Tires or attachments		ating ight	Tippin strai		Tippin full f		Wid over		Gro clear		Cha in vei dimen	rtical
	kg	lb	kg	lb	kg	lb	mm	ft in	mm	ft in	mm	ft in
26.5-25-20PR(L-3)	0	0	0	0	0	0	3010	9'11"	525	1'9"	0	0
26.5-25-20PR(L-4)	+360	+794	+250	+551	+220	+485	3010	9'11"	525	1'9"	0	0
Install additional counterweight	+400	+880	+980	+2,160	+850	+1,873						



#### STANDARD EQUIPMENT

- 2-spool valve for boom and bucket
- controls
- Alternator, 50 A
- Auto shift transmission with mode select system
- Back-up alarm
- Back-up lamp
- Batteries, **136 Ah**/12 V x 2
- Counterweight
- Directional signal
- Engine, Komatsu SAA6D125E-5 diesel

# **OPTIONAL EQUIPMENT**

- 12V converter
- 3-spool valve
- Additional counterweight
- Air conditioner
- AM/FM radio
- AM/FM stereo radio cassette
- Batteries, **140 Ah**/12V x 2
- Bucket teeth (bolt-on type)
- Bucket teeth (tip type)
- Cutting edge (bolt-on type)

#### Hard water area arrangement (corrosion resister)

- Hvdraulic-driven fan with reverse rotation
- Lift cylinders and bucket cylinder
- Main monitor panel with EMMS (Equipment Management

• Engine shut-off system, electric

Monitoring System) • PPC fingertip control, two levers

Radiator mask, lattice type

Rearview mirror for cab

Suspension System)

• Fire extinguisher

Joystick steering

• Load meter, new type

Floor mat

Front fender

• Emergency steering (SAE)

• Engine pre-cleaner with extension

• Lock-up clutch torque converter

- Tires (26.5-25-20PR tubeless)
  - and rims

• Rear window washer and wiper

• Service brakes, wet disc type

• Starting motor, 7.5 kW/24 V

• Seat, suspension type with reclining

• Steering wheel, tiltable, telescopic

ROPS/FOPS cab

Seat belt

• Sun visor

- Transmission, 4 forward and 4 reverse
- ECSS (Electronically Controlled
  - Ordinary spare parts • Power train guard
  - Seat, air suspension with automatic weight adjustment
  - Segment edges
  - Tool kit

  - Vandalism protection kit • Limited slip differential (F&R)

# KOMATSU® **WA480**-6



KOMATSU®

Printed in Japan 200806 IP.SIN (10)

CEN00134-02

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HORSEPOWER

Gross: 224 kW 300 HP @ 2000 rpm Net: 223 kW 299 HP @ 2000 rpm

> **BUCKET CAPACITY 3.8–6.1 m<sup>3</sup>** 5.0-8.0 yd<sup>3</sup>



'HEEL LOADER

Photo may include optional equipment.

# WALK-AROUND

# **Excellent Operator Environment**

- Automatic transmission with ECMV
- Electronic controlled transmission lever
- Variable transmission cut-off system
- Telescopic / tilt steering column
- Fingertip control levers
- Low-noise designed cab
- Pillar-less large ROPS/FOPS integrated cab

KOMATSU

• Easy entry/exit, rear-hinged door See pages 8 and 9.

# **Increased Reliability**

- Reliable Komatsu designed and manufactured components
- Sturdy main frame
- Maintenance-free, fully hydraulic, wet disc service and parking brakes
- Hydraulic hoses use flat face O-ring seals
- See page 6.

- - connections

# High Productivity & Low Fuel Consumption

- High performance SAA6D125E-5 engine
- Low fuel consumption
- Dual-mode engine power select system
- Large-capacity torque converter
- Automatic transmission with shift timing select system
- Lock-up Torque Converter (option)
- Variable displacement piston pump & CLSS See pages 4 and 5.

- Harmony with Environment
  - Meets EPA Tier 3 and EU Stage 3A emission regulations
  - Low exterior noise
- Low fuel consumption

# Easy Maintenance

- "EMMS" (Equipment Management Monitoring System) See page 7.
- side doors

2

### WHEEL LOADER



• Cathion electrodeposition process is used to apply primer paint • Powder coating process is used to apply main structure paint • Sealed DT connectors for electrical

HORSEPOWER Gross: 224 kW 300 HP @ 2000 rpm Net: 223 kW 299 HP @ 2000 rpm

> **BUCKET CAPACITY** 3.8-6.1 m<sup>3</sup> 5.0-8.0 yd<sup>3</sup>



Photo may include optional equipment.

• Easy access, gull-wing type engine • Automatic Reversible Fan (option)

# HIGH PRODUCTIVITY AND LOW FUEL CONSUMPTION



#### High Performance SAA6D125E-5 Engine

Electronic Heavy Duty Common Rail fuel injection system provides optimum combustion of fuel.

This system also provides fast throttle response to match the machine's powerful tractive effort and fast hydraulic response.

Net: 223 kW 299 HP

#### Low Emission Engine

This engine meets EPA Tier 3 emission regulations and EU Stage 3A emission regulations, without sacrificing power or machine productivity.

#### Low Fuel Consumption

The fuel consumption is reduced greatly because of the low-noise, high-torque engine and the large-capacity torque converter with maximum efficiency in the low-speed range.

#### **Dual-Mode Engine Power Select System**

This wheel loader offers two selectable operating modes— E and P. The operator can adjust the machine's performance with the selection switch.

- E Mode: This mode provides maximum fuel efficiency for general loading.
- P Mode: This mode provides maximum power output for hard digging operation or hill climb.



Dual mode engine power selection switch



The eco indicator will help an operator to promote energy saving.

#### Large-capacity torque converter

Newly designed drive train has a large-capacity torque converter for optimal efficiency. The WA480-6 has plenty of acceleration without the need for full throttle and it can achieve high travel speeds, even on grades or steep ramps leading to feed hoppers. This significantly assists productivity and also delivers great value for load-and-carry operations.

#### Automatic Transmission with Mode Select System

This operator controlled system allows the operator to select manual shifting or two levels of automatic shifting (low, and high).Auto L mode is for fuel saving operation with the gear shift timing set at lower speeds than Auto H mode.



Therefore Auto L mode keeps the engine in a relatively low rpm range for fuel conservation while yielding adequate tractive force by depressing the accelerator pedal.

Shift mode selection switch

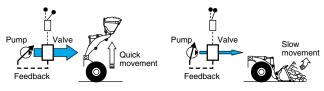
#### Lock-up Torque Converter (optional)

The Komatsu designed lock-up torque converter provides increased production efficiency, reduced cycle times and optimum fuel savings in load & carry or hill-climb operations. The operator can engage the system from 2nd to 4th gear. This optional feature allows the operator to activate the system on/off with a switch located on the right-side control panel.

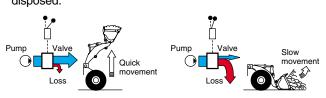
#### Variable displacement piston pump & CLSS

New design variable displacement piston pump combined with the Closed-center Load Sensing System delivers hydraulic flow just as the job requires preventing wasted hydraulic pressure. Minimized waste loss contributes to better fuel economy.

 New Variable Displacement Piston Pump: The pump delivers only necessary amounts minimizing waste loss.



• Fixed Displacement Piston Pump: The pump delivers the maximum amount at any time and the unused flow is disposed.





The long lift arms provide high dumping clearances and maximum dumping reach. The operator can even level loads on the body of a dump truck easily and efficiently.

Dumping Clearance: 3205 mm 10'6" Dumping Reach: 1410 mm 4'8" (4.6 m<sup>3</sup> 6.0 yd<sup>3</sup> bucket with B.O.C.)







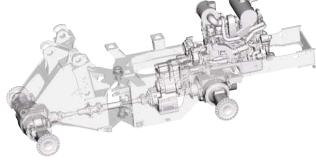




# **INCREASED RELIABILITY**

#### **Komatsu Components**

Komatsu manufactures the engine, torque converter, transmission, hydraulic units, electric parts, on this wheel loader. Komatsu loaders are manufactured with an integrated production system under a strict quality control system.

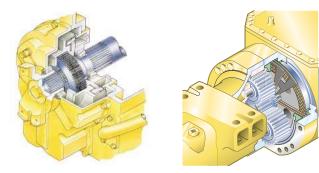


Wet multi-disc brakes and fully hydraulic braking

system mean lower maintenance costs and higher reliability. Wet disc brakes are fully sealed. Contaminants are kept out, reducing wear and maintenance. Brakes require no adjustments for wear, meaning even lower maintenance. The new parking brake is also an adjustment-free, wet multi-disc for high reliability and long life.

Added reliability is designed into the braking system by the use of two independent hydraulic circuits. Provides hydraulic backup should one of the circuits fail.

Fully hydraulic brakes mean no air system to bleed, or the condensation of water in the system that can lead to contamination, corrosion, and freezing.

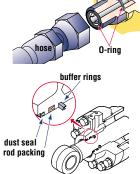


#### **High-rigidity Frames and Loader Linkage**

The front and rear frames and the loader linkage have more torsional rigidity to secure resistance against increased stress due to the use of a larger bucket. Frame and loader linkage are designed to accommodate actual working loads, and simulated computer testing proves its strength.



Flat face-to-face O-ring seals are used to securely seal hydraulic hose connections and to prevent oil leakage. In addition, buffer rings are installed to the head side of the all-hydraulic cylinders to lower the load on the rod seals and maximize the reliability.



#### **Cathion Electrodeposition Primer Paint/ Powder Coating Final Paint**

Cathion electrodeposition paint is applied as a primer paint and powder coating is applied as topcoat to the exterior sheet metal parts. This process results in a beautiful rust-free machine, even in the most severe environments. Some external parts are made of plastic providing long life and high impact resistance.

#### **Sealed DT Connectors**

Main harnesses and controller connectors are equipped

with sealed DT connectors providing high reliability, water resistance and dust resistance



# **EASY MAINTENANCE**



### EMMS

### (Equipment Management Monitoring System)

Monitor is mounted in front of the operator for easy

viewing, allowing the operator to easily check gauges and warning lights.

A specially designed two-spoke steering wheel allows the operator to easily see the instrument panel

### Maintenance Control

and Troubleshooting Functions

- Action code display function: If abnormality occurs, the monitor displays action details on the character display at the bottom center of the monitor.
- Monitor function: Controller monitors engine oil level, pressure, coolant temperature, air cleaner clogging, etc. If controller finds abnormalities, the error is displayed on LCD.
- **Replacement time notice function:** Monitor informs replacement time of oil and filters on LCD when replacement intervals are reached.
- Trouble data memory function: Monitor stores abnormalities for effective troubleshooting.



### WHEEL LOADER



#### Gull-wing Type Engine Side Doors Open Wide

The operator can open and close each gull-wing type engine side door easily with

the assistance of a gas spring to perform daily service checks from the ground.



#### **Ease of Radiator Cleaning**

If the machine is operating in adverse conditions, the operator can reverse the hydraulic cooling fan from inside the cab by turning on a switch on the control panel.

#### Automatic Reversible Fan (option)

The engine fan is driven hydraulically. It can be operated in reverse automatically. When switch is automatic position. The fan revolves in reverse for 2minutes every 2 hours intermittently. (Default setting)



B: Manual Reverse Mode A: Normal rotation Mode C: Auto Reverse Mode

# **OPERATOR ENVIRONMENT**

# **Easy Operation**

#### Automatic Transmission with ECMV

Automatic transmission with ECMV automatically selects the proper gear speed based on travel speed, engine speed, and other travel conditions. The ECMV (Electronically Controlled Modulation Valve) system engages the clutch smoothly to prevent lags and shocks when shifting. This system provides efficient machine operation and a comfortable ride.

• Kick-down switch: Consider this valuable feature for added productivity. With the touch of a finger, the kick-down switch

	1st	2nd	3rd	4th
1st	hold			
2nd	P-E	hold		
3rd	P←E ←	auto c	hange	
4th			auto change	
			↓	
	<mark>P←E</mark> One push p	ower-up function	-	cick-down sw

automatically downshifts from second to first when beginning the digging cycle. It automatically upshifts from first to second when the direction control lever is placed in reverse. This results in increased rim pull for better bucket penetration and reduced cycle times for higher productivity.

- One push power-up function: The kick-down switch also functions as a power-up switch in first gear. The first time the kick-down switch is depressed it functions as a kick-down switch and gear speed is reduced. When the machine is in E operation mode and first gear, pressing the kick-down switch a second time changes the operation mode to P allowing increased power for heavy digging operation. The operation mode returns to E when machine gear speed changes or direction changes to reverse.
- Hold switch: Auto shift is selected and if the operator turns on this switch when the lever is at the 3rd or 4th gear speed position, the transmission is fixed to that gear speed.

#### **Electronically Controlled Transmission Lever**



Easy shifting and directional changes

with Komatsu two-lever electronic shifting. Change direction or shift gears with a touch of the fingers without removing the

shifting hand from the steering wheel. Solid state electronics and conveniently located direction and gear shift controls make this possible. Automatic shifts in ranges two through four keep production high and manual shifting at a minimum.

#### Variable Transmission Cut-off System

The operator can continuously adjust the transmission cut-off pressure desired for the left brake pedal using switch located on the right-side control panel. The operator can improve the working performance by setting the cut-off pressure properly depending on working condition.

• High cut-off pressure for digging operations.

• Low cut-off pressure for truck-loading operations.



1:Cut-off ON/OFF switch 2:Cut-off adjustment switch 3:Fan reverse ON/OFF switch 4:Boom control 5:Bucket control

#### **Fingertip Work Equipment Control levers** with Large size arm rest

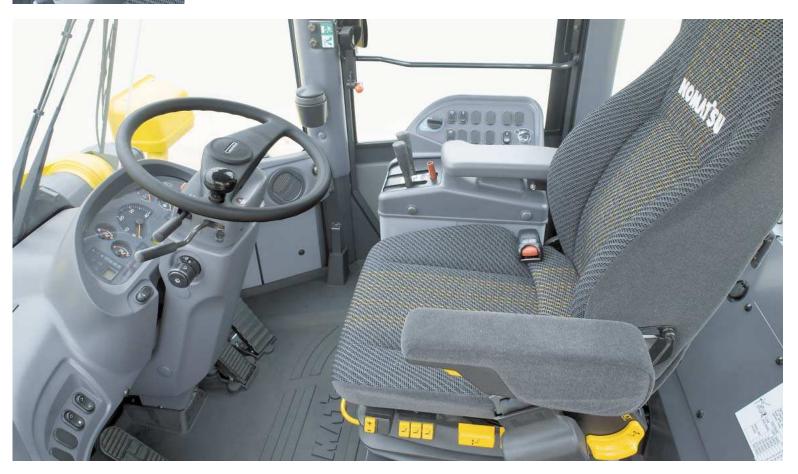
New PPC control levers are used for the work equipment. The operator can easily operate the work equipment with fingertip control, reducing operator fatigue and increasing controllability. The PPC control lever column can be slid



forward or rearward and the large size arm rest can be adjusted up or down to provide the operator with a variety of comfortable operating positions.

#### **Telescopic/Tilt Steering Column**

The operator can tilt and telescope the steering column to provide a comfortable working position.



# **Comfortable Operation**

#### Low-noise Design

Noise at operator's ear noise level : 72 dB(A) Dynamic noise level (outside): 112 dB(A)

The large cab is mounted with Komatsu's unique ROPS/FOPS viscous mounts. The low-noise engine, hydraulically driven fan,

and hydraulic pumps are mounted with rubber cushions, and the cab sealing is improved to provide a quiet,

low-vibration, dustproof with pressurizing, and comfortable operating environment. Also, exterior noise is lowest in this class.

#### **Pillar-less Large Cab**

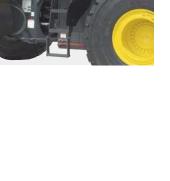
A wide pillar-less flat glass provides excellent front visibility. The wiper arm covers a large area to provide great visibility even on rainy days.

The cab area is the

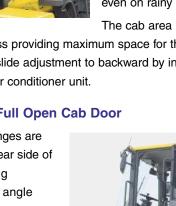
largest in its class providing maximum space for the operator. Increased seat slide adjustment to backward by introducing front mounted air conditioner unit

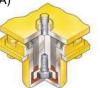
#### **Rear-hinged Full Open Cab Door**

The cab door hinges are installed to the rear side of the cab providing a large opening angle for the operator to enter and exit. The steps are designed like a staircase, so that the operator can get on and off the cab easily.











# **SPECIFICATIONS**



# 

Model	Komatsu SAA6D125E-5
Туре	Water-cooled, 4-cycle
	bocharged, aftercooled, cooled EGR
Number of cylinders	
-	<b>125 mm x 150 mm</b> 4.9" x 5.9"
	all-speed, electronic
Horsepower	
	Gross 224 kW 300 HP
	Net <b>223 kW</b> 299 HP
	blingHydraulic
	Direct injection
Lubrication system:	Ocean anna fance hubrication
Air cleaner	Dry type with double elements and dust evacuator, plus dust indicator
*Not boroopower at the maxim	um analod of radiator apoling fan

\*Net horsepower at the maximum speed of radiator cooling fan is 211 kW 283 HP.



#### Torque converter:

Туре	.3-element,	single-stage,	single-phase
Transmission:			

Type .....Full-powershift, contershaft type Travel speed: **km/h** mph

Measured with 26.5-25 tires

	1st	2nd	3rd	4th
Forward	<b>7.7</b> 4.8	<b>13.1</b> 8.1	<b>22.9</b> 14.2	<b>36.3</b> 22.6
Reverse	<b>7.9</b> 4.9	<b>13.5</b> 8.4	<b>23.6</b> 14.7	<b>37.4</b> 23.2



#### AXLES AND FINAL DRIVES

Drive systemFour-wheel drive	Drive s
FrontFixed, semi-floating	Front .
RearCenter-pin support, semi-floating,	Rear .
26° total oscillation	
Reduction gearSpiral bevel gear	Reduct
Differential gearConventional type	Differer
Final reduction gearPlanetary gear, single reduction	Final re

BRAKES

Service brakes	actuated,
wet disc brakes actuate on for	ur wheels
Parking brakeWet c	lisc brake
Emergency brakeParking brake is comm	only used



### STEERING SYSTEM

 Type
 Articulated type, full-hydraulic power steering

 Steering angle
 35° each direction (40° end stop)

 Minimum turning radius at
 6630 mm 21'9"

# HYDRAULIC SYSTEM

#### Steering system:

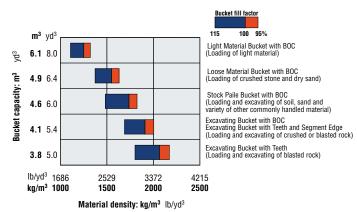
L

steering system.	
Hydraulic pumpPiston pump	
Capacity	
Relief valve setting	
Hydraulic cylinders:	
Type	
Number of cylinders	
Bore x stroke	
oader control:	
Hydraulic pump	
Capacity	
Relief valve setting	
Hydraulic cylinders:	
TypeDouble-acting, piston type	
Number of cylinders—bore x stroke:	
Boom cylinder	
Bucket cylinder	
Control valve	
Control positions:	
BoomRaise, hold, lower, and float	
Bucket	
Hydraulic cycle time (rated load in bucket)	
Raise	
Dump	
Lower (Empty)	

#### SERVICE REFILL CAPACITIES

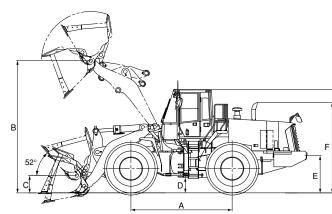
Cooling system	16.1 U.S. gal
Fuel tank	109.1 U.S. gal
Engine	10.0 U.S. gal
Hydraulic system	45.7 U.S. gal
Axle front	15.6 U.S. gal
rear	15.6 U.S. gal
Torque converter and transmission	17.2 U.S. gal





#### 

Measured with 26.5-25-20PR (L3) tires



	General Purpose Buckets					Loose Material	Light Material
	Stockpile			Excavating		Bucket	Bucket
	Bolt-on Cutting edges	Teeth	Bolt-on Cutting edges	Teeth and Segments	Teeth	Bolt-on Cutting edges	Bolt-on Cutting edges
Bucket capacity: heaped	<b>4.6 m³</b>	<b>4.3 m³</b>	<b>4.1 m³</b>	<b>4.1 m³</b>	<b>3.8 m³</b>	<b>4.9 m³</b>	<b>6.1 m</b>
	6.0 yd³	5.6 yd³	5.4 yd³	5.4 yd³	5.0 yd³	6.4 yd³	8.0 yd
struck	<b>4.0 m³</b>	<b>3.8 m³</b>	<b>3.5 m³</b>	<b>3.5 m³</b>	<b>3.2 m³</b>	<b>4.2 m³</b>	<b>5.2 m</b>
	5.2 yd³	5.0 yd³	4.6 yd³	4.6 yd³	4.2 yd³	5.5 yd³	6.8 yd
Bucket width	<b>3170 mm</b>	<b>3190 mm</b>	<b>3170 mm</b>	<b>3190 mm</b>	<b>3190 mm</b>	<b>3170 mm</b>	<b>3170 mm</b>
	10'5"	10'6"	10'5"	10'6"	10'6"	10'5"	10'5
Bucket weight	<b>2260 kg</b>	<b>2165 kg</b>	<b>2220 kg</b>	<b>2255 kg</b>	<b>2125 kg</b>	<b>2340 kg</b>	<b>2410 k</b> g
	4,982 lb	4,773 lb	4,894 lb	4,971 lb	4,685 lb	5,159 lb	5,313 lk
Dumping clearance, max. height and 45° dump angle*	<b>3205 mm</b>	<b>3080 mm</b>	<b>3320 mm</b>	<b>3195 mm</b>	<b>3195 mm</b>	<b>3150 mm</b>	<b>3080 mm</b>
	10'6"	10'1"	10'11"	10'6"	10'6"	10'4"	10'1
Reach at max. height	<b>1410 mm</b>	<b>1510 mm</b>	<b>1295 mm</b>	<b>1395 mm</b>	<b>1395 mm</b>	<b>1465 mm</b>	<b>1535 mm</b>
and 45° dump angle *	4'8"	5'0"	4'3"	4'7"	4'7"	4'10"	5'0'
Reach at 2130 mm (7') clearance	<b>2135 mm</b>	<b>2180 mm</b>	<b>2060 mm</b>	<b>2110 mm</b>	<b>2110 mm</b>	<b>2165 mm</b>	<b>2205 mm</b>
and 45° dump angle	7'0"	7'2"	6'9"	6'11"	6'11"	7'1"	7'3
Reach with arm horizontal and bucket level	<b>3020 mm</b>	<b>3175 mm</b>	<b>2855 mm</b>	<b>3010 mm</b>	<b>3010 mm</b>	<b>3100 mm</b>	<b>3195 mm</b>
	9'11"	10'5"	9'4"	9'11"	9'11"	10'2"	10'6
Operating height (fully raised)	<b>6175 mm</b>	<b>6175 mm</b>	<b>6025 mm</b>	<b>6025 mm</b>	<b>6025 mm</b>	<b>6175 mm</b>	<b>6450 mm</b>
	20'3"	20'3"	19'9"	19'9"	19'9"	20'3"	21'2
Overall length	<b>9170 mm</b>	<b>9325 mm</b>	<b>9005 mm</b>	<b>9160 mm</b>	<b>9160 mm</b>	<b>9250 mm</b>	<b>9345 mn</b>
	30'1"	30'7"	29'7"	30'1"	30'1"	30'4"	30'8
Loader clearance circle (35°)	<b>15400 mm</b>	<b>15500 mm</b>	<b>15310 mm</b>	<b>15420 mm</b>	<b>15420 mm</b>	<b>15440 mm</b>	<b>15490 mn</b>
(bucket at carry, outside corner of bucket)	50'6"	50'10"	50'3"	50'7"	50'7"	50'8"	50'10
Digging depth: 0°	<b>90 mm</b>	<b>110 mm</b>	<b>90 mm</b>	<b>110 mm</b>	<b>110 mm</b>	<b>90 mm</b>	<b>90 mn</b>
	3.5"	4.3"	3.5"	4.3"	4.3"	3.5"	3.5
10°	<b>355 mm</b>	<b>400 mm</b>	<b>335 mm</b>	<b>380 mm</b>	<b>380 mm</b>	<b>375 mm</b>	<b>385 mn</b>
	1'2"	1'4"	1'1"	1'3"	1'3"	1'3"	1'3
Static tipping load: straight	<b>20030 kg</b>	<b>20110 kg</b>	<b>20060 kg</b>	<b>20030 kg</b>	<b>20145 kg</b>	<b>19960 kg</b>	<b>19900 kg</b>
	44,160 lb	44,330 lb	44,220 lb	44,160 lb	44,410 lb	44,000 lb	43,870 lb
40° full turn	<b>17125 kg</b>	<b>17205 kg</b>	<b>17160 kg</b>	<b>17130 kg</b>	<b>17240 kg</b>	<b>17055 kg</b>	<b>16995 kg</b>
	37,750 lb	37,930 lb	37,830 lb	37,760 lb	38,010 lb	37,600 lb	37,470 ll
Breakout force	<b>212 kN</b>	<b>226 kN</b>	<b>231 kN</b>	<b>237 kN</b>	<b>249 kN</b>	<b>196 kN</b>	<b>189 kN</b>
	21600 kgf	23100 kgf	23600 kgf	24200 kgf	25400 kgf	20000 kgf	19300 kg
	47,660 lb	50,810 lb	51,930 lb	53,280 lb	55,980 lb	44,060 lb	42,490 lb
Operating weight	<b>25005 kg</b>	<b>24910 kg</b>	<b>24965 kg</b>	<b>25000 kg</b>	<b>24870 kg</b>	<b>25085 kg</b>	<b>25155 kg</b>
	55,130 lb	54,920 lb	55,040 lb	55,110 lb	54,830 lb	55,300 lb	55,460 lb

\* At the end of tooth or B.O.C.

All dimensions, weights, and performance values based on SAE J732c and J742b standards.

Static tipping load and operating weight shown include lubricant, coolant, full fuel tank, ROPS cab, and operator. Machine stability and operating weight affected by counterweight, tire size, and other attachments.

Apply the following weight changes to operating weight and static tipping load.

		F	
Ī			
,	G		
ļ	,	ļ	

	Tread	2300 mm	7'7"
	Width over tires	3010 mm	9'11"
Α	Wheelbase	3450 mm	11'4"
В	Hinge pin height, max. height	4505 mm	14'9"
С	Hinge pin height, carry position	585 mm	1'11"
D	Ground clearance	525 mm	1'9"
Ε	Hitch height	1240 mm	4'1"
F	Overall height, top of the stack	3080 mm	10'1"
G	Overall height, ROPS cab	3500 mm	11'6"

WA480-6