

**Models:**

**40400 – 120V/60 Hz**

**40410 Kit – 120V/60 Hz**

**40420 – 220V/50 Hz Kit**

**40422 Kit – 220V/50 Hz**

# Electric Dynafile® II

## Abrasive Belt Machine



Always operate, inspect and maintain this tool in accordance with the Safety Code for portable air tools (ANSI B186.1) and any other applicable safety codes and regulations. Please refer to Dynabrade's Warning/Safety Operating Instructions for more complete safety information.

### General Safety Rules

**Read all instructions**

**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 up place - out of the reach of children.
6. **Do not force tool.** It will do the job better and safer at the rate for which it was intended.
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. 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.
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 lever. Be sure lever 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.**

#### Double Insulation

Your Electric Dynafile® II is **double-insulated** to give you added safety. This means that the tool is 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 type of insulation system are not intended to be grounded. As a result, your Electric Dynafile® II 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 added for protection against injury resulting from a possible electrical insulation failure within the tool.

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

#### Extension Cords

Double-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.

**Note:** 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.

**Warning:** Keep extension away from the immediate working area.

**Save These Instructions**

## Basic Operating Assembly

**Note:** Always disconnect tool from power source before changing belts, contact arms and other accessories or attachments.

### \*Abrasive belt change

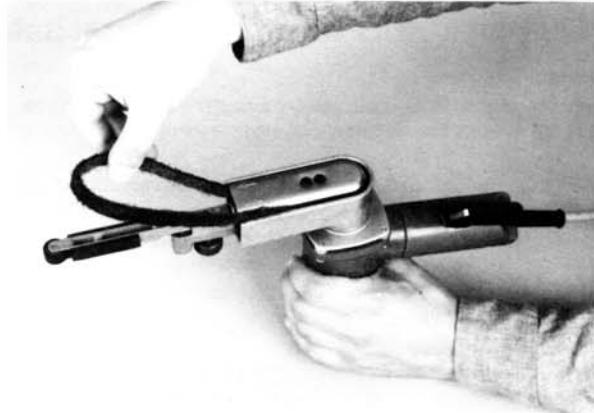
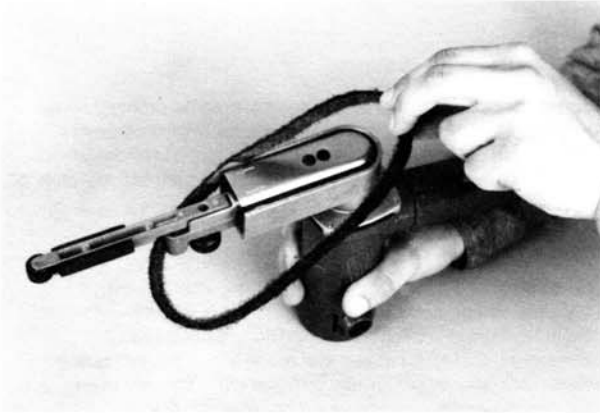
#### To remove belt

1. Pull back on belt tension arm and hold.
2. Lift belt off contact wheel and release tension arm.
3. Remove belt.

#### To replace belt

1. Slide back of belt over the drive wheel.
2. Pull back on belt tension and hold.
3. Position belt over contact wheel.
4. Release belt tension arm.
5. Adjust belt tracking using adjustment knob.

**\*Note:** Follow the steps below when loading and unloading non-woven nylon belts on the Electric Dynafile® II.



#### To Load

1. Place belt so that the front of belt is underneath contact arm and back of belt rests on cover.
2. Feed splice, abrasive side out, between cover and housing on right side of machine.
3. Grasp belt and pull clockwise through channel while exerting slight downward pressure. Belt should slide easily under cover and exit from left side of machine.
4. Contact arm is spring-loaded. Pull back on tension arm and slip belt over contact wheel.

#### To Unload

1. Pull back on tension arm and slip belt off contact wheel. Belt should remain above contact arm.
2. Pull belt slightly into channel between cover and housing on left side of machine.
3. Grasp belt on right side of machine and pull in counterclockwise direction. Belt should slide easily through channel and exit from right side of machine.

**Note:** Prolonged use of non-woven belts on the Electric Dynafile® II may result in premature wearing of the abrasive product. For optimum performance of non-woven nylon belts, Model 40320 Air-Powered Dynafile® II is recommended.

### Belt Tracking Adjustment

Adjust belt tracking by turning 95218 Adjustment Knob while unit is running. Tightening the knob makes the belt track closer to the knob, loosening the knob makes the belt move away. Adjust until the belt tracks on the center of the contact wheel.

### Changing Contact Arm

1. Always disconnect tool from power source.
2. Pull back on belt tension arm and remove abrasive belt.
3. Remove adjustment knob.
4. Remove arm and install desired arm in its place, making sure tab on end of arm is in "down" position on tension arm.
5. Assemble adjustment knob into contact arm. Install appropriate abrasive belt.
6. Follow instructions for belt tracking adjustment before using.

### Changing Brush Assembly

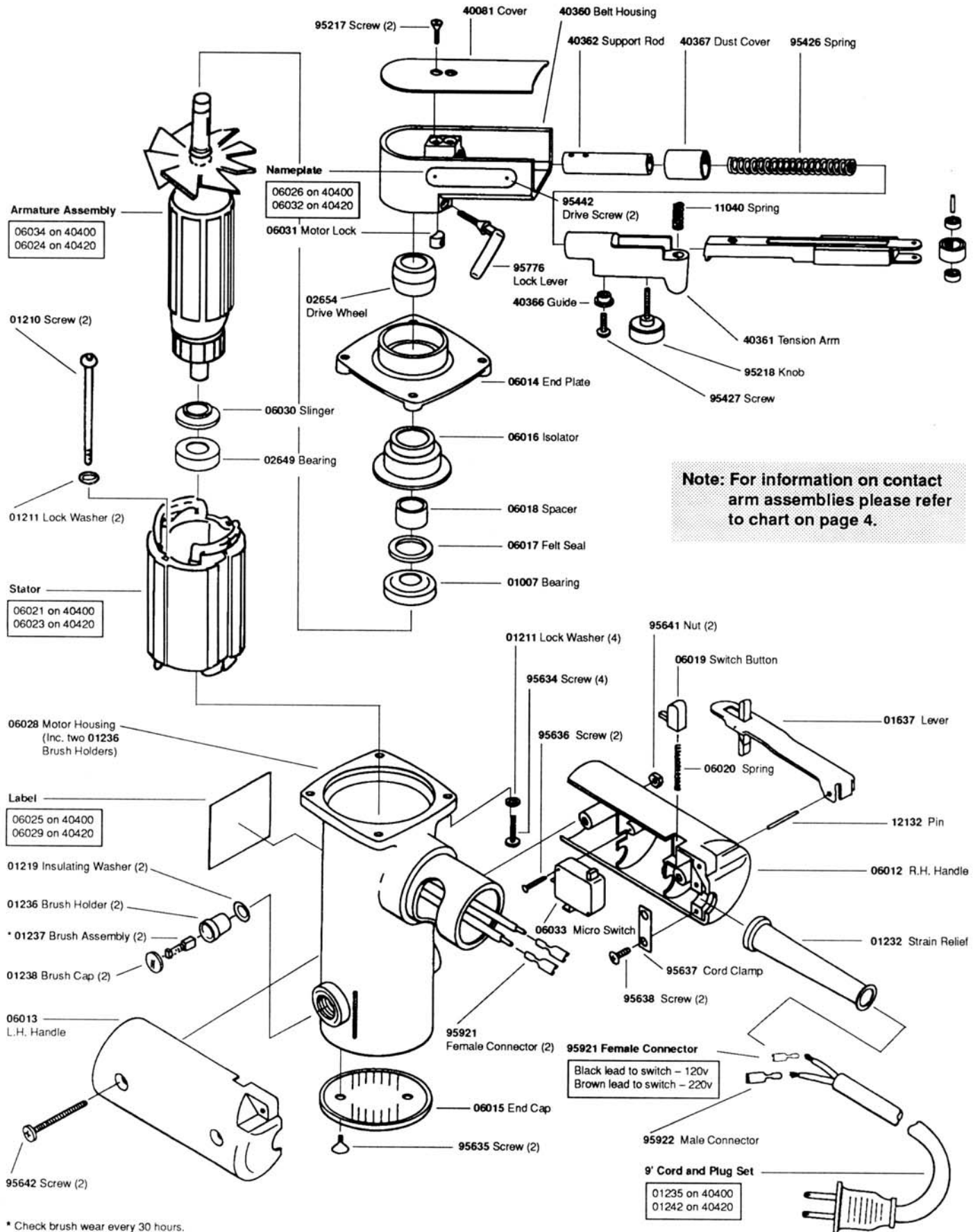
1. Always disconnect tool from power source.
2. Unscrew 01238 Brush Cap from side of motor housing.
3. Remove 01237 Brush Assembly from inner chamber of 01236 Brush Holder.
4. Replace new 01237 Brush Assembly.
5. Replace 01238 Brush Cap.
6. Repeat steps 2-5 on opposite side of motor housing to replace both brush assemblies.

**Note:** Check brush wear every 30 hours. Average brush life approximately 100 operating hours.

### Housing Angle Adjustment

To pivot the housing, loosen 95776 Lock Lever on the housing by hand. Pivot the housing to desired working angle and tighten lock lever.

# Basic Machine Assembly



**Note: For information on contact arm assemblies please refer to chart on page 4.**

\* Check brush wear every 30 hours.  
Average life approximately 100 hours.

## Dynafite® II Contact Arm Assemblies

Contact Wheel Assembly—Includes wheel, bearing and shaft.



| <b>Dynafite® II Standard Contact Arms</b> |                        |                                   |   |                        |                    |                  |           |
|---|------------------------|-----------------------------------|---|------------------------|--------------------|------------------|-----------|
| Part Number                               | Abrasive Belt Size     | Contact Wheel Description         | Comments  | Contact Wheel Assembly | Contact Wheel Only | Bearing (2) Req. | Shaft     |
| 11200                                     | 1/2" x 18"             | 5/8" Dia. x 3/8" W Rubber         | *Stroke-Sander" Arm; 1/2" W Platen                      | 11088 (2)              | 11077 (2)          | 11052 (4)        | 11055 (2) |
| *11201                                    | 1/2" x 18"             | 5/16" Dia. x 3/8" W Steel         | 1/2" W Platen   | 11068                  | 11067              | 11051            | 11054     |
| 11202                                     | 1/4" x 18"             | 5/8" Dia. x 1/8" W Rubber         | 1/4" W Platen   | 11074                  | 11073              | 11052            | 11053     |
| 11203                                     | 1/2" x 18"             | 5/8" Dia. x 3/8" W Rubber         | 1/2" W Platen   | 11078                  | 11077              | 11052            | 11054     |
| 11204                                     | 1/4" or 1/2" x 18"     | 1" Dia. x 3/8" W Radiused Rubber  | Loose Belt Application                                  | 11080                  | 11079              | 11052            | 11054     |
| 11206                                     | 5/8" or 3/4" x 18"     | 3/4" Dia. x 5/8" W Rubber         | 3/4" W Platen   | 11282                  | 11281              | 11052            | 11285     |
| *11220                                    | 5/8" or 3/4" x 18"     | 5/16" Dia. x 5/8" W Steel         | Polish Turbine Blades                                   | 11352                  | 11353              | 11051            | 11285     |
| 11280                                     | 1/4" x 18"             | 1" Dia. x 3/8" W Tapered Urethane | No Platen/Offset Design                                 | 11086                  | 11085              | 11052            | 11054     |
| 11286                                     | 1/2" x 24"             | 5/8" Dia. x 3/8" W Rubber         | 1/2" W Platen   | 11078                  | 11077              | 11052            | 11054     |
| 11287                                     | 5/8" or 3/4" x 20-1/2" | 3/4" Dia. x 5/8" W Rubber         | 3/4" W Platen   | 11282                  | 11281              | 11052            | 11285     |
| *11300                                    | 1/2" x 18"             | 1/4" Dia. x 3/8" W Steel          | Polish Turbine Blades                                   | 11332                  | 11333              | 11334            | 11335     |
| *11301                                    | 1/2" x 18"             | 5/16" Dia. x 3/8" W Steel         | Polish Turbine Blades                                   | 11068                  | 11067              | 11051            | 11054     |
| 11304                                     | 1/2" x 18"             | 5/16" Dia. x 3/8" W Steel         | *Stroke-Sander" Arm-1/2" W Platen                       | 11078                  | 11077              | 11052            | 11054     |
| 11312                                     | 1/2" x 18"             | 5/8" Dia. x 3/8" W Rubber         | H.D. Version of 11203 Arm                               | 11078                  | 11077              | 11052            | 11054     |
| 11322                                     | 1/2" x 18"             | 5/8" Dia. x 3/8" W Rubber         | Contains two 11395 Guide Wheels – Prevents Undercutting | 11090                  | 11077              | 11052            | 95610     |
| 11325                                     | 1/2" x 18"             | 5/8" Dia. x 3/8" W Rubber         | 1/2" W Steel Platen                                     | 11078                  | 11077              | 11052            | 11054     |
| 11326                                     | 5/8" or 3/4" x 18"     | 3/4" Dia. x 5/8" W Rubber         | H.D. Version of 11206 Arm                               | 11282                  | 11281              | 11052            | 11285     |
| 11329                                     | 1/2" x 44"             | 5/8" Dia. x 3/8" W Rubber         | 1/2" W Platen/17" Reach                                 | 11078                  | 11077              | 11052            | 11054     |
| *11341                                    | 1/2" x 18"             | 5/16" Dia. x 3/8" W Rubber        | Polish Turbine Blades                                   | 11342                  | 11343              | 11334            | 11335     |
| 11350                                     | 3/4" x 34"             | 5/16" Dia. x 5/8" W Steel         | Bus Bar Arm/11" Reach                                   | 11352                  | 11353              | 11051            | 11285     |
| **42642                                   | 5/8" or 3/4" x 18"     | 3/4" Dia. x 5/8" W Rubber         | 3/4" W Platen   | 42652                  | 11281              | 01187            | 11285     |
| **42644                                   | 1/2" x 18"             | 5/8" Dia. x 3/8" W Rubber         | *Stroke-Sander" Arm-1/2" W Platen                       | 42653                  | 11077              | 01187            | 11054     |
| **42646                                   | 1/4" or 1/2" x 18"     | 1" Dia. x 3/8" W Radiused Rubber  | No Platen/Offset Design                                 | 42654                  | 11079              | 01187            | 11054     |
| **42650                                   | 1/2" x 18"             | 5/8" Dia. x 3/8" W Rubber         | 1/2" W Platen   | 42653                  | 11077              | 01187            | 11054     |

\*\*For use with Wet Dynafite® II. Contains sealed bearings. \*Run at 45 PSI. Not recommended for Electric Dynafite® II.