SERVICE INSTRUCTIONS

Front Exhaust

MODELS
4117 GLS
4117 GL
4117 GLK

DISASSEMBLY

1. (a) Model 4117 with Erickson collet- remove collet nut (209-1).
2. Clamp backhead [400-G-4(S)] in a vise. Using a strap wrench, unscrew case (540098/540916). Tap lightly on threaded end of spindle, this will allow the motor to drop out.
3. Remove snap ring(400-39) with type 01 pliers. Lift out wafer (320-9W) and o-ring (If Present)(320-9R). Remove snap ring (592016).
4. With brass or aluminum jawed vise, grasp the O.D. of the cylinder and end plate (400-3) firmly. Use a 3/16" punch and tap spindle out of rear bearing (400-9), being careful not to drop spindle assembly when it is free.
5. Remove the rotor (400-5), blades (400-6), key (400-10) and front thrust plate(400-7) .
6. Place bearing and spindle assembly (threaded end down) on suitable drill block. Press spindle through the bearing with an arbor press.
7. To check throttle valve. unscrew plug (869311) and lift out valve spring (400-G-34) and plunger (400-G-29). Remove o-ring (400-G-31) and replace if cracked or worn.

REASSEMBLY

1. Support front bearing (400-G-ll) on suitable drill block. Press spindle [541148] through bearing until it bottoms on shoulder.
2. Slide on front thrust (400-7) over the arbor and on the front bearing.
3. Place the key (400-10) into the slot in the spindle.Slide rotor (400-5) over spindle, aligning the keyway in the rotor with the key in spindle. Grasp rotor firmly in a soft jawed vise and replace the ericson collet and tighten firmly.
4. Place five blades (400-6) in slots of rotor. Slip cylinder [400-2(G)] over rotor. Install rear thrust[400-3(A)]. (Carefully locate cylinder in the smaller hole of the rear thrust.)
5. Place bearing in rear thrust and tap bearing in with suitable bearing driver.
6. Place snap ring (592016) on spindle groove. If desired, drop o-ring(320-9R) and washer (320-9W) in rear thrust. Place snap ring(400-39) into groove.
7. Slip motor assembly in case (540098/540916.) Put backhead in vise and screw on motor housing. Tighten with a strap wrench.
8. Re-attach guard if necessary .

CAUTION: CHECK TOOL FOR SPEED WITH TACHOMETER. THE SPEED STAMPED ON TOOL MUST BE AT OR ABOVE THE ACTUAL SPEED OF THE TOOL.

Additional information on safety is available in the "American National Safety Code for Portable Air Tools" (ANSI Bl86.1). This bulletin is available from the American Standards Institute, Inc., 1430 Broadway, New York, N.Y. 10018.

4110GL ~ 4111GL SERVICE INSTRUCTIONS

Thls tool is designed to operate on 90 psig (6.2 bar) maximum air pressure with 1/4 (8 mm) hose.

Do not use a grinder wlthout recommended wheel guard. Do not use any wheel for which the opera[illegible] speed on the grinder.

SAFETY

1. Before operation check spindle speed with a tachometer. If the RPM's exceed the rated speed stamped on tool, servicing is required.
2. Inspect grinding wheels for bends, chips, nicks, cracks or severe wear. If the wheel has any of these problems, or has been soaked in liquids do not use. On brushes check for loose wires that may fly off in operation.
3. Start new grinding wheels under a steel bench. Run at full throttle for one minute. Defective wheels usually come apart immediately. When starting a cold wheel apply to the work slowly, allow wheel to warm up gradually.
4. The 4117 die grinders are intended for use with mounted wheels, points and carbide burrs. They are not guarded for type 1 wheels. If you have a type 1 wheel application, please purchase a wheel guard (4503,4504).
5. The 4117 die grinders can be used with a guard from the manufacturer. A guard is not needed for : a.) mounted wheels two inches (50 mm) or smaller; b.) grinders used for internal work, while within the work being ground.
6. At least one-half of the mandrel length (i.e. mounted wheel, burr, etc.) must be inserted into the collet. Secure collet chuck tightly.
7. Safety levers are available from the manufacturer (402-26).
8. Before mounting or removing a wheel disconnect grinder from air supply. The wheel should fit properly on arbor; do not use bushings or wheel flanges to adapt a wheel to any arbor unless recommended by manufacturer.(Wheel flanges should be at least 1/3 the diameter of the grinding wheel.)
   Wear safety goggles and other protective clothing (when necessary).(See regulations.)
9. Properly maintained air tools are less likely to fail or cause accidents. If tool vibrates or produces an unusual sound, repair immediately.

LUBRICATION

1. An air line filter-regulator-lubricator should be located as closely as possible to the tool.
2. Clean out dirt and moisture fron air hoses daily. Keep screen handle bushing in tool.
3. OIL TOOLS DAILY. Exxon's Spinesstic 10, Atlantic Richfield's Duro 55, Gulf's Gulfspin 10 or an equivalent is reco~mended. Pour about 1 tablespoon in air inlet and run tool to allow oil to be carried to the interior.

Updated 1/30/2004

HENRY AIR TOOLS

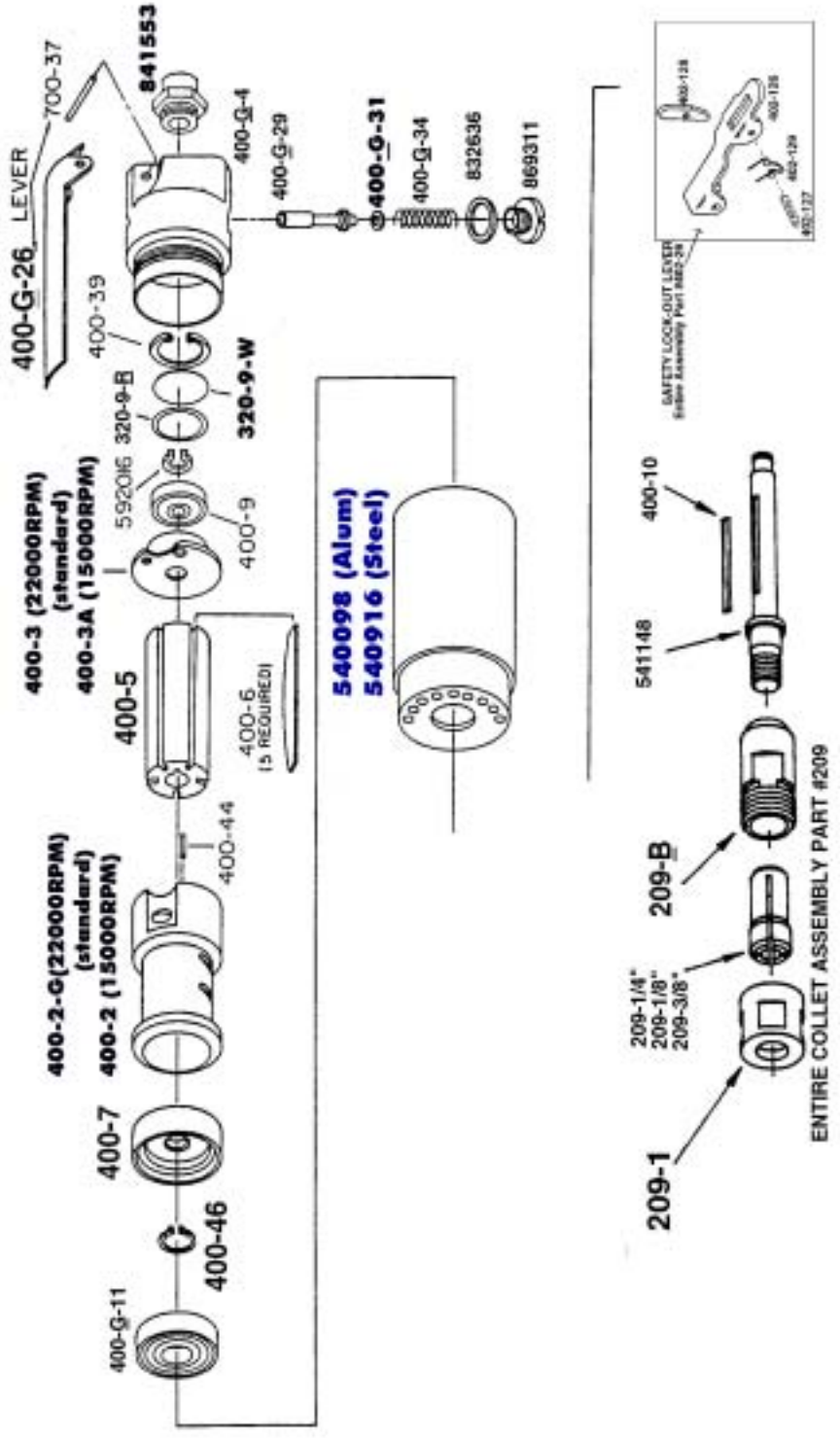
Model 4117GLK Die Grinder

Front Exhaust

Grinder with Ericson Collet

MODELS

4117 GLS
4117 GL
4117 GLK



HENRY AIR TOOLS® Updated 1/30/2004