

SHADETREE KIT TO INSTALL ON A BALD EAGLE BENCHREST

These instructions are for the fit up of the Shadetree kit for Bald Eagle cast iron alloy benchrest.

This kit consists of:

- 1) Shadetree joystick rest top
- 2) Protector Cordura front bag 3"
- 3) Rear leg bolt
- 4) Small bolt to fill threaded hold where the cable bearing was fitted.

Fitting everything up is reasonably straight forward. Just paying attention and normal tools required.

- 1) Remove the Bald Eagle benchrest from the carton. The top carriage is already turned 90 degrees for packing . Remove it by lifting up. Sometimes you may need to loosen the left side lock handle.
- 2) Then turn the cable knob so that you unscrew the other end (threaded end) from the top carriage which you removed.
- 3) Then wind the Capstan wheel and its washer off the threaded post.
- 4) Use a 13mm spanner to unlock the two nuts on the eyeball cable bearing at the rear leg. Then you can wind out that eyeball bearing post to remove the whole cable assembly.
- 5) Remove the rear leg screw with alloy lock nut and its plastic washer and place aside.
- 6) Fit the Capstan wheel with its white washer to the post on the Shadetree.
- 7) Fit the Shadetree to the Bald Eagle base and tighten the left hand lock shaft. It should line up in the slot. It will be easier to fit up the front bag as the next job with the Shadetree unit secured here first.
- 8) Fit the small black grub screw into the threaded hole where the cable bearing was removed. It's only purpose is cosmetic to fill that hole.
- 9) Now fit the stainless rear leg screw. This needs to be done because the original Bald Eagle leg screw will foul the joystick handle because it is too high. Use the small diameter plastic washer here also. It is from under the original rear leg bolt. If you choose you could possibly also use the alloy lock washer too. Not critical.
- 10) You can place aside the complete BE front carriage, flexi cable, rear leg screw. Best to keep these parts rather than throwing away.

Now to fit up the front bag onto the Shadetree.

- 11) Fill the front Cordura bag with sand using an appropriate funnel. The Forster Quick fill funnel is what we use. You need to fill the bag reasonably well but not rock hard full (overfull). This always takes some fiddling.
- 12) Tuck the fill flap back underneath into its pocket. You will need to push and pull the bag shape around a bit. It takes a while to get some shape but eventually it will be better after fitting up and after use too. Once correct it will stay correct shape forever. Just looks a bit horrible sometimes immediately after filling the bag.
- 13) Tap the underside of the bag on a solid table a few times. Just to flatten out the underside a little.
- 14) Then on the Shadetree undo the 8 mounting bolts on the front and rear clamp brackets. 4 front and 4 on the rear bracket. These are the clamping brackets for the front bag. Use a 5/32 size imperial allen key.
- 15) Then remove the front 2 bolts which remain on the plate. These will secure the bracket for the front stop assembly. Take note that these 2 bolts are slightly shorter than the other 8 so keep aside and not mixed up.
- 16) Lay the filled front bag on the top of the rest platform. You will see that some cutting and trimming of the insides of the 4 flaps is going to be required. This is so the inner holes on the Shadetree platform are exposed. Refers to the photos is best to work things out. But please pay attention to ensure that the front bag does sit evenly on the top plate. So that it is centred for sideways and between the front and rear rows of holes. For what it is worth I lay the bag on the top so that the fill flap tucked underneath is on the RH side of the Shadetree top. It's not a big deal but particularly centrefire rifles twist under torque of firing and twist right. So, since you have to fit the bag around one way or the other consider this
- 17) Refit the front and rear brackets with end plates connected.
- 18) After it is clamped up and centralised you can use a screwdriver like a rolling pin to pull around into shape. If your stock is 3" wide use a piece of timber to help shape it. If you stock is only 70mm wide, for example, use a piece of timber 70mm wide to do this.
- 19) Trim off the excess flaps only when you are happy about its positioning.

20) Fit up the front stop bracket and fore end stop bolt. We notice some people like to install some plastic tubing over this.

21). Now you are ready to go. With the Shadetree design of joystick the actual handle needs to slide in the bearings internally. There is a little screw at the front of the handle so it cannot be pulled out. But there does need to be a small amount of in and out movement on the handle. If not, it will bind up. Also, there is perceptible small free play in the mechanism when wiggling the handle any direction at the knob. This is also normal otherwise it binds up internally.

If you want to shoot F class lying in the grass you can fit up the BE F class feet and also to the new rear leg screw. But it will not be height adjustable. Should not be an issue as adjustment at the front legs should suffice.











