SOUTHERN TECHNOLOGIES CORPORATION

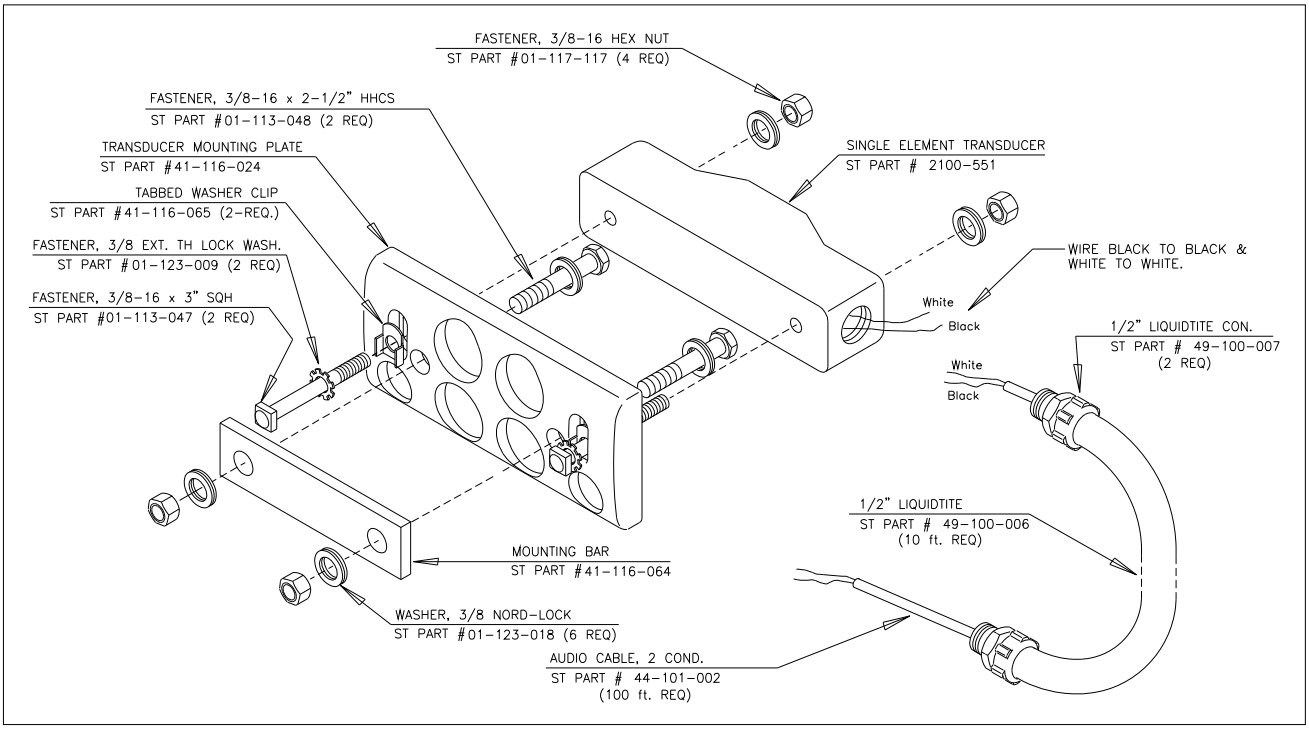
MODEL NO. 2100-550
SINGLE ELEMENT TRANSDUCER

Description:

The Model 2100-550 Single Element Transducer is a rail-mounted device that generates timing signals that allow an STC defect detector system to:

- Detect a train's presence
- Coordinate bearing and wheel temperature measurements
- Determine a train's direction
- Calculate a train's exit speed
- Calculate a train's length
- Identify individual railcars and locomotives based on axle spacing patterns

The 2100-550 consists of a horseshoe magnet with a tightly wound coil, encapsulated in a rigid epoxy potting compound. Each transducer is mounted 1-9/16 inches (3.97 centimeters) below the top of the rail. As the wheels of a railcar pass over the transducer, the wheel flange disturbs the flux field of the magnet, causing the output of a sinusoidal type waveform of varying amplitude. The depth of the flange and the speed at which the wheel is moving determines amplitude.



2100-550 Single Element Transducer – Exploded View

General Specifications:

Compatible Rail Sizes	115 lb to 141 lb
Mounting Hole Spacing	5.000" Center to Center
Cable	2 Conductor 20 AWG (100 ft)
Conduit	½" Type AT Liquidtite (10 ft)
Transducer Body Dims	8.875" x 2.500" x 2.625"
Weight	11.75 lbs
Temperature Spec. – Industrial	-40°C to +70°C
RoHS Compliant	No