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.

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 ❒	Add ❒
2	Check hydraulic system - hoses, fittings	OK ❒	Repair ❒
3	Check battery - cables & connections	OK ❒	Repair ❒
4	Check all driveline capscrews - torque to spec. See service forms 80-1057 Torque Specification Chart & 80-627 Driveline Service.	OK ❒	No ❒
5	Check electrical system - lights, options, connections	OK ❒	No ❒
6	Check all pins, bushings and load bearing hardware	OK ❒	No ❒
7	Check accumulator pre-charge (see 80-1076)	OK ❒	No ❒
8	Change Transmission Filter(s)	OK ❒	No ❒

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Weekly Maintenance (50 Hours)

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

1	Repeat the daily check - see form Daily/Shift Maintenance in section 5	OK ❒	No ❒
2	Check for fluid leaks - oil, fuel, water, transmission	OK ❒	Repair ❒
3	Check battery electrolyte level	OK ❒	Add ❒
4	Lubricate chassis & driveline cross assemblies	OK ❒	No ❒
5	Record engine rpm	High_____	Stall_____
6	Check for structural damage - inspect chassis & attachments for bending, cracking & broken welds	OK ❒	Repair ❒

First 100 Hours

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

1	Change Transmission Filter(s)	OK ❒	No ❒

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 ❒	No ❒
2	Check wheel lug nuts and studs mechanically, check torque	OK ❒	Repair ❒

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First 250 Hours

These checks should be performed after the machine has been in service for 250 hours.

1*	Check engine valve lash	OK ❒	No ❒
2*	Inspect engine valve rotators	OK ❒	No ❒

Monthly Maintenance (250 Hours)

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

1	Repeat the 100 hour check	OK ❒	No ❒
2	Obtain engine oil sample for analysis	OK ❒	No ❒
3	Change engine oil & filters	OK ❒	No ❒
4	Change primary fuel filter (Water Separator)	OK ❒	Add ❒
5	Change secondary fuel filter	OK ❒	Add ❒
6	Obtain coolant sample (level 1) for analysis	OK ❒	No ❒
7	Test/Add Cooling system supplemental cooling additive (SCA)	OK ❒	Add ❒
8	Check/Clean/Tighten engine grounding stud	OK ❒	No ❒
9	Check/Replace engine hoses and clamps	OK ❒	No ❒
10	Clean radiator	OK ❒	No ❒
11	Check engine starting motor	OK ❒	No ❒
12	Check axle differential oil level	OK ❒	Add ❒
13	Check axle planetary oil levels	OK ❒	Add ❒
14	Check all hydraulic pressures and record	OK ❒	No ❒
15	Check fire suppression actuator	OK ❒	No ❒
16	Check pump mounting bolts and hose connections. Re-torque if necessary.	OK ❒	No ❒
17	Check and adjust the parking brake (if required)	OK ❒	No ❒

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* Service must be performed by a Caterpillar representative

First 500 Hours

These checks should be performed after the machine has been in service for 500 hours.

1	Obtain coolant sample (level 2) for analysis	OK ❒	No ❒

Quarterly Maintenance (500 Hours)

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

1	Repeat the 250 hour check	OK ❒	No ❒
2	Change high pressure hydraulic filters	OK ❒	No ❒
3	Change hydraulic return filters	OK ❒	No ❒
4	Change transmission filters	OK ❒	No ❒
5	Take oil samples from transmission, axle, and hydraulic system for analysis	OK ❒	No ❒
6	Check turbocharger	OK ❒	No ❒
7	Check water pump	OK ❒	No ❒
8	Check/Adjust/Replace engine belts	OK ❒	No ❒
9	Check accumulator pre-charge pressure (see 80-1076)	OK ❒	No ❒

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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 ❒	No ❒
2	Change transmission oil	OK ❒	No ❒
3	Clean and flush cooling system	OK ❒	No ❒
4	Check pins and bushings for wear	OK ❒	No ❒
5	Clean engine crankcase breather	OK ❒	No ❒
6	Steam clean machine, inspect for structural cracks	OK ❒	No ❒
7	Replace cab pressurizer and air recirculation elements.	OK ❒	No ❒
8	Drivelines - See service form 80-627, Driveline Service & Maintenance.	OK ❒	No ❒
9	Have ANSUL representative inspect and recertify fire suppression system	OK ❒	No ❒

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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 ❒	No ❒
2	Drain, flush and fill differential	OK ❒	No ❒
3	Drain, flush and fill planetaries	OK ❒	No ❒
4	Change hydraulic oil	OK ❒	No ❒
5	Drivelines - Inspect slip splines for wear (backlash). See service form 80-627, Driveline Service & Maintenance.	OK ❒	No ❒
6	Obtain coolant sample (level 2) for analysis	OK ❒	No ❒
7	Have Allied representative inspect machine (annually)	OK ❒	No ❒

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Every 3000 Hours

Perform these checks every 3000 hours or 3 years, whichever comes first.

1*	Clean/Test aftercooler core	OK ❒	No ❒
2*	Replace coolant temperature regulator	OK ❒	No ❒
3*	Inspect crankshaft vibration damper	OK ❒	No ❒
4*	Check driven equipment	OK ❒	No ❒
5*	Check/Replace electronic unit injector	OK ❒	No ❒
6	Clean engine	OK ❒	No ❒
7	Inspect engine mounts	OK ❒	No ❒
8*	Check engine protective devices	OK ❒	No ❒
9*	Clean/Inspect speed timing sensor	OK ❒	No ❒
10*	Check engine valve lash	OK ❒	No ❒
11*	Inspect engine valve rotators	OK ❒	No ❒
12	Lubricate fan drive bearing	OK ❒	No ❒

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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/Fuel Consumption in Liters
Engine	20,000/585,000
Transmission	20,000
Converter	10,000
Pumps	10,000
Axle	20,000
Brakes	40,000
Hydraulic Cylinders - Reseal	10,000
Hoses and Fittings	20,000

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