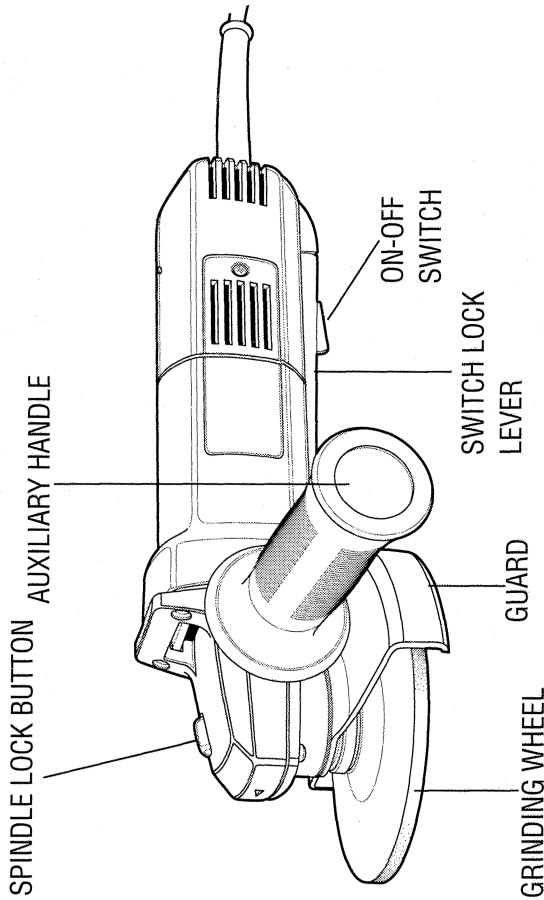


Instruction Manual
2752 • 2753
Heavy Duty Small Angle Grinders

Getting the most out of your tool.

Please take time to read this manual and pay particular attention to the safety rules we've provided for your protection. If you have any questions about your tool please call:

1-800-9-BD TOOL
(1-800-923-8665)



2752 4 1/2" (115mm) Heavy Duty Small Angle Grinder

2753 5" (127mm) Heavy Duty Small Angle Grinder

IMPORTANT SAFETY INSTRUCTIONS

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

READ ALL INSTRUCTIONS

Double Insulation

Double insulated tools are 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 tool 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 USE ONLY IDENTICAL REPLACEMENT PARTS. Repair or replace damaged cords.

Polarized Plugs

Polarized plugs (one blade is wider than the other) are used on equipment to reduce the risk of electric shock. When provided, this plug will fit into a polarized outlet only one way. If the plug does not fit fully into the outlet, reverse the plug. If it still does not fit, contact a qualified electrician to install the proper outlet. Do not change the plug in any way.

Safety Instructions For All Tools

- **KEEP WORK AREA CLEAN.** Cluttered areas and benches invite injuries.
- **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. Do not use tool in presence of flammable liquids or gases.
- **GUARD AGAINST ELECTRIC SHOCK.** Prevent body contact with grounded surfaces. For example: pipes, radiators, ranges, and refrigerator enclosures.
- **KEEP CHILDREN AWAY.** Do not let visitors contact tool or extension cord. All visitors should be kept away from work area.
- **STORE IDLE TOOLS.** When not in use, tools should be stored in dry, and high or locked-up place — out of reach of children.
- **DON'T FORCE TOOL.** It will do the job better and safer at the rate for which it was intended.
- **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.
- **DRESS PROPERLY.** Do not wear loose clothing or jewelry. They can be caught in moving parts. Rubber gloves and non-skid footwear are recommended when working outdoors. Wear protective hair covering to contain long hair.
- **USE SAFETY GLASSES.** Also use face or dust mask if operation is dusty.
- **DON'T ABUSE CORD.** Never carry tool by cord or yank it to disconnect from receptacle. Keep cord from heat, oil, and sharp edges.
- **SECURE WORK.** Use clamps or a vise to hold work. It's safer than using your hand and it frees both hands to operate tool.
- **DON'T OVERREACH.** Keep proper footing and balance at all times.
- **MAINTAIN TOOLS WITH CARE.** Keep tools sharp and clean for better and safer 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.
- **DISCONNECT OR LOCK OFF TOOLS** when not in use, before servicing, and when changing accessories, such as blades, bits, cutters.

- **REMOVE ADJUSTING KEYS AND WRENCHES.** Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning it on.
- **AVOID UNINTENTIONAL STARTING.** Don't carry tool with finger on switch. Be sure switch is off when plugging in.
- **EXTENSION CORDS.** Make sure your extension cord is in good condition. When using an extension cord, be sure to use one heavy enough to carry the current your product will draw. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating. The following table shows the correct size to use depending on cord length and nameplate ampere rating. If in doubt, use the next heavier gage. The smaller the gage number, the heavier the cord.

Minimum Gage for Cord Sets

Volts	Total Length of Cord in Feet		
120V	0-25	26-50	51-100
240V	0-50	51-100	101-200
			201-300
Ampere Rating	AWG		
More Than	Not more Than		
0	6	16	16
6	10	16	14
10	12	16	14
12	16	12	Not Recommended

- **OUTDOOR USE EXTENSION CORDS.** When tool is used outdoors, use only extension cords intended for use outdoors and so marked.
- **STAY ALERT.** Watch what you are doing. Use common sense. Do not operate tool when you are tired.
- **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 any 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. Have defective switches replaced by authorized service center. Do not use tool if switch does not turn it on and off.

ADDITIONAL SAFETY INSTRUCTIONS

Additional Safety Instructions for Grinders

- **ALWAYS WEAR EYE PROTECTION.**
- **KEEP GUARDS IN PLACE.**
- Use only grinding wheels having a maximum operating speed at least high as “No Load RPM” marked on the tool’s nameplate.
- Before using, inspect recommended accessory for cracks or flaws. If such a crack or flaw is evident, discard the accessory. The accessory should also be inspected whenever you think the tool may have been dropped.
- When starting the tool (with a new or replacement wheel installed) hold the tool in a well protected area and let it run for one minute. If the wheel has an undetected crack or flaw, it should burst in less than one minute. Never start the tool with a person in line with the wheel. This includes the operator.
- In operation, avoid bouncing the wheel or giving it rough treatment. If this occurs, stop the tool and inspect the wheel.
- **ALWAYS USE GUARDS** with depressed center wheels or flaring cup grinding wheels.
- Clean your tool out periodically.
- **ALWAYS USE SIDE HANDLE.**
- **CAUTION:** Some wood contains preservatives such as copper chromium arsenate (CCA) which can be toxic. When sanding these materials extra care should be taken to avoid inhalation and minimize skin contact.

SAVE THESE INSTRUCTIONS

Fitting and Removing the Guard (Fig. 1)

A guard is not required when using the tool for sanding with the backing pad. To fit the guard for other applications:

1. Align the lug on the guard with the slot in the bracket fixed to the base of the gear case (Fig.1).

2. Press the guard down toward the gear case, and then rotate the guard in the direction of the arrow (Fig.2).

3. In this position, the guard locking pin located in the slot prevents the guard from coming loose, but allows rotation through 105°.

To remove the guard:

1. Place the tool upside down on a flat surface.
2. Hold the tool, and using your thumb, rotate the guard in the direction of the arrow (Fig. 3). At the same time, using a screwdriver or other pointed instrument, press the locking pin in the slot so the lug on the guard comes into view (Fig. 4).
3. The locking pin does not hold the guard, and the guard can be pushed free.

IMPORTANT: Unplug the tool before mounting or removing the guard. Use the tool without the guard only when sanding with the rubber backing pad.

Figure 1

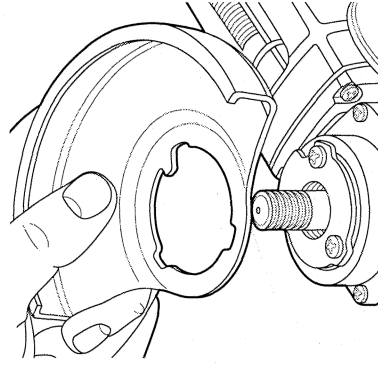
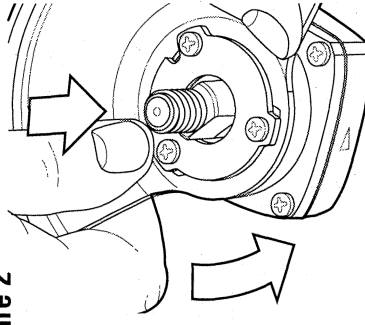


Figure 2



Starting the Tool (Fig. 5)

To start the grinder, depress the ON-OFF switch. For a more comfortable two handed grip, hold the ON-OFF switch depressed and squeeze the switch lock lever. Hold the switch lock lever depressed as you release the ON-OFF switch. The tool will continue to run as long as any part of the switch lock lever is held depressed.

Continuous Running

For continuous running, hold down the ON-OFF switch and depress and

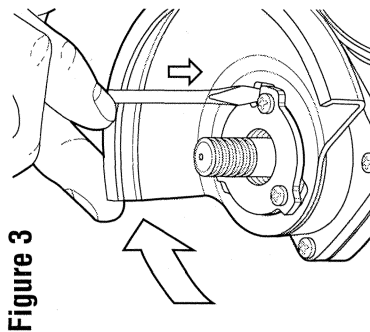


Figure 3

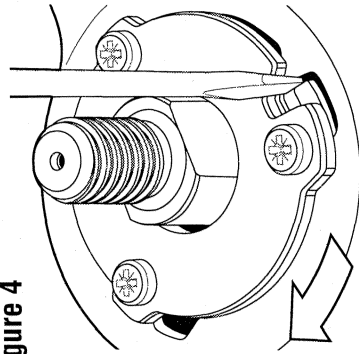


Figure 5

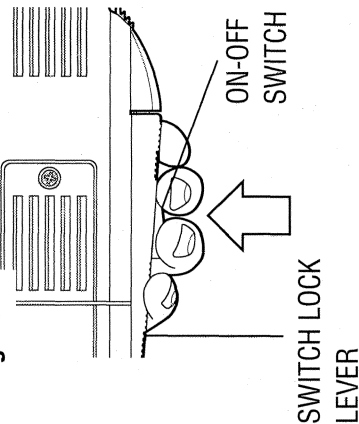
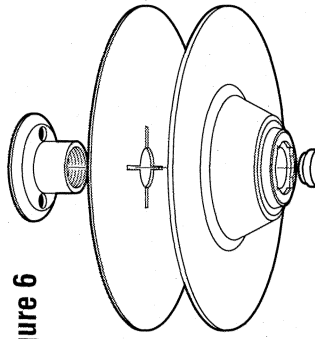


Figure 6



SLIDE FORWARD the switch lock lever. Release the switch lock lever and the ON-OFF Switch and the tool will continue to run. To turn the tool OFF from a locked ON condition, squeeze and release the ON-OFF switch once.

Electronic Units

The 2753 has a “soft start” feature, which allows the unit to build up speed slowly, avoiding an initial kickback when starting. The feature is particularly useful when working in confined spaces.

The 2753 has a “constant speed” feature, which enables the tools to maintain its speed under load. This feature maintains grinding efficiency and productivity and is particularly useful in a production environment.

Fitting a Rubber Backing Pad (Fig. 6)

The rubber backing pad is available as an optional accessory. To fit the pad:

1. Unplug the tool.
2. Remove the guard from the tool.
3. Insert the backing pad onto the machine spindle (Fig. 6). The inner driven flange in Fig. 9 is not needed.
4. Position the abrasive disc on the pad.
5. Screw the outer flange with the two grip holes, together with the pad fitted, onto the machine spindle (Fig. 7).
6. With your finger firmly on the spindle lock (Fig. 8), tighten the outer flange with the pin spanner supplied.
7. Release the spindle lock. You can now plug the tool in and start work.
8. To remove the backing pad, follow the instructions in reverse order.

Important: When using the tool for sanding, allow only a segment of the disc to contact the work and refrain from high-pressure application.

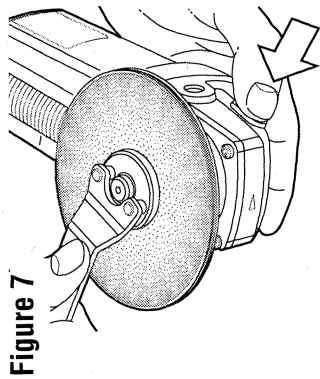


Figure 7

Mounting Grinding Wheels/Cutting Discs

The grinding wheels and cutting discs are available as optional accessories. To fit a grinding wheel/disc:

1. Disconnect the plug.
2. Locate the inner driven flange on the drive flats on the machine spindle (Fig. 9).
3. Place the wheel or disc against the flange.
4. Screw the threaded flange onto the spindle (Fig. 10).
5. Rotate the grinding wheel/disc while pressing the spindle lock (on the front of the gear case) fully until it has found its locking location and hold the spindle still.
6. Firmly tighten the threaded flange with the two-pin spanner supplied (Fig. 11). You can now plug the tool in and start work.

FOR GRINDING:

Using a depressed center disc, use the tool at an angle of approximately 30° to the work for roughing, and approximately 15° for finishing.

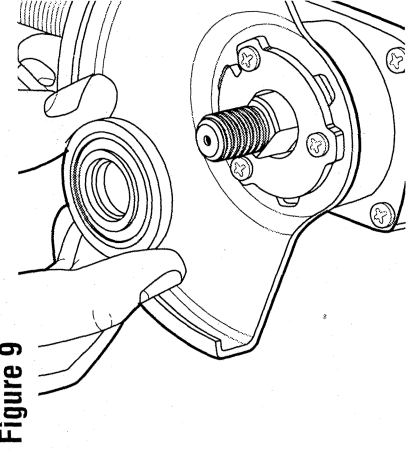


Figure 9

Figure 10

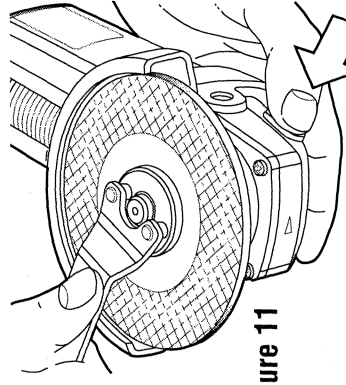
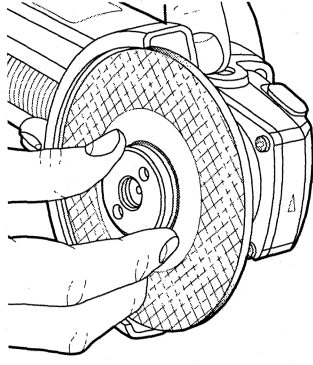


Figure 11

FOR CUTTING OFF:

Using a flat cut off wheel, always approach the workpiece at the angle at which the cut is to be made. Maintain this angle throughout the cut and do no exert side pressure on the wheel.

Fitting Wire Cup Brushes

The wire cup brush screws directly on the spindle of the machine without the use of flanges.

Side-handle (Fig. 12)

The side handle can be fitted to either side of the gear case.

Overload Indicator (Fig. 13)

(2753 only) Overload conditions will be indicated by the red LED situated on the top of the unit. When this is lit under load, it means the motor is being strained and that grinding efficiency is reduced.

To increase efficiency and productivity and to avoid damage to the motor, your angle grinder should be operated so that the LED is not lit for prolonged periods under load.

Brush Wear Indicator (Fig. 13)

(2753 only) When the LED on the top of your tool is lit continuously under no load conditions, this means the brushes in the motor will need changing within the approximately 10 hours.

This is a warning which will help in the successful maintenance of the of you tool, avoiding unnecessary loss of time and productivity.

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.

Figure 12

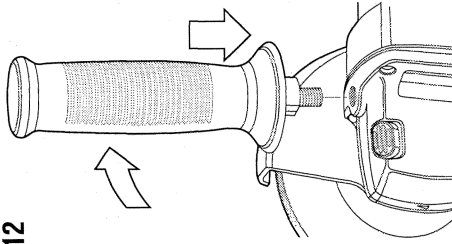
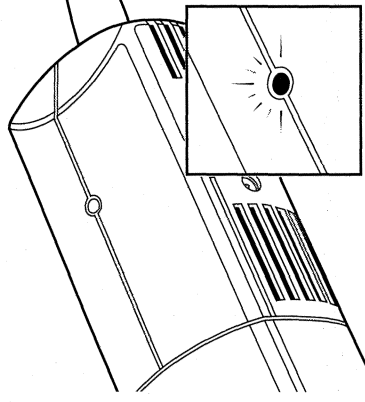


Figure 13



- 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 N.I.O.S.H. 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.
- c. 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.

Cleaning

Blowing dust and grit out of the motor housing using compressed air is a necessary regular maintenance procedure. Dust and grit containing metal particles often accumulate on interior surfaces and could create an electrical shock hazard if not frequently cleaned out. **ALWAYS WEAR SAFETY GLASSES.**

CAUTION: Never use solvents or other harsh chemicals for cleaning the non-metallic parts of the tool. Use clean, dry rag only.

Lubrication

B&D tools are properly lubricated at the factory and are ready for use. Tools should be relubricated regularly every sixty days to six months, depending on usage. (Tools used constantly on production or heavy-duty jobs and tools exposed to heat may require more frequent lubrication.) This lubrication should only be attempted by trained power tool repairpersons, such as those at B&D service centers or in other qualified service organizations.

Motor Brushes

Your tool is equipped with the B&D CHECKPOINT™ system. When the brushes become worn out, the tool will automatically stop and prevent damage to the motor. Brush replacement should be performed by B&D authorized service centers.

IMPORTANT!

To assure product safety and reliability, particularly for double insulated tools, repairs, maintenance and adjustment (excluding maintenance described in this manual) should be performed by B&D service centers or authorized service centers, using identical B&D replacement parts.

CAUTION: The use of any non-recommended accessory may be hazardous. Recommended accessories for use with your tool are available at extra cost from your distributor or local service center. A complete listing of service centers is included with your tool.

If you need any assistance in locating any accessory call: 1-800-9-BD TOOL (1-800-923-8665) or contact Black & Decker (U.S.) Inc., Consumer Services Department, 626 Hanover Pike, P.O. Box 618, Hampstead, MD 21074.

Every B&D tool is of the highest quality.

If you wish to contact us regarding this product, please call toll free between 8:00am and 8:00pm ET, seven days a week.

1-800-9-BD TOOL

(1-800-923-8665)

One Year Free Maintenance

All B&D tools for Industry and Construction are covered under a one year free maintenance program where B&D will inspect your tool for safety and provide necessary maintenance or repairs, including normal wear and tear parts, for one year, FREE OF CHARGE.

Full Warranty

All B&D tools for Industry and Construction are warranted to be free of any defects in materials or workmanship. Upon thorough examination of tool, B&D will repair or replace, at our option, any product that is determined to be defective.

Conditions

The service/safety check and the warranty do not apply to: repairs made or attempted by anyone other than an authorized B&D service location; misuse, abuse, neglect, improper application of the tool; missing parts; or normal wear and tear (after first year of ownership). Please return the complete unit, transportation prepaid, to any B&D factory owned or B&D authorized service center location (list provided with tool or see Yellow Pages under "Tools Electric").

Black & Decker (U.S.) Inc. • 701 East Joppa Road, Towson, Maryland 21286

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