



General Safety and Maintenance Manual



Bench Rammer and Floor Rammers

Model Number	Bore and Stroke	Throttle Type	Blows per Minute	Length	Diameter of Main Body	Air Consumption	Weight
1350-2BA	1.0 Inch x 4.0 Inch (25 mm x 102 mm)	(L) Lever	1240	22.2 Inches (564 mm)	1.88 Inches (48 mm)	20 cfm (9.4 L/S)	10.7 Lb. (4.8 Kg.) approx
1350-2BF				36.2 Inches (921 mm)			14.3 Lb. (6.5 Kg.) approx

THE HENRY TOOL CO., MANUFACTURED BY HENRY TOOLS

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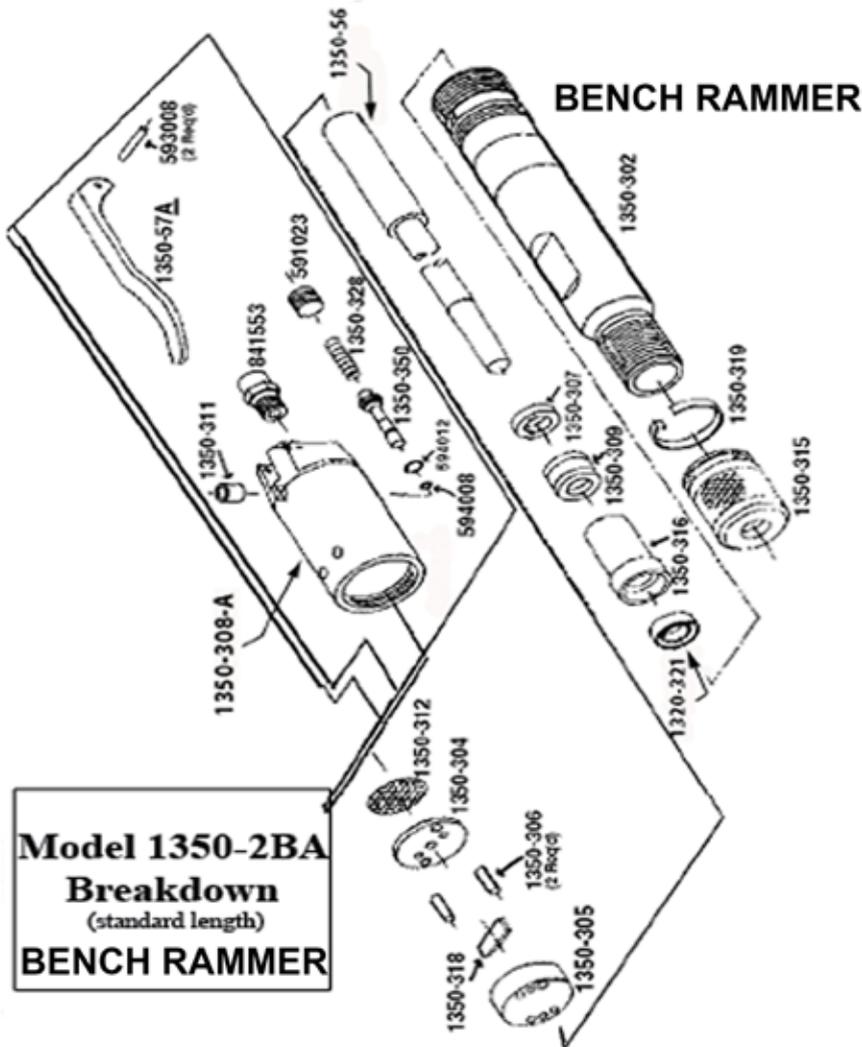


Model 1350-2BA Bench Rammer.



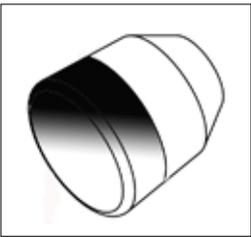
Model 1350-2BF Floor Length Rammer.

MODELS
1350-2BA
1350-2BF



Model 1350-2BA
Breakdown
 (standard length)
BENCH RAMMER

Model 1350-2BA
BENCH RAMMER
 (standard length)



Rubber/Steel Butts of various sizes are available. (see chart)

1350-2BA BENCH RAMMER

MODELS
1350-2BA
1350-2BF



Model 1350-2BA Bench Rammer



Model 1350-2BF Floor Length Rammer.



Part Number	Description
829558	Rubber Butt (2 3/8")
829558-AR	Alum/Rubber Butt (2 3/8")
829559	Alum/Rubber Butt (3")
832924	Steel Butt (3" STEEL)
832925	Steel Butt (2 3/8" Steel)
829556-AR	Alum/Rubber Pein (1 x 2 1/8")
829557-AR	Alum/Rubber Pein (3/4 x 2 3/8")

Part Number	Description
1100-326 -HT	LIVE HANDLE TO 1/2" NPT ADAPTER
829554	1-3/4 DIAMETER RUBBER BUTT "
829556	1 X 2-7/8" RUBBER PEIN "
829557	3/4 X 2-3/8" RUBBER PEIN "
829558	2-3/8 DIAMETER RUBBER BUTT "
829559	3 DIAMETER RUBBER BUTT "
832924	3 DIAMETER STEEL BUTT "
832925	2-1/2 DIAMETER STEEL BUTT "
841552	3/8 NPT TO 3/8 NPT BUSHING
1350-302	Rammer Barrel
1350-304	Upper Valve BLock Lid Cover
1350-305	Lower Valve Block
1350-307	Packing Gland Washer
1350-308-A	Alum. Lever Backhead
1350-309	Packing
1350-311	Thrtl. Valve Bushing
1350-312	Screen
1350-315	Packing Gland Cap
1350-316	Packing Gland Bushing
1350-318	Main Valve
1350-319	Packing Nut Lock Clip

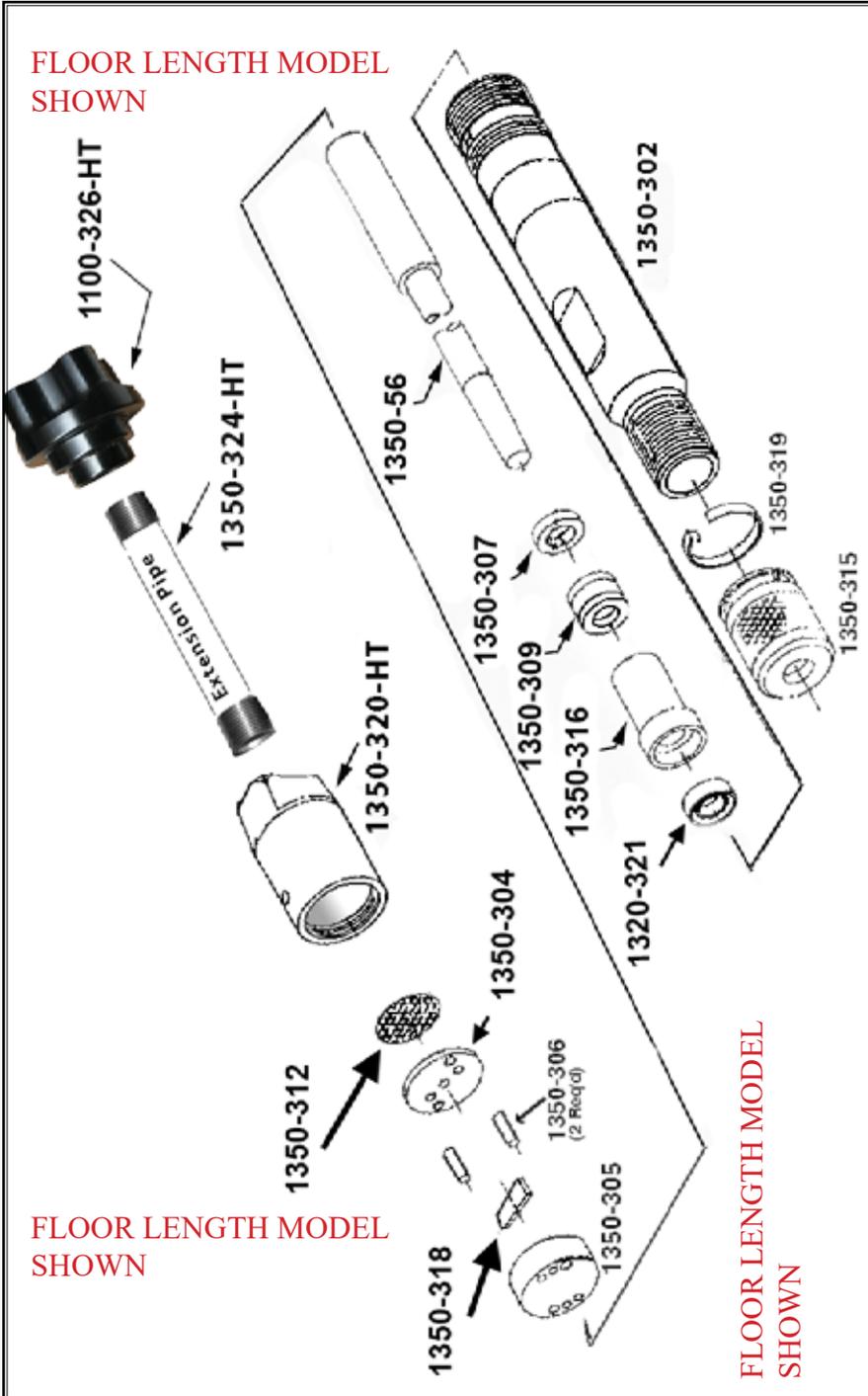
Part Number	Description
1350-328	Throt. Valve Spring
1350-350	Thrtl. Valve
1350-56	Piston
1350-57A	Thrtl. Valve Lever
591023	Throt. Valve Spring Plug
593008	Thrtl. Lever Pins (2 are Required)
594008	"O"-Ring
594012	"O""-Ring Nut
596006	Front Seal
829558	2-3/8" Dia Rubber Butt
832924	3" Steel Butt
832925	2-3/8" Steel Butt
841551	Inlet Bushing
1350-306	VALVE BLOCK DOWEL PIN (2 are REQ.)
1350-318	MAIN VALVE
1350-319	CLIP
1100-326 -HT	BACKHEAD FOR EXTENSION
1350-321	FRONT SEAL
1350-324 -HT	EXTENSION PIPE
829556-AR	1 X 2-7/8" ALUMINUM/RUBBER PEIN "
829557-AR	3/4 X 2-3/8" ALUMINUM/RUBBER PEIN "
829558-AR	2-3/8 DIAMETER ALUMINUM/RUBBER BUTT "
829559-AR	3 DIAMETER ALUMINUM/RUBBER BUTT "
841553-M	3/8 NPT TO 3/8 BSP BUSHING
AA-650-1-AL	LEVER HANDLE ASSY.
AA-650-1-ALS	SAFETY HANDLE ASSY.

HENRY TOOLS, INC. Ph: (216) 291-1011 or (800) 826-5257



Model 1350-2BF Floor Length Rammer.

MODELS
1350-2BA
1350-2BF



FLOOR RAMMER

Model 1350-2BF
Breakdown
 (Floor length extended)



Rubber/Steel Butts of various sizes are available. (see chart)

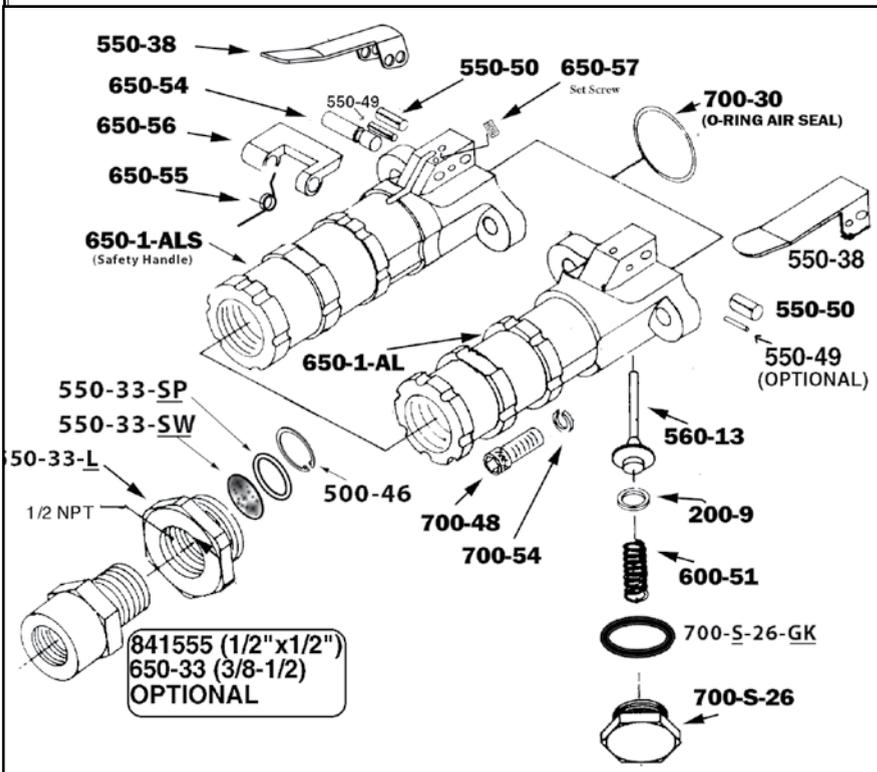


Model 1350-2BF Floor Length Rammer.



Model 1350-2BA Bench Rammer

MODELS
1350-2BA
1350-2BF



Rubber/Steel Butts of various sizes are available. (see chart)

Part No.	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 (Bare)
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)
650-33	Screen Bushing(1/2x3/8)

Part No.	Description
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-S-26-GK	Gasket
841555	Screen Bushing (1/2X1/2)

MODELS 1350-2BA 1350-2BF



Model 1350-2BA Bench Rammer



Model 1350-2BF Floor Length Rammer.

GENERAL INSTRUCTIONS FOR THE CARE OF HENRY TOOL SAND RAMMERS

LUBRICATION

Before being put into actual service, all new sand rammers should have a small amount of kerosene oil poured into the air inlet. Run the rammer a few seconds to permit the kerosene to remove any gum, oil or grease from the working parts. Do not run the rammer too long because kerosene is not a lubricant. The hose should then be disconnected and the rammer oiled with a #10 acid free lubricating oil. The rammer should be oiled as often as needed to keep all surfaces protected while the rammer is in operation.

VALVE BOX

The Henry Tool Valve box should be cleaned out at regular intervals to make sure the main valve slot is free from grit and dirt.

PACKING

Before putting the rammer into use, the tightness of the packing should be checked. This may be done by pushing the piston rod in and out by hand. There should be a very slight drag in the movement of the rod. If the drag is too great, remove the lock clip from the slot in the packing nut and back off one notch. As the rammer receives continued use, causing the leaded packing to wear. Adjustment should be made as often as necessary to maintain compression and the power of the rammer. This also prevents grit and foundry sand from working up into the cylinder to cause premature wear on both the rod and the cylinder wall. Packing is sold in sets at a very nominal cost and one or two sets should be kept on hand for replacement. Visual examination of the packing should be made regularly.

GENERAL

Always keep the rear head screwed tightly to the cylinder to prevent air leakage which, in turn, causes loss of power. Regular dismantling and cleaning of all parts will keep your rammer up to full efficiency at all times and will greatly prolong the life of the tool.

DISASSEMBLY

1. **DISCONNECT AIR SUPPLY** and remove all accessories, butts, and pins.
2. On model 1350-2BF, unscrew tool from extension pipe.
3. Position tool in vise vertically with output of tool facing upward. Clamp onto the sides of backhead (1350-308A or 1350-320-HT). (depending on the model that you have).
4. Use a small screwdriver to lift the tab on clip (1350-319) out of the slot on the packing nut (1350-315). Lift and move the clip so that the tab is fully disengaged from the packing nut.
5. Remove packing nut from barrel (1350-302).
6. Grasp the piston (1350-56) firmly and remove from tool. Remove packing gland (1350-316), packing (1350-309), and packing washer (1350-307) from piston. Remove from vise.
7. Clamp barrel (1350-302) on its flats in vise with output of the tool downward. Unscrew and remove the backhead assembly.
8. Lift off the main valve assembly, including the screen (1350-312), the upper valve block (1350-304), the lower valve block (1350-305) and the pins (1350-306). Remove from vise.
9. Turn the lower valve block over to remove the valve (1350-318).
10. Remove seal (1350-321) from the packing gland (1350-316) using a small punch if the seal needs replacement.
11. (OPTIONAL STEP): To check throttle valve on 1320-2BA, remove cap (591023) using an Allen® wrench. Remove throttle valve spring (1350-328) and throttle valve (1350-350). Replace o-ring (594012) if cracked or torn.
12. (OPTIONAL STEP): To check throttle valve on 1320-2BF, unscrew throttle valve cap (700-S-26). Lift out valve spring (600-51) and throttle valve (560-13). Replace o-ring (200-9) if cracked or torn.

ASSEMBLY

1. Be sure all parts are clean and free of any abrasive.
2. Clamp the barrel assembly in the vise vertically with the front of tool downward. Clamp onto the flats on the front of the barrel (1350-302).
3. Place the dowel pins (1350-306) into the blind holes of the barrel. The blind holes are those that you can see the bottoms of.
4. Place the lower valve block (1350-305) onto the pins. (Be sure not to block the ports.) The lower valve block assembles with the center valve slot facing the rear of the tool.

5. Drop valve (1350-318) into slot in the lower valve block. Apply a few drops of light oil to the valve.
6. Slide upper valve block (1350-304) over pins. (Be sure to align the port holes.)
7. Place the screen (1350-312) on the center of the upper valve block.
8. Screw on backhead assembly by hand. Tighten with a wrench. Remove from vise.
9. Clamp the tool in a vise vertically with the front of tool upward. Clamp onto the flats of the backhead.
10. Press seal (1350-321) into packing gland (1350-316) if it was removed.
11. Hold piston (1350-56) by the large end. Slide on the packing washer (1350-307) with the chamfer towards the large end of the piston.
12. Slide the packing (1350-309) onto the piston.
13. Slide the packing gland (1350-316) onto the piston with the seal towards the tapered end of the piston.
14. Place the piston assembly into the front of the barrel. The larger end should be oriented toward the back of the tool. It should slide freely. Push the packing washer, packing and packing gland into the nose of the barrel. The packing gland will not go all of the way into the barrel.
15. Screw on the packing gland nut (1350-315) until it is tight, then loosen a half turn.
16. Hook the tool up to the air supply and place back into vise with the output upward. Clamp securely onto the flats on the backhead.
17. Taking care that no one is near the moving piston, apply air in a few short burst. If the piston is not moving freely, loosen the locknut another half turn. If the piston is still not moving freely, take the tool back apart and check for burrs or other damage.
18. If the piston is moving freely, re-apply the air to the tool, and carefully tighten the packing gland nut until the piston just begins to slow down, then backing off of the packing gland nut until one of the notches on the rear of the gland nut aligns with the slot on the front of the barrel.
19. Using #2 needle nose pliers, fit clip (1350-319) onto the groove of the packing nut (1350-315) placing the tab end of the key into the slot on the packing nut that is over the slot on the barrel. The tab of the clip must engage the slot on the barrel fully, so the gland nut cannot be turned accidentally.
20. Reinstall butt or pin tightly onto the piston. Reinstall all safety devices and accessories.
21. Run tool for a full minute away from yourself or anyone else to insure the butt or pin is firmly attached and the tool is functioning properly.

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