



THE MODEL T FORD

ITS REPAIR, SERVICE, & RESTORATION

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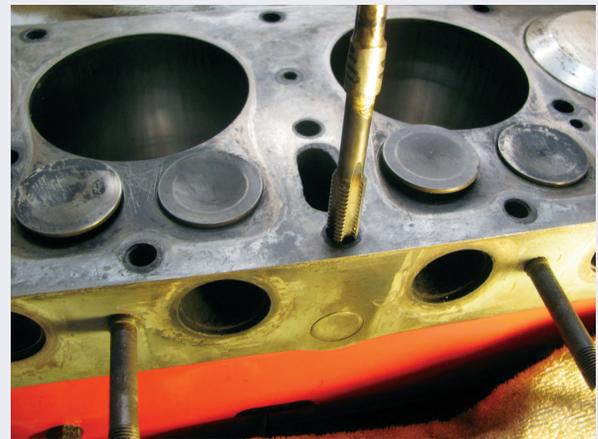
Replacing Cylinder Head and Gasket

One chore the Model T owner will do from time to time is to remove the cylinder head to clean the combustion chamber, perform valve work, or replace the cylinder head or gasket. The procedure is straightforward, but some tips can help produce longer lasting results.

Sometimes it's because of head gasket failure that it becomes a chore to be done on the road, as in this case on a winter tour (pictured below), this yellow '26 Runabout suffered a blown gasket! With the assistance of Ross Lilleker, the head was removed, a new gasket placed, and the owner, Gerald Cain, was back on the road.

Ross Lilleker (left) assists Gerald Cain (right) with replacing the head gasket on his 1926 Runabout.

In the garage, the work is the same, with attention focused on having clean bolt holes prior to seating the head bolts. With use of a bottom tap, 7/16" x 14, the block holes are cleaned. Use compressed air to remove any debris that is left.



Next, the gasket is prepared. Using a copper-faced gasket, spray liberally with gasket sealer on both sides. Turn the engine over so #1 and #4 pistons are up, to help locate the gasket. Place the gasket correctly, as the Ford head gasket has the small opening at the front of the block. The larger water opening is at the rear of the block.

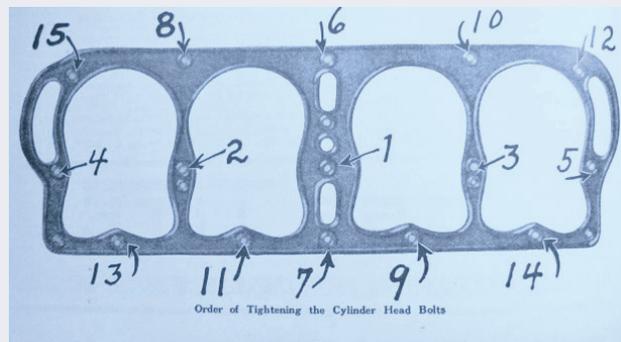




Set the cylinder head down (use of a handle is nice for the heavy iron head, or made easy with the newer, lighter aluminum high compression heads). Run down the bolts into the block. On the aluminum head, stainless steel washers go under the bolt head to prevent galling the aluminum when tightening the bolts. Use of anti-seize lube on the head bolt threads will make removing them later a bit easier with less risk of breaking.



Finally, secure the bolts in the proper sequence. It's important to use a method in tightening so the head and gasket is squeezed from the center of the cylinder block to the outside, in a rotation. By tightening the center of the head first, then alternating the tightening of bolts to the outer edges, the cylinder head is best fitted, ensuring the gasket is flattened in center first. That is where the gasket is most narrow between the cylinders.



The Model T was around before the torque wrench was developed, so there is not a torque standard. What is important to remember is that broken head bolts or stripped holes happened in the day, and to help prevent this, take care in tightening the head bolts. Old bolts shouldn't be re-used, and the earlier iron blocks can be compromised by too much torque and strip out a bolt hole. Generally, 45-50 lb./ft. is the maximum; 40-45 lb./ft. will work most times.

On running fifty miles or so, after warmed to operating temperature, check and/or snug the bolts again to re-torque. With aluminum heads, after warmed-up, allow the aluminum head to cool completely before re-establishing the torque used.

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