SOUNDZ TECHNICAL SERVICE BULLETIN

RUSHMORE CVO SPEAKER POLARITY

MODELS AFFECTED-   ALL RUSHMORE CVO HAVE THIS POTENTIAL, HOWEVER, WE HAVE ISOLATED 14-16 MODEL YEARS AS BEING THE MOST AFFECTED BY THIS ISSUE.

ISSUE -   FRONT (MOST COMMON) AND REAR SPEAKER CONNECTIONS CAN BE WIRED OUT OF PHASE AT THE FACTORY IN THE MAIN WIRE HARNESS.

RESOLVE-   CHECK FOR SPEAKER PHASE, CORRECT THE POLARITY ON EACH SPEAKER AFFECTED.

DEFINITIONS-   PHASE – FOR THIS PURPOSE, WE CONSIDER PHASE TO BE THE ELECTRICAL PHASE OF THE SPEAKER CONNECTIONS.

POLARITY – POSITIVE AND NEGATIVE SPEAKER WIRES

DIRECTIONS FOR RESOLVE

- Verify the speaker's polarity FROM the amplifier. NOTE: *This can be done with a polarity tester, which both AAMP and Metra sell, as well as a direct connection tool available from Soundz. Or for a DIY, some speaker wire and a normal household battery will work with the directions below.*

- You can use a 1.5V AAA/AA battery to pulse the speaker. Positive to the speaker output wire positive, negative to the speaker output negative, repeat for each speaker, noting results.

- If the speaker moves OUT, this means the speaker is IN Phase and you can move on. If the speaker moves IN, this means the speaker is OUT of phase and needs to be corrected.

- For the speakers that are OUT of phase, verify the connector pin positions against the factory diagrams for that model. *If that is not available to you, please contact Soundz Technical Support at 386-846-7158.*

- The connector at the Front speaker enclosure (bike side) is usually the location of the issue. At this point, you can correct the polarity with even a small regular screwdriver and a paper clip for the DIY guys, or for the pros, please use the Molex Pin Removal tool!

- **Left Front Speaker** - Pin 1 = Positive Speaker Output (Brown/Orange), Pin 2 = Negative Speaker Output (Brown/Grey). **Right Front Speaker** - Pin 1 = Positive Speaker Output (Brown/Red), Pin 2 = Negative Speaker Output (Brown/Green). Make sure to reinstall with the correct polarity!

- To De-pin the Molex connection, use a small flat blade screwdriver to pull the white center pin lock away from the connector itself. This piece can be completely removed, so take a picture before you start the process to ensure a proper reinstallation.

- With the pin lock loosened or out of the connector, you can either insert the pin removal tool, or a paper clip to lightly push the lock tab for each pin UP and lightly pull the wire out of the connector for each pin.

- Swap wire positions, reinsert into the connector observing proper direction of the pin, reinstall the white pin lock fully, and reconnect speaker.

- **Left Rear Speaker** – Pin 1 = Positive Speaker Output (Blue/Orange), Pin 2 = Negative Speaker Output (Blue/Grey). **Right Rear Speaker** - Pin 9 = Positive Speaker Output (Blue), Pin 10 = Negative Speaker Output (Blue/Black). This information assumes the 16 pin Molex Connection. IF your bike has a different connector, please contact Soundz for assistance. Make sure to reinstall with the correct polarity!