

SIP (INDUSTRIAL PRODUCTS) LIMITED

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**SIP DD LOW NOISE
OIL FREE DIRECT DRIVE
VERTICAL COMPRESSOR**

SIP CODE: 05483/05484

www.sip-group.com

**Please read and fully understand the instructions
in this manual before operation. Keep this
manual safe for future reference.**



INDEX

<i>Page</i>	<i>Content</i>
4	Safety Symbols Used Throughout This Manual
4 - 5	Safety Instructions
6 - 7	Electrical Connection
8	Guarantee
9	Getting To Know Your Air Compressor
10	Technical Specification
11 - 12	Assembly Instructions
13 - 15	Operating Instructions
16 - 17	Maintenance
18	Troubleshooting
19	Parts Information
20 - 21	05483 Spare Parts Drawing and List
22 - 23	05484 Spare Parts Drawing and List
24 - 25	Notes
26	UK - Declaration of Conformity
27	EU - Declaration of Conformity

SAFETY SYMBOLS USED THROUGHOUT THIS MANUAL



Danger / Caution: Indicates risk of personal injury and / or the possibility of damage



Warning: Risk of electrical injury or damage



Note: Supplementary Information



Important: Please read the following instructions carefully, failure to do so could lead to serious injury or damage to the product

SAFETY INSTRUCTIONS

Before using your compressor it is in your own interest to read and pay attention to the following safety rules. This manual cannot cover all eventualities; common sense must be applied.

1. Compressed air is dangerous. Do not point the jet of air at persons or animals and do not discharge compressed air against the skin.
2. DO NOT operate your compressor with any protection guard removed.
3. Repairs must only be carried out by a qualified engineer. If problems occur, contact your dealer.
4. Before carrying out any maintenance, make sure that the pressure is released from the air tank and that the compressor is disconnected from the electrical supply.
5. DO NOT leave pressure in the receiver overnight, or when transporting.
6. DO NOT adjust, or tamper with the safety valves. The maximum pressure is factory set, and clearly marked on the compressor.
7. DO NOT operate in wet or damp conditions. Keep the compressor dry at all times. Similarly, clean air will allow the compressor to work efficiently. Do

SAFETY INSTRUCTIONS

- not use in dusty or otherwise dirty locations. See pages 8.
8. Some of the metal parts can become quite hot during operation. Do not touch these until the compressor has cooled down.
 9. Always set the pressure regulator to the recommended setting for the tool.
 10. When spraying flammable materials e.g. cellulose paint, ensure that there is sufficient airflow and keep clear of any source of ignition.
 11. Before spraying any material always consult paint manufacturers instructions for safety and usage.
 12. Protect yourself. Goggles will protect your eyes from flying particles. Face masks will protect you against paint spray and fumes.
 13. Do not apply strain to electrical cables and make sure that air hoses are not kinked or wrapped around the compressor.
 14. When disconnecting air hoses or other equipment from your compressor, make sure that the air supply is turned off at the outlet and vent all pressurised air from within the tank and other equipment attached to it.
 15. Make sure that children and animals are kept well away from the compressor and any equipment attached to it.
 16. Make sure that all individuals using the compressor have had the necessary training and have read and fully understand these operating instructions.
 17. Make sure that any equipment or tool used in conjunction with your compressor has a safe working pressure exceeding that of the compressor.
 18. Be careful when transporting the compressor to prevent tipping over
 19. Permanently installed systems must be installed by a competent engineer.
 20. These compressors produce noise. Persons working near the compressor must be supplied with ear protection.



Warning: This compressor contains surfaces which may reach a high temperature during operation. Never operate with the motor housing removed.



Warning: Risk of electrical injury or damage

ELECTRICAL CONNECTION

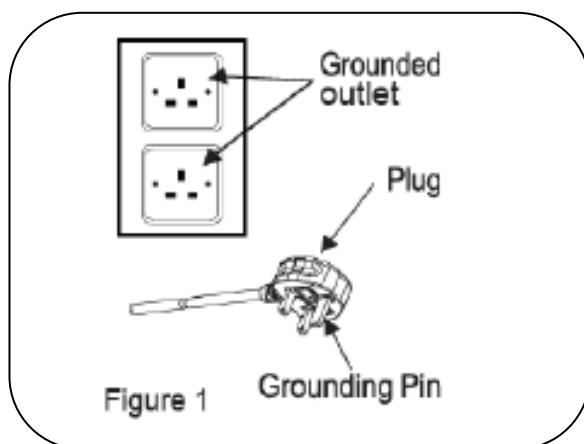


Warning Read these electrical safety instructions thoroughly before connecting the product to the mains supply.

This compressor is for use with a 230V UK domestic socket and should be grounded/earthed. Make sure that the product is connected to an outlet that has the same configuration as the plug (see Figure 1). If an extension lead is used, make sure the cable size is sufficient as to be able to take the current of the compressor.

Check with a qualified electrician if the grounding instructions are not understood or there is doubt as to whether the product is properly grounded. Do not modify the plug provided. If it will not fit the outlet, have the proper outlet installed by a licensed electrician.

Improper installation of the grounding plug will result in a risk of electric shock. If repair or replacement of the cable or plug is necessary, consult a qualified electrician.



We strongly recommend that this machine is connected to the mains supply through a Residual Current Device (RCD).

If you are not sure, consult a qualified electrician. DO NOT try to do any repairs.

ELECTRICAL CONNECTION



Note: Always make sure the mains supply is of the correct voltage and the correct fuse protection is used. In the event of replacing the fuse always replace the fuse with the same value as the original.



Warning: Improper use of extension leads may cause inefficient operation of the item which can result in overheating and motor damage.



Warning: The wires in the power cable of this product are coloured in accordance with the following code:
Blue = neutral / Brown = live / Yellow and Green = earth

GUARANTEE

This item is covered by a 24 month parts and labour warranty covering failure due to manufacturers defects.

This does not cover failure due to misuse or operating the item outside the scope of this manual - any claims deemed to be outside the scope of the warranty may be subject to charges Including, but not limited to parts, labour and carriage costs.

Consumable items such as air filters, wheels, etc are not covered by the warranty.



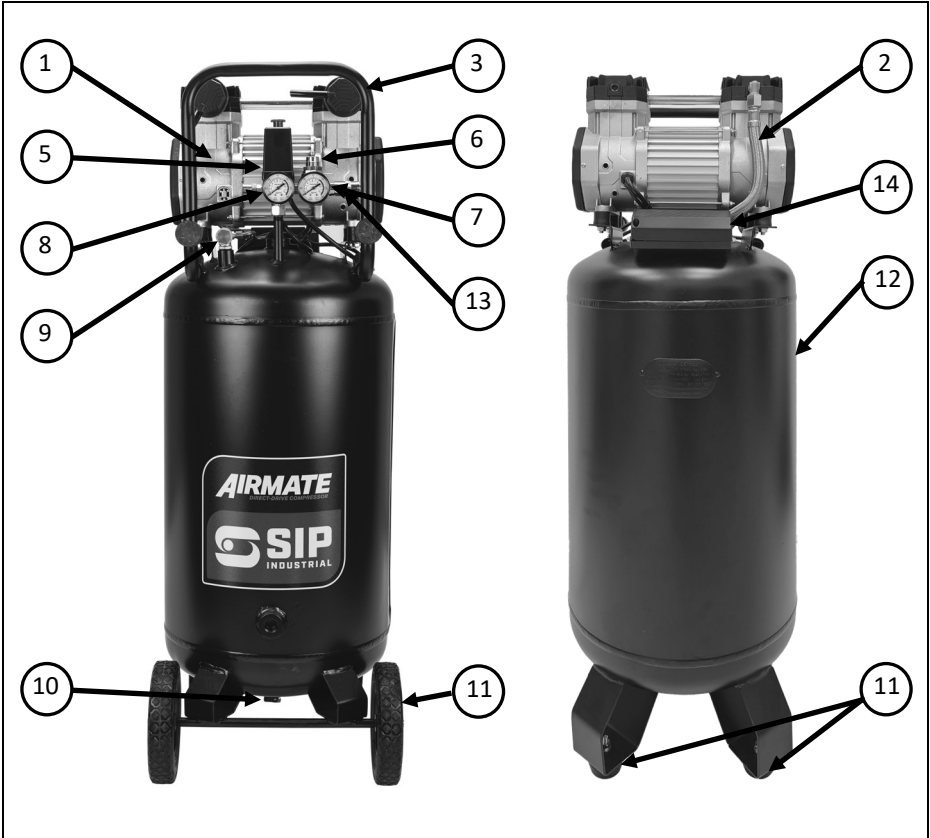
Note: Proof of purchase will be required before any warranty can be honoured.



Danger / Caution: Do not use in dusty environments; the area must be free of airborne contaminants including dust, abrasive particles, moisture or gases. Using the compressor in dusty environments will damage the pump and shorten the life of the compressor.

Damage caused by dust ingress is not covered under warranty

GETTING TO KNOW YOUR COMPRESSOR

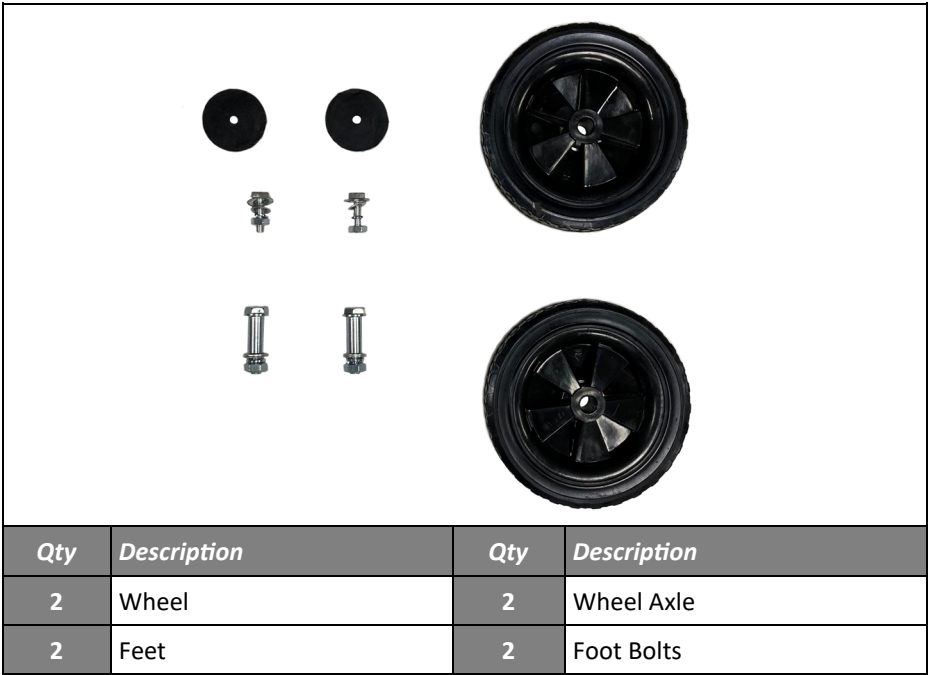


Item	Description	Item	Description
1	Motor Pump Unit	9	Non Return Valve
2	Delivery Pipe	10	Condensate Drain Valve
3	Air Filters	11	Rubber Feet
4	Solenoid Valve	12	Air Receiver
5	On/Off - Pressure Switch	13	Quick Connect Outlet
6	Air Regulator	14	Motor Capacitors
7	Working Pressure Gauge	15	Wheel
8	Air Receiver Pressure Gauge		

TECHNICAL SPECIFICATION

<i>Model</i>	<i>05483</i>	<i>05484</i>
<i>Input Voltage</i>	240v	240v
<i>Motor Power</i>	2HP / 1.5Kw	3HP / 2.2Kw
<i>Air Receiver</i>	50l	100l
<i>Max Pressure</i>	8 Bar	8 Bar
<i>Pump Speed</i>	2800RpM	2800RpM
<i>Piston Displacement</i>	9.6CFM	13.6CFM
<i>Free Air Delivered</i>	4.7CFM	9.0CFM
<i>Noise L_pA</i>	62	67
<i>Dimension L x W x H</i>	L.440mm x D.415mm x H.840mm	L.500mm x D.410mm x H.1150mm
<i>Weight</i>	30.5Kg	53.5Kg

ASSEMBLY INSTRUCTIONS



PREPARATION

Before beginning the assembly of the product make sure the assembly area is clean and ready to carry out the different operations required to build the compressor. Tools will be required (not supplied).

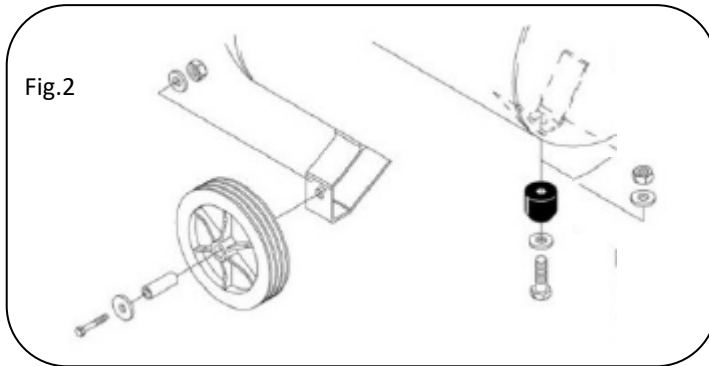
WHEEL & FOOT ASSEMBLY

1. Insert the bolt along with the washer through one of the wheels.
2. Fit the nut & washer and tighten the full assembly as indicated in the picture below (Fig.2).
3. Repeat this step for the second wheel.
4. Fit the rubber foot/feet with the nuts, bolts & washers provided

ASSEMBLY INSTRUCTIONS



Note: The images used in this section of the manual are for reference purposes only and may not depict the specific product.



Fit the handle using the bolts provided
(Where applicable) (Fig.3).

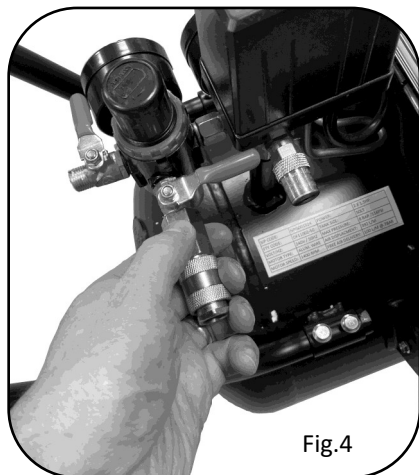
Do not over-tighten.

Fit the 2 quick connect air couplers.
(where applicable)

Fig.4

Use sealing tape or thread lock to create
a leak free seal.

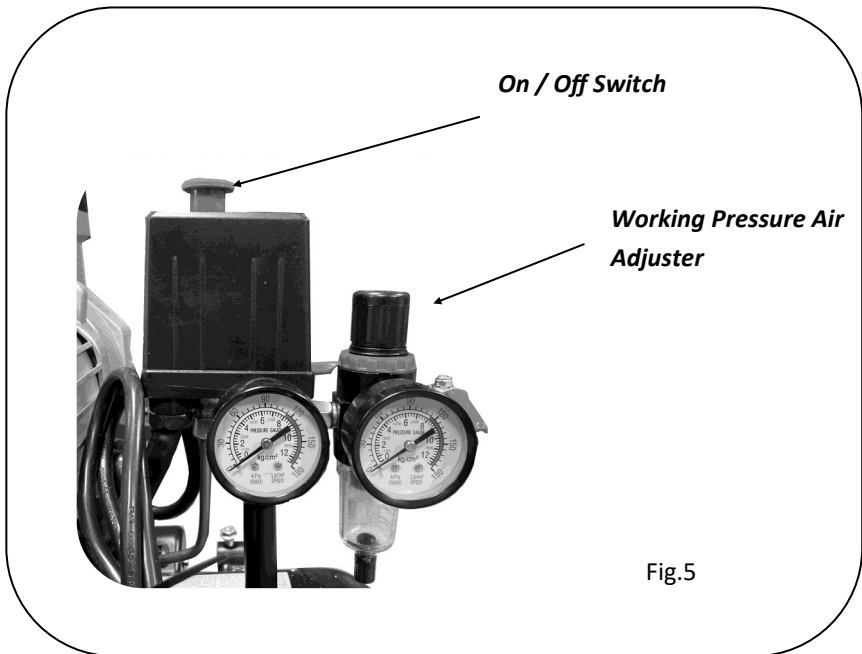
Fit these before starting the compressor
for the first time



OPERATING INSTRUCTIONS

BEFORE EACH START-UP

1. Press the ON/OFF switch down to the OFF position.
2. When using the air pressure regulator, turn the knob anti - clockwise until it stops. Fig.5
3. Attach air hose/accessories or air tools (not included) to the airline outlet coupler.
4. Now adjust the working pressure on the regulator for your air tool.
5. Most air tools work at @ 6Bar / 90psi. Check the specification before use.



OPERATING INSTRUCTIONS

HOW TO START THE COMPRESSOR

1. Ensure that the condensate drain valve is closed on the tank. Page 16, Item 6.
2. Plug in the mains lead.
3. Pull the ON/OFF switch knob **UP** to the ON position and allow tank pressure to build. Motor will stop when tank pressure reaches “cut-out” pressure (8Bar).
4. Turn the air pressure regulator clockwise until desired working pressure is reached.
5. The compressor is ready for use.
6. Once air is drawn from the tank, the compressor will automatically cut back in when the pressure in the tank is reduced to “cut-in” pressure (6.5 Bar) and starts pumping.



Danger / Caution: This compressor contains surfaces which may reach a high temperature during operation. Never operate with the motor housing removed. Do not touch the compressor whilst it is running.



Danger / Caution: Connect all the fittings and adaptor before the tank is full of air. It will allow you to connect and remove you air tools safety.



Danger / Caution: Escaping air and moisture can propel debris that may cause eye injury. Wear safety glasses when opening the drain valve.

OPERATING INSTRUCTIONS

HOW TO STOP & SHUT-DOWN THE COMPRESSOR

1. Press the ON/OFF switch knob down to the OFF position.
2. Unplug the mains lead.
3. Reduce the pressure in the tank until empty.
4. Open the tank drain valve to allow condensate to drain Page 16, Item 6.
5. Collect and dispose of according to local regulations. You may need to tip the tank to remove all the condensate.



Note: Ensure that the air receiver is drained daily using the drain valve and that the condensate collected is disposed according to local regulations.



Danger / Caution: Connect all the fittings and adaptor before the tank is full of air. It will allow you to connect and remove you air tools safety.



Danger / Caution: Escaping air and moisture can propel debris that may cause eye injury. Wear safety glasses when opening the drain valve.

MAINTENANCE

Before carrying out any operation, always turn off and unplug the mains plug. Ensure the compressor pump/s are cool prior to maintenance.

Drain the tank / air receiver (Fig.6).

You may need to tip the air receiver slightly using the handle to remove all the condensate.

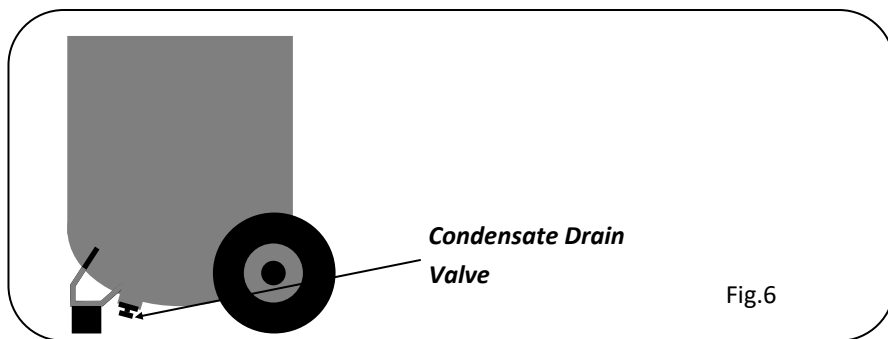


Fig.6

- ***Changing the Air Filter.***

The air filter should be changed after 100 hours of use.

Check and inspect regularly.

Please, get in touch with SIP customer service for spare parts information or visit the SIP website:

www.sip-group.com

Simply unscrew to remove.Fig.7.



Fig.7

MAINTENANCE

- **Cleaning & Storage.**

Clear dust from the machine at regular intervals, if used in a dirty environment the machine should be cleaned after each use.

If the machine is not going to be used for a long time, store it in the original packing and in a dry place.

SCREW RECOMMENDED TORQUE SETTINGS		
	Min Torque / Nm	Max Torque / Nm
Screw M6	9	11
Screw M8	22	27
Screw M10	45	55
Screw M12	76	93
Screw M14	121	148

GENERAL MAINTENANCE SCHEDULE			
FUNCTION	Every 100Hrs		
Intake Filter		✓	
Head Bolts Tensioning	Prior To Initial Starting & every 3 months thereafter		
Drain Receiver Condensate	Daily		



Danger / Caution: Do not use in dusty environments; the area must be free of airborne contaminants including dust, abrasive particles, moisture or gases. Using the compressor in dusty environments will damage the pump and shorten the life of the compressor.
Damage caused by dust ingress is not covered under warranty

1000HOUR / ANNUAL SERVICING

The servicing window is 1000hours or annually whichever comes first.



Servicing warranty: Eligibility for the second year (12month period) warranty relies upon a paid service being undertaken which must include the replacement of:-

Piston ring / seals

Valve plates

Valve plate gaskets / seals



Caution: Use and install only in areas of good ventilation, restricted air flow will cause damage not covered by warranty.

Never attempt to box the product in.

Leave a minimum of 500mm (1/2mtr) around and above the product to allow for air flow and ventilation.



Danger / Caution: Do not use in dusty environments; the area must be free of airborne contaminants including dust, abrasive particles, plasma cutting stream, moisture or gases.

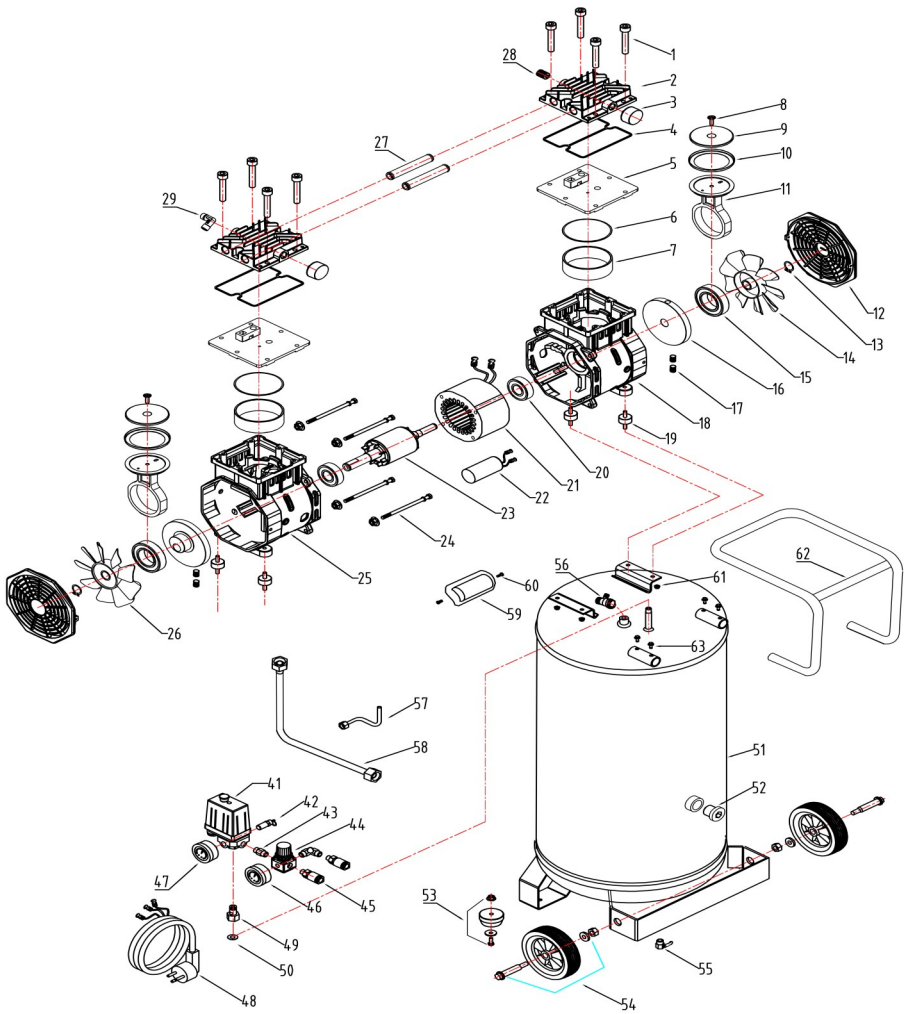
Using the compressor in dusty environments will damage the pump and shorten the life of the compressor.

TROUBLESHOOTING

<i>FAULT</i>	<i>CAUSE</i>	<i>REMEDY</i>
<i>Air Leaking From Pressure Switch</i>	Dirt or ingress preventing pastille from seating	Unscrew the top of the NRV (Non Return Valve). Remove pastille and clean.
<i>Poor performance; Frequent Start-ups.</i>	Duty cycle exceeded. Check gaskets & seals etc. Look for leaks.	Replace any faulty gas-kets etc inc valve plate.
<i>Compressor suddenly stops and restarts after several minutes</i>	Thermal cut-out stops motor due to overheating.	Clean air filter, fan vents, and mains supply. Confirm compressor is working within duty cycle.
<i>The compressor does not cut out at max pressure and safety valve blows off</i>	Potential pressure switch failure.	Replace pressure - competent trained personnel only

Always ensure that the air receiver is totally depressurised prior to working on the compressor - always isolate from the mains supply.

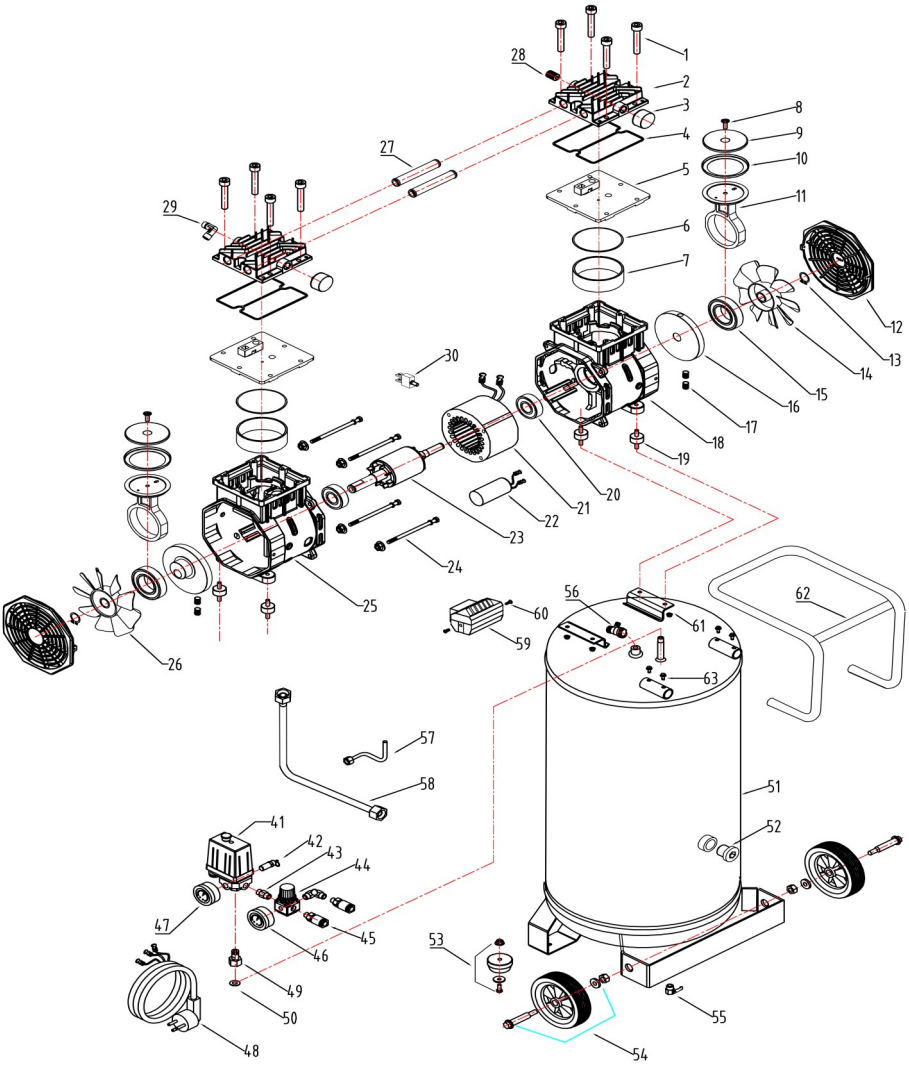
SPARES PARTS DRAWING 05483



SPARE PARTS LIST 05483

Ref. No	Description	Ref. No	Description
N/A	Complete Pump 2HP	26	Motor fan (cable side)
N/A	Valve plate kit	27	Air connection tube
1	Cylinder bolt	28	Sealing plug 1/4"
2	Black metal air filter 1/4"	29	Cylinder Elbow 1/4"-1/4"
3	Cylinder head	41	Pressure Switch 4 port 8BAR
4	Rubber ring for cylinder head	42	CE Safety Valve 1/4" 8.8-9.2BAR
5	Valve plate	43	Line connector
6	Rubber ring for cylinder	44	Small Regulator-4ports
7	Cylinder	45	Universal type quick coupler
8	Bolt for piston cover	46	Pressure Guage 50 0-8-12BAR
9	Piston cover	47	Pressure Guage 50 0-8-12BAR
10	Piston ring Ø63.7	48	Power Cable 1.3M 1.5mm2
11	Conrod	49	Connecting Adaptor
12	Fan cover	50	Sealing gasket of CT
13	Snap ring	51	Air tank vertical 50 Lt
14	Motor fan (no cable side)	52	Tank plug 1/2" with sealing ring
15	Bearing for conrod	53	Rubber foot 24LT
16	Crank	54	Black rubber Wheel 7.0"
17	Lock bolt for crank	55	Drain valve
18	Crankcase (no cable side)	56	Non-return valve for
19	Pump foot	57	Release Pipe
20	Bearing for motor	58	Delivery pipe
21	Motor stator 230V/50HZ	59	Steel capacitor cover
22	Capacitor 230V/50HZ	60	Lock bolt for capacitor cover
23	Motor rotor	61	Nut M6 for pump
24	Bolt for motor	62	U type handle for 50V
25	Crankcase (cable side)	63	Lock bolt M6 for U handle

SPARES PARTS DRAWING 05484



SPARE PARTS LIST 05484

Ref. No	Description	Ref. No	Description
N/A	Complete Pump 3HP	28	Sealing plug 3/8"
N/A	Valve plate kit	29	Cylinder Elbow 3/8"-3/8"
1	Cylinder bolt	30	Motor overload
2	Black metal air filter 3/8"	41	Pressure Switch 4 port 8BAR
3	Cylinder head	42	CE Safety Valve 1/4" 8.8-9.2BAR
4	Rubber ring for cylinder head	43	Line connector
5	Valve plate	44	Small Regulator-4ports
6	Rubber ring for cylinder	45	Universal type quick coupler
7	Cylinder	46	Pressure Gauge 50 0-8-12BAR
8	Bolt for piston cover	47	Pressure Gauge 50 0-8-12BAR
9	Piston cover	48	UK power cord 1.3M 1.5mm2
10	Piston ring Ø69.7	49	Connecting adaptor
11	Conrod	50	Sealing gasket of CT
12	Fan cover	51	Air tank vertical 100Ltr
13	Snap ring	52	Tank plug 1" with sealing ring
14	Motor fan (no cable side)	53	Rubber foot for 100L vertical
15	Bearing for conrod	54	Black rubber Wheel 8.0"
16	Crank	55	Drain valve
17	Lock bolt for crank	56	Non-return valve
18	Crankcase (no cable side)	55	Drain valve
19	Pump foot	56	Non-return valve
20	Bearing for motor	57	Release Pipe
21	Motor stator 230V/50HZ	58	Delivery pipe
22	Capacitor for 230V/50HZ	59	Plastic capacitor box
23	Motor rotor	60	Lock bolt for capacitor cover
24	Bolt for motor	61	Nut M6 for pump
25	Crankcase (cable side)	62	U type handle for 100V
26	Motor fan (cable side)	63	Lock bolt M6 for U handle
27	Air connection tube		

UK - DECLARATION OF CONFORMITY

We
SIP (Industrial Products) Ltd
Gelders Hall Road
Shepshed
Loughborough
Leicestershire
LE12 9NH
England

As the manufacturer within the UK, England, Scotland & Wales, declare that the

05483 - SIP DDV 2HP 50ltr Low Noise Oil Free Vertical Direct Drive Compressor

05484 - SIP DDV 3HP 100ltr Low Noise Oil Free Vertical Direct Drive Compressor

Conforms to the requirements of the following regulation(s), as indicated.

Supply of Machinery (Safety) Regulations 2008

Electromagnetic Compatibility - Directive 2014/30/EU

The Restriction of the Use of Certain Hazardous Substances in Electrical and

Electronic Equipment Regulations 2012

Noise Emissions in the Environment for Equipment for use Outdoors Regulations 2001

Simple Pressure Vessels (Safety) Regulations 2016

Noise measurements have been made in accordance with the internal control of production

(Schedule 45/Annex V). The declared noise values are as follows:

Guaranteed sound power level : 05483 - 62dB(A) , 05484 - 71dB(A)

And the relevant harmonised standard(s), including

BS EN 60204-1:2018

BS EN 1012-1:2010

BS EN61000-6-1:2007

BS EN61000-6-1:2007/A1:2011

BS EN ISO 3744:2010



Paul Ippaso
Managing Director
SIP (Industrial Products) Ltd
Date: 13 March 2025

**UK
CA**

EU - DECLARATION OF CONFORMITY

We

SIP (Machinery Europe) Ltd
ASM Chartered Accountants
First Floor Block One
Quayside Business Park
Dundalk
County Louth
Republic of Ireland

As the manufacturers authorised representative within the EC declare that the

05483 - SIP DDV 2HP 50ltr Low Noise Oil Free Vertical Direct Drive Compressor
05484 - SIP DDV 3HP 100ltr Low Noise Oil Free Vertical Direct Drive Compressor

Conforms to the requirements of the following directive(s), as indicated.

2006/42/EC - Machinery Directive
2014/30/EU - EMC Directive
2011/65/EU - RoHS Directive
2000/14/EC - Noise Emission Directive
2014/29/EU - Pressure Equipment Directive

Noise measurements have been made in accordance with the internal control of production (Schedule 45/Annex V). The declared noise values are as follows:

Guaranteed sound power level: 05483 - 62dB(A) , 05484 - 71dB(A)

And the relevant harmonised standard(s), including

EN 60204-1:2018
EN 1012-1:2010
EN61000-6-1:2007
EN61000-6-1:2007/A1:2011
EN ISO 3744:2010



Paul Ippaso
Managing Director
SIP (Machinery Europe) Ltd
Date: 13 March 2025



Please dispose of packaging for the product in a responsible manner. It is suitable for recycling. Help to protect the environment, take the packaging to the local amenity tip and place into the appropriate recycling bin.

Never dispose of electrical equipment or batteries in with your domestic waste. If your supplier offers a disposal facility please use it or alternatively use a recognised recycling agent. This will allow the recycling of raw materials and help protect the environment.



For help or advice please contact your distributor or SIP directly on:
Tel: 01509 500400
Email: sales@sip-group.com

or
customerservice@sip-group.com
www.sip-group.com