

ClampStar® CSR-1386FT-XXX

Recommended Installation Procedure For ClampStar® Inline Shunt Assemblies



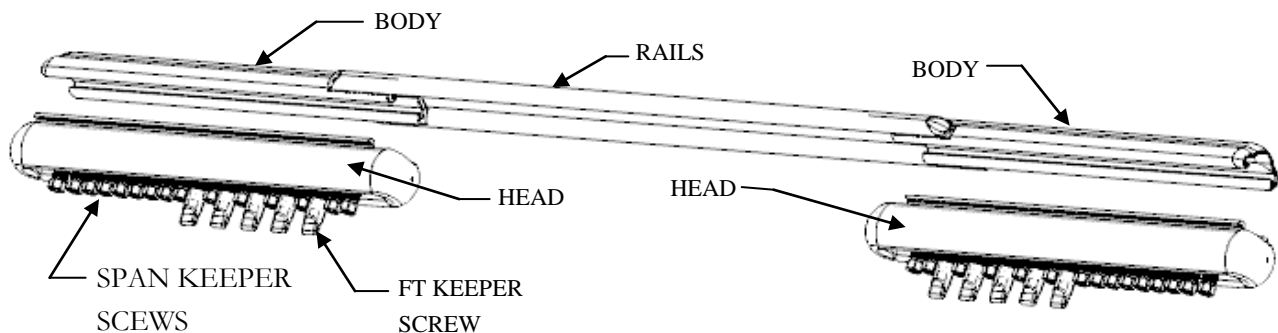
These instructions do not claim to cover all details or variations in equipment or installation, nor to provide for all possible conditions concerning installation, operation or maintenance of this equipment. If further information is desired or if particular problems are encountered which are not sufficiently covered in this guide, contact Classic Connectors, Inc. at the above address or telephone numbers.

This installation instruction is written for installation on De-energized Conductors, and assumes only qualified individuals with appropriate training and certification will be performing the work. It is not intended to serve as a "Safety Procedure." All "Safety Procedures", clearances and methods, as adopted by the user utility, shall be strictly followed. Installation on Energized Conductors is the same procedure with practices and procedures dictated by the utility to be employed.

ClampStar® assemblies come individually packaged in sealed plastic bags with their cable grooves factory-loaded with proprietary inhibitor compound. The assembly shall be kept in the sealed container prior to installation to prevent dust/dirt contamination. Additional inhibitor is not required and alternate inhibitor compounds shall not be used.

Assure you have the right ClampStar for your conductor. This CSR-1386FT is designed to receive ACSR conductors with overall diameters between 1.050" (26.7mm) to 1.386" (35.2mm), operating up to 250°C, on all system voltage classes through 800kV AC and 500kV, DC.

ASSEMBLY COMPONENT NOMENCLATURE



The unit is shipped in the final assembly configuration, the heads inserted to the body, and the heads secured in place with a "Ty-Wrap". The keeper screws are fully disengaged and no further adjustment is required. It is important to identify the difference of the "SPAN KEEPER SCREWS" and the "FT KEEPER SCREWS" as the tightening sequence is later instructed. The "SPAN KEEPER SCREWS" are bare hex head with T6 drive internal. The "FT KEEPER SCREWS" are covered with a vinyl cap to make them identifiable. The cap is **NOT** to be removed until the final installation step. The heads are "UNI-DIRECTIONAL" and can only be inserted into the bodies with the "FT KEEPER SCREWS" closest to the center and toward the existing splice, when the unit is installed on the conductor.



Tools Required

Stainless Wire Brush
Impact Driver with 3/4" Hex Socket
Short Length of Rope (Optional)

1. Prepare the Conductor

Begin by preparing the conductor in the locations where the clamping bodies of the unit will be located. It is suggested that the conductor be cleaned, wire brushed, approximately 6 inches (100-150mm) beyond the anticipated location to allow for final adjustment of the unit. The unit should be placed with the existing splice connector centered between the bodies of the body and rail component.

2. Prepare the Connector

Remove the connector from the sealed vinyl bag, being careful to protect dirt and debris from contaminating the pre-installed inhibitor. Remove the "Ty-wraps" holding the heads on the bodies and slide the heads outward to remove the heads from the bodies.

3. Place the Bodies and Rail Component on the Conductor

The unit is designed to shed water and contaminants when the bodies are placed on the top of the conductor. Place the component on top of the conductor with the existing splice centered between the 2 bodies. A short length of rope may be used as a safety catch while the heads are installed.

4. Install the Heads

With the "FT KEEPER SCREWS" turned toward the existing splice, slide each head into the body until it contacts the mechanical stop pin (*the head should be centered under the body*). Install one head, to the mechanical stop, and snug *at least* 3 of the span keeper screws to hold the head in place and repeat the process with the second head.

5. Tighten the "SPAN KEEPER SCREWS"

The screws have a *torque limiting* feature and the hex head will shear off at 55 lb/ft. of torque, but the screws need to be tightened in a sequence to gather the strands of the conductor prior to final tightening to shear the head. Snug up all the "SPAN KEEPER SCREWS" (*bypassing the FT KEEPER SCREWS with the vinyl caps*), then make another pass to further tighten, but not shearing the hex heads off. The screws should be tightened in multiple passes equal to the layers of aluminum over the steel core of the conductor. If the conductor has 3 layers of aluminum, make 3 passes on the "SPAN KEEPER SCREWS", then make a 4th pass to shear off the heads.

6. Tighten the "FT KEEPER SCREWS"

Remove the vinyl caps from the "FT KEEPER SCREWS" and tighten each one completely until the hex head shears off, multiple passes **NOT** required. When all ten of the "FT KEEPER SCREWS" are tightened and the heads sheared off, remove the safety catch rope, if applied, and the installation is complete.

