

K·M **PRECISION SHOOTING PRODUCTS**

CONTROL • ACCURACY • PRECISION

K&M Precision Shooting Products Benchtop Case Preparation Machine User Guide



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General

Congratulations on the purchase of your new K&M benchtop case preparation machine. The K&M case prep machine is an industrial grade unit that features an industrial DC brushless motor for constant torque control from 50 to 533 rpm. Models available from single spindle through six spindle configurations. The driven spindles feature a unique collet design that accepts ¼" hex shank tools that are oriented horizontally for natural ergonomics. Drive all of the K&M case prep tools or any other tool with either 8-32 or 3/8-24 threaded shanks by using the appropriate ¼" hex shank tool adapter. Arrange tools to meet your personal preference of case preparation procedure.

WARNING

This product is intended to be used by responsible individuals that have acquired the proper skills for preparing cartridge brass for re-loading. You are responsible for your safety while using this product. Many of the tools that will be used are sharp cutting tools; care must be exercised for your personal safety.

- To reduce your risk of injury, the user must read through this User Guide completely.
- When using electric tools fundamental safety precautions should always be followed to reduce the risk of fire and electric shock.
- Always connect to the proper voltage supply with a properly working ground.
- Always remove the power supply by unplugging from the outlet receptacle when the machine is not in use or before performing maintenance or inspection.
- Do not modify the motor, gearbox, cables or connections. Doing so may result in electric shock or fire. Should you require repair of internal components call K&M Precision Shooting Products to schedule service.
- Do not use this product in wet or damp locations.
- Regularly check the openings on the driver enclosure and keep clear of debris and dust. Blocking the openings can cause the unit to overheat which can lead to performance issues or possible fire. Never insert anything in the openings of the enclosure.

- **NEVER!** Work with loaded ammunition or brass with live primers.
- Do not touch the rotating tools.
- Turn the power to “standby” when changing tools or loading and unloading brass into the power adapter.
- Always use the proper personal protective devices.
 - Wear eye protection.
 - Wear hearing protection.
 - Wear protective gloves as needed.
- Secure loose clothing, jewelry, hair, etc. away from rotating tools.
- Keep your work area clean and organized.
- Do not use in the presence of flammable compounds.

CAUTION

- Keep your work area organized and clear of debris. Clean up any powder or primer spills.
- While working with the machine keep others clear, especially children.
- Unplug and securely store the machine when not in use.
- Remove and properly store tools when not in use.
- Do not use outdoors or in direct sunlight.
- Do not operate while under the influence of alcohol or drugs.
- Use this machine and related tools only when you are alert and can provide your complete attention to the task at hand.
- Periodically check your tools for wear or damage and repair or replace as needed.
- The motor can become warm or hot to the touch with heavy prolonged use. Avoid skin contact with the motor.

LOCATION OF USE

- Use in an indoor environment.
- Operating ambient temperature: 32 to 104 degrees F.
- Operating ambient humidity: 85% or less.
- Avoid direct sunlight.
- Area free of excessive dust.

Introduction

The K&M case prep machine is an industrial grade unit that features an industrial DC brushless motor for constant torque control over a speed range from 50 to 533 rpm. The speed can be quickly changed by simply rotating the dial switch and pressing to enter the speed. Models are available from single to six spindle configurations. The driven spindles feature a unique collet design that accepts ¼" hex shank tools that are oriented horizontally for natural ergonomics. Drive all of the K&M line of tools or select a ¼" hex tool shank adapter with either 8-32 or 3/8-24 threads to drive any tool of your choice. Arrange tools to meet our preference of case prep procedure. Each model has a spring loaded spindle lock pin to hold the spindle position while setting tools or loading/unloading cartridges into the power adapter.

Unique Features

- Variable speed from 50 rpm to 533 rpm.
- Ample torque for demanding operations.
- Models available with one, two, three, four, five or six driven spindles.
- Collet and idler spindles ride on oil impregnated bronze bearings for smooth operation.
- Collets lock on ¼" hex tool shanks.
- Can drive all K&M tools or any other tool that have 8-32 or 3/8-24 threaded drive shanks. Requires appropriate adapter shank.
- Manufactured and assembled in West Michigan.

Available K&M Tools



CHPA Power Adapter with Power Grip



CHPA50 .50 BMG Power Adapter



CARLRPCT
CAR SMPCT
CARLPPCT
PCTCAL50
Primer Pocket Correction Tools



FLPCRB059P
FLPCRB062P
FLPCRB082P
Premium Carbide Flash Hole Uniformers



UPSTD080
UPPPC062
Professional Flash Hole Uniformers, .080" and .062



UP20STD
UP17STD
Professional Flash Hole Uniformers, .17 and .20 cal.



CDTR6338
CDTR176

Case Mouth Chamfer Tools



PCT3LRLFP
PCT3SRLFP
PCT3SRSFP

Primer Pocket 3 in 1 Tools



HEXDRIVE8-32

1/4" Hex Drive Adapter 8-32



HEXDRIVE3/8-24

1/4" Hex Drive Adapter 3/8-24



HEXDRIVE5/16-18

1/4" Hex Drive Adapter 5/16-18 for Tapered Reamer

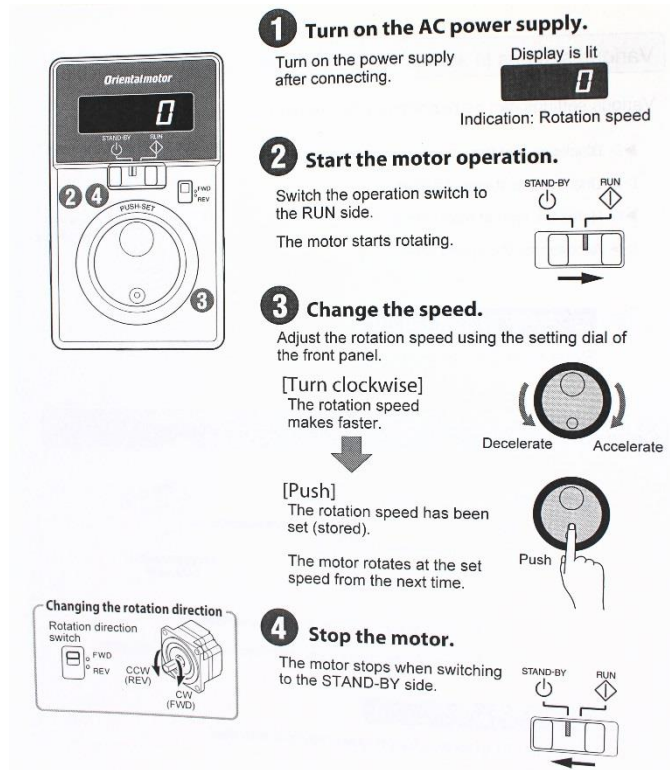


HEXDRIVE1/4CHUCK

1/4" Hex Drive 1/4" Chuck

Operating Instructions

- After shipment and unpacking your benchtop case prep machine allow it to reach ambient room temperature before powering up.
- Plug the unit into a 120V receptacle with a properly working ground.
- To power up and adjust the spindle speed (rpm):



- Rotate the setting dial clockwise to increase the spindle speed and counterclockwise to decrease.
- When the dial is rotated the display will blink and the current speed displayed. Rotate the dial until the desired speed is achieved. The display will continue to blink.
- Enter the speed setting by pressing the dial. The speed is successfully entered when the display remains constant (not blinking).
- The FWD/REV switch sets the rotation direction of the spindle(s). Most all cutting tools require counterclockwise rotation when looking directly at the spindles which means the switch be set to the FWD position.
- The FWD/REV switch can be toggled when the operation switch is in either STAND-BY or RUN. Take care reversing the spindles when a tool is engaged in operation as damage can occur to cutting edges.
- If the operation switch is in the RUN position when the machine is plugged in, an alarm code of "AL46" will display. Simply change the operation switch to STAND-BY and wait a few seconds until "0" is displayed. Next move the operation switch back to RUN and adjust the speed to your preference.

- Load your case prep tools into the collet, if you have a multi-spindle machine arrange the tools to meet your case prep operational order.
- We recommend securely mounting the case prep machine to your work bench. There are two holes in the base plate to accommodate a ¼” fastener.
- To tighten the tool in the collet, press the spring loaded spindle lock pin and rotate the spindle until the spindle lock pin engages the drive gear. This could take as much as ½ revolution of the spindle before the lock pin engages. While holding the pin depressed tighten the collet nut with an adjustable wrench or a 13/16” box end wrench. DO NOT OVERTIGHTEN, use only enough wrench torque to secure the tool in the collet.
- Do not tighten the collet without a tool inserted. Doing so could lead to damage to the collet.



- Now you are ready to prepare your brass.

Care and Maintenance

The K&M case prep machine is designed to provide years of service with very little maintenance. The machine should be kept clean with a soft cloth, avoid solvents for cleaning. The collet and collet nut should be kept clean of chips or debris and periodically sprayed or wiped with a light gun oil to control oxidation. The spindles are stainless steel and require no oil for protection.

The spindle bearings are oil impregnated bronze and it will be normal for oil to leach out of them over time. Keep any oil wiped clear with a soft cloth.

The motor and gearbox need no maintenance or lubrication.

The face cover of the motor controller can be removed. Do not change any of the mode or function settings.

Alarms

The driver provides alarms that are designed to protect the driver from overheating, poor connections, error in operation, etc., which are protective functions. If a protective function is activated and an alarm is generated the motor will stop and an alarm code will display.

Most alarms can be reset by moving the operation switch to STAND-BY and wait 1 minute before returning to RUN. When an alarm is reset, *AL00* is displayed for two seconds, then *0* is displayed. In the event that an alarm will not reset, contact K&M.

Alarm Code	Alarm Type	Cause	Remedial Action
<i>AL20</i>	Overcurrent	Excessive current has flown through the driver due to ground fault, etc.	Check the wiring between the driver and motor for damage.
<i>AL21</i>	Main Circuit Overheat	The temperature inside the driver exceeded the alarm detection temperature	<ul style="list-style-type: none"> Review the ambient temperature Review the ventilation of the enclosure
<i>AL22</i>	Overvoltage	The power supply voltage exceeded approximately 120% of the rated voltage.	<ul style="list-style-type: none"> Check the power supply voltage If this alarm occurs during operation, reduce the load.
<i>AL25</i>	Undervoltage	The power supply voltage became lower than approximately 60% of the rated voltage.	Check the power supply voltage
<i>AL30</i>	Overload	<ul style="list-style-type: none"> A load exceeding the continuous duty region was applied to the motor. The motor was started running under the state that the motor temperature was low. 	<ul style="list-style-type: none"> Reduce the load Allow motor to warm to room temperature.
<i>AL46</i>	Prevention of operation at power up	Power was supplied while the operation switch is in RUN	Cycle operation switch to STAND-BY until <i>0</i> is displayed. Cycle back to RUN

LIMITED WARRANTY AND RETURN POLICY

Benchtop Case Prep Machine Single Spindle, 2 Spindle, 3 Spindle, 4 Spindle, 5 Spindle & 6 Spindle

You may return or exchange Benchtop Case Prep Machine Single Spindle, 2 Spindle, 3 Spindle, 4 Spindle, 5 Spindle & 6 Spindle within 30 days of purchase. A restocking fee of 10% applies to any return or exchange of a Benchtop Case Prep Machine Single Spindle, 2 Spindle, 3 Spindle, 4 Spindle, 5 Spindle & 6 Spindle.

Your Benchtop Case Prep Machine Single Spindle, 2 Spindle, 3 Spindle, 4 Spindle, 5 Spindle & 6 Spindle is warranted to be free from defects in material or workmanship **for two years from the date of purchase**. This warranty is extended **only to the original consumer purchaser**. All K&M Precision Shooting Products are intended for non-commercial use by hobbyists. Any other use of these products will void the warranty. Should you believe that your Benchtop Case Prep Machine Single Spindle, 2 Spindle, 3 Spindle, 4 Spindle, 5 Spindle & 6 Spindle is defective in material or workmanship, you must return the Benchtop Case Prep Machine Single Spindle, 2 Spindle, 3 Spindle, 4 Spindle, 5 Spindle & 6 Spindle to K&M Precision Shooting Products (hereinafter "K&M") postage paid for evaluation. If defective, the product will be repaired or replaced at K&Ms' option, at no charge.

Send a dated proof of purchase to K&M along with the product information and reason for return plus call prior to shipping so you can get a return code to include along with your product.

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Warranty services cannot be provided without meeting the above requirements.

THIS LIMITED TWO WARRANTY DOES NOT COVER DEFECTS OR DAMAGE RESULTING FROM: CARELESSNESS, MISUSE, COMMERCIAL USE, ABUSE, IMPROPER INSTALLATION, MODIFICATION, OR NORMAL WEAR AND TEAR. THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE LIMITED TO THE DURATION OF THIS LIMITED TWO WARRANTY. K&M IS NOT LIABLE FOR DAMAGES IN EXCESS OF THE PURCHASE PRICE OF THE PRODUCT AND UNDER NO CIRCUMSTANCES SHALL K&M BE LIABLE FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES. HOWEVER, SOME STATES DO NOT ALLOW LIMITATIONS ON INCIDENTAL, OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

CUSTOMER SERVICE

Please contact us if you have any questions about our products or tools. We strive to offer the best tools and customer service in the reloading industry.

Please contact us at:

(616)399-7894

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