

FORWARD

GENERAL

This manual has been prepared for operators and service personnel working with the Marmon-Herrington series of transfer cases and front drive axles. For further technical assistance, please contact Marmon-Herrington Customer Service.

Please observe and follow all procedural and maintenance guidelines to ensure reliable operation and optimum service life. The Marmon-Herrington basic service schedule will integrate seamlessly with most preventative maintenance programs.

Marmon-Herrington shall not be liable for component failures or damages caused by operational abuse or neglect. Please review the Warranty Statement for a detailed explanation of coverage and claim reporting procedures.

We thank you for your investment in Marmon-Herrington equipment, and look forward to serving your needs in the best tradition of engineering excellence.

MISCELLANEOUS ISSUES

Marmon-Herrington equipped vehicles are designed for “as needed” AWD operation only, in off-road conditions.

Due to issues associated with torque, drive line wind-up and ratio mis-match, Marmon-Herrington axles and transfer cases must never be operated in AWD mode or while engaged on hard, dry surfaces.

Owner/Operators should seek expert assistance when considering alternative gear ratios and/or tire sizes.

Marmon-Herrington Axles and Transfer Cases should only be shifted when at a full stop. “Shifting on the Fly” or shifting while in motion are prohibited modes of operation. This applies to front axle engagement, high and low transfer case ranges, and locking differentials. The only exceptions are those vehicles equipped with Marmon-Herrington’s **SAFE-T-SHIFT system**.

SAFE-T-SHIFT

In 2003, Marmon-Herrington developed an electronic management system to help prevent “shift on the fly” damage. It consists of a microprocessor that receives speed information from a remote sensor in the transfer case. The system is calibrated to activate the shift solenoids at the first detection of motion, and then cancel control functions at 4 mph.

Relative rotation speeds of the gear sets may require that the vehicle be rolled a few feet before the shift will complete.

Axle and transfer case shifting can generally be heard and felt inside the cab. Indicator lights on the dash will also illuminate when the shift is complete. **DO NOT ACCELERATE UNTIL APPROPRIATE POSITION IS INDICATED ON DASH LIGHT OR CONTROL SWITCH.**

Shift Procedure

1. With the vehicle at a complete stop, select the desired range or front axle position.
2. Place the main transmission in gear.
3. Allow the vehicle to idle forward (or backwards) at walking speed until shift is completed.
4. Verify proper position indication.
5. Accelerate normally.

In the case of a manual transmission, ease the clutch out in low gear, allowing the vehicle to “walk” until shift is completed.

Some possible exclusions to the Safe-T-Shift program are those vehicles fitted with a transfer case mounted PTO, OEM factory installations, and any with non-Marmon-Herrington transfer cases.

Marmon-Herrington

