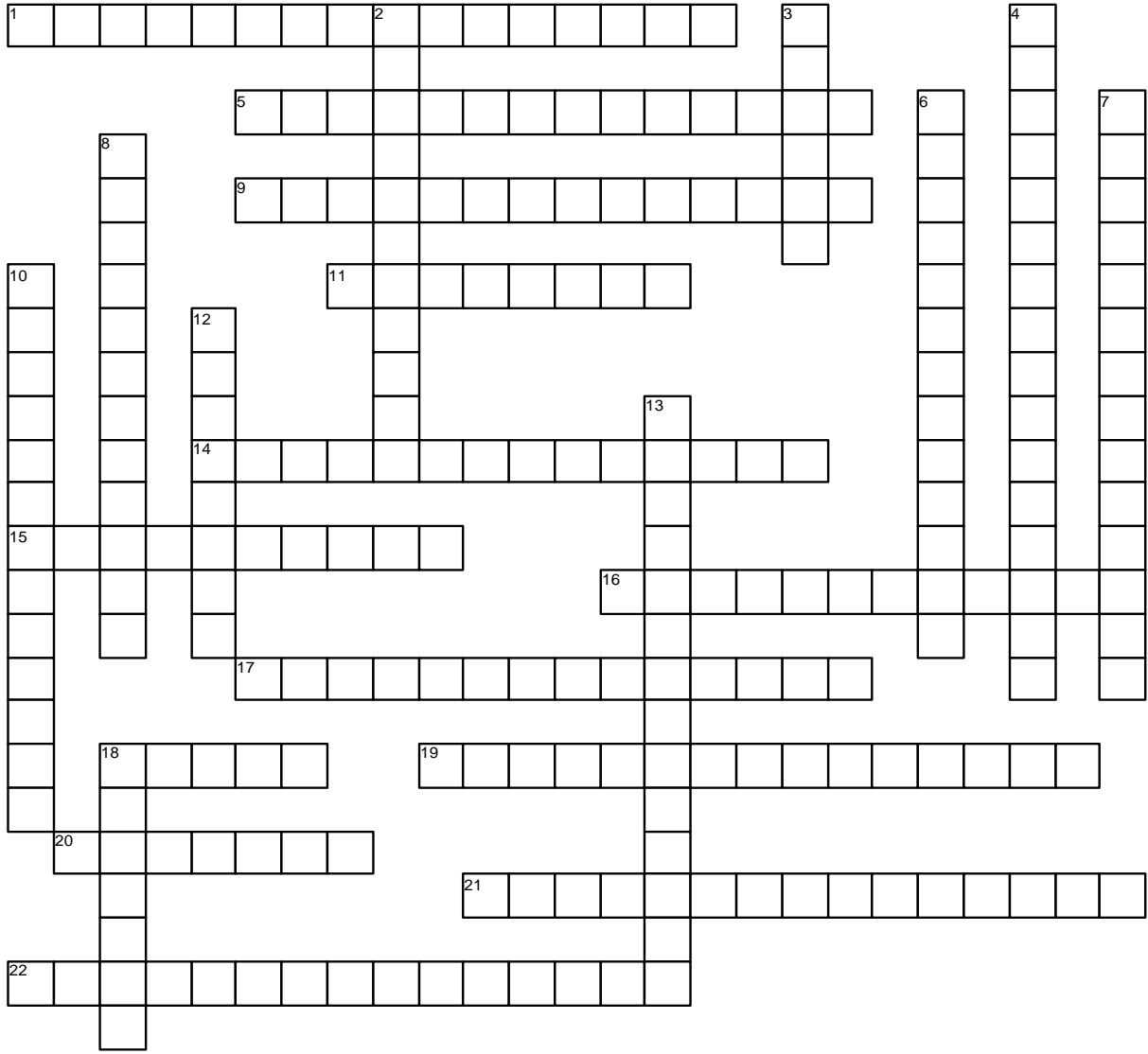


Hand Tools

Chapter 4



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ACROSS

- 1 _____ are designed to grip small objects or objects in tight locations.
- 5 Another name for a line wrench is a _____.
- 9 A _____ is a socket that is an open-end or line wrench to allow access to fasteners that cannot be reached using a conventional wrench.
- 11 _____ are the most used hand tool by service technicians.
- 14 _____ are used to remove and install snap rings.
- 15 Sockets are available in various _____, including 1/4 in., 3/8 in., and 1/2 in. sizes for most automotive use.
- 16 A _____ is placed over the top of the fastener and grips the points of the fastener.
- 17 A shot-filled plastic hammer is called a _____.

- 18 _____ are used to smooth metal and are constructed of hardened steel with diagonal rows of teeth.
- 19 Another name for multigroove adjustable pliers is _____.
- 20 The socket is rotated using either a long bar or a _____.
- 21 Socket extensions and _____ are also used with sockets to allow access to fasteners in restricted locations.
- 22 The common household type of pliers is called the _____.

DOWN

- 2 Many smaller fasteners are removed and installed by using a _____.
- 3 A _____ fits over the fastener and grips the points and/or flats of the bolt or nut.
- 4 An _____ is often used where

- the exact size wrench is not available or when a large nut, such as a wheel spindle nut, needs to be rotated but not tightened.
- 6 _____ are adjustable pliers that can be locked to hold objects from moving.
- 7 _____ are socket turning handles that are designed to apply a known amount of force to the fastener.
- 8 A _____ uses a replaceable blade and is used to cut a variety of materials such as carpet, plastic, wood, and paper products, such as cardboard.
- 10 An _____ is often used to loosen or tighten bolts or nuts that do not require a lot of torque.
- 12 Another name for a box-end wrench is a _____ wrench.
- 13 _____ are designed for cutting only.
- 18 The most commonly used screwdriver is called a _____.