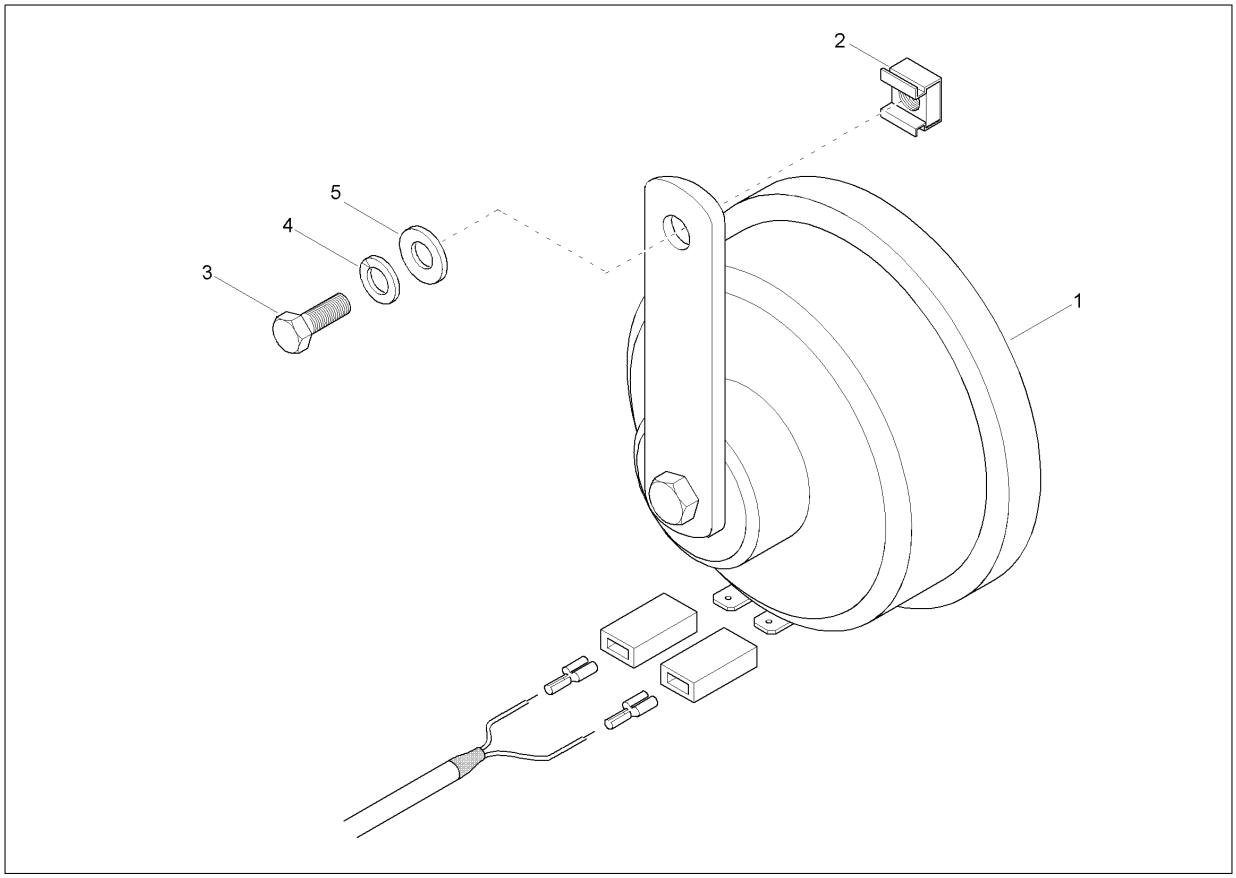


Ref. No.	Part No.	Description	Qty. Req.	Ref. No.	Part No.	Description	Qty. Req.
1	160537	WORKING LIGHT	1	2	161367	HALOGEN LAMP	1

193/223 - CABIN HEADLIGHT (OPTION) ET1940935

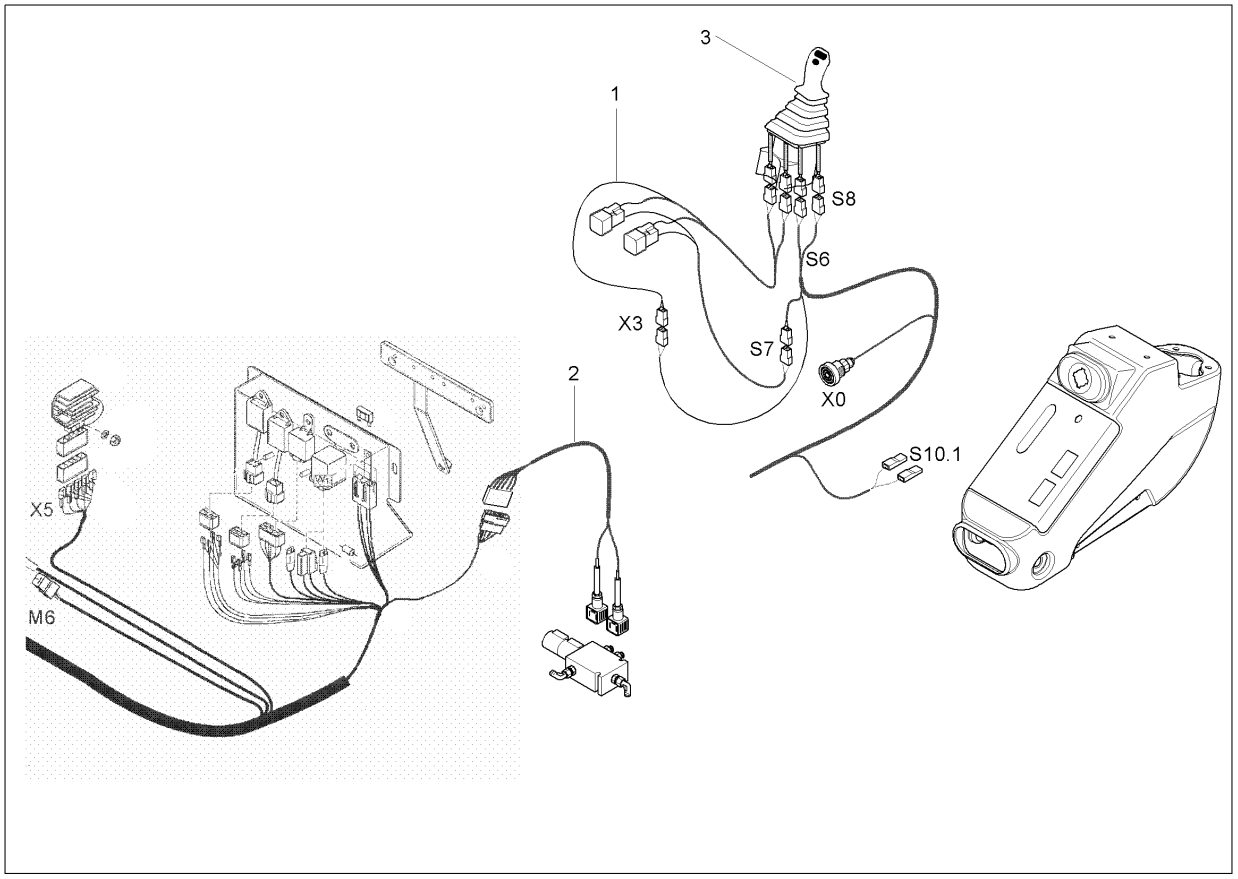


Ref. No.	Part No.	Description	Qty. Req.	Ref. No.	Part No.	Description	Qty. Req.
1	160537	WORKING LIGHT	2	5	656093	CS M 8-1.25 X 16 C8.8 ZO	2
2	161367	HALOGEN LAMP	2	6	178702	HEADLIGHT ANGLE	2
3	161667	WASHER/GR A 8.4 ZO	2	7	178707	CABLE	1
4	163670	WASHER	2	8	178916	SWITCH WORKING LIGHT	1

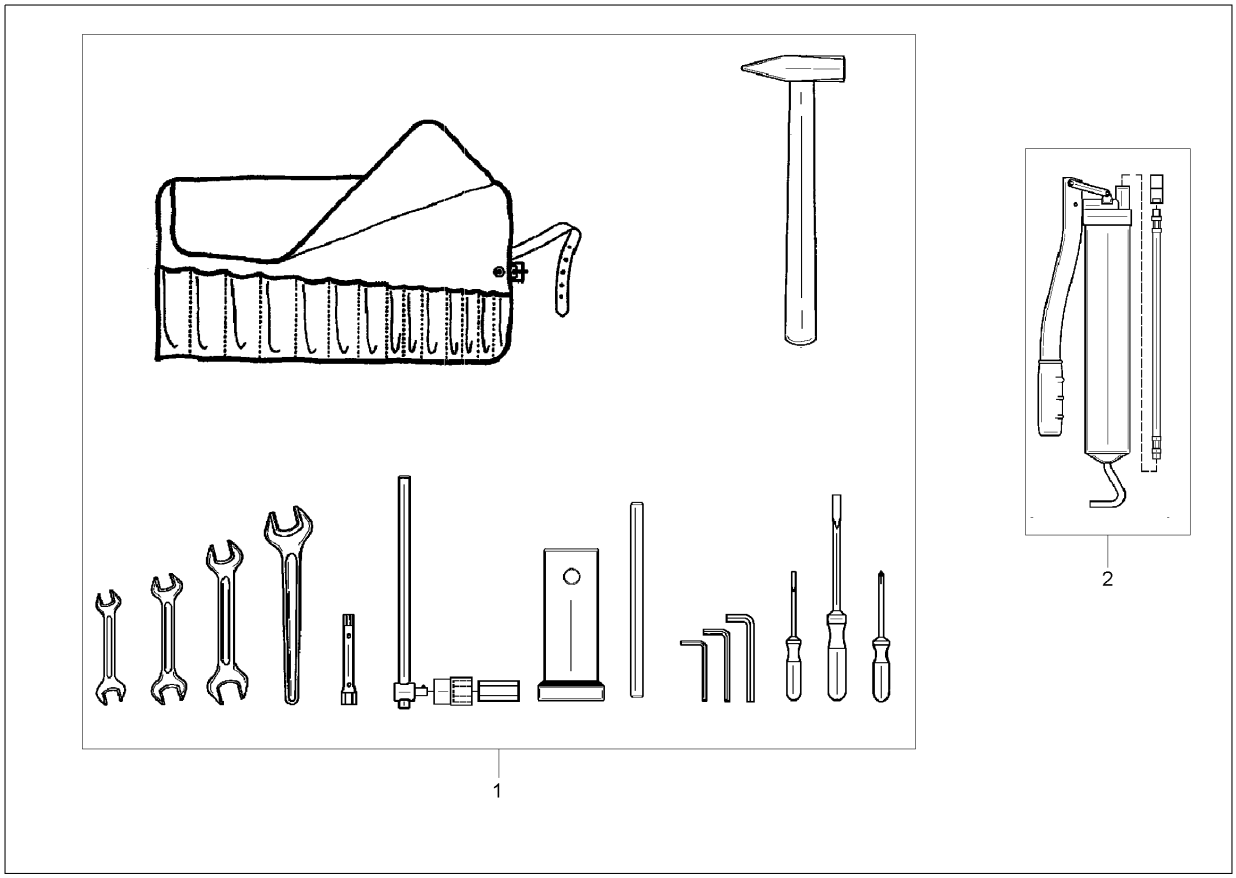


Ref. No.	Part No.	Description	Qty. Req.	Ref. No.	Part No.	Description	Qty. Req.
1	161366	HORN	1	4	163670	WASHER	1
2	161616	NUT/CAGE M8	1	5	163634	WASHER	1
3	656001	CS M 8-1.25 X 20 C8.8 ZO	1				

193/223 - ELECTR. AUXILIARY HYDRAULICS - HARNESSES ET1940950



Ref. No.	Part No.	Description	Qty. Req.	Ref. No.	Part No.	Description	Qty. Req.
1	165049	WIRE HARNESS	1	3	165044	HANDLE	1
2	1424441G	WIRE HARNESS CONNECTOR	1				



Ref. No.	Part No.	Description	Qty. Req.	Ref. No.	Part No.	Description	Qty. Req.
1	9706079G	TOOL KIT	1	2	161992	GREASE GUN	1

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163670	90	20	164663	65	04	164854	04	22	165073	52	08
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163670	97	08	164666	67	27	164868	124	16	165110	52	09
163670	98	08	164668	39	41	164894	36	13	165111	69	12
163670	123	08	164671	40	06	164894	44	06	165113	69	20
163670	128	14	164671	41	06	164897	52	15	165114	123	15
163670	130	04	164673	39	19	164907	34	21	165135	13	05
163670	131	04	164675	40	05	164907	35	21	165145	13	07
163859	13	04	164675	41	05	164911	90	02	165146	08	39
163859	69	24	164677	34	03	164927	102	14	165146	09	41
163921	109	02	164677	35	03	164927	103	14	165146	10	36
163973	04	16	164677	36	03	164928	68	09	165146	11	38
163973	06	16	164678	34	07	164929	102	15	165146	12	14
163974	04	23	164678	35	07	164929	103	15	165146	13	15
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163975	04	17	164679	35	15	164945	72	04	165168	39	04
163975	06	17	164680	34	16	164945	73	06	165176	42	14
163976	04	18	164680	35	16	164945	122	08	165176	43	16
163976	06	18	164681	34	19	164964	52	05	165195	37	06
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164319	57	25	164689	42	16	165035	39	28	165206	39	12
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164381	63	05	164719	55	04	165040	86	07	165236	124	07
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164393	67	21	164771	35	06	165049	132	01	165274	53	14
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165452	94	04	165915	53	17	178274	34	33	178308	61	15
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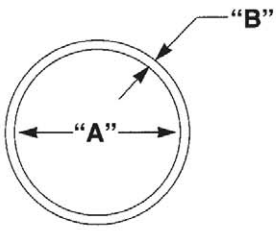
1423024G	83	18	1423449G	43	29	1425021G	49	33	1429108G	29	03
1423025G	81	22	1423450G	39	33	1425024G	26	31	1429109G	29	02
1423025G	83	23	1423453G	36	14	1425100G	52	02	1429414G	46	35
1423029G	87	12	1423453G	37	10	1425125G	53	04	1521001G	21	20
1423030G	87	13	1423454G	29	04	1425403G	47	02	1521009G	22	01
1423103G	28	01	1424401G	124	02	1425403G	64	17	1521150SKG	24	01
1423104G	28	02	1424404G	52	21	1425404G	53	13	1521183G	81	08
1423107G	37	03	1424410G	38	01	1425406G	48	14	1521183G	83	08
1423108G	42	15	1424411G	38	02	1425407G	49	01	1521185G	26	21
1423108G	43	17	1424414G	39	01	1425428G	47	27	1522042G	17	02
1423109G	43	19	1424418G	39	13	1427028G	30	31	1522042G	19	02
1423115G	29	05	1424419G	39	14	1428005G	14	05	1522050G	17	01
1423116G	37	04	1424420G	34	04	1428005G	96	01	1522050G	19	01
1423401G	46	02	1424420G	35	04	1428047G	69	16	1522068G	16	01
1423409G	34	22	1424420G	39	16	1428200G	70	11	1522069G	16	02
1423409G	35	22	1424423G	39	31	1428412G	31	15	1522078G	14	07
1423410G	34	23	1424423G	40	10	1428412G	32	15	1528002G	21	11
1423410G	35	23	1424423G	41	10	1428413G	31	14	1528002G	95	01
1423411G	34	25	1424424G	40	01	1428413G	32	14	1528005G	15	05
1423411G	35	25	1424424G	41	01	1428418G	71	01	1528005G	18	05
1423412G	34	26	1424425G	40	02	1428421G	82	02	1528005G	97	01
1423412G	35	26	1424425G	41	02	1428421G	84	02	1528005G	98	01
1423413G	34	27	1424426G	40	03	1428422G	82	03	1528015G	95	03
1423413G	35	27	1424426G	41	03	1428422G	84	03	1528017G	95	07
1423414G	34	28	1424427G	40	04	1428423G	82	04	1528050G	97	04
1423414G	35	28	1424427G	41	04	1428423G	84	04	1528050G	98	04
1423415G	34	31	1424431G	42	05	1428424G	82	05	1528051G	97	05
1423415G	35	31	1424431G	43	07	1428424G	84	05	1528051G	98	05
1423419G	39	30	1424432G	42	06	1428425G	82	06	1528059G	97	03
1423422G	36	01	1424432G	43	08	1428425G	84	06	1528059G	98	03
1423423G	36	12	1424433G	42	09	1428449G	96	15	1528402G	68	02
1423424G	36	05	1424433G	43	11	1428449G	97	15	1528403G	68	01
1423432G	39	03	1424434G	42	11	1428449G	98	15	1528404G	70	05
1423433G	34	12	1424434G	43	13	1428451G	81	26	1528405G	70	04
1423433G	35	12	1424441G	132	02	1428451G	83	27	1528406G	70	02
1423434G	35	13	1424446G	42	13	1429015G	51	08	1528407G	70	03
1423435G	35	14	1424446G	43	15	1429017G	29	06	1528410G	74	01
1423439G	39	02	1424447G	42	17	1429018G	29	08	1528411G	74	02
1423440G	39	06	1424447G	43	22	1429019G	29	12	1528412G	74	03
1423443G	39	35	1424450G	39	34	1429020G	29	09	1528413G	74	04
1423445G	39	38	1424453G	34	13	1429021G	29	07	1528414G	74	05
1423446G	43	26	1424454G	34	14	1429024G	29	13	1528415G	74	06
									1528416G	74	07

Part No.	Page No.	Ref. No.	Part No.	Page No.	Ref. No.	Part No.	Page No.	Ref. No.	Part No.	Page No.	Ref. No.
1528417G	74	08	2221001G	20	15	8003137G	117	06	9705523G	06	35
1528418G	74	09	2221002G	21	21	8004102G	105	03	9706079G	133	01
1528419G	74	10	2221003G	26	22	8004146G	104	01	9709266G	49	26
1528420G	74	11	2222015G	20	01	8004164G	105	10	9710003G	50	09
1528421G	74	12	2222018G	20	03	8004355G	107	01	9710041G	104	09
1528422G	74	13	2228006G	08	04	8004355G	108	01	9710041G	105	12
1528423G	74	14	2228006G	09	04	8004355G	118	01	9711076G	25	07
1528425G	69	23	2228006G	10	04	8004359G	116	06	9711076G	26	13
1528440G	74	15	2228006G	11	04	8004360G	118	07	9711076G	27	03
1529004G	26	14	2228006G	99	01	8004361G	104	08	9711076G	49	03
1529401G	70	07	2228010G	99	03	8004364G	104	06	9901115G	24	02
1529424G	97	07	2228011G	99	04	8004364G	105	09	9901152G	39	11
1529424G	98	07	2228013G	20	04	8004365G	104	07	9901277G	48	08
1529425G	95	09	2228013G	100	01	8004365G	105	11	9901345G	20	12
1902233G	12	01	2228014G	100	04	8004368G	102	08	9901346G	27	04
1908601G	72	10	2228406G	84	07	8004368G	103	08	9901348G	123	11
1908603G	72	07	2229004G	26	15	8004369G	105	02	9901392G	34	37
1908604G	72	08	2528024G	90	08	8004371G	106	07	9901392G	35	37
1908605G	72	11	2528024G	91	08	8004373G	105	08	9901417G	39	05
1921110G	88	04	2528024G	92	08	8004374G	106	05	9901427G	20	09
1922401G	08	18	2528024G	93	08	8004375G	121	02	9901617G	31	13
1922401G	10	18	2529457G	25	15	8005091G	121	03	9901617G	32	13
1922401G	11	18	2529457G	26	20	8005276G	102	02	9901666G	42	18
1925005G	49	02	3811016G	49	14	8005276G	103	02	9901666G	43	23
1925103G	51	06	8001851G	114	01	8005277G	102	03	9901673G	43	28
1925104G	51	01	8001863G	119	02	8005277G	103	03	9901732G	24	04
1925105G	51	05	8001863G	120	07	8005278G	118	08	9902111G	21	17
1927022G	30	26	8002124G	111	03	8005284G	102	05	9905073G	16	03
1927023G	30	22	8002307G	119	09	8005284G	103	05	9905073G	17	03
1927029G	30	21	8002307G	120	08	8006005G	101	01	9905073G	19	03
1927401G	31	17	8002308G	119	08	8006247G	102	06	9905074G	12	13
1927402G	33	20	8002309G	119	07	8006247G	103	06	9908057G	81	10
1927403G	32	17	8002309G	122	02	8009010G	119	01	9908057G	83	10
1928003G	33	09	8002310G	114	02	9705282G	04	29	9909013G	69	04
1928003G	94	01	8002311G	114	03	9705282G	06	29	9909039G	23	04
1928401G	70	01	8002312G	119	05	9705366G	04	33	9910286G	72	02
1928402G	70	06	8002312G	120	05	9705366G	06	33	9910340G	73	07
1928406G	82	07	8002315G	110	01	9705488G	04	28	9910346G	71	02
1929003G	31	09	8002315G	112	03	9705488G	06	28	9910513G	45	10
1929003G	32	09	8002315G	113	04	9705489G	04	31	9910598G	23	07
1929003G	33	12	8002323G	107	05	9705489G	06	31	9910612G	81	20
1929004G	30	10	8002323G	108	05	9705501G	04	32	9910612G	83	21
1929411G	99	07	8002331G	102	11	9705501G	06	32	9910617G	83	20
2003018G	34	36	8002331G	103	11	9705502G	04	34	9911064G	69	21
2003018G	35	36	8003037G	121	01	9705502G	06	34	9914015G	30	24
2208301G	100	02	8003132G	106	06	9705523G	04	35	9914140G	51	13
									16164323	20	10

Part No.	Page No.	Ref. No.	Part No.	Page No.	Ref. No.	Part No.	Page No.	Ref. No.	Part No.	Page No.	Ref. No.
425-36167	49	13	425-36147	47	20	425-36085	47	07	425-35265	64	07
425-36167	64	19	425-36145	47	11	425-36085	63	06	425-35265	67	17
425-36158	50	07	425-36145	55	01	425-35973	53	08	425-35264	47	13
425-36155	50	03	425-36144	47	09	425-35925	47	08	425-35264	64	01
425-36154	50	02	425-36142	47	16	425-35376	47	23	425-35207	47	10
425-36153	50	01	425-36142	64	11	425-35326	53	02	425-35207	57	24
425-36152	49	12	425-36142	67	18	425-35318	47	18	425-35207	67	11
425-36152	64	24	425-36141	47	03	425-35317	47	19	425-34853	49	19
425-36149	47	24	425-36141	64	15	425-35317	67	19	425-34753	47	12
425-36149	126	10	425-36121	55	03	425-35269	47	15	425-34707	47	06
425-36148	47	21	425-36101	50	10	425-35269	64	10	425-34683	47	05
425-36148	126	11	425-36091	53	09	425-35265	47	14	425-34683	64	05

O-RING TABLE



FITTING THREAD SIZE	DIAMETER "A"	DIAMETER "B"	GEHL PART NUMBER
9/16 - 18	0.468	0.078	055897
3/4 - 16	0.644	0.087	055896
7/8 - 14	0.755	0.097	055898
1-1/16 - 12	0.924	0.116	048953
1-5/16 - 12	1.171	0.116	058674
1-5/8 - 12	1.475	0.118	077970

Recommended Coupling & Adapter Installation Torque Specifications

For SAE "O" Ring Boss (Steel)

Size		Ft-Lbs (N·m)	
Dash	Fractional (In.)	Minimum	Maximum
-3	3/16	8 (11)	10 (14)
-4	1/4	14 (19)	16 (22)
-5	5/16	18 (24)	20 (27)
-6	3/8	24 (33)	26 (35)
-8	1/2	50 (68)	60 (81)
-10	5/8	72 (98)	80 (108)
-12	3/4	125 (169)	135 (183)
-14	7/8	160 (217)	180 (244)
-16	1	200 (271)	220 (298)
-20	1-1/4	210 (285)	280 (380)
-24	1-1/2	270 (366)	360 (488)

For JIC 37° and 45° (Machined or Flared)

Steel			
Size		Ft-Lbs (N·m)	
Dash	Fractional (In.)	Minimum	Maximum
-4	1/4	10 (14)	11 (15)
-5	5/16	13 (18)	15 (20)
-6	3/8	17 (23)	19 (26)
-8	1/2	34 (46)	38 (52)
-10	5/8	50 (68)	56 (76)
-12	3/4	70 (95)	78 (106)
-16	1	94 (127)	104 (141)
-20	1-1/4	124 (168)	138 (187)
-24	1-1/2	156 (212)	173 (235)
-32	2	219 (297)	243 (330)

TORQUE SPECIFICATIONS

NOTE: *Use these torque values when tightening **GEHL** hardware (excluding: Locknuts and Self-tapping, Thread Forming and Sheet Metal Screws) unless specified otherwise.*

All torque values are in Lb-Ft except those marked with an * which are Lb-In
(For metric torque value Nm, multiply Lb-Ft value by 1.355 or Lb-In value by 0.113)
(To convert Nm to Lb-Ft multiply by 0.738)

Unified National Thread	Grade 2		Grade 5		Grade 8	
	Dry	Lubed	Dry	Lubed	Dry	Lubed
8-32	19*	14*	30*	22*	41*	31*
8-36	20*	15*	31*	23*	43*	32*
10-24	27*	21*	43*	32*	60*	45*
10-32	31*	23*	49*	36*	68*	51*
1/4-20	66*	50*	9	75*	12	9
1/4-28	76*	56*	10	86*	14	10
5/16-18	11	9	17	13	25	18
5/16-24	12		19	14		20
3/8-16	20	15	30	23	45	35
3/8-24	23	17	35	25	50	
7/16-14	32	24	50	35	70	55
7/16-20	36	27	55	40	80	60
1/2-13	50	35	75	55	110	80
1/2-20	55	40	90	65	120	90
9/16-12	70	55	110	80	150	110
9/16-18	80	60	120	90	170	130
5/8-11	100	75	150	110	220	170
5/8-18	110	85	180	130	240	180
3/4-10	175	130	260	200	380	280
3/4-16	200	150	300	220	420	320
7/8-9	170	125	430	320	600	460
7/8-14	180	140	470	360	660	500
1-8	250	190	640	480	900	680
1-14	270	210	710	530	1000	740
Metric Course Thread	**Grade 8.8**		**Grade 10.9**		**Grade 12.9**	
	Dry	**Lubed**	**Dry**	**Lubed**	**Dry**	**Lubed**
M6-1	8	6	11	8	13.5	10
M8-1.25	19	14	27	20	32.5	24
M10-1.5	37.5	28	53	39	64	47
M12-1.75	65	48	91.5	67.5	111.5	82
M14-2	103.5	76.5	145.5	108	176.5	131
M16-2	158.5	117.5	223.5	165.5	271	200

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