

# UNIVERSAL CASE PREP CENTER



PRODUCT INSTRUCTIONS

# **WARNING!**

Before using the RCBS® Universal Case Prep Center, read these instructions carefully to fully learn how to safely operate the related reloading equipment. Failure to properly operate the related reloading equipment can result in severe personal injury and/or equipment damage.

If you have any questions while assembling or operating this product, call us at 1-800-533-5000 or 1-530-533-5191

Monday – Thursday 6:30 a.m. – 4:00 p.m. Pacific Time (hours may vary).

Or email us at rcbs.tech@atk.com.

This manual contains important safety and operating information. Keep this as a permanent part of your reloading equipment. If lost, contact us for a replacement.

# **ELECTRICAL WARNINGS**

Leave the unit unplugged until you have read all the instructions and are ready to use. To avoid death or serious injury, observe the following precautions:

# **WARNING!** Shock hazard.

- Never immerse device in water or other liquid. If the device falls into water, do not touch. Unplug first.
- Never touch the power cord or plug with wet hands.
- Unplug by grabbing the power plug, not the cord.
- Use in GFCI outlets with current-imbalance protection of 30mA or less.
- Protect device from damage. Do not use if any part of the plug, cord, electrical housing or device is damaged. Inspect device regularly.
- Do not dissemble the device or attempt repairs yourself; contact RCBS.
- Turn device off and keep unplugged at all times when not in use.
- Use only in a properly grounded, polarized outlet. Do not remove or alter the grounding prong or use with adaptors.
- Unplug unit before filing or draining.

# **AWARNING!** Keep away from children.

- This device is not intended for use by those with restricted physical, mental or sensory capabilities or those with a lack of experience and/or knowledge, including children.
- Store device out of reach of children.
- Keep device and packaging material away from children.

#### **CAUTION!** Fire hazard

- Do not clean or use device with flammable cleaners or other liquids.
- Keep device vents free from lint, dust, hair and other obstructions.
- Use device on clean, flat, dry, hard surface.
- Keep device unplugged when not in use.
- Never operate the device unattended.

# **RELOADING SAFETY**

NOTICE - This manual is not intended to provide comprehensive instructions or safety information on how to reload, or handle or use reloading components. Always read and thoroughly understand a reloading manual before attempting to reload ammunition.

Reloading is an enjoyable and rewarding hobby when conducted safely. But, as with many hobbies, carelessness or negligence can make reloading hazardous. When reloading, always follow these safety guidelines to minimize the risk of personal injury or death.

Always wear safety glasses.

- Understand what you are doing and why. Read handbooks and manuals on reloading. Talk to experienced reloaders. Write or call suppliers of equipment or components if you have questions or are in doubt.
- Read and understand all warnings and instructions accompanying your equipment and components. If you do not have written instructions, request a copy from the manufacturer. Keep instructions for future reference.
- Don't rush or take short cuts. Establish a routine and follow it at a leisurely pace.
- Keep complete records of reloads. Label each box showing the date produced, caliber and the type of primer, powder and bullet used.
- Do not smoke while reloading, or reload near sources of heat, sparks or flame.
- Observe good housekeeping in the reloading area. Keep tools and components neat, clean and orderly. Promptly and completely clean up any spills.
- Keep all reloading equipment and components out of reach of children.
- Stay alert. Reload only when you can give your undivided attention. Do not reload when tired, ill, rushed or under the influence of drugs or alcohol.

Because RCBS has no control over the choice, assembly or use of components or other reloading equipment, RCBS assumes no liability, express or implied, for the use of ammunition reloaded with this product.

#### LOADING DATA

Use only laboratory tested reloading data. We highly recommend the current Speer® Reloading Manual.

<u>AWARNING!</u> OBSERVE ALL WARNINGS ABOUT THE USE OF MAXIMUM LISTED LOADS.

# **WORKING WITH CARTRIDGE CASES**

- Examine empty cases to be sure they are in good condition before reloading. Thin, split, deformed or badly corroded or pitted cases may be structurally weak, and result in a dangerous condition. Pay particular attention to splits in the mouth, separation between the case and the head, and dents in the shoulder.
- Do not store cartridge cases or ammunition near harsh chemicals such as gasoline, household cleaners, or cat urine. The fumes can weaken the metal and present a dangerous condition.
- Do not clean cases with chemicals other than those specifically designed for this purpose.
- Do not attempt to clean loaded ammunition or primed cases. Doing so can cause corrosion, and weaken the case, or cause a misfire/hangfire condition.
- Ensure cases have proper primer pocket sizes; remove primer staking/crimp if necessary. Attempting to seat a primer into an undersized pocket or pocket with staking/crimping can result in detonation.
- Do not ream out or enlarge flash holes of cartridge cases. This may change the ignition rate and result in dangerous pressures.
- Resize and trim fired cases to ensure reliable chambering and obtain proper bullet tension and crimp.
- Never attempt to guess at the identity of your ammunition.

#### **CASE TRIMMING/PREP**

**WARNING!** It is critical for safety that cases not exceed the maximum specified case length. A case that is too long can enter the throat of the firearm when chambered. If this happens, the case cannot release the bullet properly upon firing, resulting in excessive pressure increase and creating a dangerous condition.

#### **MACHINERY**

**WARNING!** Avoid wearing loose clothing and jewelry which can be drawn into moving/rotating components.

- Keep your hands and fingers away from "danger" spots and pinch-points where they might be injured.
- Keep children and others away from machinery.
- Be sure that all moving parts are shielded and all guards are in place before operating any equipment.

# **RCBS® LIMITED WARRANTY**

Your RCBS Universal Case Prep Center is warranted to be free from defects in material or workmanship for two (2) years from the date of purchase. This warranty is extended only to the original consumer purchaser. All RCBS products are intended for non-commercial use by hobbyists. Any other use of these products will void the warranty. If you believe that your product is covered by this warranty, you must return the product to RCBS at the address below, postage paid, with proof of purchase for evaluation. If covered, we will (at our sole option) repair, replace or refund the purchase price of any part or product found to be defective. This remedy will be without charge except for the reasonable shipping, handling and insurance charges. TO ENSURE ACCURACY OF YOUR WARRANTY INFORMATION, SEND YOUR DATED PROOF OF PURCHASE TO THE ADDRESS BELOW.

This limited warranty does not cover defects or damages resulting from carelessness, misuse, commercial use, abuse, neglect, improper installation or assembly, water submersion, unauthorized or improper repair, failure to follow operation instructions, modification or normal wear and tear.

ANY WARRANTIES IMPLIED BY LAW SHALL IN NO EVENT EXTEND BEYOND DURATION OF THIS EXPRESS WARRANTY. Some States do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you. REPAIR OR REPLACEMENT AS PROVIDED HEREIN IS YOUR EXCLUSIVE REMEDY FOR ANY DEFECTIVE PRODUCT. IN NO EVENT SHALL WE BE LIABLE FOR ANY SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES OF ANY KIND ARISING OUT OF THE PURCHASE OR USE OF THIS PRODUCT, WHETHER BASED UPON CONTRACT, TORT, STATUTE OR OTHERWISE. Some States do not allow the exclusion of 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.

# **CONTACT US**

RCBS
605 Oro Dam Blvd, Oroville, California 95965
1-800-533-5000
Email: rcbs.tech@atk.com

## MAIN FEATURES & SPECIFICATIONS

- Power Requirements:
  - o Input 100/240VAC 50/60Hz
  - o Output 24VDC 2.5 Amp
- Trimmer Shaft:
  - o RPM 360 Max
  - o Torque 9 in lbs. Max
- · Six stations available for case prep.
  - o Two stations run @ 550 Max RPM
  - o Four stations run @ 360 Max RPM
- Variable speed motor allowing for optimal cutting speed adjustment.
- Simple hands-free case trimming operation.
- Micrometer adjustment to precisely set trim length by .001" increments.
- Universal Case Holder to accommodate case head diameters ranging from .250" to .625".
- Accommodate cartridge case lengths from .720" to 3.375" using standard cutter and 1.420" to 3.280" using the RCBS 3-Way Cutter.
- Ambidextrous design.

# USE

The RCBS® Universal Case Prep Center is designed to cut cartridge case length to manufacturer recommendations. Repeated firing, resizing, and reloading of cases cause them to increase in length. Whenever a case grows longer than the manufacturer's maximum specified case length, it must be trimmed back to an acceptable length for that cartridge.

There are case length specifications for every cartridge. A current copy of the Speer® Reloading Manual is an excellent source for this information.

**AWARNING!** It is critical for safety that cases not exceed the maximum specified case length. A case that is too long can enter the throat of the firearm when chambered. If this happens, the case cannot release the bullet properly upon firing, resulting in excessive pressure increase and creating a dangerous condition.

The Universal Case Prep Center will give you a consistent repeatable trim. The case mouth will be cut square/perpendicular to the longitudinal axis of the case. It is quick to set up, easy to use, easy to change from one caliber to another, and will provide years of trouble-free service.

After trimming a case, use the Case Prep area of the Universal Case Prep Center to properly chamfer/debur the case mouth inside and out with the RCBS Chamfer and Debur tools, which come standard with the Universal Case Prep Center. An optional 3-Way Cutter Tool (sold separately) can be used on the Universal Case Prep Center unit to combine trimming and chamfering the inside and outside of the case mouth in one easy operation. To order either or learn more, contact RCBS or visit rcbs.com.

# **UNPACKING**

Refer to the list below to identify parts as you carefully unpack your new Universal Case Prep Center:



Universal Case Prep Center Handle Lever Assembly Handle Link DC Power Supply



| PARTS BAG |                         |  |  |  |
|-----------|-------------------------|--|--|--|
| QTY.      | DESCRIPTION             |  |  |  |
| 1         | Outside Debur Tool      |  |  |  |
| 1         | Inside Chamfer Tool     |  |  |  |
| 1         | Primer Pocket Brush Sm. |  |  |  |
| 1         | Primer Pocket Brush Lg. |  |  |  |
| 2         | 1/4-20 x 3/4 BHCS       |  |  |  |
| 2         | 1/4-20 Nyloc Nut        |  |  |  |
| 1         | Alignment Rod           |  |  |  |
| 1         | Handle Lever Pin        |  |  |  |



|      | PILOT BAG     |
|------|---------------|
| QTY. | DESCRIPTION   |
| 1    | 22 cal. Pilot |
| 1    | 24 cal. Pilot |
| 1    | 25 cal. Pilot |
| 1    | 27 cal. Pilot |
| 1    | 28 cal. Pilot |
| 1    | 30 cal. Pilot |
| 1    | 35 cal. Pilot |
| 1    | 44 cal. Pilot |
| 1    | 45 cal. Pilot |

#### INSTALLATION

<u>CAUTION!</u> Leave the Universal Case Prep Center unplugged until you have read all the instructions and are ready to trim cases.

#### MOUNT THE TRIMMER

Securely mount your Universal Case Prep Center to your reloading bench at a location of your preference. Use six #14 wood screws, or another suitable fastener (Photo 1). Allow sufficient room around the Trimmer to operate it comfortably and safely.

NOTE: Over-tightening of mounting fasteners may distort the Base Plate. If the mounting surface is not flat, shims or washers could be used to eliminate or reduce the amount of clearance between the mounting surface and Base Plate.



Photo 1: Mounting Trimmer

#### **ASSEMBLY**

Reference the part schematic on page 17 for more information.

# **Handle Link**

Attach the Handle Link to the rear of the Shell Holder Carrier Assembly. Insert one

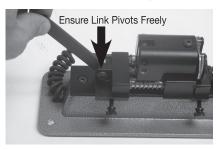


Photo 2: Handle Link

of the ¼-20x5/8 BHCS and secure with the ¼-20 Nyloc Nut. Do not over-tighten as Handle Link should pivot freely (Photo 2).

#### **Handle Lever**

Attach the Handle Lever by inserting it into the slot on the Universal Holder portion of the Shell Holder Carrier Assembly. Align the holes and insert the Handle Lever Pin (Photo 3).



Photo 3

Attach the Handle Link to the Handle Lever. Use remaining 1/4-20x5/8 BHCS and 1/4-20 Nyloc Nut. Do not over-tighten as Handle Link and Handle Lever should pivot freely (Photo 4).



Photo 4: Handle Link & Lever

# **Caliber Pilot**

Fully insert the appropriate sized Case Trimmer Pilot into the end of the Cutter Head. Securely tighten the setscrew contained on the Cutter Head using a 1/8" hex key wrench (Photo 5). Pilots are interchangeable and available in a variety of sizes. Each Pilot is machined to the caliber size of the resized case mouth. The snug fit helps eliminate case wobble and ensures alignment of the case while it is being trimmed.



Photo 5: Installing Pilot

# **Case Prep Tools**

Insert one of the 8-32x5/8 SHSS into the Outside Debur Tool and the other into the Inside Chamfer Tool (Photo 6).



Photo 6: Outside Debur & Inside Chamfer Tools

Fully insert Outside Debur Tool, Chamfer Tool and Large and Small Primer Pocket Brushes into the case prep area of the Universal Case Prep Center (Photo 7).

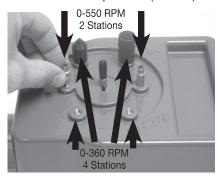


Photo 7: Case Prep Tools

NOTE: The two stations, where the Primer Pocket Brushes are installed, operate at 0-550 RPM and the remaining four stations operate at 0-360 RPM. Installing the

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Primer Pocket Brushes in these higher RPM stations significantly reduce the time to effectively clean cartridge case Primer Pockets.

# **FUNCTION**

**A CAUTION!** First ensure the On/Off/ Speed Control Knob, is in the "Off" position (Photo 8), by rotating counterclockwise until it stops.



Photo 8: On/Off/Speed Control in OFF Position

On/Off/Speed Control Knob shown in the Maximum speed position (Photo 9).



Photo 9: On/Off/Speed Control in Max RPM Position

Plug the Power Cord, from the DC Power Supply, into a grounded 120VAC outlet.



Photo 10: DC Output Cord inserted into DC Jack

Insert the DC Output, from the DC Power Supply, into the DC Jack on the rear of the Universal Case Prep Center (Photo 10).

Proceed to the ADJUSTMENT section of this manual to fine-tune the Trim Length for your case.

To operate the Universal Case Prep Center, turn the unit on by rotating the Speed Control Knob clockwise. Set the desired Cutter Head RPM by adjusting the Speed Control Knob.

NOTE: To increase Cutter Shaft RPM, rotate the Speed Control Knob clockwise, to decrease Cutter Shaft RPM rotate Knob counter-clockwise.

Load a resized and de-primed case into the Universal Case Holder by pushing all the way down on the Handle Lever and holding down with one hand; then insert the case base with the other hand (Photo 11).

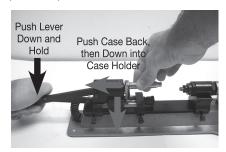


Photo 11: Inserting Case into Universal Holder

NOTE: When the Handle Lever is depressed the Shell Holder Carrier Sub Assembly will move rearward, activating a Safety Switch, shutting off power to the motor, making it safe to insert or remove cases from the Universal Case Holder.

Ensure the case base is flush with the Case Holder Knurled Face. The Case Holder has two spring-loaded "fingers" that engage the Case's Extractor Groove/Rim (Photo 12). Release the Handle Lever slowly, maintaing control until the Pilot and Cutter engages the mouth of the case (Photo 13).

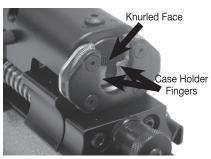


Photo 12: Case Holder 'Fingers'



Photo 13: Case Holder Assembly in Forward Position

NOTE: When the Case Holder Lever is released and the Shell Holder Carrier Sub Assembly advances forward toward the Cutter Head, de-activating the Safety Switch, the motor will resume operation.

When the trimming operation is complete, there will be a slight change in motor sound. Depress the Handle Lever all the way down and hold, moving the case rearward from the Cutter Head and Pilot. The Safety Switch will be activated and the Cutter Head will stop rotating. It is



Photo 14: Removing Case from Universal Case Holder

now safe to remove the cartridge case; simply lift it out of the Universal Case Holder (Photo 14).

Chamfer/debur the Case mouth inside and out using the Case Prep area of the Universal Case Prep Center (Photo 15 & 16).



Photo 15: Inside Case Mouth Chamfer

NOTE: Tool RPM can be adjusted by adjusting the Speed Control Knob. Clockwise rotation of Speed Control Knob will increase cutter tool RPM and counterclockwise rotation of Speed Control Knob will decrease cutter tool RPM.

An optional 3-Way Cutter Tool (sold separately) can be used to combine trimming, chamfering and deburing of the Case Mouth in one easy operation. Contact RCBS® for more information.



Photo 16: Outside Case Mouth Debur

# **Disengage Case Prep Tools**

If using only the Case Trimmer and not the Case Prep Stations, simply disengage the Six Case Prep Stations by following these steps: Ensure unit is turned off and remove DC Output Cord from DC Jack, (Photo 10). Use your hand to rotate the Shaft Coupler clockwise or counter-clockwise to line up the indicator hole on the Disengagement Shaft Assembly with the slot in the cover (Photo 17). Pull up on the Dis-

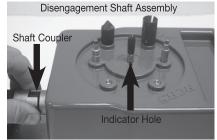


Photo 17: Indicator hole aligned with slot

engagement Shaft Assembly and rotate 90 degrees, while still holding onto the Shaft Coupler. The pin in the Disengagement Shaft will rest on the cover, disengaging the Six Case Prep Stations so that only the Case Trimmer Cutter will rotate (Photo 18). Rotate the Shaft Coupler by



Photo 18: Case Prep Stations
Disengaged

hand to confirm the six Case Prep Stations have been disengaged and do not rotate.

# **ADJUSTMENT**

Note: Reference the part schematics on page 15 of this booklet for more information.

**AWARNING!** It is critical for safety that cases not exceed the maximum specified length. A case that is too long can enter

the throat of the firearm when chambered. If this happens, the case cannot release the bullet properly upon firing, resulting in excessive pressure increase.

Trimmer Length Coarse Adjustment CAUTION! Rotate the Speed Control Knob to the OFF position before making adjustments (Photo 8).

Once the case is securely loaded into Universal Case Holder, loosen the two knurled thumbscrews and slide the Shell Holder Carrier Assembly forward. Ensure the case makes contact with the cutter face (Photo 19). Apply enough force to



Photo 19: Case in contact with Cutter Face

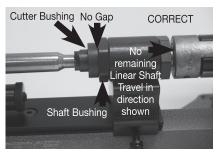


Photo 20: Cutter Bushing in contact with Shaft Bushing

ensure the Cutter Bushing is making firm contact with the Shaft Bushing. There should be NO CLEARANCE between these two components (Photo 20).

When Shell Holder Carrier Assembly is properly positioned, as shown in Photo 19, retighten the knurled thumbscrews firmly to secure Shell Holder Carrier Assembly in place (Photo 21). Shell Holder

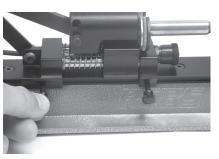


Photo 21: Securing Shell Holder Carrier
Assembly

Carrier Assembly is not positioned properly if there is clearance between Cutter Bushing and Shaft Bushing (Photo 22).

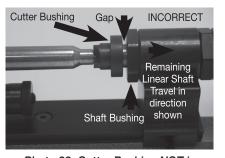


Photo 22: Cutter Bushing NOT in contact with Shaft Bushing

# **Trimmer Length Fine Adjustment**

Final adjustments are controlled by the Micrometer positioned on the front portion of the Shell Holder Carrier Assembly (Photo 23). The Micrometer screw makes contact with the Micrometer Adjustment Bushing which is secured to the Shell Holder Carrier Sub Assembly. When the Micrometer knob is rotated clockwise the trim length will be increased, i.e., moving the cartridge case away from the Cutter Head. When Micrometer Knob is rotated counter-clockwise the trim length will be decreased, i.e. moving the cartridge case toward Cutter Head.

NOTE: Ensure that when the Shell Holder Carrier Sub Assembly is at rest in its forward position, there is adequate clearance between the Shell Holder Carrier Sub Assembly and Front Carriage. This allows for necessary length adjustments (Photo 23). If there is no clearance, adjust

Micrometer clockwise until there is a minimum of .050" clearance. This will allow for just under .050" of fine adjustment to be made to trim length.

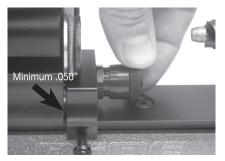


Photo 23: Micrometer

Upon completion of correct setup for Coarse Case Length Adjustment (Photo 20), depress Handle Lever downward and hold, disengaging case mouth from Cutter Head and Pilot. Rotate Speed Control Knob clockwise to turn unit on. Release Handle Lever slowly, maintaining control until the Pilot and Cutter engage the mouth of the case (Photo 19). Make necessary adjustments to Cutter RPM by adjusting Speed Control Knob (Photo 9).

When the trimming operation is complete, there will be a slight change in motor sound. Depress the Handle Lever all the way down and hold, moving the case rearward from the Cutter Head and Pilot. The Safety Switch will be activated and the Cutter Head will stop rotating. It is now safe to remove the trimmed cartridge case.

Remove the sized case and measure its length (Photo 24).



Photo 24: Measure Trimmed Case Length

Calculate the amount of brass you want to remove from the case, based on the manufacturer's trim-to-length specifications. Rotate the Micrometer counterclockwise by that amount.

Note that each indication line on the Micrometer Thimble represents approximately 0.001", and one full turn is approximately 0.025" of travel.

Reinstall the same case, and trim. Remove the trimmed case and measure to verify length is correct. Make any additional adjustments as needed by rotating the Micrometer. Repeat this process until desired results are achieved.

To make future trim length adjustments easy, save a trimmed case in a known location (such as a die box). Install this reference case to quickly set the desired trim-to length.

NOTE: If trimming excessive brass from case (.030" or more), it may be necessary to depress Handle Lever slightly to disengage case from Cutter Head and then release Handle Lever to re-engage case to Cutter Head. Doing this helps reduce the load on the motor and will aid in reducing brass chip pack-up on Cutter Head. If motor does stall during normal operation, depress Handle Lever to disengage case from Cutter Head; motor should resume operation. If motor fails to restart, turn unit off and unplug AC Power Cord from 120VAC outlet.

# **Cutter Shaft Alignment**

Your Universal Case Prep Center comes from the factory with the Cutter Shaft properly aligned to the Shell Holder Carrier Sub Assembly and ready to use. However, the Universal Case Prep Center allows the user the opportunity to set and verify proper Cutter Shaft Alignment.

To set Cutter Shaft Alignment, remove Cutter Head by unscrewing from Cutter Shaft, then remove Cutter Bushing from Cutter Shaft (Photo 25).

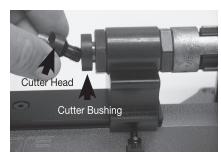


Photo 25: Removing Cutter Head and Cutter Bushing

Using a 1" wrench loosen Shaft Bushing Nut; this will allow the Shaft Bushing to float (Photo 26).

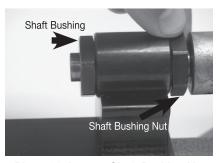


Photo 26: Loosen Shaft Bushing Nut

NOTE: Two wrenches may be necessary; one to secure the Shaft Bushing and one to loosen the Shaft Bushing Nut.

Depress the Case Holder Lever all the way down and hold; insert Alignment Rod into Universal Holder in the same way as you'd insert a case. Release the Handle Lever slowly, maintaining control until the Shell Holder Carrier Sub Assembly comes to rest against the Micrometer screw (Photo 27).

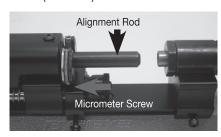


Photo 27: Insert Alignment Rod into Universal Holder

Loosen thumbscrews and slide Shell Holder Carrier Assembly all the way forward to the Cutter Shaft. Continue to apply force, loading the Alignment Rod into the Cutter Shaft. Ensure Shaft Coupler is compressed and there is no remaining linear travel (Photo 28) and retighten thumbscrews. At this point the

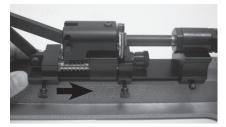


Photo 28: Slide Shell Holder Carrier Assembly to Cutter Shaft

Cutter Shaft will be properly aligned with Alignment Rod. Using a 1" wrench lightly tighten the Shaft Bushing Nut.

NOTE: See photos 29-30 for improper and proper Cutter Shaft alignment.

NOTE: If the Shaft Bushing Nut is overtightened, the Shaft Bushing could slip and re-alignment will be required.

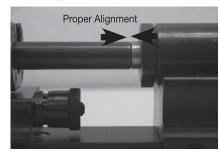


Photo 30: Proper Cutter Shaft Alianment

When proper Cutter Shaft alignment has been achieved, remove the Alignment Rod and install the Cutter Bushing and Cutter Head (Photo 31).

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Photo 31: Installing Cutter Bushing and Cutter Head

Another method to verify and set cutter shaft alignment (without having to remove the Cutter Bushing and Cutter Head) is to use a sized, deprimed cartridge case ready to be trimmed.

NOTE: Before using this cutter shaft alignment method ensure the cartridge case used is in good condition and is straight, with minimal case neck run out.

An optional RCBS® Case Master Gauging Tool (sold separately) is an ideal tool that can be used to accurately measure case neck run out. Contact RCBS for more information.

Fully insert the appropriate sized Case Trimmer Pilot into the end of the Cutter Head. Securely tighten the setscrew contained on the Cutter Head using a 1/8" hex key wrench (Photo 5).

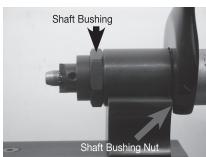


Photo 32: Loosen Shaft Bushing Nut

Using a 1" wrench, loosen Shaft Bushing Nut. This will allow the Shaft Bushing to float (Photo 32).

NOTE: Two wrenches may be necessary; one to secure the Shaft Bushing and one to loosen the Shaft Bushing Nut.

Load a resized and de-primed case into the Universal Case Holder (Photo 33).



Photo 33: Loading Case into Universal Case Holder

Slide Shell Holder Carrier Assembly to Cutter Shaft (Photo 34). Tighten thumb-screws and retighten Shaft Bushing Nut. At this point the Cutter Shaft will be properly aligned with the cartridge case.



Photo 34: Slide Shell Holder Carrier Assembly to Cutter Shaft

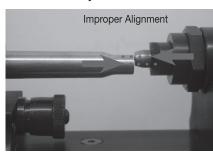


Photo 35: Improper Cutter Shaft Alignment

NOTE: See photos 35-36 for improper and proper Cutter Shaft alignment.

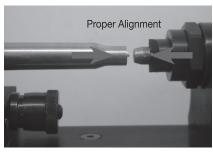


Photo 36: Proper Cutter Shaft Alignment

# **Cutter Guide Assembly**

The Cutter Guide Assembly comes from the factory positioned correctly; however, it may become necessary to re-position.

Loosen the 10-24 x 5/16" SHCS using a 5/32" hex key wrench and slide Cutter Guide Assembly away from Shaft Coupler, at the same time pushing in on Cutter Shaft. Ensure Cutter Bushing is firm

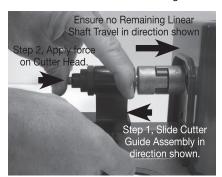


Photo 37: Re-positioning Cutter Guide Assembly

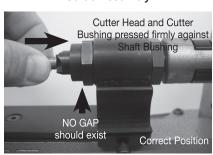


Photo 38: Cutter Guide Assembly

against Shaft Bushing face and no linear travel remains, then retighten SHCS to approximately 15-20 inch-pounds of torque (Photo 37-38).

NOTE: If Cutter Guide Assembly is not securely fastened, it could move during operation, affecting trimmed case lengths.

#### **MAINTENANCE**

It's important to occassionally clean your Universal Case Prep Center of brass shavings and debris to keep it operating smoothly.

Lightly lubricate the Universal Case Prep Center after trimming approximately 300 cases, or before long periods of storage. Use a lightweight multi-purpose grease at the following locations (photos 39-42):



Photo 39: Handle Lever Lubrication Points



Photo 40: Lubricate Guide Rods and Spring Guide

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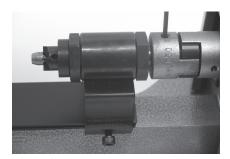


Photo 41: Remove Cutter Shaft from Shaft Coupler using 3/32" Hex Key Wrench

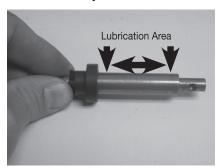


Photo 42: Generously Lubricate
Cutter Shaft

Ensure counter-sunk holes on the Guide Rail are kept free of debris. If debris accumulates in this area and the Shell Holder Carrier Assembly is positioned directly on it, it will affect proper alignment (photos 43-44). To eliminate this, periodicaly clean debris from Guide Rail. To ensure all debris has been removed, slide a straight edge over surface. The straight edge should slide over the counter-sunk hole without any resistance. If you feel resistance, debris remains.



Photo 43: Debris Accumulation



Photo 44: Debris Removed

#### **TROUBLESHOOTING**

Occasionally check the connection of the Coiled Cable to the Safety Switch. The red conductor from the Coiled Cable should be connected to the bottom spade on the Safety Switch, while the black conductor is connected to the very top spade (Photo 45). If the Safety Switch fails to function properly, check this connection to ensure leads have not been accidently dislodged.



Photo 45: Safety Switch Wiring

NOTE: If the Safety Switch fails to function properly, verify the lever on the Switch is being depressed enough to activate switch (Photo 47). If it is not, loosen the two 10-24 x ¼ SHCS securing the Switch Plate Assembly, using a 5/32" hex wrench, slide the Switch Plate Assembly up as far as possible, and re-tighten the 10-24 x ¼ SHCS (photos 45-46).

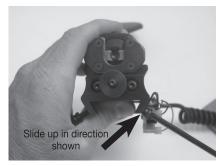


Photo 46: Safety Switch Adjustment

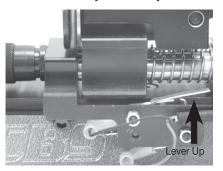


Photo 47: Safety Switch Not Activated



Photo 48: Safety Switch Activated

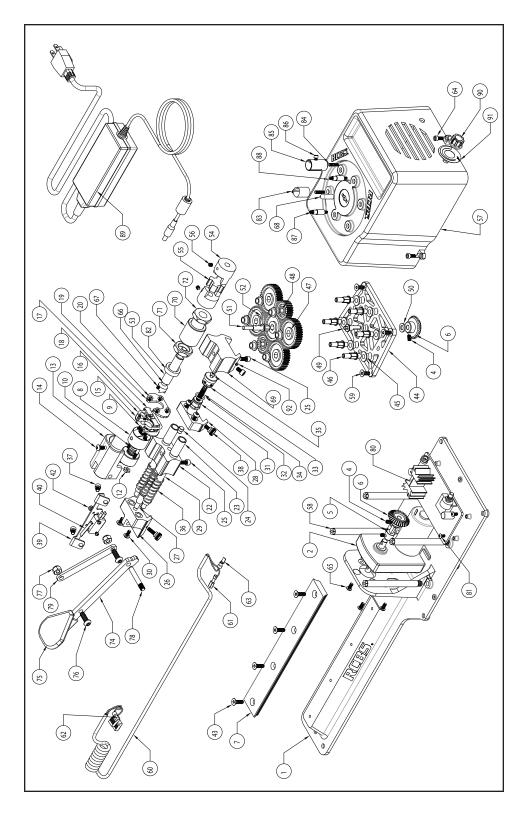
The Shell Holder Carrier Sub-Assembly should now make adequate contact with the Switch Lever to properly activate the Switch (Photo 48).

If the Safety Switch fails to function properly, contact RCBS Customer Service.

NOTE: When case trimming at a high RPM, brass chips will occasionally not break free and adhere to the edge of the cutter, affecting the overall case trim length. If this happens, simply use a weapons cleaning brush or similar device to remove the brass chips.

DO NOT ATTEMPT TO OPERATE UNI-VERSAL CASE PREP CENTER IF SAFETY SWITCH IS NOT FUNCTIONING PROP-ERLY!

16 17



| UNIVERSA    | AL CASE PRE | P CENTER PARTS L                         | IST  |
|-------------|-------------|--|------|
| ITEM NUMBER | PART NUMBER | DESCRIPTION                              | QTY. |
| 1           | 7786087     | UCP Base Plate                           | 1    |
| 2           | 7102434     | MK S-4512                                | 1    |
| 3           | 7181004     | 10-32 x 3/16" SHSS                       | 1    |
| 4           | 7186238     | 10-24 x 5/16 SHSS                        | 2    |
| 5           | 7786093     | Motor Shaft                              | 1    |
| 6           | 7786095     | Miter Gear                               | 2    |
| 7           | 7180133     | Guide Rail                               | 1    |
| 8           | 7786124     | Compression Pin                          | 1    |
| 9           | 7786125     | Actuating Rod                            | 2    |
| 10          | 7186131     | Belleville Washer                        | 6    |
| 11          | 7786123     | Spring Holder                            | 1    |
| 12          | 7186102     | 8-32 Hex Nut Zinc                        | 2    |
| 13          | 7786208     | UCP Handle Support                       | 1    |
| 14          | 7186144     | 10-32 x 3/8L BHCS                        | 1    |
| 15          | 7786114     | Case Holder Shelf                        | 1    |
| 16          | 7186266     | APS HPT Case Pawl Spring                 | 1    |
| 17          | 7784138     | APS HPT Case Holder Left                 | 1    |
| 18          | 7784139     | APS HPT Case Holder<br>Right             | 1    |
| 19          | 7186263     | APS HPT Case Holder Cap                  | 1    |
| 20          | 7186157     | 5-40 x 5/16L FHCS                        | 4    |
| 22          | 7180135     | Shell Holder Carrier                     | 1    |
| 23          | 7186161     | Bronze Bushing AA507-17                  | 2    |
| 24          | 7786213     | Mic. Adj. Button                         | 1    |
| 25          | 7181109     | 10-32 x 3/8 SHCS                         | 2    |
| 26          | 7180137     | Rear Carriage                            | 1    |
| 27          | 7786088     | Spring Guide                             | 1    |
| 28          | 7180136     | Front Carriage                           | 1    |
| 29          | 7786203     | Guide Rod                                | 2    |
| 30          | 7186144     | 10-32 X 3/8 BHCS                         | 4    |
| 31          | 7790432     | Micrometer Body                          | 1    |
| 32          | 7138285     | 0-Ring #013                              | 1    |
| 33          | 7790431     | Micrometer Thimble                       | 1    |
| 34          | 7790433     | Micrometer Screw                         | 1    |
| 35          | 7189066     | 6-32 x 1/4 BHCS                          | 1    |
| 36          | 7186138     | Compression Spring                       | 3    |
| 37          | 7186173     | 10-24 x 1/4 SHCS                         | 2    |
| 38          | 7186167     | Black Nylon 10-24x1/2                    | 2    |
| 39          | 7786202     | Switch Plate                             | 1    |
| 40          | 7181223     | "Cherry Elec. E2250HX 3A,<br>125/250VAC" | 1    |
| 41          | 7186169     | 4-40 x 5/8 BHCS                          | 2    |
| 42          | 7186170     | 4-40 Nylock Nut                          | 2    |
| 43          | 7180141     | 10-24 x 5/8 FHCS                         | 4    |
| 44          | 7180145     | Gear Plate                               | 1    |
| 45          | 7186204     | TM Flange Bearing                        | 13   |
| 46          | 7786098     | Idler Shaft                              | 6    |
| 47          |             | Trim Mate Spur Gear                      | 5    |
| 4/          | 7186202     | irim mate Spur Gear                      | 5    |

| UNIVERSAL CASE PREP CENTER PARTS LIST |              |  |      |  |  |  |
|---------------------------------------|--------------|--|------|--|--|--|
| ITEM NUMBER                           | PART NUMBER  | DESCRIPTION                              | QTY. |  |  |  |
| 48                                    | 7180140      | Spur Gear (Small)                        | 2    |  |  |  |
| 49                                    | 7786097      | Drive Shaft                              | 1    |  |  |  |
| 50                                    | 7186171      | 1/4" x 1/16" Nylon Washer                | 1    |  |  |  |
| 51                                    | 7786099      | Disengagement Shaft                      | 1    |  |  |  |
| 52                                    | 7180144      | 1/16" Dia. x 1/2" Length<br>Roll Pin     | 1    |  |  |  |
| 53                                    | 7786091      | Cutter Shaft                             | 1    |  |  |  |
| 54                                    | ML050 x 5/16 | Jaw Coupling                             | 2    |  |  |  |
| 55                                    | SRL050       | Buna N Spider                            | 1    |  |  |  |
| 56                                    | N/A          | 10-24 x 3/16 SHSS                        | 2    |  |  |  |
| 57                                    | 7180132      | UCP Cover                                | 1    |  |  |  |
| 58                                    | 7786092      | Support Rod                              | 4    |  |  |  |
| 59                                    | 7187324      | 10-32 x 1/2 FHCS                         | 4    |  |  |  |
| 60                                    | N/A          | Coiled Cord                              | 1    |  |  |  |
| 61                                    | N/A          | Ins. Terminal Conn,<br>Female, Straight  | 1    |  |  |  |
| 62                                    | N/A          | Ins. Terminal Conn,<br>Female, 90        | 2    |  |  |  |
| 63                                    | N/A          | Insulated Male Terminal<br>.187" X .020" | 1    |  |  |  |
| 64                                    | 7186145      | 8-32 x 3/8 SHCS                          | 3    |  |  |  |
| 65                                    | 7187217      | 8-32 x 3/8 BHCS                          | 4    |  |  |  |
| 66                                    | 7709406      | Cutter Head                              | 1    |  |  |  |
| 67                                    | 7109409      | 8-32 x 1/8L Setscrew                     | 1    |  |  |  |
| 68                                    | 7186216      | Plastic End Cap                          | 1    |  |  |  |
| 69                                    | 7180134      | Cutter Guide Carriage                    | 1    |  |  |  |
| 70                                    | 7786209      | Cutter Shaft Guide                       | 1    |  |  |  |
| 71                                    | 7786211      | Shaft Bushing Nut                        | 1    |  |  |  |
| 72                                    | 7786210      | Shaft Bushing                            | 1    |  |  |  |
| 73                                    | 7186234      | 10-24 x 5/16 SHCS                        | 1    |  |  |  |
| 74                                    | 7886207      | UCP Handle Blank                         | 1    |  |  |  |
| 75                                    | 7186132      | TP Handle Lever Pad                      | 1    |  |  |  |
| 76                                    | 7186168      | 1/4-20 x 3/4 BHCS                        | 2    |  |  |  |
| 77                                    | 7189072      | 1/4-20 Nylock Nut                        | 2    |  |  |  |
| 78                                    | 7786107      | Handle Lever Pin                         | 1    |  |  |  |
| 79                                    | 7786204      | Handle Link                              | 1    |  |  |  |
| 80                                    | 7180138      | Speed Control Circuit                    | 1    |  |  |  |
| 81                                    | 7189066      | 6-32 x 1/4" BHCS                         | 4    |  |  |  |
| 82                                    | 7786201      | Cutter Bushing                           | 1    |  |  |  |
| 83                                    | 7791013      | Chamfer Tool                             | 1    |  |  |  |
| 84                                    | 7186215      | 8-32 X 5/8 SHSS                          | 2    |  |  |  |
| 85                                    | 7791006      | Outside Debur Tool                       | 1    |  |  |  |
| 86                                    | 7186214      | 6-32x1/2 SHCS                            | 1    |  |  |  |
| 87                                    | 7109577      | Primer Pocket Brush Lg.                  | 1    |  |  |  |
| 88                                    | 7109578      | Primer Pocket Brush Sm.                  | 1    |  |  |  |
| 89                                    | 7180139      | Power Supply                             | 1    |  |  |  |
| 90                                    | 7180146      | Indicating Knob                          | 1    |  |  |  |
| 91                                    | 7200203      | UCP Speed Control Label                  | 1    |  |  |  |
| 92                                    | 7709410      | Brass Buffer                             | 1    |  |  |  |



We think that we make the very best reloading equipment in the world.

If you agree, please tell your friends.

If you disagree, tell us; we want to do something about it!

# Customer Service

1-800-533-5000 (US or Canada) or 530-533-5191

Hours: Monday - Thursday, 6:30 a.m. - 4:00 p.m. Pacific Time (hours may vary)

e-mail: rcbs.tech@atk.com or visit rcbs.com

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