

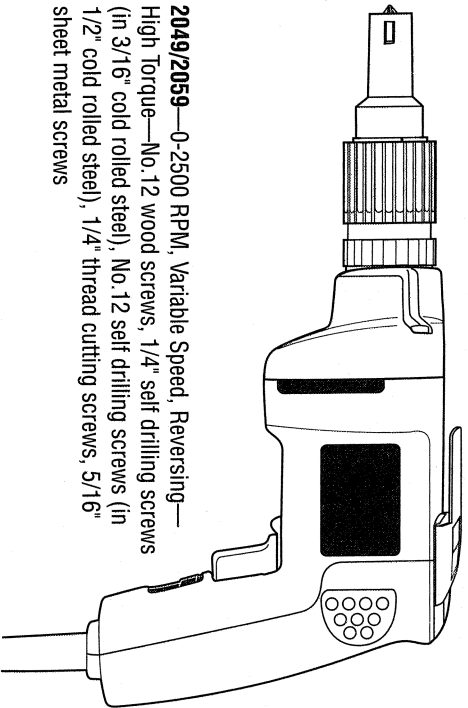
# **Instruction Manual**

## **2049 • 2059 Screwdrivers**

## 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)**



**2049/2059**—0-2500 RPM, Variable Speed, Reversing—  
High Torque—No. 12 wood screws, 1/4" self drilling screws  
(in 3/16" cold rolled steel), No. 12 self drilling screws (in  
1/2" cold rolled steel), 1/4" thread cutting screws, 5/16"  
sheet metal screws

## 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 in the 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.** Use only 3-wire extension cords that have 3-prong grounding-type plugs and 3-pole receptacles that accept the tool's plug. Replace or repair damaged 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	101-150
240V	26-50	51-100
	0-50	101-200
		201-300
Ampere Rating		AWG
More Than	Not more Than	
0	6	18
6	10	18
10	12	16
12	16	14
	16	12
	14	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.

- **CAUTION:** When drilling or driving into walls, floors or wherever live electrical wires may be encountered, DO NOT TOUCH ANY METAL PARTS OF THE TOOL. Hold the tool only by insulated grasping surfaces to prevent electric shock if you drill or drive into a live wire.

## SAVE THESE INSTRUCTIONS

### Motor Brushes

Black & Decker uses an advanced brush system which automatically stops the tool when the brushes wear out. This prevents serious damage to the motor.

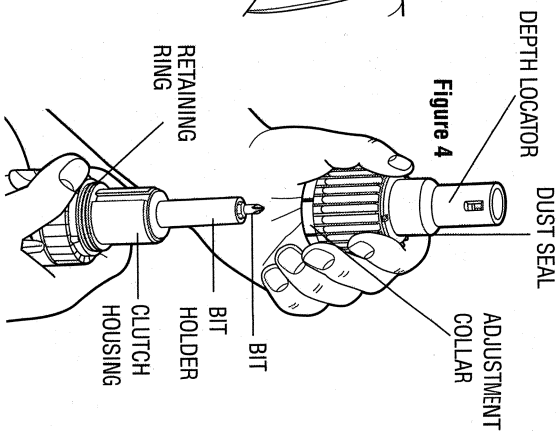
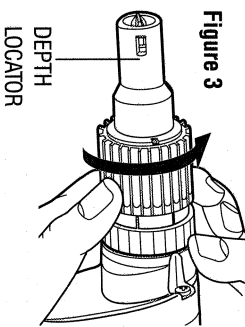
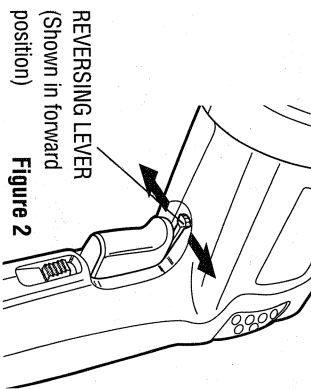
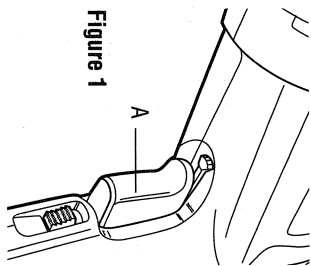
### Switch

To start tool, depress trigger switch; to stop tool, release trigger. To lock trigger in "ON" position for continuous operation, depress trigger and push up locking button "A" Figure 1, then gently release trigger. To release locking mechanism, depress trigger fully, then release it. Before using the tool (each time), be sure that the locking button release mechanism is working freely.

**THE VARIABLE SPEED TRIGGER SWITCH** permits speed control – the farther the trigger is depressed, the higher the speed of the tool.

**THE REVERSING LEVER** is used when backing out screws. To operate the tool in reverse, release the trigger switch and push the lever to the left (when viewed from the front end) as shown in Figure 2. To operate the tool in forward for driving screws, release the trigger switch and push the lever to the right (when viewed from the front end).

Return the reversing lever to the forward position after all operations in reverse are completed.



## Dead Spindle Action

All Black & Decker screwdrivers provide a "dead" front spindle to permit fasteners to be located in the driving accessory. Clutches are held apart by light spring pressure permitting the driving clutch to rotate without turning the driven clutch and accessory. When sufficient forward pressure is applied to the unit, the clutches engage and rotate the spindle and accessories. A reversing switch makes it possible to drive or loosen either right or left-hand screws.

## Phillips Head Screwdriving Depth Adjustment (Fig. 3)

1. Rotate adjustment collar. Clockwise rotation will provide deeper seating screws.
2. Test drive a fastener in scrap material to determine if fastener is correctly seating.
3. Further adjustment may be necessary to increase or decrease the fastener depth.

To increase, turn the adjustment collar so that end of bit extends further from end of locator.

To DECREASE, turn the adjustment collar so that end of bit is closer to end of locator.

Black & Decker screwdrivers have very fine depth settings, each "click" is .007" or one revolution of the locator collar equals .083" change in depth setting.

## Changing Bit Tip (Fig. 4)

1. Pull forward on adjustment collar and remove the depth locator from clutch housing.
2. To remove bit tip, pull straight out (pliers may be necessary).
3. Assemble new bit tip. Push in until bit tip seats securely into bit tip hold-

er.

4. Replace the depth locator assembly by firmly pressing until the snapping fully engages.

## Accessory Assembly

The 1/4" hex drive ball lock chuck is used on all depth sensitive and drywall screwdrivers. Assemble accessories by engaging the hex spindle and tapping lightly on the accessory until it snaps in place. Usually pliers are required to remove the accessory by pulling forward.

## Accessory Assembly & Adjustment for Depth Sensitive Units

To change Bit Holders on depth sensitive units:

1. Pull forward on adjustment collar and remove from clutch housing.
2. Pull bit holder straight out with pliers if it is difficult to remove.
3. Push new bit holder into spindle until ball lock snaps into groove in bit holder shank.
4. Replace adjustment collar by snapping over retaining ring. NOTE: align ribs on inside of depth locator with grooves in clutch housing before snapping in place.
5. Depth locator is removable by unscrewing dust seal.

## Depth Sensitive Units

### OPERATION

1. Install Bit tip in Bit Holder, or install nutsetter.
2. Adjust Depth Locator.
3. Check for correct rotation, start screwdriver and place screw on bit.
4. Contact work surface applying forward pressure to drive screw until depth locator contacts work surface. Screwdriver will ratchet automati-

cally disengaging bit from screw.

5. This depth sensitive screwdriver is suitable for driving both deck and drywall screws.

### Tips For Driving Screws Into Decks

1. Select proper length deck screws to insure complete anchoring into the wood.
2. Although the screwdriver will drive drywall screws into decks, we recommend screws specifically designed for deck assembly. Other fasteners may not drive as well or hold as satisfactorily.
3. When using the screwdriver for the first time driving screws into pressure-treated lumber, practice driving some screws in scrap material to get "feel" and to adjust for proper seating depth. It will be significantly easier to guide and control the screw if 1/8" pilot holes are pre-drilled. This pre-drilling is recommended at the board ends to avoid splitting the lumber.
4. Once a screw has started driving, do not stop the screwdriver until the screw is seated. Keep firm pressure on the screwdriver. Because of the high driving torque required in pressure-treated wood, the head of the deck screw may strip if the screwdriver user fails to maintain steady pressure on the bit.
5. More pressure can be applied to the bit if the screwdriver is gripped by sliding the thumb and index finger along the side of the tool near the top. Actuate the trigger with middle finger and/or fourth finger. Black & Decker has designed recesses along the top sides of your screwdriver to allow for a comfortable grip. (See Fig. 5.)
6. Before driving deck screws check that there is no gap between the boards to be fastened together.
7. Avoid driving screws through knots. Screws are difficult to start into knots. If a knot can't be avoided, first drill a pilot hole equal in diameter

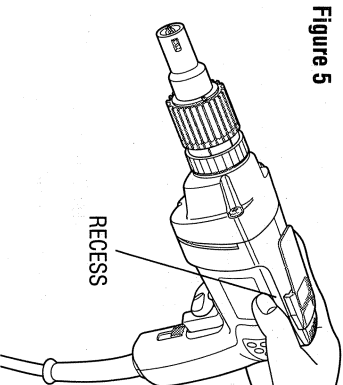


Figure 5

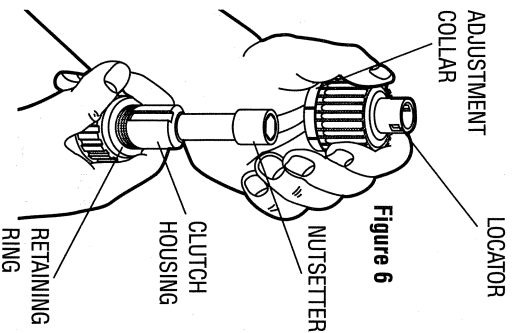


Figure 6

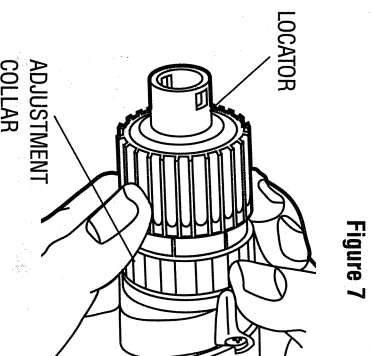


Figure 7

to the body diameter of the deck screw.

8. Keep a few additional bits on hand before starting any job.

### **Phillips Head Screwdriving Depth Adjustment**

1. Rotate adjustment collar. Clockwise rotation will provide deeper seating screws.
2. Test drive a fastener in scrap material to determine if fastener is correctly seating.
3. Further adjustment may be necessary to increase or decrease the fastener depth.

To increase, turn the adjustment collar so that end of bit extends further from end of locator.

TO DECREASE, turn the adjustment collar so that end of bit is closer to end of locator.

Black & Decker screwdrivers have very fine depth settings, each "click" is .007" or one revolution of the locator collar equals .083" change in depth setting.

### **Installing and Changing Nutsetters and Locators on Depth Sensitive Tools for Self Drilling Screws**

1. Select nutsetter size desired.
2. Two locators are supplied, a 9/16" I.D. for 3/8" nutsetters and 1/2" I.D. for 5/16" nutsetters. Match locator to desired size nutsetter or bit holder.
3. Drop nutsetter into nose of locator and rap end of nutsetter until ball lock snaps in groove in nutsetter shank.
4. To change the nutsetter of locator pull forward on adjustment collar and remove from clutch housing.

5. Pull nutsetter straight out with pliers if it is difficult to remove.
6. Assemble nutsetter as in Fig. 6.

7. Reassemble adjustment collar by snapping over ring. Note: Align ribs on inside of depth locator with grooves in clutch housing.

### **Locators**

Provide clearance needed for using 5/16", 3/8" nutsetters with 1/4" Hex Drive Shanks.

### **Depth Adjustment on Depth Sensitive Units for Drill Point Screws**

1. For washer head screws: Rotate adjustment collar until end of nutsetter is flush with end of locator.

For large washer head and "sealer" screws:

Adjust as above until end of nutsetter is recessed approximately 1/16" into the locator.

2. Test drive the fastener in scrap material to determine if seating is correct.
3. Readjust if necessary.

Depth sensitive units have very fine depth settings, each "click" is .007" or one revolution of the locator collar equals .083" change in depth setting.

4. Start drilling action at low speed for the first few revolutions to locate screw. Then pull trigger full on to seat the screw. Adjust tool's depth on scrap metal prior to production work.
5. When installing self sealing screws, adjust locating collar to compress rubber washer on screw to manufacturer's specification. ALWAYS use depth locator with self sealing screws.

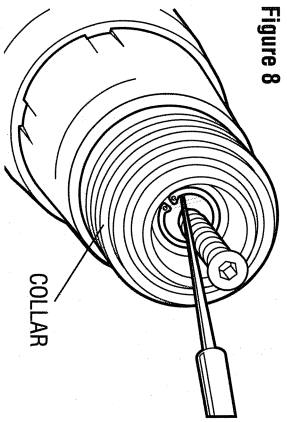
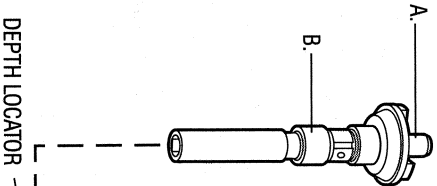


Figure 8

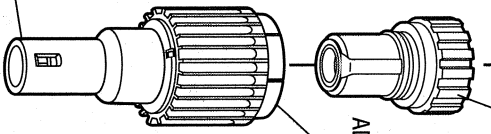
CLUTCH HOUSING

ADJUSTMENT COLLAR

Figure 9



DEPTH LOCATOR



CLUTCH ASSEMBLY



## Maintenance

### CLEANING

With the motor running, blow dirt and dust out of all air vents with dry air at least once a week. Wear safety glasses when performing this. Exterior plastic parts may be cleaned with a damp cloth and mild detergent. Although these parts are highly solvent resistant, NEVER use solvents.

Depth locator and adjustment collar should be removed, and dust blown out of clutch area housing at least once a week.

### Changing Clutches (Fig. 8)

1. Remove clutch housing by unscrewing in clockwise direction (left hand thread).
2. Clamp tool or clutch housing in a resilient clamp.
3. Remove round clutch retaining rings with a very small screw- driver or sharp pointed tool.
4. Install new clutches and new retaining rings. NOTE: If the output spindle slides toward inside of gear case, remove dead spindle spring and thread a 5/16" bolt or cap screw into end of spindle and lift up to expose retaining ring groove. Re-assemble dead spindle spring allowing no more than 1/4" projecting from end of spindle.
5. Relubricate clutches. (See lubrication.)

### Lubrication (Fig. 9)

All bearings are factory lubricated for the life of the bearings. Gearing and gear case should be re-lubricated every six months or when gear case is removed for servicing as follows: (more often if the tool is used constantly on production jobs)

1. Remove three gear case screws from front and disassemble gear case.

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").





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