



Date: Apr 13, 2011

Dear HydraMaster Distributor,

Included in this mailing is important information concerning HydraMaster equipment. Please take the time to read the correspondence carefully and take the necessary actions.

If applicable and our serial number database indicates that you are in possession of more than one piece of affected equipment, multiple copies of this Product Support Bulletin (PSB) will be included along with a list of the serial numbers that this PSB applies to. **Please make every effort to distribute these copies to the appropriate owners as soon as possible if the PSB calls for it.** At the same time please contact HydraMaster with the current ownership information for the serial number(s) that you no longer have in your possession. After reviewing the content of the PSB, please insert a copy of it into the appropriate equipment manual(s) you have on file, for future reference.

If you have any questions concerning this correspondence, please contact your HydraMaster Customer Service Representative at the number listed below or visit our website at [www.hydramaster.com](http://www.hydramaster.com).

Thank you for choosing HydraMaster as your source for professional cleaning products!



## Product Support Bulletin

To:	All HydraMaster Distributors		
Document #:	PSB-44329	Effective Date:	Apr 13, 2011
Title:	<b>27 HP Briggs Engine Spec. Deviation</b>		

### **Briggs 27 HP Cylinder Heads and Engine blocks *Machining Tolerance* - Deviation Notice**

Briggs and Stratton Corporation sent out a deviation bulletin Feb 2011 to replace the manual specs on head warpage tolerance and block warpage tolerance. In the case of rebuilding an engine follow the guide line set forth in this B&S Bulletin (see attached).

This is going to change the manual specifications of .004" (old info) to the information in the bulletin (new info).

This will restore flatness and give a good gasket mating area.

Due to a shortage of castings, **all** cylinder heads being replaced in the field must be inspected and an attempt should be made to machine the head, unless other circumstances dictate not to perform this process. This process must be documented and all data presented to Briggs if a new cylinder head is required to repair an engine in the field.

With this process we believe the repair of an engine will be expedited and down time will be held to a minimum.



## ***CENTRAL SALES AND SERVICE DISTRIBUTOR BULLETIN***

**SUBJECT:** MACHINING CYLINDER HEADS ON LIQUID-COOLED ENGINES

**No:** 2011-2

**DATE:** 2/24/11

**MODELS:** 470000 AND 610000 LIQUID-COOLED VANGUARD V-TWINS

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The service inventory of replacement cylinder heads **809276**, **809277**, **841892**, and **841893** for the subject engines is nearly depleted. An alternative to replacement is to machine the heads and/or cylinder decks to restore flatness.

Please use the following parameters when machining:

- Machine the surfaces just enough to achieve flatness to +/- .001 in (+/- .03 mm).
- Remove up to a maximum of .020 in (.51 mm) between both surfaces. For example, if the head is machined .015 in (.38 mm), then the deck can be machined up to .005 in (.13 mm). If the head is machined .020 in (.51 mm), then no material can be machined from the deck.

Machining of the head or deck may affect the alignment of the intake/exhaust manifold mounting holes. Slight oversizing of the bolt holes in the respective manifold may be required.

**BRIGGS AND STRATTON CORPORATION**  
Distribution Sales & Customer Support