

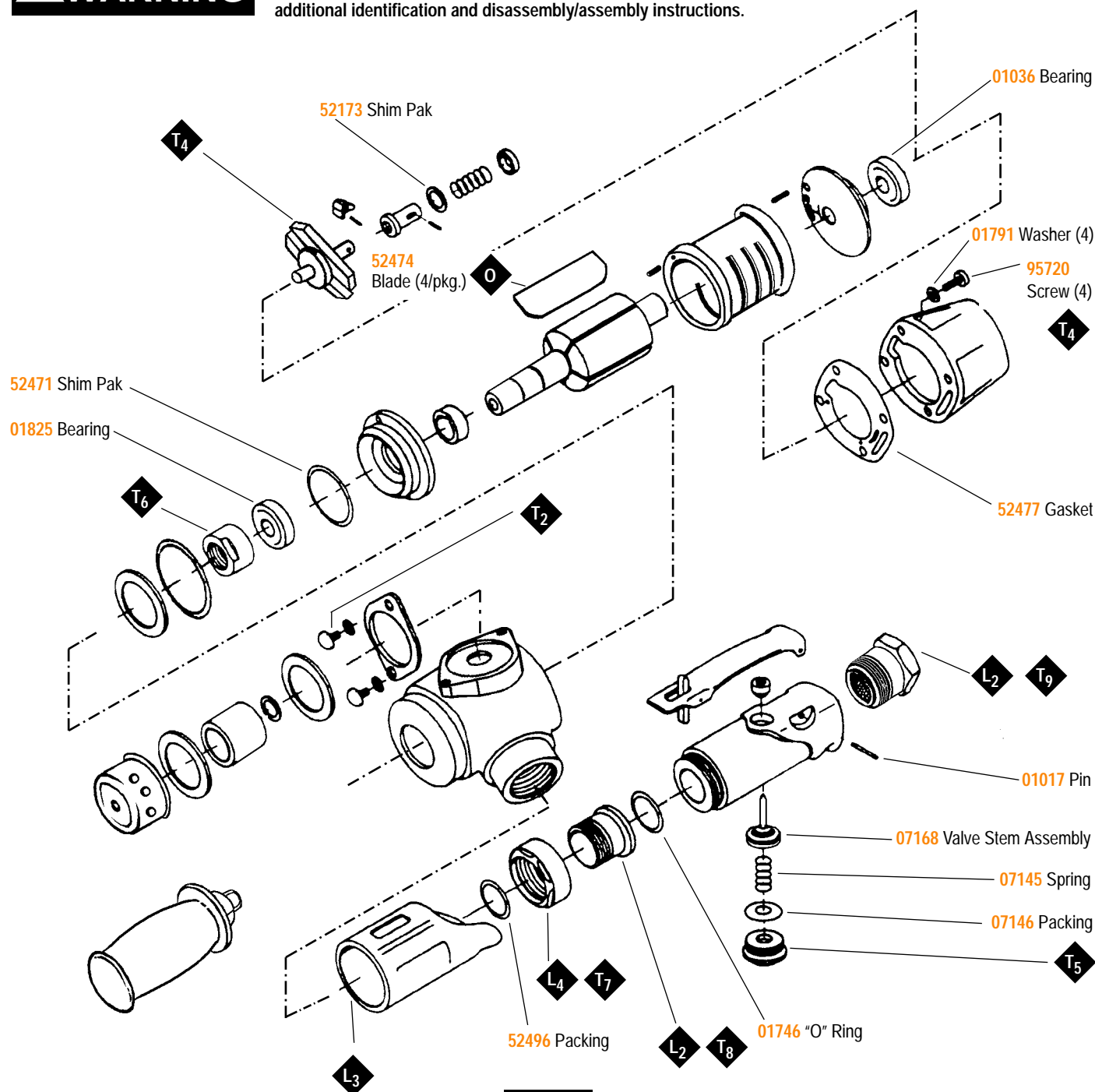
For use with Models:
11450, 11477, 52450,
52451, 52452, 52453,
52454, 52455

Parts Page Reorder No. PD97•37
Effective May, 1997

96259 Motor Tune-Up Kit

⚠ WARNING

Parts included in tune-up kit are identified by part number. Not all parts are required for all tools. Disassembly/Assembly instructions may not apply to all models, please refer to appropriate parts page for additional identification and disassembly/assembly instructions.



KEY

- O** Oil
- G** Grease
- L** Loctite/Hernon: L₂ = Loctite #271, L₃ = Loctite #380, L₄ = Hernon #940
- T** Torque: N•m x 8.85 = In. - lbs.
T₂ = 4.5 N•m, T₃ = 7 N•m, T₄ = 9 N•m, T₅ = 17 N•m,
T₆ = 22.5 N•m, T₇ = 45 N•m, T₈ = 50 N•m, T₉ = 56 N•m

Important: Please indicate Model #, Serial #, and RPM when ordering replacement parts. See reverse side for tune-up instructions.

Tune-Up Kit Instructions

Tool Disassembly:

1. Disconnect tool from power source.
2. Remove back-up pad with a 24mm wrench (P/N 95304).
3. Insert 01697 Inlet Bushing securely into vise.
4. Roll 07136 Handle Grip Back away from housing.
5. Remove 52495 Nut by using a 32mm wrench (P/N 96079).
6. Separate valve body from housing.
7. Remove 95720 Screws (4) and 01791 Washers (4) from 52461 Housing Cap. Remove housing cap and 52477 Gasket.

Motor Disassembly:

1. Grip onto governor cage assembly and pull motor assembly from housing.
Note: If motor assembly does not come out freely, gently tap tool rotor side down to "pop" motor from housing.
2. Remove governor cage assembly from 52466 Rotor (left hand thread).
3. Insert a tap pin into rear bearing plate and press the 52466 Rotor from the rear bearing plate.
4. Place motor assembly in softjaw vise.
5. Remove 01823 Washer and 01835 Shim from assembly.
6. Remove 01815 Rotor Nut with an adjustable wrench. Twist rotor nut from shaft
7. Remove 52475 Cylinder, blades (4) and spacer from rotor.
8. Remove 52472 Front Bearing Plate, front bearing and shims from 52466 Rotor. **Note:** Bearing, front bearing plate and spacer are a slip fit into rotor.
9. Press 01036 Bearing from bearing plate.

Motor disassembly complete.

Motor Reassembly:

Important: Be certain all parts are cleaned and in good repair before reassembly.

1. Place 52466 Rotor in padded vise with threaded spindle facing upwards.
2. Slip 52467 Spacer onto rotor.
3. Place .002" shim into front bearing plate as initial spacing and slip 01825 Bearing into plate. **Note:** 52471 Shim Pak contains .001" and .003" shims.
4. Install bearing/bearing plate assembly onto rotor.
5. Install 01815 Rotor Nut onto assembly.
6. Tighten rotor nut onto rotor, torque 22.5 N·m/200 in. - lbs.
7. Check clearance between rotor and bearing plate by using a .001" feeler gauge. Clearance should be at .001" to .0015". Adjust clearance by repeating steps 1-5 with different shims if necessary.
8. Once proper rotor/gap clearance is achieved, install well lubricated 52474 Blades (4) into rotor slots. Dynabrade Air Lube P/N 95842 (or equivalent) is recommended for lubrication before installation in rotor slots.
9. Install cylinder over rotor.
10. Press the 01036 Rear Bearing into 52476 Rear Bearing Plate. Press bearing/bearing plate assembly onto rotor. Be sure that pin and air slot line-up with pin hole and air inlet slot in cylinder.
11. Place the tool into a soft jaw vise and tighten the governor assembly (52478 Governor Cage) torque 9.0 N·m/80 in. - lbs. (left hand thread).
12. Place 01835 Shim and 01823 Washer into housing.
13. Install 52477 Gasket and 52461 Housing Cap with 95720 screws and 01791 Washers, tighten screws to 9 N·m/80 in. - lbs.
14. Place complete motor assembly into housing. Be sure motor drops all the way into housing.
15. Motor adjustment must now be checked. With motor housing still mounted in vise, pull end of rotor and twist (10-15 lbs. force), rotor should turn freely without drag. If drag or rub is felt, then increase preload or remove shim. Also, push end of rotor and twist (10-15 lbs. force), rotor should turn freely without drag. If drag or rub is felt, then deload or add a shim.
16. Apply 2 drops of #271 Loctite® (or equivalent) to threads of adjustment bushing before tightening.
17. Slip 52491 Bushing through 52495 Nut and packing, and secure into housing.
18. Tighten 52491 Adjustment Bushing into housing torque 50 N·m/450 in. - lbs. Tighten valve body into housing.
19. Secure inlet bushing into vise. Place 52495 Nut and 01746 O-Ring onto valve body. Swivel 52494 Valve Body to desired throttle lever position.
20. Tighten 52495 Nut to 45 N·m/400 in. - lbs. Roll 07136 Grip back into place.

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 thirty seconds to determine if tool is operating properly and to allow lubricating oils to properly penetrate motor.

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