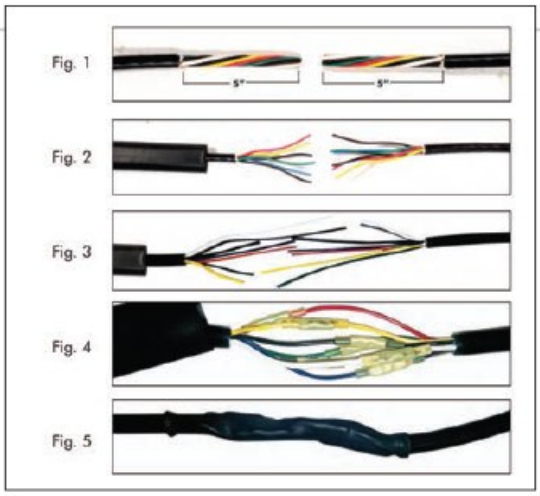
AVOIDING CORROSION WHEN SPLICING 7-WAY HARNESS



Improper repairs to a 7-way harness can expose the wiring to moisture and corrosion causing contaminants. To avoid these risks, Phillips Industries recommends the following steps when splicing a 7-way harness:

1. Remove approximately 5 in. of the outer jacketing from the end of each cable. Make sure there is no corrosion present on any of the wires. (Figure 1)
2. Slide the heat shrink tubing over one side of the cable. It does not matter which side. (Fig. 2)
3. Using the example below, assigning each letter to a circuit/wire, cut the wires on each side so they are staggered in length but come together to create approximately 7 in. (each) when connected. Staggering the connections will eliminate the bulk that would occur from the butt connectors being gathered together in one area. (Fig. 3). Note: Each letter below, A-F, should be assigned to represents the same colored circuit/wire for both SIDES 1 & 2. For example, if you choose to assign "A" to the WHT/Ground wire on SIDE 1, "A" should also represent the WHT/Ground wire on SIDE 2.

   SIDE 1:

   i. Do not cut any length off circuits A and B. They will remain at approximately 5 in. in length.
   ii. Cut 1 in. off circuits C and D, making them approximately 4 in. in length.
   iii. Cut 2 in. off circuits E and F, making them approximately 3 in. in length.
   iv. Cut 3 in. off circuit G making it approximately 2 in. in length.

   SIDE 2:

   i. Cut 1 in. off circuits E and F, making them approximately 4 in. in length.
   ii. Cut 2 in. off circuits C and D, making them approximately 3 in. in length.
   iii. Cut 3 in. off circuits A and B making them approximately 2 in. in length.
   iv. Do not cut any length off circuit G. It will remain at approximately 5 in. in length.
4. Strip 5/16 in. off the end of each circuit/wire and insert the corresponding colored circuits/wires into opposite ends of the butt connecters and crimp together. (White to white, red to red, etc.) (Fig. 4)
5. Inspect all connections for good contact and then apply heat with the heat gun to shrink the butt connectors and make a permanent connection between each circuit/wire. (Fig. 4)
6. Slide the black heat shrink tubing over the exposed circuits/wires and apply heat with the heat gun to shrink the tubing. (Fig. 5) ■

SAFETY RECALLS

The following are safety recalls issued by the National Highway Traffic Safety Administration:

- Daimler Trucks North America (DTNA) is recalling certain 2017–2018 Western Star 4900 trucks. The front axle weight capacity may exceed the spring capacity. Overloaded springs may result in the front axle separating from the vehicle, increasing the risk of a crash.
- Ford Motor Company is recalling certain 2015–2017 F-150, and 2017 F-250 and F-350 trucks equipped with a crew cab. The left rear inflatable seat belt buckle assembly may be inadequately attached to its mounting bracket. As such, these vehicles fail to comply with the requirements of Federal Motor Vehicle Safety Standard (FMVSS) number 210, "Seat Belt Assembly Anchorages." If the left rear inflatable seat belt buckle separates from its mounting bracket, the seat occupant may not be adequately restrained, increasing their risk of injury.
- Mack Trucks is recalling certain 2016 Pinnacle CHU and CXU diesel trucks equipped with certain Dana steer axles. The castellated nut and cotter pin on the steer axles may not have been properly torqued, allowing the tie rod to loosen within the steer axle. If the tie rod loosens, it may disconnect from the steering knuckle, causing a complete loss of steering, increasing the risk of a crash.
- Volvo Trucks North America is recalling certain 2016 Volvo VNL and VNM trucks equipped with certain Dana Spicer D-Series and E-Series steer axles. The castellated nut on the steer axles may not be properly torqued, allowing the tie rod to loosen. If the tie rod loosens, it may disconnect from the steering knuckle, causing a complete loss of steering, increasing the risk of a crash.