

# WA200-7 Tier 4 Interim Engine

#### **NET HORSEPOWER 126 HP @ 2000 rpm** 94 kW @ 2000 rpm

## **OPERATING WEIGHT** 25,342 – 26,313 lb

#### 25,342 - 26,313 lb 11495 - 11890 kg

#### **BUCKET CAPACITY**

**2.6 – 3.1 yd³** 2.0 – 2.4 m³



PHOTOS MAY INCLUDE OPTIONAL EQUIPMENT

**WA200** 

## **WALK-AROUND**



Photos may include optional equipment

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#### HIGH PRODUCTION WITH LOW FUEL CONSUMPTION

#### **Hydrostatic Transmission:**

- Quick Acceleration
- Dynamic Braking
- Variable Speed Traction Control
- Creeping Mode

**Komatsu SmartLoader Logic** helps reduce fuel consumption with no decrease in production.



A powerful Komatsu SAA4D107E-2 engine provides a net output of 94 kW 126 HP with up to 3% improved fuel consumption.\* This engine is EPA Tier 4 Interim and EU stage 3B emissions certified.

Variable Flow Turbocharger provides optimum air flow under various speed and load conditions.

Komatsu Diesel Oxidation Catalyst (KDOC) reduces particulate matter using 100% passive regeneration. No DPF is required.

### Increased cooling capacity

- Auto-reversing fan is standard
- Wider core coolers

**Improved cab** provides the operator with improved comfort and visibility.

**Multi-function monolever** with proportional control switch.

**Swing-out cooler design** provides easy access to service and clean the cooler assembly.

**Battery disconnect switch** allows a technician to disconnect the power supply before servicing the machine.

**Energy saving guidance** with Eco indicator.

**Komatsu Auto Idle Shutdown** helps reduce idle time and reduce operating costs.

Versatile Parallel Z-bar (PZ) linkage for parallel lift.



Komtrax equipped machines can send location, SMR and operation maps to a secure website utilizing wireless technology. Machines also relay error codes, cautions, maintenance items, fuel levels, and much more.

\* When compared to the WA200-6

# WA200-7

## HIGH PRODUCTIVITY & LOW FUEL CONSUMPTION

## High Performance Komatsu SAA4D107E-2 Engine

The Komatsu SAA4D107E-2 engine is EPA Tier 4 Interim and EU Stage 3B emissions certified and provides exceptional performance while reducing fuel consumption. Based on Komatsu proprietary technologies developed over many years, this new diesel engine reduces exhaust gas particulate matter (PM) by more than 90% and nitrogen oxides (NOx) by more than 45% when compared to Tier 3 levels.

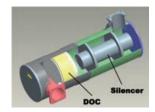
Through the in-house development and production of

engines, electronics, and hydraulic components, Komatsu has achieved great advancements in technology, providing high levels of performance and efficiency in virtually all applications. The operator will notice high torque at low speeds, excellent operation and lower fuel consumption to provide maximum productivity.



#### Komatsu Diesel Oxidation Catalyst (KDOC)

The new Komatsu Diesel Oxidation Catalyst (KDOC) has an integrated design that does not interfere with daily operation. This smart and simplified system removes soot using 100% "passive regeneration" without the need for a Diesel Particulate Filter. The KDOC's simple design does not have a scheduled service interval and no required maintenance. For owners, this means lower owning and operating costs due to less complexity and truly seamless operation for the operator.



#### Closed Crankcase Ventilation (CCV)

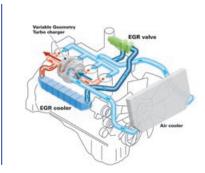
Crankcase emissions (blow-by gas) are passed through a CCV filter. The CCV filter traps oil mist which is returned back to the crankcase while the gas, which is almost oil mist free, is fed back to the air intake.



## Heavy Duty High Pressure Common Rail (HPCR) Fuel Injection System

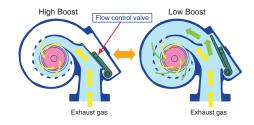
The heavy duty HPCR system is electronically controlled

to deliver a precise quantity of pressurized fuel into the combustion chamber using multiple injection events to achieve complete fuel burn and reduce exhaust gas emissions. Fuel injector reliability has been improved by using ultra-hard wear resistant materials.



#### **Variable Flow Turbocharger (VFT)**

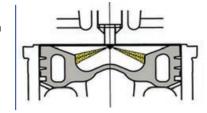
The variable flow turbocharger features simple and reliable technology that varies the intake airflow. This provides optimum air flow under all speed and load conditions producing cleaner exhaust gas without sacrificing power or performance.



#### **Redesigned Combustion Chamber**

The combustion chamber located at the top of the

engine piston has a new shape designed to improve combustion and further reduce NOx, PM, fuel consumption, and noise levels.



#### **Cooled Exhaust Gas Recirculation (EGR)**

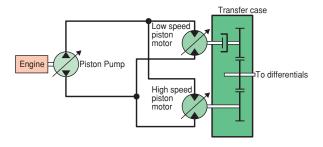
Cooled EGR, a technology that has been well proven in Komatsu Tier 3 engines, reduces NOx emissions to meet Tier 4 levels. The hydraulically actuated EGR system has increased capacity and uses larger and more robust components to ensure reliability for demanding work conditions.

#### Komatsu SmartLoader Logic

Wheel loaders have different torque requirements depending on working conditions. Komatsu SmartLoader Logic reads data from various sensors and vehicle controls to precisely control the torque output. This lowers the torque output during less demanding work, saving fuel. And because its seamless to the operator, it operates without decreasing production.

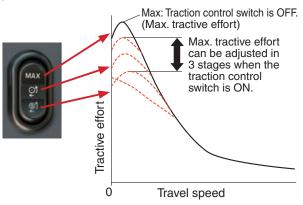
#### 1-Pump 2 Motor System

The 1-pump, 2 motor system allows for high-efficiency and high tractive effort. Engine power is transmitted hydraulically to a transfer case, then mechanically out to the differentials and the four driving wheels.



#### **Variable Traction Control System**

The new variable speed control system is designed to adjust the operating speed for each working condition. S-mode reduces tire spin in slippery or snowy conditions. Tractive effort can be adjusted in three stages when traction control switch is ON. Max traction provides the full, 100%, tractive effort.



## Fuel consumption decreased by up to 3%

(Compared with the WA200-6)

#### Electronically Controlled Hydrostatic Transmission

The HST provides quick travel response and aggressive drive into the pile. Full auto-shifting eliminates any gear shifting and kick-down operation to allow the operator to concentrate on the digging and loading. The HST also acts as a dynamic brake to slow the loader. This prolongs the life of the wet disc brakes.

#### **Eco Indicator**

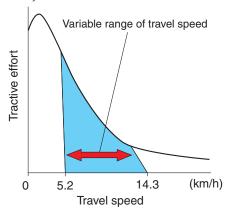
The ECO indicator helps an operator by promoting



#### Variable Speed Control

Creep mode limits the travel speed while still allowing for full hydraulic flow.





#### **OPERATOR ENVIRONMENT**

#### **New Designed Cabin**

The new cabin offers better ergonomics, more storage space and more features to improve operator comfort.



## Heated Operator Seat with Air Suspension

A new higher capacity seat is now standard. The arm rest angle is fully adjustable for optimum operator comfort.



## Tiltable Steering Wheel

The WA200-7 comes standard with a tiltable steering wheel that can be moved forward and out of the way for easy entry and exit of the cab.

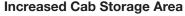


#### **Low Noise Design**

Operator's ear noise level : 70 dB(A)

Dynamic noise level (outside): 104 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 designed to provide a quiet, low-vibration, dustproof, and comfortable operating environment.



The WA200-7 cab features a storage box on the right hand side of the cab to allow the operator to store items out of the way.



#### **Ergonomic Comfort**

The dashboard and cab have been designed with operator comfort in mind. The dash displays machine speed as well as other key machine parameters.



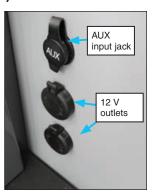
#### **Electrical Parking Brake**

The parking brake is now electrical and automatically applied when Komatsu Auto Idle Shutdown operates.



#### Auxiliary Input (MP3 Jack) 12 V Outlets

An Aux input to allow use of an MP3 player or other device is now standard as well as two 12 volt outlets. These are all located on the front of the right hand console.



## Seat Belt Caution Indicator

A warning indicator on the monitor appears when the seat belt is not engaged.



## **Engine Shutdown Secondary Switch**

The engine stop switch is incorporated to allow shutdown of the machine when accessing the key switch is not possible.





#### **OPERATOR ENVIRONMENT**

#### **Easier Entry and Egress**

The WA200-7 has an inclined ladder with wide steps and well placed hand holds to ease entry and exit from the cab. The door latch can be reached from ground level to ease opening and closing the door.



#### Electronically Controlled Suspension System (ECSS)

The Electronically Controlled Suspension System (ECSS) or ride control system uses an accumulator which absorbs some of the shock in the boom arm, giving the operator a much smoother ride. This reduces operator fatigue and reduces material spillage during load and carry operations. ECSS is speed sensitive, meaning that the boom won't move during stationary digging. ECSS is standard on the WA200-7.



#### **Multi-Function Mono Lever**

The servo-assisted multi-function mono lever, with control for optional 3rd spool, is standard. It includes a forward-neutral-reverse switch for quick and easy travel. Third spool attachments can be set to continual or proportional control allowing the operator to control the boom, bucket and attachment all with a single lever.



#### **Attachment Selector Switch**

Coupler equipped machines which use buckets and forks require a different flat level setting when switching between attachments. The attachment selector switch found in coupler equipped machines tells the loader which flat level to use.



# INFORMATION & COMMUNICATION TECHNOLOGY

#### **Right-side Control Panel**

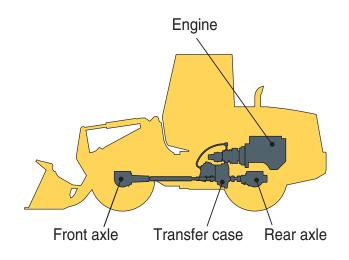
The operator can select the speed range, variable speed control, and tractive effort on the right side control panel. This is also where the directional selector switch (activates the FNR switch on the multi-function mono lever) is located. The control panel allows the operator to control the auto reverse cooling fan, 2-stage low idle function and select between two attachments, when equipped. Finally, the work equipment lock switch can be found here.



- 1: Attachment selector switch (optional)
- 2: 2-stage low idle switch
- 3: Cooling fan auto reverse rotation switch
- 4: Speed range selector switch
- 5: Variable shift control switch
- 6: Work equipment lock switch
- 7: Directional selector switch actuation switch
- 8: Traction control switch

#### **Komatsu Components**

Komatsu manufactures the engine, transfer case, axles and hydraulic components on the loader. Komatsu loaders are manufactured with an integrated production system under a strict quality control system.



## Wet Multiple-disc Brakes and Fully Hydraulic Braking System

This means lower maintenance costs and higher reliability. Sealed brakes keep contaminants out reduce wear and resulting maintenance.





#### **EASY MAINTENANCE**



#### **Full Side-Opening Gull-Wing Engine Doors**

The large gull-wing type engine doors are operated with low effort assisted by gas springs. The doors open in two steps for easy access to maintenance points. Large steps and hand holds are provided on each side of the frame to help access.



Photos may include optional equipment

#### **Swing-out Type Cooling Unit**

The large capacity cooling unit swings open for cleaning. It features wider spacing of cooling fins to reduce clogging.



Photos may include optional equipment

#### **Auto Reversing Fan**

The engine cooling fan is driven hydraulically and can be operated in reverse automatically. When the switch is in the automatic position, the fan runs in reverse for 2 minutes every 2 hours (Default).



Manual Reverse Mode Normal rotation Mode Auto Reverse Mode

#### **Battery Disconnect**

The battery disconnect switch is located in front of the right side battery box This can be used to disconnect power when performing service work on the machine.



#### **Engine Compartment**

The WA200-7 engine compartment is laid out for easy serviceability including the location of maintenance items, such as the filters, dipstick and oil fill locations. The same goes for the KDOC and CCV filter.





#### **Rear Full Fenders (Option)**

The WA200-7 has a newly designed rear fender option. The rear fenders open upward and use gas assist struts which require low lift force.

The fenders swing up with the gull wing doors to give the technician easy access to the engine compartment. Mud flaps are also included on the rear fenders.



#### **LED Taillights**

LED tail lamps / brake lamps and reverse lamps provide long bulb life and use less power than the ones on the WA200-6.



#### **Cab Air Intake Filter**

The cab air intake filter is located beneath the door, on the left hand side of the machine behind a lockable door, for easy access and security.



# MA200-7

# **KOMATSU PARTS & SERVICE SUPPORT**



### **Every new Komatsu Tier 4 Final** construction machine is covered.

The Komatsu CARE program covers all new Komatsu Tier 4 Final construction equipment, whether rented, leased or purchased. For the first 3 years or 2,000 hours, whichever occurs first, you'll receive:

- Regular service at 500, 1,000, 1,500 and 2,000-hr. intervals
- CCV filters replacement at 2,000 hours
- 50-point inspection by factory-trained technician at each scheduled interval
- Technician labor
- Fluids, oils, coolant, filters, SCR screen, tank breather and parts
- Technician travel to and from your equipment location

Service will be performed by a Komatsu Distributor and only Komatsu genuine fluids and filters will be used.

Komatsu CARE® services are available from every Komatsu Distributor in the U.S. and Canada.



#### Komatsu CARE - Extended Coverage

- Extended Coverage can provide peace of mind by protecting customers from unplanned expenses that effect cash flow
- Purchasing extended coverage locks-in the cost of covered parts and labor for the coverage period and helps turn these into fixed costs





#### **Komatsu Parts Support**

- 24/7/365 to fulfill your parts needs
- 9 parts Distribution Centers strategically located across the U.S. and Canada
- Distributor network of more than 300 locations across U.S. and Canada to serve you
- Online part ordering through Komatsu eParts
- Remanufactured components with same-as-new warranties at a significant cost reduction



#### Komatsu Oil and Wear Analysis (KOWA)

- KOWA detects fuel dilution, coolant leaks, and measures wear metals
- Proactively maintain your equipment
- Maximize availability and performance
- Can identify potential problems before they lead to major repairs
- Reduce life cycle cost by extending component life

# KOMTRAX EQUIPMENT MONITORING



- KOMTRAX is Komatsu's remote equipment monitoring and management system
- KOMTRAX continuously monitors and records machine health and operational data
- Information such as fuel consumption, utilization, and a detailed history lowering owning and



- Know when your machines are running or idling and make decisions that will improve your fleet utilization
- Detailed movement records ensure you know when and where your equipment is moved
- Up to date records allow you to know when maintenance is due and help you plan for future maintenance needs



- WHERE
- KOMTRAX data can be accessed virtually anywhere through your computer, the web or your smart phone
- Automatic alerts keep fleet managers up to date on the latest machine notifications



- Knowledge is power **make informed decisions** to manage your fleet better
- Knowing your idle time and fuel consumption will help maximize your machine efficiency
- Take control of your equipment
   any time, anywhere









### **SPECIFICATIONS**



#### ENGINE

ModelKomatsu SAA4D107E-2*
TypeWater-cooled, 4-cycle
AspirationTurbo-charged, after-cooled, cooled EGR
Number of cylinders4
Bore
Stroke
Piston displacement
Governor
Horsepower:
SAE J1995Gross 95.2 kW <b>128 HP</b>
ISO 9249 / SAE J1349 Net 94 kW 126 HP
Rated rpm 2000 rpm
Fan drive method for radiator coolingHydraulic
Fuel systemDirect injection
Lubrication system:
Method
FilterFull-flow type
Air cleaner
dust evacuator, plus dust indicator

\*EPA Tier 4 Interim and EU stage 3B emissions certified



#### **TRANSMISSION**

Transmission......Hydrostatic, 1 pump, 2 motors with speed range select

Travel speed	Forward	Reverse
1st	5.2 - 14.3 km/h <b>3.2 - 8.9 mph</b>	5.2 - 14.3 km/h <b>3.2 - 8.9 mph</b>
2nd	14.3 km/h <b>8.9 mph</b>	14.3 km/h <b>8.9 mph</b>
3rd	23.2 km/h <b>14.4 mph</b>	23.2 km/h <b>14.4 mph</b>
4th	38.0 km/h <b>23.6 mph</b>	38.0 km/h <b>23.6 mph</b>

Measured with 20.5-R25 tires



#### **AXLES AND FINAL DRIVES**

Drive system	Four-wheel drive
	Fixed, semi-floating
Rear	Center-pin support, semi-floating,
	24° total oscillation
Reduction gear	Spiral bevel gear
Differential gear	Torque proportioning
Final reduction gear	Planetary gear, single reduction



#### BRAKES



#### **STEERING SYSTEM**



#### **HYDRAULIC SYSTEM**

Steering system: Hydraulic pump
Loader control: Hydraulic pump
Type
Lift cylinder 2- 125 mm x 673.5 mm <b>4.9" x 26.5"</b> Bucket cylinder 1- 150 mm x 504 mm <b>5.9" x 19.8"</b> Control valve 2-spool type  Control positions:
Boom
Hydraulic cycle time (rated load in bucket) Raise

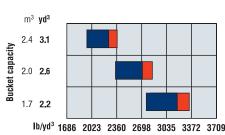


#### SERVICE REFILL CAPACITIES

Cooling system 24.6 ltr	6.5 U.S. gal
Fuel tank 177 ltr	46.8 U.S. gal
Engine	4.1 U.S. gal
Hydraulic system58 ltr	15.3 U.S. gal
Axle front	4.9 U.S. gal
Axle rear	4.8 U.S. gal
Transfer case	1.3 U.S. gal



#### **BUCKET SELECTION GUIDE**



Light Material Bucket with BOCE (Scooping and loading of light material) General Purpose Bucket with BOCE

**Bucket fill factor** 

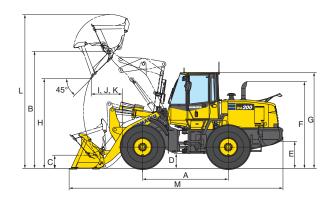
(Loading and excavating of soil, sand and a variety of other commonly handled material)

Excavating Bucket with BOCE (Loading and excavating of soil, sand and a variety of other commonly handled material)

kg/m³ 1000 1200 1400 1600 1800 2000 2200 **Material density** 

## DIMENSIONS

Measured with 20.5-R25(L3) Tires, ROPS/FOPS cab



Tread	1930 mm	6'4"
Width over tires	2470 mm	8'1"
A Wheelbase	2840 mm	9'4"
B Hinge pin height, max. height	3885 mm	12'9"
C Hinge pin height, carry position	425 mm	1'5"

# P R O T U

D Ground clearance	495 mm	1'7"
E Hitch height	965 mm	3'2"
F Overall height, top of the stack	2875 mm	9'5"
G Overall height, ROPS cab	3180 mm	10'5"

#### **BUCKET**

			General Purpose Bucket	General Purpose Bucket
			Pin On	Quick Coupler
			Bolt-on Cutting Edge	Bolt-on Cutting Edge
	Bucket capacity:	heaped	2.0 m <sup>3</sup>	2.0 m <sup>3</sup>
			2.6 yd <sup>3</sup>	2.6 yd <sup>3</sup>
		struck	1.7 m <sup>3</sup>	1.7 m <sup>3</sup>
			2.2 yd <sup>3</sup>	2.2 yd <sup>3</sup>
	Bucket width		2550 mm	2550 mm
			8'4"	8'4"
	Bucket weight		890 kg	1005 kg
			1,962 lb	2,216 lb
Н	Dumping clearand	ce, max.	2965 mm	2870 mm
	height and 45° du	mp angle*	9'9"	9'5"
1	Reach at max. he	ight and	950 mm	1115 mm
	45° dump angle*		3'1"	3'8"
J	Reach at 2130 m	m 7' clearance	1580 mm	1650 mm
	and 45° dump an	gle*	5'2"	5'5"
K	Reach with arm h	orizontal and	2315 mm	2590 mm
	bucket level*		7'7"	8'6"
L	Operating height	(fully raised)	5095 mm	5305 mm
			16'9"	17'5"
M	Overall length (bu	cket on ground)		7230 mm
			23'3"	23'9"
	Loader clearance	,	11450 mm	11470 mm
	at carry, outside o	,		37'8"
	Digging depth:	0°	110 mm	130 mm
			4"	5"
		10°	295 mm	360 mm
			12"	14"
	Static tipping load	l: straight	8605 kg	8295 kg
			18,971 lb	18,287 lb
		40° full turn	7665 kg	7300 kg
			16,898 lb	16,094 lb
	Breakout force		108 kN	90 kN
			11000 kgf	9170 kgf
			24,251 lb	20,216 lb
	Operating weight		11495 kg	11825 kg
			25,342 lb	26,070 lb

<sup>\*</sup> At the end of tooth or B.O.C.E.

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 tire size and attachments.

#### **FORK**

			Fork Quick Coupler
0	Fork tine length		1220 mm <b>4'0"</b>
Р	Ground to top of tine at maximum lift		3765 mm <b>12'4"</b>
Q	Reach at maximum lift		775 mm <b>2'6"</b>
R	Ground to top of tine - boom and tine	level	1780 mm <b>5'10"</b>
S	Reach - boom and tine level		1675 mm <b>5'6"</b>
T	Reach - tine level on ground		1040 mm <b>3'5"</b>
U	Overall length - tine level on ground		7645 mm <b>25'1"</b>
	Static tipping load - boom level: fork level, tine center	straight	5905 kg <b>13,018 lb</b>
		40° full turn	5155 kg <b>11,365 lb</b>
	Operating weight		11485 kg <b>25,320 lb</b>

Operating load per SAE J1197 (Feb. 1991), 50% of static tipping load.

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



- 2-spool valve for boom and bucket control
- Alternator 24V / 60A
- Auto shift transmission with mode select system
- Automatic hydraulic-driven fan with automatic reverse rotation
- Back-up alarm
- Batteries 2 x 12V / 92Ah
- Battery disconnect
- Boom kick-out
- Bucket positioner
- Electronically Controlled Suspension System (ECSS)
- Engine, Komatsu SAA4D107E-2
- Engine shut-off system, electric
- Equipment Management Monitoring System (EMMS)
- Lights (central warning, brake oil pressure, engine oil pressure, parking brake, cooling fan reverse, seat belt caution
- Gauges (Engine water temperature, ECO. Fuel level, HST oil temperature, speedometer/tachometer), variable speed display

- Front fenders
- Fuel pre-filter with water separator
- Heavy counterweight for quick coupler
- Horn, electric
- Hydrostatic transmission
- Komatsu SmartLoader Logic
- Komatsu Auto Idle Shutdown
- KOMTRAX®
- Lift cylinders and bucket cylinder
- Lights
- Back-up light
- Stop and tail light
- Turn signal lamps, 2 front and 2 rear with hazard switch
- Working lights, halogen, 2 front cab mount
- Working lights, halogen, 2 front fender mount
- Working lights, halogen, 2 rear grill mount
- Loader linkage with PZ lift boom
- Multifunction mono-lever loader control with transmission F/R switch
- Parking brake, electric
- Radiator, wider core
- Radiator mask, swing up
- Rear view mirrors, outside (2) inside (2)
- Rims for 20.5-R25 tires

- ROPS/FOPS Cab Level 2
- 2 x DC12V electrical outlets
- Ashtray
- Auto air conditioner
- Cigarette lighter, 24V
- Cup holder
- Operator seat, reclining, air suspension type
- Radio, AM/FM with AUX input jack
- Rear defroster, electric
- Seatbelt, 2-point retractable, 76mm 3" width
- Space for lunch box
- Steering wheel, tilt
- Sun visor, front window
- Windshield washer and wiper, front with intermittent
- Windshield washer and wiper, rear
- Service brakes, wet disc type
- Starting motor 24V / 5.5kW
- Transmission speed ranges, 4 forward and 4
- Vandalism protection kit, padlocks for battery box (2)



- 3-spool valve (will utilize integrated proportional control switch included in the multi-function mono-lever) and piping
- Auxiliary steering (SAE)

- Cutting edge (bolt-on type)
- Limited slip differential (F&R)
- Quick coupler
- Rear full fenders

- Various tire options, radial and bias
- Various bucket options

AESS864-01

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AD10(Electronic View Only)

10/14 (EV-1)



Note: All comparisons and claims of improved performance made herein are made with respect to the prior Komatsu model unless otherwise specifically stated.

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