Marvel-Schebler Aircraft Carburetors LLC
2208 Air Park Drive
Burlington, NC 27215 USA
Phone: 336-446-0002
Email: customerservice@msacarbs.com
Website: www.msacarbs.com

Service Bulletin: SB-27 Rev A

Original Date: February 1, 2021

Revision Date: May 24, 2021

SUBJECT: MA-3® and MA-4® CARBURETORS EQUIPPED WITH ACCELERATOR PUMPS

1. **Applicability:** Marvel-Schebler (and predecessors*) MA-3® and MA-4® series carburetors equipped with accelerator pumps.

2. **Purpose:** To advise the industry of an improved bushing and retention feature that secures pump stem packing P/N 44-49 without the need to install retaining washer P/N 78-388 and perform the staking operation.

3. **Discussion:** Worn accelerator pump pushrod holes are often repaired with brass bushings at the factory. Legacy bushing, P/N 60-A250, incorporates a featureless cylindrical wall inside the large diameter and when assembled into a carburetor requires a washer to retain the packing and a staking operation to retain the washer.

   The improved bushing design (after January, 2021) incorporates a groove in the large diameter of the bushing into which the packing 'snaps', see Figure 1.

   If a legacy bushing is encountered and is serviceable – install a new packing and retaining washer and stake it in accordance with appropriate MSA service information.

   If an improved bushing is encountered and is serviceable – use a popsicle stick or other non-metallic tool to seat the pump stem packing into the groove in the bushing. The packing should snap into the retaining groove. Inspect the packing to ensure it is fully seated in the groove.

   Additionally, as of May, 2021, the improved seal retention design is currently being machined directly into new carburetor throttle bodies. Use the above steps to identify which seal retention design is incorporated on your throttle body and install the pump stem packing in the carburetor body in the same manner as you would the improved bushings, see Figure 2.

** Marvel Schebler Company, Borg-Warner, Facet, Precision Airmotive, and Volare'.*

Legacy Bushing:
No Internal Groove, No Bevel At Top,
Requires Washer And Staking.

Improved Bushing:
Has Internal Groove, Has Bevel At Top,
Does Not Require Washer Or Staking.

Figure 1

Legacy Feature:
No Internal Groove, No Bevel At Top,
Requires Washer And Staking.

Improved Feature:
Has Internal Groove, Has Bevel At Top,
Does Not Require Washer Or Staking.

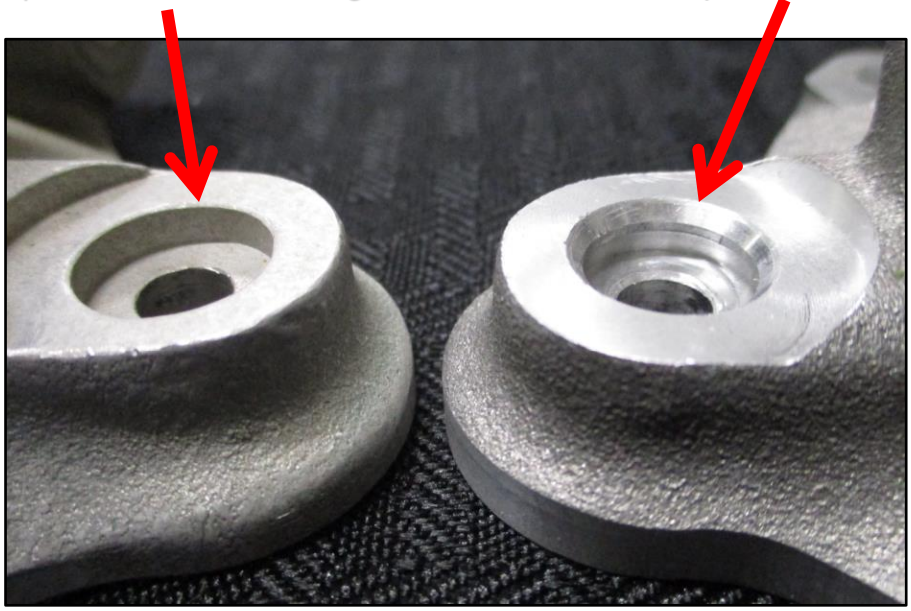

Figure 2