Steering Systems

MSHA 1010 (BP-10)

After the machine has warmed, perform steering actions with the machine parked or at a slow speed to determine if the control is responsive. Any feeling of looseness, binding, unusual noise, or stiffness in the steering control system should be checked immediately by an authorized person before the machine is put in service.

If possible, check for full left-to-right steering to ensure the steering system has its full range capability. Have any noticeable deficiencies evaluated.

Secondary (emergency) steering systems are generally provided on haulage machines. This system provides steering in the event the primary steering system fails.

If possible, check the secondary (emergency) steering system in accordance with the manufacturer's manual. Have any noticeable deficiencies evaluated. The secondary steering system should be tested in accordance with the manufacturer's operator's manual for the specific machine.

In most cases, there will be some kind of warning of possible failure of the normal steering system–loss of hydraulic pressure, warning lights, buzzers, etc. There may be increased resistance to steering control and response of the system or slack in the steering wheel.

Whenever the machine's normal steering system fails and the secondary (emergency) system is activated, the machine is to be slowed down immediately and brought to a stop as quickly as it can be done safely.

Be alert to any changes in feel, behavior, sounds, etc., of both steering systems. Immediately report them to an authorized person.

The manufacturer's operator's manual is the primary source of information for safe operation of any machine.

Any malfunction, defect, or improper operation of the steering system is to be checked immediately by an authorized person to correct the problem.

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