

# DRAPER<sup>®</sup>

## INSTRUCTIONS FOR 230V 2HP Compressor

Stock Nos. 14443 Part Nos. DA25/206A  
14444 DA50/206A

**IMPORTANT:** PLEASE READ THESE INSTRUCTIONS CAREFULLY TO ENSURE THE SAFE AND EFFECTIVE USE OF THIS PRODUCT.



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DA25/206A shown

DRAPER<sup>®</sup>

### GENERAL INFORMATION

Read all these instructions before operating this product and save these instructions.

This manual has been compiled by Draper Tools and is an integrated part of the product with which it is enclosed and should be kept with it for future references.

This manual describes the purpose for which the product has been designed and contains all the necessary information to ensure its correct and safe use. We recommend that this manual is read before any operation or, before performing any kind of adjustment to the product and prior to any maintenance tasks. By following all the general safety instructions contained in this manual, it will ensure both product and operator safety, together with longer life of the product itself.

All photographs and drawings in this manual are supplied by Draper Tools to help illustrate the operation of the product.

Whilst every effort has been made to ensure accuracy of information contained in this manual, the Draper Tools policy of continuous improvement determines the right to make modifications without prior warning.



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## GUARANTEE

Draper tools have been carefully tested and inspected before shipment and are guaranteed to be free from defective materials and workmanship for a period of 12 months from the date of purchase except where tools are hired out when the guarantee period is ninety days from the date of purchase.

A proof of purchase must be provided with the tool.

Should the machine develop any fault, please return the complete tool to your nearest authorized warranty repair agent or contact Draper Tools Limited, Chandler's Ford, Eastleigh, Hampshire, SO53 1YF England. Telephone Sales Desk: (023) 8049 4333 or Product Helpline (023) 8049 4344.

If upon inspection it is found that the fault occurring is due to defective materials or workmanship, repairs will be carried out free of charge. This guarantee does not apply to normal wear and tear, nor does it cover any damage caused by misuse, careless or unsafe handling, alterations, accident, or repairs attempted or made by any personnel other than the authorised Draper warranty repair agent.

NOTE: If the tool is found not to be within the terms of warranty, repairs and carriage charges will be quoted and made accordingly.

This guarantee applies in lieu of any other guarantee expressed or implied and variations of its terms are not authorised.

Your Draper guarantee is not effective unless you can produce upon request a dated receipt or invoice to verify your proof of purchase within the 12 month period.

Please note that this guarantee is an additional benefit and does not affect your statutory rights.

Draper Tools Limited










# SPECIFICATION

The Draper Tools policy of continuous improvement determines the right to change specification without notice.

Stock nos.	14443	14444
Part nos.	DA25/206A	DA50/206A
Rated voltage	230V~	230V~
Rated frequency	50Hz	50Hz
Rated input	1500W (2.0HP)	1500W (2.0HP)
Rated input current	6.8A	6.8A
Revolutions per minutes (no load)	2,850min <sup>-1</sup>	2,850min <sup>-1</sup>
Maximum working pressure	116PSI/8Bar	116PSI/8Bar
Air displacement	7.3cfm/206L/min	7.3cfm/206L/min
Free air delivery	5.4cfm/152L/min	5.4cfm/152L/min
Vessel:		
Capacity	24Ltr	50Ltr
Adopted corrosion allowance (C)	0.5mm	0.5mm
Actual thickness	2.0mm	2.5mm
Ingress protection	IP20	IP20
Sound pressure level	92.0dB(A)	92.0dB(A)
Sound power level	97.0dB(A)	97.0dB(A)
Weight	24kg	31kg

**WARNING: Always wear safety goggles and ear defenders.**

## - Connecting to the Power Supply:

To eliminate the possibility of an electric shock your machine has been fitted with a BS approved, non rewirable moulded plug and cable which incorporates a fuse, the value of which is indicated on the pin face of the plug. If the plug is marked with the  symbol and the fuse needs replacing, an  approved BS1362 fuse must be used of the same amp rating. If the plug is not  marked, a fuse with the  symbol,  BS Kitemark, or both  and  BS Kitemark, of the same amp rating should be used.


- The fuse cover is detachable, never use the plug with the cover omitted. If a replacement fuse cover is required, ensure it is the same colour as that visible on the pin face of the plug (i.e. red). Fuse covers are available from your Draper Tools stockist.

If the fitted plug is not suitable, it should be cut off and destroyed. \*The end of the cable should now be suitably prepared and the correct type of plug fitted. See below.

## - \*WARNING:

A plug with bare flexible wires exposed is hazardous if engaged in a live power socket outlet.

## - WARNING: THIS APPLIANCE MUST BE EARTHED.

- The mains lead is coloured Green and Yellow – Earth, Blue – Neutral and Brown – Live.
- As these colours may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:
- The wire which is coloured green and yellow must be connected to the terminal in your plug which is marked with the letter 'E' or by the earth symbol  or coloured green or green and yellow.
- The wire which is coloured blue must be connected to the terminal which is marked with the letter 'N' or coloured black or blue.
- The wire which is coloured brown must be connected to the terminal which is marked with the letter 'L' or coloured red or brown.

## - EXTENSION LEAD CHART:

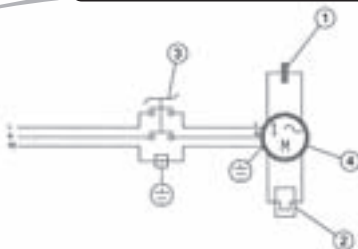
Extension lead sizes shown assure a voltage drop of not more than 5% at rated load of tool.

Ampere rating (on Name plate)	3	6	10	13
Extension cable length (Metres)	Wire Size mm <sup>2</sup>			
7.5	0.75	0.75	1.0	1.25
15	0.75	0.75	1.0	1.5
22.5	0.75	0.75	1.0	1.5
30	0.75	0.75	1.25	1.5
40	0.75	0.75	1.5	2.5

## IMPORTANT:

On products exceeding 2000W it is recommended that the power cable and/or extension cable are fully unwound before a connection is made to the power supply. However, ensure the residual cable does not pose a trip hazard.

# WIRING DIAGRAM



- ① Capacitor
- ② Overload Protector
- ③ Pressure Switch
- ④ Electrical Motor Single Phase

# GENERAL SAFETY INSTRUCTIONS

## WARNING:

Please read the following instructions carefully, failure to do so could lead to serious personal injury. When using electric tools, basic safety precautions, including the following, should always be followed to reduce the risk of fire, electric shock and personal injury. Read all these instructions before operating this product and save these instructions.

## IMPORTANT:

Draper Tools Limited recommends that this machine should not be modified or used for any application other than that for which it was designed. If you are unsure of its relative applications do not hesitate to contact us in writing and we will advise you.

- Learn how to stop the compressor in the event of an emergency.
- Ensure the mains voltage is compatible with the voltage listed on the compressors rating plate.
- Before attempting to carry out any servicing or maintenance operations, remove the plug from the socket and purge all air from the reservoir.
- Never stop the compressor using the mains switch or removing the plug from the socket. Always use the pressure switch.
- After maintenance operations ensure all parts are correctly fitted before running through the set-up procedure.
- Always wear ear defenders when in proximity to the compressor.
- Keep compressors and associated tools out of the reach of children.
- Keep animals and children out of the work area.
- **WARNING:** Avoid contact with moving parts and components prone to high temperatures.
- Do not operate the compressor near flammable materials or dangerous environments.
- Do not attempt to transport or move the compressor with the reservoir under pressure.
- Prior to each use inspect the compressor fully.
- Do not attempt to operate the compressor with damaged, faulty or missing components. Replace components immediately with genuine Draper parts.
- Do not expose to rain or moisture.
- Do not operate the compressor with the air inlet filter missing.
- Do not connect an air hose with a flow rate lower than that of the compressors.
- Do not use the compressors at temperatures below 0°C or exceeding 45°C.
- Do not alter or adjust any safety devices

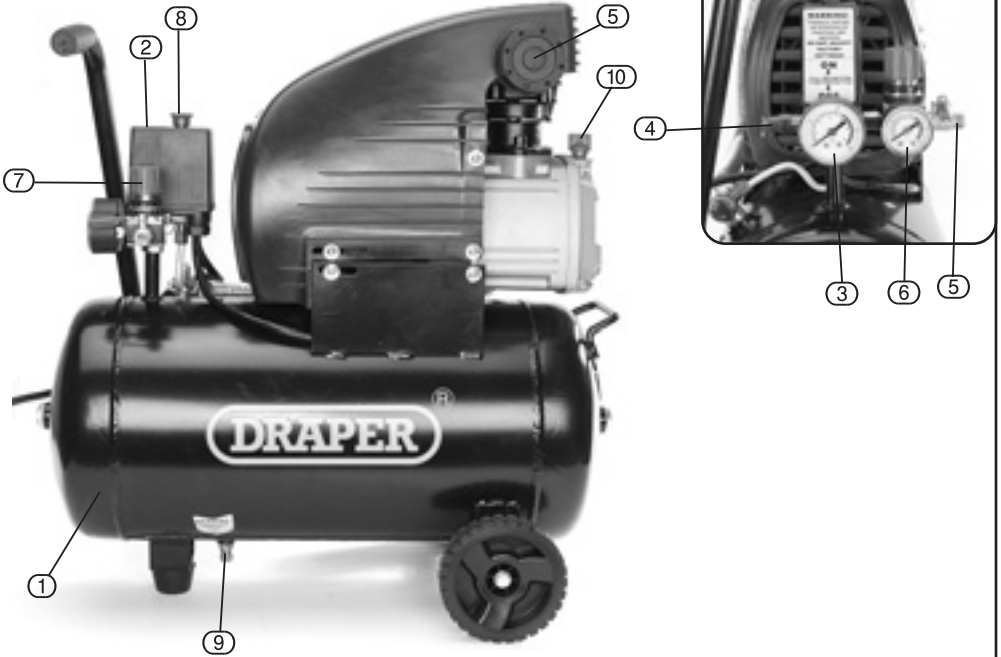
# ADDITIONAL SAFETY INSTRUCTIONS

## ADDITIONAL SAFETY INSTRUCTIONS FOR SAFETY VALVES

- **Information:** The safety valves are designed and constructed for use exclusively with compressed air, free from impurities. The materials used in construction are suitable for operating the valve at the rated pressure and temperatures. The Viton or NBR gasket conserves the resistance characteristics, even in prolonged use. The valve caulking impedes calibration modification; tampering with the valve and/or changing the constructor's calibration is forbidden.
- **Installation:** Valve installation must be performed exclusively by technically prepared persons, who are responsible and in good health. Checking the integrity of the valve before installation is obligatory. Also, check that the valve pressure is no greater than the operating pressure of the tank or of the system to protect. Check that the discharge flow rate of the valve is greater than the quantity of the air to discharge. The safety valve must be positioned directly on the tank in a vertical position, in a dry, accessible place protected against the weather and far away from liquids or condensation. It must be positioned so as to have sufficient space all around for correct air discharge, without causing damage to persons and/or things. The valve rod must therefore be free in its movement when discharging. The connection between the valve and the part to be protected must be free from all kinds of choking and be as short as possible so as not to reduce the discharge flow rate of the valve itself. The connection passage area must be greater than the valve orifice area. During installation, screw on the valve with a torque spanner using the hexagonal part of the body. Apply a maximum torque of 30Nm, paying attention not to cause any deformation; using pincers, pliers, hammers or tools other than a hexagonal spanner is forbidden. Check that the inlet hole and the shutter are not blocked by glue, teflon or similar materials that could bind the shutter or other functional components. If the valve is replaced, the compressor air contained in the system must be discharged first. We decline all responsibility for damage caused to persons and/or things due to failure to observe these instructions.
- **Maintenance and inspection:** The valve must not be subjected to knocks which may cause deformities. It is obligatory for qualified technicians to make sure that the safety valve functions correctly at least once a year. Valves equipped with a ring must be tested while pressurised to between 80-90% of the calibration value. Pull the ring and release immediately. During the test the valve must definitely open and discharge the air and re-close immediately when the ring is released. It is absolutely necessary to carry out this procedure with the utmost caution because this type of job can be dangerous if adequate safety measures are not taken; wear goggles, a head set and anything else necessary to protect against noise, jets of air, etc. which may be discharged from the valve.

## ADDITIONAL SAFETY INSTRUCTIONS FOR PRESSURE VESSELS

- 1. This pressure tank is mainly intended for static use. It can only be charged with natural air within temperature and pressure limits as specified on the manufacturer's plate and declaration of conformity.
- 2. Ensure that tank safety and control devices are efficient and flawless. When replaced, the tank should not be under pressure.
- 3. Drain the condensate off the tank every day.
- 4. Check for signs of inner corrosion at regular intervals. Tank walls should have a minimum thickness of 1.5mm (DA25/206)/2.0mm (DA50/206).
- 5. Any kind of welding to this tank is forbidden.
- 6. The user shall comply with laws on pressure vessel operation in force in the country in which the tank is operated.
- 7. The construction is mainly effected for permanent load by internal pressure. Cyclic loads are not considered, only for a range of 10% PS.



**DA25/206A**

- |   |  |
|---|--|
| <ul style="list-style-type: none"> <li>① 25 litre reservoir tank.</li> <li>② Pressure switch.</li> <li>③ Tank pressure gauge.</li> <li>④ Safety valve.</li> <li>⑤ Air line coupling.</li> </ul> | <ul style="list-style-type: none"> <li>⑥ Line pressure gauge.</li> <li>⑦ Line pressure regulator.</li> <li>⑧ On/off switch.</li> <li>⑨ Reservoir condensate drain bung.</li> <li>⑩ Oil level dipstick (see page 6).</li> </ul> |
|---|--|

- **SCOPE:** This compressor has been designed and built for intermittent duty applications. Although the compressor is equipped with an overload cut-out, Draper Tools recommend the compressor duty cycle never exceeds 50% and that continuous operation never exceeds 15 minutes.

In addition to pneumatic tools the compressor may be connected to a variety of other tools intended for washing, spraying and blowing.

- **UNPACKING:** After removing the packing material, make sure the product is in perfect condition and that there are no visible damaged parts. If in doubt, do not use the product and contact the dealer from whom it was purchased.

The packaging materials (plastic bags, polystyrene, etc.), must be disposed of in an appropriate refuse collection container. These materials must not be left within the reach of children as they are potential sources of danger.



## ASSEMBLY

Upon receipt of the compressor, ensure all components are present and have remained undamaged in transit.

Retain the packing materials and packaging in case future transportation of the compressor is necessary. We recommend that the packaging is kept, at least within the period of the guarantee.

- **WHEELS AND ANTI-VIBRATION FOOT**

- **DA25/206A**

Pass the bolt through the wheel and then insert the spacer on the underside of the wheel of the compressor's frame and fit the washer and secure with the nut. To mount the foot pass the bolt through the bracket on the bottom of the tank and then through the rubber anti-vibration foot into the front position.

- **DA50/245**

Locate the wheel onto the axle and secure in place with the internal self locking washer (single use only).

- **AIR FILTER**

If not already fitted, remove the transit bung from the top of the head and screw the air filter assembly into position.

- **OIL LEVEL**

- **NOTE:** For transportation purposes the breather bung is supplied in a separate bag.

- **ATTENTION! Remove the plastic bung from the crankcase, fill with oil and replace it with the breather bung.**

- **NOTE:** The plastic bung should be retained for future use should it be necessary to transport the unit.

- **ATTENTION!** Prior to any operation check the oil level ranges between max. and min. on the dipstick.

If necessary adjust the level (see page 10).

- **WARNING:** Never operate the compressor with only the plastic transportation bung fitted. Under normal use internal pressure can expel the bung along with oil from the head, possibly leading to damage

- **Positioning**

In order to ensure proper air flow to the ventilation grills ensure the compressor is at least 50cm from any obstacles which may impede air from flowing correctly.

- **ON/OFF SWITCH (Figs.1 & 2.):**

- **NOTE:** Prior to connecting the compressor to the power supply ensure the pressure switch is in the off position.

On initial start-up open the reservoir condensate drain bung (A)†, adjust the pressure regulator (B) to the maximum pressure.

† Unscrew bung anticlockwise to open valve.

Pull the pressure switch (C) up to start the compressor.

Allow the machine to run for 10 minutes with the air escaping from the reservoir tank before closing the drain bung (A). Ensure the compressor is switched off before doing this. Ensure the tank pressure reaches 8 bar as indicated on gauge (D) before the pressure switch shuts off the motor.

- **NOTE:** When the drain bung is closed the tone from the motor will change.  
The compressor motor will automatically restart when the tank pressure drops to approx. 2 bar less than the maximum pressure.
- **ATTENTION:** Never stop the compressor using the mains connection. Always switch off the compressor by pressing the pressure switch button down. The compressed air will be vented from the head and allowing an easy re-start.
- **NOTE:** During correct operation a whistle of compressed air escaping/releasing will be heard when the motor stops and a protracted whistle (approx. 20-30 seconds) when ever the compressor is started with no pressure in the tank.

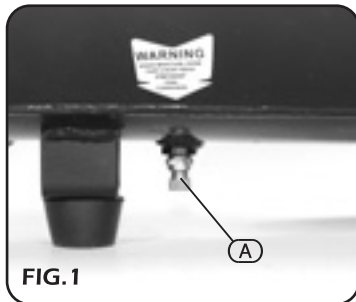


FIG. 1

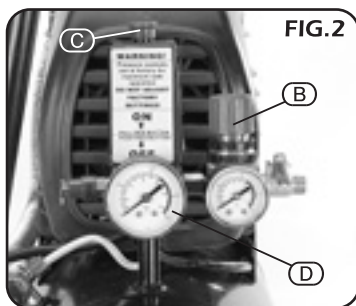


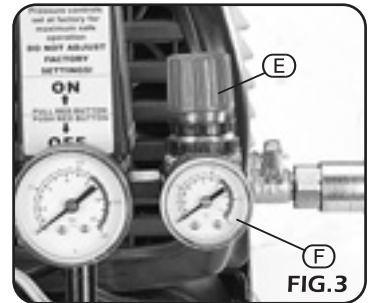
FIG. 2

## - **WORKING PRESSURE ADJUSTMENT (Fig.3.):**

- **NOTE:** For technical specifications and detailed instructions please refer to the instructions provided with the specific air tool/accessory.

The outlet line pressure from the tank is adjusted using regulator (E). Rotate the regulator clockwise to increase the pressure or anticlockwise to decrease. The pressure is indicated on gauge (F).

- **ATTENTION:** After each use set the pressure to zero to help prolong the life of the regulator and avoid damage.

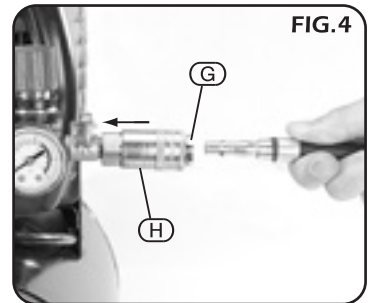


## - **AIR LINE CONNECTION (Fig.4.):**

The compressor comes equipped with a quick “in line” female connector (G). To insert a male connector, hold collar (H) backward. When fully inserted, release the collar. If a different style of connection is required the connector (G) can be replaced.

- **NOTE:** When fitting the replacement ensure the threads are sealed with PTFE† tape for an air tight union.

† Draper Stock No.63389.



- **NOTE:** Remove the plug from the socket before carrying out adjustment, servicing or maintenance.  
In order to maintain the compressor to its optimum, periodical service checks must be carried out routinely. Allowances should be made to adjust the time scale for machines in occasional service with the exception of the safety valve which must be inspected by a qualified service agent every 12 months regardless of use.
- **AFTER THE FIRST 50 HOURS SERVICE**  
Ensure that all fixings have remained tight, in particularly on the head and crankcase.  
Replace the crankcase oil with one from the recommended oil list from below.
- **RECOMMENDED OILS:**  
Recommended oils for compressors, (suitable for room temperature from +5°C and +25°C)  
SHELL Rimula D extra 15W-40  
AGIP Dicrea 100  
API CM-8X  
BP Energol CS100  
CASTROL Aircol PD100  
ESSO Exxc Olub H150  
FUCHS Renolin 104L VG100  
IP Calatia Oil ISO 100  
MOBIL Rarus 427  
TOTAL Dacnis P100  
Room temperature below +5°C: ISO 68  
Room temperature above +25°C: ISO 150.
- **NOTE:** Never mix different brand or grade oil together.
- **DAILY CHECKS:**
  - Before every use check the airline filter/regulator/seperator. Fill the lubrication level up, empty any collected condensate and adjust the line pressure to the accessory as necessary.
  - After every use adjust the line pressure back to zero.
- **WEEKLY CHECKS:**
  - At least once a week the build up of condensate should be drained from the tank†.
- † **In the absence of a filter/regulator/seperator to ensure a clean/dry lubricated air supply the condensate should be drained before each use.**  
Open the reservoir condensate drain bung fully before tilting the compressor to ensure all condensate is drained. Collect the moisture in a suitable container.  
As the compressor is oil free the condensate will contain no lubricate/pollutants so requires no special disposal.  
Finally close the bung, pressurise the tank fully and switch off the compressor. Open the bung to remove any remaining condensate under pressure.
- **NOTE:** Ear defenders and safety goggles must be worn.

## - MONTHLY CHECKS:

- Remove the foam filter to replace or clean it. Rinse the filter with water and soap. Make certain the element is completely dry prior to refitting.
- **ATTENTION: Never attempt to run the compressor without the filter element fitted as dust or foreign bodies can enter the pump unit resulting in serious damage.**

This must be carried out more frequently if the compressor is operating in a dusty environment.

The motor must be correctly ventilated during operation. For this reason avoid blocking the air inlets. After use disconnect the tool from the power supply and vacuum the ventilation slots.

If replacement of the supply cord is necessary, this has to be done by the manufacturer or his agent in order to avoid a safety hazard.

## - REPLACING/TOPPING UP OIL:

Remove the oil cap and with a suitable spanner loosen and remove the crankcase bung. Collect the used oil in a container to be disposed of in the correct manner according to european regulations.

- **NOTE:** The oil will drain more rapidly with the compressor hot from operation.

Replace and tighten crankcase bung taking care not to damage the crankcase.

Fill the oil level to max. as indicated on the oil level vial.

- **NOTE:** Do not over fill the oil level. Do not attempt to operate the compressor without the dipstick installed.



- At the end of the machine's working life, or when it can no longer be repaired, ensure that it is disposed of according to UK regulations.
- Contact your local authority for details of collection schemes in your area.

In all circumstances:

- Do not dispose of power tools with domestic waste.
- Do not incinerate.
- Do not abandon in the environment.
- Do not dispose of WEEE\* as unsorted municipal waste.



\* Waste Electrical & Electronic Equipment.

PROBLEMS	POSSIBLE CAUSES	REMEDIES
Pressure drop in the tank	Air leaks at connections	Allow the compressor to reach the maximum pressure allowed. Switch it off and carefully brush a soapy water solution onto all air connections. Look carefully for air bubbles flowing out. Tighten those connections where leaks are present. If the problem is still present, contact the authorised service agent.
The pressure switch valve leaks when the compressor is idle	Non-return valve seal defective.	Contact the authorised service agent.
The compressor stopped and does not start	Overload cutout operated due to motor overheating Other	Allow to cool before attempting a re-start Contact the authorised service agent.
The compressor does not stop even though the max. pressure allowed has been reached; the safety valve operates	Incorrect operation or pressure switch faulty	Contact the authorised service agent.
The compressor does not reach the pressure and overheats	Compressor head gasket damaged or valve faulty	Contact the authorised service agent.
The compressor is noisy with metallic clangs	Bearing or seizure	Contact the authorised service agent.
Compressor will not start	Ambient temp effecting pressure switch operation	Move compressor to a warmer atmosphere and allow time to warm up prior to restart attempts



# NOTES



# NOTES

- **DRAPER TOOLS LIMITED,**  
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- **Service/Warranty Repair Agent**  
For aftersales servicing or warranty repairs, please  
contact the Draper Tools Helpline for details of an  
agent in your local area.

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