SURFACE VEHICLE RECOMMENDED PRACTICE

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Marine Carburetors and Fuel Injection Throttle Bodies

RATIONALE

The technical report covers technology, products, or processes which are mature and not likely to change in the foreseeable future.

STABILIZED NOTICE

This document has been declared "Stabilized" by the SAE Marine Engine Fuel Systems Committee and will no longer be subjected to periodic reviews for currency. Users are responsible for verifying references and continued suitability of technical requirements. Newer technology may exist.

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1. ***Scope***—This SAE Recommended Practice covers all carburetors and throttle bodies used on permanently installed gasoline marine engines.

1.1 **Purpose**—To recommend design practices and test procedures for carburetors and throttle bodies used in a marine environment.

2. ***References***

2.1 **Applicable Publication**—The following publication forms a part of this specification to the extent specified herein.

2.1.1 ASTM PUBLICATION—Available from ASTM, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959, Tel: 610-832-9585, www.astm.org.

ASTM B 117—Standard Method of Salt Spray (Fog) Testing

3. ***Design Practice***

3.1 All vents and air bleeds shall normally be within the envelope of the air induction system. Vents or air bleeds external to the air induction system are permitted if they have flame arresting capability and are in compliance with all other requirements as stated in this document.

3.2 Each updraft and horizontal draft carburetor or throttle body must have a device that:

3.2.1 Prevents fuel from being carried out of the carburetor or throttle body and its induction system by the shock wave of a backfire or by reverse air flow; and

3.2.2 Returns collected fuel to the engine induction system after the engine starts.

3.3 All gaskets communicating to the outside of the carburetor or throttle body shall be of a nonwicking type.

3.4 The carburetor or throttle body shall be capable of operations throughout an ambient range from –7 to +80 °C (+20 to 176 °F) without failure.