



AIR SAWS FOR THE PROFESSIONAL



JP901
operating instructions



EC Declaration of Conformity

According to EC Machinery Directive 98/37/EEC

We hereby declare

Cengar Universal Tool Co. Ltd.
70, Lister Lane, Halifax
England HX1 5DN

That the following machine complies with the appropriate basic safety and health requirements of the EC Directive based on its design and type, as brought into circulation by us.

In case of alteration of the machine, not agreed by us, this declaration will lose its validity.

Machine description: Cengar Air Saw

Machine Type: JP 901

Serial Number:

Applicable EU Directives: Machinery Directive 98/37/EC

Atex Directive 94/ 9/EC

Date/Authorised Signature:

Title of Signatory: General Manager

A technical file for Cengar saws (ref: CEEX/0803) is retained at our address and is available on request.

Cengar Air Saw Model JP 901

We recommend normal safe working practices should be followed as per the Health and Safety at Work Act, or the appropriate National and State Laws. We recommend that eye protection be worn when using Cengar Saws



SPECIFICATIONS

Speed	10,000 strokes per minute
Stroke	9 mm
Air Consumption	0.116m ³ /minute
Air Pressure	5-6 Bar
Weight	1.6 Kgs.
Length	270 mm.
Height	70 mm.
Width	40 mm.
Vibration Level averaged	1.23 m/s ²
Sound Pressure Level	68.6 db.
Sound Power Level	78.0 db.
Atex Certification	CE II 2G T5 X

LUBRICATION

Use Cengar Green Oil with longer lasting coating properties for best results. Cengar Green Oil is specially prepared to: -

- 1 Emulsify the water generally found in compressed air lines.
- 2 Give perfect mist lubrication.
- 3 Remain fluid at the low working temperature of compressed air tools.
- 4 Contains corrosion and oxidation inhibitors.

Incorrect oils if used will soon “break down” forming a sludge which will slow and eventually stop the action of the saw. See maintenance details.

INSTALLATION OF BLADES.

Before attempting to insert or change a blade, ensure that the air supply is isolated by operating the isolation valve provided. Loosen the retaining grub screws with the key provided, insert blade through nosepiece so that the teeth are cutting on the pull stroke.

Locate the back screw in the hole in the end of the blade, for a positive drive, the front screw can then be tightened to grip the blade firmly.

BLADES

Cengar “Shatterproof” Bi-Metal blades are specially prepared for use with Cengar saws, to withstand the high operating speeds, and give maximum cutting life.

Choose the teeth per inch to suit the characteristics of the material being cut.

Choose pitch to ensure that at least 3 or 4 teeth are cutting at the same time.

OPERATING THE SAW

We recommend that eye protection be worn, and normal safe working practices observed as per the Health and Safety at work act, and the appropriate National and State Laws.

Set the isolator to “on” position, rest the blade on the material to be cut with the nosepiece firmly abutted to the work piece, with forward hand pressure, to prevent judder. Allow the Cengar Saw to cut under its own weight, with just a slight downward hand pressure to keep the teeth engaged in the cut. It is not necessary to put excessive downward pressure on the saw, this only accelerates blade wear, and prevents the saw from operating efficiently. Normal airline pressure of 5 to 6 Bar is required, any higher pressure only accelerates internal wear of the machine.

USE IN HAZARDOUS AREAS

We strongly advise that the contact area of the blade on the work piece be quenched with coolant or water during cutting to dissipate any heat which may be created by the cutting process.

Anti-static conductive air hose must be used, with adequate earth bond continuity (resistance below 1 ohm), to ground any electrostatic charges.

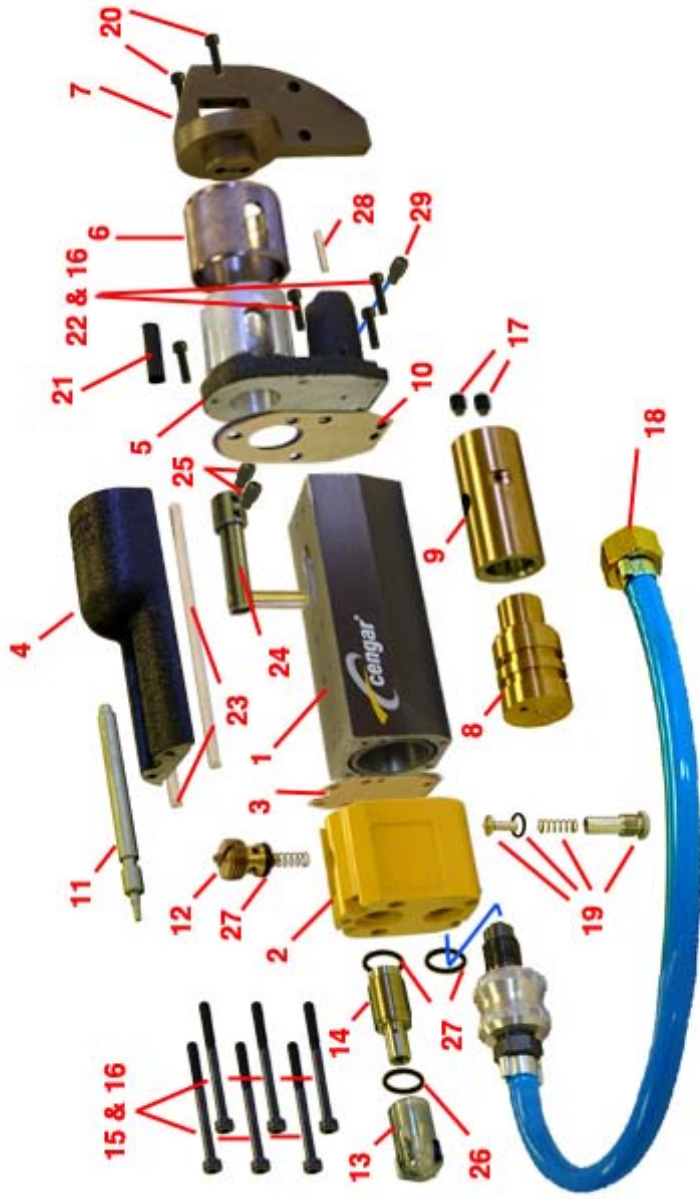
MAINTENANCE AND GENERAL HINTS

Always ensure sufficient oil in the tool, especially when the saw is in constant use, and **ALWAYS** leave a small **air bubble inside** the oil container when refilling, to prevent ‘Hydraulic Lock’ which would impede lubrication.

The tool depends upon oil which acts not only as a lubricant, but also as a **PISTON SEAL**. No oil will result in overheating, piston scorching, excessive wear, and a costly repair.

Very little maintenance is required if the correct oil is used, but incorrect oil will soon break down into sludge, slowing down the action of the saw, necessitating its removal by use of Cengar M.S. Cleaner. It is imperative that the saw is re-oiled immediately after cleaning, with Cengar Green Oil.

JP901 Exploded View



Item	Part No.	Description	Number Per Tool	Item	Part No.	Description	Number Per tool
1	9337	Body	1	18	9331C	Hose Isolator Assy	1
2	9335	Valve Unit	1	19	9334L	Starter Valve Assy	1
3	9336	Gasket rear	1		9334D	Starter Body Long	1
4	9339	Top Cover	1		9334C	Starter Spindle	1
5	9341	Front end	1		9334A	Starter Spring	1
6	9342	Silencer Guard	1		5007	Starter Seal	1
7	5045	Nosepiece	1	20	50412	Screws—Nosepiece	2
8	2253	Piston Rear	1	21	9343	Silencer Steady	1
9	2252	Piston Front	1	22	54200	Screws Front end	5
10	9340	Gasket Front	1	23	9338	Seal—Top Cover	2
11	9333	Trigger	1	24	9344	Pedestal	1
12	50034	Valve in Handle	1	25	5068	Blade Grip Screws	2
13	2257	Oil Cup	1	26	5206	Seal—Oil Cup	1
14	9332	Oiler	1	27	5108	Seal - Various	5
15	54500	Screw Valve to Body	6	28	93412	Bleed Tube	1
16	W55	Serrated Washer	10	29	5056	Bleed Screw	2
17	5068	Screw to pedestal	2		AK3	Allen Key	1

IF THE SAW DOES NOT OPERATE

- 1 Check that the isolator is switched on.
- 2 Check air supply is correct.
- 3 Valve in handle (part no. 50034) could be worn and/or the seal is broken, blocking an air passage. Check and replace if necessary.
- 4 Ensure that all valve mounting screws in the body are tight, and that air is not escaping from the gaskets at the front or rear.
- 5 Ensure the oil container is filled with Cengar Green Oil, leaving a small air bubble to prevent 'Hydraulic Lock'.

MAINTENANCE

Always remove the saw from the airline before commencing any maintenance work.

Only fit genuine Cengar parts and accessories, or safety may be compromised

REPLACEMENT OF TRIGGER VALVE - PART NO. 54500

To replace the trigger valve, loosen the six main screws securing the valve block, but do not remove, this will allow the trigger bar to be drawn out, revealing the valve.

Replace the valve, until it is level with the top of the hole, refit the trigger bar, and finger tighten screws. Reconnect air supply, and check operation of trigger. No air should flow when released, full air should flow when depressed, if needed adjust height of valve $\frac{1}{4}$ of a turn either way.

Re-tighten the six screws evenly and firmly.

OILER MECHANISM ADJUSTMENT

The oiler is preset at the factory, and should not need attention, but slight adjustment can be made if desired. **Always ensure adequate lubrication.**

The jet is screwed in to be level with the end of the body. Tightening clockwise will reduce oil flow, and unscrewing anti-clockwise will increase the oil flow.

Lubricator performance is visible in the oil container as agitation of the oil during saw operation. (bubbles present in the oil) If no agitation is observed, reset the oiler.

PEDESTAL CLEARANCE WHEN REFITTING

The pedestal, Item 24 (Part No 9344) must always be central to the bore of the front end. To ensure this, set clearance between the larger diameter blade grip section to be 0.025" (0.64 mm) above the body.

Check for free movement in the nosepiece, without any hard contact, which would cause wear and loss of power.

REPLACEMENT OF BLEED TUBE

Fit tube Item 28 (Part No. 93412) and loosely fit two bleed screws Items 29 (Part No. 5056) Replace the nosepiece, and set one bleed screw level with the surface.

Set the machine running which will sound and feel uneven, tighten the second bleed screw slowly until the tool runs smoothly.

REPLACEMENT OF PISTONS

Eventually the pistons will wear, but oversize pistons can be fitted at the factory, resulting in an 'as new' performance. This can be repeated several times before the bore is worn beyond repair.

NEVER

- 1 **NEVER** hold the Cengar saw in a vice by the body, this will distort the bores, rendering the tool inoperative.
- 2 **NEVER** screw nameplates to the body, as the screws may penetrate an airway or bore.
- 3 **NEVER** operate the Cengar saw without lubrication.
- 4 **NEVER** be tempted to clean internal parts with anything other than a clean lint free cloth, and M.S. Cleaner, or Cengar Green oil.

ALWAYS

- 1 **Always** use Cengar green oil for best results. Keeping the saw clean and well oiled will give excellent reliability and a long life.
- 2 **Always** check that the lubrication is flowing, this is indicated by the presence of a stream of bubbles in the oil visible during operation of the machine.
- 3 **Always** use Cengar Bi-Metal Shatterproof blades for safety and best cutting performance
- 4 **Always** isolate the air supply when changing blades.
- 5 **Always** wear eye protection when using sawing machines.

ACCESSORIES

Saw Blades



MYT 150/18	Tapered yellow blade for glassfibre and general purpose 18 TPI
MYN 150/18	Notched yellow blade for scrolling & fine work 18 TPI
MC 220/24	220 mm long by 12 mm deep blade for general cutting 24 TPI
MC 260/24	260 mm long by 12 mm deep blade for general cutting 24 TPI

A range of 19 mm deep blades could be fitted in certain circumstances. Replace the nosepiece 5045 with 5075 to use 19 mm blades

Cengar Green Oil



GO 9107P	Cengar Green Oil 250 ml plastic bottles for all air tools
GO 9109	As above in 5 litre container
GO 9110	As above in 25 litre container

M.S. Cleaner

MS 9105	1 litre General purpose cleaning fluid for air tools. Always use plenty of Cengar green oil afterwards.
---------	--

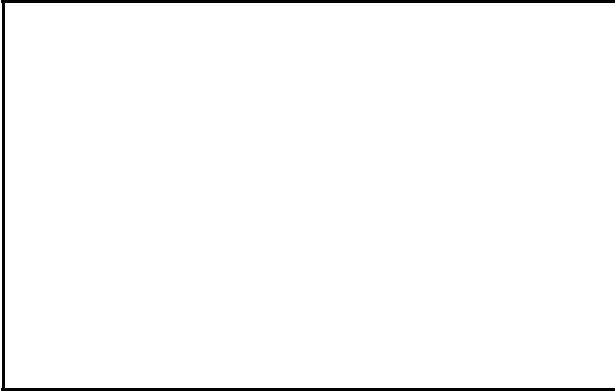
Nosepiece

5045	Replacement nosepiece/blade guide for 12 mm deep blades
5075	Alternative nosepiece/blade guide for 19mm deep blades

SERVICE

We offer a full factory repair and refurbishment service for Cengar Saws, - normally within 5 working days. Quotations at no charge can be given before work is carried out.

DISTRIBUTOR ADDRESS



Cengar Universal Tool Co. Ltd.
70 Lister Lane
Halifax, England . HX1 5DN
Tel: 01422 354626 Fax: 01422 349024
enquiries@cengar.com
www.cengar.com