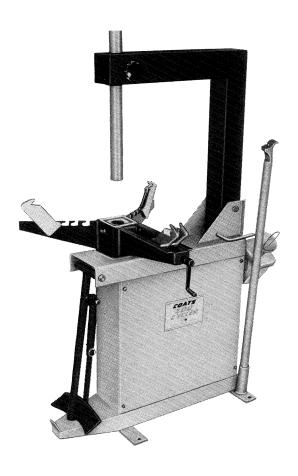




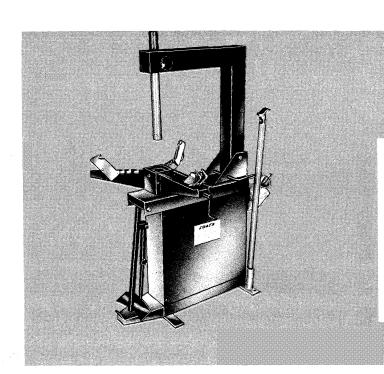
- OPERATING INSTRUCTIONS -- PARTS LIST -



200 CYCLER / 220

HENNESS YINDUSTRIES, INC.

P.O. Box 3002, 1601 J. P. Hennessy Drive, LaVergne, TN USA 37086 615/641-7533 800/688-6359 HENNESSY INDUSTRIES INC. Manufacturer of AMMCO*, COATS* and BADA* Automotive Service Equipment and Tools.





200 CYCLER/ 220

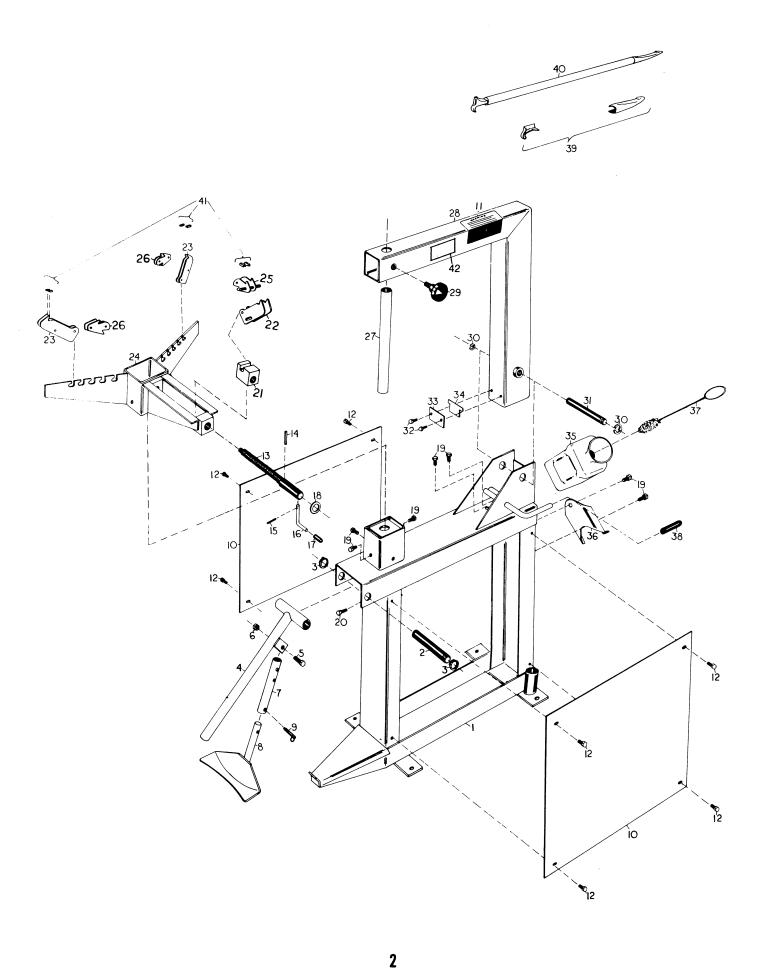
This Parts List is for units with Serial No. 200-01,326 and up Serial No. 220-00,001 and up

Manufactured by The Coats Company 1601 J. P. Hennessy Drive La Vergne, TN. 37086 PHONE: 615-641-7533

TWX: 810-380-4372

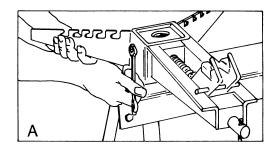
ORDER PARTS FROM YOUR DISTRIBUTOR OR JOBBER

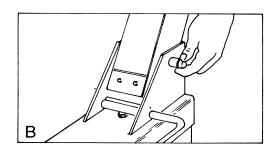
Ref.	Part		Ref.	Part	
No.	No.	Description	No.	No.	Description
1	107015	Chassis	27	107063	Fulcrum Tube
2	107378	Bead Loosener Pin	28	107056	Pivot Arm
3	101001	3/4" Snap Ring (Ea.)	29	107064	Knob Locking
4	107411	Bead Loosener Handle	30	107377	E-Ring (Ea.)
5	103740	3/8" x 2 Cap Screw	31	107052	Pivot Arm Pin
6	102937	3/8" Locknut N. F.	32	104945	1/4" x 1" Cap Screw (Ea.)
7	107417	Adjusting Tube	33	107066	Rub Block
8	107416	Shoe	34	107070	Shim Assortment
9	107418	Cotterless Hitch Pin	35	106259	Lube. Bottle
10	107426	Side Panel	36	000490	Lube Bracket
11	108017	Warning Decal	37	000491	Lube Applicator
12	106301	1/4" Hex Whiz Self Tapping Bolt (Ea.)	38	7000230	Grip
13	107043	Screw	39	107423	Combo Tool Protector Set
14	101181	3/16" x 1 Roll Pin			(6 Mount & Demount)
15	101017	1/8" x 5/8" Roll Pin	40	107156	Combo Tool
16	107090	Handle Screw	41	107424	Clamp Pads (6 Sets of 6)
17	107091	Grip Screw Handle	42	108059	Inflation Warning Decal
18	101253	Machine Bushing			
19	106300	3/8 Hex Self Tapping (Ea.)			
20	105131	3/8" 1-1/4" Self Tapping Bolt			
21	107560	Slotted Nut			
22	107559	M.C. Clamp Assembly			
23	107158	Clamp Assembly (Ea.)			
24	107034	Table Top			
25	107562	Auto Clamp Assembly (220)			
26	107049	Clamp Assembly (Ea.) (220)			

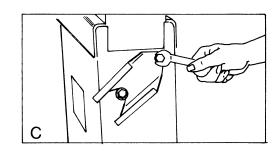


MODEL 200/220 ASSEMBLY INSTRUCTIONS

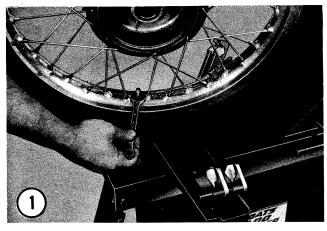
- 1. Remove all parts from the carton. The parts bag containing the rim clamps and other items is located inside chassis.
- 2. The chassis must be bolted solidly to the floor for efficient operation. This may be done by several methods. Two are suggested here:
 - A. Mark through the four holes of the mounting plates of the chassis. Drill four holes for $\frac{3}{8}$ " lag screw type anchors and secure to floor. Washers should be used under bolt heads.
 - B. Mark and drill four %" dia. holes in floor approximately 2- $\frac{1}{2}$ " deep. Place a %" x 3- $\frac{1}{2}$ " square head bolt in each hole with heads down. Melt powdered sulphur and pour around bolts. Be sure bolts are centered in holes. Liquid sulphur will solidify in about five minutes. Hardware stores also stock a special concrete mix that can be used to anchor bolts.
- 3. Place table assembly over square stub of chassis top, with the screw handle on the right side of the machine, when facing the bead loosener handle. Using four (4) %" self-tapping bolts in the parts bag, secure the table to the chassis stub. (Photo A)
- 4. Remove pivot pin and two (2) "E" rings from parts bag and install pin through the two upright brackets of chassis and through hole of pivot arm. Snap one "E" ring on each end of pin (Photo B)
- Remove center post from open side of chassis. Remove knob from parts bag and thread into weld nut on right side of pivot arm. Place center post through pivot arm and secure with knob.
- Remove lube bracket and two (2) ¾" self-tapping bolts from parts bag, and secure bracket to chassis. (Photo C) Fill bottle with rubber lubricant and slide lube bottle on bracket.
- 7. Remove the four (4) remaining 1/4" self-tapping bolts from parts bag, and secure right side panel.
- 8. Extra combination tool boot ends and clamp pads should be stored close by machine to use when needed.
- 9. Place combination tool in tool holder. The machine is now ready to use.



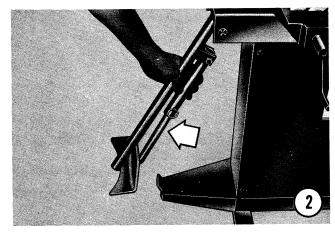




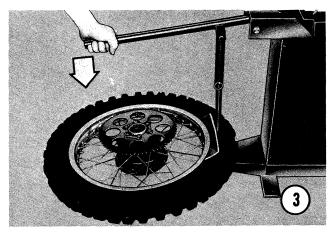
COATS 200 CYCLER TIRE CHANGER OPERATING INSTRUCTIONS



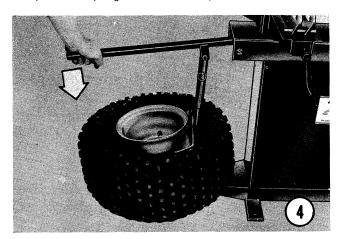
 Remove core from valve stem and allow all air to escape. Remove nuts from valve stem and bead locks. Push bead locks into tire. (PHOTO 1)



 To loosen beads, first swing bead loosener shoe away from machine enough to place rim on chassis pad against positioning toe. (PHOTO 2) For custom aluminum rims, place a shop rag over the chassis pad.

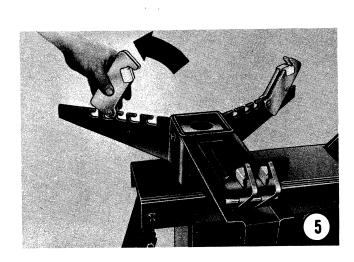


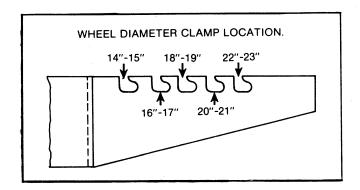
3. Place bead loosening shoe on the tire next to, but not on the rim. Push down on the bead loosener handle until the bead is free from the rim. It may be necessary to rotate the wheel until the tire is completely loosened from the rim. Repeat for opposite side. (PHOTO 3)



 For loosening beads on extra wide wheels, remove pin and slide shoe to upper position and install pin. (PHOTO 4)

RIM CLAMPING

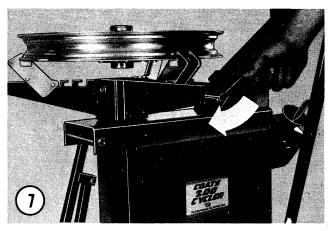




Position the two manually located clamps in the appropriate slots on the radial arms of the table top for the rim diameter being clamped. This is done by holding the clamp assembly in a vertical position, sliding the lower pin of the clamp into the appropriate slot, and then rotating and sliding it back. (PHOTO 5 & SKETCH)

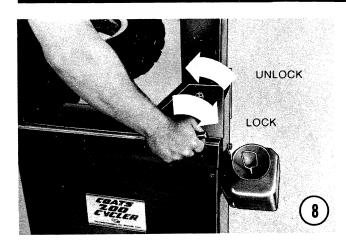


6. Place tire and wheel on the table top from the screw operated side and slide forward until the rim slides under the hook portion of the two manually located clamps. If bead locks are present, position so they will not interfere with clamps. For aluminum rims, it is recommended that the clamp pads be installed. (PHOTO 6)

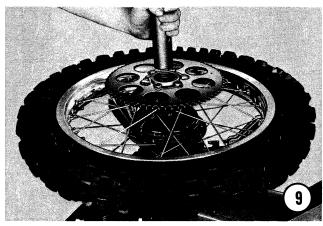


7. Using the handle on the end of the clamping screw, rotate the handle in a clockwise direction until the screw operated clamp engages the rim. NOTE: Avoid excessive clamp force which may damage the rim. Moderate hand tightening should be sufficient. (PHOTO 7)

DEMOUNTING



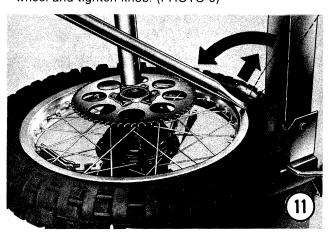
8. Rotate pivot arm over wheel and lock into position. (PHOTO 8)



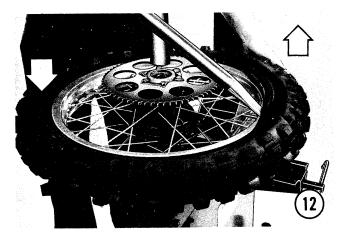
9. Lower center post to about 3cm (1 inch) from the wheel and tighten knob. (PHOTO 9)



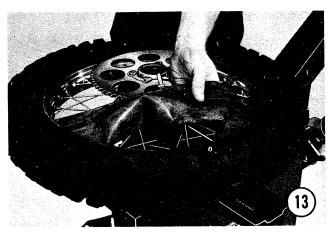
 Apply rubber lubricant to the bead and combination tool demount end. (PHOTO 10) FOR ALUMINUM RIMS IT IS RECOMMENDED THAT YOU INSTALL THE DEMOUNT PROTECTOR BOOT ON THE COMBINATION TOOL DEMOUNT END.



11. Insert the combination tool (ledge side toward tire bead) underneath the upper bead in the dotted position shown in Photo 11. IMPORTANT: PULL BACK ON THE TOOL UNTIL THE LEDGE CONTACTS THE TIRE BEAD. Then pivot the tool over and against the center post for demounting. Take care to see that the tube is not pinched. Plenty of rubber lubricant will help prevent this. (PHOTO 11)



 Rotate tool in a clockwise direction while lifting up on the tire at the start. Be sure to push the bead into the drop center on opposite side of the rim as you start demounting. (PHOTO 12)

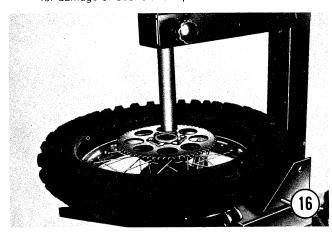


 Remove inner tube and bead locks, if present, before demounting bottom bead. (PHOTO 13) The pivot arm may be rotated back to remove the tube and tire.

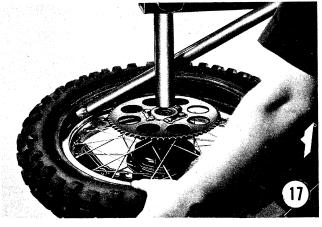
Locate the wheel on the table and secure as described in instructions 6 and 7 of the rim clamping instructions.

MOUNTING

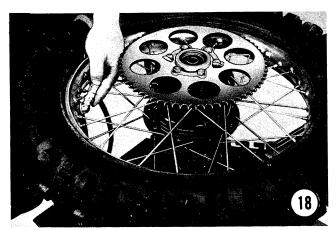
14. If the tire is a tubeless type, inspect rim seating surface for damage or debris and repair or clean.



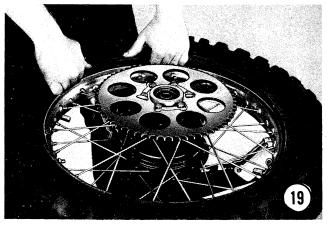
16. Apply rubber lubricant to both beads. It is recommended that you install mounting end protector and clamp pads when servicing aluminum rims. See step 22, page 6. Lay the tire on the wheel, and rotate pivot arm into position and lock. Readjust center post to desired position if necessary, and secure knob. (PHOTO 16)



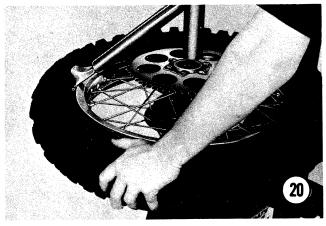
17. Position the mounting end of the combination tool through the pivot arm as shown and hook the end over the rim. Place the lower bead over the hook and against the shoulder of the tool. Start bead in drop center with hand and rotate the tool clockwise until the first bead is mounted. (PHOTO 17)



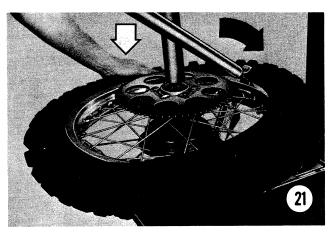
18. Insert bead locks and inner tube if present. Thread the nut on the valve stem about 1/2", but not tight. Thread the nuts on the bead locks two or three turns. Put a small amount of air in the tube and allow correct positioning without twisting. (PHOTO 18)



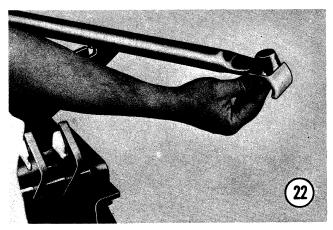
Check that the tube is straightened out, and deflate tube.
 Push bead locks into tire. (PHOTO 19)



20. Relubricate top bead. Position mounting end as shown. (PHOTO 20)



21. Mount top bead. Be sure the bead feeds into drop center, by pushing down with hand as shown. (PHOTO 21)

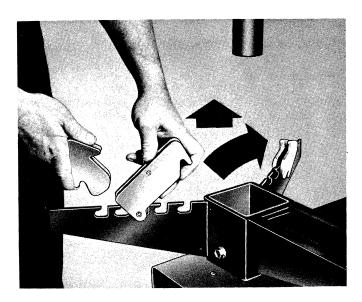


22. To prevent possible rim scratching when servicing aluminum wheels, always install mount and demount protectors on the combination tool and clamp pads on the table top. (PHOTO 22)

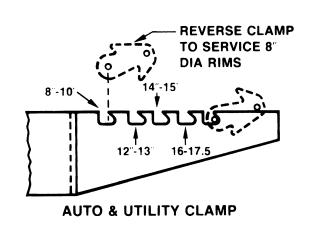
INFLATION

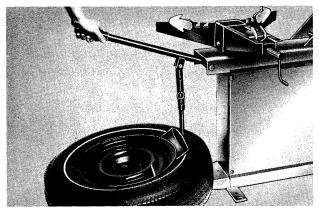
Do not inflate tire while wheel is clamped to the table top. Remove tire and wheel assembly from machine to inflate. Use a remote controlled inflation device when inflating. To seat beads, use a small amount of air intermittently; never exceed the tire manufacturer's recommendation when inflating. If beads do not seat, remove air and relubricate beads. After tire is properly inflated, secure bead locks.

ADDITIONAL INSTRUCTIONS FOR MODEL 220 FOR AUTOMOTIVE AND UTILITY WHEELS (8"-17.5" Dia.)

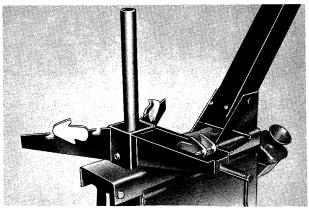


 Replace the motorcycle clamps with the automotive clamps. Place the clamp in the appropriate slots for the wheel diameter to be serviced. See clamp location decal.

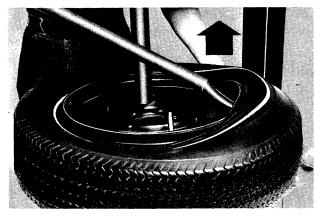




Place the wheel and tire assembly under the bead loosener shoe and loosen the beads.



NOTE: The center post tube can be inserted in the center of the table, if desired, for mounting and demounting operations.



DEMOUNTING

4. Apply rubber lubricant to both beads. Position wheel (narrow side of bead seat up) in the two manually located clamps and secure the wheel to the table with screw operated clamp. Insert combination tool (ledge side toward the bead) underneath the upper bead and pivot the tool over and against the center post and demount first bead. The bottom bead is demounted in the same manner.



MOUNTING

5. Apply rubber lubricant to both beads. Position the mounting end of the combination tool through the pivot arm as shown and hook the end over the rim. Place the lower bead over the hook and against the shoulder of the tool. Start bead in drop center with hand and rotate the tool clockwise until the first bead is mounted. Note: The tool is optimized to work best held at approximately 30° to the wheel as shown.

SPECIAL SAFETY INSTRUCTIONS

- 1. Be sure the machine is anchored securely to the floor before operating.
- 2. Be sure the wheel clamps are located in the proper slots for the correct wheel diameter.
- 3. To prevent damage to appearance of aluminum rims, always use protector pads on clamps, and mount and demount boots on the combination tool.
- Avoid excessive clamping that could damage wheels.
- 5. Always use rubber lubricant when mounting, demounting and bead seating.
- 6. DO NOT INFLATE TIRE ON TABLE TOP OF MACHINE. Remove wheel from machine before inflating.
- 7. Tire failure under pressure can be hazardous. Inspect tire carefully for wear or defects before seating or inflating. Never use air pressure beyond the tire industry recommendation. Always lubricate with approved lubricant and never damage tire beads. Keep hands and entire body back from inflating or inflated tire.
- If beads do not seat at recommended air pressure, remove air and relubricate beads. For automotive wheels, never exceed tire industry recommendation of 40 psi.
- 9. During inflation, put air in intermittently, check pressure frequently, and avoid distraction to prevent over inflation.
- 10. Secure bead locks if present, once the tire has been properly inflated.