**July 18, 2011** Subject: **Predelivery Inspection Can-Am™ ATV** No. **2012-4**

| YEAR | MODEL | MODEL NUMBER | SERIAL NUMBER |
|---|---|---|---|
| 2012 | 400 Series | | All |
| | Outlander™ | 5ACA, 5ACB, 5ACC | |
| | Outlander XT | 5BCA, 5BCB | |
| | Outlander MAX | 5CCA, 5CCB, 5CCC | |
| | Outlander MAX XT | 5DCA, 5DCB, 5DCC, 5DCD | |
| | 500 Series | | |
| | Outlander | 2TCB, 2TCC | |
| | Outlander XT | 2UCA, 2UCB, 2UCC, 2UCD, 2UCE | |
| | Outlander MAX | 2WCA | |
| | Outlander MAX XT | 2XCA, 2XCB, 2XCC, 2XCD, 2XCE | |
| | Renegade™ | 4ECB, 4ECC, 4ECD, 4ECE | |
| | 650 Series | | |
| | Outlander XT | 2PCA, 2PCB, 2PCC, 2PCD | |
| | Outlander MAX | 2RCA | |
| | Outlander MAX XT | 2SCA, 2SCB, 2SCC, 2SCD, 2SCE, 2SCF | |
| | Outlander MAX XT-P | 5HCA, 5HCB, 5HCC | |
| | 800R Series | | |
| | Outlander MAX | 2KCB | |
| | Outlander MAX LTD | 2MCA, 2MCE | |
| | Outlander MAX XT | 2LCB, 2LCC, 2LCD, 2LCE, 2LCF | |
| | Outlander MAX XT-P | 5FCB, 5FCC, 5FCD | |
| | Outlander X mr | 5SCA, 5SCB | |

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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, pre delivery 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 pre delivery 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*, *PRE DELIVERY CHECK LIST* signed copy and *SAFETY DVD*.

**⚠ WARNING**

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

# UPDATE SUMMARY

This summary highlights updates to the Predelivery Inspection for MY2012. It does not supersede procedures detailed further in this publication.

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

| APPLICABLE TO | UPDATE DESCRIPTION | REFERENCE |
|---|---|---|
| All Models | Uncrating procedure modified – new procedure to attach the vehicle inside the crate. **Read the procedure carefully before proceeding.** | Uncrating – Vehicle Removal from Crate |
| Outlander 800R X mr | All required information to perform the predelivery inspection on this model. | Parts to be installed<br>– Battery<br>– Dash Board<br>– Radiator Support Cap<br>– Wind Deflectors<br>– Mudguards<br>Fluids<br>– Coolant Level<br>– Brake Fluid Level<br>Set-up<br>– Tire Pressure<br>– Air Controlled Suspension (ACS) |

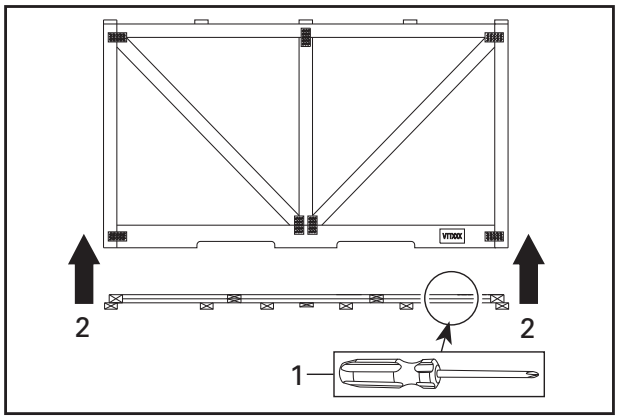
# UNCRATING

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. Remove all screws retaining crate cover to crate base. Screws that are used are Robertson† #2 (square type) that require the use of an appropriate screwdriver.
3. Assisted by another person, lift up crate cover.
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. Cut straps compressing the four shock absorbers.

**⚠ CAUTION** Shock absorber straps MUST BE CUT FIRST to avoid potential injury during vehicle straps cutting.

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

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

7. Remove protective wrapping from the vehicle.

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

8. Remove boxes, parts and equipments from crate base.
9. Carefully move vehicle out of the crate base. DO NOT apply brakes to stop the vehicle.

**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.

10. Ensure that the crate includes the following items:

*LTD Models*

| ITEM | DESCRIPTION | QTY |
|---|---|---|
| 1 | Handlebar guard with fasteners kit | 1 |
| 2 | Front bumper with fasteners kit | 1 |
| 3 | Winch kit (already installed on front bumper) | 1 |
| 4 | Mudguard kit | 1 |

*XT Models*

| ITEM | DESCRIPTION | QTY |
|---|---|---|
| 1 | Handlebar guard with fasteners kit | 1 |
| 2 | Front bumper with fasteners kit (1-UP models only) | 1 |
| 3 | Winch kit (already installed on front bumper) | 1 |

*MAX Models*

| ITEM | DESCRIPTION | QTY |
|---|---|---|
| 1 | Rear backrest | 1 |

*CE Models*

| ITEM | DESCRIPTION | QTY |
|---|---|---|
| 1 | Mirror | 2 |
| 2 | Locking device keys | 2 |
| 3 | Flag holder kit | 1 |

† Robertson is a registered trademark of Robertson Inc.

*X mr Models*

| 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

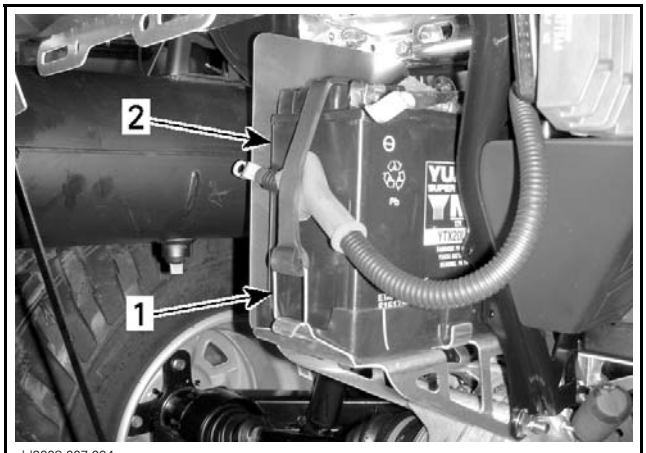
## Battery

### Battery Removal

**NOTICE** Never charge or boost battery while installed on vehicle.

*Outlander Models*

1. Unhook battery retaining strap.



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*1. Retaining strap*
*2. Battery*

2. Remove battery from vehicle.

*Renegade Models*

1. Unscrew battery retaining rod.


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*BATTERY RETAINING ROD*

2. Remove battery from vehicle.

### Battery Preparation

**Refer to the latest *CAN-AM ATV BATTERIES ACTIVATION, CHARGING AND MAINTENANCE BULLETIN* for proper activating, charging and maintenance procedure.**

### Battery Installation

1. Install charged battery on vehicle.

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

2. Properly route battery cables. Refer to *BATTERY CABLE ROUTING* below.

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

3. Apply DIELECTRIC GREASE (P/N 293 550 004) on battery posts.
4. Connect RED (+) cable to positive battery post.
5. Connect BLACK (–) cable to negative battery post.

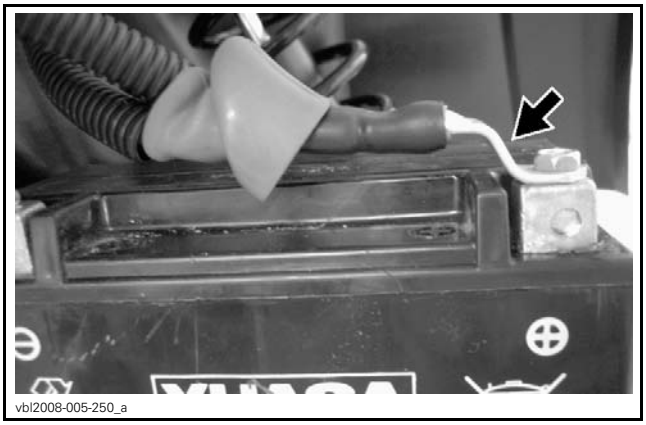
**NOTICE** Always connect RED (+) cable first and then BLACK (–) cable.

6. 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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*CORRECT WAY OF SECURING POSITIVE (+) POST*


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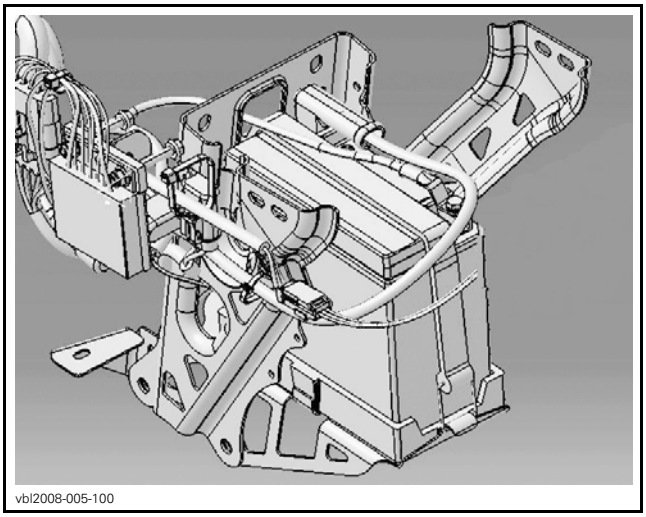
*WRONG WAY OF SECURING THE POSITIVE (+) POST*

2. Ensure that the cables is routed as per the following illustrations.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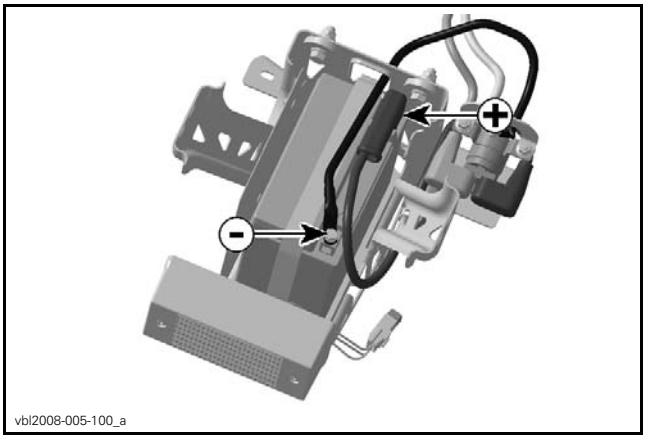
*OUTLANDER 400*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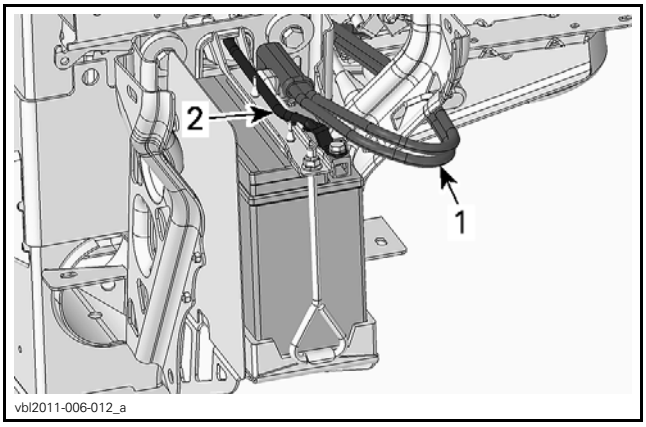
*OUTLANDER 500-650-800R (EXCEPT X MR)*



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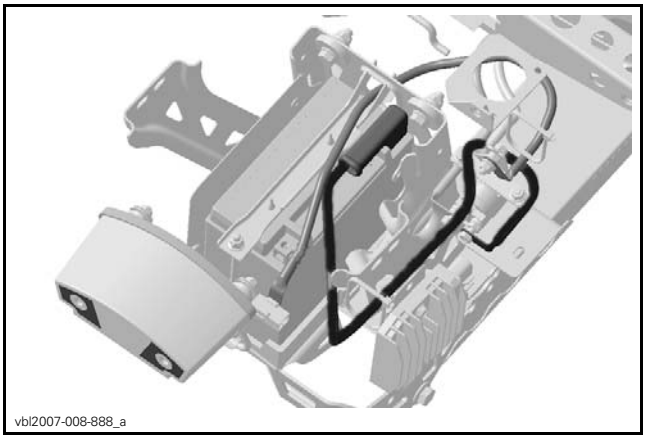
*OUTLANDER 800R X MR*
1. *RED (+) lead*
2. *BLACK (–) lead*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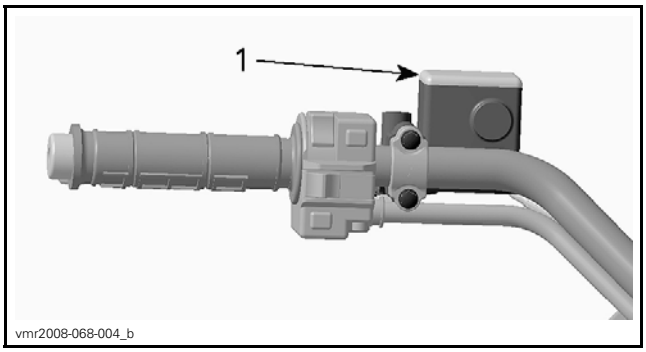
*RENEGADE 500*

## Handlebar

*All Models Except Outlander 400 series and 800R X mr*

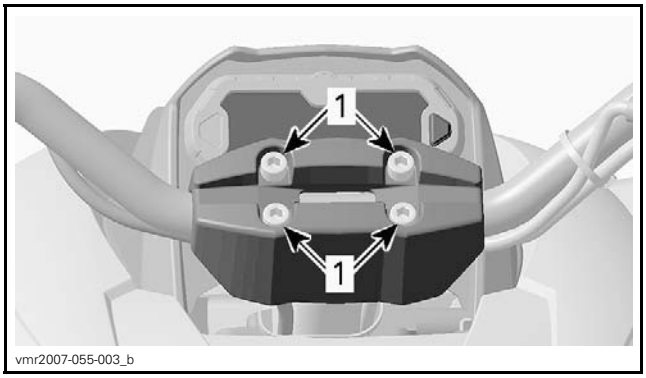
NOTE: Some air bubbles may be present in the brake lines due to the handlebar's disposition within the crate. Installing the handlebar as early as possible will allow the air bubbles to move from the brake lines to the master cylinder. The brake system does not need to be bled, the brake system pressurization will be completed further.

1. Place vehicle on a level surface.
2. Adjust both front wheels straight.
3. Carefully move handlebar upwards.
4. Adjust handlebar so the TOP of brake fluid reservoir (s) is (are) level with the ground.




*BRAKE FLUID RESERVOIR*
*1. Must be level*

5. Verify that handlebar is centered on vehicle (right/left).
6. Torque handlebar retaining screws to 31 N•m (23 lbf•ft).




*TYPICAL - RENEGADE MODEL SHOWN*
*1. Handlebar retaining screws*

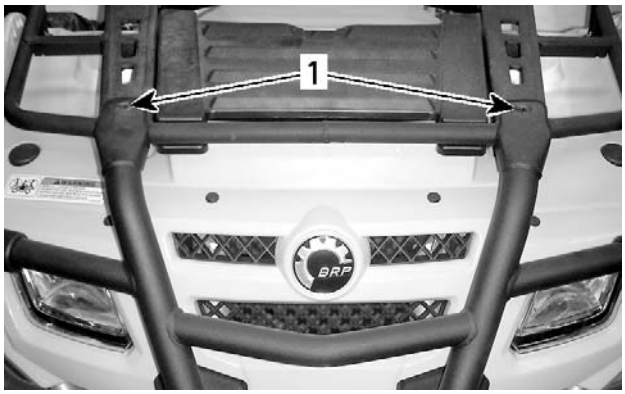
7. Reinstall handlebar cover (if applicable).
8. Confirm that handlebar is properly tightened and does not rotate.
9. Turn handlebar completely from one side to the other making sure it does not exert an unwanted tension on throttle cable, brake hoses, and other wires.

**⚠ WARNING**

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

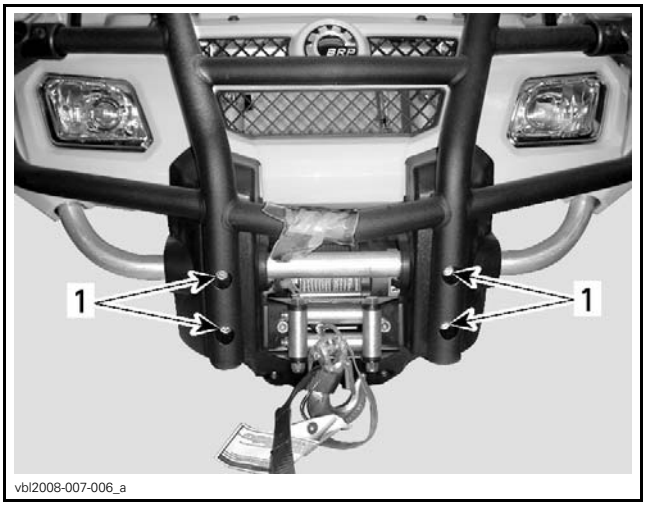
## Front Bumper (Outlander XT, 1-UP Models)

1. Install upper part of the bumper with:
   - 2x M8 x 25 Torx screws
   - 2x M8 flat washers
   - 2x M8 elastic flange nuts




*1. Upper retaining bolts*

2. Do not torque upper retaining M8 nuts yet.
3. Install lower part of the bumper with four M8 x 40 hexagonal flange screws.




*1. Lower retaining screws*

4. Secure upper retaining nuts to 11 N•m (97 lbf•**in**).
5. Secure lower retaining screws to 25 N•m (18 lbf•ft).

# Mirrors

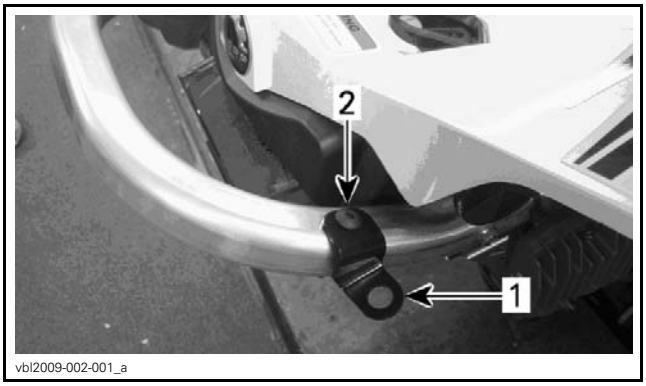
*CE Models*

1. Remove mirrors from the storage compartment.
2. Install mirrors on their supports.

# Flag Holder

*CE Models*

1. Position flag holder on vehicle rear support.
2. Install retaining bolt.
3. Tighten retaining nut.



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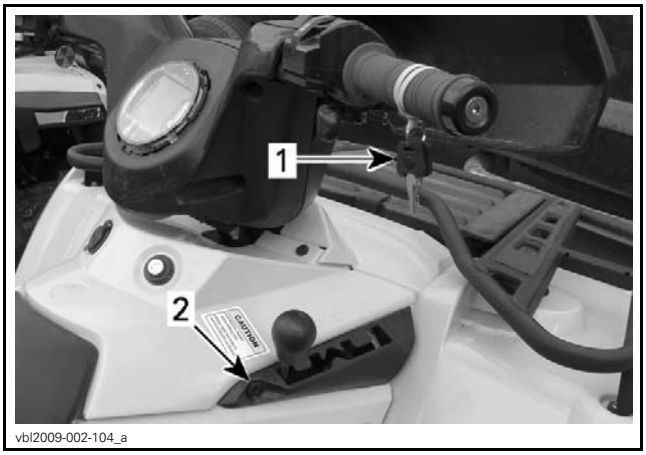
*TYPICAL*
1. *Flag holder*
2. *Retaining bolt*

# Locking Device

*CE Models*

For the European Community models a locking device is required to avoid vehicle from moving when needed. This locking device is located on the transmission lever. Refer to the following pictures.



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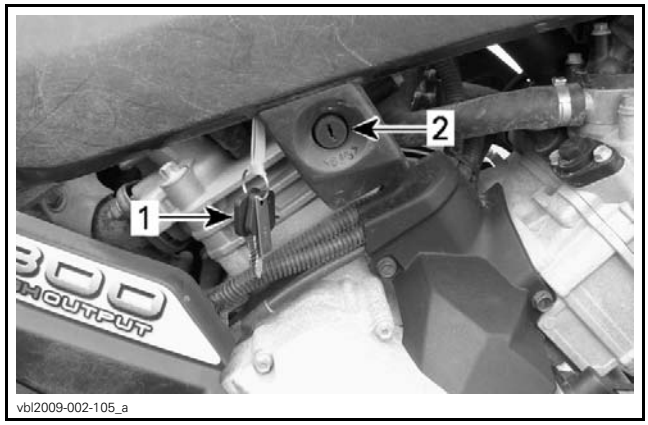
*OUTLANDER 400 SERIES*
1. *Keys*
2. *Locking device*



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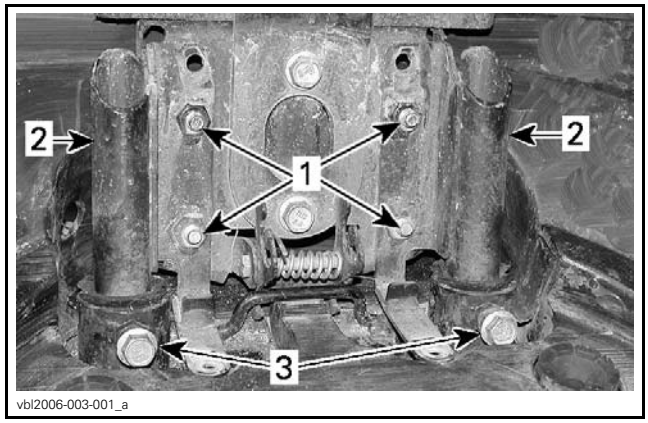
*OUTLANDER AND RENEGADE 500-650-800R SERIES*
1. *Keys*
2. *Locking device*

# Backrest

*Outlander MAX Models*

Install the backrest on passenger's seat as per the following steps :

1. Loosen bolts holding backrest plate to backrest support.
2. Install the backrest tubes into theirs locations in frame.
3. Install backrest tube bolts.
4. Do not torque bolts for the moment.



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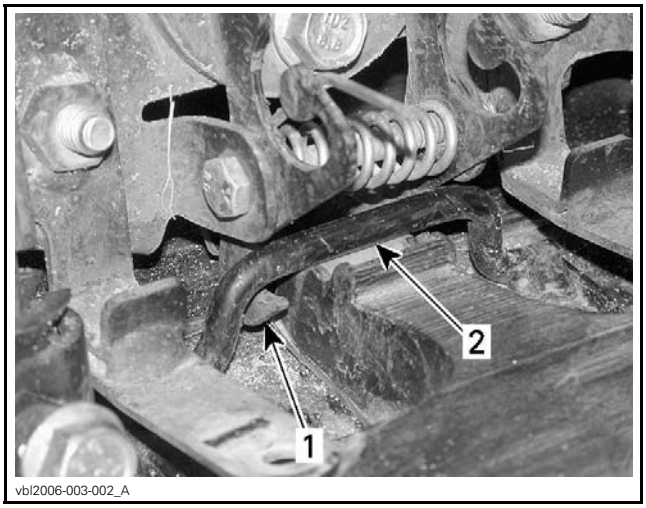
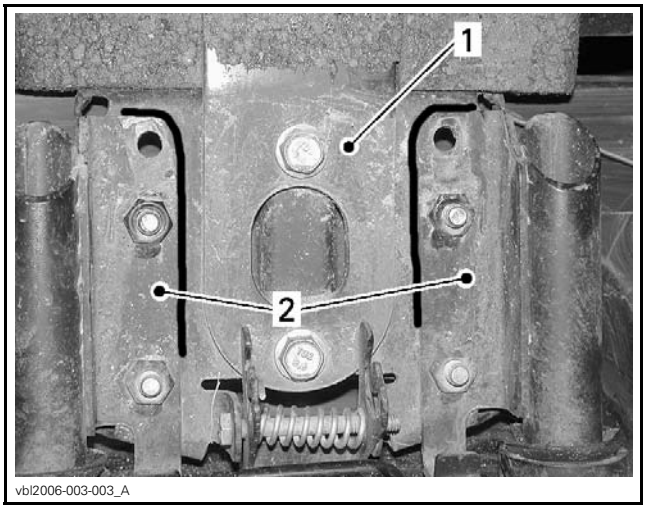
1. *Backrest holding bolts*
2. *Backrest tubes*
3. *Backrest tube bolts*

5. Check if the latch hooks are inserted under attachment rod.
6. Tighten backrest tube bolts to prevent back and forth movements.
7. Do not torque bolts for the moment.



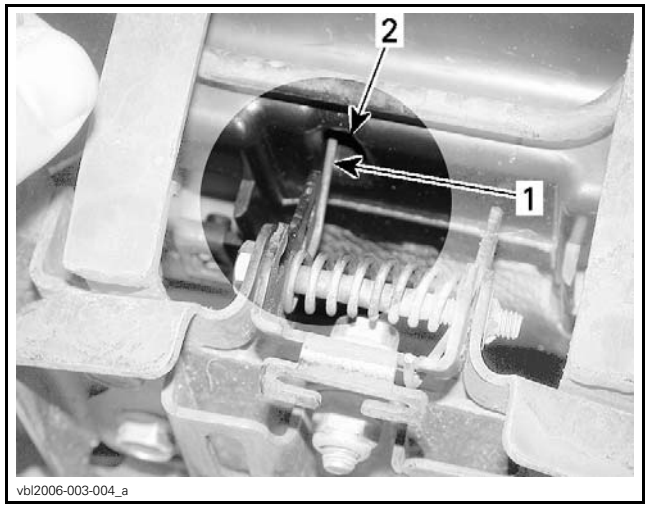

*1. Latch hooks*
*2. Attachment rod*

8. Mark the position of backrest plate on the backrest support using a marker.
9. Remove backrest from vehicle.
10. Align backrest support with the mark on backrest plate.
11. Torque bolts to 25 N•m (18 lbf•ft).




*1. Backrest plate*
*2. Backrest support*

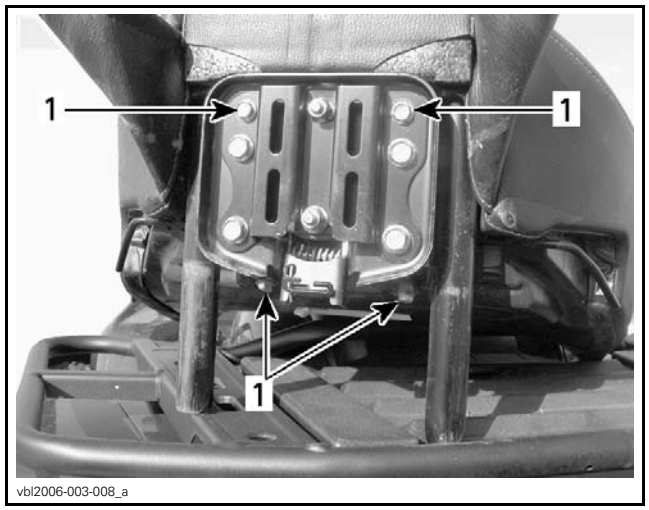
12. Place the long end of spring in the seat recess.
13. Position the seat release rod into the backrest latch slot.




*1. Long end of spring*
*2. Seat recess*

14. Secure backrest to passenger's seat.
15. Torque to 5 N•m (44 lbf•**in**).

NOTE: If required, you may add a very small amount of general purpose grease on the backrest tubes insertion plastic guides to ease tubes insertion.

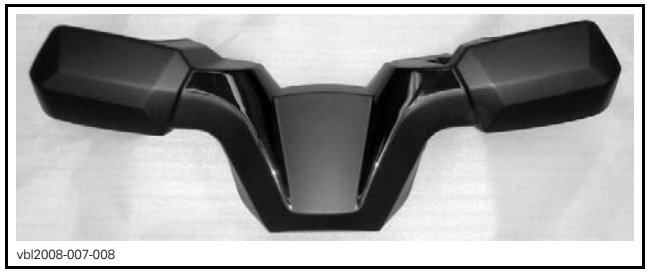



*1. Screw-in backrest*

## Handlebar Guard

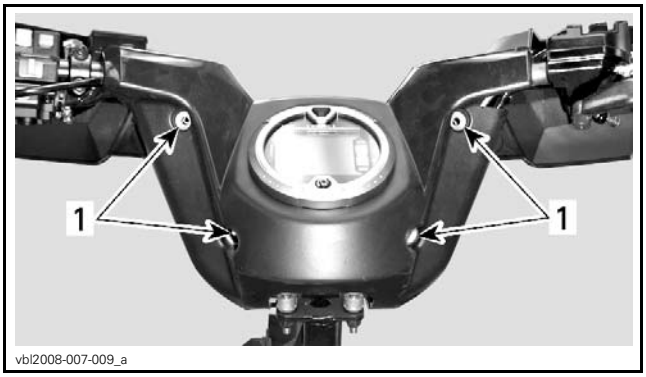
*XT Models from the 400 Series*

1. Remove handlebar guard from its box.




2. Install handlebar guard to the steering cover.

3. Secure handlebar guard using the 4 retaining screws.

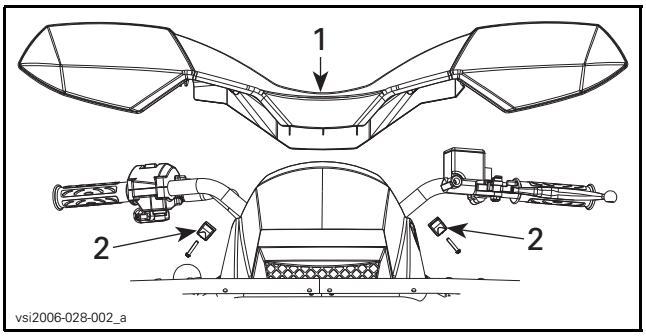



*1. Retaining screws location*

NOTE: The retaining screws are included in the handlebar guard box.

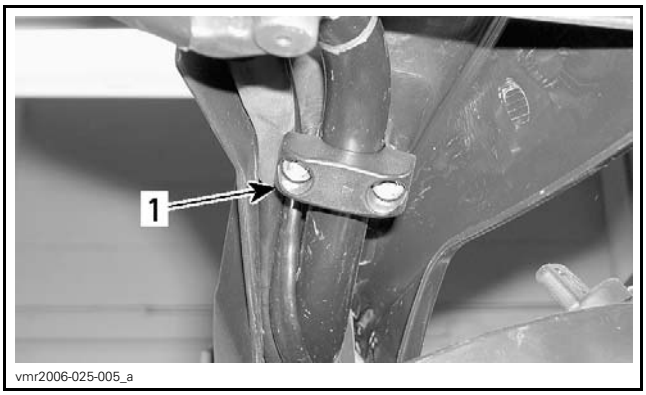
### *XT and LTD Models from 500/650/800R Series*

1. Remove handlebar guard from its box.
2. Install handlebar guard to the handlebar.




*1. Handlebar guard*
*2. U-clamps*

3. Install U-clamps with the arrows pointed toward the front of vehicle.
4. Secure handlebar guard using U-clamps and retaining screws.




*1. U-clamp*

NOTE: The U-clamps and retaining screws are included in the handlebar guard box.

## Dash Board

### *Outlander 800R X mr*

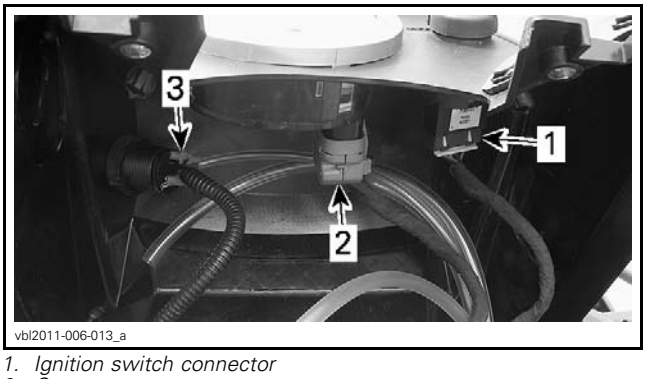
1. Remove the handlebar cover.


*1. Handlebar cover*

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

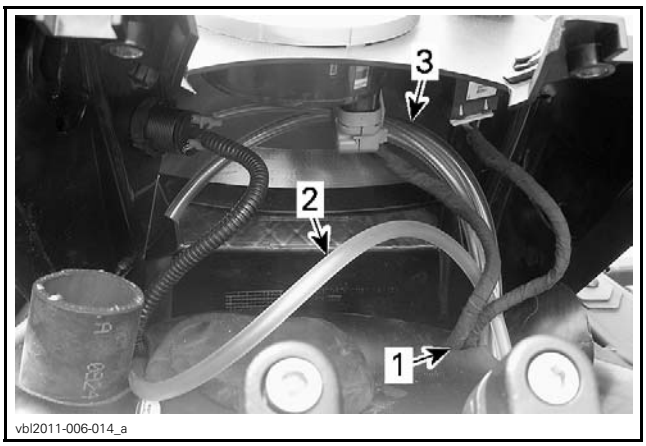

*1. Central panel*

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



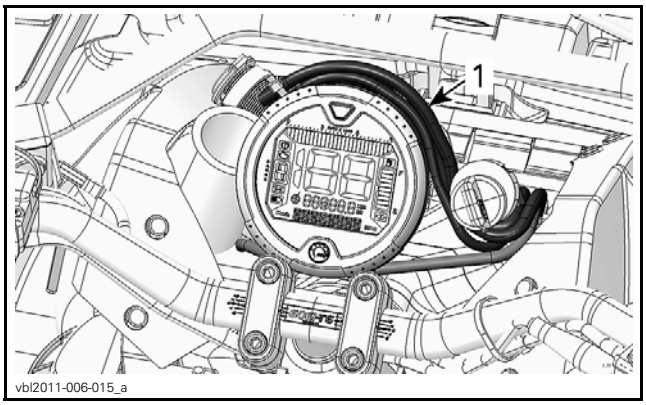

*1. Ignition switch connector*
*2. Gauge connector*
*3. 12-Volt power outlet connectors*

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.



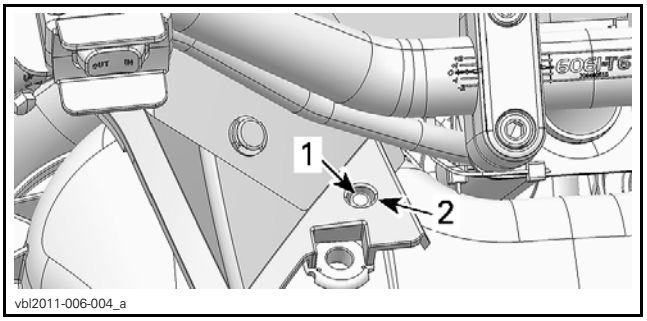

*1. Gauge and ignition switch harnesses into rubber deflector slot*
*2. Single hose routed around the air intake inlet*
*3. Vent hoses routed over gauge*

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




*1. Vent hoses attached together*

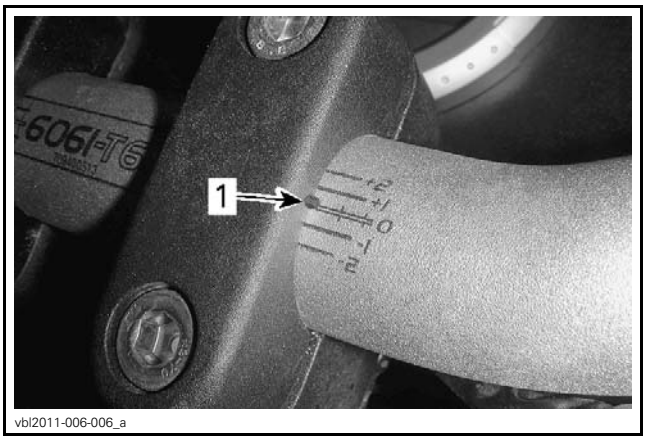
6. Install the dash board.
   6.1 Insert front fender tabs into dash board slots.
   6.2 Lower dash board slowly to avoid move vent hoses or wiring harnesses out of there required locations.
   6.3 Position dash board alignment holes over frame pins.




*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.




*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

*Outlander 800R X mr*

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**) |

## Wind Deflectors

*Outlander 800R X mr*

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

## Mudguard

*LTD and 800R X mr Models*

Install mudguard kit as per their installation instructions (included in 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

## 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 *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 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.

### 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

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

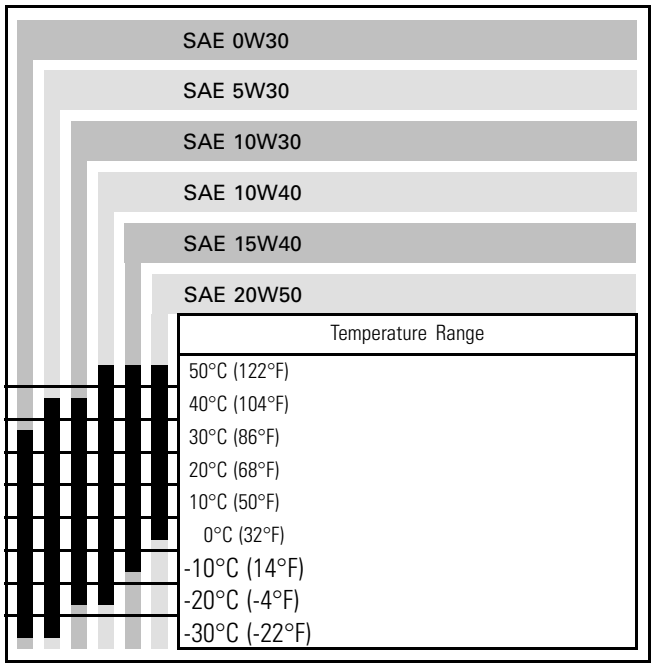
## Recommended Engine Oil

For the summer season, use XPS 4-STROKE BLEND OIL (SUMMER GRADE) (P/N 293 600 121).

For the winter season, use XPS 4-STROKE SYNTHETIC OIL (ALL CLIMATE) (P/N 293 600 112).

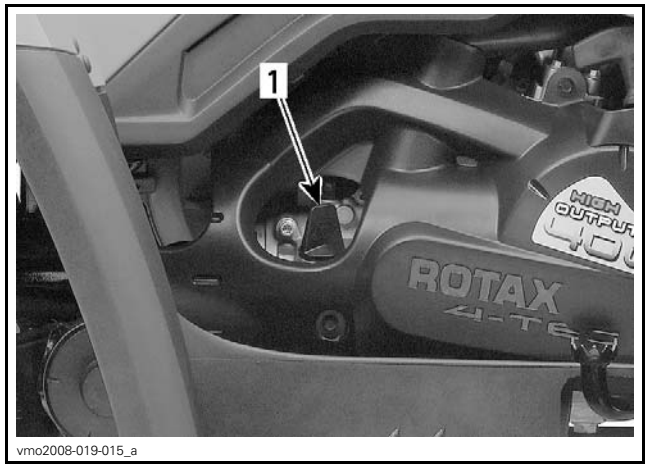
NOTE: The XPS oil is specially formulated and tested for the severe requirements of this engine.

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.



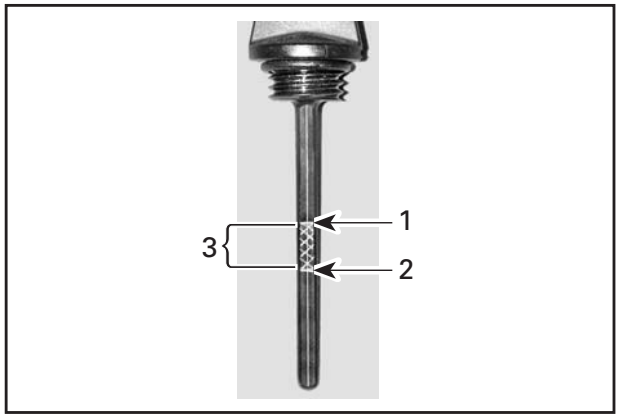

## Engine Oil Level Verification

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. Unscrew and remove the dipstick.
7. Check oil level as per the following illustration.




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

8. Ensure that oil level is between ADD and FULL marks.
9. If necessary, add recommended engine oil.
10. Reinstall and screw in the dipstick completely.

# Gearbox Oil

NOTE: For Outlander 400 series, the same oil lubricates both engine and transmission. Refer to *ENGINE OIL*.

## Recommended Gearbox Oil

### *All Models except Outlander 400 Series*

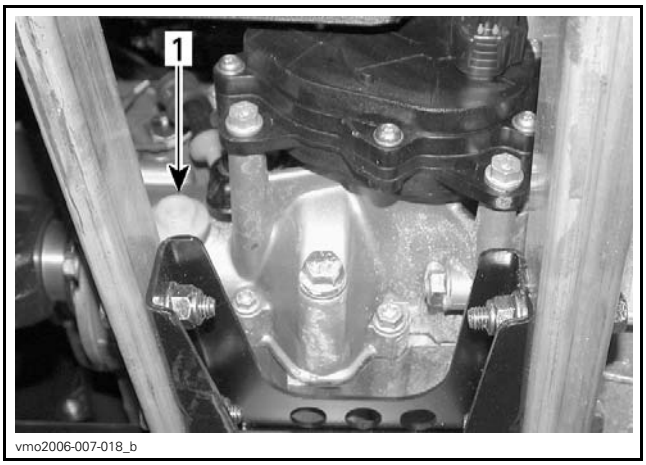
Use XPS CHAINCASE OIL (P/N 415 129 500).

**NOTICE** Do not use non recommended 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

**⚠ WARNING**

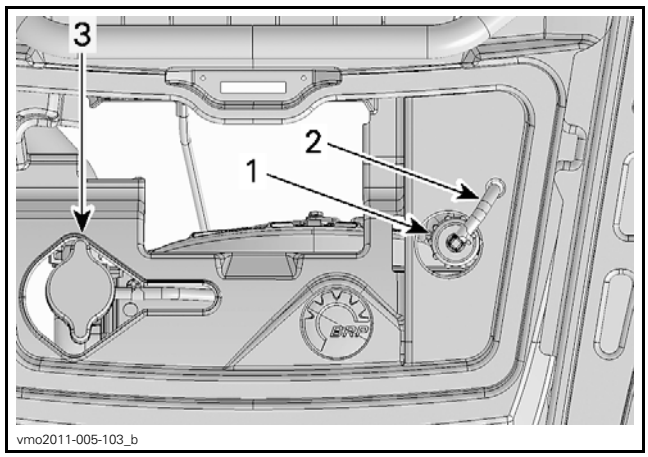
Check coolant level with engine cold. Never add coolant in cooling system when engine is hot.

**NOTICE** Do not overfill coolant reservoir.

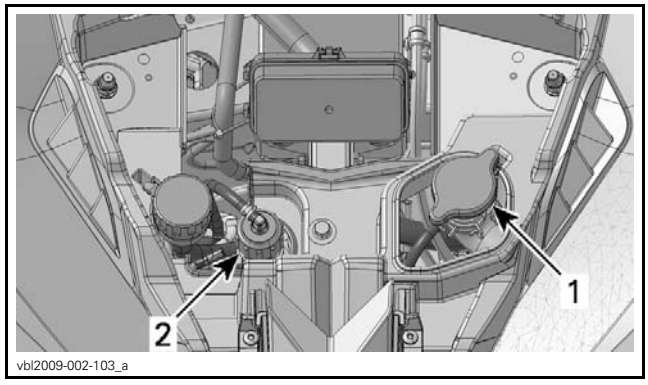
*All Models except Outlander 800R X mr*

1. Park vehicle straight on a level surface.
2. Remove front service compartment panel.
3. Check that radiator is filled with coolant by removing the radiator cap.
4. If necessary, add recommended coolant.
5. Reinstall radiator cap.

NOTE: For Outlander models, ensure coolant reservoir hose is properly routed as per the above illustration to avoid any interference, when closing cover, with the winch remote control.

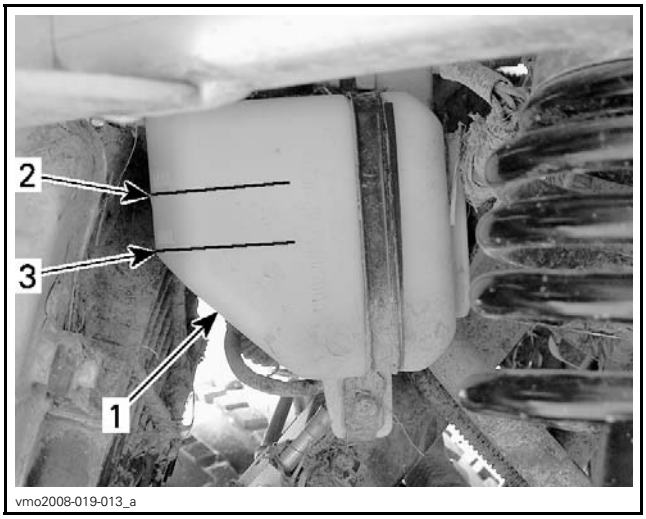



*OUTLANDER SERVICE COMPARTMENT*
*1. Coolant reservoir cap*
*2. Coolant reservoir hose*
*3. Radiator cap*




*RENEGADE SERVICE COMPARTMENT*
*1. Radiator cap*
*2. Coolant reservoir cap*

6. From underneath LH front fender, remove plastic cover.
7. Check the coolant reservoir level.
8. Ensure that fluid is between MIN. and MAX marks.




*TYPICAL - UNDERNEATH LH FRONT FENDER*
1. *Coolant reservoir*
2. *MAX. level mark*
3. *MIN. level mark*

9. If necessary, add recommended coolant.

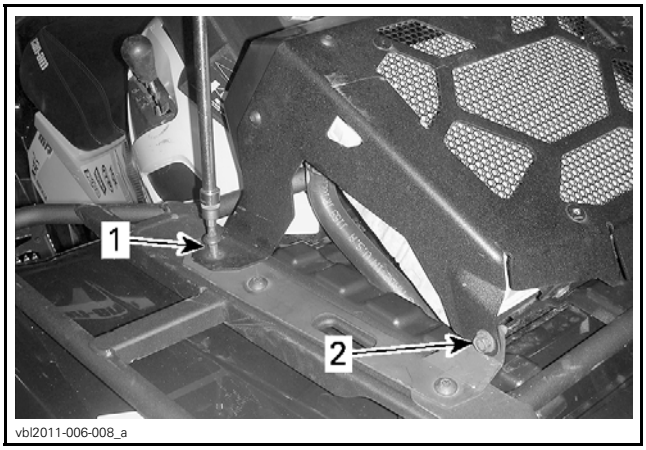
**NOTICE** Do not overfill coolant reservoir.

10. Reinstall plastic cover
11. Reinstall front service compartment panel.

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

### *Outlander 800R X mr*

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.

To add coolant, follows this procedure:

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.

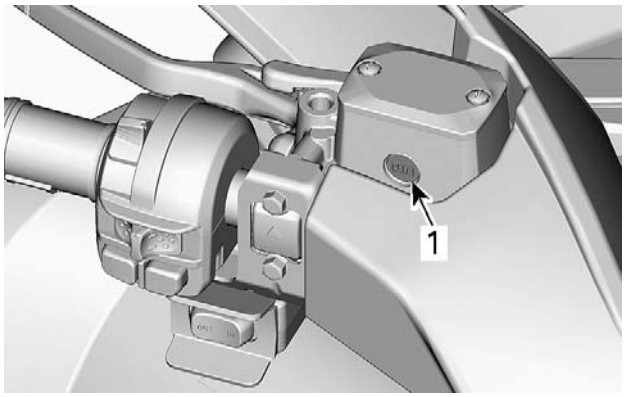
### Recommended Fluid

Always use brake fluid, from a sealed container, meeting the specification DOT 4 only such as the BRAKE FLUID (P/N 293 600 131).

**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.

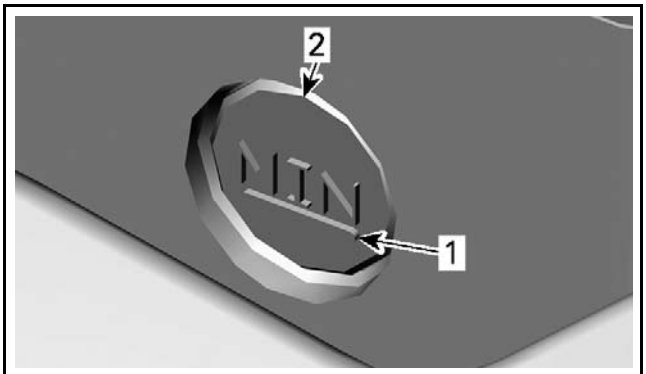
### Brake Lever Fluid Level Verification

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




*TYPICAL*

3. Check brake fluid level in reservoir.




*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.

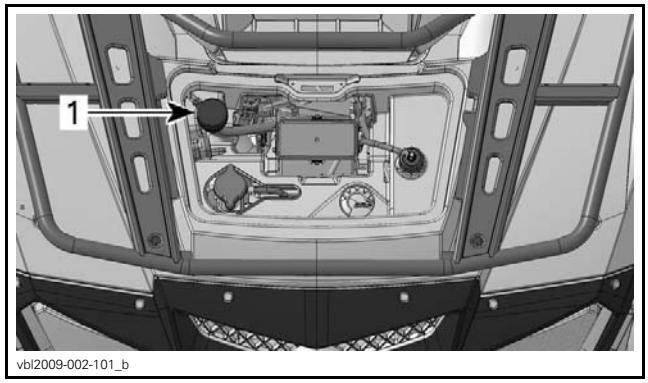
**NOTICE** Be careful not to damage the diaphragm while removing and installing handlebar reservoir caps.

## Brake Pedal Fluid Level Verification

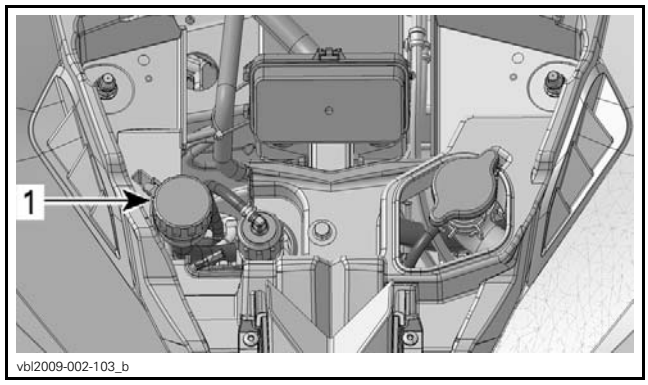
1. Park vehicle straight on a level surface.

### *All Models except Outlander 800R X mr*

2. Remove front service compartment panel.




*OUTLANDER SERVICE COMPARTMENT*
*1. Brake pedal reservoir*



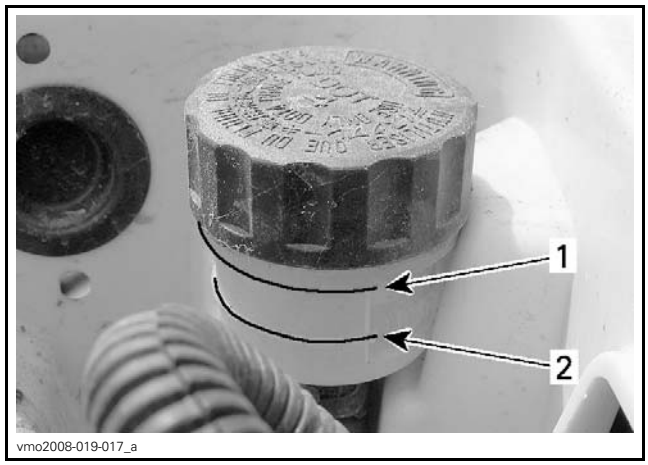

*RENEGADE SERVICE COMPARTMENT*
*1. Brake pedal reservoir*

### *Outlander 800R X mr*

3. Tilt the radiator forward.

### *All Models*

4. Check the brake fluid level.




*TYPICAL*
*1. MAX. mark*
*2. MIN. mark*

5. Ensure that fluid is between MIN. and MAX. marks.
6. If necessary, add recommended brake fluid.
7. Reinstall front service compartment panel.

*Outlander 800R X mr*

8. 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) |

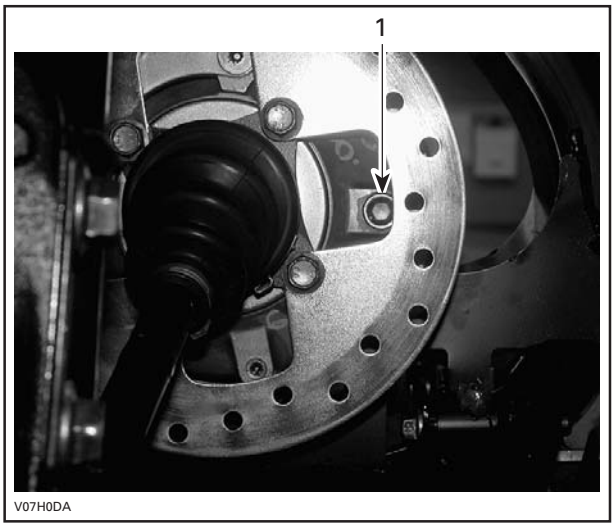
# Front Differential and Final Drive Oil

## Recommended Oil

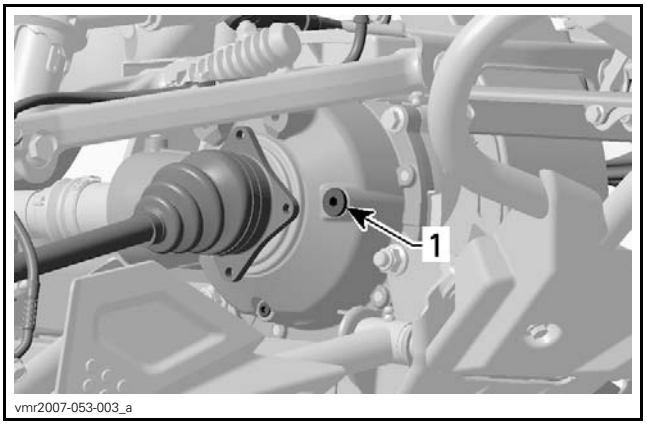
| PART | RECOMMENDED OIL | QTY |
|---|---|---|
| Front differential | XPS SYNTHETIC GEAR OIL (75W 90) (P/N 293 600 043) | 500 ml (16.91 U.S. oz) |
| Final drive | XPS SYNTHETIC GEAR OIL (75W 140) (P/N 293 600 140) | 300 ml (10.14 U.S. oz) |

## 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).




*OUTLANDER 650/800R SERIES*
*1. Filler plug*

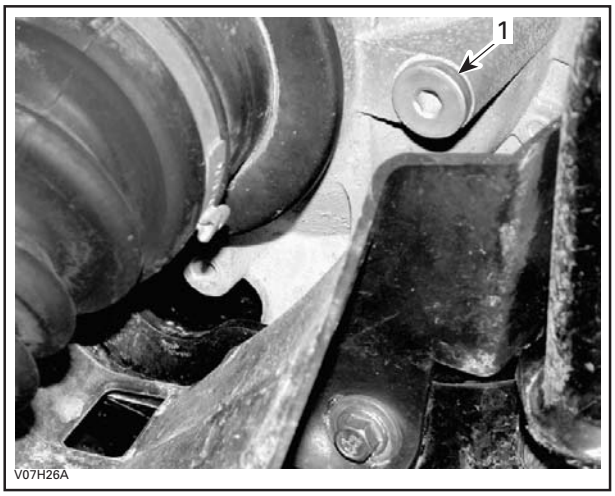



*OUTLANDER 400/500 AND RENEGADE SERIES*
*1. Filler plug*

## Final Drive Oil Level Verification

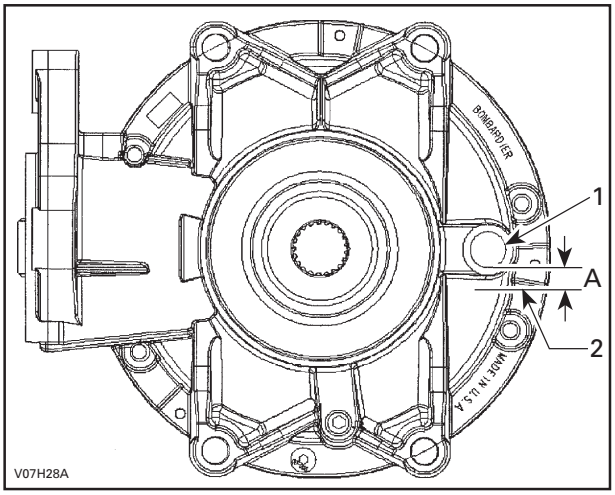
NOTE: The final drive oil is not level with the filler hole.

1. Park vehicle straight on a level surface.
2. Clean filler plug.
3. Remove filler plug.




*1. Filler plug*

4. Check 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.




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

6. If necessary, add recommended oil.
7. Install filler plug.

| TORQUE | |
|---|---|
| Filler plug | 22.5 N•m ± 2.5 N•m (17 lbf•ft ± 2 lbf•ft) |

# SET-UP

## Tires Pressure

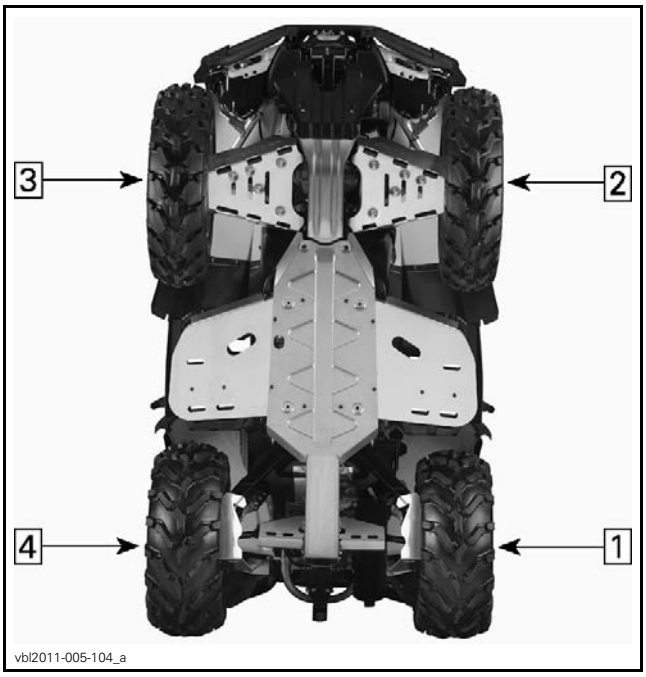
**NOTICE** Inflate tires at 200 kPa (30 PSI) THEN set tire to vehicle specification. This will ensure proper seating of the tire bead.

### Initial Inflating

1. Read and remove hang tag from tire valve.


*HANG TAG - TYPICAL (OUTLANDER SHOWN)*

2. Inflate tires at 200 kPa (30 PSI) according to the following sequence.




*TYPICAL (OUTLANDER SHOWN)*
*Step 1: Inflate LH rear tire*
*Step 2: Inflate LH front tire*
*Step 3: Inflate RH front tire*
*Step 4: Inflate RH rear tire*

3. Refer to *INFLATING TO SPECIFICATION* to complete inflating procedure.

### Inflating to Specification

Set tires to specification using the same sequence than the initial inflating, refer to the following table.

*All Models except Outlander 800R X mr*

| TIRE PRESSURE | FRONT | REAR |
|---|---|---|
| MAX | 48.3 kPa (7 PSI) | 48.3 kPa (7 PSI) |
| MIN | 34.5 kPa (5 PSI) | 34.5 kPa (5 PSI) |

*Outlander 800R X mr*

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

## Wheel Beadlock

### Wheel Beadlock Retorque

*XT-P Package*

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

1. Retorque all screws to 6 N•m (53 lbf•**in**) in a criss-cross sequence.
2. Tighten screws **a few turns at a time** to ensure even pressure on the beadlock clamp ring.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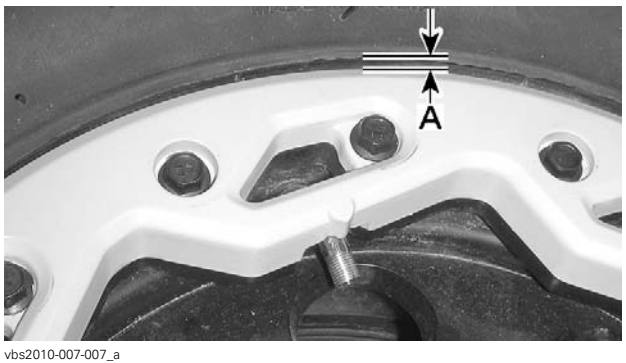
NOTE: It is normal that the beadlock clamp ring flexes slightly to match the tire bead.

### Wheel Beadlock Gap Verification

*XT-P Package*

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



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*A. Gap equal all around bead lock clamp ring*

Readjust if required.

## Brake Disk Cleanup

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

**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.

## Protective Materials

Ensure that all protective materials are removed from vehicle.

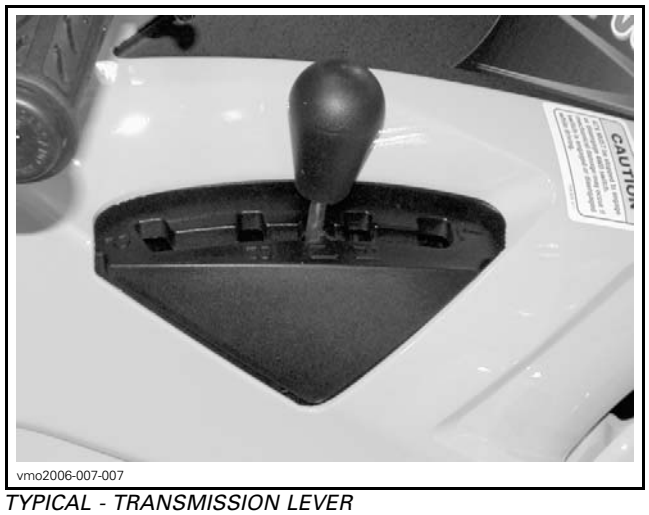
# ADJUSTMENTS

## 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*

## Suspension

*All Models except Outlander 800R X mr*

**⚠ WARNING**

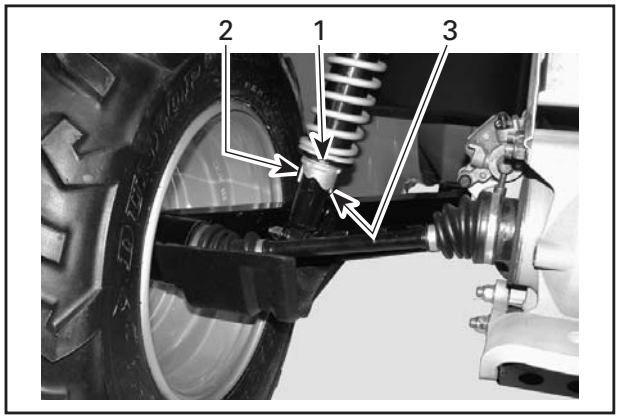
Left and right adjusting cams must always be set at the same position. Never adjust one adjusting cam only. Uneven adjustment can cause poor handling and loss of stability, which could lead to an accident.

NOTE: The front suspension of Outlander 400 series and Outlander 500 series are not adjustable.

### Front and Rear Suspension

1. Adjust the spring preload as per the owner's preference.
2. Refer to the following table for proper adjustment.

| ACTION | SPRING LENGTH | RIDE TYPE | ROAD CONDITION |
|---|---|---|---|
| Turn adjusting cam clockwise | Shorten the spring | Firmer ride | Rough road condition |
| Turn adjusting cam counterclockwise | Lengthen the spring | Softer ride | Smooth road condition |
| It is recommended to shorten the spring length when carrying cargo or pulling a trailer. | | | |




*TYPICAL*
1. *Adjusting cam*
2. *Lengthen the spring*
3. *Shorten the spring*

## Air Controlled Suspension (ACS) Adjustment

*Outlander 800R X mr*

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.

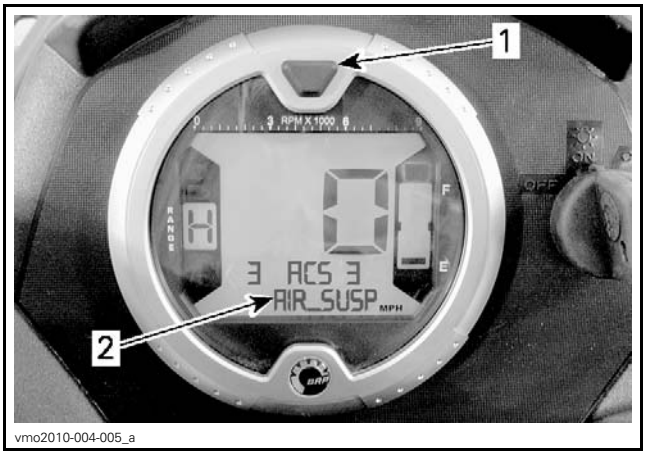
**⚠ WARNING**

**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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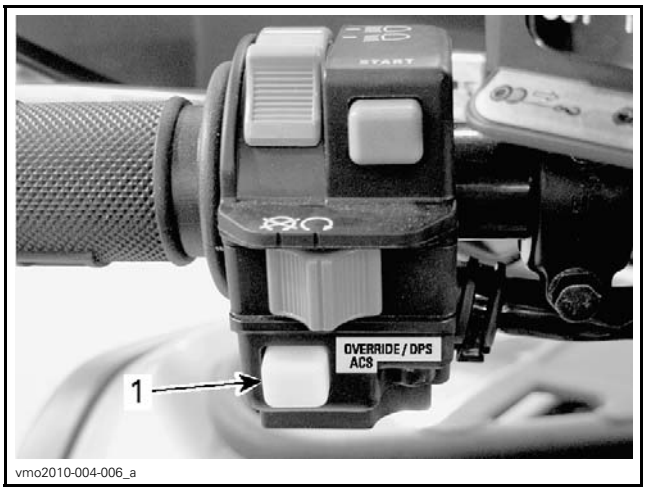
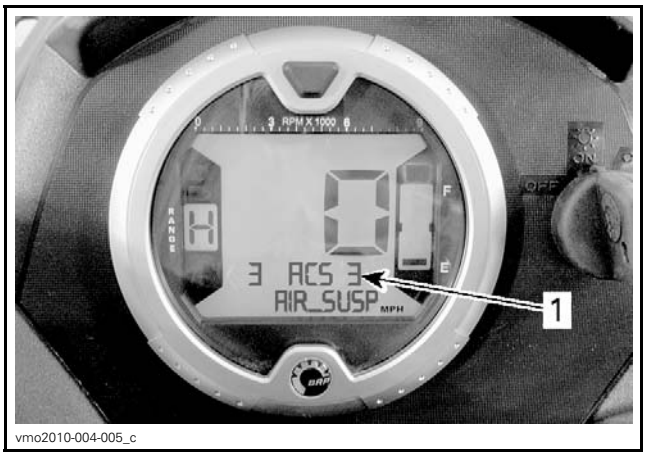
1. *Selector button*
2. **AIR_SUSP** *displayed*

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




*TYPICAL*
*1. Override/DPS/ACS button*




*1. Requested setting*

# Brake System Pressurization

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

# B.U.D.S. Programming

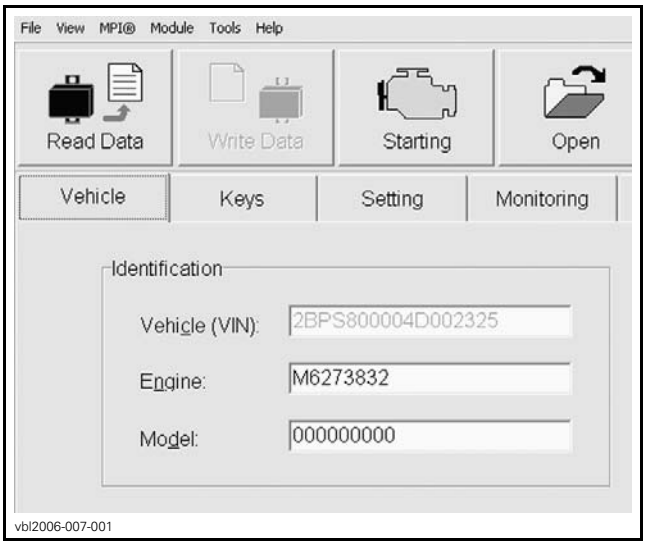
## Connecting a PC to Vehicle

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.
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*

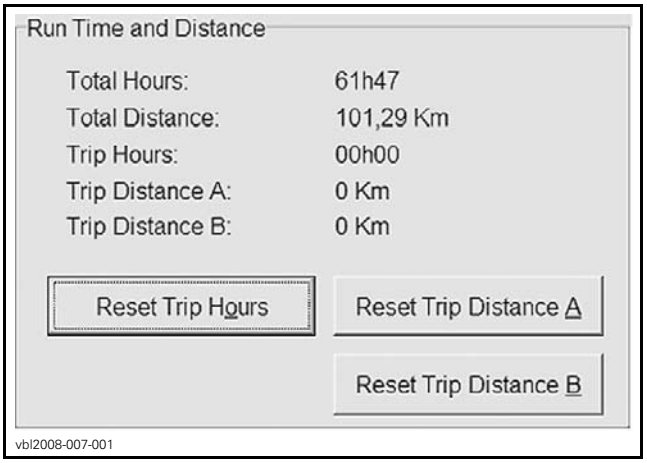
2. Type the name of the customer.


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.

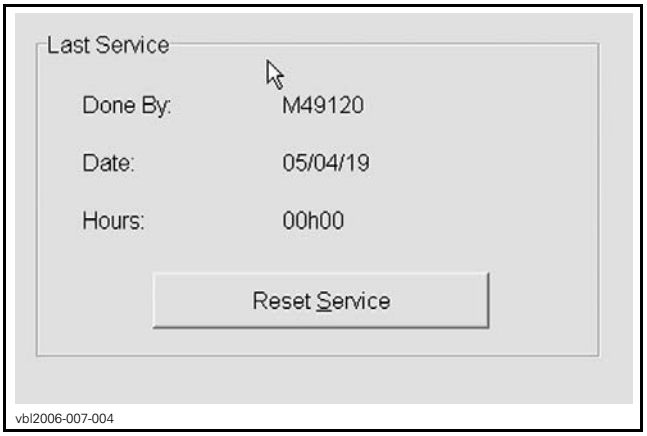



*RESET TRIP BUTTONS*

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.

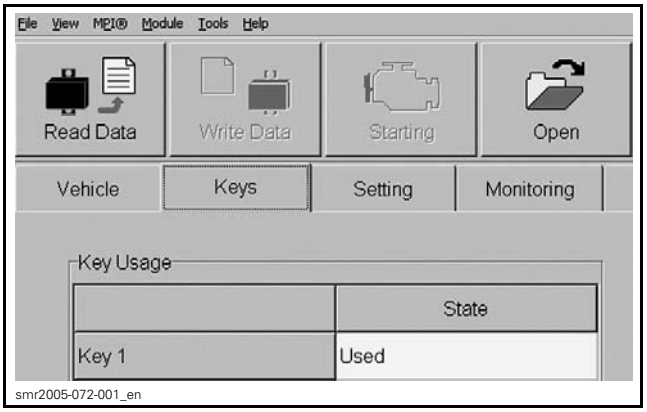



*RESET SERVICE BUTTON*

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.

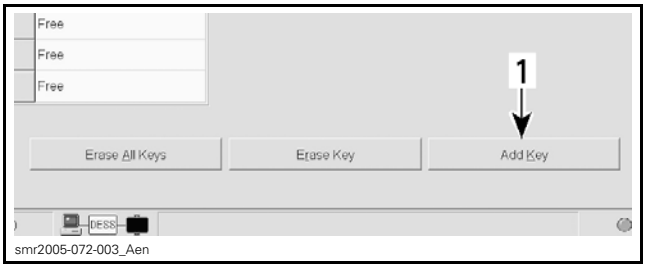



*KEYS TAB*

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.

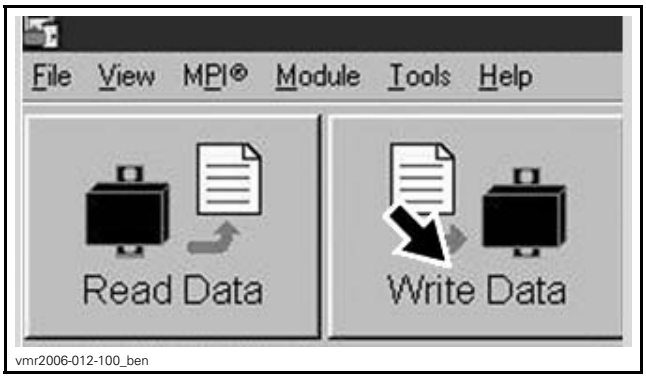
NOTE: No data will be lost when changing this setting.

## 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 lug 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

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.

2. 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 OFF-ROAD VEHICLE 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*.

The customer must removed any hang tag itself.

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 DATA

*Outlander 400 Series*

| MODEL | | | OUTLANDER 400 |
|---|---|---|---|
| ENGINE | | | |
| Engine type | | | ROTAX 400, 4-stroke, Single Over Head Camshaft (SOHC), liquid cooled |
| Number of cylinder | | | 1 |
| Number of valves | | | 4 valves (mechanical adjustment) |
| Bore | | | 91 mm (3.58 in) |
| Stroke | | | 61.5 mm (2.42 in) |
| Displacement | | | 400 $cm^3$ (24 $in^3$) |
| Compression ratio | | | 10.3:1 |
| Decompressor type | | | Automatic |
| Maximum HP RPM | | | 7500 RPM |
| Lubrication | Type | | Wet sump with replaceable oil filter |
| | Oil filter | | BRP ROTAX paper type, replaceable |
| | Engine oil | Capacity (oil change with filter) | 3 L (3.2 qt (U.S. liq.)) (engine/transmission) |
| | | Recommended | For the summer season, use XPS 4-STROKE BLEND OIL (SUMMER GRADE) (P/N 293 600 121) For the winter season, use XPS 4-STROKE SYNTHETIC OIL (ALL CLIMATE) (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 |
| GEARBOX | | | |
| Type | | | Dual range (HI-LO) with park, neutral and reverse |
| COOLING SYSTEM | | | |
| 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 | | | 400 W |
| Ignition system type | | | CDI (Capacity Discharge ignition) |
| Ignition timing | | | Not adjustable |
| Spark plug | | Quantity | 1 |
| | | Make and type | NGK DCPR8E |
| | | Gap | 0.7 mm to 0.8 mm (.028 in to .031 in) |
| Engine RPM limiter setting | | Forward | 8000 RPM |
| | | Reverse | 4000 ± 100 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/Brake light | | | 8/27 W |

| MODEL | | | | OUTLANDER 400 |
|---|---|---|---|---|
| ELECTRICAL SYSTEM (cont'd) | | | | |
| Fuses | Front fuse box | Accessories | Aux. supply | 20 A |
| | | | Diagnostic | |
| | | | Headlight | |
| | | | Power outlet | |
| | | | Winch (XT) | |
| | | | 4 x 4 | |
| | | ECM | | 5 A and 7.5 A |
| | | Fuel pump | | 7.5 A |
| | | Gauge | | |
| | | Taillight | | |
| | | Diagnostic | | |
| | | Fan | | 20 A |
| Fuses | Rear fuse holder | Main | | 30 A |
| | | Accessories | Fan | 30 A |
| | | | Acc. items in fuse box | |
| FUEL SYSTEM | | | | |
| Fuel delivery | | Type | | Electronic Fuel Injection (EFI), Dell'Orto 46 mm throttle body |
| Fuel pump | | Type | | Bosch |
| | | Model | | Electrical (in fuel tank) |
| Idle speed | | | | 1300 ± 50 RPM |
| Fuel | Type | | | Unleaded gasoline |
| | Minimum octane | 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.) |
| Fuel tank reserve | | | | ± 2 L (.5 U.S. gal.) |
| DRIVE SYSTEM | | | | |
| Drive system type | | | | Selectable 2WD/4WD |
| Front differential | | Recommended oil | | XPS SYNTHETIC GEAR OIL (75W 90) (P/N 293 600 043) |
| | | Oil capacity | | 500 ml (17 U.S. oz) |
| | | Type | | Shaft driven/auto-lock differential (Visco-Lok) |
| | | Front drive ratio | | 3.6:1 |
| Final drive | | Recommended oil | | XPS SYNTHETIC GEAR OIL (75W 140) (P/N 293 600 140) |
| | | Oil capacity | | 300 ml (10.1 U.S. oz) |
| | | Type | | Shaft driven/locked differential |
| | | Final 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) |
| TRANSMISSION | | | | |
| Type | | | | CVT (Continuously Variable Transmission) |
| Engagement RPM | | | | 2000 ± 100 RPM |

| MODEL | | | | OUTLANDER 400 |
|---|---|---|---|---|
| STEERING SYSTEM | | | | |
| Turning radius | | 1-UP | | 1.8 m (5.9 ft) |
| | | 2-UP | | 2 m (6.6 ft) |
| Total toe (vehicle on ground) | | | | 0 mm ± 4 mm (0 in ± .157 in) |
| FRONT SUSPENSION | | | | |
| Suspension type | | | | MacPherson |
| Suspension travel | | | | 178 mm (7 in) |
| Preload adjustment | | | | N.A. |
| REAR SUSPENSION | | | | |
| Suspension type | | | | TTI™ independent |
| Suspension travel | | | | 203 mm (8 in) |
| Shock absorber | | Qty | | 2 |
| | | Type | | Oil |
| Preload adjustment | | | | 5 settings |
| BRAKES | | | | |
| Front brake | | Type | | Hydraulic, 2 discs |
| Rear brake | | Type | | Hydraulic, single disc |
| Brake fluid | | Capacity | | 180 ml (6.1 U.S. oz) |
| | | Type | | DOT 4 |
| Parking brake | | | | Hydraulic lock-4 wheels |
| Brake pad material | | Front | | Organic |
| | | Rear | | Metallic |
| Minimum 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 | | | | |
| Pressure | 1-UP Models | Front | Max. | 48 kPa (7 PSI) |
| | | | Min. | 34.5 kPa (5 PSI) |
| | | Rear | Max. | 48 kPa (7 PSI) |
| | | | Min. | 34.5 kPa (5 PSI) |
| | 2-UP Models | Front | Max. | 48 kPa (7 PSI) |
| | | | Min. | 34.5 kPa (5 PSI) |
| | | Rear | Max. | 48 kPa (7 PSI) |
| | | | Min. | 34.5 kPa (5 PSI) |
| Minimum tire thread depth | | | | 3 mm (.118 in) |
| Size | | Front | | 25 x 8 x 12 (in) |
| | | Rear | | 25 x 10 x 12 (in)<br>XT: 25 x 11 x 12 (in) |

| MODEL | | OUTLANDER 400 |
|---|---|---|
| WHEELS | | |
| Size | Front | 12 x 6 (in) |
| | Rear | 12 x 7.5 (in) |
| Wheel nuts torque | Steel Wheel | 70 N•m (52 lbf•ft) |
| | Aluminum Wheel | 100 N•m (74 lbf•ft) |
| DIMENSIONS | | |
| Overall length | 1-UP | 218 cm (86 in) |
| | 2-UP | 239 cm (94 in) |
| Overall width | | 117 cm (46 in) |
| Overall height | | 114 cm (45 in) |
| Wheelbase | 1-UP | 124 cm (49 in) |
| | 2-UP | 145 cm (57 in) |
| Wheel track | Front | 96.5 cm (38 in) |
| | Rear | 91.4 cm (36 in) |
| Ground clearance | | 23.6 cm (9 in) |
| WEIGHT AND LOADING CAPACITY | | |
| Dry weight | 1-UP | 286 kg (630 lb) |
| | 2-UP | 308 kg (680 lb) |
| Weight distribution | Front/rear | 1-UP: 49/51<br>2-UP: 46/54 |
| Rear storage box (included with rear rack weight) | | 10 kg (22 lb) |
| Rack | Front | 45 kg (99 lb) |
| | Rear (including rear storage box and tongue weight) | 90 kg (198 lb) |
| Total vehicle load allowed (including driver, all other loads and added accessories) | 1-UP | 227 kg (500 lb) |
| | 2-UP | 235 kg (518 lb) |
| Gross vehicle weight rating | 1-UP | 460 kg (1,014 lb) |
| | 2-UP | 554 kg (1,221 lb) |
| Towing capacity | | 500 kg (1,102 lb) |
| Tongue capacity (included with rear rack weight) | | 14 kg (31 lb) |

*Outlander 500/500 XT*

| MODEL | | | OUTLANDER 500 |
|---|---|---|---|
| ENGINE | | | |
| Engine type | | | ROTAX V490 |
| | | | 4-stroke, Single Over Head Camshaft (SOHC), liquid cooled |
| Number of cylinders | | | 2 |
| Number of valves | | | 8 valves (mechanical adjustment) |
| Bore | | | 82 mm (3.23 in) |
| Stroke | | | 47.3 mm (1.86 in) |
| Displacement | | | 499.6 $cm^3$ (30.5 $in^3$) |
| Compression ratio | | | 10.7:1 |
| Maximum HP | | | 7400 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 4-STROKE BLEND OIL (SUMMER GRADE) (P/N 293 600 121) For the winter season, use XPS 4-STROKE SYNTHETIC OIL (ALL CLIMATE) (P/N 293 600 112) see *ENGINE OIL VISCOSITY CHART* |
| Exhaust system | | | Spark arrestor approved by USDA Forest Service |
| Air filter | | | Synthetic paper filter with foam |
| COOLING SYSTEM | | | |
| Coolant | | Type | Ethyl glycol/water mix (50% coolant, 50% water). Use premixed coolant sold by BRP (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 (without DPS) | | | 400 W |
| Magneto generator output (with DPS) | | | 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 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 |

| MODEL | | | OUTLANDER 500 |
|---|---|---|---|
| ELECTRICAL SYSTEM (cont'd) | | | |
| Taillight | | | 7/29 W |
| Indicator lamps | | | LEDS, 0.7 V approximately (each) |
| 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 |
| | | Air controlled suspension (ACS) (if applicable) | 20 A |
| | Rear fuse holder | Main | 30 A |
| | | Fan/Accessories | 30 A |
| | | Dynamic power steering (DPS) (if applicable) | 40 A |
| FUEL SYSTEM | | | |
| Fuel delivery | | Type | Electronic Fuel Injection (EFI), Dell'Orto 46 mm throttle body, 1 injector per cylinder |
| Fuel pump | | Type | Electrical (in fuel tank) |
| | | Model | Bosch |
| Idle speed | | | 1250 ± 50 RPM (not adjustable) |
| Fuel | Type | | Regular unleaded gasoline |
| | Octane no. | Inside North America | 87 ((R+M)/2) or higher |
| | | Outside North America | 92 RON or higher |
| Fuel tank capacity | | | 16.3 L (4.3 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 | | | 1750 ± 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 | | | |
| Drive system type | | | Selectable 2WD/4WD |
| Front differential | | Recommended oil | XPS SYNTHETIC GEAR OIL (75W 90) (P/N 293 600 043) or 75W 90 API GL5 synthetic oil |
| | | Oil capacity | 500 ml (17 U.S. oz) |
| | | Type | Visco-lok† front differential |
| | | Front drive ratio | 3.6:1 |

| MODEL | | | OUTLANDER 500 |
|---|---|---|---|
| DRIVE SYSTEM (cont'd) | | | |
| Final drive | | Recommended oil | XPS SYNTHETIC GEAR OIL (75W 140) (P/N 293 600 140) or 75W 140 API GL5 synthetic oil |
| | | Oil capacity | 300 ml (10.1 U.S. oz) |
| | | Type | Shaft driven/locked differential |
| | | Final 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) |
| STEERING SYSTEM | | | |
| Turning radius | | | 2.1 m (7 ft) |
| Total toe (vehicle on ground) | | | 0 mm (0 in) |
| FRONT SUSPENSION | | | |
| Suspension type | | | MacPherson |
| Suspension travel | | | 178 mm (7 in) |
| Shock absorber | | Qty | 2 |
| | | Type | Oil |
| Front preload adjustment | | | — |
| REAR SUSPENSION | | | |
| Suspension type | | | TTI™ independent |
| Suspension travel | | | 229 mm (9 in) |
| Shock absorber | | Qty | 2 |
| | | Type | Oil |
| Rear preload adjustment | | | 5 settings |
| BRAKES | | | |
| Front brake | | Type | Hydraulic, 2 discs |
| Rear brake | | Type | Hydraulic, single disc |
| Brake fluid | | Capacity | 180 ml (6 U.S. oz) |
| | | Type | DOT 4 |
| Parking brake | | | Hydraulic lock-4 wheels |
| Caliper | | | Floating |
| Brake pad material | | Front | Organic |
| | | Rear | Metallic |
| Minimum brake 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 | | | |
| Pressure | Front | Maximum | 48.3 kPa (7 PSI) |
| | | Minimum | 34.5 kPa (5 PSI) |
| | Rear | Maximum | 48.3 kPa (7 PSI) |
| | | Minimum | 34.5 kPa (5 PSI) |
| Minimum tire thread depth | | | 3 mm (.118 in) |
| Size | | Front | 25 x 8 x 12 |
| | | Rear | 25 x 11 x 12 |

| MODEL | | OUTLANDER 500 |
|---|---|---|
| WHEELS | | |
| Size | Front | 12 x 6 (in) |
| | Rear | 12 x 7.5 (in) |
| Wheel nuts torque | Steel Wheel | 70 N•m ± 7 N•m (52 lbf•ft ± 5 lbf•ft) |
| | Aluminum Wheel | 100 N•m ± 10 N•m (74 lbf•ft ± 7 lbf•ft) |
| DIMENSION | | |
| Overall length | | 218 cm (86 in) |
| Overall width | | 117 cm (46 in) |
| Overall height | | 114 cm (45 in) |
| Wheelbase | | 130 cm (51 in) |
| Wheel track | Front | 96.5 cm (38 in) |
| | Rear | 91.4 cm (36 in) |
| Ground clearance | | 27.9 cm (11 in) |
| LOADING CAPACITY AND WEIGHT | | |
| Weight | | 293 kg (646 lb) |
| Weight distribution | Front/rear | 51/49 |
| Rear storage box (included with rear rack weight) | | 10 kg (22 lb) |
| Rack | Front | 45 kg (99 lb) |
| | Rear (including rear storage box and tongue weight) | 90 kg (198 lb) |
| Total vehicle load allowed (including driver, all other loads and added accessories) | | 235 kg (518 lb) |
| Gross vehicle weight rating | | 553 kg (1,219 lb) |
| Towing capacity | | 591 kg (1,303 lb) |
| Tongue capacity (included with rear rack weight) | | 23 kg (51 lb) |

*Outlander MAX 500/650/800R Series*

| MODEL | | | OUTLANDER MAX 500 | OUTLANDER MAX 650 | OUTLANDER MAX 800R |
|---|---|---|---|---|---|
| ENGINE | | | | | |
| Engine type | | | ROTAX V490 | ROTAX V660 | ROTAX V810 |
| | | | 4-stroke, Single Over Head Camshaft (SOHC), liquid cooled | | |
| Number of cylinders | | | 2 | | |
| Number of valves | | | 8 valves (mechanical adjustment) | | |
| Bore | | | 82 mm (3.23 in) | | 91 mm (3.58 in) |
| Stroke | | | 47.3 mm (1.86 in) | 61.5 mm (2.42 in) | |
| Displacement | | | 499.6 cm³ (30.5 in³) | 649.6 cm³ (39.64 in³) | 799.9 cm³ (48.81 in³) |
| Compression ratio | | | 10.7:1 | 10.3:1 | |
| Maximum HP | | | 7400 RPM | 7700 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 4-STROKE BLEND OIL (SUMMER GRADE) (P/N 293 600 121) For the winter season, use XPS 4-STROKE SYNTHETIC OIL (ALL CLIMATE) (P/N 293 600 112) see *ENGINE OIL VISCOSITY CHART* | | |
| Exhaust system | | | Spark arrestor approved by USDA Forest Service | | |
| Air filter | | | Synthetic paper filter with foam | | |
| COOLING SYSTEM | | | | | |
| Coolant | | Type | Ethyl glycol/water mix (50% coolant, 50% water). Use premixed coolant sold by BRP (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 (without DPS) | | | 400 W | | |
| Magneto generator output (with DPS) | | | 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 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 MAX 500 | OUTLANDER MAX 650 | OUTLANDER MAX 800R |
|---|---|---|---|---|---|
| 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 | | |
| | | Air controlled suspension (ACS) (if applicable) | 20 A | | |
| | Rear fuse holder | Main | 30 A | | |
| | | Fan/Accessories | 30 A (40 A for LTD models) | | |
| | | Dynamic power steering (DPS) (if applicable) | 40 A | | |
| FUEL SYSTEM | | | | | |
| Fuel delivery | | Type | Electronic Fuel Injection (EFI), Dell'Orto 46 mm throttle body, 1 injector per cylinder | | |
| Fuel pump | | Type | Electrical (in fuel tank) | | |
| | | Model | Bosch | | |
| Idle speed | | | 1250 ± 50 RPM (not adjustable) | | |
| Fuel | Type | | Regular unleaded gasoline | | |
| | Octane no. | Inside North America | 87 ((R+M)/2) or higher | | |
| | | Outside North America | 92 RON or higher | | |
| Fuel tank capacity | | | 16.3 L (4.3 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 | | | 1750 ± 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 | | | | | |
| Drive system type | | | Selectable 2WD/4WD | | |
| Front differential | | Recommended oil | XPS SYNTHETIC GEAR OIL (75W 90) (P/N 293 600 043) or 75W 90 API GL5 synthetic oil | | |
| | | Oil capacity | 500 ml (17 U.S. oz) | | |
| | | Type | Visco-lok† front differential | | |
| | | Front drive ratio | 3.6:1 | | |

| MODEL | | OUTLANDER MAX 500 | OUTLANDER MAX 650 | OUTLANDER MAX 800R |
|---|---|---|---|---|
| DRIVE SYSTEM (cont'd) | | | | |
| Final drive | Recommended oil | XPS SYNTHETIC GEAR OIL (75W 140) (P/N 293 600 140) or 75W 140 API GL5 synthetic oil | | |
| | Oil capacity | 300 ml (10.1 U.S. oz) | | |
| | Type | Shaft driven/locked differential | | |
| | Final 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) | | |
| STEERING SYSTEM | | | | |
| Turning radius | | 2.4 m (7.9 ft) | | |
| Total toe (vehicle on ground) | | 0 mm (0 in) | | |
| FRONT SUSPENSION | | | | |
| Suspension type | | MacPherson | Double A-arm | |
| Suspension travel | | 178 mm (7 in) | 203 mm (8 in) | |
| Shock absorber | Qty | 2 | | |
| | Type | Oil | | |
| Front preload adjustment | | — | 5 settings | |
| REAR SUSPENSION | | | | |
| Suspension type | | TTI™ independent | | |
| Suspension travel | | 229 mm (9 in) | | |
| Shock absorber | Qty | 2 | | |
| | Type | Oil | | |
| Rear preload adjustment | | 5 settings | | |
| BRAKES | | | | |
| Front brake | Type | Hydraulic, 2 discs | | |
| Rear brake | Type | Hydraulic, single disc | | |
| Brake fluid | Capacity | 180 ml (6 U.S. oz) | | |
| | Type | DOT 4 | | |
| Parking brake | | Hydraulic lock-4 wheels | | |
| Caliper | | Floating | | |
| Brake pad material | Front | Organic | | |
| | Rear | Metallic | | |
| Minimum brake 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) | | |

| MODEL | | | OUTLANDER MAX 500 | OUTLANDER MAX 650 | OUTLANDER MAX 800R |
|---|---|---|---|---|---|
| TIRES | | | | | |
| Pressure | Front | Maximum | 48.3 kPa (7 PSI) | | |
| | | Minimum | 34.5 kPa (5 PSI) | | |
| | Rear | Maximum | 48.3 kPa (7 PSI) | | |
| | | Minimum | 34.5 kPa (5 PSI) | | |
| Minimum tire thread depth | | | 3 mm (.118 in) | | |
| Size | Front | | 25 x 8 x 12 | 26 x 8 x 12 | |
| | Rear | | 25 x 11 x 12 | 26 x 10 x 12 | |
| WHEELS | | | | | |
| Size | Front | | 12 x 6 (in) | | |
| | Rear | | 12 x 7.5 (in) | | |
| Wheel nuts torque | Steel Wheel | | 70 N•m ± 7 N•m (52 lbf•ft ± 5 lbf•ft) | | |
| | Aluminum Wheel | | 100 N•m ± 10 N•m (74 lbf•ft ± 7 lbf•ft) | | |
| DIMENSION | | | | | |
| Overall length | | | 239 cm (94 in) | | |
| Overall width | | | 117 cm (46 in) | | |
| Overall height | | | 114 cm (45 in) | | |
| Wheelbase | | | 150 cm (59 in) | | |
| Wheel track | Front | | 96.5 cm (38 in) | | |
| | Rear | | 91.4 cm (36 in) | | |
| Ground clearance | | | 27.9 cm (11 in) | 30.5 cm (12 in) | 30.5 cm (12 in) |
| LOADING CAPACITY AND WEIGHT | | | | | |
| Weight | | | 312 kg (688 lb) | 322 kg (710 lb) | 323 kg (712 lb) |
| Weight distribution | Front/rear | | 48/52 | | |
| Rear storage box (included with rear rack weight) | | | 10 kg (22 lb) | | |
| Rack | Front | | 45 kg (99 lb) | | |
| | Rear (including rear storage box and tongue weight) | | 90 kg (198 lb) | | |
| Total vehicle load allowed (including driver, all other loads and added accessories) | | | 272 kg (600 lb) | | |
| Gross vehicle weight rating | | | 558 kg (1,230 lb) | 649 kg (1,431 lb) | |
| Towing capacity | | | 591 kg (1,303 lb) | | |
| Tongue capacity (included with rear rack weight) | | | 23 kg (51 lb) | | |

| 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 4-STROKE BLEND OIL (SUMMER GRADE) (P/N 293 600 121). For the winter season, use XPS 4-STROKE SYNTHETIC OIL (ALL CLIMATE) (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 premixed coolant sold by BRP (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 |
| | | Air controlled suspension (ACS) | | 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 |
| | Minimun octane | 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 413 801 900) |
| DRIVE SYSTEM | | | | |
| Front differential oil/rear final drive oil | | Capacity | Front | 500 ml (17 U.S. oz) |
| | | | Rear | 350 ml (11.8 U.S. oz) |
| | | Recommended | Front | XPS SYNTHETIC GEAR OIL (75W 90) (P/N 293 600 043) or a 75W 90 API GL-5 synthetic gear oil |
| | | | Rear | XPS SYNTHETIC GEAR OIL (75W 140) (P/N 293 600 140) or a 75W 140 API GL-5 synthetic gear oil |
| Front drive | | | | Visco-Lok Quick Engagement |
| Front drive ratio | | | | 3.6:1 |
| 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<br>Air Controlled Suspension (ACS) |
| Suspension travel | | 131 mm (5.2 in) |
| Shock absorber | Qty | 2 |
| *REAR* | | |
| Suspension type | | TTI™ independent<br>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: 48.3 kPa (7 PSI)<br>Minimum: 41.4 kPa (6 PSI) |
| | Rear | Maximum: 48.3 kPa (7 PSI)<br>Minimum: 41.4 kPa (6 PSI) |
| Minimum tire thread depth | | 3 mm (.118 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) |

*Renegade series*

| MODEL | | | RENEGADE 500 |
|---|---|---|---|
| ENGINE | | | |
| Engine type | | | 4-stroke, Single Over Head Camshaft (SOHC), liquid cooled |
| Number of cylinders | | | 2 |
| Number of valves | | | 8 valves (mechanical adjustment) |
| Bore | | | 82 mm (3.23 in) |
| Stroke | | | 47 mm (1.85 in) |
| Displacement | | | 499.6 $cm^3$ (30.49 $in^3$) |
| Compression ratio | | | 10.3:1 |
| Maximum Horsepower RPM | | | 7400 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 4-STROKE BLEND OIL (SUMMER GRADE) (P/N 293 600 121). For the winter season, use XPS 4-STROKE SYNTHETIC OIL (ALL CLIMATE) (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 |
| COOLING SYSTEM | | | |
| 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 | | | 400 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 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 |
| Headlights | | | 4 x 60 W |
| Taillight | | | 8/26 W |
| Indicator lamps | | | LEDS, 0.7 V approximately (each) |

| MODEL | | | RENEGADE 500 |
|---|---|---|---|
| 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 |
| 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 |
| | Minimum octane | 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 | | | |
| Drive system type | | | Selectable 2WD/4WD |
| Front differential | | Recommended oil | XPS SYNTHETIC GEAR OIL (75W 90) (P/N 293 600 043) or 75W 90 API GL5 synthetic oil |
| | | Oil capacity | 500 ml (17 U.S. oz) |
| | | Type | Visco-lok front differential |
| | | Front drive ratio | 3.6:1 |
| Final drive | | Recommended oil | XPS SYNTHETIC GEAR OIL (75W 140) (P/N 293 600 140) or 75W 140 API GL5 synthetic oil |
| | | Oil capacity | 300 ml (10.1 U.S. oz) |
| | | Type | Shaft driven/locked differential |
| | | Final 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 | | RENEGADE 500 |
|---|---|---|
| STEERING | | |
| Turning radius | | 2.1 m (7 ft) |
| Total toe (vehicle on ground) | | 0 mm (0 in) |
| Camber angle | | 0° |
| Front sway bar | | No |
| SUSPENSION | | |
| *FRONT* | | |
| Suspension type | | Double A-Arm |
| Suspension travel | | 216 mm (8.5 in) |
| Shock absorber | Qty | 2 |
| | Type | Oil<br>5 settings |
| *REAR* | | |
| Suspension type | | TTI independent |
| Suspension travel | | 229 mm (9 in) |
| Shock absorber | Qty | 2 |
| | Type | Oil<br>5 settings |
| 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 on rear wheels |
| Caliper | | Floating |
| Brake pad material | Front | Metallic |
| | Rear | Metallic |
| Minimum bake pad thickness | | 1 mm (.039 in) |
| Minimum brake disc thickness | Front | 4.3 mm (.169 in) |
| | Rear | 4.3 mm (.169 in) |
| Maximum brake disc warpage | | 0.2 mm (.008 in) |
| TIRES AND WHEELS | | |
| *TIRES* | | |
| Pressure | Front | Maximum: 48.3 kPa (7 PSI)<br>Minimum: 34.5 kPa (5 PSI) |
| | Rear | Maximum: 48.3 kPa (7 PSI)<br>Minimum: 34.5 kPa (5 PSI) |
| Minimum tire thread depth | | 3 mm (.118 in) |
| Size | Front | 25 x 8 x 12 (in) |
| | Rear | 25 x 10 x 12 (in) |
| *WHEELS* | | |
| Size | Front | 12 x 6 (in) |
| | Rear | 12 x 7.5 (in) |
| Wheel nuts torque | | 100 N•m ± 10 N•m (74 lbf•ft ± 7 lbf•ft) |

| MODEL | | RENEGADE 500 |
|---|---|---|
| DIMENSIONS | | |
| Overall length | | 218 cm (86 in) |
| Overall width | | 117 cm (46 in) |
| Overall height | | 114 cm (45 in) |
| Wheelbase | | 129.5 cm (51 in) |
| Wheel track | Front | 96.5 cm (38 in) |
| | Rear | 91.4 cm (36 in) |
| Ground clearance | | 30.5 cm (12 in) |
| LOADING CAPACITY AND WEIGHT | | |
| Dry weight | | 275 kg (606 lb) |
| Weight distribution | Front/rear | 51/49 |
| Rear storage box | | 3.7 L (1 U.S. gal.) |
| Rack | Rear | 16 kg (35 lb) |
| Total vehicle load allowed (including driver, all other loads and added accessories) | | 141 kg (311 lb) |
| Gross vehicle weight rating | | 476 kg (1,049 lb) |
| Towing capacity [1] | | 590 kg (1,301 lb) |
| Tongue capacity (included with rear rack weight) [1] | | 23 kg (51 lb) |
| (1) Requires BRP approved rear hitch plate. | | |