

# CONQUEST ATTACHMENTS

## CA1450 FORWARD PLATE COMPACTOR OPERATOR'S MANUAL

Serial #: \_\_\_\_\_

548 BOURQUIN RD, ESTEVAN, SK S4A 2A7

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**Index**

**Safety Instructions For Plate Compactors** ..... 3

    SAFETY ..... 3

    TRANSPORT AND LIFTING ..... 3

    MAINTENANCE ..... 4

    PERIODIC MAINTENANCE ..... 4

    FIRE ..... 4

    RESIDUAL RISK ..... 4

**Max Inclination** ..... 5

**Function** ..... 5

**Applications** ..... 5

**Operation** ..... 6

    CHECKS BEFORE STARTING ..... 6

    ENGINE STARTING (MANUAL) ..... 6

    ENGINE STOPPING (MANUAL) ..... 6

    ENGINE OIL ..... 7

    AIR FILTER (DRY) ..... 7

    AIR FILTER (OIL BATH) ..... 7

**Maintenance** ..... 9

**Troubleshooting** ..... 10

**Lubrication** ..... 11

**Engine / Exciter Revs** ..... 11

**Technical Data** ..... 12

    SOUND MEASUREMENTS ..... 12

    VIBRATION MEASUREMENTS ..... 12

**Expanded View** ..... 13

**Warranty** ..... 23

## SAFETY INSTRUCTIONS FOR PLATE COMPACTORS

### SAFETY

Plate compactors must only be operated by a person who:

- is at least 18 years old;
- is physically and mentally fit for this job;
- may be expected to carry out the job he's charged with carefully.
- Plate compactors must only be used for compaction jobs observing safety and operating instructions.
- People who work with plate compactors must know all safety instructions.
- Do not take drugs or drink alcohol before using plate compactors.
- Always wear appropriate protective clothes (ear protections, gloves, protecting shoes and helmet).
- Do not alter the operation devices of the plate compactor.
- Store the compactor with engine off in a safe place.
- Always refill fuel tank when the engine is off. Do not allow fuel to come into contact with the hot parts of compactor and engine.
- Do not smoke when using the compactor. Keep the compactor out of open flames.
- Always check fuel tank cap. If there is a fuel cock, shut it off when the engine is not working.



#### **WARNING**

*If fuel tank leaks, replace it immediately: A fuel tank in bad conditions could explode.*

- Do not use the compactor in places where there are gaseous exhalations.
- Do not use the machine indoors or in an enclosed area unless inadequate ventilation.
- When the work area is near slopes, the compactor could turn over.
- When you use compactor in reverse and in a narrow place, the operator must be sideways from the handle in order to avoid stumbling.
- Always operate in safe conditions in order to avoid accidents.
- Always operate in maximum stability conditions.
- Use transport wheels only for movements in yard. In all the other situations they must be removed.
- Always be sure of the proper functioning of the safety and control devices.
- If there are any problems, immediately stop the machine and inform the person responsible of the job.

### TRANSPORT AND LIFTING

- Do not lift or transport the compactor when it is running.
- Check that lifting points are not damaged.
- For loading and unloading the compactor, appropriate lifting gear is necessary and must be used on the lifting points.

- Be sure that the ramps are fixed and check the tolerable weight in order to avoid turnovers.
- Tie the machine on vehicle to prevent sliding or tipping over.
- For long transports, empty the fuel tank completely and close it.

**WARNING**

*Do not lift or hook the plate compactor by the handle.*

**MAINTENANCE**

- Use original spare parts only.
- Do not alter the operation devices of plate compactor.
- Do not turn the engine on without air filter.

**WARNING**

*Modifications in this machine are subject to the expressed approval of Conquest Attachments. In case of non-observance, Conquest will refuse all liabilities and all warranties.*

- Do not make maintenance operations when machine is running or when engine is on.
- As soon as maintenance and repair jobs have been completed, all safety devices must be properly reinstalled.

**PERIODIC MAINTENANCE**

Regular maintenance is required for a good performance of the compactor.

**FIRE**

In the case of a fire in the machine, use an AB class powder extinguisher if possible.

**RESIDUAL RISK**

Plate compactors are designed for absorbing a large part of machine vibrations.

Depending on the operation, the ground conditions and exposure time, the recommended limits for hand-arm vibrations may be exceeded.

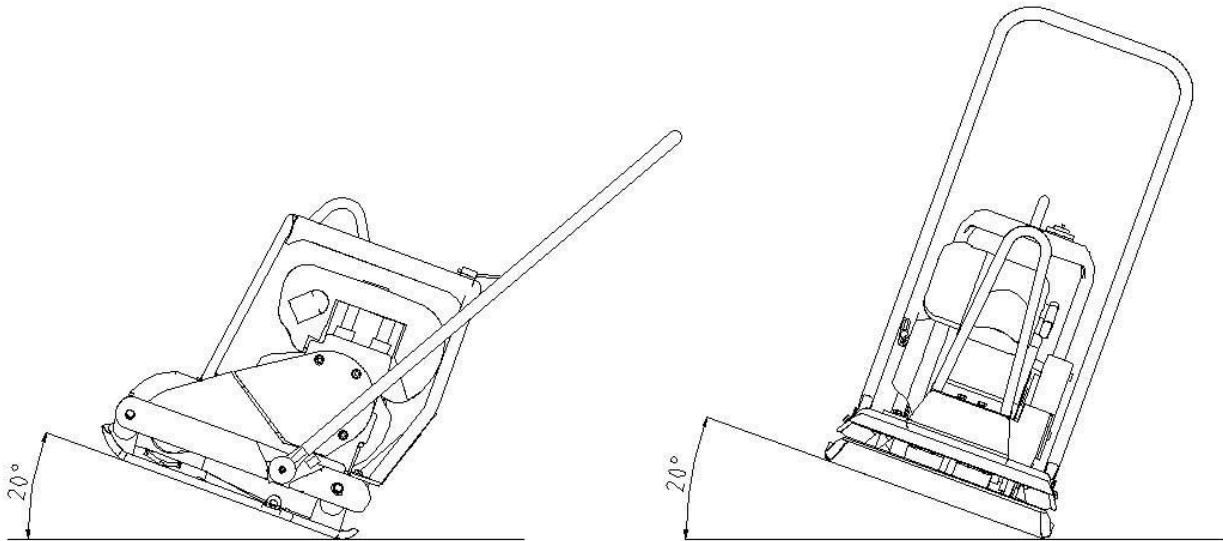
**WARNING**

*Do not use the machine on grounds already compacted.*

Prolonged exposure to vibrations could cause injury to your hands or wrists. If you feel severe discomfort or pain, do not use the machine and consult a doctor before resuming work.

Prolonged exposure to loud noises without adequate ear protection could cause permanent hearing damage.

## MAX INCLINATION



## FUNCTION

The vibration required for tamping is produced by the exciter which is on the compacting plate. The engine starts the exciter and the torque is transmitted by the centrifugal clutch and by the belt.

In order to allow the idling of the drive engine, the centrifugal clutch, at low engine speeds, interrupts the flow of power to exciter. The compactor must always be used with the gas handle in the "OPERATIVE" position.

The engine supporting and the compacting plates are connected by 4 shock mounts, which are mounted to avoid vibrations reaching the operator.

## APPLICATIONS

The CA1450 compactor is suitable for asphalted road maintenance, pavé and interlocking tiles laying, compaction of any kind of soils.

## OPERATION

### CHECKS BEFORE STARTING

- Before using compactor, carefully read instruction manual.
- Engine oil level  
Check oil level using the proper dipstick. If necessary, refill with SAE 15 W 40 oil.
- Air filter  
Check that air filter is clean and in good condition. Clean or replace it if necessary.
- Fuel  
Never use oil/gasoline mixture or dirty fuel. Avoid getting dirt, dust or water into fuel tank. Refuel avoiding leaks on engine.

### ENGINE STARTING (MANUAL)

- Open the fuel valve.
- Move the throttle lever to 3/4 position.
- Turn the choke lever (if present).
- Turn the engine switch to the ON position.
- Pull the starter grip lightly until resistance is felt, then pull briskly.

*Pull hand crank until it starts, in order to avoid counterblows*

- As the engine warms up, gradually move the choke lever (if present).
- Warm up the engine at the minimum speed for some minutes.
- The compactor will start moving when the throttle lever is in operative position.

### ENGINE STOPPING (MANUAL)

- Move the throttle lever to the minimum position. Warm up the engine at the minimum speed for some minutes.
- Turn the engine switch to the OFF position.



#### **WARNING**

*Never operate the engine switch when the engine is at the maximum speed.*

- Turn the fuel valve to the OFF position.

## ENGINE OIL

- Check oil level using the proper dipstick, refill with SAE 15 W 40 oil if necessary.

### Oil change

- Drain oil at warm engine.
- Refill with SAE 15W40 oil.



#### **WARNING**

*Only use oil with characteristics advised by the manufacturer engine (see engine book).*

## AIR FILTER (DRY)



#### **WARNING**

*Clean air filter daily in order to avoid engine damages.*

- Open air cleaner and remove element.
- Lightly and repeatedly tap the element on a hard surface to eliminate all excess dirt.
- Clean the element.
- Refit the air filter. Do not run the engine without the air filter.

## AIR FILTER (OIL BATH)



#### **WARNING**

*Clean air filter daily in order to avoid engine damages.*

- Open air cleaner and remove upper element.
- Wash the upper filtering element with soap and water.
- Clean the upper bowl.
- Remount the upper filtering element.
- Remove the lower filtering element.
- Clean and dry filtering element.
- Drain and clean bowl.
- Fill with engine oil up to level mark.
- Reassemble air cleaner.



#### **WARNING**

*Never use gasoline or low flash point solvents for cleaning the air filter to avoid fire and explosions.*

**OPERATION**

Always run the engine at the full throttle setting. This has been set at the factory and the setting has been sealed. Tampering with the throttle settings will void the warranty. Operating at low RPM can overheat the clutch and operating above factory set RPM can damage the exciter.

Never operate the unit on hard surfaces or over-compacted areas as this can damage the machine. Compaction tests should be done during operations to ensure the ground is not being excessively compacted beyond specification.



Do not disperse oil, batteries, fuel and dangerous substances in the environment, as they have high pollution power.





**TROUBLESHOOTING**

TROUBLE	POSSIBLE CAUSE	SOLUTION
The engine works properly but the machine does not vibrate	The transmission belt is broken	Replace the belt
	The wear and tear has caused the belt to loosen up	
	The centrifugal clutch has broken	Replace the centrifugal clutch
Reduced or irregular speed	The engine rpm is not correct	Verify that during compaction gas lever is in "OPERATIVE" position
	The transmission belt has loosened up	Reset the number of engine rpm
The engine rpm are low but the exciter does not stop	Centrifugal clutch malfunction	Tension the transmission belt and, if necessary, replace it
The exciter heats up to over 90°	There is too much of oil in the vibrator	Repair the centrifugal clutch and, if necessary, replace it
The engine works with difficulty and the vibrator is too noisy and it stops or slows down	Mechanical block of the exciter (bearings, shaft)	Top up the oil level. Check whether the oil seal has been damaged; replace if necessary.
The engine turns off or does not work properly	Fuel tank empty	Remove the element causing the failure or, if necessary, replace the exciter
	Oil lack	Add fuel
	Dirty air filter	Add oil
	Engine damaged	Clean air filter, if necessary replace it
		Contact an engine service center

**LUBRICATION**

	<b>Model</b>	<b>Quantity</b>	<b>Type</b>
Exciter	CP 6-7-9	0,2 kg	SAE 15 W 40
	CP 13-15-17	0,5 kg	
	CA1450 – CAD1450	0,2 kg	Pontonic FDL 75W90
Engine	All models	See engine instructions	SAE 15W40

**ENGINE / EXCITER REVS**

<b>Model</b>	<b>Engine</b>	<b>Exciter</b>
CP 6-7-9	3500 – 3550	5350 – 5400
CA1450 – CAD1450	3400 – 3450	5350 – 5400
CP 13-15-17	3550 – 3600	5350 – 5400

**WARNING**

*Set the rpm as per the above table. A different rpm will cause the compactor to work improperly and could break it. If the set rpm is changed, the warranty will not be recognized.*

## TECHNICAL DATA

Item	CAR1450	CAH1450
Dimensions base plate (Width x Length)	mm 500 x 580	
Operating weight	kg 90	
Working speed	m/min 25	
Max climbing ability	20%	
Frequency	90 Hz	
Centrifugal force	15,99 kN	
Transmission	Centrifugal clutch / Belt	
Engine	Air-cooled single-cylinder 4 stroke	
	Subaru Robin EX17	Honda GX 160
Engine Power	5.7 Hp	4.8 Hp
	4.2 kW	3.6 kW
Displacement	169 cm <sup>3</sup>	163 cm <sup>3</sup>
Fuel	Petrol	
Fuel consumption	l/h 1,2	l/h 1,2
Fuel tank capacity	l 3,6	l 3,6

### SOUND MEASUREMENTS

The product has been produced in accordance with the standard 2000/14/CE, procedure I annex VI. Measured sound power level **104,2** [dB(A)] and guaranteed sound power level **108** [dB(A)] on a significant equipment.

### VIBRATION MEASUREMENTS

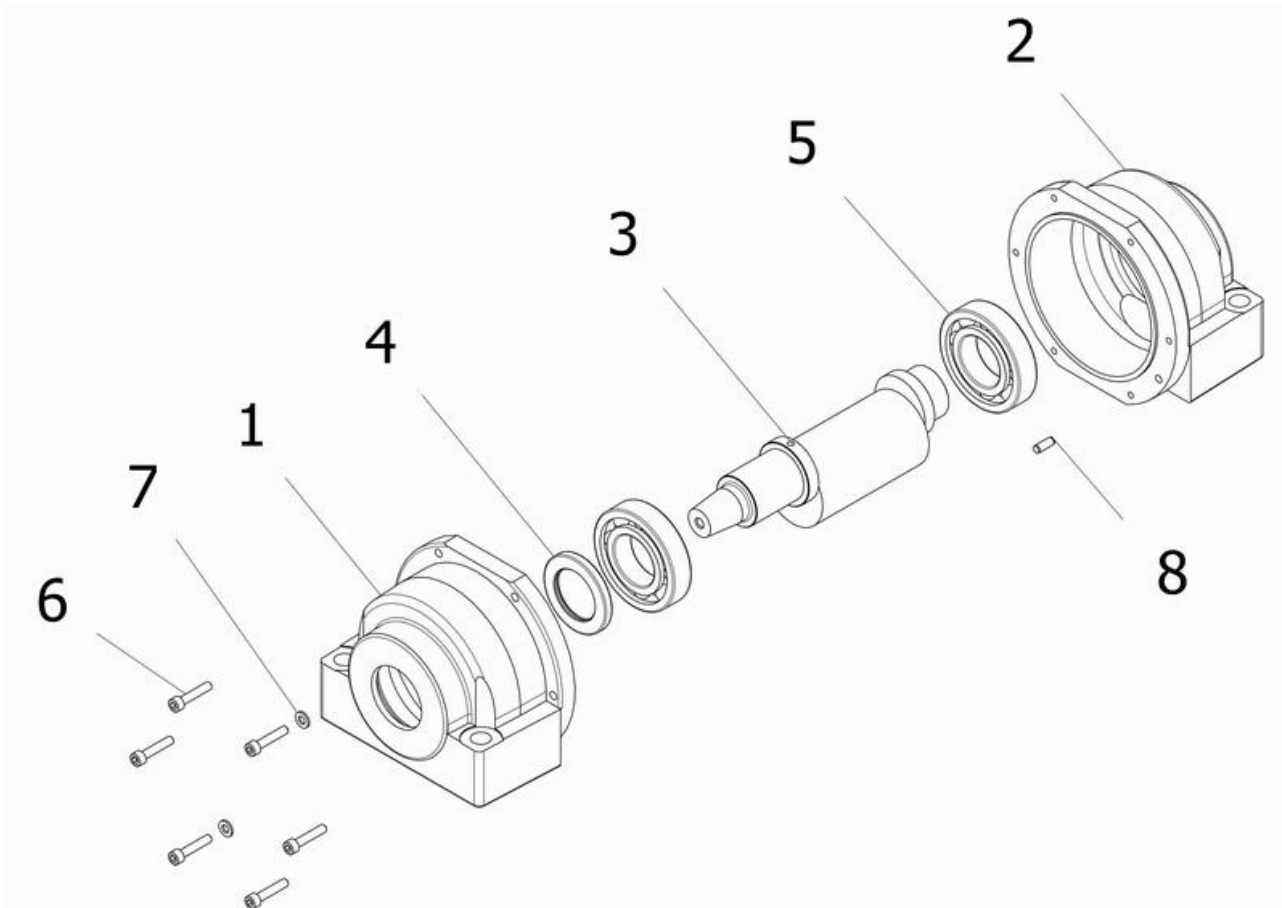
Products are tested for hand/arm vibration level in accordance with annex D prEN500-4:2001

The hand/harm vibration level is **12** m/s<sup>2</sup>

The plate compactor has been tested on a "macadam" surface, produced with not cleaned stone crusher grit, with 16 mm medium diameter (with components which have diameter that goes from 10 to 20 mm).

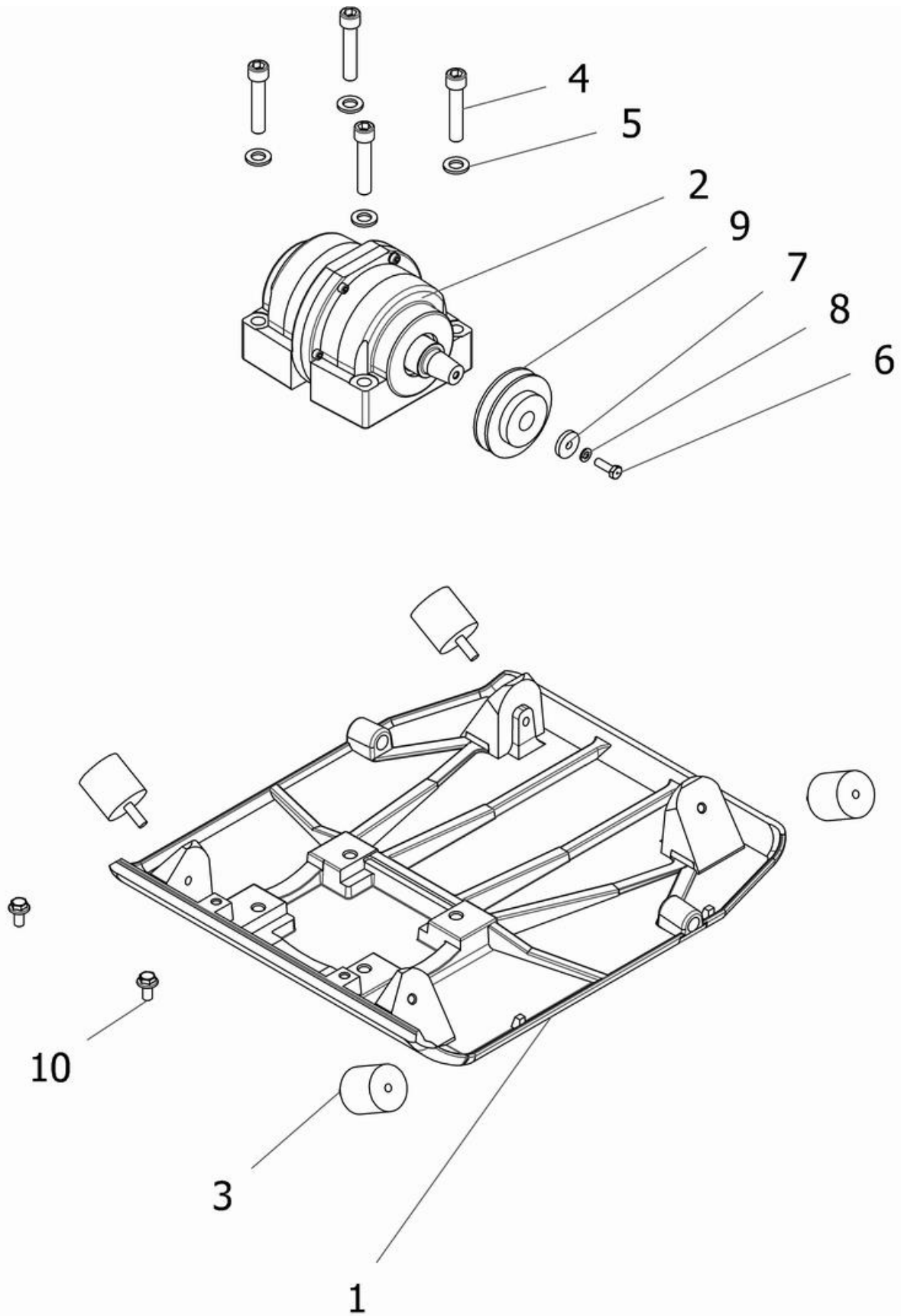
EXPANDED VIEW

EXCITER CA1450



POS	CODE	DESCRIPTION	Q.TY
1	560428	EXCITER COVER CP6/7/9	1
2	560427	EXCITER COVER CP6/7/9	1
3	560432	EXCITER SHAFT CP7/9 - CAD1450	1
4	131760	DOUBLE LIP SEAL 40x62x7	1
5	151969	ROLLER BEARING NJ 208 E.TVP2.C4	2
6	151302	SCREW TCEI M 6x 30 8.8 UNI 5931	6
7	151198	WASHER M 6 UNI 6592 ZN	2
8	152273	TRIPPING PIN D6x16	1
---	182126	OIL SAE 75W90	0,2 L

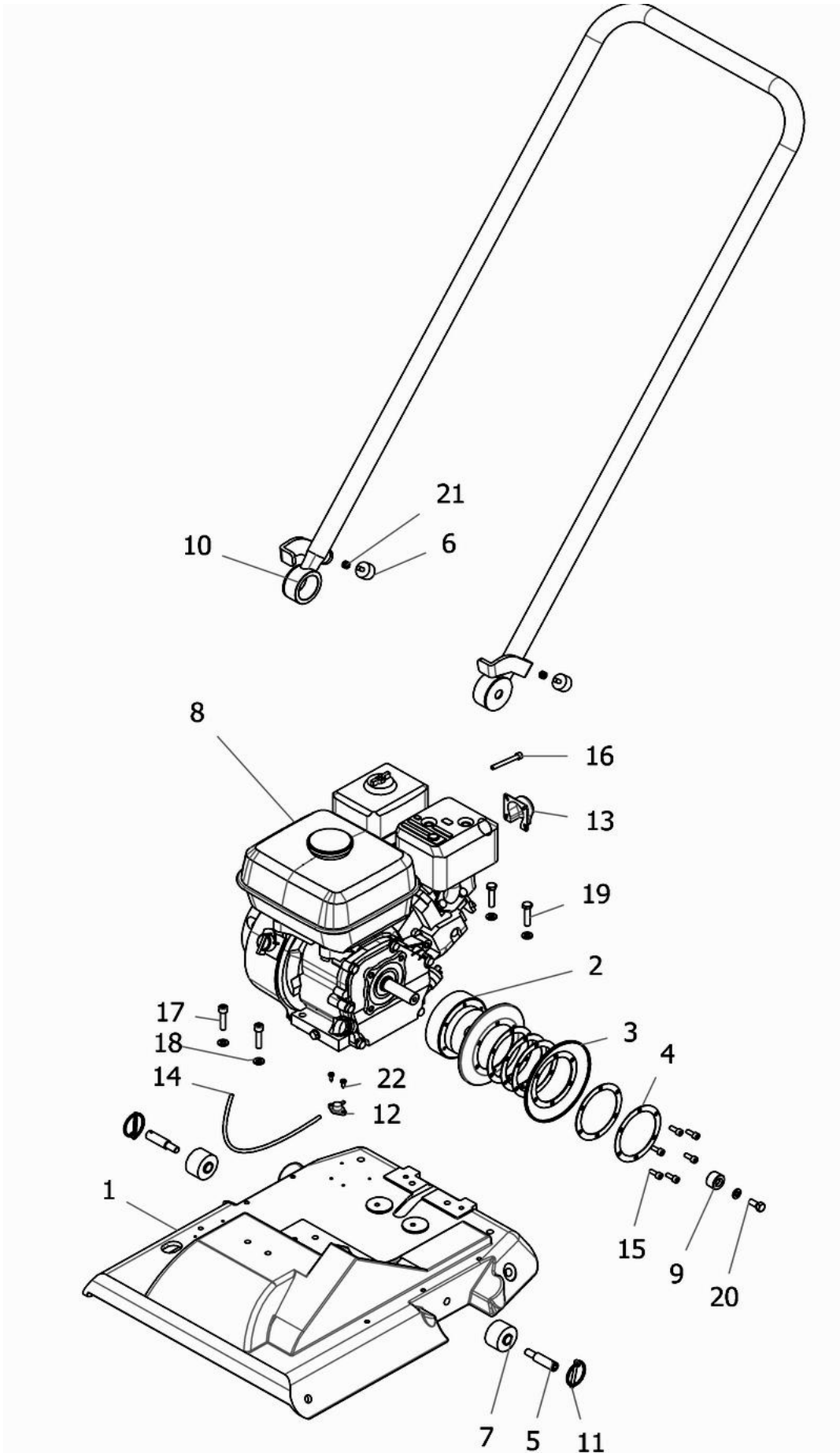
BASE PLATE CA1450



## BASE PLATE CA1450

POS	CODE	DESCRIPTION	Q.TY
1	560471	BASE PLATE CA1450	1
2	560472	EXCITER CP7/9 - CA1450	1
3	131998	SHOCKMOUNT MF D 50X50 M10X25 50-55 SH	4
4	151951	SCREW TCEI M14x 70 10.9 UNI 5931	4
5	151117	WASHER. M14 NORD LOCK	4
6	560239	SCREW	1
7	560267	CLUTCH WASHER. 28X8.5 SP.5 ZN	1
8	151207	GROWER WASHER M 8 UNI 1751	1
9	560446	EXCITER CLUTCH CA1450	1
10	152284	SCREW FLG D S/T M10X20 8.8 ZN	2

ENGINE SUPPORT CA1450

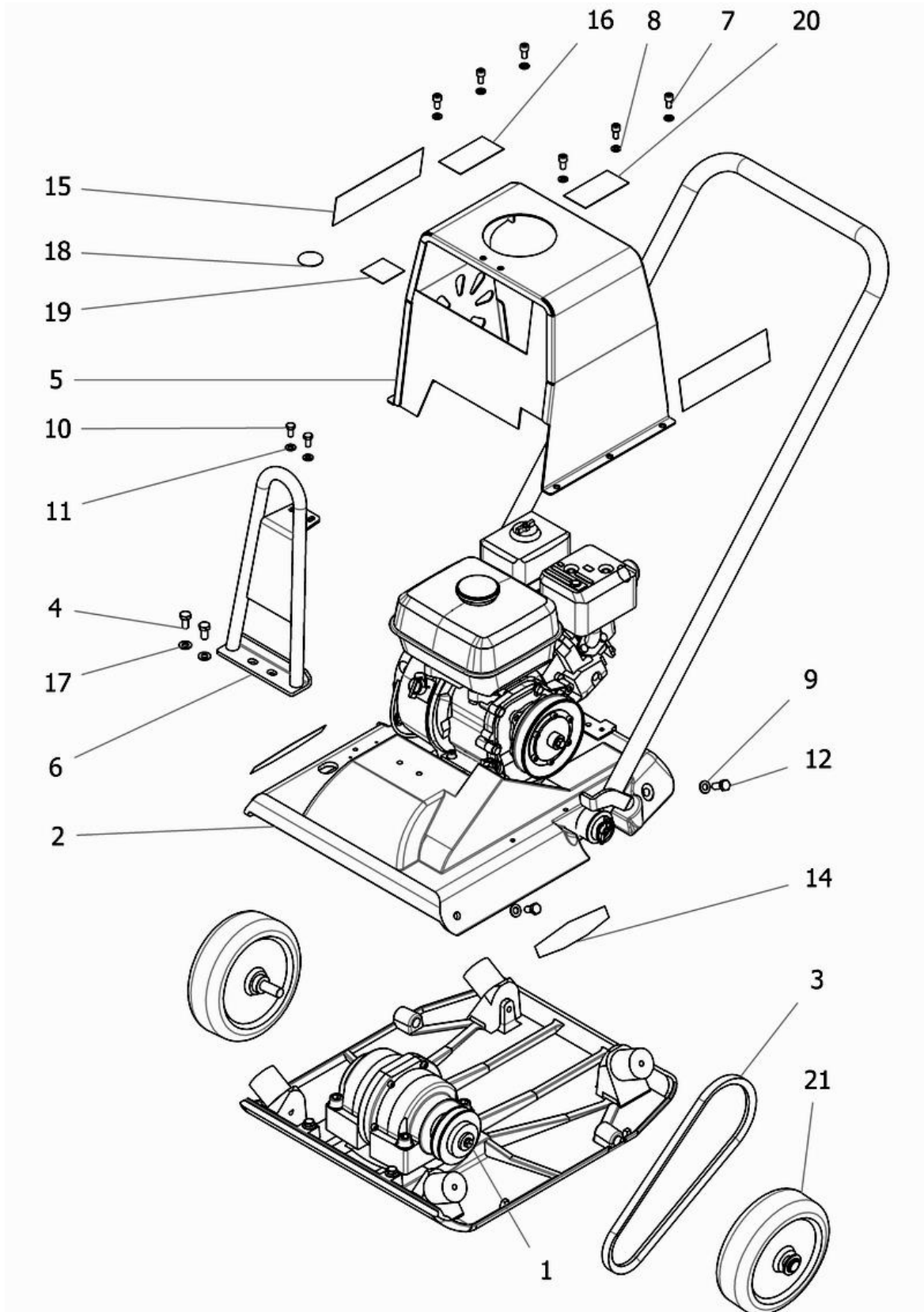




## ENGINE SUPPORT CA1450

POS	CODE	DESCRIPTION	Q.TY
1	560021	ENGINE SUPPORT CAD1450	1
2	152262	CENTRIFUGAL CLUTCH 19,05 X CAH1450	1
3	560442	CLUTCH COVER DISK D142	2
4	560443	CLUTCH GAGE D98	5
5	560468	SCREW	2
6	131999	SHOCKMOUNT MF D25X15 M6X18 60 SH	2
7	560333	SHOCKMOUNT D.43 60SH	2
8	181129	HONDA GX 160 K1 QX4 ENGINE	1
8	181217	ROBIN SUBARU EX 17OD50060	1
9	560502	CLUTCH AXEL BOX ZN	1
10	560051	HANDLE	1
11	152274	PIN mm4,5x35x23	2
12	131692	ON-OFF SWITCH	1
13	131711	DEFLECTOR BLACK	1
14	132255	ELECTRICAL CABLE	1
15	151301	SCREW TCEI M 6x 16 8.8 UNI 5931 ZN	6
16	152116	SCREW TCEI M 6x 50 8.8 UNI 5931 ZN	1
17	152278	SCREW TCEI M 8x 35 8.8 UNI 5931 ZN	2
18	151807	CONTACT WASHER 8(8.2x18x1.4)ZN	5
19	151311	SCREW TE M 8x35 8.8 UNI 5739 ZN	2
20	151309	SCREW TE 5/16-24x3/4" 8.8 UNF	1
21	151003	NUT M6 UNI 5588 ZN	2
22	152290	SCREW AUT.TCC 4,2x13 UNI 6954 - 7981	2

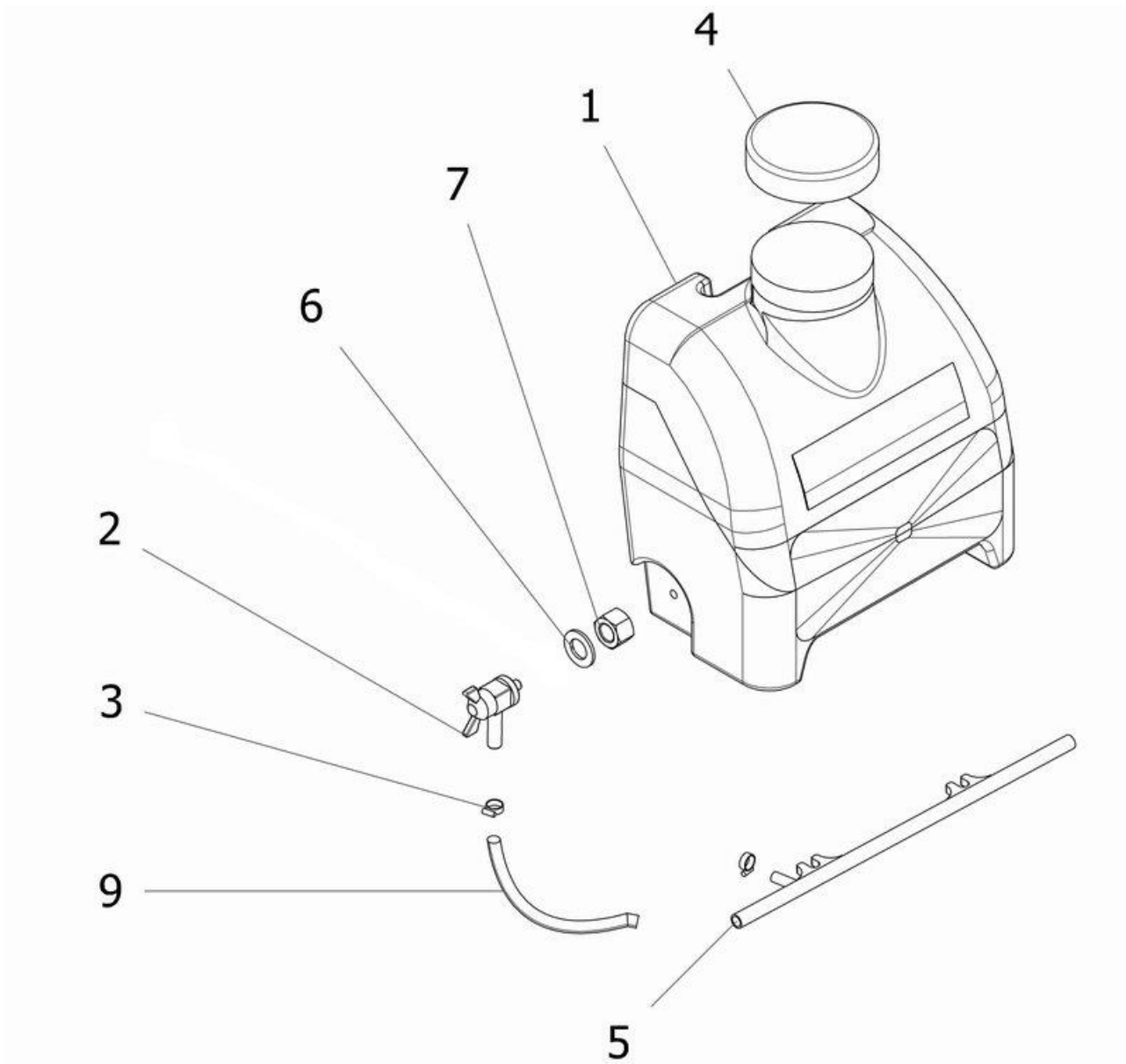
VIBRATORY PLATE CA1450



## VIBRATORY PLATE CA1450

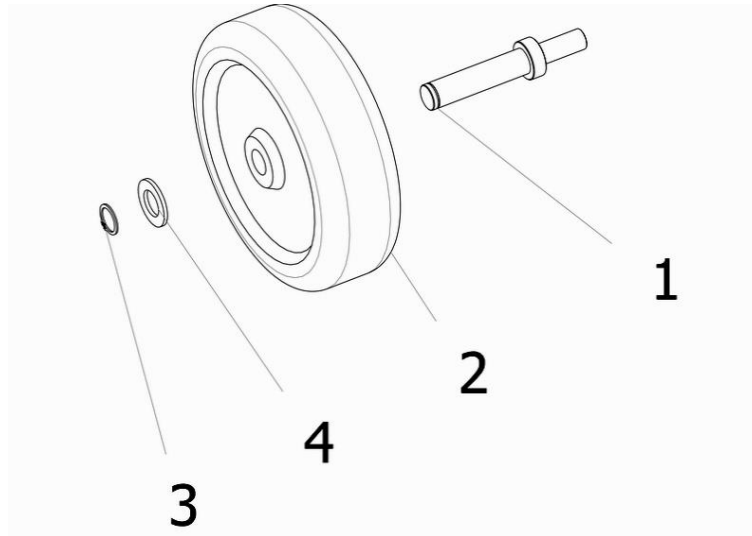
POS	CODE	DESCRIPTION	Q.TY
1	-----	BASE PLATE WITH EXCITER FOR CAD1450	1
2	-----	SUPPORT OF ENGINE WITH ENGINE FOR CAH1450	1
2	-----	SUPPORT OF ENGINE WITH ENGINE FOR CAR1450	1
3	132055	V BELT HFX SEZ. XPA 832	1
4	151836	SCREW TE M10x20 8.8 UNI 5739 ZN	4
5	560477	ENGINE COVER CAH1450	1
6	560441	ROLLBAR CAH1450	1
7	151395	SCREW TCEI M 8x 16 8.8 UNI 5931 ZN	6
8	151207	GROWER WASHER M 8 UNI 1751	6
9	151814	CONTACT WASHER 10(10.2x22x1.6)ZN	4
10	151310	SCREW TE M 8x16 8.8 UNI 5739 ZN	2
11	151807	CONTACT WASHER 8(8.2x18x1.4)ZN	2
12	151856	SCREW TE M10x25 8.8 UNI 5739 ZN	2
13	132145	CE STEEL PLATE 55X70	1
14	132265	SMALL CONQUEST STICKER	2
15	132263	CA1450 STICKER	2
16	132260	PROTECTIVE HEAR STICKER	1
17	151791	CONTACT WASHER 10(10.2x22x1.6)	2
18	132189	HOOK STICKER	1
19	132285	108 db STICKER	1
20	132261	FUEL STICKER	1
21	530419	COMPLETE WHEEL CR 11-12	2

WATER TANK CA1450



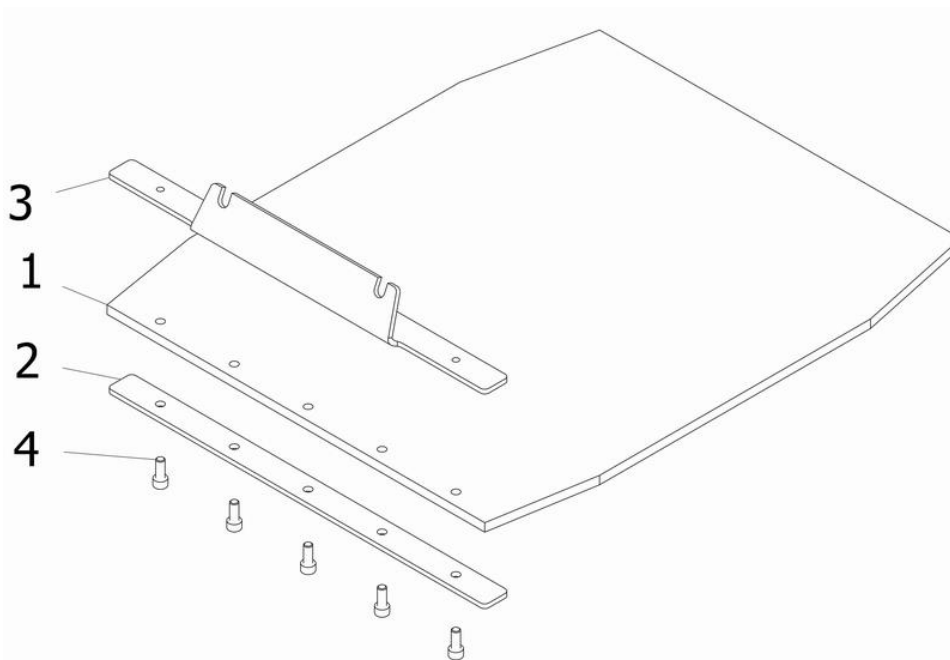
POS	CODE	DESCRIPTION	QTY
1	132250	WATER TANK 14 L.	1
2	152276	TAP	1
3	152114	CLAMP M12 D.12-20 ZNT	2
4	132254	WATER TANK 14 L. CAP	1
5	560481	PIPE CAD1450	1
6	151203	WASHER M20 UNI 6592 ZN	1
7	560175	NUT GAS 3/8 H15 CH 27 ZN	1
9	132205	PIPE D 10x14	0,25 ML

WHEEL



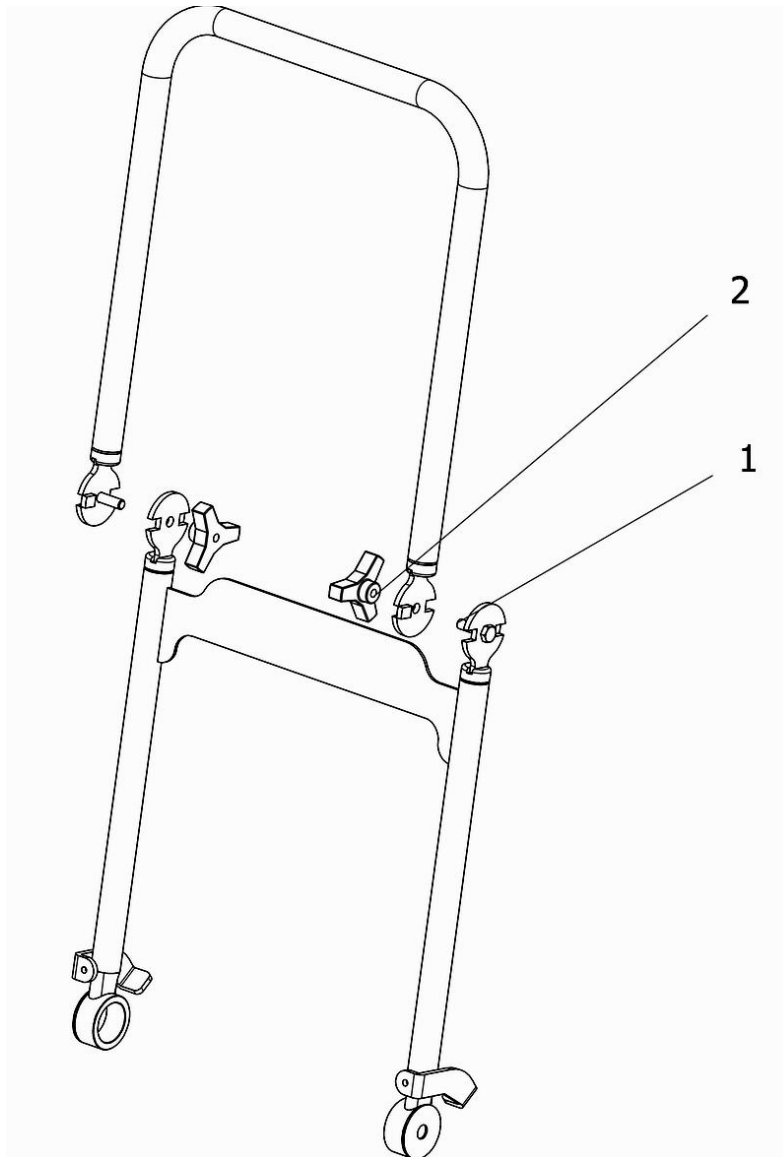
POS	CODE	DESCRIPTION	QTY
1	530208	WHEEL PIN CR11/20	1
2	131214	PNEUMATIC WHEEL 2,50-4	1
3	151219	SEEGER E. 20 UNI 7435	1
4	151203	WASHER M20 UNI 6592 ZN	1

VULKOLLAN PAD



POS	CODE	DESCRIPTION	QTY
1	360311	PAD SHEET CAD1450	1
2	560349	PAD BRACKET CAD1450	1
3	560350	PAD BRACKET CAD1450 FIL.ZN.	1
4	151407	SCREW TCEI M 8x 20 8.8 UNI 5931 ZN	5

FOLDING HANDLE



POS	CODE	DESCRIPTION	Q.TY
1	560041	FOLDING HANDLE CA1450	1
2	132230	HANDLE GRIP 1052/FP D50 M10	2

[The exploded drawings are prepared for the explanation purpose, and the parts may not appear exactly as illustrated]

## WARRANTY

This Conquest Attachments product is warranted to be free from defects in workmanship for three years from the date of purchase. Warranty is void on products and components that have been modified or repaired without the prior consent of Conquest Attachments.

Engine warranty is exclusively granted from authorised engine service centres and is separate from the machine warranty. You can find the list of approved centres, on the websites of the manufacturers or this can be requested from Conquest Attachments.

Conquest Attachments warranty does not cover damage from misuse, accidents, lack of service, or negligence or damage to the attachment or surrounding environment.

Claims are limited to replacement parts. In some cases a reasonable labour amount may be considered. Warranty does not cover service mileage, freight, downtime or replacement of attachment. Factory replacement parts must be used.

## WARRANTY PROCESS

1. Contact Conquest Attachments to request a Warranty Claim Form.
2. Once Warranty Claim Form is received along with pictures, Conquest Attachments will evaluate for repair.
3. RGA number will be assigned and replacement part sent prepaid, ground freight and invoiced.
4. Defective parts need to be returned prepaid to Conquest Attachments for warranty consideration. Upon inspection, account will be credited for defective part.



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