



OPW
P.O. Box 405003
Cincinnati, OH 45240
1-800-422-2525
(513) 870-3100

SERVICE MANUAL

RHINO Units With Compressors

TELEPHONE	800-422-2525 In US 513-870-3315 Outside US
FAX	800-421-3297 In US 513-870-3157 Outside US

Revision 02-02
X40205

TABLE OF CONTENTS

GENERAL OPERATION	1
OPERATION OVERVIEW	1
TECHNICAL SUPPORT	1
OPERATING INSTRUCTIONS—SELF CONTAINED UNITS	1
UNPACKING	1
INSTALLATION	2
STEP BY STEP OVERVIEW	2
SITE PREPARATION	2
ELECTRICAL SERVICE	2
MOUNTING	4
COMPONENT ACCESS	5
TROUBLESHOOTING	6
OVERVIEW	6
ABBREVIATED ELECTRICAL TROUBLESHOOTING GUIDE	7
ELECTRICAL COMPONENT INFORMATION	8
PUSH BUTTON.....	8
TIMERS.....	8
COMPRESSORS	10
COMPRESSOR TYPES	10
THOMAS ¾ HORSEPOWER (220V).....	10
THOMAS ¾ HORSEPOWER (120V).....	14
REELS	20
TROUBLESHOOTING	20
PARTS IDENTIFICATION	21
REPLACEMENT PARTS - GENERAL	23
WARRANTY	24

TABLE OF FIGURES

<i>MOUNTING BOLT PATTERN</i>	4
<i>HEAD ACCESS</i>	5
<i>WIRING LOCATIONS</i>	9
<i>THOMAS ¾ COMPRESSOR</i>	13
<i>Troubleshooting - General</i>	15
<i>THOMAS COMPRESSOR (120V)</i>	17
<i>THOMAS COMPRESSOR ASSEMBLY</i>	19
<i>REEL PARTS IDENTIFICATION</i>	20
<i>PARTS ID - OUTSIDE VIEW (Front view)</i>	21

GENERAL OPERATION

OPERATION OVERVIEW

This manual has been prepared as an aid in installing, diagnosing, and repairing ECO BY OPW Rhino remote units in all of their configurations. Units may come with a variety of optional features. Please read closely to identify the components on your machine.

TECHNICAL SUPPORT

Our technical support staff is available at 1-800-422-2525 during normal business hours (7:00 - 6:00 E.S.T.) to answer any questions regarding machine operation, components or spare parts. When calling technical support **it is extremely helpful to have the serial number and the machine model number readily available.**

OPERATING INSTRUCTIONS—SELF CONTAINED UNITS

1. Activate unit by pressing the push button.
2. Apply chuck to the tire and check pressure. **NOTE:** Hand gauges are rarely accurate. A properly calibrated gauge is recommended to ensure safe and proper inflation.
3. To add air depress gauge lever.
4. When finished inflating, replace hose.

UNPACKING

Immediately inspect your unit for concealed loss or damage which occurred in transit. If any such condition is found contact the carrier's agent and file a claim immediately. There is a specific time limit for requesting a claim.

ECO BY OPW strongly recommends that you save the original factory packaging. For some models warranty service requires that you return the unit to the factory via UPS. Factory packaging should prevent damage in shipment. If you require new packaging contact the factory.

INSTALLATION

STEP BY STEP OVERVIEW

√	INSTALLATION CHECKLIST
1	Prepare site in accordance with Site Preparation And Assembly Instructions.
2	Install proper power line as per Electrical Service.
3	Run supply line (water) if needed.
4	Mount unit. (See Mounting)
5	Connect electricity and or water.
6	Push START button. Check operation.

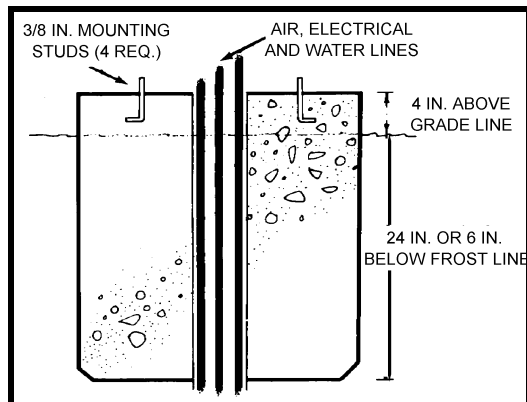
SITE PREPARATION

SITE SELECTION

Before selecting a location, refer to the Electrical Code information. Also make sure you are in compliance with local codes.

****IMPORTANT NOTE** - Never install this equipment where its use cannot be observed and/or supervised. Unobserved equipment invites vandalism and theft.**

SITE PREPARATION



ECO BY OPW tire inflators should be mounted on a 26" X 26" concrete pad which should extend 4" above, and 24" below grade level, or 6" below frost line, whichever is deeper.

Utility Requirements:

Outdoor approved electrical conduit. Refer to electrical specifications information on specific machine installation requirements. Water line for water service units equipped with 1/4" FPT connection.

ELECTRICAL SERVICE

SPECIFICATIONS

ECO BY OPW Tireflators are not classified for use in Class I locations. Accordingly, if installed within 20 feet of a gas dispenser, the unit must be placed so that the compressor is 18 inches away from the gas dispenser and 18 inches above ground level.

NOTE: In some Airtronic Models (RH41 CFA and RH43 CFB) the compressor is less than 18 inches above ground level. These units MAY NOT BE INSTALLED WITHIN 20 FEET OF A GAS DISPENSER. CHECK LOCAL CODES.

All underground wiring must be installed in rigid metal conduit or threaded steel intermediate conduit. Rigid non-metallic conduit complying with Article 347 (NEC 1993) is permitted where buried under not less than 24 inches (610 mm) of earth.

Where rigid non-metallic conduit is used, threaded rigid metal conduit or threaded steel intermediate metal conduit shall be used the last 24 inches (610 mm) of the underground run to emergence or to the point of the connection to the underground raceway; an equipment grounding conductor shall be included to provide electrical continuity of the raceway system and for ground of non-current-carrying metal parts. All underground and branch circuit wire should be type THHN or THWN solid wire.

CONNECTIONS & GROUNDING

This product should be connected to a grounded, metallic, permanent wiring system, or an equipment grounding terminal lead on the product. Each tireflator should have a separate branch circuit as below. Improperly sized circuits risk compressor damage.

Voltage	115V		230V	
	Circuit Protection	AMP Rating	Circuit Protection	AMP Rating
With Compressor	20A	10.6	10A	6.0

MOUNTING

1. Bolts should extend 4" into concrete and 2" above surface of pad (see chart for bolt pattern). A 4" diameter hole must be provided 1" forward of the center of the pad to route air, water, and electrical service to the machine. Use the correct mounting anchors for the surface selected for your installation.
2. Route electrical and optional water service to the machine
3. Secure the unit to the pad using 3/8-inch hardware.
4. Remove back cover (4 screws).
5. Incoming electrical box is located in bottom base of machine. Loosen two (2) bolts holding box and slide gently to the side (DO NOT TAKE COVER OFF OF THE BOX). Make electrical connection with incoming power and route excess wire back into base of machine. Re-attach electrical box.
6. (Water option only) Make connection to incoming water supply (1/4" FPT fitting with white tubing). This tubing should be routed to the left of the electrical box.
7. Attach outlet hose to unit (non-reel units only). The hose is threaded into a 1/4" FPT fitting located in the front bottom of the plastic housing.
8. Supply power to unit. Start unit by pushing START button. Check for proper operation as per Operating Instructions. Also check for loose hardware or excessive vibration.

****NOTE****

Before tightening mounting nuts make sure post is plumb and base plate is level.

MOUNTING BOLT PATTERN

	WIDTH	DEPTH
Standard Units	8.5 in	8.5 in

COMPONENT ACCESS

COMPONENT HOUSINGS

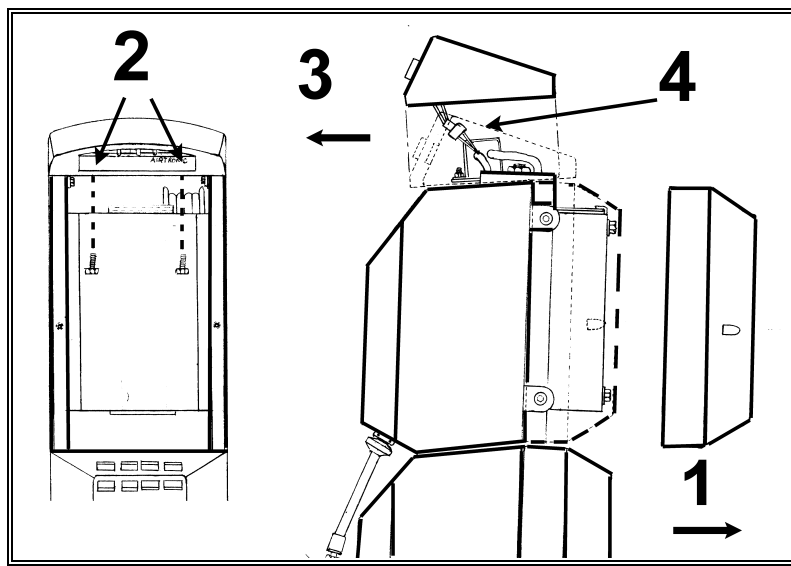
Components on the Rhino tire inflator are easily accessible. The component housings or "bins" are stacked below the head and may contain hose reels or a compressor depending on the specific model. In all cases the compressor will be located in the lowermost bin.

Access to these components is readily gained by first removing the back component housing (two Phillips head screws recessed in the back). This in turn exposes the 4 bolts holding on the front component housing (3/16 inch Allen Head).

HEAD

The timer and pushbutton are located in the head. In order to remove the head the uppermost rear component housing (two Phillips head screws recessed in the back) must be removed first (1). This exposes the two bolts which affix the head to the frame. Remove these two bolts (2) and slide the head forward (3). The head will now be connected to the timer only through the 2 wire pushbutton connector. Unplug this connector (4) and the head will be free of the machine. Access to the timer itself is gained by removing a sheet metal cover from the top of the frame.

HEAD ACCESS



WARNING

When replacing the head after repair, carefully route pushbutton wires so that they clear timer box.

TROUBLESHOOTING

OVERVIEW

This guide lays out a simple, step-by-step guide to isolating and solving technical problems that will ensure that the unit is repaired properly and completely the first time. ECO BY OPW tire inflation products come in a variety of configurations. There are two major component areas which may fail:

- Electrical / Switches
- Compressor

Units may have any combination of the above components to meet the requirements of the installation. To properly diagnose problems which may arise, the service technician must first...**ISOLATE THE PROBLEM.** This guide lays out a simple, step-by-step guide to isolating and solving technical problems that will ensure that the unit is repaired properly and completely the first time.

CHECK POWER

Before checking electrical components first confirm that the installation of the unit conforms to the electrical specifications and connections detailed in the installation section of this manual.

!! WARNING !!

DO NOT attempt to service or repair this unit unless ALL ELECTRICAL POWER HAS BEEN DISCONNECTED. Install a wall-mounted safety switch near the unit. The switch should be enclosed in a box that may be locked in the OFF position. ALWAYS place the switch to OFF and LOCK the switch BEFORE servicing the unit.

FAILURE TO OBSERVE THIS SAFETY PRECAUTION MAY RESULT IN FATAL ELECTRICAL SHOCK OR PROPERTY DAMAGE.

CHECK ELECTRICAL COMPONENTS/SWITCHES

1. Activate unit (push button)
2. If compressor switches on then skip to **COMPRESSOR.**
3. If the unit does not come on then see **ELECTRICAL.**

CHECK COMPRESSOR

1. Check compressor CFM and PSI output with a gauge of known accuracy.
2. If compressor output is below requirements or if compressor operates intermittently then see **COMPRESSOR.**

ABBREVIATED ELECTRICAL TROUBLESHOOTING GUIDE

Note - This section is designed to help isolate and troubleshoot problems with electrical components (switches, timers, compressors). More detailed information concerning individual electrical components is available in the Component section of this manual.

ELECTRICAL

PROBLEM	SOURCE	TEST	REPAIR
UNIT WILL NOT START	No power	Breaker Tripped	Reset and retest
	Inadequate power	Check voltage and circuit for 120 volts at Timer	Restore power
	Pushbutton Failure	Test continuity with pushbutton depressed.	Replace defective switch
	Timer failure	Activate timer with pushbutton Check voltage at terminal 2.	Replace timer with 31211 timer kit (110V) 31784 (220V)
	Compressor failure	Hook up compressor direct to power.	If compressor runs, timer or switch is bad. If compressor does not run make sure the thermal overload is not tripped. (automatic reset when motor cools) If it is not – replace compressor.

COMPRESSOR

<i>Problem</i>	<i>Source</i>	<i>Test</i>	<i>Repair</i>
EXCESSIVE VIBRATION	Improper installation	Check installation for loose mounting or worn vibration mounts	Re-tighten hardware or replace vibration mounts
NO AIR PRESSURE	Chuck frozen	Remove chuck and restart. Air should flow freely out hose.	Keep extra chuck at location to switch with frozen one.
	Failed pressure relief	Check compressor section for proper operation	Repair / Replace
LOW AIR PRESSURE	Leaks	Check loose fittings	Tighten or replace.
	Dirty compressor filter	Examine compressor filter	Replace
	Worn compressor	Make sure compressor is putting out at least 50 psi	Repair / rebuild compressor.
COMPRESSOR RUNS INTERMITTENTLY	Compressor overheating	Check compressor fan. Check for blocked vents.	Replace fan. Clear vents.
	Power supply problem	Check incoming power versus electrical requirements.	

ELECTRICAL COMPONENT INFORMATION

PUSH BUTTON

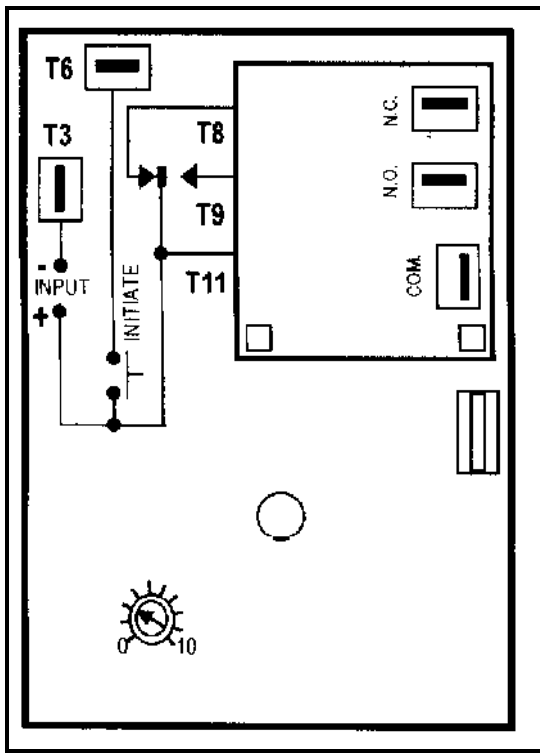
The push button contact activates the timer. To test continuity:

1. Depress center of mounting for the switch.
2. Test continuity at the electrical contacts of the switch.
3. If there is no continuity when center of switch is depressed, replace contact.

REPLACEMENT PARTS

33189	Kit Button Base/Contact (push button units)
-------	---

TIMERS



All Rhino units are supplied with a solid state timer with a variable time set resistor. Run time is preset at the factory. To check timer operation:

1. Check incoming power (T11) See Electrical Specifications.
2. Check to make sure pushbutton switch is working then activate timer with the button. There should now be voltage on terminal T9. If there is not, then replace timer with appropriate kit. The resistor is built into the timer. IF the unit does not time our properly the complete timer must be replaced.

WIRING LOCATIONS

WIRE LOCATION	TERMINAL
ALL UNITS	
<i>Incoming Power</i>	
Black Wire	T11
White Wire	T3
Ground Wire	Center of timer
<i>Pushbutton Switch</i>	
Wire1	T11
Wire2	T6
<i>Compressor</i>	
Blue Wire	T9
Brown Wire	T3

REPLACEMENT PARTS

31211	Timer Kit Infitec (120v)
31784	Timer Kit Infitec (220V)

COMPRESSORS

Compressor Types

ECO BY OPW self contained units are supplied with two different types of compressors depending on the supply voltage with different size motors:

- Gray with 220V $\frac{3}{4}$ horsepower motor (Thomas)
- Black with 1.5 horsepower motor (Devilbiss)

The most significant difference between the compressors is the method of over-pressure protection. Thomas compressors employ a simple pressure relief valve while the Devilbiss compressors use a special unloader valve.

**** IMPORTANT ****

Operating performance, trouble shooting and spare parts will vary depending upon the type and size motor of the compressor. Please verify size and style before working on compressor or ordering spare parts.

THOMAS $\frac{3}{4}$ HORSEPOWER (220V)

Specifications

Horsepower	$\frac{3}{4}$
Voltage	220V
Phase	1
CFM @ 0 PSI	3.4
CFM @ 95 PSI	2.5
Max Amp Draw	6
Outlet Pressure	95

Preventive Maintenance

These compressors are oil-less with teflon rings as piston sleeves. **DO NOT LUBRICATE THIS COMPRESSOR!** The piston cups are designed to run dry and the grease packed sealed bearings require no additional lubrication. Replace compressor air filter every 6 months or sooner in dusty locations.

Pressure Relief Valve

ECO BY OPW machines with Thomas compressors are supplied with pressure relief valve to protect the compressor. **DO NOT REMOVE THIS VALVE.**

!! WARNING !!

DO NOT REMOVE OR PLUG THIS VALVE! The valve is designed to relieve head pressure. Removing or blocking this port can cause irreparable damage to the compressor!
DO NOT ADJUST THIS VALVE! It is preset at the factory for the correct pressure.

Troubleshooting - General

Problem	Source	Test	Repair
EXCESSIVE VIBRATION	Improper installation	Check installation for loose mounting or worn vibration mounts	Re-tighten hardware or replace vibration mounts
NO AIR PRESSURE	Chuck frozen	Remove chuck and restart. Air should flow freely out hose.	Keep extra chuck at location to switch with frozen
	Pressure Relief Valve Failure	Only a small amount of air should escape when the unit is inflating.	Replace
LOW AIR PRESSURE	Leaks	Check loose fittings	Tighten or replace.
	Dirty compressor filter	Examine compressor filter	Replace
	Worn compressor	Make sure compressor is putting out at least 50 psi	Repair / rebuild compressor.
	Blown Compressor Head Or Cylinder Gasket	Check to make sure that unloader valve is installed and operating properly.	Repair compressor and reinstall other components as shown in Manifold Drawing
	Pressure Relief Valve Failure	Large amount of air escapes through valve even when unit is inflating tire	Replace valve
COMPRESSOR RUNS INTERMITTENTLY	Compressor overheating	Check compressor fan. Check for blocked vents.	Replace fan. Clear vents.
	Power supply problem	Check incoming power versus electrical requirements.	

Troubleshooting - Detailed

1. Compressor Will Not Start:
 - a) Unit not plugged in, wiring connections loose or circuit breaker tripped. (20-amp delay type circuit breaker recommended.)
 - b) Hook up compressor direct to power, bypassing timer and start button. If unit will not start, replace relay switch or start capacitor.
 - c) If compressor runs properly when hooked direct to power, timer is defective and should be replaced.

2. Compressor Starts and Runs But:
 - a) Operation is intermittent - usually motor overheats causing circuit breaker or internal thermal overload switch to trip. (This switch automatically resets when motor cools.)
 - i) Check for proper voltage (+/- 10%) and amp draw. High amp draws are caused by overloaded branch circuits or undersized power wires for length of run.
 - ii) Check for proper output pressure - **DO NOT OPERATE THIS COMPRESSOR WITHOUT THE RELIEF VALVE. DO NOT PLUG RELIEF VALVE OUTLET.** Air should relieve at the relief valve through the compressor when the unit is not inflating. If no air escapes the relief valve has failed or the compressor piston is worn. **WARNING!! OPERATING THIS EQUIPMENT WITOUT A PROPERLY SET RELIEF VALVE WILL CAUSE IRREPARABLE DAMAGE TO THE COMPRESSOR!!!**
 - iii) Check for blocked air vents - a high heat environment or lack of ventilation will shorten the life of your compressor.

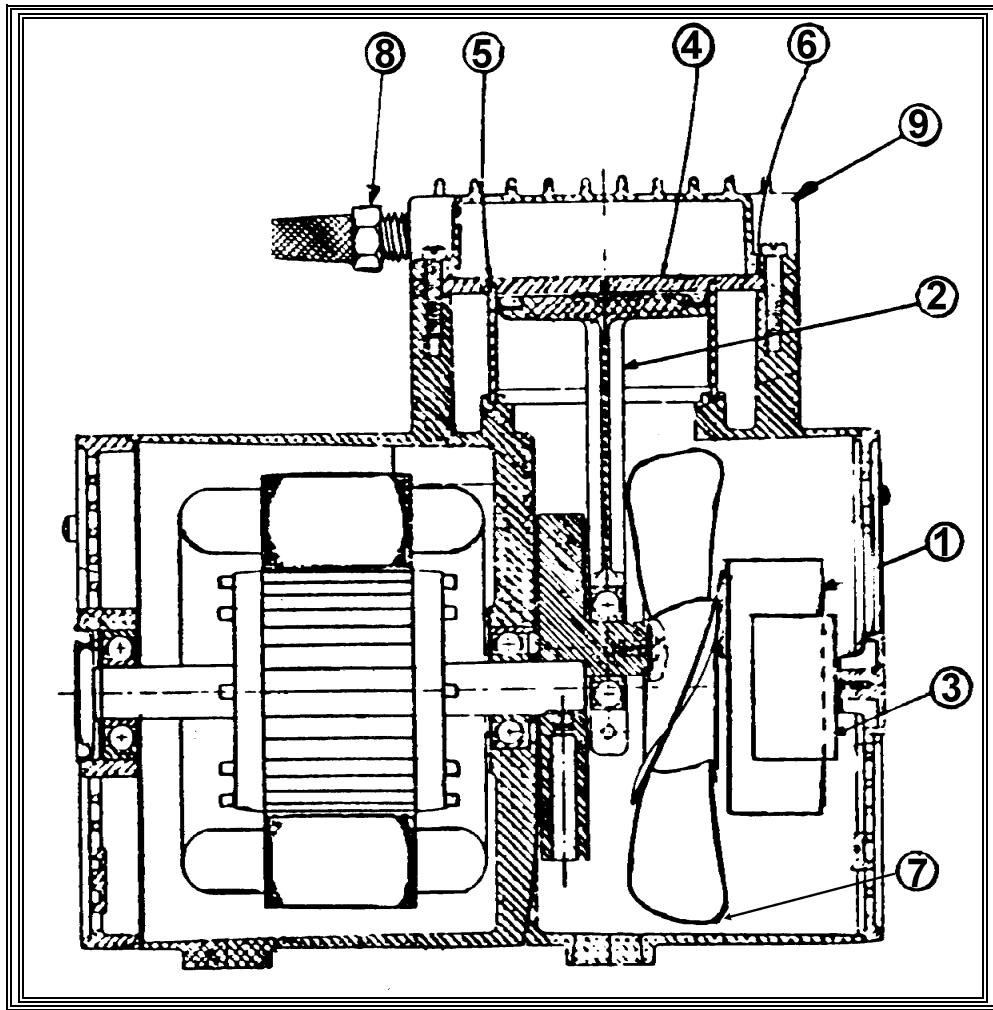
- b) Air pressure generated is below 50 psi.
 - i) Check for loose fittings.
 - ii) Clean air filter.
 - iii) Check for air blowing constantly out of inlet filter - this indicates that head o-rings or flapper valves are leaking (See Repair Procedures).
 - iv) Piston cup may be worn or damaged. (Order P/N 32221 kit from factory.) Estimated service life - 10,000 hours minimum.
 - v) Check head gasket.

Repair Procedures

1. Replacing Air Seals
 - a) Remove head screws (6) to remove head. Remove "O" ring gasket and replace taking care not to damage seal surfaces.
 - b) If piston sleeve and "O" ring need replacing remove valve plate and replace "O" ring. Reassemble.
2. Replacing Flapper Valve
 - a) Remove six head screws to remove the head. Remove valve plate assembly.
 - b) Remove screws and valve restrain. Replace flapper.

THOMAS 3/4 COMPRESSOR

Ref#	Part #	Part Name
1	31925	Start Capacitor
2	32221	Piston w Cylinder
3	31980	Switch Relay
4	32011	Valve Plate Assy.
5	31973	* "O" Ring cylinder
6	31974	* "O" Ring gasket
7	32530	Fan / Hub Assy
8	32100	* Filter Complete
9	70165	Head Compressor
*		Service Kit #32050



THOMAS 3/4 HORSEPOWER (120V)

Specifications

Horsepower	3/4
Voltage	120V
Phase	1
CFM @ 0 PSI	3.78
CFM @ 95 PSI	2.14
Max Amp Draw	10.6
Outlet Pressure	125

Preventive Maintenance

These compressors are oil-less with teflon rings as piston sleeves. **DO NOT LUBRICATE THIS COMPRESSOR!** The piston cups are designed to run dry and the grease packed sealed bearings require no additional lubrication. Replace compressor air filter every 6 months or sooner in dusty locations.

Pressure Relief Valve

ECO BY OPW machines with Thomas compressors are supplied with pressure relief valve to protect the compressor. **DO NOT REMOVE THIS VALVE.**

!! WARNING !!

DO NOT REMOVE OR PLUG THIS VALVE! The valve is designed to relieve head pressure.

Removing or blocking this port can cause irreparable damage to the compressor!

DO NOT ADJUST THIS VALVE! It is preset at the factory for the correct pressure.

Troubleshooting - General

Problem	Source	Test	Repair
EXCESSIVE VIBRATION	Improper installation	Check installation for loose mounting or worn vibration mounts	Re-tighten hardware or replace vibration mounts
NO AIR PRESSURE	Chuck frozen	Remove chuck and restart. Air should flow freely out hose.	Keep extra chuck at location to switch with frozen
	Pressure Relief Valve Failure	Only a small amount of air should escape when the unit is inflating.	Replace
LOW AIR PRESSURE	Leaks	Check loose fittings	Tighten or replace.
	Dirty compressor filter	Examine compressor filter	Replace
	Worn compressor	Make sure compressor is putting out at least 50 psi	Repair / rebuild compressor.
	Blown Compressor Head Or Cylinder Gasket	Check to make sure that unloader valve is installed and operating properly.	Repair compressor and reinstall other components as shown in Manifold Drawing
	Pressure Relief Valve Failure	Large amount of air escapes through valve even when unit is inflating tire	Replace valve
COMPRESSOR RUNS INTERMITTENTLY	Compressor overheating	Check compressor fan. Check for blocked vents.	Replace fan. Clear vents.
	Power supply problem	Check incoming power versus electrical requirements.	

Troubleshooting - Detailed

3. Compressor Will Not Start:
 - a) Unit not plugged in, wiring connections loose or circuit breaker tripped. (20-amp delay type circuit breaker recommended.)
 - b) Hook up compressor direct to power, bypassing timer and start button. If unit will not start, replace relay switch or start capacitor.
 - c) If compressor runs properly when hooked direct to power, timer is defective and should be replaced.

4. Compressor Starts and Runs But:
 - a) Operation is intermittent - usually motor overheats causing circuit breaker or internal thermal overload switch to trip. (This switch automatically resets when motor cools.)
 - i) Check for proper voltage (+/- 10%) and amp draw. High amp draws are caused by overloaded branch circuits or undersized power wires for length of run.
 - ii) Check for proper output pressure - **DO NOT OPERATE THIS COMPRESSOR WITHOUT THE RELIEF VALVE. DO NOT PLUG RELIEF VALVE OUTLET.** Air should relieve at the relief valve through the compressor when the unit is not inflating. If no air escapes the relief valve has failed or the compressor piston is worn. **WARNING!! OPERATING THIS EQUIPMENT WITOUT A PROPERLY SET RELIEF VALVE WILL CAUSE IRREPARABLE DAMAGE TO THE COMPRESSOR!!!**
 - iii) Check for blocked air vents - a high heat environment or lack of ventilation will shorten the life of your compressor.

- b) Air pressure generated is below 50 psi.
 - i) Check for loose fittings.
 - ii) Clean air filter.
 - iii) Check for air blowing constantly out of inlet filter - this indicates that head o-rings or flapper valves are leaking (See Repair Procedures).
 - iv) Piston cup may be worn or damaged. (Order P/N 32221 kit from factory.) Estimated service life - 10,000 hours minimum.
 - v) Check head gasket.

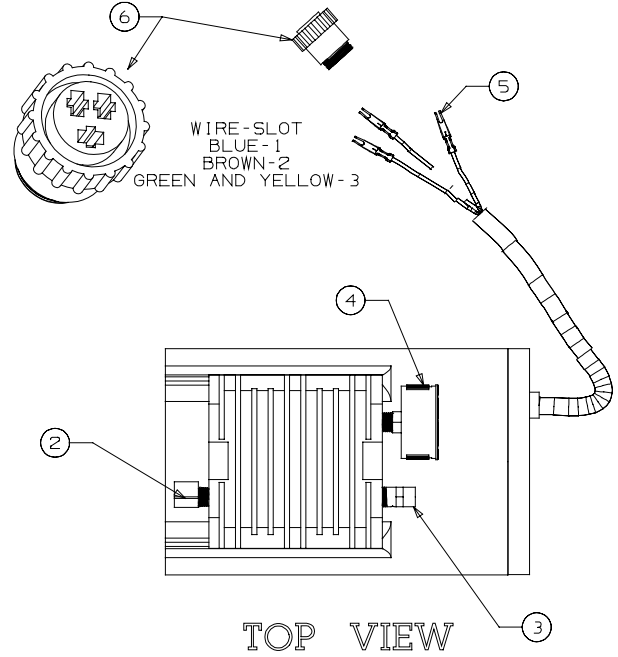
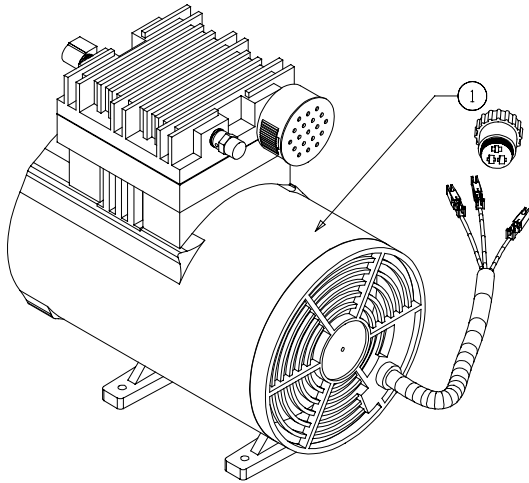
Repair Procedures

- 3. Replacing Air Seals
 - a) Remove head screws (6) to remove head. Remove "O" ring gasket and replace taking care not to damage seal surfaces.
 - b) If piston sleeve and "O" ring need replacing remove valve plate and replace "O" ring. Reassemble.
- 4. Replacing Flapper Valve
 - a) Remove six head screws to remove the head. Remove valve plate assembly.
 - b) Remove screws and valve restrain. Replace flapper.

SERVICE / REPLACEMENT PARTS

THOMAS COMPRESSOR (120V)

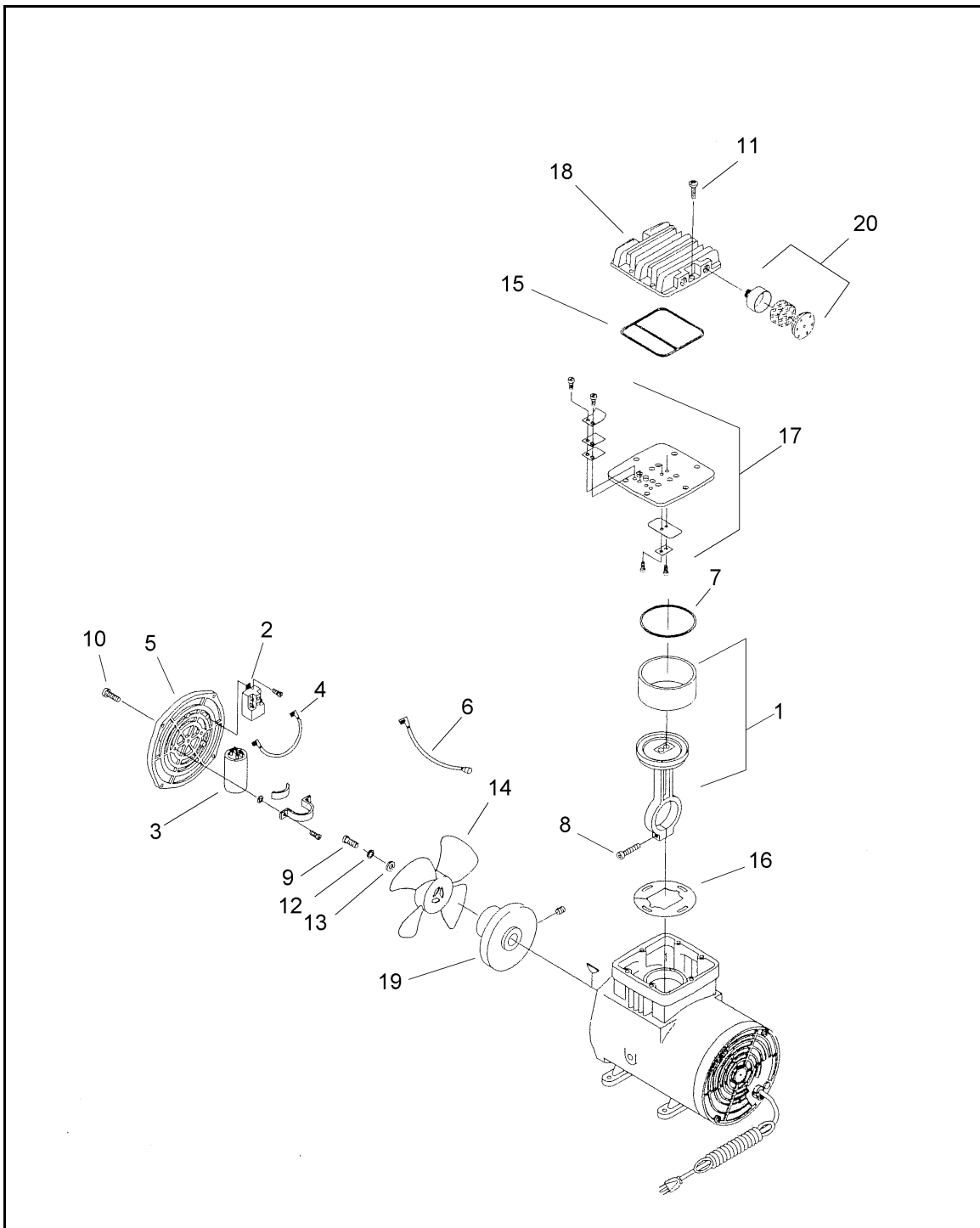
PART #	DESCRIPTION	QTY
1	X30373 COMPRESSOR, 3/4 HP THOMAS 1/6/1	1
2	X30676 ELBOW, 90 DEG X 1/4 NPT, BRASS	1
3	X32200 PRESSURE RELIEF VALVE, 100 PSI	1
4	X40382 AIR FILTER, THOMAS	1
5	X40135 FEMALE SOCKET CONNECTOR	3
6	X40137 MALE CONNECTOR HOUSING	1



COMPRESSOR

	Part #	Description	QTY
1	X40397	Connecting Rod Assembly	1
2	X40398	Relay, 115V 60 Hz	1
3	X40399	Capacitor	1
4	X40400	Lead Wire Assembly- Blue	1
5	X40401	Front Cover	1
6	X40402	Lead Wire Assembly- Brown	1
7	X40403	O-Ring- Valve Plate	1
8	X40404	Screw-Connecting Rod	1
9	X40405	Screw-Fan	1
10	X40406	Screw-Front Cover	4
11	X40407	Screw-Head	6
12	X40408	Lock-washer	1
13	X40409	Washer-Fan	1
14	X40410	Fan	1
15	X40411	O-Ring- Head	1
16	X40412	Dust Shield	1
17	X40413	Valve Plate Assembly	1
18	X40414	Head	1
19	X40415	Eccentric, Bearing, & Set Screw Assembly	1
20	X40382	Air filter Assembly	1

THOMAS COMPRESSOR ASSEMBLY



REELS

TROUBLESHOOTING

1. Reel Fails to Rewind Hose or Does Not Operate Freely
 - a) Hose is jammed. Remove back cover and check to see if reel is bent, hose has jumped off of reel or has bound between hose and housing.
 - b) Insufficient tension on main spring. To increase tension add loops of hose to reel inside cabinet.
 - c) Hose damaged, too large or of inferior grade. We recommend installation of ECO BY OPW brand hose which has been tested and approved for this reel.
 - d) Broken main spring. If reel is free spinning the spring is broken and must be replaced.

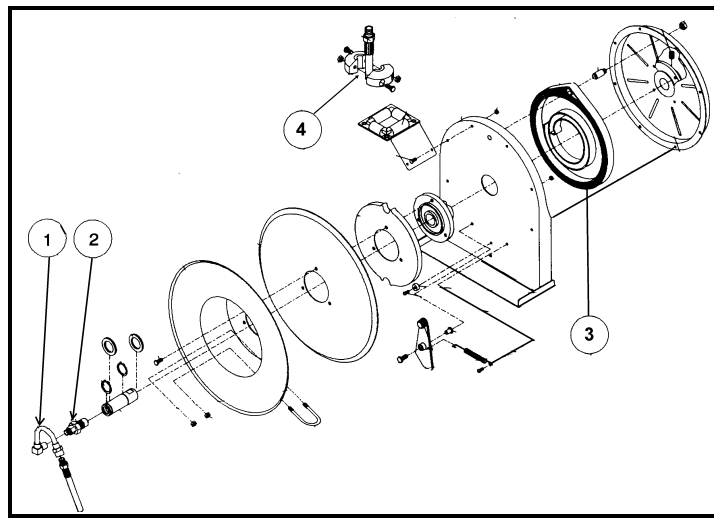
2. Hose Runs In Too Fast
 - a) Too much tension on main spring. Test tension by pulling out hose to the left, front, and right positions to check correct hose tension. To decrease hose tension, remove loops of hose from the reel inside the cabinet.

3. Leaking or loose connections.
 - a) Leaking swivel assembly or swivel connecting tube on spring drum arbor. Replace worn part.
 - b) Loose copper fittings or hose end connections. Check fitting tightness and re-cut nylon tube ends clean and square.

REPLACEMENT PARTS

30312	Reel Constant Tension (Large 13.75" Diameter)
33222	Swivel & Tube Assembly
31868	Main Spring
30947	Wire braid hose Flexsteel 25'
30500	Bumper (Large)

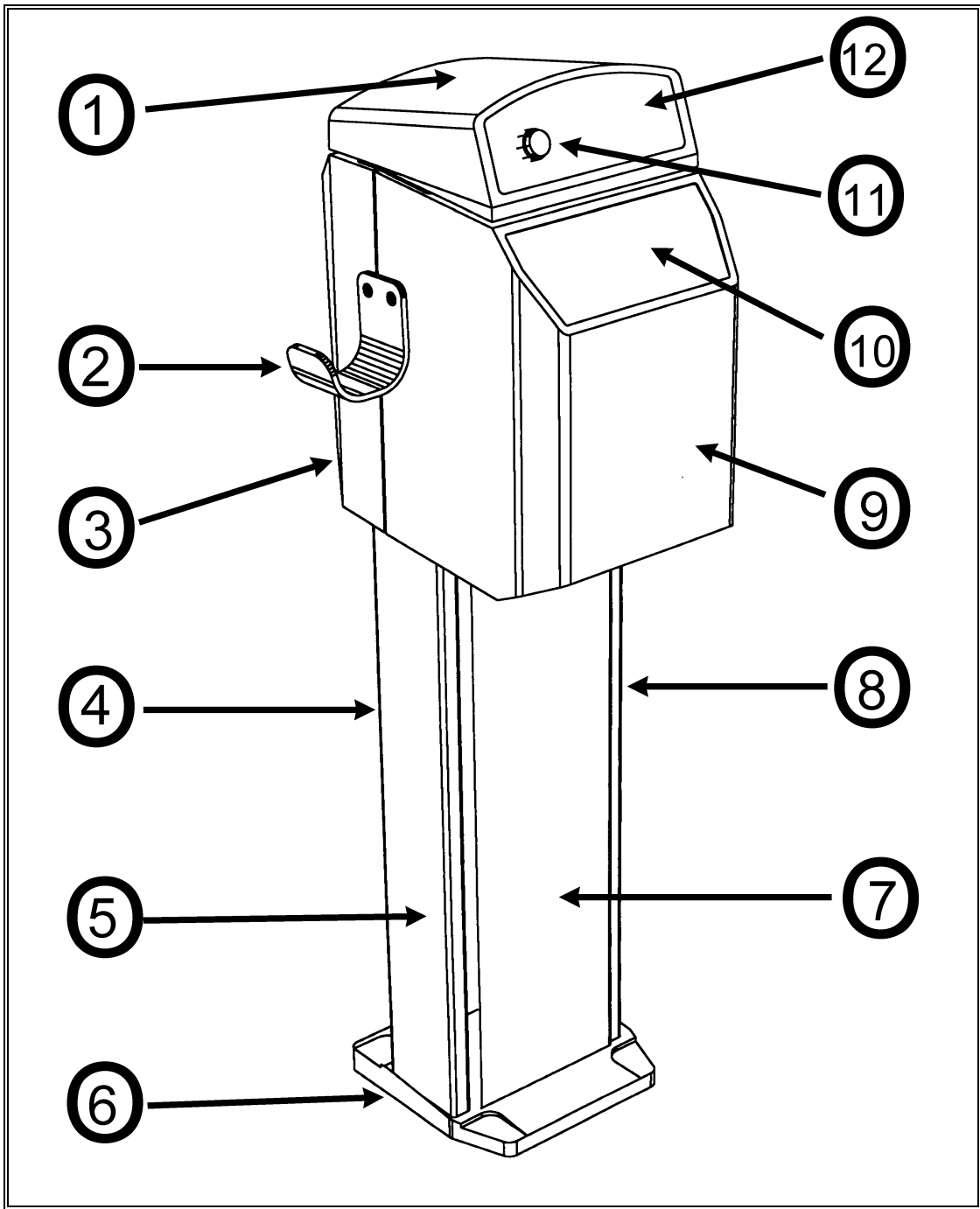
REEL PARTS IDENTIFICATION



Ref #	Part Name	Part No.
1 & 2.	Swivel & Tube Assembly	33222
3.	Main Spring (Large Reel)	31868
4.	Bumper (Large)	30500

PARTS IDENTIFICATION

PARTS ID - OUTSIDE VIEW (Front view)



Item #	Description	Part#
1	Head Housing Rhino	40066
2	Hose Hook Side	40087
3	Rear Housing	40012
4	Back Panel (With No Bins)	40038
	Back Panel (With 1 Bin)	40042
	Back Panel (With 2 Bin)	40040
5	Post Left (Model 41)	40049
	Post Left (Model 43)	40051
6	Base	40059
7	Front Panel (With No Bins)	40037
	Front Panel (With 1 Bin)	40039
	Front Panel (With 2 Bin)	40041
8	Post Right (Model 41)	40050
	Post Right (Model 43)	40052
9	Front Component Housing - Reel	40178
	Front Component Housing - Compressor (Units W/O Reels)	40170
	Front Component Housing - Compressor (Units With Reels)	40176
10	Face Component Housing (Standard) AIR	40076
	Face Component Housing (Standard) WATER	40078
	Face Component Housing (Standard) RETURN HOSE	40077
11	Pushbutton (Includes contact block)	33189
12	Face Screened (Standard)	40075
	Face Screened (No Pushbutton)	40127

REPLACEMENT PARTS - GENERAL

NOTE: For parts breakdowns and more detailed spare parts listings check the appropriate component section of this manual

HOSE REPAIR

30947	Wire braid hose Flexsteel 25' (Air or Water)
30944	Hose Assembly 25' With Gauge, Whip and Non-sealing Chuck
31886	Chuck, non-sealing type
30948	Gauge Hand Held With Whip and Non-sealing Chuck
30653	Water Nozzle (For water hose option)

WARRANTY

Notice: OPW products must be used in compliance with applicable federal, state, and local laws and regulations. Product selection should be based on physical specifications and limitations and compatibility with the environment and material to be handled. OPW makes no warranty of fitness for a particular use. All illustrations and specifications in this literature are based on the latest production information available at the time of publication. Price, materials, and specification are subject to change at any time, and models may be discontinued at any time, in either case, without notice or obligation.

STANDARD PRODUCT WARRANTY

OPW warrants that products sold by it are free from defects in materials and workmanship for a period of two years from the date of shipment by OPW. As the exclusive remedy under this limited warranty, OPW will at its sole discretion, provide a replacement or issue credit for future orders for any product that may prove defective within the two year period. This warranty shall not apply to any product that has been repaired by any party other than a service representative authorized by OPW, or when failure is due to misuse, conditions of use, or improper installation or maintenance. OPW shall have no liability whatsoever for special, incidental or consequential damages to any party, and shall have no liability for the cost of labor, freight, excavation, clean up, downtime, removal, reinstallation, loss of profit, or any other cost or charges.