

## Penetrating oil

Super-concentrated penetrating oil containing molybdenum disulphide.

- Quickly releases parts locked by rust.
- Deposits a lubricating film.
- Protects against further corrosion.

Aerosol	500 ml	479323



#### Mild industrial cleaner

Rapid-action powerful cleaning agent. Removes grease, glue and dirt without leaving any traces. May be used on a variety of materials, including plastics. Can be sprayed in any position, even upside down.

- Excellent penetration without harming delicate surfaces.
- Ideal for preparation of surfaces for painting, gluing or repair.

Aerosol	500 ml	788336



# **Degreasing cleaner**

Concentrated degreasing cleaner, biodegradable. Clean, environmentally friendly product, non toxic, non flammable, phosphatefree

- Various applications: may be used in different concentrations according to cleaning and degreasing requirement for professional purposes.
- May be used in high pressure cleaning machines.

Sprayer	750 ml	582681
Can	51	582680
Can	20 I	582679



#### Anti-rust

Anti-corrosion treatment.

Protects cavities from the inside out, ensuring that treated parts remain intact.

Aerosol	500 ml	787695

# **Mechanical Maintenance**

Servicing & Maintenance



#### **Leak detector**

Air or gas leaks. For use on all gas, compressed air, LPG, butane and propane gas pipes and tanks. Rapidly detects leaks in connectors and weld seams on all gas systems, air brakes, and compressors.

- Non toxic
- Nonflammable, does not contain halogenated solvents.
- · Contains an anti-corrosion agent.
- · Aerosol with ecological propellant.

Aerosol 400 ml <b>471553</b>	
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#### **Crack detection kit**

Detects cracks and faults on weld seams and metal surfaces. Recommended for inspecting forklift masts, Contains:

- Degreasing cleaner,
- Colored fluid for tracking.
- Indicator to show up the coloured cracks.

To be used for forks for example. See machine attachements pages for Manitou fork range.

Pack of 3 aerosols	500 ml	781572
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#### **Seal cleaner**

For cleaning seal surfaces. For use on metal surfaces, wood and plaster. Not for use on plastics or synthetic fibres.

- · Rapidly unsticks old seals.
- Dissolves seal paste and carbon, grease and paint deposits.
- For use before applying sealing products.

Aerosol	400 ml	582695



# **Cleaner and degreaser**

For preparing surfaces prior to gluing. Removes all traces of grease after wiping surfaces or other less powerful solvents, such as petrol, gasoline, or white spirit.

- Dry solvent.
- Evaporates rapidly to allow immediate application of glues and adhesives.

Aerosol	520 ml	582662



#### **Contact cleaner**

Degreasing agents for lugs, terminals, cable clamps, relays.

- Removes moisture and water smears.
- Does not damage insulation materials or affect their electrical properties.
- Improves functioning of contactors and terminals.

Aerosol	400 ml	744812



#### **Brake cleaner**

For cleaning brake drums, pads and discs,

- Rapidly dissolves and removes oil, grease and fluid from brakes.
- Penetrates dirt and corrosion.
- Restores brake efficiency without requiring disassembly.
- Non-corrosive to metals.

Aerosol	600 ml	582350
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# **Liquid Coolants & Starting Aid**

Servicing & Maintenance



# MANITOU organic liquid coolant -35°C

High quality, ready to use liquid to optimize cooling performance and provide protection to -35°C. Inhibitor system based on use of organic molecules, which create a protective film on the metal contact areas.

- Long-lasting protection of engines and metal radiators against corrosion.
- Can be used all year round.
- Improves thermal transfer to coolant.

Can	5 I	894967
Can	20	894968
drum	210 I	894969



# MANITOU organic liquid coolant, type D -25°

Developed for long-lasting protection of aluminum radiators.

- · Integrated leak detector.
- Protection to -25°C.

Can	1,5 l	894508
Can	51	788246
Can	20 I	788247
Can	210 I	788248



#### **ADBLUE**

An aqueous solution consisting of 32.5% urea and 67.5% demineralized water. For vehicles equipped with SCR (Selective Catalytic Reduction) technology: heavy goods vehicles, buses, and MANITOU SCR technology machines.

- Converts 85% of pollutants (nitrous oxide or NOx) into harmless nitrogen and water vapor.
- Reduces harmful nitrogen oxide emissions.

Complies with Euro 4, Euro 5 and Euro 6 standards for the reduction of pollutant emissions.

Can	10 I	958575
drum	200 I	958576



# Anti-bacterial additive for diesel

Destroys bacteria, algae and mildew. Prevents clogging of filters, soiling and breakage of injectors. Does not affect the quality of the fuel. Can be used for both gasoline and domestic fuel.

- Fuel stabilizer keeps fuel fresh for 24 months. Treats 250 litres.
- Reduces pollutant exhaust emissions.
- Prevents drying out of seals.

Can	250 ml	53009479



#### Gasoline anti-freeze GNR

Lowers the freezing point of gasoline and domestic fuels. Counteracts the development of ice and paraffin crystals.

- Ensures greater energy efficiency.
- Helps keep the whole injection system completely clean.
- Protects the injection system against corrosion. Reduces fumes.

Can	11	895454



# **Starting fluid**

Assists starting of older types of petrol and diesel engines.

Aerosol	250 ml	479332
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Consult your dealer to find out if this attachment is compatible with your engine.



# Cyclone pre-filter

Essential attachment for better air filtration in dusty or humid atmospheres.

- · Reduces fuel consumption.
- · Reduces clogging of air filters

224713

#### Air Pre-Filter

Self-cleaning pre-filter:

- Continuous removal of impurities: maintenance-free.
- Specially developed for difficult weather conditions.
- Reduces fuel consumption and increases service life of air filters.

Self-cleaning pre-filter for MT, MLT and M/MC.	226611
Self-cleaning pre-filter for TMT, CD/CG, MSI.	240334



# Pre-Filter Tank

Reserve tank for pre-filter ref. 224713.





# Fuel filter funnel

Filters out impurities in the fuel during decantation. It separates the water and filters out various hydrocarbons, such as diesel, kerosene, petrol and oil.

- 3 different outputs.
- Filtration 50 pm.

11 I / min	787211
17 I / min	787212
22 I / min	787213



# Water/gasoline separator decanter filter

Filters the gasoline and separates the water into a bowl to protect the injection elements (pump and injectors).

- Transparent bowl to check the presence of water and the need for draining.
- Process facilitated by purge screw or valve

Pn example, refer to your Manitou dealer to fit the specific model to your machine.

254843



Refer to your instruction manual to find the model specific to your MANITOU machine.
Your dealer is there to help you. Don't hesitate to ask for advice.

# How to recognize MANITOU genuine filter?

MANITOU oil filters, with genuine quality, have a higher dirt holding capacity. With a longer service life, genuine filters are three times more resistant to mechanical loads. Genuine oil filters are also equipped with a bypass valve to ensure lubrication and avoid oil leakage and risks of total engine failure.



# MANITOU genuine filter

- 1. Defined pleat spacing, high pleat stability and approx. 15% more filter surface area.
- 2. Reliable and accurate sealing.
- 3. Correct valve opening pressure for the application.
- 4. The middle tube is perfectly stamped from one piece of sheet metal.



### Non-genuine filter

- Reduced dirt holding capacity through wavy filter media and smaller surface area.
- 2. Low dimensional accuracy leads to leakage.
- 3. Valve opens prematurely and unfiltered oil reaches the engine which in the worst case can lead to total engine failure.
- The middle tube consists of pieces of sheet metal wound diagonally. Rough metal seams can damage the filter paper and cause leakage.



#### **TURBO Pre-filter**

Pre-filter with Cyclone technology: captures up to 98% of impurities in the air before it enters the main air filter. Self-cleaning system: maintenance-free. For diesel engine power 18 to 186 kW.

- · Increases service life of main air filter
- Reduces maintenance costs.
- Simple, rapid installation.
- · Large air inlet surface area.

# **Specific features of Turbo II:**

- Stainless steel.
- · Black galvanized paint.
- · Proven toughness.



Model 3' - 35 to 93kW (Turbo II)	160946
Model 4' - 35 to 93kW (Turbo II)	223510
Model 4.5' - 88 to 132kW (Turbo II)	160947

## **Specific features of Turbo III:**

- Nylon coating for exceptional durability.
- Excellent resistance to vibrations and temperature (110°C).

Model 3' - 18 to 93kW (Turbo III)	744588
Model 4.5' - 73 to 186kW (Turbo III)	906126





#### The 500-hour kit contains:

- Oil filter
- Air filter
- · Gasoline pre-filter
- Gasoline filter
- Transmission filter
- Hydraulic filter

(Standard kit, excluding specific machine, may vary according to machine. Always refer to MANITOU operating instructions).

# FILTER KIT for the maintenance of your machine after 500 hours and 1000 hours

Specially adapted to your machine, the filter kit contains all the elements needed for the regular maintenance of your MANITOU machine (except oil). In accordance with the manufacturer's recommendations, it is a complete pack, with peace of mind guaranteed and an attractive price.

#### The 1000-hour kit contains:

The same as the 500-hour kit + 1000-hour specific additions:

- · Safety cartridge
- Air filter

Examples of filter kits according to your MANITOU machine:



There are more than 253 items to cover almost 126 types of machine: CONTACT YOUR DEALER, TO BE SURE TO FIND A KIT THAT SUITS YOUR NEEDS!

	pack	Kit 500 h	DEUTZ Engines	MLT 634 120 ST3B / MLT 634 120 PS ST3B / MLT 735 100 ST3B / MLT 735 120 ST3B /	947843	
	kit 1	kit 1000 h	DEOTZ Eligilios	MLT 735 120 PS ST3B / MLT 741 100 ST3B / MLT 741 120 ST3B / MLT 741 120 PS ST3B	947868	
	nack	pack Kit 500 h Kit 1000 h	KUBOTA Engines	MLT 625-75 H ST3B / MT 625 H COMFORT ST3B / MT 625 H TURBO ST3B	958519	
	pack		KODO IA LIIGIII63	WELL 023-73 TESTSD / WITE 023 TESTSWIT OF THE STOLE / WITE 023 TESTS OF THE	958534	
MLT	nack	Kit 500 h	JOHN DEERE Engines	MLT 840 137 ST3B / MLT 840-115 PS / MLT 840-137 PS	947858	
	pack	Kit 1000 h	JOHN DEENE ENGINES	WILL 040 137 3130 / WILL 040-113 F3 / WILL 040-137 F3	947883	
		Kit 500 h		MLT 737 130 PS D ST4 S1 / MLT 635 130 PS D ST4 S1 / MLT 733 105 D ST4 S1 /	959717	
	pack	Kit 1000 h	PERKINS Engines	MLT 733 105 D S14 S17 MLT 033 130 PS D S14 S17 MLT 733 105 D S14 S17	050710	
		KIL TUUU II			959718	
	pack	ck Kit 1000 h DEUTZ Engine	DEUTZ Engines	Engines MT 732 ST3B / MT 732 ST3B / MT 932 ST3B	947859	
	puon		22012 Eliginos		947884	
MT	pack	Kit 500 h	PERKINS Engines	PERKINS Engines	IS Engines MT 1440 PRIVILEGE / MT 1440 EP PRIVILEGE / MT 1840 PRIVILEGE / MT 1840 EP PRIVILEGE /	947847
1011	Kit 1	Kit 1000 h	r Emanos	MT-X 1840 / MT-X 1440 E3 / MT-X 1840 E3	947867	
		Kit 500 h	PERKINS Engines	MT835 ST3B / MT835 ST3B / MT1135 ST3B / MT1335 ST3B	958443	
	pack Kit 1000 h PERKINS Eng		i Liikiivo Liigiiles	N11033 3130 / 1811033 3130 / 18111133 3130 / 18111333 3130	958444	
M		Kit 500 h		M26-2 ST3B / M30-2 ST3B / M26/30-4 ST3B / M40/50-2 ST3B / M40/50-4 ST3B	958333	
IVI	раск	pack Kit 1000 h	r LIIKINS LIIGIIIes	les   IVIZO-Z 513B / IVI3U-Z 513B / IVIZ0/3U-4 513B / IVI4U/5U-Z 513B / IVI4U/5U-4 513B	958338	
MI	pack	Filter kit 500H	YANMAR Engines	MI 20 D S2 / MI 25 D S2 / MI 30 D S2 / MI 35 D S2	958524	
IVII	раск	Filter kit 1000H	TAINIVIAN LIIGINES	1911 20 0 32 / 1911 23 0 32 / 1911 30 0 32 / 1911 33 0 32	958539	
ATJ	pack Filter kit 500H Filter kit 1000H	KUBOTA Engines	180 ATJ RC E3 / 160 ATJ PLUS Euro 3 / 180 ATJ Euro 3 / 180 ATJS Euro 3	947854		
AIJ		Filter kit 1000H	KODOTA LIIGIIIes	100 A10 110 E37 100 A131 E03 E010 37 100 A13 E010 37 100 A133 E010 3	947879	



Manitou cares about the maintenance of your machine: subscribe to a Comfort service contract, see chapter Services & Solutions.



# Why choose MANITOU filters?

Because they ensure:

- Quick and easy installation on your machine.
- Economy: less frequent replacements.
- Security: performance matches your machine.
- Rapid delivery time: international logistics and network.
- Manufacturer's guarantee.

#### Oil filter

The oil filter is essential to the proper functioning of the engine. It continuously traps external impurities (dust, sand, volatile elements, etc.) and internal impurities (carbon deposits and engine wear particles) and plays an active part in cleaning the engine.

## Why change the oil filter?

If you do not replace your filter regularly, there is a high risk of clogging, resulting in poor lubrication and premature wear of your engine.

#### Fuel filter

The quality choice: As well as filtering out impurities, MANITOU fuel pre-filters are involved in extracting water contained in the diesel. Water is heavier than oil and separates out into the pre-filter's water tank. The diesel, which is lighter, is filtered, then directed to the main filter. Reliable separation of water and diesel helps to extend the service life of the engine's sensitive components (injection pump, fuel injectors) by protecting them from corrosion. The main filters have a high capacity to filter out the finest particles, meeting the increased requirements of the new motorization standards.

MANITOU fuel filters incorporate in the same system filtration, water separation, heating and cooling down of fuel. Our fuel filters are guaranteed to be pressure-resistant, even in the lowest temperatures, or during startup. In all circumstances, they ensure a supply of clean fuel.

## Why change the fuel filter?

A well-maintained fuel filter is essential for proper functioning of the engine. It ensures protection of all the engine's components and long-lasting performance of your MANITOU machine. It also has a positive impact on fuel consumption. For the proper functioning of your engine, your fuel filters should be changed every year or every 500 hours of service.

## **Hydraulic filter**

The hydraulic oil circuit involves more than 100 litres of oil. Hydraulic oil filters are important, because they act as the machine's kidneys. The slightest particle of contamination, such as sand, welding spatter, fibres, particles of metal or even rust may damage a pump and the components of the hydraulic system. Hydraulic filters are usually installed on the return-to-tank circuit in order to capture the impurities generated or introduced into the circuit. Failure to adhere to the hydraulic filter changing schedule may lead to malfunction, premature wear, or even breakage of components.MANITOU has developed the performance of its filters by offering you a "High-Efficiency" hydraulic cartridge for an improved filtration quality. These cartridges increase filtration capacity for enhanced protection of your components.

#### Air filter

The function of the air filter is to protect your engine from attack by external contaminants. An engine can take in up to 500 cubic metres of air every hour. That air is more or less contaminated with impurities, depending on the environment (the country, climate, season, area of development). This contains dust, which eventually forms an abrasive paste that threatens the engine's functioning. It is recommended to wash the air filters very regularly, and to replace the main filter every six months (500 hours) and the safety filter every 12 months (1000 hours).

## Why change the air filter?

An air filter that is clogged or in poor condition may cause malfunctions and therefore premature wear of the engine. Loss of vehicle performance. Increased fuel consumption. Increased emission of polluting gases. To maintain the MANITOU performance level, replacement and servicing schedules must be adhered to. Carrying out preventive maintenance ensures cost efficiency!





# Manitou FILTRATION OUR RECOMMENDATIONS

MANITOU filters: a range of high quality, high-performance filters.

MANITOU filters are perfectly suited to your machine's needs. Designed specifically, MANITOU filters are developed and qualified for your machine type. Compatible with your working environment, they ensure maximum efficiency.

MANITOU parts claim superior qualities and allow engines to withstand very variable atmospheres: humidity, dust, high and low temperatures, and significant internal stresses (extreme temperatures, flow, high pressure, etc.).

You now have access to more than 750 items, in order to offer you a longer service life, MANITOU filters have a high resolution filter medium, with the finest filtration, and a bigger filter surface than a standard filter.

With their high dust and particle retention capacity, they protect key components of your forklift against damage and ensure the longevity of your machine.

#### Replacement frequency

- To maintain the original qualities of your MANITOU machine, it is essential to follow the filter replacement intervals.
- Simplify servicing and enjoy all the advantages of MANITOU's know-how by subscribing to a service contract.
- · Find out more.

	Daily -10 hrs	1 year - 500 hrs	1 year - 1000 hrs
Pre-filter clean	Clean		
Air filter clean		Replace	
Air filter safety cartridge			Replace
Fuel filter		Replace	
Engine oil filter		Replace	
Transmission oil filter		Replace	
Hydraulic fluid return filter		Replace	
Hydraulic pump filter		Replace	

• Indicative data may vary according to model type. Always refer to the specific service manual for each machine. Consult your MANITOU dealer.





# **Electric grease pump**

Electric grease gun

Grease gun with powerful 18V electric motor powered by rechargeable battery.

Use grease cartridge or bulk. Pressure output 500 bar. Approximate flow rate 150 gr / min with NLGI 2 grease.

Malette equipped with:

- 1 220V battery charger.
- 2 rechargeable batteries.
- 1 flexible and hydraulic angle.

959291



## **Grease Gun**

Lightweight and easy to use, it facilitates all lubrication operations with its mechanical qualities and long-lasting performance.

Weight without grease: 1.3 kg. Ergonomic handle and removable base to:

- Increase compression
- · Facilitate insertion of cartridges.

661591



#### Lever grease pump

Cast iron head.

• Use for 400g grease cartridge and loose grease.

Standard model	38720
Polyamide hose	164388
Hose nozzle	164389



## **Lever pump**

Cast iron head with non-return valve.

Air valve and filler valve diam.12.5 mm.

• Use for 400g grease cartridge and loose grease.

Industry model	788307
Rubber hose	788352
Hose nozzle	164389