TADANO

SPEC. SHEET No.AT-255-1-32133/EX-01
DATE April, 2016

TADANO AERIAL PLATFORM

MODEL : AT-255CG

(CARRIER : FD7JJMA)

GENERAL DATA

MAXIMUM WORKING HEIGHT	27.5 m
MAXIMUM BUCKET BOTTOM HEIGHT	25.5 m
MAXIMUM BUCKET LOADING CAPACITY	200 kg or two(2) persons
BOOM	3-section, 7.70 m – 18.26 m +4.70 m –6.65 m(Articulating)

DIMENSIONS

Overall length	approx.	8,050 mm
Overall width	approx.	2,190 mm
Overall height	approx.	3,650 mm

MASS

Vehicle mass	approx.	8,480 kg
Gross vehicle mass	approx.	8,675 kg

Specifications are subject to change without notice.

AERIAL PLATFORM SPECIFICATIONS

MODEL AT-255CG

MAX. BUCKET BOTTOM HEIGHT 25.5 m

BUCKET EQUIPMENT

Bucket
F.R.P.(Fiber-reinforced plastics)made
Inside dimensions (Length x width x depth)
0.65 m x 1.15 m x 1.0 m
Floor dimensions (Length x width)
0.72 m x 1.22 m
Capacity …….. 200 kg or two(2) persons

Automatic leveling system
By hydraulic cylinders with link.

Bucket swing system
Electric motor driven through reduction gear
Swing angle ……. 186^{o} (Left 93^{o} Right 93^{o})

BOOM

Three-section full power synchronized telescoping boom of box construction. The synchronization system consists of a double-acting hydraulic cylinder, an extension cable and a retraction cable. Hydraulic cylinder fitted with a holding valve and a pilot check valve. And two-section articulating boom of box construction. The telescoping system of articulating boom consists of a double-acting cylinder. The articulation system consists of a double-acting cylinder with holding valves and links.

Fully retracted length ……
7.70 m + 4.70 m (Articulating boom)
Fully extended length ……..
18.26 m +6.65 m (Articulating boom)
Extension speed ...10.56 m in 52 s
1.95 m in 20 s (Articulating boom)
Articulating speed ..0^{o} to 170^{o} in 65 s

ELEVATION

By a double-acting hydraulic cylinder, fitted with a holding valve.
Elevation speed .. -12^{o} to 80^{o} in 50 s

SLWEING

Hydraulic motor driven through worm reduction gear.
360^{o}continuous in either direction on ball bearing slew ring.
Slewing speed …. . 1.0 min^{-1} {rpm}

HYDRAULIC SYSTEM

Pumps ……. Gear pump and piston pump

Control valves …….. Multiple hydraulic-control valves actuated by switch with integral relief valves, on slewing frame. And electric remote control from bucket.

Hydraulic oil tank capacity ……
Approx. 110 L

Filter……. Return line filter

OUTRIGGERS

Four hydraulically operated outriggers. Each outrigger controlled simultaneously or independently from rear side of carrier. Equipped with sight level gauge. Floats mounted integrally with the jacks and retract to within vehicle width. All cylinders fitted with pilot check valves.

Fully extended width ….. 4.4 m

CONTROLS AND MONITORS

In bucket

Levers for telescoping of boom, bucket vertical/horizontal movement (it is selected by switch), articulating, elevation and slewing.

Switches for bucket swing, telescoping of articulating boom, engine start-stop, acceleration change-over (2 speed with auto-acceleration), automatic boom stowing-extending, emergency pump start and emergency stop-release.

Monitor lamps for limit of automatic motion controller(AMC), boom profile monitor system, emergency stop and selection of bucket vertical/horizontal movement.

On slewing frame

Switches for telescoping of boom, articulating, telescoping of articulating boom, elevation, slewing, acceleration change-over (2 speed with auto-acceleration), automatic boom stowing-extending, emergency pump start, emergency stop-release, emergency operation, emergency bucket leveling and emergency articulating boom telescoping articulating selection.

Outriggers control

Levers for extension-retraction and outrigger selection.

Switches for acceleration (2 speed with auto- acceleration), and engine start-stop.

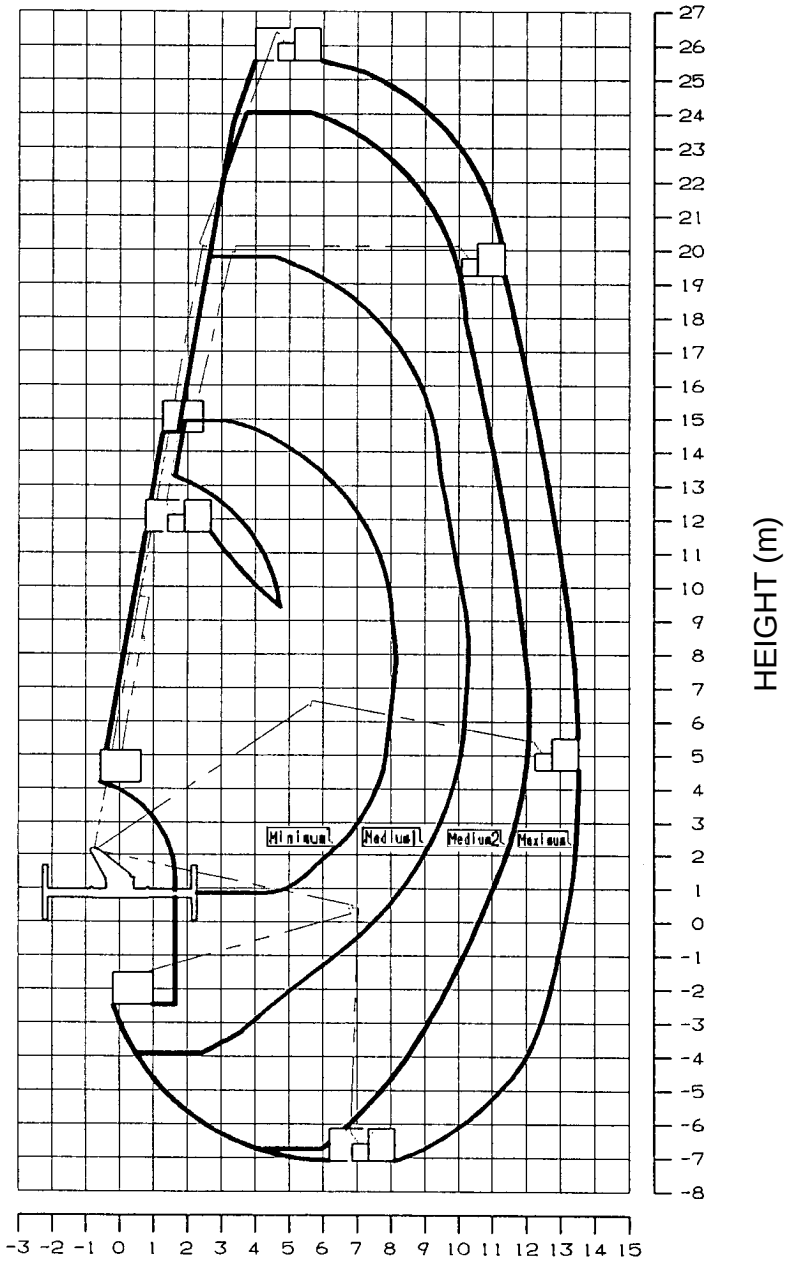
SAFETY DEVICES	Automatic working area limiter (AMC) Boom profile monitor system (Prevent hitting vehicle by boom and by bucket, prevent hitting bucket by articulating boom) Automatic speed control system on boom elevation, slewing and articulating. Automatic speed reduction and slow stop function on boom elevation, slewing, telescoping and articulating. Automatic acceleration Boom vertical/horizontal movement device Boom and bucket automatic stowing Emergency pump Emergency stop system Parking brake warning PTO connect warning (when drive) Jack interlock Boom interlock Outrigger indicator Shift lever interlock Hydraulic cylinder lock valves Hydraulic safety valves Level gauge Guard for operation levers Foot switch (on bucket)
ACCESSORIES	Hour meter Rubber blocks (for outriggers) Chocks
OPTIONAL EQUIPMENT	Work light (on bucket) Safety belt Elevation cylinder boots Beacon light (on outrigger jacks) Wood block (for outrigger) Grease pump Tools

CARRIER SPECIFICATIONS

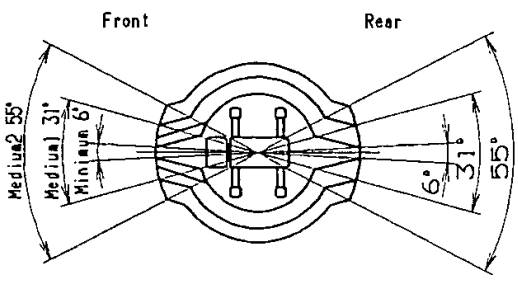
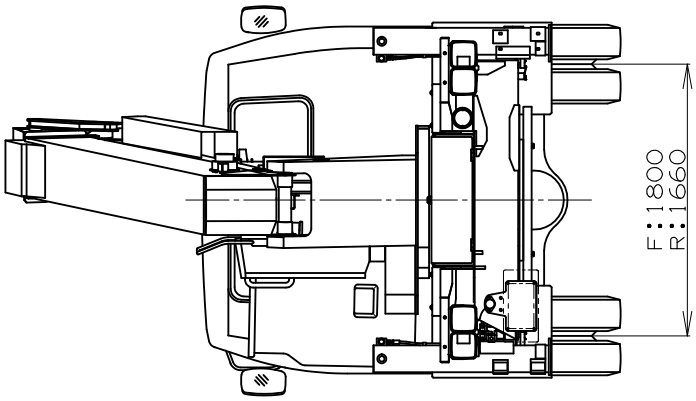
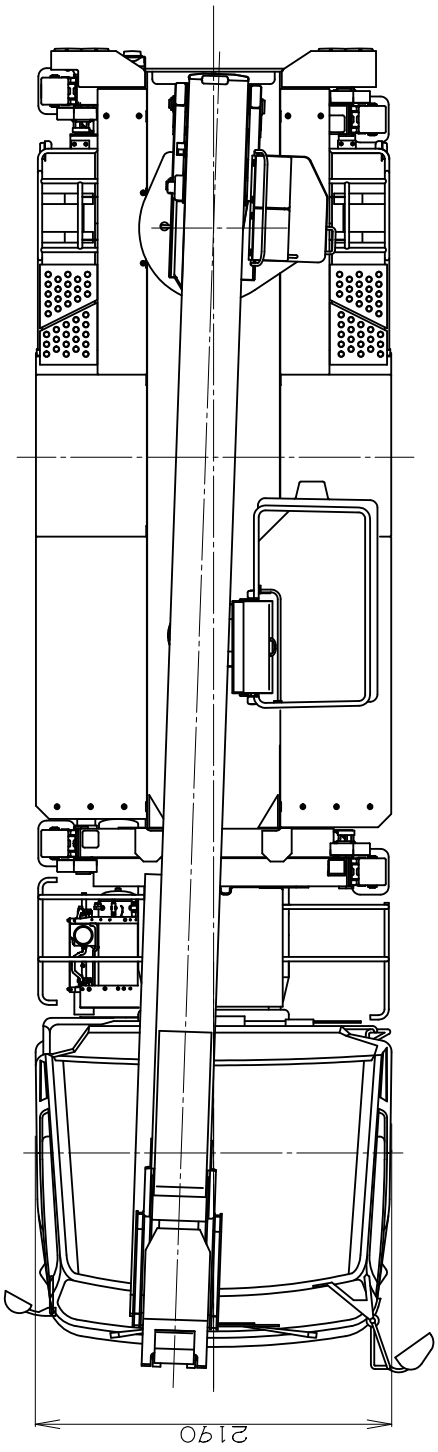
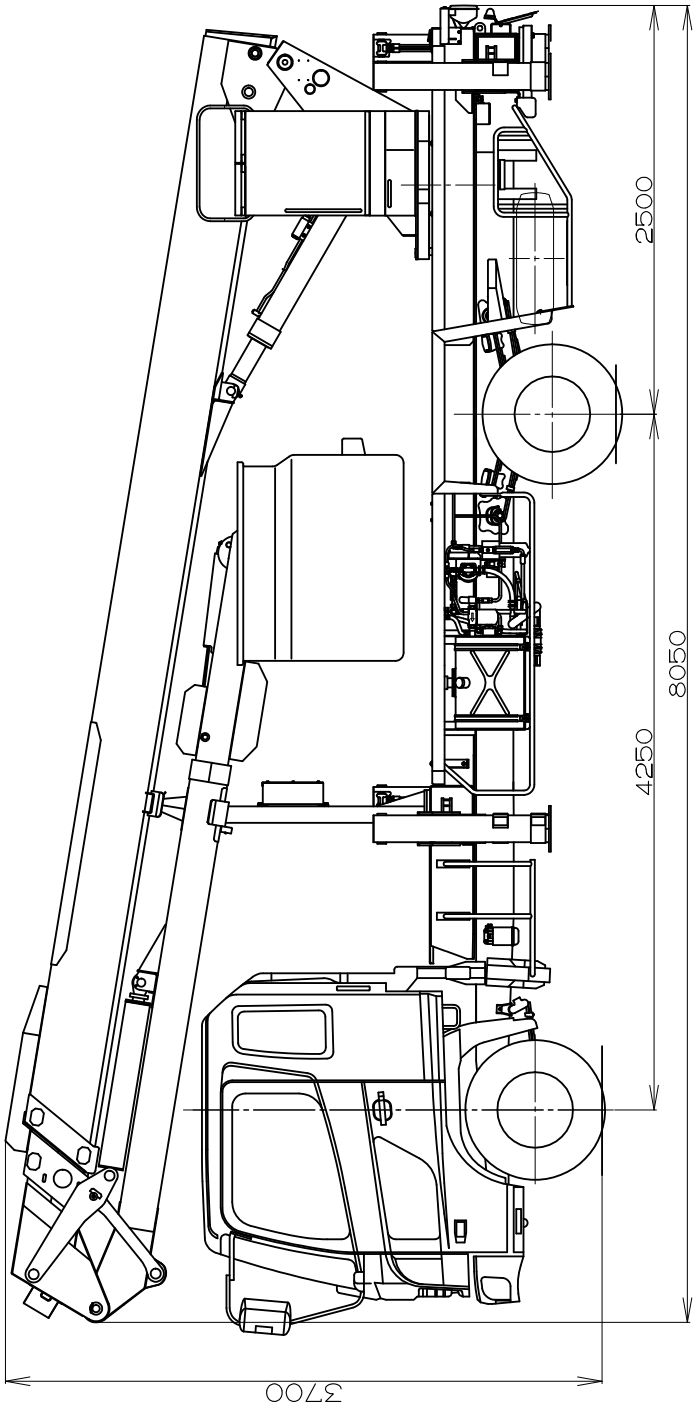
MANUFACTURER	HINO MOTORS, LTD.
MODEL	FD7JJMA ……. Right-hand steering, 4 x 2
ENGINE	Model ……J07E-TP Type …… Diesel, 4-cy., vertical, 5-cyl, in-line, overhead camshaft, water cooled, Piston displacement… 6,403cm^3 Max. output (ISO NET)...176kW {240 PS} at 2,400 min^{-1}{rpm} Max. torque (ISO NET)...716 N-m {73 kgf-m} at 1,500 min^{-1}{rpm}
CLUTCH	Dry, single plate, with damper springs, hydraulic control
TRANSMISSION	6-forward and 1reverse speeds, direct drive, synchromesh 2nd-6th
AXLES	Front..... Reversed Elliot, “I” section beam Rear..... Full floating, single reduction
STEERING	Recirculating ball with hydraulic booster
SUSPENSION	Front..... Semi-elliptic tapered leaf springs with shock absorbers Rear..... Semi-elliptic main and auxiliary leaf springs
BRAKE SYSTEM	Service..... Air over hydraulic, dual circuits Parking..... Spring brake, acting on rear wheels
ELECTRIC SYSTEM	24 Volt, negative earth Battery ……12V x 2
FUEL TANK CAPACITY	100 liters
CAB	Forward control, all steel welded construction, 3-man type
TIRES	Front..... 235/75R17.5-132/130, Single x 2 Rear..... 235/75R17.5- 132/130, Dual x 2 Spare…….. 235/75R17.5- 132/130, x 1

WORKING RANGE

Bucket loading capacity :
200 kg or 2 persons



NOTES:
1. Working ranges shown are for a case where the aerial platform is set on a firm and level ground, and do not include boom deflection.
2. “Maximum”, “Medium2”, “Medium1” and “Minimum” indicates the corresponding outrigger extension widths.
3. Working ranges above shown are for lateral directions, those for longitudinal directions are same as the one for maximum outrigger extension width, regardless of outrigger extension.
4. The applicable working range is different depending on the slewing angle as shown in the right illustration.



EXTERNAL VIEWS