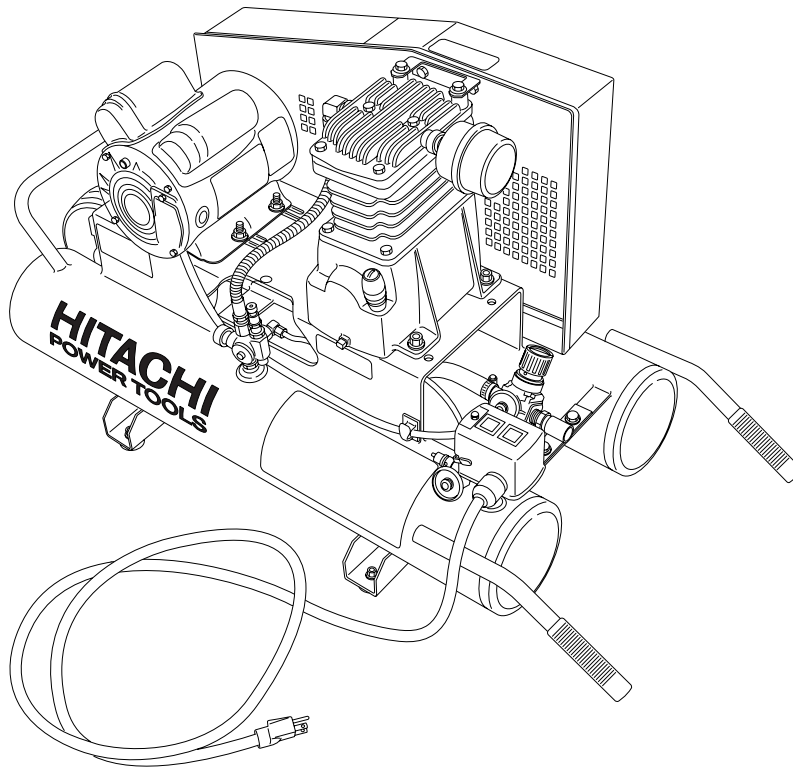


Hitachi Koki

INSTRUCTION MANUAL AND SAFETY INSTRUCTIONS FOR AIR COMPRESSOR
MANUEL D'UTILISATION ET CONSIGNES DE SÉCURITÉ DU COMPRESSEUR
MANUAL DE INSTRUCCIONES Y INSTRUCCIONES DE SEGURIDAD PARA EL COMPRESOR DE AIRE

MODEL
MODÈLE
MODELO

EC 189



⚠ WARNING

Improper and unsafe use of this compressor can result in death or serious bodily injury!
This manual contains important information about product safety.
Please read and understand this manual before operating the compressor.
Please keep this manual available for others before they use the compressor.

⚠ AVERTISSEMENT

Une utilisation du compresseur de manière incorrecte ou ne respectant pas les consignes de sécurité peut entraîner la mort ou de graves blessures !
Ce manuel renferme des informations importantes relatives à la sécurité.
Veuillez lire attentivement toutes les instructions avant de mettre le compresseur en service.
Laissez ce manuel à la disposition des personnes qui vont utiliser le compresseur.

⚠ ADVERTENCIA

¡La utilización inadecuada e insegura de este compresor puede resultar en la muerte o en lesiones serias!
Este manual contiene información importante sobre la seguridad del producto.
Antes de utilizar el compresor, lea y entienda bien este manual.
Guarde este manual a disposición para que otras personas puedan leerlo antes de utilizar el compresor.

HITACHI

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IMPORTANT INFORMATION

Read and understand all of the operating instructions, safety precautions and warnings in the Instruction Manual before operating or maintaining this compressor.

Most accidents that result from compressor operation and maintenance are caused by the failure to observe basic safety rules or precautions. An accident can often be avoided by recognizing a potentially hazardous situation before it occurs, and by observing appropriate safety procedures.

Basic safety precautions are outlined in the "SAFETY" section of this Instruction Manual and in the sections which contain the operation and maintenance instructions.

Hazards that must be avoided to prevent bodily injury or machine damage are identified by WARNINGS on the compressor and in this Instruction Manual.

Never use this compressor in a manner that has not been specifically recommended by HITACHI, unless you first confirm that the planned use will be safe for you and others.

MEANINGS OF SIGNAL WORDS

WARNING indicates a potentially hazardous situations which, if ignored, could result in death or serious injury.

CAUTION indicates a potentially hazardous situations which, if not avoided, may result in minor or moderate injury, or may cause machine damage.

NOTE emphasizes essential information.

SAFETY

IMPORTANT SAFETY INSTRUCTIONS FOR USE OF THE COMPRESSOR

⚠ WARNING: Death or serious bodily injury could result from improper or unsafe use of this compressor. To avoid these risks, follow these basic safety instructions.

READ ALL INSTRUCTIONS

1. **NEVER TOUCH MOVING PARTS.**
Never place your hands, fingers or other body parts near this compressor's moving parts.
Never insert your fingers or other objects into the housing's ventilator. Such an action invites the danger of injuries or electric shocks.
2. **NEVER OPERATE WITHOUT ALL GUARDS IN PLACE.**
Never operate this compressor without any guards or safety features in place and in proper working condition. Always unplug the air compressor before removing any guard. Replace damaged covers/guards before using the air compressor. If maintenance or servicing requires the removal of guard or safety features, be sure to replace the guard or safety features before resuming operation of this compressor.
3. **ALWAYS WEAR PROTECTION.**
Risk of injury. Always wear ANSI Z87.1 safety glasses or equivalent eye protection. Compressed air must never be aimed at anyone or any part of the body. Use ear protection as air flow noise is loud when draining.
4. **PROTECT YOURSELF AGAINST ELECTRIC SHOCK.**
Don't expose this compressor to rain. Never operate this compressor in damp or wet locations.
Make sure the air compressor is plugged into a properly grounded outlet which provides correct voltage and adequate fuse protection. Disconnect when not in use.
Check power cord for signs of crushing, cutting or heat damage. Replace faulty cord before use.
Keep all connections dry and off the ground. Do not allow electrical cords to lay in water or in such a position where water could come in contact with them. Do not touch plug with wet hands. Do not pull on the electrical cord to disconnect from the outlet.
Any electrical wiring or repairs performed on this air compressor should be done by Authorized Service Personnel in accordance with National and Local electrical codes.
To reduce risk of electric shock, do not remove cover.
5. **SHUT DOWN THE AIR COMPRESSOR**
Before servicing, inspecting, maintaining, cleaning, replacing or checking any parts, always to stop the air compressor, relieve pressure and unplug the air compressor from the power source.
6. **AVOID UNINTENTIONAL STARTING.**
Do not carry the compressor while it is connected to its power source or when the air tank is filled with compressed air. Be sure the knob of the motor/pressure switch in the "OFF" position before connecting the compressor to its power source.
7. **STORE COMPRESSOR PROPERLY.**
When not in use, this compressor should be stored in indoor dry place. Keep out of reach of children. Lock-out the storage area.
8. **KEEP WORK AREA CLEAN.**
Cluttered areas invite injuries. Always clear all work areas of unnecessary tools, debris, furniture, etc.
9. **CONSIDER WORK AREA ENVIRONMENT.**
Risk of electric shock. Don't expose this compressor to rain. Don't use this compressor in damp or wet locations.
Risk of fire or explosion. Keep work area well lit and well ventilated. Always operate air compressor in a well ventilated area free of flammable vapors, combustible dust, gases or other combustible materials. Do not carry and operate the compressor or any other electrical device near the spray area. Don't use compressor in the presence of flammable liquids or gases.
Compressor produces sparks during operation. Never use compressor in sites containing lacquer, paint, benzene, thinner, gasoline, gases, adhesive agents, and other materials which are combustible or explosive. Do not smoke if spraying flammable material. Locate the air compressor at least 20 feet (6 m) away from the spray area. (An additional hose may be required.)
Never place objects against or on top of air compressor. Operate air compressor at least 12 inches (30 cm) away from any wall or obstruction that would restrict proper ventilation.
In order to avoid damaging this compressor, do not allow the unit to be tilted more than 10° when operating.
10. **KEEP VISITORS AWAY.**
Do not let visitors contact compressor extension cord. All visitors should be kept safely away from work area.
11. **DRESS PROPERLY.**
Do not wear loose clothing or jewelry. They can be caught in moving parts.
Wear protective hair covering to contain long hair.
12. **DON'T ABUSE CORD.**
Never yank it to disconnect from receptacle. Keep cord from heat, oil and sharp edges.
13. **MAINTAIN COMPRESSOR WITH CARE.**
Follow instructions for lubricating.
Inspect cords periodically and if damaged, have repaired by authorized service center. Inspect extension cords periodically and replace if damaged.

14. OUTDOOR USE EXTENSION CORDS.

When compressor is used outdoors, use only extension cords intended for use outdoors and so marked.

15. STAY ALERT.

Watch what you are doing. Use common sense. Do not operate this compressor when you are tired. This compressor should never be used by you if you are under the influence of alcohol, drugs or medication that makes you drowsy. Know how to stop the air compressor. Be thoroughly familiar with controls.

16. CHECK DAMAGED PARTS AND AIR LEAK.

Before further use of this compressor, guard or other parts should be carefully checked to see that it will operate properly and perform its intended function. Check alignment of moving parts, binding of moving parts, breakage of parts, mounting, air leak, and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced by an authorized service center unless otherwise indicated elsewhere in this Instruction Manual.

Have defective motor/pressure switches replaced by authorized service center.

Do not use this compressor if motor/pressure switch does not turn it "AUTO/OFF."

17. NEVER USE THIS COMPRESSOR FOR APPLICATIONS OTHER THAN THOSE SPECIFIED.

Never use this compressor for applications other than those specified in the Instruction Manual.

Never use compressed air for breathing or respiration. Operate air compressor only in a well ventilated area. Follow all safety instructions provided with the materials you are spraying. Use of a respirator may be required when working with some materials.

18. HANDLE THIS COMPRESSOR CORRECTLY.

Operate this compressor according to the instructions provided herein. Never allow this compressor to be operated by children, individuals unfamiliar with its operation or unauthorized personnel. Do not operate air compressor without a filter element. Do not operate air compressor in a corrosive environment. Always operate the air compressor in a stable, secure position to prevent air compressor from falling. Follow all maintenance instructions listed in this manual.

19. KEEP ALL SCREWS, BOLTS AND COVERS TIGHTLY IN PLACE.

Keep all screws, bolts, and covers tightly mounted. Check their conditions periodically.

20. KEEP MOTOR AIR VENT CLEAN.

The motor air vent must be kept clean so that air can freely flow at all times. Check for dust build-up frequently.

21. OPERATE COMPRESSOR AT THE RATED VOLTAGE.

Operate the compressor at voltages specified on their nameplates.

If using the compressor at a higher voltage than the rated voltage, it will result in abnormally fast motor revolution and may damage the unit and burn out the motor.

22. NEVER USE A COMPRESSOR WHICH IS DEFECTIVE OR OPERATING ABNORMALLY.

If this compressor appears to be operating unusually, making strange noises or vibration, or otherwise appears defective, stop using it immediately and

arrange for repairs by a Hitachi authorized service center.

23. DO NOT WIPE PLASTIC PARTS WITH SOLVENT.

Solvents such as gasoline, thinner, benzene, carbon tetrachloride, and alcohol may damage and crack plastic parts. Do not wipe plastic parts on this compressor with such solvents. Wipe plastic parts with a soft cloth lightly dampened with soapy water and dry thoroughly.

24. USE ONLY GENUINE HITACHI REPLACEMENT PARTS.

Replacement parts not manufactured by Hitachi may void your warranty and can lead to malfunction, causing injuries. Genuine Hitachi parts are available from your dealer.

25. DO NOT MODIFY THIS COMPRESSOR.

Do not modify this compressor.

Do not operate at pressure or speed in excess of manufacturer's recommendations.

Always contact the Hitachi authorized service center for any repairs. Unauthorized modification may impair this compressor's performance and result in accident or bodily injury to repair personnel who do not have the required knowledge and technical expertise to perform the repair operations correctly. If air tank develops a leak, replace the air tank immediately. Never repair, weld or make modifications to the air tank or its attachments.

Use only genuine Manufacturer repair parts for your air compressor.

Never make adjustments to the factory set pressures.

Never exceed manufacturer's maximum allowable pressure rating of attachments.

Because of extreme heat, do not use plastic pipe or lead tin soldered joints for a discharge line.

26. TURN OFF THE MOTOR/PRESSURE SWITCH WHEN THIS COMPRESSOR IS NOT USED.

When this compressor is not used, make sure the motor/pressure switch is in the OFF position and open the drain valve to discharge the compressed air from the air tank.

27. NEVER TOUCH HOT SURFACE.

To reduce the risk of burns, never allow any part of your body or other materials to contact with any exposed metal parts on this compressor.

Never allow any part of your body to contact the motor or adjacent areas.

These areas can remain hot for at least 45 minutes after this compressor is shutdown. Cool down before servicing.

28. DO NOT DIRECT AIR STREAM AT BODY.

Risk of injury. Do not direct air stream at persons or animals, to avoid any bodily injury.

Never use compressed air for breathing or respirators.

Never leave pressurized air in the air compressor. Shut off air compressor and relieve pressure when storing or attempting maintenance.

Always maintain a safe distance from people and animals while operating the air compressor.

Do not move the air compressor while air tank is under pressure. Do not attempt to move the air compressor by pulling on the hose.

29. DRAIN TANK.

Risk of bursting. Water will condense in the air tank.

Discharge the drain after each use and every day.

When the air tank gets corroded, there can be a risk of

SAFETY — Continued

breakdown. Accordingly, be sure to discharge the drain inside the air tank after each use. The drain contains moisture in the air, abrasion particles, rust, etc. To drain the air tank open valve slowly and tilt compressor to empty accumulated water.

To discharge the drain, therefore, gradually open the drain valve, and be careful not to point it at your face or eyes.

30. DO NOT STOP COMPRESSOR BY PULLING OUT THE PLUG.

This could result in damage to the unit.

Use the "AUTO/OFF" lever of motor/pressure switch.

31. MAKE SURE THE COMPRESSOR OUTLET PRESSURE IS SET LOWER THAN THE MAXIMUM OPERATING PRESSURE OF THE TOOL.

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.

32. THE SAFETY RELIEF VALVE MUST WORK PROPERLY.

Risk of bursting. Before starting the compressor pull the ring on the safety relief valve to make sure the valve moves freely. If the safety relief valve does not work properly, over-pressurization may occur, causing air tank rupture or an explosion.

33. USE OF THIS PRODUCT WILL EXPOSE YOU TO CHEMICALS KNOWN TO THE STATE OF CALIFORNIA.

Use of this product will expose you to chemicals known to the State of California to cause cancer, birth defects and other reproductive harm. Avoid inhaling vapors, and wash hands after using.

34. BE CAREFUL NOT TO TRIP OVER OR DROP THE COMPRESSOR DURING TRANSPORT.

Exercise utmost caution when you carry this compressor. If you trip over something and drop it, there is a fear that unexpected injury may result. If you drop this compressor or bump it against any objects, air tank or any component parts can cause serious deformation, damage, severe scratches and breakdown on this compressor. If operated under such conditions, it can result in any accidents of bodily injuries by explosion of the air tank or explosion of those damaged component parts.

When there is any deformation and damage on the handle, it may drop during transport, resulting in an accident of injury.

Before carrying this compressor, make sure the motor/pressure switch is in the OFF position and discharge the drain inside the air tank.

Be cautious enough to make sure that there are no obstacles, inflammable articles, and unauthorized people around this compressor.

REPLACEMENT PARTS

When servicing use only genuine replacement parts.

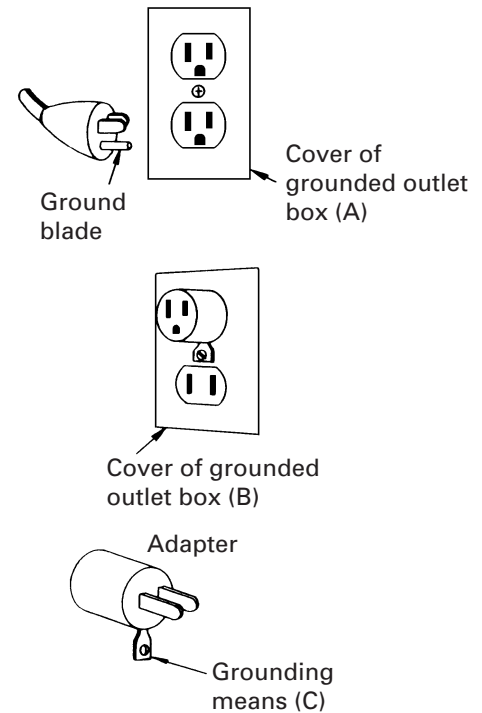
Repairs should be conducted only by a Hitachi authorized service center.

GROUNDING INSTRUCTIONS

This compressor should be grounded while in use to protect the operator from electric shock. The compressor is equipped with a three-conductor cord and three-prong grounding type plug to fit the proper grounding type receptacle. The green (or green and yellow) conductor in the cord is the grounding wire. Never connect the green (or green and yellow) wire to a live terminal. If your unit is for use on less than 150 volts, it has a plug that looks like that shown in sketch (A) in Figure on the right. An adapter, see sketches (B) and (C), is available for connecting sketch (A) type plugs to two-prong receptacles. The green-colored rigid ear, lug, or the like extending from the adapter must be connected to a permanent ground, such as a properly grounded outlet box.

NOTE: The grounding adaptor, sketch (C), is prohibited in Canada by Canadian Electrical Code Part 1. Therefore, the instructions for its use are not applicable in Canada.

We recommend that you never disassemble the compressor or try to do any rewiring in the electrical system. Any repairs should be performed only by HITACHI Service Centers or other qualified service organizations. Should you be determined to make a repair yourself, remember that the green colored wire is the "grounding" wire. Never connect this green wire to a "live" terminal. If you replace the plug on the power cord, be sure to connect the green wire only to the grounding (longest) prong on a 3-prong plug. If in doubt, call a qualified electrician and have the receptacle checked for ground.



**SAVE THESE INSTRUCTIONS
AND
MAKE THEM AVAILABLE TO
OTHER USERS OF THIS TOOL!**

OPERATION AND MAINTENANCE

NOTE: The information contained in the Compressor Instruction Manual is designed to assist you in the safe operation and maintenance of this compressor.

Some illustrations in the Compressor Instruction Manual may show details or attachments that differ from those on your own compressor.

NAME OF PARTS

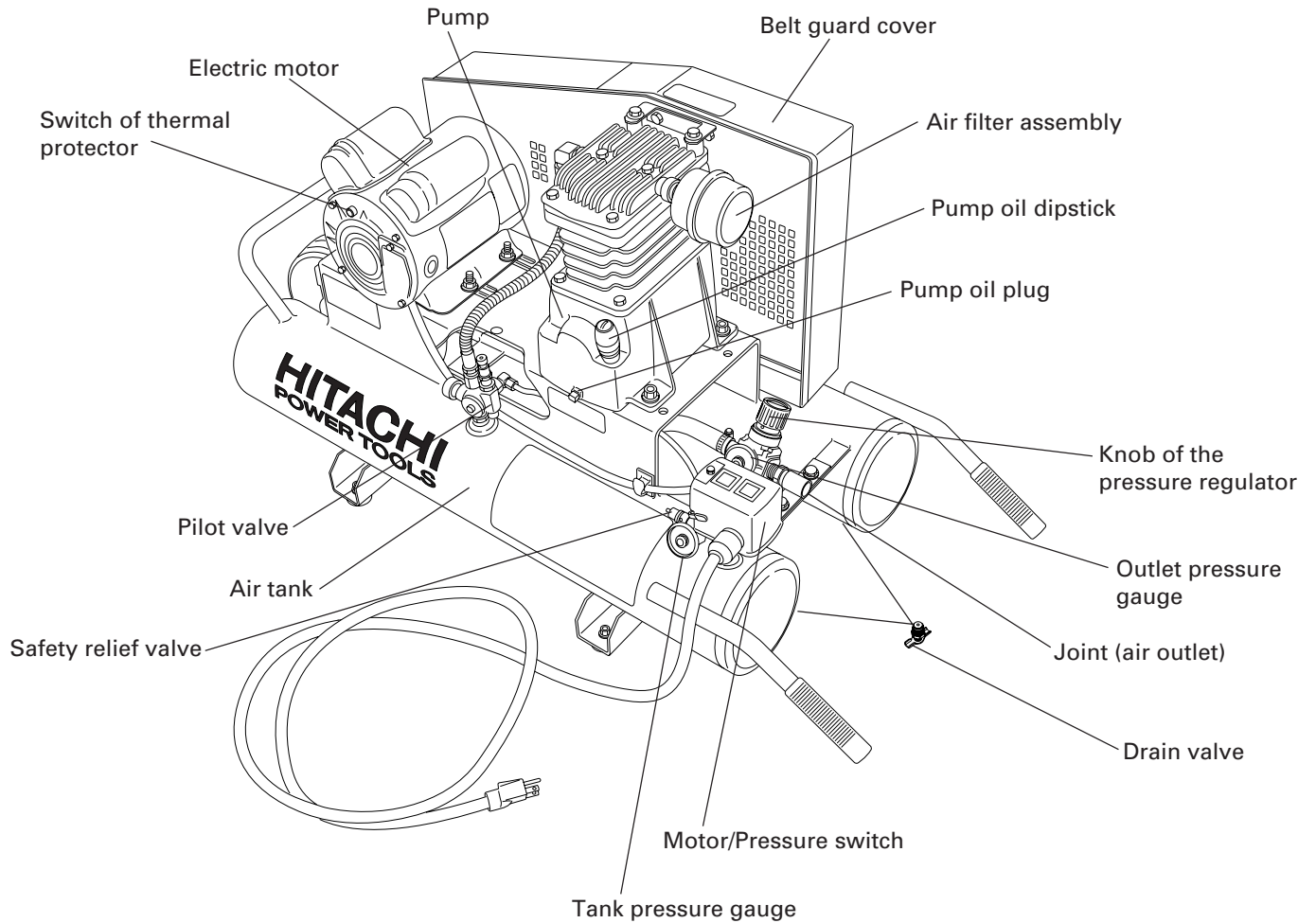


Fig. 1

SPECIFICATIONS

Model	EC189		
Motor	Single-Phase, Induction Motor		
Power Source	Single-Phase, 115V AC 60 Hz		
Output Power	1.5 HP (1.1 KW)		
Current	13.2A		
Tank Capacity	8 gal. (30.3 ltr)		
Maximum Pressure	125 PSI (8.6 bar)		
Free Air Delivery	at 40 PSI (2.8 bar)	7.2 CFM (204 ltr/min)	
	at 90 PSI (6.2 bar)	6.6 CFM (187 ltr/min)	
	at 100 PSI (6.9 bar)	6.5 CFM (184 ltr/min)	
Lubrication	Oil		

APPLICATIONS

- Air source of the pneumatic nailer and stapler.

⚠ WARNING: Never use compressor for applications other than compressor for pneumatic nailer and stapler.

PRIOR TO OPERATION

1. Initial set-up

- (1) Read safety warnings before setting-up this compressor.
- (2) Ensure the oil level in this compressor pump is adequate. If the oil level is low, replenish oil through the filling hole so that the amount of oil will come to a point between the maximum notch and the minimum notch on the pump oil dipstick according to the following OIL TYPE CHART. (Fig. 2)

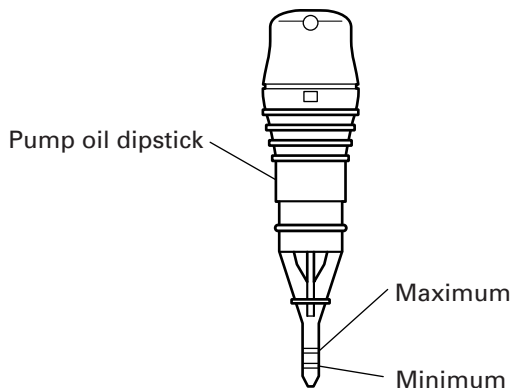


Fig. 2

OIL TYPE CHART

Ambient temperature	14~32 (°F) -10~0 (°C)	32~68 (°F) 0~20 (°C)	68~104 (°F) 20~40 (°C)
Non-detergent oil	SAE 10W	SAE 20W	SAE 30

2. Location

- (1) In order to avoid damaging this compressor, do not incline this compressor transversely or longitudinally more than 10°.

⚠ CAUTION: In order to avoid damaging the compressor, do not allow the unit to be tilted more than 10° when operating.

- (2) Place this compressor at least 12 inches away from obstacles that may prevent proper ventilation. Do not place this compressor in an area:
 - where there is evidence of oil or gas leaks.
 - where flammable gas vapors or materials may be present.
 - where air temperatures fall below 14°F (-10°C) or exceed 104°F (40°C).
 - where extremely dirty air or water could be drawn into this compressor.

3. Electrical

- (1) Power source:

Ensure that the power source to be utilized conforms to the power source requirements specified on the product nameplate.
- (2) Use of an extension cord is not recommended because it could cause the motor to overheat. It's preferable to use additional air hose instead of an extension cord.

⚠ WARNING: Improper connection of the equipment-grounding conductor can result in a risk of shock or electrocution. Check with a qualified electrician or service personnel if you are in doubt as to whether the outlet is properly grounded. Do not use any type

of adapter with this product. If repair or replacement of the cord or plug is necessary, do not connect the grounding wire to either flat blade terminal. The wire with insulation having an outer surface that is green with or without yellow stripes is the grounding wire.

⚠ WARNING: Avoid electrical shock hazard. Never use this compressor with a damaged or frayed electrical cord or extension cord. Inspect all electrical cords regularly. Never use in or near water or in any environment where electric shock is possible.

- (3) If use of an extension cord is unavoidable, be sure to use one heavy enough to carry the current your compressor will draw. Minimum cord sizes is as follows:

Cord Length	12 AWG
Up to 25 feet	10 AWG
26 to 100 feet	8 AWG
151 to 250 feet	6 AWG

- (4) Use only a 3-wire extension cord that has a 3-blade grounding plug and a 3-slot receptacle that will accept the plug on the compressor.
 (5) Examine cords before using. Do not use the compressor if its cord is damaged. Do not use a damaged extension cord.

⚠ WARNING: Damaged cord must be replaced or repaired.

- (6) Keep cords away from heat and sharp edges. Do not pull on a cord to disconnect a plug – grasp the plug.
 (7) Always shut off the compressor Motor/Pressure switch before unplugging the compressor.
 (8) If the power receptacle only loosely accepts the plug, the receptacle must be repaired. Contact the nearest electric store for repair service. If such a faulty receptacle is used, may cause overheating, resulting in a serious hazard.

⚠ WARNING: This product must be grounded. If there should be a malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This product is equipped with a cord having an equipment-grounding conductor and a grounding type plug. The plug must be plugged into an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances.

⚠ WARNING: High voltage may cause personal injury or death. Disconnect all electrical power supplies before opening the electrical enclosure or servicing.

4. Air coupler installation

Screw in the air coupler to the joint (Refer to Fig. 1 and Fig. 6). The screw size of the joint is 3/8". Use an air coupler which has the same screw size.

5. Pre-start checklist

⚠ WARNING: Do not allow the motor or Motor/Pressure switch to come in contact with flammable vapors, combustible dust, gases or other combustible materials. An electric spark may cause an explosion or fire.

- (1) The pump oil dipstick will register the amount of oil in the pump. (Fig. 2) Oil level should be checked on a daily basis to ensure it does not exceed the maximum notch or does not fall below the minimum notch on the pump oil dipstick. If the oil level is low, replenish oil through the filling hole so that the amount of oil will come to a point between the maximum notch and the minimum notch on the pump oil dipstick according to the OIL TYPE CHART on page 9.

⚠ WARNING: Drain tank to release air pressure before removing the pump oil dipstick.

⚠ WARNING: Make sure air vent in pump oil dipstick is free from debris. If air vent is blocked pressure can build in crankcase causing damage to compressor and possible personal injury.

- (2) Remove any moisture in the air compressor air tank. To drain the air tank, open the drain valve slowly and tilt compressor to empty accumulated water. Close tightly when drained.
 (3) Make sure the Motor/Pressure switch is in the "OFF" position (Fig. 3). If the plug is connected to a receptacle while the knob is in the "AUTO" position, the compressor will start operating immediately and can cause serious injury.

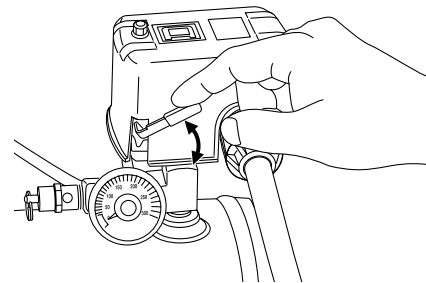


Fig. 3

- (4) Make sure the safety relief valve is working correctly. (Fig. 4)
 The safety relief valve is designed to prevent system failures by relieving pressure from the system when this compressed air reaches a predetermined level. The safety relief valve is preset by the manufacturer and must not be modified in any way. To verify the safety relief valve is working properly, pull on the ring. Air

pressure should escape. When the ring is released, it will reset.

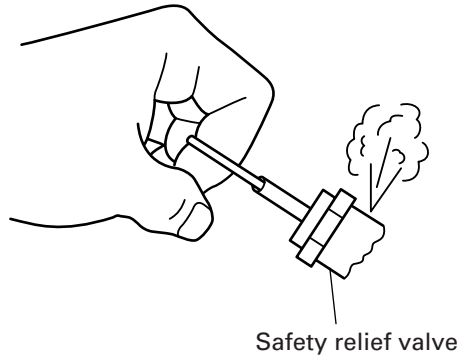


Fig. 4

- (5) Make sure all guards and covers are in place and securely mounted.

TRANSPORT

Make sure the Motor/Pressure switch is in the "OFF" position and disconnect it from the power source before move the compressor. Transport the compressor in the correct manner.

OPERATION

1. Start up

- (1) Read safety warnings before performing operation.
- (2) Ensure the Motor/Pressure switch is in the "OFF" position.
- (3) Plug the power cord into a grounded outlet.
- (4) Move the Motor/Pressure switch to the "AUTO" position.

Dual control: Locate the adjustment knob at the top of the pilot valve. (Fig. 5)

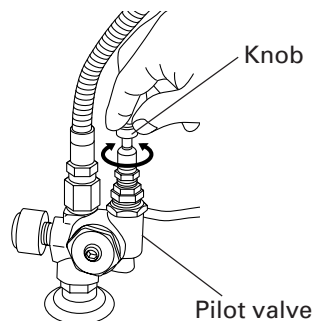


Fig. 5

- (a) This feature allows the compressor to operate in either the constant run or the stop/start mode of operation. The pilot valve is used to control the compressor when operating in the constant run mode. The Motor/Pressure switch is used to control the compressor when operating in the stop/start mode. The mode of operation is

determined by the amount of time the compressor will be required to supply air. If the demand for air is infrequent, then the unit should be set up for stop/start operation to minimize unnecessary run time and to save energy. If there is a frequent or extended demand for air, and/or the unit is located in a remote area where access to the compressor is difficult, the unit should be set up for constant run to minimize the number of times the motor must start in an hour to ensure good motor life.

- (b) If you are using the compressor when the outside air temperature (ambient temperature) is below 25°F (-4°C), use Constant Run Mode. Never use Stop Start Mode.
- (c) **Stop/Start Mode**
Turn it completely clockwise to the fully closed position. This will allow the air compressor to start building up pressure in the air tanks and stop when correct pressure is achieved. When pressure drops with usage, the air compressor will start building up pressure again.

⚠ WARNING: Over tightening of this knob can cause damage to the pilot valve.

Constant Run Mode

Turn it completely counterclockwise to the fully open position. The air compressor is now set up to "CONSTANTLY" build up pressure. When pressure reaches the preset level in the air tank, pressure will bleed through the pilot valve.

⚠ WARNING: Over loosening of this knob can cause damage to the pilot valve.

NOTE: Unit must remain running while performing the following adjustments.

The motor of the compressor is fitted with a thermal protection with manual reset (push-button), which stops the compressor when the temperature is too high. Should this be tripped, the compressor will restart only if reset is done.

If you notice any unusual noise or vibration, stop the air compressor and refer to "Troubleshooting".

⚠ WARNING: Do not stop or start the compressor by use of the plug. Always use "AUTO/OFF" knob located on the Motor/Pressure switch.

⚠ WARNING: If you notice any unusual noise or vibration, stop this compressor.

3. Adjustment of working pressure

The air pressure coming from the air tank is controlled by the regulator knob (Fig. 6). Turn the pressure regulation knob clockwise to increase discharge pressure, and counterclockwise to decrease discharge pressure.

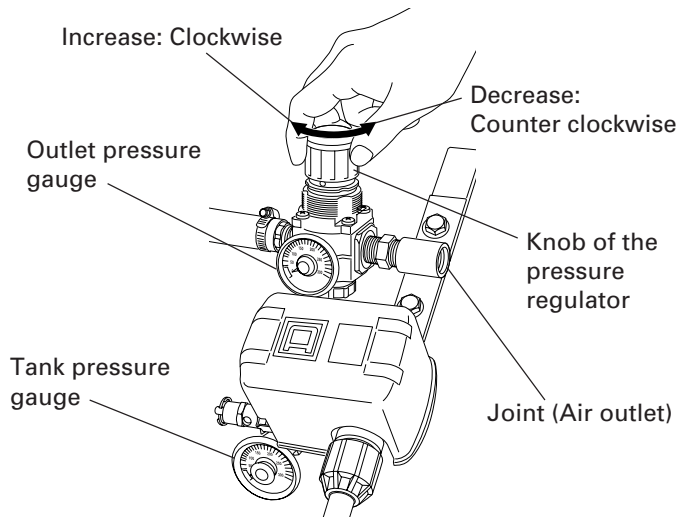


Fig. 6

The outlet pressure gauge indicates the air pressure available at the outlet side of the pressure regulator. This pressure is controlled by the pressure regulator and is always less or equal to the air tank pressure. The air tank pressure gauge indicates the reserve air pressure in the air tanks.

When adjusting the pressure, check and make sure that a pressure gauge for the tank has the pressure level that is higher than that of the pressure to be adjusted.

It is also imperative that you make adjustment by slowly starting up the pressure from the level that is lower than the pressure to be adjusted.

⚠ WARNING: Check the manufacturer's maximum pressure rating for nailers, staplers and accessories. Compressor outlet pressure must be regulated so as to never exceed the maximum pressure rating of the nailers, staplers and accessories.

4. Shutdown

- (1) To stop the air compressor, move the Motor/Pressure switch to the "OFF" position. Never stop the air compressor by unplugging it from the power source. This could result in risk of electrocution.
- (2) To drain the air tank open the drain valve slowly and tilt compressor to empty accumulated water.

⚠ WARNING: When the air tank gets corroded, there is a risk of breakdown. Accordingly, be sure to discharge the drain inside the air tank after each use. The drain contains moisture in the air, abrasion particles, rust, etc. To discharge the drain, therefore, gradually open the drain valve, and be careful not to point it at your face or eye.

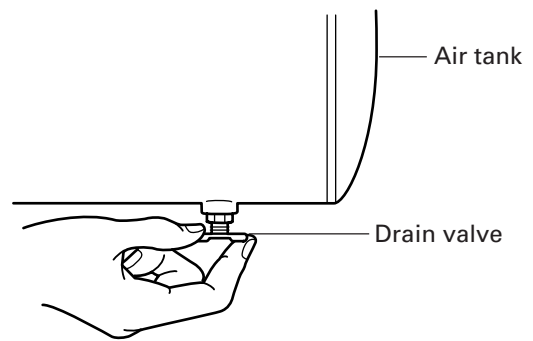


Fig. 7

- (3) Allow the air compressor to cool down.
- (4) Wipe the air compressor clean and store in a safe, non-freezing area.

5. About the thermal protector

The thermal protector operates to stop the motor when a problem such as a motor overload, etc., occurs. If the motor should stop during operation, proceed as follows.

- (1) Make sure the Motor/Pressure switch is in the "OFF" position and disconnect the plug from the receptacle. (Fig. 3)
- (2) If the extension cord does not conform to the specifications given on page 9 and 10 replace with an extension cord such as that shown on page 9 and 10. If the capacity of the power supply is insufficient, increase the power supply capacity to remove the cause of a flow of excessive current (over-current).
- (3) Wait approximately 5 minutes, then press the reset switch of the thermal protector (Fig. 8).
- (4) Start up. If the motor still stops during operation, please contact the service center.

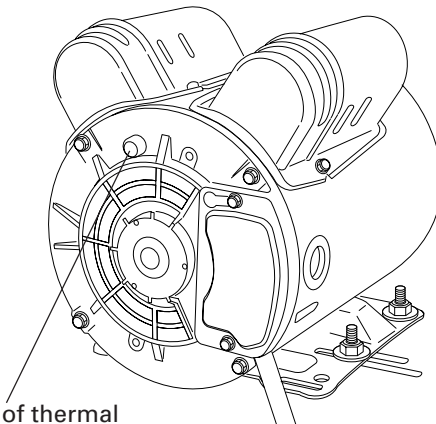


Fig. 8

MAINTENANCE

⚠ WARNING: Never assume the air compressor is safe to work on just because it is not operating. It could restart at any time!

⚠ WARNING: Disconnect the compressor from the power source and remove the compressed air from the air tank before performing the maintenance operations. Allow the compressor to cool before performing the maintenance operations.

Read the instruction manual before performing maintenance. The following procedures must be performed when stopping this compressor for maintenance or service.

- (1) Turn off this compressor.
- (2) Disconnect power cord from main power supply.
- (3) Open all drains.
- (4) Wait for this compressor to cool down before starting service.

1. Cleaning the filter element

This filter is designed to clean air coming into the pump (Fig. 9). To ensure the pump continually receives a clean, cool, dry air supply this filter must always be clean and ventilation opening must always be free from obstructions.

⚠ WARNING: Never clean filter element with a flammable liquid or solvent.

⚠ CAUTION: Do not operate without the filter element.

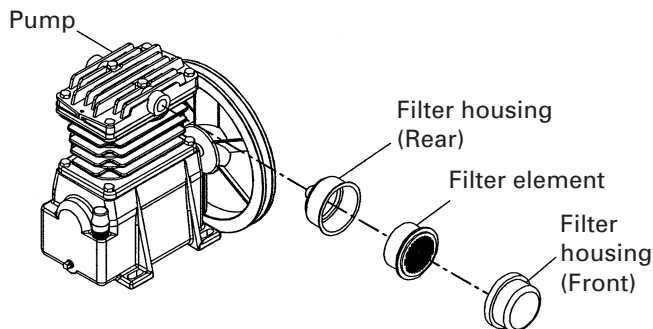


Fig. 9

NOTE: Replace the filter element when it becomes dirty.

2. Draining air tank:

Gradually open the drain valve, and drain out the air in the air tank. (Fig. 7)
Close tightly when drained.

3. Oil change-oil topping off

⚠ CAUTION: Overfilling with oil will cause premature compressor failure. Do not overfill.

- (1) Within the first 50 hours of operation, completely replace the oil of the pumping element. Unfasten the pump oil plug on the casing cover, drain all the oil, and screw the plug back on (Refer to Fig. 1 and Fig. 10).

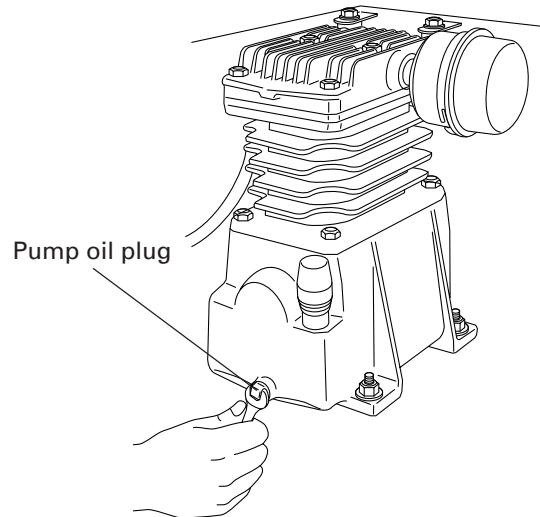


Fig. 10

Pour oil into the hole of the pump oil dipstick. To the level indicated on the pump oil dipstick (Refer to Fig. 2).

For oil replacement, follow the table below.
OIL TYPE CHART: Refer to page 9.

- (2) Check the oil level of the pumping element daily.
- (3) Change the oil every 200 working hours or every 3 months.

4. Belt tension

- (1) Checking belt tension
 - (a) Allow unit to cool.
 - (b) Remove beltguard.
 - (c) Push down on belt midway between the two pulleys.
 - (d) Belt deflection should be about 1/4 inch.
 - (e) If belt tension is significantly greater than 1/4 inch, follow adjustment procedure.
- (2) Adjusting belt tension

⚠ WARNING: Use caution when rolling belt onto flywheel as fingers can get caught between the belt and flywheel.

- (a) Loosen the nuts on all four motor mounting bolts.
- (b) Turn belt tensioner bolt at the front of the unit clockwise until 1/4 inch deflection is noticed between the pulleys.
- (c) Tighten nuts on motor mounting bolts.
- (d) Replace beltguard.

5. Maintenance chart:

MAINTENANCE CHART

PROCEDURE	AFTER USE	DAILY	WEEKLY	MONTHLY	200 HOURS
Check pump oil level		×			
Oil leak inspection		×			
Drain condensation in air tanks	×	×			
Inspect guards/covers		×			
Check for unusual noise/vibration		×			
Check for air leaks		×			
Clean exterior of compressor			×		
Inspect filter			×		
Check safety relief valve			×		
Inspect belt tension				×	
Change pump oil					×
Replace filter					×

Every 2 years, an Authorized Service Technician should check the check valve, intake valves and delivery valves.

SERVICE AND REPAIRS

All quality compressors will eventually require servicing or replacement of parts because of wear and tear from normal use. To assure that only genuine replacement parts will be used, all service and repairs must be performed by a HITACHI AUTHORIZED SERVICE CENTER, only.

NOTE: Specifications are subject to change without any obligation on the part of the HITACHI.