Service Information, Tools, and Safety
Chapter 1

ACROSS

1. A ______ has a straight, sharp cutting end that is used for cutting off rivets or to separate two pieces of an assembly.
2. A ______ or campaign is issued by a vehicle manufacturer and a notice is sent to all owners in the event of a safety-related fault or concern.
3. A ______ fits over the fastener and grips the points and/or flats of the bolt or nut.
4. _______ _______ is the maximum stress used under tension without causing the failure of a fastener.
5. _______ _______ are the female part of a threaded fastener.
6. Whenever a fastener is difficult to remove, some technicians will insert the handle of a ratchet or a breaker bar into a length of steel pipe sometimes called a _______ ___.
7. Often, a _____ will have coarse threads on one end and fine threads on the other end.

DOWN

1. Whenever diagnosing an engine operating fault, it is often necessary to use the ___________ ____ to be sure that the vehicle is the subject of a technical service bulletin or other service procedure.
2. _____ are used to smooth metal and are constructed of hardened steel with diagonal rows of teeth.
3. _______ _______ can be used to identify the part and check dimensions such as the cubic inch displacement and other information, such as the year of manufacture.
4. The size of a _______ _______ is specified by the letter M followed by the diameter in millimeters (mm) across the outside of the threads.
5. Service technicians are often asked to fabricate sheet metal brackets or heat shields and need to use one or more types of cutters available called _______.
6. _______ _______ are issued by the vehicle manufacturer to notify service technicians of a problem and include the necessary corrective action.
7. The _____ label under the hood of the vehicle shows information settings and emission hose routing information.
8. The strength or classification of a bolt is called the _______.