

MARTEK

Drill Sharpener

Your Martek Drill Sharpener Kit Contains:

- 1 Drill sharpener
- 1 Base plate and electric power drill holder
- 1 White grinding stone for steel drill bits
- 1 Green grinding stone for masonry drill bits
- 1 Steel drill collet holder marked 'S'
- 1 Masonry drill collet holder marked 'M'
- 4 Varying sized collets
- 1 Dressing stone

Votre coffret "affuteuse de Forets" MARTEK contient les éléments suivants:

- 1 Affuteuse de forets
- 1 Plaque de base et support de perceuse
- 1 Meule blanche pour forets pour métaux
- 1 Meule verte pour forets pour béton
- 1 Porte-mandrin pour forets pour métaux marqué d'un "S"
- 1 Porte-mandrin pour forets pour béton marqué d'un "M"
- 4 Mandrins de tailles différentes
- 1 Pierre à rifler les meules

Ihr Martek Bohrschleifgerät-Kasten enthält die folgenden Teile:

- 1 Bohrschleifgerät
- 1 Bodenplatte und Bohrmaschinenhalter
- 1 Weißer Schleifstein für Stahlbohrmeißel
- 1 Grüner Schleifstein für Steinbohrmeißel
- 1 Stahlbohrerspannzangenhalter mit der Bezeichnung 'S'
- 1 Steinbohrerspannzangenhalter mit der Bezeichnung 'M'
- 4 Spannzangen in verschiedenen Größen
- 1 Abrichtschleifstein

La scatola della Vostra Affilatrice Martek contiene:

- 1 affilatrice per punte
- 1 base e supporto per trapano elettrico
- 1 mola bianca per punte da trapano per acciaio
- 1 mola verde per punte da trapano per muratura
- 1 porta bussola per punte per acciaio segnata 'S'
- 1 porta bussola per punte per muratura segnata 'M'
- 4 bussole di dimensioni assortite
- 1 ravnivamola

Su Juego de Afilador de Taladro MARTEK

- Contiene:
- 1 afilador de taladro
 - 1 placa base y sostén de taladro eléctrico
 - 1 muela blanca para puntas de taladro para acero
 - 1 muela verde para puntas de taladro para mampostería
 - 1 sostén de gollete de taladro de acero marcado 'S'
 - 1 sostén de gollete de taladro para mampostería marcado 'M'
 - 4 golletes de various tamaños
 - 1 piedra de labra

DRESSING THE GRINDING WHEELS

For professional results it is important to keep the grinding wheels in good condition. Any scoring of the stone or chipping should be removed with the dressing stone provided.

Simply insert the dressing stone through the slot in the side of the body to touch the grinding wheel. Switch on the power and move the dressing stone from side to side along the length of the wheel (either side of the score mark) until

the scoring is removed. When more than 13mm has been removed from the diameter of the grinding wheel it should be discarded and a new one fitted. Further use of the stone past this point will give inferior results when sharpening your drill bits.

Care should be taken not to allow grinding dust to accumulate inside body of machine as this could affect moving parts.

TABLE OF DRILL CUTTING ANGLES FOR MATERIALS IN COMMON USE

MATERIALS REQUIRING 130° CUTTING ANGLE

Refined Alloy Steels
Stainless Steels, Nickel-chrome.
Spring Steels
Copper
Aluminium
Magnesium Alloys
Soft Thermoplastics
Hardboard and the like
Perspex

MATERIALS REQUIRING 118° CUTTING ANGLE

Free Cutting Mild Steel
Non-Alloyed Carbon Steel with 0.4% Carbon
Non-Alloyed Tool Steels
Ferro-tic
Grey Cast iron & Malleable iron
Hard Cast Iron
Brass
German Silver Steel
Zinc
Wood

MATERIALS REQUIRING 80° CUTTING ANGLE

Slate, Marble
Graphite
Hard Rubber

USEFUL HINTS ON USING YOUR MARTEK DRILL SHARPENER

1. DRILL BIT FAILS TO TOUCH GRINDSTONE AFTER SETTING.

a. Check that the drill bit was pressed firmly down during the setting operation – see item 5 on the users instructions.

b. Check that the collet is not too large for the drill bit to be sharpened. See item 4.

2. INCORRECT CLEARANCE ANGLE.

CLEARANCE ANGLE REVERSED



Repeat the setting and grinding operations (item 5 to 8) pay particular note to items 5 & 6.

3. UNEQUAL CUTTING EDGE LENGTHS.

a. Check drill bit is not bent.

b. Repeat setting and grinding operations – (items 5 to 8) check during item 5 that the drill bit is vertical when held by the drill clamp.

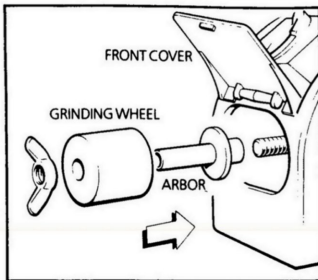
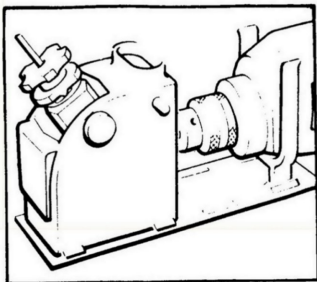
4. INCOMPLETE GRINDING OF DRILL FACES.

Repeat setting and grinding operations – item 5 to 8.

PLEASE NOTE. If a drill bit is badly worn or broken, or if you are altering the cutting angle, or if the drill bit has been previously sharpened by hand: you will find it necessary to repeat the setting and grinding operations 5 to 8 several times.

5. MASONRY DRILLS WITH WORN SHANKS.

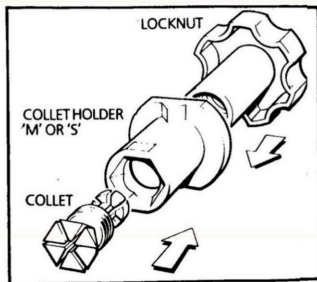
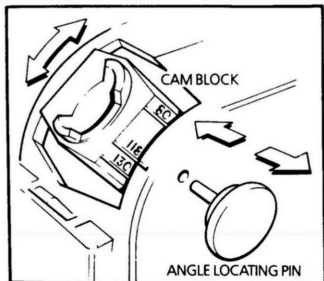
If your masonry drill is slightly wasted through use, a piece of p.v.c. tape wrapped around the shank will help the collet to grip more securely.



Sharpening blunt or broken drill bits

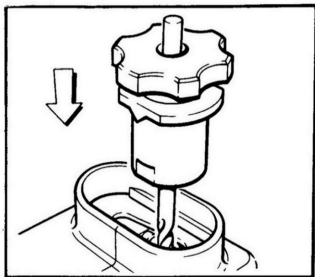
1. Assemble drill sharpener and power drill holder to baseplate as shown, and attach chuck of power drill to sharpener spindle whilst supporting body of power drill in holder. Set power drill at its maximum speed with no hammer action. Grinding stones are designed to run at speeds in excess of 2000 r.p.m. Slower speeds will cause stone to wear more quickly.

2. Select the correct grinding wheel: white for steel drills, green for Masonry. To change the wheel, first make sure the power supply is switched off, lift front cover, remove wing nut to change over wheel. Replace and tighten the wing nut.

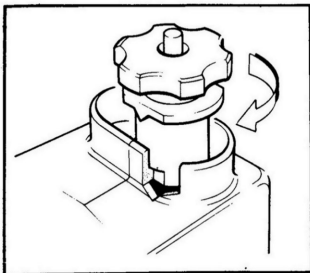


3. Move the cam block to the required cutting angle and secure with angle locating pin. N.B. 118° for standard cutting angle – refer to cutting angle table for alternative settings. Masonry bits should always be sharpened at 130° using the green grinding wheel.

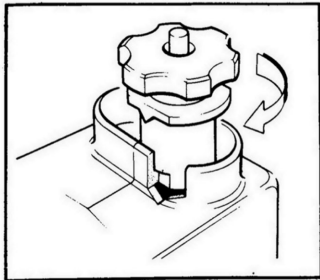
4. Make up a collet assembly by selecting the collet size suitable to the size of drill to be sharpened, and inserting it into the appropriate collet holder ('S' for steel drills – 'M' for Masonry Drills). Complete the assembly with the collet locknut. Do not tighten at this stage.



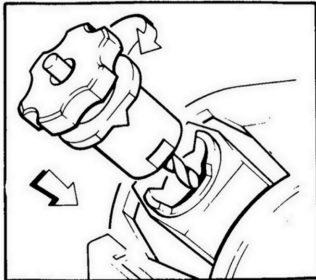
6. Place the collet assembly over drill and locate the flat faces on the collet holder with the flat faces on the sharpener body by turning the holder **CLOCKWISE** only, and **NOT** twisting. Then push firmly down.



7. Tighten the collet locknut until the drill is held firmly but do not over tighten. You can now release the drill clamp and remove the assembly complete with drill ready for sharpening. Whilst tightening the locknut keep downward pressure on top of the drill bit, as a loose locknut can let the drill move about. This will ensure that the drill bit is maintained at the correct depth setting.



7. Tighten the collet locknut until the drill is held firmly but do not over tighten. You can now release the drill clamp and remove the assembly complete with drill ready for sharpening. Whilst tightening the locknut keep downward pressure on top of the drill bit, as a loose locknut can let the drill move about. This will ensure that the drill bit is maintained at the correct depth setting.



8. Insert the collet/drill assembly into swivel guide and switch on power. Place fingers over locknut and grip collet holder – do not turn assembly using locknut. Using slight downward pressure and following the cam action. Rotate the assembly through a complete circle of 360° several times. Your MARTEK sharpener will remove approx. 0.015" from the drill – more than sufficient to sharpen most bits.

N.B. Refer to note 4 – 'Hints on use' overleaf.