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Dealer Operator / General Manager	Sales New Vehicles	Sales Used Vehicles	Business Manager (F&I)	Service	Parts & Accessories	Administration
Date: Bulletin #	5/6/2012 SV-ZMC-R-12-0045 MY 2012 Front Brake Recall 12V-307	Source: Name: Richard Kenton Title: Service and Technical Dept. Phone #: 888-786-9376 ext 52	Zero Motorcycles Aftersales Department		Program Period: N/A	

SERVICE BULLETIN (Safety Recall Code 12V-307): Front Brake System Brake-Light Switch

Purpose

Zero Motorcycles has determined that a condition affecting motor vehicle safety exists on certain 2011 Model Year S, DS, XD, MXD and XU and 2012 Model Year S, DS, X and XU motorcycles. These motorcycles have a front brake system brake-light switch that actuates at a brake lever travel point within a specified range. This brake lever travel range specification has been deemed too broad relative to ensuring that, on every motorcycle within the subject population, the switch actuation point and corresponding brake-light activation occur prior to moderate front brake application. This condition, if present on a motorcycle within this population, could lead to the brake-light not activating when moderate front braking is applied. Failure of the brake-light to activate when slowing down the motorcycle using moderate front braking may cause a diminished alert to drivers behind the motorcycle, which could lead to a possible crash and potential injury or death of the rider.

In the interest of motor vehicle safety and customer satisfaction, Zero Motorcycles has elected to initiate a voluntary recall (Campaign 12V-307) to remedy this defect, as detailed in this Service Bulletin, through the inspection and, if determined necessary, replacement of the front brake system brake-light switch with a switch manufactured to a revised actuation range that ensures brake-light activation prior to moderate front braking action. The parts necessary to perform this recall will be shipped to your dealership by Zero Motorcycles, free of charge, by no later than July 27, 2012.

As required by law, you may sell but NOT DELIVER any affected motorcycles to your customers until the remedy is completed.

Applicable Models

This recall applies to 2011 Model Year S, DS, XD, MXD and XU model motorcycles and 2012 Model Year S, DS, X and XU model motorcycles built on or before March 19, 2012. A VIN list specific to vehicles shipped to your dealership is available through Zero Motorcycles Customer Service.

Customer Notification

In accordance with Federal regulations administered by NHTSA, Zero Motorcycles Company will send a letter to registered owners of affected products notifying them of this safety-related condition and instructing them to contact their Dealer for the associated upgrade. A sample of the customer letter is attached. Zero Motorcycles will also try to contact these customers by telephone.

To protect the safety of our riders, it is our mutual responsibility to ensure the recall upgrade is performed on all affected motorcycles. Therefore, we strongly encourage you reach out to your customers to make sure that they are aware of this program. You are also required by law to perform the recall service on all affected motorcycles in your inventory prior to delivery to your customers.



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If you are aware of any unregistered owners of this affected motorcycle population, please advise us of their names, addresses and VINs so that we may mail them the owner's letter, as required by NHTSA.

If you are not sure that this safety recall has been performed on a particular motorcycle, please contact Zero Motorcycles Customer Service for verification.

Sample Owner Letter

Dear Zero Motorcycles Owner,

Recall # 12V-307

This notice is being sent to you in accordance with the requirements of the National Traffic and Motor Vehicle Safety Act.

Zero Motorcycles has decided that a defect which relates to motor vehicle safety exists on certain 2011 Model Year S, DS, XD, MXD and XU model motorcycles and 2012 Model Year S, DS, X and XU model motorcycles built on or before March 19, 2012. These motorcycles have a front brake system brake-light switch that actuates at a brake lever travel point within a specified range. This brake lever travel range specification has been deemed too broad relative to ensuring that, on every motorcycle within the subject population, the switch actuation point and corresponding brake-light activation occur prior to moderate front brake application. This condition, if present on a motorcycle within this population, could lead to the brake-light not activating when moderate front braking is applied. Failure of the brake-light to activate when slowing down the motorcycle using moderate front braking may cause a diminished alert to drivers behind the motorcycle, which could lead to a possible crash and potential injury or death of the rider. Zero Motorcycles has voluntarily initiated this recall to correct this condition.

Our records indicate that you purchased one of the motorcycles listed above.

We strongly urge you to contact your Zero Motorcycles dealer to make arrangements to have the appropriate service performed as soon as possible. Should you choose to ride your motorcycle prior to this service, we urge you to be aware of this condition.

Please contact your Zero Motorcycles dealer immediately and arrange an appointment to have your motorcycle repaired. The actual dealer labor time to perform this service will be less than one hour; however, due to scheduling, the dealer may require your motorcycle for a longer period of time. The parts and labor will be free of charge to you. Recall kits will be available at your dealer by no later than the week of July 30, 2012. To verify that the service has been completed, your Dealer will ask you to sign a recall claim.

If you no longer own this motorcycle, please contact us at 1 (888) 786-9376 ext 45 so we may update our records and notify the new owner. Federal regulation requires that any vehicle lessor receiving this recall notice must forward a copy of this notice to the lessee within ten days.

If you have had this defect repaired before you received this letter, you may be eligible to receive reimbursement for the cost of obtaining a pre-notification remedy of the problem associated with this recall. For more information contact Zero Motorcycles at 1 (888) 786-9376 ext 45.

If you take your motorcycle to your dealer on a mutually agreed upon date and they do not perform the required service to your satisfaction, please contact Zero Motorcycles for immediate assistance at the address or telephone number listed on this



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letter. If your dealer or Zero Motorcycles fails or is unable to remedy your motorcycle without charge within a reasonable time, you may wish to inform the Administrator, National Highway Traffic Safety Administration, 1200 New Jersey Avenue, SE, Washington, DC 20590, or call the toll-free hotline at 1-888-327-4236 (TTY: 1-800-424-9153); or contact NHTSA at <http://www.safercar.gov>.

We regret any inconvenience this may cause you, but we are initiating this action in the interest of your personal safety and satisfaction with our products. Thank you for your cooperation.

Sincerely,

Richard Kenton
 Director of Customer Service
 Zero Motorcycles, Inc.



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Service Procedure for 11MY and 12MY Front Brake System Brake-Light Switch Inspection and Replacement

TORQUE SPECIFICATIONS

Application	Metric	SAE
Headlight retaining bolts	1.35 Nm	1 ft-lbs

PARTS GUIDE

Part Number	QTY	Description
00-05456	1	Recall kit containing (all required parts)

Kit 00-05456 contents, for reference only.

Part Number	QTY	Description
25-05446-01	1	SWITCH FRONT BRAKE MC HAYES
20-00540	3	Cable tie #10 hole 8"
88-05455	1	2012 Recall Confirmation Card

TOOLS REQUIRED

- 3mm hex wrench
- Cable tie snips

Procedure: Step One - Inspection

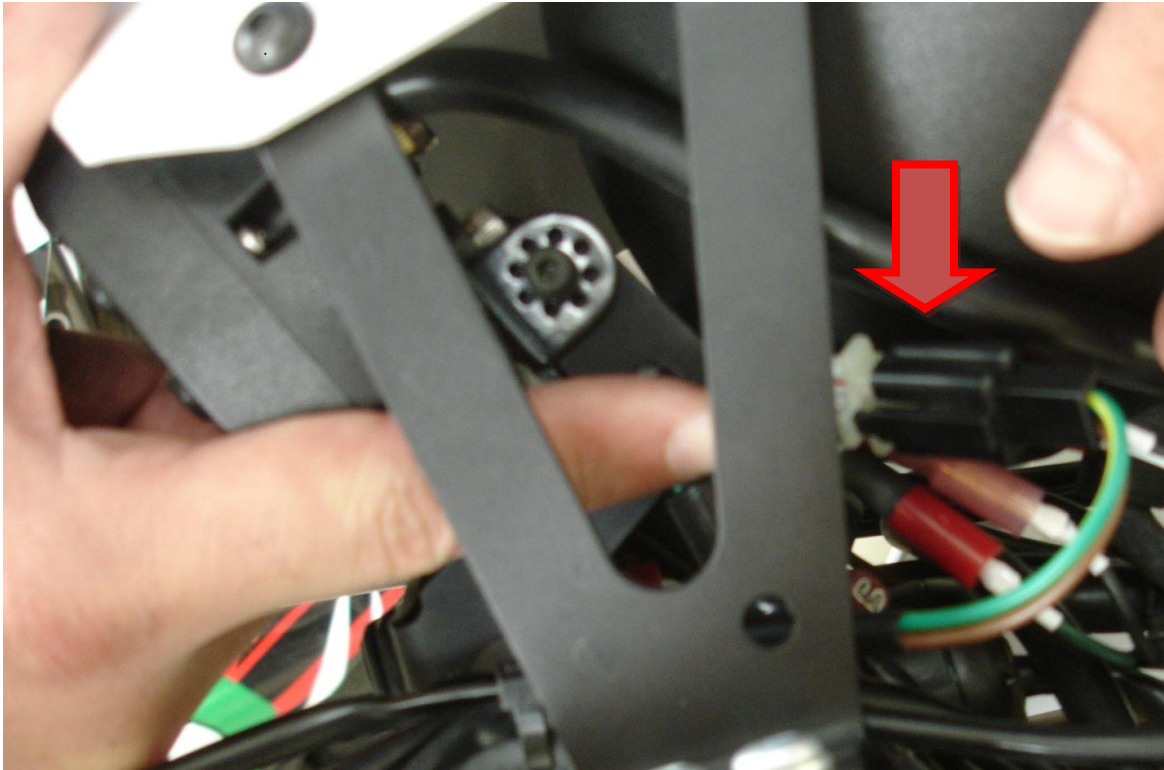
1. Making sure that the run/kill-switch is in the "kill" position; turn the motorcycle's key-switch on.
2. Stand on the left side, grip the handlebars and stand the bike up, with finger over front brake lever
3. Make sure you can see the brake light or have a co-worker spotting for you.
4. While rolling the bike forward at walking pace, not under motor power, gently and progressively apply pressure to front brake lever. If the front brake system engages and begins to appreciably resist the bike's forward motion, prior to the brake light actuating, then the Motorcycle has failed this test, and requires a brake light switch replacement.
5. If fail, go to step two
6. If pass, return to customer and create a Warranty claim for 15 minutes.



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Procedure: Step TWO, if found to be working incorrectly – Replacement

1. If you are working on 2012 or 2011 X, XD, MXD or XU:
You do not have to remove the headlight, simply follow the brake light switch to the connection plug and disconnected it, then clip the zip ties securing it in place.





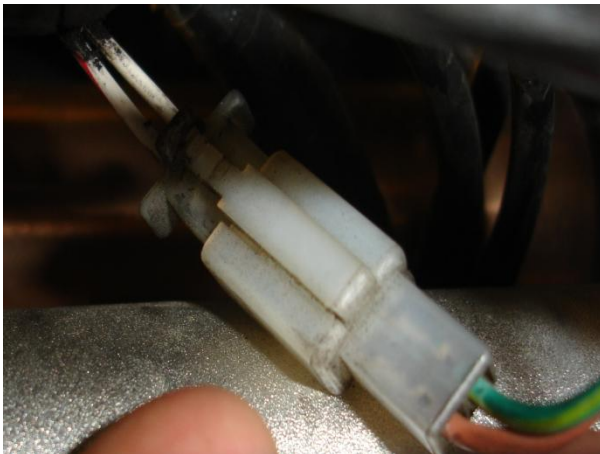
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- If you are working on 2011 S or DS:
You do not have to remove the headlight, simply follow the brake light switch to the connection plug (Fig. a) and disconnected it, then clip the zip ties securing it in place.



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Fig.a



XXXXXXXXXXXX	XXXXXXXXXXXX			XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX
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- If you are working on 2012 S or DS:
Using a 3mm hex wrench, remove the two upper M5 bolts and washers which fasten the headlight to the headlight bracket. See FIGURE 1 below.



Figure 1

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- Carefully rotate the headlight downwards to expose the brake light switch wires and connector. See FIGURE 2.

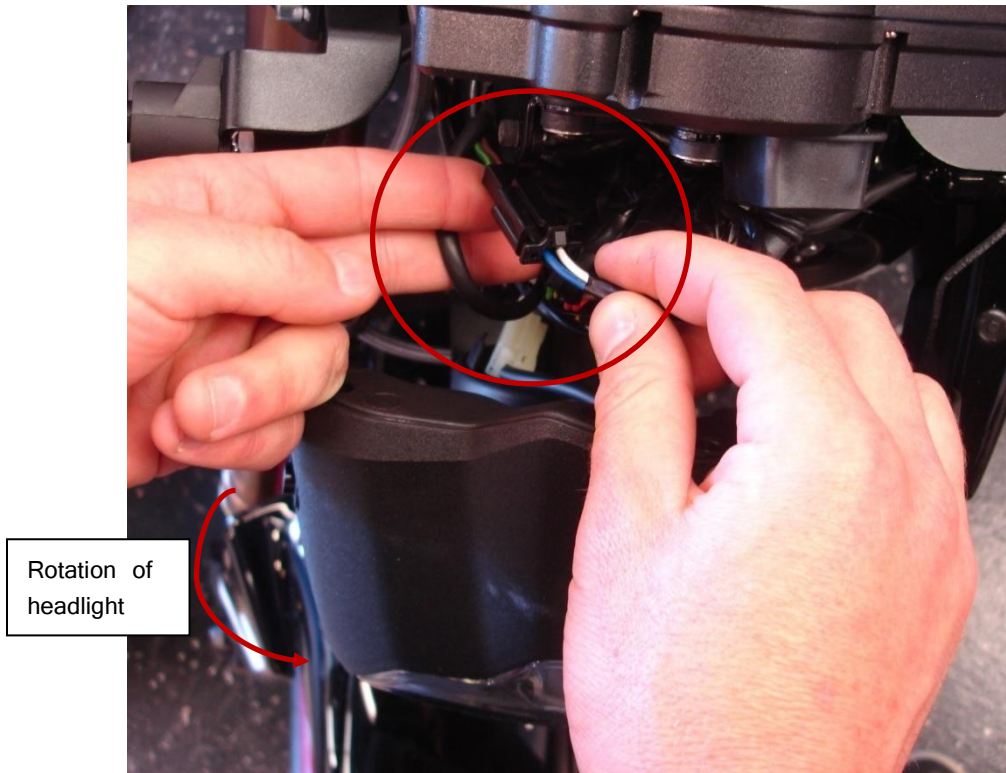


Figure 2

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5. Separate connector. Note the *brown and green wires* lead to the lever side of the brake switch. See FIGURE 3.

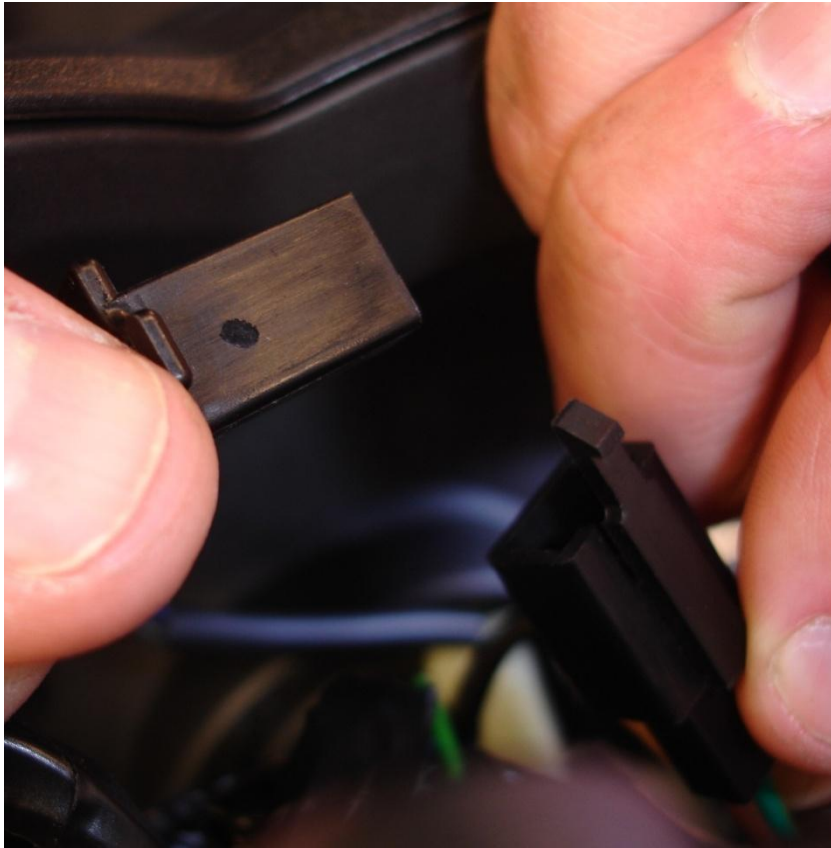


Figure 3

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- Note the location of the two cable ties in FIGURE 4. These cable ties are to be severed upon removal of the front brake switch in question.

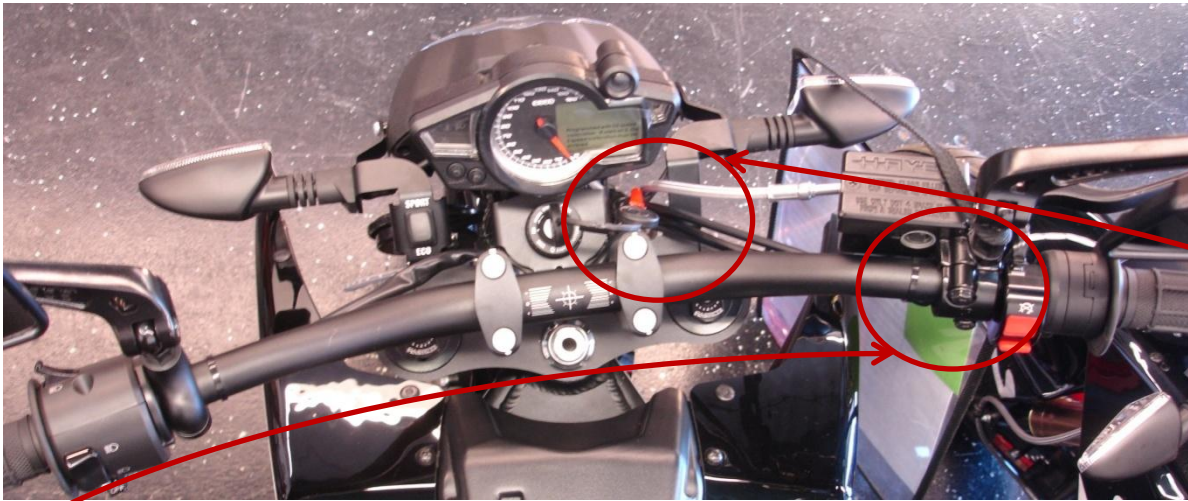


Figure 4

- Snip the two cable ties securing the brake light switch wires. See FIGURE 4, 5 and 6 for details



Figure 5



Figure 6

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8. Using a 3mm hex L-Key wrench (or similar prodding device), disconnect the switch from the master cylinder. Take care in depressing the tangs of the switch, as only light pressure is required to relieve the switch of its retaining feature. See FIGURE 7.



Figure 7

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9. Apply light pressure pulling the switch out of its socket. The switch should pop out with relative ease at this point. See FIGURE 8.

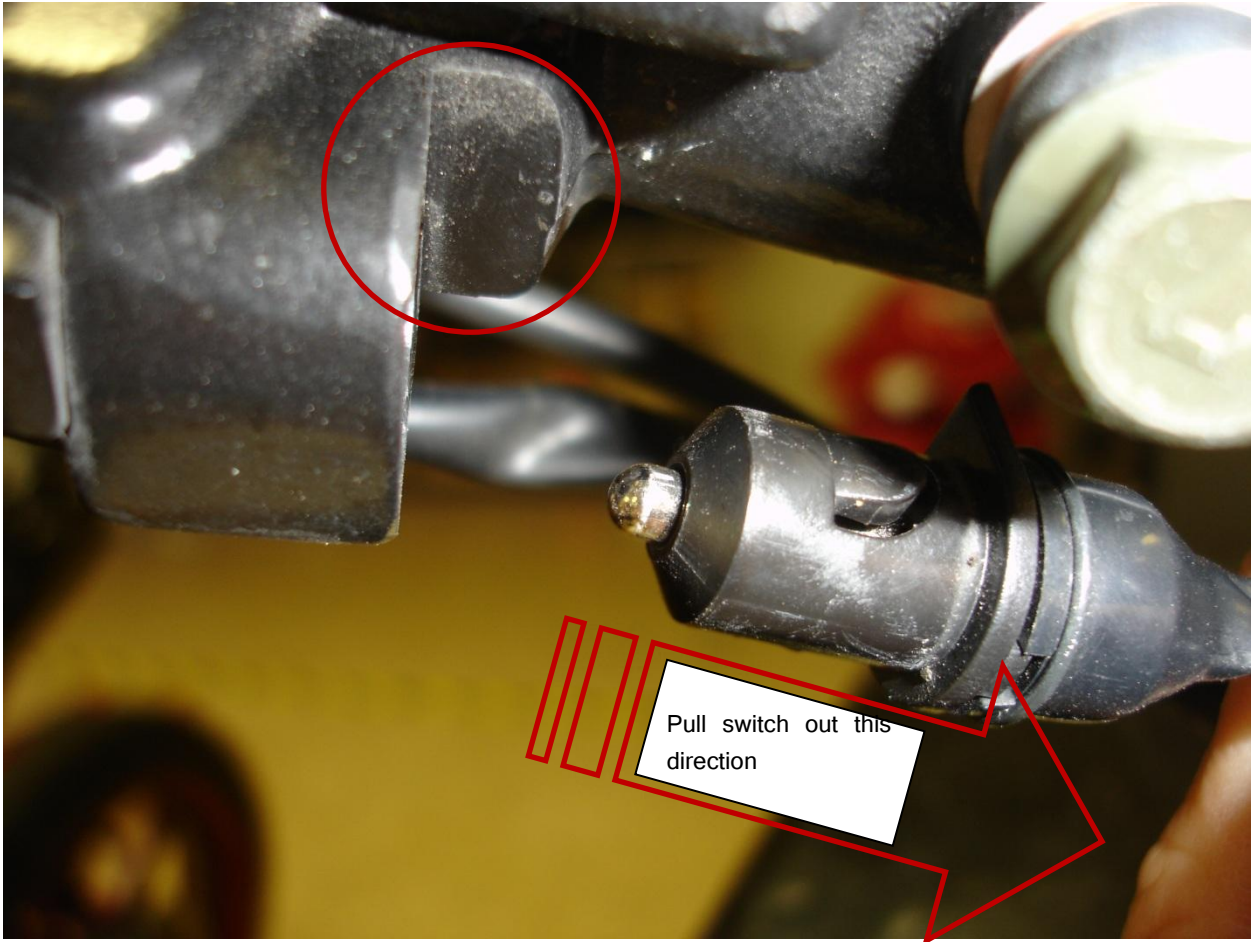


Figure 8

10. Installing the NEW switch is the reverse of removal procedure in the above steps. Do this now, noting the following steps.



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11. The following guidelines should be adhered to when installing the new switch.

- a. The flat side of the brake light switch should match up with the flat side on the master cylinder housing. See circled region in FIGURE 8 and 9.

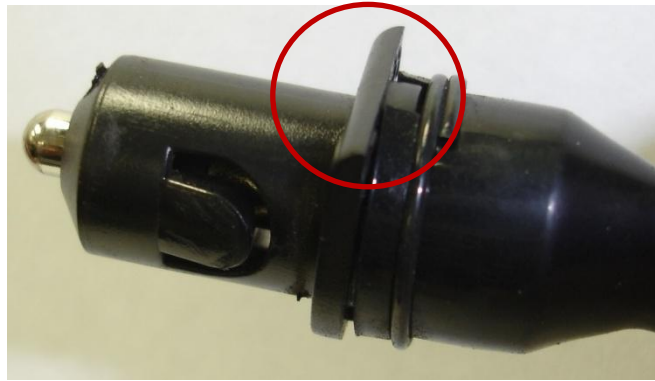


Figure 9

- b. Route the brake light switch wires per FIGURE 10.
- c. The brake switch and connector should make an audible 'click' when seated properly as the tangs engage. See FIGURE 11, 2 and 3.



Figure 10



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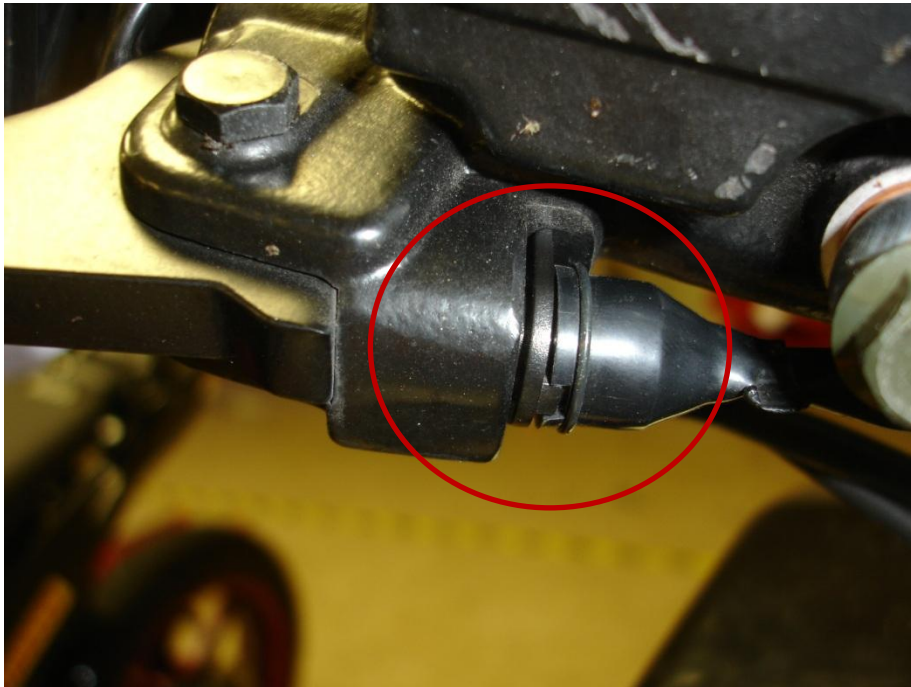


Figure 11

- d. When installing the two cable ties, and using a pair of flush-cut snips, trim the excess cable tie.
- e. **Torque** the two M5 button head cap screws removed in STEP 1 to **1 FT-LBS**.

12. Verify proper brake-light actuation is now operating correctly by using the inspection procedure in Step One of this bulletin.



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13. To verify that the service has been completed, please ask the customer or if dealer demo the service manager to sign a recall claim card supplied with parts kit.

Timing and reimbursement

Although all parts and labor is covered by Zero Motorcycles, any miscellaneous cost (Bike transportation) can be claimed.

It is necessary to denote a **Special Warranty Claim (type R – No. 045)** please refer to the Service Bulletin **R 045** in the Notes of the claim.

You are not required to order the part through the standard parts ordering method, these parts will auto ship.

The cost of the labor will be claimed at the flat rate manual of .25 hours (15 minutes), for procedure One. If required, the cost of the labor for both procedures One and Two will be claimed at the flat rate of .75 hours (45 minutes).

We kindly ask you to service affected motorcycles and submit their warranty claim not later than Aug 31, 2012.

Example of warranty submission:

Motorcycle VIN	1Z9X2P052ACA00023
Customer Name	Jeff Jolin
Battery serial number	N/A
Contact Tel #	888-786-9376 X 45
Comments	Jimmy (Zero trained Service tech) performed SV ZMC R 12-045, result was successful. Bike returned to customer. NHTSA Campaign Number: 12V-307

If you have any questions regarding warranty submission please reach out to the Customer Service hotline:
888-786-9376 ext 45 Jon M