



Tips for buying tools

Photos: Ben White

You'll pay more for an aluminium body pipe wrench, but they are far lighter and easier to use than a cast iron product.

Whether stored in a toolbox under the bench, a canvas bag behind the ute seat, or in a large mobile toolbox in the workshop, hand tools are fundamental to fixing things.

We'd all like to be able to afford a Sidchrome or Snap-on 2000-piece toolkit in matching roller draw toolbox, but most of us acquire our tools in dribs and drabs as we need them.

Sometimes we buy quality and sometimes the lure of a cheaper set of spanners is too great. While there are no hard and fast rules to tool selection there are several tips which may help anyone looking for that perfect socket set or screwdriver.

1 Sockets are good starting point for a decent tool set. Impact sockets (left) have six points and thick, solid walls to stand up to the strain of being used with an impact wrench. They are also good for using with rounded-off nuts and bolts, which may slip when used with a standard double hexagon (12 point) socket (right). Choose a quality set of 12-point sockets, which will have thinner walls, but are easier to use in tight, confined spaces.



2 There are different drive sizes used with sockets; 1/4 inch, 3/8, 1/2, 3/4 and 1 inch are common (left to right). The 1/4 inch is fine for fiddly work, but a 3/8 drive is more handy and can stand up to more forceful use. Sockets often come in combination 1/4 and 3/8 drive sets. A good starting point set for everyday work is the 1/2 inch drive, which can handle a large amount of force and usually covers sizes from about 12-32mm. For heavy duty work, 3/4 or one inch drive will handle large force without failure, but are very heavy and large tools and quite expensive.



3 Shown above are standard length (top) and deep or tube sockets (bottom). Deep sockets are ideal for tightening nuts where there is a large amount of thread protruding through the nut. A 3/8 drive set is pretty handy for day to day workshop use.



4 Many people who purchase socket sets often buy additional tools such as ratchets and extension bars. There are many types of ratchets available and selection is largely based on personal preference, with a few provisos. Large ratchet heads restrict access to tight spaces and fine ratchet mechanisms allow easier use when the handle is restricted, compared to coarser ratchets. If in doubt count the 'clicks' to do a full revolution. Ratchets must also have convenient reversing mechanisms such as the push-button (top), lever (centre tools) and dial style (bottom). Dial style mechanisms are less preferable because they require a second hand to change the ratchet direction. Note the top and second from bottom ratchets, which have a push button on the top of the head to prevent the socket from pulling off the shank.





5 Other ratchet spanners include stubby style, hinged handle or rotating head, which all help access in difficult areas. But purchase standard ratchets before shelling out for these types.



6 Every toolbox should contain a selection of adjustable wrenches. They are available in both chrome and black steel finish. The only real drawback of the black spanner is that it can be hard to spot if left on the ground and may rust in time.



7 When buying smaller adjustable wrenches, always check for slop in the jaws because a little amount of movement on a small adjustable wrench can slip, rounding nuts and bolts. For larger adjustable wrenches (300mm) this is not as much of an issue and relatively cheaper spanners can be purchased.



8 Spanners come in all shapes and sizes, but every toolbox needs a standard set in both metric and imperial sizes. There are two basic styles, double open-ended (top) and combination (bottom). While the double open-ended spanners take up less space in the toolbox (because there are two sizes on each tool), the combination spanners are a better tool because they provide greater leverage and offer the choice of open end or a ring spanner if needed.



9 Double-ended ring spanners are handy to have, but not as crucial to a basic tool kit as the combination spanner. Their big advantage is increased leverage and even relatively cheap ring spanners will resist breaking unless seriously abused. There are two styles shown above; offset (bottom) and zero offset (top). In general, the offset style is handier because they are easier to use on nuts or bolts, which are flush against a surface.



10 Other styles of spanner include the ratcheting open end (left) and the flare-nut spanner (right). The ratcheting open-end is a pretty specialist tool, but the flare-nut spanner is very handy for unscrewing fuel pipe unions, or brake lines which have a pipe or wire protruding from them. See page 23 for further information on ratchet spanners.



11 No tool kit is complete without a decent set of screwdrivers and it pays to shell out for decent quality. Handles have changed a lot in recent years, with the rubberised handle screwdrivers (left) offering far superior grip to the classic plastic handle versions (right).



12 Screwdrivers with a steel tang extending through the handle (bottom) are a great choice if you have a tendency to hit the handle with a hammer. This is especially handy for freeing stuck screws. A hammer blow on a normal plastic handle will split it in no time.



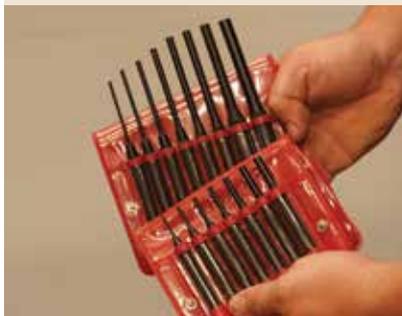
13 It is also worth considering hexagon shank screwdrivers, especially for larger screwdrivers. They can be gripped with a spanner for extra turning force.



14 Allen keys are another toolbox essential and there is a place for both square-head and ball-head versions. Ball-head allen keys allow for some misalignment between the tool and the cap screw acting as a type of universal joint. But they can strip out the screw head under high torque. That's where the square head version comes into its own.



15 A set of pin punches is useful for working on all types of machinery. There are long and short shank versions, but the long shank versions are probably the most useful one to have.



16 A selection of cold chisels is vital, especially when dealing with older machinery, or where nuts and bolts are too resistant to removal. Don't skimp on quality here - buy the best you can afford. Cheap cold chisels blunt very quickly, or shatter sending dangerous shards in every direction. Stick to the brand name chisels.





17 A set of vice grips is one of those tools that find a wide range of uses, but are also best purchased in quality brands because cheap grips quickly lose their teeth. If you are only buying one style, choose the one with rounded jaws (left) because they are far better at gripping round shanks.



18 There is a wide variety of specialist vice grips available and each is suited to specific applications. A sample range includes (top to bottom) a locking welding clamp, large jaw locking pliers, locking chain clamp, locking sheet metal tool, locking clamp with regular tips and locking clamp with swivel tips and curved jaw locking pliers. Many of these are handy for clamping bits of steel together for welding. It all depends on the size of your wallet and toolbox.



19 Pliers are another tool where you should buy the best quality that you can afford. It is better to buy a couple of high quality ones rather than several different types of lower quality. A good start is a set of standard pliers, needle-nose and side cutters.

