



Bulletin



July 3rd, 2013 Subject: Predelivery Inspection Can-Am Maverick No. 2014-1 MAX Series

YEAR	ENGINE	MODEL	MODEL NUMBER	SERIAL NUMBER
2014	1000P	Base	6LEA, 6LEC	A 11
2014	1000R	X rs/DPS	7DEA, 7DEB, 7DEC, 7DED	All

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IMPORTANT NOTICE

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

To obtain warranty coverage, predelivery procedures must be performed by an authorized BRP Can-Am SSV 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/or specific *SHOP MANUAL* sections.

Please complete the *PREDELIVERY CHECK LIST* for each vehicle and retain a customer-signed copy.

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

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

1. Carefully lay the crate on its bottom on a firm, level surface.

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

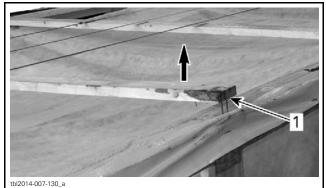
2. Carefully cut and remove all tarpaulins.



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TARPAULINS REMOVED FROM CRATE

3. Remove transversal supports on top of crate.

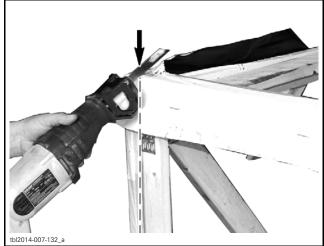


- Transversal support to remove 1.
- 4. Cut straps on the top of crate.



STRAPS TO CUT

5. Using a reciprocating saw, carefully cut end cover of crate (both wood and nails).



CUT THROUGH END COVER OF CRATE

6. Pull out the end cover.



END COVER REMOVED

7. Repeat for all other covers.

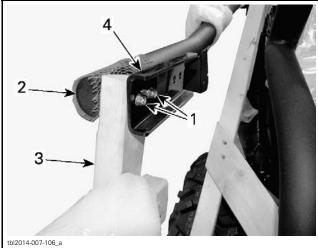
Vehicle Removal from Crate

1. Remove protective wrapping from the vehicle.



PROTECTIVE WRAPPING REMOVAL

- 2. Remove middle sections of the cage and rear cage extensions from crate.
 - 2.1 Remove front-most retaining screws and nuts securing middle section and rear cage extension plate from wooden sub-crate.



1

- Retaining screws to remove Middle section of cage
- Middle section oτ cage
 Sub-crate
 Rear cage extension plate
 - 2.2 Remove rear screws holding middle cage to bottom of crate.

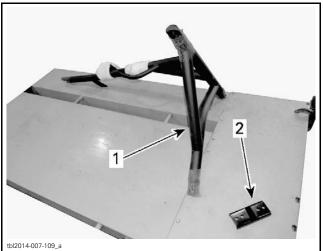


1. Retaining screw to remove

2.3 Remove and discard wooden block and fasteners holding left and right middle sections together.



1. Wooden block to remove and discard



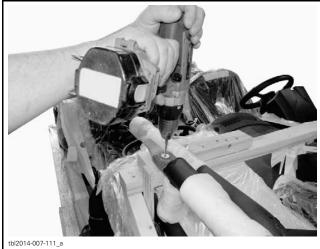
RH Middle Section of cage RH Middle Section or cag
 Rear RH cage extension

Remove rear section of the cage from vehicle.
 Remove wooden sub-crate.



WOODEN SUB-CRATE REMOVAL

3.2 Remove screws securing rear section of cage to crate.



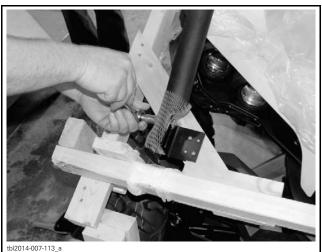
REMOVE SCREWS SECURING REAR SECTION OF CAGE TO CRATE

3.3 Cut locking ties and remove rear section of cage from crate.



1. Locking ties to cut

- 4. Remove front section of the cage from vehicle.
 - 4.1 Remove and discard fasteners in front of crate.



REMOVING FASTENERS FROM FRONT CRATE

4.2 Cut locking ties at rear section of sub-crate and remove front section of cage from crate.

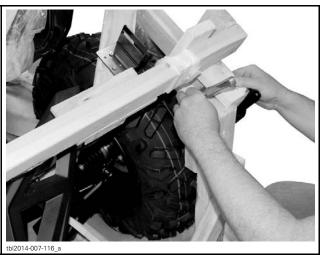


- 1. Locking tie to cut
- 5. Remove sub-crate.
 - 5.1 Remove screws located rear of sub-crate.



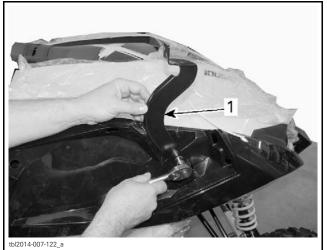
REMOVING SCREWS LOCATED AT REAR OF SUB-CRATE

5.2 Remove nut located at front of sub-crate and remove sub-crate.



REMOVING NUTS LOCATED AT FRONT OF SUB-CRATE

5.3 Remove steel supports from the front fenders. Discard fasteners and supports.



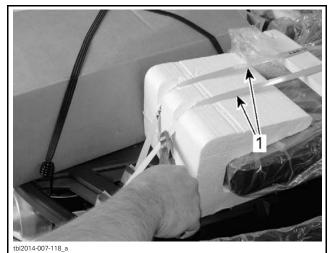
1. Steel supports

6. Remove predelivery kit box from vehicle.



1. Predelivery kit box

- 7. Remove rear seats from vehicle.
 - 7.1 Adjust steering wheel to its upper position.
 - 7.2 Cut two straps located above seats.



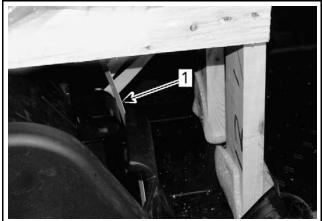
1. straps to cut located above the seat

7.3 Cut strap located in front of seat and remove rear seats from vehicle.



1. Strap to cut located in front of seat

- 8. Remove front seats from vehicle.
 - 8.1 Cut strap located under seat, securing front seats to vehicle.



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1. Strap to cut

- 8.2 Cut locking tie retaining backrest to wooded frame.
- 8.3 Unfasten lateral net straps.
- 8.4 Adjust steering wheel so it is in the upper position.
- 8.5 Carefully pull out seats from vehicle without wooden frame.
- 9. Cut locking ties holding lateral nets.



LOCKING TIES TO CUT

10. Cut front and rear straps retaining the vehicle to crate base.



TYPICAL FRONT OF VEHICLE



TYPICAL REAR OF VEHICLE

- 11. Install front and rear shock absorbers. See procedures further in this bulletin (*PARTS TO BE INSTALLED*).
- 12. Place the shift lever on N position and carefully move the vehicle rearward out of the crate base.
- 13. Position the shifter lever on PARK and install the required parts and accessories. Refer to *PARTS TO BE INSTALLED*.

PARTS TO BE INSTALLED

Ensure that the following parts are provided with the vehicle.

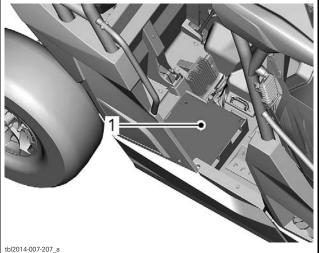
DESCRIPTION	ΟΤΥ
Predelivery kit box	1
Front shock absorber	2
Rear shock absorber	2
Cage	1
Can-Am decal (X rs model only)	1
Shoulder guard	2
Seats	2
Auxiliary foam filter kit	1

Battery

Battery Removal

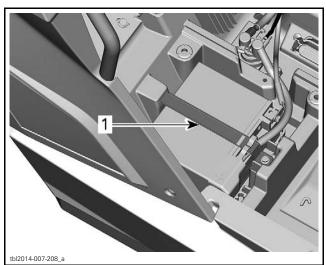
Battery BLACK (–) lead must always be disconnected first and connected last. Never charge or boost battery while installed on vehicle.

- 1. Remove rear RH passenger seat.
- 2. Remove battery cover.



1. Battery cover

3. Remove battery holder.



1. battery holder

4. Remove the battery. Keep the bag with battery fasteners for installation.

Battery Preparation

Refer to the CAN-AM SIDE-BY-SIDE VEHI-CLES BATTERIES ACTIVATION, CHARGING AND MAINTENANCE BULLETIN (2014-1) and

to instructions notice attached to battery for proper activating, charging and maintenance procedure.

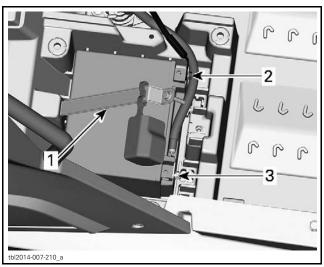
Battery Installation

NOTE: The battery should be installed only when properly activated and charged.

- 1. Install the battery in its rack.
- 2. Install battery holder and tighten the retaining nut.

PARTS	TORQUE
Battery holder nut	10 N∙m (89 lbf ∙in)

- 3. Connect the RED (+) lead on the side of battery as shown. Use provided screw and nut.
- 4. Install protective cap over terminal.
- 5. Connect the BLACK (–) lead on the top post.



TYPICAL

1. Battery holder 2. BLACK (-) lead

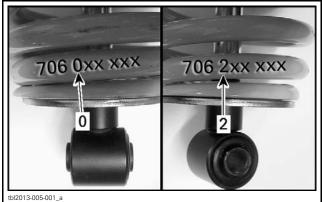
BLACK (-) lead
 RED (+) lead and protective cap

Shock Absorber Installation

Shock Absorber Identification

Make sure not to mix front and rear shock absorbers at installation.

Front and rear shock absorbers can be identified with the 4th digit of the spring part number.



TYPICAL

0 = Rear 2 = Front

Front Shock Absorber Installation

1. Safely lift front of vehicle using a hoist.

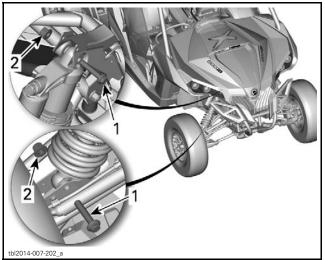


2. Remove the suspension brackets. Discard bolts and nuts.



3. Install shock absorbers. Place reservoir, rebound adjuster and bolt heads outwards.

PDI KIT PARTS	QTY
M12 x 60 Flange hexagonal bolt	2
M12 flange elastic nuts	2



TYPICAL

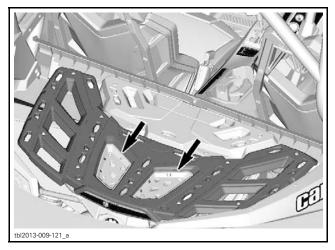
M12 x 60 Flange hexagonal bolts
 M12 flange elastic nuts

TIGHTENING TORQUE		
Shock absorber nuts	54 N∙m (40 lbf∙ft)	

4. Lower vehicle.

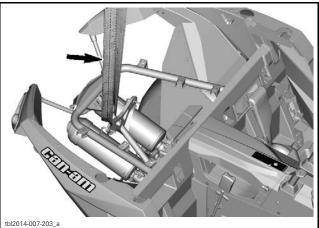
Rear Shock Absorber Installation

1. Remove the small covers on rear cargo rack.



2. Install a lifting strap to rear frame member where shown.

NOTICE Do not use a chain. It might damage the cargo rack.



LIFTING STRAP — CARGO RACK REMOVED FOR CLARITY PURPOSE ONLY

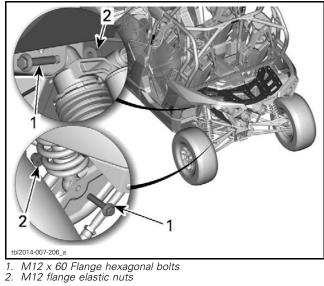
- 3. Safely lift rear of vehicle using a hoist.
- 4. Remove the suspension brackets. Discard bolts and nuts.



TYPICAL RH SIDE SHOWN

5. Install shock absorbers. Place reservoir, rebound adjuster and bolt heads outwards.

PDI KIT PARTS	QTY
M12 x 60 Flange hexagonal bolts	2
M12 flange elastic nuts	2



TIGHTENING TORQUE		
Shock absorber nuts	54 N∙m (40 lbf∙ft)	

- 6. Lower vehicle.
- 7. Reinstall covers.

Disc Cleaning

- 1. Remove wheels.
- 2. Clean brake disc. Use the XPS BRAKES AND PARTS CLEANER (USA) (P/N 219 701 705) and a clean rag.

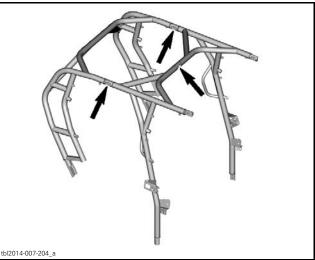
NOTICE A thin layer of anticorrosion product can be present on the brake disc and must be removed before using the vehicle. Not conforming to this procedure may lead to a brake chattering and the brake pads replacement would be necessary to solve the problem.

- 3. Reinstall wheels.
- 4. Tighten wheel lug nuts in a criss-cross sequence.

PARTS	TORQUE
Wheel lug nuts	100 N∙m (74 lbf∙ft)

Cage Installation

1. Loosely assemble the rear section and both middle sections of the cage.

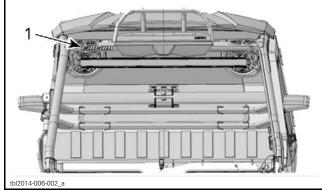


LOOSELY ASSEMBLED REAR AND MIDDLE SECTIONS OF THE CAGE

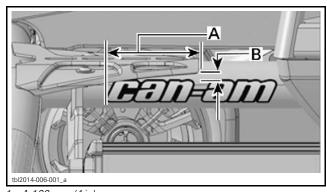
PDI KIT PARTS	QTY
M10 x 30 Torx screws	6

NOTE: DO NOT TIGHTEN screws until installation is completed.

- 2. On X rs model, install the Can-Am decal on the front tube of cage (located in glove box).
 - 2.1 Clean the right portion of the front tube.
 - 2.2 Install the decal.

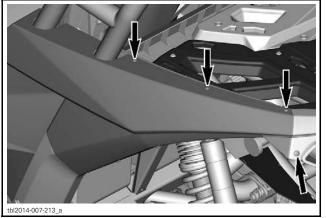


CAN-AM Label location 1

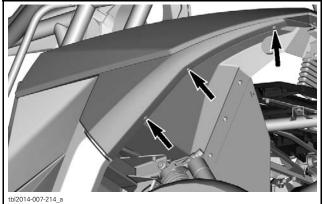


1. A.100 mm (4 in) 2. B.5 mm (0.2 in)

3. Remove rear fenders.

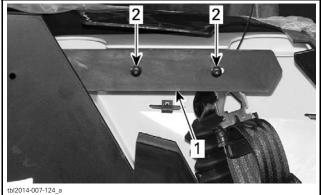


RETAINING SCREWS TO REMOVE



RETAINING SCREWS TO REMOVE

4. On both side of vehicle, remove support plates. Keep screws for reinstallation.

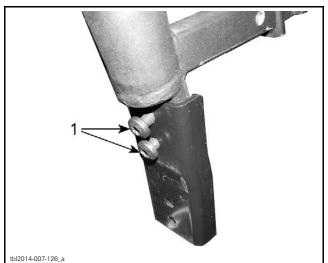


- Support plates Retaining screws to keep 1. 2.
- 5. Cut locking ties securing the seat belts.



1. Locking tie to cut

- 6. Remove rear lateral side panels.
- 7. Install cage extensions onto rear section of cage. Orientation of part is indicated on the extension.



CAGE EXTENSION INSTALLED ONTO CAGE 1. M10 x 30 Torx screws

PDI KIT PARTS	QTY
M10 x 30 Torx screws	4

8. Using a hoist, lift the rear and middle cage subassembly over the vehicle and carefully position it on vehicle.

NOTE: As an alternate method, one person at each attachment point can position the cage on the vehicle.

A CAUTION To avoid injury or vehicle damages, never handle the cage alone.

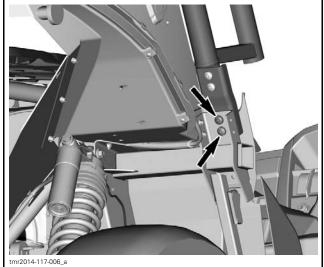


LIFTING CAGE TO POSITION IT ABOVE VEHICLE

9. Loosely install the rear and middle cage subassembly to vehicle.

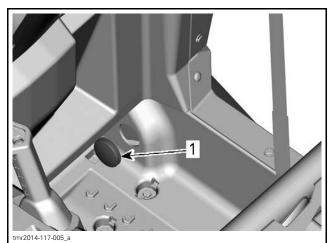
PDI KIT PARTS	QTY
M10 x 30 Torx screws	8

10. Install screws from the rear of vehicle, besides top of shock absorbers.



RH REAR CAGE ATTACHMENT POINT

11. Remove plastic cap located just behind front passenger seat and install screws and washers at the center of vehicle.



1. Plasic cap

12. Reinstall rear lateral panels.



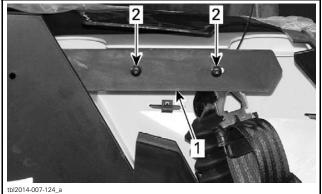
BESIDES SCREWS OF REAR CAGE ATTACHMENT POINT

13. Reinstall support plates to retain the top of the rear lateral panels.

NOTE: Position the "FRONT" marking on plates toward front of vehicle.



"FRONT" MOLDED ON PLATE

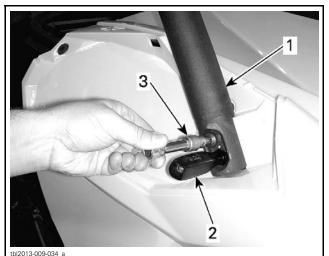


- Support plate
 Retaining screw previously removed

PARTS	TORQUE
K50 x 16 Torx screws (previously removed)	Hand torque only

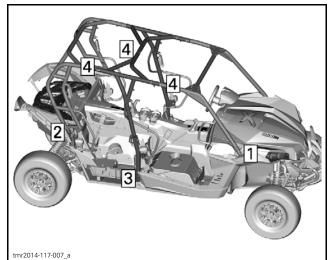
14. Install front section of cage onto vehicle.

NOTE: Insert a Phillips screwdriver into cage hole and align with the frame hole, then loosely install the top screw. Thereafter, remove screwdriver and install the 2nd screw.



- TYPICAL RH FRONT CAGE ATTACHMENT POINT
- Front tube
- Screwdriver to a
 Installing screw Screwdriver to align holes

15. Tighten all cage screws in the order illustrated.



TYPICAL - FINAL TIGHTENING SEQUENCE

16. Install front side panels.



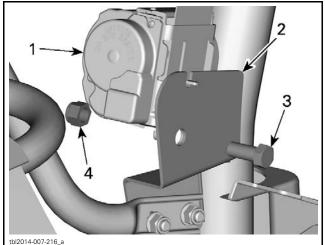
17. Reinstall rear fenders.

Seat Belt Installation

NOTE: Installation is the same for all seat belts unless otherwise specified.

1. Install safety belt retractor for driver and passenger.

PDI KIT PARTS	QTY
7/16-20 x 1 shoulder bolts	2
7/16-20 elastic nuts	2



TYPICAL

- Safety belt retractor
 Frame bracket
 Shoulder bolt
 Nylon flat washer

TIGHTENING TORQUE	
7/16-20 x 1 shoulder bolts	60 N∙m (44 lbf∙ft)

- 2. Loosen seat belt.
- 3. Secure the seat belt to cage post.

PDI KIT PARTS	QTY
7/16-20 x 1 shoulder bolts	2
7/16-20 elastic nuts	2
Nylon flat washers	4

NOTICE Make sure belt is not twisted.



- **TYPICAL RH SIDE** VIEW FROM THE LH SIDE 1. Shoulder bolt 2. Nylon flat washer

PART	TORQUE
7/16-20 x 1 shoulder bolts	60 N∙m (44 lbf∙ft)

4. Remove and discard the belt lock near seat belt mechanism.

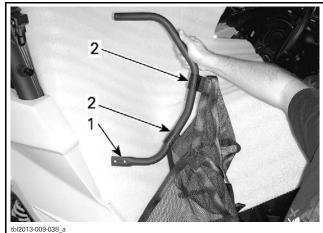


TYPICAL RH SIDE — VIEW FROM THE LH SIDE 1. Belt lock

Shoulder Guard installation

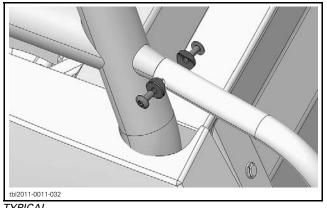
NOTE: Installation is the same for all shoulder guards unless otherwise specified.

1. Slide shoulder guard into lateral net hoops. Position guard flat end as shown.



- TYPICAL RH SIDE SHOWN
- 1. Flat end 2. Net hoops
- 2. Install shoulder guard to frame.
 - 2.1 Secure the top of the shoulder guard.

PDI KIT PARTS	QTY
M6 x 14 Torx screws	2
Support washers	2



TYPICAL

2.2 Secure the bottom of the shoulder guard to seat belt mechanism bracket.

PDI KIT PARTS	QTY
M8 x 20 hexagonal flange bolts	2
M8 elastic flange nuts	2



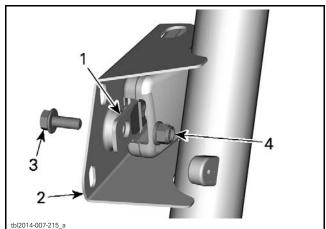
tbl2013-009-039_a TYPICAL 1. Screw heads this side

Lateral Net Installation

NOTE: Installation is the same for all lateral nets unless otherwise specified.

1. Install lateral net buckles for rear passengers.

PDI KIT PARTS	QTY
M8 x 20 hexagonal flange bolts	2
M8 elastic flange nuts	2



- Rear passenger lateral the buck.
 Frame metal bracket
 M8 x 20 hexagonal flange bolts
 M8 elastic flange nuts Rear passenger lateral net buckle.

TIGHTENING TORQUE

M8 x 20 hexagonal	
flange bolts	

24.5 N•m (18 lbf•ft)

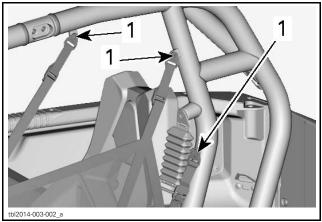
2. Buckle the lateral net.





3. Attach the top of lateral net to the cage.

PDI KIT PARTS	QTY
M5 x 14 Torx screws	4

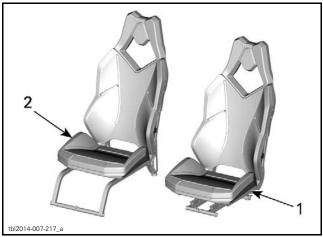


1. M5 x 14 Torx screws

TIGHTENING TORQUE	
M5 x 14 Torx screw	4.5 N∙m (40 lbf ∙in)

- 4. Adjust the length of the lateral net straps.
- 5. Buckle off the lateral net.

Front Seats



TYPICAL

- 1. Driver's seat
- 2. Passenger's seat
- 1. Insert the seat in the cockpit.
- 2. Install the seat support into retaining bracket.
- 3. Push down the backrest to latch the seat.

Seat Latch Adjustment

If the seat is hard to lock, the seat latch pin must be readjusted.

Loosen retaining screws and reposition the seat latch pin.



Rear Seats



TYPICAL

NOTE: Prior to installing passenger's seat, check the engine oil level. Refer to *ENGINE OIL LEVEL VERIFICATION* in this bulletin.

- 1. Insert the seat in the cockpit.
- 2. Install the seat support into retaining bracket.
- 3. Push down the backrest to latch the seat.

Auxiliary Foam Filter Kit

If vehicle is used in dusty and muddy conditions, it is strongly recommended to install the foam filter kit in addition to the air filter. The kit is located in glove box. For the installation, refer to the instruction sheet supplied with the kit.

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.

FLUIDS

All fluids (except fuel) have already been filled at factory, it is only necessary to validate some of them. If refill is needed, use the provided procedure.

Fuel

1. Add fuel in the fuel reservoir.

NOTICE Never mix oil with fuel, these vehicles are equipped with a 4-stroke engine.

NOTICE Never place anything over fuel tank cap as this could block the vent hole, leading to engine misfire.

- Always stop engine before refueling. Open reservoir cap slowly.
- If a differential pressure condition is noticed (whistling sound heard when loosening fuel reservoir cap) have vehicle inspected and/or repaired before further operation.
- Fuel is flammable and explosive under certain conditions.
- Never use an open flame to check fuel level.
- Never smoke or allow flame or spark in vicinity.
- Always work in a well-ventilated area.
- Never top up the fuel tank before placing the vehicle in a warm area. As temperature increases, fuel expands and may overflow.
- Always wipe off any fuel spillage from the vehicle.
- Never fill a fuel container in the vehicle cargo box or on-board vehicle as electrical static discharge may ignite fuel.

Recommended Fuel

Use premium unleaded gasoline, available from most service stations or oxygenated fuel containing a maximum total of 10% of ethanol or methanol. The gasoline used must have the following recommended minimum octane rating.

MINIMUM OCTANE RATING		
Inside North America 91 (R + M)/2		
Outside North America	95 RON	

NOTICE Never experiment with other fuels. The use of non recommended fuel can result in vehicle performance deterioration and damage to critical parts in the fuel system and engine components.

Engine Oil

NOTICE Do not overfill. Operating the engine with an improper oil level may severely damage engine. Wipe off any oil spillage.

Recommended Engine Oil

RECOMMENDED OIL			
SEASON	ТҮРЕ		
Summer	XPS 4-STROKE SYNTH. BLEND OIL (SUMMER) (P/N 293 600 121)		
Winter	XPS 4-STROKE SYNTHETIC OIL (ALL CLIMATE) (P/N 293 600 112)		

NOTE: The XPS oil is specially formulated to meet the lubrication requirements of this engine. BRP strongly recommends the use of its XPS 4-stroke oil.

NOTICE Damages caused by the use of oil not suitable for this engine will not be covered by the BRP limited warranty.

If XPS oil is not available, use 4-stroke SAE 5W 40 engine oil that meets or exceeds the requirements for API service classification SM, SL or SJ. Always check the API service label certification on the oil container it must contain at least one of the above standards.

Engine Oil Level Verification

NOTE: Dipstick is located under passenger's seat.

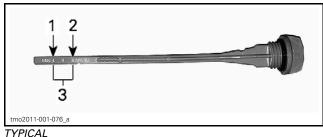
1. Unscrew dipstick then remove it and wipe clean.



UNDER PASSENGER'S SEAT

1. Dipstick

- 2. Reinstall dipstick, screw in it completely.
- 3. Remove and check oil level. It should be near or equal to the upper mark.



1. MIN

MAX
 Operating range

To add oil, remove the dipstick. Place a funnel into the dipstick tube.

Add a small amount of recommended oil and recheck oil level.

Repeat the above procedures until oil level reaches the dipstick upper mark.

NOTE: Do not overfill. Wipe off any spillage. Properly tighten dipstick.

Engine Coolant

Recommended Engine Coolant

COOLANT HEADER		
BRP recommended product	LONG LIFE ANTIFREEZE (P/N 219 702 685)	
Alternative if not available	Distilled water and antifreeze solution (50% distilled water, 50% antifreeze)	

NOTICE Always use ethylene-glycol antifreeze containing corrosion inhibitors specifically for internal combustion aluminum engines.

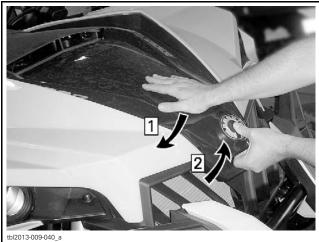
Engine Coolant Level Verification

Check coolant level with engine cold.

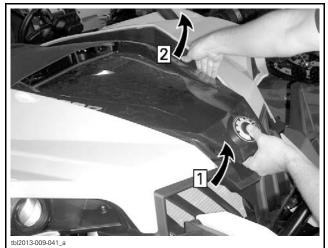
Place vehicle on a level surface.

Unlatch service cover as follows.

NOTICE Failure to follow the described procedure for opening the service cover may lead to cover damage.



Step 1: Push down service cover and HOLD Step 2: Lift the front part of service cover

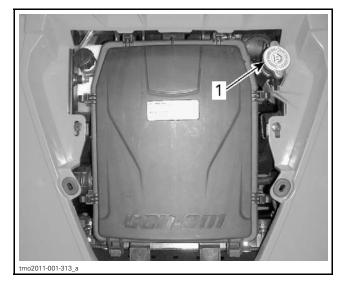


Step 1: Keep on lifting the front part of service cover Step 2: Gently release the cover post from its grommet then release the post on the other side



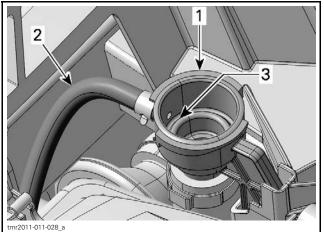
FULLY LIFT COVER

Remove radiator pressure cap.



1. Radiator pressure cap

Ensure cooling system is full up to the pressure cap seat.



- 1.
- 2. 3.
- Cooling system refill adapter Expansion tank hose Coolant system full level (pressure cap seat)

Add coolant in system if necessary.

Reinstall radiator pressure cap.

Check coolant level in expansion tank by looking at the side of the coolant expansion tank.



Coolant should be at the MIN mark when engine is COLD.



COOLANT EXPANSION TANK

Add coolant if required. Remove filler cap from expansion tank. Add coolant up to MIN mark. Use a funnel to avoid spillage. Do not overfill. Reinstall filler cap. Reinstall service cover.

SET-UP

Tires Pressure

From factory, tires air pressure could be different from the recommended air pressure. To ensure proper seating of the tire bead, inflate tires at 200 kPa (29 PSI) **THEN** set tire pressure to vehicle specification. Refer to the following table.

NOTICE Always check pressure when tires are cold.

NOTICE Low pressure may cause tire to deflate and rotate on wheel. Overpressure may burst the tire. Always follow recommended pressure. Since tires are low-pressure type, a manual pump should be used.

NOTE: Tire pressure varies with temperature and altitude.

TIRE PRESSURE	FRONT	REAR
MINIMUM	124 kPa (18 PSI)	124 kPa (18 PSI)
MAXIMUM (USE WHEN TOTAL LOAD IS GREATER THAN 180 KG (397 LB)	138 kPa (20 PSI)	179 kPa (26 PSI)

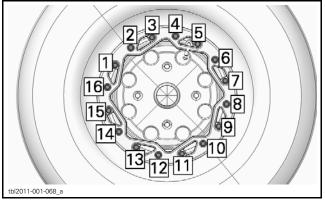
Wheel Beadlock

Wheel Beadlock Tightening

X rs Model

NOTICE Do not use an impact wrench for tightening beadlock screws in order to avoid to damage them.

Check beadlock screws tightening as per the following sequence.



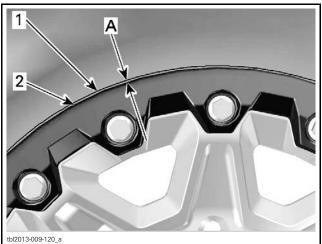
TYPICAL

PART	TORQUE
Beadlock screws	8N∙m (71 lbf ∙in)

Wheel Beadlock Gap Verification

X rs Model

Verify the gap between tire and beadlock clamp ring, it should be practically equal all around the ring.



1. Tire

2. Beadlock clamp ring edge

A. Gap equal all around bead lock clamp ring

Readjust if required. Refer to proper shop manual for complete procedure.

Protective Materials

Ensure that all protective materials are removed from vehicle.

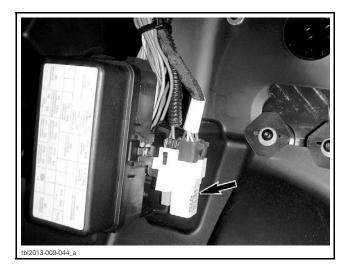
Recall or Factory-directed Modification

Complete applicable recall or factory-directed modification.

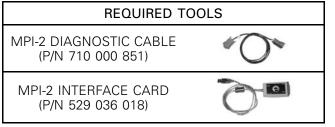
B.U.D.S. PROGRAMMING

Diagnostic Connector Location

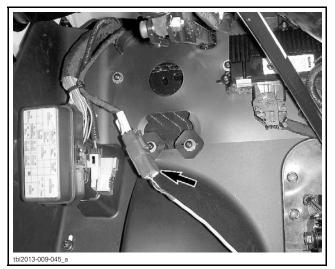
The diagnostic connector is located under the dashboard on the driver's side. It is stored in its protective cap besides the fuse box.



Connecting the PC to the Vehicle



- 1. Locate the 6-pin diagnostic connector, refer to *DIAGNOSTIC CONNECTOR LOCATION*.
- 2. Disconnect the 6-pin diagnostic connector from its holder (protective cap).
- 3. Connect one end of the MPI-2 diagnostic cable to the vehicle connector.

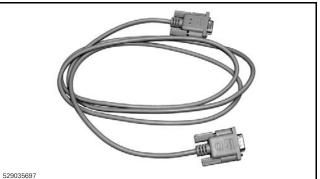


4. Connect the other end of diagnostic cable to the MPI-2 interface card.



DIAGNOSTIC CABLE CONNECTED TO MPI-2 INTERFACE CARD

NOTE: An optional MALE-FEMALE EXTENSION SE-RIAL CABLE (P/N DB9) available at electronic retail outlets can be used between diagnostic cable and MPI-2 interface. Do not exceed 7.6 m (25 ft).



OPTIONAL MALE-FEMALE EXTENSION SERIAL CABLE

5. Connect the MPI-2 interface card to the USB port of a PC (personal computer).



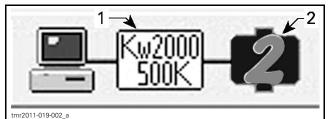
MPI-2 INTERFACE CARD CONNECTED TO USB PORT

How to Establish Communication Using B.U.D.S. Software

NOTE: Before beginning, check if the latest version of B.U.D.S., available on BOSSWeb for this vehicle, is installed on your computer.

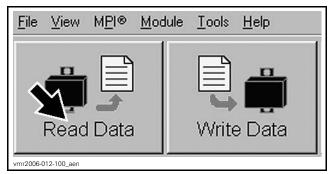
IMPORTANT: Ensure all connections have been made before starting B.U.D.S. to allow proper operation.

- 1. Turn ignition switch to ON using any of the key provided with the vehicle. DO NOT start the engine.
- 2. Start B.U.D.S. and logon.
- 3. Wait during detection setup.
- 4. Ensure the status bar shows the Kw2000 protocol and the appropriate number of modules to its right according to the vehicle model.



TYPICAL - SUCCESSFUL CONNECTION

- Connection protocol
 Number of modules read
- 5. Click the **Read Data** button.



B.U.D.S. is now ready for edition, programming and for diagnostics.

Entering Customer's Name

When starting the vehicle, the multifunction display will show the name of the customer.

To set the customer name in the multifunction display:

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

Read Data	Write Dat	a Starting	Open
Vehicle	Keys	Setting	Monitoring
	ni <u>c</u> le (VIN):	2BPS800004D002 M6273832	325
	del:	00000000	



2. Type the name of the customer.

Activ	ation	Faults	History
	-Purchas C <u>u</u> sto Deliv		Mr Smith 05/03/04
vbl2006-007-00)2		

3. Click on WRITE DATA to save the information in the 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 Distance

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

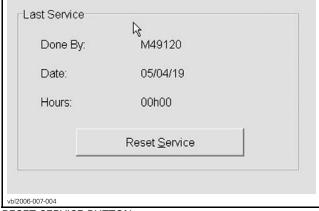


RESET TRIP BUTTONS

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.

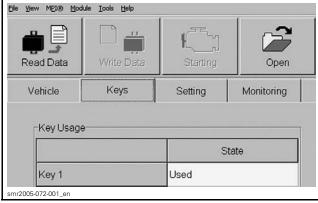


RESET SERVICE BUTTON

After each maintenance service, last service should be reset to keep a good tracking of the vehicle service history.

Programing Keys

1. Click on KEYS tab.



KEYS TAB

2. Click on ERASE ALL KEYS button.

Key 4	Free	
Key 5	Free	
Key 6	Free	
Key 7	Free	
Key 8	Free	
Erase	Key	
Erase Al		Add <u>N</u> ormal Key

- 1. Click here to erase all keys
- 3. Click "YES" to confirm the action.
- 4. Confirm key color in ignition switch.
- 5. Program the key by selecting the right type according to chart.

KEY	KEY TYPE
BLACK key	Performance key
GRAY key	Normal key

Erase <u>A</u> ll	Keys	Add Performance Key	Add Normal Key	Add Work Key
Etase I	Key	¥	₩.	
8	Free	/	2	
7	Free		1	
6	Free			
5	Free			
4	Free			
13	Free			

1. Add Performance Key button

- 2. Add Normal Key button
- 6. Turn ignition switch to OFF. Remove the key.
- 7. Install the other key.
- 8. Turn ignition key to ON position.
- 9. Program the other key by selecting the right type according to above chart.
- 10. Repeat steps 6 to 9 to program other keys (8 maximum).

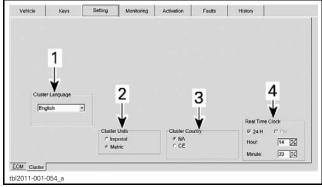
NOTE: The Work key (ORANGE key) is optional.

Language and Speedometer Reading

Gauge settings can be changed to accommodate the owner preferences:

- Language (English, French, Spanish, Dutch, etc.)
- Units (Miles or Kilometers)
- Country (NA)
- Time clock (12hr or 24hr)
- 1. Select SETTING tab in B.U.D.S.
- 2. Modify the selections in accordance with the owner preferences.

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



- 1 Language
- 2. Units
- 3. Country 4. Time clock

Checking for Fault Codes

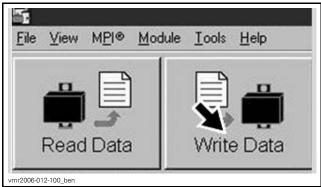
Click on FAULT tab and check if there are active faults.

- If so, service vehicle then clear the faults in B.U.D.S.

NOTICE After a problem has been solved, ensure to clear the fault(s) in the ECM. This will properly reset the appropriate counter(s). This will also records that the problem has been fixed in the ECM memory.

Saving Changes and Exiting the **B.U.D.S. Session**

1. Click on WRITE DATA button to transfer new settings and information to the ECM.



WRITE DATA BUTTON

- 2. Click on EXIT button to end session.
- 3. Disconnect all cables and hardware from vehicle.
- 4. Ensure to reinstall the connector into its housing.

ADJUSTMENTS

All adjustments have already been performed at factory, it is only necessary to validate them.

Suspension Adjustments Guideline

Vehicle handling and comfort depend upon suspension adjustments.

WARNING

Suspension adjustment could affect vehicle handling. Always take time to familiarize yourself with the vehicle behavior after any suspension adjustment has been made.

Choice of suspension adjustments vary with vehicle load, personal preference, riding speed and terrain condition.

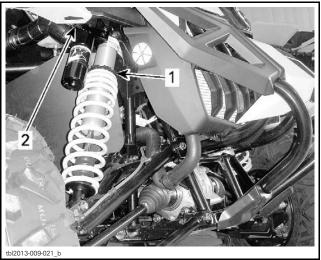
The best way to set up the suspension, is to start from factory settings, then customize each adjustment one at a time.

Front and rear adjustments are interrelated. It may be necessary to readjust the rear shock absorbers after adjusting front shock absorbers for instance.

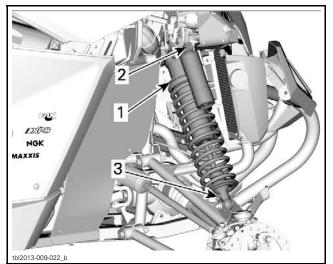
Test run the vehicle under the same conditions; trail, speed, load, etc. Change one adjustment and retest. Proceed methodically until you are satisfied.

Following are guidelines to fine-tune suspension.

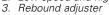
Adjustment Location



FRONT SUSPENSION - BASE MODELS Preload adjustment 1. 2. Compression damping clicker

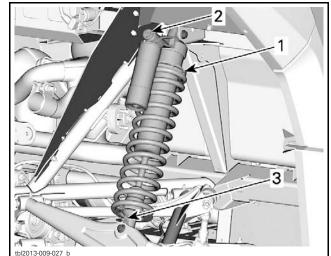


- FRONT SUSPENSION X RS MODELS
- 1. Preload adjustment
- 2. Low speed and high speed compression damping adjuster





- REAR SUSPENSION BASE MODELS
- Preload adjustment
 Compression damping clicker



REAR SUSPENSION — X RS MODELS

- 1. Preload adjustment
- Low speed and high speed compression damping adjuster
 Rebound adjuster

Suspension Factory Settings

For adjustment procedures, refer to *SPRING PRELOAD ADJUSTMENT (FRONT AND REAR)* and *SHOCK DAMPING ADJUSTMENTS (FRONT AND REAR)* in this section.

To adjust compression and rebound to factory settings, proceed as follows:

- 1. Turn adjuster clockwise until it stops.
- 2. Turn adjuster counterclockwise by the specified amount, see table below.

FRONT SUSPENSION FACTORY SETTINGS			
ADJUSTMENT	MODEL	FACTORY SETTING	
Coving proload	Base	78.3 mm (3.08 in)	
Spring preload	X rs DPS	103 mm (4.05 in)	
Compression damping	Base	12 positions	
Compression damping (low speed)	X rs DPS	9 positions	
Compression damping (high speed)	X rs DPS	9 positions	
Rebound damping	X rs DPS	12 positions	

REAR SUSPENSION FACTORY SETTINGS				
ADJUSTMENT	MODEL	FACTORY SETTING		
	Base	54.5 mm (2.15 in)		
Spring preload	X rs DPS	71.4 mm (2.81 in)		
Compression damping	Base	12 positions		
Compression damping (low speed)	X rs DPS	12 positions		
Compression damping (high speed)	X rs DPS	9 positions		
Rebound damping	X rs DPS	9 positions		

Spring Preload Adjustment (Front and Rear)

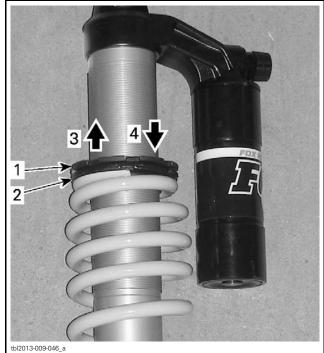
Shorten the spring for a firmer ride and rough riding condition or when pulling a trailer.

Lengthen the spring for a softer ride and smooth riding condition.

The left and right shock adjustment on front or rear suspension must always be set to the same position. Never adjust one shock only. Uneven adjustment can cause poor handling and loss of stability, which could lead to an accident.

Lift the vehicle. Spring length should be measured without load on the wheels.

Adjust by loosening lock ring and turning adjuster ring as desired. Use tool from vehicle tool kit.



TYPICAL

Loosen top lock ring 1.

Z. Turn adjuster ring as necessary
 To soften preload
 To stiffen preload

Shock Damping Adjustments (Front and Rear)

Perform adjustments one position (click) at a time. Test run the vehicle under the same conditions. Proceed methodically until you are satisfied.

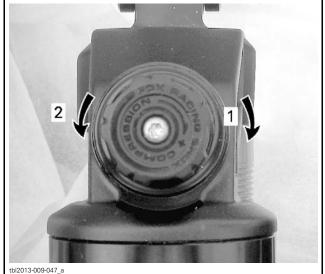
Compression Damping

Base Models

Compression damping controls how the shock absorber reacts when suspension collapses.

ADJUSTMENTS

ACTION	RESULT ON BIG BUMPS
Increasing compression damping force	Firmer compression damping
Decreasing compression damping force	Softer compression damping



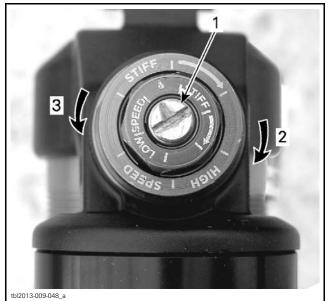
TURN CLICKER TO ADJUST 1. Increases damping (stiffer) 2. Decreases damping (softer)

Low Speed Compression Damping

X rs DPS Models

Low speed compression damping controls how the shock absorber reacts to a low suspension velocity (slow compression strokes, in most cases when riding at lower speeds).

ACTION	RESULT ON BIG BUMPS
Increasing low speed	Firmer compression
compression damping	damping (slow
force	compression)
Decreasing low speed	Softer compression
compression damping	damping (slow
force	compression)



LOW SPEED COMPRESSION DAMPING (USE A SCREWDRIVER) Low speed adjuster 1.

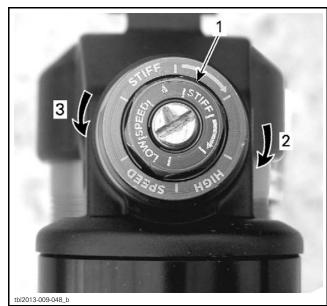
Increases damping (stiffer)
 Decreases damping (softer)

High Speed Compression Damping

X rs DPS Models

High speed compression damping controls how the shock absorber reacts to a high suspension velocity (quick compression strokes, in most cases when riding at higher speeds).

ACTION	RESULT ON SMALL BUMPS
Increasing high speed	Firmer compression
compression damping	damping (fast
force	compression)
Decreasing high speed	Softer compression
compression damping	damping (fast
force	compression)



HIGH SPEED COMPRESSION DAMPING (USE A 17 MM WRENCH)

- 1. High speed adjuster
- Increases damping (stiffer)
 Decreases damping (softer)

Rebound Damping

X rs DPS Models

Use a flat screwdriver to adjust it.



Rebound adjuster 1.

- Increases rebound (stiffer)
- 2. 3. Decreases rebound (softer)

ASSEMBLY INSPECTION

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

- 1. Chassis
- 2. Steering operation
- 3. Suspension arm ball joint cotter pins
- 4. Tie rod end nuts and cotter pins

FINAL INSPECTION

Vehicle Test Run

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

Vehicle Cleaning

1. Wash and dry the vehicle.

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 damages.

- Remove any dirt.
- 3. Clean vinyl and plastic parts, using a chamois, a flannel cloth or a microfiber cloth with XPS MULTI-PURPOSE CLEANER (P/N 219 701 709).

NOTICE It is necessary to use a chamois, a flannel cloth or a microfiber cloth on plastic parts to avoid damaging surfaces. Never clean plastic parts with strong detergent, degreasing agent, paint thinner, acetone, products containing chlorine, etc.

- 4. Clean the entire vehicle, including metallic parts, with XPS ATV WASH (P/N 219 701 702).
- 5. Painted parts which are damaged should be properly repainted to prevent rust.

Delivery To Customer

Before Delivery the Vehicle

Complete the PREDELIVERY CHECK LIST.

The customer must read and sign the PREDELIV-ERY CHECK LIST.

Give OPERATOR'S GUIDE and SAFETY DVD to customer.

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

TECHNICAL SPECIFICATIONS

	MODEL	1000	
ENGINE			
		ROTAX® 1010	
Engine type		4-stroke, Single Over Head Camshaft (SOHC), liquid cooled with timing chain	
Number of cylinders		2	
Number of valves		8 valves (mechanical adjustment)	
Bore		91 mm (3.58 in)	
Stroke		75 mm (2.95 in)	
Displacement		976 cm³ (59.56 in³)	
Exhaust system		Spark arresters approved by USDA Forest Service	
Engine air filter		Synthetic paper filter with foam	
LUBRICATION SYSTEM	Λ		
Туре		Wet sump. Replaceable oil filter	
Oil filter		BRP Rotax [®] paper type, replaceable	
	Capacity (oil change with filter)	2 L (2.1 qt (U.S. liq.))	
Engine oil	Recommended	For the summer season, use XPS 4-STROKE SYNTH. BLEND OIL (SUMMER) (P/N 293 600 121). For the winter season, use XPS 4-STROKE SYNTHETIC OIL (ALL CLIMATE) (P/N 293 600 112). If not not available, use a 5W 40 motor oil that meets the requirements for API service classification SG, SH or SJ	
Coolant	Туре	Ethyl glycol/water mix (50% coolant, 50% water). Use premixed coolant sold by BRP (P/N 219 702 685) or coolant specifically designed for aluminum engines	
	Capacity	6.81 L (1.8 U.S. gal.)	
CVT TRANSMISSION			
Туре		CVT (Continuously Variable Transmission)	
Engagement RPM		1850 RPM	
GEARBOX			
Туре		Dual range (HI-LO) with PARK, neutral and reverse	
	Capacity	450 ml (15 U.S. oz)	
Gearbox oil	Recommended	XPS synthetic gear oil (P/N 293 600 140) or a 75W 140 API GL-5	

	MODEL	1000		
ELECTRICAL SYSTEM				
Magneto generator outp	put	625 W @ 6000 RPM		
Ignition system type		IDI (Inductive Discharge Ignition)		
Ignition timing		Not adjustable		
	Quantity	2		
Spark plug	Make and type	NGK LMAR8C-9		
	Gap	0.9 mm (.035 in)		
Engine RPM limiter sett	ing	8000 RPM		
	Туре	Maintenance free		
Detter	Voltage	12 volts		
Battery	Nominal rating	18 A•h		
	Power starter output	1.34 kW		
Headlights		4 x 60 W		
Taillight		2 x 5/21 W		
	Main	40 A		
	Accessories (main)	50 A		
	DPS (if equipped)	50 A		
	Speedometer/ tail lamp	10 A		
	Ignition/injection/ speed sensor	7.5 A		
	Engine control module (ECM)	5 A		
	4WD Actuator	5 A		
	Key switch	5 A		
Fuses	Fan (fuse breaker)	25 A		
	Head lamp	30 A		
	DC Outlet	15 A		
	Relay Driver	5 A		
	Accessories	15 A		
	Fuel pump	5 A		
	Clock	5A		
	Remote winch (option package)	5A		
	Starter solenoid	5A		
	Winch (option package)	5A		

MODEL				1000
FUEL SYSTEM				
Fuel delivery	Туре			Electronic fuel injection (EFI) with iTC
Throttle body				54 mm with ETA
Fuel pump	ритр Туре			Electric (in fuel tank)
Idle speed In Sport mode			1250 \pm 50 RPM (not adjustable)	
			1500 \pm 50 RPM (not adjustable)	
Туре			Premium unleaded gasoline	
Fuel	Minimum oo	n octane		87 Pump Posted AKI (92 RON) - Refer to FUEL REQUIREMENTS
F	Recommended octan			91 Pump Posted AKI (95 RON) - Refer to FUEL REQUIREMENTS
Fuel tank capacity				37.8 L (10 U.S. gal.)
Fuel remaining when	low fuel lig	ht turns ON		± 12 L (3.2 U.S. gal.)
DRIVE SYSTEM				
Drive system type				Selectable 2WD/4WD
		0 it -	Front	500 ml (17 U.S. oz)
		Capacity	Rear	400 ml (13.5 U.S. oz)
Front Differential oil/rear final drive oil	ear final		Front	XPS Synthetic gear oil (75W 90 API GL-5) (P/N 293 600 043) or synthetic oil 75W 90 API GL5
	Туре	Rear	XPS Synthetic gear oil (P/N 293 600 043) or synthetic oil 75W 90 API GL5	
F (1)			Base	Visco-lokt front differential
Front drive X rs DPS			X rs DPS	Visco-lok† QE front differential
Front drive ratio				3.6:1
Rear drive				Angle drive/spiral bevel gear
Rear drive ratio				3.6:1
CV joint grease				Castrol CV joint grease (P/N 293 550 062)
Propeller shaft grease				Propeller shaft grease (P/N 293 550 063)

MODEL			1000
STEERING			
Steering wheel			Adjustable tilt steering
Turning radius			392 cm (154 in)
Total toe (vehicle on ground)			$0^{\circ} \pm 0.2^{\circ}$
FRONT SUSPENSION			·
Suspension type			Double suspension-arm
Suspension travel			356 mm (14 in)
	Qty		2
Shock absorber		Base	HPG shocks with compression and preload adjustments
	Туре	X rs	HPG shock with remote reservoir. Dual speed compression damping and rebound damping adjustments
REAR SUSPENSION			
Suspension type			Torsional Trailing A-arm Independant (TTA) with external sway bar
Suspension travel			356 mm (14 in)
	Ωty		2
Shock absorber		Base	HPG shocks with compression and preload adjustments
	Туре	X rs	HPG shock with remote reservoir. Dual speed compression damping and rebound damping adjustments
BRAKES			
Front brake	Туре		Dual 220mm cross-drilled disc brakes with hydraulic twin-piston calipers
Rear brake	Туре		Dual 214mm cross-drilled disc brake with hydraulic single-piston calipers
Brake fluid	Capacity		250 ml (8.5 U.S. oz)
	Туре		DOT 4
Caliper			Floating
Brake pad material	Front		Metallic
Diake pau material	Rear		Metallic
Minimum brake pad thickness			1 mm (.039 in)
Minimum brake disc thickness	Front		4 mm (.157 in)
	Rear		4 mm (.157 in)
Maximum brake disc warpage			0.2 mm (.008 in)
TIRES			
Pressure	Front		Maximum: 138 kPa (20 PSI) Minimum: 124 kPa (18 PSI)
	Rear		Maximum: 179 kPa (26 PSI) Minimum: 124 kPa (18 PSI)
Minimum tire thread depth			3 mm (.118 in)
Tire size	Front		27 x 9 x 12 (in)
1110 3120	Rear		27 x 11 x 12 (in)

MODEL	-	1000		
WHEELS				
Tune	Base	Cast aluminium wheels		
Туре	X rs	Aluminum beadlock wheels		
Pim cizo	Front	12 x 6 (in)		
Rim size	Rear	12 x 7.5 (in)		
Wheel nuts torque		100 N • m ± 10 N • m (74 lbf • ft ± 7 lbf • ft)		
CHASSIS				
Cage type		50 mm (2 in) diameter, high strength steel, ROPS-approved cage		
DIMENSIONS				
Overall length		375.9 cm (148 in)		
Overall width		162.6 cm (64 in)		
Overall height		188.5 cm (74.2 in)		
Wheelbase		289 cm (113.8 in)		
	Front	140.7 cm (55.4 in)		
Wheel track	Rear	135.6 cm (53.4 in)		
Ground clearance		31.8 cm (12.5 in)		
LOADING CAPACITY AND WE	GHT			
Dry weight		737.1 kg (1,625 lb)		
Weight distribution (front/rear)		44/56		
Cargo rack capacity		68 kg (150 lb)		
Total vehicle load allowed (including driver, passengers, all other loads and added accessories)		all 399 kg (880 lb)		
Gross vehicle weight rating		1 170 kg (2,579.5 lb)		