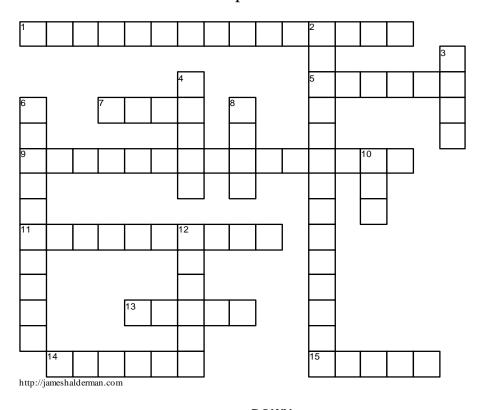
## Service Information, Tools, and Safety

Chapter 1



## **ACROSS**

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. **5** A \_\_\_\_\_ fits over the fastener and grips the points and/or flats of the bolt or nut. 7 The \_\_\_\_ label under the hood of the vehicle shows information settings and emission hose routing information. \_\_ is the maximum stress used under tension without causing the failure of a fastener. 11 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 13 The strength or classification of a bolt is called the 14 A \_\_\_\_\_ has a straight, sharp cutting end that is used for cutting off rivets or to separate two pieces

## DOWN

2	can be used to identify the part
	and check dimensions such as the cubic inch
	displacement and other information, such as the
	y ear of manufacture.
3	Often, a will have coarse threads on one end
	and fine threads on the other end.
4	are used to smooth metal and are
	constructed of hardened steel with diagonal rows of
	teeth.
6	The size of a is specified by the letter
	M followed by the diameter in millimeters (mm)
	across the outside of the threads.
8	are the female part of a threaded fastener.
10	are issued by the vehicle manufacturer to notify
	service technicians of a problem and include the
	necessary corrective action.
12	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.



15 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

of an assembly.