



U.S. Department
of Transportation

**National Highway
Traffic Safety
Administration**

ODI RESUME

Investigation: PE 14-007
Date Opened: 03/20/2014
Investigator: Robert Young
Approver: Frank Borris
Subject: Front brake malfunction - Motorcycle

Date Closed: 05/08/2014
Reviewer: Bruce York-B

MANUFACTURER & PRODUCT INFORMATION

Manufacturer: Westward Industries
Products: 2013 Westward GO-4
Population: 80

Problem Description: Loss of brake effectiveness caused by front brake pad ejection from the brake caliper.

FAILURE REPORT SUMMARY

	ODI	Manufacturer	Total
Complaints:	1	1	1**
Crashes/Fires:	0	0	0
Injury Incidents:	0	0	0
Fatality Incidents:	0	0	0
Other*:	1	0	1

*Description of Other: Technical Service Bulletin

** Total eliminates duplicates received by ODI and manufacturer.

ACTION / SUMMARY INFORMATION

Action: Recall 14V-210. Close this PE

Summary:

The Office of Defects Investigation (ODI) was contacted by a municipal fleet manager responsible for 49 GO-4 three-wheeled parking enforcement vehicles (subject vehicles). The fleet manager informed ODI of the possibility of front brake pad ejection from the brake caliper on the subject vehicles. Further, the fleet manager provided ODI with a copy of a Technical Service Bulletin (TSB ID: 10055374) that outlined a pad, rotor and brake caliper spacer replacement campaign. On the basis of his information, ODI opened this Preliminary Evaluation (PE) to investigate alleged front brake failure due to worn brake pad ejection.

Shortly after opening this PE, Westward Industries decided to address the problem with a Safety Recall, 14V-210. Based on this action by the manufacturer, this investigation is closed.

The ODI report cited above can be viewed at: <http://www-odi.nhtsa.dot.gov/owners/SearchNHTSAID> using complaint number 10566532 and TSB number 10055374.



Work Instruction

Title: Brake Rotor Change




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Step	Instruction	Visual Aid
1	<p>Inspect front brake caliper and determine if caliper is marked with a 20V or a 20S.</p> <p>20S no further action is required 20V proceed with pad, rotor and brake caliper spacer replacement</p> <p>Tools needed :</p> <p>Torque wrench 3/4 & 9/16 sockets 5/16 Allen key socket Long flat head screw driver 17mm socket Loctite 262 red</p>	
2	<p>Lift vehicle on approved lift or Jack up front of vehicle and safely secure with jack stands, never work on a vehicle supported only by a jack.</p> <p>Remove the wheel bolts. 17mm socket</p>	
3	<p>Use a screwdriver to loosen the caliper.</p>	



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Remove the caliper bolts.
3/4 inch socket

Place the brake caliper in safe place

Do not let it hang from brake hose.



5

Remove the shock bolt.
9/16 socket

Remove the axle bolts.
5/16 inch Allen key socket



6

Rotate the arm of the way.

Do not exert extra force on axle while it is hanging on right side arm only.

Remove solid brake rotor.

Install new vented rotor





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7	<p>Clean axle to leading arm mating surface</p> <p>Apply red Loctite 262. Make sure axle spacer is still in position.</p>	
8	<p>Rotate leading arm back into position and start the 3 -5/16 axle bolts by hand paying special attention not to strip the bolts or the axle.</p>	
9	<p>Tighten the axle bolts in three steps.</p> <ul style="list-style-type: none">1st. 25 ft-lb2nd. 45 ft-lb3rd. 55 ft-lb <p>At final re torque all 6 axle bolts to 55 ft-lb.</p> <p>Check the other side axle bolts to 55 ft-lb to make sure.</p>	
10	<p>Reinstall lower shock bolt and nut</p> <p>Tighten the shock bolt to 35 ft-lb.</p>	



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Reinstall brake caliper with new bolts and spacers supplier.
New spacers are 33.18mm in length
Bolts.....

Old spacers must be sent back to factory with VIN number.

Reinstall the caliper.

Tighten the caliper bolts to 50 ft-lb.

* old spacers are 39mm in length



12

Replace the wheel bolts.

Tighten the wheel bolts to 70 ft-lb.



13

Rotate front wheel assembly and make sure it spins freely.

Check the location of the rotor to the center of the caliper.

Lower vehicle from lift
Pump Brake pedal several times before starting.
Test drive

