November 16, 2012 Subject: **Can-Am™ Spyder™ RT Predelivery Instructions**

No. **2013-2**

REVISION 2
March 14th, 2013

YEAR	MODEL	MODEL NUMBER	SERIAL NUMBER
2013	Spyder RT Series	Refer to table on next pages for complete listing	All

▶Text(s) between arrows is (are) modified element(s) to the original publication.◀

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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.

⚠ WARNING

To obtain warranty coverage, predelivery 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*

⚠ 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.

UPDATE SUMMARY

This summary highlights updates to the Predelivery Inspection for MY2013. 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
RT Models	Front fenders crating method	*PARTS AND SUB-CRATES REMOVAL*
	Battery installation	*PARTS TO BE INSTALLED*

MODEL LISTING

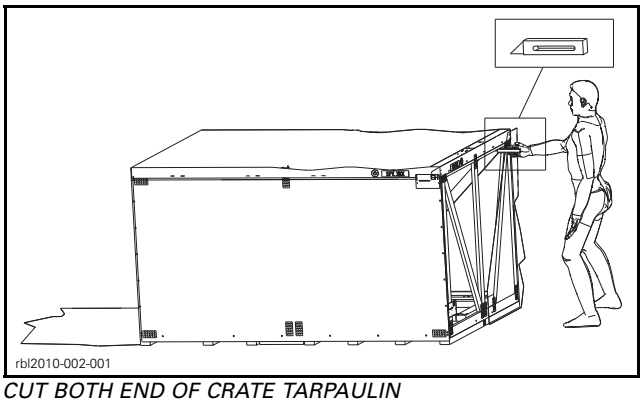
YEAR	MODEL	MODEL NUMBER	COUNTRY	PREDELIVERY KIT	SERIAL NUMBER
2013	Spyder RT SM5	A3DE	Australia	(P/N 703 100 390)	All
		A3DC, A3DD, A3DF, A3DG	Canada - USA		
		A3DB	Europe		
	Spyder RT SE5	B2DC, B2DE, B2DF, B2DG	Canada - USA		
		B2DB, B2DD	Europe		
	Spyder RT Limited SE5	B9DK	Australia		
		B9DM	Brazil		
		B9DC, B9DE, B9DG, B9DJ, B9DL, B9DN, B9DP, B9DR	Canada - USA		
		B9DB, B9DD, B9DF,	Europe		
	Spyder RT-S SM5	B5DB, B5DC, B5DD,B5DG, B5DH, B5DJ, B5DK, B5DL	Canada - USA	(P/N 703 100 391)	
	Spyder RT-S SE5	A4DB, A4DK	Australia		
		A4DL	Brazil		
		A4DC, A4DE, A4DG, A4DM, A4DN, A4DP, A4DR, A4DS	Canada - USA		
		A4DD, A4DF, A4DT	Europe		

UNCRATING

Crate Cover Removal

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

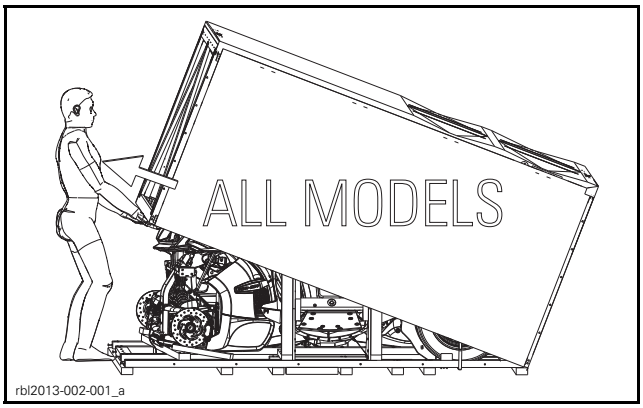
1. Position the crate on a firm, level surface.
2. Carefully cut both ends of crate tarpaulin to locate the front of vehicle.



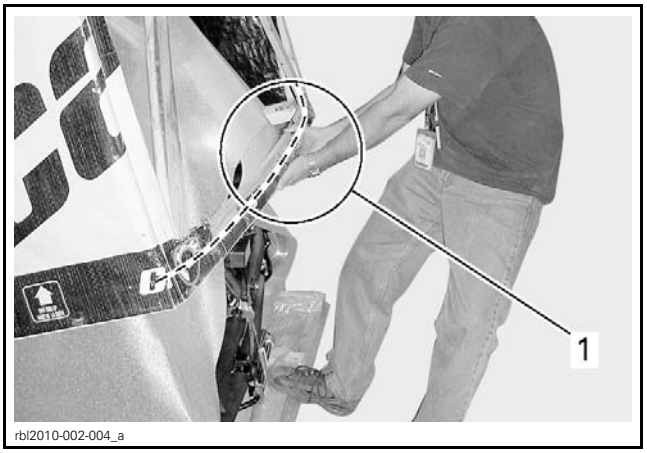
CUT BOTH END OF CRATE TARPAULIN

3. Remove all screws holding crate cover to crate base.
4. Tilt cover from the front side of the vehicle then pull cover toward you to clear vehicle fascia.

NOTICE Do not raise cover vertically. Tilt cover located on the front side of the vehicle. Refer to illustration.



TYPICAL - TILT COVER THEN PULL IT



FRONT OF VEHICLE
1. Pull crate cover to clear front fascia of the vehicle

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

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

Parts and Sub-crates Removal

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

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

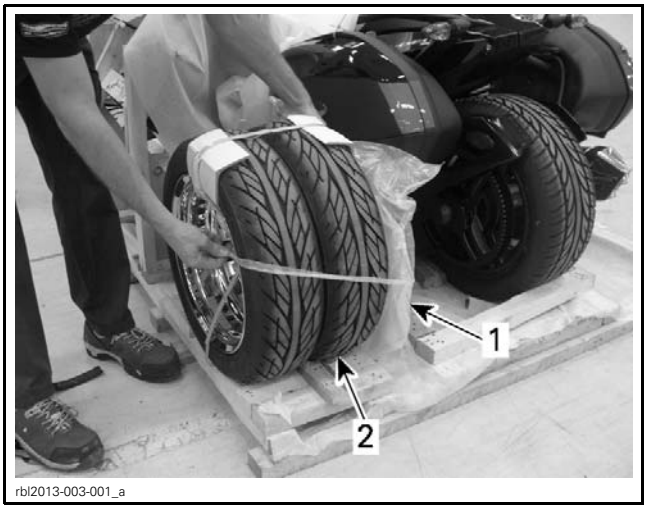
1. Remove protective foam from vehicle.

2. On LH side, remove all screws holding front cargo module sub-crate.

† Robertson is a registered trademark of Robertson Inc.

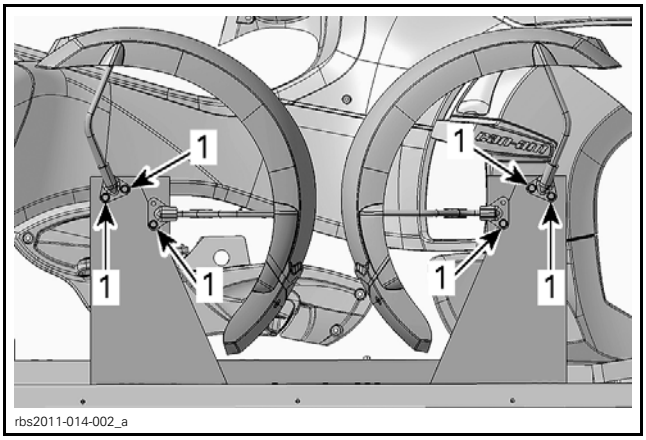
TYPICAL - LH SIDE
1. Sub-crate that contains front cargo module

3. Remove windshield and front wheels from crate base.



TYPICAL
1. Windshield
2. Front wheels

4. On RH side, remove six bolts and two fenders from sub-crate.



TYPICAL - RH SIDE - SUB-CRATE THAT CONTAINS FRONT FENDER
1. Bolts

5. On RH side, remove all **nails** holding front fender sub-crate and remove sub-crate.

Parts Check

Ensure that the crate includes the following items (inside front storage compartment or secured to front of vehicle):

NOTE: Empty all contents from front storage compartment.

DESCRIPTION	MODEL	QTY
Operator's guide	All	1
Predelivery check list		1
Safety DVD		1
Predelivery kit		1
Service covers		2
Windshield trim		2
Wheel caps		2
Front cargo liner	RT-S RT Limited	1

The predelivery kit includes the following items:

DESCRIPTION (LOCATION)	QTY
Wheel lug nut - black (front wheels) (RT-S)	6
Wheel lug nut - chrome (front wheels) (RT and RT LTD)	6
Plastic bushing (rear suspension)	2
M10 x 140 hexagonal flange screw (rear suspension)	1
M10 elastic flange nut (rear suspension)	1
M6 x 20 hexagonal flange screw (rear suspension)	1

DESCRIPTION (LOCATION)	QTY
M6 caged nut (front cargo module)	1
Black M6 x 20 hexagonal flange 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)	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

Ensure that the following items are included inside the rear cargo compartment:

DESCRIPTION	MODEL	QTY
iPOD† cable	– RT-S – RT Limited	1
Audio auxiliary cable	– RT-S – RT Limited	1

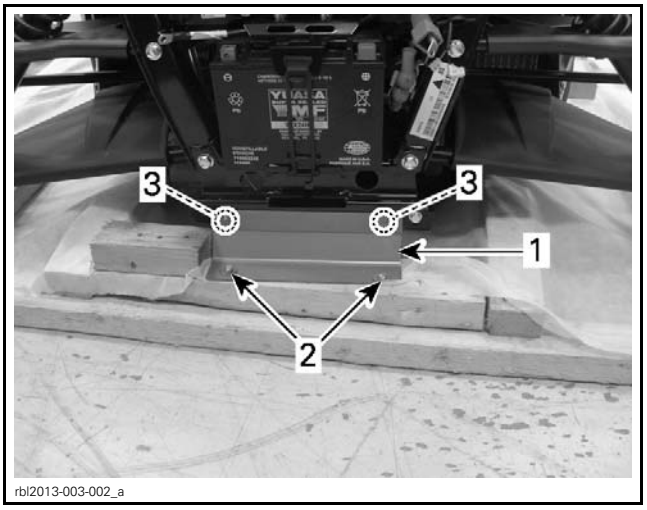
Remove the antenna from the sub-crate.

Lifting the Front of Vehicle

⚠ WARNING

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

1. Remove plate retaining front of vehicle to crate base by removing screws and nuts.



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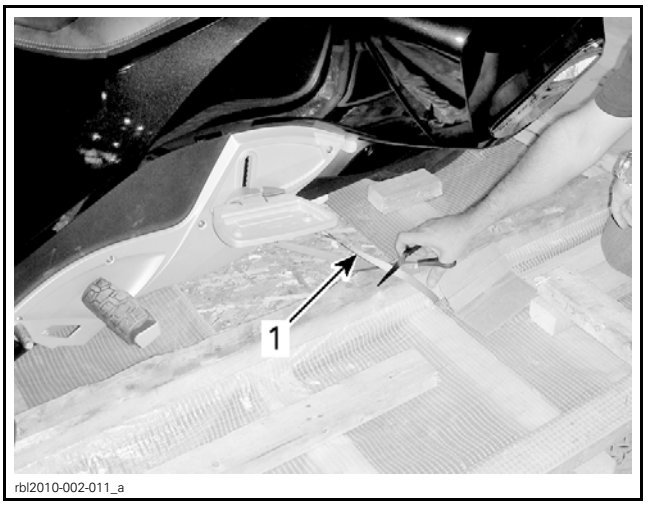
1. Plate
2. Screws
3. Screws and nuts

2. Remove strap retaining side of vehicle to crate base.



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TYPICAL
1. Side strap

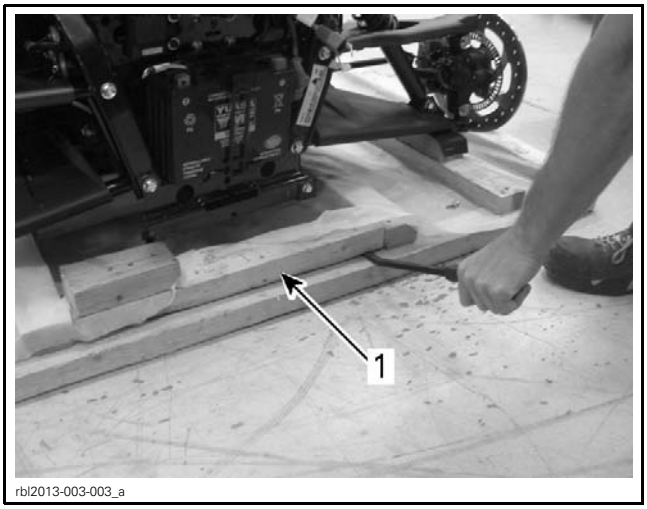
NOTE: The following steps will describe two methods to lift the front of the vehicle. The conventional one uses a hydraulic jack and the alternate one uses a chain block. Use the proper method according to your shop layout.

Conventional Method

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

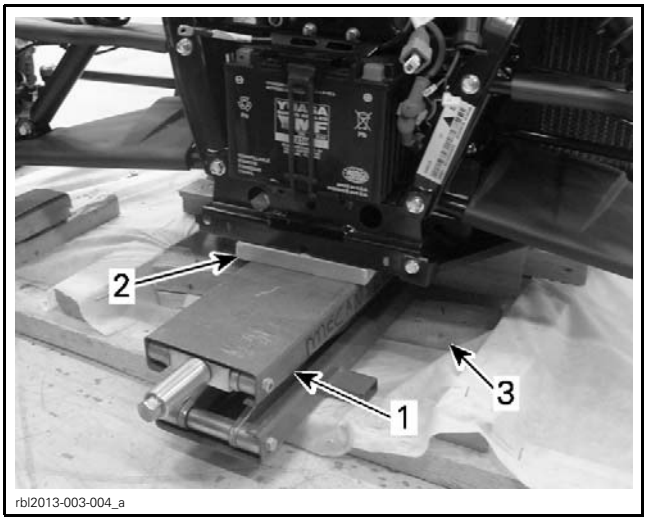
NOTE: This piece of wood can be used to level the jack at next step.

†iPod is a trademark of Apple Inc.



1. Wood piece to remove

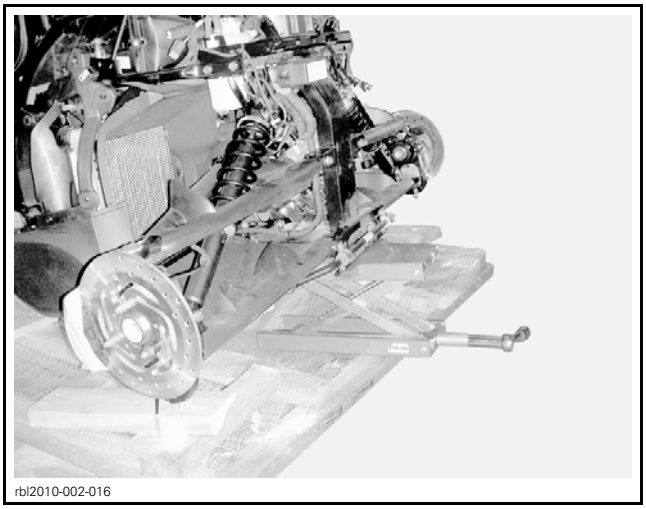
2. Install a jack with a piece of wood on top to increase contact surface.



TYPICAL - FRONT OF VEHICLE
1. Jack
2. Wood piece
3. Wood piece removed earlier

⚠ CAUTION Approach with care when vehicle is jacked because it may be unstable.

3. Lift the vehicle.



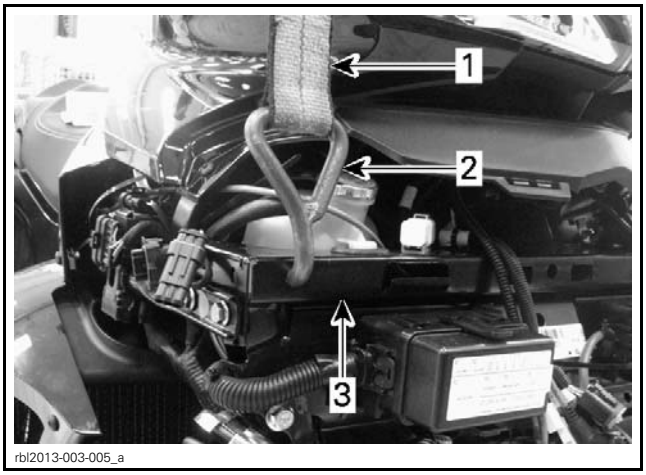
TYPICAL

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.



1. Strap
2. Hook
3. Frame

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

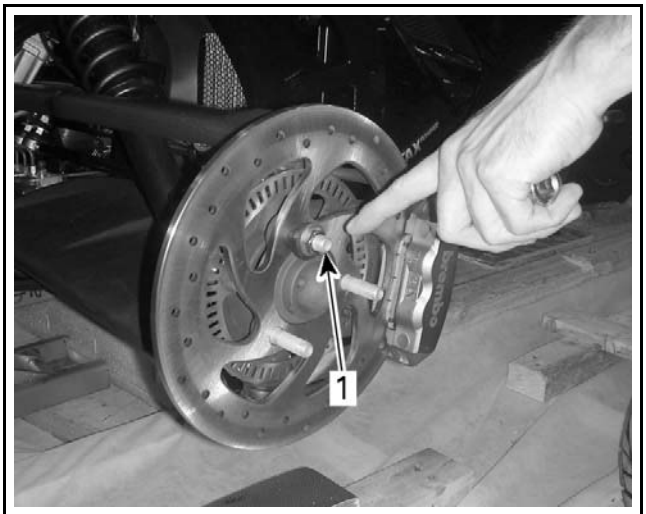
NOTICE Never lift vehicle by the suspension arm.

Front Wheels Installation

1. Clean front and rear brake discs using XPS BRAKES AND PARTS CLEANER (USA) (P/N 219 701 705) and a clean rag.

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.

2. Remove nut securing front brake discs to vehicle.



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1. Nut

3. Install front wheels on vehicle.
4. Ensure that the rotation direction shown by the arrow is respected.

⚠ WARNING

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

5. Tighten wheels lug nuts by hand (from PDI kit).
6. Lower vehicle on crate base.
7. Remove the jack.


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TYPICAL

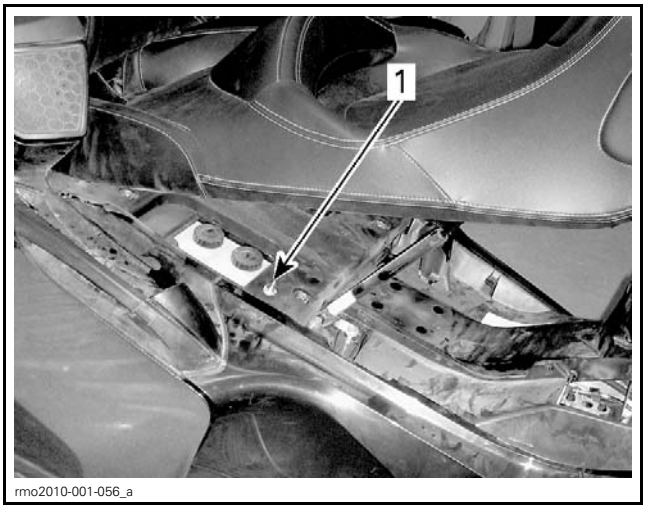
8. Torque wheels lug nuts.

PART	TORQUE
Wheel lug nut	105 N•m (77 lbf•ft)

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

Vehicle Removal

1. Locate ACS suspension pneumatic valve then unscrew cap.



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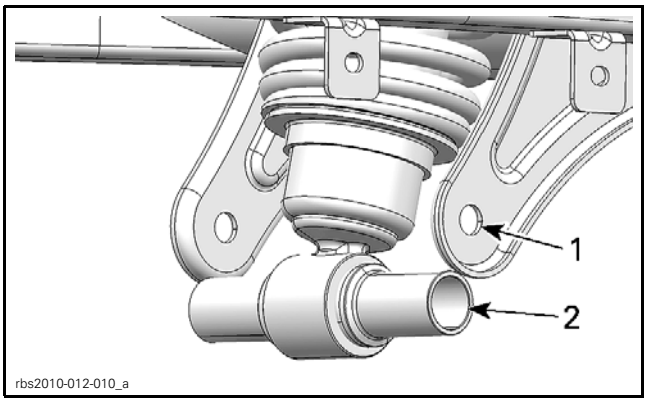
1. Pneumatic valve

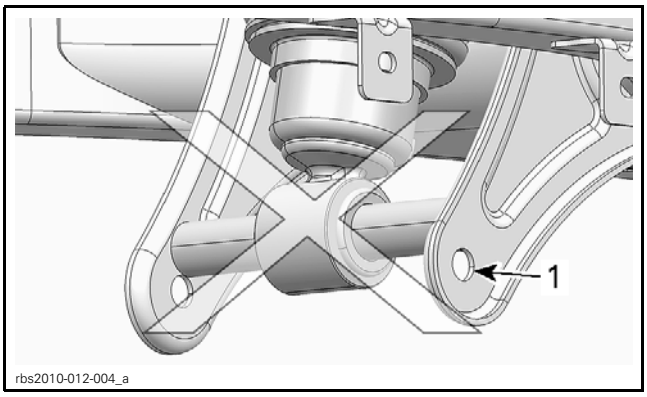
2. From underneath of vehicle, locate the bottom of the rear shock absorber.
3. Get the following hardware from the PDI kit:
   - M10 x 140 hexagonal flange screw
   - M10 elastic flange nut
   - Plastic bushings.
4. Install the 2 plastic bushings over the steel sleeve at the bottom of the shock absorber.

5. With the help of another person, **slightly** inflate the ACS spring while your assistant, from the LH side of the vehicle, monitors the alignment of the bottom of the shock absorber (anchoring holes) with the bottom of the lower brackets.



1. Lower bracket hole
2. Anchoring holes

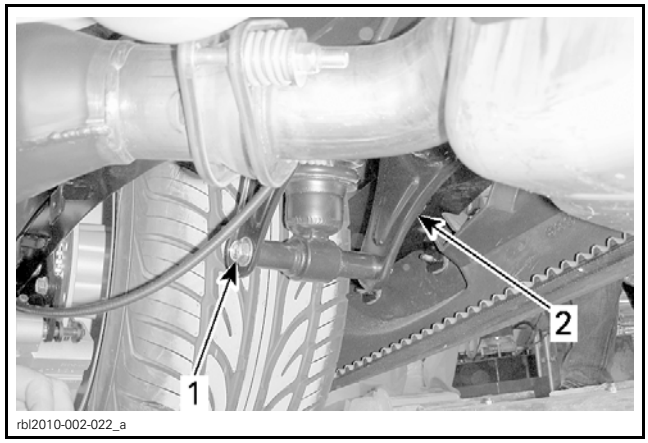
NOTICE Adding air may create rapid high changes because of the small air volume in the ACS spring. The anchoring hole of shock absorber must NEVER exceed the lower bracket holes when adding air into ACS spring. To avoid damaging the ACS system, DO NOT exceed 551 kPa (80 PSI) into the ACS spring.



1. Lower bracket hole

6. Secure shock absorber as follows:
   6.1 Using the passenger grab handles, slightly lift the rear of the vehicle by HAND to align both bushings on lower bracket hole.
   6.2 Install M10 x 140 hexagonal flange screw.
   6.3 Install and torque M10 elastic flange nut.

PART	TORQUE
M10 elastic flange nut	48 N•m (35 lbf•ft)

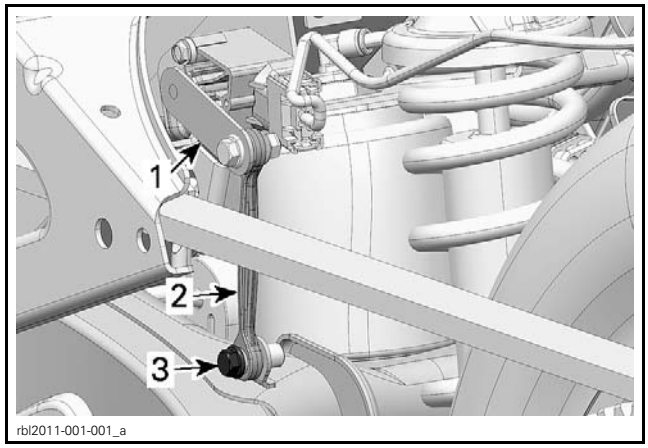


1. Shock absorber bolt
2. Lower bracket

RT-S and RT Limited Models

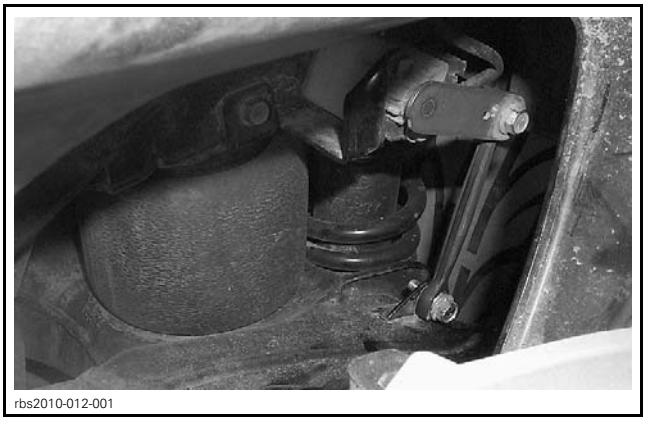
7. Install the link of the ACS position sensor to swing arm.
   7.1 Position the ACS position sensor lever rearward.
   7.2 Place the link on the outside of swing arm bracket.
   7.3 Secure the link using M6 x 20 hexagonal flange screw (from PDI kit)

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



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

NOTICE Ensure that ACS position sensor lever orientation is correct.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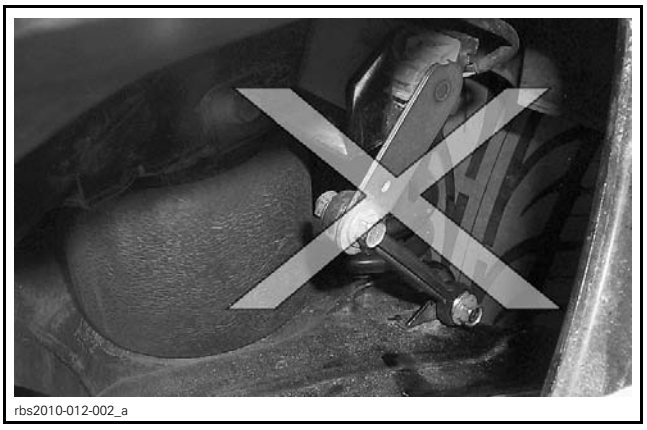
CORRECT ORIENTATION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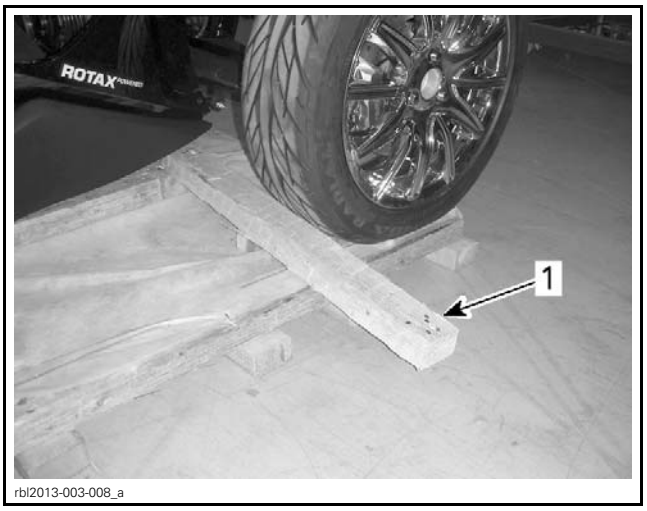
INCORRECT ORIENTATION

8. Put a piece of wood behind the front wheels to prevent the vehicle from rolling.



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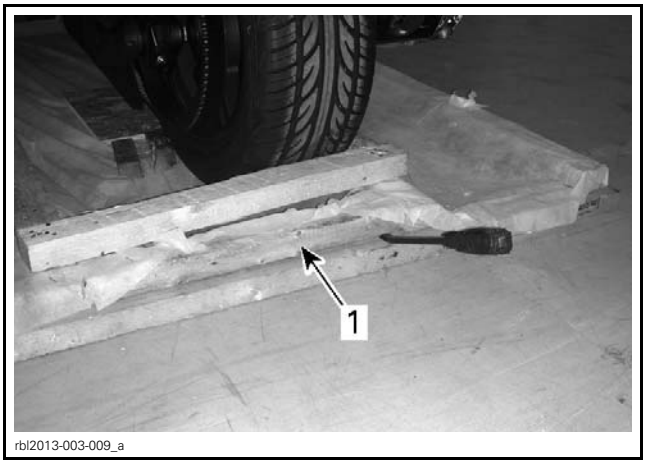
TYPICAL - FRONT RH WHEEL
1. Wood piece

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



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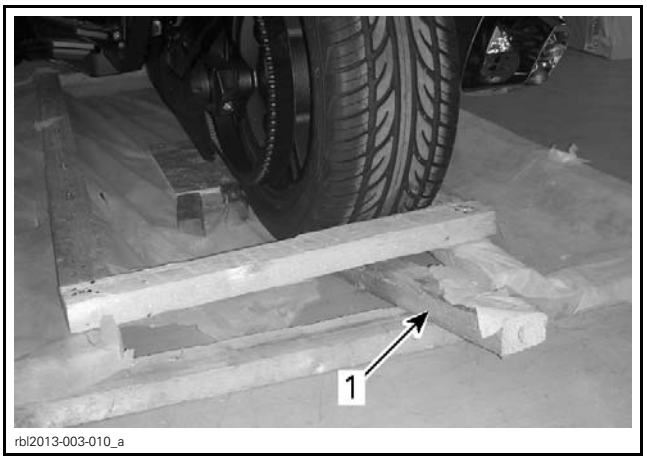
TYPICAL
1. Wood piece



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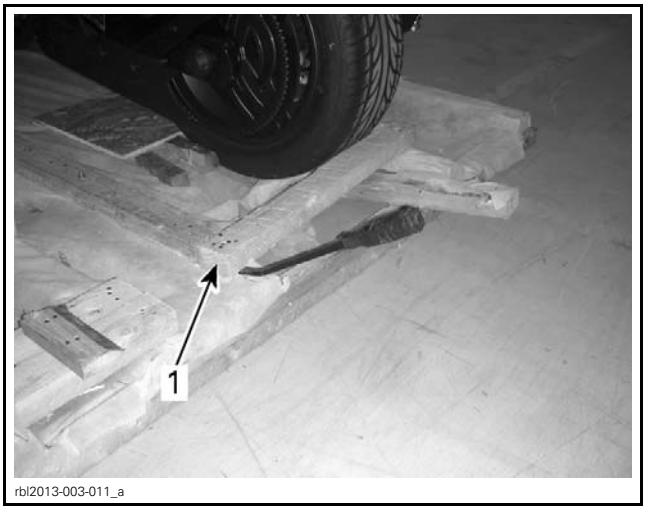
TYPICAL
1. Wood piece removed earlier

10. Remove the piece of wood from behind the rear wheel.



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TYPICAL
1. Wood piece behind rear wheel

11. Carefully remove pieces of wood positioned earlier behind the front wheels.
12. With the help of your assistant, move vehicle rearward out of the crate base.


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TYPICAL

NOTICE Always move vehicle rearward out of the crate base.

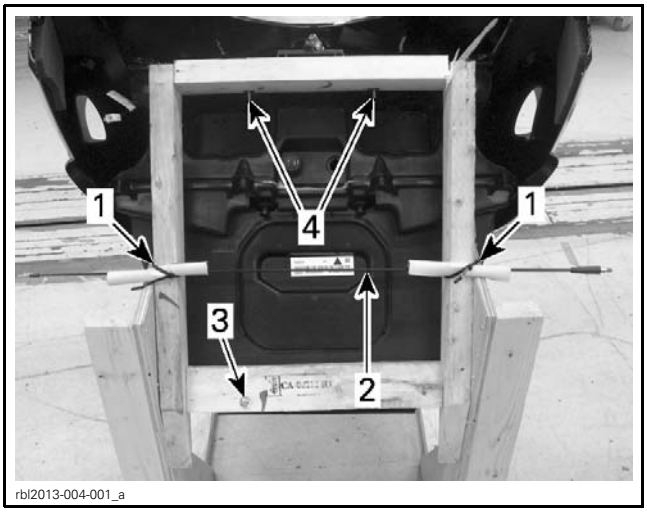
PARTS TO BE INSTALLED

Front Cargo Module

⚠ 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. Assisted by another person, remove and discard bolts holding the bottom and the top sections of sub-crate.



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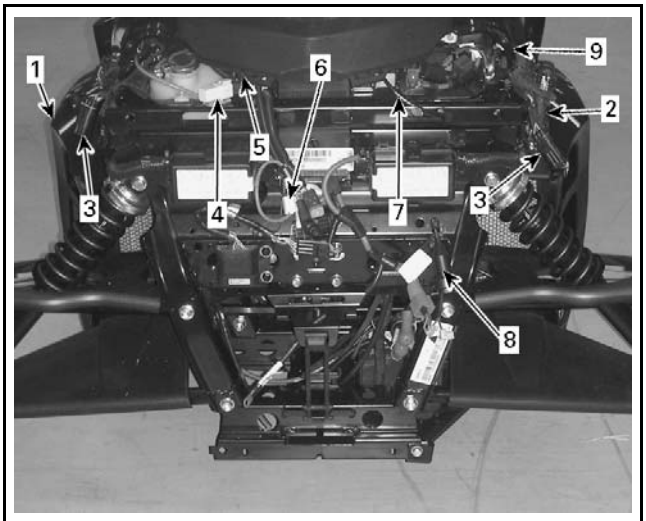
1. Tie-raps
2. Antenna
3. Lower retaining bolt
4. Upper retaining bolts

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

2. Open front storage compartment cover.

3. Ensure that the following cables and connectors are accessible prior to installing front cargo module, cut locking ties if required.



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REFER TO THE FOLLOWING TABLE FOR ITEMS DESCRIPTION

ITEMS	DESCRIPTION
1	AAPTS sensor connector (hidden on the illustration)
2	Horn connector (hidden on the illustration)
3	RH and LH auxiliary light connector - Low beam light (CE) - Fog light (option package)
4	DLC connector (B.U.D.S.)
5	Storage cover actuator connector (option package)
6	Storage cover switch connector (option package)
7	Storage cover cable
8	12 V power outlet (option package)
9	Storage compartment light (option package)

All Models

4. Before installing storage compartment, remove the fuse service covers as follows:

   4.1 Unzip the liner if applicable.

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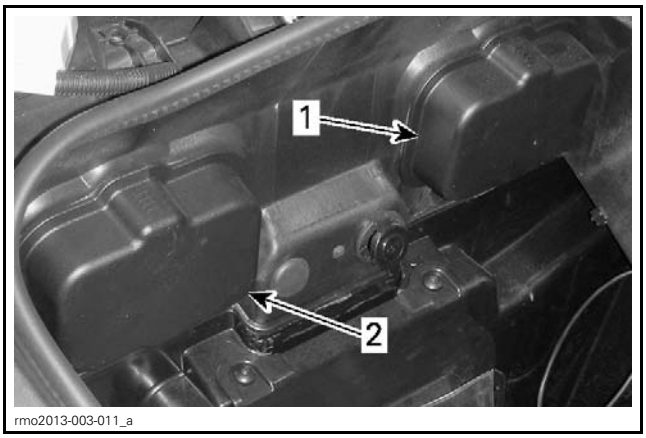
1. Liner

4.2 Push down on the fuse service covers to open the fuse boxes and pull the covers off.



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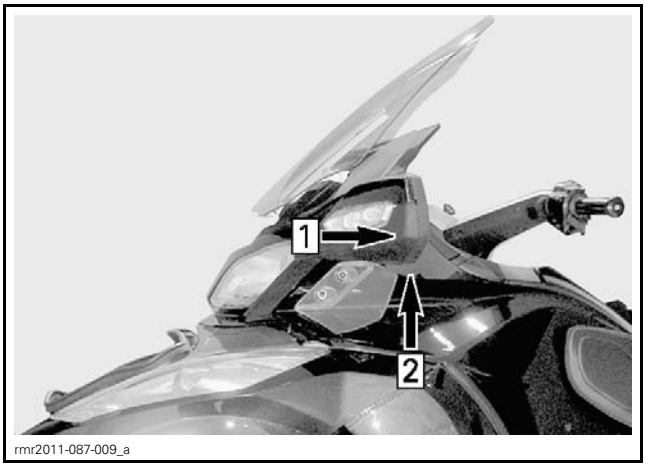
1. Left fuse service cover
2. Right fuse service cover

5. Remove mirrors as follows:

5.1 Hit with a sharp blow lower part of mirror toward the rear to unlock it.

5.2 Slide mirror upwards to unhook it from upper slot.



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Step 1: Hit with a sharp blow
Step 2: Slide mirror upwards

6. Remove middle side panel as follows:

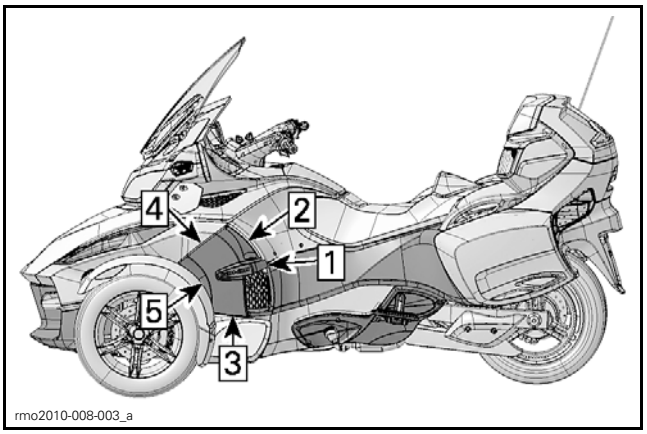
6.1 Pull the rear of panel out of its grommet.

6.2 Slide down the top of the panel to free panel hook.

6.3 Pull the bottom of the panel out of its grommet.

6.4 Pull the front of the panel out of its grommet.

6.5 Slide the front of the panel to remove it.



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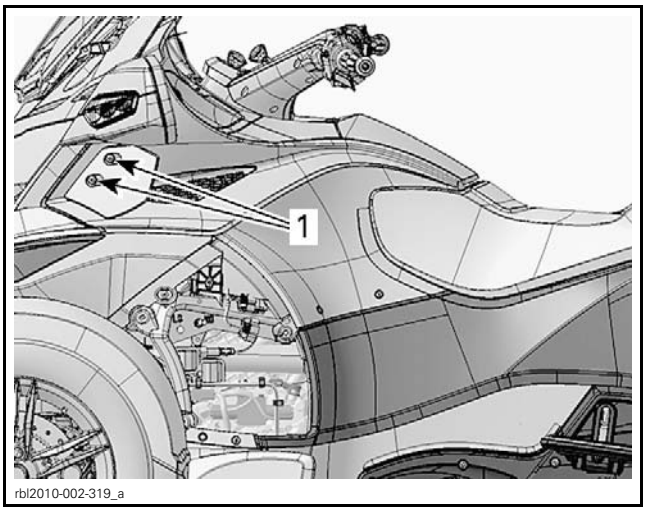
REMOVAL SEQUENCE

7. Remove retaining screws from lower wind deflectors.



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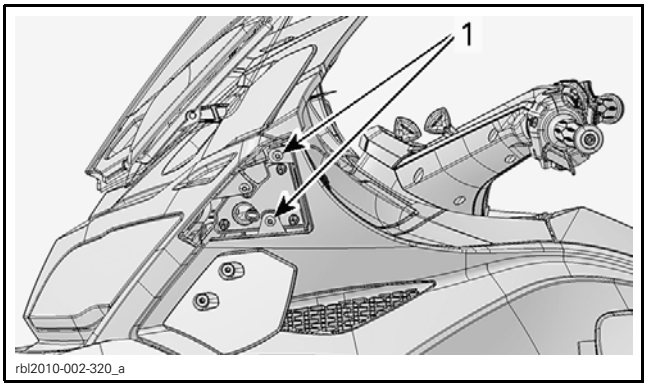
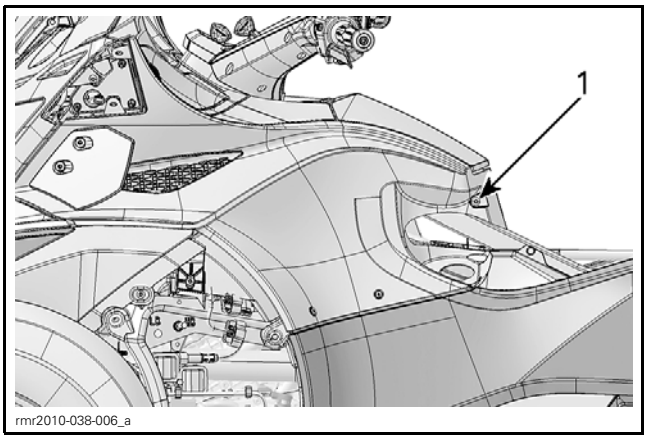
TYPICAL
1. Retaining screws of wind deflector

8. Remove upper retaining screws from top side panels.



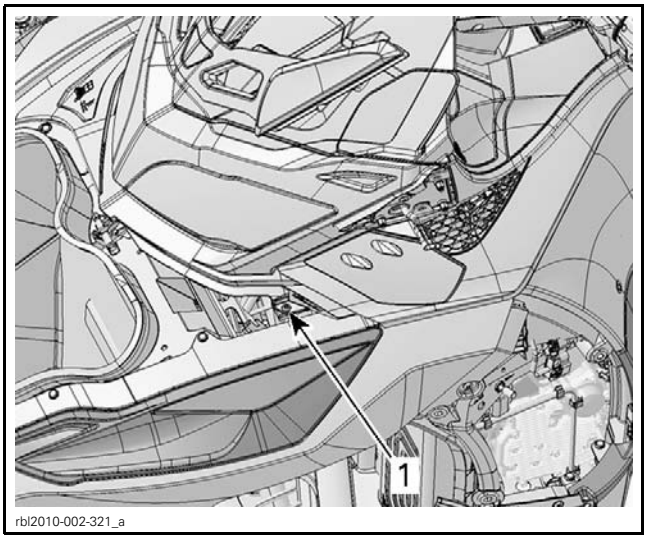
TYPICAL
1. Upper retaining screws

9. Remove rear retaining screw from top side panels.



TYPICAL
1. Rear retaining screw

10. Remove front retaining screw from top side panels.

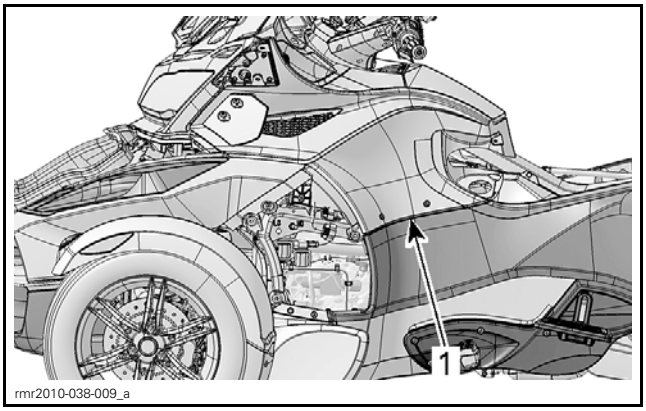


TYPICAL
1. Front retaining screw

11. Pull out lower part of top side panel to remove it from grommets.

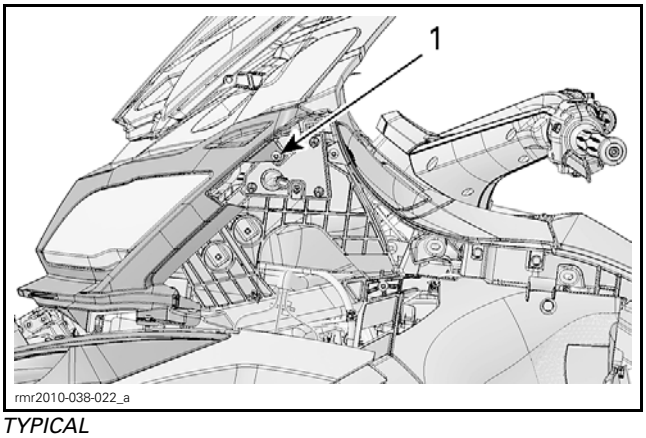
NOTE: Do not remove lower screws from top side panel.

12. Remove top side panels by lifting them upwards.



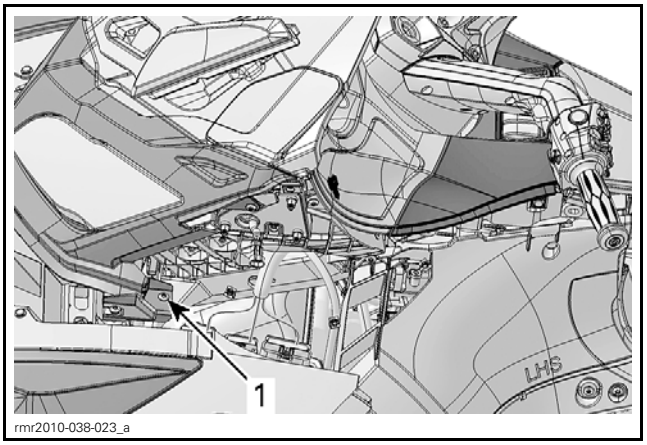
TYPICAL
1. Top side panel

13. Remove upper retaining screws from front fascia.



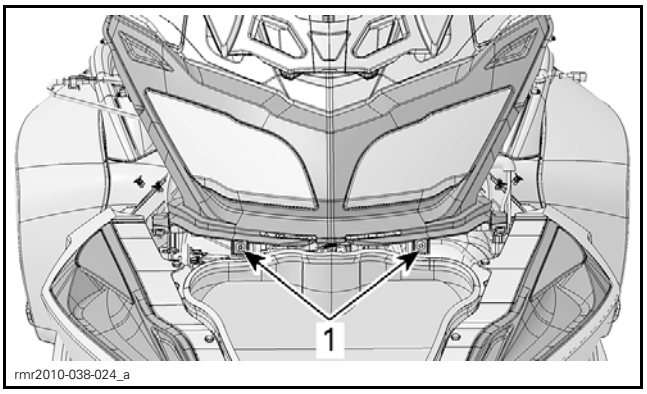
TYPICAL
1. Upper retaining screw

14. Remove middle retaining screws from front fascia.



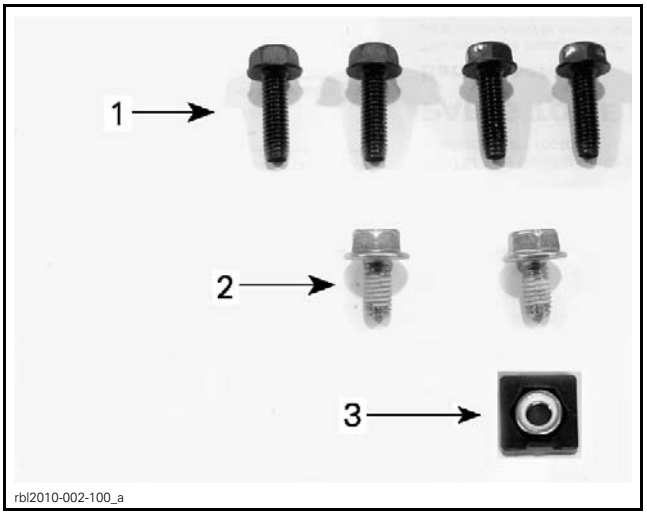
TYPICAL
1. Middle retaining screw

15. Remove lower retaining screws and washers from front fascia.



TYPICAL
1. Lower retaining screw

16. Remove front fascia from vehicle.
17. Use the following hardware to install front cargo module on vehicle.



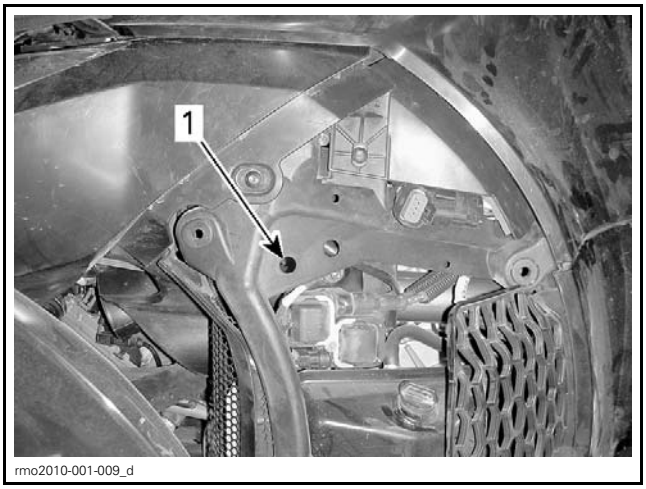
TYPICAL (RS SHOWN)
1. Black M6 x 20 hexagonal flange screws from PDI kit
2. Gold M6 x 20 hexagonal flange screws from PDI kit
3. M6 caged nut from PDI kit

NOTE: The second caged nut is already installed on front cargo module.

18. Assisted by another person, position front cargo module into support slots of vehicle.
19. Connect the following front cargo module connectors and cable:
    - AAPTS sensor connector
    - Horn connector
    - RH and LH auxiliary light connector (CE and Option Package)
    - DLC connector (B.U.D.S.) stowed in its receptacle
    - Storage cover actuator connector (option package)
    - Storage cover switch connector (option package)
    - Storage cover cable
    - 12 V power outlet
    - Storage compartment light (option package).

CE Models

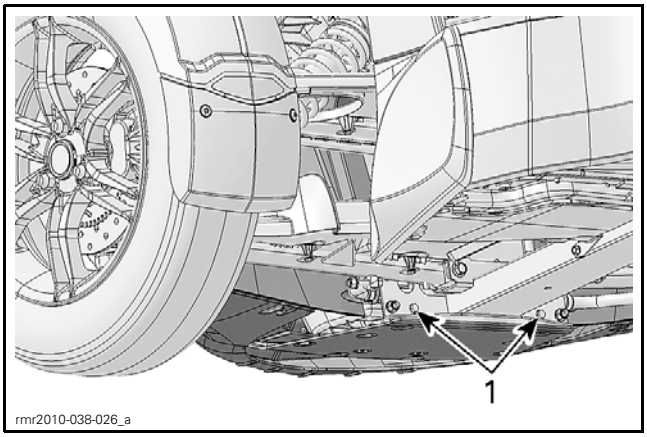
20. Install auxiliary light adjustment cable as follows:
    20.1 Install adjustment cable through hole in panel.
    20.2 Tighten nut securing adjustment cable (from PDI kit).



LEFT SIDE SHOWN
1. Install through this hole

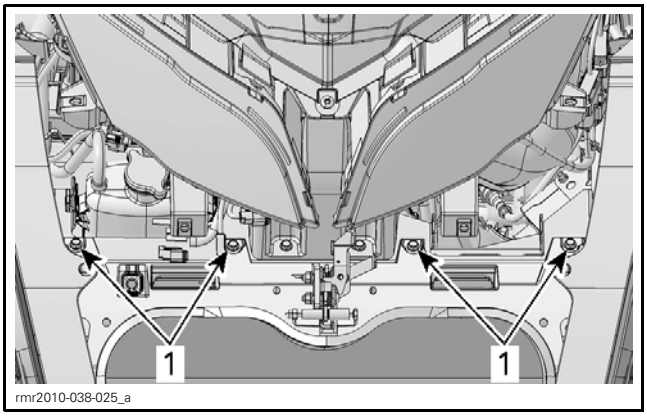
All Models

21. Install M6 caged nut (from PDI kit) on a bottom hole of storage compartment.
22. Install gold M6 hexagonal flange screws to secure bottom of storage compartment. Do not tighten yet.



1. Gold M6 screws

23. Install black M6 hexagonal flange screws to secure top of storage compartment.



1. Black M6 screws

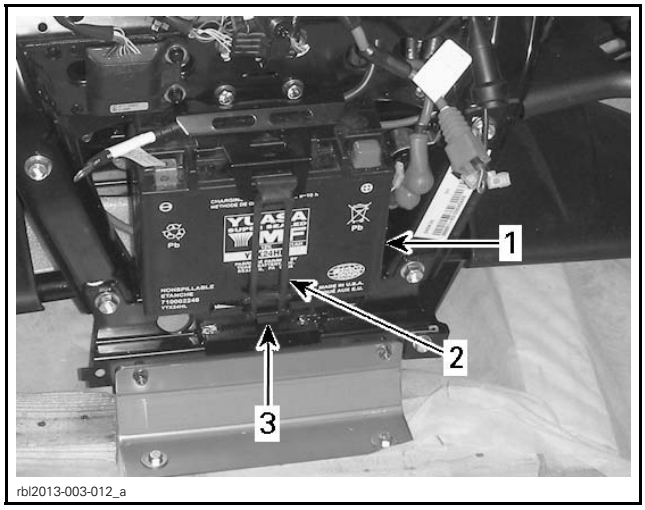
24. Torque upper and lower M6 hexagonal flange screws.

PART	TORQUE
M6 hexagonal flange screws	4.5 N•m (40 lbf•**in**)

Battery

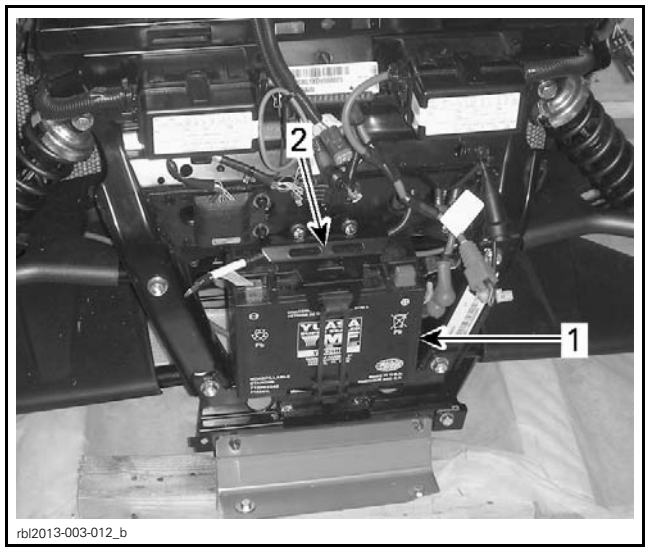
The battery is located at the front of the cargo module.

1. Pull down the rubber strap to disengage it from the hook.



TYPICAL
1. Battery
2. Rubber strap
3. Hook

2. Remove bracket and battery from the vehicle.



TYPICAL
1. Battery
2. Bracket

NOTE: If you do not have a fully charged battery at hand, the fully charged battery can be put in place later.

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

3. Install charged battery in battery rack.

NOTICE **Always charge battery before its installation on the vehicle.**

4. Connect RED (+) positive battery cables using battery screws from the PDI kit.

⚠ WARNING

Always connect RED (+) cable first.

5. Tighten positive post battery screw.

PART	TORQUE
Post battery screw	4 N•m (35 lbf•**in**)

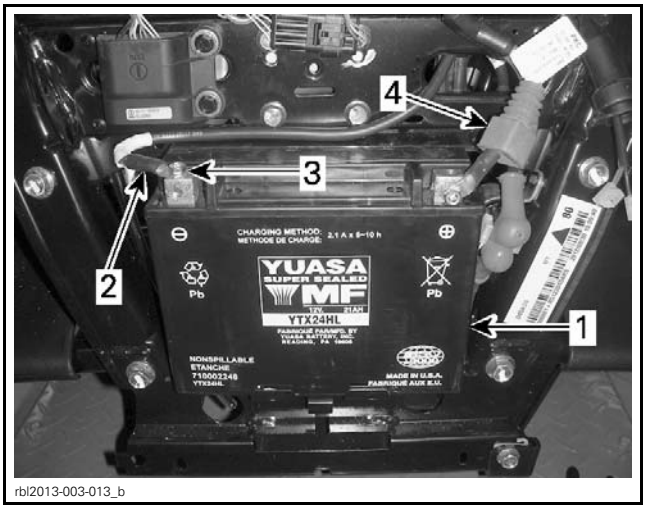
rbl2013-003-013_a

1. Battery
2. RED (+) positive battery cable
3. Positive post battery screw

6. Apply DIELECTRIC GREASE (P/N 293 550 004) on battery posts.
7. Connect BLACK (–) negative battery cables using battery screws from the PDI kit.
8. Tighten negative post battery screw.

PART	TORQUE
Post battery screw	4 N•m (35 lbf•**in**)

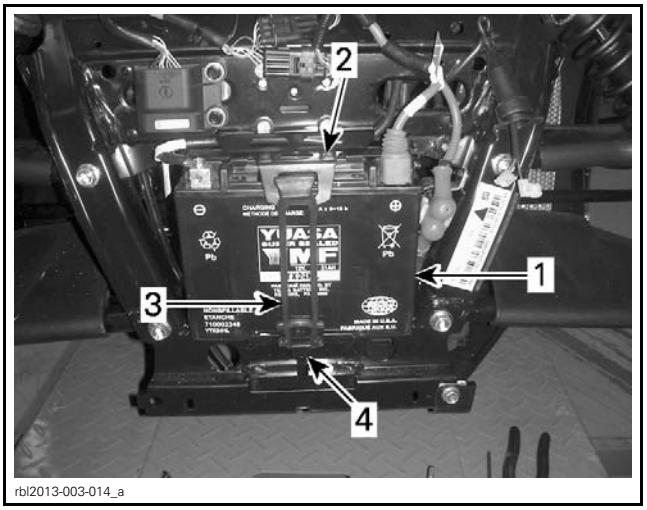
9. Close RED rubber boot cover.



rbl2013-003-013_b

1. Battery
2. Black (-) negative battery cable
3. Negative post battery screw
4. RED rubber boot cover

10. Put bracket back in position on battery.
11. Install rubber strap and pull it down to engage it with the hook.



rbl2013-003-014_a

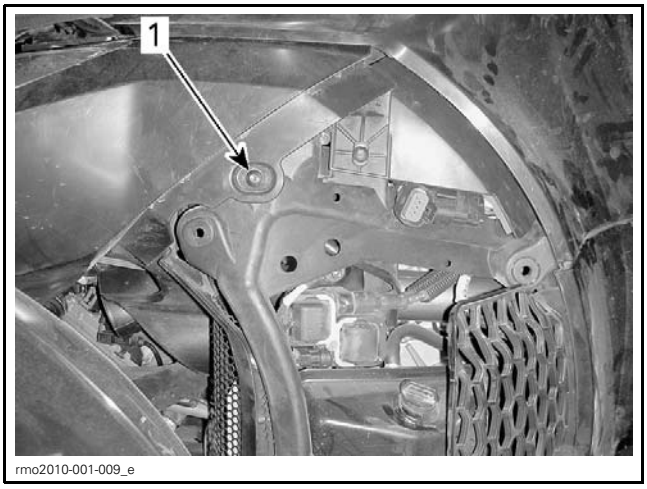
1. Battery
2. Bracket
3. Rubber strap
4. Hook

Body Parts Installation

1. Install the following body panels:
   - Front fascia
   - Top side panels
   - Middle side panels
   - Mirrors.

Front Fascia

1. Install M6 x 20 Torx screws and plastic washers (from PDI kit) to secure side panels.



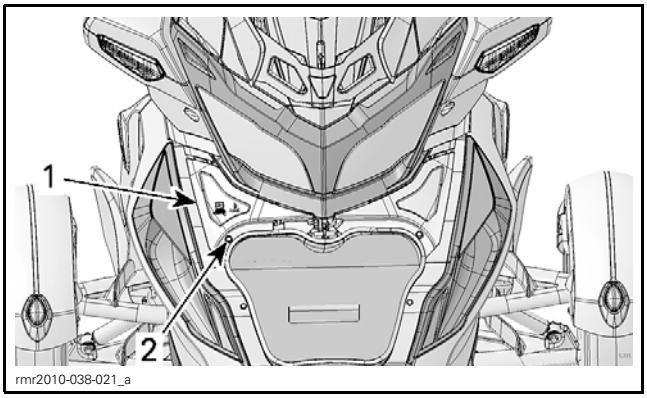
LEFT SIDE SHOWN
1. *M6 x 20 Torx screw and plastic washer (from PDI kit)*

2. Torque front fascia retaining screws and top side panels retaining screws.

PART	TORQUE
M6 x 20 Torx screw	3.5 N•m (31 lbf•**in**)

3. Install service covers as follows:
   - 3.1 Open front storage compartment cover.
   - 3.2 Insert upper tabs of service cover into the vehicle grooves.
   - 3.3 Push lower portion of service cover then install plastic rivet (from PDI kit).

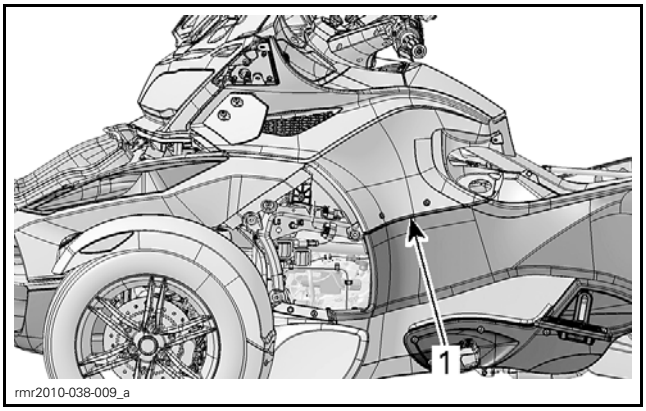
NOTICE **For the RH service cover, pay attention not to damage the FCS switch (if equipped).**



1. *RH service cover*
2. *Plastic rivet*

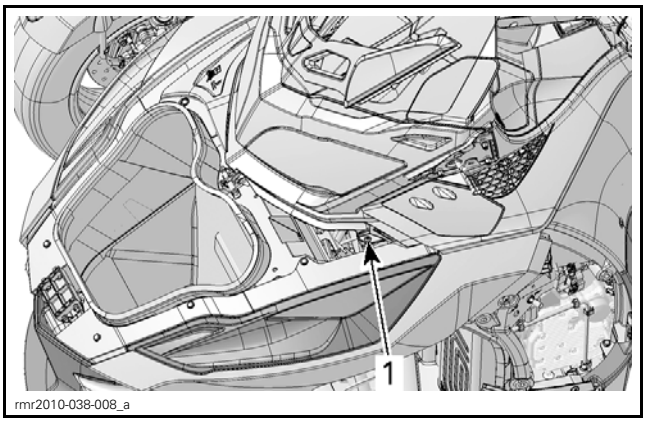
Panels and Mirrors

1. Install top side panel by lowering it.



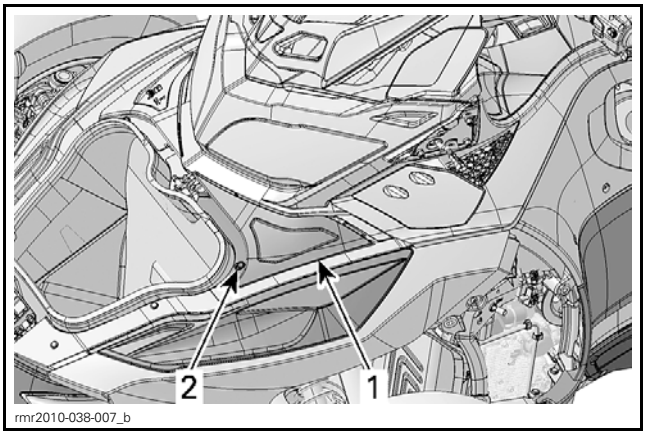
1. *Top side panel*

2. Install lower retaining screws of top panel.
3. Install front retaining screw from top side panel.



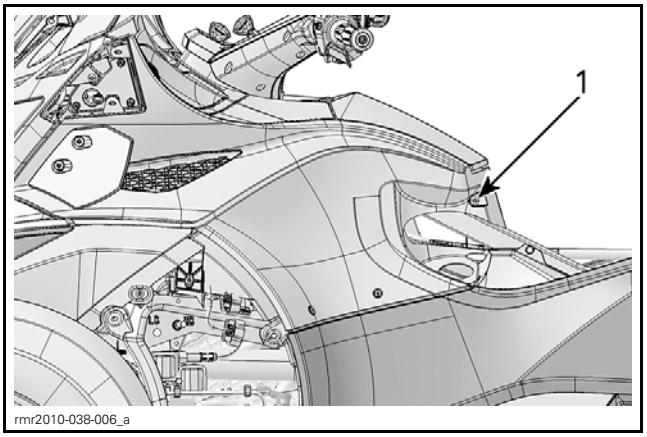
1. *Front retaining screw*

4. Install left service cover using plastic rivet.



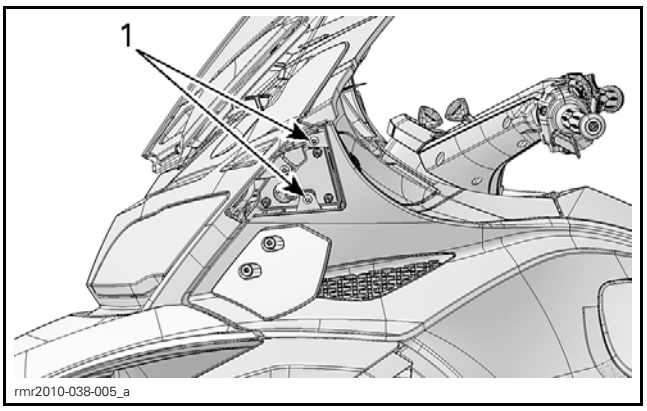
1. *Left service cover*
2. *Plastic rivet*

5. Install rear retaining screw on top side panel.



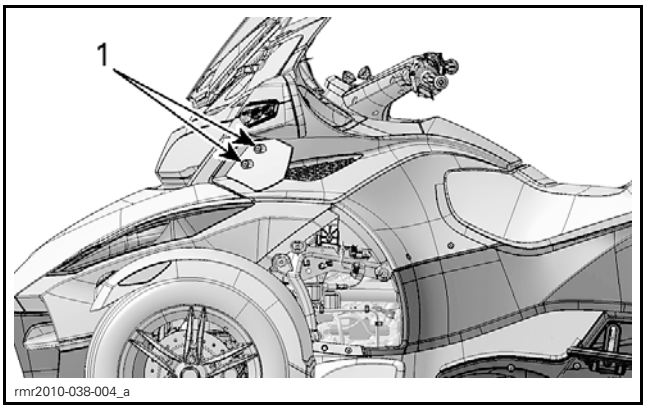
1. Rear retaining screw

6. Install upper retaining screws on top side panel.

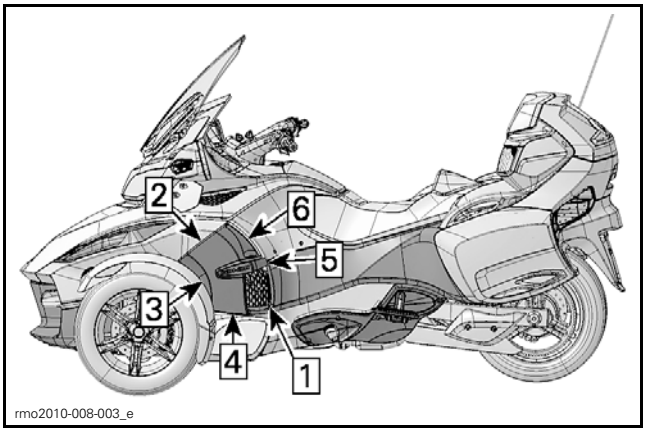


1. Upper retaining screws

7. Install mirror:
   - 7.1 Carefully position the mirror using the top stud.
   - 7.2 Firmly push the mirror inwards until it engages with the two bottom studs.
8. Install retaining screws on lower wind deflector and install the top side panel.



1. Retaining screws of wind deflector

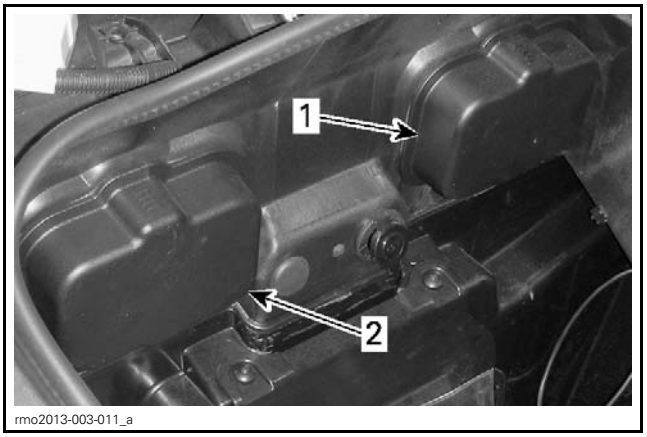


INSTALLATION SEQUENCE

9. Install the grille on the panel.
10. Push the front of panel in its grommet.
11. Rotate the panel and clip it on the support.
12. Push the bottom of the panel in its grommet.
13. Push the rear of the panel in its grommet.
14. Push the top of the panel to fix the plastic hook.

All Models

15. After installing storage compartment, reinstall the fuse service covers as follows:
    - 15.1 Position the fuse service covers and push down carefully until the fuse service covers engage.



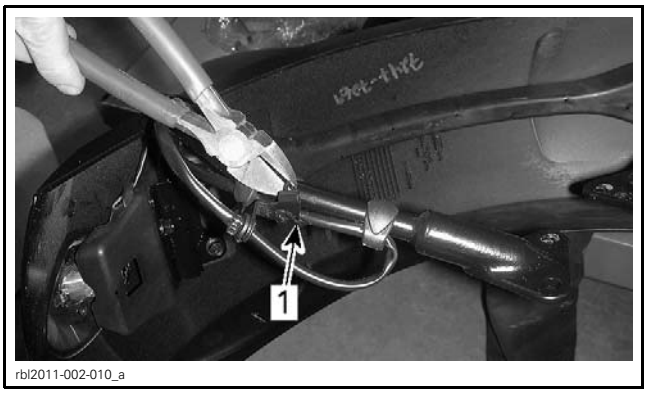
1. Left fuse service cover
2. Right fuse service cover

    - 15.2 Zip the liner if applicable.

1. Liner

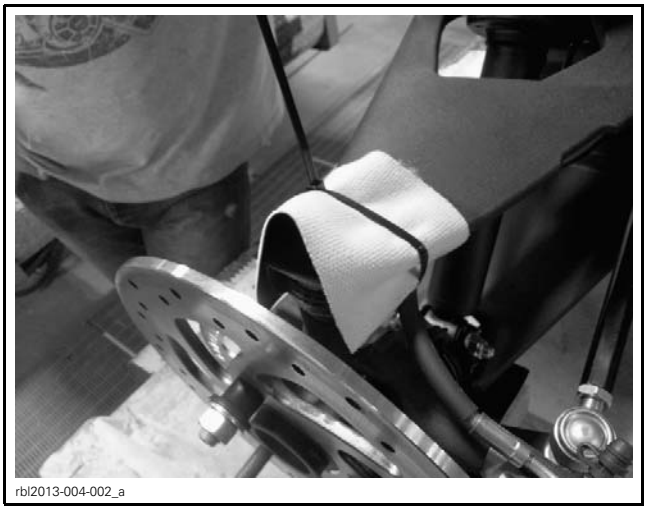
Front Fenders

1. Cut locking tie that hold harness bracket on fender.



TYPICAL
1. Locking tie

NOTE: Do not remove protection from suspension arms.

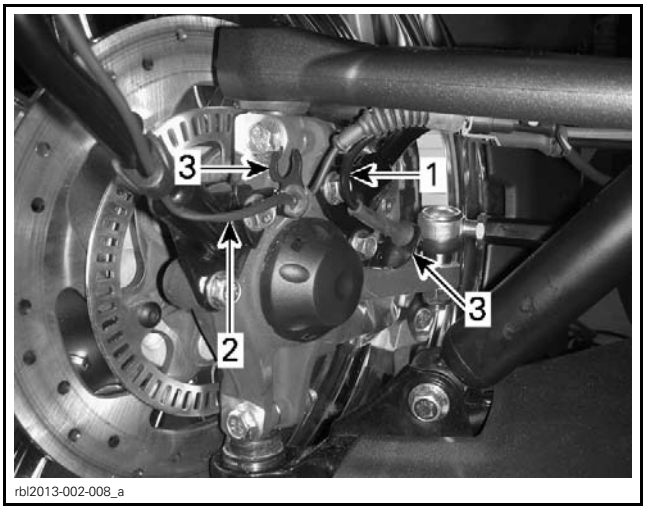


TYPICAL

2. Position front fender on vehicle.

TYPICAL

3. Route front ABS sensor harness and fender light harness on fender hooks.



TYPICAL
1. ABS sensor harness
2. Fender light harness
3. Fender hooks

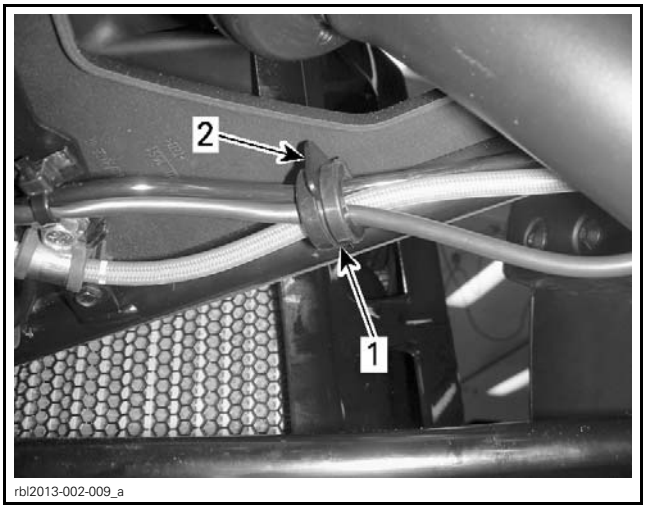
NOTE: Do not torque screws.

NOTE: Properly insert cable grommet on harness bracket.

4. Connect fender light connector.

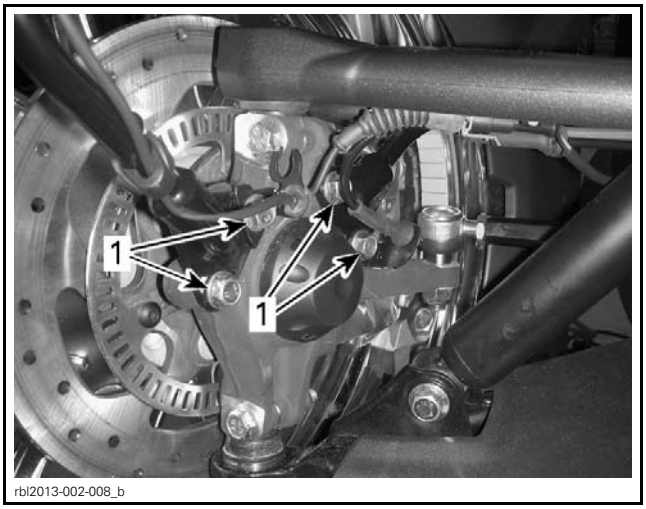
NOTE: Make sure harnesses are properly secured through grommet.

1. Fender light connector



1. Cable grommet
2. Harness bracket

5. Secure fender support on wheel hub.
6. Remove protection from suspension arms.



1. M8 x 20 hexagonal flange screws

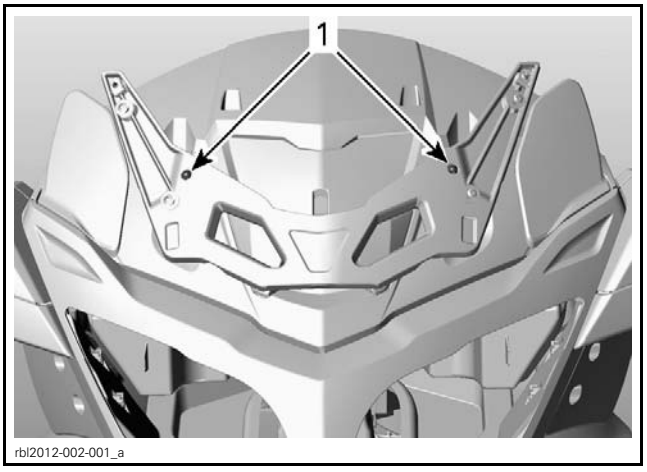
7. Install 4 M8x 20 hexagonal flange screws to complete the fender support installation.

FENDER SUPPORT RETAINING SCREW
24 N•m (18 lbf•ft)

8. Carry out the same procedure for the other side.

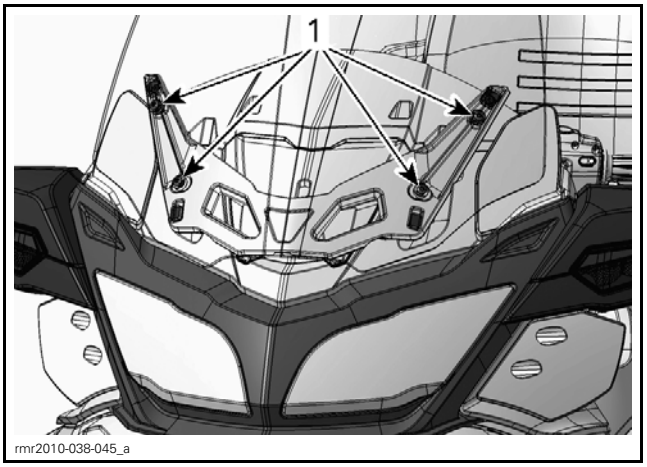
Windshield

1. Install spacer 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. Torque windshield retaining screws.

PART	TORQUE
Windshield retaining screw	4.5 N•m (40 lbf•**in**)

5. Install windshield trim panels as follows:
   5.1 Insert M5 retaining nut (from PDI kit) on trim panel.

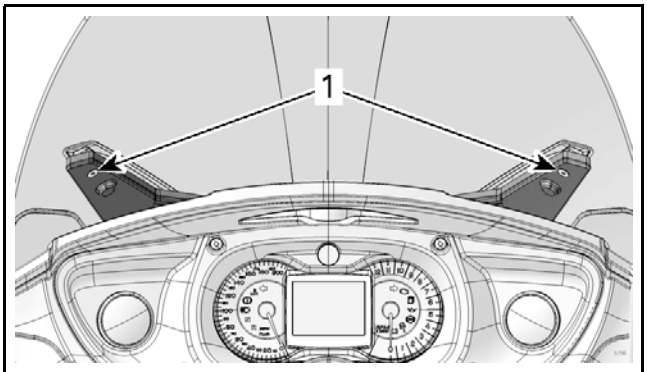
5.2 Place a sheet of paper on windshield to protect it, refer to illustration.

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


rbl2010-002-028

5.3 Insert trim panel into windshield slot and push it upwards.

5.4 From inside windshield, secure trim panel using M5 x 25 countersunk Torx screw (from PDI kit).



rmr2010-038-043_a

1. Windshield trim panels screws

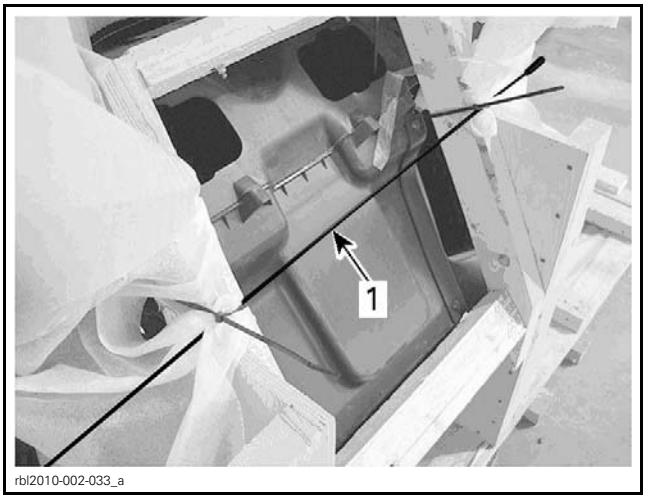
5.5 Torque windshield trim panel screws.

PART	TORQUE
Windshield trim panel screw	2.5 N•m (22 lbf•**in**)

6. Remove sheet of paper.

Antenna

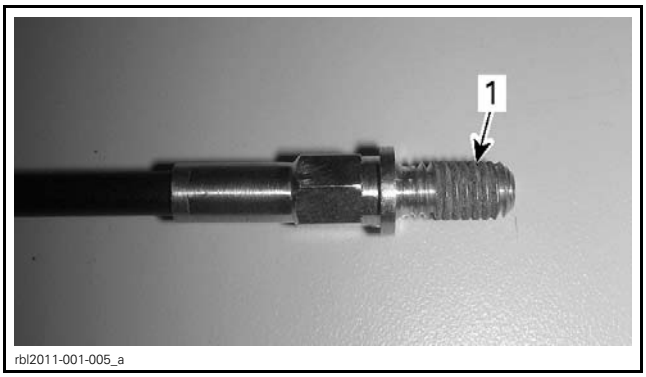
1. Detach antenna from the sub-crate.



rbl2010-002-033_a

1. Antenna

Antenna With Self-Locking Product



rbl2011-001-005_a

1. Self-locking product already applied

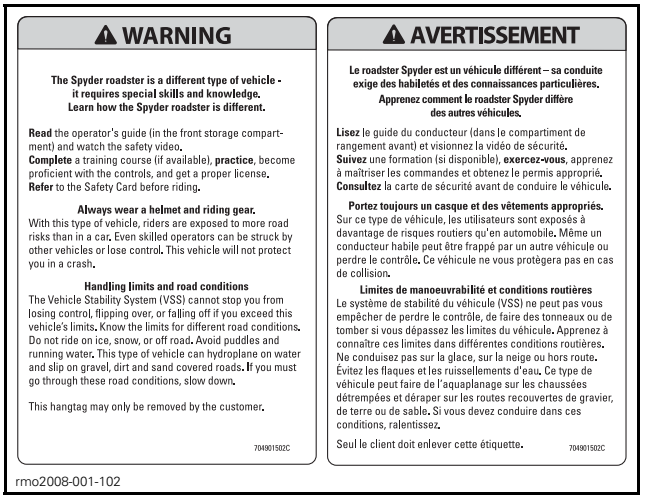
Install the antenna on the RH side of the rear cargo module (tighten by hand) and position the rubber cap.

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 language can be chosen by customer, according to availability.

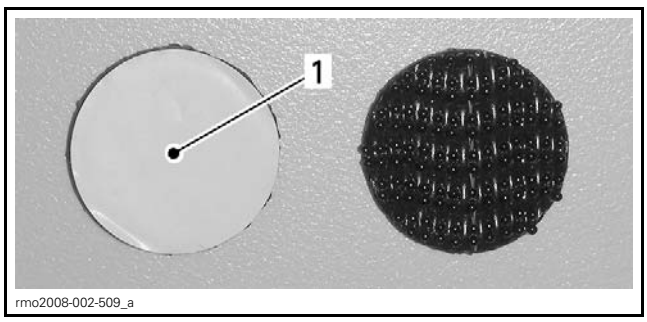


rmo2008-001-102

Licence Plate

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

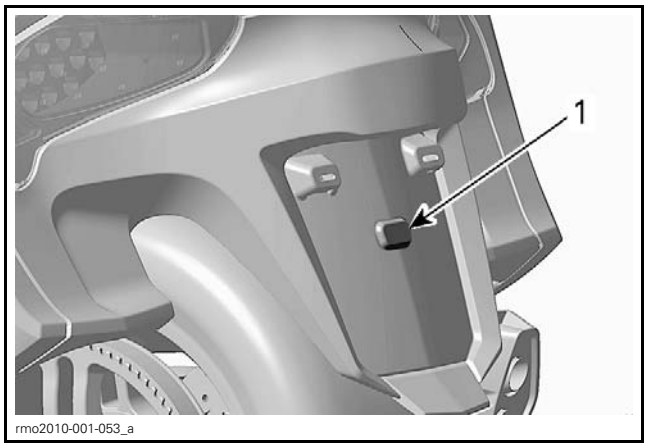
1. Remove existing plate on vehicle (if applicable).
2. Peal off backing of new damping pad.



rmo2008-002-509_a

1. Damping pad backing

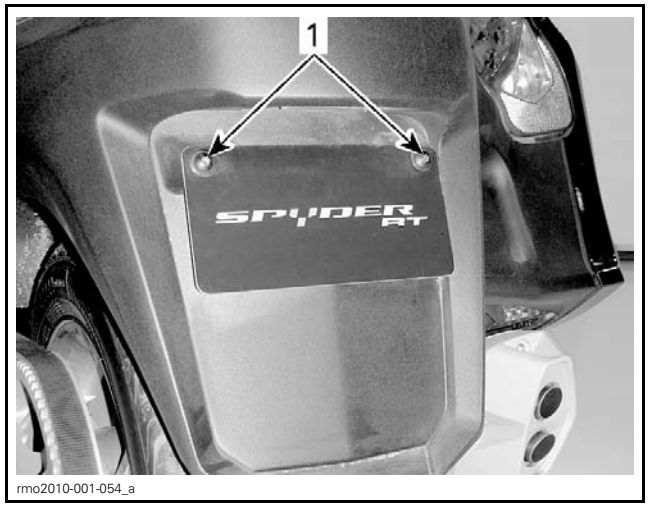
3. Position new damping pad on vehicle plate support.



rmo2010-001-053_a

1. Plate support

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



rmo2010-001-054_a

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).
2. 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.

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.

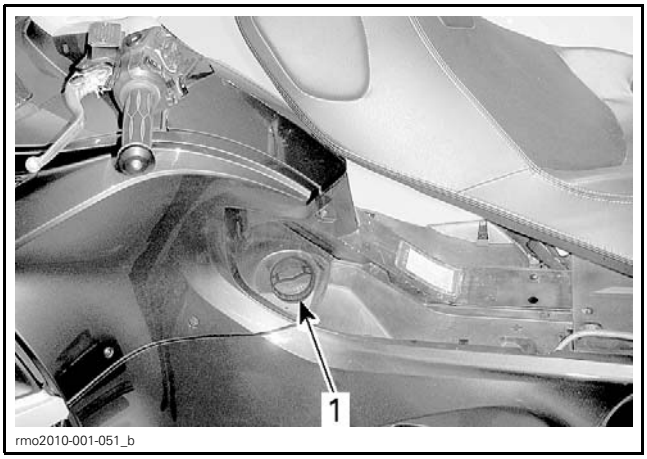
FLUIDS

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 regular unleaded gasoline containing MAXIMUM 10% ethanol. The gasoline must have the following minimum octane requirements.

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

FUEL OCTANE RATING	
INSIDE NORTH AMERICA	
Recommended	Minimum
91 (RON + MON)/2)	87 (RON + MON)/2)
Use premium unleaded fuel for optimum engine performance.	

FUEL OCTANE RATING	
OUTSIDE NORTH AMERICA	
Recommended	Minimum
95 RON	92 RON
Use premium unleaded fuel for optimum engine performance.	

⚠ 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 following parts are lubricated with the same oil:

– Engine
– Gearbox
– Clutch
– Hydraulic Control Module (SE5 Models only)

Use XPS 4-STROKE SYNTH. BLEND OIL (SUMMER) (P/N 293 600 121).

If not available, use a 5W 40 semi-synthetic (minimum) or synthetic **motorcycle oil** meeting the requirements for API service SL, SJ, SH or SG classification. Always check the API service label on the oil container.

NOTICE To avoid damaging the clutch, do not use a motor oil meeting the API service SM or ILSAC GF-4 classification. Clutch slippage will occur. Motorcycle oils designed for use with a wet-clutch are the best alternative.

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

Engine Oil Level Verification

⚠ WARNING

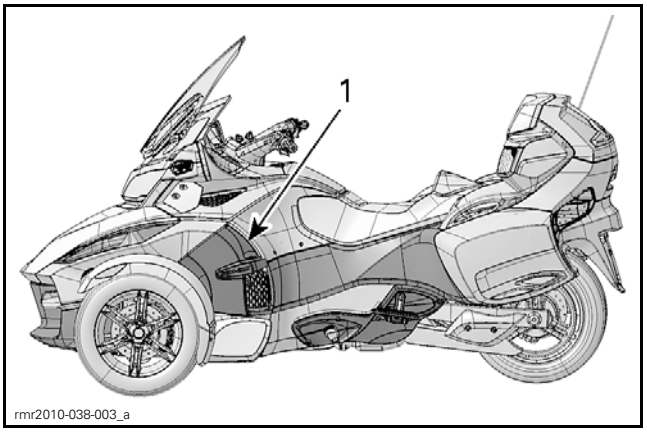
Before starting vehicle ensure vehicle in a well ventilated area or is outside. Smoke will come from the engine for 10 minutes as the anti corrosion coating on the exhaust system and engine burns off.

NOTICE For an accurate oil level reading, it is necessary to ride vehicle for 5–7 minutes to ensure that the engine is at its operating temperature. If oil level is verified when vehicle is not at operating temperature, oil level must be between lower and upper marks on dipstick.

NOTICE Never add oil in the engine if the verification is performed when the engine is cold.

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. Remove the LH side panel.

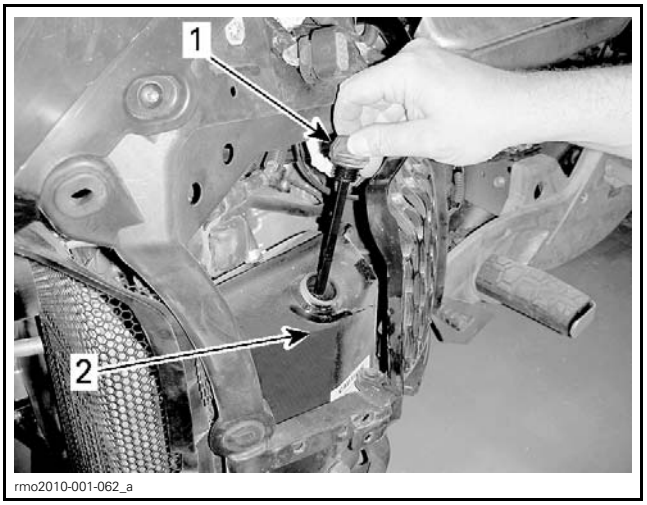


1. Middle side panel

3. With the engine already at normal operating temperature, start engine and let it run for at least 30 seconds.

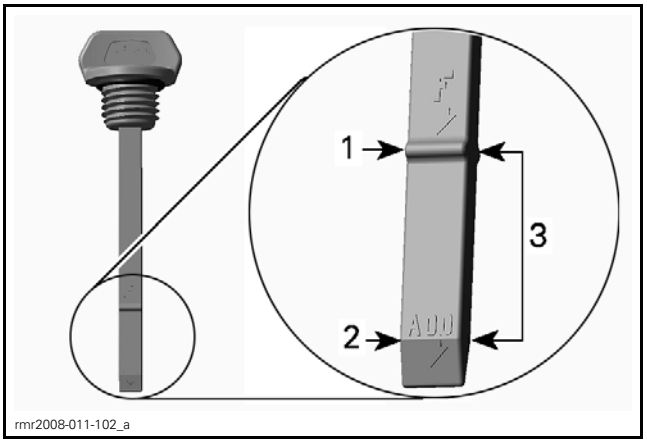
NOTE: Running engine for at least 30 seconds allows the suction oil pump to drain the oil from the engine crankcase back into the oil tank. Not carrying out this step could result in overfilling the engine oil.

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



1. Oil dipstick
2. Oil tank

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 (full)
2. Lower mark (add)
3. Operating range

If oil level is at or near upper mark:
– Do not add oil.
– Properly insert and tighten dipstick.
– Install the LH side panel.

If oil level adjustment:
– Adjust oil level until it is in the operating range, close to the upper mark. **Do not overfill.**
– Properly insert and tighten dipstick.
– Install the LH side panel as the reverse of removal.

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

Clutch Fluid (SM5 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.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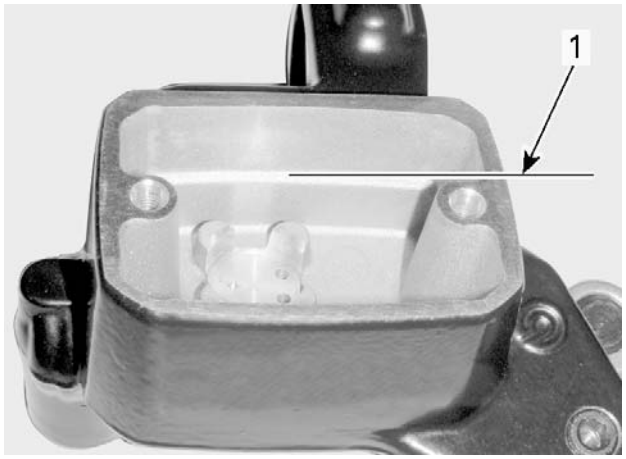
6. Carefully remove cap. Pay attention not to drop the cap seal.
7. Look inside the reservoir to see the fluid level.
8. Check clutch fluid level inside the reservoir:
   – The fluid must be flush to the fill level line (protuberance on the reservoir wall).



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FLUID REMOVED FOR CLARITY PURPOSE
1. Fill level line

9. Add recommended fluid as required. **Do not overfill.**

⚠ 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

⚠ 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).

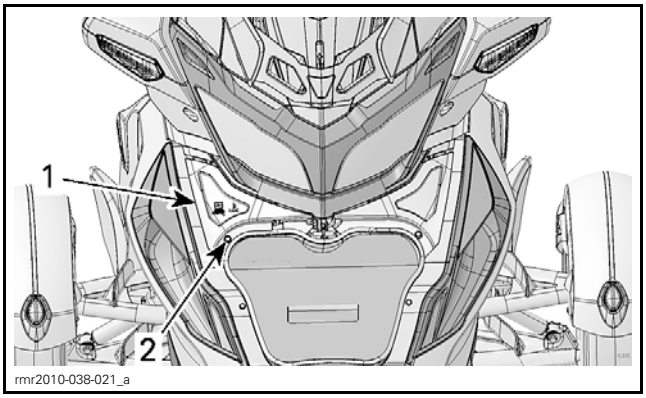
For best performance, use BRP PREMIXED COOLANT (P/N 219 700 362)

Coolant Level Verification

⚠ 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.



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1. Right service cover
2. Plastic rivet

4. Pull down the service cover using the recess to release upper tabs from the front fascia.


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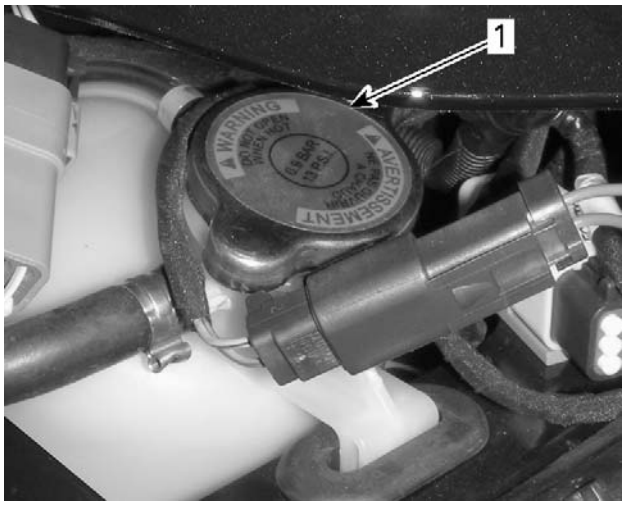
5. Pull out the rear tab.
6. Lift service cover to remove it.

NOTICE Pay attention not to damage the FCS switch.

7. Check the coolant level on the right hand side. Coolant must be visible without exceeding the COLD. level mark.



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TYPICAL
1. Coolant reservoir cap

8. If required, add recommended coolant until it is visible in the reservoir. This will correspond to a level between COLD and HOT marks. Do not exceed the HOT level mark. **Do not overfill.**
9. Reinstall the service cover.

Brake Fluid

⚠ 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.

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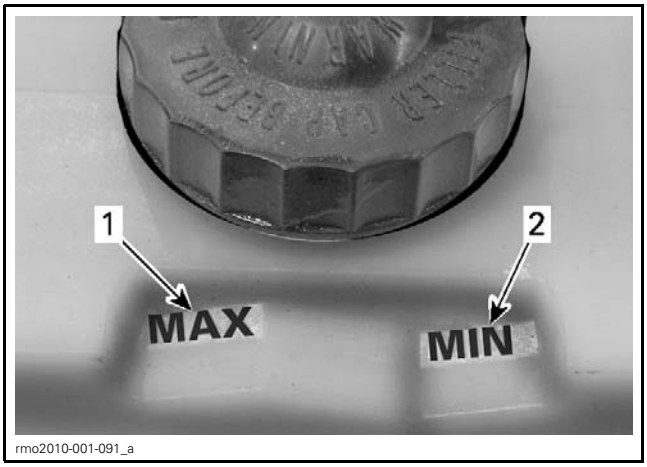
1. Brake fluid reservoir

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



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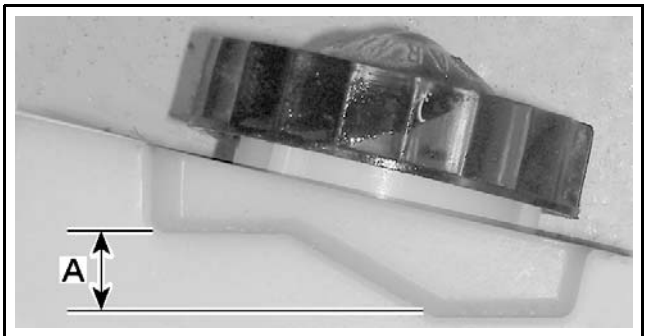
1. Brake fluid MAX. level mark
2. Brake fluid MIN. level mark



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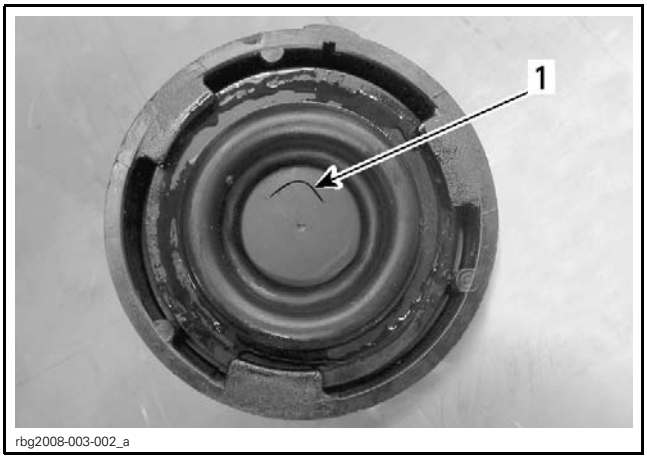
A. Operating range

6. Immediately wipe up spills if necessary.
7. Prior to installing brake fluid reservoir caps:
   – Check that V slit is in good condition.
   – Ensure diaphragm are properly positioned.



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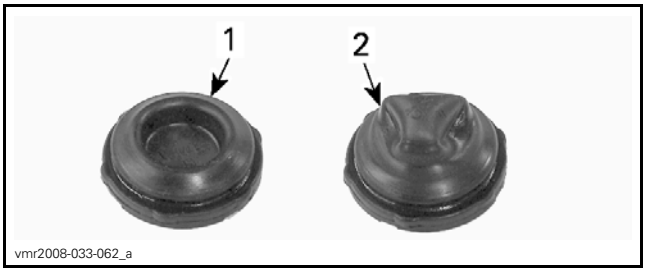
TYPICAL
1. V slit



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TYPICAL
1. Correct position
2. Wrong position

8. Reinstall both caps of the reservoir.
9. 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.

Tires Pressure

⚠ 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).

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

COLD TIRE PRESSURE RECOMMENDATION	
FRONT	REAR
103 kPa ± 14 kPa (15 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.


rmr2008-030-009

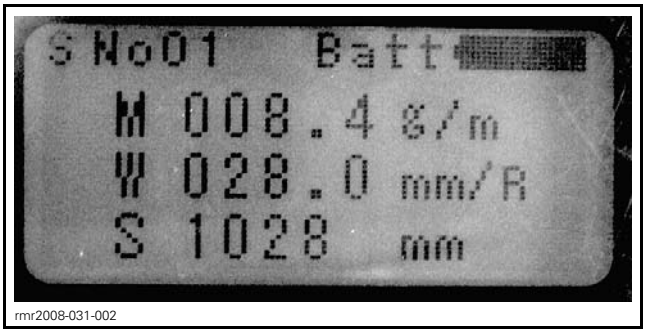
TYPICAL - LIFT BY THE FRAME

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


529036115

5. Enter the following specifications to program the meter.

MASS	WIDTH	SPAN
8.4 g/m	28.0 mm/R	1028 mm



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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.


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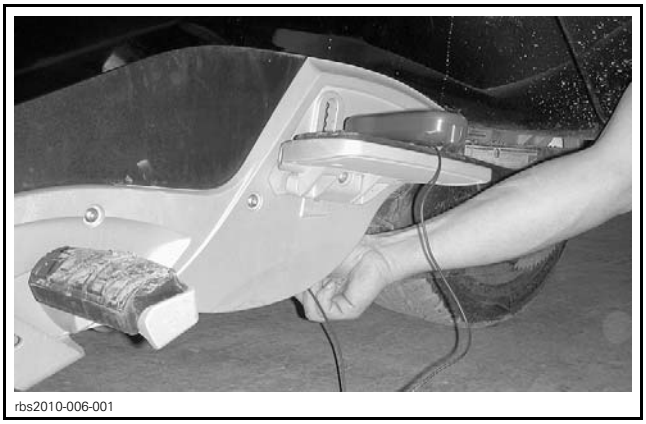
TYPICAL - SWING ARM ALIGNS WITH A SPOKE

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.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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:

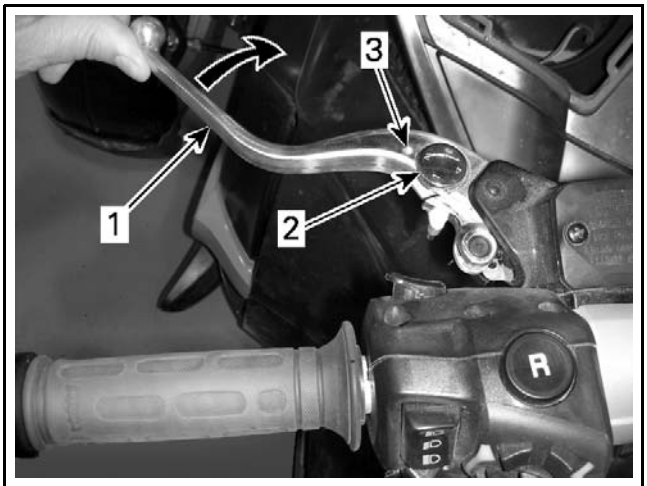
DRIVE BELT TENSION (PARTS AT ROOM TEMPERATURE AND REAR WHEEL LIFTED)
►1050N ± 150N◄

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 MANUAL*.

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
3. Dot

Suspension

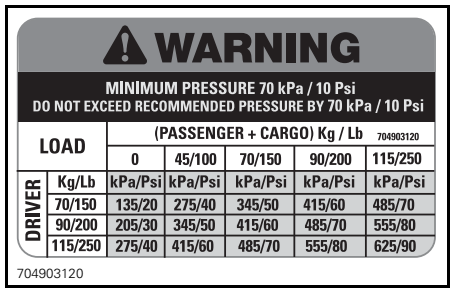
ACS Rear Suspension

Models Without Compressor (Manual Adjustment)

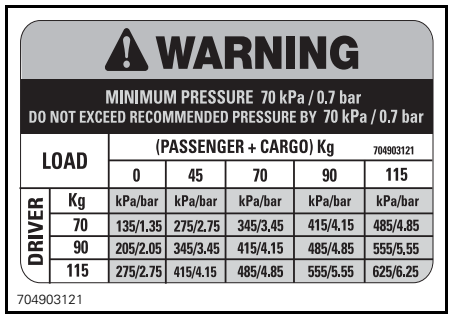
The suspension pressure is adjustable by deflating or inflating the air spring. Use an air compressor and a pressure gauge.

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.



INSIDE NORTH AMERICA

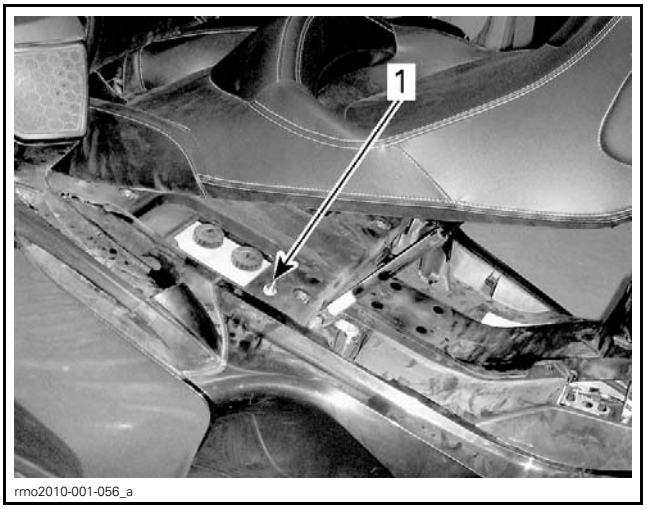


OUTSIDE NORTH AMERICA

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 schrader valve located under the seat.



1. Schrader valve

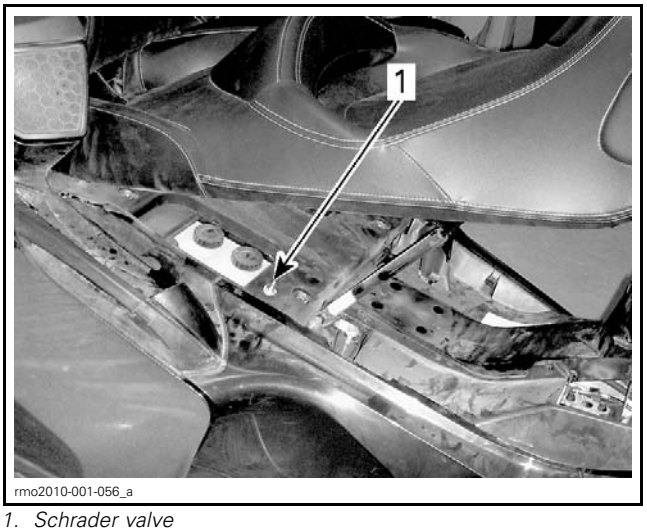
NOTE: On models equipped with a remote adjustment, it is not necessary to adjust the suspension setting. The air spring will inflate automatically at the factory setting after the vehicle start up. Refer to the *SPYDER RT OPERATOR'S GUIDE* for details.

Lights

Headlights Aiming Verification

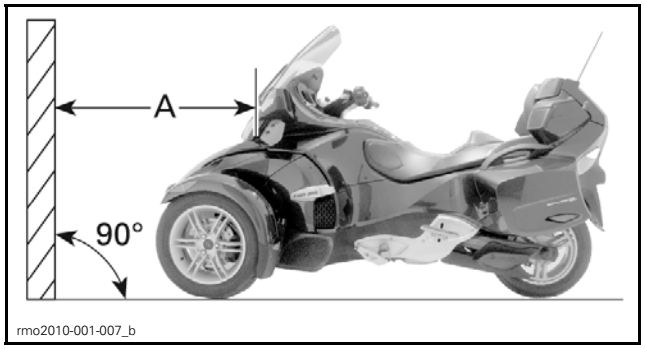
North American Models

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



1. Schrader valve

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

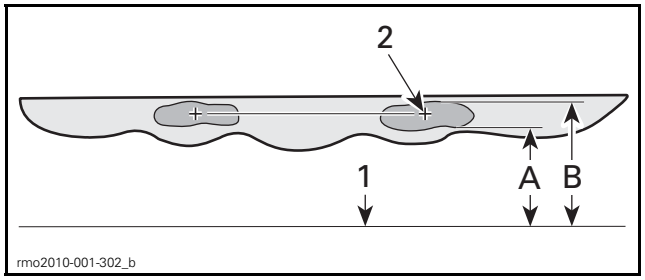


A. 10 m (33 ft)

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.

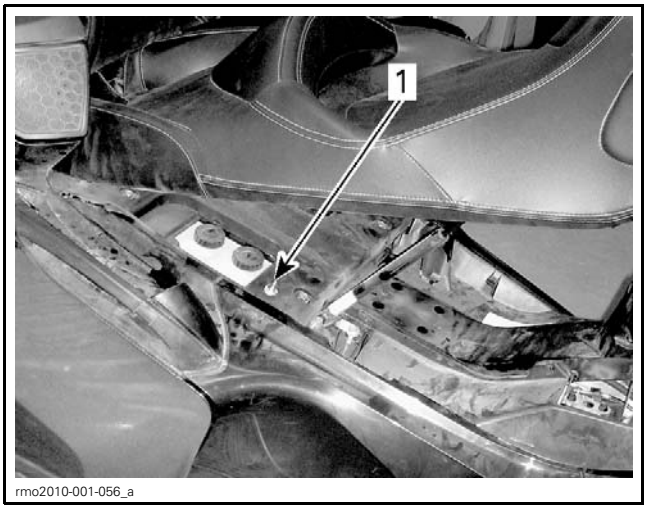


TYPICAL HEADLIGHT REFLECTION ON TEST SURFACE
1. Ground
2. Focus point
A. 642 mm (25.3 in) above ground
B. 732 mm (28.8 in) above ground

CE Models (Low Beam)

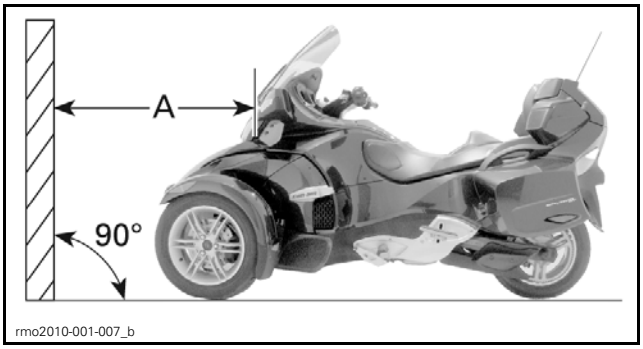
NOTE: This verification is valid for either left-hand or right-hand traffic regulations.

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



1. Schrader valve

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

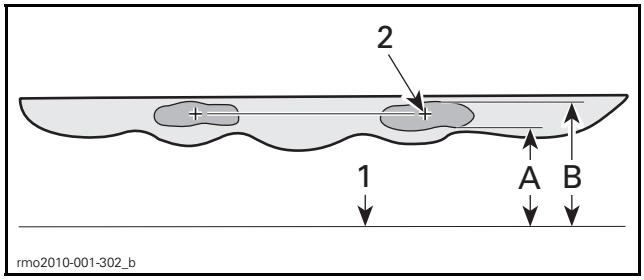


A. 10 m (33 ft)

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

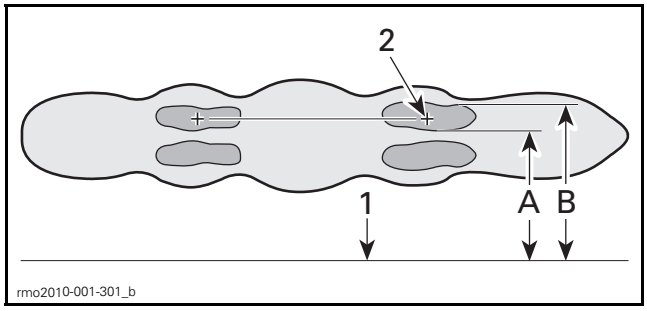
CE Models (High Beam)

NOTE: As the low beam and high beam are separate units, this verification is valid for either left-hand 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.



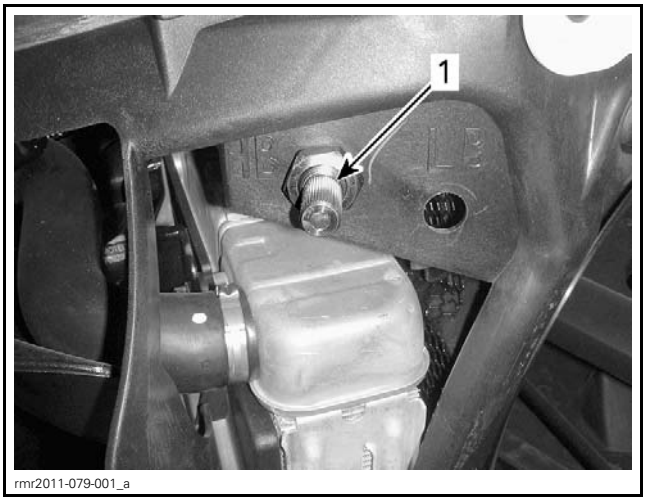
TYPICAL HEADLIGHT REFLECTION ON TEST SURFACE
1. Ground
2. Focus point
A. 800 mm (31.5 in) above ground
B. 850 mm (33.5 in) above ground

Headlights Aiming Adjustment

1. Remove both middle side panels.

Upper Headlight Units

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

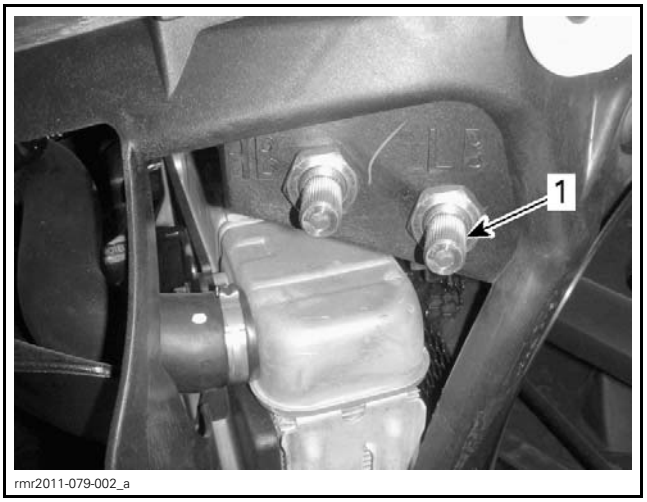


RH SIDE SHOWN
1. Adjustment knob "HB"

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

Lower Headlight Units (European Models Only)

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



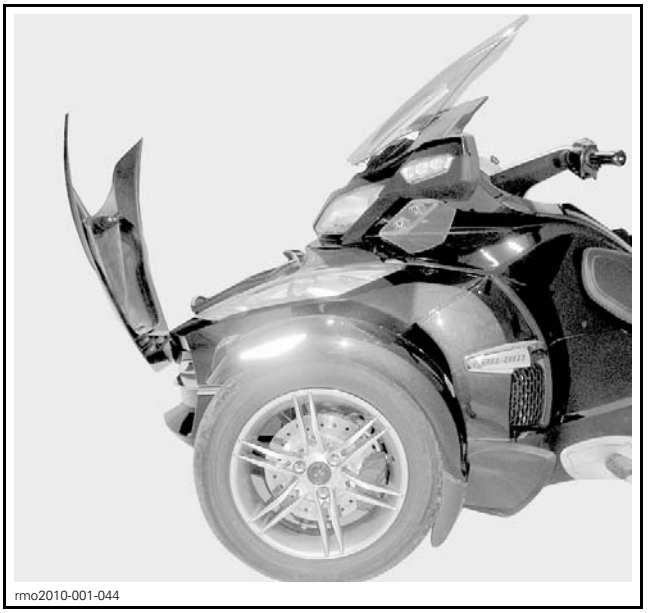
RH SIDE SHOWN
1. Adjustment knob "LB"

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

Storage Compartment Covers

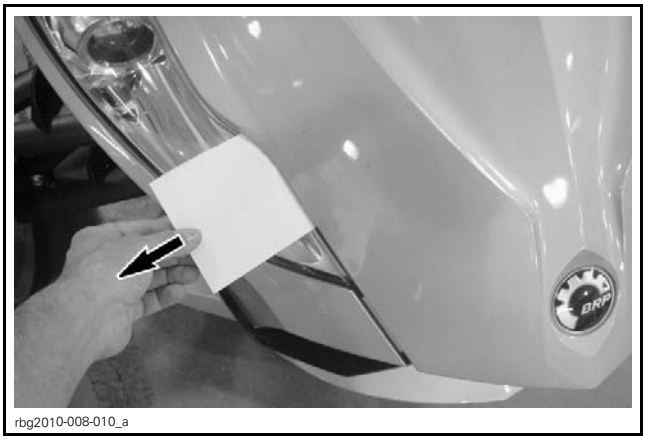
Front Storage Compartment Cover

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.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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.


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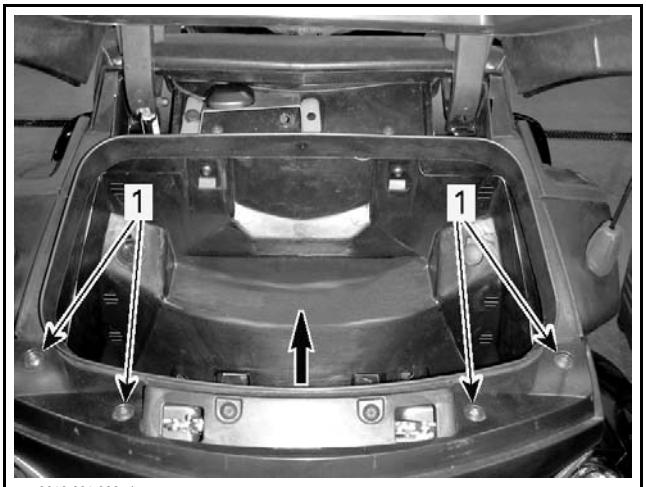
TOP STORAGE COMPARTMENT VERIFICATION	
PASS	Cover opens and latches properly
FAIL	Cover does not open or not latch properly

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.



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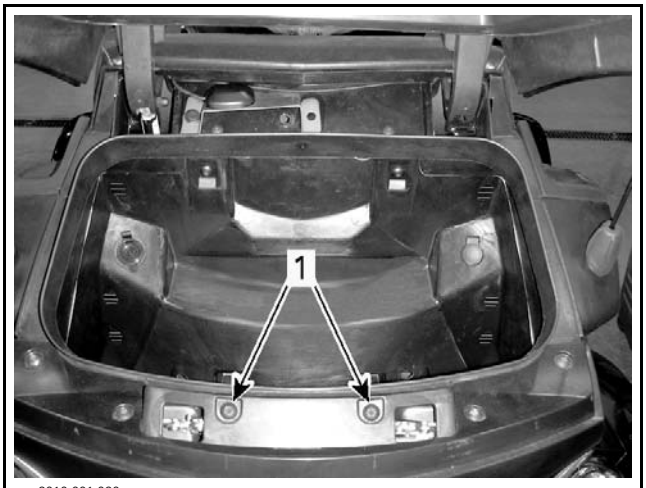
1. Screws on the top of rear panel

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.



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1. Latch retaining screws

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

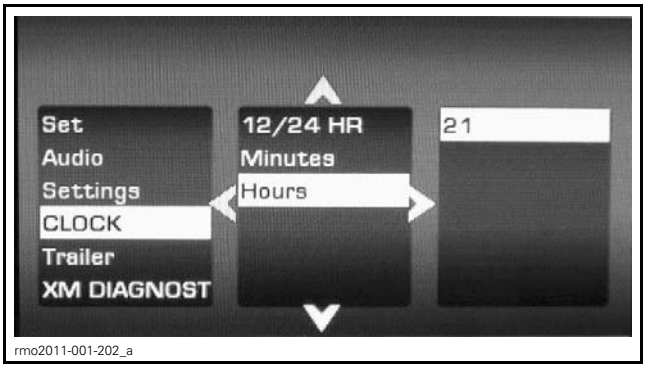
Clock Setting

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

Setting the Time

To set the hours:

Select CLOCK in main category of Preferences Screen.

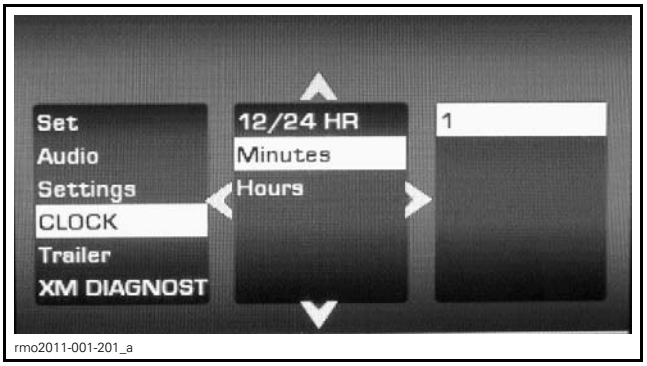


Select HOURS in secondary category.

Adjust the unit value using the UP and DOWN arrow.

To set the minutes:

Select CLOCK in main category of Preferences Screen.



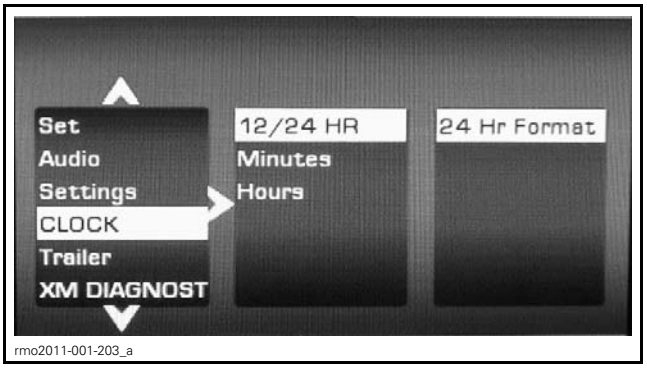
Select MINUTES in secondary category.

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.

B.U.D.S. Programming

Always use the latest B.U.D.S. version on your shop computer. It is available from the following web site:

WWW.BOSSWEB.BRP.COM

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

NOTICE During data transfer, make sure that:

- Voltage (12V) remains stable before starting update. Charge the battery or use a power pack to have enough power.
- Although screen "freezes" for a while, remain on the B.U.D.S. because update still continues
- Never disconnect any cable while updating ECM.

MANDATORY TOOLS	
A personal computer (laptop or desktop)	
MPI-2 INTERFACE CARD (P/N 529 036 018)	
MPI-2 DIAGNOSTIC CABLE (P/N 710 000 851)	
OPTIONAL TOOL	
Extension cable available at electronic retail outlets. Do not exceed 7.5 m (25 ft)	

NOTE: B.U.D.S. is not used to program the hard keys (included keys are ready to use).

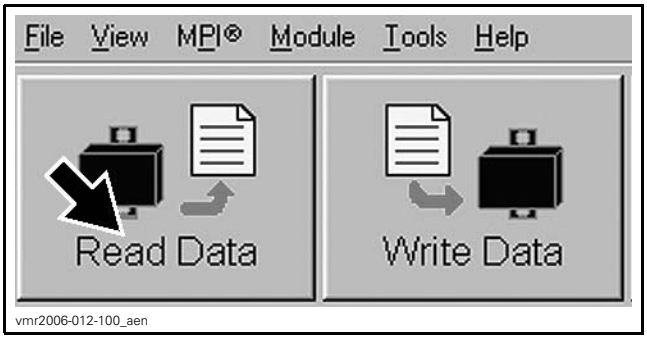
Use B.U.D.S. to

- Enter Customer's Name
- Reset Trip Hours and Trip Distances
- Reset Last Service
- Set Speedometer Units
- Set Cluster Language
- Check fault codes (if any).

Connecting PC to Vehicle

1. Remove service cover from vehicle.
2. Connect the PC to vehicle. Refer to the latest edition of *CAN-AM ROADSTER B.U.D.S. SOFTWARE AND COMMUNICATION TOOLS* for the proper connecting procedure.

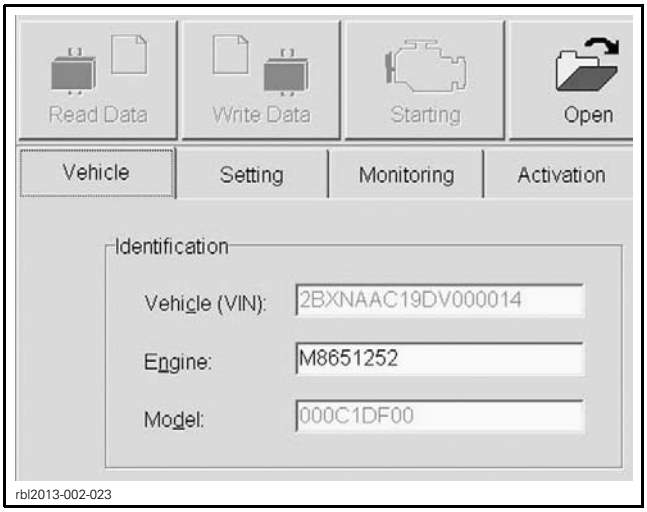
3. Press READ DATA button from the tool bar to initiate communication with the vehicle.



Entering Customer's Name

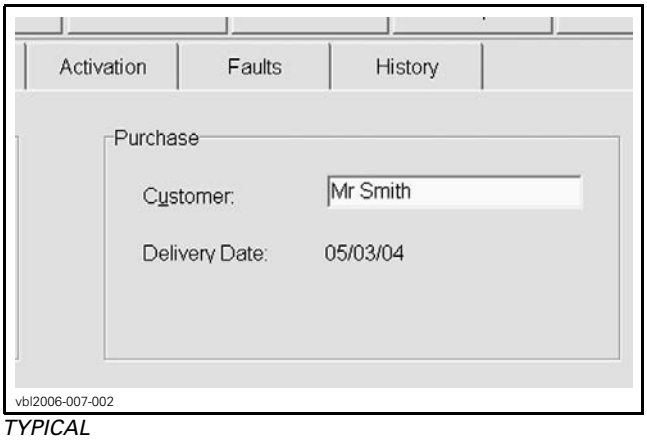
NOTE: When starting the vehicle, the multifunction display will show the name of the customer; for example: "HI JOHN SMITH". If the customer's name is not programmed, only "HI" will be visible when turning the vehicle ON.

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



TYPICAL

2. Type the name of the customer.



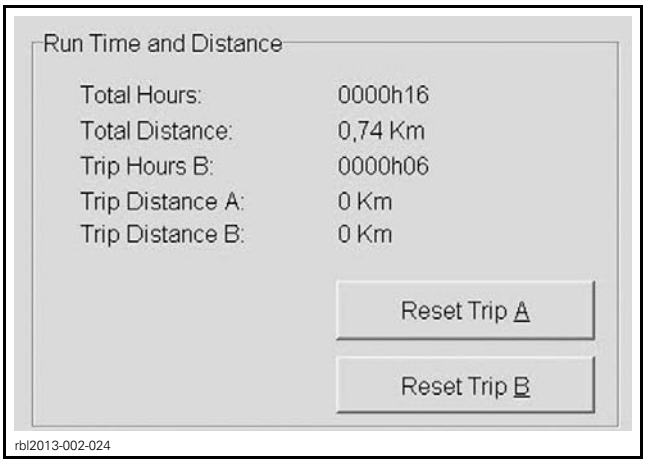
TYPICAL

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.

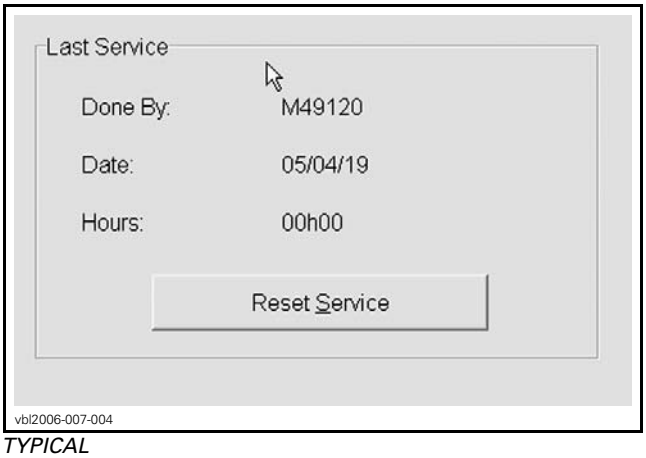


TYPICAL

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.

Speedometer Units

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.

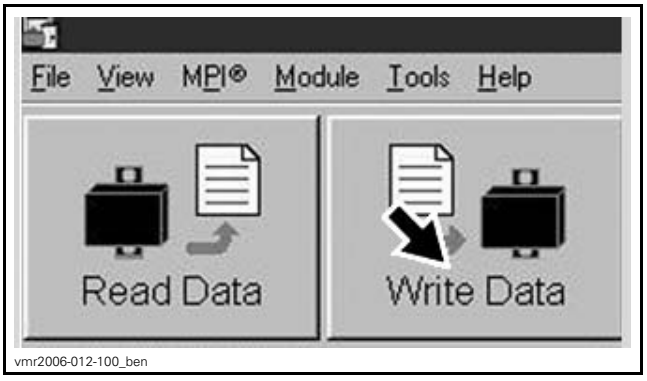
1. Select the SETTING tab in B.U.D.S.
2. Select CLUSTER page.
3. Select **Metric** or **Imperial** from the **Cluster Units** section.

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).**

1. 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 into its housing.
5. Reinstall 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.

1. Front compartment cover and seat locks
2. Passenger grab handles
3. Front wheel nuts torque (must be 105 N•m (77 lbf•ft))
4. Rear shock absorber retaining nuts torque (must be 48 N•m (35 lbf•ft))
5. Suspension arm ball joint cotter pins
6. Tie rod end nuts and cotter pins
7. Rear axle nut and cotter pin
8. Gearshift pedal operation
9. Parking brake operation
10. Brake lines
11. 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 in first gear, slightly apply on throttle then release.
   - 9.3 Shift in reverse, slightly apply on throttle then release.
   - 9.4 Shift in neutral position, slightly apply on throttle then release.
10. Throttle operation.
    - – The throttle is the right handgrip, and 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 you release it.

11. Clutch lever operation (SM5 Model).
    – The clutch lever is in front of the left handgrip. 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
    – Front storage light (option package).
14. Dimmer switch operation.
15. Headlight overrun button operation.
    – There is a headlight override button on the front of the right handgrip.
16. Horn operation.
    – The horn button is located near the left handgrip.
17. Brake operation.
    – The brake pedal is in front of the right footpeg.
    – Press it down to operate.
    – This pedal brakes all three wheels.

    17.1 Ensure brake pedal is firm when pressure is applied and that it returns freely.
18. Electronic parking brake operation.
    – The parking brake switch is located on the central panel.

    18.1 Press it down to apply the parking brake.

    18.2 Press the switch down a second time to release the parking brake.

    18.3 Ensure parking brake is shut-off.
19. Shifter operation.
20. Leakage of the following fluids:
    – Fuel
    – Engine oil
    – Engine coolant
    – Brake fluid
    – Clutch fluid
21. Proper operation of seat release and hood release using key.
22. Absence of abnormal noises or vibrations.
23. Tool kit, DVD and Operator's Guide in front storage compartment.
24. Radio operation using, front and rear controls (option package).
25. Front and rear heated grips operation (option package).
26. iPod® and MP3 audio player wires stowed in rear top storage compartment.
27. Complete applicable recall or factory-directed modification.
28. Ensure that hang tag is on vehicle handle bars (to be removed by owner).

Vehicle Cleaning

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

NOTICE Do not polish windshield with any plastic cleaner or polisher.

NOTICE Never use a high pressure washer to clean the vehicle. USE LOW PRESSURE ONLY (like a garden hose). The high pressure can cause electrical or mechanical damage.

NOTICE It is necessary to use flannel cloths on plastic parts to avoid damaging surfaces.

NOTICE Do not wash the seat with a vinyl or plastic cleaner because the seat may become slippery.

NOTICE Certain plastic or vinyl cleaners will damage the seat cover. Use only mild detergent, such as soap specially formulated for motorcycles or automobiles.

1. Wet the vehicle thoroughly with water.

iPod is a trademark of Apple Inc.

2. Wash the vehicle with water mixed with a mild detergent, such as soap specially formulated for motorcycles or automobiles.
3. Dry the vehicle with a chamois or a soft towel.

NOTE: While washing the vehicle, check for grease or oil. If necessary, use a mild automotive degreaser and follow the manufacturer's instructions.

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.

SPECIFICATIONS

Canada and USA

MODEL				SPYDER RT
ENGINE				
Engine type				ROTAX 991 60° V-Twin
				4-stroke, Dual Over Head Camshaft (DOHC), liquid cooled
Number of cylinders				2
Number of valves				8 valves
Bore				97 mm (3.82 in)
Stroke				67.5 mm (2.66 in)
Displacement				998 cm³ (60.9 in³)
Compression ratio				12.2:1
Lubrication	Type			Dry sump with separate oil tank and oil cooler
	Oil filter	Engine		BRP Rotax microglass fibre type, replaceable
		Transmission		BRP Rotax microglass fibre type, replaceable
	Engine oil capacity	Oil change with new engine filter	SM5	3.9 L (4.1 qt (U.S. liq.))
		Oil change with new engine filter	SE5	4.2 L (4.4 qt (U.S. liq.))
		Oil change with new engine and HCM filters		4.3 L (4.5 qt (U.S. liq.))
	Recommended engine oil			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 or SG classification
Clutch	SM5 model		Type	Wet, multi-plate, manual operation through a hydraulic piston, vacuum assist
			Fluid	DOT 4 Brake fluid
	SE5 model		Type	Centrifugal clutch + wet multi-plate clutch automatically controlled by TCM
			Engage-ment	2000 +/- 200 RPM (centrifugal)
			Stall	3200 +/- 200 RPM (centrifugal)
Exhaust system				2 into 1 with catalytic converter
Air filter				Paper element
GEARBOX				
Type	SM5			Sequential Manual 5-speed (SM5) with remote electronic reverse interlock
	SE5			Sequential Electronic 5-speed (SE5) with reverse interlock
COOLING SYSTEM				
Type				Liquid cooled, single radiator with cooling fan
Coolant		Type		Ethyl glycol/water mix (50% coolant, 50% distilled water). Use premixed coolant sold by BRP (P/N 219 700 362) or coolant specifically designed for aluminum engines
		Capacity		3 L (.79 U.S. gal.)

MODEL			SPYDER RT
ELECTRICAL SYSTEM			
Magneto generator output			650 W at 2000 RPM
Ignition system type			Electronic ignition with dual output coil
Ignition timing			Not adjustable
Spark plug		Quantity	2
		Make and type	NGK KR8BI (apply heat-sink paste P12 (P/N 420 897 186) on spark plug threads)
		Gap	0.7 mm to 0.8 mm (.028 in to .031 in)
Engine RPM limiter setting		Forward	9500 RPM
Battery		Type	Yuasa YTX24HL-BS
		Voltage	12 volts
		Nominal rating	21 A•h
		Recommended charging rate	2 A
Headlight			2 x 65 W halogen (type H9)
Fog light (Spyder RT-S)			2 x 35 W halogen
Taillight/brake light			LED 3.1 W total
Turn signal lights		Front	LED 4.5 W each side
		Rear	2 x 21 W
Position lights			2 x 5 W
License plate light			5 W
Backup light			2 x 20 W
Day light (Spyder RT-S/LTD)			0.5 W
Front storage compartment light (Spyder RT-S/LTD)			0.2 W
Fuses			Refer to *FUSES* in the appropriate *OPERATOR'S GUIDE*
FUEL SYSTEM			
Fuel delivery		Type	Multi-point Electronic Fuel Injection (EFI) with ETC (Electronic Throttle Control). Dual throttle body (51 mm) with an actuator
Fuel pump		Type	Electrical module in fuel tank
Idle speed			1400 ± 100 RPM (electronically controlled, not adjustable)
Fuel	Type		Regular unleaded gasoline (fuel which may contain up to 10% MAX ethanol)
	Octane no.	Inside North America	Recommended for optimum performance: 91 (R+M)/2. Minimum: 87 (R+M)/2
		Outside North America	Recommended for optimum performance: 95 RON. Minimum: 92 RON
Fuel tank capacity			25 L (6.6 U.S. gal.)
DRIVE SYSTEM			
Final drive type			Carbon reinforced drive belt
Final drive ratio			28/79
STEERING			
Type			Dynamic Power Steering (DPS)

MODEL		SPYDER RT
FRONT SUSPENSION		
Suspension type		Double A-arm with anti-roll bar
Suspension travel		174 mm (6.85 in)
Shock absorber	Qty	2
	Type	SACHS twin-tube coil-over
REAR SUSPENSION		
Suspension type		Air Controlled Suspension (ACS). Compressor-controlled (ACS with remote adjustment only). Swing arm with monoshock
Suspension travel		152 mm (5.98 in)
Shock absorber	Qty	1
	Type	SACHS twin-tube coil-over
Preload adjustment (ACS with manual adjustment)		Adjustable air pressure:135 kPa to 625 kPa (20 PSI to 90 PSI)
Preload adjustment (ACS with remote adjustment)		5 positions
BRAKES		
Type		Brembo
Front brake		Dual rigid discs 270 mm (10.6 in), radially mounted monobloc, with 4 piston calipers, 2-pad
Rear brake		Single disc 270 mm (10.6 in) with 1 piston floating caliper with integrated parking brake
Brake fluid	Capacity	530 ml (17.9 U.S. oz)
	Type	DOT 4
Parking brake		Mechanical, electrically actuated to the rear caliper
Minimum brake pad thickness		1 mm (.04 in)
Minimum brake disc thickness		6.4 mm (.25 in)
Maximum brake disc warpage		0.1 mm (.004 in)
TIRES		
Type (use only tires recommended by BRP)	Front	KR31 165/55R15
	Rear	KR21 225/50R15
Pressure	Front	Nominal.: 103 kPa (15 PSI) Min.: 89 kPa (13 PSI) Max.: 117 kPa (17 PSI)
	Rear	Nominal.: 193 kPa (28 PSI) Min.: 179 kPa (26 PSI) Max.: 207 kPa (30 PSI) NOTE: The pressure difference between the left and right side tire should not exceed 3.4 kPa (.5 PSI).
Minimum tire tread depth	Front	2.5 mm (3/32 in)
	Rear	4 mm (5/32 in)
WHEELS		
Size (diameter X width)	Front	381 mm (15 in) x 127 mm (5 in)
	Rear	381 mm (15 in) x 178 mm (7 in)
Front wheel nuts torque		90 N•m to 120 N•m (66 lbf•ft to 89 lbf•ft)
Rear drive axle nut torque		123 N•m to 137 N•m (91 lbf•ft to 101 lbf•ft)

MODEL		SPYDER RT
DIMENSIONS		
Overall length		2 667 mm (105 in)
Overall width		1 572 mm (61.9 in)
Overall height	Windshield up	1 510 mm (59.45 in)
	Windshield down	1 473 mm (58 in)
Seat (top) height		772 mm (30.4 in)
Wheelbase		1 711 mm (67.4 in)
Front wheel track		1 384 mm (54.5 in)
Ground clearance, front and under engine		110 mm (4.3 in)
WEIGHT AND LOADING CAPACITY		
Dry weight		433 mm (17 in)
Front storage compartment	Capacity	55 L (14.5 U.S. gal.)
	Maximum load	16 kg (35 lb)
Glove box	Capacity	1.2 L (.317 U.S. gal.)
	Maximum load	2 kg (4 lb)
Rear lateral storage compartment	Capacity	49.7 L (13.13 U.S. gal.)
	Maximum load	7 kg (15 lb)
Rear center storage compartment	Capacity	40.5 L (10.7 U.S. gal.)
	Maximum load	9 kg (20 lb)
Total vehicle load allowed (including operator, passenger, cargo and added accessories)		224 kg (493.8 lb)
Gross vehicle weight rating (GVWR)		680 kg (1,499.1 lb)
Maximum weight on trailer tongue		18.2 kg (40 lb)
Maximum towed weight (trailer and cargo)		182 kg (401 lb)

Europe

MODEL				SPYDER RT (CE)
ENGINE				
Engine type				ROTAX® 991 60° V-Twin
				4-stroke, Dual Over Head Camshaft (DOHC), liquid cooled
Number of cylinders				2
Number of valves				8 valves
Bore				97 mm (3.82 in)
Stroke				67.5 mm (2.66 in)
Displacement				998 cm^3 (60.9 in^3)
Compression ratio				12.2:1
Lubrication	Type			Dry sump with separate oil tank and oil cooler
	Oil filter	Engine		BRP Rotax microglass fibre type, replaceable
		Transmission (SE5)		BRP Rotax microglass fibre type, replaceable
	Engine oil Capacity	Oil change with new engine filter	SM5	3.9 L (4.1 qt (U.S. liq.))
		Oil change with new engine filter	SE5	4.2 L (4.4 qt (U.S. liq.))
		Oil change with new engine and HCM filters		4.3 L (4.5 qt (U.S. liq.))
	Recommended engine oil			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 or SG classification
Clutch	SM5 model		Type	Wet, multi-plate, manual operation through a hydraulic piston, vacuum assist
			Fluid	DOT 4
	SE5 model		Type	Centrifugal clutch + wet multi-plate clutch automatically controlled by TCM
			Engage-ment	2000 ± 200 RPM (centrifugal)
			Stall	3200 ± 200 RPM (centrifugal)
Exhaust system				2 into 1 with catalytic converter
Air filter				Paper element

MODEL			SPYDER RT (CE)
GEARBOX			
Type	SM5		Sequential Manual 5-speed (SM5) with remote electronic reverse interlock
	SE5		Sequential Electronic 5-speed (SE5) with reverse interlock
COOLING SYSTEM			
Type			Liquid cooled, single radiator with cooling fan
Coolant		Type	Ethyl glycol/water mix (50% coolant, 50% distilled water). Use premixed coolant sold by BRP (P/N 219 700 362) or coolant specifically designed for aluminum engines
		Capacity	3 L (.79 U.S. gal.)
ELECTRICAL SYSTEM			
Magneto generator output			650 W at 2000 RPM
Ignition system type			Electronic ignition with dual output coil
Ignition timing			Electronically controlled, not adjustable
Spark plug		Quantity	2
		Make and type	NGK KR8BI (apply heat-sink paste P12 (P/N 420 897 186) on spark plug threads)
		Gap	0.7 mm to 0.8 mm (.028 in to .031 in)
Engine RPM limiter setting		Forward	9500 RPM
Battery		Type	Maintenance free
		Voltage	12 volts
		Nominal rating	21 A•h
		Recommended charging rate	2 A
Headlight — high beam			2 x 65 W halogen (type H9)
Headlight — low beam			2 x 60 W halogen
Taillight/brake light			LED 3.1 W total
Turn signal lights		Front	LED 2 x 4.5 W each side
		Rear	2 x 10 W
Position lights			2 x 5 W
License plate light			5 W
Backup light			2 x 10 W
Day light (Spyder RT-S/LTD)			0.5 W

MODEL			SPYDER RT (CE)
ELECTRICAL SYSTEM (cont'd)			
Front storage compartment light (Spyder RT-S/LTD)			0.15 W
Fuses			Refer to *FUSES*
FUEL SYSTEM			
Fuel delivery		Type	Multi-point Electronic Fuel Injection (EFI) with ETC (Electronic Throttle Control). Dual throttle body (51 mm) with an actuator
Fuel pump		Type	Electrical module in fuel tank
Idle speed			1400 ± 100 RPM (electronically controlled, not adjustable)
Fuel	Type	All vehicles except Brazilian	Regular unleaded gasoline (fuel which may contain up to 10% MAX ethanol)
		Brazilian	Regular unleaded gasoline (fuel which may contain up to 25% MAX ethanol)
	Octane no.		Recommended for optimum performance: 95 RON. Minimum: 92 RON
Fuel tank capacity			25 L (6.6 U.S. gal.)
DRIVE SYSTEM			
Final drive type			Carbon reinforced drive belt
Final drive ratio			28/79
STEERING			
Type			Dynamic Power Steering (DPS)
FRONT SUSPENSION			
Suspension type			Double A-arm with anti-roll bar
Suspension travel			174 mm (6.85 in)
Shock absorber		Qty	2
		Type	SACHS twin-tube coil-over
Spring preload adjustment			No adjustment

MODEL		SPYDER RT (CE)
REAR SUSPENSION		
Suspension type		Air Controlled Suspension (ACS). Compressor-controlled (ACS with remote adjustment only). Swing arm with monoshock
Suspension travel		152 mm (5.98 in)
Shock absorber	Qty	1
	Type	SACHS twin-tube coil-over
Preload adjustment (ACS with manual adjustment)		Adjustable air pressure:135 kPa to 625 kPa (20 PSI to 90 PSI)
Preload adjustment (ACS with remote adjustment)		5 positions
BRAKES		
Type		Brembo
Front brake		Dual rigid discs 270 mm (10.6 in), radially mounted monobloc, with 4 piston calipers, 2-pad
Rear brake		Single disc 270 mm (10.6 in) with 1 piston floating caliper with integrated parking brake
Brake fluid	Capacity	530 ml (17.9 U.S. oz)
	Type	DOT 4
Parking brake		Mechanical, electrically actuated to the rear caliper
Minimum brake pad thickness		1 mm (.04 in)
Minimum brake disc thickness		6.4 mm (.25 in)
Maximum brake disc warpage		0.1 mm (.004 in)
TIRES		
Type (use only tires recommended by BRP)	Front	KR31 165/55R15
	Rear	KR21 225/50R15
Pressure	Front	Nominal: 103 kPa (15 PSI) Min.: 89 kPa (13 PSI) Max.: 117 kPa (17 PSI)
	Rear	Nominal: 193 kPa (28 PSI) Min.: 179 kPa (26 PSI) Max.: 207 kPa (30 PSI) NOTE: The pressure difference between the left and right side tire should not exceed 3.4 kPa (.5 PSI).
Minimum tire tread depth	Front	2.5 mm (3/32 in)
	Rear	4 mm (5/32 in)
WHEELS		
Size (diameter X width)	Front	381 mm (15 in) x 127 mm (5 in)
	Rear	381 mm (15 in) x 178 mm (7 in)
Front wheel nuts torque		90 N•m to 120 N•m (66 lbf•ft to 89 lbf•ft)
Rear drive axle nut torque		123 N•m to 137 N•m (91 lbf•ft to 101 lbf•ft)
DIMENSIONS		
Overall length		2 667 mm (105 in)
Overall width		1 572 mm (61.9 in)
Overall height		1 510 mm (59.4 in)
Seat (top) height		772 mm (30.4 in)
Wheelbase		1 711 mm (67.4 in)
Front wheel track		1 384 mm (54.5 in)

MODEL		SPYDER RT (CE)
Ground clearance, front and under engine		110 mm (4.3 in)
WEIGHT AND LOADING CAPACITY		
Dry weight		433 mm (17 in)
Front storage compartment	Capacity	55 L (14.5 U.S. gal.)
	Maximum load	16 kg (35 lb)
Glove box	Capacity	1.2 L (.3 U.S. gal.)
Side storage compartment	Capacity	49.7 L (13.13 U.S. gal.)
	Maximum load	7 kg (15 lb)
Rear storage compartment	Capacity	40.5 L (10.7 U.S. gal.)
	Maximum load	9 kg (20 lb)
Total vehicle load allowed (including operator, passenger, cargo and added accessories)		224 kg (493.8 lb)
Gross vehicle weight rating (GVWR)		680 kg (1,499 lb)
Maximum weight on trailer tongue		18 kg (40 lb)
Maximum towed weight (trailer and cargo)		180 kg (400 lb)

Because of our ongoing commitment to product quality and innovation, BRP reserves the right, at any time, to make changes in design and specifications and/or to make additions to, or improvements in its products without imposing any obligation upon itself to install them on its previously manufactured products.