

## Installation of “Classic” original style 635050 or “New Style” 643259 Starter Adapters

The starter adapters mentioned above (see over) are eligible for installation on most “sand cast”, rear alternator, 470, 520 and 550 series engines. TCM introduced the “New Style” starter adapter on August 14, 1992 via SBM92-10. The Classic / Original style starter adapter has been in service for over 50 years.

On September 9<sup>th</sup>, 2008, TCM issued SB08-12 mandating the installation of an improved crankshaft gear, part number 657175 at overhaul or on engine disassembly. The teeth, on this new crank gear, interface almost 0.085” (85 thou.) further into the starter adapter shaft gear teeth, improving serviceability and safety. The “New Style” starter adapter does NOT have any clearance issues with the improved crankshaft gear, part number 657175. Use the standard adapter gasket, p/n CAM653749.

Many aircraft owners / operators / repair & overhaul facilities may prefer to install the Classic / Original style starter adapter because of its proven long term, trouble free, service record. **If this is the case, be aware that there COULD be an interference problem when installing the “Classic” 635050 starter adapter.** The starter adapter “friction sleeve” (see picture) may contact the crankshaft gear “attaching bolts”. Before measuring the clearance, the crankshaft MUST be pushed as far to the rear (back) of the engine as is possible. Note that TCM service limits permits up to .025” fore & aft movement!

Check Friction Sleeve height – should be 1.100” – 1.105”

- If measurement from the crank deck to head of bolt is more than 1.100” install Standard Gasket
- If measurement from the crank deck to head of bolt is between 1.100” and 1.040” install P60 Gasket
- If measurement from the crank deck to head of bolt is less than 1.040” call us.

**After installing the Classic / Original style starter adapter, ALWAYS rotate the engine slowly BACKWARDS for at least one full revolution. Push the crankshaft toward the rear of the engine while rotating to confirm no interference between the “crankshaft gear” attaching bolts and the adapter “friction sleeve”.**

If you have any questions or encounter any difficulties, please contact Niagara Air Parts, Inc. or Canadian Aero Manufacturing at 800 565 4268 USA or 705 326 1368 International.

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Classic "Original Style"  
Starter Adapter p/n 635050-Axx

New Style Starter adapter as per  
SB M92-10, p/n 643259-Axx



Old Crank Gear  
536421 / 653631

New Crank Gear  
657175