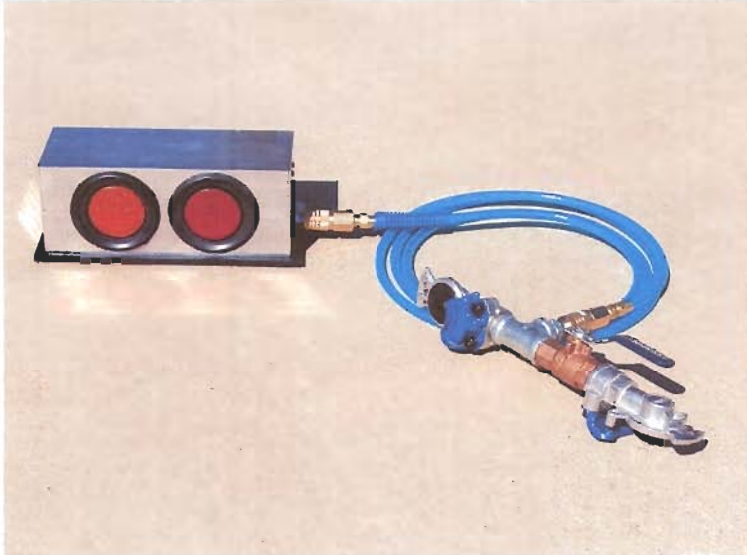


Brake Application Pressure Tester™

Portable device for verifying application pressure during brake testing



Developed by:
Applied Vehicle Data Inc.,
supplier of brake testing
equipment

- ✓ Verify that brake application pressure during slack adjuster testing is greater than 80psi.
- ✓ Catches out of service trucks that pass at low brake application pressures.
- ✓ Portable with quick setup.
- ✓ Verify compliance with CFR and CVSA requirements.

Brake Application Pressure Tester attached to Glad-hands

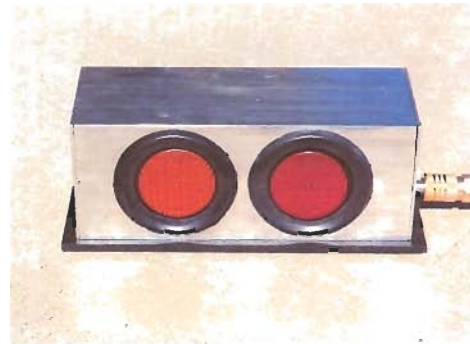
AVD Brake Application Pressure Tester™

Summary of Features:

- ◆ Verifies application pressure is greater than 80 PSI during slack adjuster testing.
- ◆ Amber light illuminates when brake application pressure is greater than 80 PSI, red light if above 90 PSI.
- ◆ Portable design that attaches to glad hand with light system that lies on ground under the tractor.
- ◆ When performing slack adjuster measurement testing under vehicle, the person conducting the test can see the illuminated light from all brake chambers positions.

Catching Out-of-Service Vehicles:

- ◆ Vehicles tested at improperly low brake application pressure may appear to be "in service" but when tested at the proper brake application pressure these vehicles can be out of service.



How to Setup the Brake Application Pressure Tester:

- ◆ Connect gladhands to truck.
- ◆ Place indicator light under truck.
- ◆ While driver applies brakes, watch for indicator light.
- ◆ Amber light indicates brake application pressure is 80 PSI or greater.
- ◆ Measure brake strokes.
- ◆ Red light indicates brake application pressure is higher than 90 PSI.

Works with 98 percent of all on and off road trucks (vehicles equipped with air)

The importance of Testing at Proper Application Pressure

Catching out of Service Vehicles:

- ◆ Vehicles tested at improperly low brake application pressure may have slack adjuster displacements that are less than 2 inches but when tested proper brake application pressure these vehicles may have displacements that exceed 2 inches.

Spring Brakes and Slack Adjustment:

- ◆ Vehicles equipped with spring brakes with slack adjusters are approximately 98 percent of all off and on highway trucks.
- ◆ Slack adjustment maintains clearance between the brake shoes and the brake drum.
- ◆ Slack adjuster clearance is critical because it is the primary factor in determining the ultimate braking capacity of the brake.

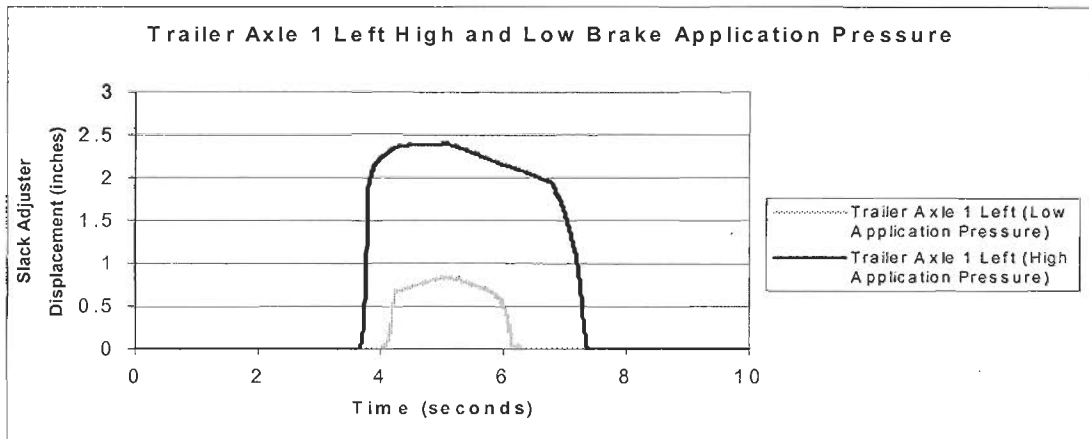
- ◆ Slack adjusters operate over a very narrow band of adjustment. For Type 30 chambers, normal brake stroke is from 1.5 to 1.75 inches with the readjustment point at 2 inches.

Example of Out of Service Vehicle:

- ◆ Single truck was tested twice using a slack adjuster data acquisition system that captures the exact displacement of slack adjusters and brake application pressure.
- ◆ During first test brake application pressure was 26 PSI and all slack adjuster displacements were less than 2 inches.
- ◆ During second brake test application pressure was increased to 96 PSI.
- ◆ At 96 PSI all slack adjusters moved greater than two inches.
- ◆ Vehicle is out-of-service.

Example of Out of Service Vehicle:

Slack Adjuster Displacement	Brake Application	Brake Application	
	Pressure Low	Pressure High	
Tractor Axle 1 Left	0.25	2.25	inch
Tractor Axle 1 Right	0.25	2.375	inch
Tractor Axle 2 Left	0.625	2.25	inch
Tractor Axle 2 Right	0.375	2.25	inch
Tractor Axle 3 Left	1.75	2.375	inch
Tractor Axle 3 Right	1	2.25	inch
Trailer Axle 1 Left	0.75	2.375	inch
Trailer Axle 1 Right	1	2.375	inch
Trailer Axle 2 Left	0.75	2.375	inch
Trailer Axle 2 Right	0.625	2.25	inch
Air Pressure at Glad Hand			
Max press during test	26	96	PSI



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