

# **Handheld Breaker**



### **Disclaimer**

- This Quick Reference Guide is to provide quick and simple information to the Operator and does not include any health and safety aspects. In addition, because of our continual development of machines, features described in this Quick Reference Guide may differ from those on your machine. No errors and emissions be entirely ruled out.
- > This Quick Reference Guide DOES NOT replace the Operators Manual. You MUST read ALL the disclaimers and safety and other instructions in the Operators Manual before initially operating this product. Accordingly, no legal claims can be entertained on the basis of the data, illustrations or descriptions in this Quick Reference Guide.
- This machine should not be operated by any person who isn't appropriately qualified or had the appropriate training.
- > Operation of this machine without periodic maintenance could cause it to malfunction.
- > For more information please contact your JCB Dealer.

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### Intended use

#### **General**

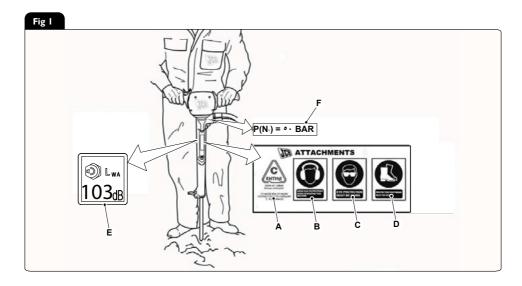
- > Machine Type Handheld Breaker
- > Externally powered, handheld, hydraulic breaker

#### Intended Use

- > The machine is intended to be used in normal conditions for the applications and in the environmental condition as described in the operators manual
- > Essentially used for breaking apart surfaces and dense materials
- > The machine is not intended for use in mining and quarrying applications, demolition activities, forestry, any use underground, or in any kind of explosive atmosphere
- If the machine is to be used in applications where there is a high silica concentration, risk due to materials containing asbestos or similar hazards, additional protective measures such as the use of PPE (Personal Protective Equipment) may be required
- > The machine should not be operated by any person who does not have an appropriate level of qualification ,training or experience of use of this type of machine
- > Prior to use of the machine, its suitability (size, performance, specification etc.) should be considered with regards to the intended application and any relevant hazards that may exist.

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### Safety decals



### Fig 2

### Α

Description: To avoid risk of injury. Connect only to correct EHTMA category powerpack,



### D

P033640-16 Description: Protective footwear must be worn.



### В

Description: Wear ear protectors when operating this machines.



### Ε

Description: Noise Level.

**Note:** This value varies for different models.



P(N₁) = • · BAR

### C

P033640-15

Description: Eye protection must be worn.



### F

Description:

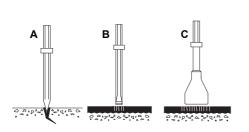
Accumulator gas pressure.

**Note:** This value varies for different models.



### **Choosing a steel**

### Fig 3



A Moil Point

Used for breaking hard materials.

**B** Chisel

Used for breaking asphalt and other softer materials. The steel must be sharpened, if necessary, before use.

**c** Asphalt Cutter Used for breaking

asphalt.

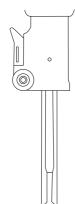
Fig 4

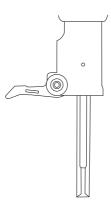
### **Changing a Steel**

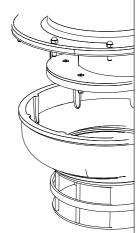
**Important:** Never rest the breaker on its handle when changing steels. Before changing steels or opening the latch isolate breaker from hydr.

#### Removal

- I To remove a steel:
- **a** Kick down the latch
- **b** Remove the steel from the breaker





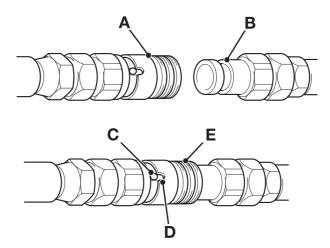


### Installation

I To install a steel: **a** Install a steel to the breaker **b** Push up the latch.

### **Connecting quick release hoses**

### Fig 5



### **Connecting Quick Release Couplings**

- I Remove any residual hydraulic pressure trapped in the service line hose.
- **2** Wipe the two faces of the male and female couplings and make sure they are clean.
- **3** Make sure that ball **C** in the female coupling is located in one of its slots.
- **4** Fit the male coupling into the female coupling.
- 5 Where applicable, rotate sleeve E half a turn and make sure that the locking ball C does not align with the slot D.

### **Disconnecting Quick Release Couplings**

- Remove any residual hydraulic pressure trapped in the service line hose.
- 2 Where applicable, align the slot **D** with ball **C**.
- 3 Pull back sleeve **E** to release the coupling.

### **Operation of the breaker**

#### Instructions

**Important:** Make sure the correct breaker is selected to suit operators ability and physical capabilities.

**Important:** Take care when laying the breaker down that the control trigger on top of the handle is not accidentally operated. Do not invert the breaker without first isolating the hydraulic supply.

**Important:** Avoid activating the breaker when it is removed from the material. This will lead to increased hydraulic oil temperatures and seal wear.

**Note:** In cold conditions, warm up the breaker by light use for a few minutes before starting work.

Always use the correct steel for the breaker, and the correct steel for the job in hand. Keep steels sharp.

Always investigate leaks at the earliest opportunity.

Do not continue to work if the hoses vibrate abnormally.

Using the 'D' handle pick horizontally for long periods can be tiring. If you feel yourself becoming tired, do not continue breaking but take a rest and continue when you feel fresher.

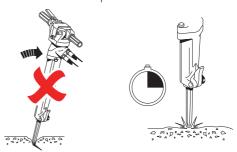
### Operation of hydraulic breakers

- I Position the steel against the surface, at an angle of 90°.
- 2 Press the breaker firmly against the material to be broken.
- 3 Activate the trigger. Keep pressing down on the breaker as the steel penetrates the material. Keep the steel at 90°.

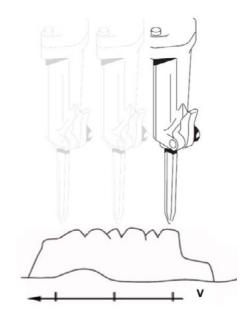
**Important:** In order to reduce the level of transmitted vibration to a minimum do not push the breaker handles to the full extent of their travel. Aim to operate in the mid position.

**4** Operate for a maximum of 15 seconds, if material has not broken, reposition and repeat steps 1-4.

**Note:** Take care when placing the breaker down, make sure not to drop the breaker on its handle.



**Note:** The distance V should be such that the rock breaks within 15 seconds at the most. If this is not the case, reduce the amount of distance or reposition the breaker at a different point of attack.



### Service/Maintenance

### **Routine Maintenance**

### **Daily**

### **WARNING**

Maintenance work must only be done by competent personnel.

#### Clean

Clean the breaker, it's steel and its hoses.

### Check

- > All hydraulic connections.
- > For damage to the breaker, its steels and its hoses.
- > Nose latch spring.

### **Monthly**

### Check

- > Torque tightness of all fasteners
- > The hexagon bush in nose casting for wear and damage
- > The cutting steel shanks for excessive wear.

**Note:** If, for any reason the nose latch has to be replaced to a 'T' pick, a new shim kit will be required to eliminate any free play.

#### Lubricants

Vibro-damped handle types only. Spray the trigger and all contacting parts with suitable lubricants.

#### Check

- > Torque tightness of all fasteners.
- > The hexagon bush in nose casting for wear and damage.
- > The cutting steel shanks for excessive wear.

# **Every 600 Operating Hours or Yearly** (whichever occurs first)

> Overall the breaker.

# **Troubleshooting / FAQs**

## **Operator Fault Finding**

Symptom	Possible Fault	Remedy		
Breaker fails to	No flow from supply	Check output with flow and pressure tester		
operate	Hoses incorrectly installed	Check that pressure feed is connected to to port on the breaker		
	Insufficient movement of trigger spool (Bent Trigger)	The trigger spool should move approx. 5mm (0.2in). Check lever mechanism		
	Relief valve jammed or damaged	Remove and check. Clean all associated parts		
	Striker piston seized	Remove and check for 'pick-up' on piston feeder or barrel. Replace any damaged parts		
Breaker lacks breaking power	Insufficient available pressure.	Check Main Relief Valve – minimum setting 76 bar (1100 lbf/in2) for the 19 kg Breaker and 117 bar (1700 lbf/lbf/in2) for the 25 kg Breaker		
	Low accumulator gas pressure (Normally associated with violent shaking of hoses)	Re charge the accumulator		
	Hexagon bush in nose casting loose	Apply Loctite 648 and press back		
Breaker runs slow	Insufficient flow	Check that the flow rate is between 18 - 22 I/min. (3.96 - 4.84 gal/min)		
	Cold oil	Warm up the oil supply. Optimum temperature 20 - 70C (68° - 158°F)		
	High return line back pressure	Check return line back-pressure.		
		Pressure should not exceed 12 bar (174 lbf/in²)		
	Incorrect oil	Use only JCB Hydraulic Oil HP32 (part no. 4002/1000)		
Breaker runs hot	Inadequate cooling of hydraulic oil	Check oil supply has adequate cooling. Temperature should not exceed 80°C (176°F)		

# **Specifications**

Model No	Steel Size	Description	Handle Type	Category (EHTMA)	Accumulator Gas Pressure
929/05400	(7/8") 22 x 82.5	20 KG	Standard	С	38 bar
929/05600	(I") 25 x 108	20 KG	Standard	С	38 bar
929/11600	(I") 25 x 108	23 KG	Standard	С	43 bar
929/22300	(I I/4") 32 x I60	23 KG	Standard	С	43 bar
929/07200	(I I/4") 32 x I60	26 KG	Standard	С	50 bar
929/08200	(I I/4") 32 x I60	26 KG	Standard	D	50 bar
929/31200	(I I/8") 28 x I60	26 KG	Standard	С	50 bar
929/31000	(I I/8") 28 x I60	26 KG	Standard	С	50 bar
929/05300	(7/8") 22 x 82.5	22 KG	Vibro - Damped	С	38 bar
929/05500	(I") 25 x 108	22 KG	Vibro - Damped	С	38 bar
929/11700	(I") 25 x 108	23 KG	Vibro - Damped	С	43 bar
929/22200	(I I/4") 32 x I60	25 KG	Vibro - Damped	С	43 bar
929/07400	(I I/4") 32 x I60	28 KG	Vibro - Damped	С	50 bar
929/08300	(I I/4") 32 x I60	28 KG	Vibro - Damped	D	50 bar
929/31300	(I I/8") 28 x I60	28 KG	Vibro - Damped	С	50 bar
929/31100	(I I/8") 28 x I60	28 KG	Vibro - Damped	С	50 bar
929/20400	(7/8") 22 x 82.5	T-Pick	Т Туре	С	33 bar
929/30900	(7/8") 22 x 82.5	T-Pick	Т Туре	С	33 bar
929/12900	(7/8") 22 x 82.5	D-Pick	D Type	С	33 bar
929/30800	(7/8") 22 x 82.5	D-Pick	D Type	С	33 bar
929/92500	(7/8") 22 x 82.5	HM 22	Vibro - Damped	С	38 bar
929/92600	(I") 25 x 108	HM 22	Vibro - Damped	С	38 bar
929/92400	(I I/4") 32 x I60	HM 25	Vibro - Damped	С	43 bar
929/A26I3	(I I/4") 32 x I60	HM25LV	Vibro - Damped	С	50 bar
929/92700	(I I/4") 32 x I60	HM29 (20 lpm)	Vibro - Damped	С	50 bar
929/92900	(I I/4") 32 x I60	HM29 (30 lpm)	Vibro - Damped	D	50 bar
929/A5861	(I I/4") 32 x I60	HM25LV	Vibro - Damped	С	50 bar





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Download the very latest information on this product range at: www.jcb.com

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