Manual No. TA3001 Rev. 4 April 2015



# OPERATING MANUAL MODELS: TA-3 TA-3EA

# **AIR SYSTEMS INTERNATIONAL, INC.**

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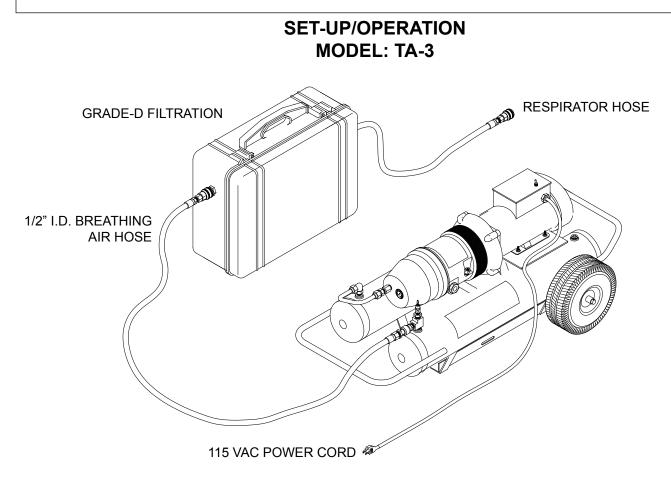
# OVERVIEW

The TA-3 is a portable 3 man breathing air compressor designed for use with pressure demand respirators when used with a Grade-D filtration package. The system operates on 115 VAC / 60 Hz / 20 amp electrical service. The system produces pressure up to 110 PSI (7.5 BAR) that is monitored by a built in pressure gauge. Adding a 30 or 60 minute air cylinder, pressure reducing regulator, and an Auto Air Breather Box<sup>™</sup> gives you a 3 man compressor with automatic backup air for IDLH operation.

**Notes:** The compressor should be connected to the filtration package with a minimum 1/2" I.D. breathing air hose. Constant flow respirators cannot be used with this compressor system!

Always run, store, or ship the compressor in the horizontal position. Never stand the compressor upright as oil will drain from the sump and cause damage to the compressor.

Check compressor oil level before each usage. If oil is low, add only Air Systems approved oil. Order P/N HP-268 USDA synthetic lubricant. Do not overfill!



# STEP 1)

Connect compressor to the Grade-D filtration unit using a 1/2" I.D. hose.

# STEP 2)

Plug compressor power cord into a 115 VAC receptacle with a dedicated 20 amp service. Note: If an extension cord is to be used be rated for a minimum 20 amp service (12 AWG).

# STEP 3)

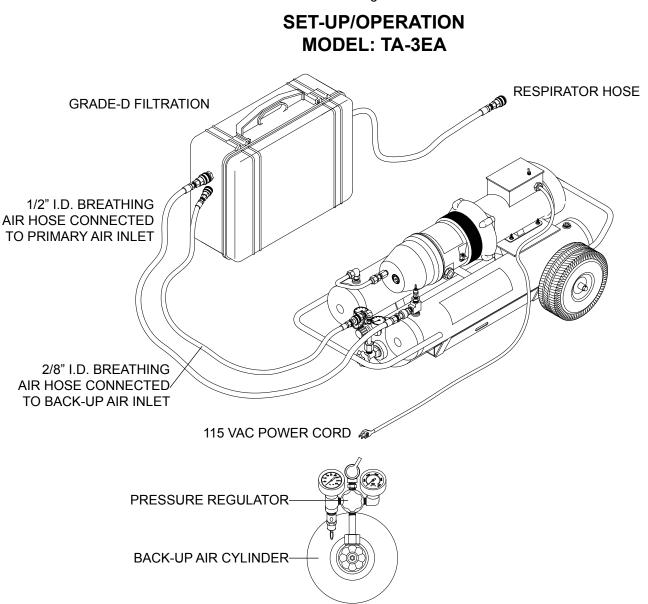
Turn compressor on and note the gauge pressure. Pressure should reach 110 PSI (7.5 BAR).

# STEP 4)

Attach hose(s) and respirator(s) to filtration unit. Up to 3 respirators can be used with this compressor. Never leave an open (unused) respirator attached to the system as output pressure will not be maintained.

# STEP 5)

Adjust the pressure regulator on the filtration unit to the required output pressure of the pressure demand respirator(s). Review manual on the Grade-D filtration unit and carbon monoxide monitor for details on operation, service, and calibration before commencing work.



# STEP 1)

Connect compressor to the primary air inlet on the Grade-D filtration unit using a 1/2" I.D. hose.

# STEP 2)

Connect back-up air regulator to back-up air inlet on the Grade D filtration unit using a 3/8" I.D. hose.

# STEP 3)

Open back-up air cylinder valve and adjust pressure regulator to the required pressure of the respirator(s) being used.

# STEP 4)

Plug compressor power cord into a 115 VAC receptacle with a dedicated 20 amp service. Note: If an extension cord is to be used be rated for a minimum 20 amp service (12 AWG).

# STEP 5)

Turn compressor on and note the gauge pressure. Pressure should reach 110 PSI (7.5 BAR).

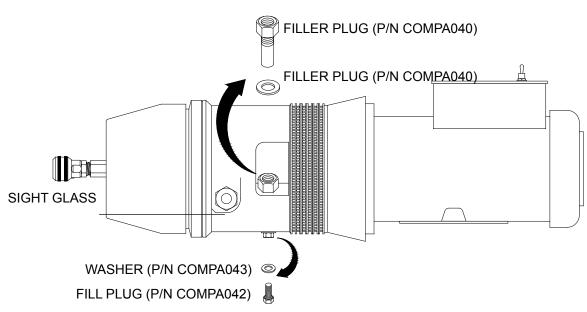
# STEP 6)

Attach hose(s) and respirator(s) to filtration unit. Up to 3 respirators can be used with this compressor. Never leave an open (unused) respirator attached to the system as output pressure will not be maintained.

# STEP 7)

Adjust the pressure regulator on the filtration unit to the required output pressure of the pressure demand respirator(s). Review manual on the Grade-D filtration unit and carbon monoxide monitor for details on operation, service, and calibration before commencing work.





# STEP 1)

View pressure gauge to insure there is no pressure in compressor body.

### STEP 2)

Remove filler plug/dipstick and gasket. (replace gasket if necessary)

### STEP 3)

Position a suitable container underneath compressor and remove drain plug and gasket. (replace gasket if necessary)

#### STEP 4)

When oil is finished draining, reinstall the drain plug and gasket.

#### STEP 5)

Fill compressor with factory approved oil. Use Air Systems part no. HP-268 (approximately .8 liters). Oil should reach the bottom threads of the filler plug/dipstick or just to the top of the sight glass. **DO NOT OVERFILL!** 

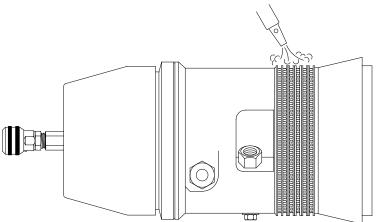
#### STEP 6)

Reinstall the filler plug/dipstick and gasket. Tighten to approximately 25Nm (18.5 ft./lbs.)

#### STEP 7)

Run compressor for approximately 10 seconds, turn off, recheck oil level, and add if necessary.

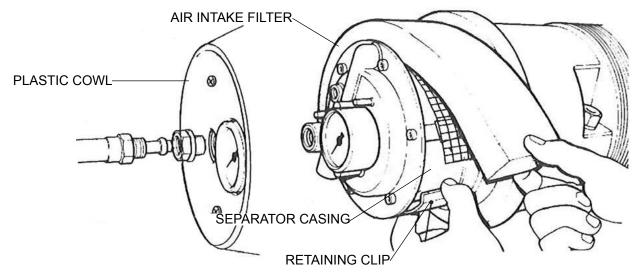




Blow dust off of oil cooler periodically to prevent over-heating.

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# **REPLACEMENT OF AIR INTAKE FILTER**



# STEP 1)

Remove the outlet fitting from the compressor.

# STEP 2)

Remove the black plastic cowl from the air end by pulling firmly.

# STEP 3)

Remove the foam air filter and clean or replace. If filter is in good condition it can be cleaned with a mild detergent and water.

# STEP 4)

With filter removed, clean inside of plastic cowl and separator casing.

#### STEP 5)

There are 2 styles of air filters used on these compressors. A donut style filter that slides over the air end and is not held in place by retaining clips (new style) and a strip filter that is held in place by retaining clips (old style). If you receive the donut style filter and you have the retaining clips on your air end, simply cut the donut filter so it will wrap around the separator casing and the ends of the filter will be held in place by the retaining clips.

# **REPLACEMENT OF OIL SEPARATOR ELEMENT**



Remove retaining screws (A).

# STEP 2)

Gently tap the end cover (B) until it is clear of the separator casing.

# STEP 3)

Unscrew the oil separator element (C) and discard.

#### STEP 4)

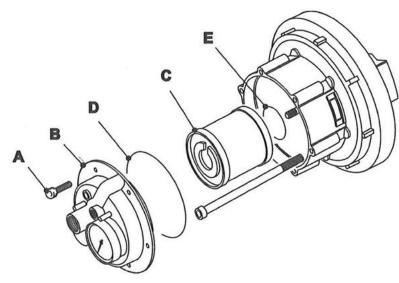
Install a new separator element (P/N COMPA022). Ensure that the o-ring (E) is in place. Do not overtighten.

# STEP 5)

Refit end cover (B). Ensure cover is positioned correctly and bolt holes are in line. Be careful not to damage o-ring (D) when refitting.

# STEP 6)

Refit cap screws (A) and tighten between 4-6.8 Nm (3-5 ft./lbs.)



# MAINTENANCE SCHEDULE

### **DAILY**

Check oil level Drain air receiver tanks

# EVERY 50 HOURS

Check oil level Clean or replace air intake filter Clean oil cooler

#### EVERY 500 HOURS

Clean oil cooler Change oil Change air intake filter Change oil separator

# ORDERING INFORMATION

# ITEM NUMBER

HP-268-1 HP-268-5 COMPA021 COMPA022 COMPA023 COMPA028 COMPA041 COMPA043 DESCRIPTION USDA Approved Oil - 1 gallon USDA Approved Oil - 5 gallon Intake Air Filter Oil Separator "O" Ring Oil Separator (Rear) "O" Ring Oil Separator (Front) Oil Fill Plug Gasket Oil Drain Plug Gasket

# WARRANTY DISCLAIMER

Air Systems' manufactured equipment is warranted to the original user against defects in workmanship or materials under normal use for one year from the date of purchase. Any part which is determined by Air Systems to be defective in material or workmanship will be, as the exclusive remedy, repaired or replaced at Air Systems' option. This warranty does not apply to electrical systems or electronic components. Electrical parts are warranted, to the original user, for 90 days from the date of sale. During the warranty period, electrical components will be repaired or replaced at Air Systems' option.

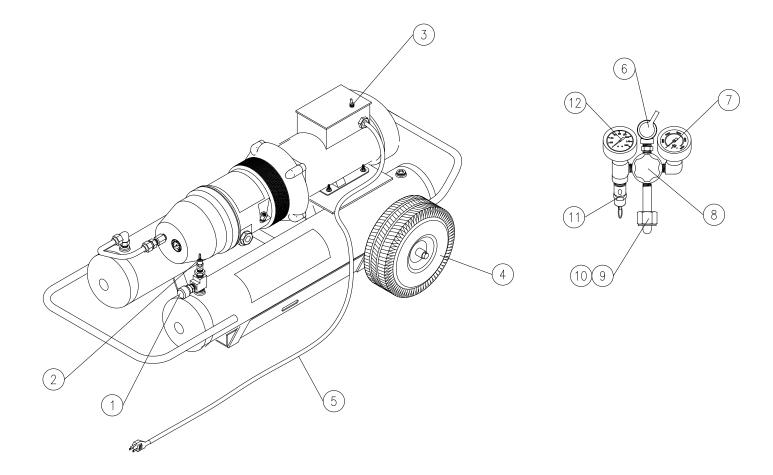
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Air leaks are not covered under warranty except when they result from a defective system component, i.e. an on/off valve or regulator or upon initial delivery due to poor workmanship. Air leaks due to poor delivery or damage will be covered under delivery claims. Minor air leaks are part of routine service and maintenance and are the responsibility of the customer just as are filters and oil changes.

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# **REPLACEMENT PARTS**



ITEM #	DESCRIPTION	PART #
1	OUTLET FITTING	QDH5SL8M
2	125 PSI RELIEF VALVE	VR4125BR
3	ON/OFF SWITCH	ELSW021
4	10" PNEUMATIC TIRE	HDWR108
5	POWER CORD	ELCB008
6	BACK-UP AIR CONNECTION	QDH3SL4MDC
7	CYLINDER PRESSURE GAUGE	GA2075KB
8	REGULATOR	REG004
9	CGA-347 STEM	HPBR049
10	CGA-347 NUT	HPBR050
11	150 PSI RELIEF VALVE	VR4150BR
12	DISCHARGE PRESSURE GAUGE	GA20160B

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