



**MARVEL-SCHEBLER**

**AIRCRAFT CARBURETORS LLC**

**Marvel-Schebler Aircraft  
Carburetors LLC**

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**EMERGENCY**

**Service Bulletin: SB-18 Rev A**

Original Date: October 14<sup>th</sup>, 2010

Revision Date: March 15<sup>th</sup>, 2011

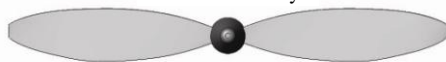
**SUBJECT: LOOSE MIXTURE SLEEVES  
- BEFORE FURTHER FLIGHT-  
AVOID SERIOUS RISK OF INJURY OR DEATH**

1. **Applicability:** Except as noted in the “Exempted MFB Carburetors” section below, this service bulletin applies to all machined from billet (MFB) HA-6<sup>TM</sup> carburetors, including but not necessarily limited to the following part numbers (including all dash numbers): 10-5219-XX, 10-5224-XX, 10-5230-XX, 10-5235-XX, 10-5253-XX, 10-5255-XX, 10-5283-XX, 10-6001-XX, 10-6019-XX, and 10-6030-XX, regardless of whether the carburetor is new, rebuilt, overhauled or used, and regardless of what agency performed service on the carburetor(s) in the past. MFB HA-6<sup>TM</sup> carburetors are found on various Lycoming engine models, possibly on engines made by other manufacturers, and on certificated and non-certificated aircraft of various types. This bulletin applies only to MFB HA-6<sup>TM</sup> carburetors, it does NOT apply to die-cast HA-6<sup>TM</sup> carburetors. (See Figure 3 below)

**Exempted MFB Carburetors** – This bulletin does not apply to MFB HA-6<sup>TM</sup> carburetors manufactured by Marvel-Schebler Aircraft Carburetors LLC (MSA), formerly known as Volare Carburetors LLC and having a serial number listed below. This SB likewise does not apply to any MFB HA-6<sup>TM</sup> carburetors that MSA serviced after October 10, 2010, or to any MFB HA-6<sup>TM</sup> carburetor bearing:

- A. “IC” number of 17 or higher on the data plate;
- B. One of the following or higher serial numbers stamped on the carburetor data plate in cases where the original data plate and original carburetor body combination remains unchanged;

MN353303	MS385901	VC213901	VC307001	VN041603	VN067103	VN148901
MN353304	MS392501	VC224401	VC334201	VN041604	VN091501	VN158301
MN353305	MS392901	VC230501	VC346701	VN041605	VN091502	VN226403
MN382201	MS392902	VC238401	VC356501	VN041606	VN091503	VN244301
MS357901	MS392903	VC242401	VN026601	VN041607	VN091504	VN244305

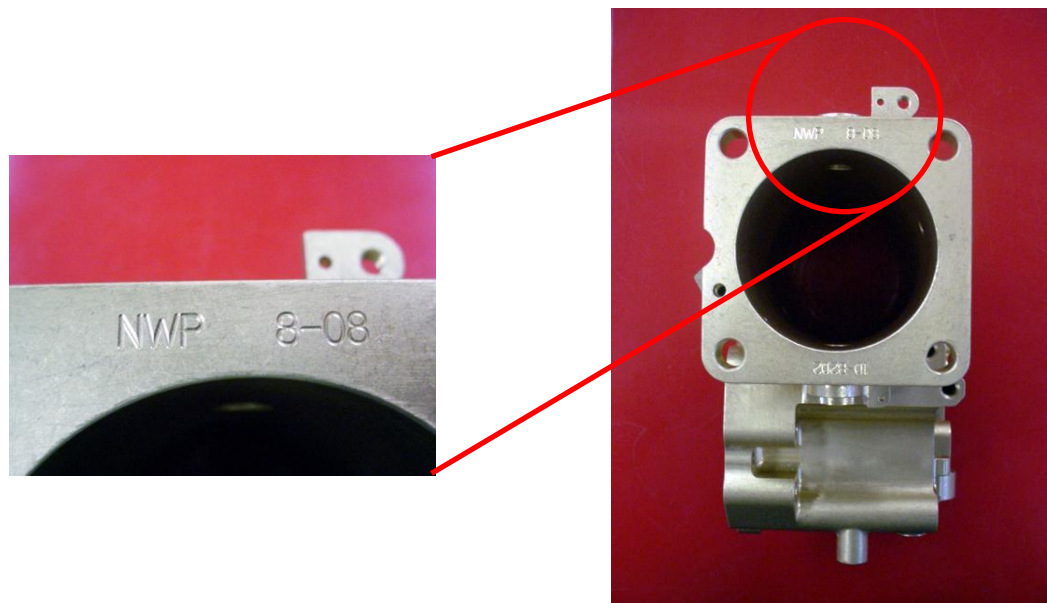


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MS364001	VC140601	VC242402	VN026602	VN041609	VN091505	VN292901
MS366301	VC140602	VC249201	VN026603	VN041610	VN091506	VN297501
MS366501	VC140701	VC249202	VN026604	VN043801	VN091507	VN298301
MS370501	VC171301	VC249203	VN026605	VN043802	VN091508	VN313804
MS370503	VC171401	VC249204	VN026606	VN043803	VN111203	VN313805
MS372301	VC181101	VC249205	VN026607	VN043804	VN111204	VN314601
MS378301	VC181102	VC260801	VN026608	VN043805	VN111205	VN314602
MS385201	VC181103	VC260802	VN041001	VN043806	VN134001	VN326701
MS385202	VC210701	VC264101	VN041201	VN067101	VN134003	VN326703
MS385203	VC213401	VC264102	VN041601	VN067102	VN134004	VN326704
						VN326705

NOTE: If the carburetor body has been replaced, the serial number is not exempt.

- C. The letters NWP and/or 8-08 (or numbers representing a month and year later than August 2008) stamped in the airbox flange and/or the engine flange gasket surface. (See Figure 1), or;

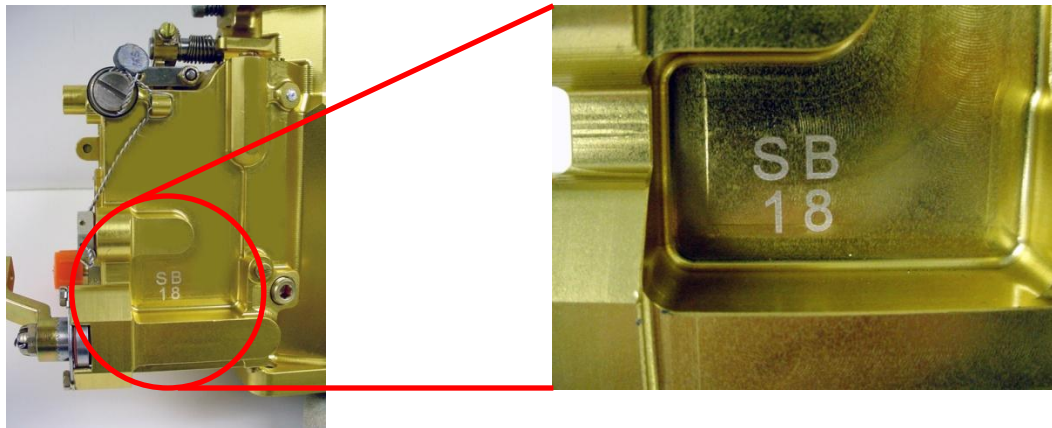


**Figure 1**

- D. A laser marking affixed to the carburetor by Marvel-Schebler® on the bottom of the carburetor float bowl as shown in Figure 2 indicating that the carburetor is in compliance with this service bulletin.



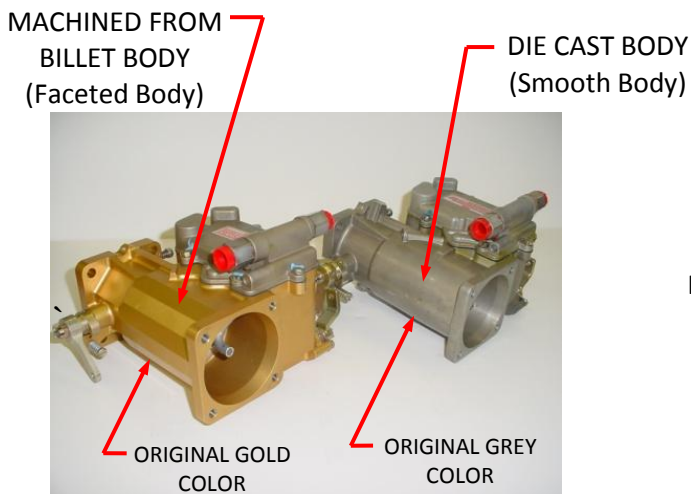
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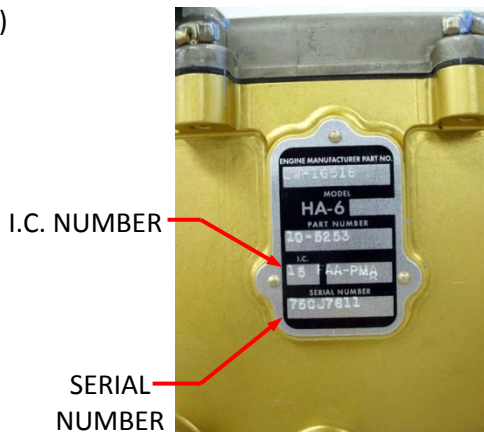
**Figure 2**

**CAUTION:** Some over-haulers have substituted data plates bearing their own names and/or logos on carburetors originally manufactured by MSA or its predecessors. Such obfuscation of the actual manufacturer of an aircraft component can lead to confusion as to what service bulletins and or Airworthiness Directives apply to what units (see MSA Service Bulletin SB-16). Regardless of what name or logo appears on the data plate, this service bulletin applies to every MFB HA-6™ carburetor originally manufactured by MSA or its predecessors unless it is specifically exempted above.

**NOTE:** Machined From Billet (MFB) HA-6™ carburetors can be identified by their faceted, milled surfaces (most MFB HA-6™ carburetors were originally anodized a golden color. Color alone should not be the sole factor in determining if a HA-6™ carburetor was made from billet or was die cast. A die-cast carburetor may have been painted or the gold anodizing could have been removed from the MFB) See Figure 3 & 4 below. Do not confuse MFB HA-6™ carburetors with die-cast HA-6™ carburetors.



**Figure 3**



**Figure 4**



2. **Reason:** Marvel-Schebler® has discovered a very dangerous problem involving loose mixture control sleeves or sleeves that might become loose and is issuing this SB to inform over-haulers, owners, and operators of serious issues with certain MFB HA-6™ carburetors.
3. **Background:** This service bulletin is prompted by a reported in-flight loss of engine power resulting in the forced landing of an aircraft equipped with a made from billet HA-6™ carburetor. Upon inspection, Marvel-Schebler™ determined that the carburetor's mixture control sleeve was loose and had rotated in the carburetor body. If a mixture sleeve rotates sufficiently it will interrupt fuel flow to the engine.
4. **Procedure:**
  - A. For every affected MFB HA-6™ carburetor installed on an aircraft, prior to further flight:
    - i. Remove the carburetor and send it to Marvel-Schebler® for inspection and possible repair before re-installing on the aircraft;
    - ii. Replace the carburetor with a serviceable MFB HA-6™ carburetor of the proper part number that is exempt from this SB; or,
    - iii. Replace the carburetor with a serviceable die-cast HA-6™ carburetor of the proper part number.
  - B. For every affected MFB HA-6™ carburetor in inventory or otherwise not installed on an aircraft, prior to releasing such carburetors for flight, submit such carburetors to Marvel-Schebler® for inspection and possible repair.
5. **Voiding of Warranty and Waiver of Liability:** Operation of a carburetor in which other than genuine Marvel-Schebler® 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 Marvel-Schebler Aircraft Carburetors LLC responsible or liable for the malfunction or failure of such an aviation carburetor.
6. **Safety First:** Marvel-Schebler® is a customer-service oriented company committed to technical innovation in pursuit of aviation safety. While Marvel-Schebler® has no authority to compel owners to act responsibly and take prudent action to insure their own safety and the safety of others, Marvel-Schebler® believes compliance with this **EMERGENCY** Service Bulletin is important and will help to insure safer, better maintained and better performing products.