Parts Page Reorder No. EUR-99-8
Effective May, 1999

Models:
11021 – 230 V / 50 Hz / 0,6 KW
11022 – Kit 230 V / 50 Hz / 0,6 KW

Electric Dynafile®

Abrasive Belt Machine

⚠WARNING **Always operate, inspect and maintain this tool in accordance with the safety standards established by OSHA, Underwriters Laboratories, Inc., The Canadian Standards Association and The American National Standards Institute (ANSI). Dynabrade, Inc. assumes no responsibility for any damage or accidents resulting from the misuse of this tool, its misapplication or nonadherence to precautionary safety measures.**

General Safety Rules

Read and save all instructions before operating this power tool.

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

1. **Keep work area clean.** Cluttered areas and benches invite accidents.
2. **Consider work area environment.** Do not expose tools to rain. Keep work area well lit. Do not use power tools in damp or wet locations. Do not use tools in the presence of flammable liquids or gases.
3. **Guard against electric shock.** Prevent body contact with grounded surfaces. For example; pipes, radiators, ranges, refrigerator enclosures.
4. **Keep children away**. Do not let visitors contact tool or extension cord. All visitors should be kept away from work area.
5. **Store idle tools.** When not in use, tools should be stored in a dry, or locked place - out of the reach of children.
6. **Do not force tool.** It will do a better and safer job at its intended rate.
7. **Use the right tool.** Do not force a small tool or attachment to do the job of a heavy duty tool. Do not use tool for purposes not intended.
8. **Dress properly.** Do not wear loose fitting clothing or jewelry. Clothes 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.
9. **Use safety glasses.** Also use face-shield or dust mask if operation area is dusty.
10. **Do not abuse cord.** Never carry tool by cord or yank it to disconnect from receptacle. Keep cord from heat, oil and sharp edges.
11. **Secure work.** Use clamps or a vice to hold workpiece. It's safer than using your hand and it frees up both hands to operate tool.
12. **Do not overreach.** Keep proper footing and balance at all times.
13. **Maintain tools with care.** Keep tools clean for better use 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.
14. **Do not leave tool running**. Disconnect tools when not in use, before servicing, when changing belts, contact arms, etc.
15. **Remove keys and wrenches.** Form a habit of checking to see that all keys and adjusting wrenches are removed from tool before turning it on.
16. **Avoid accidental starting.** Do not carry around plugged in tool with finger on switch. Be sure switch is off when plugging in.
17. **Out-door use extension cords**. When tool is used outdoors, use only extension cord suitable for outdoor use. They should be marked with the suffix W-A (for UL) or W (for CSA in Canada).
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, breakage of moving parts, binding of moving 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. Do not use tool if switch does not turn tool on or off.
20. **Avoid gaseous areas.** Do not operate portable electric tools in gaseous or explosive atmospheres. Motors in these tools normally spark, and the sparks can ignite fumes.
21. **Do not alter or misuse tool.** This tool is precision built. Any alteration or modification not specified is misuse and may result in a dangerous condition. Only these accessories and attachments that are found in this instruction manual are acceptable for use with this tool. The use of any other accessory or attachment might present a risk to the operator.
22. **Replacement parts.** When servicing, use only identical replacement parts. When ordering replacement parts, please specify model and serial numbers of your machine.

Voltage Warning
Before connecting the tool to a power source (receptacle, outlet, etc.), be sure the voltage supplied is the same as what is specified on the nameplate of the tool. A power source with greater than that specified for tool can result in **serious injury** to the user as well as damage to the tool. Using a power source with voltage less than the nameplate rating is harmful to the tool's motor. If in doubt, **do not plug in the tool.**

Insulation
Electric Dynafile® is **insulated** according to DIN 57740/VDE 0740 and CEE-publication 20. Radio-shielded according to DIN 57875/VDE 0875 and CISPR. To protect the insulation do not drill any hole in motor housing to fit any labels, use only stickers when it is required, to give you added safety. Tools built with this type of insulation system are not intended to be grounded. As a result, your Electric Dynafile® is equipped with a two prong plug which permits you to use extension cords without concern for maintaining a ground connection.

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

Caution: When servicing insulated tools, **use only identical replacement parts.** Repair or replace damaged cords.

Extension Cords
Insulated tools have two-wire cords, and can be used with either two-wire or three-wire extension cords. Only round jacketed extension cords should be used, and we recommend that they be listed by Underwriters Laboratories (UL) - (CSA in Canada). If the extension cords will be used outside, the cord must be suitable for outdoor use. They should be marked with the suffix W-A (for UL) or W (for CSA in Canada). Any cord marked as an outdoor cord can also be used for indoor work.

Important: To increase the life of the electrical motor it is absolutely necessary to clean the inside by blowing carefully compressed air through the ventilation channels.

Sound Level: 85 - 88 dBA.

Warning: Keep extension away from the immediate working area.

Full One Year Warranty

Following the reasonable assumption that any inherent defect which might prevail in a product will become apparent to the user within one year from the date of purchase, all equipment of our manufacture is warranted against defects in workmanship and materials under normal use and service. We shall repair or replace at our factory any equipment or part thereof which shall, within one year after delivery to the original purchaser, indicate upon our examination to have been defective. Our obligation is contingent upon proper use of Dynabrade tools in accordance with factory recommendations, instructions and safety practices. It shall not apply to equipment which has been subject to misuse, negligence, accident or tampering in any way so as to affect its normal performance. Normally wearable parts such as bearings, contact wheels, rotor blades, etc., are not covered under this warranty.

Important Operating and Safety Instructions

Carefully read all instructions before operating or servicing any Dynabrade® Abrasive Power Tool.

Warning: Hand, wrist and arm injury may result from repetitive work motion and overexposure to vibration.

Operating Instructions:

Warning: Eye, face and body protection must be worn while operating power tools. Failure to do so may result in serious injury or death. Follow safety procedures posted in workplace.

1. With power source disconnected from tool, securely fasten abrasive/accessory on tool.
2. Connect power source to tool. Be careful **not** to switch on in the process.
3. Hold tool by the motor housing only. One or two hands may be used. **Do Not** hold tool by head/housing assembly. **Keep hands away from all grinding/sanding edges and moving parts.**
4. Switch on to start tool, switch off to stop tool.
5. While tool is running, Adjust belt tracking by tuning **95218** Rough Adjustment Knob to the left or right accordingly, so as abrasive belt rides evenly over contact arm.
6. Always work off the return-side of the abrasive belt. This will ensure superior tracking and reduce downtime of tool.

Abrasive Belt/Contact Arm Change Instructions

To Change Belt:

1. Disconnect power source.
2. Remove **11005/E** Belt Guard by lifting up front "lip"and unhooking latches.
3. Gently pull back on idler arm to expose internal workings of tool.
4. Depress idler arm lever and pll belt away from the contact wheel.
5. Slip belt over contact wheel.

To Replace Belt

1. Create a loop with belt by pinching together the sides of belt in the middle.
2. Slip one loop under the no. 12 Drive Wheel and around idler arm.
3. Depress idler arm lever and pull belt toward the contact wheel.
4. Slip belt over contact wheel, connect to power source.
5. Adjust belt tracking using **95218** Knob.

To Change Contact Arm Assembly:

1. Disconnect power source.
2. Remove **11005/E** Guard by lifting up front "lip" and unhooking latches.
3. Gently pull back on idler arm to expose internal workings of tool.
4. Depress idler arm lever and pull belt away from the contact wheel.
5. Slip belt over contact wheel.
6. Remove **95218** Rough Adjustment Knob.
7. Remove contact arm and replace with desired arm, making sure that the tab on the end of the arm is facing forward.
8. Replace 95218 knob.
9. Install abrasive belt and replace belt guard.
10. Connect power source and adjust belt tracking by turning 95218 knob.

Safety Instructions:

Warning: Eye, face and body protection must be worn while operating power tools. Failure to do so may result in serious injury or death. Follow safety procedures posted in workplace.

Important: User of tool is responsible for following accepted safety codes such as those published by the American National Standards Institute (ANSI).

- Operate machine for 30 seconds before application to workpiece to determine if machine is working properly and safely before work begins.
- Always disconnect power supply before changing abrasive or making machine adjustments.
- Inspect abrasives and accessories for damage or defects prior to installation on tools.
- Please refer to Dynabrade's Warning/Safety Operating Instructions Tag (Reorder No. 95903) for more complete safety information.

Warning: Hand, wrist and arm injury may result from repetitive work, motion and overexposure to vibration.

Extension Cords

Grounded tools require a three wire extension cord. Double insulated tools can use either a two or three wire extension cord. As the distance from the supply outlet increases, you must use a heavier gauge extension cord. Using extension cords with inadequately sized wire causes a serious drop in voltage resulting in loss of power and possible tool damage. Refer to the table below to determine the required minimum wire size.

Nameplate Amperes	Extension Cord Length					
	25'	50'	75'	100'	150'	200'
0–5.0	16	16	16	14	12	12
5.1–8.0	16	16	14	12	10	–
8.1–12.0	14	14	12	10	–	–
12.1–15.0	12	12	10	10	–	–
15.1--20.0	10	10	10	–	–	–

**Based on limiting the line voltage drop to live volts at 150% of the rated amperes*

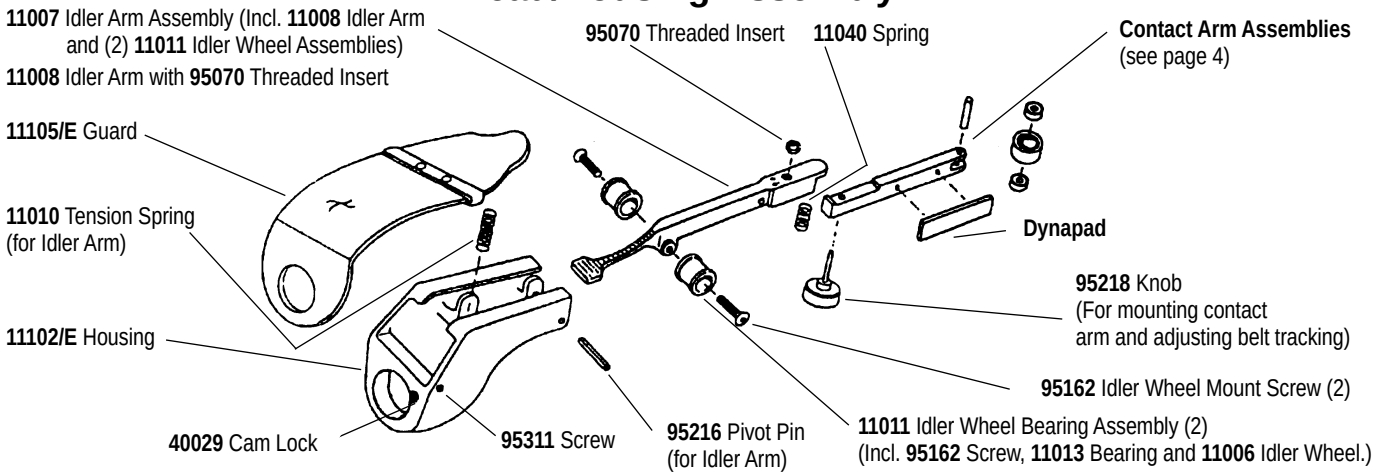
The smaller the gauge number of the wire the greater the capacity of the cord. For example a 14 gauge cord can carry a higher current than a 16 gauge cord. When using more than one extension cord to make up the total length, be sure each cord contains at least the minimum wire size required. If you are using one extension cord for more than one tool, add the nameplate amperes and use the sum to determine the required minimum wire size.

Guidelines For Using Extension Cords

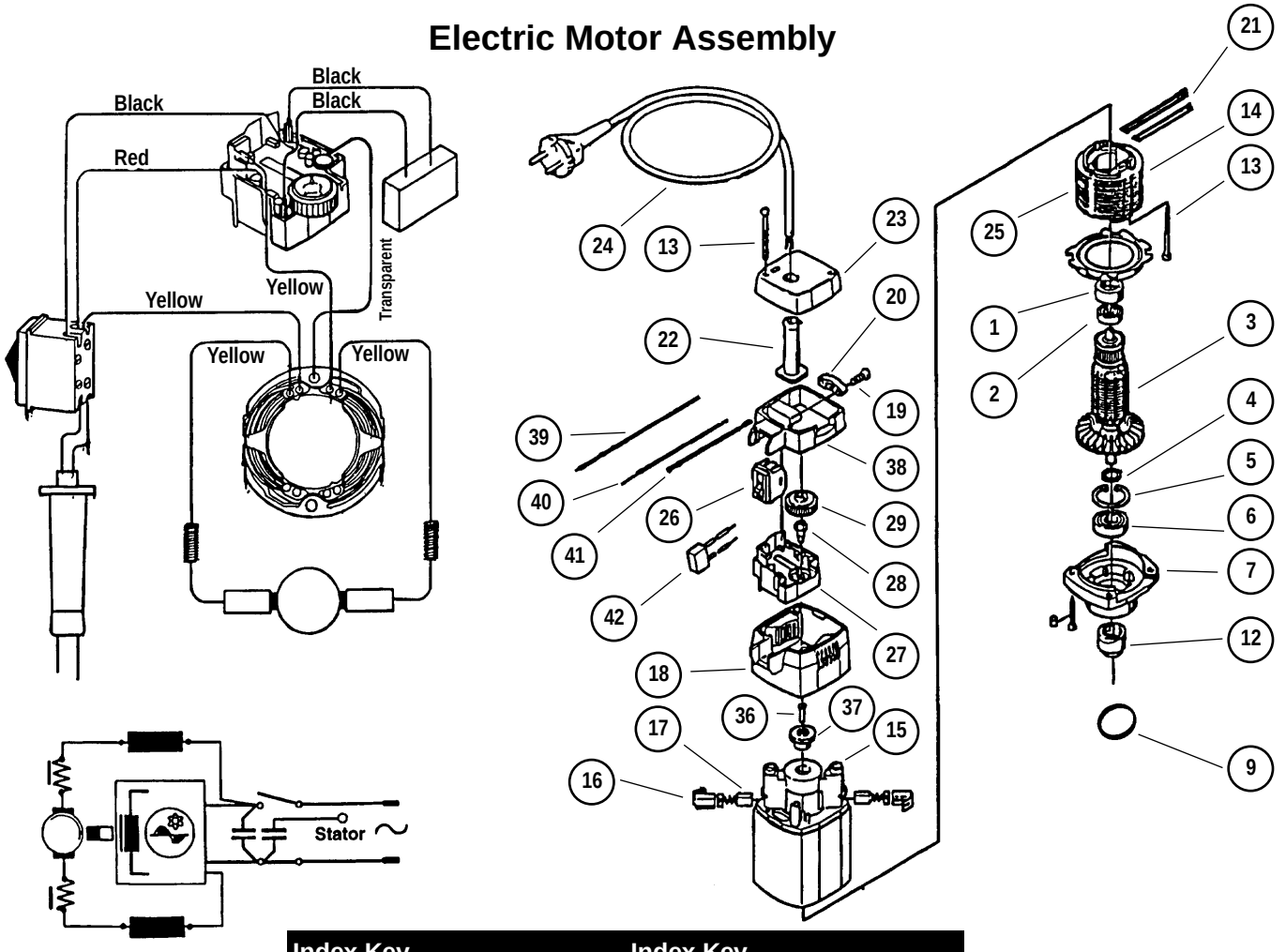
- If you are using an extension cord outdoors, be sure it is marked with the suffix "W-A" ("W" in Canada) to indicate that it is acceptable for outdoor use.
- Be sure your extension cord is properly wired and in good electrical condition. Always replace a damaged extension cord or have it repaired by a qualified person before using it.
- Protect your extension cords sharp objects, excessive heat and damp or wet areas.

Read and save all instructions for future reference

Head/Housing Assembly



Electric Motor Assembly



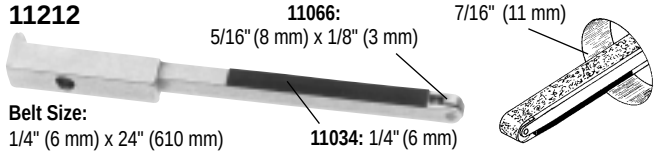
Index Key		Index Key	
No.	**Description**	**No.**	**Description**
1	Rubber Suspension Ring	20	Cord Clamp
2	Bearing	21	Interference Capacitor
3	Rotor	22	Strain Relief
4	Snap Ring	23	End Cap
5	Snap Ring	24	Cord and Plug Set
6	Bearing	25	Ventilation Ring
7	End Plate	26	Switch
8	Screw	27	Electronic Board
9	Aluminum Ring	28	Potentiometer Shaft
12	Drive Wheel	29	Speed Regulator
13	Screw	36	Screw
14	Stator	37	Magnetic Ring
15	Housing	38	Adapter
16	Brush Holder	39	Stranded Hook-Up Wire
17	Brush Assembly	40	Stranded Hook-Up Wire
18	End Cape	41	Stranded Hook-Up Wire
19	Screw	42	Stranded Hook-Up Wire

Electric Dynafile® Standard Contact Arms

11212

11066: 5/16" (8 mm) x 1/8" (3 mm)

7/16" (11 mm)

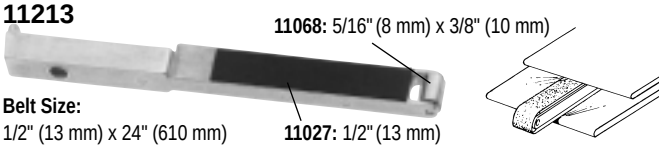


Belt Size:
1/4" (6 mm) x 24" (610 mm)

11034: 1/4" (6 mm)

11213

11068: 5/16" (8 mm) x 3/8" (10 mm)



Belt Size:
1/2" (13 mm) x 24" (610 mm)

11027: 1/2" (13 mm)

11214

11070: 7/16" (11 mm) x 3/8" (10 mm)



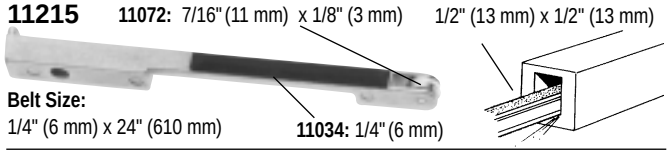
Belt Size:
1/2" (13 mm) x 24" (610 mm)

11025: 1/2" (13 mm)

11215

11072: 7/16" (11 mm) x 1/8" (3 mm)

1/2" (13 mm) x 1/2" (13 mm)



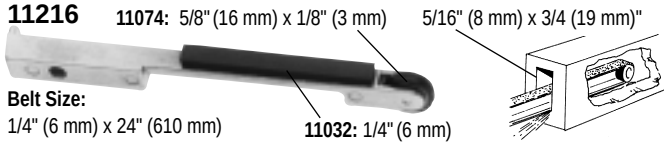
Belt Size:
1/4" (6 mm) x 24" (610 mm)

11034: 1/4" (6 mm)

11216

11074: 5/8" (16 mm) x 1/8" (3 mm)

5/16" (8 mm) x 3/4 (19 mm)"

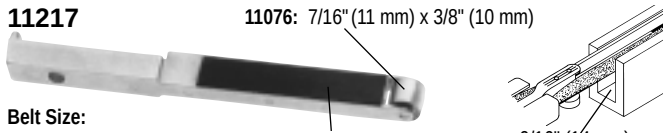


Belt Size:
1/4" (6 mm) x 24" (610 mm)

11032: 1/4" (6 mm)

11217

11076: 7/16" (11 mm) x 3/8" (10 mm)



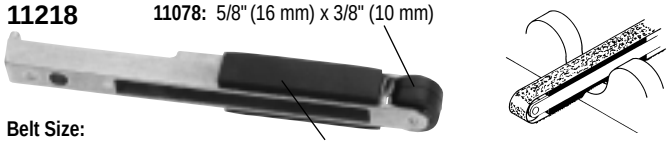
Belt Size:
1/2" (13 mm) x 24" (610 mm)

11027: 1/2" (13 mm)

9/16" (14 mm)

11218

11078: 5/8" (16 mm) x 3/8" (10 mm)



Belt Size:
1/2" (13 mm) x 24" (610 mm)

11025: 1/2" (13 mm)

11237 & 11238 Turbine Blade Arms

- Grind, blend and polish turbine blades.
- Reach areas as small as 5/16" (8 mm) wide.



11237: 1/4" (6 mm) x 24" (610 mm) belts
11066 Contact Wheel, 5/16" (8 mm) dia. x 1/8" (3 mm) wide steel.

11238: 1/2" (13 mm) x 24" (610 mm) belts.
Contact Wheel: 1/4" (6 mm) dia. x 3/8" (10 mm) wide steel (with three 11051 Bearings).

11234 Double-Burrer Arm



- Deburrs both edges of workpiece simultaneously.
- Contact wheels adjust for material 1/8" (3 mm) to 5/8" (16 mm) thick.

Belt Size: 1/2" (6 mm) x 34" (864 mm).
11080 Contact Wheels: 1" (13 mm) dia. x 3/8" (9 mm) wide, rubber.

11253 and 11254 Big Wheel Arms

Belt Size:
1/4" (6 mm) to 1/2" (13 mm) x 34" (864 mm).

- Grinds and polishes deep slots or narrow groves.
- Choose 1/4" (6 mm) or 1/2" (13 mm) wide wheels in 2-1/8" (54 mm) dia. (11253), or 4-3/4" (121 mm) dia (11254).

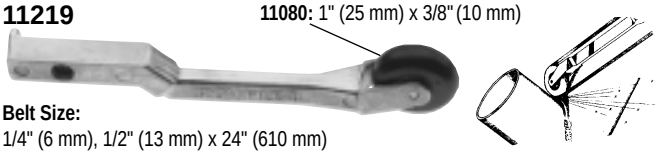


11253 Arms (specify width)
11377 Contact Wheel: 2-1/8" (54 mm) dia. x 1/2" (13 mm) wide, urethane.
11378 Contact Wheel: 2-1/8" (54 mm) dia. x 1/2" (13 mm) wide, urethane.

11254 Arms (specify width)
11375 Contact Wheel: 4-3/4" (121 mm) dia. x 1/2" (13 mm) wide, urethane.
11376 Contact Wheel: 4-3/4" (121 mm) dia. x 1/4" (6 mm) wide, urethane.

11219

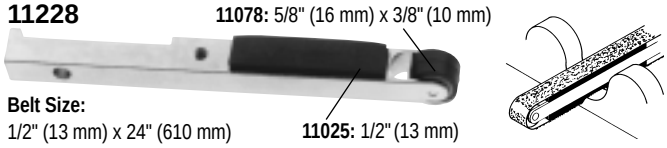
11080: 1" (25 mm) x 3/8" (10 mm)



Belt Size:
1/4" (6 mm), 1/2" (13 mm) x 24" (610 mm)

11228

11078: 5/8" (16 mm) x 3/8" (10 mm)

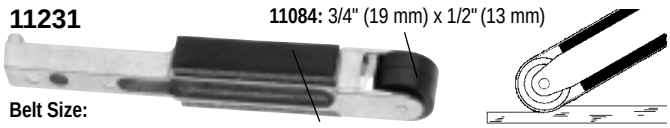


Belt Size:
1/2" (13 mm) x 24" (610 mm)

11025: 1/2" (13 mm)

11231

11084: 3/4" (19 mm) x 1/2" (13 mm)

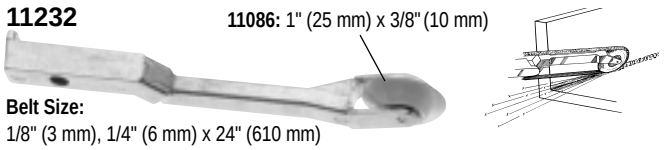


Belt Size:
1/2" (13 mm) x 24" (610 mm)

11135: 1/2" (13 mm)

11232

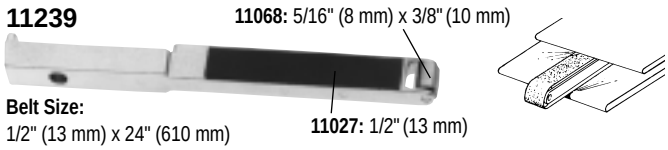
11086: 1" (25 mm) x 3/8" (10 mm)



Belt Size:
1/8" (3 mm), 1/4" (6 mm) x 24" (610 mm)

11239

11068: 5/16" (8 mm) x 3/8" (10 mm)

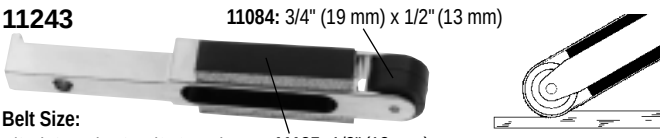


Belt Size:
1/2" (13 mm) x 24" (610 mm)

11027: 1/2" (13 mm)

11243

11084: 3/4" (19 mm) x 1/2" (13 mm)

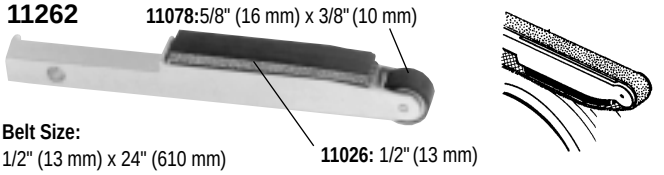


Belt Size:
1/2" (13 mm) x 24" (610 mm)

11135: 1/2" (13 mm)

11262

11078: 5/8" (16 mm) x 3/8" (10 mm)



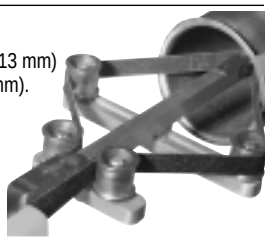
Belt Size:
1/2" (13 mm) x 24" (610 mm)

11026: 1/2" (13 mm)

11255 Cross-Bow Arm

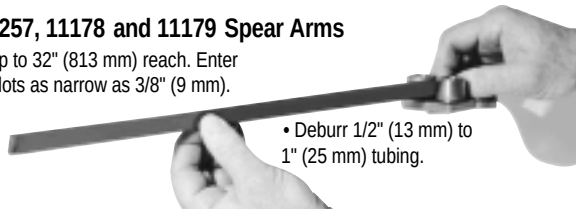
- I.D. polishing or deburring with one 180° wrist turn.
- Deburr leading radius of 1" (25 mm) to 4" (102 mm) round openings.

Belt Size: 1/2" (13 mm) x 34" (864 mm).



11257, 11178 and 11179 Spear Arms

- Up to 32" (813 mm) reach. Enter slots as narrow as 3/8" (9 mm).
- Deburr 1/2" (13 mm) to 1" (25 mm) tubing.



11257: Custom-made. To order, specify usable length up to 32" (813 mm). Specify 11068 – 5/16" (8 mm) diameter steel, or 11078 – 5/8" (16 mm) diameter rubber contact wheel.

11178: 9" (229 mm) reach with 11068 – 5/16" (8 mm) dia. steel contact wheel. Belt Size: 1/2" (13 mm) x 34" (864 mm). 45 PSI / 3 Bars Max.

11179: 9" (229 mm) reach with 11078 – 5/8" (16 mm) dia. rubber contact wheel. Belt Size: 1/2" (13 mm) x 34" (864 mm).

CE

DYNABRADE®

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