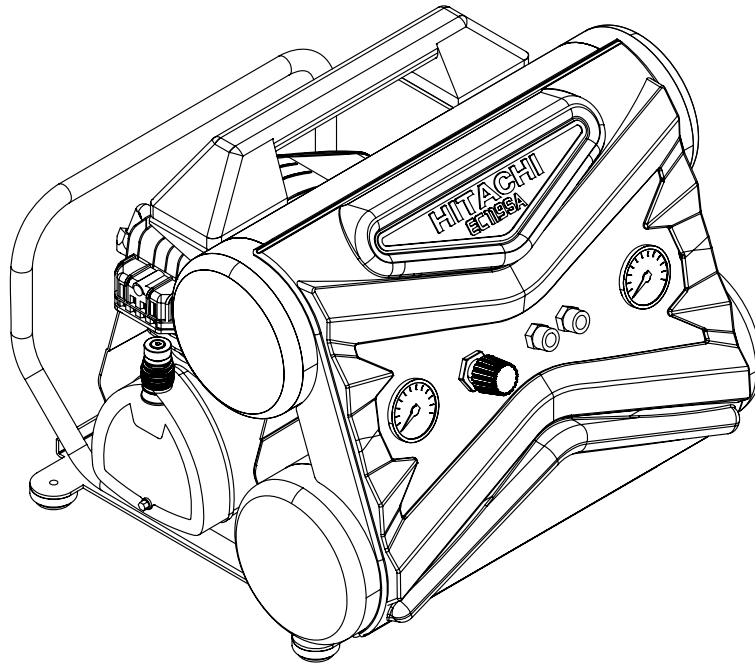


HITACHI

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 119SA



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 Koki

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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 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 the 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 all guards or safety features in place and in proper working order. If maintenance or servicing requires the removal of a guard or safety features, be sure to replace the guard or safety features before resuming operation of the compressor.

3. ALWAYS WEAR PROTECTION.

Risk of injury. Always wear ANSI Z87.1 safety glasses with side shields 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.

Prevent body contact with grounded surfaces such as pipes, radiators, ranges and refrigeration enclosures.

This compressor must be properly grounded. Don't expose compressor to rain. Never operate the compressor in damp or wet locations.

To reduce risk of electric shock, do not remove cover.

5. DISCONNECT THE COMPRESSOR.

Always disconnect the compressor from the power source and remove the compressed air from the air tank before servicing, inspecting, maintaining, cleaning, replacing or checking any parts.

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 pressure switch in the "OFF" position before connecting the compressor to its power source.

7. STORE COMPRESSOR PROPERLY.

When not in use, the 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. Clear all work areas of unnecessary tools, debris, furniture, etc.

9. CONSIDER WORK AREA ENVIRONMENT.

Keep work area well lit and well ventilated.

Risk of fire or explosion. Do not carry and operate the compressor or any other electrical device near the spray area. Do not use compressor in the presence of flammable liquids or gases.

Never place objects against or on top of compressor.

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.

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

10. KEEP CHILDREN 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. Never stand on the compressor. Do not operate compressor when you are tired.

Compressor should never be used by you if you are under the influence of alcohol, drugs or medication that makes you drowsy.

16. CHECK DAMAGED PARTS AND AIR LEAK.

Before further use of the compressor, a guard or other part is damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for 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 pressure switches replaced by authorized service center.

Do not use compressor if switch does not turn it on and off.

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

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

Never use compressed air for breathing or respiration.

18. HANDLE COMPRESSOR CORRECTLY.

Operate the compressor according to the instructions provided herein. Never allow the compressor to be operated by children, individuals unfamiliar with its operation or unauthorized personnel.

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 the 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 them 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 and resulting injuries. Genuine Hitachi parts are available from your dealer.

25. DO NOT MODIFY THE COMPRESSOR.

Do not modify the compressor. Do not operate at pressure or speed in excess of manufacturer's recommendations. Always contact the Hitachi authorized service center any repairs. Unauthorized modification may not only impair the compressor performance but may also result in accident or injury to repair personnel who do not have the required knowledge and technical expertise to perform the repair operations correctly.

26. PUSH THE KNOB OF PRESSURE SWITCH TO OFF WHEN THE COMPRESSOR IS NOT USED.

When the compressor is not used, push the knob of the pressure switch OFF, disconnect it from the power source and open the drain cock to discharge the compressed air from the air tank.

27. NEVER TOUCH HOT SURFACE.

To reduce the risk of burns, do not touch tubes, heads, cylinder and motors.

28. DO NOT DIRECT AIR STREAM AT BODY.

Risk of injury, do not direct air stream at persons or animals.

29. DRAIN TANK.

Risk of bursting. 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.

Drain tank daily or after 4 hours of use. To drain tank open valve slowly and tilt compressor to empty accumulated water.

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

This could result in damage to the unit. Use the "ON/OFF" knob of 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. DO NOT ATTEMPT TO OPERATE THIS COMPRESSOR WITHOUT FIRST ADDING OIL TO THE CRANKCASE.

The compressor is shipped without oil in the crankcase. Serious damage can result from even limited operation unless filled with oil and broken in correctly. Make sure to closely follow initial prior to operation procedures.

33. THE SAFETY VALVE MUST WORK PROPERLY.

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

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

Some dust created by this product contains chemicals known to State of California to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- compounds in fertilizers
- compounds in insecticides, herbicides and pesticides
- arsenic and chromium from chemically treated lumber

To reduce your exposure to these chemicals, wear approved safety equipment such as dust masks that are specially designed to filter out microscopic particles. 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 dust, and wash hands after using. This product contains chemicals, including lead, known to the State of California to cause cancer, and birth defects or other reproductive harm. Wash hands after handling.

REPLACEMENT PARTS

When servicing use only identical replacement parts.
Repairs should be conducted only by a Hitachi authorized service center.

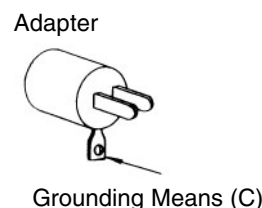
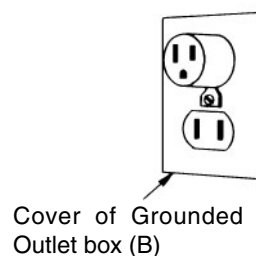
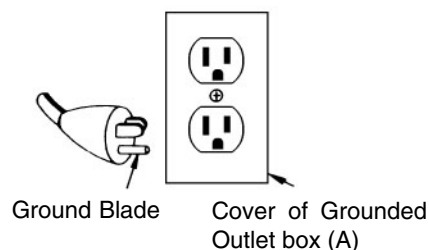
SAFETY — Continued

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.



EXTENSION CORD

Use only three-wire extension cords that have three-prong grounding-type plugs and three-pole receptacles that accept the compressor's plug. Replace or repair damaged cord.

Make sure your extension cord is in good condition. When using an extension cord, be sure to use one heavy enough to carry the current your product will draw. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating. Table shows the correct size to use depending on cord length and name plate ampere rating. If in doubt, use the next heavier gage. The smaller the gage number, the heavier the cord.

MINIMUM GAGE FOR CORD SETS

	Ampere More Than	Rating Not More Than	Total Length of Cord in Feet (Meter)				
			0 – 25 (0 – 7.6)	26 – 50 (7.9 – 15.2)	51 – 100 (15.5 – 30.5)	101 – 150 (30.8 – 45.7)	
			AWG				
	0	-	6	18	16	16	14
	6	-	10	18	16	14	12
	10	-	12	16	16	14	12
	12	-	16	14	12	Not Recommended	

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.

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

OPERATION AND MAINTENANCE

NOTE:

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

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

NAME OF PARTS

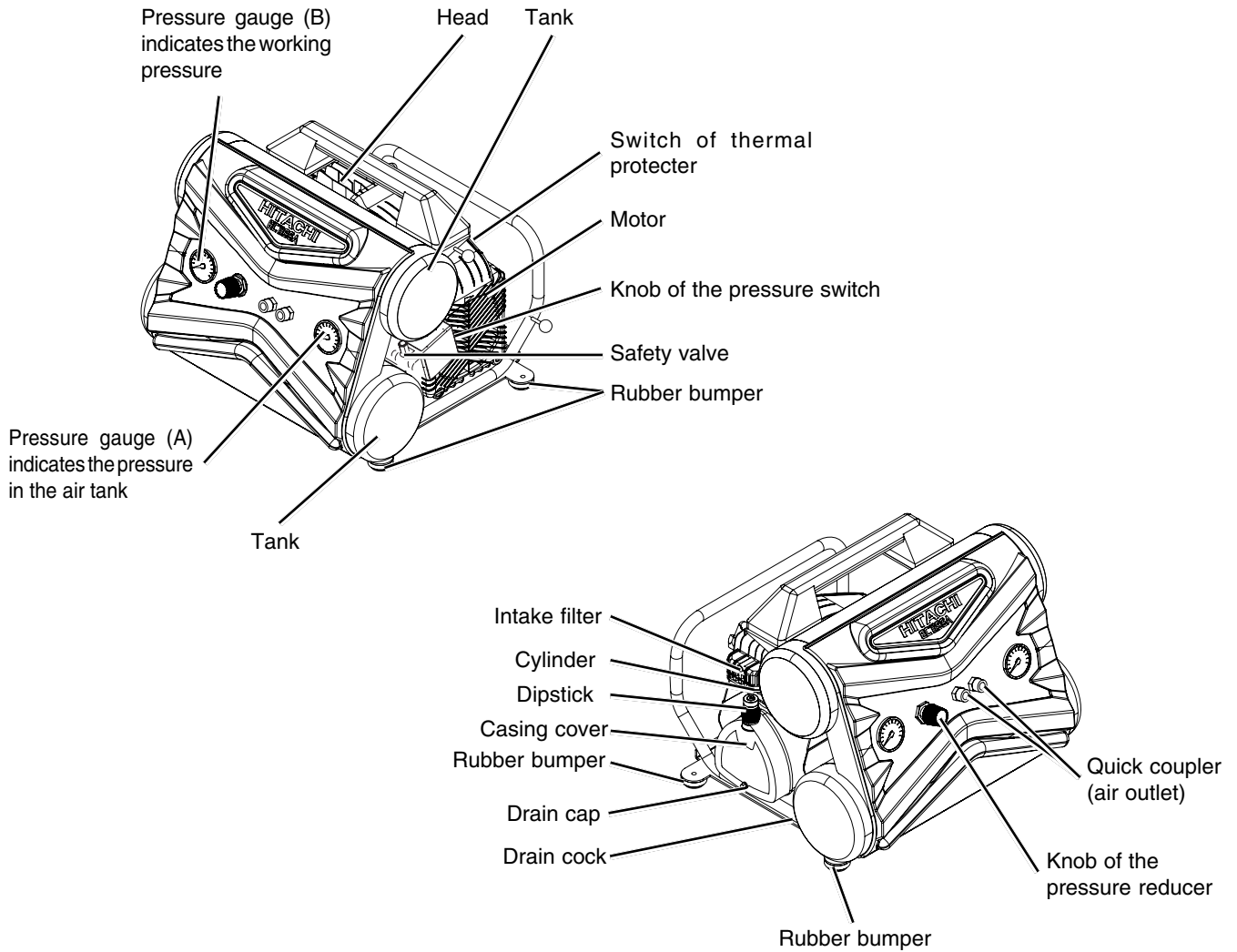


Fig.1

SPECIFICATIONS

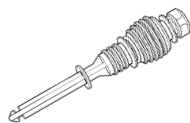
Model	EC119SA	
Motor	Single-Phase, Induction Motor	
Power Source	Single-Phase, 120V AC 60Hz	
Output Power	1.6 HP (1.2KW)	
Current	15.0 A	
Tank Capacity	4 gal. (15.1 ltr)	
Maximum Pressure	135 PSI (9.3 bar)	
Free Air Delivery	at 40 PSI (2.8 bar)	5.3 CFM (150 ltr/min)
	at 90 PSI (6.2 bar)	4.4 CFM (125 ltr/min)
	at 100 PSI (6.9 bar)	4.0 CFM (113 ltr/min)
Lubrication	Oil	

ACCESSORY

WARNING: Accessory other than these shown below can lead to malfunction and resulting injuries.

STANDARD ACCESSORY

Dipstick..... 1



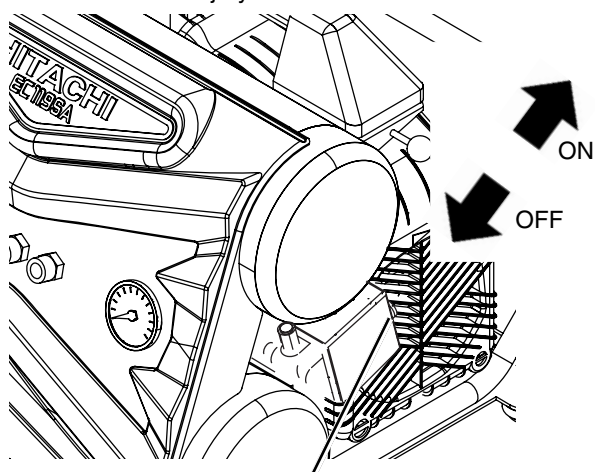
APPLICATIONS

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. Power source
Ensure that the power source to be utilized conforms to the power source requirements specified on the product nameplate.
2. Power switch
Ensure that the knob of the pressure switch is in the "OFF" position (Fig. 2). If the plug is connected to a receptacle while the knob is in the "ON" position, the compressor will start operating immediately and can cause serious injury.



Knob of the pressure switch

Fig.2

3. Extension cord
When the work area is far away from the power source, use an extension cord of sufficient thickness and rated capacity (refer page 6). The extension cord should be kept as short as practicable.

WARNING: Damaged cord must be replaced or repaired.

4. Confirm the power receptacle
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.

5. Dipstick insertion and oil level check
Use a screwdriver or similar tool to remove the plastic cap on the lower part of the cylinder (Fig.3).

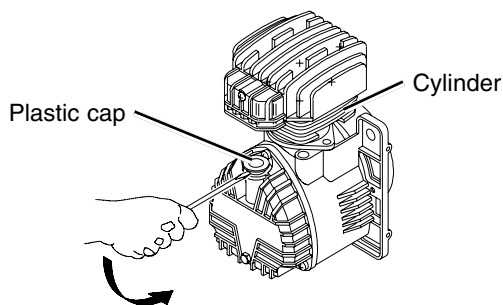


Fig.3

Insert the accessory dipstick all the way to the bottom. Remove the dipstick and make sure the oil level is within the range of the dipstick notches (Fig.4).

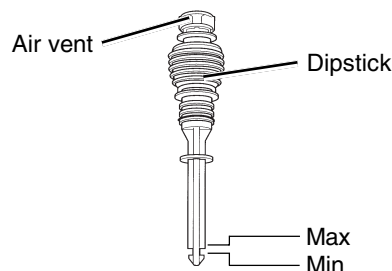


Fig.4

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

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

When the oil volume is insufficient, refer to the section "Oil change-oil topping off" on page 10 for a description of how to supply the oil.

6. Right running position
Position the compressor on a flat surface or one with an inclination of 10° at the most, in a well ventilated area away from atmospheric agents and not in explosive areas (Fig.5).

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

NOTE: When operating or storing the compressor, set 4 rubber bumpers downward on the floor (Refer to Fig.1)

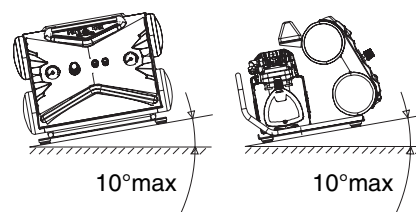


Fig.5

7. Temperature
Operating temperatures are between 32°F and 104°F (0°C and 40°C).

CAUTION: Never operate in temperatures below 32°F (0°C) or above 104°F (40°C).

TRANSPORT

Push the knob of the pressure switch to "OFF" and disconnect it from the power source before move the compressor. Transport the compressor in the correct manner.

OPERATION

1. Start-up
Insert the plug into the receptacle and start the compressor by pulling the knob of the pressure switch to "ON" (Refer to Fig. 2).

WARNING: Do not stop or start the compressor by use of the plug. Always use "ON/OFF" knob located on the pressure switch.

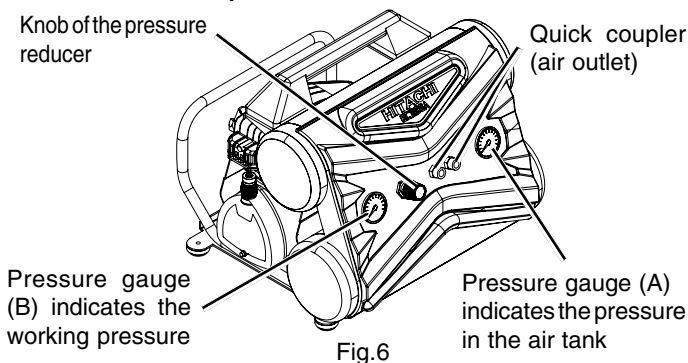
The operation of the compressor is automatic and is controlled by the pressure switch which stops it when the pressure in the air-tank reaches the maximum level and restart it when the air pressure drops during use to the restart level.

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.

CAUTION: Wear appropriate personal hearing protection during use. Under some conditions and duration of use, noise from this product may contribute to hearing loss.

2. Adjustment of working pressure
Unlock the knob of the pressure reducer pulling it up, adjust the pressure to the required level by turning the knob clockwise to increase and counterclockwise to decrease. A pressure gauge (B) is provided to know when the required pressure is reached, lock the knob by pushing it down firmly (Refer to Fig. 6).
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.



3. Shutdown
 - (1) Push the knob of the pressure switch to "OFF" (Refer to Fig. 1 and Fig. 2).
 - (2) Unplug the plug from power source.
 - (3) Open the drain cock located at the lower part of the tank (Fig. 7).

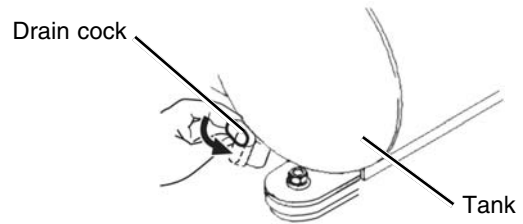


Fig.7

WARNING: Risk of bursting. When the tank gets corroded, there is a risk of breakdown. 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. Drain tank daily or after 4 hours of use. The drain contains moisture in the air, abrasion particles, rust, etc.. To drain tank open valve slowly and tilt compressor to empty accumulated water. Keep face and eyes away from drain cock.

4. 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) Push the pressure switch knob to the "OFF" position and disconnect the plug from the receptacle (Fig. 2).
 - (2) If the extension cord does not conform to the specifications given on page 6 replace with an extension cord such as that shown on page 6. 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.

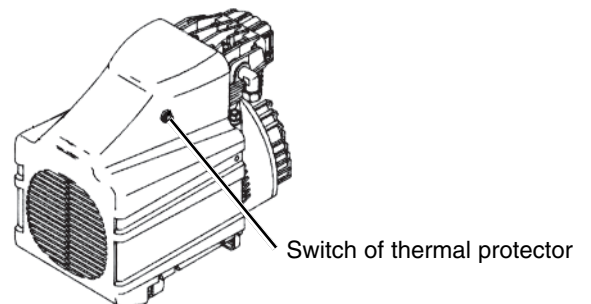


Fig.8

MAINTENANCE

WARNING: 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.

1. Cleaning the intake filter
Remove the intake filter (Refer to Fig. 1) every 50 hours or once a week and clean the inside of the intake filter and the filter element with compressed air (Fig. 9). Use a phillips screwdriver to disassemble intake filter.

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

CAUTION: Do not operate without the intake filter.

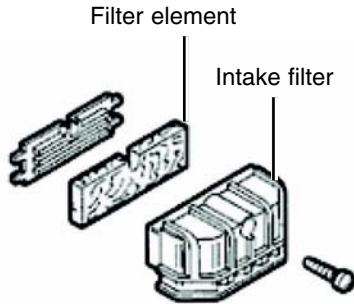


Fig.9

NOTE: Replace the filter element when it becomes dirty.

2. Draining tank
Drain tank daily or after 4 hours of use. Open drain cock and tilt compressor to empty accumulated water (Refer to Fig. 7).

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 oil drain cap on the casing cover, drain all the oil, and screw the cap back on (Refer to Fig.1 and to Fig.10).

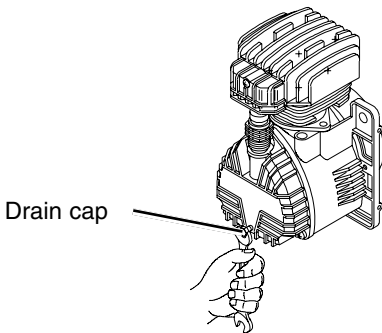


Fig.10

Pour oil into the hole of the dipstick.
To the level indicated on the dipstick (Refer to Fig.4).
For oil replacement, follow the table below.

OIL TYPE

SAE 5W50 SYNTHETIC OIL (-20° + 120°F) For both summer and winter use SAE 10W40 MULTI-GRADED OIL (+50° +120°F) For warm weather use only
--

- (2) Check the oil level of the pumping element every 50 hours or once a week.
- (3) Change the oil every 300 working hours or every 6 months.

SERVICE AND REPAIRS

All quality compressors will eventually require servicing or replacement of parts because of wear from normal use. To assure that only authorized 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.