

Dairy Capping Headsets

Service & Installation Instructions

P-2096-WE



 **Warner**[®]
Electric

An **Altra Industrial Motion** Company

Magnetic Clutch Rebuild Procedure

Remove two set screws using a 3mm (YTL1-0015) or 1/8" (YTL1-0009) hex wrench.



Figure 1

Remove the third set screw in the slot on the backside of the housing using a 2.5mm (YTL1-0014) or 3/32" (YTL1-0007) hex wrench.



Figure 2

Remove three button head Torx screws using 3mm (T-15) Torx security bit (YTL1-0002).



Figure 3

Place clutch shaft hex into vice. Remove the top nut using a FIX-0004.



Figure 4

Separate shaft, housing, spacer, magnet stack, and nut.



Figure 5

Separate magnet stack and clean all magnets – replace as required. Use an alcohol based cleaning solvent to clean the black driver magnets. Do not use anything abrasive when wiping the black driver magnets. Use Scotch Brite deburr wheel to polish the hysteresis magnets.



Figure 6

Press out old bearing using FIX-0001 and an arbor press.



Figure 7

Turn housing over. Press new bearing in housing using FIX-0001 and an arbor press.



Figure 8

Install magnet plate into housing. Line up any three holes and insert screws.



Figure 9

Tighten the three button head Torx screws with a 3mm (T-15) Torx wrench (YTL1-0002).



Figure 10

Apply food grade grease to stack of black magnets.



Figure 11

Apply food grade grease to black magnet inside of housing.



Figure 12

Stack remaining parts, except housing, according to engineer drawing.



Figure 13

Place housing down around parts that were stacked in previous step. Install clamp nut on shaft thread.



Figure 14

Place clutch back into vice and, using a FIX-0004 to hold the clutch in place, tighten clamp nut to 508.4 Ncm (45 ft-lbs).



Figure 15

Reinstall set screw on the side of the clutch.



Figure 16

Reinstall two larger set screws. Tighten set screws to 8-10 lb-in. Over tightening is not necessary and will strip the screws or possibly damage the housing body.



Figure 17

Set clutch to 5 and using a digital torque wrench and a socket check to make sure the torque is smooth and reaching the specified maximum torque. If torque is not smooth or is very high, disassemble clutch to look for mechanical rubbing or parts assembled incorrectly. Check the epoxy over the magnet screws for signs of rubbing, carefully trim the epoxy down to specification.



Figure 18

Set torque to desired setting using a face spanner wrench (YTL2-0002) and tighten set screws.



Figure 19

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. Tighten set screws to 8-10 lb-in. Over tightening is not necessary and will strip the screws or possibly damage the housing body. Do not use the set screw in the slot on the backside of the housing for torque adjustment.
3. For optimum results, check setting with a torque wrench and FIX-0007 or FIX-0010.

Application Torque Setting Charts

Clutch Setting	Application Torque - Standard Magnet	
	lb-in	NCm
0.00	2.0	22.6
0.50	2.2	24.8
1.00	3.4	38.4
1.50	5.7	64.4
2.00	8.4	94.9
2.50	11.6	131.0
3.00	15.1	170.6
3.50	18.9	213.5
4.00	22.3	251.9
4.50	24.8	280.2
5.00	26.0	293.7



Figure 1

Rebuild Kits and Rebuild Exchange Programs

Warner Electric Capping Headsets

Magnetic Headset Rebuild Kits

End-users can purchase rebuild kits to rebuild the magnetic headsets themselves. It is recommended that the end-user keep both bearing and magnetic kits on hand in order to reduce maintenance downtime.

Factory Rebuild Program

End-users can ship their headsets back to Warner Electric for a full factory rebuild and certification. Upon receipt, Warner Electric will rebuild and factory certify headsets. Typical turnaround for headsets is 1-2 weeks. Expedited services are available upon request. Additional fees will apply. End-user will be invoiced for the rebuilt headset when the rebuilt headset is shipped. The end-user is responsible for freight to and from factory.

Headset Exchange Program (TWO YEAR AGREEMENT):

Once end-users own Warner Electric headsets, they have the option of signing up for a Warner Electric Headset Exchange Program for rebuilt headsets. In this case, end-users would receive rebuilt headsets from Warner Electric at a predetermined time during the year in exchange for their used Warner Electric headsets. End-user signs an agreement for the headset exchange program for 2 years. Pricing for the headset exchange program will be paid once per year, on the date the agreement is signed and on the agreement anniversary date. At the beginning of the agreement period, the end-user must specify the headset model, how many heads are to be rebuilt, and what time(s) during the year rebuilt headsets are expected. Warner Electric will ship rebuilt headsets to end-user at the predetermined date. Within two weeks from receipt of rebuilt headsets, the end-user is required to return their used headsets. The end-user is responsible for freight to and from the factory.

Headset Lease Exchange Program (3 YEAR AGREEMENT)

Warner Electric offers an option for end-users to receive factory rebuilt Warner Electric headsets at no initial purchase fee if they sign up for a 3 year headset exchange program with Warner Electric. At the end of the 3 year agreement period, the end-user will own their Warner Electric headsets.

End-user signs an agreement for the headset exchange program for 3 years. Pricing for the headset exchange program will be paid once per year, on the date the agreement is signed and on the agreement anniversary dates. At the beginning of the agreement period, the end-user must specify the headset model, how many heads are to be rebuilt and what time(s) during the year rebuilt headsets are expected. Upon receipt of initial payment, Warner Electric will ship rebuilt headsets to the end-user. On the predetermined rebuild dates, Warner Electric will ship rebuilt headsets to end-user. Within two weeks from receipt of rebuilt headsets, the end-user is required to return their used headsets. At the end of the 3 year agreement period, the end-user will own their magnetic headsets. The end-user is responsible for all freight to and from the factory.

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

Upgrade Kits

Warner Electric Capping Headsets

Benefits of upgrading your M4.5 Headsets:

1. Eliminate setscrew stripping during torque adjustment
 - Larger adjustment screws in housing makes it easier to adjust the torque and helps prevent stripping of the screw head. Old setscrew in a 10-32 utilizing a 3/32" wrench. The new setscrew is a 1/4-28 utilizing a larger 1/8" wrench.
2. Longer bearing and magnet life
 - Bottom seal in end cap helps to prevent water and other contaminants from getting inside of the headset. Easy to retrofit in the field.

Here's how to order:

1. Find the headset part number or serial number engraved on the housing body.
2. Call 1-888-350-1891
3. See Cross-reference list below for part number Information.
4. Parts are in stock and ready for immediate delivery.
5. Step-by-step instructions available.

Material Requirements

Anti-Seize Compound

- Apply to spindle at time of headset installation

Cleaning Solution

- Alcohol based cleaning solvent used to wipe and clean parts during rebuild.

Grease

- Citgo Clarion Food Grade Grease, HTEP NLGI No. 2 Grade used to lubricate headset.

Loctite

- Blue Removable - 242 threadlocker used to secure components within the headset.

Epoxy

- Five minute epoxy – Amber, Devcon dev-pak adhesive 14270 used to fill counter-bores in the magnet plate.

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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