TERRAGATOR B RAVEN RS1™ ISO GUIDANCE AND STEERING INSTALLATION GUIDE

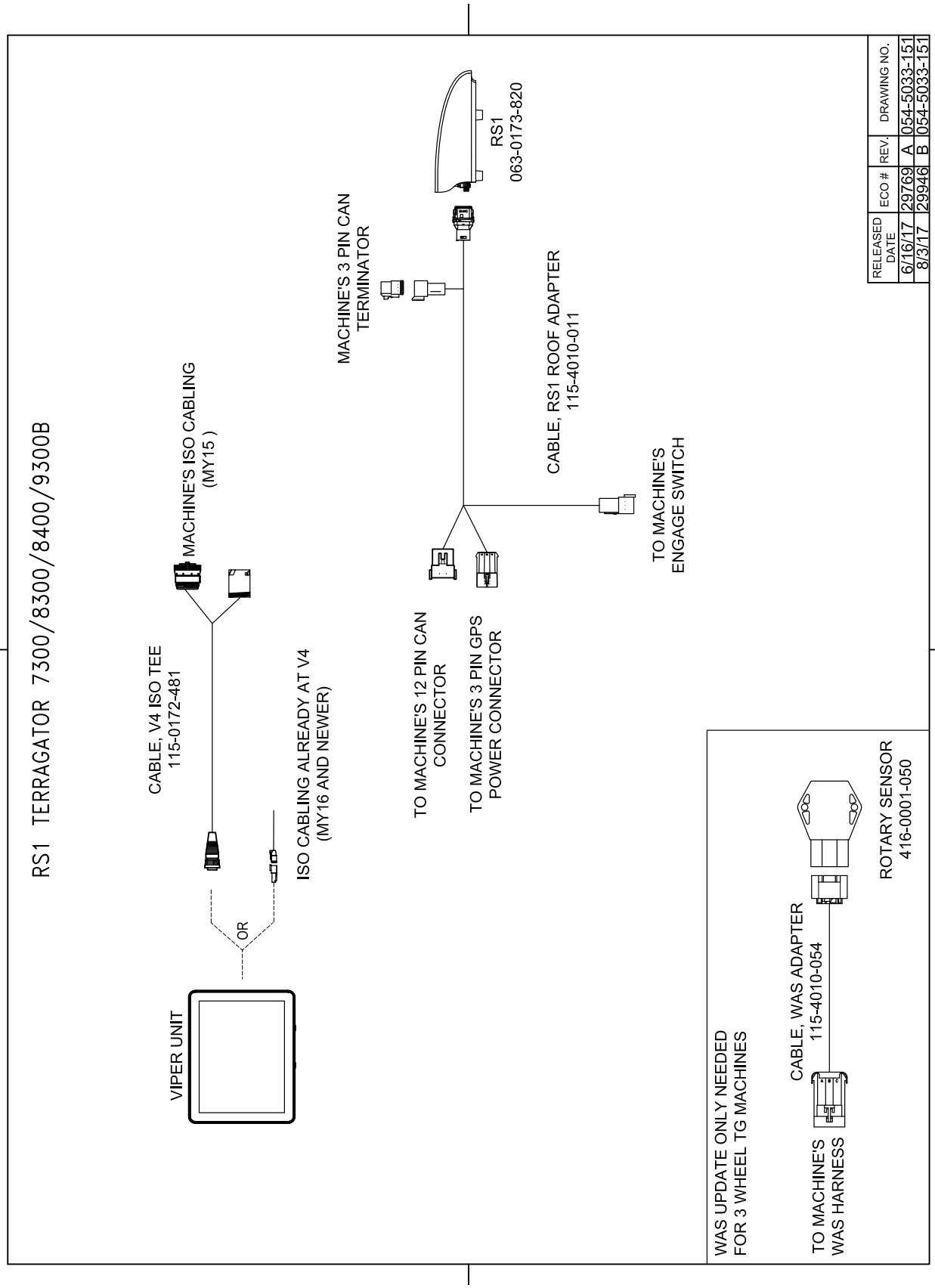
This quick guide provides the instructions for the installation of RS1 on an ISO TerraGator B series machine. For calibration and operation information, refer to the Operation Manual (P/N 016-4010-001) included with the kit.

The RS1 is an all-in-one unit that provides GPS, guidance, and cellular connectivity.

INSTALLATION DIAGRAM

The drawing below provides a basic overview of the installation of the RS1. Refer to the next sections for detailed installation information.

FIGURE 1. RS1 TerraGator B Series Installation Diagram

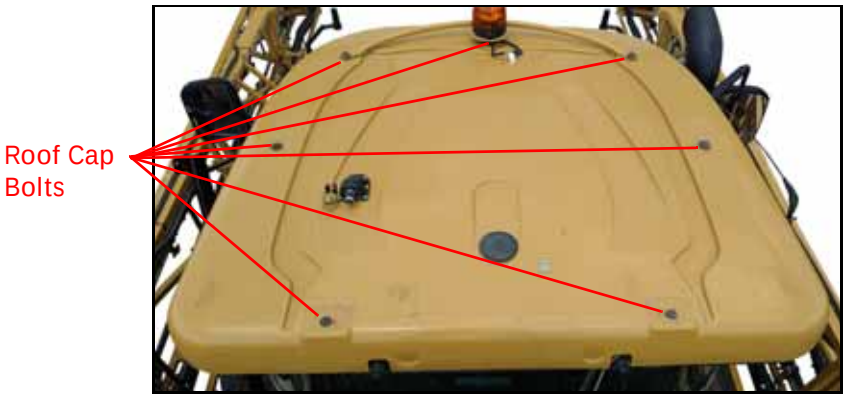


RS1 UNIT INSTALLATION

For RS1 to operate, the RS1 unit must be mounted on the cab roof. To install the unit:

1. Remove the seven bolts that secure the top of the roof cap to the cab frame. If the roof bracket has already been installed, remove this while removing the roof cap. The roof bracket will be reinstalled later.

FIGURE 2. TerraGator Cab Cover Bolt Locations



2. Lift the roof cap up and slide it forward until you can access the cab access plug.
3. Remove the access plug located along the right side on the top of the cab.

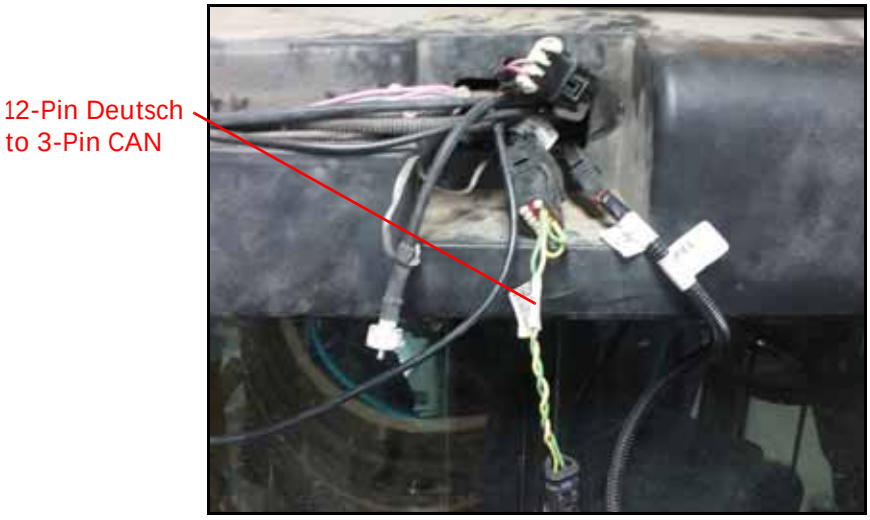
FIGURE 3. Access Plug

4. On the inside of the cab, remove the radio cover plate.

FIGURE 4. Radio Cover Plate

5. On the top of the cab, feed the 12-pin Deutsch, 3-pin Metri-Pack, and 6-pin Deutsch connectors on the RS1 adapter cable (P/N 115-4010-011) into the cab through the opening.
6. Locate the machine's 12-pin Deutsch to 3-Pin can terminator cable labeled AUTOGUIDE TOPDOCK and power connector labeled GPS.

FIGURE 5. 12-Pin Deutsch to 3-Pin CAN



7. Remove the CAN terminator cable labeled AUTOGUIDE TOPDOCK.
8. Remove the CAN terminator from the CAN terminator cable and install it on the mating 3-pin Deustch connector on the 115-4010-011 cable.
9. In the radio opening, connect the 12-pin Deutsch connector on the RS1 cable (P/N 115-4010-011) to the machine's 12-pin CAN connector.

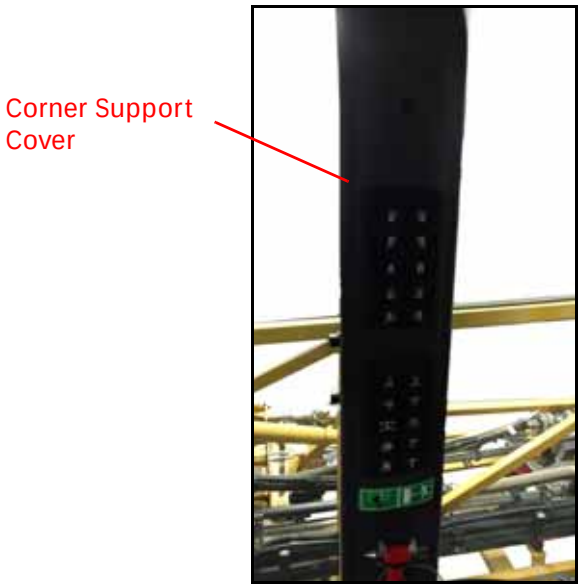
NOTE: Any of the connectors labeled GPS 1 or GPS 2 will work.

10. Connect the 3-pin Metri-Pack Power Connector to an unused Machine's Mating GPS connector.

FIGURE 6. GPS Connection

11. Inside the cab, remove the corner support cover.

FIGURE 7. Corner Support Cover

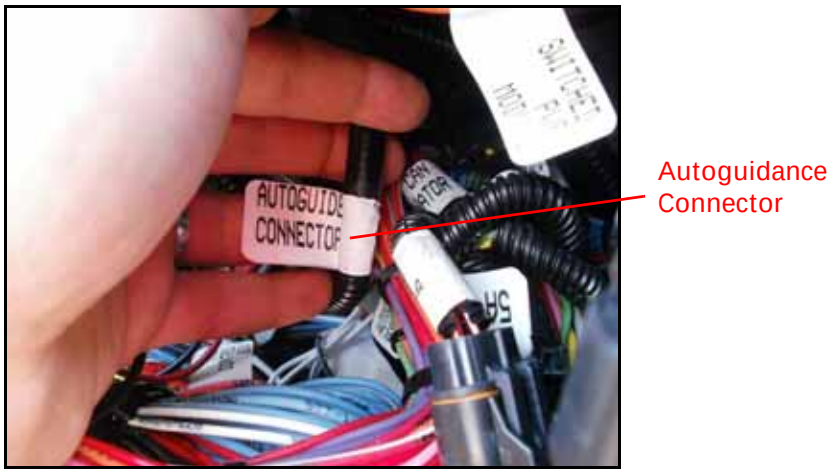


12. Reach inside the radio opening and remove the plug along the bottom that allows access to the corner support.
13. Feed the 6-pin connector labeled “Engage” down the corner post and into the opening below the cup-holder in the rear-right corner.
14. Carefully push the RS1 cable assembly into the radio opening and replace the radio cover.
15. Locate and remove the corner access panel on the outside of the cab.

FIGURE 8. Corner Access Panel

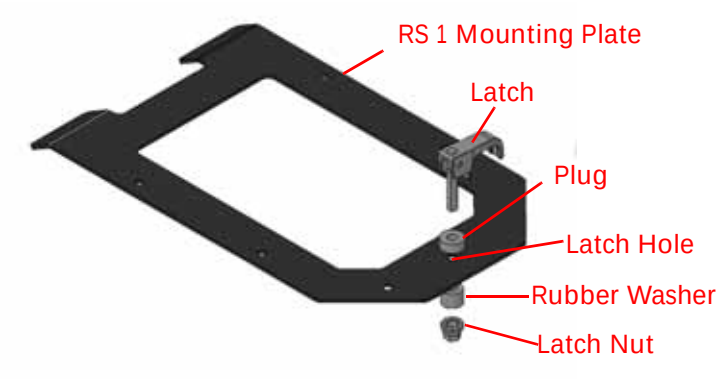
16. Locate the cable that was fed down the corner post and below the cup-holder assembly.
17. Locate and disconnect the machine’s Deutsch 6-pin connector labeled “AUTOGUIDANCE CONNECTOR”.

FIGURE 9. Autoguidance Connector



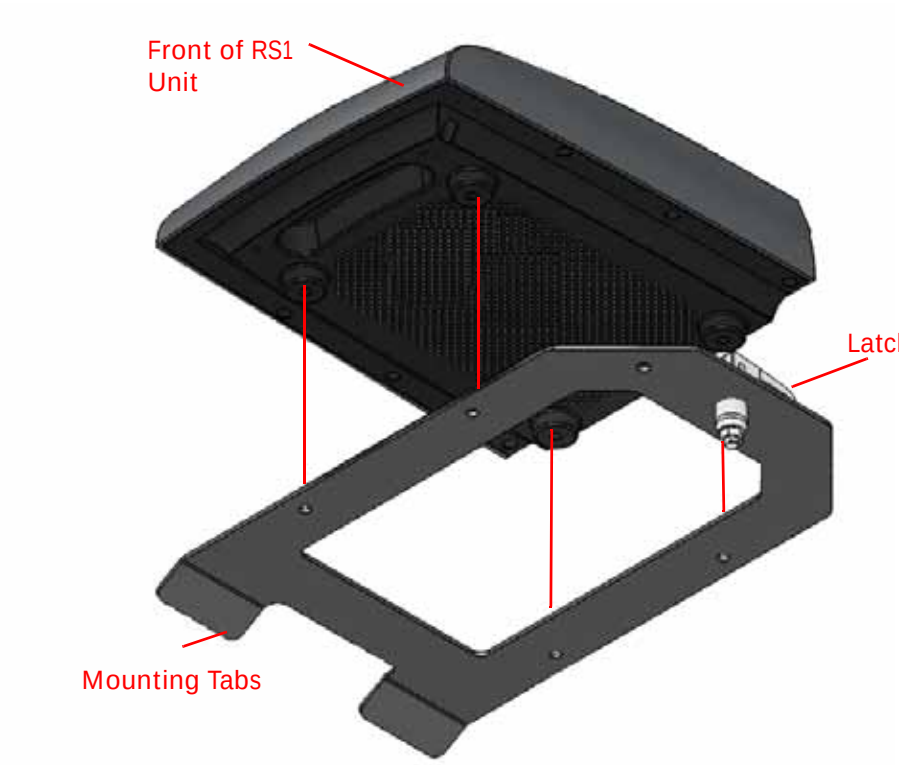
18. Insert the 6-pin connector labeled “Engage” into the machine’s mating connector.
19. Replace the corner access panel.
20. While ensuring the 12-pin Deutsch connector is fed out the back of the top of the cab, replace the cab cap.
21. Reinstall, but do not tighten, the front three bolts that secure the top of the cab to the frame.
22. Assemble the latch, plug, rubber washer, and latch nut through the latch hole on RS1 mounting plate.

FIGURE 10. Latch Assembly



23. Mount the RS1 base plate to the RS1 unit using the four bolts provided. It should be mounted so, the mounting tabs are to the right and the latch hole is to the left.

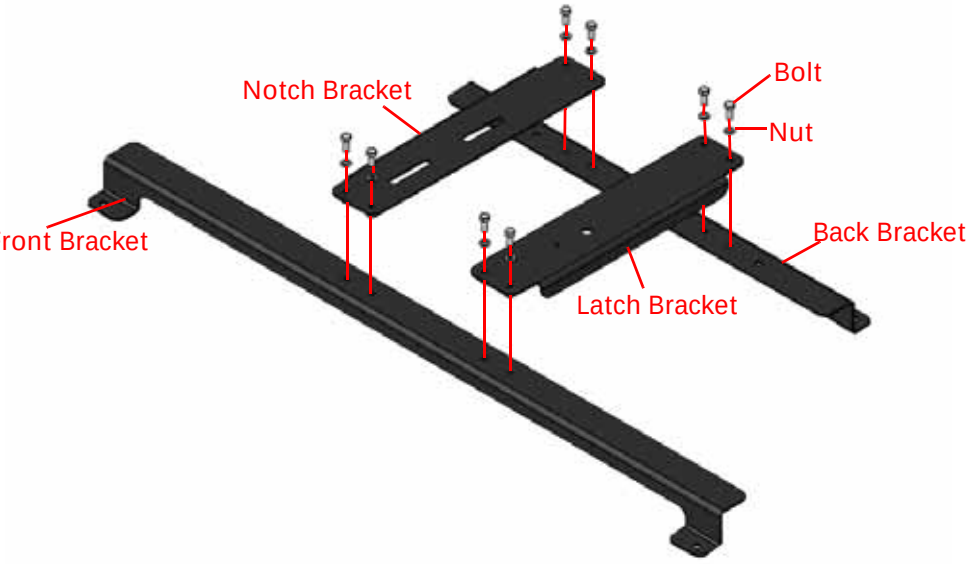
FIGURE 11. Mounting RS1 Unit to Mounting Bracket



24. Assemble the four pieces of the RS1 roof bracket (as shown in"RS1 Roof Bracket Assembly" on page 7). Use the eight provided 3/8" x 1 bolts and lock washers to secure the assembly together.

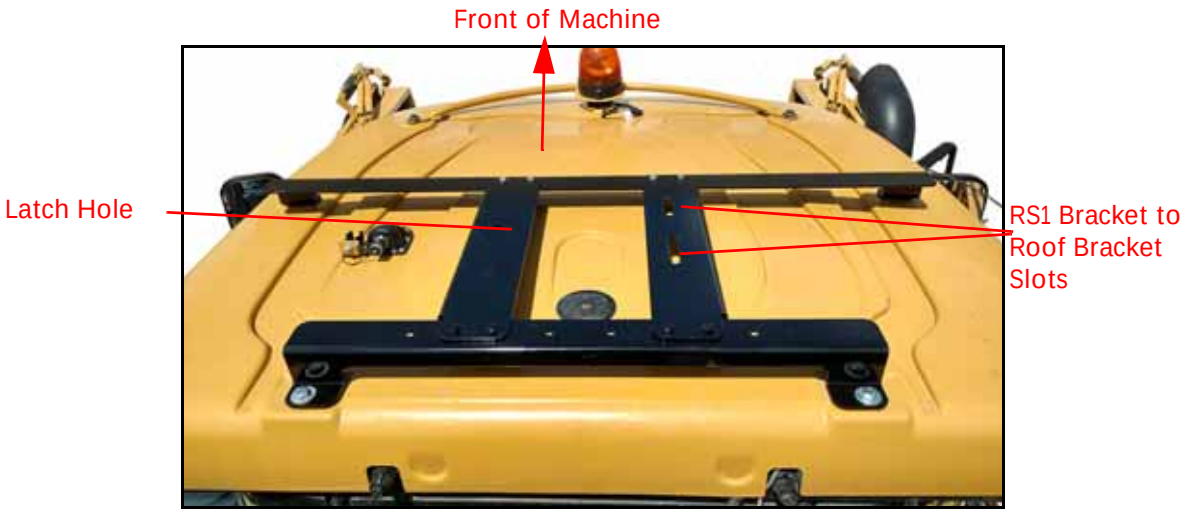
NOTE: If the machine came equipped with a roof rack, reinstall the existing roof cap then skip to step 27.

FIGURE 12. RS1 Roof Bracket Assembly



25. Place the RS1 unit roof bracket on the cab with it oriented as shown in Figure 13 on page 8. The holes on the corners of the roof bracket will line up with existing cab mounting holes.

FIGURE 13. RS1 Roof Bracket Orientation



26. Secure the roof bracket and the top of the cab using the remaining hardware removed from the top of the cab earlier.
27. Insert the two tabs on the RS1 mounting bracket into the roof bracket slot on the roof bracket.
28. Insert the latch into the hole on the roof bracket and secure in place by pressing down on the handle.

NOTE: The latch may need to be adjusted to provide proper compression. To do this, tighten the nut on the bottom of the latch.

FIGURE 14. RS1 Unit Orientation

29. Connect the 12-pin Deutsch connector to the mating receptacle on the RS1 unit.

FIGURE 15. Cabling Connection on RS1 Unit

30. If applicable, connect the cellular antenna to the back of the RS1 unit and secure the antenna to the roof bracket using the magnet attached to the antenna.
31. Install the Viper 4 or CR7 according to the directions provided with the field computer

MODEL YEAR 15 ISO CONNECTION

1. Route the ISObus tee cable (P/N 115-0172-481) to the back of the Viper 4 or CR7 and connect it to the ISO port on the back of the field computer.
2. Connect the other end of the ISObus tee cable to the machine's mating ISObus CAN diagnostic port located near the floor on the right side of the machine.

FIGURE 16. ISObus Tee Cable in Diagnostic Port

MODEL YEAR 16 AND NEWER MACHINE ISO CONNECTION.

1. Locate the ISO harness at the back of the Viper 4.

FIGURE 17. ISO Harness

2. Ensure the round ISO connector is plugged into the back of the Viper 4.

FIGURE 18. Connection on Back of Viper 4

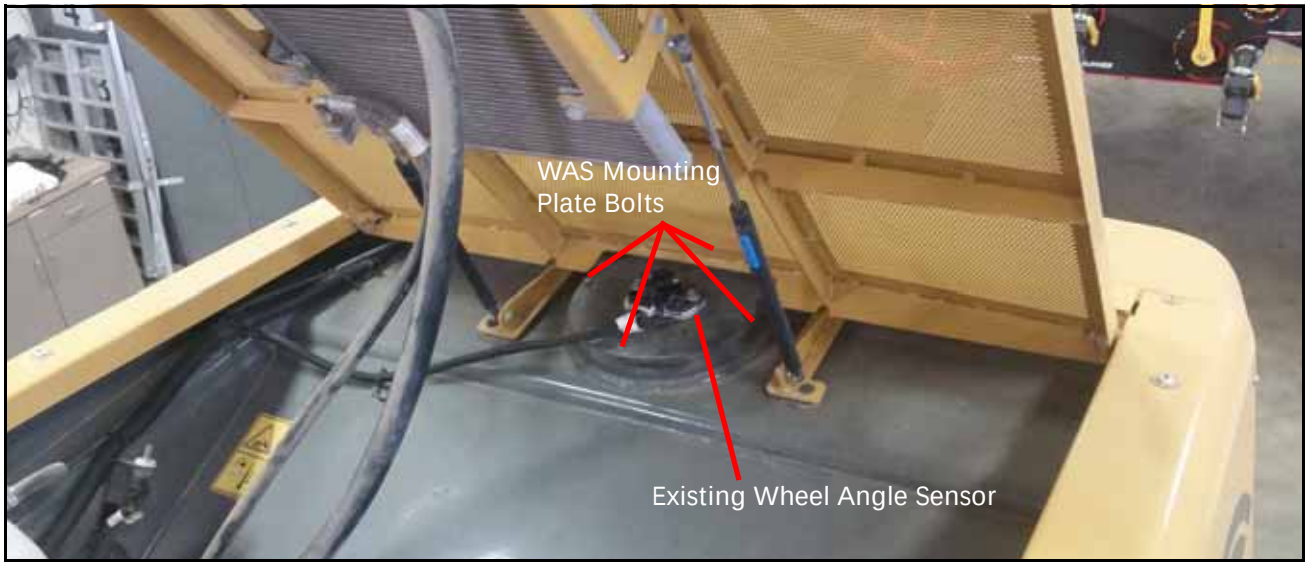
3. Ensure the two 2-pin Deutsch ISO CAN connectors on the Viper 4 ISO CAN harness are connected to each other and are not plugged into dust caps.

FIGURE 19. 2-Pin Deustch Connectors

REPLACEMENT WHEEL ANGLE SENSOR INSTALLATION (TERRAGATOR 7300/8300/9300B ONLY)

1. Verify the machine is parked with the front wheel pointing straight ahead.
2. Locate and remove the machines existing Wheel Angle Sensor (WAS).

FIGURE 20. Existing Wheel Angle Sensor



3. Remove the four bolts securing the WAS mounting plate to the machine.
4. Remove the OEM WAS shaft and replace it with the provided WAS shaft (P/N 019-519-622). Do not tighten the jam nut at this time.

NOTE: One of the flat faces on the square stub must face directly towards the cab.

FIGURE 21. Installed WAS Shaft

5. Install the plastic coupler (P/N 307-0159-419) onto the square stub with the flat of the D-profile facing rearward, towards the cab.

6. Temporarily reinstall the WAS mounting plate. The top of the plastic coupler should be flush, or slightly above, the round plate.

FIGURE 22. Plastic Coupler on WAS Mounting Plate

7. If necessary, adjust the WAS shaft to obtain the correct plastic coupler height. After the plastic coupler is the right height, tighten the jam nut.

NOTE: Ensure the flat on the D-shaft is still facing the cab, after height adjustment.

8. Reinstall and tighten the four bolts securing the large round plate.

NOTE: When reinstalling the plate, make sure to reseal the plate in accordance with AGCO specifications.

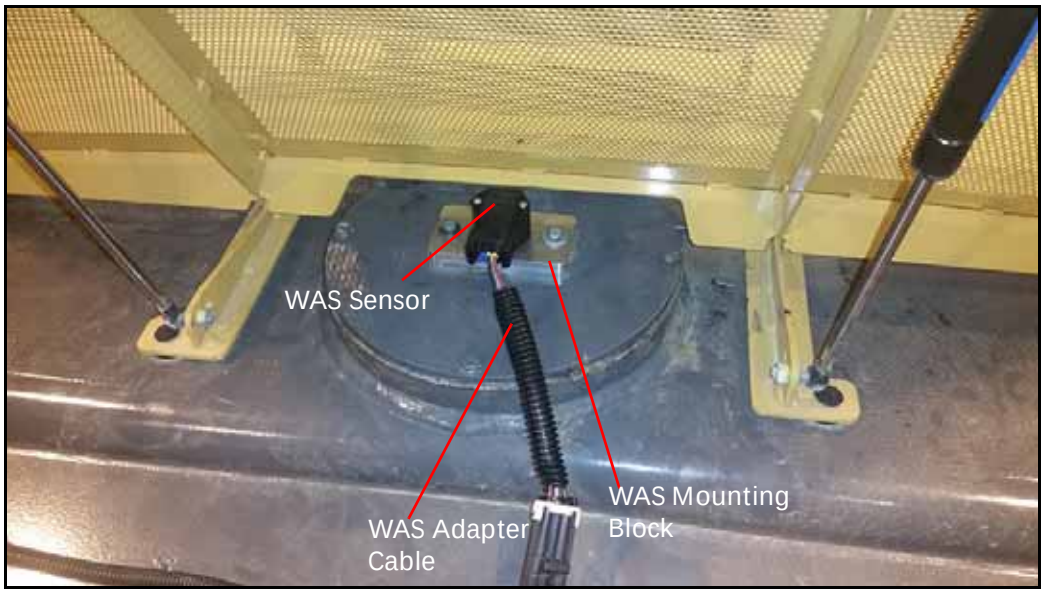
9. Identify the 063-0174-085 wheel angle sensor (WAS) assembly.
10. Install the provided o-ring on the bottom of the WAS assembly, utilizing the provided di-electric grease.

NOTE: Visually inspect the grease level to ensure top gearcase is filled in accordance with AGCO capacity.

FIGURE 23. WAS with O-Ring and Di-Electric Grease Applied

11. Install the WAS assembly to the mounting block on the machine. Verify that the flat on the D shaft of the sensor is pointed toward the electrical connector and toward the rear of the machine.

FIGURE 24. Completed WAS Installation



12. Tighten all mounting hardware.
13. Connect the WAS Adapter Cable (P/N 115-4010-054) between the machine's WAS harness and the sensor.

NOTE: When performing the initial RS1 WAS calibration, verify that the voltage reported by the sensor changes value all the way to both the left and right locks.

OPERATION

Refer to the RS1 Calibration and Operation Manual (P/N 016-4010-001) for instructions on configuring, calibrating, and operating RS1. Please note the location of the master switch and the resume button on the machine since they are needed for operation.

FIGURE 25. Master Switch and Foot Pedal