Operating Instructions



Premium Super Dry Cutter 9435

Premium Dry Cutter 9430



Premium Super Dry Cutter 9435 Premium Dry Cutter 9430



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JEPS

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NOTE

Please read this manual before the machine is transported and put into operation. With the purchase of this machine you acquired a quality product. However, you may still have questions concerning the operation. In order for us to be able to assist you more quickly, please provide the following information:

Machine number: Vendor: Delivery date:

The operating instructions were written by KO SHIN (TAIWAN)/JEPSON

according to specifications of the manufacturer.

Reproductions of any kind may be made only with our authorisation. The manufacturer reserves the right to make changes to the technical design of the development without notice.

Changes for technical advancement reserved.



EC CONFORMITY DECLARATION

We, JEPSON POWER GmbH Ernst – Abbe – Straße 5 52249 Eschweiler, Germany

As the manufacturer declare herewith under our responsibility that our products:

PREMIUM SUPER DRY CUTTER	9435
PREMIUM DRY CUTTER	9430

Complies with the following standards, directives and referenced standard documents:

2006/42/EG 2006/95/EG 2004/108/EG Machinery Low Voltage Electromagnetic Compatibility

EN	953	1997+A1:2009
EN	12100	2010
EN	55014-1	2006+A1:2009
EN	55014-2	1997+A1:2001+A2:2008
EN	61029-1	2010

06. January 2014

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Signature:	a	
	Pierre Michiels	-

CEO



JUNITEC JEPSON



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1. FOREWORD

A new series of high-speed circular cold saws

The circular saw is the most commonly used machine employed in processing metal and other materials. The reason for this lies in the fact that the metal circular saw is very compact in construction, uses an inexpensive saw blade, which can be re-sharpened, and is very simple to operate on account of the relatively low cutting speed. These obvious benefits - and their wide application - speak for the use of circular saws but their disadvantages cannot be denied.

These machines are normally operated with HSS saw blades, which can be used only at very low cutting speeds on materials, which are difficult to cut. In addition these saw blades always require a cooling lubricant. Cooling lubricant not only causes problems relating to the disposal of the chips, but there are also the questions of its preparation and disposal. The application of the cooling lubricants is particularly problematic in case of high requirements for subsection welding of the parts. The demands can generally be fulfilled only if the parts to be welded are washed after cutting. The additional step not only creates additional cost, but it is also problematic from the ecological point of view.

More than 15 years ago, carbide tipped circular cold saw blades were developed and successfully used for cutting steel in the industry. For several years we have been offering the PREMIUM SUPER DRY CUTTER for the use on construction sites. This circular cold saw operates with thin cuts, using carbide tipped saw blades (1.8/2.2mm cutting width) with a diameter of 355 mm.

With a cutting velocity of 1,400 m/min, this saw can dry-cut steel pipes, high-grade steel, stainless-steel pipes, and profiles, angle bars, U and double-T profiles, SML pipes, plastic-encased pipes, and other steel profiles. When cutting with the Premium Super Dry Cutter the problem of the disposal of the oil-soaked chips and the coolant no longer exists.

For the different materials and profile thicknesses, we offer saw blades with 100, 90, 72, 66, and 60 teeth.

We wish you productive work with your SUNITEC JEPSON circular cold saw.



2. SHORT DESCRIPTION

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The construction saws PREMIUM SUPER DRY CUTTER and PREMIUM DRY CUTTER are designed and built according to current international standards of the machine tool industry.

The machines comply with the current regulations for emissions and safety at work, in particular the rules for the prevention of accidents. Aside from the EC conformity mark, the machines were tested by TÜV Rheinland. The machines have obtained the certificate S 94 10 863.

IMPORTANT

If changes to a machine are made without our authorisation, the certificate is null and void and the EC conformity mark ceases to be valid. The machine may no longer be operated. Likewise, the guarantee and the liability of the manufacturer are cancelled.

The construction saws PREMIUM SUPER DRY CUTTER and PREMIUM DRY CUTTER stand out for:

- easy transport
- simple operation
- large work space
- su
- many possible applications
- suitable for sawing metals and for mitre cuts

3. TECHNICAL SPECIFICATIONS

	PREMIUM SUPER DRY CUTTER	PREMIUM DRY CUTTER
Voltage	230 VAC, 50 Hertz	230 VAC, 50 Hertz
Performance	2200 W (9,6 A)	2000 W (8,7 A)
Saw blade	355mm Øx2,2/1,8 mmx25,4 mm	305mm Ø x 2,2/1,8mm x 25,4mm
Number of teeth	90	60
Speed	1300 rpm (idling)	1500 rpm (idling)
Peripheral speed	1450 m/min (idling)	1450 m/min (idling)
Mitre cutting	15° - 30° - 45°	15° - 30° - 45°
Surface area	480 x 290 mm	480 x 290 mm
Weight	23,5 kg without saw blade	22,5 kg without saw blade
Sound pressure level	100 dB(A)	100 dB(A)
Sound power level	113 dB(A)	113 dB(A)
Hand and arm vibration	1,19 m/s ²	0,53 m/s ²

4. PERFORMANCE DATA

(PREMIUM SUPER DRY CUTTER		PREMIUM DRY CUTTER	
max. Ø mm max a x b	90°	45°	90°	45°
-0	140 mm 125 (inox)	110 mm	115 mm	85 mm
	125x125 mm	85x85 mm	100x100 mm	85x85 mm
	105x200 mm	85x115 mm	85x160 mm	85x85 mm



5. SAFETY REGULATIONS

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- 1. The safety device may not be removed during the working process and must always be kept operational.
- 2. The adjustment keys and wrenches must be removed before the machine is turned on.
- 3. The workspace is to be kept tidy since an untidy working environment is the cause of numerous accidents.
- 4. The machine should not be used in a dangerous environment, e.g. an environment containing inflammable fluids or gas.
- 5. Children and all visitors must also be kept away from the workspace.
- 6. The workshop must be secured with a padlock or master switches.
- 7. The machine may not be overloaded.
- 8. Only original parts may be used. Only cut materials suitable for the machine and the saw blade.
- 9. Wear suitable clothing. Do not wear loose clothes, gloves, ties, rings, bracelets or jewellery, which may get caught in the mobile parts of the machine. Skid-proof shoes are recommended and the hair should be tied or hair protection should be worn.
- 10. During work with the machine, safety goggles, protective gloves, and ear protector must be worn at all times. A face or dust mask should also be work if sawing produces dust. Regular eyeglasses do not replace safety goggles.
- 11. The work piece must always be clamped with the vice so that both hands of the operator are free to operate the machine.
- 12. Do not lean over the machine during operation and always ensure safe position of the machine and good balance of the operator.
- 13. The saw blade must be maintained carefully. It must always be kept in sharp and safe state, as this is an essential condition for good and safe operation.
- 14. Pull the power supply plug before changing spare parts, accessories or the saw blade.
- 15. To reduce the risk of unintentional start-up of the machine, it must be ensured that the switch is turned OFF before the power plug is inserted into the socket.
- 16. Use the recommended accessories as the use of incorrect parts can cause accidents.
- 17. Never stand on the machine. It may tilt and start unexpectedly and cause severe accidents.
- 18. Damaged parts must be verified and repaired before the machine is used. The safety device or other damaged parts must be verified carefully to determine whether they operate properly according to their function. A certified maintenance engineer must verify the alignment of the mobile parts, the mounting as well as any other factors that may affect the operation of the machine before the machine is put into operation. All defective parts must be properly repaired or replaced.
- 19. Never allow the machine to run unsupervised. Do not leave the machine until the saw blade stands still.
- 20. Use only identical original spare parts for maintenance.



1. Always clamp the work piece securely.

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- 2. Observe the rotation direction of the saw blade.
- 3. Ensure that the saw blade is always sharp, is unimpeded and runs without vibration.
- 4. Lift the circular cold saw off the work piece before the safety switch is operated.
- 5. Before sawing, allow the motor to achieve full speed.
- 6. Operate the machine only if it is properly grounded.
- 7. Due not reach into the workspace with your hands while the machine is connected to the socket.
- 8. Protect the machine against moisture.
- 9. Wear safety goggles, protective gloves, and ear protector.

Power supply and grounding



In the case of malfunction or a defect, the grounding provides a path of lowest resistance for the electric current in order to reduce the risk of electric shock.

The machine is equipped with a power cable provided with an equipment protective conductor and a grounded plug. The plug must be plugged into a suitable socket that is properly installed and grounded according to all local laws and regulations. Do not alter the provided plug. If it does not fit into the socket, an electrician must install a suitable socket.



6. START-UP

After unpacking the machine from the packaging, verify if the content is complete. Place the machine on a surface so that it is solid and as level as possible. Loosen the locking bolt. Install the saw blade according to the instructions in chapter 7.2, "Replacing the Saw Blade". Before inserting the power supply plug into the socket, make sure that it is a grounded socket. In the case you are using cable extensions, you must make sure that they are also grounded.



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7.1. Adjusting the tensioning device

It is important for the safe operation of the circular cold saw as well as for good cut and a long life of the machine that the work piece is clamped securely.

7.1.1 Positioning of the rear chuck jaw base (Fig.1)

The rear chuck jaw base can set to 3 positions (3 holes) to adjust it to different material dimensions. Remove screw A and locking lever B for the adjustment, position the chuck jaw base accordingly, and then tighten screw A and locking lever B. For cuts at angles of 0° (90°), 15°, and 30° of materials up to 25 mm thickness, the chuck jaw base should be set to medium position. For thicknesses over 25 mm, set it to the rear position. The right rear stop can be aligned from its rear position (Figure 3).

7.1.2 Work piece clamping (Fig.1)

Put the work piece between the clamping plate (C) and the rear chuck jaw (D) and ensure that the tensioning device is tightened with the locking lever (B) in clockwise direction. In order to set the rear chuck jaw (D) of the vice to the desired angle, loosen screw A and locking lever B and adjust the desired angle. The machine is equipped with an adjustable back support for the sawing section (Figure 2).

7.1.3 Setting of the right rear stop (Fig.3)

The use of the right rear stop (stopper) extends the service life of the saw blade and is particularly useful in order to avoid that small sections are thrown into the protective cover.

To do so, loosen the screw C and align the right rear stop in a straight line with the rear chuck jaw set. Then tighten the screw C again. Depending on the material thickness, insert the screw D into hole A or B.

7.1.4 Quick release fastener (Fig.4)

The quick release fastener permits quick pre-adjusting in order to avoid having to rotate the clamping fixture too much via the clamping handle to bring it into position depending on the work piece size. To do so, turn the locking pin (A) left into a perpendicular position: You can now pre-adjust the clamping fixture (B) without screwing. After having done this, turn the locking pin right again so that the thread engages again. You can now clamp the work piece tight by rotating the clamping handle.



7.2. Replacing the saw blade

The blade can be replaced easily by following these instructions:

Step 1

Pull the power supply plug from the socket. Next, put the plug aside so that it cannot be plugged in accidentally.

Step 2 (Figure 5 and 5a)

Premium Dry Cutter 9430: Loosen the protective cover and push the cover to the side (Figure 5).

Premium Super Dry Cutter 9435: Loosen the butterfly screw (A), turn the small cover (B) to the rear, pull up the vibration dampers (C), and lock them by turning them to the side (figure 5a).

Step 3 (Figure 6 and 7)

Push in spindle lock (Figure 6-A). Grip the screw with the hexagonal wrench and loosen the screw. Turn the face cover up and carefully remove the blade (Premium Dry Cutter 9430, Figure 7).

Step 4 (Figure 7)

Push the new blade carefully onto the axle shaft, ensuring that the rotation direction indicated on the saw blade runs counter-clockwise and the saw blade is grease-free. Also ensure that the blade rotates in the direction indicated by the arrow on the protective cover. Next, replace the external flange and the screw and tighten firmly

Step 5

Premium Dry Cutter 9430: The face cover is attached by turning it back to its original position and replacing the screws (Figure 5).

Premium Super Dry Cutter 9435: Turn the small cover back to its original position and tighten the butterfly screw (Figure 5a-A). Move the vibration dampers back to their original position by turning them (figure 5a-C).

Step 6

 Δ Loosen the spindle lock and ensure that the saw blade can rotate freely (Figure 6).



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Regularly spray the spots where the saw blade comes into contact with the saw blade guides with lubricating oil spray. Since the vibration dampers are consumption parts, they should be replaced when they are worn down by approx. 3 mm to a residual value of 1 mm.

MAINTENANCE:

Replacing the carbon brushes: (Figure 8 and 9)

- 1. Replace the carbon a brush when they are worn down to approx. 1/4" (6 mm) or spark formation occurs. Both brushes must be replaced at the same time.
- 2. Remove the worn brushes, insert the new brushes and close the cover again.





MATERIALS:

- Rust and acid-resistant steel (V2A) (Super Dry Cutter)
- Mass structural steel (ST 33, ST 37-2, ST 52-3)
- Casting (SML Pipes)
- Water and gas pipes
- Angle bars, U profiles and double T profiles
- Plastic-encased pipes



7.3 Cutting technique

Step 1: The circular cold saw can cut at angles of 45°-90°.

a) For 90°, position the work piece between the clamping plate and the setting up piece and ensure that the clamping fixture is tightened with the clamping handle in clockwise direction.

b) For 45°, loosen the screw at the setting up piece, set the machine to the desired angle and re-tighten screws.

Next, insert the work piece and tighten the clamping fixture firmly.

Step 2: On the handle, there is a safety switch (Figure 10). In order to turn on the machine, push the arm lock (A) simultaneously with the switch handle (B). Only then, the handle can be moved downwards.

Ensure that the motor runs load free for a few seconds to reach the maximum operating speed before you start sawing.

Step 3: Cut slowly and evenly. Lift the handle off the work piece and release the switch to switch off the saw. Release the handle only after the saw blade comes to a total standstill.

7.4 Chip box

The chip box (Figure 11/A) catches up to 80% of the chips.

7.5 Transporting the Premium Super Dry Cutter

If you want to transport the Premium Super Dry Cutter machine, keep the stopper handle (Figure 12/A) pulled outward and lower the operating arm to the lowest position. Now let the stopper handle engage.

You can now transport the device with the handle.



8. STANDARD EQUIPMENT:

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- Carbide tipped saw blade 60 Z (305x1.8/2.2x25.4 mm) PREMIUM Dry Cutter (Part no. 600530)
- 1b. Carbide tipped saw blade 90 Z (355x1.8/2.2x25.4 mm) PREMIUM Super Dry Cutter (Part no. 600570)
- 2. Hexagonal wrench and screwdriver

OPTIONAL PREMIUM DRY CUTTER:

- 1. 80 Z carbide tipped saw blade for steel and other materials (Part no. 600540)
- 2. 60 Z carbide tipped saw blade for steel and other materials (Part no. 600530)
- 3. 60 Z carbide tipped saw blade for SML (Part no. 600535)
- 4. Mounting stand (Part no. 600526)
- 5. Thinfix (Part no. 600546)

OPTIONAL PREMIUM SUPER DRY CUTTER:

- 1. 90 Z carbide saw blade for steel and other materials except SML (Part no. 600571)
- 2. 72 Z carbide saw blade for steel and other materials except SML (Part no. 600581)
- 3. 60 Z carbide saw blade for steel and other materials except SML (Part no. 600591)
- 4. 60 Z carbide saw blade for SML pipes (not for steel) (Part no. 600592)
- 66 Z carbide saw blade for mass steel (not usable for stainless steel and SML) (Part no. 600595)
- 6. 100 Z carbide saw blade for aluminium (Part no. 600594)
- 7. Thinfix (Part no. 600546) (Figure 13-A)
- 8. Stand (Part no. 600551) (Figure 14-15-16)



9. CORRECT CUTTING PROCEDURE AT 90°



10. RECOMMENDATIONS

In order to achieve an optimal saw blade performance, please read the following recommendations:

- 1. Fasten the work piece well
 - First check by hand if the work piece is safely and solidly attached.
 - Clamp and cut pipes and round materials individually only.
- 2. At the beginning insert the carbide tipped saw blade carefully and gently into the material and then continue sawing quickly.
- 3. Carefully remove chips deposited between the carbide teeth during the work before continuing to work.
- 4. Check the carbide saw blade regularly for abrasion and broken carbide teeth. If a blade becomes blunt due to wear and broken teeth, replace it with a new one.
- 5. Always wear safety goggles when sawing.
- 6. Never reach into the running saw with your hands. Keep clothing away.
- 7. Watch for the rotation direction when mounting the saw blade.
- 8. Have saw blades sharpened only by specialised sharpening services.
- 9. Saw blades can be re-sharpened 5 times on average.



<u>11. WARRANTY</u>

The warranty time (warranty according to the commercial code) is 12 months from the day of sale to the end consumer.

It covers and is limited to the free replacement of the defective parts or the free repair of defects that are demonstrably due to the use of imperfect materials during production or due to assembly errors.

Incorrect use or start-up and unauthorised installations or repairs not specified in the operating instructions void the warranty. Parts that are subject to wear are also excluded from the warranty. We expressly reserve the right to make decisions on the warranty application. The warranty is void if the device is opened by a third party. Transport damages, maintenance work as well as damage and malfunctions due to insufficient maintenance are not covered by the warranty.

For warranty claims, the proof of purchase of the device must be given by presenting the delivery note, bill, or cash receipt.

As far as it is legal, we assume no liability for any personal, material or consequential damages, in particular if the device is used differently than for the purpose indicated in the operating instructions, not installed or repaired according to the operating instructions, or repairs were executed by a layperson.

We reserve the right to perform repairs or maintenance over and above the ones specified in these operating instructions at the factory.

The warranty excludes wear parts such as: Switches, flanges, carbon brushes, supportings and Cutting tools (saw blades, carbide inserts, drills).

The quality and safety of the CS Unitec JEPSON circular cold saw depends on the exclusive use of original CS Unitec JEPSON saw blades. The use of other saw blades may damage the machines.

The original CS Unitec JEPSON saw blade fulfills all requirements of the TÜV examination (several inspection offices and is therefore certified by these inspection offices. In case of use of saw blades of foreign makes, the manufacturer assumes no liability.



12. QUOTATION

When returning a defective machine for repair, there is an estimation fee of \$30. This fee is waived with approval of repairs or purchase of a new replacement machine.

13. Spare parts

For current spare parts list with order numbers please visit our website: **www.csunitec.com/pricelist**

JEPSON IS CERTIFIED ACCORDING TO DIN EN ISO 9001







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