OPERATOR'S MANUAL DRILL-DRIVER

Applications

You may use this product for the purposes listed below:

Drilling in all types of wood products (lumber, plywood, paneling, composition board, and hard board), ceramics, plastics, fiberglass, laminates, and metals; driving screws into wood and drywall with screwdriver bits

Variable Speed Switch Trigger

The variable speed switch trigger delivers higher speed with increased trigger pressure and lower speed with decreased trigger pressure.

To turn the drill ON, depress the switch trigger. To turn it OFF, release the switch trigger and allow the chuck to come to a complete stop.

NOTE: A whistling or ringing noise coming from the switch during use is a normal part of the switch function.

NOTE: Running at low speeds under constant usage may cause the drill to become overheated. If this occurs, cool the drill by running it without a load and at full speed.

Direction Of Rotation Selector

(FORWARD/REVERSE/CENTER LOCK)

Set the direction of rotation selector in the OFF (center lock) position to lock the switch trigger and help prevent accidental starting when not in use.

Position the direction of rotation selector to the left of the switch trigger for forward drilling. Position the selector to the right of the switch trigger to reverse the direction.

NOTE: The drill will not run unless the direction of rotation selector is pushed fully to the left or right.

Installing/Removing Battery Pack

- Lock the switch trigger.
- Insert the battery pack into the product as shown.
- Make sure the latches on each side of the battery pack snap in place and the battery pack is secured in the product before beginning operation.
- Depress the latches to remove the battery pack

Installing/Removing Bits

The arrows on the keyless chuck indicate which direction to rotate the chuck sleeve to tighten or release the drill bit.

Do not use a wrench to tighten or loosen the chuck jaws.

- To install bits, lock the switch trigger.

- Open or close the chuck jaws until the opening is slightly larger than the bit size you intend to use.
- Raise the front of the drill slightly and insert the drill bit.

WARNING:

Make sure to insert the drill bit straight into the chuck jaws. Do not insert the drill bit into the chuck jaws at an angle, then tighten. This could cause the drill bit to be thrown from the drill, resulting in possible serious personal injury or damage to the chuck.

- Rotate the chuck sleeve to close and tighten the chuck jaws.

WARNING:

Do not hold the chuck sleeve with one hand and use the power of the drill to tighten the chuck jaws on the drill bit. The chuck sleeve could slip in your hand, or your hand could slip and come in contact with the rotating drill bit. This could cause an accident resulting in serious personal injury.

- To remove bits, lock the switch trigger and open the chuck jaws.
- The bit provided with the drill can be placed in the storage area, located on the base of the drill.

Two-Speed Gear Train

- Select low speed (1) for applications requiring higher power and torque, such as driving screws and drilling in metal.
- Select high speed (2) for fast drilling or driving applications, for drilling in wood or masonry.

NOTICE:

Never change speeds while the tool is running. Failure to obey this caution could result in serious damage to the drill.

NOTE: If you have difficulty changing from one speed range to the other, turn the chuck by hand until the gears engage.

Adjusting Torque

Rotate the adjustment ring to the proper torque setting for the type of material and size of screw you are using.

• 1 - 4 For driving small screws

• 5 - 8 For driving screws into soft material

• 9 - 12 For driving screws into soft and hard materials

• 13 - 16 For driving screws into hard wood

• 17 - 20 For driving large screws

• 21 - For heavy drilling

Drilling/Driving Screws

- Check the direction of rotation selector for the correct setting (forward or reverse).
- Select low speed (1) or high speed (2), depending on your application. Refer to Two-Speed Gear Train and Adjusting Torque.
- Secure the workpiece in a vise or with clamps to keep it from turning as, the bit rotates.
- Hold the drill firmly and place the bit at the point to be drilled, or where the screw is to be driven.

WARNING:

Do not drive a screw where there is likely to be hidden wiring behind the surface. Contact with a "live" wire will make exposed metal parts of the tool "live" and possibly shock the operator. If you must drive a screw where hidden wire may be present, always hold tool by insulated gripping surfaces (handle) when performing the operation to prevent a shock to the operator

- Depress the switch trigger to start the drill.
- Move the bit into the workpiece, applying only enough pressure to keep the bit cutting or driving the screw. Do not force the drill or apply side pressure to elongate a hole. Let the tool do the work.

WARNING:

When drilling, be prepared for binding at bit breakthrough. When these situations occur, drill has a tendency to grab and kick opposite to the direction of rotation and could cause loss of control when breaking through material. If not prepared, this loss of control can result in possible serious injury.

- When drilling hard, smooth surfaces, use a center punch to mark the desired hole location. This will prevent the bit from slipping off-centre as the hole is started.
- If the bit jams in the workpiece or if the drill stalls, stop the tool immediately. Remove the bit from the workpiece and determine the reason for jamming.

NOTE: This drill has an electric brake. When the switch trigger is released, the chuck stops turning. When the brake is functioning properly, sparks will be visible through the vent slots on the housing. This is normal and is the action of the brake.

NOTE: If an operation creates considerable dust resulting in low visibility of the workpiece, frequent vacuuming of the work area is recommended.

Wood And Metal Drilling

For maximum performance, use high speed steel bits for wood or metal drilling. Select drilling mode. Begin drilling at a very low speed to prevent the bit from slipping off the starting point.

Wood Drilling

- Increase the speed as the drill bit bites into the material.
- When drilling through holes, place a block of wood behind the workpiece to prevent ragged or splintered edges on the back side of the hole.

Metal and Steel Drilling

- Use a light oil on the drill bit to keep it from overheating. The oil will prolong the life of the bit and increase the drilling action.
- Maintain a speed and pressure which allows cutting without overheating the bit. Applying too much pressure will:
    - Overheat the drill;
    - Wear the bearings;
    - Bend or burn bits; and
    - Produce off-centre or irregular-shaped holes.
- When drilling large holes in metal, start with a small bit, then finish with a larger bit