

FAQs

Remington 700 and Clone Short Action DBM

7075-T6-REM700-SA 316-REM700-SA 4140-QPQ-REM700-SA

The Q+A here relate to material, installation, and functionality including common problems encountered during fitting. Please email or call us if this section doesn't address a specific question you have. Please note that the majority of problems are caused by not using the bedding pillars provided. For the best performance from your DBM, we strongly recommend using these pillars and testing the final assembly of DBM-pillars-action prior to fitting everything into your stock. Inserting a magazine and cycling snap caps is the best method of doing this.

Q: Where do I get the magazines from?

A: Delta Tactical import the USA made Alpha Industries magazines which are a high quality and 100% AICS compatible magazine. Delta Tactical resell these at a very competitive price which eliminates the need to import them yourself, their contact details are in our Where to Buy page. Otherwise Accuracy International (UK), Accurate Mag (USA), and C Products (USA) all manufacture magazines and these can be found locally as well as imported fairly easily with a B709A (form available from your state's firearms registry). At this stage AI are the only company manufacturing the AE Mk1 short action magazines which we intend to use on the lower end DBMs.

Q: What magazine do I need to use for the DBM I have?

A: Please check the Magazines page for details or email us if still unsure, we produce the DBMs to suit a variety of AI mags.

Q: Will the Accuracy International AW magazines fit your DBM?

A: Yes, however only to the short action type DBM suited for the AICS magazines. This is 'type 2' as outlined on our Magazines page. Although the AW magazine will fit into and lock up into our DBM, it may not feed reliably depending on the action. Modification of the action will probably be necessary.

Q: Do you make a DBM to suit the new CIP length 338 Lapua AI magazine?

A: No, not at this stage. Only the standard 338 Lapua mag from AI will fit the long action DBM. The new CIP length mag won't. We do have a couple of CIP length magazines here though and are considering which actions they would be best suited to with minimal changes needed.

Q: There are no instructions or inlet profile diagram included with my DBM, where do I get this information from?

A: Please download these PDF files from the Products page

Q: I have a stock inletted for the badger but your DBM doesn't fit properly, what is wrong?

A: The DBM inlet profile is correct however most likely the stock inlet is not accurate. We've seen variations for the inlet profile (width and depth) across many stock makers, some being too large, whilst others being too small. Our inlet profile is listed in PDF format on our products page. If you have a stock where the inlet is too large, the DBM can be made to fit nicely with no gap by applying bedding compound such as devoon around the gap between DBM and stock. In the case of synthetic and fibreglass stocks, this can be then sanded and painted to match your stock once dry (remember to apply release compound). If your inlet is too small, we recommend getting it professionally inletted on a CNC milling machine. In many cases, the inlet profile may be just about right and only a small amount of material may need to be removed (by carefully using a dremel or hand file) from the stock to have a nice clean fit. Be careful not to remove too much material, always measure twice and cut once.

Q: I have assembled the rifle and DBM however I cannot get a round to chamber from the magazine and/or the magazine does not insert and click into the the DBM when loaded. The bolt contacts the rim of the cartridge but then jams at the front. What is happening?

A: Check the magazine and see if there is a front insert between magazine wall and follower. If you are using Alpha industries type 2 mags, or AICS magazines with the insert removed, your feedramp will need to be modified on some actions (including factory remington 700). This can be done very carefully with a dremel or similar rotary tool followed by polishing (and a cold blue if not a stainless action). We recommend careful measuring multiple times to minimise how much material is removed. If unsure, get a competent gunsmith to modify it for the longer rounds. The internal OAL of these modified magazines is approximately 75.50mm (2.972") compared to approximately 73.50mm (2.89") for the magazines with the insert. An extra 2mm to 3mm cut in the middle of the feedramp is usually required for the longer projectiles to clear from our experience, but please make sure to measure thoroughly and repeatedly whilst doing this modification. Regular reassembly of the DBM to the barreled action (using the pillars provided) and cycling using snapcaps or other dummy rounds minimises potential mistakes..

Q: The magazine does not latch up into the DBM when I try inserting it, what is the problem?

A: It is likely that the DBM is mounted too close to the action. Please try assembling the DBM to the action outside of the stock first using the gold anodised pillars provided, the front pillar is the short one and the rear pillar is the longer one. Test magazine function once this is done. If the action cycles the dummy rounds without an trouble, then the problem is most likely due to the stock providing insufficient distance between DBM and action. This problem should not occur if you are using the pillars and screws provided.

Q: I am still having trouble with the magazine not locking into the DBM.

A: The remaining possibilities are:

- The magazine could be damaged or out of spec, try another mag. Make sure it is AICS or AICS compatible.
- The lever is damaged or the lever spring is not functioning as designed. Inspect carefully or contact us for a replacement.
- The wrong pillars are being used, ensure the overall length of the front pillar is 18.32mm and the
 overall length of the rear pillar is 27.20mm using vernier calipers or a ruler. The pillars we supply are
 anodised gold in colour to avoid the possibility of them getting mixed up with pillars from other
 manufacturers.
- The action is not compatible and/or not a true clone action (mostly in the case of Remington 700s) for the make and model the DBM was designed for (please contact us if you suspect this is the case).

Q: The magazine latches up but the bolt nose won't pick up the cartridge when cycling. The magazine is also a little loose and rattly.

A: It is likely that there is too large a gap between the DBM and action. Please assemble outside of the stock using the pillars provided and test for function. Check that you are using our action pillars (gold anodised colour). The front pillar is shorter than the rear pillar. If you are using the pillars provided, the top of the front of the magazine should just touch the bottom of the receiver - check the assembly outside of the stock first.

Q: I have checked the above FAQ but the bolt nose STILL won't pick up the cartridge when cycling.

A: The remaining possibilities are:

The magazine could be damaged or out of spec try another mag, make sure it is AICS or AICS compatible. The lever may have been filed down, modified or the roll-pin hole may have been redrilled. If you are not the original owner, check these areas carefully. Contact us for a new lever if required.

The action is not compatible and/or not a true Remington 700 clone.

Q: I am using the bedding pillars provided however when I install everything into my stock, they don't appear long enough to make contact between DBM and action, how do I fix this?

A: Some stocks, both inletted from the stock manufacturer as well as afterwards by gunsmiths may be cut a little shallow. We have made our pillars to the minimum length (same as the badger) to ensure maximum contact between bolt nose and cartridge case head meaning you have the most reliable cycling possible. If you don't wish to cut your inletting down to suit the pillar length, we have included several shims. When assembling the rifle, add an equal number of shims to both the front and back pillar. Ensure no more than 2 shims are used on each pillar otherwise the magazine won't sit close enough to the action and the bolt won't make contact with the cartridge case. These shims are made especially to match the OD and ID of the pillars.

Q: The magazine latches into the DBM just fine, but I am having trouble extracting the magazine.

A: There are several possible causes to this problem, all are easily fixed:

- The magazine has been damaged or is out of spec (try another magazine)
- Carefully check the rear spine of the magazine as well as the detent that the lever locks into. Ensure the surface is clean and smooth and free of any dents or debris.
- If you are not using the pillars provided it is likely that the magazine is being pushed to far into the DBM and the latch detent on the magazine is becoming stuck wedging the magazine into the DBM.
- Some brands of magazine may have holes drilled into the rear spine (in the case of Alpha Magazines, it is one hole below and one hole above the detent for the lever). The hole above this detent can become caught on the top of the lever when removing the magazine, and this may cause the magazine to lock into place. This can be remedied by gently tapping the hole in with a tapered pin punch slightly. This will not affect the function of the magazine's follower if done carefully.

Q: When I insert the magazine into the DBM, a small amount of the black finish is scraped off the magazines body. What's happening?

A: This is going to happen. It depends on how durable the magazine finish is, which varies between brands. Many magazines use a Teflon type finish which although nice is not that wear resistant. We have found that the finish also comes off the magazine when using the aluminium DBMs on the market, this is not something exclusive to steel DBMs. Additionally, if you have an aluminium DBM on hand, have a close inspection of the interior surface around the magwell you will likely notice that the anodising has worn in the same areas of the DBM as well as the magazine! Our DBMs will not wear in this fashion. Although we polish and very finely bead blast the DBMs for a nice, smooth uniform finish this will still happen regardless. Don't worry too much about the finish on the magazines it will occur in specific places (generally around the latch area as well as on the corners). After a while the magazines will feed a lot easier and smoother once the finish has rubbed off in these areas and it doesn't affect the functionality whatsoever of the magazine. Most of the better AICS magazines are made from stainless so corrosion is not an issue.

Q: It is difficult to insert the magazine into the DBM. I need to push quite hard just to get the magazine to positively feed into the magwell opening

A: We use a strong spring in the lever. Our first prototypes used a much lighter spring but we had complaints from the hunters and field users who trialled it regarding accidental release of the magazines by the lever getting knocked unintentionally. We have remedied this by the stronger spring. It is fairly easy to insert the magazine with some practice, we suggest tipping the magazine slightly and inserting the mag from the rear first whilst pulling the magazine back and up against the lever. We have found this is the quickest method. Alternatively, the lever can be held forward slightly to 90 degrees with the thumb, whilst the palm pushes (firmly) the magazine into the DBM. Changing the lever spring to one of the light and smaller springs (included) will make it a little easier to insert the magazine.

Q: The strong tension of the magazines release lever still bothers me, any other options?

A: We have included an extra lever spring inside the small zip-lock bag included with the carton. This spring can be cut down by one or two coils and installed to achieve a lighter pull. We have also included in this same zip-lock bag, two of the original lightweight versions (smaller diameter, slightly shorter stainless spring). These are great for f-class and benchrest shooters. Be careful when driving out the roll-pin to remove the lever and current spring, it is held with pressure and may launch a fair distance. The lighter springs are different from the spring that comes with the assembled unit and are a smaller diameter. It is best to epoxy or glue in both ends of this spring to ensure to doesn't slip out of the larger diameter spring-detent of both the lever and DBM. Feel free to contact us for more springs if you need them.

Q: There is a small scallop machined out of my DBM around the top of the trigger recess. What is this?

A: This is not a machining mistake. This allows enough clearance for the safety lever to be engaged and disengaged for those using a Jewell HVR or Timney trigger. This cut does not reduce the strength or durability of the DBM. The scallop is on both sides to accommodate left hand shooters as well. If the action is perfectly aligned to the DBM and the trigger is mounted and hanging dead-centre in the action, then these machining cuts should be unnecessary as the safety lever will clear the recess. However we have found that this is not always the case. Before assembling the rifle and DBM back into the stock, we recommend that you assemble the action-DBM using the pillars provided and check carefully the clearance for the trigger you are using is sufficient so as to avoid possibly damaging this component.

Q: When I assemble the DBM, my trigger housing or trigger safety lever make contact with your DBM

A: Please contact us with details of the trigger you are using. We have deliberately made the trigger recess as large as possible and also scalloped a portion at the front to clear the bottom of the safety arm on some of the triggers available, without affecting the integrity or strength of the DBM. However there are always new triggers for the Remington 700 being released which we may not have trialled. Please send photos if you have a trigger which is not compatible with our DBM. Usually any problems can be resolved by carefully filing away material from the DBM in the contact areas. Cold blue afterwards if using the 4140 nitrided unit.

Q: I have dismantled my DBM and the lever is difficult to attach again. How do I reassemble the DBM? There seems to be a lot of pressure required to push the lever back into place so that it aligns with the roll-pin hole?

A: Without a special jig setup, the easiest method is hold the DBM upright so that the rear tang is sitting firmly in a soft padded vice, and then with the other hand push firmly down on the lever using your thumb, whilst a second person inserts the roll pin. Alternatively, small vice-grip pliers can be adjusted so that they lock up compressing the lever perfectly in alignment the roll-pin hole (when the top jaw is against the face of the lever and the bottom jaw is gripping the inside of the mag well) - then the roll pin can be inserted. Take care not to mar the surface when doing this, wrapping the vice grip jaws in electrical tape is best.

Q: I have reassembled the rifle but cannot get the bolt to slide into the action.

A: It is likely that the rear action screw is protruding through the action screw thread and is stopping the bolt nose from sliding in. Please double check the correct action screws are being used. The action screws should

not thread all the way through. Remove rear action screw completely and try to reinsert the bolt again. This problem should not occur if you are using the pillars and screws provided.

Q: I have reassembled the rifle, I can get the bolt to slide into the rear of the action but I cannot close it.

A: It is likely that the front action screw is protruding through the action screw thread and is preventing the bolt lugs from turning and making contact with the lug recesses. Remove the front action screw completely and try closing the bolt again. If the bolt closes - check that the front action screw is correct. This problem should not occur if you are using the pillars and screws provided.

Q: I am using a stock with a full length aluminium bedding block and have inletted now for the DBM to sit flush, what do I need to do to ensure that the magazines will function flawlessly.

A: Using vernier callipers, ensure the thickness of the aluminium block is 18.32mm at the front action-screw hole and 27.20mm at the rear action-screw hole. If is undersized then adding flat steel washers or shims between the tang of the DBM and the bottom of the DBM inlet until the nominated thickness is achieved will correct the problem. If the aluminium block is oversized still, further inletting will correct the problem until the nominated thickness has been reached for both front and rear sections,

Q: What torque setting do I tighten the action screws to?

A: 65 in-lbs when using pillars or aluminium bedding. Make sure the torque wrench is measured in inchpounds not foot-pounds. A properly expoxied bedded stock (over pillars or aluminium block) will require less torque. Be careful not to over-tighten the action screws as the threads may strip.

Q: I am not using the pillars, what torque setting should I be tightening the action screws to?

A: 40 to 45 in-lbs for laminate stocks, 30 to 35 in-lbs for wood stocks depending on quality of epoxy bedding. Make sure to check clearance between action and the top of DBM tang and ensure correct spacing between the tang of the DBM and the bottom of action prior to torqueing each screw (18.32mm for front, 27.20mm for rear). We recommend using red loctite in the action screw threads when tightening action screws if torque setting is less than 40 in-lbs, it doesn't take much to clean this out later if required.

Q: What is the hardness of the 4140 unit which has undergone the QPQ treatment

A: 65 Rc. QPQ nitriding also commonly goes under the proprietary names of Melonite and Tenifer by some companies supplying this salt bath nitriding hardening treatment and it is being seen more and more on the slides, bolts and other high-wear components from premium pistol and rifle manufacturers. In addition to the increase in hardness it offers increased lubrication to the surface metal as well as a tough and resilient black colour superior to bluing (black oxide) in our opinion.

Q: Can the 4140 nitrided DBM be parkerized or blued?

A: Yes, and with good results.

Q: How corrosion resistant are these DBMs

A: Extremely corrosion resistant. Not only are all the internal components manufactured from 316 stainless steel, but the 4140 unit is QPQ nitrided which also adds to its corrosion resistance. The 7075-T6 alloy version is naturally corrosion resistant but we hard coat type III anodise as well for extra resistance. The stainless 316 variant is nitric acid passivated after the machining and bead blasting operations for the absolute maximum performance in saline environments.

Q: None of my questions have been addressed here

A: Please email us