

### ENGINE

Model	
Case Family III 445T/M2 diesel, Tier II certified	
Type	4-stroke, turbocharged
Cylinders	4
Bore/Stroke	4.1 x 5.2 in (104 x 132 mm)
Displacement	274 in <sup>3</sup> (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	2480±50
Rated – full load	2300
Low idle	1050±50
Horsepower per SAE J1349	
Gross	89 (66 kW) @ 2300 rpm
Net	82 (61 kW) @ 2300 rpm

Peak torque	
@ 1400 rpm	263 lb-ft (357 N-m)

### ENGINE COOLING

Radiator	
Core type	Square wave serpentine
Core size area	450 in <sup>2</sup> (.290 m <sup>2</sup> )
Rows of tubes	3
Cap pressure	13.0 psi (89.6 kPa)

Fan	
Diameter	18.9 in (480 mm)
Ratio	1.1:1

Water pump	
Style	Integral
Flow	52.8 gpm (200 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 w/integral charge pump driven directly off engine flywheel	
Pump to engine ratio	1:1
Displacement	0 to 2.81 in <sup>3</sup> (46 cc)
Pump flow @ rated rpm	28.0 gpm (106 L/min)
Flow	
Bi-directional	
Charge pressure	360 psi (24.8 bar)
System relief	5000 psi (345 bar)
Controls	
Servo	
Drive motors	
Fixed displacement radial piston	
Maximum displacement	18.9 in <sup>3</sup> (309 cc)
Speed @ rated engine rpm	
@ max displacement	342 rpm
Optional high speed	530 rpm
Torque @ max displacement and relief pressure	
	1,255 lb-ft (1701 N-m)

Travel speed mph (km/h)	
Low range	5.1 (8.2)
High range (optional)	7.6 (12.2)

Final drive	Single-reduction planetary
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Undercarriage	
Torque @ max displacement and relief pressure	4,595 lb-ft (6230 N-m)
Track adjustment	Hydraulic
Frame	Rigid
Length of track on ground	56.5 in (1436 mm)

Track rollers per side	3
Front idler diameter	13.7 in (350 mm)
Rear Idler diameter	11.4 in (290 mm)

Bottom Rollers	
Outer flange diameter	7.8 in (200 mm)
Center flange diameter	8.4 in (214 mm)

Sprocket Teeth	
Number	17
Width	1.8 in (46 mm)

Track rollers and idlers sealed with duo cone face seals and permanently lubricated bushings

Parking brakes	
Spring applied, hydraulic release disc	

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

### HYDRAULIC SYSTEM

Standard equipment pump	
Type	Gear pump
Displacement	2.2 in <sup>3</sup> /rev (36 cc)
Pump flow @ rated engine rpm	
Total	21.9 gpm (83 L/min)
Optional high flow @ rated engine rpm	
Total	32.6 gpm (123 L/min)

Loader control valve	
3-spool open-center series with power beyond port	
Relief pressure	3050 psi (210 bar)

Port relief pressures	
#1B Raise	3350 psi (230 bar)

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

Hydraulic oil cooler	
Core type	Two 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	
Air cleaner restriction	
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	3.3 kW
Battery	
12-volt low-maintenance 850 cold-cranking amps @ 0° F (-18° C)	

## OPERATOR ENVIRONMENT

Tilt ROPS/FOPS canopy w/side screens
Water-shedding vinyl seat
Seat presence switch
2 in (51 mm) retractable seat belt
Seat bar w/integral armrests
Two servo-assist, adjustable, hands-only control levers
Hand throttle
Loader control lockout system
Front and rear halogen floodlights
Floor cleanout access

## 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

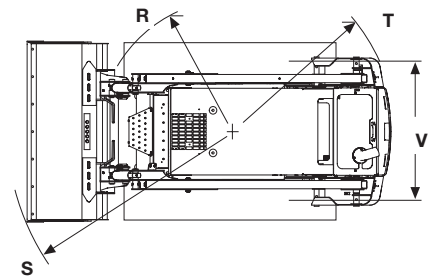
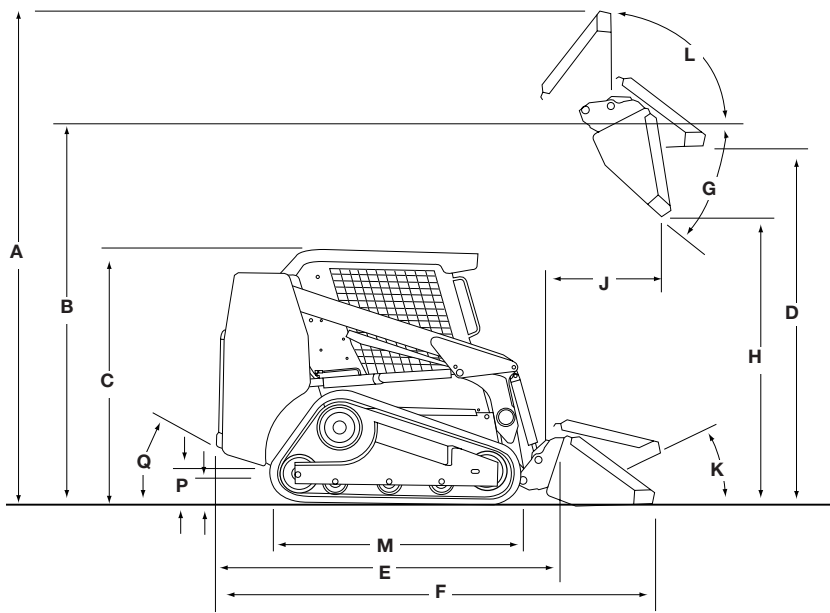
Unit equipped with 15.7 in (400 mm) track, 72 in (1.8 m) foundry/excavating bucket, mechanical attachment coupler, full fuel tank and 165 lb (75 kg) operator	
	8,915 lb (4043 kg)
Shipping weight	8,317 lb (3772 kg)
Add-on weights	
Side cab glass	+70 lb (32 kg)
Glass door with wiper	+77 lb (35 kg)
Suspension seat	+10 lb (4.5 kg)

## SERVICE CAPACITIES

Fuel tank	22.0 gal (83.3 L)
Engine oil w/filter	12.7 qt (12 L)
Engine cooling system	18 qt (17 L)
Hydraulic system	
Reservoir	7.1 gal (26.8 L)
Total	13.2 gal (50.0 L)

## TRACK SELECTION

	Area in <sup>2</sup> (cm <sup>2</sup> )	Ground Pressure psi (kPa)	Width to Outside of Track in (mm)
15.7 in (400 mm)	1,780 (11 488)	5.0 (34.5)	71 (1802)



## DIMENSIONS\*

<b>A.</b> Overall operating height	
w/foundry/excavating bucket – short lip	152.4 in (3.87 m)
w/low profile bucket – standard lip	158.0 in (4.01 m)
w/low profile extended bucket – long lip	163.0 in (4.14 m)
Height to	
<b>B.</b> Bucket hinge pin	121.5 in (3.09 m)
<b>C.</b> Top of rollover protective structure	76.7 in (1.95 m)
<b>D.</b> Bottom of level bucket, loader arm fully raised	114.2 in (2.90 m)
Overall length	
<b>E.</b> w/o attachment w/coupler	103.9 in (2.64 m)
<b>F.</b> w/foundry/excavating bucket on ground	127.2 in (3.23 m)
<b>F.</b> w/low profile bucket on ground	132.9 in (3.38 m)
<b>F.</b> w/low profile extended bucket on ground	137.9 in (3.50 m)
<b>G.</b> Dump angle at maximum height	39°
<b>H.</b> Dump height – loader arm fully raised*	
w/foundry/excavating bucket	96.6 in (2.45 m)
w/low profile bucket	93.1 in (2.37 m)
w/low profile extended bucket	90.0 in (2.29 m)
<b>J.</b> Dump reach – loader arm fully raised	
w/foundry/excavating bucket	23.4 in (0.59 m)
w/low profile bucket	27.9 in (0.71 m)
w/low profile extended bucket	31.7 in (0.81 m)
Maximum attachment rollback	
<b>K.</b> Bucket on ground	32°
<b>L.</b> Bucket at full height	84°
<b>M.</b> Length of track on ground	56.5 in (1.4 m)
Ground clearance	
<b>P.</b> Bottom of belly pan	9 in (229 mm)
<b>Q.</b> Angle of departure	34°
Clearance circle front	
<b>R.</b> Less bucket	51.8 in (1.32 m)
<b>S.</b> w/72 in (1.8 m) foundry/excavating bucket on ground	80.4 in (2.04 m)
<b>S.</b> w/72 in (1.8 m) low profile bucket on ground	84.0 in (2.13 m)
<b>S.</b> w/72 in (1.8 m) low profile extended bucket on ground	88.5 in (1.48 m)
<b>T.</b> Clearance circle rear	58.0 in (1.48 m)
<b>V.</b> Track gauge, centerline to centerline	55.2 in (1.4 m)

NOTE:\*Equipped with 15.7 in (400 mm) track

## PERFORMANCE SPECS

Operating load @ 35%	2,100 lb (952 kg)
Operating load @ 50%	3,000 lb (1361 kg)
Tipping load	6,000 lb (2721 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 in (0 mm)
Cycle time	
Raise	4.1 seconds
Lower	2.6 seconds
Dump	2.4 seconds
Rollback	1.9 seconds

NOTE: SAE rated lift capacities. Breakout force and cycle time measured with rated load in F/E bucket.

## OPTIONAL BUCKETS

Type	Width inch (m)	Weight lb (kg)	Heaped Capacity ft <sup>3</sup> (m <sup>3</sup> )
Foundry/ Excavating	72 (1.8)	390 (177)	16.7 (0.47)
	78 (2.0)	495 (225)	18.4 (0.52)
	72 (1.8)	425 (193)	14.5 (0.41)
Low Profile Extended	72 (1.8)	477 (216)	17.1 (0.48)
	78 (2.0)	502 (228)	18.6 (0.53)
	Utility/Light Material	72 (1.8)	434 (197)
84 (2.1)		497 (225)	27.9 (0.79)
Heavy Duty Dirt		72 (1.8)	501 (227)
	78 (2.0)	527 (239)	15.9 (0.45)

## STANDARD EQUIPMENT

### OPERATOR'S COMPARTMENT

ROPS/FOPS canopy w/side screens  
Tilt ROPS/FOPS  
Instrument panel  
Water-shedding vinyl seat  
2 in (51 mm) retractable seat belt  
Hand throttle  
Ergonomic hand controls  
Seat bar w/integral armrests  
Rear window w/emergency escape feature  
Loader control lockout system  
Electric brake control  
Floor cleanout panel

### LOADER

Radial loader arm design  
Lift cylinder plumbing guard  
Mechanical attachment coupler

## OPTIONAL EQUIPMENT

### OPERATOR'S COMPARTMENT

Vinyl suspension seat w/2 in (51 mm) retractable seat belt or with shoulder restraint  
Vinyl suspension seat w/3 in (76 mm) retractable seat belt  
Auxiliary front electric control  
Electric auxiliary hydraulic control  
Glass front door w/wiper & washer  
Sliding side windows  
Air conditioning (adds 3 inches to height to top of ROPS)  
Heater (deluxe)  
Foot throttle  
Rubber floor mat with foot rests  
Headliner and seal strips  
Accessory power outlet

### LOADER

Ride control  
Hydraulic attachment coupler  
Hydraulic self-leveling (raise only)

### HYDRAULICS

High-flow auxiliary hydraulics  
3050 psi (210 bar) – 32.6 gpm (123 L/min)  
Second auxiliary hydraulics  
Attachment case drain plumbing

### ENGINE

Case Family III 445T/M2 diesel  
Tier II certified  
Automatic fan belt tensioner  
Integral engine oil cooling  
Fuel filter w/water trap  
Dual element air cleaner  
95 amp alternator  
850 CCA 12-volt battery  
Heavy-duty radiator

### POWERTRAIN

Hydrostatic  
Servo controls  
SAHR disc parking brakes  
2 speed

### 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 control 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

### ENGINE

Coolant block heater  
Aspirator

### OTHER

Backup alarm/horn package  
Rotating beacon  
Lift hooks  
Special paint  
Language decals  
Buckets – see page 3  
Bolt-on bucket cutting edges  
42 in (1.07 m) and 48 in (1.22 m) pallet forks  
Battery disconnect switch/jump start terminals

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

NOTE: All engines meet current EPA emissions requirements.

IMPORTANT: CNH America LLC reserves the right to change these specifications without notice and without incurring any obligation relating to such change. CNH America LLC does not warrant the safety or reliability of attachments from other manufacturers.

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