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Read and fully understand the instructions before operating the Portek Mini Post Driver

# Mini Post Driver

[portek.co.uk](http://portek.co.uk)

## Operators Handbook

# Before you start

## READ AND UNDERSTAND THIS MANUAL FULLY BEFORE OPERATING THE MINI POST DRIVER



The Mini Post Driver is a high-speed, driving power tool, special safety precautions must be observed to reduce risk of personal injury. Read this manual carefully. Be familiar with the controls and the proper use of the unit. Know how to shut it off quickly.

This graphic accompanied by the words **WARNING** and **DANGER** highlights an act or a condition which can lead to **SERIOUS INJURY**



## ALWAYS WEAR EYE AND EAR PROTECTION.

Always **TURN OFF ENGINE** and make sure the Mini Post Driver has stopped before cleaning, removing or adjusting.

**DISCONNECT** spark plug lead before cleaning or essential maintenance to the Mini Post Driver.

**WARNING!** Never modify the Mini Post Driver in any way.

Improper use of any Mini Post Driver can cause **SERIOUS OR FATAL PERSONAL INJURY.**

The engine exhaust from this product contains chemicals to cause cancer, birth defects, or other reproductive harm.

Specifications, descriptions and illustrative material in this manual are as accurate as known at the time of publication, but are subject to change without notice. Illustrations may include optional equipment and accessories, and may not include all standard equipment.

Proper safety precautions must be observed. Like all equipment this unit must be handled carefully **DO NOT EXPOSE YOURSELF TO DANGER.** Follow these general rules. Do not permit others to use the Mini Post Driver unless they are thoroughly responsible and have read, and understand the machine manual and are trained in its operation.

Always wear hard hat, ear defenders and safety goggles for protection. Dress properly, do not wear loose clothing or jewellery that could become caught in moving parts of the unit. Safe, sturdy, steel toe cap non skid footwear should always be worn. Long hair should be tied back. Legs and feet be covered to protect from flying debris during operation.

**ALWAYS WEAR SAFETY CLOTHING IN CONJUNCTION WITH HAND, EYE, HEARING AND FOOT PROTECTION TO HSE/EN SPECIFICATIONS - SEE PAGE 6**



# Important safety information

Before use, inspect the entire machine for loose parts (nuts, bolts, screws, etc.) and any damage. Repair or replace as necessary before using this machine. Serious injury to the operator or bystanders could result as well as damage to the machine.

Keep the handles free from oil and fuel.

Do not smoke while mixing fuel or filling tank.



Do not mix fuel in an enclosed room or near open flames. Assure adequate ventilation.

Always mix and store the fuel in a properly marked container that is approved by local codes and ordinances for such usage.

Never remove the fuel tank cap while the engine is running.

Before transport, always empty the fuel tank to avoid leakage.



Never start or run the engine inside a closed room or building. When being used in "closed areas" such as tunnels or trenches, make sure the area is well ventilated. Fumes from the exhaust contain dangerous carbon monoxide.



Never attempt to make engine adjustments while the unit is running. Always make engine adjustments with the unit resting on a flat, clear surface. **REMOVE SPARK PLUG LEAD TO PREVENT ACCIDENTAL STARTING**

Do not use the unit if it is damaged or poorly adjusted.

Keep children away. Onlookers should be kept at a safe distance from the work area, at least 15 metres/50 feet.

Never leave the machine unattended.



Do not use this unit for any job other than those for which it is intended as described in this manual.



While operating the machine do not overreach. Keep proper footing and balance at all times. Do not run the unit while standing on a ladder or on any other unstable footing location. Do not operate one-handed.

While lifting the machine, do not pull on the 'Throttle Switch', and carry out idle-speed operation of the machine.



Do not use the unit when you are tired or under the influence of medication, drugs or alcohol.

# Important safety information

## FOLLOW INSTRUCTIONS FOR CHANGING ACCESSORIES.



Do not store in a closed area where fuel vapours can reach an open flame from hot water heaters, furnaces etc. Store in a locked, well ventilated area only.

Use only PORTEK equipment parts when servicing the unit, this will ensure safe and proper performance of your product. These parts are available from your dealer. The use of any other accessories or attachments may cause a potential hazard to the user, damage to the machine and void this warranty.

When refuelling, be sure to stop the engine. **NEVER** refuel when the engine is running or has overheated. When gasoline spills, be sure to wipe it up completely and properly dispose of those materials before starting the engine.

Stay clear of other workers or bystanders by at least 15 metres/50 feet.

Whenever approaching an operator of the machine, carefully call his attention and confirm the operator stops the engine. Be careful not to startle or distract the operator which can cause an unsafe situation.

Pay attention to loosening and overheating of parts. If there is any abnormality of the machine, stop operation immediately and check that machine carefully. If necessary, have the machine serviced by an authorised dealer. Never continue to operate a machine which may be malfunctioning.

In start-up or during operation of the engine, never touch hot parts such as the muffler, the high voltage wire or the spark plug.

After the engine has stopped, the muffler is still hot. Never place the machine in any places where there are flammable materials (dry grass etc.) combustible gasses or combustible liquids.

### **AFTER USE**

Clean the machine completely, especially the fuel tank, its surroundings and the cowlings vents.

# Safety and contents

Pay special attention to operation in the rain or just after the rain as the ground may be slippery.

If you slip or fall to the ground, release the throttle lever immediately.

Be careful not to drop the machine or hit it against obstacles.

Before proceeding to adjust or repair the machine, be sure to stop the engine and detach the spark plug cap from the spark plug.

When the machine is placed in storage for a long time, drain fuel from the fuel tank and carburettor, clean the parts, move the machine to a safe place and confirm that the engine is cooled down.

Make periodic inspections to assure safe and efficient operation. For a thorough inspection of your machine, please contact a dealer.

Keep the machine away from fire or sparks.

## CONTENTS

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# Safety Equipment Requirements

## Essential Equipment for Your Protection

The Portek Mini Post Driver complies with all current safety standards. For your safety You must wear full protection as specified below.



### Head, eye and hearing protection

Eye protection to EN166 – B  
Hearing protection to EN 352-1: 2002  
Face protection visor recommended



### Hand protection

Gloves to EN 12477:2001



### Foot protection

Boots to EN 20345:2011



### Leg protection

Sturdy full length trousers - ideally to EN381 standard

# Specifications

<b>Max power and speed:</b>	900W / 7,000rpm
<b>Max torque and speed:</b>	1.45N.m / 5,000rpm
<b>Impact frequency:</b>	1,500 ± 100bpm
<b>Impact energy:</b>	20 ~ 45J
<b>Noise level:</b>	LpA:97.5dB / LwA: 108.5dB
<b>Vibration level:</b>	12.995 m/s <sup>2</sup> / K=1.5m/s <sup>2</sup>
<b>Engine:</b>	Single cylinder, air-cooled, 2 stroke petrol
<b>Cylinder diameter × stroke:</b>	36mm × 32mm
<b>Capacity:</b>	32.7cc
<b>Carburettor:</b>	MZ10.7
<b>Spark plug type:</b>	L6
<b>Starting method:</b>	Recoil type 'pull' starter
<b>Fuel mixture:</b>	25:1 - petrol:oil mixture
<b>Fuel tank capacity:</b>	1.0l
<b>Fuel consumption rate:</b>	≤0.5l/h
<b>Weight of complete unit:</b>	13.2kg
<b>Length × width × height:</b>	532mm × 260mm × 330mm

## Mini Post Driver Box Contents

- Mini Post Driver with 3" capacity post holder fitted  
- compatible with Clipex Beefy Post.
- Y-Post adapter compatible with Clipex Standard Post.
- 1" Post Holder.
- 2" Post Holder.
- Fuel mixing bottle.
- Lubricating grease.
- Instruction booklet.
- Tool kit (comprising of): spark plug, spark plug handle, 4/5/6mm Hex keys, T-shaped Hex key, screwdriver.

# Setting up

## Post Holders & Sizing Rings

The pre-fitted post holder on the machine can be used without further attachments for 3" diameter and Clipex Beefy post.

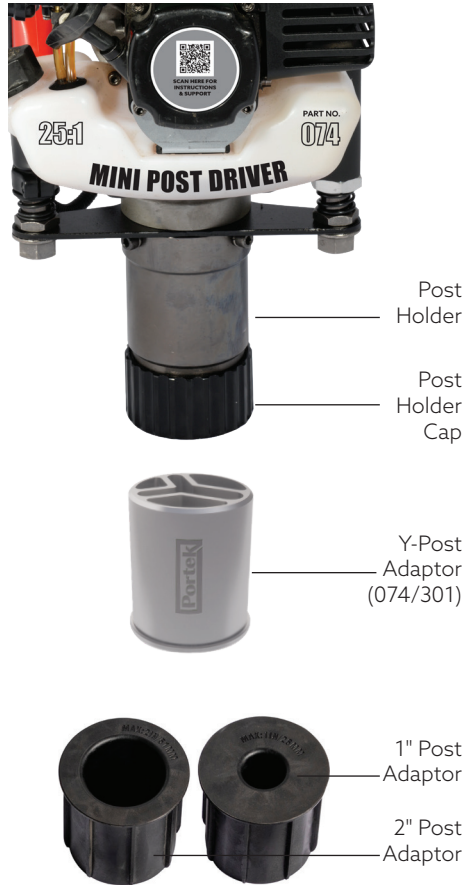
For Clipex Standard post, please use the aluminum Y-Post adapter.

For smaller posts two (1" and 2") post holders are provided.

The adapters can easily be changed by screwing the post holder cap off, replace the adapter then screw the post holder cap back with the post holder cap wrench.

### Important!

Care should always be taken to avoid damage to the threads of the post holder cap.



## Preparing the Fuel

Always refuel the Mini Post Driver in a well ventilated area. Use the mixing container supplied to mix the petrol and 2 stroke oil (see specifications) in the ratio of 25:1.

Fill the fuel tank of the Mini Post Driver (do not overfill). The fuel level should not exceed the neck of 'Fuel Tank Filling Port'.

If you spill fuel during refill, clean up and then wait until the fuel has evaporated completely before restarting the machine. After refuelling, tighten and check the lid of Fuel tank before operation.

Recommended mixing ratios:

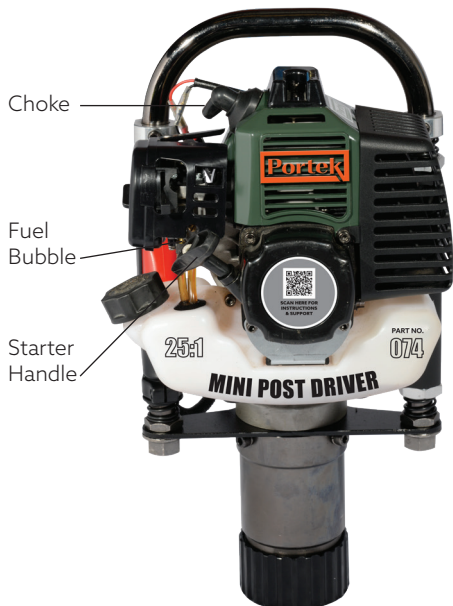
Operating Hours	Petrol:Engine Oil
Operation within 20 hours	20:1
Operation of over 20 hours	25:1

## Starting

Before starting the Mini Post Driver, prime the engine with fuel by pressing the flexible plastic bulb several times to pump the fuel into the carburettor. If the engine is cool, close the choke, but make sure you open it after starting.

With the Mini Post Driver upright. Hold the upper part of handle tightly with one hand while the other pulls the pulling handle of starter for over 50cm quickly. Do not let the pulling handle go back freely in repeated pulling but hold it tightly to avoid injury resulting from quick recoil.

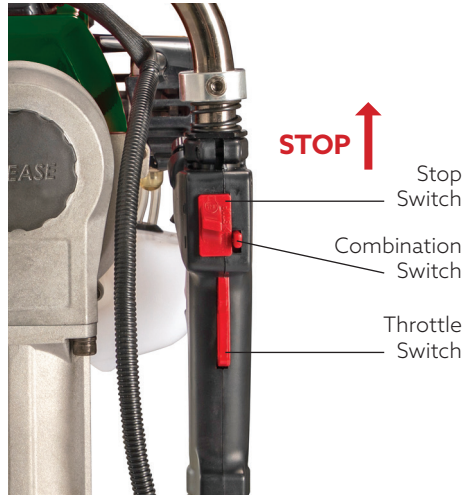
Start the engine and then open the choke completely. After idle operation of 5 minutes, start normal work.



# Operation

## Stopping

To stop the Mini Post Driver, release the 'Throttle Switch' and carry out idle running of the machine for 3-5 minutes. Then pull the 'Stop Switch' to the stop position.



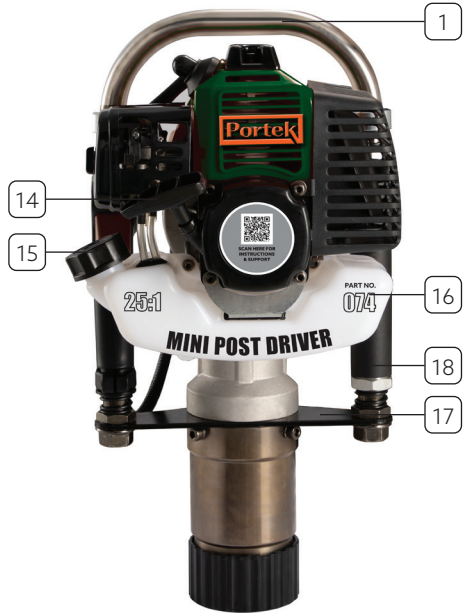
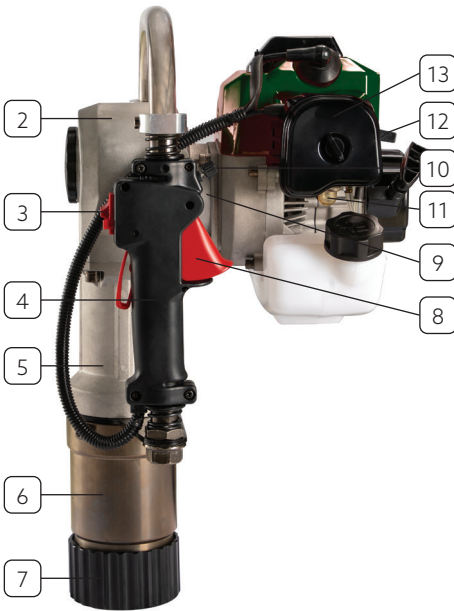
Once you have started the engine, allow the engine to carry out 'Idle Operation' of 5 minutes to give the Mini Post Driver time to reach correct operating temperature.

When the engine is warm, press the 'Throttle Switch' to the appropriate operating position according to the required impact power.

The Mini Post Driver should be run at low or medium-speed in the first 20 hours of operation and in order to extend the service life of the machine.

The Mini Post Driver should not be run at high-speed during operation.

# Maintenance



## No. Description

- 1 Steel Tube Handle
- 2 Gearbox
- 3 Stop Switch
- 4 Combination Switch
- 5 Hammer Case
- 6 Post Holder
- 7 Post Holder Cap
- 8 Throttle Switch
- 9 Gearbox Cover

## No. Description

- 10 Throttle Cable Adjuster
- 11 Fuel Bubble
- 12 Choke Lever
- 13 Air Filter
- 14 Pull Cord Starter
- 15 Fuel Tank Lid
- 16 Fuel Tank
- 17 Support Plate
- 18 Handle Grip

# Maintenance

## Air Filter

Check and clean the air filter on a regular basis. Soot deposits blocking the filter element will reduce the engine power and the service life of your Mini Post Driver. If the filter has a high level of soot deposits, carefully remove it, and clean it with warm water and detergent. Leave to dry before refitting. The air filter should be replaced if damaged in any way.

## Fuel Filter

If the fuel filter becomes blocked, the Mini Post Driver engine power will become greatly reduced and you will find the impact energy will become weak. To check and clean the filter open the fuel tank lid and remove the fuel filter from tank, using a metal hook. While the fuel filter is removed, inspect the fuel tank at same time.

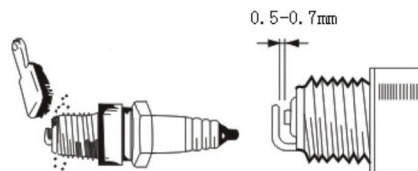


## Carburettor

Over time oil residue may build up around the carburettor and the fuel tank, this is normal but you should take care that the greasy oil does not block the oil line to the engine and cause problems when starting. It is highly recommended that when the Mini Post Driver is non-operational for long periods that the fuel is properly drained. To drain the carburettor of fuel, carefully pull out the oil inlet pipe and firmly press the rubber bubble of the carburettor repeatedly to discharge the fuel into a container. Continue to press the fuel bubble until the oil return pipe is empty. Replace the oil inlet pipe and clean off any spillage and oil residue from the Mini Post Driver.

## Spark Plug

To ensure normal operation of the engine, the spark plug gap must be properly maintained. Remove any sediment with a wire brush. The proper gap of the spark plug is 0.5 - 0.7mm.



## Muffler

Regularly remove any dirt build up with warm water and detergent from both the inlet and outlet of the muffler of the Mini Post Driver.

## The Cylinder Heat Sink

The Mini Post Driver is air-cooled so regularly remove dust to ensure cylinder cooling. If dust accumulates on the cylinder heat sink, the cooling effect will be reduced, which may lead to failure of the cylinder.

## Impact Cylinder Lubrication

The impact cylinder should be re-lubricated with 45g of lubricating grease only after the first 50 hours of operation. Check the impact cylinder after every 250 hours operation (or yearly, whichever is sooner).

Undo the grease cover (counter-clockwise), add 45g of grease then re-tighten (clockwise) the grease cover. The impact cylinder should NEVER have more than 45g of lubricating grease. DO NOT over grease as this can cause irreparable damage and will void the warranty.



# Maintenance

The Mini Post Driver will provide reliable performance and service if maintained regularly.

The following intervals apply to normal operating conditions. If you are using the Mini Post Driver in very dusty conditions or for long operating periods, adjust accordingly.

Please contact your Portek Dealer if in any doubt.

before starting work  
after finishing work or daily  
after each refuelling stop  
every week  
every month  
every 250hrs or every year  
if problem or damaged  
if required

Complete Post Driver machine	Check	X		X					
	Clean		X						
Controls	Check	X		X					
Air Filter	Clean				X				X
	Replace							X	
Fuel Filter	Check					X			
	Replace							X	
Fuel Tank & Cover	Clean		X	X					
	Check	X		X					
	Tighten								X
Gearbox	Check					X			
	Add Grease								X
Cylinder	Check						X		
	Add Grease								X
Silencer	Check					X			
	Clean								X
Cooling Fan	Check					X			
	Clean								X
Spark Plug	Electrode gap (0.025" / 0.635mm)					X			
	Replace (every 100 operating hours)								X
All screws/nuts and fixings for tightness	Check	X		X					

## Warranty

Warranty for your Mini Post Driver is 12 months for domestic use and 3 months for any commercial or contractor use. Please retain your proof of purchase for any warranty claim.

# Troubleshooting & spare parts



**WARNING!** Operating problems are often due to causes that the user can fix. Therefore check the product using this section to eliminate these simple issues. In most cases the problem can be solved quickly.



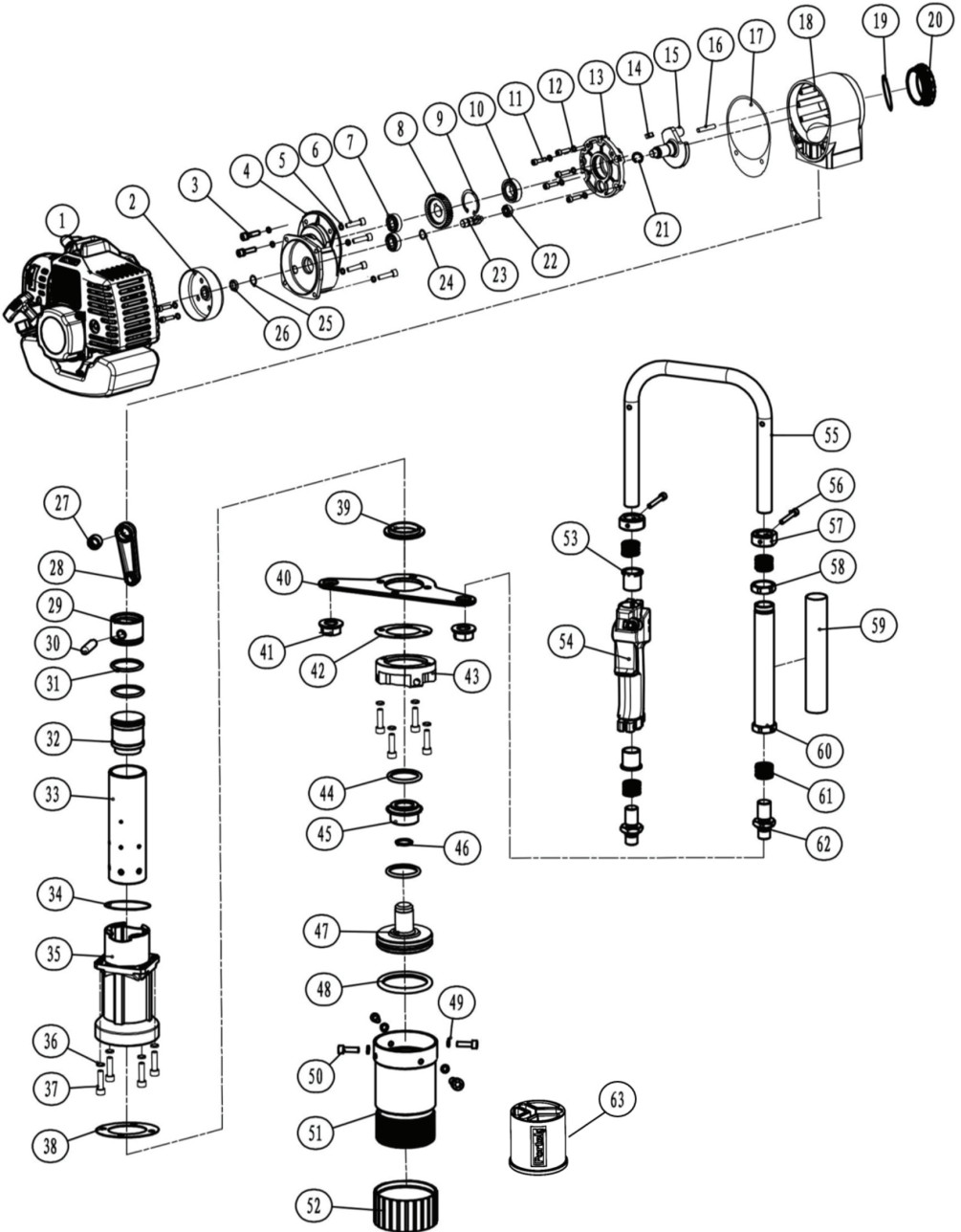
**WARNING!** Only perform the steps described below! All further inspection, maintenance and repair work must be performed by an authorised service centre or a similarly qualified specialist if you cannot solve the problem yourself! **IF IN DOUBT SEEK EXPERT ADVICE**

Problem	Possible Cause	Remedy
Difficulties in starting engine in cooling state.	Not enough fuel in fuel tank	Add fuel
	Spark plug is wet	Remove spark plug and dry
	Spark plug is damaged	Replace spark plug
	Spark plug connector lose	Check and secure
	Spark plug gap incorrect	Set gap to 0.025" (0.635mm)
Difficulties in restarting after a sudden stop.	Not enough fuel in fuel tank	Add fuel
	Carburettor is blocked	Check and clean
	Fuel filter is blocked	Replace fuel filter
	High carbon deposits found on spark plug	Remove carbon deposits from spark plug, clean filter
Slow speed or weak power.	Air filter is blocked	Replace air filter
	Fuel tank feed pipe or air vent blocked	Check and clean
	High carbon deposits found in combustion chamber	Remove carbon deposits
Abnormal sound	Damage or abrasion to active components	Replace worn parts
	High carbon deposits found in combustion chamber	Remove carbon deposits
Mini Post Driver works but not efficiently	Rubber impact piston ring is aged or worn	Replace worn parts
Excessive smoke	Wrong fuel mixture	Drain fuel and replace

## Spare Parts

A full range of spares are available. Please contact your Portek Dealer to request replacement parts.

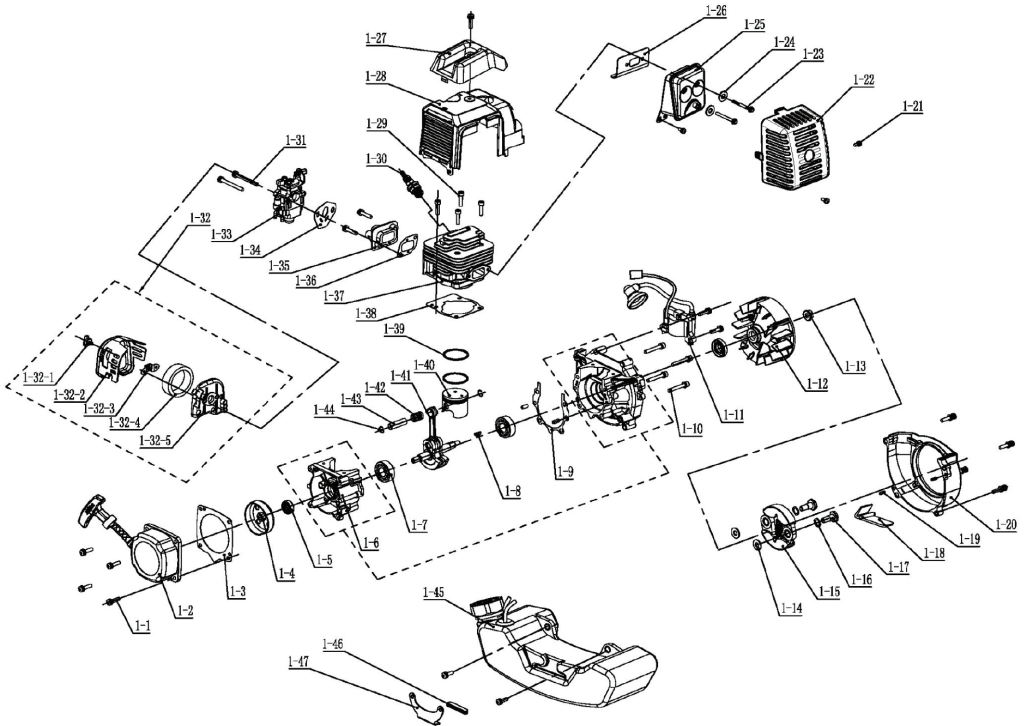
# Exploded drawings



# Exploded drawings

No.	Part No.	Description	Qty	No.	Part No.	Description	Qty
01	074/01	Gasoline Engine 140FA	1	33	074/33	Impact Cylinder	1
02	074/02	Driven Disk	1	34	074/34	O-ring 65x2.5	1
03	074/03	Hex Socket Head Cap Screw M6x25	4	35	074/35	Hammer Case	1
04	074/04	Gearbox Cover	1	36	074/36	Spring Washer M8	8
05	074/05	Spring Washer M6	8	37	074/37	Hex Socket Head Cap Screw M8x40	8
06	074/06	Hex Socket Head Cap Screw M6x18	4	38	074/38	Lower Paper Pad	1
07	074/07	Ball Bearing 6001-2RS	2	39	074/39	Cylinder Gasket	1
08	074/08	Big Gear	1	40	074/40	Support Plate	1
09	074/09	Circlip 37	1	41	074/41	Hex Flange Nut M18x1.5	2
10	074/10	Ball bearing 61904-2RS	1	42	074/42	Connector Pad	1
11	074/11	Hex Socket Head Cap Screw M5x25	5	43	074/43	Connector	1
12	074/12	Spring Washer M5	5	44	074/44	O-ring 42x5	2
13	074/13	Middle Cover	1	45	074/45	Shock Guide Sleeve	1
14	074/14	Flat Key Level A 6x6x14	1	46	074/46	O-ring 28x2.5	1
15	074/15	Impact Crankshaft	1	47	074/47	Shock & Inner Pile Head	1
16	074/16	Cylindrical Pin ø5x25	1	48	074/48	O-ring 77x5	1
17	074/17	Gearbox Gasket	1	49	074/49	Spring Washer M10	4
18	074/18	Gearbox	1	50	074/50	Hex Socket Head Cap Screw M10x30	4
19	074/19	Grease Cover O-ring	1	51	074/51	Post Holder	1
20	074/20	Grease Cover	1	52	074/52	Post Holder Cap	1
21	074/21	Shaft Ring 17	1	53	074/53	Guide Sleeve	2
22	074/22	Ball Bearing 607-2RS	1	54	074/54	Combination Switch	1
23	074/23	Small Gear	1	55	074/55	Steel Tube Handle	1
24	074/24	Small Gear Gasket	1	56	074/56	Hex Socket Head Cap Screw M6x35	2
25	074/25	Red Copper Gasket 12x16x0.5	1	57	074/57	Position Sleeve	2
26	074/26	Driven Disk Washer	1	58	074/58	Handle Nut	1
27	074/27	Needle Bearing NK142212	1	59	074/59	Handle Soft Sleeve	1
28	074/28	Impact Connecting Rod	1	60	074/60	Handle Sleeve	1
29	074/29	Impact Piston	1	61	074/61	Spring ø25x18	4
30	074/30	Impact Piston Pin	1	62	074/62	Elbow Joint	2
31	074/31	O-ring 42x4	2	63	074/301	Y-Post Adaptor	1
32	074/32	Hammer	1				

# Exploded drawings



# Exploded drawings

No.	Part No.	Description	Qty	No.	Part No.	Description	Qty
1-1	074/01-01	Hex Socket Head Screw M5x20	13	1-27	074/01-27	Cowling Cover	1
1-2	074/01-02	Starter Assembly	1	1-28	074/01-28	Cowling	1
1-3	074/01-03	Starter Gasket	1	1-29	074/01-29	Hex Socket Head Screw M5x20	4
1-4	074/01-04	Starter Driving Plate	1	1-30	074/01-30	Spark Plug	1
1-5	074/01-05	Oil Seal FB12x22x7	2	1-31	074/01-31	Hex Socket Head Screw M5x50	2
1-6	074/01-06	Left & Right Crankcase	1	1-32	074/01-32	Air Filter Assembly	1
1-7	074/01-07	Ball Bearing 6201	2	1-32-1	074/01-32-1	Nut M5x9	1
1-8	074/01-08	Wood Ruff-Key 3x3x13	1	1-32-2	074/01-32-2	Air Filter Cover	1
1-9	074/01-09	Crankcase Seal Pad	1	1-32-3	074/01-32-3	Air Filter Plate	1
1-10	074/01-10	Screw M5x30	4	1-32-4	074/01-32-4	Filter Element	1
1-11	074/01-11	Ignitor Assembly	1	1-32-5	074/01-32-5	Air Filter Seat Assembly	1
1-12	074/01-12	Magnetic Flywheel	1	1-33	074/01-33	Carburetor	1
1-13	074/01-13	Hex Flange Locknut M8x1.25	1	1-34	074/01-34	Carburetor Gasket	1
1-14	074/01-14	Flat Pad ø8x1.5	2	1-35	074/01-35	Inlet Pipe	1
1-15	074/01-15	Clutch	1	1-36	074/01-36	Inlet Pipe Pad	1
1-16	074/01-16	Wave Washer ø10x15x0.5	2	1-37	074/01-37	Cylinder	1
1-17	074/01-17	Bolt M8x10	2	1-38	074/01-38	Cylinder Gasket	1
1-18	074/01-18	Air Guide Plate	1	1-39	074/01-39	Piston Ring	2
1-19	074/01-19	Position Pin 5x10	2	1-40	074/01-40	Piston	1
1-20	074/01-20	Fan Cover	1	1-41	074/01-41	Crankshaft Connecting Rod Assembly	1
1-21	074/01-21	Hex Socket Head Screw M5x14	3	1-42	074/01-42	Needle Roller Bearing K9x12x12	1
1-22	074/01-22	Muffler Cover	1	1-43	074/01-43	Piston Pin	1
1-23	074/01-23	Hexagon Socket Head Screw M5x55	2	1-44	074/01-44	Piston Pin Baffle Ring	2
1-24	074/01-24	Washer Class 5x12x1	2	1-45	074/01-45	Fuel Tank Assembly	1
1-25	074/01-25	Muffler	1	1-46	074/01-46	Tank Plate Jacket	1
1-26	074/01-26	Muffler Pad	2	1-47	074/01-47	Tank Plate	1a

# Declaration of Conformity

## EC Declaration of Conformity

Portek Ltd, Bryn Hall, Knolton Bryn, Overton on Dee, Wrexham, LL13 0LF  
declare that the machinery named below conforms to the requirements  
of EC Council Machinery Directive, Annex II

Designation of Machinery: Portek Mini Post Driver

Relevant EC Council Directives:  
2006/42/EC (Machinery Directive)  
2014/30/EU (Electromagnetic Compatibility Directive)

Applied Harmonised Standards:  
BS EN ISO 11148-4:2012  
BS EN ISO 14982: 2009



Declaration made by Hugh David  
Managing Director on 01/07/2024.



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