

Wet Dynafire® II

Motor and Machine Parts

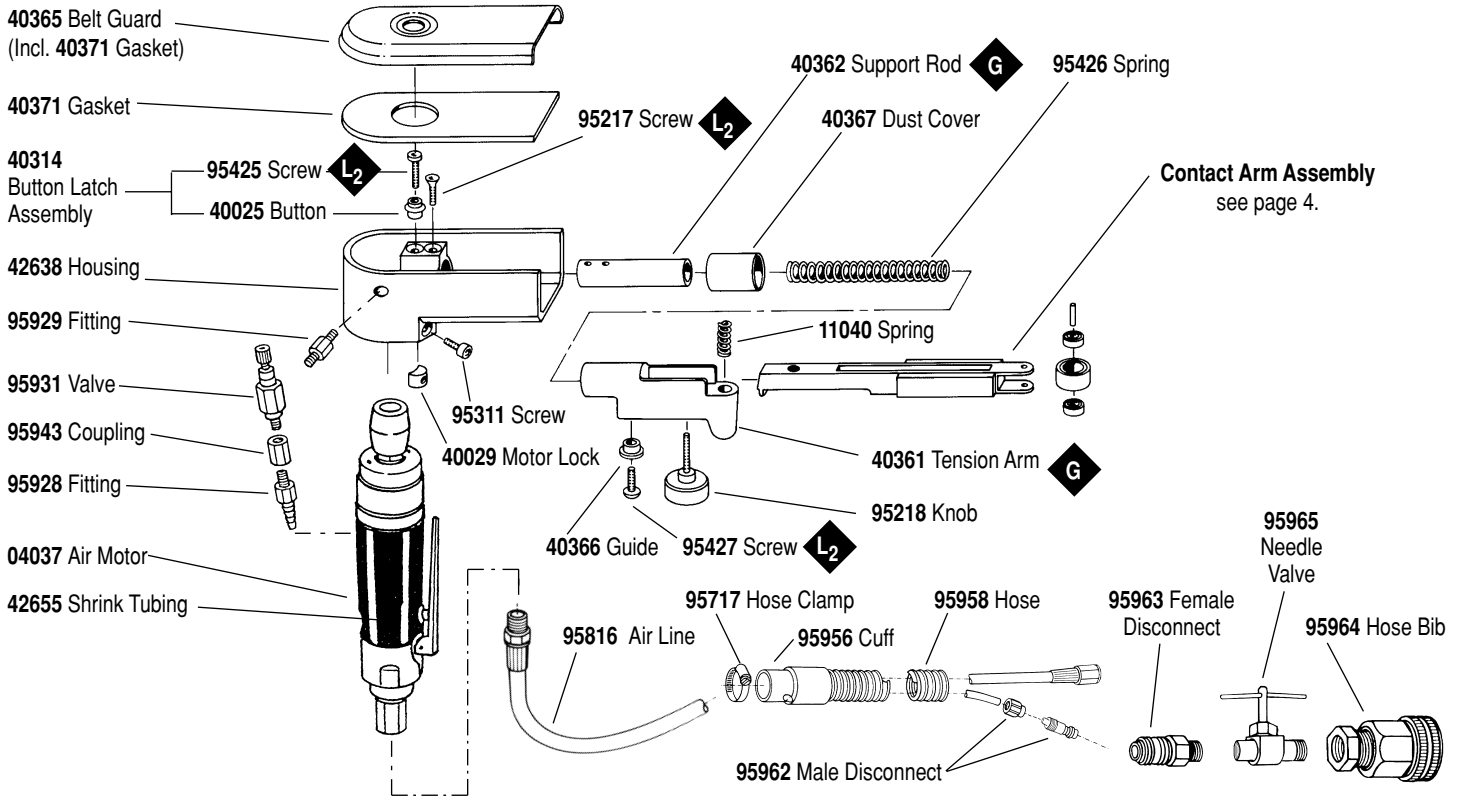
Models:
42630 – Standard Machine
42631 – Versatility Kit

KEY

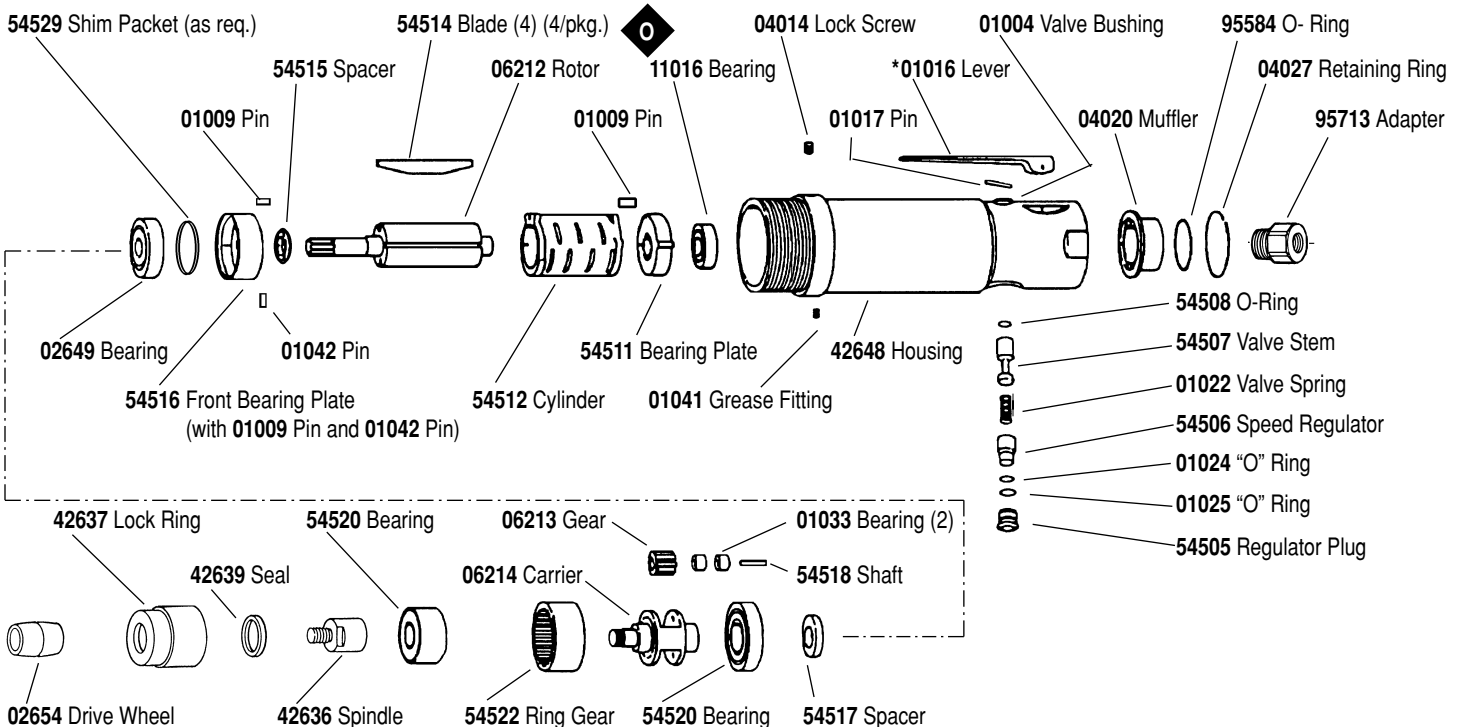
O Oil	G Grease
L Loctite/Hernon: L ₂ = Loctite #271	
T Torque: N•m x 8.85 = In. - lbs. T ₂ = 22.5 N•m, T ₃ = 28 N•m	

! WARNING

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.



04037 Air Motor



See inside for Important Operating, Maintenance and Safety Instructions.

Important Operating, Maintenance 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.

Important: All Dynabrade air tools must be used with a Filter-Regulator-Lubricator to maintain all warranties.

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. Install air fitting into inlet bushing of tool. **Important:** Secure inlet bushing of tool with a wrench before attempting to install the air fitting to avoid damaging valve body housing.
3. Connect power source to tool. Be careful not to depress throttle lever in the process.
4. Check tool speed with tachometer. If tool is operating at a higher speed than the RPM marked on the tool or operating improperly, the tool should be serviced to correct the cause before use.

Maintenance Instructions:

1. Check tool speed regularly with a tachometer. If tool is operating at a higher speed than the RPM marked on the tool, the tool should be serviced to correct the cause before use.
2. Some silencers on air tools may clog with use. Clean and replace as required.
3. All Dynabrade air motors should be lubricated. Dynabrade recommends one drop of air lube per minute for each 10 SCFM (example : if the tool specification state 40 SCFM, set the drip rate of your filter-lubricator at 4 drops per minute). Dynabrade Air Lube (P/N 95842: 1pt. 473ml.) is recommended.
4. An air line filter-regulator-lubricator must be used with this air tool to maintain all warranties. Dynabrade recommends the following: **11289** Air Line Filter-Regulator-Lubricator — Provides accurate air pressure regulation, two-stage filtration of water contaminants and micro-mist lubrication of pneumatic components. Operates 40 CFM @ 100 PSI has 3/8" NPT female ports.
5. Use only genuine Dynabrade replacement parts. To reorder replacement parts, specify the **Model #**, **Serial #**, and **RPM** of your machine.
6. A motor tune-up kit (P/N 95604) is available which includes assorted parts to help maintain motor in peak operating condition.
7. Mineral spirits are recommended when cleaning the tool and parts. Do not clean tool or parts with any solvents or oils containing acids, esters, ketones, chlorinated hydrocarbons or nitro carbons.

Safety Instructions:

Products offered by Dynabrade should not be converted or otherwise altered from original design without expressed written consent from Dynabrade, Inc.

- **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 one minute before application to workpiece to determine if machine is working properly and safely before work begins.
- Always disconnect power supply before changing abrasive/accessory or making machine adjustments.
- Inspect abrasives/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.

Notice

All Dynabrade motors use the highest quality parts and metals available and are machined to exacting tolerances. The failure of quality pneumatic motors can most often be traced to an unclean air supply or the lack of lubrication. Air pressure easily forces dirt or water contained in the air supply into motor bearings causing early failure. It often scores the cylinder walls and the rotor blades resulting in limited efficiency and power. Our warranty obligation is contingent upon proper use of our tools and cannot apply to equipment which has been subjected to misuse such as unclean air, wet air or a lack of lubrication during the use of this tool.

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.

Model Number	Length Inch (mm)	Height Inch (mm)	Machine Weight	Abrasive Belt Size Inch (mm)	Air Flow Rate SCFM (LPM)	Sound Level	Motor HP (W)	Motor RPM	Air Pressure PSI (Bars)
42630	14-1/4" (362)	4-7/8" (124)	2.5 lbs. (1.1)	1/4"-3/4" 6-19)W x 18"-24" (457-610)L	15 (425)	81 dBA	.27 (201)	5,000	1,450 (441)

Additional specifications: Air Inlet Thread 1/4" (6 mm) NPT • Hose Size 3/8" (9 mm) • Air Pressure 90 PSI (6.2 Bars)

Disassembly/Assembly Instructions - Wet Dynafire II

Important: Manufacturer's warranty is void if tool is disassembled before warranty expires.

A Motor Repair Kit (95604) is available which contains special tools for disassembly/assembly. Please refer to parts breakdown for part identification.

To Disassemble:

1. Remove Belt Guard, abrasive belt and contact arm assembly.
2. Loosen **01788** Screw and remove housing assembly from air motor.
3. Loosen **95427** Screw and remove **40366** Guide, this will release **40361** Tension Arm and **95426** Spring.
4. Remove **40367** Dust Cover. Remove **95217** Screw, **95425** Screw and **40362** Support Rod.

Motor Disassembly:

1. Secure tool in a soft jaw vise holding onto wrench flats on rear of motor housing. **Important:** Do not over tighten vise or housing could be damaged.
2. Remove drive wheel by inserting a 4 mm hex key through drive wheel and into the end of the rotor/drive shaft.
3. Using a wrench (14 mm) or pliers, twist the drive wheel counterclockwise and remove.
4. Secure lock ring with a wrench and twist from motor housing (**Note:** Left hand threads).
5. Remove **42636** Spindle from planetary gear assembly.
6. Pull planetary gear assembly from motor housing. Pull motor from housing (if motor does not pull out freely, lightly tap end of housing with a rubber mallet).
7. Clamp a bearing separator between the **54522** Ring Gear of the planetary carrier assembly and front **54520** Bearing (nearest to spindle end of assembly). Press bearing from carrier.
8. Remove ring gear and gears. Press rear **54520** Bearing from planetary carrier.
9. Press rotor from **02649** Bearing and front bearing plate. Remove spacer, cylinder and blades from rotor. Press **11016** Bearing from rear bearing plate.
10. Remove **54505** Plug from motor housing. Remove valve assembly.
11. Remove **95713** Inlet Adapter. Pry retaining ring from rear of housing and remove **04020** Muffler and **95584** O-Ring.

Motor disassembly complete.

Motor Reassembly:

Important: Be sure parts are clean and in good repair before reassembly. Follow all torque, grease and lubrication instructions.

1. Insert a .002" shim from **54529** Shim pack into front bearing plate.
2. Insert **02649** Bearing into front bearing plate.
3. Place **54515** Spacer onto pinion end of rotor. Make sure countersink faces rotor.
4. Press from bearing plate assembly onto rotor until tight against spacer.
5. Check clearance between rotor and bearing plate. Apply an outward (pulling) pressure on rotor. If rotor rubs bearing plate, reduce the spacing by removing shim or substitute with .001" shim.
6. Insert **54514** Blades (lubricate blades with Dynabrade Air Lube P/N **95842** or equivalent before installation).
7. Place cylinder over rotor. Be sure pin holes and air inlet holes align with holes in bearing plate.
8. Press **11016** Bearing into rear bearing plate and press assembly onto rotor. Be sure pin holes and air holes line up with holes in cylinder.
9. Insert motor assembly into housing. The pin in front bearing plate should enter guide slot in housing wall.
10. Install **54517** Spacer with unrelieved face towards front bearing plate.
11. Press **54520** Bearing onto front end of planetary carrier. Replace gears, gear shafts and ring gear (notches face rear of carrier).
12. Press **54520** Bearing onto carrier (there should be a slight drag between ring gear and bearings).
13. Install planetary assembly onto motor housing. Line-up notches in ring gear with hole in housing for lock screw.
14. Install **42637** Lock Ring onto motor housing.
15. Install O-rings and spring stem assembly and replace into motor housing.
16. Install **95584** O-Ring onto muffler and replace into housing. Replace snap ring and inlet adapter.
17. Install drive wheel.

Motor reassembly complete.

To Reassemble:

1. Place **40362** Support Rod into housing.
2. Apply one drop of #271 Loctite® (or equivalent) to **95217** Screw and tighten.
3. Install **40637** Dust Cover onto **40362** Support Rod. Lubricate (grease) inside of **40362** Support Rod and **40361** Tension Arm.
4. Install **95426** Spring into **40362** Support Rod and place **40361** Tension Arm over **95426** Spring.
5. Place **40366** Guide onto **95427** Screw, apply one drop of #271 Loctite® (or equivalent) to screw threads.
6. Compress tension arm and secure in place with **40366** Guide/**95427** Screw. Adjust **95427** Screw so that **40361** Tension Arm slides freely.
7. Press **40025** Button onto **95425** Screw and apply one drop of #271 Loctite® to threads.
8. Place **40365** Belt Guard over **40360** Housing, tighten **95425** with **40025** Button into **40360** Housing
9. With **40373** Motor lock in place, install air motor assembly into housing and secure in place with **95311** Screw.
10. Complete assembly by installing contact arm assembly, abrasive belt and **40365** Belt Guard.

Tool assembly is complete. Please allow 30 minutes for adhesives to cure before operating tool.

Important: Motor should now be tested for proper operation at 90 PSI. If motor does not operate properly or operates at a higher RPM than marked on the tool, the tool should be serviced to correct the cause before use. Before operating, place 2-3 drops of Dynabrade Air Lube (P/N **95842**) directly into air inlet with throttle lever depressed. Operate tool for 30 seconds to determine if tool is operating properly and to allow lubricating oils to properly penetrate motor. Loctite® is a registered trademark of Loctite Corp.

Abrasive Belt/Contact Arm Change Instructions:

To Change Belt:

1. Disconnect power source.
2. Remove "pop-off" cover.
3. Pull back on tension arm assembly.
4. Remove and replace abrasive belt and cover.
5. Connect power source.
6. Adjust belt tracking by turning **95218** Rough Adjustment Knob to the left or right accordingly while machine is running.

To Change Contact Arm Assembly:

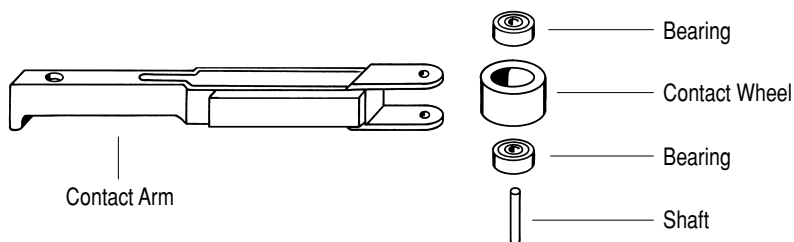
1. Disconnect power source.
2. Remove "pop-off" cover.
3. Pull back on tension arm assembly and remove abrasive belt.
4. Remove **95218** Rough Adjustment Knob.
5. Remove contact arm and replace with desired arm, making sure that the tab on the end of the arm is facing downward.
6. Replace **95218** Knob.
7. Install abrasive belt and cover.
8. Connect power source and adjust belt tracking by turning **95218** Knob to the left or right accordingly while machine is running.

Housing Angle Adjustment:

To pivot housing, loosen **95311** Screw on housing with the supplied 9/64" hex wrench (P/N – **95134**). Pivot housing to desired angle and retighten **95311** Screw.

Wet Dynafile® II Contact Arm Assemblies

Contact Wheel Assembly – Includes wheel, bearing and shaft.



Specialized Contact Arms						
Arm Number	Description	Wheel Assy.	Wheel Description	Wheel Number	Belt Size	Shaft Number
42642	3/4" Wide Platen	42652	3/4" Dia. x 5/8" W rubber	11281	3/4" x 18" / 5/8" x 18"	11285
42644	1/2" Wide Platen	42653	3/4" Dia. x 5/8" W rubber	11077	3/4" x 18" / 5/8" x 18"	11054
42646	No Platen - Offset design	42654	1" Dia. x 3/8" W radiused rubber	11079	1/2" x 18" / 1/4" x 18"	11054
42650	1/2" Wide Platen	42653	3/4" Dia. x 5/8" W rubber	11077	1/2" x 18"	11054

Optional Accessories



95604 Motor Tune-Up Kit:

- Includes assorted parts to help maintain motor in tip-top shape.

Visit our new Web Site via Industry.Net MROP On-Line: <http://www.dynabrade.com>

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