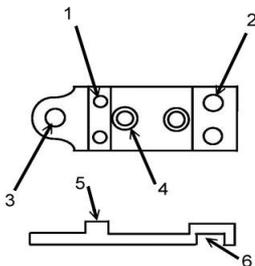


The Heavy Duty Recoil Base installation Instructions

Because there is a tremendous variation in the strength of barrel steel used in both original and reproduction black powder muzzle loading and cartridge rifles, we have designed our heavy duty recoil base. In the original and our present Malcolm scopes, the rear mount takes all of the recoil. This means that the rear dovetail groove takes a lot of force. A 4000 series alloy steel barrel can be 5 to nearly 10 times as strong as a 1000 series steel such as 12L14 leaded steel. Since it is difficult to know what steel is in your barrel, we insist that our heavy duty recoil base is required to install. On Sharps type rifles that have the usual rear sight dovetail and screw hole, you can simply remove the rear sight and install the heavy recoil base using the correct sized dovetail block and a screw that fits the screw hole in the rifle. The screw attaches to the barrel thru hole (3) and the dovetail block is repositioned to slot (6) and attached with supplied screws thru holes (2). The rear mount is attached to the base using the screws that had been provided in holes (1) to secure the rear U Shape mount to projection (5). There are two extra holes (4) in the base that require drilling and tapping two 8-40 screw holes in the barrel to screw the base on securely in this way. This is the only way we can assure you that the scope will not shoot loose.



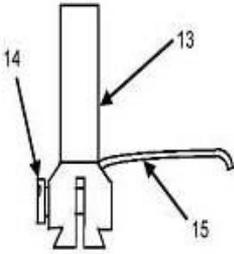
Note: When initially installing the rear mount on projection 5 it may be necessary to hand fit it into the slot in the rear mount. This is to insure the windage adjustment is very precise. Check the fit of the Malcolm dovetail block of the rear mount in the dovetail cuts in your barrel. The fit should be precise, but still allow these dovetailed parts to be slipped in without having to be driven in. IF THE DOVETAIL CUTS OF YOUR BARREL AND THE DOVETAIL BLOCK IN THE MALCOLM MOUNTS DO NOT MATCH, CONTACT LEATHERWOOD HI-LUX OPTICS AT (310) 257-8142 TO GET HELP.

3. Mounting the "Wm. Malcolm®" Telescopic Rifle Sight

The standard dovetails provided both for the front and rear mount are 3/8 wide. This is standard on most rifles. However if you have an original Sharps, a Shiloh Sharps, C. Sharps or Armi-Sport rifle the rear dovetail is a different size. You need to contact your dealer or **LEATHERWOOD / HI-LUX OPTICS** at (310) 257-8142 to obtain a dovetail block of the correct size. There are 4 different lengths of sunshades available to allow one scope to be used on several different barrel lengths. Check the general layout of the rifle and the scope to confirm that the scope has the correct sunshade length. Remove the sights of your rifle from the dovetail cuts in the top of the barrel.

The M634 Mount Installation Instructions

A. To install The Front Mount:



3/8" Dovetail size

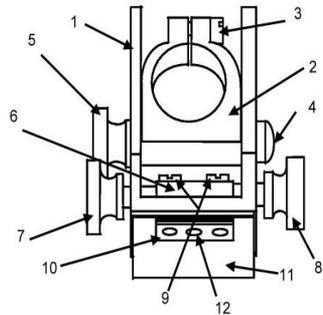
(1). The front ring (13) slides forward to be removed from the scope. Slide the front mount into the front sight dovetail (Nearly all reproduction rifles have a 3/8 dovetail. If yours does not, it will be necessary to use an accessory front mount that has a provision for different width dovetails). It may be necessary to tap the front mount in place. Check the fit of the Malcolm dovetailed base of the front mount in the dovetail cut on you barrel. The fit should be precise, but still allow these

dovetailed parts to be slipped in without having to be driven in. IF THE DOVETAIL CUTS OF YOUR BARREL AND THE DOVETAILED MALCOLM MOUNT PARTS DO NOT MATCH, CONTACT **LEATHERWOOD HI-LUX OPTICS** AT (310) 257-8142 FOR HELP.

(2). There are two screws in the front mount. These should be on the muzzle side of the mount. Center the mount in the dovetail and tighten these two screws. These screws spread the mount and cause it to be locked in the dovetail. This completes installation of the front mount.

B. To Install The Rear Mount:

(1). To remove the rear mount bracket assembly (1), loosen and remove the knurled nut (5) and washers from the elevation lock cross bolt (4). Push the cross bolt toward the left and remove. You can now lift the scope (with scope elevation mount block attached) from the bracket.



(2). Loosen the two screws (9) that attach the windage adjustment plate (6) to the rear mount bracket (1) and the dovetail base block (10). This allows the base block (10) to be removed from the remainder of the rear mount. If your rifle dovetail cut is 3/8", the dovetail block should be used when you install the heavy-duty recoil base.

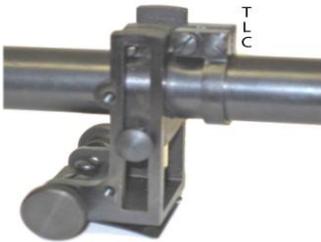
(3). Loosen the two screw in the heavy duty recoil base (1), Position the rear mount bracket assembly (1) over the Heavy Duty Recoil Base Projection (5). ,align the two screws (9) with the two screw holes of the heavy duty recoil base projection (5) and tighten to attach the mount to the base. (Be sure that the flat spring tension plate is in place between the bottom of the mount and the top of the heavy duty recoil base. The curve of the spring should be facing down, so that the bracket pushes down against the center of the spring, not the ends.) Make sure that the screws (9) are sufficiently tightened that the

spring is almost flat. If these screws (9) would not be tightened and secured, the mount bracket could be bent in front by the recoil.

(4). Before the scope is reinstalled in the mounts, first loosen the two ring screws (3) just enough to allow the scope block (2) to slide on the scope tube. Insert the front of the scope (sunshade tube) into the front mount and slide forward. Re-insert the elevation adjustment screw (from left side of mount) through the mount bracket and the hole through the bottom of the scope block, slip on the washers and knurled lock nut (5). You can now adjust the scope for proper eye relief and engagement with the front mount. Level the scope as close as possible and tighten the lock nut to secure scope in place.

(5). Rotate scope until crosshairs are level. Loosen elevation lock nut (5) just enough to allow scope to be lifted to highest position in the rear mount. This will permit access to the screws (3) that tighten the ring on the tube. Tighten the screws (3) very tightly to prevent scope from rotating or sliding back and forth in the ring. Return the scope to level position, and you're ready to make sight-in adjustments. (Even if you get the screws tightened, you still need to install the tube locking collar to prevent the scope from moving).

C. To install The Tube Locking Collar (TLC):



Install the TLC to fit against the back of the rear elevation block as the photo shows. You can remove the E.P. from the back quickly and slide the TLC on the tube and put the E.P. back on as soon as you can. You should tighten the two screws on the TLC tightly. Now the scope should not move forward during shooting. (If the TLC is already on the tube, you just need to tighten the two screws).