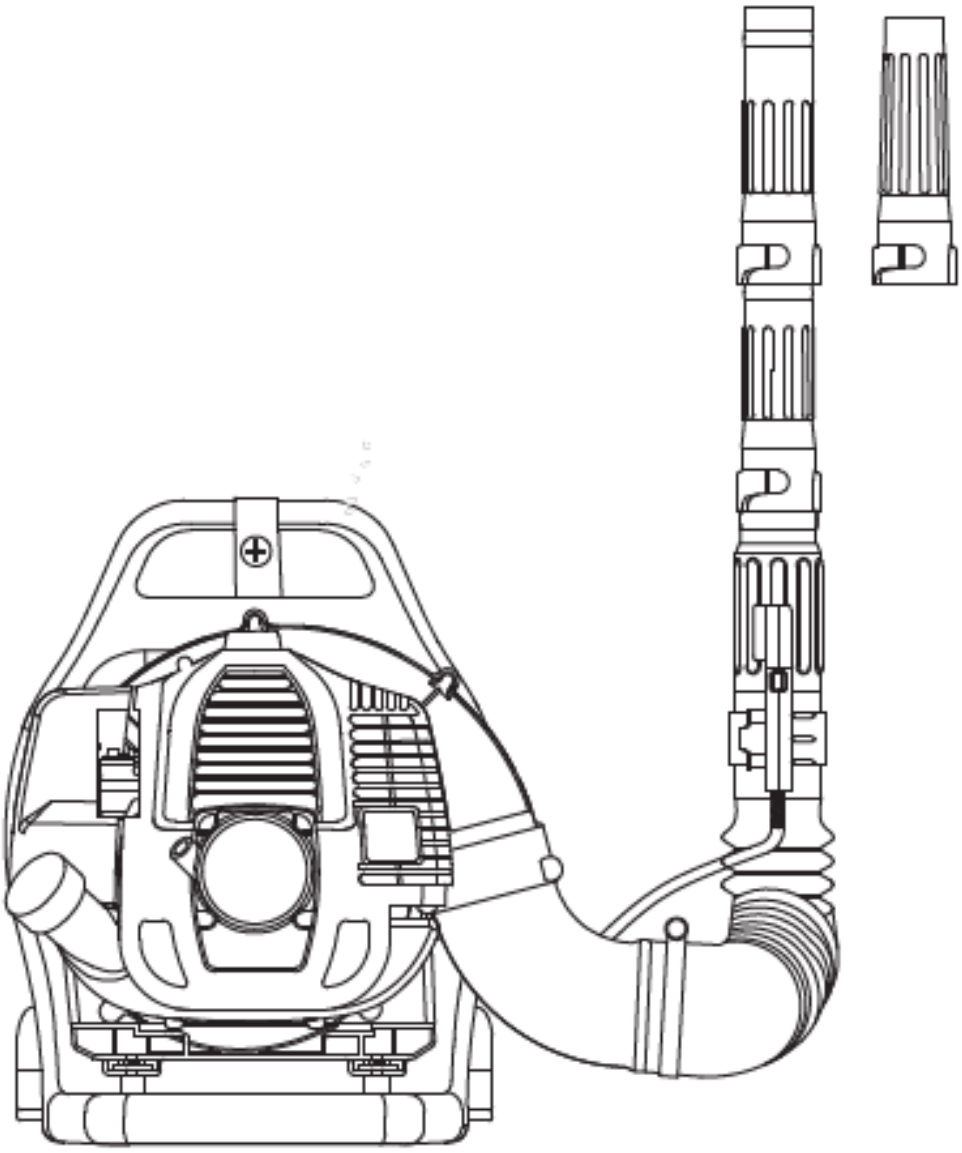
HYUNDAI

BACK-PACK BLOWER

Model HYB33



User Manual

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CONTENTS

1. SAFETY.

1.1. The operator of the machine is responsible for and has a duty of care in making sure that the machine is operated safely and in accordance with the instructions in this user manual. Please note the following safety points

1.1.2. The machine should never be left it in a condition which would allow an untrained or unauthorised person/s to operate this machine.

1.1.3. All due care and diligence should be taken by the operator for the safety of and with regard to those around whilst using the machine

1.2. Some or all of the following PPE, Warning Signs and symbols may appear throughout this manual and you must adhere to their warning/s. Failure to do so may result in personal injury.

Warning Signs and Symbols – FOLLOW safety messages to avoid or reduce risk of injury or death.

DANGER	WARNING	CAUTION	NOTE	
DANGER - indicates a hazard which if not avoided could result in serious injury or death.	WARNING - indicates a hazard which if not avoided could result in serious injury or death.	CAUTION - indicates a hazard which if not avoided might result in minor or moderate injury.	NOTE - indicates a situation that could easily result in equipment damage.	READ MANUAL

EXPLOSION	FIRE	ELECTRIC SHOCK	KICKBACK
HOT SURFACE	TOXIC FUMES	SLIPPERY	MOVING PARTS
KEEP BYSTANDERS AWAY	KEEP BYSTANDERS 15 m AWAY	TAKE CARE OF OVERHEAD POWER LINES	PROTECT FROM RAIN & DAMP
KEEP NAKED FLAMES AWAY FROM FUEL	BE AWARE OF THROWN OBJECTS	TAKE CARE OF THROWN OBJECTS	ROTATING CUTTING BLADES

1.3. Carbon monoxide. 

1.3.1. Carbon monoxide is a colourless and odourless gas. Inhaling this gas can cause death as well as serious long term health problems such as brain damage.

1.3.2. The symptoms of Carbon monoxide poisoning can include but not limited to the following;

1.3.2.1. Headaches, dizziness, nausea, breathlessness, collapsing or loss of consciousness.

1.3.2.2. Carbon monoxide symptoms are similar to flu, food poisoning, viral infections and simply tiredness. It is quite common for people to mistake this very dangerous poisoning for something else.

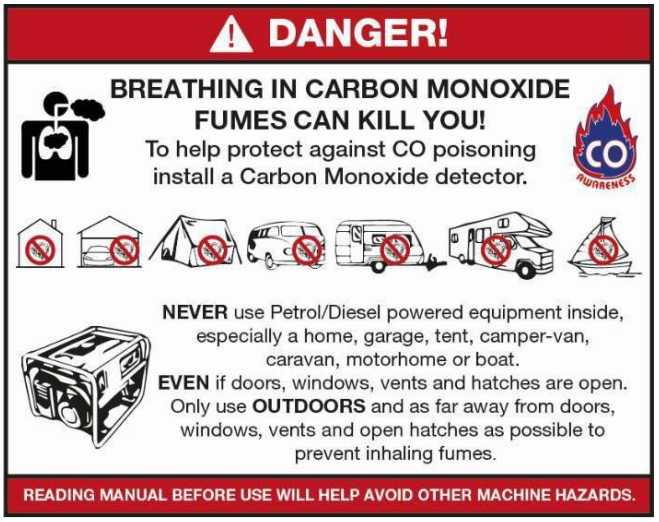
1.3.3. To avoid Carbon monoxide poisoning DO NOT Use Petrol/Diesel powered equipment inside a home, garage, tent, camper van, mobile home, caravan or boat. The list is not exhaustive if you are in any doubt contact your dealer.

1.3.4. If you think you or someone around you has been affected by carbon monoxide poisoning;

1.3.4.1. Get fresh air immediately, by opening doors and windows, turning off the machine and leaving the affected area.

1.3.4.2. See your doctor immediately or go to hospital - let them know that you suspect carbon monoxide poisoning.

1.3.5. **DO NOT** use in an enclosed area or a moving vehicle.



1.4. General fuel safety. 

1.4.1. Fuel Safety additional information can be obtained from the Health and Safety Executive.

1.4.2. CAUTION All fuels are flammable.

1.4.3. Keep away from all ignition sources i.e. heaters, lamps, sparks from grinding or welding.

1.4.4. Hot work on tanks that have contained fuel is extremely dangerous and should not be carried out.

1.4.5. Keep work area clean and tidy.

1.4.6. Clean up all spills promptly using correct methods i.e. absorbent granules and a lidded bin.

1.4.7. Dispose of waste fuels correctly.

1.4.7. Dispose of waste fuels correctly.

1.4.8. Petrol safety. 

1.4.8.1. Always fuel and defuel in well-ventilated area.

1.4.8.2. Always wear correct, suitable and fit for purpose Personal Protective Equipment (PPE), suggested items are as follows, but are not limited too.

1.4.8.3. 

1.4.8.4. 

1.4.8.5. 

Respiratory protective equipment should be used when in an unventilated area.

1.4.8.6. When defueling always use a propriety fuel retriever.

1.4.8.7. Always carry fuel in the correct and clearly marked container.

1.5. <u>Additional Safety guidelines'</u>

1.5.1. To prevent fire.

1.5.1.1. Never add fuel to the fuel tank whilst the engine is running. Wipe away any spilt fuel or oil with a clean cloth before operating. Keep explosives and any other flammable products away from the machine at all times.

1.5.1.2. To prevent fire and to provide adequate ventilation, keep the machine at least one metre away from buildings and other equipment during operation.

1.5.1.3. Operate the machine on level ground. - Do not place the machine indoors whilst the engine is still hot.

1.5.2. To prevent inhaling exhaust fumes.

1.5.2.1. Exhaust gas contains poisonous carbon monoxide which is harmful to health and can kill.

1.5.2.2. For this reason, never use the machine in a closed area or areas with poor ventilation.

1.5.3. To prevent burns.

1.5.3.1. The muffler and the engine body becomes very hot whilst the engine is running or just after running.

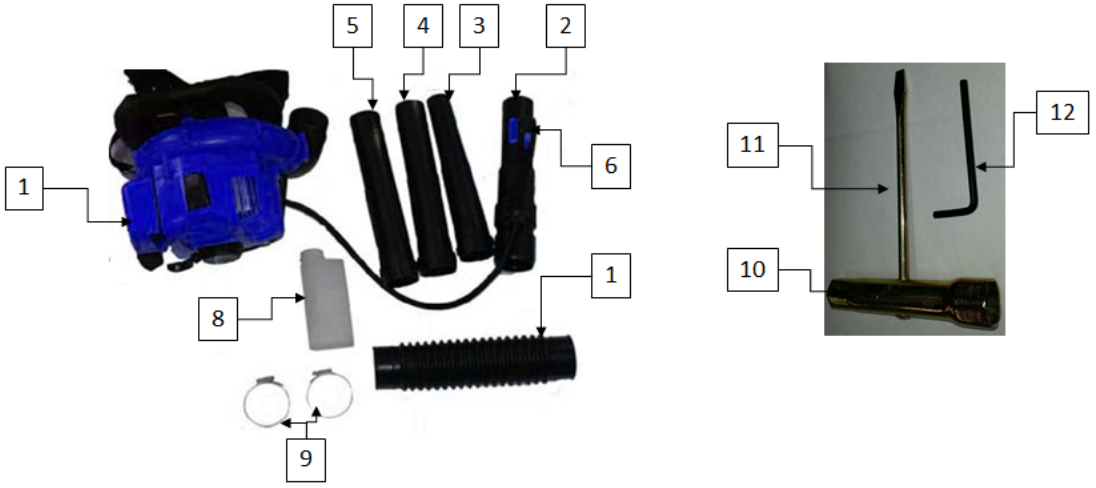
1.5.3.2. To prevent any burns, do not touch these parts during these times.

2. MACHINE COMPONENT LOCATIONS

2.1 Main unit.

1. Back pack
2. Blower unit
3. Spark plug cover
4. Air filter cover
5. Recoil starter handle
6. Fuel tank
7. Primer bulb
8. Choke lever

2.2 Parts.



1. Main unit
2. Blower pipe A
3. Blower pipe B
4. Blower pipe C
5. Blower pipe D
6. Throttle controls
7. Flexible hose
8. Oil container (40:1) # See note below.
9. Pipe clips
10. Spark plug box spanner
11. Screwdriver
12. Allen key

Pre-mix 2-stroke oil with fresh unleaded petrol as follows:

Mineral based 2-stroke oil : 25:1 (40ml of oil per 1 litre of petrol)
Synthetic 2-stroke oil: 40:1 (25ml of oil per 1 litre of petrol)

3. ASSEMBLY AND INITIAL OPERATION

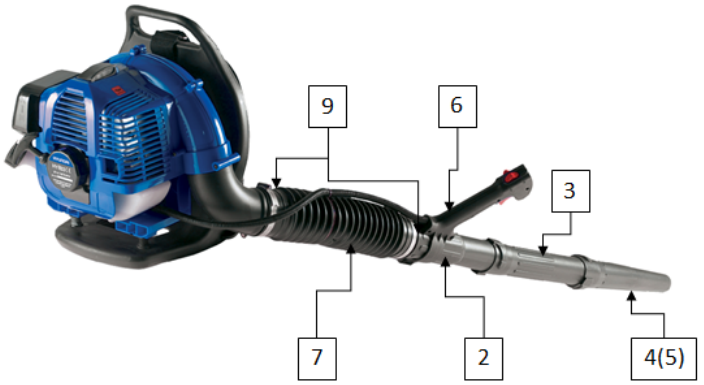
3.1 Connecting controls and attachment hose.

3.1.1 Connect flexible hose to the main unit by using the 2 pipe clips (9).

3.1.2 Put one pipe clip (9) over flexible hose (7) then push one end over main unit outlet.

3.1.3 Put the other pipe clip (9) over the other end then push it over the blower pipe A (2).

3.1.4 Then push the blower pipe B (3) over the spare end of blower pipe A (2), locate the keyway and then lock in an clockwise direction. Continue to do the same with blower pipes C and D as required. See picture 1 below.



2. Blower pipe A
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6. Throttle controls
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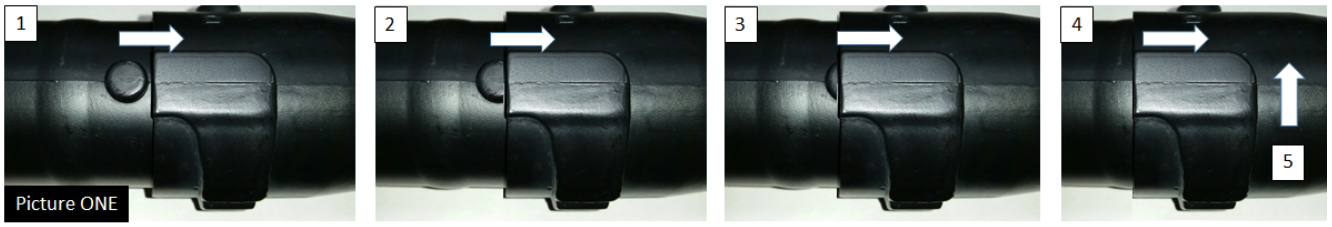


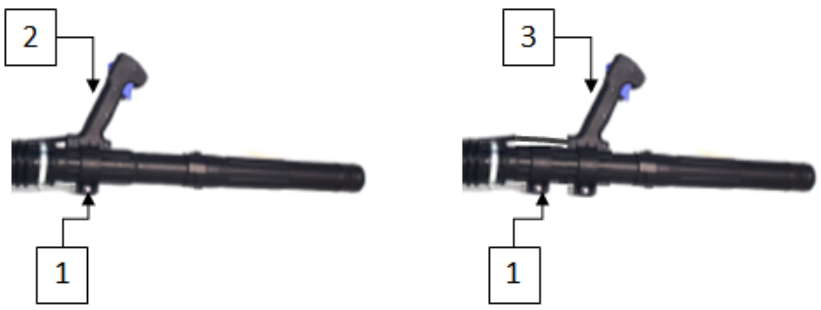
Picture ONE

3.2 Adjusting the control handle.

3.2.1 Put unit on your back.

3.2.2 Using supplied allen key undo screw (1), slide control handle (2) along the pleated section until it is in the desired position.

3.2.3 Once in the desired position (example (3)) usIng the supplied allen key re-tighten the screw.

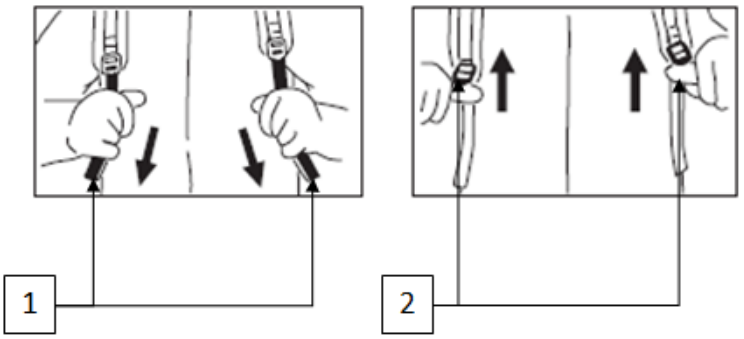


3.3 Adjusting the harness straps.

3.3.1 Pull the end of the straps (1) downward to tighten the harness.

3.3.2 Lift the tabs (2) of the two sliding adjusters.

3.3.3 Adjust the straps so that the back plate is held firmly and comfortably against your back.



3.4 Fuelling.

3.4.1 Your engine requires a mixture of petrol and two stroke oil. The quality of these constituents and the mixed ratio has a decisive influence on the function and service life of the engine.

3.4.2 Use only regular unleaded petrol.

3.4.3 Use only quality two-stroke engine oil.

3.4.3.1 Fuel ratios;

3.4.3.1.1 Pre-mix 2-stroke oil with fresh unleaded petrol as follows:

3.4.3.1.1.1 Mineral based 2-stroke oil : 25:1 (40ml of oil per 1 litre of petrol).

3.4.3.1.1.2 Synthetic 2-stroke oil: 40:1 (25ml of oil per 1 litre of petrol).

3.4.4 Avoid direct skin contact with petrol and avoid inhaling petrol fumes.

3.4.5 Use a container approved for storing fuel. Pour oil into the container first, then add petrol, and mix thoroughly. Do not mix too much fuel as it will last from one season to another.

3.4.6 Thoroughly shake the mixture in the container before fuelling your machine.

3.4.7 Pressure may build up in the container so open it carefully.

3.4.8 Clean the fuel tank and container on a regular basis.

3.4.8.1 Dispose of cleaning fluid properly at authorised disposal location.

3.4.8.2 Before refuelling, clean the filler cap and the area around it to ensure that no dirt falls into the tank.

3.4.8.3 Position the unit so that the filler cap is facing up.

3.4.8.4 Take care not to spill fuel while fuelling and do not overfill the tank.

3.4.8.5 After refuelling, tighten down filler cap by hand as securely as possible.

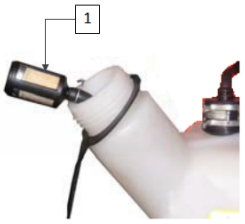
3.4.9 Change the fuel filter once every year.

3.4.9.1 Drain the fuel tank

3.4.9.2 Use a hook to pull the fuel filter (1) out of the tank.

3.4.9.3 Push the new filter into the hose.

3.4.9.4 Place the filter in the tank.



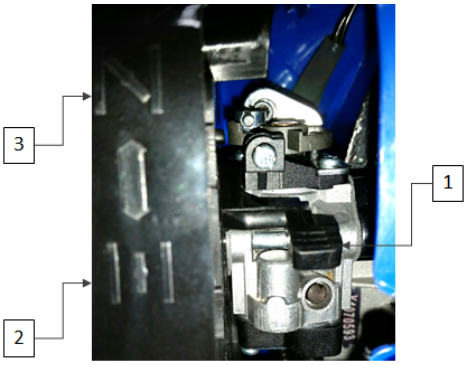
3.5 Starting and stopping the engine.

3.5.1 Observe all safety precautions in this manual.

3.5.2 Before starting: Turn on blower move switch down(1), set throttle (3) to the fast position.

3.5.2.1 If the engine is cold, close (3) the choke (1).

3.5.2.2 If the engine is hot, open (2) the choke fully. Also use this position when the engine has been running but is still cold.



3.5.2.3 Press the primer bulb (1) at least 10 times.

3.5.2.4 Put the unit on the ground. Check that bystanders are well clear of the general work area and the nozzle.

3.5.2.5 Make sure you have a firm footing:

3.5.2.5.1 Hold the unit with your left hand on the housing and put one foot against the base plate to prevent it slipping.

3.5.2.5.2 Pull the starter grip slowly with your right hand to 20cm and give it a brisk strong pull.

3.5.2.5.3 DO NOT pull the starter rope out all the way as it might break.

3.5.2.5.4 DO NOT let the starter grip snap back.

3.5.2.5.5 Guide it slowly back into the housing so that the starter rope can rewind properly.

3.6 When the engine begins to fire:

3.6.1 If the engine is cold, open the choke and continue cranking until engine runs.

3.6.2 If the engine is warm, continue cranking until engine runs.

3.7 As soon as engine runs:

3.7.1 Move the throttle lever (3) to the centre position so that the engine settles down to idle speed.

3.8 Stopping the engine.

3.8.1 Moving the power switch (1) to "0" will turn the off engine. 3.9 If the engine does not start.

Note: If you do not open the choke quickly enough after engine begins to run the engine will stop.

3.9.2 Remove the spark plug cap

3.9.2.1 Remove spark plug cover and HT lead (2) unscrew and dry the spark plug (3). See 4.6 for spark plug adjustment.

3.9.2.2 Set the stop switch (1) to OFF

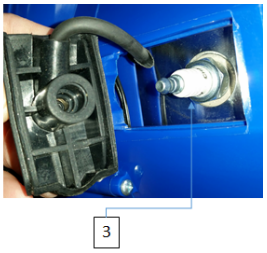
3.9.2.3 Pull the starter rope several times to clear the combustion chamber.

3.9.2.4 Fit the spark plug and reconnect the spark plug cap.

3.9.2.5 Move the stop switch (1) to ON

3.9.2.6 Open the choke even if the engine is cold.

3.9.2.7 Now start the engine.



3.10 Fuel tank has been run until dry and then refuelled.

3.10.1 Pull the starter rope at least 10 times.

4. OPERATION

4.1 Breaking in a new machine.

4.1.1 A new engine should not be run at a high speeds. Avoid unnecessary high loads during the break-in period.

4.1.2 The engine will develop its maximum power after about 5 to 15 tank fillings.

4.2 During operation.

4.2.1 After long periods of full-throttle operation, allow engine to run for a while at idle speed so that the heat in the engine can be dissipated by the flow of cooling air. This helps protect engine mounted components (ignition, carburettor etc) from thermal overload.

4.3 After finishing work.

4.3.1 Storing for short periods.

4.3.1.1 Wait for the engine to cool down, to avoid condensation, fill the fuel tank and keep the unit in a dry place until you need it again. Storing for a long period: see chapter "Storing Machine"

4.4 Cleaning the air filter.

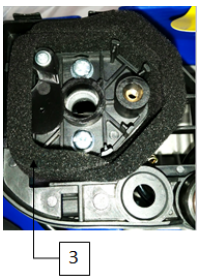
4.4.1 Dirty air filters reduce engine power, increase fuel consumption and make starting more difficult, So if there is a noticeable loss of engine power carry out the following steps.

4.4.1.1 Stop the machine.

4.4.1.2 Undo cover screw (1) clockwise and remove the air filter cover (2).

4.4.1.3 Remove the foam filter (3) from the housing and inspect it. If it is dirty wash in warm soapy water, rinse until clear of soap then allow to fully dry. If is damaged replace with a new one.

4.4.1.4 Refit the cover and tighten the cover screw (1).



4.5 Carburettor - General Information:

4.5.1 Your carburettor comes from the factory with a standard setting. The setting provides optimum fuel-air mixture under most operating conditions.

N.B. We advise that you do not adjust the carburettor. If you suspect the carburettor is mal-adjusted or faulty contact your dealer for assistance.

4.5.2 The high speed screw alters the engine power output and the maximum off road engine speed.

4.5.3 If the setting is too lean, there is a risk of engine damage due to insufficient lubrication and overheating.

4.6 Checking the spark plug.

4.6.1 If the engine is down on power, difficult to start or runs poorly at idle speed, first check the spark plug.

4.7 Remove the spark cover and HT lead (1), remove plug (2) using supplied box spanner.

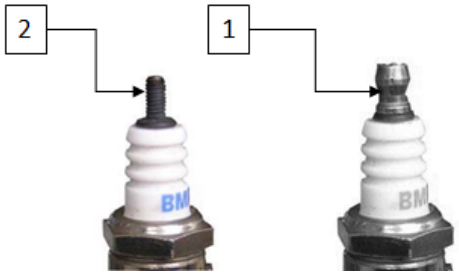
4.8 Check electrode gap (3) (0.6-0.7mm) and adjust if necessary.

4.9 Rectify the problems which have caused the spark plug (3) to become fouled and give unfavourable running conditions.

4.9.1 Too much oil in the fuel mixture.

4.9.2 Dirty air filter.

4.10 If the spark plug comes with a detachable adapter nut (1), screw it on thread (2) firmly, then press the cap firmly onto the spark plug.



4.11 Poor engine running.

4.11.1 If you have cleaned the air filter, and the carburettor is properly adjusted and the engine still runs badly. The cause may be in the exhaust system return machine to dealer for checks, clean and possible repair.

5. STORING THE MACHINE

5.1 If you intend to store the machine for a period of longer than three months, carry out the following procedure.

5.1.1 Empty the fuel tank.

5.1.2 Run the engine until carburettor is dry - This helps prevent carburettor diaphragms sticking together.

5.1.3 Thoroughly clean the machine:

5.1.3.1 Pay special attention to the cylinder and air filter.

5.1.4 Store the machine in a dry, high or locked location out of the reach of children and other unauthorised persons.

5.1.5 Do not expose the container to direct sunlight for unnecessarily long period. UV rays can make the container material brittle, which could result in leaks or breakage.

5.2 Reducing wear and avoiding damage to machine.

5.2.1 Observing the instructions in this manual will help to reduce the risk of unnecessary wear and damage to the power tool.

5.2.2 The power tool must be operated, maintained and stored with the due care and attention described in this owner's manual.

5.2.3 The user is responsible for all damage caused by non-observance of the safety precautions, operating and maintenance instructions in this manual. This includes in particular:

5.2.3.1 Alteration or modifications to the product not approved by dealer.

5.2.3.2 Using accessories, power tool accessories or cutting tools not approved by dealer.

5.2.3.3 Using the product for purpose for which it was not designed.

5.2.3.4 Using the products for sports or competitive events.

5.2.3.5 Continuing to use the product with defective components.

6. MAINTENACE AND REPAIR

6.1 All the operations described in this manual must be performed on a regular basis. If these maintenance operations cannot be performed by the owner, they should be performed by an authorised dealer.

6.2 If these operations are not carried out as specified, the user assumes responsibility for any damage that may occur. Among other things, this includes:

6.2.1 Damage to the engine due to neglect or deficient maintenance, incorrect carburettor adjustment and adequate cleaning of cooling air inlets.

6.2.2 Corrosion and other consequential damage resulting from improper storage.

7. SPECIFICATIONS

MODEL	HYB33
Engine type	Hyundai 2-Stroke
Power kw	0.9
Engine size - cc	33
Fuel/oil	Pre-mix 2-stroke oil with fresh unleaded petrol as follows: Mineral based 2-stroke oil : 25:1 (40ml of oil per 1 litre of petrol) Synthetic 2-stroke oil: 40:1 (25ml of oil per 1 litre of petrol)
Fuel tank ml	650
Noise level dB	111
Engine speed - rpm	8000
Engine idle speed - rpm	2500
In use carry method	Backpack
Air speed - km/hr	187
Carburettor type	Diaphragm
Starting method	Recoil
Gross Weight kg	8
Fully Assembled Dimensions L x W x H	1230 x 390 x 390 (Pipe attached)
Net weight kg	6.3
Box Dimensions L x W x H	420 x 350 x 420
Vibration value m/s^2	3.87

8. DECLARATIONS OF CONFORMITY

Genpower Ltd confirms that this Hyundai product conforms to the following CE directives:

2006/42/EC Machinery directive.
2004/108/EC EMC directive.
2000/14/EC Noise emissions directive.
97/68/EC NRMM Emissions directive.

EC DECLARATION OF CONFORMITY

The undersigned, as authorised by: **Genpower Ltd**

Declares that the following equipment manufactured under licence by Hyundai Korea

Conforms to the Directive: -

2000/14/EC (as amended)

of the European Parliament and of the council on the approximation of the laws of the Member States relating to the noise emission in the environment by equipment for use outdoors.

Equipment Category:	**Garden Machinery**
Product Name/Model:	**HYB33**
Type/Serial No:	**Back-Pack Blower**
The technical documentation is kept by:	**Roland Llewellin, Genpower Ltd, Isaac Way, Pembroke Dock, Pembrokeshire, SA72 4RW**

The conformity assessment procedure followed was in according with annex V of the Directive.

Notified Body:	**TÜV SÜD Industrie Service GmbH, Westendstrasse 199, 80686, Deutschland. Test report BJ5000904201**
Measured Sound Power Level:	**111dB(A)**
Guaranteed Sound Power Level:	**111dB(A)**

A copy of this certificate has been submitted to the European Commission and to EU Member State United Kingdom.

Place of Declaration:	**Pembroke Dock, SA72 4RW**
Date:	**19th June 2014**
Signed by:	**Roland Llewellin**
Position in Company:	**Director**

Name and address of manufacturer or Authorised representative:

R J Llewellin

Genpower Ltd, Isaac Way, Pembroke Dock, Pembrokeshire, SA72 4RW

HYUNDAI

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