



ACCII Thumbwheel Rebuild Kit (TRB-KIT)

UnwiredTools, LLC
2200 East Cedar #1
Flagstaff, AZ 86004
www.unwiredtools.com
info@unwiredtools.com

ACCII Thumbwheel Rebuild Kit

Installation Guide

Many thanks to Detlev from Euro Motors, 1490 Stratford Ave, Stratford, CT. The technicians at Euro Motors installed an UnwiredTools ACCII Upgrade Kit and found that the thumbwheel assembly in the car had failed. To finish the installation Euro Motors purchased first one, then another "new" thumbwheel assembly. Both were defective. Euro Motors then contacted us for help. With their assistance we developed this product to assist others to reliably rebuild the thumbwheel assembly.

We welcome feedback and advice from our customers. We are looking forward to hearing from you at support@unwiredtools.com or 928-773-0469.



ACCII Thumbwheel Rebuild Kit (TRB-KIT)

UnwiredTools, LLC
2200 East Cedar #1
Flagstaff, AZ 860004
www.unwiredtools.com
info@unwiredtools.com

The ACCII System requires a properly operating thumbwheel to select the regulated temperature. The thumbwheel is a variable resistor which changes as you turn it. The resistance of the thumbwheel should match the following table, +/- 50 Ohms:

Temperature Dial Setting	Resistance
65 Degrees	300 Ohms
75 Degrees	950 Ohms
85 Degrees	1500 Ohms

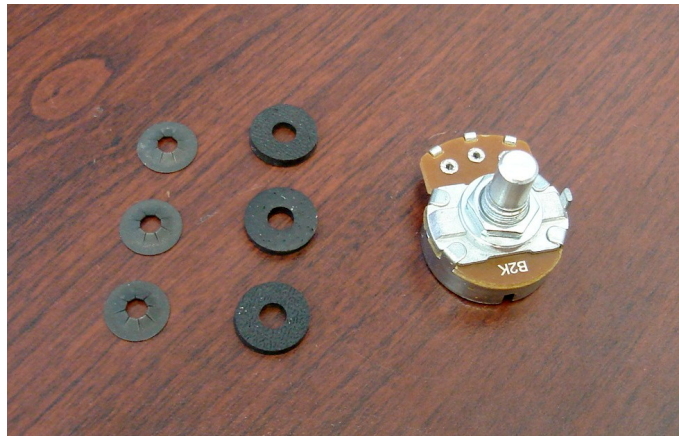
The thumbwheel will eventually wear out which leads to open spots, completely open, short-circuited, or a resistance which does not change. The TRB-KIT will restore the thumbwheel function to the original specifications.

Instructions regarding how to check the thumbwheel are given in the UnwiredTools™ ACCII Upgrade Kit Manual. This manual is available at no charge from the UnwiredTools website. Please contact UnwiredTools if you need detailed instructions to remove your thumbwheel assembly.

Note: The TRB-KIT requires filing or grinding of a small section of aluminum shaft.

The TRB-KIT includes the following components:

1. 3 each Neoprene 0.8mm insulating washers
2. 3 each 4mm push spring fasteners
3. 1 each Automotive grade potentiometer



Tools Required:
Hacksaw, triangular file, or thin abrasive cutoff wheel
Flat file
Soldering iron

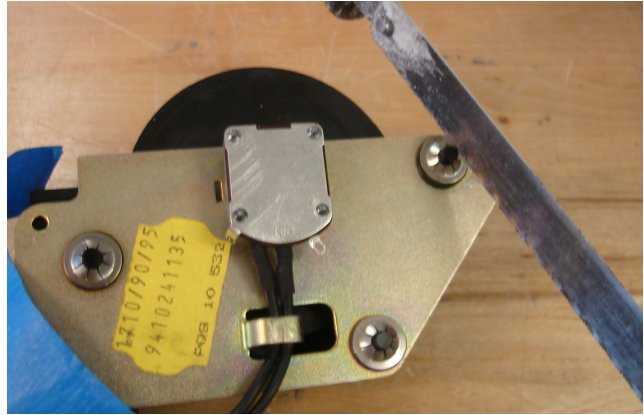


ACCII Thumbwheel Rebuild Kit (TRB-KIT)

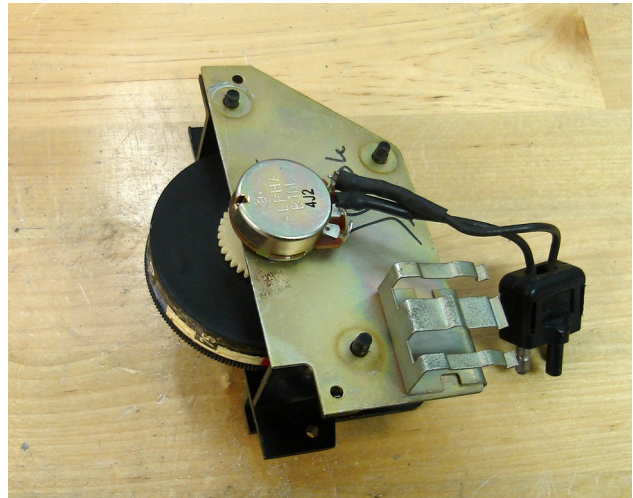
UnwiredTools, LLC
2200 East Cedar #1
Flagstaff, AZ 860004
www.unwiredtools.com
info@unwiredtools.com

Step-by-step instructions:

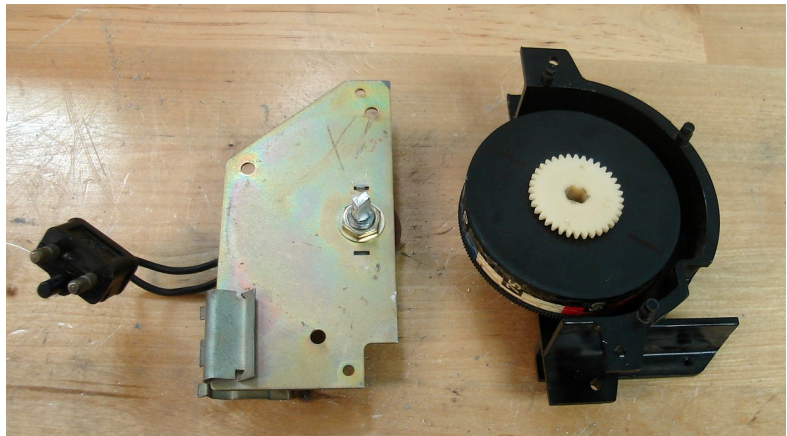
Start by removing the 3 spring fasteners which hold the thumbwheel assembly together. Cut the outer rim with a hacksaw, triangle file, or thin abrasive wheel. **DO NOT PULL OFF THIS FASTENER.** The posts are plastic and these will break if force is used.



When the fasteners are removed then the rubber washers can be removed. Remove any residue left by the rubber washers.



Now remove the metal side-plate with the attached potentiometer. Remove the potentiometer.

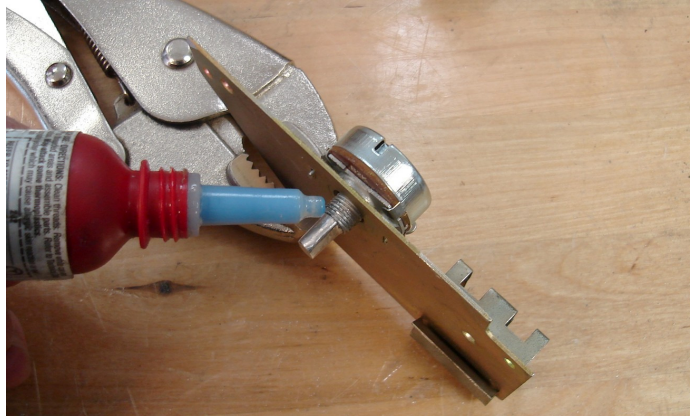




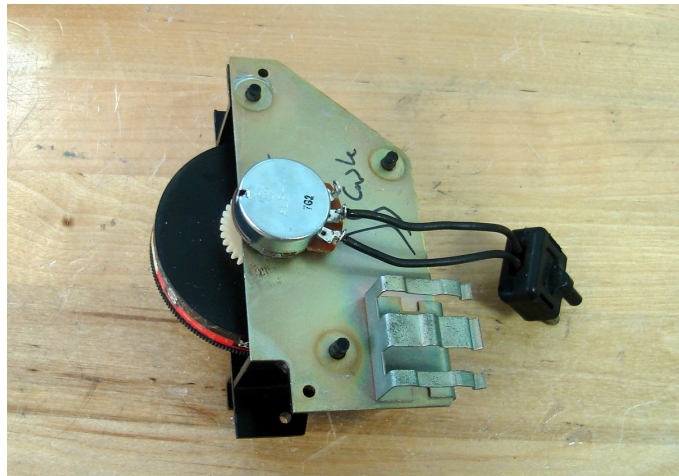
ACCII Thumbwheel Rebuild Kit (TRB-KIT)

UnwiredTools, LLC
2200 East Cedar #1
Flagstaff, AZ 860004
www.unwiredtools.com
info@unwiredtools.com

Now we're ready to begin re-assembly. Use a thread-locking compound when fitting the nut on the threads of the potentiometer. Put the nut on the threads finger-tight. Don't tighten it all the way yet.



Use a soldering iron to move the connector from the old potentiometer to the new one. Make sure the wires are soldered to the lower two terminals as shown here. The connector is not polarized. It does not matter which wire goes to which terminal. It only matters that the wires are soldered to the lower two terminals as shown here. Re-fit the side plate with the new potentiometer. The shaft of the potentiometer should slide in easily. If not then use a file to get a better fit.



Set the thumbwheel for 75 degrees and rotate the body of the potentiometer so that that the resistance of the thumbwheel is 900 ohms, +/- 50 Ohms at a dial setting of 75 degrees. Now tighten the nut on the potentiometer.



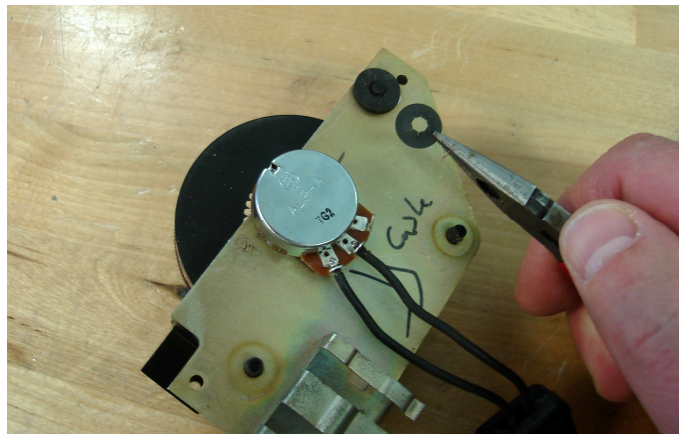


ACCII Thumbwheel Rebuild Kit (TRB-KIT)

UnwiredTools, LLC
2200 East Cedar #1
Flagstaff, AZ 86004
www.unwiredtools.com
info@unwiredtools.com

Add the Neoprene washers and the spring fasteners. Press the spring fastener down around the edges, not in the center.

That's it. The rebuilt assembly is now ready for service.



Note: this version of the kit uses a slightly higher value of potentiometer than the stock part. The value is now 2500 ohms instead of 2000 ohms. This gives you a slightly cooler setting in summer, with longer max cool, and slightly warmer in winter. The value at 75 degrees is calibrated.



ACCII Thumbwheel Rebuild Kit (TRB-KIT)

UnwiredTools, LLC
2200 East Cedar #1
Flagstaff, AZ 86004
www.unwiredtools.com
info@unwiredtools.com

UNWIREDTOOLS Limited Warranty

UNWIREDTOOLS, LLC ("UT") warrants that your new UnwiredTools™ ACCII Upgrade Kit ("Product") is free from defects in materials and workmanship at the time of manufacture. This warranty extends for a period of FIVE YEARS from the date of purchase of the original Product. If there is a defect in or malfunction of this Product that is covered by this warranty, UT will repair the Product free of charge as follows: PARTS: New or comparable rebuilt parts will be provided in exchange for defective parts. LABOR: You will not be charged for labor required by UT to make the necessary repairs under this warranty. UT is not responsible, however, for any other labor charges, for example, such as those attributable to removing the Product from your vehicle or reinstalling it in your vehicle. This warranty does not include normal wear and tear, tubing, wiring connector, or other parts which may wear or fail as a result of normal use. This warranty also does not include any defect or failure of any kind arising from improper installation, improper use, neglect, abuse, accident, or any cause other than defects in materials and workmanship at the time of manufacture. This warranty applies only to the original purchaser of the Product from UT or an authorized distributor or reseller. It does not apply to persons who purchased this Product second hand or used.

TO OBTAIN SERVICE UNDER THIS WARRANTY, the Product must be delivered to a UT Authorized Service Center nearest to your location; or the Product must be shipped postage prepaid, insured and via a traceable shipping method to a UT Authorized Service Center or to the UT Corporate Service Center at 2200 East Cedar Avenue, Suite 1, Flagstaff, Arizona 86004. You must:

- Pack your Product in the original carton or equivalent.
- Enclose a copy of the bill of sale or invoice showing original purchase date and seller. (Please note that you should retain the original proof of purchase for your records to establish date of original purchase. Your warranty starts with the date of original purchase.)
- Enclose a card or note describing in detail the difficulty you are experiencing with the Product.
- Be sure to include your complete name, address and daytime telephone number. In addition, please include your e-mail address if you agree to permit UT to contact you through it.
- Bring or ship, prepaid and insured, via a traceable shipping method, the above Product to the nearest UT Authorized Service Center location or to the UT Corporate Service Center.

Please note that UT will NOT pay return postage, shipping or insurance, so you will need to make arrangements for this. Products repaired or replaced pursuant to this warranty will be returned to the address identified as the sender unless another address is provided. The UT and/or the Service Center cannot be held responsible for any loss or damage that occurs while in transit or outside our control.

OTHER THAN THE EXPRESS WARRANTIES PROVIDED HEREIN, THERE ARE NO OTHER WARRANTIES, EXPRESS OR IMPLIED. UT HEREBY EXPRESSLY DISCLAIMS ALL SUCH OTHER WARRANTIES, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. UT SHALL NOT BE LIABLE FOR ANY SPECIAL, INDIRECT, CONSEQUENTIAL, INCIDENTAL, OR EXEMPLARY DAMAGES OF ANY KIND, INCLUDING BUT NOT LIMITED TO SUCH DAMAGES RESULTING FROM ANY FAILURE, DEFECT, OR MALFUNCTION OF THIS PRODUCT, EVEN IF UT IS NOTIFIED OF THE POTENTIAL FOR SUCH DAMAGES. UT'S LIABILITY UNDER THIS WARRANTY SHALL BE LIMITED TO REPAIR OR REPLACEMENT OF THE PRODUCT OR A REFUND OF YOUR ORIGINAL PURCHASE PRICE FOR THE PRODUCT. Some states do not allow limitations on how long an implied warranty lasts and some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions 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. This warranty is valid only for Products delivered and used in the United States. Your purchase of this Product, or installing or using the Product, will be deemed acceptance of this Limited Warranty and Remedies Limitation as set forth here. If you do not accept these and do not intend to be bound by them, please return the Product in its original packaging as you received it to your original point of purchase for a full refund of your purchase price.

To find the nearest Authorized Service Centers within your local area, see our Web site at www.unwiredtools.com, or you may call the UT Corporate Service Center directly at 928-773-0469.