

# *150L* INDIJSTRIAL

Air Compressor

JEFC150L10B-230

**User Manual** 

v.1.1





PROFESSIONAL TOOLS & EQUIPMENT

# **Parts & Servicing**

For Jefferson approved replacement parts contact your nearest dealer or contact Jefferson tools

Telephone: +44 (0)1244 646 048 Fax: +44 (0)1244 241 191 Email: warranty@jeffersontools.com

**Important:** Please read all these instructions before operating this product and save these instructions. This manual has been compiled by Jefferson Tools and is an integrated part of the product with which it's enclosed and should be kept with it for the future reference.

This manual describes the purpose for which the product has been designed and contains all the necessary information to ensure its correct and safe use. We recommend that this manual is read before any operation or, before performing any kind of adjustment to the product and prior to any maintenance tasks. By following all the general safety instructions contained in this manual you will help to ensure operator safety and extend the potential lifespan of the equipment.

All photographs and drawings in this manual are supplied by Jefferson Tools to help illustrate the operation of the product. Whilst every effort has been made to ensure accuracy of information contained in this manual our policy of continuous improvement determines the right to make modifications without prior warning.

**Note:** The information contained in this Instruction Manual is designed to assist you in the safe operation and maintenance of the compressor. Some illustrations in this Instruction Manual may show details or attachments that differ from those on your own compressor. Contact your nearest Jefferson Dealer if you are unsure about any information included in this manual or require any additional information about the safe use, operation maintenance, or repair of this equipment.



# 2. Introduction

Please read and ensure that you understand all of the operating instructions, safety precautions and warnings in this Instruction Manual before operating or maintaining this compressor. Most accidents that result from compressor operation and maintenance are caused by the failure to observe basic safety rules or precautions. An accident can often be avoided by recognizing a potentially hazardous situation before it occurs, and by observing the appropriate safety procedures. Hazards that must be avoided to prevent bodily injury or machine damage are identified by **WARNINGS** on the compressor and in this Instruction Manual.

Never use this compressor in a manner that has not been specifically recommended by manufacturer, unless you first confirm that the planned use will be safe for you and others. Do not modify this equipment for any use other than it was designed. Do not exceed the rated capacity stated in the specifications.

#### **SIGNAL WORDS:**

WARNING: Indicates a potentially hazardous situations which, if ignored, could result in serious personal injury.

CAUTION: Indicates a hazardous situations which, if ignored, could result moderate personal injury, or could cause machine damage.

NOTE: Emphasizes essential information

TECHNICAL SPECIFICATIONS		
Tank Capacity:	150L	
Motor:	3HP / 2.2kW	
Max Pressure:	10bar / 145psi	
Cylinder:	2 x 65mm	
Stroke:	58mm	
Speed:	1060rpm	
Displacement:	14.4cfm / 408l/min	
Input Supply:	230V ~ 50Hz	
Plug:	UK 13A	
Net Weight:	102kg / 224lbs	
Size (I x b x h):	1350 x 460 x 910mm	





















# 3. Safety Information

# **WARNING:**

Death or serious bodily injury could result from improper or unsafe use of compressor. To avoid these risks, follow these basic safety instructions.

# READ ALL SAFETY INSTRUCTIONS

## 1. Never touch moving parts

Never place your hands, fingers or other body parts near the compressor's moving parts.

## 2. Never operate without all the supplied safety guards in place

Never operate this compressor without the guards or safety features in place and in proper working order. If maintenance or servicing requires the removal of a guard or safety features, be sure to replace the guards or safety features before resuming operation of the compressor.

#### 3. Always wear eye protection

Always wear safety goggles or equivalent eye protection. Compressed air must never be aimed at anyone or any part of the body.

#### 4. Protect yourself against electric shock

Prevent body contact with grounded surfaces such as pipes, radiators, ranges and refrigeration enclosures. Never operate the compressor in damp or wet locations.



# 150L AIR COMPRESSOR

#### 5. Disconnect the compressor

Always disconnect the compressor from the power source and remove the compressed air from the air tank before servicing, inspecting, maintaining, cleaning, replacing or checking any parts.

#### 6. Avoid unintentional starting

Do not carry the compressor while it is connected to its power source or when the air tank is filled with compressed air. Be sure the knob of the pressure switch in the "Off" position before connecting the compressor to its power source.

#### 7. Store compressor properly

When not in use, the compressor should be stored in dry place. Keep out of reach of children.

#### 8. Keep work area clean

Cluttered work areas can lead to injuries. Clear all work areas of unnecessary tools, debris, furniture etc...

## 9. Wear suitable clothing during operation

Do not wear loose clothing or jewellery. They can be caught in moving parts. Wear protective hair covering to contain long hair.

#### 10. Don't abuse the power cable

Never yank it to disconnect from receptacle. Keep cord from heat, oil and sharp edges.

11. Keep children and animals away from the work area.

# 12. Maintain compressor with care

Follow instructions for lubricating. Inspect cords periodically and if damaged, have repaired by authorized service facility. Inspect extension cords periodically and replace if damaged.

#### 13. Outdoor use extension cords

When compressor in used outdoors, use only extension cords in-tended for use outdoors and so marked.

#### 14. Stav alert

Watch what you are doing. Use common sense. Do not operate compressor when you are tired.

Compressor should never be used by you if you are under the influence of alcohol, drugs or medication that makes you drowsy.

#### 15. Check damaged parts and air leak

Before further use of the compressor, a guard or other part is damaged should be carefully checked to determine that it will operate properly and perform its intended function.

Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, air leak, and any other conditions that may affect its operation.

A guard or other part that is damaged should be properly repaired or replaced by an authorized service centre unless otherwise indicated elsewhere in this instruction manual. Have defective pressure switches replaced by authorized service centre. Do not use compressor if switch does not turn it on and off.

#### 16. Handle compressor correctly

Operate the compressor according to the instructions provided herein. Never allow the compressor to be operated by children, individuals unfamiliar with its operation or unauthorized personnel.

# 17. Keep all screws, bolts and covers tightly in place

Keep all screws, bolts, and plates tightly mounted.

Check their conditions periodically.

## 18. Keep motor air vent clean

The motor air vent must be kept clean so that air can freely flow at all times. Check for dust build-up frequently.

#### 19. Operate compressor at the rated voltage

Operate the compressor at voltages specified on their nameplates. If using the compressor at a higher voltage than the rated voltage, it will result in abnormally fast motor revolution and may damage the unit and burn out the motor.

# 20. Never use a compressor which is defective or operating abnormally

If the compressor appears to be operating unusually, making strange noises, or otherwise appears defective, stop using it immediately and arrange for repairs by a authorized service centre.

#### 21. Do not wipe plastic parts with solvent

Solvents such as gasoline, thinner, benzine, carbon tetrachloride, and alcohol may damage and crack plastic parts. Do not wipe them with such solvents. Wipe plastic parts with a soft cloth lightly dampened with soapy water and dry thoroughly.

#### 22. Use only genuine replacement parts

Replacement parts not original may void your warranty and can lead to malfunction and resulting injuries. Genuine parts are available from your dealer.

#### 23. Do not modify the compressor

Do not modify the compressor. Always contact the authorized service centre any repairs. Unauthorized modification may not only impair the compressor performance but may also result in accident or injury to repair personnel who do not have the required knowledge and technical expertise to perform the repair operations correctly.

# 24. Turn off the pressure switch when the compressor is not used

When the compressor is not used, turn the knob of the pressure switch off, disconnect it from the power source and open the drain cock to discharge the compressed air from the air tank.

#### 25. Never touch hot surface

To reduce the risk of burns, do not touch tubes, heads, cylinder and motors.

#### 26. Do not direct air stream at body

Risk of injury, do not direct air stream at persons or animals.

#### 27. Drain tank

Drain tank daily or after 4 hours of use. Open drain fitting and tilt compressor to empty accumulated water.

## 28. Do not stop compressor by pulling out the plug

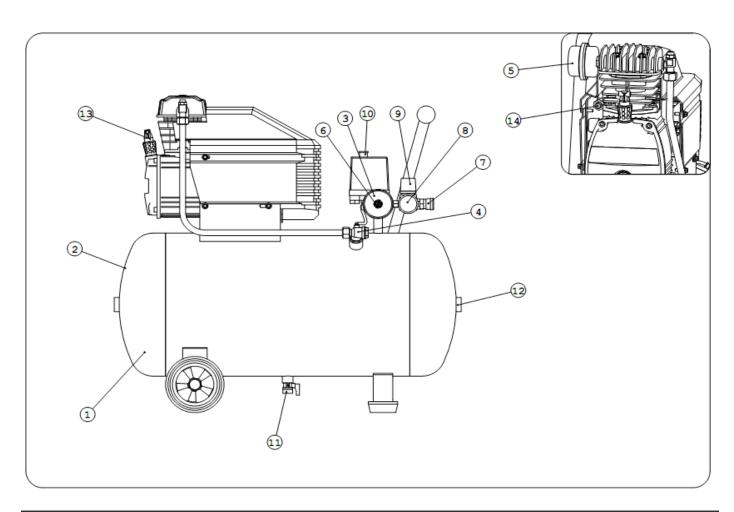
Use the "auto/off" knob of pressure switch.

#### 29. Use only Jefferson recommended air handling parts

Acceptable for pressure not less than 125 psi (8.6 Bar). Repairs should be conducted only by authorized Jefferson service centre.



# 3. EQUIPMENT IDENTIFICATION



1. Air Reservoir Tank	8. Line Pressure Gauge.
2. Tank Rating Plate	9. Line pressure Regulator.
3. Pressure Gauge	10. Pressure Switch.
4. Non-Return Valve	11. Reservoir Condensate Drain Bung
5. Air Inlet Filter	12. Tank Outlet (Sealed)
6. Safety Valve	13. Oil Level Dipstick
7. Air Line Coupling	14. Overload Protection Reset Switch

## SCOPE:

This compressor has been designed and built for intermittent duty applications. Although the compressor is equipped with an overload cut-out, Jefferson Tools recommend the compressor duty cycle never exceeds 50% and that continuous operation never exceeds 15 minutes.

In addition to pneumatic tools the compressor may be connected to a variety of other tools intended for washing, spraying and blowing etc.

#### UNPACKING

After removing the packing materials, check to ensure the product is in perfect condition and that there are no damaged parts from transit. If in doubt, do not use the product and notify your Jefferson Dealer.

The packaging materials (cardboard, plastic bags, polystyrene, etc), must be disposed of in an appropriate manner and recycled where possible. These materials must not be left within the reach of children as they are potential sources of danger.



# 4. UNPACKING & ASSEMBLY

Upon receipt of the compressor, ensure all components are present and have remained undamaged in transit..Retain the packing materials and packaging in case future transportation of the compressor is necessary. We recommend that the packaging is kept, at least within the period of the guarantee.

#### WHEELS AND ANTI-VIBRATION FOOT

Pass the 15mm bolt through the wheel, the compressor's frame and secure with the 15mm nut. Press the rubber anti-vibration foot into the front position. Locate the wheel onto the axle and secure in place with the internal self locking washer (single use only).

#### AIR FILTER

If not already fitted, remove the transit bung from the top of the head and screw the air filter assembly into position.

#### **OIL BREATHER**

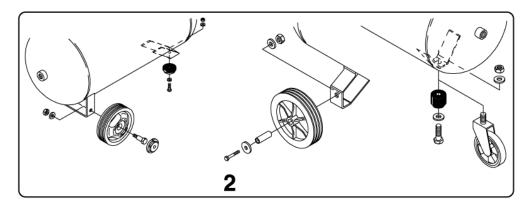
- For transportation purposes the oil breather is supplied in a separate bag.
- · Read the caution plate and take off the plastic bung from the crankcase, add oil and then assembly the oil breather.
- The plastic bung should be retained for future use should it be necessary to transport the unit.

#### WARNING

Never operate the compressor with only the plastic transportation bung fitted. Under normal use internal pressure can expel the bung along with oil from the head, possibly leading to damage.

PLEASE NOTE THE FOLLOWING PHOTOGRAPHS & INSTRUCTIONS ARE FOR REFERENCE ONLY AND MAY DIFFER FOR YOUR COMPRESSOR MODEL. PLEASE CONTACT JEFFERSON TOOLS IF YOU NEED ANY ADVICE ON THE ASSEMBLY PROCEDURE.



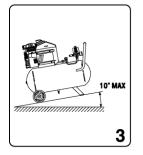


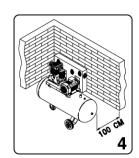
Position the compressor on a flat surface or with a maximum permissible inclination of 10° (**Fig.3**), in a well aired place, protected against atmospheric agents and not in a place subject to explosion hazard. If the surface is inclined and smooth, check if the compressor moves while in operation – if it does, secure the wheels with two wedges.

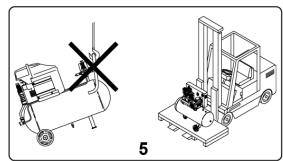
If the surface is a bracket or a shelf top, make sure it cannot fall, securing it in a suitable way.

To ensure good ventilation and efficient cooling, the compressor's belt guard must be at least 100 cm from any wall (**Fig. 4**). Compressors fitted on the tank, with fixed feet, should not be rigidly secured to the ground and fitted with 4 anti-vibration supports.

Ensure that the compressor is transported correctly, do not overturn it or lift it with hooks or ropes (**Fig. 5-6**)









# 4. ELECTRICAL SAFETY

# **GROUNDING INSTRUCTIONS**

WARNING: This appliance must be earthed. A plug with bare flexible wires exposed is hazardous if engaged in live power socket outlet.

To eliminate the possibility of an electric shock your machine has been fitted with a CE approved, non re-wireable moulded plug and cable which incorporates a fuse, the value of which is indicated on the pin face of the plug. If the plug is marked with the symbol and the fuse needs replacing, a CE approved fuse must be used of the same specified amp rating. The fuse cover is detachable, never use the plug with the cover omitted. If a replacement fuse cover is required, ensure it is the same colour as that visible in the pin face of the plug (i.e.red). If the fitted plug is not suitable, it should be cut off and destroyed. The end of the cable should now be suitably prepared and the correct type of plug fitted.

# **EXTENSION CORDS**

#### IMPORTANT:

On product exceeding 2000W it is recommended that the power cable and/or extension cable are fully unwound before a connection is made to the power supply. However, ensure the residual cable dose not pose a trip hazard. Use only extension cords that have three-prong grounding type plugs and three-pole receptacles that accept the compressor's plug. Replace or repair any damaged cords. Make sure your extension cord is in good condition. When using an extension cord, be sure to use one heavy enough to carry the current your product will draw. An under sized cord will cause a drop in line voltage resulting in loss of power and overheating. The table shows the correct size to use depending on cord length and name plate ampere rating. If in doubt, use the next heavier gauge. The smaller the gauge number, the heavier the cord.

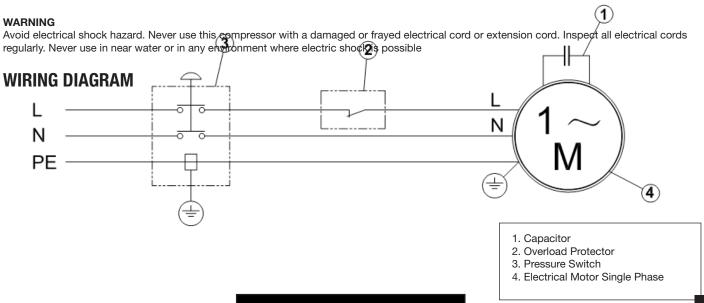
Table 1: Section Valid For A Max Length Of 20M Single-Phase

HP	kW	220/230V	110/120V
0,75 - 1	0,65–0,7	1,5	2,5
1,5	1,1	2,5	4
2	1,5	2,5	4 – 6
2,5 - 3	1,8 – 2,2	4	/

The diameter of the extension cable of the 3-phase compressors must be in proportion to its length: see table (tab 2)

Table 2: Section Valid For A Max Length Of 20M Three-Phase

HP	kW	220/230V	110/120V
0,75 - 1	0,65–0,7	1,5	2,5
1,5	1,1	2,5	4
2	1,5	2,5	4 – 6
2,5 - 3	1,8 – 2,2	4	/





# **ELECTRICAL CONNECTIONS**

Single-phase compressors are supplied with an electrical cable and a two-pole + earth plug. The compressor must be connected to a grounded power socket (Fig.12).

Three-phase compressors (L1+L2+L3+PE) must be installed by a specialised technician. Three-phase compressors are supplied without a plug. Connect a plug, with screw-on grommet and securing collar (**Fig.13**), to the cable, consulting the table below.

Нр	kW	Power supply Volt/ph	Plug model
2-3-4	1,5-2,2.3	220/230/3	16 A 3 pole+ground
		380/400/3	16 A 3 pole+ground
5,5-7,5-10	4-5,5-7,5	220/230/3	32 A 3 pole+ground
		380/400/3	32 A 3 pole+ground
15 - 20	11 - 15	220/230/3	63 A 3 pole+ground
		380/400/3	32 A 3 pole+ground

Compressors installed on the 500L tank, with capacity of HP7.5/55kW and HP10/7.5kW can be supplied a star/triangle starting control unit.

#### Installation instructions:

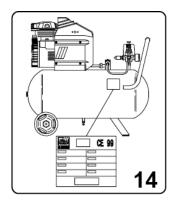
Secure the control unit box on a wall or on a fixed support, and provide it with a power cable with plug, of a diameter in proportion to its length. Any damage caused by incorrect connections of the power line to the mains, automatically excludes warranty of electrical parts. To avoid connection errors, we advise you to contact a specialised technician.

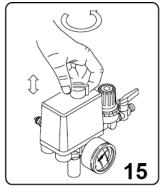
#### Important:

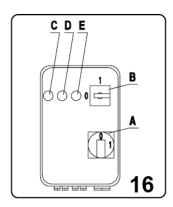
Never use the ground socket instead of the neutral wire. The ground connection must be made to meet safety standards (EN 60204). The plug of the power cable must not be used as a switch, but must be fitted in a power socket controlled by a suitable differential switch (thermal breaker).

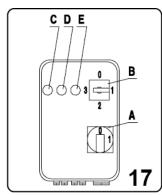
### Starting:

Check that the mains power matches that indicated on the electrical data-plate (**Fig.14**) – the permissible tolerance range is +/-5%. When first starting compressors operating on 3-phase voltage, check the rotation direction of the cooling fan by comparing it with the direction of the arrow on the belt guard or on the protective housing.









Turn or press into position "0" (according to the type of pressure switch fitted on the appliance) the knob located on the upper section (Fig. 15).

Fit the plug in the power socket (Fig. 12 - 13) and start the compressor, turning the pressure switch knob into position "I". The compressor is fully automatic, and is controlled by the pressure switch which stops it when tank pressure reaches maximum value and restarts it when it falls to minimum value. The pressure difference between maximum and minimum values is usually about 2 bar (29 psi).

The compressor will stop when it reaches exceeds the maximum operating pressure 8 bar (116 psi) and will restart automatically when the pressure inside the tank drops to 6 bar (87 psi).

After connecting the compressor to the power line, load it to maxi-mum pressure and check exactly how the machine is operating.



# **ELECTRICAL CONNECTIONS**

Electrcal powered compressors must be connected to a power socket protected by a suitable differential switch (thermal-breaker).

The motor of coaxial compressors is equipped with an automatic thermal breaker located inside the winding – this stops the compressor when motor temperatures reach excessively high values.

If the breaker is tripped, the compressors restarts automatically after 10 to 15 minutes. The motors of compressor models coaxial double cylinders are supplied with a manually resetting automatic amperometric thermal-breaker, located outside the terminal board cover. When the breaker is tripped, wait for a few minutes and then reset the breaker manually (**Fig. 20**).

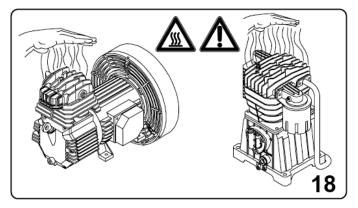
The motors of the belt drive series compressors are supplied with a manually resetting amperometric thermal-breaker, located on the terminal board cover. When the breaker is tripped, wait for a few minutes and then reset the breaker manually (**Fig. 20**).

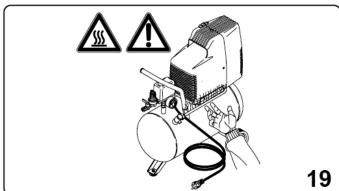
The safety davice is automatic in three-phase and silent compressors.

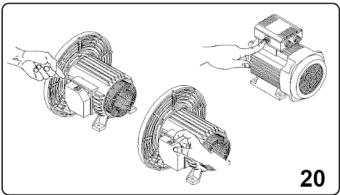
When the thermal-breaker is tripped, the pressure switch is re-leased to "0" (OFF) position.

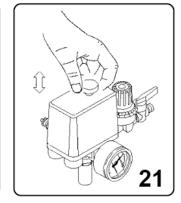
Wait for a few minutes and return the pressure switch to "I" (ON) position. For compressors supplied with a control unit, the thermal-breaker is installed inside the control unit. When the thermal-breaker is tripped, observe the following procedure (Fig. 22):

• Turn the switches on the control unit cover to position "0", open the cover and press push-button 1 of the thermal-breaker. Close the cover of the control unit and restart the compressor, observing the operations described in the paragraph "Starting compressors with control unit". The same instructions apply to compressors powered at 60Hz.













# 5. SAFETY VALVE

#### **IMPORTANT**

The safety valves supplied with this equipment are designed and constructed for use exclusively with compressed air, free from impurity. The materials used in construction are suitable for operating the valve at the rated pressure and temperatures. The viton or NBR gasket conserves the resistance characteristics, even in prolonged use. The valve caulking is designed to impede calibration, modification or tampering. Any modification or recalibration of of the safety valve will nullify warranty and potentially make the equipment unsafe.

Valve installation must be performed exclusively by Jefferson approved engineers. Checking the integrity of the valve before installation is obligatory. Also, check that the valve pressure is no greater than the operating pressure of the tank or of the system that it is installed with.

- Check that the discharge flow rate of the valve is greater than the quantity of the air to discharge.
- The safety valve must be positioned directly on the tank in a vertical position, in a dry, accessible place protected against the weather and far away from liquids or condensation.
- It must be positioned to allow sufficient space all around for correct air discharge, without causing damage to persons or the surrounding area.
- The valve rod must be free in its movement when discharging.
- The connection between the valve and the part to be protected must be free from all kinds of choking and be as short as possible so as not to reduce the discharge flow rate of the valve itself.
- The connection passage area must be greater than the valve orifice area.
- During installation screw on the valve with a torque spanner using the hexagonal part of the body.
- Apply a maximum torque of 30Nm, paying attention not to cause any deformation; using pincers, pliers, hammers or tools other than a
  hexagonal spanner is forbidden and will void warranty.
- Check that the inlet hole and the shutter are not blocked by glue, Teflon or similar materials that could bind the shutter or other functional components.
- If the valve is replaced the compressed air contained in the system must be discharged first.

#### **WARNING:**

Jefferson Tools cannot take any responsibility for damage caused to persons and/or things due to failure to observe these instructions.

# 6. OPERATION

# ON/OFF SWITCH

Prior to connecting the compressor to the power supply, ensure the pressure switch is on the **OFF** position. On initial start-up open the reservoir condensate drain bung (A), adjust the pressure regulator (B) to the maximum pressure. Unscrew the bung anti-clockwise to open valve.

Pull the pressure switch (C) up to start the compressor.

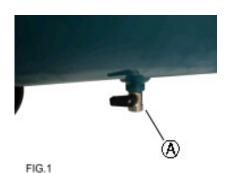
Allow the machine to run for 10 minutes with the air escaping from the reservoir tank before closing the drain bung (A).

Ensure the tank pressure reaches 8 bar as indicated on the gauge (D) before the pressure switch shuts off the motor.

**Note:** When the drain bung is closed the tone from the motor will change. The compressor motor will automatically restart when the tank pressure drops to approximately 2 bar less than the maximum pressure.

**WARNING:** Never stop the compressor using the mains connection. Always switch off the compressor by pressing the pressure switch button down. The compressed air will be vented from the head and allowing an easy re-start.

**NOTE:** During correct operation a whistle of compressed air escaping/releasing will be heard when the motor strops and a protracted whistle (approx. 20-30 seconds) whenever the compressor is started with no pressure in the tank.



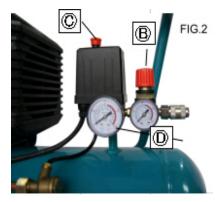


FIG.3



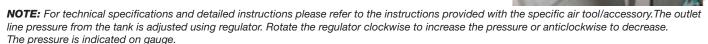
# **OVERLOAD CUT OUT**

The compressor is equipped with an overload cut out (E) which operates as a safety device to protect the motor.

Should a fault occur and begin to overheat the motor the overload cut out will automatically operate, cutting power.

This prevents damage occurring to the motor.

Allow 5 minutes for the machine to cool prior to attempting to reset the overload cut out (E). Press button. If after restarting the overload cut out is activated again, switch off the machine, disconnect the power supply and contact your Jefferson Dealer for advice.



ATTENTION: After each use set the pressure to zero to help prolong \the life of the regulator and avoid damage.

**AIR LINE CONNECTION:** The compressor comes equipped with a quick in line female connector. To insert a male connector, hold collar backward. When fully insearted, release the collar. If a different style of connection is required the connector can be replaced.

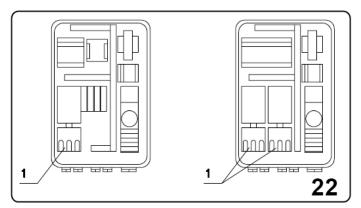
NOTE: When fitting the replacement ensure the threads are sealed with PTFE tape for an air tight union.

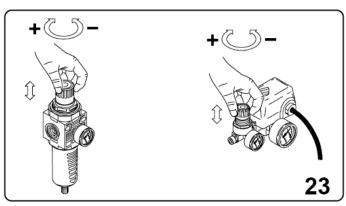
# ADJUSTING THE OPERATING PRESSURE

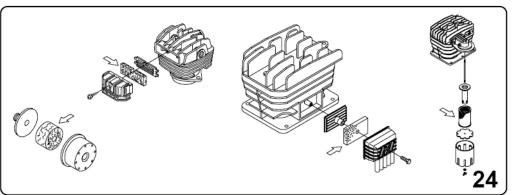
You do not have to use the maximum operating pressure at all times. On the contrary, the pneumatic tool being used often requires less pressure. On compressors supplied with a pressure reducer, operating pressure must be correctly adjusted.

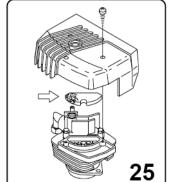
Release the pressure reducer knob by pulling it up, adjust pressure to the required value by turning the knob clockwise to increase pressure and anti-clockwise to reduce it. When you have obtained optimum pressure, lock the knob by pressing it downward (**Fig. 23**). For pressure reducers equipped without a pressure gauge, the set pressure can be seen on the graduated scale located on the reducer body. On pressure reducers equipped with a pressure gauge, pressure can be seen on the gauge itself.

WARNING: Some pressure regulators do not have "push to lock", therefore simply turn the knob to adjust the pressure.











Before attempting any maintenance jobs on the compressor, make sure of the following:

- Master power switch in position "0".
- Pressure switch and the control unit switches all off, in position "0".
- No pressure in the air tank.

Every 50 hours of duty: we advise you to dismantle the suction filter and clean the filtering element by blowing compressed air on it (**Fig. 24**). You are recommended to replace the filter element at least once if the compressor operates in a clean environment, but more frequently if in a dusty environment. The compressor generates condensate water which accumulates in the tank. The condensate in the tank must be drained at least once a week, by opening the drain tap (**Fig. 26**) under the tank. Take care if there is compressed air inside the cylinder, and water could flow out with considerable force. Recommended pressure: 1 – 2 bar max. Condensate of compressors that are oil lubricated must not be drained into the sewer or dispersed in the environment as it contains oil.

# **OIL CHANGES**

The compressor is filled with synthetic oil. We recommend a full change of oil in the pumping element within the first 100 hours of duty. Unscrew the oil drain plug on the housing cover, allow all the oil to flow out, and re-screw the plug (Fig. 27 - 28).

Pour oil into the upper hole of the housing cover (Fig. 29 - 30) until it reaches the level indicated on the stick (Fig. 9) or indicator (Fig. 11) Pour oil into the upper hole of the head (Fig. 30) in belt assisted units designed for topping up in that area. Once a week: check oil level of the pumping element (Fig. 11) and see if it needs topping up. For operation at ambient temperature in the range -5°C to +40°C, use synthetic oil. The advantage of this oil is that is does not lose its characteristics either in winter or summer. Do not drain used oil into the sewer or dispose of it in the environment.

# **MAINTENANCE**

#### **Hints For Efficient Operation**

- For efficient operation of the machine at full continuing load and at maximum operating pressure, make sure the temperature of the work environment indoors does not exceed +25°C.
- We advise you to use the compressor at 70% maximum duty per hour at full load as this ensures efficient operation of the product long-term.

#### **Storing The Packed And Unpacked Compressor**

For the whole time that the compressor is not used before unpacking it, store it in a dry place at a temperature between +5°C and + 45°C and sheltered away from weather. For the whole time that the compressor is not used after unpacking it, while waiting to start it up or due to production stoppages, place sheets over it to protect it from dust, which may settle on the components. The oil is to be replaced and the operational efficiency of the compressor is to be checked if it is not used for long periods.

#### **Pneumatic Connections**

Make sure you always use pneumatic tubes for compressed air with maximum pressure characteristics that are adequate for the compressor. Do not attempt to repair tubes if faulty.

Please Note: Jefferson Tools we reserve the right to make any modifications to this equipment without prior notice whenever necessary.



# **TROUBLESHOOTING**

Note: Please refer to the diagrams on the next page

#### Loss of air in valve under pressure switch

This trouble depends on poor tightness of the check valve - take the following action (Fig. 31):

- Discharge all pressure from the tank
- Unscrew the hexagon-head of the valve (A)
- Carefully clean both the rubber disk (B) and its seat.
- Refit all parts accurately.

#### Air losses

These can be caused by poor tightness of a union - check all unions, wetting them with soapy water.

#### Compressor turns but does not load

Coaxial compressors: (Fig. 32)

- this may be due to failure of the valves (C1 - C2) or of a seal (B1 - B2): replace the damaged part.

Pulley drive compressors: (Fig. 33)

- this may be due to failure of the valves F1 and F2 or of a seal (D1 - D2): replace the damaged part.

#### Compressor no starting

If the compressor has trouble starting, check the following:

- Does mains power match that of the data-plate? (Fig. 14)
- Are power cable extensions of adequate diameter or length?
- Is the work environment too cold? (under 0°C)
- For belt drive series the thermal-breaker tripped (Fig. 20).
- Is there oil in the housing to ensure lubrication? (Fig. 11)
- Is power supplied to the electrical line? (sockets well connected, thermal- breaker, fuses in good condition).

#### Compressor not stopping

- If the compressor does not stop when maximum pressure is reached, the tank safety valve comes into operation. To repair the valve, contact your nearest service centre.

# IMPORTANT

- Do not on any account unscrew any connection while the tank is pressurised always check if the tank is pressure free.
- Do not drill holes, weld or purposely deform the compressed air tank.
- Do not do any jobs on the compressor unless you have disconnected the power plug.
- Temperature in operating ambient: 0°C +35°C.
- Do not aim jets of water or inflammable liquids on the compressor.
- Do not place inflammable objects near the compressor.
- During down-times, turn the pressure switch to position "0" (OFF).
- Never aim the air jet at people or animals (Fig. 34)
- Do not transport the compressor while the tank is pressurised.
- Be careful with regard to some parts of the compressor such as the head and delivery tubes, as they can reach high temperatures. Do not touch these parts to avoid burns.(Fig. 18 19)
- Transport the compressor, lifting or pulling it with the appropriate grips or handles (Fig. 4 6)
- Keep children and animals well away from the machine operating area.
- If using the compressor for painting:
- a) Do not work in closed environments or near to naked flames
- b) Make sure there is adequate exchange of air at the place of work
- c) Protect your nose and mouth with an appropriate mask. (Fig. 35)
- If the electrical cable or plug are damaged, do not use the compressor and contact an authorised service centre to replace the faulty element with an original spare part.
- If the compressor is located on a shelf or on a top above floor height, t must be secured to prevent it falling while in operation.
- Do not put objects or your hands inside the protective grilles to avoid injury to yourself or damaging the compressor. (Fig. 36)
- Do not use the compressor as a blunt object toward things or animals, to avoid serious damage.
- When you have finished using the compressor, always remove the lug from the power socket.

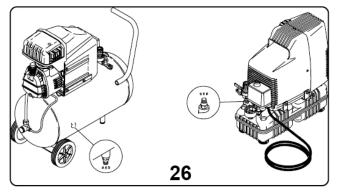
# N.B. Two-stage compressors can be supplied on request for use up to 4 bar. In this case:

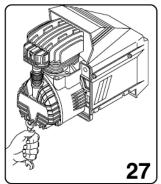
- Maximum operating pressure 14.75 bar
- Minimum operating pressure 14 bar

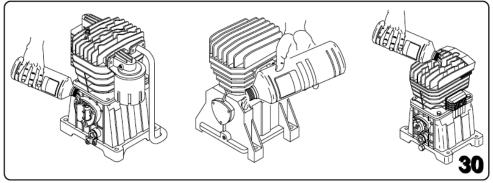
The level of acoustic pressure can increase from 1 to 10 dB(A) according to the place in which the compressor is installed.

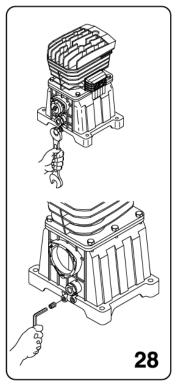
# 150L AIR COMPRESSOR

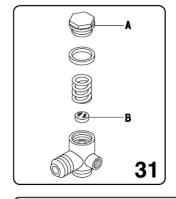


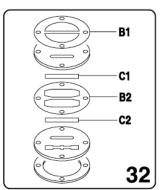


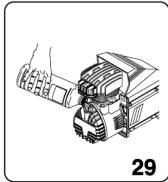


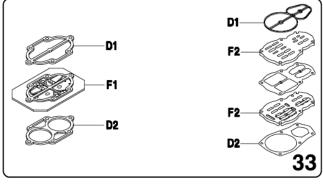


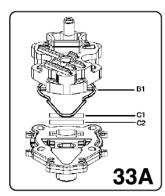


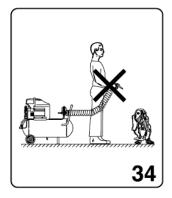


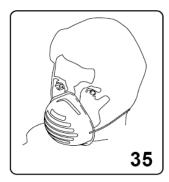


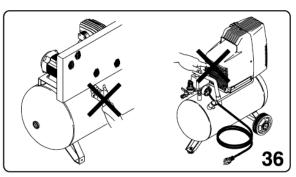
















# **EC DECLARATION OF CONFORMITY**

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) Noise Emission in the Environment by Equipment for Use Outdoors

2014/30/EU (as amended) Electromagnetic Compatibility

2006/42/EC (as amended) Machinery Directive

2014/29/EU (as amended) Simple Pressure Vessels Directive

2014/35/EU (as amended) Low Voltage Directive

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

Product Name/Model: JEFC150L10B-230 150L Compressor [230v]

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

Measured Sound Power Level: 96dB (LWA)

Guaranteed Sound Power Level: 96dB (LWA)

EU Member State, United Kingdom

Signed by:Stephen McIntyrePosition in the company:Operations Director

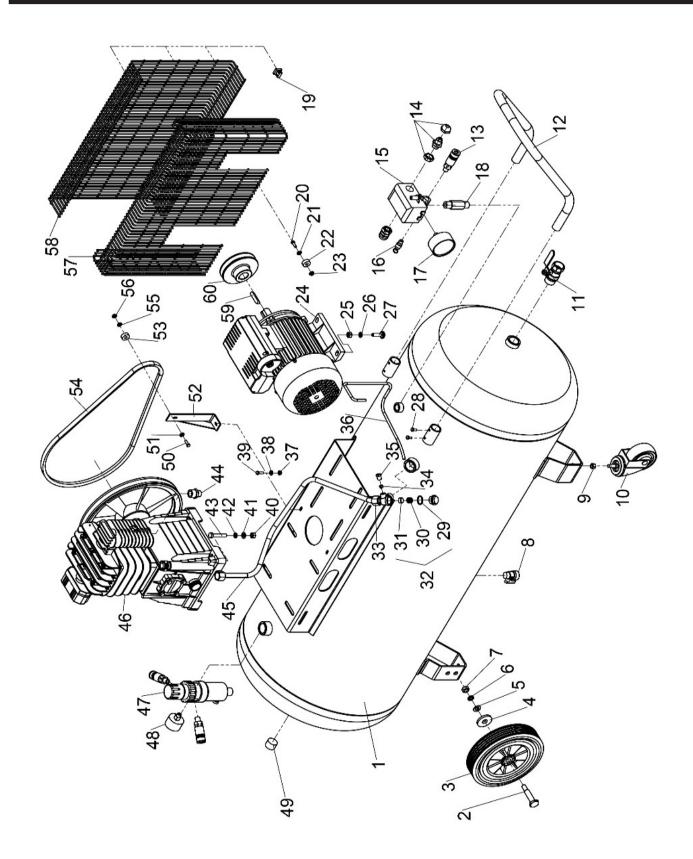
**Date:** 22 June 2017

Technical file holder's address as shown below

Name and address of manufacturer or authorised representative:



# **PARTS DIAGRAM**





# **PARTS LIST**

#	Quantity	Description
1	1	Tank
2	2	Wheel spacer
3	2	Wheel
4	2	Washer
5	2	Washer
6	6	Washer spring
7	2	Screw
8	1	Drain valve
9	2	Screw
10	2	Omni-directional wheel
11	1	Drain valve
12	1	Handle
13	3	Quick coupler
14	1	Sleeve
15	1	Pressure switch
16	1	Safety valve
17	1	Pressure gauge
18	1	Nipple
19	8	Belt guard holder
20	1	Screw
21	1	Washer
22	1	Belt guard washer
23	1	Nut
24	1	Motor
25	4	Nut
26	4	Washer
27	4	Screw
28	4	Screw
29	1	O-ring
30	1	Spring,Check valve

#	Quantity	Description
31	1	Seal,Check valve
32	1	Check valve
33	2	Nut
34	1	Sleeve
35	1	Sleeve nut
36	1	Discharge pipe
37	1	Nut
38	1	Washer
39	1	Screw
40	4	Nut
41	4	Washer
42	4	Washer spring
43	4	Screw
44	1	Nipple
45	1	Copper pipe ass'y
46	1	Pump
47	1	pressure regulating
48	1	Pressure gauge
49	1	Plug
50	1	Screw
51	1	Washer
52	1	Belt guard bracket
53	1	Belt guard washer
54	1	V-Belt
55	1	Washer
56	1	Nut
57	1	Belt guard
58	1	Belt guard
59	1	Key
60	1	Motor pulley



# 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, 13AAir Compressor 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.

#### 2 Years

• All Jefferson petrol and electric compressors

#### 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 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.

\* Jefferson reserve the right to void any warranty for damages identified as being caused through misuse

# **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 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. 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, **together with a copy of the original 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.

Please note: Jefferson will be unable to collect or process any warranty requests without a copy of the original proof of purchase.

#### 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

#### Disclaimer:

The information in this document is to the best of our knowledge true and accurate, but all recommendations or suggestions are made without guarantee. Since the conditions of use are beyond their control, Jefferson Tools® disclaim any liability for loss or damage suffered from the use of this data or suggestions. Furthermore, no liability is accepted if use of any product in accordance with this data or suggestions infringes any patent. Jefferson Tools® reserve the right to change product specifications and warranty statements without further notification. All images are for illustration purposes only.

# **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

**Tel.** +44 (0)1244 646 048 **Email:** sales@jeffersontools.com