



POLARIS®

TECHNICAL SERVICE BULLETIN

Date: December 19, 2016

GEM

Bulletin Number: L-16-01

Model Years: 2016-2017

Safety Bulletin

Service Bulletin

Service Alert Fax

Distribution: Owner/Principal Service Manager Sales Manager Parts Manager Technicians

This Service Bulletin is located at www.polarisdealers.com

-Confidential and Proprietary-

VERSION: R01 (December 19, 2016)

IMPORTANT STOP SALE SAFETY NOTICE!

STOP SELLING ALL GEM VEHICLES IMMEDIATELY UNTIL THE REPAIR PROCEDURE HAS BEEN COMPLETED ON ALL AFFECTED UNITS AT YOUR DEALERSHIP

IMPORTANT

If you are working with a printed copy, please verify you have the most current version of these instructions.

SUBJECT:

2016-2017 GEM Drive-Mode Switch Replacement

PURPOSE:

The drive-mode switch can send an out-of-tolerance electrical signal to the vehicle controller, resulting in an incorrect drive direction selection. This failure may occur intermittently and does not occur in all drive-mode selections.

When the vehicle is shifted into Forward, an out-of-tolerance signal may cause the vehicle controller to shift into reverse. The unexpected vehicle movement may result in an accident.

Your service department **MUST** perform the following actions as directed by this Safety Bulletin:

1. Each member of your service department team must review this Safety Bulletin in its entirety.
2. Each member of your service department team must watch the training video prior to ordering **ANY** parts, completing **ANY** work, or submitting **ANY** warranty claim for this Safety Bulletin.

AFFECTED MODELS

MODEL YEAR	MODELS	MODEL NUMBERS		VEHICLE IDENTIFICATION NUMBER RANGE
2016-2017	E2, E4, E6, EL XD	L16G2AGAEA L16G2AGALA L16G2DGALA L16G4AGAEA L16G4AGALA L16G6AGALA L16G6AGAMA	L17G2AGAEA L17G2AGALA L17G2DGALA L17G4AGAEA L17G4AGALA L17G6AGALA	Reference "Unit Inquiry" on the dealer website or the Service Bulletin list on the STOP site to lookup affected units.

CUSTOMER NOTIFICATION

A customer notification letter will be sent to all registered owners of affected vehicles. In addition to the notification letter sent by Polaris, dealers are required to review sales records and contact consumers who have purchased a potentially affected vehicle. Make arrangements to perform the steps outlined in this Safety Bulletin immediately.

WARRANTY CLAIM / PARTS INFORMATION

Service and safety bulletin parts are excluded from the standard RMA policy and cannot be returned. To assure we can update as many units as soon as possible, please only place orders to update units in current inventory and customer units.

SAFETY BULLETIN #	L-16-01
CLAIM TYPE	SB (Service Bulletin)
LABOR ALLOWANCE	1.2 hrs (72 minutes)
PART NUMBER / DESCRIPTION	2207155 (QTY 1) K-GEAR SELECT 7170107 (QTY 1) BULLETIN COMPLETION DECAL
PARTS AVAILABILITY	Available to order in limited quantities
UNIVERSITY OF POLARIS VIDEO TRAINING REQUIREMENT	YES*
PHOTO REQUIREMENT	NO

*Polaris requires one person from a dealership to be certified before parts ordering may occur and two people from a dealership to be certified before warranty claims may be processed.

ACCESSORY REMOVE & REPLACE LABOR

Polaris will cover labor for the removal and installation of accessories required to complete the bulletin work. Follow the steps below to obtain reimbursement.

For accessory removal and installation up to 1 hour of labor:

1. Start a new warranty claim under the Service and Warranty dropdown and enter the VIN.
2. Enter the Date Failed and Date Repaired information into the applicable fields.
3. Enter "L-16-01" in the Authorization field.
4. Enter the miles and hours.
5. Enter the labor time up to 1 hour.
6. Enter "L-16-01" in the CONCERN and CAUSE fields. In the CORRECTION field, enter "ACCESSORY REMOVAL AND INSTALLATION".
7. Add part 0000511, quantity 1.
8. Enter warranty fail codes 127/401/152.
9. Validate the parts.
10. Save and submit the claim to Polaris.

For accessory removal and installation over 1 hour of labor:

1. Start a new Ask Polaris Case, Service & Warranty Question > Authorization: Non-Cosmetic & Polaris ESC or Authorization: Out of Warranty.
2. Enter your contact information and VIN, along with miles and hours into the applicable fields.
3. Enter "L-16-01" in the CONCERN and CAUSE fields. In the CORRECTION field, enter "ACCESSORY REMOVAL AND INSTALLATION".
4. Enter warranty fail codes 127/401/152.
5. Add part 0000511, quantity 1.
6. Attach photos of the vehicle and accessories sufficient to support the labor time requested.
7. Submit the case to Polaris.

TRANSPORT & MOBILE SERVICE REIMBURSEMENT:

Polaris will cover up to 1 hours of labor for dealer transport, or travel to the affected vehicle(s) to perform the bulletin. Polaris understands that not all situations will require this and recommend that dealers work with the customers to determine the best solution for their situation. Follow the steps below to obtain travel/transportation reimbursement.

1. Start a new warranty claim under the Service and Warranty dropdown and enter the VIN.
2. Enter the Date Failed and Date Repaired information into the applicable fields.
3. Enter "L-16-01" in the Authorization field.
4. Enter the miles and hours.
5. Enter the labor time up to 1 hour.
6. Enter "L-16-01" in the CONCERN and CAUSE fields. In the CORRECTION field, enter "TRAVEL LABOR".
7. Add part 0000511, quantity 1.
8. Enter warranty fail codes 127/401/152.
9. Validate the parts.
10. Save and submit the claim to Polaris.

WARRANTY COVERAGE PERIOD

Warranty coverage for Safety Bulletin L-16-01 will begin 12/19/2016. This bulletin has no expiration date.

DISPOSAL INFORMATION

Under no circumstances shall the parts removed in this repair be re-used, sold, or re-purposed for another application. It is your dealership / distributor's responsibility to make sure every part replaced (related to this bulletin) is taken out of circulation and disposed of properly.

SERVICE BULLETIN COMPLETION DECAL

A Service Bulletin Completion Decal must be completed for this bulletin repair. Remove the hood and place the decal on an easily visible portion of vehicle. If you require more decals, order them through normal Polaris parts ordering channels.

Sincerely,



Doug Koch
Technical Service and Warranty Director

IMPORTANT

Several steps of this procedure require an audit by another dealership representative other than the technician who is completing the repair. Completing these check backs is a critical component to ensuring the repair has been properly completed.

An audit checklist will be provided with each kit. It must be completed and retained with the instruction sign-off and repair order.

AUDIT CHECKLIST

- Confirm the new drive-mode switch is mounted correctly, fits properly, and is well retained.
- Confirm the correct wires were paired, and the solder splices were properly installed and heated.
- Verify that the new right-hand stalk has been installed, and confirm the stalk arm cannot be actuated up and down.
- Verify that the tilt shock fastener was torqued using a torque wrench set to the correct specification. Mark the fastener with a paint pen to indicate the audit has been completed. Torque value: **96 in-lbs (11 Nm)**.
- Confirm the gauge display corresponds to selected switch mode, and vehicle operates correctly in all drive modes.
- Verify that the wiper, hazards, and washer all function properly.

UNIVERSITY OF POLARIS VIDEO TRAINING REQUIREMENT

Each member of your service department team must watch the training video on University of Polaris prior to completing any work, or submitting ANY warranty claim for this Safety Bulletin. You must watch the video through the University of Polaris in order to get credit for watching the video.

www.universityofpolaris.com

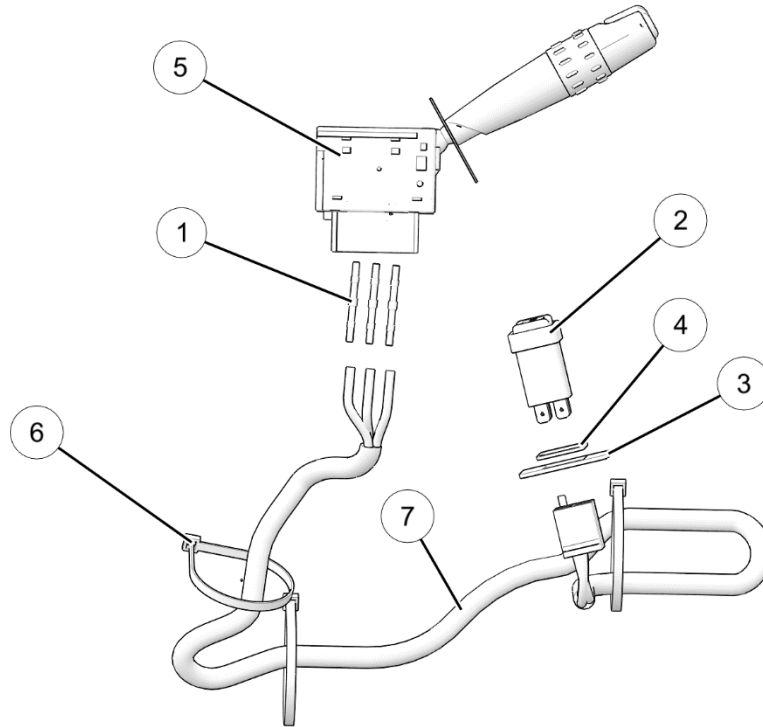
FEEDBACK FORM

A feedback form has been created for the technician to provide POLARIS with an overall satisfaction rating for the instructions, provide comments on your experience or upload pictures/videos from a specific repair. This feedback form is viewable on a mobile device by scanning the QR code shown or by clicking [HERE](#) if viewing this document electronically.

FEEDBACK FORM



KIT CONTENTS (P/N 2207155)



REF	PART DESCRIPTION	PART NUMBER	QTY
①	Solder Splice	2410784	4
②	Drive-Mode Switch	4017093	1
③	Drive-Mode Switch Bracket	5264445	1
④	Drive-Mode Switch Gasket	5814621	2
⑤	Right-hand Stalk Switch	4017076	1
⑥	Cable Ties	7080492	3
⑦	Wire Harness	2413938	1
	Kit Instructions	9928058	1
	Printed Stencil	9928115	1

DRIVE-MODE SWITCH REPLACEMENT

Tools Required:

- Heat Gun
- Side Cutters
- Wire Stripper
- Multi-Function Pliers
- 4 mm Allen
- 10mm Wrench
- T20 Torx driver
- T25 Torx driver
- Phillips Screwdriver
- Drill
- Drill Bit – 5/32" (4 mm)
- Saw/Cutting Tool

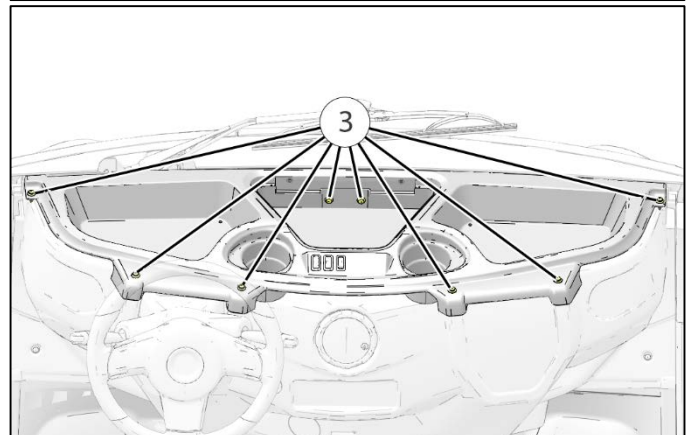
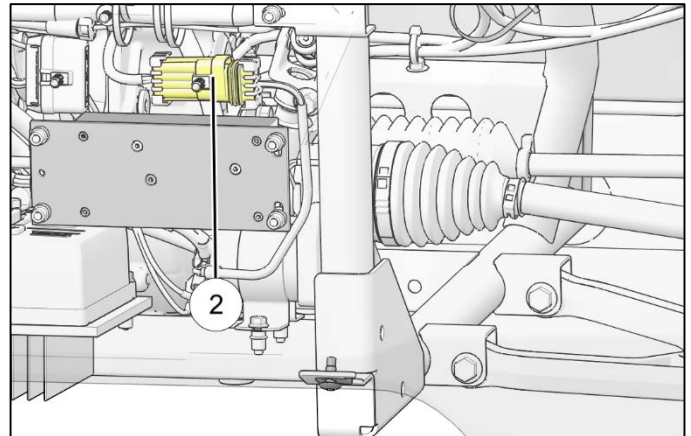
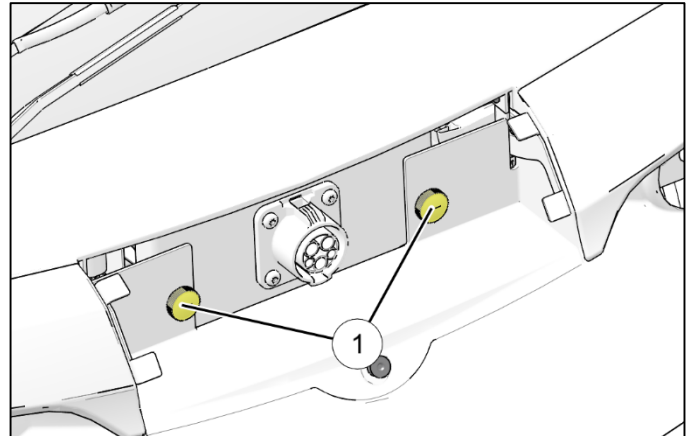
REMOVAL

1. Engage parking brake. Turn key to "Off" position and remove from vehicle.
2. Remove the two hood screws ① located under to charge port door and remove the hood.
3. Disconnect the service disconnect plug ② located under the horn assembly, beneath the hood on the LH side.

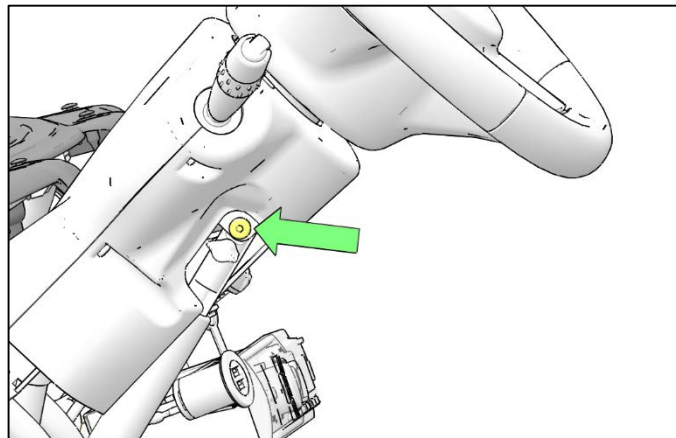
CAUTION

Failure to disconnect the service disconnect plug may result in electrical short damage to the vehicle electrical systems.

4. Remove the eight plastic push rivets ③ securing the dash to the frame.
5. Slightly raise the dash and unplug any switch connections located between the cup holders.
6. Carefully remove the dash from the vehicle.



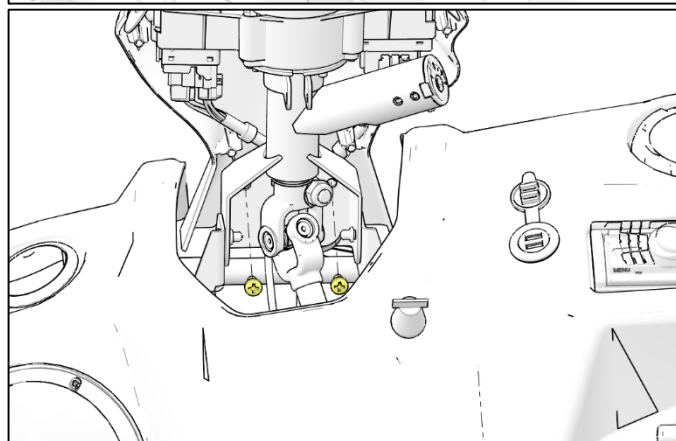
7. **For vehicles equipped with tilt steering ONLY.**
Remove the allen bolt retaining the tilt shock to the steering column. Move tilt shock down and out of the way.



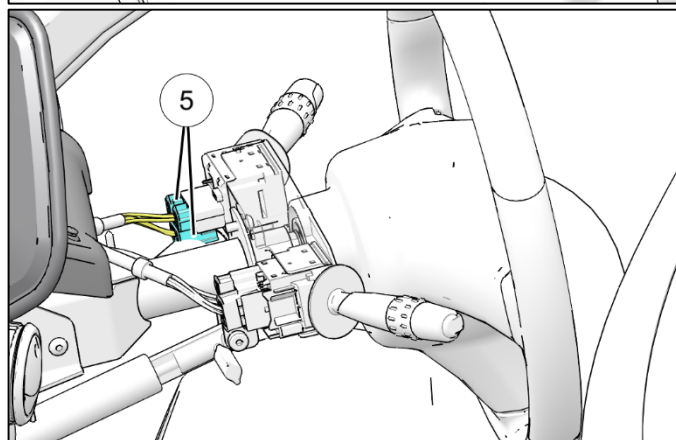
8. Remove the four screws (4) fastening the lower steering wheel cover and remove the lower steering wheel cover from the vehicle.



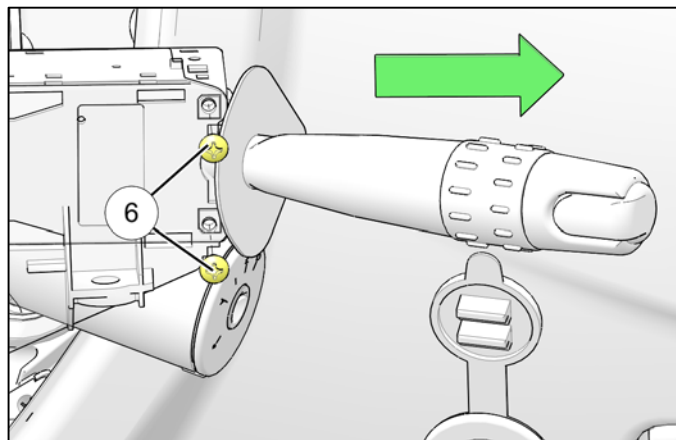
9. Remove the two screws retaining the upper steering wheel cover to the tilt bracket and remove the upper steering wheel cover.



10. Disconnect the right-hand shift stalk switch connectors (5).



11. Remove the two screws ⑥ retaining the right-hand shift stalk switch.
12. Slide the stalk out of the channel as shown to remove it from the vehicle and DISCARD.



INSTALLATION

1. Locate the stencil provided in the kit.
2. Use a scissors to cut along the stencil and switch outlines.
3. Align the stencil with the dash features and tape the stencil to the vehicle dash.
4. Clearly trace the switch outline on the dash and remove the stencil.
5. Using a 5/32" (4 mm) drill bit, drill out each of the corners of the switch outline.

CAUTION

Use caution to avoid damage to components and wiring behind the vehicle dash.

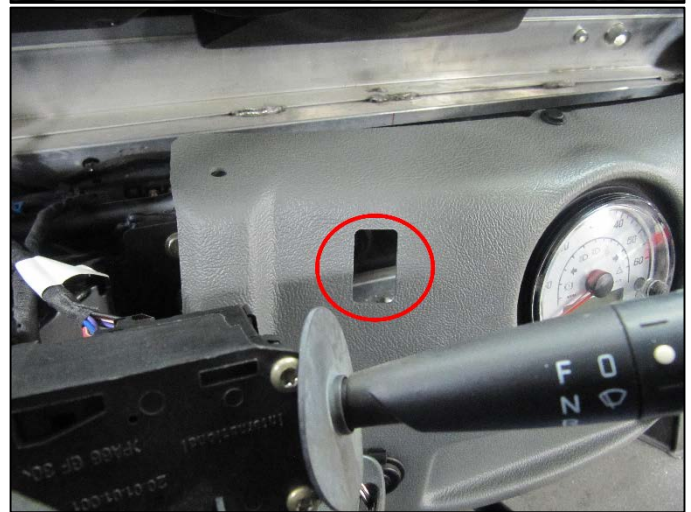
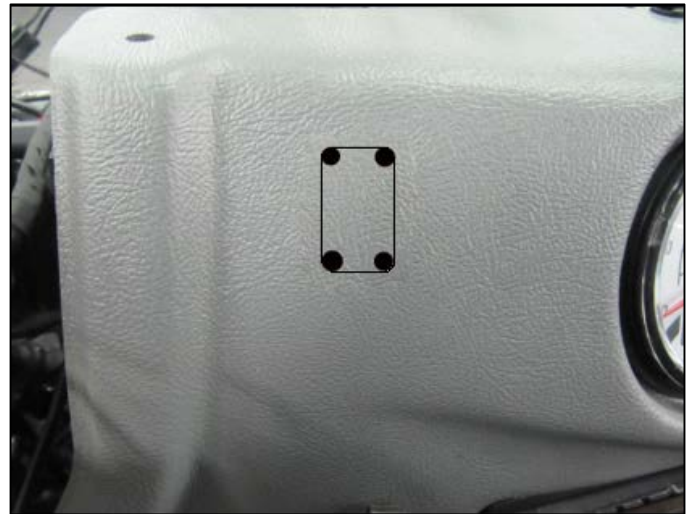
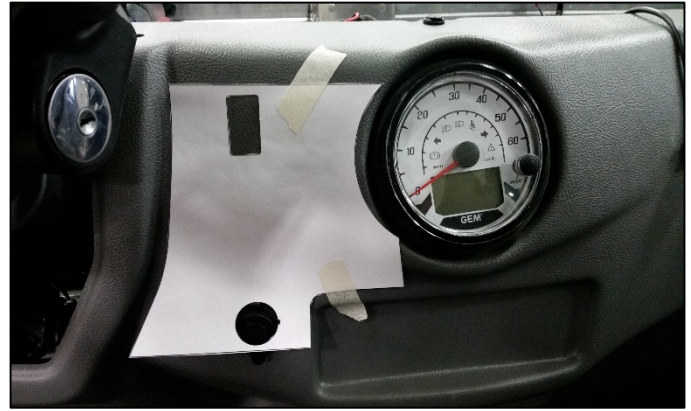
6. Using a cutting wheel or alternate cutting tool, cut along the outline of the switch.

IMPORTANT

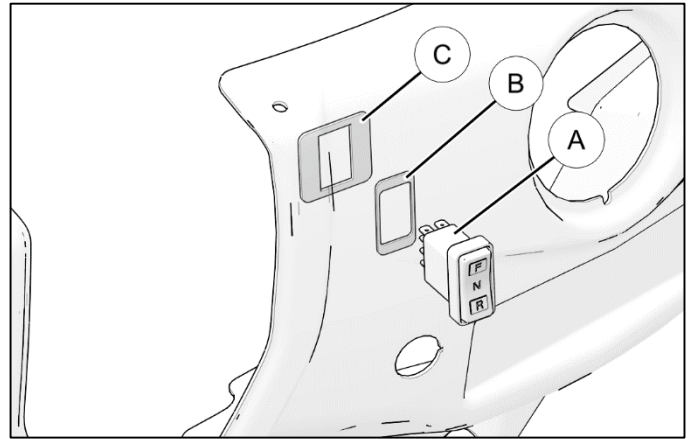
Cut along the inside of your traced line to ensure the hole is not too big or the wrong shape.

CAUTION

Use caution to avoid damage to components and wiring behind the vehicle dash.



7. Locate the new drive-mode switch (A).
8. Install rubber gasket to back-side of switch (B).
9. Orient the new drive-mode switch so that the drive-mode indicator letters can be read, and firmly press switch into the cut-out to engage the retaining tabs.
10. Install bracket mount (C) onto the back of the switch behind the dash, engaging retaining tabs.



11. Attach wire harness to switch.

IMPORTANT – AUDIT STEP

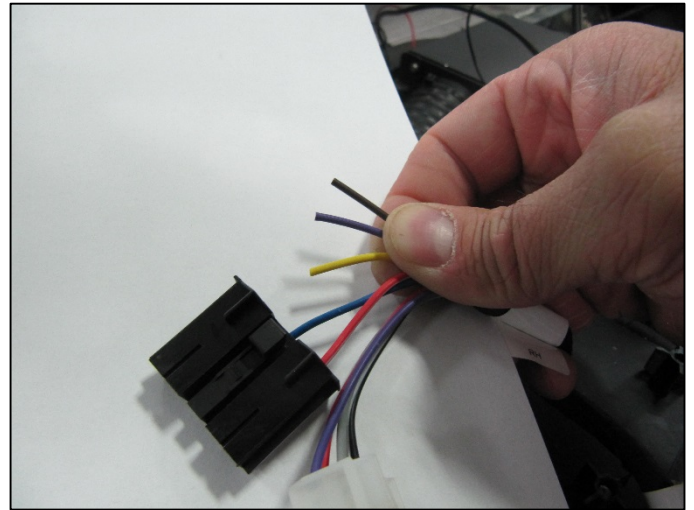
A secondary dealer representative must confirm that the new drive-mode switch is mounted correctly, fits properly, and is well retained.



12. Locate the black connector for the right-hand stalk switch that was disconnected earlier.
13. Remove approximately two inches of the tape back from the wires to the Y-junction. Cut the cable tie if applicable.
14. Locate the brown, violet, and yellow-white wires on the black connector.



15. Cut the brown, violet, and yellow-white wires flush with back side of the black connector as shown.



16. Strip the brown, violet, and yellow-white wires. The strip length must be approximately 1/4".

MEASUREMENT
Wire Strip Length: 1/4" (6 mm)

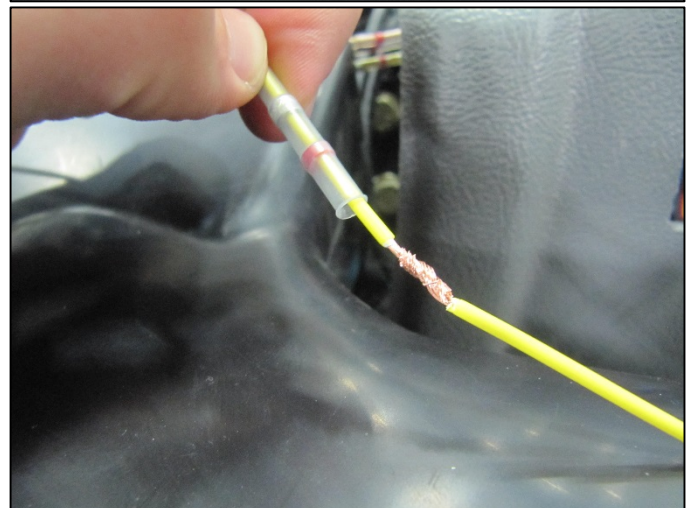
17. Slide the solder sleeve over a wire from the vehicle harness wires as shown.



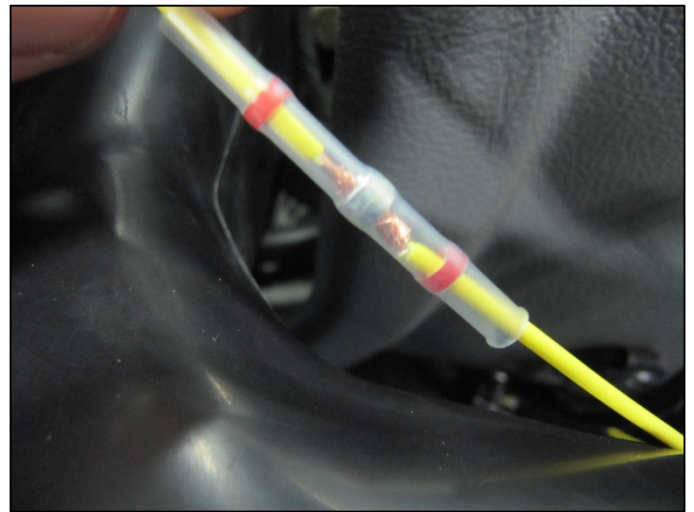
18. Locate the corresponding wire from the right-hand stock harness.

- a. Violet to Violet
- b. Brown to Brown
- c. Yellow-White to Yellow-Brown

19. Tightly twist the wires together as shown.



20. Center the solder sleeve over the twisted wires



21. Evenly apply heat to the solder sleeve until the sleeve has contracted and the solder ring has evenly melted into the wires.

IMPORTANT – AUDIT STEP

A secondary dealer representative must confirm the correct wires were paired, and the solder splices were properly installed and heated.

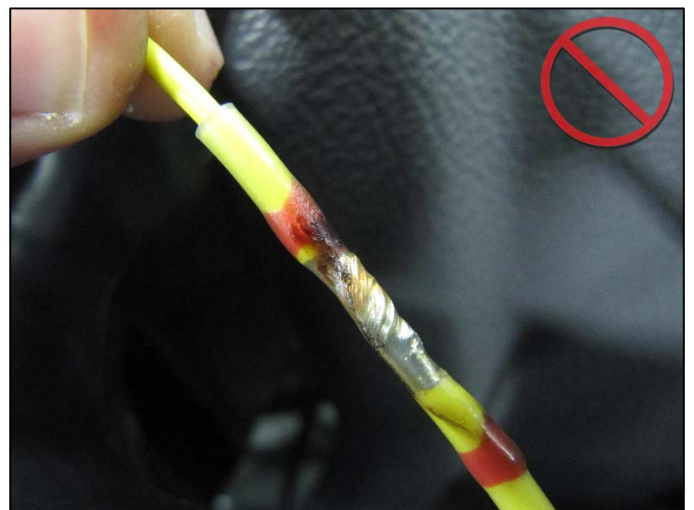
22. Repeat steps 17-21 for each pair of wires.



Acceptable – Solder is fully melted and sleeve has contracted.



Unacceptable – Inadequate heat. Contour of the solder ring is clearly visible.



Unacceptable – Excessive heat. Sleeve is burnt and has left the wires exposed.

23. Install the new right-hand stalk switch onto the vehicle.
Torque screws ⑦ to specification.

TORQUE

Right-hand Stalk Screw:
24 in-lbs (3 Nm)

IMPORTANT – AUDIT STEP

A secondary dealer representative must verify that the new right-hand stalk switch has been installed and confirm the stalk arm cannot be actuated up and down.

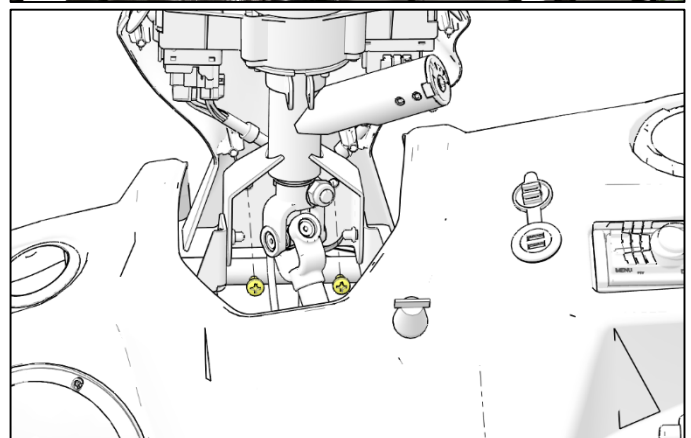
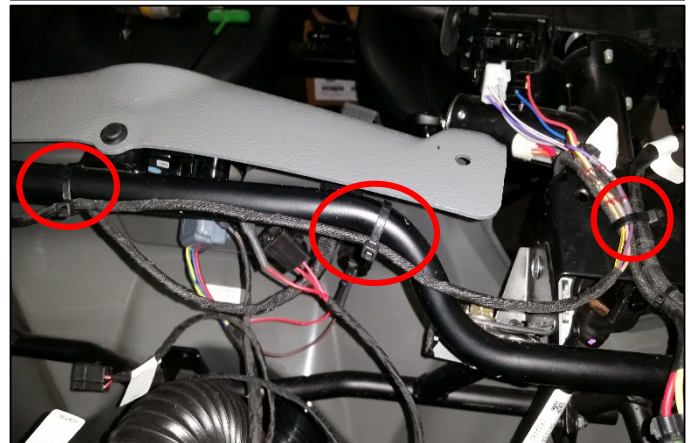
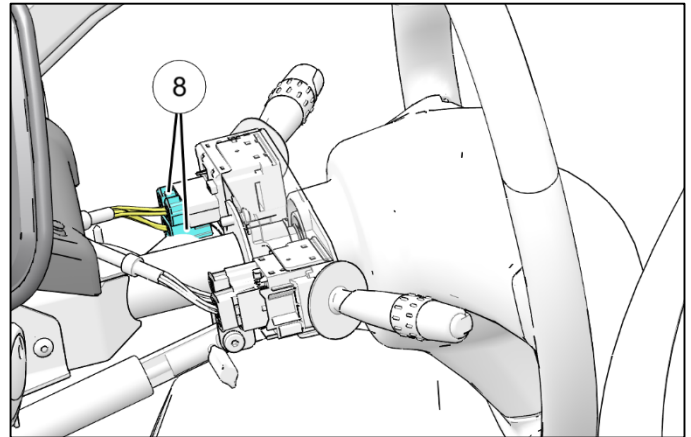
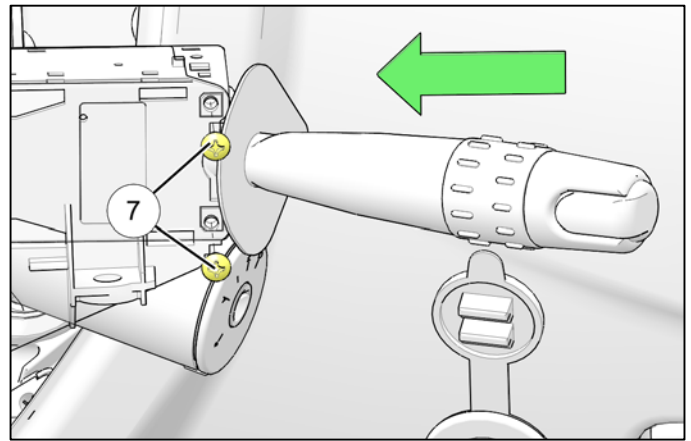
24. Install both connectors ⑧ into the new right-hand stalk switch.

25. Locate the three cable ties provided in the kit.
26. Secure the new switch wires to the upper dash tube using the cable ties as shown.
27. Cut off excess from the cable ties.

28. Install the upper steering wheel cover.
29. Install the two tilt bracket screws and torque to specification.

TORQUE

Tilt Bracket Screw:
12 in-lbs (1.4 Nm)



30. Install the lower steering wheel cover.
31. Install the four screws ⑨ and torque to specification.

TORQUE

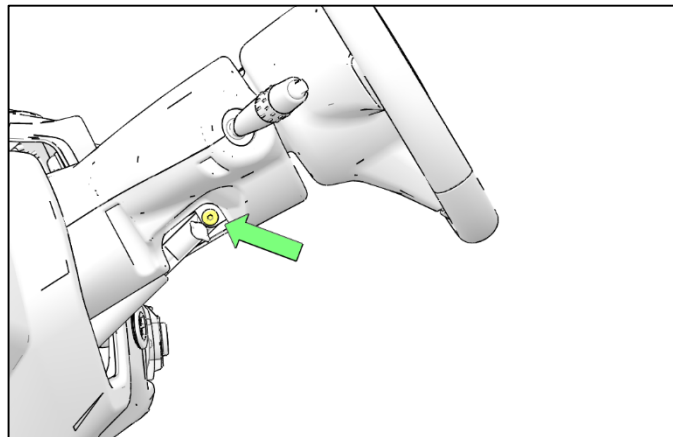
Steering Wheel Cover Screw:
12 in-lbs (1.4 Nm)



32. **For vehicles equipped with tilt steering ONLY.** Align the tilt shock with the upper mounting hole and install the allen bolt retaining the tilt shock to the steering column. Torque the bolt to specification.

TORQUE

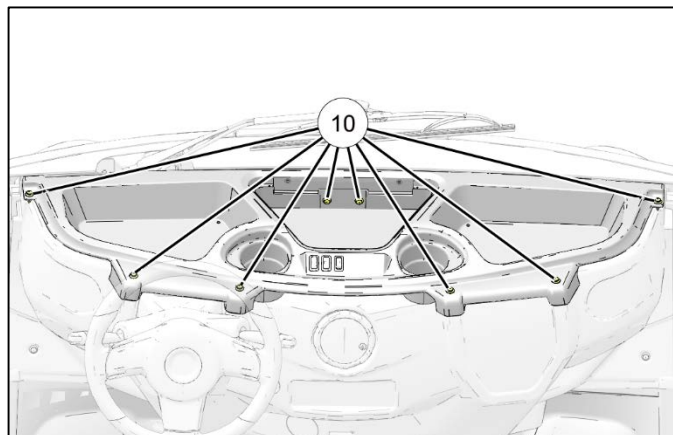
Tilt Shock fastener:
96 in-lbs (11 Nm)



IMPORTANT – AUDIT STEP

A secondary dealer representative must verify that the tilt shock fastener was torqued using a torque wrench set to the correct specification. Mark the fastener with a paint pen to indicate the audit has been completed.

33. Install the upper dash panel.
34. Slightly raise the dash and reconnect any switch connections located between the cup holders.
35. Install the push darts retaining the upper dash ⑩.



36. Reconnect the service disconnect plug ⑪.
37. Turn key to "ON" position and test the new drive-mode switch. Confirm gauge display corresponds to selected switch mode, and vehicle operates correctly in all drive modes.

IMPORTANT – AUDIT STEP

A secondary dealer representative must confirm the gauge display corresponds to selected switch mode, and vehicle operates correctly in all drive modes.

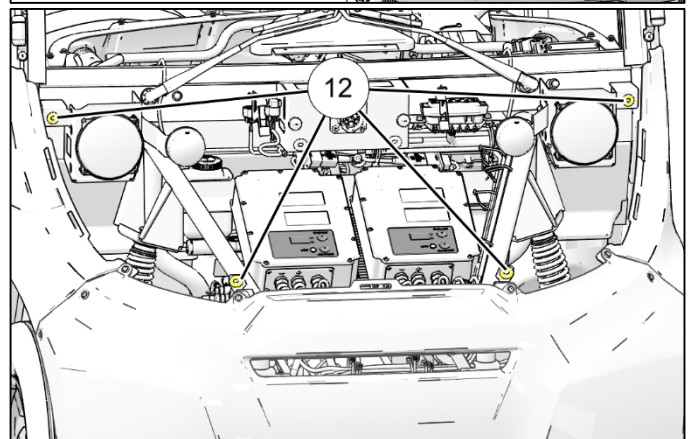
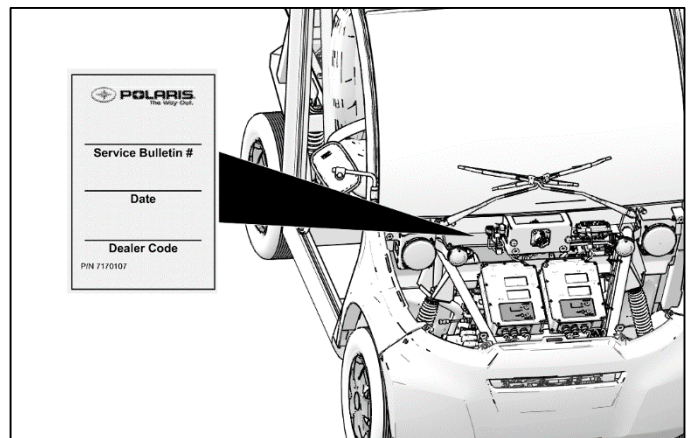
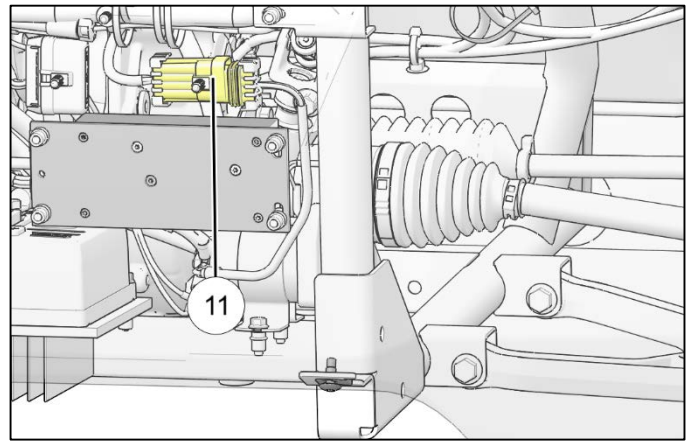
38. Verify the wiper, hazards, and washer all function properly.

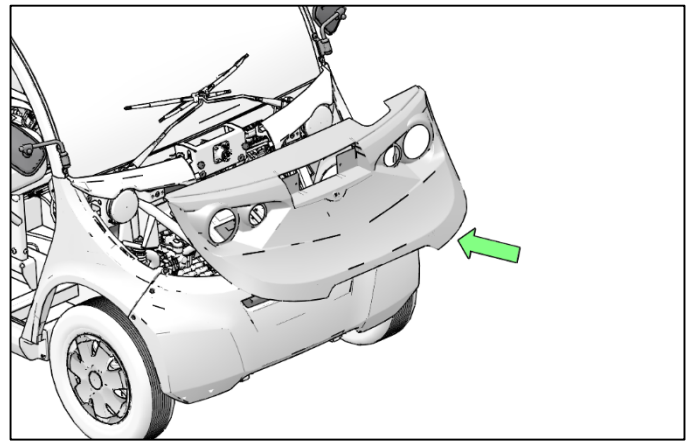
IMPORTANT – AUDIT STEP

A secondary dealer representative must verify that the wiper, hazards, and washer all function properly.

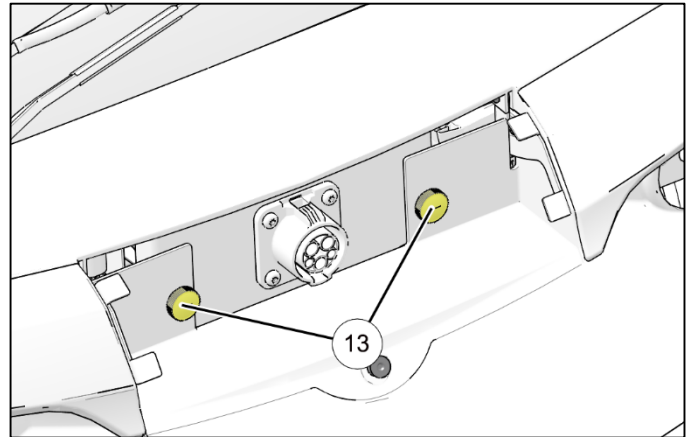
39. Install the bulletin completion decal on the frame, next to the Digital Wrench connector.

40. Slide the hood into the mounting tabs on the vehicle. Ensure all mounting tabs ⑫ are engaged.





41. Install thumb screws ⑬.





GEM, Work & Transportation Division
Polaris Industries Inc.
P.O. Box 47700
Medina, MN 55340-9960

IMPORTANT SAFETY RECALL

This notice applies to your vehicle

Recall Campaign: 16V-884

Subject: 2016-2017 GEM

DRIVE-MODE SWITCH REPLACEMENT

PLEASE READ IMMEDIATELY

VIN L-16-01

FIRST NAME LAST NAME

ADDRESS

CITY, ST ZIP

Dear GEM Owner:

This notice is sent to you in accordance with the requirements of the National Traffic and Motor Vehicle Safety Act. The GEM, Work & Transportation Division of Polaris Industries Inc. has decided that a defect which relates to motor vehicle safety exists in certain model year 2016-2017 GEM vehicles. Our records indicate that you have purchased a potentially affected vehicle.

The reason for this recall:

GEM has determined that the drive-mode switch can send an out-of-tolerance electrical signal to the vehicle controller, resulting in an incorrect drive direction selection. This failure may occur intermittently and does not occur in all drive-mode selections. When the vehicle is shifted into Forward, an out-of-tolerance signal may cause the vehicle controller to shift into reverse. The unexpected vehicle movement may result in a crash.

What GEM and your dealer will do:

GEM will issue a *Safety Recall Bulletin* to all GEM dealers, with the appropriate instructions to replace the drive-mode switch on affected vehicles. Repairs will be made at an authorized GEM dealer at no cost to you. The actual repair should take under two hours to perform; however, it may take longer due to service scheduling requirements.

What you should do:

Contact your authorized GEM dealer to schedule an appointment to have the bulletin repairs performed. Do not attempt repairs yourself. Repairs must be done only by an authorized GEM dealer.

If you have questions or if you need more information:

While your GEM dealer is in the best position to answer your questions, if you have any questions that your dealer cannot address, if you are having difficulty obtaining the recall repair outlined in this letter, or if you need assistance finding a GEM dealer, please visit the web site at <http://www.polaris.com> or contact our GEM Consumer Service Department by calling 1-855-743-3436.

This notice was mailed to you according to our most current registration information. If you no longer own your GEM vehicle, please contact your local GEM dealer to have the ownership information changed. The GEM Consumer Service Department cannot change ownership information without identification. Federal law requires that any vehicle lessor receiving this recall notice must forward a copy of this notice to the lessee within 10 days.

If you have had this repair performed 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 regarding obtaining reimbursement please contact the GEM Consumer Service Department using the contact information above.

If you believe that the GEM, Work & Transportation Division of Polaris Industries Inc. has failed to remedy this defect without charge or is unable to do so within a reasonable time, you may submit a complaint to the Administrator, National Highway Traffic Safety Administration, 1200 New Jersey Avenue SE., Washington, D.C. 20590; or call the toll-free Vehicle Safety Hotline at 1-888-327-4236 (TTY: 1- 800-424-9153); or on the web go to <http://www.safercar.gov>.

Please accept our apologies for any inconvenience this may cause you. Your safety and continued satisfaction with your GEM vehicle is our primary concern. Thank you for your prompt attention to this matter.

Sincerely,

The GEM Team



GEM, Work & Transportation Division
Polaris Industries Inc.
P.O. Box 47700
Medina, MN 55340-9960

IMPORTANT SAFETY RECALL

This notice applies to your vehicle

Recall Campaign: 2016659

**Subject: 2016-2017 GEM
DRIVE-MODE SWITCH REPLACEMENT
PLEASE READ IMMEDIATELY**

VIN L-16-01

FIRST NAME LAST NAME
ADDRESS
CITY, ST ZIP

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Sincerely,

The GEM Team

Lessors receiving this recall notice please forward a copy of this notice to the lessee within 10 days. If you are no longer the owner of the GEM vehicle indicated by this letter, please contact your local GEM dealer to have the ownership information changed.

Polaris Industries Ltd.
Consumer Service Department
50 Prairie Way
Winnipeg, MB, CA R2J – 3J8

Ref: L-16-01