

# Supercharger Adapter Kit for 1979 and Later Ford Mustang and Mercury Capri with Ford 302 CID Engine Installation Instructions

Part Nos. 90684 and 90869  
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The Holley Mustang/Capri supercharger adapter kits are designed to fit late model 302 CID engines factory-equipped with a single belt serpentine accessory drive system. Kit #90684 fits vehicles with air conditioning, #90869 fits vehicles without air conditioning. Some 1985 Mustangs and Capris use a two speed accessory drive system with two belts. The Holley adapter kits will not work with this accessory drive. The Holley adapter kit also will not work on other Ford engines that use two serpentine belts to drive the engine accessories.

The Mustang and Capri uses the standard Holley small block Ford supercharger kit (part no. 90675 or 90676) together with this adapter kit. The supercharger is installed in the normal manner. This adapter kit, together with the standard Ford parts listed below, is required to modify the original Ford accessory drive system on these vehicles. Normally the drive housing of the Holley blower would interfere with the alternator bracket and belt tensioner of the stock Ford serpentine accessory drive. This kit permits the mounting of a different design tensioner on the serpentine belt.

In addition to the tools needed for the supercharger you will also need a 19/64" drill and a 3/8-16 tap.

The required standard Ford parts, illustrated in **figure 1**, are listed below. They should be obtained prior to disassembly. They are readily available from your Ford or Mercury dealer. We suggest you take the illustration with you to the dealer when you purchase these parts.

Ford Part Number	Description
E3DZ-8A610-A	Inner alternator bracket
E2DZ-8A610-A	Outer bracket
E2DZ-6B217-A	Pulley
385252-S	Retainer clip
N-802135-S	Adjuster bolt
N-605799-S	Bolts (2)

For vehicles without air conditioning you will also need:

E2ZZ-8620-A	Drive belt
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They are normally used on the 1982 and later Ford 3.8 liter V6 engine in various Ford cars. The pieces, shown in **figure 2**, are slightly different from the parts book drawing.

For the majority of the installation the procedure will be the same as in the regular installation instructions. The differences are noted below. The steps are outlined and the additional illustrations required are included in these instructions.

**Installation of adapter kit:** The Mustang and Capri adapter kit is installed while the supercharger kit is being installed. Listed below are the steps needed to install the adapter kit. The parts of the adapter kit should be installed in these steps for easy installation. The reworked serpentine accessory drive installation should be completed before the supercharger is installed, since the

access to these parts is limited after the supercharger is bolted onto the intake manifold.

**Disassembly:** Pull up on the stock tensioner to loosen the belt. You will need a breaker bar or a long screwdriver to get enough leverage on the tensioner. Remove the belt and release the tensioner. Remove the tensioner assembly from the engine. Remove the alternator from the engine. Remove the cast aluminum alternator bracket from the engine. Set alternator, bracket, and tensioner aside.

**Installation:** Install the Holley supercharger drive pulley and the crank pulley spacer. You will need to use the spacer shim ring that is included in this kit. This shim is installed over the pilot diameter on the back side of the Holley crank pulley spacer and goes inside of the Ford harmonic balancer. This is needed because these late model engines have a larger pilot diameter than earlier model engines.

After installing the intake manifold but before installing the supercharger: Cut out the template included in these instructions and place it over the Mustang/Capri cast aluminum alternator bracket/tensioner support as shown in **figure 3**. Mark the dotted line on the bracket as a guide. Cut along the dotted line and remove the material above the line. Material must also be removed from the back side of the bracket for clearance as shown in **figures 4 and 5**. Remove this material with a grinder or belt sander.

The new inner bracket (E3DZ-8A610-A) must be modified to clear the boss cast on the side of the alternator with a minimum of 1/8" clearance. See **figures 6 and 8**.

Install the idler support brace between the cast alternator bracket and the new inner bracket using the supplied bolts and nuts as shown in figure 8. The two upper holes that will support the top of the alternator must line up. If they do not you must grind more material off of the back of the cast bracket. When the two parts fit together, reinstall the cast alternator bracket, new inner bracket and support brace on the engine, using the mounting holes and hardware for the cast bracket. Put the alternator in place and install the lower bolt. Put the 3/8-16 x 1" stud through the top alternator mounting hole and the holes in both the cast and stamped brackets. Put nuts on both ends of the stud. The parts should fit as shown in **figure 8**.

Using the hole in the top of the new inner bracket, indicated in **figure 8**, as a guide, drill and tap the cast aluminum alternator bracket. Use a 19/64" drill and a 3/8-16 tap. The location of the drilled and tapped hole is shown in **figure 5**.

Install the supplied 3/8-16 x 1" bolt through the hole in the new inner bracket into the threaded hole in the cast bracket. Tighten all of the bolts on both brackets. Install the new idler pulley on the outer bracket with the retaining clip. Install the adjusting bolt into the outer bracket. Bolt

the outer bracket to the inner bracket using the Ford bolts that you bought. The assembly should look like **figures 7 and 8**.

For vehicles with air conditioning install the original Ford serpentine accessory drive belt. If you have more than 20,000 miles on the original belt we suggest that you replace it with a new Ford belt.

For vehicles without air conditioning the additional idler must be installed as shown in **figure 9**. The bracket and pulley attach to the two studs at the top of the water pump housing. The two spacers go over the studs behind the idler bracket. The new drive belt is routed under the adjustable idler, over the additional idler and then to the power steering pump.

The tensioner for the serpentine accessory drive belt will no longer be spring loaded. To correctly tension the belt tighten the adjusting bolt until the belt is able to flex only slightly between the tensioner pulley and the alternator pulley.

The tension on the Ford serpentine accessory drive belt should be checked after the first 100-200 miles and then should be checked when the supercharger drivebelt is checked.

Continue with the remainder of steps in the supercharger installation steps as described in the main supercharger instructions.

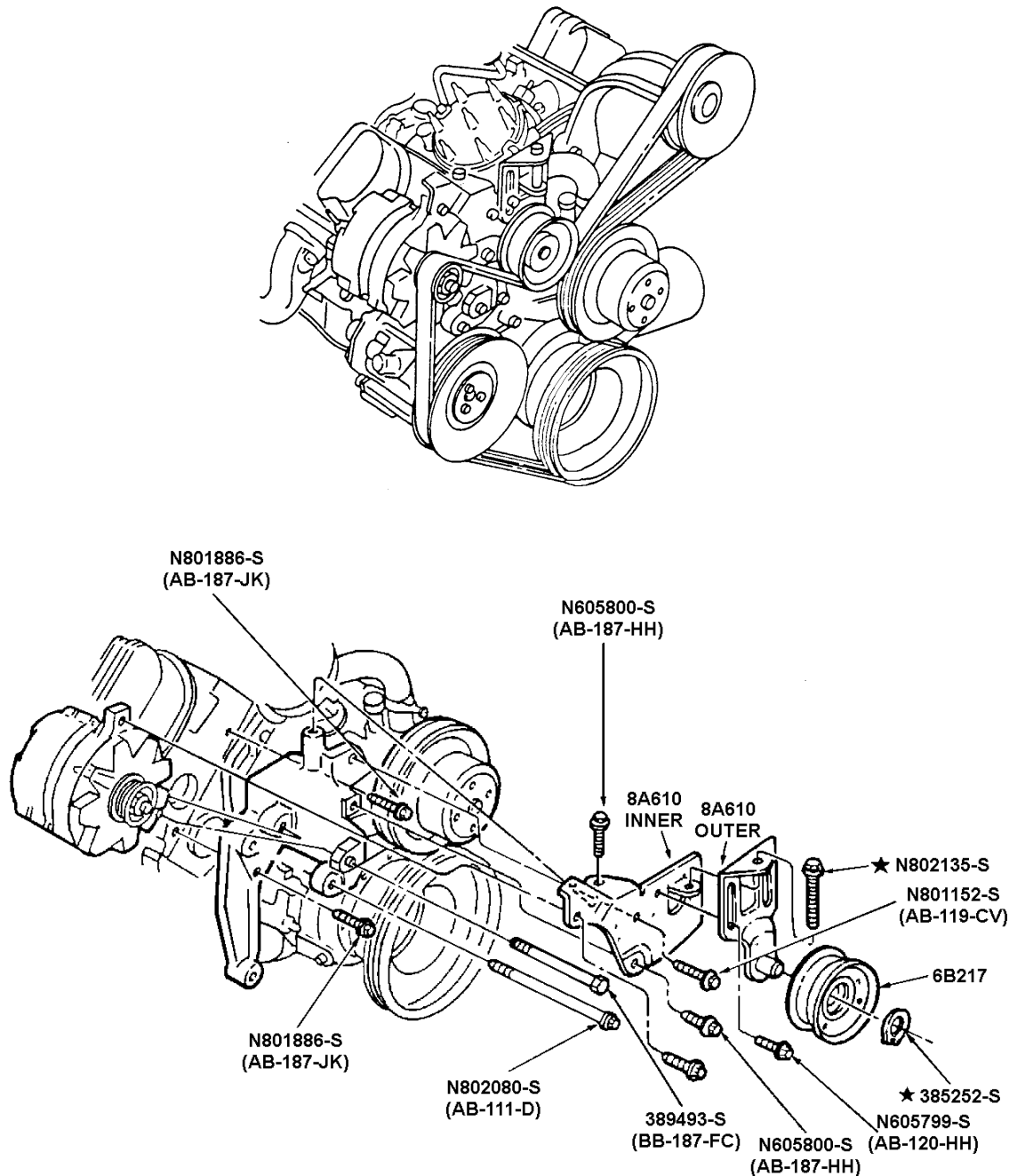


Figure 1

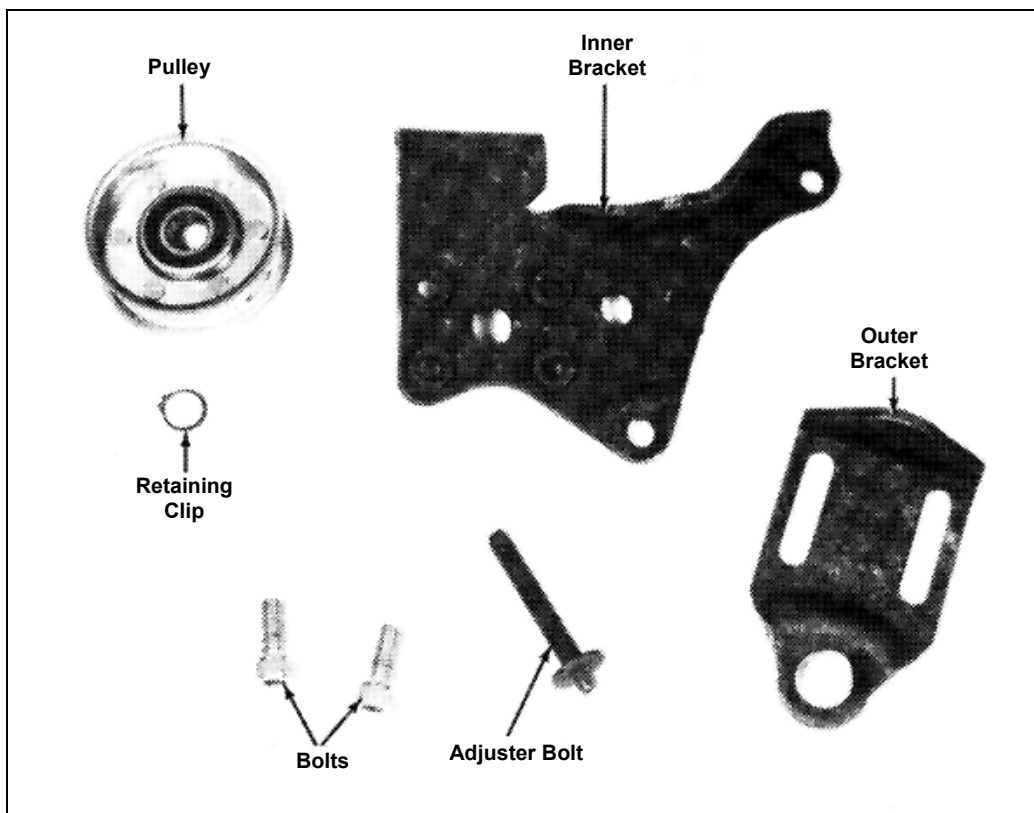


Figure 2

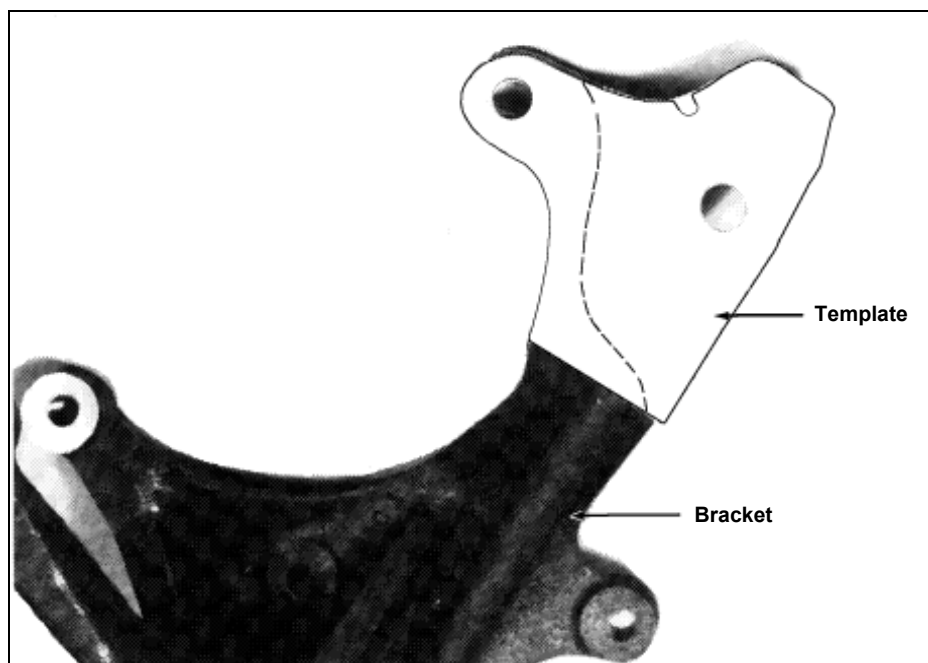


Figure 3



Figure 4

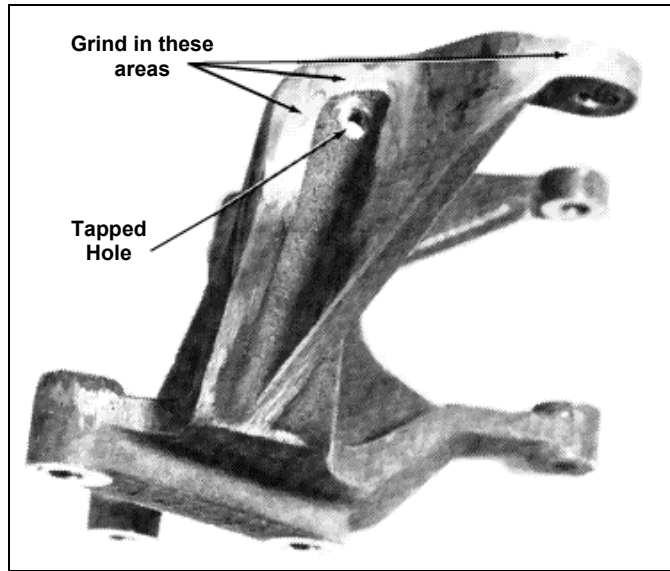


Figure 5

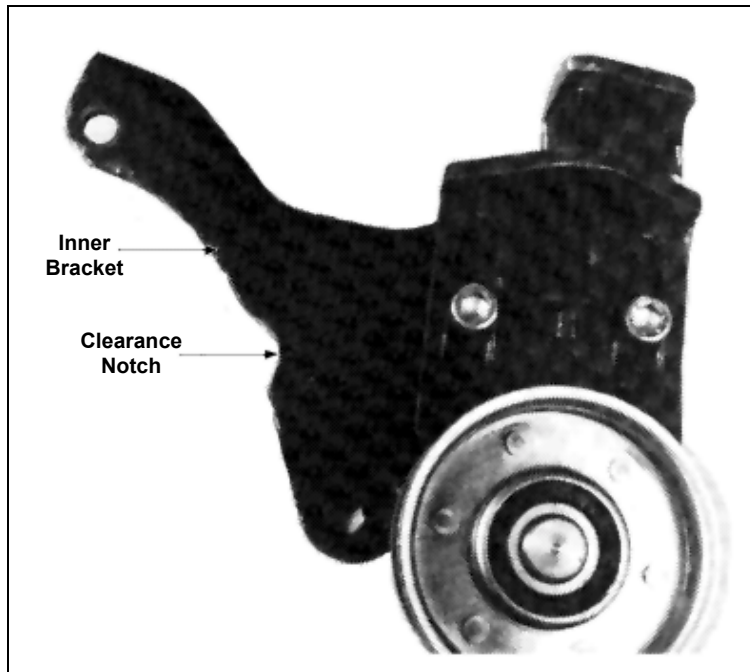


Figure 6

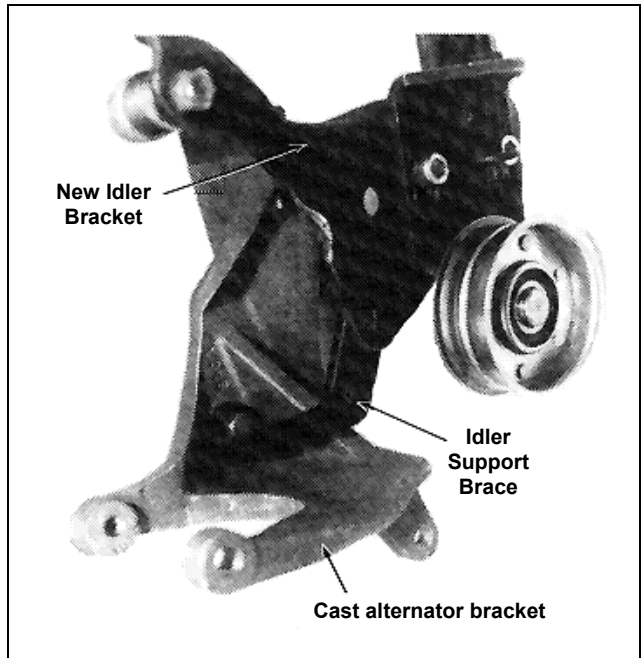


Figure 7

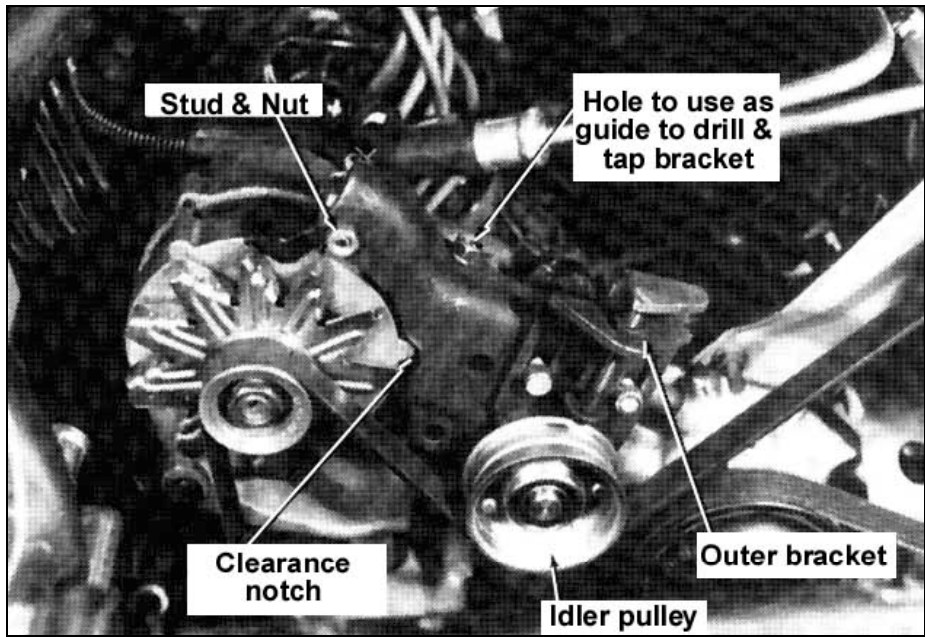


Figure 8

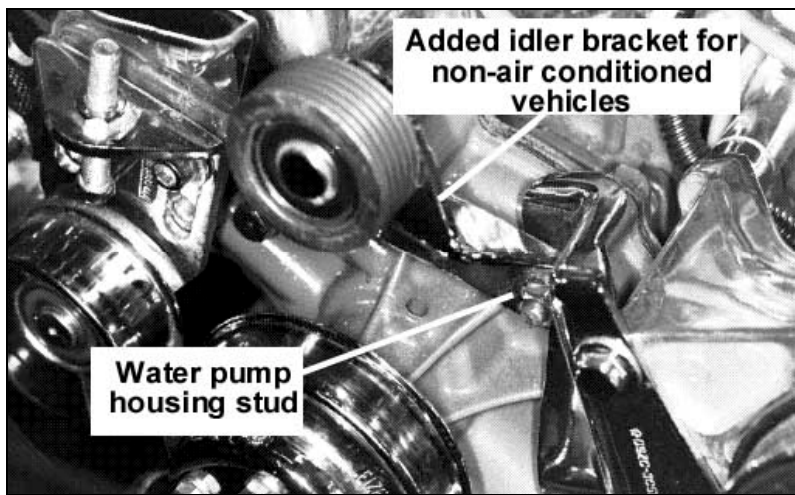


Figure 9

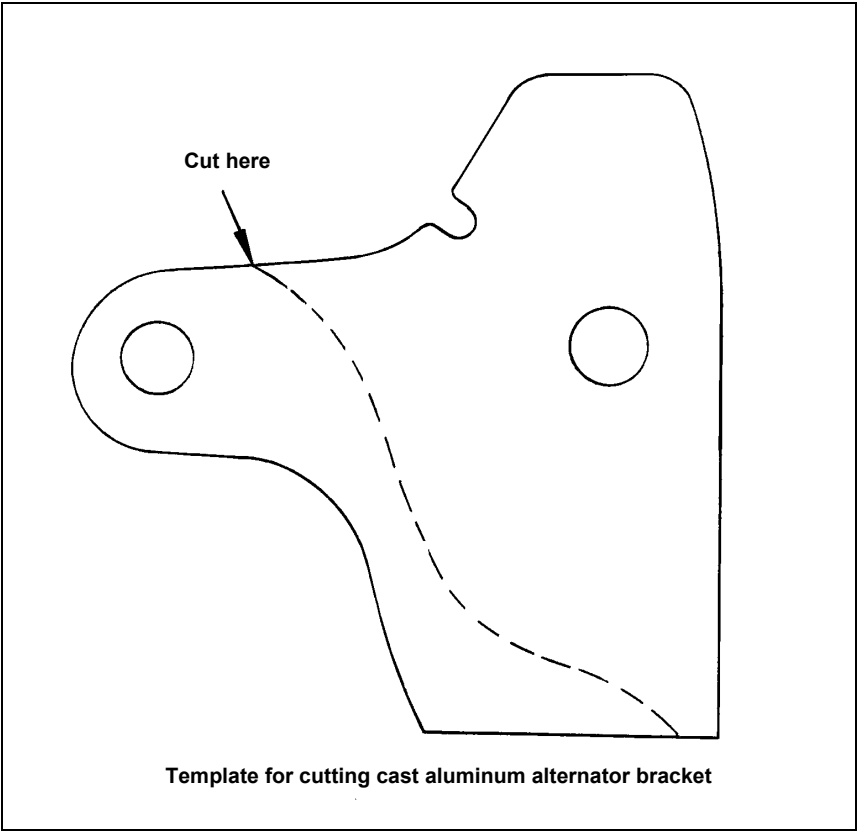


Figure 10