



# Turbo Charger 4500 psi Compressor

## **COMPRESSOR OPERATION:**

Get it right first time. Your simple steps to successful operation.

- Unscrew the Water Tank Cap, on the top of Turbo Charger. Pour in contents of both bottles (Ice & Antifreeze). Then, top up with water to an inch below the rim. Pure / filtered water is best, tap water is OK, but NEVER use distilled water. Screw glass top cover back on.
- 2. The self drainage adjust device (right hand side of front panel) allows you to set the moisture drainage frequency. This is dependent on humidity in the environment. The damper it is, the more venting you'll need. Set the knob on the left for the length of venting in seconds. It is suggested that you set it, initially, at 0.5. The knob on the right controls how often it vents in minutes. If filling an air cylinder, set the left hand knob to 1 second and the right hand knob to vent every 15 minutes as a good start point. In warm, dry conditions, you can set it to 20-30 min.. Frequent and long venting slows down the fill speed.
- 3. The over-current protector switch should be set to RESET.
- 4. Plug the power cable in to the Turbo Charger. Turn on using on/off rocker switch. This activates the water pump and fan. Check that water is flowing by looking through sight glass in the water cap.
- 5. At the top of the compressor, screw the fill hose in firmly.
- 6. Set the PSI you require on the main dial by pushing in the knob and turning. The short metal arm pushes the needles into position. Set both needles so they are together. **Do not fill air tanks above 4500 PSI**, as the burst disc is set to 4800 PSI. If disc bursts, there are spares in the kit pack. (Small, gold circular discs). Use the supplied tweezers, if necessary.
- 7. Attach the other end of the hose firmly to the tank/cylinder using 1/8 inch quick-connect adaptor.
- 8. Push green button to start tank-filling. It's normal to hear a rocking/ tapping sound.
- 9. The Turbo Charger stops automatically at the correct PSI. Then, close air tank & bleed out excess air from compressor using the Bleed Valve. Air is expelled at rear of compressor. Be sure to release excess air from hose before removing adaptor from tank/gun.

# Where to put your Omega Turbo Charger

- ✓ Place your Turbo Charger on a smooth flat surface. Do not operate / store in dusty humid conditions or below 35 F.
- ✓ Allow 2" space behind compressor for air exiting.
- ✓ For long term storage, keep indoors and away from freezing temps. In sub-zero temps, drain water tank and fill with pure antifreeze, run for 1 min. Use supplied cover.

## Fill times

- ✓ Typically, for a rifle 2-3 min
- ✓ A 12cf tanks takes 20-25 min from 0-4500 psi
- √ A 75cf tank take 1.25 -1.5 hrs from 0-4500 psi

## Maintenance

- ✓ After every 6 hrs of compressor operation or when the red indicating light comes on, turn green grease screw 1 click (1/3 turn). Fill cavity when low (use white grease syringe). Push the red indicating light to reset.
- ✓ When refilling the grease, open air gap screw on top of the unit nearest to each grease port. Tighten the green grease knob until the air pocket "burps" and then replace the screw. This pushes grease into position ready for each maintenence click.
- ✓ Top off water tank as necessary
- ✓ If changing the water, use ½ ounce of Royal Purple ICE and regular 1 ounce of regulator antifreeze. Fill with purified water, never use distilled water. Fill below water flume.



# **Troubleshooting**

# Compressor not "on" (no lights)

- ✓ Make sure there is power at outlet
- Make sure power cord is pushed in on the compressor
- ✓ Make sure the red circuit breaker hasn't tripped
- ✓ Take off side panels and look for loose wires

# Compressor is not running but lights are "on"

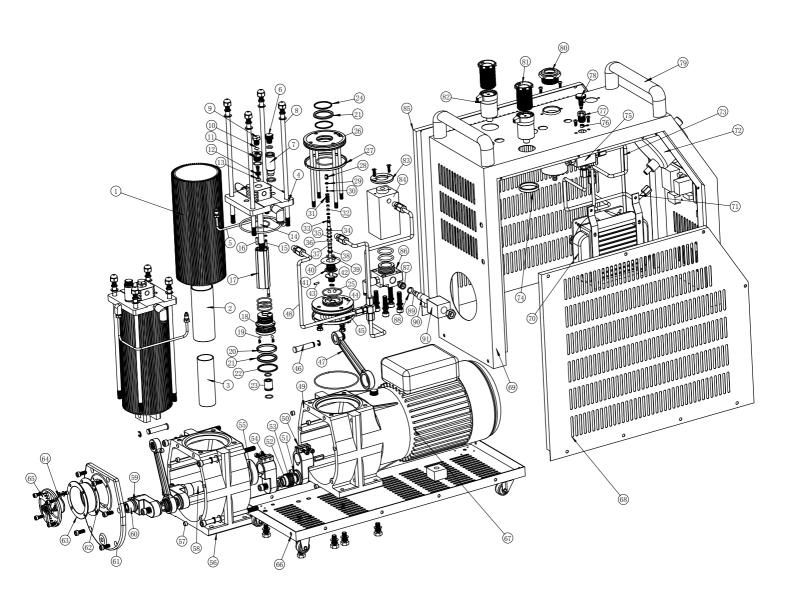
- ✓ Make sure there is water in tank and its flowing, the compressor is equipped with a flow switch, so if the water pump is not working the compressor will not turn on. Tap on water pump to unblock trapped air.
- ✓ Loose wires

# Compressor not building pressure

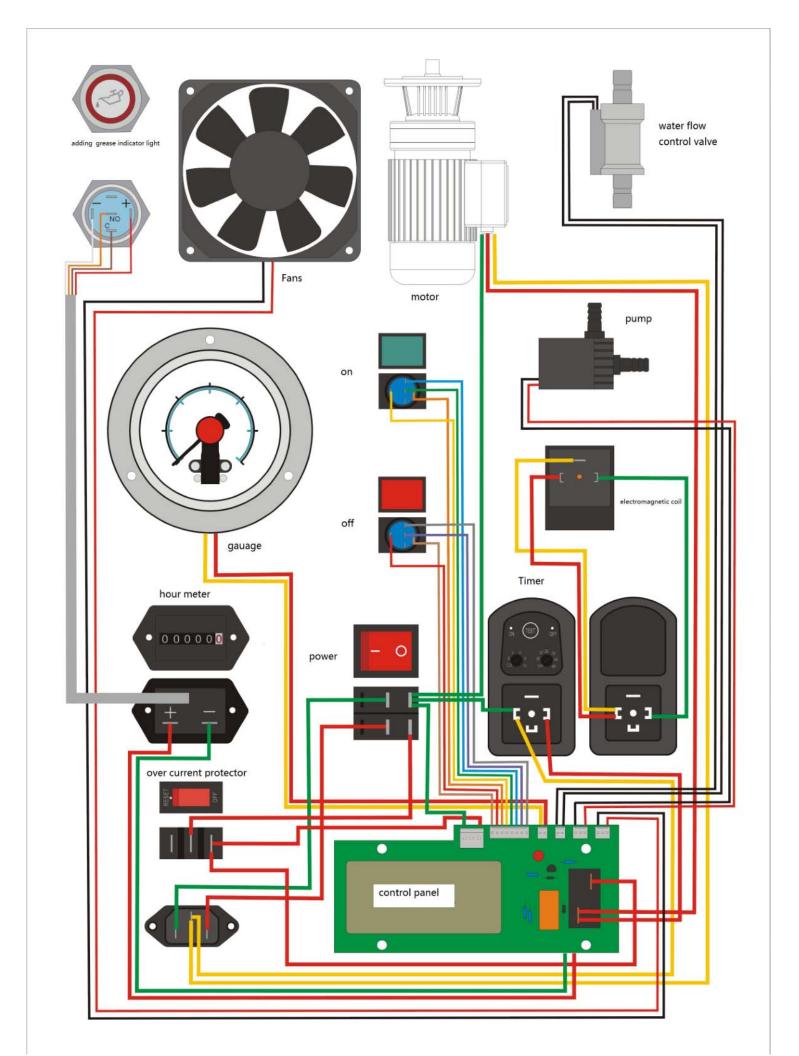
- ✓ Make sure bleed screw is tight, as the compressor builds PSI, you might need to retighten.
- ✓ Check burst disc for damage (is air coming out of the tiny hole?). Replacement disc in maintenance bag. Tighten fitting to firm snug.
- Check main check valve (under 19mm brass fitting). Look for burnt or dirty valve, clean hole where valve is located. New valves are in maintenance bag. Place small end of spring on valve and center, replace brass fitting ,tighten to about 5lb.

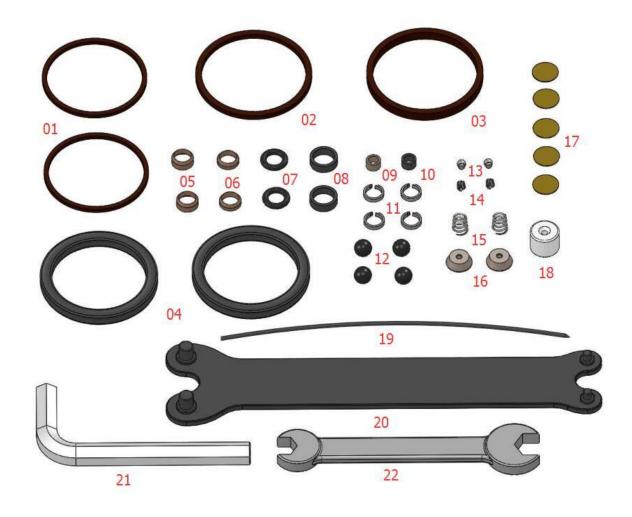
## No water flow

- ✓ Make sure there is water in tank, turn the master switch on and off many times so as to prime and push any air bubbles out
- ✓ Check for 12 volts at water pump, if no volts, replace / check wires at circuit board
- ✓ If there is volts, replace water pump



No	name	No	name	No	name
1	level 1 cylinder sleeve	36	rubber sleeve	71	gauge connect pipe
2	level 2 cylinder sleeve	37	inner sealed ring	72	gauge
3	level 3 cylinder sleeve	38	locating pad	73	bleed valve connect pipe
4	cylinder seat	39	high pressure pole	74	grease port seat clamp ring
5	grease port	40	oil-way catch	75	bleed valve seat
6	grease port seat	41	sealing seat	76	bleed valve gasket
7	oil column	42	high pressure pole fixed se	77	bleed valve nut
8	cylinder bolt	43	3mm pin	78	bleed valve
9	burst nut	44	fixed seat at bottom	79	handle
10	burst disc	45	85*6 guide ring	80	water tank cap
11	burst nut seat	46	Connecting rod pin	81	grease port
12	check valve	47	Connecting rod	82	grease port seat
13	check valve gasket	48	high pressure air pipe	83	filter's clamp ring
14	high pressure pipe	49	crankshaft box	84	filter body
15	oil-way connect pipe	50	crankshaft 1	85	right cover
16	oil-way locating pin	51	bearing gasket	86	filter cover
17	oil-way liner	52	bearing sleeve	87	Drain valve gasket
18	level 2 piston	53	needle roller bearing	88	Drain valve sealing gasket
19	5mm rubber ball	54	crankshaft 2	89	Drain valve core
20	Level 2 cylinder piston guide rin	55	6205 bear	90	Drain valve body
21	Level 2 cylinder piston sealing r	56	crankshaft box section 2	91	solenoid
22	Level 2 cylinder piston sealing r	57	locating sleeve	92	
23	Level 2 cylinder piston thread nu	58	Conversion shaft	93	
24	Level 2 cylinder piston guide rin	59	support shaft	94	
25	7mm rubber ball	60	4900 needle roller bearing	95	
26	fixed panel	61	crankshaft cover	96	
27	85*4 guide ring	62	Filter mask cushion	97	
28	High pressure piston cover	63	Air intake filter cover	98	
29	High pressure piston gasket	64	valves	99	
30	High pressure valve core	65	crankshaft box cover	100	
31	sealed ring outside	66	outside shell bottom panel	101	
32	high pressure piston sealing ring	67	motor	102	
33	high pressure piston body	68	left cover	103	
34	stop ring	69	outside shell	104	
35	Cone pad	70	water tank	105	





1. Level 2 cylinder piston guide ring	12. rubber ball		
2. Level 2 cylinder piston sealing ring	13. High pressure valve core		
3. Level 2 cylinder piston guide ring	14. <b>φ</b> 3 spring		
4. Level 2 cylinder sealing ring	15. φ 4-φ 7 pagoda spring		
5. Level 2 cylinder piston sealing ring (up)	16. check valve gasket		
6. Level 2 cylinder piston sealing ring (down)	17. Burst disc		
7. Level 2 cylinder piston sealing ring	18. Sealing gasket of bleed valve		
8. Level 2 cylinder piston sealing gasket	19. Nozzle Cleaner		
9. High pressure piston sealing ring	20. special spanner		
10. High-pressure piston sealing gasket	21.7mm allen wrench		
11. sealed ring outside	22. open spanner		

#### RAPTOR PNEUMATICS, LLC ONE YEAR RETAIL LIMITED WARRANTY

RAPTOR PNEUMATICS, LLC (RP) warranties to the original consumer of this product that it will be free from workmanship and material defects based upon normal usage during the time of the warranty, or 12 months from the date of purchase. This warranty covers the, materials, labour and parts needed to repair.rebuild or replace the faulty part or equipment, at RP's option, for a period of one (1) year (shipping not included). The warranty period commences from the date on which the original buyer purchases the equipment. This limited warranty covers manufacturing defects that occur during the warranty period. RP will, at its discretion, repair, rebuild or replace the faulty part or equipment in accordance with the terms set forth below. If the customer chooses to repair the problem at their home or facility, then thedamaged part must first be returned to RP and then a replacement part will be shipped out, at the customer's expense, to the address that the customer specifies.

## **Warranty Terms**

During this 12 month warranty period, the product will be repaired, rebuilt, or replaced at no charge to the consumer, when returned to RP with the sale receipt or invoice (containing date of purchase) according to the following terms. This warranty covers the, materials, labour and parts needed to repair, rebuild or replace the faulty part or equipment, at RP's option, for a period of one (1) year (shipping not included). This owner's limited warranty is only valid, if the item is used in an environment approved by RP for that particular equipment. The warranty is invalid if the product has been misused, abused or damaged from causes not arising out of defects in material or workmanship. RP cannot be held responsible for any subsequent damages to the machine or to the user's human body that may arise from use of this unit after the defect or damage has occurred. This owner's limited warranty applies to the EZ-FILL 4500 PCP, Paint Ball or Scuba Compressor. Warranty repairs will not extend the warranty period.

## **Warranty Restrictions**

This owner's warranty only covers the following:

- a. Flaws caused by materials or labour in the equipment that existed when the equipment was originally assembled.
- Faults that occur in normal use as defined in the owner's manual and providing that RP's instructions on start-up, maintenance and use have been followed.
- c. The original purchaser of the equipment who holds an original proof of purchase.

(Continued)

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### This warranty does not extend to, or cover, any of the following:

- a. Equipment or components that have been modified without the consent of RP.
- b. Faults resulting from natural wear and tear, use in conditions for which the equipment is not intended, corrosion, or damage incurred during loading or shipping not provided by RP, or by accident, fire, flood, war or acts or God.
- c. Maintenance activities, such as cleaning, lubricating, or normal checking of parts: or installation procedures that customers can do themselves.
- d. Damage or equipment failure caused by faulty electrical wiring used to power the equipment.
  - (i) electrical wiring not in compliance with applicable electrical codes.
  - (ii) electrical wiring not in compliance with the owner's manual or
  - (iii) electrical wiring that has not been maintained as outlined in owner's manual.
- e. Repairs performed by someone other than an authorized RP representative.
- f. Repairs due to limitations or corrections in the equipment's software.
- g. Repairs to consumable or cosmetic items, e.g., grips, seals, labels, or wheels.
- h. Repairs performed on equipment missing a serial number or with a serial tag that has been altered or removed.
- i. Service calls to correct installation of the equipment or instruct owners on how to use the equipment.
- j. Pick-up, delivery, or freight charges involved with repairs.

RP MAKES NO EXPRESS WARRANTIES OR CONDITIONS BEYOND THOSE STATED IN THIS OWNER'S WARRANTY. RP DISCLAIMS ALL OTHER WARRANTIES AND CONDITIONS, EXPRESS, OR IMPLIED, INCLUDING WITHOUT LIMITATION IMPLIED WARRANTIES AND CONDITION OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. SOME STATES (OR JURISDICTIONS) DO NO ALLOW LIMITATIONS ON IMPLIED WARRANTIES OR CONDITIONS, SO THIS LIMITATION MAY NOT APPLY TO THE USER OR OWNER.

RP'S RESPONSIBILITY FOR MALFUNCTIONS AND DEFECTS IN THE EQUIPMENT IS LIMITED TO REPAIR AND REPLACEMENT AS SET FORTH IN THIS OWNER'S WARRANTY. THESE WARRANTIES GIVE THE USER OR OWNER SPECIFIC LEGAL RIGHTS, AND THE USER OR OWNER MAY ALSO HAVE OTHER RIGHTS, WHICH VARY FROM STATE TO STATE (OR JURISDICTION).

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Despite continuous quality control, faults or operating errors in equipment may result from individual components. Delivering the complete piece of equipment for repair is often unnecessary, because the flaw can usually be fixed by replacing just the faulty part. It is preferable that you make any inquiries about the warranty directly to your RP retailer or to RP directly.

Please contact the store where you purchased your compressor or email to Gilbert Distribution Ltd: info@gilbertdistribution.co.uk

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We, at RP, want to develop our products and services continuously according to the needs and wishes of our customers. For this reason, we kindly ask you to complete the registration card and send it to us as soon as possible, preferably within ten days of purchasing the equipment. If registration is intended, it must be made within two (2) months of the date of purchase.

Please fill in all the fields to ensure that we can serve you as efficiently as possible.

# PLEASE COMPLETE, SCAN, SIGN AND EMAIL BACK TO: info@raptorpneumatics.com

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This repair guide applies to the following Omega Compressor Models:

Omega Super Charger and Turbocharger

# Warning

# Prior to Starting any Repair or Service

# Make sure the power cord is disconnected from the compressor

# All air is completely released from the compressor

- 1. Gauge replacement disconnect the connector on the back of the gauge, unscrew the 3 Philip head screws, take out old gauge, install new gauge and push connector back on, tighten screws.
- 2. Water pump replacement Drain water from unit, disconnect quick connector at the circuit board, loosen the two (2) hose clamps. Install new water pump and reconnect the connector at circuit board.
- 3. Fan replacement Disconnect quick connector. Unscrew four (4) Philip head screws. Please Note: The fan placement should be directed so that the air blows into fan. Install new fan and replace all the hardware.
- 4. Fill hose replacement Use a 14 mm wrench, unscrew fill hose and install the new hose, tighten the new fill hose. Use soapy water to test for any air leaks.
- 5. Air/Water separator replacement and Automatic solenoid Disconnect the 3 wires on the side of the solenoid, make note of the color and position of wires. Use (2) 14mm wrenches and undo the steel line from the bottom and from the top inside of the air/water separator. Remove all the screws that hold the case on. Carefully remove the case, watch out for wires and hoses that might get caught up. Take out the 2 small screws on top of separator. Carefully pull out and disconnect solenoid. To take apart solenoid, loosen nut on top of black coil, unscrew plunger housing from air/water separator, being careful not to lose the small spring that is inside of plunger, clean plunger and oil it.. Install the new Air/Water separator and put solenoid back together making sure small spring is inside of plunger. Replace all the lines and wires.
- 6. Burst Disc replacement Use a 19 mm wrench to hold the brass fitting tightly while a 14 mm wrench is used to undo the brass fitting that holds the burst disc in place. Remove the damaged burst disc. Install the new burst disc and gently tighten the brass fitting. Then spray soapy water around the burst disk and check for any air leaks.
- 7. Piston Isolation Tool The enclosed tool is used to isolate each piston in order to determine whether the other is malfunctioning. To use, remove the brass 19mm fitting on top of the compressor. Remove the spring and check valve. Screw in the Piston Isolation Tool until hand tight. Set the gauge to 4000-4500 psi, install the test plug into the fill hose disconnect and run compressor as normal. If the system does not build pressure, then the piston opposite the tool is malfunctioning and should repaired. Contact a repair facility for troubleshooting. If the pressure builds up to the psi setting, the piston opposite the tool is functioning normally. Bleed the system, re-install the spring and check valve, and tighten the 19mm brassing until wrench tight. You can then test the opposite piston by doing the same steps to install the Piston Isolation Tool into the opposite 19mm brass fitting.