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Item #32500

QST-80/120 SCROLL COMPRESSOR INSTRUCTIONS



The **EASTWOOD ELITE QST-80/120 SCROLL 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 conventional piston-type air compressors. The unique Scroll Pump design also has fewer moving parts and significantly reduced friction for greater reliability and longer life.

CONTENTS

- (1) QST-80/120 Scroll Compressor
- (1) 3/4" x 3-3/8" Pipe Nipple
- (1) Side Panel Key
- (1) Eastwood Instruction Manual

SPECIFICATIONS

Power Requirement:	208-240V, 60Hz, 31.0-amp, 3 phase
Motor Horsepower:	11 hp
Motor RPM:	3516
Sound Reading @ 10 ft. [3m]:	62 +/- 3 db.*
Air Output:	31.8 SCFM @ 90 PSI [900 l/min. @ 6.2 bar]
Cut-in Pressure:	115 PSI [8 bar]
Cut-out Pressure:	145 PSI [10 bar]
Max. Pressure:	145 PSI [10 bar]
Pressure Relief Valve Setting:	160 PSI [11 bar]
Oil Capacity:	
Total System:	135 oz. [4.0 liter]
Oil Change (see maintenance schedule):	74 oz. [2.2 liter]

* Using standard sound level testing conditions. Results may vary based on compressor location and environment.

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

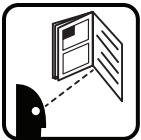
WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.

⚠ 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 disconnect compressor from the electrical power supply before leaving it unattended.



⚠ WARNING ELECTRICAL SHOCK HAZARD!

- Connect only to a 208-240VAC, 60Hz, 3 phase, 30 Amp circuit meeting all applicable local electrical codes.



⚠ WARNING INJURY HAZARD!

- This unit starts automatically. **ALWAYS** shut off the compressor, disconnect electrical power, and bleed all pressure from the tank before servicing the compressor, and when the compressor is not in use.
- Do not use the unit with the Cover removed. Serious 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 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 INJURY HAZARD!

- Fan Blade can start at any time. To help avoid personal injury, keep hands clear.



⚠ CAUTION BURN HAZARD!

- The Scroll Pump generates heat during operation. 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.



⚠ CAUTION

- Drain the moisture from the tank daily. An empty, dry 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 3’ (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.

⚠ NOTICE

- **REQUIRES 208-240 VAC, 60Hz., 3 phase.**

COMPRESSOR SITE LOCATION

- The Eastwood Elite QST-80/120 Scroll Compressor must be located in an indoor area, on a firm, clean, level surface. A solid, level concrete floor is best.

⚠ WARNING FIRE OR EXPLOSION HAZARD!

Keep compressor a minimum of 20 feet from flammable or explosive vapors and materials.

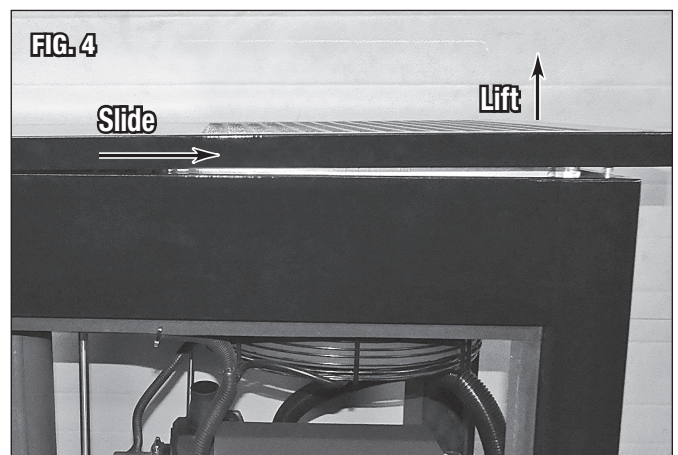
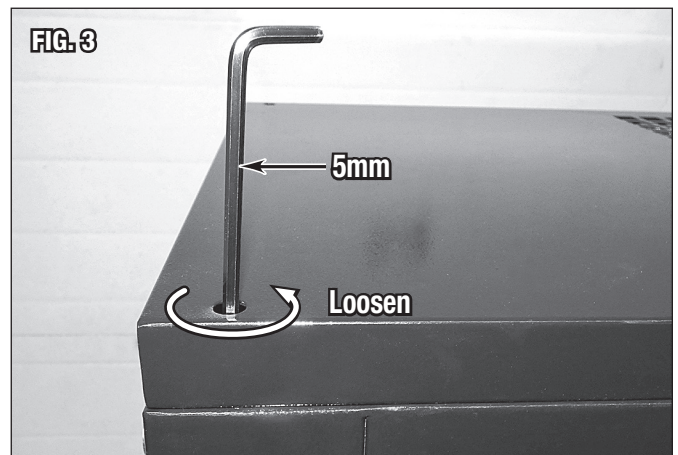
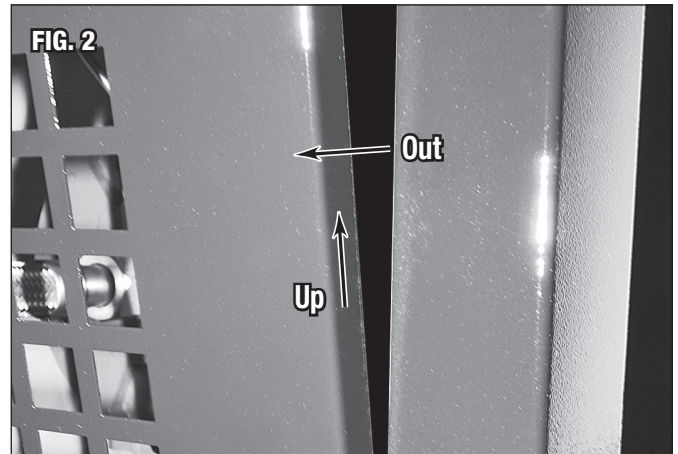
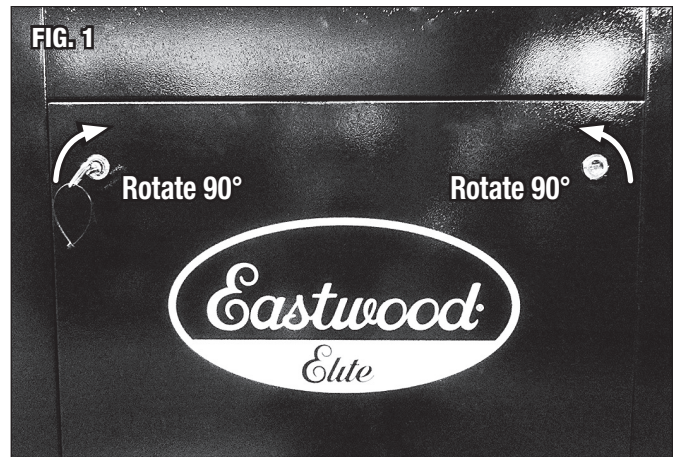
⚠ NOTICE

The Scroll Compressor generates heat during operation and has a highly efficient heat-exchanging and air-cooled system. Sufficient space must be provided around the unit for cooling air circulation.

- Select an area with adequate ventilation and air circulation. A minimum of 3’ [90 cm] of free space **must** be maintained around all sides and above the compressor. This is to allow for adequate ventilation and panel removal and to allow room for access for maintenance purposes. Do not store objects behind, alongside or on top of the compressor.
- Do not place the Scroll Compressor in an area where dust and debris can be drawn into the cooling vents and air intake or severe damage to the unit can occur.
- The temperature environment for proper operation must be between 32°F and 110°F [0°C and 43°C]. The Compressor is equipped with over temperature shut off circuitry which may activate in excessive ambient temperature conditions.
- For best performance, humidity levels should be below 75%. For extended operation in higher humidity environments, particular attention should be devoted to draining tank of moisture.

COMPRESSOR SET-UP

- **Level Scroll Compressor** - Using an accurate level, check to see that the Scroll Compressor is level and not prone to rocking or vibration. Use suitable shims under the corners of the frame, if necessary, to achieve a level condition.
- **Remove Panels** - Access to all interior components is by panel removal. All four sides and top panels are removable:
 - Front rear and side panels are removed by placing the included triangular profile key over the triangular posts of the latches (**FIG 1**). Front and rear panels have 2 latches each and are released by turning the key 1/4 of a turn to the respective outside corner. End panels have one latch each and are released with 1/4 turn to the right.
 - After latch release, lift panel off locating pins on the outer floor of the unit then pull up and away (**FIG 2**).
 - The top panel is removed by inserting a 5mm hex key into the holes at the corners and loosening the socket head cap screws.**NOTE:** Do not remove the screws as the underside flange of the top panel has "Keyhole" slots. Standing at the rear of the Compressor, slide the top panel to the right to clear screw heads and lift off (**FIGS 3 & 4**).



- **Check Oil Level** – The Scroll Compressor is shipped with the correct amount of Scroll Compressor Oil, however the oil level should be verified as it is extremely critical to the function of the Scroll.

⚠ NOTICE

If the oil level is found to be low, check all lines, fittings, oil reservoir and heat exchanger for any signs of leakage from shipping damage before continuing.

- View the Sight Gauge on the side of the Oil Reservoir to make sure that it reads **FULL** (at or above the “M” line but not above the “H” line (FIG 5).
- If the oil level is below the “M” line, oil must be added.
- If needed, remove the Fill Plug from the Oil Reservoir with a 22mm wrench (not included) and add #31718 Eastwood Scroll Compressor Oil to the fill port of the Oil Reservoir using a suitable funnel (FIG 6).
- Check the condition of the seal then replace Oil Fill Plug and tighten securely.
- **Check Air Filter** – Clean, filtered intake air is vital to the life of the Scroll as it is machined to extremely close tolerances.
 - Check that the Cover on the Air Filter is latched correctly and hasn't vibrated loose in shipment. The two molded in arrows on the base and lid should be aligned (FIG 7).

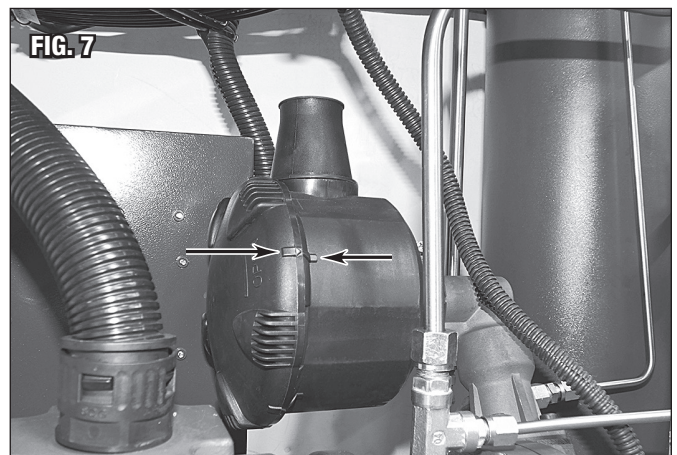
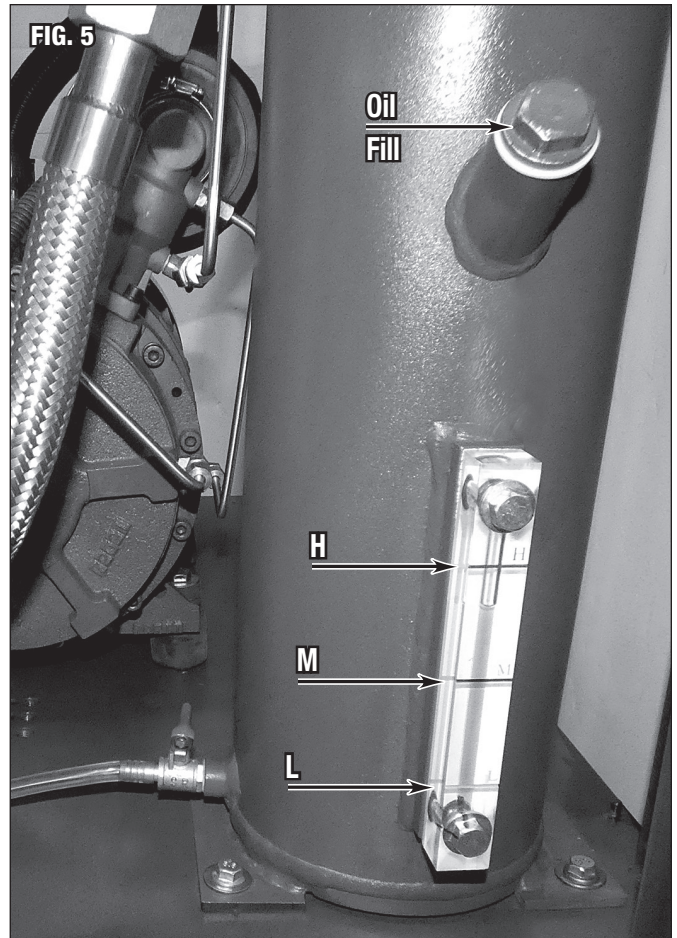
AIR LINE CONNECTION

⚠ NOTICE

The Eastwood Elite QST-80/120 Scroll Compressor is designed to be used with a minimum external 60 Gallon Air Tank and a 3/4" Flexible Air Line with 3/4" NPT input and output threads.

To utilize the maximum performance from the Compressor, it is strongly recommended to use 3/4" or larger air lines and fittings throughout your system. The use of 3/8" or smaller lines and fittings 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 Air Regulator (not included) and Moisture/Oil Separator (not included) in a well-planned air line layout.



▲ NOTICE 3 PHASE REQUIREMENTS

- 208-240V, 60Hz, 22-amp, 3 phase 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 circuit breaker or fuse 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 voltage variation between the rated input voltage requirements and that of the actual input voltage supply must not exceed +/- 10%. If greater variation exists, a step-up or step down transformer must be installed.
- The voltage variation between legs of the 3-phase supply must be within 5%. If greater variation exists, a voltage regulator or rectifier must be used.
- 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 main breaker disconnect switch in the line from the electrical panel to the Compressor within momentary reach of the Compressor. 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.

ELECTRICAL CONNECTION

1. The 3 phase wiring connections are made at the Upper Terminals of the Electrical Box (**FIG 8**).
2. The Scroll Compressor features a microprocessor in the control unit Control Panel Display which will detect incorrect phasing and will display "ALARM1:" "PHASE REVERSE" and an audible alarm will sound.
3. If these conditions occur, it is an indication that the 3 Phase connections have been done incorrectly. To correct, shut off power at main breaker disconnect switch and revise the connection sequence of the three phase upper terminals of the Electrical Box (**FIG 11**).
4. Press the SET Button (S) to cancel alarm and reset the Error message in the LCD Display window.

▲ NOTICE

The 3 phase wiring connections **MUST** be done in the proper sequence or the motor could possibly run in reverse which could cause severe and permanent damage to the Scroll.

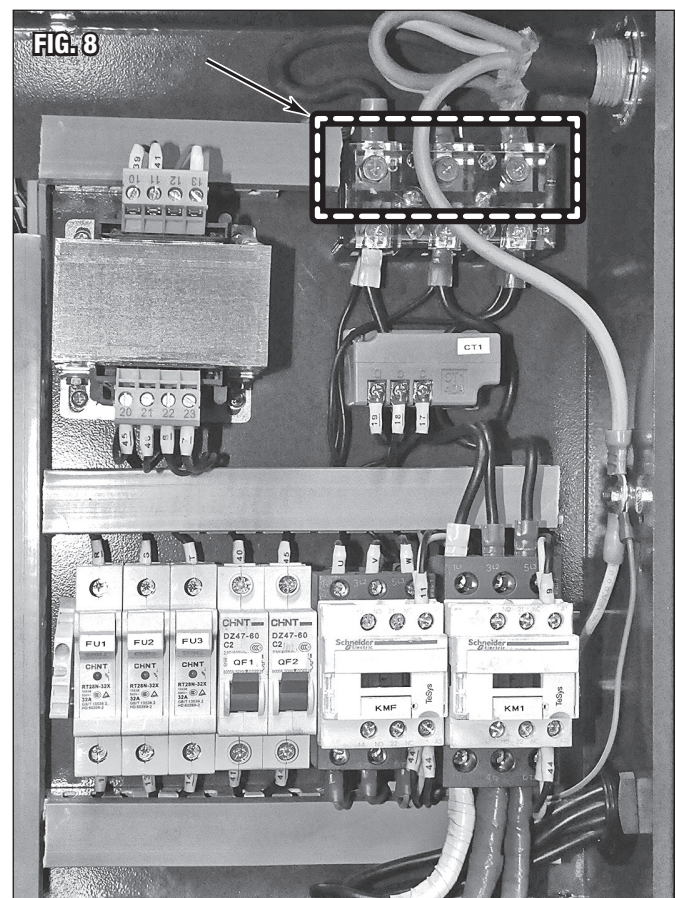













FIG. 9





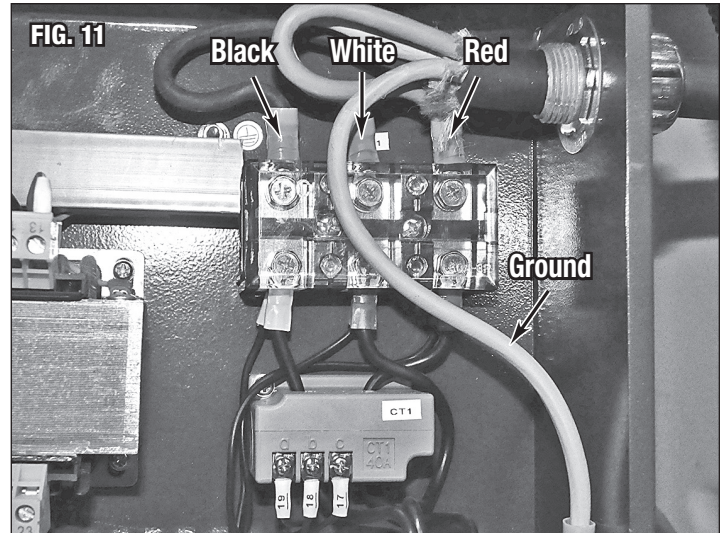
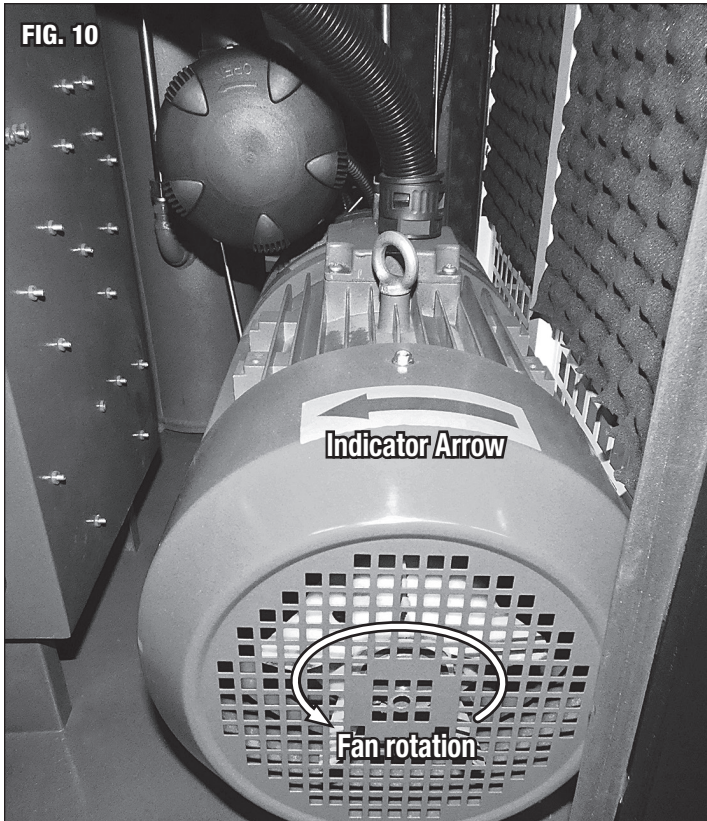
CONTROL PANEL FEATURES AND FUNCTIONS (FIG 9)

- | | | | |
|---|-------------------------------------------------------------------------------------|----------------------------------|----------------------------------------------------------------------------------|
| A |  | START Button | Turns Compressor On |
| B |  | OFF Button | Turns Compressor Off (Cooling Fan and Pressure Release Valve may still function) |
| C |  | SET Button | Enters Menu Selection / Alarm Reset |
| D |  | Down Menu Button | Scrolls Down in Menu Selections |
| E |  | Up Menu Button | Scrolls Up in Menu Selections |
| F |  | Selection to Right Button | Enables option selection / Moves cursor position right |
| G |  | Return Button | Exit Menu Page or return to previous setting |
| H |  | Emergency Stop Switch | Stops all compressor functions in an emergency |
| J |  | Power ON Indicator | Illuminates GREEN when Start Button is ON |
| K |  | Run Indicator | Illuminates AMBER when Motor is running |
| L |  | ALARM Indicator | Illuminates RED when a Fault Condition exists |


▲ NOTICE

As an added precaution, the following check should be performed before starting the Compressor for the first time:

1. Obtain the assistance of an observer and view the Motor cooling fan blades visible through the screened housing at the end of the Motor case (FIG 10).
2. Have the same observer note the directional arrow label on the Motor case (FIG 10).
3. Depress the "START" Button  of the Control Panel.
4. If the observer views the cooling fan begin to rotate in the opposite direction of the directional arrow label, depress the "OFF" Button  immediately!
5. If 3 phase connection corrections are required, do so and repeat check sequence beginning at step 1.
6. If correct rotation of the Motor has been verified, proceed to COMPRESSOR OPERATION.



COMPRESSOR OPERATION

- Depress the "START" Button  of the Control Panel (FIG 9).
- 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 [8 bar].

▲ NOTICE

The Pressure Gauge is visible through the upper right-side Compressor Panel and indicates the actual output line and tank pressure. When the pressure reaches the 145 PSI [10 bar] cutoff point, an Unloader Valve will automatically release static pressure in the Scroll to allow it to easily restart without needing to overcome residual pressure. This produces a momentary audible "hiss" or "bubbling" sound and is normal.

MENU SELECTIONS

The Microprocessor offers many display parameters to monitor major compressor functions and maintenance data including cumulative run time recording. Whenever any of the Control Panel keys are pressed, the Display Panel illumination feature will activate and, if not touched within 1 minute, will automatically go out.

TO BEGIN DISPLAY SEQUENCE:


- Press  1st time:
 Displays: Motor amperage draw for each individual 3-phase leg (**FIG 12**)


FIG. 12 MOTOR(A) A- 27.6
B- 29.3 C- 27.7
- Press  2nd time:
 Displays: Eastwood Tech Phone # (**FIG 13**)


FIG. 13 TEL :
800-343-9353
- Press  1st time:
 Displays: Air Pressure (**FIG 14**)
 (Air pressure at Scroll output, may read higher than Gauge Pressure visible at the side of the unit)


FIG. 14 PRES:0.00MPa
AUTO LOAD
- Press  2nd time:
 Displays: Scroll Air Temperature (**FIG 15**)



FIG. 15 TEMP: 60°C
AUTO LOAD
- Press  Again:
 Toggles between Air Pressure and Air Temperature.
- Press :
 Displays: RUN PARAMETER (**FIG 16**)


FIG. 16 RUN PARAMETER
USE PARAMETER
- Press  Again:
 Displays: Returns to motor amperage draw for each individual 3-phase leg: (**FIG 12**)


FIG. 17 MOTOR(A) A- 27.6
B- 29.3 C- 27.7
- Press :
 Displays: TOTAL RUN TIME (**FIG 17**)
 (Records total overall unit running time)


FIG. 18 TOTAL RUN TIME:
6H15M
- Press :
 Displays: TOTAL LOAD TIME (**FIG 18**)
 (Records actual Scroll/Motor running time under load)


FIG. 19 TOTAL LOAD TIME
6H13M
- Press :
 Displays: OIL FILTER TIME (**FIG 19**)
 (Cumulative time of oil filtration)


FIG. 20 OIL FILTER TIME
0006H
- Press :
 Displays: OIL/AIR FILTER TIME (**FIG 20**)
 (Cumulative time of moisture/oil separator filter)




FIG. 21 O-A FILTER TIME
0053H
- Press :
 Displays: AIR FILTER TIME (**FIG 21**)
 (Cumulative time of air filtration)


FIG. 12 AIR FILTER TIME
0006H

- Press 
 Displays: LUBE TIME (FIG 22) ————— FIG. 22


LUBE TIME: 0006H

 (Cumulative time of Scroll Oil use)
- Press 
 Displays: ALARM1 (FIG 23) ————— FIG. 23


ALARM1:000006H PHASE REVERSE

 (Records occurrence of PHASE REVERSE)
- Press 
 Displays: ALARM2 (FIG 24) ————— FIG. 24


ALARM2:000151H P HIGH 0.82MPa

 (Records occurrence of HIGH LOAD PRESSURE)
- Press 
 Displays: ALARM3 (FIG 25) ————— FIG. 25


ALARM3:000151H P HIGH 0.62MPa

 (Records occurrence of UNLOADED HIGH PRESSURE)
- Press 
 Displays: ALARM4 (FIG 26) ————— FIG. 26


ALARM4:000131H T HIGH 105°C

 (Records occurrence of HIGH FAN TEMPERATURE)
- Press 
 Displays: ALARM5 (FIG 27) ————— FIG. 27


ALARM5:000128H T HIGH 105°C

 (Records occurrence of HIGH MOTOR TEMPERATURE)
- Press 
 Displays: PROD DATE (FIG 28) ————— FIG. 28

PRODUCT DATE: 2018-11-15

 (Build date of unit)
- Press 
 Displays: SERIAL# (FIG 29) ————— FIG. 29



SERIAL NUMBER: 18111531

 (Serial # of unit)
- Press 
 Displays: C-STATE RX:-TX: (FIG 30) ————— FIG. 30

C-STATE: RX:- TX:-

 (This is a manufacturer-only check point setting used for calibration purposes)

▲ NOTICE

Pressing  beyond the RUN PARAMETERS display will reveal three additional Menus (USE PARAMETERS, FAC PARAMETERS and MOD PARAMETERS). Pressing  will produce a prompt in the Display Window that requests a Password be entered in order to gain access. These menus are exclusively used at assembly to achieve initial factory settings and calibrations only. No password is available and no user manipulation of these settings is possible.

THERMAL OVERLOAD PROTECTION

As long as the air output capacity, 31.8 SCFM @ 90 PSI [900 l/min. @ 6.2 bar], of the Eastwood Elite QST-80/120 Scroll Compressor is not exceeded, it is capable of running continuous, automatically controlled on/off cycles. If the air output is exceeded, the Compressor will run continuously in efforts to meet demand. If this occurs, the Motor and or Scroll will overheat. When the Compressed Air Outlet Temperature Sensor detects 203°F [95°C] the Thermal Overload alarm will activate (audible warning buzzer and LCD Screen Warning display) however, the Motor will continue to run for a short period. At this point, all work demands of the Compressor should be stopped immediately and the unit should be allowed to continue to run without a load until it cools. This will automatically cancel the Thermal Overload LCD Screen Warning, however, the audible warning buzzer alarm must be reset by pressing the **(S)** Button **(FIG 9)**.

If the Thermal Overload warning is not heeded, the Motor will shut off when the Compressed Air Outlet Temperature Sensor detects 212°F [100°C]. The cooling fan will continue to run. The motor will not start until it has cooled sufficiently.

OIL TEMPERATURE ALARM

In addition to the Motor and Scroll overheating protection, the Oil Over Temperature sensor constantly monitors the Scroll oil temperature. If the oil temperature becomes excessive, the Oil Over Temperature alarm will activate (audible warning buzzer and LCD Screen Warning display) however, the Motor will continue to run for a short period. At this point, all work demands of the Compressor should be stopped immediately and the Compressor housing should be checked for blockage of cooling air side vent panels, or blockage of the Fan Air Outlet on top.

The Fan should be allowed to continue to run until the oil sufficiently cools. This will automatically cancel the Oil Over Temperature LCD Screen Warning however, the audible warning buzzer alarm must be reset by pressing the **(S)** Button **(FIG 9)**.

If the Oil Over Temperature warning is not heeded, the Motor will shut off and will not start until the oil has cooled sufficiently.

LOW OIL LEVEL ALARM

In addition to the Motor and Scroll overheating protection, the Oil Level sensor constantly monitors the Scroll oil level. If the oil level becomes too low, the Low Oil Level alarm will activate (audible warning buzzer and LCD Screen Warning display) and the Motor will stop running.

The oil level must be checked and filled with the necessary amount of Eastwood Scroll Compressor Oil and the alarm must be reset by pressing the **(S)** Button **(FIG 9)**.

The Scroll, Oil/Moisture Tank, and all lines should be checked for leaks to determine the reason for the low oil condition before resuming use.

PRESSURE RELIEF VALVE

The Pressure Relief Valve **(FIG 31)** is factory set to release at 160 PSI [11 bar]. **DO NOT** attempt to adjust or tamper with it. Doing so can cause an unsafe condition resulting in violent bursting of lines, tank or other components.

If the Pressure Relief Valve should suddenly release, this indicates that a dangerous condition exists! Stop all work immediately and quickly depress the large **“STOP”** Button located on the Control Panel. **DO NOT** resume Compressor use until a cause for the pressure release has been found.

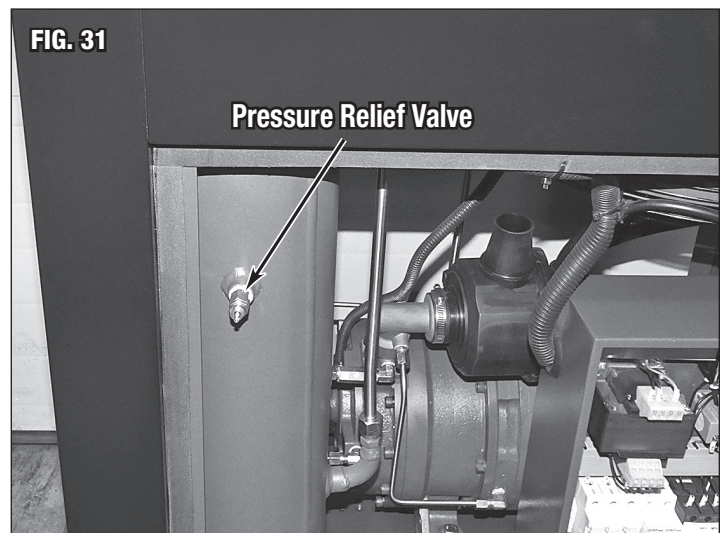
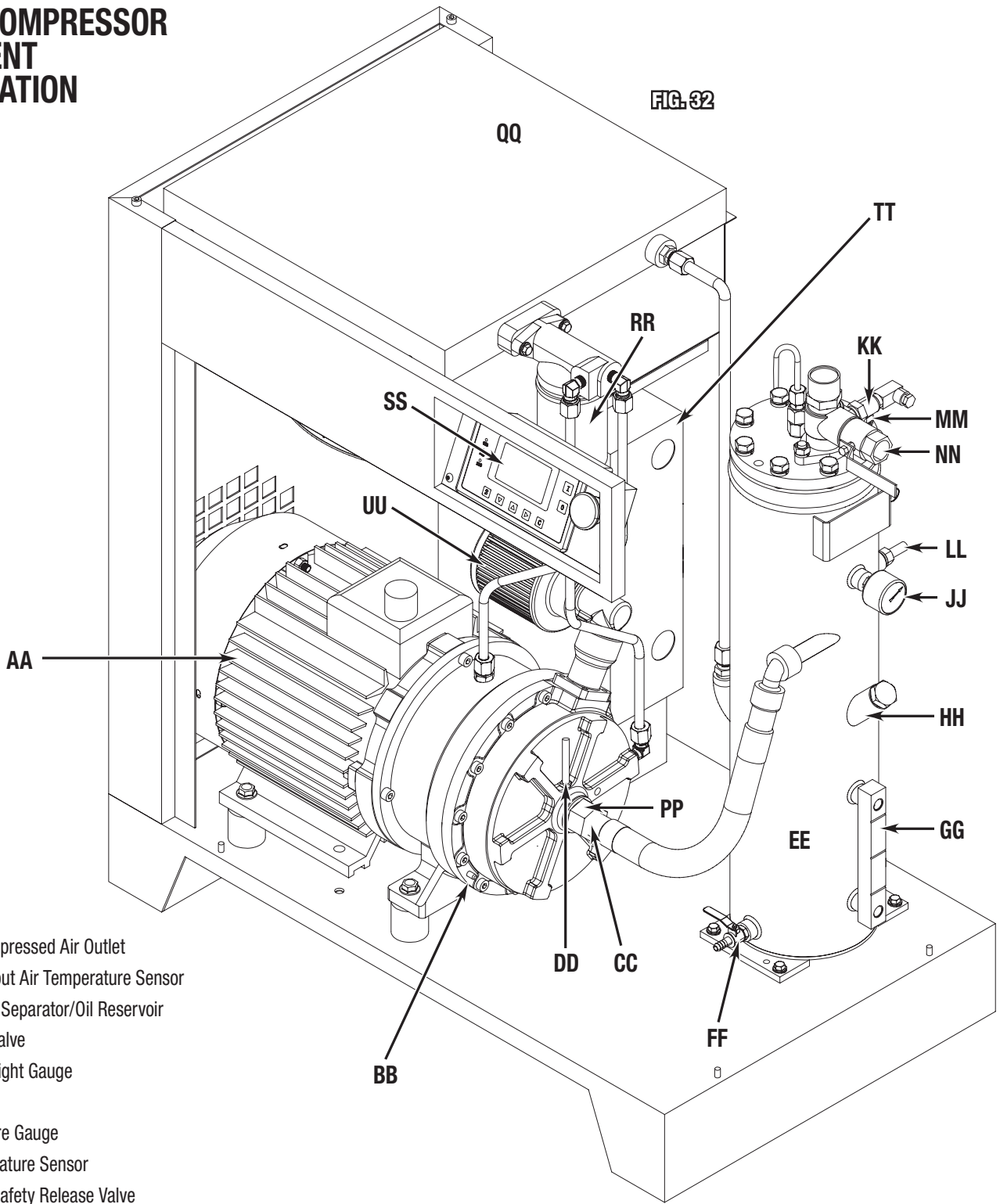


FIG. 31

Pressure Relief Valve

SCROLL COMPRESSOR COMPONENT IDENTIFICATION (FIG 32)

FIG. 32



- AA – Motor
- BB – Scroll
- CC – Scroll Compressed Air Outlet
- DD – Scroll Output Air Temperature Sensor
- EE – Oil and Air Separator/Oil Reservoir
- FF – Oil Drain Valve
- GG – Oil Level Sight Gauge
- HH – Oil Fill Port
- JJ – Air Pressure Gauge
- KK – Oil Temperature Sensor
- LL – Pressure Safety Release Valve
- MM – Pressure Sensor
- NN – Compressed Air Outlet Port
- PP – Pressure Switch
- QQ – Oil Heat Exchanger
- RR – Oil Filter
- SS – Microprocessor Control Panel
- TT – Electrical Cabinet
- UU – Air Inlet/ Air Filter Housing

ELECTRICAL PANEL COMPONENT IDENTIFICATION (FIGS 33 & 34)

- a – FU1, FU2 & FU3 = Motor & Fan Fuses
(Upper = Motor Connections, Lower = Fan Connections)
- b – QF1 = Fan Pressure Switch
- c – QF2 = Unloading Valve Pressure Switch
- d – KMF = Fan Contactor
- e – KM1 = Motor Contactor
- f – Transformer, 24v & 220V
- g – Current Transformer Phase Meter
- h – Upper Terminals
- j – Ground lug

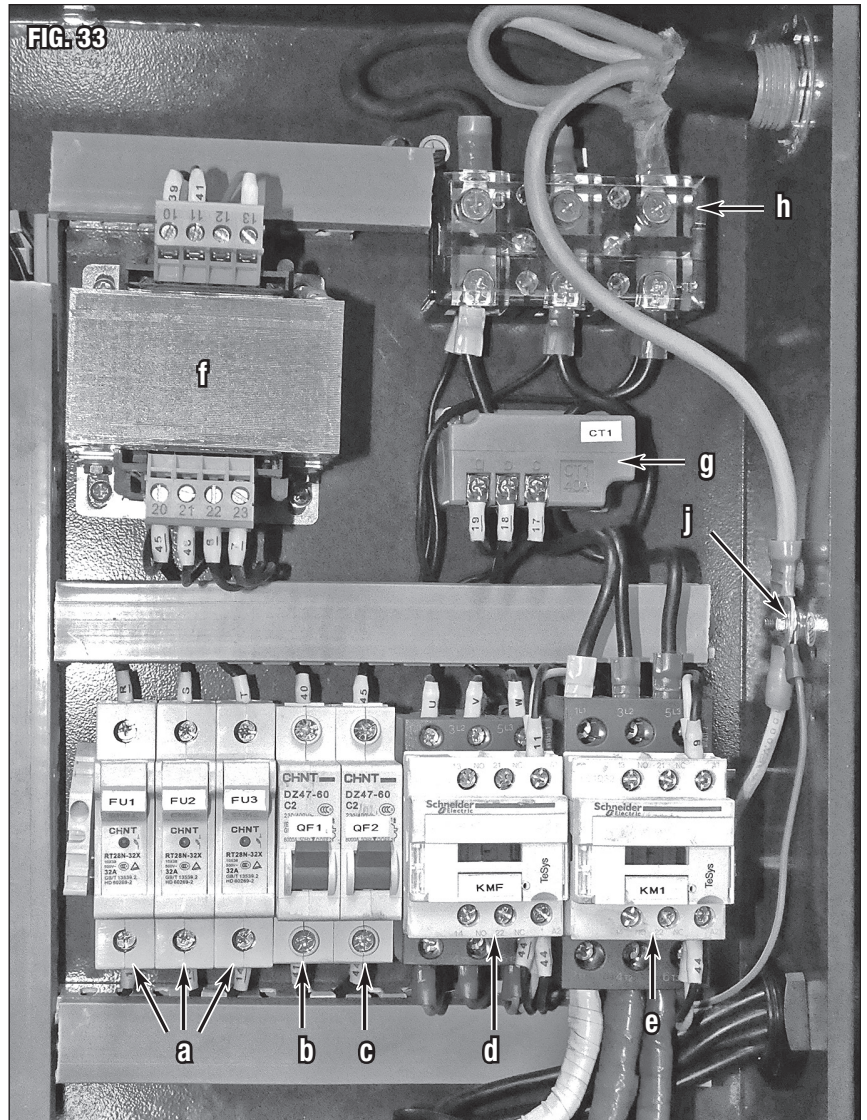
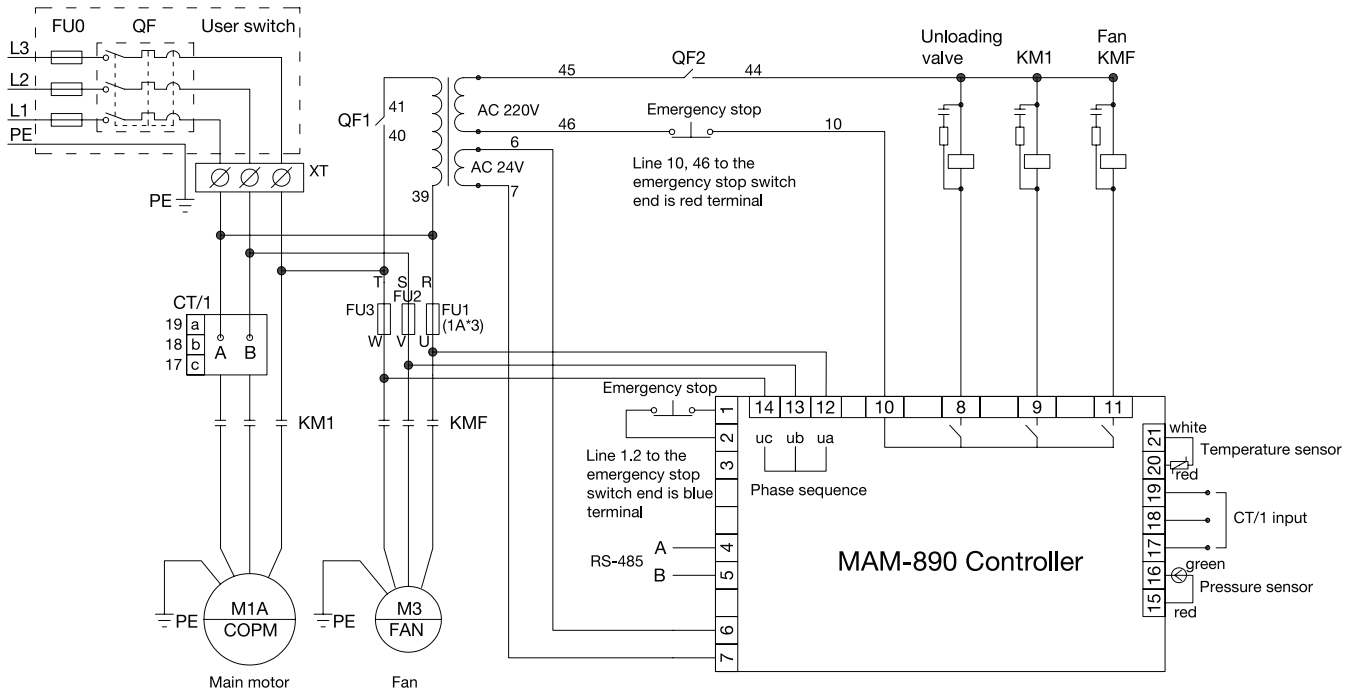


FIG. 34



MAINTENANCE

MAINTENANCE SCHEDULE

⚠ NOTICE

The following schedule should be adhered to for normal operating conditions. For operation in a harsh or dirty environment, all maintenance intervals should be decreased by 20%.


Maintenance Interval	Maintenance Item
Daily	<ul style="list-style-type: none">• Inspect Tank, Fittings and Lines for Damage or Leaks• Drain Condensation Moisture from Tank• Clear Dirt or Debris from Cooling Air Vents• Check Oil Level
After First 500 Hours	<ul style="list-style-type: none">• Replace Air Filter• Change Oil• Replace Oil Filter• Check Electrical Connections
Every 6 Months or 1000 Hours	<ul style="list-style-type: none">• Replace Air Filter• Change Oil• Replace Oil Filter• Replace Oil/Air Moisture Separator Filter• Clean Cooling Fins of Heat Exchanger

DRAIN CONDENSATION

In normal compressor use particularly in humid environments, moisture will condense and collect in the tank.

All tanks must be drained of moisture daily. Failure to do causes internal tank corrosion, perforation and ultimate failure.

The following is the moisture draining procedure for the optionally available Eastwood #32501, 80 Gallon Vertical Tank: (other tanks supplied by customer may vary in detail)

1. Press the "OFF" Button  and shut off main power.
2. Release all pressure from the Tank until the Tank Pressure Gauge reads less than 20 PSI.
3. **Slowly** open the Drain Valve of the tank (will vary with tank design).

⚠ CAUTION

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

- Clean dirt and debris from cooling air vents. Use a semi-firm brush or compressed air to keep cooling air passages free from dirt or debris accumulation.


PANEL REMOVAL

Access to all interior components is by panel removal. All four sides and top panels are removable:


1. Front rear and side panels are removed by placing the included triangular profile Panel Key over the triangular posts of the latches (**FIG 1**). Front and rear panels have 2 latches each and are released by turning the key 1/4 of a turn to the respective outside corner. End panels have one latch each and are released with 1/4 turn to the right.
2. After latch release, lift panel off locating pins on the outer floor of the unit then pull up and away (**FIG 2**).
3. The top panel is removed by inserting a 5mm hex key into the holes at the corners and loosening the socket head cap screws.
NOTE: Do not remove the screws as the underside flange of the top panel has Keyhole” slots. Standing at the rear of the Compressor, slide the top panel to the right to clear screw heads and lift off (**FIGS 3 & 4**).

⚠ CAUTION

PERFORM THE FOLLOWING STEPS BEFORE PERFORMING ANY MAINTENANCE PROCEDURES!



- Shut off power. Press the “OFF”  Button [B] (Fig 9) and shut off the main 3 phase power switch to the unit.
- Release all pressure from the Tank and Compressor.

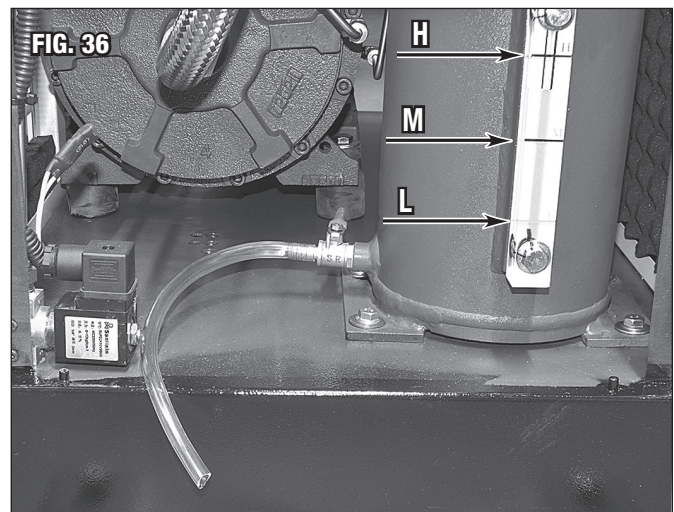
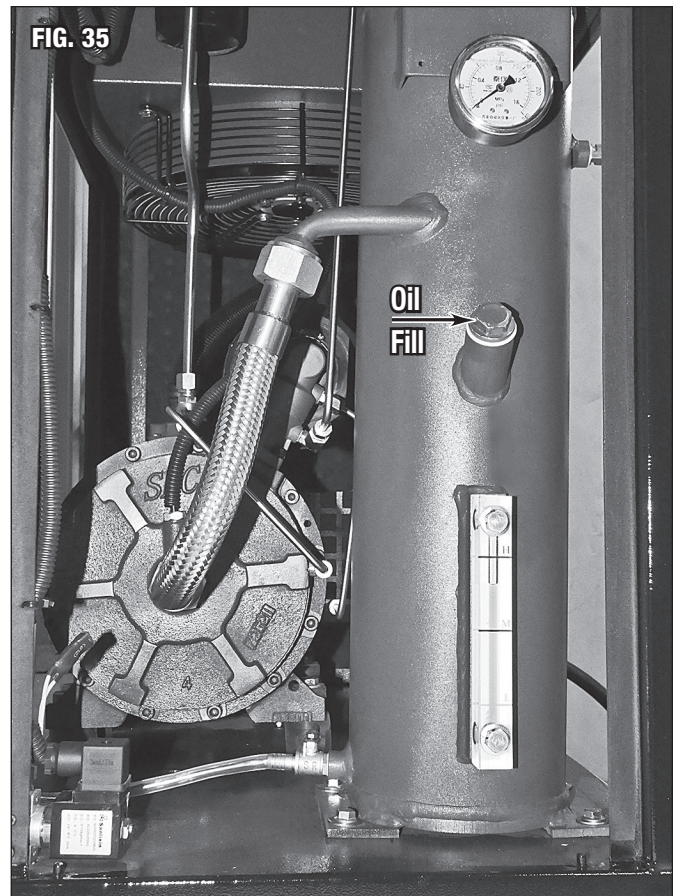
OIL CHANGE

1. Shut off power. Press the “OFF” Button  and shut off main power.
2. Release all pressure from the Tank and Compressor.
3. Remove the Oil Fill Plug from the upper side of the Oil Reservoir with a 22mm wrench (not included) (**FIG 35**).
4. Unroll the transparent Oil Drain Tube and place the open end into a suitable container (**FIG 36**).
5. Open the Oil Drain Ball Valve by rotating the handle 1/4 turn Counter Clockwise.

⚠ NOTICE


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

6. Allow oil to drain into vessel.
7. Close Oil Drain Ball Valve by rotating the handle 1/4 turn Clockwise
8. Add 74 oz. [2.2 liter] of Eastwood #31718 Scroll Compressor Oil to the fill port of the Oil Reservoir using a suitable funnel (not included).
9. After the recommended amount of Oil is added, view the Sight Gauge on the side of the Oil Reservoir to make sure that it reads FULL (At or above the “M” Line but not above the “H” Line (**FIG 35**). If the oil level is below the “M” Line, oil must be added.
10. Replace Oil Fill Plug and tighten securely.
11. Restore power to Compressor. Depress the “START” Button , run Compressor and check for leaks.
12. Press the “OFF” Button  and replace all panels.




⚠ CAUTION

PERFORM THE FOLLOWING STEPS BEFORE PERFORMING ANY MAINTENANCE PROCEDURES!



- Shut off power. Press the “OFF”  Button [B] (Fig 9) and shut off the main 3 phase power switch to the unit.
- Release all pressure from the Tank and Compressor.

OIL FILTER CHANGE

1. Shut off power. Press the “OFF” Button  and shut off main power.
2. Release all pressure from the Tank and Compressor.
3. Drain Compressor oil. Follow steps 3 through 7 of the “Oil Change Procedure” (page 16).
4. Loosen and remove Oil Filter from the Filter Manifold with a suitable filter wrench (FIG 37).

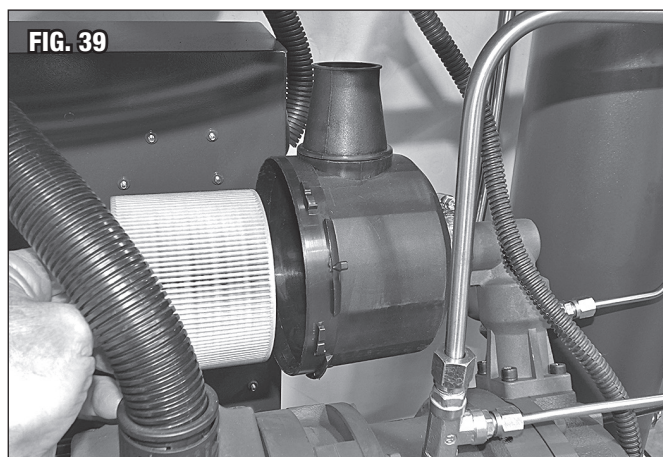
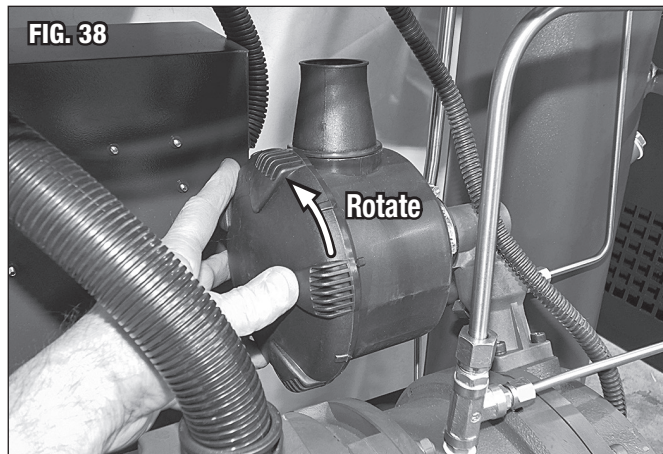
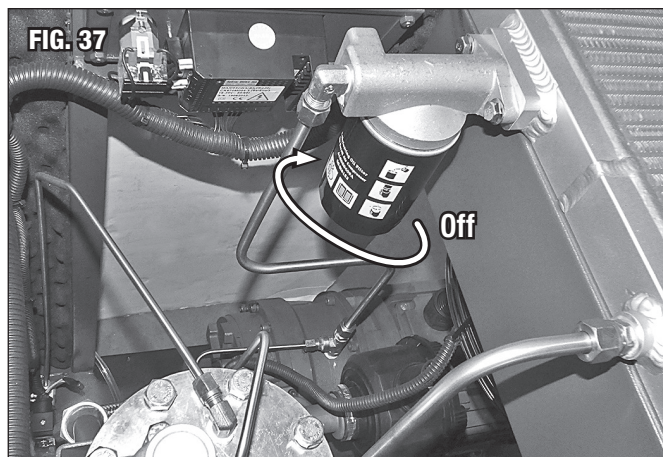
⚠ NOTICE

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

5. Install replacement Oil Filter (FIG 37).
6. Add 74 oz. [2.2 liter] of Eastwood #31718 Scroll Compressor Oil to the fill port of the Oil Reservoir using a suitable funnel (not included).
7. After the recommended amount of Oil is added, view the Sight Gauge on the side of the Oil Reservoir to make sure that it reads FULL (At or above the “M” Line but not above the “H” Line (FIG 35). If the oil level is below the “M” Line, oil must be added.
8. Replace Oil Fill Plug and tighten securely.
9. Restore power to Compressor. Depress the “START” Button , run Compressor and check for leaks.
10. Press the “OFF” Button  and replace all panels.

AIR FILTER CHANGE


1. Grasp the sides of the plastic Air Filter Housing located at the top of the Scroll Air Intake Manifold and rotate 1/8 turn Counter Clockwise (as viewed from filter housing) (FIG 38).
2. Remove Air Filter Housing.
3. Remove the Paper Element and discard it (FIG 39).
4. Replace the Paper Element with a new one and replace the Air Filter Housing by rotating 1/8 turn Clockwise until it latches and molded in arrows are aligned (FIG 40).




REPLACE MOISTURE SEPARATOR FILTER (REQUIRES OIL RESERVOIR PARTIAL DISASSEMBLY)

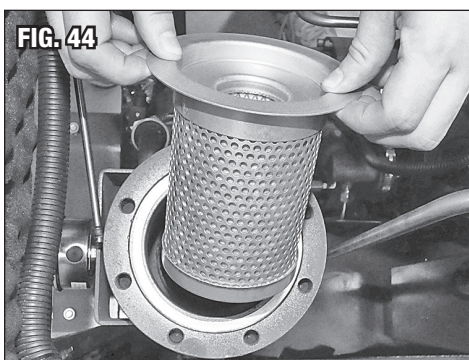
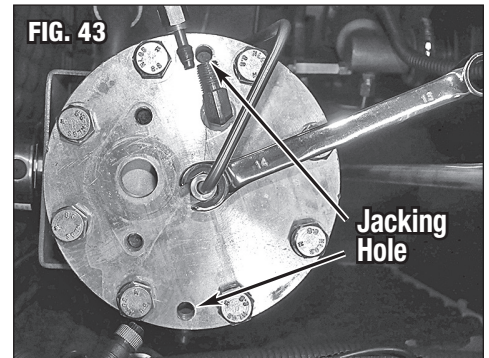
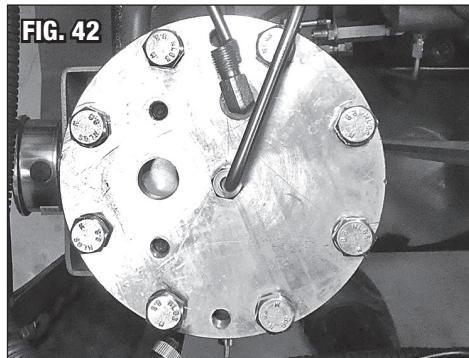
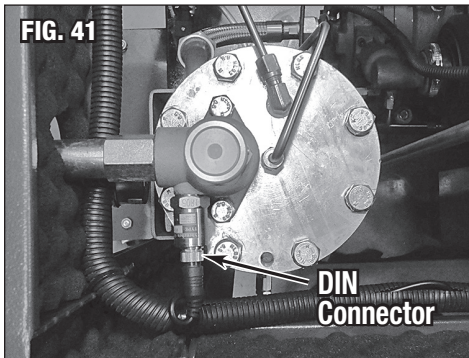
⚠ CAUTION

PERFORM THE FOLLOWING STEPS BEFORE PERFORMING ANY MAINTENANCE PROCEDURES!



- Shut off power. Press the “OFF”  Button [B] (Fig 9) and shut off the main 3 phase power switch to the unit.
- Release all pressure from the Tank and Compressor.

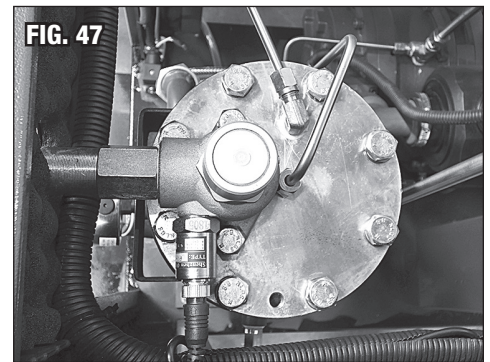
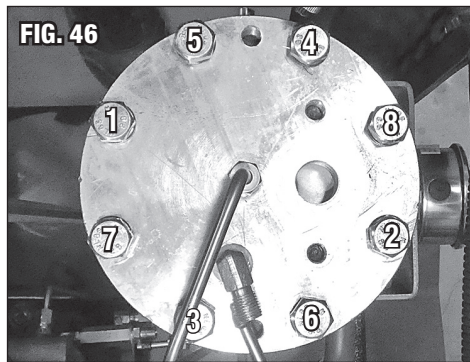
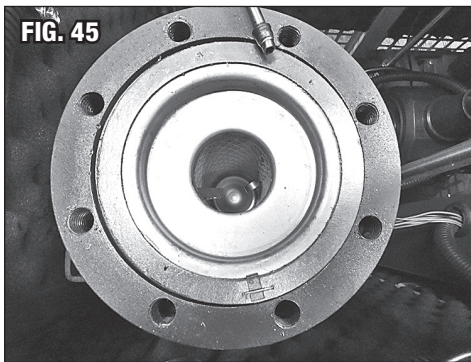
OIL RESERVOIR DISASSEMBLY PROCEDURE:

1. Shut off power. Press the “OFF” Button  and shut off main power.
2. Release all pressure from the Tank and Compressor.
3. Drain Compressor oil. Follow steps 3 through 7 of the “Oil Change Procedure” (PAGE 16).
4. Unthread DIN Connector retaining ferrule and disconnect DIN plug from the Pressure Sensor (FIG 41).
5. Remove 3/4” Outlet Pipe with a 27mm wrench (not included) (FIG 41).
6. Remove Check Valve housing using a 16mm wrench (FIG 42).
7. Detach the oil line compression fitting at the 90° elbow attached to the Head Plate with a 14mm line wrench (not included) (FIG 43).
8. Detach the oil outflow line leading from the center of the Head Plate with a 14mm line wrench (not included) (FIG 43).
9. Remove Head Plate using an 18mm wrench (FIG 43). **NOTE:** If the Head Plate is stuck to the Cylinder, two of the Head Plate Bolts may be threaded into the two threaded jacking holes and alternately tightened to push the Head Plate away from the Cylinder.
10. Withdraw Moisture Separator Filter from bore (FIG 44).



OIL RESERVOIR REASSEMBLY PROCEDURE:

1. Set the replacement Moisture Separator into the center bore of the Oil Reservoir with the flange centered in the machined recess (**FIG 45**).
2. Replace the Head Plate and hold in place by loosely hand threading in 2 of the 8 Head Plate bolts to allow some movement of the Head Plate and avoid cross-threading the line fittings.
3. Reconnect the oil outflow line at the inlet to the Scroll. **NOTE:** Use caution not to cross-thread the compression nut on the stationary line fitting.
4. Reconnect the oil line compression fitting at the 90° elbow attached to the Head. **NOTE:** Use caution not to cross-thread the compression nut on the stationary line fitting.
5. Thread in the remaining 6 Head Plate Bolts.
6. Torque Head Plate bolts initially to 30 lb-ft [40.7Nm] then to 62 lb-ft [84.3Nm]. **NOTE:** Follow Head Plate torquing sequence as shown in (**FIG 46**).
7. Replace Check Valve housing (**FIG 47**).
8. Reconnect DIN Connector to the Pressure Sensor and secure by threading on retaining ferrule (**FIG 47**).
9. Refill with 74 oz. [2.2 liter] of Eastwood #31718 Scroll Compressor Oil.
10. Restore power to Compressor. Depress the "START" Button , run Compressor and check for leaks.
11. Press the "OFF" Button  and replace all panels.



TROUBLESHOOTING

PROBLEM	CAUSE	CORRECTION
Does Not Run When "START" Button is Pressed	No Power	Check 208/240 VAC, 3 Phase power source and connection to unit.
	Motor or Scroll overheated and Thermal Overload detection activated	Press the SET Button (S) to reset alarm, allow fan to run and cool the Motor or Scroll, determine cause of overheating condition before attempting to restart.
Compressor Runs Too Slow/Develops Low Power	3 Phase input voltage too low	Determine the cause of low input voltage condition or consult a licensed electrician for diagnosis.
	Compressor being operated in excessively low (under 32°F [0°C] ambient temperature conditions)	Do not operate Compressor until ambient temperature conditions are favorable.
Compressor Runs Constantly	Excessive air supply demand	Do not exceed 32 SCFM @ 90 PSI [906 l/min. @ 6.2 bar].
	Air leak at fittings, lines, hose or air-powered device	Stop compressor use, locate leak and perform repair.
Motor and/or Scroll Overheats	Excessive air supply demand	Do not exceed 32 SCFM @ 90 PSI [906 l/min. @ 6.2 bar].
	Dirt and debris buildup in motor cooling air intake and/or Heat Exchanger	Use a brush or compressed air to remove debris from grille and/or Heat Exchanger.
	Items blocking motor cooling air intake and or Heat Exchanger Fan Air Outlet	Remove items blocking cooling air intake vents on cabinet sides and or Heat Exchanger Fan Air Outlet on top
	Compressor unit located in an area of insufficient cooling air flow	Relocate Compressor unit to an area with adequate cooling air flow.
	Compressor being operated in excessively high (over 110°F [43°C] ambient temperature conditions)	Do not operate Compressor until ambient temperature conditions are favorable.

ADDITIONAL ITEMS

- #32509 Replacement Inlet Air Filter
- #31715 Replacement Oil Filter
- #32508 Replacement Oil/Air Separator Filter
- #31718 Eastwood Scroll Compressor Oil
- #13600 3/4 in Professional Compressed Air Line Kit
- #32501 80 Gallon (302 Liter) Vertical Air Storage Tank

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

The Eastwood Technical Assistance Service Department: 800.343.9353 >> email: tech@eastwood.com

PDF version of this manual is available at eastwood.com

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