Step 1: Dry Fit Splice

Prepare tubes to be spliced together. Cut the tubes to the proper length and square ends that will butt together. Also mark center of splice to aid in centering splice in joint.

Step 2: Sand Bonding Area

Scuff insides of tubes using 150 grit sandpaper to the appropriate depth. Sand hard enough to break the skin of epoxy resin. Do not sand too deeply as the result may cut or damage underlying fibers. This will compromise the integrity of the carbon fiber tube.

Step 3: Clean Surfaces

The pieces must be cleaned to remove any contaminants. Wipe components to be bonded (insides of tubes, and splice) with a solvent such as acetone or isopropyl alcohol to remove all dust, dirt, and grease.
Step 4: Bonding Joint First Half

Bond one half of the splice to eliminate the risk of the splice being bonded off center. First apply Scotch-Weld to the inside of the tube, making sure to get equal coverage on all four sides and to a sufficient depth. Next spread the Scotch-Weld on the splice, applying equal coverage to all four sides, stopping at the center line. Slide the splice into the tube up to the center line marked on the splice.

Step 5: Clean Up

Remove unhardened excess adhesive with a cloth dampened with isopropyl alcohol, acetone, or MEK. Clean around splice to facilitate a debris free second bond and allow for a clean butt joint of tubes over the splice.

Allow splice to cure. At room temperature (75 degrees F), adhesive will cure overnight. Faster cures are obtained using elevated temperatures. Refer to the tech sheet for Scotch-weld epoxy 2216B/A Gray for further information.

Step 6: Bonding Joint Second Half

The next step is bonding the second half to the cured splice. First apply Scotch-Weld to the inside of the tube, making sure to get equal coverage on all four sides and to a sufficient depth. Next spread adhesive on the pre-bonded splice, applying equal coverage to all four sides. Now slide the tube halves together.

Step 7: Clean up

Remove unhardened excess adhesive that may have oozed out of splice joint. Wipe excess adhesive with a cloth dampened with isopropyl alcohol, acetone, or MEK.

Allow splice to cure. At room temperature (75 degrees F), adhesive will cure overnight. Faster cures are obtained using elevated temperatures. Refer to the tech sheet for Scotch-weld epoxy 2216B/A Gray for further information.