



MANUALE DELL'OPERATORE - MANUALE RICAMBI
OPERATING INSTRUCTIONS - SPARE PARTS CATALOG
MANUEL DE L'OPÉRATEUR - PIÉCES DE RECHANGE
BETRIEBSANLEITUNG - WARTUNGSANLEITUNGEN

KIT HI-TIP CARRY 107

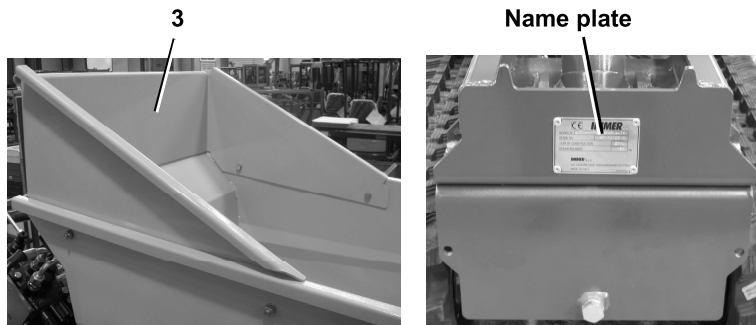
numeri di serie a partire dal n°:
serial numbers from nr.:
numéros de série depuis le n°:
Seriennummern ab:
HT107001

*(Istruzioni originali - Original instructions
Notice originale - Originalbetriebsleitung)*

HI-TIP KIT

Description

The Hi-Tip kit consists of a pantograph frame (1) operated by a multi-stage telescopic cylinder (2) equipped with a safety valve for protection against sudden drops. The top frame can accommodate a standard bucket provided with a protective border (3), also when mounted on the self-loading shovel specifically designed for this kit.



The kit's design makes it possible to reach an unloading height of approx. 1.6 metres, which is ideal for unloading onto medium-size trucks or into the specific containers. The kit can be installed on **machines Carry107 with expandable undercarriage**.



Use

Use the tipping bucket accessory and the self-loading shovel as described in the machine's user manual.

ATTENTION. In the Hi-Tip configuration, the machine's centre of gravity is lifted up, reducing its stability in particular work conditions. The machine can work on compact surfaces with slight bumps and moderate slopes with inclinations no greater than 12%. When working on very bumpy ground or covered with rocks and stones or on extremely soft ground, the machine must be driven carefully and in very low speed, using just one gear. **NEVER CAUSE** blows to the crawlers or to the machine with sudden stops or accelerations.



WARNING

- While traveling with load on machine, always use the lower frame on expansion configuration.
- **NEVER** travel with the Hi-Tip kit in the raised position. If the centre of gravity is too high, the machine becomes highly prone to tipping over.
- Raise the accessory **ONLY** when close to the point of discharge and **ONLY** when the machine is standing on firm, level ground.
- **ABSOLUTELY NEVER RAISE** the accessory when the machine is on a slope!
- Always make sure that there are no persons inside the working area.

Precautions while driving on slopes



ATTENTION

- Make sure that no one is close or within the range of action of the vehicle.
- Reduce engine speed.
- Select forward movement in one gear proceeding at moderate and constant speed.
- Move with the crawlers in the direction of the slope and not sideways.
- Do not change direction.
- When stopping, do not release the levers immediately but move them to neutral.



PRUDENCE

MAX ALLOWED SLOPE 7°-12%

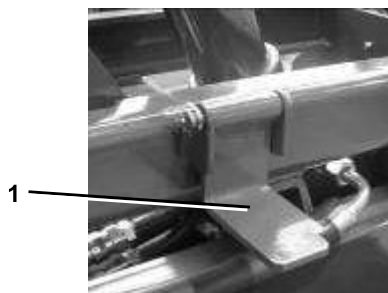
Dumping

To perform dumping, move the machine close to the desired spot keeping the tipping bucket low. Lift the tipping bucket to the requested height by manoeuvring the specific lever (1), then, if necessary, approach the dumping spot by moving forward carefully at low speed.

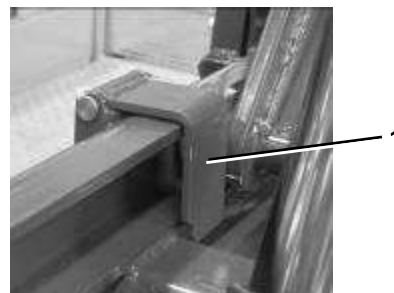
Tip the bucket carefully, performing the manoeuvres required as shown in point 2.1.3 of the machine user manual.



When you need to leave the accessory in the raised position for relatively long periods (e.g., when performing maintenance), apply the safety device (1) by turning it towards the inside of the frame so that it blocks the pantograph.



Released



Locked

Maintenance

Inspect the equipment daily. Wash off any dirt or debris from the runner guides. Check for oil leaks. Make sure there are no damaged or worn-out parts, and repair or replace if necessary. Periodically check the tightness of the bolts and the conditions of the cylinders and hydraulic hoses. Lubricate the bushings on the joints following the lubrication schedule for the machine.

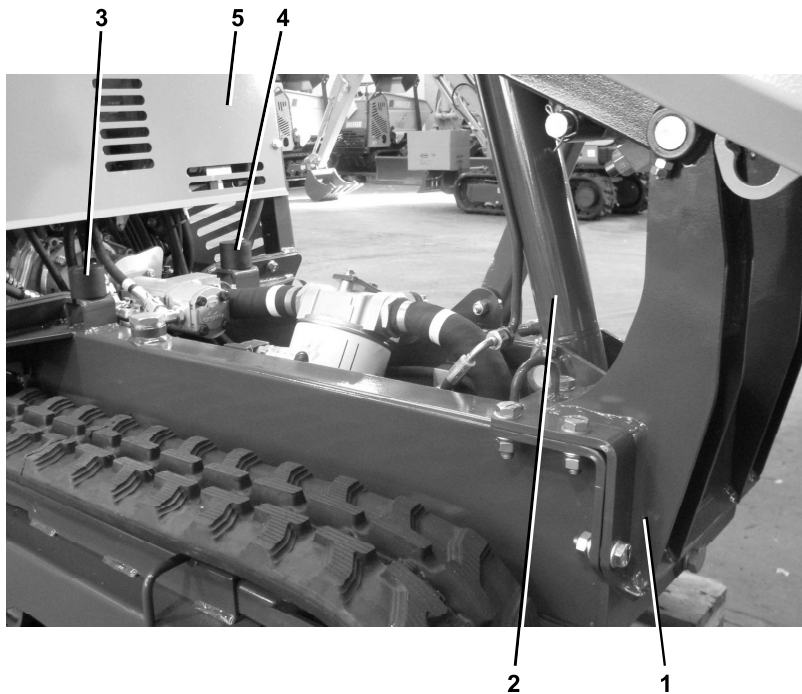
HI-TIP KIT (HT) INSTALLATION INSTRUCTIONS

The following instructions apply only when installing the kit on machines on the worksite. Install the kit in an adequately equipped workshop provided with hoisting equipment. Bring the machine close to the hoisting equipment. Stop the engine. Remove the accessory from its housing (see sect. 2.8). Start the engine and raise the accessory-holder frame. Stop the engine. Attach the accessory holder to the hoisting equipment. Depressurize the hydraulic circuit (see sect. 3.6.4). Disconnect the lifting cylinder from the accessory holder.

Uncouple the support (1) from the frame base and take it completely out. Disconnect the hydraulic hoses from the lifting cylinder (2) and close them using G1/4 plugs. Mark the hose fastened to the bottom connection. Use an appropriate container to collect the oil that comes out.

Warning! Do not disperse oil in the environment. Used oil must be disposed of as required by law.

Remove the cylinder (2) from the frame base. Remove the rubber bumpers (3) and (4). Remove the front casing (5) on the bucket side.



Place the HT bottom frame (5) on the machine's frame base and secure it using the screws, washers and nuts (6) previously removed and the screws, washers and nuts (7) supplied.

Fasten the control valve (8) supplied with the kit to the RH side of the guide frame using the knob-head screws.



Disconnect the hose (9) from the port (10) of the control valve of the machine and connect to the hose (11) (1130723010) to the port (12) of the HT control valve. Connect the hose (13) (1130723012) of the port (10) of the control valve on the machine. Connect the hose (14) (1130723011) on the discharge port (15) of the control valve to the discharge (16) on the machine. Lift the Hi Tip kit and place it on the frame base. Fasten it using the screws, nuts and washers provided. Connect the hose (17) (1130723009) to the multi-stage lifting cylinder and fasten it to the frame with the clamp (18). Start the engine and raise the Hi Tip kit using the lever on the control valve. Stop the engine and apply the safety device. Connect the hose that was disconnected from the cylinder bottom to the hose on the kit marked in red, and connect the hose that was disconnected from the cylinder head to the hose marked in grey.

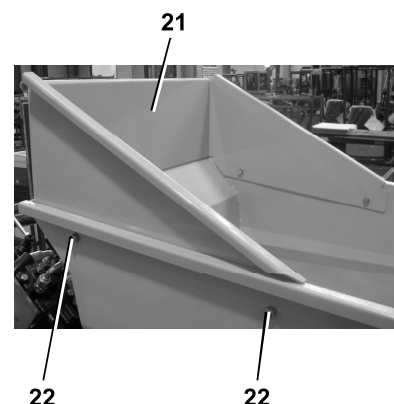
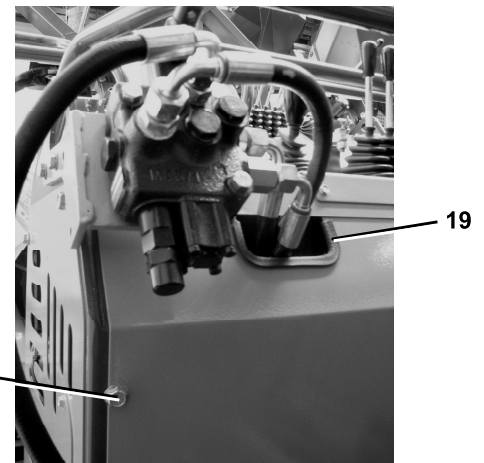
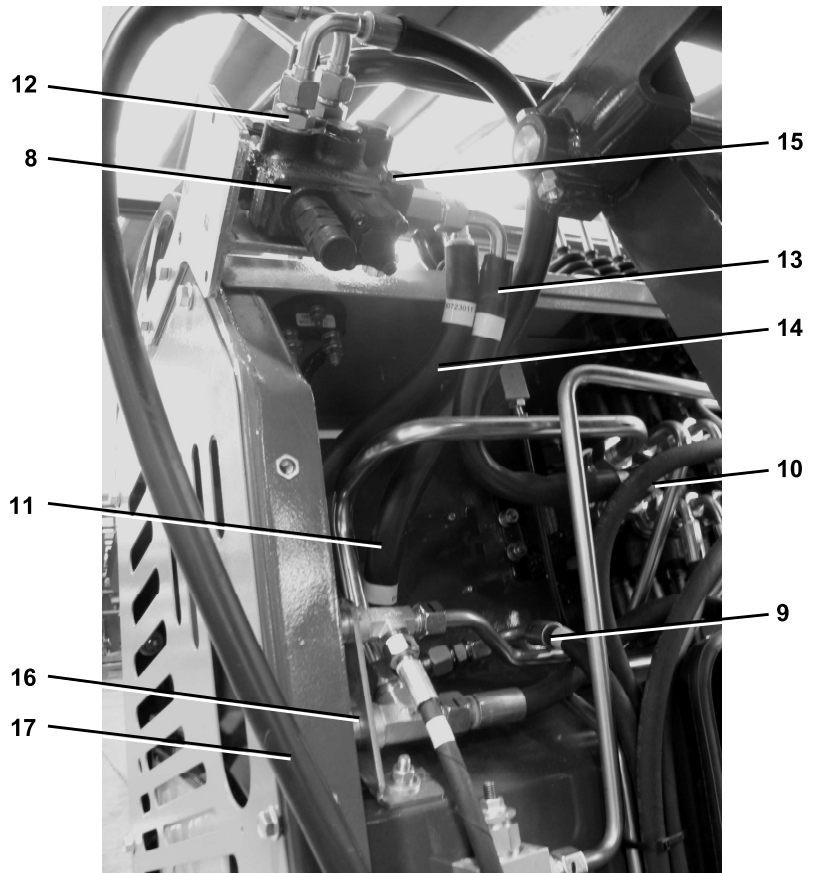
In case a self-loading shovel is used, proceed as follows:

- disconnect the male coupling from the hose of the circuit on the machine and connect it to the hose marked in white on the HT kit;
- connect the quick-action coupling to the other end;
- disconnect the female coupling from the hose of the circuit on the machine and connect it to the hose marked in blue on the HT kit. Connect the quick-action coupling to the other end;
- start the engine, release the safety and lower the pantograph frame. Stop the engine;
- install and fasten the accessory (see sect. 2.8.2). Start the engine and tip the accessory.

If a self-loading shovel is used, attach the quick-action couplings. Carry out a few manoeuvres, bringing the cylinders to the end-of-stroke position. Make sure the equipment responds as expected and check for any oil leaks. If the manoeuvres are not performed as expected, invert the relevant hoses. If you notice any leaks, tighten the couplings.

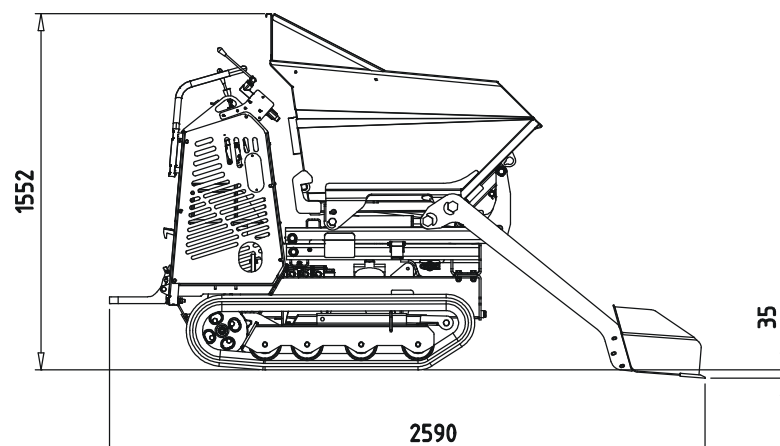
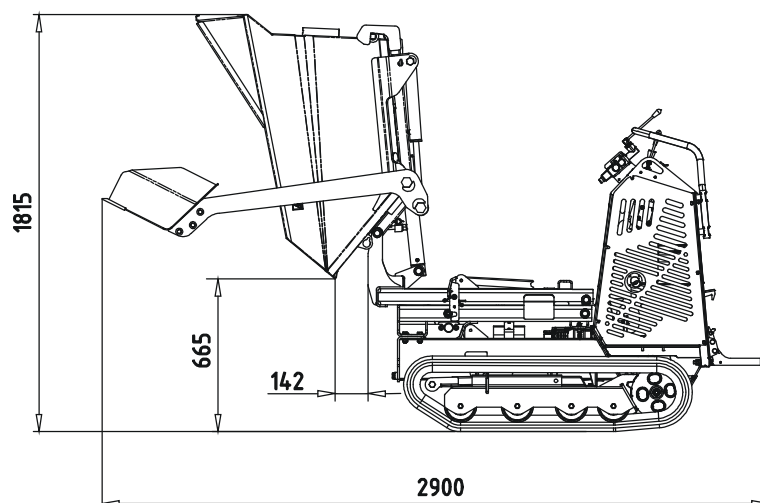
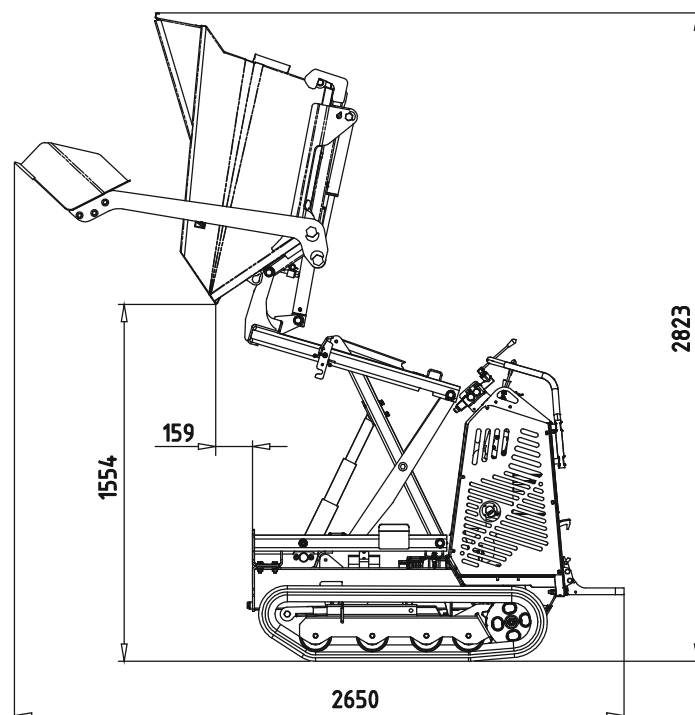
Note: Clean and remove every trace of oil.

Remove the hose window on the front casing. Install the U-section seal (19). Put the casing in place and fasten it with the screws (20). Apply the "HT Up/Down" sticker close to the HT control valve. Fasten the bucket side extension (21) with the screws supplied (22) after drilling the holes using the extension as reference.



KIT HI-TIP

DIMENSIONI MACCHINA – MACHINE DIMENSIONS
DIMENSIONS DU VÉHICULE – MASCHINENABMESSUNGEN



USE OF THE PARTS CATALOG

1. Preface.

Illustrations and diagrams shown in the parts catalog are shown to the extent necessary to identify the part, but are not meant to serve as a detailed representation of the part. To order parts, refer to the itemization given below, then place your order with the servicing plant designated by KATO IMER.

2. How to read the Parts Catalog.

a) An index and table of contents list each item separately. Please, refer to the necessary sections.

b) Meanings of symbols preceding the parts number.

X Part cannot be supplied.

☆ Supplied as a separate part.

Part number is indicated in the remarks column.

△ Special order parts, which are manufactured after the order is received.


Detailed diagram provided separately. Sheet number indicated in the remarks column.

c) An asterisk preceding the part name indicates a compositional part required in part assembly. All subsequent multiple asterisks indicate parts that are structurally required for the assembly of the preceding part.


d) The quantity. In principle, indicates the number of parts required for one unit of machinery. For parts requiring assembly, the number of parts required to assembly one set is given.

e) Interchange ability of parts is shown as follows:

0750 729 UA  Change from part shown at the top to part shown below.

0750 744 UA  The new part is interchangeable with the old.

0750 659 UA  Change from part shown at the top to part shown below.

0750 669 UA  The new part is not interchangeable with the old.

f) Suitability for various machinery.

26127~ Part used in equipment numbered 26127 and equipment subsequently numbered.

26127~26169 Part used in equipment numbered 26127 through 26169.

g) Notes and meaning of abbreviations.

Sh.No.	Sheet n.	I.D.	Inside diameter
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L	Length	O.D.	Outside diameter
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t	Thickness	P.	Pitch
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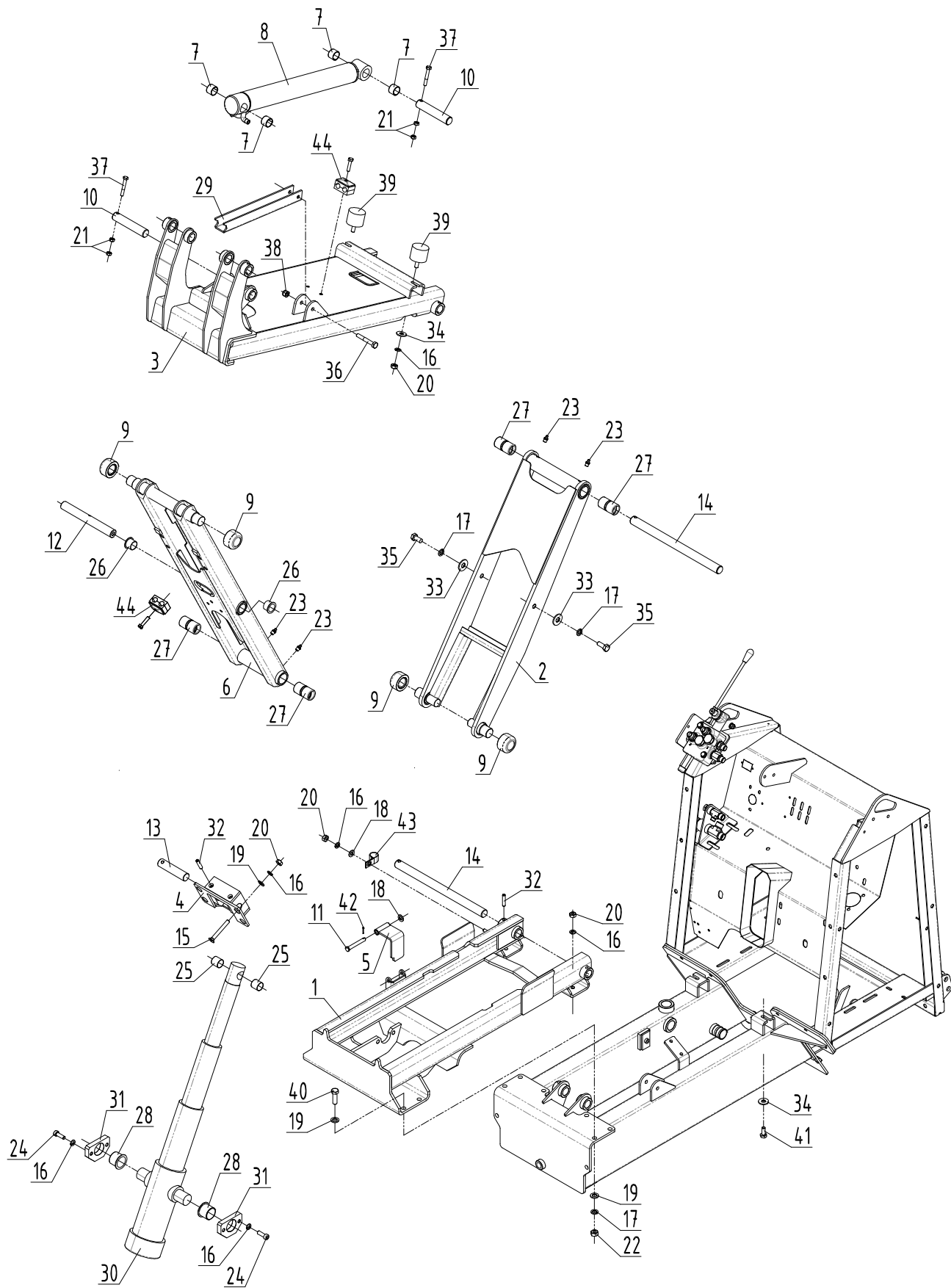
W/	With	AR	As required (number required)
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W/O	Without		
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3. Engine part orders: Please order from your local sales distributor or engine manufacturer, using their catalog.

4. When placing an order for parts, please check that you have clearly specified the following: (1) machinery name, (2) machinery number, (3) parts number, (4) parts name and (5) quantity of parts you are ordering.

5. With regard to improvements to equipment, such modifications may be made without notice.



KEY		S	PART No.	DESCRIPTION	Q'TY	CH.	SERIAL No.	REMARKS
No.								
0	x		5180101603	Hi-Tip Ass'y <i>Montaggio Hi-Tip</i>	1		HT000001 ~	
1			2050202071	* Lower Frame <i>Base Inferiore</i>	1		HT000001 ~	
2			2050202072	* External Arm <i>Braccio Esterno</i>	1		HT000001 ~	
3			2050202073	* Upper Frame <i>Base Superiore</i>	1		HT000001 ~	
4			2050202077	* Support <i>Supporto Testa Cilindro</i>	1		HT000001 ~	
5			2050202076	* Hinge <i>Cerniera Arresto</i>	1		HT000001 ~	
6			2050202074	* Pantograph Rear Arm <i>Braccio posteriore Pantografo</i>	1		HT000001 ~	
7			4041000394	* Bush <i>Boccola</i>	4		HT000001 ~	D.25-28-20
8			2050208022	* Tilting Cylinder <i>Cilindro Ribaltamento</i>	1		HT000001 ~	
9			2050200006	* Roll <i>Rullo Scorrimento Hi-Tip</i>	4		HT000001 ~	
10			2050205016	* Cylinder Pin <i>Perno Cilindro Ribaltamento</i>	2		HT000001 ~	
11			2050205075	* Hinge Pin <i>Perno Cerniera Arresto</i>	1		HT000001 ~	
12			2050205071	* Joint Pin <i>Perno Articolazione Pantografo</i>	1		HT000001 ~	
13			2050205072	* Upper Pin <i>Perno Superiore Pistone Hi-Tip</i>	1		HT000001 ~	
14			2050205070	* Joint Pin <i>Perno Articolazione Basi</i>	2		HT000001 ~	
15			1030110080	* Bolt Treatment <i>Vite TPSEI (H.T.)</i>	4		HT000001 ~	M10x80
16			1224801	* Washer Spring <i>Rosetta Grower</i>	13		HT000001 ~	M10
17			1224803	* Washer Spring <i>Rosetta Grower</i>	6		HT000001 ~	M12
18			1224103	* Washer Flat <i>Rosetta Piana</i>	6		HT000001 ~	M10
19			1224121	* Washer Flat <i>Rosetta Piana</i>	8		HT000001 ~	M12
20			1223650	* Nut <i>Dado Esagonale</i>	9		HT000001 ~	M10
21			1223570	* Nut <i>Dado Esagonale</i>	13		HT000001 ~	M8
22			1223700	* Nut <i>Dado Esagonale</i>	4		HT000001 ~	M12
23			1230680	* Nipple Grease <i>Ingrassatore</i>	4		HT000001 ~	1/8"
24			1222750	* Bolt <i>Vite TCEI</i>	4		HT000001 ~	M10x30
25			1101130004	* Bush <i>Boccola</i>	2		HT000001 ~	GFM 25-26-25
26			1101130001	* Bush <i>Boccola</i>	2		HT000001 ~	GFM 25-28-21
27			1101112001	* Bush <i>Boccola Acciaio</i>	4		HT000001 ~	D.25x35x65
28			1101130005	* Bush <i>Boccola</i>	2		HT000001 ~	GFM 35-39-47
29			2050201092	* Bucket Support <i>Sostegno Cassone</i>	1		HT000001 ~	
30			2050208021	* Cylinder <i>Cilindro 3 Sfilì</i>	1		HT000001 ~	
31			2050201383	* Cylinder Plate <i>Piastra Cilindro Hi-Tip</i>	1		HT000001 ~	
32			1110320008	* Pin Spring <i>Spina Elastica</i>	3		HT000001 ~	ø8x40

NOTE

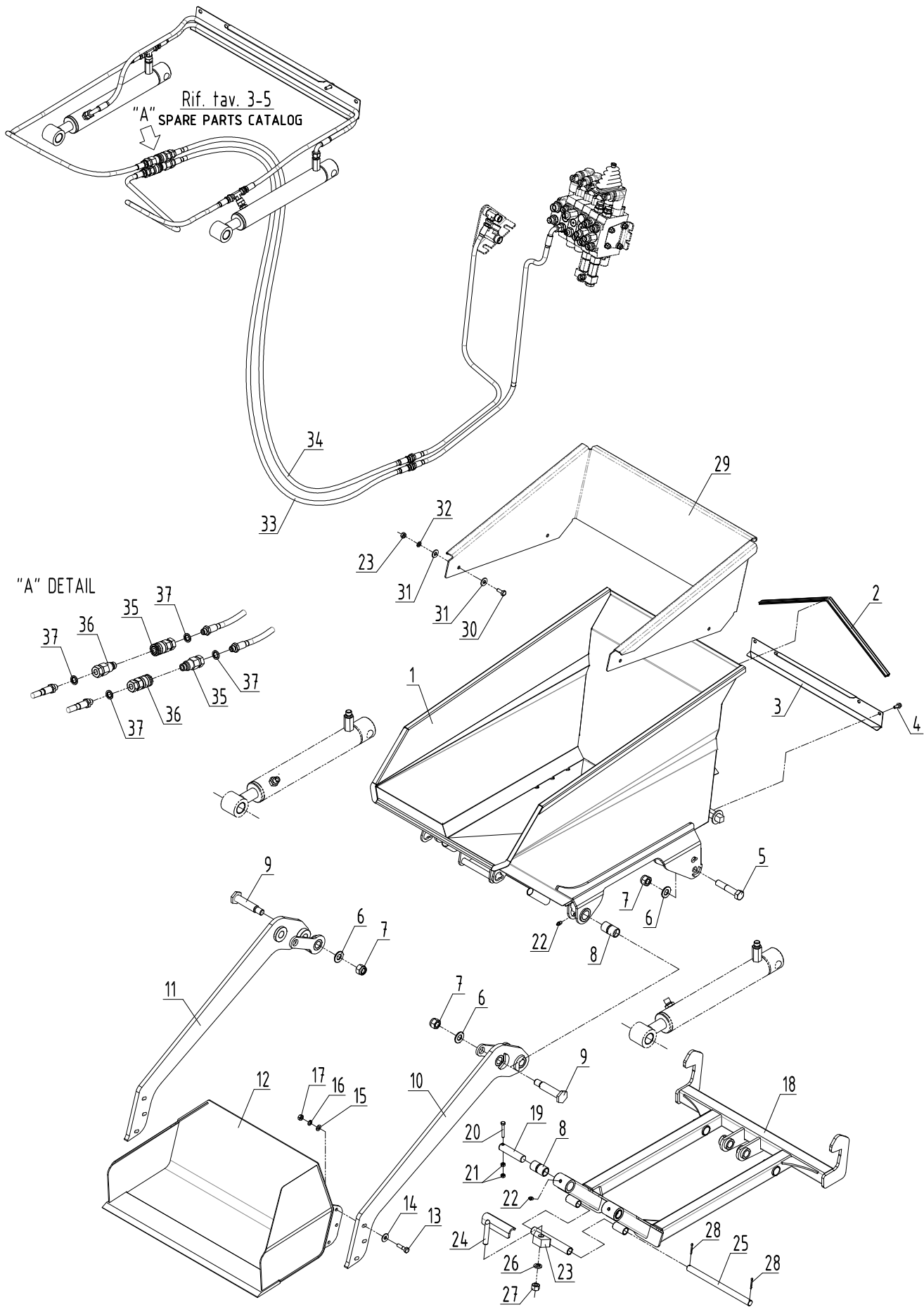
KEY		PART No.	DESCRIPTION	Q'TY	CH.	SERIAL No.	REMARKS
No.	S						
33		1224125	* Washer Flat <i>Rosetta Piana</i>	2		HT000001 ~	D.12x36
34		1224104	* Washer Flat <i>Rosetta Piana</i>	2		HT000001 ~	D.10x30
35		1222086	* Bolt <i>Vite TE</i>	2		HT000001 ~	M12x30
36		1222077	* Bolt <i>Vite TE</i>	1		HT000001 ~	M10x70
37		1222052	* Bolt <i>Vite TE</i>	2		HT000001 ~	M8x55
38		1223920	* Lock Nut <i>Dado Autobloccante</i>	1		HT000001 ~	M10
39		1220410050	* Rubber Stop <i>Piedino Antivibrante</i>	2		HT000001 ~	
40		1222914	* Bolt <i>Vite TE</i>	4		HT000001 ~	M12x40
41		1222095	* Bolt <i>Vite TE</i>	2		HT000001 ~	M10x25
42		1110202500	* Pin Cotter <i>Copiglia</i>	1		HT000001 ~	D.2,5x16
43		1219561	* Hose Clamp <i>Fascetta Stringitubo</i>	1		HT000001 ~	D.22
44		1110910016	* Clamp <i>Collare Fermatubo</i>	4		HT000001 ~	D.16-16
45		2050007001	* Plate Name <i>Targa Alluminio</i>	1		HT000001 ~	
46		1224982	* Rivet <i>Rivetto a strappo</i>	4		HT000001 ~	
47		2050207014	* Name Plate <i>Etich. Peric. Uso Sicurezza Corpi Sospesi</i>	1		HT000001 ~	
48		2030807012	* Name Plate (Safety) <i>Etich. Ades. Pericolo Cesoimento</i>	2		HT000001 ~	

NOTE

MEMO

KEY		PART No.	DESCRIPTION	Q'TY	CH.	SERIAL No.	REMARKS
No.	S						
0	x	5180101603	Hi-Tip Ass'y <i>Montaggio Hi-Tip</i>	1		HT000001 ~	
1		1150620003	* Control Valve <i>Distributore</i>	1		HT000001 ~	HC-M45/1
2		2050204008	* Lever <i>Leva Corta</i>	1		HT000001 ~	
3		1190900009	* Knob <i>Pomello</i>	1		HT000001 ~	D.8 L=43
4		1223570	* Nut <i>Dado Esagonale</i>	5		HT000001 ~	M8
5		2050201199	* Control Valve Bracket <i>Supporto Distributore</i>	1		HT000001 ~	
6		1190900010	* Hand Wheel <i>Volantino a Lobi</i>	2		HT000001 ~	M8x25
7		1224083	* Washer Flat <i>Rosetta Piana</i>	6		HT000001 ~	M8
8		1224794	* Washer Spring <i>Rosetta Grower</i>	4		HT000001 ~	M8
9		1222032	* Bolt <i>Vite TE</i>	2		HT000001 ~	M8x70
10		1220608	* Nipples <i>Niples</i>	4		HT000001 ~	3/8"
11		1140713300	* Nipples <i>Prolunga</i>	1		HT000001 ~	3/8"-3/8"
12		3251846	* Washer Seal <i>Rondella G.M.</i>	4		HT000001 ~	3/8"
13		1130723011	* Hose Ass'y <i>Tubo Idraulico</i>	1		HT000001 ~	L=410
14		1130723012	* Hose Ass'y <i>Tubo Idraulico</i>	1		HT000001 ~	L=310
15		1130723009	* Hose Ass'y <i>Tubo Idraulico</i>	1		HT000001 ~	L=1460
16		1130723010	* Hose Ass'y <i>Tubo Idraulico</i>	1		HT000001 ~	L=590
17		2050208023	* Special Screw <i>Vite Forata</i>	1		HT000001 ~	
18		1220007	* Plug <i>Tappo Girevole.</i>	1		HT000001 ~	3/8"
19		1220140	* Washer Seal <i>Rondella G.M.</i>	2		HT000001 ~	1/2"
20		1130722021	* Hose Ass'y <i>Tubo Idraulico</i>	1		HT000001 ~	L=1630
21		1130722022	* Hose Ass'y <i>Tubo Idraulico</i>	1		HT000001 ~	L=1720
22		4041000505	* Valve <i>Valvola Paracadute</i>	1		HT000001 ~	3/8"

NOTE



BUCKET AND BLADE KIT HI-TIP

KEY							
No.	S	PART No.	DESCRIPTION	Q'TY	CH.	SERIAL No.	REMARKS
0		5180101011	Bucket Ass'y <i>Benna Carico Completa</i>	1		HT000001 ~	
0 - 1		5180101601	HI-TIP Blade Ass'y <i>Pala Caricatrice HI-TIP Completa</i>	1		HT000001 ~	
1		2050202011	* Bucket <i>Cassone</i>	1		HT000001 ~	
2		6050203004	* Seal <i>Guarnizione Cassone</i>	1		HT000001 ~	L=690
3		2050201136	* Bracket <i>Lamiera Passatubi</i>	1		HT000001 ~	
4		1010908020	* Bolt <i>Vite TECF</i>	4		HT000001 ~	M8x20
5		1222728	* Bolt, Hex. <i>Vite TE</i>	2		HT000001 ~	M20x100
6		1090000020	* Washer, Flat <i>Rosetta Piana</i>	6		HT000001 ~	M20
7		1080811000	* Nut, Lock <i>Dado Autobloccante</i>	6		HT000001 ~	M20
8		1101112001	* Bushing <i>Boccola Acciaio</i>	4		HT000001 ~	
9		2050205011	* Shaft <i>Perno Pala</i>	4		HT000001 ~	
10		2050202079	* HI-TIP Arm (L.H.) <i>Braccio Sinistro Pala HI-TIP</i>	1		HT000001 ~	
11		2050202078	* HI-TIP Arm (R.H.) <i>Braccio Destro Pala HI-TIP</i>	1		HT000001 ~	
12		2050202020	* Blade <i>Pala Saldata</i>	1		HT000001 ~	
13		1222906	* Bolt, Hex. <i>Vite TE</i>	6		HT000001 ~	M10x40
14		1224104	* Washer, Flat <i>Rosetta Piana</i>	6		HT000001 ~	M10
15		1224103	* Washer, Flat <i>Rosetta Piana</i>	6		HT000001 ~	M10
16		1224801	* Washer, Spring <i>Rosetta Grower</i>	6		HT000001 ~	M10
17		1223650	* Nut <i>Dado Esagonale</i>	6		HT000001 ~	M10
18		2050202009	* Tools Support <i>Telaio Accessori</i>	1		HT000001 ~	
19		2050205012	* Shaft <i>Perno Telaio Accessori</i>	2		HT000001 ~	
20		1222680	* Bolt <i>Vite TE</i>	2		HT000001 ~	M8x55
21		1223570	* Nut <i>Dado Esagonale</i>	4		HT000001 ~	M8
22		1230680	* Nipple, Grease <i>Ingrassatore Dritto</i>	4		HT000001 ~	PT1/8
23		2050202080	* Connection Lower <i>Parte Inferiore Aggancio</i>	1		HT000001 ~	
24		2050202081	* Connection Upper <i>Parte Superiore Aggancio</i>	1		HT000001 ~	
25		2050204004	* Shaft <i>Perno Aggancio Access.</i>	1		HT000001 ~	
26		1224809	* Washer, Spring <i>Rosetta Grower</i>	1		HT000001 ~	M16
27		1223800	* Nut <i>Dado Esagonale</i>	1		HT000001 ~	M16
28		1226454	* Pin, Cotter <i>Copiglia</i>	2		HT000001 ~	D.4x30
29		2050202075	* Guard <i>Bavero Hi-Tip 107 Completo</i>	1		HT000001 ~	
30		1222031	* Bolt <i>Vite TE</i>	4		HT000001 ~	M8x20
31		1224085	* Washer Flat <i>Rosetta Piana</i>	8		HT000001 ~	D.8x24

NOTE

KEY		PART No.	DESCRIPTION	Q'TY	CH.	SERIAL No.	REMARKS
No.	S						
32		1224794	* Washer Spring <i>Rosetta Grower</i>	4		MC000001 ~	M8
33		1130722024	* Hose Ass'y <i>Tubo Idraulico</i>	1		HT000001 ~	L=1450
34		1130722023	* Hose Ass'y <i>Tubo Idraulico</i>	1		HT000001 ~	L=1450
35		3292743	* Quick Connector (Male) <i>Innesto Rapido (Maschio)</i>	2		HT000001 ~	1/4"
36		3292744	* Quick Connector (Female) <i>Innesto Rapido (Femmina)</i>	2		HT000001 ~	1/4"
37		3251845	* Washer Seal <i>Rondella G.M.</i>	4		HT000001 ~	1/4"

NOTE

KIT HI-TIP CARRY 107

PUBBLICATO IN MARZO 2017

KATO IMER S.p.A.

ITALY



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