

# **Jefferson®**

## **25L Compressor**



**JEFLD2001**

# **USER MANUAL**

**[www.jeffersonstools.com](http://www.jeffersonstools.com)**

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## ■ Forward

Please read this manual carefully and make a full understanding before operating. Due to the limited pages we cannot answer all the questions, but this manual can help you avoid unnecessary mistakes during operating the new machines. Please pay special attention to the "Warning". If you don't stick to the instructions you may have your machine damaged.

Excuse for not informing of the alteration for techniques of the products change all the time.

Please follow the operating procedures described in this manual. By doing so you'll save your time and energy. If any problem or fault occurs, please contact our authorized service centre without delay.

If any machine parts need to be replaced, please use those produced in our factory to ensure an effective operation and to increase service life.

## ■ Security Notes

Before starting the machine, please take a check before operation or the safe operation.

Do not place any inflammable substance near the air compressor.

Do not inject the compressed air to man and animals.

Keep children or animals away from the compressor or auxiliary facilities. Don't touch the machine or exhaust pipe during operation, it remains in very high temperature.

The technical service center of our factory is the only organization that has the right to confirm whether the product in question is within the warranty scope.

The operator should know the correct operation of the machine and how to turn it off immediately.

DO not move the machine when the air container still contains in compressed condition.

Before repairing, especially before disassembling the machine, the power should be turned off and the compressed gas should be released from the gas container. If the power is not turned off the air compressor may start suddenly. In the evening, if the unstable voltage in the power grid may damage the motor in the machine.

The following two points should be noted when the air compressor is used for spraying painting.

a. Do not operate the air compressor in the airtight space or in the place where there is fire.

b. The air compressor should be operated in the well ventilated place.

## ■ Installation

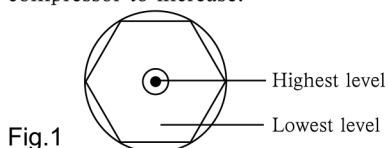
a. Install the compressor in a ventilated place.

b. The space between the compressor and the wall should be at least 50cm.

## Before starting

a. Before starting the compressor be sure that the lube is enough. It is safe when the lube level is at the red point of oil glass.(Figure 1) When necessary, add the lube through the hole of the dipstick

**Caution:** If the lube is lower than the lower mark of the dipstick(Fig.1),the compressor will be frayed and the axle head will be destroyed.If too high ,it may cause the lube to spray and the loan of the compressor to increase.



b. The ideal lube for the compressor should be, in a general way, high grade with antioxidant in, not easy to become thick because of oxygenating, not easy to froth with little carbon left and high ignition point. Usually the 13# air compressor oil is used. the 19# air compressor oil is used in winter.

## Notes before operating

a. Plug in the power plug to the matched outlet.

b. Do use the air switch(Figure 2) to start or stop the compressor, according to the button position marked on the shell of air switch ,for the compressed air in the pipeline will exhaust automatically when the air switch break ,and then the compressor could be started with little burden next time, prevent the motor from damage.

## ⚠ C. Safety Valve

The air-compressor is equipped with safety valve as the protective device to prevent from excessive pressure in the gas tank. The safety valve has already been adjusted according to the designing standard of "Pressure Containers". Please don't adjust it at discretion Please advise the maintenance services of our company or distributors to do for you if adjustment is necessary. To assure that the function of the safety valve is in normal state, please drag the gas release ring at least once a week.(Figure 3)

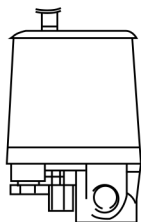


Fig.2



Fig.3

## Operation of the compressor

The compressor uses an air switch to control the motor. When the pressure in the air storage tank rises to the rated maximum pressure, the air switch automatically breaks to disconnect the power and stop the air compressor. When the pressure in the air storage tank goes down below the rated minimum pressure, the air switch automatically closes and restarts the motor to drive the compressor.

## Adjust the exhausting air pressure

a.pull out upward the knob of the pressure adjuster turn clockwise to increase the exhausting air pressure to a rated maximum pressure the same as in the air storage tank (Figure 4)

b.pull out upward the knob of the pressure adjuster,turn anticlockwise to reduce the exhausting air pressure to zero bar.

### Caution:

(1)When adjusting the exhausting air pressure,you can look into the small manometer to get the pressure readings.

(2)When the manometer shows the maximum pressure value,stop turning clockwise.or the thin film of the pressure adjuster would be damaged.

(3)When the compressor stop working,turn the pressure adjust anticlockwist to zero bar and then stop,you may open the drain tap to make sure that the compressor stops.

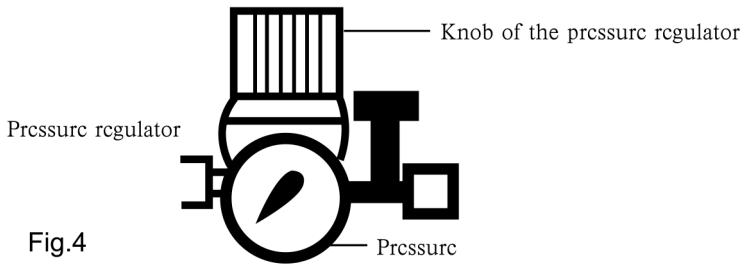


Fig.4

## Maintenance

a.When the new machine has been set to work for 50 hours,unscrew the oil-escape-bolt to let out the old lube and add in the new lube to the marked level of the dipstick.

b.Clean the filter every 100 hours.(Figure 5)

c.Replace the filter element with a new one if it is too dirty.

d.Turn on the water escape valve at the botton of the air storage tank to drain everyday.

e.In every 500 hours or 12 months,replace the lube with new lube.

f.Please check the sensitivity of the safety valve and the operating pull-ring once a week.

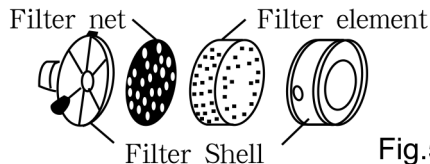
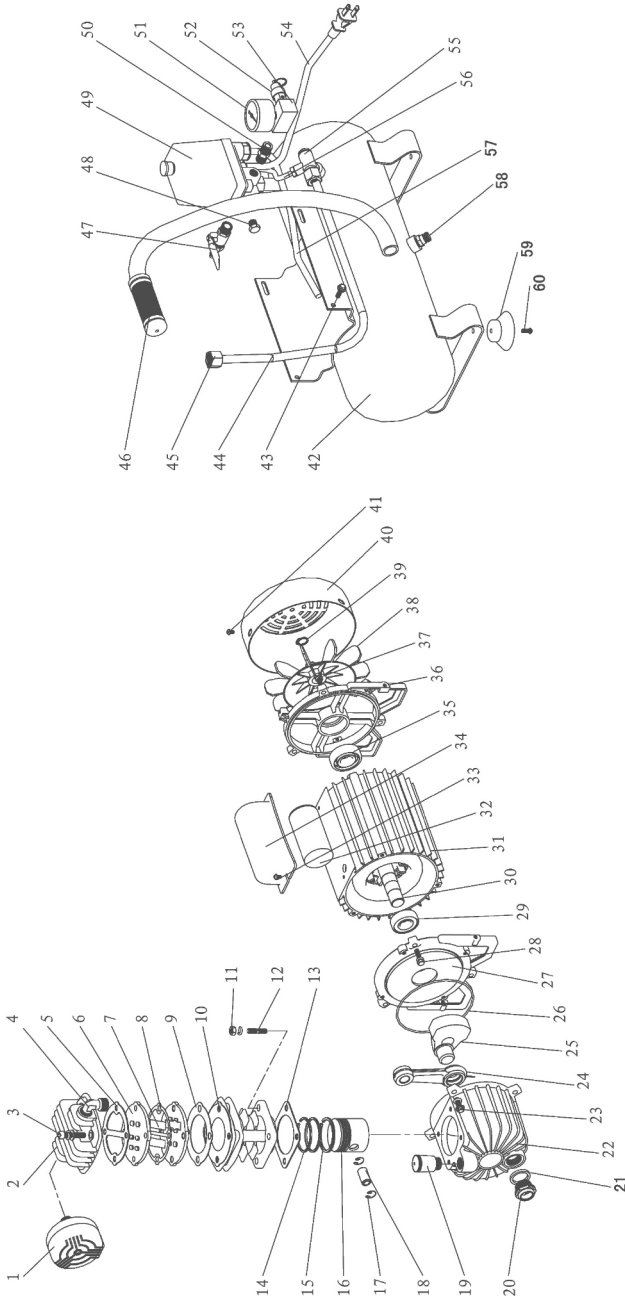


Fig.5

## Causes of Breakdown and Maintenance of the Air-compressor

Breakdown	Possible Reasons	Maintenance
Less output air-quantity or inadequate pressure	<ol style="list-style-type: none"> <li>1.The air volume required is beyond the rated</li> <li>2.Blockage of the inlet air filter</li> <li>3.Adhesive of carbon or other substances on the valve block</li> <li>4.Unfix of valve seat or damage of filler</li> <li>5.Abrasion of valves or Ineffectiveness of spring</li> <li>6.Air leakage of the exhaust pipes or connectors</li> </ol>	<ol style="list-style-type: none"> <li>1.Change with a more powerful air-compressor</li> <li>2.Clean the cartridge or renew it</li> <li>3.Strip it and clean it</li> <li>4.Lock or renew it</li> <li>5.Renew it</li> <li>6.Check the pipe or connectors with soap water and lock them up</li> </ol>
Over pressure or the safety valve alarms	<ol style="list-style-type: none"> <li>1.The set output voltage is higher than the rated</li> <li>2.Damage of pressure switch or relieving valve</li> <li>3.Too low pressure setting or Damage of safety valve</li> </ol>	<ol style="list-style-type: none"> <li>1.Adjust the voltage setting</li> <li>2.Renew it</li> <li>3.Adjust pressure or renew it</li> </ol>
Over vibration of the air -compressor	<ol style="list-style-type: none"> <li>1.Excessive working pressure</li> <li>2.Unstable foundation</li> </ol>	<ol style="list-style-type: none"> <li>1.Lessen the working pressure</li> <li>2.Fix the foundation with a cushion or otherwise</li> </ol>
Too noise during the rotation	<ol style="list-style-type: none"> <li>1.Unfix of valve seat</li> <li>2.The piston impact the cover of the cylinder</li> </ol>	<ol style="list-style-type: none"> <li>1.Lock the valve seat</li> <li>2.Intensify the filler</li> </ol>
Superheat of the part in the compressor	<ol style="list-style-type: none"> <li>1.Excessive working pressure</li> <li>2.Super surrounding temperature bad ventilation</li> </ol>	<ol style="list-style-type: none"> <li>1.Lessen the working pressure</li> <li>2.Move to a place with good ventilation</li> </ol>
Constant leakage of the saturated exhaust valve	<ol style="list-style-type: none"> <li>1.Damage of exhaust valve</li> <li>2.The check valve is blocked or damaged</li> </ol>	<ol style="list-style-type: none"> <li>1.Renew it</li> <li>2.Stripped and checked or renewed</li> </ol>
No sound after being charged	<ol style="list-style-type: none"> <li>1.Imperfect wire connection or fuse break</li> <li>2.The temperature controller stripped</li> <li>3.Breakdown of the motor</li> </ol>	<ol style="list-style-type: none"> <li>1.Check the wires or change the fuse</li> <li>2.After cooling, switch on temperature controller again to see if the voltage is normal</li> <li>3.Sent for maintenance</li> </ol>
The motor makes sounds but does not work	<ol style="list-style-type: none"> <li>1.Voltage drop caused by super extension wire</li> <li>2.Inadequate voltage</li> <li>3.Motor overload</li> <li>4.Break down of the motor</li> </ol>	<ol style="list-style-type: none"> <li>1.Shorten the extension wire or change to use a proper power line</li> <li>2.Ask the electric power company to repair</li> <li>3.Release the pressure of the drum and reduce the load</li> <li>4.Sent for maintenance</li> </ol>

Please turn on the air switch to discharge the pressure in the drum before wain tenance.



PART NO.	DESCRIPTION	PART NO.	DESCRIPTION	PART NO.	DESCRIPTION	PART NO.	DESCRIPTION	PART NO.	DESCRIPTION	PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
1	Filter element	9	Valve packing	17	Crank shaft	33	Screw	41	Screw	49	Pressure switch	57	Electrical wire
2	Cylinder head	10	Cylinder	18	O ring	34	Condenser cover	42	Tank	50	Connector	58	Water drain valve
3	Screw	11	Screw	19	Motor frame(front)	35	Bearing2	43	Screw	51	Pressure gauge	59	Rubber feet
4	Elbow assembly	12	Bolts	20	Oil glass	36	Motor frame(rear)	44	Aluminum pipe	52	Safety valve	60	Screw
5	Valve packing	13	Cylinder packing	21	O ring	29	Bearing1	45	Connector	53	Gauge mounted plate		
6	Valve seat	14	Compression ring	22	Crank case	30	Motor	46	Handle grip	54	Electric wire		
7	Valve packing	15	Scraper ring	23	Screw	31	Motor frame	47	Air cock	55	Check valve kits		
8	Valve plate	16	Piston	24	Connecting rod	32	Condenser	48	Brass Plug	56	Exhaust hose		
													<b>Exploded View</b>





# Jefferson®

## PROFESSIONAL TOOLS & EQUIPMENT

### EC Declaration of Conformity

We, Jefferson Professional Tools & Equipment, as the authorised European Community representative of the manufacturer, declare that the following equipment conforms to the requirements of the following Directives:

2000/14/EC (as amended)	<b>Noise Emission in the Environment by Equipment for Use Outdoors</b>
2004/108/EC (as amended)	<b>Electromagnetic Compatibility</b>
2006/42/EC (as amended)	<b>Machinery Directive</b>
2009/105/EC (as amended)	<b>Simple Pressure Vessels Directive</b>
2006/95/EC (as amended)	<b>Low Voltage Directive</b>

**Equipment Category:** Air Compressor (Item 8)

**Product:** JEF LDS2012/TWIN • 2HP / 12L / 230V / 50HZ / 10BAR • **Measured Sound Level:** 96dB • **Guaranteed Sound Level:** 96dB  
JEF LD2001 • 2HP / 25L / 230V / 50 HZ / 8BAR • **Measured Sound Level:** 96dB • **Guaranteed Sound Level:** 96dB  
JEF LD2001/110 • 2HP / 25L / 110V / 50 HZ / 8BAR • **Measured Sound Level:** 96dB • **Guaranteed Sound Level:** 96dB  
JEF LD2001/50 • 2HP / 50L / 230V / 50HZ / 8BAR • **Measured Sound Level:** 96dB • **Guaranteed Sound Level:** 96dB  
JEF LD2001/50110 • 2HP / 50L / 110V / 50HZ / 8BAR • **Measured Sound Level:** 96dB • **Guaranteed Sound Level:** 96dB  
JEF LD3007/50 • 2HP / 50L / 230V / 50HZ / 8BAR • **Measured Sound Level:** 97dB • **Guaranteed Sound Level:** 97dB  
JEF LD3007/50110 • 2HP / 50L / 110V / 50HZ / 8BAR • **Measured Sound Level:** 97dB • **Guaranteed Sound Level:** 97dB  
JEF LD3008/100L • 3HP / 100L / 230V / 50HZ / 10BAR • **Measured Sound Level:** 97dB • **Guaranteed Sound Level:** 97dB  
JEF LD4009/200L • 4HP / 200L / 230V / 50HZ / 10BAR • **Measured Sound Level:** 96dB • **Guaranteed Sound Level:** 96dB  
JEF LDV0.48/270L • 5.5HP / 270L / 415V / 50HZ / 10BAR • **Measured Sound Level:** 96dB • **Guaranteed Sound Level:** 96dB  
JEF LDW0.67/270L • 7.5HP / 270L / 415V / 50HZ / 10BAR • **Measured Sound Level:** 97dB • **Guaranteed Sound Level:** 97dB  
JEF LDW0.9/340L • 10HP / 340L / 415V / 50HZ / 10BAR • **Measured Sound Level:** 97dB • **Guaranteed Sound Level:** 97dB  
JEF LDW2.0/500L • 20HP / 500L / 415V / 50HZ / 10BAR • **Measured Sound Level:** 97dB • **Guaranteed Sound Level:** 97dB


The conformity assessment procedure followed was in accordance with Annex VI of the Outdoor Noise Directive

**Notified Body:** ENTE CERTIFICAZIONE MACCHINE (ECM) SRL (1282)

**A copy of this certificate has been submitted to the European Commission and to the EU Member State, United Kingdom**

**Signed by:**

Stephen McIntyre  
Operations Director  
23 June 2014



**Position in the company:**

**Date:**

**This technical document is held by:**

Jimmy Hemphill

*Technical file holder's address as shown below*

**Name and address of manufacturer or authorised representative:**

Jefferson Tools, Herons Way, Chester Business Park, Chester, United Kingdom, CH4 9QR  
**Telephone:** +44 (0)1244 646 048 **Fax:** +44 (0)1244 241 191 **Email:** enquiries@jeffersonstools.com  
[www.jeffersonstools.com](http://www.jeffersonstools.com)

# Limited Warranty Statement

Jefferson Professional Tools & Equipment, or hereafter "Jefferson" warrants its customers that its products will be free of defects in workmanship or material. Jefferson shall, upon suitable notification, correct any defects, by repair or replacement, of any parts or components of this product that are determined by Jefferson to be faulty or defective.

This warranty is void if the equipment has been subjected to improper installation, storage, alteration, abnormal operations, improper care, unauthorised service or repair.

## Warranty Period

Jefferson will assume both the parts and labour expense of correcting defects during the stated warranty periods below.

All warranty periods start from the date of purchase from an authorised Jefferson dealer. If proof of purchase is unavailable from the end user, then the date of purchase will be deemed to be 3 months after the initial sale to the distributor.

### 1 Year

- Jefferson 25L Compressor (JEFLD2001)

### 90 Days

- All replacement parts purchased outside of the warranty period

***Important:** All parts used in the repair or replacement of warranty covered equipment will be subject to a minimum of 90 days cover or the remaining duration of the warranty period from the original date of purchase.*

## Warranty Registration / Activation

You can register and activate your warranty by visiting the Jefferson Tools website using the following address: [www.jeffersontools.com/warranty](http://www.jeffersontools.com/warranty) and completing the online form. Online warranty registration is recommended as it eliminates the need to provide proof of purchase should a warranty claim be necessary.

## Warranty Repair

Should Jefferson confirm the existence of any defect covered by this warranty the defect will be corrected by repair or replacement at an authorized Jefferson dealer or repair centre.

## Packaging & Freight Costs

The customer is responsible for the packaging of the equipment and making it ready for collection. Jefferson will arrange collection and transportation of any equipment returned under warranty. Upon inspection of the equipment, if no defect can be found or the equipment is not covered under the terms of the Jefferson warranty, the customer will be liable for any labour and return transportation costs incurred.

These costs will be agreed with the customer before the machine is returned.

## Warranty Limitations

Jefferson will not accept responsibility or liability for repairs made by unauthorised technicians or engineers. Jefferson's liability under this warranty will not exceed the cost of correcting the defect of the Jefferson products.

Jefferson will not be liable for incidental or consequential damages (such as loss of business or hire of substitute equipment etc.) caused by the defect or the time involved to correct the defect. This written warranty is the only express warranty provided by Jefferson with respect to its products.

Any warranties of merchantability are limited to the duration of this limited warranty for the equipment involved.

Jefferson is not responsible for cable wear due to flexing and abrasion. The end user is responsible for routine inspection of cables for possible wear and to correct any issues prior to cable failure.

# Claiming Warranty Coverage

The end user must contact Jefferson Professional Tools & Equipment (**Tel:** +44 (0) 1244 646 048) or their nearest authorised Jefferson dealer where final determination of the warranty coverage can be ascertained.

## Step 1 - Reporting the Defect

### Online Method:

- Visit our website [www.jeffersontools.com/warranty](http://www.jeffersontools.com/warranty) and complete the Warranty Returns form. You can complete the form online and submit it to us directly or download the form to print out and return by post.

### Telephone Method:

Contact your Jefferson dealer or sales representative with the following information:

- Model number
- Serial number (usually located on the specification plate)
- Date of purchase

A Warranty Returns form will be sent to you for completion and return by post or fax, together with details of your nearest authorised Jefferson repair centre. **Please note: Proof Of Purchase Must be Included with any warranty claims.** On receipt of this form Jefferson will arrange to collect the equipment from you at the earliest convenience.

## Step 2 - Returning the Equipment

It is the customer's responsibility to ensure that the equipment is appropriately and securely packaged for collection. Please ensure that you include a copy of your proof of purchase. Please note that Jefferson cannot assume any responsibility for any damage incurred to equipment during transit. Any claims against a third party courier will be dealt with under the terms & conditions of their road haulage association directives.

## Step 3 - Assessment and Repair

On receipt, the equipment will be assessed by an authorised Jefferson engineer and it will be determined if the equipment is defective and in need of repair and any repairs needed are covered by the warranty policy. In order to qualify for warranty cover all equipment presented must have been used, serviced and maintained as instructed in the user manual.

Where repair is not covered by the warranty a quotation for repair, labour costs and return delivery will be sent to the customer (normally within 7 working days).

**Note:** *If the repair quotation is not accepted Jefferson Professional Tools & Equipment will invoice 1 hour labour time at £30 per hour plus return carriage costs (plus VAT).*

*In cases where no fault can be found with the equipment, or, if incorrect operation of the equipment is identified as the cause of the problem, a minimum of 1 hour labour at £30 per hour plus carriage costs will be required before the equipment will be despatched back to the customer.*

*Any equipment repaired or replaced under warranty will normally be ready for shipment back to the customer within 7 working days upon receipt of the equipment at an authorised Jefferson Repair centre (subject to part availability). Where parts are not immediately available Jefferson will contact you with a revised date for completion of the repair.*

## General Warranty Enquiries

For any further information relating to Jefferson warranty cover please call **+44 (0) 1244 646 048** or send your enquiry via email to [warranty@jeffersontools.com](mailto:warranty@jeffersontools.com).

## **IMPORTANT! SAFETY FIRST!**

Before attempting to use this product please read all the safety precautions and operating instructions outlined in this manual to reduce the risk of fire, electric shock or personal injury.

Jefferson Tools, Herons Way, Chester Business Park, Chester, United Kingdom, CH4 9QR

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**[www.jeffersontools.com](http://www.jeffersontools.com)**