

## Assembly Instructions - 0.4 hp. (Angle Head)

### Angle Head Assembly:

1. Use the **RAISED CENTER** of the **96243** Bearing Press Tool and the arbor press to install the **54542** Bearings (2) onto the **54549** Work Spindle and the **54541** Spindle.



2. Use the **RAISED CENTER** of the **96418** Bearing Press Tool and the arbor press to install the **54537** Bearing onto the **54549** Work Spindle.



3. Use the **54536** Shim Pack. **Notice:** Shim pack contains .002" (0.05 mm) and .005" (~0.13 mm) thick shims. To start, install a .002" (0.05 mm) thick shim into the **54547** Angle Housing. Install **54549** Work Spindle with bearings into the angle housing.

4. Use the **96165** Pin Wrench to install the **54550** Bearing Cap hand-tight. **LEFT HAND THREAD** Turn counterclockwise.



5. Rotate the work spindle to check the fit in the angle housing. The spindle should turn smoothly. Also, check axial movement of the spindle.
  - a) If spindle rotation is rough, remove the shim and check rotation again.
  - b) If there is axial movement, add shims as required.



Visit Our Website: [www.dynabrade.com](http://www.dynabrade.com)

Email: [customer.service@dynabrade.com](mailto: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

6. When the adjustment is correct, apply Loctite #7649 Primer to the threads of the **54550** Bearing Cap. Apply a small amount of Loctite #567 (or equivalent) to the threads of the bearing cap. Use the **96165** Pin Wrench to tighten the bearing cap.  
(T to 1.2 N•m/~11 in. lbs.)
7. Install the **95398** Bearing onto the **54541** Spindle. **Notice:** If necessary, use the **RAISED CENTER** of the **96243** Bearing Press Tool and the arbor press.
8. Install the **54541** Spindle with bearings into the housing.



Install the **54540** Retaining Nut. (T to 34 N•m/~300 in. Lbs.)

9. With the **54541** Spindle secured in the angle housing, shake the angle housing assembly to check movement of the spindle assembly. **Notice:** Minimal movement is desired to reduce gear backlash.



If there is movement, use the **54536** Shim Pack and add shims as required.

**Notice:** Shim pack contains .002" (0.05 mm) and .005" (~0.13 mm) thick shims.

10. Fasten the wrench flats of the **54547** Angle Housing in a vise with aluminum or bronze jaws.
11. Join the **53451** or **53454** Adapter to the **54547** Angle Housing. Use an adjustable wrench to tighten the **54527** Lock Ring. **LEFT HAND THREAD** Turn counterclockwise.
12. Use an adjustable wrench to tighten the **54527** Lock Ring. **LEFT HAND THREAD** Turn counterclockwise. (T to 34 N•m/~300 in. lbs.)  
**Angle Head Assembly Complete.**

Visit Our Website: [www.dynabrade.com](http://www.dynabrade.com)

Email: [customer.service@dynabrade.com](mailto: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