

SHERIDAN

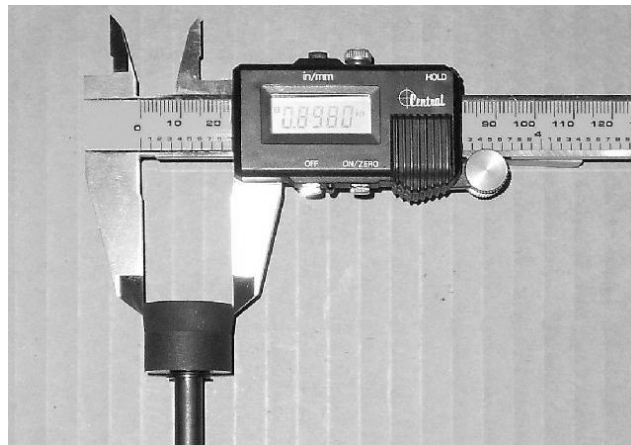
Model A and B Repair Manual Supplement-1 replacement pump cup fabrication

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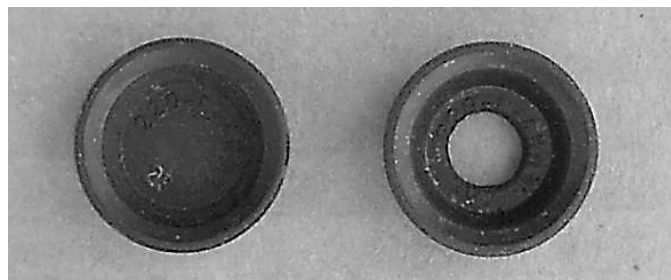
The pump cups offered by James Valdez on ebay work very well and I recommend them. However, if you can not obtain one, or if you like to experiment and practice your skills, this supplement may be a good guide for fabricating your own pump cup.

Please do not destroy an original piston/pump cup that can be rejuvenated as outlined in the Repair Manual. If the original cup is bad, it will chip/crack when put in the vice.

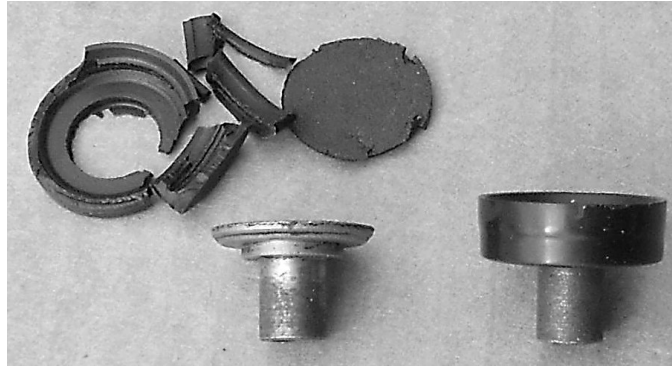
Following is an example of a replacement piston fabricated with a 13/16" brake cylinder cup and an original piston metal insert. Read through the entire procedure for a clear understanding before proceeding.



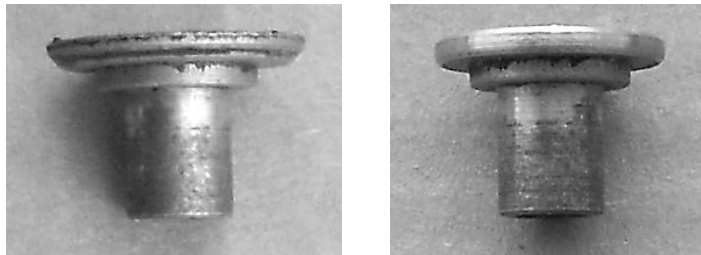
The replacement piston should measure about .900" at the flared end of the cup when installed on the piston rod. This measurement varies and is best determined by trial-and-error fitting of the piston assembly into the rifle and testing how well it pumps. The cup should not allow air to bypass it and it should not have too much friction which makes pumping difficult.



the cup used in this example is a Bendix 92002
punch a 5/16" hole in center of cup



remove molded on hycar material from original piston and retain metal insert

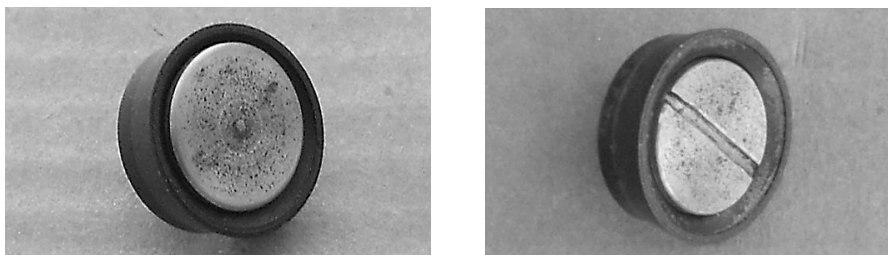


turn down diameter of head on insert as shown on the right

The diameter of the insert is determined by how the piston fits the pump tube when installed securely on the pump rod. Remove a little material at a time and check fit. A good starting point is .725". Measure the flared end of the cup as described on the previous page. For the Bendix cup shown in this example the diameter of the insert needed to be .675"

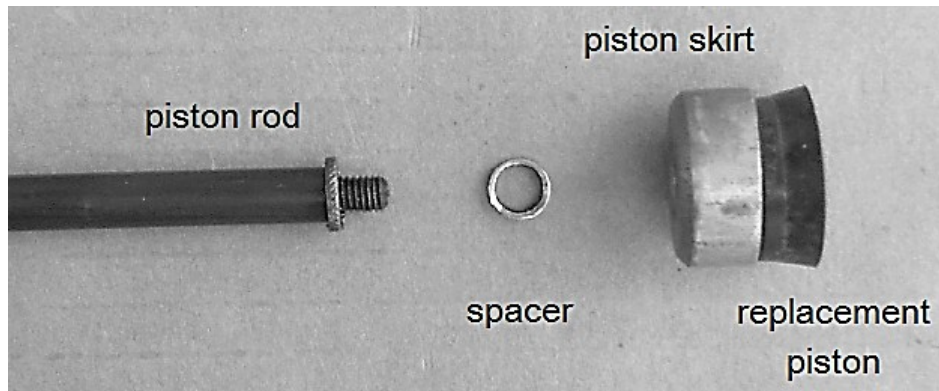


Optional: a slot can be cut on front of insert to aid in installation

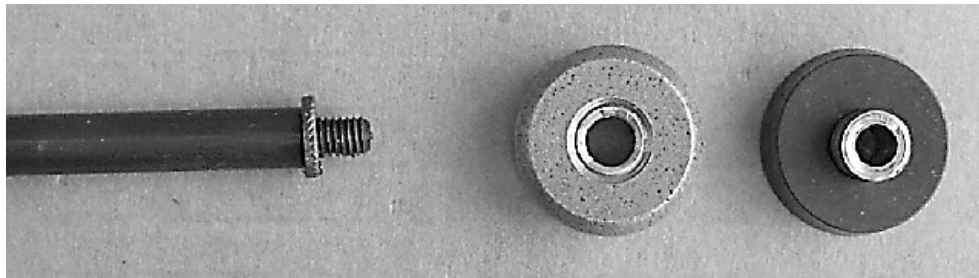


brake cylinder cup placed on modified insert makes up the replacement piston

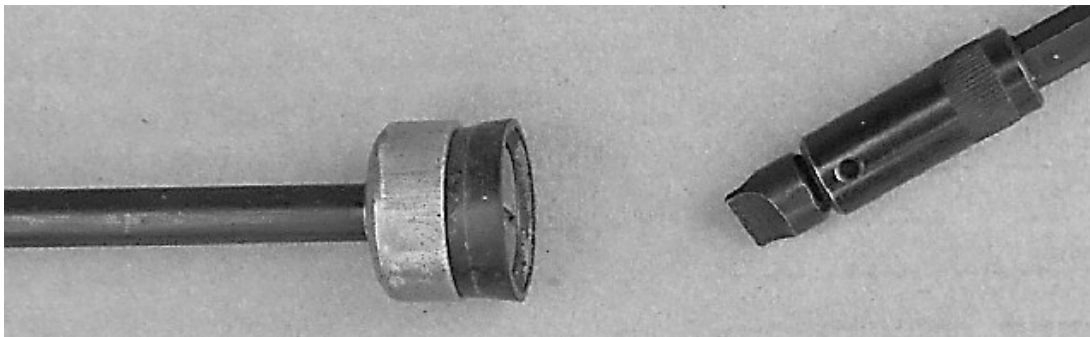
spacer cut from 5/16" steel or brass tubing is needed to fill void in piston skirt



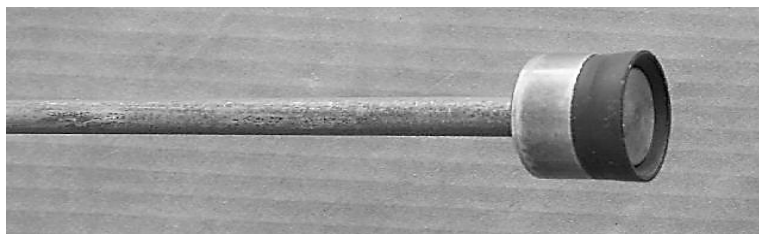
When secured to the rod the back side of the piston cup should be of slightly less diameter than the surface of the piston skirt which it mates to. Also, the cup should be firmly seated to the piston skirt and not rotate when secured. This fit is determined by the width of the spacer. In this example it is .0625". A good starting point is .100".



back side of piston skirt with spacer inserted / back side of replacement piston



install replacement piston securely on rod and check for proper dimensions



install pump assembly into rifle as outlined in Repair Manual and test for proper operation
make adjustments to width of spacer and/or diameter of metal insert as necessary