

Atlas Copco

5 Maintenance

5.1 Preventive maintenance schedule

Warning



Before carrying out any maintenance, repair work or adjustments, proceed as follows:

- Stop the compressor.
- Switch off the voltage and open the isolating switch.
- Close the air outlet valve and open the manual condensate drain valves.
- Depressurise the compressor.

For detailed instructions, see the next sections.

The operator must apply all relevant [Safety precautions](#).

Warranty-Product Liability

Use only authorised parts. Any damage or malfunction caused by the use of unauthorised parts is not covered by Warranty or Product Liability.

General

When servicing, replace all removed gaskets, O-rings and washers.

Intervals

Carry out maintenance at the interval which comes first. The local Atlas Copco Customer Centre may overrule the maintenance schedule, especially the service intervals, depending on the environmental and working conditions of the compressor.

The "longer interval" checks must also include the "shorter interval" checks.

Preventive maintenance schedule

Period (1)	Running hours (1)	Action
Daily	--	After stopping, drain the condensate from the air receiver . Check the oil level.
Monthly	50	For Full-Feature versions: check that condensate from the dryer is draining automatically.
"		For Floor-mounted versions: inspect the prefilter at the rear side of the compressor. Clean if necessary.
3-monthly	500 (2)	Inspect the air filter. Clean if necessary.
"	500	Check the belt tension.
"	"	For compressors with PDX filter: check the service indicator, replace the filter if necessary.
3-monthly	1000 (2)	Inspect the oil cooler; clean if necessary.


Period (1)	Running hours (1)	Action
“	“	For Full-Feature versions: inspect the condenser of the dryer; clean if necessary.
Yearly	2000 (2)	Replace the air filter.
“	2000 (3)	If Roto-Inject Fluid is used, change the oil and the oil filter.
“	2000	For compressors with PDX filter: replace the filter.
“	4000 (3)	If Roto-Xtend Duty Fluid is used, change the oil and the oil filter.
“	4000	Replace the oil separator.
“	--	Have the safety valve tested.

(1): whichever comes first.

(2): more frequently in a dusty environment

(3): The indicated oil exchange intervals are valid for standard operating conditions (see section [Reference conditions and limitations](#)) and nominal operating pressure (see section [Compressor data](#)). Exposure of the compressor to external pollutants or operation at high humidity combined with low duty cycles may require a shorter oil exchange interval. Contact Atlas Copco if in doubt.

Important

	<ul style="list-style-type: none"> • Always consult Atlas Copco if a service timer setting has to be changed. • For the change interval of oil and oil filter in extreme conditions, consult your Atlas Copco Customer Centre. • Any leakage should be attended to immediately. Damaged hoses or flexible joints must be replaced.
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5.2 Drive motor


General

Keep the outside of the electric motor clean for efficient cooling. If necessary, remove dust with a brush and/or compressed air jet.

Description

The motor bearings are greased for life.

5.3 Oil specifications

	Never mix oils of different brands or types as they may not be compatible and the oil mix will have inferior properties. A label, indicating the type of oil filled ex-factory, is stuck on the air receiver/oil tank.
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It is strongly recommended to use Atlas Copco lubricants. See section Preventive maintenance schedule for recommended oil change intervals.

For part numbers, consult the Spare Parts List.

Roto-Inject Fluid

Atlas Copco's Roto-Inject Fluid is a specially developed lubricant for use in single stage oil-injected screw compressors. Its specific composition keeps the compressor in excellent condition. Roto-Inject Fluid can be used for compressors operating at ambient temperatures between 0 °C (32 °F) and 40 °C (104 °F). If the compressor is regularly operating in ambient temperatures between 40 °C and 46 °C (115 °F), oil lifetime is reduced significantly. In such case it is recommended to use Roto-Xtend Duty Fluid.

Roto-Xtend Duty Fluid

Atlas Copco's Roto-Xtend Duty Fluid is a high quality synthetic lubricant for oil-injected screw compressors which keeps the compressor in excellent condition. Because of its excellent oxidation stability, Roto-Xtend Duty Fluid can be used for compressors operating at ambient temperatures between 0 °C (32 °F) and 46 °C (115 °F).

Roto-Foodgrade Fluid

Special oil, delivered as an option.

Atlas Copco's Roto-Foodgrade Fluid is a unique high quality synthetic lubricant, specially created for oilinjected screw compressors providing air for the food industry. This lubricant keeps the compressor in excellent condition. Roto-Foodgrade Fluid can be used for compressors operating at ambient temperatures between 0 °C (32 °F) and 40 °C (104 °F).

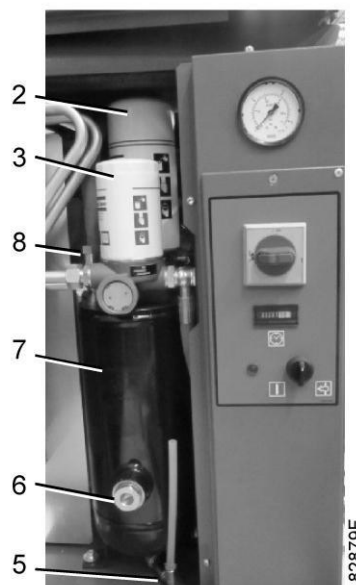
5.4 Oil, filter and separator change

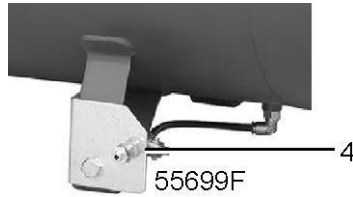
Important



Never mix oils of different brands or types. A label, indicating the type of oil filled ex-factory, is stuck on the air receiver/oil tank.
Always drain the compressor oil at all drain points. Used oil left in the compressor can shorten the lifetime of the new oil.
If the compressor is exposed to external pollutants, is being used at high temperatures (oil temperature above 90°C / 194°F) or is being used under severe conditions, it is advisable to change the oil more frequently. Consult Atlas Copco.

GX 2 up to GX 5





Step	Action
1	Run the compressor until warm. Stop the compressor, close the air outlet valve and switch off the voltage.
2	Remove the front and top panels.
3	Depressurise the compressor by unscrewing filler plug (8) one turn to permit any pressure in the system to escape.
4	Depressurise the air receiver by opening drain valve (4).
5	Drain the oil by opening drain valve (5). Close the valve after draining. Deliver the spent oil to the local oil collection service.
6	Remove oil filter (3) and separator (2). Clean the seats on the manifold.
7	Oil the gaskets of the new filter and separator and screw them into place. Tighten firmly by hand.
8	Remove filler plug (8) and fill oil tank (7) with oil until the level reaches the middle of sightglass (6). Ensure no dirt gets into the system. Refit and tighten filler plug (8).
9	Unscrew the air filter cover (1), remove the filter element and carefully pour approx. 0.1 l (0.03 US gal / 0.02 Imp gal) of oil into the compressor element. Do not overfill.
10	Re-assemble the inlet filter
11	Fit the bodywork panels.
12	Close drain valve (4) of the air receiver.
13	Run the compressor for a few minutes. Check the oil level.

5.5 Storage after installation

If the compressor is stored without running from time to time, consult Atlas Copco as protective measures may be necessary.

5.6 Service kits

Service kits

For overhauling and for preventive maintenance, a wide range of service kits is available. Service kits comprise all parts required for servicing the component and offer the benefits of genuine Atlas Copco parts while keeping the maintenance budget low.

Also, a full range of extensively tested lubricants, suitable for your specific needs is available to keep the compressor in excellent condition.

Consult the Spare Parts List for part numbers.