

Disassembly Instructions – 35, 50, 60 (K) Hand-Held Pencil Grinders

1. Insert **Shaft Lock Pin 51694** through the housing and drive shaft. Secure housing in **Vise (Bronze or Aluminum Jaws)**. Use **HEAT GUN** to warm cover / housing and soften Loctite.



2. Use **Adjustable Pin Spanner Wrench** to remove cover & hose assembly.



Visit Our Website: www.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

1

Email: customer.service@dynabrade.com

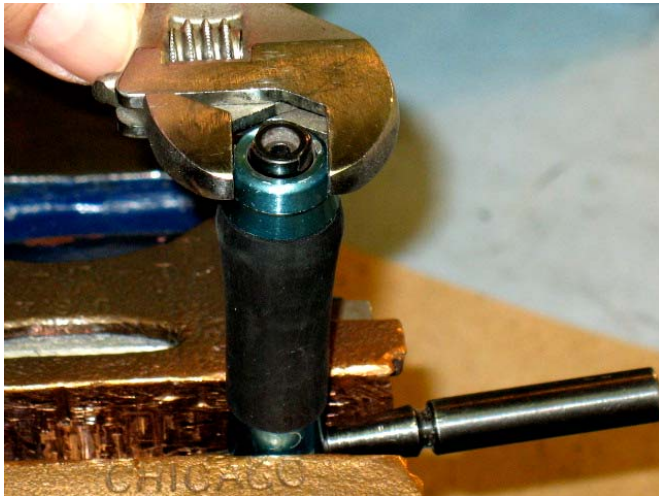
DYNABRADE EUROPE S.à.r.l.
Zone Artisanale, L-5485 Wormeldange—Haut, Luxembourg
Telephone: +352 768 494 1 • Fax: +352 768 495

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. Flip Pencil Grinder in **Vise**. Use **HEAT GUN** to warm collet guard and soften Loctite.



4. Use **Adjustable Wrench** to remove collet guard.



Visit Our Website: www.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

2

Email: customer.service@dynabrade.com

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 **8 MM Wrench 95731** to remove collet cap.



6. Use **Collet Insert Removal Tool 96486** to remove insert.



7. Use **Extension Retainer Wrench 96479** to remove bearing retainer.



8. Remove Pencil Grinder from **Vise** & use **Soft Hammer** to remove drive shaft assembly from housing.

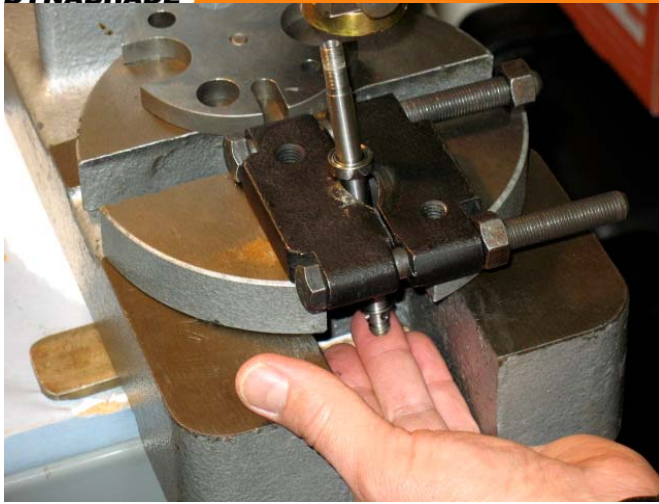


9. Use **Shaft Lock Pin 51694** & **Vise (Bronze or Aluminum Jaws)** to hold drive shaft assembly. Use **Top Plate Wrench 96408** or **Adjustable Wrench** to remove top plate.



10. Remove turbine motor assembly.

11. Use **Separator 96346** & **Arbor Press 96232** to remove rear bearing.



12. Drop **Shaft Lock Pin 51694 (PIN-END-FIRST)** through housing to remove front bearing.



13. Use **Air Bushing Tool 94999** or **Wood Screw** to remove air bushing.

Visit Our Website: www.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 Completed.

Clean & Inspect Parts: (Loctite Adhesive Highlighted in BLUE) (Torque Specs. Highlighted in GREEN)

Assembly Instructions – 35, 50, 60 (K) Hand-Held Pencil Grinders

1. Clean the threaded surface on the cover. Apply **Loctite #7649 Primer (or equivalent)** to the threaded surface.



Visit Our Website: www.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

7

Email: customer.service@dynabrade.com

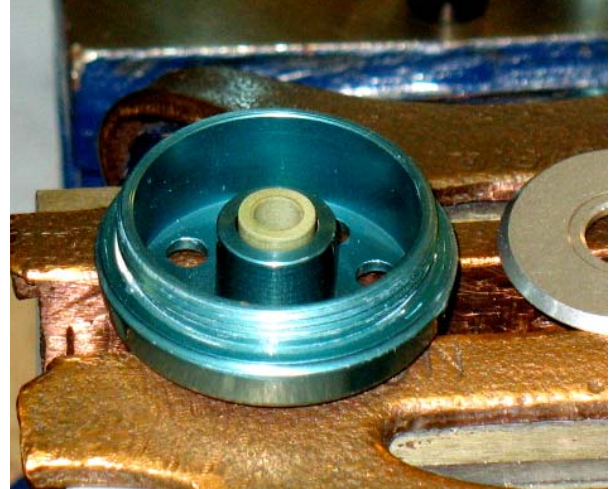
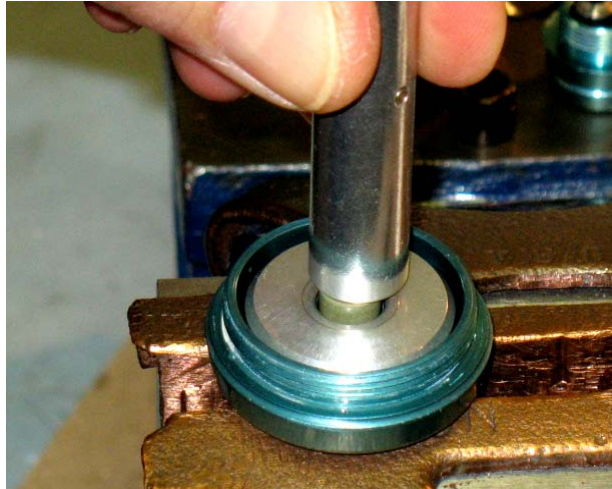
DYNABRADE EUROPE S.à.r.l.
Zone Artisanale, L-5485 Wormeldange—Haut, Luxembourg
Telephone: +352 768 494 1 • Fax: +352 768 495

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

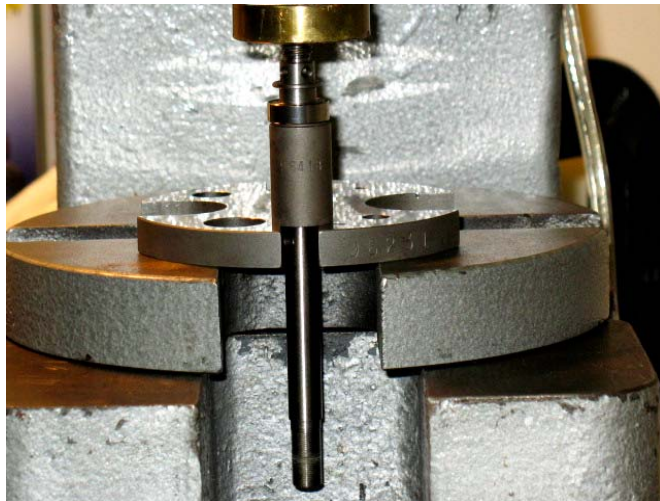


Disassembly/Assembly Instructions

2. Press a new air bushing into the cover. **NOTICE:** Leave 1/16" (1.5mm) of the air bushing exposed, extending out of the cover. Use turbine base as a **JIG** to preset air bushing into cover. (Set aside Cover & Hose Assembly until STEP #13)



3. Use **Bearing Press Tool 96418 (Raised Center)** & **Arbor Press** to install rear bearing onto drive shaft.



Visit Our Website: www.dynabrade.com

8

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

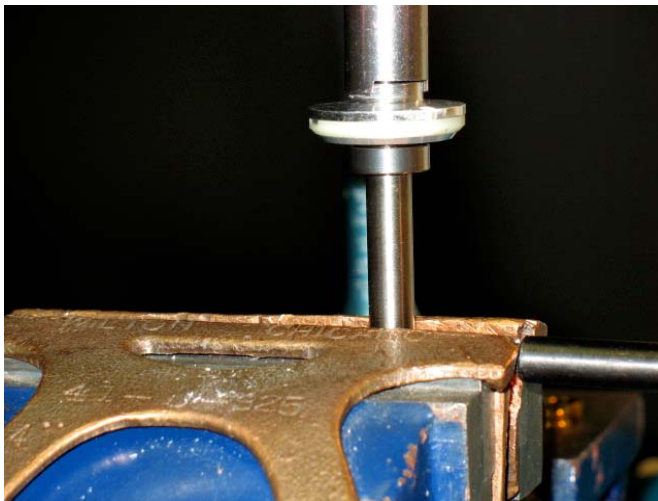


Disassembly/Assembly Instructions

4. Apply a small amount of **Loctite #222 (or equivalent)** to thread of top plate. Install turbine base, turbine, governor & top plate onto drive shaft assembly.



5. Use **Shaft Lock Pin 51694 & Vise (Bronze or Aluminum Jaws)** to hold drive shaft assembly. Use **Top Plate Wrench 96408** and **Torque Wrench** to tighten top plate. **(Torque to 4.5 Nm/40 in. lbs.)**



Visit Our Website: www.dynabrade.com

9

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 wave spring & drive shaft assembly into housing.

7. Place **Bearing Press Tool 96418 (Raised Center Down)** on the table of the **Arbor Press**. Position top plate / drive shaft assembly & housing on the **Bearing Press Tool 96418 (Raised Outside Up)** with the threaded end of the drive shaft assembly pointing up.

8. Use **Bearing Press Tool 96419 (Raised Outside)** & **Arbor Press** to install Front Bearing. **NOTICE: Flip Bearing Press Tool 96419 so that the Raised Center is against the inside race of front bearing. Check rotation of bearings while the assembly is still in Arbor Press.**

Visit Our Website: www.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

10

Email: customer.service@dynabrade.com

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



9. Install the large diameter of the debris eliminator against front bearing.

10. Secure **Top Plate Wrench 96408** in a **Vise (Bronze or Aluminum Jaws)**. Position housing & drive shaft assembly on the **Top Plate Wrench**. Apply a small amount of **Loctite #222 (or equivalent)** just above the debris eliminator. Use **Torque Wrench** with **Extension Retainer Wrench 96479** to install bearing retainer.

(Torque to 2 Nm/18 in. lbs.)

Visit Our Website: www.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

11

Email: customer.service@dynabrade.com

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



Visit Our Website: www.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

12

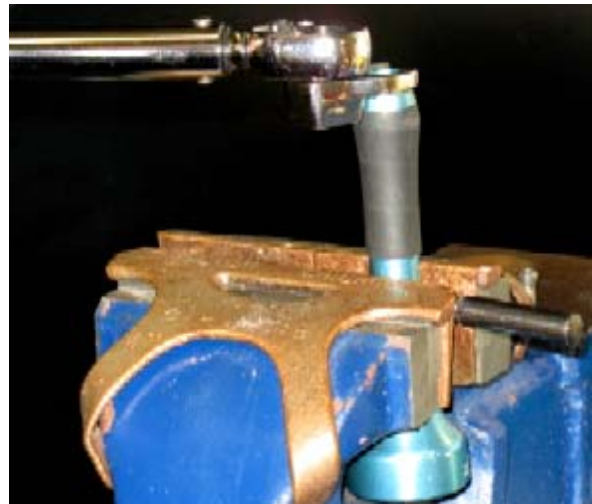
Email: customer.service@dynabrade.com

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

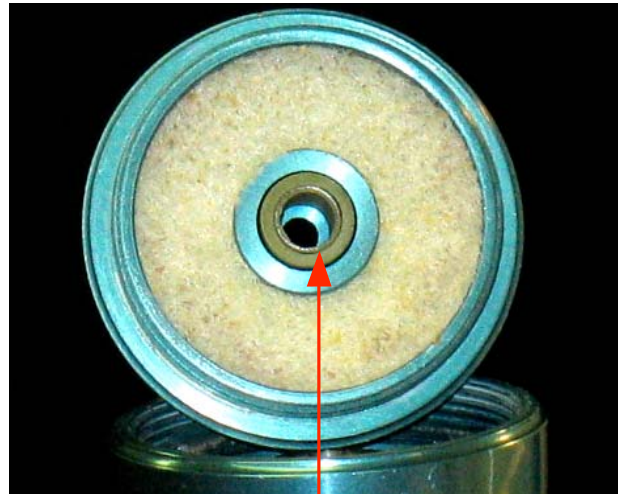
11. Apply **Loctite #7649 Primer (or equivalent)** to threads of the collet guard. Allow 5 minutes cure time, and then apply a very small amount of **Loctite #567 (or equivalent)** to threads of the collet guard. Use **Shaft Lock Pin 51694 & Vise (Bronze or Aluminum Jaws)** to secure housing. Use a **14 mm Crow Foot and Torque Wrench** to install the collet guard onto the housing.

(Torque to 4.5 Nm/40 in. lbs.)



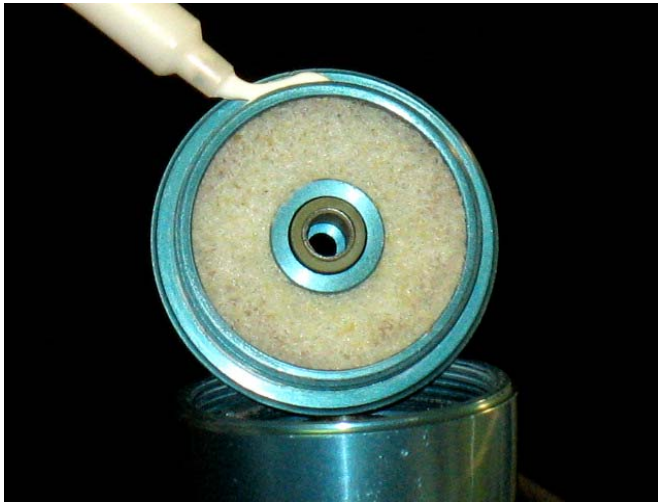
12. Use **Shaft Lock Pin 51694** to hold the drive shaft stationary. Use **8 MM 95731 Wrench or Adjustable Wrench** to install collet insert & cap.

13. Cover & Hose Assembly: After performing Assembly Steps: 1 & 2, install muffler into cover. Perform air bushing “BURN-IN”: By hand, thread cover & hose assembly all of the way onto the housing. Connect hose to the air supply. Move air valve to ON. By hand, slowly loosen the cover until the drive shaft rotates. Use a **Tachometer** to read RPM. By hand, continue to tighten & loosen the cover until it is tightened all the way onto the housing. Run pencil grinder until Maximum RPM is reached. Move the air valve to OFF & disconnect the hose from the air supply. Remove cover and hose assembly from the housing.



Air Bushing after “Burn-In”

14. Apply a small amount of **Loctite #567 (or equivalent)** to the threads of the cover & install the cover onto the housing assembly with the **Adjustable Pin Spanner Wrench**. (Torque to 14 Nm/125 in. lbs.)



15. Connect hose to the air supply. Move air valve to ON & check RPM with **Tachometer**.

Assembly Complete

Visit Our Website: www.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

15

Email: customer.service@dynabrade.com

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