

Instruction Manual

7474 / TS710 Sander

Lubrication

Self lubricating bearings are used in the tool and periodic relubrication is not required. However, it is recommended that, once a year, you take or send the tool to a service center for a thorough cleaning and inspection.

Important

To assure product **SAFETY** and **RELIABILITY**, repairs, maintenance and adjustments should be performed by Black & Decker Service Centers or other qualified service organizations, always using Black & Decker replacement parts.

Commercial/Industrial Use Warranty

Black & Decker (U.S.) Inc. warrants this product for one year from the date of purchase. We will repair without charge, any defects due to faulty material or workmanship. Please return the complete unit, transportation prepaid, to any Black & Decker Service Center or Authorized Service Station listed under "Tools Electric" in the yellow pages. This warranty does not apply to accessories or damage caused where repairs have been made or attempted by others.

Like most Black & Decker tools, this tool is listed by Underwriters Laboratories to ensure that it meets stringent safety requirements.

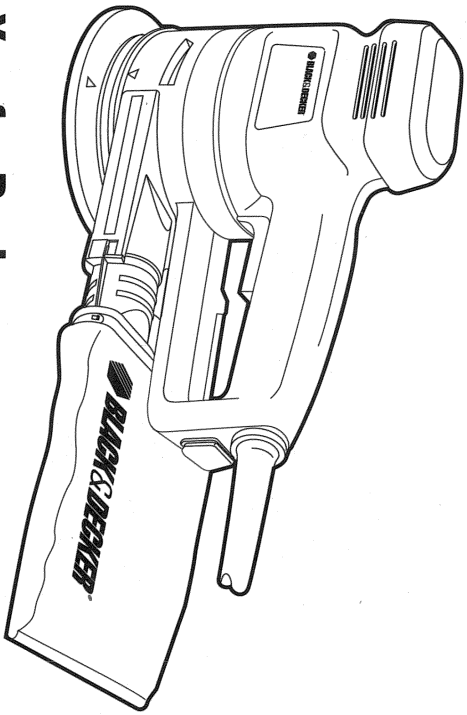


This symbol on the nameplate means the product is listed by Underwriters Laboratories, Inc.

Every Black & Decker tool is of the highest quality. If you wish to contact us regarding this product, please call, toll free, between 8:00 a.m. and 5:00 p.m. EST, Monday through Friday. 1-800-762-6672



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Black & Decker (U.S.) Inc., U.S. Power Tools Group, 701 E. Joppa Rd., Towson, MD 21286 U.S.A.



Thank You for Buying a Black & Decker Random Orbit Sander

Your sander has been carefully designed to meet the rugged standards for quality and dependability that have made Black & Decker the most respected name in quality woodworking tools.

Your random orbit sander is capable of fast material removal and fine finishing. With the right abrasive paper you can produce satin smooth finishes that are ready for painting or varnishing. The sander features through the pad dust collecting capability

and includes an easy to empty dust bag.

Performance, features and Black & Decker's inherent toughness make this sander every inch the pro that you are.

Please read this informative instruction manual and pay particular attention to the safety instructions we've included for your protection.

Don't forget to send in your owner's registration card.

Thanks, again for buying a Black & Decker!

BLACK & DECKER®

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IMPORTANT SAFETY INSTRUCTIONS

WARNING: When using Electric Tools, basic safety precautions should always be followed to reduce the risk of fire, electric shock, and personal injury, including the following:

READ ALL INSTRUCTIONS

1. **KEEP WORK AREA CLEAN.** Cluttered areas and benches invite injuries.
2. **CONSIDER WORK AREA ENVIRONMENT.** Don't expose power tools to rain. Don't use power tools in damp or wet locations. Keep work area well lit.
3. **GUARD AGAINST ELECTRIC SHOCK.** Prevent body contact with grounded surfaces. For example: pipes, radiators, ranges, refrigerator enclosures.
4. **KEEP CHILDREN AWAY.** All visitors should be kept away from work area. Do not let visitors contact tool or extension cord.
5. **STORE IDLE TOOLS.** When not in use, tools should be stored in dry, and high or locked-up place—out of reach of children.
6. **DON'T FORCE TOOL.** It will do the job better and safer at the rate for which it was intended.
7. **USE RIGHT TOOL.** Don't force small tool or attachment to do the job of a heavy-duty tool. Don't use tool for purpose not intended, for example, don't use circular saw for cutting tree limbs or logs.
8. **DRESS PROPERLY.** Do not wear loose clothing or jewelry. They can be caught in the moving parts. Rubber gloves and nonskid footwear are recommended when working outdoors. Wear protective hair covering to contain long hair.
9. **USE SAFETY GLASSES.** Also use face or dustmask if operation is dusty.
10. **DON'T ABUSE CORD.** Never carry tool by cord or yank it to disconnect from receptacle. Keep cord away from heat, oil, and sharp edges.
11. **SECURE WORK.** Use clamps or a vise to hold work. It's safer than using your hand and frees both hands to operate tool.
12. **DON'T OVERREACH.** Keep proper footing and balance at all times.
13. **MAINTAIN TOOLS WITH CARE.** Keep tools sharp and clean for better and safe performance. Follow instructions for lubricating and changing accessories. Inspect tool cords periodically and if damaged have repaired by authorized service facility. Inspect extension cords periodically and replace if damaged. Keep handles dry, clean, and free from oil and grease.
14. **DISCONNECT TOOLS.** When not in use, before servicing, and when changing accessories, such as blades, bits, cutters.
15. **REMOVE ADJUSTING KEYS AND WRENCHES.** Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning it on.
16. **AVOID UNINTENTIONAL STARTING.** Don't carry plugged-in tool with finger on switch. Be sure switch is off when plugging in.
17. **OUTDOOR USE EXTENSION CORDS.** When tool is used outdoors, use only extension cords intended for use outdoors and so marked.
18. **STAY ALERT.** Watch what you are doing. Use common sense. Do not operate tool when you are tired.
19. **CHECK DAMAGED PARTS.** Before further use of the tool, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced by an authorized service center unless otherwise indicated elsewhere in this instruction manual. Do not use tool if switch does not turn it on and off.
20. **DO NOT OPERATE** portable electric tools near flammable liquids or in gaseous or explosive atmospheres. Motors in these tools normally spark, and the sparks might ignite fumes.

**SAVE THESE SAFETY RULES
FOR FUTURE USE.**

Special Safety

Instructions For Sanders

Always wear eye protection and a respirator when sanding.

See page 8 for special caution concerning the removal of lead based paint.

Double Insulation

Your Sander is DOUBLE-INSULATED to give you added safety. This means that it is constructed throughout with TWO separate "layers" of electrical insulation or one DOUBLE thickness of insulation between you and the tool's electrical system.

Tools built with this insulation

system are not intended to be grounded. As a result, your Sander is equipped with a two-prong plug which permits you to use extension cords without concern for maintaining a ground connection.

NOTE: DOUBLE-INSULATION

does not take the place of normal safety precautions when operating this tool. The insulation system is for added protection against injury resulting from a possible electrical insulation failure within the tool.

CAUTION: When servicing Double Insulated Tools, **USE ONLY IDENTICAL REPLACEMENT PARTS.** Repair or replace damaged cords.

Extension Cords

Double Insulated tools have 2 wire cords, and can be used with 2 wire or 3 wire extension cords. Only round jacketed extension cords should be used, and we recommend that they be listed by Underwriters Laboratories (U.L.) (C.S.A. in Canada). If the extension will be used outside, the cord must be suitable for outdoor use. Any cord marked as outdoor can also be used for indoor work. The letters "WA" on the cord jacket indicate that the cord is suitable for outdoor use.

An extension cord must have adequate wire size (AWG or American Wire Gauge) for safety, and to prevent loss of power and overheating. The smaller the gauge number of the wire, the greater the capacity of the cable, that is 16 gauge has more capacity than 18 gauge. When using more than one extension to make up the total length, be sure each individual extension contains at least the minimum wire size.

To determine the minimum wire size required, refer to the chart below:

CHART FOR MINIMUM WIRE SIZE (AWG) OF EXTENSION CORDS

NAME/PLATE RATING-AMPS	TOTAL EXTENSION CORD LENGTH- FEET							
	25	50	75	100	125	150	175	200
0 - 10.0	18	18	16	16	14	14	12	12
10.1 - 13.0	16	16	14	14	14	12	12	12
13.1 - 15.0	14	14	12	12	12	12	12	-----

Before using an extension cord, inspect it for loose or exposed wires, damaged insulation, and defective fittings. Make any needed repairs or replace the cord if necessary.

Motor

Be sure your power supply agrees with the nameplate marking. Voltage decrease of more than 10% will cause loss of power and overheating. All Black & Decker tools are factory tested; if this tool does not operate, check the power supply.

SAVE THESE INSTRUCTIONS

About your random orbit sander

The random orbit sander combines a rotary movement with an orbital movement. This not only reduces the risk of swirl marks, it also makes your sander 30-50% faster than normal orbital sanders.

Other benefits are:

- The ideal combination of **SPEED** and **SMOOTHNESS** for your sanding work.
- The ability to sand **CONTOURED SURFACES**.
- A Sanding Control Feature to eliminate gouging and scratching.
- Hook & loop attachment system.

Your sander arrives with a medium sanding pad fitted. This is ideal for flat and slightly curved surfaces. A soft sanding pad for highly contoured surfaces, and a hard sanding pad, for flat surfaces, are available as accessories at your local hardware center or Black & Decker service center.

Sanding Control Feature

Your Black & Decker sander incorporates a Sanding Control Feature. This feature gives you optimal control of your sanding by maintaining the sanding pad at "load" speed whether the unit is on or off the work surface. This prevents

scratches from forming when the unit is placed on or taken off the surface.

After switching off the sander, the disc comes to a halt very quickly, allowing you to lay it down without the risk of damaging surfaces.

Sanding a large amount of abrasive materials, especially plaster, may cause a gradual reduction in the effectiveness of the Sanding Control Feature. This is a customer serviceable part and is available from your Black & Decker Service Center.

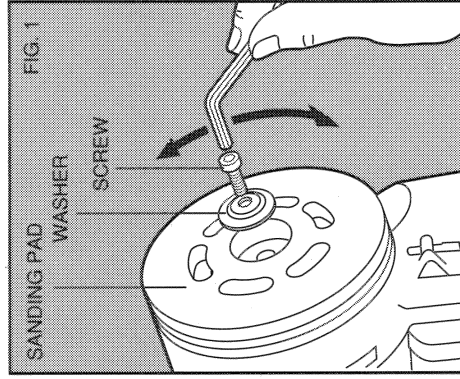
Sanding Pad

NEVER ATTEMPT TO SAND ANY SURFACE WITHOUT ATTACHING A SANDING DISC TO THE SANDING PAD.

Only use Black & Decker accessories otherwise you may damage the Sanding Control Feature and possibly cause injuries.

Important: Always remove the plug from the power before changing the sanding pad. Do not over tighten or under tighten the sanding pad screw.

If you lose the screw or washer that holds the sanding pad, always replace with original Black & Decker parts. (See Fig. 1)

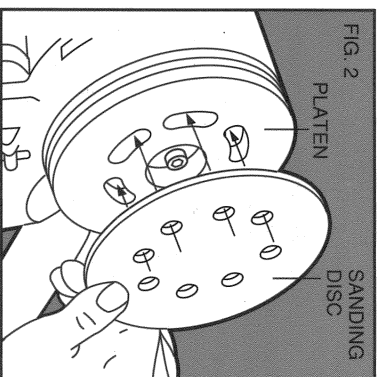


Attaching Abrasive Paper

Your sander is equipped with a hook & loop attachment system for maximum convenience. There are no clamps and there is no paper wear at the edges; simply stick the sanding disc onto the sanding pad. The discs are easily removed to fit new papers or different grit papers. To change the disc, simply peel it off.

It may be necessary to brush the base of the sanding pad with a soft brush from time to time to remove any trapped dust.

Important: Align the holes in the sanding disc with the holes in the sanding pad to allow for maximum dust extraction. Your Black & Decker sanding pad has elongated holes that make alignment easy. (See Fig. 2)



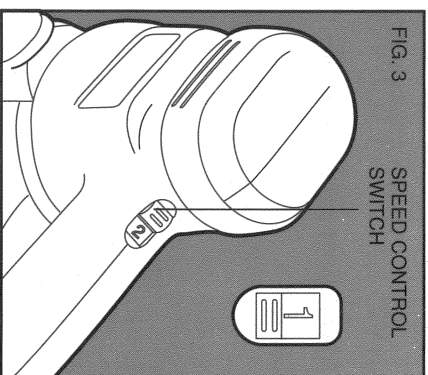
Speed Settings (TS710 Only)

Your speed control switch gives you optimum performance on every kind of material (see Fig. 3). The following table gives you an indication of which speed settings to use.

The best result comes from a combination of the right speed setting and disc grit size.

The higher the number of the sanding disc, the finer the grit and finish. As a rule of thumb, start by using coarse grits and gradually change to finer grits for a really fine finish.

Material	2-Speed TS710
Hardwood (beech)	1-2
Softwood (Pine)	2
Veneer Wood	1
Synthetic materials	1
Acrylic sheet	1
Lacquer removal	2



Sander Operation

Important: Excessive pressure on the machine will slow down the rotation of the disc. The randomness will be suppressed and both the rate of material removal and fineness of finish will deteriorate. We therefore recommend light pressure for best results.

Dust Extraction System

You sander is equipped with a dust collection system.

The powerful fan, working with the large dustbag and removable dustskirt, ensures dust-free sanding.

The dustbag can be removed or left on the unit when emptying. To empty just slide off the seal at the rear of the dustbag (See Fig. 4). Ensure that the bag

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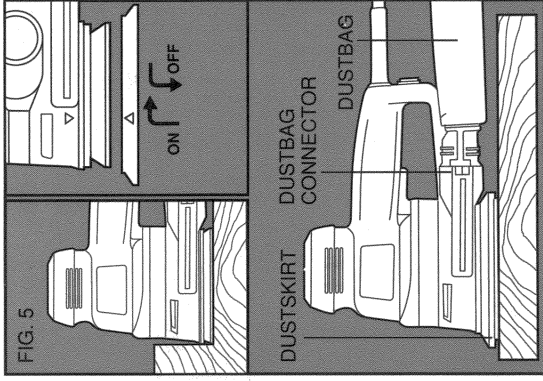
seal is fitted at all times. If lost, replace with an original Black & Decker part.

To ensure maximum efficiency, we recommend that you empty the dustbag at approximately 10 minute intervals.

A vacuum cleaner can also be attached to the dust outlet by first twisting and pulling the dustbag connector off the sander. The outlet will take most vacuum cleaner tubes. However, adaptors are available as an accessory for irregular fittings.

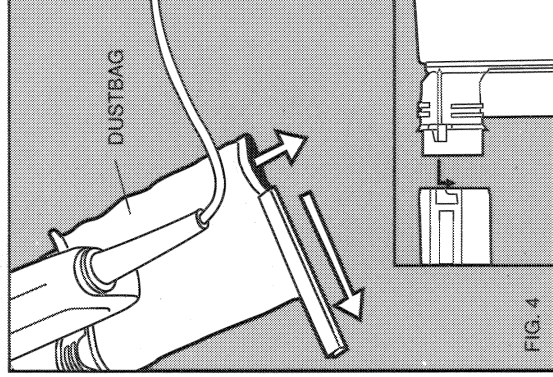
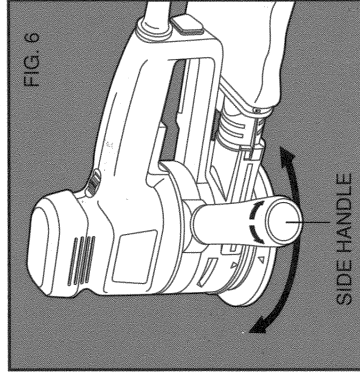
A dustbag or vacuum cleaner must be fitted at all times.

To fit the dustskirt simply line up the arrows, on the skirt and the unit, and turn the skirt so it locks. Reverse this procedure when you want to remove the skirt. Removing the dust skirt allows you to sand up to vertical edges, but will reduce the dust extraction efficiency. (See Fig. 5)



Side Handle (TS710 Only)

The position of the side handle can be adjusted for maximum comfort. Loosen the tightening mechanism by unscrewing the handle, which can then be moved horizontally. Ensure the handle is properly tightened afterwards, but do not overtighten. (See Fig. 6)



Lock-On Button

For continuous sanding over a long period, press the lock-on button on the back of the handle. To unlock, press the on/off switch. (See Fig. 7)

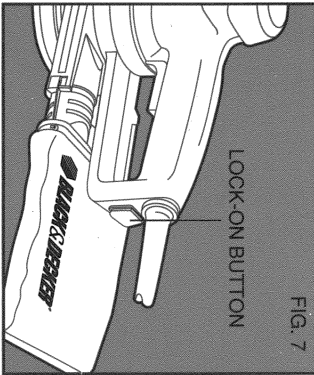


FIG. 7

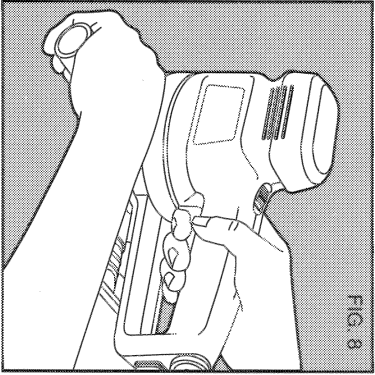


FIG. 8

Holding Your Sander

The body of your sander has been designed to give maximum control and comfort. Always use the side handle shown in Figure 8 (TS710 only) or the palm grip shown in Figure 9 to avoid blocking the air inlet slots with your hand.

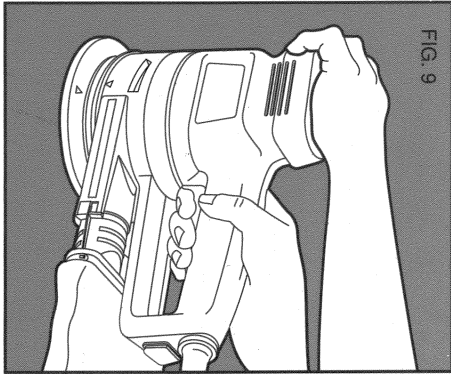


FIG. 9

Precautions To Take When Sanding Paint

1. Sanding of lead based paint is NOT RECOMMENDED due to the difficulty of controlling the contaminated dust. The greatest danger of lead poisoning is to children and pregnant women.
2. Since it is difficult to identify whether or not a paint contains lead without a chemical analysis, we recommend the following precautions when sanding any paint:

PERSONAL SAFETY

 - a. No children or pregnant women should enter the work area where the paint sanding is being done until all clean up is completed.
 - b. A dust mask or respirator should be worn by all persons entering the work area. The filter should be replaced daily or whenever the wearer has difficulty breathing.

NOTE: Only those dust masks suitable for working with lead paint dust and fumes should be used. Ordinary painting masks do not offer this protection. See your local

hardware dealer for the proper NIOSH approved mask.

- c. NO EATING, DRINKING or SMOKING should be done in the work area to prevent ingesting contaminated paint particles. Workers should wash and clean up BEFORE eating, drinking or smoking. Articles of food, drink, or smoking should not be left in the work area where dust would settle on them.
- ENVIRONMENTAL SAFETY**
- a. Paint should be removed in such a manner as to minimize the amount of dust generated.
 - b. Areas where paint removal is occurring should be sealed with plastic sheeting of 4 mils thickness.
 - c. Sanding should be done in a manner to reduce tracking of paint dust outside the work area.
- CLEANING AND DISPOSAL**
- a. All surfaces in the work area should be vacuumed and thoroughly cleaned daily for the duration of the sanding project. Vacuum filter bags should be changed frequently.
 - b. Plastic drop cloths should be gathered up and disposed of along with any dust chips or other removal debris. They should be placed in sealed refuse receptacles and disposed of through regular trash pick-up procedures. During clean up, children and pregnant women should be kept away from the immediate work area.
 - c. All toys, washable furniture and utensils used by children should be washed thoroughly before being used again.

Tool Care

Keep your machine as clean as possible by wiping with a clean cloth and occasionally blowing through with air.

Don't use harsh chemicals or solvents to clean the tool. These chemicals could seriously damage the plastic.

Avoid overloading your sander.

Overloading will result in a considerable reduction in speed and efficiency and the unit will become hot. In this event, run sander at a "no load" condition for a minute or two.

Accessories

The accessories listed in this manual are available at extra cost from your local hardware center or Black & Decker service center.

A complete listing of service centers is included on the owner's registration card packed with your tool.

If you need assistance in locating any accessory please contact:

Black & Decker (U.S.) Inc.
 Consumer Service Department
 626 Hanover Pike
 P.O. Box 618
 Hampstead, MD 21074-0618

Description	Use/Materials
Soft Pad	Contoured Surfaces
Medium Pad	General Purpose
Hard Pad	Flat Surfaces
Vacuum Attachment	
Sand Paper	60, 120, 180, 240 Grit