

Cylinder Head Bolts: Technical Service Bulletins

New Cylinder Head Bolt - Service Tips

Article No.

95-3-10

02/13/95

ENGINE - 5.0L - NEW TORQUE-TO-YIELD CYLINDER HEAD BOLT KIT AND NEW PROCEDURES - SERVICE TIP

FORD:

1988 THUNDERBIRD

1988-91 CROWN VICTORIA

1988-95 MUSTANG

1991-93 THUNDERBIRD

LINCOLN-MERCURY:

1988 COUGAR

1988-90 TOWN CAR

1988-91 GRAND MARQUIS

1988-92 MARK VII

1991-93 COUGAR

LIGHT TRUCK:

1988-95 BRONCO, ECONOLINE, F-150-350 SERIES

ISSUE:

In 1992, the type of cylinder head bolts used on the 5.0L engines was changed to the torque-to-yield bolts. Depending on the build date of the engine, the 1992 model year engines came with either torque-to-yield bolts or standard torque, not a combination of the two (2). In 1993, torque-to-yield bolts were used on all 5.0L engines.

ACTION:

Refer to the following for proper bolt identification, usage and torque specifications.

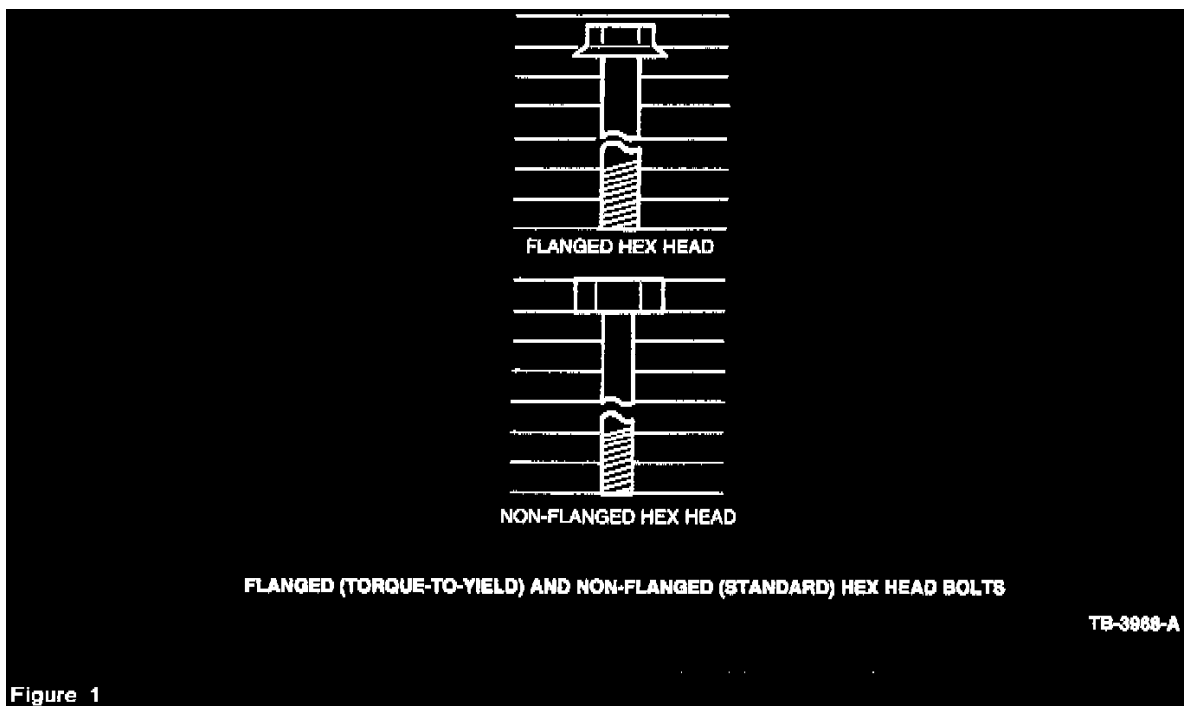


Figure 1

^ The two (2) types of bolts being used are physically different. Refer to Figure 1.

^ The standard torque bolt is a non-flanged hex head bolt.

^ The torque-to-yield bolt is a flanged head bolt.

^ The two (2) types of bolts may be used on any of the 5.0L engines.

^ The bolts must be all the same style on each cylinder head.

CAUTION:

DO NOT USE BOTH TYPES OF CYLINDER HEAD BOLTS ON ONE (1) CYLINDER HEAD. EACH CYLINDER HEAD MUST HAVE

ALL OF ONE (1) TYPE OF RETAINING BOLT: STANDARD TORQUE OR TORQUE-TO-YIELD.

The torque-to-yield cylinder head bolts will be available only in a packaged kit (F3ZZ-6065-E). The kit will contain the following:

- ^ Five (5) 7/16-14x3.94 Bolts
- ^ Five (5) 7/16-14x2.49 Bolts
- ^ One (1) 3/8-16x7/16-3.93 Stud
- ^ One (1) Instruction Sheet (I.S. # 6605)

Some applications use a various quantity of studs for fastening of items to the cylinder head.

TORQUE SPECIFICATIONS

FOR THE NON-FLANGED STANDARD HEX HEAD BOLTS, TIGHTEN IN TWO (2) STEPS AS FOLLOWS:

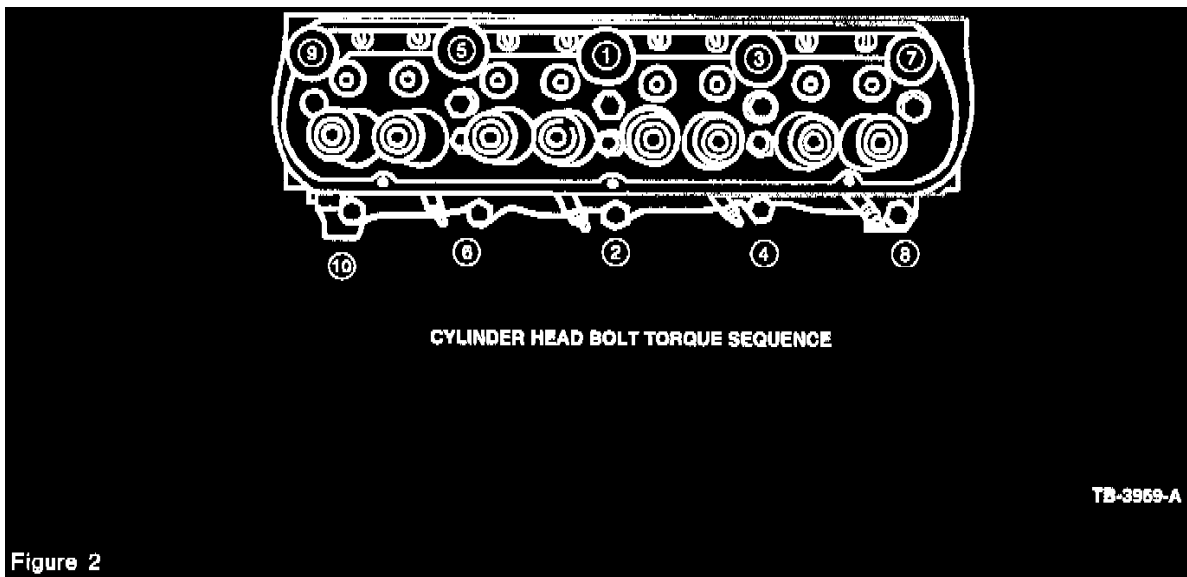


Figure 2

1. Tighten all bolts in sequence (Figure 2) to 75-88 N-m (55-65 lb.ft.).
2. Tighten all bolts in sequence (Figure 2) to 88-98 N-m (65-72 lb.ft.).

FOR ALL TORQUE TO YIELD HEX HEAD BOLTS, TIGHTEN IN THREE (3) STEPS AS FOLLOWS:

1. Tighten all bolts in sequence (Figure 2) to 34-47 N-m (25-35 lb.ft.).
2. Tighten all bolts in sequence (Figure 2) to 61-75 N-m 45-55 lb.ft.).
3. Tighten all bolts in sequence (Figure 2) an additional 1/4 turn (85-95 degrees).

NOTE:
WHEN THE CYLINDER HEAD BOLTS HAVE BEEN TIGHTENED FOLLOWING THESE PROCEDURES, IT IS NOT NECESSARY TO RETIGHTEN THE BOLTS AFTER EXTENDED OPERATION.

CAUTION:
TORQUE-TO-YIELD CYLINDER HEAD BOLTS MUST BE REPLACED WITH NEW BOLTS. DO NOT REUSE TORQUE-TO-YIELD BOLTS. TORQUE-TO-YIELD BOLTS MAY ONLY BE USED ONE (1) TIME.

PART NUMBER	PART NAME
F3ZZ-6065-E	Cylinder Head Bolt

OTHER APPLICABLE ARTICLES: NONE
WARRANTY STATUS: INFORMATION ONLY
OASIS CODES: 499000, 702100