

# DYNAPAC CONCRETE EQUIPMENT

## BG39/49 Power Floats



INSTRUCTIONS&SPARE PARTS CATALOGUE

BG39/49 - IS - 10658 - ENG

***DYNAPAC***

# SAFETY INSTRUCTIONS

- **MACHINES SUBMITTED**: Powered with : Electric, Pneumatic, Petrol or Diesel engine.

- **SYMBOLS**: The words **WARNING** and **CAUTION** used in safety instructions, have the following meanings :  
**WARNING** indicates hazards or hazardous procedures which could result in serious injury or death if the **WARNING** is not observed.  
**CAUTION** indicates hazards or hazardous procedures which could result in injury or damage to equipment if the **WARNING** is not observed.

- **IMPORTANT RULES FOR YOUR SAFETY**:



## **WARNING**

***The machine must not be modified without prior consent of the manufacturer. Use only original parts. If modifications are made without prior consent of the manufacturer there is a risk of serious injury to the personal.***

- These safety recommendations have been compiled from international safety standards. Local regulations must also be checked and observed. Before using the machine, read carefully these instructions and keep them in a safe place.
- Make sure that the signs about using, safety, and maintenance are always legible.
- The use of the machine is restricted to the applications specified in the product literature.
- Always change damaged parts immediately. Change wear parts in due time.

- **SAFETY EQUIPMENT** :



## **WARNING**

***The admissible sound level of 85 dB (A), can be exceeded because of the machine and/or the application. Long time exposure to loud noise without ear protectors can cause permanent damage to hearing. Long time exposure to vibrations can damage the hands, fingers and wrists. Do not use the machine if you are experiencing discomfort, cramp or pain. Consult a doctor before working again with the machine.***

- Always use approved safety equipment. The following safety equipment applies to operators and other personnel in the immediate vicinity of the working zone.
- Safety helmet.
- Ear protectors.
- Dust mask in dusty environments.
- Protective gloves.
- Protective shoes.
- Goggles.

To avoid the risk of clothes being caught in the machine, avoid wearing loose-lifting clothes. If you have long hair, cover it with a hair net.

- **WORKING AREA** :



## **WARNING**

***Do not use the machine in explosive environments. Do not operate a machine powered by a petrol or diesel engine in poorly ventilated spaces. These types of engines produce toxic gases which can cause serious health troubles.***

**- POWER SUPPLY :**



**WARNING**

***Make sure that the power supply equipment complies with the relevant safety requirements of the local and the international standards.***

- Electric machine : It must be ensured that the machine is connected to the voltage and the frequency specified on the name plate. The power supply cable has to be properly sized. Check that the cable and the plug of the machine are not damaged. Never switch off the machine by pulling the plug from its socket. Use the machine switch. Keep the cable out of the moving parts of the machine.

- Pneumatic machine : Check that the compressed-air hose and the hose coupling are not damaged. Never attempt to loosen a compressed-air hose which is pressurized. First switch off the air at the compressor and then leave the machine running itself to discharge the hose after some seconds.

- Machine powered by petrol or diesel engine : Petrol has an extremely low flash-point and can be explosive in certain situations. Keep away from all hot or spark-generating objects, do not smoke, when handling fuel. Wait until the machine has cooled before filling the tank. Avoid spilling petrol or diesel on the ground.

**- STARTING THE MACHINE :**



**CAUTION**

***Before starting make yourself familiar with the machine and make sure that the machine does not show any obvious faults. Then start the machine according the instruction and spare parts catalogue.***

**- OPERATION :**



**CAUTION**

***Use the machine only for the purpose for which it is intended. Make sure you know how to stop the machine quickly in the event of an emergency situation. Do not touch rotating parts during operation.***

**- MAINTENANCE :**



**CAUTION**

***Maintenance work must only be carried out by skilled personnel. Keep unauthorized persons away from the machine. Do not carry out maintenance work while the machine is moving or the engine is running. Never use a machine which is damaged.***

**- BE ALERT :**



**CAUTION**

***Always concentrate on what you are doing. Use common sense. Never operate the machine if you are tired or under the influence of drugs alcohol or other substances which can affect your vision, reaction, ability or judgement.***

## **GENERAL**

The DYNAPAC BG39 and BG49 are designed for rough and fine machine trowelling of concrete floor.

## **DESIGN**

BG39 and BG49 are driven by a four stroke petrol engine (1).

They are equipped with a dead-man handle (2) which stops the rotor as soon as it is released or if the operator loose control of the operating handle (3).

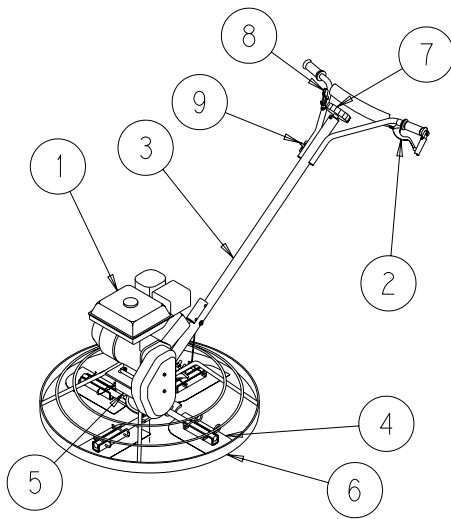
The engine power is transmitted to the rotor supporting the blades (4) through a V belt clutch and a reduction gear box (5). The blades are protected by a guard ring (6).

The blade control knob (7) provides an accurate and easy adjustment of the blade pitch.

The rotation speed of the blades should be adjusted by the throttle lever (8).

The engine stop is controlled by an ON-OFF switch (9) which avoid to loose the operating handle to stop the engine.

The BG39/49 can be equipped of short or long operating handle.



- 1 Petrol engine .
- 2 Dead-man handle .
- 3 Operating handle .
- 4 Blades .
- 5 Reduction gear box .
- 6 Guard ring .
- 7 Control knob .
- 8 Throttle lever .
- 9 ON-OFF switch .

## **TECHNICAL DATA**

	<b>BG39GS HONDA</b>	<b>BG39GL HONDA</b>	<b>BG49GS HONDA</b>	<b>BG49GL HONDA</b>
Total weight kg - (lb)	76 *	88 *	107 *	119 **
Rotor diameter mm - (in)	890 - (35)	890 - (35)	1140 - (44.80)	1140 - (44.80)
Blade speed (r.p.m.)	50 to 120	50 to 120	50 to 120	50 to 120
Number of blades	4			
<b>POWER UNIT</b>				
Engine brand	HONDA	HONDA	HONDA	HONDA
Model	GX160 QX	GX160 QX	GX270 QX	GX270 QX
Rated power kW - (hp)	4.0 - (5.5)	4.0 - (5.5)	6.6 - (9.0)	6.6 - (9.0)
At (r.p.m.)	3 600			
Fuel	Gasoline			
Gasoline tank capacity l - (gal)	3.60 - (1)	3.60 - (1)	6 - (1.60)	6 - (1.60)
Noise level measured in air at 1 m from the power floats dB(A) , according to ISO 6081.	90.10	90.10	90.10	90.10
Weighted effective acceleration measured on the operating handle (m/s <sup>2</sup> ), according to ISO 8662-1.	3.16	3.16	3.16	3.16
<b>OVERALL DIMENSIONS</b>				
L x w x h (mm)	1 800 x 930 x 1 010	2530 x 930 x 1 010	2176x1196x1010	2796x1196x1010
(in)	70.9 x 36.6 x39.8	100 x 36.6 x39.8	85.4 x 47 x 39.8	110 x 47 x 39.8

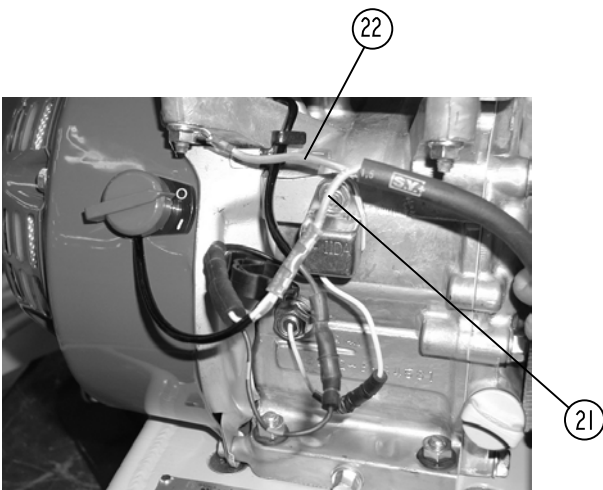
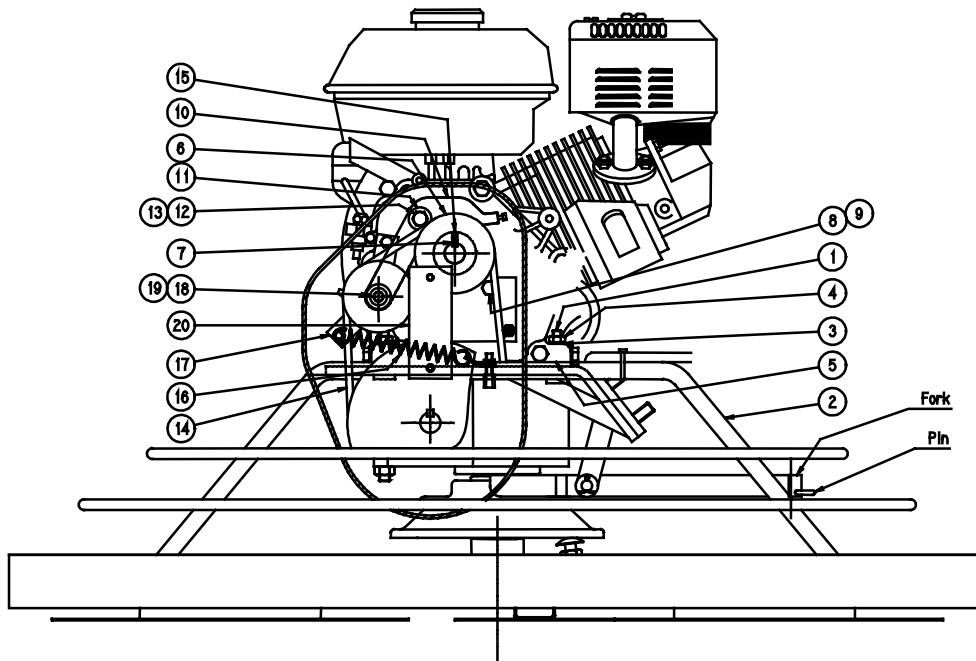
## **ASSEMBLY INSTRUCTIONS**

### **INSTALLATION OF ENGINE**

– Available for BG39 Kit (Without engine) P/N 368341 or for engine replacement. Equipped to receive : HONDA GX160QX, Briggs & Stratton 135232 or Robin EY20DU.

– Available for BG49 Kit (Without engine) P/N 368347 or for engine replacement. Equipped to receive : HONDA GX270QX.

- Screw in place the four studs (1) on the base (2) (Screw driver 5 mm width). Use Loctite 243 or equivalent. Then put the engine in place and secure it with washers (3) and nuts (4) (17mm flat spanner).
- Note : For Robin engine 4 x washers (5) have to be placed between the engine and the base.
- Put in place the drive pulley (6) on the engine shaft without screwing the locking screw. Do not forget the key (7).
- Install the cover holder on the engine and tight it with screws (8) and washer (9) (13mm flat spanner).
- Mount the complete lever (10) on the engine use 1 x washer (11) between the nut (12) and the engine. Thighten the screw (13) and then secure it with nut (12) (2x13mm flat spanner) in order to let the complete lever praticly free in rotation.
- Put in place the V-belt (14) and thihgten locking screws (15) in order to get the 3 x pulleys in line (3mm Hexagonal spanner).
- Hook the spring (16) to the guide screw (17).
- When bending the V-belt by hand, using lever (10) the gap between guide screws and V-belt should be approx.3 mm. If necessary adjust the gap with screw (18) and washer (19) (5mm Hexagonal spanner + 17mm flat spanner).



- Connect the cable 21 on the stop engine cable and connect the cable 22 on the engine body.

## **INSTALLATION OF OPERATING HANDLE**

- Take off the 4 x nuts and washers from the base . Then put in place the operating handle and secure it with washers and nuts ( 17mm Flat spanner).
- Slide the electrical cable inside the protective tube of the operating handle and connect it to the ON/OFF switch.
- Hook up the throttle cable for each particular engine (Cruciformscrew driver) . When throttle control is fully pushed in, engine throttle control should be against idle adjustment stop . If adjustment in cable length is necessary , make adjustment at handle end of the cable (3mm Screw driver).
- Dismantle the V-belt cover (10mm Flat spanner). Then slide the clutch cable through the adjusting screw of the guard ring and through the tensioning lever hole . By hand let the tensioning lever bend slightly the V-belt and then tighten the tensioning lever screw (3mm Screw driver). Ensure that when the dead man handle is grip the V belt is normally tensioned and when it is released the V belt is not tensioned.  
If necessary make adjustment of tensioning by the adjusting screws situated at each end of the cable .
- Put in place the V-belt cover.
- Turn trowel control knob in a counter-clockwise direction until rotation is impossible. Take off the pin from the fork, slide the cable into the fork and then secure it with the pin.

## **INSTALLATION OF BLADES**

- Slip the blade in place on the trowel arm.
- Secure the blades with the spring clips supplied (2 per blades).

## **TEST**

### ***ALWAYS HAVE THE THROTTLE AT IDLE WHEN STARTING ENGINE***

- Check engine oil level.
- Fill gasoline tank.
- Set ON/OFF switches on "ON" position (on engine and operating handle).
- Start the engine (see engine operating manual) and if necessary adjust throttle cable and clutch cable for proper operation.
- Set the engine to 3000 rpm (see engine instruction manual).

## **WORKSHOP TOOLS**

- 1x Screw driver 5 mm width.
- 1x 10mm Flat spanner.
- 1x 17mm Flat spanner.
- 2x 13mm Flat spanner.
- 1x 3mm Hexagonal spanner.
- 1x 5mm Hexagonal spanner.
- 1x Screw driver 3 mm width.
- 1x Cruciform screw driver.

## **OPERATING INSTRUCTIONS**

### **IMPORTANT**

KEEP CLEAR OF ROTATING PARTS WHEN OPERATING .  
ALWAYS HAVE THROTTLE POSITION AT IDLE WHEN STARTING ENGINE .  
NEVER LIFT BY THE GUARD RING .  
REMOVE SMOOTHING DISC BEFORE LIFTING .  
ALWAYS TEST DEAD MAN HANDLE FOR PROPER OPERATION BEFORE BEGINNING .  
NEVER REFUEL WHILE RUNNING OR WHILE ENGINE IS HOT .  
REFUEL IN WELL VENTILATED AREA, AWAY FROM SPARKS AND OPEN FLAME .  
ALWAY DISCONNECT SPARK PLUG BEFORE SERVICING .

### **BEFORE STARTING**

#### ***ALWAYS HAVE THE THROTTLE AT IDLE WHEN STARTING ENGINE***

- Check engine oil level.
- Fill gasoline tank.
- Make sure that all blades are at the same angle. If necessary adjust the blade angle.

## STARTING

- Turn the fuel valve "ON".
- Set ON/OFF switches on "ON" position.
- Close choke located on the engine only if the engine is cold.
- After the engine starts open choke for smooth running and let the engine warm up for two or three minutes at idle speed. Adjust the throttle at desired speed and then clamp slowly the dead man handle in order to start the blades rotating.

## STOPPING

- Release the dead man handle.
- Set throttle at idle speed.
- Set the ON/OFF switch to "OFF" position.

## ORDER NUMBERS

### RANGE OF POWER FLOATS

Type	Engine brand	Order numbers	Description
BG39GS	HONDA	368338	DYNAPAC Blade arms
BG39GL	HONDA	368294	DYNAPAC Blade arms
BG39GS	HONDA	368339	Hexagonal blade arms
BG49GS	HONDA	368344	DYNAPAC Blade arms
BG49GL	HONDA	368295	DYNAPAC Blade arms
BG49GS	HONDA	368345	Hexagonal blade arms

### ACCESSORIES

Description	BG39 P/N 368338 P/N 368294	BG39 P/N 368339	BG49 P/N 368344 P/N 368295	BG49 P/N 368345
Set of 4 blades	701364	364830	702752	365553
Spring clips (8 per machine)	702681	-	702681	-
Smoothing disc	364767	364767	365276	365276
Lifting eye	368353	368353	368354	368354

## MAINTENANCE

### DAILY

- Clean cement from machine.
- Check engine oil level. Add oil as needed to reach up the maximum level. Do not overfill. Refer to the engine instruction book.
- Clean air filter foam cover.
- Check blade pitch adjustment for proper operation.
- Check "ON-Off" switch and dead man handle for proper operation.

### WEEKLY (50 hours)

- Check blades for excessive wear. If necessary reverse or replace blades.
- Change engine oil. Refer to the engine instruction book.
- Grease the blade arms (4 grease nipples) with SHELL Retinax HD grease or equivalent.
- Check gear box oil level. Add oil as needed to reach up the maximum level. OIL MOBIL SHC634.

## MAINTENANCE KITS

<b>SPARE PARTS IN THE MAINTENANCE KITS</b>	<b>BG39 GS P/N 368435</b>	<b>BG39 GL P/N 368436</b>	<b>BG49 GS P/N 368437</b>	<b>BG49 GL P/N 368438</b>
Clutch cable	363517	368394	365537	368394
Throttle cable	368100	368393	368103	368393
Blade angle cable	365494	368395	365536	368395
V-belt (2)	363516	363516	365516	365516
Dead-man handle	363518	-	363518	-
Spark plug	361242	361242	361242	361242
Air filter element	361246	361246	361266	361266
Air filter foam	361247	361247	361267	361267
Carburettor gasket set	361252	361254	361272	361272