# **Cordless Impact Driver**



Machine:	Cordless Driver Drill	
Make/Model:	Makita XPH14	
Revised:	3 / 20 / 2023	
Author:	Trevor Marks	
Location:	Machine Shop	
Department:	Mechanical Engineering	

DO NOT use this machine unless you have been trained in its safe use and operation!

### **Personal Protective Equipment**



Safety Glasses Required



Caution Cut Hazard



Entanglement Hazard



Contain Long Hair

#### **Potential Hazards**

- Eye injury from flying chips or broken bits
- Cuts from contact with cutting tools
- Entanglement in rotation machine parts
- Burns from hot tools or hot work pieces
- Splinters

## **Typical Operations**

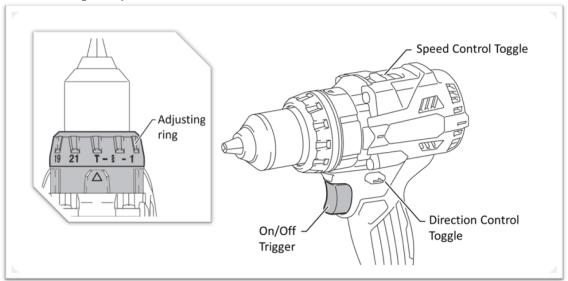
- Hand drilling
- Driving screws
- Maximum bit size: 1/2" (25 mm)

	No-load Speed (rpm)	Blows per Minute
High Gear	2,100	31,500
Low Gear	550	8,250

#### **Procedure Checklist**

#### **PRE-Operation:**

- o Identify direction control toggle and ensure the lever is in the neutral (locked) position.
- Select the appropriate speed using the *speed control toggle*.
- o Select the appropriate torque setting for the operation using the adjusting ring.
  - 1 21 Screwdriving Mode (rotation with clutch)
  - Drilling Mode (rotation only)
  - $\Upsilon$  Hammer Drilling Mode (rotation + hammer)
- o Ensure the workpiece is secure and that you know what is behind your workpiece.
- Install the correct bit for the desired operation.
- Install battery cartridge by aligning the tongue on the battery cartridge with the groove in the housing and slip it into place. Insert it all the way until it locks in place with a little click. If you can see the red indicator on the upper side of the button, it is not locked completely.



#### Operation:

- Hold the tool firmly with two hands.
- o Apply forward pressure on the tool to the extent that the bit will not slip off workpiece.
- To start the tool pull the switch trigger. Tool speed is increased by increasing pressure on the switch trigger. Release the switch trigger to stop.
- Ensure the bit runs 'true' and does not wobble. Excess vibration must be identified and addressed immediately.

#### **POST-Operation:**

- Press the Forward/Reverse lever to the neutral (locked) position.
- Remove the bit and return to proper location.
- Remove the battery cartridge by sliding it from the tool while sliding the button on the front of the cartridge. Place the battery on an open charging port.
- Wipe tool down with a clean rag and return the tool to its proper storage place.
- o Leave the work area in a safe, clean state.

#### Do's and Don'ts

#### Do's:

- Read the user manual: [GitHub Link]
- Stay alert, watch what you are doing and use common sense when operating a power tool. A moment of inattention while operating power tools may result in serious personal injury.
- o Be sure you have a firm footing and know what is behind your workpiece.
- Hold the tool firmly.
- Use the correct power tool for your application.

#### Don'ts:

- Do not use the driver without approval!
- Do not force the power tool.
- o Do not overreach.
- Do not touch the bit or the workpiece immediately after operation, they may be extremely hot and could burn your skin.