

CYLINDER HEAD TORQUE PROCEDURE UPDATE

Purpose

To communicate a new standardized cylinder head torque procedure, which improves clamp force of cylinder heads.

Motorcycles Affected

All Twin Cam 88 / 88B, 5 speed Sportster, CVO and Buell models. Does not include Evolution 1340 or 4-speed Sportster models.

Required Dealer Action

Update service literature and notify all service personnel.

CAUTION

Improperly tightened cylinder head bolts may result in gasket leaks, stud failure and distortion of cylinder and/or cylinder head. Always tighten in sequence shown.

NOTE

For complete cylinder head installation process, please see your service manual.

Short head bolts will be installed in the 1 and 2 positions, and long head bolts in the 3 and 4 positions.

Single cylinder Buell Blast models will reference the front head procedure for the Sportster/Buell models.

Twin Cam 88 Models:

1. Lightly oil cylinder head bolt threads and shoulders prior to installation with clean H-D 20W50 engine oil.
2. See Figure 1. Tighten cylinder head bolts incrementally in the sequence shown, first between 120-144 in-lbs. (13.5-16.2 Nm). Then between 15-17 ft lbs (20.3-23 Nm).
3. See Figure 2. Mark cylinder head and head bolt shoulder with a line as shown. Tighten bolts an additional 90°.

Sportster and Buell Models:

1. Lightly oil cylinder head bolt threads and shoulders prior to installation with clean H-D 20W50 engine oil.
2. See Figure 1. For each cylinder head, start with bolt numbered one, as shown. In increasing numerical sequence (i.e. 1,2,3,4) tighten head bolts in the following steps:

- a. Tighten each head bolt to 96-120 in lbs (11-13 Nm).
 - b. Tighten each head bolt to 13-15 ft-lbs (18-20 Nm).
 - c. Loosen all head bolts.
 - d. Tighten each head bolt to 96-120 in lbs (11-13 Nm).
 - e. Tighten each head bolt to 13-15 ft-lbs (18-20 Nm).
3. See Figure 2. Mark cylinder head and head bolt shoulder with a line as shown. Tighten bolts an additional 90°.

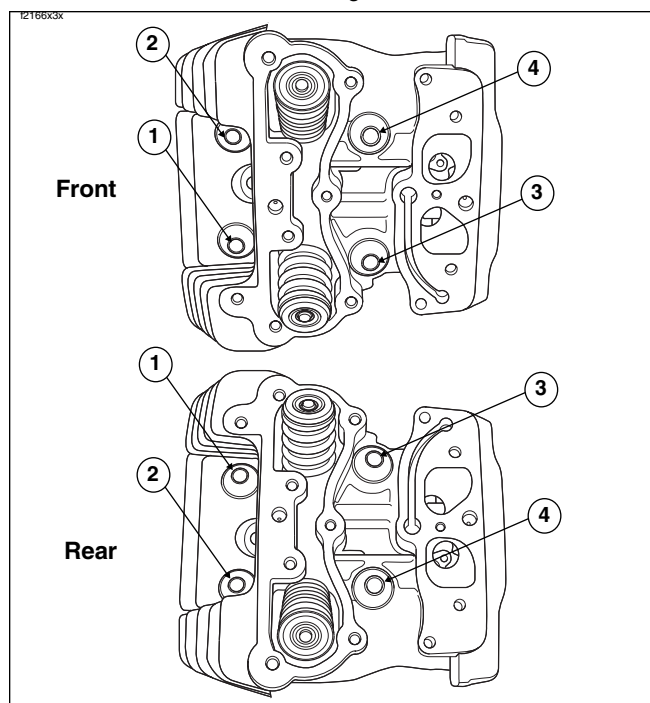


Figure 1. Cylinder Head Tightening Sequence

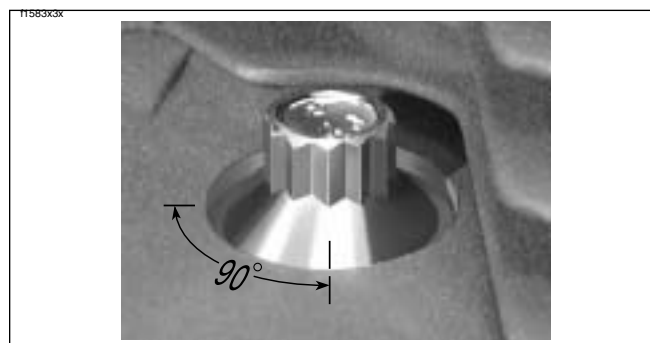


Figure 2. Turn Cylinder Head Bolts Additional 90°

IMPORTANT NOTE

In the interest of preserving customer safety and satisfaction, always check for outstanding recalls whenever any motorcycle is brought into your dealership for either maintenance or service.

ROUTING	SERVICE MANAGER	SALES MANAGER	PARTS MANAGER	LEAD TECHNICIAN	TECHNICIAN NO.1	TECHNICIAN NO. 2	TECHNICIAN NO. 3	TECHNICIAN NO. 4	RETURN THIS TO
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