

VAHVA GRAPPLE

C, E and KC

26, 30, 36, 36 HD

Spare Parts Book

Version 27.6.2022 (English)

The VAHVA logo is displayed in a bold, black, sans-serif font with a white outline, set against a yellow rectangular background.

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1 General

This manual describes the spare parts used for the VAHVA grapple.

The book provides you necessary information about the structure and operation of our product to use and maintain the device properly.

For the most demanding repair and maintenance work, we recommend contacting Koneosapalvelu or your grapple dealer. Our service staff has the experience and special tools needed for more demanding jobs.

The C models in our VAHVA collection are designed to be mounted on a rotator and the KC models are quick-mounted on an excavator. If the model marking also includes an E, the grapple has spikes instead of jaws. The digit after E indicates the number of spikes.

VAHVA original spare parts are sold by Koneosapalvelu Oy.

Contact information for spare parts sales:

Koneosapalvelu Kuopio

Saaristokatu 5
tel. +358 20 755 1243

Koneosapalvelu Lappeenranta

Toikansuontie 7
tel. +358 20 755 1245

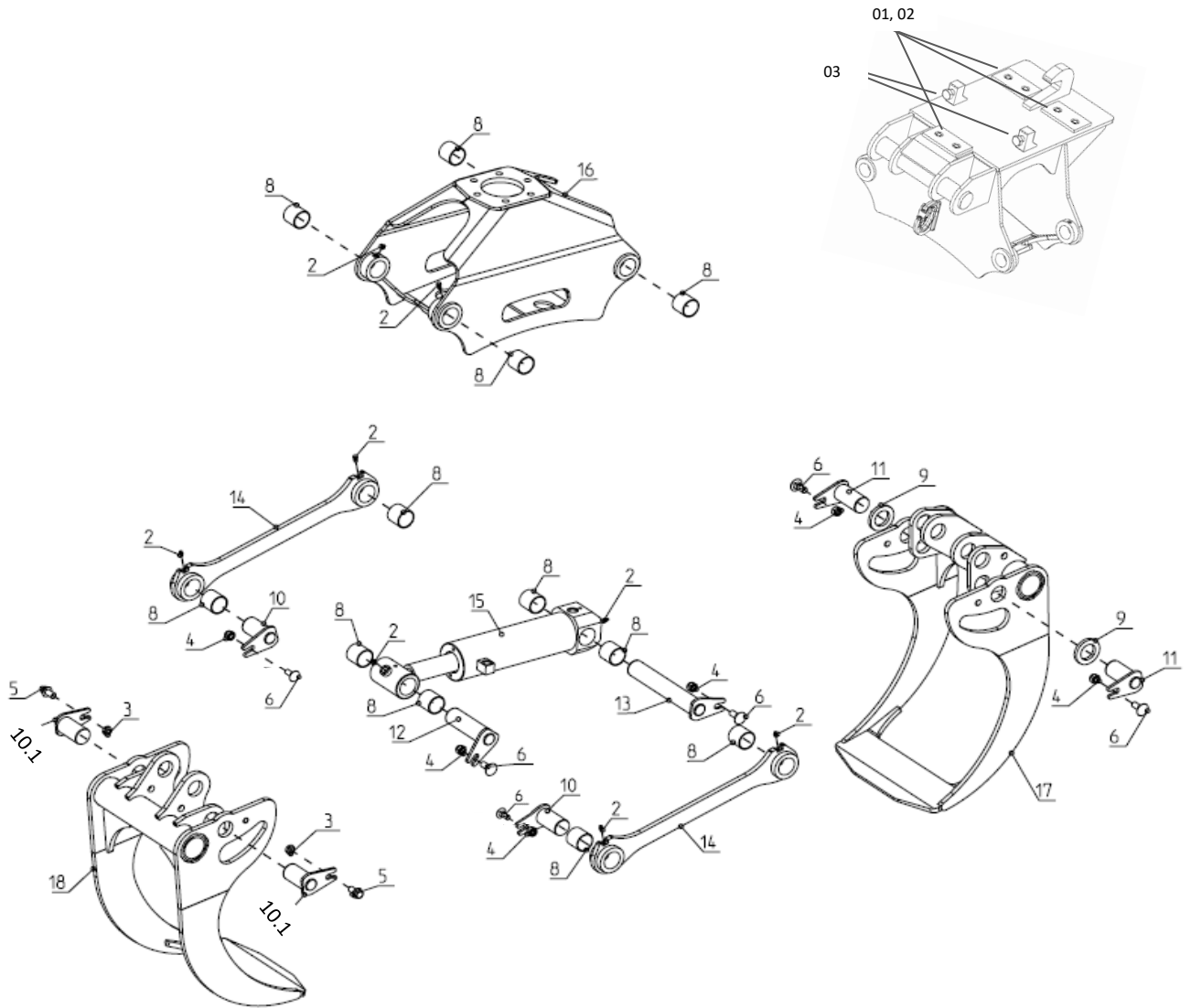
Koneosapalvelu Vilppula

Teollisuustie 5
tel. +358 20 755 1240

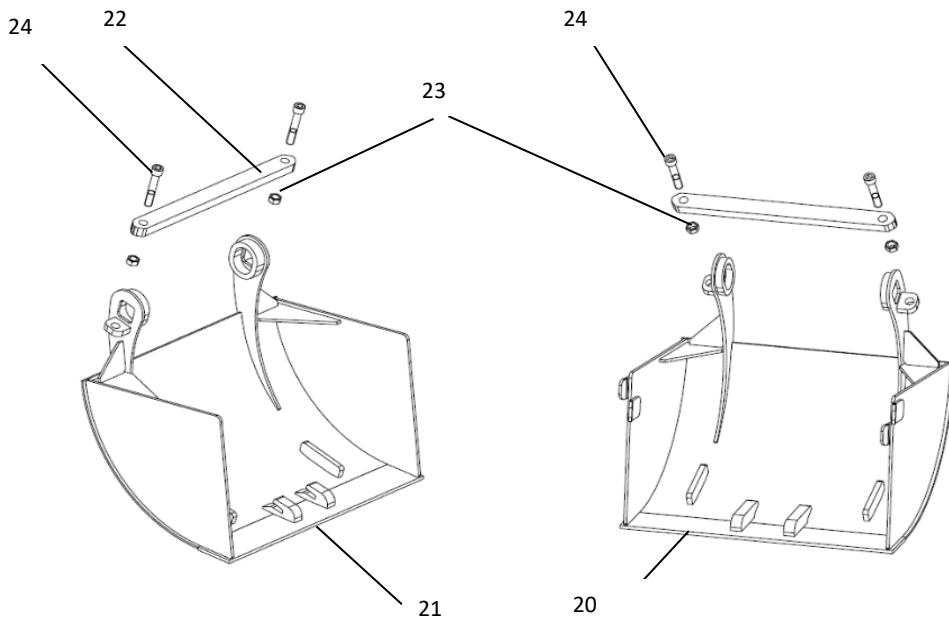
The pictures and drawings below are for reference only. .

2 Spare parts drawing

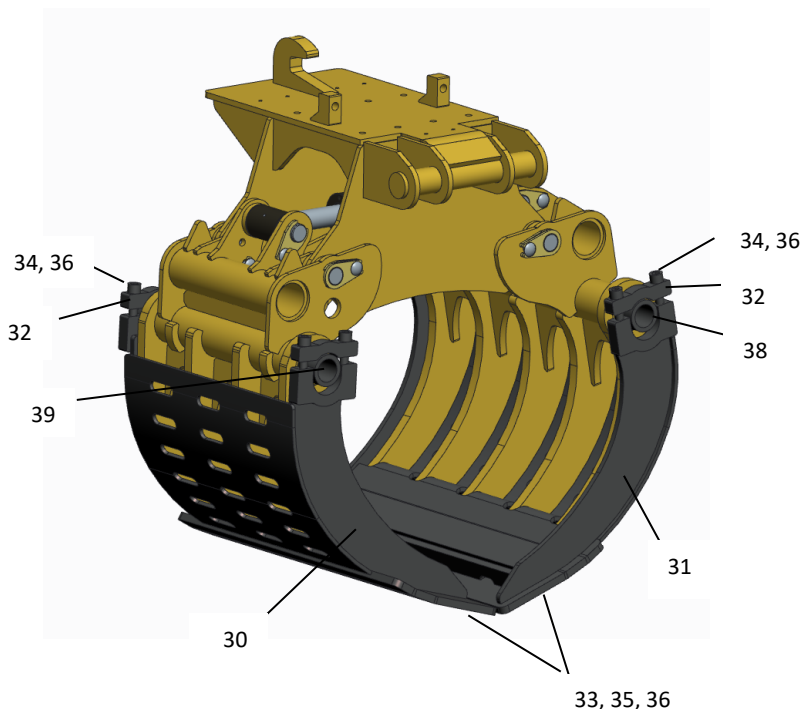
2.1 Grapple



2.2 Gravel buckets



2.3 Removal jaws



3 Spare parts lists

3.1 VAHVA GRAPPLE C26 L

Part	Order code	Part No.	Name	Amount	Unit
	A60162	V223100	VAHVA GRAPPLE C26 L	1	pcs
	A61172	V220060	PIN GROUP 2 C2x, C3x	1	pcs
2	A13827	TRM1167	GREASE NIPPLE M8x1 DIRECT	8	pcs
3	A29358	TZK2016	HEX NUT M16 low, DIN 936 ZN	2	pcs
4	A13618	TZN1016	HEX LOCK NUT M16 DIN 985 8.8	6	pcs
5	A65406	TRE2163	PAN HEAD SCREW M16*30 DIN 7380	2	pcs
6	A61154	TRE2165	PAN HEAD SCREW M16*40 DIN 7380	4	pcs
8	A19760	A19760	BEARING 50/55*50 WB802	8*	pcs
9	A29350	V220027	PLATE 10 D80/50x10	2	pcs
10	A29985	V600082	PIN D50*101	4	pcs
11	A28914	V600074	PIN D50*111	2	pcs
12	A29351	V600088	PIN D50*176	1	pcs
13	A29352	V600086	PIN D50*310	1	pcs
14	A29353	V220050	PUSHROD C26/30/36	2	pcs
15	A28367	V220001	HYDRAULIC CYLINDER 100/56*277	1	pcs
16	A29354	V220010	FRAME C26/30/C36	1	pcs
17	A61140	V223120	OUTER GRAPPLE ARM C26 L	1	pcs
18	A61146	V223130	INNER GRAPPLE ARM C26 L	1	pcs

3.2 VAHVA GRAPPLE C30 L

Part	Order code	Part No.	Name	Amount	Unit
	A60163	V223200	VAHVA GRAPPLE C30 L	1	pcs
	A61172	V220060	PIN GROUP 2 C2x, C3x	1	pcs
2	A13827	TRM1167	GREASE NIPPLE M8x1 DIRECT	8	pcs
3	A29358	TZK2016	HEX NUT M16 low DIN 936 ZN	2	pcs
4	A13618	TZN1016	HEX LOCK NUT M16 DIN 985 8.8	6	pcs
5	A65406	TRE2163	PAN HEAD SCREW M16*30 DIN 7380	2	pcs
6	A61154	TRE2165	PAN HEAD SCREW M16*40 DIN 7380	4	pcs
8	A19760	A19760	BEARING 50/55*50 WB802	8*	pcs
9	A29350	V220027	PLATE 10, D80/50x10	2	pcs
10	A29985	V600082	PIN D50*101	4	pcs
11	A28914	V600074	PIN D50*111	2	pcs
12	A29351	V600088	PIN D50*176	1	pcs
13	A29352	V600086	PIN D50*310	1	pcs
14	A29353	V220050	PUSHROD C26/30/36	2	pcs
15	A28367	V220001	HYDRAULIC CYLINDER 100/56*277	1	pcs
16	A29354	V220010	FRAME C26/30/C36	1	pcs
17	A61141	V223220	OUTER GRAPPLE ARM C30 L	1	pcs

18	A61147	V223230	INNER GRAPPLE ARM C30 L	1	pcs
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3.3 VAHVA GRAPPLE C30 E4 L

Part	Order code	Part No.	Name	Amount	Unit
	A60168	V223500	VAHVA GRAPPLE C30 E4 L	1	pcs
	A66024	V224060	PIN GROUP 3 C3x E4	1	pcs
2	A13827	TRM1167	GREASE NIPPLE M8x1 DIRECT	8	pcs
3	A29358	TZK2016	HEX NUT M16 low DIN 936 ZN	2	pcs
4	A13618	TZN1016	HEX LOCK NUT M16 DIN 985 8.8	6	pcs
5	A65406	TRE2163	PAN HEAD SCREW M16*30 DIN 7380	2	pcs
6	A61154	TRE2165	PAN HEAD SCREW M16*40 DIN 7380	4	pcs
8	A19760	A19760	BEARING 50/55*50 WB802	8*	pcs
9	A29350	V220027	PLATE 10 D80/50x10	2	pcs
10	A29985	V600082	PIN D50*101	4	pcs
11	A28915	V600080	PIN D50*131	2	pcs
12	A29351	V600088	PIN D50*176	1	pcs
13	A29352	V600086	PIN D50*310	1	pcs
11/	A29986	V224027	FERRULE D80/50 x 35	2	pcs
14	A29353	V220050	PUSHROD C26/30/36	2	pcs
15	A28367	V220001	HYDRAULIC CYLINDER 100/56*277	1	pcs
16	A60232	V221010	FRAME C36 HD	1	pcs
17	A61143	V223520	OUTER GRAPPLE ARM C30 E4 L	1	pcs
18	A61149	V223530	INNER GRAPPLE ARM C30 E4 L	1	pcs

3.4 VAHVA GRAPPLE KC30 S45 L

Part	Order code	Part No.	Name	Amount	Unit
	A60171	V223700	VAHVA GRAPPLE KC30 S45 L	1	pcs
	A61172	V220060	PIN GROUP 2 C2x, C3x	1	pcs
2	A13827	TRM1167	GREASE NIPPLE M8x1 DIRECT	8	pcs
3	A29358	TZK2016	HEX NUT M16 low DIN 936 ZN	2	pcs
4	A13618	TZN1016	HEXA LOCK NUT M16 DIN 985 8.8	6	pcs
5	A65406	TRE2163	PAN HEAD SCREW M16*30 DIN 7380	2	pcs
6	A61154	TRE2165	PAN HEAD SCREW M16*40 DIN 7380	6	pcs
8	A19760	A19760	BEARING 50/55*50 WB802	8*	pcs
9	A29350	V220027	PLATE 10, D80/50x10	2	pcs
10	A29985	V600082	PIN D50*101	4	pcs
11	A28914	V600074	PIN D50*111	2	pcs
12	A29351	V600088	PIN D50*176	1	pcs
13	A29352	V600086	PIN D50*310	1	pcs
14	A29353	V220050	PUSHROD C26/30/36	2	pcs
15	A28367	V220001	HYDRAULIC CYLINDER 100/56*277	1	pcs
16	A60229	V224090	FRAME KC30 S45	1	pcs

17	A61141	V223220	OUTER GRAPPLE ARM C30 L	1	pcs
18	A61147	V223230	INNER GRAPPLE ARM C30 L	1	pcs

3.5 VAHVA GRAPPLE KC30 E4 S45 L

Part	Order code	Part No.	Name	Amount	Unit
	A60172	V223750	VAHVA GRAPPLE KC30 E4 S45 L	1	pcs
14	A29353	V220050	PUSHROD C26/30/36	2	pcs
15	A28367	V220001	HYDRAULIC CYLINDER 100/56*277	1	pcs
16	A60229	V224090	FRAME KC30 S45	1	pcs
17	A61143	V223520	OUTER GRAPPLE ARM C30 E4 L	1	pcs
18	A61149	V223530	INNER GRAPPLE ARM C30 E4 L	1	pcs
	A66024	V224060	PIN GROUP 3 C3x E4	1	pcs
2	A13827	TRM1167	GREASE NIPPLE M8x1 DIRECT	8	pcs
3	A29358	TZK2016	HEX NUT M16 low DIN 936 ZN	2	pcs
4	A13618	TZN1016	HEX LOCK NUT M16 DIN 985 8.8	6	pcs
5	A65406	TRE2163	PAN HEAD SCREW M16*30 DIN 7380	2	pcs
6	A61154	TRE2165	PAN HEAD SCREW M16*40 DIN 7380	6	pcs
8	A19760	A19760	BEARING 50/55*50 WB802	8*	pcs
9	A29350	V220027	PLATE 10 D80/50x10	2	pcs
10	A29985	V600082	PIN D50*101	4	pcs
11	A28915	V600080	PIN D50*131	2	pcs
12	A29351	V600088	PIN D50*176	1	pcs
13	A29352	V600086	PIN D50*310	1	pcs
11/	A29986	V224027	FERRULE D80/50 x 35	2	pcs

3.6 VAHVA GRAPPLE C36 L

Part	Ordering code	Part No	Name	Pc	Unit
	V60165	V223300	VAHVA GRAPPLE C36 L	1	pcs
	A61172	V220060	PIN GROUP 2 C2x, C3x	1	pcs
2	A13827	TRM1167	GREASE NIPPLE M8x1 DIRECT	8	pcs
3	A29358	TZK2016	HEX NUT M16 low DIN 936 ZN	2	pcs
4	A13618	TZN1016	HEX LOCK NUT M16 DIN 985 8.8	6	pcs
5	A65406	TRE2163	PAN HEAD SCREW M16*30 DIN 7380	2	pcs
6	A61154	TRE2165	PAN HEAD SCREW M16*40 DIN 7380	6	pcs
8	A19760	A19760	BEARING 50/55*50 WB802	8*	pcs
9	A29350	V220027	PLATE 10, D80/50x10	2	pcs
10	A29985	V600082	PIN D50*101	4	pcs
11	A28914	V600074	PIN D50*111	2	pcs
12	A29351	V600088	PIN D50*176	1	pcs
13	A29352	V600086	PIN D50*310	1	pcs
14	A29353	V220050	PUSHROD C26/30/36	2	pcs
15	A28367	V220001	HYDRAULIC CYLINDER 100/56*277	1	pcs

16	A29354	V220010	FRAME C26/30/C36	1	pcs
17	A61142	V223320	OUTER GRAPPLE ARM C36 L	1	pcs
18	A61148	V223330	INNER GRAPPLE ARM C36 L	1	pcs

3.7 VAHVA GRAPPLE C36 HD L

Part	Order code	Part No.	Name	Amount	Unit
	A60166	V223400	VAHVA GRAPPLE C36 HD L	1	pcs
	A65524	V220071	PIN GROUP 6 C36 HD L	1	pcs
2	A13827	TRM1167	GREASE NIPPLE M8x1 DIRECT	8	pcs
3	A29358	TZK2016	HEX NUT M16 low DIN 936 ZN	2	pcs
4	A13618	TZN1016	HEX LOCK NUT M16 DIN 985 8.8	6	pcs
5	A65404	TRL1650	LOCK HEAD SCREW 16*50 DIN 603	2	pcs
6	A61154	TRE2165	PAN HEAD SCREW M16*40 DIN 7380	6	pcs
8	A19760	A19760	BEARING 50/55*50 WB802	8*	pcs
9	A61152	V223429	FERRULE D80/50 x 23	2	pcs
10.1	A28914	V600074	PIN D50*111	2	pcs
11	A28915	V600080	PIN D50*131	2	pcs
12	A29351	V600088	PIN D50*176	1	pcs
13	A29352	V600086	PIN D50*310	1	pcs
10	A29985	V600082	PIN D50*101	2	pcs
14	A29353	V220050	PUSHROD C26/30/36	2	pcs
15	A28367	V220001	HYDRAULIC CYLINDER 100/56*277	1	pcs
16	A60232	V221010	FRAME C36 HD	1	pcs
17	A61144	V223420	OUTER GRAPPLE ARM C36 HD L	1	pcs
18	A61150	V223430	INNER GRAPPLE ARM C36 HD L	1	pcs

3.8 VAHVA GRAPPLE C36 E7 L

Part	Order code	Part No.	Name	Amount	Unit
	A60169	V223600	VAHVA GRAPPLE C36 E7 L	1	pcs
	A61172	V220060	PIN GROUP 2 C2x, C3x	1	pcs
2	A13827	TRM1167	GREASE NIPPLE M8x1 DIRECT	8	pcs
3	A29358	TZK2016	HEX NUT M16 low DIN 936 ZN	2	pcs
4	A13618	TZN1016	HEX LOCK NUT M16 DIN 985 8.8	6	pcs
5	A65406	TRE2163	PAN HEAD SCREW M16*30 DIN 7380	2	pcs
6	A61154	TRE2165	PAN HEAD SCREW M16*40 DIN 7380	4	pcs
8	A19760	A19760	BEARING 50/55*50 WB802	8*	pcs
9	A29350	V220027	PLATE 10, D80/50x10	2	pcs
10	A29985	V600082	PIN D50*101	4	pcs
11	A28914	V600074	PIN D50*111	2	pcs
12	A29351	V600088	PIN D50*176	1	pcs
13	A29352	V600086	PIN D50*310	1	pcs
14	A29353	V220050	PUSHROD C26/30/36	2	pcs

15	A28367	V220001	HYDRAULIC CYLINDER 100/56*277	1	pcs
16	A60232	V221010	FRAME C36 HD	1	pcs
17	A61145	V223620	OUTER GRAPPLE ARM C36 E7 L	1	pcs
18	A61151	V223630	INNER GRAPPLE ARM C36 E7 L	1	pcs

3.9 VAHVA GRAPPLE KC36 S60 L

Part	Order code	Part No.	Name	Amount	Unit
	A601174	V223850	VAHVA GRAPPLE KC36 S60 L	1	pcs
	A65524	V220071	PIN GROUP 6 C36 HD L	1	pcs
2	A13827	TRM1167	GREASE NIPPLE M8x1 DIRECT	8	pcs
3	A29358	TZK2016	HEX NUT M16 low DIN 936 ZN	2	pcs
4	A13618	TZN1016	HEX LOCK NUT M16 DIN 985 8.8	6	pcs
5	A65404	TRL1650	LOCK HEAD SCREW 16*50	2	pcs
6	A61154	TRE2165	PAN HEAD SCREW M16*40 DIN 7380	6	pcs
8	A19760	A19760	BEARING 50/55*50 WB802	8*	pcs
9	A61152	V223429	FERRULE D80/50 x 23	2	pcs
10.1	A28914	V600074	PIN D50*111	2	pcs
11	A28915	V600080	PIN D50*131	2	pcs
12	A29351	V600088	PIN D50*176	1	pcs
13	A29352	V600086	PIN D50*310	1	pcs
10	A29985	V600082	PIN D50*101	2	pcs
14	A29353	V220050	PUSHROD C26/30/36	2	pcs
15	A28367	V220001	HYDRAULIC CYLINDER 100/56*277	1	pcs
16	A60231	V221080	FRAME KC36 S60	1	pcs
17	A61144	V223420	OUTER GRAPPLE ARM C36 HD L	1	pcs
18	A61150	V223430	INNER GRAPPLE ARM C36 HD L	1	pcs

3.10 VAHVA GRAPPLE KC36 NTP10 L

Part	Ordering code	Part No	Name	Amount	Unit
	A60173	V223800	VAHVA GRAPPLE KC36 NTP10 L	1	pcs
14	A29353	V220050	PUSHROD C26/30/36	2	pcs
15	A28367	V220001	HYDRAULIC CYLINDER 100/56*277	1	pcs
16	A60230	V224410	FRAME KC36 ntp10	1	pcs
17	A61144	V223420	OUTER GRAPPLE ARM C36 HD L	1	pcs
18	A61150	V223430	INNER GRAPPLE ARM C36 HD L	1	pcs
01	A32769	V600344	COVER PLATE, KC36 NTP10	3	pcs
02	TRT2123	TRT2123	HEX SCREW M12*30 DIN 933 10.9	6	pcs
03	A63344	trt1247	HEX SCREW M24*70 DIN 933 8.8	2	pcs
	A65524	V220071	PIN GROUP 6 C36 HD L	1	pcs
2	A13827	TRM1167	GREASE NIPPLE M8x1 DIRECT	8	pcs
3	A29358	TZK2016	HEX NUT M16 low DIN 936 ZN	2	pcs
4	A13618	TZN1016	HEX LOCK NUT M16 DIN 985 8.8	6	pcs

5	A65404	TRL1650	LOCK HEAD SCREW 16*50	2	pcs
6	A61154	TRE2165	PAN HEAD SCREW M16*40 DIN 7380	2	pcs
8	A19760	A19760	BEARING 50/55*50 WB802	8*	pcs
9	A61152	V223429	FERRULE D80/50 x 23	2	pcs
10.1	A28914	V600074	PIN D50*111	2	pcs
11	A28915	V600080	PIN D50*131	2	pcs
12	A29351	V600088	PIN D50*176	1	pcs
13	A29352	V600086	PIN D50*310	1	pcs
10	A29985	V600082	PIN D50*101	2	pcs

3.11 VAHVA GRAPPLE KC36 E7 S60 L

Part	Order code	Part No.	Name	Amount	Unit
	A60176	V223950	VAHVA GRAPPLE KC36 E7 S60 L	1	pcs
	A61172	V220070	PIN GROUP 2 C2x, C3x	1	pcs
2	A13827	TRM1167	GREASE NIPPLE M8x1 DIRECT	8	pcs
3	A29358	TZK2016	HEX NUT M16 low DIN 936 ZN	2	pcs
4	A13618	TZN1016	HEX LOCK NUT M16 DIN 985 8.8	6	pcs
5	A65406	TRE2163	PAN HEAD SCREW M16*30 DIN 7380	2	pcs
6	A61154	TRE2165	PAN HEAD SCREW M16*40 DIN 7380	4	pcs
8	A19760	A19760	BEARING 50/55*50 WB802	8*	pcs
9	A29350	V220027	PLATE 10, D80/50x10	2	pcs
10	A29985	V600082	PIN D50*101	4	pcs
11	A60226	V600096	PIN D50*111	2	pcs
12	A29351	V600088	PIN D50*176	1	pcs
13	A29352	V600086	PIN D50*310	1	pcs
14	A60660	V221050	PUSHROD C26/30/36 HD	2	pcs
15	A28367	V220001	HYDRAULIC CYLINDER 100/56*277	1	pcs
16	A60231	V221080	FRAME KC36 S60	1	pcs
17	A61145	V223620	OUTER GRAPPLE ARM C36 E7 L	1	pcs
18	A61151	V223630	INNER GRAPPLE ARM C36 E7 L	1	pcs

3.12 VAHVA GRAPPLE KC36 E7 NTP10 L

Part	Order code	Part No.	Name	Amount	Unit
	A60175	V223900	VAHVA GRAPPLE KC36 E7 ntp10 L	1	pcs
	A61172	V220070	PIN GROUP 2 C2x, C3x	1	pcs
2	A13827	TRM1167	GREASE NIPPLE M8x1 DIRECT	8	pcs
3	A29358	TZK2016	HEX NUT M16 low DIN 936 ZN	2	pcs
4	A13618	TZN1016	HEX LOCK NUT M16 DIN 985 8.8	6	pcs
5	A65406	TRE2163	PAN HEAD SCREW M16*30 DIN 7380	2	pcs
6	A61154	TRE2165	PAN HEAD SCREW M16*40 DIN 7380	4	pcs
8	A19760	A19760	BEARING 50/55*50 WB802	8*	pcs
9	A29350	V220027	PLATE 10, D80/50x10	2	pcs

10	A29985	V600082	PIN D50*101	4	pcs
11	A60226	V600096	PIN D50*111	2	pcs
12	A29351	V600088	PIN D50*176	1	pcs
13	A29352	V600086	PIN D50*310	1	pcs
14	A60660	V221050	PUSHROD C26/30/36 HD	2	pcs
15	A28367	V220001	HYDRAULIC CYLINDER 100/56*277	1	pcs
16	A60230	V224410	FRAME KC36 ntp10	1	pcs
17	A61145	V223620	OUTER GRAPPLE ARM C36 E7 L	1	pcs
18	A61151	V223630	INNER GRAPPLE ARM C36 E7 L	1	pcs
01	A32769	V600344	COWER PLATE, KC36 NTP10	3	pcs
02	TRT2123	TRT2123	HEX SCREW M12*30 DIN 933 10.9	6	pcs
03	A63344	TRT1247	HEX SCREW M24*70 DIN 933 8.8	2	pcs

3.13 GRAVEL BUCKETS WITH C26 GRAPPLE

Part	Order code	Part No.	Name	Amount	Unit
	A32139	V228000	GRAVEL BUCKETS WITH C26 GRAPPLE	1	pcs
20	A60331	V228020	OUTER GRAVEL JAW GRAPPLE C26	1	pcs
21	A60330	V228040	INNER GRAVEL JAW GRAPPLE C26	1	pcs
22	A60332	V228034	PLATE 15	2	pcs
23	TZN1020	TZN1020	HEX LOCK NUT M20 DIN 985 8.8	4	pcs
24	A66026	TRT1210	HEX SCREW M20*100 DIN 933 8.8	4	pcs
23, 24	TZA1020	TZA1020	WASHER M20 DIN 125	8	pcs
25	TRK1163	TRK1163	HEX SCREW M16*40 DIN 933 12.9	4	pcs
	A60226	V600096	PIN D50*111	2	pcs

3.14 VAHVA REMOVAL JAWS WITH C36 E7 GRAPPLE

Part	Order code	Part No.	Name	Amount	Unit
	A31577	V220980	VAHVA REMOVAL JAWS WITH C36 E7 GRAPPLE	1	pcs
-	A60390	V220970	INNER REMOVAL JAW C36 E7 / CONFIGURATION	1	pcs
39	A60389	V220978	TUBE D50/35 LENGHT 625	1	pcs
30	A60390	V220971	INNER REMOVAL JAW C36 E7 / WELDED	1	pcs
-	A60385	V220960	OUTER REMOVAL JAW C36 E7 / CONFIGURATION	1	pcs
38	A60388	V220968	TUBE D50/35 LENGHT 725	1	pcs
31	A60385	V220961	OUTER REMOVAL JAW C36 E7 / WELDED	1	pcs
32	A60387	V220981	FASTENER	4	pcs
33	A30389	V600981	WEAR PLATE	2	pcs
36		TZA1020	WASHER M20 DIN 125	26	pcs
36	TZN1020	TZN1020	HEX LOCK NUT M20 DIN 985 8.8	18	pcs
35	A13693	TRG2070	HEX SOCKET COUNTERSUNK SCREW M20*70 DIN 7991 10.9	10	pcs

34	TRE2215	HEXAGON SOCET HEAD CAP SCREW M20*150 DIN 933 8.8	8	pcs
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In addition, all models include:				
	A60242	V600324	STICKER "Danger of oil splashes"	1 pcs
	A60243	V600325	STICKER "Danger of compression"	1 pcs
	A65523	V600310	STICKER, VAHVA	2 pcs

Other parts (accessories / repair kits):				
	A27074	A27074	Seal Kit Vahva 100/56 Cylinder	1 pcs

* In addition, the cylinder contains 4 pcs of bearing fittings.
/ The ferrule enters that pin.

4 Hydraulic cylinder repair

4.1 Hydraulic cylinder removal and installation

1. Place the grapple in closed position, lower the loader on a level surface. Make sure the loader stays in place.
2. Disconnect the hydraulic hoses and plug the connections.
3. Remove the pivot pins locking bolts.
4. Knock out the pivot pins. Use a mass hammer and a suitable knockout mandrel.
5. Configuration in reverse order. Make sure that the cylinder goes in the right direction.

4.2 Hydraulic cylinder seals replacement

1. Drain the oil from the cylinder.
2. Squeeze the cylinder firmly at its lower end into an upright position and open the muzzle using a cylinder tool.
3. Lift off the piston rod.
4. Remove the piston using a special tool. The piston is glued with a screw lock. You may have to heat it to open.
5. Check the order of the seals before disassembling and make sure you have the correct gasket set. Remove old seals.
6. Install the new seals in the correct orientation and order, lubricate them when installing.
7. Assemble the cylinder in reverse order.

