can-am BRP

ATV
PREDELIVERY
Bulletin

D

August 25, 2010 Subject: **Outlander X™ mr** No. **2011-5**

YEAR	MODEL	MODEL NUMBER	SERIAL NUMBER
2011	Outlander X mr	5SBA, 5SBB	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.

⚠ WARNING

To obtain warranty coverage, predelivery procedures must be performed by an authorized BRP Can-Am ATV 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*.

⚠ 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

1. Carefully lay the crate on its bottom.
2. Remove all screws retaining crate cover to crate base.

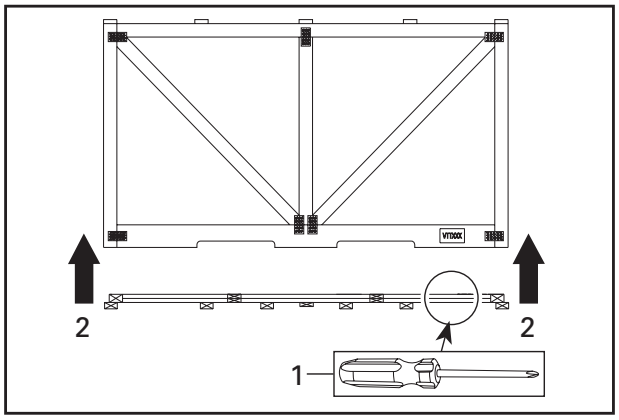
NOTE: Screws that are used are Robertson† #2 type (square head type) that require the use of an appropriate screwdriver.

3. Assisted by another person, lift up crate cover.

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

4. Raise cover vertically from both ends at the same time.

NOTICE **Never tip cover toward the front or rear of the vehicle while lifting it.**



1. Screw
2. Lift up crate cover

5. Remove protective wrapping from the vehicle.
6. Remove boxes from crate base.
7. Remove parts and equipments from crate base.
8. Remove straps, hooks and brackets retaining vehicle to crate base.

⚠ WARNING

Never stand at front or at rear of the vehicle while straps are being cut.

NOTICE **While manipulating to cut, take care not to damage trim components with blade.**

9. Move vehicle out of the crate base.
10. Ensure that the crate includes the following items:

DESCRIPTION	QTY
Dash board (including gauge, ignition switch and 12-volt power outlet)	1
Wind deflectors kit (box including wind deflectors, fasteners and instruction sheet)	1
Radiator support cap (box including radiator cover cap, spring nuts and screws)	1
Mudguard kit (bag including mudguards, fasteners and instruction sheet)	1

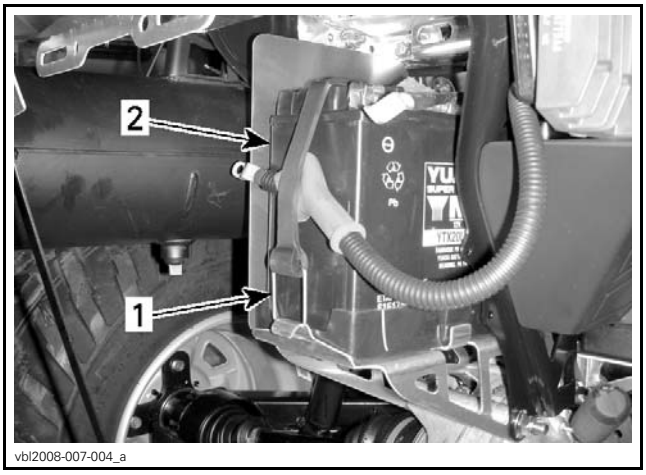
NOTE: This vehicle comes with a hang tag and labels containing important safety information. Do not remove hang tag from vehicle, they are considered permanent parts of the vehicle.

PARTS TO BE INSTALLED

Battery

Battery Installation

1. Unhook battery retaining strap.



1. Retaining strap
2. Battery

2. Remove battery from vehicle.
3. Charge battery. Refer to *CAN-AM ATV BATTERIES SERVICE BULLETIN* for proper activating, charging and maintenance procedures.

⚠ CAUTION **Never charge or boost battery while installed on vehicle.**

4. Install charged battery on vehicle.
5. Properly route battery cables. Refer to *BATTERY CABLE ROUTING* below.

† Robertson is a registered trademark of Robertson Inc.

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

6. Apply DIELECTRIC GREASE (P/N 293 550 004) on battery posts.
7. Connect RED positive cable to positive battery post.
8. Connect BLACK negative cable to negative battery post.

NOTICE Always connect RED positive cable first and then BLACK negative cable.

9. Cover positive post with rubber boot.

Battery Cable Routing

NOTICE Always respect the specific cable routing. Refer to the following illustrations.

1. Ensure that the cable end is installed as illustrated and the cable is routed over the battery.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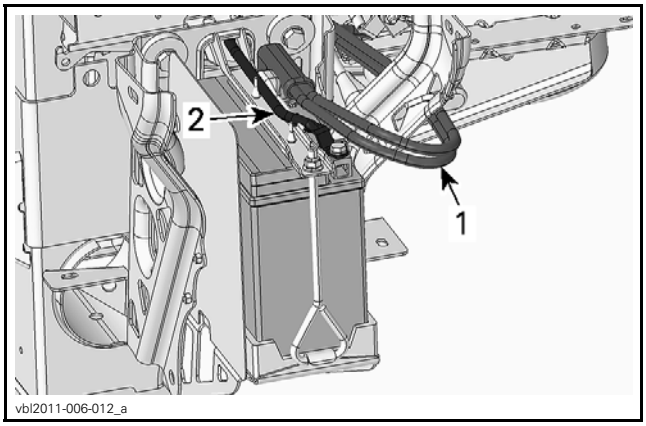
TYPICAL – CORRECT WAY OF SECURING POSITIVE (+) POST

2. Ensure that the cables is routed as per the following illustration.



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1. *RED (+) lead*
2. *BLACK (–) lead*

Dash Board

1. Remove the handlebar cover.

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1. *Handlebar cover*

2. Loosen handlebar retaining screws.
3. Remove seat and central panel.

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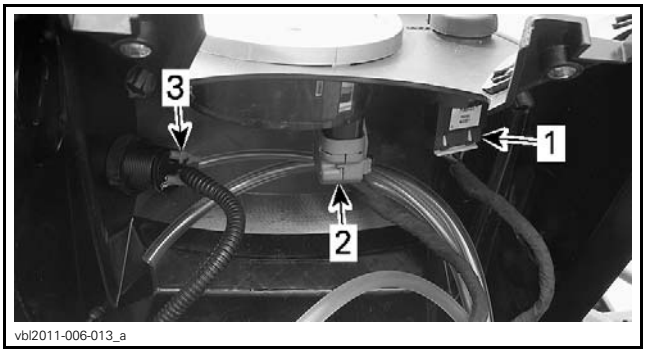
1. *Central panel*

4. Connect the following connectors under dash board:
   – Gauge
   – Ignition switch
   – 12-Volt power outlet.



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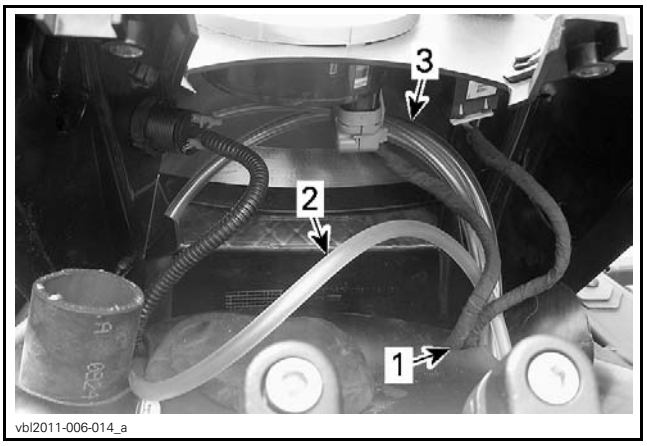
1. *Ignition switch connector*
2. *Gauge connector*
3. *12-Volt power outlet connectors*

5. Make sure that all hoses and wires are properly positioned before installing the dash board. See the following illustration to position parts correctly.
   – Gauge and ignition switch harnesses must be inserted into the slot of the rubber deflector.

– Single hose located near the air intake inlet.
– Vents hoses attached together with a locking ties between the top of gauge and dash board.



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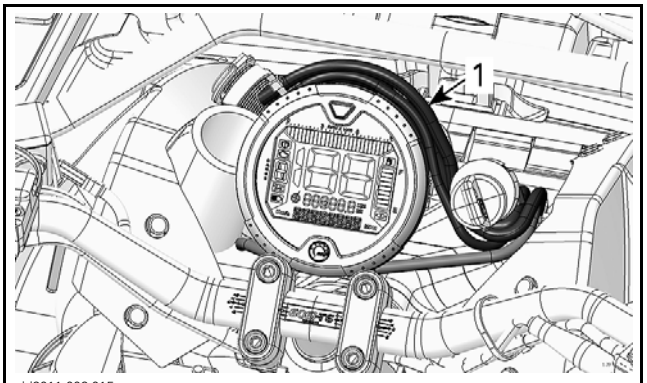
1. Gauge and ignition switch harnesses into rubber deflector slot
2. Single hose routed around the air intake inlet
3. Vent hoses routed over gauge

NOTE: Make sure to position the three vent hoses attached together as high as possible over the gauge.



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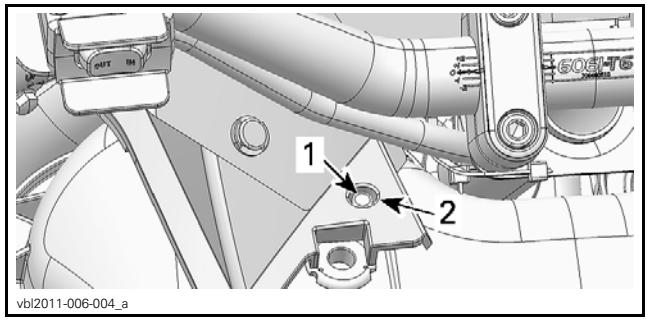
1. Vent hoses attached together

6. Install the dash board.
   6.1 Insert front fender tabs into dash board slots.
   6.2 Lower dash board slowly to avoid move vent hoses or wiring harnesses out of there required locations.
   6.3 Position dash board alignment holes over frame pins.



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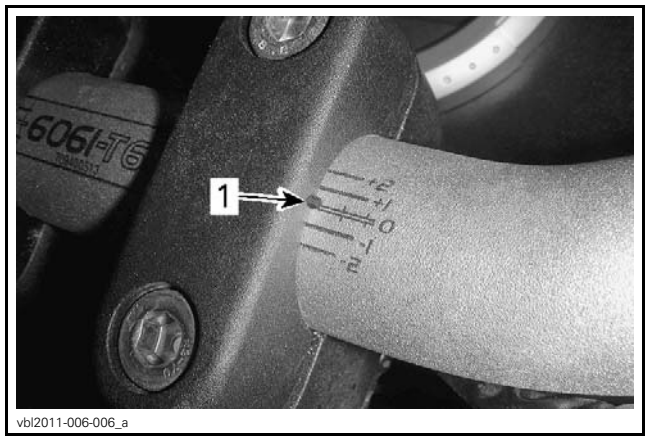
LH SIDE OF CENTRAL PANEL SHOWN
1. Frame pin
2. Dash board alignment hole

NOTE: If the dash board raises oneself up, reposition vent hoses and wiring harness under dash board. Make sure not to pinch any wire nor hose.

7. Position handlebar.
   7.1 Rotate handlebar. Align handlebar clamp indicators with the position 0 (zero) or in accordance with owner's preferences.



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1. Handlebar clamp indicator

   7.2 Verify that handlebar is centered on vehicle (right/left).
   7.3 Tighten handlebar.

PART	TORQUE
Handlebar retaining screws	31 N•m (23 lbf•ft)

8. Confirm that handlebar is properly tightened and does not rotate.
9. Turn handlebar completely from one side to the other making sure it does not exert an unwanted tension on throttle cable, brake hoses, and other wires.

⚠ WARNING

Make sure cables, wires and hoses are not squeezed between the handlebar and vehicle components.

10. Reinstall handlebar cover.

11. Install central panel and seat.

Radiator Support Cap

NOTE: Engine coolant should be checked before installing the radiator support cap.

1. Install spring nuts on radiator cap.
2. Install the radiator support cap using provided M6 x 16 Torx screws (5x).

1. Radiator cover cap

PART	TORQUE
Radiator support cap screws (M6 x 16 Torx screws)	3.5 N•m (31 lbf•**in**)

Mudguard

Install mudguard kit as per their installation instructions (included in the bag).

Wind Deflectors

Install wind deflectors as per their installation instructions (included in the box).

Accessories Installation

1. Install accessories (if any) as per their installation instructions (included in each kit).
2. Install any other equipment required by state or local 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

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 *OUTLANDER AND RENEGADE ATV SHOP MANUAL* for the proper 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.

⚠ WARNING

Always stop engine before refueling. Open cap slowly. If a differential pressure condition is noticed (whistling sound heard when loosening fuel tank 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 or oil spillage from the vehicle.

Recommended Fuel

Use regular unleaded gasoline or oxygenated fuel containing less than 10% of ethanol or methanol.

Refer to the following table for recommended minimum octane number:

OCTANE RATING	
Inside North America	87 (R + M)/2
Outside North America	92 RON

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

Engine Oil

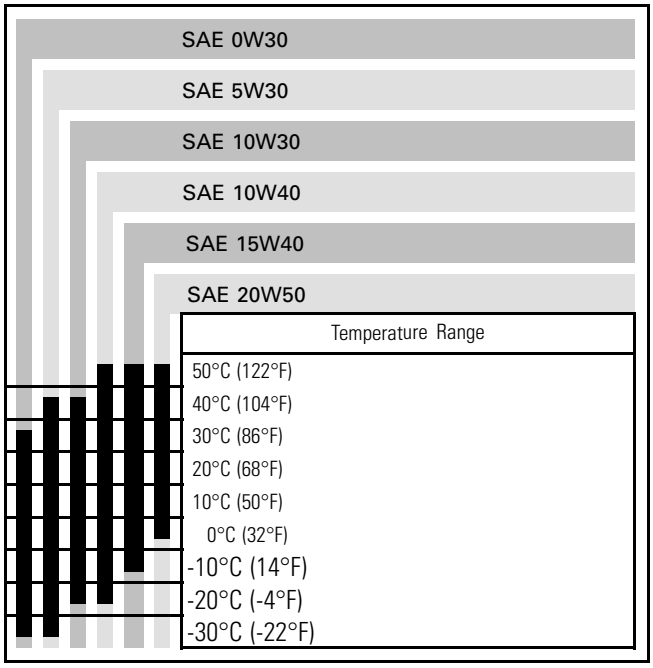
Recommended Engine Oil

For the summer season, use XPS SYNTHETIC BLEND OIL (SUMMER GRADE) (P/N 293 600 121).

For the winter season, use XPS SYNTHETIC OIL (WINTER GRADE) (P/N 293 600 112).

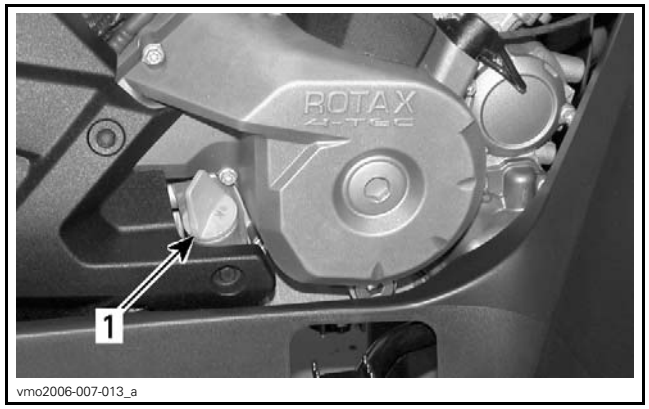
NOTE: The XPS oil is specially formulated and tested for the severe requirements of this engine.

If not available, use 4-stroke SAE 5W30 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. Refer to the viscosity chart for details.



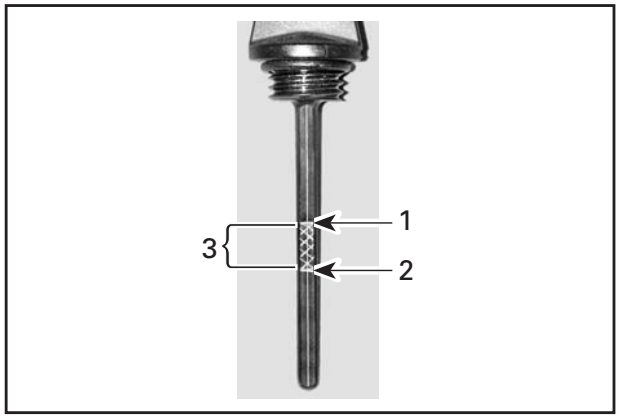
Engine Oil Level Verification

1. Ensure that engine is cold and not running.
2. Park vehicle straight on a level surface.
3. Unscrew and remove oil dipstick.



TYPICAL - RH SIDE OF ENGINE
1. Oil Dipstick

4. Wipe dipstick.
5. Reinstall and screw in the dipstick completely.
6. Remove the dipstick and check oil level. It should be near or equal to the dipstick's upper mark.



OIL DIPSTICK
1. Full
2. Add
3. Operating Range

7. If necessary, add recommended engine oil.

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

8. Reinstall and screw in the dipstick completely.

Gearbox Oil

Recommended Gearbox Oil

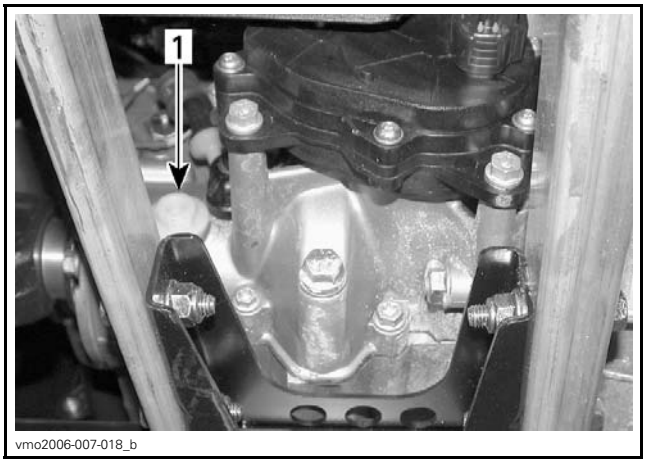
Use XPS CHAINCASE OIL (P/N 415 129 500).

NOTICE Do not use another types of oil when servicing. Do not mix with other types of oil.

Gearbox Oil Level Verification

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

1. Park vehicle straight on a level surface.
2. Select transmission lever to NEUTRAL position.
3. Apply parking brake.
4. Check oil level by removing the gearbox oil level plug.



1. Oil level plug

5. Ensure that gearbox oil is level with the bottom of the oil plug hole.
6. If necessary, add recommended gearbox oil.
7. Reinstall and screw in the gearbox oil level plug.

Engine Coolant

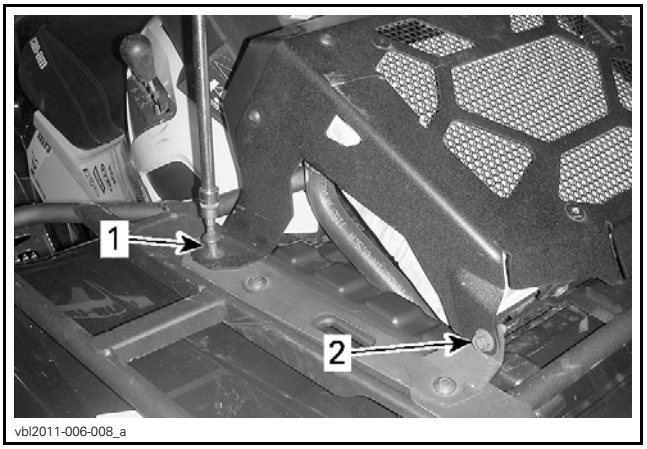
Recommended Coolant

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

Cooling system must be filled with water and antifreeze solution (50% water, 50% antifreeze) or with BRP PREMIXED COOLANT (P/N 219 700 362).

Coolant Level Verification

1. Tilt radiator.
   - 1.1 Remove and discard radiator support rear screws.
   - 1.2 Loosen radiator support front screws.
   - 1.3 Tilt the radiator forward.



RH SIDE OF VEHICLE SHOWN
1. Radiator support rear screw
2. Radiator support front screw

2. Remove the service compartment panel.
3. With vehicle on a level surface, liquid should be between MIN. and MAX. level marks of coolant reservoir.

NOTE: When checking level at temperature lower than 20°C (68°F), it may be slightly lower than MIN. mark.

If coolant is added in the coolant reservoir, check also the level in the radiator.

Adding Coolant

1. Remove the vent hose fitting from the coolant reservoir cap.
2. Unscrew the coolant reservoir cap.
3. Using a funnel, add coolant up to MAX. mark. Do not overfill.
4. Properly reinstall and tighten coolant reservoir cap.
5. Reinstall the vent hose.

NOTICE Do not store any objects in the front service compartment.

6. Check brake pedal fluid level before reinstall the front service compartment panel.

Brake Fluid

NOTICE Be sure to clean reservoir caps before removing it to avoid contaminating the oil.

Recommended Fluid

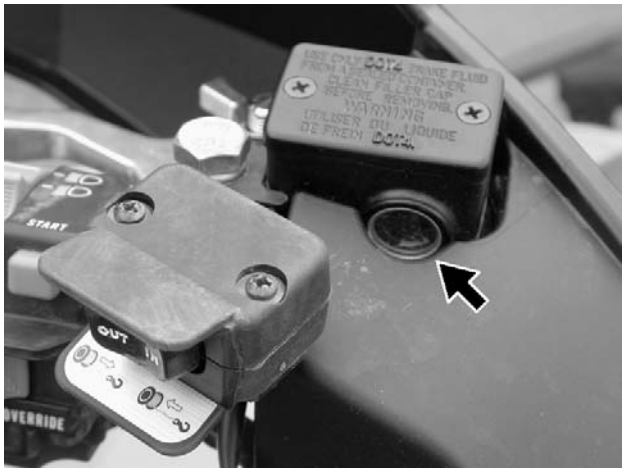
Use BRAKE FLUID (P/N 293 600 131).

Always use brake fluid meeting the specification DOT 4, from a sealed container.

NOTICE To avoid serious damage to the braking system, do not use fluids other than the recommended one, nor mix different fluids for topping up.

Brake Lever Fluid Level Verification

1. Park vehicle straight on a level surface.
2. Turn steering in the straight-ahead position to ensure reservoir is level.



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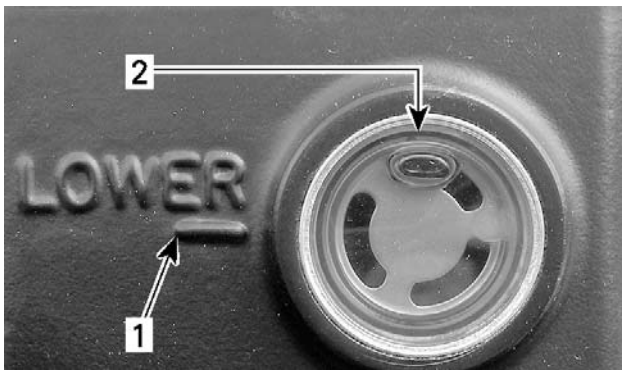
TYPICAL

3. Check brake fluid level in reservoir.



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1. MIN. mark
2. MAX. mark

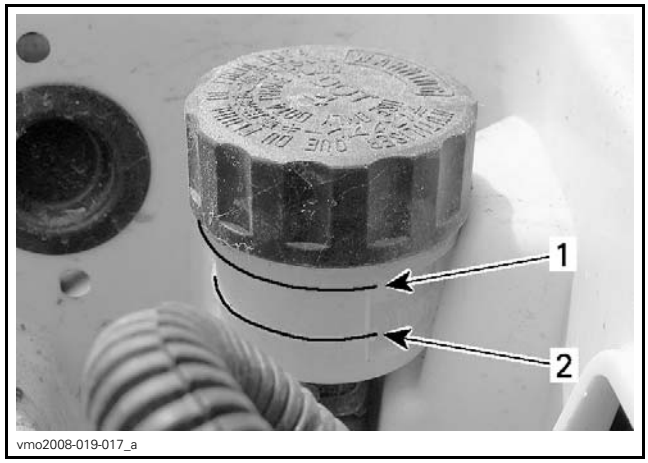
4. Ensure that fluid reaches top of window.
5. If necessary, add recommended brake fluid.

NOTICE Do not overfill brake fluid reservoir.

NOTICE Be careful not to damage the diaphragm while removing and installing handlebar reservoir caps.

Brake Pedal Fluid Level Verification

1. Park vehicle straight on a level surface.
2. Tilt the radiator forward.
3. Check the brake fluid level.



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TYPICAL
1. MAX. mark
2. MIN. mark

4. Ensure that fluid is between MIN. and MAX. marks.
5. If necessary, add recommended brake fluid.
6. Reinstall front service compartment panel.
7. Lower radiator and secure the radiator support using new M8 x 20 hexagonal flanged screws.

PART	TORQUE
Radiator support rear screws (M8 x 20 hexagonal flanged screws)	24.5 N•m (18 lbf•ft)

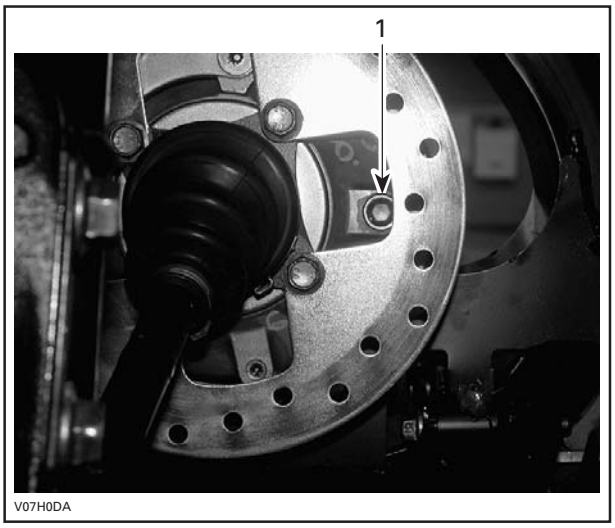
Front Differential Oil

Recommended Oil

Use XPS SYNTHETIC GEAR OIL (75W 90) (P/N 293 600 043) or a 75W 90 API GL-5 synthetic gear oil.

Front Differential Oil Level Verification

1. Park vehicle straight on a level surface.
2. Clean filler plug.
3. Remove filler plug.
4. Check front differential oil level.
5. Ensure that oil reaches the lower edge of filler hole.
6. If necessary, add recommended oil.
7. Install filler plug then torque to 22 N•m (16 lbf•ft).



1. Filler plug

Rear Final Drive Oil

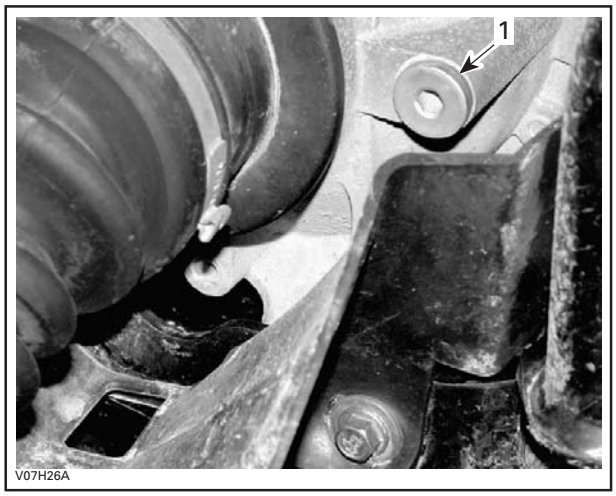
Recommended Oil

Use XPS SYNTHETIC GEAR OIL (75W 140) (P/N 293 600 140) or a 75W 140 API GL-5 synthetic gear oil.

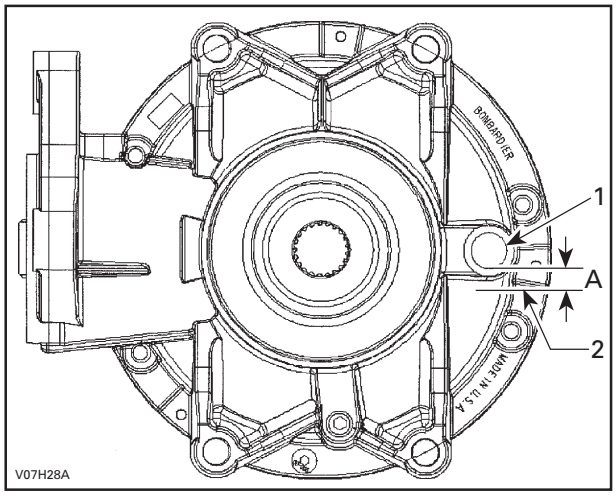
Rear Final DriveOil Level Verification

NOTE: The rear final drive oil is not level with the filler hole.

1. Park vehicle straight on a level surface.
2. Clean filler plug.
3. Remove filler plug.
4. Check rear final drive oil level by inserting a wire with a 90° bend through oil filler hole.
5. Ensure that oil is between 25 mm to 32 mm (1 in to 1-1/4 in) from the bottom of oil filler hole.
6. If necessary, add recommended oil.
7. Install filler plug then torque to 22 N•m (16 lbf•ft).



1. Filler plug



TYPICAL
A. 25 mm to 32 mm (1 in to 1-1/4 in)
1. Filler plug
2. Oil level

SET-UP

Tires Pressure

NOTICE Inflate all tires at 200 kPa (30 PSI) THEN set tire to vehicle specification. This will ensure proper seating of the tire bead.

Initial Inflating

1. Read and remove hang tag from tire valve.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HANG TAG - TYPICAL (OUTLANDER SHOWN)

2. Inflate all tires at 200 kPa (30 PSI).
3. Set tires to required pressure, refer to the following table.

TIRE PRESSURE		
	FRONT	REAR
MAX	48 kPa (7 PSI)	48 kPa (7 PSI)
MIN	41.5 kPa (6 PSI)	41.5 kPa (6 PSI)

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.

Brake Disk Cleanup

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.

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

Protective Materials

1. Ensure that all protective materials are removed from vehicle.

ADJUSTMENTS

General 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 *ATV SHOP MANUAL* for the proper procedure.

Transmission Lever

1. Verify that transmission lever works properly and adjust if required.


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TYPICAL - TRANSMISSION LEVER

Air Controlled Suspension (ACS) Adjustment

This system allows the operator to adjust the front and rear suspension simultaneously by simply pressing a button. By changing the ACS setting, air pressure in the front and rear shocks absorbers will change to provide a different suspension adjustment.

NOTE: The ACS suspension is functional but will NOT self-adjust unless the engine is running, even when key switch is set to on or is on with lights.

The following suspension settings are preset in the vehicle.

ACS SUSPENSION SETTINGS		
SETTING	RIDING COMFORT	RIDING CONDITION
ACS 1	Softest	Trail riding
ACS 2	Soft	
ACS 3	Semi-soft	Trail riding with cargo
ACS 4	Semi-firm	
ACS 5	Firm with high ground clearance	Deep mud riding
ACS 6	Firmest with high ground clearance	

When operating in muddy or watery environment, you can use the ACS 5 or 6 settings to maximise ground clearance and increase performance while riding in those environments or crossing obstacles.

As soon as vehicle is operated on normal trail riding conditions, the ACS setting should be lowered. Refer to *ACS SUSPENSION SETTINGS* table above.

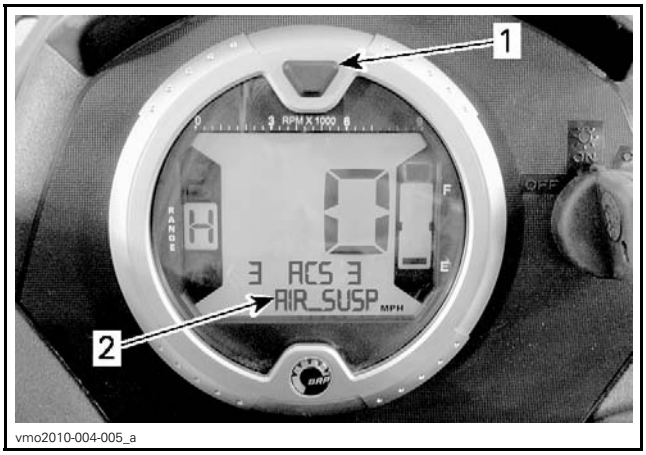
⚠ WARNING

Always adjust the ACS suspension setting according to load, riding condition, and speed. Adhere to the above recommendations regarding the transportation of cargo on your vehicle.

ACS Suspension Setting Change

NOTE: All Outlander X mr are factory set to ACS 1.

1. Press selector button several times until AIR_SUSP is displayed.



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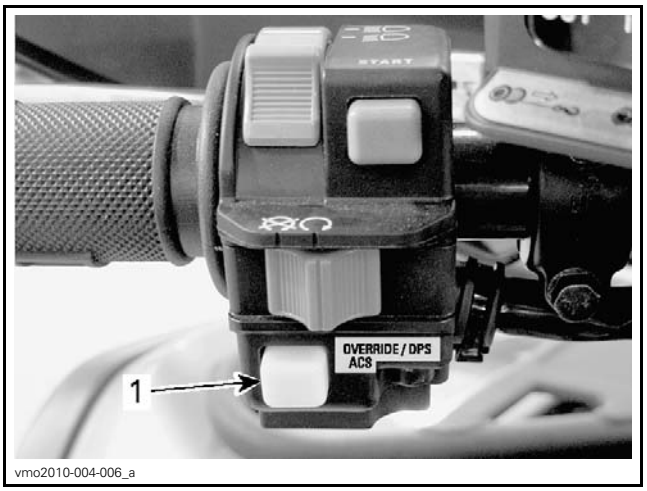
1. Selector button
2. AIR_SUSP displayed

2. Press and release ACS button until the requested setting is displayed.



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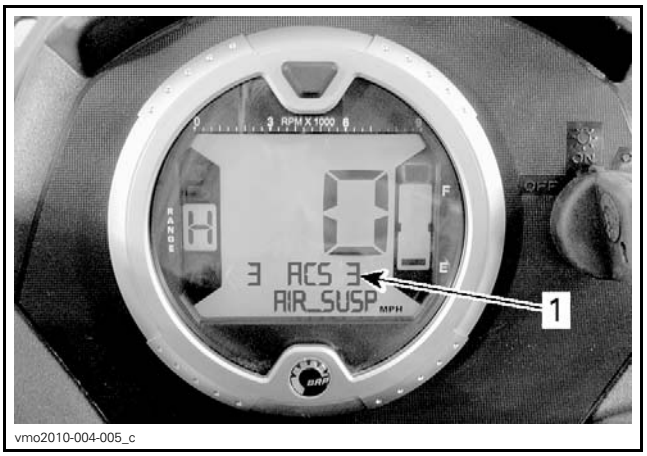
TYPICAL
1. Override/DPS/ACS button



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1. Requested setting

Brake System Pressurization

1. Activate handlebar brake lever as well as the foot pedal.
2. If the brakes feel spongy, pump the handlebar brake lever as well as the pedal.
3. Continue until brakes have a firm feel and work properly.

B.U.D.S. Programming

Connecting a PC to Vehicle

1. Connect the PC to vehicle. Refer to the latest edition of *CAN-AM ATV B.U.D.S. SOFTWARE AND COMMUNICATION TOOLS* for the proper connecting procedure.

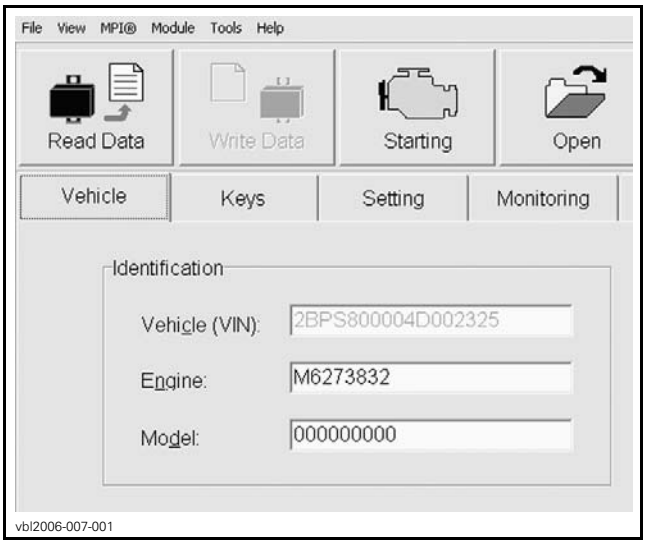
NOTE: Tilt the radiator and remove the service compartment panel to reach the diagnostic connector.

2. Ensure that the status bar shows the proper protocol and the proper number of modules.
3. Press the READ DATA button from the tool bar to initiate communication with the vehicle.

Entering Customer's Name

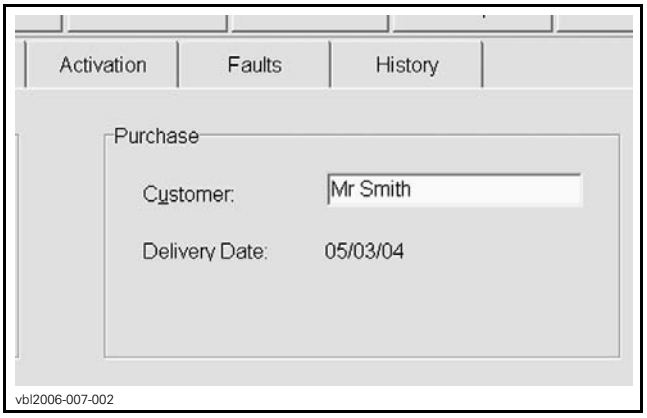
NOTE: When starting the vehicle, the multifunction display will show the name of the customer.

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



VEHICLE TAB

2. Type the name of the customer.

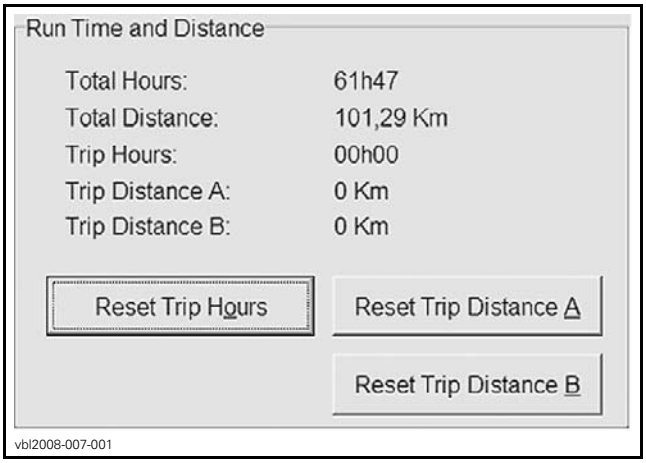


3. Click on WRITE DATA to save the information in the vehicle's ECM.

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.

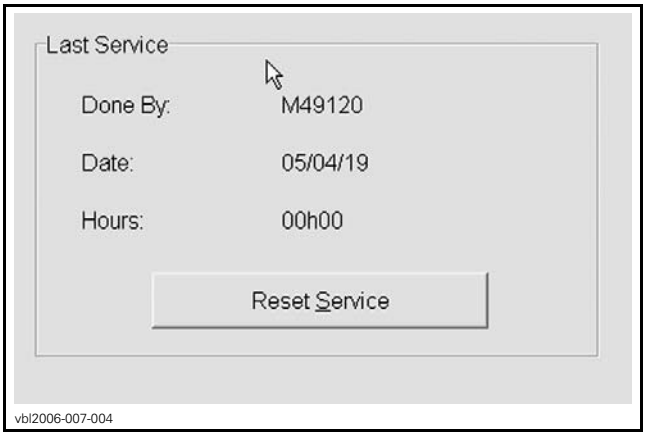


RESET TRIP BUTTONS

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.

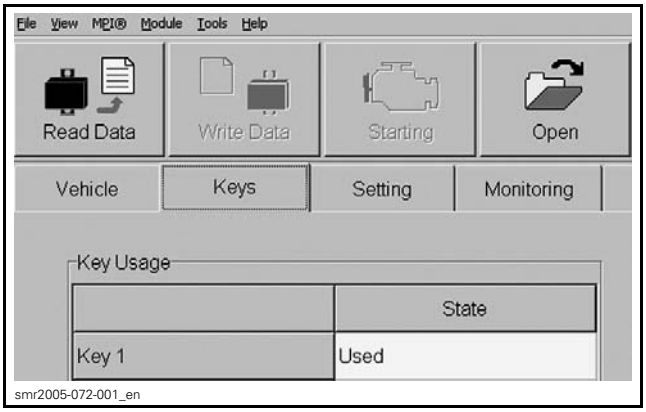


RESET SERVICE BUTTON

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.
3. Insert ignition key in the ignition switch.

D.E.S.S. IGNITION KEY

4. Turn ignition switch to any ON position.
5. Click on ADD KEY button.

1. Add Key Button

6. Repeat to program more keys.
7. Click on WRITE DATA to save the information in the vehicle's ECM.

Speedometer Reading

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 SETTING tab in B.U.D.S.
2. Select Miles or Kilometers from the CLUSTER SCALE section.

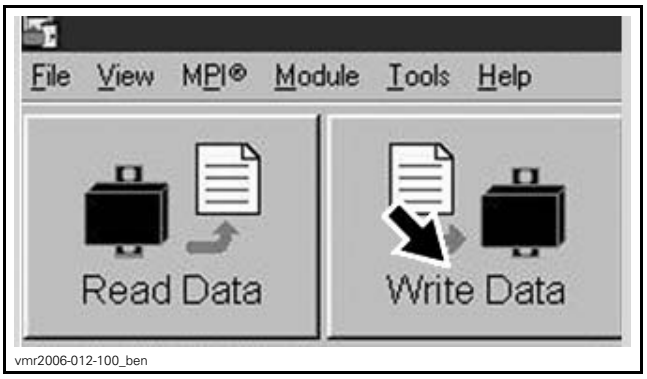
NOTE: No data will be lost when changing this setting.

Ending a B.U.D.S. Session

1. Click on FAULT tab and check if there are active faults.
   – If so, service vehicle then clear the faults in B.U.D.S.

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.**

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



WRITE DATA BUTTON

3. Click on EXIT button to end session.
4. Disconnect all cables and hardware from vehicle.
5. Ensure to reinstall the cap over the vehicle's communication connector.

ASSEMBLY INSPECTION

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

1. Handlebar tightness
2. Wheel nut torque
3. Tubes/hoses routing and condition
4. Steering column cotter pin
5. Suspension arm ball joint cotter pins
6. Tie rod end nuts and cotter pins
7. Complete applicable recall or factory-directed modification.

FINAL INSPECTION

Vehicle Test Run

1. 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.**

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

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

Oiling Air Filter

Ask to owner if the vehicle will be used in severe dusty environments.

– If not, complete with *BEFORE DELIVERY THE VEHICLE*.
– If the answer is positive or if the situation is possible, advise the owner to clean the air filter element more frequently as recommended in the Operator's guide to ensure proper engine performances and durability. Then using the service bulletin 2009-10, oil the foam element of the air filter before delivery the vehicle.

Before Delivery the Vehicle

Complete the *PREDELIVERY CHECK LIST*.

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

Give *OPERATOR'S GUIDE* and *SAFETY DVD* to customer.

NOTE: 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.

TECHNICAL DATA

MODEL			OUTLANDER 800R X mr
ENGINE			
Engine type			4-stroke, Single Over Head Camshaft (SOHC), liquid cooled
Number of cylinders			2
Number of valves			8 valves (mechanical adjustment)
Bore			91 mm (3.58 in)
Stroke			62 mm (2.44 in)
Displacement			799.9 cm^3 (48.81 in^3)
Compression ratio			10.3:1
Maximum Horsepower RPM			7250 RPM
Lubrication	Type		Wet sump. Replaceable oil filter
	Oil filter		BRP Rotax® paper type, replaceable
	Engine oil	Capacity (oil change with filter)	2.2 L (2.3 qt (U.S. liq.))
		Recommended	For the summer season, use XPS SYNTHETIC BLEND OIL (SUMMER GRADE) (P/N 293 600 121). For the winter season, use XPS SYNTHETIC OIL (WINTER GRADE) (P/N 293 600 112). See *OIL VISCOSITY CHART*
Exhaust system			Spark arrestor approved by USDA Forest Service
Air filter			Synthetic paper filter with foam
Air intake			Integrated snorkel system (ISS)
COOLING SYSTEM			
Radiator			Canted radiator
Coolant		Type	Ethyl glycol/water mix (50% coolant, 50% water). Use BRP PREMIXED COOLANT (P/N 219 700 362) or coolant specifically designed for aluminum engines
		Capacity	2.5 L (2.6 qt (U.S. liq.))
ELECTRICAL SYSTEM			
Magneto generator output			650 W
Ignition system type			IDI (Inductive Discharge Ignition)
Ignition timing			Not adjustable
Spark plug		Quantity	2
		Make and type	NGK DCPR8E
		Gap	0.6 mm to 0.7 mm (.024 in to .028 in)
Engine revolutions per minute (RPM) limiter setting		Forward	8000 RPM
		Reverse	3200 RPM
Battery		Type	Dry battery type
		Voltage	12 volts
		Nominal rating	18 A•h
		Power starter output	0.7 KW
Headlight			2 x 35 W
Taillight			7/29 W
Indicator lamps			LEDS, 0.7 V approximately (each)

MODEL			OUTLANDER 800R X mr
ELECTRICAL SYSTEM (cont'd)			
Fuses	Front fuse box	Ignition coils	5 A
		Fan	20 A
		Fuel injectors	5 A
		Speedometer/speed sensor/taillight	7.5 A
		Fuel pump	7.5 A
		Engine control module (ECM)	5 A
		Accessories	20 A
	Rear fuse holder	Main	30 A
		Fan/Accessories	30 A
		Dynamic power steering (DPS)	40 A
FUEL SYSTEM			
Fuel delivery		Type	Electronic Fuel Injection (EFI), Dell'Orto 46 mm throttle body, 1 injector per cylinder
Fuel pump		Model	Electrical (in fuel tank)
Idle speed			1250 ± 50 RPM (not adjustable)
Fuel	Type		Regular unleaded gasoline
	Octane rating	Inside North America	87 (R+M)/2 or higher
		Outside North America	92 RON or higher
Fuel tank capacity			16.3 L (4 U.S. gal.)
Remaining fuel in fuel tank when display light turns ON			± 2 L (.5 U.S. gal.)
CVT TRANSMISSION			
Type			CVT (Continuously Variable Transmission)
Engagement RPM			1600 ± 100 RPM
GEARBOX			
Type			Dual range (HI-LO) with park, neutral and reverse
Gearbox oil		Capacity	400 ml (14 U.S. oz)
		Recommended	XPS CHAINCASE OIL (P/N 415 129 500)
DRIVE SYSTEM			
Front differential oil		Capacity	500 ml (17 U.S. oz)
		Recommended	XPS SYNTHETIC GEAR OIL (75W 90) (P/N 293 600 043) or a 75W 90 API GL-5 synthetic gear oil
Front drive			Visco-Lok Quick Engagement
Front drive ratio			3.6:1
Rear final drive oil		Capacity	XPS SYNTHETIC GEAR OIL (75W 140) (P/N 293 600 140) or a 75W 140 API GL-5 synthetic gear oil
		Recommended	350 ml (11.8 U.S. oz)
Rear drive			Shaft driven/spool
Rear drive ratio			3.6:1
CV joint grease			CV GREASE (P/N 293 550 019)
Propeller shaft grease			XPS SYNTHETIC GREASE (P/N 293 550 010)

MODEL		OUTLANDER 800R X mr
STEERING		
Turning radius		2 715 mm (107 in)
Total toe (vehicle on ground)		0 mm ± 4 mm (0 in ± .157 in)
Camber angle		1°
SUSPENSION		
FRONT		
Suspension type		Double A-Arm Air Controlled Suspension (ACS)
Suspension travel		131 mm (5.2 in)
Shock absorber	Qty	2
REAR		
Suspension type		TTI™ independent Air Controlled Suspension (ACS)
Suspension travel		205.7 mm (8.1 in)
Shock absorber	Qty	2
BRAKES		
Front brake	Type	Hydraulic, 2 discs
Rear brake	Type	Hydraulic, single disc
Brake fluid	Capacity	250 ml (8.5 U.S. oz)
	Type	DOT 4
Parking brake		LH brake lever includes a lock
Caliper		Floating
Brake pad material	Front	Organic
	Rear	Metallic
Minimum bake pad thickness		1 mm (.039 in)
Minimum brake disc thickness	Front	3.5 mm (.138 in)
	Rear	4.3 mm (.169 in)
Maximum brake disc warpage		0.2 mm (.008 in)
TIRES AND WHEELS		
TIRES		
Pressure	Front	Maximum: 48 kPa (7 PSI) Minimum: 41.5 kPa (6 PSI)
	Rear	Maximum: 48 kPa (7 PSI) Minimum: 41.5 kPa (6 PSI)
Minimum tire thread depth		12 mm (15/32 in)
Size	Front	AT 76.2 cm (30 in) X 22.9 cm (9 in) X 35.6 cm (14 in)
	Rear	AT 76.2 cm (30 in) X 22.9 cm (9 in) X 35.6 cm (14 in)
WHEELS		
Size	Front	35.6 cm (14 in) X 15.2 cm (6 in)
	Rear	35.6 cm (14 in) X 15.2 cm (6 in)
Wheel nuts torque		100 N•m ± 10 N•m (74 lbf•ft ± 7 lbf•ft)
Power Steering		Dual-mode dynamic power steering (DPS)

MODEL		OUTLANDER 800R X mr
DIMENSIONS		
Overall length		239 cm (94 in)
Overall width		127 cm (50 in)
Handlebar overall width		77.5 cm (30.5 in)
Overall height		119 cm (47 in)
Wheelbase		150 cm (59 in)
Wheel track	Front	102 cm (40.2 in)
	Rear	102 cm (40.2 in)
LOADING CAPACITY AND WEIGHT		
Weight distribution	Front/rear	53/47
Rear storage box		3.7 L (1 U.S. gal.)
Rack	Front	45 kg (99 lb) loaded on sides only to avoid obstruction to the radiator
	Rear	90 kg (200 lb)
Total vehicle load allowed (including driver, all other loads and added accessories)		235 kg (518 lb)
Gross vehicle weight rating		684 kg (1,508 lb)