



PRODUCT SUPPORT BULLETIN BULLETIN NO. 332

DATE: **September 4, 2001**

MACHINE: **M2 Ballast Regulators and Snow Fighters**

SERIAL
NUMBER(S): **All**

SUBJECT: **Transmission Destroke Valve Removal Kit No. 800320KIT**

The M2 Regulator & Snow Fighters are powered with a Hydrostatic Drive driven through a ZF brand Power-Shift Transmission. During the transmission shift cycle, two “Destroke” valves cut-out the Hydrostatic system (one equalizes the pump servos and the other equalizes the A and B lines). If electrical power is lost to one of the valves or if one of the valves should fail, the M2 will not propel.

We have found a way to remove these valves and increase the reliability of the unit. This modification is not mandatory but if performed, will require a transmission modification as described below. Note; removal of the valves and performing the transmission modification have resulted in a smoother shifting machine.

To make this modification, please follow the following steps and use the parts in Kit 800320KIT:

1. Locate the two solenoid valves mounted on the right rear of the engine. See Figure 1.
2. Remove the four hoses between the valves and the hydrostatic pump.
3. Remove the fittings from the pump and replace them with Plugs, **p/n 2098746**.
4. Disconnect the wiring from the solenoid valves and tie the wires so they are out of the way and will not be pinched by any moving parts. Remove the valves and discard.

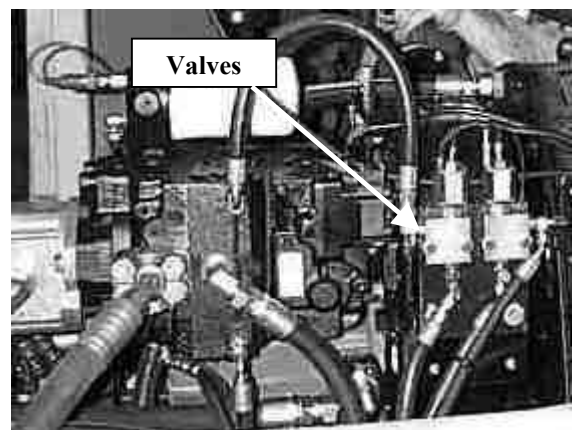
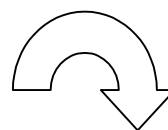


Figure 1



5. Locate the Orifice on the Transmission. See Figure 2. Clean any dirt or grease from around the area of the Orifice. Using the supplied 5mm Allen wrench, remove the Orifice and the 2 o-rings from the Transmission (one o-ring is on the body of the orifice and the other is on the end of the orifice or it may even still be in the bore of the transmission.)
6. Install the new **Orifice, p/n 800321** (ZF #4644 306 522) into the Transmission using large o-ring **p/n 800322** (ZF #0634 303 280) and small o-ring **p/n 800323** (ZF #0634 306 170). Apply grease on the end of the Orifice to keep the smaller o-ring in position during installation. **Note: If small o-ring is incorrectly installed or seated, harsh shifting and damage to the Transmission may result.**



Figure 2.

For additional information, please contact the NORDCO Service Department at 1-800-445-9258.