



Volare Carburetors LLC

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Service Bulletin: SB-13

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SUBJECT - ACCELERATOR PUMP PLUNGER

- Applicability:** MA-3TM series float carburetors manufactured by Volare Carburetors LLC (“Volare”), and its predecessors in interest Precision Airmotive Corporation, Facet Aerospace Products Company, Borg Warner, and Marvel-ScheblerTM (hereinafter “Volare Float Carburetors”) that incorporate accelerator pump plungers identified as part number 194-593.
- Reason:** Volare is issuing this SB to help owners, operators, and over-haulers of Volare Float Carburetors to identify suspect accelerator pump plungers. Suspect plungers should be removed from inventory and must not be used in Volare Float Carburetors.
- Background:** Volare has received field reports of low accelerator pump output and weak acceleration in some engines equipped with MA-3TM carburetors. Some accelerator pump plungers reportedly manufactured by AVStar Fuel Systems, Inc. (but not marked with FAA-PMA identification) differ in important ways from plungers authorized by Volare for use in MA-3TM carburetors. Suspect pump plungers differ in overall length and stroke, among other things. Never install a part not manufactured or authorized by Volare or its predecessors in a Volare float carburetor.
- Compliance:** Immediately, if weak (stumbling) engine acceleration is encountered, unless the problem can be positively traced to another source or at the next carburetor disassembly or overhaul, if no operational difficulties are experienced, replace the accelerator pump plunger with a serviceable plunger that meets the following criteria:
 - The dimension from the top of the pin retaining washer to the top of the brass skirt back-up washer must be at least .730 inches (18.5 mm), see Figure 1.
 - The cross pin retaining washer must be at least .022 inches (.56 mm) thick, see Figure 2.

- c. Plungers must be at least 2.620 inches (66.5 mm) long, see Figure 3. (Do not measure over the upset end of the stem at the center of the piston.)
 - d. The skirt spring must be plated, see Figure 4. Plated spring, left, is bright, silver colored. Non-plated spring, right, is blue/black.
5. **Voiding of Warranty and Waiver of Liability:** Operation of a carburetor in which other than genuine Volare-approved parts are installed **voids any otherwise applicable warranty and constitutes a complete and total waiver** to the extent permitted by law of any and all rights the owner, operator and/or service facility or repairer may have had to hold Volare responsible or liable for the malfunction or failure of such an aviation carburetor.
6. **Safety First:** Volare is a customer-service oriented company committed to technical innovation in pursuit of aviation safety. While Volare has no authority to compel owners to act responsibly and take prudent action to insure their own safety and the safety of others, Volare believes compliance with this Service Bulletin is important and will help to insure better maintained and better performing products.

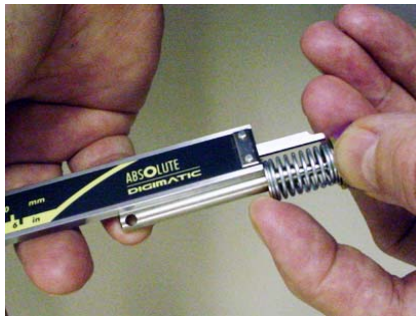


FIGURE 1



FIGURE 2



FIGURE 3

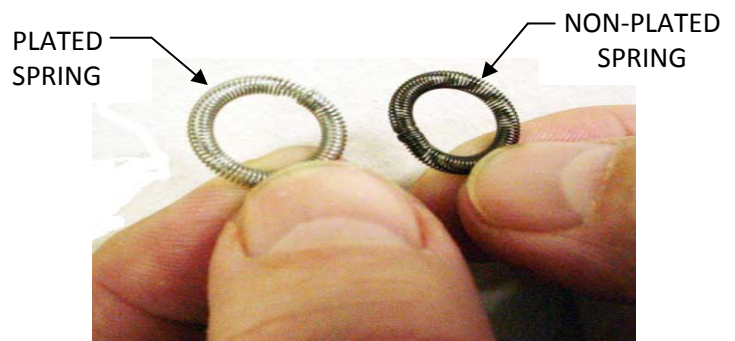


FIGURE 4