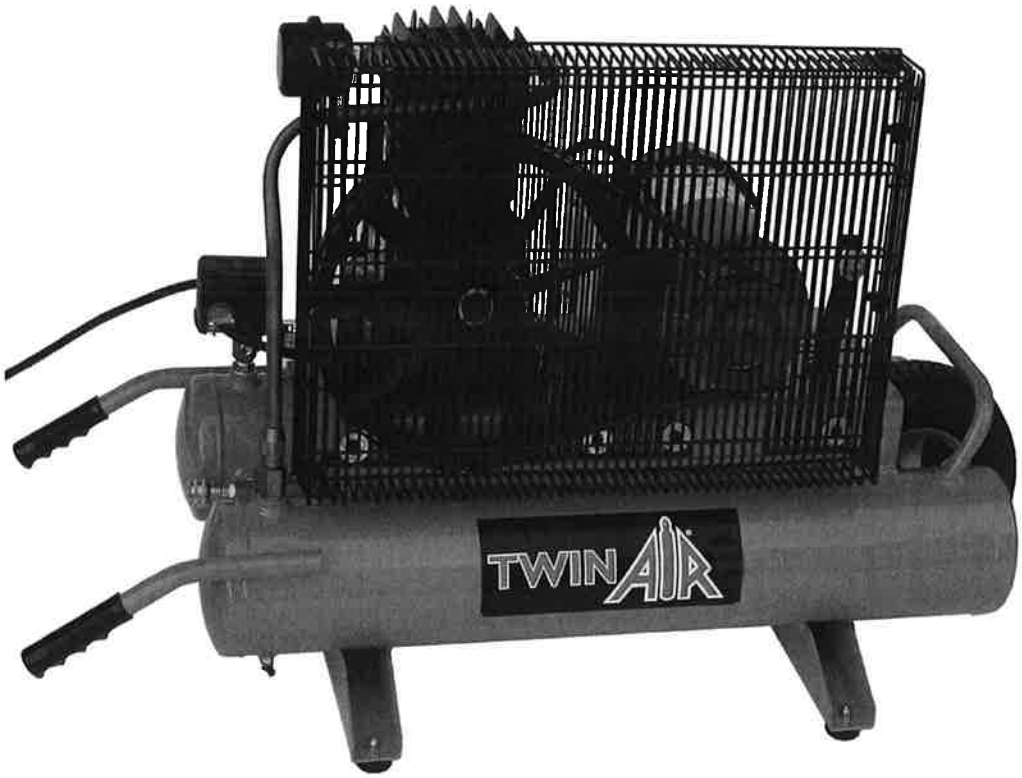
Model TA-1, TA-1G, & TA-1-50
Twin Air Compressor

Manual No. TA3002
(Rev 4 Dec 2012)

Operating Manual



AIR SYSTEMS INTERNATIONAL, INC.
829 Juniper Crescent, Chesapeake, Va. , 23320
Telephone (757) 424-3967
Toll Free 1-800-866-8100
Fax No. (757) 424-5348
http://www.airsystems.com
e-mail: sales@airsystems.com

Printed in U.S.A

⚠ WARNING:

This manual should be read completely and understood thoroughly prior to operation of the compressor; failure to do so could cause injury. Contact Air Systems if you have any questions concerning your compressor, 800-866-8100 or 757-424-3967.

INSTALLATION OF COMPRESSOR

The compressor must be located in a clean, well ventilated area in order to provide an adequate supply of fresh air to the compressor intake and to cool the unit.

The compressor flywheel must have a minimum clearance of 12" from any obstructions (walls, cabinets, etc.) to insure proper cooling. Flywheel rotation is clockwise when facing the oil sight glass.

The compressor should be installed so that the pump is level in order to allow for proper lubrication.

Anchoring the compressor to the floor is NOT recommended. When this is necessary, the tank legs MUST BE SHIMMED in order to avoid undue stress on the tank welds. Vibration isolator pads are STRONGLY RECOMMENDED.

All electrical wiring and connections must be done by a qualified electrician and must be in accordance with all national and local electrical codes.

⚠ WARNING: GRADE-D FILTRATION REQUIRED

The TA-1 compressor must be used with a portable Breather Box™. Use Model BB15-CO for one person operation or Model BB30-CO for 2 person operation.

SPECIFICATIONS

MODEL TA-1 & TA-1-50

Electric Motor Model TA-1:	115/230 VAC, 60 Hz TEFC, 2 HP, 1-phase
Electric Motor Model TA-1-50:	220 VAC, 50 Hz TEFC, 1.5 HP, 1-phase
Pressure:	110psi with automatic start/stop pressure switch with pressure discharge
Flow:	8.8 acfm @ 100psi 10.0 acfm @ 40psi
Receiver Tank:	8 gallon capacity with manual drain valves
Belt Drive:	Fully enclosed safety guard
Respirator Capacity:	1 hood style respirator (w/ vortex) 2 pressure demand respirators
Intake Filter:	0.5 - 0.7 micron rated filter Part No. BAC-20F *(Note: Order Part No. BAC-10F if your compressor was manufactured prior to 12/2006)*
Weight:	152 lbs.

MODEL TA-1G

Gasoline Motor:	Honda 5.0 HP Gasoline
Pressure:	110psi with automatic start/stop pressure switch with pressure discharge
Flow:	8.8 cfm @ 100psi 9.7 cfm @ 40psi
Receiver Tank:	8 gallon capacity with manual drain valves
Belt Drive:	Fully enclosed safety guard
Respirator Capacity:	1 hood style respirator 2 pressure demand respirators
Intake Filter:	0.5 - 0.7 micron rated filter Part No. BAC-20F *(Note: Order Part No. BAC-10F if your compressor was manufactured prior to 12/2006)*
Weight:	159 lbs.

ELECTRICAL CONNECTION

A qualified electrician familiar with local electrical codes in your area should be used for all units requiring electrical connections. Long extension cords SHOULD NOT be used on portable unites. Longer air lines or piping are always the best method of extending the range of your air compressor.

START UP

Prior to running the compressor, check the following items:

1. Crankcase oil - Be sure that the sight glass shows 1/2 full. Use only Air Systems approved oil, Part No. HP-268-32 for moderate temperature climates. See " Temperature" section for cold or hot climate oil recommendations.
2. Switch the compressor on for a few revolutions to be sure rotation is correct. Correct rotation is clockwise when standing facing the gauge. Air should blow across the compressor pump to assure proper cooling.
3. Operate the compressor for a few minutes. Be sure that the pressure switch properly switches the system off at approximately 110psi. If the pressure gauge on the tanks indicate above the maximum setting, the unit should be shut off immediately and the pressure switch adjusted. Consult Air Systems for service assistance.

   Note: The TA-1 series of compressors MUST BE used with Grade-D filtration.

4. Turn off compressor and connect the Grade-D filtration unit, Breather Box™ Models BB15-CO or BB30-CO. Attach desired respirator connections to the Grade-D filtration unit. See accompanying instruction manual for further information on operation and usage of the Breather-Box™.

MAINTENANCE OF COMPRESSOR

Compressor oil level should be maintained at the halfway point on the sight glass. The oil should be changed as required (at least every 3 months or 300 hours) and should be Air Systems brand food-grade lubricant, Part Number HP-268-32 for moderate temperature climates. See " Temperature" section for cold or hot climate oil recommendations.

For compressor with gasoline engines, follow the engine manufacturers recommendations for oil changes, oil types, and oil levels.
Valves should be inspected every 3 months and cleaned as needed.
Proper belt tension should be maintained at all times. Belts should be checked regularly for wear.
Air intake filter (BAC-20F) should be changed frequently.
All nuts, bolts, cap screws, and fittings should be kept tight.

PERIODIC MAINTENANCE

SAFETY RULES

1. Always unplug the electric compressor prior to working on the unit; disconnect spark plug on gasoline units.
2. Drain tank system of all air pressure.
3. Be careful of hot components and sharp objects.
4. Disconnect spark plug wires on gasoline drive compressors when working on the compressor pump.

DAILY

1. Check oil level at sight glass or dip stick. Check engine oil on gasoline drives.
2. Drain moisture from the receiver tanks by opening both drain valves.
3. Verify that the pressure switch unloader is working by listening for a hissing sound when the compressor shuts down.
4. Visually check machine for loose parts or excessive noise or vibration.

MONTHLY

1. Check the belt(s) for tension. Belts should not move up and down while the compressor runs and when stopped should not have more than 1/2" of play when depressed. Be careful not to over tighten the belts during adjustment.
2. Remove and check the air intake filter, they should be replaced when dust is visible.
3. Oil Change - Every 3 months or 300 hours the oil should be changed.

TEMPERATURE			OIL WT.	AIR SYSTEMS PART #
Cold Climates	-	Below 30°F	20 WT.	No. HP-546
Moderate Climate	-	30°F - 90°F	30WT	No. HP-268
Hot Climate	-	Above 90°F	40WT	No. B1260800

TROUBLESHOOTING

Slow pumping or insufficient air pressure can be caused by:

1. Clogged inlet filter - replace.
2. Leaks in air lines, valves, fittings, etc. - (Locate leak using soapy water spray if necessary; replace or tighten threaded parts.) Be sure to drain air tanks prior to disassembly.
3. Compressor too small for the number of respirators attached.
4. Leaking valves - consult factory.

Excessive oil consumption can be caused by:

"Oil Pumping" usually results from using the wrong type or an inferior grade of oil. Keep the unit horizontal at all times. Compressor should never be run dry of oil. Check daily.

Noisy operation can be caused by:

1. Loose parts - external - (Tighten loose belts, particularly the flywheel pulley to the crankshaft).
2. Foreign matter such as carbon, metal chips, etc. on pistons striking head at top of stroke (remove head and clean).
3. Loose compressor mounting bolts (check).

Oil leak

At base or end cover gasket - tighten bolts. If that does not stop leak, then disassemble at point of leak, replace gaskets and reassemble. Maintain correct oil level.

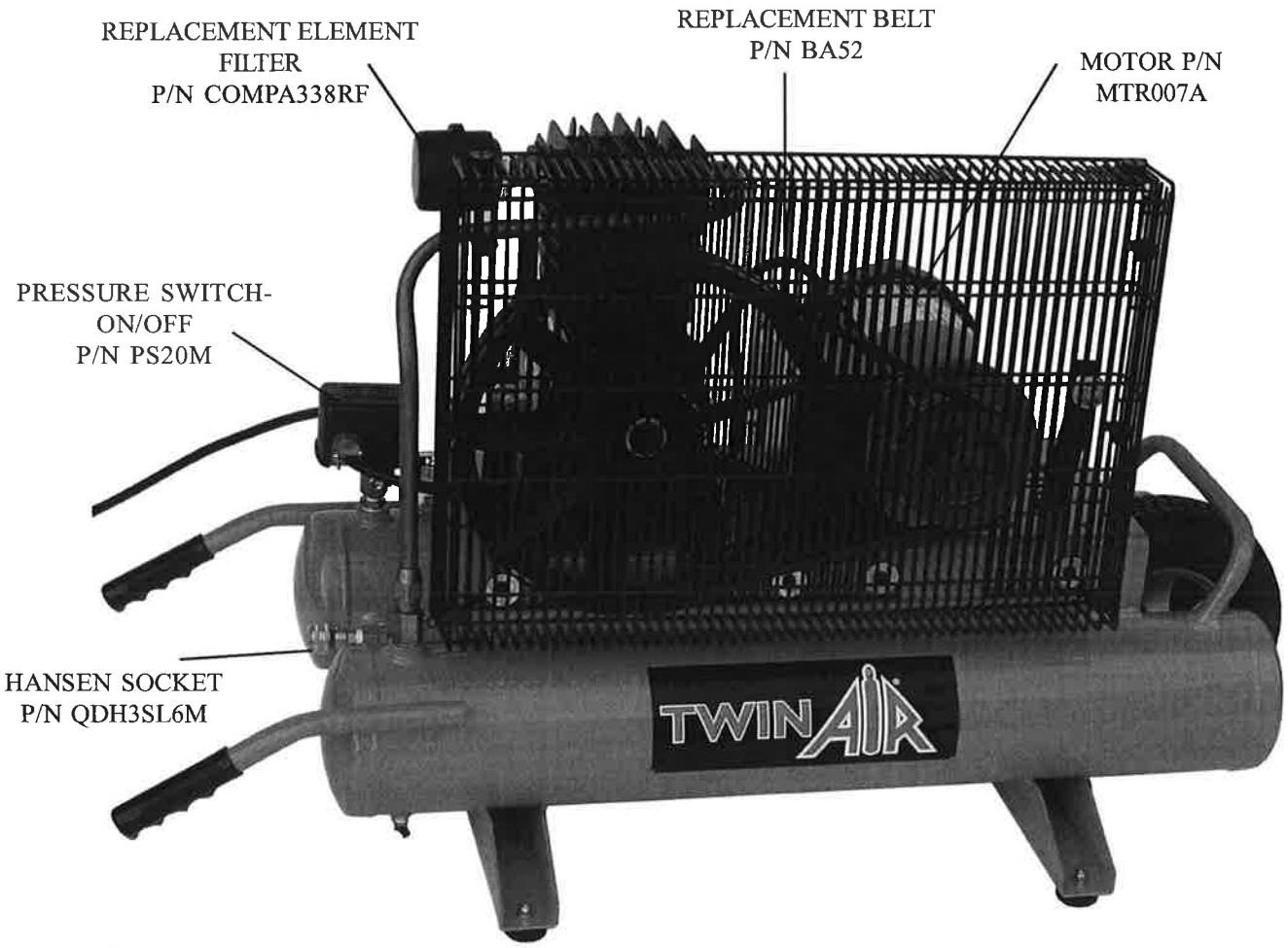
Vibration

Characteristic of all reciprocating machines, this can be held to a minimum by maintaining proper belt alignment and tension and keeping nuts and bolts tight.

Overheating can be cause by:

1. Pump running backwards - (Reverse direction). Proper rotation is counterclockwise facing the flywheel.
2. One or more head valves failing to seat properly.
3. Blown cylinder head gasket.
4. Restriction in head, intercooler or check valve, if used.
5. Lack of oil.
6. Dirt in intercooler fins or cylinder fins.
7. Poor ventilation and high room temperature.

REPLACEMENT ITEMS



Warranty Disclaimer

Air Systems' manufactured equipment is warranted to the original user against defects in workmanship or materials under normal use for one year after 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.

NO OTHER WARRANTY, EXPRESSED OR IMPLIED, AS TO DESCRIPTION, QUALITY, MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR ANY OTHER MATTER IS GIVEN BY AIR SYSTEMS IN CONNECTION HEREWITH. UNDER NO CIRCUMSTANCES SHALL THE SELLER BE LIABLE FOR LOSS OF PROFITS, ANY OTHER DIRECT OR INDIRECT COSTS, EXPENSES, LOSSES OR DAMAGES ARISING OUT OF DEFECTS IN, OR FAILURE OF THE PRODUCT OR ANY PART THEREOF.

The purchaser shall be solely responsible for compliance with all applicable Federal, State and Local OSHA and/or MSHA requirements. Although Air Systems International believes that its products, if operated and maintained as shipped from the factory and in accordance with our "operations manual", conform to OSHA and/or MSHA requirements, there are no implied or expressed warranties of such compliance extending beyond the limited warranty described herein. Product designs and specifications are subject to change without notice. **Rev 2 12/98**

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.