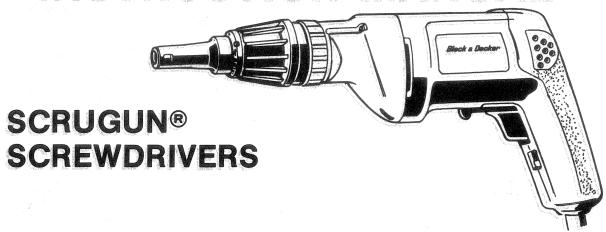
INSTRUCTION MANUAL



IMPORTANT SAFETY INSTRUCTIONS (FOR ALL TOOLS)

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

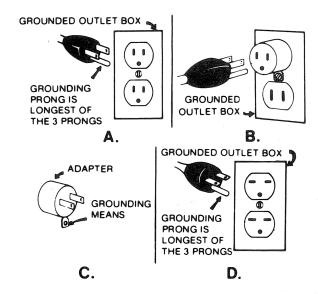
- 1. **KEEP WORK AREA CLEAN.** Cluttered areas and benches invite injuries.
- CONSIDER WORK AREA ENVIRONMENT. Don't expose power tools to rain. Don't use power tools in damp or wet locations. Keep work area well lit.
- GUARD AGAINST ELECTRIC SHOCK. Prevent body contact with grounded surfaces. For example: pipes, radiators, ranges, refrigerator enclosures.
- KEEP CHILDREN AWAY. All visitors should be kept away from work area. Do not let visitors contact tool or extension cord.
- 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, 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 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 dustmask if cutting 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.
- 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.
- DISCONNECT 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 pluggedin tool with finger on switch. Be sure switch is off when plugging in.
- 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.
- 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 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.
- 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.

FOR TOOLS EQUIPPED WITH 3-WIRE CORD & REQUIRE GROUNDING, PLEASE READ THE FOLLOWING:

GROUNDING

This tool should be grounded while in use to protect the operator from electric shock. The tool is equipped with an approved three-conductor cord and three prong grounding type plug to fit the proper grounding type receptacle. The green (or green and yellow) conductor in the cord is the grounding wire. Never connect the green (or green and yellow) wire to a live terminal. If your unit is for use on less than 150 volts, it has a plug like that shown in Figure A. If it is for use on 150 to 250 volts, it has a plug like that shown in Figure D. An adapter, Figures B and C, is available for connecting Figure A plugs to two-prong receptacles. The green-colored rigid ear, lug, etc., must be connected to a permanent ground such as a properly grounded outlet box. No adapter is available for a plug as shown in Figure D. ADAPTER SHOWN IN FIGURES B & C IS NOT FOR USE IN CANADA.



FOR TOOLS EQUIPPED WITH 2-WIRE CORDS, AND ARE DOUBLE INSULATED, PLEASE READ THE FOLLOWING:

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 all 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. Tools that have 3-wire cords requiring grounding must only be used with extension cords that have 3-prong grounding type plugs and 3-pole receptacles. Make sure which construction your tool is before choosing an extension cord. 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 letter "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								ORDS
NAMEPLATE	Т	OTAL E	XTEN	SION C	ORD I	ENGT	H - FEE	T
RATING-AMPS	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. Black & Decker has extension cords available that are U.L. (C.S.A. in Canada) listed for outdoor use.

SAVE THESE INSTRUCTIONS SWITCHES (FIG. 1 & 2)

To start unit, depress trigger switch; to stop unit, release trigger. To lock trigger in "ON" position for continous 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 lock button release mechanism is working freely.

Be sure to release the switch locking button before disconnecting the plug from the power supply. Failure to do so will cause the tool to start immediately the next time it is plugged in. Damage or injury could result.

The Variable Speed Trigger Switch permits speed control-the farther the trigger is depressed, the higher the speed of the unit.

For maximum tool life, use lower speed only for starting the fastener. Continuous use at lower speed is not recommended.

The Reversing Switch is used for removing screws at lower speeds. It is located above the Trigger Switch (Figure 2). To reverse the motor, release the trigger FIRST and then push the lever to the right. After any reversing operations, return switch to forward position by pushing it to the left.

BRUSHES

Your tool is equipped with Black & Decker brush check-point system. When the brushes become worn out the tool will automatically stop and prevent damage to the motor. Return tool to a Black & Decker Service Center for brush replacement.

ACCESSORY ASSEMBLY

The 1/4" HEX DRIVE BALL LOCK CHUCK is used on all depth sensitive 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.

THE 1/4" HEX DRIVE QUICK CHANGE CHUCK (Fig. 3) is used on all positive and versa-clutch units. A ball retainer provides positive locking of all accessories in the chuck. Push forward on the ball retainer and hold while inserting or removing accessories. Release for positive accessory retention.

ACCESSORY ASSEMBLY & ADJUSTMENT FOR DEPTH SENSITIVE UNITS (FIG. 4)

To change Bit Holders or Remove screws on depth sensitive units:

- 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 in groove in bit holder shank.
- Replace adjustment collar by snaping over retaining ring.
 NOTE: align ribs on inside of depth locator with grooves in clutch housing before snapping in place.
- 5. Depth locator is removeable by unscrewing dust seal.

DEPTH ADJUSTMENT ON DRYWALL UNITS (FIG. 5)

- Rotate adjustment collar. Clockwise rotation will provide deeper seating of screws.
- Test drive a fastener in scrap material to determine if fastener is correctly seating.
- 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 Drywall Units 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 UNITS FOR DRILL POINT SCREWS (FIG. 6)

- 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 (1/2" I.D. supplied on unit) 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.

- To change the nutsetter or 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 step 3 above.
- Reassemble adjustment collar by snaping 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.

Available from B&D Service Centers

STD. 1/2" ID for 5/16" Hex Head Screws STD. 9/16" ID for 3/8" Hex Head Screws

DEPTH ADJUSTMENT ON DEPTH SENSITIVE UNITS FOR DRILL POINT SCREWS (FIG. 7)

- 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.
- Test drive a fastener in scrap material to determine if seating is correct.
- 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.

ADJUSTMENT OF VERSA-CLUTCH UNITS (FIG. 8)

External adjustment of all Versa-Clutch Units for a wide range of fastener sizes is fast and easy as follows:

- Pull out and rotate collar in INCREASE direction (stamped on Adjustment Collar) to increase the amount of clutch engagement and torque output.
- Maximum rotation of the collar in the counterclockwise direction results in full clutch engagement and maximum torque output and fastener capacity. Any decrease from maximum results in the thrust bearing contacting the bearing stop and limits the clutch engagement decreasing torque output. Collar and adjustable stop will not screw off clutch housing.

NOTE: Test drive a fastener into a scrap piece to check proper fastener seating. It is normal after a period of use to require a slightly different collar setting due to wear on the clutch faces.

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.

POSITIVE CLUTCH UNITS

NOMINAL CAPACITY									
RPM	WOOD SCREWS	LAG SCREWS	THREAD CUTTING SCREWS	SHEET METAL SCREWS					
600	#16	5/16" w/pilot hole	1/4"	5/16"	VI '				
0-1200	#14	5/16" w/pilot hole	1/4"	1/4"					
0-1800	#12		#12	1/4"					

- 1. Install proper bit and set screwdrivers for correct rotation.
- 2. Place fastener on bit and contact work.
- Apply steady pressure on screw driver to keep clutches engaged and bit in contact with fastener.
- Upon fastener seating the clutches will ratchet. Disengage bit from fastener.

DEPTH SENSITIVE DRYWALL UNITS

RPM	NOMINAL CAPACITY	
2500*	All Commercially	
4000	Available Drywall	
0-4000	Screws	

- *Recommended for 14 & 16 ga. studs and multiple board layers using long drill point drywall screws.
- 1. Install Drywall Bit in Bit Holder.
- 2. Adjust Depth Locator.
- Check for correct rotation, start screwdriver and place drywall screw on bit.
- Contact drywall applying forward pressure to drive screw until depth locator contacts work surface. Screwdriver will ratchet automatically disengaging bit from screw.

DEPTH SENSITIVE FOR DRIVING SELF DRILLING, THREAD CUTTING, SHEET METAL & WOOD SCREWS

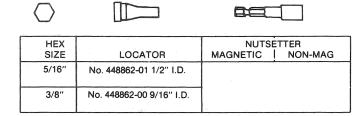
RPM	WOOD SCREWS	SCF	CAPACIT DRILL REWS 3/16" CR	THREAD CUTTING SCREWS	SHEET METAL SCREWS	
0-1800	#12	#12	1/4"	1/4"	5/16"	
0-2500	#12	#12	1/4"	1/4"	5/16"	

- Install proper size nutsetter, socket, bit or driving accessory AND proper inside diameter locator to prevent fastener wobble. See set-ups below & on page 6:
- 2. Adjust depth locator.
- Check for correct rotation, start screwdriver and place fastener in nutsetter, socket or bit.
- 4. Contact workpiece applying pressure to keep drilling screws cutting. Upon fastener seating depth locator will contact workpiece causing screwdriver to automatically ratchet disengaging the driving accessory from fastener.

POWER UNITS (FIG. 10)

The unit is supplied with a 3/4-20 UNEF threaded clutch housing.

HEX HEAD SCREWS USING ONE-PIECE 1/4" HEX DRIVE NUTSETTERS



HEX HEAD SCREWS USING 1/4" HEX DRIVE EXTENSION & SOCKETS

					D
	HEX SIZE	LOCATOR	EXTENSION	SOC MAGNETIC	KET NON-MAG.
İ	1/4"	1/2" I.D. No. 448862-01			
	5/16"	1/2" I.D. No. 448862-01	1/4" Sq. x 2" Long No. 20510		
	3/8"	9/16" I.D. No. 448862-00			

VERSA-CLUTCH FOR DRIVING A WIDE RANGE OF FASTENERS

	NOMINAL CAPACITY								
1			SELF	THREAD	SHEET				
RPM	WOOD LAG		DRILL	CUTTING	METAL	MACHINE			
	SCREWS	SCREWS	SCREWS	SCREWS	SCREWS	SCREWS			
0-900	#16	5/16" w/pilot hole	_	1/4"	5/16"	1/4"			
0-2500	#12	#12	1/4"	1/4"	5/16"	1/4"			
	1/2" CRS 3/16" CRS								

- Install proper fastener driving accessory and set screwdriver for correct rotation.
- 2. Adjust clutch setting.
- Place fastener in accessory, contact workpiece and apply pressure to seat fastener keeping clutches engaged.
- Upon fastener seating the clutches will ratchet. Disengage screwdriver from fastener.

NOTE: With Versa-Clutch the operator has the ability to "override" clutch ratchet if a fastener hits a wood knot, variable hardness in steel workpieces or incorrect pilot holes. Increased operator pressure will usually cause the clutches to "pick-up" and continue to seat the fastener. Further, a quick twist of the collar will change the clutch setting to overcome most driving difficulties and will provide for immediate change in torque output giving the operator option to drive a range of fastener sizes.

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.

DRYWALL SCRUGUNS

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

CHANGING CLUTCHES (FIG. 9)

- 1. Remove clutch housing by unscrewing in direction of arrow (left hand thread).
- 2. Clamp tool or clutch housing in a resilent clamp.
- Remove round clutch retaining rings with a very small screwdriver 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" - 18 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)

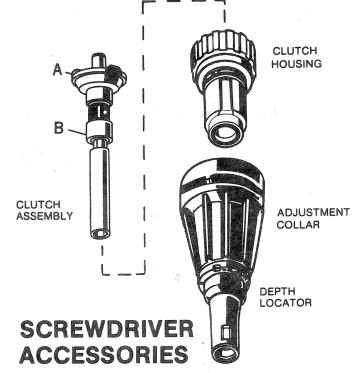
LUBRICATION

All ball bearings and needle roller bearings are factory lubricated for the life of the bearings. Needle roller bearings receive additional lubrication from the grease in the gear case. 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)

- Remove three gear case screws from front and disassemble gear case.
- 2. Clean out old grease and thoroughly clean all parts.
- Relubricate gear box and gearing with the quantity of B&D Heavy Duty grease as called for on Parts Bulletin.
- 4. Reassemble:

Clutches should be lubricated at same time the gearing is relubricated in accordance with the following procedure:

- Remove clutch housing by unscrewing in direction of arrow (left hand thread).
- 2. On Drywall, Depth Sensitive units slip clutch assembly from clutch housing.
- Lightly brush or coat areas marked A, B with B&D Clutch Grease. Coat clutch face inside nose of gear case.
- On Positive and Versa-Clutch units the clutch assembly will not slip out of the clutch housing. It is necessary only to coat the clutch faces on these units.
- 5. Reassemble. Clutch housing.



The accessories listed in this manual are available at extra cost from your local dealer 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 Services Department, 626 Hanover Pike, P.O. Box 618, Hampstead, MD 21074-0618.

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

CAUTION: Recommended accessories for use with your Scrugun are shown in this manual. The use of any other accessory or attachment might be hazardous.

Hex Shank Bit Tip Holders for Non-Drywall Screwdrivers

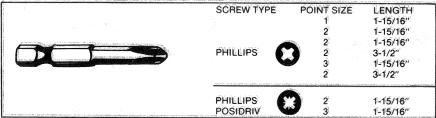
		LENGTH
1/4" HEX SHANK	Non-Magnetic	2-1/8"
FOR 1/4" TIP	Magnetic	2-1/8"

Hex Shank Insert Bits for Bit Tip Holders

		SCREW TYPE	POINT SIZE 1 2
		PHILLIPS	3
			2 drywall
		FREARSON REED & PRINCE	6 & larger 5 & smaller
		PHILLIPS POSIDRIV	2 3
		SOCKET HEAD CAP SCREWS	1/8" 5/32" 3/16"

SCREWDRIVER ACCESSORIES continued

Hex Shank Power Bits



1/4" Hex Drive Nutsetters —for driving hex head fastener

	TYPE	SOCKET SIZE	LENGTH
		1/4"	2-9/16"
	Non-	5/16"	2-9/16"
	Magnetic	3/8"	2-9/16"
		1/4"	1-5/8"
		1/4"	2-9/16"
	Magnetic	5/16"	2-9/16"
METAGEN NAME (1) de tre apparties de seu de jui en leur de mangrés de pare major de participar de la faction de la	AND STATE OF SHAPE OF THE COLUMN PARK OF THE COLUMN STATE OF THE C	3/8"	2-9/16"

Hex Drive Shank Extensions

	SHANK SIZE	SQ. DR.	LENGTH	
	1/4"	1/4"	2"	
*For use with 1/4" square drive sockets-1/4" hex.	1/4"	1/4"	6"	

Sockets for the above:

11 47 May 17 May 18 A 18	TYPE	SOCKET SIZE	DIAM.	LENGTH
FOR DRIVING		1/4"	1/2"	7/8"
HEX NUTS AND	Non-	5/16"	1/2"	7/8"
SHEET METAL SCREWS 1/4" Sq. Drive	Magnetic	3/8″	9/16"	15/16"
		1/4"	7/16"	7/8"
	Magnetic	5/16"	1/2"	7/8"
		3/8"	9/16"	7/8"

	SCREW TYPE AND NUMBER SIZE							
I	FLAT OR OVAL	DALOU CHA	FILLISTER	BINDING	PAN	TRUSS		

1/4" Hex Bits For Slotted Head Screws

3,4 5 6 8 10 12, 14, 1/4	3, 4 5 6 8 10, 12 14, 16, 1/4 14, 1/4	4, 5 6 8 10 12 1/4 1/4	3 4 5 6, 8 10 12, 1/4	4 5 6 8 10 12 1/4	2 3, 4 — 5, 6 8 10

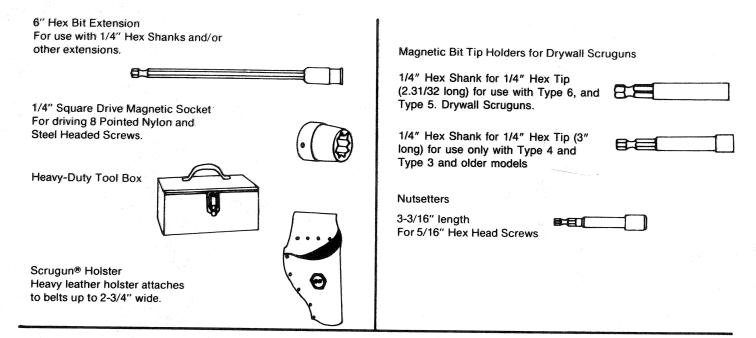
1/4" Hex Bits With Rotating Finder For Use With Any 1/4" Hex Drive Power Tool

						BIT LENGTH
4, 5 8 8 10 12	4, 5 8 8 10 12	4, 5, 6 8, 10 8, 10 12 1/4	4, 5 6 6 8, 10	4, 5 8 8 10 12	5, 6 5, 6 8, 10	3-1/2" 3-1/2" 6" 3-1/2" 3-1/2"

^{*}For std. "soft" screws.

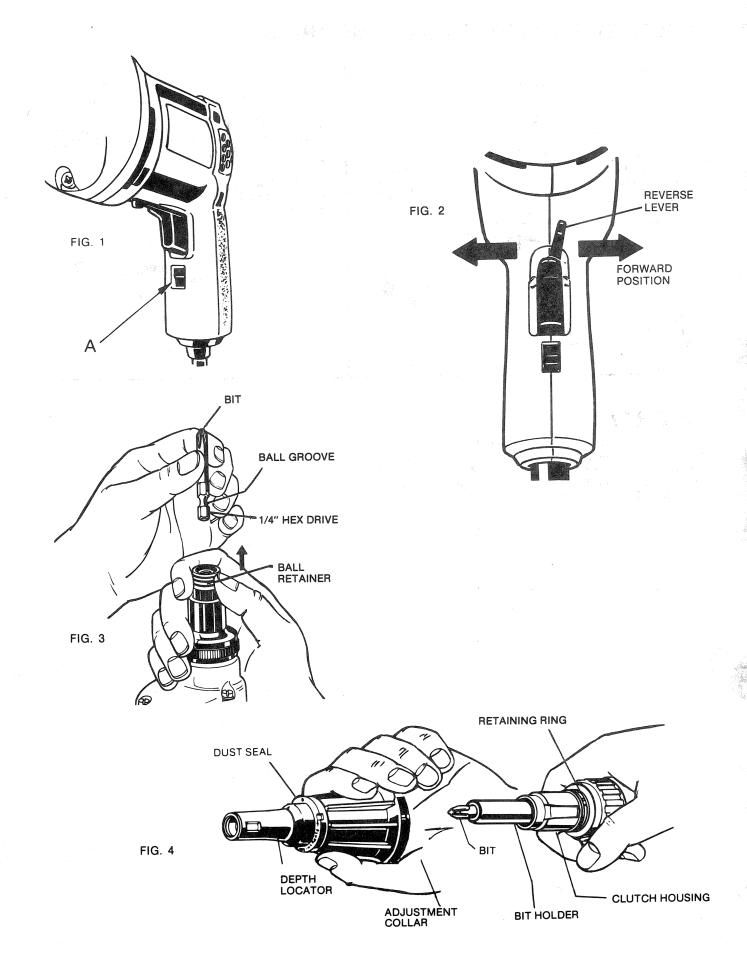
[†]For sheet metal, Tek, self-tapping screws.

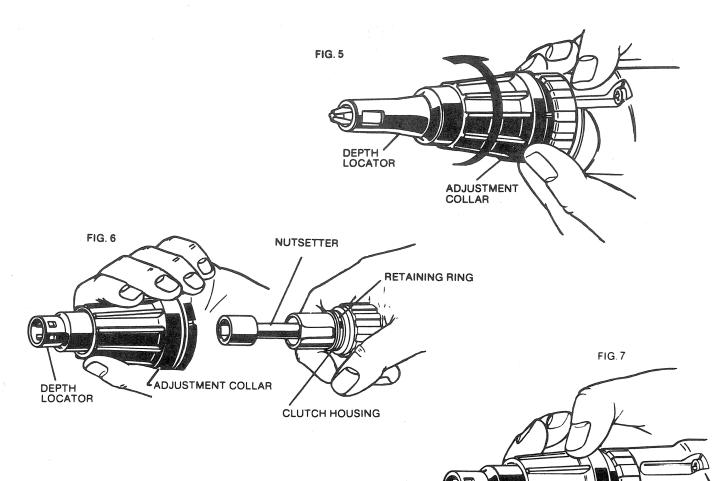
MISC. SCREWDRIVER ACCESSORIES



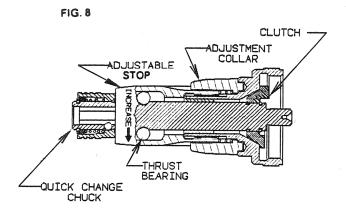
IMPORTANT

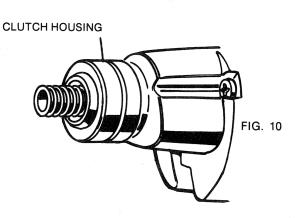
To assure product SAFETY and RELIABILITY, repairs, maintenance and adjustment (excluding maintenance printed in this manual) should be performed by BLACK & DECKER Service Centers or other qualified service organizations, always using BLACK & DECKER replacement parts.

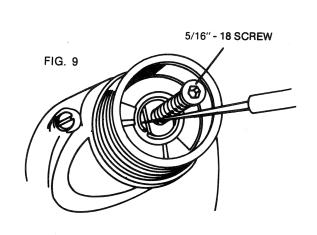




DEPTH LOCATOR







ADJUSTMENT COLLAR

NOTES

NOTES

COMMERCIAL/INDUSTRIAL USE WARRANTY

Black & Decker (U.S.) Inc. warrants this product for one year from 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.



BLACK & DECKER (U.S.) INC.
U.S. Power Tools Group • 10 North Park Drive
P.O. Box 798, Hunt Valley, MD 21030-0798