



U.S. Department
of Transportation

1200 New Jersey Ave SE
Washington, D.C. 20590

**National Highway
Traffic Safety
Administration**

Trip Report

Date: Feb 2, 2023

Subject: PE21-017 Triumph Brakes – [REDACTED] Bike Inspection

Attendees: Santiago Maldonado MHDVD
Nate Seymour MHDVD Team Lead

We met [REDACTED] at his HOR

[REDACTED]
Washington, DC [REDACTED]
[REDACTED]

Subject vehicle

2018 Triumph Street Triple

VIN: [REDACTED]

2,200 miles at start of inspection

We arrived separately from HOR at approximately 1000. Santiago drove and I rode. Weather was dry and partly cloudy and 35 degrees.

Santiago photographed the subject bike. We interviewed [REDACTED] to understand the functionality of the brake system and his concerns.

The bike has an adjustable front brake lever. Measurements were taken at minimum and maximum reach. See table below.

[REDACTED] normally rides "2 fingers" on the brake lever. He stated that the advanced rider courses he's taken taught this method. This is contrary to the advance ride course I took for Harley Davidsons. While 2 finger braking the lever will contact the 2 fingers that remain on the grip. However, the lever does not contact the grip if full hand braking (4 fingers on the brake lever). This was tested in minimum and maximum lever reach. In neither case was did the lever to contact the grip when maximum force was applied.

[REDACTED] has ridden on the track and desired to with this bike. He stated he has not taken this bike on the track due to the inconsistent brake performance. Additionally, he has used and listed other bikes on Riders-Share.com but has not done so with the subject bike due to concerns of inconsistent braking.



DOT AUTO SAFETY HOTLINE
888-DASH-2-DOT
888-327-4236



U.S. Department
of Transportation

1200 New Jersey Ave SE
Washington, D.C. 20590

**National Highway
Traffic Safety
Administration**

Per the VOQ he has had the brakes serviced/bleed three times which has not corrected the issue. Forum chat indicates that the caliper pistons are responsible for this inconsistency. Fluid may pass the pistons due to a manufacturing defect/deficiency.

Inspection:

Tire pressure

	OEM psi	Actual psi
Front	33	34.5
Rear	44	39.5

Front Brake Lever Travel

Measurement	1 st	2 nd	3 rd	Average	Delta
Single Pull	0.948"	0.850"	0.912"	0.903"	1.397"
Double Pull	1.285"	1.265"	1.171"	1.240"	1.160"
Minimum Setting				2.30"	
Difference S & D pull					0.337"
Single Pull	1.708"	1.542"	1.780"	1.677"	0.968"
Double Pull	1.818"	1.858"	2.003"	1.893"	0.752"
Maximum Setting				2.645"	
Difference S & D pull					0.216"

Measurements were taken between one point on the grip and the brake lever perpendicular to the closest point of the lever in its fully released position.

Dynamic Braking Tests

		1 st	2 nd	3 rd	Average	
Single Pull	Rear only	27'	27.5'	28	27.5'	
	Front only	11'	11'	11'	11'	
	F & R	11'	10.5'	10.5'	10.67'	
Double Pull	Front only	10'	10.5'	11'	10.5'	
	F & R	9.5'	8.5'	8'	8.67'	

This consisted of accelerating the bike to 20mph (digital dash) then initiating fully braking ability as the front wheel crossed the tap line. The brake lever was in the



DOT AUTO SAFETY HOTLINE
888-DASH-2-DOT
888-327-4236



U.S. Department
of Transportation

1200 New Jersey Ave SE
Washington, D.C. 20590

**National Highway
Traffic Safety
Administration**

minimum reach position. Stopping distance measurements were then taken from the center of the rear wheel back to the line. In all test I attempted to activate the ABS. This was felt in the lever as a pulsing. Front only, single pull was run twice due to aggressiveness/comfort of bike progressed. The first set averaged 14.5' with one outlier.



DOT AUTO SAFETY HOTLINE
888-DASH-2-DOT
888-327-4236



U.S. Department
of Transportation

1200 New Jersey Ave SE
Washington, D.C. 20590

**National Highway
Traffic Safety
Administration**



Screen shot of weather



DOT AUTO SAFETY HOTLINE
888-DASH-2-DOT
888-327-4236



U.S. Department
of Transportation

1200 New Jersey Ave SE
Washington, D.C. 20590

**National Highway
Traffic Safety
Administration**



Rear Wheel – right side



www.nhtsa.dot.gov
nhtsa ★
people saving people

DOT AUTO SAFETY HOTLINE
888-DASH-2-DOT
888-327-4236



U.S. Department
of Transportation

1200 New Jersey Ave SE
Washington, D.C. 20590

**National Highway
Traffic Safety
Administration**



Rear wheel – brake rotor and caliper, right side



www.nhtsa.dot.gov
nhtsa
people saving people

DOT AUTO SAFETY HOTLINE
888-DASH-2-DOT
888-327-4236



U.S. Department
of Transportation

1200 New Jersey Ave SE
Washington, D.C. 20590

**National Highway
Traffic Safety
Administration**



Rear tire



DOT AUTO SAFETY HOTLINE
888-DASH-2-DOT
888-327-4236



U.S. Department
of Transportation

1200 New Jersey Ave SE
Washington, D.C. 20590

**National Highway
Traffic Safety
Administration**



Front brake caliper, left side – note brake pads



DOT AUTO SAFETY HOTLINE
888-DASH-2-DOT
888-327-4236



U.S. Department
of Transportation

1200 New Jersey Ave SE
Washington, D.C. 20590

**National Highway
Traffic Safety
Administration**



Front brake caliper, right side – note brake pads



www.nhtsa.dot.gov
nhtsa ★
people saving people

DOT AUTO SAFETY HOTLINE
888-DASH-2-DOT
888-327-4236



U.S. Department
of Transportation

1200 New Jersey Ave SE
Washington, D.C. 20590

**National Highway
Traffic Safety
Administration**



Front wheel – right side view



www.nhtsa.dot.gov
nhtsa ★
people saving people

DOT AUTO SAFETY HOTLINE
888-DASH-2-DOT
888-327-4236



U.S. Department
of Transportation

**National Highway
Traffic Safety
Administration**

1200 New Jersey Ave SE
Washington, D.C. 20590



Digital Dash



www.nhtsa.dot.gov
nhtsa
people saving people

DOT AUTO SAFETY HOTLINE
888-DASH-2-DOT
888-327-4236



U.S. Department
of Transportation

1200 New Jersey Ave SE
Washington, D.C. 20590

**National Highway
Traffic Safety
Administration**



Side view – Right side



DOT AUTO SAFETY HOTLINE
888-DASH-2-DOT
888-327-4236



U.S. Department
of Transportation

1200 New Jersey Ave SE
Washington, D.C. 20590

**National Highway
Traffic Safety
Administration**



Front brake rotor – right side view



www.nhtsa.dot.gov
nhtsa ★
people saving people

DOT AUTO SAFETY HOTLINE
888-DASH-2-DOT
888-327-4236



U.S. Department
of Transportation

1200 New Jersey Ave SE
Washington, D.C. 20590

**National Highway
Traffic Safety
Administration**



Front brake lever. Note adjustment mechanism. No indents, continuous variability.



www.nhtsa.dot.gov
nhtsa
people saving people

DOT AUTO SAFETY HOTLINE
888-DASH-2-DOT
888-327-4236



U.S. Department
of Transportation

**National Highway
Traffic Safety
Administration**

1200 New Jersey Ave SE
Washington, D.C. 20590



Front tire and brake caliper – side view



www.nhtsa.dot.gov
nhtsa
people saving people

DOT AUTO SAFETY HOTLINE
888-DASH-2-DOT
888-327-4236



U.S. Department
of Transportation

1200 New Jersey Ave SE
Washington, D.C. 20590

**National Highway
Traffic Safety
Administration**



Front tire – front view



www.nhtsa.dot.gov
nhtsa
people saving people

DOT AUTO SAFETY HOTLINE
888-DASH-2-DOT
888-327-4236



U.S. Department
of Transportation

1200 New Jersey Ave SE
Washington, D.C. 20590

**National Highway
Traffic Safety
Administration**



Front brake fluid reservoir – rear view.



www.nhtsa.dot.gov
nhtsa
people saving people

DOT AUTO SAFETY HOTLINE
888-DASH-2-DOT
888-327-4236



U.S. Department
of Transportation

1200 New Jersey Ave SE
Washington, D.C. 20590

**National Highway
Traffic Safety
Administration**



Front brake fluid reservoir – front view.



www.nhtsa.dot.gov
nhtsa ★
people saving people

DOT AUTO SAFETY HOTLINE
888-DASH-2-DOT
888-327-4236



U.S. Department
of Transportation

1200 New Jersey Ave SE
Washington, D.C. 20590

**National Highway
Traffic Safety
Administration**



Geared up for safety



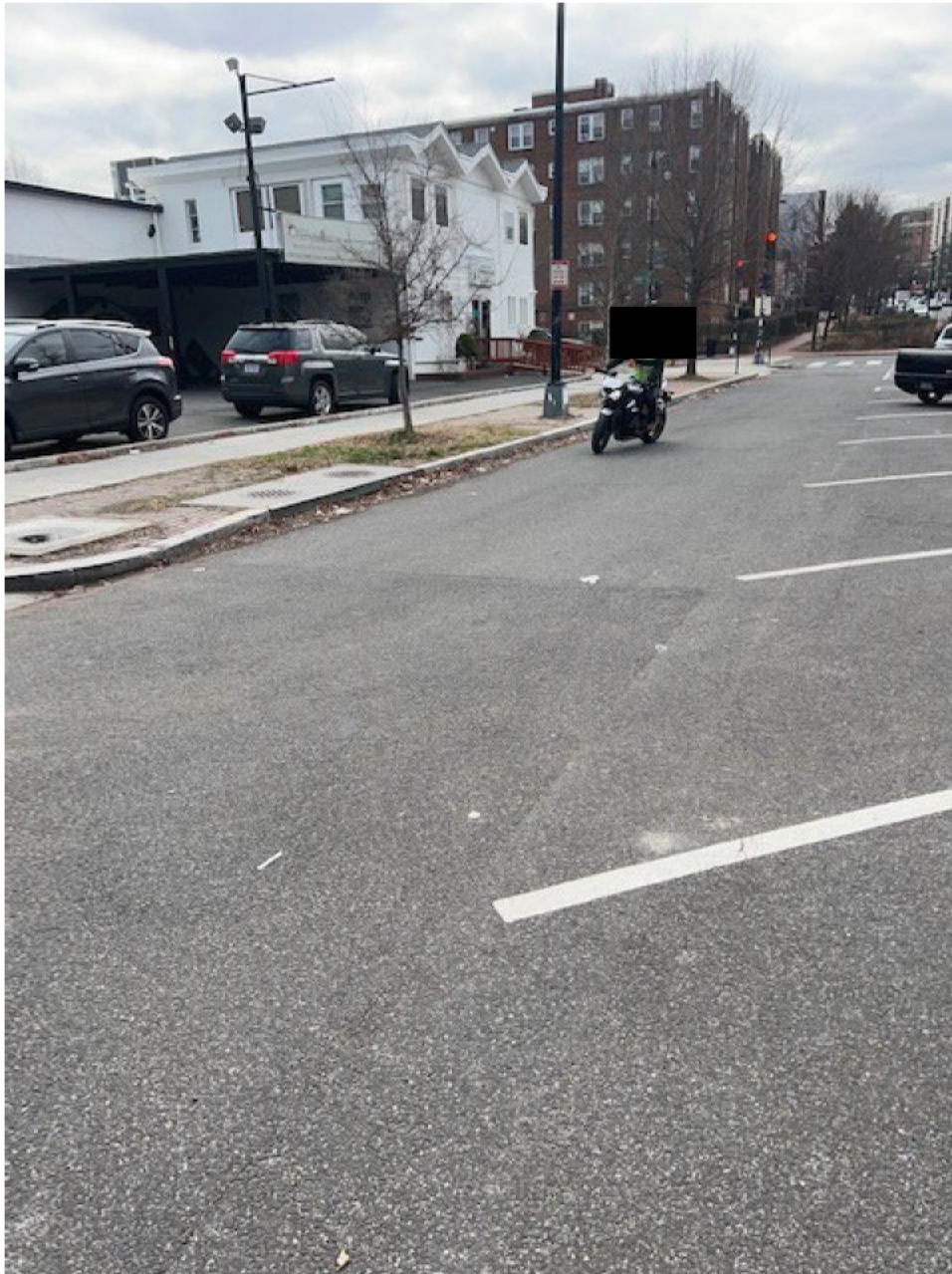
DOT AUTO SAFETY HOTLINE
888-DASH-2-DOT
888-327-4236



U.S. Department
of Transportation

1200 New Jersey Ave SE
Washington, D.C. 20590

**National Highway
Traffic Safety
Administration**



Test Area: turn around area



DOT AUTO SAFETY HOTLINE
888-DASH-2-DOT
888-327-4236



U.S. Department
of Transportation

1200 New Jersey Ave SE
Washington, D.C. 20590

**National Highway
Traffic Safety
Administration**



Test Area. Note Blue line used as brake initiation point. Yellow tap measure on right side



www.nhtsa.dot.gov
nhtsa
people saving people

DOT AUTO SAFETY HOTLINE
888-DASH-2-DOT
888-327-4236



U.S. Department
of Transportation

1200 New Jersey Ave SE
Washington, D.C. 20590

**National Highway
Traffic Safety
Administration**



Test Area. Note Blue line used as brake initiation point. Yellow tap measure on right side



www.nhtsa.dot.gov
nhtsa
people saving people

DOT AUTO SAFETY HOTLINE
888-DASH-2-DOT
888-327-4236