BRT Shooters' Supply. PO Box 1124, Springwood. QLD 4127.

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## **Butch Lamberts Joystick front rest tops.**



Thank you for purchasing the SE&A rest top made by Butch Lambert in Texas, USA. Butch is a good friend of ours and we are proud to sell his products. His website is <a href="http://www.shadetreeea.com/">http://www.shadetreeea.com/</a>

Normally these rest tops come a little more assembled than you may be receiving it now. Butch sometimes leaves the ¾" x UNC threaded posts off the rest tops or the handles and other hardware off when mailing them out to us from Texas because it adds a lot of bulk to the overall parcel and makes wrapping difficult. Butch has made a jig which he installs the ¾" posts to align the slot position for a standard Hart Rest, the most common type of front rest in the US. Many bench bests used in Australia are different from those commonly used in the USA. However if installation is onto a Bald Eagle Rest (sling shot type) or many of the other types of front rests then the slot alignment needs to be in a different position. Since you may be installing your new joystick rest top onto another type of tripod rest, eg a Caldwell, disassembly of the joystick will be required. The rest top is attached to the threaded post by a countersunk bolt from the inside of the main housing.

The internals of the joystick top are not rocket science but we suggest that you carefully take note of things as they are pulled apart and lay them out in order carefully onto a cleared table and inside out of the wind and dust etc. Remove the 4 countersunk screws, along the middle of the bag base plate. These hold the bag plate base onto the internal mechanism. Once all this is removed you will then see how it all works. If there is still any doubt just move the handle around a bit. Now to further dissemble undo the two fine threaded friction screws which are the tension screws (at the rear). On the underside there are two small screws containing a plastic stopper which are used to hold the tension screws from moving their position. Loosen these first. Try to keep all the parts like the friction pads and Belleville washers together with each of these screws. Observe their order and assembly. You may need to get some pointy nose pliers to remove the Delrin pads if they do not come out with the screws. Everything will come loose now. Remove the two steel vertical pins separating the two internal movable plates.

Undo the allen head screw in the front of the handle, then the handle will slide out of that front bearing. If it is firm use a pin punch inside the threaded hole to knock it out. A new modification here, Butch has put two Delrin pins with springs on them inside this movable plate. They act vertically. This system helps support the weight of the rifle and balances the movement in all directions. He now calls this the F Class model. Take note of their positions in the forward (movable) plate so when it is reassembled you will get it right. See pictures.







Now that the housing is empty the post can be installed using the <u>countersunk screw</u> which is supplied with the separate ¾", 1" or 7/8" Acme threaded post. Install the post to the rest base housing. Align the slot if your rest base uses the slot for alignment (eg. Hart, Bald Eagle, Wichita, Edgley, Caldwell etc). If installing onto an Australian made RTM rest the position of the slot doesn't matter. If you are using a different post altogether which would suit another brand of front rest, like an Edgley, Caldwell or Wilcox etc then drill and tap into your own post to suit. Inspect the way the supplied threaded post is drilled and thread tapped to copy it. Ideally this should be done in a lathe. The countersunk screw is 3/8 UNC 16tpi. Butch suggests that the screw be locktited into the post. Just use <u>screw lock</u>, nothing too permanent. Just be very sure that you have the top section (joystick part) lined where you want it positioned on the tripod base before applying the locktite and then reassembling everything. Make sure you have that countersunk bolt very tight and also secure the unit when tightening so it does not rotate or misalign during the tightening process.

Upon reassembly of the internal bits take note of lubrication points – at the front of the forward sliding plate, around the two vertical pins and around the tension screw pads. Normal wheel bearing grease should be OK but I use a popular grease called Nulon pre assembly grease for camshafts. Refit the internal plates and the 2 vertical pins. Then insert each tension screw from the rear and make sure the pads fit in and align into the horizontal slot in the rearward plate. Lube is required here too. Apply some tension on the screws. Refit the <u>bag plate</u> on top with the 4 countersunk screws and then fit a front bag. Use your existing favourite bag or a new bag. It is designed so the bag tabs are clamped between the front and rear bars of which each have 4 countersunk screws. It takes a bit to align any front bag properly. So take your time and get it right. You may need to trim the edges of the tabs on some bags.

Pull the tabs tight and then clamp down. Do not cut off the excess straps from the bag just yet. Wait until a few matches are done to be sure you are happy with the setup and know it will not need any more disassembly before trimming off the excess tabs.

An optional extra we offer consists of two machined plates which fit under the front and rear clamping plates. This modification allows the owner to quickly change the front bags for a different size. For example, from a 3" wide bag to a 2 ¼" wide bag and then back again. For this system the leather tabs are removed from the bags. The alloy plates and the adjustable end plates hold the bags in place quite well.

While on the subject of bags if you want to get a new front bag instead of using something which you already have then we can only recommend one type. These are the Protektor brand Cordura ones. They come is 3 sizes to fit rifle forends from 1 ½", 2 ¼" and 3". You can fill them with fine sand but for a small extra fee we can fill bags with our special heavy sand! © We stock these bags.









Now install the forend stop where you like it positioned. We do generally recommend the use of a forend stop with <u>any</u> joystick rest system. When setting up on the bench fit the forend of the stock into the bag and run back and forward several times to settle a shape into the front bag. It is also a good idea to find a piece of material, eg wood, that is the same size and shape as your rifle forend. Use this to fit onto the bag when travelling and storing the rest at home. It will help to keep the shape formed in the bag.

Now finally the 2 tension screws need to be adjusted. The important part here is that each of the two tension screws needs to have about the same tension. Otherwise the system will wobble a little on the vertical rise and it will tend to twist when raised and lowered. If this is occurring then the side that rises first will be the side with the least tension on it. So adjust accordingly. With a little practice and experimentation you will get it right. I use a tension wrench. About 8-10 inch pounds is all that is required but it must be the same on each screw. Butch uses Belleville washers in here which is a good idea. They are best for maintaining correct tension but they do not need much movement on the adjusting screw to change that tension. Once the tension is set where you like tighten the small friction screws underneath. Do not over tighten these.







Remember what feels nice and free <u>will probably be too loose</u> when the weight of a rifle is on it. Usually people seem to start with a loose tension on the joystick as they think it feels best. <u>We have found we prefer a little firmer tension</u>. After a while it is easy to get used to a firmer tension and there is less risk of any movement of the joystick when the rifle is under recoil. Think about that.

It usually does take a while to get used to the feel of any joystick front rest system. Things seem to move the wrong way at first! It is a different style of shooting but with practice and experimentation you will get to enjoy it. As usual, set your rear bag in the correct position on the bench and move the front rest around on the bench to align the rifle with the target. Then move the joystick around, top left to right, then bottom right to bottom left. This is in a square pattern going to maximum vertical and horizontal observing where the crosshairs go. If the target isn't centred in the middle of this (square) pattern you will have trouble so adjust your rest height or rear bag accordingly. A quick set up is to place the handle down at the 6 o'clock position and align the rest and bags so the rifle scope is aimed just off the bottom / centre of the sighter target. Remember rear bags usually settle for the first few shots and this will change your whole setup. All of this should cause you to pay much more attention to the overall setup of the rests and rifle which is a good thing. A lot of ills come from rear sandbags.

Good luck and enjoy. It is also really great for hunter class or any score shooting benchrest matches as you could imagine. Any questions and comments just get in touch with either of us or directly with Butch himself. He would be very happy to hear any comments from you and is a very obliging Texan. His website is <a href="http://www.shadetreeea.com/index.html">http://www.shadetreeea.com/index.html</a>

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Many thanks, Stuart and Annie Elliott.









