

# SAF-T Ground Ball Installation Instructions

H53163PA

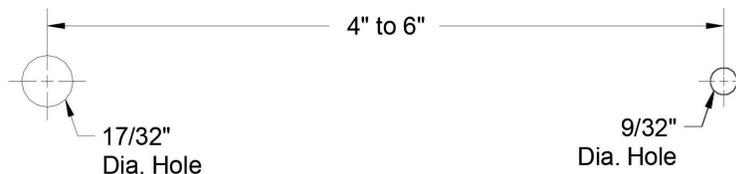
The Civacon SAF-T Ground Ball is used to produce the special ground verification signal required by many loading rack ground verification monitors. For proper operation, it MUST be installed correctly onto the tanker chassis to assure a proper ground. The Civacon GS1002 SAF-T Ground Ball is mechanically and electrically compatible with the Scully P/N 08274 and Flo-Tech P/N FT451 assemblies.

***CAUTION – Do not use electric drills, or other tools that use electricity, generate sparks, or produce heat near a petroleum tanker unless the tanker has been purged or otherwise rendered safe, and the work area is verified as being free of hazardous vapors.***

To Properly Mount the GS1002 Ground Ball:

1. Select a proper mounting location on the tanker. Typically to the rear of the bottom loading area (curbside), or at the curbside rear of a tanker that top loads.
2. Drill a 17/32" hole in the chassis for mounting the Ground Ball. Remove all paint, dirt, debris, rust, etc. at least 1-inch around the hole on both sides.
3. 4" to 6" away from the above hole (see Drawing), drill a 9/32" hole in the chassis for mounting the Ground Ball's Green Wire. Remove all paint, dirt, debris, rust, etc. at least 1-inch around this hole on both sides.
4. Apply a coating of electrical dielectric grease (like Truck-Lite® Brand NYK-77 or equal) to the clean, bare area around both holes prior to installation of the Ball. This will help protect the installed Ball from corrosion and ensure a good chassis electrical connection.
5. Insert the GS1002 Ground Ball through the clearance hole with an internal tooth lock washer (provided) on both sides of the chassis and tighten securely. Do not over-tightening (see Caution Note below).
6. Crimp the included 1/4" Ring Lug onto the pre-stripped end of the Ground Ball's Green Wire using the proper crimping tool.
7. Attach the Ring Lug to the 1/4" clearance hole using the included 1/4-20 bolt an internal tooth lock washer (also provided) on both sides of the chassis and tighten securely.
8. Clean the area around the Ground Ball and adhere the provided identifying label around the installed Ball.

***CAUTION – Tighten the Nut to no more than 25 ft. lbs. (300 inch lbs.) Any more torque applied than this rating could cause damage to the Ball and may cause improper operation.***



**Testing the Installation:** The Civacon SAF-T Ground Bolt/Ball contains a diode. The installation can be tested with a standard digital multimeter that has a "diode test" scale. The meter's dial will have a test function position marked "→|—".

Test the installed Ground Wire by touching the Red Test Lead to Pin #10 and the Black Test Lead to Pin #9. The Meter's Display should read 0.500 to 0.700 Volts. Reverse the test leads (Red on #9 and Black on #10), and the Meter's Display should read 0 Volts, or OL (same as when test leads are not touching anything). ***If "YES" the installation is OK.***



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