

ROADSTER PREDELIVERYBulletin



November 25, 2010 Subject: Can-Am™ Spyder™ RT Predelivery Instructions

No. **2011-2**

REVISION 1 March 23, 2011

YEAR	MODEL	MODEL NUMBER	COUNTRY	PREDELIVERY KIT	SERIAL NUMBER
	Spyder® RT SM5	АЗВА	Canada United States of America		
		A3BB	Europe		
	Spyder RT Audio & Convenience SM5	А7ВА, А7ВС	Canada United States of America		
	Spyder RT Audio & Convenience SE5™	A9BA, A9BC	Canada United States of America		
2011	Spyder RT Techno SM5	A7BD	Europe]	
	Spyder RT Techno SE5	А9ВВ	Europe	(P/N 703 100 263)	All
	Spyder RT-S SM5	B5BA, B5BC, B5BD, B5BE	Canada United States of America		
	Spyder RT-S SE5	A4BA, A4BC, A4BE, A4BG	Canada United States of America		
		A4BB, A4BD, A4BF, A4BH	Europe		
	Spyder RT Limited SE5	В9ВА	Canada United States of America		
	SLU	B9BB	Europe		

<u>Underlined text(s) between arrows is (are) modified element(s) to the original publication.</u> ◀

*NEW - in title = Revised or new procedure compared to previous model year.

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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, 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*

A WARNING

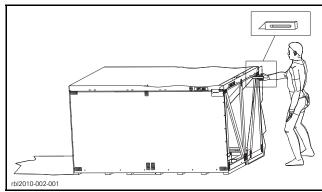
Torque wrench tightening specifications must be strictly adhered to. Where specified, install new locking devices (e.g. lock tabs, elastic stop nuts). If the efficiency of a locking device is impaired, it must be renewed.

UNCRATING

Crate Cover Removal

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

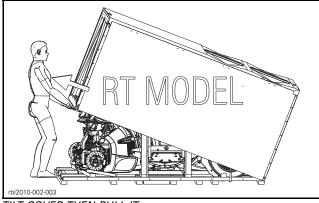
- 1. Position the crate on a firm, level surface.
- 2. Carefully cut both ends of crate tarpaulin to locate the front of vehicle.



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.



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-crate Removal

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

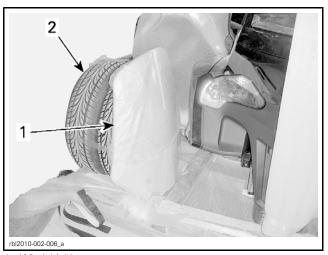
NOTE: The sub-crate is located on the left side of vehicle and it contains the front cargo module.

1. Remove protective foam from vehicle.

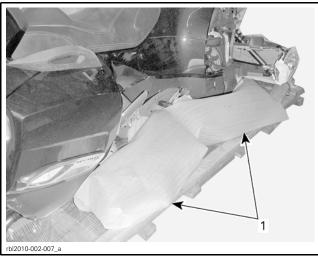


2. Remove windshield and front wheels from crate base.

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



- Windshield
 Front wheels
- 3. Remove front fenders from crate base.



- 1. Front fenders
- 4. Remove all screws holding sub-crate to crate base.



1. Sub-crate

5. Assisted by another person, carefully lift up the sub-crate.



*NEW - Parts Check

Ensure that the crate includes the following items (inside front storage compartment) :

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

The predelivery kit should included the following items:

DESCRIPTION (LOCATION)	
Wheel lug nut (front wheels)	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
M6 caged nut (front cargo module)	1

DESCRIPTION (LOCATION)	
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
Clip (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)	
M6 elastic flange nut (mudguards)	4
M6 x 20 Torx screw (mudguards)	4
M6 stainless steel lock washer (antenna)	1

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

DESCRIPTION	MODEL	QTY
iPOD† cable	RT Audio & ConvenienceRT TechnoRT-SRT Limited	1
Audio auxiliary cable	RT-SRT Limited	1

For the following models, remove the antenna from the sub-crate.

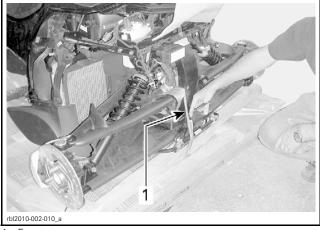
DESCRIPTION	MODEL	QTY
Antenna with rubber cap	RT Audio & ConvenienceRT TechnoRT-SRT Limited	1

*NEW – Lifting the Front of Vehicle

A WARNING

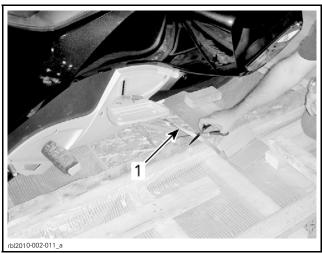
No one should be standing in front or at the back of the vehicle while straps are being cut.

1. Remove strap retaining front of vehicle to crate base.



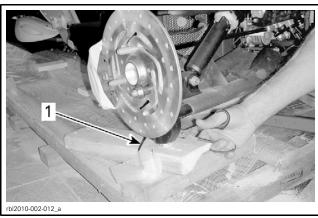
1. Front strap

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



1. Side strap

3. Remove strap on the RH caliper.

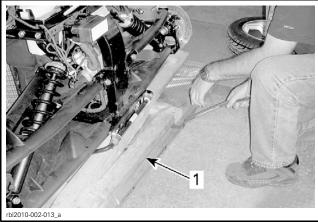


1. Caliper strap

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.

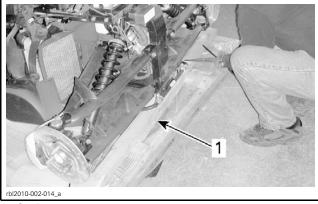
Conventional Method

1. Remove top crate board located at the front of vehicle.



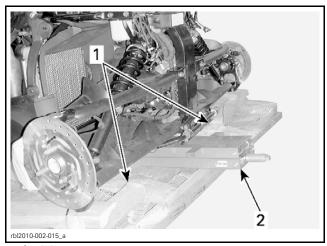
1. Stud to remove

2. Cut second crate board located at the front of vehicle using a proper saw.



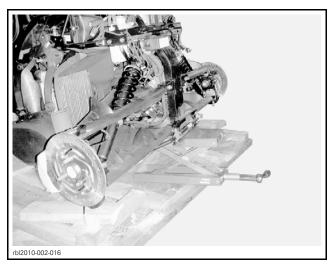
1. Stud to cut

3. Install a jack under the front lower beam of



Stud that was cut
 Hydraulic jack

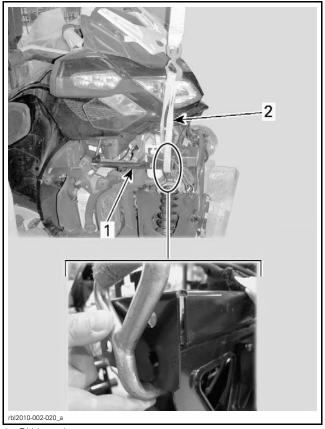
4. Lift the vehicle.



NOTICE Never lift vehicle by the suspension

Alternate Method

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



- 1. RH lateral support 2. Proper strap
- 2. Hook straps on an appropriate lifting kit.
- 3. Lift vehicle using a chain block.

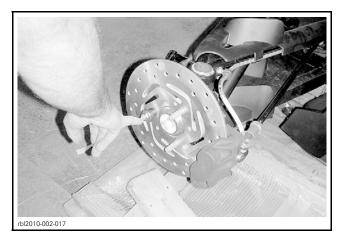
NOTICE Never lift vehicle by the suspension arm.

*NEW – Front Wheels Installation

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

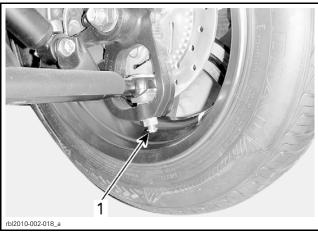
NOTICE A thin layer of anticorrosion treatment is present on the brake discs and must be removed before using the vehicle. Not conforming to this procedure may lead to a brake chattering squeaking and brake pad replacement would be necessary. ◀

2. Remove nut securing front brake discs to vehicle.



3. Install front wheels on vehicle.

NOTICE Be careful not to scratch front wheels with ball joint cotter pins during wheels installation.

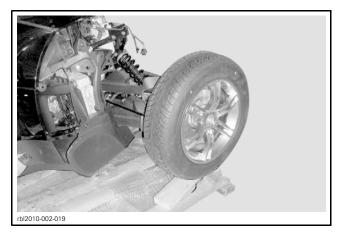


- 1. Ball joint cotter pin
- 4. Ensure that the rotation direction shown by the arrow is respected.

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. Torque wheels lug nuts.

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

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

▶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.

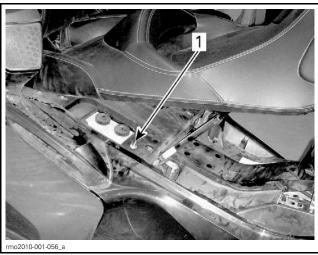
NOTE: Tire pressure changes with temperature and altitude. Recheck pressure if one of these conditions has changed (e.g., significant weather change, driving in the mountains).

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

COLD TIRE PRESSURE RECOMMENDATION		
FRONT	REAR	
Nominal.: 103 kPa (15 PSI)	<u>Nominal.: 193 kPa</u> (28 PSI) <mark>◀</mark>	

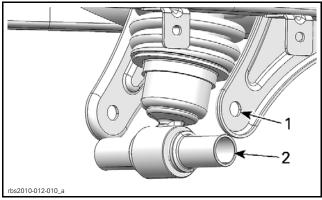
*NEW - Vehicle Removal

- 1. Open seat.
- 2. Locate ACS suspension pneumatic valve then unscrew cap.



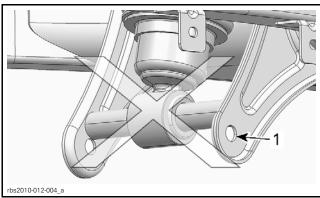
1. Pneumatic valve

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



Lower bracket hole
 Anchoring holes

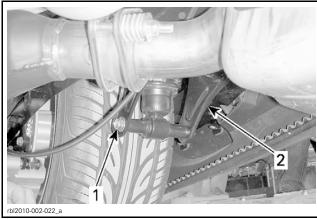
NOTICE Adding air may create rapid high changes because of the small air volume in the ACS spring. The anchoring hole of shock absorber must NEVER exceed the lower bracket holes when adding air into ACS spring. To avoid damaging the ACS system, DO NOT exceed 551 kPa (80 PSI) into the ACS spring.



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 and torque M10 elastic flange nut.

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



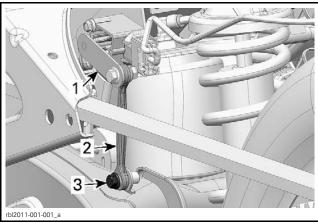
Shock absorber bolt

2. Lower bracket

RT-S and RT Limited Models

- 8. Install the link of the ACS position sensor to swing arm.
 - 8.1 Position the ACS position sensor lever rearward.
 - 8.2 Place the link on the outside of swing arm bracket.
 - 8.3 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)



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

NOTICE Ensure that ACS position sensor lever orientation is correct.



CORRECT ORIENTATION

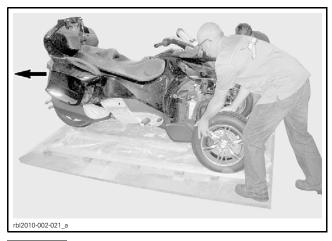


INCORRECT ORIENTATION

WARNING

SE5 models are automatically set in neutral position when engine is stopped. Always secure the rear wheel of vehicle with proper blocks to avoid moving.

9. 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

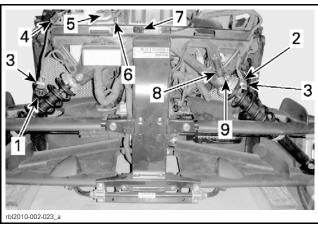
1. Remove and discard bolts and nuts holding the bottom and the top sections of sub-crate.



- Bolt and nut holding the bottom section
- 2. Bolts and nuts holding the top section

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

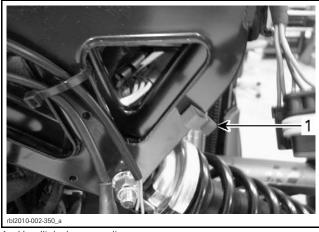
- 2. Open front storage compartment cover.
- 3. Ensure that the following cables and connectors are accessible prior to installing front cargo module, cut locking ties if required.



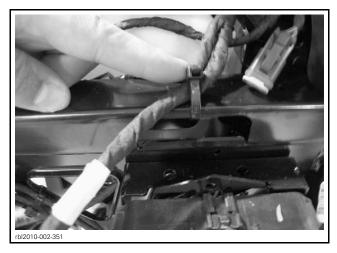
REFER TO THE FOLLOWING TABLE FOR ITEMS DESCRIPTION

ITEMS	DESCRIPTION
1	AAPTS sensor connector
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
9	Storage compartment light (option package)

4. Install headlight harness clip (from PDI kit) on vehicle frame as shown (on both side).



- 1. Headlight harness clip
- 5. Cut locking tie holding headlight harness.



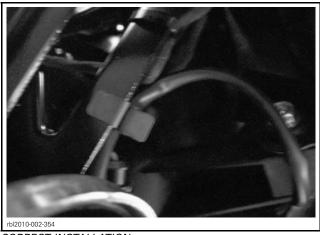
6. Insert headlights harness into clips as shown.



LH SIDE



7. Do not let auxiliary lights harness hang near shock absorber. Properly insert it into clips (on both sides).

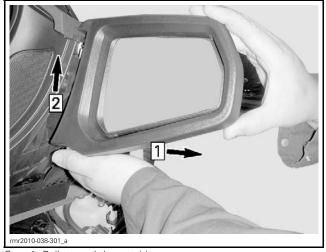


CORRECT INSTALLATION



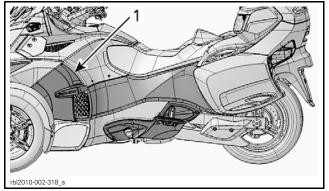
WRONG INSTALLATION

- 8. Remove mirrors as follows:
 - 8.1 Pull lower part of mirror toward the outside to unlock it.
 - 8.2 Slide mirror upwards to unhook it from upper slot.
 - 8.3 Disconnect connector.



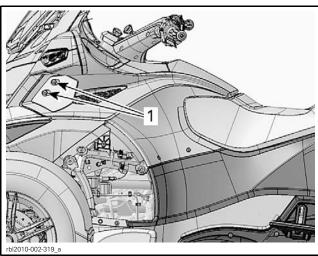
Step 1: Pull toward the outside Step 2: Slide upwards

- 9. Remove middle side panels as follows:
 - 9.1 Pull panel toward the outside to remove it from grommets at the front.
 - 9.2 Unhook the rear.



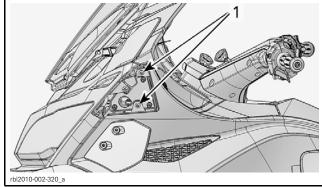
TYPICAL

- 1. Middle side panel
- 10. Remove retaining screws from lower wind deflectors.



TYPICAL

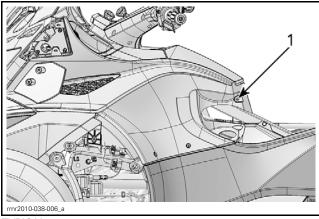
- 1. Retaining screws of wind deflector
- 11. Remove upper retaining screws from top side panels.



TYPICAL

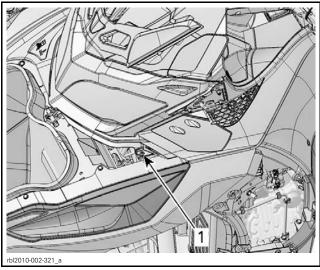
1. Upper retaining screws

12. Remove rear retaining screw from top side panels.



TYPICAL

- 1. Rear retaining screw
- 13. Remove front retaining screw from top side panels.



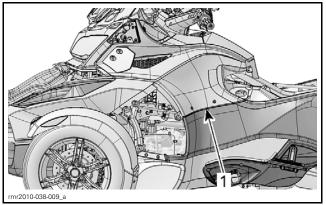
TYPICAL

- 1. Front retaining screw
- 14. Pull out lower part of top side panel to remove it from grommets.

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



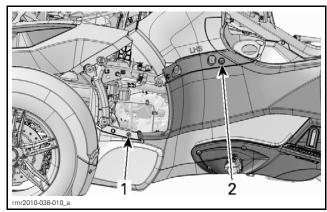
 Remove top side panels by lifting them upwards



TYPICAL

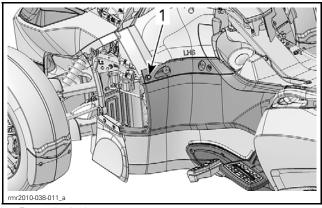
1. Top side panel

- 16. Remove front retaining screw of LH rear side panel.
- 17. Remove upper retaining screw and washer from LH rear side panel.



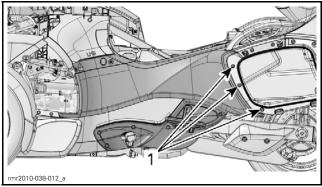
Front retaining screw
 Upper retaining screw

18. Remove front plastic rivet from LH rear side panel.



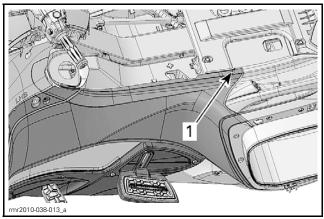
1. Front plastic rivet

- 19. Open LH storage compartment cover.
- 20. Remove rear retaining screws from LH rear side panel.



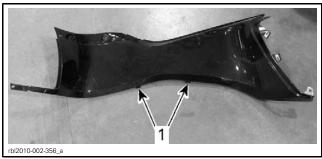
1. Rear retaining screws

21. Remove top retaining screw of LH rear side panel.



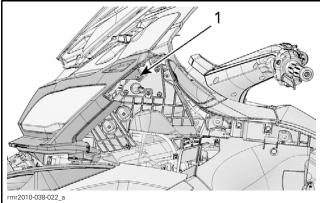
1. Top retaining screw

NOTICE Be careful not to break lower tabs.

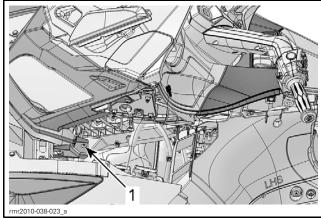


LH REAR SIDE PANEL

- 22. Remove LH rear side panel from vehicle.
- 23. Remove upper retaining screws from front fascia.

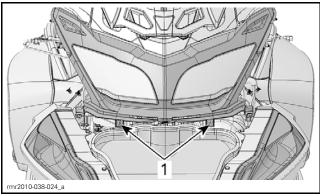


- 1. Upper retaining screw
- 24. Remove middle retaining screws from front



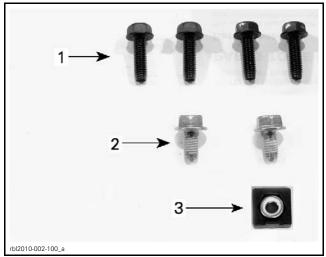
TYPICAL

- 1. Middle retaining screw
- 25. Remove lower retaining screws and washers from front fascia.



TYPICAL

- 1. Lower retaining screw
- 26. Remove front fascia from vehicle.
- 27. Use the following hardware to fix front cargo module on vehicle.



- Black M6 x 20 hexagonal flange screws from PDI kit
- Gold M6 x 20 hexagonal flange screws from PDI kit
 M6 caged nut from PDI kit

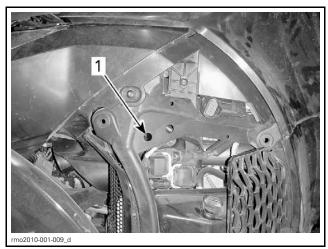
NOTE: The second caged nut is already installed on front cargo module.

- 28. Assisted by another person, position front cargo module into support slots of vehicle.
- 29. 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

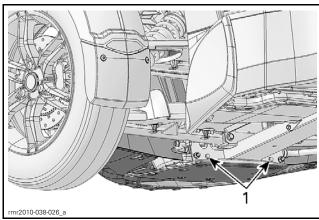
- Install auxiliary light adjustment cable as follows:
 - 30.1 Install adjustment cable through hole in panel.
 - 30.2 Tighten nut securing adjustment cable (from PDI kit).



LEFT SIDE SHOWN
1. Install through this hole

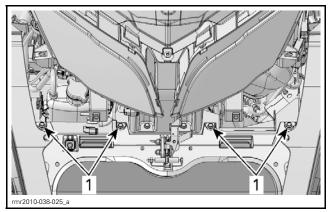
All Models

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



1. Gold M6 screws

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



1. Black M6 screws

34. Torque upper and lower M6 hexagonal flange screws.

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

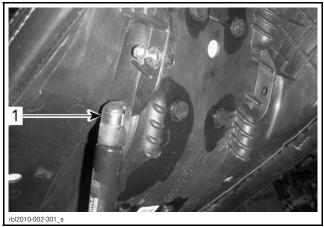
35. Do not reinstall body panels for the moment, follow *BATTERY CHARGING AND INSTALLA-TION* procedure then finalize front cargo module as per *FRONT CARGO MODULE (CON-TINUED)* procedure.

*NEW – Battery Charging and Installation

NOTE: The battery is filled and serviced. However it needs to be fully charged prior to vehicle delivery. To perform charging of the battery you will need to remove battery from vehicle.

NOTE: Refer to the latest edition of *CAN-AM ROADSTER BATTERIES SERVICE BULLETIN* for proper activating, charging and maintenance procedures.

- 1. Open seat
- 2. Disconnect cylinder from seat base.

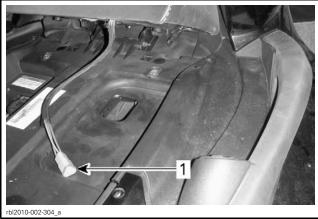


Cylinder

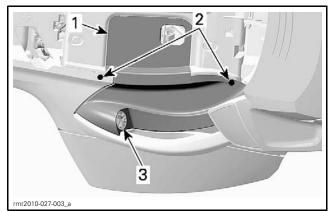
3. Lift seat and secure it using a piece of wood.



4. Unplug pillion rider (passenger) switch.



- 1. Pillion rider switch connector
- 5. Remove the battery access panel located at the LH side of vehicle.
- 6. Disconnect rear heated grip switch if applicable.



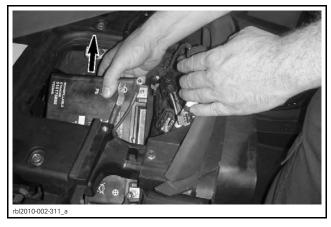
TYPICAL - LH SIDE OF VEHICLE

- Battery access panel
 Battery access panel retaining screws
 Rear heated grips switch
- 7. Remove battery holding strap and discard battery hardware included with the battery.

- 8. Cut locking ties securing battery cables together.
- 9. Move electrical harness outward to make room around battery.



10. Lift the leading edge of the battery and carefully pull it out of the battery rack.



11. Charge battery. Refer to CAN-AM ROADSTER BATTERIES SERVICE BULLETIN.

A CAUTION Never charge or boost battery while installed on vehicle.

NOTICE It is of the upmost importance for the battery life span that the battery initial charging be performed.

12. Install charged battery in battery rack.

NOTICE Always charge battery before its installation on the vehicle.

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

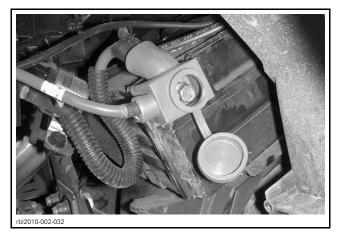
WARNING

Always connect RED (+) cable first.

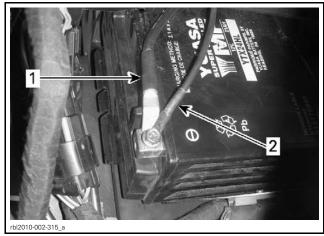
14. Tighten positive post battery screw.

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

- 15. Apply DIELECTRIC GREASE (P/N 293 550 004) on battery posts.
- 16. Close RED rubber boot cover.



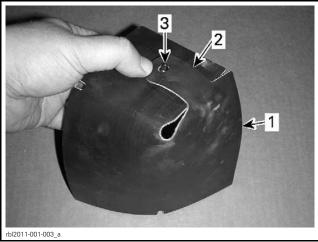
- 17. Connect BLACK (-) negative battery cables as
 - 17.1 Position BLACK (-) main battery cable (large) on negative (-) battery post.
 - 17.2 Position BLACK (-) regulator/rectifier cable (small) on negative (-) battery post.



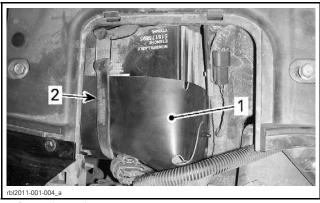
- 1. BLACK (-) main battery cable (large)
 2. BLACK (-) regulator/rectifier cable (small)
 - 17.3 Tighten negative post battery screw.

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

18. Fold the protective pad and secure the locking tab using the dart.



- Protective pad
- Lock
 Dart Locking tab
- 19. Install the protective pad over the visible battery corner as shown on the following illustration.
- 20. Install battery holding strap.



Protective pad
 Battery holding strap

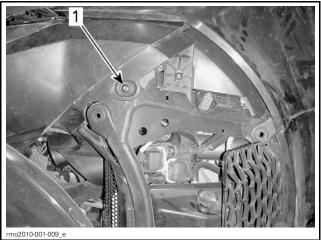
NOTICE Make sure not to squeeze battery cables between vehicle components.

- 21. Position electrical harness in their original location.
- 22. Connect rear heated grip switch if applicable.
- 23. Install the battery access panel.
- 24. Connect pillion rider (passenger) switch.
- 25. Connect shock absorber on seat base.

Front Cargo Module (continued)

- 1. Install the following body panels as the reverse of removal procedure:
 - Front fascia
 - LH rear side panel
 - Top side panels

- Middle side panels
- Mirrors.
- 2. Install M6 x 20 Torx screws and plastic washers (from PDI kit) to secure side panels.



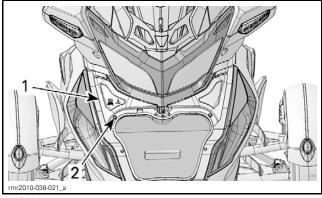
LEFT SIDE SHOWN

- 1. M6 x 20 Torx screw and plastic washer (from PDI kit)
- 3. 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)		

- 4. Install service covers as follows:
 - 4.1 Open front storage compartment cover.
 - 4.2 Insert upper tabs of service cover into the vehicle grooves.
 - 4.3 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.



RH service cover Plastic rivet

Mudguards

1. From inside mudguards, check for proper location (LH or RH side).



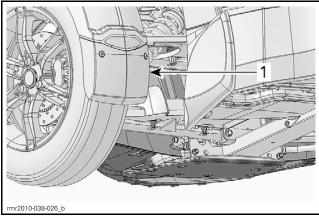
1. Installation side

2. Install two M6 panel nuts (from PDI kit) on each fender.



1. Panel nuts

- 3. Position mudguards on proper fender.
- 4. Secure mudguards using M6 x 20 Torx screws (from PDI kit).



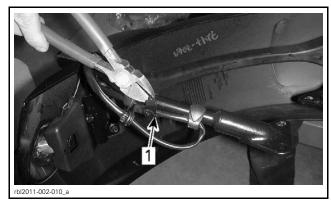
1. Mudguard

MUDGUARD SCREW TIGHTENING TORQUE

3 N•m (27 lbf•in)

Front Fenders

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

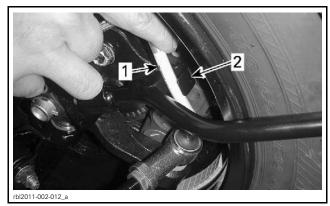


1. Locking tie

2. Position front fender on vehicle.

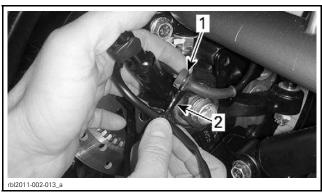


3. Route front brake hose on fender hook.



Brake hose

4. Properly insert cable grommet on harness bracket.



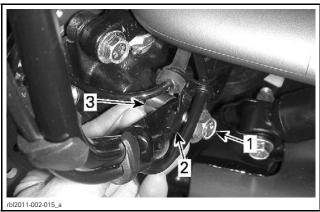
Cable grommet Harness bracket

5. Connect fender light connector.



1. Fender light connector

- 6. Secure fender support on wheel hub.
 - 6.1 Install the harness bracket over the fender support and secure them on wheel hub using a M8 x 35 hexagonal flange screw and a sleeve from the PDI kit.



M8 x 35 hexagonal flange screws

Sleeves (one hidden)

Harness bracket

6.2 Install 3 other M8x 35 hexagonal flange screws and sleeves to complete the fender support installation.

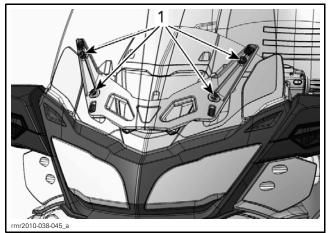
FENDER SUPPORT RETAINING SCREW

24 N•m (18 lbf•ft)

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

Windshield

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



1. Windshield M6 x 20 screws

3. Torque windshield retaining screws.

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

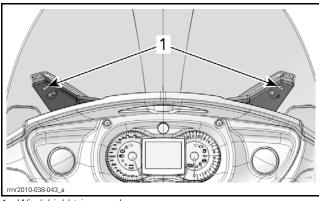
4. Place a sheet of paper on windshield to protect it, refer to illustration.

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



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

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



1. Windshield trim panels screws

5.5 Torque windshield trim panel screws.

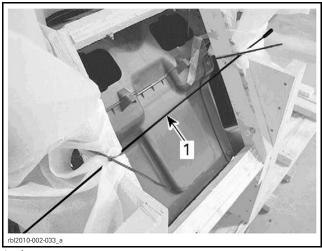
PART	TORQUE	
Windshield trim panel screw	2.5 N•m (22 lbf•in)	

6. Remove sheet of paper.

*NEW – Antenna (Option Package)

All except RT STD Models

1. Detach antenna from the sub-crate.

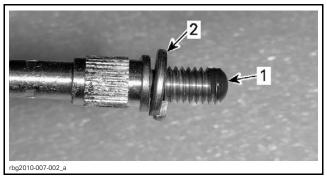


1. Antenna

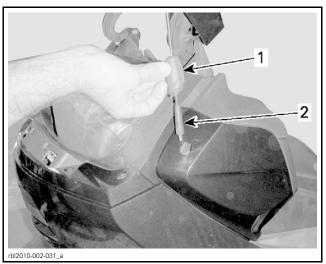
Antenna Without Self-Locking Product

- 2. Insert the M6 stainless steel lock washer (from PDI kit) and rubber cap onto antenna.
- 3. Apply one drop of LOCTITE 243 (BLUE) (P/N 293 800 060) on the first thread of the antenna.

NOTICE To avoid hydro-lock or further loosening problems, do not add the threadlocker in other location and do not apply more than the recommended quantity of threadlocker.

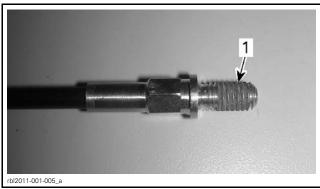


- 1. Drop of LOCTITE 243
- 2. M6 stainless steel lock washer
- 4. Position antenna on RH side of rear cargo mod-



- 1. Rubber cap
- 2. Antenna
- 5. Tighten antenna then install rubber cap on vehicle (tighten by hand).

Antenna With Self-Locking Product



1. Self-locking product already applied

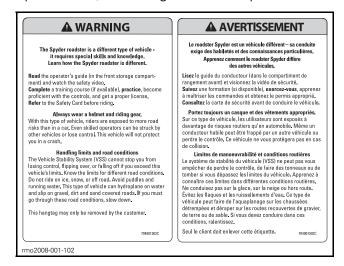
Install the antenna on the RH side of the rear cargo module (tighten by hand) and position the rubber cap.

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.

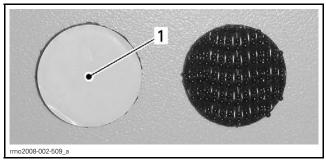
Safety labels of several language can be chosen by customer, according to availability.



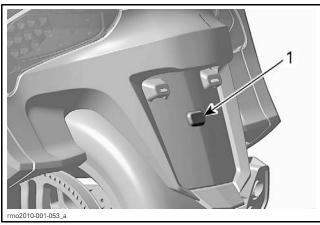
Licence Plate

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.



- 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).
- 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.

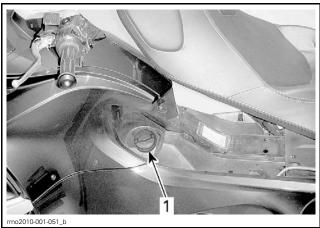
FLUIDS

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 unleaded gasoline or oxygenated fuel containing no more than 10% ethanol or methanol. The gasoline used must meet the following octane number:

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.

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 following parts are lubricated with the same oil:

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

Use XPS SYNTHETIC BLEND OIL (SUMMER GRADE) (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.

Engine Oil Level Verification

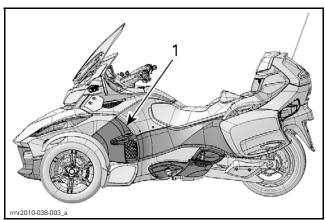
A WARNING

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.

- 1. Park the vehicle on a level surface.
- 2. Remove the LH middle side panel as follows:
 - 2.1 Pull panel out of its grommets at the front then unhook the rear.

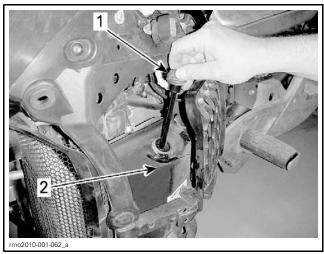


1. Middle side panel

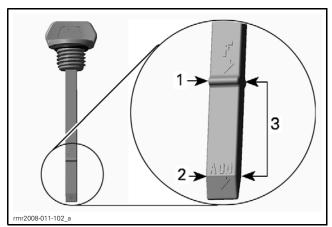
3. With the engine already at normal operating temperature, start engine and let it run for at least 30 seconds.

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.



- Oil dipstick
 Oil tank
- 6. Wipe off the dipstick.
- 7. Reinsert and completely screw in the dipstick to assure an accurate reading.
- 8. Unscrew and remove the dipstick again.
- 9. Check the oil level on the dipstick. It should be near or equal to the upper mark.



- Full
- 3. Operating range

If Oil Level is at or Near Upper Mark:

- Properly insert and tighten dipstick.
- Install the LH middle side panel as the reverse of removal.

If Oil Level is Under Operating Range:

- Add a small amount of recommended oil.
- Repeat the previous steps until oil level reaches the dipsticks upper (F) mark. Do not overfill.
- Properly insert and tighten dipstick.
- Install the LH middle side panel as the reverse of removal.

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.

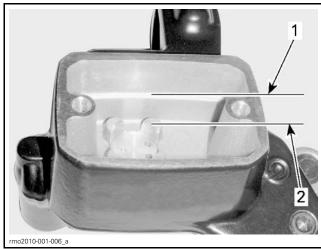
Clutch Fluid Level Verification

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 in the straight ahead position.
- 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. Level should be within the maximum level line and the minimum level indicated by the protuberances in the bottom of reservoir.



FLUID REMOVED FOR CLARITY PURPOSE

- Maximum level line
- Maximum level line
 Minimum level (top of protuberance)
- 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).

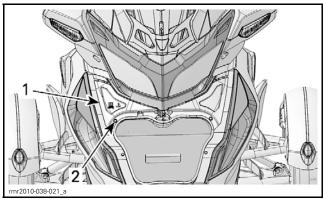
For best performance, use BRP PREMIXED COOLANT (P/N 219 700 362)

Coolant Level Verification

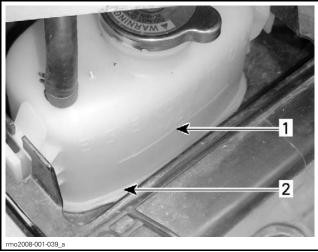
WARNING

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.



- Right service cover
- 4. Lift lower portion of service cover then pull it toward the front.
- 5. Check the coolant level. Coolant must be visible without exceeding the MAX. level mark.



TYPICAL

- Coolant MAX. level mark
- Coolant must be visible
- 6. If required, add recommended coolant until it is visible in the reservoir without exceeding the MAX. level mark. Use a funnel to avoid spillage. Do not overfill.
- 7. 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

A 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.

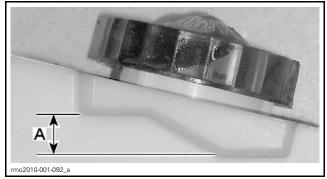


1. Brake fluid reservoir

- 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

- 6. Immediately wipe up spills if necessary.
- 7. Reinstall both caps of the reservoir.
- 8. Close the seat and ensure it is fully latched.

ADJUSTMENTS

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.

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.



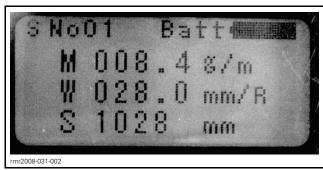
TYPICAL - LIFT BY THE FRAME

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	
8.4 g/m	28.0 mm/R	1028 mm	



SONIC TENSION METER DISPLAY

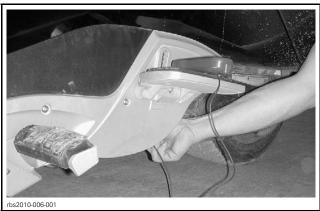
NOTE: Refer to the manufacturer's instructions to set the informations into the device.

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)

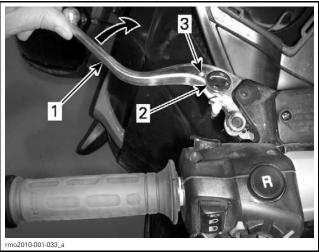
 $450N \pm 150N$

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

- Clutch lever
- 2. Adju 3. Dot Adjuster dial

Suspension

WARNING

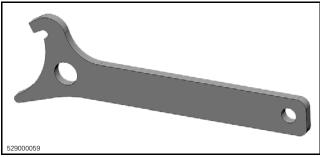
Left and right adjusting cams must always be set at the same position. Never adjust one adjusting cam only. Uneven adjustment can cause poor handling and loss of stability, which could lead to an accident.

Front Suspension

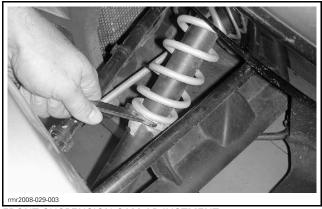
NOTICE Before adjusting suspension, lift the front of vehicle using a jack to extend the suspension. This will ease turning the adjustment cam and will prevent a potential breakage of the adjustment plate.

- 1. Adjust the spring preload as per the owner's preference.
 - 1.1 Place the vehicle on a level surface.
 - 1.2 Engage the parking brake.

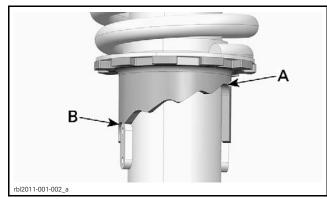
1.3 Adjust the spring preload by turning the cam with the adjusting wrench (stored in the tool kit).



FRONT SUSPENSION ADJUSTING WRENCH



FRONT SUSPENSION CAM ADJUSTMENT



- Smooth adjustment (position 1)
- B. Hard adjustment (position 5)

RECOMMENDED FRONT SHOCK ADJUSTMENT			
LOAD	CAM POSITION		
68 kg (150 lb) rider	1, 2		
91 kg (200 lb) rider	3		
68 kg (150 lb)) rider with cargo	3		
91 kg (200 lb) rider with cargo	4		
Rider with passenger and cargo	5		

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.

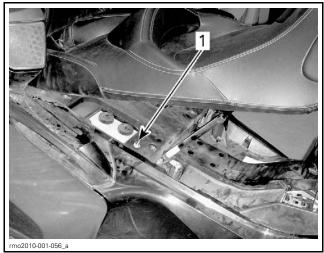
- Adjust the air spring as per the owner's preference.
- 2. Refer to the following chart for proper adjustment.

	▲ WARNING					
	MINIMUM PRESSURE 10 PSI / 70 kPa					
Do n	ot exceed	l recomme	ended pre	ssure by	10 PSI / 70) kPa
LOAD PASSENGER + CARGO (lb /kg)						
LU	Aυ	0 100/45 150/70 200/90 250/115				
~	Lb/Kg	PSI/kPa	PSI/kPa	PSI/kPa	PSI/kPa	PSI/kPa
DRIVER	150/70	20/135	40/275	50/345	60/415	70/485
J. J.	200/90	30/205	50/345	60/415	70/485	80/555
_	250/115	40/275	60/415	70/485	80/555	90/625
704902072						

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

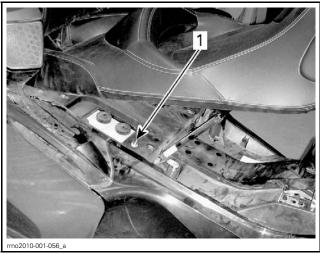
NOTE: On models equipped with a remote adjustment, it is not necessary to adjust the suspension setting. The air spring will inflate automatically at the factory setting after the vehicle start up. Refer to the SPYDER RT OPERATOR'S GUIDE for details.

Lights

Headlights Aiming Verification

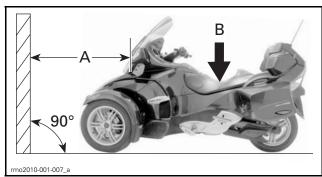
North American Models

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

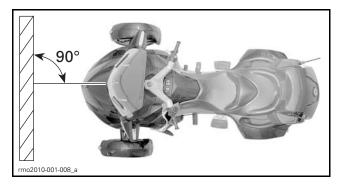


1. Schrader valve

- 2. Position the vehicle in front of a test surface as
- 3. Have a person of at least 91 kg (200 lb) taking place on the driver's seat.



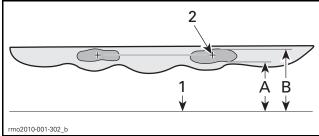
A. 10 m (33 ft) B. 91 kg (200 lb)



4. 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		

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



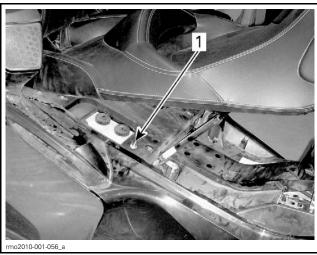
TYPICAL HEADLIGHT REFLECTION ON TEST SURFACE

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

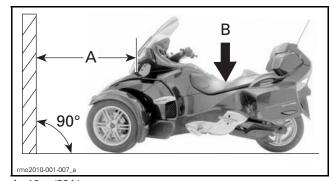
CE Models (Low Beam)

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

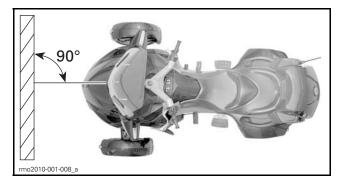
1. Set the rear suspension air pressure to 0 kPa (0 PSI) using the schrader valve located under the seat.



- Schrader valve
- 2. Position the vehicle in front of a test surface as shown.
- 3. Have a person of at least 91 kg (200 lb) taking place on the driver's seat.



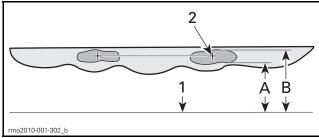
A. 10 m (33 ft) B. 91 kg (200 lb)



4. 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	

- 5. Select low beam.
- 6. 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
- Focus point
- A. 415 mm (16.3 in) above ground
- B. 515 mm (20.3 in) above ground

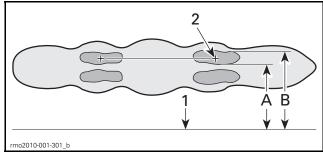
CE Models (High Beam)

- 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 grou		

3. Select the high beam.

Beam aiming is correct when the focus point (brightest spot) of the headlight reflection is within the marks.



TYPICAL HEADLIGHT REFLECTION ON TEST SURFACE

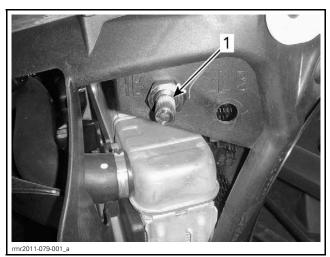
- 1. Ground
- 2. Focus point
- A. 800 mm (31.5 in) above ground
- B. 850 mm (33.5 in) above ground

► <u>Headlights Aiming Adjustment</u>

1. Remove both middle side panels.

Upper Headlight Units

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

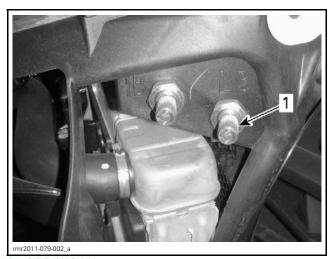


RH SIDE SHOWN 1. Adjustment knob "HB"

HEADLIGHT BEAM ADJUSTMENT			
<u>Raise beam</u>	Turn knob clockwise		
<u>Lower beam</u>	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		
<u>Raise beam</u>	Turn knob clockwise	
<u>Lower beam</u>	<u>Turn_knob</u> counterclockwise◀	

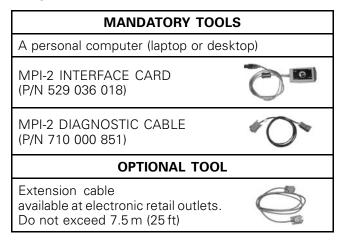
B.U.D.S. Programming

Always use the latest B.U.D.S. version on your shop computer. At time of printing, the latest B.U.D.S. version is P2.3.29. It is available from the following web site:

WWW.BOSSWEB.BRP.COM

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.



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. SOFT-WARE AND COMMUNICATION TOOLS* for the proper connecting procedure.
- 3. Ensure that the status bar shows the proper protocol and proper ECU number. Refer to the following table.

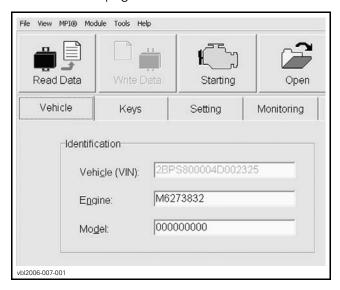
MODEL	PROTOCOL	ECU QUANTITY
SM5	KW2000 500K	5
SE5	KW2000 500K	6

4. 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.



2. Type the name of the customer.

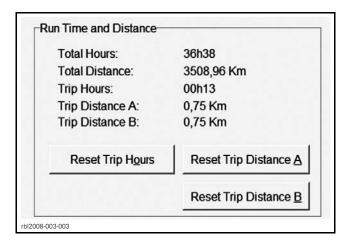


3. Click on WRITE DATA to save the information in the vehicle ECM.

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

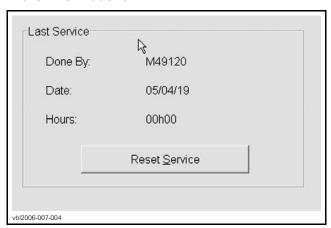
- 1. Ensure that the VEHICLE tab is selected.
- 2. Click on the RESET TRIP buttons to reset the information.



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.



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.

Cluster Language (chosen by customer according to availability)

NOTE: The default language displayed in the multifunction gauge is English. To change the language displayed in the multifunction gauge.

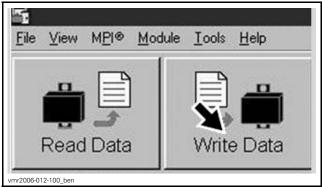
- 1. Select SETTING tab at the top of the page.
- 2. Select CLUSTER tab at the bottom of the page.
- 3. Select desired language in the Cluster Language field.

NOTE: If the language selection is not available, the gauge may not have the latest software version available.

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 into its housing.
- 5. Reinstall service cover on vehicle.

ASSEMBLY INSPECTION

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

- 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 and check the following items:

- 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 footpea.
 - 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.
- 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.

iPod is a trademark of Apple Inc.

SPECIFICATIONS

MODEL			SPYDER RT	
ENGINE				
Familia Ausa			ROTAX 991 60° V-Twin	
Engine type			4-stroke, Dual Over Head Camshaft (DOHC), liquid cooled	
Number of cylin	ders			2
Number of valve	es			8 valves
Bore				97 mm (3.82 in)
Stroke				68 mm (2.68 in)
Displacement				998 cm³ (60.9 in³)
Compression rat	io			12.2:1
	Туре			Dry sump with separate oil tank and oil cooler
	Oil filter	Engine		BRP Rotax paper type, replaceable
	Oil liller	Transmission (SE5)		BRP Rotax paper type, replaceable
		Oil change with new engine filter	SM5	3.9 L (4.1 qt (U.S. liq.))
Lubrication	Engine oil Capacity	Oil change with new engine filter	055	4.2 L (4.4 qt (U.S. liq.))
		Oil change with new engine and HCM filters	SE5	4.3 L (4.5 qt (U.S. liq.))
	Recommended Engine Oil			XPS SYNTHETIC BLEND OIL (SUMMER GRADE) (P/N 293 600 121) or a 5W 40 semi-synthetic (minimum) or synthetic motorcycle oil meeting the requirements for API service SL, SJ, SH or SG classification.
	SM5 model		Туре	Wet, multi-plate, manual operation through a hydraulic piston, vacuum assist
			Fluid	DOT 4
Clutch	SE5 model		Туре	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				
Typo	SM5			Sequential Manual 5-speed (SM5) with reverse
Type SE5				Sequential Electronic 5-speed (SE5) with reverse
COOLING SYST	ГЕМ			
Гуре				Liquid cooled, single radiator with cooling fan
Coolant		Туре		Ethyl glycol/water mix (50% coolant, 50% distilled water). Use BRP PREMIXED COOLANT (P/N 219 700 362) or coolant specifically designed for aluminum engines
		Capacity		3.2 L (.85 U.S. gal.)

		MODEL	SPYDER RT
ELECTRICAL SYST	EM		
Magneto generator output			650 W
Ignition system type			Electronic ignition with dual output coil
Ignition timing			Electronically controlled, not adjustable
		Quantity	2
Spark plug		Make and type	NGK DCPR8E (apply heat-sink paste P12 (P/N 420 897 186) on spark plug threads)
		Gap	0.8 mm to 0.9 mm (.031 in to .035 in)
Engine RPM limiter	setting	Forward	10 000 RPM
		Туре	Maintenance free
Datta		Voltage	12 volts
Battery		Nominal rating	21 A•h
		Recommended charging rate	2 A
		CA/US Models	2 x 55 W Halogen
Headlight		OF Market	High beam: 2 x 55 W Halogen
		CE Models	Low beam: 2 x 60 W Halogen
Fog light (Spyder RT	T-S)	•	2 x 35 W Halogen
Taillight/brake light			2 x 0.25 W/2 x 2.5 W
		Front	2 x 4.5 W
Turn signal lights		Rear	2 x 20 W
Position lights		•	2 x 5 W
License plate light			5 W
Backup light			2 x 20 W
Day light (Spyder R	T-S)		0.5 W
Front storage compa	artment light (Spyc	der RT-S)	0.15 W
	Lights: tail, position, plate & day Vbat: Cluster, VIM & DLC		15 A
	Vbat Control: (Vkey: SAS, YRSMSR	main relays S, VCM, ECM, D.E.S.S., PRS &	10 A
	Vbat: Main re Vrelayed: WPM TCM, DPS	lay 1, CL, FG, CTG, PBS pilot light,	20 A
	Vbat: Cooling fa	an relay	15 A
Fuse	-		10 A
(In storage Compartment)	Vbat: radio (XIV	1, CB, GPS, "iPod")	15 A
Compartificiti)	Vbat: Backup a	ctuator & trailer module	10 A
	Vbat: Horn, sh Vrelayed: suspe Pilot lights: CSS	ension relay, heated grips, HA, LED	20 A
	Vbat: Accessory plugs		10 A
	Vrelayed: ECM		5 A
	Vrelayed: Inject	ors & ignition coils	15 A
	Vrelayed: H02S1 & 2, EVAP, CAPS, fuel pump motor, CSV, pre-starting relay		15 A

MODEL			SPYDER RT	
ELECTRICAL SYS	TEM (cont'd)			
	Accessories		40 A	
	TCM valves (SE5 model)		20 A	
	Rectifier		60 A	
Fuse	Main fuse		40 A	
(Under seat)	Dynamic Power	Steering (DPS) motor	40 A	
	VSS pump		40 A	
	Headlights		30 A	
	VSS valves		25 A	
FUEL SYSTEM				
Fuel delivery		Туре	Multi-point Electronic Fuel Injection (EFI) with ETC (Electronic Throttle Control) Dual throttle body (51 mm) with an actuator	
Fuel pump		Туре	Electrical module in fuel tank	
Idle speed		•	1400 ± 100 RPM (electronically controlled, not adjustable)	
	Туре		Regular unleaded gasoline	
Fuel	Ostoro rotino	Inside North America	Recommended for optimum performance: 91 (R+M)/2 Minimum: 87 (R+M)/2	
	Octane rating	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				
Туре			Dynamic Power Steering (DPS)	
FRONT SUSPENS	SION			
Suspension type			Double A-arm with anti-roll bar	
Suspension travel			151 mm (5.9 in)	
		Qty	2	
Shock absorber		Туре	Oil damper	
Spring preload adju	ustment	•	5 position cam adjustment	
REAR SUSPENSION				
Suspension type			Air Controlled Suspension (ACS) Compressor-controlled (ACS with remote adjustment only) Swing arm with monoshock	
Suspension travel			145 mm (5.7 in)	
Charle about the		Oty	1	
Shock absorber		Туре	Oil damper	
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	

MODEL		SPYDER RT	
BRAKES			
Туре		Foot-actuated, fully integrated hydraulic 3-wheel braking system with ABS and EBD	
Front brake		Dual discs (250 mm (9.8 in) x 6 mm (.24 in)) with 4 piston calipers	
Rear brake		Single disc (250 mm (9.8 in) x 6 mm (.24 in)) with 1 piston caliper	
Brake fluid	Capacity	530 ml (17.9 U.S. oz)	
Diake ilulu	Туре	DOT 4	
Parking brake		Mechanical, electrically actuated to the rear caliper	
Minimum brake pad thickness		1 mm (.04 in)	
Minimum brake disc thickness		5.33 mm (.21 in)	
Maximum brake disc warpage		0.13 mm (.005 in)	
TIRES			
Type (use only tires recommended by	Front	Kenda KR21 MC 165/65R14 47H (special motorcycle type)	
BRP)	Rear	Kenda KR21 MC 225/50R15 76H (special motorcycle type)	
	Front	Nominal.: 103 kPa (15 PSI) Min.: 89 kPa (13 PSI) Max.: 117 kPa (17 PSI)	
Pressure	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 time toward doubt	Front	2.5 mm (3/32 in)	
Minimum tire tread depth	Rear	4 mm (5/32 in)	
WHEELS			
Cine (diameter V width)	Front	355 mm (14 in) x 127 mm (5 in)	
Size (diameter X width)	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 (62 in)	
Overall height		<u>1 473 mm (58 in)</u> ◀	
Seat (top) height		► 772 mm (30.4 in)	
Wheelbase		1 708 mm (67 in)	
Front wheel track		1 384 mm (54.5 in)	
Ground clearance, front and under engine		115 mm (4.5 in)	

	MODEL	SPYDER RT
WEIGHT AND LOADING CAPA		
Dry weight (Spyder RT)		<u> 421 kg (928 lb)</u>
Dry weight (Spyder RT Audio 8 Convenience Package)	Š.	413 kg (911 lb)
Dry weight (Spyder RT-S)		422 kg (930 lb)
Front atorago compartment	Capacity	55 L (14.5 U.S. gal.)
Front storage compartment	Maximum load	16 kg (35 lb)
Glove box	Capacity	1.8 L (.5 U.S. gal.)
diove box	Maximum load	2 kg (4 lb)
Cido atorogo comportment	Capacity	23.5 L (6.2 U.S. gal.)
Side storage compartment	Maximum load	7 kg (15 lb)
Door storage comportment	Capacity	40.5 L (10.7 U.S. gal.)
Rear storage compartment	Maximum load	9 kg (20 lb)
Total vehicle load allowed (includ accessories)	ling operator, passenger, cargo and added	240 kg (525 lb)
Gross vehicle weight rating (GVW	/R)	663 kg (1,462 lb)
Maximum weight on trailer tongu	ie	18 kg (40 lb)
Maximum towed weight (trailer a	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.