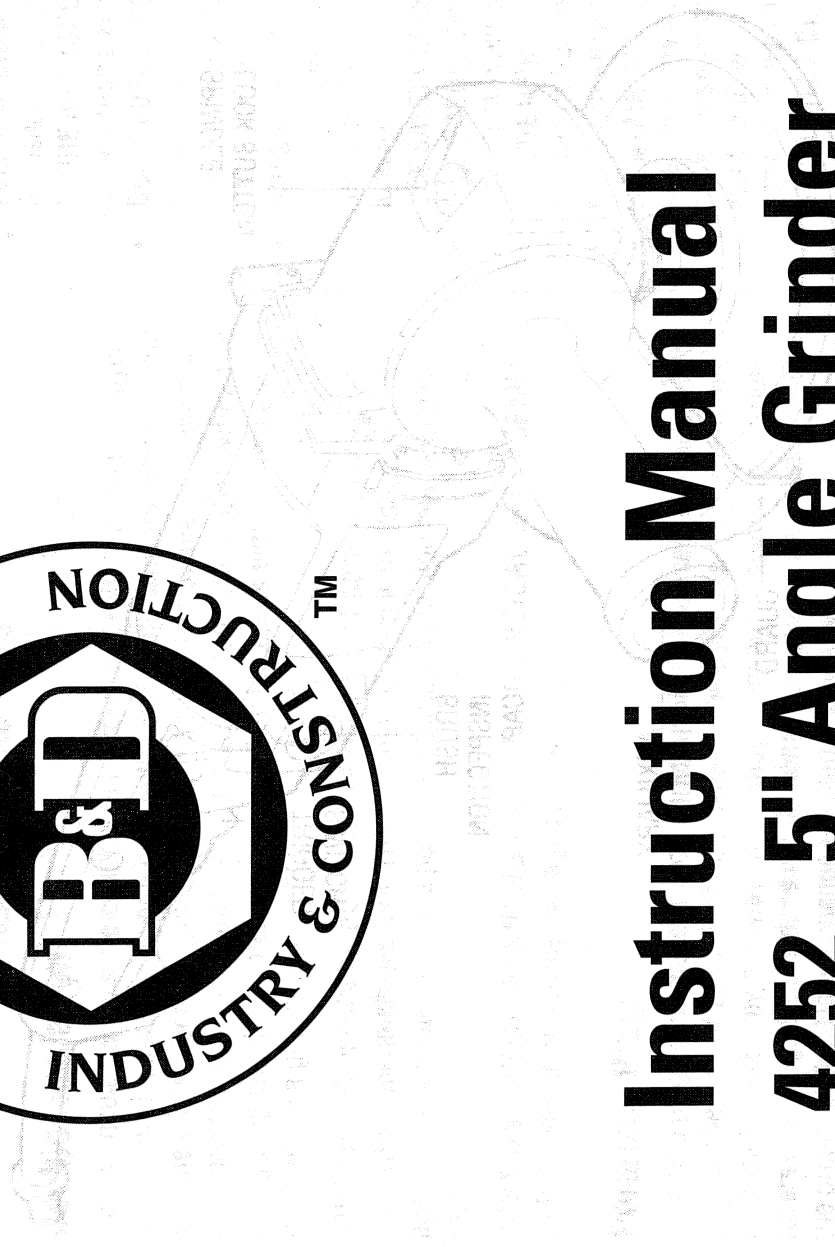




Instruction Manual

4252 5" Angle Grinder



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.
- **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

Motor

Your B&D tool is powered by a B&D built 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 B&D tools are factory tested; if this tool does not operate, check the power supply.

- 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

More Than	Not more Than	AWG
0	6	18
6	10	16
10	12	16
12	16	14
		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.

TOOL OPERATION

Switch

To start the tool, squeeze the trigger switch shown in Figure 1. To turn the tool off, release the switch. The tool can be locked on for continuous use by holding the trigger switch depressed while you depress the switch locking button next to the trigger, shown in Figure 1. Hold the locking button in as you gently release the trigger. Release the locking button and the tool will continue to run. To turn the tool off from a locked on condition, squeeze and release the trigger once.

Auxiliary Handle

An auxiliary handle is provided with your tool for convenience. The handle can be screwed into either side of the gear case, shown in Figure 2, and should be used at all times when sanding or grinding.

Spindle Lock Button

Turn off and unplug grinder. In order to prevent the spindle of the tool from rotating while installing or removing accessories, a spindle lock button has been provided in the gear head of the machine. Depress spindle lock button and rotate the spindle until the lock pin engages to lock the spindle.

NEVER DEPRESS THE SPINDLE LOCK BUTTON WITH THE TOOL RUNNING OR COASTING.

Sanding With Abrasive Discs (Figure 3)

To install sanding discs:

1. TURN OFF TOOL AND DISCONNECT FROM POWER SUPPLY.

2. Push the hub of the disc nut through the center of the sanding disc, as far as it will go, and also through the backing disc.
 3. Put the assembled discs on the tool spindle and engage the disc nut into the disc nut hub.
 4. Thread the assembly clockwise, completely down on the spindle.
 5. Engage the lock button to lock the spindle in place.
- When using a sanding disc, hold the tool at an angle of 10°-15° to the work. If only the outer edge of the sanding disc is used, a rough cut surface will result. If the sanding disc is pressed flat against the work, the surface will be irregular and bumpy, and the tool will be difficult to control.

Figure 1

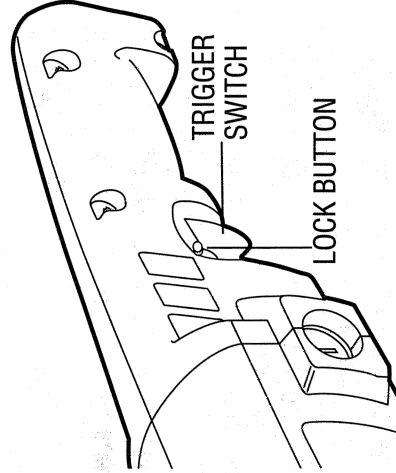
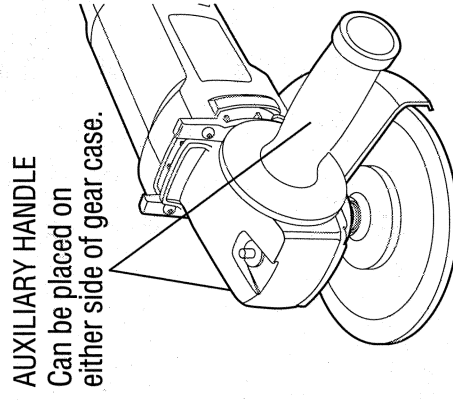


Figure 2



To remove disc:

1. Engage spindle lock button to lock the spindle in place.
2. Using a cloth or glove to protect your hand, turn disc assembly counterclockwise to remove it from the tool spindle. (Figure 4)

Depressed-Center Wheels

Depressed center wheels may be used for moderate metal removal on flat or contoured surfaces. **CAUTION:** Never use depressed center wheels without the proper guard.

To install depressed center wheels: (See Figure 6)

1. TURN OFF TOOL AND DISCONNECT FROM POWER SUPPLY.
 2. Be sure the guard assembly is securely attached to the spindle housing. Position guard so that the open part of the guard is facing away from the operator.
 3. Put the backing flange onto the tool spindle.
 4. Check rated speed on depressed center wheel. Never use wheel with rated speed lower than the speed in the "WARNING" statement on the nameplate of the tool.
 5. Place the depressed center wheel on the tool spindle.
 6. Thread the clamp washer on tool spindle, hold the tool spindle by engaging the lock button, and tighten clamp washer with wrench.
- When using a depressed center wheel, hold the tool so that an angle of approximately 30° exists between the wheel and the work. (See Figure 5)

Figure 3

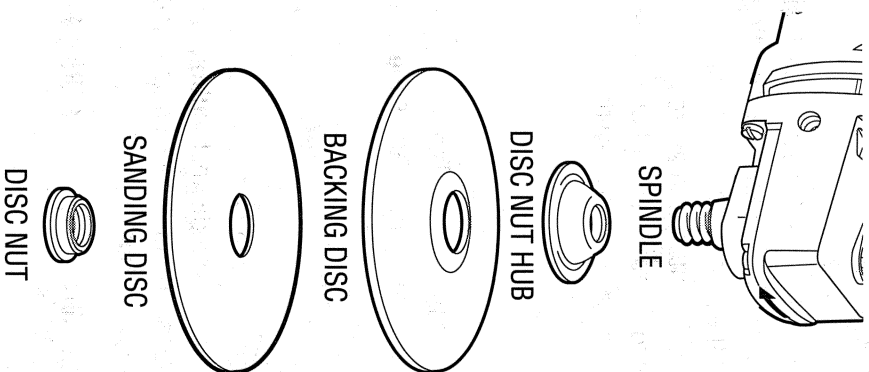


Figure 4

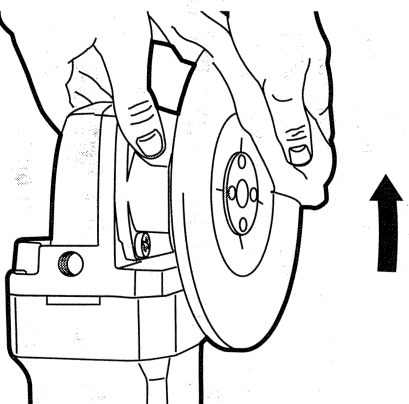
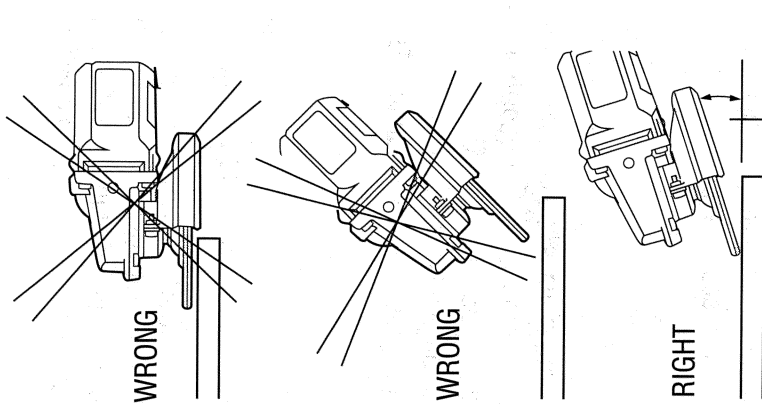


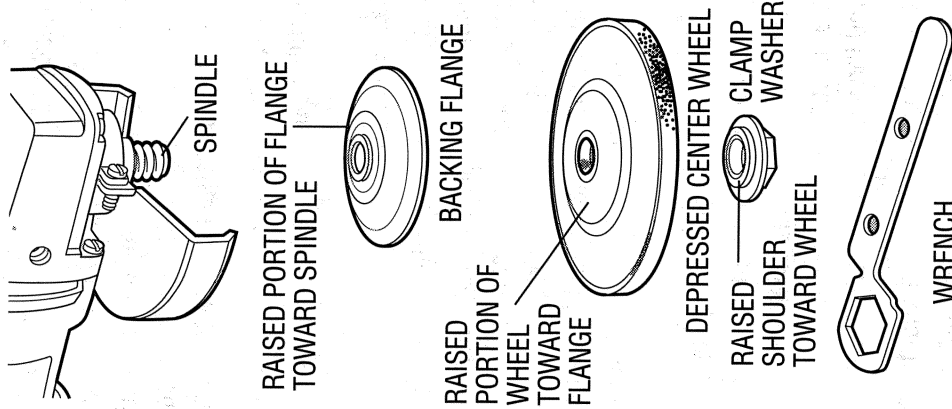
Figure 5



When grinding, leave 30° between the wheel and the work as shown above.

When sanding, leave 10°-15° between the wheel and the work.

Figure 6



Wire Brushing

Common applications for wire cup brushes include cleaning welds, angles, corners and removal of paint.

1. Disconnect tool from power source. Rest grinder on its back with spindle facing up.
2. Ensure that the rated speed of the wire brush is equal to or higher than the rated speed of the grinder found on the nameplate.
3. Thread wire cup brush onto spindle and tighten.
4. Always wear eye protection and appropriate protective clothing.

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 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. 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.

MAINTENANCE

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

Be sure tool is turned off and disconnected before inspecting brushes. Carbon brushes should be regularly inspected for wear. To inspect brushes, unscrew the plastic brush inspection caps (located in the sides of the motor housing) and the spring and brush assemblies may be withdrawn from the tool.

Keep brushes clean and sliding freely in their guides. Carbon brushes have varying symbols stamped into them, and if the brush is worn down to the line closest to the spring, they must be replaced. New brush assemblies are available at B&D service centers.

ACCESSORIES

NOTE: Use accessories recommended per chart below:

Accessory Type	Notes	Usage
DEPRESSED CENTER WHEEL	Use guard supplied with tool	Use for moderate metal and masonry removal on flat or contoured surfaces
SANDING DISCS		Use for smoothing welds, and sharp edges, and automotive body work
WIRE CUP BRUSHES	MAX-4" Knotted Wheel MAX-2-3/4" Cup Wheel	Use for rust removal and surface preparation before painting

Depressed center grinding wheels must fit within the confines of the guard and must be rated higher than the recommended speed as marked on the nameplate.

CAUTION: Strands of wire cup brushes may break and fly off while in use. Users and others in the area should wear adequate eye, face and body protection. Use only wire cup brushes that are rated at or greater than the RPM shown on the tool's nameplate.

WARNING: To reduce the risk of injury, always use proper guards when grinding and wear eye protection.

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.

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.

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 Service/Safety Check

All B&D tools for Industry and Construction are covered under a service/safety check 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").

YOUR POWER TOOLS MAY BE SERVICED AT THE FOLLOWING B&D SERVICE DEPOTS.

ALBERTA
Edmonton T6E 6H6, 3845 99th St. 403-462-5005

BRITISH COLUMBIA
Vancouver V5M 3Y7, 1735 Boundary Rd. 604-291-9942

MANITOBA
Winnipeg R3H OK3, 934 St. James St. 204-783-7294

NOVA SCOTIA
Halifax B3K 2A4, 6100 Young Street. 902-453-5090

ONTARIO
Brockville K6V 5W6, 100 Central Ave. 613-342-6641
Kanata K2L 1V3, 462 Hazeldean Rd #11 613-831-2332
Glencairn Plaza
London N6E 3A9, 981 Wellington Rd #6. 519-649-2407
Markham L3P 3J3, 9275 Hwy 48 Unit 12/13. 905-472-6168
Mississauga L4X 1L3, 1480 Dundas St. E #7. 905-277-0011
North York M3J 3G5, 48 Kodlak Cres. 416-635-6740

QUEBEC
Brossard J4W 1M6, 5840 Boul Taschereau ... 514-462-4881
Montreal H1Y 1B4, 3061 Belanger ... 514-722-1021

**FOR ADDITIONAL SERVICE LOCATIONS
CALL: 1-800-9-BD TOOL**

YOUR POWER TOOLS MAY BE SERVICED AT THE FOLLOWING B&D SERVICE CENTERS.

ALABAMA: Birmingham 35209, 2412 Green Springs Hwy..... Mobile 36608, 3831 Airport Blvd.....	205-943-6624 205-342-0528	Des Moines 50310, 3427 Merle Hay Rd..... Wichita 67213, 155 S. West St.....	515-270-1340 316-943-1271
ALASKA: Anchorage 99518, 910 West International Airport Rd.....	907-563-4664	Louisville 40213, 5211 Preston Hwy.....	502-968-7100
ARIZONA: Mesa 85202, 535 S. Dobson, Suite 7..... Phoenix 85013, 4501 N. 7th Avenue..... Tucson 85712, 4845 E. Speedway Blvd.....	602-461-1074 602-279-6414 602-323-3388	Baton Rouge 70815, 11859 Florida Blvd..... Harvey 70058, 2500 Lapato Blvd..... Metairie (New Orleans) 70002, 3504 N. Causeway Blvd..... Shreveport 71108, 7710-7714 Jewella Rd.....	504-272-8111 504-366-8676 504-837-2550 318-688-1553
ARKANSAS: Little Rock 72201, 519 W. Seventh St.....	501-372-3040	MARYLAND: Baltimore (East) 21205, 4712 Erdman Ave..... Baltimore (North) 21030, 29-31 Cranbrook Rd., Cockeysville..... Baltimore (South) 21122, 8220 Ritchie Hwy., Pasadena..... Colmar Manor 20722, 4153 Bladensburg Rd.....	410-485-5550 410-666-9966 410-647-8456 301-779-3808
CALIFORNIA: Anaheim 92806, 540 South State College Blvd..... Chula Vista 91910, 309 Broadway..... Concord 94520, 1500 Monument Blvd., #C2..... Fresno 93710, 5412 North Blackstone Ave..... Long Beach 90805, 2011 South St..... Los Angeles 90040, 4820 South Eastern Ave., Suite "L"..... Riverside 92506, 6215 Magnolia Ave., Suite "B"..... Sacramento 95825, 2033 Fulton Ave..... San Diego 92123, 9270 Clairemont Mesa Blvd..... San Jose 95128, 1185 So. Bassom Ave..... San Leandro 94578, 15206 E. 14th St..... Van Nuys 91411, 14920 Victory Blvd.....	714-772-4050 619-420-6350 510-682-4880 209-435-0810 410-222-5825 213-720-1834 909-787-9700 916-972-9090 619-279-2011 408-293-7350 510-276-1610 818-787-5531	MASSACHUSETTS: Brighton (Boston) 02135, 12 Market St..... Seekonk 02771, 120 Highland Ave.....	617-782-6264 508-336-8510
COLORADO: Denver 80219, 1171 S. Federal Blvd.....	303-922-8325	MICHIGAN: Grand Rapids 49512, 3040 28th St., S.E..... Lansing 48917, 3203 W. Saginaw Hwy..... Warren 48093, 27035 Van Dyke Blvd..... Westland (Detroit) 48185, 8067 North Wayne Rd.....	616-949-8331 517-323-4181 313-756-6711 313-427-1520
CONNECTICUT: Orange 06477, 481 Boston Post Rd..... Wethersfield (Hartford) 06109, 662 Sillas Dean Hwy.....	203-795-3583 203-563-5800	MINNESOTA: Bloomington (Minneapolis-St. Paul) 55420, 9517 Lyndale Ave., S.....	612-884-9191
DISTRICT OF COLUMBIA: Washington Colmar Manor 20722, 4153 Bladensburg Rd..... Falls Church, VA 22046, 344 W. Broad St.....	301-779-3808 703-533-7313	MISSOURI: Kansas City 64111, 4324 Main St..... St. Ann (North St. Louis) 63074, 3637 North Lindbergh Blvd..... St. Louis 63131, 12882 Manchester Rd.....	816-531-0629 314-739-4661 314-821-8740
FLORIDA: Ft. Lauderdale 33334, 799 E. Oakland Pk. Blvd..... Ft. Myers 33907, 5224 Bank Street..... Jacksonville 32205, 920 Cassat Ave..... Miami (North) 33168, 13345 N.W. Seventh Ave..... Miami (South) 33156, 12233 So. Dixie Hwy..... Orlando 32803, 3807 E. Colonial Dr..... St. Petersburg 33709, 5635 49th St., N..... Tampa 33609, 3432 W. Kennedy Blvd..... West Palm Beach 33415, 310 South Military Trail.....	305-566-5102 913-278-1188 904-781-2253 305-681-6658 305-232-9497 407-894-7011 813-525-0273 813-872-8317 407-689-3247	NEBRASKA: Omaha 68127, 4225 S. 84th St.....	402-592-5666
GEORGIA: Atlanta (South) 30349, 5330 Old National Hwy..... Smyrna 30080, 2550 Cobb Pkwy..... Stone Mountain (Atlanta) 30086, 5723 Memorial Dr.....	404-762-8844 404-956-0869 404-292-4714	NEVADA: Las Vegas 89104, 3411 East Charleston Blvd.....	702-641-6555
HAWAII: Honolulu 96819, 330 Sand Island Access Road.....	808-847-7447	NEW JERSEY: Cherry Hill 08034, 1444 E. Marlton Pike/Rte. 70..... Little Falls 07424, 1189 U.S. Highway 46..... Union (Scotch Plains) 07076, 2520 Route #22 East.....	609-429-2822 201-256-9373 908-233-5665
ILLINOIS: Des Plaines (Chicago) 60018, 1277 South Elmhurst Rd..... Lincolnwood (Chicago) 60468, 6710 N. Crawford Ave..... Lisle (West Chicago) 60532, 2950 Ogden Ave., Unit H..... Moline 61265, 4433 23rd Ave..... Oak Lawn (Chicago) 60453, 6343 W. 95th St..... Waukegan 60085, 39 S. Greenbay Rd.....	708-364-5220 708-673-0923 708-717-1075 309-762-3000 708-423-7212 708-249-4390	NEW MEXICO: Albuquerque 87110, 5617 Menaul Blvd., N.E.....	505-884-1002
INDIANA: Evansville 47710, 307 First Ave., Crescent Ctr..... Hammond 46323, 7103 Kennedy Ave..... Indianapolis 46224, 5999 Crawfordsville Rd.....	812-425-4269 219-845-5100 317-243-8308	NEW YORK: Buffalo 14209, 881 W. Delavan Ave..... Centereach L.I., 11720, 2061-63 Middle Country Rd..... Elmhurst (New York) 11373, 77-20 Queens Blvd..... Latham (Albany) 12110, 836 Troy-Schenectady Rd..... Rochester 14623, 2969 W. Henrietta Rd..... Syracuse 13214, 3485 Erie Blvd., East..... Westbury L.I. (New York) 11590, 1061 Old Country Rd.....	716-884-6220 516-737-4706 518-335-1042 518-785-1867 716-424-1310 315-446-3086 516-997-6140
		NORTH CAROLINA: Charlotte 28205, 3007 E. Independence Blvd..... Greensboro 27407, 3716 High Point Rd..... Raleigh 27604, 2930 Capital Blvd.....	704-374-1779 910-852-1300 919-878-0357
		OHIO: Cincinnati 45241, 2310 E. Sharon Rd..... Columbus 43227, 3975 E. Livingston Ave..... Dayton 45409, 2898 S. Dixie Dr..... Mayfield Heights (East Cleveland) 44124, 5681 Mayfield Rd.....	513-772-3111 614-237-0461 513-298-1951 216-449-2770
		PENNSYLVANIA: Evanston City 16033, 20808 Rt. 19 North..... Harrisburg 17112, 6080 Allentown Blvd..... Lancaster 17601, 118 Keller Ave..... Philadelphia 19103, 333 N. 20th St..... Philadelphia (North) 19115, 9977-81 Bustleton Ave..... Pittsburgh 15232, 5437 Baum Blvd..... Whitehall (Allentown) 18052, 2242 MacArthur Rd..... Wilkes-Barre 18702, 759 Kiddler Street.....	412-779-9600 717-545-0651 717-393-5251 215-564-5520 415-464-7771 412-362-2700 610-435-9544 717-824-5704
		PUERTO RICO: Puerto Nuevo.....	809-783-3535
		RHODE ISLAND: See Seekonk, MA	
		SOUTH CAROLINA: Greenville 29607, 1557 Laurens Rd.....	803-232-3038
		TENNESSEE: Chattanooga 37421, 6231 Perimeter Drive, Space E..... Knoxville 37917, 4118 N. Broadway..... Memphis 38116, 1085 East Brooks Rd..... Nashville 37211, 4811 Nolensville Rd.....	615-894-5957 615-688-0921 901-332-3444 615-833-8277
		TEXAS: Amarillo 79106, 3008 West 6th Ave..... Austin 78757, 6549 Burnet Rd..... Dallas 75229, 2257 Royal Ln..... El Paso 79915, 6822 Gateway East..... Fort Worth 76111, 721 North Beach St..... Garland 75043, 718 W. Centerville Rd..... Houston 77022, 536 E. Tidwell Rd..... Houston (S.W.) 77025, 9319 Stella Link Blvd..... San Antonio 78201, 500 Culebra Ave..... Webster 77598, 100 East Nasa Rd. One.....	806-373-1531 512-459-1133 214-620-6655 915-778-9769 817-831-3828 414-686-9302 713-692-7111 713-664-3666 210-732-1221 713-338-4556
		UTAH: Salt Lake City 84115, 1541 S. Third West St.....	801-486-5828
		VIRGINIA: Falls Church 22046, 344 W. Broad St..... Hampton 23666, 3416 W. Mercury Blvd..... Norfolk 23513, 7631 Sewells Point Rd..... Richmond 23222, 1424 Chamberlayne Ave.....	703-533-7313 804-826-9382 804-480-3333 804-649-9245
		WASHINGTON: Seattle 98108, 421 S. Michigan St..... Spokane 99208, N. 7011 Division St..... Tacoma 98409, 2602 S. 38th St.....	206-763-2010 509-467-8190 206-473-6040
		WEST VIRGINIA: Charleston 25312, 1638 Sixth Ave.....	304-343-0289
		WISCONSIN: Milwaukee (Wauwatosa) 53226, 10424 West Bluemound Rd.....	414-453-4240

Black & Decker (U.S.) Inc. • 701 East Joppa Road, Towson, Maryland 21286
Printed in U.S.A. (APR95-CD-2) Form No. 159243-01 Copyright © 1994, 1995