Distributor:	Linder Machinery
Item # 205	

KOMATSU GD655-7 Grader

BUILD SHEET

Engine and its related items:

Accelerator and electric throttle control
Air cleaner, double element with dust indicator

Air intake extension

Antifreeze -22 F(-30C)

Auto-idle Shutdown

Engine, Komatsu SAA6D107E-3, 145 to 218 VHP

EPA Tier 4 Final certified, turbocharged and air-air aftercooled

Fuel line pre-filter

Hyraulic driven, reversing, cooling fan, blower type,

plastic blade, with fan guard

KDPF - After-Treatment Assembly Consisting of KDOC and KCSF

Secondary Engine Shutdown Switch

Selective Catalytic Reduction (SCR) System

Electrical system:

Alarm, backup

Alternator, 140 Ampere, (24V)

Battery disconnect switch

Batteries, Extreme duty, 2 x 12V, 1146 cca each

Dome light in cab

Headlights, (2) halogen type, front bar mounted

Horn, electric

Indicator lights:

- Battery charge
- Blade float
- · Brake oil pressure
- · Cooling fan reverse mode
- Differential lock
- · Differential oil temperature
- · Dual power mode, economy and power
- · Engine oil pressure
- · Engine RPM set
- Lift arm lock
- · Lights, high beam
- Parking break
- · Transmission system electrical circuit

Lights, backup, stop, directional

Starter 5.5kW

Working light, (4) cab mounted flood type

Working light, front(4) and rear(2)

Operator environment:

12V (10A) power port

Air conditioner (R134a) with heater

AM/FM radio

Cab: low profile with ROPS/FOPS(SAE J1040,J2311)

Console, powered adjustable with instrument panel monitoring system

Electric defroster rear window

Mirrors: interior cab, right and left exterior mirrors

Multi-monitor with 7" LCD Display

Rearview Camera and Monitor

Seat, air suspension type, reclining (fabric)

Sound suppression, 74 Dba at operators ear with floormat

with tinted windows, front, rear and door intermittent wiper/washers

MoldBoard

14' x 26"

Power Train:

Axle, rear full floating, planetary type reduction
Differential, manual lock/unlock
Dual mode transmission (8F-4R) power shift direct drive
and torque converter with auto shift
Parking brake, spring apply, hydraulic release dry disc
Service brakes, fully hydraulic wet disc

Tires and rims: 17.5R25 radials on one piece 13" rims (6)

Work Equipment and Hydraulics:
Articulation stop-at-center feature
Blade acccumulators
Blade lift float, detent type, LH and RH
Circle, drawbar mounted, 360 deg rotation with blade lift
and circle side shift with anti drift check valves
Circle slip clutch
Greaseless circle wear plates

Hydraulic control valve, two, five valve sections with EPC control

Hydraulic system, closed center, load sensing

Seat mounted work equipment controls

Steering, full hydraulic with tilt steering wheel plus leaning front wheels and frame articulation with anti-drift check valves

Steering wheel with steering lever (joystick)

Other Standard Equipment:

Battery cover and engine side covers

Komtrax - Level 5

Precleaner, Turbo II

Rear hitch

Provision and hydrualics for Ripper, rear

Steps and handrails, right, left and rear

Toolbox with lock

TOPCON, Plug & Play provision for

Vanalism protection, lockable fuel tank, hydraulic tank



GD655-7

Tier 4 Final Engine

RIO RIST



HORSEPOWER

Net: 218 HP 163 kW Gross: 221 HP 165 kW

OPERATING WEIGHT

38,250 lb 17350 kg **42,946 lb** 19480 kg (with ripper)

BLADE LENGTH

14' 4.27 m



THE ROAD TO SUCCESS STARTS WITH KOMATSU

The GD655-7 features a SAA6D107E-3
Tier 4 Final Compliant Engine and when coupled to Komatsu's Dual Mode
Transmission, operators benefit from maximum control while reducing fuel consumption by up to 15% when compared to the GD655-5.

Komatsu's Dual Mode Transmission utilizes both a torque converter and a direct drive clutch to achieve high tractive effort, inching ability, high ground speeds and low fuel consumption.

Performance Features

- Dual mode transmission takes advantage of the torque multiplication and inching characteristics of a torque converter as well as the low fuel consumption and increased travel speed of a direct drive.
- Automatic engine stall prevention disengages direct drive and utilizes a torque converter preventing engine stall
- . Economy and Power engine modes
- Spring applied, hydraulic-release parking brake with larger caliper diameter for increased capacity
- Long wheelbase optimizes fine grading performance and body stability while maintaining a 24.2 ft turning radius
- · 25 degree articulation angle
- Closed-center load sensing hydraulics system ensures predictable work equipment response, multi-functioning abilities, reduced noise, and reduced fuel consumption.
- New articulation stop-at-center feature automatically returns the machine to the articulation center line
- New shift lever and F-N-R switch to simplify operation
- New gearshift preset function allows for initial presets of forward/ reverse shuttle gears

New Larger Operator's Cab

- ROPS/FOPS Level II
- New high-capacity seat design with air suspension
- Auxiliary jack for MP3 device and 2 x 12V sockets
- New low-effort electronic proportional control levers
- · New steering wheel and steering lever
- · LCD monitor panel with enhanced capability
- Standard rearview monitoring system with separate color monitor
- · Hexagonal cab design provides excellent visibility of the moldboard
- New fingertip control allows for more precise and natural feeling of controls
- · Operator presence monitoring system

Serviceability

- · Hydraulically driven, reversible cooling fan
- · Monitor based diagnostics
- · Dust boots installed on control valves prevent contamination
- · Ground level fueling with no obstruction from ripper
- · Fuel pre-filter and water separator
- · Battery box location provides protection from dust and debris
- · Battery disconnect switch can be locked for service

Standard Features

- · Air conditioner/heater
- KOMTRAX Level 5
- · Blade-lift accumulators
- · Circle slip clutch
- · Cab mounted work lights
- Plug-and-Play for Topcon System including integrated fingertip control levers in the cab

Structural / Quality Features

- Komatsu Harmony all major components are designed and manufactured by Komatsu
- New reduced cab noise by fine tuning rigidity of driveline (72 dB(A) in cabin)
- · Optimized lubrication circuit in transmission for increased durability
- · Larger drive shaft for increased durability
- · Strong front frame
- Steel backed, rubber clamps to keep hydraulic lines cleanly routed and reduce chafing

Komatsu Tier 4 Final Engine

- The SAA6D107E-3 engine reduces fuel consumption by up to 15% compared to the GD655-5
- Selective catalytic reduction (SCR) system
- · Komatsu Diesel Particulate Filter with automatic active regeneration
- · Hydraulically actuated Variable Geometry Turbocharger
- Hydraulically actuated Cooled EGR
- Komatsu auto idle shutdown reduces unnecessary idle time, reducing SMR, fuel consumption, and exhaust emissions
- SCR system includes a heated DEF tank, heated lines and a reversing pump to prevent DEF from freezing in the delivery lines.

OPERATOR ENVIRONMENT



New Steering Wheel and Steering Lever

By moving the control console forward and backward, entry and exit



Visibility

Excellent visibility from the hexangular cab and layout of the rear side pillars boost operator confidence and productivity in all grader applications. Well-positioned blade linkage provides an unobstructed view of the moldboard and front tires.



Less Effort

The new control system reduces operator arm movement, and relieves stress during operation.

Movement of arm

Reduce up to 92%

Stress during operation

Reduce up to 10%

Typical test data at Komatsu test center

Fingertip Control

Short lever throws and low effort in both directions allows the operator to use multiple controls with one hand.



Excellent Rear Visibility

The operator has an excellent view to the rear of the machine as well as the ripper.



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 operating cost



- 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





- 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



 KOMTRAX is standard equipment on all Komatsu construction products







KOMTRAX Plus°

For construction and compact equipment.

For production and mining class machines.

KOMATSU PARTS & SERVICE SUPPORT



KOMATSU CARE

Program Includes:

*The GD655-7 comes standard with complimentary factory scheduled maintenance for the first 3 Years or 2,000 Hours, whichever occurs first.

Planned Maintenance Intervals at:

500/1000/t500/2000 hour intervals. (250 hr. initial interval for some products) Complimentary Maintenance Interval includes: Replacement of Oils & Fluid Filters with genuine Komatsu Parts, 50-Point inspection, Komatsu Oil & Wear Analysis Sampling (KOWA) / Travel & Mileage (distance set by distributor; additional charges may apply)

Benefits of Using Komatsu CARE

- Assurance of Proper Maintenance with OEM Parts & Service
- Increased Uptime & Efficiency
- Factory Certified Technicians Performing Work
- Cost of Ownership Savings
- Transferable Upon Resale

Complimentary KDPF Exchanges

The GD655-7 comes standard with 2 Complimentary KDPF Exchange units for the first 5 Years or 9000 hours whichever occurs first. The suggested KDPF Exchange unit service intervals are 4500 hours & 9000 hours. End user must have authorized Komatsu distributor perform the removal & installation of the KDPF.

Complimentary SCR Maintenance

The GD655-7 also includes 2 factory recommended services of the Selective Catalytic Reduction (SCR) Diesel Exhaust Fluid (DEF) system during the first 5 Years or 9000 hours whichever occurs first. The service includes factory recommended DEF tank flush & strainer cleaning at the suggested service intervals of 4500 hours & 9000 hours.

Interval PM	i250	500	1000	1500	2000
KOWA SAMPLING - engine and hydraulic only	1				
CLEAN AC FRESH AND RECIRC AIR FILTERS	1		99-		
CHANGE TRANSMISSION CASE OIL	1		1		1
CLEAN TRANSMISSION STRAINER	1		1		1
CHANGE FINAL DRIVE CASE OIL	1		1		1
REPLACE FINAL DRIVE BREATHER	1		1		1
REPLACE HYDRAULIC OIL FILTER	1		1		1
CHECK CIRCLE ROTATION GEAR CASE OIL	1				1
CHANGE TANDEM CASE OIL	1				1
LUBRICATE LINKAGE, JOINTS, & CYLINDERS	1	1	1	1	1
CHECK AND CLEAN AIR CLEANER	1	1	1	1	1
DRAIN SEDIMENT FROM FUEL TANK	1	1	1	1	1
COMPLETE 50 POINT INSPECTION FORM:	1	,	,	,	1
LEAVE PINK COPY WITH CUSTOMER OR IN CAB	4	*	1	*	1
RESET MONITOR PANEL MAINTENANCE	1	,	,	,	,
COUNTER FOR APPROPRIATE ITEMS	V	1	1	1	1
KOWA SAMPLING - transmission, final drive,		,	,	-	-
tandem(I & r), engine and hydraulic		1	1	1	1
CHANGE ENGINE OIL		1	1	1	1
REPLACE ENGINE OIL FILTER		1	1	1	1
REPLACE FUEL PREFILTER		1	1	1	1
REPLACE AC FRESH & RECIRC FILTERS		1	1	1	1
REPLACE FUEL MAIN FILTER			1		1
REPLACE TRANSMISSION OIL FILTER			1		1
REPLACE TRANSMISSION BREATHER			1		1
REPLACE DEF BREATHER			1		1
REPLACE HYDRAULIC TANK BREATHER			1		1
CHANGE HYDRAULIC OIL			1		1
CLEAN HYDRAULIC TANK STRAINER			1		1
REPLACE KCCV FILTER					1
REPLACE DEF PUMP FILTER		2 4		1/4	1
FACTORY TRAINED TECHNICIAN LABOR	1	1	1	1	1
2 KDPF Exchanges suggested at 4,500 Hrs and 9.	000 H	rs.			-

2 SCR System Maintenance Services suggested at 4,500 Hrs. and 9000 Hrs.

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

^{*} Certain exclusions and limitations apply. Refer to the customer certificate for complete program details and eligibility. Komatsu® and Komatsu Care® are registered trademarks of Komatsu Ltd. Copyright 2019 Komatsu America Corp.

SPECIFICATIONS



ENGINE

ENGINE	
Model SAA6D107 Type Water-cooled, 4-cycle, direct inject Aspiration Turbocharged, aftercooled, cooled Number of cylinders	ction EGR
Bore	
Stroke	
Piston displacement	
	2 III-
Gross horsepower (Manual mode)	
Gear 1-3136 kW 183 HP / 2000	
Gear 4-6	
Gear 7-8	rpm
E-mode	
Gear 1-6136 kW 183 HP / 2000	
Gear 7-8	rpm
Net horsepower (Manual mode)** P-mode	
Gear 1-3134 kW 180 HP / 2000	rom
Gear 4-6	
Gear 7-8	
E-mode	
Gear 1-6134 kW 180 HP / 2000	rnm
Gear 7-8	A 100 PM
Max. torque 941Nm 96.0 kgm 694 ft-lbs / 1450	
Torque rise	
Fan speed	
Air cleaner 2-stage, dry-	ype

** Net horsepower output for standard (SAE J1349) including air cleaner, alternator (not charging), water pump, lubricating oil, fuel pump, muffler and fan running at minimum speed.



TRANSMISSION AND TORQUE CONVERTER

Full power shift transmission with integral free wheeling stator torque converter and lock-up.

Speeds (at rated engine speed)

* EPA Tier 4 Final emissions certified.

Gear	Forward	Reverse
1st	3.8 km/h 2.4 mph	5.0 km/h 3.1 mph
2nd	5.5 km/h 3.4 mph	10.2 km/h 6.3 mph
3rd	7.7 km/h 4.8 mph	22.3 km/h 13.9 mph
4th	11.2 km/h 7.0 mph	44.4 km/h 27.6 mph
5th	16.9 km/h 10.5 mph	
6th	24.5 km/h 15.2 mph	
7th	33.7 km/h 20.9 mph	
8th	48.5 km/h 30.1 mph	



TANDEM DRIVE

Oscillating welded box section	520 mm x 203 mm 1'8" x 8"
Side wall thickness: Inner	22 mm 0.87"
	19 mm 0.75 "
Wheel axle spacing	1525 mm 5'0"
	11° forward, 13° reverse
	7 L 1.8 U.S. gal



FRONT AXLE

Type	Solid bar	construc	tion we	lded	steel sectio	ns
	rance at pivot					
Wheel lean	angle, right or left				1	6°
Oscillation.	total					2°



REAR AXLE

Alloy steel, heat treated, full floating axle with lock/unlock differential.



WHEELS, FRONT AND REAR

Bearings	Tapered roller
Tires	17.5R25
Tire rims (demountable)	13" one-piece rime



STEERING



BRAKES

Service brake Foot operated, sealed oil disc brakes, hydraulically actuated on four tandem wheels.

Parking brake Manually actuated, spring applied, hydraulically released caliper.



FRAME

Front Fra	me S	Str	uc	ctu	ure	е																
Height													 			3	00	m	ım	1	1.8"	
Width																3	00	m	ım	1	1.8"	
Upper, L	ower	٠.															2	5	mn	1	1.0"	



DRAWBAR

SPECIFICATIONS



CIRCLE

Single piece rolled ring forging. Six circle support shoes with replaceable wear surface. Circle teeth hardened on front 180° of circle.



MOLDBOARD

Hydraulic power shift fabricated from high tensile steel. Includes replaceable metal wear inserts, cutting edge and end bits. Cutting edge and end bits are hardened.

..... 456 x 156 x 16 mm 1'6" x 6" x 0.6" Blade pull



BLADE RANGE

Moldboard side shift:

 Right
 625 mm 2'1"

 Left
 625 mm 2'1"

 Maximum Shoulder reach outside rear tires (frame straight)
 2480 mm 8'2"

 Left
 2590 mm 8'6"

 Maximum Iift above ground
 480 mm 1'7"

 Maximum cutting depth
 615 mm 2'0"

 Maximum blade angle, right or left
 90°

 Blade tip angle
 40° forward, 5° backward



HYDRAULICS

Load-sensing closed center hydraulics with variable displacement piston pump. Electronic proportional controlled valves with preselected maximum flow setting to each function. Double acting anti-drift check valves on blade lift, tip, circle shift, articulation, and leaning wheels.



INSTRUMENT

Electric monitoring system with diagnostics:

Standard: articulation, engine coolant temperature, fuel level, speed meter, transmission shift indicator, engine tachometer, torque converter oil temperature

Warning lights/Indicator:

Standard: battery charge, blade float, brake oil pressure, inching temperature, directional indicator, engine oil pressure, hydraulic oil temperature, heater signal, lift arm lock, parking brake, differential lock, torque converter oil, temperature, ecology, E-mode, fan reverse, rpm set, high beam, working lights



CAPACITIES (REFILLING)

Fuel tank			 						39	90	L	1	10	3.0	U.S.	gal
Cooling system			 								30	L		7.9	U.S.	gal
Crank case											23	L		6.1	U.S.	gal
Transmission			 							4	5	L	1	1.9	U.S.	gal
Final drive											16	L	_	4.2	U.S.	gal
Tandem housing (each	1)									5	7	L	1	5.1	U.S.	gal
Hydraulic system										6	9	L	1	8.2	U.S.	gal
Circle reverse housing											7	L		1.8	U.S.	gal
DEF Tank											36	L		9.5	U.S.	gal



OPERATING WEIGHT (APPROXIMATE)



RIPPER

Ripping depth, maximum	425 mm 1'5"
Ripper shank holders	5
Ripper shank holder spacing	534 mm 1'9"
Penetration force	kg 21,275 lbs
Pryout force 16600	kg 36,597 lbs
Machine length increase, beam raised	690 mm 2'5"

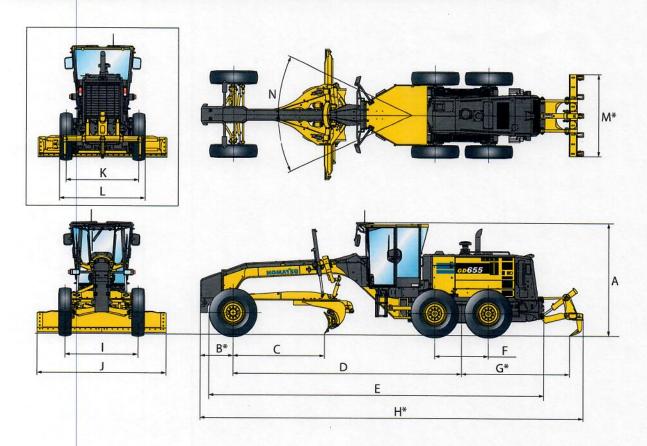


SCARIFIER

Middle, V-type	
Working width	1430 mm 4'8'
Scarifying depth, maximum	
Scarifier shank holders	11
Scarifier shank holders spacing	
Rear	
Working width	2186 mm 7'2"
Scarifying depth, maximum	165 mm 6.5"
Scarifier shank holders	
Scarifler shank holders spacing	267 mm 10.5'



DIMENSIONS



			100
A	Height: Low profile cab	3200 mm	10'6"
B*	Center of front axle to counterweight (Pusher)	930 mm	3'1"
C	Cutting edge to center of front axle	2580 mm	8'6"
D	Wheelbase to center of tandem	6495 mm	21'4"
E	Front tire to rear bumper	9510 mm	31'2"
F	Tandem wheelbase	1525 mm	5'0"
G*	Center of tandem to back of ripper	3065 mm	10'1"
H	Overall length	10875 mm	35'8"
1	Tread (front)	2170 mm	7'1"
J	Width of standard moldboard	4270 mm	14'0"
K	Tread (rear)	2160 mm	7'1"
L	Width over tires	2680 mm	8'9"
M*	Ripper beam width	2305 mm	7'7"
N	Articulation, left or right	25	,

^{*:} optional



STANDARD EQUIPMENT FOR BASE MACHINE

Engine and its related items:

- Accelerator and electric throttle control
- Air cleaner, double element with dust indicator
- Air intake extension
- Antifreeze -22 F(-30C)
- Auto-idle Shutdown
- Hydraulic driven, reversing, cooling fan, blower type, plastic blade, with fan guard
- Engine, Komatsu SAA6D107E-3, 145 to 218 VHP EPA Tier 4 Final certified, turbocharged and air-air after cooled
- Fuel line pre-filter
- KDPF After-Treatment Assembly Consisting of KDOC and KCSF
- Pre-cleaner
- Secondary Engine Shutdown Switch
- Selective Catalytic Reduction (SCR) System

Electrical system:

- Alarm, backup
- Alternator, 140 Ampere, (24V)
- Batteries, Extreme duty, 2 x 12V, 1146 cca each
- Battery, disconnect switch
- Dome light cab
- Headlights,(2) halogen type, front bar mounted
- Horn, electric
- Indicator lights:
- Battery charge
- Blade float
- Brake oil pressure
- Cooling fan reverse mode
- Differential lock
- Differential oil temperature
- Dual power mode, economy and power
- Engine oil pressure
- Engine RPM set
- Lift arm lock
- Lights, high beam

Parking brake

- Transmission system electrical circuit
- Lights: backup, stop, directional, tail
- Operator presence monitoring system.
- Starter 5.5kW
- Working light, front(4) and rear(2)
- Working light ,(4)cab mounted flood type

Operator environment:

- 12V (10A) power port
- Adjustable air suspension seat
- Adjustable tilt/telescopic steering wheel
- Air conditioner (R134a) with heater
- AM/FM radio with Aux input
- Cab: low profile with ROPS/FOPS Level II (SAE J1040, J2311)
- Console, adjustable with instrument panel monitoring system
- Electric defroster rear window
- Electronic height adjustable LH and RH consoles
- Mirrors: interior cab, right and left exterior mirrors
- Multi-monitor with 7" LCD Display
- Rearview Camera and Monitor
- Sound suppression, 72 Dba at operators ear with floor mat with tinted windows, front, rear and door intermittent wiper/washers

Power train:

- Dual mode transmission (8F-4R) power shift direct drive and torque converter with auto shift
- Electronic gear shift lever
- Axle, rear full floating, planetary type reduction
- Service brakes, fully hydraulic wet disc
- Parking brake, spring apply, hydraulic release dry disc
- Differential, manual lock/unlock
- Tires and rims: 17.5R25 radials on one-piece 13" rims (6)
- Transmission underguard

Work equipment and hydraulics:

- Articulation stop-at-center
- Blade accumulators
- Blade lift float, detent type, LH and RH
- Circle, drawbar mounted, 360° rotation with blade lift and circle side shift with anti-drift check valves
- Circle slip clutch
- Low-effort electronic proportional control levers (joysticks)
- Greaseless circle wear plates
- Hydraulic control valve, 2-5 valve sections
- Hydraulic system, closed center, load sensing
- Steering, full hydraulic with tilt steering wheel plus leaning front wheels and frame articulation with anti-drift check valves. Steering lever/ joystick provided

Other standard equipment:

- Anchor point for tie offs
- Komtrax Level 5
- Precleaner, Turbo II
- Provision for Grade Control, TOPCON
- Rear hitch
- Ripper, provision for battery cover and engine side covers
- Steps and handrails, right, left and rear
- Toolbox with lock
- Vandalism protection, lockable fuel tank. hydraulic tank, battery cover, engine side



OPTIONAL EQUIPMENT

- 610 mm 2' LH/RH moldboard extensions
- Amber colored warning light
- Moldboard: 3710 mm x 660 mm x 22 mm 12' x 26" x 0.87" with replaceable end bits, 152 mm x 16 mm 6" x 0.63" throughhardened cutting edges and 5/8" hardware
- Pusher plate (for use with rear mounted ripper/scarifier assembly)
- Moldboard extensions
- Mid-mounted scarifier assembly (includes 11 shanks and replaceable points)
- Rear-mounted ripper/scarifier assembly includes (3) shanks or (9) scarifier shanks can be inserted into the available slots
- Winter tires with three piece rims







Ripper

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AD06(1.5M)OSP

01/20 (EV-3)



Note: All comparisons and claims of improved performance made herein are made with respect to the GD655-6 unless otherwise specifically stated. The GD655-6 & -7 share the same engine, transmission, frame, and other components.

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