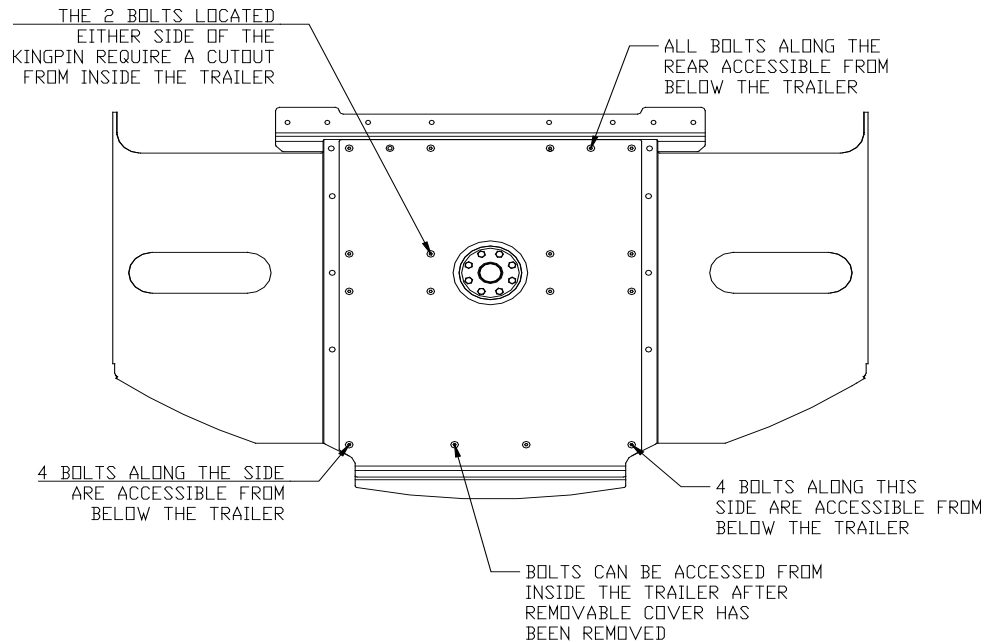


ALUMINUM COUPLER ASSEMBLY DESIGN 1/4" STAINLESS STEEL WEAR PLATE REPLACEMENT

The Titan Trailers aluminum coupler assembly design comes equipped with a replaceable 1/4" stainless steel wear plate. A step by step procedure outlines how to remove and re-install the wear plate.



The illustration above outlines what bolts are easily and readily accessible. All the bolts along the outer perimeter are readily accessible, 12 bolts can be accessed from below the trailer, the 2 in the middle at the front can be accessed once the removable cover plate installed inside the trailer above the front portion of the coupler is removed. The 2 bolts on either side of the kingpin block (4 bolts total) will require some work to gain access to them. Below outlines the work to be performed.

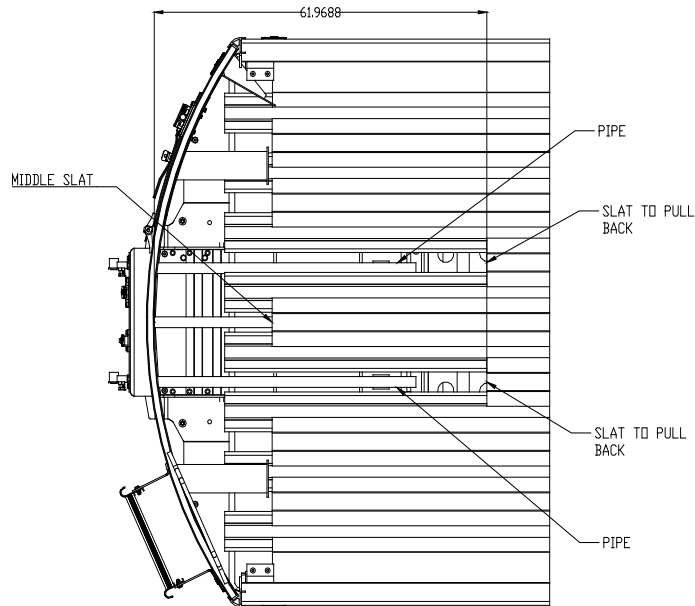
The hardware is as follows:

1/2"-13 unc, grade 8 countersunk head bolts

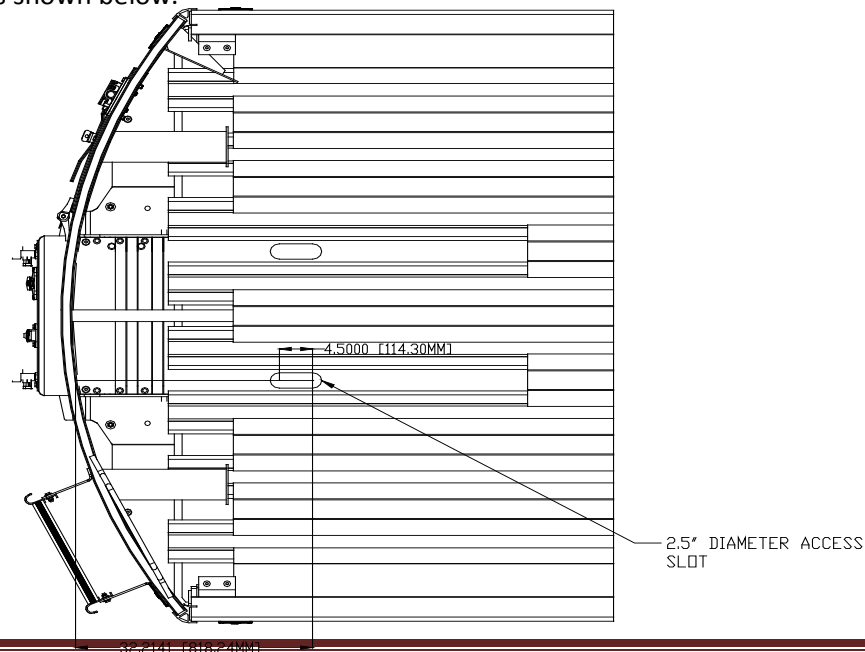
1/2" grade 8 hardened washers

1/2" grade c all metal lock nuts.

- 1.) Two slats will have to be slid back out of the way to gain access to the 4 bolts located inside the coupler assembly. Find the middle slat, the slat on each side of this middle slat must be slid back out of the way. Loosen and remove the bolts that attach these 2 steel slats to the shoes on the drive unit (18 bolts per slat).



- 2.) With the bolts removed you can pound back the slat hitting the front of the slat forcing it back or you can weld on a lug to the rear of the slat and then with a chain pull the slat back. The slat should be pulled back approx. 60".
- 3.) Once the slats are pulled back you will notice 2 aluminum pipes resting between the sub deck above the coupler assembly. These pipes will have to be sectioned and removed in order to gain access to the bolts. Remove the lines that run thru these pipes. Approximately 6" (152.4mm) back from the front wall cut the pipe. At the rear of the pipe you will notice that the pipe is welded to 2 tabs, cut the pipe free from the tabs. The pipe can now be removed.
- 4.) With the pipes removed the next step will be to cut a slot in the sheet that covers the coupler assembly. Measure back from the inside of the front wall approx. 32.25" (819MM) midspan between the sub deck, mark this location. Measure forward from this location approx. 114.3MM, mark this location. With a 63.5MM hole saw drill a hole thru the plate. Once the holes are drilled take a sabre saw or cutting disk and cut the straight portions out to obtain a slot profile as shown below.



- 5.) With the slots cut in the top plate in line with the slats that were pulled back you can now access the lock nuts located inside the coupler assembly in this area. Remove the 4 remaining bolted connections.
- 6.) The coupler plate should now be free and removed from the aluminum coupler assembly structure.
- 7.) Make sure the area where the plate was removed is cleaned and ready for the install of the new stainless steel wear plate.
- 8.) A corrosion barrier paste must be applied between the stainless steel plate and the aluminum coupler structure. The product used during the manufacturing of this coupler assembly is ECK, a heavy duty anti-seize. Using a brush spread ECK over the entire area where the wear plate will be in contact with the aluminum.
- 9.) Install the new wear plate, the existing bolts can be used again. Torque the nuts to 80 ft.lbs.
- 10.) With the plate installed the next step is to cover the slots that were cut in the top plate for bolt access. Shear an aluminum plate that will fit inside the slot, the plate must be installed to the inside of this sheet so the pipe can be put back in place. Pull the profile tight to the underside of the sheet covering the slot opening. Weld the straight portion of the cut on each side to this cover plate.
- 11.) With cover plates installed at each slot, bolt on the cover plate that was removed at the front of the coupler assembly.
- 12.) Re-install the aluminum pipes that were removed. Weld back in place at the seam and at the tabs located at the rear of the coupler assembly
- 13.) Re-install the lines that ran thru the pipes.