

# **Installation Instructions**

## **WOT Tunnel Supports**

### **Ski-doo XP/XR Chassis**



**White Out Technologies, LLC**

**REV 01**

**12/2011**

## Installation Instructions

### WOT Tunnel Supports

### Ski-Doo XP/XR Chassis

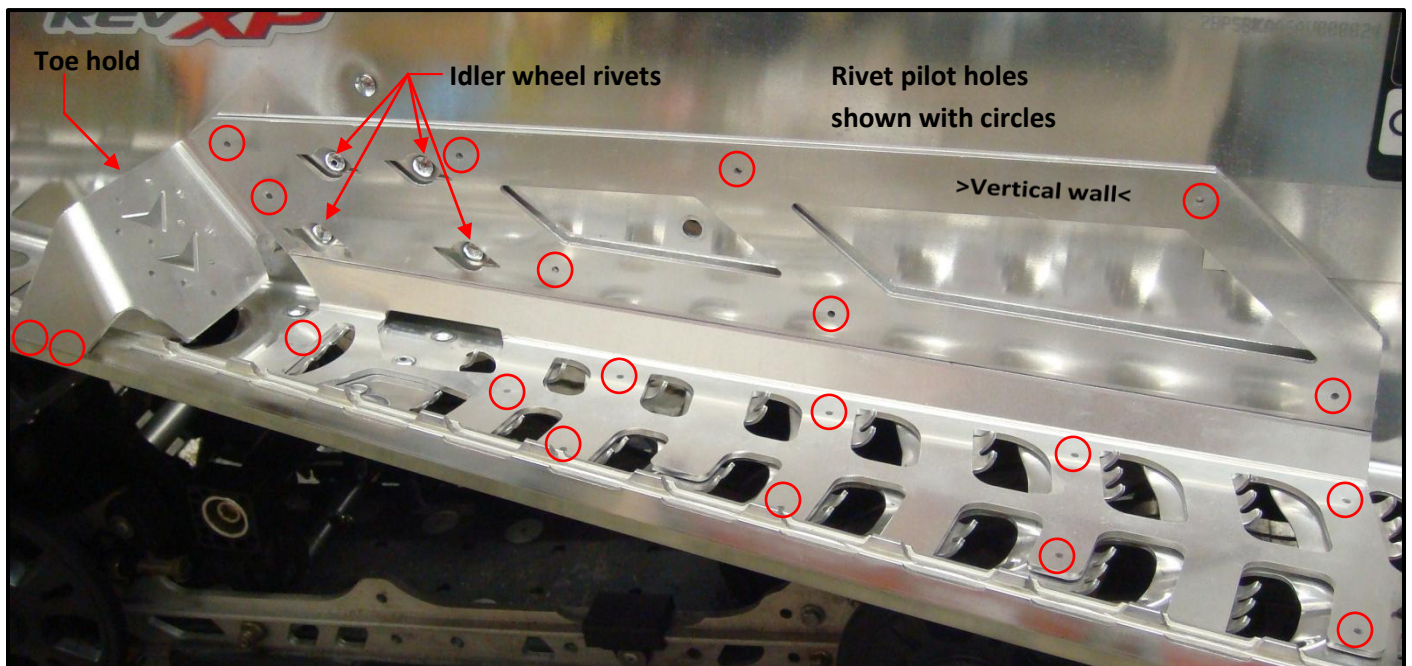
#### Required Tools:

- [1] Drill
- [1] 5/32" Drill Bit
- [2] 5" or 6" C-Clamps
- [1] Cold Chisel (or small pry bar)
- [1] Rivet Gun (5/32" tip)
- [1] Hole Reamer
- [1] Tape / Marker

#### Included Parts:

Part Name	Quantity	Reference No
LH Tunnel Support	1	(1)
RH Tunnel Support	1	(2)
5/32" Rivets	46	(3)

#### Part Reference Locations:

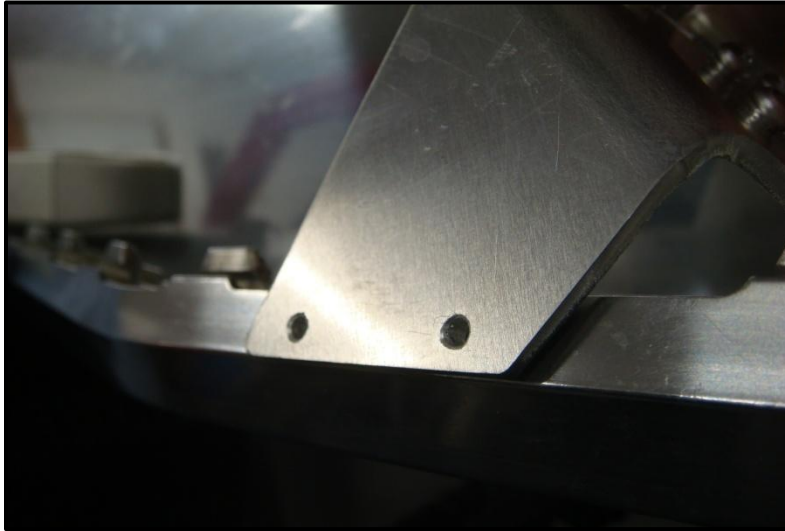


#### Before Getting Started:

- A. Be sure that tunnel is clean and clear of debris.
- B. If tunnel has pre-existing bends and deformation, installation may be difficult if not impossible-check for straightness of running boards, tunnel wall, and outside rail. Depending on condition, minor manipulation of the running boards may be necessary.
- C. Check general fit of both LH and RH supports to check for any issues prior to beginning installation process.

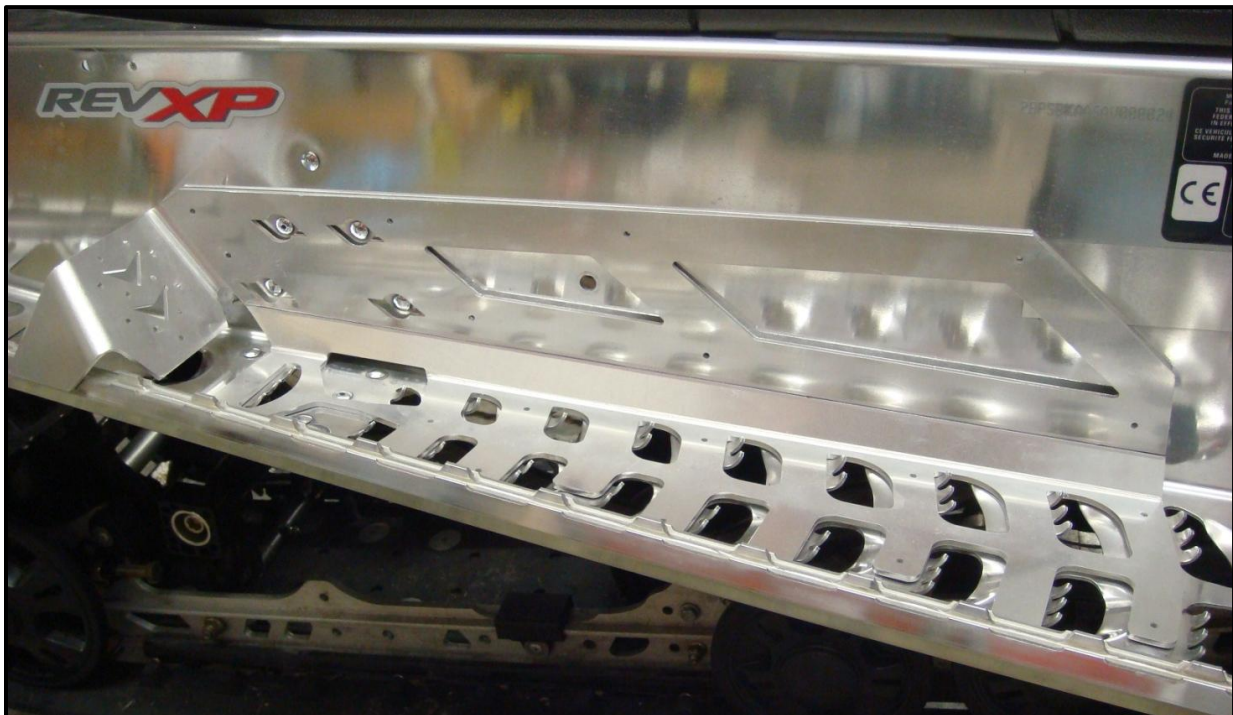
**Installation Instructions:**

1. Place the RH Tunnel Support (2) on the RH running board, being sure that the outer flap of the rear toe hold sits on the outside of the outer rail (Figure 1). This position may be achieved with slight downward pressure.



**Figure 1** –Toe hold aligned with outer rail

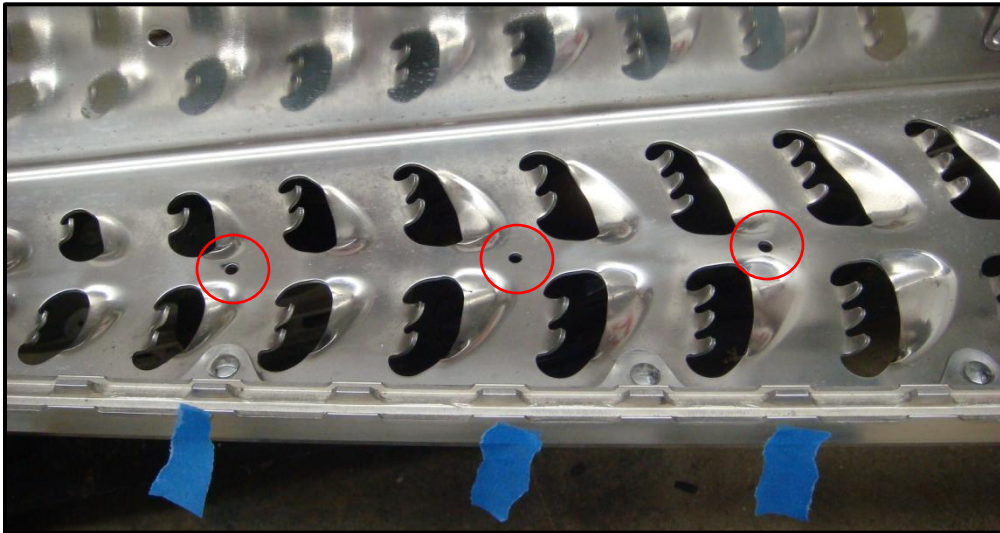
Ensure that the pattern of the support (2) floor board is seated properly on the running board of the sled (Figure 2). A slight gap of around  $\frac{1}{4}$ " at the vertical wall will be addressed during installation. For short track sleds, check that the idler wheel rivet holes have adequate clearance to the rivets. Lightly grind this area on the back side of the support (2) as necessary.



**Figure 2** – Support properly seated on running board-not yet installed



2. Locate the 3 existing holes in the sled's running board floor and mark these positions on the outside rail for reference (Figure 3).



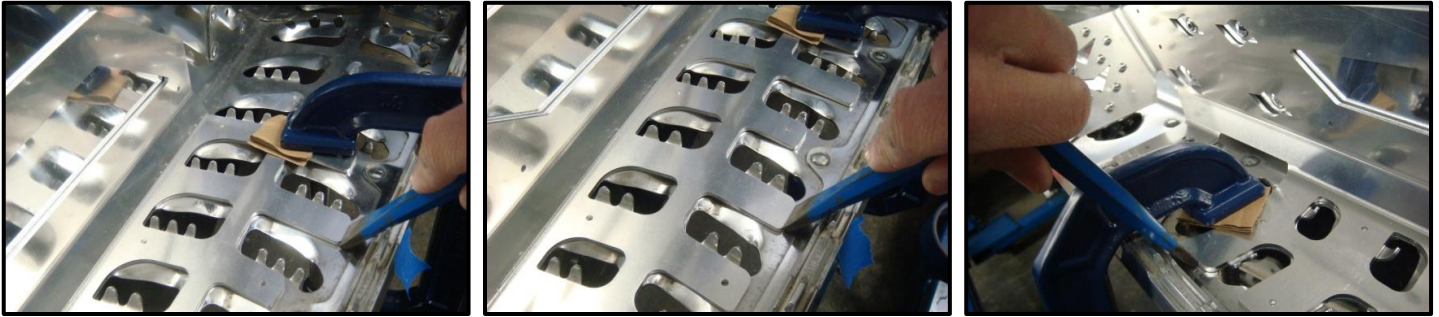
**Figure 3** – 3 existing holes in sled's running board (RH side running board shown)

3. Using two pieces of cardboard and the 2 C-Clamps, lightly secure the support (2) in place as shown (Figure 4). Note the blue tape locates the position of the OEM rivet holes on the tunnel floor. Do not clamp in these areas as access to them will be required in Step 5.



**Figure 4** – Properly seat support against tunnel and lightly clamp in place

4. Use a cold chisel or small pry bar to slide the support (2) against the tunnel wall of the sled (Figure 5). Work from the front to the rear of the sled and tighten both clamps to secure the support (2) in its adjusted location.



1. Pry support up against tunnel at front

2. Move back and continue prying

3. Pry support up against tunnel at rear

**Figure 5** – Pry support against tunnel wall using cold chisel and clamp tight when complete

5. Using the 5/32" drill bit and the 3 holes from Figure 3 as guides, drill through the support (2) from the underside of the running board at these locations (there are no holes in the support at these locations, but mounting utilizes the existing factory holes that run down the centerline of the running board). Use reaming tool to ream out the holes and remove scrap material as necessary.
6. Install 3 rivets (3) in these locations from the underside such that the mandrel is pointed upward and the head rests against the bottom of the floor board. This will serve as additional traction during operation.
7. Locate the remaining 10 rivet pilot holes in the support (2) floor board and drill these holes all the way through the support (2) and the running board from the top side of the support (2). Use reaming tool to ream out the holes and remove scrap material as necessary.
8. Install 9 rivets (3) in these locations from the underside such that the mandrel is pointed upward and the head rests against the bottom of the floor board. This will serve as additional traction during use (Figure 6).

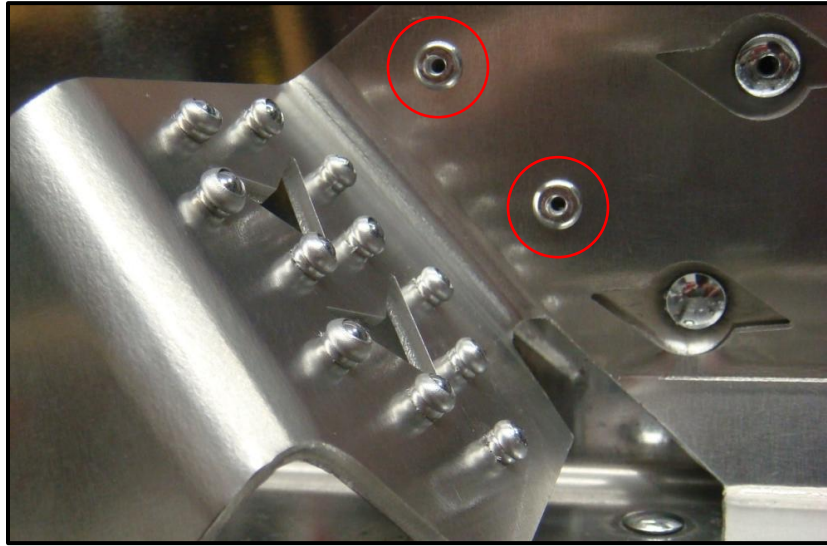


**Figure 6** – Rivet positions following installation on the running board floor

9. Install the rivet (3) in the rivet hole furthest to the rear of the support (2) floor board from top side down (only required on short track sleds, long track sleds can install from the bottom side up). Clamps can now be removed.
10. Locate the 8 rivet pilot holes in the vertical wall of the support (2). **Taking care not to plunge too deeply (to avoid drilling into the track or suspension components)**, drill the 2 holes furthest to the rear of the vertical wall, passing through both the support (2) and the tunnel wall. A thin piece of wood may be used to act as a barrier to protect the track while drilling. Use reaming tool to clean out the holes and remove scrap material as necessary.

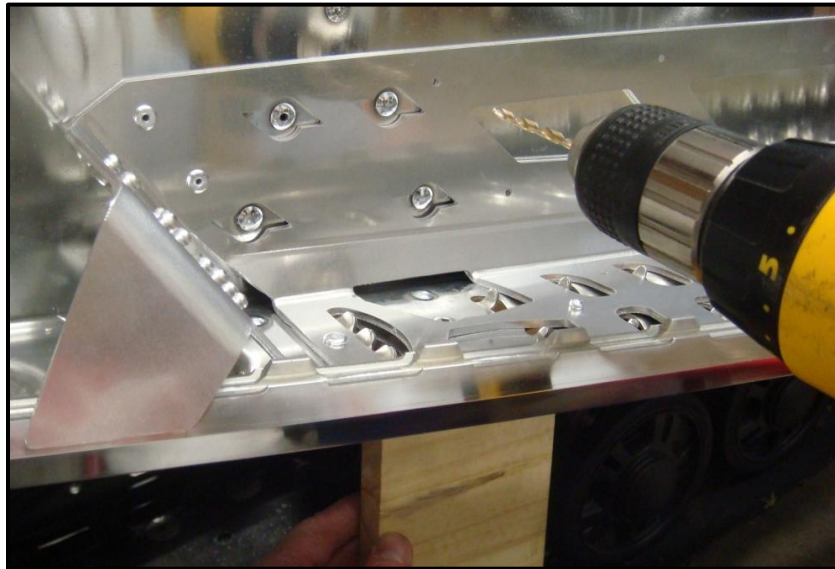


11. Install 2 rivets (3) in these holes from the outside of the tunnel (Figure 7) and check that proper track clearance is maintained on the inside of the tunnel for wide track applications.



**Figure 7** – Drill mounting holes and install 2 rearmost rivets on vertical wall

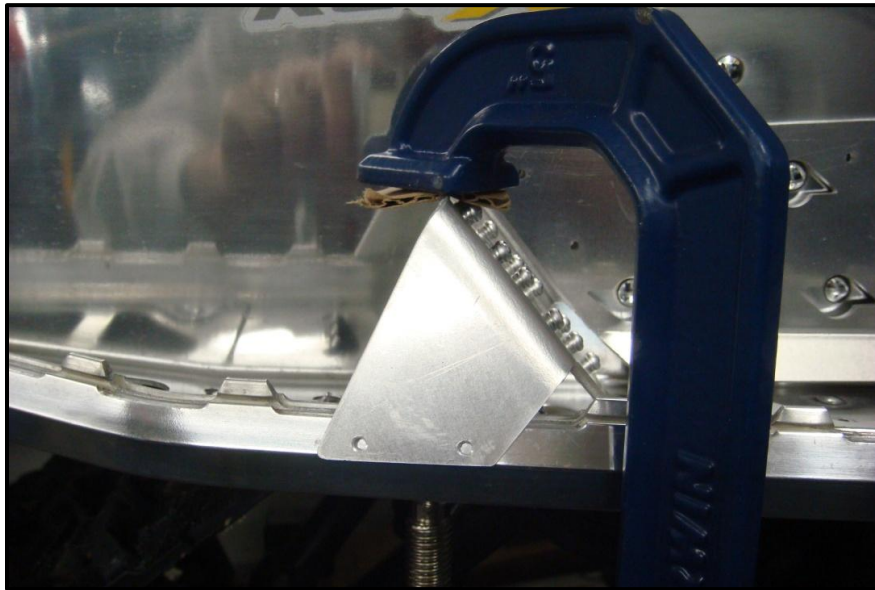
12. Continue drilling, reaming, and installing rivets (3) in the remaining 6 rivet pilot holes on the support's (2) vertical wall, working from the rear to the front of the sled being sure to seat the support (2) to the tunnel wall by applying pressure while riveting (Figure 8).



**Figure 8** – Drill mounting holes and install rivets working towards the front of sled

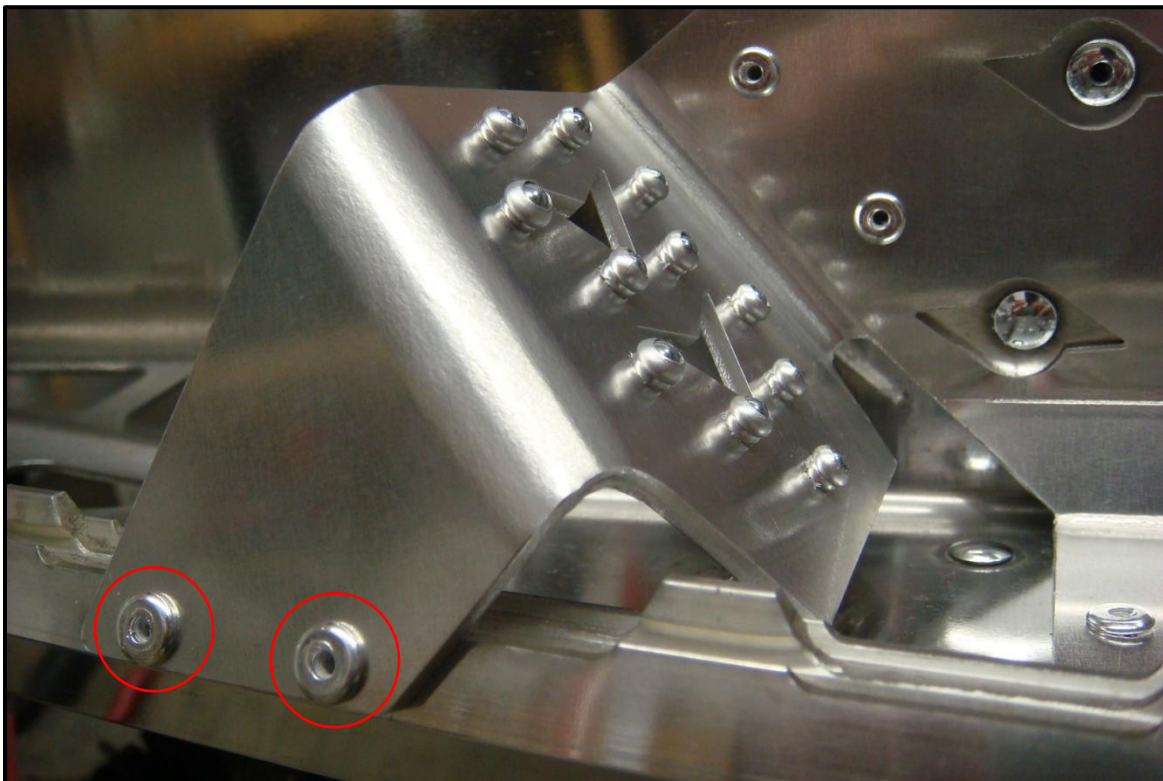
13. Locate the 2 rivet pilot holes in the toe hold (at rear of support (2), on outside edge of rail) and check that the holes align with the flat plane of the outer rail. The bottom edge of the toe hold must align with the outermost edge of the rail (Figure 1). It may be beneficial to draw down the toe hold into position by applying slight force to the top of the toe hold with a C-Clamp (Figure 9). Drill the 2 holes through the toe hold rivet pilot holes and the outer wall of the

rail (do not drill all the way through both walls of the running board outer rail). Use reaming tool to clean out the holes and remove scrap material as necessary.



**Figure 9** – Clamping toe hold into position (LH side running board shown)

14. Install 2 rivets (3) in the toe hold holes from the outside of the support (2) (Figure 10).



**Figure 10** – Toe hold outside rivets installed (RH side running board shown)

15. Half-way complete! See Figure 11 for completed installation of RH side. Repeat steps 1-14 for the LH tunnel support (1).



**Figure 11 – Completed RH Installation**