



SCREW AIR COMPRESSOR

TS30 PMVS (30HP) • TS50 PMVS (50HP)



TUNCINDSPMVS-30.0
TUNCINDSPMVS-50.0

USER MANUAL

v.1.1



INTRODUCTION

- Direct-driven rotary screw compressor designed for high-capacity continuous, industrial use
- Fitted with an efficient heavy duty three-phase electric motor (IE4)
- Variable speed running modes
- High capacity screw air end
- Quiet running performance, ideal for environments requiring low noise emissions
- Powder-coated solid steel cabinet housing with foam noise insulation barriers
- 100% duty cycle application
- Advanced controller system
- Welded tank fully-compliant with the latest European manufacturing & safety standards

SPECIFICATIONS

Compressor	TUNCINDSPMVS-30.0	TUNCINDSPMVS-50.0
Working Pressure	10bar (145psi)	10bar (145psi)
Motor Power	30HP (22kW)	50HP (37kW)
Free Air Delivery (FAD)	99 cfm (2.8m³/Min)	209 cfm (5.9m³/Min)
Motor Speed	3000 rpm	3000 rpm
Oil Capacity	8.0L	11.0L
Voltage	415~50Hz/3	415~50Hz/3
Input Current	50A	90A
Efficiency	96% IE4	96% IE4
Sound Pressure	70 dB(A)	70 dB(A)
Weight	370kg	505kg



WARNING

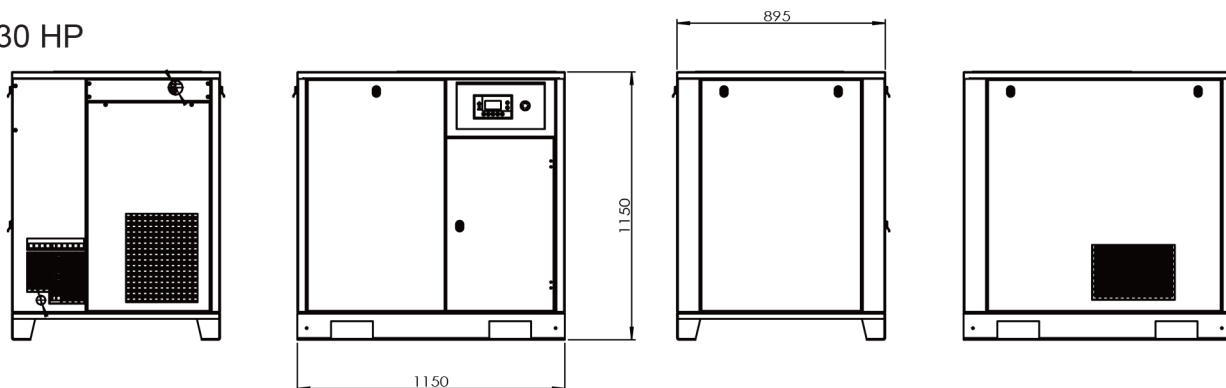
Please read all these instructions before operating this product and save these instructions. This manual has been compiled by Tundra Industrial and is an integrated part of the product with which it's enclosed and should be kept with it for the future reference.

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 Tundra Industrial 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 Tundra Industrial 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.

30 HP



50 HP

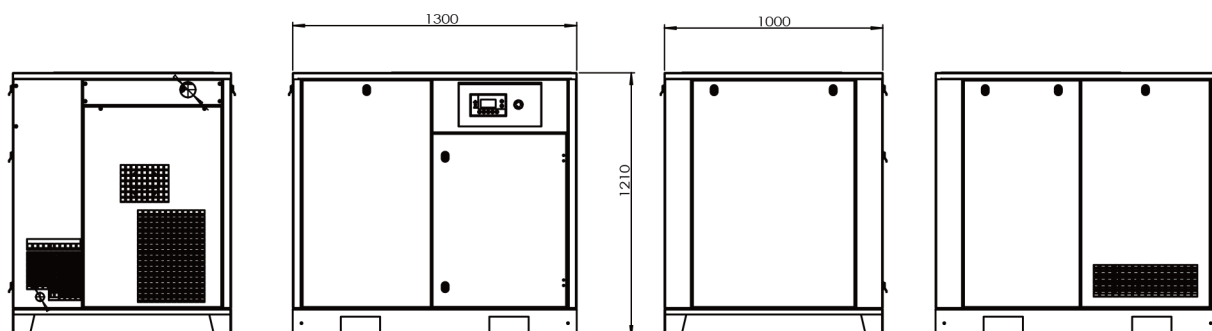


Fig.1

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, Tundra Industrial 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. Tundra Industrial reserve the right to change product specifications and warranty statements without further notification. All images are for illustration purposes only.

UNPACKING & POSITIONING

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

1. Check the outer packing for any signs of damage that may have occurred in transit
2. Unpack the compressor (paying attention to any instruction on the packaging itself).
3. Check the equipment for damage. Do not use the equipment if damage is detected. If in doubt, contact your dealer for advice.
4. Open the hatches and visually check the internal parts.
5. Store the packing (at least for the warranty period).

Lifting And Moving The Machine

Lift the equipment using a forklift truck (Fig.2). After removing the packing materials, check to ensure the product is in perfect condition and that there are no damaged parts from transit. If your compressor is supplied with anti-vibration mounts ensure that they are fitted correctly as required.

Positioning

Position the compressor on a flat surface in a well aired place, protected against atmospheric agents and not in a place subject to explosion hazard.

The compressor should be installed in a dust free and well-ventilated working environment that adheres to your local Health and Safety and workplace standards. The ideal environmental temperature should be between 5 ° C & 45 ° C.

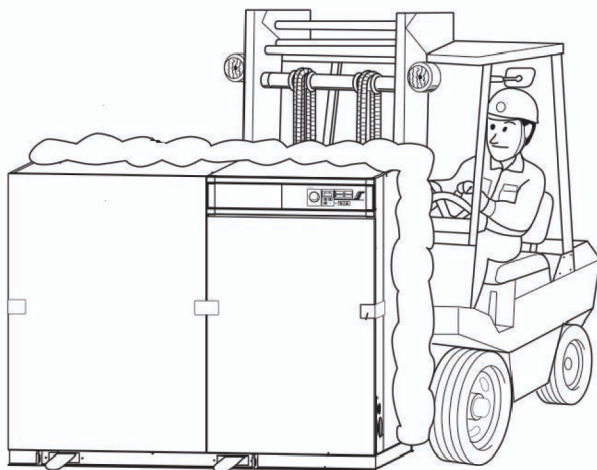
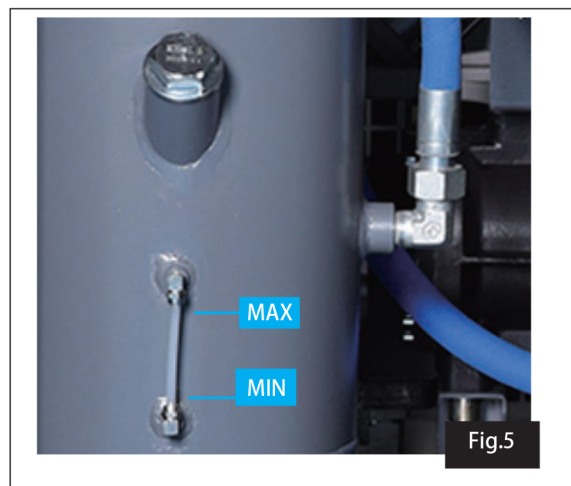
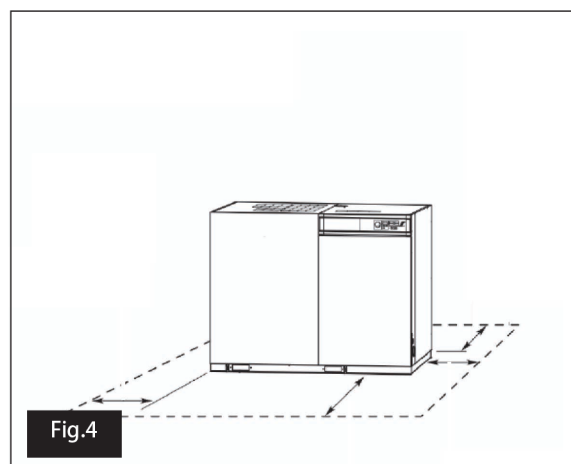
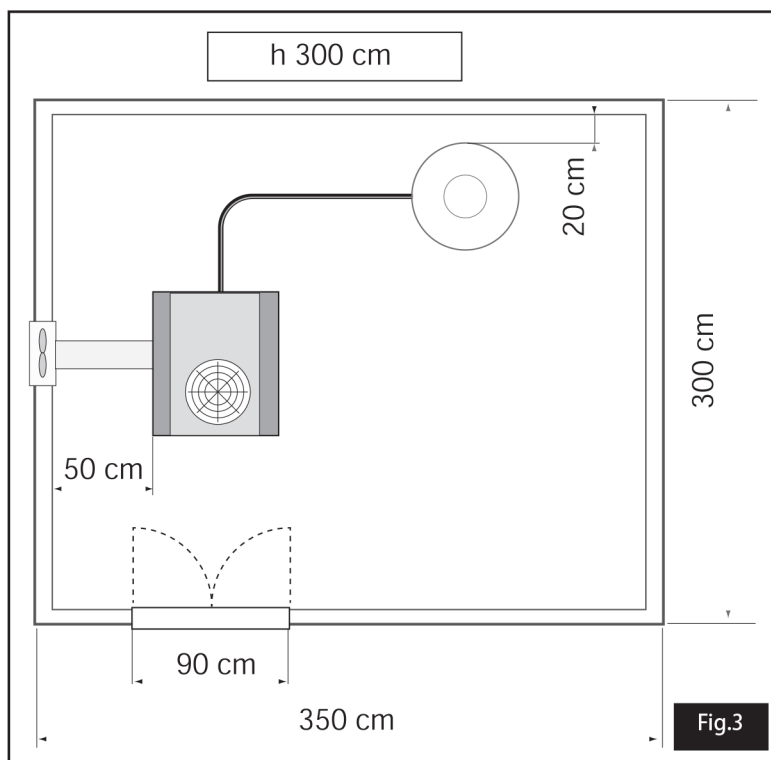


Fig.2



Installation

Ensure that the compressor is installed with a minimum of 50cm from walls and other objects or fixtures (Fig.3, Fig.4).

Check the correct oil level as shown (Fig.5)

Position the compressor in a stable manner on a level surface, making sure that you leave at least 50cm free between the equipment and any walls or other surfaces to allow sufficient air flow for the ventilation system.

Position the air tank and connect the compressor and tank using the flexible pipe supplied. The flexible pipe helps to prevent the transmission of vibrations produced by the compressor to the air distribution line.

Important: Hot (exhaust) air escapes from the top of the compressor at a temperature of about 15-35°C higher than the environmental temperature. It is essential to ensure sufficient ventilation within the working environment to accommodate the exhaust air. If necessary during the summer months you can fit an additional exhaust pipe with section more or less equal to the radiator, together with a fan to extract the hot air outside of the working environment to ensure a safe working temperature.

CHECKS BEFORE FIRST USE

Check Oil Level:

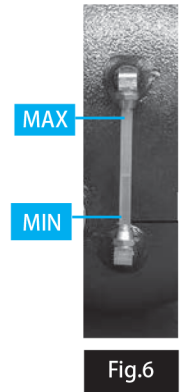
Before using the compressor check the oil level using the inspection glass. If the oil is not between the MIN and MAX marks it should be topped up with a suitable screw compressor oil (for example EcoPress 48, RotEnergy Plus) contact your nearest dealer for advice if required before filling (Fig.6).

Check Power Supply Is Correct For This Compressor:

It is essential that the air compressor has an adequate power supply. The correct voltage and supply ratings are shown on the aluminium foil tank label. Always check with a qualified electrician for advice on how to correctly install and test this equipment.

Always utilize more air hose before choosing to use an extension lead, as low voltage could cause damage to the motor. (Low voltage damage is not covered under warranty)

Read and understand all the electrical safety guidelines laid out in this manual, follow all applicable local authority safety guidelines.



Visual Equipment Inspection

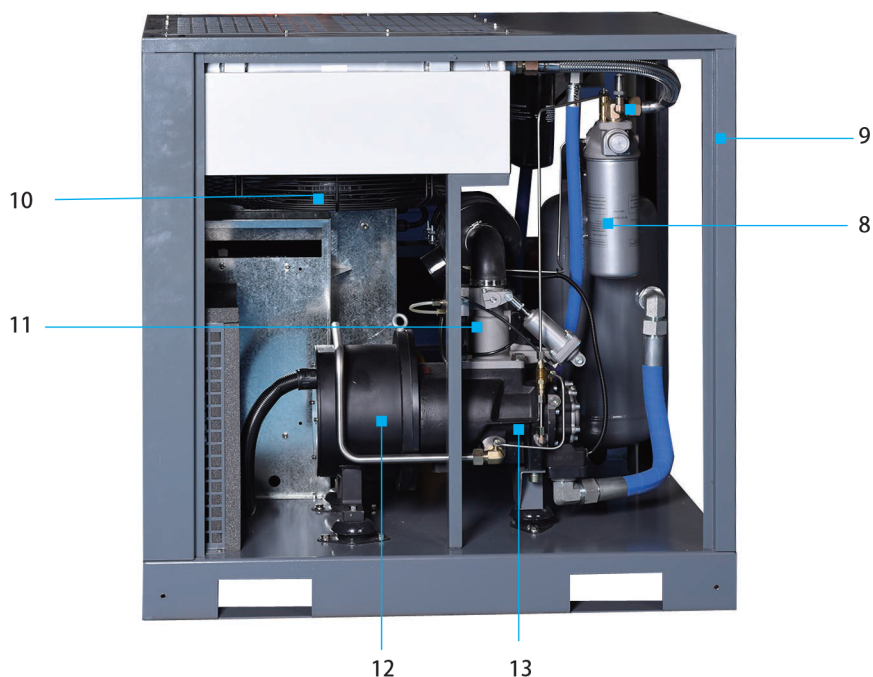
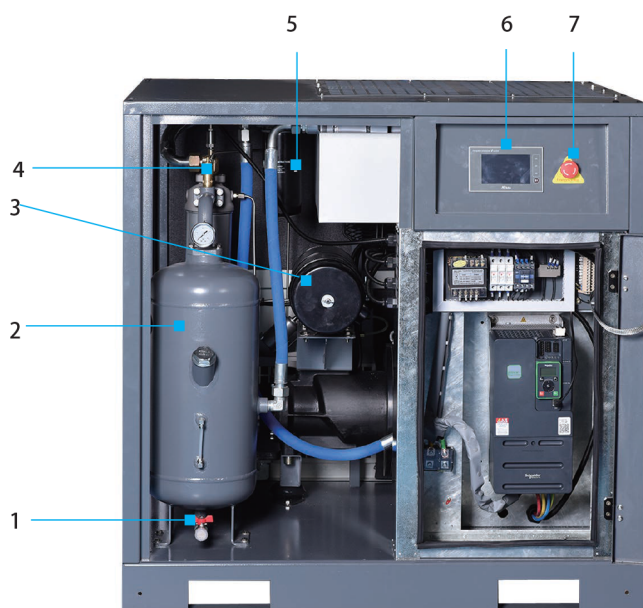
Check the equipment, cables, connections, hoses and all equipment parts for any signs of damage or fault prior to use. If you detect any damage contact your nearest Jefferson Dealer for advice.

Important: Do not run the compressor if any damage or faults are detected before use.

Transportation Bolts

Remove all transportation bolts (these are fixed in the factory prior to shipping to reduce the risk of vibration damage during transit).

EQUIPMENT IDENTIFICATION



1. Drain Valve
2. Air / Oil Separator Tank
3. Air Filter
4. Safe Valve
5. Oil Filter
6. Control Panel
7. Emergency Stop
8. Oil Separator Cartridge
9. Screw Compressor Housing & Assembly
10. Fan
11. Intake valve
12. Motor
13. Air End

SAFETY GUIDELINES



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 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 or modify it in any way that has not been specifically recommended by the manufacturer. Contact a qualified electrician for advice on any issues relating to electrical safety in your working environment.

Electrical Safety



Ensure that you check the equipment thoroughly to ensure it is safe and fit for purpose before each use. It is important that you inspect all plugs, sockets, power cables and electrical fittings for wear and damage and repair or replace any defective components. The risk of electric shock can be minimised by the correct use of the appropriate electrical safety devices.

For products that require a connection of a 415V supply you should contact a qualified electrician to ensure that a suitable rated supply is available. We recommend that you discuss the installation of an industrial round pin plug and socket with your electrician based on the compressor specifications.

- We recommend that you fit a Residual Current Circuit Breaker (RCCB) in the main distribution board and that a Residual Current Device (RCD) is used when operating this equipment.
- The Electricity at Work Act 1989 includes legislation that places legal implications on employers to ensure the safety of electrical devices in the workplace. The regulations dictate that all portable equipment must be inspected regularly and tested to ensure that it is safe for use. 'Portable equipment' means any electrical item that can be moved and this is often referred to as Portable Appliance Testing (PAT). PAT testing should be carried out regularly on this equipment by trained, authorised personnel, as required by the legislation.
- The Health and Safety at Work Act 1974 states that it is the responsibility of the owner of electrical appliances to ensure that both the equipment and working environments are maintained to ensure safe operation at all times.
- Check that all equipment cables are secure, correctly insulated, free from damage, and protected against short circuit and overload before connecting to the power supply. Do not use worn or damaged cables, plugs, sockets or other fittings.
- Ensure that the power supply matches voltage requirements specified on the equipment before use. Check with your electrician.
- Ensure the power cables are kept away from heat, oil and sharp edges.
- We recommend that the equipment is connected directly to the power supply without the use of extension leads as the resulting voltage drop can reduce motor performance.
- 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.
- Do not use the compressor in damp / wet conditions.
- IMPORTANT: During electrical installation please ensure that the motor is wired to turn in the direction indicated on the air end.

Equipment Safety

- Never place your hands, fingers or other body parts near the compressor's moving parts during operation. Ensure that the equipment is isolated from the power supply and all switches in the OFF position before carrying out maintenance, repairs or adjustments.
- Never operate this compressor without all 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.
- Always wear safety goggles or equivalent eye protection. Compressed air must never be aimed at anyone or any part of the body.

- When not in use, the compressor should be stored in dry place. Keep out of reach of children. Keep children and animals away from the work area.
- Clear all work areas of unnecessary tools, debris, furniture etc. prior to use. Cluttered work areas can lead to injuries.
- Do not wear loose clothing or jewellery when operating this equipment. They can be caught in moving parts. Wear protective hair covering to contain long hair.
- Follow instructions for lubricating this equipment as required.
- Watch what you are doing and remove any potential distractions before use. Use common sense at all times.
- Do not operate this equipment when you are tired or if you are under the influence of alcohol, drugs or medication that makes you drowsy.
- Check for the correct alignment of moving parts, binding of moving parts, condition of parts, mounting, and air leaks, and any other issues that might affect the safe operation of this equipment. A guard or other part that is damaged should be properly repaired or replaced by an authorized Jefferson service centre unless otherwise indicated elsewhere in this instruction manual. Have defective pressure switches replaced by an authorized service centre. Do not use compressor if the switch does not turn it on and off.
- Operate the compressor according to the instructions provided in this manual. Never allow the compressor to be operated by children, individuals unfamiliar with its operation or unauthorized personnel.
- Keep all screws, bolts, and plates tightly mounted. Check regularly.
- The motor air vent must be kept clean so that air can freely flow at all times. Check for dust build-up frequently and clean as required.
- If the equipment 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.
- Solvents such as petrol, thinner, benzene, 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.
- Only use Jefferson approved replacement parts. Non-approved parts will void your warranty and can lead to malfunction and resulting injuries. Genuine parts are available from Jefferson your dealer.
- Do not modify the compressor for any use other than which it was designed for by the manufacturer. Do not tamper with or attempt to adjust the tank, pressure switch or safety valve. Never strap anything to the tank. Do not subject the tank to impact, vibration, heat, abrasion or corrosive materials.
- Always contact an authorized service centre for advice on 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.
- When the compressor is not in use, ensure the pressure switch is turned off, disconnect the equipment from the power source and open the drain cock to discharge the compressed air from the air tank.
- To reduce the risk of burns, do not touch tubes, heads, cylinder and motors. During or immediately after use. Allow equipment to cool down before carrying out maintenance, repairs or adjustments.
- Never direct the output jet of air at persons or animals. Ensure air supply valve is turned OFF before disconnecting the air supply hose.
- Read the all safety instructions for any tool or accessory used with the compressor and ensure the safe working pressure of any appliance used exceeds the output pressure of the compressor. If you are using a spray gun it is important to ensure that the work area has sufficient ventilation in place.
- Do not operate in the vicinity of flammable liquids, gases or solids.
- Do not operate the compressor without an air filter or restrict the air flow around the equipment.
- When the compressor is not in use ensure that it is switched off, disconnected from the power supply and the air and moisture drained from the tank.

WARNING LABELS

Warning Symbols:



High temperature hazard



Risk of electric shock



Risk of hot or dangerous gases in the work area



Pressurised container



Moving mechanical parts



Maintenance interventions in progress



Machine with automatic start-up

Prohibition Symbols:



Do not open the hatches with the machine functioning



If necessary, always use the emergency stop and not the line isolator switch



Do not use water to put out fires on electrical appliances



Read the user instructions carefully

OPERATION GUIDE

Digital Control Panel

When the compressor connected to the power supply and in regular operation the main interface on the digital control screen will show the following (Fig.7):

1. Exhaust Temperature
2. Air Pressure
3. Operating State

Button Operation



——Start button

When the air compressor is in the standby state, long press this button for more than 3S to start the air compressor operation.



——Shutdown button

When the air compressor is in the running state, long press this button for more than 3S to stop the air compressor operation.



——Reset button

When the machine is down, press this button to reset the fault.



——Next page

Press this button to enter other viewing and setup pages.



——Return page

Pressing this button will return to the previous page of this page.



——power:

The indicator lights when the controller is powered.



——Operation:

The indicator lights when the controller is powered.



——Fault:

The fault indicator light is on during the warning and the fault, and is cleared when the alarm or fault is cleared.



Fig.7

Breakdown Alarms

There are a number of different alarm settings (varying in severity) which will alert the user to operating issues with the compressor and instructions will be shown on the digital display how to resolve them.

Safety Devices and Controls

See (Fig.8 & Fig.9)

- A: Pressure transducer: adjusts the START and STOP pressure
 B: Safety valve: opens the air discharge at the safety value.
 C: Maximum temperature probe: stops the motor when +110°C is exceeded

Startup Procedure

When starting the compressor for the first time follow the procedure listed below:

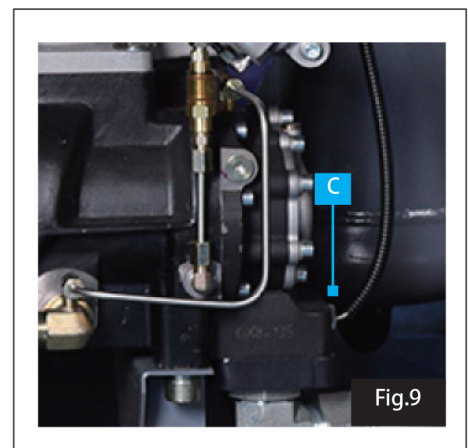
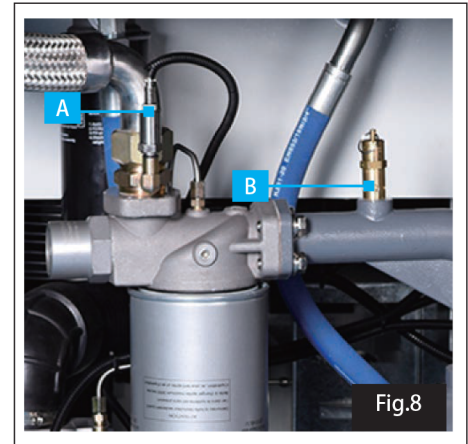
1. Check and confirmed that the compressor has been correctly installed and is free from damage.
2. Check the power supply to the air compressor control panel. If the power supply phase is incorrect, the LCD will show "power supply phase sequence error" information. Check with your electrician or contact Jefferson Tools for advice.
3. Rotation confirmation: Press the "START" button ,and press the " Emergency Stop Button " immediately to confirm that the rotation direction is correct.
4. START: press the "START" button to run the machine if setup is correct.

Shutdown Procedure

Stop: please press the "OFF" button, the air compressor will stop automatically.

Emergency button:

If there is any abnormal sound, vibration and leakage, please press the "emergency stop button" to stop the repair immediately



MAINTENANCE

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

1. The master power switch is turned off and equipment is isolated from the mains supply.
2. Pressure switch and the control unit switches are all in the OFF position.
3. All pressure has been removed from the air tank.

Procedure	Hours of Service
Check oil level and top-up if necessary	100
Clean suction filter	500
Check blockage and cleaning of the radiator	1000
Complete oil replacement	4000
Oil filter replacement	1000
Air filter replacement	1000
Oil-separator filter replacement	2500
Discharge condensation	At least once a month
Check minimum pressure valve	12000

Please note: Maintenance intervals are strongly influenced by environmental conditions and working conditions of the compressor. Contact your Jefferson Dealer for any additional information or advice on the maintenance schedule for this equipment.

TROUBLESHOOTING

FAULT	CAUSE	REMEDY
Motor stops due to circuit breaker relay intervention.	Supply voltage is incorrect. Motor over-heating.	Check / correct the voltage, press Reset button to restart. Check motor absorption and check relay calibration. If absorption is normal press Reset and re-start.
High oil consumption.	Faulty drainage. Oil level too high. Oil-separator filter broken. Faulty seal on the oil separator nipple.	Check the oil drainage pipe and the non-return valve. Check the oil level and discharge if necessary. Replace the oil-separator filter. Replace the oil-separator nipple seal.
Oil leak from suction filter.	Suction adjuster does not close properly.	Check the adjuster and the electrovalve
Safety valve opens continually.	Pressure too high. The suction adjuster does not close at cycle end. Oil-separator filter blocked.	Check pressure transducer & calibration Check adjuster and electrovalve Check the difference between the line pressure and the oil separator tank. Replace the oil-separator filter if necessary
Compressor overheating.	Environmental temperature is too high. Radiator is blocked. Oil level is too low. The electrovalve does not start-up.	Increase ventilation. Clean the radiator using solvent. Add oil. Check the command relay and fan motor.
The compressor is running but does not compress air.	The adjuster is closed, it does not open because it is dirty or has no command.	Remove the suction filter and check if the adjuster opens manually. If necessary, disassemble and clean. Check the presence of the signal between the pressure gauge and electrovalve. Replace any damaged parts.
The compressor continues to compress air above the maximum pressure.	The adjuster is open, it does not close because it is dirty or has no command. Faulty pressure transducer.	Disassemble and replace the adjuster Check the presence of the signal between the pressure gauge and electrovalve. Replace any damaged parts. Replace the transducer.
Oil located in the cabinet / housing	Leaking pipes / loose connections. Leak from the screw unit front flange.	Check pipes and tighten connections as required. Replace the sealing rings.
Tank pressure drops continually.	Air leak, check all connections.	Locate and rectify leak. Run the compressor at maximum pressure then switch off and disconnect. Brush a soapy water solution over the connections and look for bubbles. Tighten any connections showing leaks. If problem persists contact your authorised service agent.
Tank pressure won't build up or performance is reduced.	The drain valve is open. Air filter dirty or blocked.	Close the tank drain valve. Clean or replace the filter.
The compressor won't switch off.	Pressure switch fails to stop motor. Faulty pressure switch.	Contact your authorised service agent.
Tank pressure won't build up.	The compressor head gasket or valve plate is faulty.	Contact your authorised service agent.
There is a leak from the base of the pressure switch when the compressor is running.	Failure of the pressure relief valve. (Located in the base of pressure switch).	Contact your authorised service agent.
There is a leak from the base of the pressure switch when the compressor is stopped.	The non-return valve (from the tank) is leaking.	Disassemble and clean, if necessary replace valve insert. Contact your authorised service agent.
The compressor is noisy with metallic clangs / knocks.	Bearing problem. Low oil level.	Stop the compressor and contact a specialized service technician. Top up with oil.
The compressor sounds like it is trying to start (motor makes a humming noise).	Faulty capacitor or fault within the electric motor.	Stop the compressor and contact a specialized service technician.
Overload switch activated.	Startup load may have activated overload switch. Extension lead is too long (if in use) Head unloader not functioning.	Leave for a few minutes then press the reset button and restart. Remove the extension lead and test compressor by connecting the compressor as close to the main fuse box as possible. Stop the compressor and contact a specialized service technician.
Air leaks from the safety valve at pressures less than 10 bar.	The safety valve is faulty.	Replace the safety valve.
Compressor stops and will not restart.	Power failure. Motor failure.	Check electrical supply and fuse. Contact your authorised service agent.

ENVIRONMENTAL PROTECTION



**PLEASE
RECYCLE**

Recycle any packaging and unwanted materials instead of disposing of them as waste. All tools, accessories and packaging should be sorted, taken to a recycling centre and disposed of in a manner which is compatible with the environment.

When the product becomes completely unserviceable, reaches the end of its working life and requires disposal, drain off any fluids (if applicable) into approved containers and dispose of the product and the fluids according to local regulations.

WEEE Waste Electrical and Electronic Equipment Statement



Information on Disposal for Users of Waste Electrical & Electronic Equipment

This symbol on the product(s) and / or accompanying documents means that used electrical and electronic products should not be mixed with general household waste. For proper treatment, recovery and recycling, please take this product(s) to designated collection points where it will be accepted free of charge.

For private households:

Dispose of this product at the end of its working life and in compliance with the EU Directive on Waste Electrical and Electronic Equipment (WEEE). Contact your local solid waste authority for recycling information for this equipment.

Disposing of this product correctly will help save valuable resources and prevent any potential negative effects on human health and the environment, which could otherwise arise from inappropriate waste handling.

Please contact your local authority for further details of your nearest designated collection point.

Penalties may be applicable for incorrect disposal of this waste, in accordance with your national legislation.

For business users in the European Union:

If you wish to discard electrical and electronic equipment, please contact your dealer or supplier for further information.

Information on Disposal in other Countries outside the European Union:

This symbol is only valid in the European Union. If you wish to discard this product please contact your local authorities or dealer and ask for the correct method of disposal.

EC DECLARATION OF CONFORMITY

We, Tundra Industrial, as the authorised European Community representative of the manufacturer, declare that the following equipment conforms to the requirements of the following Directives:

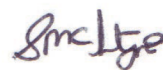
Directive:	Description:	Notified Body:
2000/14/EC (as amended)	Noise Emission in the Environment by Equipment for Use Outdoors	Ente Certificazione Macchine Srl Via Ca' Bella, 243 – Loc. Castello Di Serravalle – 40053 Valsamoggia (Bo) - Italy #1282
2014/30/EU (as amended)	Electromagnetic Compatibility	Sede Legale e Uffici Via Donatori di sangue, 9 - 46024 Moglia (MN) #0865
2006/42/EC (as amended)	Machinery Directive	
2014/35/EU (as amended)	Low Voltage Directive	
2014/29/EU (as amended)	Simple Pressure Vessels Directive	Technicka Inspekcia A.s. Trnavska Cesta 56 821 01 Bratislava Country : Slovakia #1354

Equipment Category: Air Compressor (Item 8)
 Model Number: TUNCINDSPMVS-30.0 TUNCINDSPMVS-50.0
 Product Name / Description: Belt Driven Screw Air Compressor • 10Bar • 415V~50Hz Three Phase

Measured Sound Power Level: 70dB(A)
 Guaranteed Sound Power Level: 70dB(A)

Signed by:

Stephen McIntyre



Position in the company:
 Date:

Operations Director
 18th July 2019

Name and address of manufacturer or
 authorised representative:

Tundra Industrial, Herons Way, Chester
 Business Park, Chester,
 United Kingdom, CH4 9QR
 Telephone: +44 (0)1244 646 048
 Fax: +44 (0)1244 241 191



USER MANUAL

SCREW AIR COMPRESSOR
TS30 PMVS (30HP) • TS50 PMVS (50HP)
415V ~ 50Hz / (3)

v.1.1

LIMITED WARRANTY STATEMENT

Tundra Industrial warrants its customers that its products will be free of faults in workmanship or material. Tundra Industrial shall, upon suitable notification, correct any faults, by repair or replacement, of any parts or components of this product that are determined by Tundra Industrial to be faulty or defective.

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

Warranty Period

Tundra Industrial will assume both the parts and labour expense of correcting faults during the stated warranty periods below.

All warranty periods start from the date of purchase from an authorised Tundra Industrial 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

- TUNCINDSPMVS-30.0 - Screw Air Compressor TS30 PMVS (30HP) (415V~50Hz / 3)
- TUNCINDSPMVS-50.0 - Screw Air Compressor TS50 PMVS (50HP) (415V~50Hz / 3)

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.jeffersonstools.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 Tundra Industrial confirm the existence of any fault covered by this warranty the fault will be corrected by repair or replacement at an authorized Tundra Industrial dealer or repair centre.

Packaging & Freight Costs

The customer is responsible for the packaging of the equipment and making it ready for collection. Tundra Industrial will arrange collection and transportation of any equipment returned under warranty. Upon inspection of the equipment, if no fault can be found or the equipment is not covered under the terms of the Tundra Industrial 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.

Important: Tundra Industrial reserve the right to void any warranty for damages identified as being caused through misuse

Warranty Limitations

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

Tundra Industrial will not be liable for incidental or consequential damages (such as loss of business or hire of substitute equipment etc.) caused by the fault or the time involved to correct the fault. This written warranty is the only express warranty provided by Tundra Industrial with respect to its products. Any warranties of merchantability are limited to the duration of this limited warranty for the equipment involved.

Tundra Industrial 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 Tundra Industrial (Tel: +44 (0) 1244 646 048) or their nearest authorised Tundra Industrial dealer where final determination of the warranty coverage can be ascertained.

Step 1 - Reporting the Fault

Online Method:

- Visit our website www.jeffersonstools.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 Tundra Industrial 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 Tundra Industrial repair centre. On receipt of this form Tundra Industrial 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 Tundra Industrial 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: Tundra Industrial 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 Tundra Industrial 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 Tundra Industrial 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 Tundra Industrial Repair centre (subject to part availability). Where parts are not immediately available Tundra Industrial will contact you with a revised date for completion of the repair.

General Warranty Enquiries

For any further information relating to Tundra Industrial warranty cover please call **+44 (0) 1244 646 048** or send your enquiry via email to **warranty@jeffersonstools.com**

