

CMX

Crazy Mtn Motorsports Inc

POB 162 ~ 312 1ST Ave N.

Clyde Park MT. 59018 ~ USA

PH 406-686-4921 ~ FAX 406-686-4222

www.crazymtn.com

CMXDS INSTALLATION INSTRUCTIONS FOR POLARIS DRAGON

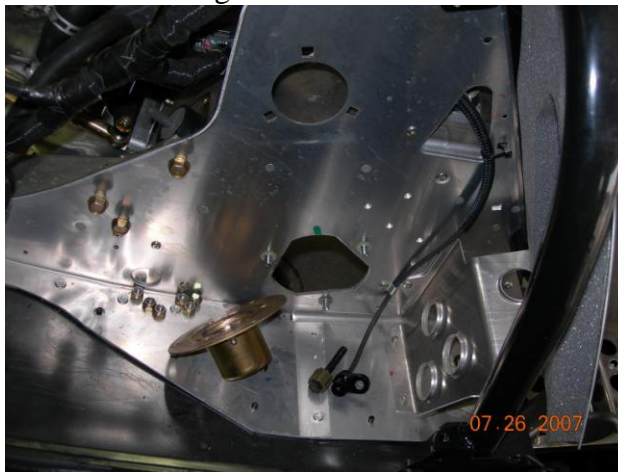
Congratulations on the purchase of the Crazy Mountain Xtreme Drive system. When installed properly it will provide exceptional reliability, noticeable performance increase and reduced weight.

Start by removing your rear suspension. The rails need to be shortened to clear the Wahl Bros. No Slip Drivers. Remove rail caps and discard. Cut 1 ¼" off of the front of the rails as shown in picture. We have found that it is easier to cut the rails with the hifax removed.

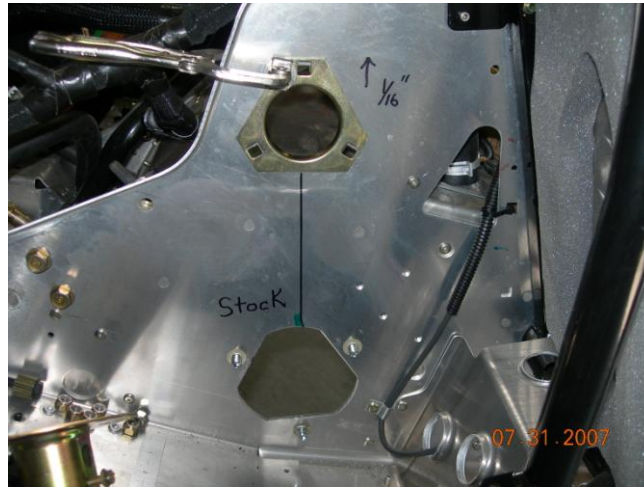


The Wahl Bros. Anti Stab kit replaces the factory shaft that the limiter straps attach to. You will now attach the limiter straps to the new shaft. After reinstalling the hifax, you will need to cut the excess off and sand it smooth to match the front of the rails. Now rear suspension is ready to reinstall after CMXDS installation.

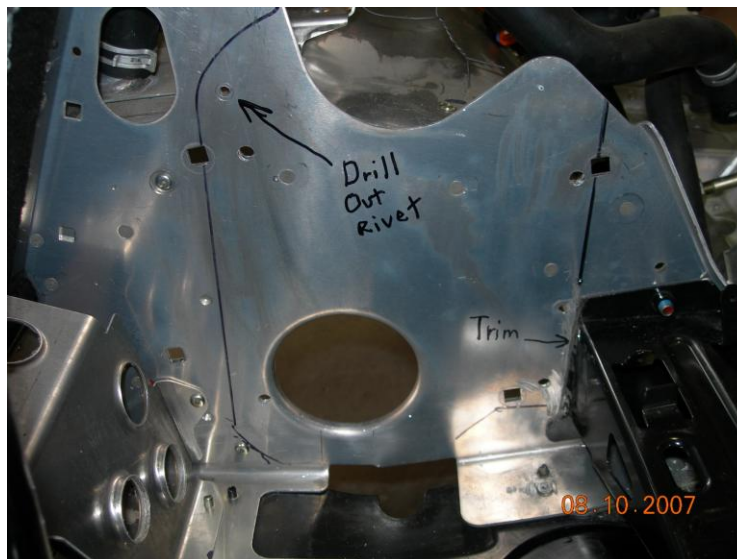
Now it is time to get down to business. Remove complete stock drive system, shafts, chain case and all. Open hood. Remove side panels. Remove secondary clutch. Remove air-box. Remove exhaust canister. Drain chain case. Remove chain case cover, chain & sprockets. Remove jackshaft, trackshaft, chain case and brake system. The only part of the brake system to be reused is the master cylinder on the handlebars. Retain bearing retainers, flangettes and bolts to be reused on clutch side. You will need to pull the bearing off of the trackshaft on the clutch side to retrieve the bearing retainer with bolt studs to be reused when installing new trackshaft.



Now you can do the modification to the clutch side to relocate the jackshaft 1/16" higher on the clutch side. Note: This will not effect your drive belt alignment. Use the flangette as a template as shown in picture. The large hole in the bulkhead needs no attention. The only thing you will be doing is removing a little material in the bolt holes to raise the shaft as shown in picture. Note: move in direction of stock shaft angle, note straight up.



Now we will go to the drive side. You will use the template provided to locate and drill new holes to mount the CMXDS mounting plate. Before you can do that you will need to drill out a factory rivet shown in picture. We have machined the back side of the CMXDS plate to set over the steel exhaust mount. You may need to trim or grind to ensure the plate seats flat against the side of the bulkhead.



Bolt the template to the side of the bulkhead using the stock chaincase bolt holes. Please take your time and do a good job with this step as it is critical in the location of the system and how it will operate. Drill 1/8" pilot holes through guide holes in template for new CMXDS mount plate. Final hole size will be 5/16" to be drilled after template is removed.

NOTE: We have machined the CMXDS Plate to fit around the exhaust mount to make installation easier. You may have to do a little grinding to ensure the plate sets perfectly flat against the bulkhead.



Before removing template scribe 2 lines against the out side of the slots in the bottom of the template.



Remove template and drill 4ea. 1/8" pilot holes to 5/16". Use air body saw to cut area out of lower shaft hole.



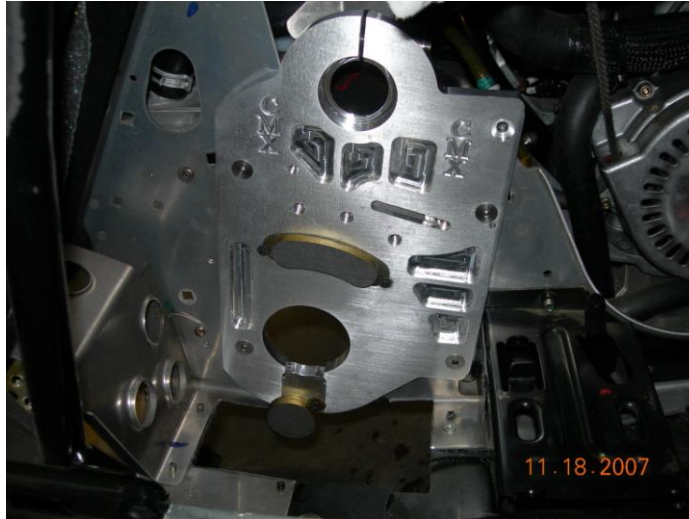
Use air body saw to cut rolled hole area for nut and washer clearance.



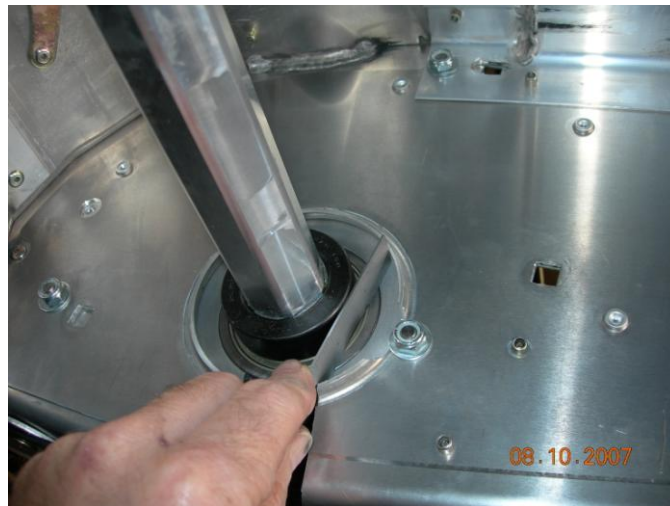
Use cardboard pattern to mark area to be cut out for CMXDS protector cup. Due to the hardness of this little steel plate material, we are providing a new aluminum plate to go in its place. Drill out the rivets and remove the stock steel plate, before cutting with air body saw.



Now you can install the CMXDS mount plate. Make sure that it sets perfectly flat against the side of the sled before bolting it on. Note: make sure to put slider nut for idler sprocket in slot in back side of plate before bolting plate on.

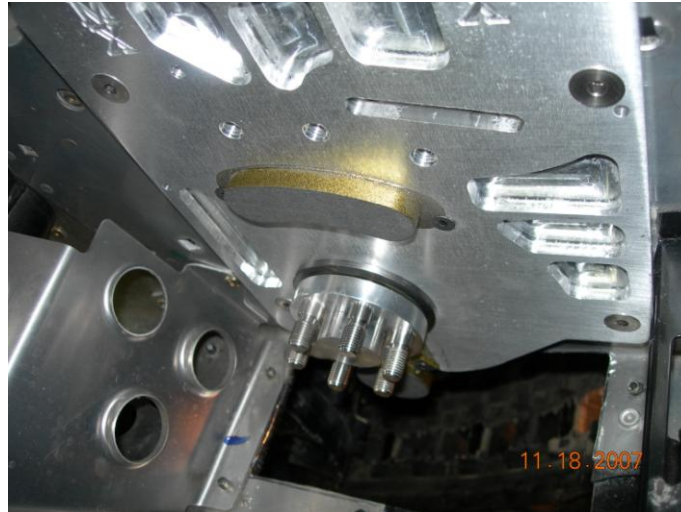


You are on the home stretch now. Place track in tunnel and install bottom shaft. You will remove the 5MM allen screw that holds the window in the bottom of the CMXDS mount plate. Drop window out. Track shaft is installed by lining the hex of the shaft with the slot in the plate and sliding shaft toward the clutch side of the sled inserting big bearing on drive side into CMXDS plate. The inside of the bearing should be flush with the inside of the CMXDS plate.

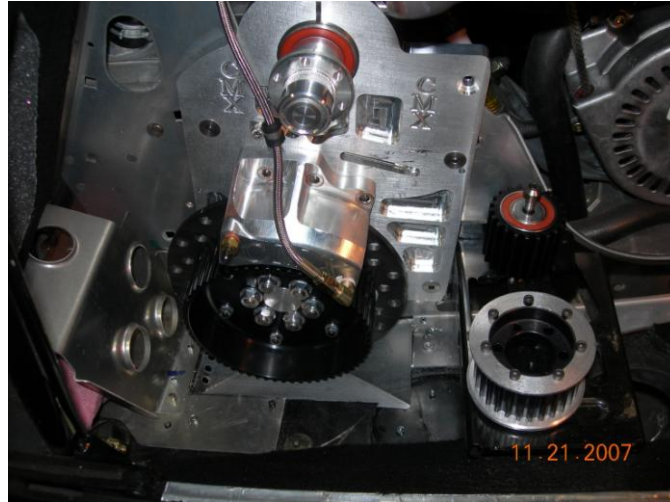


Install window with retaining bolt in bottom of CMXDS plate. Do not tighten at this time. Install bearing (supplied) on clutch side of trackshaft using all stock bolts and hardware. Note: Your stock speedo pickup wheel will bolt to the end of the trackshaft with a shorter bolt. Do not set eccentric locking collar on clutch side bearing at this point. It should be locked to the shaft after the rear suspension is installed to not put any

side load on trackshaft bearings. Now you can tighten the 5MM allen pinch bolt on the drive side. This bolt is titanium, so tighten it, loosen it slightly and retighten. Double check to see that big bearing is still flush with inside of plate shown in previous picture.



Temp install bottom sprocket and brake disc to test fit protector cup to be installed later. Now install bottom sprocket with brake disc. Install brake caliper and brake line. Install jackshaft. Bearing on jackshaft seats against shoulder in CMXDS plate. Use stock bolts with supplied flanges on clutch side. Be sure to lift clutch side of jackshaft to new location on clutch side. After clutch side is installed you can tighten the 5MM top pinch bolt in the same manner that you did the bottom. Keep in mind that the top bearing is smaller and needs less torque. Spin the jackshaft as you tighten the pinch bolt. Tighten until you feel a little drag, then loosen and retighten slightly less than the first time. Now you can set the eccentric locking collar on the clutch side bearing. Put the black locking collar over the protruding end of the bearing race and rotate toward gas tank. You can use a hammer and dull chisel to set the locking collar. Remove set screw and use red locktite to install set screw tight. Remember you will use this same locking procedure on the clutch side trackshaft bearing after you have reinstalled rear suspension.



Now install belt and top sprocket at same time. Install idler sprocket. Push idler with your hand only. Too loose is better than too tight for belt tension. You should be able to push the back side of the belt with 1 finger and make it touch the caliper with ease. When you push on the back side, you should see a little movement on the belt between the top sprocket and the idler as well as between the bottom sprocket and the idler sprocket. Install protector cup. Now your system should look like this.



Reinstall everything that was removed to do installation. When reinstalling secondary clutch, you must duplicate the spacing between the bearing and the inside of the secondary clutch. Reinstall rear suspension and set track tension so that you have about 1" of track hanging below the rails in the middle. You should run your sled on a stand to check track alignment later. Now that you have the rear suspension installed you need to set the eccentric locking collar on the trackshaft on the clutch side. Use the same procedure that you used on the jackshaft clutch side bearing.

We recommend Dot 5.1 Motul brake fluid. Fill the reservoir and open the bleeder on the caliper. The brake will gravity bleed itself. After fluid starts to run out you can close the bleeder and pump the brake handle until you get some resistance. At that point you can finish pressure bleeding the brake system.

If you have any questions please give us a call.