

Dairy Cap Chuck

Service & Installation Instructions

P-2021-WE



An **Altra Industrial Motion** Company
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Setting Application Torque

1. Determine initial clutch setting from torque chart below.
2. Loosen the torque adjustment screws. Rotate the adjustment ring using the face spanner wrench to the desired setting and then retighten the torque adjustment screws. Do not use the set screw in the slot on the backside of the housing for torque adjustment. Tighten set screws to 8-10 lb-in. Over tightening is not necessary and will strip the screws or possibly damage the housing body.
3. For optimum results, check setting with a torque wrench and FIX-0115* or FIX-0138.

*For use with DBJ closure



Figure 1

Application Torque Setting Charts

Clutch Setting	Application Torque Standard Torque Units (lb-in)	Application Torque High Torque Units (lb-in)
0.00	3.00	11.00
1.00	4.00	12.00
2.00	8.00	17.00
3.00	13.00	22.00
4.00	16.00	26.00
5.00	18.00	28.00

Recommended Maintenance For CHF38-035 Chuck



Figure 2

Disassemble, clean, and replace all wearing parts in the headset every 7000 hours of machine run time.

- See rebuild instructions for detailed information on disassembly and assembly of Warner headsets.
- Dependent upon machine speed and washdown procedure, some environments may require more frequent rebuilds.
- CHF38-035 chucks cannot be submerged in water. Proper cleaning procedures for the chucks include wipe down operations or foaming. If necessary chucks can be taken apart, cleaned and rebuilt.
- Chucks can be greased if needed using lubrication hole in chuck and needle fitting on grease gun. Do not over grease as this will cause the chucks to stick.

Note: CHF38-037 and later model chucks may be submerged in water or COP/CIP cleaners. No re-greasing is required.

Installing Clutch

Remove handle. Set aside finger, three socket head cap screws and lock washers. See figure 3.



Figure 3

Remove screen. Set aside screen, 4 screws, and 4 lock washers. See figure 4.

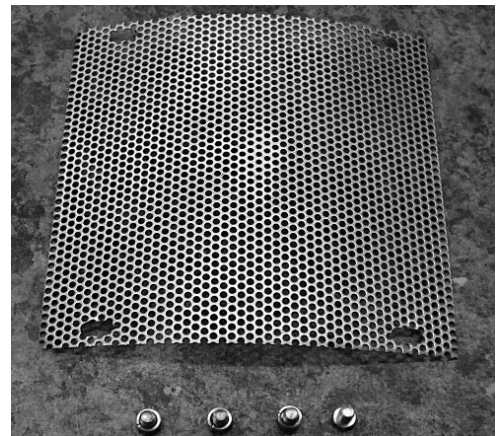


Figure 4

Install screen, 4 lock washers, and 4 screws onto new unit. It may be necessary to widen original holes on screen. See figure 5.

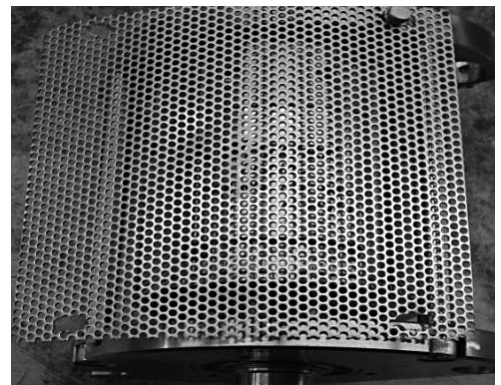


Figure 5

Install finger onto new unit. See figure 6.

***Depending on previous equipment a longer finger may be necessary.**



Figure 6

To set torque loosen the two set screws using 3mm Hex wrench. Tighten set screws to 8-10 lb-in. Over tightening is not necessary and will strip the screws or possibly damage the housing body. See figure 7.

Set Screws



Figure 7

Align visual marking with desired setting. Using a face spanner wrench (YTL2-0002). Then tighten down set screws. See figure 8.



Figure 8

Remove turret cover from top of machine. See figure 9.

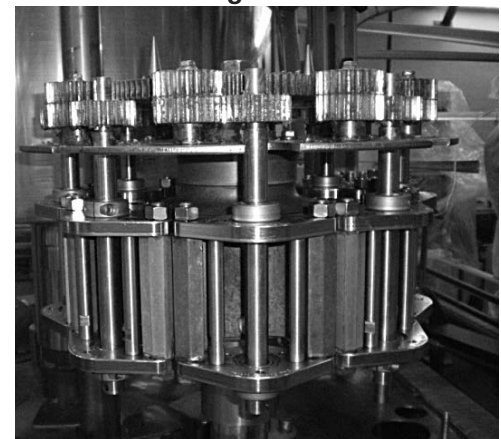


Figure 9

Remove the two bolts that hold the unit to the machine. Set the bolts aside for later use. See figure 10.

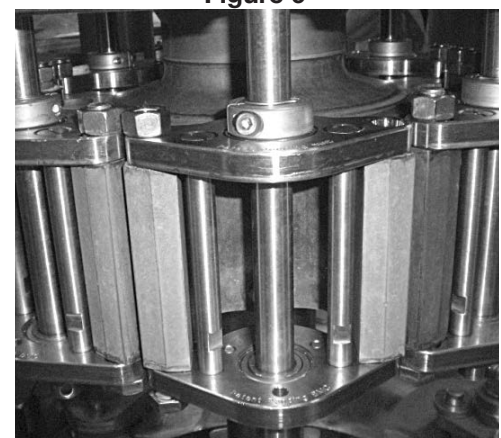


Figure 10

Remove old unit from the machine. See figure 11.

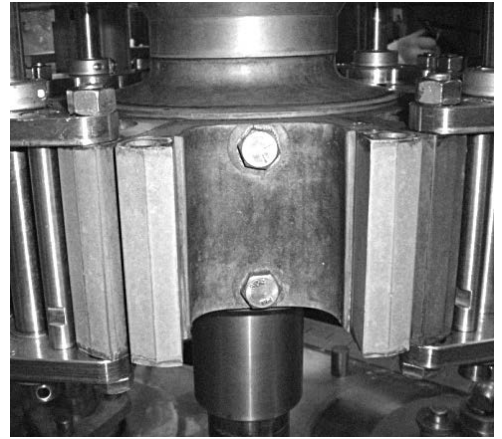


Figure 11

Install new unit onto the machine. Use original two bolts to secure unit from Figure 15. See figure 12.



Figure 12

Adjust gear position where necessary using 3mm Hex wrench. Apply proper food grade lubricant to gears. See figure 13.



Figure 13

Clutch installation is now complete. Install remainder of clutches in the same manner. Adjust clutch torque and machine turret height as needed. See figure 14.



Figure 14

Outer Bearing Rebuild

Remove snap ring from bottom plate. See figure 15.



Figure 15

Remove screws from bottom plate using 3/16" (3mm) hex wrench. Remove bottom plate from unit. See figure 16.

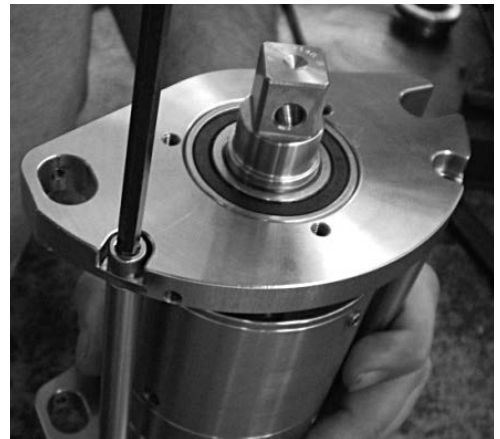


Figure 16

Remove set screw on the backside of housing using 3mm hex wrench. See figure 17.



Figure 17

Using spanner wrenches (YTL3-0008) and rubber mallet separate clutch from top adapter. See figure 18.



Figure 18

Remove clutch from top adapter. See figure 19.



Figure 19

Remove gear from shaft using 3mm Hex wrench. See figure 20.



Figure 20

Remove retaining ring from shaft. See figure 21.



Figure 21

Remove shims from shaft. See figure 22.



Figure 22

Remove shaft from top plate. See figure 23.



Figure 23

Replace the two bearings in the top plate.
Replace bearing in bottom plate. See figure 24.



Figure 24

Install shaft with adapter onto top plate. See figure 25.



Figure 25

Install shims onto shaft. See figure 26.



Figure 26

Install retaining ring onto shaft. See figure 27.



Figure 27

Install gear onto top of shaft using 3mm Hex wrench. See figure 28.



Figure 28

Install clutch onto adapter. See figure 29.



Figure 29

Using spanner wrenches (YTL3-0008) and rubber mallet tighten down clutch onto adapter. See figure 30.



Figure 30

Install set screw on back side of housing using 3mm hex wrench. Tighten set screws to 8-10 lb-in. Over tightening is not necessary and will strip the screws or possibly damage the housing body. See figure 31.



Figure 31

Install bottom plate over shaft of clutch. Install screws using 3/16" hex wrench onto bolts to hold plate in place. See figure 32.

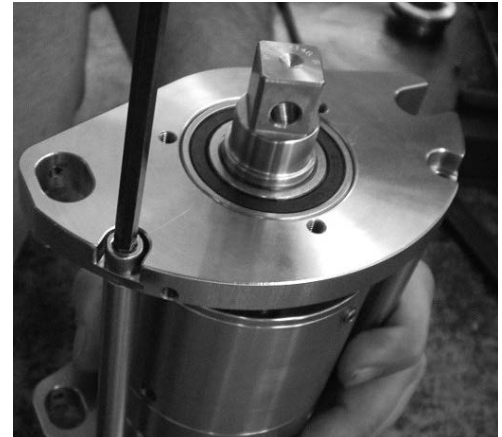


Figure 32

Install snap ring over shaft of clutch. See figure 33.



Figure 33

Clutch Rebuild Procedure

Place unit into vice. Using FIX-0019 and 1 1/8" or 28mm" socket wrench remove nut from top of housing. See figure 34.



Figure 34

Remove the two set screws from housing of unit using a 3mm hex wrench. See figure 35.



Figure 35

Move adjustable end plate until spring and pin are visible. Remove pin and spring from housing. See figure 36.



Figure 36

Pull magnet stack away from housing. Set magnet stack aside. See figure 37.



Figure 37

Remove three cap screws from top of housing using 3mm hex wrench. Remove black driver magnet from housing. See figure 38.

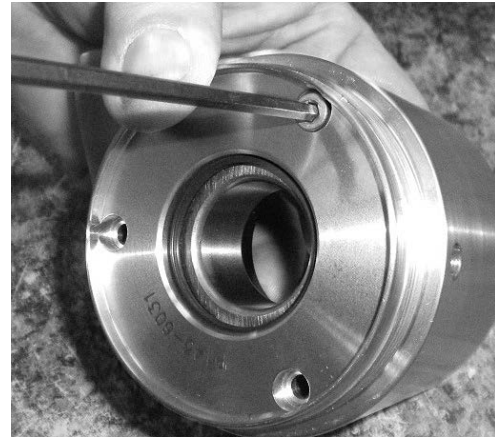


Figure 38

Remove spacer from magnet stack. See figure 39.



Figure 39

Remove hysteresis magnet from magnet stack. See figure 40.

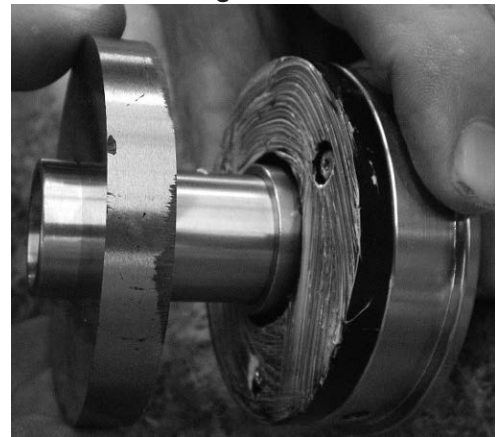


Figure 40

Remove adjustable end plate with black driver magnet from shaft. See figure 41.



Figure 41

Remove spacer and grease seal. See figure 42.



Figure 42

Remove O-ring from shaft. See figure 43.



Figure 43

Remove seal from top of housing. See figure 44.



Figure 44

Using an arbor press remove bearing from inside of housing. See figure 45.



Figure 45

You will now have all of the pieces shown in the picture to the right. Clean all pieces and replace parts as needed. Use an alcohol based cleaning solvent to clean the black driver magnets. Do not use anything abrasive when wiping the black driver magnets. Use a Scotch Brite deburr wheel to polish the hysteresis magnet. See figure 46.



Figure 46

Turn housing over. Press new bearing in housing using FIX-0002 and an arbor press. See figure 47.

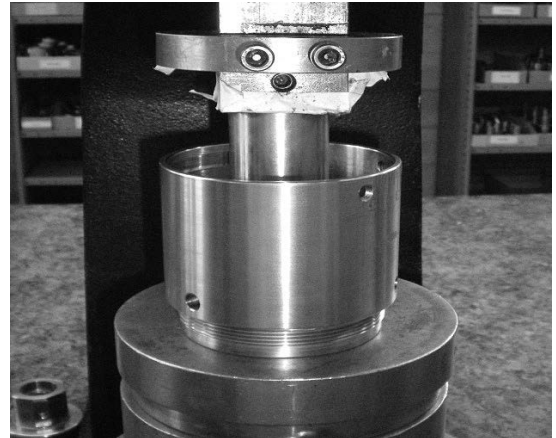


Figure 47

Put in new seal. See figure 48.



Figure 48

Install end cap with black driver magnet into housing. Be sure to line up holes for set screws. See figure 49.



Figure 49

Reinstall three cap screws on top of housing using 3mm hex wrench. See figure 50.



Figure 50

Place grease seal over spacer. See figure 51.



Figure 51

Install o-ring into groove of shaft. See figure 52.



Figure 52

Slide spacer with grease seal onto shaft. See figure 53.



Figure 53

Once the spacer is placed on the shaft. Apply thin layer of grease to the seal. See figure 54.



Figure 54

Apply thin layer of grease to black driver magnet that is attached to the adjustable end plate. See figure 55.

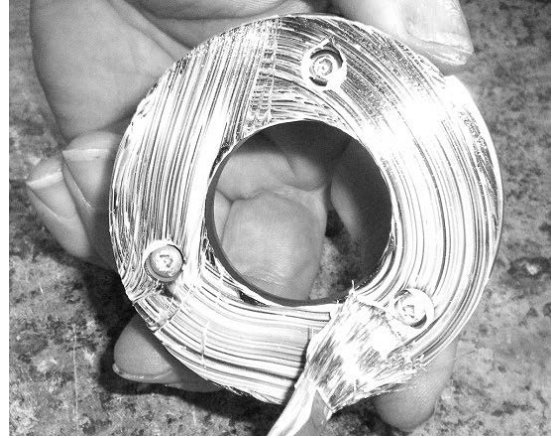


Figure 55

Slide adjustable end plate and magnet onto shaft. See figure 56.



Figure 56

Slide hysteresis magnet onto shaft so that it rests on the black driver magnet. See figure 57.



Figure 57

Install spacer onto shaft. See figure 58.



Figure 58

Apply thin layer of grease to black driver magnet inside housing. See figure 59.



Figure 59

Place magnet stack inside of housing. Line up the hole on the adjustable end plate with one of the set screw holes on the housing. Be careful as the magnets will attract together and snap into place. See figure 60.



Figure 60

Place small spring inside of the aligned holes. Then place pin, flat side up, into the hole. See figure 61.



Figure 61

Press down on pin with allen wrench and place spanner wrench (YTL2-0002) onto adjustable end plate. Turn the allen wrench and the spanner wrench at the same time to lock pin into place. See figure 62.



Figure 62

Turn adjustable end plate until witness mark falls between the 0 and 5 torque markings. See figure 63.



Figure 63

Install the two set screws onto front of housing using 3mm hex wrench. Do not tighten down yet. See figure 64.



Figure 64

Place unit back into the vice. Apply Blue loctite to the thread of the nut. Using FIX-0019 and 1 1/8" or 28mm socket wrench reinstall the nut. Torque nut down to 45 ft. lb. See figure 65.



Figure 65

Using spanner wrench (YTL2-0002) adjust to desired torque setting. See figure 66.



Figure 66

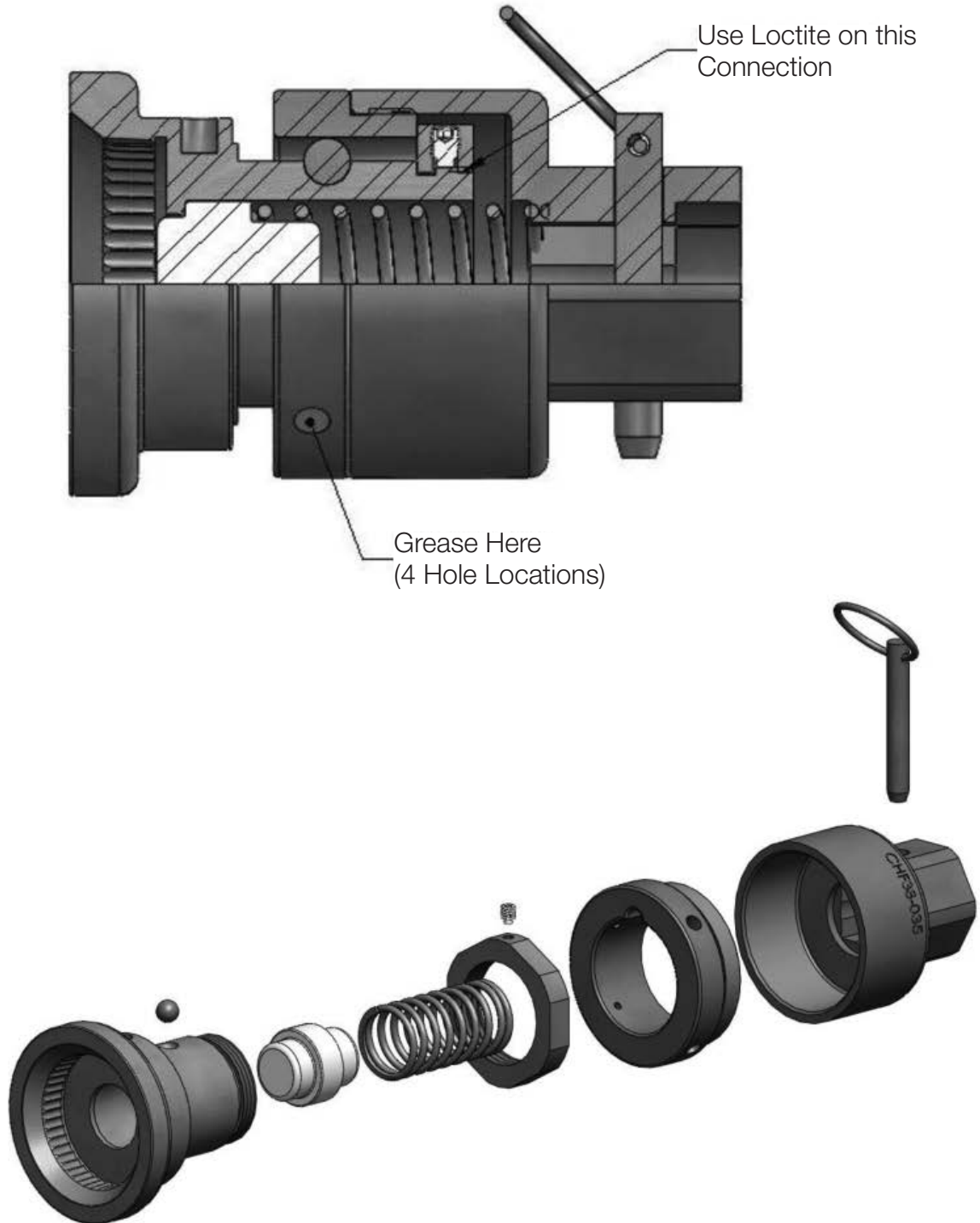
Tighten down set screws using 3mm hex wrench. Tighten set screws to 8-10 lb-in. Over tightening is not necessary and will strip the screws or possibly damage the housing body. Reinstall unit. See figure 67.



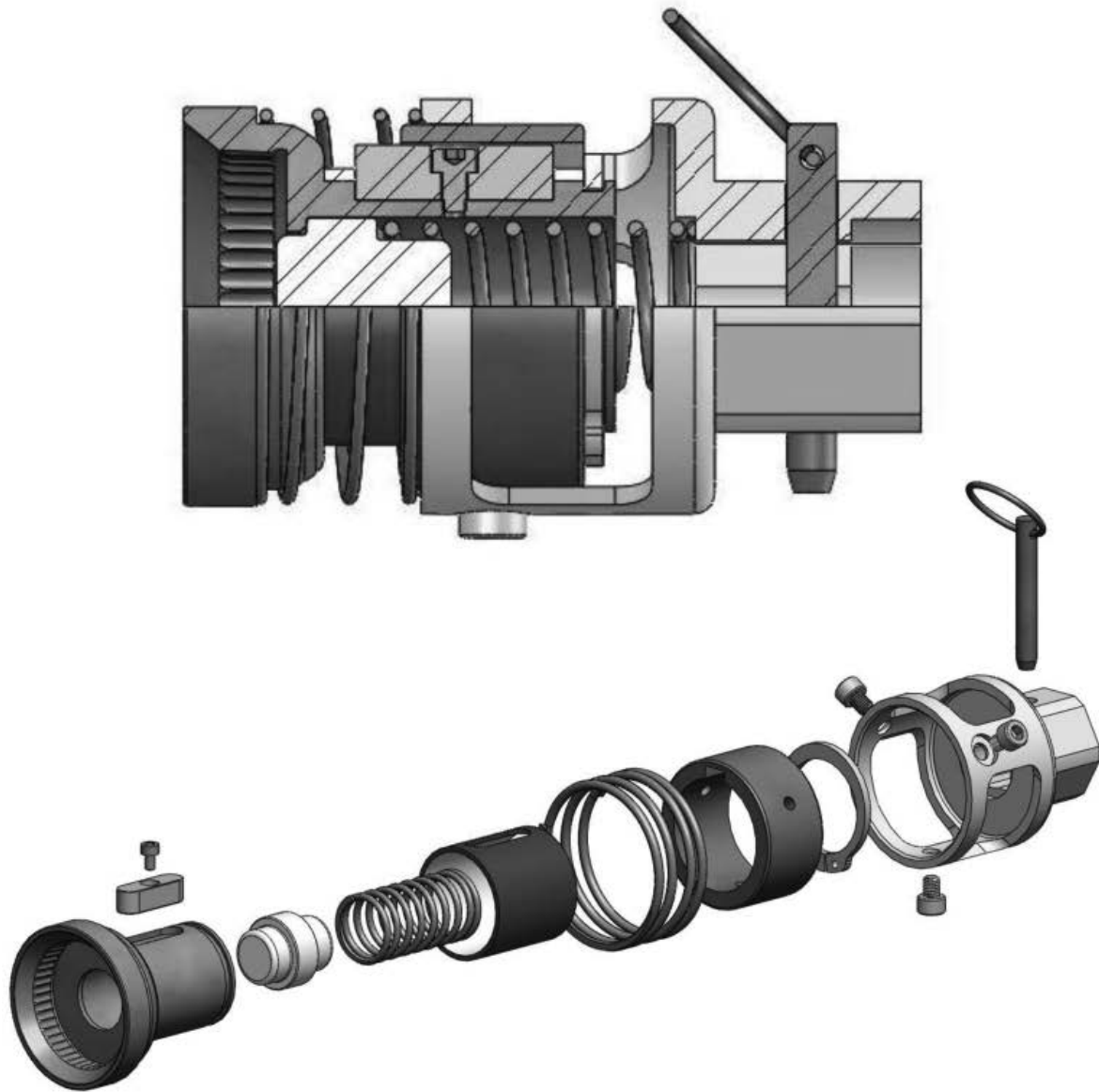
Figure 67

CHF38-035

Exploded View for Chuck Rebuild



CHF38-037 & Later Models Exploded View for Chuck Rebuild (non-grease chuck)



On-site Service Support

Warner Electric Capping Headsets

On-site service support is available for installation of new Warner headsets, rebuild support of existing Warner headsets, training, etc. Our factory-trained and certified service department with over 50 years combined experience can help prevent costly delays and down time of your capping operation.

Precision Tork is the ONLY Service Group that is factory authorized to work on the Warner Electric headsets.

Services Provided:

- Installation of new equipment
- Machine audits and troubleshooting
- Service and repair of filling and capping equipment
- Consulting: New Installations-existing issues for filling and capping
- Develop new design for efficient production
- Assist with planning of preventative maintenance programs
- Operator and mechanical training
- Highly qualified trained field engineers ready to work on the following bottling equipment:
 - **Alcoa** • **Zalkin** • **Fowler** • **AROL**

Precision Tork Service Benefits:

- We manufacture the headsets!
- Most up-to-date designs available only through Precision Tork.
- Our service technicians are trained to rebuild your headsets to their existing revision level OR upgrade them to the latest technology.
- Component parts and rebuild kits on hand so you do not incur downtime.
- Coming soon...secure website for headset information and parts ordering with a credit card.

To schedule a certified Warner Service Technician contact Melissa Bottke at 1-888-350-1891

Trouble Shooting

- **Proper Operation:** Before cap comes out of chuck the chuck should reach a stall point. At that point cap will be completely tightened on bottle. It is important to have proper turret height and clutch torque adjustment for this to occur.
- **Loose Caps**
 - Torque setting on clutch to low; increase torque setting on clutch
 - Turret position set to high while cap is being screwed onto bottle
 - Cap will be pulled from chuck before properly tightened. To correct, lower turret of machine.
- **Bottle Damage**
 - Can result if turret is set to low.
 - Chuck will cause cap to be crushed onto bottle.
 - To correct raise turret of machine.
- **Sticky Chuck Float**
 - For proper operation, chuck must float up and down approximately 0.2 inches.
 - If grease is washed out of chuck and chuck becomes dry, re-greasing chuck will become necessary.
 - Chuck should move easily in and out without hang ups.

Information for Ordering Spare Parts

It is important to stock spare parts on hand to avoid unnecessary downtime. Warner recommends that you stock at least two spare headsets per machine and a few bearing and magnet rebuild kits so that you have the necessary parts on hand if you need them.

How to order spare parts – required information:

1. Purchase Order Number.
2. Warner headset model number/part number OR serial number
(only on models manufactured July 2007 and later).
3. Warner Component or Kit Part Number.
4. Preferred distributor to order from.

All orders will be routed through local distribution. Pricing and lead-time can be quoted by calling the Manufacturing Facility at (888) 350-1891.

Warranty

Warner Electric LLC warrants that it will repair or replace (whichever it deems advisable) any product manufactured and sold by it which proves to be defective in material or workmanship within a period of one (1) year from the date of original purchase for consumer, commercial or industrial use.

This warranty extends only to the original purchaser and is not transferable or assignable without Warner Electric LLC's prior consent.

Warranty service can be obtained in the U.S.A. by returning any defective product, transportation charges prepaid, to the appropriate Warner Electric LLC factory. Additional warranty information may be obtained by writing the Customer Satisfaction Department, Warner Electric LLC, 449 Gardner Street, South Beloit, Illinois 61080, or by calling 815-389-3771.

A purchase receipt or other proof of original purchase will be required before warranty service is rendered. If found defective under the terms of this warranty, repair or replacement will be made, without charge, together with a refund for transportation costs. If found not to be defective, you will be notified and, with your consent, the item will be repaired or replaced and returned to you at your expense.

This warranty covers normal use and does not cover damage or defect which results from alteration, accident, neglect, or improper installation, operation, or maintenance.

Some states do not allow limitation on how long an implied warranty lasts, so the above limitation may not apply to you.

Warner Electric LLC's obligation under this warranty is limited to the repair or replacement of the defective product and in no event shall Warner Electric LLC be liable for consequential, indirect, or incidental damages of any kind incurred by reason of the manufacture, sale or use of any defective product. Warner Electric LLC neither assumes nor authorizes any other person to give any other warranty or to assume any other obligation or liability on its behalf.

WITH RESPECT TO CONSUMER USE OF THE PRODUCT, ANY IMPLIED WARRANTIES WHICH THE CONSUMER MAY HAVE ARE LIMITED IN DURATION TO ONE YEAR FROM THE DATE OF ORIGINAL CONSUMER PURCHASE. WITH RESPECT TO COMMERCIAL AND INDUSTRIAL USES OF THE PRODUCT, THE FOREGOING WARRANTY IS IN LIEU OF AND EXCLUDES ALL OTHER WARRANTIES, WHETHER EXPRESSED OR IMPLIED BY OPERATION OF LAW OR OTHERWISE, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS.

Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

Changes in Dimensions and Specifications

All dimensions and specifications shown in Warner Electric catalogs are subject to change without notice. Weights do not include weight of boxing for shipment. Certified prints will be furnished without charge on request to Warner Electric.



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