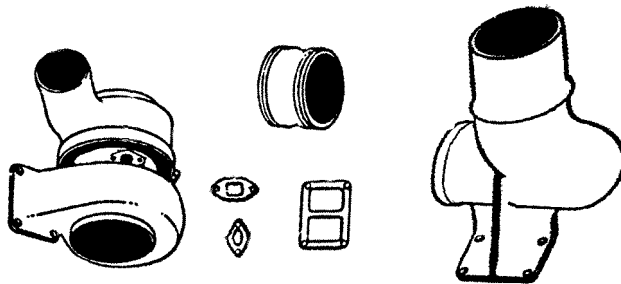


TURBOCHARGERS—INSTALLATION TIPS

Turbochargers are typically one of the easier jobs our dealers and repair shops are involved with, but sometimes it's easy to overlook the little things when doing a simple turbo replacement. The purpose of this article is to just go over the basics of turbo replacement so there are no questions as to the procedure. The first step, of course, is to take the old turbo off the manifold in one piece, that is, the turbine (*exhaust*) housing, center section, and compressor (*intake*) housing left together as one unit. This is important because it can affect core value. Be sure to remove all oil inlet and outlet fittings from the center section because they will not be on your new or remanufactured turbo. The gaskets, however, do come with our remanufactured and new turbochargers. The other piece that sometimes doesn't get removed is the cast iron exhaust sleeve that extends out of the turbine housing that connects the turbo to the exhaust elbow. If this sleeve needs to be replaced, Howard Enterprises does carry a few of these for certain applications. Now is a good time to check the manifold to make sure nothing fell down in it that could damage the new turbo.



After bolting the new/remanufactured unit down be sure to tighten the clamps around the housings to the proper torque value that is listed on the instructions that come with the turbo. The next step is critical. Make sure oil is going to and getting away from the turbo properly before starting the engine up for the first time. Pulling the fuel stop and turning the engine over will get oil going to the turbo bearings. Turbochargers can fail prematurely if started with the bearings dry. Also make sure nothing gets left in the intake side of the pipe feeding the turbo as this is the leading cause of damaged fins on the compressor wheel. This is also a good time to change outer AND inner air filters.