

Eastwood®

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Item #31915

29 GALLON SINGLE STAGE AIR COMPRESSOR

INSTRUCTIONS



The **Eastwood 29 Gallon Single Stage Air Compressor** is specifically designed with the home garage user in mind. The twin-cylinder layout delivers higher efficiency and operates at lowered sound and vibration levels, while providing sufficient air volume to operate most home hobbyist air tools and paint guns. The unique compact size fits in as little as 3 square feet and the cast-iron cylinder block offers greater reliability and longer life.

SPECIFICATIONS

Power Requirement: 120V, 60Hz, 13.8 A, Single Phase

Motor Horsepower: 2 HP

Tank Size: 29 gallon [110 liter]

Air Delivery: 5.9 scfm @ 90 psi, 7.3 scfm @ 40 psi

Cut-in Pressure: 120 PSI [8.3 bar]

Cut-out Pressure: 150 PSI [10.3 bar]

Max. Pressure: 150 PSI [10.3 bar]

Pressure Relief Valve Setting: 170 PSI [11.7 bar]

Motor RPM: 3,450

Pump RPM = 1,150

Sound Reading @ 10 ft. [3m] = 82 dB

Power Cord = 6ft, 3-prong, grounded, 14 AWG

SAFETY INFORMATION

The following indicators are displayed in this manual, on the labeling, and all other information provided with this product:

⚠ DANGER

DANGER indicates a hazardous situation which, if not avoided, will result in death or serious injury.

⚠ WARNING

WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.

⚠ CAUTION

CAUTION used with the safety alert symbol, indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

⚠ NOTICE

NOTICE is used to address practices not related to personal injury.



⚠ READ INSTRUCTIONS

- Thoroughly read and understand these product instructions before using the Compressor.
- Keep these product instructions for future reference.



⚠ WARNING FIRE OR EXPLOSION HAZARD!

- Never spray flammable liquids in a confined area. It is normal for the motor and pressure switch to produce sparks while operating. If sparks come into contact with vapors from gasoline or other solvents, they may ignite, causing fire or explosion. Always operate the compressor in a well-ventilated area. Do not smoke while spraying. Do not spray where sparks or flame are present. Keep compressor a minimum of 20 feet from spray area.



⚠ WARNING FIRE HAZARD!

- Never allow the compressor to operate unattended. Always disconnect from the electrical power supply before leaving.



⚠ WARNING ELECTRICAL SHOCK HAZARD!

- Never use an electric air compressor outdoors when it is raining or on a wet surface, as it may cause an electric shock.
- Connect to a 120, 60Hz, 15 Amp minimum circuit meeting all applicable local electrical codes.

SAFETY INFORMATION



⚠ WARNING INJURY HAZARD!

- This unit starts automatically. ALWAYS shut off the compressor, remove the plug from the outlet, and bleed all pressure from the tank before servicing the compressor, and when the compressor is not in use.
- Fan Blade can start at any time. To help avoid personal injury, keep hands clear.
- Do not use the unit with the Cover removed. Severe injury could occur from contact with moving parts.
- Never direct high-pressure airstream to exposed flesh.
- This compressor must be located only on a flat, level and secure surface. Do not locate the compressor on an elevated platform, table, bench, roof or other non-secure location



⚠ WARNING BURN HAZARD!

- The Pump generates heat during operation. Use caution when servicing to avoid burns.



⚠ WARNING EYE INJURY HAZARD!

- Always wear ANSI Z87 approved eye protection when operating this compressor and associated equipment. Air, moisture and debris can be ejected at high velocity while using this equipment.



⚠ WARNING HEALTH HAZARD!

- Air discharged from this compressor is not intended for and should never be used as supply air for human consumption.



⚠ WARNING

- The Tank is labeled with a U.S. Consumer Product Safety Commission mandated expiration date for pressure vessels based on date of manufacture. Operating the Tank beyond the posted expiration date subjects the user to a Bursting Hazard.
- **DO NOT** operate the Compressor beyond the posted date without having the tank pressure tested at an approved compressed air tank testing facility. Internal rust and metal fatigue from long term use can severely impair tank strength and cause an extremely hazardous condition.



⚠ CAUTION BURN HAZARD!

- Touching the Pump while running and for a considerable time afterward will cause burns.
- Use caution when servicing to avoid burns.



⚠ CAUTION BURST HAZARD!

- Check the manufacturer's maximum pressure rating for air tools and accessories. Compressor outlet pressure must be regulated to never exceed the maximum pressure rating of the tool. Relieve all pressure through the hose before attaching or removing accessories.
- Do not adjust the Pressure Relief Valve for any reason. The Pressure Relief Valve has been pre-set at the factory for the maximum safe pressure of this unit. Personal injury and/or property damage may result if the relief valve is tampered with.
- Use only hose, pipe and fittings rated for compressed air distribution lines. Do Not use plastic or PVC pipes.
- Do not weld, drill or modify the air tank of this compressor. Welding or modifications on the air compressor tank can severely impair tank strength and cause an extremely hazardous condition.

⚠ CAUTION Drain the moisture from the tank daily. An empty, moisture free tank will help prevent internal corrosion & prolong tank life.

⚠ CAUTION To provide proper ventilation for cooling and prevent overheating, the compressor must be kept a minimum of 12 inches (31 cm) from the nearest wall, in a well-ventilated area. DO NOT allow the Belt Guard to be blocked or possible permanent damage could occur.

⚠ NOTICE Pull the Pressure Relief Valve ring daily to test that the valve is functioning properly, & to clear the valve of any obstructions.

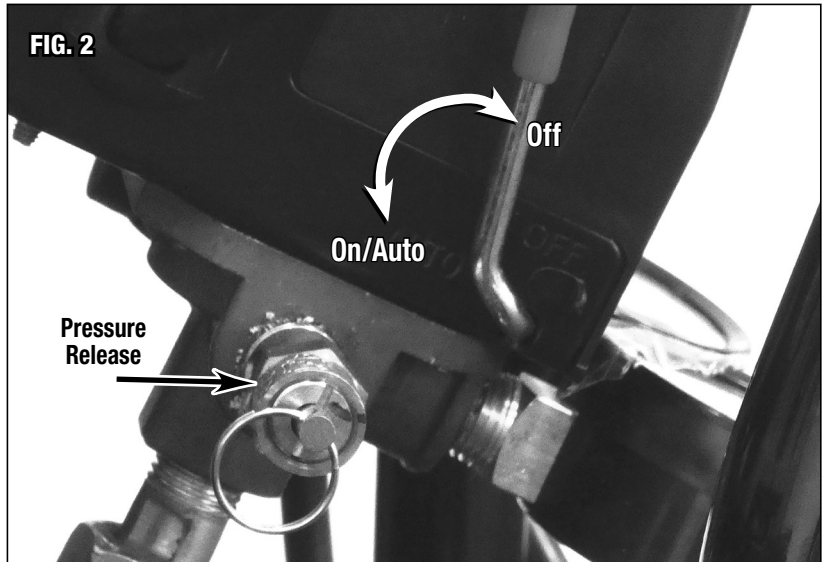
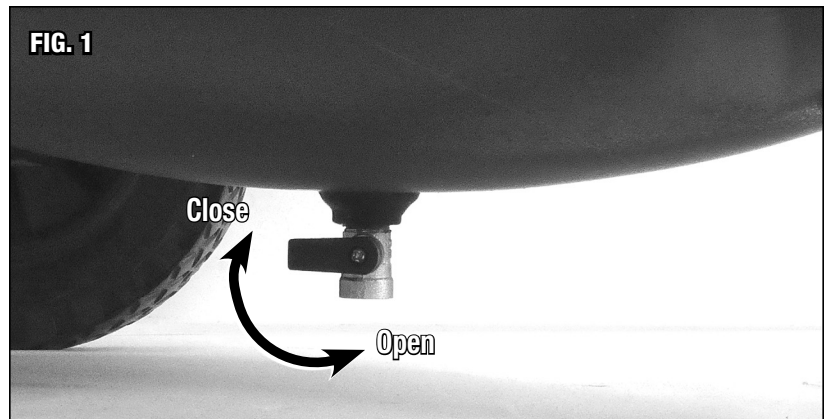
⚠ NOTICE **REQUIRES 120 VAC, 13.8 AMP, 60Hz.** This unit is equipped with a Grounded Plug. It may be hardwired, however the warranty will be void if not performed by a licensed electrician.

COMPRESSOR SET UP

Compressor Break-In Procedure

▲ NOTICE The initial, new compressor break-in procedure must be performed for best performance & maximum pump life. To do so:

1. Check the oil level (see maintenance section on page 6).
2. Open the Water Drain Valve located at the underside of the Tank (Fig 1).
3. Make sure the Power Switch is in the "OFF" position (Fig 2).
4. Plug the Power Cord into an appropriate 120 VAC, 15 Amp minimum, grounded receptacle.
5. Move Power Switch to the "ON/AUTO" position (Fig 2).
6. Allow the Compressor to run for 10 minutes. Air and manufacturing oil will discharge freely from the Water Drain Valve.
7. After 10 minutes, move the Power Switch to the "OFF" position (Fig 2) and unplug the Power Cord.
8. Close the Water Drain Valve (Fig 1).
9. Inspect the entire system including crankcase, cylinders and hard lines for any evidence of oil leaks.
10. With the Water Drain and Air Outlet Valves closed, plug the unit back in, turn the Power Switch to "ON/AUTO", allow full pressure to build, once again, turn the Power Switch to "OFF" (Fig 2).
11. Listen for any air leakage and observe the crankcase, all lines and fittings for any evidence of oil leakage.
12. The Eastwood 29 Gallon Compressor is now ready for use.



COMPRESSOR LOCATION

Positioning

▲ NOTICE The Eastwood 29 Gallon Compressor generates heat during operation and has a highly efficient air-cooled system. Sufficient space must be provided around the unit for cooling air circulation.

1. Locate the Air-Intake Grill no less than 1 ft. [.3m] away from any wall or enclosure.
2. Locate the sides and front of the Compressor no less than 1 ft. [.3m] away from any wall or enclosure.
3. Maintain at least 2 feet [.6m] of free space above the Compressor.

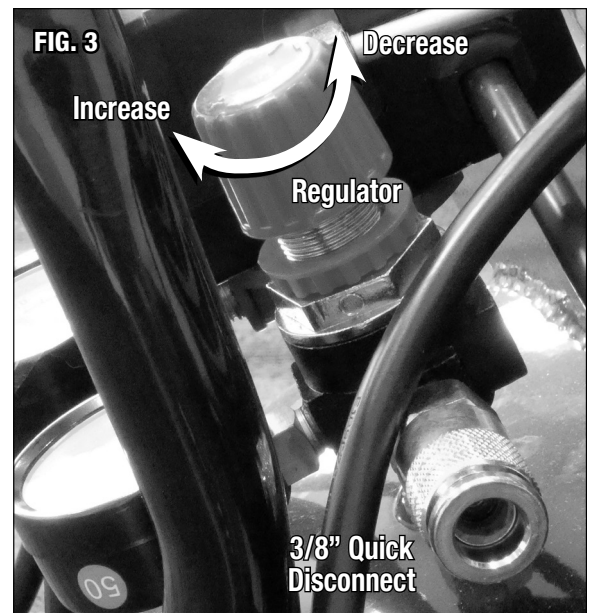
▲ CAUTION To provide proper ventilation for cooling and prevent overheating, the compressor must be kept a minimum of 12 inches (31 cm) from the nearest wall, in a well-ventilated area. DO NOT allow the Cover ventilation holes to be blocked or possible permanent damage could occur.

Air Line Connection

▲ NOTICE The Eastwood 29 Gallon Compressor is designed with a convenient, pre-installed 3/8" Female Quick-Disconnect at the air outlet and is compatible with most 1/4" NPT, 3/8" Male Quick Disconnect fittings (Fig 3).

To utilize the maximum performance from the Compressor, it is strongly recommended to use 3/8" or larger air lines and fittings throughout your system. The use of less than 3/8" lines will greatly hamper performance.

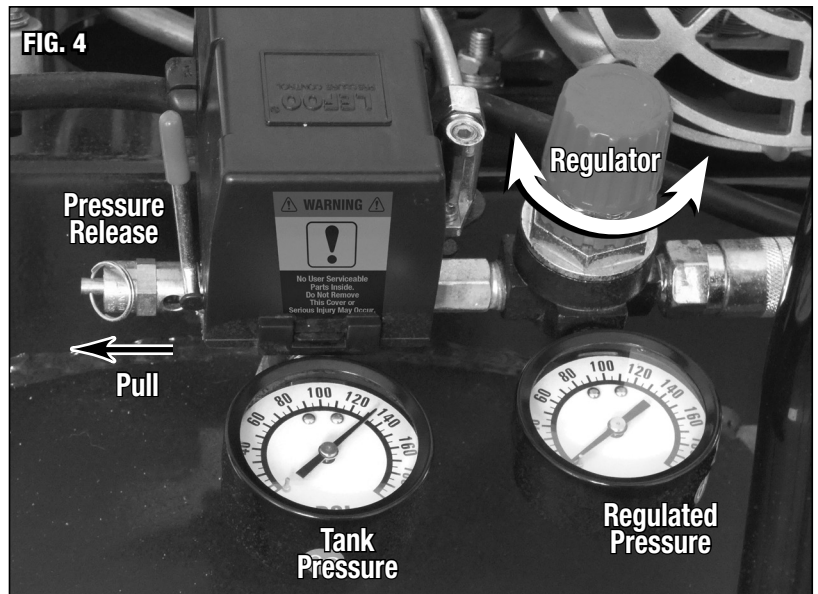
In order to protect valuable air tools and equipment and prevent contamination it is strongly advisable to use a suitable, high efficiency Moisture/Oil Separator (not included) in a well-planned airline layout after the Air Outlet.



COMPRESSOR OPERATION

⚠ WARNING INJURY HAZARD! This unit starts automatically. ALWAYS shut off the compressor, remove the plug from the outlet, and bleed all pressure from the tank before servicing the compressor, and when the compressor is not in use.

1. Before each use, pull and release the Pressure Release Safety Valve (Fig 4) to verify it is not stuck.
2. Plug the power cord into an appropriate 120 VAC, 60 Hz, 15 Amp minimum, grounded outlet.
3. Move the Power Switch to the "ON" position (Fig 2).
4. Allow the Tank pressure to build to 150 PSI [10.3 bar] before each use. With the Air Compressor turned on, operation is automatic and under the control of the internal Pressure Controller. It will turn off @ 150 PSI [10.3 bar] and automatically restart @ 120 PSI [8.3 bar].



⚠ NOTICE

The Pressure Gauge located on left side under the "ON/OFF" Pressure Switch indicates actual tank pressure (Fig 4).
The Pressure Gauge located on the right under the Regulator indicates regulated outlet pressure (Fig 4).

5. To Increase regulated output pressure, rotate the Regulator Knob Counter-clockwise. To decrease regulated output pressure, rotate the Regulator Knob Clockwise (Fig 4).

USING THE PRESSURE RELEASE SAFETY VALVE MANUALLY

In addition to emergency over pressure relief function, the Pressure Release Safety Valve can be used when rapid tank air pressure release is desired. To do so:

1. Move the Power Switch to the "OFF" position and unplug Power Cord.
2. Pull and hold the Pressure Release Safety Valve ring to release pressure from the Tank (Fig 4).
3. When all pressure is released, release the ring on the Pressure Release Safety Valve.

CONDENSATION DRAIN

In normal use particularly in humid environments, moisture will condense and collect in the tank. It must be used daily to drain all accumulated moisture. Failure to do causes internal tank corrosion, perforation and ultimate failure. Tank moisture draining procedure:

1. Move the Power Switch to the "OFF" position (Fig 2) and unplug Power Cord.
2. Pull and hold the Pressure Release Safety Valve ring to release pressure from the Tank until the Tank Pressure Gauge reads less than 20 PSI (Fig 2).
3. **Slowly** open the Drain Valve (Fig 1).

⚠ CAUTION

Only *slightly* open the water Drain Valve to blow air and moisture out of the Tank.

⚠ CAUTION

Opening it all the way or too quickly will cause contaminated water to be blown out at high velocity. Wear appropriate eye protection.

4. Drain moisture from tank into a suitable container.

⚠ NOTICE

Condensate is a polluting material and should be disposed of in compliance with local regulations. If drain valve becomes clogged, release all air pressure, remove and clean valve, then reinstall.

THERMAL BREAKER RESET BUTTON

As long as the SCFM capacity (5.9 scfm @ 90 psi, 7.3 scfm @ 40 psi) of the Eastwood 29 Gallon Compressor is not exceeded, it is capable of running continuously automatically controlled on/off cycles. If the SCFM demands are exceeded, the Compressor will run continuously in efforts to meet demand. If this occurs, the motor will overheat and the Thermal Protection Breaker will activate and cause the motor to shut off. If this should occur, allow the motor to cool then press the red Reset Button located at the front endcap of the motor (Fig 5).

NOTE: The motor will only start when it has cooled sufficiently.



MAINTENANCE

⚠ NOTICE

The following maintenance should be performed **BEFORE** each use:

- Inspect tank and fittings for damage or leaks.
- Drain moisture from tank.
- Test Pressure Relief Valve.

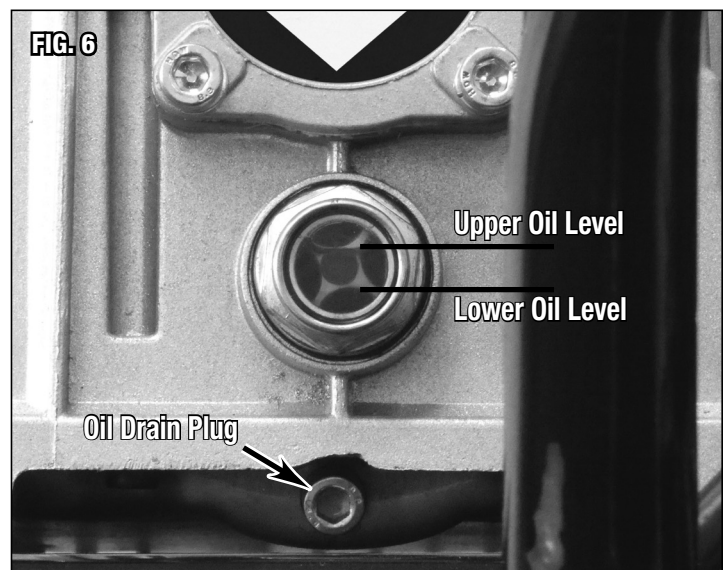
⚠ NOTICE

The following maintenance should be performed **AFTER** each use:

- Inspect tank and fittings for damage or leaks.
- Drain moisture from tank.
- Clean dirt and debris from cooling air vents.

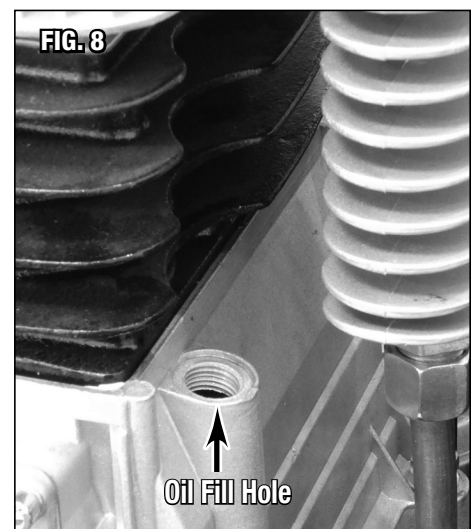
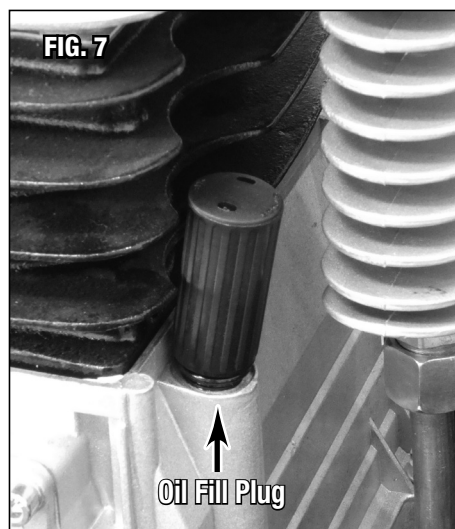
CHECK OIL

1. The Compressor must be on a level surface for an accurate oil level reading.
2. Turn Compressor off and allow a minute or so for the oil to drain into the crankcase.
3. View Sight glass at the front of the crankcase. The oil level should be within the Red Red Dot visible in the Sight Glass (Fig 6). If the oil level appears below the bottom edge of the Red Dot, oil must be added.



ADD OIL

1. Turn-off the Automatic Switch and unplug the Compressor from the electrical power source.
2. Disconnect Air Line from Compressor Air Outlet.
3. Remove the black plastic Oil Fill Plug from the upper right front corner of the Crankcase (Figs 7 & 8).
4. Add a good grade of detergent free, SAE 30 Oil until the oil level is within the Red Dot of the Sight Glass (Fig 6).
5. Replace Fill Plug and tighten securely.



CHANGE OIL

The recommended Oil Change interval is 100 Hours of operating time.

1. Turn-off the Automatic Switch and unplug the Compressor from the electrical power source.
2. Disconnect Air Line from Compressor Air Outlet.
3. Remove the Oil Drain Plug located at the lower front of the Crankcase (**Fig 9**) with a 5mm Hex Key (NOT INCLUDED).
4. Place a suitable container under the Drain Hole and allow the oil to run into it. It may be helpful to place wedged under the wheels to allow the Compressor to tilt forward slightly to aid in complete oil removal.

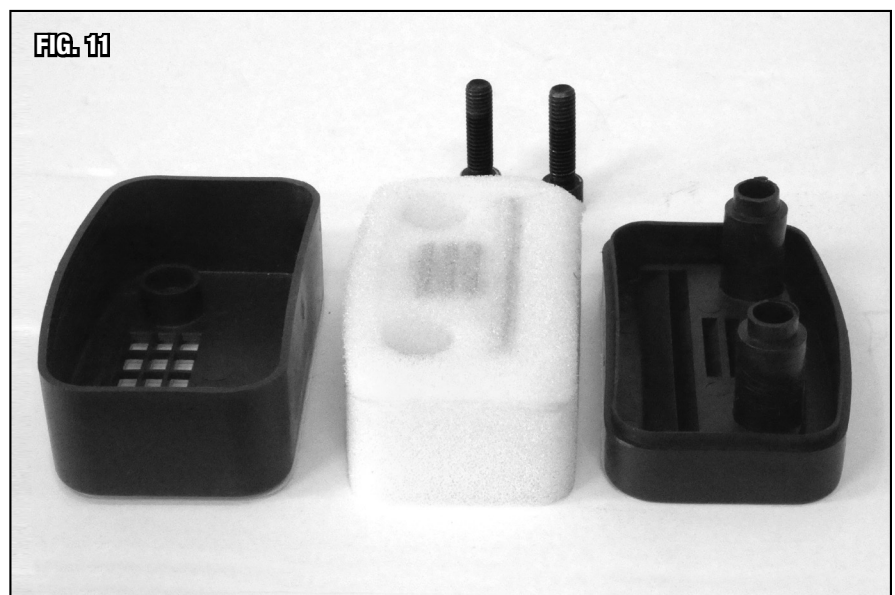
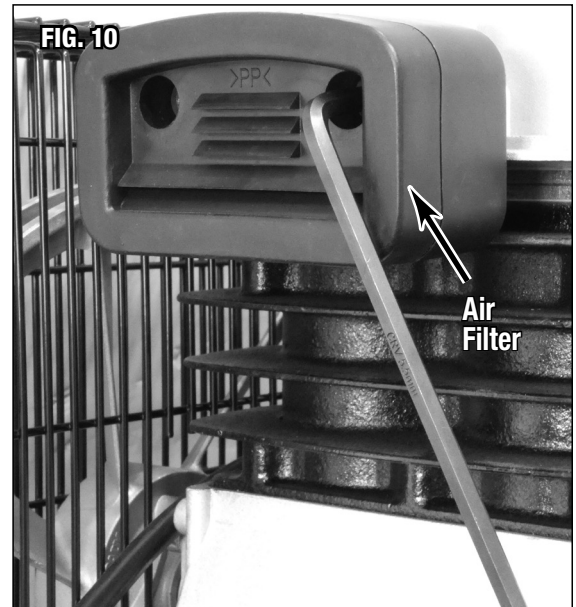
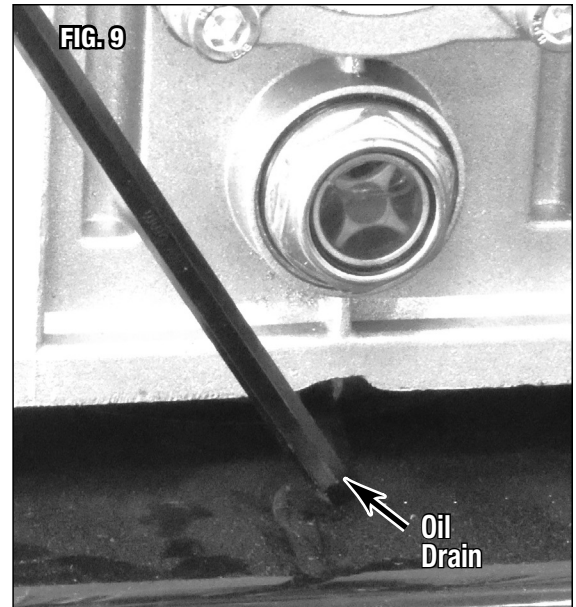
▲ NOTICE Used Oil is a polluting material and should be disposed of in compliance with local regulations.

5. Replace Drain Plug and tighten securely with a 5mm Hex Key (NOT INCLUDED).
6. Remove the black plastic Oil Fill Plug from the upper right front corner of the Crankcase (**Figs 7 & 8**).
7. Add a good grade of detergent free, SAE 30 Oil until the oil level is within the Red Dot of the Sight Glass (**Fig 6**).
8. Replace Fill Plug

CLEANING AIR FILTER

It is important to clean the Air Filter every 100 Hours of operating time in normal conditions and more frequently in the presence of sanding dust or other debris. The Air Filter Element is of a permanent type designed for unlimited cleanings with no replacement necessary

1. Turn-off the Automatic Switch and unplug the Compressor from the electrical power source.
2. Disconnect Air Line from Compressor Air Outlet.
3. Remove the two Socket Head Cap Screws retaining the Air Filter Housing to the Cylinder Head with a 5.5mm Hex Key (NOT INCLUDED) (**Fig 10**).
4. Remove the plastic Housing and separate the Filter (**Fig 11**).
5. Tap to remove any accumulation of dirt and debris then blow it out under low pressure (approx. 40 PSI [3 bar]).
6. Re-install Filter to Housing and re-attach to Cylinder Head with Screws and tighten securely (**Fig 10**).



MAINTENANCE (CONTINUED)

ADJUST BELT TENSION

⚠ WARNING INJURY HAZARD! This unit starts automatically. ALWAYS shut off the compressor, remove the plug from the outlet, and bleed all pressure from the tank before servicing the compressor, and when the compressor is not in use.

- Fan Blade can start at any time. To help avoid personal injury, keep hands clear.
- Do not use the unit with the Cover removed. Severe injury could occur from contact with moving parts.

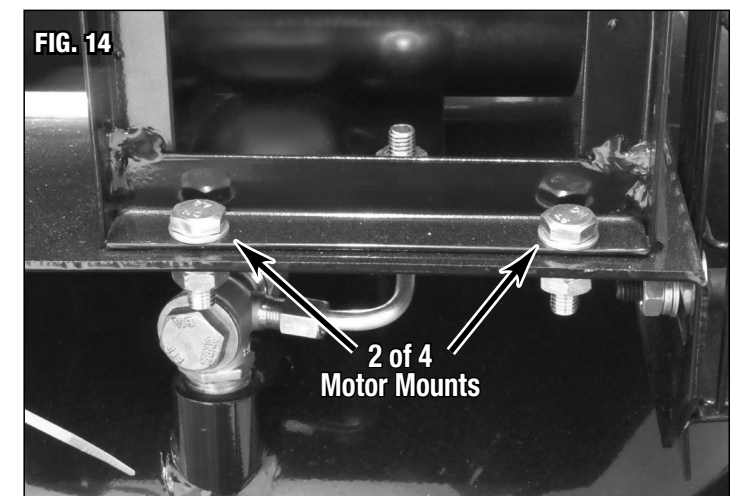
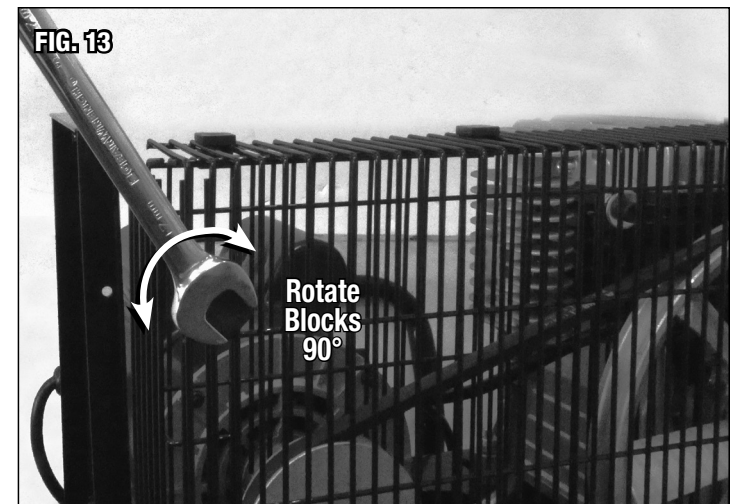
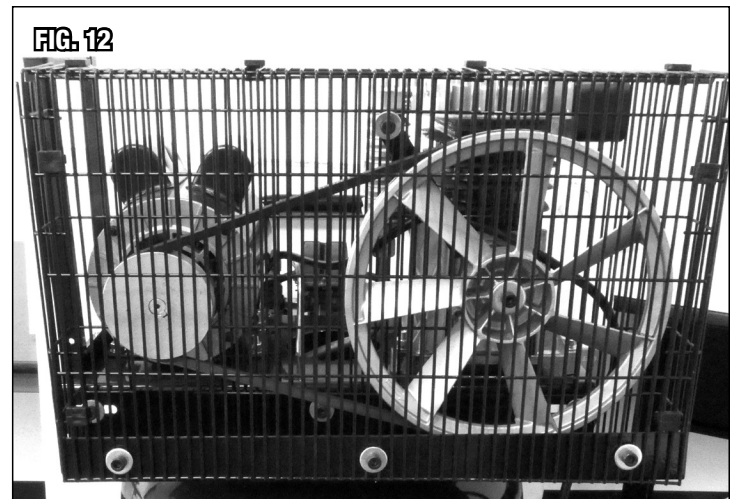
⚠ CAUTION BURN HAZARD! The Pump generates heat during operation.

- Touching the Pump while running & for a considerable time afterward will cause burns.
- Use caution when servicing to avoid burns.

1. Turn-off the Automatic Switch and unplug the Compressor from the electrical power source before adjusting belt.
2. Disconnect Air Line from Compressor Air Outlet.
3. Remove Outer Belt Guard by first removing the three Socket Head Cap Screws and Washers along the lower rear of the Outer Guard (**Fig 12**) with a 6mm Hex Key (NOT INCLUDED).
4. Next, remove the eight Square Retainers (**Fig 13**) by rotating each 90° with a 17mm wrench (NOT INCLUDED).
5. Check Belt tension by placing a straightedge along the top run of the Belt then pushing down on the belt in the center of the run between the large and small pulleys. At proper tension, the belt should deflect approx. 1/2" [1.3cm].

To Tighten:

1. Loosen four Motor Mount Bolts with two 13mm wrenches (NOT INCLUDED) (**Fig 14**).
2. Push Motor outward to increase belt tension, tighten bolts then re-check belt deflection.
3. Re-install Belt Guard. Tighten all fasteners securely.



TROUBLESHOOTING

PROBLEM	CAUSE	CORRECTION
Does Not Run When Switch is Turned On	No Power	Check 120 VAC power source and connection to unit
		Check for tripped Thermal Protection Breaker and overheated motor condition
Compressor Motor Stops Running	Motor Overheated and Thermal Protection Breaker Tripped	Wait for motor to cool then press Thermal Protection Breaker button
Compressor Runs Too Slow/Develops Low Power	Excessive Voltage Drop	Under-sized and or too long of an extension cord used. Extension cord not recommended. If necessary, use only 14 Gauge or larger cord and limit length to 25'
Compressor Runs Constantly	Excessive air supply demand, compressor is overworked and capability has been exceeded	Do not exceed load of 5.9 scfm @ 90 psi, 7.3 scfm @ 40 psi
	Air Leak at Fitting or Hose	Stop compressor use, locate leak and perform repair
Motor Overheats	Excessive air supply demand, compressor is overworked and capability has been exceeded	Do not exceed load of 5.9 scfm @ 90 psi, 7.3 scfm @ 40 psi
	Dirt & debris buildup in air intake filter	Follow "Cleaning Air Filter" under MAINTENANCE
	Supply voltage to motor too low	Determine cause of under voltage condition and resolve

OPTIONAL ITEMS

- # 31733 Rockwood 3/8" NPT Air Filter/Regulator
- # 51537 3/8" Garage Air Line Kit
- # 70491 Eastwood Industrial Air Hose, 3/8" x 25'
- # 70492 Eastwood Industrial Air Hose, 3/8" x 50'

If you have any questions about the use of this product, please contact

The Eastwood Technical Assistance Service Department: 800.544.5118 >> email: techelp@eastwood.com
PDF version of this manual is available online >> eastwood.com/31915manual

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