

Best Practices- Developed by the Surface Haulage Safety Task Force in Cooperation with MSHA

100-TON OR GREATER TRUCK PREOPERATION INSPECTION

The following procedures are designed to allow you to make a pre or postoperation inspection in one continuous trip around the truck. Start at the boarding ladder, conduct the inspection, and correct all safety or major mechanical problems before placing the truck in service.

These inspection items are generic and applicable to most models of surface haulage trucks.

Items identified with an asterisk (*) require specific information that must be obtained by consulting the manufacturer's operator or service manual.

Personal Safety Items

- Always wear appropriate personal protective equipment, i.e., hard hat, safety boots, safety glasses or goggles, hearing protection, gloves, and dust mask or respirator.
- Don't wear jewelry that may get caught on controls or other machine parts.
- Before checking fluid levels, park the machine on flat ground, chock the wheels, and set the parking brakes. If the machine is loaded, avoid getting under the load.

External Checks

Make sure the access ladder is free of debris, securely fastened to the truck, and in general good condition. After confirming its condition, climb the ladder to the superstructure level.

CAUTION: Use the handrails, face the ladder and maintain the ©threepointsofcontact^a (2 feet and 1 hand or 1 foot and 2 hands) whenever climbing or descending the boarding ladder or steps.

- Clean cab windows, and adjust and clean all mirrors.
- Check the superstructure (deck area where truck cab is located) to ensure that it is free of debris and in general good condition. After confirming its condition, enter the cab. Cab doors and windows must be in good working condition.

Remove or secure trash, tools, or any loose objects which could jam a

control or prevent the operator from performing a critical control function.

- Switch "on" all exterior lights including the emergency flashers (if so equipped). The lights should be checked during the inspection to verify that they are working.

Return to ground level and continue the inspection.

- Do not smoke while making an inspection; many fluids, lubricants, etc. are potential explosive hazards.
- Ensure that all headlights and other warning lights are clean and illuminated.
- Visually inspect the air cleaner assembly. Ensure that the seal around the cover is in place.
- Verify that the air ducting from the filter assembly to the engine is not cracked, missing, or has holes in the rubber connections. **Note: This is a critical inspection item. If the engine takes in unfiltered air, extensive damage to the engine will occur.**
- *Visually inspect the left front suspension assembly for evidence of wear, damage, leakage, and proper inflation.
- Visually inspect the exterior of the left rear brake assembly for leakage, and, if visible, wear or damage to the brake assembly.
- Check steering system components, ball joints, clevis pins, tie rods, bellcranks, and cylinders, for damage, leakage, and evidence of lubrication.
- Visually inspect the left front tire and rim assembly for deep cuts, missing chunks, missing lug nuts, and proper inflation. If there is any abnormal bulging or tread/sidewall separation immediately move away from the tire and notify the appropriate supervisor.
- *Check hydraulic oil level in reservoir. (The truck box must be down to do this.)
- Visually inspect the left dump cylinder (end dump trucks) for evidence of leakage, wear, or damage. Make sure the upper and lower mounting points are secure and lubricated. See that the hoses are properly routed and in good condition.
- Inspect operating linkage, components, etc., (belly dump) for wear, damage and leakage.

- See that hydraulic and grease hoses are not leaking, are properly routed, and in good condition.
- Visually inspect each of the left rear tires and rim assemblies for deep cuts, missing chunks, missing lug nuts, and proper inflation. If there is any abnormal bulging or tread/sidewall separation immediately move away from the tire and notify the appropriate supervisor.
- Visually inspect the exterior of the left rear brake assembly for leakage, and if visible, wear or damage to the brake assembly.
- Visually inspect the left and right dump body hinge pins for evidence of them coming out of their attaching points.
- If equipped, verify that all of the grease lines from the "rear of truck" injector bank are in good condition and not leaking.

*Visually inspect the left and right rear suspensions for evidence of damage, leakage, and proper inflation.

- Ensure that the suspension's upper and lower mounting points are secure and lubricated.
- Ensure that all tail, stop, warning (turn signal), retarding, and backup lights on the truck are clean and operational.
- Visually inspect the exterior of the right rear brake assembly for leakage, and, if visible, wear or damage to the brake assembly.
- Visually inspect each of the right rear tires and rim assemblies for deep cuts, missing chunks, missing lug nuts, and proper inflation. If there is any abnormal bulging or tread/sidewall separation immediately move away from the tire and notify the appropriate supervisor.
- *Visually inspect the main air supply tank and lines. Drain any moisture from the tank using the appropriate draining procedure.
- Check to see that hydraulic, fuel, grease, air, and coolant hoses are free of kinks, secured from moving parts, not leaking, and not dragging on the ground.
- Visually inspect the right dump cylinder (end dump trucks) for leakage, wear, or damage. Make sure that the upper and lower mounting points are secure and properly lubricated. See that the hoses are properly routed and in good condition.
- Examine the hydraulic pumps, pump drives, and related hoses for evidence of leakage, damage, or wear.

- Visually inspect the right front tire and rim assembly for deep cuts, missing chunks, adequate tread depth, proper mounting, missing lug nuts, and proper inflation. If there is any abnormal bulging or tread/sidewall separation immediately move away from the tire and notify the appropriate supervisor.
- Check steering system components, ball joints or clevis assemblies, tie rods, bellcranks, and steering cylinder on the right side of the truck. If any piece is damaged, bent, or leaking, do not drive the truck. Report the condition immediately.
- *Visually inspect the right front suspension assembly for evidence of wear, damage, leakage, and proper inflation.
- Visually inspect the underside of the truck for indications of damage or leakage. See that hoses are free of kinks and cracks, and secured away from moving parts.
- Visually inspect the exterior of the right rear brake assembly for leakage, and, if visible, wear or damage to the brake assembly.
- Inspect the engine compartment. Look for defective drive belts and check the condition of the fan guard assembly.
- Check for engine oil, hydraulic, coolant, and fuel leaks.
- Visually inspect the condition of the radiator. Ensure that it is free of debris that could interfere with its cooling capability.
- Climb the access ladder to the superstructure level.
- *Check externally mounted fire extinguishers or fire suppression system components for serviceability. Make sure you know how to activate it in an emergency.
- *On trucks equipped with an automatic fire suppression system, ensure that the system is properly pressurized and that you know how to activate it in an emergency.
- *On trucks equipped with an automatic lubrication system, check for leaks throughout the system, and ensure that the level of the lubricating grease in the main supply reservoir is adequate.
- Return to the cab to continue your inspection.

Engine Starting Checks

The remainder of inspection checks are confined to the cab area.

- Check all gauges and warning lights before starting the engine and after the engine is running for proper warnings and indications.

Turn "ON" the master switch, or any other switch(s) required to start the engine.

- » Be sure that the:
 - » Parking brake is "set."
 - » Transmission/shifter is in "neutral."
 - » *Starting air pressure is adequate (on airstart trucks).
 - » Circuit breakers are all in the operating position (pushed "IN").
 - » Appropriate "AID" or other auxiliary warning indicators flash and alarms sound.
 - » Engine function gauges and warning lights are working.
- *If equipped, verify the operation of the secondary (emergency) steering system, in accordance with the manufacturer's manual.

Warn any people in the area that you are going to start the truck. Make sure they are clear of the truck, sound the horn, and wait a sufficient amount of seconds before starting the engine.

Starting the Engine

- *Do not accelerate a cold engine. Allow the engine to idle until coolant temperatures show that the engine is warmed up. If the engine does not start, refer to the appropriate engine manual for additional instructions.
- As soon as the engine is started and operating, check all gauges and indicators for proper reading.
- Adjust the operator's seat to the best driving position for maximum comfort and safety.
- Verify that windshield wipers are working and (if equipped) that there is an adequate supply of fluid in the washer reservoir.
- Securely fasten your seat belt. You and anyone riding in the cab must be seated and have seat belts securely fastened at all times.

- When engine coolant temperature, oil pressure, system air pressure, and amperage and voltage levels reach normal operating ranges, the truck may be put into operation.
- Complete required inspection reports. Report mechanical problems and safety hazards immediately, and, most of all, do not operate an unsafe machine.
- Proceed with caution and follow all haulage safety rules and procedures.

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