

*Eastwood*<sup>®</sup>

DO THE JOB RIGHT.<sup>®</sup>

Item #31700

# QST-30/60 SCROLL COMPRESSOR INSTRUCTIONS



The **EASTWOOD QST 30/60 AIR COMPRESSOR** has been engineered and developed using breakthrough Scroll Pump Technology. It operates at much lower sound and vibration levels while producing much greater air output with lower power demands than old technology, conventional piston-type air compressors. The unique Scroll pump design also has far fewer moving parts and significantly reduced friction for greater reliability and longer life.

## CONTENTS

- (1) Eastwood QST 30/60 Scroll Type Air Compressor
- (1) Dipstick
- (1) Instruction Manual

## SPECIFICATIONS

<b>Power Requirement:</b>	220-240V, 60Hz, Single Phase
<b>Full Load Amps:</b>	20
<b>Motor Horsepower:</b>	3.3 hp
<b>Tank Size:</b>	26.4 gallon [100 liter]
<b>Tank Fill Time:</b>	3 minutes max.
<b>Air Delivery:</b>	12 SCFM @ 90 PSI
<b>Cut-in Pressure:</b>	115 PSI [7.9 bar]
<b>Cut-out Pressure:</b>	145 PSI [10 bar]
<b>Max. Pressure:</b>	145 PSI [10 bar]
<b>Pressure Relief Valve Setting:</b>	160 PSI [11 bar]
<b>Motor and Scroll Pump RPM:</b>	3450
<b>Sound Reading @ 3.2 ft. [1m]:</b>	69 DB
<b>Power Cord:</b>	6ft, 3-conductor grounded, 12 AWG

# SAFETY INFORMATION

The following explanations are displayed in this manual, on the labeling, and on 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**

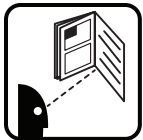
WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.

## **⚠ 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 move power switch to the "OFF" position before leaving the work area.



### **⚠ 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.
- Compressor must be installed by a licensed electrician.



### **⚠ WARNING INJURY HAZARD!**

- This unit starts automatically. **ALWAYS** shut the compressor off at the pressure switch, bleed all pressure from the tank, then shut off breaker or disconnect power supply before servicing the compressor, and when the compressor is not in use.
- **DO NOT** run the unit with the Cover removed. Serious burns could occur from contact with hot components.
- 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 Scroll 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.



**⚠ 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 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.
- 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.



**⚠ CAUTION**

- Drain the moisture from the tank daily. An empty tank will help prevent corrosion and prolong tank life.
- 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 permanent damage could occur.

**⚠ NOTICE**

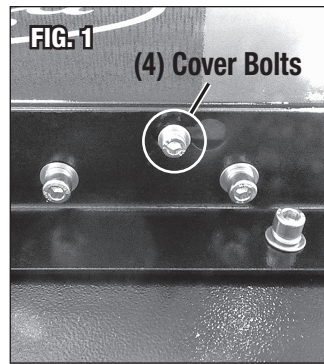
- The Eastwood QST 30/60 Compressor is mounted on Casters and can vibrate or move slightly during operation. Always lock Casters before running.

# COMPRESSOR SET-UP

## ⚠ NOTICE

Before starting and running the Eastwood QST 30/60, the following brief steps **MUST** be performed:

- Place the Compressor on a level surface.
- Remove Cover by removing the four Socket Head Cap Screws located under the edge of the Cover Frame (**FIG 1**).
- Lift off Cover and place aside in a secure location.



## STEP 1 – CHECK OIL LEVEL

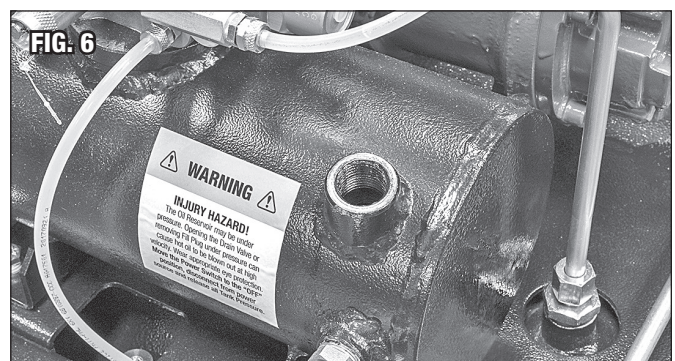
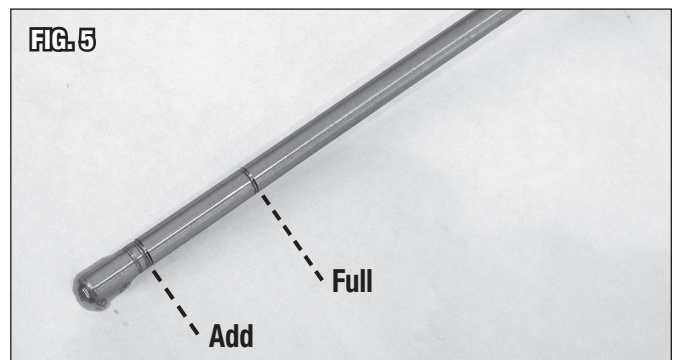
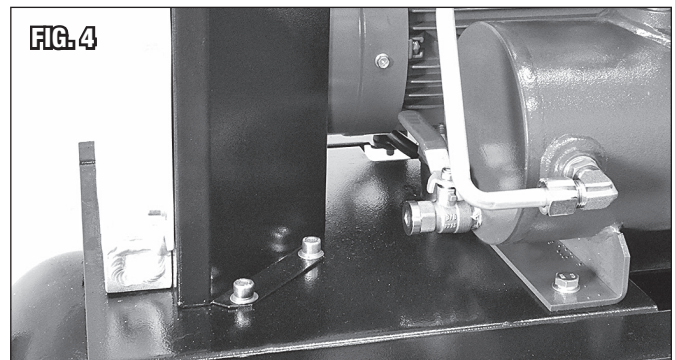
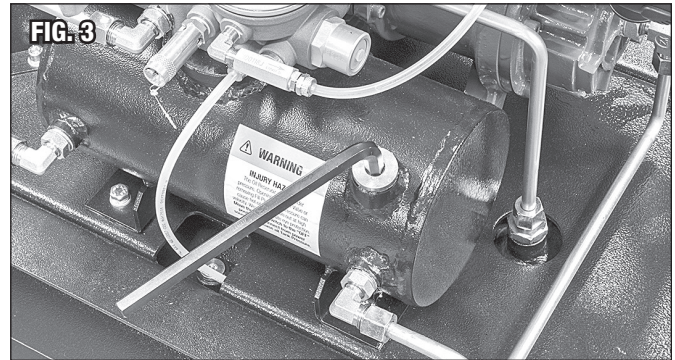
## ⚠ NOTICE

Oil is extremely critical to the operation and performance of the Compressor. The oil must first be checked before any other steps are taken.

## ⚠ WARNING INJURY HAZARD!

The Oil Tank may be under pressure. Opening the Drain Valve or removing the Fill Plug under pressure can cause oil to be blown out at high velocity. Move Power Switch to the “OFF” position. Release pressure from the Tank until Tank Pressure Gauge indicates 0 PSI. Disconnect Compressor from power supply. Always wear appropriate eye protection.

- Move Power Switch to the “OFF” position (**FIG 2**).
- Release pressure from the Tank until Tank Pressure Gauge indicates 0 psi.
- Disconnect Compressor from power supply.
- Remove the brass Oil Fill Plug from the upper front corner of the Oil Reservoir with a 10mm Hex Key (**FIG 3**).
- Check for full closure of the Drain Valve located on the Oil Reservoir (**FIG 4**).
- Check oil level with included Dipstick. Insert Dipstick until it touches the bottom of the Reservoir. The oil level is 100% full when it is at the top mark (**FIG 5**). If the oil is below the lower mark, oil must be added.
- Add #31718 Eastwood Synthetic Scroll Compressor Oil to the fill port of the Oil Reservoir using a suitable funnel (**FIG 6**).
- Replace Fill Plug and tighten securely.

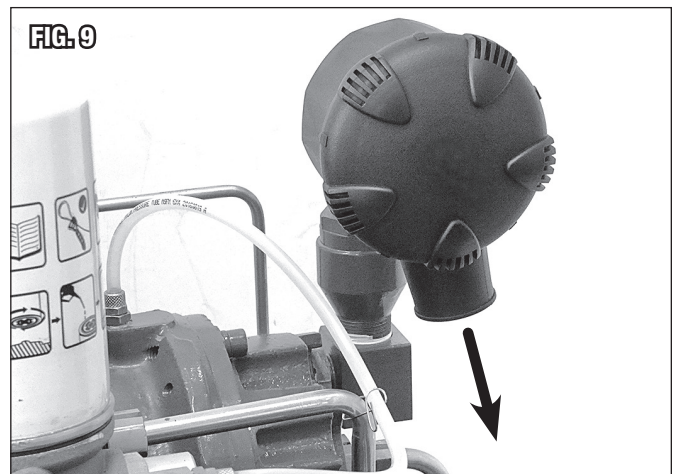
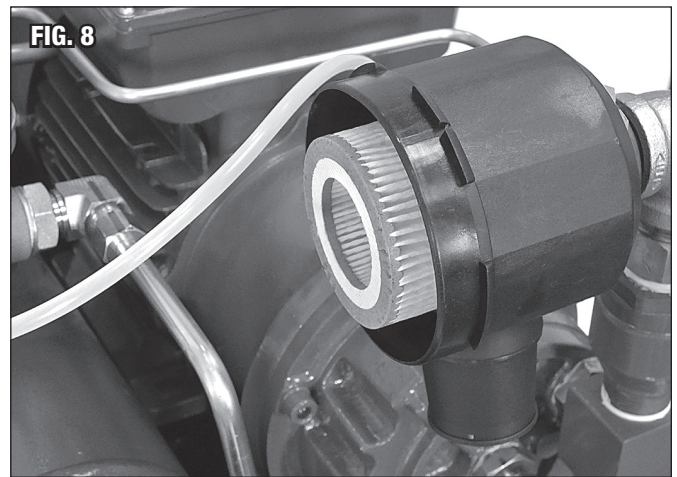
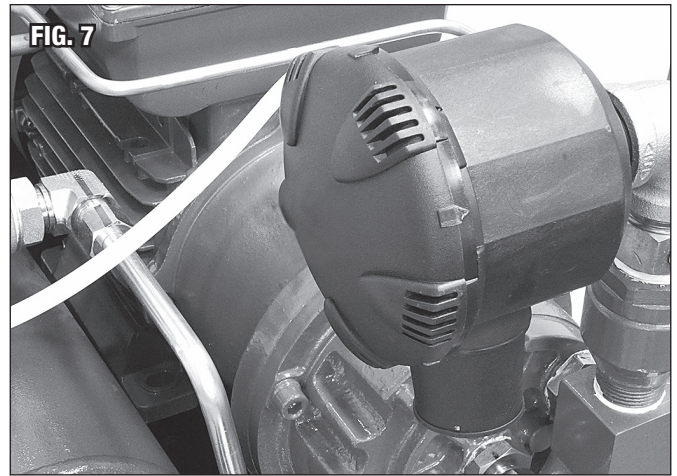


## STEP 2 – CHECK AIR FILTER

- Remove the Air Filter Lid from the Air Filter Housing by rotating the Lid counter-clockwise (**FIG 7**).
- Check that the Paper Element is in place (**FIG 8**) then replace the Air Filter Lid. Note that the arrow of the Air Cleaner Lid must be indexed with one of the 5 arrows around the circumference of the Filter Housing and the snorkel of the Air Cleaner Housing must be pointing downward (**FIG 9**).

## STEP 3 – ELECTRICAL CONNECTION

- Refer to the Compressor nameplate for voltage and amperage requirements. All wiring must be done by a licensed electrician, in accordance with National Electric Code and state and local requirements. For best performance, the Compressor must be installed on a dedicated circuit, with a circuit breaker or fuse for protection. Each time the Compressor motor starts, it will momentarily draw several times its full load amperage. It is important to consider this start-up surge when specifying circuit breakers or fuses. If fuses are used, time-delay type must be installed.
- The power supply wiring must be adequately sized to prevent dangerous overheating and low voltage at the Compressor during startup and running. Low voltage will cause difficult starting, overheating, and excessive tripping of circuit breakers. The wire gauge must be increased for longer wire runs to accommodate the increased resistance inherent in longer runs. Refer to the National Electric Code to determine the proper wire gauge for your wire run length. Low voltage can also be caused by low supply voltage from the power company, or from other equipment running on the same line.
- For safety reasons, install a disconnect switch in the line from the electrical panel to the Compressor as close to the Compressor as possible. When the switch is off, all power to the Compressor is disconnected. When the switch is on, the compressor will start and stop automatically as it will be controlled by the pressure switch.



## STEP 4 – CHECK RUN PROCEDURE

### ⚠ NOTICE

Before re-installing the Cover and placing the Eastwood QST 30/60 in service for use, the following brief steps **MUST** be performed:

### ⚠ WARNING BURN HAZARD!

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

### ⚠ WARNING INJURY HAZARD!

Before performing any service, turn Power Switch to the “OFF” position (FIG 2). Shut off breaker or disconnect power supply. Release pressure from Tank (FIG 10) until Gauge indicates 0 PSI. and allow to cool minimum 1 hour after last use before servicing to avoid burns.

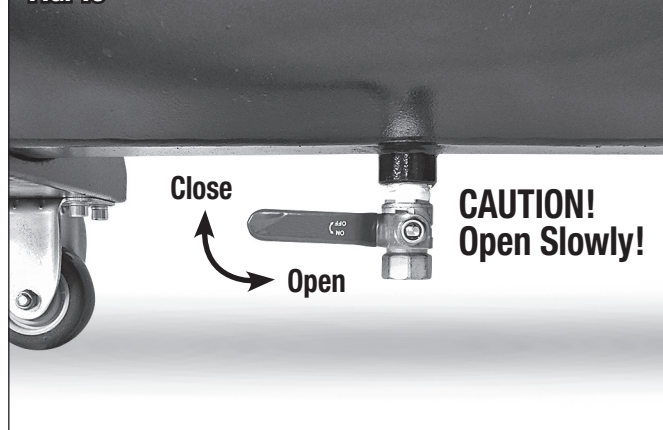
- Close all outlet valves.
- Connect Compressor to power supply.
- Move the Power Switch to the “ON” position (FIG 2).
- Allow the Compressor to run until it builds full pressure and automatically shuts off (approx. 3 minutes)
- Move the Power Switch to the “OFF” position.
- Listen for any air leakage and observe the Scroll case, all lines and fittings for any evidence of oil leakage.

### ⚠ NOTICE

If any air or oil leaks are discovered, call Eastwood Tech at: 1-800-343-9353.

- If no leaks exist, replace the Cover and secure with the four Socket Head Cap Screws.
- The Eastwood QST 30/60 Compressor is now ready for use.

FIG. 10



## COMPRESSOR LOCATION

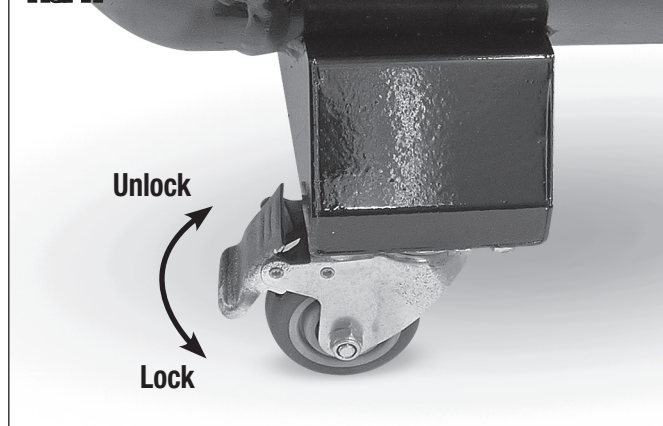
### POSITIONING

### ⚠ NOTICE

The Eastwood QST 30/60 Compressor generates heat during operation. Sufficient space must be provided around the unit for cooling air circulation.

- Locate the Air-Intake Grill no less than 1 foot [.3m] away from any wall or enclosure.
- Locate the sides and front of the Compressor no less than 1 foot [.3m] away from any wall or enclosure.
- Maintain at least 2 feet [.6m] of free space above the Cover.
- **DO NOT** allow the Cover ventilation holes to be blocked or permanent damage could occur.

FIG. 11



### CASTER LOCKING

### ⚠ NOTICE

The Eastwood QST 30/60 Compressor is mounted on Casters and can vibrate or move slightly during operation. Always lock Casters before running.

#### To Lock:

- Note that both of the Swivel Casters are equipped with brakes. Push down on the Paddles to lock brakes (Fig 11), lift up on the paddles to release brakes.

# AIR LINE CONNECTION

## ⚠ NOTICE

The Eastwood QST 30/60 Compressor is designed with a high efficiency, 1/2" Ball Valve at the air outlet with 1/2" FNPT threads. It is strongly recommended to use 1/2" or larger air lines and fittings throughout your system. The use of 3/8" or smaller lines is acceptable but will greatly hamper performance.

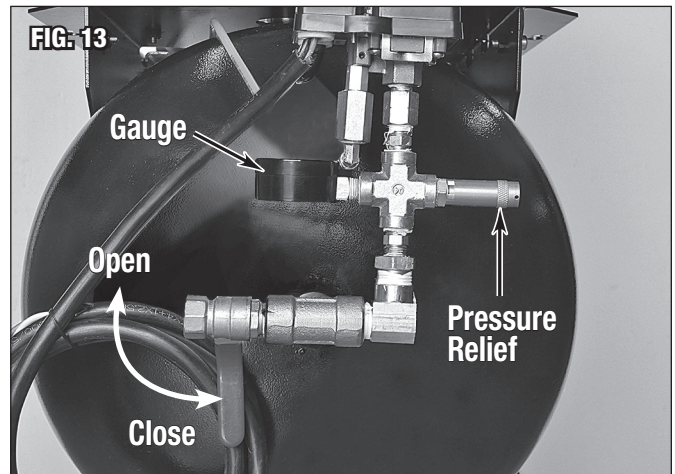
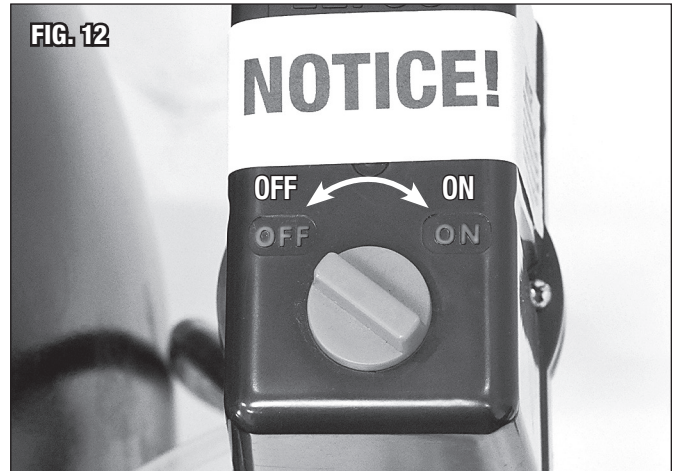
It is strongly advisable to use a suitable high efficiency Air Regulator and Moisture/Oil Separator in a well-planned air-line layout after the Air Outlet Valve.

# COMPRESSOR OPERATION

- Close the Water Drain Valve located at the underside of the Tank (FIG 10).
- Move the Power Switch to the "ON" position (FIG 12).
- Allow the Tank pressure to build to 145 PSI [10 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 @ 145 PSI [10 bar] and automatically restart @ 115 PSI [7.9 bar].

## ⚠ NOTICE

The Pressure Gauge, located on the side of the "ON/OFF" and Pressure Switch, indicates actual tank pressure (Fig 13).





# CONDENSATION DRAIN

In normal use, particularly in humid environments, moisture will condense and collect in the tank. It must be drained daily to prevent internal tank corrosion and ultimate failure.

## Tank moisture draining procedure:

- Move the Power Switch to the “OFF” position.
- Release pressure from the Tank until the Tank Pressure Gauge indicates 0 PSI.

### ⚠ CAUTION

Opening the Drain Valve before releasing pressure from the Tank will cause contaminated water to be blown out at high velocity. Release pressure from the Tank until Tank Pressure Gauge indicates 0 PSI. Always wear appropriate eye protection.

- Place a suitable container under the Drain Valve.
- **Slowly** open the Drain Valve located on the underside of the Tank (Fig 10).
- Close Drain Valve securely when finished.

### ⚠ 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.

# MAINTENANCE

## The following maintenance must be performed:

- **Before each use:** Drain moisture from tank.
- **After 1st year of operation:** Perform oil change.
- **After 3 years of operation:** Perform major maintenance including Oil, Oil Filter, Moisture Separator, and Air Filter.

**NOTE:** If operating in excessively dusty or dirty environments, vacuum debris or dust from the cooling air screen and vents and periodically follow the **Air Filter Change** procedure to remove, blow-out and re-install Air Filter Element.

## OIL CHANGE ONLY

### ⚠ WARNING BURN HAZARD!

Significant heat is generated during operation. Components and oil may be hot. Allow to cool a minimum of 1 hour after last use before servicing to avoid burns.

### ⚠ WARNING INJURY HAZARD!

Before performing any service, turn Power Switch to the “OFF” position (Fig 12). Shut off breaker or disconnect power supply. Release pressure from Tank until Gauge indicates 0 PSI.

- Remove Cover by removing the four, 6mm Socket Head Cap Screws located at the “keyhole” slots under the edge of the Cover Frame (FIG 1) with a 5mm Hex Key.

### ⚠ WARNING INJURY HAZARD!

The Oil Tank may be under pressure. Opening the Oil Drain Valve or removing the Fill Plug under pressure can cause oil to be blown out at high velocity. Move Power Switch to the “OFF” position, release pressure from the Tank until Tank Pressure Gauge indicates 0 PSI, and disconnect Compressor from power supply before opening Drain Valve or removing Fill Plug. Always wear appropriate eye protection.

- Move Power Switch to the “OFF” position (FIG 12). Release pressure from Tank until Tank Pressure Gauge indicates 0 psi.
- Disconnect Compressor from power supply.
- With a suitable drain pan in place, first remove the Drain plug with a 10mm Hex Key then slowly open the Drain Valve (FIG 4).  
**TIP:** It is advisable to place spacers under the opposite side Casters lifting the Compressor slightly on that end to force the maximum amount of oil to drain from the Reservoir into a suitable container (FIG 14).  
**TIP:** A 3/8” NPT barbed fitting installed into the Drain Valve with a length of tubing or hose attached is helpful for directing oil into drain pan.

**⚠ NOTICE**

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

- Close Oil Drain Valve completely then re-install brass Drain Plug and tighten securely.
- Remove the brass Oil Fill Plug from the upper front corner of the Oil Reservoir with a 10mm Hex Key (FIG 3).
- Add #31718 Eastwood Synthetic Scroll Compressor Oil to the fill port of the Oil Reservoir (FIG 6) using a suitable funnel.
- Check oil level with included Dipstick. The oil level is 100% full when it is at the top mark (FIG 5). If the oil is below the lower mark, oil must be added.
- Replace Fill Plug and tighten securely.
- With the Water Drain and Air Outlet Valves closed, turn the Power Switch back to “ON”. Allow full pressure to build until the Pressure Switch automatically shuts the unit off then turn the Power Switch to “OFF”.
- Listen for any air leakage and observe the Scroll case, all lines and fittings for any evidence of oil leakage.

**⚠ NOTICE**

If any air or oil leaks are discovered, call Eastwood Tech at: 1-800-345-1178.

- If no leaks exist, replace the Cover and secure with the four, 6mm Socket Head Cap Screws

### OIL, OIL FILTER, AND MOISTURE SEPARATOR CHANGE

**⚠ WARNING BURN HAZARD!**

Significant heat is generated during operation. Components and oil may be hot. Allow to cool a minimum of 1 hour after last use before servicing to avoid burns.

**⚠ WARNING INJURY HAZARD!**

Before performing any service, turn Power Switch to the “OFF” position (Fig 12). Shut off breaker or disconnect power supply and release pressure from Tank until Gauge indicates 0 PSI.

- Remove Cover by removing the four, 6mm Socket Head Cap Screws located at the “keyhole” slots under the edge of the Cover Frame (FIG 1) with a 5mm Hex Key.

**⚠ WARNING INJURY HAZARD!**

The Oil Tank may be under pressure. Opening the Oil Drain Valve or removing the Fill Plug under pressure can cause oil to be blown out at high velocity. Move Power Switch to the “OFF” position, release pressure from the Tank until Tank Pressure Gauge indicates 0 PSI, and disconnect Compressor from power supply before opening the Drain Valve or removing Fill Plug. Always wear appropriate eye protection.

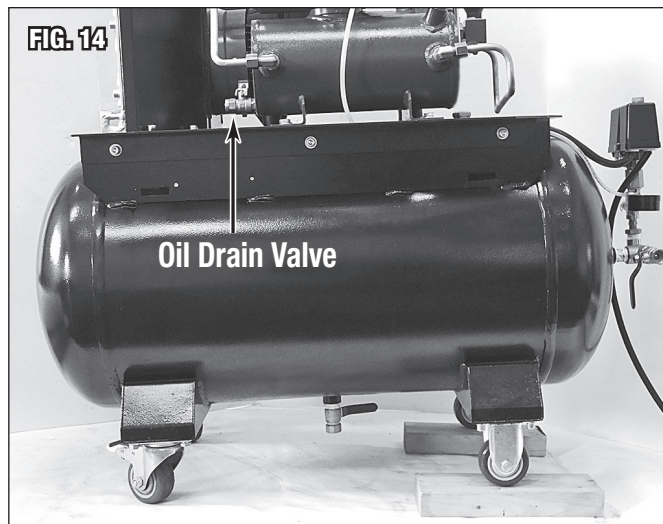
- Move Power Switch to the “OFF” position.
- Release pressure from Tank until Tank Pressure Gauge indicates 0 psi.
- Disconnect Compressor from power supply.
- With a suitable drain pan in place, first remove the Drain plug with a 10mm Hex Key then slowly open the Drain Valve.

**TIP:** It is advisable to place spacers under the opposite side Casters lifting the Compressor slightly on that end to force the maximum amount of oil to drain from the Reservoir into a suitable container (FIG 14).

**TIP:** A 3/8” NPT barbed fitting installed into the Drain Valve with a length of tubing or hose attached is helpful for directing oil into drain pan.

**⚠ NOTICE**

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



- Close Oil Drain Valve completely then re-install brass Drain Plug and tighten securely.
- Remove the brass Oil Fill Plug from the upper front corner of the Oil Reservoir with a 10mm Hex Key (FIG 3).
- Add #31738 Eastwood Synthetic Scroll Compressor Oil to the fill port of the Oil Reservoir (FIG 6) using a suitable funnel.
- Check oil level with included Dipstick. The oil level is 100% full when it is at the top mark (FIG 5). If the oil is below the lower mark, oil must be added.
- Replace Fill Plug and tighten securely.
- Remove Oil Filter (*Black Canister*) from the Filter Manifold.
- Remove Moisture Separator (*White Canister*) from the Filter Manifold.
- Clean all gasket sealing surfaces thoroughly.

**⚠ NOTICE**

The Oil in this unit is under high pressure and filters **MUST** be tight to prevent leakage. To tighten: Snug down by hand then tighten 3/4 to 1 full turn after initial seal contact.

- Install a new Eastwood #31715 Oil Filter (*Black Canister*) at the **left** position of the Filter Manifold (FIG 15).
- Install a new Eastwood #31716 Moisture Separator (*White Canister*) at the **right** position of the Filter Manifold (FIG 15).

**⚠ NOTICE**

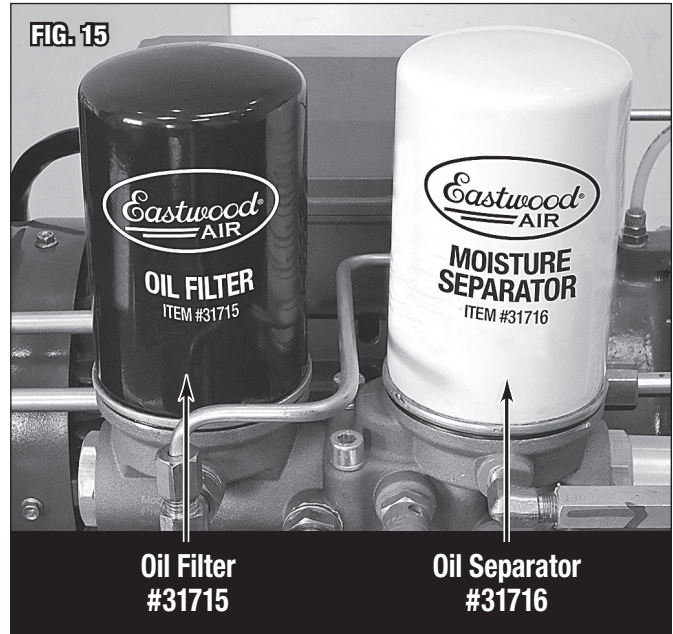
Used Oil is a polluting material and should be disposed of in compliance with local regulations.

- With the Water Drain and Air Outlet Valves closed, turn the Power Switch back to "ON". Allow pressure to build until the Pressure Switch automatically shuts the unit off then turn the Power Switch to "OFF".
- Listen for any air leakage and observe the Scroll case, all lines and fittings for any evidence of oil leakage.

**⚠ NOTICE**

If any air or oil leaks are discovered, call Eastwood Tech at: 1-800-345-1178.

- If no leaks exist, replace the Cover and secure with the four, 6mm Socket Head Cap Screws.



**AIR FILTER CHANGE**

**⚠ WARNING BURN HAZARD!**

Components are Hot! Significant heat is generated during operation. Allow to cool a minimum of 1 hour after last use before servicing to avoid burns.

**⚠ WARNING INJURY HAZARD!**

Before performing any service, turn Power Switch to the "OFF" position (Fig 12). Shut off breaker or disconnect power supply.

- Remove Air Filter Lid by turning it counter-clockwise (FIG 7).
- Remove the Air Filter Element and discard it (FIG 8).
- Replace the Air Filter Element with a new Eastwood #31717 and re-install the Air Filter Housing Lid. Note that the arrows on the Air Filter Lid must be indexed with the 5 arrows around the circumference of the Filter Housing and the snorkel of the Air Cleaner Housing must be pointing downward (FIG 9).

# TROUBLESHOOTING

PROBLEM	CAUSE	CORRECTION
Compressor runs constantly without cycling off	Air demand is greater than the capacity of the Compressor	Reduce air demand. Do not exceed 12 SCFM @ 90 PSI.
	Severe air leak at fittings, line or hose	Stop compressor use, locate leak and perform repair.
Does not run when switch is turned on	No Power	Check 220/240 VAC power source and connection to unit. If it is determined after proper diagnostics that power is present up to the Pressure Switch, call Eastwood Tech at: 1-800-345-1178.
Motor appears to be running excessively hot	Air demand is greater than the capacity of the Compressor	Reduce air demand. Do not exceed 12 SCFM @ 90 PSI.
	Dirt, dust and debris buildup in motor cooling air intake grille and/or Heat exchanger	Use a soft brush or vacuum cleaner to remove debris from grille and or Heat Exchanger.

## ADDITIONAL ITEMS

- #31721 Replacement Eastwood Air Filter Element
- #31715 Replacement Eastwood Oil Filter
- #31716 Replacement Eastwood Moisture Separator
- #31718 1 Quart [0.946 liter] Eastwood Synthetic Scroll Compressor Oil
- #20472 Eastwood Filter Separator Regulator System
- #13600 3/4 in Professional Compressed Air Line Kit

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

The Eastwood Technical Assistance Service Department: 800.343.9353 >> email: [techhelp@eastwood.com](mailto:techhelp@eastwood.com)

PDF version of this manual is available at [eastwood.com](http://eastwood.com)

The Eastwood Company 263 Shoemaker Road, Pottstown, PA 19464, USA 800.343.9353 [eastwood.com](http://eastwood.com)