### (IR) Ingersoll Rand. **OPERATION AND MAINTENANCE**

# **IR30BV AND IR30BS** TBO

CE

GB



This manual contains important safety information and must be made available to personnel who operate and maintain this machine

SERIAL NO: CZ04C00001  $\rightarrow$ 

CPN: 85040277 DATE: **APRIL 2004** 

#### PORTABLE POWER PRODUCT WARRANTY

Ingersoll-Rand, through its distributor, warrants that each item of equipment manufactured by it and delivered hereunder to the initial user will be free of defects in material and workmanship for a period of three (3) months from initial operation or six (6) months from the date of shipment to the initial user, whichever occurs first.

With respect to the following types of equipment, the warranty period enumerated below will apply in lieu of the foregoing warranty period.

- **A. Aftercoolers** The earlier of nine (9) months from date of shipment to or six (6) months from initial operation by initial user.
- B. Portable Compressors, Portable Generator Sets - 9 Kva through to 550 Kva, Portable Light Towers and Air Dryers – The earlier of twelve (12) months from shipment to or the accumulation of 2,000 hours of operation by the initial user.

**2.5 Kva Through to 8 Kva** – The earlier of twelve (12) months from shipment to or the accumulation of 2,000 hours of operation by the initial user.

Ingersoll-Rand will provide a new part or repaired part, at it's sole discretion, in place of any part which is found to be defective in material or workmanship during the period described above. Labour cost to replace the part is the responsibility of the initial user.

- **C. Portable Compressor Air Ends** The earlier of twentyfour (24) months from shipment to or the accumulation of 4,000 hours of operation by the initial user. For Air Ends, the warranty against defects will include replacement of the complete Air End, provided the original Air End is returned assembled and all original seals are intact.
- **D.** Portable Compressor Airend Limited Extended Warranty – The earlier of sixty (60) months from shipment to or the accumulation of 10,000 hours of operation by the initial user. This extended warranty is limited to defects in design or defective material or workmanship in rotors, housings, bearings and gears and provided all the following conditions are met:
  - 1. The original air end is returned assembled and all original seals are intact.
  - 2. Continued use of genuine Ingersoll-Rand parts, fluids, oil and filters.
  - 3. intervals by authorised and properly trained service engineers.
- **E.** Generator Alternator 9 Kva through to 550 Kva, the earlier of twenty-four (24) months from shipment to or the accumulation of 4,000 hours of operation by the initial user.

**2.5 Kva Through to 8Kva** – The earlier of twelve (12) months from shipment to or the accumulation of 2,000 hours of operation by the initial user.

- **F. Portable Light Tower Alternator** The earlier of twelve (12) months from shipment to or the accumulation of 2,000 hours of operation by the initial user. Light Source model only, the earlier of twenty-four (24) months from shipment to or the accumulation of 4,000 hours of operation by the initial user.
- **G. Ingersoll-Rand Engines** The earlier of twenty-four (24) months from shipment to or the accumulation of 4,000 hours of operation by the initial user.
- H. Ingersoll-Rand Platinum Drive Train Limited Extended Warranty – Platinum drive train refers of the Ingersoll-Rand Engine and Airend combination. The ear-

lier of sixty (60) months from shipment to, or the accumulation of 10,000 hours of operation by the initial user. The starter, alternator, fuel injection system and all electrical components are excluded from this extended warranty. The airend seal and drive coupling are included in the warranty but airend drive belts are excluded. This limited extended warranty is automatically available when meeting the following conditions:

- 1. The original airend is returned assembled and unopened.
- 2. Continued use of genuine Ingersoll-Rand parts, fluids, oil and filters.
- 3. Maintenance is performed at prescribed intervals by authorised and properly trained service engineers.
- I. 1. Construction Tools, (Portable Power range only) – Twelve months from shipment to initial user. Ingersoll-Rand will provide a new part or repaired part, at it's sole discretion, in place of any part which is found to be defective in material or workmanship during the period described above. Labour cost to replace the part is the responsibility of the initial user.

2. Construction Tools Limited Extended Warranty, (Portable Power range only) – Thirty-six (36) months from shipment to initial user. This extended warranty is automatically available only when the tool is registered with Ingersoll-Rand by completing and submitting the Warranty Registration form. Ingersoll-Rand will provide a new part or repaired part, at it's sole discretion, in place of any part which is found to be defective in material or workmanship during the period described above. Labour cost to replace the apart is the responsibility of the initial user.

J. Spare Parts - Six (6) months from date of shipment to the initial user. Ingersoll-Rand will provide a new part or repaired part, at its sole discretion, in place of any part that is found to be defective in material and workmanship during the period described above. Such parts will be repaired or replaced without charge to the initial user during normal working hours at the place of business of an Ingersoll-Rand distributor authorised to sell the type of equipment involved or other establishment authorised by Ingersoll-Rand. User must present proof of purchase at the time of exercising warranty. The above warranties do not apply to failures occurring as a result of abuse; misuse, negligent repairs, corrosion, erosion and normal wear and tear, alterations or modifications made to the product without express written consent of Ingersoll-Rand; or failure to follow the recommended operating practices and maintenance procedures as provided in the product's operating and maintenance publications.

Accessories or equipment furnished by Ingersoll-Rand, but manufactured by others, including, but not limited to, engines, tires, batteries, engine electrical equipment, hydraulic transmissions, carriers, shall carry only the manufacturers warranty, which Ingersoll-Rand can lawfully assign to the initial user.

THE ABOVE WARRANTIES ARE IN LIEU OF ALL OTHER WARRANTIES EXPRESSED OR IMPLIED, (EXCEPT THAT OF TITLE), AND THERE ARE NO WARRANTIES OF MER-CHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE.

Machine models represented in this manual may be used in various locations world-wide. Machines sold and shipped into European common market countries requires that the machine display the EC Mark and conform to various directives. In such cases, the design specification of this machine has been certified as complying with EC directives. Any modification to any part is absolutely prohibited and would result in the CE certification and marking being rendered invalid. A declaration of that conformity follows:

## (F

DECLARATION	OF CONFORMITY WITH	EC DIRECTIVES
	98/37/EC, 2000/14/EC	
	We	
Ingersoll–Rand Company Portable Power Division P. O. Box 868 501 Sandford Avenue Mocksville, North Carolina 27028 USA	Represented in EC by	Ingersoll–Rand Company Ltd Portable Power Division Swan Lane Hindley Green Wigan WN2 4EZ United Kingdom
Declare that under our so	le responsibility for manufacture	and supply, the product(s)
Pave	ment Breaker Type IR30BV and IR	230BS
To which this declaration relates, is (	are) in conformity with the provis following principal standards	ions of the above directives using the
	EN292, BSEN28662–5	
Issued at Mocksville on 1–1–2002	2 Iss	sued at Hindley Green on 1–1–2002
Fic Juno face		Heddon
Ric Lunsford		Harry Seddon
Manager of Quality Control		Quality Assurance Manager

**Quality Assurance Manager** 

#### **CONFORMITY TO NOISE DIRECTIVE** 2000/14/EC Ingersoll – Rand Company Limited declare that the following Pavement Breakers have been manufactured in conformity with the directive as shown. Mean Measured Guaranteed Directive **Machine Model** Weight Range **Notified Body** Value Level IR30BV 110.80 L<sub>wa</sub> A V Technology 109.67 L<sub>wa</sub> 30 kg 2000/14/EC Stockport UK Annex VI Part 1 IR30BS 30 kg 109.67 L<sub>wa</sub> 110.80 L<sub>wa</sub> Nr. 1067

-410.

Issued at ..... Hindley Green 1<sup>st</sup> Declaration 01/2002

**Quality Assurance Manager** 



Look for these signs on machines shipped to markets in North America, which point out potential hazards to the safety of you and others. Read and understand thoroughly. Heed warnings and follow instructions. If you do not understand, inform your supervisor.

#### 

#### **Red Background**

Indicates the presence of a hazard which WILL cause serious injury, death or property damage, if ignored.



#### **Yellow Background**

Indicates the presence of a hazard which WILL or can cause injury or property damage, if ignored.

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#### **Orange Background**

Indicates the presence of a hazard which CAN cause serious injury, death or property damage, if ignored.

#### NOTICE

#### **Blue Background**

Indicates important set-up, operating or maintenance information.

NOTICE

IR30BV and IR30BS Paving Breakers are designed for the disintegration of low to medium strength materials (e. g. concrete, masonry bituminous asphalt etc). The tool is intended for vertical or inclined downward breaking. Ingersoll – Rand is not responsible for customer modifications of tools for applications on which Ingersoll – Rand was not consulted.



#### IMPORTANT SAFETY INFORMATION ENCLOSED. READ THIS MANUAL BEFORE OPERATING TOOL. IT IS THE RESPONSIBILITY OF THE EMPLOYER TO PLACE THE INFORMATION IN THIS MANUAL INTO THE HANDS OF THE OPERATOR. FAILURE TO OBSERVE THE FOLLOWING WARNINGS COULD RESULT IN INJURY.

#### PLACING TOOL IN SERVICE

- Always operate, inspect and maintain this tool in accordance with all regulations (local, state, federal and country), that may apply to hand held/hand operated pneumatic tools.
- For safety, top performance, and maximum durability of parts, operate this tool at 103 psig (7.0 bar/700 kPa) maximum air pressure at the inlet with 3/4" (19 mm) inside diameter air supply hose.
- Always turn off the air supply and disconnect the air supply hose before installing, removing or adjusting any accessory on this tool, or before performing any maintenance on this tool.
- Do not use damaged, frayed or deteriorated air hoses and fittings.
- Be sure all hoses and fittings are the correct size and are tightly secured. See Dwg. PP1 for a typical piping arrangement.
- Always use clean, dry lubricated air at 103 psig (7.0 bar/ 700 kPa) maximum air pressure. Dust, corrosive fumes and/or excessive moisture can ruin the motor of an air tool.
- Do not lubricate tools with flammable or volatile liquids such as kerosene, diesel or jet fuel.
- Do not remove any labels. Replace any damaged label.

#### **USING THE TOOL**

- Always wear eye protection when operating or performing maintenance on this tool.
- Always wear hearing protection when operating this tool.
- Keep hands, loose clothing and long hair away from rotating end of tool.
- Anticipate and be alert for sudden changes in motion during start up and operation of any power tool.
- Keep body stance balanced and firm. Do not overreach when operating this tool.
- Tool accessories may continue to impact briefly after throttle is released.
- Air powered tools can vibrate in use. Vibration, repetitive motions or uncomfortable positions may be harmful to your hands and arms. Stop using any tool if discomfort, tingling feeling or pain occurs. Seek medical advice before resuming use.
- Use accessories recommended by Ingersoll-Rand.
- This tool is not designed for working in explosive atmospheres.
- This tool is not insulated against electric shock.

#### NOTICE

The use of other than genuine Ingersoll-Rand replacement parts may result in safety hazards, decreased tool performance, and increased maintenance, and may invalidate all warranties. Repairs should be made only by authorised trained personnel. Consult your nearest Ingersoll-Rand Authorised Servicenter.

#### WARNING LABEL IDENTIFICATION

#### WARNING

#### FAILURE TO OBSERVE THE FOLLOWING WARNINGS COULD RESULT IN INJURY.



#### 🛦 WARNING

Always wear eye protection when operating or perfoming maintenance on this tool.



🛦 WARNING Alwavs wear hearing protection when operating this tool.



#### A WARNING

Always turn off the air supply and disconnect the air supply hose before installing removing or adjusting any accessory on this tool, or before performing any maintenance on this tool.

🛦 WARNING

Do not use damaged, frayed

or deterlorated air hoses

and fittings.



🏔 WARNING Air powered tools can vibrate in use. Vibration, repetitive motions or unfocomfortable po sitions may be harmful to you hands and arms. Stop using any tool is discomfort, tingling feelingor pain occurs. Seek medical advice before resumina use







Keep body stance balanced and firm. Do not overreach



#### SPECIFIC WARNINGS

- When wearing gloves and operating models with inside trigger, always be sure that the gloves will not prevent the trigger from being released.
- Wear safety shoes, hard hat, safety goggles, gloves, dustmask and any other appropriate protective clothing while operating the tool.
- Do not indulge in horseplay. Distraction can cause acci-. dents
- . Keep hands and fingers away from the throttle lever until it is time to operate the tool.
- Never rest the tool or chisel on your foot. •
- Never point the tool at anyone.
- Compressed air is dangerous. Never point an air hose at yourself or co-workers.
- Never blow clothes free of dust with compressed air.
- Be sure all hose connections are tight. A loose hose not only leaks but can come completely off the tool and while whipping under pressure, can injure the operator and others in the area. Attach safety cables to all hoses to prevent injury in case a hose is accidentally broken.
- Never disconnect a pressurised air hose. Always turn off the air supply and bleed the tool before disconnecting a hose.
- The operator must keep limbs and body clear of the

chisel. If a chisel breaks, the tool with the broken chisel projecting from the tool will suddenly surge forward.

- Do not ride the tool with one leg over the handle. Injury can result if the chisel breaks while riding the tool.
- Know what is underneath the material being worked. Be alert for hidden water, gas, sewer, telephone or electric lines.
- Use only proper cleaning solvents to clean parts. Use only cleaning solvents which meet current safety and health standards. Use cleaning solvents in a well-ventilated area.
- Do not flush the tool or clean any parts with diesel fuel. Diesel fuel residue will ignite in the tool when the tool is operated, causing damage to internal parts. When using models with outside triggers or throttle levers, take care when setting the tool down to prevent accidental operation.
- Do not operate the tool with broken or damaged parts.
- Never start the tool when it is lying on the ground.
- This tool is not designed for working in explosive atmospheres.
- This tool is not insulated against electric shock.

LUBRICATION

#### **Protec Engine Oil**

Always use an air line lubricator with these tools. We recommend the following Lubricator-Unit and Lubricant:

In Line Lubricator:	CPN: 35371111
Lubricant: Protec Engine Oil	CPN: 85448405

Attach the lubricator as close to the tool as practical.

After each two or three hours of operation and at the beginning of each work shift, if an air line lubricator is not used, disconnect the air hose and pour about 3 cc of oil into the air inlet of the tool.

Before storing the tool or if the tool is to be idle for a period exceeding twenty-four hours, pour about 3 cc of oil into the air inlet and operate the tool for 5 seconds to coat the internal parts with oil.

#### INSTALLATION

#### **Air Supply and Connections**

Always use clean, dry lubricated air. Dust, corrosive fumes and/or excessive moisture can ruin the motor of an air tool. An air line filter can greatly increase the life of an air tool. The filter removes dust and moisture.

Make sure all hoses and fittings are the correct size and are tightly secured. See diagram PP1 for a typical piping arrangement.

The tool is shipped from the factory with 3/4" NPT male inlet thread and quick release coupling.



Diagram PP1

**OPERATION** 

#### **Accessory Installation**



Always turn off the air supply and disconnect the air supply hose before installing, removing or adjusting any accessory on this tool or before performing any maintenance on this tool. Failure to do so could result in injury.

#### **For Latch Type Retainer**

- 1. Operate the Latch until it is approximately 90 degrees to the body of the tool and clicks into position.
- Insert the accessory into the tool until the collar of the 2. accessory is past the Latch.
- Operate the Latch until it is parallel to the tool and it 3. clicks into position.

15 - 20 kg (30 - 40 lbs) is the recommended amount of downforce to apply to the tool when working. The amount of downforce is correct when the tool hits rhythmically, is comfortable to hold and works efficiently.

#### NOTICE

Do not repair the tool at the work site. Always take the tool to a repair shop. Never drag the tool on the ground. The air port and other openings will become clogged with dirt and debris.

#### CAUTION

Compressed air is dangerous. When blowing the line clear of dirt, wear eye protection and keep the air line directed toward a safe, clear area.

Always blow out the air line before using to clear the line of dirt.

CAUTION

Do not operate the tool unless the chisel is against the work since this will cause premature wear of parts and reduce the vibration isolation properties of the tool.

Always break material to the point of "give." Cracking does not result in a complete break. Clear away rubble as it is broken since uncleared rubble blocks the point of "give."

Always take the right size "bite" with the tool. When working new material, experiment to find the right size "bite" required for breaking that material efficiently.

#### NOTICE

If "bites" are too big, the operator will try to pry with the tool. This could break the chisel. The tool is designed for demolition, not prying. Always use a pick for prying. If "bites" are to small, the operator will be working too slowly.

If the chisel or accessory should become stuck, do not use excessive force or mechanical means on the tool to pull out the chisel. Doing so will damage the vibration isolation unit. Break out the stuck chisel with a spare chisel or tool.

#### DISASSEMBLING THE IR30BV AND IR30BS PAVING BREAKER

#### **GENERAL INSTRUCTIONS**

- Clean the breaker outer surface.
- Do not disassemble the breaker any further than necessary to replace or repair damaged or worn parts.
- Whenever grasping a breaker or a part in a vice, always use leather or copper-covered vice jaws to protect the surface of the part and help prevent distortion. Take extra care with threaded parts and housings.
- Do not remove any part that is a press fit in or on a subassembly unless the removal of the part is necessary for repairs or replacement.
- Do not disassemble the breaker unless a complete set of and O-rings is available for replacement.

#### DISASSEMBLY OF THE FRONTHEAD

Remove nut (25) and fronthead pinch bolt (24) from the fronthead (3). Lightly tap the fronthead (using a hide mallet if necessary) from the cylinder (1).

Press or drift out the two fronthead spring pins (22, 23) and remove the latch (6).

The plunger (20) and the plunger spring (21) can be removed from the fronthead.

#### Handle Disassembly (BV and BS models)

Using a hide mallet tap loose and remove the muffler (29) from the cylinder.

Firmly grip the cylinder upright in a vice with leather or copper cover jaws.

Loosen the four handle screws (26) and remove nuts (27) and washers (40 and 47).

Lift the handle assembly (5) or (42) from the cylinder assembly tap with a hide mallet to loosen if necessary.

*For BV models only:* Press or tap out the handle pivot pin (12) remove both handle lever (8 and 9) from the handle body (5) together with the trigger (7).

Remove the handle springs (11) from their pockets.

Tap out the sleeve (13) to detach the handle levers from each other. Remove the handle springs (11) from the handle body (5).

If it is necessary to remove the handle stop (14), use a punch of suitable size (15-19 mm dia.) and drift out the stop (14) from the handle casting from the cylinder side.

It is possible at this stage to remove the trigger pin (15) if required.

Unscrew the inlet bushing (18), and remove trigger spring (17), trigger ball (16) and throttle pin (15).

Unscrew and remove the oiler plug (39) and sealing washer (38) and drain the oil in the reservoir into a suitable receptacle for safe disposal.

Pry out the wick plug (37) from the base of the handle casting. Inspect the wick (36) and wick holder (35) if clean and remove if necessary.

Remove the handle grips (10) if they are to be replaced it may prove easier to cut the grips off.

**For BS models only:** Drift or press out the spring pin (45) and remove the trigger lever (44) The trigger pin (46) may be removed at this stage if required.

Removal of the handle bar (43) from the casting (5) should not normally be necessary. If it is necessary cut off the handle grips (10) and drift or press out spring pin (48). Securely support the handle body (42) beneath a press and using a suitably sized pressing bar press out the handle bar (43) from the handle body (5).

Unscrew the inlet bushing (18), and remove trigger spring (17), trigger ball (16) and trigger pin (46).

Unscrew and remove the oiler plug (39) and sealing washer (38) and drain the oil in the reservoir into a suitable receptacle for safe disposal.

Pry out the wick plug (37) from the base of the handle casting. Inspect the wick (36) and wick holder (35) if clean and remove if necessary.

Remove the handle grips (10) if they are to be replaced it may prove easier to cut the grips off.

#### CYLINDER DISASSEMBLY

Remove the spacing washer (30) and valve plate (31). Slide valve ring (34) from cylinder (1).

Remove sealing ring (28).

Release the cylinder from the vice, invert and allow the piston (4) to slide out and be caught.

The nozzle (2) is pressed in the cylinder and retained with Loctite 601 - do not disassemble unless replacement is necessary.

The cushion bushing (33) is pressed in the cylinder – do not disassemble unless replacement is necessary.

#### **GENERAL INSTRUCTIONS**

- Before assembly of the breaker, clean all parts thoroughly and lubricate surfaces with a thin film of recommended oil (see Lubrication).
- Apply a film of O-ring lubricant to all O-rings before final assembly.
- It is recommended that the assembling of the nozzle (2) and the cushion bushing (33) should be carried out by the manufacturer or authorised distributor.
- The existence of a piston air cushion should be determined. Hold the cylinder vertically and allow the piston to drop down the bore small diameter first. An air cushion is present if the piston "bounces" at the bottom of the cylinder and no metal to metal contact noise can be heard. If a cushion is not present contact your authorised Ingersoll –Rand repair centre for advice.

#### **CYLINDER ASSEMBLY**

Grip the cylinder (1) vertically in a vice protected with leather or copper covered vice jaws.

Lubricate and insert the piston (4) small end first into the bore. - Check for cushion.

Lubricate and slide the valve ring (34) onto the cylinder (1) and replace valve cover (31).

Position the valve spacer (30) on top of the valve cover (31). Replace the sealing ring (28).

#### HANDLE ASSEMBLY

#### BV models only:

If the handle stop (14) was removed during disassembly it should be replaced with a new part as the retaining feature is destroyed upon removal. Locate the stop in the hole in the handle casting and tap the stop sharply into place using a soft drift and hammer.

If the hand grip rubbers (10) were removed these may now be replaced. Lubricate the inside of the rubber with soapy water and slide the new rubbers into position.

Assemble left and right hand grips (8 and 9), trigger (7) together with sleeve (13) , lubricate around the pivot area with oil, and position the sub-assembly in the slot in the handle body (5).

Locate the handle springs (11) in place beneath the hand grip assembly, compress the springs slightly and fix the whole assembly in place by drifting or pressing the handle pivot pin (12).

Lubricate and slide trigger pin (15) into position in the handle casting, replace trigger ball (16) trigger spring (17) and replace air inlet bushing (18) apply thread retainer (Loctite 243, or similar) to the threads.

Tighten the inlet bushing to a torque of 200Nm (147ft.lbs) torque.

Note. The trigger pin has a reduced diameter, which is placed next to the trigger ball.

Check that the handles and trigger move freely.

Assemble wick (36) in wick holder (35) and slide the assembly into position in the handle body casting. Retain the assembly in position by pressing in the wick plug (37).

Refill the oil reservoir with clean air tool lubricant and replace the seal (38) and oil fill plug (39) hand tighten only.

#### BS models only:

If the handle bar (43) was disassembled from the handle body (42) it should now be replaced. Securely support the handle body (42) beneath a press and position the handle bar (43) in the mating hole.

#### Note: Ensure that the handle bar has the correct orientation and is aligned to accept the trigger pin (45) when pressed home.

Press the handle bar home to depth until the lock pin hole is aligned.

Press or drift in the lock spring pin (48).

Lubricate and slide the trigger pin (46) into position in the handle casting, replace trigger ball (16), trigger spring (17) and replace inlet bushing (18) apply thread retainer (Loctite 243, or similar) to the threads.

Tighten the inlet bushing to a torque of 200Nm (147ft.lbs) torque.

#### Note. The trigger pin has a reduced diameter, which is placed next to the trigger ball.

Position trigger lever (44) and secure in place with spring pin (45) Check the trigger moves freely.

Assemble wick (36) in wick holder (35) and slide the assembly into position in the handle body casting. Retain the assembly in position by pressing in the wick plug (37).

Refill the oil reservoir with clean air tool lubricant and replace the seal (38) and oil fill plug (39) hand tighten only.

If the hand grip rubbers (10) were removed these may now be replaced. Lubricate the inside of the rubber with soapy water and slide the new rubbers into position.

#### MAIN ASSEMBLY

Lightly grip the cylinder assembly vertically in a vice and position the handle assembly in place.

Note that it is usual to orientate the air inlet and trigger lever 180 degrees from the fronthead bolt groove in the cylinder.

Replace the four handle screws (26) and handle washers (40) and (47) using new handle nuts (27) tighten the screws down evenly to a torque of 90Nm (66.4 ft.lbs).

Remove the cylinder and handle assembly from the vice. Replace muffler (29) on the assembly by tapping the muffler fully home using a hide mallet.

#### FRONTHEAD ASSEMBLY

Apply a coating of grease then replace spring (21) and plunger (20) in position in fronthead (3).

Position the latch (6) in its slot and secure in place by drifting or pressing in outer spring pin 23. Position then press or drift home inner spring pin (22).

Replace fronthead assembly onto cylinder and aligning pinch bolt hole with the cylinder groove.

Replace pinch bolt (24) and nut (25) and tighten a torque of 200 Nm (147 lb.ft) torque.

#### **ASSEMBLY CHECKS**

Following service the breaker should be checked for correct operation prior to being released back to the job site.

Fit the correct size accessory into the breaker and connect to an airline. Using air at low pressure 2 bar (30psi), check that the breaker is free from air leaks around the inlet connection and that the breaker does not automatically start to operate without the trigger being depressed.

Increase the air pressure to 6 bar (90psi) and run the tool in short bursts to check the tool operates correctly and stops and starts cleanly without hesitation.

Breaker operating frequency should be 1200 blows per minute and air consumption  $1.7m^3$ /min (60 CFM) at 6 bar (90psi) air pressure.

FrontheadutNutTorqueNm (ft.lbs)	.) 200 (147)	.) 200 (147)	200 (147)	.) 200 (147)
Handle N Torque N (ft.lbs)	90 (66.4	90 (66.4	90 (66.4	90 (66.4
Impact Frequency /min	1200	1200	1200	1200
Certified Noise Level L <sub>ws</sub>	112	112	112	112
Certified Vibration Level m/s <sup>2</sup> @ 6 bar	4.28	4.28	10.70	10.70
Air Consumption m <sup>3/</sup> min @ 6 bar (CFM)	1.7 (60)	1.7 (60)	1.7 (60)	1.7 (60)
Max Working Pressure bar (psi)	7 (103)	7 (103)	7 (103)	7 (103)
Weight kg (lbs)	30.5 (66)	30.5 (66)	30.5 (66)	30.5 (66)
Overall Width mm (in)	441 (17.4)	441 (17.4)	453 (17.8)	453 (17.8)
Overall Length mm (in)	735 (28.9)	735 (28.9)	700 (27.5)	659 (25.9)
Срп	85040079	85040053	85040061	85040087
Chuck Size	28 hex x 160	32 hex x 160	28 hex x 160	32 hex x 160
Model	IR30BV	IR30BV	IR30BS	IR30BS

SPECIFICATIONS FOR IR30BV AND IR30BS PAVING BREAKERS

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Ref.	Part Name	Quantity	Cpn
1	Cylinder Assembly (28x160 Nozzle)	. 1	85040608
1	Cylinder Assembly (32x160 Nozzle)	1	85040616
2	Nozzle 28 hex x 160	1	85040574
2	Nozzle 32 hex x 160	1	85040590
3	Fronthead Assembly	1	85040665
3	Fronthead	1	85040673
9	Latch	1	85040749
20	Plunger	1	85040939
21	Plunger Spring	1	85040947
22	Fronthead Spring Pin Inner	1	85040962
23	Fronthead Spring Pin Outer	1	85040988
24	Fronthead Screw	1	85041002
25	Fronthead Nut	1	85041028
4	Piston	1	85040707
5	Handle Assembly (BV Models - Vibration Damped)	1	85043487
5	Handle Body (BV Models - Vibration Damped)	1	85043503
7	Trigger	1	85040756
8	Handle Lever Left	1	85040772
6	Handle Lever Right	1	85040798
10	Handle Grip	2	85040806
11	Handle Spring	2	85040822
12	Handle Pivot Pin	1	85040830
13	Sleeve	1	85040848
14	Handle Lever Stop	1	85040855
15	Trigger Pin	1	85043529
16	Trigger Ball	1	85040871
17	Trigger Spring	1	85040889
18	Inlet Bushing	1	85040897
19	Quick Coupling EU	1	85040905
19	Quick Coupling USA	1	85040913
35	Wick Body	1	85043537
36	Wick	1	85043545
37	Wick Plug	1	85043552
38	Seal	1	15099278
39	Oil Fill Plug	1	85043560
42	Handle Assembly (BS Models - Fixed Handle)	1	85043578
10	Bar Grip	2	85040806
16	Trigger Ball	1	85040871
17	Trigger Spring	1	85040889
18	Inlet Bushing	1	85040897
19	Quick Coupling EU	1	85040905
19	Quick Coupling USA	1	85040913
35	Wick Body	1	85043537
36	Wick	1	85043545

Ref.	Part Name	Quantity	Cpn
3	7 Wick Plug	1	85043552
3	8 Seal	1	15099278
3	9 Oil Fill Plug	1	85043560
4	2 Handle Body (BS Models - Fixed Handle)	1	85043594
4	3 Handle Bar	1	85041267
4	4 Trigger	1	85041275
4	5 Spring Pin	1	85041283
4	6 Trigger Pin	1	85043628
4	8 Trigger Spring Pin	1	85043610
26	Handle Body Screw	4	85043636
27	Handle Body Nut	4	85041010
28	Sealing Ring	1	85041044
29	Muffler	1	85041051
30	Spacing Washer	1	85041069
31	Valve Plate	1	85041093
33	Cushion Bushing	1	85041150
34	Valve Ring	1	85041176
40	Steel Washer	2	85043644
47	Plastic Washer	2	85043651

41	Latch Kit	1	85041317
9	Latch	1	85040749
20	Plunger	1	85040939
21	Plunger Spring	1	85040947
22	Fronthead Spring Pin Inner	1	85040962
23	Fronthead Spring Pin Outer	1	85040988
24	Fronthead Screw	1	85041002
25	Fronthead Nut	1	85041028
Items no	ot illustrated:		
50	Handle Plate	1	85040244
51	Handle Plate Screw	4	85041325
54	Noise Sticker 112	1	85040236
55	Warning Sticker	1	85040202
56	Box	1	85040178
57	Warranty Card	1	85040285
58	Box Label EU	1	85040186
59	Box Label USA	1	85040194
60	Box Insert Handle	2	85041333
61	Box Insert Fronthead	2	85041341
64	Box Space Insert	1	85041366
67	Operation & Maintenance Manual	1	85040277
69	In Line Lubricator	1	35371111
70	Protec Engine Oil 51	1	85448405





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