



Please read carefully – This Installation Checklist must be followed to validate product warranty.

## TRANSMISSION INSTALLATION CHECKLIST

Items marked with ‡ do not apply to *World Transmission units* – these include the following series:  
1000, 2000, 3000 and 4000

### 1. Engine, Transmission Adaptation

- Flywheel housing adaptation specifications must be according to Allison guidelines.
- Check flex plates for cracks, wear or bends. Replace if bent or broken.
- Check pilot bore in the flywheel for wear.
- The transmission should slide up to the engine. If you have to use draw bolts to pull the transmission up, something is wrong. There should be at least 1/8" clearance between the torque converter and the flex plate when the transmission is bolted up. A "0" clearance condition will cause immediate pump damage and unit failure.

### 2. Oil Cooler, Oil Filter + Lines

- Flush or replace oil cooler until absence of contamination.
- Inspect cooler hoses for cracks or kinks and ensure inner lining has not separated from the hose.
- Cooler fittings are straight thread "0" ring fittings. Using pipe fittings will damage the case and void the warranty.
- ‡  An auxiliary filter **must** be installed in the cooler return line.
- ‡  Replace all external filters on the vehicle's transmission system.

### 3. Coupling to Driveline

- Check the driveline for bad universal joints and damaged slip yokes.
- Check that the driveline is straight and in good working order.
- Check that the universal joints are in phase at proper angles.

### 4. Oil Check Procedure

- The dipstick must be installed so that the oil level reads per Allison specifications.
- The oil level must be checked and corrected to the full mark after the following:
  - a) Engine is running, temperature is hot and the transmission is in neutral;
  - b) Vehicle has been driven for 5 miles to ensure the oil has circulated and is hot.
- Transynd** oil is highly recommended. **Dexron** and **Allison C4** oils are also approved.

### 5. Other Installation Procedures

- Check that mounts are tight and in good condition. Replace if broken or damaged.
- When installing a PTO only use a gasket or shims as needed. **DO NOT USE SILICONE** - loose pieces will plug lube ports and stick valves. Backlash clearance should be between 0.006 - 0.012 inches.
- ‡  Shift linkage must be installed so each position on the transmission is aligned with proper positions of the vehicle's shift tower.
- ‡  The modulator linkage should be adjusted so that full modulation is achieved when engine is at full throttle.
- ‡  The reverse signal switch must be installed with extreme caution. Over tightening the switch will break the case and void the warranty.
- World Transmission Series:** Ensure all ECU and main transmission connectors are tight, clean and undamaged prior to installing transmission.