

Tag Placement

Savi Technology requires that you mount Savi SensorTag ST-673 by inserting the tag and supplied metal mounting sleeve through the humidity detection orifice on the jet engine container. You use the pressure sensitive tape (PST) to reinforce the tag and sleeve to the engine container.

PST Reliability and Durability

The only brand of PST that Savi Technology recommends for mounting SaviTags is 3M Corporation's Automotive Acrylic Plus Attachment Tape.

For ease of installation, during manufacturing Savi installs this PST on the back of the mounting sleeve. PST mounting kits are also available for separate purchase.

Once a mounting sleeve is fastened to an asset, you can leave it on the asset even after Savi SensorTag ST-673 is removed so it is available for future use with other compatible SaviTags. Prior to re-use, visually inspect the PST-mounted sleeve to make sure it is attached securely. If necessary, reinstall the sleeve using new PST.

3M Corporation has conducted extensive environmental testing on their Automotive Acrylic Plus Attachment Tape. In addition, Savi has conducted its own independent environmental tests of PST. The U.S. Army (Tobyhanna Army Depot) has also tested PST for use on surfaces treated with Chemical Agent Resistant Coating (CARC). All these tests confirm that PST is an appropriate choice for mounting SaviTags.

◆ Savi Technology successfully conducted the following tests upon samples of 3M PST:

- ❖ Extreme temperature -40°C to +158°F (-40° to +70° Celsius)
- ❖ Step test (200 pounds applied in shear)
- ❖ Shock (140g or 120 lbs.)
- ❖ Vibration (MIL-STD-810E)
- ❖ Salt fog (MIL-STD-810E)
- ❖ Corrosive liquids
- ❖ Peel test (50 pounds of peel force)

Savi's tests confirm the adhesion integrity and reliability of 3M PST.

- ◆ 3M Corporation conducted a longevity test of PST. They found no significant degradation in the performance of PST even after five years of service on a test vehicle. As long as the surface is prepared properly, PST will work reliably for five years or longer.
- ◆ 3M Corporation compared the peel strength of a new roll of PST versus a roll that had been aged 21 months. In all cases, the aged roll matched performance of the new roll in tests conducted over a 72-hour period.

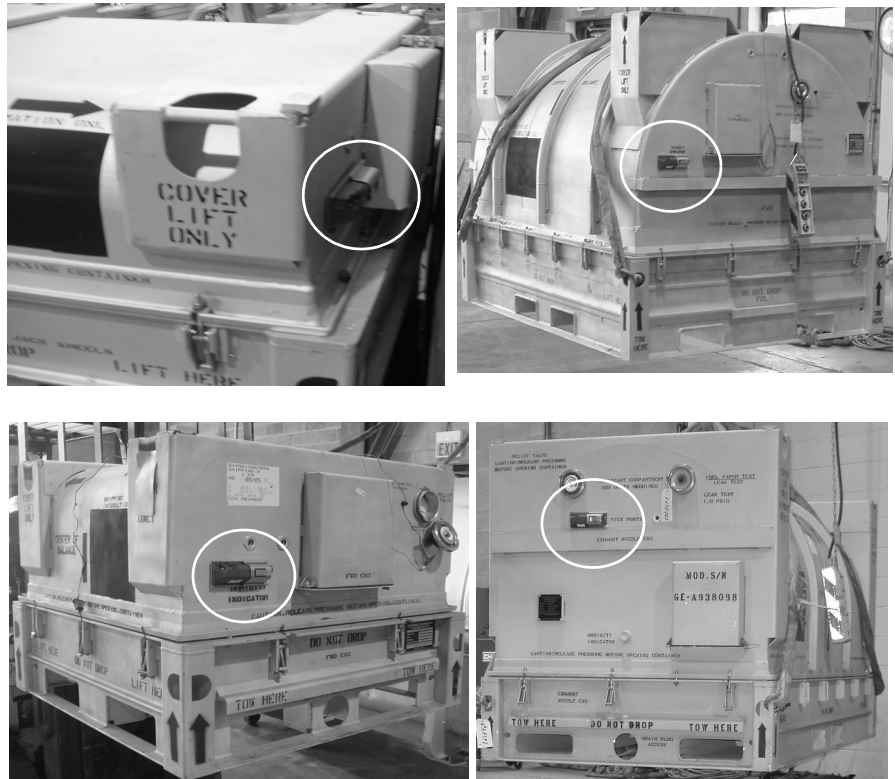
Achieving Maximum Communication

Savi SensorTag ST-673 achieves a 300-foot (91.44 meters) read range from SR-410 and SR-650 fixed readers. To achieve the most consistent communications with the tag, the fixed readers must be mounted:

- ◆ To have an unobstructed line of sight to the tag
- ◆ At 20 feet (6 meters) or higher
- ◆ With the reader dome pointed downward

The following photos show specific Savi SensorTag ST-673 mounting locations that are based on the location of the humidity detection orifice.

Figure 2-1 Specific mounting locations on the jet engine container



Mounting Savi SensorTag ST-673

The mounting method for Savi SensorTag ST-673 includes using pressure sensitive tape, screws, and a metal mounting sleeve. This method prevents accidental loss of the tag by sudden impact, vibration, or shock during transport.

Savi SensorTag ST-673 includes these required mounting fasteners:

- ◆ Stainless steel screws and washers
- ◆ PST
- ◆ Metal mounting sleeve