

MMS MS380-C

MMS Mini Skid Steer Loader MS380-C User Manual

Model: 380 Parallel Crawler With Rato Engine

1. INTRODUCTION

This manual provides comprehensive instructions for the safe and efficient operation, maintenance, and troubleshooting of your MMS MS380-C Mini Skid Steer Loader. This compact, powerful machine is designed for various tasks including digging, bulldozing, landscaping, and material handling in diverse environments such as construction sites, yards, and docks. Its robust 22 HP EPA engine and hydraulic system ensure precise control and high performance. Please read this manual thoroughly before operating the machine to ensure safety and optimal performance.

2. SAFETY INFORMATION

Operating heavy machinery requires strict adherence to safety protocols to prevent injury or damage. Always prioritize safety.

2.1 General Safety Precautions

- Always wear appropriate Personal Protective Equipment (PPE), including hard hat, safety glasses, hearing protection, and steel-toed boots.
- Ensure the operating area is clear of personnel, obstacles, and overhead hazards.
- Never operate the machine under the influence of alcohol or drugs.
- Familiarize yourself with all controls and their functions before starting the engine.
- Keep all guards and safety devices in place and in good working order.
- Do not allow unauthorized personnel to operate the machine.

2.2 Operating Environment

- Operate on stable, level ground whenever possible. The machine is capable of climbing slopes up to 30 degrees, but caution is advised.
- Be aware of ground conditions; rubber tracks provide superior traction but can slip on extremely wet or icy surfaces.
- Maintain a safe distance from trenches, excavations, and unstable edges.
- Ensure adequate ventilation when operating in enclosed spaces due to engine exhaust.

HIGH-PERFORMANCE TIRES

Safe climbing height " 30° "



The lifting arm, bucket and attachments are operated separately.

Figure 2.1: The MMS MS380-C Mini Skid Steer Loader is designed for safe climbing on slopes up to 30 degrees. The image shows the machine on an incline, highlighting its stability and the independent operation of the lifting arm, bucket, and attachments.

3. SETUP AND ASSEMBLY

3.1 Unpacking and Inspection

The MMS MS380-C Mini Skid Steer Loader is typically shipped in a robust wooden case to ensure protection during transit. Upon receipt, carefully inspect the packaging for any signs of damage. Use a forklift or appropriate lifting equipment to unload the machine from the transport vehicle and remove it from its wooden case.



Figure 3.1: The machine is securely packed in a wooden case for shipping. A forklift is recommended for safe unloading and handling.

3.2 Initial Checks

- Verify all components are present as per the packing list.
- Check all fluid levels: engine oil, hydraulic fluid, and fuel. Top up if necessary.
- Inspect all hoses, connections, and wiring for any signs of damage or leaks.
- Ensure all bolts and fasteners are tight.

3.3 Attaching the Front End Bucket

The front end bucket is typically shipped separately and requires attachment. Follow these steps:

1. Position the bucket in front of the loader's attachment plate.
2. Align the loader's quick-attach mechanism with the bucket's mounting points.
3. Engage the locking pins or levers to secure the bucket firmly in place.
4. Ensure the bucket is securely attached before operation.



Figure 3.2: The MMS MS380-C Mini Skid Steer Loader with its standard front end bucket attached, ready for operation.

4. OPERATING INSTRUCTIONS

This section outlines the basic procedures for operating your mini skid steer loader.

4.1 Controls Overview

The MMS MS380-C features an ergonomic operating platform with intuitive controls. Full hydraulic control is managed by two handles, allowing for precise movement and attachment operation.



Figure 4.1: The operator's console features dual joysticks for hydraulic control, along with gauges for fuel, temperature, and other vital machine parameters.

4.2 Starting the Engine

1. Ensure the machine is on level ground and the parking brake is engaged.
2. Turn the ignition key to the "ON" position and check all indicator lights.

3. Turn the key to the "START" position. Release once the engine starts.
4. Allow the engine to warm up for a few minutes before engaging in heavy work.

4.3 Driving and Maneuvering

- Use the left joystick to control forward/reverse movement and the right joystick for steering.
- The machine can steer in place, providing excellent maneuverability in tight spaces.
- Always maintain a clear line of sight. If visibility is obstructed, stop operation.
- The rubber tracks provide stable movement across various terrains.

4.4 Using the Bucket and Attachments

- The lifting arm, bucket, and other attachments are operated independently using the hydraulic controls.
- For digging, position the bucket at the desired angle and lower the arm while moving forward.
- For loading, raise the arm and tilt the bucket to dump material.
- The machine supports various attachments including diggers, grapples, 4-in-1 buckets, log splitters, rock buckets, rippers, breakers, augers, and land planes. (Note: These accessories are not included in the standard package.)

ADAPTIVE ATTACHMENT



Digger



Grapple



4 in 1 bucket



Log splitter



Rock Bucket



Ripper



Breaker



Auger



Land Plane



Note: These accessories are not included in the package

Figure 4.2: The MMS MS380-C is compatible with a wide range of hydraulic attachments, enhancing its versatility for various tasks.

5. MAINTENANCE

Regular maintenance is crucial for the longevity and optimal performance of your MMS MS380-C Mini Skid Steer Loader.

5.1 Daily Checks

- Check engine oil level.
- Inspect hydraulic fluid level.
- Verify fuel level.
- Check for any visible leaks (oil, hydraulic fluid, fuel).
- Inspect tracks for damage or excessive wear.
- Clean debris from the engine compartment and radiator.

5.2 Periodic Maintenance

- **Engine:** Refer to the Rato engine manual for specific service intervals for oil changes, air filter replacement, and spark plug inspection.
- **Hydraulic System:** Change hydraulic fluid and filter as recommended in the service schedule.
- **Chassis:** Lubricate all grease points regularly. Inspect all fasteners for tightness.
- **Cooling System:** Ensure the radiator and cooling fins are free of debris. The chassis features ventilation patterns for optimal cooling.



Figure 5.1: The front cover plate of the skid loader can be opened and supported by double rods, providing convenient access for inspection and maintenance of the engine and internal components.

6. TROUBLESHOOTING

This section provides solutions to common operational issues. For complex problems, contact MMS customer support.

Problem	Possible Cause	Solution
Engine will not start	Low fuel level, battery discharged, faulty ignition, clogged fuel filter.	Check fuel, charge battery, inspect ignition system, replace fuel filter.
Loss of hydraulic power	Low hydraulic fluid, clogged hydraulic filter, hydraulic pump issue.	Check fluid level, replace filter, contact service for pump inspection.
Machine moves slowly or lacks power	Overload, low engine RPM, fuel quality issue, air filter clogged.	Reduce load, check throttle, use correct fuel, clean/replace air filter.
Excessive engine noise or vibration	Loose components, engine malfunction, worn bearings.	Inspect for loose parts, contact service for engine diagnosis.

7. SPECIFICATIONS

Key technical specifications for the MMS MS380-C Mini Skid Steer Loader.

Feature	Detail
Manufacturer	MMS
Model Number	MS380-C
Engine	Rato Engine (22 HP EPA compliant)
Power Source	Gasoline
Wattage	9.5 KW
Item Weight	2000 pounds (approx. 907 kg)

Feature	Detail
Package Dimensions	74 x 56 x 48 inches (approx. 188 x 142 x 122 cm)
Material	Manganese steel
Included Components	Tool Box
Bucket Capacity	0.13 m³
Max Lifting Force	380 Kg
Max Working Height	2120 mm
Max Dumping Height	1405 mm
Max Dumping Distance	575 mm
Max Dumping Angle	30°
Ground Clearance	120 mm
Travel Speed	0-4.5 km/h
Operating Weight	800 Kg

MS380 LOADER



Engine	Rato R740
Rated Power(Kw)	9.5Kw/3600rpm
Rotating speed (rpm)	3600
Noise(Db)	<95
Pressure (Mpa)	17Mpa
Flow rate	0-21L
Operating Load Lifting Force	250 Kg
Bucket Capacity	0.13m³
Max Lifting Force	380 Kg
Travel speed	0-4.5Km/h
Operating Weight	800
Oil	Gasoline

Max working height	2120mm
Max pin height	1860mm
Max Dumping height	1405 mm
Max Dumping distance	575mm
Max Dumping Angle	30°
Total height	1350mm
Ground clearance	120mm
Wheel base	640mm
Overall lengthwithout bucket	1990mm
Total width	1020 mm
Bucket width	1150mm
Total length with bucket	2245 mm

Figure 7.1: Detailed specifications for the MMS MS380 Loader, including engine type, power, and various dimensions and capacities.

8. WARRANTY AND SUPPORT

MMS is committed to providing professional quality and performance, backed by comprehensive customer support. While specific warranty details are not provided in this manual, MMS offers a perfect after-sales service to ensure customer satisfaction.

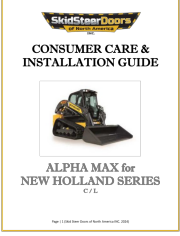


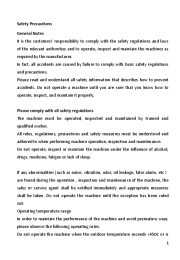

For any inquiries, technical assistance, or warranty claims, please contact MMS customer support. Our professional sales and maintenance teams are ready to provide you with consultation and support.

You can typically find contact information on the MMS official website or through your point of purchase. Please have your model number (MS380-C) and purchase date ready when contacting support.

9. PRODUCT VIDEOS

Note: No relevant official product video URLs with "creator_type": "Seller" were provided in the product data. Therefore, no videos can be embedded in this manual.

Related Documents - MS380-C

	<p>Skid Steer Doors Alpha Max for New Holland Series C/L: Consumer Care & Installation Guide</p> <p>Detailed consumer care instructions, safety warnings, disclaimer, and step-by-step installation guide for the Skid Steer Doors Alpha Max model, designed for New Holland Series C/L skid steer loaders. Learn about material properties, cleaning, and installation procedures.</p>
	<p>Grundfos MS, MMS Submersible Motors: Installation and Operating Instructions</p> <p>Comprehensive installation and operating instructions for Grundfos MS and MMS submersible motors, covering delivery, storage, general description, preparation, electrical connection, installation, maintenance, fault finding, and cable sizing.</p>
	<p>Zodiac Cadet RIB & Compact Owner's Manual - Assembly and Technical Specifications</p> <p>This manual provides assembly procedures and technical specifications for Zodiac Cadet RIB and Compact inflatable boats, including models C 220 RIB, C 260 RIB, C 310 RIB, C 340 RIB, C 250 COMPACT, and C 300 COMPACT. It covers inflation, pressure, equipment assembly, and deflation.</p>
	<p>MS08 Mini Compact Excavator: Operation and Safety Manual</p> <p>Comprehensive guide for the MS08 Mini Compact Excavator from mms industry, detailing safety precautions, operational controls, maintenance procedures, and technical specifications for safe and efficient use.</p>
	<p>Autonomic MMS Series Multi-Source Music Streamer User Manual</p> <p>Comprehensive user manual for the Autonomic MMS-1e, MMS-3e, and MMS-5e Multi-Source Music Streamers, detailing setup, configuration, features, streaming service integration, and specifications.</p>

HN-KIT COMPACT C 32 C 45
HORN KIT FOR COMPACT C 32 AND C 45

[RCF HN-KIT COMPACT C 32 C 45 Horn Kit Owner's Manual](#)

Detailed owner's manual for the RCF HN-KIT COMPACT C 32 C 45, providing instructions for replacing the horn assembly and converting the crossover for RCF COMPACT C 32 and C 45 speakers.