EARTHQUAKE PLATE COMPACTOR

MODEL GFX-3200-HD

OPERATORS MANUAL

POWERED BY BRIGGS&STRATTON

WARNING **CE**

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 our EARTHQUAKE Industries Inc. plate compactors. All possible situations cannot be covered in these instructions. Care must be exercised by everyone using, maintaining or working near this equipment.

CONTENTS

INTRODUCTION

Thank you for your selection of our equipment.

We have taken care in the design, manufacturing and testing of this product. It is covered by a 1 year parts replacement warranty. Should service or spare parts be required, prompt and efficient service is available from our company or our agent.

General Safety instruction for the Operation of Power Equipment.

The goal of our company is to produce power equipment that helps the operator work safety and efficiently. The most important safety device for this or any tool is the operator. Care and good judgement 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 instructions 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.

APPLICATIONS

Trench compaction	Interlocking
Road maintenance	Landscaping
Brick paving	Driveway Repair

FUNCTIONS AND CONTROLS

The motor is controlled by an ON/OFF switch or push button which 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 make sure that the four nuts and the set

screw locknuts are tightened after adjustment.

ACCESSORIES

Transportation Trolley; Protective Frame; Rubber Mat etc.

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;

Plates 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 any adjustments.

ENSURE both the machine and the operator are stable by setting up on level terrain and the machine will not tip over, slide of 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.

EUSURE that the area to be compacted does not contain any “live” electrical cables, gas, water or communication services which many 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 make contact with the muffler when the engine is hot.This can cause severe burns.

MAKE SURE that the repairs to the Engine and machine are carried out by COMPETENT personnel.

！FIRE & EXPLOSION HAZARDS

Gas 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 Engine in the area of sparks, a flame or a person smoking.

DO NOT over fill the fuel tank and avoid spilling petrol when refueling, .spilled gas or gasl 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. As required by Occupational Health and Safety regulations.

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. Be aware of uneven or slippery work surfaces.

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

OPERATION

Prestart-up inspection

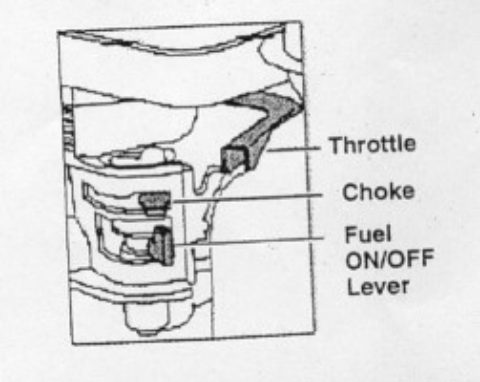
The following Pre-start-up inspection must be performed before the start of each work session or after every four hours of use. Whichever is first. If any fault is discovered, the compactor must not be used until the fault is rectified.

1. 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.
2. Check the engine oil level and top up as necessary
3. Check the engine fuel level and top up as necessary
4. Check for fuel and oil leaks

Start and stop Procedure for Petrol Engine

1. Open the fuel tap by moving the fuel ON/OFF lever fully to the right
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 clockwise to the “1” 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 plate 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 starter return.
6. Taking care not to pull starter’s cope 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 5.
10. To stop the engine, set the throttle to idle and turn the engine ON/OFF switch anticlockwise o the “0” position.
11. Turn the fuel off



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.

For more information of starting and correct operating procedures of the motor, refer to the motor operation manual

supplied with the unit.

Increase the motor sped 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 loose control when starting or operating the machine;

Inspection the water hose and its connections to ensure that they do not leak.

CARE AND PREVENTIVE MAINTENANCE

Check the oil level in the motor crankcase daily.

Check the vibrator oil level weekly.

Inspect the rubber anti vibration mounts for wear or deterioration.

Inspection the water hose and its connections to ensure that they do not leak.

Clean the underside of the plate regularly to prevent a build up of material.

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.

Start the motor using the recoil starter. (If the motor is fitted with an on/off switch this must first be turned to ON before starting.)

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.

The optional water tank kit is recommended when the machine is used on bituminous surfaces as the water flume prevents

A build up of material on the underside of the plate.

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.

TABLE 1. MACHINE INSPECTION

ITEM	Hours of Operation
(Starting check)	Every 8 hours (every day)
Loosened of lost screws	Every 8 hours (every day)
Damage of any part	Every 8 hours (every day)
Function of controlling system part	Every 8 hours (every day)
Vibrator oil check	Every 100 hours
Vibrator oil replacement	Every 100 hours
V-belt (Clutch)Check	Every 100 hours

TABLE 2. ENGINE CHECK

(For details, see separate engine manual)	
ITEM	Hours of Operation
Leakage of oil fuel	Every 8 hours (every day)
Tightness of fastening Threads	Every 8 hours (every day)
Engine oil check and replenishment	Every 8 hours (every day) (Replenish to specified Max.Level)
Engine oil replenishment	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.

CAUTION:

Fuel piping and connections should be replaced every 2 years.

Daily Service:

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 below (Tightening torque),for retightening.

TABLE 3.

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.								

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. Replace the oil with 200ML of 10W-30 motor oil.

Air Filter

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

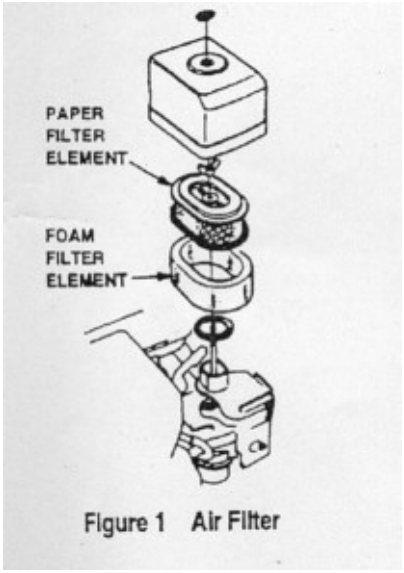


Figure 1 Air Filter

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.

Checking and Replacing the V-belt and Clutch

After 200 hours of operation, remove the upper belt cover to check the V-belt tension (Figure 2).Tension is proper if the belt bends about 10mm when depressed strongly with finger between shafts. Loose or worn V-belts reduce power transmission efficiency, cause weak compaction and reduces the life of the belt itself.

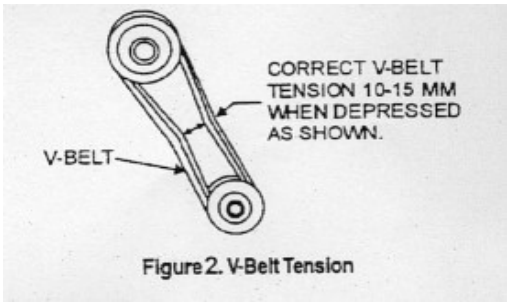


Figure 2. V-Belt Tension

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 the lower vibrator pulley and push the V-belt to the 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 or shoe should be checked with running check. If the shoe is worn, power transmission becomes deficient and slipping will result.

SPECIFICATIONS

GFX-3200-HD PLATE COMPACTOR

Motor

Briggs＆Stratton 4.7kw output

Petrol Robin EX13 3.2KW output

Petrol Honda GX160 4.0kw output

Governed speed—3500r/min

Drive Belt: 1x"A"section vee belt

Vibrator

Frequency—---------90HZ

Centrifugal force—15KN

Operation Mass--- 87kgs

Travel speed--------0.79Km/h

Bearings: The following bearing are sealed; Centrifugal clutch-grease lubricated; Vibrator-oil bath lubricated

Acoustic Noise (According to 2000/14/EC)

Model No.:	GFX-3200-HD
Measured Sound power Level	103.3dB(A)
Guaranteed sound power level	105dB
Uncertainty	2.5dB

Hand-Arm-Vibration (as per ISO 8662,part 1,m/s2):4-9

Working Size (LXWXH):94X42X85 cm

TRANSPORTATION

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

TROUBLE SHOOTING

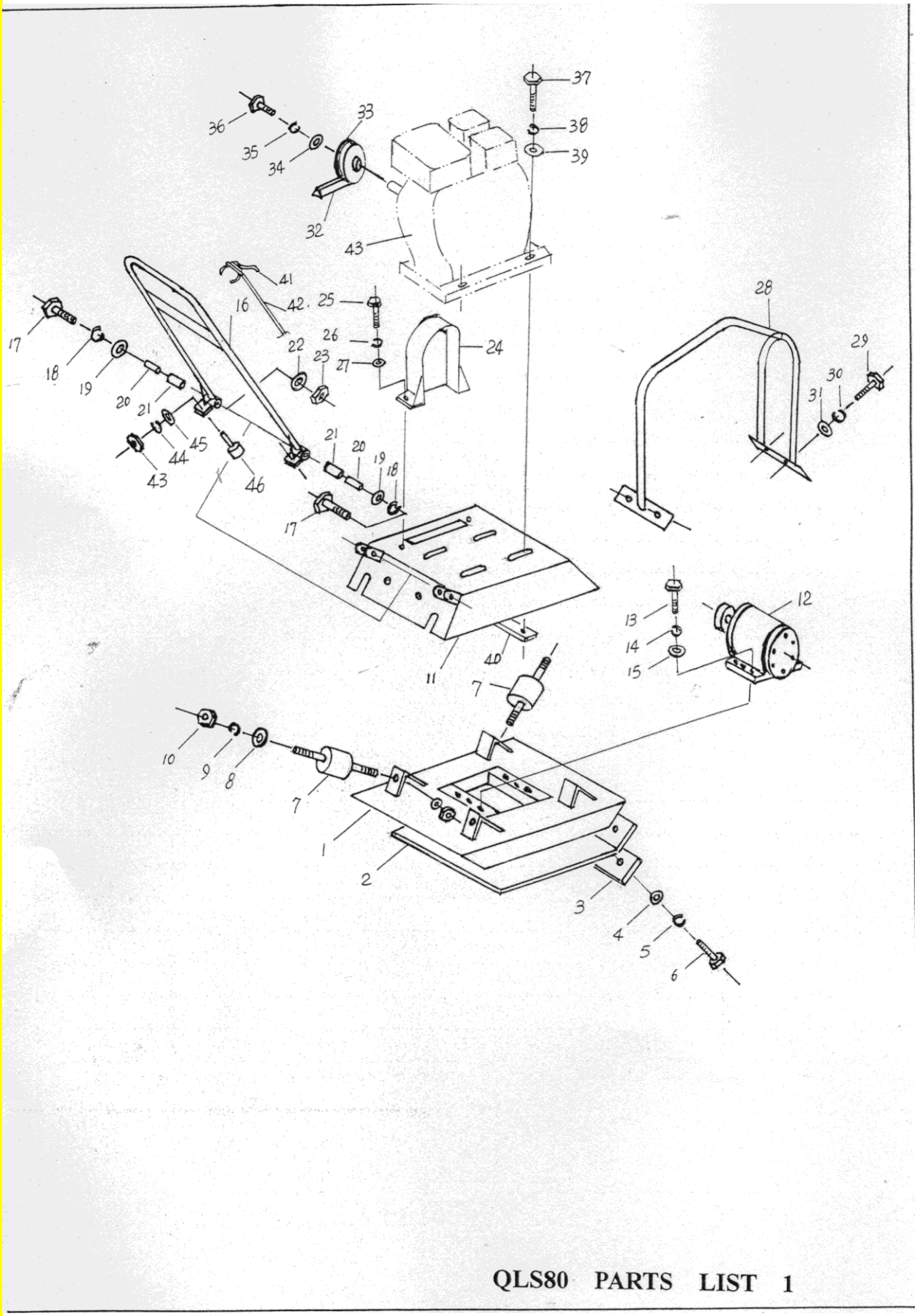
SYMPTOM	POSSILBE CAUSES	SOLUTION
Travel Speed too low, and vibration is weak	Engine speed too low?	Set engine speed to correct RPM.
	Clutch slips?	Check or replace clutch
	V-belt slips?	Adjust or replace V-belt
	Excessive oil in vibration?	Drain excess oil and fill to proper level
	Malfunction in vibrator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

ENGINE TROUBLE SHOOTING

SYMPTOM	POSSIBLE CAUSES	SOLUTION
Difficult to start," Fuel is available, but no SPARK at spark plug".	Spark plugs bridging?	Check gap, insulation or replace spark plug.
	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, but no SPARK at spark plug".	ON/OFF switch is shorted?	Check switch wiring, replace switch
	Ignition coil detective?	Replace ignition coil.
	Improper spark gap, point's dirty?	Set correct spark gap and clean points.
	Condenser insulation worn of short circuiting?	Replace condenser.
	Spark plug wire broken or short circuiting?	Replace defective spark plug wiring
Difficult to start," Fuel is available, spark is present and compression is normal	Wrong fuel type?	Flush fuel system, and replace with correct type of fuel.
	Water or dust in fuel system?	Flush fuel system.
	Air cleaner dirty?	Clean or replace air cleaner.
Difficult to start," Fuel is available, spark is present and compression is low.	Suction/exhaust valve stuck or protruded?	Re-seat valves
	Piston ring and/or cylinder worn?	Replace piston rings and or piston
	Cylinder head and /or spark plug not tightened properly?	Torque cylinder head bolts and spark plug
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 misfires	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 correct type of fuel
	Dirty spark plug?	Clean or replace spark plug
	Ignition coil defective?	Replace ignition coil,
Engine overheats	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 for 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

GFX-3200-HD PLATE COMPACTOR DIAGRAM & PART LIST



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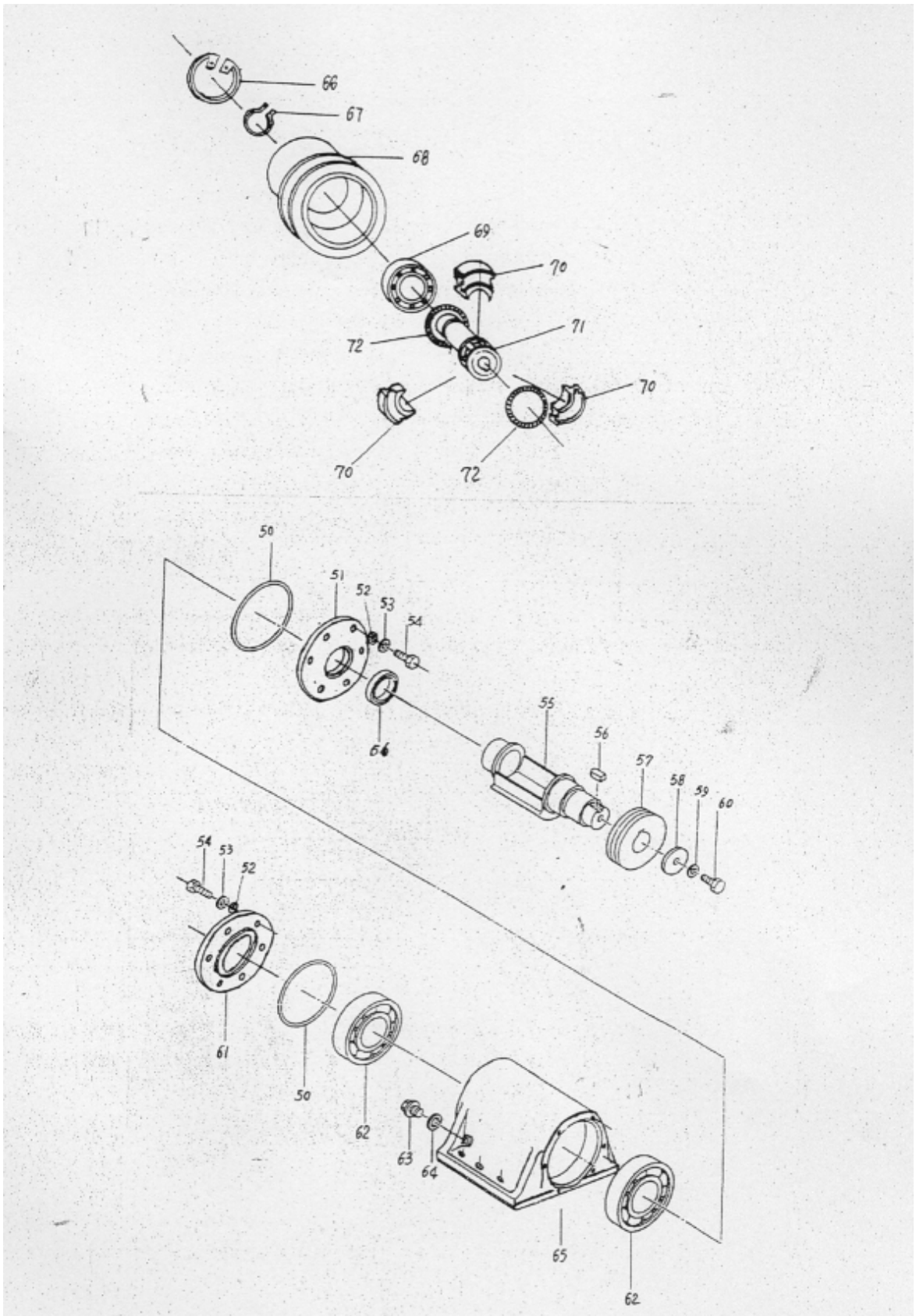
GFX-3200-HD PLATE COMPACTOR DIAGRAM & PARTS LIST 1

ITEM NO.	PART NO.	DESCRIPTION	QUANTITY
1	800001	BASE PLATE	1
2	800002	RUBBER PLATE	1
3	800003	FIXING PLATE	1
4	800004	FLAT WASHER 10-GB95	2
5	800005	SPRING WASHER 10-GB93	2
6	800006	BOLT M10X40-GB5780	2
7	800007	VIBRATING ABSORBER	4
8	800008	FLAT WASHER 10-GB95	4
9	800009	FLAT WASHER 10-GB93	4
10	800010	NUT M10-GB6184	4
11	800011	ENGINE MOUNTING PLATE	1
12	800012	VIBRATOR ASSEMBLY	1
13	800013	BOLT M12X45-GB5781	6
14	800014	SPRING WASHER 12-GB93	6
15	800015	FLAT WASHER 12-GB95	6
16	800016	HANDLE	1
17	800017	BOLT M12X55-GB5782	2
18	800018	SPRING WASHER 12-GB93	2
19	800019	FLAT WASHER 10-GB97.1	2
20	800020	STEEL COLLAR	2
21	800021	RUBBER COLLAR	2
22	800022	FLAT WASHER 12-GB97.1	2
23	800023	NUT M12-GB6184	2
24	800024	BELT COVER	1
25	800025	BOLT M8X25-GB5782	2
26	800026	SPRING WASHER 8-GB93	2
27	800027	FLAT WASHER 8-GB97.1	2
28	800028	GUARD HOOK	1

GFX-3200-HD PLATE COMPACTOR DIAGRAM & PARTS LIST 1

ITEM NO.	PART NO.	DESCRIPTION	QUANTITY
29	800029	BOLT M8X30-GB5782	4
30	800030	SPRING WASHER 8-GB93	4
31	800031	FLAT WASHER 8-GB95	4
31	800032	V-BELT FOR DIESEL ENGINE	1
		V-BELT FOR PETROL ENGINE	1
33	800033	ENGINE PULLEY ASSEMBLY	1
34	800034	FLAT WASHER 8-GB95	1
35	800035	SPRING WASHER 8-GB93	1
36	800036	BOLT M8X25-GB5782	1
37	800037	BOLT M8X25-GB5782	4
38	800038	SPRING WASHER 8-GB93	4
39	800039	FLAT WASHER 8-GB95	4
40	800040	NUT PLATE 2-M8	2
41	800041	THROTTLE CONTROL LEVER	1
42	800042	THROTTLE CONTROL WIRE	1
43	800043	NUT M10-GB6184	2
44	800044	SPRING WASHER 10-GB93	2
45	800045	FLAT WASHER 10-GB97.1	2
46	800046	VIBRATION DAMPER	2

GFX-3200-HD PLATE COMPAC DIAGRAM & PARTS LIST 2



QLS80 PARTS LIST 2

GFX-3200-HD PLATE COMPACTOR DIAGRAM & PART LIST 2

ITEM NO.	PART NO.	DESCRIPTION	QTY
12	800012	VIBRATOR ASSEMBLY	1
50	800012-1	O-RING 100-GB3452.1	2
51	800012-2	CASE COVER(R)	1
52	800012-3	FLAT WASHER 8-GB97.1	12
53	800012-4	SPRING WASHER 8-GB93	12
54	800012-5	BOLT M8X25-GB5782	12
55	800012-6	ECCENTRIC ROTATOR	1
56	800012-7	KEY C8-GB1096	1
57	800012-8	PULLEY	1
58	800012-9	FLAT WAHSER 8-GB95	1
59	800012-10	SPRING WAHSER 8-GB93	1
60	800012-11	BOLT M8X25-GB5782	1
61	800012-12	CASE COVER（R）	1
62	800012-13	BEARING 6211-GB276	2
63	800012-14	PLUG SCREW M14 X1.5	1
64	800012-15	PACKING PIECE	1
65	800012-16	VIBRATING CASE	1
33	800013	ENGINE PULLEY ASSEMBLY	1
66	800013-1	CIRCLIP INT62-GB893.1	1
67	800013-2	CIRCLIP INT30-GB94.1	1
68	800013-3	DRUM	1
69	800013-4	BEARING 60206-GB276	1
70	800013-5	CENTRIFUGAL LUMP	3
71	800013-6	CLUTCH CENTRE FOR DIESEL	1
		CLUTCH CENTRE FOR PETROL	1
72	800013-7	CLUTCH SPRING	2

WARRANTY

These products are covered by warranty for a period of six (6) months from the date of purchase against defects in material or workmanship provided that:

.The product concerned has been operated and maintained in accordance with the operating instructions

.Has not been damaged by accident, misuse or abuse.

Has not been tampered with or repaired by any unauthorized person.

The owner is responsible for the cost of transpiration to and from the authorized repairer and the unit is at the owners risk while in transit to and from the repairer.

Impact damage is not covered under warranty. Clutches are not covered under any warranty. Engines are warranted by their manufacturer.

MAINTENANCE RECORDS

PREVENTATIVE MAINTENANCE AND ROUTINE SERVICE PLAN

This plate compactor has been assembled with care and will provide years of service. Preventative maintenance and routine service are essential to the long life of your plate compactor. After reading through this manual thoroughly, you will find that you can do some of the regular maintenance yourself. However, when in need of parts or major service, be sure to see your dealer. For your convenience we have provided this space to record relevant date about your plate compactor.

Invoice Number.		**Type of Machine:**	
Date Purchased:		**Dealer Name:**	
Serial Number:		**Dealer Phone:**	

REPLACEMENT PARTS USED					**MAINTENANCE LOG**	
ITEM NO.	**DESCRIPTION**	**QUANTITY**	**COST**	**DATE**	**DATE**	