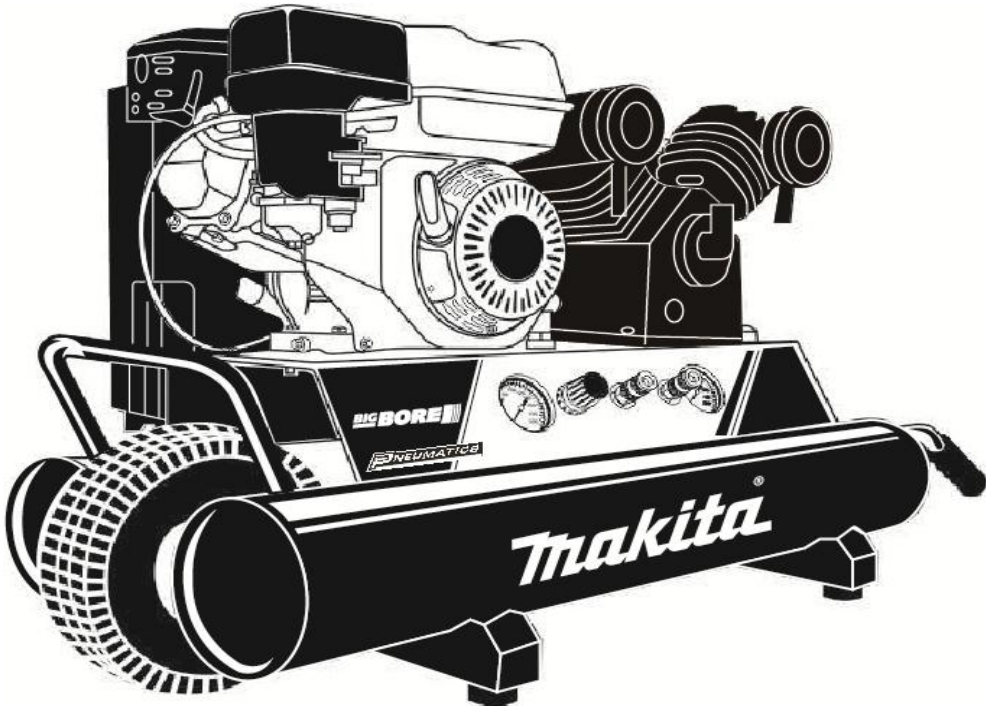




# Gas Compressor Operating Instructions



[www.makitatools.com](http://www.makitatools.com)

## NOTICE

Carefully read this instruction manual and the engine manual before attempting to operate this compressor.



**WARNING:** *This product contains chemicals known to the State of California to cause cancer, and birth defects or other reproductive harm. Wash hands after handling this product.*

MODEL # MAC5501G SERIAL # \_\_\_\_\_



## OWNERS MANUAL FOR

Gas Compressor

**MODEL No.**

**MAC5501G**

### SPECIFICATION CHART

Maximum Horsepower	5.5 HP
SCFM @ 40 PSIG	14
SCFM @ 100 PSIG	12.5
Cut-In Pressure	110
Cut-Out Pressure	135
Engine RPM	3600
Tank Size	10 Gallon
Weight	190 lbs.

**IMPORTANT - Read the Safety Guidelines and ALL instructions carefully before operating.**



**Wear hearing protection**  
**Wear eye protection**

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# IMPORTANT SAFETY INSTRUCTIONS



**DANGER:** Carbon Monoxide. Using an engine indoors can kill you in minutes. Engine exhaust contains high levels of carbon monoxide (CO), a poisonous gas you cannot see or smell. You may be breathing CO even if you DO NOT smell engine exhaust.

**WARNING** The engine exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm.



**\*SAVE THESE INSTRUCTIONS\***




## WARNING




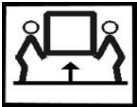
**IMPROPER OPERATION OR MAINTENANCE OF THIS PRODUCT  
COULD RESULT IN SERIOUS INJURY AND PROPERTY DAMAGE.**

**READ AND UNDERSTAND ALL WARNINGS  
AND OPERATING INSTRUCTIONS BEFORE  
USING THIS EQUIPMENT.**

HAZARD	WHAT CAN HAPPEN	HOW TO PREVENT IT
<p><b>WARNING</b> Risk of Unsafe Operation</p>	<p>Unsafe operation of your air compressor could lead to serious injury to you or others.</p>	<ul style="list-style-type: none"> <li>• Review and understand all instructions and warnings in this manual</li> <li>• Become familiar with the operation and controls of the air compressor.</li> <li>• Keep operating area clear of all persons, pets, and obstacles.</li> <li>• Keep children away from the air compressor at all times.</li> <li>• Do not operate the product when fatigued or under the influence of alcohol or drugs. Stay alert at all times.</li> <li>• Never defeat the safety features of this product.</li> <li>• Equip area of operation with a fire extinguisher.</li> <li>• Do not operate machine with missing, broken or unauthorized parts.</li> </ul>

HAZARD	WHAT CAN HAPPEN	HOW TO PREVENT IT
<p><b>⚠ WARNING</b></p> <p><b>Risk of Air Tank Bursting</b></p> 	<p>The following conditions could lead to a weakening of the tank and RESULT IN A VIOLENT TANK EXPLOSION RESULTING IN SERIOUS INJURY TO YOU OR OTHERS:</p> <ul style="list-style-type: none"> <li>· Failure to properly drain condensed water from the tank, causing rust and thinning of the tank wall.</li> <li>· Modifications or attempted repairs to the tank.</li> <li>· Unauthorized modifications to the pressure switch, safety valve, or any other components, which control tank pressure.</li> </ul>	<ul style="list-style-type: none"> <li>· Drain the tank DAILY or after each use. If tank develops a leak, replace it immediately with a new tank or new compressor unit.</li> <li>· Never drill into, weld, or make any modifications to the tank or its attachments. Never attempt to repair a damaged or leaking tank. Replace with a new tank.</li> <li>· The tank is designed to withstand specific operating pressures. Never make adjustments or parts substitutions to alter the factory set operating pressures.</li> <li>· For essential control of air pressure, you must install a pressure regulator and regulated air pressure gauge to the air outlet of your compressor.</li> </ul>
<p><b>⚠ WARNING</b></p> <p><b>Risk of Attachments and Accessories Bursting</b></p> 	<p>Exceeding the pressure rating of air tools, spray guns, air operated accessories, tires AND other inflatables can cause them to explode or fly apart, and could result in serious injury to you and others.</p>	<ul style="list-style-type: none"> <li>· Follow the equipment manufacturers recommendation and never exceed the maximum allowable pressure rating of attachments. Never use the compressor to inflate small low-pressure objects such as children's toys, footballs, basketballs, etc.</li> </ul>

HAZARD	WHAT CAN HAPPEN	HOW TO PREVENT IT
<p><b>⚠ WARNING</b> Risk From Noise</p> 	<p>Under some conditions and duration of use, noise from this product may contribute to hearing loss.</p>	<p>Always wear certified safety equipment: ANSI S12.6 (S3.19) hearing protection.</p>
<p><b>⚠ WARNING</b> Risk of Explosion or Fire</p> 	<p>Never operate the compressor in an atmosphere where flammable vapors are present. Doing so can result in serious injury to you or others.</p>	<ul style="list-style-type: none"> <li>· Always operate the compressor in a well-ventilated area, free of gasoline or solvent vapors.</li> <li>· If spraying flammable materials, locate compressor at least 20 feet away from spray area.</li> <li>· Store flammable materials in a secure location away from compressor.</li> </ul>
<p><b>⚠ WARNING</b> Risk to Breathing</p> 	<ul style="list-style-type: none"> <li>· The compressed air from your compressor is not safe for breathing. The air stream may contain carbon monoxide or other vapors, or particles from the tank or other components.</li> <li>· Sprayed materials such as paint, paint solvents, paint remover, insecticides, weed killers, etc., contain harmful vapors and poisons.</li> <li>· Breathing compressor or sprayed materials vapor can result in serious injury.</li> </ul>	<ul style="list-style-type: none"> <li>· Never inhale air from the compressor, either directly or from a breathing device connected to the compressor. Work in an area equipped with good cross ventilation.</li> <li>· Read and follow the safety instructions provided on the label or safety data sheet for the material you are spraying.</li> <li>· Use an approved respirator designed for use with your specific application.</li> </ul>

HAZARD	WHAT CAN HAPPEN	HOW TO PREVENT IT
<p><b>⚠ WARNING</b> Risk from Compressed Air</p> 	<p>The compressed air stream can cause soft tissue damage, and can propel dirt, chips, loose particles and small objects at high speed, resulting in property damage or personal injury.</p>	<ul style="list-style-type: none"> <li>· Always wear approved safety glasses with side shields when using the compressor.</li> <li>· Never point any nozzle or sprayer toward any part of the body or at other people or animals.</li> <li>· Always turn the compressor off and bleed pressure from the air line before attempting maintenance, attaching tools or accessories.</li> </ul>
<p><b>⚠ WARNING</b> Risk from Moving Parts</p> 	<p>If your attempt repair or maintenance while the compressor is operating, you can expose yourself to moving parts. These moving parts can cause serious injury.</p>	<ul style="list-style-type: none"> <li>· Always shut off the compressor and release air pressure from the tank and any attachments before attempting any maintenance or repair.</li> <li>· Never operate the compressor with guards or covers which are damaged or removed.</li> </ul>
<p><b>⚠ WARNING</b> Risk of Burn</p> 	<p>Contact with hot parts such as the compressor head, engine, or outlet tubes could result in a serious skin burn.</p>	<ul style="list-style-type: none"> <li>· Never touch hot components during or immediately after operation of the compressor. Do not reach around protective shrouds or attempt maintenance until unit has been allowed to cool.</li> </ul>
<p><b>⚠ WARNING</b> Risk of Injury from Lifting</p> 	<p>Serious injury can result from attempting to lift too heavy an object.</p>	<ul style="list-style-type: none"> <li>· The compressor is too heavy to be lifted by one person. Obtain assistance from others before lifting.</li> </ul>

**⚠ WARNING** This product may not be equipped with a spark-arresting muffler. If the product is not equipped and will be used around flammable materials or on land covered with materials such as agricultural crops, forest, brush, grass, or other similar items, then an approved spark arrester must be installed and is legally required in the state of California. It is a violation of California statutes section 130050 and/or sections 4442 and 4443 of the California Public Resources Code, unless the engine is equipped with a spark arrester, as defined in section 4442, and maintained in effective working order. Spark arresters are also required on some U.S. Forest Service land and may also be legally required under other statutes and ordinances.

## **EMISSIONS NOTICE**

**The U.S., California Clean Air Act, and Environment Canada EPA,** California, and Canadian regulations require all manufacturers to furnish written instructions describing the operation and maintenance of emission control systems.

For proper instructions and procedures, refer to section "Emission Control System Information" in your engine owners manual.

## **GLOSSARY**

CFM: Cubic feet per minute.

SCFM: Standard cubic feet per minute; a unit of measure of air delivery.

PSIG: Pounds per square inch gauge; a unit of measure of pressure.

CUT-IN PRESSURE: While the engine is idling, air tank pressure drops as you continue to use your accessory or air tool. When the tank pressure drops to a certain level, the engine will automatically go back to full RPM & this is called "cut-in pressure".



## GLOSSARY (con't.)

**CUT-OUT PRESSURE:** When you start your air compressor, it begins to run, air pressure in the tank begins to build. It builds to a certain pressure before the engine automatically idles down - protecting your air tank from pressure higher than its design rating. The pressure at which the engine idles down is called "cut-out pressure".

## DUTY CYCLE

All Makita manufactured air compressors are recommended to be operated on not more than a 50% duty cycle. This means an air compressor that pumps air more than 50% of one hour is considered misuse because the air compressor is undersized for the required air demand.

## GENERAL INFORMATION

Check oil, engine, and compressor pump oil daily. Add oil as required.

Your air compressor can be used for operating paint spray guns, air tools, caulking guns, grease guns, air brushes, sandblaster, inflating tires or spraying weed killers, insecticides, etc. An air pressure regulator is supplied for these applications.

Separate air transformers which combine the functions of air regulation and/or moisture and dirt removal should be used

where applicable.

## ON-RECEIPT INSPECTION

**DAMAGE:** Each air compressor outfit is carefully tested and checked before shipment. With improper handling, damage may result in transit and cause problems with compressor operation.

Immediately upon arrival, check equipment for both concealed and visible damages to avoid expenses being incurred to correct such problems. This should be done regardless of any visible signs of damage to the shipping container. If this product was shipped directly to you, report any damages to the carrier and arrange for inspections of goods immediately.

## STORAGE

Before you store the air compressor, make sure you do the following:

1. Review the "Maintenance" and "Operating Procedures" sections and perform maintenance as necessary. Be sure to drain water from the air tank.
2. For proper instructions & maintenance for storing your gas engine, refer to the section your engine owners manual titled "Storing Your Engine".
3. Store the air compressor in a clean and dry location.

## DESCRIPTION OF OPERATION

**DRAIN VALVE:** The drain valve is located at the bottom of the air tanks and is used to drain condensation at the end of each use.

## DESCRIPTION OF OPERATION (con't)

**AIR INTAKE FILTER:** This filter is designed to clean air coming into the compressor pump. This filter must always be clean and free from obstructions. See "Maintenance".

**AIR COMPRESSOR PUMP:** To compress air, the pistons move up and down in the cylinder. On the down stroke, air is drawn in through the air intake valve. The exhaust valve remains closed. On the upstroke of the piston, air is compressed. The intake valve closes and compressed air is forced out through the exhaust valve, through the outlet tube, through the check valve and into the air tank. Useable air is not available until the compressor has raised the air tank pressure above that required at the air outlet.

**UNLOADER VALVE:** When the compressor pumps the factory set amount of air into the tank, the unloader will blow off. This puts the engine in idle mode and the unloader will open, allowing the unused air to escape preventing over pressuring of the tank.

**SAFETY VALVE:** If the engine does not idle down at its "cut-out" pressure setting, the safety valve will protect against high pressure by "popping out" at its factory set pressure (slightly higher than the unloader valve "cut-out" setting). Do not tamper with or attempt to eliminate the safety relief valve.

**TANK PRESSURE GAUGE:** The tank pressure gauge indicates the air pressure in the tank.

**OUTLET PRESSURE GAUGE:** The outlet pressure gauge indicates the air pressure available at the outlet side of the regulator. This pressure is controlled by the regulator and is always less or equal to the tank pressure. See "Operating Procedures".

**REGULATOR:** The air pressure coming from the air tank is controlled by the regulator knob. Turn the knob clockwise to increase pressure and counter-clockwise to decrease pressure. To avoid minor re-adjustment after making a change in pressure setting, always approach the desired pressure from a lower pressure. When reducing from a higher to a lower setting, first reduce to some pressure less than desired pressure. Depending on the air requirements of each particular accessory, the outlet regulated air pressure may have to be adjusted while you are operating the accessory.

## INSTALLATION AND BREAK-IN PROCEDURES

### LOCATION OF THE AIR COMPRESSOR

Locate the air compressor in a clean, dry, and well-ventilated area. The air filter must be kept clear of obstructions, which could reduce air delivery of the air compressor. The air compressor should be located at least 12 inches away from the wall or other obstructions that will interfere with the flow of air. The air compressor head and shroud are designed to allow for proper cooling. If humidity is high, an air filter can be installed on the air outlet adapter to remove excessive moisture. Follow the instructions packaged with the air filter for proper installation.

## INSTALLATION AND BREAK-IN PROCEDURES (con't.)

### Initial Start Up Procedure:

1. Check engine & pump oil.
2. Open the air receiver's drain valve.
3. Run the compressor for a minimum of twenty (20) minutes in the no-load condition to seat the piston ring.
4. Close air receiver drain valve. Your compressor is now ready for use.

### **⚠ CAUTION** Piping

Plastic or PVC pipe is not designed for use with compressed air. Regardless of its indicated pressure rating, plastic pipe can burst from air pressure. Use only metal pipe for air distribution lines.

If a pipe line is necessary, use pipe that is the same size, or larger than, the air tank outlet. Piping that is too small will restrict the flow of air. If piping is over 100 feet long, use the next larger size. Bury underground lines below the frost line and avoid pockets where condensation can gather and freeze. Apply pressure before underground lines are covered to make sure all pipe joints are free of leaks.

## OPERATING PROCEDURES

### Installation

Proper care, maintenance and lubrication ensures longevity. The compressor should always be level for proper lubrication. Use only in a clean, dry, well-ventilated area. The compressor has heat dissipation fins for proper cooling. Keep the fins and other parts that collect dust clean. Do not place rags or other materials on top of the compressor, as this obstructs cooling and can be a fire hazard.

### Daily Start-up Checklist

1. Before attaching air hose or accessories, make sure the pressure switch lever is set to "OFF" and the air regulator or shut-off valve is closed.
2. Attach hose and accessories. Too much air pressure causes a hazardous risk of bursting. Check the manufacturer's maximum pressure rating for air tools and accessories. The regulator outlet pressure must never exceed the maximum pressure rating.
3. Turn the pressure switch lever to "ON/AUTO" and allow tank pressure to build. Motor will stop when tank pressure reaches "cut-out" pressure.
4. Open the regulator by turning it clockwise. Adjust the regulator to the correct pressure setting. Your compressor is now ready for use.
5. Always operate the air compressor in well-ventilated areas; free of gasoline or other solvent vapors. Do not operate the compressor near the spray area.

### When you are finished:

6. Set the pressure switch lever to "OFF".
7. Using the air tool or accessory, bleed the tank pressure down to zero.
8. Remove the air tool or accessory.
9. Drain water from the air tank by opening drain cock valve on bottom of tank.  
WATER WILL CONDENSE IN THE AIR TANK. IF NOT DRAINED, WATER WILL CORRODE AND WEAKEN THE AIR TANK CAUSING A RISK OF AIR TANK RUPTURE.

### Note:

*If drain cock valve is plugged, release all air pressure. The valve can then be removed, cleaned, then reinstalled.*

10. After the water has been drained, close the drain valve. The air compressor can now be stored.

## OPERATING PROCEDURES

### BEFORE OPERATING THE AIR COMPRESSOR

#### PLEASE CHECK THE FOLLOWING CAREFULLY:

- 1) Check to see that nuts and bolts are all snug.
- 2) Check if the quantity and quality of oil is correct.
- 3) If the intake filters are dirty, they should be replaced or cleaned.

### COMPRESSOR LUBRICATION

Always check the oil level and quality before start-up. DO NOT ADD OR CHANGE OIL WHILE THE UNIT IS RUNNING. Use only recommended non-detergent oil.

### RECOMMENDED OIL

Compressor oil: #EAOIL10 (1 Liter)

Compressor oil: #EAOIL40 (4 Liters)

*\*Compressor originally filled with SAE 30W oil*

Compressor oil is a non-detergent mineral oil formulated with additives to help minimize carbon build-up, increase ring life, and reduce oil consumption, for use at ambient temperatures of 32° F - 86° F (0° to 30° C)

### OTHER APPROVED OILS

Regular mineral oils can also be used in Makita compressors. Always use a non-detergent oil with the following specifications:

AMBIENT TEMPERATURES AT POINT OF OPERATION	SAE VISCOSITY	ISO VISCOSITY
-16° C TO 0° C (3.2° F - 32° F)	SAE 10W	ISO 32
1° C TO 26° C (33.8° F - 78.8° F)	SAE 20W	ISO 68
ABOVE 27 °C (80.6° F)	SAE 30W	ISO 100

## FILLING THE COMPRESSOR WITH OIL

- 1) Remove the oil filler plug
- 2) Slowly pour the proper oil into the pump crankcase
- 3) Always keep oil level in the middle of the sight glass

### OIL CHANGES

#### INITIAL OIL CHANGE DUE AT 25 HOURS

Change oil every 300 hours or 3 months - whichever comes first.

- 1) Remove the oil drain plug. Allow oil to drain completely.
- 2) Replace the oil drain plug.
- 3) Refill with the recommended oil to the proper level.

### ENGINE LUBRICATION

Check engine Owner's manual for lubrication and maintenance requirements.

### MAINTENANCE

Before doing any maintenance or adjustments to your air compressor, the following safety precautions should be taken:

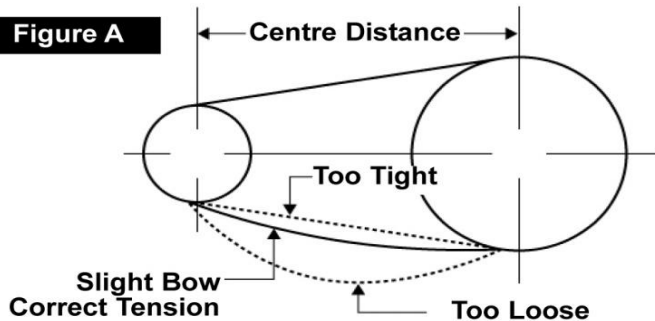
- 1) Turn off engine. Wait until engine is completely stopped.
- 2) Drain air receiver and air lines of air pressure.

## OPERATING PROCEDURES

### CHECKING BELT TENSION

Adjust belt(s) so when pressure is applied at the center, there is approximately 1/2" slack (see diagram "Figure A" below). If the belt is installed too tight, the engine might be overloaded. This will cause the engine to overheat. If the belt is installed too loosely, it will slip and excessive wear and vibration will occur.

**Figure A**



### HOW TO INSTALL A NEW BELT IF REQUIRED:

- 1) Turn off engine. Wait until engine is completely stopped.
- 2) Remove belt guard.
- 3) Loosen engine bolts and slide engine toward compressor head just enough to allow the old belt to be removed.
- 4) Install proper replacement belt.
- 5) Slide engine away from compressor head to provide recommended tension as shown in diagram above (Figure A).
- 6) Align belt using a straight edge ruler against pulley's edge.
- 7) Fasten engine bolts.
- 8) Ensure engine and compressor pulley's are secure. Re-check alignment.
- 9) Re-install belt guard.
- 10) Belt tension should be checked after 20 hours of operation. Check tension monthly thereafter.

### OPERATING YOUR AIR COMPRESSOR

#### ENGINE - GAS DRIVEN

- 1) Check the entire unit for any damage.

- 2) Check compressor and engine oil level, fill or add if necessary.
- 3) Make sure gas tank is filled.
- 4) Read entire engine manual.
- 5) Starting the engine:
  - a) Move fuel lever to the "ON" position.
    - If engine is cold, move choke lever to the "CLOSED" position.
    - If engine is warm, leave choke lever in "OPEN" position.
  - b) Turn engine switch to "ON" position.
  - c) Pull starter grip lightly until you feel resistance, then pull briskly, returning starter grip gently - engine should start. If not, repeat.
  - d) Once the engine starts running, slowly move the choke lever to the "OPEN" position.
  - e) With the engine running properly, the compressor fills the air receiver with compressed air, when maximum pressure (set by the pilot valve control) is reached, the engine and compressor will slow down to idle speed, and will return to full RPM when the cut-in pressure is reached. The unit will continue to cycle automatically until turned off.
- 6) Stopping the engine:
  - a) Turn the engine switch to the "OFF" position.
  - b) Turn the fuel lever to the "OFF" position.

**ENGINE IDLE SPEED MAY NEED TO BE ADJUSTED, EVEN ON YOUR BRAND NEW UNIT TO COMPENSATE FOR DIFFERENCES IN ALTITUDE. PLEASE CONSULT THE ENGINE OPERATING MANUAL.**



**EXTRA CARE SHOULD BE TAKEN TO  
AVOID PERSONAL INJURIES WITH  
AUTOMATICALLY CONTROLLED  
COMPRESSORS**

## **MAINTENANCE SCHEDULE**

### **DAILY OR BEFORE EACH USE**

- 1) Check oil level
- 2) Drain condensation from air receiver
- 3) Check for any unusual noise or vibration
- 4) Be sure all nuts and bolts are tight

### **WEEKLY**

- 1) Turn off engine. Clean dust and foreign matter from cylinder head, engine, fan blades, intercooler, and air receiver.
- 2) Clean air filter by opening air filter, removing filter element and cleaning it thoroughly and allow to dry completely before assembly.
- 3) Worn filter should be replaced.
- 4) Check v-belts for wear.

### **MONTHLY**

- 1) Inspect unit for leaks.
- 2) Tighten joints if leaks are observed.
- 3) Check v-belts for proper tension.
- 4) Check compressor pulley and engine sheave are aligned and securely fastened.

### **QUARTERLY OR 300 HOURS (Whichever comes first)**

- 1) Inspect the air receiver for corrosion or other damage.
- 2) Change compressor oil.

- 3) Replace air filter (more often if compressor is used near paint spraying operations or in dusty environments).

## TROUBLE SHOOTING

<b>PROBLEM</b>	<b>POSSIBLE CAUSE</b>	<b>CORRECTIVE ACTION</b>
Will not start		Please refer to Honda manual included
Low pressure	Safety valve leaks	Replace safety valve
	Drain cock open	Close drain cock
	Loose tubes or fittings	Tighten fittings
	Dirty or plugged air filter	Clean or replace as necessary
	Defective unloader valve	Replace unloader valve
Oil in Discharge	Too much oil in the crank-case	Drain oil and fill to proper level
	Improper oil viscosity	Drain and replace oil
	Compressor overheated	Air pressure regulated too high
	Restricted air filter	Clean or replace air filter
	Worn piston rings	Replace piston rings
Compressor Overheats	Dirty compressor head, cylinder or intercooler	Clean with compressed air
	Clogged inlet filter	Clean or replace as necessary
	Operating pressure too high	Reduce operating pressure
	Low oil or wrong oil being used	Drain and replace oil
	Compressor cycle too long. Proper cycle is 50-60% on Stop/Start operation	Allow for longer rest between Cycles
Compressor loads & unloads or idles up & down excessively	Pilot valve differential adjusted too close.	Replace worn components as necessary Make necessary adjustments
	Leaks in air system	Check for leaks
	Worn or loose drive belts	Tighten V-belts or replace
	Defective compressor valves	Replace valves
	Compressor too small for intended use	Upgrade to larger compressor

## TROUBLE SHOOTING

<b>PROBLEM</b>	<b>POSSIBLE CAUSE</b>	<b>CORRECTIVE ACTION</b>
Insufficient output, low discharge pressure	Clogged inlet filter	Clean or replace as necessary
	Leaks in air lines, air valves, fittings, etc.	Replace worn components as necessary
	Drive belts slipping.	Tension V-belts
	Drain valve left open	Close drain valve
	Defective pressure gauge	Replace pressure gauge
	Leaking head gasket	Replace head gasket
	Dirty or plugged inter cooler tubes	Remove and clean inter cooler tubes
	Unloader pilot adjusted too low, or defective	Make necessary adjustments
	Worn or defective compressor valves	Replace valves
	Worn piston work out rings	Replace worn parts
	Restrictive check valve	Clean check valve and replace if necessary
Compressor incorrectly sized	Upgrade to larger compressor	
Engine stalls	Faulty unloader / check valve	Replace unloader check valve
	Low oil in engine	Add oil to engine
	Compressor not level	Level compressor
Water in crankcase oil gets dirty, rusty valves or cylinders	Cycle too short; compressor does not operate long enough to vaporize condensed moisture during compression	Allow for longer operating cycle
	Compressor operating outside in cold conditions or inlet filter not protected against weather	Provide adequate protection against extreme weather conditions



## TROUBLE SHOOTING

PROBLEM	POSSIBLE CAUSE	CORRECTIVE ACTION
	System pressure leaking back through check valve when compressor is stopped.	Check and replace check valve if necessary
	Wrong oil being used	Drain and replace with proper oil
Excessive vibration	Loose compressor, engine or engine guard	Tighten components
	Compressor not level	Level compressor
	Leg bolts over tightened to floor	Loosen leg bolts
	Excessive discharge pressure	Reduce operating pressure
	Wrong oil being used	Drain and replace with proper oil
	Loose flywheel, drive, pulley or drive belts	Tighten loose components and check belts
	Worn connector rods, wrist pin or main bearings	Check and replace worn parts
Compressor Knocks	Compressor valves loose or broken	Check and replace worn or broken valves
	Check valve knocks at low pressure	Remove and clean check valve
Compressor uses too much oil	Clogged inlet filter	Clean inlet filter or replace as necessary
	Wrong oil being used, wrong viscosity	Drain and replace oil
	Oil level too high	Fill compressor with oil to proper level
	Crankcase breather valve malfunction	Replace crankcase breather
	Compressor runs unloaded too long	Increase load or stop compressor when not needed. Check for air leaks





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# MAKITA WARRANTY

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## MAKITA LIMITED ONE YEAR WARRANTY

### Warranty Policy

Every Makita tool is thoroughly inspected and tested before leaving the factory. It is warranted to be free of defects from workmanship and materials for the period of ONE YEAR from the date of original purchase. Should any trouble develop during this one year period, return the COMPLETE tool, freight prepaid, to one of Makita's Factory or Authorized Service Centers. If inspection shows the trouble is caused by defective workmanship or material, Makita will repair (or at our option, replace) without charge.

This Warranty does not apply where:

- repairs have been made or attempted by others:
- repairs are required because of normal wear and tear:
- the tool has been abused, misused or improperly maintained:
- alterations have been made to the tool.

IN NO EVENT SHALL MAKITA BE LIABLE FOR ANY INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES FROM THE SALE OR USE OF THE PRODUCT. THIS DISCLAIMER APPLIES BOTH DURING AND AFTER THE TERM OF THIS WARRANTY.

MAKITA DISCLAIMS LIABILITY FOR ANY IMPLIED WARRANTIES, INCLUDING IMPLIED WARRANTIES OF "MERCHANTABILITY" AND "FITNESS FOR A SPECIFIC PURPOSE," AFTER THE ONE YEAR TERM OF THIS WARRANTY.

This Warranty gives you specific legal rights, and you may also have other rights which vary from state to state. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. Some states do not allow limitation on how long an implied warranty lasts, so the above limitation may not apply to you.

**Makita Corporation**  
3-11-8, Sumiyoshi-cho  
Anjo, Aichi 446-8502 Japan