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Tuson Sway Control

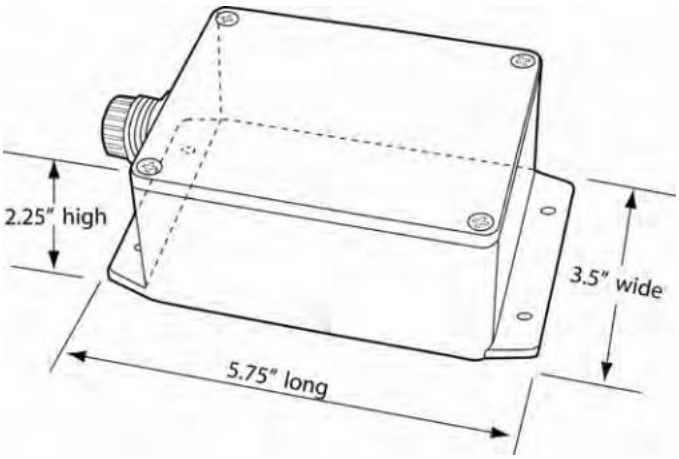
Tuson introduces the first of its kind in trailer sway control, Tuson Sway Control (TSC). This system continuously monitors trailer yaw and rapidly identifies a trailer sway condition. The TSC is wired directly into the trailer braking system and automatically calculates a trailer braking solution to reduce and control a trailer swaying condition.

Key Features	Details
LED Status Light	RED/GREEN LED light on a 10 foot cord for mounting in an easily seen location to show the functional status of the unit with different flashing modes for diagnostic troubleshooting.
Automatic system disable in off-road conditions	The module continually monitors the sway sensor to detect and activate during trailer sway. It also is able to determine rough terrain during which it disables sway control braking until exiting the rough terrain at which time the system re-enables.
Trailer sway brake level auto adjustment	Closed-loop sensory feedback allowing the system to independently increase or decrease the right and left side sway control braking levels to compensate for variances in trailer brake condition/efficiency.
Fully sealed, water proof	The system is fully sealed and water proof. It is designed to withstand water from road spray and can even be submerged for short periods of time.

TSC Wires	Trailer Wire Function	Wire Gauge Required
Purple Wire	Left (driver's side) electric brake output (all driver's side brakes)	14 Gauge min.
Pink Wire	Right (curb side) electric brake output (all curb side brakes)	14 Gauge min.
White Wire	Trailer battery/frame ground point	14 Gauge min.
Blue Wire	Electric brake controller signal from tow vehicle	14 Gauge min.
Black Wire	12VDC from tow vehicle trailer harness	14 Gauge min.

How It Works

- The TSC continuously monitors trailer yaw.
- It has a proprietary algorithm which is used to determine the difference between quick steering to avoid a road obstacle (or other such circumstances) and the rapid onset of a trailer swaying event.
- It measures the angle, travel distance and speed of the lateral motion of the trailer (and other parameters) and uses this information to quickly intervene with the application of trailer brakes.
- The processing capability of the TSC is powerful and rapid. It captures all the critical elements of the swaying condition and uses this information to predict how the event will proceed without any driver intervention.
- It uses this data to get ahead of the event by applying the brakes on the correct side of the trailer, in a timely manner, with the proper braking level for the required duration.
- This quickly dampens and brings the trailer sway under control.



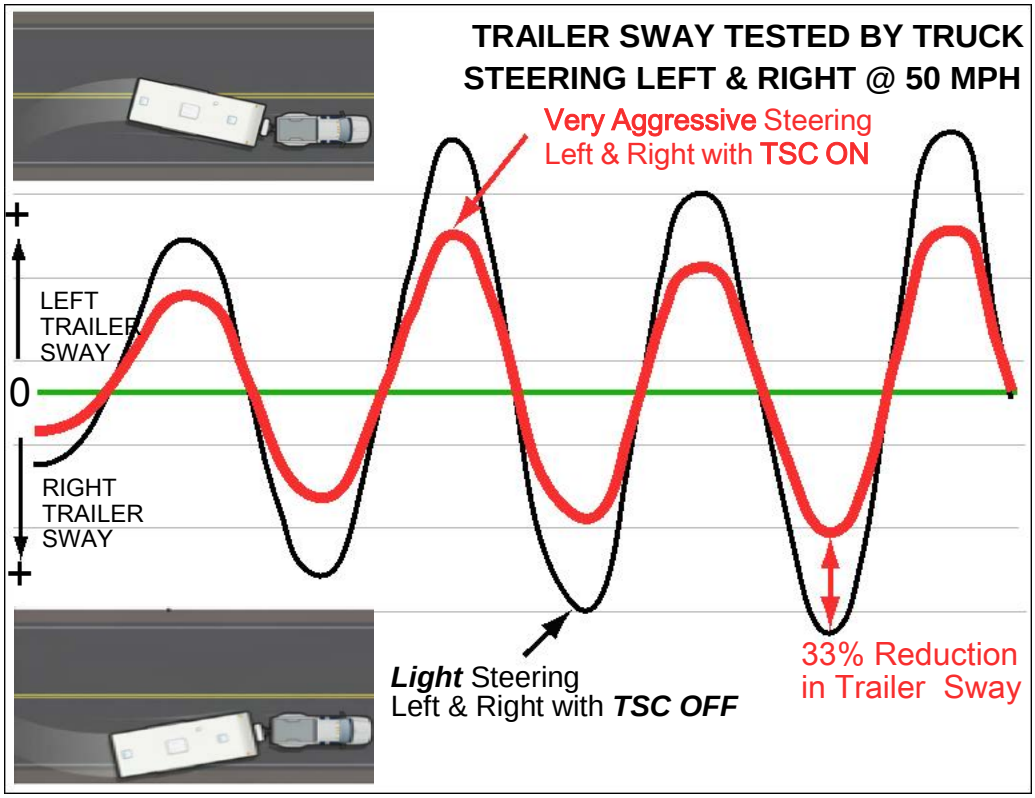
TSC Dimensions

Nov. 2015

Tuson Sway Control Independent Testing by Mr. Truck

Truck tested: 2012, Ford F250 with Ford Trailer Sway Control on the truck

Trailer tested: 2014, 2 horse, bumper pull stock trailer, GVWR 12,000 lbs.



Trailer Sway Control Testing at Bandimere Speedway, Morrison, Colorado

See video of the testing and test results at:
WWW.MRTRUCK.COM

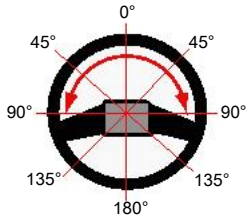
Testing verified that the Tuson Sway Control dampened trailer sway well enough that the Ford Trailer Sway Control on the truck did not activate.

Tuson Sway Control Independent Testing by Bosch

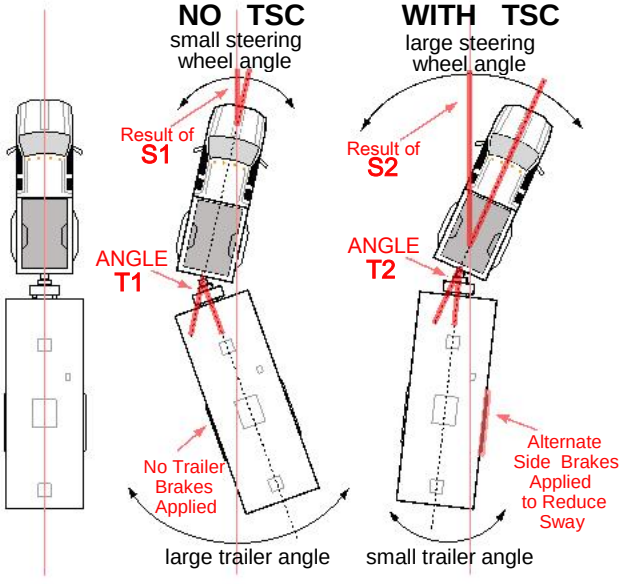
Trailer tested: 2013, 32 foot, bumper pull RV, GVWR of 10,000lbs.

Test Results (45 mph)
Angle Comparisons

NO TSC		WITH TSC	
S1	T1	S2	T2
55°	5°	105°	5°
65°	6°	103°	6°
74°	7°	110°	7°



STEERING WHEEL ANGLES
(see **S1** and **S2** in table above)
TEST DRIVER STEERED RAPIDLY
LEFT to RIGHT to LEFT to RIGHT...



Trailer Sway Control Testing at Bosch Proving Grounds, New Carlisle, Indiana

The test trailer (right) had weight loaded behind the axles in order to create a tongue weight of 500 lbs. or 5% of the total trailer weight. At 45mph, the truck steering wheel was rapidly turned back & forth to the angles in the table above.

Tuson Sway Control was tested to a modified* version of SAE International - J 2 6 6 4 Trailer Sway Response Test Procedure where truck steering angle and trailer sway angle are compared to measure the effectiveness of trailer sway control.

(*) details of the test are available from Tuson