

ROADSTER PREDELIVERYBulletin



September 16, 2013 Subject: Can-Am™ Spyder™ RT Predelivery Instructions

No.

2014-1

YEAR	MODEL	MODEL NUMBER	SERIAL NUMBER
2014	Spyder RT Series	Refer to table on next pages for complete listing	All

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IMPORTANT NOTICE

This bulletin must be used in conjunction with the check list enclosed in the bag with the *OPERATOR'S GUIDE*. Make sure that Spyder roadster *PRE DELIVERY CHECK LIST* is completed and signed.

A WARNING

To obtain warranty coverage, pre-delivery procedures must be performed by an authorized BRP Can-Am roadster dealer/distributor. Apply all necessary torques as indicated.

NOTE: The information and components/system descriptions contained in this document are correct at the time of publication. BRP however, maintains a policy of continuous improvement of its products without imposing upon itself any obligation to install them on products previously manufactured.

Due to late changes, there might be some differences between the manufactured product and the descriptions and/or specifications in this document. BRP reserves the right at any time to discontinue or change specifications, designs, features, models or equipment without incurring obligation.

The illustrations in this document show the typical construction of the different assemblies and may not reproduce the full detail or exact shape of the parts. However, they represent parts that have the same or similar function.

The content of this bulletin is designed as a guideline only. All mechanics performing predelivery procedures should have attended the current model-year service training.

Further information or inquiries should be directed to your service representative and specific *SHOP MANUAL* sections.

Make sure the customer receives the *OPERATOR'S GUIDE, PREDELIVERY CHECK LIST* signed copy and *SAFETY DVD*

A WARNING

Torque wrench tightening specifications must be strictly adhered to. Where specified, install new locking devices (e.g. lock tabs, elastic stop nuts). If the efficiency of a locking device is impaired, it must be renewed.

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UPDATE SUMMARY

This summary highlights updates to the Predelivery Inspection for MY2014. It does not supersede procedures detailed further in this publication.

IMPORTANT: Technicians should read and apply all procedures in this PDI bulletin as applicable to model.

APPLICABLE TO	UPDATE DESCRIPTION	REFERENCE
	Battery removal for charging moved	PARTS AND SUB-CRATES REMOVAL
	Parts stored in different compartments for shipping	PARTS CHECK
	Vehicle uncrating sequence modified	UNCRATING
	Front cargo module installation sequence additions, modifications and sequence changes	PARTS TO BE INSTALLED
	NEW radiator protector removal added	PARTS TO BE INSTALLED
	NEW Engine air inlet duct connection added	PARTS TO BE INSTALLED
	Body parts installation sequence additions and modifications. Also divided into smaller topics	PARTS TO BE INSTALLED
	Front fenders installation additions	PARTS TO BE INSTALLED
All RT Models	Rear turn signal lights installation (Japan models)	PARTS TO BE INSTALLED
	New shift sequence decal SM6 and SE6 (Japan models)	PARTS TO BE INSTALLED
	NEW engine oil level verification procedure	FLUIDS
	NEW recommended engine coolant	FLUIDS
	Front tire pressure change	SETUP
	New meter setup for drive belt tension	SETUP
	Addition of procedure for setting cluster language	SETUP
	New remote horizontal adjuster, high beam headlights (Japan models)	SETUP
	Specifications pages removed, available on BOSSWeb or INFO CENTER	

MODEL LISTING

YEAR	MODEL	MODEL NUMBER	COUNTRY	PREDELIVERY KIT	SERIAL NUMBER
		A3EE	Australia		All
		A3EB, A3EG	Canada - USA		
	Spyder RT SM6	A3ED	Europe		
		A3EF	Japan		
	Spyder RT SE6	B2EB, B2EE	Canada - USA		
	Spyder ni SEo	B2ED	Europe	(P/N 703 100	
	2014 Spyder RT Limited SE6	В9ЕН	Australia	433)	
		B9EJ	Brazil		
2014		B9EB, B9EE, B9EL, B9ER, B9EV	Canada - USA		
		B9ED, B9EG, B9EN, B9ET	Europe		
		B9EK, B9EU	Japan		
	Spyder RT-S SM6	B5EB, B5ED, B5EF,B5EH	Canada - USA		
		A4EG, A4EN	Australia	1	
	A4EP	Brazil	(P/N 703 100		
	Spyder RT-S SE6	A4EB, A4ED, A4EH, A4EK	Canada - USA	434)	
		A4EF, A4M	Europe		
		A4ER	Japan		

UNCRATING

Crate Cover Removal

NOTICE Allowing the crate to drop may cause serious damage to vehicle.

- 1. Position the crate on a firm, level surface.
- 2. Remove all screws holding crate cover to crate base.

NOTE: Screws that are used are Robertson[†] #2 type (or equivalent) that require the use of an appropriate screwdriver.



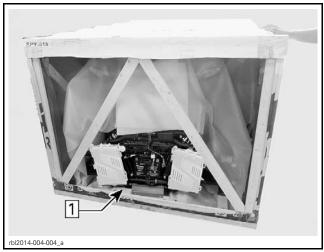
SCREW REMOVAL FROM CRATE COVER

3. Carefully cut both ends of crate tarpaulin.



Step 1: Carefully cut both ends of crate tarpaulin

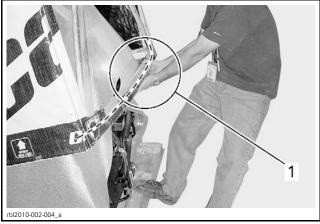
4. Locate front of vehicle



Step 1: Locate front of vehicle

5. At front end of vehicle, pull crate cover out toward you, then up to clear vehicle fascia.

NOTICE Do not lift crate cover vertically. Pull crate cover out and up at front end of vehicle. Refer to illustration.



FRONT OF VEHICLE

1. Pull crate cover out and up to clear front fascia of the vehicle

NOTICE The crate cover must be pulled outward while lifting it to avoid damage to the vehicle.

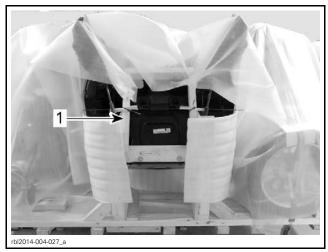
Parts and Sub-crate Removal

NOTICE Be careful not to scratch the front bumper and front fascia.

NOTE: The sub-crates are located on each side of the vehicle.

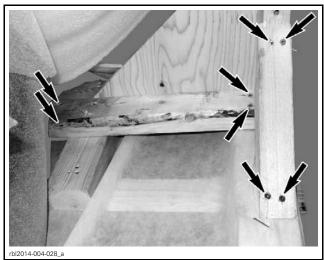
1. On LH side, remove front cargo module subcrate.

[†] Robertson is a registered trademark of Robertson Inc.



TYPICAL - LH SIDE

1. Sub-crate that contains front cargo module

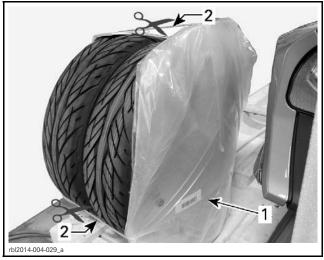


SCREWS TO REMOVE, BOTH SIDES OF CARGO MODULE SUB-CRATE

2. Remove protective foam sheet from vehicle.



3. Remove windshield from front wheels.



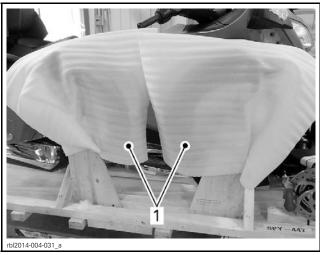
- Windshield to remove
 Cut tapes here
- 4. Remove front wheels from crate base.



- TYPICAL

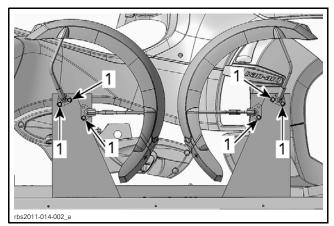
 1. Front wheels

 2. Cut transport strap here
- 5. Remove shipping covers from fenders.



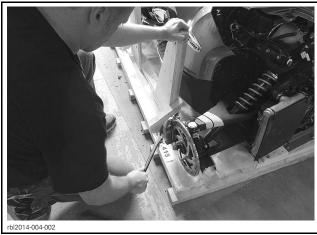
Fender covers to remove

6. On RH side, remove two fenders from sub-crate.



TYPICAL - RH SIDE - SUB-CRATE THAT CONTAINS FRONT FENDER

- 1. Bolts to remove (6)
- 7. Remove front fender sub-crate.



FRONT FENDER SUB-CRATE REMOVAL

8. If you dot not have a fully charged new battery of the same type on hand, remove battery from vehicle and carry out the *BATTERY CHARGING* procedure. See *BATTERY* further in this bulletin.

Parts Check

Ensure the crate includes the following items:

FRONT STORAGE COMPARTEMENT		
DESCRIPTION	MODEL	QTY
Operator's guide		1
Predelivery check list		1
Safety DVD	All	1
Predelivery kit		1
Wheel caps		2
Front cargo liner	RT-S RT Limited	1
Travel bag	RT Limited	1

REAR CARGO COMPARTMENT			
DESCRIPTION	MODEL	QTY	
Service covers	All	2	
Windshield trim	All	2	
iPOD† cable	RT-S RT Limited	1	
Audio auxiliary cable	RT-S RT Limited	1	
Antenna grommet	RT-S RT Limited	1	
Rear turn signal lights kit (Japan models)	All	1	

GLOVE BOX			
DESCRIPTION	MODEL	QTY	
Spare key	All	1	
Trailer key barrel	All	1	

Ensure pre-delivery kit includes the following:

PREDELIVERY KIT			
DESCRIPTION	WHERE USED	QTY	
Wheel lug nut - black (RT-S)	Front wheels	6	
Wheel lug nut - chrome (RT and RT LTD)	Front wheels	6	
Plastic bushing	Rear suspension	2	
M10 x 140 hexagonal flange screw	Rear suspension	1	
M10 elastic flange nut	Rear suspension	1	

PREDELIVERY KIT			
DESCRIPTION	WHERE USED	QTY	
M6 x 20 hexagonal flange screw	Rear suspension	1	
Black M6 x 20 hexagonal flanged forming screw	Front cargo module	4	
Gold M6 x 20 hexagonal flange screw	Front cargo module	2	
Plastic rivet	Service cover	2	
Battery installation kit (2 bolts and 2 nuts)	Battery terminals	1	
M6 x 20 Torx screw	Front panels	2	
Plastic washer	Front panels	2	
M14 jam nut	Headlights	2	
M8 x 20 hexagonal flange screw	Front fenders	8	
M6 x 20 Torx screw	Windshield	4	
M5 x 25 countersunk Torx screw	Windshield	2	
M5 retaining nut	Windshield	2	
Windshield spacer	Windshield	2	
Hose clamp	Air inlet duct	1	

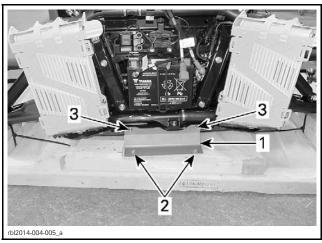
Lifting the Front of Vehicle

A WARNING

No one should be standing in front or at the back of the vehicle while straps are being cut.

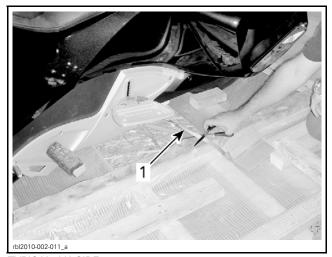
1. Remove metal plate retaining front of vehicle to crate base.

NOTE: If you are planning to use a hoist to lift vehicle from crate base for tire installation, only the wood screws need to be removed at this time.

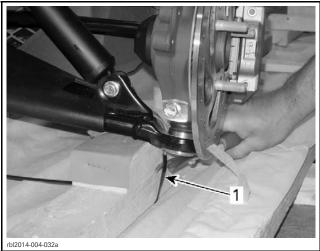


TYPICAL

- 1. Plate
- 2. Screws
- 3. Screws and nuts
- 2. Remove straps retaining side and front of vehicle to crate base.



TYPICAL, LH SIDE 1. Side strap



LH FRONT ILLUSTRATED

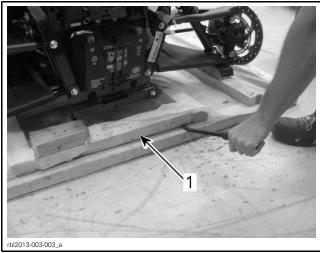
1. Front strap, each side

NOTE: The steps that follow describe two methods for lifting the front of the vehicle from the crate base. The conventional method uses a hydraulic jack and the alternate method uses a chain block. Use the proper method according to your shop layout.

Conventional Method

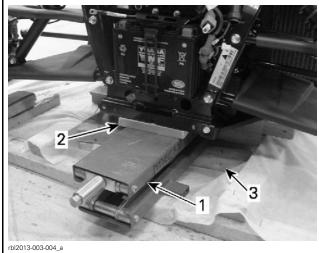
1. Remove piece of wood located at the front of the vehicle.

NOTE: The removed piece of wood can be used to level the jack in the following step.



TYPICAL

- 1. Wood piece to remove
- 2. Install a floor jack with a piece of wood on top to increase contact surface of jack pad.

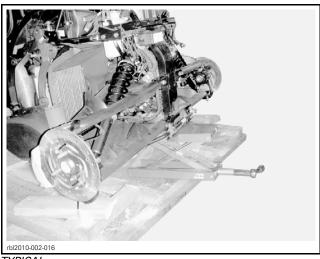


TYPICAL - FRONT OF VEHICLE

- Jack
- Wood piece
- 3. Wood piece removed earlier

A CAUTION Approach with care when vehicle is on the jack as it may be unstable.

3. Lift the vehicle.



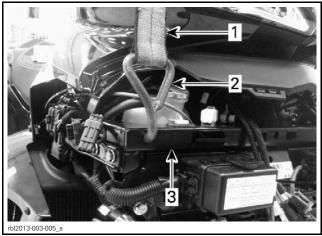
TYPICAL

NOTICE Never lift vehicle by the suspension arm.

Alternate Method

1. Install proper straps with hooks on RH and LH lateral supports of vehicle.

NOTE: Insert hooks through the holes in the frame.



TYPICAL

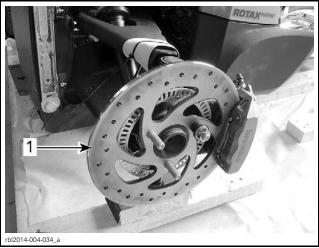
- 1. Strap 2. Hook 3. Frame
- 2. Hook straps on an appropriate lifting kit.
- 3. Lift vehicle using a chain block.

NOTICE Never lift vehicle by the suspension arm.

Front Wheels Installation

1. Clean front and rear brake discs.

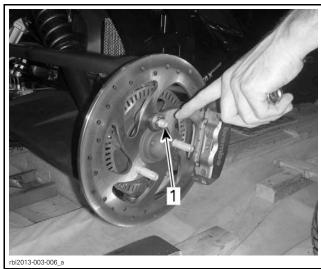
NOTICE A thin layer of anticorrosion treatment is present on the brake discs and must be removed before using the vehicle. Not conforming to this procedure may lead to a brake chattering squeaking and brake pad replacement would be necessary.



1. LH, RH and rear brake disks to clean, both sides of disk

BRAKE DISC CLEANING		
SERVICE PRODUCT	REQUIRED TOOL	
XPS BRAKES AND PARTS CLEANER (CAN) (P/N 219 701 776)	Shan rag	
XPS BRAKES AND PARTS CLEANER (USA) (P/N 219 701 705)	Shop rag	

2. Remove nut securing front brake discs to vehi-



TYPICAL

- 1. Nut to remove, both sides
- 3. Install front wheels on vehicle.

NOTE: Ensure that the rotation direction shown by the arrow on the tire is respected.

WARNING

The tires are only designed to rotate in one direction. Do not switch the left and right front wheels.

- 4. Hand tighten wheel lug nuts snug (from PDI kit).
- 5. Lower vehicle on crate base.
- 6. Remove floor jack (or hoist and lifting strap).



TYPICAL

7. Torque wheels lug nuts.

PART	SPECIFIED TORQUE
Wheel lug nut	110 N•m (81 lbf•ft)

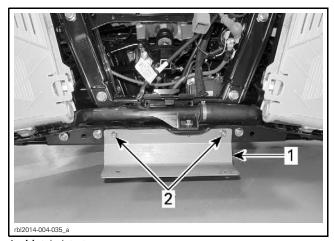
8. Install wheel caps (inside front storage compartment).



1. Front wheel cap to install, one each side

9. Remove metal plate that retained front of vehicle to crate base.

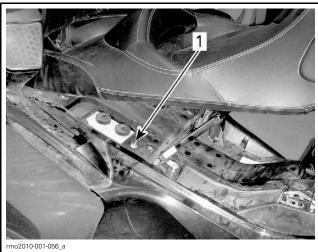
NOTE: This step is only applicable if a hoist was used to lift front of vehicle from crate base for tire installation.



- Metal plate to rem
 Screws to remove Metal plate to remove

Vehicle Removal

1. Locate ACS suspension manual inflation valve under seat and remove cap.

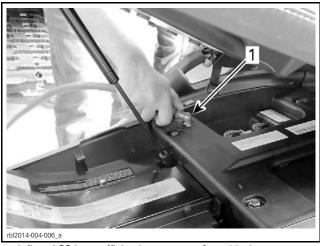


- 1. Manual ACS inflation valve
- 2. With the help of another person, slightly inflate the ACS and remove the foam block from the rear suspension.

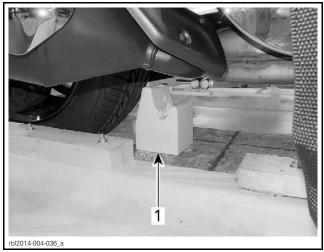
WARNING

Rapid changes in rear suspension height can occur during ACS inflation or deflation. Do not place hands or fingers near rear suspension or severe injury can occur.

NOTICE Adding removing air may create rapid changes in suspension height due to the small volume of the ACS air spring chamber. The anchoring hole of the shock absorber must NEVER exceed the lower bracket holes when adding air in the ACS spring. To avoid damaging the ACS system, DO NOT exceed 551 kPa (80 PSI) in the ACS spring.

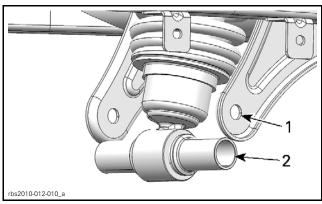


Inflate ACS just sufficiently to remove foam block

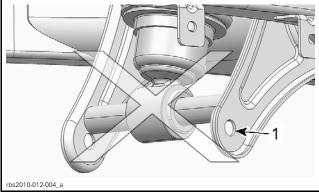


1. Foam block to remove

- 3. Obtain the following hardware from the PDI kit:
 - M10 x 140 hexagonal flange screw
 - M10 elastic flange nut
 - Plastic bushings.
- 4. From underneath the vehicle, locate the bottom of the rear shock absorber.
- 5. Install the 2 plastic bushings over the steel sleeve at the bottom of the shock absorber.
- 6. While monitoring from the LH side of the vehicle the alignment of the bottom anchor pin of the shock absorber with the bottom of the lower shock brackets, have an assistant, slightly inflate the ACS spring.



- Lower shock bracket hole
- Lower shock anchor pin

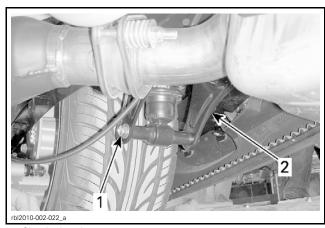


1. Lower bracket hole

- 7. Secure shock absorber as follows:
 - 7.1 Using the passenger grab handles, slightly lift the rear of the vehicle by HAND to align both bushings on lower bracket hole.
 - 7.2 Install M10 x 140 hexagonal flange screw.
 - 7.3 Install M10 elastic flange nut.

NOTICE Apply specified torque to the hexagonal flanged screw, not the nut.

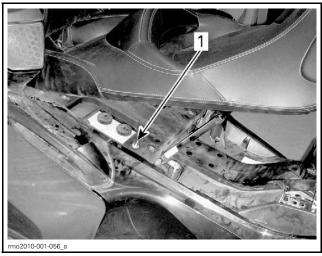
PART	SPECIFIED TORQUE
M10 hexagonal flanged screw	48 N•m (35 lbf•ft)



Shock absorber screw

Lower bracket

8. Install cap on ACS suspension manual inflation

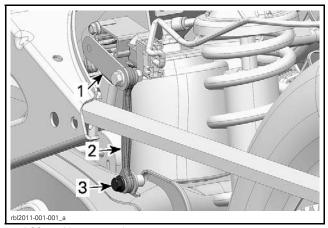


1. Cap to install

RT-S and RT Limited Models

- 9. Install the link of the ACS position sensor on the swing arm.
 - 9.1 Position the ACS position sensor lever rearward.
 - 9.2 Place the link on the outside of swing arm bracket.
 - 9.3 Secure the link using M6 x 20 hexagonal flange screw (from PDI kit)

PART	SPECIFIED TORQUE
M6 x 20 hexagonal flange screw	4 N•m (35 lbf•in)



- ACS position sensor lever ACS position sensor link
- 3. M6 x 20 hexagonal flange screw

NOTICE Ensure that ACS position sensor lever orientation is correct.

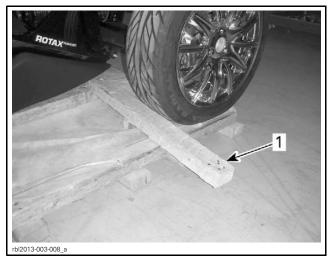


CORRECT ORIENTATION



INCORRECT ORIENTATION

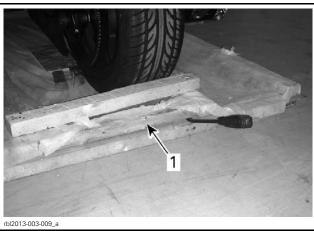
10. Place a piece of wood behind the front wheels to prevent the vehicle from rolling.



TYPICAL - FRONT RH WHEEL

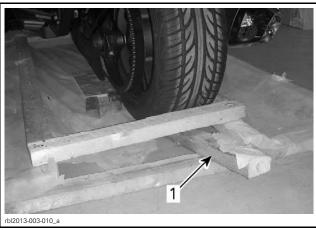
1. Wood piece

11. Remove the piece of wood at the back of the crate and insert it under the rear wheel.



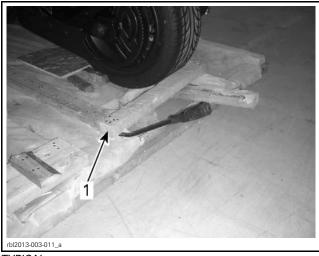
TYPICAL

1. Wood piece back of the crate



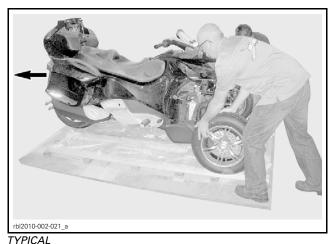
- TYPICAL

 1. Wood piece removed earlier
- 12. Remove the piece of wood from behind the rear wheel.



TYPICAL

- 1. Wood piece behind rear wheel
- 13. Carefully remove pieces of wood positioned earlier behind the front wheels.
- 14. With the help of your assistant, move vehicle rearward out of the crate base.



NOTICE Always move vehicle rearward out of the crate base.

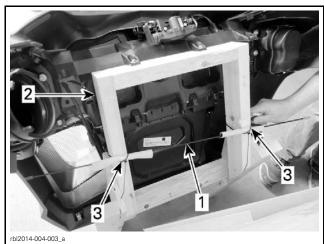
PARTS TO BE INSTALLED

Front Cargo Module Installation

WARNING

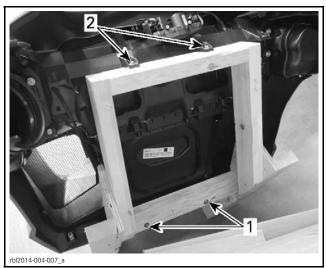
Make sure battery is not connected before installing front cargo module. Do not install front cargo module if battery is connected because sparks can occur if tools touch battery terminals.

1. Remove antenna from front cargo module sub-



ANTENNA REMOVAL

- Antenna
- Front cargo module
 Locking ties to cut Front cargo module sub-crate
- 2. Assisted by another person, remove and discard bolts holding the bottom and the top sections of sub-crate.

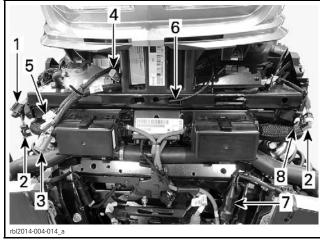


TYPICAL

- Lower retaining bolt
 Upper retaining bolts

NOTE: Be careful not to lose the caged nuts located in the bottom fixation holes of the front cargo module.

- 3. Open front storage compartment cover.
- 4. Ensure the following cables and connectors are accessible prior to installing front cargo module, cut locking ties if required.



REFER TO THE FOLLOWING TABLE FOR ITEMS DESCRIPTION

ITEMS	DESCRIPTION
1	PTS connector
2	RH and LH light connectors - Fog lights (RT-S, RT Limited and option package) - Low beam headlights (CE models)
3	DLC connector (B.U.D.S.)
4	Storage cover actuator connector (as applicable)
5	Storage cover switch connector (as applicable)

ITEMS	DESCRIPTION
6	Storage cover cable
7	12 V power outlet (as applicable)
8	Storage compartment light (as applicable)

5. Remove luggage bag from front storage compartment (as applicable).

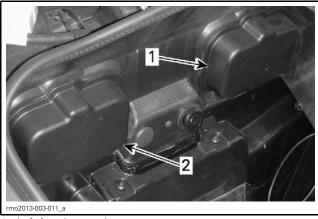
All Models

- 6. Before installing storage compartment, remove the fuse box service covers as follows:
 - 6.1 Unzip the liner (if applicable).



1. Liner

6.2 Push down on top of fuse box service covers and pull the covers off.



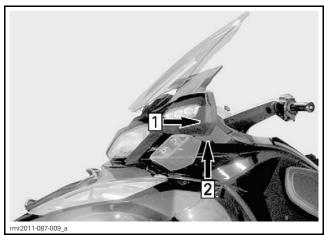
- Left fuse box service cover
- Left fuse box service cover
 Right fuse box service cover

NOTE: Removal of fuse box service covers is required only to aid in the alignment of the front cargo module when installing it onto the front frame of the vehicle.

- 7. Remove mirrors as follows:
 - 7.1 Using your hand, hit with a sharp blow the outer extremity of the mirror toward the rear of the vehicle to unlock it.

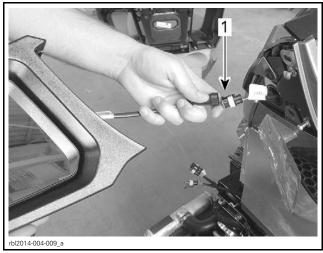
NOTICE Do not use excessive force or a mallet of any kind to prevent damage to mirror pin holders.

7.2 Slide mirror upwards to unhook it from upper pin holder.



Step 1: Hit with a sharp blow here Step 2: Slide mirror outwards

8. Disconnect flasher connector from mirror.

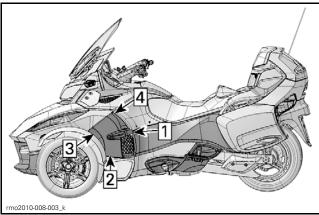


Flasher connector to disconnect

9. Remove middle side panel.



MIDDLE SIDE PANEL REMOVAL

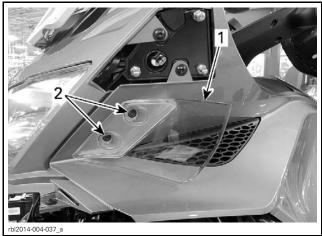


REMOVAL SEQUENCE

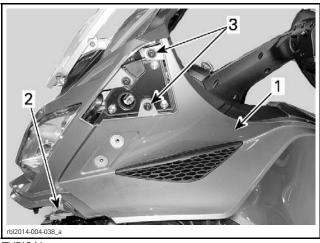
Step 1: Pull rear of panel out of its grommet. Step 2: Pull bottom of the panel out of its grommet. Step 3: Pull front of the panel out of its grommet.

Step 4: Unhook top of the panel to remove it.

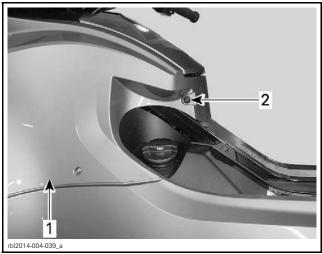
10. Remove lower wind deflectors.



- Lower wind deflector (both sides)
- Retaining screws
- 11. Unlock and lift seat to full open position.
- 12. Remove front and upper retaining screws from top side panels.



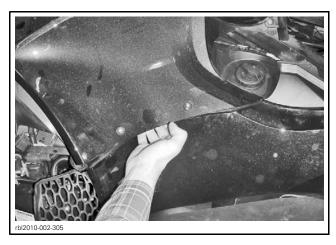
- Top side panel (both sides)
- Front retaining screw
 Upper retaining screws
- 13. Remove rear retaining screw from top side panels.



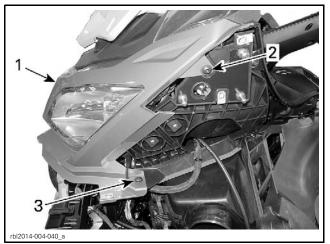
TYPICAL

- Top side panel (both sides)
 Rear retaining screw
- 14. Remove front retaining screw from top side
- 15. Pull out lower part of top side panel to remove it from grommets and remove panel from ve-

NOTE: Do not remove lower screws from top side panel.

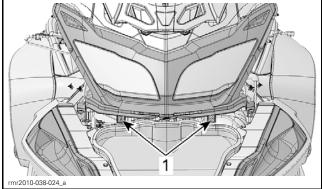


16. Remove upper and middle retaining screws from front fascia (both sides).



TYPICAL

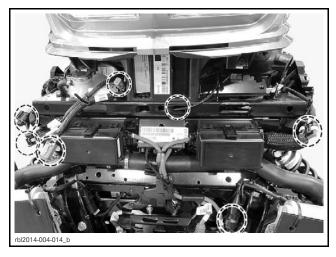
- Front fascia
- Upper retaining screw
 Middle retaining screw
- 17. Remove lower retaining screws and washers from front fascia.



- TYPICAL
 1. Lower retaining screw
- 18. Remove front fascia from vehicle.



19. Turn up and store all wiring and connectors in front of vehicle to prevent them from being caught between the frame and front cargo module.



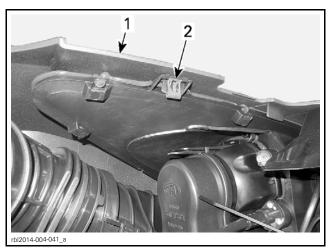
20. Remove 3 plastic rivets from LH air duct trim panel (low beam headlight trim panel on CE models).



1. Plastic rivets to remove (3)

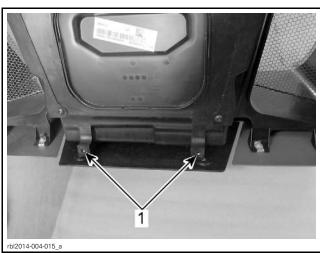
21. Unhook metal retaining clip from inside panel.

NOTE: Be very careful not to break panel tab when removing metal clip.



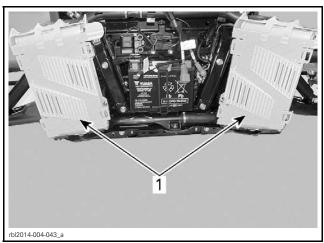
LH AIR DUCT TRIM PANEL (LOW BEAM HEADLIGHT TRIM PANEL ON CE MODELS)

- Trim panel
- 2. Metal retaining clip to remove from inside panel
- 22. Ensure both caged nuts are installed in lower fixation holes of front cargo module.



Caged nuts installed here

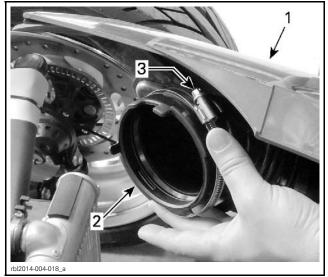
23. Remove radiator protectors installed for ship-



Radiator protectors to remove

NOTICE Radiator protectors must be removed before installation of front cargo module or engine overheat will occur during engine operation. Care must be taken not to damage radiators once protectors are removed.

24. Insert hose clamp from PDI kit onto air inlet duct in cargo module as per following illustration.

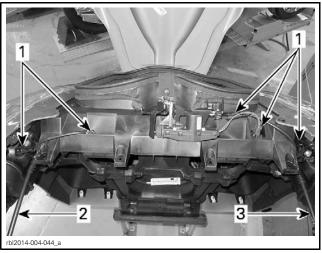


- Front cargo module
- Air inlet duct Clamp orientation, screw facing out towards wheel

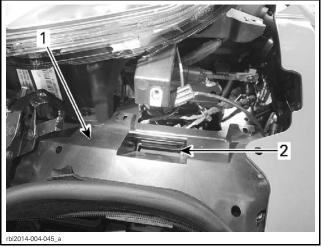
NOTE: Spray a solution of water and mild soap inside the inlet duct mating surface to aid in the installation of the duct.

25. Turn up and store all the wiring and connectors on cargo module to prevent them from being pinched between the front cargo module and front frame.

NOTE: On models with separate low beam headlights, pay attention to the routing of the adjuster cables for the low beam headlights when installing the front cargo module.



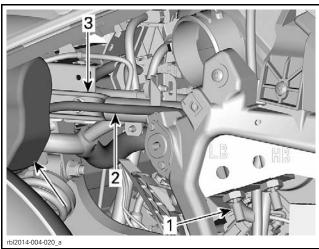
- Wiring connectors stored out of the way
- 2. LH adjuster cable, low beam headlight 3. RH adjuster cable, low beam headlight
- 26. Assisted by another person, position front cargo module onto upper supports in front frame of vehicle.



- Front cargo module
 LH upper support, RH similar

CE Models

27. Properly route adjuster cables for low beam headlights along side frame members (both sides).



LH SIDE ILLUSTRATED, RH SIMILAR

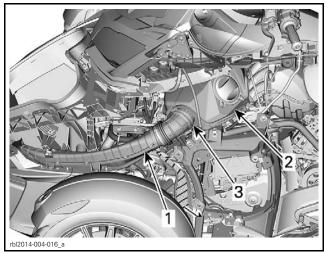
- Final adjuster knob location
- Adjuster cable routing
- Side frame member

All Models

28. Ensure air inlet duct in front cargo module is properly connected to the primary air intake silencer (LH side).

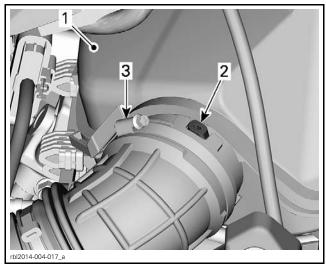
NOTICE Inlet duct must mate completely around the outer diameter of the duct receptacle on the primary air intake silencer.

NOTE: In following illustration, some panels were removed for clarity



LH SIDE VIEW

- Air inlet duct
- Primary air intake silencer
- Primary air intake silence
 Air inlet duct connection
- 29. Ensure no wiring was pinched between cargo module and frame prior to installing any fastener.
- 30. Properly position air inlet duct with alignment key and tighten hose clamp on air inlet duct as specified.

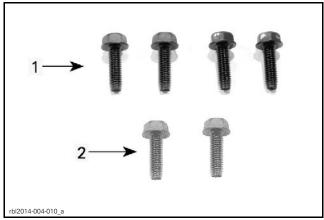


AIR INLET DUCT CONNECTION

- 1. Primary air intake silencer
- 2. Air inlet duct alignment key
- 3. Hose clamp position

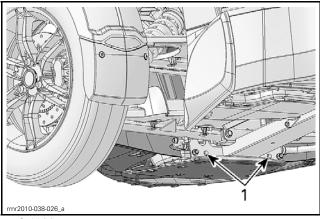
SPECIFIED TORQUE	
Hose clamp	1.5 N•m ± .5 N•m (13 lbf•in ± 4 lbf•in)

31. Obtain the following hardware from PDI kit to install front cargo module on vehicle.



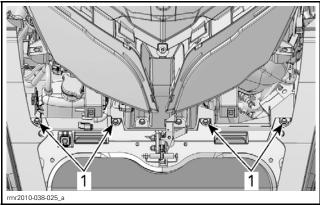
TYPICAL

- 1. Black M6 x 20 hexagonal forming screws from PDI kit 2. Gold colored M6 x 20 hexagonal flange screws from PDI kit
- 32. Install 2 gold colored M6 hexagonal flange screws to secure bottom of storage compartment. Do not tighten yet.



1. Gold M6 screws

33. Install 4 black M6 hexagonal forming screws to secure top of storage compartment.

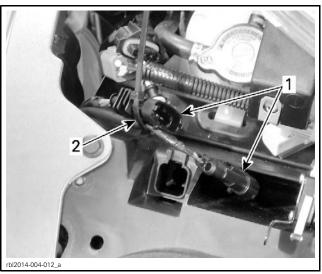


1. Black M6 screws

34. Torque upper and lower M6 hexagonal screws as specified.

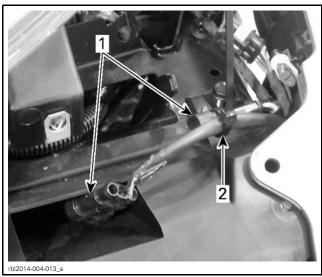
SPECIFIED TORQUE	
M6 X 20 hexagonal forming screws (4)	4.5 N•m ± .5 N•m (40 lbf•in ± 4 lbf•in)
M6 X 12 hexagonal flanged screws (2)	10 N•m ± 2 N•m (89 lbf•in ± 18 lbf•in)

35. Cut locking ties securing connectors near LH and RH sides of cargo module.



RH CONNECTORS

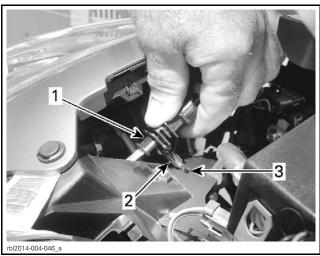
- Connectors
- 2. Locking tie to cut



LH CONNECTORS

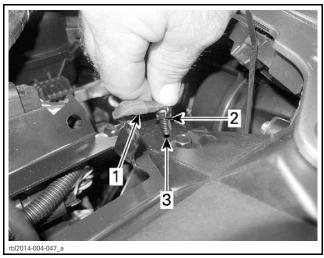
- Connectors
- 2. Locking tie to cut
- 36. Connect the following front cargo module connectors and cable:
 - PTS connector
 - RH and LH fog light connectors (RT-S and RT Limited models)
 - RH and LH low beam headlight connectors (CE models)
 - DLC connector (B.U.D.S.) stowed in its receptacle
 - Storage cover actuator connector (as appli-
 - Storage cover switch connector (as applicable)
 - Storage cover cable
 - 12 V power outlet
 - Storage compartment light (as applicable).

37. Install the PTS connector retaining clip on the front frame.



PTS HARNESS CONNECTOR SECURED TO FRAME

- PTS harness connector
- Retaining clip
- 3. Hole in upper front frame
- 38. Install the wiring harness retaining clip for the storage compartment light on the front frame.



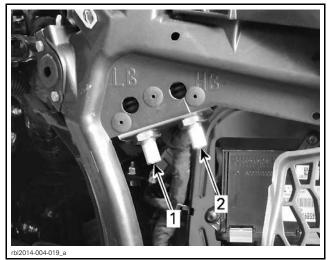
STORAGE COMPARTMENT LIGHT WIRING HARNESS SECURED TO FRAME

- Storage compartment light harness
 Retaining clip
 Hole in upper front frame

CE Models

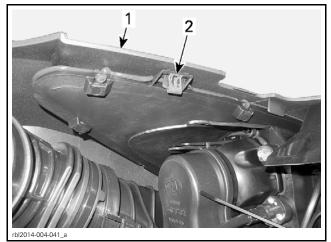
- 39. Install LH and RH adjuster cables for low beam headlights as follows:
 - 39.1 Insert adjuster cable through hole in
 - 39.2 Tighten nut securing adjuster cable (from PDI kit).

SPECIFIED TORQUE	
Adjuster nut	2.5 N•m ± .5 N•m (22 lbf•in ± 4 lbf•in)



LEFT SIDE SHOWN (RIGHT SIDE SIMILAR)

- Low beam adjuster (to install at PDI)
 High beam adjuster (installed at factory)
- 40. From inside the LH air duct trim panel (low beam headlight trim panel on CE models), carefully insert the tab on the inside of the panel and install the metal clip that was previously removed.



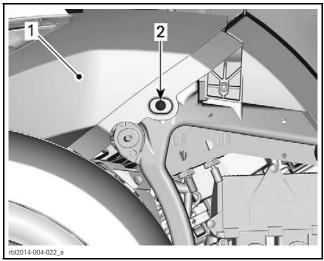
LH AIR DUCT TRIM PANEL (LOW BEAM HEADLIGHT TRIM PANEL ON CE MODELS)

- 1. Trim panel
- 2. Metal retaining clip to install from inside panel
- 41. Install 3 plastic rivets that were previously removed on the trim panel of the LH air duct (low beam headlight trim panel CE models).



LOW BEAM HEADLIGHT TRIM PANEL ILLUSTRATED (CE MODEL)

- 1. Plastic rivets to remove (3)
- 42. Install M6 x 20 Torx screws and plastic washers to secure trim panels of the LH and RH air ducts (low beam headlight trim panels CE models).



LEFT SIDE SHOWN, RIGHT SIDE SIMILAR

- 1. Trim panel
- 2. M6 x 20 Torx screw and washer

SPECIFIED TORQUE	
Side panel retaining screws	3.5 N•m ± .5 N•m (31 lbf•in ± 4 lbf•in)

Battery

Battery Activation

The battery is fully activated and only requires an initial top up charge to ensure it is fully charged prior to vehicle delivery.

NOTE: If you do not have a fully charged new battery at hand, the battery can be removed from the vehicle, fully charged as per manufacturers specification and reinstalled in the vehicle later.

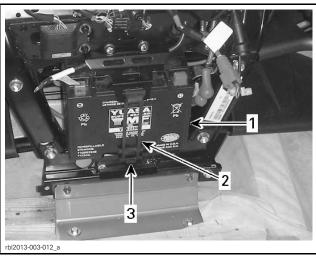
IMPORTANT: It is of the upmost importance for the battery life span that the initial charging be performed as recommended. Refer to the latest CAN-AM ROADSTER BATTERY ACTIVATION, CHARGING AND MAINTENANCE. Correct keywords to search the latest Service Bulletin in BOSSWEB or Info Center are: "roadster battery activation" including quotation marks.

Install charged battery in battery rack.

Battery Removal

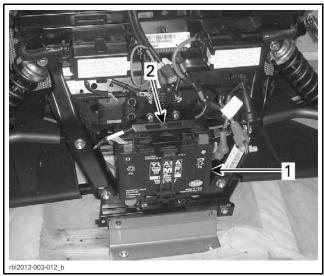
The battery is located on the lower front frame member, just aft of the front cargo module.

1. Pull down the rubber retaining strap to disengage it from the hook on the lower frame member.



TYPICAL

- Battery
- Rubbe
 Hook Rubber strap
- 2. Remove bracket and battery from the vehicle.



TYPICAL Battery

Brackét

Battery Installation

- 1. If front storage module is installed, carry out the following:
 - Open front storage compartment cover.
 - Unzip storage compartment liner for access to battery access panel.
 - Remove battery access panel.
- 2. Insert battery in battery rack with battery posts facing out.

NOTICE Always charge battery before its installation on the vehicle.

3. Connect RED (+) positive battery cables first using battery screw and square nutS from the PDI kit.

WARNING

Always connect RED (+) cable first.

4. Connect BLACK (-) negative battery cables second using battery screw and nut from the PDI kit.

SPECIFIED TORQUE 4 N•m (35 lbf•in) Battery post screws



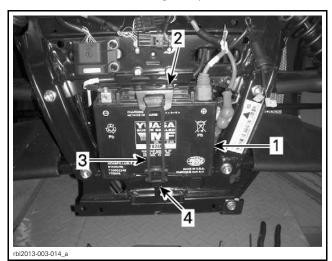
- Battery
- RED (+) positive battery cable
- Positive post battery screw
- 5. Apply dielectric grease on battery posts.

SERVICE PRODUCT	
Battery posts	DIELECTRIC GREASE (P/N 293 550 004)

6. Install RFD rubber boot cover.



- Battery Black (-) negative battery cable Negative post battery screw RED rubber boot cover
- 7. Position battery retaining bracket over battery. Be sure to properly engage it in the frame front member.
- 8. Install rubber retaining strap.



- Battery
- Retaining bracket
- Rubber strap
- Hook on lower front frame member

Body Parts Installation

Install the following body parts:

- Front fascia
- Top side panels
- Middle side panels
- Lower wind deflectors
- Electrical connector service covers
- Fuse box service covers
- Mirrors.

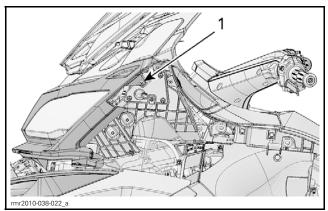
Front Fascia Installation

1. Position front fascia on vehicle and install retaining screws.

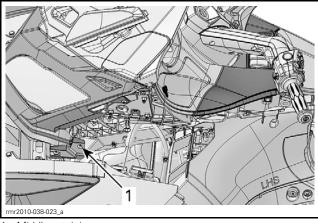


SPECIFIED TORQUE	
Front fascia retaining screws	3.5 N•m ± .5 N•m (31 lbf•in ± 4 lbf•in)

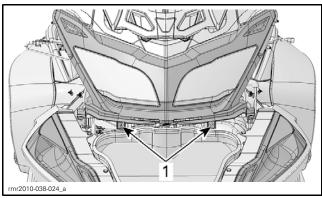
NOTE: Left side illustrated, right side similar.



Upper retaining screw



1. Middle retaining screw

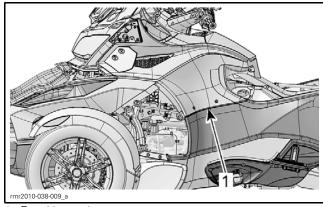


1. Lower retaining screw

Top Side Panel Installation

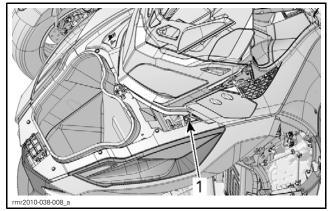
- 1. Spray a solution of mild soap and water on the panel retaining grommets to ease installation.
- 2. Install top side panels in grommets on vehicle and install retaining screws.

NOTE: Left side illustrated, right side similar.

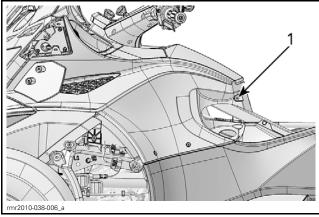


Top side panel

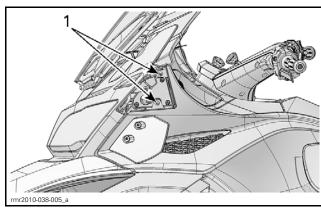
SPECIFIED TORQUE	
Top side panel retaining screws	4 N•m ± 1 N•m (35 lbf•in ± 9 lbf•in)



1. Front retaining screw



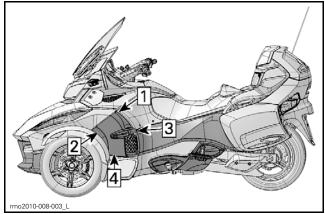
Rear retaining screw



1. Upper retaining screws

Middle Side Panel Installation

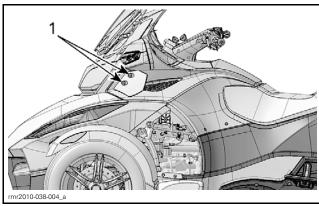
Spray a solution of mild soap and water on the panel retaining grommets to ease installation. Install middle side panels.



INSTALLATION SEQUENCE
Step 1: Engage hook at top of panel
Step 2: Push the front of panel in its grommet.
Step 3: Push the rear of the panel in its grommet.
Step 4: Push the bottom of the panel in its grommet.

Lower Wind Deflector Installation

NOTE: Left side illustrated, right side similar.



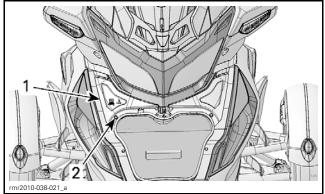
1. Retaining screws of wind deflector

SPECIFIED TORQUE	
Lower wind deflector retaining screws	5.5 N•m ± .5 N•m (49 lbf•in ± 4 lbf•in)

Electrical Service Cover Installation

- 1. Open front storage compartment cover.
- 2. Insert rear tabs of service cover in vehicle grooves.
- 3. Lower front portion of service cover and install plastic rivet (from PDI kit).

NOTE: The RH electrical service cover may be installed only after the vehicle has been setup using B.U.D.S.

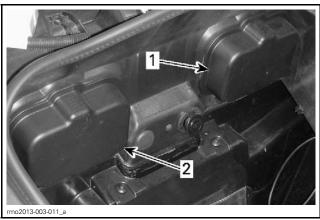


1. RH service cover

2. Plastic rivet

Fuse Box Service Cover Installation

1. Position the fuse box service cover and push down carefully until the cover engages.



Left fuse service cover
 Right fuse service cover

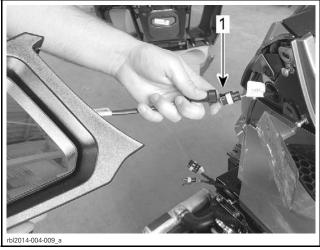
- 2. Zin the storage compa
- 2. Zip the storage compartment liner (if applicable).



1. Liner

Mirror Installation

1. Position mirror near vehicle and connect flasher connector.



1. Flasher connector to connect

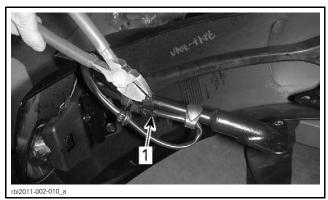
2. Carefully feed the flasher wiring in the console module as you position the mirror on the vehicle using the top stud.

- 3. Firmly push the mirror inwards until it engages with the bottom two studs.
- 4. Ensure mirror is properly secured.

Front Fenders

NOTE: Fender installation similar on both sides.

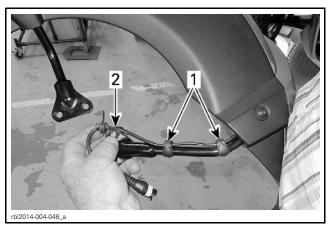
1. Cut locking ties that hold wire harnesses to fender supports.



TYPICAL 1. Locking tie

2. Ensure proper position of fender wiring harness.

NOTE: LH illustrated, RH similar.



Wiring harness clamps
 Wiring harness bracket

NOTE: Do not remove protection from suspension arms.



TYPICAL

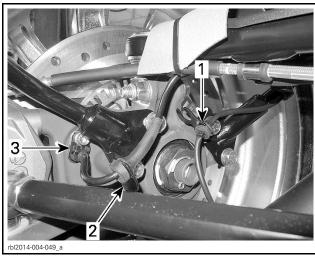
3. Position front fender on vehicle.



4. Install 4 M8x 20 hexagonal flange screws loosely to hold the fender in its position.

NOTE: Be sure to install the fender light harness and ABS harness brackets as illustrated. Do not torque screws at this time.

NOTE: Left side fender installation illustrated, right side similar.



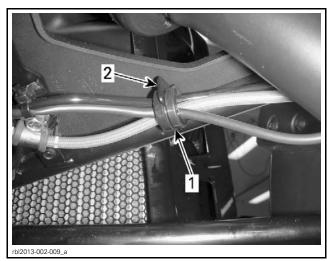
- Fender light harness bracket, top screw, forward fender support ABS harness bracket, lower screw, rear fender support
- Fender light
 ABS harness
 ABS sensor

5. Connect fender light connector.

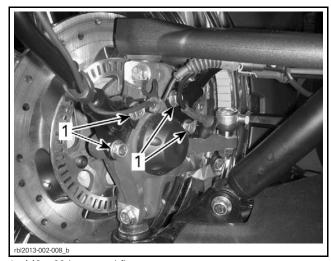
NOTE: Make sure harnesses are properly secured through cable grommet in upper suspension arm.



1. Fender light connector



- Cable grommet
- Harness bracket
- 6. Tighten fender support screws to specification.



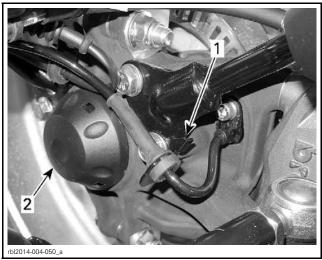
1. M8 x 20 hexagonal flange screws

SPECIFIED TORQUE

Fender support retaining screws

24 N•m (18 lbf•ft)

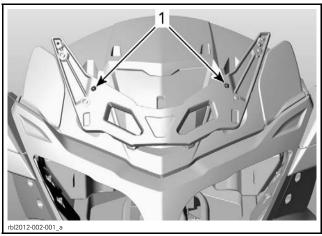
- 7. Ensure harness brackets are properly positioned when torque is applied.
- 8. Ensure cap for wheel hub nut is properly secured to steering knuckle.



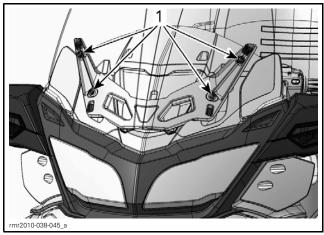
- Check for harness bracket contact here Wheel hub nut cap secure
- 9. Remove protection from suspension arms.

Windshield

1. Install spacers (from PDI kit) on windshield support as illustrated.



- 1. Windshield spacer
- 2. Align windshield on windshield support.
- 3. Install M6 x 20 Torx screws (from PDI kit) to secure windshield.

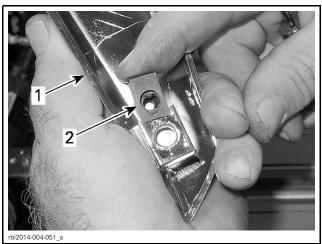


1. Windshield M6 x 20 screws

4. Tighten windshield retaining screws as specified.

SPECIFIED TORQUE		
Windshield retaining	8 N•m ± 1 N•m	
screws	(71 lbf•in ± 9 lbf•in)	

- 5. Start engine and raise windshield to maximum height.
- 6. Turn engine off.
- 7. Install windshield trim panels as follows:
 - 7.1 Insert M5 retaining nut (from PDI kit) on trim panel.

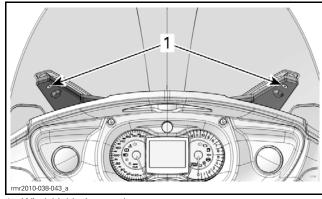


- 1. Windshield trim
- 2. Retaining nut installation
 - 7.2 Place a sheet of paper on windshield to protect it, refer to illustration.

NOTICE If this precaution is not taken, scratch on the windshield may occur and will not be covered under warranty.



- 7.3 Insert trim panel into windshield slot and push it upwards.
- 7.4 From inside windshield, secure trim panel using M5 x 25 countersunk Torx screws (from PDI kit).



1. Windshield trim panels screws

7.5 Tighten windshield trim panel screws to specified torque.

SPECIFIED TORQUE	
Windshield trim panel screws	2 N•m ± .5 N•m (18 lbf•in ± 4 lbf•in)

8. Remove sheet of paper.

Rear Turn Signal Lights Installation (Japan Models Only)

Vehicle Preparation

1. Open top storage compartment cover. **Do not remove cover from vehicle**.



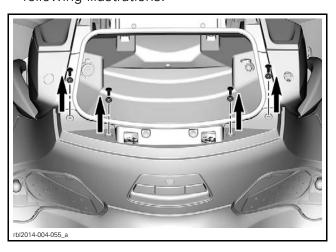
TYPICAL, TOP STORAGE COMPARTMENT

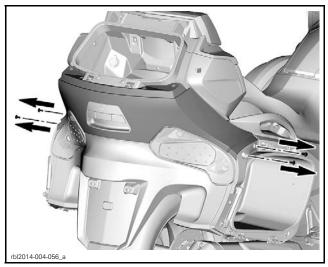
2. Open the left and right storage compartment covers. **Do not remove covers from vehicle**.

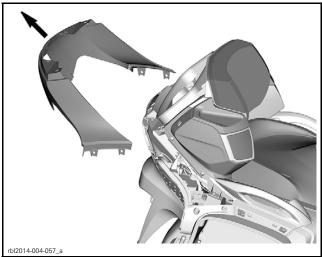


TYPICAL, RIGHT SIDE STORAGE COMPARTMENT ILLUSTRATED

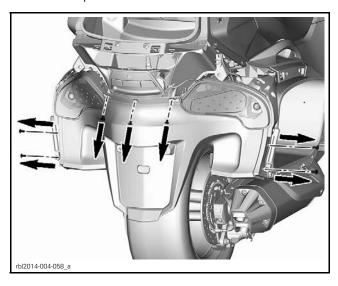
3. Remove screws, washers and panels shown in following illustrations.



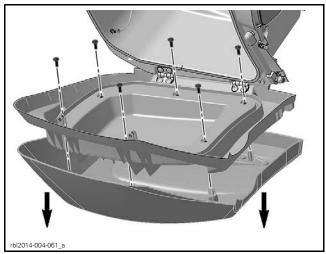




NOTE: Removal of rear fender panel screws in following illustration is to allow the sides of the panel to be gently pulled open for access to the signal lights connectors. It is not necessary to completely remove the rear fender panel for this installation procedure.



4. Remove outer panel from LH and RH rear storage covers.



LEFT REAR STORAGE COVER ILLUSTRATED. RIGHT SIDE

Rear Signal Lights Installation

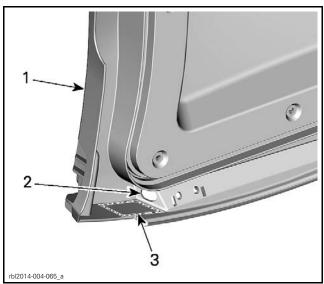
1. Using a small portable hand torch, apply a light flame treatment to the areas identified in following 2 illustrations.

NOTE: The light flame treatment is only required to burn off impurities on the panel surface in preparation of 4 locking tie mount installations.

NOTICE When applying flame treatment, be very careful to not overheat panel or damage will occur.

WARNING

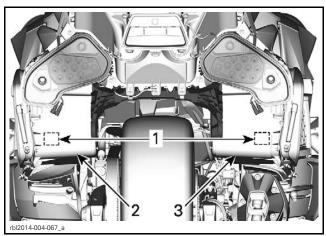
Be extra careful when working with an open flame. Ensure there are no flammable materials or vapors in the immediate area to prevent the possibility of a fire or an explosion occurring.



LH SIDE ILLUSTRATED, RH SIDE SIMILAR

- Inner storage compartment cover
- Pass through hole, signal lig
 Apply flame treatment here Pass through hole, signal light wire, aft corner

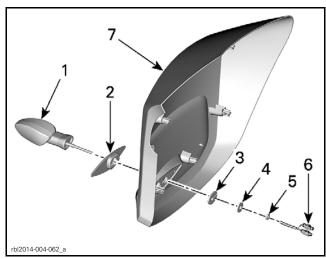
NOTE: In the following illustration, the rear fender panel is not shown for clarity of illustration. To apply flame treatment, it will be necessary to gently pull open the side of the rear fender panel.



REAR VIEW OF VEHICLE, REAR FENDER PANEL NOT SHOWN

- Apply a light flame treatment here
- LH storage compartment
- 3. RH storage compartment
- 2. Install turn signal light on outer left side storage cover as per following illustration. Pay attention to retaining washer position. Ensure light lens is facing aft.

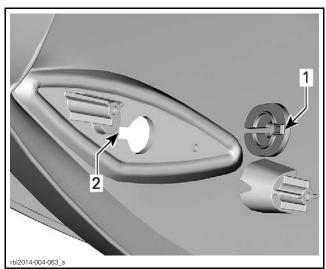
NOTICE Do not exceed specified tightening torque or damage to the light assembly may occur.



LEFT SIDE STORAGE COVER, RIGHT SIDE SIMILAR

- Turn signal light assembly
- Light holder
- Plastic retaining washer

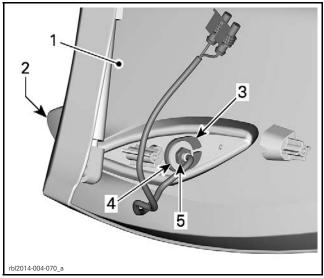
- LH signal light wiring and connectors
- Metal flat washer
 Retaining nut
 LH signal light wiring
 Outer storage cover



RETAINING WASHER POSITIONING

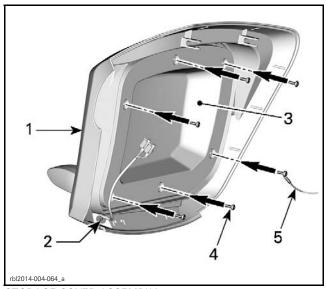
- Retaining washer alignment key
- Alignment key in outer storage cover

SIGNAL LIGHT NUT TIGHTENING TORQUE	
Retaining nut	2.4 N•m (21 lbf•in)



SIGNAL LIGHT INSTALLED ON OUTER COVER

- LH outer storage cover
- Signal light
 Plastic retaining washer
- Metal flat washer
- 5. Retaining nut



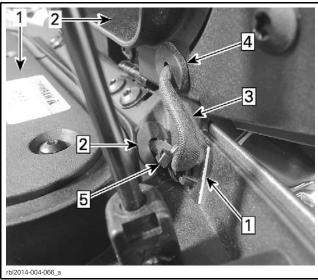
STORAGE COVER ASSEMBLY 1. Outer cover

- Signal light wiring passed through hole
- Inner cover
- Retaining screws (x6)
- Storage cover retention cable

TIGHTENING TORQUE	
Storage cover retaining screws (x6)	2.5 N•m ± 0.5 N•m (22 lbf•in ± 4 lbf•in)

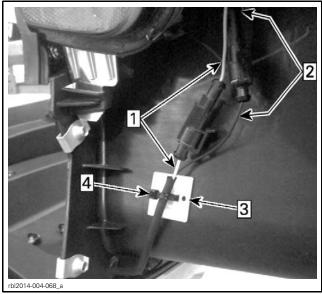
3. Insert signal light wiring through hole in storage compartment side and install parts as in following illustrations.

NOTE: Route wiring and locking tie as in illustration to prevent wiring from being pinched by cover when closed.



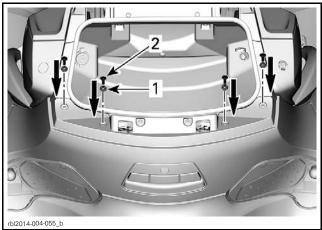
- LH storage compartment cover
- 2. LH storage compartment
- Step 1: Install locking tie mount
- Step 2: Install grommet in cover
- Step 3: Insert wiring through hole in storage compartment side Step 4: Install grommet in compartment side Step 5: Install locking tie loosely

NOTE: Tighten locking tie only after wiring is passed through hole in storage compartment and adjusted for length to prevent wiring from being pinched by cover closure. However, wiring must be sufficiently long to prevent tension on wires when cover is opened.



- Step 1: Connect colored wires together
- Step 2: Connect black wires together Step 3: Install locking tie mount
- Step 4: Install locking tie
- 4. Repeat steps for right side turn signal light in-
- 5. Turn vehicle power on and ensure turn signal lights are functioning correctly.

- 6. Install all parts removed from vehicle in reverse order of disassembly however, pay attention to the following:
 - Tighten all panel screws as specified.
 - Install plastic washers on top 4 screws of upper rear storage compartment panel.

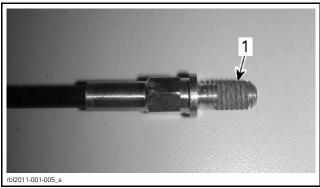


- Plastic washers (x4)
- 2. Retaining screws (x4)

TIGHTENING TORQUE	
Panel retaining screws	3.5 N•m ± 0.5 N•m (31 lbf•in ± 4 lbf•in)

Antenna

Antenna With Self-Locking Product

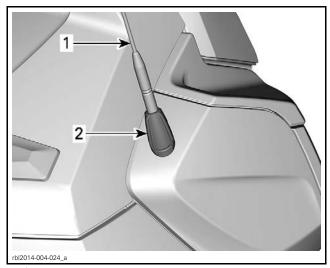


Self-locking product already applied

Install the antenna on the RH side of the rear cargo module and tighten as specified.

SPECIFIED TORQUE	
Antenna	1.5 N•m (13 lbf•in)

Install antenna grommet shipped in rear cargo compartment around base of antenna.



Antenna

2. Antenna base grommet

Hang Tag and Safety Labels

This vehicle comes with a hang tag and labels containing important safety information. The labels are considered permanent parts of the vehicle and should not be removed. Hang tag is to be removed by the owner only.

Any person who rides this vehicle should read and understand all the information given on hang tag and safety labels before riding.

Safety labels of several languages can be chosen by customer, according to availability.

MARNING

The Spyder roadster is a different type of vehicle it requires special skills and knowledge. Learn how the Spyder roadster is different.

Read the operator's guide (in the front storage compartment) and watch the safety video.

Complete a training course (if available), **practice**, become proficient with the controls, and get a proper license. **Refer** to the Safety Card before riding.

Always wear a helmet and riding gear.

With this type of vehicle, riders are exposed to more road risks than in a car. Even skilled operators can be struck by other vehicles or lose control. This vehicle will not protect you in a crash.

Handling limits and road conditions

The Vehicle Stability System (VSS) cannot stop you from losing control, flipping over, or falling off if you exceed this vehicle's limits. Know the limits for different road conditions. Do not ride on ice, snow, or off road. Avoid puddles and running water. This type of vehicle can hydroplane on water and slip on gravel, dirt and sand covered roads. If you must go through these road conditions, slow down.

This hangtag may only be removed by the customer.

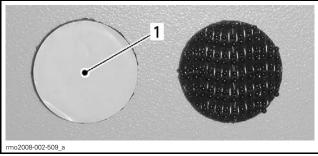
704904124

704904124

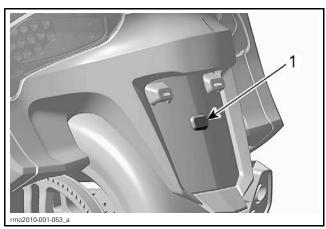
Licence Plate

NOTE: When a license plate needs to be installed or replaced, ensure to install new damping pad (P/N 293 740 028).

- 1. Remove existing plate on vehicle (if applicable).
- 2. Peal off backing of new damping pad.



- 1. Damping pad backing
- 3. Position new damping pad on vehicle plate support.



1. Plate support

4. Secure upper portion of license plate on vehicle plate support using existing hardware.



1. Existing hardware

5. Squeeze license plate and support together at the center.

Accessories Installation

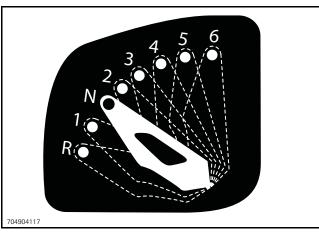
- 1. Install accessories (if any) as per their installation instructions (included in each kit).
- Install any other equipment required by law (if any).

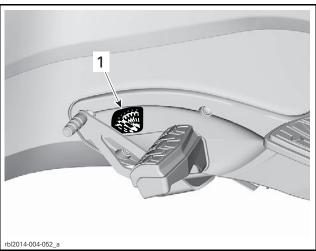
Vehicle Decals

- 1. Install decals on vehicle according to customer country language and local legislation.
- 2. Ensure that the new decals are installed at the same location and over the factory installed decals.

Japan SM6 Models

3. Install gear shift sequence decal as per following illustrations.



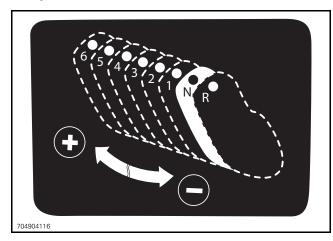


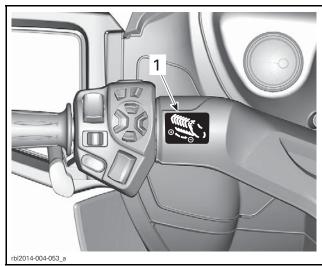
DECAL POSITION ON NEAR GEAR SHIFT LEVER

1. Gear shift sequence decal (P/N 704904117)

Japan SE6 Models

4. Install gear shift sequence decal as per following illustrations.





DECAL POSITION ON LEFT HANDLEBAR

1. Gear shift sequence decal (P/N 704904116)

Key Barrel - Trailer RT 622

An extra key barrel is supplied with each Spyder RT. This allows the use of the vehicle key for the trailer.

Refer to the trailer RT 622 PDI Bulletin for all the details.

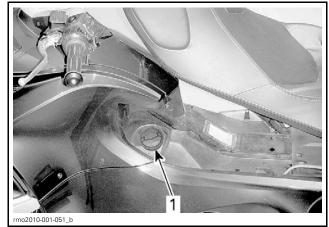
FLUIDS

General Guidelines

All fluids (except fuel) have already been filled at factory, it is only necessary to validate them. However, if refill is needed, refer to the appropriate *ROADSTER SHOP MANUAL* for the proper procedure.

Fuel

- 1. Unlatch and lift seat.
- 2. Add fuel in the fuel reservoir.



1. Fuel cap

Recommended Fuel

Use premium unleaded gasoline containing MAXI-MUM 10% ethanol. The gasoline must have the following minimum octane requirements.

In Brazil, use regular unleaded gasoline containing MAXIMUM 25% ethanol.

Use premium unleaded gasoline with an AKI (RON+MON)/2 octane rating of 91, or an RON octane rating of 95.

NOTICE Never experiment with other fuels. Engine or fuel system damages may occur with the use of an inadequate fuel.

Inside North America Only

NOTICE Do NOT use fuel from fuel pumps labeled E85.

Use of fuel labeled E15 is prohibited by U.S. EPA Regulations.

A WARNING

Never top off the fuel tank before placing the vehicle in a warm area. As temperature increases, fuel expands and may overflow. Fuel is flammable and explosive under certain conditions. Always wipe off any fuel or oil spillage from the vehicle.

NOTICE Other fuel can degrade vehicle performance and damage critical parts in the fuel system and engine.

Engine Oil

NOTICE The procedures for checking the Spyder roadster oil level and replacing oil are different from most of the motor vehicles today. Properly follow instructions provided in this section.

Recommended Engine Oil

The same oil is used for the engine, gearbox, clutch, and the Hydraulic Control Module (HCM) on the SE6 model.

Use the XPS 4-STROKE SYNTH. BLEND OIL (SUMMER) (P/N 293 600 121) or a 5W40 semi-synthetic (minimum) or synthetic motorcycle oil meeting the requirements for API service SL, SJ, SH, SG or higher classification. Always check the API service label on the oil container.

NOTICE Do not add any oil additives to the recommended oil. This may lead to gearbox and clutch malfunctions.

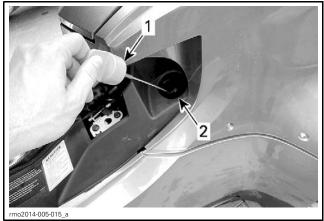
Engine Oil Level Verification

NOTICE The Spyder roadster has a dry sump type lubrication system. To obtain a precise reading of the engine oil level, you must follow this procedure.

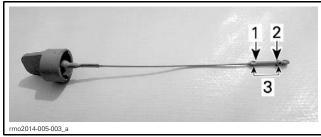
- 1. Park the vehicle on a level surface.
- 2. Open the seat. Refer to *OPENING THE SEAT* in the *EQUIPMENT* subsection.
- 3. The engine needs to idle for at least 30 seconds at normal operating temperature prior to verifying the oil level.

NOTE: Adjusting the oil level on a cold engine will result in overfilling.

- 4. Stop engine.
- 5. Unscrew and remove the oil dipstick.



- 1. Oil dipstick
- 6. Wipe off the dipstick.
- 7. Reinsert and **completely screw in** the dipstick.
- 8. Unscrew and remove the dipstick again.
- 9. Check the oil level on the dipstick.



- 1. Upper mark (F)
- 2. Lower mark (add)
- 3. Operating range

NOTE: At the lower mark (add), 500 ml (.5 qt (U.S. liq.)) of oil is required to reach upper mark (F).

Clutch Fluid (SM6 Model)

Recommended Clutch Fluid

Use DOT 4 brake fluid from a sealed container. An opened container may be contaminated or may have absorbed moisture from the air.

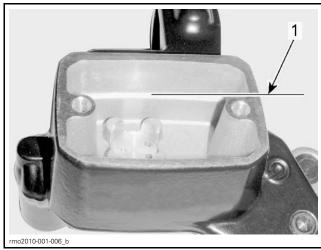
Clutch Fluid Level Verification

The clutch fluid reservoir is near the reverse button on the left handlebar.

- 1. Park the vehicle on a firm, level surface.
- 2. Set the handlebar straight in order to position the top of clutch fluid reservoir horizontally.
- 3. Wipe clean the cap area.
- 4. Use the Phillips head screwdriver located in the toolkit.
- 5. Unscrew cap retaining screws.



- 6. Carefully remove cap. Pay attention not to drop the cap seal.
- 7. Look inside the reservoir to see the fluid level.
- 8. Check clutch fluid level inside the reservoir:
 - The fluid must be flush to the fill level line (protuberance on the reservoir wall).



FLUID REMOVED FOR CLARITY PURPOSE

Add recommended fluid as required. Do not overfill.

A WARNING

Avoid getting brake fluid on skin or in eyes — it may cause severe burns. In case of contact with the skin, wash thoroughly. In case of contact with the eyes, immediately rinse with plenty of water for at least 10 minutes and then consult a doctor immediately.

- 10. Immediately wipe up spills if necessary.
- 11. Ensure that the seal located inside the cap is collapsed.
- 12. Reinstall the cap to the reservoir.
- 13. Tighten cap screws.
- 14. Wipe off reservoir if necessary.

Engine Coolant

A WARNING

When opening the reservoir, the coolant can be very hot and spray out if the engine is hot. In order to avoid getting burned, check coolant level when engine is cold.

Recommended Coolant

The cooling system must be filled with distilled water and antifreeze solution (50% distilled water, 50% antifreeze).

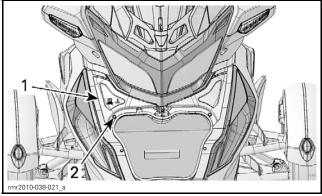
For best performance, use LONG LIFE ANTIFREEZE (P/N 219 702 685).

Coolant Level Verification

A WARNING

When opening the reservoir, the coolant can be very hot and spray out if the engine is hot. In order to avoid getting burned, check the coolant level when the engine is cold.

- 1. Park the vehicle on a firm, level surface.
- 2. Open the front storage compartment.
- 3. Remove the plastic rivet from the right service cover.



- 1. Right service cover
- 2. Plastic rivet
- 4. Pull down the service cover using the recess to release upper tabs from the front fascia.



- 5. Pull out the rear tab.
- 6. Lift service cover to remove it.

NOTICE Pay attention not to damage the FCS switch.

7. Check the coolant level on the right hand side. Coolant must be slightly above the COLD. level mark.



TYPICAL

- 1. Coolant reservoir cap
- 8. If required, add recommended coolant until it is visible in the reservoir, slightly above COLD level mark. Use a funnel to avoid spillage. **Do not overfill.**
- 9. Reinstall the service cover.

Brake Fluid

A WARNING

Avoid contact of brake fluid with skin or eyes because it may cause severe burns. In case of contact with the skin, wash thoroughly. In case of contact with the eyes, immediately rinse with plenty of water for at least 10 minutes and then consult a doctor immediately.

NOTICE Do not overfill brake fluid reservoir.

Recommended Fluid

Use only DOT 4 brake fluid from a sealed container. An opened container may be contaminated or may have absorbed moisture from the air.

NOTICE To avoid serious damage to the braking system, do not use non-recommended fluids. Brake fluid can damage plastic and painted surface. Handle with care.

Brake Fluid Level Verification

WARNING

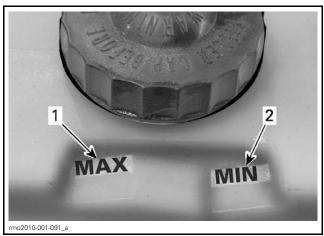
Clean filler cap before removing. Use only DOT 4 brake fluid from a sealed container.

- 1. Park the vehicle on a firm, level surface.
- 2. Unlatch and lift the seat.
- 3. Check the brake fluid level in both reservoirs, near the back of the seat. They should both be above the MIN. mark.

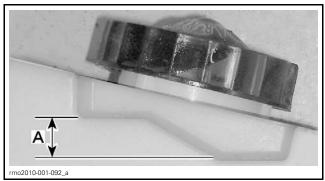


TYPICAL

- 1. Brake fluid reservoir
- 4. Clean the filler caps before removing.
- 5. Add recommended fluid as required. **Do not overfill.**



- . Brake fluid MAX. level mark
- 2. Brake fluid MIN. level mark



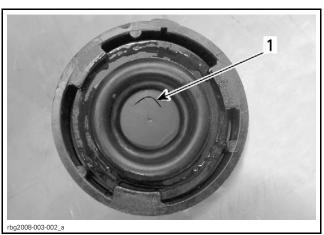
A. Operating range

A WARNING

Clean filler cap before removing. Use only DOT 4 brake fluid from a sealed container.

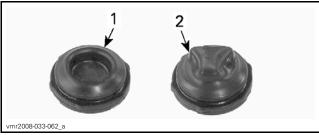
NOTICE Brake fluid can damage painted surfaces or plastic parts. Immediately wipe off any spill.

- 6. Prior to installing brake fluid reservoir caps:
 - Check that V slit is in good condition.
 - Ensure diaphragms are properly positioned.



TYPICAL

1. V slit



TYPICAL

- 1. Correct position
- 2. Wrong position
- 7. Reinstall both caps of the reservoir.
- 8. Close the seat and ensure it is fully latched.

SETUP

Guidelines

All adjustments have already been performed at factory. It is only necessary to validate them. However, if readjustment is needed, refer to the appropriate *ROADSTER SHOP MANUAL* for the proper procedure.

Tire Pressure

A WARNING

Low pressure may cause tire to deflate and rotate on wheel. Overpressure may burst the tire. Always follow recommended pressure.

NOTICE Always check pressure when tires are cold before using the vehicle.

NOTE: Tire pressure changes with temperature and altitude. Recheck pressure if one of these conditions has changed (e.g., significant weather change, driving in the mountains).

Inflate tires to the specified air pressure. Refer to the following table.

COLD TIRE PRESSURE RECOMMENDATION		
FRONT REAR		
138 kPa ± 14 kPa (20 PSI ± 2 PSI)	193 kPa ± 14 kPa (28 PSI ± 2 PSI)	

NOTE: The pressure difference between the left and right side tire should not exceed 3.4 kPa (.5 PSI).

For your convenience, an electronic pressure gauge is supplied in the tool kit.

Drive Belt

NOTICE Always verify drive belt tension with all parts at room temperature and the rear wheel lifted of the ground.

1. Place vehicle on a level surface.

NOTE: The area must be protected against wind and must have a very low background noise.

- 2. Set transmission to NEUTRAL.
- 3. Lift rear of vehicle by the frame until rear wheel is off the ground.

NOTICE Do not lift under rear shock absorber. Always lift by the frame. Refer to illustration.



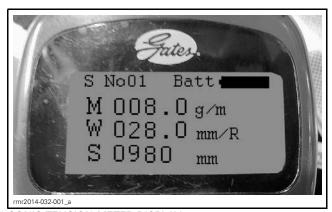
TYPICAL - LIFT BY THE FRAME

4. To check the drive belt tension use the BELT TENSION METER (P/N 529 036 115).



5. Enter the following specifications to program the meter.

MASS	WIDTH	SPAN
8.0 g/m	28.0 mm/R	980 mm



SONIC TENSION METER DISPLAY

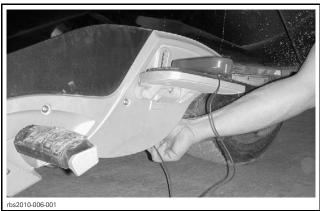
NOTE: Refer to the manufacturer's instructions to set the informations into the device.

6. Turn rear wheel to align a wheel spoke with the swing arm.



TYPICAL - SWING ARM ALIGNS WITH A SPOKE

7. Position the sensor under the LH passenger footrest and hold the sonic tension meter sensor approximately 1 cm (1/2 in) from belt or closer without touching the belt.



SPYDER RT

- 8. Tap the belt to make the belt vibrate and note the measurement.
- 9. Repeat step 8.

NOTE: The second value should be within ±25N. If no, repeat measurements until tolerance is met.

10. Repeat steps 6 to 9 for the 2 remaining wheel spokes.

The average of the 3 obtained values (at the 3 spokes) must be within the following range:

DRIVE BELT TENSION (PARTS AT ROOM TEMPERATURE AND REAR WHEEL LIFTED)

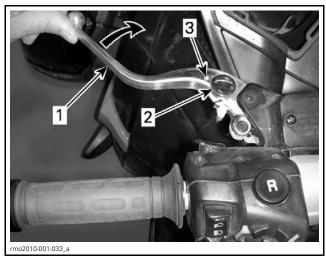
►1050N ± 150N◀

If the tension of drive belt is out of specification, adjust drive belt as per *DRIVE BELT TENSION ADJUSTMENT*. Refer to *DRIVE SYSTEM* subsection in the proper *CAN-AM ROADSTER SHOP MAN-UAL*.

Clutch Lever

NOTE: The distance between the clutch lever and handgrip can be adjusted from position 1 (greatest distance) to position 4 (smallest distance).

- 1. Adjust the clutch lever as per the owner's preference.
 - 1.1 Push the clutch lever forward to release the adjuster dial. Hold in position.
 - 1.2 Turn the adjuster dial to the desired position aligning the dial number with the dot on the lever.
 - 1.3 Release the clutch lever.



CLUTCH LEVER ADJUSTMENT

- 1. Clutch lever
- 2. Adjuster dial
- 2. Auju 3. Dot

Suspension

ACS Rear Suspension

Models Without Compressor (Manual Adjustment)

The suspension pressure is adjustable by deflating or inflating the air spring. Use an air compressor and a pressure gauge.

To soften suspension, reduce the air pressure and to harden suspension, increase air pressure.

- 1. Adjust the air spring as per the owner's preference.
- 2. Refer to the following chart for proper adjustment.

			A	WA	RNI	NG	
MINIMUM PRESSURE 70 kPa / 10 Psi DO NOT EXCEED RECOMMENDED PRESSURE BY 70 kPa / 10 Psi							
	LOAD (PASSENGER + CARGO) Kg / Lb 704904300						
	١.	UAD	0	45/100	70/150	90/200	115/250
	Ж	Kg/Lb	kPa/Psi	kPa/Psi	kPa/Psi	kPa/Psi	kPa/Psi
	IVER	70/150	310/45	380/55	450/65	480/70	515/75
	R	90/200	345/50	415/60	480/70	515/75	550/80
1		115/250	380/55	450/65	515/75	550/80	585/85
7049043	300						

INSIDE NORTH AMERICA

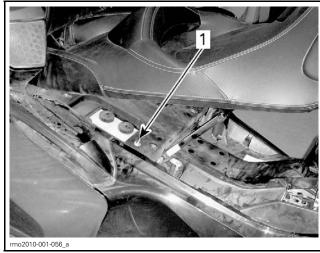
			A	WA	RNI	NG	
	DO					a / 0.7 bar BY 70 kPa	a / 0.7 bar
	LOAD		(F	(PASSENGER + CARGO) Kg 704904301			
	-	UAD	0	45	70	90	115
	Ж	Kg	kPa/bar	kPa/bar	kPa/bar	kPa/bar	kPa/bar
	RIVER	70	310/3.10	380/3.80	450/4.50	480/4.80	515/5.15
		90	345/3.45	415/4.15	480/4.80	515/5.15	550/5.50
(115	380/3.80	450/4.50	515/5.15	550/5.50	585/5.85
049043	301		-				

OUTSIDE NORTH AMERICA

NOTICE Do not exceed the maximum allowed pressure. This might damage the air suspension.

NOTE: When adjusting the pressure, do not put your weight on the vehicle and do not load cargo in the storage compartment.

The air spring is connected directly to an air hose with a manual ACS inflation valve located under the seat.



1. Manual ACS inflation valve

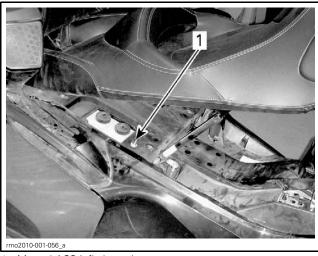
NOTE: On models equipped with a remote adjustment, it is not necessary to adjust the suspension setting. The air spring will inflate automatically at the factory setting after the vehicle start up. Refer to the SPYDER RT OPERATOR'S GUIDE for details.

Lights

Headlights Aiming Verification

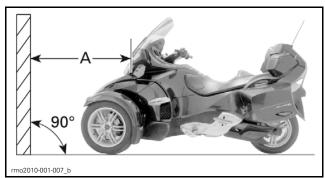
North American Models

1. Set the rear suspension air pressure to 0 kPa (0 PSI) using the manual ACS inflation valve located under the seat.

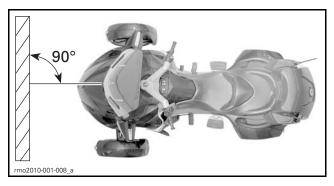


1. Manual ACS inflation valve

2. Position the vehicle in front of a test surface as shown.



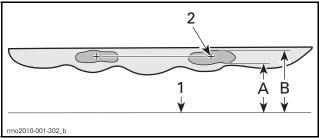
A. 10 m (33 ft)



3. Trace 2 lines parallel to the ground on the test surface as follows:

LINES ON THE TEST SURFACE		
Line A	642 mm (25.3 in) above ground	
Line B	732 mm (28.8 in) above ground	

- 4. Select low beam.
- 5. Beam aiming is correct when the focus point (brightest spot) of the headlight reflection is within the marks.



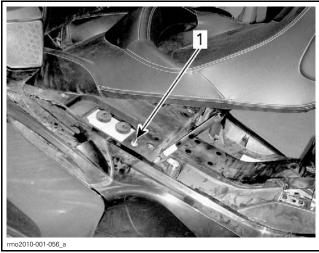
TYPICAL HEADLIGHT REFLECTION ON TEST SURFACE

- 2. Focus point
- A. 642 mm (25.3 in) above ground B. 732 mm (28.8 in) above ground

CE Models (Low Beam)

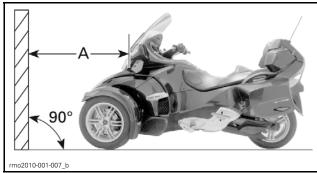
NOTE: This verification is valid for either left-hand or right-hand traffic regulations.

1. Set the rear suspension air pressure to 0 kPa (0 PSI) using the manual ACS inflation valve located under the seat.

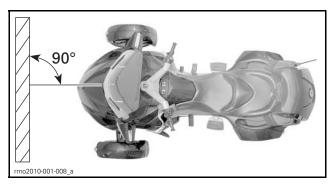


1. Manual ACS inflation valve

2. Position the vehicle in front of a test surface as shown.



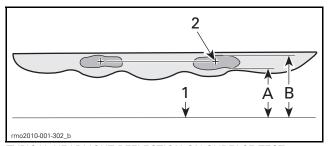
A. 10 m (33 ft)



3. Trace 2 lines parallel to the ground on the test surface as follows:

LINES ON THE TEST SURFACE		
Line A	415 mm (16.3 in) above ground	
Line B	515 mm (20.3 in) above ground	

- 4. Select low beam.
- 5. Beam aiming is correct when the focus point (brightest spot) of the headlight reflection is within the marks.



TYPICAL HEADLIGHT REFLECTION ON SURFACE TEST

- Ground
- Focus point
- A. 415 mm (16.3 in) above ground B. 515 mm (20.3 in) above ground

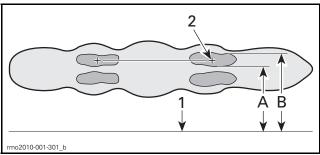
CE Models (High Beam)

NOTE: As the low beam and high beam are separate units, this verification is valid for either lefthand or right-hand traffic regulations.

- 1. Follow steps 1 and 2 of the low beam verification procedure.
- 2. Trace 2 lines parallel to the ground on the test surface as follows:

LINES ON THE TEST SURFACE		
Line A 800 mm (31.5 in) above ground		
Line B	850 mm (27-1/2 in) above ground	

- 3. Select the high beam.
- 4. Beam aiming is correct when the focus point (brightest spot) of the headlight reflection is within the marks.



TYPICAL HEADLIGHT REFLECTION ON TEST SURFACE

- Ground
- 2. Focus point
- A. 800 mm (31.5 in) above ground B. 850 mm (33.5 in) above ground

Headlights Vertical Aiming Adjustment

1. Remove both middle side panels.

Upper Headlight Units

2. To adjust headlight beam, turn the adjustment knob. Adjust both headlights evenly.

North American Models



LH SIDE SHOWN 1. Adjustment knob

CE Models (High Beam)



LH SIDE SHOWN 1. High beam adjustment knob

HEADLIGHT BEAM ADJUSTMENT		
Raise beam Turn knob clockwise		
Lower beam	Turn knob counterclockwise	

3. Install both middle side panels.

Low Beam Headlight Units (CE Models)

- 1. Remove both middle side panels.
- 2. To adjust headlight beam, turn the adjustment knob. Adjust both headlights evenly.



LH SIDE SHOWN 1. Adjustment knob "LB"

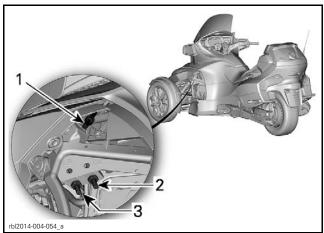
3. Install both middle side panels.

Headlights Horizontal Aiming Adjustment, High Beams (Japan Models Only)

If high beam headlights are out of adjustment (to far left or right), carry out the following procedure.

1. Remove both middle side panels.

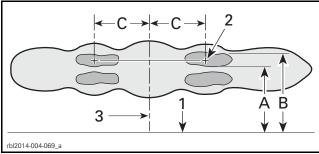
2. To adjust headlight beam, turn the adjustment knob.



LH SIDE SHOWN

- High Beam Horizontal Adjustment Knob
- High Beam Vertical Adjustment Knob "HB"
- 3. Low Beam Vertical Adjustment Knob "LB"

Adjust both high beam headlights so that a line drawn from the center of the focus point (brightest spot on the wall) to the center of the headlight assembly is parallel to the fore and aft center line of the vehicle.



TYPICAL - HIGH BEAM HEADLIGHT REFLECTION ON TEST **SURFACE**

- 1. Ground Focus point
- 3. Vehicle center line
- A. 800 mm (31-1/2 in) above ground
- B. 850 mm (33-1/2 in) above ground C. 122 mm (4-13/16 in) from vehicle center line

Storage Compartment Covers

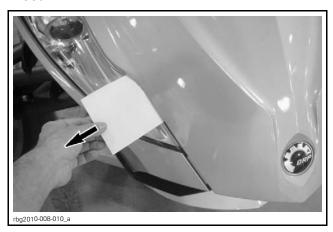
Front Storage Compartment Cover

1. Open front storage compartment cover then let it fall.



FRONT STORAGE COMPARTMENT VERIFICATION		
PASS	Cover latches properly	
FAIL	Cover does not latch properly	

2. Place a sheet of paper on storage compartment seal.



- 3. Pull on the sheet of paper.
- 4. Repeat for the other side.

FRONT STORAGE COMPARTMENT VERIFICATION		
PASS	Sheet not easily removable	
FAIL	Sheet easily removable	

5. If any tests fail, adjust front storage compartment cover. Refer to *BODY* subsection in the proper *CAN-AM ROADSTER SHOP MANUAL*.

Side Storage Compartment Cover

1. Open and close side storage compartment cover.



SIDE STORAGE COMPARTMENT VERIFICATION		
PASS	Cover opens and latches properly	
FAIL	Cover does not open or not latch properly	

- 2. If test fail, adjust latch cable accordingly.
- 3. Repeat for the other side.

Top Storage Compartment Cover

1. Open and close top storage compartment cover.



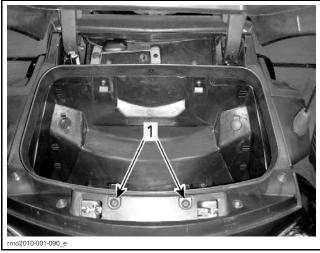
TOP STORAGE COMPARTMENT VERIFICATION		
PASS	Cover opens and latches properly	
FAIL	Cover does not open or not latch properly	

- 2. If test fail, proceed as follows:
 - 2.1 Loosen screws on the top of rear panel.
 - 2.2 Push and hold rear panel forward.
 - 2.3 Tighten screws on the top of rear panel.



1. Screws on the top of rear panel

- 3. If proper adjustment cannot be obtained, proceed as follows:
 - 3.1 Slightly loosen one latch retaining screw.
 - 3.2 Adjust latch position accordingly.
 - 3.3 Tighten latch retaining screw.
 - 3.4 Proceed the same way for the other screw.



1. Latch retaining screws

NOTE: Do not remove latch retaining screws completely as the latch will fall into vehicle.

Clock and Language Setting

NOTE: It is normal that the check engine indicator lamp is displayed while the clock is adjusted.

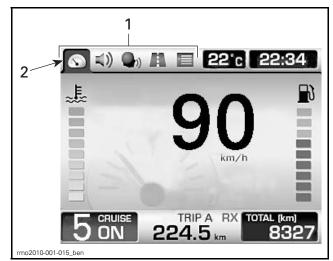
Use the RECC (Roadster Electronic Command Center) to control the display functions.



1. RECC

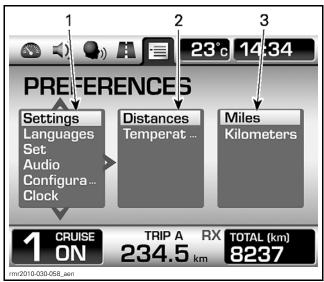
Pressing the MODE button will move a selection through the category icons, located at the top left area of the screen, in this order: Default riding screen, Audio, CB, Trip meter and Preferences. Each press of the button will move the selection to the next available icon. When an icon is selected, its related screen will appear.

NOTE: The audio and CB icons are skipped when the vehicle is not equipped with these features. The Preferences screen is skipped when the vehicle is above 5 km/h (3 MPH), except for the SE6 model for the towing mode.



Category icons Default riding icon selected

In the preferences screen, select the appropriate category.



PREFERENCES SCREEN

1. 1st column: Main category

2. 2nd column: Secondary cátegory or item

3. 3rd column: Unit or setting

Use the LEFT/RIGHT button to select the desired column.

Use the UP/DOWN button to move to the desired item in the column.

Use the RIGHT button to moved to the options column for that selection.

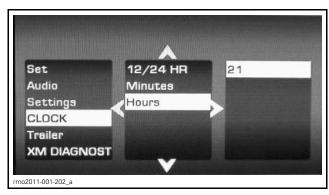
Use the UP/DOWN button to again to move to the desired item in that column.

NOTE: When an item is selected, the item is set as the current value. You may then navigate to any other screen and the item selected item will be kept.

Setting the Time

To set the hours:

Select CLOCK in main category of Preferences Screen.

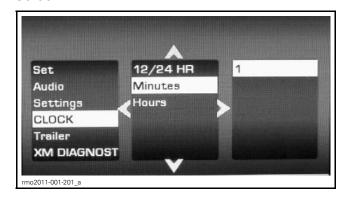


Select HOURS in secondary category.

Adjust the unit value using the UP and DOWN arrow.

To set the minutes:

Select CLOCK in main category of Preferences Screen.



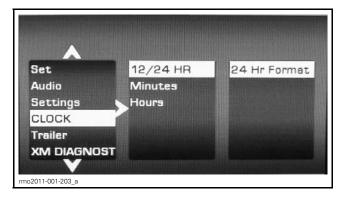
Select MINUTES in secondary category.

Adjust the unit value using the UP and DOWN arrow.

Selecting the Hour Mode

To select the 12/24 hour mode:

Select CLOCK in main category of Preferences Screen.



Select 12/24 HOUR in secondary category.

Select the appropriate value in main unit or setting.

Language Setting

In the preferences screen, choose:

- Languages
- Select the appropriate language from the available selections.

B.U.D.S. Programming

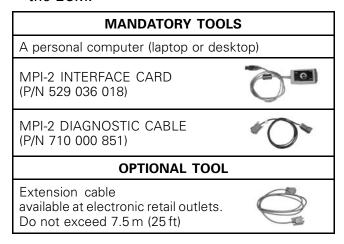
Always use the latest applicable B.U.D.S. version. It is available from the following web sites:

WWW.BOSSWEB.BRP.COM

Please note that the latest B.U.D.S. version is also available in Info Center.

NOTICE During data transfer, make sure that:

- Voltage (12V) remains stable before starting update. Charge the battery or use a power pack to ensure sufficient power reserve for the procedure.
- Although the screen may "freeze" for a while, B.U.D.S. continues to function in the background.
- Never disconnect any cable while updating the ECM.

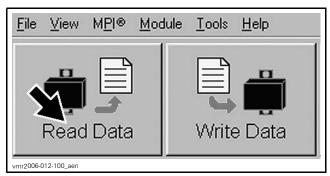


B.U.D.S. can be used to

- Enter Customer's Name
- Reset Trip Hours and Trip Distances
- Reset Last Service
- Setting Units of Display
- Check fault codes (if any)
- Program keys.

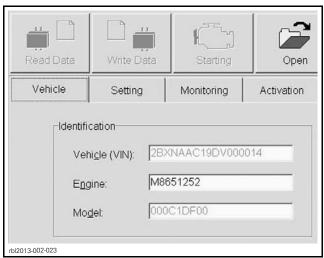
Connecting PC to Vehicle

- 1. Remove RH service cover from vehicle.
- Connect the PC to vehicle. Refer to the latest edition of CAN-AM ROADSTER B.U.D.S. SOFT-WARE AND COMMUNICATION TOOLS for the proper procedures.
- 3. Press READ DATA button from the tool bar to initiate communication with the vehicle.



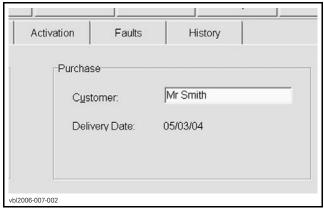
Entering Customer's Name

1. Click on the VEHICLE tab to open the vehicle information page.



TYPICAL

2. Type the name of the customer.



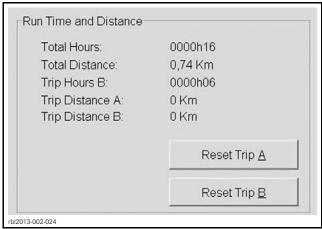
TYPICAL

3. Click on WRITE DATA to save the information in the vehicle ECM.

NOTE: After you are finished typing the name, B.U.D.S. automatically updates the Delivery Date on the screen.

Resetting Trip Hours and Trip Distances

- 1. Ensure that the VEHICLE tab is selected.
- 2. Click on the RESET TRIP buttons to reset the information.

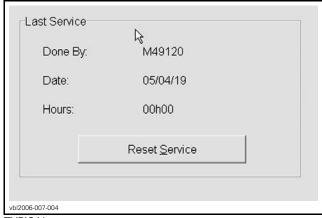


TYPICAL

NOTE: It can also be done directly on the info-center, using the selector button.

Resetting Last Service

1. Click on the RESET SERVICE button to reset the informations.



TYPICAL

NOTE: After each maintenance service, Last Service should be reset to keep a good track of vehicle service history.

Setting Units of Display

NOTE: The speedometer is factory preset in miles but it is possible to change it to kilometer reading. Any unit modification is applied to the speedometer, odometer and trip meter.

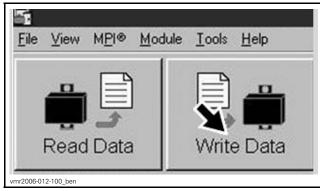
- 1. Select the SETTING tab in B.U.D.S.
- 2. Select CLUSTER page.
- 3. Select **Metric** or **Imperial** from the **Cluster Units** section.

NOTE: No data will be lost when changing this setting.

Ending a B.U.D.S. Session

NOTICE Clear the fault(s) after a problem has been solved. This will properly reset the appropriate counter(s).

- Click on FAULT tab and check if there are active faults. If so, service vehicle then clear the faults in B.U.D.S.
- 2. Click on WRITE DATA button to transfer new settings and information to the modules.



WRITE DATA BUTTON

- 3. Click on EXIT button (right most) to end session.
- 4. Reinstall DCL connector in its holder.
- 5. Reinstall RH service cover on vehicle.

ASSEMBLY INSPECTION

Inspect the following parts to make sure that the vehicle is properly assembled.

NOTE: Ensure that all protective materials are removed from vehicle.

- Front compartment cover and seat locks
- Passenger grab handles
- Front wheel nuts torque (must be 105 N•m (77 lbf•ft))
- Rear shock absorber retaining nuts torque (must be 48 N•m (35 lbf•ft))
- Suspension arm ball joint cotter pins
- Tie rod end nuts and cotter pins
- Rear axle nut and cotter pin
- Gearshift pedal operation
- Parking brake operation
- Brake lines
- Foot pegs.

NOTE: Refer to the Predelivery Check List to confirm that all items are covered by your inspection.

FINAL INSPECTION

Vehicle Test Run

Ride the vehicle to ensure proper operation of all systems and components.

NOTE: It is normal for the shock absorbers not to provide their optimal performance during the first test ride. They will be set after a few suspension strokes.

- 1. Instrument cluster operation.
- 2. Indicator-warning pilot lamps functioning on power up.
- 3. Display of safety message in cluster.
- 4. Starter interlock mechanism operation.
 - 4.1 Press start button to make sure engine can not be started if M button is not depressed to acknowledge safety message.
- 5. Cluster mode button and set button operation.
- 6. Error messages in cluster (correct if necessary).
- 7. LH handlebar multifunction switch operation.
- 8. Ignition keys allow the engine to start.
- 9. Reverse button operation.
 - 9.1 Start engine.
 - 9.2 Shift transmission to first gear, slightly apply throttle then release.
 - 9.3 Shift transmission to reverse, slightly apply throttle then release.
 - 9.4 Shift transmission to neutral position, slightly apply throttle then release.
- 10. Throttle operation.
 - The throttle is the right handgrip, it controls engine speed. To increase engine speed, roll the throttle toward you. To decrease engine speed, roll the throttle away from you. The throttle is spring loaded and should return to idle when released.
- 11. Clutch lever operation (SM6 Model).
 - The clutch lever is in front of the left hand grip. The clutch controls the transmission of power from the engine to the rear wheel. The lever is squeezed to disengage power and released to engage power.
- 12. Engine stop switch operation.
 - The engine stop switch is near the right handgrip. It has two positions and must be set to the run position before you can start the engine. It allows you to stop the engine anytime without removing your hand from the handlebar.

- 13. Operation of the following lights:
 - Headlights (HI and LO beam)
 - Taillights
 - Brake light
 - Position lights
 - Turn signal lights
 - Hazard lights
 - Licence plate light
 - Back up light
 - Fog lights (as applicable)
 - Front storage light (as applicable).
- 14. Dimmer switch operation.
- 15. Horn operation.
 - The horn button is located near the left hand grip.
- 16. Brake operation.
 - The brake pedal is in front of the right footpeg.
 - Press it down to operate.
 - This pedal brakes all three wheels.
 - 16.1 Ensure brake pedal is firm when pressure is applied and that it returns freely.
- 17. Electronic parking brake operation.
 - The parking brake switch is located on the central panel.
 - 17.1 Press it down to apply the parking brake.
 - 17.2 Press the switch down a second time to release the parking brake.
 - 17.3 Ensure parking brake is shut-off.
- 18. Shifter operation.
- 19. Leakage of the following fluids:
 - Fuel
 - Engine oil
 - Engine coolant
 - Brake fluid
 - Clutch fluid
- 20. Proper operation of seat release and hood release using key.
- 21. Absence of abnormal noises or vibrations.
- 22. Tool kit, DVD and Operator's Guide in front storage compartment.
- 23. Radio operation using, front and rear controls (as applicable).
- 24. Front and rear heated grips operation (as applicable).

- 25. iPod® and MP3 audio player wires stowed in rear top storage compartment.
- 26. Complete applicable recall or factory-directed modification.
- 27. Ensure the hang tag is on the vehicle handle bar (to be removed by owner).

Vehicle Cleaning

To clean the vehicle, do not use high-pressure washers (like the ones found in car washes) as they may damage certain parts of the vehicle.

NOTICE Do not clean the windshield with alkaline or acid cleaner, gasoline or solvent to avoid windshield damage.

NOTICE For Matt finishes, do not use wax, detail spray, or other products used on regular paint. Do not wash with abrasive materials. Do not use mechanical cleaners or polishers, and do not rub the surfaces vigorously.

To clean the vehicle:

- 1. Rinse the vehicle thoroughly with water to remove loose dirt.
- Using a soft, clean cloth, wash the vehicle with water mixed with a mild detergent, such as soap specially formulated for motorcycles or automobiles.

NOTE: Using warm water works well to remove bugs in the windshield and front panels.

NOTE: For Matt finishes, hand-wash with a soft wash mitt and a mild cleaning product safe for matt paint. To remove foreign substances such as insects, use a soft applicator and a mild solvent. Saturate and soak area before cleaning. Rub lightly.

- 3. While washing the vehicle, check for grease or oil. You can use XPS ROADSTER WASH (P/N 219 701 703) or a mild automotive degreaser. Thoroughly follow the manufacturer's instructions.
- 4. Dry the vehicle with a chamois or a soft towel.

NOTE: Vehicles with a matt paint finish may require more frequent cleaning.

Delivery to Customer

- 1. Complete the PREDELIVERY CHECK LIST.
- 2. Give *OPERATOR'S GUIDE* and *SAFETY DVD* to customer.

The customer and dealer must read and sign the *PREDELIVERY CHECK LIST*.

Hang tag is to be removed by the owner only.

Any person who rides this vehicle should read and understand all the information given on hang tag and safety labels before riding.

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