

GROUNDING

Double Insulated Tools: Tools with Two Prong Plugs

Tools marked "Double Insulated" do not require grounding. They have a special double insulation system which satisfies OSHA requirements and complies with the applicable standards of Underwriters' Laboratories, Inc., the Canadian Standard Association and the National Electrical Code. Double Insulated tools may be used in either of the 120 volt outlets shown in figures A or B.

EXTENSION CORDS

Grounded tools require a three wire extension cord. Double insulated tools can use either a two or three wire extension cord. As the distance from the supply outlet increases, you must use a heavier gauge extension cord. Using extension cords with inadequately sized wire causes a serious drop in voltage, resulting in loss of power and possible tool damage. Refer to the table at right to determine the required minimum wire size.

The smaller the gauge number of the wire, the greater the capacity of the cord. For example, a 14 gauge cord can carry a higher current than a 16 gauge cord. When using more than one extension cord to make up the total length, be sure each cord contains at least the minimum wire size required. If you are using one extension cord for more than one tool, add the nameplate amperes and use the sum to determine the required minimum wire size.

Guidelines for Using Extension Cords

- If you are using an extension cord outdoors, be sure it is marked with the suffix "W-A" ("W" in Canada) to indicate that it is acceptable for outdoor use.
- Be sure your extension cord is properly wired and in good electrical condition. Always replace a damaged extension cord or have it repaired by a qualified person before using it.
- Protect your extension cords from sharp objects, excessive heat and damp or wet areas.

READ AND SAVE ALL INSTRUCTIONS FOR FUTURE REFERENCE.

OPERATION



WARNING!

To reduce the risk of injury, always unplug tool before attaching or removing accessories. Only use specifically recommended accessories. Others may be hazardous.

This Impact Wrench is intended only for use with sockets designed for impact wrenches and that have a 1/2" square drive. Other sockets could shatter or break, causing injury. To attach sockets or other accessories, snap firmly into position on drive shank. To remove the accessory, pull it straight off the drive shank.

Starting and Stopping the Tool

The Impact Wrench is equipped with a rocker switch that offers both forward and reverse rotation.

1. For forward (clockwise) rotation, pull the upper portion of the switch.
2. For reverse (counterclockwise) rotation, pull the lower portion of the switch.

To prevent damage to the motor and internal mechanism, allow the motor to stop completely before switching from forward to reverse or from reverse to forward.

Impacting Techniques

The longer a bolt, screw, or nut is impacted, the tighter it will become. To help prevent damaging the fasteners or workpieces, avoid excessive impacting. Be particularly careful when impacting smaller fasteners because they require less impacting.

Practice impacting with various fasteners, noting the length of impacting required to reach the desired torque. Check the tightness with a hand-torque wrench. If the fasteners are too tight, reduce the impacting time. If they are not tight enough, increase the impacting time.

Impacting for two seconds is generally sufficient for a 3/8" bolt and one second for a 5/16" bolt. However, oil, dirt, rust or other matter on the threads or under the head of the fastener affects the degree of tightness.

The torque required to loosen a fastener averages 75% to 80% of the tightening torque, depending on the condition of the contacting surfaces.

On light gasket jobs, run each fastener down to a relatively light torque and use a hand torque wrench for final tightening.