

# **STRAIGHTLINE**

## **PERFORMANCE**

### **Ski-Doo 900 ACE Turbo Vari-Sound Muffler Installation Instructions 134-214**



1. Remove stock muffler completely. Be sure to not lose any springs or rubber grommets.
2. Install the rubber grommets onto the base of the muffler and top support.
3. Assemble muffler, Vari-sound valve, and outlet pipe by lining the bolt holes and flange edges of the muffler, valve, and outlet pipe. Note: Actuator motor is positioned at the flange cut out. Install the supplied bolts with a flat washer through the top and a flat washer, lock washer and nut on the bottom. **DO NOT TIGHTEN AT THIS POINT.** Set this assembly aside.



Note: Align flange edges to achieve proper orientation – Very Important

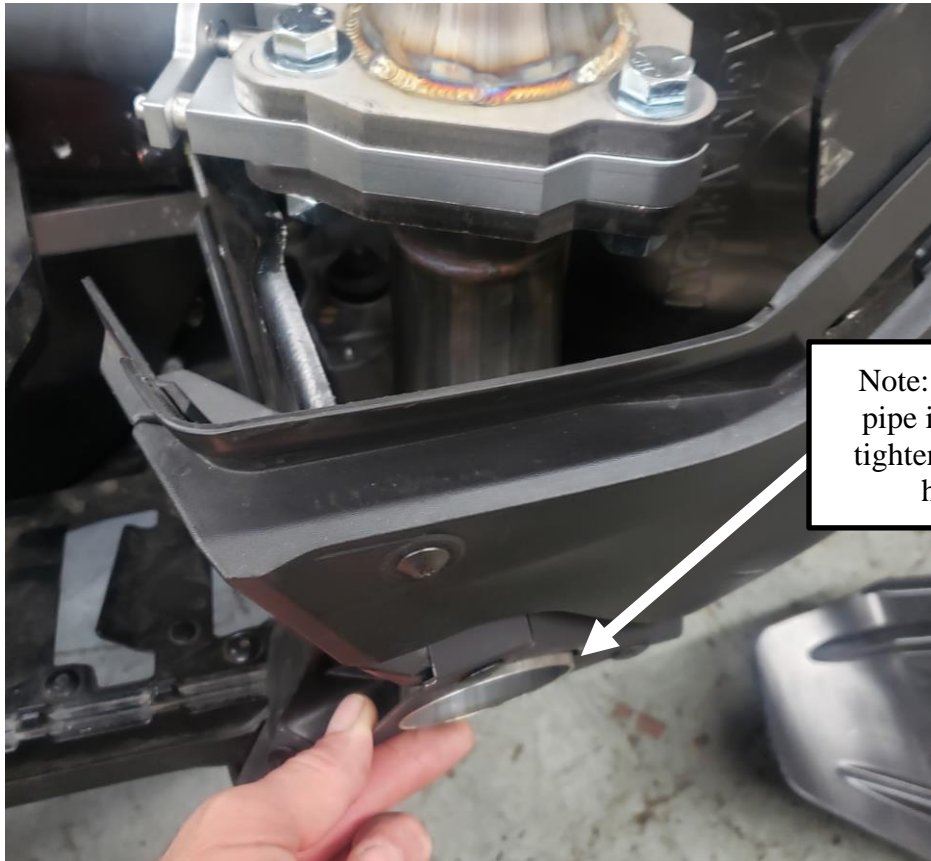
4. Prepare belly pan: Hold up belly pan plate to lower corner of the belly pan and mark the outlet circle and rivet locations. Use a hole saw or appropriate tool to cut out the material for the center and a 3/16" drill bit for the rivet holes. Note: The hole in the belly pan should be slightly larger than the center hole of the plate for heat clearance.



Note: Mark hole with plate in place, then remove plate so hole can be cut larger.

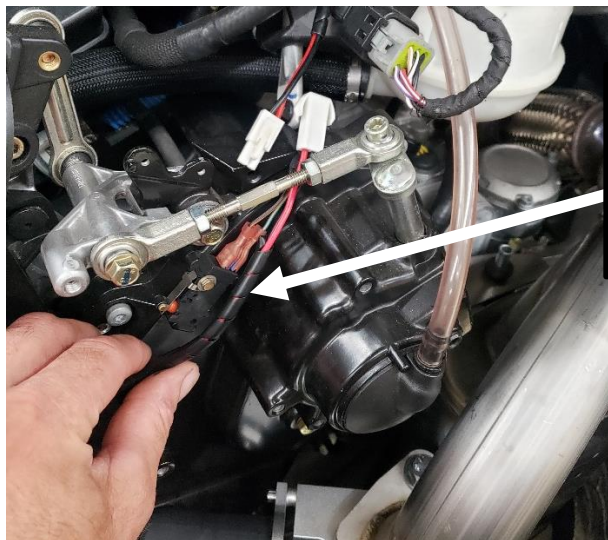
5. Install the plate with the three supplied rivets and rivet backers. The rivet backers go on the inside of the belly pan, on the back of the rivet.
6. Install the muffler assembly previously prepared into the sled, making sure to get the lower grommet seated in place, and install the cone spring and 10mm bolt in top location.
7. Install inlet springs from mid pipe to muffler.
8. Center the side outlet in the belly pan plate previously installed and tighten the bolts that were installed at the sound valve flange, making sure that the outlet pipe does not rest on the belly pan.





Note: Center outlet pipe in plate while tightening the valve hardware

9. Remove hood assembly as per manufacture procedure.
10. Install sound valve control box by plugging into the accessory plug on the top left of the steering support and the sound valve plug routed by the reverse switch wires as pictured. Secure control box to harness or frame tube with supplied zip ties.



Note: Make sure harness runs in front of switch as to not interfere with reverse arm

11. Route wires from the Vari-sound valve up the chaincase making sure not to interfere with the reverse actuator assembly. Plug into the control box and secure wires with supplied zip ties.
12. Reinstall hood and perform a final inspection of the wire routing and muffler fitment. Make sure the harness is clear of reverse operation and secured to not touch the muffler.
13. Start engine and check the operation of the sound valve. The “on” button on the key fob is the loud setting and the “Off” button on the key fob is the quiet setting. The button only needs to be pressed momentarily for the valve to make the complete operation.

# Warning: Do not test the valve with 12v power without it connected to the black box. This will cause failure on the motor.

- Be sure the muffler has no manufacture defects. If the muffler has been run/used there are no warranties for fitment.
- Jetting/Fuel Requirements- No Jetting/ Fuel modifications Required
- Clutching Requirements-No Clutching Required

Technical Question Please Email [Tech@straightlineperformance.com](mailto:Tech@straightlineperformance.com)

Bill of Materials (BOM):

Rev A

Qty	Part Number	Description	In Box
1	IT-134-196-Muffler	Muffler	
1	IT-134-214-Pipe	Outlet pipe	
1	CUTO-VAL-2.5	Vari-sound valve	
1	IT-134-196-Plate	Outlet Side plate	
3	97526A150	3/16" Black Rivet	
3	90183A217	3/16" Rivet backer	
3	110120364	7/16-14X1 3/4" Bolt	
6	1133084	7/16" Flat washer	
3	1133624	7/16" Lock washer	
3	1136308	7/16-14 Nut	
3	63130	14.5 Black Cable Tie	

Checked By:	