

Henrytools

Industrial Tools at Work

MODELS

56 HL
56 HS
56 HG
56 HL+2"
56 HL+3"

General Safety and Maintenance Manual 3 H.P HORIZONTAL GRINDERS



CAPACITY
-6 Inch (150 mm) or 8 Inch (200 mm) Type 1 Wheels
-Any Type 16, 17, 17R, 18 or 18R Cone Wheels w/ 5/8-11 Mounting

3 H.P HORIZONTAL GRINDERS

Model Number	Rated Power	Throttle Type	Rated Speed	Spindle Type and Thread	Weight		Overall Length	Working Air Consumption	Spindle Length & Thread
					ALUM				
56H	3.0 H.P (2250 W)	(L) Lever or (K) Safety Lever	4500 - 8000RPM	T1 - 5/8-11 X 1.9	5.9 Lb./2.9 Kg		21.7 Inch (550 mm)	45 cfm (21.2 L/S)	5/8-11 X 0.9 Inch (5/8-11 X 23 mm)
56HS		(K) Safety Lever							
56HK		(K) Safety Lever							
56HG		(G) Spade Handle			11.5 Lb. (5.2 Kg)				

THE HENRY TOOL CO., MANUFACTURED BY HENRY TOOLS

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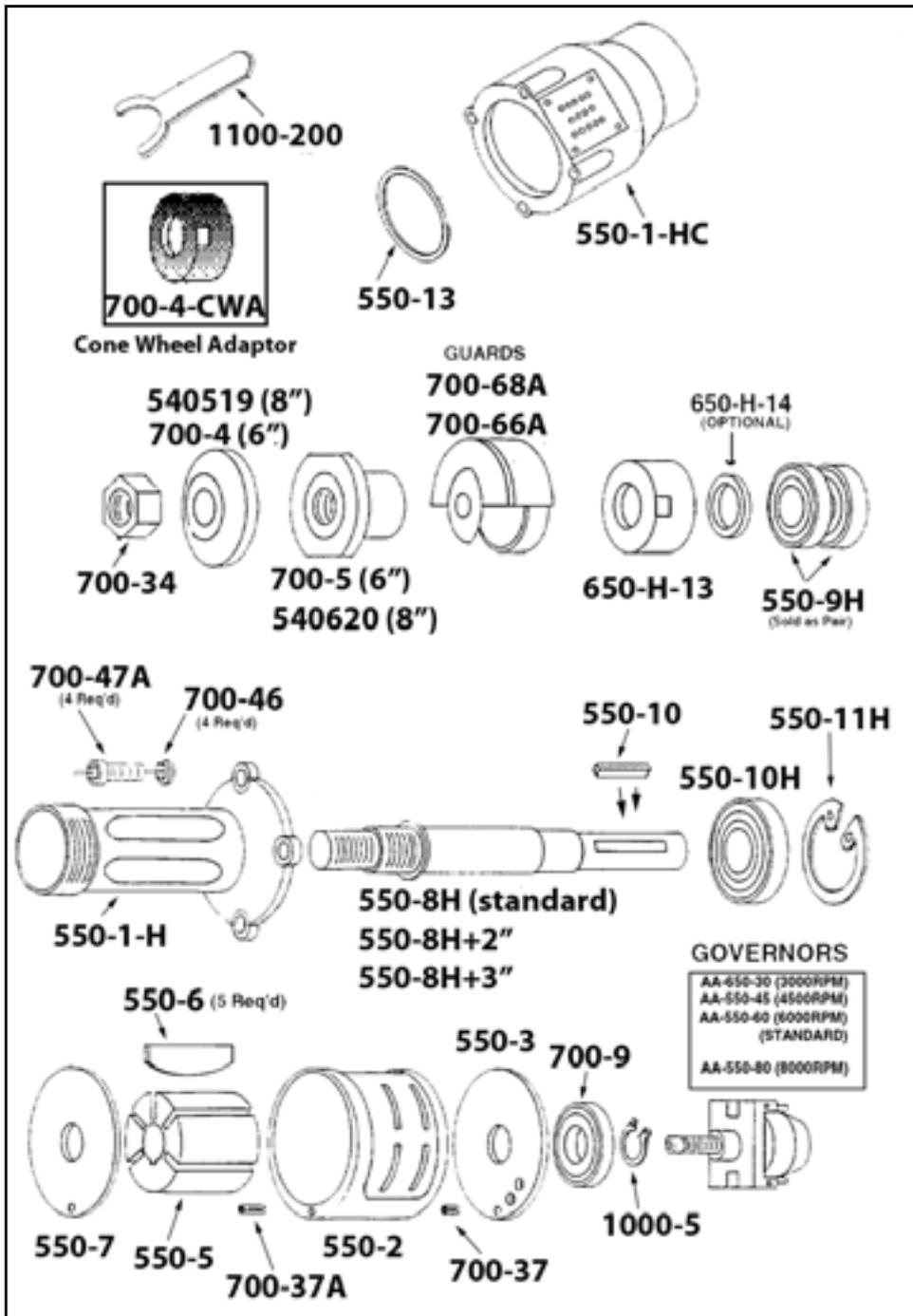
Model 56H Horizontal grinder shown with 8" Guard



Model 56H Horizontal grinder shown with cone wheel adaptor.

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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, 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 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.)
6. Wear safety goggles and other protective clothing (when necessary). (See regulations.)
7. Properly maintained air tools are less likely to fail or cause accidents. If tool vibrates or produces an unusual sound, repair immediately.

WARNING

Do not disassemble the governor. The governor is guaranteed for the life of the tool if it is not abused. Prior to reassembly inspect governor for gouges, nicks or dents.

LUBRICATION

1. An air line filter-regulator-lubricator should be located as closely as possible to the tool.
2. Clean out dirt and moisture from air hoses daily. Keep screen handle bushing



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PART NO.	DESCRIPTION
700-37	Cylinder Pin
550-1-H	FRONT SPINDLE HOUSING
550-2	CYLINDER
550-3	REAR ENDPLATE
550-5	ROTOR
550-6	ROTOR BLADE (5 REQ.)
550-7	FRONT ENDPLATE
550-8-H	SPINDLE (STANDARD - TYPE 1)
550-8-H+2	Spindle +2" Length
550-8-H+3	Spindle +3" Length
550-9-H	FRONT BEARING PAIR
550-10-H	CENTER BEARING
550-11-H	SNAP RING
550-10	KEY
550-13	GASKET
600-48	GOV. PIN RETAINER
650-H-13	FRONT BEARING CAP
650-H-14	SEAL
700-4	WHEEL FLANGE(6 INCH WHEELS)
700-4D	WHEEL FLANGE(8 INCH WHEELS)
700-5	DRIVE FLANGE(6 INCH WHEELS)
700-5D	DRIVE FLANGE(8 INCH WHEELS)
700-4-CWA	CONE WHEEL ADAPTOR (UN-THREADED I.D.)
700-4-CWB	CONE WHEEL ADAPTOR (THREADED I.D.)
700-9	BEARING
700-34	SPINDLE NUT
700-37	CYLINDER PIN
700-46	WASHER (4 REQ.)
700-47A	SCREW (4 REQ.)
1000-5	LOCK RING
540619	WHEEL FLANGE(8 INCH WHEELS)(same as 700-4D)
540620	DRIVE FLANGE(6 INCH WHEELS)(Same as 700-5D)
GUARDS	
650-HS-56A	6 INCH TYPE 1 WHEEL GUARD(Same as 700-66A)
650-HS-58A	8 INCH TYPE 1 WHEEL GUARD (Same as 700-68A)
700-66A	6 INCH TYPE 1 WHEEL GUARD(Same as 650-HS-56A)

PART NO.	DESCRIPTION
700-68A	8 INCH TYPE 1 WHEEL GUARD (Same as 650-HS-58A)
GOVERNORS	
AA-550-30	GOVERNOR ASSY. (3000 RPM)
AA-550-45	GOVERNOR ASSY. (4500 RPM)
AA-550-60	GOVERNOR ASSY. (6000 RPM)(standard)
AA-550-80	GOVERNOR ASSY. (8000 RPM)
WRENCHES	
1100-200	2" Wrench
REPAIR KITS	
510081	REPAIR KIT: INCLUDES ALL BEARINGS AND ROTOR BLADES, SNAP RINGS AND GASKETS.

SAFETY (continued)

in tool.

3. **OIL TOOLS DAILY.** Pour about 1 tablespoon in air inlet and run tool to allow oil to be carried to the interior. **NEVER MODIFY ANY PART OF THIS TOOL INCLUDING ACCESSORIES AND GUARDS. Serious injury can result.**

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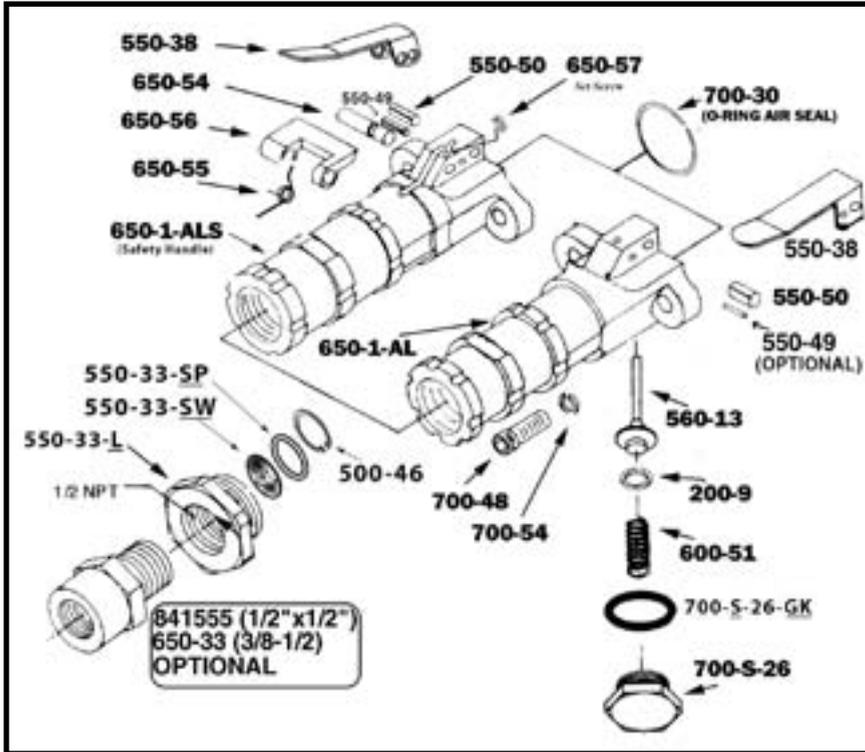
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Part Number	Description
200-9	O-Ring
500-46	Snap Ring
550-33-L	Live Handle Adaptor bushing
550-33-SW	Screen Filter
550-33-SP	Spacer
550-38	Lever
550-50	Lever Pin
560-13	Throttle Valve Assembly with 200-9 O-ring installed
600-51	Plunger Spring
650-1-AL	Live Handle Body (Non-Lockout type)
650-1-ALS	Safety Lock Valve Body(Bare)
AA-650-1-AL	Handle Assembly (Complete)(Non-lockout handle)
AA-650-1-ALS	Safety Lock Handle Assembly (Complete)

Part Number	Description
650-33	Screen Bushing(1/2x3/8)
650-54	Safety Lock Pin
650-55	Safety Lock Spring
650-56	Safety Lock Lever
650-57	Set Screw
700-30	O-Ring
700-48	Cap Screw
700-54	Lock Washer
700-S-26	Plug
700-G-26-GK	Gasket
841555	Screen Bushing (1/2X1/2)

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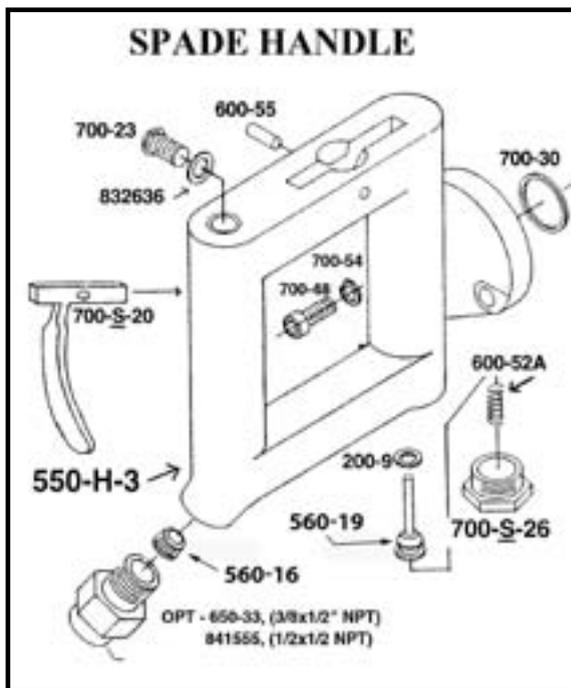
DISASSEMBLY

1. Disconnect air & remove all wheels and accessories.
2. Remove the wheel guard by removing the two screws which clamp it to the case.
3. Hold the hand grip portion of the case in a vise and remove the four socket head cap screws (700-47A) and washer (700-46) The governor housing (550-1-HC) can now be removed.
4. Holding the arbor (550-8H) in a vise, unscrew the governor assembly (left hand thread).
5. Remove from vise, remove snap ring (1000-5). Using a 1/4 punch, tap out spindle 550-8H (Place the punch inside the hole where the governor was originally seated.) Do not damage internal threads on spindle. This will cause the cylinder (550-2), rotor (550-5) and rear thrust (550-3) to slide out.
6. Next remove key from the arbor, which will allow the front thrust (550-7) to be removed.
7. Replace key in arbor, using brass vise grips, remove flange (700-5/540620) (right hand thread.)
8. Remove from vise and reclamp vise on housing (550-1H). Unscrew bearing cap (650-H-13).
9. Remove from vise and remove snap ring (550-11H) with proper pliers.
10. With arbor press - press out spindle on threaded end of spindle - removing bearing (550-10H). Remove double bearing (550-9H).
11. The only part of the valve which will require replacement is the o-ring (200-9). To replace this ring, unscrew plug (700-S-26) and lift out valve spring (600-51) and plunger 560-13. Remove the o ring with sharp tool and replace with a new ring.

ASSEMBLY

1. Slip double bearing (550-9H) into housing (550-1-H).
2. Invert housing and press arbor (550-8H) into the housing, being careful to fully support front double bearing. Press on bearing (550-10H) until it bottoms on shoulder of the housing. Replace snap ring (550-11H).
3. Clamp housing (550-1H) in vise and screw on bearing cap (650-H-13) with wrench.
4. Place key (550-10) in arbor. Grip arbor and key in vise jaws to protect surfaces. Screw down and tighten flange (700-5/540620) (Right hand threads).
5. Remove from vise. Remove key. Place front thrust (550-7) on arbor. Replace key.
6. Place housing in vise-locating on the flats of the flange (700-5/540620).
7. Slip rotor (550-5) on arbor aligning keyway with key in arbor. Drop in blades (550-6).
8. Drop in cylinder (550-2), making sure that the long dowel (700-37) goes through the hole in front thrust plate and the small hole in housing. Install rear thrust (550-3) placing small hole over pin (700-37A).
9. Screw on Governor (AA-660-60) Note: Left hand thread.
10. Secure motor housing in a vise with handle downward. Clamp vise onto the live handle (AA-650-1-AL)
11. Place gasket (550-13) in rear face of case. Slide the motor assembly into case. The motor assembly must be kept straight to install into the case easily.
12. Install 4 case bolts (700-47A) and lock washers (700-46). Tighten bolts down until snug then back off 1/2 turn.
13. Connect tool to air supply and apply air in several short bursts.

14. Run tool and tighten down bolts evenly. (Alternating from corner to corner.)
15. Check RPM with a reliable tachometer. Tool must run at or below speed stamped on the tool.
16. Install wheel guard. **Never operate this tool without a wheel guard.**



PART NO.	DESCRIPTION
700-23	SCREW
832636	GASKET
200-9	O-RING
550-H-3	D HANDLE
560-19	THROTTLE VALVE (INCLUDES O-RING 200-9)
600-52A	SPRING
650-55	TRIGGER PIN
700-30	GASKET
700-48	SCREW
700-54	LOCK WASHER
700-S-20	LEVER TRIGGER
700-S-26	THROTTLE VALVE CAP
841555	1/2 INCH NPT X 1/2 INCH NPT SCREEN HANDLE BUSHING
AA-550-H-3	SPADE HANDLE ASSY.(COMPLETE)

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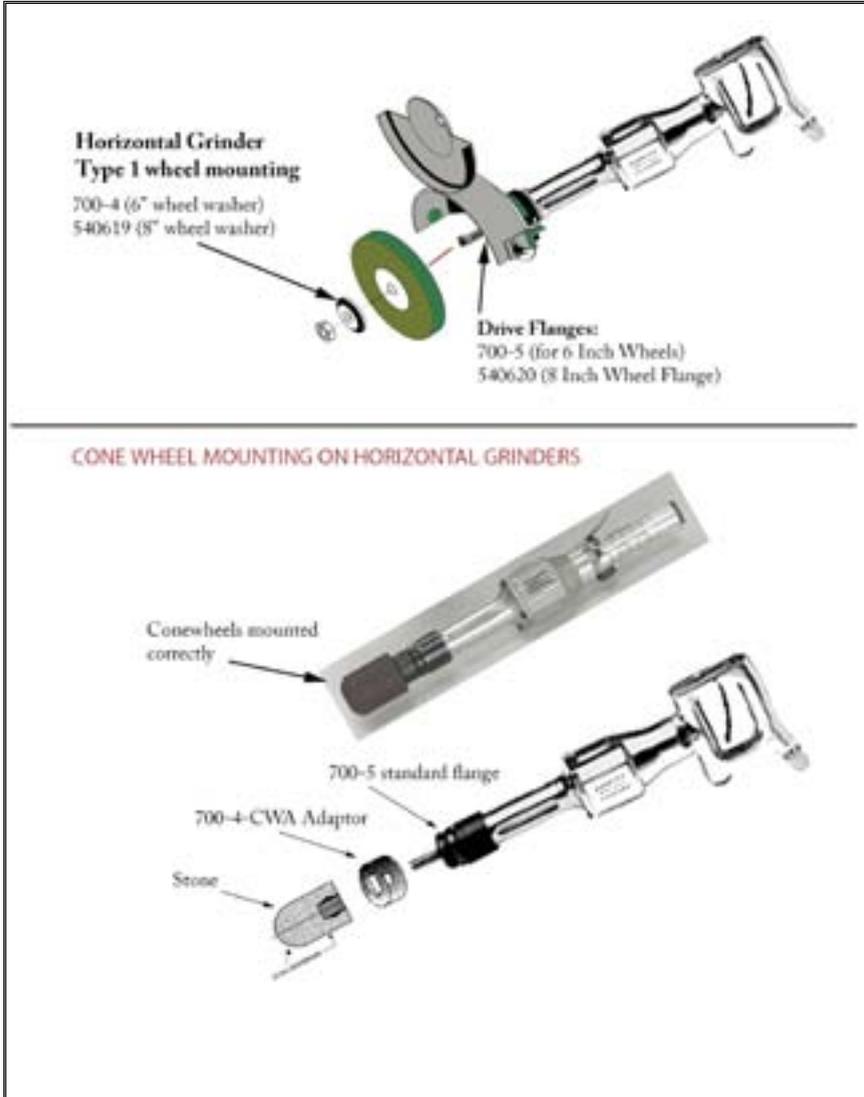
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such that opening in guard is away from operator.

Before using or after mounting a wheel, the tool must be run for one minute in protected enclosure to check the integrity of the wheel.

INSPECT THE WHEEL OR ACCESSORY

Check the maximum safe RPM marked on the wheel or accessory. Never use a wheel or accessory rated below the actual tool speed. Cracked, dropped, faulty, or bent accessories are dangerous. Suspect accessories should not be used and should be disposed of. Inspect wheel for cracks or chips, water stains, or signs of abuse or improper storage. Cracked or faulty grinding wheels are dangerous. They must be destroyed rather than risk their use by someone who may not notice that they are damaged.

Never operate a grinder without a wheel guard. Guard must not be modified, and any guard damaged or bent must be replaced. Grinder must be used

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