

**GEHL**®

Form No.  
918036  
Revision D  
June 2009

# Model 223

## Compact Excavator

### Serial Number Range

Engine Tier I Models: **AD00454 to AD04180**

Engine Tier II Models: **AE00001 and Up**



# Parts Manual

# 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 cab.

“Right” and “left” are determined from a position sitting on the operator’s seat and facing forward.

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 special parts descriptions. Standard attaching hardware torque values are also provided near the back of this manual. Metric torque values shown in the illustrations are in Newton-meters and are converted to foot-pounds by multiplying by 0.738.

Specific reference numbers, indicating a complete assembly, are circled in some illustrations. A small bag, pictured in some illustrations, indicates a seal kit (seals, o-rings, etc.). In the exploded view parts list, additional information may follow the Reference Number.

Serial number breaks are indicated as follows:

- (SN 999 and before) - indicates serial numbers up to and including 999.
- (SN 1000 - 2000) - indicates serial numbers between 1000 and 2000.
- (SN 999 and up) - indicates serial numbers including 999 and after.

Serial number exceptions and inclusion are indicated as follows:

- (SN 999 and before except 997) - indicates serial numbers up to and including 999, EXCEPT 997.
- (SN 1000 - 2000 except 1996 including 997) - indicates serial numbers between 1000 and 2000, INCLUDING 997 EXCEPT 1996.

- (SN 2001 and up including 1996) - indicates serial numbers including 2001 and after, INCLUDING 1996.

Unless otherwise specified, all cap screws and bolts are Grade 8.8, cadmium or zinc plated.

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

ASSD	Assembled
ASSY	Assembly
AR	As Required
CB	Carriage Bolt
CP	Cotter Pin
CS	Cap Screw (Hexagon Head)
CYL	Cylinder
DIA	Diameter
DIN	Deutsches Institut für Normung
FHCS	Flat Head Cap Screw
GR	Grade
HB	Hex Bolt
HLN	Hex Lock Nut
HN	Hex Nut
HP	High Pressure
HYD	Hydraulic
INS	Insert
LH	Left Hand
LN	Lock Nut
LT	Left
LW	Lock Washer
M	Meter or Meters
MM/mm	Millimeter
NPT	National Pipe Threaded
NSS	Not Sold Separately
OS	Oversize
RH	Right Hand
RT	Right
SHCS	Socket Head Cap Screw
SLTD	Slotted
SN	Serial Number or Slotted Nut
SQ	Square
US	Undersize
W/	With
W/O	Without
ZO	Zinc Oxide
ZY	Zinc Yellow

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## NOTES

# 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. The listing includes decal illustration reference number, part number, description and quantity information. Refer to the illustrations for appropriate replacement locations.

To ensure proper selection of the correct replacement decals, compare all of the various closeup location drawings to the machine before starting to refinish the unit. Then circle each decal shown (applicable to the machine) while checking off its part number in the listing. After verifying 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

If there is a decal on a part that is to be replaced, be sure that the decal is applied to the replacement part. 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 the unit.**

### PAINT NOTICE

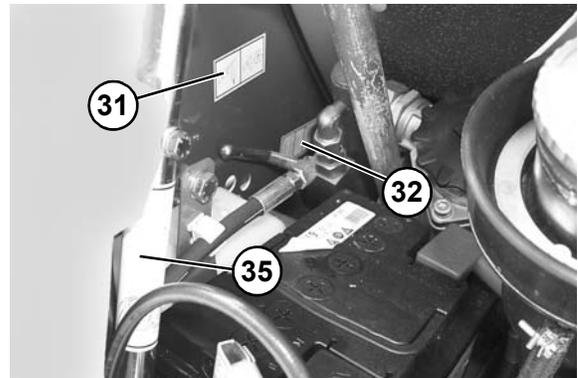
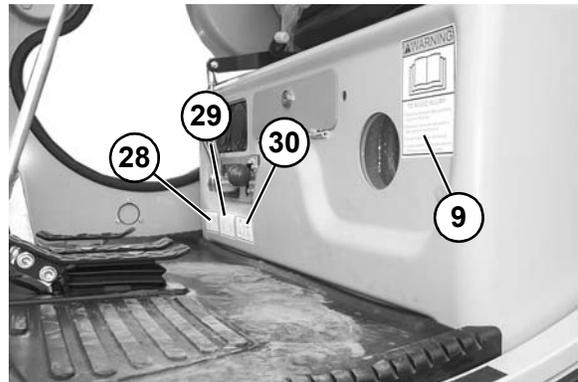
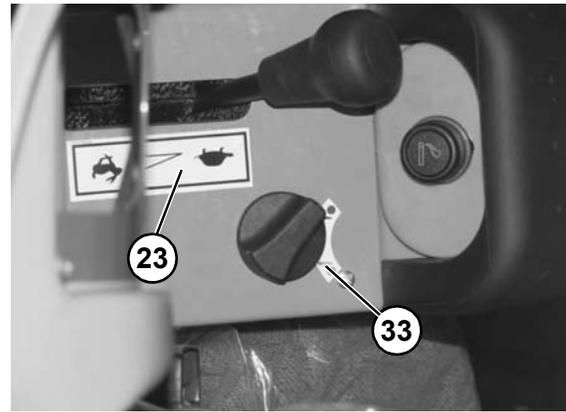
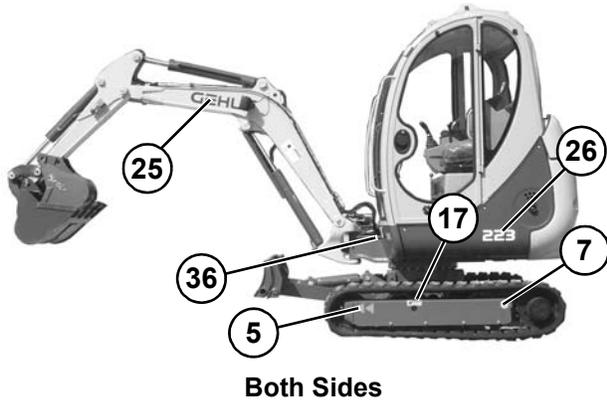
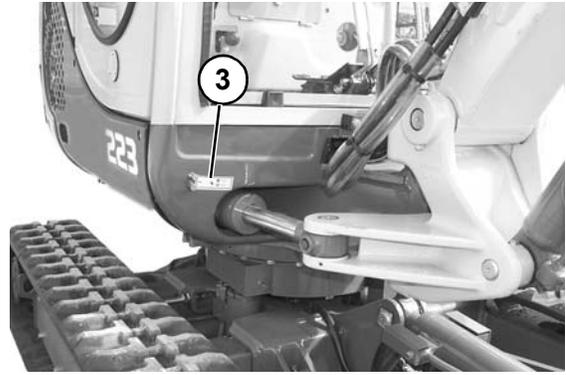
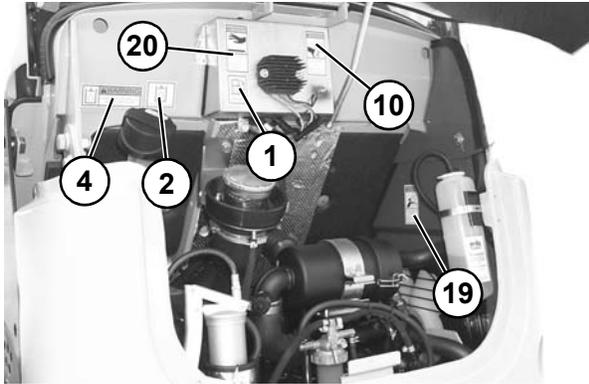
Use this list to order paint for refinishing:

<b>167788</b>	<b>4 qts. Construction Yellow (GEHL)</b>
<b>167780</b>	<b>4 qts. Light Gray (GEHL)</b>
<b>167774</b>	<b>4 qts. Dark Gray (GEHL)</b>
<b>167789</b>	<b>6 (12.8 oz. Spray Cans) Yellow (GEHL)</b>
<b>167775</b>	<b>6 (12.8 oz. Spray Cans) Dark Gray (GEHL)</b>
<b>167781</b>	<b>6 (12.8 oz. Spray Cans) Light Gray (GEHL)</b>

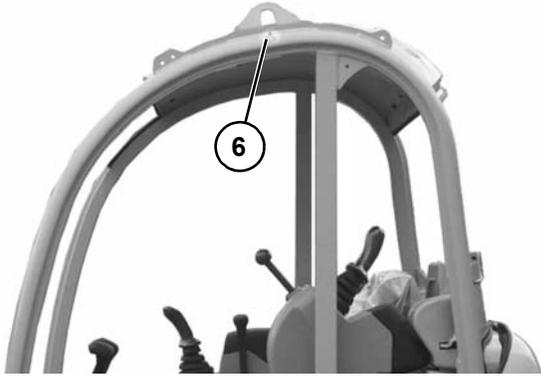
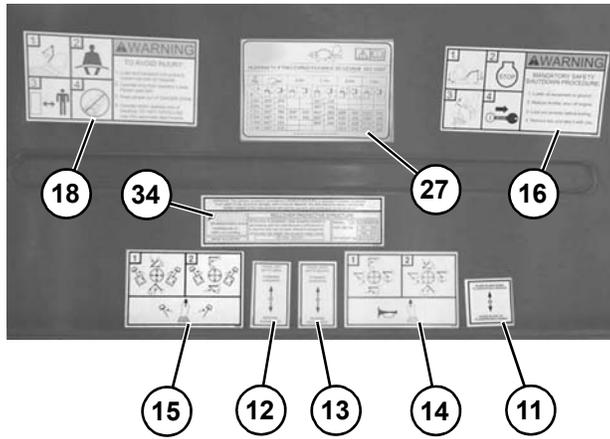
The decal kit for the model 223 Compact Excavator is listed below:

Ref. No.	Part No.	Description & Quantity
	165993	Kit/Decal GE223
1	161965	Decal/Diesel Fuel
2	161966	Decal/Hydraulic Oil
3	161967	Decal/Lubrication
4	161969	Decal/Warning Hyd Reservoir
5	161970	Decal/Arrow (2 places)
6	161981	Decal/Lift Point (4 places)
7	161982	Decal/Tiedown Point (4 places)
8	161985	Decal/Warning Keep Away (2 places)
9	161986	Decal/Warning Read Manual
10	161987	Decal/Warning Rotating Fan (2 places)
11	162449	Decal/Dozer Blade Up-Down
12	162450	Decal/Travel Left
13	162451	Decal/Travel Right
14	162452	Decal/Joystick Control Right
15	162453	Decal/Joystick Control Left
16	163973	Decal/Warning Mandatory Shutdown
17	163975	Decal/Warning Avoid Injury (2 places)
18	163976	Decal/Warning Avoid Injury
19	163977	Decal/Warning Entanglement Hazard
20	163978	Decal/Warning Hot Surface
21	206032	Decal/Reflector (2 places)
22	164854	Decal/Warning Avoid Injury (Cabin models only)
23	163974	Decal/Throttle Speed
24	183935	Decal/Gehl 5.50 x 23.34
25	183963	Decal/Gehl 3.75 x 15.92 (2 places)
26	170179	Decal/223 (2 places)
27	203794	Decal/Lifting Capacity
28	9705488G	Decal/Swing Lock
29	9705282G	Decal/Track Spread
30	162458	Decal/Cabin Tilt
31	9705489G	Decal/Return Flow Control
32	9705501G	Decal/ISO-SAE Valve
33	9705366G	Decal/Heater (Cabin Models only)
34	9705502G	Decal/ROPS-FOPS
35	9705523G	Decal/Cabin Support
36	104833	Decal/ Gehl 2.00 x 8.49 (white)

# DECAL LOCATIONS

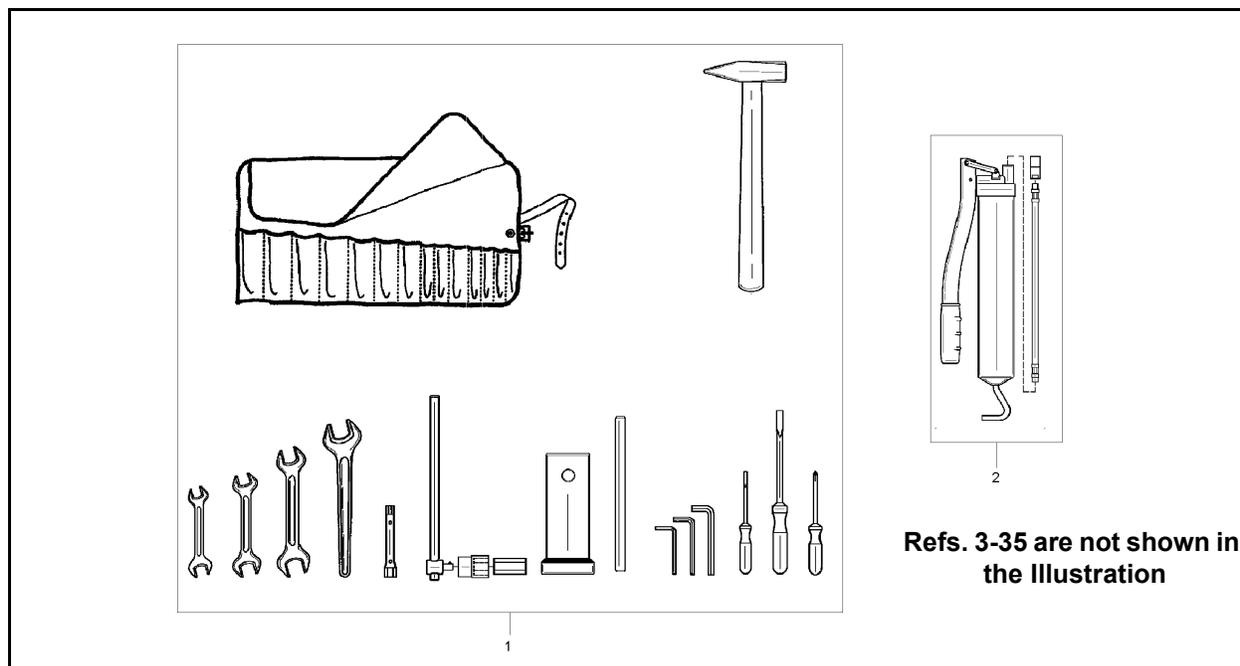


# DECAL LOCATIONS



## NOTES

**223 - TOOLS / SERVICE KITS**  
**1000135878**



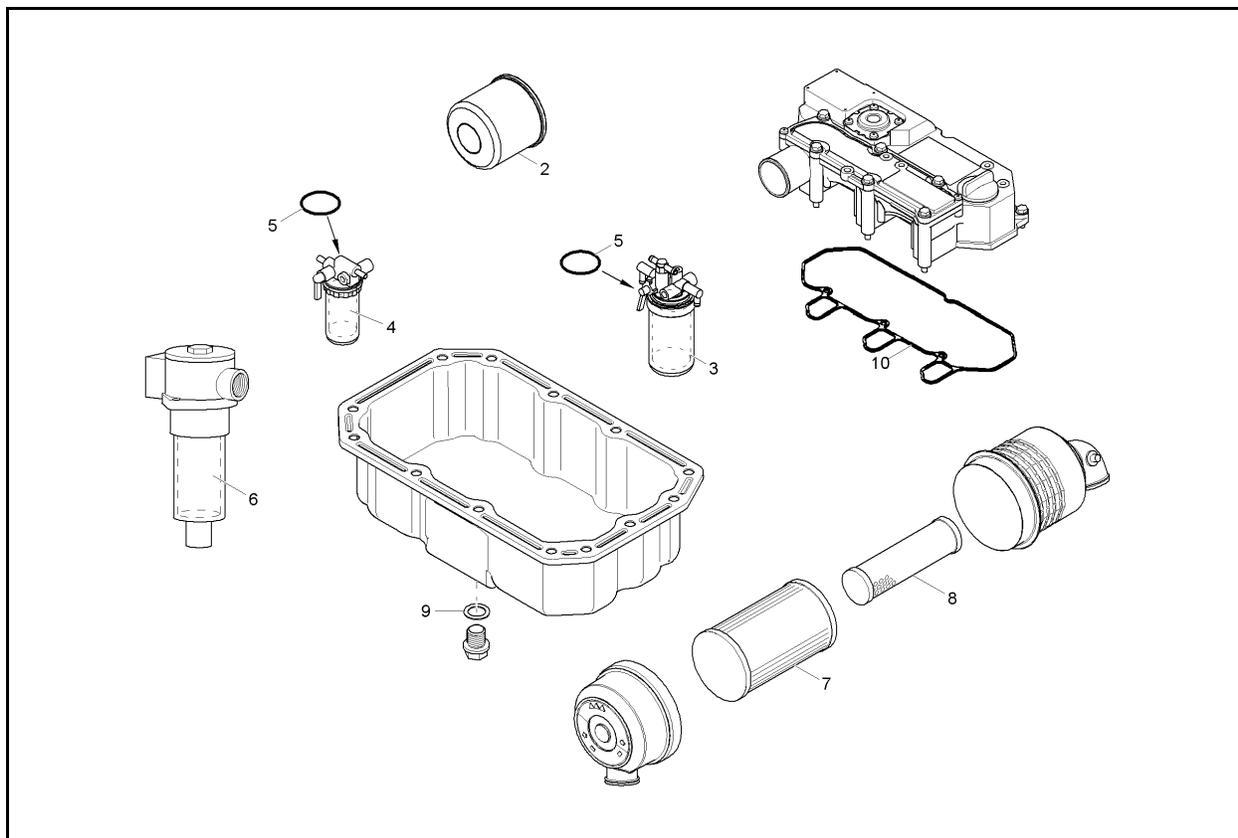
Ref. No.	Part No.	Description	Qty.
1	9706079G	TOOL KIT	1
2	161992	GREASE GUN	1
3	184467	HYDRAULIC GAUGE KIT	1
4	186011	TEST PORT, 4MP-M16X2, 1/4 NPT	1
5	183877	TEST PORT, 3/4-16 UNF	1
6	184472	TEST GAUGE, 1000PSI	1
7	184473	TEST GAUGE, 6000PSI	1
8	184475	TEST HOSE, 120" (Used with Gauge Kits)	1
9	184476	ADAPTER, 4FP-M16X2BLKHD (Used with Gauge Kits)	1
10	184474	TEST GAUGE, 10,000PSI	1
11	420-34912	ROD SEAL INSTALL TOOL, 3/4" X 1-1/4" DIAMETER SEALS	1
12	420-34913	ROD SEAL INSTALL TOOL, 1-1/2" X 2" DIAMETER SEALS	1
13	420-34914	ROD SEAL INSTALL TOOL, 2" X 3" DIAMETER SEALS	1
14	272814	OIL VACUUM PUMP (incl. in Engine Oil Analysis Kit)	1
15	272815	COOLANT VACUUM PUMP (incl. in Coolant Analysis Kit)	1
16	272816	1/4" PLASTIC TUBING, 100' (incl. in Analysis Kit)	1
17	195344	TRAIN KIT TOOL (Yanmar TNV)	1
18	195345	INJECTOR PULLER (Yanmar; Wrench-type)	1
19	195346	INJECTOR PULLER (Yanmar; Slide-hammer adapter)	1
20	195348	TIMING KIT TOOL (Yanmar TNV)	1

Ref. No.	Part No.	Description	Qty.
21	195387	DIAL INDICATOR (incl. in 195348 Timing Kit Tool)	1
22	195388	30MM EXT ROD (incl. in 195348 Timing Kit Tool)	1
23	195389	M14 ADAPTOR (incl. in 195348 Timing Kit Tool)	1
24	195390	M16 ADAPTOR (incl. in 195348 Timing Kit Tool)	1
25	195391	ADAPTOR NUT (incl. in 195348 Timing Kit Tool)	1
26	195392	CLAMP (incl. in 195348 Timing Kit Tool)	Set of 2
27	195393	COMPRESSION ADAPTOR TOOL (Yanmar; TNE78—TNE106, TNV82/84/88)	1
28	195394	COMPRESSOR ADAPTOR TOOL (Yanmar; 4TNV94/91/106)	1
29	195395	1/4NPT ADAPTOR TOOL (Yanmar)	1
30	241766	DIAGNOSTIC TOOL (Yanmar TNV Tier III)	1
31	272813	FIELD TEST COOLANT STRIP (1 Kit from Coolant Analysis Kit)	1
32	272806	HYDRAULIC OIL ANALYSIS KIT (GEHL)	Set of 10
33	272809	ENGINE OIL ANALYSIS KIT (GEHL)	Set of 10
34	272811	FUEL ANALYSIS KIT (GEHL)	1
35	272812	COOLANT ANALYSIS KIT (GEHL)	Set of 10

**\*Analysis Kits - Contact your dealer.**

# 223 - FILTERS, GASKETS AND SEALS

1000148608

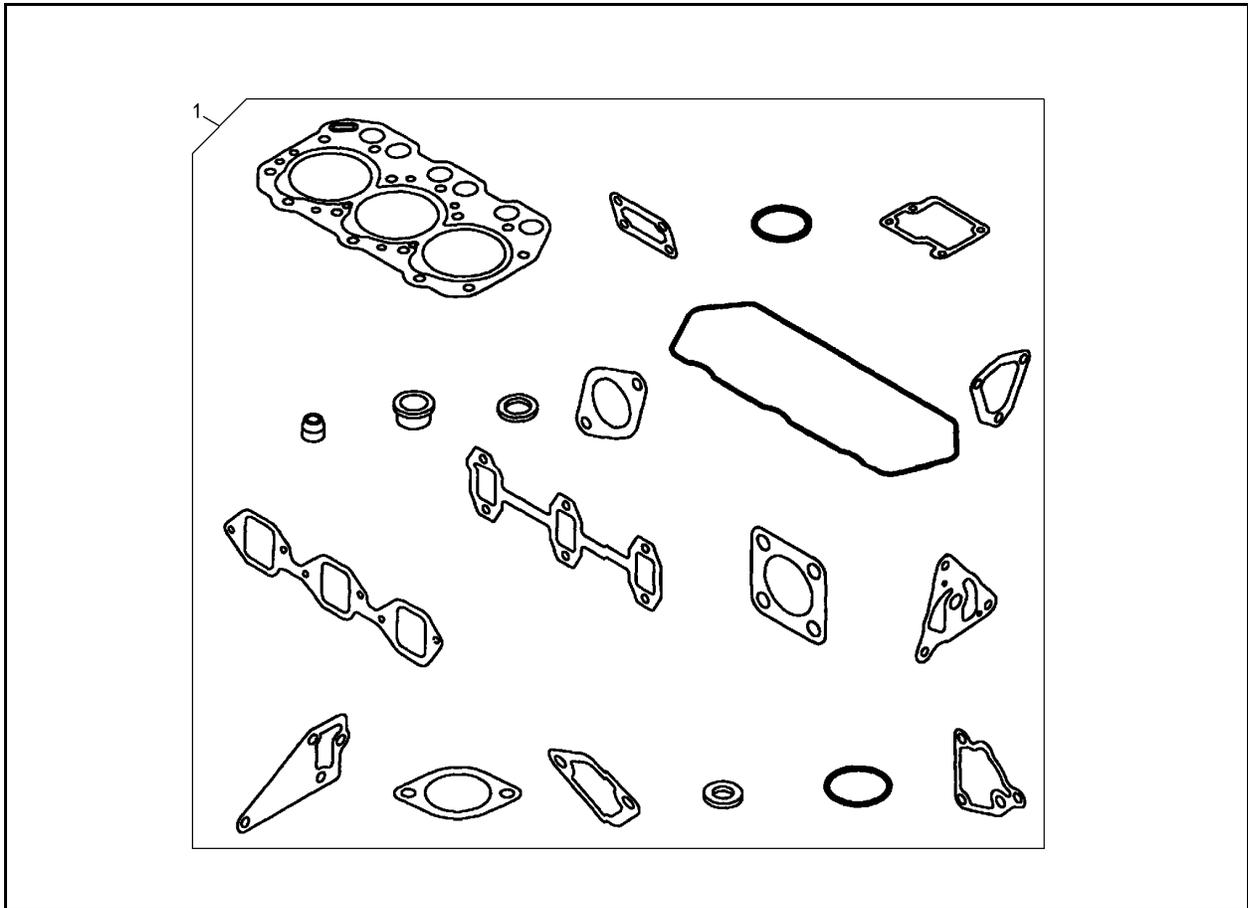


Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
2	178677	ENGINE OIL FILTER	1	8	206304	AIR FILTER/INNER* (SN AE00001 AND UP)	1
3	206299	FUEL FILTER ELEMENT (SN AE00001 AND UP)	1	9	206249	SEAL RING (SN AE00001 AND UP)	1
	425-35326	ELEMENT/FUEL (SN AD00454 - AD04180)	1		164719	PLUG GASKET (SN AD00454 - AD04180)	1
4	425-36091	SEPARATOR FILTER ELEMENT	1	10	206227	VALVE COVER SEAL (SN AE00001 AND UP) (SHOWN)	1
5	206912	O-RING	2		425-35207	GASKET/BONNET (SN AD00454 - AD04180)	1
6	165111	HYDRAULIC OIL FILTER ELEMENT	1				
7	206303	AIR FILTER/OUTER (SN AE00001 AND UP)	1				
	425-36154	ELEMENT/AIR CLEANER (SN AD00454 - AD04180)	1				

\* Inner element not used on SN AD00454 - AD04180

# 223 - SEAL KIT

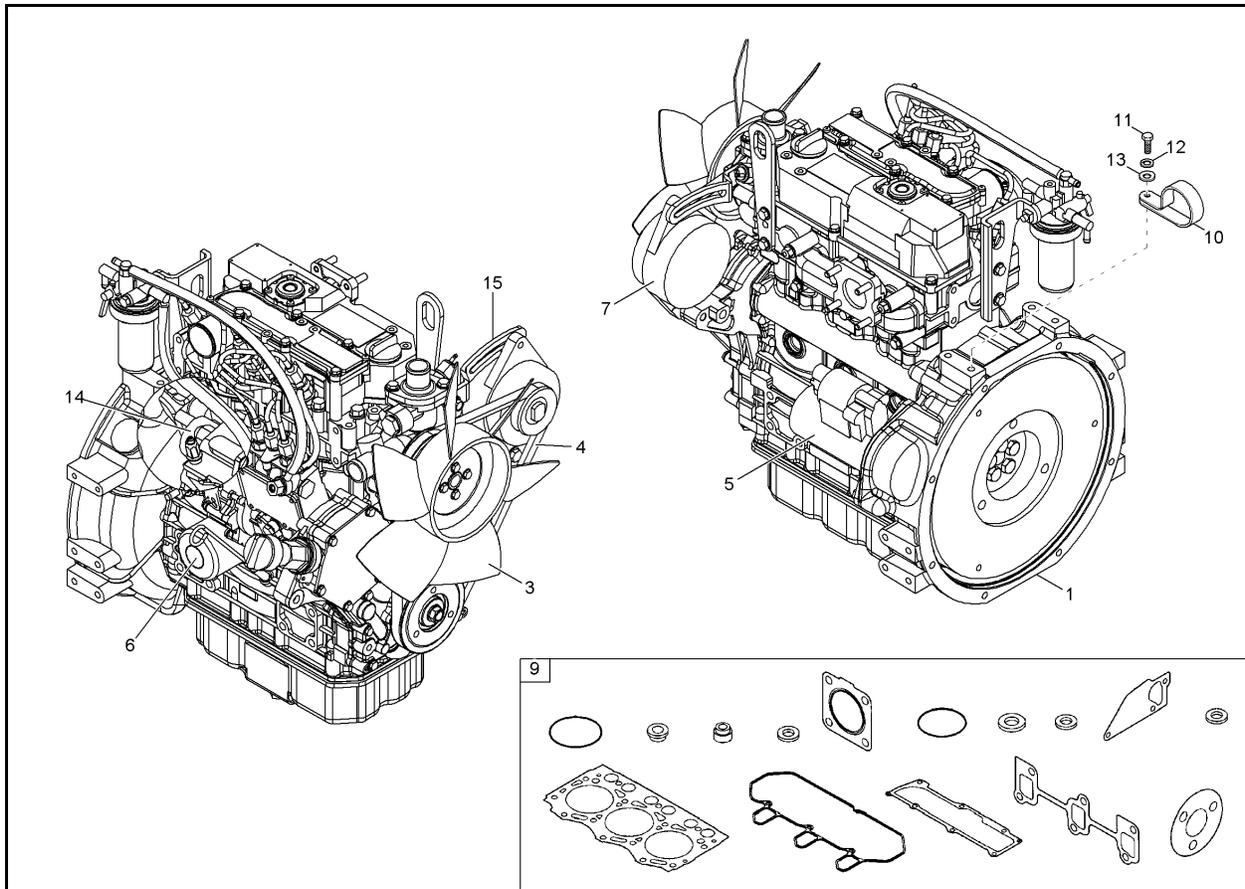
1000131597 - (SN AD00454 - AD04180)



Ref.	No.	Part No.	Description	Qty.
	1	1405422G	SEAL KIT	1

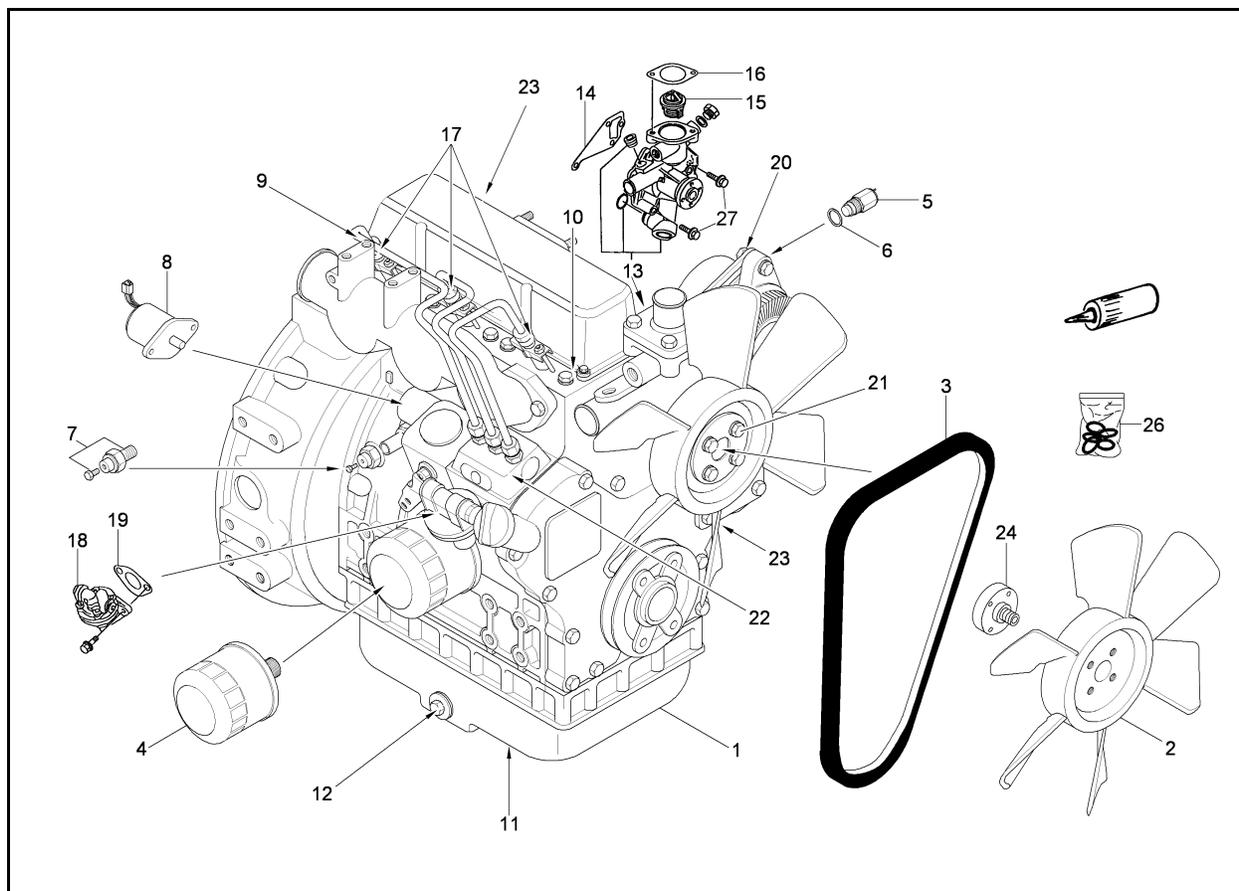
## NOTES

**223 - DIESEL ENGINE**  
**1000148603 - (SN AE0001 AND UP)**



Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	206203	DIESEL ENGINE (YANMAR 3TNV76-SNS)	1	10	206210	HOSE CLAMP	1
3	206204	VENTILATION FAN	1	11	656006	CS M10-1.5X20 C8.8 ZY DIN931	1
4	206205	FAN BELT	1	12	161669	LOCKWASHER S10	1
5	206206	STARTER	1	13	161640	WASHER/GR A 10.5	1
6	178677	ENGINE OIL FILTER	1	14	189575	SOLENOID/STOP	1
7	206207	ALTERNATOR	1	15	206208	CLAMP BAR/ALTERNATOR ADJUSTING	1
9	206209	SEAL KIT	1				

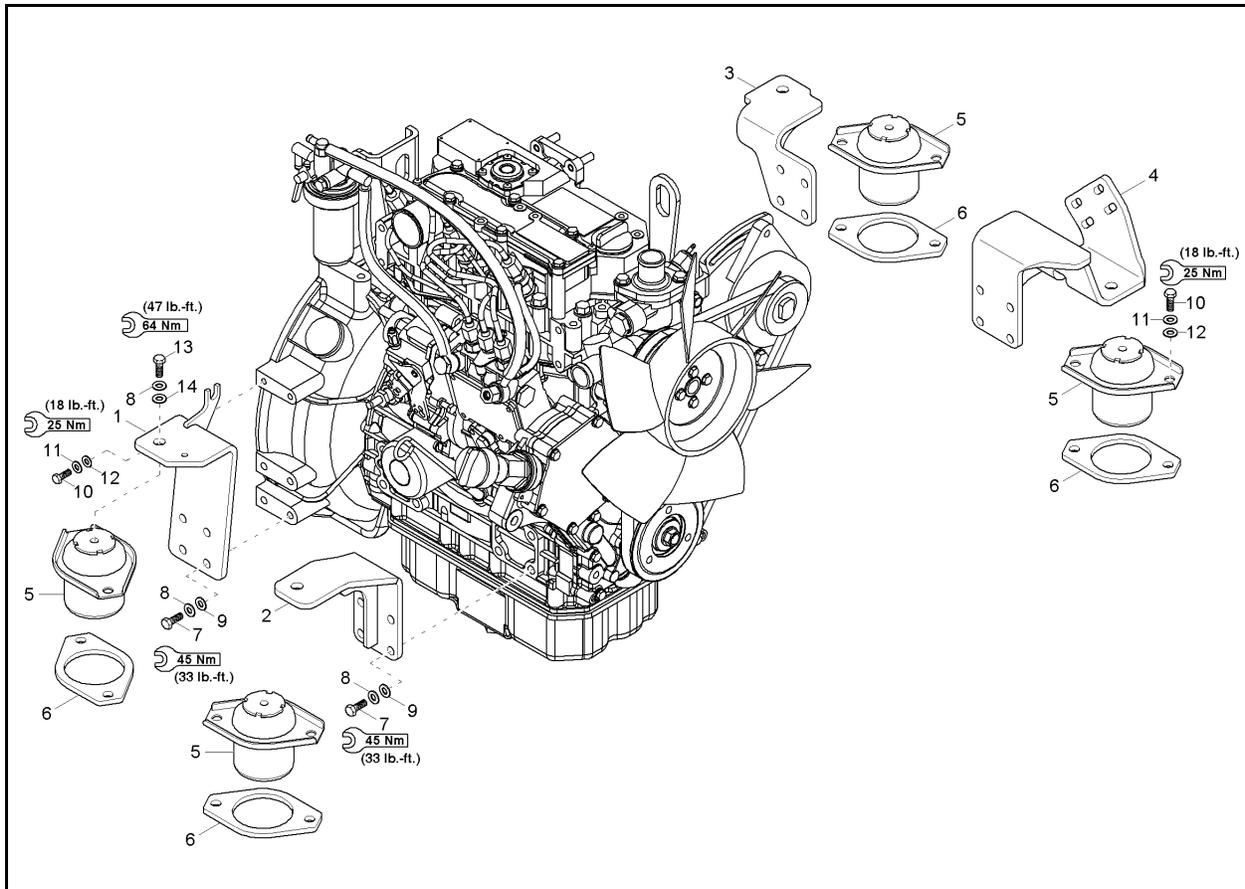
## 223 - DIESEL ENGINE 1000131576 - (SN AD00454 - AD04180)



Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	1405426G	DIESEL ENGINE (YANMAR 3TNE74-ENSR2)	1	14	425-35265	GASKET/WATER PUMP	1
2	1425403G	FAN	1	15	425-35269	THERMOSTAT	1
3	425-36141	BELT/FAN	1	16	425-36142	GASKET	1
4	178677	ENGINE OIL FILTER	1	17	178688	INJECTION NOZZLE	3
5	425-34683	SENSOR/THERMOSTAT 110° C	1	18	425-35318	FUEL PUMP ASSEMBLY	1
6	425-34707	SEAL	1	19	425-35317	GASKET/FUEL PUMP	1
7	425-36085	SENDER/OIL PRESSURE	1	20	425-36147	GENERATOR	1
8	425-35925	SOLENOID STOP	1	21	162025	SCREW	4
9	178321	CYLINDER HEAD SEAL	1	22	178687	INJECTION PUMP	1
10	425-35207	GASKET/BONNET	1	23	425-35376	STARTER	1
11	425-36145	SUMP ASSY/LUB OIL	1	24	1425428G	FAN SPACER	1
12	425-34753	PLUG/OIL DRAIN	1	26	1405422G	SEAL KIT	1
13	425-35264	WATER PUMP ASSEMBLY	1			See page 10 for individual components	

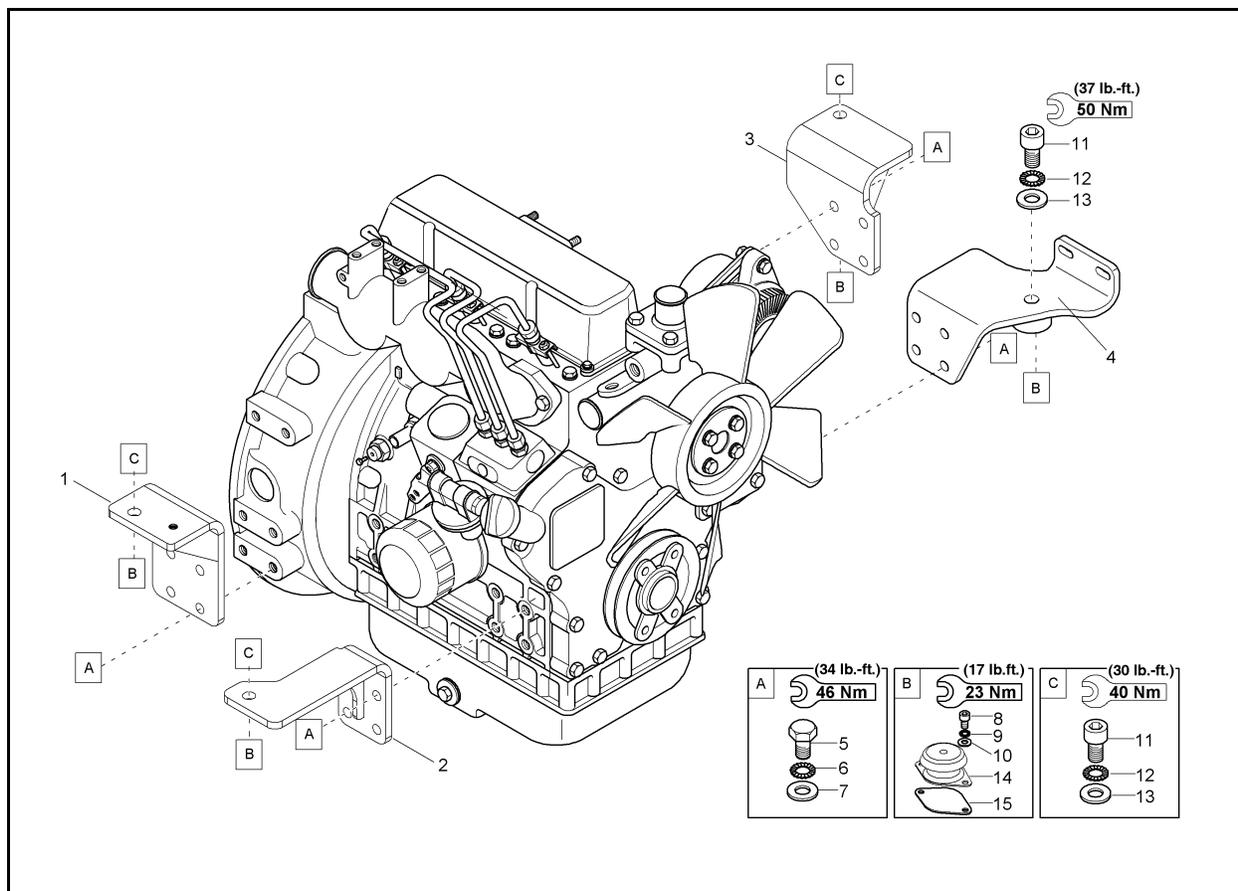
# 223 - ENGINE MOUNTS

## 1000148832 - (SN AE0001 AND UP)



Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	206196	ENGINE MOUNT	1	8	161669	LOCKWASHER S10	20
2	206197	ENGINE MOUNT	1	9	161640	WASHER/GR A 10.5	16
3	206198	ENGINE MOUNT	1	10	177648	HEX SCREW	10
4	206199	ENGINE MOUNT	1	11	163670	LOCKWASHER	10
5	160645	MOTOR MOUNT	4	12	206301	SPACER	10
6	206200	SUPPORT PLATE	4	13	651395	CS M10-1.5X30 C10.9 ZY DIN931	4
7	651393	CS M10-1.5X25 C8.8 ZY	16	14	163642	WASHER	4

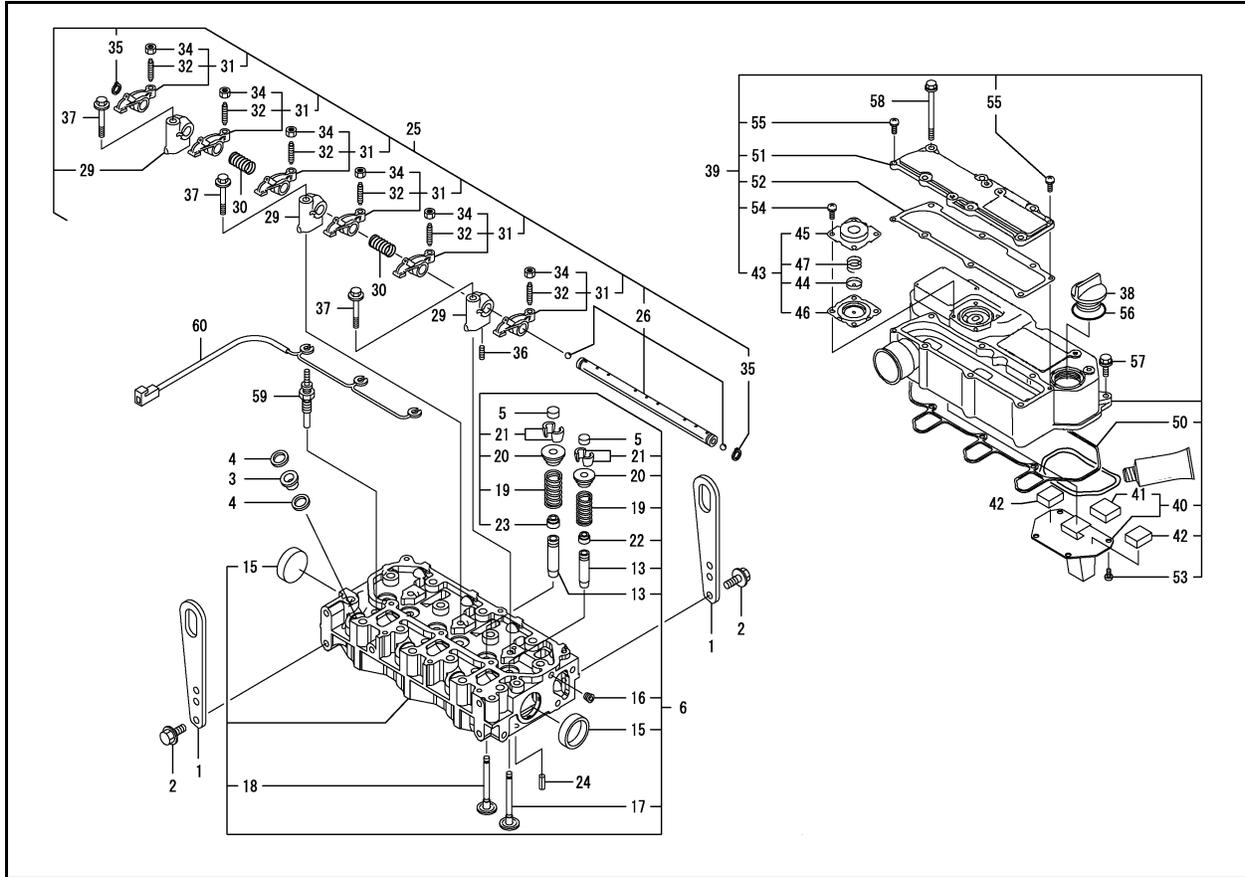
## 223 - ENGINE MOUNTS 1000131457 - (SN AD00454 - AD04180)



Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	1425001G	ENGINE MOUNT	1	9	163670	LOCKWASHER	8
2	1425011G	ENGINE MOUNT	1	10	163634	WASHER	8
3	1425010G	ENGINE MOUNT	1	11	656148	FHSCS M12-1.75X40 C10.9 ZY DIN7991	4
4	1425002G	ENGINE MOUNT	1	12	163651	WASHER	4
5	651393	CS M10-1.5X25 C8.8 ZY	16	13	161644	WASHER/GR A 13 DIN134	4
6	161669	LOCKWASHER S10	16	14	1425406G	VIBRATION MOUNT	4
7	161640	WASHER/GR A 10.5	16	15	1425014G	BRACKET (SN AC00681 AND BEFORE)	4
8	9901277G	SCREW	8				

# 223 - CYLINDER HEAD, VALVE COVER

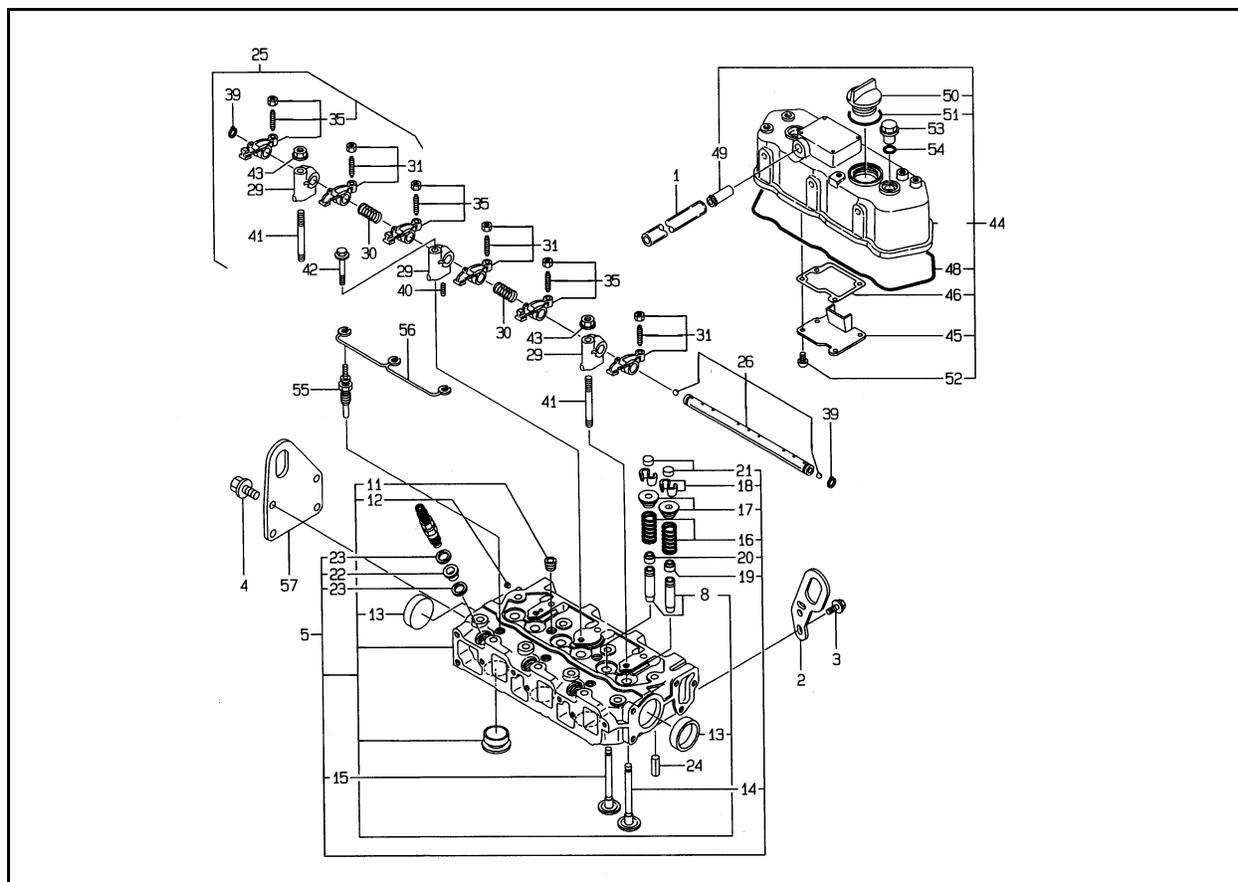
## 1000148833 - (SN AE0001 AND UP)



Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	188679	LIFT BRACKET	2	35	425-35203	CIRCLIP 12	2
2	425-34733	BOLT M8 X 16 PLATED	4	36	425-35204	SCREW M5 X 16	1
3	425-34733	GUARD	3	37	188742	BOLT M8 X 40 PLATED	3
4	425-35195	SEAL	6	38	425-34740	FILLER CAP	1
5	203103	VALVE CAP	6	39	203118	VALVE COVER	1
6	203104	CYLINDER HEAD	1	40	203119	BAFFLE PLATE	1
13	197458	VALVE	6	41	203120	BAFFLE BREATHER	1
15	203105	PLUG	2	42	203120	BAFFLE BREATHER	2
16	138124	PLUG NPT1/16 SCREW	1	43	203121	DIAPHRAGM	1
17	206214	INTAKE VALVE	3	44	188465	PLATE/DIAPHRAGM	1
18	203107	EXHAUST VALVE	3	45	188466	COVER/DIAPHRAGM	1
19	203108	SPRING	6	46	203122	DIAPHRAGM	1
20	197523	SPACER	6	47	188469	SPRING/DIAPHRAGM	1
21	197455	CLAMP	12	50	203123	VALVE COVER SEAL	1
22	197456	VALVE STEM SEAL	3	51	203124	BONNET COVER	1
23	197457	VALVE STEM SEAL	3	52	203125	SEAL	1
24	425-34783	SPRING PIN 6 X 12	2	53	186598	SCREW 5 X 10 TAPPING	4
25	203114	SHAFT	1	54	186598	SCREW 5 X 10 TAPPING	4
26	203115	ROCKER ARM SHAFT	1	55	197787	SCREW 5 X 16	2
29	203116	ROCKER ARM SUPPORT	3	56	425-34745	O-RING	1
30	425-35202	SPRING, ARM SHAFT	2	57	188732	BOLT M6 X 20 PLATED	3
31	203117	ROCKER ASSY	6	58	203127	BOLT M6 X 75 PLATED	6
32	188596	SCREW, VALVE	6	59	203128	GLOW PLUG	3
34	425-34791	NUT M8 X P-1.0	6	60	203129	GLOW PLUG CONNECTOR	1

## 223 - CYLINDER HEAD, VALVE COVER

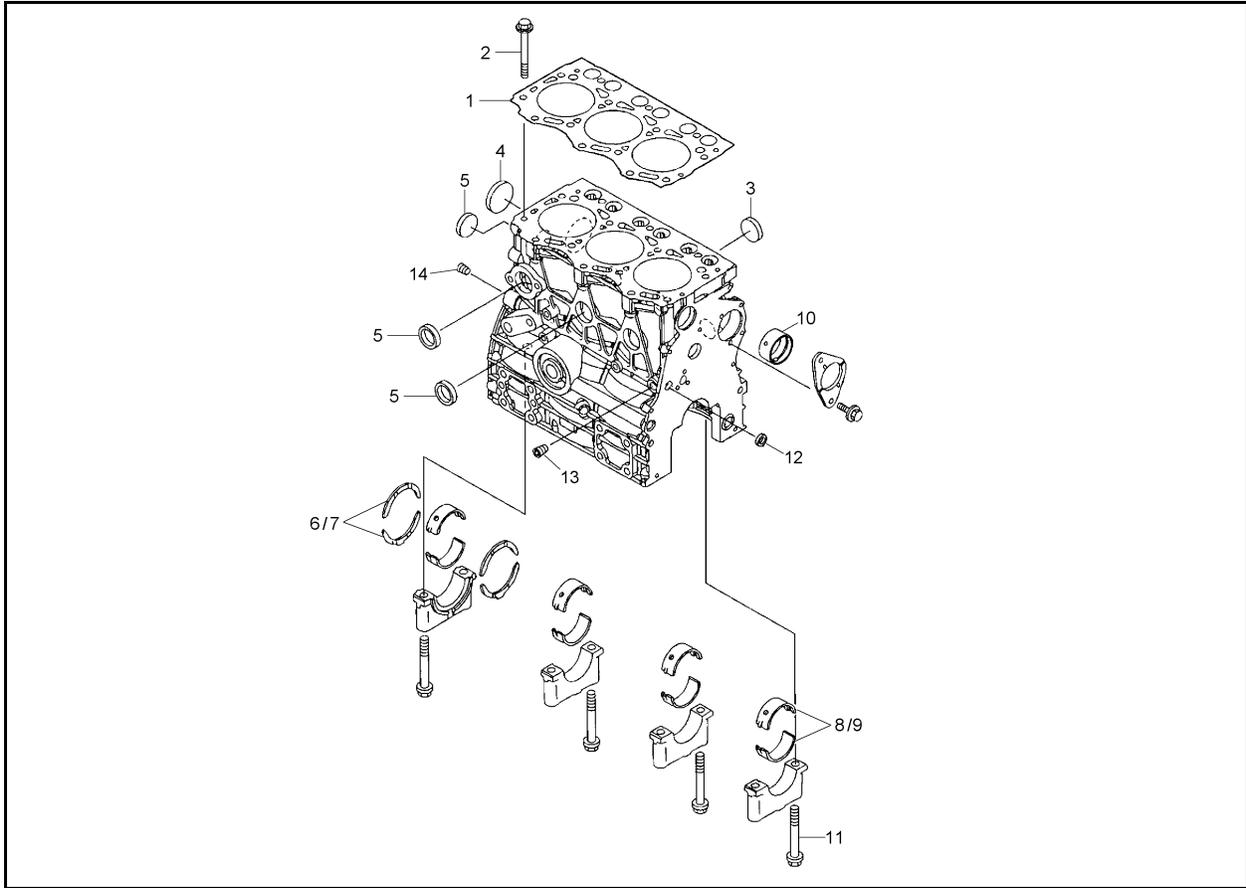
1000131587 - (SN AD00454 - AD04180)



Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	425-35212	HOSE	1	29	425-35201	SUPPORT, ROCKER ARM	3
2	178325	CONNECTING LINK	1	30	425-35202	ARM SHAFT SPRING	2
3	188736	SCREW	1	31	425-35198	ARM ASSEMBLY, ROCKER	3
4	186615	SCREW	4	35	425-35200	ARM ASSEMBLY, ROCKER	3
5	178324	CYLINDER HEAD	1	39	425-35203	CIRCLIP 12	2
8	178330	GUIDE	6	40	425-35204	SCREW M5 X 16	1
11	186602	PLUG	2	41	425-35205	STUD, ARM SUPPORT	2
12	425-35184	PLUG	1	42	425-34747	BOLT M8 X 45 PLATED	1
13	425-34779	PLUG	1	43	425-35206	NUT M8 W/WASHER	2
14	178329	INLET VALVE	3	44	178305	COVER	1
15	425-35186	VALVE	3	45	425-35210	PLATE	1
16	425-35187	SPRING	6	46	178335	SEAL	1
17	425-35188	SPACER	6	48	425-35207	GASKET/BONNET	1
18	208135	VALVE WEDGE	6	49	178336	SHAFT	1
19	425-35191	SEAL	3	50	425-34740	FILLER CAP	1
20	425-35190	VALVE SHAFT SEAL	3	51	425-34745	O-RING	1
21	425-35192	CAP	6	52	186598	SCREW	4
22	425-35194	INJECTION NOZZLE	3	53	425-34775	HEADNUT	2
23	425-35195	SEAL	6	54	425-34776	O-RING	2
24	425-34783	PIN/DOWEL	2	55	425-35419	GLOW PIN	3
25	186598	ROCKER ARM SHAFT	1	56	425-35420	GLOW PLUG CONNECTION	1
26	425-35197	SHAFT ASSEMBLY, ROCKER	1	57	178326	CONNECTING LINK	1

# 223 - CYLINDER BLOCK

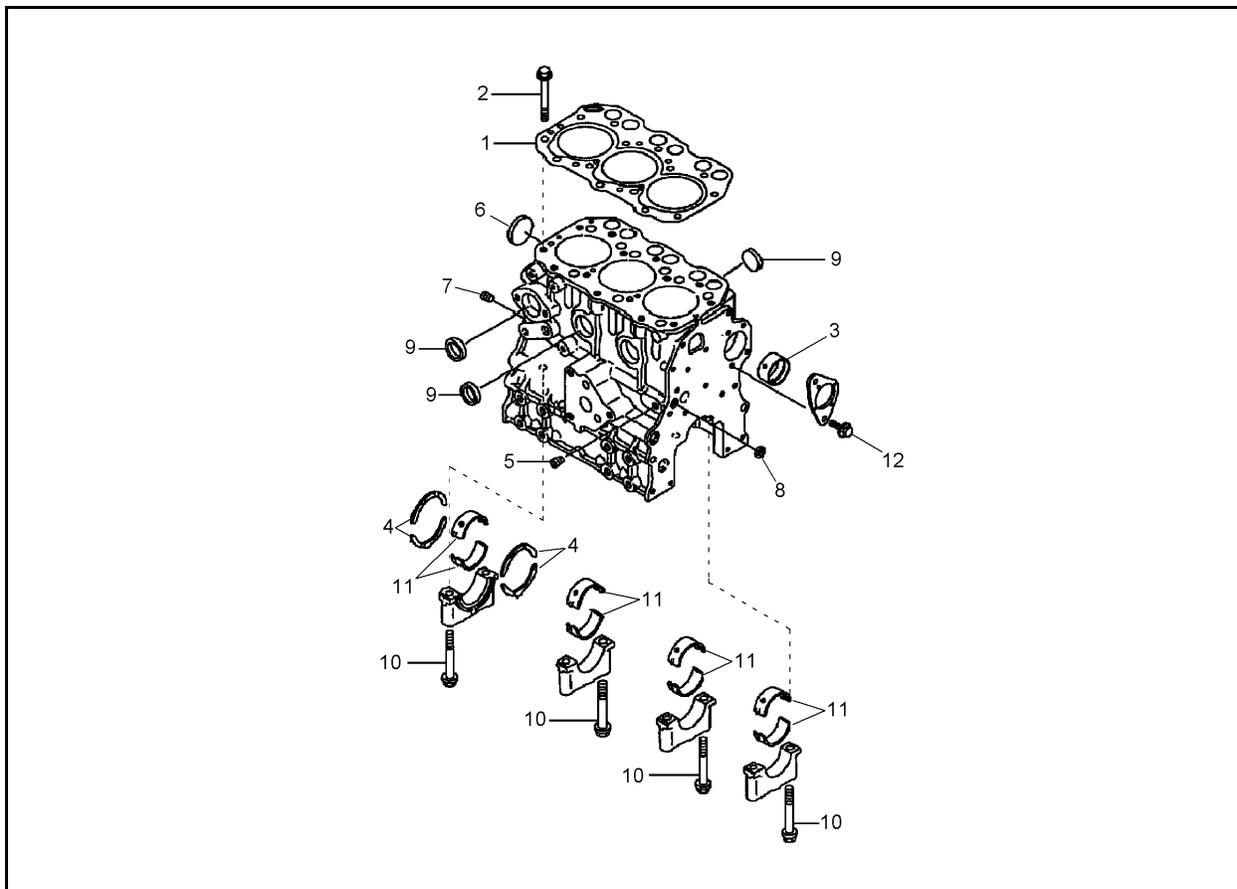
## 1000148834 - (SN AE0001 AND UP)



Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	203079	CYLINDER HEAD GASKET	1	8	206237	MAIN BEARING SET	4
2	203078	CYLINDER HEAD SCREW	14	9	206238	MAIN BEARING SET (US=0.25MM)	4
3	203075	PLUG	3	10	201568	BUSHING	1
4	203074	PLUG	1	11	425-35149	SCREW	8
5	203073	PLUG	4	12	425-34725	PLUG 12	1
6	206235	AXIAL BEARING	2	13	425-34723	PLUG PT 1/8	1
7	206236	AXIAL BEARING (OS=0.25MM)	2	14	425-34721	PLUG PT 1/4	1

## 223 - CYLINDER BLOCK

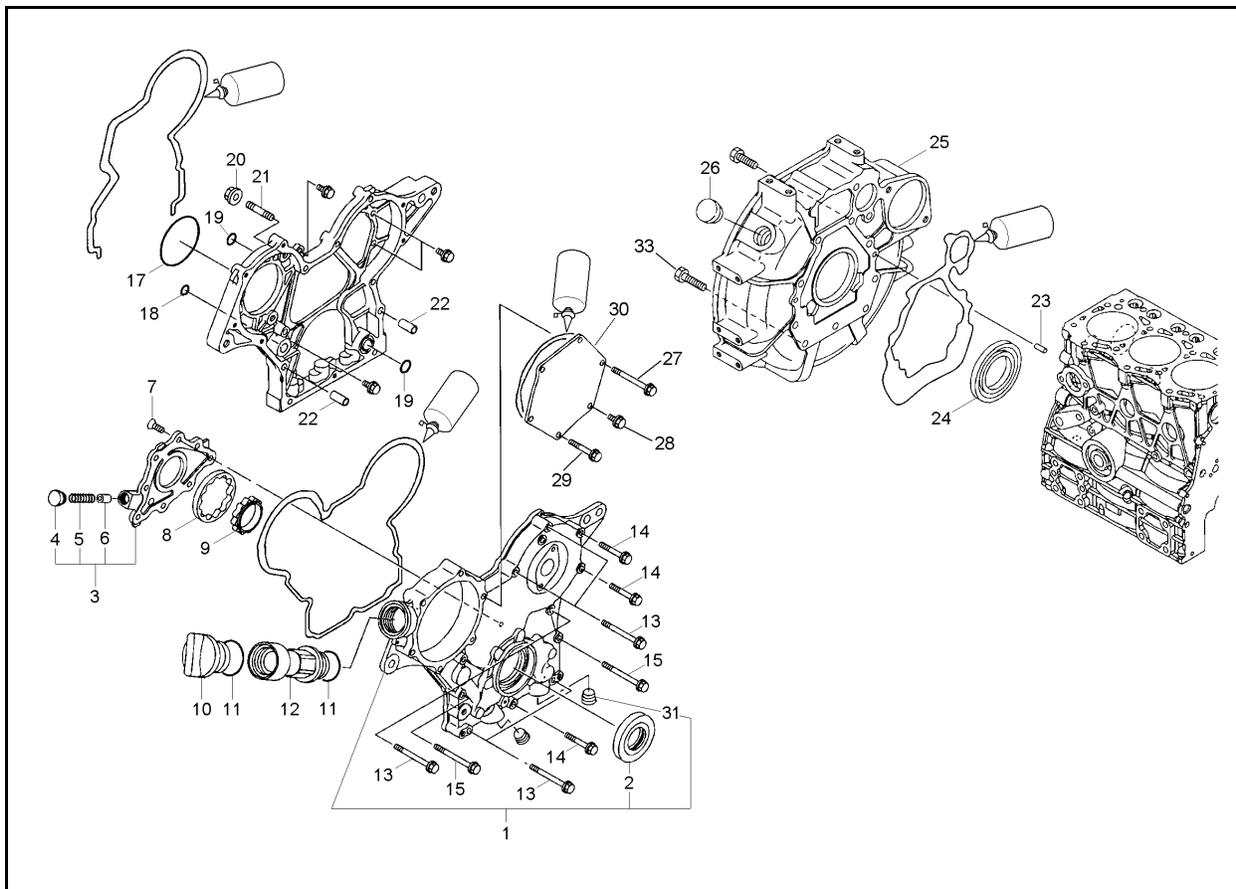
1000131586 - (SN AD00454 - AD04180)



Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	178321	CYLINDER HEAD SEAL	1	8	177260	PLUG	1
2	425-35154	SCREW	14	9	425-34726	COVER	6
3	178428	BEARING	1	10	425-35149	SCREW	8
4	425-35151	AXIAL BEARING	2	11	425-35150	MAIN BEARING SET	4
5	425-36239	PLUG	1		425-35156	MAIN BEARING SET (US=0.25MM)	4
6	203074	PLUG	1	12	186615	SCREW	2
7	178493	PLUG	1				

# 223 - SEAL, CRANKSHAFT

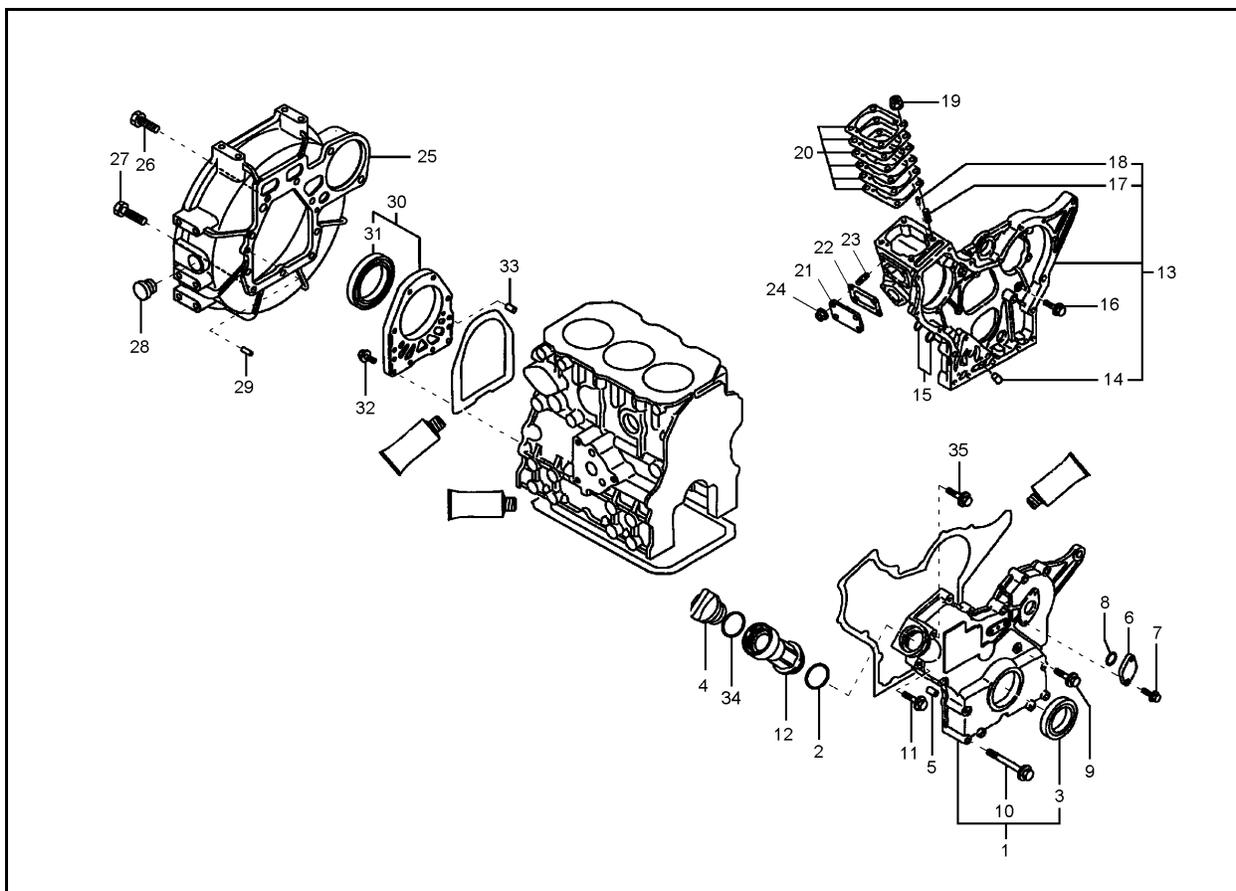
## 1000148835 - (SN AE0001 AND UP)



Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	206239	GEARBOX	1	18	203095	O-RING	1
2	425-35160	SEAL	1	19	203096	O-RING	3
3	203089	COVER	1	20	138140	HEXAGON NUT	3
4	188536	PLUG	1	21	203084	STUD BOLT	3
5	203091	SPRING	1	22	425-35661	TUBE	4
6	188680	VALVE	1	23	188573	FITTING PIN	2
7	188484	SCREW	8	24	425-35179	SEAL	1
8	203093	GEAR	1	25	206247	FLYWHEEL HOUSING	1
9	203092	GEAR	1	26	425-34756	RUBBER PLUG	1
10	425-34740	FILLER CAP	1	27	425-35166	BOLT M6 X 60 PLATED	7
11	425-34745	O-RING	2	28	186615	BOLT M6 X 12 PLATED	1
12	186592	OIL FILLER PIPE	1	29	425-34998	BOLT M6 X 12 PLATED	4
13	425-35166	SCREW	7	30	203094	PUMP TIMING COVER	1
14	425-34998	SCREW	3	31	164436	PLUG	2
15	178185	SCREW	2	33	203084	BOLT STUD M8	3
17	425-34681	O-RING	1				

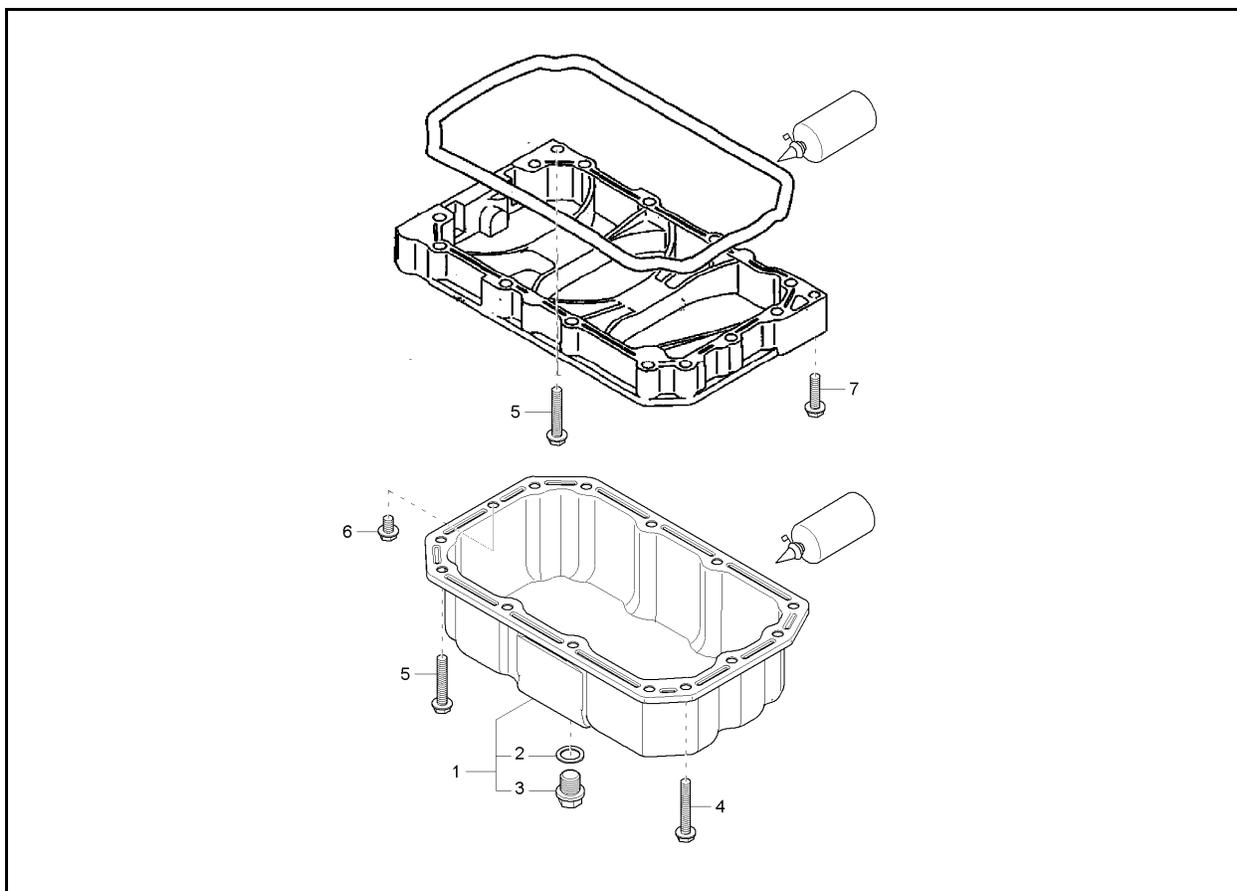
## 223 - SEAL, CRANKSHAFT

1000131592 - (SN AD00454 - AD04180)



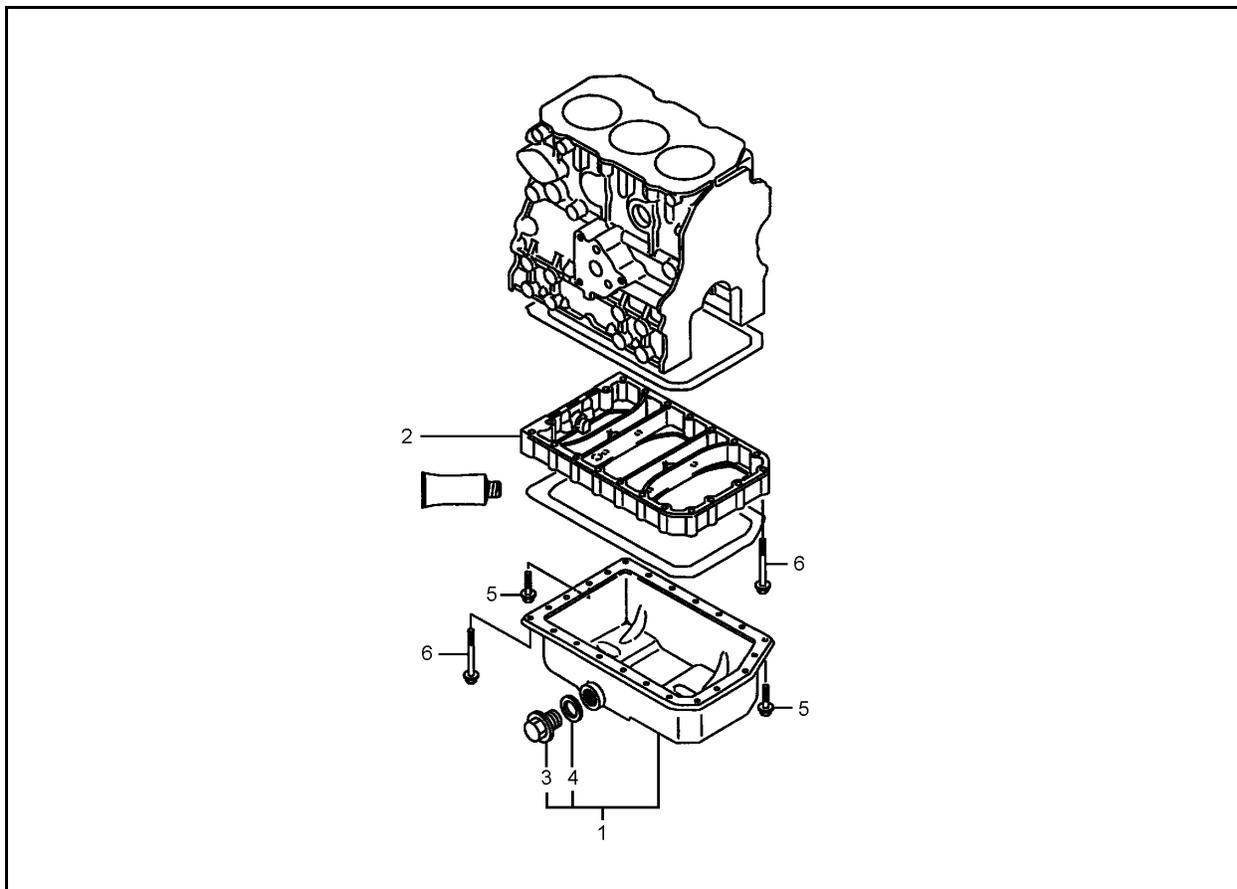
Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	178399	COVER	1	19	425-35163	NUT	4
2	425-34745	O-RING	2	20	178313	SEAL	AR
3	425-35160	SEAL	1	21	425-35168	COVER	1
4	425-34740	FILLER CAP	1	22	425-35169	SEAL	1
5	425-35661	TUBE	4	23	425-35170	STUD BOLT	4
6	425-34751	COVER	1	24	425-34781	NUT	4
7	425-35164	SCREW	2	25	425-35181	FLYWHEEL HOUSING	1
8	425-34763	O-RING	1	26	188749	SCREW	6
9	425-35166	SCREW	4	27	425-35182	SCREW	3
10	425-35166	SCREW	6	28	425-34756	RUBBER PLUG	1
11	425-35165	SCREW	8	29	188573	FITTING PIN	2
12	186592	OIL FILLER PIPE	1	30	178288	HOUSING	1
13	425-35157	GEAR BOX	1	31	425-35179	SEAL	1
14	425-35158	PLUG	1	32	425-35180	SCREW	10
15	203095	O-RING	2	33	425-35177	GRUB SCREW	2
16	425-35164	SCREW	7	34	425-34745	O-RING	1
17	425-34739	STUD BOLT	4	35	425-35166	BOLT M6 X 60 PLATED	1
18	425-34815	CYLINDER PIN	2				

**223 - OIL PAN**  
**1000148836 - (SN AE0001 AND UP)**



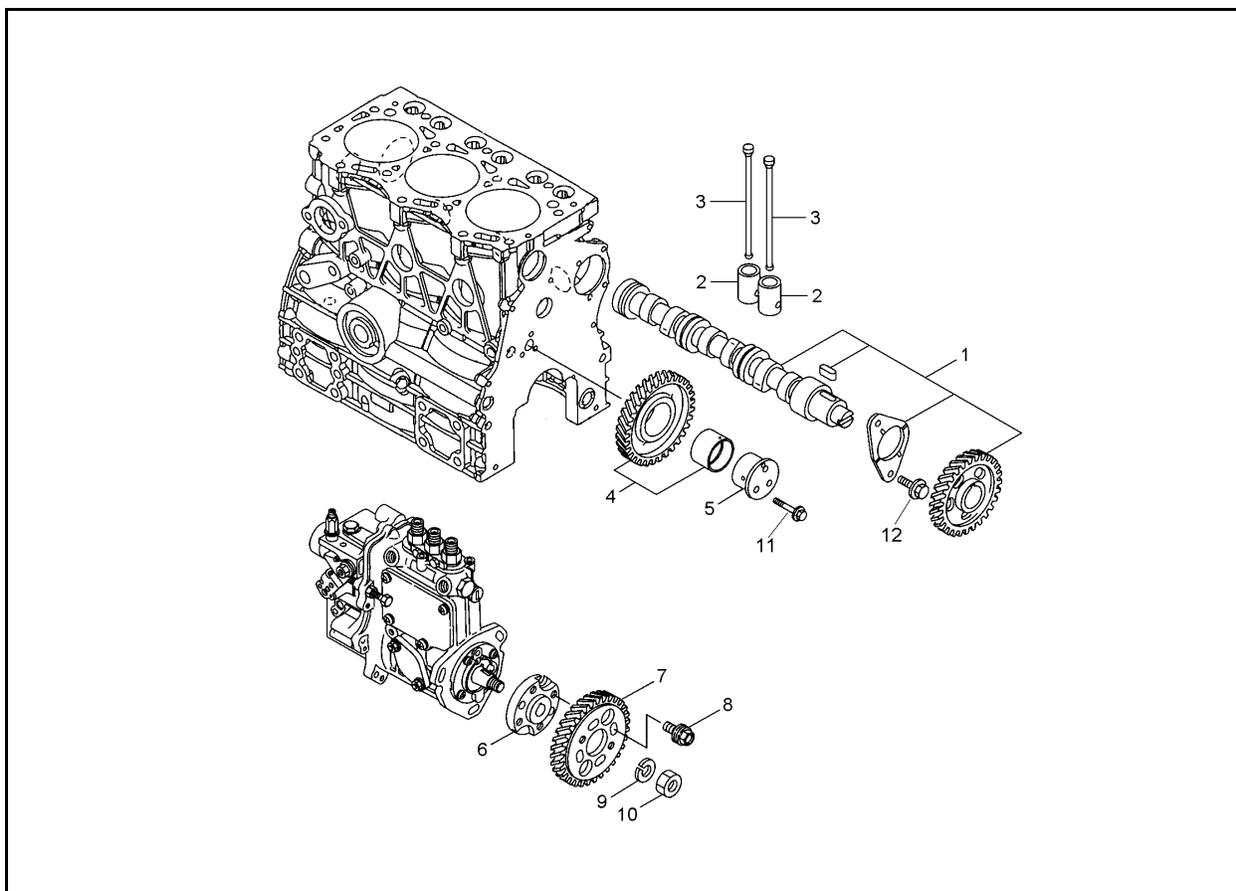
Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	206248	OIL PAN	1	5	425-34747	SCREW	11
2	425-35949	SEAL RING	1	6	425-34729	SCREW M8 X 12 PLATED	1
3	425-35495	LOCK SCREW	1	7	425-34760	SCREW	1
4	425-34766	SCREW	3				

**223 - OIL PAN**  
**1000131585 - (SN AD00454 - AD04180)**



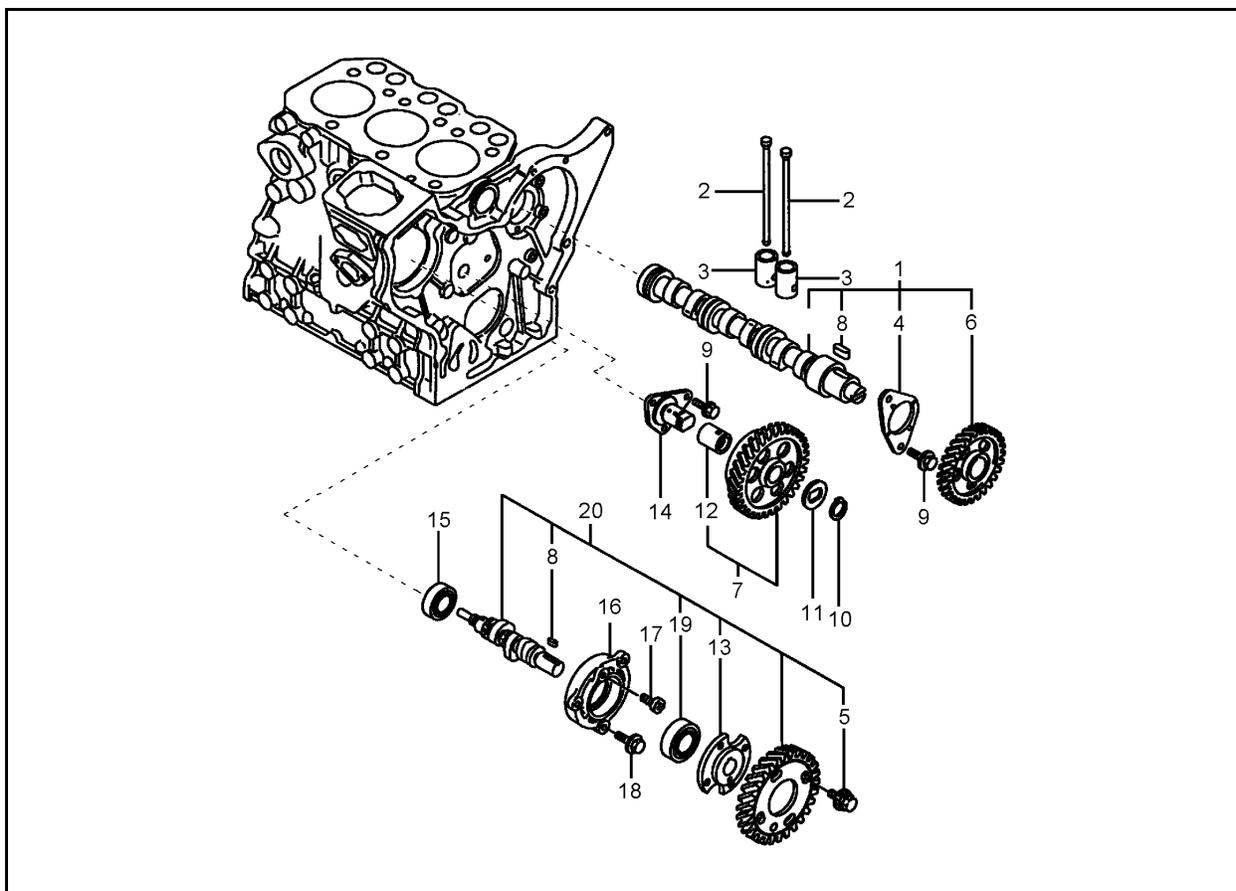
Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	425-36145	SUMP ASSY/LUB OIL	1	4	138113	PLUG GASKET	1
2	425-35175	SPACER	1	5	186615	SCREW	3
3	425-36121	PLUG/DRAIN	1	6	425-35176	SCREW	20

**223 - CAMSHAFT**  
**1000148837 - (SN AE00001 AND UP)**



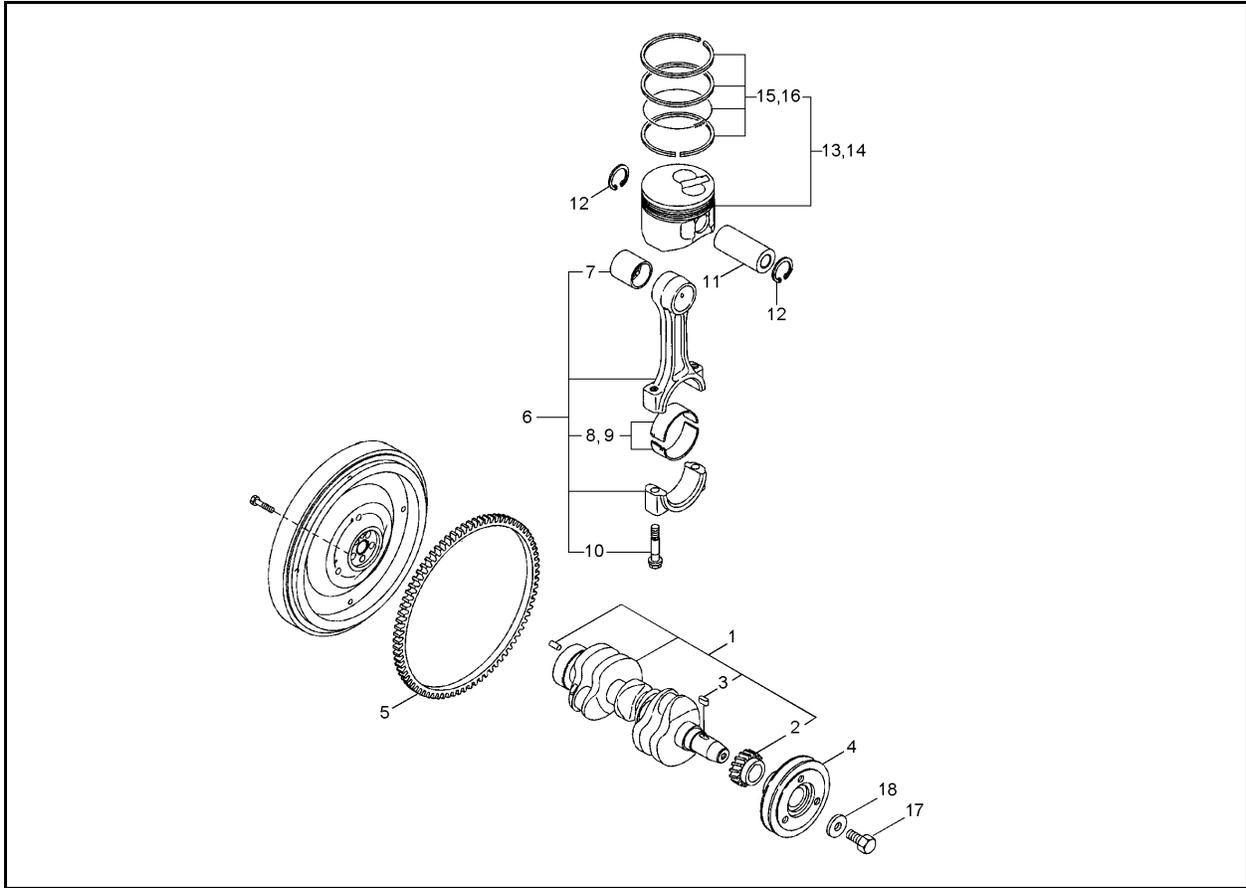
Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	206252	CAMSHAFT	6	7	203138	GEAR	1
2	425-35220	LIFTER	6	8	425-36187	SCREW	4
3	203134	PUSH ROD	6	9	425-34902	SPRING RING	1
4	206254	GEAR	1	10	210-32084	HEXAGON NUT	1
5	203136	BRACKET	1	11	242982	BOLT BOLT M6 X 35	2
6	203139	FLANGE	1	12	186615	BOLT M6 X 12 PLATED	3

## 223 - CAMSHAFT 1000131588 - (SN AD00454 - AD04180)



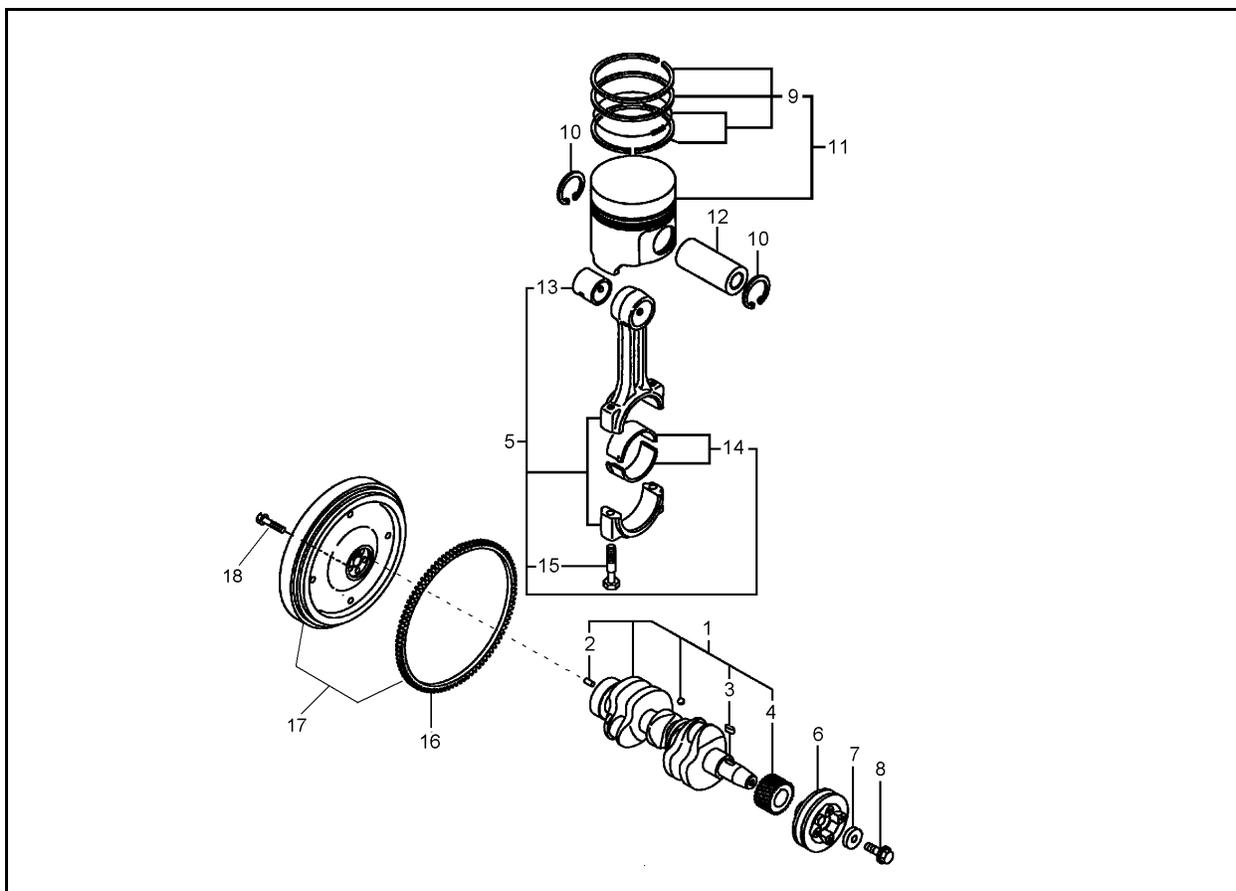
Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	178338	CAMSHAFT	1	11	425-35228	WASHER	1
2	178421	PUSH ROD	6	12	425-35231	BUSHING	1
3	425-35220	LIFTER	6	13	178352	FLANGE	1
4	425-35153	CAMSHAFT BEARING	1	14	178347	SHAFT	1
5	178340	SCREW	4	15	425-35225	BEARING	1
6	425-35219	TOOTHED GEAR	1	16	178349	BEARING	1
7	178342	TOOTHED GEAR	1	17	178350	SCREW	1
8	425-35222	PARALLEL KEY	2	18	425-35164	SCREW	3
9	186615	SCREW	5	19	203991	BEARING	1
10	425-35232	WASHER	1	20	178353	SHAFT COMPLETE	1

# 223 - CRANKSHAFT, PISTON 1000148838 - (SN AE0001 AND UP)



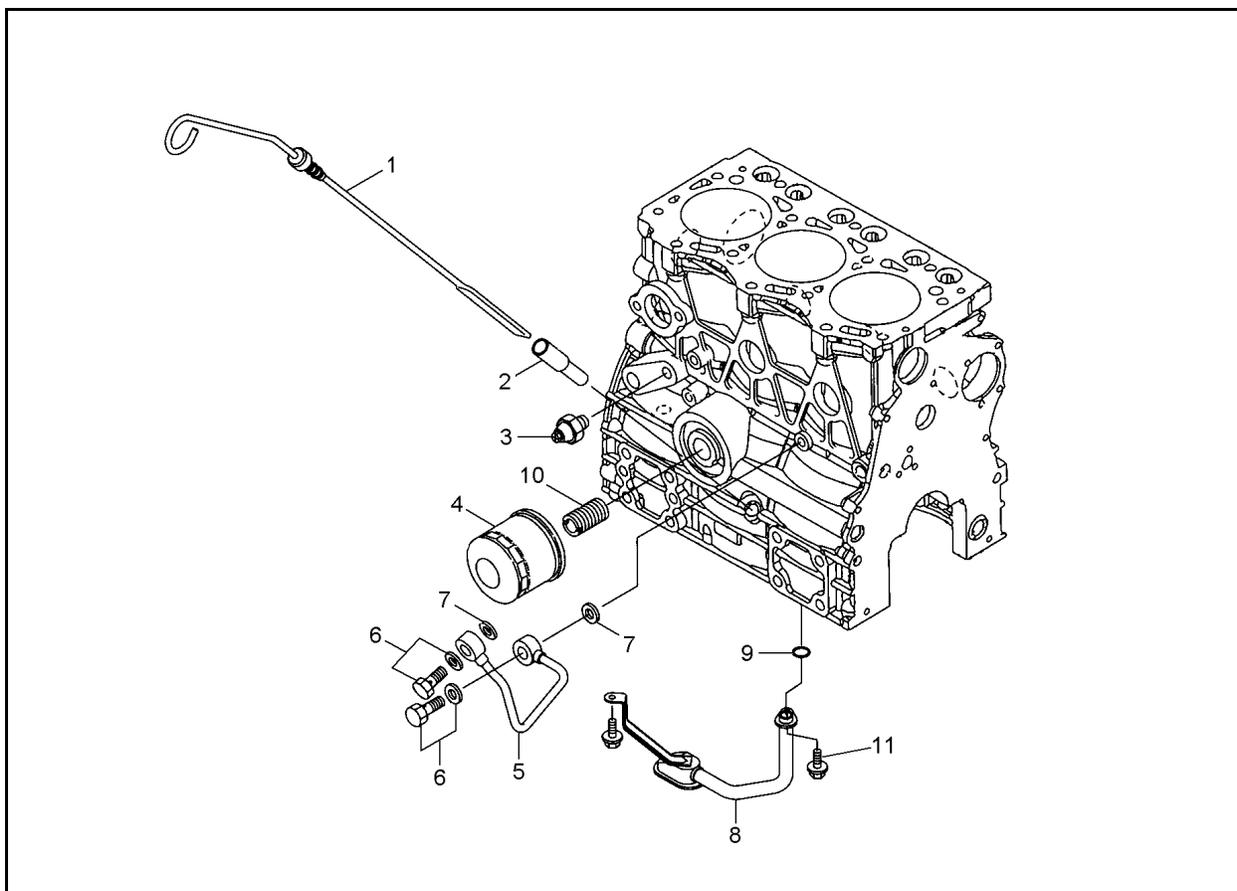
Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	203141	CRANK SHAFT	1	10	203150	SCREW	6
2	203142	GEAR	1	11	203147	PIN	3
3	425-35222	PARALLEL KEY	1	12	203148	LOCK RING	6
4	203144	BELT PULLEY	1	13	203145	PISTON	3
5	425-34694	RING GEAR	1	14	206272	PISTON (OS=0.25MM)	3
6	203149	CONNECTING ROD	3	15	203146	SET/BACKUP RINGS	3
7	203152	BUSHING	3	16	203154	SET/BACKUP RINGS (OS=0.25MM)	3
8	206266	BEARING	3	17	425-35238	SCREW	1
9	206267	BEARING (US=0.25MM)	3	18	425-35239	WASHER	1

**223 - CRANKSHAFT, PISTON**  
**1000131591 - (SN AD00454 - AD04180)**



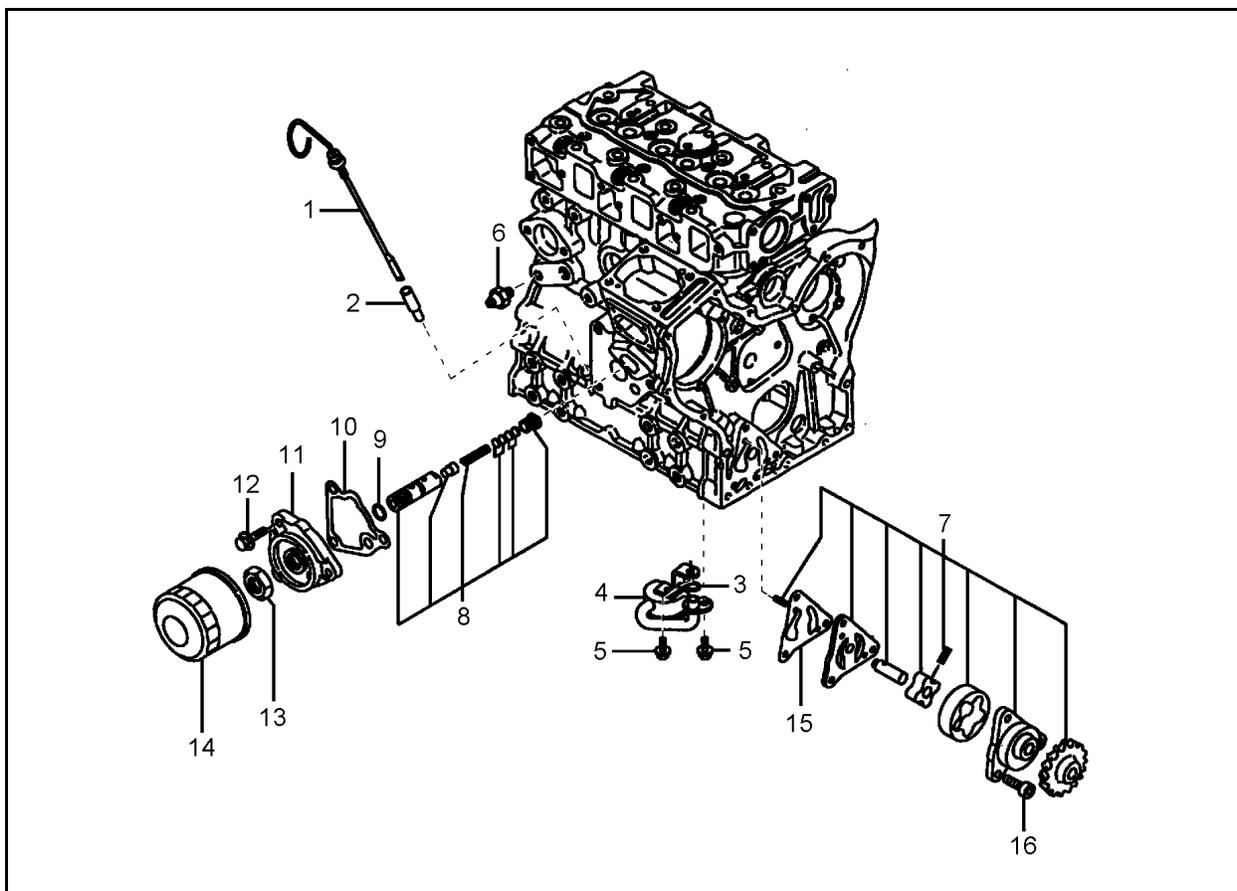
Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	178420	CRANKSHAFT	1	11	178357	PISTON	3
2	188573	FITTING PIN	1		203998	PISTON (OS=0.25MM)	3
3	425-35222	PARALLEL KEY	1	12	178358	PIN	3
4	178356	GEAR	1	13	425-35250	BUSHING	3
5	425-35247	CONNECTING ROD	3	14	425-35249	BEARING	3
6	425-35237	BELT DISC	1		425-35251	BEARING (US=0.25MM)	3
7	425-35239	WASHER	1	15	425-35248	SCREW	6
8	425-35238	SCREW	1	16	425-34694	RING GEAR	1
9	178422	BACKUP RINGS SET	3	17	204202	FLYWHEEL ASSY	1
	204201	BACKUP RINGS SET (OS=0.25MM)	3	18	425-34693	FLYWHEEL BOLT	4
10	425-35244	CIRCLIP	6				

**223 - LUBRICATION**  
**1000148839 - (SN AE0001 AND UP)**



Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	206331	DIPSTICK	1	7	425-34750	SEAL RING	2
2	176148	DIPSTICK TUBE	1	8	206333	PIPE LINE	1
3	425-36085	SENDER/OIL PRESSURE	1	9	203160	O-RING	1
4	178677	ENGINE OIL FILTER	1	10	270966	SCREW JOINT	1
5	203162	PIPE LINE	1	11	425-35263	BOLT M6 X 10 PLATED	1
6	186468	BANJO BOLT	2				

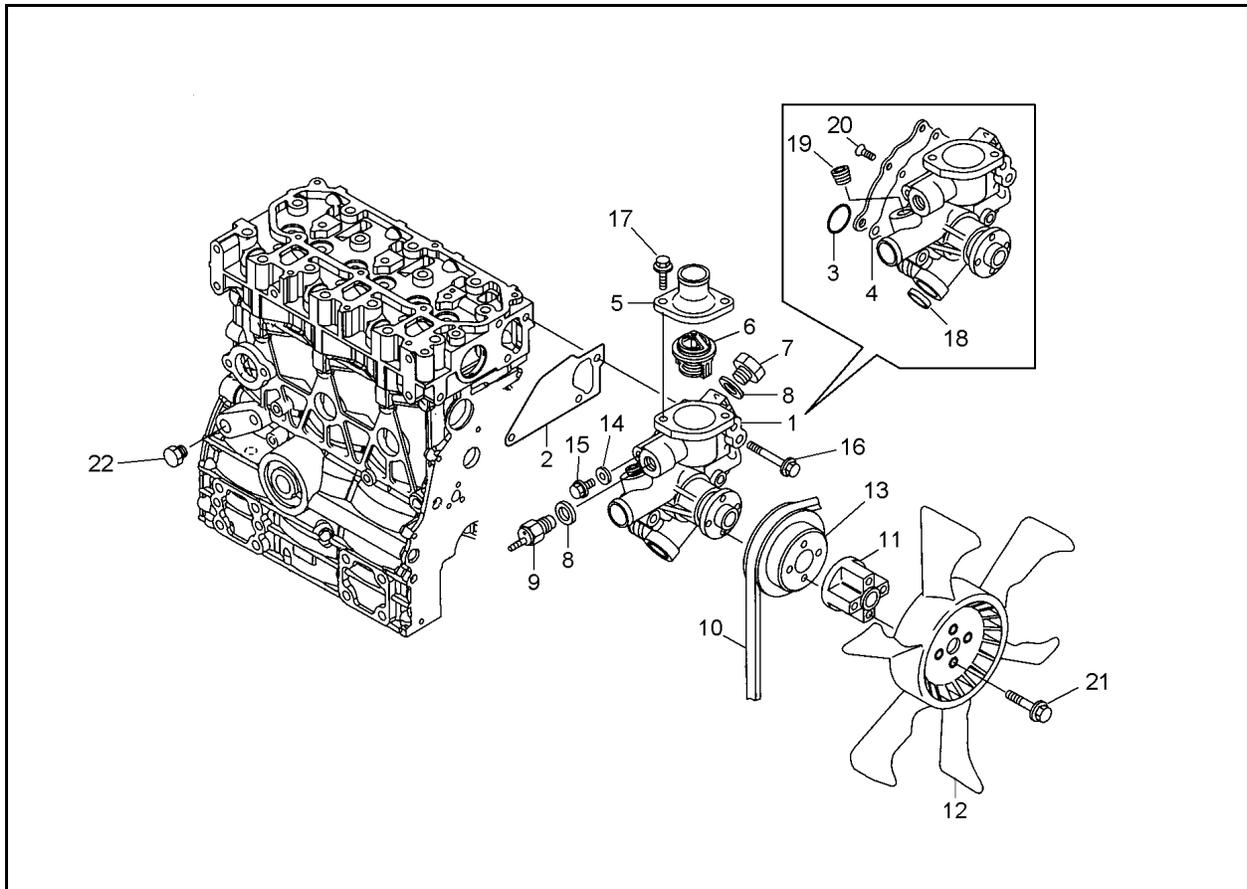
**223 - LUBRICATION**  
**1000131593 - (SN AD00454 - AD04180)**



Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	178279	DIPSTICK	1	9	425-34744	O-RING	1
2	176148	DIPSTICK TUBE	1	10	178413	SEAL	1
3	178365	O-RING	1	11	425-35257	HOUSING	1
4	178366	TUBE	1	12	425-34746	SCREW	3
5	425-35263	SCREW	2	13	178487	NUT	1
6	178673	SENDER/OIL PRESSURE	1	14	178677	ENGINE OIL FILTER	1
7	178300	OIL PUMP	1	15	425-35253	SEAL	1
8	425-35261	PRESSURE LIMITING VALVE	1	16	425-35254	SCREW	3

# 223 - COOLING SYSTEM

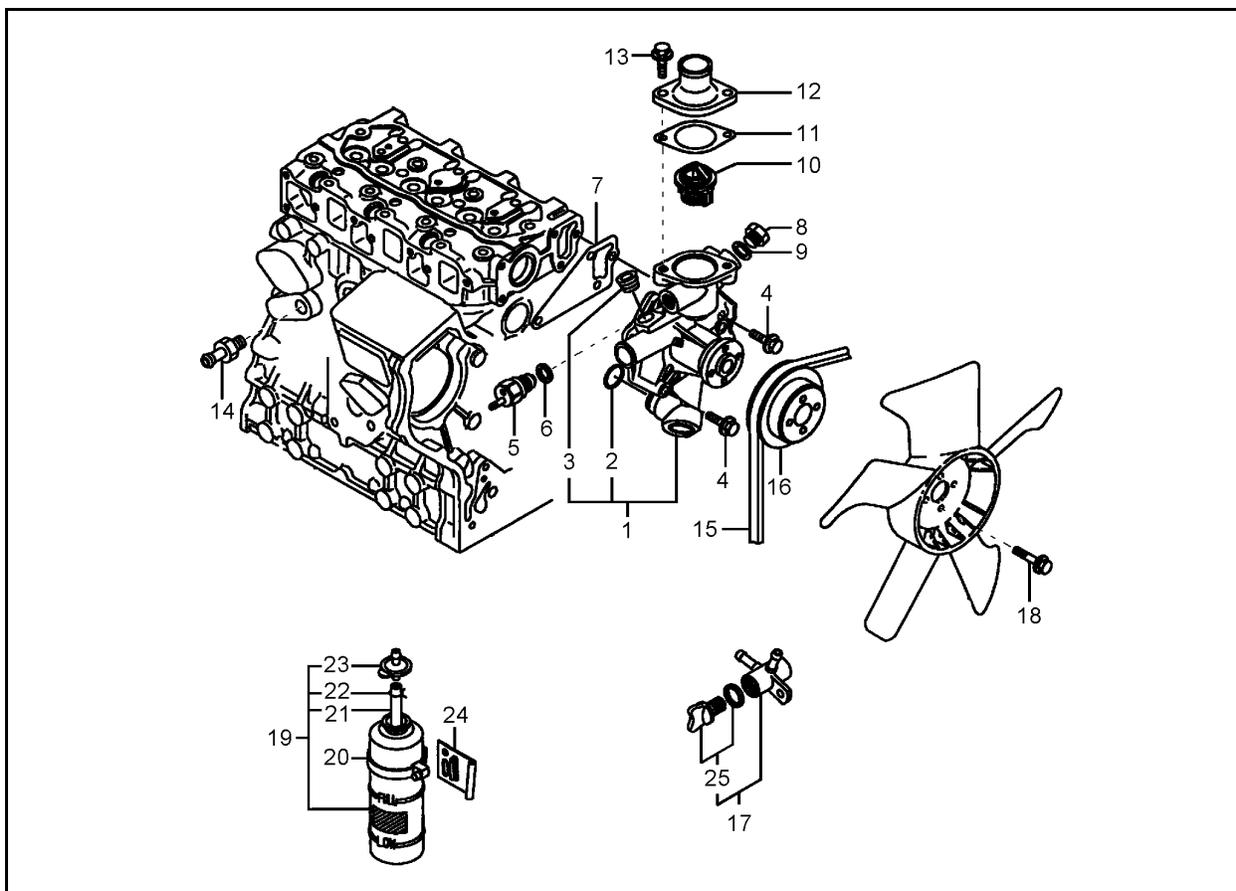
## 1000148840 - (SN AE0001 AND UP)



Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	206311	WATER PUMP	1	12	206204	VENTILATION FAN	1
2	203168	WATER PUMP GASKET	1	13	203169	WATER PUMP PULLEY	1
3	203167	O-RING	1	14	425-34727	PACKING 8	1
4	206314	GASKET	1	15	425-34729	BOLT M8 X 12 PLATED	1
5	425-34843	THERMOSTAT HOUSING	1	16	425-34766	BOLT M8 X 50 PLATED	3
6	203172	THERMOSTAT	1	17	425-34746	BOLT M8 X 20 PLATED	2
7	425-34851	PLUG	1	18	425-35657	PLUG 25	1
8	160427	SEAL	2	19	188686	PLUG/DRAIN	1
9	425-34683	SENSOR/THERMOSTAT 110° C	1	20	203166	SCREW M6 X 12	4
10	206205	FAN BELT	1	21	242982	BOLT M6 X 35	4
11	197778	FAN SPACER	1	22	270970	DRAIN PLUG	1

## 223 - COOLING SYSTEM

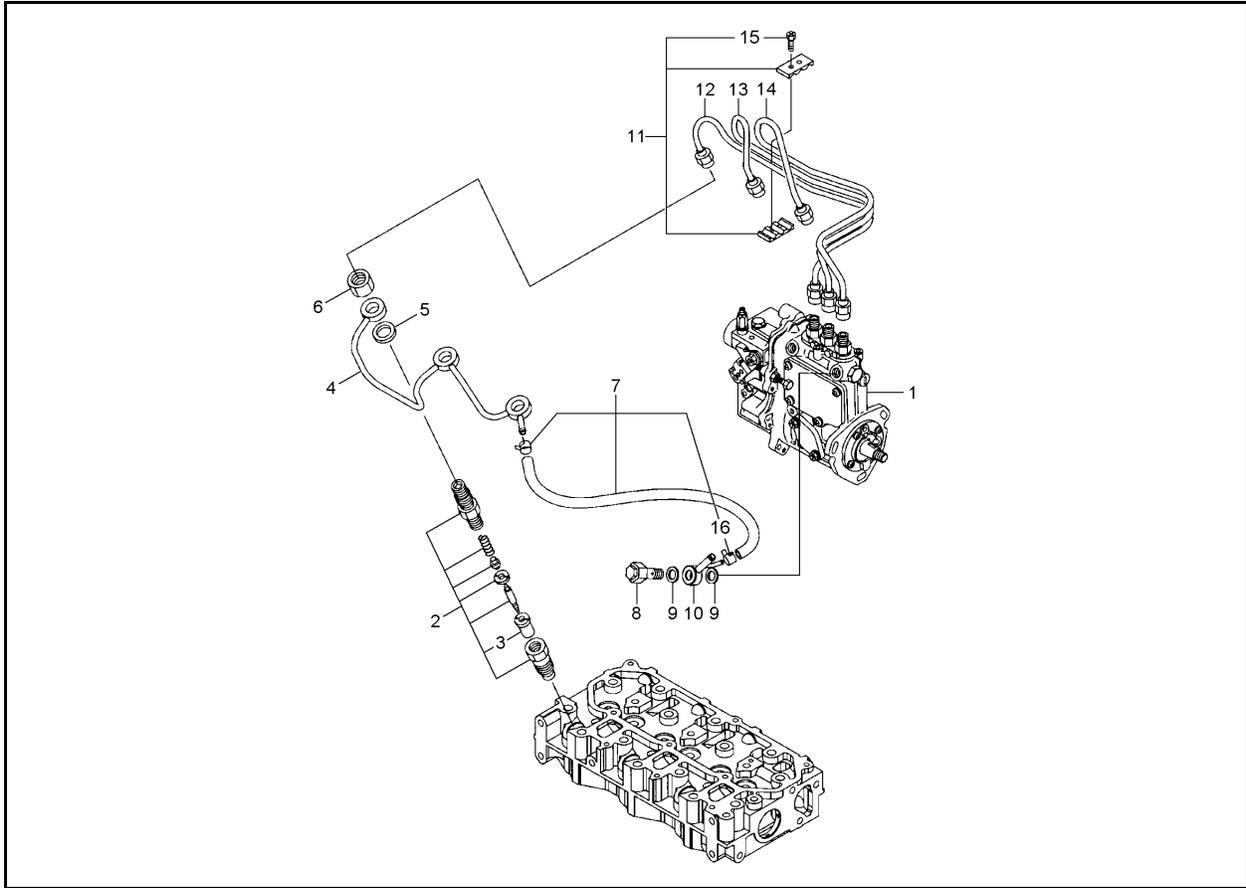
### 1000131594 - (SN AD00454 - AD04180)



Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	425-35264	WATER PUMP ASSEMBLY	1	14	425-34736	CONNECTION	1
2	178359	O-RING	1	15	425-36141	BELT/FAN	1
3	164436	PLUG	1	16	425-35267	BELT DISC	1
4	425-34747	SCREW	4	17	425-34854	DRAIN COCK COMPLETE	1
5	425-34683	SENSOR/THERMOSTAT 110° C	1	18	203990	SCREW	4
6	160427	SEAL	1	19	190845	BOTTLE-OVERFLOW (COOLANT)	1
7	425-35265	GASKET/WATER PUMP	1	20	425-36235	COLLAR	1
8	425-34851	PLUG	1	21	188720	TUBE	1
9	160427	SEAL	1	22	186461	COLLAR	1
10	425-35269	THERMOSTAT	1	23	188526	PLUG	1
11	425-36142	GASKET	1	24	425-36152	BRACKET/SUB-TANK	1
12	425-34843	THERMOSTAT HOUSING	1	25	425-35273	DRAIN COCK	1
13	425-34746	SCREW	2				

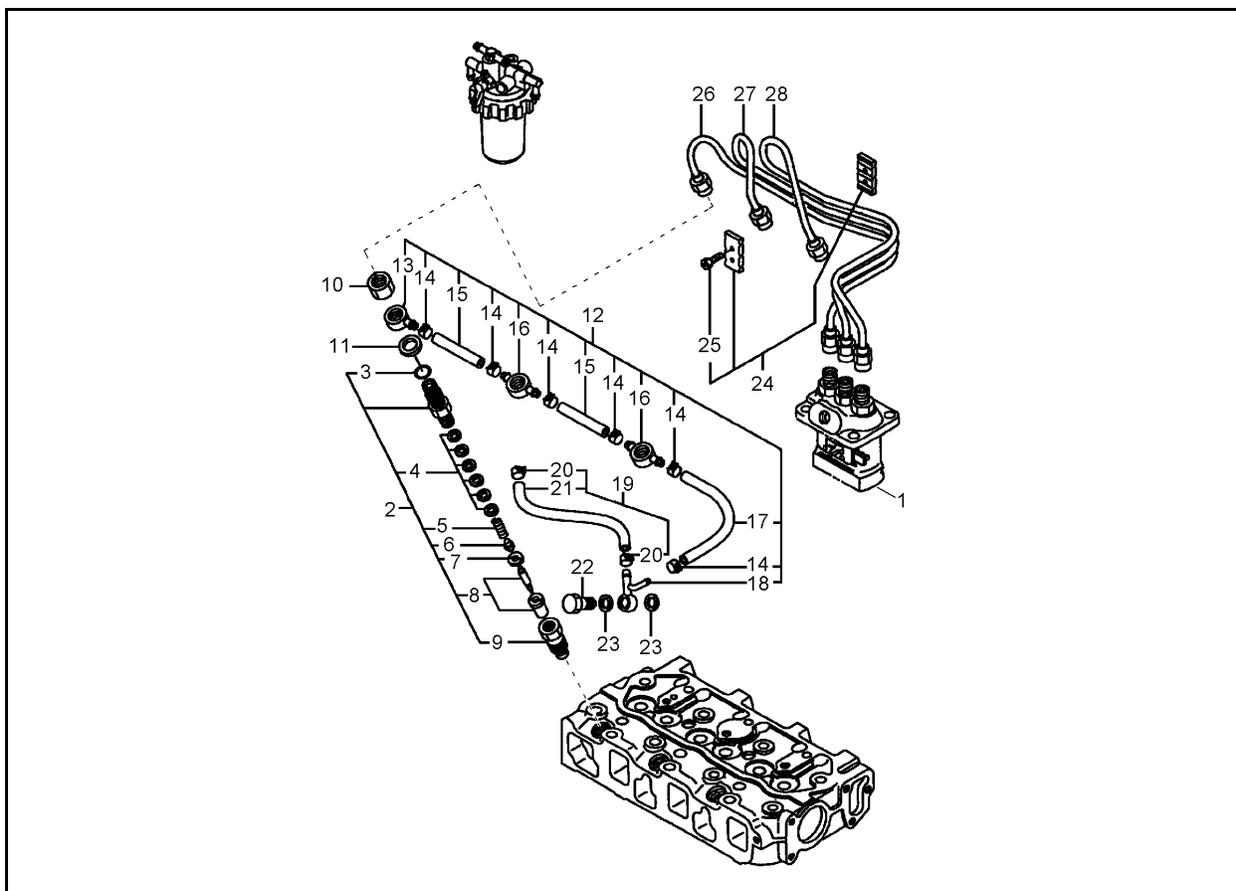
# 223 - FUEL INJECTION SYSTEM

## 1000148841 - (SN AE0001 AND UP)



Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	206275	INJECTION PUMP	1	9	425-35959	SEAL	2
2	203206	INJECTION NOZZLE	3	10	425-34933	INJECTION COUPLING	1
3	206277	NOZZLE	3	11	425-35452	CLAMP	1
4	203213	TUBE	1	12	203210	INJECTION LINE	1
5	203214	SEAL RING	3	13	203211	INJECTION LINE	1
6	425-35315	HEX NUT	3	14	203212	INJECTION LINE	1
7	203215	TUBE	1	15	186473	SHCS M4 X 14	2
8	203216	NON-RETURN VALVE	1	16	425-34928	CLAMP	2

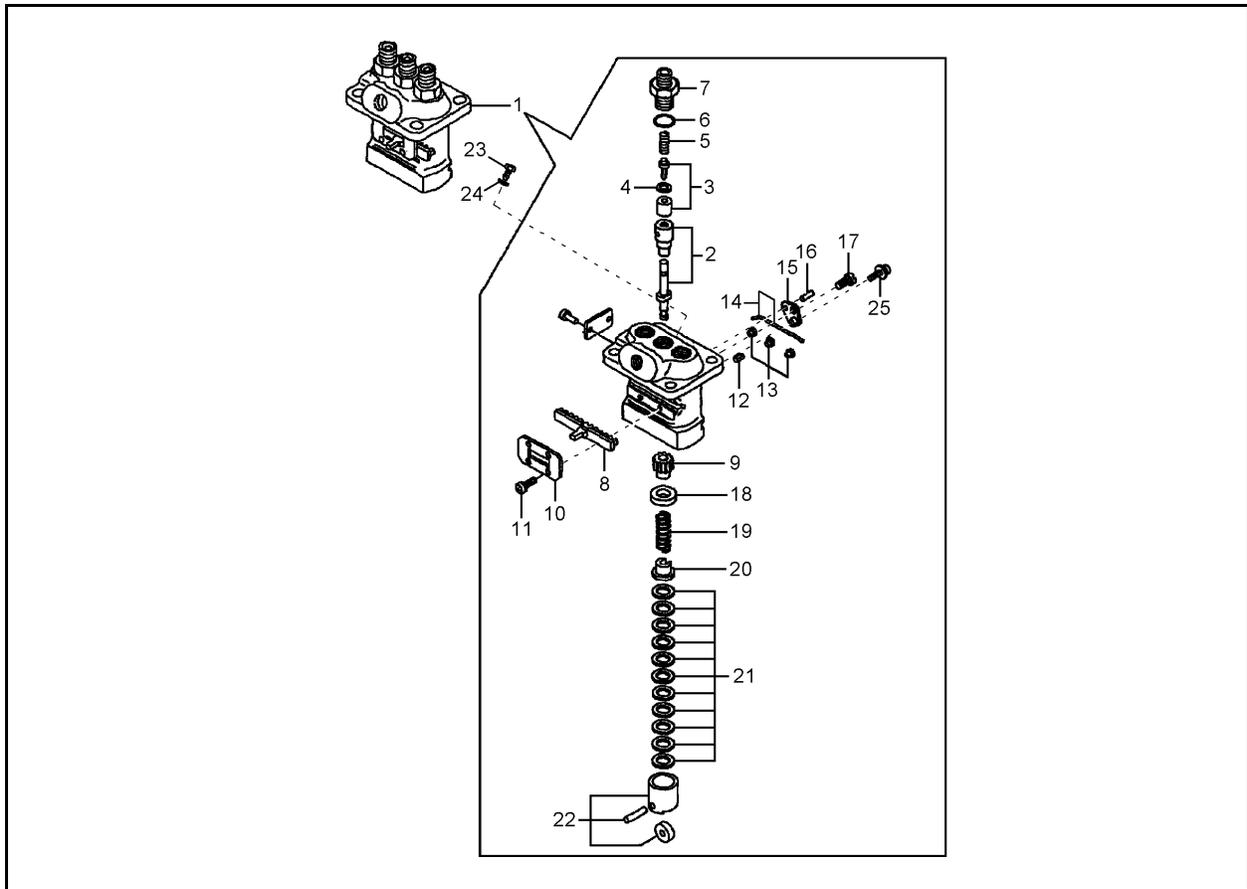
## 223 - FUEL INJECTION SYSTEM 1000131595 - (SN AD00454 - AD04180)



Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	178687	INJECTION PUMP See page 32 for individual components	1	15	425-35314	PIPE	2
2	178688	INJECTION NOZZLE	3	16	425-35313	INJECTION COUPLING	2
3	425-34679	O-RING	3	17	178392	PIPE	1
4	188448	ADJUSTING WASHER	AR	18	178393	INJECTION COUPLING	1
5	425-35303	SPRING	3	19	178394	PIPE COMPLETE	1
6	425-34905	SEAT- NOZZLE SPRING	3	20	425-34916	CLAMP 12	2
7	425-35306	WASHER	3	21	178395	PIPE	1
8	425-35300	INJECTION VALVE	3	22	425-34836	SCREW	1
9	425-35301	SCREW JOINT	3	23	425-34750	SEAL RING	2
10	425-35315	RETAINER	1	24	425-35452	CLAMP	1
11	138112	SEAL	3	25	186473	SCREW	2
12	178390	PIPE	1	26	425-35308	HP TUBE	1
13	425-35312	INJECTION COUPLING	1	27	425-35309	HP TUBE	1
14	425-34928	CLAMP 8	6	28	425-35310	HP TUBE	1

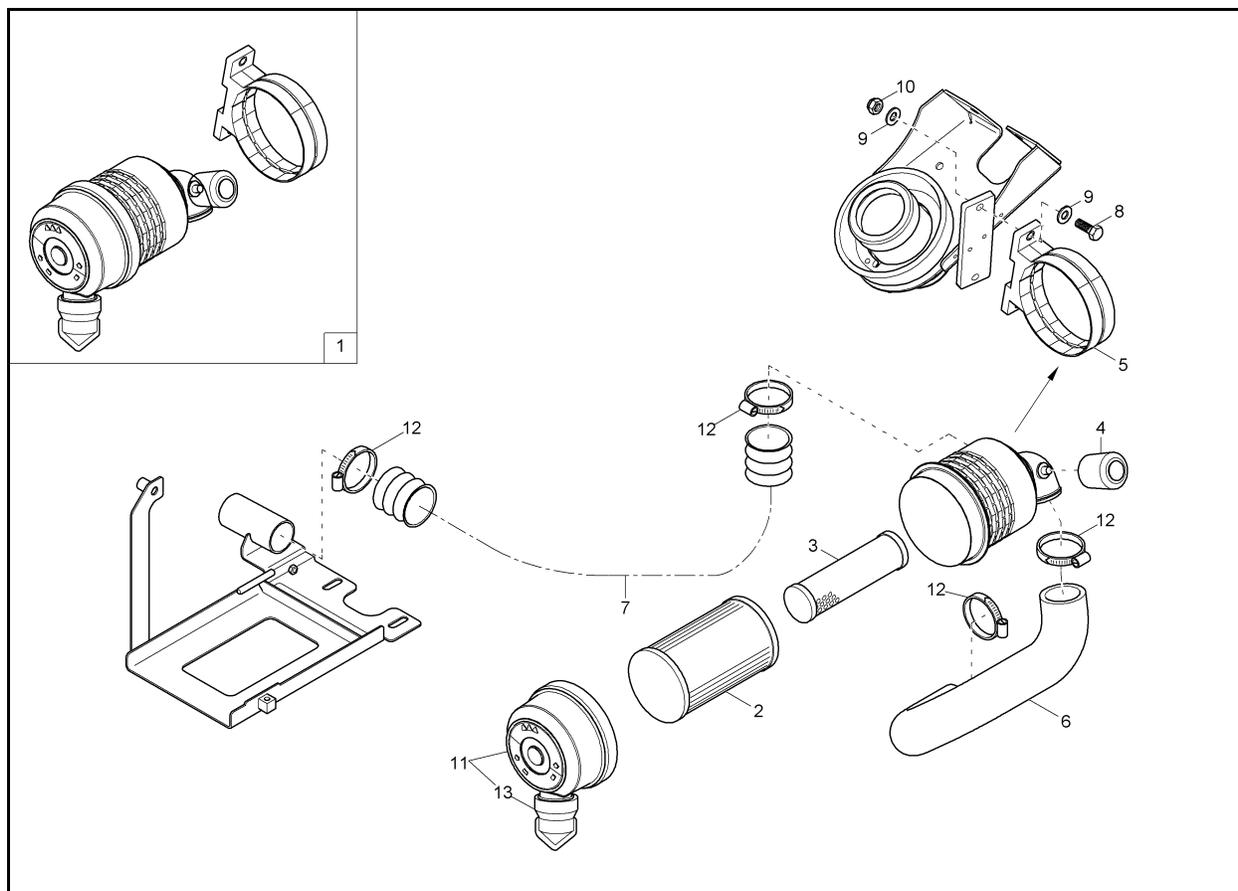
# 223 - FUEL INJECTION PUMP

## 1000131596 - (SN AD00454 - AD04180)



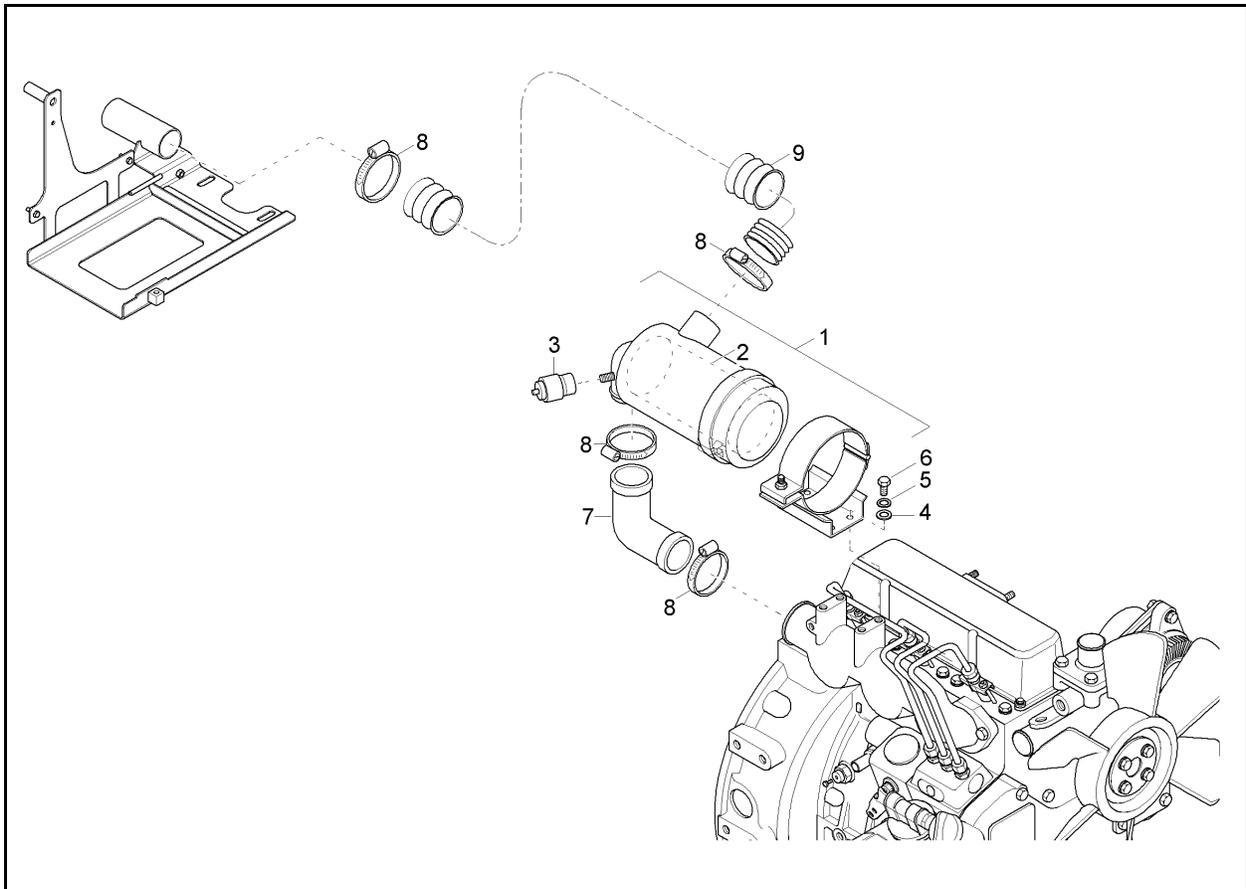
Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	178687	INJECTION PUMP	1	14	178685	SPRING ASSEMBLY	1
2	425-35275	HYDRAULIC PUMP ELEMENT	3	15	178380	PLATE	2
3	425-35280	NON RETURN VALVE	3	16	178381	PIN	2
4	425-35283	CONICAL NIPPLE	3	17	178382	SCREW	2
5	178371	SPRING	3	18	178383	WASHER	3
6	178418	O-RING	3	19	178384	SPRING	3
7	425-35282	BRACKET	3	20	178385	BRACKET	3
8	178373	RACK	1	21	178386	WASHER KIT	3
9	178374	PINION	3	22	178387	PLUNGER	3
10	178375	BRACKET	1	23	178388	SCREW	1
11	178376	SCREW	4	24	425-34750	SEAL RING	1
12	178377	PIN	1	25	178316	SCREW	2
13	178378	GUIDE	3				

## 223 - AIR INTAKE SYSTEM 1000148816 - (SN AE0001 AND UP)



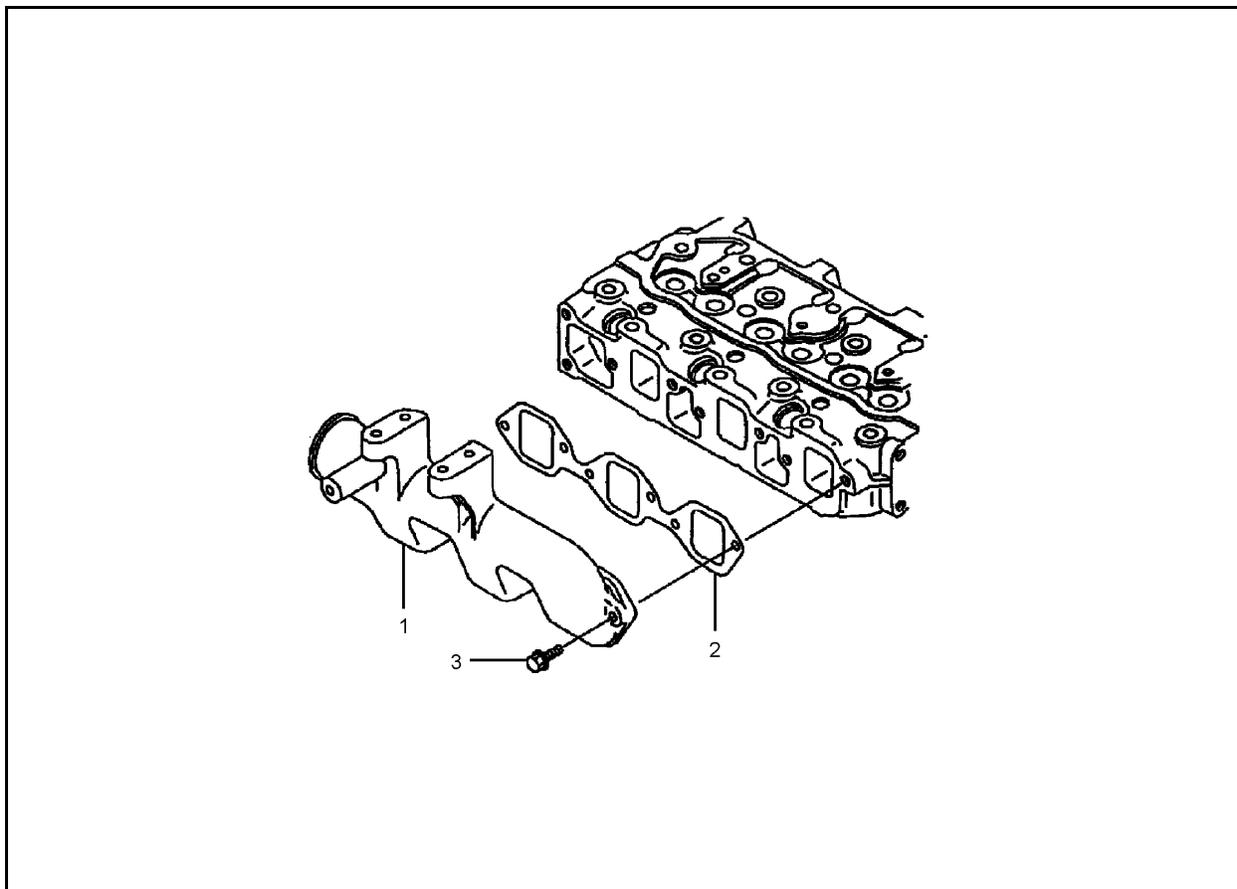
Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	206302	AIR FILTER ASSY. - COMPLETE	1	8	656002	CS M8-1.25X35 C8.8 ZY DIN931	2
2	206303	AIR FILTER/OUTER	1	9	206301	SPACER	4
3	206304	AIR FILTER/INNER	1	10	651458	LN INS M8-1.25 C8 ZY DIN6924	2
4	206305	DIRT INDICATOR	1	11	206309	FILTER COVER	1
5	206306	AIR FILTER BRACKET	1	12	206310	HOSE CLAMP	4
6	206307	AIR INTAKE HOSE	1	13	0009960751	DUST VALVE	1
7	207101	PROTECTING COVER SUPERFLEX (0.75M)	1				

**223 - AIR INTAKE SYSTEM**  
**1000131579 - (SN AD00454 - AD04180)**



Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	425-36153	AIR CLEANER ASSY	1	6	651430	CS M8-1.25X12 C8.8 ZY DIN931	4
2	425-36154	ELEMENT/AIR CLEANER	1	7	425-36158	SUCTION PIPE	1
3	425-36155	DIRT INDICATOR	1	8	425-36159	HOSE CLAMP	4
4	163634	WASHER	4	9	207103	PROTECTING COVER SUPERFLEX (1.0M)	1
5	163670	LOCKWASHER	4				

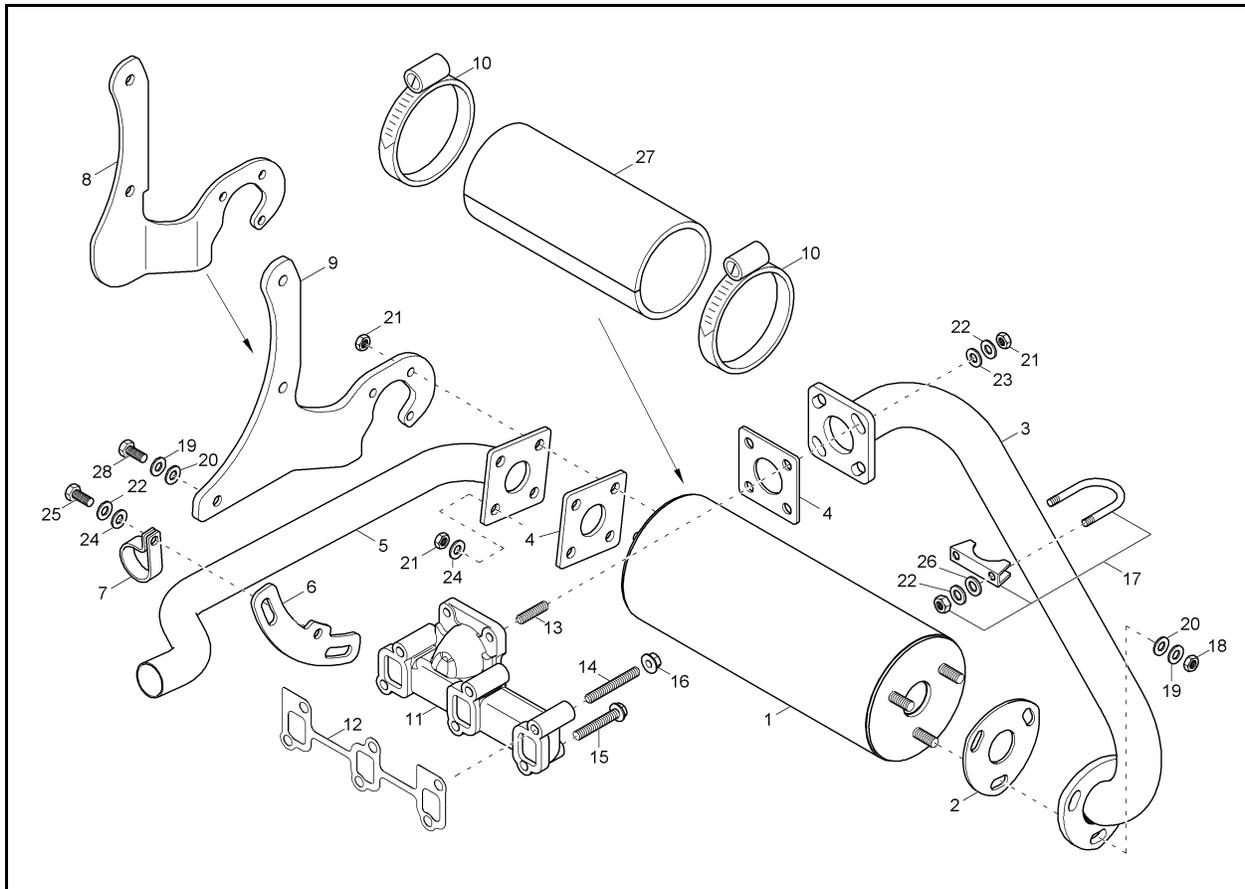
**223 - INTAKE MANIFOLD**  
**1000131589 - (SN AD00454 - AD04180)**



Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	178290	INTAKE MANIFOLD	1	3	188732	SCREW	6
2	178285	GASKET	1				

# 223 - EXHAUST SYSTEM

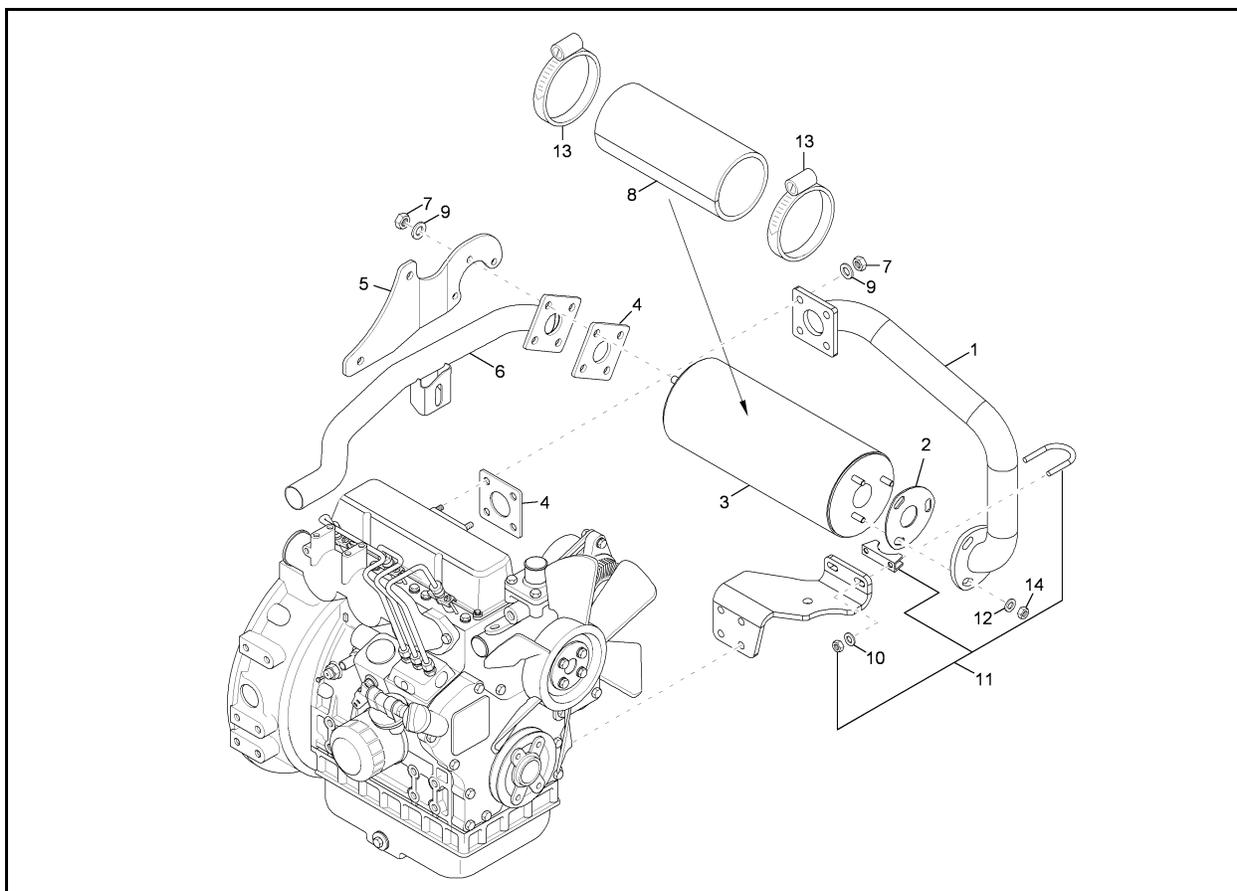
## 1000148842 - (SN AE00001 AND UP)



Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	206287	MUFFLER	1	15	206297	SCREW	4
2	1405428G	SEAL	1	16	177400	HEXAGON NUT	2
3	206288	EXHAUST PIPE	1	17	160848	CLAMP ASY	1
4	177311	GASKET	2	18	656102	HN M10-1.25 F8 ZY DIN934	3
5	206290	EXHAUST PIPE	1	19	161669	LOCKWASHER S10	6
6	206291	EXHAUST BRACKET	1	20	161640	WASHER/GR A 10.5	6
7	206292	CLAMP	1	21	656048	HN M8-1.25 C8 ZY DIN934	8
8	206293	EXHAUST BRACKET (SN AE00001 - AF02683)	1	22	163670	LOCKWASHER	7
9	204038	EXHAUST BRACKET (SN AF02684 AND UP)	1	23	161668	WASHER/GR A 8.4 ZO DIN134	4
10	9914140G	HOSE CLAMP	2	24	163634	WASHER	2
11	203130	EXHAUST MANIFOLD	1	25	177648	HEX SCREW	1
12	203131	GASKET	1	26	7462680011	WASHER 8.4 ST A2C	2
13	177401	STUD BOLT	4	27	1429015G	ISOLATION MAT	1
14	206296	STUD BOLT	2	28	651397	CS M10-1.5X35 C8.8 ZY	3

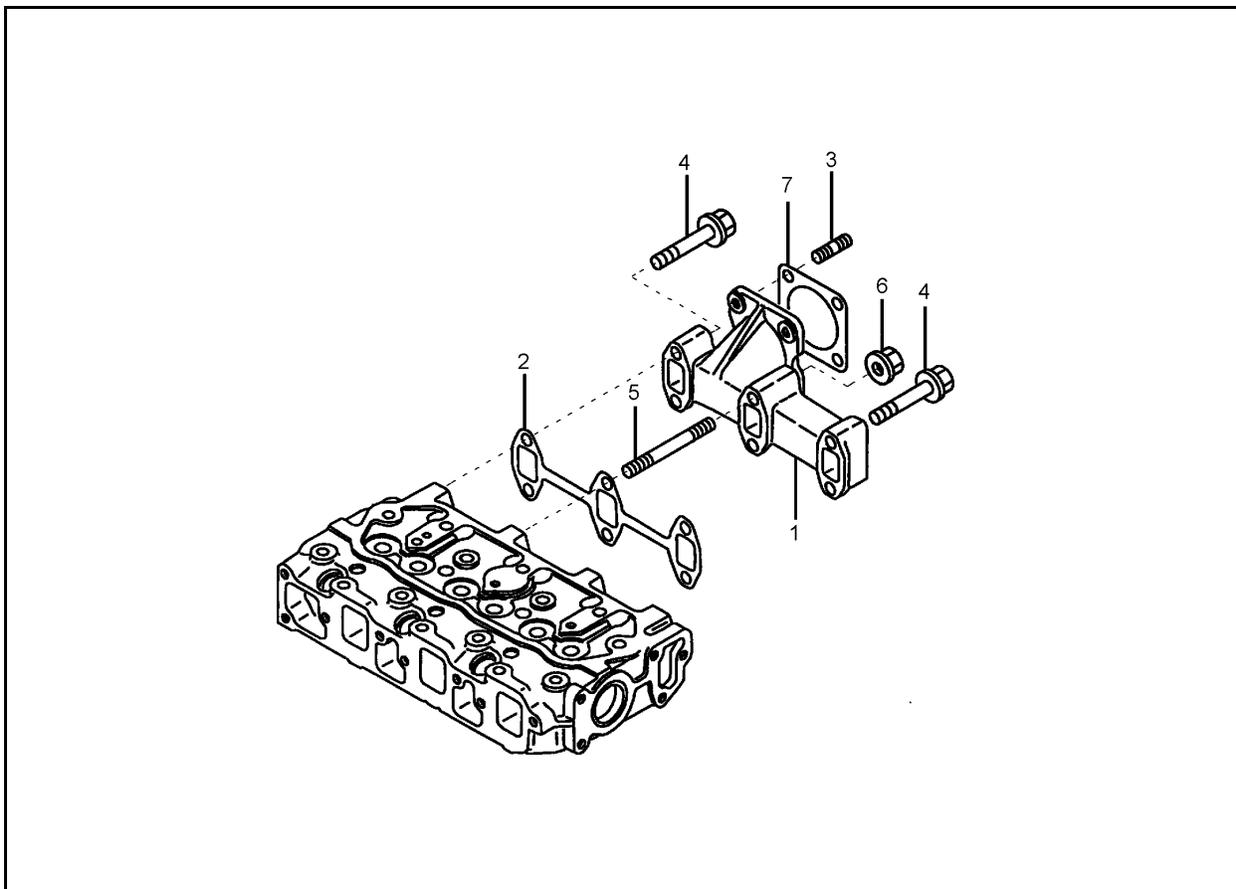
## 223 - EXHAUST SYSTEM

1000131942 - (SN AD00454 - AD04180)



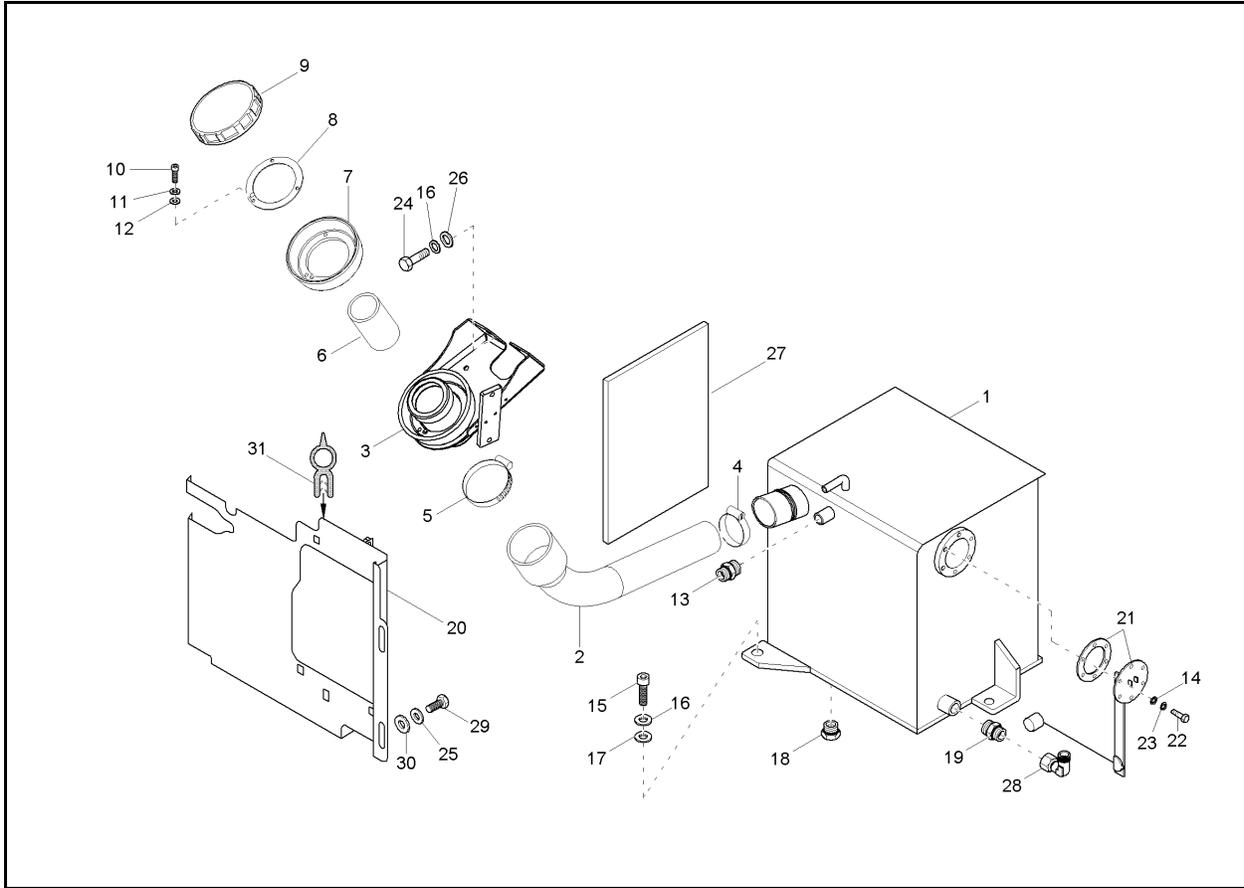
Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	1925104G	EXHAUST PIPE	1	8	1429015G	ISOLATION MAT	1
2	1405428G	SEAL	1	9	163634	WASHER	8
3	1405427G	MUFFLER	1	10	7462680011	WASHER 8.4 ST A2C	2
4	425-36251	GASKET	2	11	165822	CLAMP	1
5	1925105G	EXHAUST BRACKET	1	12	161640	WASHER/GR A 10.5	3
6	1925103G	EXHAUST PIPE	1	13	9914140G	HOSE CLAMP	3
7	656048	HN M8-1.25 C8 ZY DIN934	8	14	656102	HN M10-1.25 F8 ZY DIN934	3

**223 - EXHAUST MANIFOLD**  
**1000131590 - (SN AD00454 - AD04180)**



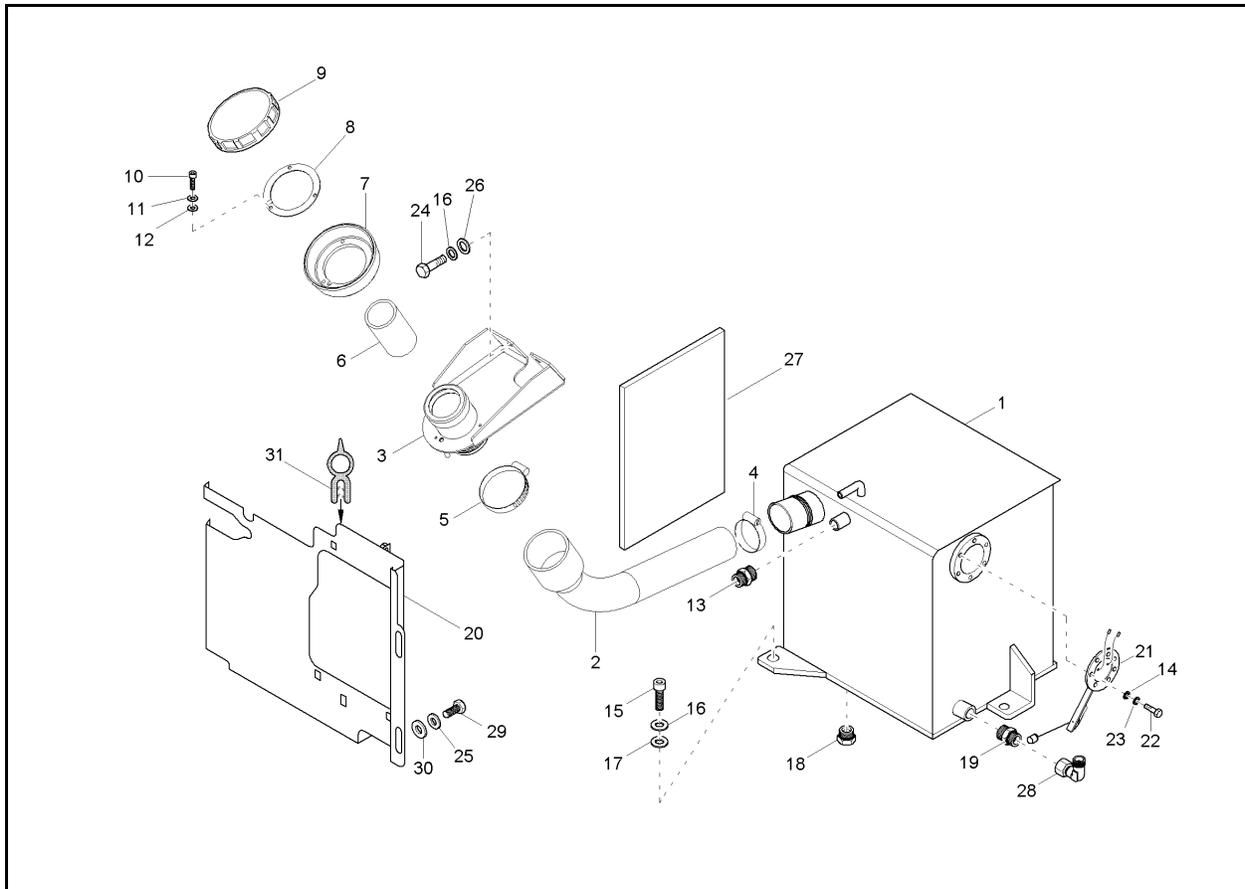
Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	425-35213	EXHAUST MANIFOLD	1	5	425-35215	STUD BOLT	2
2	425-35214	GASKET	1	6	425-35206	NUT	2
3	425-36249	STUD BOLT	4	7	425-36251	GASKET	1
4	188742	SCREW	4				

# 223 - DIESEL TANK 1000148941 - (SN AE0001 AND UP)



Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	206329	FUEL TANK	1	17	163642	WASHER	3
2	1425100G	DIESEL HOSE	1	18	161415	PLUG	1
3	206330	FILLER NECK	1	19	161427	SCREW JOINT	1
4	162611	HOSE CLAMP	1	20	178695	COVER	1
5	164964	HOSE CLAMP	1	21	207037	SENDER	1
6	160436	STRAINER/FUEL TANK	1	22	651421	CS M4-0.7X16 C8.8 ZY DIN931	6
7	165072	RING	1	23	161673	LOCKWASHER S4	6
8	165073	BRACKET	1	24	651393	CS M10-1.5X25 C8.8 ZY	2
9	165110	FUEL CAP	1	25	163670	LOCKWASHER	2
10	651504	SHCS M5-0.8X16 C8.8 ZY DIN912	3	26	161640	WASHER/GR A 10.5	2
11	161674	LOCKWASHER S16	3	27	1429026G	ISOLATION MAT	1
12	161659	WASHER/GR A 5.3 ZO DIN125	3	28	161443	90° FITTING	1
13	161426	SCREW JOINT	1	29	177648	HEX SCREW	2
14	161658	WASHER/GR A 4.3 ZO DIN125	1	30	7462680011	WASHER 8.4 ST A2C	2
15	651475	SHCS M10-1.25X30 F8.8 ZY DIN912	3	31	207275	RUBBER EXTRUSION (0.7M)	1
16	161669	LOCKWASHER S10	5				

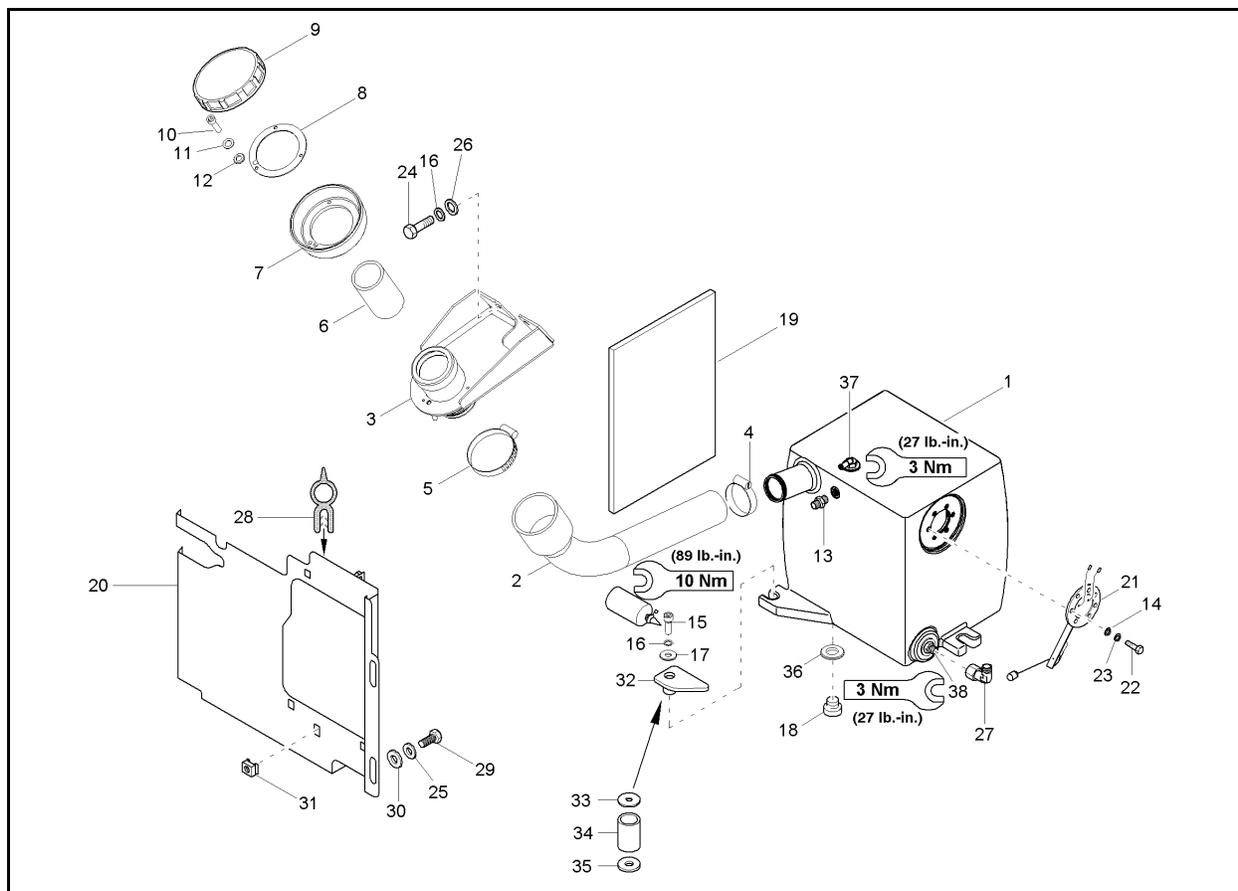
**223 - DIESEL TANK**  
**1000136066 - (SN AD01243 - AD04180)**



Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	206329	FUEL TANK	1	17	163642	WASHER	3
2	1425100G	DIESEL HOSE	1	18	161415	PLUG	1
3	1421137G	FILLER NECK	1	19	161427	SCREW JOINT	1
4	162611	HOSE CLAMP	1	20	178695	COVER	1
5	164964	HOSE CLAMP	1	21	1424404G	SENDER	1
6	160436	STRAINER/FUEL TANK	1	22	651421	CS M4-0.7X16 C8.8 ZY DIN931	6
7	165072	RING	1	23	161673	LOCKWASHER S4	6
8	165073	BRACKET	1	24	651393	CS M10-1.5X25 C8.8 ZY	2
9	165110	FUEL CAP	1	25	163670	LOCKWASHER	2
10	651504	SHCS M5-0.8X16 C8.8 ZY DIN912	3	26	161640	WASHER/GR A 10.5	2
11	161674	LOCKWASHER S16	3	27	1429026G	ISOLATION MAT	1
12	161659	WASHER/GR A 5.3 ZO DIN125	3	28	161443	90° FITTING	1
13	161426	SCREW JOINT	1	29	177648	HEX SCREW	2
14	161658	WASHER/GR A 4.3 ZO DIN125	1	30	7462680011	WASHER 8.4 ST A2C	2
15	651475	SHCS M10-1.25X30 F8.8 ZY DIN912	3	31	207275	RUBBER EXTRUSION (0.7M)	1
16	161669	LOCKWASHER S10	5				

# 223 - DIESEL TANK

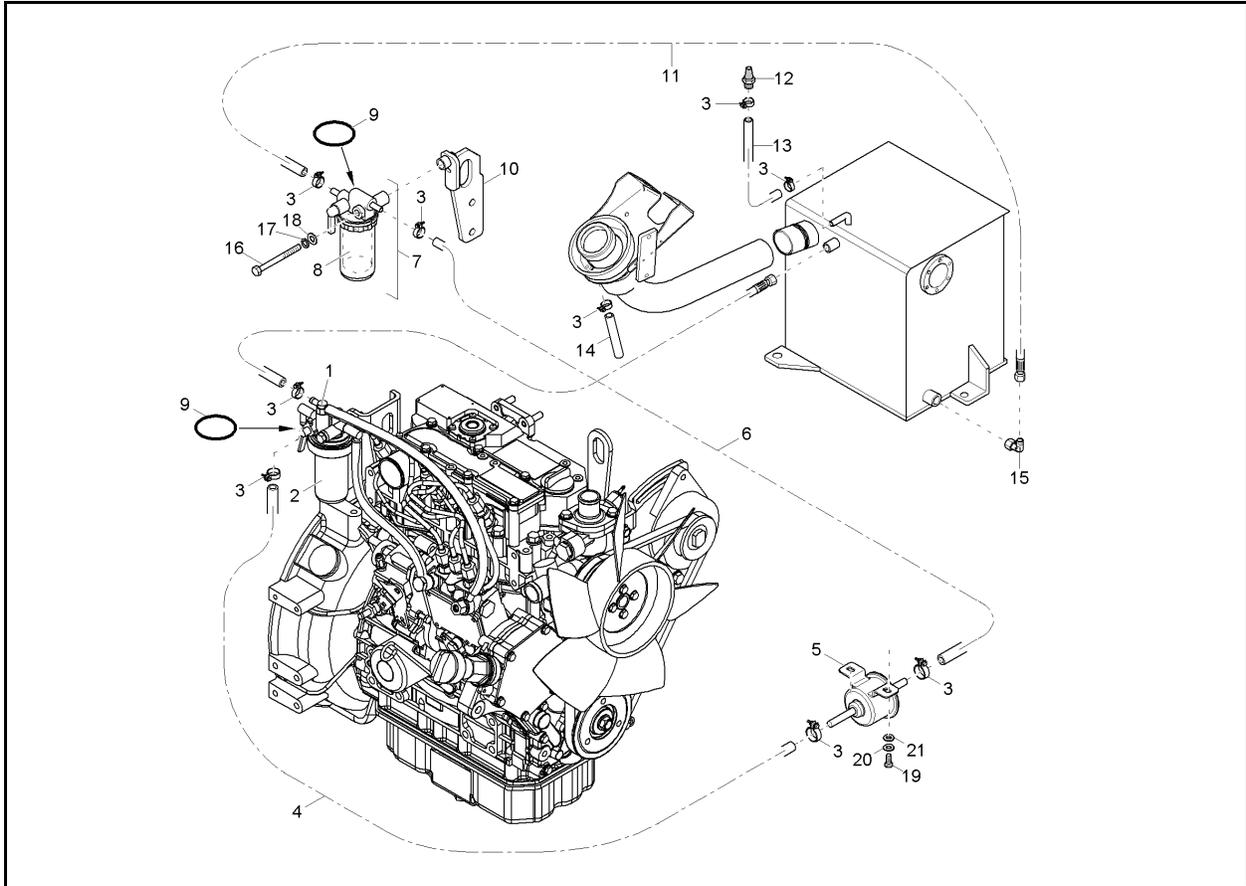
## 1000131581 - (SN AD00454 - AD01242)



Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	1421400G	KIT/FUEL TANK	1	21	1424404G	SENDER	1
2	1425100G	DIESEL HOSE	1	22	651421	CS M4-0.7X16 C8.8 ZY DIN931	6
3	1421137G	FILLER NECK	1	23	161673	LOCKWASHER S4	6
4	162611	HOSE CLAMP	1	24	651393	CS M10-1.5X25 C8.8 ZY	2
5	164964	HOSE CLAMP	1	25	163670	LOCKWASHER	2
6	160436	STRAINER/FUEL TANK	1	26	161640	WASHER/GR A 10.5	2
7	165072	RING	1	27	161443	90° FITTING	1
8	165073	BRACKET	1	28	207275	RUBBER EXTRUSION (0.7M)	1
9	165110	FUEL CAP	1	29	177648	HEX SCREW	2
10	651504	SHCS M5-0.8X16 C8.8 ZY DIN912	3	30	7462680011	WASHER 8.4 ST A2C	2
11	161674	LOCKWASHER S16	3	31	161615	NUT/CAGE M8	1
12	161659	WASHER/GR A 5.3 ZO DIN125	3	32	178694	PLATE (SN AD00454 - AD00891)	1
13	161426	SCREW JOINT	1	33	203993	WASHER/RUBBER (SN AD00892 - AD01242)	1
14	161658	WASHER/GR A 4.3 ZO DIN125	1	34	203992	SPACER (SN AD00892 - AD01242)	1
15	164897	SCREW	3	35	203994	WASHER (SN AD00892 - AD01242)	1
16	161669	LOCKWASHER S10	5	36	178262	SEAL RING	1
17	163642	WASHER	3	37	203984	FITTING	1
18	161415	PLUG	1	38	205317	STUB COMPLETE	1
19	1429026G	ISOLATION MAT	1				
20	178695	COVER	1				

# 223 - FUEL SYSTEM

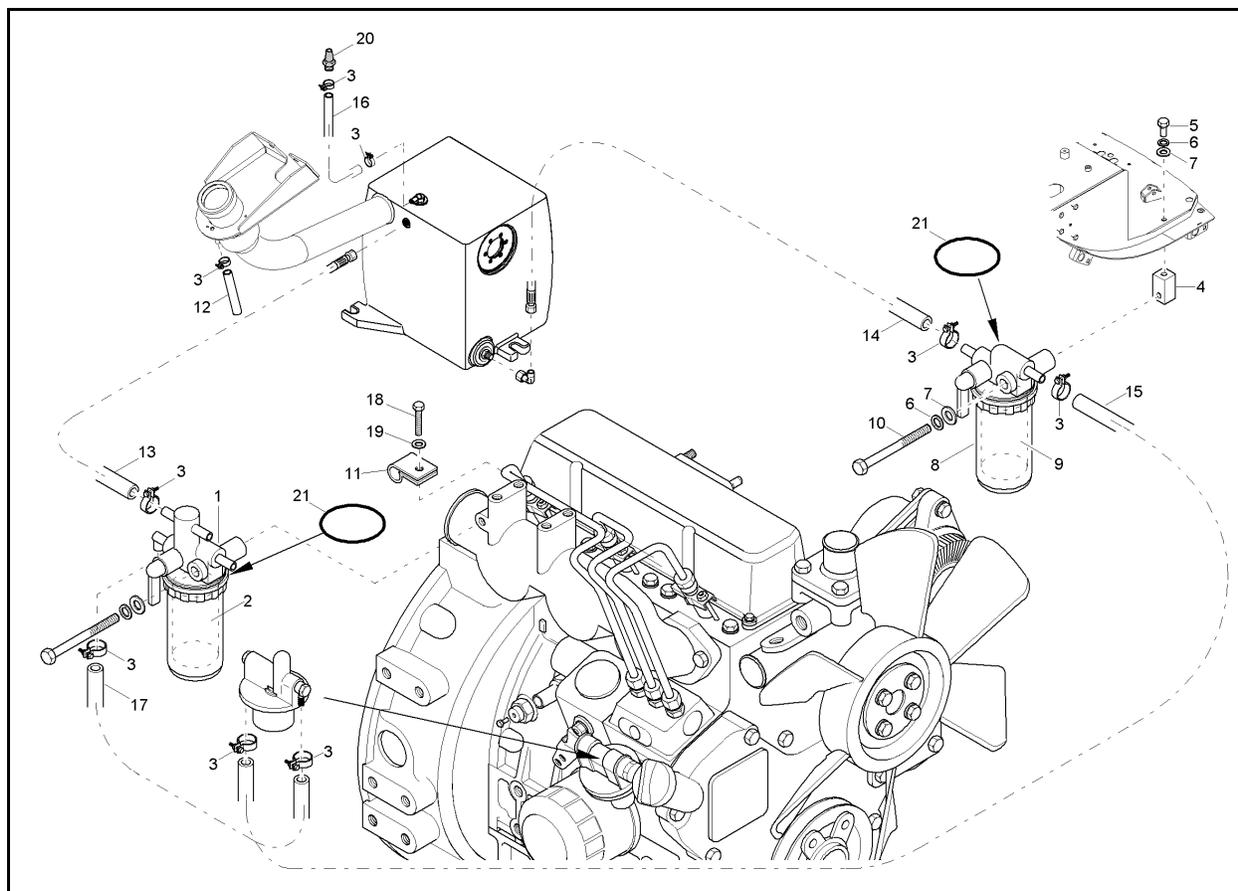
## 1000148826 - (SN AE0001 AND UP)



Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	206298	FUEL FILTER ASSY	1	12	178965	FILTER	1
2	206299	FUEL FILTER ELEMENT	1	13	207265	FUEL LINE (0.9M)	1
3	162504	HOSE CLAMP	9	14	207263	FUEL LINE (0.7M)	1
4	207266	FUEL LINE (1.0M)	1	15	161443	90° FITTING	1
5	186308	FUEL PUMP	1	16	651439	HB M8-1.25X80 C8.8 ZY	1
6	207265	FUEL LINE (0.9M)	1	17	163670	LOCKWASHER	1
7	425-35973	WATER SEPARATOR COMPLETE	1	18	206301	SPACER	1
8	425-36091	SEPARATOR FILTER ELEMENT	1	19	9901671G	HEXAGON HEAD SCREW	2
9	206912	O-RING	2	20	161675	LOCKWASHER S6	2
10	206300	BRACKET	1	21	161660	WASHER GR A6.4 ZO DIN 125	2
11	165274	TUBE	1				

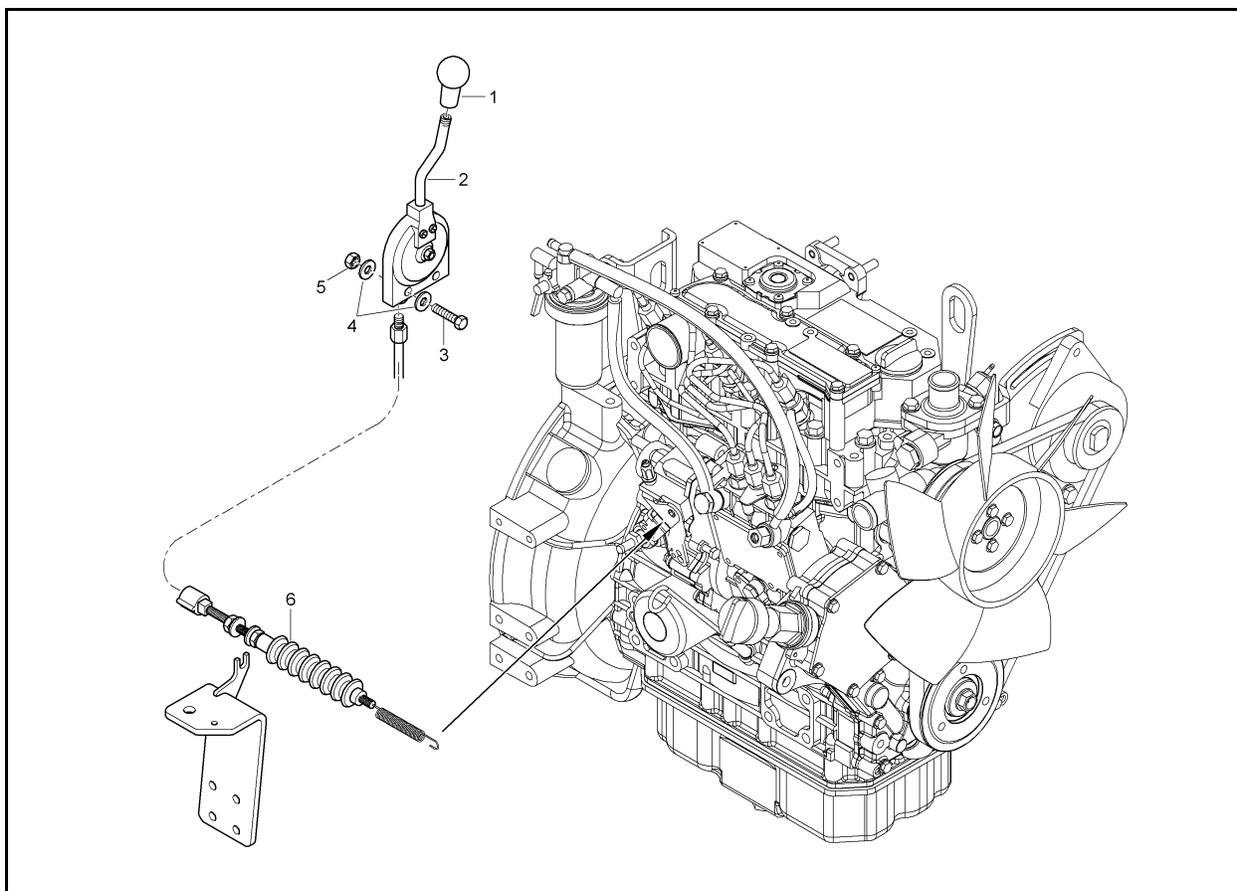
## 223 - FUEL SYSTEM

### 1000131582 - (SN AD00454 - AD04180)



Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	162077	FUEL FILTER ASSY	1	12	207263	FUEL LINE (0.7M)	1
2	425-35326	ELEMENT/FUEL	1	13	1425404G	DIESEL SUCTION TUBE	1
3	162504	HOSE CLAMP	9	14	165274	TUBE	1
4	1425125G	BRACKET	1	15	207270	FUEL LINE (2.1M)	1
5	177648	HEX SCREW	1	16	207265	FUEL LINE (0.9M)	1
6	163670	LOCKWASHER	2	17	207260	FUEL LINE (0.45M)	1
7	163634	WASHER	2	18	656006	CS M10-1.5X20 C8.8 ZY DIN931	1
8	425-35973	WATER SEPARATOR COMPLETE	1	19	161640	WASHER/GR A 10.5	1
9	425-36091	SEPARATOR FILTER ELEMENT	1	20	178965	FILTER	1
10	651438	HB M8-1.25X70 C8.8 ZY	1	21	206912	O-RING	2
11	162608	HOSE CLAMP	1				

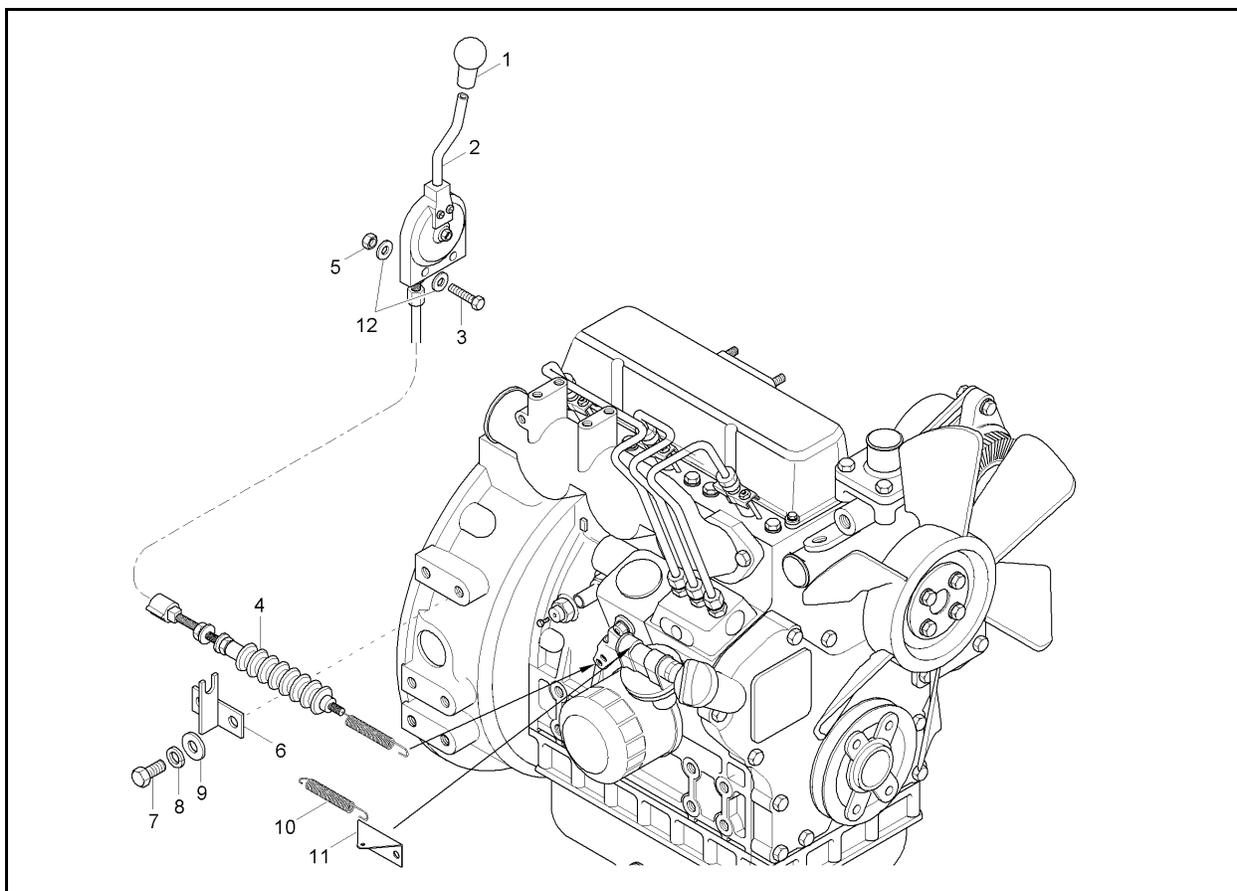
**223 - THROTTLE LEVER**  
**1000150828 - (SN AE0001 AND UP)**



Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	162398	KNOB	1	4	161660	WASHER GR A6.4 ZO DIN 125	4
2	1410401G	THROTTLE LEVER	1	5	161678	HN M6-1.00 C8 ZO	2
3	656128	CS M6-1X30 C8.8 ZY DIN931	2	6	1420403G	THROTTLE CABLE	1

## 223 - THROTTLE LEVER

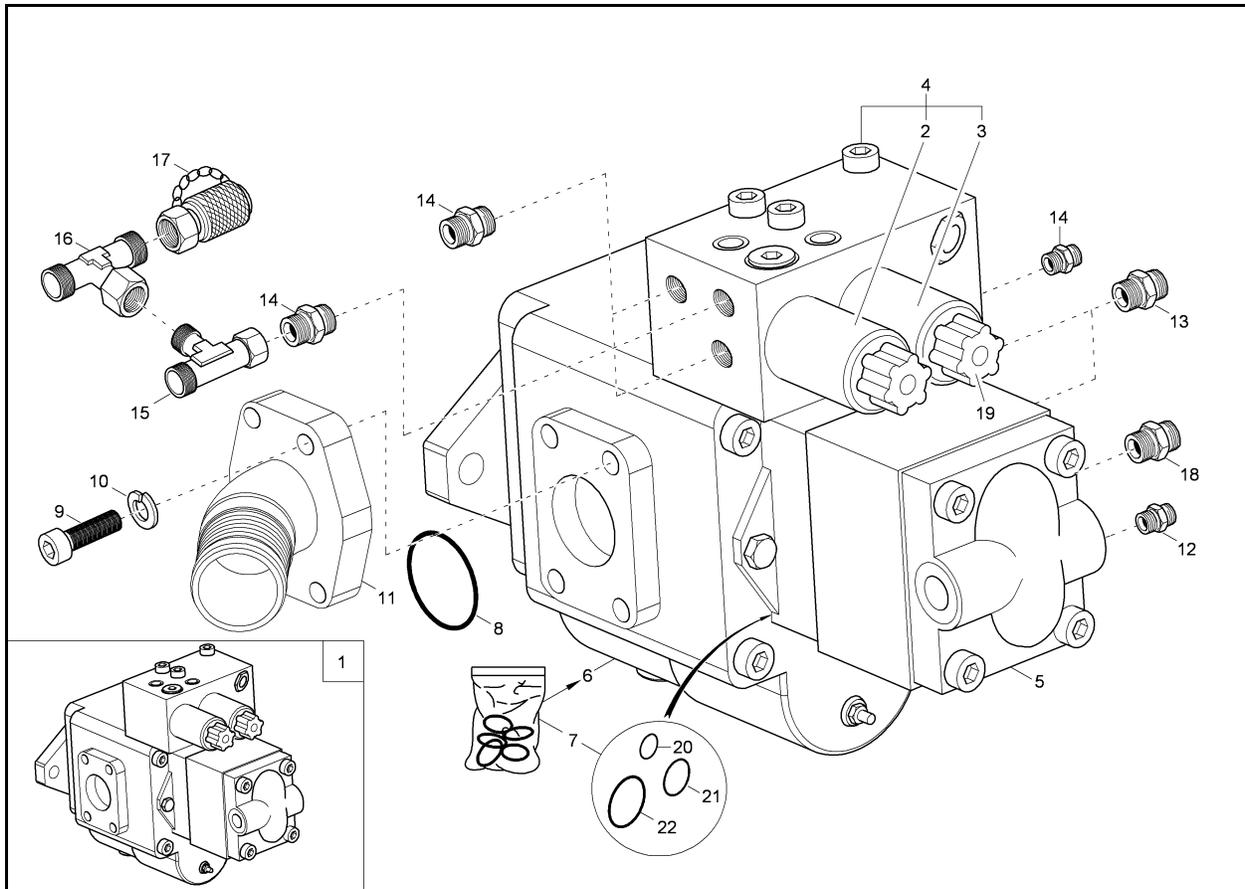
1000131584 - (SN AD00454 - AD04180)



Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	162398	KNOB	1	7	177648	HEX SCREW	2
2	1410401G	THROTTLE LEVER	1	8	163670	LOCKWASHER	2
3	656128	CS M6-1X30 C8.8 ZY DIN931	2	9	163634	WASHER	2
4	1420403G	THROTTLE CABLE	1	10	160480	SPRING	1
5	161678	HN M6-1.00 C8 ZO	2	11	161734	BRACKET	1
6	161733	BRACKET	1	12	161660	WASHER GR A6.4 ZO DIN 125	4

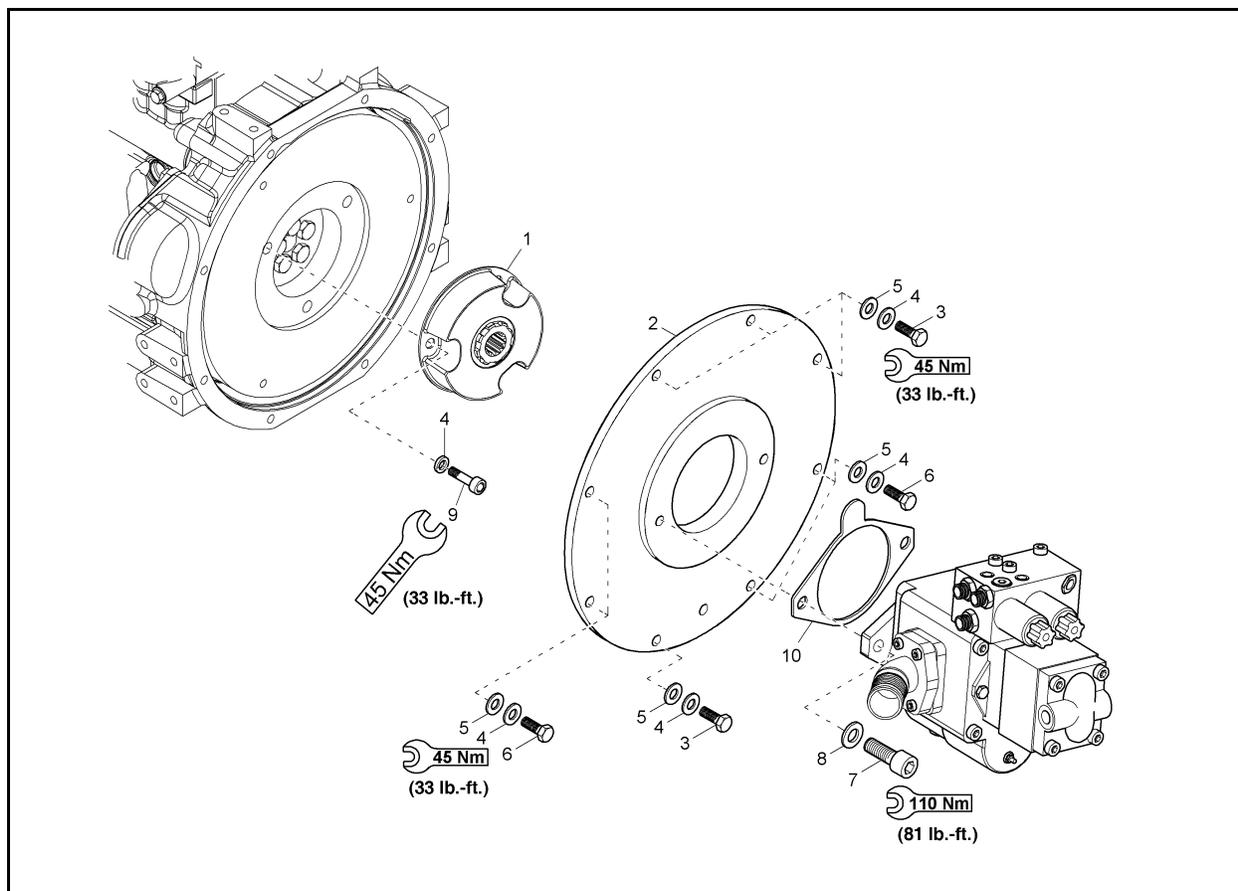
# 223 - HYDRAULIC PUMP

## 1000131600



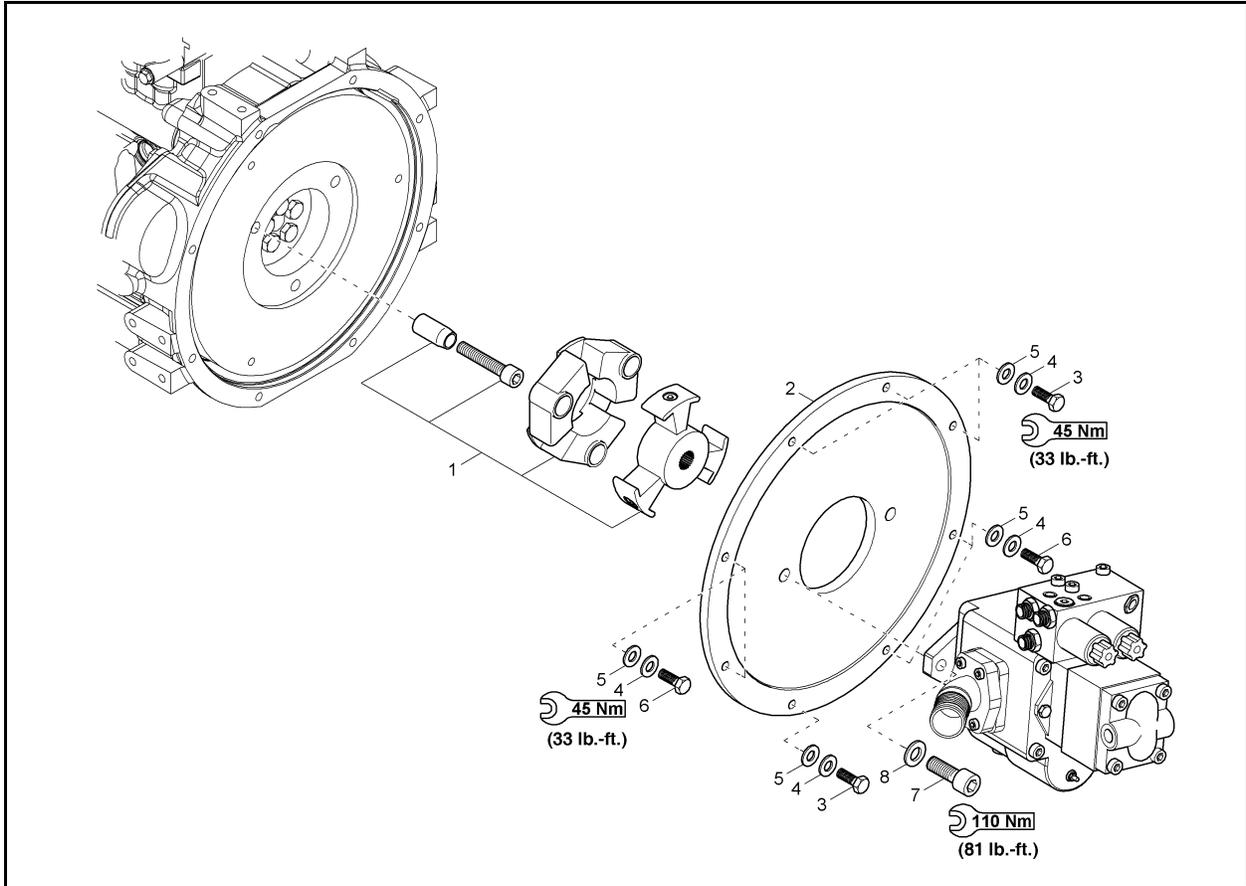
Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	1928401G	PUMP COMPLETE (Includes Ref. Nos. 4, 5 & 6)	1	13	165965	SCREW JOINT	2
2	1528406G	SOLENOID SWITCH	1	14	164945	SCREW JOINT	4
3	1528407G	SOLENOID SWITCH	1	15	161448	TEE	1
4	1528405G	PILOT OIL SUPPLY UNIT	1	16	161450	TEE	1
5	1528404G	GEAR PUMP	1	17	0003638466	TEST CONNECTION 8 L A3C	1
6	1928402G	VARIABLE PUMP	1	18	165971	SCREW JOINT	1
7	1529401G	SEAL KIT (VARIABLE PUMP)	1	19	178811	SCREW	2
8	161565	O-RING	1	20	179135	O-RING (FOR GEAR PUMP REPLACEMENT)	1
9	163344	SCREW	4	21	205701	O-RING (7.8MM) (FOR GEAR PUMP REPLACEMENT)	1
10	161669	LOCKWASHER S10	4	22	178812	O-RING (6.8MM) (FOR GEAR PUMP REPLACEMENT)	1
11	1428200G	FLANGE	1				
12	165970	SCREW JOINT	1				

## 223 - HYDRAULIC PUMP DRIVE 1000184641 - (SN AF03764 AND UP)



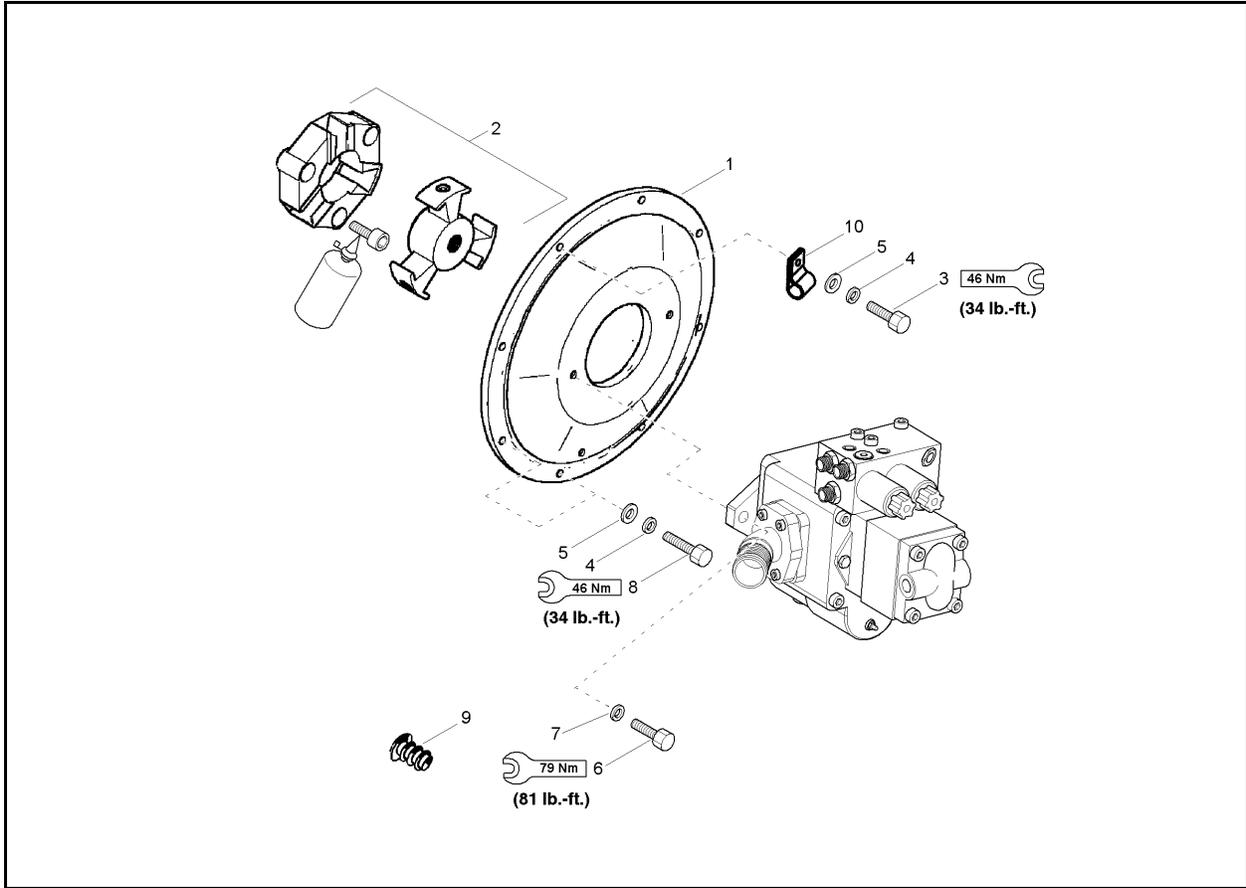
Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	201582	COUPLER	1	6	651397	CS M10-1.5X35 C8.8 ZY	4
2	204040	PUMP CARRIER	1	7	651480	SHCS M12-1.75X30 C10.9 ZY DIN912	2
3	656008	CS M10-1.5X30 C8.8 ZY DIN931	4	8	163651	WASHER	2
4	161669	LOCKWASHER S10	11	9	651472	SHCS M10-1.25X20 F8.8 ZY DIN912	3
5	161640	WASHER/GR A 10.5	8	10	204125	PLATE	1

**223 - HYDRAULIC PUMP DRIVE**  
**1000148942 - (SN AE00001 - AF03763)**



Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	206335	COUPLING	1	5	161640	WASHER/GR A 10.5	8
2	206336	PUMP CARRIER	1	6	651397	CS M10-1.5X35 C8.8 ZY	4
3	656008	CS M10-1.5X30 C8.8 ZY DIN931	4	7	651480	SHCS M12-1.75X30 C10.9 ZY DIN912	2
4	161669	LOCKWASHER S10	8	8	163651	WASHER	2

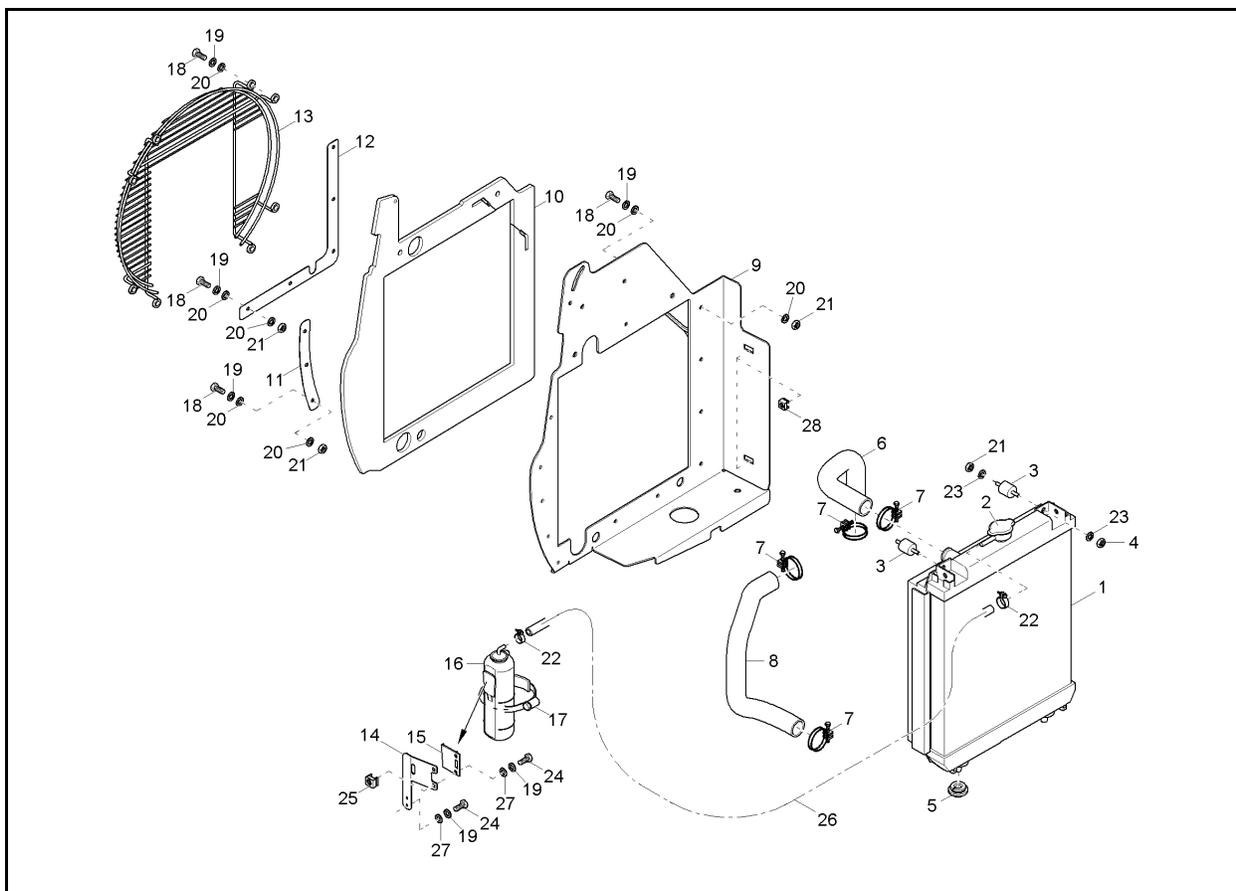
## 223 - HYDRAULIC PUMP DRIVE 1000131598 - (SN AD00454 - AD04180)



Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	1528403G	PUMP CARRIER	1	6	651480	SHCS M12-1.75X30 C10.9 ZY DIN912	2
2	1528402G	COUPLER	1	7	163651	WASHER	2
3	656008	CS M10-1.5X30 C8.8 ZY DIN931	6	8	651397	CS M10-1.5X35 C8.8 ZY	2
4	161669	LOCKWASHER S10	8	9	164928	PLUG	1
5	161640	WASHER/GR A 10.5	8	10	162608	HOSE CLAMP	1

# 223 - RADIATOR

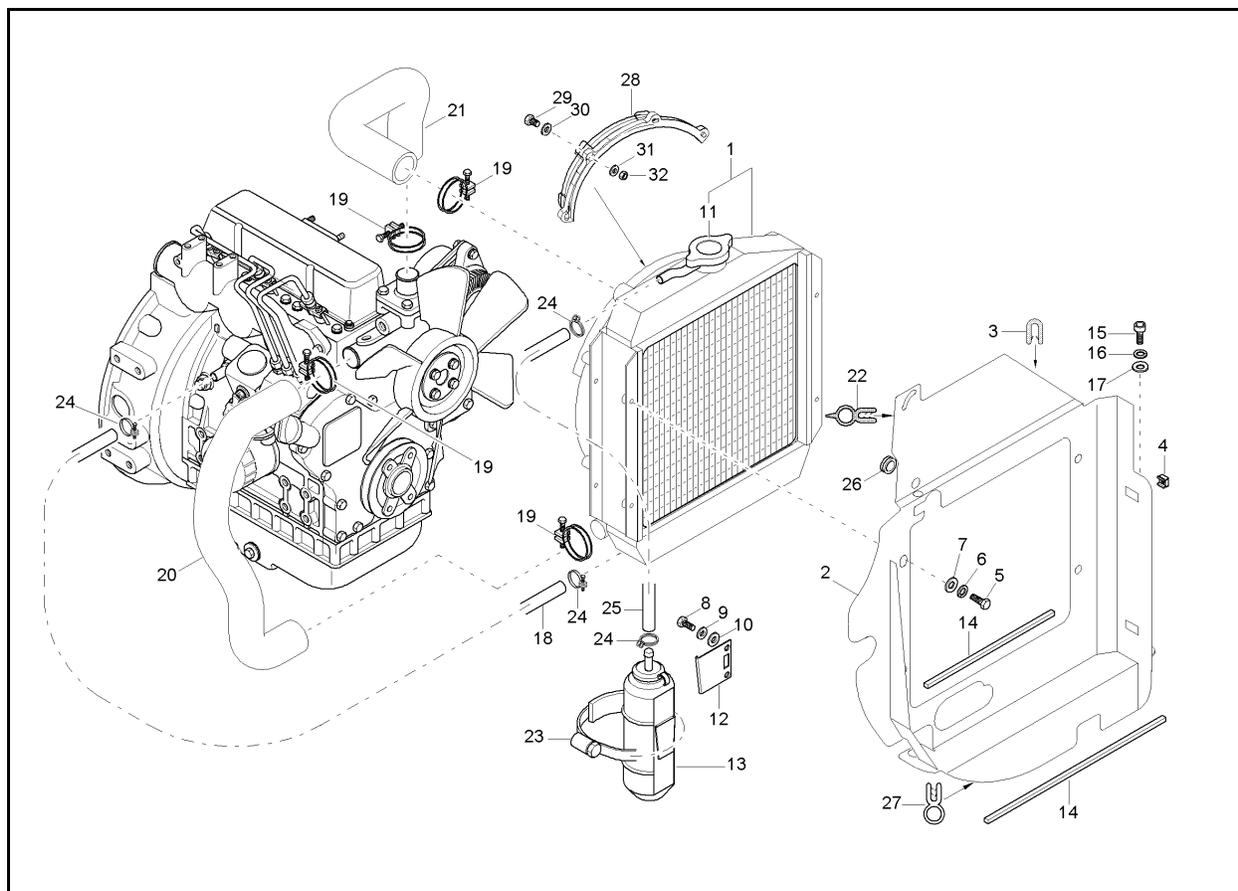
## 1000148844 (SN AE00001 AND UP)



Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	206318	RADIATOR	1	15	425-36152	BRACKET/SUB-TANK	1
2	177996	RADIATOR CAP	1	16	425-36233	RESERVOIR	1
3	206319	METAL-RUBBER BUFFER	2	17	161856	CLAMP	1
4	656047	HN M6-1 C8 ZY DIN934	2	18	651424	CS M6-1X20 C8.8 ZY DIN931	21
5	177710	RUBBER BUFFER	2	19	161675	LOCKWASHER S6	25
6	206320	HOSE	1	20	161613	NUT/CAGE M6	34
7	425-34853	CLAMP 38	4	21	161678	HN M6-1.00 C8 ZO	15
8	206321	HOSE	1	22	162504	HOSE CLAMP	2
9	206322	BRACKET	1	23	161621	LW SPRING 6 DIN7980	4
10	206323	RUBBER SEAL	1	24	656149	CS M6-1X16 C8.8 ZY DIN931	4
11	206324	CLAMP PLATE	1	25	161613	NUT/CAGE M6	2
12	206325	CLAMP PLATE	1	26	207258	FUEL LINE (0.4M)	1
13	206326	PROTECTING SCREEN	1	27	161660	WASHER GR A6.4 ZO DIN 125	4
14	206327	BRACKET	1	28	161615	NUT/CAGE M8	2

## 223 - RADIATOR

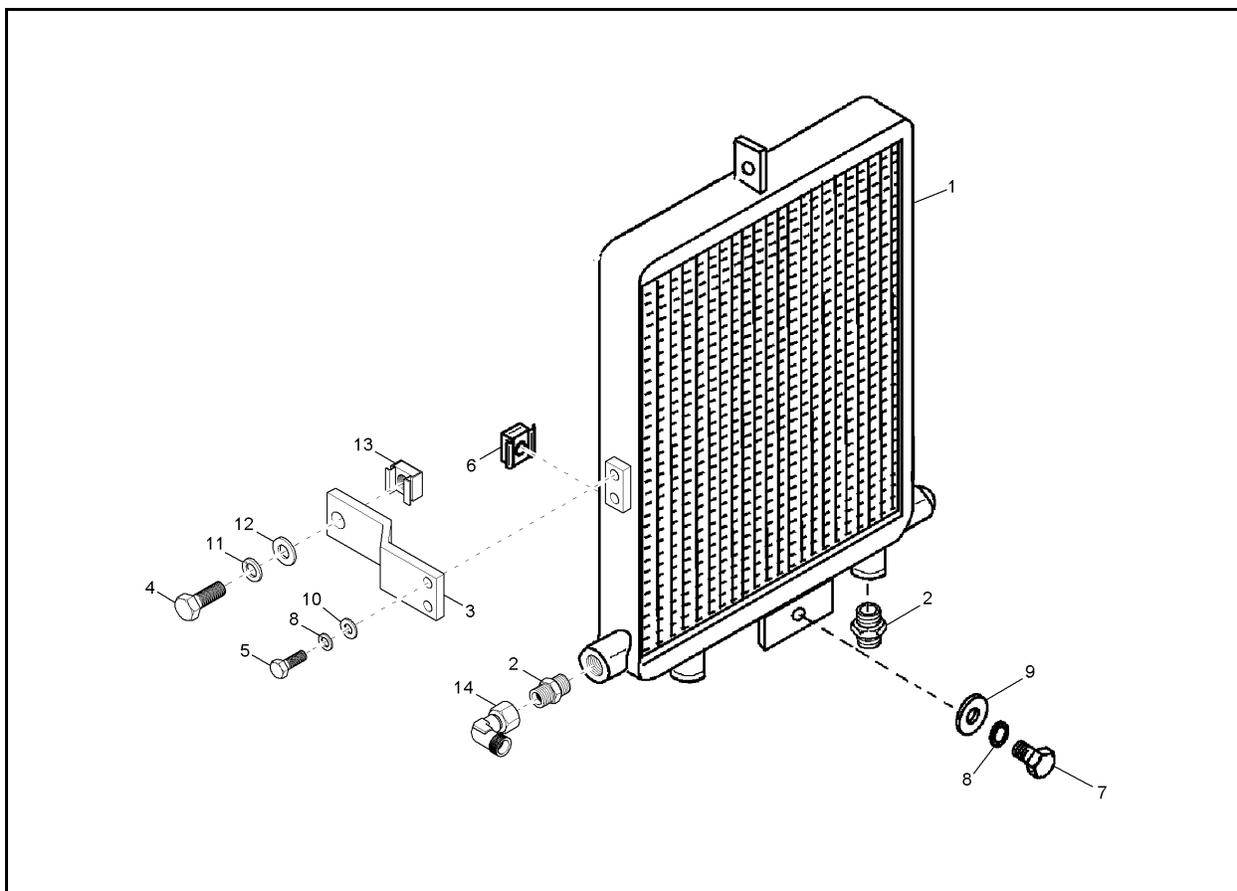
### 1000131578 - (SN AD00454 - AD04180)



Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	425-36150	RADIATOR	1	17	163642	WASHER	3
2	1925005G	BRACKET	1	18	207263	FUEL LINE (0.6M)	1
3	207209	EDGE PROTECTION SECTION (0.4M)	1	19	425-34853	CLAMP 38	4
4	161615	NUT/CAGE M8	2	20	161794	RADIATOR HOSE	1
5	656093	CS M8-1.25X16 C8.8 ZY DIN931	4	21	161795	RADIATOR HOSE	1
6	163670	LOCKWASHER	4	22	207276	RUBBER EXTRUSION (0.9M)	1
7	7462680011	WASHER 8.4 ST A2C	4	23	161856	CLAMP	1
8	656092	CS M6-1X12 C8.8 ZY DIN931	2	24	162504	HOSE CLAMP	4
9	161675	LOCKWASHER S6	2	25	207257	FUEL LINE (0.3M)	1
10	7462680008	WASHER	2	26	9709266G	RUBBER BUSHING	1
11	160424	RADIATOR CAP	1	27	206328	RUBBER PROFILE (0.50M)	1
12	425-36152	BRACKET/SUB-TANK	1	28	1425021G	VENTILATOR	1
13	190845	EXPANSION CONTAINER	1	29	651430	CS M8-1.25X12 C8.8 ZY DIN931	4
14	207151	RUBBER EXTRUSION (1.0M)	1	30	163634	WASHER	4
15	162022	SCREW	3	31	656110	LW M8 ZY DIN127	4
16	161669	LOCKWASHER S10	3	32	656048	HN M8-1.25 C8 ZY DIN934	4

# 223 - OIL COOLER

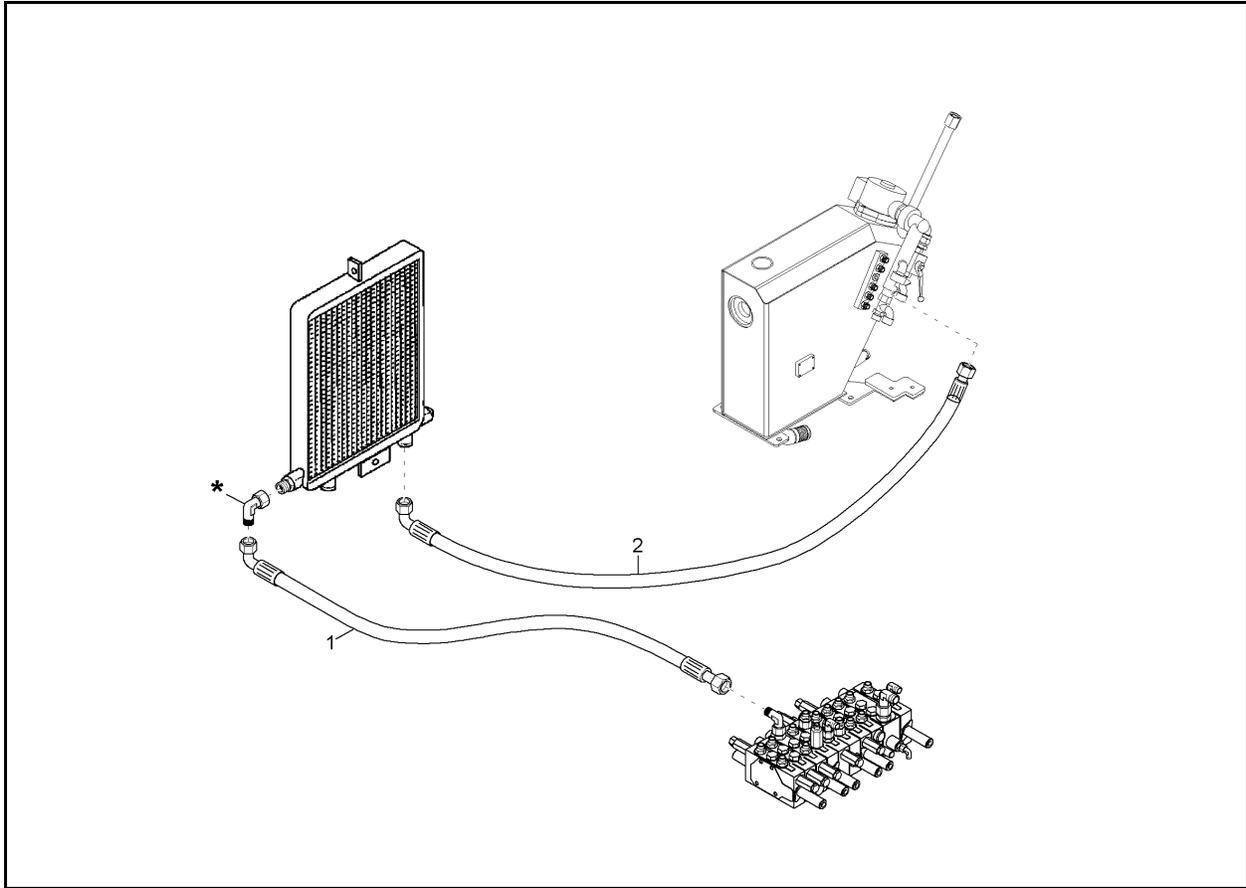
1000149063/1000131601 - (SN AD00454 AND UP)



Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	1428418G	HYDRAULIC OIL COOLER	1	8	163670	LOCKWASHER	3
2	9910346G	SCREW JOINT	2	9	7462680011	WASHER 8.4 ST A2C	1
3	178796	BRACKET	1	10	163634	WASHER	2
4	651393	CS M10-1.5X25 C8.8 ZY	1	11	161669	LOCKWASHER S10	1
5	656093	CS M8-1.25X16 C8.8 ZY DIN931	2	12	161640	WASHER/GR A 10.5	1
6	161616	NUT/CAGE M8	1	13	161610	NUT/CAGE M10	1
7	656094	CS M8-1.25X30 C8.8 ZY DIN931	1	14	161447	90° FITTING (SN AD03121 AND UP)	1

# 223 - OIL COOLER INSTALLATION

## 1000131631 - (SN AD00454 AND UP)

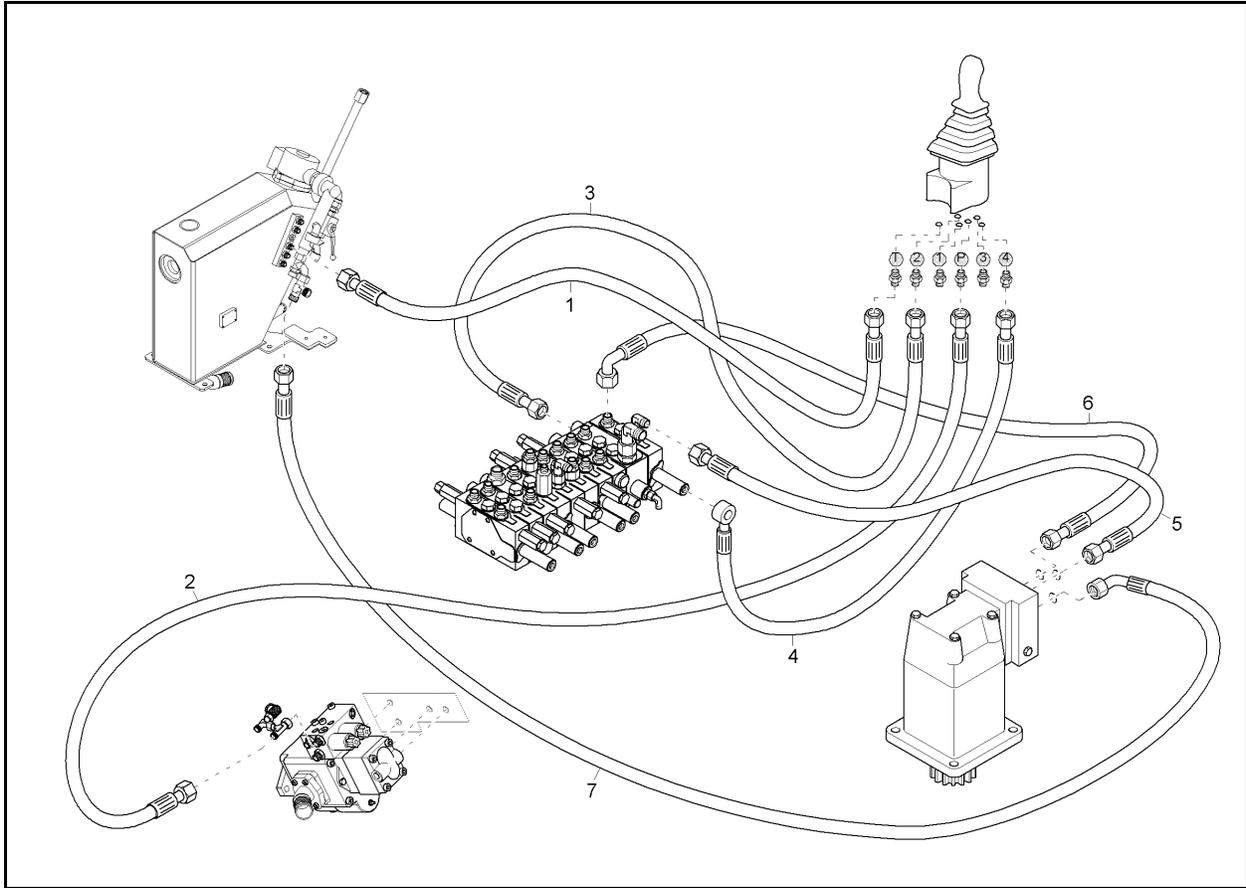


Ref.	No.	Part No.	Description	Qty.
	1	8006005G	HP HOSE	1
	2	178524	HP HOSE	1

\* 90° elbow only present on SN AD03121 and up.

# 223 - TURNTABLE DRIVE UNIT INSTALLATION

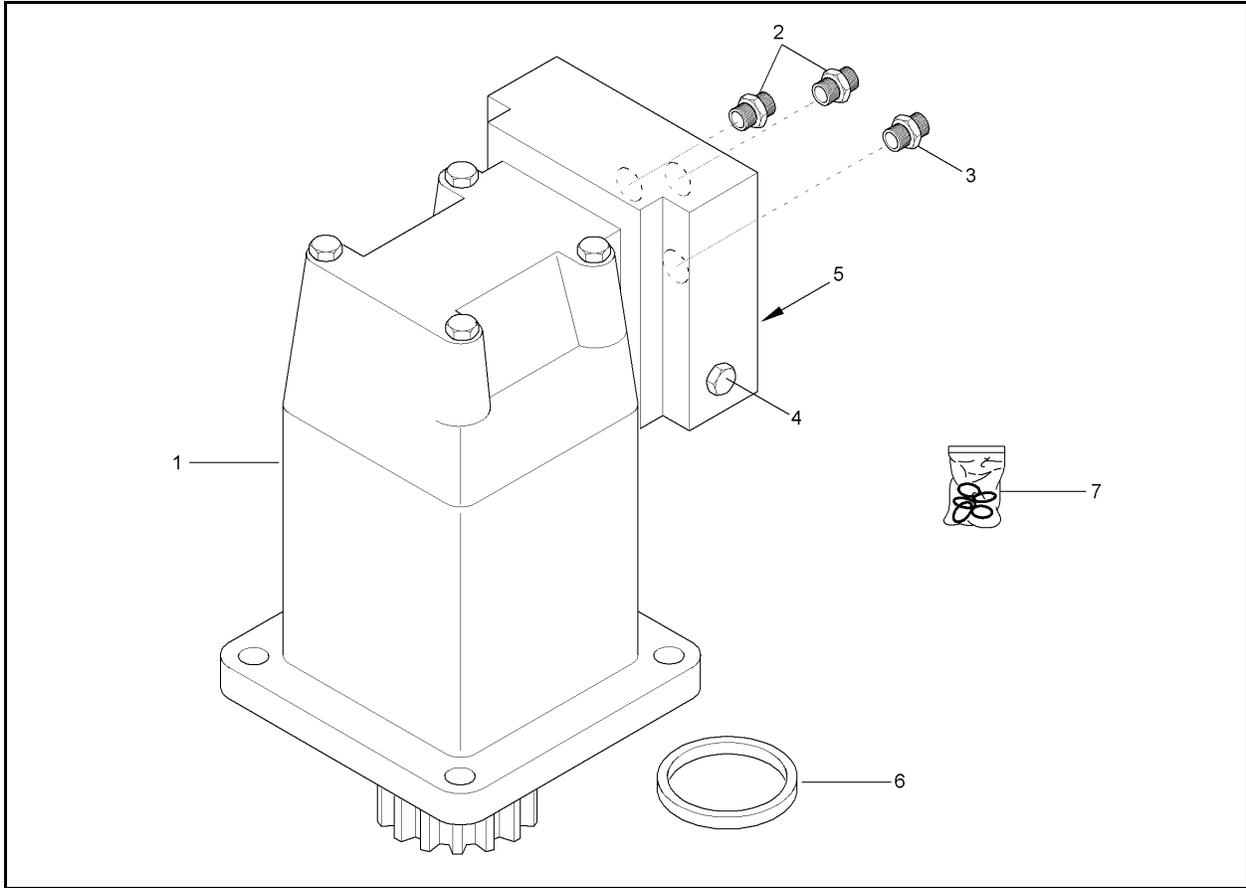
## 1000131636



Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	162447	HP HOSE	1	5	8004374G	HP HOSE	1
2	163288	HP HOSE	1	6	203996	HP HOSE	1
3	179544	HP HOSE	1	7	8004371G	HP HOSE	1
4	178516	HP HOSE	1				

# 223 - TURNTABLE DRIVE UNIT

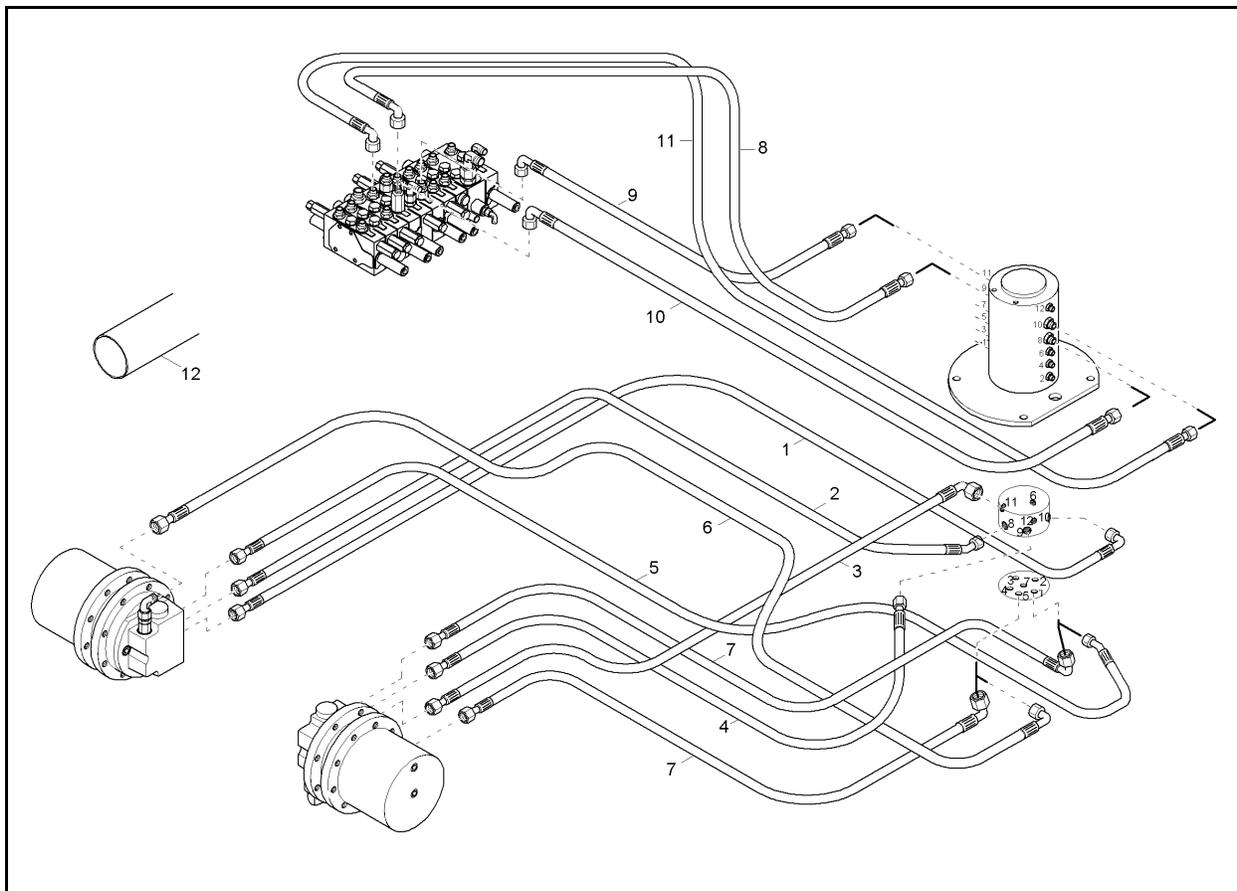
1000131607



Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	160595	MOTOR/HYDRAULIC	1	5	160567	VALVE/SHOCK	1
2	161428	SCREW JOINT 10L	2	6	160570	SEAL	1
3	165966	SCREW JOINT	1	7	160604	SEAL KIT	1
4	160569	VALVE/PRESSURE LIMITING	1				

# 223 - TRAVEL GEAR INSTALLATION

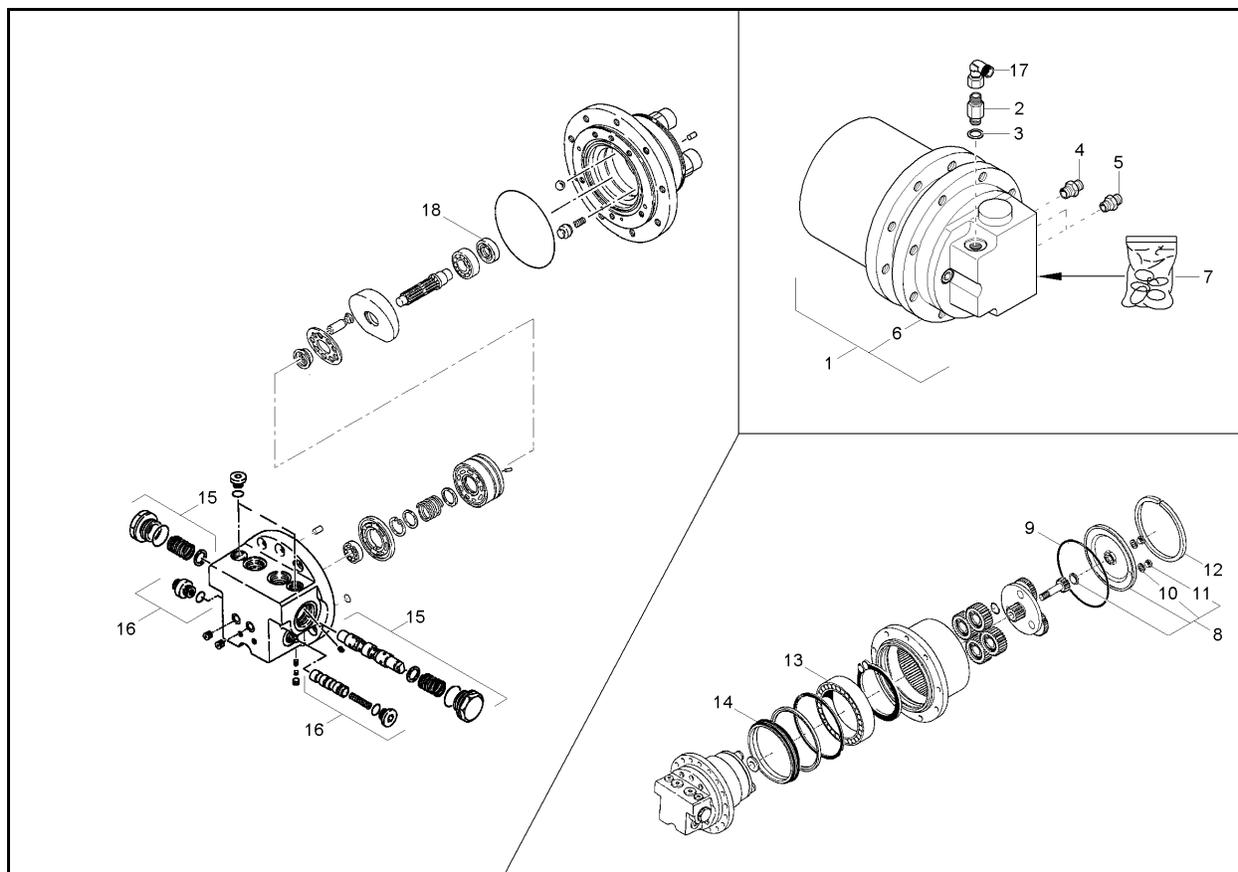
1000131635



Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	162970	HP HOSE	1	8	8004373G	HP HOSE	1
2	8004369G	HP HOSE	1	9	8004364G	HP HOSE	1
3	8004102G	HP HOSE	1	10	8004164G	HP HOSE	1
4	161308	HP HOSE	1	11	8004365G	HP HOSE	1
5	161288	HP HOSE	1	12	9710041G	HOSE PROTECTION	2
6	161245	HP HOSE	1				
7	204117	HP HOSE (SN AD00454 and up)	2				
	165832	HP HOSE (SN AB00440 - AD00453)	1				

# 223 - DRIVE MOTOR

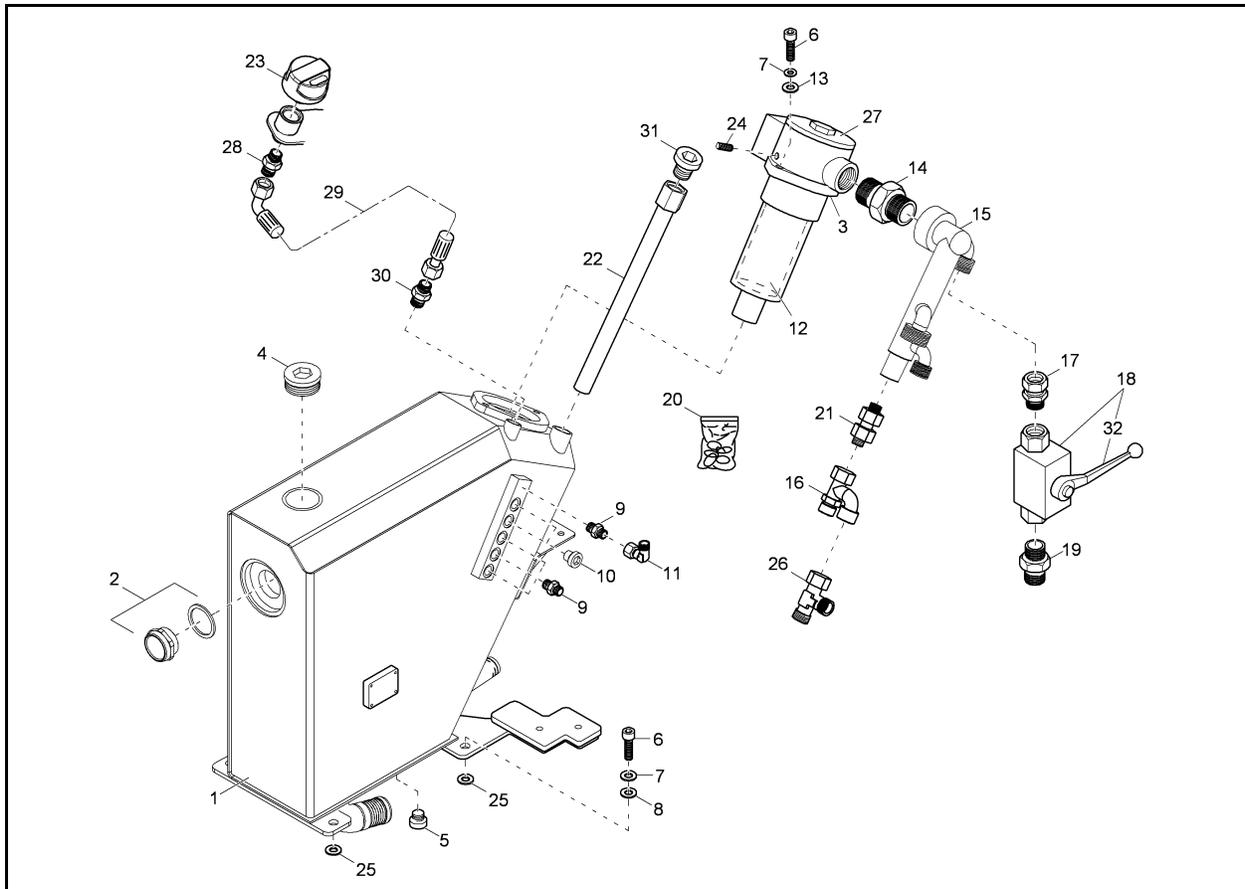
## 1000135907



Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	160636	DRIVE MOTOR COMPLETE	2	10	206097	PLUG	4
2	9910286G	SCREW JOINT	2	11	206098	SEAL RING	4
3	161574	O-RING	2	12	206099	LOCK RING	2
4	164945	SCREW JOINT	2	13	206100	BEARING/DRIVE ASSY	2
5	165966	SCREW JOINT	4	14	206101	SEAL/LIFE TIME	2
6	1908603G	HYDRAULIC MOTOR	2	15	206102	VALVE SET	2
7	1908601G	SEAL KIT - HYDRAULIC MOTOR	2	16	206103	CONTROL PLUNGER	2
8	1908604G	COVER	2	17	161443	90° FITTING	2
9	204122	O-RING	1	18	204123	SEAL RING	2

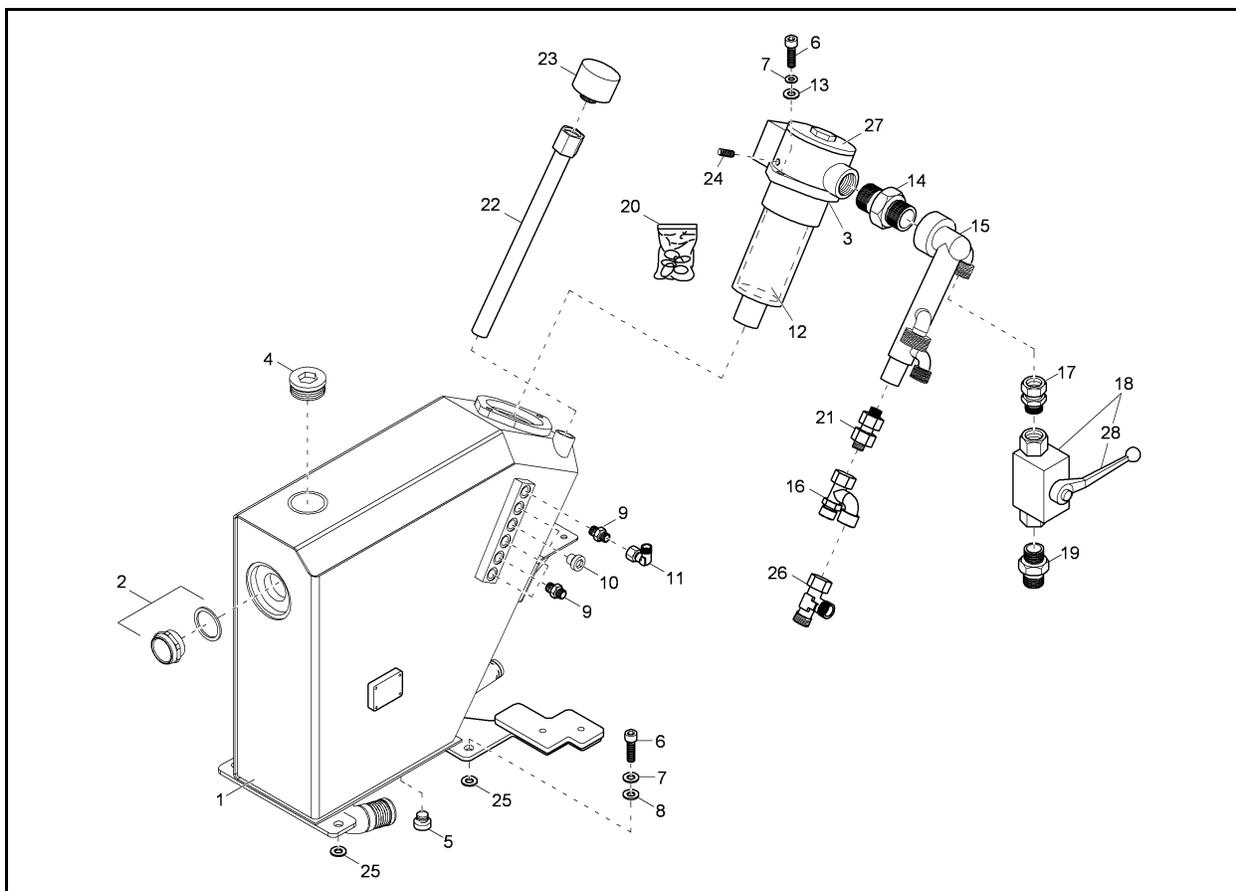
# 223 - HYDRAULIC TANK

## 1000163419 (SN AF01068 AND UP)



Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	206007	OIL TANK	1	18	206084	BALL VALVE (Includes Ref. No. 32)	1
2	1428450G	OIL LEVEL GLASS	1	19	161431	SCREW JOINT	1
3	165108	HYD OIL FILTER COMPLETE	1	20	165113	SEAL KIT/HYD FILTER	1
4	9909013G	PLUG	1	21	9911064G	NON RETURN VALVE	1
5	161415	PLUG	1	22	178431	TUBE	1
6	651475	SHCS M10-1.25X30 F8.8 ZY DIN912	6	23	1528425G	BREATHER	1
7	161669	LOCKWASHER S10	6	24	163859	SCREW	1
8	163642	WASHER	4	25	161663	WASHER/GR A 10.5 ZO	2
9	161426	SCREW JOINT	5	26	162062	ELBOW	1
10	161414	SCREW	1	27	178268	COVER	1
11	161443	90° FITTING	1	28	204000	SCREW JOINT	1
12	165111	HYDRAULIC OIL FILTER ELEMENT	1	29	204009	HP HOSE	1
13	161640	WASHER/GR A 10.5	2	30	165960	SCREW JOINT	1
14	161490	SCREW JOINT	1	31	179799	HEXAGON HEAD SOCKET PIPE PLUG	1
15	178453	TUBE	1	32	204011	LEVER	1
16	1428047G	DISTRIBUTION FITTING	1				
17	162495	SCREW JOINT	1				

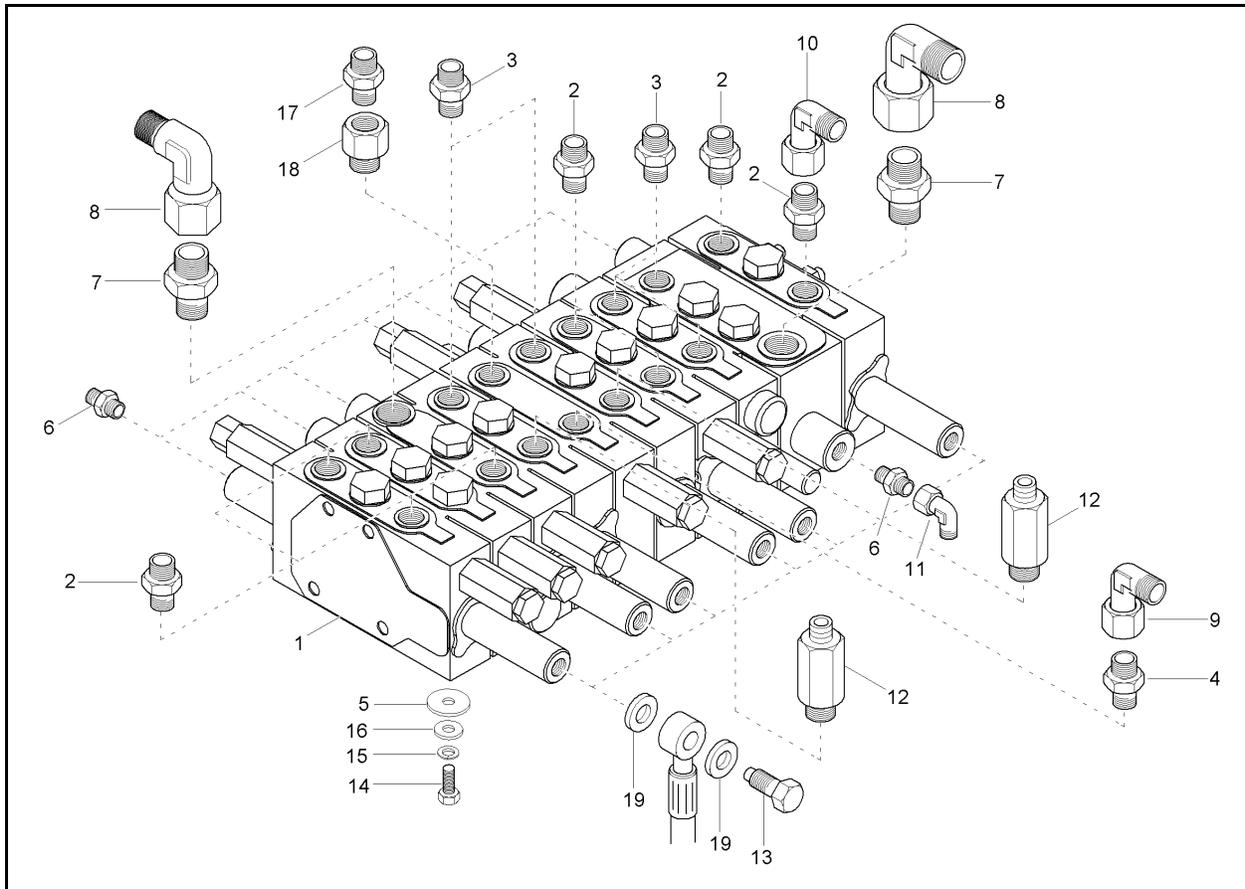
## 223 - HYDRAULIC TANK 1000131599 - (SN AD00454 - AF01067)



Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	178430	HYDRAULIC OIL TANK	1	16	1428047G	DISTRIBUTION FITTING	1
2	1428450G	OIL LEVEL GLASS	1	17	162495	SCREW JOINT	1
3	165108	HYD OIL FILTER COMPLETE	1	18	206084	BALL VALVE (Includes Ref. No. 28)	1
4	9909013G	SCREW	1	19	161431	SCREW JOINT	1
5	161415	PLUG	1	20	165113	SEAL KIT/HYD FILTER	1
6	651475	SHCS M10-1.25X30 F8.8 ZY DIN912	6	21	9911064G	NON RETURN VALVE	1
7	161669	LOCKWASHER S10	6	22	178431	TUBE	1
8	163642	WASHER	4	23	1528425G	BREATHER	1
9	161426	SCREW JOINT	5	24	163859	SCREW	1
10	161414	SCREW	1	25	161663	WASHER/GR A 10.5 ZO	2
11	161443	90° FITTING	1	26	162062	ELBOW	1
12	165111	HYDRAULIC OIL FILTER ELEMENT	1	27	178268	COVER	1
13	161640	WASHER/GR A 10.5	2	28	204011	LEVER	1
14	161490	SCREW JOINT	1				
15	178453	TUBE	1				

# 223 - CONTROL VALVE

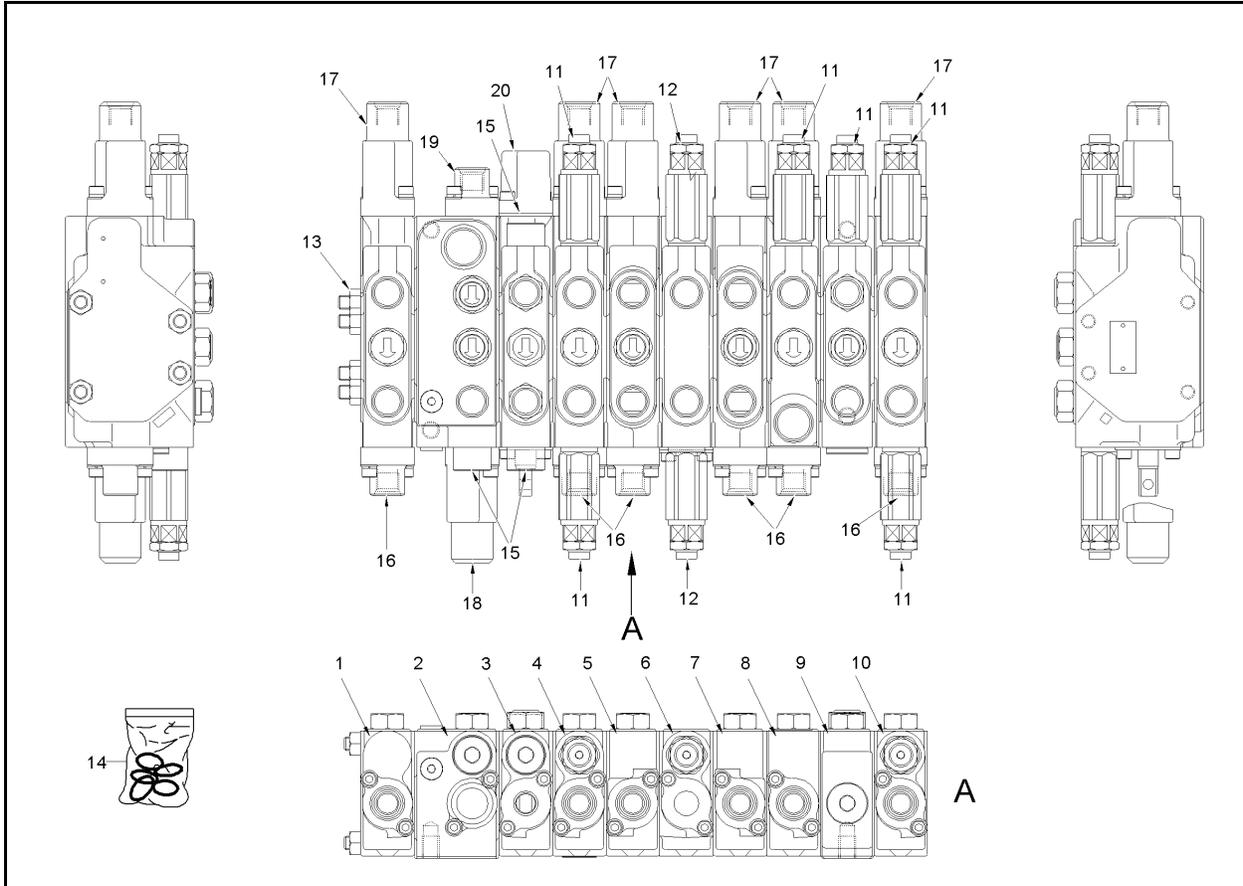
## 1000131603



Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	178810	CONTROL VALVE	1	11	161443	90° FITTING	1
2	161428	SCREW JOINT 10L	8	12	165505	SCREW JOINT	1
3	165966	SCREW JOINT	5	13	163124	SCREW	6
4	165971	SCREW JOINT	1	14	656006	CS M10-1.5X20 C8.8 ZY DIN931	3
5	204007	RUBBER WASHER	3	15	161669	LOCKWASHER S10	3
6	164945	SCREW JOINT	7	16	161640	WASHER/GR A 10.5	3
7	179843	SCREW JOINT	1	17	161463	SCREW JOINT	1
8	161447	90° FITTING	1	18	160560	SCREW JOINT	2
9	161446	90° FITTING	1	19	179866	WASHER	12
10	161444	90° FITTING	1				

# 223 - CONTROL VALVE SEGMENTS

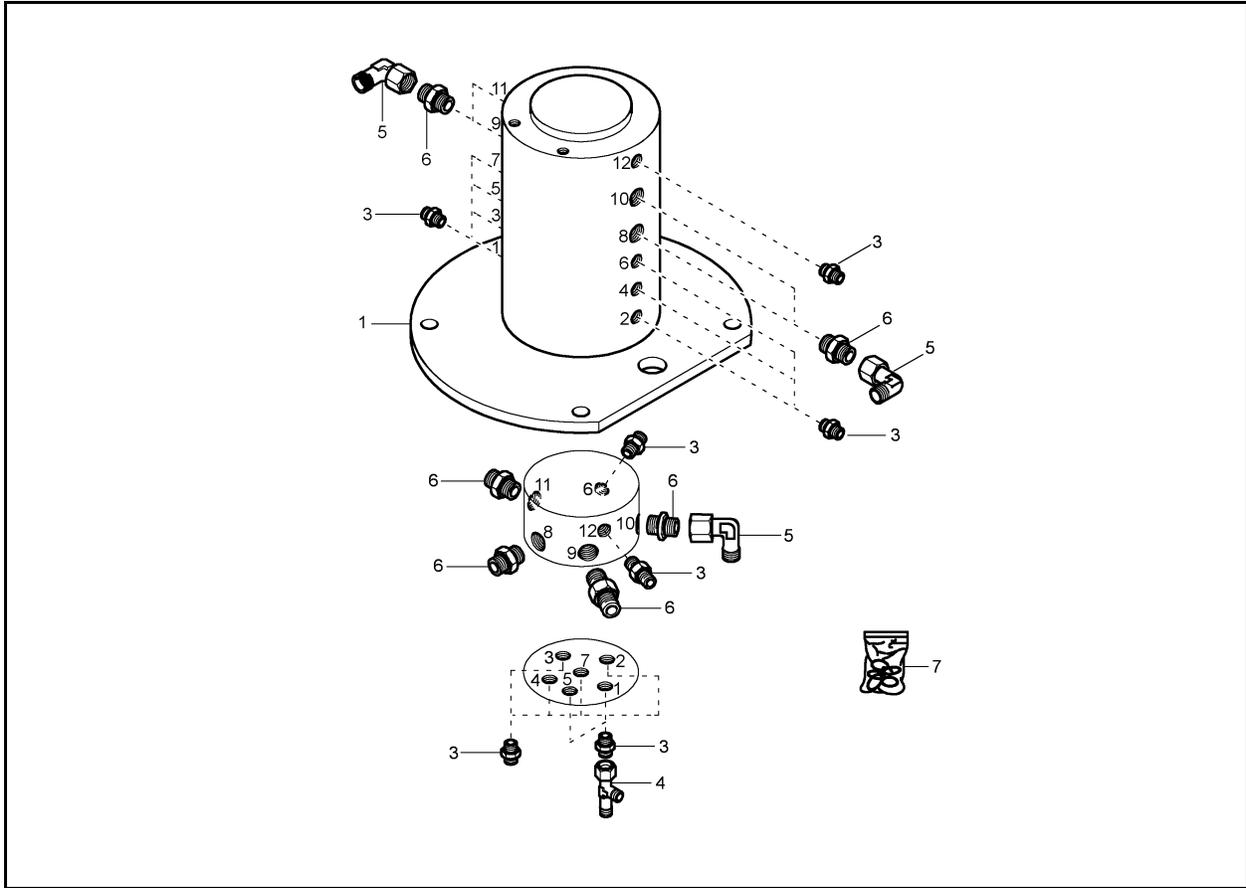
1000131604



Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	1528410G	SECTION (SWIVELLING)	1	11	1528420G	PRESSURE LIMITING VALVE	6
2	1528411G	SEGMENT (COUNTERBALANCING SYSTEM)	1	12	1528421G	PRESSURE LIMITING VALVE	2
3	1528412G	SEGMENT (AUX. HYD/OFFSET)	1	13	1528422G	TIE ROD	4
4	1528413G	SEGMENT (DIPPER ARM)	1	14	1528423G	SEAL KIT	1
5	1528414G	SEGMENT LT (DRIVING LT)	1	15	1528440G	VENT PLUG	3
6	1528415G	INLET SECTION (INPUT)	1	16	178815	PILOT CONTROL CAP 1	6
7	1528416G	SEGMENT RT (DRIVING RT)	1	17	178816	PILOT CONTROL CAP 2	6
8	1528417G	SEGMENT (BOOM 1)	1	18	178817	CAP	1
9	1528418G	SEGMENT (BOOM 2)	1	19	178818	CAP	1
10	1528419G	SEGMENT (BUCKET)	1	20	178819	CAP	1

# 223 - SWIVEL JOINT

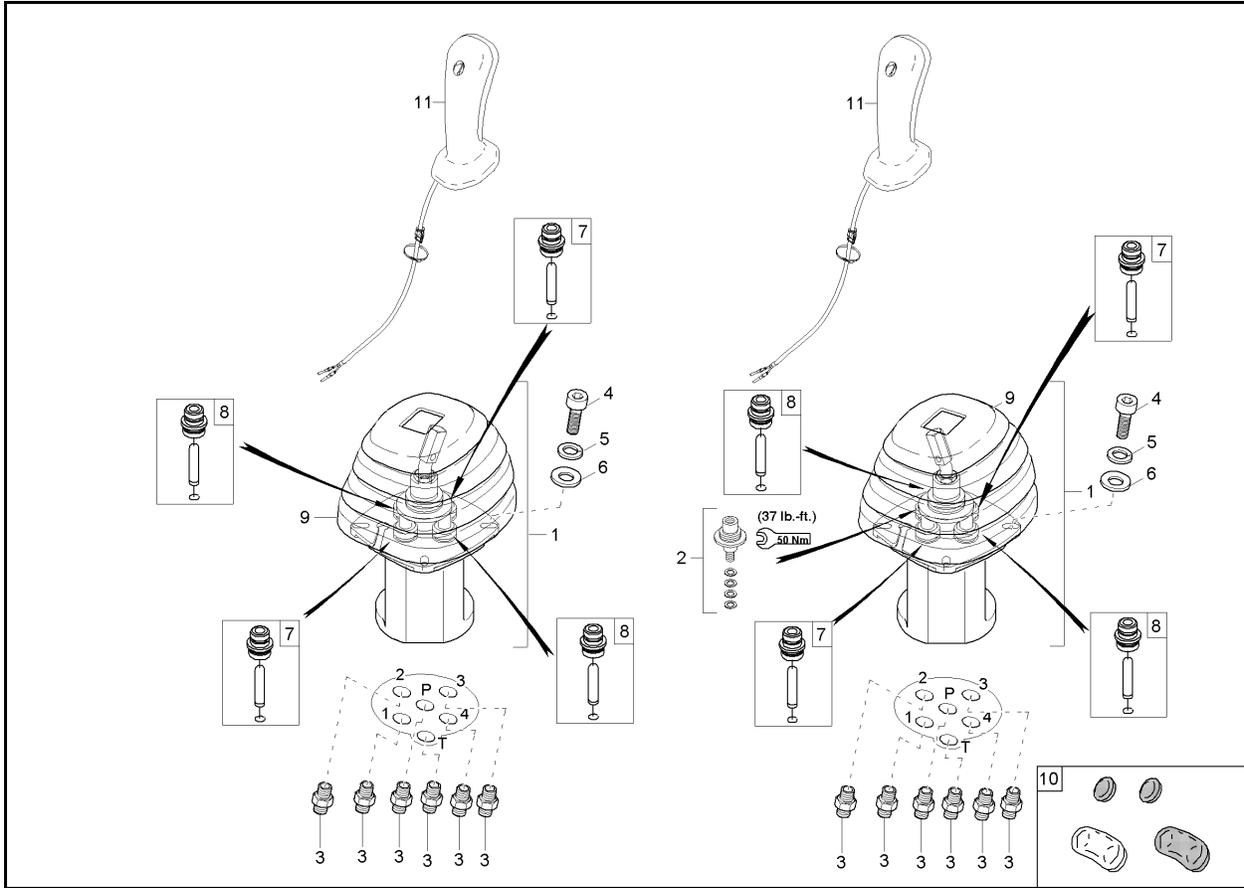
## 1000131916



Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	204127	SWIVEL JOINT (SN AF04939 AND UP)	1	7	204126	KIT/SWIVEL JOINT SEAL COMPLETE (SN AF04939 AND UP) **	1
*		SWIVEL JOINT (SN AF04938 AND BEFORE)	1	178128		KIT/SWIVEL JOINT SEAL COMPLETE (SN AF04938 AND BEFORE) **	1
3	161426	SCREW JOINT	16	* For service, use 204127 (Swivel Joint), SN AF04939 and Up to replace 162115 (Swivel Joint), SN AF04938 and Before.			
4	161448	TEE	2	** Use 204126 (Seal Kit), for 204127 (Swivel Joint) and use 178128 (Seal Kit) for 162115 (Swivel Joint).			
5	161445	90° FITTING	5				
6	161429	SCREW JOINT 12L	8				

# 223 - JOYSTICK

## 1000161738 - (SN AF00798 AND UP)

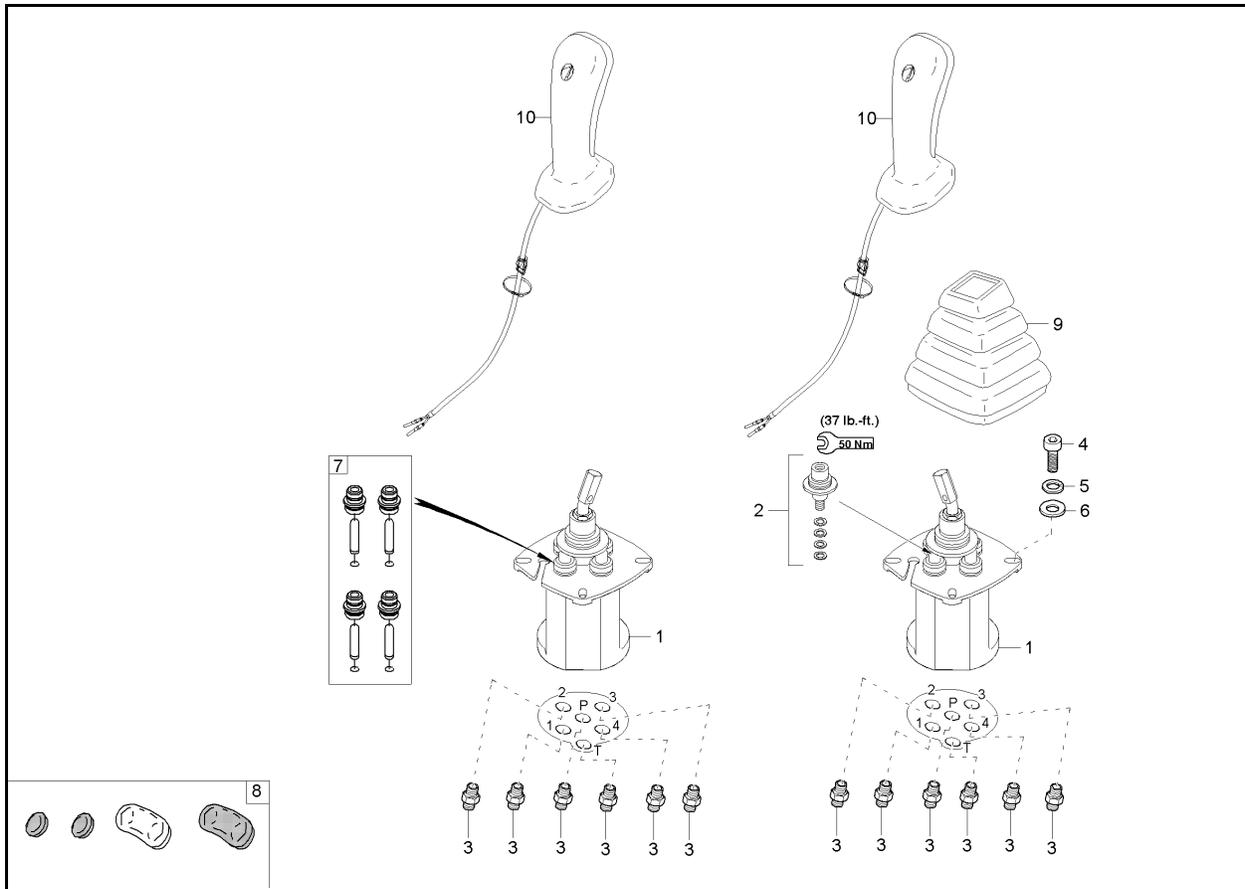


Ref. No.	Part No.	Description	Qty.
1	205869	VALVE	2
2	165037	UNIVERSAL JOINT	2
3	161426	SCREW JOINT	12
4	651507	SHCS M6-1X20 C8.8 ZY DIN912	8
5	161675	LOCKWASHER S6	8
6	161660	WASHER GR A6.4 ZO DIN 125	8

Ref. No.	Part No.	Description	Qty.
7	205999	PLUNGER KIT	2
8	205998	PLUNGER KIT	2
9	206002	BELLOW	2
10	177652	RUBBER CAP	2
11	165039	JOYSTICK	2

# 223 - JOYSTICK

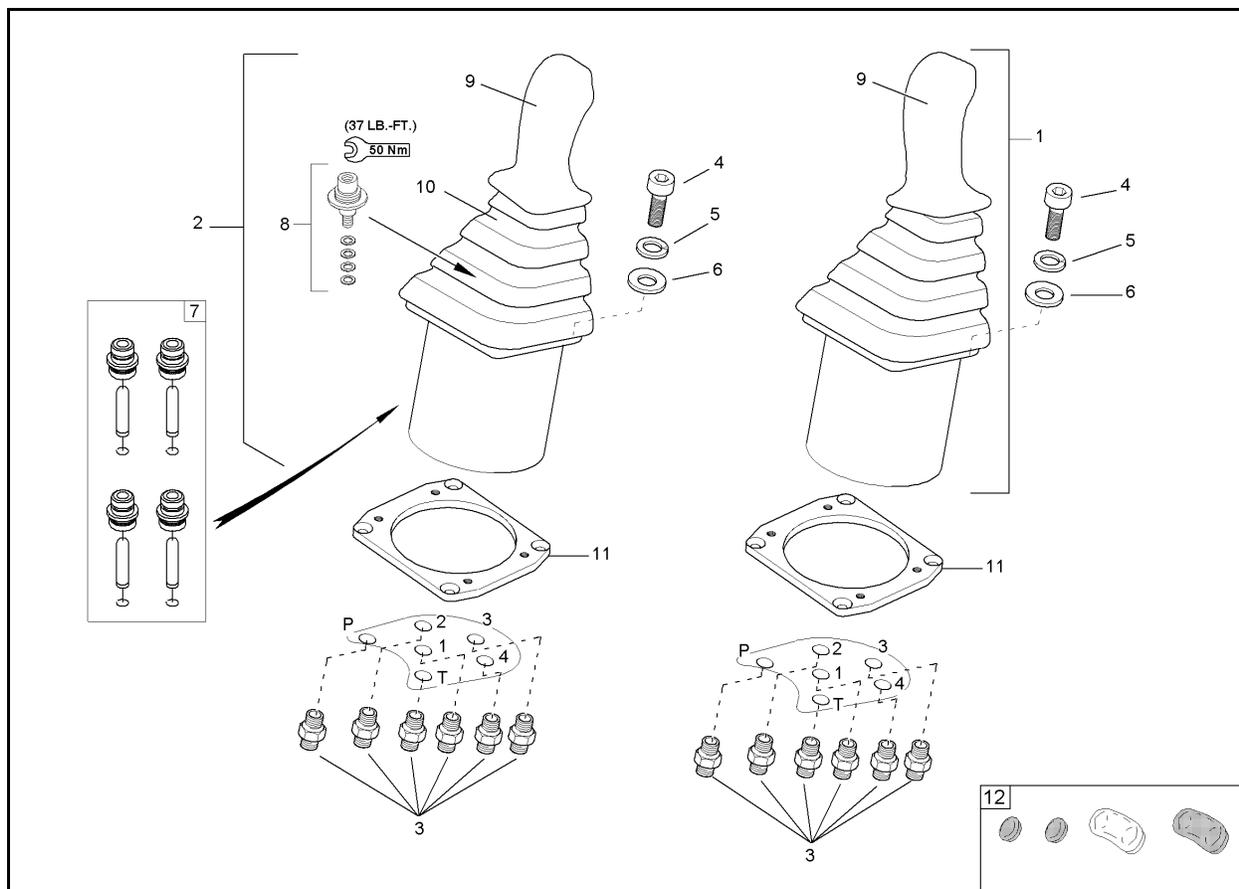
1000161737 - (SN AE00001 - AF00797)



Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	205531	VALVE	2	6	161660	WASHER GR A6.4 ZO DIN 125	8
2	165037	UNIVERSAL JOINT	2	7	165040	PILOT VALVE SEAL KIT	2
3	161426	SCREW JOINT	12	8	177652	RUBBER CAP	2
4	651507	SHCS M6-1X20 C8.8 ZY DIN912	8	9	165038	BELLOWS	2
5	161675	LOCKWASHER S6	8	10	165039	JOYSTICK	2

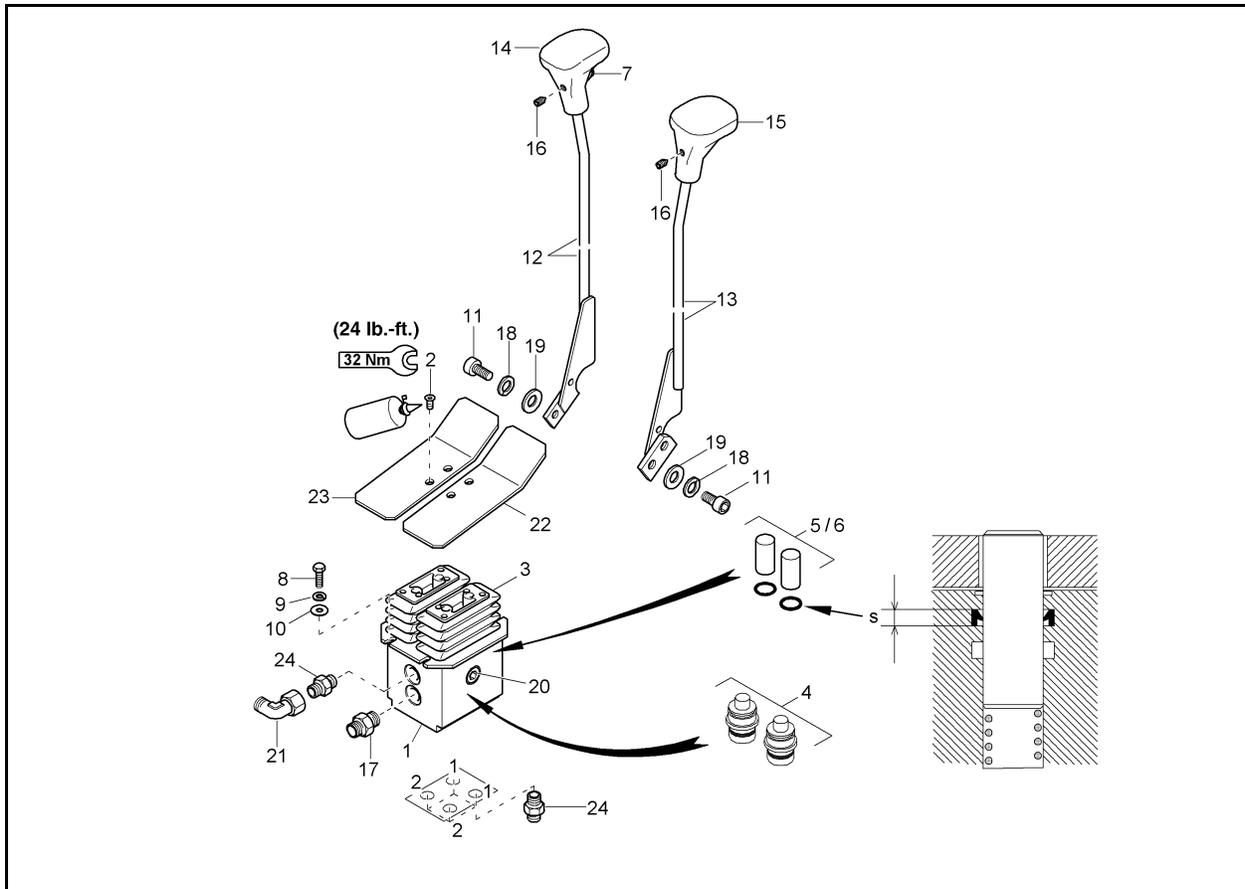
# 223 - JOYSTICK

## 1000131617 - (SN AD00454 - AD04180)



Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	178770	JOYSTICK RT COMPLETE	1	7	165040	PILOT VALVE SEAL KIT	2
2	178769	JOYSTICK LT COMPLETE	1	8	165037	UNIVERSAL JOINT	2
3	161426	SCREW JOINT	12	9	165039	JOYSTICK	2
4	651508	SHCS M6-1X25 C8.8 ZY DIN912	8	10	165038	BELLOWS	2
5	161675	LOCKWASHER S6	8	11	178874	PLATE	2
6	161660	WASHER GR A6.4 ZO DIN 125	8	12	177652	RUBBER CAP	2

**223 - PILOT VALVE, TRAVEL**  
**1000131337/1000135943**

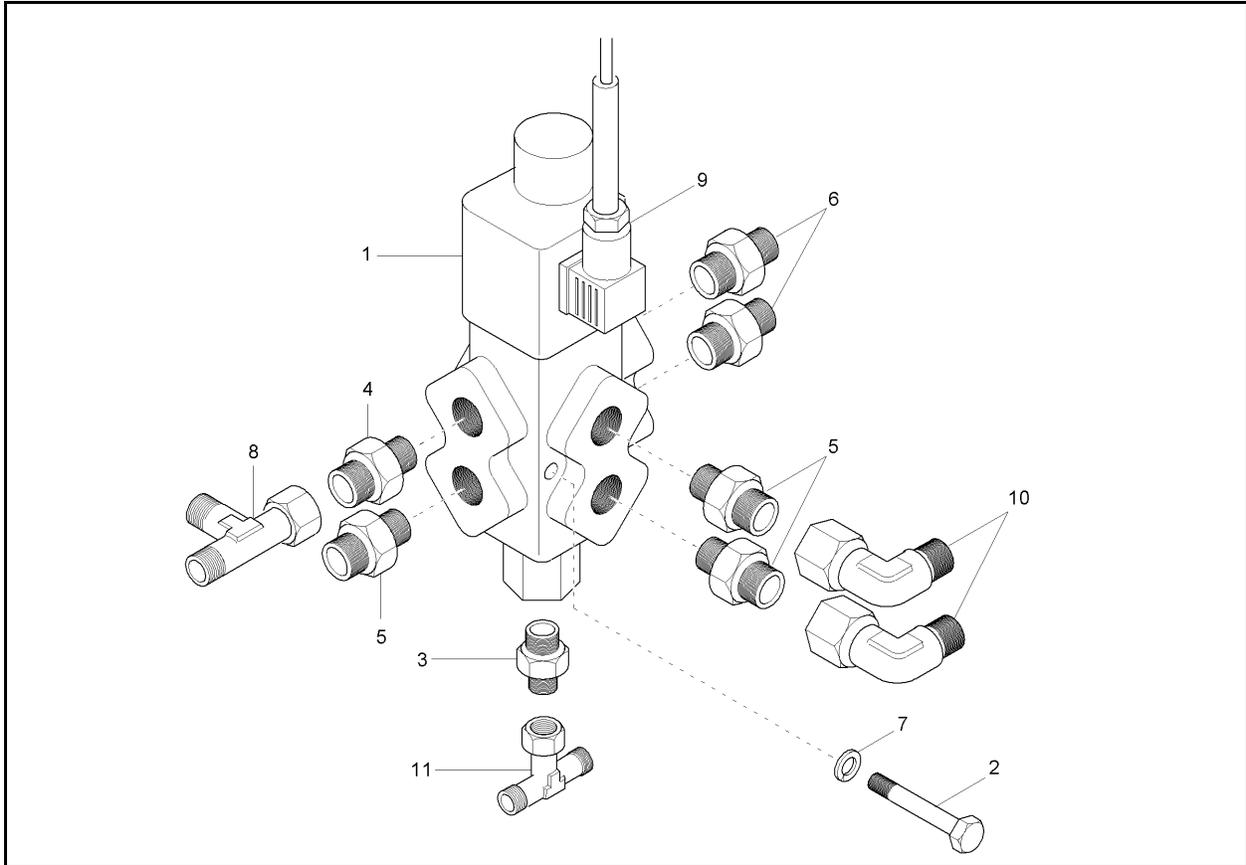


Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	178947	TRAVEL PILOT VALVE COMPLETE	1	15	161764	KNOB	1
2	162041	SCREW	4	16	162027	SET SCREW	2
3	165522	BELLOWS	1	17	164535	PILOT CONTROL RESTRICTOR	1
4	165521	PLUNGER KITS	2	18	161669	LOCKWASHER S10	4
5	165520	PLUNGERS/4.8MM SEALS*	2	19	161640	WASHER/GR A 10.5	4
6	201838	PLUNGERS/3.7MM SEALS*	2	20	165514	SCREW	1
7	161363	SWITCH	1	21	161443	90° FITTING	1
8	177648	HEX SCREW	4	22	178764	TRAVEL PEDAL RT	1
9	163670	LOCKWASHER	4	23	178763	TRAVEL PEDAL LT	1
10	163634	WASHER	4	24	161426	SCREW JOINT	6
11	651472	SHCS M10-1.25X20 F8.8 ZY DIN912	4				
12	1423029G	TRAVEL LEVER LT	1				
13	1423030G	TRAVEL LEVER RT	1				
14	160658	KNOB W/RED SWITCH	1				

\* Machines SN AD00454 - AD04180 supplied with 4.8 mm seals.  
Machines SN AE00001 and up may be supplied with either 4.8 mm or 3.7 mm seals. Measure old seal to confirm size.

# 223 - REVERSING VALVE

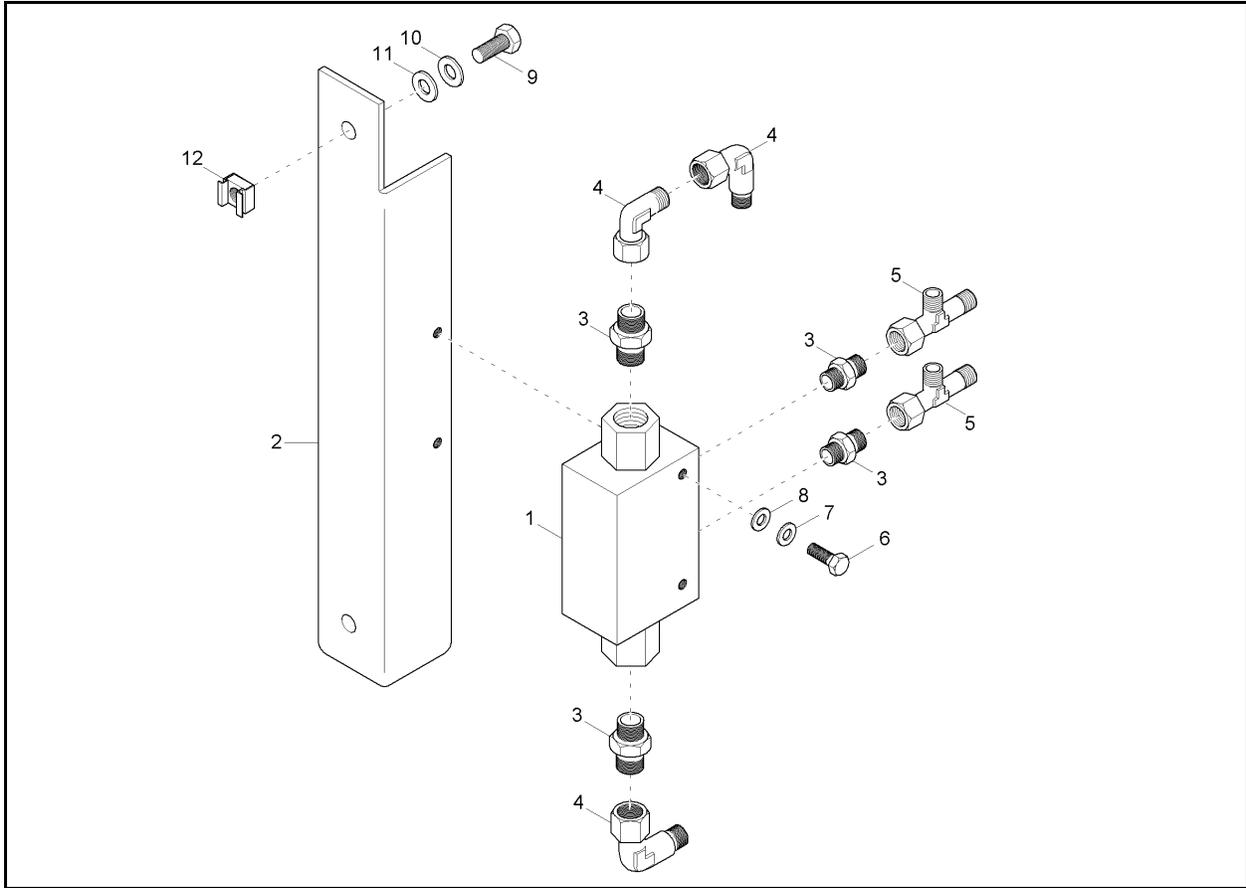
## 1000131610



Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	160568	VALVE/SELECTION	1	7	161675	LOCKWASHER S6	2
2	651428	CS M6-1X50 C8.8 ZY DIN931	2	8	161471	TEE	1
3	161426	SCREW JOINT	1	9	160438	PLUG	1
4	161463	SCREW JOINT	1	10	161446	90° FITTING	2
5	161429	SCREW JOINT 12L	3	11	161450	TEE	1
6	161427	SCREW JOINT	2				

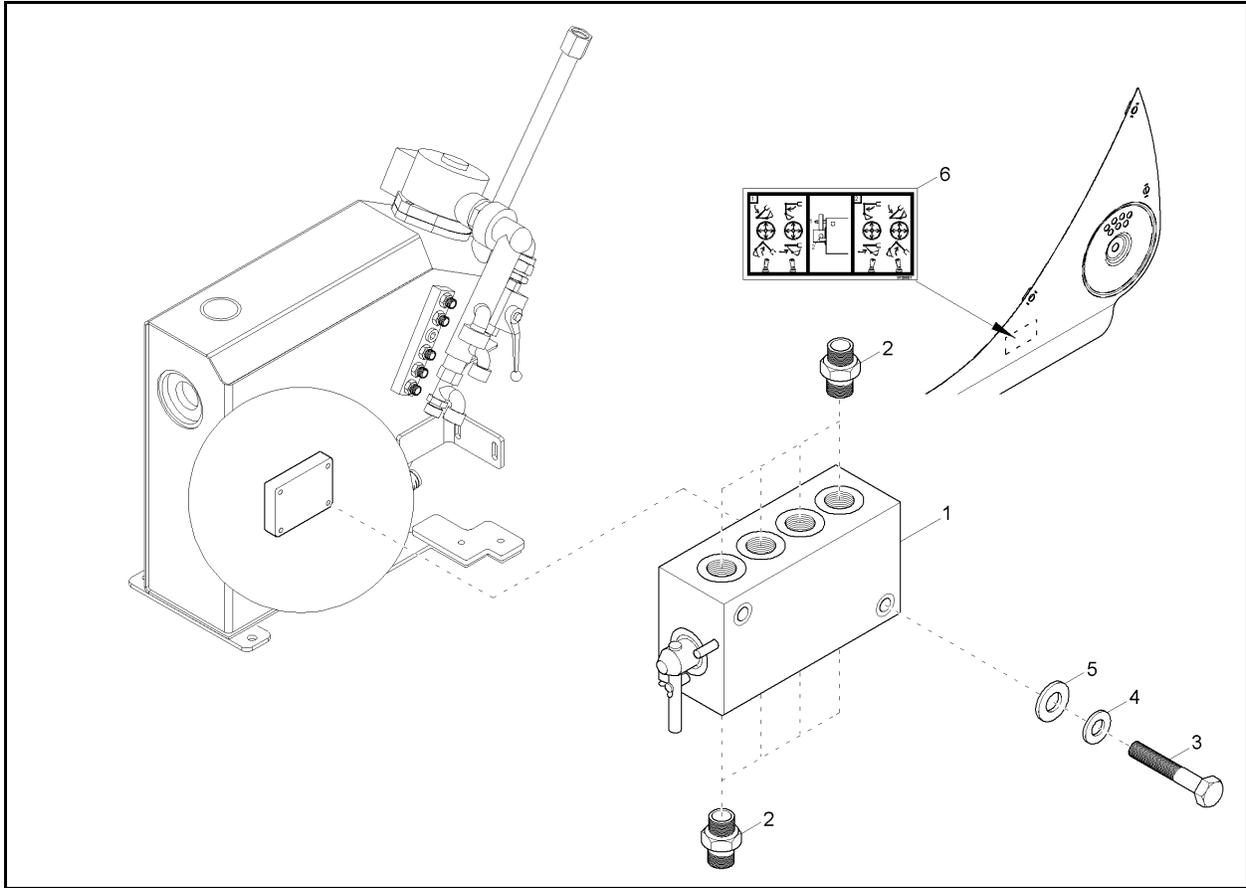
# 223 - LOCK VALVE

## 1000131616



Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	160667	NON RETURN VALVE	1	7	161675	LOCKWASHER S6	2
2	178836	ANGLE	1	8	161660	WASHER GR A6.4 ZO DIN 125	2
3	161426	SCREW JOINT	4	9	177648	HEX SCREW	2
4	161443	90° FITTING	3	10	163670	LOCKWASHER	2
5	179067	SCREW JOINT	2	11	7462680011	WASHER 8.4 ST A2C	2
6	165939	SCREW	2	12	161615	NUT/CAGE M8	2

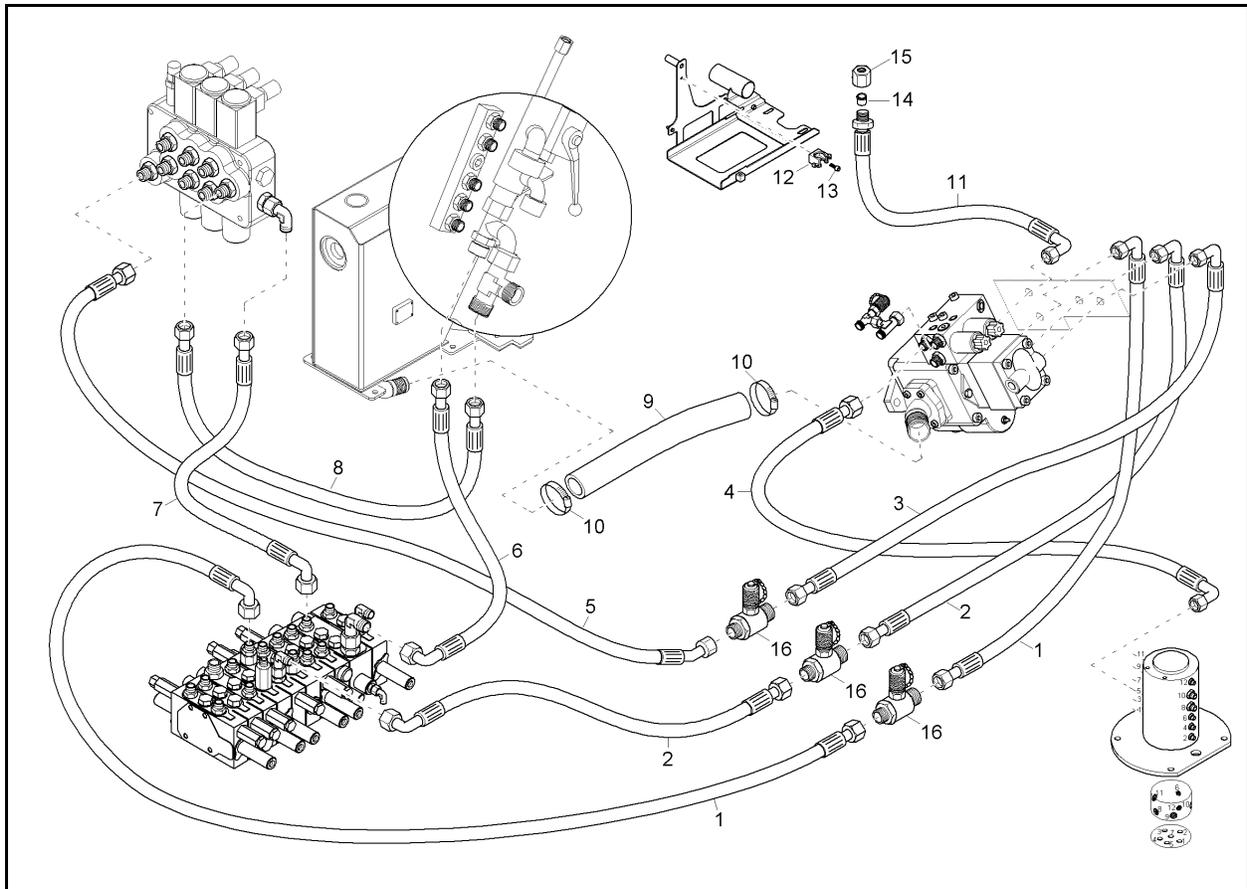
**223 - ISO/SAE VALVE**  
**1000131609**



Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	1408450G	ISO/SAE VALVE	1	4	161675	LOCKWASHER S6	2
2	161426	SCREW JOINT	8	5	161660	WASHER GR A6.4 ZO DIN 125	2
3	165946	SCREW	2	6	9705501G	DECAL/ISO-SAE VALVE	1

# 223 - HYDRAULIC PUMP INSTALLATION

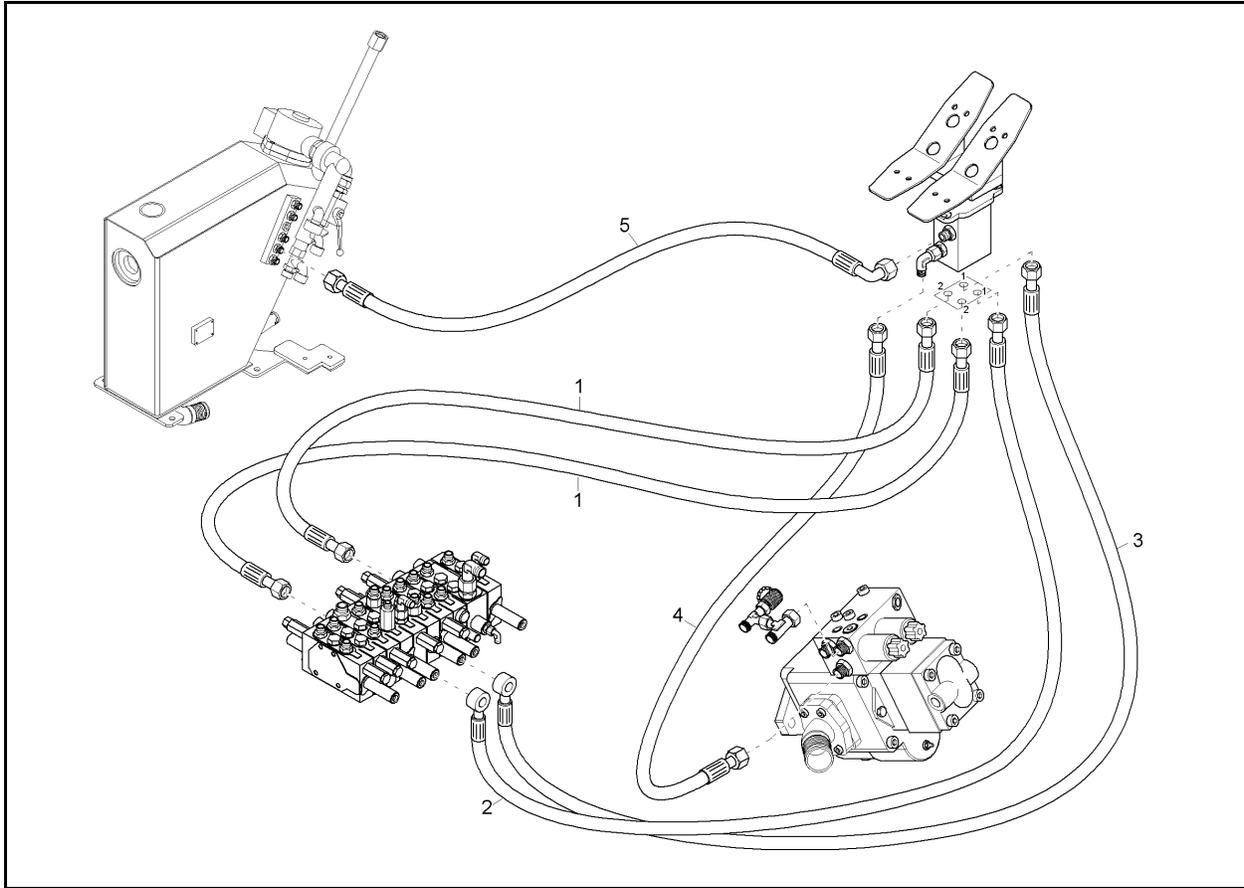
1000131633



Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	204114	HP HOSE	2	9	160566	HOSE	1
2	204115	HP HOSE	2	10	204124	HOSE CLAMP	2
3	204116	HP HOSE	1	11	204085	HP HOSE	1
4	162957	HP HOSE	1	12	162389	CLAMP	1
5	8005284G	HP HOSE	1	13	162035	SCREW	1
6	8006247G	HP HOSE	1	14	164927	PLUG	1
7	161297	HP HOSE	1	15	164929	NUT	1
8	8004368G	HP HOSE	1	16	0003636417	TEST CONNECTION 15-L A3C	3

# 223 - TRAVEL VALVE INSTALLATION

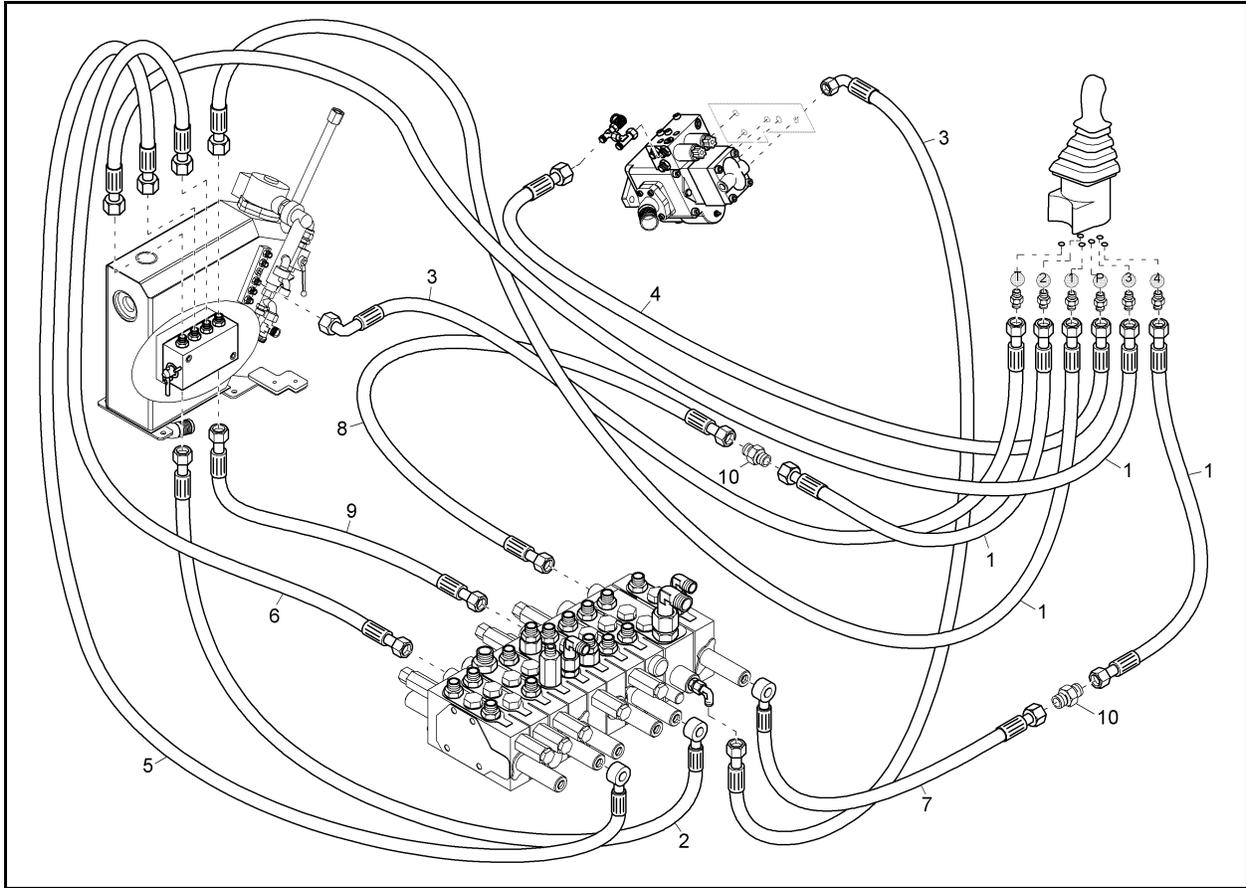
1000131644



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

# 223 - JOYSTICK HYDRAULICS INSTALLATION, LEFT

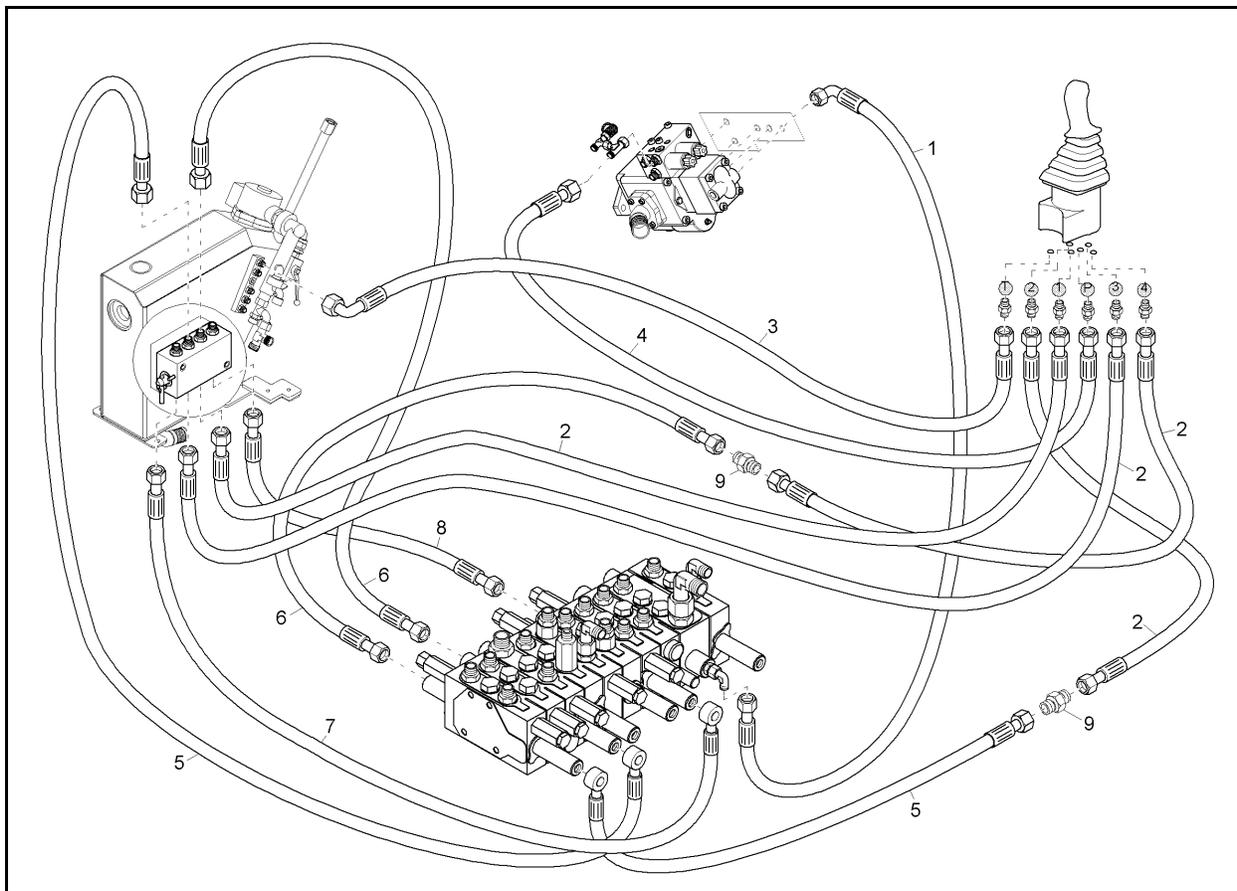
## 1000131650



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

# 223 - JOYSTICK HYDRAULICS INSTALLATION, RIGHT

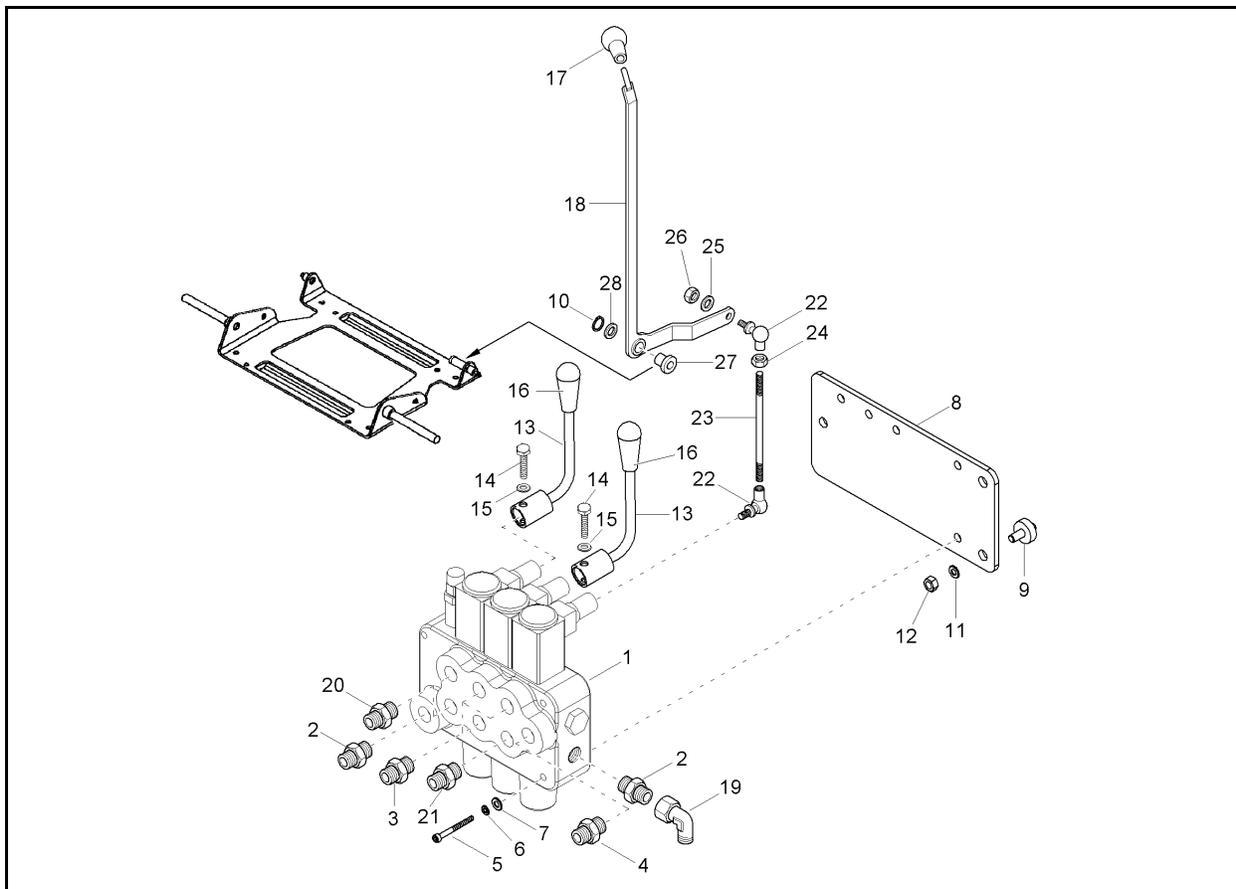
10000131661



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

# 223 - DOZER BLADE VALVE (TRIPLE)

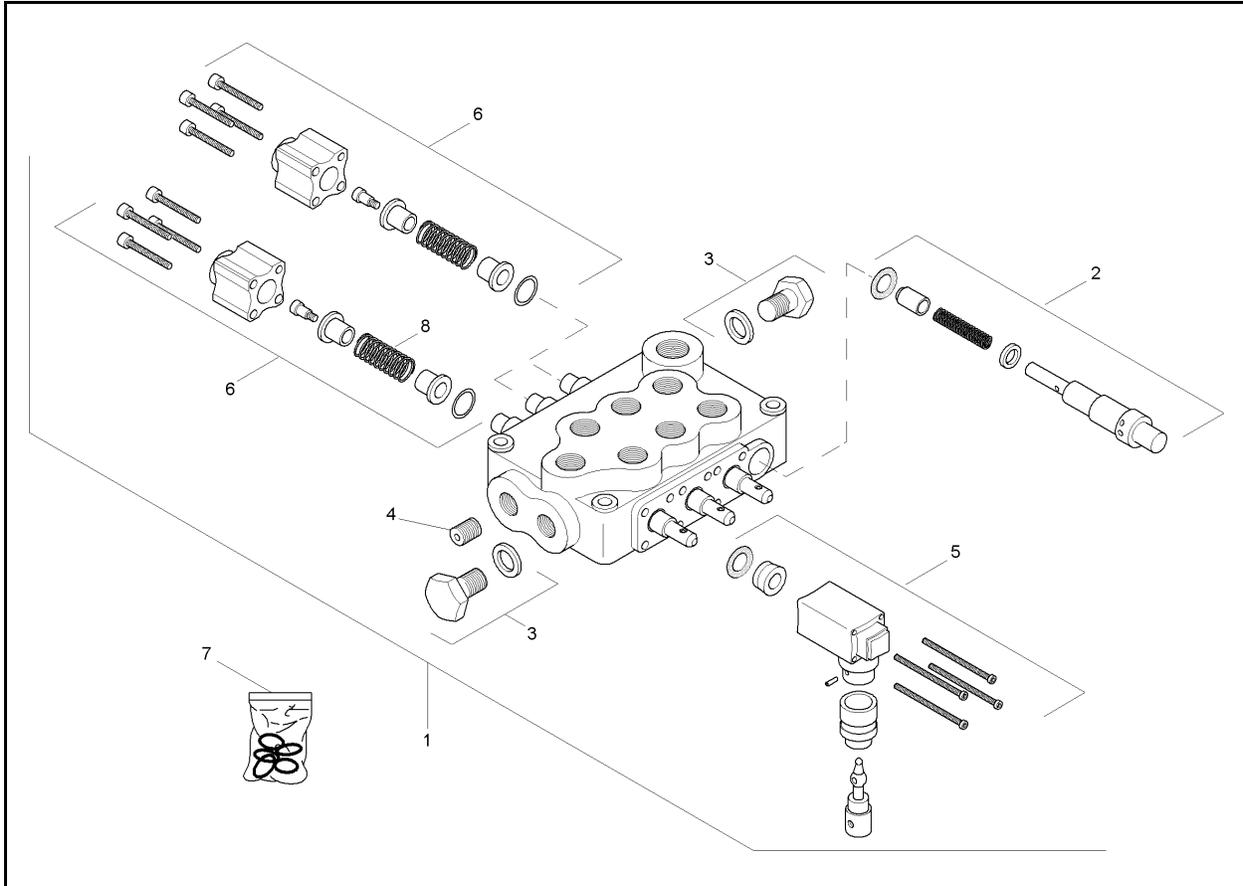
1000131728



Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	178843	DOZER BLADE VALVE See page 75 for individual components	1	15	163670	LOCKWASHER	2
2	161429	SCREW JOINT 12L	2	16	161903	HANDLE	2
3	161426	SCREW JOINT	3	17	162398	KNOB	1
4	161463	SCREW JOINT	1	18	1423024G	LEVER	1
5	656088	CS M6-1X60 C8.8 ZY DIN931	3	19	161445	90° FITTING	1
6	161675	LOCKWASHER S6	3	20	9910617G	SCREW JOINT	2
7	161660	WASHER GR A6.4 ZO DIN 125	3	21	9910612G	SCREW JOINT	1
8	1521183G	PLATE	1	22	162072	BALL AND SOCKET	2
9	165566	RUBBER-METAL-BUFFER	3	23	1423025G	THREADED ROD	1
10	9908057G	WASHER	1	24	656048	HN M8-1.25 C8 ZY DIN934	1
11	161669	LOCKWASHER S10	3	25	163634	WASHER	1
12	656102	HN M10-1.25 F8 ZY DIN934	3	26	651458	LN INS M8-1.25 C8 ZY DIN6924	1
13	1423012G	LEVER	2	27	1428451G	BEARING	1
14	656105	CS M8-1.25X25 C8.8 ZY DIN931	2	28	7451680116	WASHER B17-140HV A2C	1

# 223 - DOZER BLADE VALVE (TRIPLE) - DISASSEMBLED

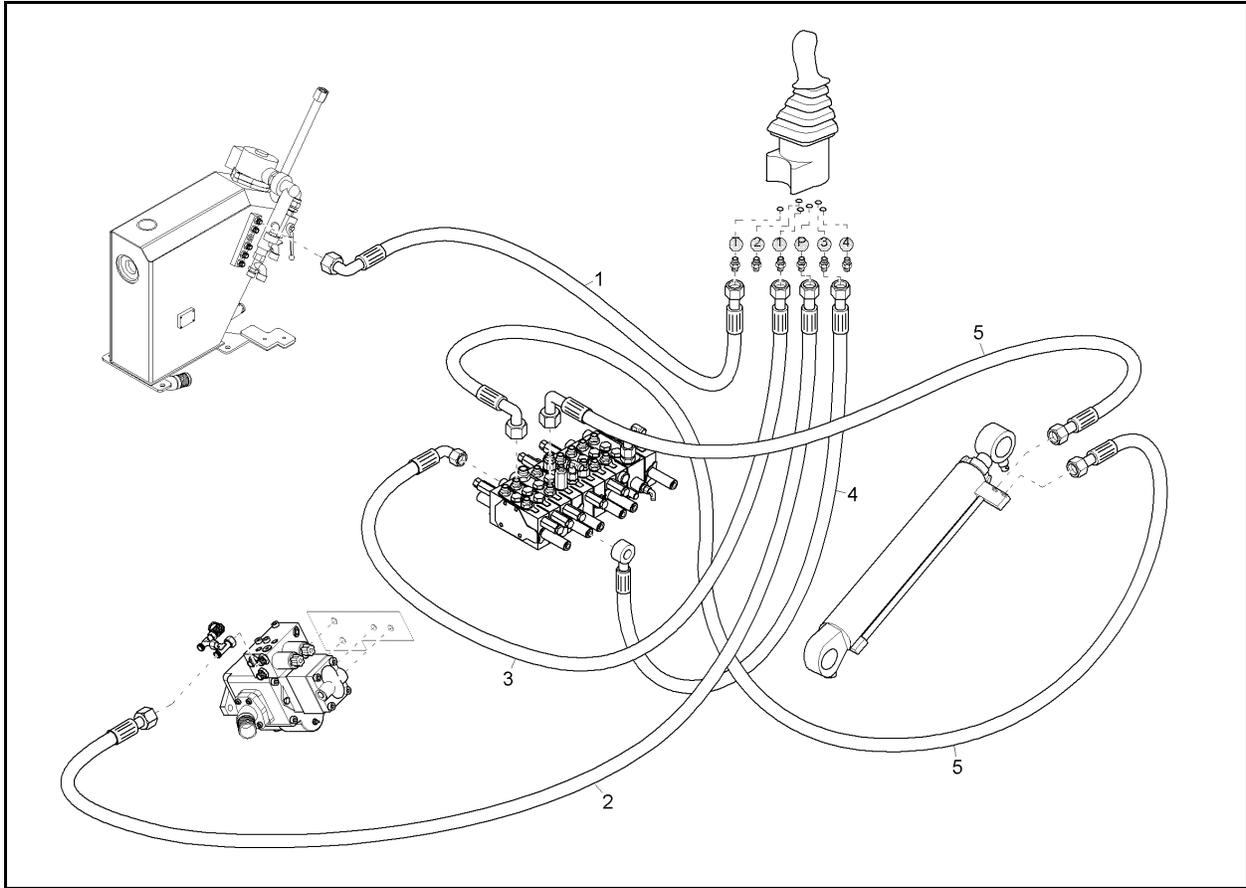
1000131730



Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	178843	DOZER BLADE VALVE	1	6	1428425G	KIT	3
2	1428421G	PRESSURE LIMITING VALVE	1	7	2228406G	SEAL KIT	1
3	1428422G	PLUG	2	8	*	SPRING	1
4	1428423G	PLUG	1	* For service, use 1428425G (Kit) to replace 178706 (Spring).			
5	1428424G	KIT	3				

# 223 - BOOM CYLINDER INSTALLATION

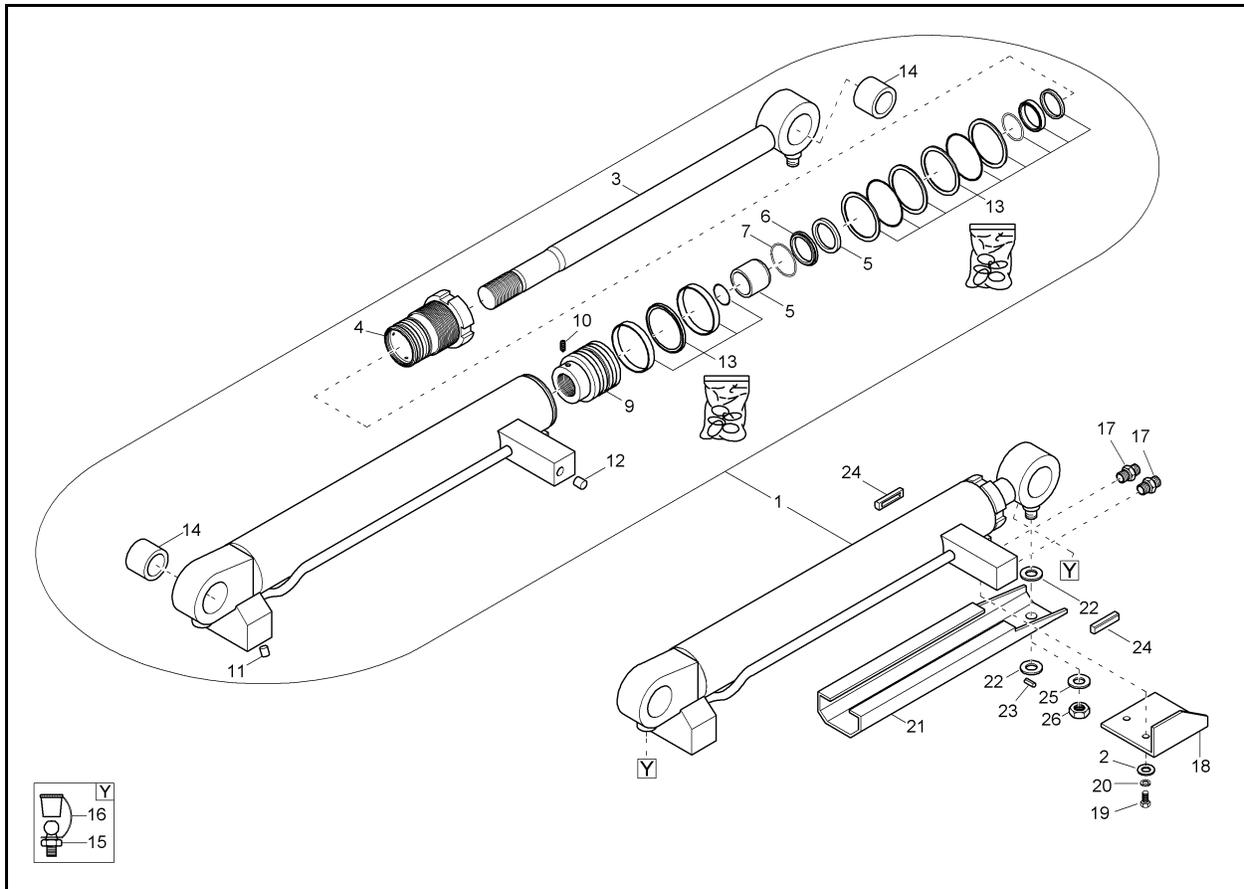
## 1000131645



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

# 223 - BOOM CYLINDER

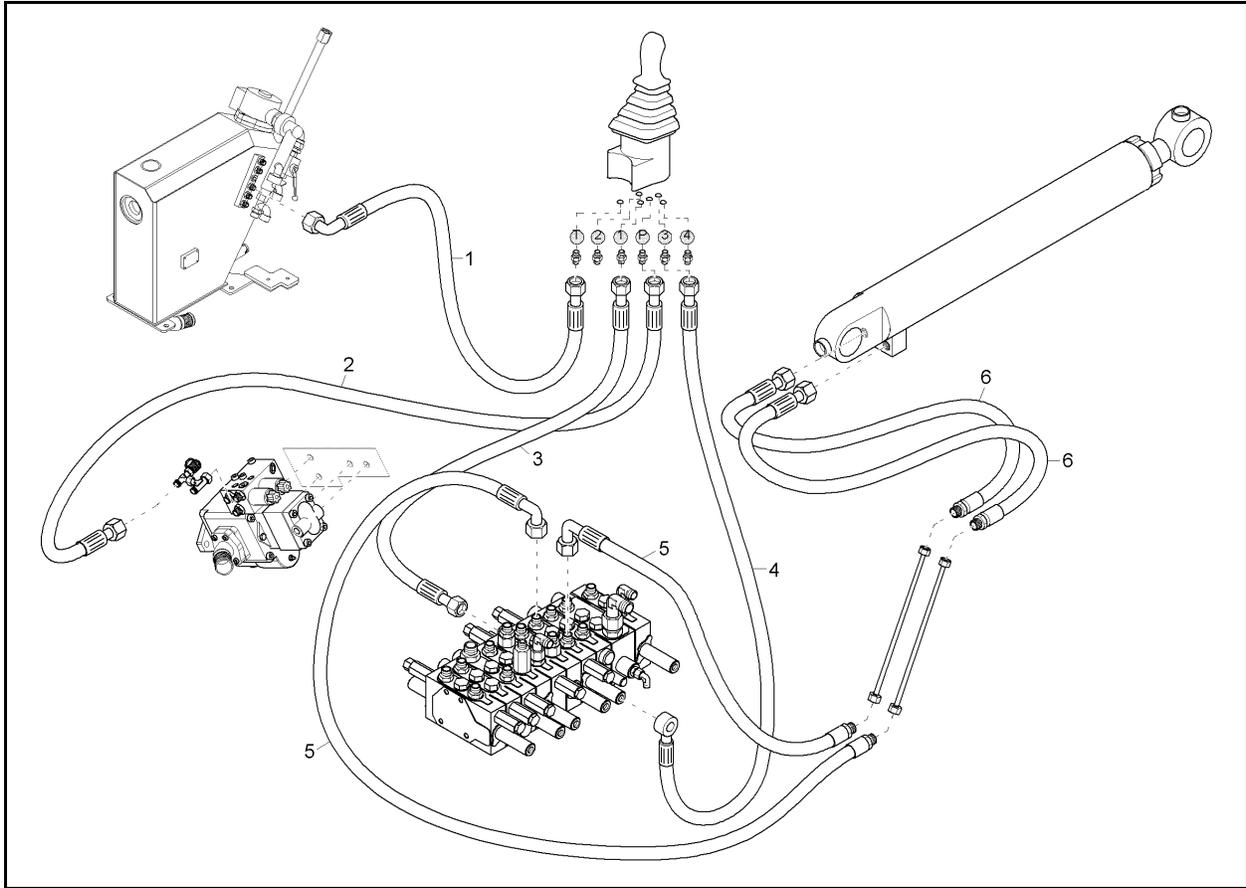
1000131620



Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	204056	BOOM CYLINDER	1	15	161411	GREASE ZERK-7MM HEX HEAD	2
2	163634	WASHER	2	16	161422	CAP	2
3	165454	PISTON ROD	1	17	161428	SCREW JOINT 10L	2
4	165448	BUSHING	1	18	161754	PROTECTION	1
5	177645	KIT/RING & BUSHING	1	19	656093	CS M8-1.25X16 C8.8 ZY DIN931	2
6	160465	RING	1	20	163670	LOCKWASHER	2
7	161408	WASHER	1	21	165482	PROTECTION	1
9	165449	PISTON	1	22	161650	WASHER/GR A 19 ZO DIN125	1
10	161400	SET SCREW	1	23	651468	PIN/SPRING M5X36	1
11	165959	BALL EXPANDER	1	24	161205	GUIDE	2
12	162060	BALL EXPANDER	1	25	161642	WASHER/GR A 13	1
13	165570	SEAL KIT	1	26	179793	NUT	1
14	161544	BUSHING	2				

# 223 - DIPPER ARM CYLINDER INSTALLATION

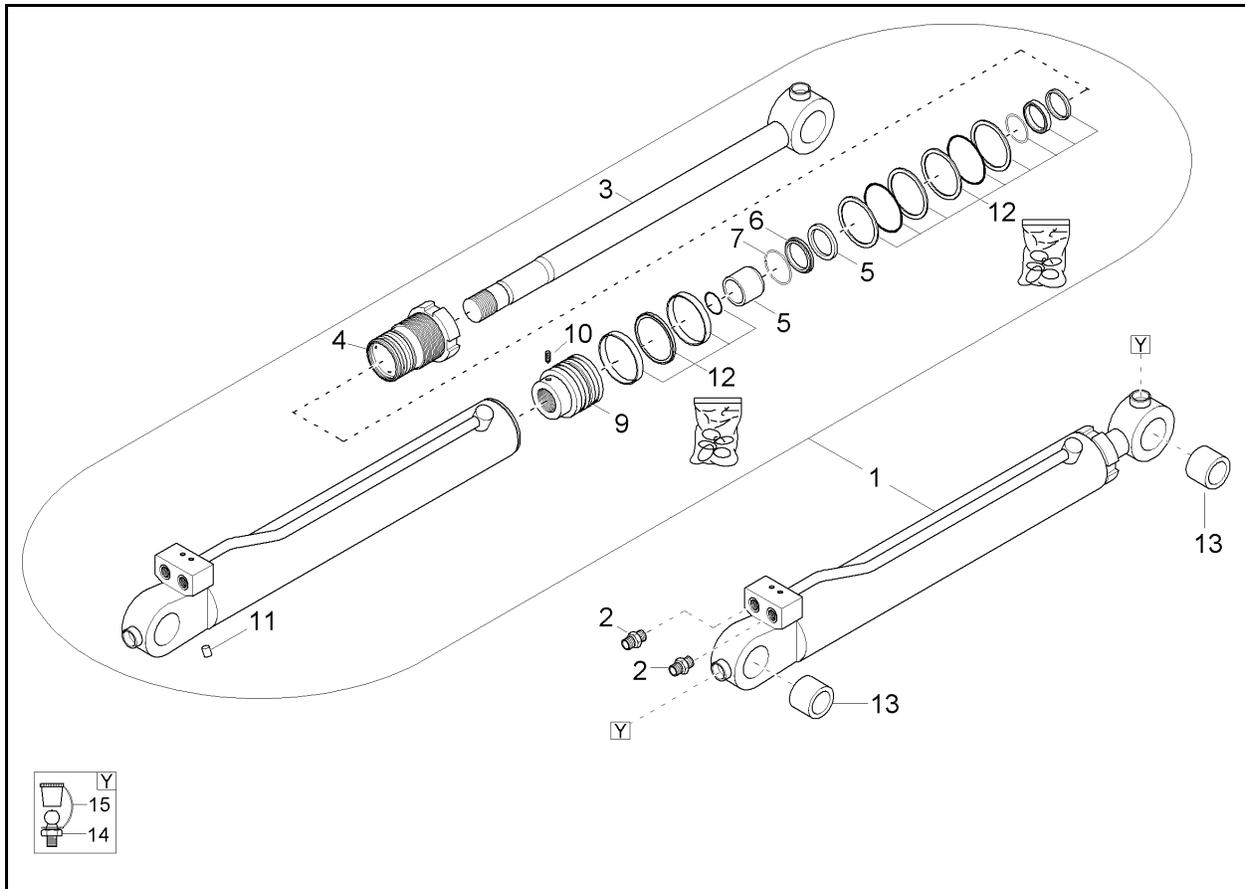
1000131646



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

# 223 - DIPPER ARM CYLINDER

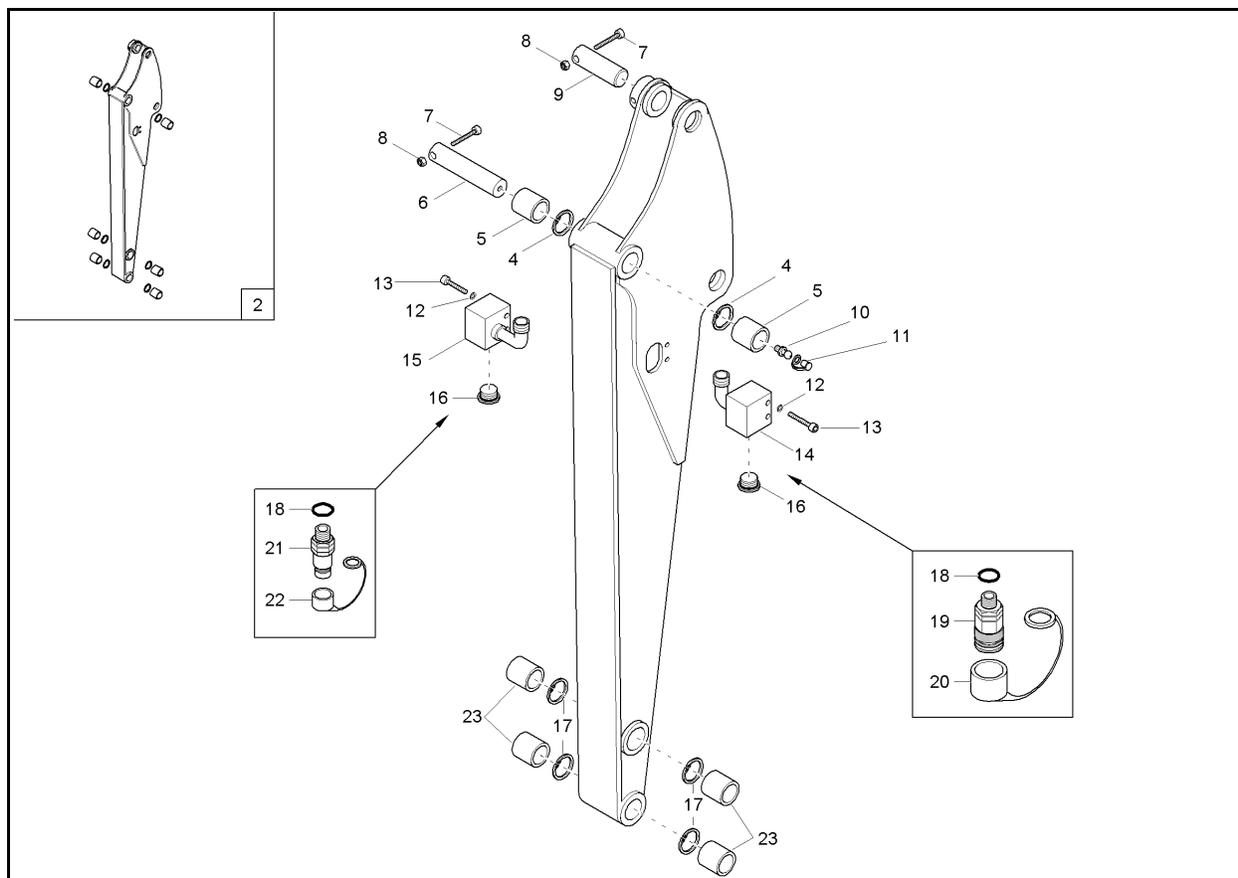
1000131622



Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	204057	DIPPER ARM CYLINDER	2	9	165449	PISTON	1
2	161429	SCREW JOINT 12L	2	10	161400	SET SCREW	1
3	165451	PISTON ROD	1	11	165959	BALL EXPANDER	1
4	165448	BUSHING	1	12	165570	SEAL KIT	1
5	177645	KIT/RING & BUSHING	1	13	161544	BUSHING	2
6	160465	RING	1	14	161411	GREASE ZERK-7MM HEX HEAD	2
7	161408	WASHER	1	15	161422	CAP	2

# 223 - DIPPER ARM SHORT

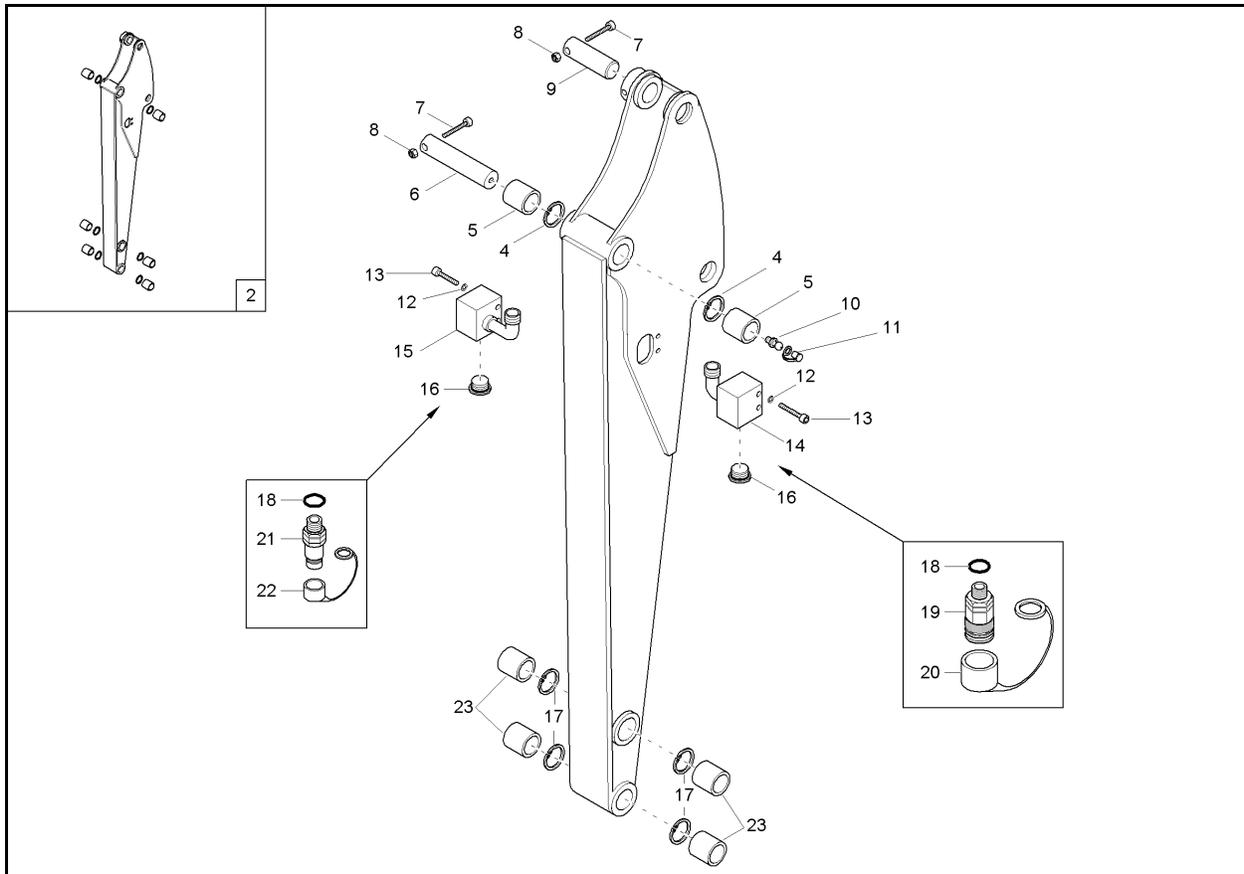
## 1000131549



Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
2	1927401G	PRE-ASSEMBLED DIPPER ARM (Includes ref. nos. 4, 5, 17 & 23) See page 84, ref. 6 and page 95, refs. 7 & 8 for required HP hoses.	1	13	9901617G	SCREW	4
4	161685	RING/SNAP B45 D7993	2	14	1428413G	BLOCK	1
5	161539	BUSHING	2	15	1428412G	BLOCK	1
6	165050	PIN DM=36X241	1	16	178527	SCREW	2
7	651438	HB M8-1.25X70 C8.8 ZY	2	17	161684	RING/SNAP B38 D7993	4
8	651458	LN INS M8-1.25 C8 ZY DIN6924	2	18	161585	O-RING	2
9	1929003G	PIN DM=32X137	1	19	178564	COUPLING/FEMALE A13 15L BG3	1
10	161411	GREASE ZERK-7MM HEX HEAD	1	20	177804	CAP	1
11	161422	CAP	1	21	178576	COUPLING/MALE A13 15L BG3	1
12	163670	LOCKWASHER	4	22	177803	CAP	1
				23	161543	BUSHING	4

# 223 - DIPPER ARM LONG (OPTION)

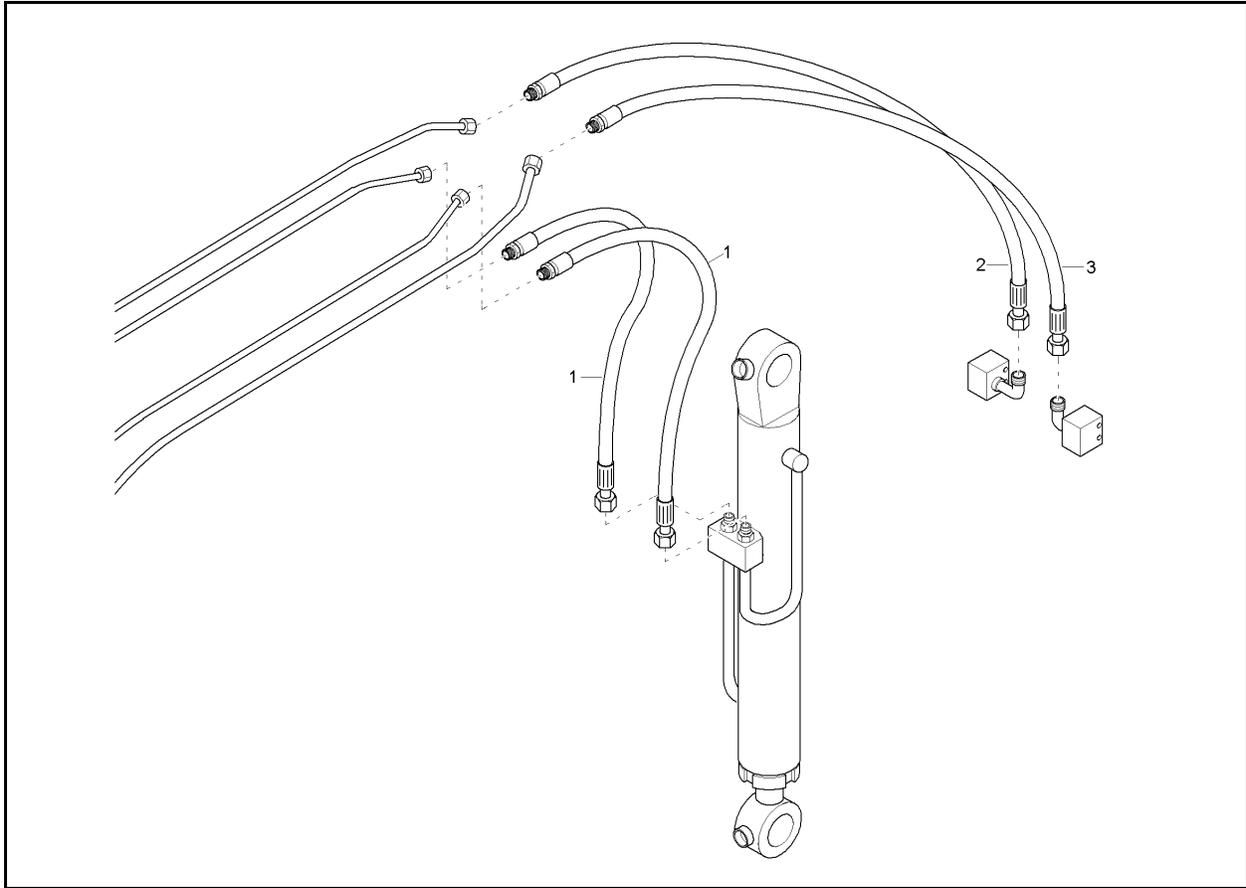
1000131550



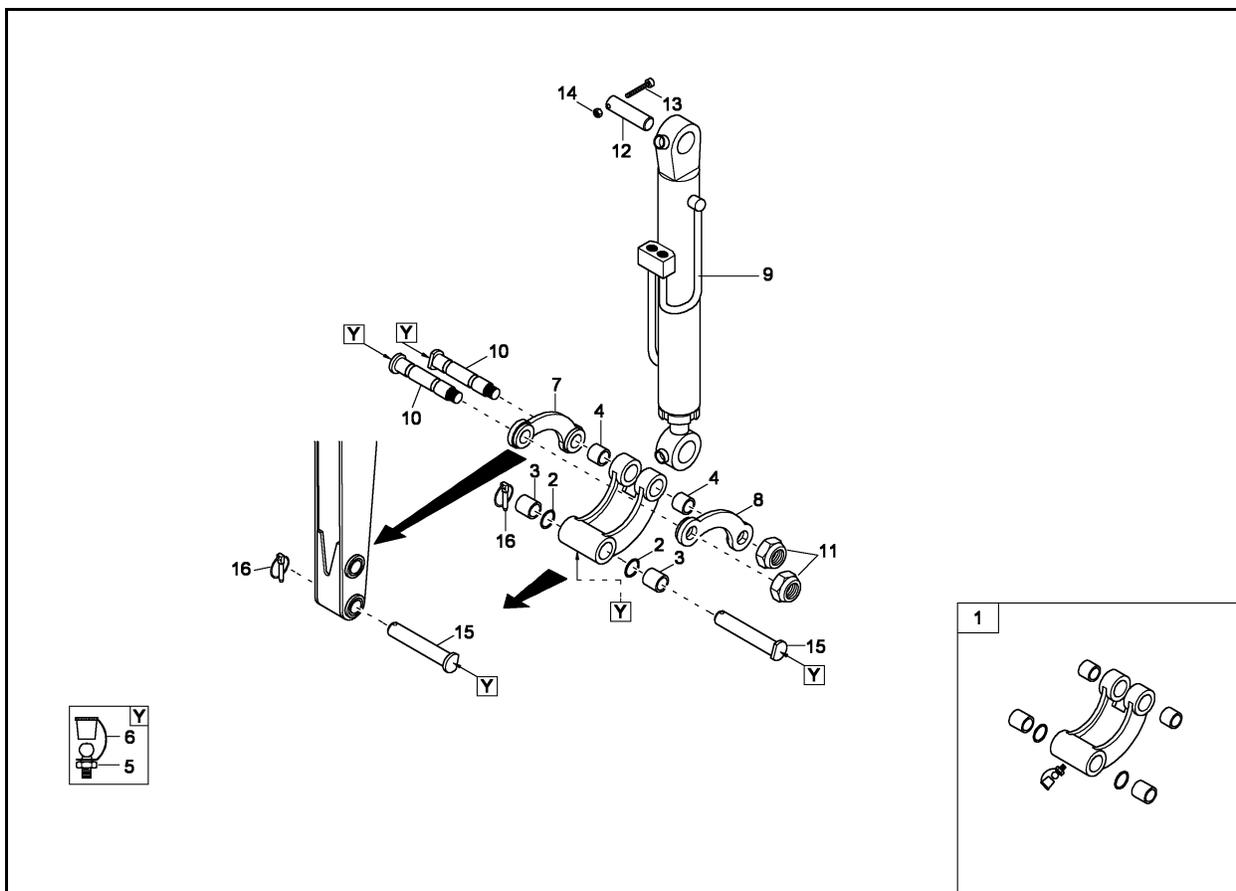
Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
2	1927403G	PRE-ASSEMBLED DIPPER ARM LONG (Includes Ref. Nos. 4, 5, 17, 23) See page 84, ref. 6 and page 95, refs. 7 & 8 for required HP hoses.	1	13	9901617G	SCREW	4
4	161685	RING/SNAP B45 D7993	2	14	1428413G	BLOCK	1
5	161539	BUSHING	2	15	1428412G	BLOCK	1
6	165050	PIN DM=36X241	1	16	178527	SCREW	2
7	651438	HB M8-1.25X70 C8.8 ZY	2	17	161684	RING/SNAP B38 D7993	4
8	651458	LN INS M8-1.25 C8 ZY DIN6924	2	18	161585	O-RING	2
9	1929003G	PIN DM=32X137	1	19	178564	COUPLING/FEMALE A13 15L BG3	1
10	161411	GREASE ZERK-7MM HEX HEAD	1	20	177804	CAP	1
11	161422	CAP	1	21	178576	COUPLING/MALE A13 15L BG3	1
12	163670	LOCKWASHER	4	22	177803	CAP	1
				23	161543	BUSHING	4

# 223 - DIPPER ARM, LONG HOSE INSTALLATION (OPTION)

1000131662



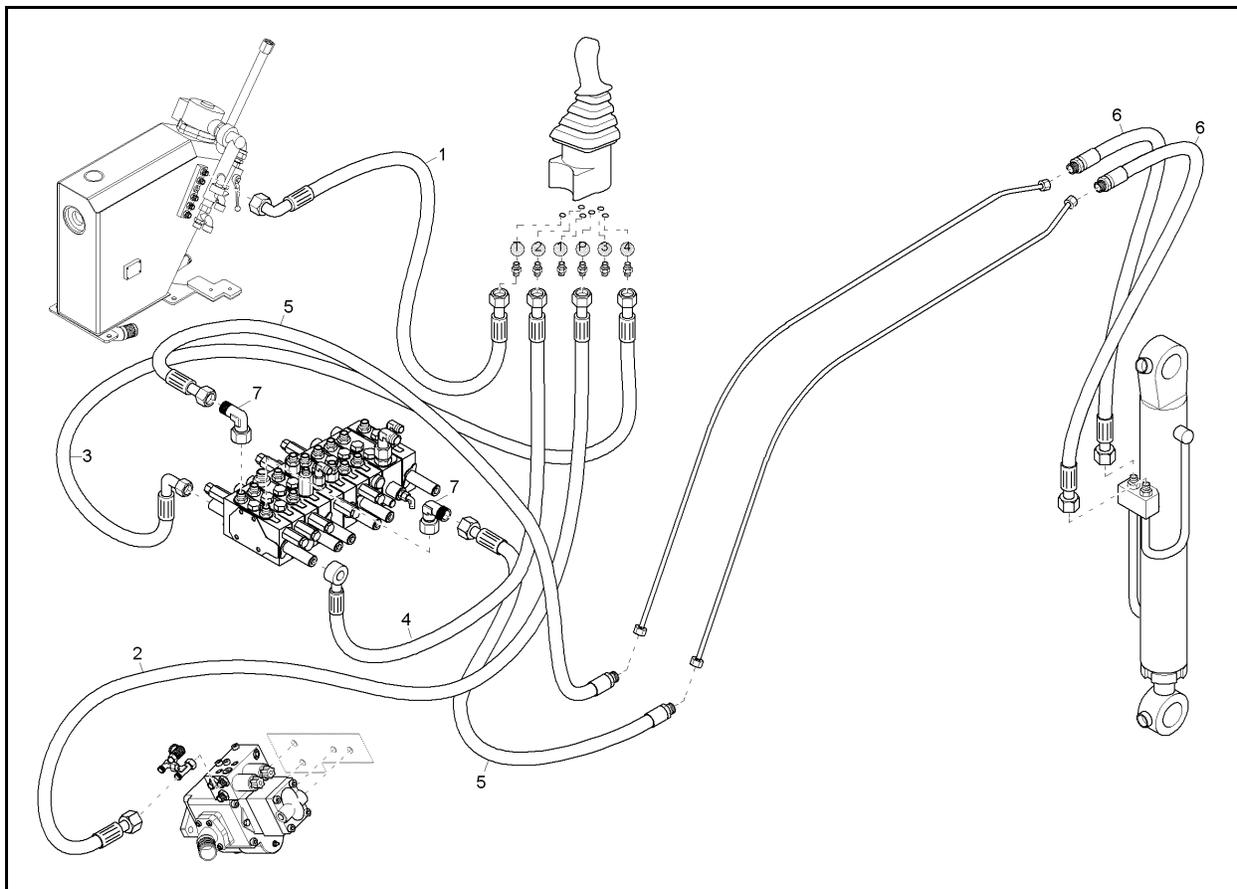
Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	8003037G	HP HOSE	1	3	8005091G	HP HOSE	1
2	8004375G	HP HOSE	1				



Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	165442	CONNECTING LINK ASSEMBLED (Includes Ref. Nos. 2, 3 & 4)	1	9	204053	BUCKET CYLINDER See page 85 for individual components	1
2	161684	RING/SNAP B38 D7993	2	10	160696	PIN	2
3	161543	BUSHING	2	11	651454	LN INS M27-3 C8 ZY	2
4	161540	BUSHING	2	12	1929003G	PIN DM=32X137	1
5	161411	GREASE ZERK-7MM HEX HEAD	5	13	651438	HB M8-1.25X70 C8.8 ZY	1
6	161422	CAP	5	14	651458	LN INS M8-1.25 C8 ZY DIN6924	1
7	160662	CONNECTING LINK	1	15	165051	PIN DM=32X190	2
8	160663	CONNECTING LINK	1	16	161405	LYNCH PIN	2

# 223 - BUCKET CYLINDER INSTALLATION

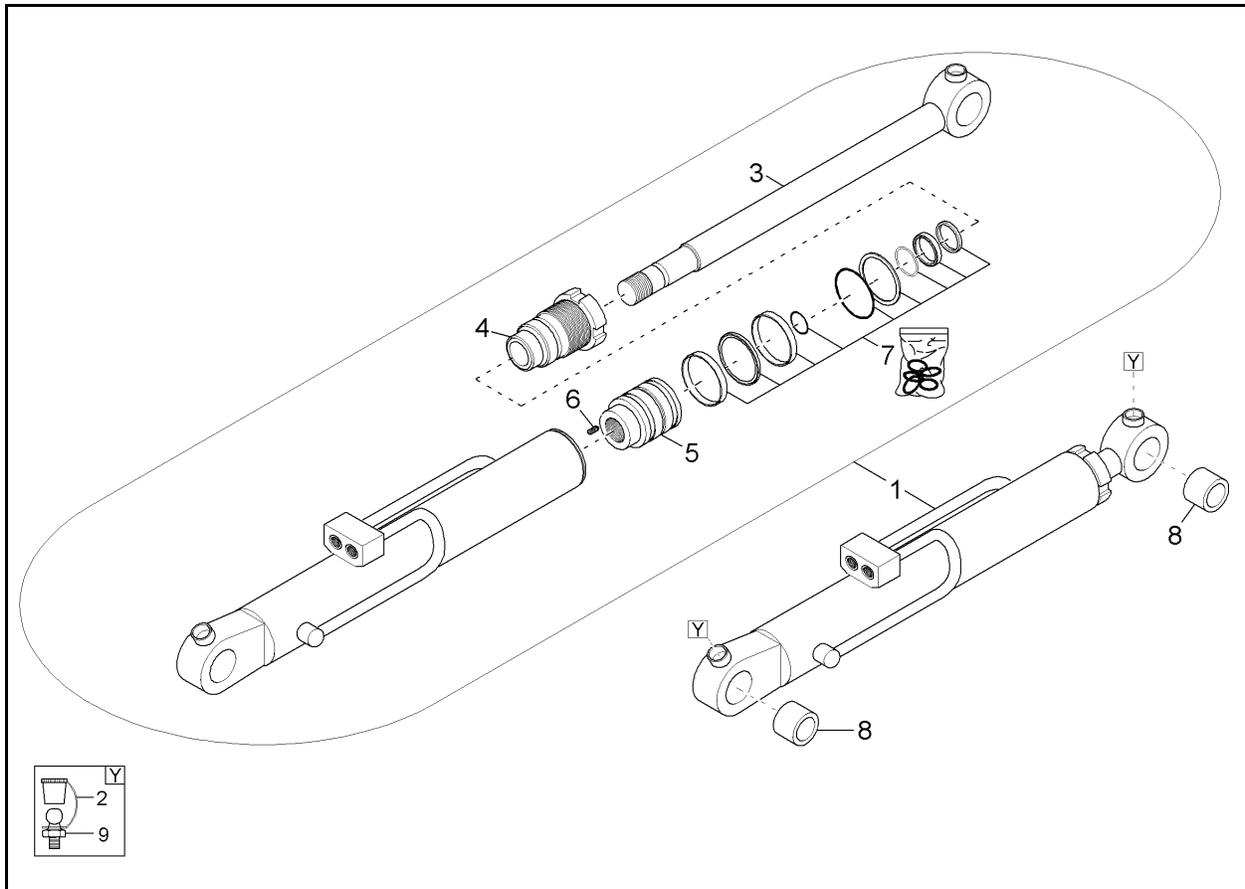
1000131648



Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	161220	HP HOSE	1	6	205001	HP HOSE (SHORT DIPPER ARM)	2
2	163291	HP HOSE	1		8003037G	HP HOSE (LONG DIPPER ARM, OPTION)	2
3	178517	HP HOSE	1	7	161444	90° FITTING	2
4	178514	HP HOSE	1				
5	178518	HP HOSE	2				

# 223 - BUCKET CYLINDER

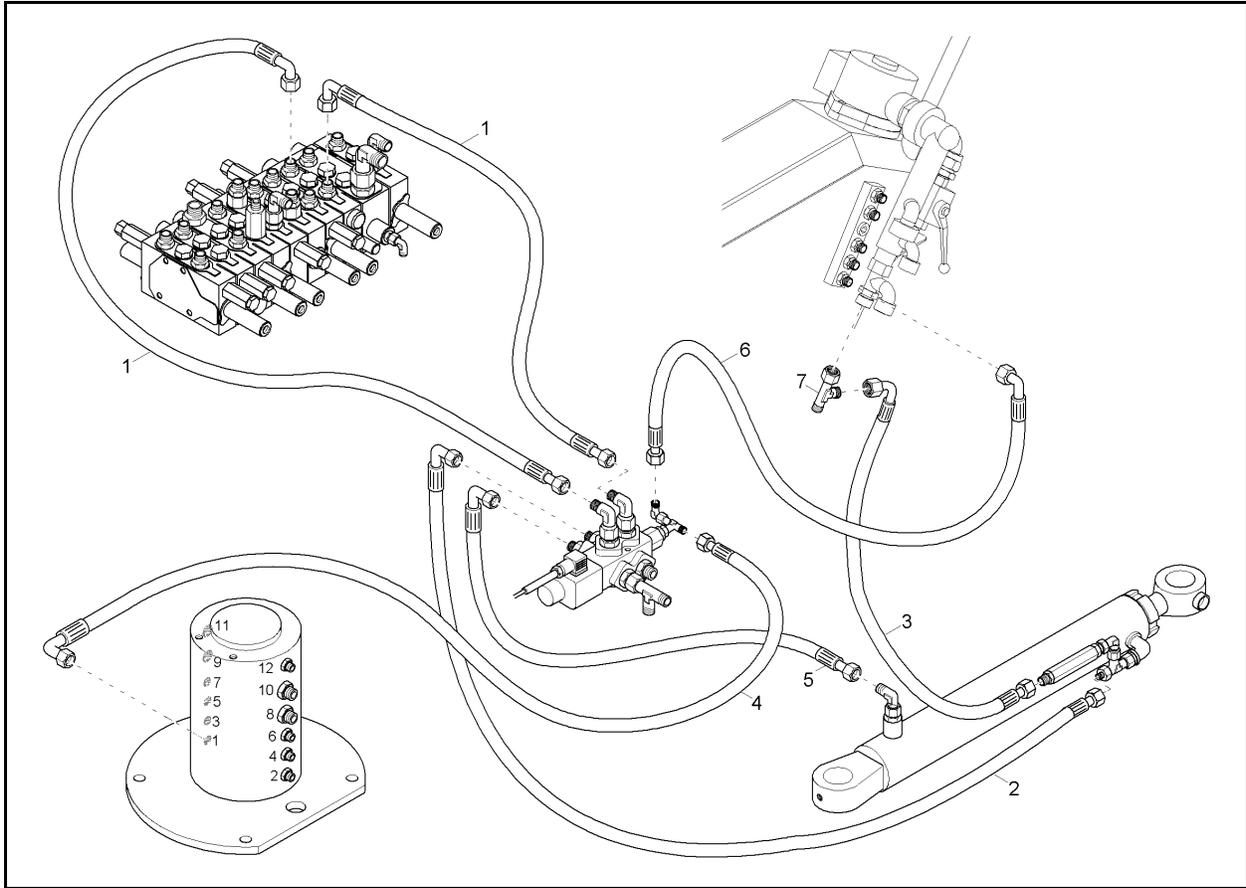
1000131624



Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	204053	BUCKET CYLINDER	1	6	161400	SET SCREW	1
2	161422	CAP	2	7	165570	SEAL KIT	1
3	165453	PISTON ROD	1	8	161544	BUSHING	2
4	165452	GLAND	1	9	161411	GREASE ZERK-7MM HEX HEAD	2
5	165449	PISTON	1				

# 223 - BOOM OFFSET CYLINDER INSTALLATION

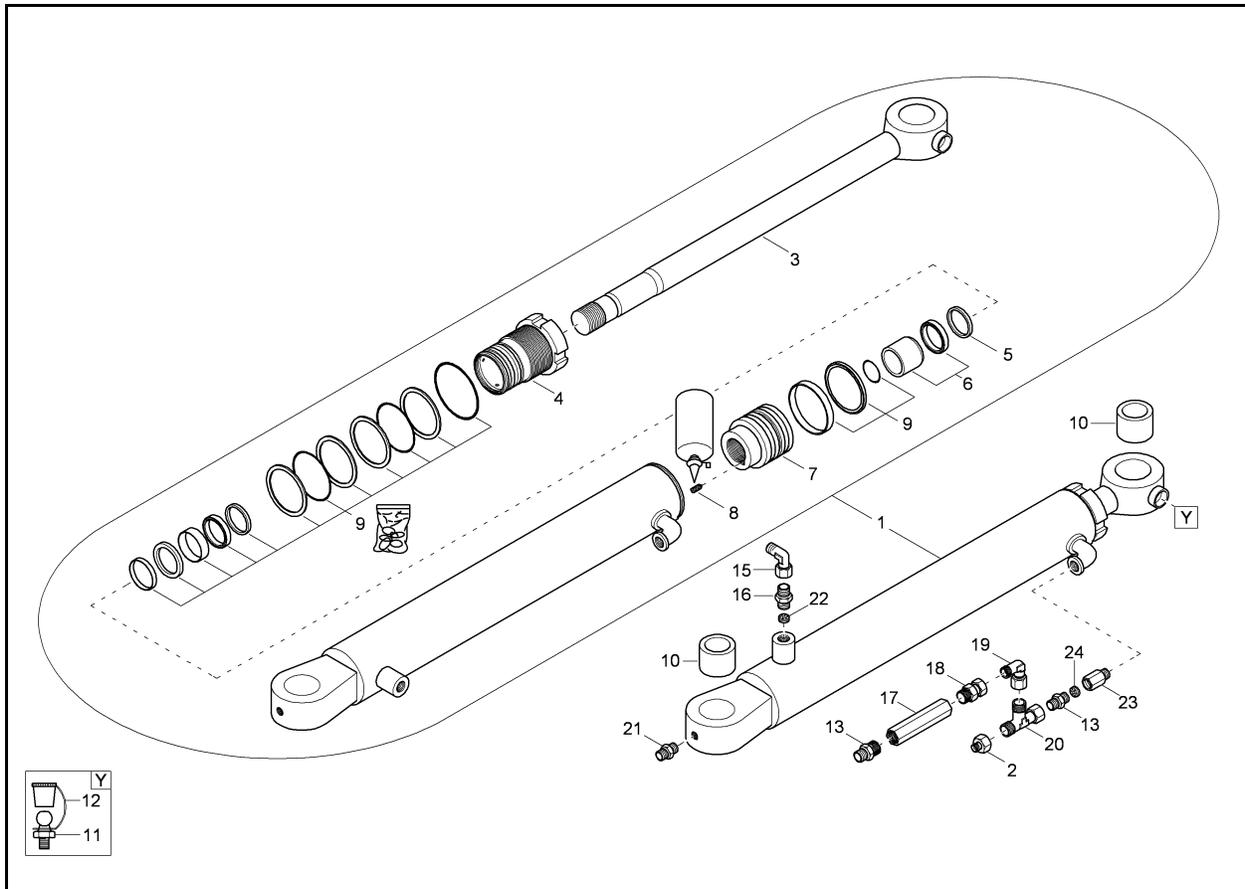
## 1000131638



Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	8004355G	HP HOSE	2	5	8002323G	HP HOSE	1
2	178513	HP HOSE	1	6	161225	HP HOSE	1
3	161309	HP HOSE	1	7	162062	ELBOW	1
4	177672	HP HOSE	1				

# 223 - BOOM OFFSET CYLINDER

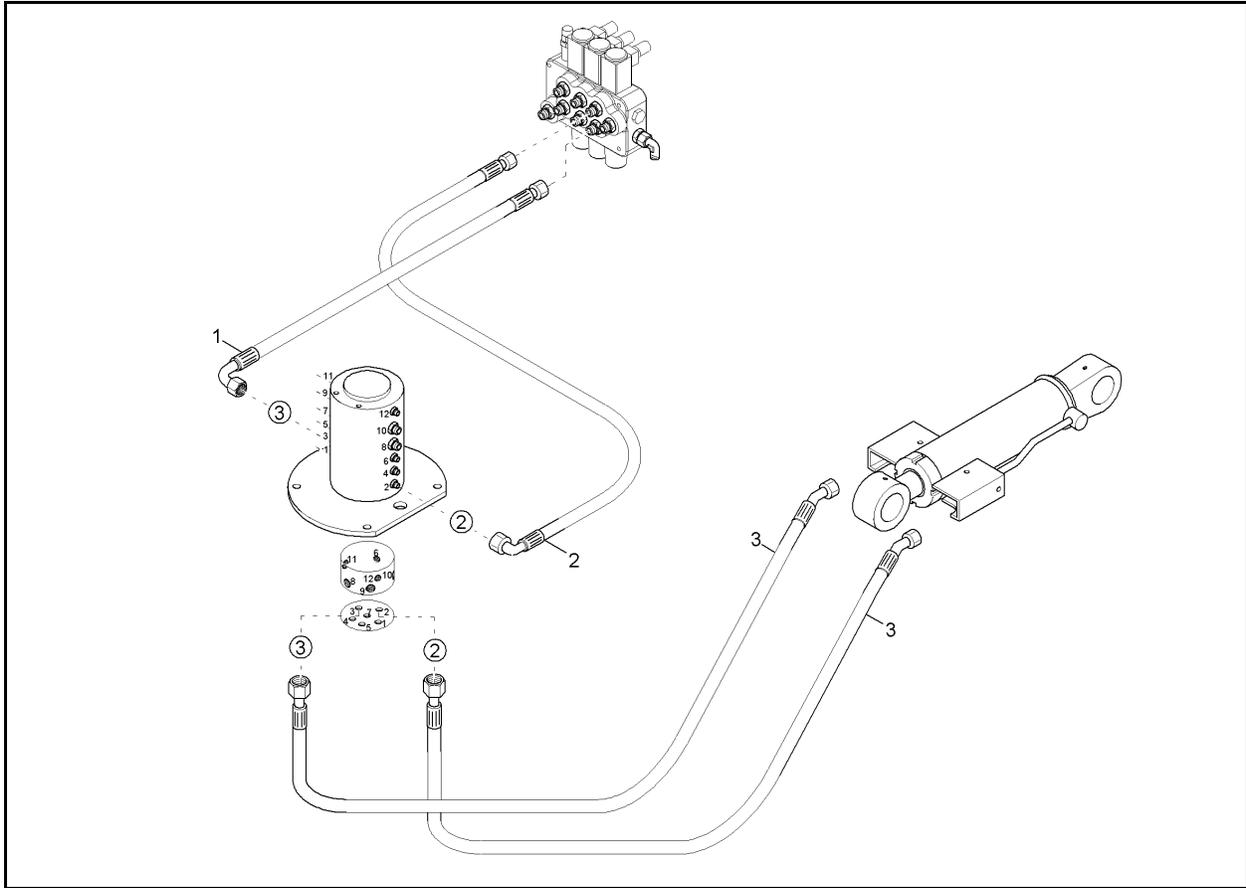
1000152579/1000131625



Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	204049	BOOM OFFSET CYLINDER	1	13	161429	SCREW JOINT 12L	2
2	163116	REDUCTION JOINT	1	15	161443	90° FITTING	1
3	1528015G	PISTON ROD	1	16	161427	SCREW JOINT	1
4	160681	BUSHING	1	17	178456	NONRETURN VALVE	1
5	160682	RING	1	18	162063	SCREW JOINT	1
6	206816	KIT/RING & BUSHING	1	19	161445	90° FITTING	1
7	1528017G	PISTON	1	20	162062	ELBOW	1
8	161400	SET SCREW	1	21	161461	SCREW JOINT	1
9	1529425G	SEAL KIT	1	22	160651	RESTRICTOR (SN AE00200 AND UP)	1
10	161545	BUSHING	2	23	161357	CONNECTOR (SN AE00200 AND UP)	1
11	161411	GREASE ZERK-7MM HEX HEAD	1	24	165896	RESTRICTOR (SN AE00200 AND UP)	1
12	161422	CAP	1				

# 223 - DOZER BLADE CYLINDER INSTALLATION

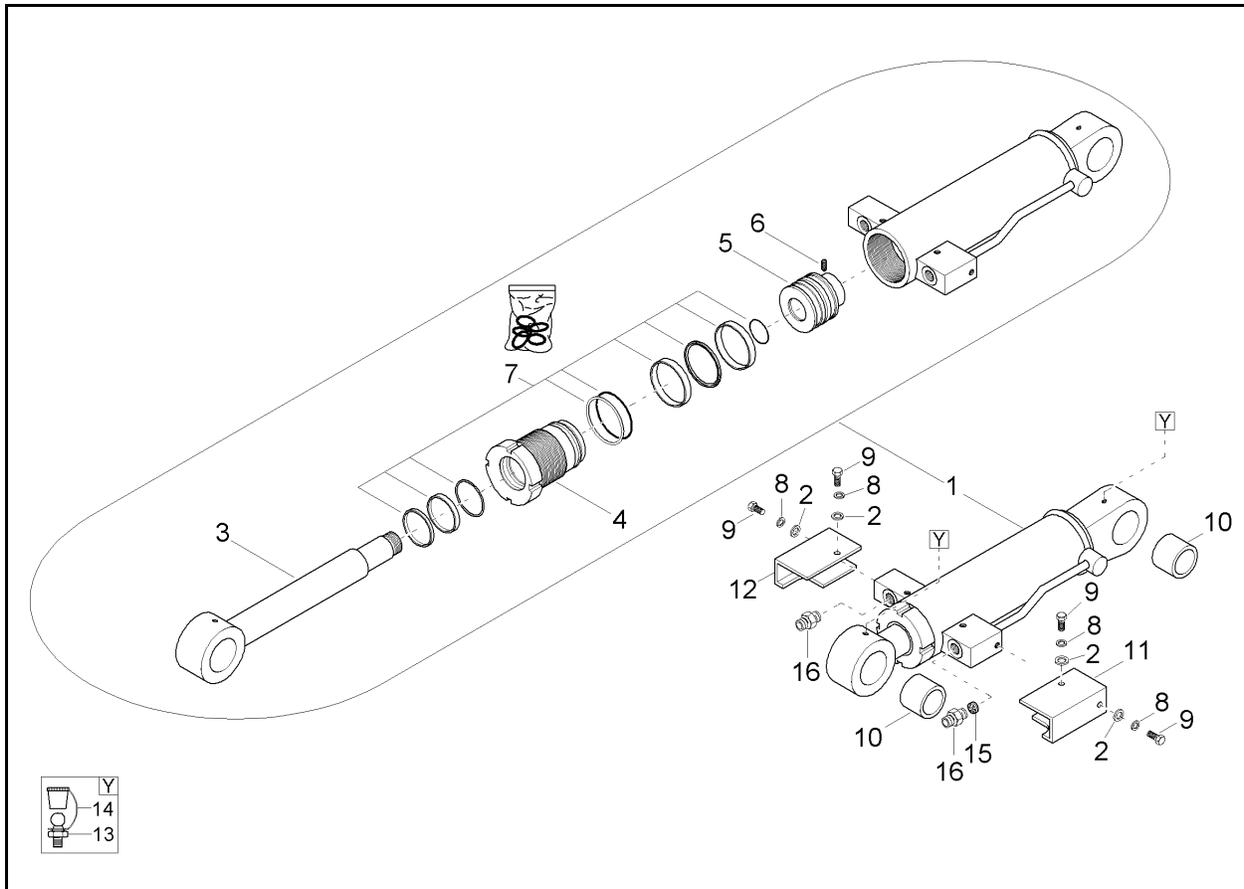
1000131640



Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	8002315G	HP HOSE	1	3	161249	HOSE	2
2	161261	HP HOSE	1				

# 223 - DOZER BLADE CYLINDER

1000131628

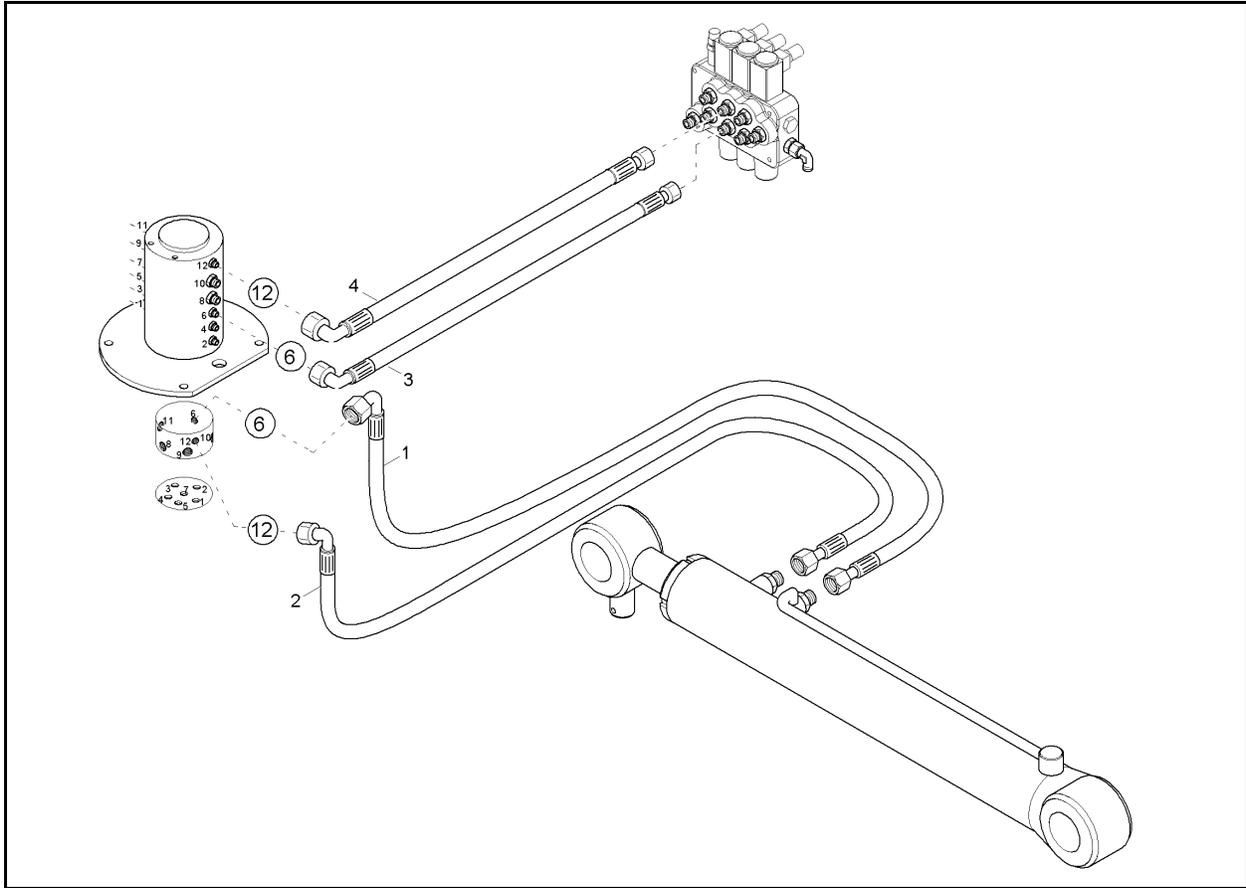


Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	204052	DOZER BLADE CYLINDER COMPLETE	1	10	161544	BUSHING	2
2	163634	WASHER	4	11	161757	PROTECTION	1
3	1528059G	PISTON ROD	1	12	161756	PROTECTION	1
4	*	GUIDE BUSHING	1	13	161411	GREASE ZERK-7MM HEX HEAD	2
5	*	PISTON	1	14	161416	CAP	2
6	161400	SET SCREW	1	15	1428449G	RESTRICTOR	1
7	1529424G	SEAL KIT	1	16	161427	SCREW JOINT	2
8	163670	LOCKWASHER	4				
9	651430	CS M8-1.25X12 C8.8 ZY DIN931	4				

\* For service, use 204052 (Dozer Blade Cylinder) to replace 1528050G (Guide Bushing) and 1528051G (Piston).

# 223 - TELESCOPIC CYLINDER INSTALLATION

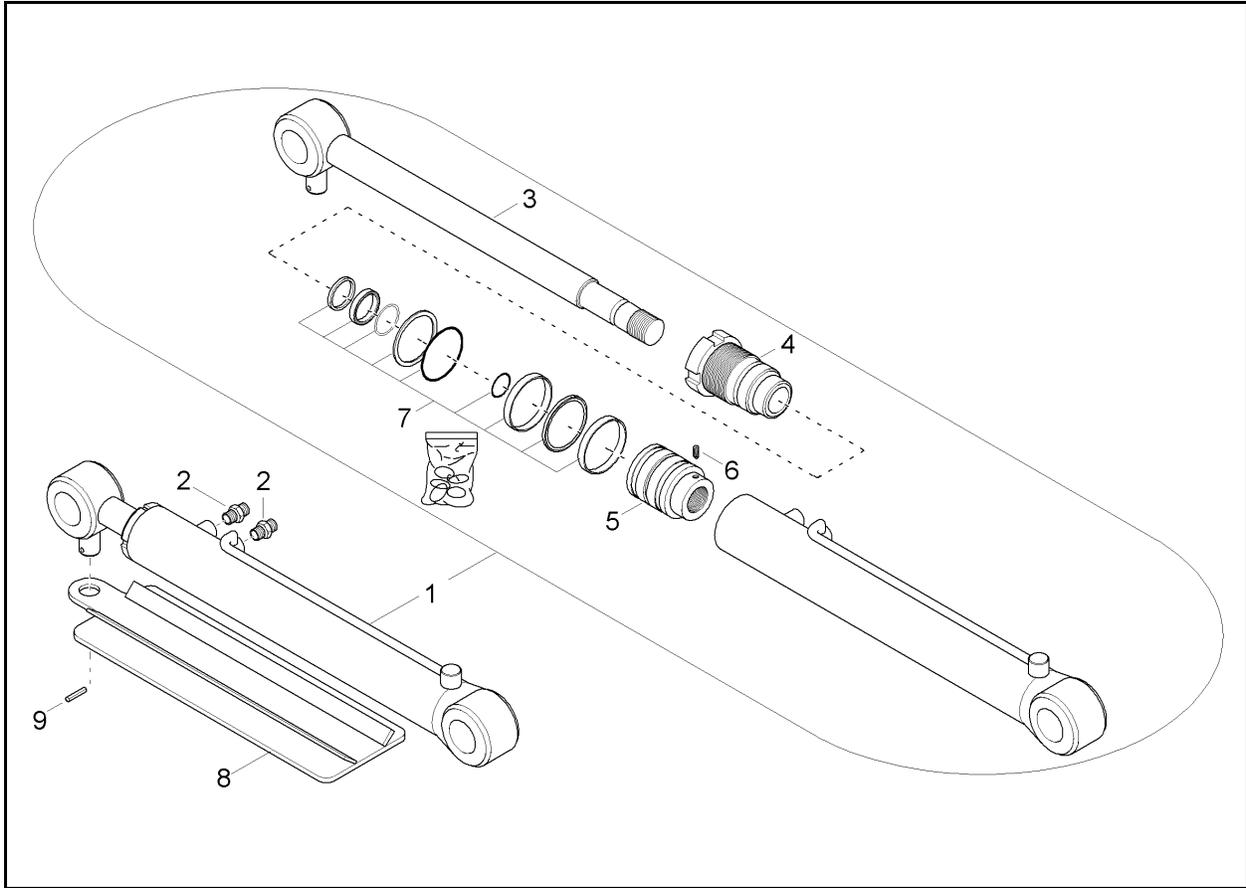
## 1000131642



Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	204118	HP HOSE (SN AD00454 and up)	1	3	8002315G	HP HOSE	1
	161232	HP HOSE (SN AB00440 - AD00453)	1	4	161257	HP HOSE	1
2	204119	HP HOSE (SN AD00454 and up)	1				
	161234	HP HOSE (SN AB00440 - AD00453)	1				

# 223 - TELESCOPIC CYLINDER

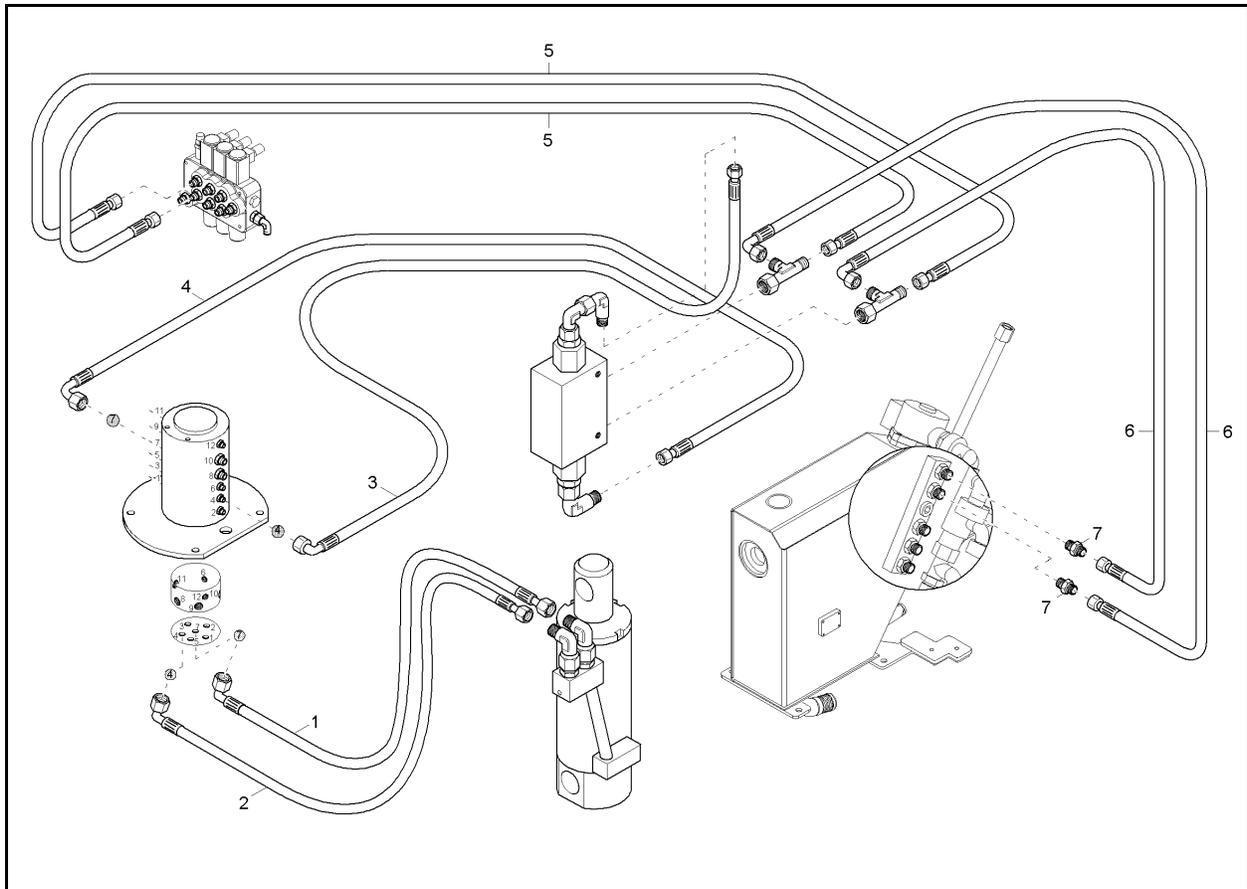
1000131629



Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	204055	TELESCOPIC CYLINDER	1	6	161401	SET SCREW	1
2	161427	SCREW JOINT	2	7	1929411G	SEAL KIT	1
3	2228010G	PISTON ROD	1	8	160616	SHIELD	1
4	2228011G	GUIDE BUSHING	1	9	651468	PIN/SPRING M5X36	1
5	160620	PISTON	1				

# 223 - TILT CYLINDER INSTALLATION

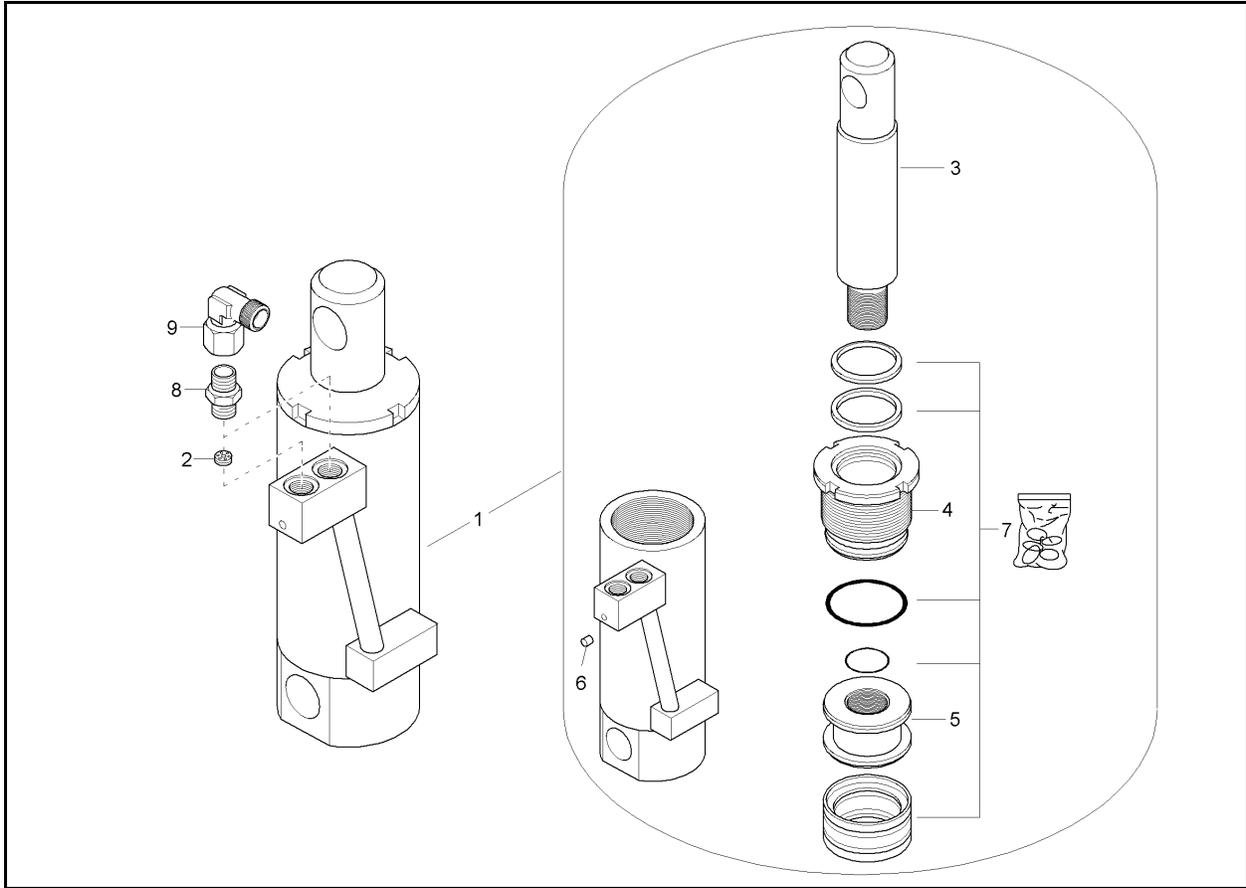
1000131643



Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	204120	HP HOSE (SN AD00454 and up)	1	4	8002315G	HP HOSE	1
	161247	HP HOSE (SN AB00440 - AD00453)	1	5	179531	HP HOSE	2
2	204119	HP HOSE (SN AD00454 and up)	1	6	161256	HP HOSE	2
	161234	HP HOSE (SN AB00440 - AD00453)	1	7	161426	SCREW JOINT	2
3	161261	HP HOSE	1				

# 223 - TILT CYLINDER

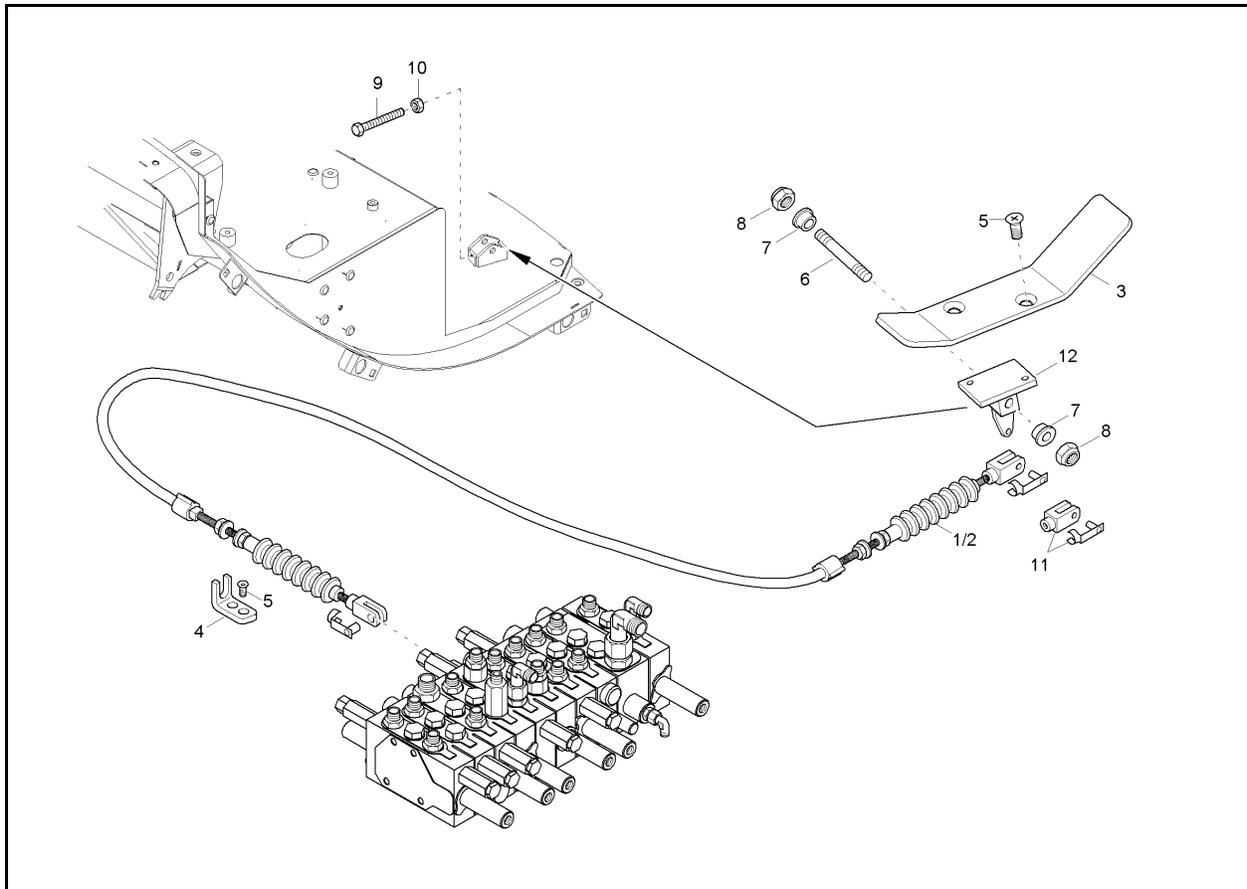
## 1000131630



Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
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	BUSHING	1	9	161443	90° FITTING	2
5	160787	PISTON	1				

# 223 - AUXILIARY HYDRAULICS

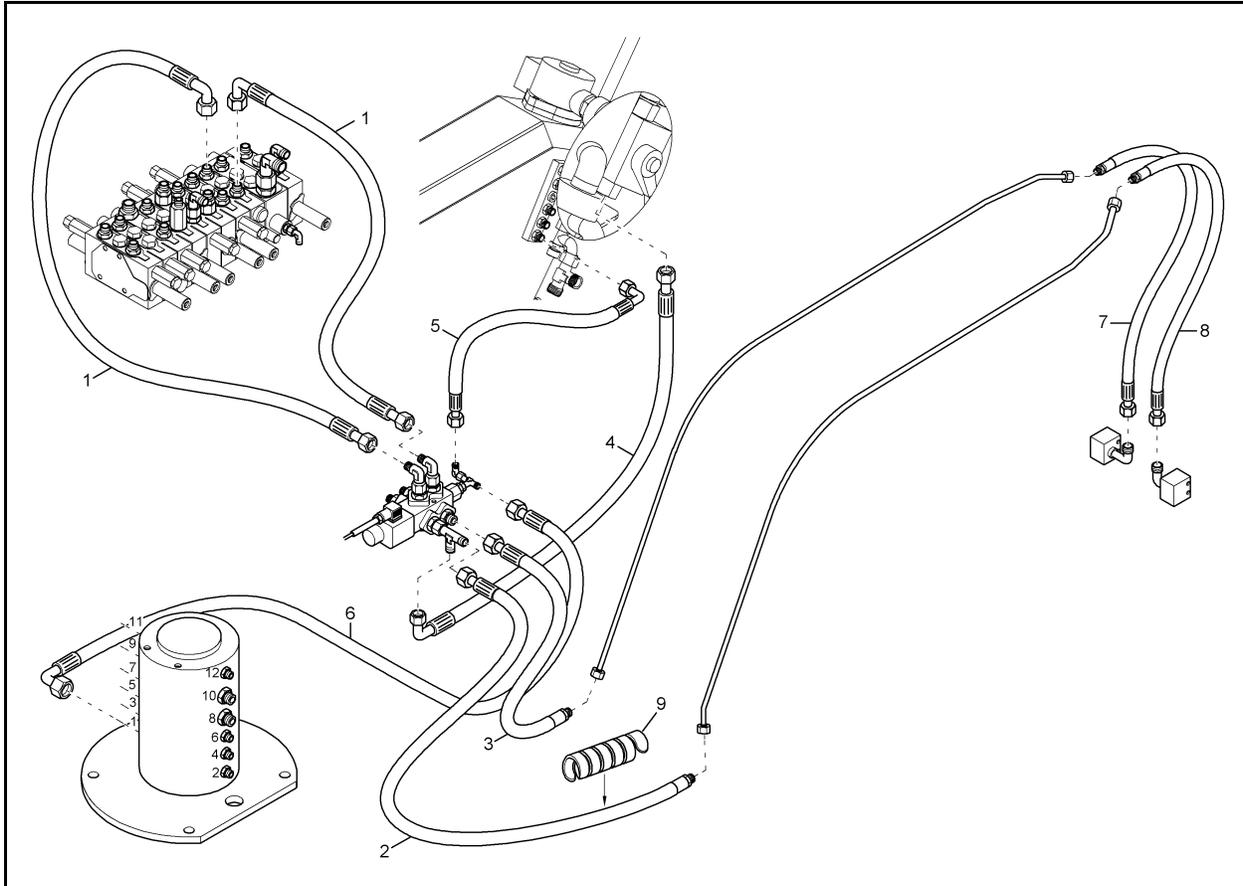
1000149064/1000131619



Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	206813	CABLE KIT (SN AD01439 AND BEFORE)	1	7	165567	BEARING	2
2	165058	CABLE (SN AD01440 AND UP)	1	8	179793	NUT	2
3	206346	PEDAL	1	9	162021	SCREW	2
4	1921110G	BRACKET	1	10	656100	HN M5-0.8 C8 ZY DIN934	2
5	651465	FHSCS M8-1.25X16 C8.8 ZY DIN7991	4	11	206347	CLEVIS (SN AD01440 AND UP)	1
6	165550	PIN	1	12	165548	LEVER	1

# 223 - AUXILIARY FUNCTION INSTALLATION

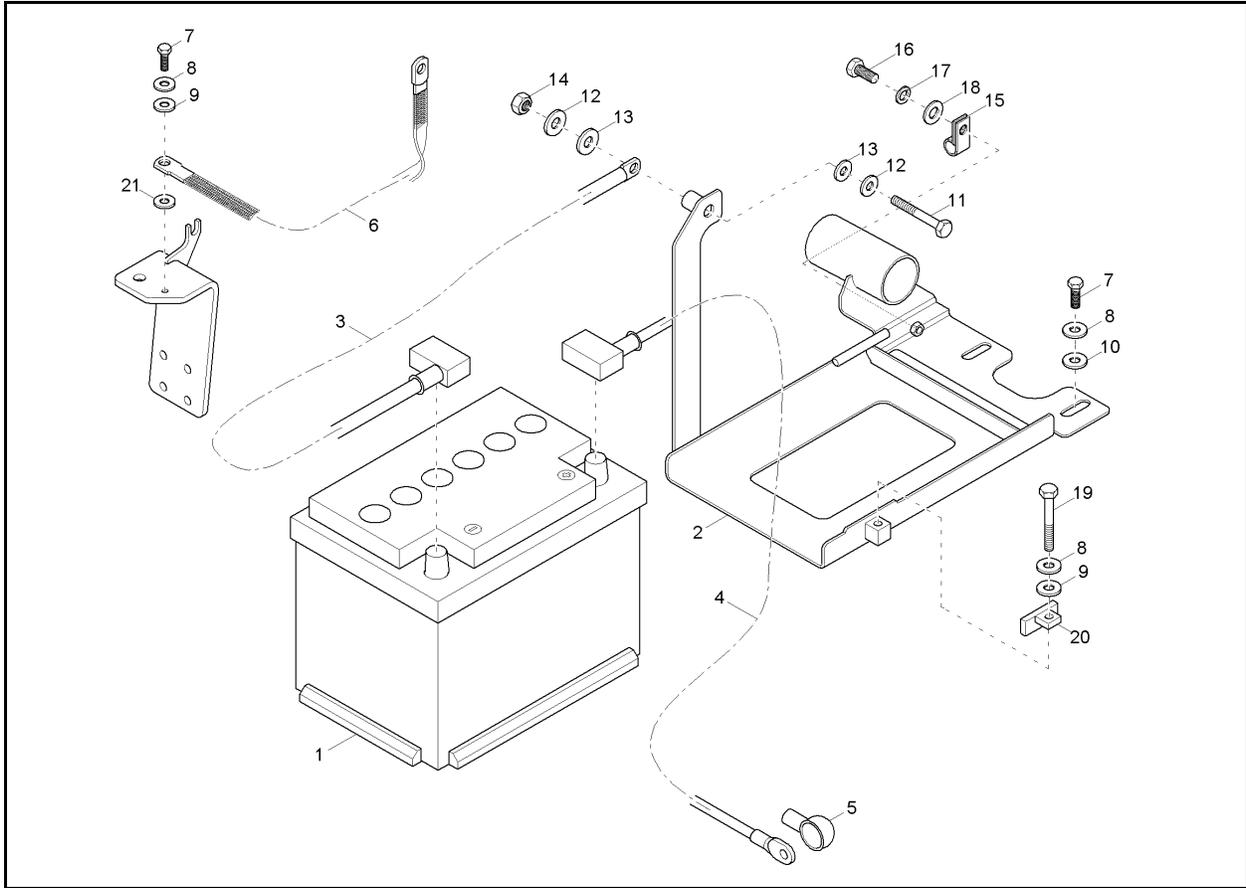
1000148633



Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	8004355G	HP HOSE	2	8	8005278G	HP HOSE (SHORT DIPPER ARM)	1
2	178523	HP HOSE	1		8005091G	HP HOSE (LONG DIPPER ARM, OPTION)	1
3	178521	HP HOSE	1	9	204018	PROTECTION HOSE (0.55M) (SN AF02673 AND UP)	1
4	162426	HP HOSE	1				
5	161225	HP HOSE	1				
6	177672	HP HOSE	1				
7	8004360G	HP HOSE (SHORT DIPPER ARM)	1				
	8004375G	HP HOSE (LONG DIPPER ARM, OPTION)	1				

# 223 - BATTERY

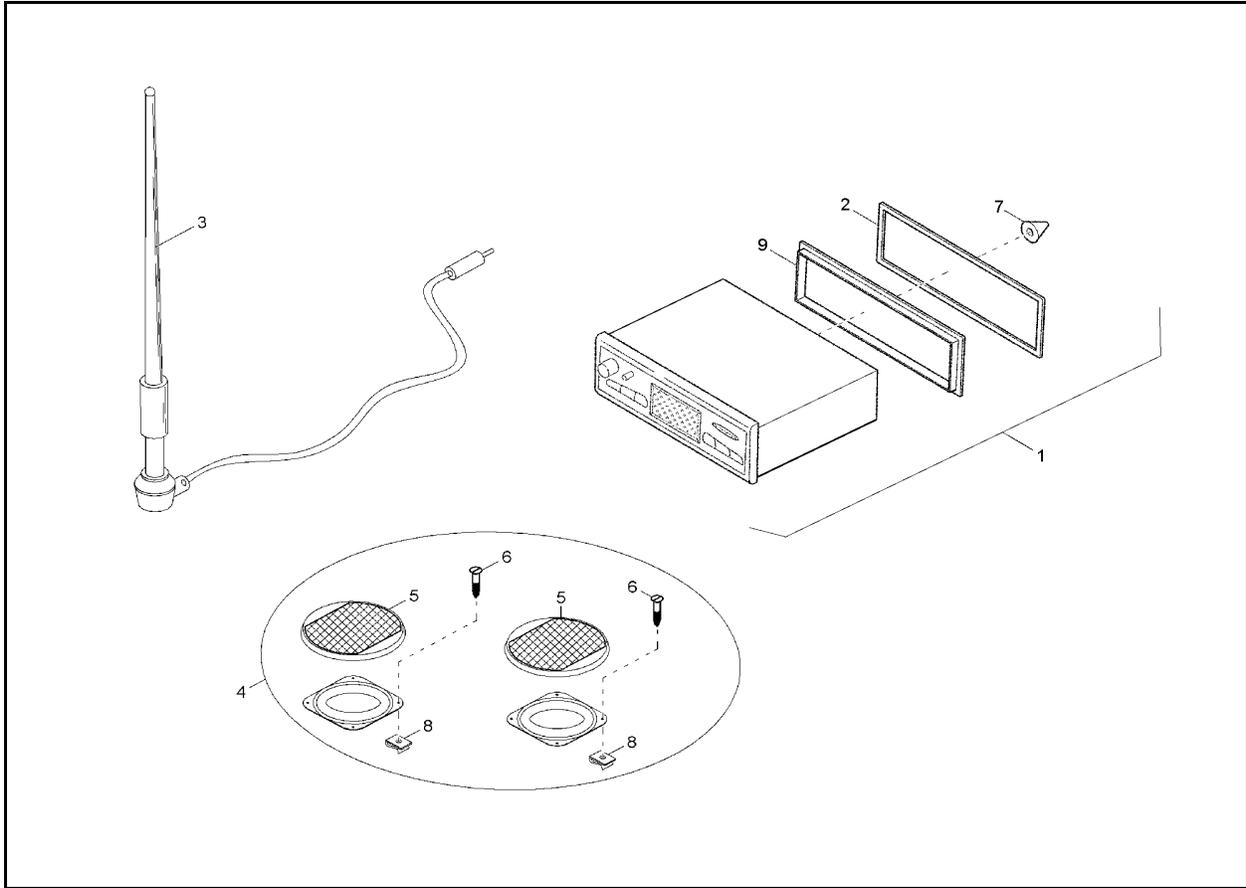
## 1000148845



Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	*	BATTERY	1	12	161669	LOCKWASHER S10	2
2	206349	BATTERY CARRIER	1	13	161640	WASHER/GR A 10.5	2
3	161851	BATTERY CABLE - NEGATIVE	1	14	656102	HN M10-1.25 F8 ZY DIN934	1
4	161850	CABLE	1	15	165114	CLAMP	1
5	161994	CAP	1	16	651424	CS M6-1X20 C8.8 ZY DIN931	1
6	165224	GROUND CABLE	1	17	161675	LOCKWASHER S6	1
7	177648	HEX SCREW	3	18	161660	WASHER GR A6.4 ZO DIN 125	1
8	163670	LOCKWASHER	3	19	178526	SCREW	1
9	163634	WASHER	2	20	178463	CARRIER	1
10	7462680011	WASHER 8.4 ST A2C	2	21	177461	EXTERNAL TOOTH LOCKWASHER	1
11	9901348G	SCREW	1				

\* Purchase locally. Group size 42; 360 CCA.

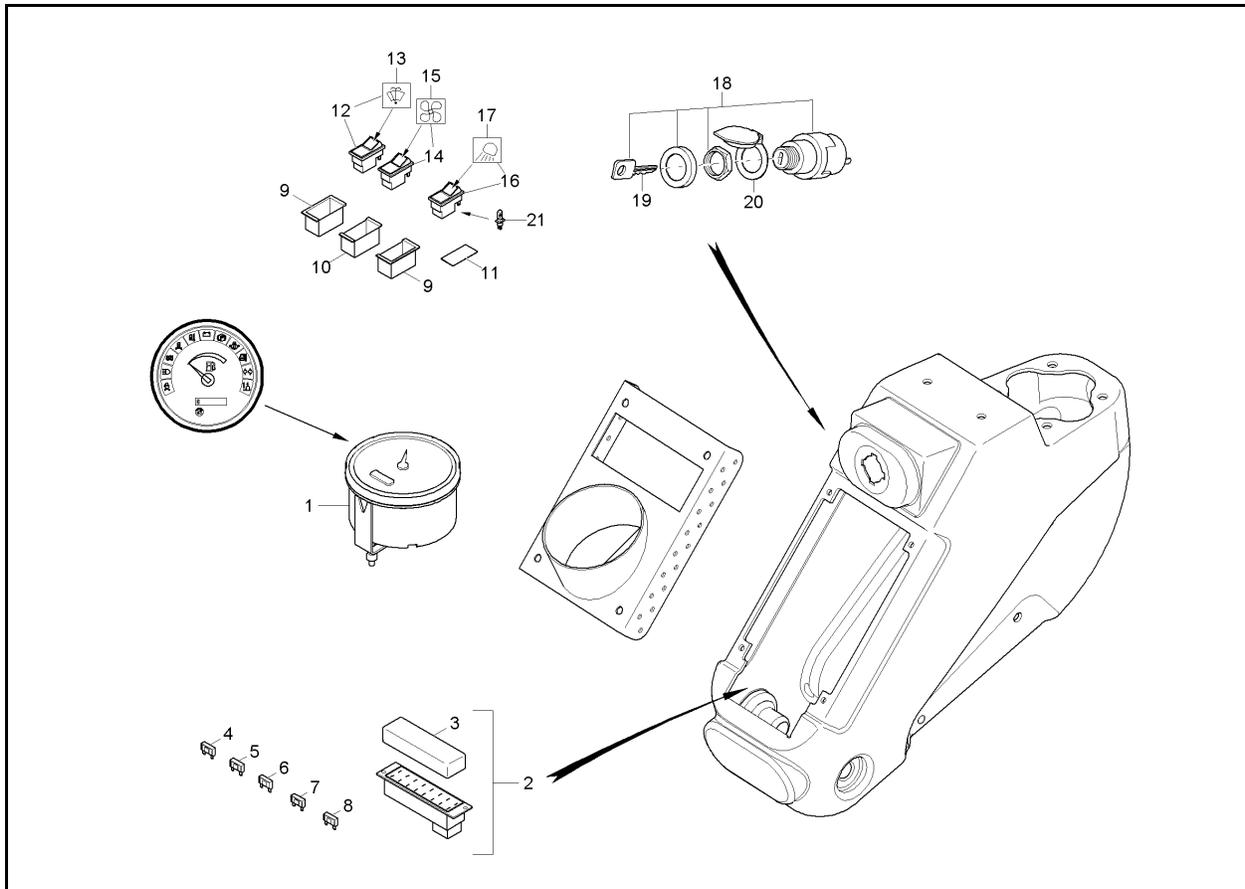
**223 - RADIO (OPTION)**  
**1000144767**



Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	204027	RADIO	1	6	162035	SCREW	8
2	164187	FRAME	2	7	178107	RUBBER BUFFER	1
3	162839	ANTENNA	1	8	164683	NUT	8
4	165204	SPEAKER KIT	1	9	205940	MOUNTING FRAME	1
5	206003	SPEAKER COVER	2				

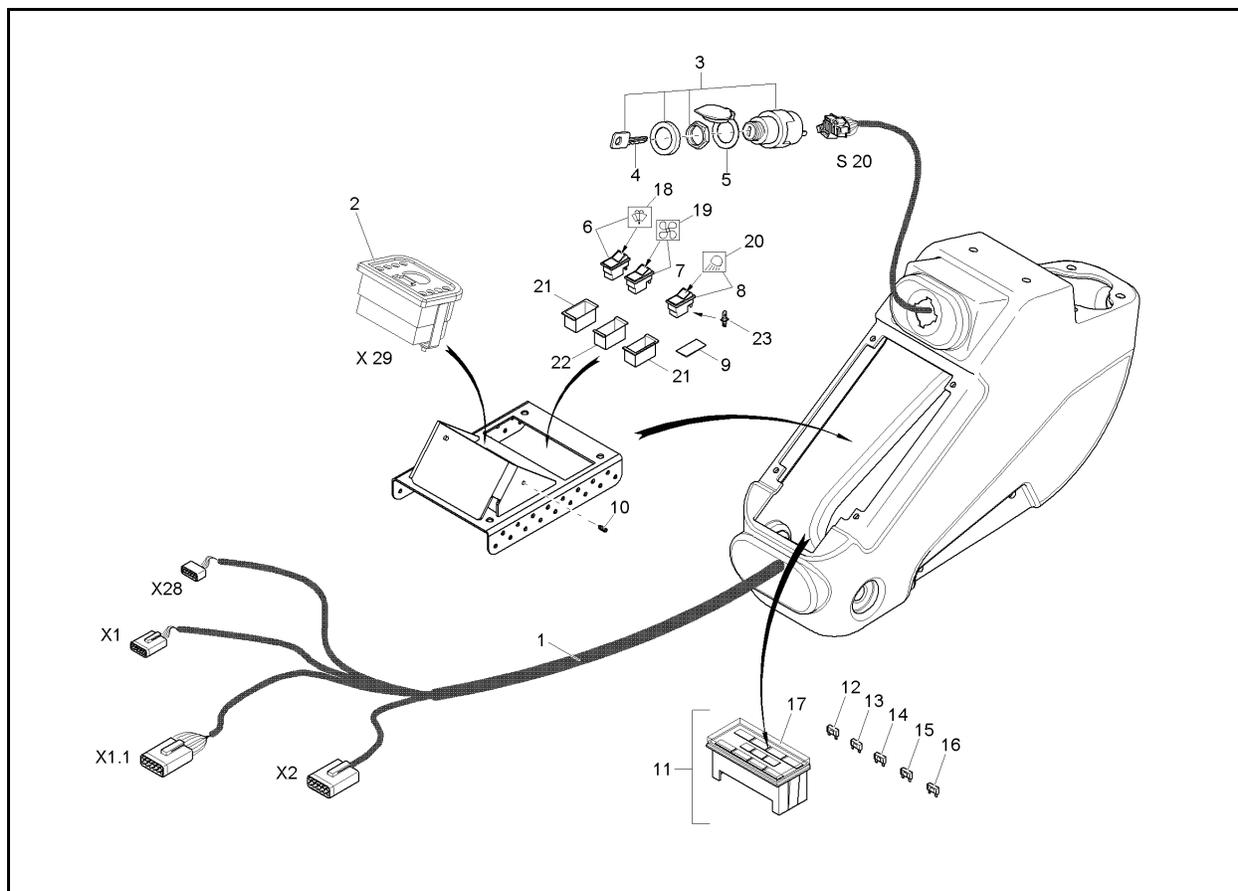
# 223 - DASHBOARD

## 1000148621 - (SN AE0001 AND UP)



Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	177095	INSTRUMENT CLUSTER	1	12	165235	WINDSHIELD WIPER SWITCH	1
2	177976	FUSE BOX	1	13	164709	WIPER SYMBOL	1
3	177977	COVER/FUSE BOX	1	14	165236	ROCKER SWITCH	1
4	161376	FUSE 7.5 A	1	15	164708	VENTILATION FAN SYMBOL	1
5	161374	FUSE 10 A	1	16	165238	LIGHT SWITCH	1
6	161375	FUSE 15 A	1	17	164879	WORK LIGHT SYMBOL	1
7	162836	FUSE 30 A	1	18	0003331306	PREHEATING START SWITCH W/KEY	1
8	164868	FUSE 20 A	1	19	101792	KEY (W/O LOCK)	1
9	209197	FRAME	2	20	161368	COVER	1
10	209196	FRAME	3	21	177646	BULB	1
11	0003320872	BLANK	2				

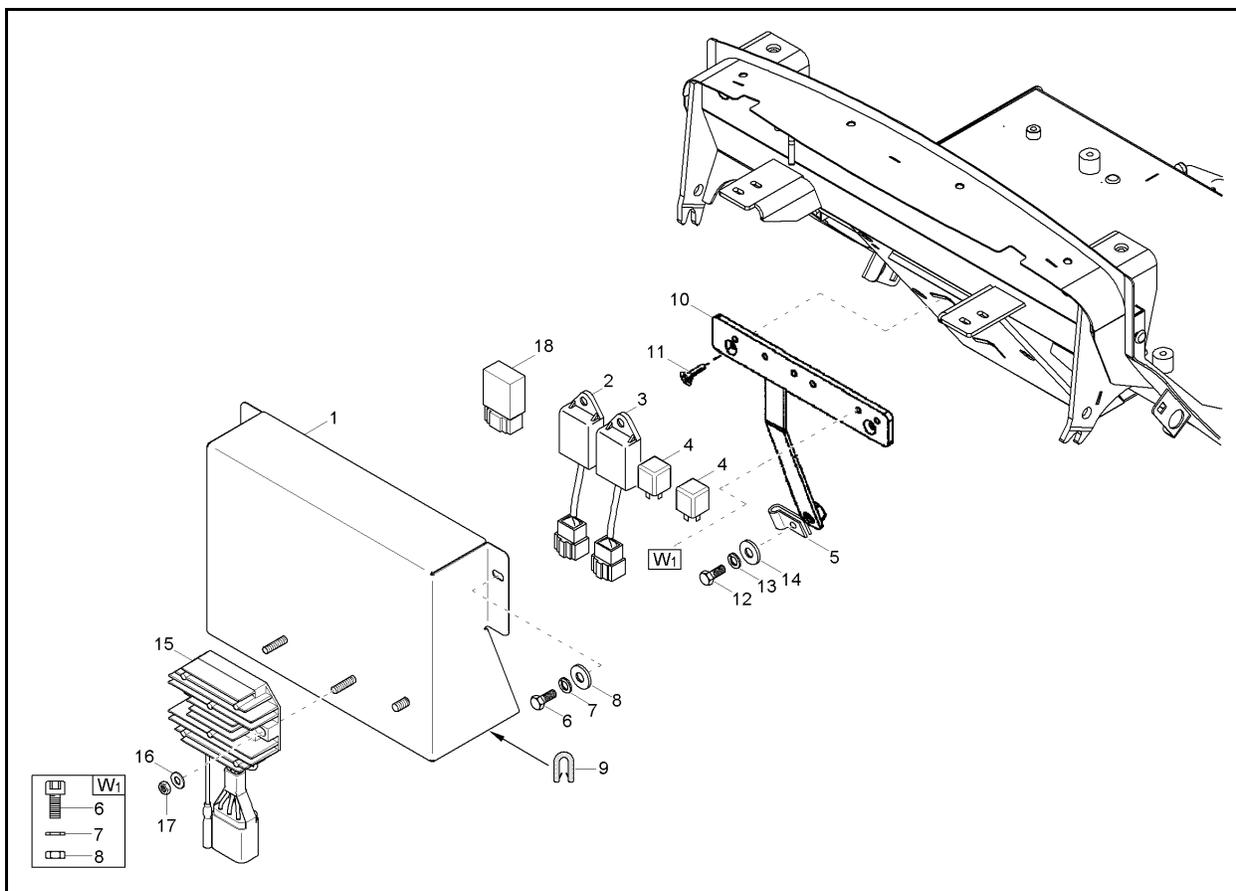
## 223 - DASHBOARD 1000131669 - (SN AD00454 - AD04180)



Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	178721	WIRE HARNESS/ARMREST	1	13	161374	FUSE 10 A	1
2	1424401G	DISPLAY UNIT	1	14	161375	FUSE 15 A	1
3	0003331306	PREHEATING START SWITCH W/KEY	1	15	162836	FUSE 30 A	1
4	101792	KEY (W/O LOCK)	1	16	164868	FUSE 20 A	1
5	161368	COVER	1	17	205343	COVER FUSE BOX	1
6	165235	WINDSHIELD WIPER SWITCH	1	18	164709	WIPER SYMBOL	1
7	165236	ROCKER SWITCH	1	19	164708	VENTILATION FAN SYMBOL	1
8	165238	LIGHT SWITCH	1	20	164879	WORK LIGHT SYMBOL	1
9	0003320872	BLANK	2	21	209196	FRAME	2
10	179777	SET SCREW	2	22	209197	FRAME	3
11	161364	FUSE BOX	1	23	177646	BULB	3
12	161376	FUSE 7.5 A	1				

# 223 - RELAY BOX

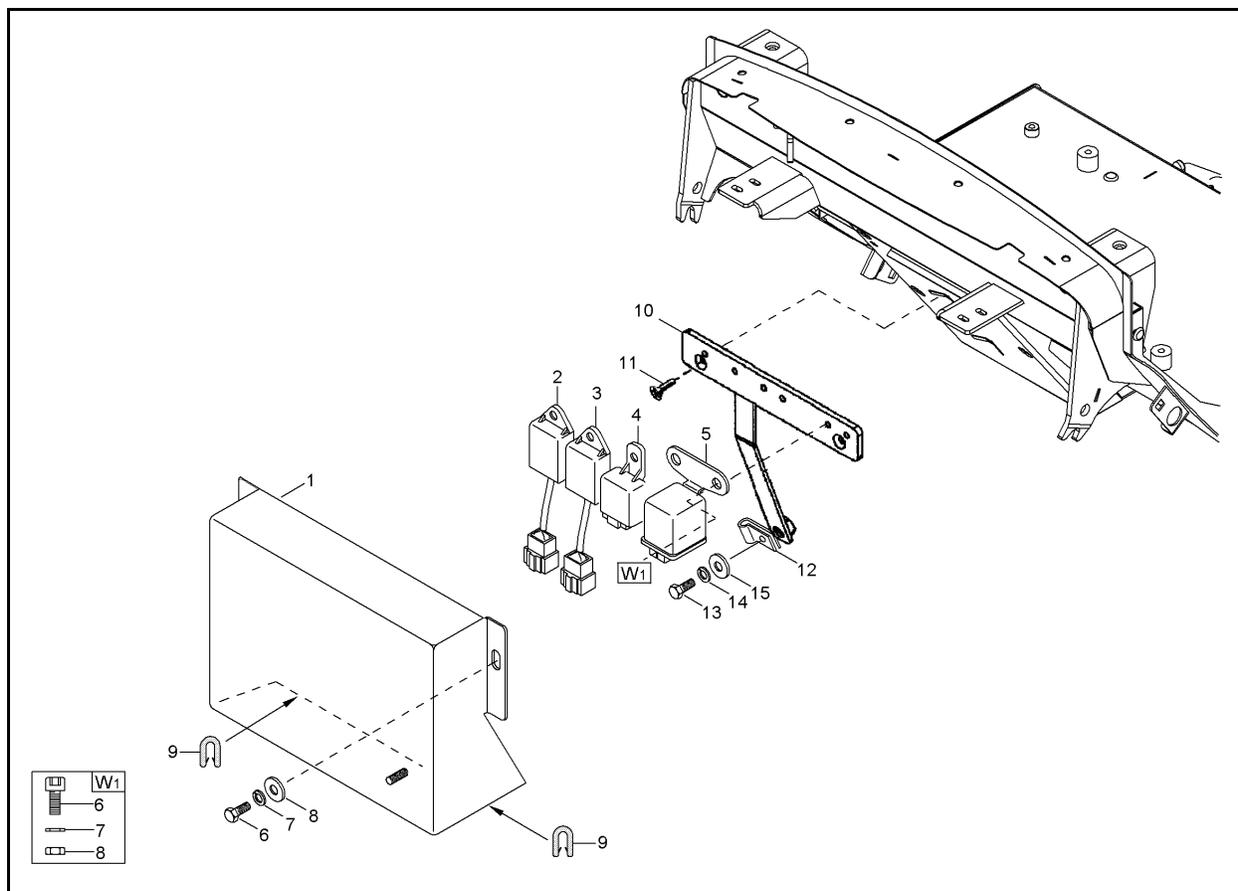
## 1000148636 - (SN AE0001 AND UP)



Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	1421032G	RELAY BOX	1	9	207222	PVC EDGE PROTECTION (0.6M)	1
2	160821	RELAY 10 A (TIMING RELAY FOR PULLING CONTACT)	1	10	1421035G	BRACKET	1
3	206358	RELAY (PRE-HEATING RELAY)	1	11	651460	FHSCS M5-0.8X16 C8.8 ZY DIN7991	2
4	205214	RELAY 40/60 AMP (STARTING RELAY/SWITCHING RELAY FOR PULLING CONTACT)	2	12	656093	CS M8-1.25X16 C8.8 ZY DIN931	1
5	179855	HOSE COLLAR	1	13	163670	LOCKWASHER	1
6	651502	SHCS M5-0.8X10 C8.8 ZY DIN912	4	14	163634	WASHER	1
7	161674	LOCKWASHER S16	4	15	203810	VOLTAGE REGULATOR	1
8	161659	WASHER/GR A 5.3 ZO DIN125	4	16	161665	WASHER/GR A 5.3	2
				17	656100	HN M5-0.8 C8 ZY DIN934	2
				18	177647	DIODE	1

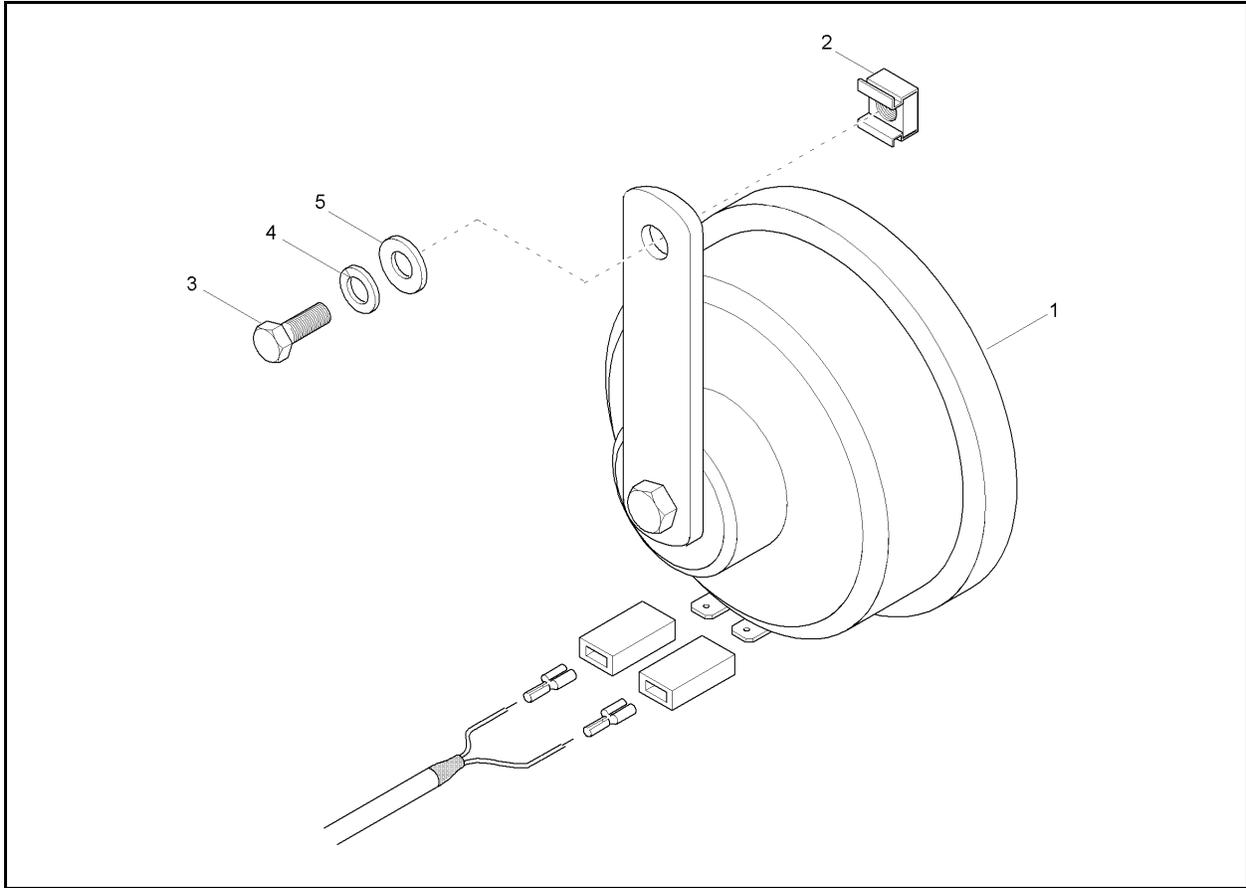
## 223 - RELAY BOX

1000131674 - (SN AD00454 - AD04180)



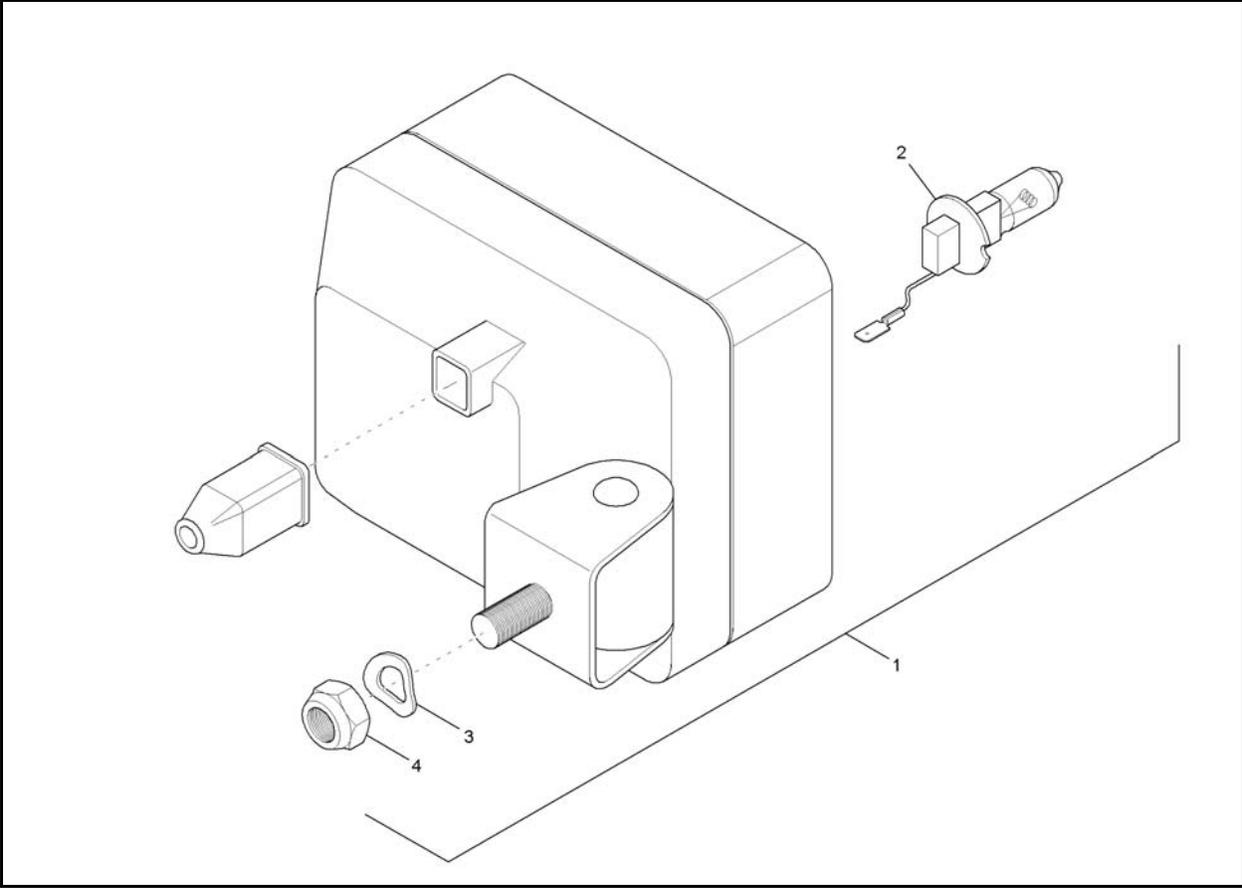
Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	1421032G	RELAY BOX	1	8	161659	WASHER/GR A 5.3 ZO DIN125	7
2	160821	RELAY 10 A (TIMING RELAY FOR PULLING CONTACT)	1	9	207222	PVC EDGE PROTECTION (0.6M)	1
3	160891	RELAY 10 A (PRE-HEATING RELAY)	1	10	1421035G	BRACKET	1
4	160890	RELAY (STARTING RELAY)	1	11	651460	FHSCS M5-0.8X16 C8.8 ZY DIN7991	2
5	160889	RELAY - 40 A (SWITCHING RELAY FOR PULLING CONTACT)	1	12	179855	HOSE COLLAR	1
6	651502	SHCS M5-0.8X10 C8.8 ZY DIN912	7	13	656093	CS M8-1.25X16 C8.8 ZY DIN931	1
7	161674	LOCKWASHER S16	7	14	163670	LOCKWASHER	1
				15	163634	WASHER	1

**223 - HORN**  
**1000131677**



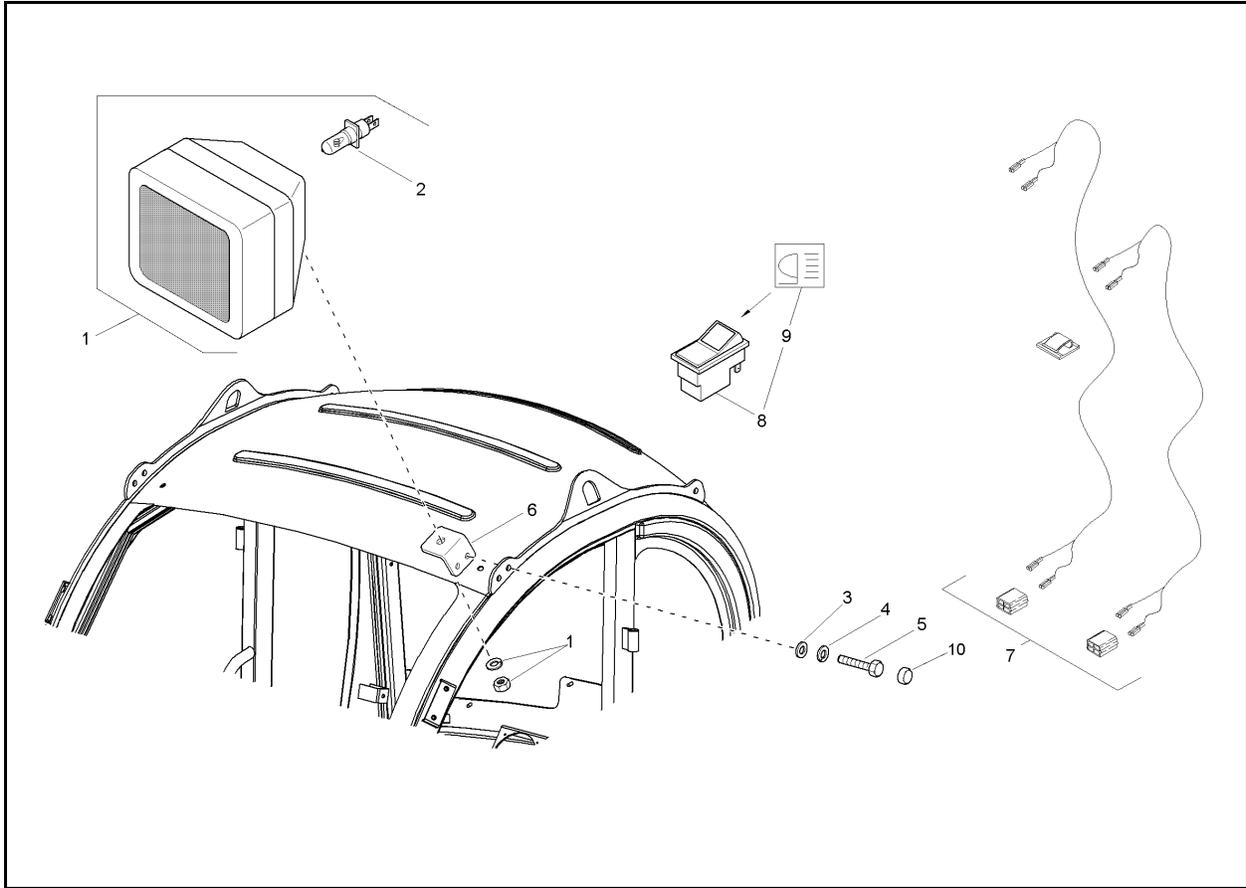
Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	161366	HORN	1	4	163670	LOCKWASHER	1
2	161616	NUT/CAGE M8	1	5	163634	WASHER	1
3	177648	HEX SCREW	1				

**223 - WORK LIGHT**  
**1000131675**



Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	160537	WORK LIGHT COMPLETE	1	3	161623	LW SPRING B10 DIN7981	1
2	161367	HALOGEN BULB	1	4	651448	LN INS M10-1.5 C8 ZY DIN6924	1

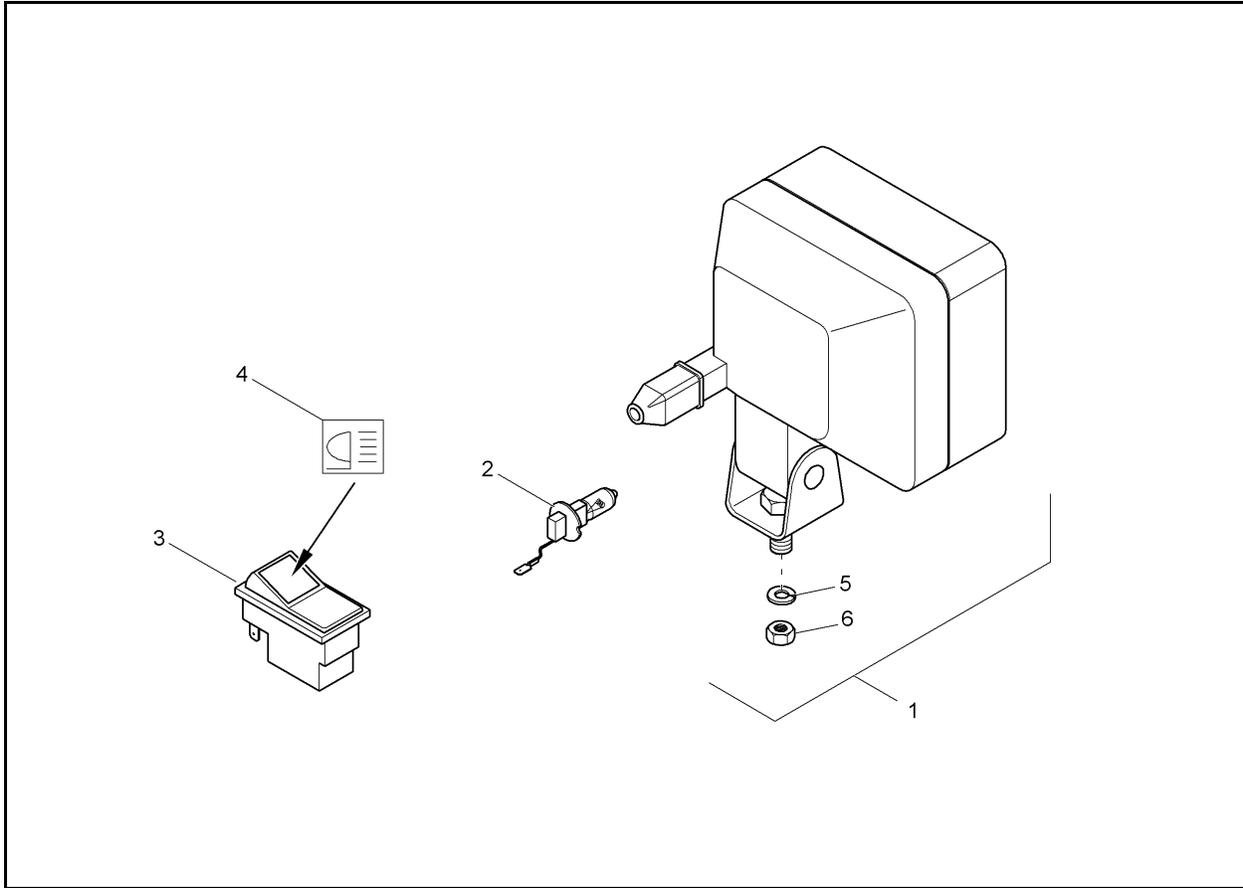
**223 - CAB WORK LIGHT (OPTION)**  
**1000131397**



Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	160537	WORK LIGHT COMPLETE	2	6	178702	HEADLIGHT ANGLE	2
2	161367	HALOGEN BULB	2	7	178707	CABLE	1
3	7462680011	WASHER 8.4 ST A2C	4	8	178916	WORK LIGHT SWITCH	1
4	163670	LOCKWASHER	4	9	164871	WORK LIGHT SYMBOL	1
5	656093	CS M8-1.25X16 C8.8 ZY DIN931	4	10	165052	COVER	4

# 223 - CAB WORK LIGHT, REAR (OPTION)

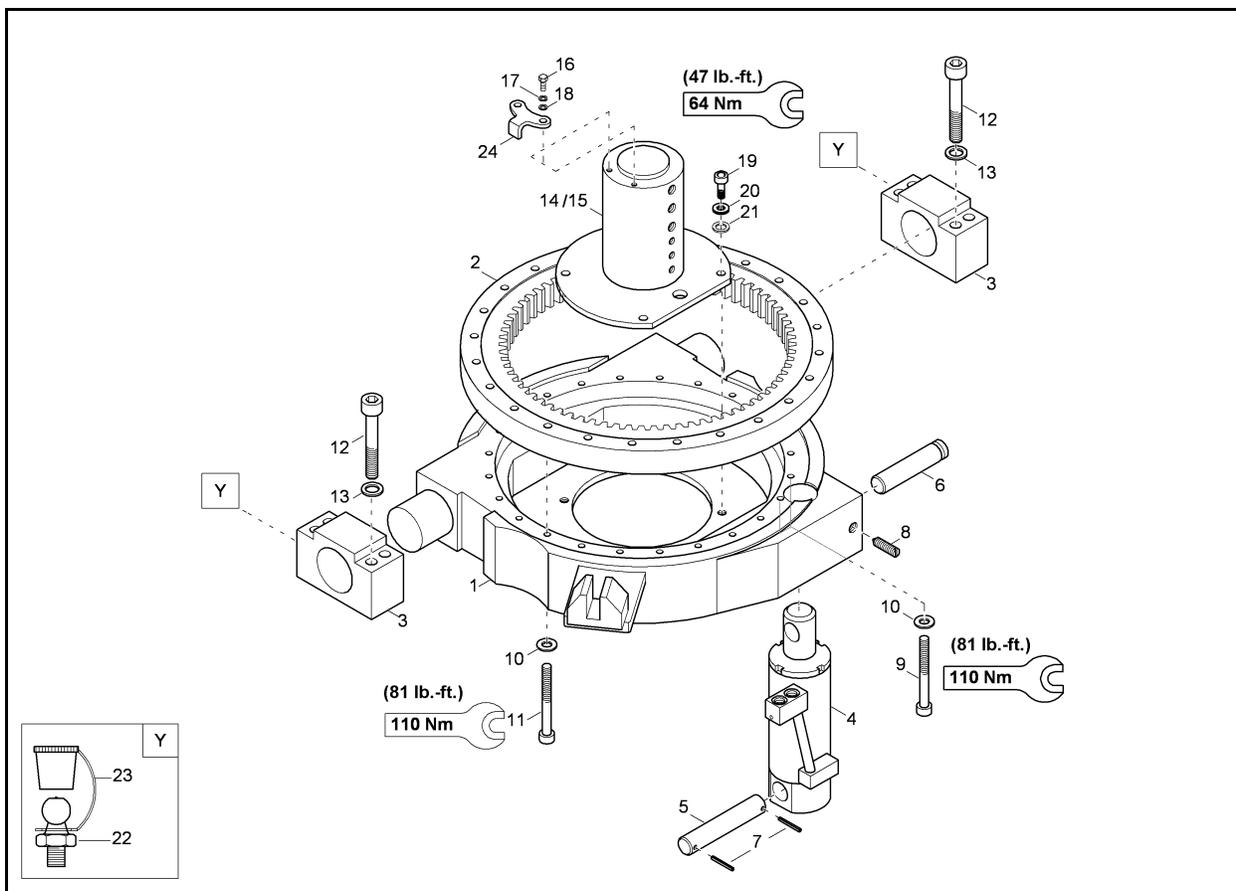
1000124310



Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	160537	WORK LIGHT COMPLETE	1	4	164871	WORK LIGHT SYMBOL	1
2	161367	HALOGEN BULB	1	5	161623	LW SPRING B10 DIN7981	1
3	164884	ROCKER SWITCH - 2 POSITION	1	6	651448	LN INS M10-1.5 C8 ZY DIN6924	1

# 223 - ROTATING GROUP

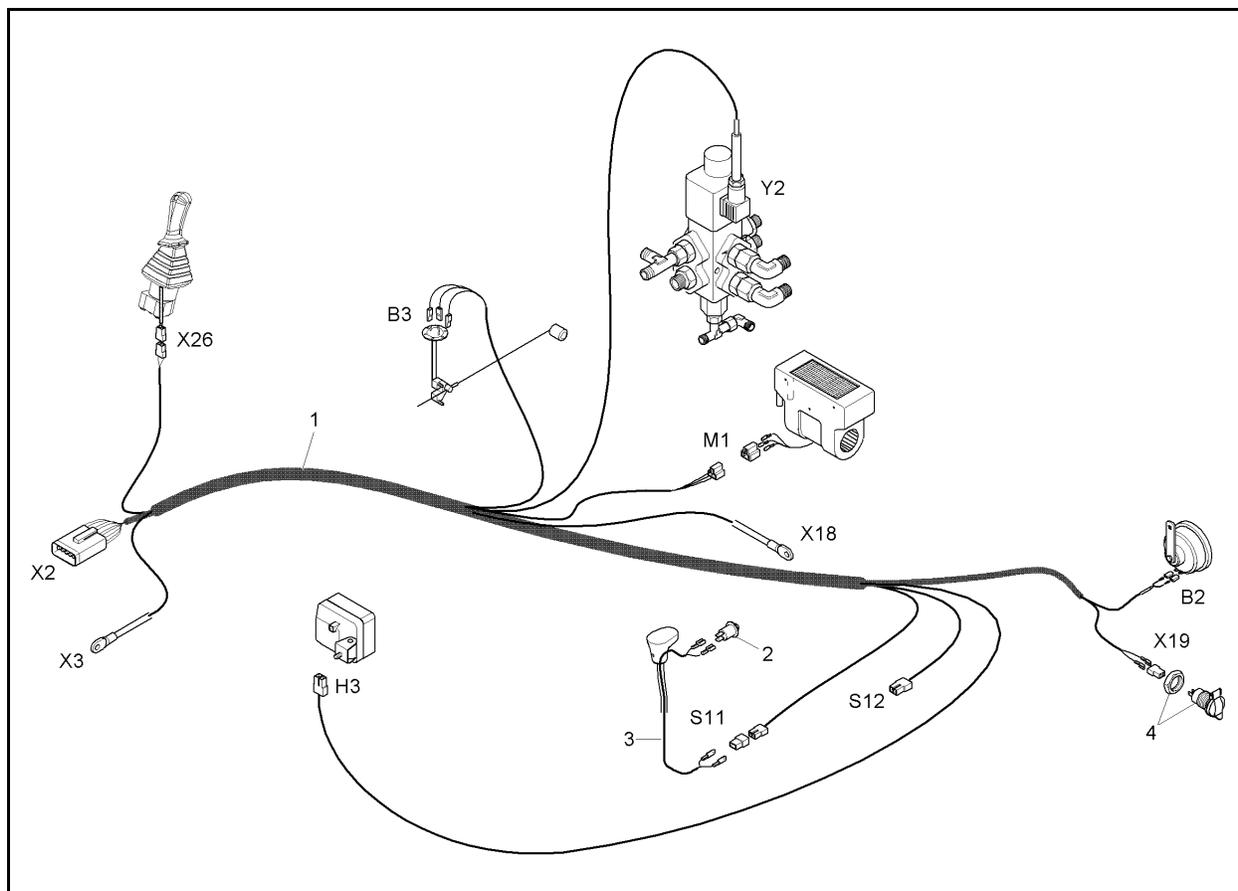
## 1000131725



Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	2222015G	TURNTABLE HOUSING	1	13	161672	LOCKWASHER S16	8
2	161724	TURNTABLE	1	14	204127	SWIVEL JOINT (SN AF04939 AND UP)	1
3	2222018G	BLOCK	2	15	162115	SWIVEL JOINT (SN AF04938 AND BEFORE)	1
4	2228013G	TILT CYLINDER	1	16	656105	CS M8-1.25X25 C8.8 ZY DIN931	2
		See page 93 for individual components		17	163670	LOCKWASHER	14
5	160779	PIN	1	18	163634	WASHER	6
6	160780	PIN	1	19	651474	SHCS M10-1.25X25 F10.9 ZY DIN912	20
7	162124	COTTER PIN	2	20	163641	WASHER	54
8	651445	SHSS DP M10-1.50X16 C 45H	1	21	161640	WASHER/GR A 10.5	16
9	9901427G	SCREW	2	22	161412	GREASE ZERK-9MM HEX HEAD	2
10	161643	WASHER/ROUND HI-TENS	23	23	161416	CAP	2
11	162122	SCREW	21	24	2221001G	BRACKET	1
12	9901345G	SCREW	8				

# 223 - CHASSIS WIRE HARNESS

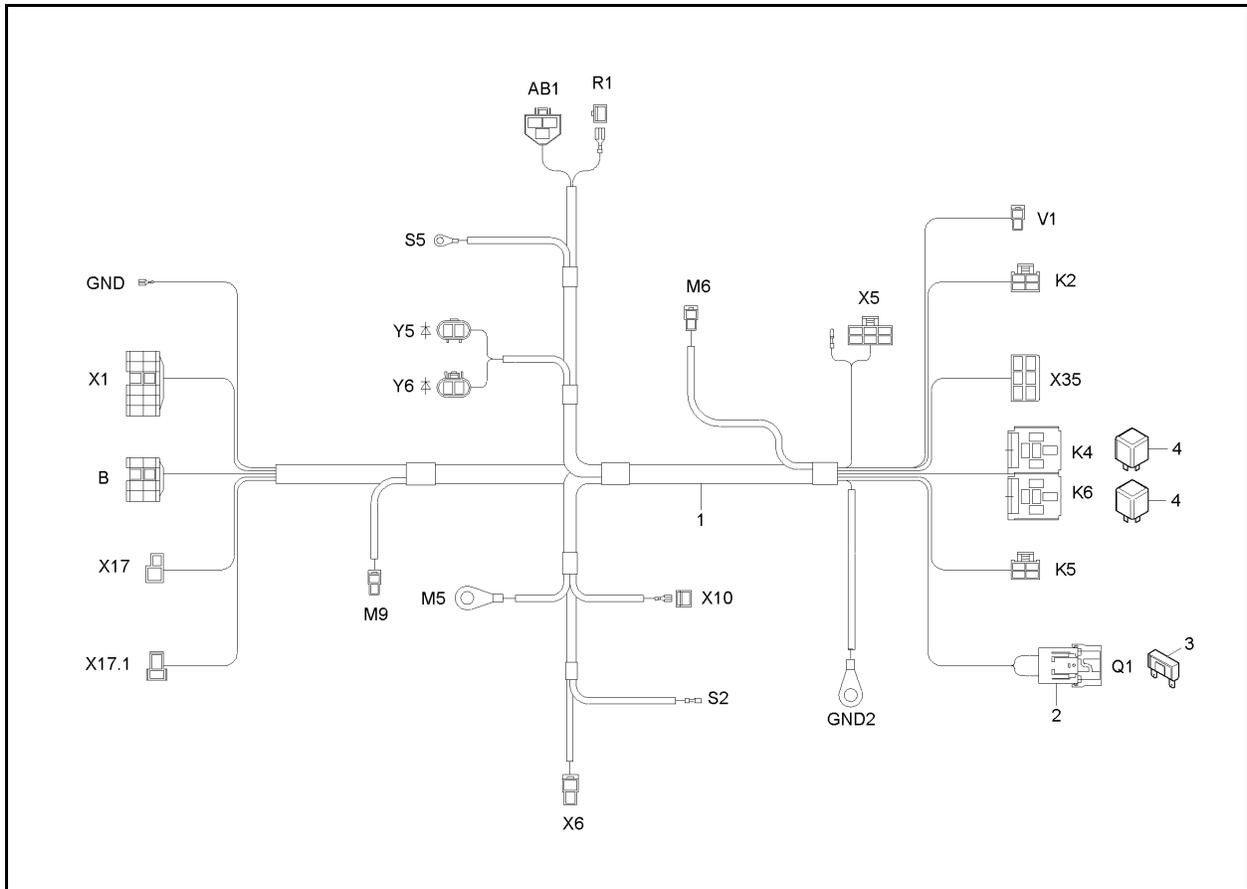
1000131673



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

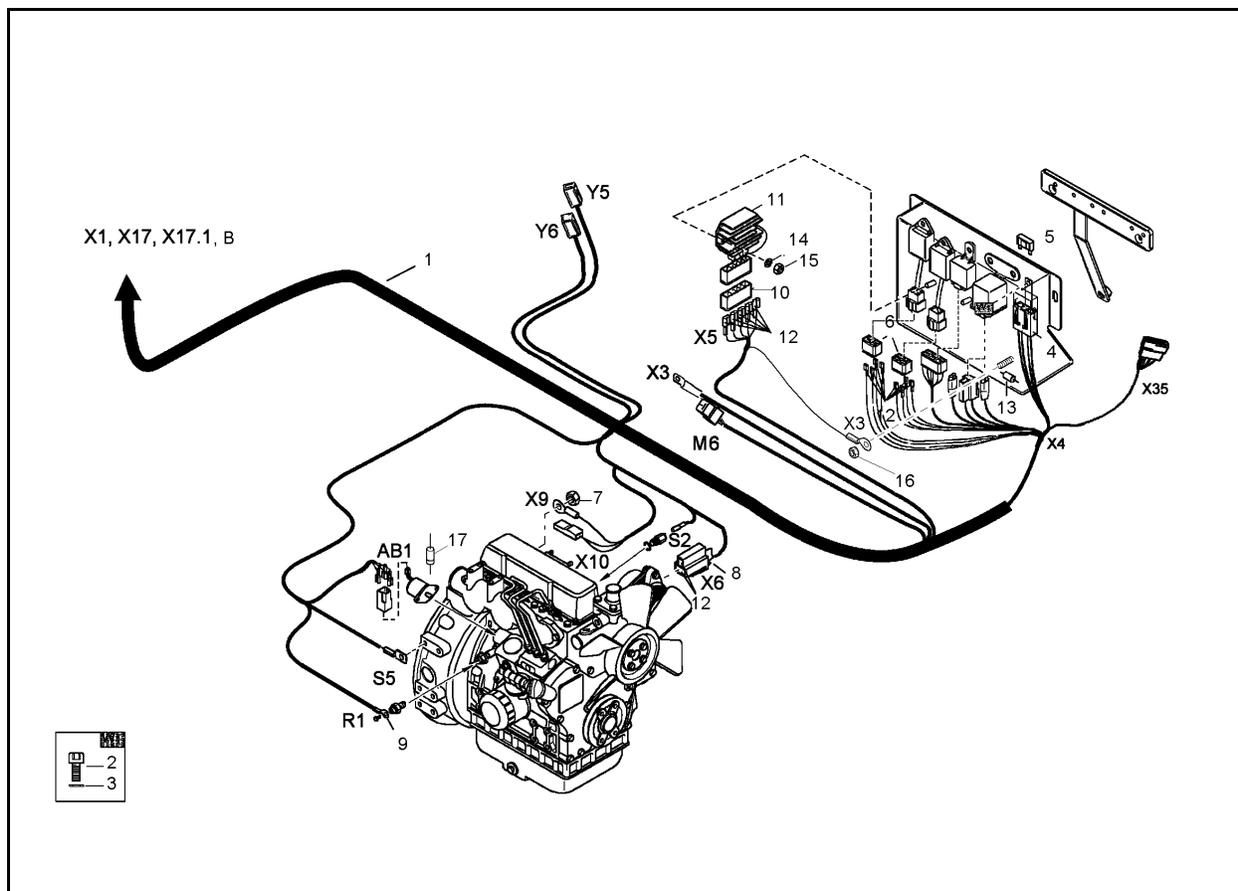
# 223 - ENGINE WIRE HARNESS

## 1000148637 - (SN AE0001 AND UP)



Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	206357	ENGINE WIRE HARNESS	1	3	162838	FUSE 40 A (MAIN FUSE)	1
2	0003330440	SUPPORT	1	4	205214	RELAY 40/60 AMP	2

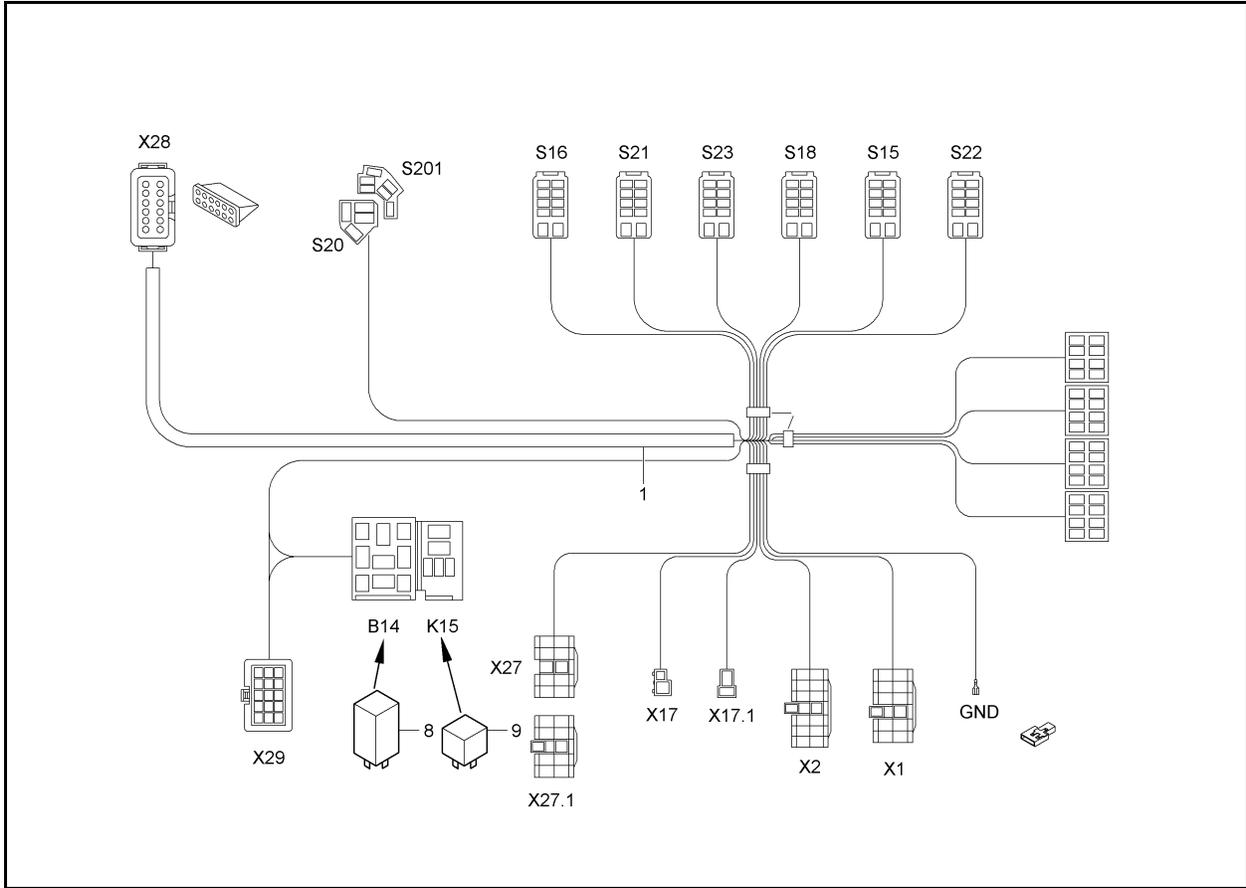
## 223 - ENGINE WIRE HARNESS 1000131671 - (SN AD00454 - AD04180)



Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	178719	WIRE HARNESS/ENGINE	1	10	425-36149	COUPLER/REGULATOR	1
2	651502	SHCS M5-0.8X10 C8.8 ZY DIN912	1	11	425-36148	REGULATOR	1
3	161659	WASHER/GR A 5.3 ZO DIN125	1	12	162470	PLUG	20
4	0003330440	SUPPORT	1	13	161355	DIODE	1
5	161998	FUSE - 50 A	1	14	161665	WASHER/GR A 5.3	2
6	162003	PLUG	2	15	656100	HN M5-0.8 C8 ZY DIN934	2
7	656048	HN M8-1.25 C8 ZY DIN934	1	16	161678	HN M6-1.00 C8 ZO	1
8	201821	CONNECTOR	2	17	206064	DIODE	1
9	162004	PLUG	1				

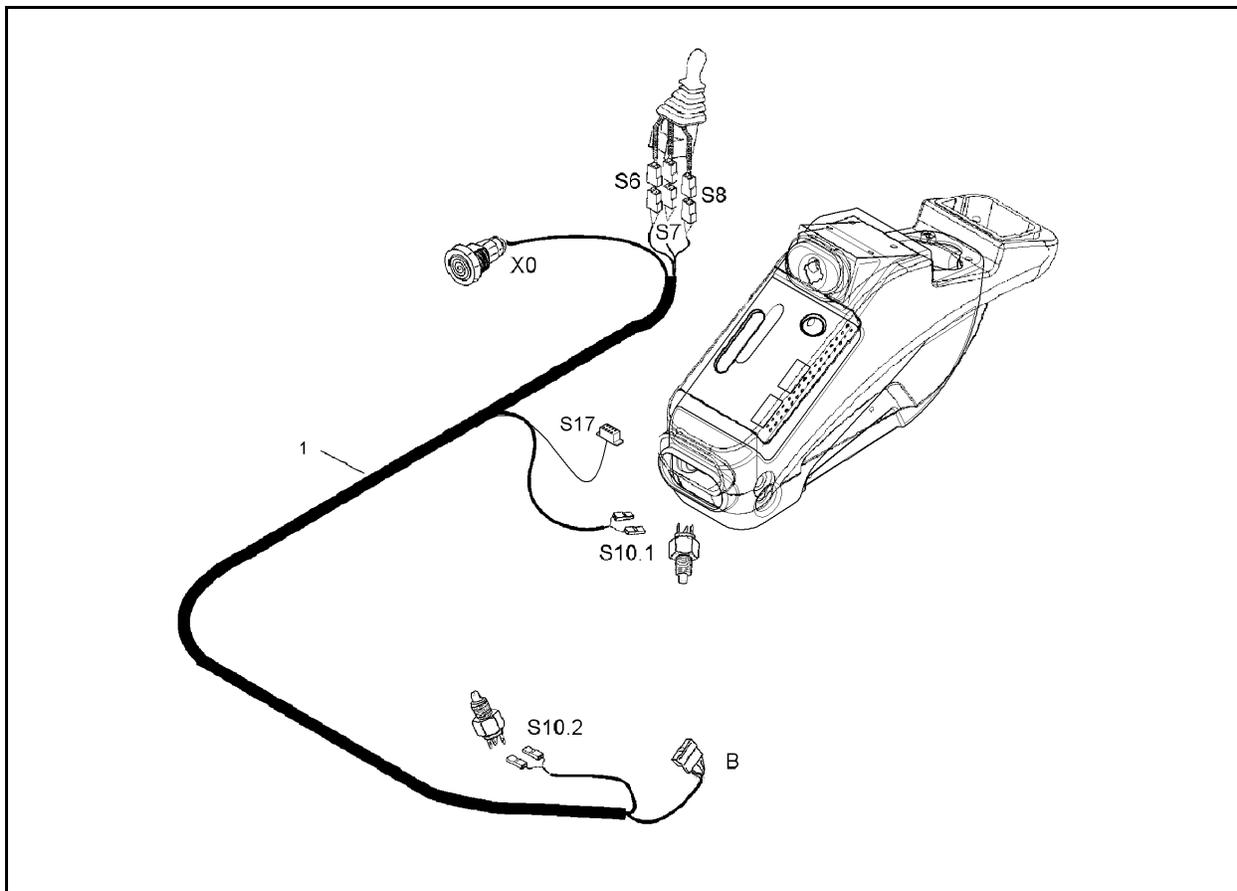
# 223 - ARMREST WIRE HARNESS

## 1000148638 - (SN AE0001 AND UP)



Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	206350	ARMREST WIRE HARNESS	1	9	209061	RELAY - 20/35 A	1
8	207057	RELAY	1				

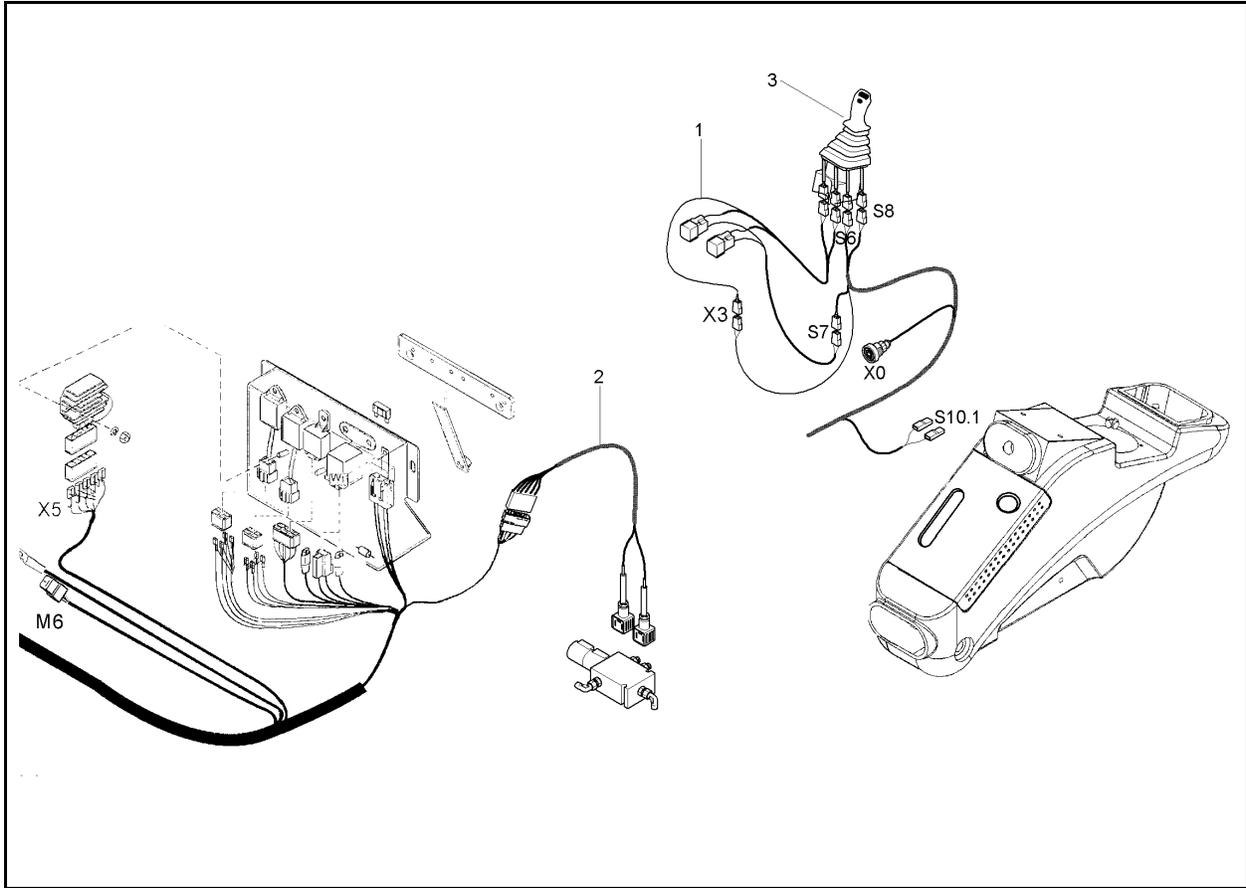
**223 - ARMREST WIRE HARNESS**  
**1000131670 - (SN AD00454 - AD04180)**



Ref. No.	Part No.	Description	Qty.
1	178722	WIRE HARNESS/ARMREST	1

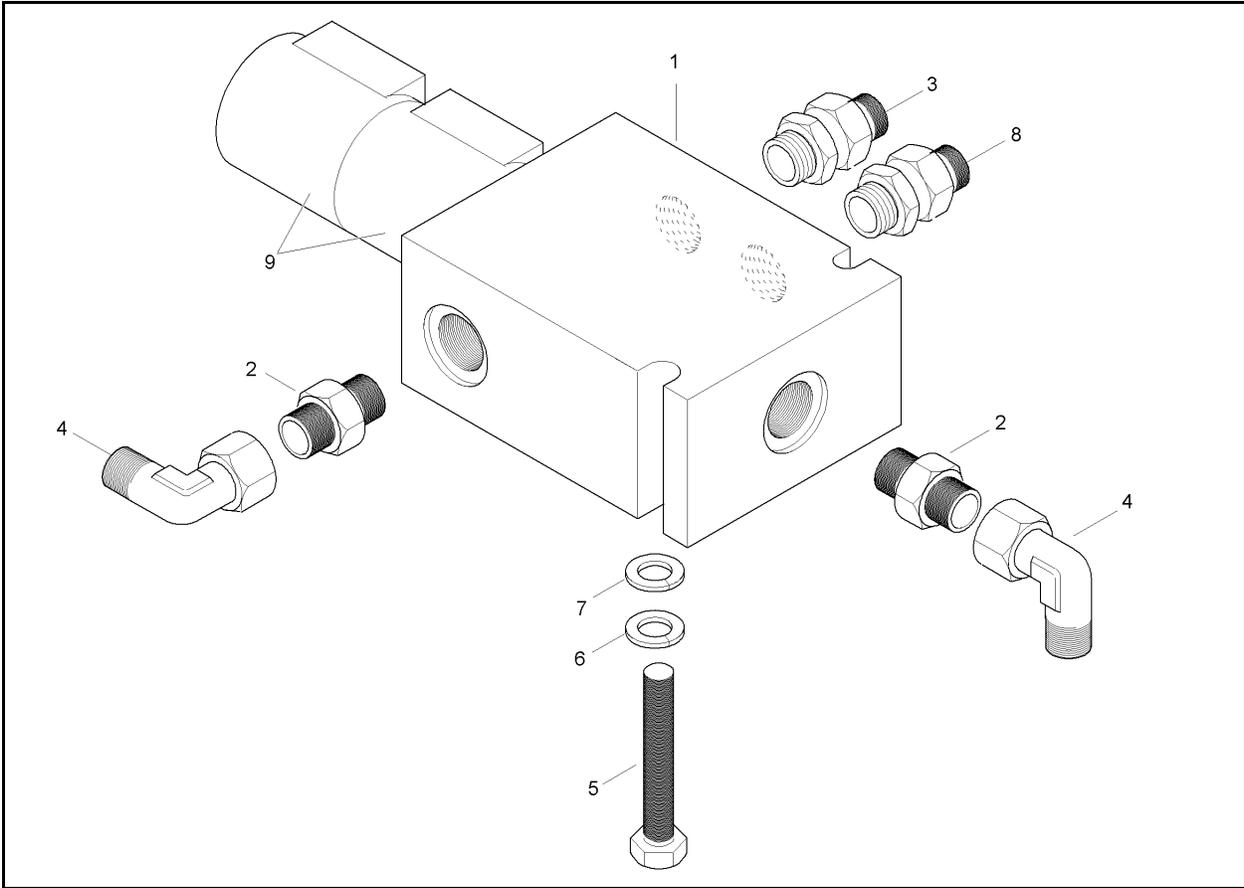
# 223 - AUXILIARY HYDRAULICS ELECTRICAL HARNESSSES

## 1000131670 - (SN AF00293 AND BEFORE)



Ref. No.	Part No.	Description	Qty.
1	165044	JOYSTICK LT/PROPORTIONAL	1
2	165049	WIRE HARNESS	1
3	1424441G	WIRE HARNESS CONNECTOR	1

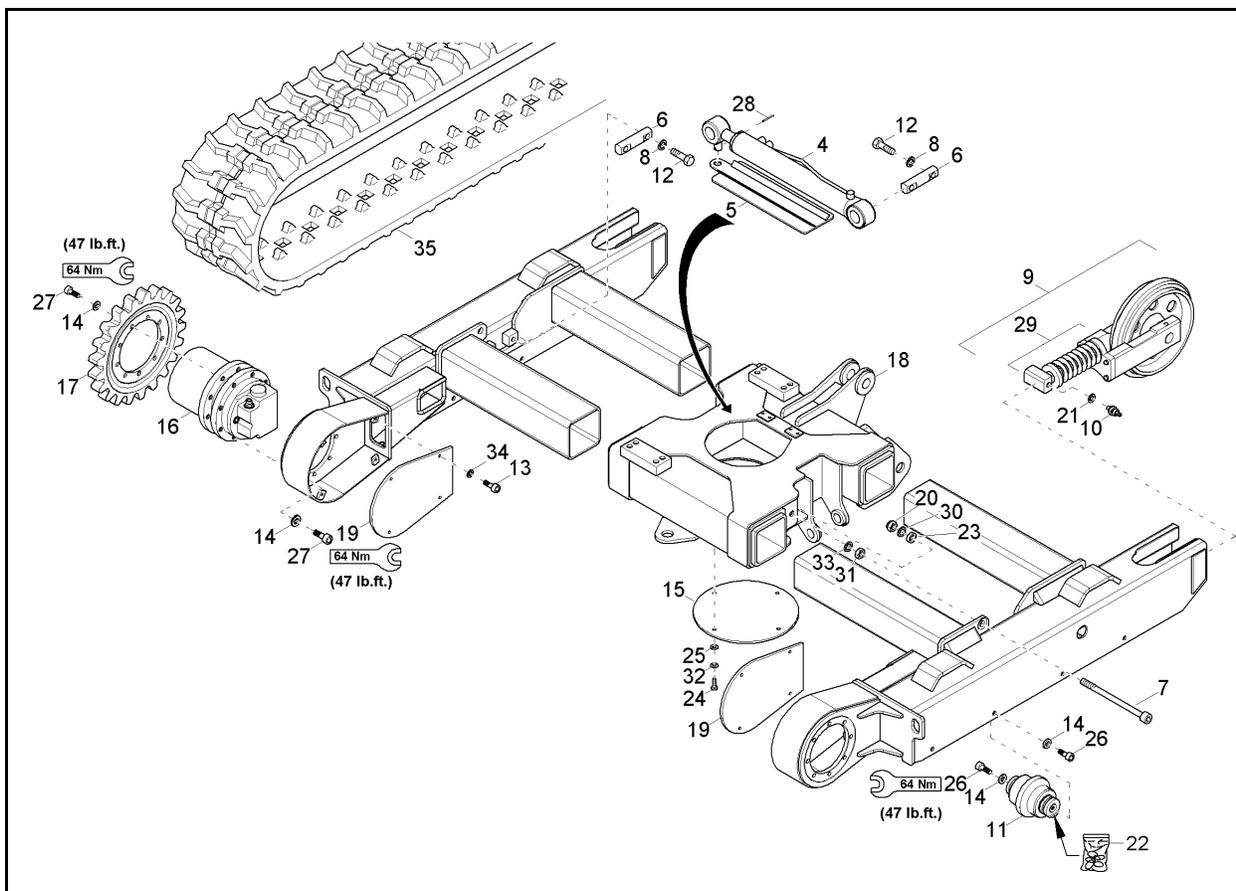
**223 - 4/3 VALVE (OPTION)  
1000131608 - (SN AF00293 AND BEFORE)**



Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	165827	4/3 VALVE	1	6	161675	LOCKWASHER S6	2
2	161426	SCREW JOINT	2	7	7462680008	WASHER	2
3	165976	RESTRICTOR	1	8	179850	RESTRICTOR	1
4	161443	90° FITTING	2	9	177827	SOLENOID	2
5	165939	SCREW	2				

# 223 - UNDERCARRIAGE AND RUBBER TRACK

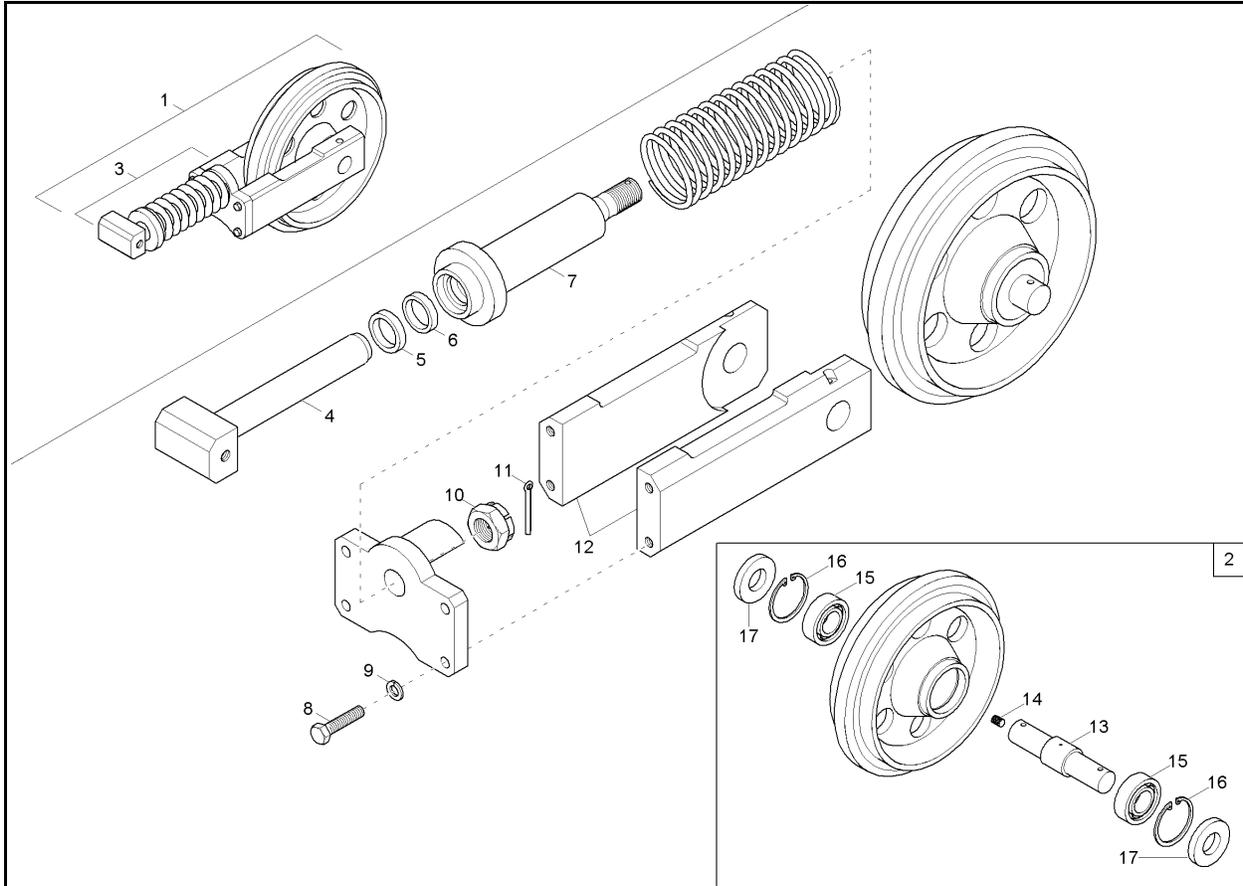
## 1000149040



Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
4	204055	TELESCOPIC CYLINDER See page 91 for individual components	1	19	178472	COVER	2
5	160616	SHIELD	1	20	651451	HLN INS M16-2.0 ZO	2
6	160622	PIN	2	21	178067	SEALING RING	2
7	161399	SCREW	2	22	165146	SEAL KIT/BOTTOM ROLLER	8
8	161671	LOCKWASHER S14	4	23	161915	TUBE	2
9	160516	TRACK TENSIONER COMPLETE See page 115 for individual components	2	24	656006	CS M10-1.5X20 C8.8 ZY DIN931	4
10	203913	NON RETURN VALVE	2	25	161640	WASHER/GR A 10.5	4
11	160517	ROLLER	8	26	651474	SHCS M10-1.25X25 F10.9 ZY DIN912	16
12	651412	CS M14-2X50 C10.9 ZY DIN931	4	27	162022	SCREW	34
13	651515	SHCS M8-1.25X20 C8.8 ZY DIN912	8	28	651468	PIN/SPRING M5X36	1
14	163641	WASHER	50	29	1402306G	SPRING ASSEMBLY	2
15	162094	COVER	1	30	161649	WASHER/GR A 18 ZO DIN7989	2
16	160636	DRIVE MOTOR COMPLETE See page 57 for individual components	2	31	656052	HN M16-2 C8 ZY DIN934	2
17	160634	SPROCKET	2	32	161669	LOCKWASHER S10	4
18	178484	BRACKET	1	33	163645	WASHER	2
				34	163670	LOCKWASHER	8
				35	1922401G	RUBBER TRACK	2

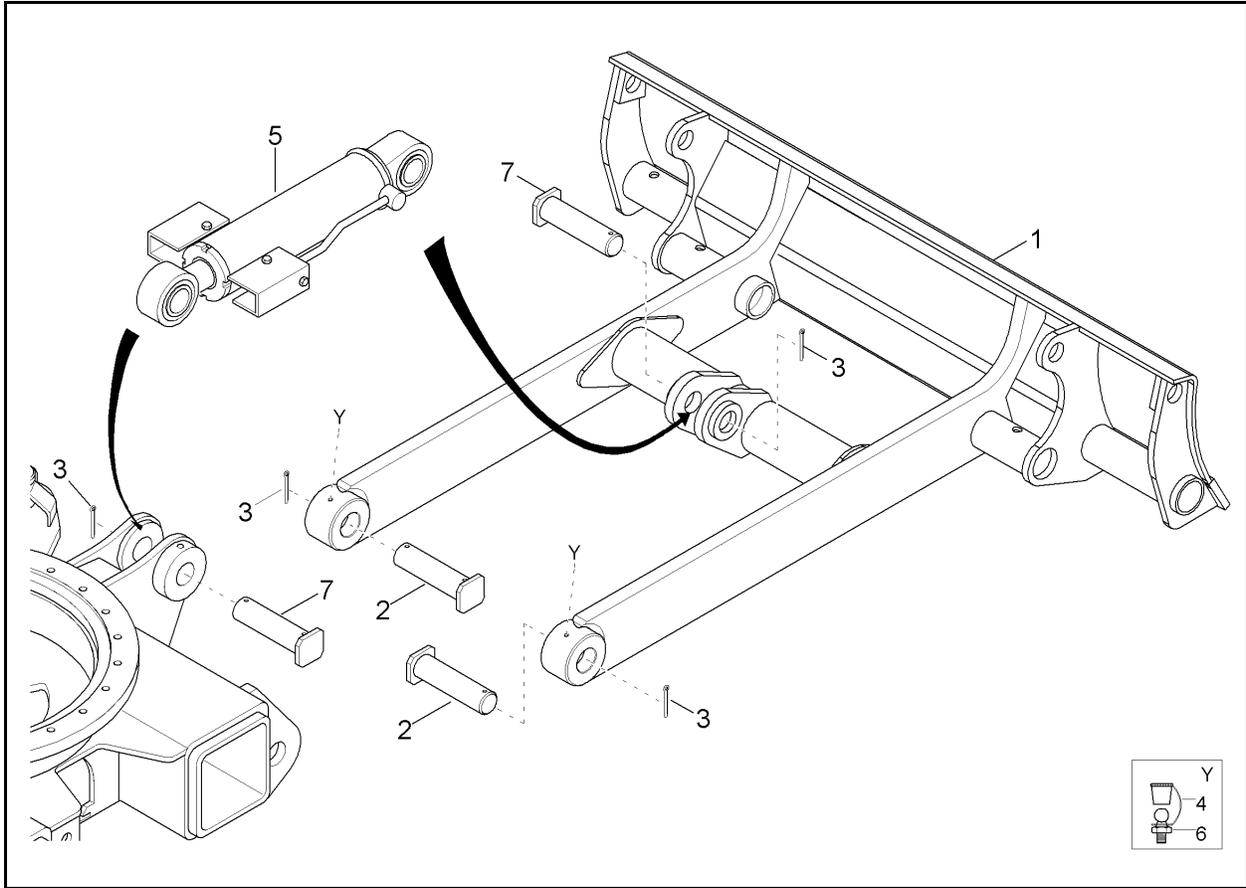
# 223 - TRACK TENSION, RUBBER TRACK

1000131531



Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	160516	TRACK TENSIONER COMPLETE	1	10	162049	NUT	1
2	1902233G	ROLLER COMPLETE	1	11	162053	COTTERPIN	1
3	1402306G	SPRING ASSEMBLY	1	12	160518	GUIDES	2
4	160520	PISTON	1	13	160522	SHAFT	1
5	161564	SEAL	1	14	163859	SCREW	1
6	161561	SEAL	1	15	161559	BEARING	2
7	160521	CYLINDER	1	16	162055	WASHER	2
8	651398	CS M10-1.5X35 C10.9 ZY DIN931	4	17	161575	SEAL	2
9	161623	LW SPRING B10 DIN7981	4				

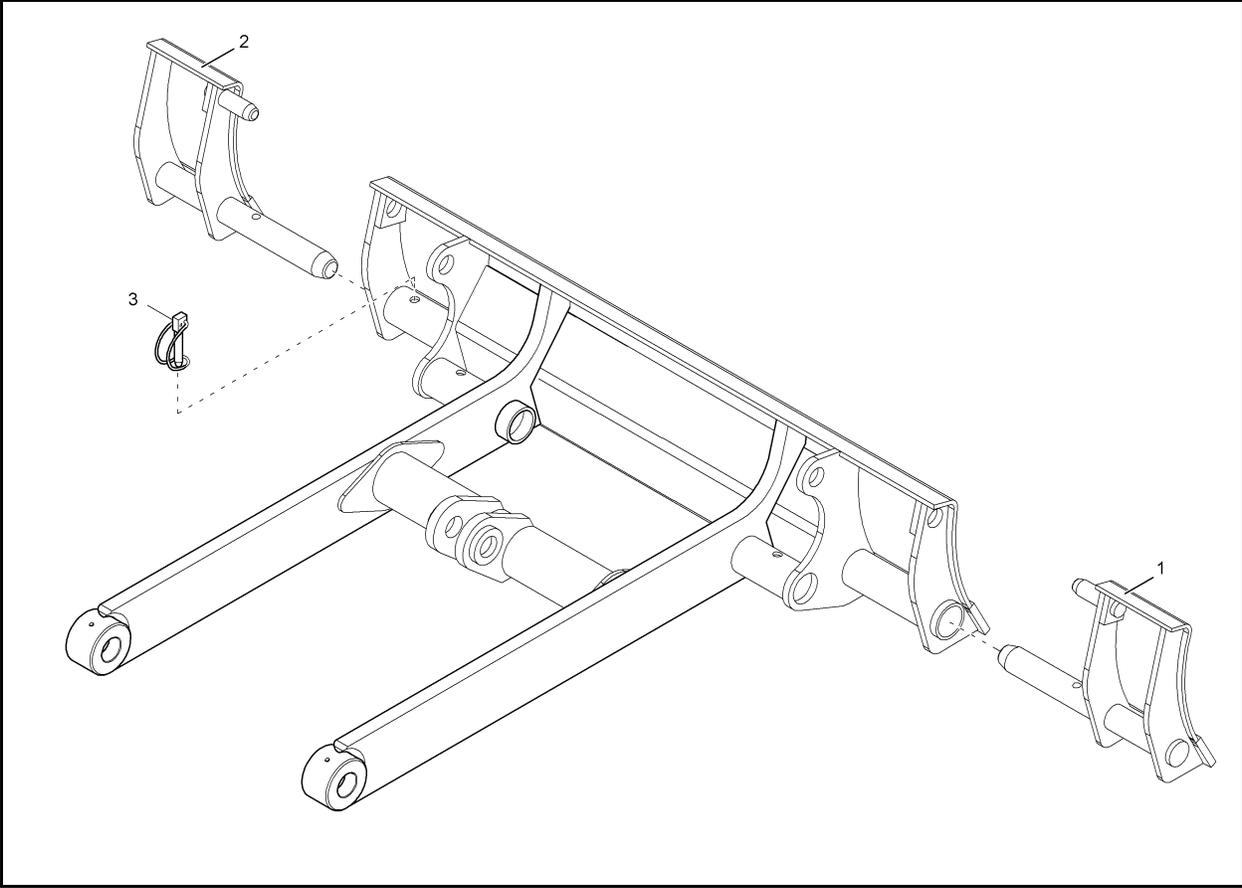
**223 - DOZER BLADE**  
**1000131534**



Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	178466	DOZER BLADE LONG	1	5	204052	DOZER BLADE CYLINDER COMPLETE	1
2	178459	PIN	2	See page 89 for individual components			
3	161681	PIN/SPRING M6.3X50 ZO	4	6	161411	GREASE ZERK-7MM HEX HEAD	2
4	161416	CAP	2	7	178460	PIN	2

**223 - DOZER BLADE EXTENSIONS**

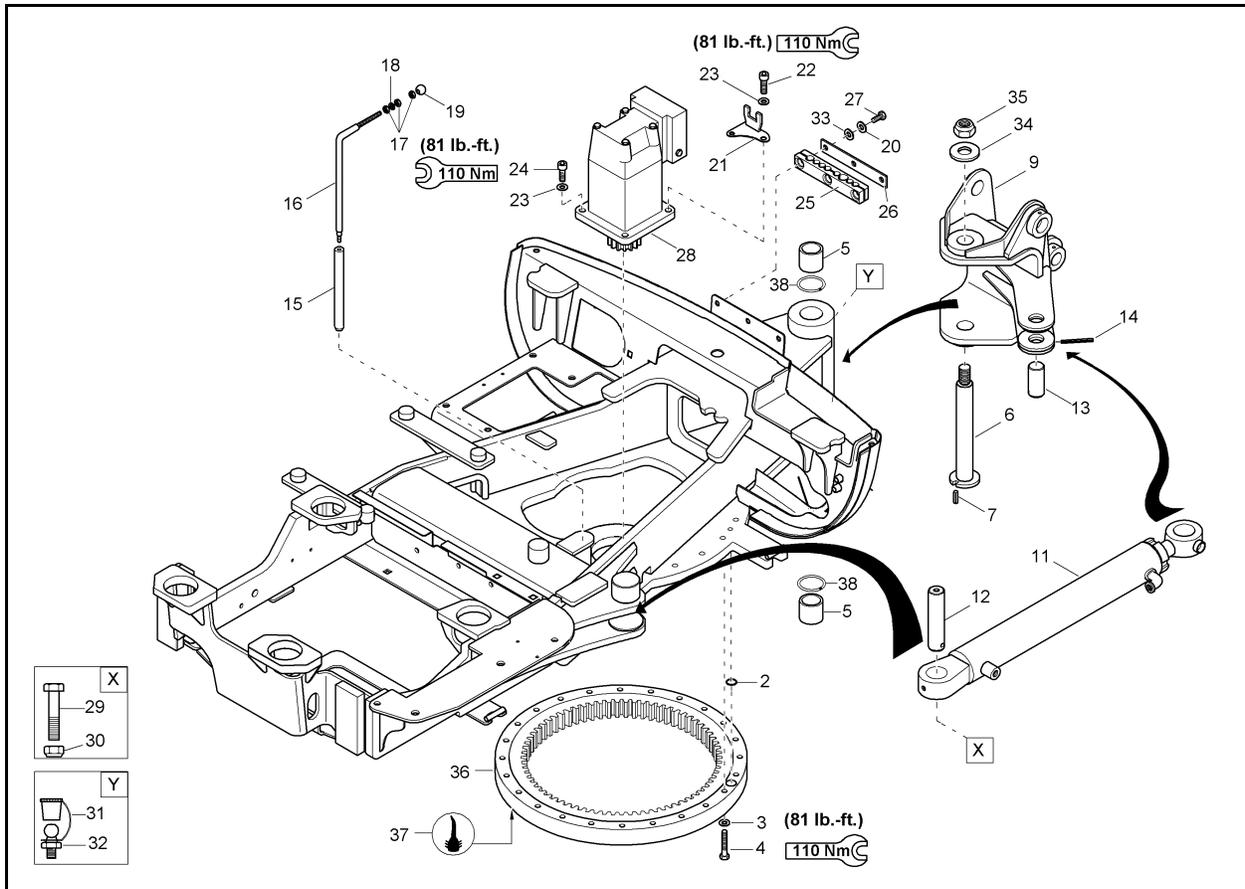
**1000131537**



Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	1522050G	DOZER EXTENSION RT	1	3	9905073G	CONNECTOR	2
2	1522042G	DOZER EXTENSION LT	1				

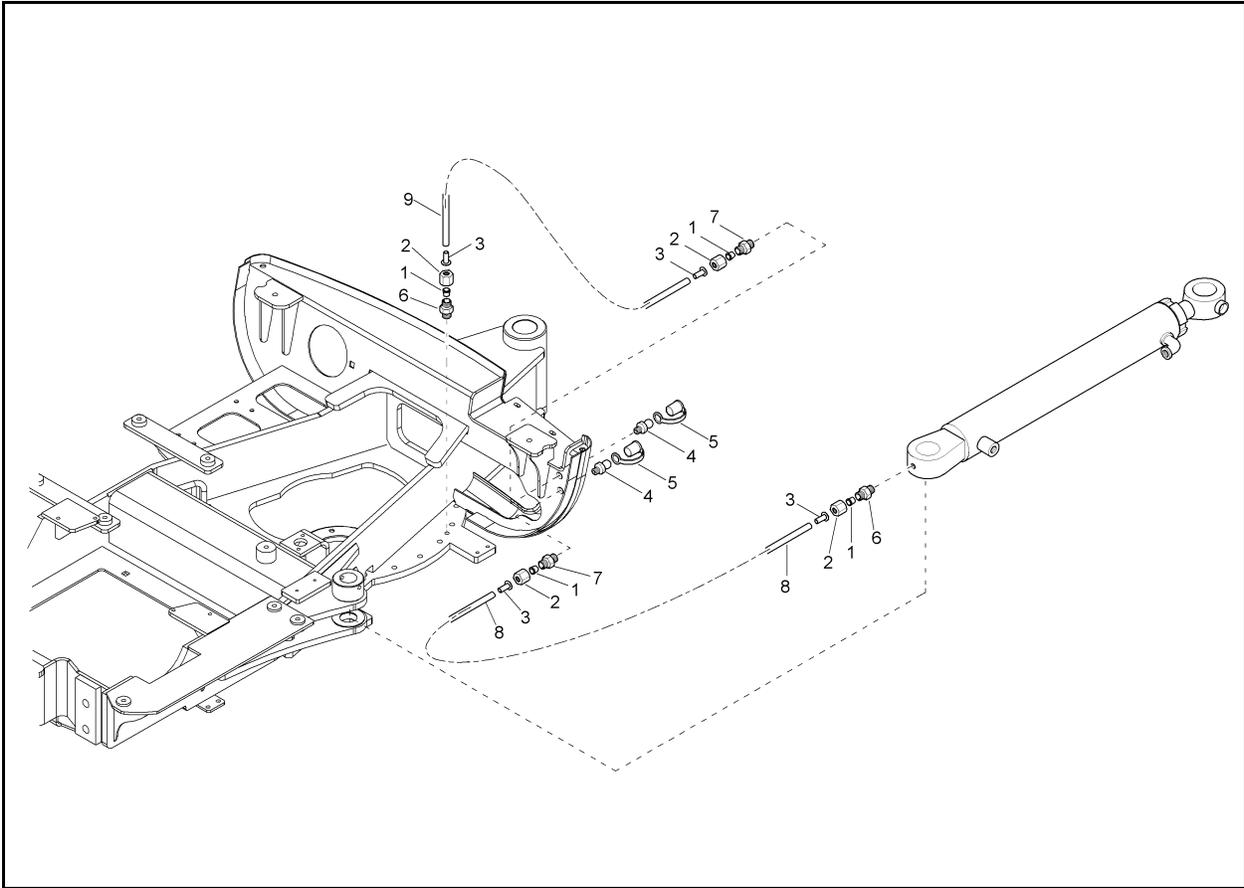
# 223 - CHASSIS

## 1000148950



Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
2	161570	O-RING	1	22	656148	FHSCS M12-1.75X40 C10.9 ZY DIN7991	2
3	161643	WASHER/ROUND HI-TENS	24	23	161636	WASHER/NORD-LOCK NL 12	4
4	651411	HB M12-1.7X 60 C10.9 ZY	24	24	651480	SHCS M12-1.75X30 C10.9 ZY DIN912	2
5	161541	BUSHING	2	25	178435	COLLAR	1
6	160697	PIN	1	26	178436	COVER PLATE	1
7	165954	GRUB SCREW	1	27	651433	HB M8-1.25X 40 C8.8 ZY	3
9	165439	SWING BRACKET	1	28	160595	MOTOR/HYDRAULIC	1
11	204049	BOOM OFFSET CYLINDER See page 87 for individual components	1	28	160595	HYDRAULIC MOTOR See page 55 for individual components	1
12	160732	PIN	1	29	651438	HB M8-1.25X70 C8.8 ZY	1
13	204096	PIN	1	30	651458	LN INS M8-1.25 C8 ZY DIN6924	1
14	651469	PIN/SPRING M8X70	1	31	161422	CAP	1
15	1429104G	LOCKING PISTON	1	32	161411	GREASE ZERK-7MM HEX HEAD	1
16	1429106G	LEVER	1	33	163670	LOCKWASHER	3
17	9902111G	HEXAGON NUT	3	34	161656	WASHER/ROUND HI-TENS 28	1
18	163642	WASHER	1	35	651454	LN INS M27-3 C8 ZY	1
19	161631	KNOB D40MM	1	36	161724	TURNTABLE	1
20	163634	WASHER	3	37	205598	SEAL (1.80M)	1
21	2221002G	BRACKET	1	38	161686	SNAP RING	2

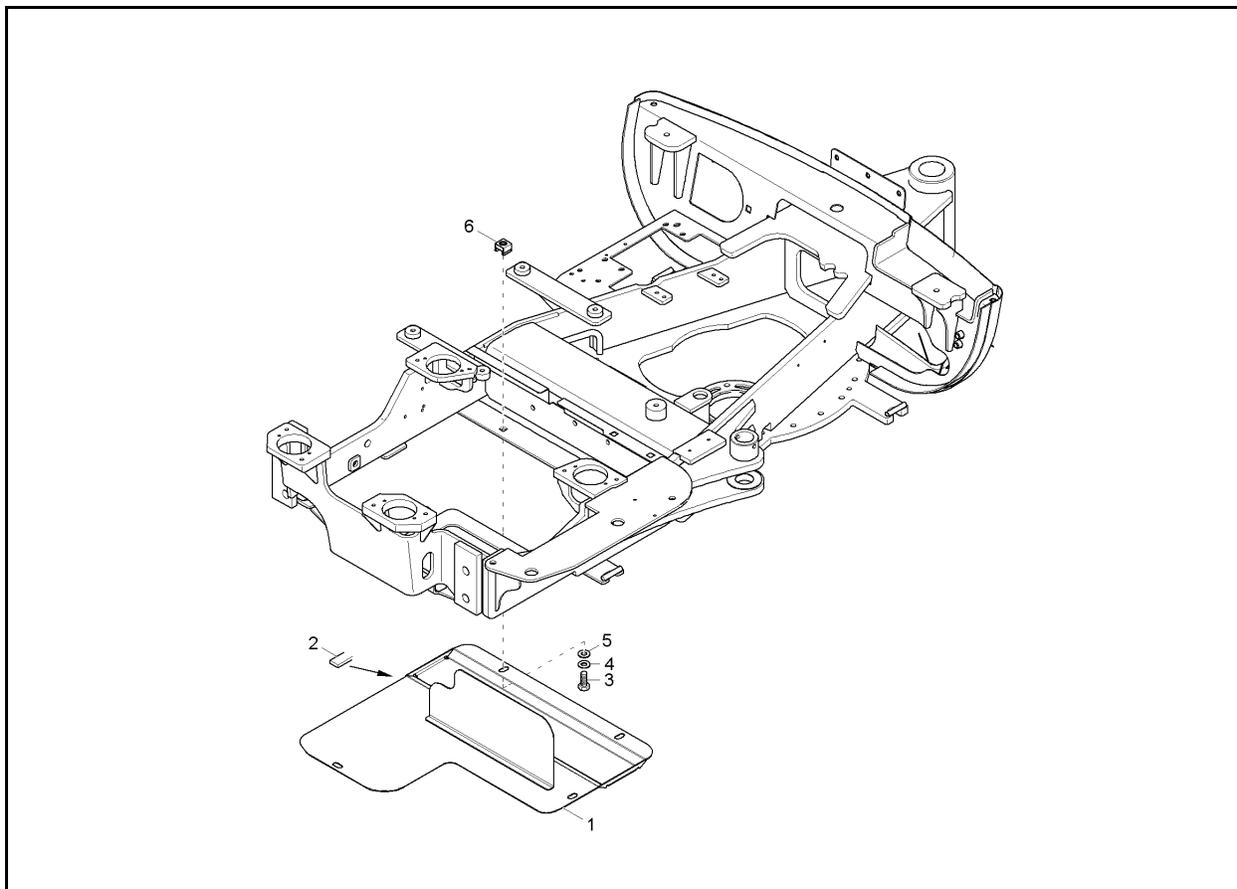
**223 - LUBRICATION**  
**1000131245**



Ref. No.	Part No.	Description	Qty.
1	161469	WASHER	4
2	161468	NUT	4
3	206094	PLUG SLEEVE (SN AE00363 AND UP)	4
4	9909039G	GREASE FITTING	2
5	161416	CAP	2

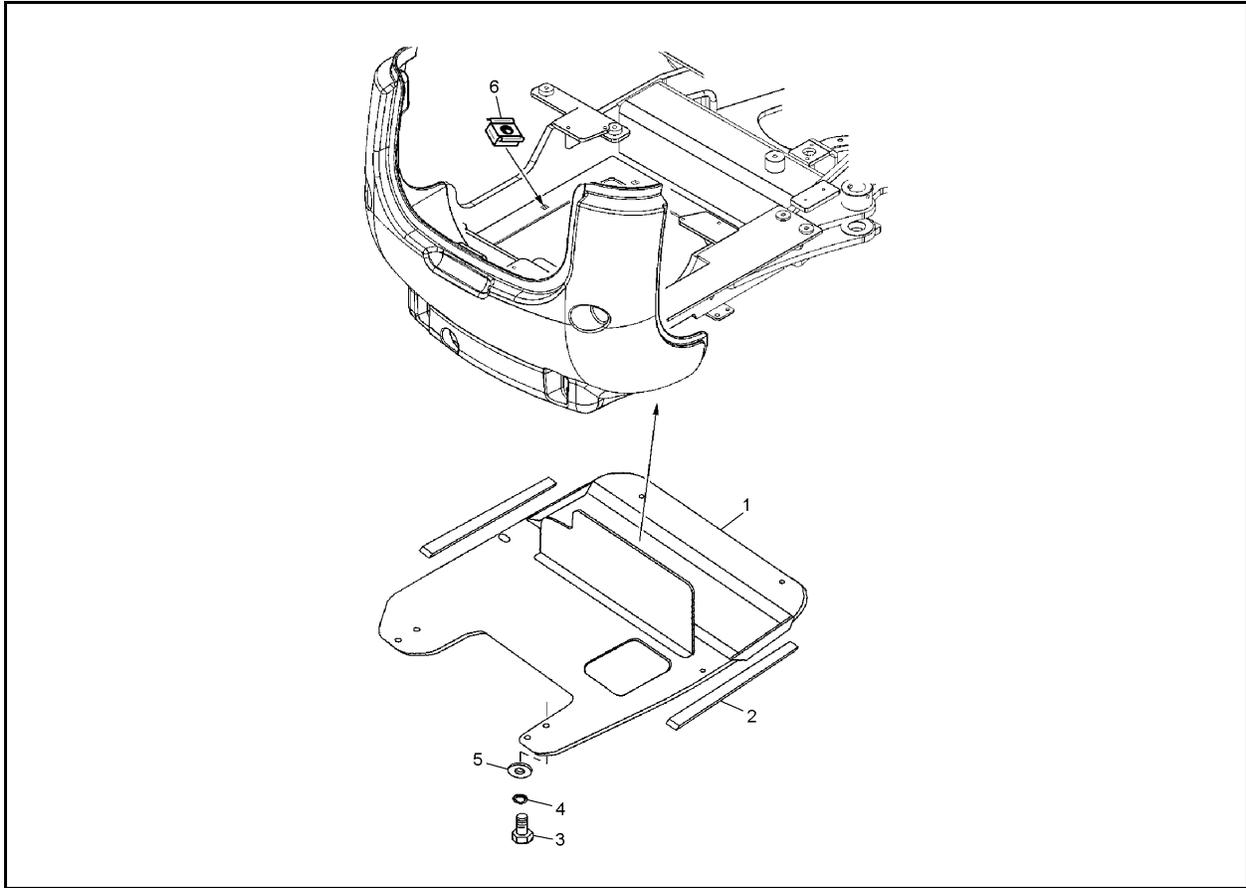
Ref. No.	Part No.	Description	Qty.
6	161461	SCREW JOINT	2
7	9910598G	SCREW JOINT	2
8	206165	LUBRICATION TUBE (0.90M)	1
9	206976	LUBRICATION TUBE (0.4M)	1

**223 - CHASSIS COVER**  
**1000148944 - (SN AE00001 AND UP)**



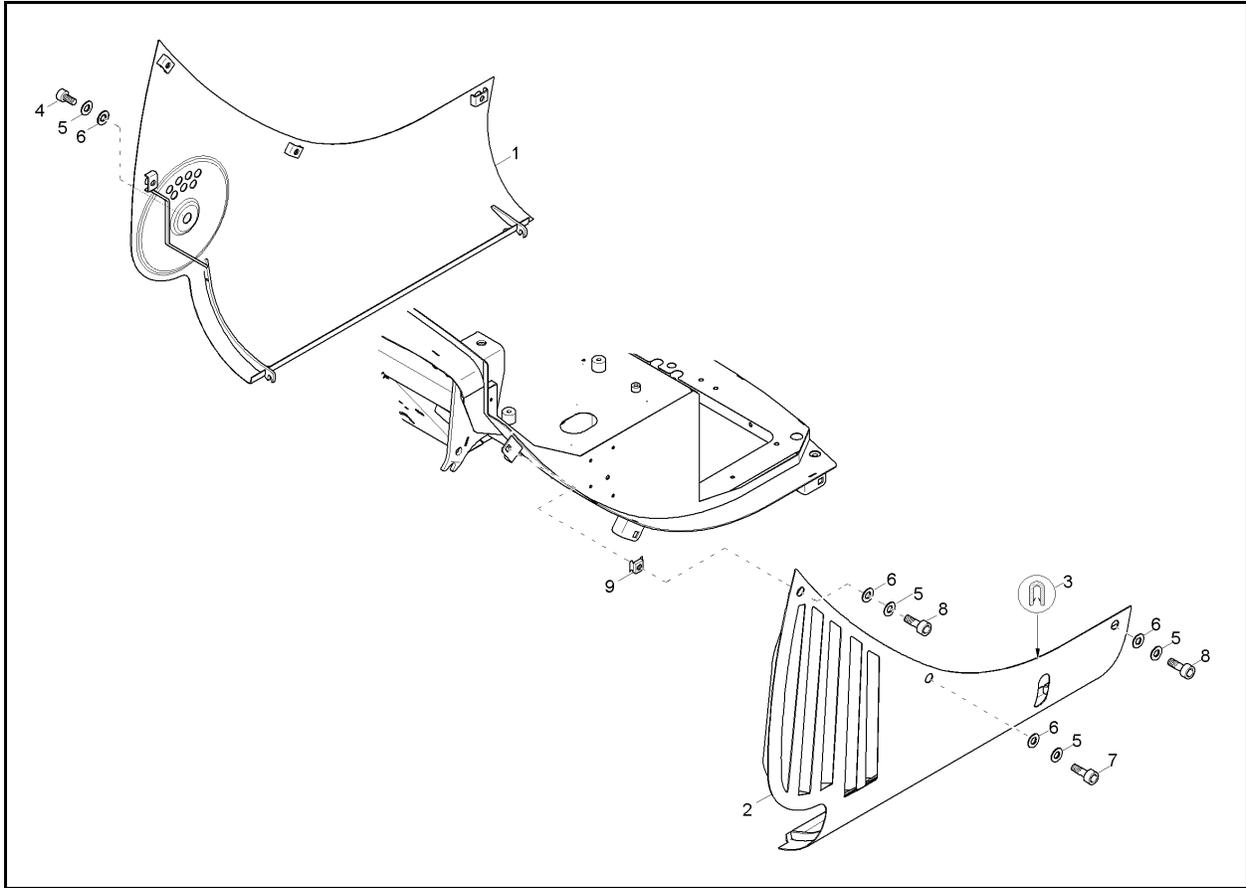
Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	206164	ENGINE COVER	1	4	163670	LOCKWASHER	6
2	204020	SEAL STRAP FOAM (1.10M)	1	5	7462680011	WASHER 8.4 ST A2C	6
3	177648	HEX SCREW	6	6	161616	NUT/CAGE M8	6

**223 - CHASSIS COVER**  
**1000131540 - (SN AD00454 - AD04180)**



Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	1521009G	COVER	1	4	163670	LOCKWASHER	6
2	204020	SEAL STRAP FOAM (1.10M)	1	5	7462680011	WASHER 8.4 ST A2C	6
3	177648	HEX SCREW	6	6	161616	NUT/CAGE M8	6

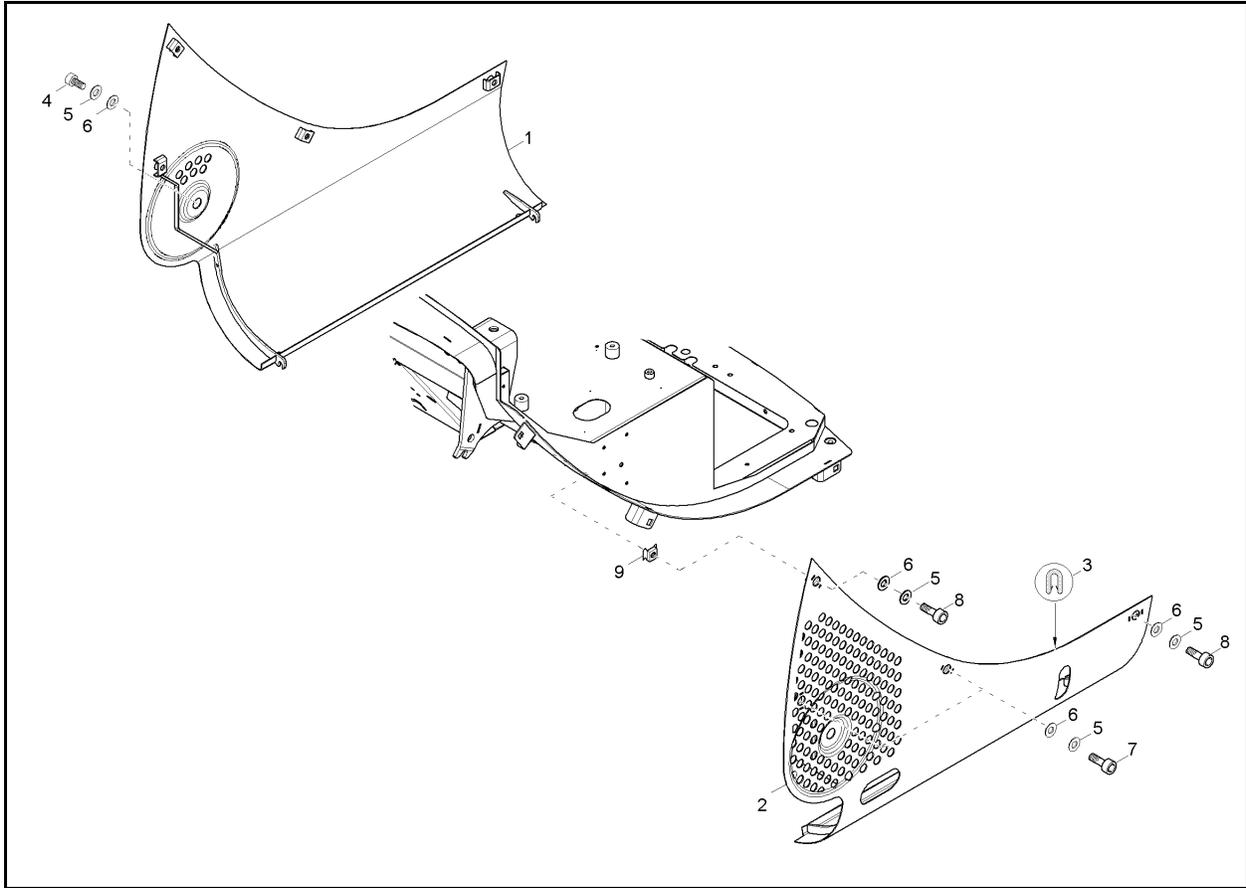
**223 - SIDE PANELS**  
**1000155451 - (SN AF00152 AND UP)**



Ref. No.	Part No.	Description	Qty.
1	178433	SIDE WALL LT	1
2	206024	SIDE WALL RT	1
3	207215	EDGE PROTECTION SECTION (6.0M)	6
4	9901346G	SCREW	1
5	161669	LOCKWASHER S10	7

Ref. No.	Part No.	Description	Qty.
6	161640	WASHER/GR A 10.5	7
7	651473	SHCS M10-1.25X25 F8.8 ZY DIN912	2
8	651475	SHCS M10-1.25X30 F8.8 ZY DIN912	4
9	161610	NUT/CAGE M10	6

**223 - SIDE PANELS**  
**1000131545 - (SN AD00454 - AF00151)**

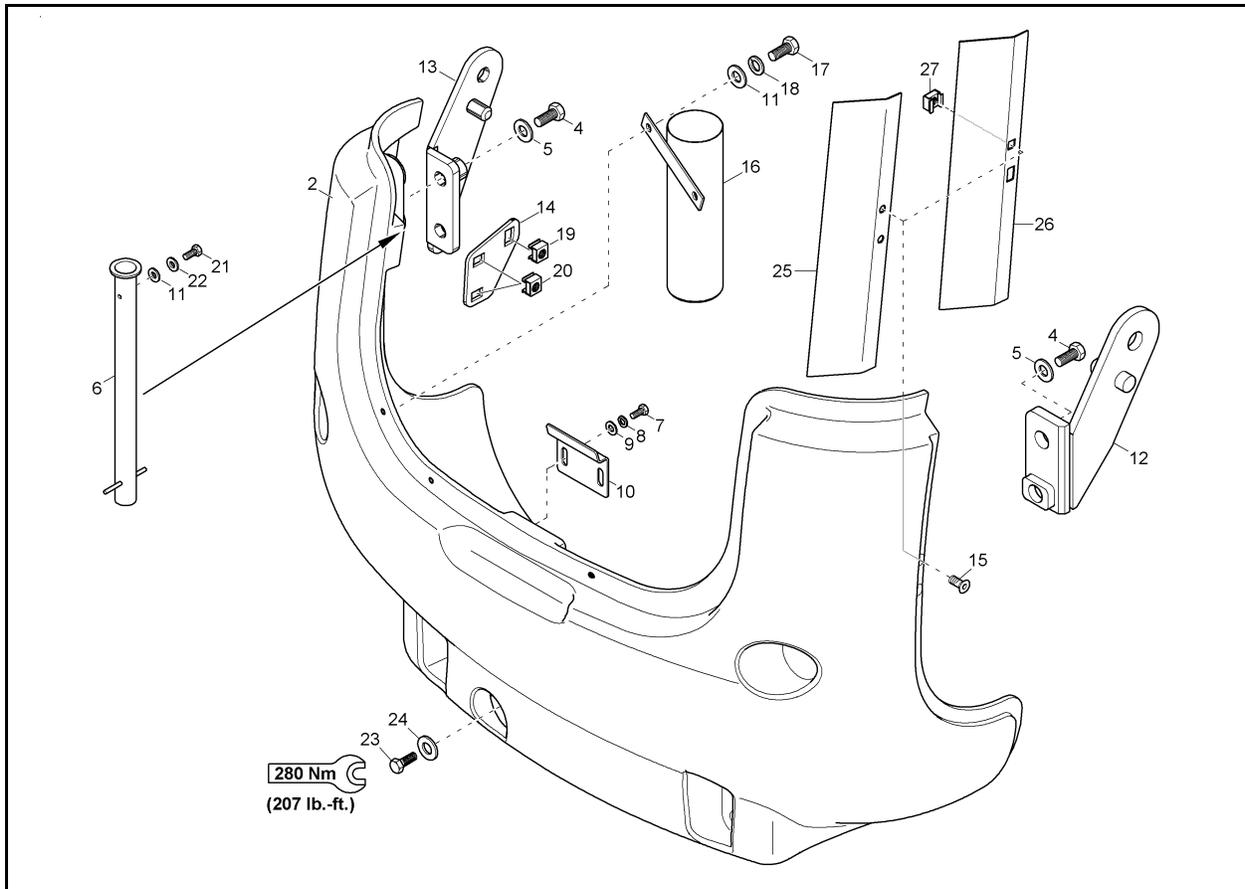


Ref. No.	Part No.	Description	Qty.
1	178433	SIDE WALL LT	1
2	178434	SIDE WALL RT	1
3	207215	EDGE PROTECTION SECTION (6.0M)	1
4	9901346G	SCREW	1
5	161669	LOCKWASHER S10	8

Ref. No.	Part No.	Description	Qty.
6	161640	WASHER/GR A 10.5	8
7	651473	SHCS M10-1.25X25 F8.8 ZY DIN912	3
8	651475	SHCS M10-1.25X30 F8.8 ZY DIN912	4
9	161610	NUT/CAGE M10	6

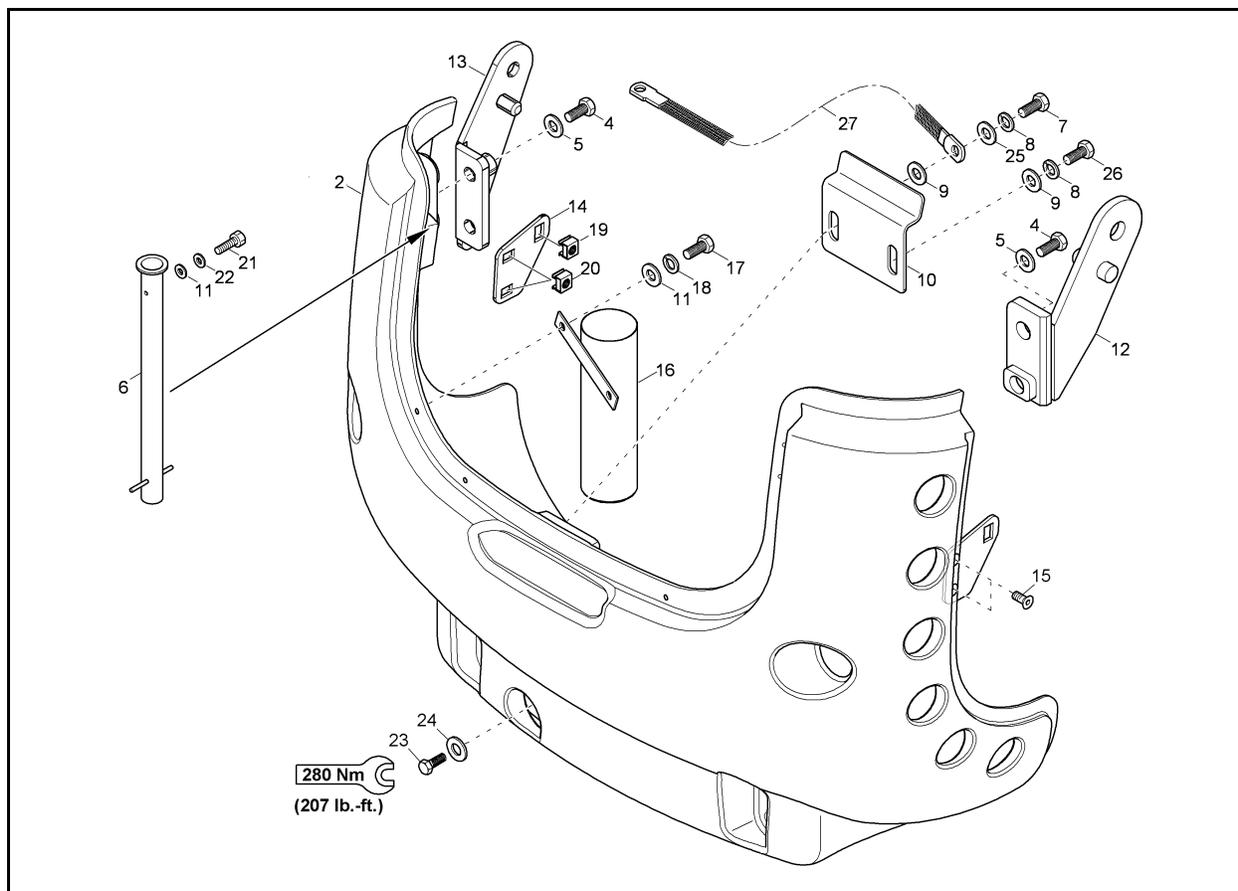
# 223 - COUNTERWEIGHT

## 1000155445 - (SN AF00243 AND UP)



Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
2	206025	COUNTERWEIGHT	1	17	656093	CS M8-1.25X16 C8.8 ZY DIN931	2
4	9901732G	HEX HEAD SCREW	4	18	163670	LOCKWASHER	2
5	163645	WASHER	4	19	161610	NUT/CAGE M10	1
6	1423011G	SUPPORT	1	20	161616	NUT/CAGE M8	2
7	656090	CS M10-1.5X16 C8.8 ZY DIN931	2	21	656002	CS M8-1.25X35 C8.8 ZY DIN931	1
8	161669	LOCKWASHER S10	2	22	656110	LW M8 ZY DIN127	1
9	161663	WASHER/GR A 10.5 ZO	2	23	9901115G	SCREW	4
10	178432	BRACKET	1	24	161653	WASHER/ROUND HI-TENS 21	4
11	163634	WASHER	3	25	206026	BRACKET (SN AF03277 AND BEFORE)	1
12	206167	BRACKET	1	26	204039	BRACKET (SN AF03278 AND UP)	1
13	1421156G	BRACKET	1	27	161615	NUT/CAGE M8	2
14	1421213G	MOUNTING LINK	1				
15	651466	FHSCS M8-1.25X20 C8.8 ZY DIN7991	4				
16	206168	GREASE GUN BRACKET	1				

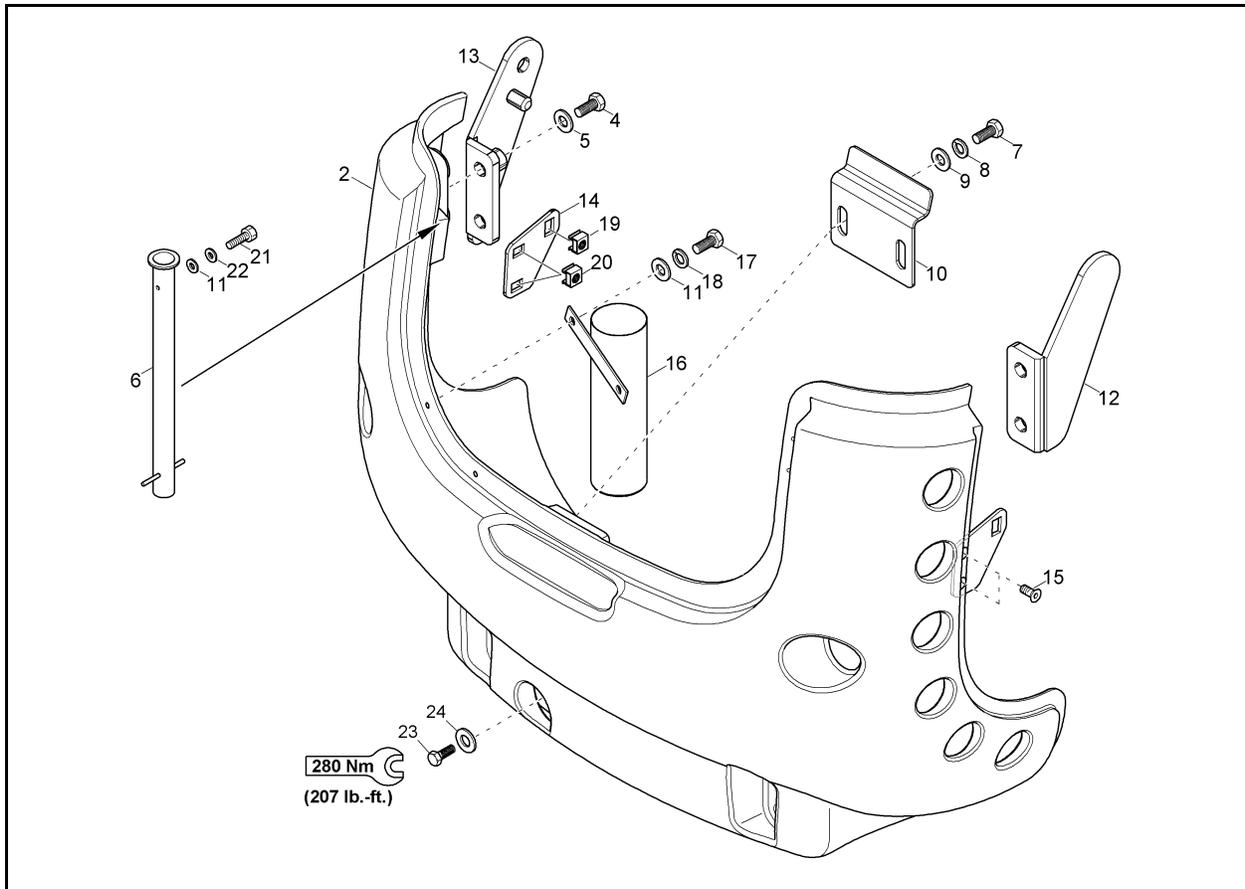
## 223 - COUNTERWEIGHT 1000148831 - (SN AE00001 - AF00242)



Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
2	206166	COUNTERWEIGHT	1	16	206168	GREASE GUN BRACKET	1
4	9901732G	HEX HEAD SCREW	4	17	656093	CS M8-1.25X16 C8.8 ZY DIN931	2
5	163645	WASHER	4	18	163670	LOCKWASHER	2
6	1423011G	SUPPORT	1	19	161610	NUT/CAGE M10	2
7	651393	CS M10-1.5X25 C8.8 ZY	1	20	161616	NUT/CAGE M8	4
8	161669	LOCKWASHER S10	2	21	656002	CS M8-1.25X35 C8.8 ZY DIN931	1
9	161663	WASHER/GR A 10.5 ZO	2	22	656110	LW M8 ZY DIN127	1
10	178432	BRACKET	1	23	9901115G	SCREW	4
11	163634	WASHER	3	24	161653	WASHER/ROUND HI-TENS 21	4
12	206167	BRACKET	1	25	161640	WASHER/GR A 10.5	1
13	1421156G	BRACKET	1	26	656006	CS M10-1.5X20 C8.8 ZY DIN931	1
14	1421213G	MOUNTING LINK	2	27	165224	GROUND CABLE	1
15	651466	FHSCS M8-1.25X20 C8.8 ZY DIN7991	4				

# 223 - COUNTERWEIGHT

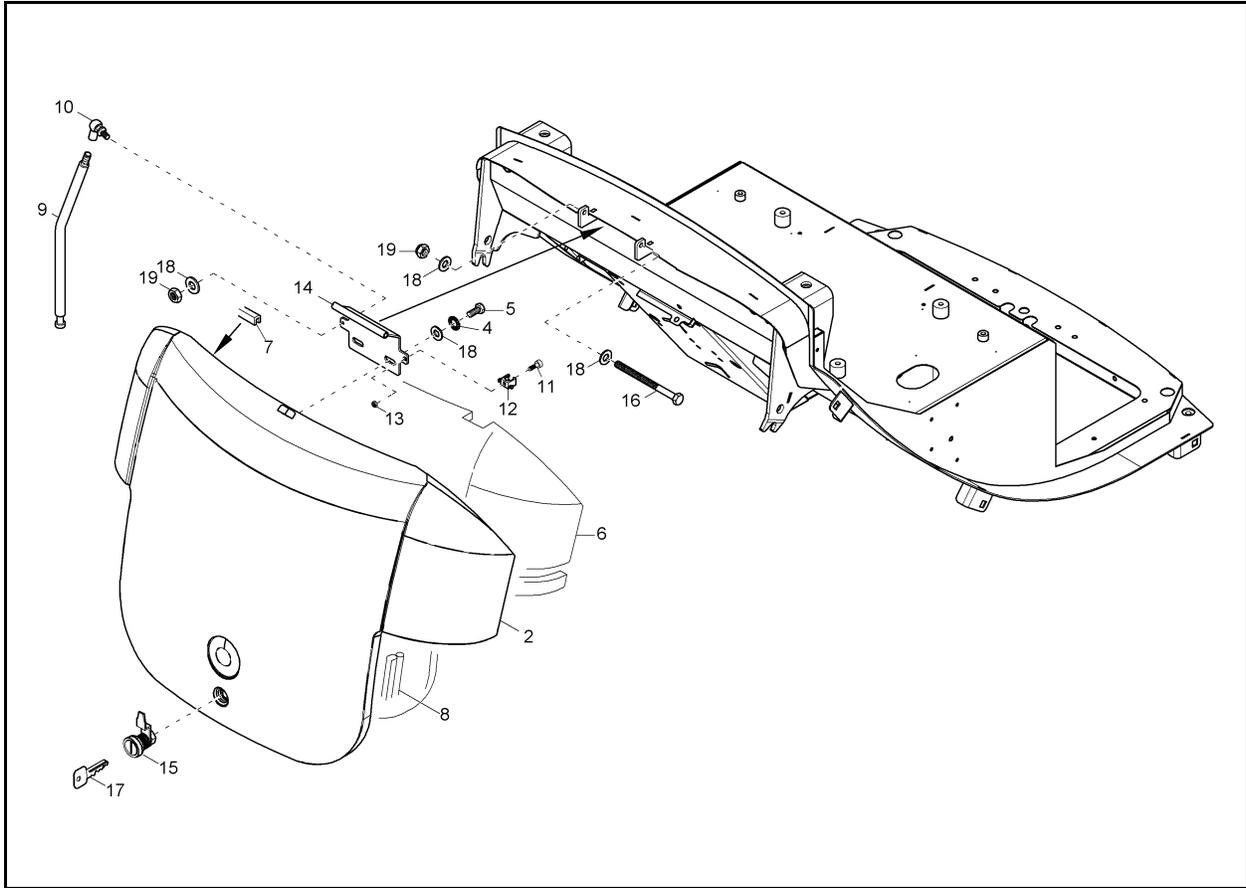
1000131247 - (SN AD00454 - AD04180)



Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
2	**	COUNTERWEIGHT	1	15	651466	FHSCS M8-1.25X20 C8.8 ZY DIN7991	4
4	9901732G	HEX HEAD SCREW	4	16	1421036G	GREASE GUN BRACKET	1
5	163645	WASHER	4	17	656093	CS M8-1.25X16 C8.8 ZY DIN931	2
6	1423011G	SUPPORT	1	18	163670	LOCKWASHER	2
7	656090	CS M10-1.5X16 C8.8 ZY DIN931	2	19	161610	NUT/CAGE M10	2
8	161669	LOCKWASHER S10	2	20	161616	NUT/CAGE M8	4
9	161663	WASHER/GR A 10.5 ZO	2	21	656002	CS M8-1.25X35 C8.8 ZY DIN931	1
10	178432	SHEET METAL	1	22	656110	LW M8 ZY DIN127	1
11	163634	WASHER	3	23	9901115G	SCREW	4
12	1421158G	BRACKET	1	24	161653	WASHER/ROUND HI-TENS 21	4
13	1421156G	BRACKET	1				
14	1421213G	MOUNTING LINK	2				

**\*\* Call for Availability**

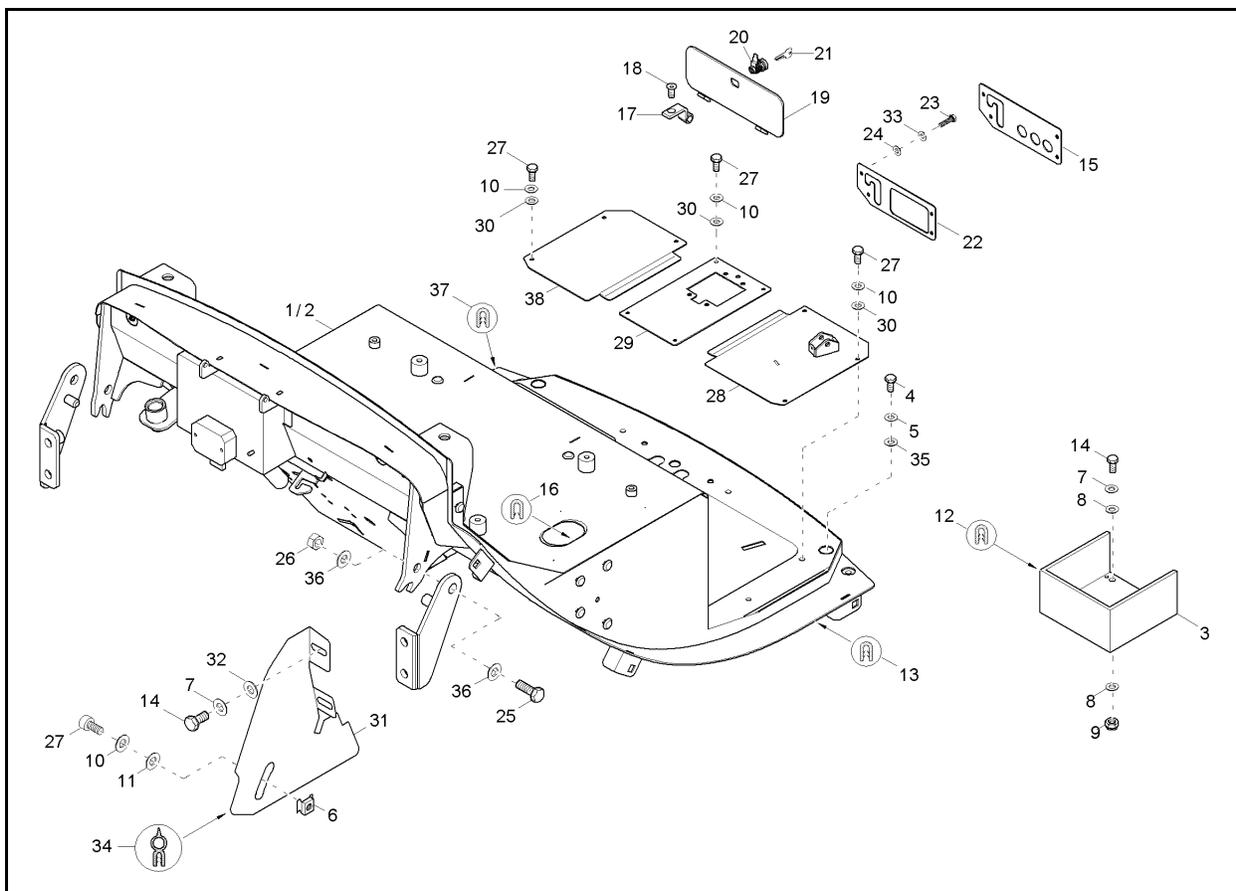
**223 - HOOD**  
**1000131248 - (SN AD00454 AND UP)**



Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
2	178429	HOOD	1	12	162389	CLAMP	1
4	163670	LOCKWASHER	2	13	651456	LN INS M5-0.8 C8 ZY DIN6924	1
5	656094	CS M8-1.25X30 C8.8 ZY DIN931	2	14	178464	HINGE	1
6	178458	ISOLATION MAT	1	15	2529457G	LOCK W/O KEYS	1
7	207212	EDGE PROTECTION SECTION (1.3M)	1	16	178525	SCREW	1
8	206170	RUBBER PROFILE (2.00M)	1	17	101792	KEY	1
9	178437	BRACKET	1	18	163634	WASHER	5
10	162072	BALL AND SOCKET	1	19	651458	LN INS M8-1.25 C8 ZY DIN6924	2
11	651460	FHSCS M5-0.8X16 C8.8 ZY DIN7991	1				

# 223 - SEAT CONSOLE

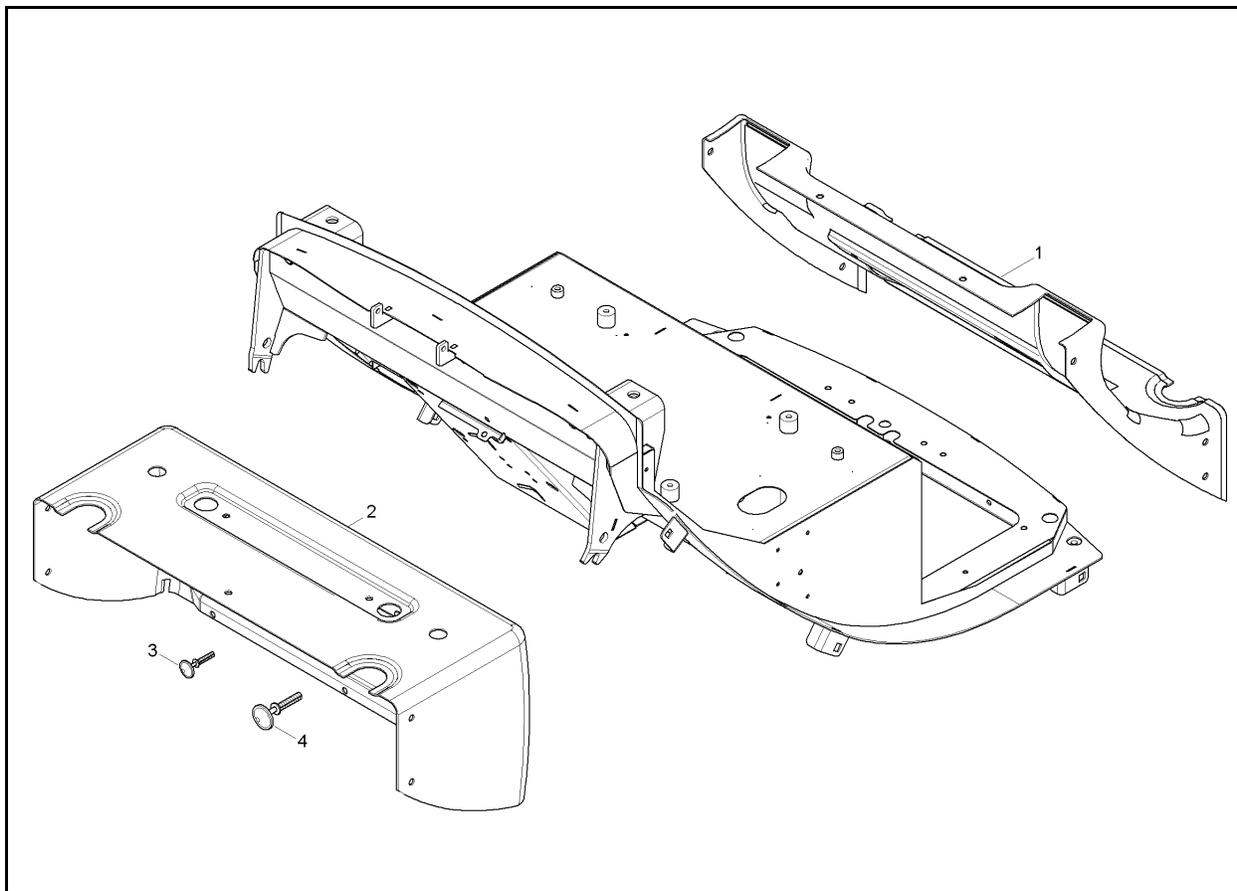
## 1000135902



Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	204023	SEAT CONSOLE (SN AF01068 AND UP)	1	20	2529457G	LOCK W/O KEYS	1
2	178462	SEAT CONSOLE (SN AF01067 AND BEFORE)	1	21	101792	KEY	1
3	1423018G	STORAGE BOX	1	22	2221003G	COVER	1
4	651480	SHCS M12-1.75X30 C10.9 ZY DIN912	2	23	651504	SHCS M5-0.8X16 C8.8 ZY DIN912	4
5	163651	WASHER	2	24	161665	WASHER/GR A 5.3	4
6	161615	NUT/CAGE M8	1	25	651414	CS M16-2.00X40 C10.9 ZY DIN931	2
7	161675	LOCKWASHER S6	5	26	656052	HN M16-2 C8 ZY DIN934	2
8	161660	WASHER GR A6.4 ZO DIN 125	6	27	177648	HEX SCREW	11
9	656047	HN M6-1 C8 ZY DIN934	3	28	178799	BOTTOM COVER	1
10	163670	LOCKWASHER	14	29	178800	BOTTOM COVER	1
11	7462680011	WASHER 8.4 ST A2C	5	30	163634	WASHER	10
12	207222	PVC EDGE PROTECTION (0.6M)	1	31	1425024G	AIR GUIDING PLATE	1
13	207213	EDGE PROTECTION SECTION (1.4M)	1	32	7462680008	WASHER	2
14	656149	CS M6-1X16 C8.8 ZY DIN931	5	33	161674	LOCKWASHER S16	4
15	2229004G	COVER	1	34	206171	RUBBER PROFILE (0.30M)	1
16	207222	PVC EDGE PROTECTION (0.6M)	1	35	161642	WASHER/GR A 13	2
17	1421033G	HINGE	2	36	163645	WASHER	4
18	651460	FHSCS M5-0.8X16 C8.8 ZY DIN7991	2	37	207213	EDGE PROTECTION SECTION (1.4M)	1
19	1421034G	COVER-CABIN MODEL	1	38	178801	BOTTOM COVER LT	1

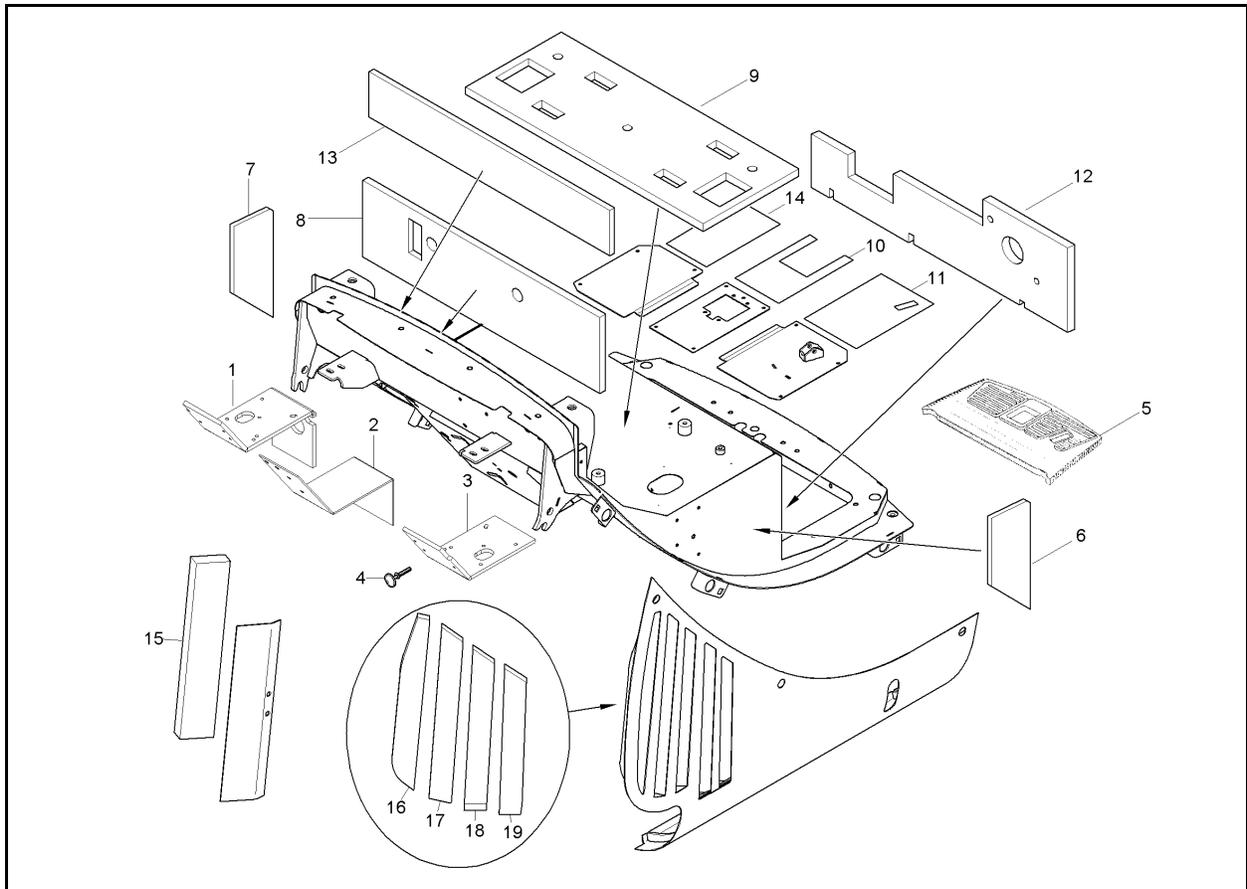
# 223 - SEAT CONSOLE COVER

1000131546



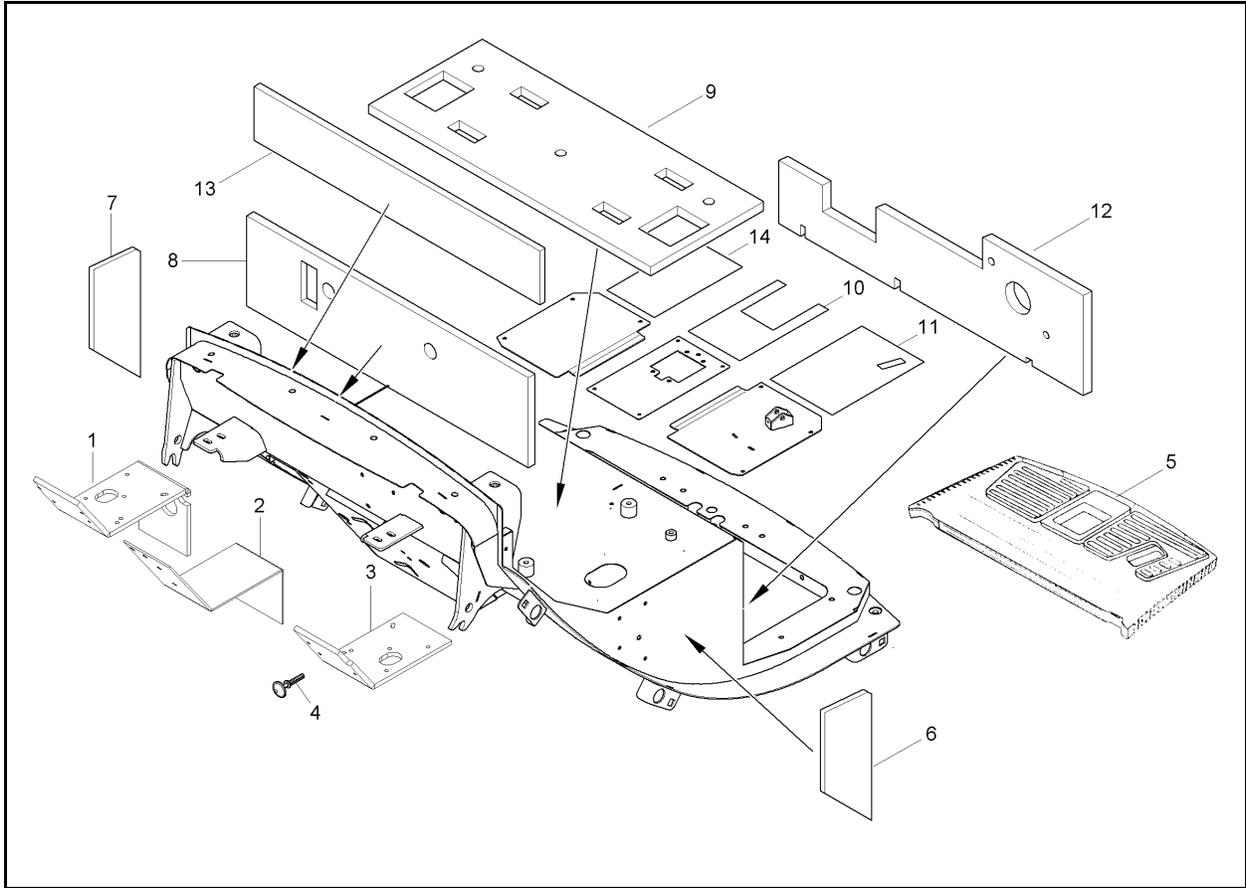
Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	1423103G	COVER	1	3	164689	RIVET 11MM	7
2	1423104G	COVER	1	4	164754	RIVET 20MM	16

**223 - ISOLATION MATS**  
**1000155450 - (SN AF00152 AND UP)**



Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	1429107G	ISOLATION MAT	1	11	178457	ISOLATION MAT	1
2	1429109G	ISOLATION MAT	1	12	1429019G	ISOLATION MAT	1
3	1429108G	ISOLATION MAT	1	13	1429024G	ISOLATION MAT	2
4	1423454G	LOCK/RT	14	14	178793	ISOLATION MAT	1
5	204025	FOOT MAT	1	15	204005	ISOLATION MAT	1
6	1429017G	ISOLATION MAT RT	1	16	204001	ISOLATION MAT	1
7	1429021G	ISOLATION MAT LT	1	17	204002	ISOLATION MAT	1
8	1429018G	ISOLATION MAT	1	18	204003	ISOLATION MAT	1
9	1429020G	ISOLATION MAT	1	19	204004	ISOLATION MAT	1
10	178794	ISOLATION MAT	1				

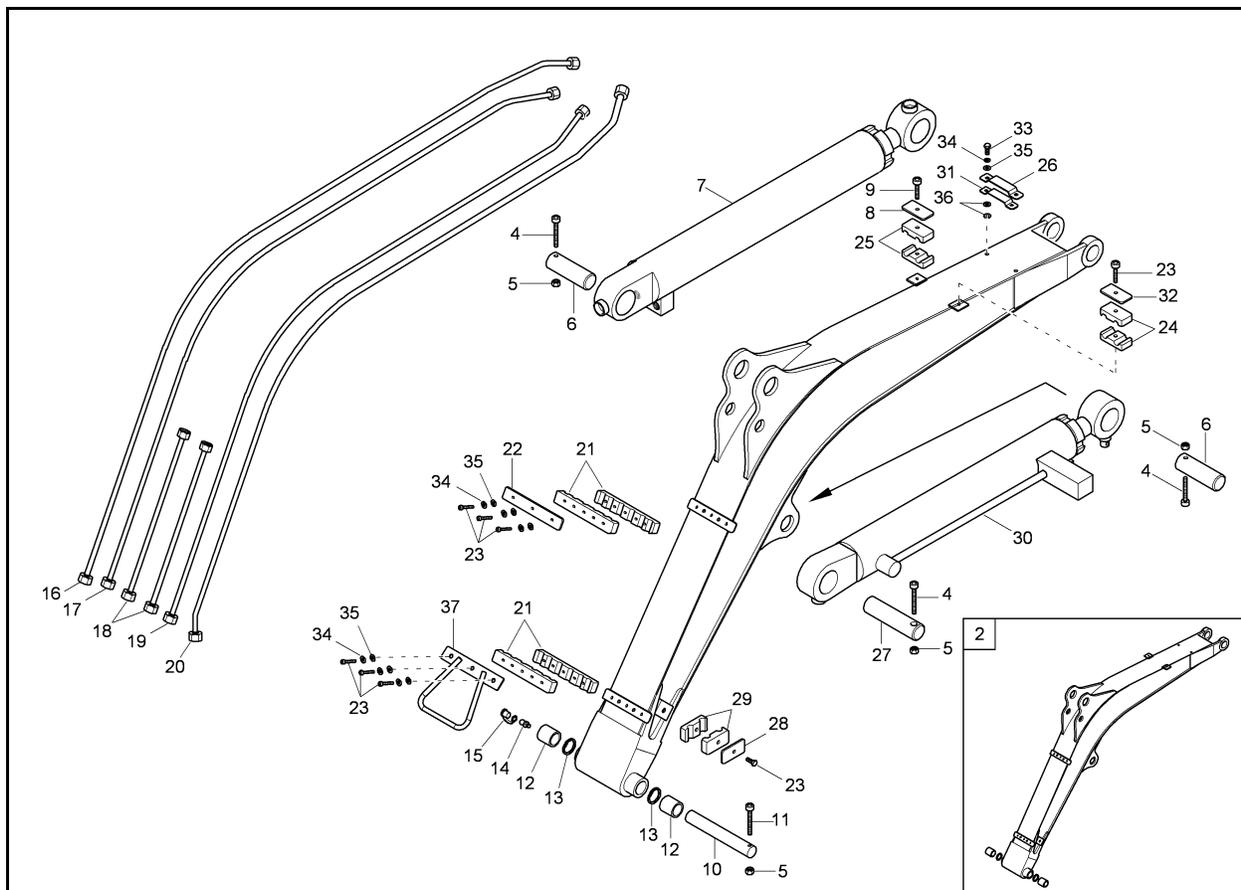
**223 - ISOLATION MATS**  
**1000131547 - (SN AD00454 - AF00151)**



Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
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/RT	14	11	178457	ISOLATION MAT	1
5	204025	FOOT MAT	1	12	1429019G	ISOLATION MAT	1
6	1429017G	ISOLATION MAT RT	1	13	1429024G	ISOLATION MAT	2
7	1429021G	ISOLATION MAT LT	1	14	178793	ISOLATION MAT	1

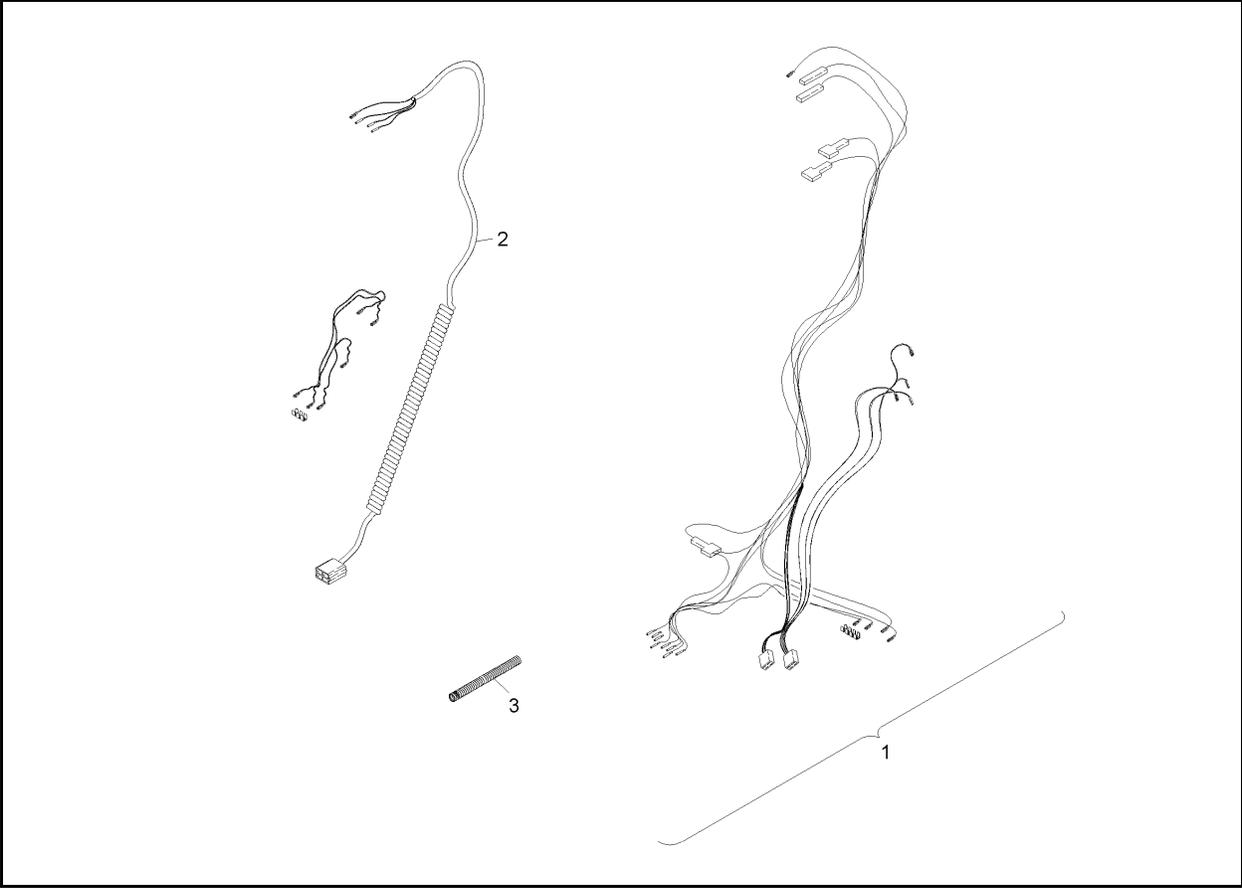
# 223 - LIFTING BOOM

## 1000131548



Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
2	178474	PRE-ASSEMBLED BOOM	1	21	1927029G	PIPE CLAMP	2
4	651439	HB M8-1.25X80 C8.8 ZY	3	22	1927023G	COVER	1
5	651458	LN INS M8-1.25 C8 ZY DIN6924	4	23	656002	CS M8-1.25X35 C8.8 ZY DIN931	8
6	165545	PIN DM=32X118	2	24	9914015G	COLLAR	2
7	204057	DIPPER ARM CYLINDER See page 79 for individual components	1	25	161552	COLLAR	2
8	162070	COVER	1	26	1927022G	CLAMP	1
9	656139	CS M6-1X35 C8.8 ZY DIN931	1	27	165546	PIN DM=32X168	1
10	1929004G	PIN DM=36X269	1	28	162069	COVER	1
11	651440	HB M8-1.25X90 C8.8 ZY	1	29	161556	TUBE CLAMP	2
12	161539	BUSHING	2	30	204056	BOOM CYLINDER See page 77 for individual components	1
13	161685	RING/SNAP B45 D7993	2	31	1427028G	RUBBER	1
14	161411	GREASE ZERK-7MM HEX HEAD	1	32	162069	COVER	1
15	161422	CAP	1	33	177648	HEX SCREW	2
16	178478	TUBE	1	34	161675	LOCKWASHER S6	8
17	178477	TUBE	1	35	163634	WASHER	8
18	178475	TUBE	2	36	7462680011	WASHER 8.4 ST A2C	4
19	178476	TUBE	1	37	178452	BRACKET	1
20	178479	TUBE	1				

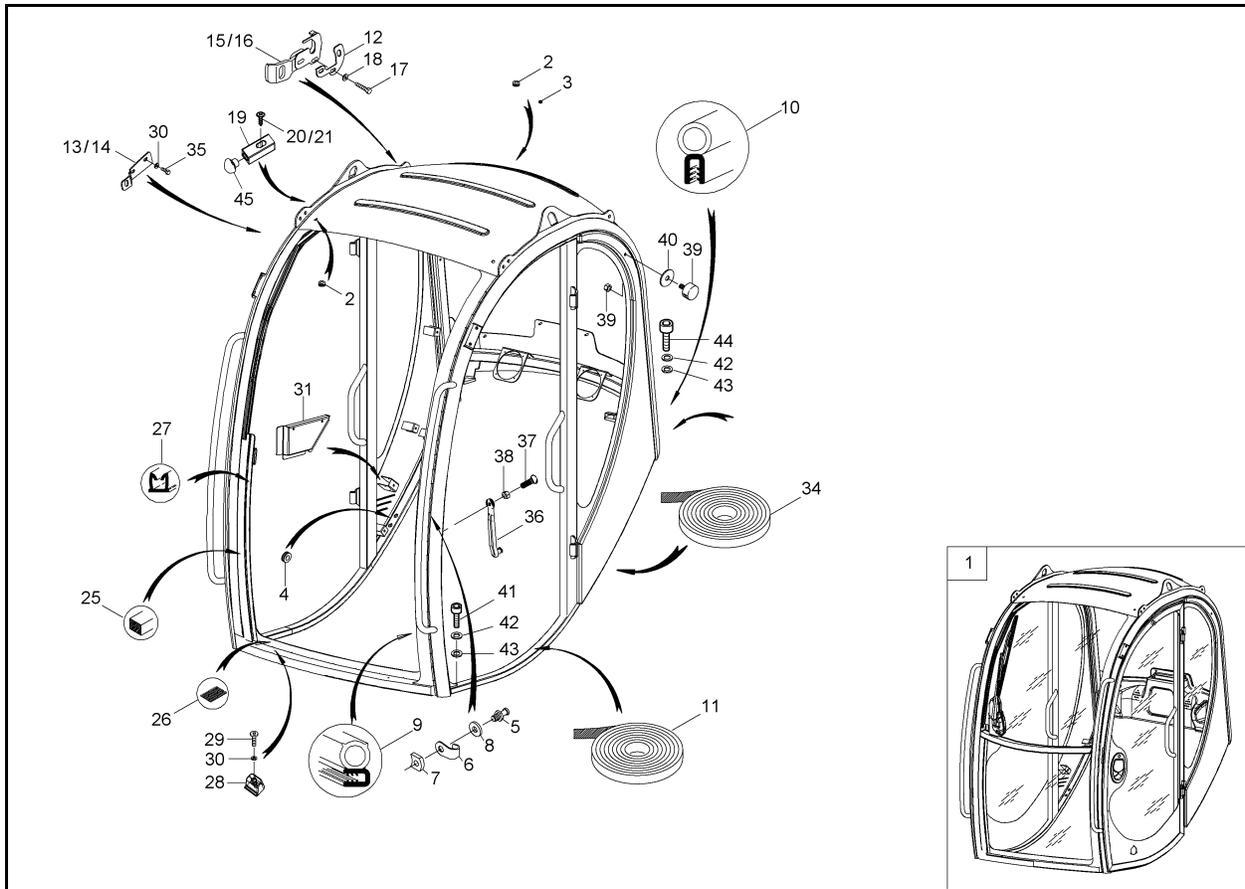
**223 - CAB HARNESES**  
**1000131260**



Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	1424410G	MAIN CABIN HARNESS	1	3	207138	TUBING SLIT (0.2M)	1
2	1424411G	WINDSHIELD HARNESS	1				

# 223 - CAB FRAME

## 1000131256

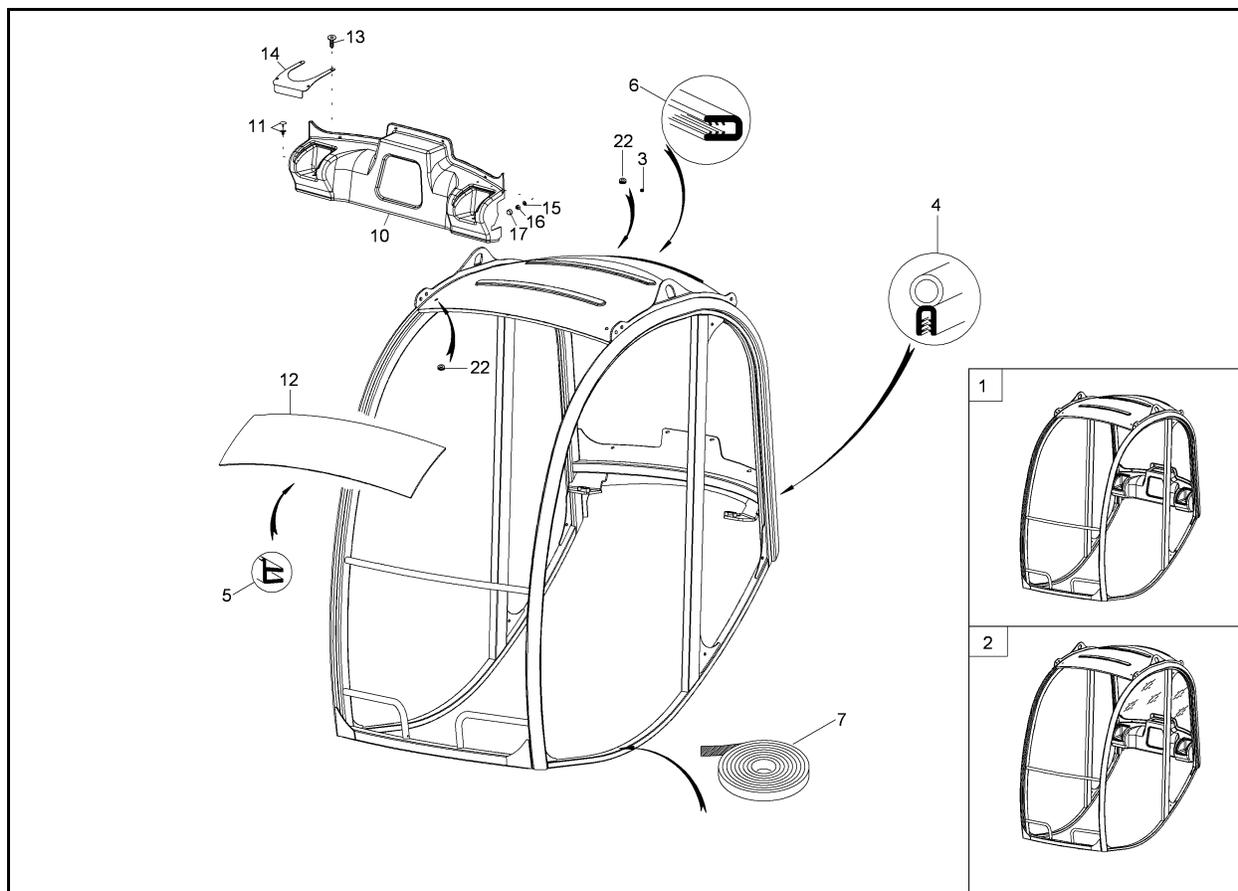


Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	**	CABIN COMPLETE	1	23	1423410G	FOIL RT	1
2	162797	PLUG	5	25	207112	FOAM RUBBER BLACK 10X15MM (1.5M)	1
3	164677	PLUG	2	26	206173	SEAL STRAP (0.80M)	1
4	1424420G	RUBBER BUSHING	8	27	206174	WINDOW SEAL (1.50M)	1
5	161921	PIN	2	28	1423414G	COLLAR	2
6	164771	BRACKET	2	29	162862	SCREW	2
7	164678	PLATE	2	30	162925	WASHER	6
8	161923	WASHER	2	31	1423415G	BRACKET	1
9	206172	RUBBER PROFILE - (3.90M)	1	34	206175	RUBBER STRIP (3.00M)	1
10	207093	HOSE PROFILE (1.1M)	1	35	651521	CS M5-0.8X16 C8.8 ZY DIN931	4
11	206020	ANTI-SLIDE STRIP 25MM (1.00M)	1	36	2003018G	LATCH POST EXTENSION	2
12	1423433G	LOCK	1	37	9901392G	SCREW	2
13	1424453G	LOCK LT	1	38	656048	HN M8-1.25 C8 ZY DIN934	6
14	1424454G	LOCK RT	1	39	1423449G	RUBBER BUFFER	1
15	164679	BRACKET LT	1	40	160639	RUBBER WASHER	1
16	164680	BRACKET RT	1	41	651483	SHCS M12-1.75X35 C10.9 ZY DIN912	2
17	656128	CS M6-1X30 C8.8 ZY DIN931	4	42	163651	WASHER	4
18	162924	WASHER	4	43	161645	WASHER/GR A 13 DIN7349	4
19	164681	RESILIENT PAD	2	44	656148	FHSCS M12-1.75X40 C10.9 ZY DIN7991	2
20	164907	SCREW (CAB SN 52264 AND BEFORE)	2	45	164686	RUBBER PLUG	2
21	207045	SCREW (CAB SN 52265 AND UP)	2				
22	1423409G	FOIL LT	1				

\*\* Call for Availability

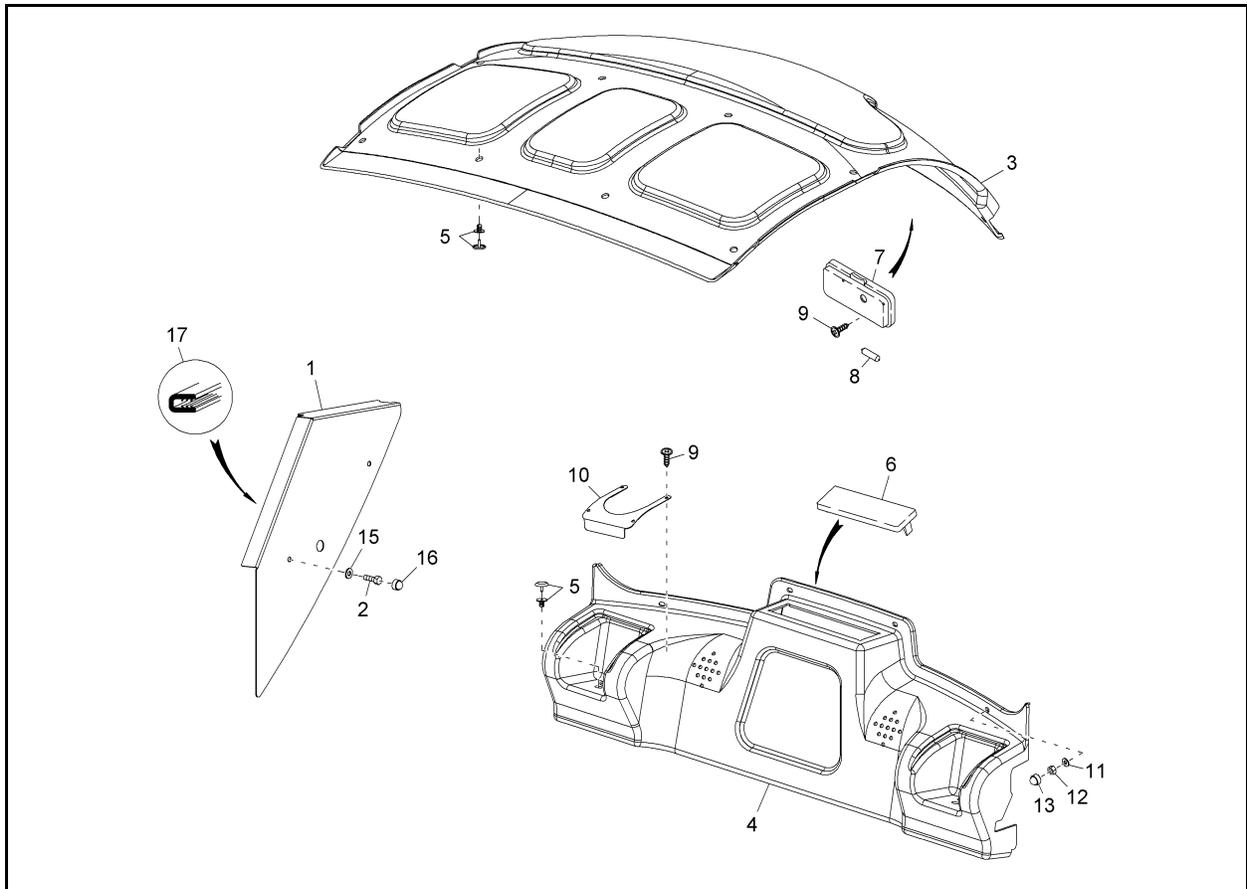
# 223 - CANOPY FRAME

1000131257

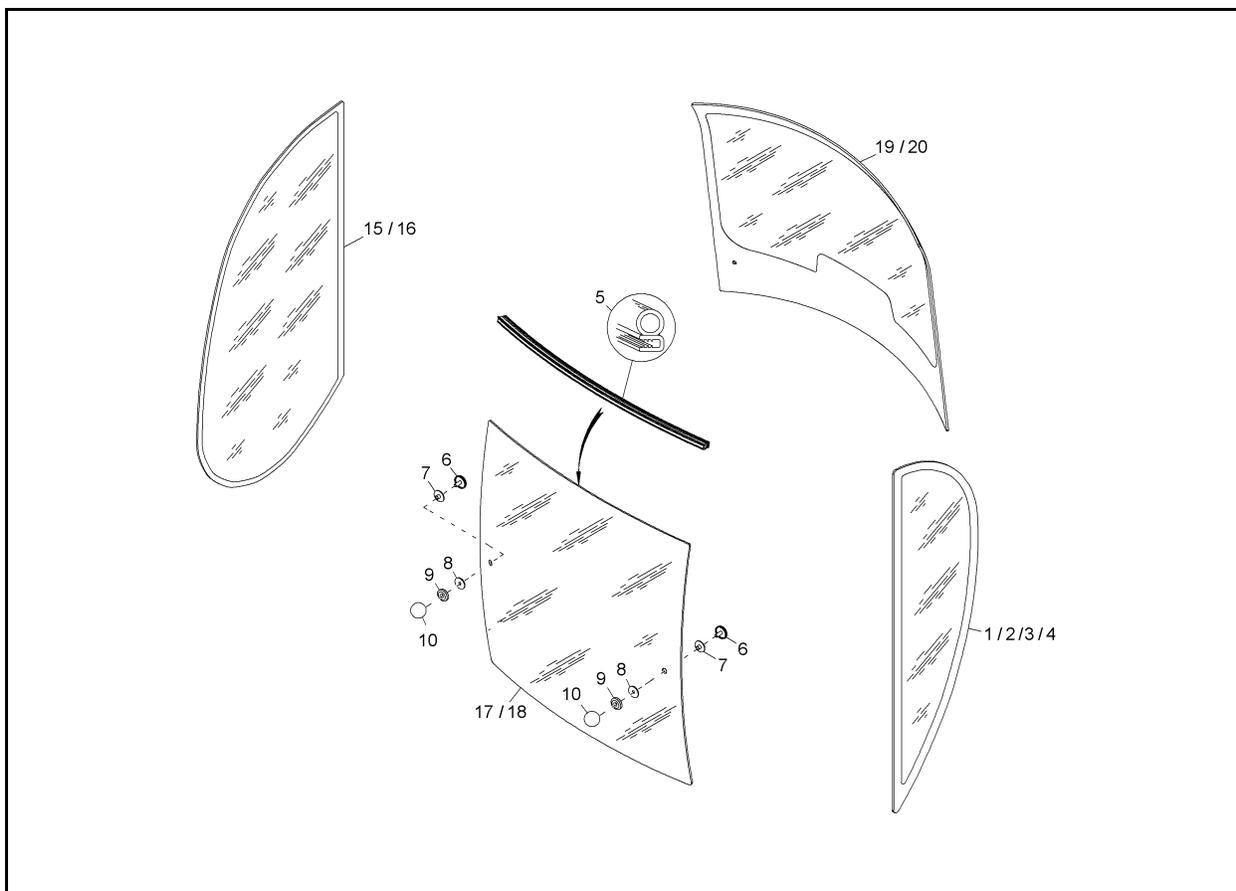


Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	204043	CANOPY	1	11	164689	RIVET 11MM	2
2	206177	CANOPY W/REAR GLASS	1	12	1423423G	FRONT WINDOW/TOP	1
3	164677	PLUG	2	13	162035	SCREW	4
4	207093	HOSE PROFILE (1.1M)	1	14	1423416G	COVER	2
5	1423424G	EDGE PROTECTION	1	15	162925	WASHER	4
6	207133	EDGE PROTECTION (1.0M)	1	16	651456	LN INS M5-0.8 C8 ZY DIN6924	4
7	206039	ANTI-SLIDE STRIP 25MM (0.60M)	1	17	165214	CAP D=5MM	4
10	178701	STORAGE BOX	1	22	162797	PLUG	5

**223 - COVERS**  
**1000131259**



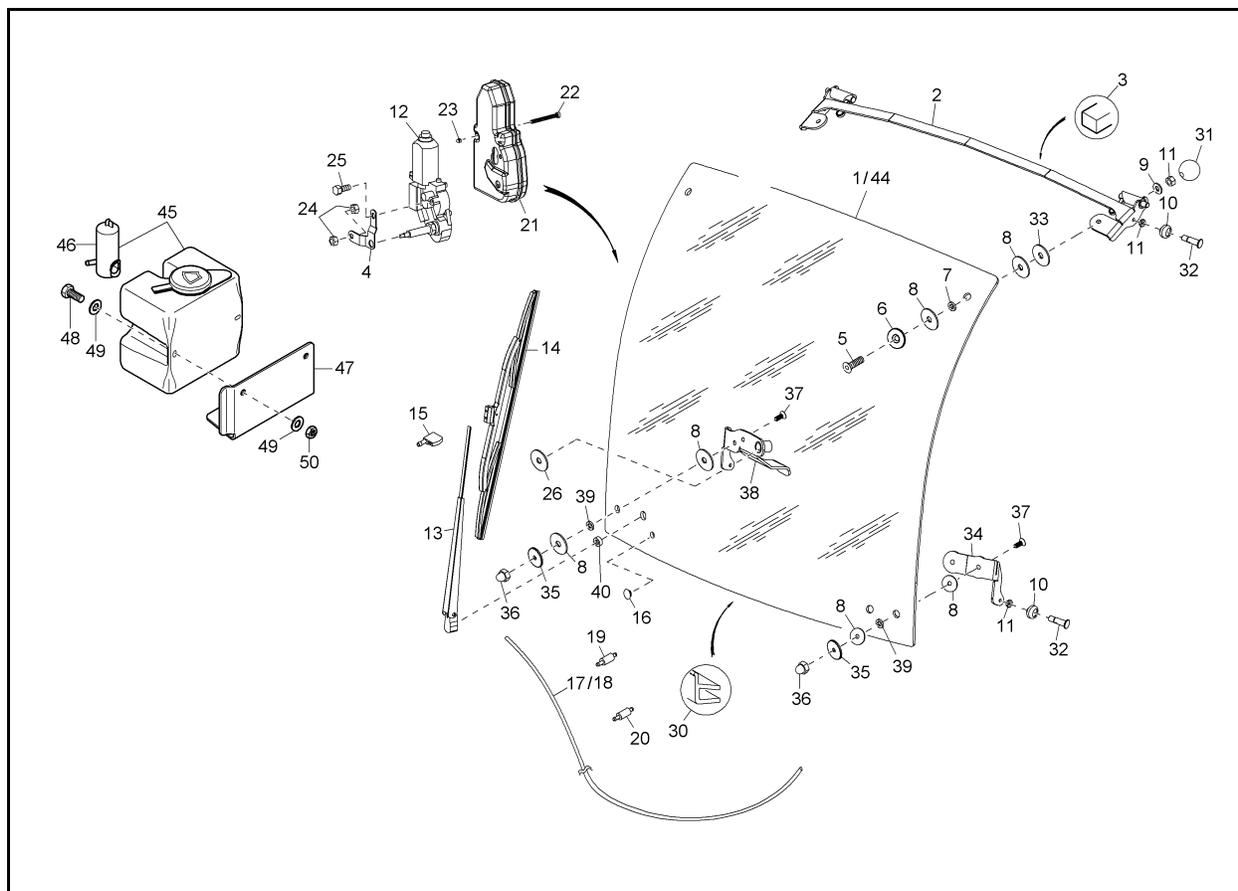
Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	178447	COVER	1	10	1423416G	COVER	2
2	656092	CS M6-1X12 C8.8 ZY DIN931	2	11	162925	WASHER	4
3	1423107G	COVER	1	12	651456	LN INS M5-0.8 C8 ZY DIN6924	4
4	1423116G	COVER	1	13	165214	CAP D=5MM	4
5	164689	RIVET 11MM	14	15	162924	WASHER	2
6	165195	COVER	1	16	162737	COVER	2
7	160488	DOME LIGHT	1	17	207212	EDGE PROTECTION SECTION (1.3M)	1
8	164182	BULB	1				
9	162035	SCREW	10				



Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	1424424G	SIDEPANE LT	1	9	160641	PVC-WASHER	2
2	178726	SIDEPANE LT TINTED	1	10	1424423G	BALL KNOB	2
3	1424425G	SIDEPANE RT	1	15	178446	SIDEPANE RT	1
4	178727	SIDEPANE RT TINTED	1	16	206179	SIDEPANE RT TINTED	1
5	206913	HOSE PROFILE (1.00M)	1	17	178724	FRONT WINDOW/LOWER TINTED	1
6	164671	PVC-WASHER	2	18	1424427G	FRONT WINDOW/LOWER	1
7	160640	RUBBER WASHER	2	19	1424426G	REAR WINDOW	1
8	160639	RUBBER WASHER	2	20	178725	REAR WINDOW TINTED	1

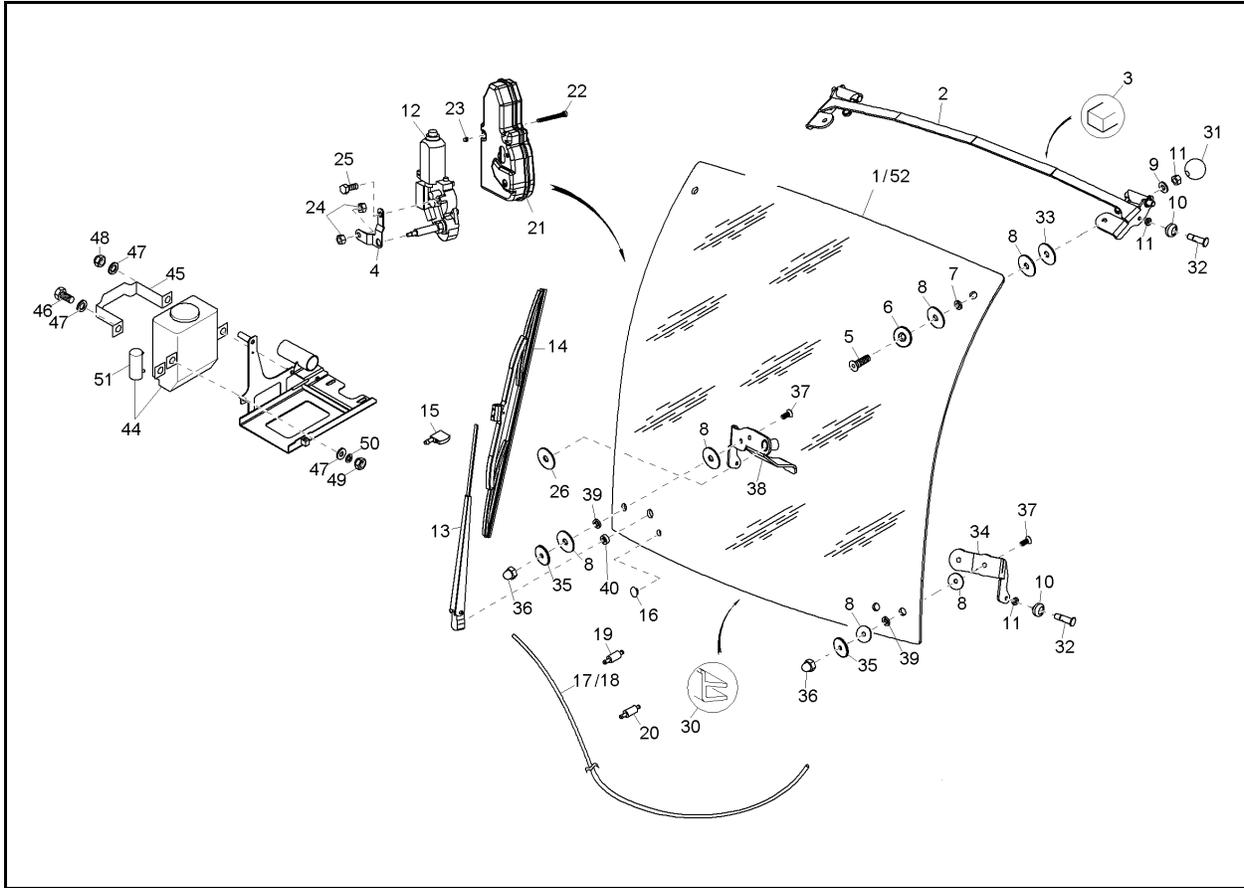
# 223 - FRONT WINDOW

## 1000148849 - (SN AE0001 AND UP)



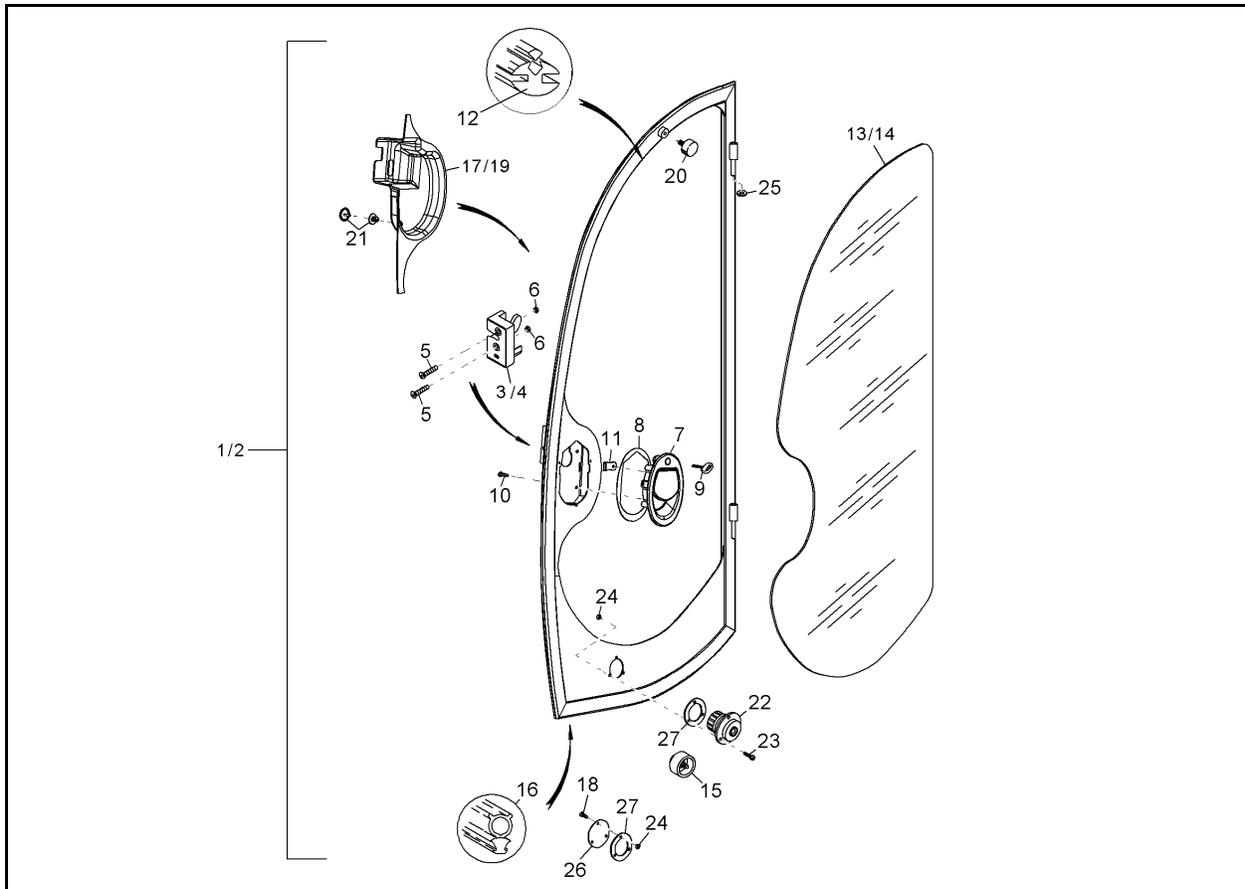
Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	1424414G	FRONT WINDOW	1	24	656048	HN M8-1.25 C8 ZY DIN934	2
2	1423439G	WINDOW FRAME/UPPER	1	25	651430	CS M8-1.25X12 C8.8 ZY DIN931	1
3	207114	FOAM STRIP (0.85M)	1	26	160639	RUBBER WASHER	1
4	165168	BAR LOCK	1	30	1423419G	PVC-PROFILE	1
5	162042	SCREW	2	31	1424423G	BALL KNOB	2
6	1423440G	WASHER	2	32	177915	CATCH BOLT	4
7	177918	DISTANCE ROLLER	2	33	162812	WASHER	2
8	160639	RUBBER WASHER	9	34	206180	MOUNTING PLATE LT	1
9	161668	WASHER/GR A 8.4 ZO DIN134	2	35	1423443G	WASHER	3
10	177914	PVC-ROLLER	4	36	161618	HN DOMED CAP M8	3
11	9901152G	NUT	6	37	651466	FHSCS M8-1.25X20 C8.8 ZY DIN7991	3
12	165206	WIPER MOTOR	1	38	206181	MOUNTING PLATE RT	1
13	1424418G	WIPER ARM	1	39	177916	DISTANCE ROLLER	3
14	1424419G	WIPER BLADE	1	40	177917	SPACER	1
15	161087	NOZZLE	1	44	178723	WINDSHIELD TINTED	1
16	1424420G	RUBBER BUSHING	1	45	177821	WINDSHIELD WASHER RESERVOIR	1
17	206138	WATER HOSE (1.00M)	1	46	178074	PUMP WASHTANK	1
18	207292	WATER HOSE (2.3M)	1	47	206186	FASTEN PLATE	1
19	164673	NON RETURN VALVE	1	48	656149	CS M6-1X16 C8.8 ZY DIN931	2
20	161847	CONNECTOR	1	49	161660	WASHER GR A6.4 ZO DIN 125	4
21	165159	COVER	1	50	651457	LN INS M6-1 C8 ZY DIN6924	2
22	165048	SCREW	2				
23	165948	NUT	2				

## 223 - FRONT WINDOW 1000142852 - (SN AD00454 - AD04180)



Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	1424414G	FRONT WINDOW	1	24	656048	HN M8-1.25 C8 ZY DIN934	2
2	1423439G	WINDOW FRAME/UPPER	1	25	651430	CS M8-1.25X12 C8.8 ZY DIN931	1
3	207114	FOAM STRIP (0.85M)	1	26	160639	RUBBER WASHER	1
4	165168	BAR LOCK	1	30	1423419G	PVC-PROFILE	1
5	162042	SCREW	2	31	1424423G	BALL KNOB	2
6	1423440G	WASHER	2	32	177915	CATCH BOLT	4
7	177918	DISTANCE ROLLER	2	33	162812	WASHER	2
8	160639	RUBBER WASHER	9	34	206180	MOUNTING PLATE LT	1
9	161668	WASHER/GR A 8.4 ZO DIN134	2	35	1423443G	WASHER	3
10	177914	PVC-ROLLER	4	36	161618	NUT/HEX DOMED CAP M8	3
11	9901152G	NUT	6	37	651466	FHSCS M8-1.25X20 C8.8 ZY DIN7991	3
12	165206	WIPER MOTOR	1	38	206181	MOUNTING PLATE RT	1
13	1424418G	WIPER ARM	1	39	177916	DISTANCE ROLLER	3
14	1424419G	WIPER BLADE	1	40	177917	SPACER	1
15	161087	NOZZLE	1	44	164690	WINDSHIELD WASHING TANK	1
16	1424420G	RUBBER BUSHING	1	45	164668	CLAMP	1
17	206138	WATER HOSE (1.00M)	1	46	651521	CS M5-0.8X16 C8.8 ZY DIN931	1
18	207292	WATER HOSE (2.3M)	1	47	161659	WASHER/GR A 5.3 ZO DIN125	3
19	164673	NON RETURN VALVE	1	48	651456	LN INS M5-0.8 C8 ZY DIN6924	1
20	161847	CONNECTOR	1	49	656100	HN M5-0.8 C8 ZY DIN934	1
21	165159	COVER	1	50	161674	LOCKWASHER S16	1
22	165048	SCREW	2	51	178891	PUMP	1
23	165948	NUT	2	52	178723	WINDSHIELD TINTED	1

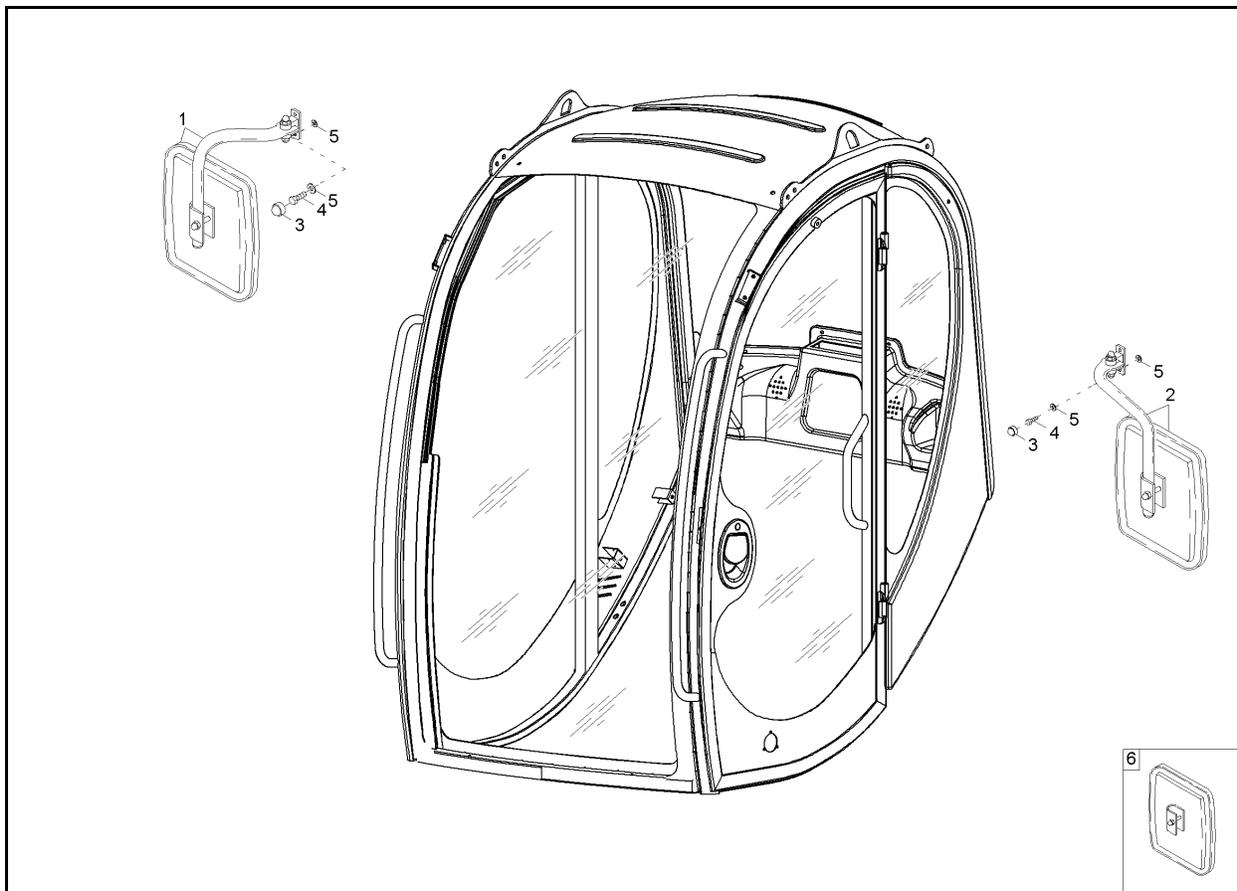
**223 - CAB DOORS**  
**1000131265**



Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	178449	CAB DOOR COMPLETE LT	1	15	1424446G	DOOR FASTENER	1
2	178451	CAB DOOR COMPLETE RT	1	16	206185	SEAL PROFILE (7.60M)	1
3	160525	LOCK LT (W/O KEYS)	1	17	1423108G	COVER LT	1
4	160490	LOCK RT (W/O KEYS)	1	18	9901673G	SCREW	3
5	162864	SCREW	4	19	1423109G	COVER RT	1
6	651458	LN INS M8-1.25 C8 ZY DIN6924	4	20	1423449G	RUBBER BUFFER	1
7	1424431G	HANDLE	2	21	164689	RIVET 11MM	8
8	1424432G	SHIM	2	22	1424447G	DOOR LATCH	1
9	101792	KEY	2	23	9901666G	SCREW	3
10	656092	CS M6-1X12 C8.8 ZY DIN931	8	24	651456	LN INS M5-0.8 C8 ZY DIN6924	6
11	1424433G	KEY BUTTON	2	25	164688	WASHER	2
12	206184	RUBBER PROFILE (6.60M)	1	26	1423446G	COVER PLATE	1
13	1424434G	DOOR WINDOW	2	27	1423447G	RUBBER WASHER	2
14	178728	DOOR WINDOW TINTED	2				

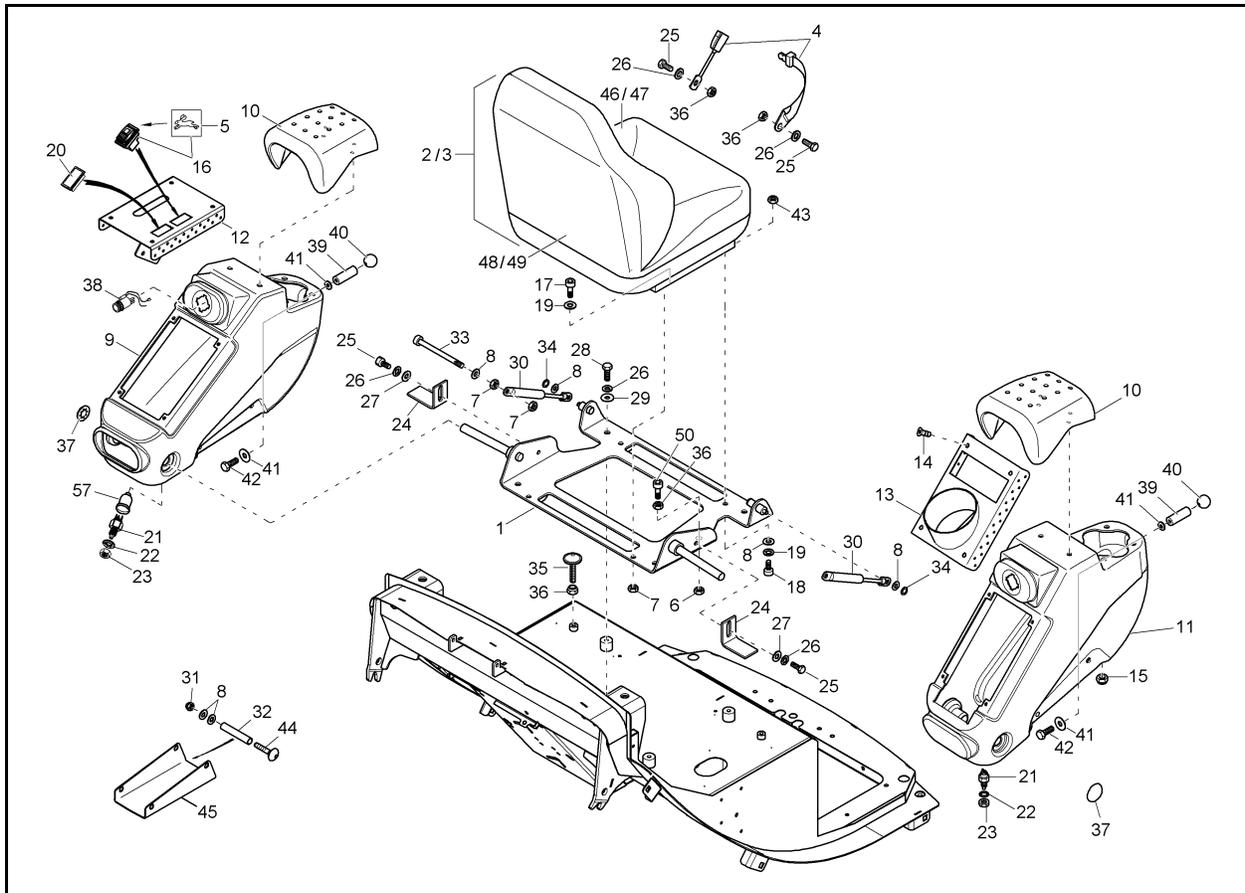
# 223 - MIRRORS (OPTION)

1000144750



Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	162607	MIRROR LT	1	4	656149	CS M6-1X16 C8.8 ZY DIN931	4
2	163213	MIRROR RT	1	5	162924	WASHER	8
3	162737	COVER	4	6	178890	MIRROR	2

# 223 - OPERATOR'S SEAT 1000148850 - (SN AE0001 AND UP)



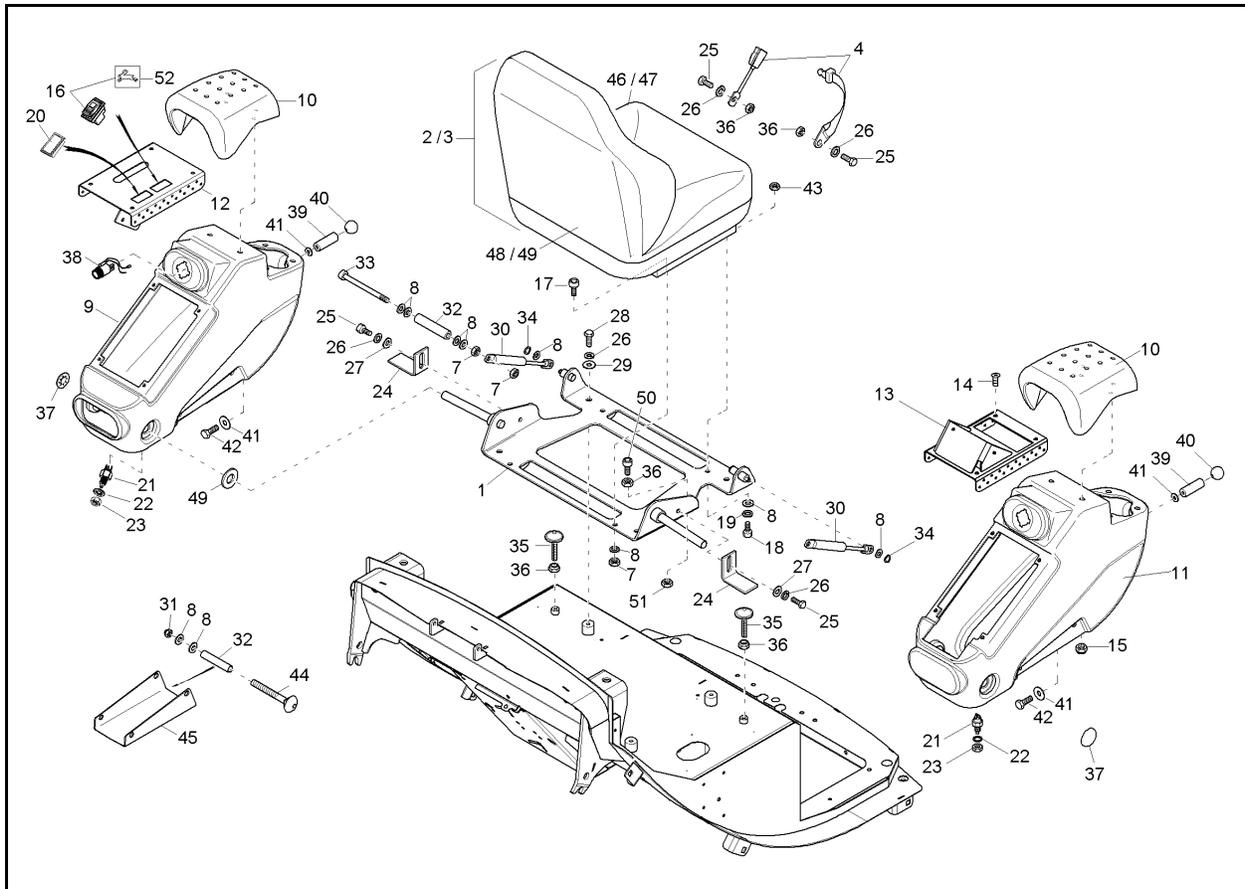
Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	204008	SEAT BRACKET	1	20	0003320872	BLANK	1
2	206189	OPERATOR'S SEAT (CLOTH)	1	21	164980	MICROSWITCH	2
3	206190	OPERATOR'S SEAT (VINYL)	1	22	164982	WASHER	2
4	207060	SEAL BELT/2" RETRACTABLE	1	23	164981	NUT	2
	809306	3" SEAT BELT KIT	1	24	1423003G	BRACKET	2
5	164710	HIGH SPEED SYMBOL	1	25	656090	CS M10-1.5X16 C8.8 ZY DIN931	4
6	651448	LN INS M10-1.5 C8 ZY DIN6924	1	26	161669	LOCKWASHER S10	8
7	651458	LN INS M8-1.25 C8 ZY DIN6924	6	27	161663	WASHER/GR A 10.5 ZO	2
8	163634	WASHER	10	28	651393	CS M10-1.5X25 C8.8 ZY	4
9	178703	CONTROL CONSOLE LT	1	29	161640	WASHER/GR A 10.5	4
10	178873	ARMREST	2	30	160611	SPRING	2
11	206192	CONTROL CONSOLE RT	1	31	161618	NUT/HEX DOMED CAP M8	2
12	178438	DASHBOARD PANEL LT	1	32	178876	TUBE	2
13	207061	CONSOLE/INSTRUMENTS	1	33	179782	SCREW	2
14	161634	SCREW/C'SUNK HD M5X16	8	34	161848	LOCKWASHER	2
15	165952	NUT	8	35	1429414G	ELEVATION ADJUSTMENT	2
16	178909	SWITCH FAST SPEED	1	36	656102	HN M10-1.25 F8 ZY DIN934	5
17	651515	SHCS M8-1.25X20 C8.8 ZY DIN912	2	37	161730	PLUG	2
18	651514	SHCS M8-1.25X16 C8.8 ZY DIN912	2	38	164696	CIGARETTE LIGHTER	1
19	163670	LOCKWASHER	4	39	161868	TUBE	2

**223 - OPERATOR'S SEAT  
1000148850 - (SN AE00001 AND UP)**

<b>Ref. No.</b>	<b>Part No.</b>	<b>Description</b>	<b>Qty.</b>	<b>Ref. No.</b>	<b>Part No.</b>	<b>Description</b>	<b>Qty.</b>
40	161631	KNOB D40MM	2	46	206194	SEAT UPHOLSTERY (CLOTH)	1
41	161651	WASHER 20	4	47	207375	SEAT UPHOLSTERY (VINYL)	1
42	651390	HB M10-1.5X120 C8.8 ZY	2	48	206195	BACK CUSHION (CLOTH)	1
43	656048	HN M8-1.25 C8 ZY DIN934	2	49	207376	BACK CUSHION (VINYL)	1
44	206193	FLAT HEAD SCREW	2	50	163344	SCREW	1
45	178875	SHEET METAL	2	57	204037	RUBBER SLEEVE	1

# 223 - OPERATOR'S SEAT

## 1000148919 - (SN AD04010 - AD04180)



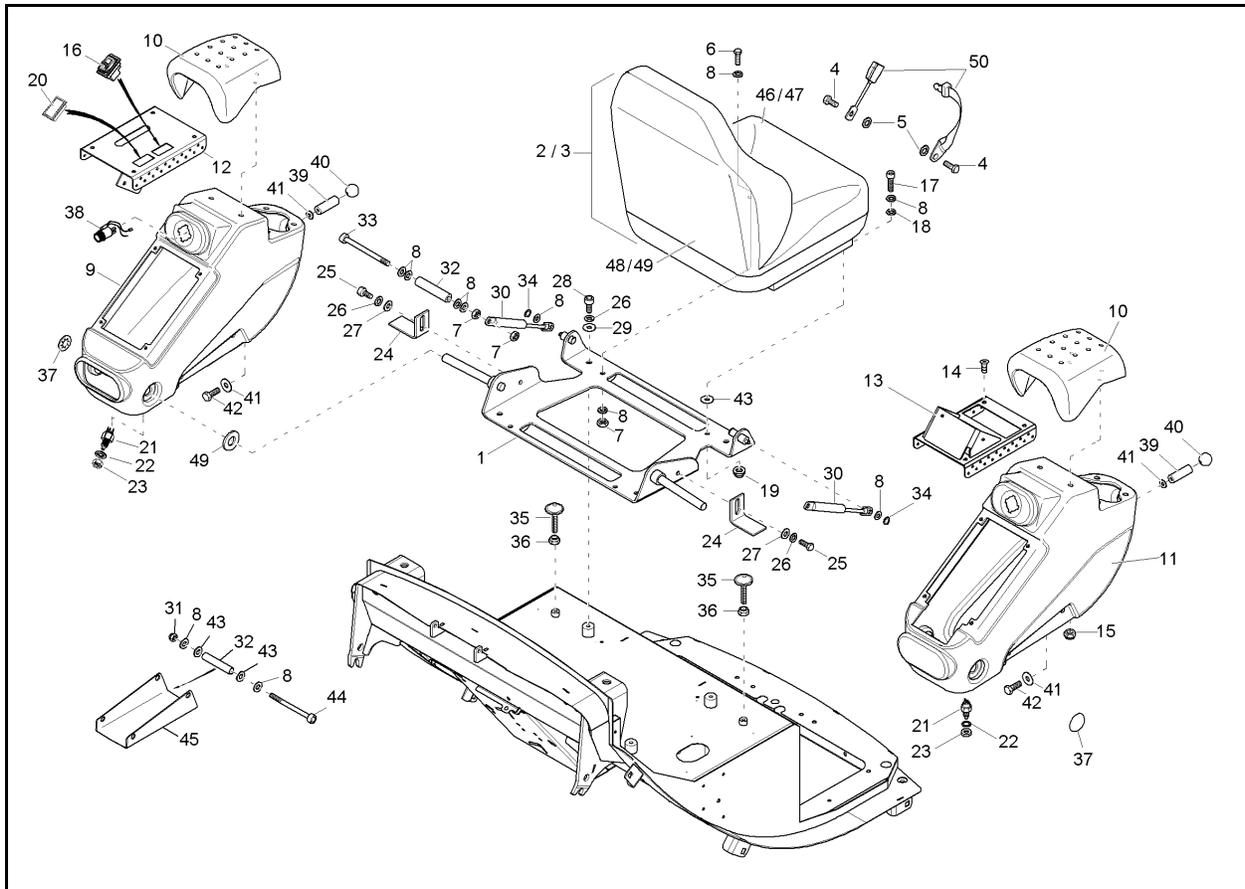
Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	206188	SEAT BRACKET	1	22	164982	WASHER	2
2	206189	OPERATOR'S SEAT (CLOTH)	1	23	164981	NUT	2
3	206190	OPERATOR'S SEAT (VINYL)	1	24	1423003G	BRACKET	2
4	207060	SEAL BELT/2" RETRACTABLE	1	25	656090	CS M10-1.5X16 C8.8 ZY DIN931	2
	809306	3" SEAT BELT KIT	1	26	161669	LOCKWASHER S10	8
5	161642	WASHER/GR A 13	2	27	161663	WASHER/GR A 10.5 ZO	2
6	656105	CS M8-1.25X25 C8.8 ZY DIN931	4	28	651393	CS M10-1.5X25 C8.8 ZY	4
7	651458	LN INS M8-1.25 C8 ZY DIN6924	6	29	161640	WASHER/GR A 10.5	4
8	163634	WASHER	12	30	160611	SPRING	2
9	178703	CONTROL CONSOLE LT	1	31	161618	NUT/HEX DOMED CAP M8	2
10	178873	ARMREST	2	32	178876	TUBE	4
11	178704	CONTROL CONSOLE RT	1	33	179782	SCREW	2
12	178438	DASHBOARD PANEL LT	1	34	161848	LOCKWASHER	2
13	178700	CONSOLE FOR DASHBOARD RT	1	35	1429414G	ELEVATION ADJUSTMENT	2
14	161634	SCREW/C'SUNK HD M5X16	8	36	656102	HN M10-1.25 F8 ZY DIN934	5
15	165952	NUT	8	37	161730	PLUG	2
16	178909	SWITCH FAST SPEED	1	38	164696	CIGARETTE LIGHTER	1
17	651515	SHCS M8-1.25X20 C8.8 ZY DIN912	2	39	161868	TUBE	2
18	651514	SHCS M8-1.25X16 C8.8 ZY DIN912	2	40	161631	KNOB D40MM	2
19	163670	LOCKWASHER	2	41	161651	WASHER 20	4
20	0003320872	BLANK	1	42	651390	HB M10-1.5X120 C8.8 ZY	2
21	164980	MICROSWITCH	2	43	656048	HN M8-1.25 C8 ZY DIN934	2

**223 - OPERATOR'S SEAT**  
**1000148919 - (SN AD04010 - AD04180)**

<b>Ref.</b>	<b>No.</b>	<b>Part No.</b>	<b>Description</b>	<b>Qty.</b>	<b>Ref.</b>	<b>No.</b>	<b>Part No.</b>	<b>Description</b>	<b>Qty.</b>
	44	206193	FLAT HEAD SCREW	2		49	207376	BACK CUSHION (VINYL)	1
	45	178875	SHEET METAL	2		50	163344	SCREW	1
	46	206194	SEAT UPHOLSTERY (CLOTH)	1		51	651448	LN INS M10-1.5 C8 ZY DIN6924	1
	47	207375	SEAT UPHOLSTERY (VINYL)	1		52	164710	HIGH SPEED SYMBOL	1
	48	206195	BACK CUSHION (CLOTH)	1					

# 223 - OPERATOR'S SEAT

## 1000131268 - (SNAD00454 - AD04009)

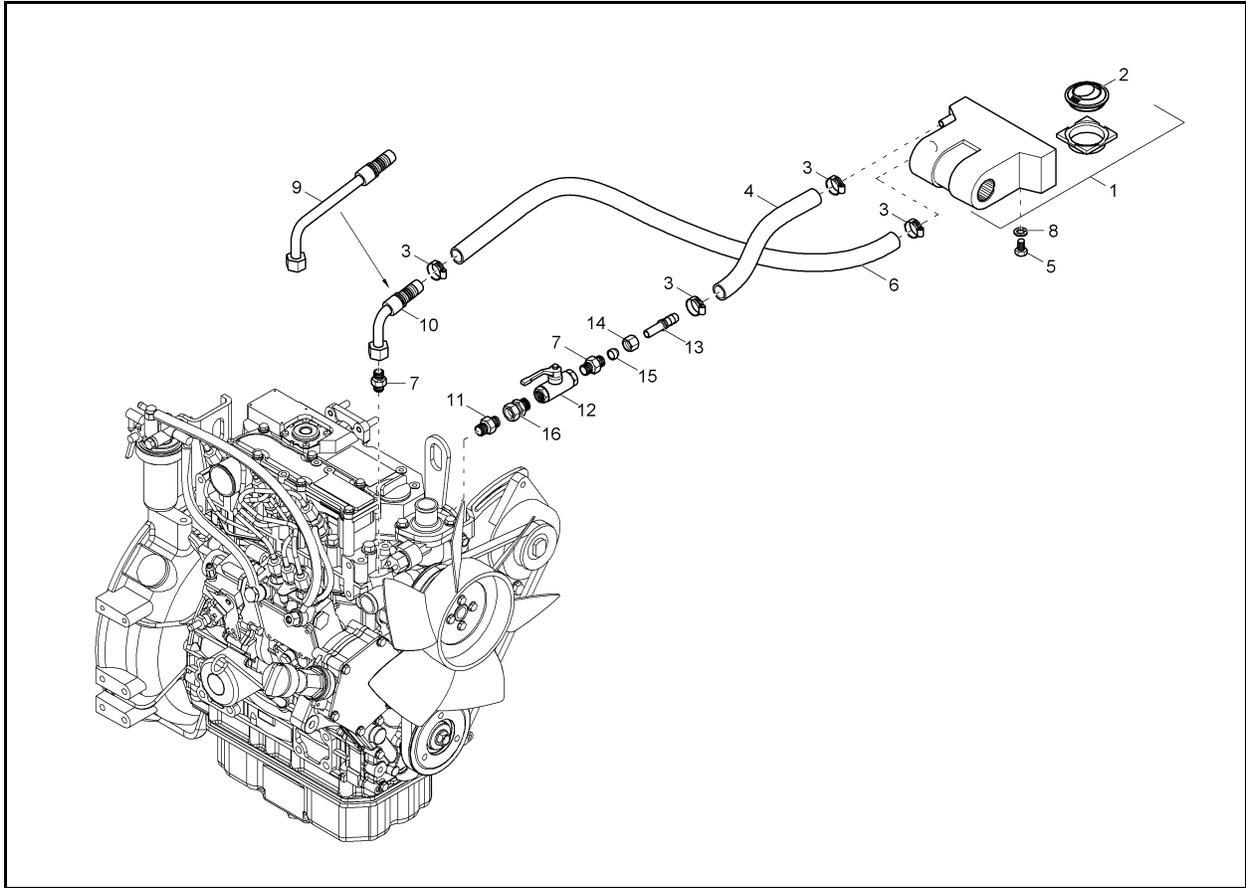


Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	1423021G	SEAT BRACKET	1	22	164982	WASHER	2
2	1423401G	OPERATOR'S SEAT (CLOTH)	1	23	164981	NUT	2
3	178439	OPERATOR'S SEAT (VINYL)	1	24	1423003G	BRACKET	2
4	7236677187	HEX SCREW M12X25-8.8	2	25	656090	CS M10-1.5X16 C8.8 ZY DIN931	2
5	161642	WASHER/GR A 13	2	26	161669	LOCKWASHER S10	6
6	656105	CS M8-1.25X25 C8.8 ZY DIN931	4	27	161663	WASHER/GR A 10.5 ZO	2
7	651458	LN INS M8-1.25 C8 ZY DIN6924	7	28	651393	CS M10-1.5X25 C8.8 ZY	4
8	163634	WASHER	21	29	161640	WASHER/GR A 10.5	4
9	178703	CONTROL CONSOLE LT	1	30	160611	SPRING	2
10	178873	ARMREST	2	31	161618	NUT/HEX DOMED CAP M8	2
11	178704	CONTROL CONSOLE RT	1	32	178876	TUBE	4
12	178438	DASHBOARD PANEL LT	1	33	179782	SCREW	2
13	178700	CONSOLE FOR DASHBOARD RT	1	34	161848	LOCKWASHER	2
14	161634	SCREW/C'SUNK HD M5X16	8	35	1429414G	ELEVATION ADJUSTMENT	2
15	165952	NUT	8	36	656102	HN M10-1.25 F8 ZY DIN934	2
16	178909	SWITCH FAST SPEED	1	37	161730	PLUG	2
17	651516	SHCS M8-1.25X25 C8.8 ZY DIN912 (SN AD00814 AND UP)	1	38	164696	CIGARETTE LIGHTER	1
18	163670	LOCKWASHER	1	39	161868	TUBE	2
19	165952	NUT	1	40	161631	KNOB D40MM	2
20	0003320872	BLANK	1	41	161651	WASHER 20	4
21	164980	MICROSWITCH	2	42	651390	HB M10-1.5X120 C8.8 ZY	2
				43	7462680011	WASHER 8.4 ST A2C	5

**223 - OPERATOR'S SEAT**  
**1000131268 - (SNAD00454 - AD04009)**

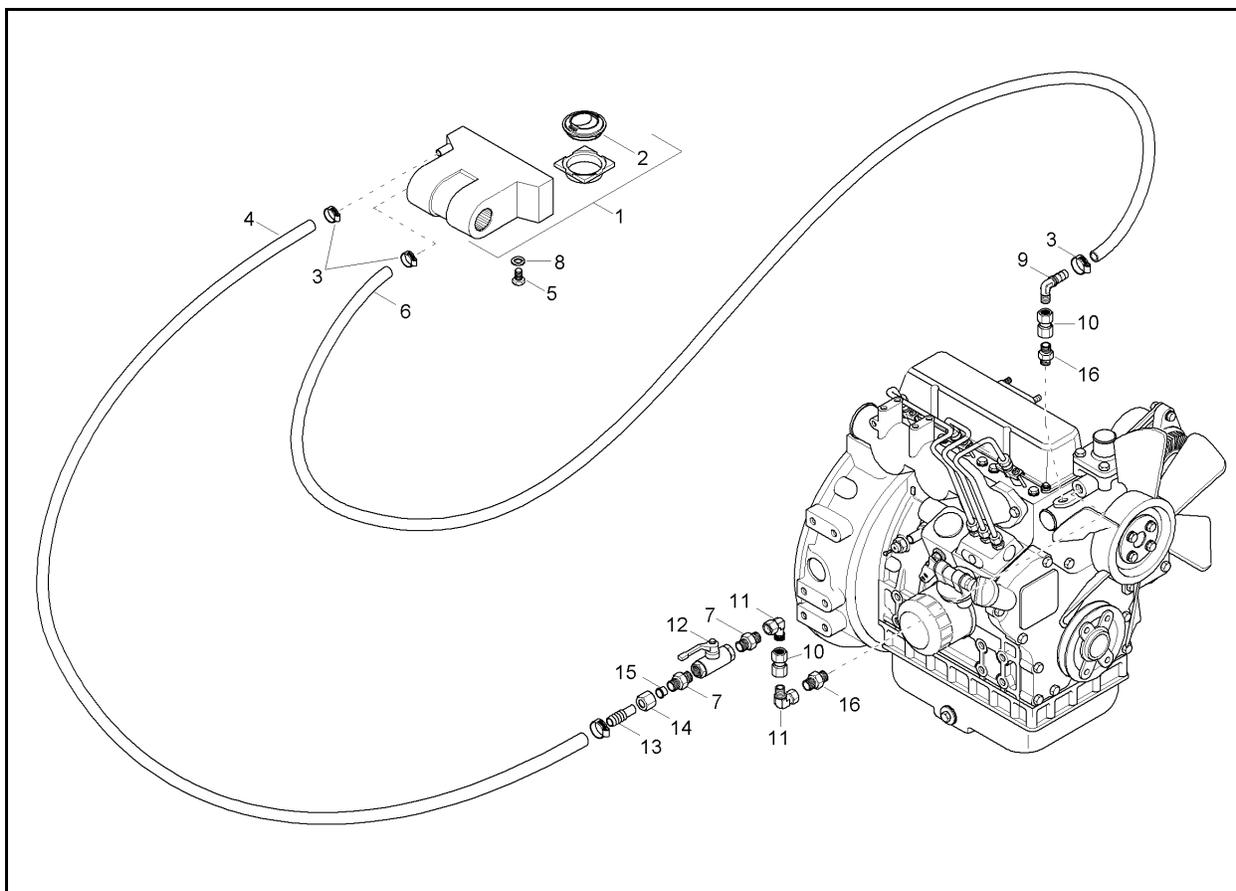
<b>Ref.</b>				<b>Ref.</b>			
<b>No.</b>	<b>Part No.</b>	<b>Description</b>	<b>Qty.</b>	<b>No.</b>	<b>Part No.</b>	<b>Description</b>	<b>Qty.</b>
44	651519	SHCS M8-1.25X90 C8.8 ZY DIN912	2	48	178443	BACK CUSHION (CLOTH)	1
45	178875	SHEET METAL	2	49	178441	BACK CUSHION (VINYL)	1
46	178442	SEAT CUSHION (CLOTH)	1	50	207060	SEAL BELT/2" RETRACTABLE	1
47	178440	SEAT CUSHION (VINYL)	1	809306	3" SEAT BELT KIT		1

**223 - HEATER**  
**1000148668 - (SN AE0001 AND UP)**



Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	178275	CAB HEATER	1	9	206187	TUBE (SN AE00363 AND BEFORE)	1
2	161853	VENT	2	10	204006	TUBE (SN AE00364 AND UP)	1
3	162064	HOSE CLAMP	4	11	161436	SCREW JOINT	1
4	207249	HEATER HOSE (0.9M)	1	12	160950	BALL VALVE	1
5	161630	SCREW/HEX HD TAP B5.5X19	3	13	160860	HOSE COVER	1
6	206139	HEATER HOSE (1.00M)	1	14	7788010663	UNION NUT AL 12 VERZ.	1
7	161476	SCREW JOINT	2	15	161424	WASHER	1
8	7462680008	WASHER	3	16	161477	SCREW JOINT	1

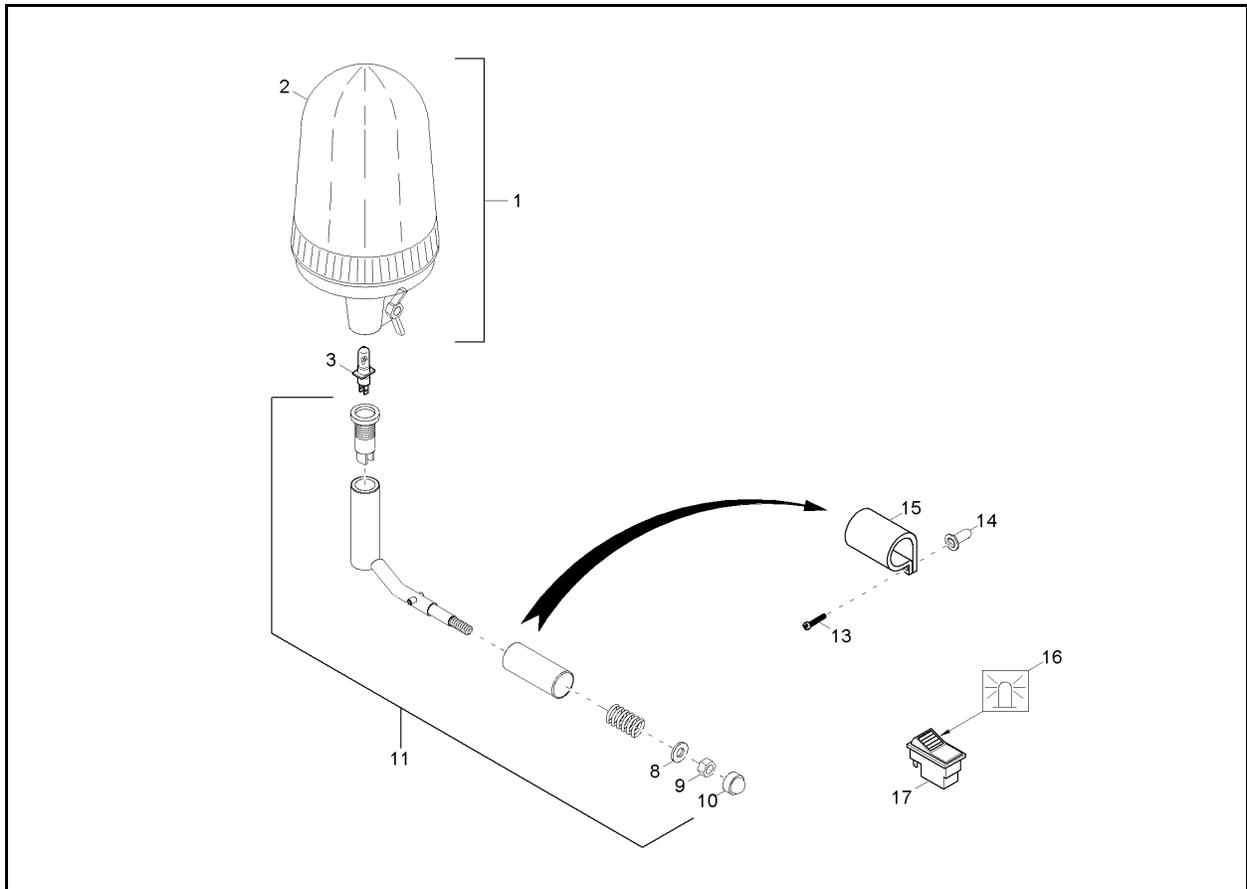
**223 - HEATER**  
**1000131574 - (AD00454 - AD04180)**



Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	178275	CAB HEATER	1	9	165501	90° FITTING	2
2	161853	VENT	2	10	9910513G	SCREW JOINT	2
3	162064	HOSE CLAMP	4	11	161445	90° FITTING	2
4	207249	HEATER HOSE (0.9M)	1	12	160950	BALL VALVE	1
5	161630	SCREW/HEX HD TAP B5.5X19	3	13	160860	HOSE COVER	1
6	207249	HEATER HOSE (0.9M)	1	14	7788010663	UNION NUT AL 12 VERZ.	1
7	161476	SCREW JOINT	2	15	161424	WASHER	1
8	7462680008	WASHER	3	16	161436	SCREW JOINT	2

# 223 - ROTATING BEACON (OPTION)

1000144744



Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	165199	LAMP COMPLETE	1	11	165208	LAMP ATTACHMENT	1
2	165207	LENS	1	13	165941	SCREW	2
3	179740	HALOGEN LAMP	1	14	204733	BLIND RIVET NUT	2
8	161668	WASHER/GR A 8.4 ZO DIN134	1	15	165200	BRACKET	1
9	651458	LN INS M8-1.25 C8 ZY DIN6924	1	16	177666	SYMBOL/TURNING LIGHT	1
10	165052	COVER	1	17	164883	ROCKER SWITCH	1

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160488	136	7	160640	137	7	161232	90	1
160490	140	4	160641	137	9	161234	90	2
160516	114	9	160645	12	5	161234	92	2
160516	115	1	160651	87	22	161245	56	6
160517	114	11	160658	66	14	161247	92	1
160518	115	12	160662	83	7	161249	88	3
160520	115	4	160663	83	8	161256	92	6
160521	115	7	160664	93	3	161257	90	4
160522	115	13	160667	68	1	161261	88	2
160525	140	3	160681	87	4	161261	92	3
160537	103	1	160682	87	5	161288	56	5
160537	104	1	160696	83	10	161297	70	7
160537	105	1	160697	118	6	161308	56	4
160560	60	18	160699	93	7	161309	86	3
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160567	55	5	160779	106	5	161357	87	23
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161376	99	12	161422	85	2	161436	148	11
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161400	89	6	161426	39	13	161443	57	17
161401	91	6	161426	40	13	161443	58	11
161405	83	16	161426	41	13	161443	59	11
161408	77	7	161426	58	9	161443	60	11
161408	79	7	161426	59	9	161443	66	21
161411	77	15	161426	62	3	161443	68	4
161411	79	14	161426	63	3	161443	87	15
161411	80	10	161426	64	3	161443	93	9
161411	81	10	161426	65	3	161443	113	4
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161463	67	4	161610	124	19	161640	13	7
161463	74	4	161610	125	19	161640	36	20
161468	119	2	161610	126	19	161640	37	12
161469	119	1	161613	50	20	161640	39	26
161471	67	8	161613	50	25	161640	40	26
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161479	72	10	161615	68	12	161640	48	5
161479	73	9	161615	124	27	161640	49	5
161490	58	14	161615	128	6	161640	52	12
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161540	83	4	161616	124	20	161640	96	13
161541	118	5	161616	125	20	161640	106	21
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161545	87	10	161623	103	3	161642	77	25
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161556	132	29	161623	115	9	161642	144	5
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161653	125	24	161668	139	9	161674	101	7
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161659	39	12	161669	39	16	161675	63	5
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161659	139	47	161669	49	4	161675	74	6
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161660	44	4	161669	52	11	161675	113	6
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161660	64	6	161669	66	18	161678	45	5
161660	65	6	161669	74	11	161678	50	21
161660	68	8	161669	96	12	161678	109	16
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161663	58	25	161669	126	8	161685	81	4
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161756	89	12	162022	51	15	162426	95	4
161757	89	11	162022	114	27	162447	54	1
161764	66	15	162025	11	21	162447	72	3
161794	51	20	162027	66	16	162447	73	1
161795	51	21	162035	70	13	162447	78	1
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161853	149	2	162055	115	16	162495	59	17
161856	50	17	162060	77	12	162504	42	3
161856	51	23	162060	93	6	162504	43	3
161868	142	39	162062	58	26	162504	50	22
161868	144	39	162062	59	26	162504	51	24
161868	146	39	162062	86	7	162607	141	1
161903	74	16	162062	87	20	162608	43	11
161915	114	23	162063	87	18	162608	49	10
161921	134	5	162064	148	3	162611	39	4
161923	134	8	162064	149	3	162611	40	4
161965	4	1	162069	132	28	162611	41	4
161966	4	2	162069	132	32	162737	136	16
161967	4	3	162070	132	8	162737	141	3
161969	4	4	162072	74	22	162797	134	2
161970	4	5	162072	127	10	162797	135	22
161981	4	6	162077	43	1	162812	138	33
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161986	4	9	162122	106	11	162836	99	15
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161992	8	2	162389	70	12	162839	97	3
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162925	134	30	163634	128	30	163670	68	10
162925	135	15	163634	132	35	163670	74	15
162925	136	11	163634	142	8	163670	77	20
162957	70	4	163634	144	8	163670	80	12
162970	56	1	163634	146	8	163670	81	12
163116	87	2	163641	106	20	163670	89	8
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163213	141	2	163642	12	14	163670	100	13
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164677	134	3	164928	49	9	165072	41	7
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164679	134	15	164945	57	4	165073	41	8
164680	134	16	164945	60	6	165108	58	3
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164683	97	8	164964	40	5	165110	39	9
164686	134	45	164964	41	5	165110	40	9
164688	140	25	164980	142	21	165110	41	9
164689	129	3	164980	144	21	165111	9	6
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164689	136	5	164981	142	23	165111	59	12
164689	140	21	164981	144	23	165113	58	20
164690	139	44	164981	146	23	165113	59	20
164696	142	38	164982	142	22	165114	96	15
164696	144	38	164982	144	22	165146	114	22
164696	146	38	164982	146	22	165159	138	21
164708	98	15	165037	63	2	165159	139	21
164708	99	19	165037	64	2	165168	138	4
164709	98	13	165037	65	8	165168	139	4
164709	99	18	165038	64	9	165195	136	6
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164710	145	52	165039	63	11	165200	150	15
164719	9	9	165039	64	10	165204	97	4
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164854	4	22	165044	112	1	165208	150	11
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165454	77	3	165970	46	12	177672	95	6
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165520	66	5	170179	4	26	177804	81	20
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165827	113	1	177647	100	18	177976	98	2
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178349	23	16	178430	59	1	178475	132	18
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178357	25	11	178432	126	10	178484	114	18
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1423416G	135	14	1424427G	137	18	1428449G	89	15
1423416G	136	10	1424431G	140	7	1428450G	58	2
1423419G	138	30	1424432G	140	8	1428450G	59	2
1423419G	139	30	1424433G	140	11	1428451G	74	27
1423423G	135	12	1424434G	140	13	1429015G	36	27
1423424G	135	5	1424441G	112	3	1429015G	37	8
1423433G	134	12	1424446G	140	15	1429017G	130	6

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1429019G	130	12	1528414G	61	5	210-32084	22	10
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1429020G	130	9	1528416G	61	7	2221001G	106	24
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1429026G	40	27	1528423G	61	14	2228013G	93	1
1429026G	41	19	1528425G	58	23	2228013G	106	4
1429104G	118	15	1528425G	59	23	2228014G	93	4
1429106G	118	16	1528440G	61	15	2228406G	75	7
1429107G	130	1	1529401G	46	7	2229004G	128	15
1429107G	131	1	1529424G	89	7	2529457G	127	15
1429108G	130	3	1529425G	87	9	2529457G	128	20
1429108G	131	3	1902233G	115	2	420-34912	8	11
1429109G	130	2	1908601G	57	7	420-34913	8	12
1429109G	131	2	1908603G	57	6	420-34914	8	13
1429414G	142	35	1908604G	57	8	425-34679	31	3
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1521009G	121	1	1925005G	51	2	425-34683	28	9
1521183G	74	8	1925103G	37	6	425-34683	29	5
1522042G	117	2	1925104G	37	1	425-34693	25	18
1522050G	117	1	1925105G	37	5	425-34694	24	5
1528015G	87	3	1927022G	132	26	425-34694	25	16
1528017G	87	7	1927023G	132	22	425-34707	11	6
1528059G	89	3	1927029G	132	21	425-34721	16	14
1528402G	49	2	1927401G	80	2	425-34723	16	13
1528403G	49	1	1927403G	81	2	425-34725	16	12
1528404G	46	5	1928401G	46	1	425-34726	17	9
1528405G	46	4	1928402G	46	6	425-34727	28	14
1528406G	46	2	1929003G	80	9	425-34729	20	6
1528407G	46	3	1929003G	81	9	425-34729	28	15
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425-34740	15	50	425-34853	50	7	425-35179	19	31
425-34740	18	10	425-34853	51	19	425-35180	19	32
425-34740	19	4	425-34854	29	17	425-35181	19	25
425-34744	27	9	425-34902	22	9	425-35182	19	27
425-34745	14	56	425-34905	31	6	425-35184	15	12
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425-34746	27	12	425-34998	18	14	425-35191	15	19
425-34746	28	17	425-34998	18	29	425-35192	15	21
425-34746	29	13	425-35149	16	11	425-35194	15	22
425-34747	15	42	425-35149	17	10	425-35195	14	4
425-34747	20	5	425-35150	17	11	425-35195	15	23
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425-34751	19	6	425-35157	19	13	425-35202	14	30
425-34753	11	12	425-35158	19	14	425-35202	15	30
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425-34775	15	53	425-35165	19	11	425-35206	38	6
425-34776	15	54	425-35166	18	13	425-35207	9	10
425-34779	15	13	425-35166	18	27	425-35207	11	10
425-34781	19	24	425-35166	19	9	425-35207	15	48
425-34783	14	24	425-35166	19	10	425-35210	15	45
425-34783	15	24	425-35166	19	35	425-35212	15	1
425-34791	14	34	425-35168	19	21	425-35213	38	1
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425-35220	23	3	425-35303	31	5	425-36145	21	1
425-35222	23	8	425-35306	31	7	425-36147	11	20
425-35222	24	3	425-35308	31	26	425-36148	109	11
425-35222	25	3	425-35309	31	27	425-36149	109	10
425-35225	23	15	425-35310	31	28	425-36150	51	1
425-35228	23	11	425-35312	31	13	425-36152	29	24
425-35231	23	12	425-35313	31	16	425-36152	50	15
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425-35237	25	6	425-35315	30	6	425-36153	34	1
425-35238	24	17	425-35315	31	10	425-36154	9	7
425-35238	25	8	425-35317	11	19	425-36154	34	2
425-35239	24	18	425-35318	11	18	425-36155	34	3
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425-35247	25	5	425-35376	11	23	425-36187	22	8
425-35248	25	15	425-35419	15	55	425-36233	50	16
425-35249	25	14	425-35420	15	56	425-36235	29	20
425-35250	25	13	425-35452	30	11	425-36239	17	5
425-35251	25	14	425-35452	31	24	425-36249	38	3
425-35253	27	15	425-35495	20	3	425-36251	37	4
425-35254	27	16	425-35657	28	18	425-36251	38	7
425-35257	27	11	425-35661	18	22	8001851G	71	1
425-35261	27	8	425-35661	19	5	8001863G	72	2
425-35263	26	11	425-35925	11	8	8001863G	73	7
425-35263	27	5	425-35949	20	2	8002307G	72	9
425-35264	11	13	425-35959	30	9	8002307G	73	8
425-35264	29	1	425-35973	42	7	8002308G	72	8
425-35265	11	14	425-35973	43	8	8002309G	72	7
425-35265	29	7	425-36085	11	7	8002310G	71	2
425-35267	29	16	425-36085	26	3	8002311G	71	3
425-35269	11	15	425-36091	9	4	8002312G	72	5
425-35269	29	10	425-36091	42	8	8002312G	73	5
425-35273	29	25	425-36091	43	9	8002315G	88	1
425-35275	32	2	425-36121	21	3	8002315G	90	3
425-35280	32	3	425-36141	11	3	8002315G	92	4
425-35282	32	7	425-36141	29	15	8002323G	86	5
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8004164G	56	10	9705501G	4	32	9901732G	125	4
8004355G	86	1	9705501G	69	6	9901732G	126	4
8004355G	95	1	9705502G	4	34	9902111G	118	17
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8004364G	56	9	9709266G	51	26	9909013G	58	4
8004365G	56	11	9710041G	56	12	9909013G	59	4
8004368G	70	8	9901115G	124	23	9909039G	119	4
8004369G	56	2	9901115G	125	23	9910286G	57	2
8004371G	54	7	9901115G	126	23	9910346G	52	2
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8004374G	54	5	9901152G	139	11	9910598G	119	7
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8005091G	82	3	9901346G	122	4	9911064G	58	21
8005091G	95	8	9901346G	123	4	9911064G	59	21
8005278G	95	8	9901348G	96	11	9914015G	132	24
8005284G	70	5	9901392G	134	37	9914140G	36	10
8006005G	53	1	9901427G	106	9	9914140G	37	13
8006247G	70	6	9901617G	80	13			
8009010G	72	1	9901617G	81	13			
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## NOTES

# 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.

Hydraulic fittings with various seals (light application). All torque values are in lb.-ft. (Nm) unless marked otherwise.					
Thread	Straight pipe fitting with thread and screwed plug (GE)			Non-return valve with elastic seal	Identification aid outside Ø
	Sealing washer	Elastic seal	O-ring		
M10X1.0	7 (9)	13 (18)	11 (15)	13 (18)	0.4 in. (10 mm)
M12X1.5	15 (20)	18 (25)	18 (25)	18 (25)	0.5 in. (12 mm)
M14X1.5	26 (35)	33 (45)	26 (35)	26 (35)	0.6 in. (14 mm)
M16X1.5	33 (45)	41 (55)	30 (40)	37 (50)	0.6 in. (16 mm)
M18X1.5	41 (55)	52 (70)	33 (45)	52 (70)	0.7 in. (18 mm)
M22X1.5	48 (65)	92 (125)	44 (60)	92 (125)	0.9 in. (22 mm)
M27X2.0	66 (90)	133 (180)	74 (100)	107 (145)	1.0 in. (27 mm)
M33X2.0	111 (150)	229 (310)	118 (160)	155 (210)	1.3 in. (33 mm)
M42X2.0	177 (240)	332 (450)	155 (210)	266 (360)	1.7 in. (42 mm)
M48X2.0	214 (290)	398 (540)	192 (260)	398 (540)	1.9 in. (48 mm)
G1/8A	7 (9)	13 (18)	11 (15)	13 (18)	0.4 in. (9.73 mm)
G1/4A	26 (35)	26 (35)	22 (30)	26 (35)	0.5 in. (13.16 mm)
G3/8A	33 (45)	52 (70)	33 (45)	37 (50)	0.7 in. (16.66 mm)
G1/2A	48 (65)	66 (90)	41 (55)	48 (65)	0.8 in. (20.96 mm)
G3/4A	66 (90)	133 (180)	74 (100)	103 (140)	1.0 in. (26.44 mm)
G1A	111 (150)	229 (310)	118 (160)	140 (190)	1.3 in. (33.25 mm)
G1 1/4A	177 (240)	332 (450)	155 (210)	266 (360)	1.7 in. (41.91 mm)
G1 1/2A	214 (290)	398 (540)	192 (260)	398 (540)	1.9 in. (47.80 mm)

**Hydraulic fittings with various seals (heavy application). All torque values are in lb.-ft. (Nm) unless marked otherwise.**

Thread	Straight pipe fitting with thread and screwed plug (GE)			Non-return valve with elastic seal	Identification aid outside Ø
	Sealing washer	Elastic seal	O-ring		
M12X1.5	15 (20)	26 (35)	26 (35)	26 (35)	0.5 in. (12 mm)
M14X1.5	26 (35)	41 (55)	33 (45)	33 (45)	0.6 in. (14 mm)
M16X1.5	33 (45)	52 (70)	41 (55)	41 (55)	0.6 in. (16 mm)
M18X1.5	41 (55)	66 (90)	52 (70)	52 (70)	0.7 in. (18 mm)
M20X1.5	41 (55)	92 (125)	59 (80)	74 (100)	0.8 in. (20 mm)
M22X1.5	48 (65)	100 (135)	74 (100)	92 (125)	0.9 in. (22 mm)
M27X2.0	66 (90)	133 (180)	125 (170)	100 (135)	1.0 in. (27 mm)
M33X2.0	111 (150)	229 (310)	229 (310)	155 (210)	1.3 in. (33 mm)
M42X2.0	177 (240)	332 (450)	243 (330)	266 (360)	1.7 in. (42 mm)
M48X2.0	214 (290)	398 (540)	310 (420)	398 (540)	1.9 in. (48 mm)
G1/8A	26 (35)	41 (55)	33 (45)	33 (45)	0.5 in. (13.16 mm)
G1/4A	33 (45)	59 (80)	44 (60)	44 (60)	0.7 in. (16.66 mm)
G3/8A	48 (65)	85 (115)	55 (75)	74 (100)	0.8 in. (20.96 mm)
G1/2A	66 (90)	133 (180)	125 (170)	107 (145)	1.0 in. (26.44 mm)
G3/4A	111 (150)	229 (310)	229 (310)	192 (260)	1.3 in. (33.25 mm)
G1A	177 (240)	332 (450)	243 (330)	266 (360)	1.7 in. (41.91 mm)
G1 1/4A	214 (290)	398 (540)	310 (420)	398 (540)	1.9 in. (47.80 mm)

**With coarse-pitch thread. All torque values are in lb.-ft. (Nm) unless marked otherwise.**

Thread	Threads according to DIN 912, DIN 931, DIN 933, etc.			Threads according to DIN 7984	
	8.8	10.9	12.9	8.8	10.9
M5	4.1 (5.5)	6 (8)	7 (10)	4 (5)	5 (7)
M6	7 (10)	10 (14)	13 (17)	6.3 (8.5)	9 (12)
M8	18 (25)	26 (35)	31 (42)	15 (20)	22 (30)
M10	33 (45)	48 (65)	59 (80)	30 (40)	44 (59)
M12	64 (87)	81 (110)	108 (147)	51 (69)	74 (100)
M14	100 (135)	133 (180)	170 (230)	81 (110)	118 (160)
M16	155 (210)	203 (275)	258 (350)	125 (170)	184 (250)
M18	207 (280)	302 (410)	354 (480)	181 (245)	254 (345)
M20	302 (410)	420 (570)	509 (690)	251 (340)	361 (490)
M22	406 (550)	575 (780)	686 (930)	339 (460)	487 (660)
M24	524 (710)	738 (1000)	878 (1190)	435 (590)	620 (840)
M27	767 (1040)	1092 (1480)	1305 (1770)	642 (870)	922 (1250)
M30	1047 (1420)	1482 (2010)	1770 (2400)	885 (1200)	1254 (1700)

**With fine-pitch thread. All torque values are in lb.-ft. (Nm) unless marked otherwise.**

Thread	Threads according to DIN 912, DIN 931, DIN 933, etc.			Threads according to DIN 7984	
	8.8	10.9	12.9	8.8	10.9
M8X1.0	18 (25)	27 (37)	32 (43)	16 (22)	24 (32)
M10X1.0	37 (50)	55 (75)	65 (88)	32 (43)	48 (65)
M10X1.25	36 (49)	52 (71)	61 (83)	31 (42)	46 (62)
M12X1.25	64 (87)	96 (130)	111 (150)	55 (75)	81 (110)
M12X1.5	61 (83)	92 (125)	107 (145)	53 (72)	77 (105)
M14X1.5	100 (135)	148 (200)	173 (235)	89 (120)	129 (175)
M16X1.5	155 (210)	229 (310)	266 (360)	133 (180)	195 (265)
M18X1.5	232 (315)	332 (450)	391 (530)	199 (270)	284 (385)
M20X1.5	325 (440)	465 (630)	538 (730)	277 (375)	391 (530)
M22X1.5	435 (590)	620 (840)	723 (980)	369 (500)	524 (710)
M24X2.0	546 (740)	789 (1070)	922 (1250)	465 (630)	664 (900)
M27X2.0	811 (1100)	1143 (1550)	1328 (1800)	679 (920)	959 (1300)
M30X2.0	1106 (1500)	1586 (2150)	1844 (2500)	959 (1300)	1364 (1850)





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