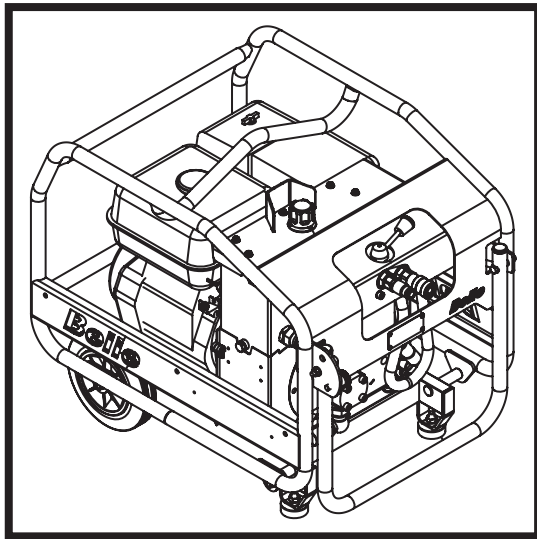




# BELLE

## BULLDOG & HPP POWER PACKS

870/40000/6  
02/22



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**2**

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EC Declaration of Conformity

# Declaration Of Conformity (DOC)

We, **Altrad Belle, Sheen, Nr. Buxton, Derbyshire, SK17 0EU, GB** declare that the DoC is issued under our sole responsibility and belongs to the followings product(s):



PRODUCT TYPE .....

MODEL.....

SERIAL No.....

DATE OF MANUFACTURE

SOUND POWER LEVEL  
MEASURED /  
.....(GUARANTEED)

WEIGHT.....



## Object of the Declaration:

Portable petrol/diesel driven hydraulic power source for powering a range of hydraulic tools.

The object of the declaration described above is in conformity with the relevant **Statutory Requirements:**

- **2008 No. 1597** Supply of Machinery (Safety) Regulations 2008
- **2001 No. 1701** Noise Emission in the Environment by Equipment for use Outdoors Regulations 2001
- **2016 No. 1091** Electromagnetic Compatibility Regulations 2016

The following designated standards and technical specifications have been applied:

- **EN ISO 12100:2010** Safety of machinery
- **BS EN ISO 4413: 2010** Hydraulic fluid power. General rules and safety requirements for systems and their components.
- **ISO 3744:2010** Acoustics — Determination of sound power levels and sound energy levels of noise sources using sound pressure

**ANP CERTIFICATION LTD. (Approved Body, number 8500) 2 Parkfield Street, Manchester, M14 4PN, UK** carried out Internal Control of Production with Assessment of Technical Documentation and Periodical Checking as per Schedule 9 of SI 2001 1701

Technical Files are held by **Ray Neilson** at the Altrad Belle address stated above:-

## Place of Declaration:-

Sheen,  
Nr. Buxton,  
Derbyshire,  
SK17 0EU,  
UK

Signed by:

Ray Neilson

## Date of Declaration:-

February 2022

**Managing Director**  
On behalf of Altrad Belle  
Sheen, Derbyshire, UK



# EC Declaration Of Conformity (DOC)



We, **Altrad Belle, Sheen, Nr. Buxton, Derbyshire, SK17 0EU, GB** declare that the DoC is issued under our sole responsibility and belongs to the followings product(s):



PRODUCT TYPE .....

MODEL.....

SERIAL No.....

DATE OF MANUFACTURE .....

SOUND POWER LEVEL  
MEASURED /  
.....(GUARANTEED)

WEIGHT.....



Signed by:

**Ray Neilson**  
**Managing Director**

*On behalf of Altrad Belle, Sheen, Derbyshire, UK*

**Place of Declaration:-**  
*Sheen, Nr. Buxton, Derbyshire, SK17 0EU, UK*  
**Date of Declaration:-**  
*May 2021*

**Object of the Declaration:**

Portable petrol/diesel driven hydraulic power source for powering a range of hand-held hydraulic tools.

The object of the declaration described above is in conformity with the relevant **Union Harmonisation Legislation:**

- **2006/42/EC** - New machinery directive
- **2000/14/EC** - Noise - equipment for use outdoors

The following harmonised standards and technical specifications have been applied:

- **EN ISO 12100:2010** Safety of machinery
- **BS EN ISO 4413: 2010** Hydraulic fluid power. General rules and safety requirements for systems and their components.
- **ISO 3744:2010** Acoustics — Determination of sound power levels and sound energy levels of noise sources using sound pressure

**VINÇOTTE nv/sa (NB0026)** carried out Internal Control of Production with Assessment of Technical Documentation and Periodical Checking as per Annex VI of 2000/14/EC

Technical Files are held by **Hugues Menager** at the following address:-  
**Altrad (Group Holding)**, 125 Rue du Mas Carbonnier, 34000, Montpellier, France.



# EU Declaration Of Conformity (DOC)



We, **Altrad Belle, Sheen, Nr. Buxton, Derbyshire, SK17 0EU, GB** declare that the DoC is issued under our sole responsibility and belongs to the followings product(s):



PRODUCT TYPE .....

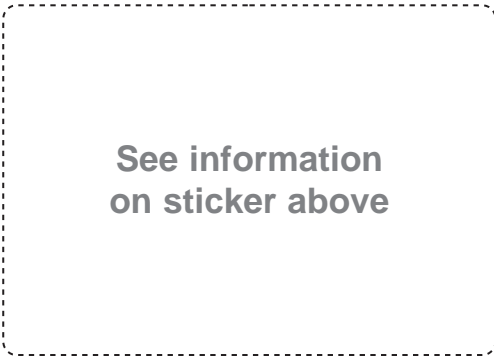
MODEL.....

SERIAL No.....

DATE OF MANUFACTURE .....

SOUND POWER LEVEL  
MEASURED /  
.....(GUARANTEED)

WEIGHT.....



Signed by:

**Ray Neilson**  
**Managing Director**

*On behalf of Altrad Belle, Sheen, Derbyshire, UK*

**Place of Declaration:-**  
*Sheen, Nr. Buxton, Derbyshire, SK17 0EU, UK*  
**Date of Declaration:-**  
*May 2021*

**Object of the Declaration:**

Portable petrol/diesel driven hydraulic power source for powering a range of hand-held hydraulic tools.

The object of the declaration described above is in conformity with the relevant **Union Harmonisation Legislation:**

- **2014/30/EU** - EMC Directive

The following harmonised standards and technical specifications have been applied:

- **EN ISO 12100:2010** Safety of machinery
- **BS EN ISO 4413: 2010** Hydraulic fluid power. General rules and safety requirements for systems and their components.
- **ISO 3744:2010** Acoustics — Determination of sound power levels and sound energy levels of noise sources using sound pressure

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**Altrad (Group Holding)**, 125 Rue du Mas Carbonnier, 34000, Montpellier, France.



# How To Use This Manual

This manual has been written to help you operate and service the Hydraulic Power Pack safely. This manual is intended for dealers and operators of the Hydraulic Power Pack.

## Foreword

The '**Machine Description**' section helps you to familiarise yourself with the machine's layout and controls.

The '**General Safety**' and '**Health and Safety**' sections explain how to use the machine to ensure your safety and the safety of the general public.

The '**Operating Instructions**' section helps you with the setting up and use of the machine.

The '**Trouble Shooting Guide**' helps you if you have a problem with your machine.


The '**Environment**' section gives instructions on how to handle the recycling of discarded apparatus in an environmentally friendly way.

The '**Service & Maintenance**' section is to help you with the general maintenance and servicing of your machine.

The '**Warranty**' section details the nature of the warranty cover and claims procedure.

## Directives with regard to the notations.


Text in this manual to which special attention must be paid are shown in the following way:

 **CAUTION** *The product can be at risk. The machine or yourself can be damaged or injured if procedures are not carried out in the correct way.*

 **WARNING** *The life of the operator can be at risk.*



# WARNING

 **WARNING** *Before you operate or carry out any maintenance on this machine **YOU MUST READ** and **STUDY** this manual.*

**KNOW** how to safely use the unit's controls and what you must do for safe maintenance.

(Be sure that you know how to switch the machine off before you switch on, in case you get into difficulty.)

**ALWAYS** wear or use the proper safety items required for your personal protection.

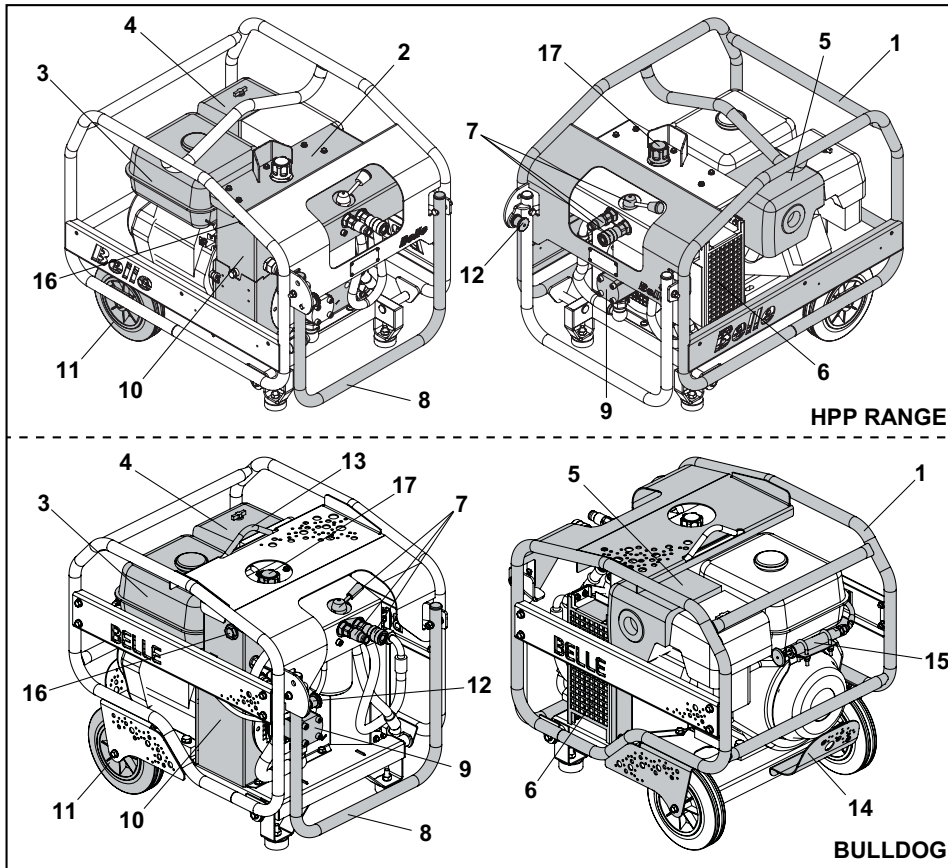
If you have **ANY QUESTIONS** about the safe use or maintenance of this unit, ASK YOUR SUPERVISOR OR CONTACT THE Altrad Belle+44 (0)1298 84606



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# Machine Description



1. Frame
2. Cowl
3. Fuel Tank
4. Air Filter
5. Exhaust
6. Oil Cooler
7. Valve Block
8. Transport Handle
9. Pump
10. Hydraulic Oil Tank
11. Transport Wheels
12. Handle Latch
13. Lifting Eye
14. Engine Protection
15. Power on Demand (POD) System.
16. Hydraulic Oil Sight Glass
17. Hydraulic Oil Filler Cap

# Applications



The Altrad Belle Bulldog Power Pack is suitable to power the following Altrad Belle hydraulic tools.

- |                                    |                                    |                                   |
|------------------------------------|------------------------------------|-----------------------------------|
| a) BHB12 12 Kg. Hand held Pick.    | b) BHB19 19 Kg. Hand held breaker. | c) BHB23 23 Kg Hand held breaker. |
| d) BHB25 25 Kg. Hand held breaker. | e) BHB25X 25 Kg. Hand Held Breaker | f) 2322-S Sub Water Pump.         |

The Bulldog Power Pack can safely be connected to any tool which carries the EHTMA Category 'C' ( Green Triangle ). If in doubt regarding the correct and safe connection of a tool please consult Altrad Belle, or your local Agent for advice.

The Altrad Belle Midi Power Pack is suitable to power the following Altrad Belle hydraulic tools.

- |                                    |                                    |                                   |
|------------------------------------|------------------------------------|-----------------------------------|
| a) BHB12 12 Kg. Hand held Pick.    | b) BHB19 19 Kg. Hand held breaker. | c) BHB23 23 Kg Hand held breaker. |
| d) BHB25 25 Kg. Hand held breaker. | e) BHB25X 25 Kg. Hand Held Breaker | f) 2322-S Sub Water Pump.         |

The Midi Power Pack can safely be connected to any tool which carries the EHTMA Category 'C' ( Green Triangle ). If in doubt regarding the correct and safe connection of a tool please consult Altrad Belle, or your local Agent for advice.

The Altrad Belle Major Power Pack MAJOR 20/140X & MAJOR 20/160X is suitable to power the following Altrad Belle hydraulic tools EHTMA Cat. 'C'.

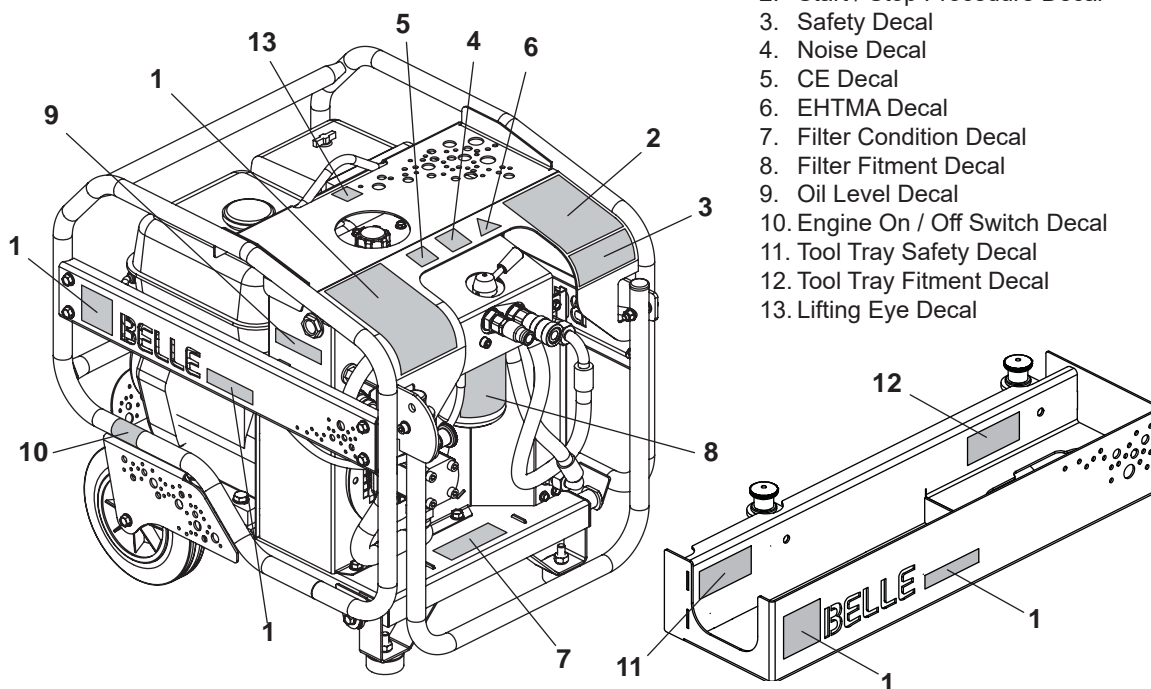
- |                                    |                                    |                                   |
|------------------------------------|------------------------------------|-----------------------------------|
| a) BHB12 12 Kg. Hand held Pick.    | b) BHB19 19 Kg. Hand held breaker. | c) BHB23 23 Kg Hand held breaker. |
| d) BHB25 25 Kg. Hand held breaker. | e) BHB25X 25 Kg. Hand Held Breaker | f) 2322-S Submersible Water Pump. |

The Altrad Belle Major Power Pack MAJOR 30/140 is suitable to power the following Altrad Belle hydraulic tools EHTMA Cat. 'D'.

- |                                 |                                     |                    |
|---------------------------------|-------------------------------------|--------------------|
| a) BHB27 27 Kg. Hand held Pick. | b) BHB 27X 30Kg. Hand held breaker. | c) 188 Disc Cutter |
|---------------------------------|-------------------------------------|--------------------|

The Major Power Pack can safely be connected to any other tool which carries the relevant EHTMA Category 'D' ( Brown Triangle ). If in doubt regarding the correct and safe connection of a tool please consult Altrad Belle or your local Agent for advice.

1. Branding Decals
2. Start / Stop Procedure Decal
3. Safety Decal
4. Noise Decal
5. CE Decal
6. EHTMA Decal
7. Filter Condition Decal
8. Filter Fitment Decal
9. Oil Level Decal
10. Engine On / Off Switch Decal
11. Tool Tray Safety Decal
12. Tool Tray Fitment Decal
13. Lifting Eye Decal



- 1. Branding Decals**  
Indicates the make and model of the machine.
- 2. Start / Stop Procedure Decal**  
Gives instructions on how to Start and Stop the Bulldog Power Pack.

**3. Safety Decal**



**Read the Operators Manual**



**Wear Ear Protection**

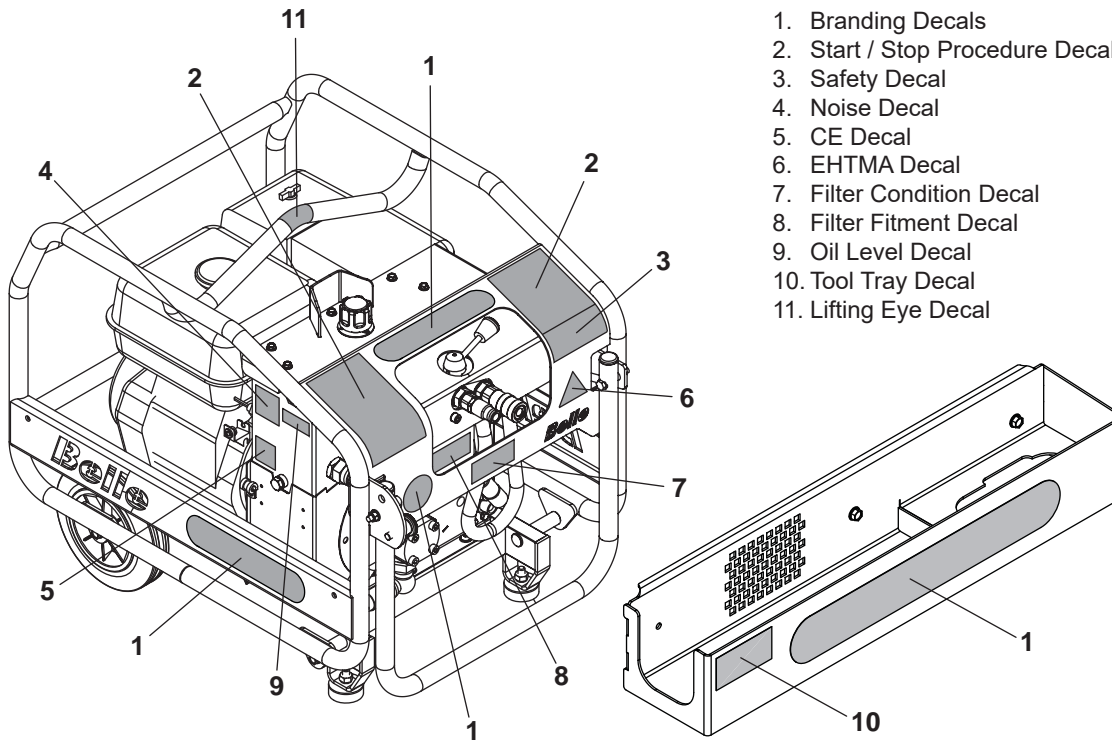


**Wear Eye Protection**



**Wear Protective Footwear**

- 4. Noise Decal**  
Indicates the Noise Level (dB(A)) of the machine.
- 5. CE Decal**  
Indicates that the machine is CE certified.
- 6. EHTMA Decal**  
Indicates the EHTMA Rating, which identifies the hydraulic flow rate and working pressure of the machine
- 7. Filter Condition Decal**  
Gives servicing information for the hydraulic filter.
- 8. Filter Fitment Decal**  
Indicates how to change the hydraulic filter.
- 9. Oil Level Decal**  
Indicates the position of the hydraulic oil gauge.
- 10. Engine On / Off Switch Decal**  
Indicates the position of the Engine On / Off Switch
- 11. Tool Tray Safety Decal**  
Gives safety instructions for using the tool tray correctly.
- 12. Tool Tray Fitment Decal**  
Gives instructions for fitting the tool tray to the machine correctly.
- 13. Lifting Eye Decal**  
Gives safety instructions for using the tool tray correctly.



1. Branding Decals
2. Start / Stop Procedure Decal
3. Safety Decal
4. Noise Decal
5. CE Decal
6. EHTMA Decal
7. Filter Condition Decal
8. Filter Fitment Decal
9. Oil Level Decal
10. Tool Tray Decal
11. Lifting Eye Decal

### 1. Branding Decals

Indicates the make and model of the machine.

### 2. Start / Stop Procedure Decal

Gives instructions on how to Start and Stop the Bulldog Power Pack.

### 3. Safety Decal



**Read the  
Operators Manual**



**Wear Ear  
Protection**



**Wear Eye  
Protection**



**Wear Protective  
Footwear**

### 4. Noise Decal

Indicates the Noise Level (dB(A)) of the machine.

### 5. CE Decal

Indicates that the machine is CE certified.

### 6. EHTMA Decal

Indicates the EHTMA Rating, which identifies the hydraulic flow rate and working pressure of the machine

### 7. Filter Condition Decal

Gives servicing information for the hydraulic filter.

### 8. Filter Fitment Decal

Indicates how to change the hydraulic filter.

### 9. Oil Level Decal

Indicates the position of the hydraulic oil gauge.

### 10. Tool Tray Decal

Gives safety instructions for using the tool tray correctly.

### 11. Lifting Eye Decal

Gives safety instructions for using the tool tray correctly.



# Technical Data

Model	Bulldog 20-140	Midi 20-110D*	Midi 20-140
Engine	Honda GX270	Lombardini 15LD 350	Honda GX270
Engine Power (Hp)	9	7.5	9
Hydraulic Flowrate (Ltrs/Min)	20	20	20
Working Pressure (Bar)	140	110	140
Length (mm) (With Handle Folded)	705	740	740
Width (mm)	515	555	555
Height (mm)	620	620	620
Hydraulic Connections	3/8" / 1/2"	3/8" / 1/2"	3/8" / 1/2"
	Flat faced, quick release, Non-drip couplings		
Hydraulic Oil Type	- Below 30° = ISO VG T32. - Above 30° = ISO VG T46		
Dry Weight (Kg)	59.5	67	60
Weight Including Oils (Kg)	65.5	73	66
Oil Tank Capacity (Ltrs)	5.6	6.2	6.2
Fuel Type	Unleaded	Diesel	Unleaded
Fuel Tank Capacity (Ltrs)	6	4.3	6
Noise Level (dB(A))	101	104	101

Model	Major 20-140X	Major 20-160X	Major 30-140
Engine	Honda GX390	Honda GX390	Honda GX390
Engine Power (Hp)	13	13	13
Hydraulic Flowrate (Ltrs/Min)	20	20	30
Working Pressure (Bar)	140	160	140
Length (mm) (With Handle Folded)	740	740	740
Width (mm)	555	555	555
Height (mm)	620	620	620
Hydraulic Connections	3/8" / 1/2"	3/8" / 1/2"	3/8" / 1/2"
	Flat faced, quick release, Non-drip couplings		
Hydraulic Oil Type	- Below 30° = ISO VG T32. - Above 30° = ISO VG T46		
Dry Weight (Kg)	72	72	72
Weight Including Oils (Kg)	78	78	78
Oil Tank Capacity (Ltrs)	6.2	6.2	6.5
Fuel Type	Unleaded	Unleaded	Unleaded
Fuel Tank Capacity (Ltrs)	6.5	6.5	6.5
Noise Level (dB(A))	101	101	101

\* = Not CE Approved



# General Safety



The following precautions should be taken before operating Altrad Belle Hydraulic Power Units and Road Breaking Tools.

- a) Read this Operators Guide and the operating handbook for the tool to be connected and run. Observe the manufacturers recommendations.
- b) Never operate the power units and tools without the correct Personal Protection Equipment. Altrad Belle recommend the use of protective goggles and/or face shield, ear defenders, protective footwear, gloves, and hand hat.
- c) Ensure that the 'STEEL' is securely locked into the breaker.
- d) Only operate the Power unit in a well Ventilated area ensuring adequate flow of air for the cooling fan and the removal of the exhaust gases.
- e) Ensure that a safe operating work position (Workstation) is selected. Altrad Belle recommend that tools are operated at the extremity of the transmission hoses connecting the tool to the power unit.
- f) Ensure that the hydraulic tool is compatible with the hydraulic power supply to be used. It is DANGEROUS to use a hydraulic tool with an incompatible flow rate and pressure.

**NOTE:-** Hydraulic power units and tools supplied by EHTMA member companies carry range identification labels and it is essential to check that the tools and power unit have the same identification label.

- g) Check the power unit, hoses and tools frequently for damage and/or leaks.
- h) Do not adjust the power pack settings, ie:- the engine speed/flow rate, Relief Valve pressure setting etc. Operating with flows and pressures outside the specifications can be dangerous.
- j) All loose items (Hoses, Hydraulic Breaker, Steel) should be removed before lifting as they are not secured and may cause a falling object hazard when lifting.
- k) Use only Altrad Belle replacement parts. It can Prove dangerous to fit obscure parts.



## **WARNING**

*Never attempt to add fuel or oil when the engine is running. Use only the correct grade, and do not overfill.*

# Health and Safety



## **Vibration**

Some vibration from the machines operation is transmitted through the handle to the operator's hands. The Altrad Belle Hydraulic Tool range has been specifically designed to reduce hand/arm vibration levels. Refer to specifications & technical data for vibration levels and usage times (recommended maximum daily exposure time). DO NOT exceed the maximum usage times.

## **PPE (Personal Protective Equipment)**

Personal injury or property damage may be caused by knocks, crushing, slipping, tripping, falling, or by flying chips due mainly to the improper or careless handling of the machine, or working in a confined area.

Suitable PPE must be worn when using this equipment i.e. Safety Goggles, Gloves, Ear Defenders, Dust Mask and Steel Toe capped footwear. Wear clothing suitable for the work you are doing. Tie back long hair and remove any jewellery which may catch in the equipment's moving parts.

## **Dust**

Many of the tools which can be used with this Power Pack can produce dust, which may be hazardous to your health. Always wear a mask that is suited to the type of dust being produced.

# Pre-start Checks



- 1) Ensure that the Power Unit is standing on stable ground or where necessary that it is suitable checked for stability.



## **CAUTION**

*Do not operate the machine at an angle of greater than 20 degrees, otherwise the engine lubricating system may fail, causing extensive damage to the engine.*

- 2) Ensure that the engine exhaust is not obstructed and that there is adequate ventilation to disperse the exhaust gases.
- 3) Ensure that the transmission hoses are positioned to avoid damage by vehicles etc., and that they will not be understrain when the accessory tool is in use.



## **CAUTION**

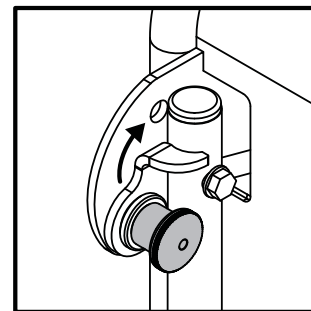
*Ensure that the hose couplings to the accessory tool are thoroughly cleaned before ceonnecting. Failure to do so may cause damage to the seals.*

- 4) Check engine fuel and oil level, and top up as necessary. Refer to the engine manuals for details of grade.
- 5) Check hydraulic oil level and top up as necessary.

**NOTE:-** When topping up the hydraulic tank it is advisable to use a strainer. Do not overfill.

## Take the Power Pack to where it is required.

When using the wheels and transport handle **ALWAYS** ensure the handle latch is engaged before transporting the Power Pack (see image)



Where it is necessary to use lifting equipment to position the Power Pack, make sure the lifting equipment has a WLL (Working Load Limit) suitable for the Power Pack's weight (see Technical Data section or machine serial plate). Attach suitable chains or slings **ONLY** to the lifting point on the top of the Power Pack.

## Starting the Engine

**NOTE:-** Refer to the engine manual for details. Always ensure the Bypass lever is in the Bypass position.

### Petrol Engines

- 1) Open the fuel tap.
- 2) Close the choke on the carburetter.
- 3) Set the engine ignition switch to 'ON'.
- 4) Start the Engine by pulling on the recoil starter rope.
- 5) As the engine warms up, gradually return the choke to 'OPEN'.

**NOTE:-** Midi and Major petrol Power Packs are fitted with a Power On Demand device and the engine will run at idle speed until pressure is generated in the hydraulic system.

### Diesel Engines

- 1) Open the fuel tap.
- 2) Set the engine speed control to the 'START' position.
- 3) Set the decompressor lever to the 'START' position.
- 4) Start the engine by pulling the recoil starter rope.

## Operating Checks

Before commencing operation with the accessory tool connected, the following checks should be carried out.

- 1) Bypass lever is in the "FLOW" position.
- 2) Check that there is no excessive engine vibrations.
- 3) Ensure that there are no hydraulic leaks from hoses or couplings.
- 4) Check that the filter condition indicator is not within the clogging sector. When this sector is indicated, the return line filter should be replaced.  
Depending on the ambient temperature, optimum performance is usually achieved after 5-10 minutes operation, this is the time required for the hydraulic oil to reach its correct operating temperature.

## Stopping the Engine

**NOTE:-** Refer to the engine manual for details.

### Petrol Engines.

- 1) Set the bypass lever to the 'BYPASS' position.
- 2) Set the ignition switch to 'OFF'.
- 3) Switch off the fuel tap.

### Diesel Engines.

- 1) Set the bypass lever to the 'BYPASS' position.
- 2) Set the engine speed control to the 'STOP' position.
- 3) Switch off the fuel tap.

Problem	Cause	Remedy
<b>Engine stops or will not start.</b>	Fuel tap switched off.	Switch on fuel tap.
	Fuel shortage.	Refuel.
	Fuel line blocked.	Clean filters/pipes.
	Air vents in filter cap blocked.	Clean.
	Air cleaner blocked.	Clean or renew element. Refer to engine manual.
	Engine malfunctions.	Refer to engine manual.
	Low engine oil (Petrol only).	Top up to correct level. Refer to engine manual for correct grade.
	Insufficient oil in hydraulic tank (Petrol only).	Top up to correct level (Refer to Technical Data Section)
	Engine Ignition switch or connecting wires damaged (Petrol units only).	Check for earth leak, and renew worn or damaged parts.
	Hydraulic tank float switch wires damaged (Petrol units only).	Renew worn or damaged parts.
<b>Hydraulic Oil Pressure low.</b>	Hydraulic pump seized.	Renew pump.
	Bypass lever is in the 'BYPASS' position.	Set to 'FLOW'.
	Relief valve set low or worn.	Check relief valve setting and adjust.
	Pump worn or damaged.	Check system oil flow. Renew pump as necessary.
<b>Accessory Tool running hot or loose.</b>	Engine power low.	Refer to engine manual.
	Radiator fins blocked.	Clean using air blast.
	Oil cooler fan damaged.	Tighten or renew as necessary
	Hydraulic pump worn or damaged.	Renew pump.
	Relief valve set low or worn.	Check setting and renew as necessary.
<b>Engine speed remains at idle when tools are operated (if fitted)</b>	Hydraulic oil contaminated.	Drain oil tank and transmission hoses and replenish with clean oil. Replace filters.
	P.O.D. Cylinder seized in retracted position.	Check the cylinder and replace as necessary
<b>Engine speed remains at full when off load / Bypass.</b>	Throttle lever incorrectly set at low speed.	Reset engine speed and lock throttle lever.
	P.O.D. Cylinder seized in extended position.	Check cylinder and replace as necessary.



## Service & Maintenance

The following schedule details the attentions considered necessary to ensure satisfactory operation of the power unit.

**NOTE:-** The attentions and periods summarised in the schedule are the initial recommendations and should be revised to suit the Power Unit working conditions.

Item	Attention	First 50 Hours	10 Hours	100 Hours	300 Hours
<b>Complete Unit.</b>	Keep all areas clean and free from dust, debris etc.		✓		
	Check security of all fasteners especially on engine mountings.		✓		
<b>Wheels and Feet.</b>	Examine for damage.		✓		
<b>Transmission Hoses.</b>	Examine for leaks or damage.		✓		
	Check for the correct positioning of the protective sleeves.		✓		
<b>Engine.</b>	Check oil level.		✓		
	Examine mountings.			✓	
	Examine exhaust silencer for damage of deterioration.			✓	
	Check for excess vibration when running.			✓	
	Change Oil/Service (Refer to manufacturers instructions).				
<b>Hydraulic Tank.</b>	Check oil level.		✓		
	Replace Filter.	✓			✓
	Change Hydraulic Oil.				✓
<b>Oil Cooler.</b>	Externally clean using compressed air. <b>DO NOT USE A WIRE BRUSH</b>			✓	
<b>Return Line Filter.</b>	Replace filter				✓
<b>Hydraulic pipes / connectors.</b>	Examine for oil leaks.		✓		

### System Pressure and Flow Checks

1. Connect a suitable hydraulic test unit to the powerpack. The unit should comprise a high pressure flowmeter 0-50l/min, a gauge 0-200 bar (0-3000psi), a temperature gauge, and a load valve. Suggested unit available from UCC (UC4120).
2. Connect the test unit to the power pack with the load valve and the By-Pass lever in the by-pass position and start the power pack. Allow the engine to warm up, set the by-pass lever to the flow position. Close the load valve completely and check that the relief valve setting is correct. The hydraulic oil will tend to get quite hot during this operation and therefore the checking should be carried out as quickly as possible and the load valve opened before excessive temperatures are reached.
3. Carefully close the load valve to raise the pressure to 100 Bar. Check that the flow rate is between 18 and 20 l/min (28 and 30 l/min for Major 30-140). Adjust the engine speed to give the correct flow.  
**DO NOT EXCEED 3600 RPM (2900 RPM for Major 30-140) on load** . If correct flow cannot be obtained within max engine speed then the pump must be replaced

**Before Starting.** Refer to manufacturer’s operating instructions.

**Compatibility.** Hydraulic Power Systems are designed to operate at a specific Flow and Pressure. Equipment produced by EHTMA members carries a triangular colour coded range identification label. Check that both the tool and power unit have the same identification label before operation. It is imperative that power systems and tools having different colour codings are not interconnected as this practice is both inefficient and dangerous.

For reference the EHTMA colour code is as follows:-

Classification	Colour Code.	Flow l/min	Max pressure Bar.
A	Yellow	5.5 – 6.5	180
B	Blue	13.5 – 16.5	172
C	Green	18.0 – 22.0	138
D	Brown	27.0 – 33.0	138
E	Red	36.0 – 44.0	138
F	Black	45.0 – 55.0	138
G	Orange	54.0 – 66.0	138
Z	Grey	9.0 – 11.0	180

If in doubt consult the equipment manufacturer.

**Characteristics.** Operators not familiar with the use of hydraulic tools should note the following points:-

- 1) Hydraulic breakers are usually more powerful than the equivalent weight pneumatic tools.
- 2) The body of the hydraulic breaker and the supply hoses will become quite warm during normal operation.
- 3) As the breaker has no exhaust it is generally much quieter in operation. This should not be taken as a lack of power.

**Safety Points.**

- 1) Always wear safety footwear when operating breaking equipment.
- 2) Eye protection is strongly recommended, particularly on hard surfaces.
- 3) Ensure that the ‘steel’ is securely locked into the breaker.
- 4) Check hoses for deep cuts or exposed braiding; replace any damaged hose.

## Environment

**Safe Disposal.**



Instructions for the protection of the environment. The machine contains valuable materials. Take the discarded apparatus and accessories to the relevant recycling facilities.

Component	Material
Handle	Steel
Chassis	Steel
Frame	Steel
Engine	Steel, Aluminium & Plastic
Hydraulic Oil Tank	Steel
Hydraulic Pump	Steel & Aluminium
Hoses	Steel & Rubber
Valve Block	Aluminium
Flexible Mounts	Steel & Rubber
Various Parts	Steel & Aluminium



**CAUTION** DO NOT lift the Power Pack with the Breaker and/or Breaker Steel still stored in the Tool Tray.



**CAUTION** DO NOT leave the Breaker Steel fitted inside the Breaker whilst stored in the Tool Tray

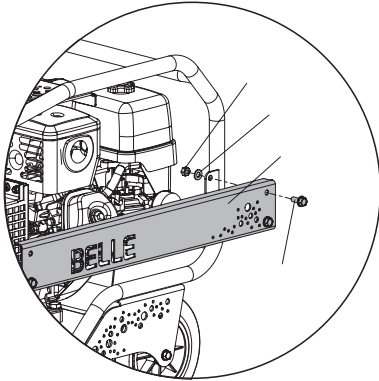


Image 1

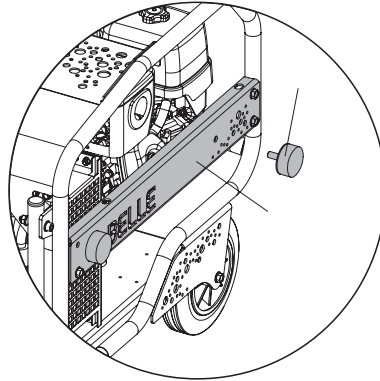


Image 2

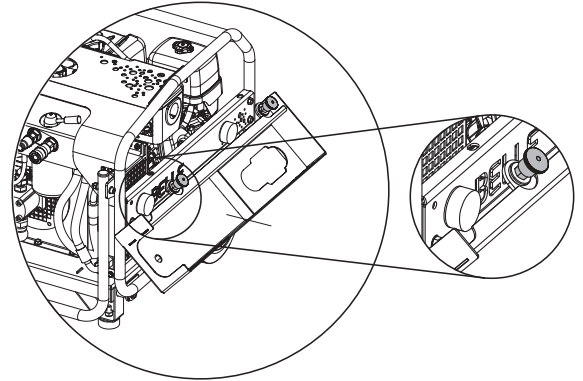


Image 3

### Tool Tray Installation - Bulldog

1. Remove left-hand side guard and 4 x M8 bolts, nuts & washers (**See Image 1**)
2. Replace with new side guard and 4 x M8 bolts, nuts & washers provided in the kit. Tighten to 28Nm.
3. Screw 2 x anti-vibration mounts using 2 x M10 washers and nuts provided through location holes in the new side guard, hand tightened (**See Image 2**)
4. Hook the tool tray flange underneath the installed side guard and retract both plungers (**See Image 3**)
5. Pivot the tool tray upwards until both plungers are located above the slots in the top of the installed side guard. Release the plunger handles to lock the assembly in place. (**See Image 4**)
6. Ensure plungers are fully extended in the side guard slots and all bolts / nuts are correctly tightened before storing equipment in the tool tray.

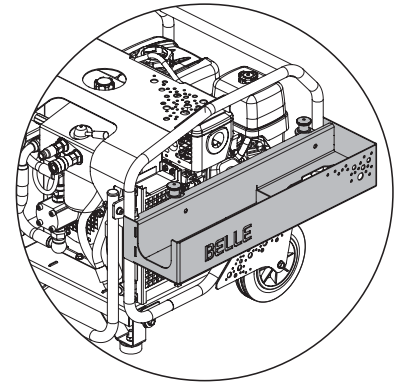


Image 4

### Tool Tray Removal - Bulldog

1. Ensuring there is no equipment still stored in the tool tray, retract both plungers and tilt backwards and down to un-hook the flange from the underside of the side guard.

### Tool Tray Installation - HPP Range

1. Line up the 3 x holes on the side of the tool tray with the 3 x holes on the left-hand side guard. Secure the tool tray to the frame using the 3 x M8 bolts, nuts & washers provided in the kit. Tighten to 28Nm (**See Image 5**)

### Tool Tray Removal - HPP Range

1. Ensuring there is no equipment still stored in the tool tray, remove the 3 x M8 bolts, nuts & washers.

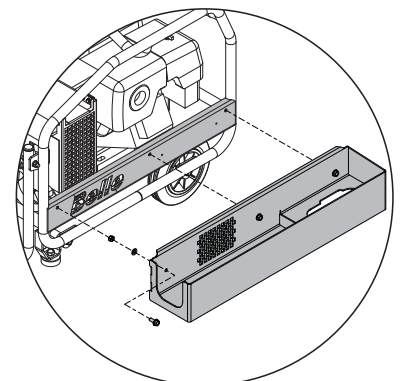


Image 5

# Warranty



Your new Altrad Belle Hydraulic Power Pack is warranted to the original purchaser for a period of one-year (12 months) from the original date of purchase. Altrad Belle warranty is against defects in design, materials and workmanship.

The following are not covered under the Altrad Belle warranty:

1. Damage caused by abuse, misuse, dropping or other similar damage caused by or as a result of failure to follow assembly, operation or user maintenance instructions.
2. Alterations, additions or repairs carried out by persons other than Altrad Belle or their recognised agents.
3. Transportation or shipment costs to and from Altrad Belle or their recognised agents, for repair or assessment against a warranty claim, on any machine.
4. Materials and/or labour costs to renew, repair or replace components due to fair wear and tear.

The following components are not covered by warranty.

- Engine air filter
- Engine spark plug

Altrad Belle and/or their recognised agents, directors, employees or insurers will not be held liable for consequential or other damages, losses or expenses in connection with or by reason of or the inability to use the machine for any purpose.

## Warranty Claims

All warranty claims should firstly be directed to Altrad Belle, either by telephone, by Fax, by Email, or in writing.

### For warranty claims:

Tel : +44 (0)1298 84606,

Fax : +44 (0)1298 84073,

Email : [Warranty.dept@altrad-belle.com](mailto:Warranty.dept@altrad-belle.com)

### or Write to:

Altrad Belle Warranty Department,  
Sheen, Nr. Buxton  
Derbyshire  
SK17 0EU  
England

### Warranty Registration:

In the bid for ALTRAD Belle to become greener and more eco friendly, we have now introduced online Warranty registration. To access the registration page of our website, please use the following address:-

[http://www.bellegroup.com/index.php?p=warranty\\_registration](http://www.bellegroup.com/index.php?p=warranty_registration)

Alternatively, please scan the adjacent QR Code (Quick Response Code) using your smartphone to access the registration page.



# Replacement Parts



When maintaining this product only the manufacturers original, genuine replacement parts may be used.

The user will lose any possible claims if replacement parts used are other than the makers original replacement parts.

Replacement parts for this product can be ordered online 24 hours a day, 7 days a week at [www.Altrad-Belle247.com](http://www.Altrad-Belle247.com)

For more information regarding the availability of replacement parts for this product, please contact Altrad Belle using the following contact details:-

Tel:- +44 (0)1298 84606

Fax:- +44 (0)1298 84073

Email:- [sales@altrad-belle.com](mailto:sales@altrad-belle.com)

Alternatively, please scan the adjacent QR Code (Quick Response Code) using your smartphone to access the Altrad Belle online parts portal.

