



PETROL AIR COMPRESSORS

OPERATING MANUAL

Contents

| | |
|---|----|
| General Safety Information | 3 |
| Safety Instructions | 4 |
| Safety Symbols Used In This Booklet | 4 |
| Safety Components | 5 |
| Know Your Compressor..... | 6 |
| Idler Control Valve | 7 |
| Idler Control Valve - Adjustment | 7 |
| Operating Instructions..... | 8 |
| Filter Regulator | 8 |
| Air Intake Filters | 9 |
| Compressor oil | 9 |
| Pump Head Tensions | 9 |
| Care and Maintenance | 10 |
| Common Faults/Troubleshooting | 11 |
| Warranty | 12 |

General Safety Information

Please read these instructions carefully, failure to do so could lead to serious injury. Basic safety precautions should be used to reduce the risk of electrocution, fire and injury.

Do Not use an electric compressor in damp or wet locations or exposed to rain.

Do Not use an Electric, Petrol compressor in a potentially explosive environment.

Never tamper with or modify the power cable/plug on any electric compressor as this will void any warranty. This includes, and is not limited to, grinding or filing the earth pin.

Never turn the compressor on or off using the mains switch as the primary switch. Always switch the compressor on or off using the "pressure switch" on the compressor as this releases head pressure stored in the pump. Failure to release this pressure can cause capacitor/motor failure.

Never use the compressor with safety guards removed.

Never allow children into the working area of an operational Compressor.

Never use compressed air for cleaning clothing or directly onto skin, as particles may be present in the air stream which could cause injury.

Do Not use this compressor for breathing purposes/apparatus unless the correct filtration specifically designed for this purpose has been used.

Never use a power extension lead as this is a common cause of voltage drop. Voltage drop will cause capacitor/motor failure. Use longer air hose to reach the work area.

Do Not modify your compressor in any way as this may void warranty. Contact Euroquip on the contact numbers listed in this manual for advise if you believe any modification is needed.

Ensure all connections, I.E hoses, pipes and fittings are the correct size, sealed, and suitable for the working pressure rating of the compressor.

Use the correct tools. Use tools or accessories that require less "Free Air" than the compressor can provide. Using a higher "Free Air" will extend the running time of the compressor which will result in excessive heat and damage.

Use a qualified repair agent for repairs. Repairs should only carried out by a Euroquip authorised repair agent, using genuine spare parts. Contact Euroquip to find an authorised repair agent near you.

Never use corrosive or flammable products to clean the compressor.

Safety Instructions

- Ensure the operator understands the operation of the compressor and is aware of how to stop the compressor in an emergency situation.
- Never operate the compressor without a working air filter.
- Allow room around the compressor for sufficient air flow needed for Pump/Motor cooling.
- Before carrying out any maintenance, ensure the compressor is switched off and drained of all air. For a petrol compressor, ensure the engine is switched off, and any power supply (for electric start) is disconnected.
- Ensure the compressor has cooled to room temperature before any maintenance or adjustment is made.
- After maintenance or adjustment, ensure all parts have been fitted correctly and all fittings have been correctly sealed.
- Never touch the Pump, Exhaust Tubes, Non Return Valves, Engine Exhaust or any metal component while the compressor is running as these parts maintain a high temperature during operation.
- Never use an air tool or pneumatic accessory that requires a larger "Free Air Delivery" (FAD) than the compressor can provide.
- Ensure the compressor is away from dust or vapours that could block air filters.

Safety Symbols Used In This Booklet



General Caution Possible risk of injury and or damage



Warning Risk of electric shock



Caution Compressed Air warning



Ear and Eye protection is recommended when using air compressors

Safety Components



230V Pressure Switch

The pressure switch is the primary "On-Off" switch for the electric compressor. It also controls the cut in and cut out pressures of the compressor and works in partnership with the Non Return Valve to vent head pressure from the pump.



400V Pressure Switch

The pressure switch is the primary "On-Off" switch for the electric compressor. It also controls the cut in and cut out pressures of the compressor and works in partnership with the Non Return Valve to vent head pressure from the pump.



Idler Control Valve

The Idler Control Valve controls the cut in and cut out pressures of a Petrol compressor and automatically controls the engine speed. The idler control valve also works as a Non Return Valve to vent head pressure from the pump.



Safety Valve

The safety valve is commonly found on the side of the pressure switch, or directly on the air receiver. This valve ensures that the vessel does not reach dangerous pressure levels should any problems occur.



Belt Guard

The belt guard protects the operator from moving parts that could cause injury or damage.



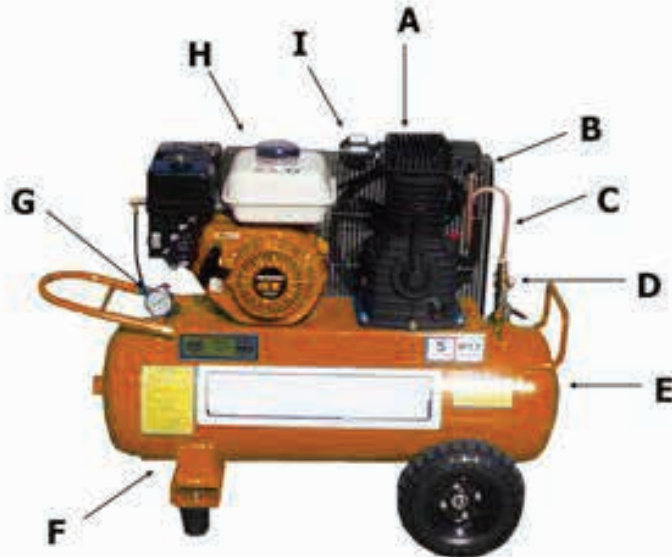
Filter Regulator

The filter regulator regulates a safe pressure for the desired air tool/application. The filter Regulator can be adjusted to the correct pressure by the operator.



Unless specified in this manual, do not adjust any component without first seeking advise from an authorised repair agent. Any unspecified adjustment could cause injury, damage or void warranty.

Know Your Compressor



A Compressor Pump
C Exhaust Tube
E Air Receiver Tank
G Pressure Gauge
I Air Intake Filter

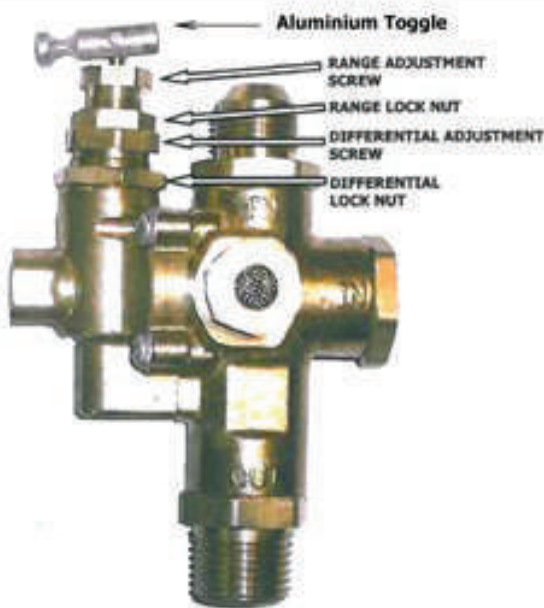
B Belt Guard
D Idler Control Valve
F Drain Plug
H Engine

Idler Control Valve



Idler Control Valve's are used in compressed air systems to actuate another device using a pneumatic (air) signal. On the Air Compressors, the Idler Control Valve is used to control the running speed of the engine in a set pressure range. The range has an unload setting and a load setting and as a compressor operates in this range, it is said to be cycling. At the unload setting, the pilot valve opens and actuates another device (throttle control). At the load setting, the pilot valve closes and returns the compressor to normal operation. It also has a built in Non Return Valve to automatically vent head pressure from the pump when the compressor reaches its preset cut out pressure. A lever (aluminium toggle) can be found on the idler which manually releases head pressure allowing the compressor to be started while the air receiver tank is pressurised.

Idler Control Valve - Adjustment



Cut-out pressures are adjustable between **60psi to 145psi** for a single stage pump and **60psi to 175psi** for a two stage pump.

The differential (difference between cut-in and cut-out pressures) is set at the factory and will not normally need to be adjusted.

However, should the differential need adjusting, please contact **Euroquip** or an authorised service agent.

This cannot be adjusted by the operator.

Adjustment Procedure

1. Loosen only Range Lock Nut
2. Turn Range Adjustment Screw clockwise to raise the cut-out/cut-in pressure levels, or counter clockwise to lower the cut-out/cut-in pressure levels.
3. Start compressor and note cut-out/cut-in pressures. Make adjustments as necessary using range screw and when desired cut-pressure is reached tighten Range Lock Nut.



The differential (difference between cut-in and cut-out pressures) is set at the factory and will not normally need to be adjusted. However, should the differential need adjusting, please contact Euroquip or an authorised service agent. This cannot be adjusted by the operator.

Operating Instructions

Your Petrol compressor has the correct engine oil added, and has been tested before delivery. After correctly installing the compressor and fitting the hose fittings, supplied air intake filter(s) etc, the compressor is ready to be operated. Please ensure any outlet valves, drain valves etc are closed.

- Please read and understand the engine manufacturers operating instructions before starting the engine.
- Follow the engine manufacturers starting instructions.
- Once started, the compressor will run at full Revs Per Minute (RPM) until it reaches its preset cut out pressure. At reaching this preset pressure, the compressor will switch to idle RPM automatically.

At any time during this process, the engine can be switched off by using the correct procedure listed in the engine manufacturers operating instructions.

NOTE: While operating in the idle RPM range, compressed air from the compressor pump will be vented to atmosphere through the muffler on the idler control valve. This is the Idler Control Valve operating correctly.



Please read and understand the engine manufacturers operating instructions before starting the engine. Never adjust engine speeds without authority from the manufacturer as this can result in damage to the machine, and void all warranties.

Filter Regulator



The **Filter Regulator** is fitted as standard equipment on some models of Peerless compressors, but is optional for others.

Filter regulators are used to control the output pressure from the compressor to the apparatus/air tool being used. This output pressure can vary greatly. Please read the operating manual supplied with the apparatus/air tool to find the correct setting.

To adjust the Filter Regulator

- Carefully lift the top cap to allow the cap to turn.
- Turn the cap while watching the pressure gauge to adjust the output pressure (Clockwise increases output pressure, Anticlockwise decreases output pressure)
- Push the cap down into its locking position.



Please read and understand the apparatus/air tool operating manual before setting the output pressure on the Filter Regulator. Incorrect output pressures can damage the apparatus/air tool

Air Intake Filters



Air Intake Filters are an important part of the air compressor pump.

Designed to trap foreign particles before they enter the compressor pump, air intake filters have a cleanable and replaceable element of either foam or paper.



Actual cleaning or replacement intervals depend on the usage of the compressor, and the environment it is operated in. Environments with a high content of fine particles or high humidity (moisture) may require a specialised air filter. A failing or dirty air filter can cause damage to both the pump and motor.



Compressor Oil

It is important to use the correct oil in the Air Compressor Pump. Through hours of testing, we have been able to formulate an oil that will enhance the performance and life of the air compressor pump. ISO VG100 Compressor Oil oil will cut carbon build up by 90% in the valve system, even in high speed aluminium pumps, where oil temperatures are increase dramatically. When using Compressor Oil in slow revving cast iron pumps, its viscosity will remain stable to ensure total protection of the air compressor pump.

Pump Head Tensions

RE-TENSION

16 FT LB - 22.40NM

Care and Maintenance

Daily

Check Oil Level

Inspect oil level before use. Oil level should remain at or above the centre indicator on the oil sight glass.

Check Air Filter(s)

Check air filters frequently. Blocked intake filters can cause Motor, Head Gasket and Valve Failure.

Drain Air Receiver Tank

Drain compressor tank by opening the drain cock located under the tank. Hi humidity areas will require more frequent draining.

Weekly

Clean Air Filter(s)

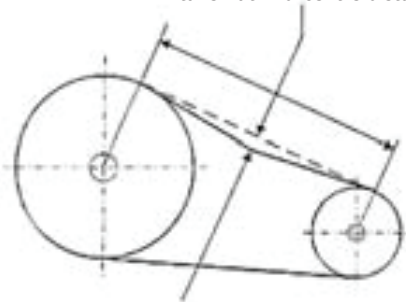
Clean air filters frequently. Blocked intake filters can cause Motor, Head Gasket and Valve Failure.

Check For Air Leaks

Continually check for air leaks from compressor fittings, air lines etc. Even the smallest air leak can cause the compressor to continually cycle causing over-heating and damage.

Check V-Belt Tension (Belt Drive Compressor)

Belt Tension Indicator measurement taken at mid-centre distance



| Belt Section | Force required to deflect belt 16 mm per metre of span | | |
|--------------|--|------------|----------------------|
| | Small Pulley Dia (mm) | Newton (N) | Kilogram-force (kgf) |
| A | 80 to 140 | 10 to 15 | 1.0 to 1.5 |
| B | 125 to 200 | 20 to 30 | 2.0 to 3.1 |

Monthly

Change Oil (if operating daily)

Oil level should remain at or above the centre indicator on the oil sight glass. Oil should be changed every 250hrs of operation.

Clean/Replace NRV Seal and Spring

Ensure the Non Return Valve seal and spring are kept clean and in good working order to limit damage to Electric motor or Pump.

Check Head Bolt Tension

Ensure Head Bolt Tension is set correctly (Refer Page 14 for Head Tension Specification)

Common Faults/Troubleshooting

Compressor Wont Start

- 1/ Check compressor power lead is plugged in and supply power is turned on.
- 2/ Ensure Pressure Switch is set to ON
- 3/ Petrol engine wont start (Refer Engine manufacturer operating instructions)

Compressor Wont Pump Up To Cut-Out Setting

1/ Air leaks

- Faulty Connection Fittings
- Leaking Air Tools
- Air leaking from Pressure switch

2/ Intake Filters Blocked

- Remove Intake filters and check pump up performance.
- Blocked intake filters can cause Motor, Head Gasket and Valve Failure.

3/ Head Gasket or Valve Failure

- Remove Filters and place hand or sheet of paper over intake port in head. If your hand or sheet of paper blows away from the port, this indicates a gasket or valve failure.

Air Leaking From Under Pressure Switch

1/ Air Leaking From Bleeder Tube Valve

- When a constant discharge of air is noticeable from the bleeder tube valve underneath the pressure switch, the Non Return Valve is commonly the fault

2/ Air Leaking inside Pressure Switch

- Air leaking from inside the pressure switch shows that the rubber diaphragm may have split. Please contact us to find you're nearest Euroquip authorised repair agent.

Oil Leaks

1/ Oil Leaking From Sight Glass

- Over a period of time, some hints of oil may leak from behind the oil sight glass. This is caused by an insecure sight glass seal. Carefully retighten or replace the seal.

2/ Oil Expelling From Oil Breather

- Oil blowing or misting from the oil breather is commonly caused by overfilling the oil volume, leaning the compressor over vertical, or a faulty Non Return Valve causing back pressure in the Crankcase.

3/ Excessive Oil In The Air Line

- Commonly caused by a faulty Non Return Valve causing back pressure in the Crankcase.

WARRANTY

As part of an on-going commitment to excellence in product support, Euroquip offers a comprehensive product warranty program.

1. THIS WARRANTY:

The benefits provided to the consumer in this warranty are in addition to other rights and remedies of a consumer under the New Zealand Consumer Guarantees Act 1993 and any other laws in relation to the products to which this warranty relates. This warranty:

- Covers the product against faulty materials or workmanship; and
- Covers the replacement of parts, the repair labour used, a refund of the price of the product or replacement of the machine, or other compensation for the remainder of the warranty period.

This product warranty is only applicable to the original purchaser of the machine and only purchases made from Euroquip Authorized Retailers.

2) WARRANTY PERIODS:

Commercial: 24 Months

Or

1000 hours of operation – whichever occurs first.

Commercial Warranty applies to commercial or business use of the product: All uses other than domestic use, including use for income-producing (including farming) or rental purposes.

*These Air Command Warranty periods are for products that are:

- Serviced by a Air Command Dealer in accordance with the Air Command service schedule, using genuine parts and the correct grade of oil (proof required)
- Meeting all other warranty requirements

NOTE: These warranty conditions apply to New Zealand only.

Euroquip warrants each new Air Command machine free from defect in material and workmanship under normal use and routine servicing, for the warranty periods specified. Conditional to the limitations and exclusions list below. The warranty period begins when the product is purchased by the end user. Warranty is not transferrable and is only claimable by the original purchaser.

Proof of purchase documentation with product serial number must be provided. If it has been lost and Euroquip does not have a record of the purchaser's details, the warranty period shall be calculated from the appropriate dealer wholesale sale date.

The purchaser must keep a record of all service and maintenance history as proof of servicing history. This may be requested when assessing any future warranty claims. The decision that an issue with a product qualifies as a warranty claim is made at the sole jurisdiction of Euroquip.

No costs incurred will be considered under warranty if repairs or maintenance are carried out by any party other than a Euroquip Approved Service Agent, unless with prior consent in writing from Euroquip.

It is the full responsibility of the purchaser to deliver the product under warranty to the nearest relevant service agent or product reseller. Warranty does not cover transportation costs including call outs, mileage and freight costs.

Customers are responsible for the care and cleaning of their product prior to sending it to our service centre. Any product being sent us must be thoroughly cleaned. Depending on what the product has come into contact with, it could pose an Occupational/ Work Health and Safety risk for our staff and or/service agents to inspect, repair or service a product that has come into contact with a hazardous substance. If we are asked to inspect, repair or service a product that has come into contact with a hazardous substance such as chemicals, asbestos or silica dust, we may not be able to inspect, service or repair the product. If this is the case, we will inform the purchaser and the product will be returned.

If a product is repaired under warranty, parts and labour required for the repair will be supplied at no charge. All defective parts replaced under warranty become property of Euroquip. Consumable items such as, but not limited to, oils, coolants, filter and spark plugs shall be the responsibility of the owner. Warranty assessment and repair will be scheduled and executed according to the normal work flow at the service location and depending on the availability of suitable replacement parts.

This warranty policy is an additional benefit and does not supersede the legal rights of any customer, reseller or service agent.

Should any issue be found to be a combination of a warranty failure and a non-warranty issue such as incorrect charging techniques, the repair cost component to rectify and repair the non-warranty failure is the **customer's** full responsibility.

3) EXCLUSIONS:

- Warranty does not cover parts that are subject to wear and tear from usage and/or damage which results from neglect of periodic maintenance.
- Evidence must be provided that the product has been maintained and serviced suitably for a claim to be considered under warranty.
- Batteries supplied with your product are warranted against defect for 3 months and does not include lack of charge due to non-use. Consumable items such as, but not limited to, oils, coolants, filters, spark plugs and batteries shall be the responsibility of the purchaser.
- Failure caused by incorrect operation of the product as specified in the manual either intentionally or by error.
- Lack of proper care and maintenance of the product.
- Any damage which results from unavoidable natural disasters, fire, collision, theft, etc.
- Any normal wear or deterioration, such as that of sliding or rotating parts caused under normal operating conditions.
- Any damage that results from misuse or use beyond the imitations of the products intended purpose (such as overloading or use under abnormal conditions).
- External circumstances such as product deterioration or corrosion due to environmental conditions like heat, cold, salt spray, sand or due to the passage of time
- Normal phenomena such as noise, vibration or oil seepage which are considered by Euroquip as not affecting the quality, function or performance of the product.
- Any damage due to improper storage or transport.
- Consumable replacement items: Spark plugs, contact points, shear pins, fuel strainers, oil filter elements, air cleaner elements, brake shoes or pads, clutch components, fuses, motor brushes, gaskets, tube or hoses, belts, cutting blades, light bulbs, serviceable bearings. Petroleum and others fluids: Oil, grease, battery electrolyte, and radiator coolant. Other items specified by Euroquip.
- Periodical maintenance items such as cleaning, inspection and adjustments.
- Contaminated fuel
- Modifications or installations of other products to the product
- Damage that results from the use of non-genuine parts, lubricant or fluid not approved by Euroquip
- Any repair and/or adjustment to correct improper or poor quality work previously performed.
- Attempted repair/ service by a party other than an Approved Service Agent, or any repair undertaken prior to approval of warranty by Euroquip is not covered under warranty.
- Warranty does not cover pre delivery service and adjustment, or failure that may occur as a result of lack of/ incorrect pre delivery service and adjustment. Warranty does not cover any incidental, indirect or consequential loss, damage, personal injury, or expense that may result from any defect, failure, malfunction, or misuse of a product.
- Any product that is found to have come into contact with hazardous substances such as chemicals, asbestos or silica dust and NOT been industrially cleaned prior to servicing.

4) HOW TO CLAIM WARRANTY:

In the event you are faced with a manufacturing fault with your Air Command product, you can claim a repair or part replacement under warranty if the following conditions are fulfilled:

- The problem is related to production quality or specifications of the machine
- The machine is within the warranty period outlined in schedule
- The issue does not fall within the warranty exclusions listed

If the criteria above is met, and you would like to request a warranty, then please go online to <https://www.euroquip.co.nz/Service-Request-End-User> and log your warranty claim.



Congratulations on your new AIR COMMAND product. We are proud to have you as our customer and will strive to provide you with the best service and reliability in the industry. This product is backed by our extensive warranty and service network. To locate your nearest distributor or service agency visit www.euroquip.co.nz, or email us at customerservice@euroquip.co.nz