Mollom CHS101653

Mollom TCT Carbide Hole Saw Kit (16-53mm, 10-Piece) Instruction Manual

Model: CHS101653

1. Product Overview

The Mollom TCT Carbide Hole Saw Kit (Model CHS101653) is designed for efficient and precise hole cutting in various metal materials. This 10-piece set features industrial-grade carbide-tipped teeth for high hardness, rust resistance, and durability. The ultra-sharp blades ensure smooth cuts with minimal resistance.

This kit is suitable for use with hand-held electric drills, motor-driven drill presses, and mobile magnetic drill machines. It is ideal for industrial installations, HVAC applications, and general metalworking.

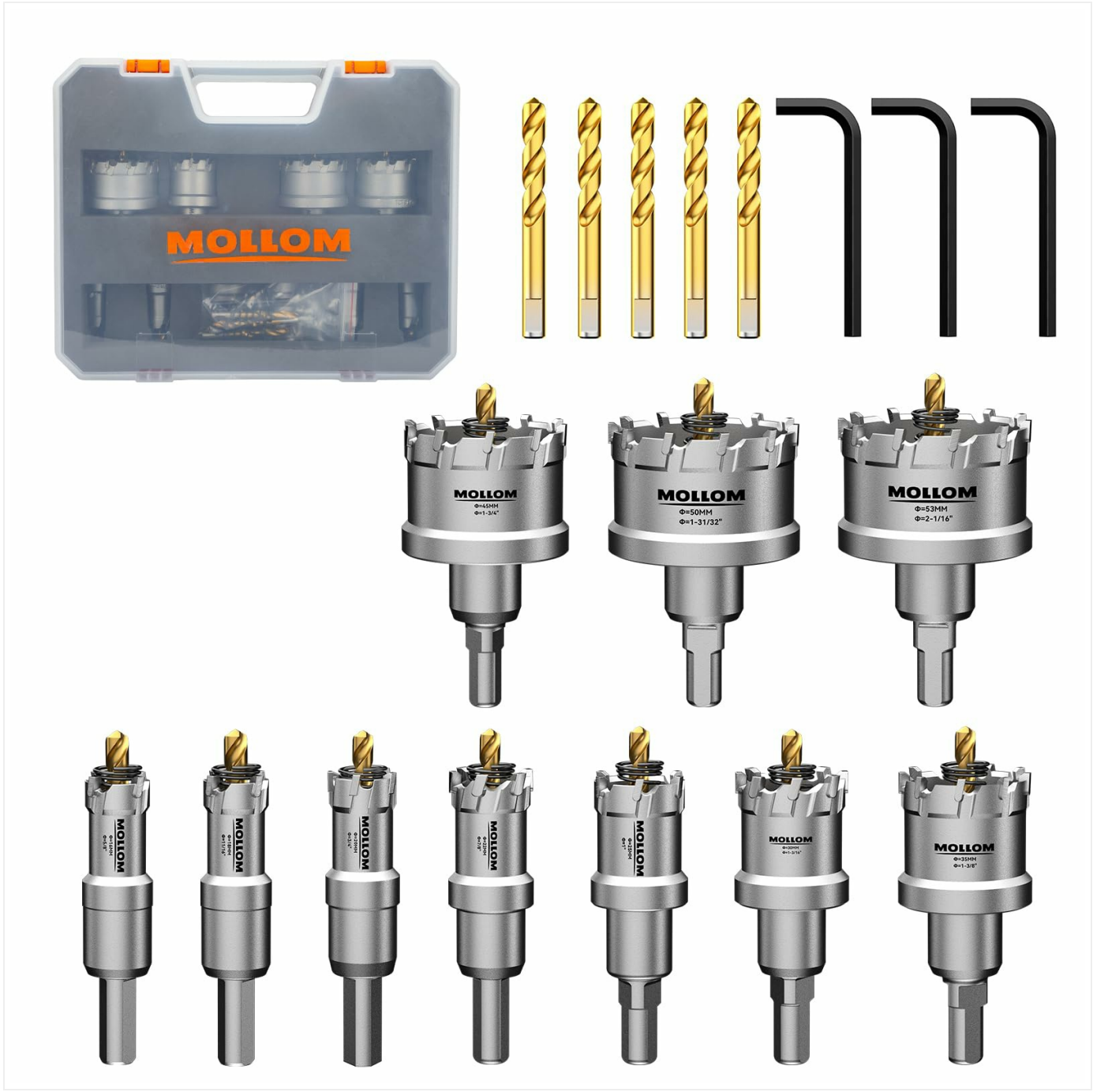


Image: The complete Mollom 10-piece TCT Carbide Hole Saw Kit, showcasing the different hole saw sizes and components.

2. Safety Instructions

Always prioritize safety when operating power tools. Failure to follow these instructions may result in injury or damage to the tool.

- **Wear Personal Protective Equipment (PPE):** Always wear safety glasses, gloves, and hearing protection.
- **Secure Workpiece:** Ensure the material being drilled is firmly clamped to prevent movement during operation.
- **Use Correct RPM:** Refer to the RPM chart (Section 4.3) and select the appropriate speed for the material and hole saw size. Using excessive speed can cause overheating and damage.
- **Apply Lubricant:** Always use a suitable cutting lubricant (e.g., cutting oil or water) when drilling metal to reduce friction, prevent overheating, and extend tool life.
- **Avoid Overheating:** If the hole saw becomes excessively hot, stop drilling and allow it to cool. Continuous drilling without cooling can damage the carbide teeth.
- **Check for Damage:** Before each use, inspect the hole saw for any signs of damage, such as chipped teeth or

cracks. Do not use damaged tools.

- **Maintain Control:** Hold the drill firmly with both hands, especially when starting a cut.
- **Clear Debris:** Allow the drill to come to a complete stop before removing any debris or swarf from the workpiece or hole saw.
- **Material Compatibility:** This kit is specifically designed for stainless steel, hard metal, iron, mild steel, alloy steel, aluminum, FRP, and plastic. **NOT recommended for tiles, glass, concrete, or stone.**

3. Package Contents

Your Mollom TCT Carbide Hole Saw Kit includes the following components:

- 10 x TCT Hole Saws in the following sizes:
  - 16mm (5/8 inch)
  - 18mm (11/16 inch)
  - 20mm (25/32 inch)
  - 22mm (7/8 inch)
  - 25.5mm (1 inch)
  - 30mm (1-3/16 inch)
  - 35mm (1-3/8 inch)
  - 45mm (1-3/4 inch)
  - 50mm (1-31/32 inch)
  - 53mm (2-1/16 inch)
- 5 x Extra Pilot Drills
- 3 x Hex Keys

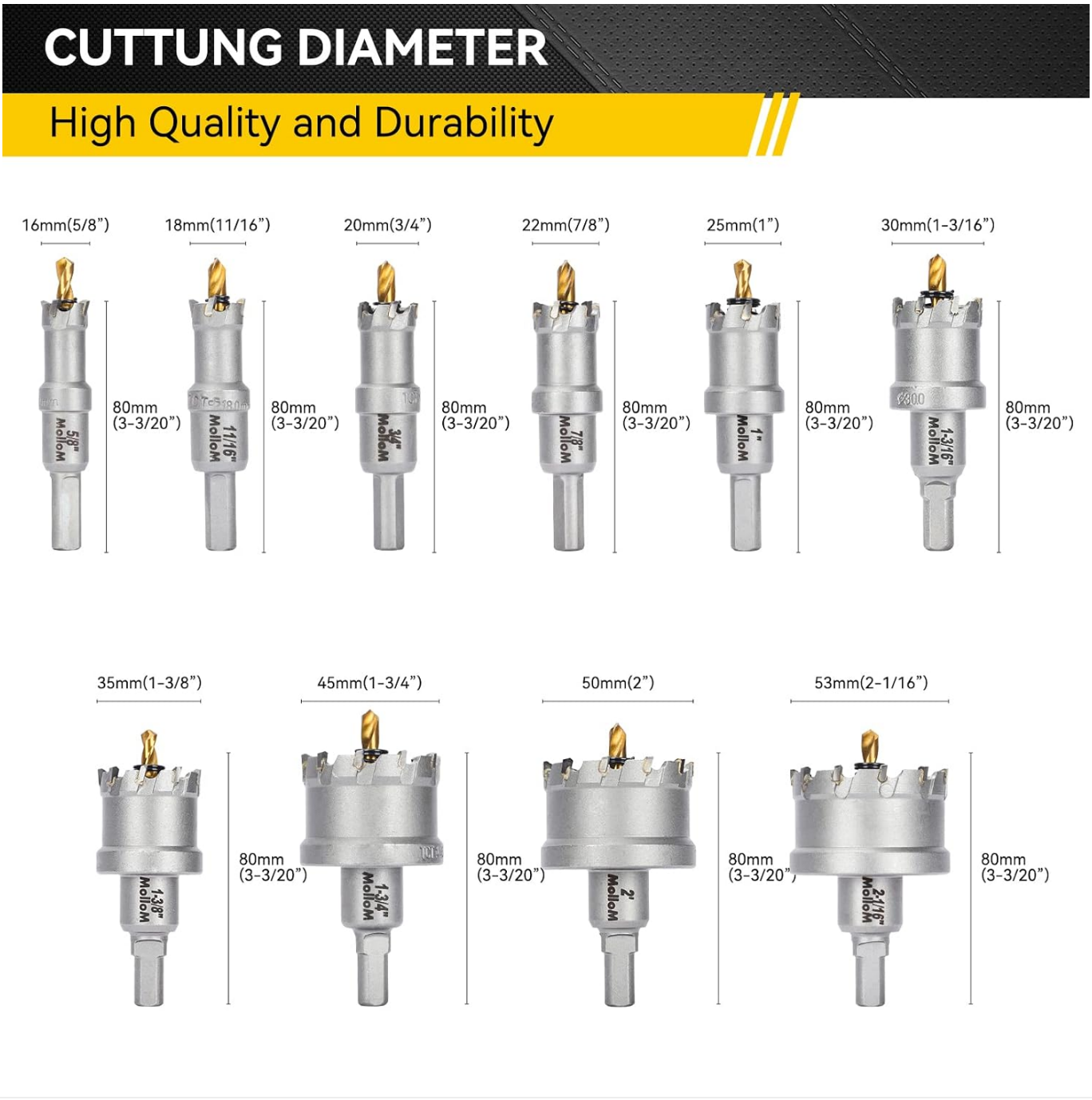


Image: Visual representation of the different cutting diameters included in the kit, ranging from 16mm to 53mm.

4. Setup and Operation

4.1 Attaching the Hole Saw

1. Select the appropriate hole saw size for your application.
2. Insert a pilot drill into the center of the hole saw arbor. Secure it with the provided hex key.
3. Attach the assembled hole saw to your compatible drilling machine (hand-held electric drill, motor-driven drill press, or mobile magnetic drill). Ensure it is securely tightened in the chuck.



Image: A close-up view of a pilot drill with its spring, used for guiding the hole saw during drilling.



Image: Detailed view of the hole saw assembly, highlighting the unique tipped tooth blade for faster cutting and the mechanism for removing metal filings for efficient cooling.

4.2 Compatible Devices

This hole saw kit is compatible with a range of drilling equipment:

- Rechargeable Drills
- Portable Hand Drills
- Bench Drills (Drill Presses)



Image: Illustration of various drilling machines compatible with the Mollom TCT Carbide Hole Saw Kit.

4.3 Drilling Procedure and RPM Guide

1. Mark the center point for your hole on the workpiece.
2. Securely clamp the workpiece to prevent movement.
3. Select the appropriate RPM based on the material and hole saw size using the table below.
4. Apply cutting lubricant to the drilling area.
5. Position the pilot drill on the marked center point.
6. Start the drill at a low speed, applying gentle pressure. The pilot drill will guide the hole saw.
7. Once the hole saw teeth engage the material, increase speed to the recommended RPM and maintain steady, even pressure.
8. Continue applying lubricant throughout the drilling process to prevent overheating.
9. Once the cut is complete, withdraw the hole saw slowly while the drill is still rotating to clear debris.



Image: A visual guide demonstrating the steps for achieving a smooth and perfect cut using the hole saw.

Recommended RPM List:

Important:

1. Please select suitable RPM according to the hardness and size of the material.
2. Please select lower RPM when drilling continuously.
3. Always use a lubricant (water or cutting oil) to prevent the bit from overheating.

RPM list

1.Please select suitable RPM according to hardness and size of the material.

2.Please select lower RPM when drilling continuously.

Inch	Stain Less Steel	Cast Iron	Steel	Brass	Alu
9/16"	300	400	580	790	900
5/8"	275	365	550	730	825
3/4"	230	300	460	660	690
7/8"	195	260	390	520	585
1"	175	235	350	470	525
1-1/8"	150	200	300	400	450
1-3/8"	125	165	250	330	375
1-3/4"	95	125	190	250	285
2"	85	115	170	220	255
2-3/8"	70	95	140	190	220

● Do not forget to use a lubricant so that the bit does not overheat.

It can be water or some kind of oil.

Image: Table showing recommended RPMs for various materials (Stainless Steel, Cast Iron, Steel, Brass, Aluminum) across different hole saw sizes.

4.4 Applications

The Mollom TCT Carbide Hole Saw Kit is suitable for drilling holes in:

- 3mm Stainless Steel
- 15mm Iron Plate
- Metal Tubes
- 15mm Aluminum Alloy
- FRP (Fiber Reinforced Plastic)
- Plastic

Note: Not suitable for drilling concrete, tiles, glass, or stone.



Image: Visual examples of materials that can be drilled with this hole saw kit, including stainless steel, iron, metal tubes, and aluminum alloy.

5. Maintenance

- **Cleaning:** After each use, clean the hole saw and pilot drill to remove metal chips and debris. Use a brush or compressed air.
- **Lubrication:** Apply a light coat of oil to the metal parts after cleaning to prevent rust, especially if storing for extended periods.
- **Storage:** Store the hole saws in their original case or a protective container to prevent damage to the carbide teeth. Keep them in a dry environment.
- **Inspection:** Regularly inspect the carbide teeth for wear or damage. Replace worn or damaged hole saws to ensure optimal performance and safety.

6. Troubleshooting

- **Problem:** Hole saw is cutting slowly or not cutting at all.
  - **Solution:** Check if the RPM is appropriate for the material (refer to RPM table). Ensure sufficient lubricant is being used. Inspect the carbide teeth for wear or damage; replace if necessary.
- **Problem:** Excessive heat or smoke during drilling.
  - **Solution:** This indicates insufficient lubrication or too high an RPM. Reduce speed, apply more lubricant, and allow the tool to cool. Ensure continuous drilling is done at lower RPM.
- **Problem:** Hole saw gets stuck in the material.
  - **Solution:** This can happen with too much pressure or incorrect RPM. Reduce pressure, ensure the workpiece is securely clamped, and try to slowly reverse the drill to free the saw.
- **Problem:** Inaccurate or off-center holes.
  - **Solution:** Ensure the pilot drill is securely fastened and the hole saw is tightly chucked in the drill. Start drilling at a very low speed to allow the pilot drill to establish the center.

7. Specifications

Brand	Mollom
Model Number	CHS101653
Material	Tungsten Carbide
Color	Silver
Product Dimensions (L x W x H)	29.97 x 7.87 x 23.88 cm (11.8 x 3.1 x 9.4 inches)
Item Weight	2.19 kilograms (4.83 lbs)
Hole Saw Sizes Included	16mm, 18mm, 20mm, 22mm, 25.5mm, 30mm, 35mm, 45mm, 50mm, 53mm
Compatible Materials	Stainless Steel, Hard Metal, Iron, Mild Steel, Alloy Steel, Aluminum, FRP, Plastic
Incompatible Materials	Tiles, Glass, Concrete, Stone
Country of Origin	China

8. Warranty and Support

Mollom products are manufactured to high-quality standards. For any questions, technical assistance, or warranty claims, please contact Mollom customer support through the retailer where the product was purchased. Please retain your proof of purchase for warranty purposes.
For more information, visit the official Mollom brand page or contact their support directly if details are provided on the product packaging.

Ask a question about this manual

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

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After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. Privacy details.

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question