AMPHIBIOUS SOFT TERRAIN BACKHOE
MA200

Model Code: MA200-5G
Engine Rated Power: 125 kW (168 HP)
Operating Weight: 21,500 kg
Backhoe Bucket (ISO Heaped): 0.46 m³
ENGINE
Model ........................................ Isuzu CC-6BG1T
Type ........................................ 4-cylinder, water-cooled, direct injection
Aspiration ................................ Turbocharged, intercooled
No. of cylinders .......... 6
Rated power  
ISO 9041, net ...... 125 kW (168 HP) at 2 000 min⁻¹ (rpm)
SAE J1349, net .... 125 kW (168 HP) at 2 000 min⁻¹ (rpm)
Maximum torque ......... 637 Nm (65 kgf.m) at 1 800 min⁻¹ (rpm)
Piston displacement ... 6.494 L
Bore and stroke ........ 105 mm x 125 mm
Batteries ................. 2 x 12 V / 88 Ah

HYDRAULIC SYSTEM
Work mode selector  
Digging mode / Attachment mode  Engine speed sensing system

Hydraulic Pumps
Main pumps .......... 2 variable displacement axial piston pumps
Maximum oil flow ...... 2 x 212 L/min
Pilot pump .......... 1 gear pump
Maximum oil pressure ... 315 bar

Hydraulic Motors
Travel ................. 2 variable displacement axial piston motors
Swing .................. 1 axial piston motor

Relief Valve Settings
Implant circuit ........ 34.3 MPa (350 kgf/cm²)
Swing circuit .......... 34.3 MPa (350 kgf/cm²)
Travel circuit ........ 34.3 MPa (350 kgf/cm²)
Pilot circuit .......... 3.9 MPa (40 kgf/cm²)
Power boost ........ 38.0 MPa (388 kgf/cm²)

Hydraulic Cylinders
<table>
<thead>
<tr>
<th>Components</th>
<th>Cylinder Bore</th>
<th>Rod Diameter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boom</td>
<td>120 mm</td>
<td>86 mm</td>
</tr>
<tr>
<td>Arm</td>
<td>135 mm</td>
<td>96 mm</td>
</tr>
<tr>
<td>Bucket</td>
<td>115 mm</td>
<td>80 mm</td>
</tr>
</tbody>
</table>

UPPERSTRUCTURE
Revolving Frame  
D-section frame skid for resistance to deformation.

Swing Device
Axial piston motor with planetary reduction gear is bathed in oil. Swing circle is single-row. Swing parking brake is spring-set/hydraulic-released disc type.
Swing speed .......... 13.5 min⁻¹ (rpm)
Swing torque ........ 684 Nm (6 900 kgf) of ISO Standards.

Operator’s Cab
Independent spacious cab, 1.005 m wide by 1.675 m high, conforming to ISO Standards.

UNDERCARRIAGE
The special undercarriage, fitted with square hollow steel shoes and floating seal rollers, gives exceptional mobility on wetland and swamps. It boosts buoyancy and ruggedness too. The machine can be easily knocked down for quick transport to the next job site, as the undercarriage is bolted to the upperstructure through the support beam, and hydraulic piping employs quick couplers.

Numbers of Shoes and Float Capacity on Each Side
- Bucket............ 55 : 49 (without wiper) + 6 (with wiper)
- Float capacity ... 29.0 m³

Swing Device
Each track-driven by axial piston motor through spur wheel double reduction gear for counterrotation of the tracks.
Parking brake is spring-set/hydraulic-released disc type. Travel shockless relief valve built in travel motor absorbs shocks when stopping travel.
Travel speeds .......... 0 to 4.0 km/h

Swing torque .......... 68 kNm (6 900 kgf.m)

UPPERSTRUCTURE
Width : 2 710

SUPPORT BEAM
Width : 2 000

ARM
Width : 390

BOOM Width : 820

FLOAT Width : 2 650

BUCKET Width : 870

MAXIMUM POWER
Fuel tank ........................................... 400.0 L
Engine coolant .................... 23.0 L
Engine oil .................. 25.0 L
Swing device ............... 6.2 L
Travel device (each side) ........ 6.8 L
Hydraulic system .......... 240.0 L
Hydraulic oil tank .......... 135.0 L

WEIGHTS AND GROUND PRESSURE
Equipped with 6.50 m boom, 3.42 m arm and 0.46 m³ bucket (ISO heaped).

Shoe type | Shoe width | Operating weight | Ground pressure |
<table>
<thead>
<tr>
<th></th>
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<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Steel</td>
<td>1 620 mm</td>
<td>21 500 kg</td>
<td>11.5 kPa (0.12 kgf/cm²)</td>
</tr>
</tbody>
</table>

SERVICE REFILL CAPACITIES
- Fuel tank ................. 400.0 L
- Engine coolant ............ 23.0 L
- Engine oil .................. 25.0 L
- Swing device ............... 6.2 L
- Travel device (each side) ........ 6.8 L
- Hydraulic system .......... 240.0 L
- Hydraulic oil tank .......... 135.0 L

Notes
- The MA200-5G is not a ship. It is not fitted with equipment for cruising or working on water.
- The MA200-5G is designed for working on soft ground. Working or traveling on hard and rough ground is prohibited.
- Avoid operating with machine floating on water.
- Never attempt to work with the machine floating on water. Failure to do so may result in overturning of the machine.

BACKHOE ATTACHMENTS
Boom and arms are of welded, box-section design. 6.50 m boom, 3.42 m arm is available. Bucket is of welded steel structure. Side clearance adjust mechanism provided on the bucket joint bracket.

Buckets
<table>
<thead>
<tr>
<th>Capacity</th>
<th>Width</th>
<th>No. of teeth</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISO heaped</td>
<td>872 mm</td>
<td>4</td>
<td>260 kg</td>
</tr>
<tr>
<td>ISO heaped</td>
<td>909 mm</td>
<td>–</td>
<td>250 kg</td>
</tr>
</tbody>
</table>

WEIGHTS AND GROUND PRESSURE

Shoe type | Shoe width | Operating weight |
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UNIT: mm

DIMENSIONS

WORKING RANGES

TRANSPORTATION

SPECIFICATIONS

SAE J1349, net 125 kW (168 HP) at 2 100 min⁻¹ (rpm)
ISO 9249, net 125 kW (168 HP) at 2 100 min⁻¹ (rpm)
These specifications are subject to change without notice. Illustrations and photos show the standard models, and may or may not include optional equipment, accessories, and all standard equipment with some differences in color and features. Before use, read and understand the Operator’s Manual for proper operation.

Standard and optional equipment may vary by country, so please consult your Hitachi dealer for details.

* Hitachi Construction Machinery cannot be held liable for theft, any system will just minimize the risk of theft.

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**EQUIPMENT**

**ENGINE**
- Air cleaner double filters
- Auto idle system
- Cartridge-type engine oil filter
- Cartridge-type fuel pre-filter
- Cartridge-type fuel main filter
- Dry-type air filter with evacuator valve (with air filter restriction indicator)
- ECO/PWR mode control
- Engine warm-up device
- Fan guard
- Pre-cleaner
- Radiator reserve tank
- Water separator
- 50 A alternator

**CAB**
- All-weather sound suppressed steel cab
- AM-FM radio
- Ashtray
- Auto control air conditioner
- AUX. terminal and storage
- CRES V (Center pillar reinforced structure) cab
- Drink holder with hot & cool function
- Electric double horn
- Engine shut-off switch
- Evacuation hammer
- Fire extinguisher bracket
- Floor mat
- Footrest
- Front window washer
- Front windows on upper, lower and left side can be opened
- Glove compartment
- Hot & cool box
- Intermittent windshield wipers
- Key cylinder light
- LED room light with door courtesy
- OPG top guard fitted Level II (ISO10262) compliant cab
- Pilot control shut-off lever
- Rear tray
- Retractable seat belt
- Rubber radio antenna
- Seat : fabric seat
- Seat : mechanical suspension seat
- Seat : air suspension seat with heater
- Seat adjustment part : backrest, armrest, height and angle, slide forward / back
- Short wrist control levers
- 4 fluid-filled elastic mounts
- 24 V cigarette lighter

**MONITOR SYSTEM**
- Alarm buzzers: overheat, engine oil pressure, overload
- Alarms: overheat, engine warning, engine oil pressure, alternator, minimum fuel level, hydraulic filter restriction, air filter restriction, work mode, overload, etc
- Display of meters: water temperature, hour, fuel rate, clock
- Other displays: work mode, auto-idle, glow, rearview monitor, operating conditions, etc
- 32 languages selection

**UNDERCARRIAGE**
- Bolt-on sprocket
- Travel motor covers
- Travel parking brake
- Upper and lower rollers
- 1 620 mm box type shoes

**FRONT ATTACHMENTS**
- Centralized lubrication system
- Dirt seal on all bucket pins
- Flanged pin
- HN bushing
- Reinforced resin thrust plate
- WC (tungsten-carbide) thermal spraying
- Reinforced bucket link B
- 0.48 m² bucket (ISO heaped)

**ATTACHMENTS**
- Accessories for 2 speed selector
- Additional pump (30 L/min)
- Assist piping
- Attachment basic piping
- Breaker and crusher piping
- Parts for breaker and crusher
- Line filter

**MISCELLANEOUS**
- Global e-service
- Lockable fuel refilling cap
- Lockable machine covers
- Onboard information controller
- Skid-resistant, plates and handrails
- Standard tool kit

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Before using a machine with a satellite communication system, please make sure that the satellite communication system complies with local regulations, safety standards and legal requirements. If not so, please make modifications accordingly.