



An Oshkosh Corporation Company

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# **Service and Maintenance Manual**

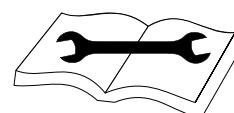
## ***Model*** **1250AJP**

***P/N - 3121171***

**June 11, 2013**

**ANSI**

**CE**





## SECTION A. INTRODUCTION - MAINTENANCE SAFETY PRECAUTIONS

### A GENERAL

This section contains the general safety precautions which must be observed during maintenance of the aerial platform. It is of utmost importance that maintenance personnel pay strict attention to these warnings and precautions to avoid possible injury to themselves or others, or damage to the equipment. A maintenance program must be followed to ensure that the machine is safe to operate.

#### **⚠ WARNING**

**MODIFICATION OR ALTERATION OF AN AERIAL WORK PLATFORM SHALL BE MADE ONLY WITH WRITTEN PERMISSION FROM THE MANUFACTURER.**

The specific precautions to be observed during maintenance are inserted at the appropriate point in the manual. These precautions are, for the most part, those that apply when servicing hydraulic and larger machine component parts.

Your safety, and that of others, is the first consideration when engaging in the maintenance of equipment. Always be conscious of weight. Never attempt to move heavy parts without the aid of a mechanical device. Do not allow heavy objects to rest in an unstable position. When raising a portion of the equipment, ensure that adequate support is provided.

#### **⚠ WARNING**

**SINCE THE MACHINE MANUFACTURER HAS NO DIRECT CONTROL OVER THE FIELD INSPECTION AND MAINTENANCE, SAFETY IN THIS AREA RESPONSIBILITY OF THE OWNER/OPERATOR.**

### B HYDRAULIC SYSTEM SAFETY

It should be noted that the machines hydraulic systems operate at extremely high potentially dangerous pressures. Every effort should be made to relieve any system pressure prior to disconnecting or removing any portion of the system.

### C MAINTENANCE

#### **⚠ WARNING**

**FAILURE TO COMPLY WITH SAFETY PRECAUTIONS LISTED IN THIS SECTION COULD RESULT IN MACHINE DAMAGE, PERSONNEL INJURY OR DEATH AND IS A SAFETY VIOLATION.**

- ENSURE REPLACEMENT PARTS OR COMPONENTS ARE IDENTICAL OR EQUIVALENT TO ORIGINAL PARTS OR COMPONENTS.
- NO SMOKING IS MANDATORY. NEVER REFUEL DURING ELECTRICAL STORMS. ENSURE THAT FUEL CAP IS CLOSED AND SECURE AT ALL OTHER TIMES.
- REMOVE ALL RINGS, WATCHES AND JEWELRY WHEN PERFORMING ANY MAINTENANCE.
- DO NOT WEAR LONG HAIR UNRESTRAINED, OR LOOSE-FITTING CLOTHING AND NECKTIES WHICH ARE APT TO BECOME CAUGHT ON OR ENTANGLED IN EQUIPMENT.
- OBSERVE AND OBEY ALL WARNINGS AND CAUTIONS ON MACHINE AND IN SERVICEMANUAL.
- KEEP OIL, GREASE, WATER, ETC. WIPED FROM STANDING SURFACES AND HAND HOLDS.
- USE CAUTION WHEN CHECKING A HOT, PRESSURIZED COOLANT SYSTEM.
- NEVER WORK UNDER AN ELEVATED BOOM UNTIL BOOM HAS BEEN SAFELY RESTRAINED FROM ANY MOVEMENT BY BLOCKING OR OVERHEAD SLING, OR BOOM SAFETY PROP HAS BEEN ENGAGED.
- BEFORE MAKING ADJUSTMENTS, LUBRICATING OR PERFORMING ANY OTHER MAINTENANCE, SHUT OFF ALL POWER CONTROLS.
- BATTERY SHOULD ALWAYS BE DISCONNECTED DURING REPLACEMENT OF ELECTRICAL COMPONENTS.
- KEEP ALL SUPPORT EQUIPMENT AND ATTACHMENTS STOWED IN THEIR PROPER PLACE.
- USE ONLY APPROVED, NONFLAMMABLE CLEANING SOLVENTS.

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## SECTION 1. SPECIFICATIONS

## 1.1 CAPACITIES

Table 1-1. Capacities

Hydraulic Tank	53.3 gallons (201.7 liters)
Fuel Tank	31 gallons (117 liters)
Hydraulic System	65.4 gallons (247.5 liters)
Drive Hub	
Bonfiglioli	2.1 quarts (2 liters) ± 10%
Reggiana Riduttori	0.5 quarts (0.5 liters) ± 10%

## 1.2 OPERATING SPECIFICATIONS &amp; PERFORMANCE DATA

Table 1-2. Operating Specifications &amp; Performance Data

Maximum Work Load (Capacity)	
Unrestricted	500 lb (230 kg)
Restricted	1000 lb. (450 kg)
Max. Vertical Platform Height (Unrestricted)	125 ft. (38.1 m)
Max. Vertical Platform Height (Restricted)	125 ft. (38.1 m)
Max. Horizontal Platform Reach (Unrestricted)	63 ft. 2 in. (19.3 m)
Max. Horizontal Platform Reach (Restricted)	53 ft. 2 in. (16.2 m)
Up and Over Height	60 ft. 7 in. (18.5 m)
Main Boom Range (At Maximum Up & Over)	+75° / -55°
Maximum Boom Swing	360° Continuous
JibPLUS	
Length	8ft. (2.44m)
Horizontal Motion	125° working, 210° stowed
Vertical Motion	130° (+75/-55)
Max. Hydraulic System Pressure	4600 psi (317 Bar)
Maximum Wind Speed	28 mph (12.5 m/s)
Maximum Manual Force	400 N
Electrical System Voltage	12 Volts
Max Tire Load	23,700 lbs. (10750 kg)
Maximum Platform Rotation	±90°

## 1.3 CHASSIS SPECIFICATIONS

Table 1-3. Chassis Specifications

Maximum Travel Grade With boom in stowed position (Gradeability)	45%
Maximum Travel Grade With boom in stowed position (Side Slope)	5°
Turning Radius (Axles Retracted)	
Outside	22 ft. 6 in. (6.8 m)
Inside	14 ft. 5 in. (4.4 m)
Turning Radius (Axles Extended)	
Inside	8 ft. (2.4 m)
Outside	19 ft. 4 in. (5.9 m)
Max Tire Load	23700 lbs. (10750 kg)
Max Ground Bearing Pressure	100 psi (7.03 kg/cm <sup>2</sup> )
Maximum Drive Speed	
Stowed	3.25 mph (5.2 kph)
Elevated	0.75 mph (1.2 kph)
Gross Machine Weight	
Platform Empty	44,000 lbs. (19,958 kg)
Platform Empty w/ Skypower	44,215 lbs. (20,056 kg)

## 1.4 TIRES

Table 1-4. Tire Specifications

Size	445/50D710
Load Range	J
Ply Rating	18
Foam Fill	Polyurethane HD (55 Durometer) Foam
Diameter	46.45 in. (117.9 cm)
Width	18 in. (45.7 cm)
Rim Size	15x28
Tire & Wheel Weight	867 lbs. (393 kg)
Max Tire Load	23,700 lbs. (10750 kg)
Size	445/65-24
Type	Solid
Diameter	45.3 in. (115.1 cm)
Width	17.3 in. (43.9 cm)
Rim Size	12.00-24
Tire & Wheel Weight	960 lbs. (435.4 kg)
Max Tire Load	23,700 lbs. (10750 kg)

**SECTION 1 - SPECIFICATIONS**

**1.5 DIMENSIONAL DATA**

**Table 1-5. Dimensional Data**

Overall Width	
Axles Retracted	8ft. 2in. (2.49 m)
Axles Extended	12ft. 6in. (3.8 m)
Stowed Height	10ft. (3.05 m)
Stowed Length (Transport Mode)	37ft. 7 in. (11.46 m)
Stowed Length (Working Mode)	47ft. 6 in. (14.48 m)
Wheelbase	12ft. 6in. (3.81 m)
Tailswing	
Tower Up	7ft. (2.13 m)
Tower Down	11 ft. 3 in. (3.43 m)
Oscillating Axle	±6 in. (0.15 m)
Ground Clearance (Axle)	12 in. (30.4 cm)
Ground Clearance (Chassis)	25.5 in. (64.7 cm)

**1.6 ENGINE DATA**

**Engine Data Prior to S/N 0300127698**

**Table 1-6. Deutz BF4M2011 Specifications**

Type	Liquid Cooled
Number of Cylinders	4
Bore	3.7 in. (94 mm)
Stroke	4.4 in. (112 mm)
Total Displacement	190 cu. in. (3108 cm <sup>3</sup> )
Compression Ratio	17.5
Firing Order	1-3-4-2
Output	87hp (65 kW)
Oil Capacity	
Cooling System	5 Quarts (4.5 L)
w/Filter	11 Quarts (10.5 L)
Total Capacity	16 Quarts (15 L)
Average Fuel Consumption	1.1 gph (4.1 lph)
Idle Engine RPM	1200
Mid Engine RPM	1800
High Engine RPM	2475

**Engine Data S/N 0300127698 to Present**

**Table 1-7. Deutz TD2011L4 Specifications**

Type	Liquid Cooled
Number of Cylinders	4
Bore	3.7 in. (94 mm)
Stroke	4.4 in. (112 mm)
Total Displacement	190 cu. in. (3108 cm <sup>3</sup> )
Compression Ratio	17.5
Firing Order	1-3-4-2
Output	75hp (56 kW)
Oil Capacity	
Cooling System	5 Quarts (4.5 L)
w/Filter	11 Quarts (10.5 L)
Total Capacity	16 Quarts (15 L)
Average Fuel Consumption	1.1 gph (4.1 lph)
Idle Engine RPM	1200
Mid Engine RPM	1800
High Engine RPM	2475

**Caterpillar**

**Table 1-8. Caterpillar 3.4T**

Type	Liquid Cooled, Antifreeze
Number of Cylinders	4
Bore	3.7 in. (94 mm)
Stroke	4.7 in. (120 mm)
Total Displacement	201 cu. in. (3294 cm <sup>3</sup> )
Compression Ratio	19.5:1
Firing Order	1-3-4-2
Output	73.7hp (55 kW)
Oil Capacity	10.5 Quarts (10 L)
Average Fuel Consumption	1.36 gph (5.14 lph)
Idle Engine RPM	1200
Mid Engine RPM	1800
High Engine RPM	2475