



# TECH TIP CVT DRIVE SYSTEM



## BULLETIN TT004-13

### › PART NUMBER:

- G-Force CVT Belts
- G-Force Carbon Cord CVT Belts
- PowerLink Scooter Belts

### › MAKE:

All

### › MODEL:

All

### › YEAR:

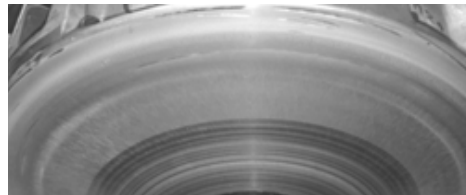
All

### › ENGINE:

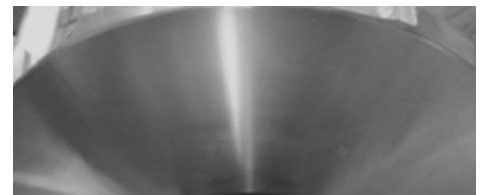
All

## CVT Belt Drive System

To ensure optimal operation of newly installed belts, the CVT sheaves must be cleaned of all old belt residue, glazing, and oils. Cleaning can be accomplished by carefully scuffing belt contaminants off the sheave/belt contact area with a mild abrasive such as 220-400 grit sandpaper, Scotch Brite Pad, or Steel Wool. Follow up by cleaning the surfaces thoroughly with soapy water and or brake cleaner until all impurities have been removed. **Cleaning the sheave surface until all contaminants have been removed is vital to future belt and CVT operation.** If any particles remain, belt slip and a noticeable drop in vehicle performance can occur. If a belt is to be removed and reinstalled during future maintenance, it is highly recommended that the belt is reinstalled in the same direction as before to match belt wear profile to contact with the corresponding sheave profile.



DIRTY SHEAVE PLATES



CLEAN SHEAVE PLATES

Dirty Sheaves should be cleaned with a mild abrasive to remove rubber and other wear contaminants as shown above by dirty Sheave. Dark wear patterns must be removed from the surface then cleaned off with an alcohol agent or brake cleaner to remove fine particulates.

### NEW BELT BREAK IN PROCESS:

**New CVT drive belts require a break-in period of at least 20 miles to maximize belt life and performance.** Two complete heat cycles **must** be performed during the break-in process. A heat cycle is defined as bringing the belt up to normal operating temperature (typically 15 minutes of use), followed by a shutdown of the engine and complete cool down of the belt. In addition, proper belt contact over the entire sheave/belt contact path is optimized by conservatively running through the entire shift range. Following these guidelines eliminates belt slippage and drastically increases the belt's lifespan.

### Follow these guidelines to accomplish proper Belt-Break in:

- › Vary vehicle speed and engine RPM to shift belt through normal operational range.
- › Do not exceed  $\frac{3}{4}$  throttle within the first 20 miles of installation.
- › Perform **two** complete heat cycles as described above.

### During break-in period, the following activities **SHOULD BE AVOIDED**:

- › Aggressive acceleration or 'jerky' throttle movements at low speeds.
- › Holding engine/vehicle speed constant for extended time periods.
- › Pulling heavy loads.
- › Long run times without complete CVT/belt cool down.

By following the break-in process carefully, the belt surface will wear in to match the individual CVT sheaves to maximize grip performance and dramatically reduce heat, glazing, and future wear.



ALTHOUGH G-FORCE BELTS ARE NOT DIRECTIONALLY BIASED, IT IS RECOMMENDED TO INSTALL THEM WITH THE LABEL LETTERING FACING TOWARD THE USER TO KEEP BELT REINSTALLATION CONSISTENT.

For more information, please contact our Technical Department at 303.744.5651 or apateam@gates.com.

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