



Aerial device model **400**

PREVENTIVE MAINTENANCE AND INSPECTION REPORT

Unit # _____

Serial # _____

Date: _____

PTO Hours: _____

Intervals: 340 PTO hours / 4 months

5000 PTO hours / 5 years

1000 PTO hours / 1 year

Other: _____

Location: _____

Work order: _____

Visual check of the unit (Clean unit if necessary)

General condition: Excellent Fair Good Poor

Check for weld cracks

Check for damaged or missing parts

Check for oil leaks

Check structural for wear or deformations

Operational check

Engine High RPM: _____

From the lower control station, cycle the aerial device functions through the complete range of motion

Check holding valves

Operate all functions from upper controls

Notes: _____

Oil temperature at end of operational check: _____°F or _____°C

Maximum main pressure, holding outrigger function on "retract" : _____ PSI



Aerial device model 400

PREVENTIVE MAINTENANCE AND INSPECTION REPORT

Detailed inspection as per attached check list

<u>Item#</u>	<u>Corrective actions</u>	Done (✓) <input type="checkbox"/>
		<input type="checkbox"/>
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Repeat operational test when repairs are done

Comments:

Mechanic: Inspection certificate installed

Supervisor: Inspection completed date: _____

340 Hours/4 Months and 1,000 Hours/1 Year

√ -Ok or completed X -Repairs to be arranged O -Repairs and adjustments made

1. In cab		7. Pedestal	
1 Parking brake-PTO interlock and buzzer	<input type="checkbox"/>	1 Structure (welds intact, no deformation or cracks)	<input type="checkbox"/>
2 Travel height decal (condition, no change on height)	<input type="checkbox"/>	2 Hydraulic rotation (no leaks, bolts tight)	<input type="checkbox"/>
3 Boom and outriggers stow lights working	<input type="checkbox"/>	3 Pneumatic rotation (no leaks, bolts tight)	<input type="checkbox"/>
2. PTO		4 Electric rotation (set screw tight, wiring condition)	<input type="checkbox"/>
1 Operation, noise level	<input type="checkbox"/>	5 Hoses and manifolds (routing, condition, no leaks)	<input type="checkbox"/>
2 Hoses, wires, solenoid condition	<input type="checkbox"/>	6 Rotation bearing inside row, mounting bolts tight	<input type="checkbox"/>
3 Mounting bolts tight	<input type="checkbox"/>	8. Turntable	
4 No leaks	<input type="checkbox"/>	1 Structure (welds intact, no deformation or cracks)	<input type="checkbox"/>
3. Pump		2 Hoses and manifolds (routing, condition, no leaks)	<input type="checkbox"/>
1 Noise level	<input type="checkbox"/>	3 Rotation bearing wiper seals (condition, in place)	<input type="checkbox"/>
2 Mounting bolts tight	<input type="checkbox"/>	4 Rotation bearing outside row, mounting bolts tight	<input type="checkbox"/>
3 No leaks	<input type="checkbox"/>	5 Main boom pivot pin (Bolt tight, welds intact, nut tight)	<input type="checkbox"/>
4. Chassis underside		6 Boom cylinder pivot pin (pin retainer condition, bolt tight)	<input type="checkbox"/>
1 Hoses (routing, condition, no leaks, exhaust shields)	<input type="checkbox"/>	7 Tilt cylinder (No leak, holding, pins, wiper condition)	<input type="checkbox"/>
2 Utility body mounting (bolts tight, no cracks)	<input type="checkbox"/>	9. Boom rotation	
3 Subframe and mounting plates (welds intact, no cracks, no rust)	<input type="checkbox"/>	1 Rotation motor (mounting bolts tight, no leak)	<input type="checkbox"/>
4 HP filter, change if necessary (if equipped)	<input type="checkbox"/>	2 Gearbox mounting bolts tight	<input type="checkbox"/>
5 Subframe mounting bolts tight	<input type="checkbox"/>	3 Gearbox breather cleanliness	<input type="checkbox"/>
5. Lower controls (boom, outriggers, tools)		4 Gearbox oil level	<input type="checkbox"/>
1 Placards, decals, inclinometer (condition, readable)	<input type="checkbox"/>	5 Pinion gear teeth condition	<input type="checkbox"/>
2 Control valves (no leaks, rubber boots condition) free return of each spool	<input type="checkbox"/>	6 Rotation bearing gear teeth condition	<input type="checkbox"/>
3 Hoses (routing, condition, no leaks)	<input type="checkbox"/>	7 Pinion to rotation gear backlash	<input type="checkbox"/>
4 Emergency stop-dump operation	<input type="checkbox"/>	8 Rotation bearing (tilt, smoothness and noise level)	<input type="checkbox"/>
5 Emergency DC pump switch operation (if equipped)	<input type="checkbox"/>	10. Lower boom lift cylinder	
6 Engine start-stop operation (if equipped)	<input type="checkbox"/>	1 Tube (no leaks, piping condition, welds intact)	<input type="checkbox"/>
7 Engine two speed throttle operation (if equipped)	<input type="checkbox"/>	2 Chromed rod condition (no rust, scratches, pin holes)	<input type="checkbox"/>
8 Upper winch up-down operation	<input type="checkbox"/>	3 Pivot bearing secure within cylinder eye	<input type="checkbox"/>
9 Tool outlet quick couplers (condition, dust caps)	<input type="checkbox"/>	5 Bearing-pin clearance, retaining bolt tight	<input type="checkbox"/>
10 Tool outlet pressure (2000 PSI) reading: _____	<input type="checkbox"/>	6 Holding valve manifold (no leaks, bolts tight)	<input type="checkbox"/>
6. Hydraulic reservoir and filter		11. Lower boom	
1 Cover bolts tight, welds intact, no cracks, no leaks	<input type="checkbox"/>	1 Structure (welds intact, no deformation or cracks)	<input type="checkbox"/>
2 Shutoff valves fully open and secured	<input type="checkbox"/>	2 Fibreglass insert (clean, no cracks, scratches, chips)	<input type="checkbox"/>
3 Drain water from bottom	<input type="checkbox"/>	3 All covers in place (remove for inspection)	<input type="checkbox"/>
4 Oil level	<input type="checkbox"/>	4 Remove any debris from inside boom	<input type="checkbox"/>
5 Breather air filter, change if dirty	<input type="checkbox"/>	5 Hoses assembly (routing, properly attached, no leaks)	<input type="checkbox"/>
6 Return filter, check indicator and change if necessary	<input type="checkbox"/>	6 Turret boom pivot pin (retaining bolt tight)	<input type="checkbox"/>
7 Oil condition (cleanliness, color, appearance)	<input type="checkbox"/>	7 Pivot pins-bearings clearance	<input type="checkbox"/>
		8 Fibreglass insert's fasteners tight	<input type="checkbox"/>
		9 Leveling chain, rods and sprocket condition	<input type="checkbox"/>

340 Hours/4 Months and 1,000 Hours/1 Year

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12. Boom rest

- 1 Boom stow pads condition
- 2 Structure (welds intact, no deformation or cracks)
- 3 Boom tie down system (tightness, air line, no leak)

13. Upper boom lift cylinder

- 1 Tubes (no leaks, piping condition, welds intact)
- 2 Chromed rods condition (no rust, scratches, pin holes)
- 3 Rod wiper condition
- 4 Pivot bearing secure within cylinder eye
- 5 Pivot pins (Retainer condition, bolt tight)
- 6 Holding valves manifold (no leaks, bolts tight)

14. Knuckle and steel boom

- 1 Structure (welds intact, no deformation or cracks)
- 2 Hoses assembly (routing, properly attached, no leaks)
- 3 Pivot pins (Retainer condition, bolt tight, snap rings)
- 4 Scissors' levers (condition, welds, no cracks)
- 5 Chains, rods and sprockets condition
- 6 All covers in place (remove for inspection)
- 7 Vinyl cover (condition, rubber bands)

15. Upper boom

- 1 Steel boom (welds intact, no deformation or cracks)
- 2 Fibreglass boom (clean, no cracks, scratches, chips)
- 3 Fiberglass boom bolts tight
- 4 Boom stow pad condition
- 5 Boom stow lock down system (operation, tight)
- 6 Boom tip weldment (no cracks, deformation)
- 7 Boom tip sprocket (condition, looseness)
- 8 Leveling chain condition, no rust
- 9 Boom tip cover (condition, in place)
- 10 Remove any debris from inside upper boom

16. Upper controls station

- 1 Placards and decals (condition, readable)
- 2 Controls (no leak, rubber boots, spools operation)
- 3 Joystick (rubber boot condition, trigger stroke)
- 4 Hoses (routing, condition, no leaks)
- 5 Emergency stop-dump operation
- 6 Emergency DC pump switch operation (if equipped)
- 7 Engine start-stop operation (if equipped)
- 8 Engine two speed throttle operation (if equipped)
- 9 Tool outlet(s) quick couplers (condition, dust caps)
- 10 Tool outlet(s) pressure (2000 PSI) reading:

17. Platform

- 1 Mounting frame (welds intact, no deformation, cracks)
- 2 Mounting frame and cover (condition, mounting)
- 3 Platform (condition, no cracks, no holes)
- 4 Liner (condition, cleanliness)
- 5 Placards and decals (in place, readable)
- 6 Platform cover (condition, mounting)
- 7 "D" ring (bolt tight, no deformation or cracks)
- 8 Hoses (no leak, routing, not pinched or pulled)
- 9 Platform rotation cylinder (no leak, holding, piping)
- 10 Bearings-pins clearance, retaining bolts tight
- 11 Platform leveled, not rocking
- 12 Platform mounting bolts tight

18. Upper boom jib

- 1 Material handling placards (condition, readable)
- 2 Boom angle indicators (condition, rotate freely)
- 3 Jibboom condition (no crack, scratch, cleanliness)
- 4 Jib support wear pads condition
- 5 Rotation cylinder (no leaks, pins retaining bolts tight)
or Rotation gear box & motor (no leaks, bolts tight)
- 6 Jib extension cylinder (no leaks, retaining bolts tight)
- 7 Jib attachments condition (bushings, sheaves, no cracks, welds intact)
- 8 Winch motor and gear box (no leaks, bolts tight)
- 9 Jib covers (condition, cleanliness)
- 10 Winch rope (wear, thimble, eye, anchoring bolt tight)
- 11 Jibboom mounting bracket bolts tight
- 12 Plastic covers (condition, in place)

19. Outriggers

- 1 Structure (welds intact, no deformation or cracks)
- 2 Stability marks readable
- 3 Cylinder pins retaining rings in place
- 4 Cylinder tube (no leaks, piping condition, welds intact)
- 5 Chromed rod condition (no rust, scratches, pin holes)
- 6 Pivot bearings secure within cylinder eyes
- 7 Holding valves manifold (no leaks, bolts tight)

20. Lubrication

- 1 Refer to Lubrication chart Page 4-3

340 Hours/4 Months and 1,000 Hours/1 Year

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1,000 Hours / 1 Year (Additional maintenance)

- | | | |
|---|---|--------------------------|
| 1 | Dielectric test of the insulating booms | <input type="checkbox"/> |
| 2 | Rotation bearing tilt measurement | <input type="checkbox"/> |
| 3 | Check monitoring system (if equipped) | <input type="checkbox"/> |
| 4 | Check anti-vacuum system (if equipped) | <input type="checkbox"/> |
| 5 | Dielectric test on non-conductive joystick (if equipped) | <input type="checkbox"/> |
| 6 | Critical bolts torque check (refer to Page 5-7) | <input type="checkbox"/> |
| 7 | Collect oil sample for analysis (Change oil if necessary) | <input type="checkbox"/> |

5,000 Hours / 5 Years (Additional maintenance)

- | | | |
|------------------------|---|--------------------------|
| 1 | Change rotation gear box oil | <input type="checkbox"/> |
| Leveling system | | |
| 2 | Inspect the complete leveling system | <input type="checkbox"/> |
| 3 | Leveling chains, clean and inspect each link
No rust, jammed rollers or cracks | <input type="checkbox"/> |
| 4 | Leveling rods (wear, cracks, end joint) | <input type="checkbox"/> |
| 5 | Leveling sprockets and idlers, clean and inspect for wear | <input type="checkbox"/> |