

**DRAPER**<sup>®</sup>

**GB** ORIGINAL LANGUAGE

230V DIRECT DRIVE

**OIL FREE**

# **COMPRESSOR**

24974 (EU 37639)



**UK  
CA** **CE**

**F** **COMPRESSEUR 230V À  
HUILE À TRANSMISSION  
DIRECTE V-TWIN**

24974 (EU 37639)

**E** **COMPRESOR SIN ACEITE  
DE ACCIONAMIENTO  
DIRECTO 230V**

24974 (EU 37639)

**P** **COMPRESSOR DE TRANS-  
MISSÃO DIRETA SEM ÓLEO,  
230V**

24974 (EU 37639)

**D** **DIREKT ANGETRIEBENER,  
ÖLFREIER KOMPRESSOR  
MIT 230V**

24974 (EU 37639)

**NL** **2230V OLIEVRIJE  
COMPRESSOR MET  
DIRECTE AANDRIJVING**

24974 (EU 37639)

# 1. INTRODUCTION

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## 1.1 SCOPE

The compressor described in this manual is capable of supplying compressed air to a maximum pressure of 8bar. To operate pneumatic tools for a variety of applications including blowing, spraying and tyre inflating.

Part of our core range, this product is suitable for enthusiasts and tradespersons alike. Any application other than that it was intended for, is considered misuse.

This product is not a toy and must not be used by children or any person with reduced physical, sensory or mental capabilities or lack of experience and knowledge, or people unfamiliar with these instructions.

Local regulations may restrict the age of the operator.

## 1.2 UNDERSTANDING THIS MANUALS SAFETY CONTENT:

**Warning!** – Information that draws attention to the risk of injury or death.

**Caution!** – Information that draws attention to the risk of damage to the product or surroundings.

## 1.3 EXPLANATION OF SYMBOLS



Before plugging in your tool, make sure the socket voltage matches that on the product plate. If the socket voltage does not match that shown on the type plate, it can result in a serious hazard and damage to your tool.



Important: Read instruction manuals before operating and servicing this equipment.



Wear suitable eye/face protection.



Warning!  
Wear ear defenders.



For indoor use.  
Do not expose to rain.



Tank air capacity



Motor capacity (Horse power).



Motor capacity (Kilowatts).



Air displacement (cubic feet per minute).



Air displacement (Litres per minute).



Max. pressure (psi).



Max. pressure (bar).



Do not abandon into the environment.



Drain moisture from tank.



Warning! Pressurised cylinder.



Warning!  
Heavy object.



Do not run machine without oil/lubricant.



Do not adjust factory set pressure settings.



Lift by 2 people.



Continuous A-Weighted Sound Pressure Level in accordance to and declared according to EN60745.



Machine weight.



**Warning!** Disable the machine before attempting to maintain it.



WEEE –  
Waste Electrical & Electronic Equipment.  
Do not dispose of Waste Electrical & Electronic  
Equipment in with domestic rubbish.



Class 1 appliance  
(Must be earthed).



UK Conformity Assessed.



European conformity.


## 2. SPECIFICATION

### 2.1 SPECIFICATION

Stock No. ....	24974 (EU 37639)
Part No. ....	DA6/169
Rated voltage .....	230~50Hz
Rated input .....	1100W (1.5HP)
Maximum working pressure .....	116psi (8bar)
Air displacement.....	6.0cfm (169L/min)
Free air delivery.....	3.46cfm (98L/min)
Receiver capacity .....	6 Litres
Sound power level.....	97dB(A)
Sound pressure level.....	85dB(A)
Dimensions .....	485 x 275 x 550mm
Weight .....	14kg

## 3. HEALTH AND SAFETY INFORMATION

### 3.1 GENERAL SAFETY INSTRUCTIONS FOR POWER TOOL USE

 **Warning! Read all safety warnings, instructions, illustrations and specifications provided with this power tool.** Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury.

**Save all warnings and instructions for future reference.**

The term “power tools” in the warnings refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.

#### 1) Work area safety

- Keep work area clean and well lit.** Cluttered or dark areas invite accidents.
- Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust.** Power tools create sparks which may ignite the dust or fumes.

- Keep children and bystanders away while operating a power tool.** Distractions can cause you to lose control.

#### 2) Electrical safety

- Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools.** Unmodified plugs and matching outlets will reduce risk of electric shock.
- Avoid body contact with earthed or grounded surfaces, such as pipes, radiators, ranges and refrigerators.** There is an increased risk of electric shock if your body is earthed or grounded.
- Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.
- Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts.** Damaged or entangled cords increase the risk of electric shock.
- When operating a power tool outdoors, use an extension cord suitable for outdoor use.** Use of a cord suitable for outdoor use reduces the risk of electric shock.
- If operating a power tool in a damp location is unavoidable, use a residual current device (RCD) protected supply.** Use of an RCD reduces the risk of electric shock.

#### 3) Personal safety

- Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication.** A moment of inattention while operating power tools may result in serious personal injury.
- Use personal protective equipment Always wear eye protection.** Protective equipment such as a dust mask, non-skid safety shoes, hard hat or hearing protection use for appropriate conditions will reduce personal injuries.
- Prevent unintentional starting. Ensure the switch is in the off-position before connecting to power source and/or battery pack, picking up or carrying the tool.** Carrying power tools with your finger on the switch or energising power tools that have the switch on invites accidents.
- Remove any adjusting key or wrench before turning the power tool on.** A wrench or a key left attached to a rotating part of the power tool may result in personal injury.
- Do not overreach. Keep proper footing and balance at all times.** This enables better control of the power tool in unexpected situations.

- f) **Dress properly. Do not wear loose clothing or jewellery. Keep your hair and clothing away from moving parts.** Loose clothes, jewellery or long hair can be caught in moving parts.
- g) **If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used.** Use of dust collection can reduce dust-related hazards.
- h) **Do not let familiarity gained from frequent use of tools allow you to become complacent and ignore tool safety principles.** A careless action can cause severe injury within a fraction of a second.

#### 4) Power tool use and care

- a) **Do not force the power tool. Use the correct power tool for your application.** The correct power tool will do the job better and safer at the rate for which it was designed.
- b) **Do not use the power tool if the switch does not turn it on and off.** Any power tool that cannot be controlled with the switch is dangerous and must be repaired.
- c) **Disconnect the plug from the power source and/or remove the battery pack, if detachable, from the power tool before making any adjustments, changing accessories, or storing power tools.** Such preventive safety measures reduce the risk of starting the power tool accidentally.
- d) **Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool.** Power tools are dangerous in the hands of untrained users.
- e) **Maintain power tools and accessories. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use.** Many accidents are caused by poorly maintained power tools.
- f) **Keep cutting tools sharp and clean.** Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
- g) **Use the power tool, accessories and tool bits etc. in accordance with these instructions, taking into account the working conditions and the work to be performed.** Use of the power tool for operations different from those intended could result in a hazardous situation.
- h) **Keep handles and grasping surfaces dry, clean and free from oil and grease.** Slippery handles and grasping surfaces do not allow for safe handling and control of the tool in unexpected situations.

#### 5) Service

- a) **Have your power tool serviced by a qualified repair person using only identical replacements parts.** This will ensure that the safety of the power tool is maintained.

### 3.2 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 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 subject 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.

### 3.3 ADDITIONAL SAFETY INSTRUCTIONS FOR PRESSURE VESSELS

- 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.
- Ensure that tank safety and control devices are efficient and flawless. When replaced, the tank should not be under pressure.
- Drain the condensation off the tank every 7 days.
- Check for signs of inner corrosion at regular intervals. Tank walls should have a minimum thickness of 1.0 – 2.0mm.
- Any kind of welding to the tank is forbidden.
- The user shall comply with laws on pressure vessel operation in force in the country in which the tank is operated.
- The construction is mainly effected for permanent load by internal pressure. Cyclic loads are not considered, only for a range of 10% PS.

### 3.4 RESIDUAL RISK

**Important:** Although the safety instructions and operating manuals for our tools contain extensive instructions of safe working with power tools, every power tool involves a certain residual risk which can not be completely excluded by safety mechanisms. Power tools must therefore always be operated with caution!

### 3.5 CONNECTION TO THE POWER SUPPLY

**Caution:** Risk of electric shock. Do not open.

This appliance is supplied with an approved plug and cable for your safety.


Never use a damaged or incomplete plug.

This appliance is Class I<sup>†</sup> and is designed for connection to a power supply matching that detailed on the rating label and compatible with the plug fitted.

Carefully select an extension lead. Some machines are not suitable for use with extension leads. If the tool is designed for use outdoors, only use an extension lead suitable for that environment in conjunction with an RCD adaptor. When using an extension lead, select one capable of handling the current (amps) drawn by the machine in use. Ensure the cable is fully unwound regardless of the distance between the power supply and the tool. Excess current (amps) and a coiled

extension lead will cause the cable to heat up and can result in fire.

Keep extension leads away from moving hazardous parts to avoid damages to the cable which can lead to contact with live parts. Position cable safely to avoid tripping over.

<sup>†</sup>Earthed:  This product requires an earth connection to protect against electric shock from accessible conductive parts in the event of a failure of the basic insulation.

**Important!** If using an extension lead, follow the instructions that came with your lead regarding maximum load while cable is wound. If in doubt, ensure that the entire cable is unwound. Using a coiled extension lead will generate heat which could melt the lead and cause a fire.

## 4. UNPACKING AND CHECKING



### 4.1 PACKAGING

Carefully remove the product from the packaging and examine it for any sign of damage. Check contents against the parts shown in Fig A. If any part is damaged or missing, please contact the Draper Help Line (see back page). Do not attempt to use the product!

The packaging material should be retained during the warranty period, in case the product needs to be returned for repair.

#### **Warning!**

- Some of the packaging materials may be harmful to children. Do not leave any of these materials in reach of children.
- If any of the packaging is to be thrown away, make sure they are disposed of correctly, according to local regulations.

5. IDENTIFICATION – FIG.A 



FIG.A

**Note:** For details of our full range of accessories and consumables, please visit [drapertools.com](http://drapertools.com)

## 6. PREPARE THE COMPRESSOR

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**Note:** Remove the plug from the socket before carrying out adjustment, servicing or maintenance.

It is extremely important to install the compressor in a clean, well ventilated area where the surrounding air temperature will not be more than 40°C. A minimum clearance of 500mm between the compressor and a wall is required.

### 6.1 FITTING THE AIR FILTER - FIG. 1

Remove the transit bung from the top of the head and screw the air filter (10) into the filter connection.

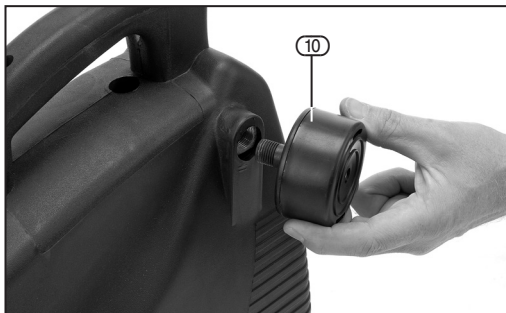


FIG. 1

When the installation procedure is complete, the compressor is ready for use. Make sure the pressure switch button (2) is positioned "OFF".

Switch the pressure switch button to the "ON" position to start the compressor.

### 6.2 INITIAL STARTUP – FIGS. 2 - 3

- Insert a euro connector into the air outlet connector (4) and open the regulator (3) fully.

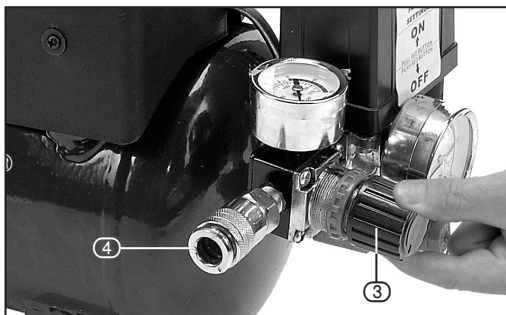


FIG. 2

- Turn the compressor on by pulling the pressure switch On/Off button (2) up.



FIG. 3

- Run the compressor for 30 minutes allowing the pressure to escape.
- Turn the regulator dial fully counter-clockwise allowing pressure to build up. Once the maximum pressure is reached, the pressure switch will automatically turn the machine off.
- Turn the compressor off, by pressing the pressure switch On/Off button down and open the regulator valve allowing the air to escape.

## 7. OPERATION

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### 7.1 BASIC COMPRESSOR OPERATION – FIG. 5

- Connect the air line to the compressor by pulling back the collar (4.1) on the air outlet quick coupling (4) and inserting the corresponding air coupling fitted on the air line. Release the collar so it slides back in place to secure the air coupling.

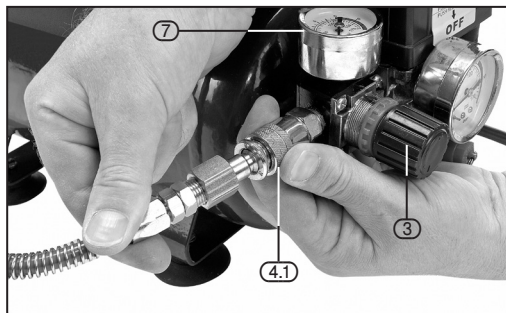


FIG. 4

- Turn the air regulator clockwise to its lowest setting and turn on the compressor by lifting the pressure switch On/Off button (2) upwards.
- Once the compressor has reached maximum pressure, open the regulator valve (3) to the desired pressure on the air outlet regulator gauge (7).

### 7.2 MOISTURE IN COMPRESSED AIR

Moisture in compressed air will form into droplets as it

comes from an air compressor pump. When humidity is high or when a compressor is in continuous use for an extended period of time, this moisture will collect in the tank. When using a paint spray gun or sandblast gun, this water will be carried from the tank through the hose, and out of the gun as droplets mixed with the spray material.

**Important:** This condensation will cause water spots in a paint job, especially when spraying other than water based paints. If sandblasting, it will cause the sand to case and clog the gun rendering it ineffective. A filter in the air line, located as near to the gun as possible, will help eliminate this moisture.

### 7.3 SAFETY VALVE – FIG.6

**⚠ Warning! Do not remove or attempt to adjust the safety valve!**

The valve (8) has been factory set to operate automatically in the event of an excess air pressure malfunction.

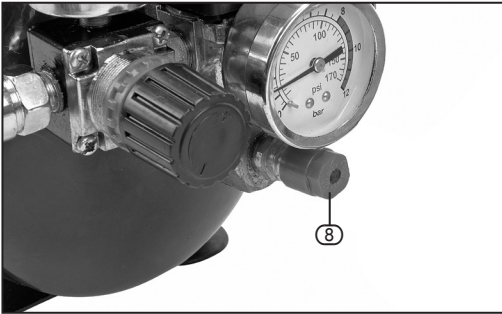


FIG. 5

### 7.4 THERMAL OVERLOAD PROTECTOR

**Caution:** This compressor is equipped with an automatic reset thermal overload protector, which will shut off the motor if it becomes overheated.

If thermal overload protector shuts motor OFF frequently, look for the following causes.

- Low voltage.
- Clogged air filter.
- Lack of proper ventilation.

**Caution:** If the thermal overload protector is actuated, the motor must be allowed to cool down before start-up is possible. The motor will automatically restart without warning if left plugged into electrical outlet and unit is turned on.

### 7.5 STORAGE

- When not in use, store hose and compressor in a cool dry place.
- Drain tank of moisture.
- Disconnect hose and hang open ends down to allow

any moisture to drain.



## 8. TROUBLESHOOTING

### 8.1 TROUBLESHOOTING GUIDE

Problem	Possible Cause	Remedy
<b>Compressor will not run.</b>	1. No electrical power.	1. Plugged in? Check fuse/breaker or motor overload.
	2. Blown fuse.	2. Replace blown fuse.
	3. Breaker open.	3. Reset, determine cause of problem.
	4. Thermal overload open.	4. Motor will restart when cool.
	5. Pressure switch fault.	5. Replace.
<b>Motor operating, but cannot run or runs slowly.</b>	1. Defective check valve or unloaded.	1. Replace or repair.
	2. Poor contacts, line voltage low.	2. Check connections, eliminate extension cord if used, check circuit with voltmeter.
	3. Shortened or open motor winding.	3. Replace motor. <b>Danger! Do not disassemble check valve with air in tank – bleed tank.</b>
<b>Fuses blow/circuit breaker trips repeatedly.</b> <b>Caution! Never use an extension cord with this product.</b>	1. Incorrect size fuse, circuit overloaded.	1. Check for proper fuse, use time-delay fuse. Disconnect other electrical appliances from circuit or operate compressor on its own branch circuit. Disconnect other electrical appliances from circuit or operate compressor on its own branch circuit.
	2. Defective check valve or unloaded.	2. Replace or repair. <b>Danger! Do not disassemble check valve with air in tank – bleed tank.</b>
<b>Thermal overload protector cuts out repeatedly.</b>	1. Low voltage.	1. Eliminate extension cord, check with voltmeter.
	2. Clogged air filter.	2. Clean filter (see maintenance section).
	3. Lack of proper ventilation/room temperature too high.	3. Move compressor to well ventilated area.
	4. Check valve malfunction.	4. Replace.
	5. Compressor valves failed.	5. Replace valve assembly. <b>Danger! Do not disassemble check valve with air in tank – bleed tank.</b>
<b>Knocks, rattles, excessive vibration.</b>	1. Loose bolts, tank not level.	1. Tighten bolts, shim tank to level position.
	2. Defective bearing on eccentric or motor shaft.	2. Replace.
	3. Cylinder or piston ring is worn or scored.	3. Replace or repair as necessary.
<b>Tank pressure drops when compressor shuts off.</b>	1. Loose drain cock.	1. Tighten.
	2. Check valve leaking.	2. Disassemble check valve assembly, clean or replace.
	3. Loose connections at pressure switch or regulator.	3. Check all connections with soap and water solution and tighten.

<b>Compressor runs continuously and air output is lower than normal/low discharge pressure.</b>	1. Excessive air usage, compressor too small.	1. Decrease usage or purchase unit with higher air delivery (SCFM).
	2. Clogged intake filter.	2. Clean or replace.
	3. Air leaks in piping (on machine or in outside system).	3. Replace leaking components or tighten as necessary.
	4. Broken inlet valves.	4. Replace compressor valves.
	5. Piston ring worn.	5. Replace piston and cylinder.
<b>Excessive moisture in discharge air.</b>	1. Excessive water in tank.	1. Drain tank.
<b>Compressor runs continuously and safety valve opens as pressure rises.</b>	1. Defective pressure switch.	1. Replace switch.
	2. Defective safety valve.	2. Replace safety valve with genuine replacement part.
<b>Excessive starting and stopping (auto start).</b>	Excessive condensation in tank	Drain more often.
<b>Air leaking from unloader on pressure switch.</b>	Check valve stuck in an open position.	Remove and replace check valve. <b>Danger! Do not disassemble check valve with air in tank – bleed tank.</b>

## 9. MAINTENANCE

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### 9.1 BASIC MAINTENANCE AND CHECKS – FIG.7

**Note:** Remove the plug from the socket before carrying out adjustment, servicing or maintenance.

In order to maintain the compressor, 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.

**Note:** Where necessary, ear defenders and safety goggles must be worn.

#### Daily checks:

- Before every use check the airline/regulator/separator.
- After every use adjust the line pressure back to zero.

#### Monthly checks:

- Remove the foam air filter element (14.1) for cleaning or renew if necessary.
- Rinse the filter with water and soap. Make certain the element is completely dry prior to re-fitting.

The cleaning/replacement of the air filter must be carried out more frequently if the compressor is operating in a dusty environment.



FIG. 6

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

If replacement of the supply cord becomes necessary, this will need to be completed by the manufacturer or an appointed agent in order to avoid potential safety hazards.

**Warning!** 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.

### 9.2 DRAINING WATER FROM THE TANK – FIG. 7

The drain cock (9) is located on the bottom of the tank. Use this valve to drain moisture from the tank daily to reduce the risk of corrosion.

- Reduce the tank pressure below 10psi.

- Drain moisture from the tank by opening the drain cock located underneath the tank.

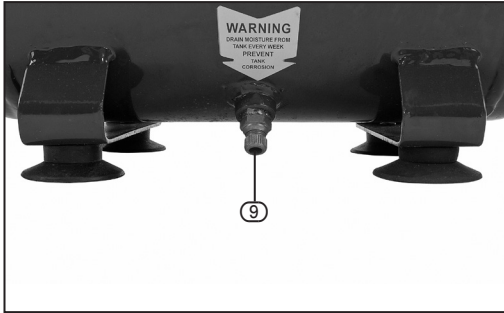


FIG. 7

## 10. WARRANTY



### 10.1 WARRANTY

Draper tools have been carefully tested and inspected before shipment and are guaranteed to be free from defective materials and workmanship.

Should the tool develop a fault, please return the complete tool to your nearest distributor or contact:

Draper Tools Limited

UK: Chandler's Ford, Eastleigh, Hampshire, SO53 1YF. England.

EU: Oude Graff 8, 6002 NL Weert (NL).

Telephone Sales Desk: +44 (0)23 8049 4333 or:

Product Helpline +44 (0)23 8049 4344.

A proof of purchase must be provided.

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 warranty period covering labour is 6 months from the date of purchase except where tools are hired out when the warranty period is 90 days from the date of purchase. This warranty does not apply to any consumable parts, any type of battery or normal wear and tear, nor does it cover any damage caused by misuse, careless or unsafe handling, alterations, accidents, 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 warranty applies in lieu of any other warranty expressed or implied and variations of its terms are not authorised.

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

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

Draper Tools Limited.

## 11. DISPOSAL



### 11.1 DISPOSAL

- 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 national 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 dispose of WEEE\* as unsorted municipal waste.



\* Waste Electrical & Electronic Equipment.