

Introduction

INTENDED USE

This Bosch Multi-X Oscillating Tool is intended for dry sanding of surfaces, corners, edges, for scraping, for sawing soft metals,

wood and plastic components, and for grout removal using the applicable tools and accessories recommended by Bosch.

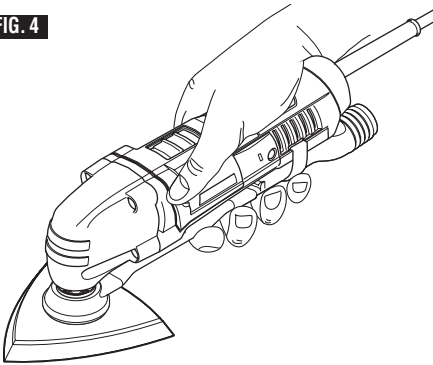
Operating Instructions

LEARNING TO USE THE TOOL

Getting the most out of your oscillating tool is a matter of learning how to let the speed and the feel of the tool in your hands work for you.

The first step in learning to use the tool is to get the "feel" of it. Hold it in your hand and feel its weight and balance (Fig. 4). Depending on the application, you will need to adjust your hand position to achieve optimum comfort and control. The unique comfort grip on the body of the tool allows for added comfort and control during use.

FIG. 4



When holding tool, do not cover the air vents with your hand. Blocking the air vents could cause the motor to overheat.

IMPORTANT! Practice on scrap material first to see how the tool's high-speed action performs. Keep in mind that your tool will perform best by allowing the speed, along with the correct accessory, do the work for you. Be careful not to apply too much pressure.

Instead, lower the oscillating accessory lightly to the work surface and allow it to touch the point at which you want to begin. Concentrate on guiding the tool over the work using very little pressure from your hand. Allow the accessory to do the work.

Usually it is better to make a series of passes with the tool rather than to do the entire job with one pass. To make a cut, for example, pass the tool back and forth over the work. Cut a little material on each pass until you reach the desired depth.

SLIDE "ON/OFF" SWITCH

The tool is switched "ON" by the slide switch located on the topside of the motor housing (Fig. 1).

TO TURN THE TOOL "ON" slide the switch button forward to the "1".

TO TURN THE TOOL "OFF" slide the switch button backward the "0".

ELECTRONIC FEEDBACK

Your tool is equipped with an internal electronic feedback system that provides a "soft start", which will reduce the stresses that occur from a high torque start. The system also helps to keep the preselected speed virtually constant between no-load and load conditions.

VARIABLE SPEED DIAL

This tool is equipped with a variable speed dial. The speed may be controlled during operation by presetting the dial in any one of six positions (Fig. 1).

OPERATING SPEEDS

The Bosch Multi-X has a high oscillating motion of 8,000 - 20,000 /min (OPM). The high speed motion allows the Bosch Multi-X to achieve with excellent results. The oscillating motion allows the dust to fall to the surface rather than slinging particles into the air.

To achieve the best results when working with different materials, set the variable speed control to suit the job (See Speed Chart on Page 12 for guidance). To select the right speed for the accessory in use, practice with scrap material first.







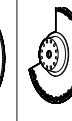
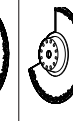


NOTE: Speed is affected by voltages changes. A reduced incoming voltage will slow the OPM of the tool, especially at the lowest setting. If your tool appears to be running slowly, increase the speed setting accordingly. The tool may not start at the lowest switch setting in areas where outlet voltage is less than 120 volts. Simply move the speed setting to a higher position to begin operation.

The variable speed control settings are marked on the speed control dial. The settings for approximate /min (OPM) are:

Switch Setting	Speed Range /min (OPM)
1	8,000
2	10,400
3	12,800
4	15,200
5	17,600
6	20,000

You can refer to the charts on next page to determine the proper speed, based on the material and accessory being used. These charts enable you to select both the correct accessory and the optimum speed at a glance.

Multi-X Accessory Speed Settings

	Description	Catalog Numbers	Soft Wood	Hard Wood	Painted Wood	Laminates/	Steel	Aluminum/ Copper	Vinyl/ Carpet	Caulk/ Adhesive	Stone/ Cement	Grout
	Sanding Sheets — For Wood	SDTR	1 - 6	1 - 6	-	1 - 4	4 - 6	4 - 6	-	-	-	-
	Sanding Sheets — For Paint	SDTR	1 - 6	1 - 6	1 - 6	1 - 4	4 - 6	4 - 6	-	-	-	-
	3/8" HCS Wood Blade — Plunge Cut Blade	OSC38	1 - 6	3 - 6	-	1 - 4	-	-	-	-	-	-
	3/4" HCS Wood Blade — Plunge Cut Blade	OSC34	1 - 6	3 - 6	-	1 - 4	-	-	-	-	-	-
	3/4" BIM Wood/Metal Blade — Plunge Cut Blade	OSC34F	1 - 6	3 - 6	-	1 - 4	4 - 6*	4 - 6	-	-	-	-
	3-1/2" Saw Blade	OSC312F	1 - 6	3 - 6	-	1 - 4	-	-	-	-	-	-
	Grout Removal Blade — 1/8"	OSC312RF	1 - 6	3 - 6	-	1 - 4	-	-	-	-	-	3 - 6
	Grout Removal Blade — 1/16"	OSC212RF	-	-	-	-	-	-	-	-	-	3 - 6
	Rigid Scraper Blade	OSC2RFC	-	-	1 - 3	-	-	-	1 - 6	1 - 4	-	-
	Flexible Scraper Blade	OSC2RFSC	-	-	1 - 3	-	-	-	-	1 - 4	-	-

* Soft steel only

Operating Applications

APPLICATIONS

Your Bosch Multi-X oscillating tool is intended for sanding and cutting wooden materials, plastic, plaster and non-ferrous metals. It is especially suitable for working close to edges, in tight spaces, and for flush cutting.

Below are some typical uses for your Bosch Multi-X oscillating tool.

⚠ WARNING For all accessories, work with the accessory away from the body. Never position hand near or directly in front of working area. Always hold the tool with both hands and wear protective gloves.

Flush Cutting

Remove excess wood from door jamb, window sill and/or toekick. Removing excess copper or PVC pipe.

Removal work

e.g. carpets & backing, old tile adhesives, caulking on masonry, wood and other surfaces.

Removal of excess materials

e.g. plaster, mortar splatters, concrete on tiles, sills.

Preparation of surfaces

e.g. for new floors and tiles.

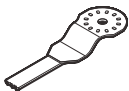
Detail sanding

e.g. for sanding in extremely tight areas otherwise difficult to reach and require hand sanding

CUTTING

Saw blades are ideal for making precise cuts in tight areas, close to edges or flush to a surface.

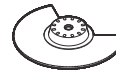
Select a medium to high speed for making initial plunge, start off at medium speed for increased control. After making your initial cut, you can increase speed for faster cutting ability.



Flush cutting blades are intended to make precise cuts to allow for installation of flooring or wall material. When flush cutting it is important not to force the tool during the plunge cut. If you experience a strong vibration in your hand during the plunge cut, this indicates that you are applying too much pressure. Back the tool out and let the speed of the tool do the work. While keeping the teeth of the blade in the work surface, move the

back of the tool in a slow sideways motion. This motion will help expedite the cut.

When making a flush cut it is always a good idea to have a piece of scrap material (tile or wood) supporting the blade. If you need to rest the flush cutting blade on a delicate surface, you should protect the surface with cardboard or masking tape.



The flat saw blade is ideal for making precise cuts in wood, plaster, drywall material.

Applications include cutting openings in flooring for venting, repairing damaged flooring, cutting openings for electrical boxes. The blade works best on softer woods such as pine. For harder woods, the blade life will be limited.

Select a medium to high speed.

The flat saw blade can also be used for window restoration making glazing easy to remove. The saw blade can be placed directly against the edge of the window frame, guiding the blade through the glazing.

GROUT REMOVAL



Grout removal blades are ideal for removing damaged or cracked grout. Grout blades come in different widths (1/16" and 1/8") to tackle different grout line widths. Before selecting a grout blade measure the grout line width to pick the appropriate blade.

Select a medium to high speed.

To remove the grout, use a back and forth motion, making several passes along the grout line. The hardness of the grout will dictate how many passes are needed. Try and keep the grout blade aligned with the grout line and be careful not to apply too much side pressure on the grout blade during the process. To control plunge depth use the carbide grit line on the blade as an indicator. Be careful not to plunge beyond the carbide grit line to avoid damage to the backer board material.

The grout blades can handle both sanded and unsanded grout. If you notice the blade clogging during the grout removal process, you can use a brass brush to clean the grit, thus exposing the grit again.

The grout blade geometry is designed so that the blade can remove all grout up to the surface of a wall or corner. This can be

accomplished by ensuring that the segmented portion of the blade is facing the wall or corner.

SCRAPING

Scrapers are suitable for removing old coats of varnish or adhesives, removing bonded carpeting, e.g. on stairs/steps and other small/medium size surfaces.

Select low to medium speed.



Rigid scrapers are for large area removal, and harder materials such as vinyl flooring, carpeting and tile adhesives. When removing strong, tacky adhesives, **grease the scraper blade surface with (petroleum jelly or silicone grease) to reduce gumming up.**

The carpet/vinyl flooring removes easier if it is scored prior to removal so the scraper blade can move underneath the flooring material.



Flexible scrapers are used for hard to reach areas and softer material such as caulk.

Mount the scraper blade with the logo side facing up. With the flexible scraper, make sure that the screw head does not make contact with surface during the scraping process (a 30 - 45 degree pitch is recommend). This can be accomplished by making sure that the tool is at an angle to the blade. You should be able to see the blade flex during the scraping process.

If you are removing caulk from a delicate surface such as a bath tub or tile back splash, we recommend taping or protecting the surface that the blade will rest on. Use rubbing alcohol to clean the surface after the caulk and/or adhesive is removed.

Turn the tool on and place desired accessory on the area where material is to be removed.

Begin with light pressure. The oscillating motion of accessory only occurs when pressure is applied to the material to be removed.

Excessive pressure can gouge or damage the background surfaces (e.g., wood, plaster).

SANDING



Sanding accessories are suitable for dry sanding of wood, metal, surfaces, corners and edges and hard to reach areas.

Work with the complete surface of the sanding pad, not only with the tip.

Corners may be finished using the tip or edge of the selected accessory, which should occasionally be rotated during use to distribute the wear on the accessory and backing pad surface.

Sand with a continuous motion and light pressure. **DO NOT** apply excessive pressure - let the tool do the work. Excessive pressure will result in poor handling, vibration, and unwanted sanding marks and premature wear on the sanding sheet.

Always be certain that smaller workpieces are securely fastened to a bench or other support. Larger panels may be held in place by hand on a bench or sawhorses.

Open-coat aluminum oxide sanding sheets are recommended for most wood or metal sanding applications, as this synthetic material cuts quickly and wears well. Some applications, such as metal finishing or cleaning, require special abrasive pads which are available from your dealer. For best results, use Bosch sanding accessories which are of superior quality and are carefully selected to produce professional quality results with your oscillating tool.

The following suggestions may be used as a general guide for abrasive selection, but the best results will be obtained by sanding a test sample of the workpiece first.

Grit	Application
Coarse	For rough wood or metal sanding, and rust or old finish removal.
Medium	For general wood or metal sanding
Fine	For final finishing of wood, metal, plaster and other surfaces.

With the workpiece firmly secured, turn tool on as described above. Contact the work with the tool after the tool has reached its full speed, and remove it from the work before switching the tool off. Operating your oscillating tool in this manner will prolong switch and motor life, and greatly increase the quality of your work.

Move the oscillating tool in long steady strokes parallel to the grain using some lateral motion to overlap the strokes by as much as 75%. **DO NOT** apply excessive pressure - let the tool do the work. Excessive pressure will result in poor handling, vibration, and unwanted sanding marks.

Selecting Sanding/Grinding Sheets



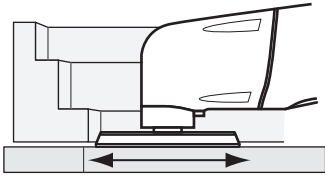
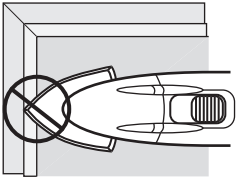
Material	Application	Grit Size	
All wooden materials (e.g., hardwood, softwood, chipboard, building board) Metal materials– Metal materials, fiberglass and plastics  Sand Paper (Red)	For coarse-sanding, e.g. of rough, unplanned beams and boards	Coarse	40/60
	For face sanding and planing small irregularities	Medium	80/120
	For finish and fine sanding of wood	Fine	180/240
Paint, varnish, filling compound and filler  Sand Paper (White)	For sanding off paint	Coarse	40/60
	For sanding primer (e.g., for removing brush dashes, drops of paint and paint run)	Medium	80/120
	For final sanding of primers before coating	Fine	180/240

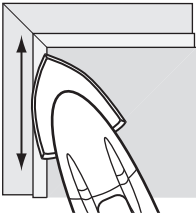
FIG. 5



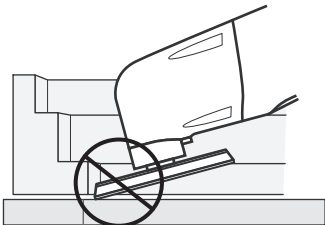
CORRECT: Sand with a smooth back and forth motion, allowing the weight of the tool to do the work.



INCORRECT: Avoid sanding with only the tip of the pad. Keep as much sand paper in touch with the work surface as possible.

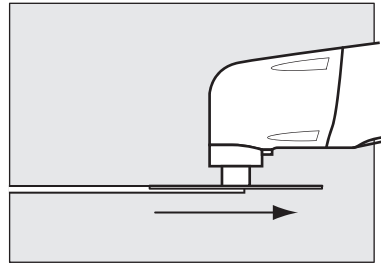


CORRECT: Always sand with the pad and sandpaper flat against the work surface. Work smoothly in a back and forth motion.

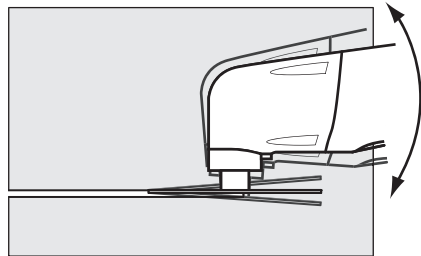


INCORRECT: Avoid tipping the pad. Always sand flat.

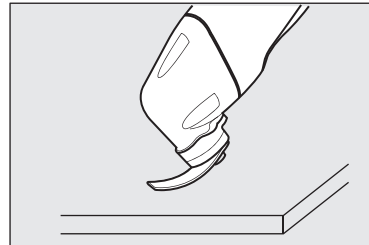
FIG. 6



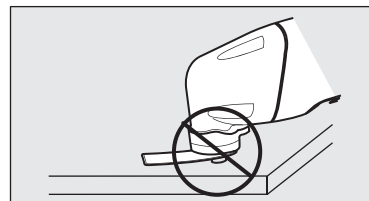
CORRECT: Always cut with a smooth back and forth motion. Never force the blade. Apply light pressure to guide the tool.



INCORRECT: Do not twist the tool while cutting. This can cause the blade to bind.



CORRECT: Make sure flexible scraper blade flexes enough



INCORRECT: Avoid screw head touching surface with flexible scraper blade.