

PARTS LIST

VMX13ER

MULTIPLE USE CUTTER/CRUSHER



SUPPLY PERIOD OF SPARE PARTS

Thank you for purchasing a Furukawa Rock Drill product.

Please note that the supply of spare parts will be assured for 10 years after the termination of production. Although the supply of spare parts is terminated in principle at the maturity of the subject supply period, we may be able to supply them upon request even after the expiration of the supply period on condition that the delivery date and price are subject to negotiation.

Even if it is within the supply period, however, the delivery date, price, etc. may be subject to negotiation when it is difficult to keep stocks should the purchased parts, such as electronic parts, etc., be not available because the manufacturer does not produce them anymore.

If you have any questions about any particular model subject to the warranty as stated above and the time limit of spare parts supply, please contact your nearest FRD Europe B.V. distributor.

USING THE PARTS LIST

1. This parts list describes the components of a multiple use cutter/crusher.
2. When ordering a part, refer to the illustrations and lists in this parts list and then inform the FRD Europe B.V. distributor in your area of the following items.
 - (1) Model name
 - (2) Serial No.
 - (3) Part No.
 - (4) Part name
 - (5) Quantity
3. Use "Genuine Furukawa Rock Drill Parts" when replacing all parts.
4. The illustrations in this parts list show the positions and shapes of the parts so that a user can order a part without any problem.

Do not repair a cutter/crusher by using this parts list.
5. The parts in this list are subject to change for improvement without notice on the part of the manufacturer.

How to use the parts list

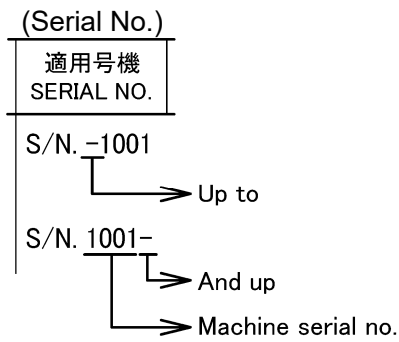
(1) Illustration

- ① Group Name It is the same as the Group Name on the CONTENTS.
- ② Fig. No. It shows the illustration number and corresponds to Fig. No. of the parts breakdown.
- ③ Item It corresponds to Item on the parts breakdown.
- ④ Group Name It shows the group name in which the parts breakdown is covered on a separate page in this parts list.
- ⑤ Page The left side of “–” (hyphen) shows consecutive numbers in each unit. The right side shows consecutive numbers of drawings/lists in each unit.

(2) Parts Breakdown

- ① Item It is shown by two figures and corresponds to the Item in the illustration. Item nos. are not always in sequence.
When a part has been changed in design and then the part number or quantity has been changed, a sub-number is added to Item in order to show the order of change.
- ② Part No. (a) Part number is shown.
(b) Indication of a no-service part
With parts which cannot be serviced as a single part, only the illustrations and part names are given and the mark ** is shown in the part number column. These parts are serviced as an assembly, a kit or a set.
- ③ Part Name It shows the description of a part. When the following marks are put before the part name.
No mark Represents a single part or an assembly component.
* Represents a part or an assembled part of the assembly component. It is listed out after the assembly name.
** Represents a part of the assembled part of the assembly component.
- ④ Q' ty As a rule, this column indicates the quantity of a part required for one crusher. In case of a part of an assembly component, however, it indicates the quantity of the part required for one assembly component. In this column, the following mark is also used besides the Arabic numerals to indicate the quantity of parts.
() Parenthesis This part is not included in an assembly. ••• Option etc.
AR As required.

⑤ Serial No. Serial No. in which this part is used is as shown in the following example:



⑥ Remarks The marks and part numbers in the Remarks column are described below.

A..... Replaceable common part and following part no.

B..... Represents that this part is not supplied as a single part; however, it is supplied as a set.

C Represents that this part is not supplied as a single part.

When an assembly including this part is supplied, the parts after this mark are supplied. When no parts are given after this mark, the components of this part are supplied.

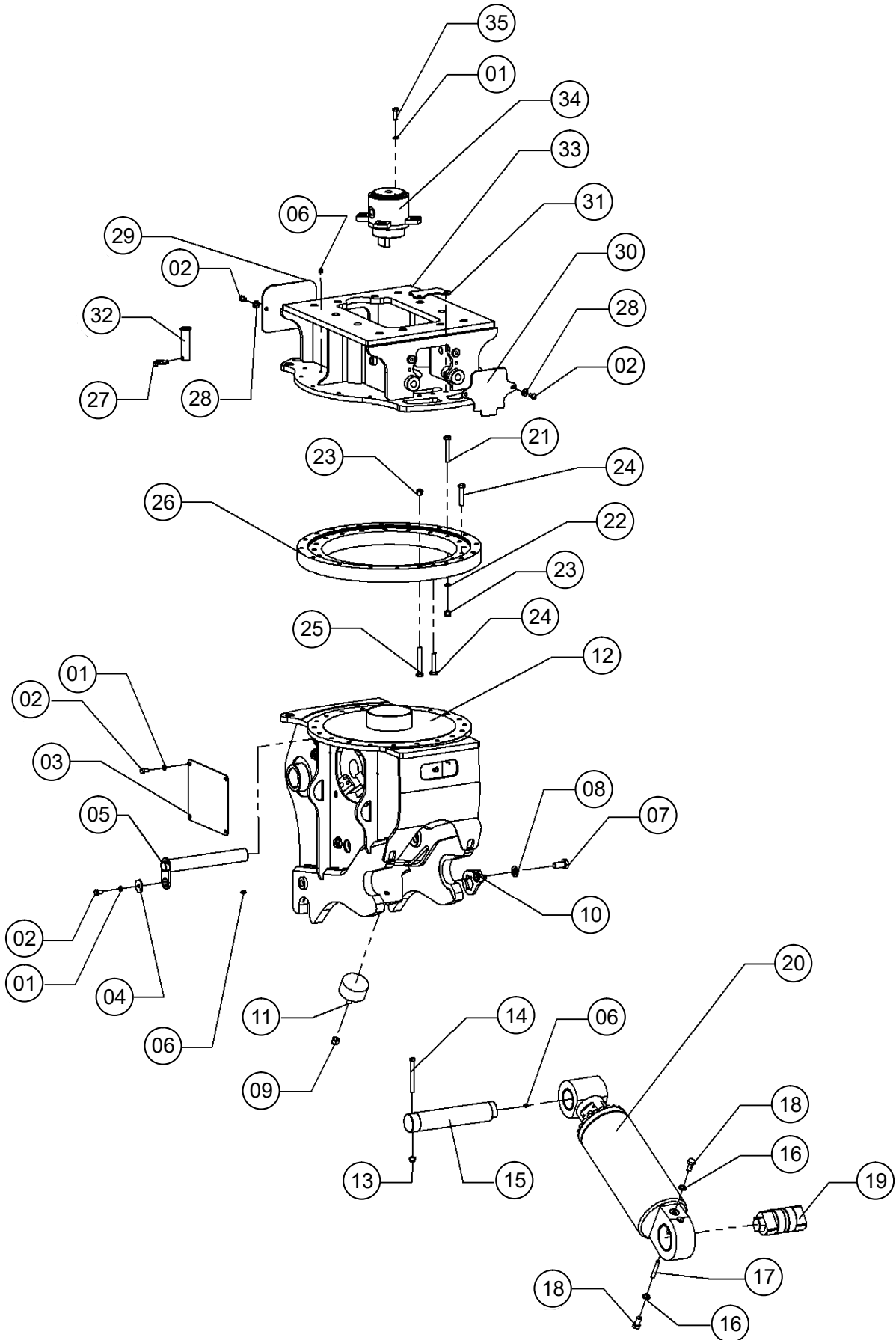
D This part is no longer manufactured due to an incorrect part number or a change and supplying this part is discontinued. When a substitute can be supplied, the part after this mark is supplied.

⑦ Page..... The left side of “-” (hyphen) shows consecutive numbers in each unit. The right side shows consecutive numbers of drawings/lists in each unit.

CONTENTS

GROUP NAME	PAGE
CRUSHER FRAME ASSEMBLY	01-01
HYDRAULIC CYLINDER.....	02-01
ROTATION MOTOR ASSEMBLY.....	03-01
CYLINDER HYDRAULIC SYSTEM.....	04-01
ROTATION HYDRAULIC SYSTEM.....	05-01
ROTATION ASSEMBLY LUBRICATION LINE	06-01
PRIMARY (P) JAW ASSEMBLY	07-01
PULVERIZER (S) JAW ASSEMBLY	08-01
COMBI CUTTER/CRUSHER (M) JAW ASSEMBLY.....	09-01
STEEL CUTTER (C) JAW ASSEMBLY	10-01

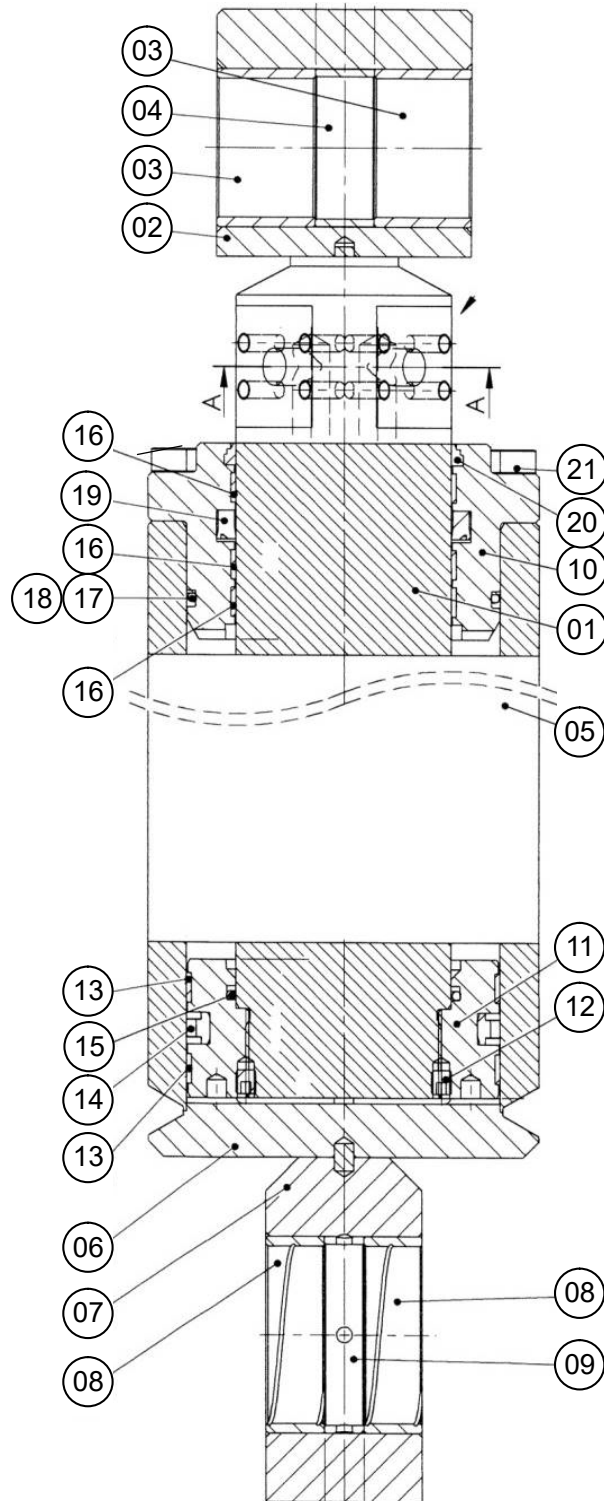
CRUSHER FRAME ASSEMBLY



CRUSHER FRAME ASSEMBLY

ITEM	PART NO.	PART NAME	Q'TY	REMARKS
01	VM19ER-08508	DISC WASHER	13	M12
02	101022-12020	HEXAGON BOLT	13	M12 X 20 8.8
03	VXB6ER-02502	COVER	2	
04	VMX25ER-02501	FLAT WASHER	1	
05	VMX17ER-02502	SAFETY PIN	1	
06	VS30E-02508	GREASE NIPPLE	6	
07	VR15ER-02503	HEXAGON BOLT	1	
08	HB3R-81114E	DISC WASHER	1	M24
09	VS30E-02506	SELF LOCKING NUT	1	
10	VMX10ER-02507	WRENCH	1	
11	VMX25ER-02509	BUFFER	1	
12	VMX13ER-02501	FRAME ASSEMBLY	1	
13	V4-02516	SELF LOCKING NUT	1	
14	VR26ER-02618	HEXAGON BOLT	1	
15	VMX13ER-02502	CYLINDER ROD PIN	1	
16	VX26ER-02516	DISC WASHER	2	M14
17	VMX13ER-02503	SPRING PIN	1	
18	VXS25ER-02509	HEXAGON BOLT	2	
19	VMX13ER-02504	CYLINDER PIN	1	
20	VMX13ER-91001	HYDRAULIC CYLINDER	1	SEE PAGE 02-01
21	VR15ER-02513	HEXAGON BOLT	12	
22	VX100ER-03509	DISC WASHER	12	
23	VR15ER-02514	SELF LOCKING NUT	14	
24	VR15ER-02512	HEXAGON BOLT	26	
25	VMX17ER-02508	HEXAGON BOLT	2	
26	VR15ER-93001	SWIVEL BEARING	1	
27	VR26ER2-02506	COTTER PIN	1	
28	NORDLOCK 12	DISC WASHER	4	M12
29	VMX17ER-02504	COVER	1	
30	VMX17ER-02505	COVER	1	
31	VMX17ER-02506	COVER	1	
32	VMX17ER-02503	SAFETY PIN	1	
33	VXS20ER-02509	FLAT TOP BRACKET	1	
34	VR7ER-94001	HYDRAULIC SWIVEL JOINT ASSEMBLY	1	
35	101032-12035	HEXAGON BOLT	4	M12 X 35 10.9
**	VMX13ER-91011	CYLINDER SEAL KIT	**	
**	VR7ER-94011	HYDRAULIC SWIVEL JOINT SEAL KIT	**	

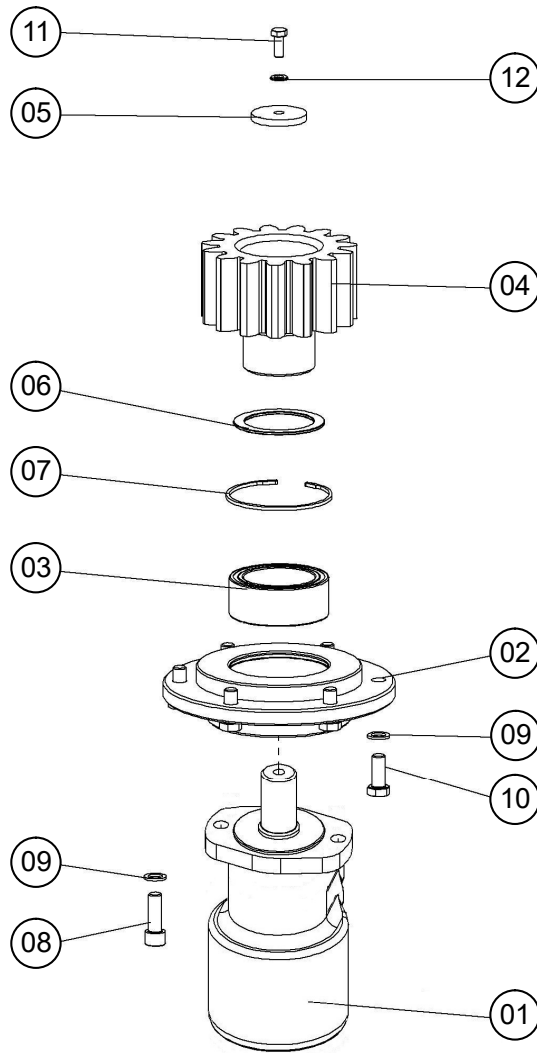
HYDRAULIC CYLINDER



HYDRAULIC CYLINDER

ITEM	PART NO.	PART NAME	Q'TY	REMARKS
	VMX13ER-91001	HYDRAULIC CYLINDER ASSEMBLY	1	(ITEMS 1 - 21)
01	VMX13ER-01501	* PISTON ROD	1	
02	VMX13ER-01502	** PISTON ROD CONNECTION	1	
03	VMX13ER-01503	** BUSHING	2	
04	VMX13ER-01504	** SPACER	1	
05	VMX13ER-01505	* CYLINDER TUBE	1	
06	VMX13ER-01506	** CYLINDER BASE	1	
07	VMX13ER-01507	** CYLINDER BASE CONNECTION	1	
08	VMX13ER-01508	** BUSHING	2	
09	VMX13ER-01509	** SPACER	1	
10	VMX13ER-01510	* PISTON HEAD	1	
11	VMX13ER-01511	* PISTON	1	
12	VMX13ER-01512	* SET SCREW	2	
13	VMX13ER-01513	* PISTON GUIDE RING	2	
14	VMX13ER-01514	* PISTON SEAL	1	
15	VMX13ER-01515	* PISTON SEAL	1	
16	VMX13ER-01516	* ROD GUIDE RING	3	
17	VMX13ER-01517	* PISTON HEAD SEAL	1	
18	VMX13ER-01518	* PISTON HEAD SEAL	1	
19	VMX13ER-01519	* ROD SEAL	1	
20	VMX13ER-01520	* SCRAPER RING	1	
21	VMX13ER-01521	* HEXAGON SOCKET BOLT	22	
**	VMX13ER-91011	CYLINDER SEAL KIT	1	(ITEMS 13 - 20)

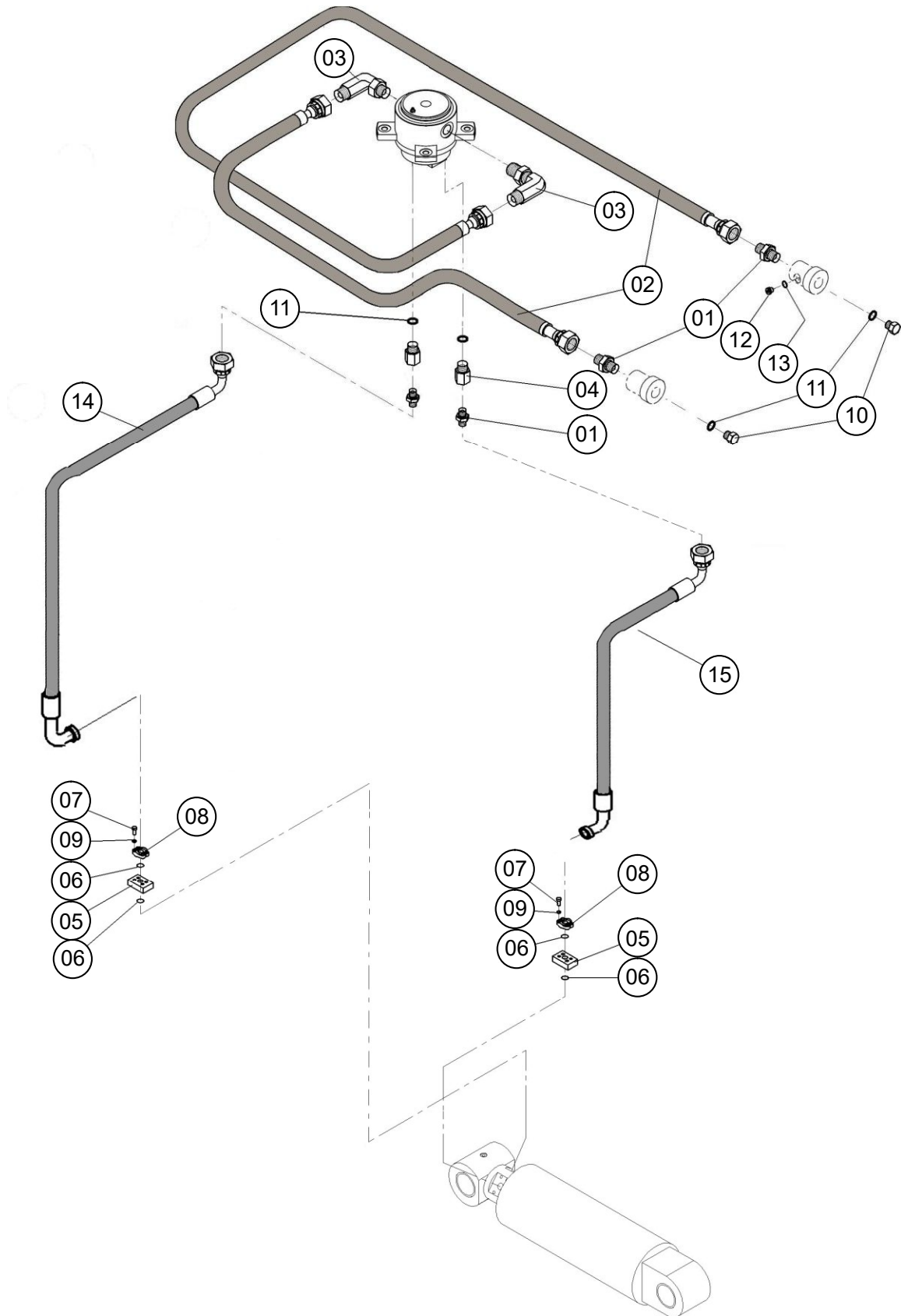
ROTATION MOTOR ASSEMBLY



ROTATION MOTOR ASSEMBLY

ITEM	PART NO.	PART NAME	Q'TY	REMARKS
**	**	ROTATION MOTOR ASSEMBLY	1	(ITEMS 1 - 12)
01	VMX17ER-08501	* ROTATION MOTOR	1	
02	VR15ER-08501	* FLANGE	1	
03	VM19ER-08502	* BEARING	1	
04	VMX17ER-08503	* GEAR	1	
05	V4-02513	* WASHER	1	
06	VM19ER-08505	* SHIM	1	
07	VM19ER-08506	* CIRCLIP	1	
08	VM19ER-08507	* HEXAGON SOCKET BOLT	2	
09	VM19ER-08508	* DISC WASHER	8	M12
10	101032-12030	* HEXAGON BOLT	6	M12 X 30 10.9
11	101032-08020	* HEXAGON BOLT	1	M8 X 20 10.9
12	VMX17ER-08502	* WASHER	1	
**	VX5ER-98011	ROTATION MOTOR SEAL KIT	1	

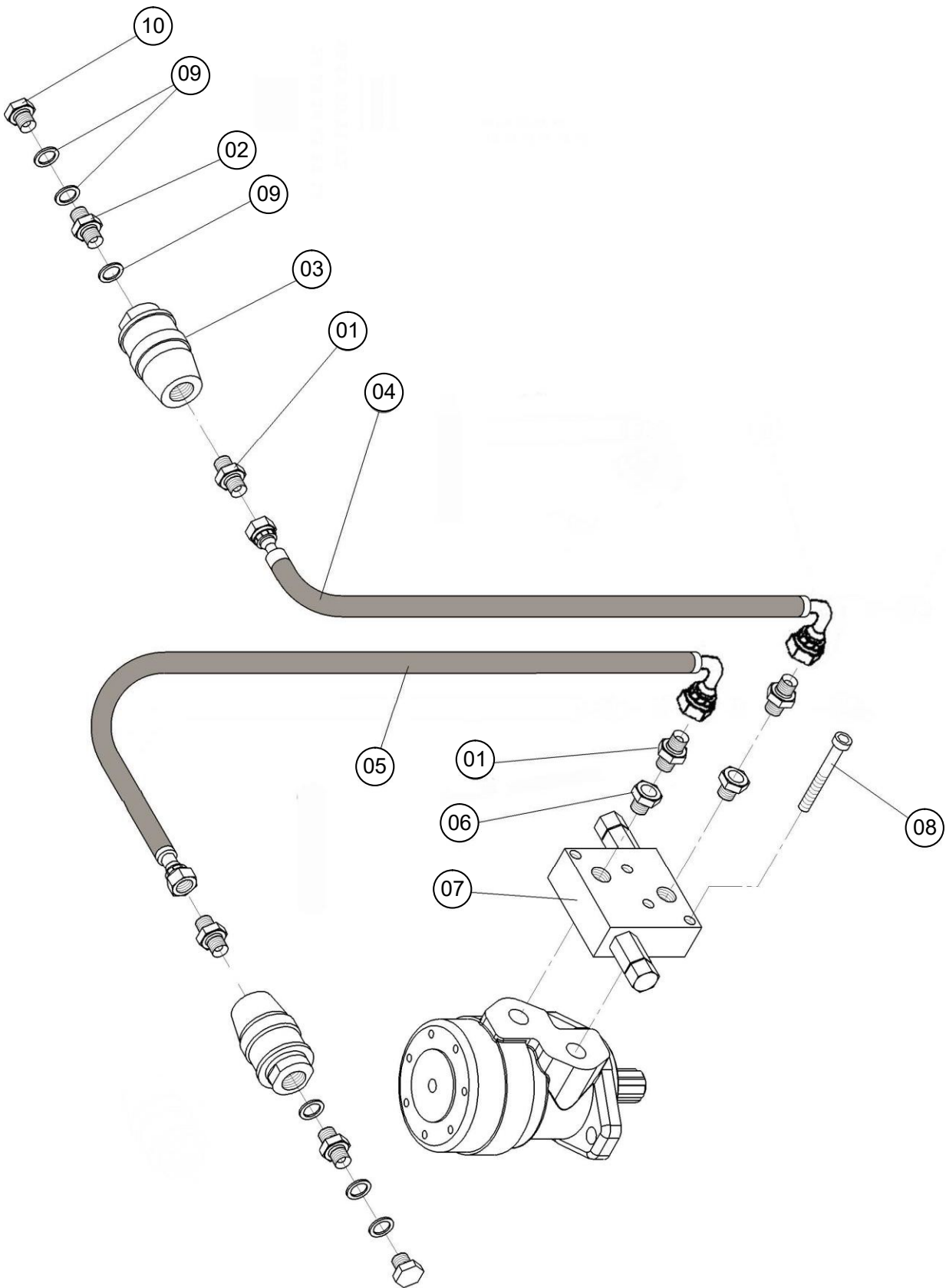
CYLINDER HYDRAULIC SYSTEM



CYLINDER HYDRAULIC SYSTEM

ITEM	PART NO.	PART NAME	Q'TY	REMARKS
01	V6-03501	CONNECTOR	4	
02	VMX17ER-03501	HOSE ASSEMBLY	2	
03	VR7ER-03503	90° ELBOW FITTING	2	
04	V6-03505	EXTENSION FITTING	2	
05	VM13ER-03501	VALVE BLOCK	2	
06	VM32ER-03508	O-RING	4	
07	VM13ER-03502	HEXAGON BOLT	8	
08	VM19ER-03505	SPLIT FLANGE	2	
09	VMX25ER-03502	DISC WASHER	8	
10	VR15ER-03506	PLUG	2	
11	VR7ER-03505	SEAL	4	
12	VMX17ER-03502	PLUG	2	
13	VM32ER-03515	SEAL	2	
14	VMX13ER-03501	HOSE ASSEMBLY	1	
15	VMX13ER-03502	HOSE ASSEMBLY	1	

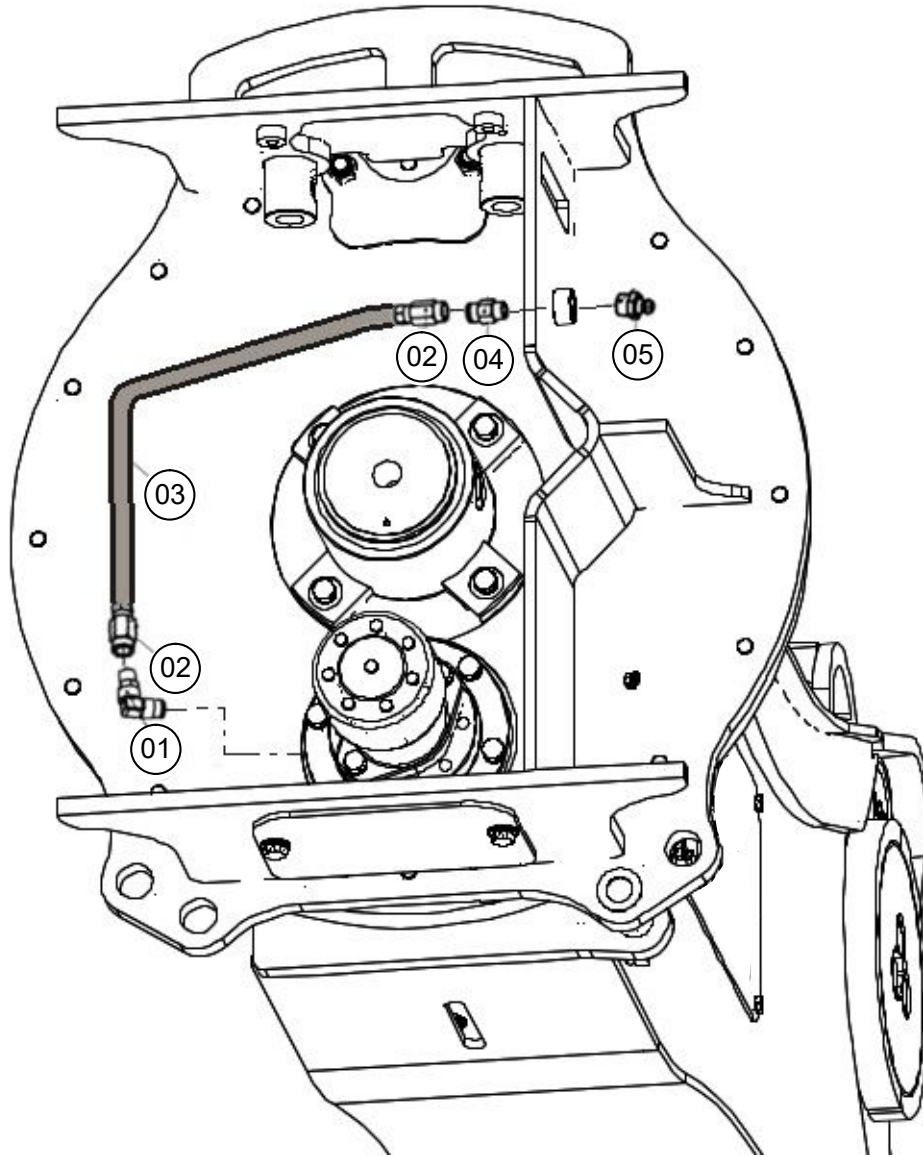
ROTATION HYDRAULIC SYSTEM



ROTATION HYDRAULIC SYSTEM

ITEM	PART NO.	PART NAME	Q'TY	REMARKS
01	V4-03503	CONNECTOR	4	
02	VM32ER-03535	CONNECTOR	2	
03	V4-03502	VALVE	2	
04	VMX13ER-03503	HOSE ASSEMBLY	1	
05	VMX17ER-03504	HOSE ASSEMBLY	1	
06	V4-03507	REDUCER	2	
07	V4-03501	VALVE ASSEMBLY	1	
08	V4-03508	HEXAGON SOCKET BOLT	4	
09	VM19ER-03516	SEAL	6	
10	VM19ER-03515	PLUG	2	

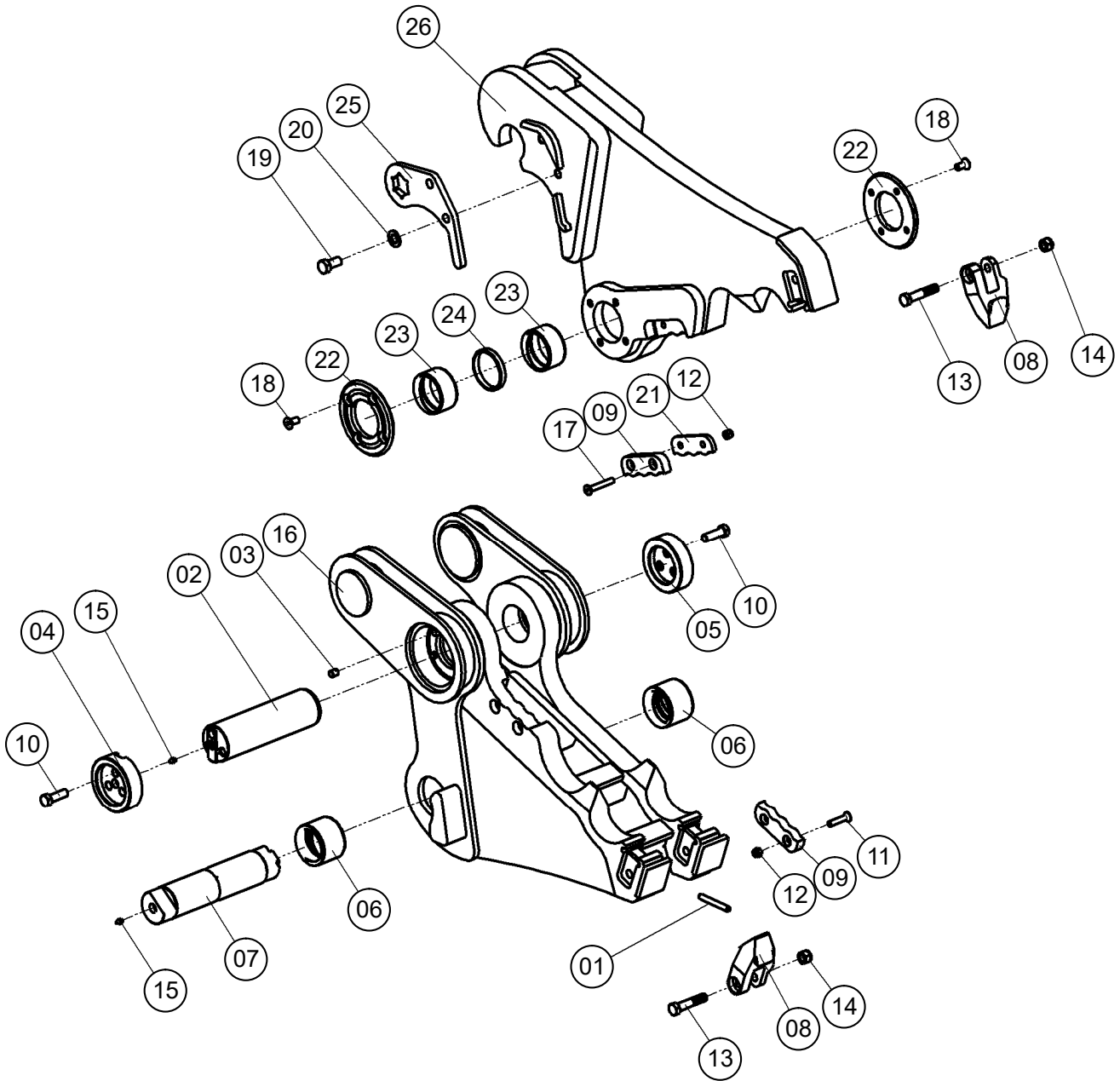
ROTATION ASSEMBLY LUBRICATION LINE



ROTATION ASSEMBLY LUBRICATION LINE

ITEM	PART NO.	PART NAME	Q'TY	REMARKS
01	VMX17ER-03551	90° ELBOW FITTING	1	
02	VMX17ER-03552	HOSE FITTING	2	
03	VMX17ER-03553	HOSE	1	
04	VMX17ER-03554	CONNECTOR	1	
05	VS30E-02508	GREASE NIPPLE	1	

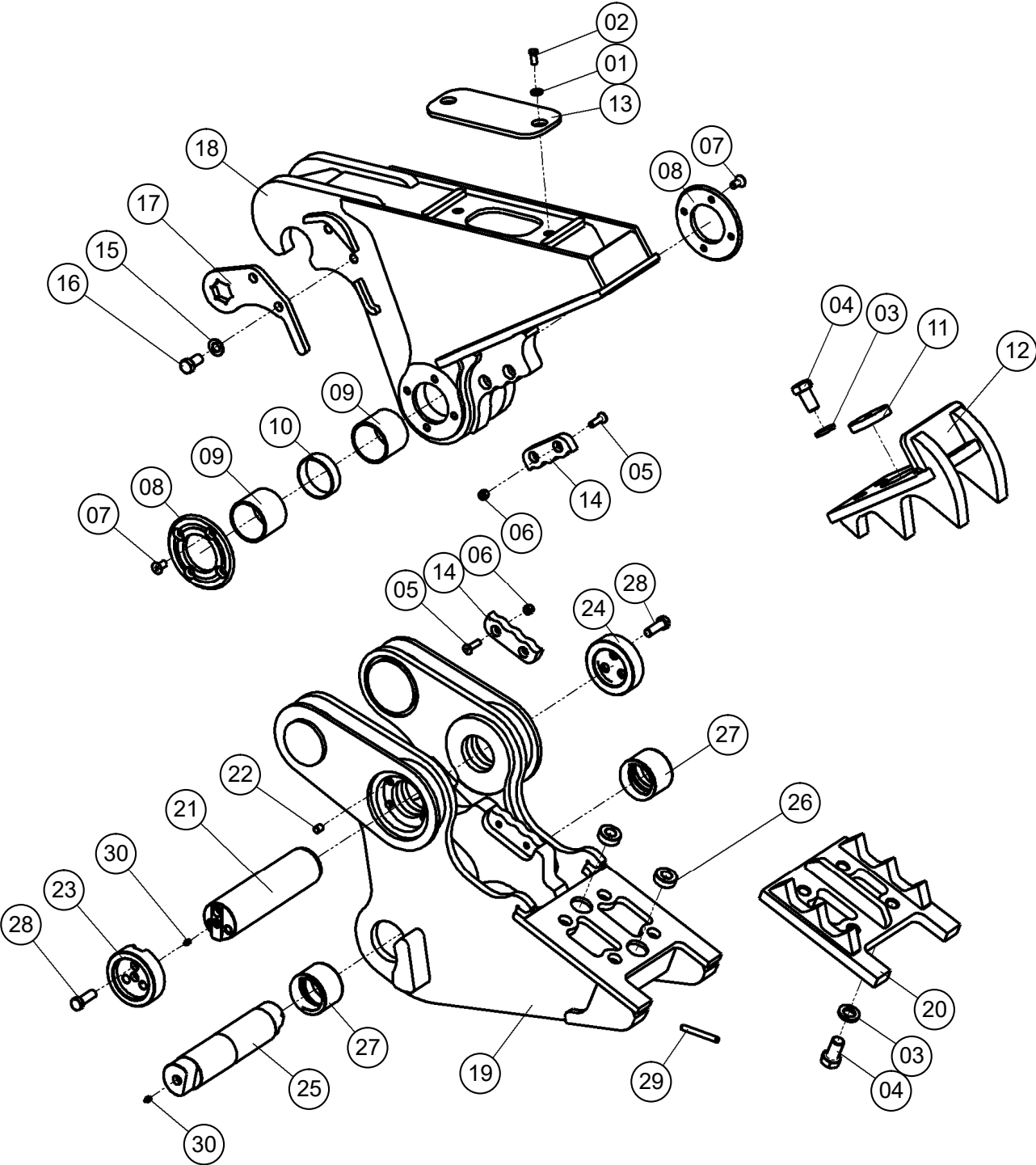
PRIMARY (P) JAW ASSEMBLY



PRIMARY (P) JAW ASSEMBLY

ITEM	PART NO.	PART NAME	Q'TY	REMARKS
01	V50P-02809	SPRING PIN	1	
02	VXS20ER-02501	JAW PIVOT PIN	1	
03	VMX25ER-02705	DOWEL PIN	4	
04	VMX13ER-02701	PIN COVER	1	
05	VMX13ER-02702	PIN COVER	1	
06	V22P-02801	BUSHING	2	
07	VMX13ER-02703	PIN	1	
08	VMX22ER-02856	TOOTH	3	
09	V22S-02804	CUTTER BLADE	2	
10	101032-18055	HEXAGON BOLT	6	M18 X 55 10.9
11	V4C-02805	COUNTERSUNK SCREW	2	
12	V4-02516	SELF-LOCKING NUT	4	
13	VMX22ER-02857	HEXAGON BOLT	3	
14	VMX22ER-02855	SELF-LOCKING NUT	3	
15	VS30E-02508	GREASE NIPPLE	2	
16	VMX13ER-02704	JAW	1	
17	V26S-02805	COUNTERSUNK SCREW	2	
18	VM16ER-02507	COUNTERSUNK SCREW	8	
19	VR15ER-02503	HEXAGON BOLT	2	
20	HB3R-81114E	DISC WASHER	2	
21	VMX13ER-02705	SHIM	1	
22	VS9E-02507	RETAINING PLATE	2	
23	VMX13ER-02706	BUSHING	2	
24	VXS20ER-02504	SPACER	1	
25	VMX10ER-02704	WRENCH	1	
26	VMX13ER-02707	JAW	1	

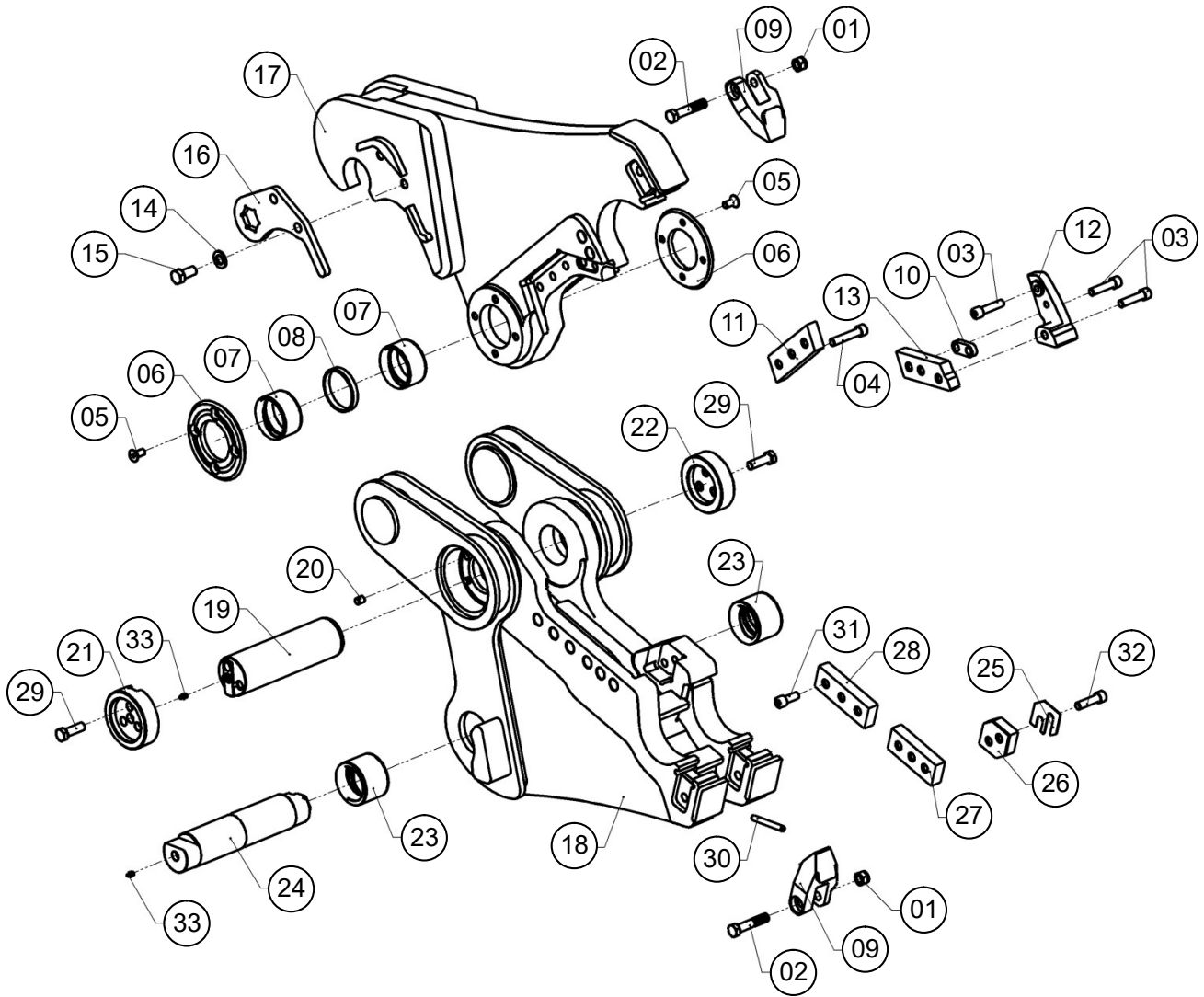
PULVERIZER (S) JAW ASSEMBLY



PULVERIZER (S) JAW ASSEMBLY

ITEM	PART NO.	PART NAME	Q'TY	REMARKS
01	NORDLOCK 12	DISC WASHER	2	M12
02	101022-12025	HEXAGON BOLT	2	M12 X 25 8.8
03	HB5G-81114E	DISC WASHER	8	
04	VS9E-02511	HEXAGON SOCKET BOLT	8	
05	VMX17ER-02805	COUNTERSUNK SCREW	4	
06	V4-02516	SELF-LOCKING NUT	4	
07	VM16ER-02507	COUNTERSUNK SCREW	8	
08	VS9E-02507	RETAINING PLATE	2	
09	VXS20ER-02503	BUSHING	2	
10	VMX13ER-02801	SPACER	1	
11	VS30E-02504	SPACER	1	
12	VMX13ER-02802	REPLACEABLE TOOTH ASSEMBLY	1	
13	VMX13ER-02803	COVER	1	
14	V22S-02804	CUTTER BLADE	2	
15	HB3R-81114E	DISC WASHER	2	
16	VR15ER-02503	HEXAGON BOLT	2	
17	VMX10ER-02704	WRENCH	1	
18	VMX13ER-02804	JAW	1	
19	VMX13ER-02805	JAW	1	
20	VMX13ER-02806	REPLACEABLE TOOTH ASSEMBLY	1	
21	VMX13ER-02807	JAW PIVOT PIN	1	
22	VMX25ER-02705	DOWEL PIN	4	
23	VMX13ER-02701	PIN COVER	1	
24	VMX13ER-02702	PIN COVER	1	
25	VMX13ER-02703	PIN	1	
26	VR26ER-02634	SPACER	2	
27	V22P-02801	BUSHING	2	
28	101032-18055	HEXAGON BOLT	6	M18 X 55 10.9
29	V50P-02809	SPRING PIN	1	
30	VS30E-02508	GREASE NIPPLE	2	

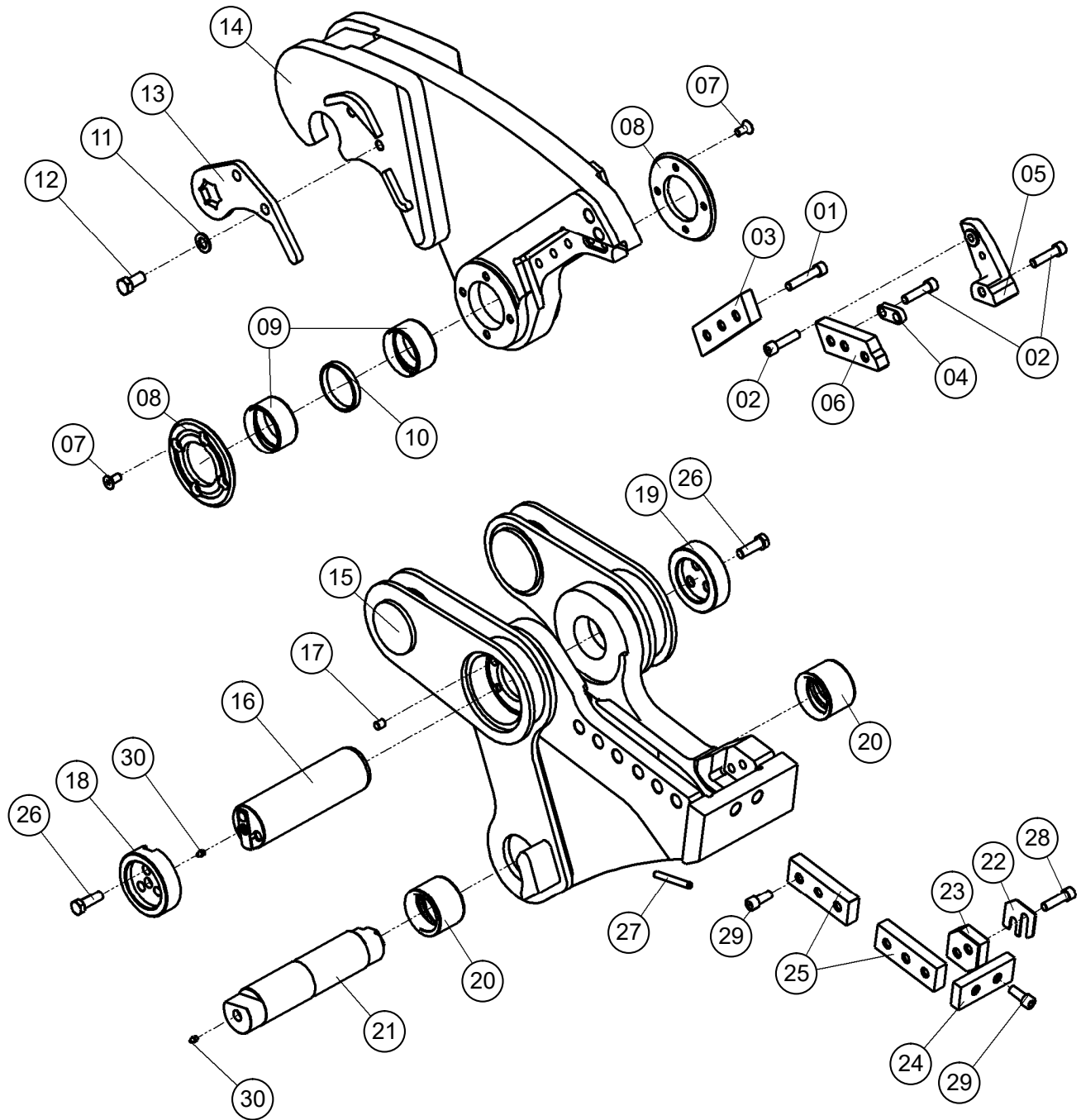
COMBI CUTTER/CRUSHER (M) JAW ASSEMBLY



COMBI CUTTER/CRUSHER (M) JAW ASSEMBLY

ITEM	PART NO.	PART NAME	Q'TY	REMARKS
01	VMX22ER-02855	SELF-LOCKING NUT	3	
02	VMX22ER-02857	HEXAGON BOLT	3	
03	VR4ER-02609	HEXAGON SOCKET BOLT	5	
04	VR7ER-02530	HEXAGON SOCKET BOLT	3	
05	VM16ER-02507	COUNTERSUNK SCREW	8	
06	VS9E-02507	RETAINING PLATE	2	
07	VMX13ER-02706	BUSHING	2	
08	VXS20ER-02504	SPACER	1	
09	VMX22ER-02856	TOOTH	3	
10	VR4ER--02617	LOCKPLATE	1	
11	VMX13ER-02851	CUTTER BLADE	1	
12	VR4ER--02607	TOOTH	1	
13	VR4ER--02608	CUTTER BLADE	1	
14	HB3R-81114E	DISC WASHER	2	
15	VR15ER-02503	HEXAGON BOLT	2	
16	VMX10ER-02704	WRENCH	1	
17	VMX13ER-02852	JAW	1	
18	VMX13ER-02853	JAW	1	
19	VXS20ER-02501	JAW PIVOT PIN	1	
20	VMX25ER-02705	DOWEL PIN	4	
21	VMX13ER-02701	PIN COVER	1	
22	VMX13ER-02702	PIN COVER	1	
23	V22P-02801	BUSHING	2	
24	VMX13ER-02703	CYLINDER PIN	1	
25	VMX10ER-02854	SHIM	1	
26	VMX10ER-02855	CUTTER BLADE	1	
27	VMX13ER-02854	CUTTER BLADE	1	
28	VMX13ER-02855	CUTTER BLADE	1	
29	101032-18055	HEXAGON BOLT	6	M18 X 55 10.9
30	V50P-02809	SPRING PIN	1	
31	VR4ER-02514	HEXAGON SOCKET BOLT	6	
32	VR26ER-02606	HEXAGON SOCKET BOLT	2	
33	VS30E-02508	GREASE NIPPLE	2	

STEEL CUTTER (C) JAW ASSEMBLY



STEEL CUTTER (C) JAW ASSEMBLY

ITEM	PART NO.	PART NAME	Q'TY	REMARKS
01	VR7ER-02530	HEXAGON SOCKET BOLT	3	
02	VR4ER-02609	HEXAGON SOCKET BOLT	5	
03	VMX13ER-02875	CUTTER BLADE	1	
04	VR4ER--02617	LOCKPLATE	1	
05	VR4ER--02607	TOOTH	1	
06	VR4ER--02608	CUTTER BLADE	1	
07	VM16ER-02507	COUNTERSUNK SCREW	8	
08	VS9E-02507	RETAINING PLATE	2	
09	VMX13ER-02706	BUSHING	2	
10	VXS20ER-02504	SPACER	1	
11	HB3R-81114E	DISC WASHER	2	
12	VR15ER-02503	HEXAGON BOLT	2	
13	VMX10ER-02704	WRENCH	1	
14	VMX13ER-02876	JAW	1	
15	VMX13ER-02877	JAW	1	
16	VXS20ER-02501	JAW PIVOT PIN	1	
17	VMX25ER-02705	DOWEL PIN	4	
18	VMX13ER-02701	PIN COVER	1	
19	VMX13ER-02702	PIN COVER	1	
20	V22P-02801	BUSHING	2	
21	VMX13ER-02703	CYLINDER PIN	1	
22	VMX10ER-02854	SHIM	1	
23	VMX10ER-02855	CUTTER BLADE	1	
24	VMX10ER-02877	CUTTER BLADE	1	
25	VMX13ER-02855	CUTTER BLADE	2	
26	101032-18055	HEXAGON BOLT	6	M18 X 55 10.9
27	V50P-02809	SPRING PIN	1	
28	VR26ER-02606	HEXAGON SOCKET BOLT	2	
29	VR4ER-02514	HEXAGON SOCKET BOLT	8	
30	VS30E-02508	GREASE NIPPLE	2	



FURUKAWA ROCK DRILL EUROPE B.V.

Proostwetering 29

3543 AB Utrecht, The Netherlands

Tel.: +31-(0)30-2475160 Fax: +31-(0)30-2412305

Book No. : VMX13ER-K101E

Date of Issue : November 2018