New Transmission Fluid Checks

Grab some pine, drivers, and take notes on new fluid checks that'll help reduce transmission failures on M35A3-series trucks.

For openers, the checks are now part of the before-operation PMCS, not after-operation as before. This will ensure there's enough fluid in the transmission for operation. Improper fluid levels are one of the biggest causes of transmission failures.

Cold-run level checks and hot-run level checks are performed at least twice each during the before-operation PMCS.

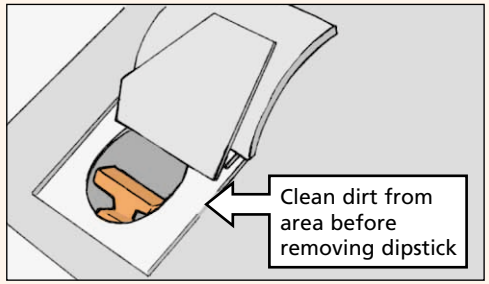
Cold-run level checks are made only to ensure there is enough fluid in the transmission to operate it for the hot-run level checks.

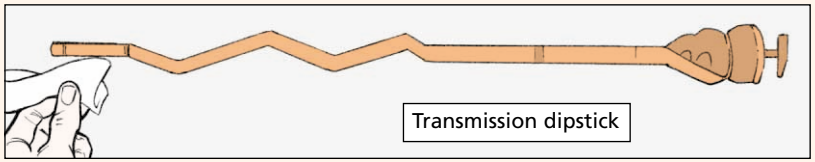
Cold-run Level Check

1. Park the vehicle on a level surface, apply the parking brake and chock the wheels.

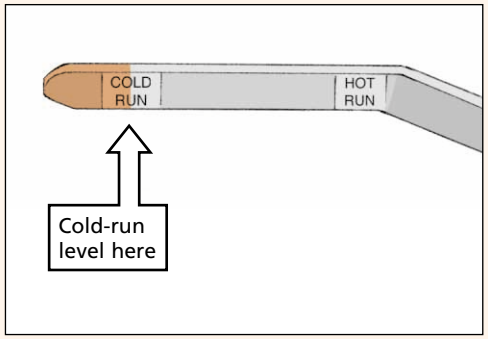
2. Run the engine in neutral (N) at 1,000-1,500 rpm for 1 minute. Then allow the engine to return to idle. Shift the transmission to drive (D) and then to reverse (R) to clean hydraulic circuits of air. Then shift to N. The transmission temperature should be between 60°-160° F.

3. Clean off the access door, dipstick handle and the end of the filler tube so dirt, dust or grit won't get into the transmission. Remove the dipstick, wipe it clean and check the fluid level. Then wipe the dipstick the second time and check the fluid level again.





If the fluid level is within the cold-run band, you can operate the transmission until it is hot enough to make a hot-run check. If it's not within the band, add or drain oil as needed to bring the level to the middle of the cold-run band. The fluid level should never be above the top of the cold-run band in a cold-run check, according to the transmission manufacturer.



4. Once the level is OK, put the dipstick all the way into the filler tube and turn the T-handle until it's tight.

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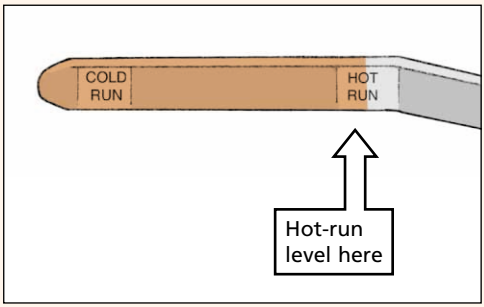
Hot-run Level Checks

Make these checks only after the transmission fluid temperature reaches 160°-300°F. The fluid must be hot to make an accurate check.

1. Park the vehicle on a level surface and shift into N, letting the engine idle. Apply the parking brake and chock the wheels.

2. Remove the dipstick, wipe it clean and check the fluid level. Then wipe the dipstick clean again and check the fluid level again. The level is OK if it is anywhere within the hot-run band on the dipstick. Add or drain fluid as needed to bring the level within the band.



3. Once the level is acceptable, push the dipstick all the way into the filler tube and turn the T-handle until it is tight.

If you are getting level readings that are inconsistent or always wrong, have your mechanic check out the transmission vent tube.

Vent tube blockage can cause overpressure in the transmission, which can alter the fluid level readings and cause fluid to blow out of the dipstick tube if the T-handle is not intalled tightly.