

# INGCO

## Air Compressor

**EN** Air Compressor



**AC1200508 AC1200508T AC1200508S-2 AC1200508-8  
AC1301008 AC1301008T AC1301008S-2 AC1301008-8**

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## Forward

Please read this manual carefully and make a full understanding before operating. Due to the limited pages we cannot answer all the questions but this manual can help you avoid unnecessary mistakes during operating the new machines. Please pay special attention to the "Warning". If you don't stick to the instructions you may have your machine damaged.

Excuse for not informing of the alteration for techniques of the products change all the time.

Please follow the operating procedures described in this manual. By doing so you'll save your time and energy. If any problem or fault occurs Please contact our authorized service centre without delay.

If any machine parts need to be replaced Please use those produced in our factory to ensure an effective operation and to increase service life.

## Security Notes

Before starting the machine Please take a check before operation or the safe operation.

Do not place any inflammable substance near the air compressor.

Do not inject the compressed air to man and animals

Keep children or animals away from the compressor or auxiliary facilities.

Don't touch the machine or exhaust pipe during operation it remains in very high temperature.

The technical service center of our factory is the only organization that has the right to confirm whether the product in question is within the guaranty scope.

The operator should know the correct operation of the machine and how to turn it off immediately.

DO not move the machine when the air container still contains in compressed condition.

Before repairing especially before disassembling the machine the power should be turned off and the compressed gas should be released from the gas container. If the power is not turned off the air compressor may start suddenly. In the evening if the unstable voltage in the power grid may damage the motor in the machine.

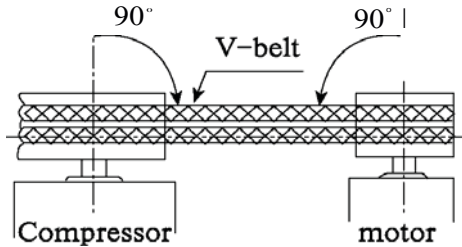
The following two points should be noted when the air compressor is used for spraying painting.

a. Do not operate the air compressor in the airtight space or in the place where there is fire.

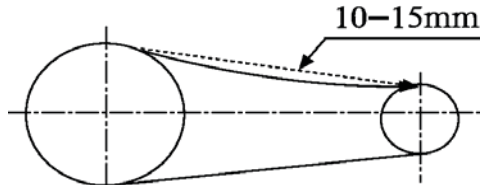
b. The air compressor should be operated in the well ventilated place.

## Installation

- a. Install the compressor in a ventilated place.
- b. The space between the compressor and the wall should be at least 50cm.
- c. Installation of Motor:
  1. If you buy the motor yourself, please buy the same model as the air-compressor
  2. Install the as shown in the following diagram:



3. Adjust the belt to a proper degree of tightness in the way of pressing the middle of the belt till it sinks for 10-15mm as shown in the following diagram:



4. If the belt is too tight the belt will be overloaded and in consequence the axis of the motor may easily wear out, the motor may get heated and consume more power and the belt may break down because of super-tension;

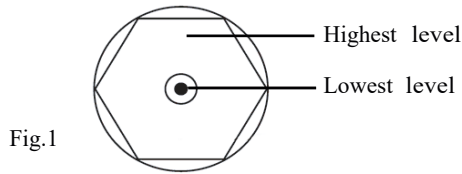
5. If the belt is too loose, the belt may slip and in consequence it may cause a high-heat abrasion of the belt, unsteady rotation of the air-compressor and inadequate displacement.

## Before starting

- a. Before starting the compressor be sure that the lube is enough. It is safe when the lube level is at the red point of oil glass. (Figure 1) When necessary, add the lube through the hole of the dipstick

Caution: If the lube is lower than the lower mark of the dipstick (Figure 1) the

compressor will be frayed and the axle head will be destroyed. If too high it may cause the lube to spray and the load of the compressor to increase.



b. The ideal lube for the compressor should be a general way high grade with antioxidant in not easy to become thick because of oxygenating, not easy to froth with little carbon left and high ignition point. Usually the 13# air compressor oil is used. the 19# air compressor oil is used in winter.

### Notes before operating

- a. Plug in the power plug to the matched outlet.
- b. Check the tightness of the belt and see if we can remove pulley easily by hand.
- c. Do use the air switch (Figure 2) to start or stop the compressor according to the button position marked on the shell of air switch, for the compressed air in the pipeline will exhaust automatically when the air switch break and then the compressor could be started with little burden next time prevent the motor from damage.

#### c. Safety Valve

The air-compressor is equipped with safety valve as the protective device to prevent from excessive pressure in the gas tank. The safety valve has already been adjusted according to the designing standard of "Pressure Containers". Please don't adjust it at discretion. Please advise the maintenance services of our company or distributors to do for you if adjustment is necessary. To assure that the function of the safety valve is in normal state. Please drag the gas release ring at least once a week (Figure 3).

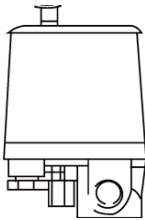


Fig.2



Fig.3



## Operation of the compressor

The compressor uses an air switch to control the motor. When the pressure in the air storage tank rises to the rated maximum pressure, the air switch automatically breaks to disconnect the power and stop the air compressor. When the pressure in the air storage tank goes down below the rated minimum pressure, the air switch automatically closes and restarts the motor to drive the compressor.

Adjust the exhausting air pressure

a. pull out upward the knob of the pressure adjuster, turn clockwise to increase the exhausting air pressure to a rated maximum pressure the same as in the air storage tank (Figure 4)

b. pull out upward the knob of the pressure adjuster, turn anticlockwise to reduce the exhausting air pressure to zero bar.

Caution:

(1) When adjusting the exhausting air pressure, you can look into the small manometer to get the pressure reading.

(2) When the manometer shows the maximum pressure values, stop turning clockwise, or the thin film of the pressure adjuster would be damaged.

(3) When the compressor stops working, turn the pressure adjuster anticlockwise to zero bar and then stop, you may open the drain tap to make sure that the compressor stops.

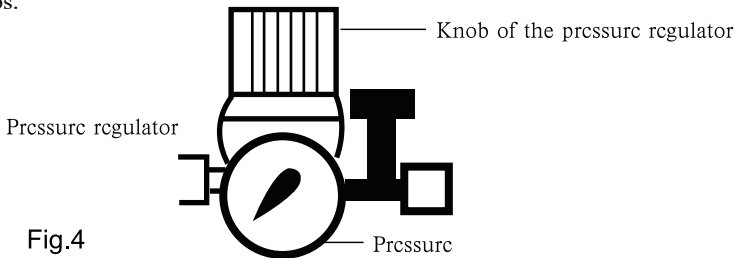


Fig.4

## Maintenance

a. When the new machine has been set to work for 50 hours, unscrew the oil-escape-bolt to let out the old lube and add in the new lube to the marked level of the dipstick.

b. Clean the filter every 100 hours. (Figure 5)

c. Replace the filter element with a new one if it is too dirty.

d. Turn one water escape valve at the bottom of the air storage tank to drain everyday.

e. In every 500 hours or 12 months replace the lube with new lube.

f. Please check the sensitivity of the safety valve and the operating pull-ring once a week.

g. Check the tightness of the V-belt once in three months.

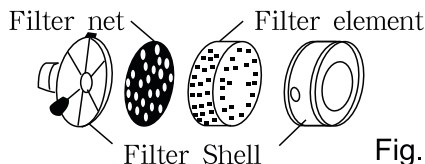


Fig.5

## Causes of Breakdown and Maintenance of the Air-compressor

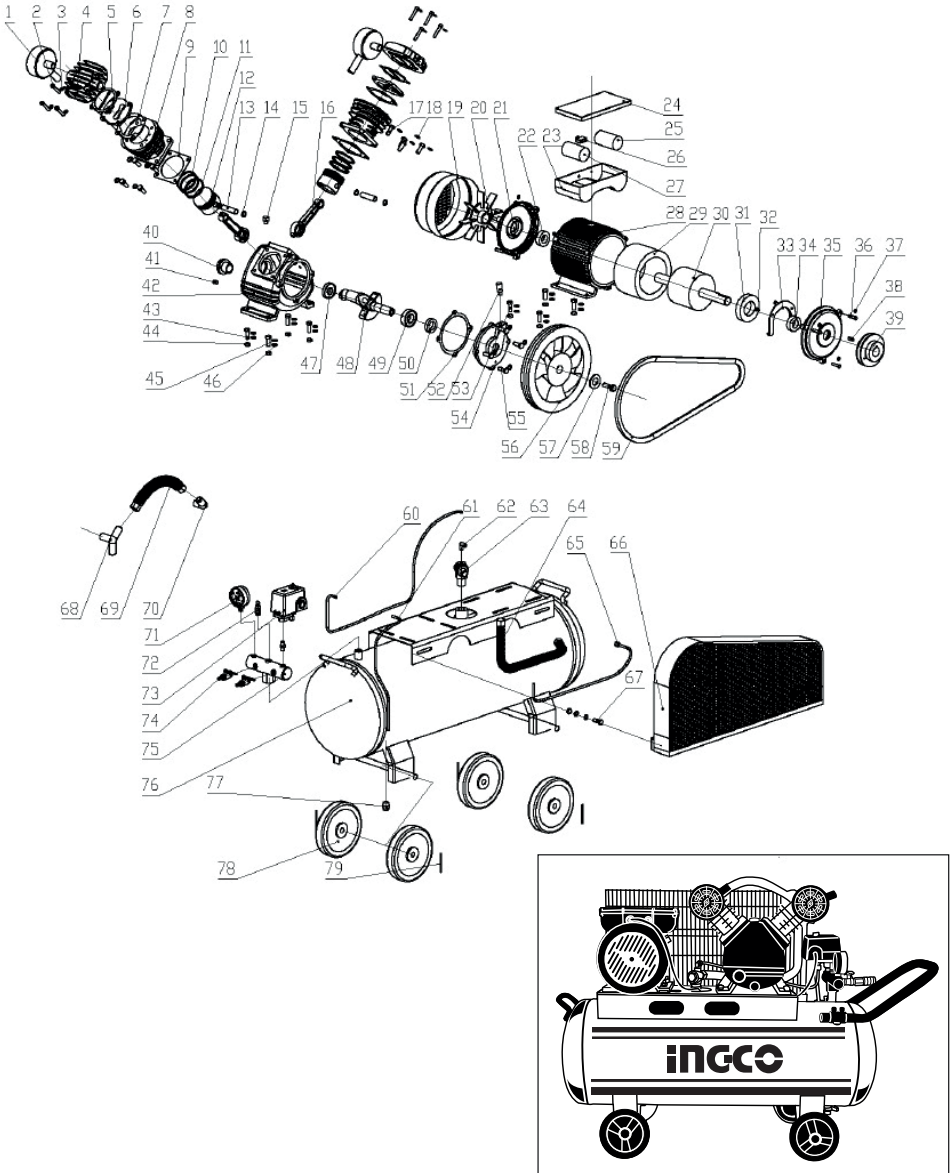
| Breakdown   | Possible Reasons  | Maintenance   |
|---|---|---|
| Less output air-quantity or inadequate pressure               | <ol style="list-style-type: none"> <li>1.The air volume required is beyond the rated.</li> <li>2.Blockage of the inlet air filter</li> <li>3.Adhesive of carbon or other substances on the valve block</li> <li>4.Unfix of valve seat or damage of filler</li> <li>5.Abrasion of valves or Ineffectiveness of spring</li> <li>6.Air leakage of the exhaust pipes or connectors</li> </ol> | <ol style="list-style-type: none"> <li>1. Change with a more powerful air-compressor</li> <li>2.Clean the cartridge or renew it</li> <li>3.Strip it and clean it</li> <li>4.Lock or renew it</li> <li>5.Renew</li> <li>6 Check the pipe or connectors with soap water and lock them up</li> </ol> |
| Over pressure or the safety valve alarms                      | <ol style="list-style-type: none"> <li>1.The set output voltage is higher than the rated</li> <li>2.Damage of pressure switch or relieving valve</li> <li>3.Too low pressure setting or Damage of safety valve</li> </ol>   | <ol style="list-style-type: none"> <li>1.Adjust the voltage setting</li> <li>2.Renew it</li> <li>3.Adjust pressure or renew it</li> </ol>   |
| The gas is mixed up with oil or excessive consumption of fuel | <ol style="list-style-type: none"> <li>1. Filling too much fuel;</li> <li>2. Wrong installation of oil ring;</li> <li>3.Inappropriate viscosity of oil;</li> <li>4.Piston ring or cylinder head plug broke down</li> <li>5.Blockage of the air-vent;</li> </ol>   | <ol style="list-style-type: none"> <li>1.Adjust the oil quantity;</li> <li>2.Change</li> <li>3.Change to use correct lubricating oil</li> <li>4.Renewal of new parts</li> <li>5.Clear away the plug-ups.</li> </ol>   |
| Over vibration of the r-compressor                            | <ol style="list-style-type: none"> <li>1. Excessive working pressure</li> <li>2.Unstable foundation</li> </ol>  | <ol style="list-style-type: none"> <li>1.Lessen the working pressure</li> <li>2.Fix the foundation with cushion or otherwise</li> </ol>   |
| Too noise during the rotation                                 | <ol style="list-style-type: none"> <li>1.Unfix of valve seat</li> <li>2.The piston impact the cover of the cylinder</li> </ol>  | <ol style="list-style-type: none"> <li>1.Lock the valve seat</li> <li>2.Intensify the filler</li> </ol>   |
| Superheat of the part in the compressor                       | <ol style="list-style-type: none"> <li>1. Excessive working pressure</li> <li>2. Super surrounding temperature bad ventilation</li> </ol>   | <ol style="list-style-type: none"> <li>1.Lessen the working pressure</li> <li>2.Move to place with good ventilation</li> </ol>  |
| Constant leakage of saturated exhaust valve                   | <ol style="list-style-type: none"> <li>1. Damage of exhaust valve</li> <li>2 The check valve is blocked or damaged</li> </ol>   | <ol style="list-style-type: none"> <li>1. Renew it</li> <li>2. Stripped and checked or renewed</li> </ol>   |
| No sound after being charged                                  | <ol style="list-style-type: none"> <li>1.Imperfect wire connection or fuse break</li> <li>2.the temperature controller stripped</li> <li>3.Break down of the motor</li> </ol>   | <ol style="list-style-type: none"> <li>1. Check the wires or change the fuse</li> <li>2 After cooling, switch on temperature control lever again to see if the voltage is normal</li> <li>3.Sent for maintenance</li> </ol>   |
| The motor makes sounds but does not work                      | <ol style="list-style-type: none"> <li>1. Voltage drop caused by super extension Wire</li> <li>2.Inadequate voltage</li> <li>3.Motor overload</li> <li>4.Break down of the motor</li> </ol>   | <ol style="list-style-type: none"> <li>1. Shorten the extension wire or charge to use a proper power line</li> <li>2.Ask the electric power company to repair</li> <li>3.Release the pressure of the drum and reduce the load</li> <li>4.Sent for maintenance</li> </ol>                          |

Please turn on the air switch to discharge the pressure in the drum before maintenance.

| Model                            | AC1200508    | AC1200508T  | AC1301008    | AC1301008T  |
|----------------------------------|--------------|-------------|--------------|-------------|
|                                  | AC1200508S-2 | AC1200508-8 | AC1301008S-2 | AC1301008-8 |
| Rated Voltage(V)                 | 220-240~     |             | 220-240~     |             |
| Rated Frequency(Hz)              | 50           |             | 50           |             |
| Input power (kW/HP)              | 1.5<br>(2.0) |             | 2.2<br>(3.0) |             |
| No-load speed(/min)              | 950          |             | 950          |             |
| Tank capacity(L/Gal)             | 50(13.2)     |             | 100(26.4)    |             |
| Max. operating pressure(Bar/PSI) | 8(116)       |             | 8(116)       |             |
| Air displacement (L/min@7bar)    | 84           |             | 107          |             |
| Protection type                  | IP 44        |             | IP 44        |             |
| Net weight(Kg)                   | 51.6         |             | 63.1         |             |

**INGCO****EXPLODED VIEW**

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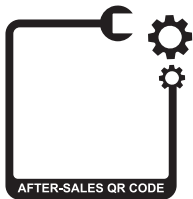
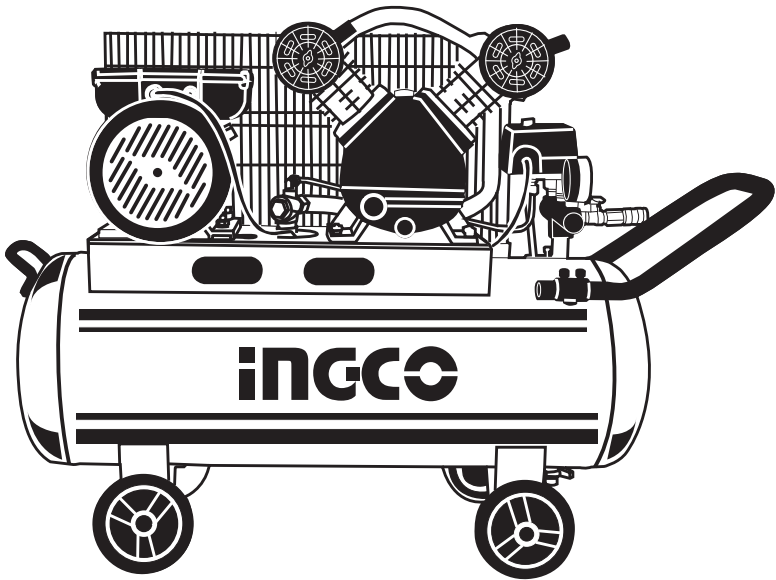


## SPARE PART LIST

**AC1200508,AC1200508T,AC1200508S-2,AC1200508-8,  
AC1301008,AC1301008T,AC1301008S-2,AC1301008-8**

| <b>NO.</b> | <b>Part Description</b> | <b>Qty</b> | <b>NO.</b> | <b>Part Description</b> | <b>Qty</b> |
|------------|-------------------------|------------|------------|-------------------------|------------|
| 1          | Filter                  | 2          | 41         | Oil Drain Screw         | 1          |
| 2          | Cylinder Head Screw     | 8          | 42         | Crankshaft Case         | 1          |
| 3          | Spring washer           | 8          | 43         | Bolt                    | 4          |
| 4          | Cylinder Head           | 2          | 44         | Nut                     | 8          |
| 5          | Cylinder Head Gasket    | 2          | 45         | Spring Washer           | 8          |
| 6          | Air Valve               | 2          | 46         | Flat Washer             | 8          |
| 7          | Air Valve Gasket        | 2          | 47         | Bearing 6204开式          | 1          |
| 8          | Cylinder                | 2          | 48         | Crankshaft              | 1          |
| 9          | Cylinder Gasket         | 2          | 49         | Bearing 6205开式          | 1          |
| 10         | Oil Ring                | 2          | 50         | Oil Seal                | 1          |
| 11         | Air Ring                | 4          | 51         | Front Cover Gasket      | 1          |
| 12         | Piston                  | 2          | 52         | Breath Plug             | 1          |
| 13         | Piston Pin              | 2          | 53         | Bolt                    | 4          |
| 14         | Clamp Spring            | 4          | 54         | Front Cover             | 1          |
| 15         | Nut                     | 1          | 55         | Bolt                    | 4          |
| 16         | Connecting-Rod          | 2          | 56         | Main Wheel              | 1          |
| 17         | Cylinder Screw          | 8          | 57         | Washer                  | 1          |
| 18         | Spring washer           | 12         | 58         | Bolt                    | 4          |
| 19         | Fan Cover               | 1          | 59         | Belt                    | 1          |
| 20         | Fan                     | 1          | 60         | Connecting wire         | 1          |
| 21         | Back Cover              | 1          | 61         | power plug & cable      | 1          |
| 22         | Bearing 6204RZ          | 4          | 62         | Pipe Bend               | 1          |
| 23         | Capacitor Box           | 1          | 63         | One-Way Valve           | 1          |
| 24         | Capacitor Box Cover     | 1          | 64         | Exhaust Pipe            | 1          |
| 25         | Starting Capacitor      | 1          | 65         | Discharge Pipe          | 1          |
| 26         | Protector               | 1          | 66         | Shield                  | 1          |
| 27         | Running Capacitor       | 1          | 67         | Shield Screw            | 2          |
| 28         | Motor housing           | 1          | 68         | Connector               | 1          |
| 29         | Stator                  | 1          | 69         | Pipe                    | 1          |
| 30         | Rotor                   | 1          | 70         | Pipe Bend               | 1          |
| 31         | Bearing L25 202Y        | 1          | 71         | Pressure Gauge          | 1          |
| 32         | Centrifugal Piece Screw | 2          | 72         | Safety Valve            | 1          |
| 33         | Centrifugal Piece       | 1          | 73         | Pressure Switch         | 1          |
| 34         | Bearing 6205RZ          | 1          | 74         | Ball Valve              | 2          |
| 35         | Front Cover             | 1          | 75         | Switch Bracket          | 1          |
| 36         | Bolt                    | 6          | 76         | Air Tank                | 1          |
| 37         | Spring washer           | 6          | 77         | Water Drain Valve       | 1          |
| 38         | Pin                     | 1          | 78         | Wheel                   | 4          |
| 39         | Motor Wheel             | 1          | 79         | Split Pin               | 4          |
| 40         | Oil Mirror              | 1          |            |                         |            |

# INGCO



INGCO TOOLS CO., LIMITED  
No.45 Songbei Road, Suzhou  
Industrial Park, China.

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

MADE IN CHINA 1120.V03

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