



G Gearbox Inspection SB-172

September 4, 2019

PRODUCT NAME: G Gearbox Inspection

AFFECTED PART NUMBERS: Muscle Pump Manual 029-0020-63-0

Hale has released Appendix I for the Muscle Pump Manual covering general G gearbox inspection. The appendix covers input shaft bearing, slider gear, idler gear, and shift fork inspection. The gearbox should be checked when the gearbox is noisy, unable to properly shift between road and pump modes, oil appears to contain contaminants, or if excessive metal particulates are found on the magnetic drain plug.

OPERATING RECOMMENDATIONS

Please find the appendix on Hale's website – [Link to Manual](#)

SOLUTION

Should the inspection of the G gearbox find any components outside of what the Appendix defines as healthy steps should be taken to ensure the cause is alleviated.

If the input shaft bearing is found to be unhealthy the following steps should be taken:

- Ensure proper oil level is maintained.
- Check connection on drive unit cooler.
- Shield exhaust if located too closely to the gearbox.
- Use correct lubricant.

If the slider gear and idler gear are found to be unhealthy the following steps should be taken:

- Ensure proper oil level is maintained.
- Check connection on drive unit cooler.
- Shield exhaust if located too closely to the gearbox.
- Use correct lubricant.
- Audit standard operating procedures to make sure that the operators are not shifting too fast causing shift to occur before driveline has stopped spinning.
- Consider retrofitting a shift interlock that exceeds the latest NFPA 1901 standard requirements such as Hale P/N 546-00052-100

If the shift fork shows excessive wear the following steps should be taken:

- Ensure proper oil level is maintained.
- Check connection on drive unit cooler.
- Shield exhaust if located too closely to the gearbox.
- Use correct lubricant.
- Audit standard operating procedures to make sure that the operators are not shifting too fast causing shift to occur before driveline has stopped spinning.
- Ensure driveline is correct. Refer to Service Bulletins SB66, SB67, and SB90 for more information.