

PRODUCT SPECIFICATIONS FOR 420F2/420F2 IT

ENGINE

Net Power - SAE J1349	93 HP
Bore	4.13 in
Stroke	5 in
Displacement	268 in ³
Net Peak Power - 1,800 rpm - SAE J1349	105 HP
Net Peak Power - 1,800 rpm - ISO 9249	106 HP
Rated Net Power - 2,200 rpm - EEC 80/1269	94 HP
Net Peak Power - 1,800 rpm - EEC 80/1269	106 HP
Gross Power - ISO 14396	100 HP
Gross Power - SAE J1995	102 HP
Net Power - 2,200 rpm - SAE J1349	93 HP
Net Torque Rise - 1,400 rpm - SAE J1349	46%
Rated Net Power - 2,200 rpm - ISO 9249	94 HP
Engine Model	Cat® C4.4 ACERT™
Net Peak Torque - 1,400 rpm	322 ft-lb
Rated Net Power - SAE J1349	93 HP
Rated Net Power - ISO 9249	94 HP
Note	Engine meets Tier 4 Final emission standards.

WEIGHTS

Operating Weight - Maximum	24251 lb
Cab - ROPS/FOPS	359 lb
Ride Control	31 lb

Four Wheel Drive	364 lb
Counterweights - Option 1	255 lb
Air Conditioning	93 lb
Counterweights - Option 2	530 lb
Counterweights - Option 3	1015 lb
Auto-Shift Transmission	525 lb
MP Bucket (1.00 m³/1.30 yd³) - No Forks or Teeth	1642 lb
Loader, IT with Quick Coupler	699 lb
Extendible Stick	672 lb
Operating Weight - Maximum - ROPS Capacity	24251 lb

BACKHOE

Dig Depth - Standard	14.3 ft
Dig Depth - E-Stick Extended	17.9 ft

HYDRAULIC SYSTEM

Pump Type	Variable Flow, Axial Piston
System Pressure - Backhoe	3600 psi
Pump Capacity at 2,200 rpm	43 gal/min
System Pressure - Loader	3600 psi
Type	Closed Center

TRANSMISSION

Power Shuttle Transmission - Forward 4th	25 mile/h
Power Shuttle Transmission - Reverse 4th	25 mile/h

Auto-Shift - Optional - Forward 6th	25 mile/h
Auto-Shift - Optional - Forward 1st	3.6 mile/h
Power Shuttle Transmission - Reverse 3rd	13 mile/h
Power Shuttle Transmission - Forward 3rd	13 mile/h
Auto-Shift - Optional - Reverse 2nd	7.6 mile/h
Power Shuttle Transmission - Forward 1st	3.4 mile/h
Auto-Shift - Optional - Reverse 1st	3.6 mile/h
Auto-Shift - Optional - Forward 5th	16 mile/h
Power Shuttle Transmission - Reverse 1st	3.4 mile/h
Power Shuttle Transmission - Reverse 2nd	5.6 mile/h
Auto-Shift - Optional - Forward 2nd	5.7 mile/h
Auto-Shift - Optional - Forward 3rd	7 mile/h
Power Shuttle Transmission - Forward 2nd	5.6 mile/h
Auto-Shift - Optional - Forward 4th	12 mile/h
Auto-Shift Transmission - With Lock-Up Torque Converter - Optional: Forward - 2nd	5.7 mile/h
Auto-Shift Transmission - With Lock-Up Torque Converter - Optional: Forward - 6th	25 mile/h
Auto-Shift Transmission - With Lock-Up Torque Converter - Optional: Reverse - 1st	3.6 mile/h
Auto-Shift - Optional - Reverse 3rd	17 mile/h
Auto-Shift Transmission - With Lock-Up Torque Converter - Optional: Forward - 1st	3.6 mile/h
Auto-Shift Transmission - With Lock-Up Torque Converter - Optional: Forward - 6th LUC	25 mile/h
Auto-Shift Transmission - With Lock-Up Torque Converter - Optional: Forward - 5th LUC	15 mile/h
Auto-Shift Transmission - With Lock-Up Torque Converter - Optional: Forward - 4th	12 mile/h
Auto-Shift Transmission - With Lock-Up Torque Converter - Optional: Reverse - 3rd	17 mile/h
Auto-Shift Transmission - With Lock-Up Torque Converter - Optional: Reverse - 1st	7 mile/h

Auto-Shift Transmission - With Lock-Up Torque Converter - Optional: Forward - 3rd	7.6 mile/h
Auto-Shift Transmission - With Lock-Up Torque Converter - Optional: Reverse - 2nd	7.6 mile/h
Auto-Shift Transmission - With Lock-Up Torque Converter - Optional: Forward - 5th	14 mile/h

SERVICE REFILL CAPACITIES

Rear Axle	4.4 gal (US)
Transmission - Power Shuttle - 2WD	4 gal (US)
Fuel Tank	42 gal (US)
Cooling System with Air Conditioning	5.9 gal (US)
Front Axle (4WD) - Planetaries	0.2 gal (US)
Engine Oil - With Filter	2.3 gal (US)
Diesel Exhaust Fluid*	5 gal (US)
Hydraulic System	25.1 gal (US)
Transmission - Auto-Shift - 4WD	5 gal (US)
Front Axle (4WD)	2.9 gal (US)
Rear Axle - Planetaries	0.4 gal (US)
Transmission - Power Shuttle - 4WD	4 gal (US)
Hydraulic Tank	10.6 gal (US)
Note (1)	* Must meet the requirements outlined in ISO 22241.
Note (2)	Requires ultra-low sulfur fuel less than or equal to 15 ppm fuel sulfur.

AXLE RATINGS

Rear Axle - Static	50582 lb
Front Axle (4WD) - Dynamic	20233 lb

Front Axle (2WD) - Static	50582 lb
Front Axle (2WD) - Dynamic	20233 lb
Front Axle (4WD) - Static	50582 lb
Rear Axle - Dynamic	20233 lb
Axle Oscillation	10 Degrees

STEERING

Rod Diameter	1.4 in
Stroke	4.7 in
Turning Circle - (inner wheel not braked) - Outside Front Wheels	26.8 ft
Turning Circle - (inner wheel not braked) - Outside Widest Loader Bucket	36 ft
Axle Oscillation	11°
Power Steering	Hydrostatic
Bore	2.6 in
Type	Front Wheel

BRAKES

Feature (1)	Brakes meet the following standards: SAE J1473 and ISO 3450 requirements.
Feature (4)	Parking/secondary brakes are independent of the service brake system.
Feature (3)	Foot operated brake pedals can be interlocked for roading.
Feature (5)	Parking brake is mechanically applied through an adjustable hand lever located on the right console.
Feature (2)	Self-adjusting, completely enclosed and sealed.

ENGINE FEATURES

Feature (10)	Dry-type axial seal air cleaner with integral precleaner, automatic dust ejection system, and filter condition indicator.
Feature (11)	Direct electric, 12-volt starting and charging system with 880 CCA Group 31 maintenance free battery.
Feature (9)	Direct injection fuel system provides accurate fuel delivery; remote mounted electric lift pump improves serviceability.
Feature (13)	High contact ratio/gear train, peripheral fixed isolation top cover and open deck block design reduce bare engine noise.
Feature (7)	Cylinder head is high strength, cast iron alloy construction with extra duty wall and deck thickness.
Feature (14)	Higher low end torque for better engine/machine performance.
Feature (2)	Three-ring pistons made of lightweight, silicon/aluminum alloy for strength and maximum thermal conductivity.
Feature (3)	Forged chrome/molybdenum-steel crankshaft with crankshaft with either induction hardened or nitrocarburized journals.
Feature (6)	Cylinder block is high strength, cast iron alloy of deep skirt, monobloc design for increased strength and long life.
Feature (1)	Regeneration is passive and does not require any input from the operator or disrupt work.
Feature (4)	Front and rear crankshaft oil seals are "lip" type Viton and PTFE designs featuring an integral dust lip.
Feature (5)	Heat resistant, silicone-chrome steel intake and STELLITE-faced exhaust valves provide long life.
Feature (8)	Cylinder head's intake and exhaust ports are precision cast to promote optimum gas flow.
Feature (12)	Standard glow plug starting aid system for efficient cold weather starting.

Feature (15)Engine is equipped with electric fuel priming pump.

TIRES

Choice 5Front: 340/80R 18/Rear: 500/70R 24 RT

Choice 2Front: 12.5/80-18 (12 ply) 1-3/Rear: 19.5L-24 (12 ply) ATU

Choice 3Front: 12.5/80-18 NHS (12 ply) 1-3/Rear: 21L-24 (16 ply) R4 ATU

Choice 4Front: 340/80R 18/Rear: 19.5L-24 (12 ply) R4 ATU

Choice 1Front: 11L-16 (12 ply) F-3/Rear: 19.5L-24 (12 ply) R4 ATU

STANDARDS

Cab - ROPSSAE J1040 MAY94; ISO 3741 1994

Cab - SoundANSI/SAE J1166 OCT98 is 79 dB(A)

Cab - FOPSSAE J/ISO 3449 APR98 LEVEL II and ISO 3449: 1992 LEVEL II

BrakesSAE J/ISO 3450; ISO 3450 1996

Exterior SoundSAE J188 JUN86 is 76 dB(A)

420F2/420F2 IT STANDARD EQUIPMENT

ADJUSTABLE AUXILIARY CONTROLS, BACKHOE LOADER

AIR CLEANER

ALARM, BACK-UP

ALTERNATOR, 150 AMP

AUDIBLE SYSTEM FAULT ALARM

AUTOMATIC ENGINE SPEED CONTROL (AESC)

BATTERY, MAINTENANCE-FREE, 880 CCA

BATTERY DISCONNECT SWITCH

BATTERY REMOTE JUMPSTART

BOOM TRANSPORT LOCK

BRACE, LIFT CYLINDER

BRAKE, SECONDARY PARKING

BRAKES, HYDRAULICALLY BOOSTED, OIL DISC, DUAL PEDALS, INTERLOCKING

BUCKET LEVEL INDICATOR

CANOPY ROPE/FORS

CANOPY, ROPS/FOPS

CAT CUSHION SWING SYSTEM

COAT RESTRAINT

COOLANT/ANTIFREEZE, EXTENDED LIFE

COUNTERWEIGHT, BUMPER

DOMELIGHT (CAB ONLY)

DIAGNOSTIC PORT FOR ENGINE, MACHINE AND GAUGE CLUSTER ELECTRONIC CONTROL MODULES

DIFFERENTIAL LOCK, LOADER JOYSTICK

ENGINE, CAT C4.4 ACERT (DIRECT INJECTION TURBOCHARGED), MEETS TIER 4 FINAL EMISSION STANDARDS, SELECTIVE CATALYST REDUCTION, DIESEL OXIDATION CATALYST (DOC)

ENGINE ENCLOSURE, SOUND SUPPRESSION REMOVAL PANELS

FACE SEALS, O-RING

FAN, SUCTION AND GUARD

FAST REVERSING SHUTTLE, ALL GEARS

FENDERS, REAR

FILTERS, SPIN-ON: FUEL, ENGINE OIL, TRANSMISSION OIL, WATER SEPARATOR

FILTERS, BOWL AND CARTRIDGE: HYDRAULIC FLUID

FLASHING HAZARDS/SIGNAL LIGHTS

FLOOR MAT

FUEL TANK, FULLY ENCLOSED

FULLY HINGED FRONT GRILL FOR COOLING PACKAGE CLEANING ACCESS

GAUGE CLUSTER: COOLANT TEMPERATURE, FUEL LEVEL, TORQUE CONVERTER TEMPERATURE, DEF LEVEL

GROUND LEVEL FUEL FILL AND DEF FILL

HIGH AMBIENT COOLING PACKAGE

HOOD LOCK, INSIDE CAB

HYDRAULIC HOSE, XT™

HYDRAULIC OIL COOLER

HYDRAULIC OIL LEVEL SIGHT GAUGE

HYDRAULIC VALVE, HYDROSTATIC STEERING

HYDRAULIC VALVES, LOADER 2 FUNCTION

HYDRAULIC VALVES, BACKHOE 5 FUNCTION

HYDRAULICS, LOAD SENSING WITH VARIABLE DISPLACEMENT PISTON PUMP

INDICATOR LIGHTS: ECO MODE ACTIVE, WATER IN FUEL, REMOTE DIAL THROTTLE ACTIVE, ENGINE

WARNING, WARNING LAMP, EMISSIONS MODULE MALFUNCTION, AESC ACTIVE, LOW BATTERY/CHARGING SYSTEM WARNING, HIGH HYDRAULIC OIL TEMPERATURE; LCD WARNINGS: ENGINE OIL PRESSURE, MACHINE LOCKED (IF EQUIPPED), SERVICE DUE, AIR FILTER BLOCKED, HIGH COOLANT TEMPERATURE, AUTO IDLE SHUTDOWN, HIGH TORQUE CONVERTER TEMPERATURE, HYDRAULIC FILTER BYPASS

INSTRUMENT PANEL LIGHTS

JOYSTICK CONTROLS: PILOT OPERATED, EXCAVATOR-STYLE WITH PATTERN CHANGER

KEY START/STOP SYSTEM

LCD SCREEN: ENGINE SPEED, HOUR METER, GEAR/DIRECTION, BATTERY VOLTAGE, HYDRAULIC OIL TEMPERATURE, TORQUE CONVERTER TEMPERATURE, COOLANT TEMPERATURE, TRIP TOTALS (FUEL AND HOURS), LIFETIME TOTALS (FUEL AND HOURS), OPERATOR SETTINGS (UNITS, BRIGHTNESS, PROGRAMMABLE HOE AUXILIARY FLOW), SERVICE MODE DIAGNOSTICS, OIL LIFE RESET, DPF FORCE REGENERATION, MAINTENANCE INTERVALS, ECM/SYSTEM INFO

LIGHTS, WORKING (4 FRONT, 4 REAR)

LOADER, SELF-LEVELING, RETURN-TO-DIG AND TRANSMISSION DISCONNECT SWITCH

LOADER, SINGLE TILT

MIRROR, REARVIEW

ONE-TOUCH LOW IDLE

OPEN CIRCUIT BREATHER

PATTERN CHANGER, IN CAB

POWER RECEPTACLE, 12 VOLT, 2 INTERNAL, 1 EXTERNAL

POWER STEERING, HYDROSTATIC

RADIO READY CAB

SEAT BELT, RETRACTABLE, 51 MM (2 IN)

SOCKET, TWO ROOF

STABILIZER SHOES, STREET

STEERING KNOB

SEAT, AIR SUSPENSION, FABRIC OR VINYL COVER, WITH ARMREST

STARTING SYSTEM, GLOW PLUGS

STEERING, HYDROSTATIC

STORAGE COMPARTMENT, LOCKABLE

STORAGE TRAY

STOP AND TAIL LIGHTS

SWING TRANSPORT LOCK

TILT STEERING WHEEL

TIRES

TOOLBOX, EXTERNAL, LOCKABLE

TORQUE CONVERTER

THROTTLE, HAND AND FOOT, ELECTRONIC

TRANSMISSION, FOUR SPEED, SYNCROMESH

TRANSMISSION NEUTRALIZER SWITCH

TRANSPORT TIE-DOWNS

TWO WHEEL DRIVE

VANDALISM LOCKS, FOUR

WARNING HORN, ELECTRIC

420F2/420F2 IT OPTIONAL EQUIPMENT

BATTERY, ADDITIONAL, 880 CCA

CAB, DELUXE

COLD WEATHER FUEL (-30° C/-22° F)

COLD WEATHER PACKAGE, INCLUDING ADDITIONAL BATTERY, ENGINE BLOCK HEATER, RADIATOR ANTIFREEZE, COLD WEATHER FUEL (-30° C/-22° F) AND MOUNTING FOR AN ETHER BOTTLE

COUNTERWEIGHTS, 115 KG (255 LB), 240 KG (530 LB) OR 460 KG (1,015 LB)

FENDERS, FRONT WITH INTEGRAL STEPS

FOUR WHEEL DRIVE

GUARD, BOOM PROTECTION PLATE

GUARD, STABILIZER, ROCK

HYDRAULIC VALVES, LOADER (3RD VALVE FOR GP, MP OR QUICK COUPLER)

HYDRAULIC VALVES, BACKHOE 6 FUNCTION

HYDRAULIC LINES, COMBINED FUNCTION AUXILIARY

LOADER, IT WITH QUICK COUPLER AND PILOT LOADER CONTROL

PRODUCT LINK, SATELLITE, PL631E

PRODUCT LINK, CELLULAR, PL641I

QUICK COUPLER, HYDRAULIC, DUAL LOCK

QUICK COUPLER, MANUAL, DUAL LOCK

QUICK COUPLER, PIN LOCK

RADIO AND CD PLAYER

RADIO AND CD PLAYER, BLUETOOTH

RIDE CONTROL

ROTATING BEACON, MAGNETIC MOUNT

SEAT BELT, 75 MM (3 IN)

SEAT, HEATED

SECURITY SYSTEM KEYPAD

STABILIZER PADS, REVERSIBLE

STICK, EXTENDIBLE

STORAGE BOX

TRANSMISSION, AUTOSHIFT

TRANSMISSION, AUTOSHIFT WITH LOCK-UP TORQUE CONVERTER

VANDALISM PROTECTION, GAUGE COVER

WORK TOOL ATTACHMENTS SUCH AS BUCKETS, FORKS, MATERIAL HANDLING ARMS, AUGERS, HAMMERS, BROOMS, COLD PLANERS AND VIBRATORY PLATE COMPACTORS. SEE YOUR CAT DEALER FOR MORE INFORMATION.

