



Expertise and Service everyday!

October, 2021

# MAINTENANCE PARTS



Check the performance of your machine to cope with winter!







MANITOU advise keeping your machine in optimum working conditions during severe season.

### MAIN SPARE PARTS TO MAINTAIN DURING WINTER

WINDSCREEN ENVIRONMENT

**BATTERIES** 

HYDRAULIC OIL & ANTIFREEZE

LED LIGHTING



When driving a handling machine, the driver's visibility is essential for both his safety and that of his working environment.

In winter, when weather conditions are difficult and days are getting shorter, it is essential to have a machine equipped with:

- Tank filled with windshield washer fluid suitable for winter conditions
- New and cleaned wiper blades
- Windshield without splinters or cracks on the glass part

# lce washing Special Winter





Designation	P/N
lce washing - 5 L canister	486424
Ice washing - 1 L canister	490402

#### **Product description**

Ready to use. Special Winter - 20° for defrosting glass parts. Based on fully biodegradable bioalcohol. Contains a bittering agent against the risk of ingestion

- Winter: used in its pure state, anti-ice and anti-freeze function up to -20 °C.
- Summer: cleans, degreases, anti-static and anti-mosquito. Ensures perfect visibility.
- 5L or 1L canister packaging.

# WINTER OFFER



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### Windscreen wiper



Wipers are essential for good visibility when driving your Manitou machines.

In the fields as well as on the road, bad weather, rain and sludge reduce the vision of your workspace.

You must have a clean windshield to maintain an optimal field of vision from your driver's seat and continue to work safely.

Your windshield wipers are subject to heavy wear and tear. Rubber blades are in the front line of outdoor conditions: frozen winter temperatures and frozen windshields, wide temperature variations throughout the year: the blades wear naturally.

#### When to change your windshield wipers?

Do you see streaks or veils appear on your windshield, the brushes are cut or lift? Think about your safety: change your windshield wipers at the first signs of wear,not to damage your windshield and avoid risks due to a lack of visibility.

#### Why using genuine Manitou windshield wipers?

Selected for the quality of their materials and their adapted design, the rubber blades perfectly follow the shape of your windshield for optimal wiping.

Manitou wiper blade arm stiffeners provide the necessary strength for daily use, regardless of the frequency of weather conditions.

To be sure to use windshield wipers that fit your windshield and are high quality, use Genuine Manitou windshield wipers.



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### Windscreen range

An unobstructed field of view inside your handling machine and the quality of the glazing contribute to your working comfort and safety.

# The windscreen, your shield to optimize your work in winter!

The windscreen is a component of the bodywork and contributes to passive resistance in the event of an impact. Constantly exposed to splashes and the risk of falls during handling, he is also exposed to extreme outside temperatures, which are also a risk for the driver.

All our front windows are made of tempered glass: 5 times stronger than a conventional glass, in case of breakage it breaks into a multitude of harmless debris. In winter, in addition to lack of visibility and visual discomfort, an impact can spread at any time. Stone projections, bad weather, impact of branches and crossing irregular ground can transform a simple crack into a complete breakage of the wind shield.





In extreme cold, water infiltration and freezing in a single chip can cause a whole wind shieldto crack, accelerated by the thermal shock when heating the cabin.

Don't let winter conditions overtake you, keep your Manitou in good visibility!

#### Why order a Manitou original glass?

Manitou windows have been designed for their quality and perfectly fit to your cabin. The quality of the glass ensures a good vision in line with the design of the machine.

Manitou windows comply with European regulation 43R, which requires precise and approved marking on each window. You will find there: name of the manufacturer Manitou, regulatory numbers corresponding to the country of origin of manufacture and the approval laboratory, glazing safety technique and Manitou reference.

If you have any questions, ask your dealer for advice.



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**HYDRAULIC OIL &** ANTIFRFF7F

LED LIGHTING



In your handling work, your Manitou machine is subject to many external stresses and strains. In winter, extreme temperatures, vibrations, repeated starts and bad weather cause energy and heat losses that draw from the charge level of your battery.

In addition, the heat waves of the summer have severely weakened the batteries: the heat causes self-discharge, which accelerates their ageing. In hot weather, the machines are used with air conditioning, even for short distances. The batteries are therefore heavily stressed and do not have time to recharge.

When winter comes, start your engine requires more energy from batteries that have already been well proven. One night of freezing with aged battery, and it's out of order.



### Starter batteries - 12V





12 V starter batteries, for professional use, recognized for their performance. High reliability, optimal power and adapted to the needs of your engine, Manitou batteries have a long service life.

- Maintenance-free
- 24-month guarantees
- Ready to use: clean and practical to handle!
- Perfect fit in battery box

207 X 175 X 190 IIIIII							
47 Ah / 450 A 207 x 175 x 190 mm	546193	77 Ah / 760 A 278 x 175 x 165 mm	546194	110 Ah / 750 A 348 x 175 x 232 mm	247068	145 Ah / 1000 A 360 x 253 x 232 mm	745150
62 Ah / 540 A 242 x 175 x 190 m	80147	95 Ah / 680 A 306 x 173 x 222 mm	485215	120 Ah / 850 A 510 x 175 x 195 mm	737688	180 Ah / 1000 A 513 x 223 x 223 mm	283831
74 Ah / 680 A 278 x 175 x 175 mm	275727	105 Ah / 850 A 315 x 175 x 205 mm	689092	135 Ah / 1000 A 513 x 175 x 209 mm	505534	180 Ah / 1235 A 513 x 223 x 223 mm	303985
74 Ah / 680 A 278 x 175 x 190 mm	546190	110 Ah / 900 A 348 x 175 x 235 mm	282080	140 Ah / 800 A 513 x 189 x 223 mm	544200		ByManitou able from



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**HYDRAULIC OIL & ANTIFREEZE** 

LED LIGHTING

The hydraulic system is an essential component of your handling equipment. It is heavily solicited during each use. Manitou hydraulic oils are designed to keep your machine's circuit running in all weathers.

- Optimal performance
- Long life of the hydraulic system
- Working safety
- Anti-oxidation properties
- Pour point between -39° and -63°
- Excellent thermal stability
- High shear strength
- Perfect cold flowability





### Hydraulic oil ISO VG22 Extreme cold





Designation	L	P/IN
HYDRAU EXTREME COLD HV22 -45°	20 L canister 209 L canister	964854 964908
HYDRAU BIO HEES 32 -22°	20 L canister 209 L canister	52698506 52698507

Recommended hydraulic fluid for all industrial truck lifting systems working at very low temperatures (e.g. refrigeration system).

- Exceptionally low pour point and cold viscosity: trouble-free start-up down to -45 °C
- High shear strength
- Anti-wear and anti-corrosion additive for optimal protection of your equipment
- Compatible with mineral hydraulic oils



Coolant -37°



Designation	P/N
5 L canister	894967

High quality ready-to-use liquid to optimize cooling performance and obtain protection down to -37°. Inhibition system based on the use of organic molecules that create a protective film on the metal in contact.

- Protects engines and metal radiators against
- Improves heat transfer to the coolant.
- Can be used in all seasons.



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**LED LIGHTING** 



You work in all weathers, early in the morning and late in the evening. The lighting of your machine is essential: it allows you to see, for the proper operation of the machine and the operations to be carried out, while having the safety of being seen.

We developed a range of lighting to increase the accuracy and efficiency of your work in the dark. LED work lights cover a very wide field of view with exceptional light intensity and very low consumption (3 to 4 times less than halogen). LED headlights also have a longer life span. For more efficiency, equip your machine with LED lighting!



### Led lighting range

**LED Work light - Lateral** 



Designation	P/N
LED work light	52540901

**LED Work light** 



Designation	P/N
LED work light	52536784
LED work light	947997

**LED Work light - Front** 



Designation	P/N
LED light - Right	52562044
LED light - Left	52562043

Contact your dealer to find p/n associated to your machine type