

Replacing the Downtrunk

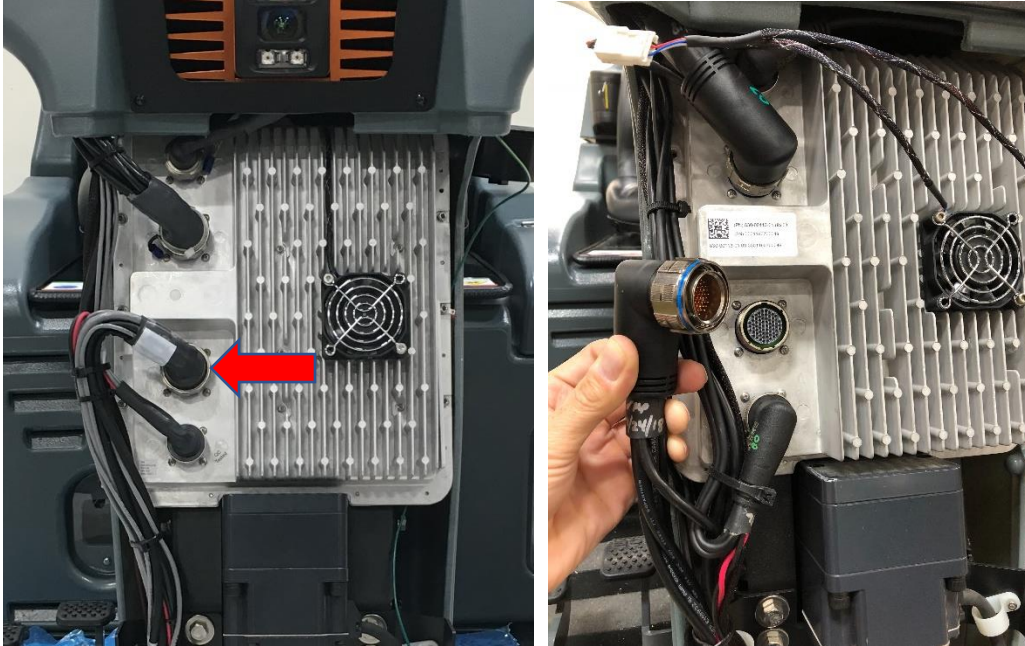
The Downtrunk is a wiring bundle that connects the BCM to numerous sensors, encoders and indicators throughout the lower half of the robot.



To replace this component, power down the unit, remove the front plastic shield (5 mm) and the screws that hold the control panel (2 mm) in place.

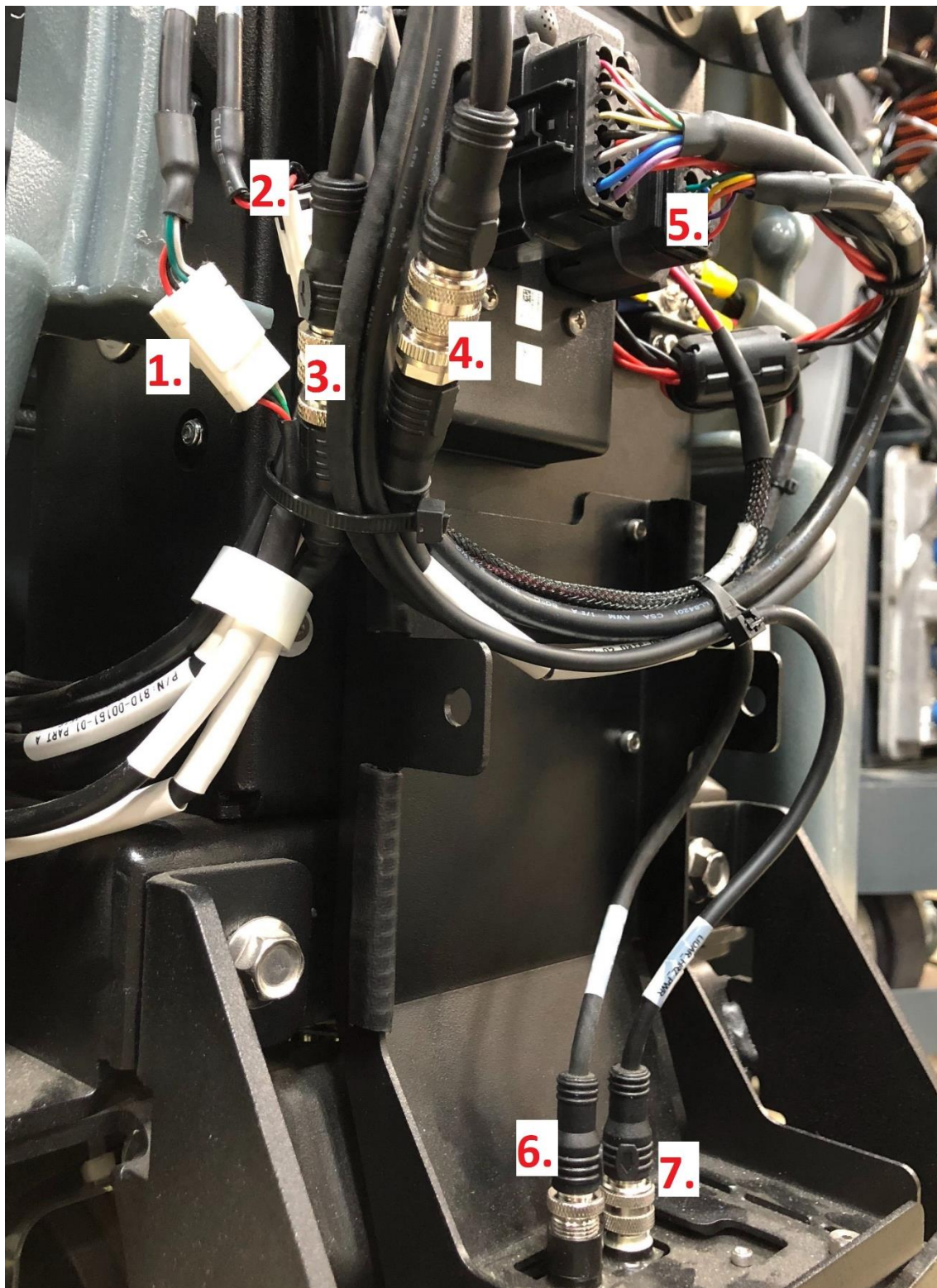


Remove the Downtrunk connector by spinning it counter-clockwise.

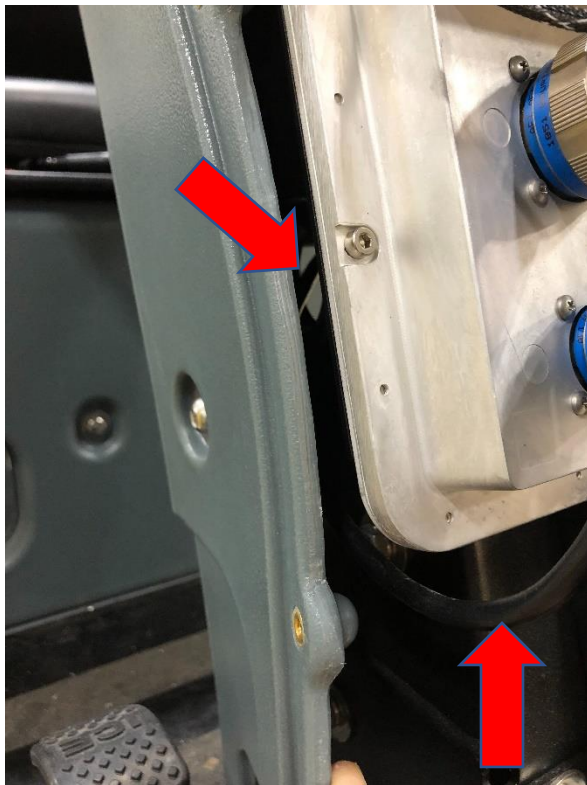


Remove any zip ties that secure any of the Downtrunk cables.

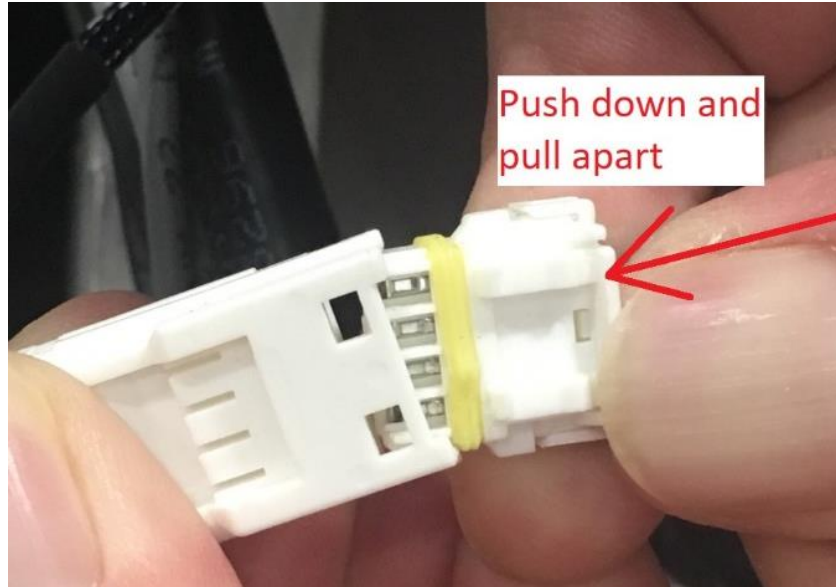
1. START_PAUSE
2. ESTOP
3. SP_ETH (SSH Port)
4. ENC_TRACT1
5. STEERING
6. LIDAR_HRZ_ETH
7. LIDAR_HRZ_PWR
8. ENC_ABS (Steering Encoder)



Remove the access panel opposite the seat and route the ENC_ABS cable as shown below.



To disconnect the START_PAUSE and ESTOP coupling:



Use caution when handling the LIDAR_HRZ_ETH and LIDAR_HRZ_PWR cables. When connecting them to the LIDAR sensor, be gentle, as any modification to the sensor's position may result in a necessary recalibration of machine sensors.

Reverse the steps outlined in this document to reassemble the scrubber after replacing the Downtrunk, then power on the machine.

To verify unit functionality following the Downtrunk replacement:

Ensure that the UI screen can display Planar LIDAR signal, the Start/Pause button and E-stop buttons function, the steering and traction encoders change value when driven and the wheel is rotated.