**ENGINE**

Model  
Case 445T/M3 diesel, Tier III certified

Type  
4-stroke, turbocharged

Cylinders  
4

Bore/Stroke  
4.1 in x 5.2 in  
(104 mm x 132 mm)

Displacement  
274 in³ (4.5 L)

Fuel injection  
Direct

Fuel  
#2 Diesel

Fuel filter  
In-line strainer

Air intake  
Cross-flow

Cooling  
Liquid

Engine speeds (rpm)  
High idle – no load 2415±60  
Rated – full load 2300  
Low idle 1075±75

Horsepower per SAE J1349  
Gross 90 (67 kW) @ 2300 rpm  
Net 83 (62 kW) @ 2300 rpm

Peak torque  
@ 1300 rpm 288 lb·ft (390 N·m)

**ENGINE COOLING**

Radiator  
Core type Square wave serpentine  
Core size area 377 in² (.243 m²)  
Rows of tubes 4  
Cap pressure 14.0 psi (97.0 kPa)

Fan  
Diameter 18.9 in (480 mm)  
Ratio 1.09:1

Water pump  
Style Integral  
Flow 29.0 gpm (110 L/min)

Engine lubrication  
Pump Deep sump with plate cooler and pressurized under-piston nozzles

Pump operating angle ratings  
Side-to-side Rated 35°  
Fore and aft Rated 35°

Oil filtration  
Replaceable, full-flow cartridge

**POWERTRAIN**

Drive pump  
Tandem, axial piston hydrostatic transmission with integral charge pump driven directly off engine flywheel

Pump to engine ratio 1:1

Displacement 0 to 2.81 in³ (46 cc)

Pump flow @ high idle engine rpm 29.4 gpm (111 L/min)

Flow Bi-directional

Charge pressure 360 psi (24.8 bar)

System relief 4350 psi (300 bar)

Controls Servo

Drive motors Fixed displacement radial piston

Maximum displacement 28.7 in³ (470 cc)

Speed @ high idle engine rpm  @ max displacement 237 rpm  
Optional high speed 394 rpm

Torque @ max displacement and relief pressure 1,655 lb·ft (2245 N·m)

Travel speed mph (km/h)  
Low range 7.0 (11.2)  
High range (optional) 11.4 (18.3)

Final drive Single-reduction chain drive

Drive chain  
Size ASA #100HV  
Tensile strength 30,000 lb (133 447 N)

Axles  
One-piece, forged induction-hardened high carbon steel

Torque @ max displacement and relief pressure 4,170 lb·ft (5653 N·m)

Diameter 2.0 in (51 mm)  
Length 14.61 in (371 mm)

Parking brakes  
Spring applied, hydraulic release disc

Engagement  
Depress on/off brake button on handle or instrument panel, raise seat bar, get off seat, or stop engine

**HYDRAULIC SYSTEM**

Standard equipment pump  
Type Gear pump  
Displacement 2.2 in³/rev (36 cc)  
Pump flow @ rated engine rpm Total 21.9 gpm (83 L/min)  
Optional high flow @ rated engine rpm Total 37.8 gpm (143.1 L/min)

Loader control valve  
3-spool open-center series with power beyond port

Relief pressure 3050 psi (210 bar)

Port relief pressures  
Loader Raise 3120 psi (215 bar)  
Bucket Dump 3800 psi (260 bar)  
Bucket Curl 3350 psi (230 bar)

Hydraulic lines  
Tubing 37° JIC Flare  
Loop hoses SAE 100 R12

Hydraulic oil cooler  
Core type 4 row in line

Hydraulic filter  
6 micron spin-on replaceable element on the return line with warning indicator
INSTRUMENTATION
Indicators
Digital Hourmeter
Fuel level LCD bar graph with alarm
Warning lights with alarms
Engine coolant temperature
Engine oil pressure
Engine Malfunction
Hydraulic charge pressure
Hydraulic filter restriction
Hydraulic oil temperature
Warning alarms
Battery voltage (plus display)
Indicator light
Engine preheat
Parking brake
Seat bar reminder

ELECTRICAL SYSTEM
Alternator 95 amp
Starter 2.7 kW
Battery 12-volt low-maintenance 1125 cold-cranking amps @ 0° F (-18° C)

OPERATOR ENVIRONMENT
ROPS/FOPS level 1 canopy w/side screens
Tilt ROPS/FOPS
Rear window w/ emergency escape
Instrument panels
Suspension vinyl seat
2 in (51 mm) retractable seat belt
Hand throttle
Foot throttle
Alarm package
Headliner
Top window
Cup holder
Power plug socket
Foot rest
Storage tray
Low effort ergonomic hand controls
Padded seat bar w/integral armrests
Loader control lockout system
Electric parking brake control
Floor cleanout panel

CYLINDERS
Lift cylinder
Bore diameter 2.5 in (63.5 mm)
Rod diameter 1.5 in (38.1 mm)
Stroke 35.8 in (910 mm)
Closed length 46.8 in (1190 mm)
Bucket cylinder
Bore diameter 3.0 in (76.2 mm)
Rod diameter 1.5 in (38.1 mm)
Stroke 14.6 in (370 mm)
Closed length 26.9 in (683 mm)

OPERATING WEIGHTS
Unit equipped with 12 x 16.5 Galaxy Beefy Baby II tires, 66 in (1.6 m) foundry/excavating bucket, mechanical attachment coupler, full fuel tank and 165 lb (75 kg) operator
7,040 lb (3193 kg)
Shipping weight 6,390 lb (2898 kg)
Add-on weights
Side cab glass +70 lb (32 kg)
Lexan® door +50 lb (22.6 kg)
Glass door w/wiper +77 lb (35 kg)
Suspension seat +10 lb (4.5 kg)

SERVICE CAPACITIES
Fuel tank 22 gal (83.3 L)
Engine oil w/filter 12.7 qt (12 L)
Engine cooling system 3 gal (11.4 L)
Hydraulic system
Reservoir 7.1 gal (26.8 L)
Total 13.2 gal (50 L)
Chain tanks (per side) 8 qt (7.6 L)

TIRE SELECTION

<table>
<thead>
<tr>
<th>Size</th>
<th>Ply Rating</th>
<th>Tread Depth</th>
<th>Tire Width</th>
<th>Width Over Tires</th>
<th>Tire Weight*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Galaxy XD2002</td>
<td>10.00 x 16.5</td>
<td>8</td>
<td>0.59 in (15 mm)</td>
<td>10.7 in (284 mm)</td>
<td>59 in (1.50 m)</td>
</tr>
<tr>
<td>Galaxy XD2002</td>
<td>12.00 x 16.5</td>
<td>10</td>
<td>0.69 in (17 mm)</td>
<td>12.4 in (315 mm)</td>
<td>64 in (1.63 m)</td>
</tr>
<tr>
<td>Galaxy XD2002 (offset wheel)</td>
<td>12.00 x 16.5</td>
<td>10</td>
<td>0.69 in (17 mm)</td>
<td>12.4 in (315 mm)</td>
<td>69 in (1.80 m)</td>
</tr>
<tr>
<td>Galaxy Beefy Baby II</td>
<td>12.00 x 16.5</td>
<td>10</td>
<td>0.81 in (21 mm)</td>
<td>12.4 in (315 mm)</td>
<td>64 in (1.63 m)</td>
</tr>
<tr>
<td>Galaxy Beefy Baby II (offset wheel)</td>
<td>12.00 x 16.5</td>
<td>10</td>
<td>0.81 in (21 mm)</td>
<td>12.4 in (315 mm)</td>
<td>71 in (1.80 m)</td>
</tr>
<tr>
<td>Galaxy Hippo</td>
<td>33/15.50 x 16.5</td>
<td>12</td>
<td>0.81 in (21 mm)</td>
<td>15.2 in (386 mm)</td>
<td>70 in (1.78 m)</td>
</tr>
<tr>
<td>Galaxy Hulk</td>
<td>12.00 x 16.5</td>
<td>12</td>
<td>1.37 in (35 mm)</td>
<td>12.0 in (305 mm)</td>
<td>64 in (1.63 m)</td>
</tr>
<tr>
<td>Galaxy Bulky Hulk</td>
<td>33/15.50 x 16.5</td>
<td>14</td>
<td>1.37 in (35 mm)</td>
<td>15.1 in (384 mm)</td>
<td>70 in (1.78 m)</td>
</tr>
<tr>
<td>Galaxy Solid Flex</td>
<td>12 x 16.5</td>
<td>n/a</td>
<td>.8 in (21 mm)</td>
<td>11 in (279 mm)</td>
<td>61 in (1.54 m)</td>
</tr>
<tr>
<td>Galaxy Solid Flex (offset wheel)</td>
<td>12 x 16.5</td>
<td>n/a</td>
<td>.8 in (21 mm)</td>
<td>11 in (279 mm)</td>
<td>67 in (1.70 m)</td>
</tr>
</tbody>
</table>

NOTE: *Tire weight does not include wheel weight.
**PERFORMANCE SPECS**

- **Operating load**: 2,200 lb (998 kg)
- **Tipping load**: 4,400 lb (1996 kg)
- **Breakout force**
  - Lift cylinder: 4,576 lbf (20,355 N)
  - Bucket cylinder: 6,207 lbf (27,610 N)
- **Dig depth**
  - w/bucket flat: 0.9 in (23.0 mm)
- **Cycle time**
  - Raise: 4.1 seconds
  - Lower: 2.6 seconds
  - Dump: 1.7 seconds
  - Rollback: 1.9 seconds

**NOTE:** SAE rated lift capacities.

**OPTIONAL BUCKETS**

<table>
<thead>
<tr>
<th>Type</th>
<th>Width inch (m)</th>
<th>Weight lb (kg)</th>
<th>Capacity ft³ (m³)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Foundry/Excavating</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>66</td>
<td>66</td>
<td>370</td>
<td>15.2 (0.43)</td>
</tr>
<tr>
<td>72</td>
<td>(1.6)</td>
<td>(168)</td>
<td></td>
</tr>
<tr>
<td>78</td>
<td>(1.8)</td>
<td>(177)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Low Profile</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>66</td>
<td>66</td>
<td>400</td>
<td>13.2 (0.37)</td>
</tr>
<tr>
<td>72</td>
<td>(1.6)</td>
<td>(193)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Low Profile Extended</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>66</td>
<td>66</td>
<td>434</td>
<td>15.5 (0.44)</td>
</tr>
<tr>
<td>72</td>
<td>(1.6)</td>
<td>(197)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Utility/Light Material</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>72</td>
<td>72</td>
<td>434</td>
<td>23.7 (0.67)</td>
</tr>
<tr>
<td>84</td>
<td>(1.8)</td>
<td>(216)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Heavy-Duty/Dirt</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>66</td>
<td>66</td>
<td>474</td>
<td>13.3 (0.37)</td>
</tr>
<tr>
<td>72</td>
<td>(1.6)</td>
<td>(215)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**DIMENSIONS**

A. Overall operating height
   - w/foundry/excavating bucket – short lip: 154.0 in (3.91 m)
   - w/low profile bucket – standard lip: 160.0 in (4.08 m)
   - w/low profile extended bucket – long lip: 165.6 in (4.21 m)

B. Bucket hinge pin: 121.6 in (3.09 m)
C. Top of rollover protective structure: 80.0 in (2.03 m)
D. Bottom of level bucket, loader arm fully raised: 114.2 in (2.90 m)
E. w/o attachment w/coupler: 102.5 in (2.60 m)
F. w/foundry/excavating bucket on ground: 129.4 in (3.29 m)
   - w/low profile bucket on ground: 135.1 in (3.43 m)
   - w/low profile extended bucket on ground: 140.1 in (3.56 m)
G. Dump angle at maximum height: 39°
H. Dump height – loader arm fully raised
   - w/foundry/excavating bucket: 96.0 in (2.44 m)
   - w/low profile bucket: 93.1 in (2.37 m)
   - w/low profile extended bucket: 90.0 in (2.29 m)
J. Dump reach – loader arm fully raised
   - w/foundry/excavating bucket: 22.8 in (0.58 m)
   - w/low profile bucket: 25.9 in (0.66 m)
   - w/low profile extended bucket: 29.7 in (0.75 m)
K. Bucket on ground: 29°
L. Bucket at full height: 96°
M. Wheelbase: 42.3 in (1.07 m)

**NOTE:** *Equipped with 12.00 x 16.5 Galaxy Beefy Baby II tires.*
## STANDARD EQUIPMENT

**OPERATOR'S COMPARTMENT**
- ROPS/FOPS level 1 canopy w/side screens
- Tilt ROPS/FOPS
- Rear window w/emergency escape
- Instrument panels
- Suspension vinyl seat
- 2 in (51 mm) retractable seat belt
- Hand throttle
- Foot throttle
- Alarm package
- Headliner
- Top window
- Cup holder
- Power plug socket
- Foot rest
- Storage tray
- Low effort ergonomic hand controls
- Padded seat bar w/integral armrests
- Loader control lockout system
- Electric parking brake control
- Floor cleanout panel

**LOADER**
- Radial loader arm design
- Mechanical attachment coupler
- Loader lift arm support

**ENGINE**
- Case 445T/M3 diesel
- Tier III certified
- No maintenance belt
- Battery disconnect switch w/jumpstart terminals
- Side-by-side radiator and oil cooler
- Grid heater
- Integral engine oil cooling
- Fuel filter w/water trap
- Dual element air cleaner
- 95 amp alternator
- 1125 CCA 12-volt battery

**POWERTRAIN**
- Hydrostatic four wheel drive
- Servo controls
- ASA #100HS drive chain
- SAHR disc parking brakes

**HYDRAULICS**
- Auxiliary hydraulics 3050 psi (210 bar) – 21.9 gpm (83 L/min)
- Hydraulic circuit pedal lock
- Loader arm-mounted ISO flat face connectors
- Auxiliary function lockout override
- Loader function lockout system
- Loader lift lockout override
- 3-spool loader control valve
- Heavy-duty oil cooler
- Loader arm float position

**OTHER**
- Integral bumper counterweight
- Lockable service access hood
- Single-point daily servicing
- Halogen lights, 2-front, 1-rear
- Rear tail lights
- Options harness
- Battery disconnect switch/jump start terminals

## OPTIONAL EQUIPMENT

**OPERATOR'S COMPARTMENT**
- Deluxe cloth suspension seat w/heater and lumbar support
- Interior mirror
- Electric auxiliary hydraulic control
- Glass front door w/wiper & washer
- Sliding side windows
- 3 inch retractable seat belt
- Heater and AC
- Radio
- Demolition door

**LOADER**
- Auxiliary front electric control
- Ride control
- Pilot controls
- Hydraulic attachment coupler
- Hydraulic one-way self-leveling

**HYDRAULICS**
- High-flow auxiliary hydraulics
  - 3050 psi (210 bar) – 37.8 gpm (143.1 L/min)
- Second auxiliary hydraulics
- Attachment case drain plumbing

**ENGINE**
- Coolant block heater

**OTHER**
- 2 speed ground drive
- Deluxe instrument panel
- Road lights
- Rotating beacon
- Lift hooks
- Special paint
- Language decals
- Factory-installed tires – see page 2
- Buckets – see page 3
- Bolt-on bucket cutting edges
- 42 in (1.07 m) and 48 in (1.22 m) pallet forks
- Steel tracks

---

**NOTE:** All specifications are stated in accordance with SAE Standards or Recommended Practices, where applicable.

**NOTE:** All engines meet current EPA emissions requirements.

**IMPORTANT:** Case Construction Equipment Inc. reserves the right to change these specifications without notice and without incurring any obligation relating to such change. Case Construction Equipment Inc. does not warrant the safety or reliability of attachments from other manufacturers.

Case is a registered trademark of CNH America LLC. Any trademarks referred to herein, in association with goods and/or services of companies other than CNH America LLC, are the property of those respective companies.

---

www.casece.com

All Case construction equipment is biodiesel ready.