



Disassembly/Assembly Instructions

Disassembly Instructions - 0.5 hp. Dynaflex II

Models: 40320, 40321, 40324, 40326, 40330, 40335

Important: Use these instructions along with the tool parts page or manual.

Notice: Shut off the air supply and depress throttle lever to deplete remaining air.

• Carefully disconnect the tool from the air supply hose. • Remove the abrasive belt and contact arm assembly. • Use the Special Repair Tools designed for the disassembly and assembly of this motor.

Motor Disassembly:



1. Use a 9/64" hex key to loosen the 95311 Screw. Remove the motor from the belt housing.

Visit Our Website: www.dynabrade.com

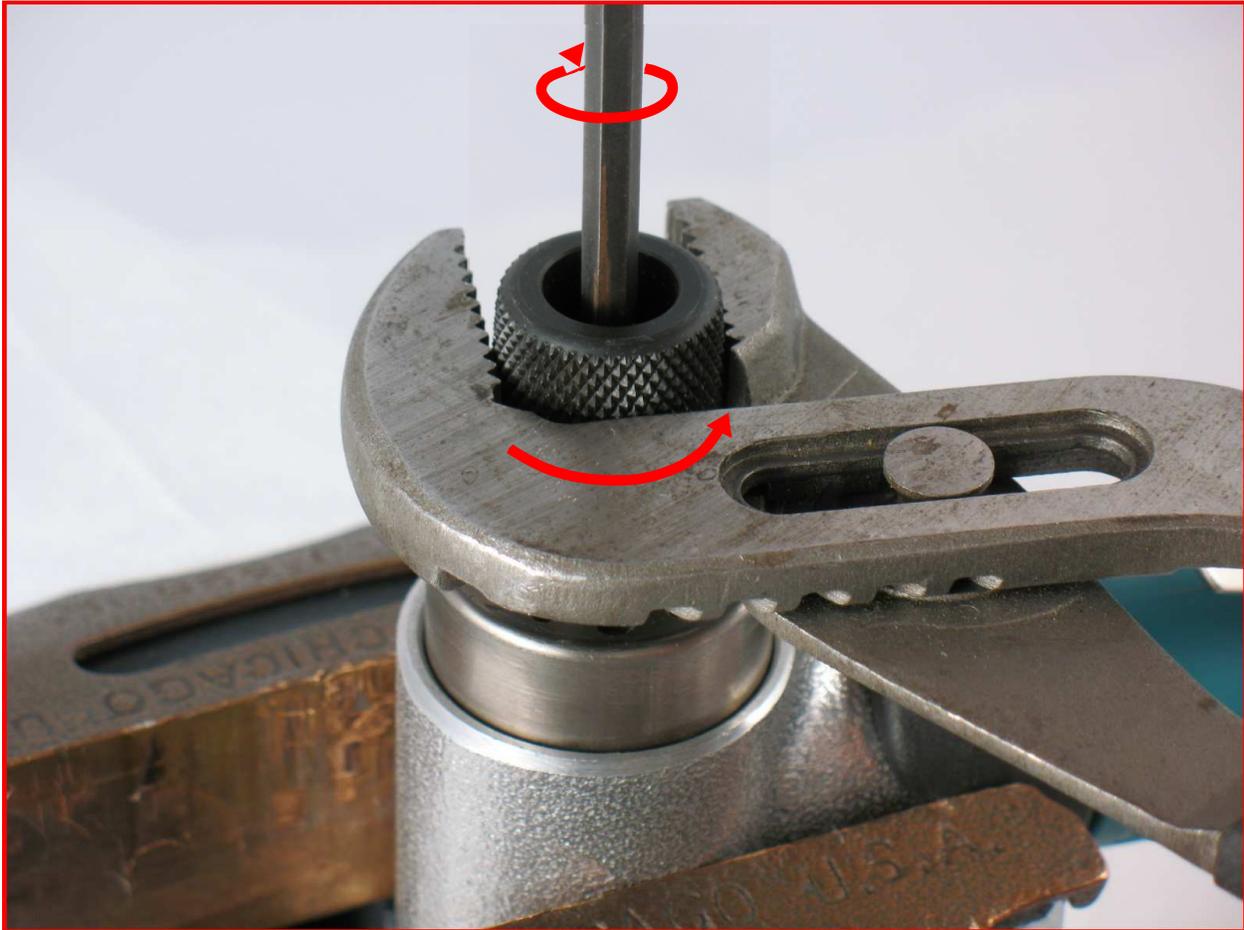
Email: customer.service@dynabrade.com

DYNABRADE, INC. • DYNABRADE INTERNATIONAL
8989 Sheridan Drive, Clarence, New York 14031-1490 USA
Telephone: (716) 631-0100 • Fax: 716-631-2073 • Int'l Fax: 716-631-2524

DYNABRADE DO BRASIL
Rua Oneda, 632, Sao Bernardo do Campo • SP – CEP 09895-280
Telephone: 55-11-4390-0133 • Fax: 55-11-4399-1067

DYNABRADE EUROPE S.à.r.l.
Zone Artisanale, L-5485 Wormeldange—Haut, Luxembourg
Telephone: +352 768 494 1 • Fax: +352 768 495

DYNABRADE INDIA ABRASIVE POWER TOOLS Pvt Ltd.
EL-54, TTC Industrial Area, M.I.D.C. Mahape, Electronic Zone, Navi Mumbai - 400705
Maharashtra, India • Telephone: +91 22 2763 2226 • Fax: +91 22 2763 2228



2. Carefully hold the **01447** Housing in a vise with aluminum or bronze jaws so that the drive wheel is pointing up. **Notice: Over tightening vise will damage housing.**
 - Insert a 3/16" hex key through drive wheel and into the end of the **01120** Rotor.
 - Use groove pliers to grasp the drive wheel and remove. Turn counterclockwise.

Visit Our Website: www.dynabrade.com

Email: customer.service@dynabrade.com

DYNABRADE, INC. • DYNABRADE INTERNATIONAL
8989 Sheridan Drive, Clarence, New York 14031-1490 USA
Telephone: (716) 631-0100 • Fax: 716-631-2073 • Int'l Fax: 716-631-2524

DYNABRADE DO BRASIL
Rua Oneda, 632, Sao Bernardo do Campo • SP – CEP 09895-280
Telephone: 55-11-4390-0133 • Fax: 55-11-4399-1067

DYNABRADE EUROPE S.à.r.l.
Zone Artisanale, L-5485 Wormeldange—Haut, Luxembourg
Telephone: +352 768 494 1 • Fax: +352 768 495

DYNABRADE INDIA ABRASIVE POWER TOOLS Pvt Ltd.
EL-54, TTC Industrial Area, M.I.D.C. Mahape, Electronic Zone, Navi Mumbai - 400705
Maharashtra, India • Telephone: +91 22 2763 2226 • Fax: +91 22 2763 2228



3. Use the **50971** Lock Ring Wrench to remove the motor lock ring. Turn counterclockwise.
 - Remove the exhaust control spacer.

Visit Our Website: www.dynabrade.com

Email: customer.service@dynabrade.com

DYNABRADE, INC. • DYNABRADE INTERNATIONAL

8989 Sheridan Drive, Clarence, New York 14031-1490 USA
Telephone: (716) 631-0100 • Fax: 716-631-2073 • Int'l Fax: 716-631-2524

DYNABRADE DO BRASIL

Rua Oneda, 632, Sao Bernardo do Campo • SP – CEP 09895-280
Telephone: 55-11-4390-0133 • Fax: 55-11-4399-1067

DYNABRADE EUROPE S.à.r.l.

Zone Artisanale, L-5485 Wormeldange—Haut, Luxembourg
Telephone: +352 768 494 1 • Fax: +352 768 495

DYNABRADE INDIA ABRASIVE POWER TOOLS Pvt Ltd.

EL-54, TTC Industrial Area, M.I.D.C. Mahape, Electronic Zone, Navi Mumbai - 400705
Maharashtra, India • Telephone: +91 22 2763 2226 • Fax: +91 22 2763 2228



- Pull the motor out of the housing.

Visit Our Website: www.dynabrade.com

Email: customer.service@dynabrade.com

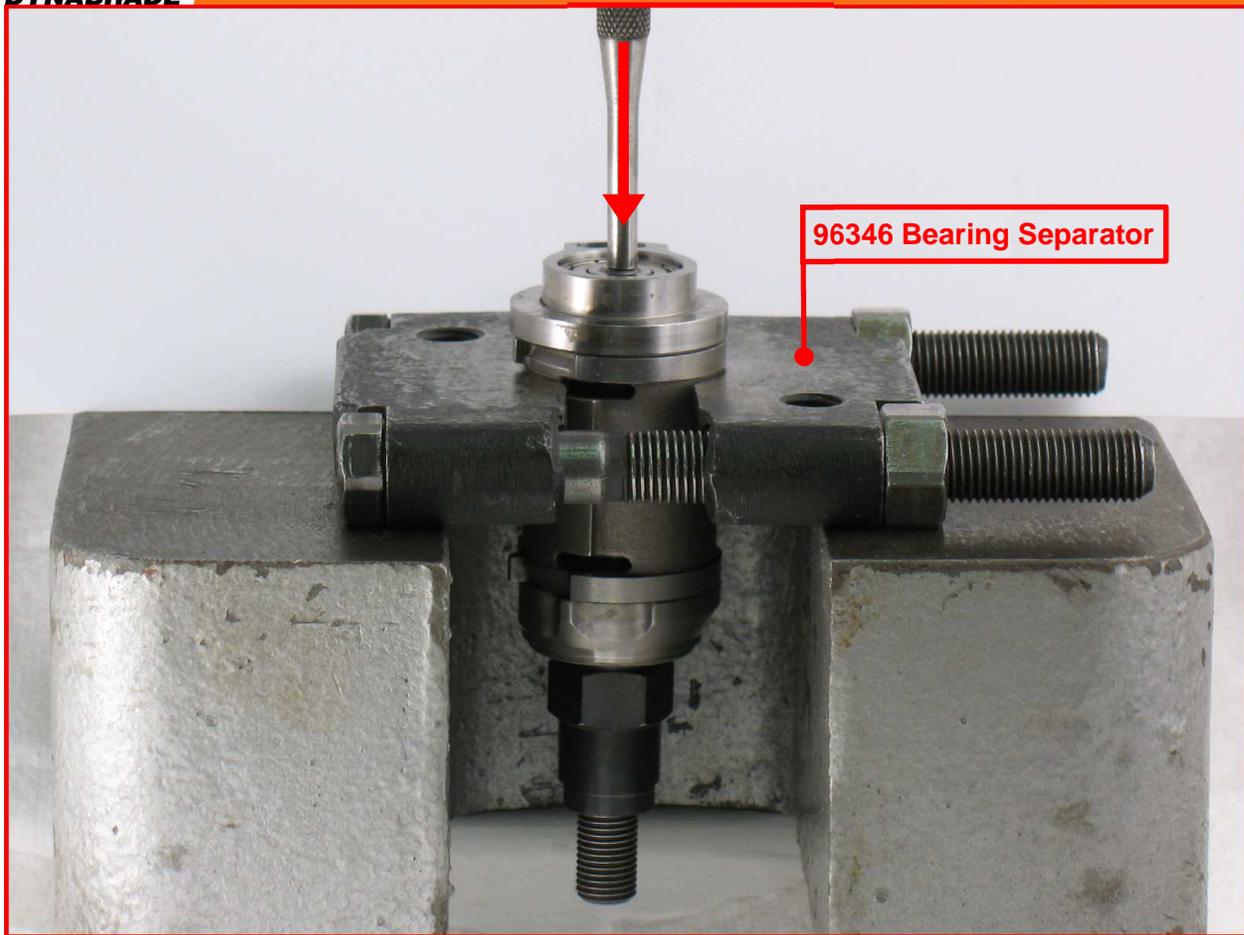
DYNABRADE, INC. • DYNABRADE INTERNATIONAL
8989 Sheridan Drive, Clarence, New York 14031-1490 USA
Telephone: (716) 631-0100 • Fax: 716-631-2073 • Int'l Fax: 716-631-2524

DYNABRADE DO BRASIL
Rua Oneda, 632, Sao Bernardo do Campo • SP – CEP 09895-280
Telephone: 55-11-4390-0133 • Fax: 55-11-4399-1067

DYNABRADE EUROPE S.à.r.l.
Zone Artisanale, L-5485 Wormeldange—Haut, Luxembourg
Telephone: +352 768 494 1 • Fax: +352 768 495

DYNABRADE INDIA ABRASIVE POWER TOOLS Pvt Ltd.
EL-54, TTC Industrial Area, M.I.D.C. Mahape, Electronic Zone, Navi Mumbai - 400705
Maharashtra, India • Telephone: +91 22 2763 2226 • Fax: +91 22 2763 2228

Disassembly/Assembly Instructions



4. Fasten the **96346** Bearing Separator (2") around the **01013** Cylinder. Place the separator and the motor in the **96232** Arbor Press (#2) so that the rotor spindle is pointing down.
 - Use a 3/16" or 5 mm diameter flat end drive punch to push the rotor out of the **01015** Bearing.

Visit Our Website: www.dynabrade.com

Email: customer.service@dynabrade.com

DYNABRADE, INC. • DYNABRADE INTERNATIONAL
8989 Sheridan Drive, Clarence, New York 14031-1490 USA
Telephone: (716) 631-0100 • Fax: 716-631-2073 • Int'l Fax: 716-631-2524

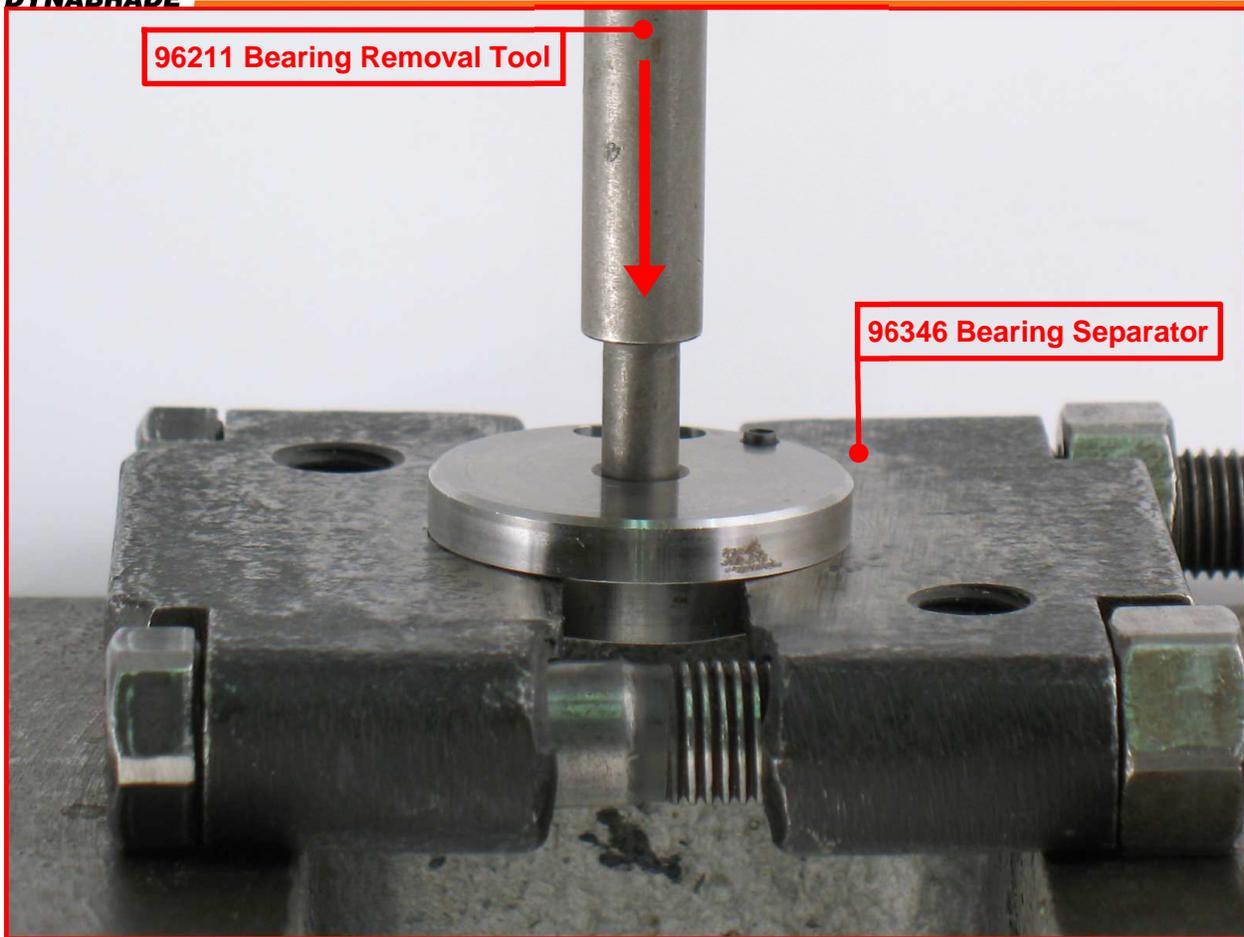
DYNABRADE DO BRASIL
Rua Oneda, 632, Sao Bernardo do Campo • SP – CEP 09895-280
Telephone: 55-11-4390-0133 • Fax: 55-11-4399-1067

DYNABRADE EUROPE S.à.r.l.
Zone Artisanale, L-5485 Wormeldange—Haut, Luxembourg
Telephone: +352 768 494 1 • Fax: +352 768 495

DYNABRADE INDIA ABRASIVE POWER TOOLS Pvt Ltd.
EL-54, TTC Industrial Area, M.I.D.C. Mahape, Electronic Zone, Navi Mumbai - 400705
Maharashtra, India • Telephone: +91 22 2763 2226 • Fax: +91 22 2763 2228



Disassembly/Assembly Instructions



5. Use the **96211** Bearing Removal Tool and the arbor press to remove the **01015** Bearing from the rear bearing plate.

Visit Our Website: www.dynabrade.com

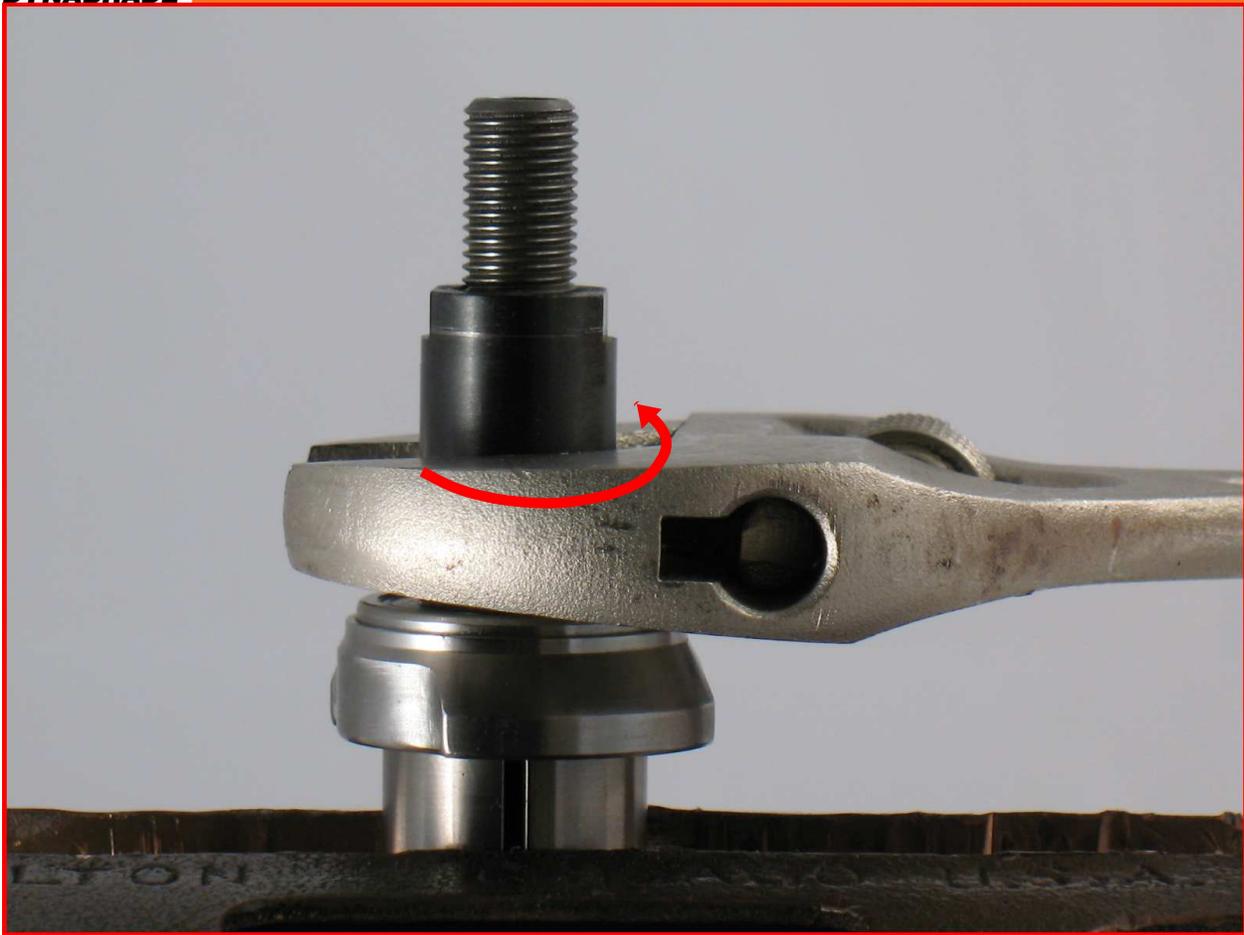
Email: customer.service@dynabrade.com

DYNABRADE, INC. • DYNABRADE INTERNATIONAL
8989 Sheridan Drive, Clarence, New York 14031-1490 USA
Telephone: (716) 631-0100 • Fax: 716-631-2073 • Int'l Fax: 716-631-2524

DYNABRADE DO BRASIL
Rua Oneda, 632, Sao Bernardo do Campo • SP – CEP 09895-280
Telephone: 55-11-4390-0133 • Fax: 55-11-4399-1067

DYNABRADE EUROPE S.à.r.l.
Zone Artisanale, L-5485 Wormeldange—Haut, Luxembourg
Telephone: +352 768 494 1 • Fax: +352 768 495

DYNABRADE INDIA ABRASIVE POWER TOOLS Pvt Ltd.
EL-54, TTC Industrial Area, M.I.D.C. Mahape, Electronic Zone, Navi Mumbai - 400705
Maharashtra, India • Telephone: +91 22 2763 2226 • Fax: +91 22 2763 2228



6. Fasten the **01120** Rotor in the vise with aluminum or bronze jaws and use an adjustable wrench to remove the **04081** Rotor Nut. Turn counterclockwise.
 - Remove the **01007** Bearing, **01008** Bearing Plate, shims, and **01010** Spacer.**Motor Disassembly Completed.**

Clean and inspect parts before assembling.

Visit Our Website: www.dynabrade.com

Email: customer.service@dynabrade.com

DYNABRADE, INC. • DYNABRADE INTERNATIONAL
8989 Sheridan Drive, Clarence, New York 14031-1490 USA
Telephone: (716) 631-0100 • Fax: 716-631-2073 • Int'l Fax: 716-631-2524

DYNABRADE EUROPE S.à.r.l.
Zone Artisanale, L-5485 Wormeldange—Haut, Luxembourg
Telephone: +352 768 494 1 • Fax: +352 768 495

DYNABRADE DO BRASIL
Rua Oneda, 632, Sao Bernardo do Campo • SP – CEP 09895-280
Telephone: 55-11-4390-0133 • Fax: 55-11-4399-1067

DYNABRADE INDIA ABRASIVE POWER TOOLS Pvt Ltd.
EL-54, TTC Industrial Area, M.I.D.C. Mahape, Electronic Zone, Navi Mumbai - 400705
Maharashtra, India • Telephone: +91 22 2763 2226 • Fax: +91 22 2763 2228

Assembly Instructions - 0.5 hp. Dynaflex II



Motor Assembly:

1. Install the **01010** Spacer onto the rotor.
 - Install .003" (~0.80 mm) shim thickness into the **01008** Front Bearing Plate.
 - Install the **01007** Bearing into the front bearing plate.
 - Install the bearing and plate onto the rotor.

Visit Our Website: www.dynabrade.com

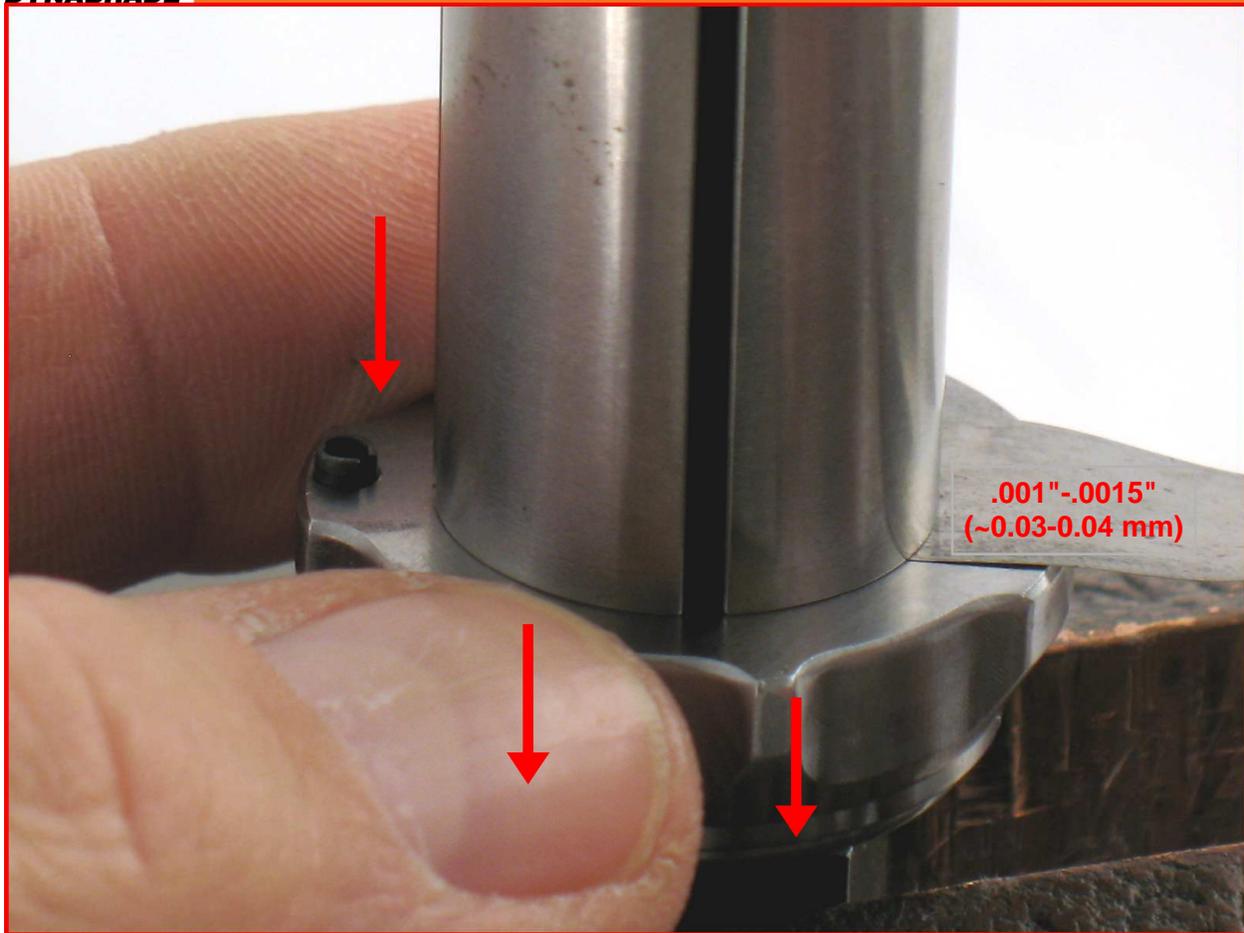
Email: customer.service@dynabrade.com

DYNABRADE, INC. • DYNABRADE INTERNATIONAL
8989 Sheridan Drive, Clarence, New York 14031-1490 USA
Telephone: (716) 631-0100 • Fax: 716-631-2073 • Int'l Fax: 716-631-2524

DYNABRADE DO BRASIL
Rua Oneda, 632, Sao Bernardo do Campo • SP – CEP 09895-280
Telephone: 55-11-4390-0133 • Fax: 55-11-4399-1067

DYNABRADE EUROPE S.à.r.l.
Zone Artisanale, L-5485 Wormeldange—Haut, Luxembourg
Telephone: +352 768 494 1 • Fax: +352 768 495

DYNABRADE INDIA ABRASIVE POWER TOOLS Pvt Ltd.
EL-54, TTC Industrial Area, M.I.D.C. Mahape, Electronic Zone, Navi Mumbai - 400705
Maharashtra, India • Telephone: +91 22 2763 2226 • Fax: +91 22 2763 2228



2. By hand, install the **04081** Rotor Nut. Pull the front bearing plate forward to take movement out of the bearing. Check the clearance between the rotor and plate.
 - Use a .001" (~0.03 mm) thick feeler gauge. **Notice:** The clearance should be .001"-.0015" (~0.03-0.04 mm). If the rotor/plate clearance needs adjustment, repeat steps 1 and 2. Remove or add shims as required.



Disassembly/Assembly Instructions



3. Use a 17 mm socket or crowfoot, and a torque wrench to tighten the **04081** Rotor Nut. (T to 17 N•m/~150 in. lbs.)

Visit Our Website: www.dynabrade.com

Email: customer.service@dynabrade.com

DYNABRADE, INC. • DYNABRADE INTERNATIONAL
8989 Sheridan Drive, Clarence, New York 14031-1490 USA
Telephone: (716) 631-0100 • Fax: 716-631-2073 • Int'l Fax: 716-631-2524

DYNABRADE DO BRASIL
Rua Oneda, 632, Sao Bernardo do Campo • SP – CEP 09895-280
Telephone: 55-11-4390-0133 • Fax: 55-11-4399-1067

DYNABRADE EUROPE S.à.r.l.
Zone Artisanale, L-5485 Wormeldange—Haut, Luxembourg
Telephone: +352 768 494 1 • Fax: +352 768 495

DYNABRADE INDIA ABRASIVE POWER TOOLS Pvt Ltd.
EL-54, TTC Industrial Area, M.I.D.C. Mahape, Electronic Zone, Navi Mumbai - 400705
Maharashtra, India • Telephone: +91 22 2763 2226 • Fax: +91 22 2763 2228



4. Apply the **95842** Dynabrade Air Lube, 10W/NR or equivalent to the **01011** Vanes and install them into the rotor.

Visit Our Website: www.dynabrade.com

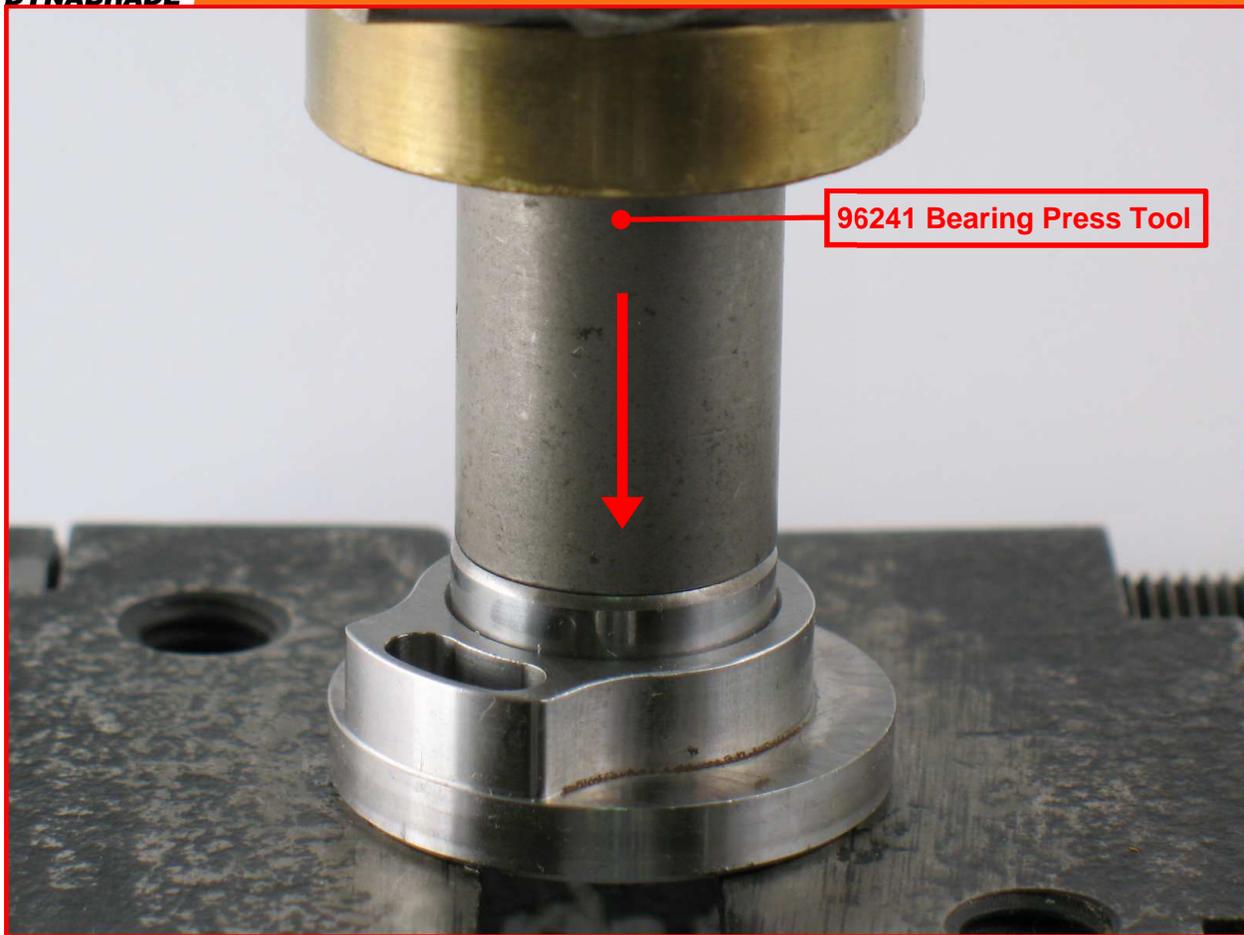
Email: customer.service@dynabrade.com

DYNABRADE, INC. • DYNABRADE INTERNATIONAL
8989 Sheridan Drive, Clarence, New York 14031-1490 USA
Telephone: (716) 631-0100 • Fax: 716-631-2073 • Int'l Fax: 716-631-2524

DYNABRADE DO BRASIL
Rua Oneda, 632, Sao Bernardo do Campo • SP – CEP 09895-280
Telephone: 55-11-4390-0133 • Fax: 55-11-4399-1067

DYNABRADE EUROPE S.à.r.l.
Zone Artisanale, L-5485 Wormeldange—Haut, Luxembourg
Telephone: +352 768 494 1 • Fax: +352 768 495

DYNABRADE INDIA ABRASIVE POWER TOOLS Pvt Ltd.
EL-54, TTC Industrial Area, M.I.D.C. Mahape, Electronic Zone, Navi Mumbai - 400705
Maharashtra, India • Telephone: +91 22 2763 2226 • Fax: +91 22 2763 2228



5. Use the **RAISED OUTSIDE DIAMETER** of the **96241** Bearing Press Tool and the arbor press to install the **01015** Bearing. **Notice:** Press the bearing all the way into the plate.

Visit Our Website: www.dynabrade.com

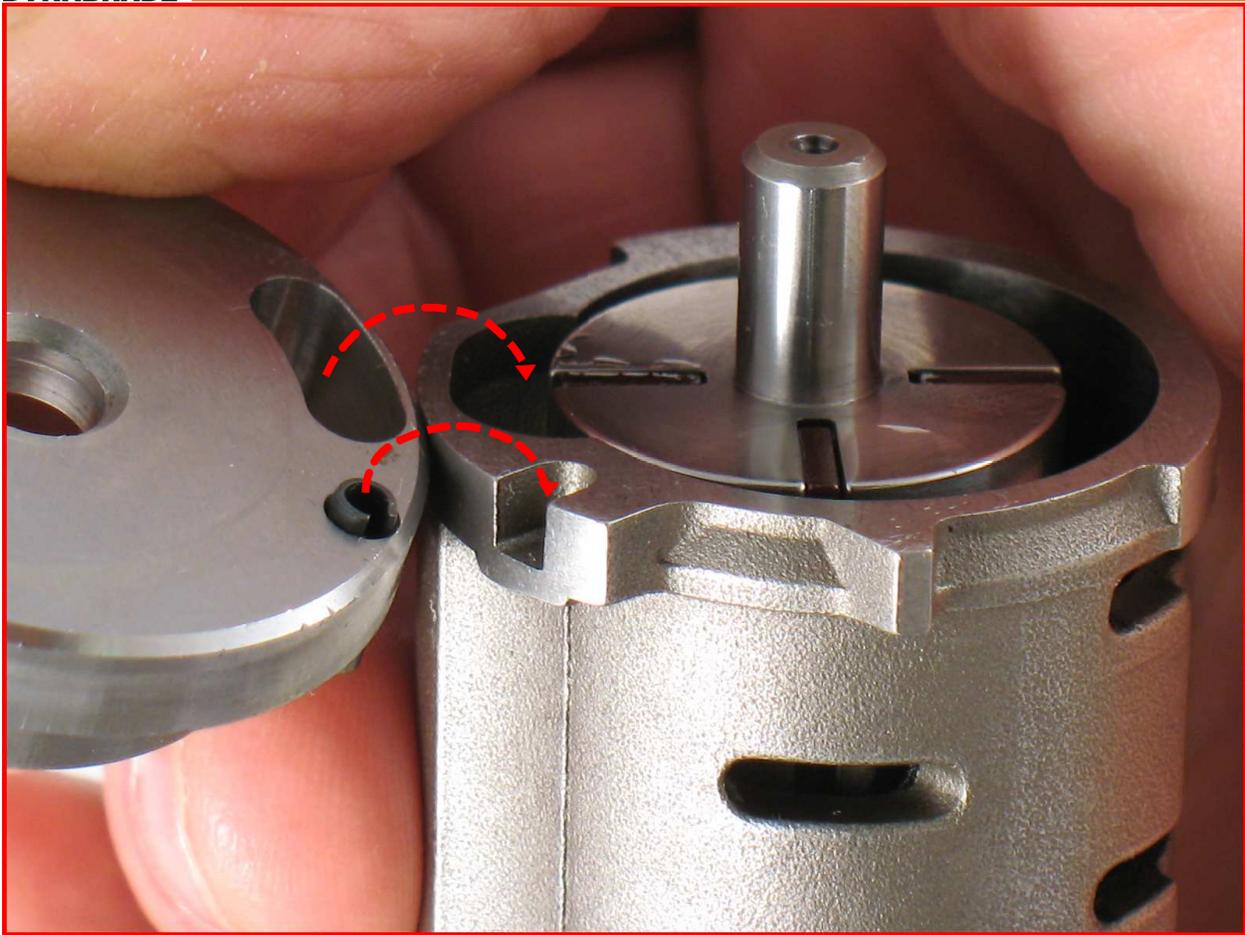
Email: customer.service@dynabrade.com

DYNABRADE, INC. • DYNABRADE INTERNATIONAL
8989 Sheridan Drive, Clarence, New York 14031-1490 USA
Telephone: (716) 631-0100 • Fax: 716-631-2073 • Int'l Fax: 716-631-2524

DYNABRADE DO BRASIL
Rua Oneda, 632, Sao Bernardo do Campo • SP – CEP 09895-280
Telephone: 55-11-4390-0133 • Fax: 55-11-4399-1067

DYNABRADE EUROPE S.à.r.l.
Zone Artisanale, L-5485 Wormeldange—Haut, Luxembourg
Telephone: +352 768 494 1 • Fax: +352 768 495

DYNABRADE INDIA ABRASIVE POWER TOOLS Pvt Ltd.
EL-54, TTC Industrial Area, M.I.D.C. Mahape, Electronic Zone, Navi Mumbai - 400705
Maharashtra, India • Telephone: +91 22 2763 2226 • Fax: +91 22 2763 2228



6. Install the cylinder and rear bearing plate so that the air inlet openings line-up with each other.

Visit Our Website: www.dynabrade.com

Email: customer.service@dynabrade.com

DYNABRADE, INC. • DYNABRADE INTERNATIONAL
8989 Sheridan Drive, Clarence, New York 14031-1490 USA
Telephone: (716) 631-0100 • Fax: 716-631-2073 • Int'l Fax: 716-631-2524

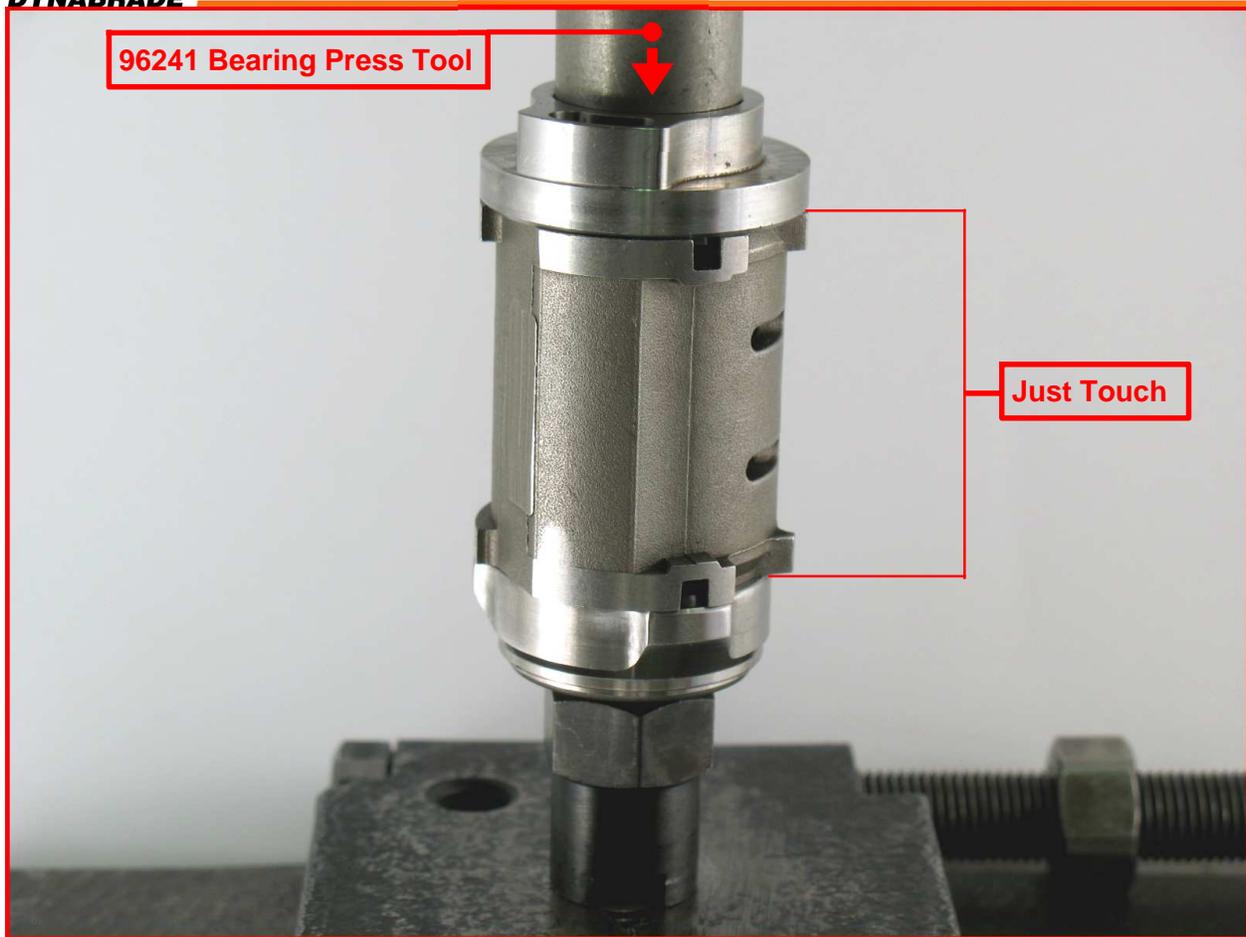
DYNABRADE DO BRASIL
Rua Oneda, 632, Sao Bernardo do Campo • SP – CEP 09895-280
Telephone: 55-11-4390-0133 • Fax: 55-11-4399-1067

DYNABRADE EUROPE S.à.r.l.
Zone Artisanale, L-5485 Wormeldange—Haut, Luxembourg
Telephone: +352 768 494 1 • Fax: +352 768 495

DYNABRADE INDIA ABRASIVE POWER TOOLS Pvt Ltd.
EL-54, TTC Industrial Area, M.I.D.C. Mahape, Electronic Zone, Navi Mumbai - 400705
Maharashtra, India • Telephone: +91 22 2763 2226 • Fax: +91 22 2763 2228



Disassembly/Assembly Instructions



7. Use the **RAISED INSIDE DIAMETER** of the **96241** Bearing Press Tool and the arbor press to install the bearing and plate.

Important: Press the bearing and plate down until the rear bearing plate just touches the 01013 Cylinder. Doing so, will produce a close fit between the bearing plates and the cylinder.

Visit Our Website: www.dynabrade.com

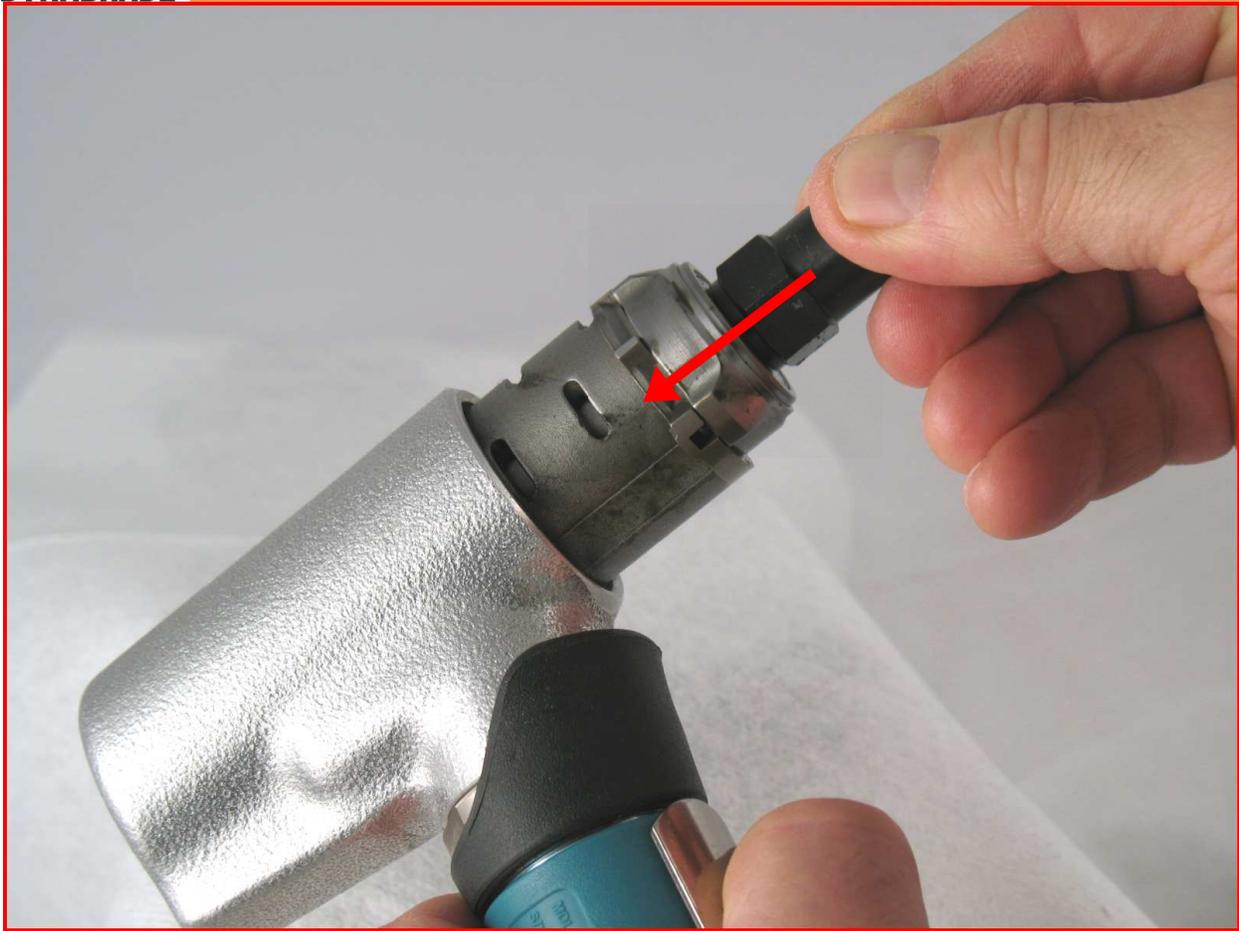
Email: customer.service@dynabrade.com

DYNABRADE, INC. • DYNABRADE INTERNATIONAL
8989 Sheridan Drive, Clarence, New York 14031-1490 USA
Telephone: (716) 631-0100 • Fax: 716-631-2073 • Int'l Fax: 716-631-2524

DYNABRADE DO BRASIL
Rua Oneda, 632, Sao Bernardo do Campo • SP – CEP 09895-280
Telephone: 55-11-4390-0133 • Fax: 55-11-4399-1067

DYNABRADE EUROPE S.à.r.l.
Zone Artisanale, L-5485 Wormeldange—Haut, Luxembourg
Telephone: +352 768 494 1 • Fax: +352 768 495

DYNABRADE INDIA ABRASIVE POWER TOOLS Pvt Ltd.
EL-54, TTC Industrial Area, M.I.D.C. Mahape, Electronic Zone, Navi Mumbai - 400705
Maharashtra, India • Telephone: +91 22 2763 2226 • Fax: +91 22 2763 2228



8. Install the motor assembly.

Visit Our Website: www.dynabrade.com

Email: customer.service@dynabrade.com

DYNABRADE, INC. • DYNABRADE INTERNATIONAL
8989 Sheridan Drive, Clarence, New York 14031-1490 USA
Telephone: (716) 631-0100 • Fax: 716-631-2073 • Int'l Fax: 716-631-2524

DYNABRADE DO BRASIL
Rua Oneda, 632, Sao Bernardo do Campo • SP – CEP 09895-280
Telephone: 55-11-4390-0133 • Fax: 55-11-4399-1067

DYNABRADE EUROPE S.à.r.l.
Zone Artisanale, L-5485 Wormeldange—Haut, Luxembourg
Telephone: +352 768 494 1 • Fax: +352 768 495

DYNABRADE INDIA ABRASIVE POWER TOOLS Pvt Ltd.
EL-54, TTC Industrial Area, M.I.D.C. Mahape, Electronic Zone, Navi Mumbai - 400705
Maharashtra, India • Telephone: +91 22 2763 2226 • Fax: +91 22 2763 2228



Disassembly/Assembly Instructions



9. Carefully fasten the **01447** Housing in a vise with aluminum or bronze jaws so that the rotor spindle is pointing up. **Notice: Over tightening vise will damage housing.**
 - As needed, install fabric silencer around the exhaust control spacer and o-rings around the lock ring.
 - Apply Loctite #7649 Primer to the thread of the lock ring.
 - Apply a small amount of Loctite #567 or equivalent to the lock ring.
 - Use the **50971** Lock Ring Tool and a torque wrench to install the lock ring.
 - T to 34 N·m/~300 in. lbs.

Visit Our Website: www.dynabrade.com

Email: customer.service@dynabrade.com

DYNABRADE, INC. • DYNABRADE INTERNATIONAL
8989 Sheridan Drive, Clarence, New York 14031-1490 USA
Telephone: (716) 631-0100 • Fax: 716-631-2073 • Int'l Fax: 716-631-2524

DYNABRADE DO BRASIL
Rua Oneda, 632, Sao Bernardo do Campo • SP – CEP 09895-280
Telephone: 55-11-4390-0133 • Fax: 55-11-4399-1067

DYNABRADE EUROPE S.à.r.l.
Zone Artisanale, L-5485 Wormeldange—Haut, Luxembourg
Telephone: +352 768 494 1 • Fax: +352 768 495

DYNABRADE INDIA ABRASIVE POWER TOOLS Pvt Ltd.
EL-54, TTC Industrial Area, M.I.D.C. Mahape, Electronic Zone, Navi Mumbai - 400705
Maharashtra, India • Telephone: +91 22 2763 2226 • Fax: +91 22 2763 2228

Disassembly/Assembly Instructions



10. Insert a 3/16" hex key through the drive wheel and into the end of the **01120** Rotor to hold it stationary.
 - Use groove pliers to tighten the drive wheel.

IMPORTANT: Use a tachometer to check motor speed and to verify proper operation.

Visit Our Website: www.dynabrade.com

Email: customer.service@dynabrade.com

DYNABRADE, INC. • DYNABRADE INTERNATIONAL
8989 Sheridan Drive, Clarence, New York 14031-1490 USA
Telephone: (716) 631-0100 • Fax: 716-631-2073 • Int'l Fax: 716-631-2524

DYNABRADE DO BRASIL
Rua Oneda, 632, Sao Bernardo do Campo • SP – CEP 09895-280
Telephone: 55-11-4390-0133 • Fax: 55-11-4399-1067

DYNABRADE EUROPE S.à.r.l.
Zone Artisanale, L-5485 Wormeldange—Haut, Luxembourg
Telephone: +352 768 494 1 • Fax: +352 768 495

DYNABRADE INDIA ABRASIVE POWER TOOLS Pvt Ltd.
EL-54, TTC Industrial Area, M.I.D.C. Mahape, Electronic Zone, Navi Mumbai - 400705
Maharashtra, India • Telephone: +91 22 2763 2226 • Fax: +91 22 2763 2228



Disassembly/Assembly Instructions



11. Install the air motor into the housing.

- Use a 9/64" hex key to fasten the motor with the **95311** Screw and **40029** Cam Lock.

Motor Assembly Completed.

Notice: For belt housing, contact arm and valve assemblies, refer to the exploded view and the additional instructions contained in the tool parts page or manual.

Visit Our Website: www.dynabrade.com

Email: customer.service@dynabrade.com

DYNABRADE, INC. • DYNABRADE INTERNATIONAL
8989 Sheridan Drive, Clarence, New York 14031-1490 USA
Telephone: (716) 631-0100 • Fax: 716-631-2073 • Int'l Fax: 716-631-2524

DYNABRADE DO BRASIL
Rua Oneda, 632, Sao Bernardo do Campo • SP – CEP 09895-280
Telephone: 55-11-4390-0133 • Fax: 55-11-4399-1067

DYNABRADE EUROPE S.à.r.l.
Zone Artisanale, L-5485 Wormeldange—Haut, Luxembourg
Telephone: +352 768 494 1 • Fax: +352 768 495

DYNABRADE INDIA ABRASIVE POWER TOOLS Pvt Ltd.
EL-54, TTC Industrial Area, M.I.D.C. Mahape, Electronic Zone, Navi Mumbai - 400705
Maharashtra, India • Telephone: +91 22 2763 2226 • Fax: +91 22 2763 2228