Dexter Never-Adjust Brake Install

Arctic Fox 2007 29-5T

Warning: This involves lifting your trailer, working under and around it. If you do not have the correct equipment and knowledge for this, please have a professional RV tech do the work for you. I cannot stress this too much.

I got tired of crawling under the trailer about once a year to adjust the brakes. So when I saw an online ad for Dexter's Nev-R-Adjust brakes, I went to their site and read the information on them. I checked online and at that time, Trailer Parts Superstore had the best price.

http://www.easternmarine.com/Electric-Trailer-Brake-Assemblies/

You need to find out what size drums you have and the width of the brake shoes. I decided that since I had the 2 inch X 12 inch drums, I would go with the 7,000 pound brake assemblies. Note when ordering there is a LH (left hand) and a RH (right hand) brake assemblies.

Once I had the brakes it was time to get to work. First thing I did was to call the factory and ask where to lift the trailer to get both tires on the same side off of the ground. Once I had this information, I took two 20 ton jacks, shoring to hold them, and a block of wood to go between the jack and the frame, and the jack handles to the driveway where I was going to do the work. I gather up all of the tools that I would need and set everything out.

The first thing that I learned was to use the marine quality butt connectors that are heat shrinkable to make a water tight and strong connection. You will have to purchase the tool to crimp them correctly but in the end this will be a lot simpler than soldering and using heat shrink tubing. You will need the 14 to 16 gauge connectors if you are not upgrading the wiring. Also you will need a heat source to cause the heat shrinking to shrink. I used a propane torch at first but then changed to an electric heat gun. Gave me more control and less overheating of the area around the connector.

Getting Started:

- 1. Block the trailer tires on the side opposite that you will be working on. Place the shoring under the jack and the block between the jack and the frame of the trailer.
- 2. Slowly start jacking on both sides of the wheel. If you are doing this by yourself, jack one side a certain number to strokes and then switch sides. Raise the trailer as evenly as you can. Once you have the tires off of the ground, you really don't need to life the trailer any higher other than to get jack stands under the axles. I put mine between the u-bolts that hold the spring to the axle. The trailer was then lowered onto the jack stands.



The picture above shows the jack, shoring, and the block between the jack and the frame of the trailer. The picture below shows the trailer on the jack stands with the wheels removed.



3. Once you have removed the wheels, I suggest that you take one axle down at a time. That way you have a reference in case any questions come up about what goes where. In the picture below, the dust cap has been removed and the carter pin holding the axle nut had been removed. My trailer has Dexter Nev-R-Lube axles which means that you take off the axle nut, the washer behind it, then slide the bearings and drum off as one assembly. There is no seal on the back side of the drum. On other axles, you will have to replace the seal on the rear face of the drum once the drum is removed for the axle. Also the bearings will be loose and now would be a great time to repack them.



- 4. Once you have the drum off of the axle, you will see the brake backing plate and shoes and other parts. I suggest at this point in time to reach behind the brake backing plate and cut the wires powering the brake as close to the where they are joined. The connector will be different on all of the trailers but I suggest you cut the wires on the trailer side of the connection.
- 5. Looking at the picture on the next page, you can see the brake backing plate is held to the axle by a series of studs and nuts. On my trailer these nuts required a ½ inch socket to remove them. Remove the nuts and save them as you will use them to mount the new brake assembly. Once you have removed these nuts, put the brake assembly off of the axle and set it aside. Make sure that the wires don't have some sort of device to secure them to some other part of the axle or trailer.



6. Install the new brake assembly on the studs sticking out of the axle and run the nuts down about hand tight. Using a torque wrench, tighten each nut (in a star pattern) to 50 foot pounds.



- 7. The picture above is the new brake assembly mounted on the axle. Now we need to connect the wiring to the trailer. I suggest highly that you use one of two methods. The first is to use marine quality butt connectors that have a heat shrinking material that is heated to shrink around the wire to form a weather tight seal. The second method is to solder the wires together and use heat shrink tubing. Just remember to put the heat shrink tubing on the wires before soldering them together.
- 8. Install the drum on the axle and attach all parts that were removed during disassembly. Once you have the drum on, we need to adjust the brakes to set them for use. I know the brakes are self adjusting but they have to be set the first time only. There is a little rubber/plastic plug on the bottom on the rear of the brake backing plate. Remove it, reaching in with a screwdriver or brake adjusting tool and tighten the brakes until you can not turn the drum by hand. Back off until you have barely move it with both hands. Replace the plug, install the wheel and you are done with this one. Try to set all of the brakes with the same amount of resistance so that you have even braking until the self-adjusting mechanism has a chance to adjust the brakes.
- 9. Once have have done all of the wheels, take time to use your torque wrench to torque all of the lug nuts to the specs set by the factory. Hook the trailer up and try the brakes. These brakes adjust while moving **foreward** unlike the automotive systems that adjust when you back up. It may take several brake applications to fully set the shoes but that should not take long.
- 10. Last word, read the instructions that come with the Dexter Nev-R-Adjust brakes. Lot of information in there.