

Spra-Coupe 3650 AutoSPRAY Interface Cable Installation Guide

- I. Description: The AutoSPRAY interface for the Spray Coupe is an add-on interface unit for the Leica AS4080. As the Spra-Coupe uses motorized valves that require the voltage to them to be reversed to close them, the AutoSPRAY interface must be installed “in-line” with the existing wiring, not in parallel.
 - a. Important information: The interface is not a “plug-in” type installation. The wiring within the vehicle must be broken and the AutoSPRAY interface wired “in-line” . Leica strongly recommends this work be performed by qualified Auto-Electricians and/or vehicle dealers with sound knowledge of the vehicle wiring.
 - b. Kit Contents
 - i. AutoSPRAY interface cable box
 - ii. Ignition sense wire (orange)
 - iii. Master input wire (yellow/red)
 - iv. Push on two way adaptor
 - v. 100mm Cable ties
 - vi. 200mm Cable ties
- II. AutoSPRAY Cable box installation !!Disconnect the battery negative terminal to ensure that no electrical damage can occur during installation!!
 - a. Switch panel removal:
 - i. Carefully remove the four retaining screws from the boom switch panel.
 - ii. Take care as these screws are plastic not metal. Keep these safe.
 - b. Harness tie removal:
 - i. The large cable ties that secure the wiring harness in place under the dash will need to be cut. This is to allow the wiring to move so the switch panel can be worked on.
 - c. Moving the harness:
 - i. Lift the Orange loom which leads toward the fuse panel. This loom is heavy and weighs down the switch panel, making it difficult to lift.
 - ii. Lifting this loom upward will allow the rear of the switch panel to be accessed.
 - d. Accessing the switch panel:
 - i. Lay the switch panel over to the left on its side. This will reveal the underside wiring and make it accessible.
 - e. Mounting the interface cable box:

- i. The Spra-Coupe interface cable box can be mounted to the cab wall using the double sided tape affixed to the rear of the housing.
 - ii. Please ensure the surface of the cab is clean and free from dirt and grease.
 - f. Routing the input wires:
 - i. Route the input wires upward toward the switch panel.
 - ii. The input wires are fitted with female push on terminals.
 - g. Removing the solenoid wires:
 - i. The yellow wires from the boom section switches can be removed.
 - 1. Each of the switches has one wire which is piggy-backed
 - 2. The piggy-backed wire is not to be removed; instead the entire piggy-back should be removed from the switch tab.
 - ii. A pair of long nose pliers may be needed to gently ease the terminals from the switch tabs.
 - iii. For the left boom switches, the switch panel will need to be arched over to the right so the switch tabs can be accessed from the other side.
 - h. Routing the solenoid wires:
 - i. Another cable tie will need to be removed to allow the yellow wires that were earlier removed to be routed down to the front of the side console.
 - i. Positioning the solenoid wires
 - i. Carefully route the cables down and forward through the other cabling without entangling.
 - ii. The wires should easily show through the front underside of the console.
 - j. Connecting the AutoSPRAY input wires:
 - i. Use the chart in Appendix A to connect the input wires to the boom switch tabs.
 - ii. Follow the instructions in Appendix A very carefully to avoid installing the wires in the wrong order or in the wrong location. *(Will need to get a jpg of appendix A from original)*
 - k. Connecting the AutoSPRAY output wires
 - i. Use Appendix A to connect the output wires to the yellow solenoid wires which now reside below the dash. A small amount of electrical tape should be used to cover the connections of the output wires.
 - ii. Although the push on terminals are insulated, there are small amounts of exposed conductor; these should be covered as a precautionary measure. The output wires can now be tied up to the existing wiring loom under the dash.
 - iii. The cables should not be strained tight but clear of any moving parts and the operator. Follow the instructions in Appendix A carefully!
 - l. Connecting the master input wire

- i. The master input wire can now be fitted. Remove the yellow wire numbered 525 from the pump switch and fit the push on two way adapter to the switch tab.
 - ii. The yellow wire number 525 can be re-fit to the pump switch now. Connect the master input wire (yellow/red) to the spare tab of the push on two way adapter.
 - iii. The master wire can now be routed down to the front side console and emerge near the AutoSPRAY interface cable box.
 - iv. Connect the master input wire to the yellow/red (matching color) wire which is labeled "MASTER" on the AutoSPRAY interface cable box.
- III. AS4080 Power Cable Installation
 - a. Removing the battery post nuts
 - i. The Leica power cable can be connected to the positive and negative posts inside the cab.
 - ii. The negative post requires a 11/16th ring spanner and the positive post requires a 5/8th ring spanner.
 - b. Fitting the Leica power cable
 - i. The ring terminals of the Leica power cable are larger than what is required for this particular vehicle. We recommend the power cable ring terminals be placed underneath two of the existing terminals when installing. This will ensure a reliable connection.
 - ii. Use the 100mm cable ties to gather the power wiring.
 - c. Connecting the ignition sense wire
 - i. Remove the orange wire from the pump switch tab, and fit a push on two way adapter. Re-fit the removed orange wire to the adapter. Fit the ignition sense wire (pink) to the spare tab of the push on two way adapter.
 - ii. Route the ignition sense wire down to the front of the side console. The wire should exit close to the AutoSPRAY interface cable box.
 - iii. Connect the orange wire (this is fitted with a male tab terminal) from the power cable to the ignition sense wire.
 - d. Securing the fuse holder
 - i. The fuse holder can be secured to the existing wiring loom using the larger 200mm ties.
 - ii. The orange ignition wires can be grouped and tied along with the fuse holder
 - e. Finishing the installation
 - i. This completes the installation of the wiring. All that remains is the reassembling of the switch panel. The cabling on the underside of the panel may have to be pulled down to allow the panel to seat correctly. The four retaining screws can be re-inserted and firmed.

- ii. All cabling on the underside of the dash should be checked and tied as required. The tie that was cut from the adhesive mount can also be replaced.
- iii. The AutoSPRAY interface will require mounting. There is no particular position where this can be mounted. It is up to the owner/installer to best determine the installation location that will suit the owner/operator. It is recommended to check that the required cabling can be routed to the selected mounting location prior to the AutoSPRAY unit actually being affixed.
- iv. Once the installation is complete, please refer to the AutoSPRAY operator's handbook for instructions on the correct setup and use of the AutoSPRAY unit.
- v. The vehicle battery can now be re-connected.

IV. Disclaimer

- a. No liability is assumed with respect to the use of the information contained herein. While every precaution has been taken in the preparation of this manual, Leica assumes no responsibility for errors or omissions and is not liable for any damages resulting from the use of the information. Further, this manual and the features described are subject to change without notice.
- b. Use of this system is strictly limited to providing steering assistance to the operator who must remain in control of the vehicle at all times.
- c. Leica Geosystems, including its officers and agents, does not make any representation to any party and will not accept any responsibility or liability whatsoever for any loss or damage of any nature that may occur as a result of any person or corporation choosing to use this system or any part associated with it.
- d. By use of this system, the operator agrees that Leica Geosystems is not liable or responsible for any damage whatsoever to the vehicle, any property, personal injuries, or death that may result from the use or misuse of this system.