

Maintenance Checklists

Periodic scheduled maintenance is intended to be performed in a complete maintenance facility by trained mechanics. Scheduled maintenance procedures can be found by referring to the appropriate section of the service manual.

Always refer to manufacture's (e.g. engine, transmission, axle) maintenance manual before performing any maintenance.

Expander Pins (1, 3, 10, 40 Hours)

Check the expander pins at the specified intervals after the machine is put into service, or anytime after the expander pin is repositioned or replaced. See section 8-1 in your service manual for details.

| | | | |
|---|--|-----------------------------|-----------------------------|
| 1 | Check torque of expander pins after 1 hour. | OK <input type="checkbox"/> | No <input type="checkbox"/> |
| 2 | Check torque of expander pins after 3 hours. | OK <input type="checkbox"/> | No <input type="checkbox"/> |
| 3 | Check torque of expander pins after 10 hours or one day. | OK <input type="checkbox"/> | No <input type="checkbox"/> |
| 4 | Check torque of expander pins after 40 hours or four days. | OK <input type="checkbox"/> | No <input type="checkbox"/> |

First 50 Hours

These checks should be performed after the machine has been in service for 50 hours.

| | | | |
|---|---|-----------------------------|-----------------------------------|
| 1 | Check fluid levels - differential, planetaries | OK <input type="checkbox"/> | Add <input type="checkbox"/> |
| 2 | Check hydraulic system - hoses, fittings | OK <input type="checkbox"/> | Repair <input type="checkbox"/> |
| 3 | Check battery - cables & connections | OK <input type="checkbox"/> | Repair <input type="checkbox"/> |
| 4 | Check all driveline capscrews - torque to spec. See service forms 80-1057 Torque Specification Chart & 80-627 Driveline Service. | OK <input type="checkbox"/> | No <input type="checkbox"/> |
| 5 | Check electrical system - lights, options, connections | OK <input type="checkbox"/> | No <input type="checkbox"/> |
| 6 | Check all pins, bushings and load bearing hardware | OK <input type="checkbox"/> | No <input type="checkbox"/> |
| 7 | Check accumulator pre-charge (see 80-1076) | OK <input type="checkbox"/> | No <input type="checkbox"/> |
| 8 | Check parking brake lining wear and readjust if necessary | OK <input type="checkbox"/> | Readjust <input type="checkbox"/> |
| 9 | Check wheel lug nuts and studs mechanically, check torque | OK <input type="checkbox"/> | Readjust <input type="checkbox"/> |

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First 100 Hours

These checks should be performed after the machine has been in service for 100 hours.

| | | | |
|---|---|-----------------------------|-----------------------------------|
| 1 | Drain and fill differential | OK <input type="checkbox"/> | No <input type="checkbox"/> |
| 2 | Drain and fill planetaries | OK <input type="checkbox"/> | No <input type="checkbox"/> |
| 3 | Inspect wheel bearing, readjust if necessary | OK <input type="checkbox"/> | No <input type="checkbox"/> |
| 4 | Check wheel lug nuts and studs mechanically, check torque | OK <input type="checkbox"/> | Readjust <input type="checkbox"/> |
| 5 | Change transmission filters | OK <input type="checkbox"/> | No <input type="checkbox"/> |

Weekly Maintenance (50 Hours)

Perform these checks weekly, or after 50 hours, whichever occurs first.

| | | | |
|---|--|-----------------------------|---------------------------------|
| 1 | Repeat the Daily/Shift maintenance (see Section 5-4-1) | OK <input type="checkbox"/> | No <input type="checkbox"/> |
| 2 | Check for fluid leaks - oil, fuel, water, transmission | OK <input type="checkbox"/> | Repair <input type="checkbox"/> |
| 3 | Check battery electrolyte level | OK <input type="checkbox"/> | Add <input type="checkbox"/> |
| 4 | Lubricate chassis & driveline cross assemblies | OK <input type="checkbox"/> | No <input type="checkbox"/> |
| 5 | Record engine rpm | High _____ | Stall _____ |
| 6 | Check for structural damage - inspect chassis & attachments for bending, cracking & broken welds | OK <input type="checkbox"/> | Repair <input type="checkbox"/> |

Bi-Weekly Maintenance (100 Hours)

Perform these checks every other week, or after 100 hours, whichever occurs first.

| | | | |
|---|---|-----------------------------|---------------------------------|
| 1 | Repeat the 50 hour check | OK <input type="checkbox"/> | No <input type="checkbox"/> |
| 2 | Check wheel lug nuts and studs mechanically, check torque | OK <input type="checkbox"/> | Repair <input type="checkbox"/> |

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Monthly Maintenance (250 Hours)

Perform these checks monthly, or after 250 hours, whichever occurs first.

| | | | |
|----|---|-----------------------------|------------------------------|
| 1 | Repeat the 100 hour check | OK <input type="checkbox"/> | No <input type="checkbox"/> |
| 2 | Obtain engine oil sample for analysis | OK <input type="checkbox"/> | No <input type="checkbox"/> |
| 3 | Check axle differential oil level | OK <input type="checkbox"/> | Add <input type="checkbox"/> |
| 4 | Check axle planetary oil levels | OK <input type="checkbox"/> | Add <input type="checkbox"/> |
| 5 | Check all hydraulic pressures and record | OK <input type="checkbox"/> | No <input type="checkbox"/> |
| 6 | Check torque of expander pins. See Section 8-1 in Service Manual. | OK <input type="checkbox"/> | No <input type="checkbox"/> |
| 7 | Check all cylinder pins for wear, damage, or lack of lubrication | OK <input type="checkbox"/> | No <input type="checkbox"/> |
| 8 | Check and adjust the parking brake (if required) | OK <input type="checkbox"/> | No <input type="checkbox"/> |
| 9 | Clean radiator | OK <input type="checkbox"/> | No <input type="checkbox"/> |
| 10 | Change hydraulic tank breather assembly | OK <input type="checkbox"/> | No <input type="checkbox"/> |
| 11 | Check pump mounting bolts and hose connections. Re-torque if necessary. | OK <input type="checkbox"/> | No <input type="checkbox"/> |
| 12 | Sample fuel. Check for water. See Section 2-4 in Service Manual. | OK <input type="checkbox"/> | No <input type="checkbox"/> |
| 13 | Flush fuel strainer | OK <input type="checkbox"/> | No <input type="checkbox"/> |
| 14 | Change air cleaner primary and secondary filter elements | OK <input type="checkbox"/> | No <input type="checkbox"/> |
| 15 | Check charge air cooler and charge air piping | OK <input type="checkbox"/> | No <input type="checkbox"/> |

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Quarterly Maintenance (500 Hours)

Perform these checks quarterly, or after 500 hours, whichever occurs first.

| | | | |
|----|---|-----------------------------|------------------------------|
| 1 | Repeat the 250 hour check | OK <input type="checkbox"/> | No <input type="checkbox"/> |
| 2 | Change high pressure hydraulic filters | OK <input type="checkbox"/> | No <input type="checkbox"/> |
| 3 | Change hydraulic return filters | OK <input type="checkbox"/> | No <input type="checkbox"/> |
| 4 | Change transmission filters | OK <input type="checkbox"/> | No <input type="checkbox"/> |
| 5 | Take oil samples from transmission, axle, and hydraulic system for analysis | OK <input type="checkbox"/> | No <input type="checkbox"/> |
| 6 | Check accumulator pre-charge pressure (see 80-1076) | OK <input type="checkbox"/> | No <input type="checkbox"/> |
| 7 | Change brake cooling return filter | OK <input type="checkbox"/> | No <input type="checkbox"/> |
| 8 | Change engine oil & filters | OK <input type="checkbox"/> | No <input type="checkbox"/> |
| 9 | Check antifreeze concentration | OK <input type="checkbox"/> | Add <input type="checkbox"/> |
| 10 | Test radiator pressure cap | OK <input type="checkbox"/> | No <input type="checkbox"/> |
| 11 | Change primary fuel filter | OK <input type="checkbox"/> | No <input type="checkbox"/> |
| 12 | Change secondary fuel filter | OK <input type="checkbox"/> | No <input type="checkbox"/> |
| 13 | Change coolant filter | OK <input type="checkbox"/> | No <input type="checkbox"/> |
| 14 | Check batteries, cables, and connectors | OK <input type="checkbox"/> | No <input type="checkbox"/> |

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Semi-Annual Maintenance (1000 Hours)

Perform these checks semi-annually, or after 1000 hours, whichever occurs first.

| | | | |
|----|--|-----------------------------|-----------------------------|
| 1 | Repeat the 500 hour check | OK <input type="checkbox"/> | No <input type="checkbox"/> |
| 2 | Change transmission oil | OK <input type="checkbox"/> | No <input type="checkbox"/> |
| 3 | Drain wet disk brake housings | OK <input type="checkbox"/> | No <input type="checkbox"/> |
| 4 | Check pins and bushings for wear | OK <input type="checkbox"/> | No <input type="checkbox"/> |
| 5 | Steam clean machine, inspect for structural cracks | OK <input type="checkbox"/> | No <input type="checkbox"/> |
| 6 | Replace cab pressurizer and air recirculation elements. | OK <input type="checkbox"/> | No <input type="checkbox"/> |
| 7 | Drivelines - See service form 80-627, Driveline Service & Maintenance. | OK <input type="checkbox"/> | No <input type="checkbox"/> |
| 8 | Drain and clean fuel tank | OK <input type="checkbox"/> | No <input type="checkbox"/> |
| 9 | Remove and clean fuel strainer | OK <input type="checkbox"/> | No <input type="checkbox"/> |
| 10 | Inspect AC system components (see 80-1082 in Service Manual) | OK <input type="checkbox"/> | No <input type="checkbox"/> |
| 11 | Drain and fill differential | OK <input type="checkbox"/> | No <input type="checkbox"/> |
| 12 | Drain and fill planetaries | OK <input type="checkbox"/> | No <input type="checkbox"/> |
| 13 | Check belt tensioner (water pump) | OK <input type="checkbox"/> | No <input type="checkbox"/> |

Every 1,500 Hours, or 1 Year

Perform these checks at 1500 hours, or 1 year, whichever occurs first. Perform all previous maintenance procedures that are due for scheduled maintenance.

| | | | |
|---|--|-----------------------------|-----------------------------|
| 1 | Change DEF tank suction filter | OK <input type="checkbox"/> | No <input type="checkbox"/> |
| 2 | Change aftertreatment dosing unit filter | OK <input type="checkbox"/> | No <input type="checkbox"/> |

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Annual Maintenance (2000 Hours)

Perform these checks annually, or after 2000 hours, whichever occurs first.

| | | | |
|----|--|-----------------------------|-----------------------------------|
| 1 | Repeat the 1,000 hour check | OK <input type="checkbox"/> | No <input type="checkbox"/> |
| 2 | Change hydraulic oil | OK <input type="checkbox"/> | No <input type="checkbox"/> |
| 3 | Drivelines - Inspect slip splines for wear (backlash). See service form 80-627, Driveline Service & Maintenance | OK <input type="checkbox"/> | No <input type="checkbox"/> |
| 4 | Have Allied representative inspect machine (annually) | OK <input type="checkbox"/> | No <input type="checkbox"/> |
| 5 | Check wet disc brake lining wear | OK <input type="checkbox"/> | No <input type="checkbox"/> |
| 6 | Inspect wheel bearing preload, readjust if necessary | OK <input type="checkbox"/> | Readjust <input type="checkbox"/> |
| 7 | Perform automatic clutch calibration, transmission | OK <input type="checkbox"/> | No <input type="checkbox"/> |
| 8 | Clean engine | OK <input type="checkbox"/> | No <input type="checkbox"/> |
| 9 | Check rubber and viscous engine vibration dampers | OK <input type="checkbox"/> | No <input type="checkbox"/> |
| 10 | Check radiator hoses | OK <input type="checkbox"/> | No <input type="checkbox"/> |
| 11 | Check the swivel box wear (see 80-1166-LC90- <i>serial number</i>) | OK <input type="checkbox"/> | No <input type="checkbox"/> |
| 12 | Check air compressor discharge lines | OK <input type="checkbox"/> | No <input type="checkbox"/> |

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HOUR METER _____

Every 5,000 Hours, or 4 Years

Perform these checks at 5,000 hours, or 4 years, whichever occurs first. Perform all previous maintenance procedures that are due for scheduled maintenance.

| | | | |
|---|---|-----------------------------|-----------------------------|
| 1 | Adjust the overhead set | OK <input type="checkbox"/> | No <input type="checkbox"/> |
| 2 | Inspect and replace (if necessary) aftertreatment diesel particulate filter | OK <input type="checkbox"/> | No <input type="checkbox"/> |
| 3 | Adjust the engine brake assembly | OK <input type="checkbox"/> | No <input type="checkbox"/> |

Every 20,000 Hours, or 8 Years

Perform these checks at 20,000 hours, or 8 years, whichever occurs first. Perform all previous maintenance procedures that are due for scheduled maintenance.

| | | | |
|---|--------------------------------|-----------------------------|-----------------------------|
| 1 | Clean and flush cooling system | OK <input type="checkbox"/> | No <input type="checkbox"/> |
|---|--------------------------------|-----------------------------|-----------------------------|

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Overhaul Schedule

To maximize efficiency and minimize downtime and costly failures, Allied Systems Company recommends the following overhaul chart to be used. When followed closely, your equipment will last longer with less unexpected downtime. Contact your local Wagner dealer for the kits necessary to overhaul your drivetrain components or allow your dealer to overhaul the components for you. They are authorized to overhaul and test your components.

It is recommended that some components be overhauled at the same time, even if they might have some time before their required rebuild, to minimize downtime. Many components may have to be removed in order to gain access to others so the parts should all be rebuilt together. This will save you from having to tear the machine down again a few thousand operation hours later.

During the overhaul process, make sure all parts are thoroughly cleaned before installation. Parts that do not receive this cleaning can cause the lubricant to become contaminated, which leads to much shorter service life.



CAUTION

The overhaul schedule below is applicable when all preventive maintenance and oil testing is performed and only when genuine Wagner OEM replacement parts and lubricants are used. Major component overhauls may need to be performed more frequently if preventive maintenance is not performed, non-OEM replacement parts are used, and/or the machine is operated frequently on slopes, uneven terrain, or in poor traction conditions.

| Component | Hours |
|------------------------------|---------|
| Engine | 20,000 |
| Transmission | 20,000 |
| Converter | 10,000 |
| Pumps | 10,000 |
| Axle | 20,000 |
| Brakes | 20,000* |
| Hydraulic Cylinders - Reseal | 10,000 |
| Hoses and Fittings | 20,000 |

* Or sooner if indicated during 2,000 hour wear check.

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