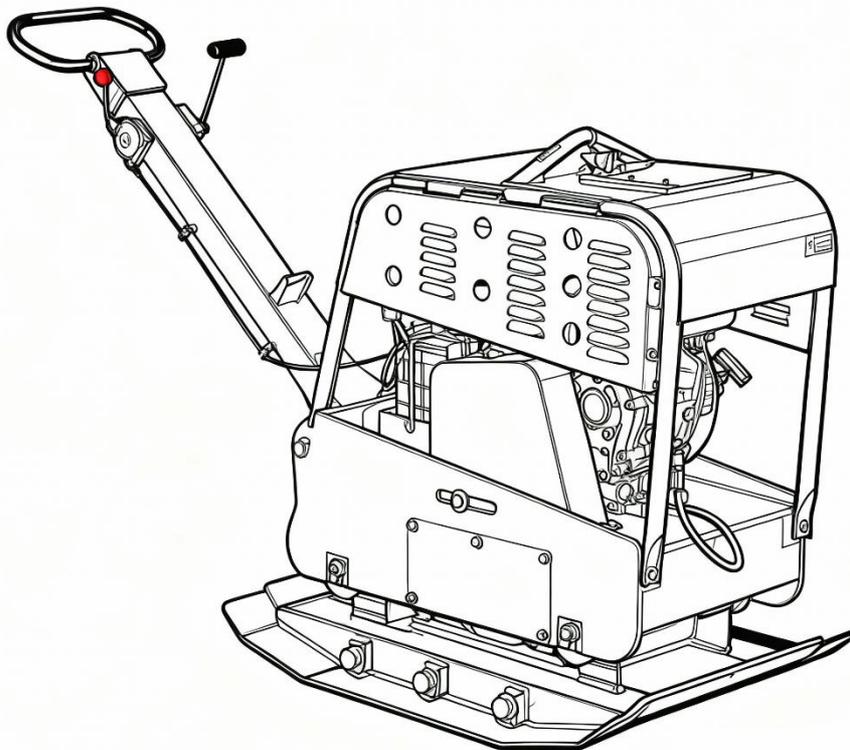


## **BWM Reversible Plate Compactor**

### **User's Manual**



### ***BWM C125, C160 & C330 SERIES***

To reduce the risk of injury, all operators and maintenance personnel must read and understand these instructions before operating, changing accessories, or performing maintenance on BWM Products power equipment. All possible situations cannot be covered in these instructions. Care must be exercised by everyone using, maintaining or working near this equipment.

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## INTRODUCTION

### General safety instruction for the operation of power equipment

The goal of our company is to manufacture power equipment that helps the operator work safely and efficiently. The most important safety device for this or any tool is the operator. Care and good judgment are the best protection against injury. All possible hazards cannot be covered here, but we have tried to highlight some of the important items, individuals should look for and obey caution, warning and danger signs placed on equipment, and displayed in the workplace. Operators should read and follow safety instruction packed with each product.

Learn how each machine works. Even if you have previously used similar machines, carefully check out each machine before you use it. Get the 'feel' of it and know its capabilities, limitations, potential hazards, how it operates, and how it stops.

## HAZARDS AND RISKS

NEVER allow any person to operate the machine without adequate instruction.

ENSURE all operators read, understand and follow the operating instructions.

SERIOUS INJURY could result from improper or careless use of this machine.

Plate compactors are heavy units and should be positioned by two people of appropriate strength. Using the lifting handles provided on the machine, along with correct lifting techniques.

## APPLICATIONS

Trench compaction	Earthworks
Road maintenance	Landscaping
Brick paving	Driveway topping

## FUNCTIONS AND CONTROLS

The motor is controlled by an 'ON/OFF' switch or push button is mounted on the motor below the fuel tank.

Tension of the drive belt is adjustable, loosen the four nuts on the bolts which secure the motor to the base plate. Adjust the set screws which bear against the motor crankcase to achieve the required belt tension. Ensure that the four nuts and the set screw locknuts are tightened after adjustment.

## ACCESSORIES

Accessories	Model
Trolley wheel-for easy Transportation.	C125 Series C160 Series
Extension Plate	C330 Series
Heavy duty industrial throttle control	C125 Series C160 Series C330 Series

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Plate compactors are heavy units and should be positioned by two people of appropriate strength. Using the lifting handles provided on the machine, along with correct lifting techniques.

### **! MECHANICAL HAZARDS**

DO NOT operate the machine unless all protective guards are in place.

KEEP handles and feet clear of rotating and moving parts as they will cause injury if contacted.

ENSURE that the motor operation switch is in the 'OFF' position and the spark plug ignition lead is disconnected before removing the guards or making adjustments.

ENSURE both the machine and the operator are stable by setting up on level terrain and the machine will not tip over, slide or fall while in operation or unattended.

DO NOT leave the machine in operation while it is unattended.

ENSURE that the walls of a trench are stable and will not collapse due to the action of the vibration, prior to commencing compaction.

ENSURE that the area to be compacted does not contain any 'live' electrical cables, gas, water, or communication services which may be damaged by the action of vibration.

EXERCISE CARE when operating unit. Exposure to vibration or repetitive work actions may be harmful to hands and arms.

NEVER stand on the unit while it is operating.

DO NOT increase the governed no-load motor speed above 3,500 r/min. Any increase may result in personal injury and damage to the machine.

BE CAREFUL not to come in contact with the muffler when the engine is hot, since it can cause severe burns.

ENSURE that the repairs to the motor and machine are carried out by COMPETENT personnel.

### **! FIRE & EXPLOSION HAZARDS**

PETROL is extremely flammable and explosive under certain conditions.

ENSURE that the petrol is only stored in an approved storage container.

DO NOT refuel the motor while it is in operation or hot.

DO NOT refuel the motor in the vicinity of sparks, a naked flame, or a person smoking.

## HAZARDS AND RISKS

DO NOT over fill the fuel tank and avoid spilling petrol when refueling. Spilled petrol or petrol vapour may ignite. If spillage occurs, ensure that the area is dry before starting the motor.

ENSURE that the fuel tank cap is securely fitted after refueling.

### **! CHEMICAL HAZARDS**

DO NOT operate or refuel a petrol or diesel motor in a confined area without adequate ventilation.

CARBON MONOXIDE exhaust gases from internal combustion motor-driven units can cause death in confined spaces.

### **! NOISE HAZARDS**

EXCESSIVE NOISE can lead to temporary or permanent loss of hearing.

WEAR an approved hearing protection device to limit noise exposure.

### **! PROTECTIVE CLOTHING**

ALWAYS wear approved hearing protection when working in a confined work space. Protective goggles and a dust mask should be worn when working in a dusty environment. Protective clothing and footwear may also be desirable when working with hot mix bitumen.

### **! ADDITIONAL HAZARDS**

Slip/Trip/Fall is a major cause of serious injury or death. Beware of uneven or slippery work surfaces.

Exercise care when working in the vicinity of unprotected holes or excavations.

### Pre-start-up Inspection

The following Pre-start-up inspection must be performed before the start of each work session or after every four hours of use, whichever is first. If any fault is discovered, the compactor must not be used until the fault is rectified.

Thoroughly inspect the compactor for signs of damage. Check components are present and secure. Pay special attention to the belt drive safety guard fitted between the engine and the vibrator unit.

- Check the engine oil level and top up as necessary.
- Check the fuel level and top up as necessary.

### Starting and Stopping Procedure

1. Turn on the fuel tap by moving the fuel 'ON/OFF' lever fully to the right (Figure 1).
2. If starting the engine from cold, set the choke 'ON' by moving the choke lever fully to the left. If restarting a warm engine, the choke is usually not required. However, if the engine has cooled to a degree, partial choke may be required.
3. Turn the engine 'ON/OFF' switch to the 'ON' position.
4. Set the throttle to the idle position by moving the throttle lever fully to the right. Do not start the engine on full throttle, as the compactor will vibrate as soon as the engine starts.
5. Taking a firm hold of the control handle with one hand, grasp the recoil starter handle with the other. Pull the recoil starter until engine resistance is felt, then let the starter return.
6. Taking care not to pull the starter's rope fully out, pull the starter handle briskly.
7. Repeat until the engine fires.
8. Once the engine fires, gradually set the choke lever to the 'OFF' position by moving it to the right.
9. If the engine fails to fire after several attempts, follow the trouble-shooting guide on page 9.
10. To stop the engine, set the throttle to idle and turn the engine 'ON/OFF' switch to the 'OFF' position.
11. Turn the fuel off.

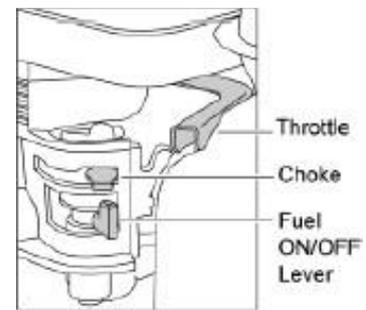


Figure 1.

## CARE AND PREVENTATIVE MAINTENANCE

The machine is best suited to the compaction of bituminous and granular materials e.g. granular soils such as silt and clay are best compacted using the impact force produced by a vibrating rammer.

Where possible, the site should be graded and leveled before commencing compaction.

Correct moisture content in soil is vital to proper compaction. Water acts as a lubricant to help slide soil particles together. Too little moisture means inadequate compaction; too much moisture leaves water-filled voids that weaken the soil's load-bearing ability.

Compaction of dry materials will be facilitated by moistening with a water hose fitted with a sprinkler.

Excessive watering or water content will cause the machine to stall.

Use unleaded grade petrol and ensure that the fuel is free from contamination.

The vibratory motion provides a self-propelling action. Position the handle at the opposite end of the machine to the vibrator.

For more information on starting and correct operating procedures of the motor, refer to the motor operation manual supplied with the unit.

Increase the motor speed to the maximum setting using the hand throttle lever before commencing compacting.

The machine should be controlled by grasping the handle with both hands and applying restraint to control the forward motion.

Steer the machine by moving the handle sideways to the right or left.

ALWAYS maintain good footing so that you do not slip and lose control when starting or operating the machine.

If reversing the machine, you should pull the travel lever back, and make sure that the lever is kept at the bottom position (you need to use more strength than when pushing the lever forward). Due to the design principle, the reverse speed is slower than the forward speed.

## MAINTENANCE

Check the oil level each use.

Inspect the rubber anti-vibration mounts for wear or deterioration.

If the optional water tank is fitted, inspect the water hose and its connections to ensure that they do not leak.

Clean the underside of the plate regularly to prevent a buildup of material.

### CAUTION:



Inspection and other services should always be carried out on hard and level ground with the engine shutdown.

### Inspection and Maintenance Service Tables.

To make sure your plate compactor is always in good working condition before using, carry out the maintenance inspection in accordance with Tables 1 through 3.

**TABLE2. ENGINECHECK**

(For details, see to the Engine Manual)	
Item	Hours of Operation
Leakage of oil & fuel	Each Use
Tightness of a fastening thread	Each Use
Engine oil check and replenishment	Each Use
Engine oil change	At first 20 hours, then every 100 hours
Air cleaner cleaning	Every 50 hours

### CAUTION:



These inspection intervals are for operation under normal conditions. Adjust your inspection intervals based on the number hours plate compactor is in use and particular working conditions.

### Inspection Before Using.

- Check for leakage of fuel or oil.
- Remove soil and clean the bottom of compaction plate.
- Check engine oil.
- Check for loose screws including tightness. See Table 3 above (Tightening Torque) for retightening.

**TABLE1. MACHINE INSPECTION**

Item	Hours of Operation
(Starting check)	Each Use
Loosened or lost screws	Each Use
Damage of any part	Each Use
Function of controlling System part	Each Use
Vibrator oil check	Every 100 hours
Vibrator oil replacement	Every 200 hours
V-belt (clutch) check	Every 200 hours

**TABLE3. TIGHTENING TORQUE (in.kg/cm) Diameter**

Material	6mm	8mm	10mm	12mm	14mm	16mm	18mm	20mm
4T	70	150	300	500	750	1100	1400	2000
6-8T	100	250	500	800	1300	2000	2700	3800
11T	150	400	800	1200	2000	2900	4200	5600
*	100(6mm)300-350(8mm)650-700(10mm)							
*(In case counter-part is of aluminum)								
(Threads in use with this machine are all right-handed)								
Material and quality of material is marked on each bolt and screw.								

### CAUTION:



Fuel piping and connections should be replaced if needed.

## Changing Vibrator Oil

When changing the vibrator oil, remove the drain plug located at the bottom-right of the vibrator, and simply tip the compactor to drain the oil. Note that the oil will drain more easily while it is hot. For C125 and C160 series, replace the oil with 0.6 L of Honda 10W-30 engine oil. For C330 series, 1.1 L of the 10W-30 engine oil are required.

## Air Filter

1. The air filter element should be cleaned/replaced because a clogged air cleaner can cause poor engine starting, lack of power and shorten engine life substantially.
2. To clean or replace the air filter, loosen the wing nut on the air filter housing (Figure 2). Remove the cover and take out the air filter cartridge. If only cleaning of the air filter is needed, blow through the air filter cartridge from the inside, moving a jet of dry compressed air up and down until all dust is removed.

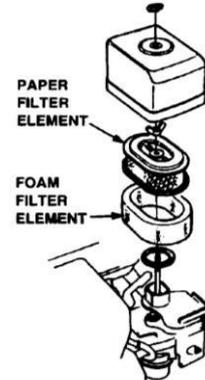


Figure 2. Air filter

## Checking and Replacing the V-Belt and Clutch

### CAUTION:



**NEVER** attempt to check the V-belt with the engine running. Severe injury can occur if your hand gets caught between the V-belt and the clutch. Always use safety gloves.

After 200 hours of operation, remove the upper belt cover to check the V-belt tension (Figure 3). Tension is proper if the belt bends about 10mm when depressed strongly with finger between shafts. Loose or worn V-belts reduces power transmission efficiency, causing weak compaction and reduces the life of the belt itself.

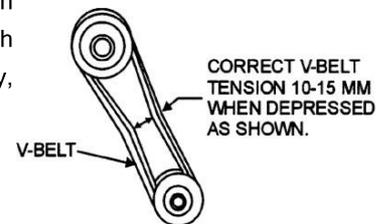


Figure 3. V-belt tension

### CAUTION:



Whenever the compactor's vibration becomes weak or lost during normal operation, regardless of operation hours, check the V-belt and clutch immediately.

#### ● Replacing the V-belt

Remove the upper and lower belt covers. Engage an offset wrench (13mm) or the like to vibrator pulley (lower) fastening bolt. Engage waste cloth or the like at midway of V-belt on the left side and while pulling it back strongly, rotate the offset wrench clockwise so that the V-belt will come off.

#### ● Reinstalling the V-belt

Engage V-belt to lower vibrator pulley and push the V-belt to left side of upper clutch and, in the same manner as in removal, rotate offset wrench clockwise so that the V-belt goes back on.

#### ● Checking Clutch

Check the clutch simultaneously with V-belt checking. With belt removed, check outer drum of the clutch for seizure and "V" groove for wear or damage with your eyes. Clean the "V" groove as necessary. Wear of lining should be checked with running check. If the lining is worn, power transmission becomes deficient and slipping will result.

## SPECIFICATIONS

### Motor

Model	Engine Type	Max. Output
C125 Series	Honda GX160	4.0kW (5.5HP)
C160 Series	Honda GX200	4.8kW (6.5HP)
C330 Series	Honda GX270	6.6kW (9.0HP)

### Governor Speed (RPM)

3,500r/min: C125 Series

3,200r/min: C160 Series, C330 Series

### Drive Belt

1xA"sectionV-belt: C125 series

1xB"sectionV-belt: C160 series, C330 series

Spare parts are available from BWM dealers and BWM official website

### Vibrator

Model	Frequency (Vibration/Min)	Centrifugal Force (kN)
C125 Series	4300	25
C160 Series	4000	30.5
C330 Series	3750	38

### Operation Mass:

Model	Operation Mass (KG)
C125 Series	126
C160 Series	149
C330 Series	321

### Bearings

The following bearings are sealed:

Centrifugal clutch - grease lubricated

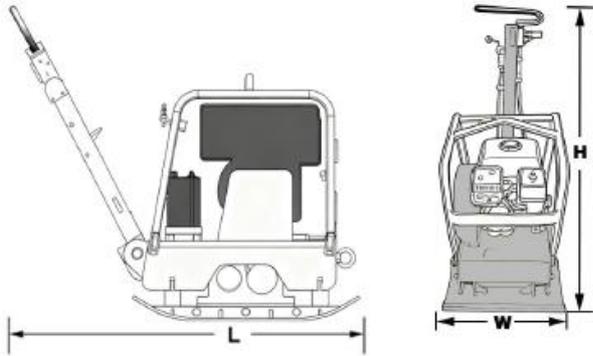
Vibrator-oil bath lubricated

## SPECIFICATIONS

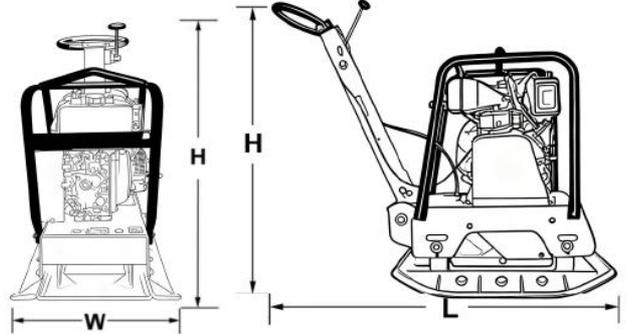
Hand-Arm-Vibration (as per ISO8662, Part1,  $m/s^2$ ): 4.9  $m/s^2$

Working Size (L X W X H):

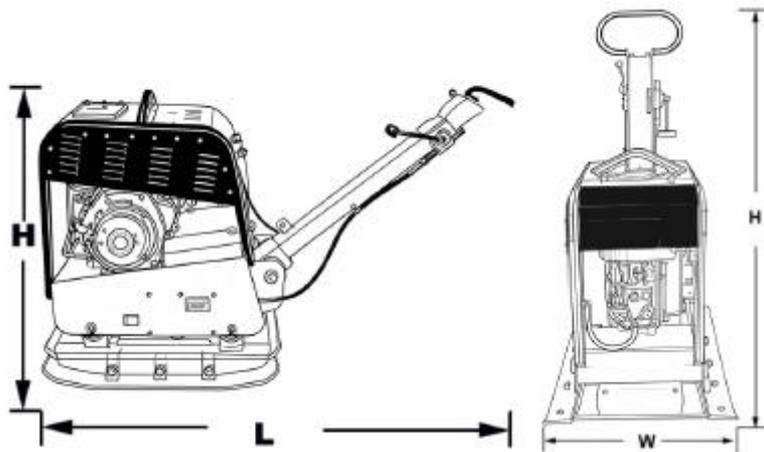
C125 Series: 75x40 x93CM



C160 Series: 86x57x93 CM



C330 Series: 178x67x90CM



## TRANSPORTATION

1. Always turn off the engine when transporting machine.
2. Make sure lifting device has enough capacity to hold machine (see identification plate on machine for weight).
3. Use lifting point when lifting machine.
4. Trolley wheel as optional is used for short distance transportation.

## TROUBLESHOOTING

SYMPTOM	POSSIBLE CAUSES	SOLUTION
Travel speed too low, and vibration is weak.	Engine speed too low?	Set engine speed to correct RPM.
	Clutch slips?	Check or replace clutch.
	V-belt slips?	Adjust or replace V-belt.
	Excessive oil in vibration?	Drain excess oil and fill to proper level.
	Malfunction in vibrator housing?	Check eccentric, gears and counter weights.
	Bearing failure?	Replace bearing
	Insufficient engine output?	Check engine compression etc.

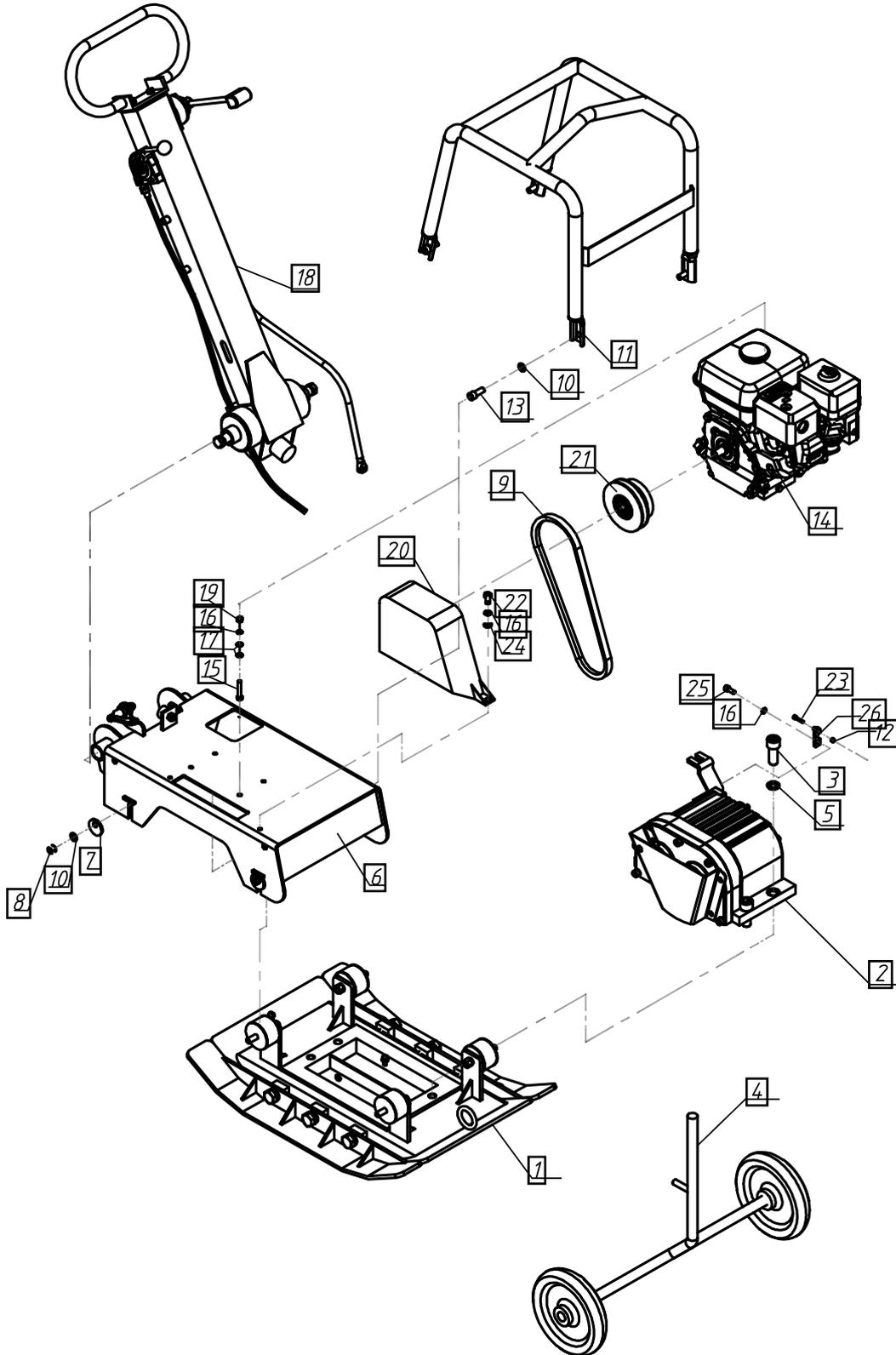
### ENGINE TROUBLESHOOTING

SYMPTOM	POSSIBLE CAUSES	SOLUTION
Difficult to start, "fuel is available, But no SPARK at spark plug".	Sparkplug bridging?	Check gap, insulation or replace sparkplug.
	Carbon deposit on spark plug?	Clean or replace spark plug.
	Short-circuit due to deficient Spark plug insulation?	Check spark plug insulation replace if worn.
	Improper spark plug gap?	Set to proper gap.
Difficult to start, "fuel is available, and SPARK is present at spark plug".	ON/OFF switch is shorted?	Check switch wiring, replace switch.
	Ignition coil defective?	Replace ignition coil.
	Improper spark gap points dirty?	Set correct spark gap and clean points.
	Condenser insulation worn or short-circuiting?	Replace condenser.
Difficult to start, "fuel is available, spark is present and compression is normal".	Spark plug wire broken or short-circuiting?	Replace defective spark plug wiring
	Wrong fuel type?	Flush fuel system, and replace with fresh unleaded 91 fuel.
	Water or dust in fuels stem?	Flush fuel system.
Difficult to start, "fuel is available, spark is present and compression is low".	Air cleaner dirty?	Clean or replace air cleaner.
	Suction/exhaust valve stuck or protruded?	Re-seat valves.
	Piston ring and/or cylinder worn?	Replace piston rings and or piston.
Difficult to start, "fuel is available, spark is present and compression is low".	Cylinder head and/or spark plug not tightened properly?	Torque cylinder head bolts and spark plug.
	Head gasket and/or spark plug gasket damaged?	Replace head and spark plug gaskets.
No fuel present at carburetor.	Fuel not available in fuel tank?	Fill with correct type of fuel.
	Fuel cock does not open properly?	Apply lubricant to loosen fuel cock level, replace if necessary.
	Fuel filter clogged?	Replace fuel filter.
	Fuel tank cap breather hole clogged?	Clean or replace fuel tank cap.
	Air in fuel line?	Bleed fuel line.
"Weak in power", compression is Proper and does not misfire.	Air cleaner not clean?	Clean or replace air cleaner.
	Improper level in carburetor?	Check float adjustment, re-build carburetor.
	Defective spark plug?	Clean or replace spark plug.
"Weak in power" compression is Proper but misfires.	Water in fuel system?	Flush fuel system, and replace with fresh unleaded 91 fuel.
	Dirty sparkplug?	Clean or replace spark plug.
	Ignition coil defective?	Replace ignition coil.
Engine over heats.	Spark plug heat value improper?	Replace with correct type of spark plug.
	Correct type of fuel?	Replace with correct type of fuel.
	Cooling fins dirty?	Clean cooling fins.
Rotational speed fluctuates.	Governor adjusted correctly?	Adjust governor.
	Governor spring defective?	Replace governor spring.
	Fuel flow restricted?	Check entire fuel system or leaks or clogs.
Recoil starter malfunction.	Recoil mechanism clogged with dust and dirt?	Clean recoil assembly with soap and water.
	Spiral spring loose?	Replace spiral spring.

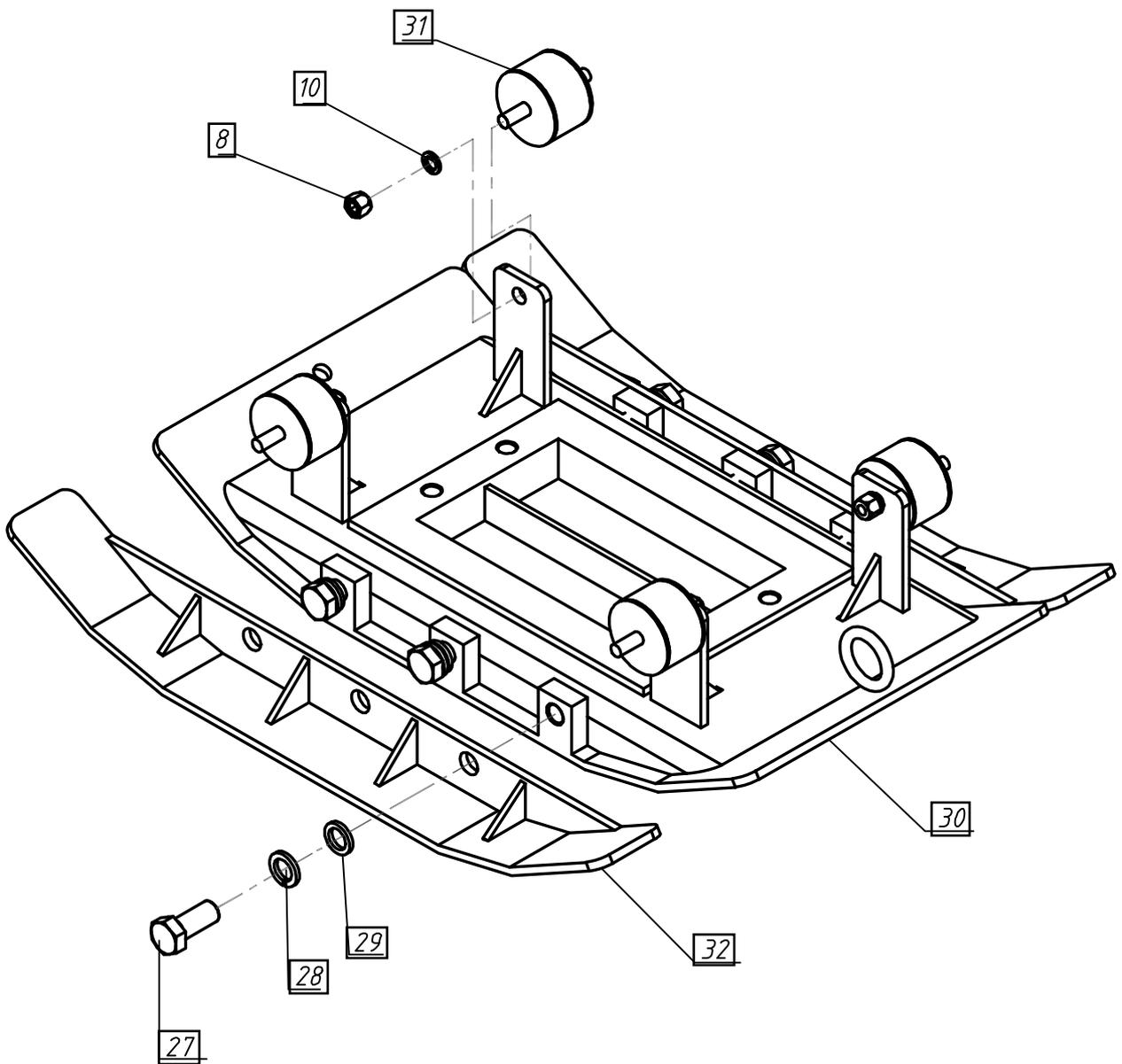


# ILLUSTRATED PARTS LIST

## C125 & C160 SERIES

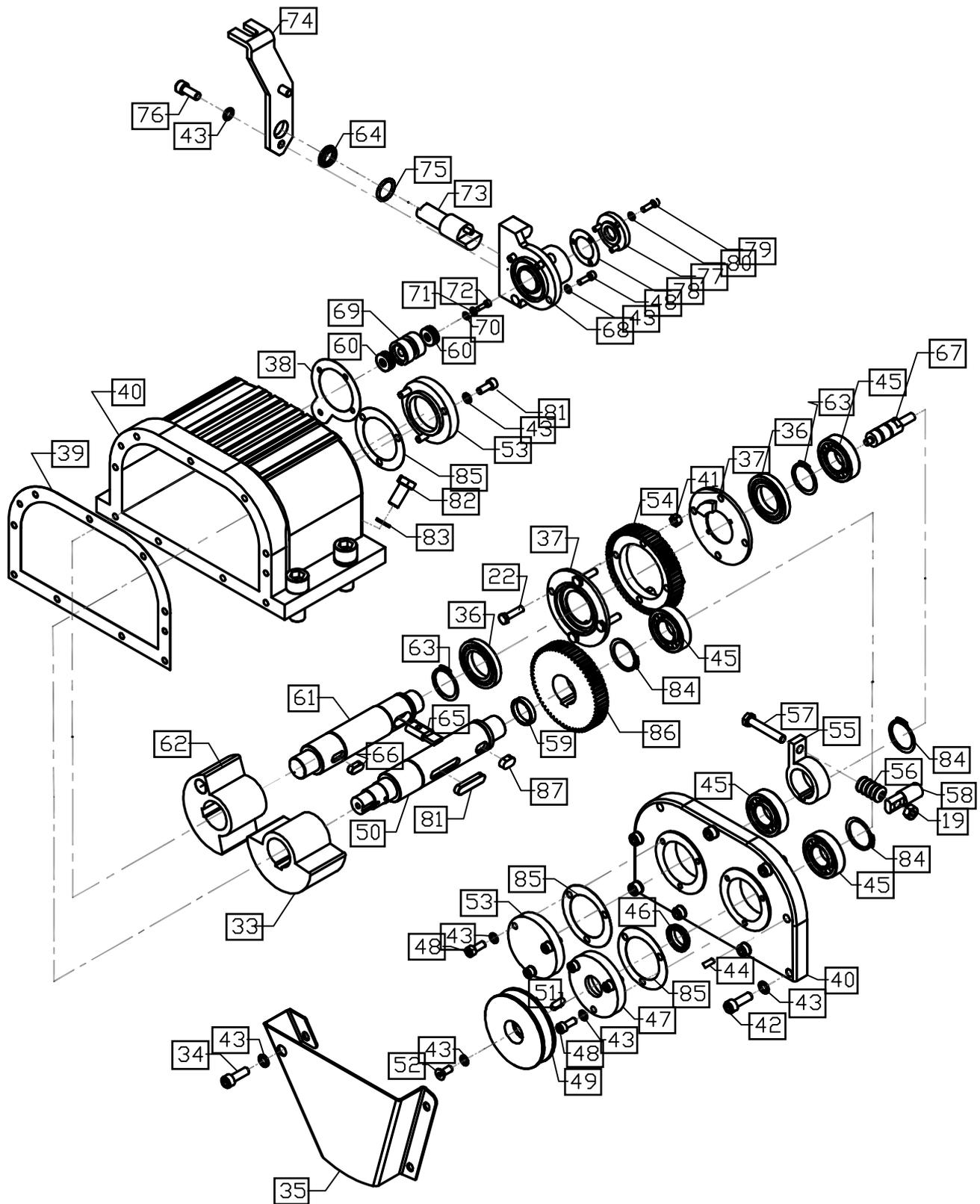


PARTS LIST 1			
ITEM NO.	PART NO.	DESCRIPTION	QTY
1	MS000001-1	C160 Base Plate (73*37)	1
	MS000001-4	C125 Base Plate	1
2	MS000002-1	C160 Casing Assembly	1
	MS000002-2	C125 Casing Assembly	1
3	MS000003	Blackened Hex Socket M18*50	4
4	MS000004	Transport Wheel Assembly	1
5	MS000005	Galvanized Spring Washer $\phi$ 18	4
6	MS000006-1	C160 Upper Bracket (Gasoline)	1
	MS000006-4	C125 Upper Bracket (Gasoline)	1
7	MS000007	Eccentric Washer $\phi$ 12	4
8	MS000008	Lock Nut M12	8
9	MS000009-2	Belt B813 FOR PETROL ENGINE FOR C160	1
	MS000009-4	Belt B800 FOR PETROL ENGINE FOR C125	1
10	MS000010	Galvanized Spring Washer $\phi$ 12	14
11	MS000011-1	Gasoline Engine Protection Frame (C125/C160)	1
12	MS000012	M6 Lock Nut	1
13	MS000013	Blackened Hex Socket M12*35	4
14	MS000014-2	Honda Engine	1
15	MS000015-1	Galvanized Hex Bolt M8*40 (Gasoline)	4
16	MS000016-1	Galvanized Spring Washer $\phi$ 8 (Gasoline)	16
17	MS000017-1	Galvanized Flat Washer $\phi$ 8 (Gasoline)	10
18	MS000018-1	C160 Handle Frame Assembly	1
	MS000018-2	C125 Handle Frame Assembly	1
19	MS000019-1	M8 Lock Nut for Petrol	4
20	MS000020-1	Gasoline Engine Belt Cover (C125 & C160)	1
21	MS000021-4	Clutch Assembly (GX160-SX , GX160-SX4,GX200-SDH, GX200-SM14, EX17)	1
	MS000021-5	Clutch Assembly FOR HONDA ( GX160-QX , GX160-QX4 )	1
22	MS000022	Galvanized Hex Bolt M8*30	6
23	MS000023	Blackened Hex Bolt M6*25	1
24	MS000024	Semi-circular Galvanized Flat Washer $\phi$ 8	2
25	MS000025	Galvanized Hex Bolt M8*20	5
26	MS000026	Cable Connecting Plate	1



## PARTS LIST 2

ITEM NO.	PART NO.	DESCRIPTION	QTY
30	MS000030-1	Standard Base Plate (C160)	1
	MS000030-5	Base Plate (C125)	1
31	MS000031-1	Base Plate Shock Absorber (C125)	4
	MS000031-2	Base Plate Shock Absorber (C160)	4

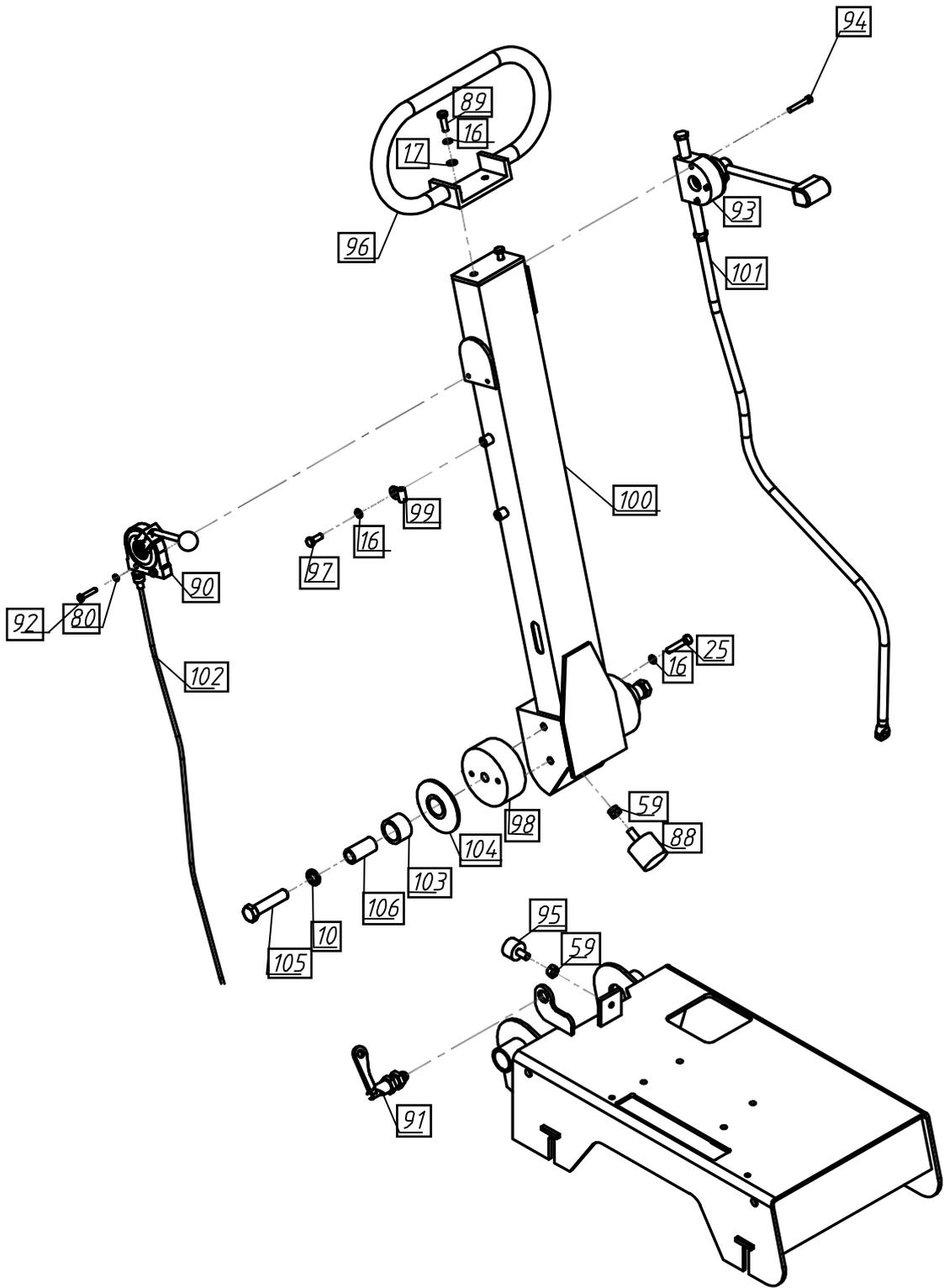


## PARTS LIST 3

ITEM NO.	PART NO.	DESCRIPTION	QTY
33	MS000033-1	Main Shaft Eccentric Wheel FOR C160	1
	MS000033-2	Main Shaft Eccentric Wheel FOR C125	1
34	MS000034	Blackened Hex Socket M8*16	4
35	MS000035	Lower Belt Guard	1
36	MS000036	Bearing 16008	2
37	MS000037	Clutch Plate	2
38	MS000038	Control Seat Paper Gasket	1
39	MS000039	Casing Paper Gasket	1
40	MS000040-1	Casing (C160) with Cover	1
	MS000040-2	Casing (C125) with Cover	1
41	MS000041	Standard Nut M8	4
42	MS000042	Blackened Hex Socket M10*30	9
43	MS000043	Galvanized Spring Washer	9
44	MS000044	Cylindrical Pin 8*30	2
45	MS000045	Bearing NJ206	2
46	MS000046	Oil Seal $\phi 50 \times \phi 28 \times 10$	1
47	MS000047	Through Cover	1
48	MS000048	Galvanized Hex Socket M8*20	13
49	MS000049-1	Belt Pulley (C160/C125)	1
50	MS000050-1	Main Shaft (FOR C160)	1
	MS000050-2	Main Shaft (FOR C125)	1
51	MS000051	Flat Key 8*20	1
52	MS000052	Internal Flat Base M8*20	1
53	MS000053	Blind Cover	2
54	MS000054	Gear Ring	1
55	MS000055-1	Stacked Spring Clip (C160 ONLY)	1
56	MS000056	Spring	1
57	MS000057	Blackened Die Hex Socket M10*60	1
58	MS000058	Lifting Screw	1
59	MS000059-1	Spacer (FOR C160)	1
	MS000059-2	Spacer (FOR C125)	1
60	MS000060	Bearing NXK1024	1
61	MS000061-1	Auxiliary Shaft (FOR C160)	1
	MS000061-2	Auxiliary Shaft (FOR C125)	1

## PARTS LIST 3

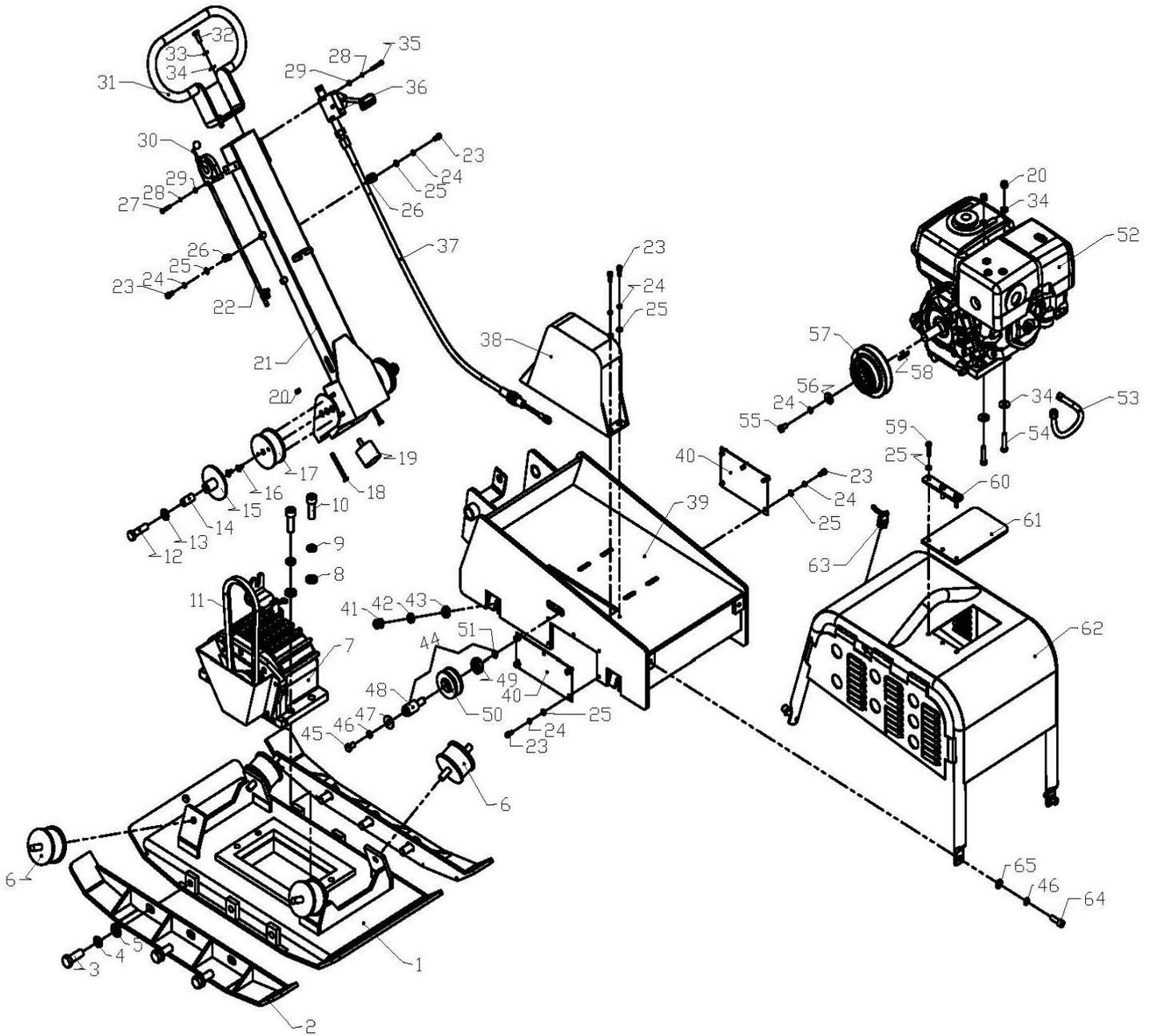
ITEM NO.	PART NO.	DESCRIPTION	QTY
62	MS000062-1	Auxiliary Shaft Eccentric Wheel ( FOR C160)	1
	MS000062-2	Auxiliary Shaft Eccentric Wheel ( FOR C125)	1
63	MS000063	Shaft Retainer $\varnothing$ 40	2
64	MS000064	Oil Seal $\varnothing$ 22x $\phi$ 30x5	1
65	MS000065	Shift Fork	1
66	MS000066	Flat Key 12*20	1
67	MS000067	Small Shaft	1
68	MS000068	Control Seat	1
69	MS000069	Rotating Sleeve	1
70	MS000070	Enlarged Flat Washer $\varnothing$ 5	1
71	MS000071	Spring Washer $\varnothing$ 5	1
72	MS000072	Blackened Hex Socket M5*16	1
73	MS000073	Steering Output Shaft	1
74	MS000074	Cable Positioning Plate	1
75	MS000075	O-ring $\varnothing$ 30*4	1
76	MS000076	Blackened Hex Socket M10*25	2
77	MS000077	Control Seat Cover Plate	1
78	MS000078	Control Seat Cover Plate Paper Gasket	1
79	MS000079	Blackened Hex Socket M6*16	3
80	MS000080	Spring Washer $\varnothing$ 6	5
81	MS000081-1	Flat Key 12*50	1
82	MS000082	Oil Plug M14*1.5	2
83	MS000083	Copper Washer $\varnothing$ 14	2
84	MS000084	Shaft Retainer $\varnothing$ 42	3
85	MS000085	Three-hole Paper Gasket	3
86	MS000086	Gear	1
87	MS000087	Flat Key 12*20	1



## PARTS LIST 4

ITEM NO.	PART NO.	DESCRIPTION	QTY
88	MS000088	Large Bumper	1
89	MS000089	Galvanized Hex Bolt M8*25	2
90	MS000090	Throttle Switch	1
91	MS000091	Single-arm Positioning Lock	1
92	MS000092	Galvanized Hex Bolt M6*30	2
93	MS000093	Control Handle	1
94	MS000094	Galvanized Hex Socket M6*45	3
95	MS000095	Small Bumper	1
96	MS000096-1	Handle (FOR C160)	1
	MS000096-2	Handle (FOR C125)	1
97	MS000097	Galvanized Hex Bolt M8*16	3
98	MS000098-1	Handle Shock Absorber (FOR C160)	2
	MS000098-2	Handle Shock Absorber (FOR C125)	2
99	MS000099	Small Clip	3
100	MS000100-1	Handle Frame (FOR C160)	1
	MS000100-2	Handle Frame (FOR C125)	1
101	MS000101-1	Cable (FOR C160)	1
	MS000101-2	Cable (FOR C125)	1
102	MS000102-1	Throttle Cable (FOR C125&C160)	1
103	MS000103	Nylon Sleeve	2
104	MS000104-1	Nylon Ring (FOR C160)	2
	MS000104-2	Nylon Ring (FOR C125)	2
105	MS000105-1	Galvanized Hex Bolt M12*60 (FOR C160)	2
	MS000105-2	Galvanized Hex Bolt M12*60 (FOR C125)	2
106	MS000106	Steel Liner Tube	2

**C330 SERIES**



**PARTS LIST 1**

<b>ITEM NO.</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>	<b>QTY</b>
1	X33010001	BASE PLATE ASSEMBLY	1
2	X33010002	EXTENSION PLATE	2
3	X33010003	OUTER HEXAGONAL SCREW M20*60	6
4	X33010004	SPRING WASHER C20	6
5	X33010005	FLAT WASHER C20	6
6	X33010006	VIBRATION DAMPER	4
7	X33010007	VIBRATION BOX	1
8	X33010008	FLAT WASHER C18	4
9	X33010009	SPRING WASHER C	4
10	X33010010	HEXAGONAL SOCKET SCREW M18*55	4
11	X33010011-1	BELT	1
12	X33010012	OUTER HEXAGONAL SCREW M16*60	2
13	X33010013	FLAT WASHER C16	2
14	X33010014	STEEL PIPE	2
15	X33010015	NYLON WASHER	2
16	X33010016	SCREW M8*20	4
17	X33010017	SHOCK ABSORBER	2
18	X33010018	OUTER HEXAGONAL SCREW M10*45	2
19	X33010019	RUBBER PAD	1
20	X33010020	NUT M10	1
21	X33010021	LOWER HANDLE	1
22	X33010022	THROTTLE CONTROL CABLE	1
23	X33010023	OUTER HEXAGONAL SCREW M8*20	14
24	X33010024	SPRING WASHER C8	14
25	X33010025	FLAT WASHER C8	14
26	X33010026	RUBBER CLAMP	3
27	X33010027	HEXAGONAL SOCKET SCREW M6*30	3
28	X33010028	SPRING WASHER C6	6
29	X33010029	FLAT WASHER C6	6
30	X33010030	THROTTLE CONTROL LEVER	1
31	X33010031	UPPER HANDLE	1

32	X33010032	OUTER HEXAGONAL SCREW M10*30	1
33	X33010033	SPRING WASHER C10	5
34	X33010034	FLAT WASHER C	5
35	X33010035	HEXAGONAL SOCKET SCREW M6*45	3
36	X33010036	REVERSAL HANDLE	1
37	X33010037	REVERSAL CABLE	1
38	X33010038-1	BELT GUARD	1
39	X33010039-1	MOUNTING PLATE	1
40	X33010040	NAME PLATE BOARD	1
41	X33010041	NUT M24	4
42	X33010042	SPRING WASHER C24	4
43	X33010043	FLAT WASHER C24	4
44	X33010044	TENSIONING WHEEL ASSEMBLY	1
45	X33010045	HEXAGONAL SCREW M12*30*1.25	1
46	X33010046	BIG FLAT WASHER C12	1
47	X33010047	SPRING WASHER C12	1
48	X33010048	TENSIONING WHEEL SHAFT	1
49	X33010049	BEARING 6205RZ	2
50	X33010050	TENSIONING WHEEL SLEEVE	1
51	X33010051	CLAMP C53	1
52	X33010052	ENGINE	1
53	X33010053	OIL DRAIN PIPE	1
54	X33010054	HEXAGONAL SCREW M10*50	4
55	X33010055	SOCKET SCREW M8*30	1
56	X33010056	BIG FLAT WASHER C8	1
57	X33010057	CLUTCH ASSY.	1
58	X33010058	KEY	1
59	X33010059	HEXAGONAL SCREW M8*45	3
60	X33010060	RUBBER BAR	1
61	X33010061	RUBBER PIECE	1
62	X33010062-1	PROTECTION FRAME	1
63	X33010063	BOLT	1
64	X33010064	SOCKET SCREW M12*40	4
65	X33010065	FLAT WASHER C12	4



PARTS LIST 2

ITEMNO.	PARTNO.	DESCRIPTION	QTY
66	X33010066	BEARING NJ2206	4
67	X33010067	BUFFER RING	1
68	X33010068	SHAFT	1
69	X33010069	MINOR BEARING	3
70	X33010070	ECCENTRIC GEAR	1
71	X33010071	BEARING 16008	2
72	X33010072	CLUTCH DISC 1	1
73	X33010073	GEAR RING	1
74	X33010074	CLUTCH DISC 2	1
75	X33010075	HEXAGONAL SOCKET SCRE M10*60	1
76	X33010076	SPRING	1
77	X33010077	GEAR	1
78	X33010078	MAIN ECCENTRIC GEAR	1
79	X33010079	MAINS HAFT	1
80	X33010080	KEY	1
81	X33010081	UNDER BELT GUARD	1
82	X33010082	PULLEY	1
83	X33010083	KEY	1
84	X33010084	COVER	2
85	X33010085	GENERAL COVER	1
86	X33010086	OIL SEAL	1
87	X33010087	PAPER WASHER WITH THREE HOLE	3
88	X33010088	BOX COVER	1
89	X33010089	BOX PAPER WASHER	1
90	X33010090	VIBRATION BOX	1
91	X33010091	REVERSAL CASE WASHER	1
92	X33010092	BEARING	2
93	X33010093	SLEEVE	1
94	X33010094	COPPER C14	1
95	X33010095	SCREW M14	1
96	X33010096	CABLE BRACKET	1
97	X33010097	CABLE CONNECTOR	1
98	X33010098	KEY	1
99	X33010099	BEARING CLAMP	1
100	X33010100	STEERING SHAFT	1
101	X33010101	O RING	1

102	X33010102	REVERSAL CASE	1
103	X33010103	CAP OF REVERSAL CASE	1
104	X33010104	PAPER WASHER	1
105	X33010105	HEXAGONAL SOCKET SCREW M10*20	1
106	X33010106	HEXAGONAL SOCKET SCREW M6*22	3
107	X33010107	HEXAGONAL SOCKET SCREW M8*20	3
108	X33010108	NUT M10	1
109	X33010109	OUTER HAXAGONAL M8*35	4
110	X33010110	NUT M8	4
111	X33010111	OUTER HEXAGONAL SCREW M8*20	1
112	X33010112	HEXAGONAL SOCKET SCREW M10*30	9
113	X33010113	PIN	2
114	X33010114	BIG FLAT WASHER C10	1
115	X33010115	HEXAGONAL SCREW M10*20	3
116	X33010116	BEARING CLAMP C40	1
117	X33010117	SMALL SPINDLE	1
118	X33010118	PLATE FOR OIL SEAL	1
119	X33010119	SPRING WASER C5	3
120	X3301020	HEXAGONAL SOCKET SCREW 5*16	3

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Spare parts are available from our dealers and our official website

