# HEDRY TOOLS

Industrial Airtools at Work

MODELS 40 GHL+6" 40 GHLS+6"



## General Safety and Maintenance Manual





This tool is an extended model of 18" in length for 2 handed operation. Can be used with either a collet for carbide burrs or a guard for use with cutoff wheels. (Wheel guard not shown for clarity.)

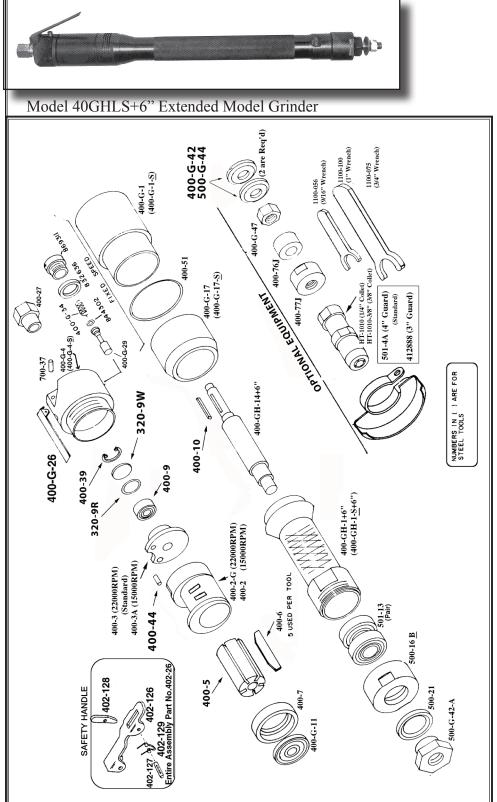




Model	Exhaust	Spindle Type	Throttle	Speed	Power	Case	Weig	jht	Length	Diameter	Air
Number	Direction		Type		Output	Material	Aluminum	Steel			Consumption
40 GHL+6"	Side	3/8-24 X 1.0 Inch		15000-22000 R.P.M.	0.9 H.P .675 W	(S) Steel or Aluminum	4 ½ lbs., 2 kg		18 1/4" 463.5mm	1.500"/ 38.1 mm	25 cfm (11.8 L/S)
40 GHLS+6"		(3/8-24 X 25 mm	(K) Safety Lever	(18000PM is standard)				5.8 Lb. (2.6 Kg)			

# THE HENRY TOOL CO., MANUFACTURED BY HENRY TOOLS

498 So. Belvoir Blvd., South Euclid, OH 44121 U.S.A.
Ph: (216) 291-1011 or (800) 826-5257 • Fax: (216) 291-5949 or (800) 303-2800
Email: daviidh@msn.com • Website: www.Henrytools.com



MODELS 40 GHL+6" 40 GHLS+6"

This tool is designed to operate on 90 psig(6.2 bar) maximum air pressure with 1/4"(8mm) hose. Do not use any wheel having an operating speed lower than the actual free speed on grinder.

SAFETY

- 1. Check speed of tool with tachometer before every wheel & burr change. If RPM excees 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, or has bee 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. Model 40GH grinders are equipped with a guard from the manufacturer. A guard is not needed for:
- a.) mounted wheels two inches
   (50 mm) or smaller;

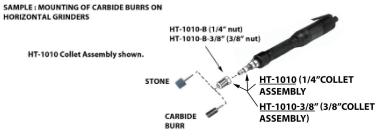
   b.) grinders used for internal
   work, while within the work
- work, while within the work being ground.
- 5. If your tool is purchased with a collet. At least one-half of the mandrel length (i.e. mounted wheel, burr, etc.) must be inserted into the collet. Secure collet chuck tightly.
- 6. Before mounting or removing a wheel or carbide burr 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.)

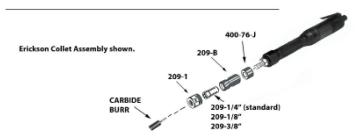
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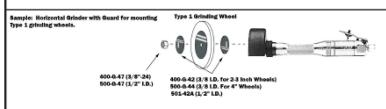
MODELS 40 GHL+6" 40 GHLS+6"

Model 40GHLS+6" Extended Model Grinder









#### SAFETY (continued)

- 7. Wear safety goggles and other protective clothing. Continuous exposure to vibration may cause injury to hands and arms.
- Properly maintained air tools are less likely to fail or cause accidents. If tool vibrates unusually or produces an unusual noise, repair immediately.

Check for wet or dirty air. Excessive moisture in the air supply tends to wash ubricant away from the working parts of the tool and rust or corrode the interior. Grit will damage the interior by scoring closely fitted parts, and impede the action of the tool.

f the above are found in order, disconnect tool and pour a liberal amount of rec-

ommended oil or an SAE #10 oil cut with an equal quantity of kerosene into the air inlet. Operate the tool to allow lubricant to flush accumulated gum and grit out the exhaust.

If outside factors are not to blame, dissassemble the tool, clean and inspect all parts and replace those worn or broken. Coat parts with airtool oil and reassemble. Pour about 1/2 oz. in air inlet and run tool to allow oil to be carried to interior.

#### DISASSEMBLY

- 1. Disconnect air and remove all wheels and accessories.
- Clamp wrench flats of case(400-GH-1) in vise and unscrew backhead(400-G-4). Unscrew case (400-G-1) and remove it. Lift off exhause sleeve (400-G-17).
- 3. Remove snap ring(400-39) and(320-9R) and (320-9R).
- Remove assembly from vise. Place brass jaws in vise. Clamp cylinder and rear thrust assembly in vise. Using a 3/16" punch, tap out lightly on the end of the spindle(400-GH-14). This will allow the cylinder(400-2[G]), end plate(400-3), bearing(400-9), and blades(400-6) to be removed.
- 5. Using a 5/16"punch, tap out bearing(400-9) from end plate(400-3).
- 6. Place rotor(400-5), which is steill attached to the spindle, in a vise with brass jaws. Unscrew wheel flange(500-G-42A)(NOTE: right hand thread). Remove rotor, key(400-10), and front thrust plate(400-7).
- 7. Remove brass jaws from vise. Clamp wrench flats of case(400-G-1) in vise. Remove bearing cap(500-16B)(LEFT HAND THREAD). Using an arbor press, press on the front of the spindle. This will enable the rear bearing(400-G-11) to drop out and the spindle to be removed.
- 8. Using a 3/4" round bar, tap out bearing (501-13) from case (400-GH-1).

#### REASSEMBLY

- 1. Press bearings (501-13) into recess in front of the case(400-GH-1). Spin (500-16B) back onto (400-GH-1)(NOTE: Left Hand Thread) a. Press spindle (400-GH-14) through bearings from the
- 2. Press bearing (400-G-11) into case from the rear and place the front thrust plate (400-7) over the bearing.
- 3. Place case (400-GH-1) in vise by the flats. Tighten bearing cap(500-16B)(Left HAND THREAD). Make sure (500-16B) is tight.
- Replace key(400-10) and drop rotor(400-5) into place. With BRASS jaws installed on vise, grab

MODELS 40 GHL+6" 40 GHLS+6"

## Model 40GHLS+6" Extended Model Grinder

PART NUMBER	DESCRIPTION					
320-9R	O-Ring					
320-9-W	Wafer (Bearing Cover)					
400-10	Key					
400-2	Cylinder 15000RPM (with pin)					
400-27	Bushing					
400-2-G	Cylinder(18000RPM STANDARD)(with Pin installed)					
400-3	Rear Plate(Standard)					
400-39	Lock Ring (844941)					
400-3A	Rear Plate(15000RPM)					
400-44	Pin					
400-5	Rotor					
400-51	O-RIng					
400-6	Blade(5 req'd)					
400-7	Front Thrust					
400-9	Rear Bearing (Sealed) (590004)					
400-G-1	Case (Alum.) (412431)					
400-G-11	Bearing(2 Req'd)					
400-G-17	Alum. Exhaust Sleeve					
400-G-17-S	Steel Exhaust Sleeve					
400-G-1-S	Case (STEEL)					
400-G-26	Valve Lever					
400-G-29	Valve (412451)					
400-G-34	Spring					
400-G-4	Alum.Coupling					
400-G-4-S	Steel Coupling					
400-GH-1	Extended Case (Alum.) (412475)					
400-GH-14+6"	Spindle (40GHL+6)					
400-GH-1-6	Extended Case (Aluminum)					
400-GH-1-S+6	Extended Case (Steel)					
402-134	Muffler Screen					
500-16B	Front Bearing CAP					
500-21	Seal(Optional)					
500-G-42-A	Flange Nut, 1/2-20 Thread					
501-13	Bearings (412891)(PAIR)					
501-G-42A	Flange (1/2-13 Thread)					
700-37	Lever Pin					
832636	T.V. Cap Gasket					
869311	Throttle Valve Cap					

PART NUMBER	DESCRIPTION					
ACCESSORIES						
400-76-J-3/8"	Collet Spacer 3/8"					
400-77J	Cone Wheel Adaptor (3/8"Threaded)					
400-G-42	Flange Washer (for 2" and 3" Wheels)					
400-G-47	3/8" Jam Nut					
500-G-44	Flange (3/8" for 4" and 5" Wheels)					
500-G-45	Flange (1/2-13 Thread) for 4" Wheels.					
500-G-47	Spindle Nut (1/2-13 Thread)					
HT-1010	Heavy Duty Collet Assembly (1/4")					
HT-1010-3/8	Heavy Duty Collet Assembly (3/8")					
1100-056	Wrench 9/16"					
1100-100	Wrench 1"					
1100-075	Wrench 3/4"					
510084	Repair Kit (Same as 5000-40GHL Kit)					
GUARDS						
501-4A	4" Guard					
412888	3" Guard (501-3A)					

### Reassemble (continued)

hold of rotor(400-5). Replace flange(500-G-42A) onto spindle (400-GH-14) and tighten.

- 5. Place cylinder (400-2) over rotor (400-5). Place rear thrust (400-3) on cylinder (make sure pin in cylinder lines up with hole in rear plate(400-3). Press bearing(400-9) into rear thrust with a suitable bearing driver.
- 6. Place o-ring(320-9R), washer(320-9W) in rear thrust. Place snap ring(400-3) into groove.
- 7. Place O-ring (400-51) onto case(400-G-1). Place case(400-G-1) into sleeve (400-G-17). Slide this assembly onto case(400-GH-1) and hand tighten.
- 8. (OPTIONAL STEP): To make sure there are no air leaks in handle, unscrew cap (869311) and lift out spring(400-G-34) and throttle valve (400-G-29). Remove oring(400-G-31) with a sharp tool and replace with a new O-ring.
- CHECK THE OPERATING SPEED WITH A RELIABLE TACHOM-ETER. THE SPEED MUST BE AT OR BELOW THE STAMPED SPEED ON THE TOOL.