

PetrolMaster 240-10-10 B

A 444 001





Original Compressor Instruction Manual













3a

3b











ENGLISH

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1. General information

We recommend that checks, settings and maintenance work should always be carried out by the same person, or their deputy, and documented in a service log. If you have any questions, please always state the serial number, article number and designation of the compressor.

If the compressor is operated outside Germany, the statutory regulations (e.g.: Ordinance on Industrial Safety and Health) for operation of the compressor may be different to those in this instruction manual.

Observe without exception!

Before working with the compressor, find out how the compressor can be turned off quickly and how it can be completely depressurised.

Observe the safety instructions!

Read the instruction manual!

The operating company (owner / person responsible) is obliged to observe the instruction manual and to instruct all users of this equipment in accordance with the instruction manual. Instruction should be repeated once a year.

1.1 Symbols

Symbol	Signal word	Hazard level	Consequences if not observed	
	DANGER	Imminently hazardous situation	Death or serious injury	
	WARNING	Hazardous situation	Death or serious injury	
<u>~``</u>	CAUTION	Hazardous situation	Minor to moderate injury	
	NOTE	Hazardous situation	Property damage	

Important: Pay particular attention to these symbols!

Safety symbols on the compressor

Symbol	Meaning	Consequences if not observed		
		Injury or death of the operator		
li	Read the Instruction Manual	Damage to the compressor		
		Faulty operation of the compressor		
	Caution: Hot surface!	Burns when touching the surface		

Additional symbols on the compressor

Symbol	Meaning
	Oil-free / oiled compressed air

Other safety instructions relating to the petrol engine: see petrol engine instruction manual.

2. Scope of delivery

- Compressor
- Instruction manual for compressor
- Additional instructions (see Chap. 3)
- Warranty card
- 2 wheels, 2 rubber suction feet

4. Technical data

3. Applicable documents

- Spare parts list
- Documents accompanying compressed air vessel
- Instruction manual for petrol engine

Suction capacity	230	l/min
Inflation performance	140	l/min
Motor output	2.2	kW
Max. operating speed	3400	rpm
Compression final pressure	10	bar
Vessel capacity	10	I
Maximum permissible working overpressure of vessel	10	bar
Compressor unit oil quantity ¹⁾	0.1	I
LWA Sound power level according		
to DIN EN ISO 3744 (RL 2000/14/EC)	97	dB(A)
L _{PA4} Sound pressure level at distance of 4 m	79	dB(A)
Normal petrol	91	Octane
Fuel consumption	approx. 2	l/h
Fuel tank capacity	2	I
Overall dimensions: width x depth x height	505 x 445 x 725	mm
Weight	31	kg

¹⁾Initial filling: mineral oil up to 10°C. Under 10 °C, use fully synthetic oil. Subject to technical modifications. Illustrations may deviate from the original. Revised: June 2007

5. Conventional use

The PetrolMaster 240-10-10 B compressor is a mobile, oil-lubricated piston compressor that is suitable for generating and storing compressed air up to 10 bar. The maximum permitted compression pressure for this unit is 10 bar. The generated compressed air is only suitable for crafting and industrial tools.

The compressed air must not be used for medical and food applications or for breathing. Any other type of use requires consultation with the manufacturer. The compressor is powered by a petrol engine and remains independent of the mains power supply.

6. Safety instructions



DANGER

Uncontrolled movement of air hose when

quick-action coupling is opened \rightarrow Hold the air hose firmly!

DANGER

Risk of burns!

Operation of the compressor causes the engine, exhaust pipe, power unit and connecting hose to heat up.

WARNING

Danger of explosion \rightarrow Do not use the compressor in potentially explosive areas.

WARNING

Risk of poisoning from exhaust fumes! \rightarrow Do not operate the compressor inside closed rooms!

CAUTION

Danger of damage to hearing! → Wear ear protection! You may have problems communicating with others!

- The operating company is responsible for ensuring correct operation.
- Read the separate instruction manual for the vessel and petrol engine.
- Keep children and animals well away from the operation area.
- Compressors must only be operated and maintained by instructed personnel. Repairs may only be carried out by qualified specialist staff (Schneider Druckluft GmbH or its service partners).
- The compressor must not be manipulated, subject to emergency repair, or used in a non-specified manner.
- All safety devices must be present and correct. Do not remove, modify or damage any of the safety devices. The blow-off pressure at the safety valve preset ex works must not be adjusted.
- Do not adjust the idle speed control.
- Always depressurise the compressor prior to transportation.
- Always switch off the petrol engine and allow to cool prior to refuelling.

The following applies for all maintenance and repair work: Switch off the petrol engine (see Chap. 10.1) and allow the compressor to cool before starting work. Then depressurise the entire compressor. Detach the ignition cable from the spark plug.

- No inflammable, caustic or toxic gases must be sucked in.
- Only use original spare parts.
- Never operate the compressor without an intake filter.

7. Components

- 01 Compressor unit intake filter
- 02 Compressor unit
- 03 Connecting hose
- 04 Honda GX 120 drive motor
- 05 Oil dipstick
- 06 Oil dipstick for drive motor
- 07 Oil drain screw
- 08 Rubber suction foot
- 09 Vessel
- 10 Wheel
- 11 Overflow valve
- 12 Mist oiler
- 13 Throttle
- 14 Filter pressure reducer
- 15 Quick-action coupling for compressed air with oil content
- 16 Quick-action coupling for oil-free compressed air
- 17 Pressure gauge (working pressure)
- 18 Condensate drain screw
- 19 Safety valve
- 20 Pressure gauge (vessel pressure)
- 21 Motor switch
- 22 Pull cord starter handle
- 23 Fuel cock
- 24 Choke lever

8. Function

The drive motor (item 04) is combined with the compressor unit (item 02) to form a compressor block. Via the intake filter (item 01), which also serves as a silencer, surrounding air is drawn in and compressed in the cylinder. The compressed air flows through the

pressure valve installed in the cylinder head into the connecting hose (item 03), where it then flows through the overflow valve (item 11) into the vessel (item 09). The compressor operates continuously. When a maximum pressure of 10 bar is reached, the overflow valve opens and releases the excess compressed air. During this operating phase, the compressor unit and the petrol engine continue to operate without load. Compressed air bleeding decreases the vessel pressure and the overflow valve closes at approx. 8 bar, at which point compressed air is supplied to the vessel once more.

9. Commissioning

9.1 Conditions at the place of installation

\bigwedge

WARNING

Danger of explosion! \rightarrow Do not use the compressor in potentially explosive areas.

WARNING

Risk of poisoning from exhaust fumes! → Do not operate the compressor inside closed rooms!

- Environment must be dry and free of dust.
- Ambient temperature: min. +5°C, max. +35°C.
- Supporting surface must be flat.
- Min. 1 m away from buildings and other devices.
- No inflammable, caustic or toxic gases must be sucked in.

9.2 Transport

Always depressurise the compressor prior to transportation.Make sure you have a firm hold of the compressor before pulling.

Inside the vehicle:

- Transport the compressor in a vertical position.
- Secure the compressor against accidental movement.

9.3 Before first use

- 1. Before starting the compressor, read and make a mental note of the most important information in the chapter "Safety instructions".
- 2. Carry out a visual check of the compressor.
- 3. Retain the packaging material for the duration of the warranty and then dispose of according to applicable local regulations.
- 4. Check the oil level in the compressor (see Chap. 11.3).
- 5. Remove the transport plug from the crankcase and insert the accompanying oil dipstick. (Figure 6)
- 6. Mount the wheels and rubber suction feet.

9.4 Filling the mist oiler

Use a suitable oil to lubricate compressed air devices (item number B 770 000)!

- 1. Depressurise the compressor.
- 2. Unscrew the oil vessel from the mist oiler in an anticlockwise direction.
- 3. Fill the oil vessel up to a maximum of 75%.
- Screw the oil vessel onto the mist oiler in a clockwise direction.

(Figure 10a)

9.5 Adjusting the mist oiler

1. Make basic adjustments: carefully screw in the regulating screw (rotates in opposite direction to conical plastic seat) in a clockwise direction using a screwdriver. Unscrew the regulating screw 1 to 1.5 revolutions. (Figure 10b)

- 2. Check setting: connect a blow gun with a 10 m air hose to the compressor. Blow more initially until the hose is coated with oil. Direct the blow gun at a sheet of paper and blow out compressed air. A fine film of oil will appear on the sheet within a short time. While blowing the compressed air, oil precipitation is visible on the upper sight glass in the form of drops.
- 3. Adjust the setting according to the compressed air consumption. Check regularly.

Caution: the hoses for air with oil content should not exceed 10 m in length because large amounts of oil will be deposited in the hose instead of reaching the tool. If the hose is longer than 10 m, we recommend installing an air lubricator in the direct vicinity of the tools.

10. Operation

10.1 Insert

- 1. Check the fuel and oil level in the petrol engine.
- 2. Depressurise the vessel.
- 3. Connect the compressed air hose to the quick-action coupling of the compressor. See Chap. 10.2. Then, connect the consumer.

Starting the petrol engine

- 1. Set the fuel cock (item 23) to ON.
- 2. If the engine is cold, slide the choke lever (item 24) to the left.
- 3. Set the motor switch (item 21) to ON.
- 4. Slide the throttle 1/3 between MIN. and MAX.
- 5. Firmly pull the handle on the pull cord starter (item 22).

- 6. Gradually slide the choke lever back to the right as the engine warms up.
- 7. The compressor fills the vessel and is ready for operation.

(Figure 4)

Stopping the petrol engine/ switching off the compressor

- 1. Slide the throttle to MIN.
- 2. Set the motor switch to OFF.
- 3. Move the fuel cock to the left.

10.2 Compressed air bleeding

Connecting the air hose

Push the plug nipple on the air hose into the quick-action coupling. It locks automatically.(Figure 1a)

10.3 Maintenance unit

Oil-mist compressed air is used for staplers, nail guns, chisel hammers, impact screwdrivers and similar tools, whereas oil-free compressed air is used for sand blasting, inflating tyres and general blowing tasks. We recommend using separate air hoses for oil-mist and oil-free compressed air. Stickers highlight the difference between the quick-release couplings: oil can symbol for oil-mist compressed air, crossed out oil can symbol for oilfree compressed air.

10.4 Adjusting the working pressure

When the end pressure is reached, the operating pressure is set at the filter pressure reducer (item 14). The set operating pressure can be read off at the pressure gauge (item 17) of the filter pressure reducer.

- Pull the adjustment button up to release the locking mechanism. (Figure 2a)
- 2. The operating pressure is increased by turning clockwise (+). The oper-

ating pressure is decreased by turning anticlockwise (-). (Figure 2b)

 Push down the adjustment button to secure the filter pressure reducer against accidental turning.(Figure 2c)

Observe the specifications on compressed air consumption, operating pressure and flow pressure in the instruction manuals for the compressed air tools and devices used.

10.5 After use

- 1. Switch off the petrol engine (see Chap. 10.1) and allow the compressor to cool.
- 2. Depressurise the entire compressor.

Uncontrolled movement of compressed air hose when quick-action coupling is opened! \rightarrow Hold the air hose firmly!

- 1. Push the plug nipple on the air hose against the quick-action coupling and slide back the outer coupling ring.
- 2. Pull the air hose from the quickaction coupling. (Figure 1b)
- 3. Clean the compressor if necessary (see Chap. 11.8).
- 4. Depressurise the compressor (see Chap. 11.1).
- 5. Transport the compressor to the storage location (see Chap. 9.2).
- 6. Store the compressor (see Chap. 12).

11. Maintenance

11.1 Before each maintenance task

1. Switch off the petrol engine (see Chap. 10.1) and allow the compressor to cool.

- Depressurise entire compressor: connect blow gun to the quickaction coupling and discharge pressure from the vessel.
- 3. Detach the ignition cable from the spark plug.

11.2 Cleaning the intake filter on the compressor unit

- 1. Unscrew the cover on the filter housing. Remove filter insert.
- 2. Clean the filter insert using the blow gun, exchange the filter insert if necessary.
- 3. Insert the filter insert.
- 4. Screw on the filter housing cover. (Figures 3a, 3b)

NOTES

Do not blow out the intake opening. No foreign objects may enter. Never operate the compressor without an intake filter.

11.3 Checking the oil level on the compressor unit

- 1. Remove the oil dipstick. (Figure 6)
- Check the oil level and correct if necessary. (Figure 5)
- 3. Insert the oil dipstick again.

In very unfavourable conditions, condensate may find its way into the oil. This is indicated by milky discolouration of the oil. If this happens, the oil must be changed immediately.

11.4 Changing/topping up the oil in the compressor unit

Dispose of used oil according to applicable local regulations.

DANGER Hot oil!

 \rightarrow Wear protective gloves and safety glasses!

1. Run the compressor until warm.

- 2. Switch off the compressor (see Chap. 10.1).
- 3. Remove the oil dipstick.
- 4. Hold a container for used oil under the oil drain screw.
- 5. Unscrew the oil drain screw.
- 6. Drain used oil completely.
- 7. Screw the oil drain screw closed.
- 8. Add the prescribed quantity of oil.
- 9. Check the oil level (see Chap. 11.3) and correct if necessary.
- 10. Insert the oil dipstick again.(Figure 6).

NOTE

Mixing synthetic and mineral oil can damage the compressor!

11.5 Drain condensate from pressure vessel

NOTE: Condensate is a water pollutant. Dispose of condensate according to applicable local regulations.

- 1. Place a suitable vessel under the condensate drain.
- 2. To drain condensate, the pressure may be no more than 2 bar.
- Open the condensate drain valve: turn 1.5 revolutions in a clockwise direction. (Figure 7)
- 4. Turn the condensate drain valve anticlockwise to close.
- 11.6 Draining condensate from the filter pressure reducer

Semi-automatic drainage:

Open the condensate drain valve: turn quarter of a revolution in a clockwise direction. Under 1 bar, the condensate drains out automatically. (Figure 8a)

Manual drainage:

1. Turn the condensate drain valve anticlockwise to close.(Figure 8b)

 Push up the condensate drain valve. The condensate drains away.(Figure 8c)

11.7 Cleaning the filter insert

- 1. Depressurise the vessel of the filter pressure reducer.
- 2. Hold a suitable vessel under the condensate drain. Drain condensate.
- 3. Remove the vessel of the filter pressure reducer.
- 4. Unscrew the mounting screw for the filter insert in an anticlockwise direction.
- 5. Remove the filter insert and clean in soapy water (max. 50 °C).
- 6. Assemble the filter insert again in reverse order.
- 7. Mount the vessel on the filter pressure reducer.

(Figure 9)

11.8 Cleaning the compressor

Keep the cooling fins on the cylinder, cylinder head and aftercooler clean and free of dust.Clean with compressed air.

11.9 Check screw fittings

- 1. Check all screw connections for tight fit and retighten if necessary.
- Observe the tightening torques (tightening torques calculated according to VDI 2230).

12. Decommissioning

Preservation is necessary if the compressor is taken out of service for a long period (over 3 months) or is new from the factory and will not be operated until much later.

DANGER

A Hot oil!

 \rightarrow Wear protective gloves and safety glasses

- 1. Switch off the compressor (see Chap. 10.1).
- 2. Allow the oil to drain. See Chap. 11.4.
- 3. Fill corrosion inhibiting oil (viscosity SAE 30).
- 4. Insert the oil dipstick.
- 5. Run the compressor until warm.
- 6. Switch off the compressor.
- 7. Remove intake filter.
- 8. Fill a small quantity of corrosion inhibiting oil into the intake open-ings.
- 9. Allow the corrosion inhibiting oil to drain.
- 10. Refit intake filter and seal watertight with Scotch tape.
- 11. Drain condensate.
- 12. Depressurise the compressor.

Store the compressor in a dry location and do not expose to large temperature fluctuations.

12.1 Recommissioning

NOTE

Without an adequate oil supply, the compressor may become damaged.

- 1. Fill with oil (see Chap. 11.4).
- 2. Check all screw fittings.See Chap. 11.9.

12.2 Disposal

The device must be disposed of in accordance with the valid statutory regulations.

13. Troubleshooting

Observe the safety instructions and maintenance instructions!

If necessary, contact our service staff, see last page.

Refer to the petrol engine instruction manual for a description of other potential faults and necessary rectification measures.

	Fault	Cause	Re	emedy
А	Petrol engine does	No fuel in the tank	⇒	Fill the tank with fuel
	not start	Fault in the high-voltage component on the ignition system	ᡎ	Check the contacts on the spark plug and check the ignition cable
В	Compressor runs continuously during	Intake filter is badly contami- nated	⇔	Clean or replace intake filter.
	the loading phase	Air consumption of com- pressed air tools is too high	⇔	Check air consumption of compressed air tool and seek assistance from Schneider Druckluft Service
		Compressor leaking	⇔	Locate the leakage, contact Schneider Druckluft Service
		Excessive condensate in the vessel	Ŷ	Drain the condensate (see Chap. 11.5).
		Compressed air line leaking	⇒	Check compressed air line, plug leak.
		Condensate drain valve is open or missing	⇒	Close or replace
C	Compressed air escapes through the overflow valve when the compres- sor is idling.	Overflow valve leaking or defective	⇔	Clean or replace the overflow valve
D	Compressor fre- quently switches	Excessive condensate in the pressure vessel	⇔	Drain the condensate (see Chap. 11.5).
	between loading and idle phase	Overflow valve defective or set incorrectly	ᡎ	Replace the overflow valve or have adjusted by Schneider Druckluft Ser- vice
E	Safety valve blows out.	Vessel pressure is higher than the set switch-off pres- sure	⇔	Replace the overflow valve or have adjusted by Schneider Druckluft Ser- vice
		Safety valve is defective	⇒	Call Schneider Druckluft Service
F	Compressor unit overheats	Air supply is not sufficient	⇔	Make sure that adequate ventilation is provided
		Cooling fins on cylinder (cylinder head) contaminated	⇔	Clean cooling fins on cylinder (cylind- er head).
G	The oil level rises without oil having	Condensate collects in the oil	⇔	The compressor dimensions are too large, call Schneider Druckluft Service
	been added	High humidity.	⇒	Change oil
Η	Petrol engine makes unusual operating noises	Motor knocks or whines in the upper speed ranges	⇔	Check that the octane number of the fuel is correct (see Chap. 4)
I	Silencer on the petrol engine emit-	Carburettor set incorrectly	₽	Check the carburettor setting and adjust if necessary
	ting unusual noises	Air filter on the petrol engine clogged	₽	Replace the air filter on the petrol engine

	Fault	Cause	Rei	medy
J	Maximum pressure is reached, but petrol engine does not switch to idling mode	Overflow valve defective or set incorrectly	ſſ	Replace the overflow valve or have adjusted by Schneider Druckluft Service
K	Switch-on pressure has been reached but compressed air is not supplied to the vessel	Overflow valve defective or set incorrectly	ſſ	Replace the overflow valve or have adjusted by Schneider Druckluft Ser- vice

14. Maintenance table

The maintenance intervals apply under normal operating conditions. Under extreme operating conditions, the maintenance intervals are shortened accordingly.Petrol engine maintenance: see petrol engine instruction manual.

Tasks	Intervals	See chap ter	Date	Date	Date	Date
Intake filter • inspect • clean • replace	every week every 50 operating hours at least once a year	11.2				
Checking the oil level daily or every time prior to commissioning						
Changing the oil 1st oil change Mineral oil Synthetic oil 	after 50 operating hour- sonce a year every two years	11.4				
Filling/topping up oil	As needed	11.4				
Drain condensate from pressure vessel	After each use	11.5				
Drain condensate from filter pressure reducer	After each use	11.6				
Cleaning the filter insert	as required	11.7				
Cleaning the compressor	as required	11.8				
Check screw connec- tions	first time after 10 operating hours then every 500 operat- ing hours	11.9				

15. Compressor inspections

NOTE

The vessel papers accompanying the compressor are approval documents and must be kept throughout the service life of the vessel.

Special inspections are not required for this compressor.

We recommend that a "qualified person" perform a pressure test on the vessel after 10 years, depending on general levels of wear and tear.

A "qualified person" should be well informed about Ordinance on Industrial Safety and Health (formerly authorised expert)

These specifications only apply to the Federal Republic of Germany. For all other countries, the corresponding national regulations apply.

Tip: Most of our service partners have employees with expert qualifications.

16. Warranty conditions

The basis for all warranty claims is the proof of purchase. Damage caused by incorrect handling of the compressor shall not be covered by the warranty. If you have any questions, please provide us with the data on the specification plate of the compressor.

Corresponding to the statutory provisions, you will receive a guarantee warranty for 24 months on material and production faults on all products for private use only, and a 12-month guarantee on products used commercially or professionally.

10 years for the supply of spare parts.

The following shall be excluded from the warranty:

wear parts and damage caused by overloading the compressor, improper use, insufficient / no maintenance, improper installation, dust accumulation or lack of knowledge about working methods.

If warranty claims are to be honoured, the compressor must be in its original condition.

17. Accessories

Refer to our latest catalogue for the order numbers.

18. EC Declaration of Conformity

Compressor	Serial no.
PEM 240-10-10 B	A121007
Year of CE mark: 2008	

We declare under our sole responsibility that this product complies with the following guidelines and standards: 98/37/EC, 97/23/EC (Module A), 87/404/EEC, 2000/14/EC, 2004/108/EC, 2006/95/EC, DIN EN ISO 3744 / 12100, DIN EN 1012 / 60204-1 / 55014-1 / 286-1, EN 61000-3-2, -3-3, -3-11.

Marco Lodui

pp Marco Lodni Head of Development/Testing 08.2008

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Machine design: Piston compressor Sound power level LWA according to DIN EN ISO 3744 (RL 2000/14/EC): Measured value: 93 dB(A), guaranteed value: 97 dB(A). Nominated centre for the conformity evaluation procedure: 0036



Item	Art. no.	St.	Item	Art. no.	St.	Item	Art. no.	St.
Item	Order	Qty.	Item	Order	Qty.	Item	Order	Qty.
0050	G460753	1	0650	G402377	4	0820	E014142	1
0070	G460709	1	0660	G460586	4	0830	G470488	0.4 m
0500	G410465	1	0670	G410468	2	0840	E670014	1
0520	G205208	2	0680	E770258	1	0850	E700001	2
0530	G205031	2	0690	G401408	1	0870	E021442	1
0540	G460557	2	0700	G410469	1	0880	E041922	1
0550	G400130	2	0710	G223002	1	0890	G461053	1
0560	G720502	6	0720	G410470	1	0900	E770266	1
0570	G720702	12	0730	G406031	10	0910	E030051	1
0580	G720602	6	0740	G410471	1	0920	G720124	2
0590	G461149	4	0750	G410472	2	0930	G720602	2
0600	G461150	1	0760	G225027	1	0940	G471190	4
0610	G461151	2	0770	G461152	1	0950	G461153	1
0620	G404799	2	0800	G012035	1	9000	G870489	1
0640	G201013	2	0810	E042222	1			
A454001 / 02.08								

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