Instructions for Lyman Case Care Kit

Lyman®

The Lyman Case Care Kit should include the following items:

- 1) Pedestal Crank Tool
- 2) Inside Chamfer Tool fits cartridges from 17 to 45 caliber
- 3) Outside Chamfer Tool fits cartridges from 17 to 45 caliber
- 4) Primer Pocket Reamers (Large and Small)
- 5) Primer Pocket Cleaners (Large and Small)
- 6) Primer Pocket Uniformers (Large and Small Rifle Cases Only)

Your Pedestal Crank Tool is manufactured to rigid tolerances. An occasional drop of oil or powdered graphite on rotating parts will improve performance. There is also a set screw on the back side of the tool which can be tightened or loosened to adjust the amount of end play that the shaft will have. The set screw should be adjusted so that the shaft will turn freely but with minimum end play. Be careful not to over-tighten this screw as it could cause wear or damage to the shaft. The Pedestal Crank can be mounted directly to a bench using the holes in the base or to a piece of wood that can be held in a vise (mounting screws are not included).

Caution: As with any revolving tool, safety glasses must be worn. The cutting tools provided also have sharp edges and care must be taken to keep hands away from the cutting blades. This tool is not a toy and must be kept away from children.

To use the Pedestal Crank, select the tool for the operation you wish to perform and thread it into the end of the Pedestal Crank Shaft. Position the case onto the tool and slowly rotate the crank handle. Most operations only require a few turns of the handle to complete the operation. Be careful not to over cut the brass, particularly with the inside and outside chamfer tools. Removing too much material will weaken the cases and cause them to fail prematurely. See below for instruction on use of the individual tools:

Inside Chamfer: This tool eliminates damage to the bullet caused by sharp edges on the case mouth and will remove burrs left inside the case from trimming. It cuts a gentle 22 degree chamfer on the case mouth to allow bullets to easily be seated. Place the case on the tool and give the crank one or two turns. Do not over cut brass as this will weaken the case. Works on cartridges from 17 cal. To 45 cal.

<u>Outside Chamfer:</u> This tool will remove burrs left on the outside of case mouths from trimming. Place the case on the tool and give the crank one or two turns. Do not over cut brass as this will weaken the case. Works on cartridges from 17 cal. To 45 cal.

Primer Pocket Reamers: These tools will remove the primer pocket crimp from military cases. It will cut through the crimp and leave a slight chamfer on the edge of the pocket. It will only require a few turns of the handle to remove the crimp. Be sure to hold the case straight in-line with the tool. Holding the case at an angle could enlarge the primer pocket and could cause gas leakage. Select the large or small reamer for the primer pocket size of your brass.

<u>Primer Pocket Cleaners:</u> Quickly removes fouling from the bottom of primer pockets. Select either the large or small cleaner for the primer pocket size of your brass and insert the tool into the pocket. Give the crank handle several turns until the fouling is removed.

Primer Pocket Uniformers: The Uniformer tools are designed to cut rifle primer pockets to a uniform depth. Uniform primer depth will produce more consistent ignition and can lead to improved accuracy. Primer pocket uniformers cut the primer pocket to a uniform depth and at the same time squares the seating surface for the anvil of the primer. Primers are constructed so that the anvil protrudes slightly from the open end of the primer cup. This is necessary so that the anvil will rest firmly on the bottom of the primer pocket. When the firing pin strikes the primer, the impact sensitive compound inside the primer is crushed between the anvil and cup causing the compound to ignite. Variations in the depth of the depth or configuration of the primer pocket, or in the primer seating operation itself, can alter the effects of the firing pin blow. This in turn effects the ignition of the primer and may affect the accuracy of the cartridge.

The uniform tools are factory set to S.A.A.M.I. specifications and are fixed in place. No adjustments are needed or should be attempted! DO NOT use the large uniformer tool on pistol cases as large pistol primers are a different height than large rifle cases.

To use the uniformer tool, insert the proper size tool, large or small, into the primer pocket of an empty, deprimed case. Be sure to hold the case straight in-line with the tool and turn the crank several times while applying pressure against the cutter. Keep the case straight in-line with the cutter as holding the case at an angle could enlarge the primer pocket and cause gas leakage. Continue to turn the crank until the shoulder of the cutting tool makes contact with the head of the case. Remove the case from the tool and check for any brass shavings. Remove any shavings that are found. If no material is removed, the primer pocket is already as deep as it should be. If military cases are used, remove the primer pocket crimp first before uniforming the pocket depth.



Inside Chamfer Tool



Outside Chamfer Tool



Primer Pocket Reamers



Primer Pocket Cleaners



Primer Pocket Uniformers