

ATV PREDELIVERY Bulletin



July 18, 2011	Subject: Can-Am™ DS 250™ Predelivery Inspection	No.	2012-2
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YEAR	MODEL	MODEL NUMBER	SERIAL NUMBER
2012	DS 250	ЗЈСА, ЗЈСВ, ЗЈСС	All

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IMPORTANT NOTICE

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

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

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

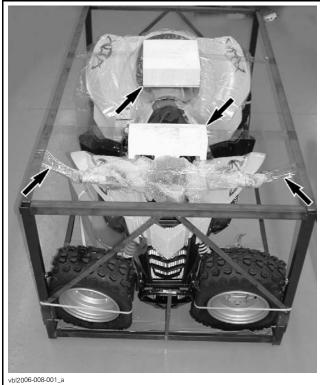
NOTICE Proceed with care in order not to damage components while uncrating vehicle.

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

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

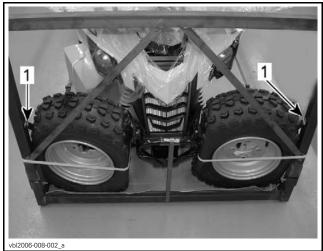
- 2. Lift and discard 4 top steel corners.
- 3. Remove plastic and cardboard wrapping around steel frame.
- 4. Remove foam protectors on top of vehicle.
- 5. Cut handlebar wrapping around top longitudinal angle bars.

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



CUT WRAPPING

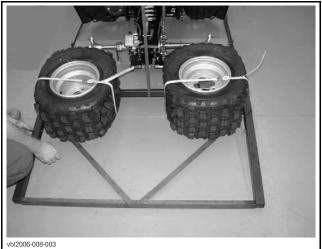
- 6. Lift and discard both longitudinal angle bars.
- 7. Remove retaining pins that hold flat bars onto corner square tubes and lay down flat bars.



1. Retaining pins

8. Slowly lower both end steel frames down.

NOTE: Tires and wheels assembly follow the steel frame downward movement and become easily accessible.



LOWER END STEEL FRAME DOWN

9. Remove cardboard box from crate bottom.

Canada and USA models

Inside that box are the following parts :

- 16 wheel nuts
- 1 steering pod bracket
- 4 M8 x 40 socket head bolts
- 1 battery with its hardware
- 1 right side mirror and 1 left side mirror.

Other Countries models

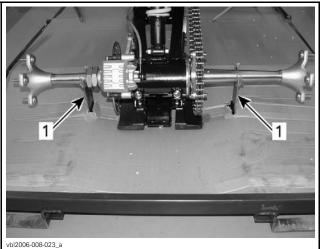
Inside that box are the following parts :

- 16 wheel nuts
- 1 front fascia
- 1 battery with its hardware
- 1 right side mirror and 1 left side mirror.
- 10. Cut front and rear retaining straps.



CUT RETAINING STRAPS

11. Keep rear axle on its 2 rear U-brackets.



1. Rear U-brackets

- 12. Remove protective wrapping all over vehicle.
- 13. Cut straps retaining wheels to end steel frames.

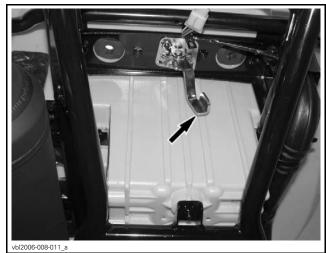
PARTS TO BE INSTALLED

Battery

1. Refer to the latest edition of *CAN-AM ATV BAT-TERY SERVICE BULLETIN* for the proper activating, charging and maintenance procedures.

NOTICE Always charge battery before its installation on the vehicle.

2. Remove seat by pulling underneath latch at rear.



SEAT LATCH

3. Install charged battery on vehicle, positive post on right side.

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

4. Secure battery in place using supplied bracket with its 2 retaining bolts and washers.

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

- 5. Apply DIELECTRIC GREASE (P/N 293 550 004) on battery posts.
- 6. Connect RED positive cable to positive battery post using supplied nut and bolt.
- 7. Connect BLACK negative cable to negative battery post using supplied nut and bolt.

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

8. Cover positive post with rubber boot.



BATTERY INSTALLATION

9. Reinstall seat.

Brake Discs Cleanup

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

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.

Tire Pressure

Inflate tires to specified air pressure.

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

NOTICE Always check pressure when tires are cold.

TIRE PRESSURE	FRONT	REAR
Recommended	34 kPa (5 PSI)	34 kPa (5 PSI)
Minimum	26 kPa (4 PSI)	26 kPa (4 PSI)

Wheels

- 1. Lift front of vehicle.
- 2. Install front wheels on vehicle with air valves toward the outside.
- 3. Ensure that the rotation direction shown by the arrow is respected.

NOTICE Respect the rotation direction shown by the arrow on the outside wall of the tire.



- 4. Torque wheel lug nuts to 50 N•m (37 lbf•ft).
- 5. Lift vehicle from rear U-brackets.
- 6. Install rear wheels on vehicle with air valves toward the outside.
- 7. Ensure that the rotation direction shown by the arrow is respected.
- 8. Torque wheel lug nuts to 50 N•m (37 lbf•ft).
- 9. Move vehicle out of the crate.

Mirrors

On applicable models, install both right side and left side mirrors.

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.

Accessories Installation

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

Handlebar

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 in this section.

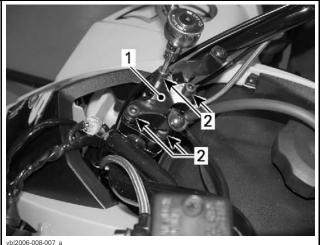
Canada and USA models

1. Remove and discard the 4 handlebar retaining bolts.



HANDLEBAR RETAINING BOLTS

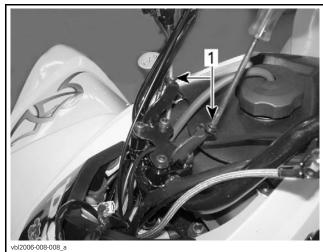
- 2. Park vehicle straight on a level surface.
- 3. Position handlebar so both brake fluid reservoirs are level.
- 4. Align steering pod bracket.
- 5. Secure pod bracket with handlebar in place using 4 new socket head bolts.
- 6. Torque bolts in a crisscross sequence to 20 N•m (15 lbf•ft).



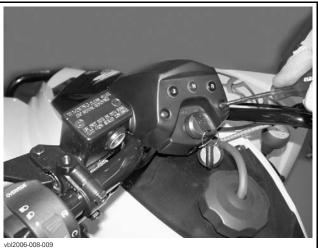
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Steering pod bracket
 Socket head bolts

7. Remove 2 bolts from steering pod bracket.



- 1. Steering pod bracket bolts
- 8. Align pod on its bracket.
- 9. Secure pod in place using same bolts (previously removed).



SECURE POD ON ITS BRACKET

Other Countries models

- 10. Park vehicle straight on a level surface.
- 11. Loosen 4 handlebar retaining bolts.
- 12. Position handlebar so both brake fluid reservoirs are level.
- 13. Torque handlebar bolts in a crisscross sequence to 20 N•m (15 lbf•ft).
- 14. Remove the 4 bolts from instrument cluster bracket.
- 15. Align cluster on its bracket.
- 16. Secure cluster in place using same bolts (previously removed).
- 17. Route fuel reservoir vent tube into hole in cluster.



SECURE CLUSTER

All models

Safety label addressed to purchaser is rolled around right side handlebar grip; it must remain there until vehicle is delivered to retail owner.



FLUIDS

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

Add fuel in the fuel reservoir.

Recommended Fuel

Use regular unleaded gasoline or gasohol containing less than 10% of ethanol or methanol, available from most service stations.

Refer to the following table for recommended minimum octane number:

COUNTRY	OCTANE NUMBER
Inside North America	87 (RON + MON) / 2
Outside North America	92 (RON)

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.

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

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

NOTICE Never mix oil with fuel. This vehicle has a 4-stroke engine. Oil is added in the engine only.

Engine Oil

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

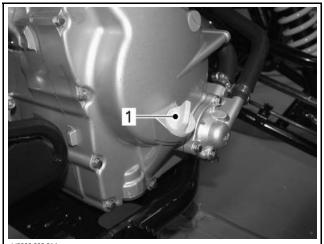
Recommended Engine Oil

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 SYNTHE-TIC OIL (ALL CLIMATE) (P/N 293 600 112). **NOTE:** The XPS oil is specially formulated and tested for the severe requirements of this engine.

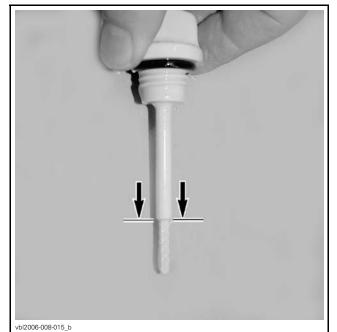
Engine Oil Level Verification

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



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- 1. Engine oil dipstick
- 4. Wipe dipstick.
- 5. Reinstall dipstick (do not screw it in).
- 6. Remove dipstick.
- 7. Check oil level as per the following illustration.



UPPER MARK (FULL)

8. Ensure that oil level is close to or on upper mark (Full).

- 9. If necessary, add recommended engine oil .
- 10. Reinstall and screw in dipstick completely.

Gearbox Oil

Recommended Gearbox Oil

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

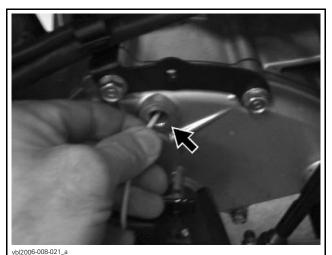
NOTICE Do not use non recommended types of oil when servicing. Do not mix with other types of oil.

Gearbox Oil Level Verification

NOTICE Make sure to use a clean (completely free of greasy matter) wire to avoid oil contamination.

NOTE: The following procedure is not an accurate one, it must be only used to verify the presence of oil in the gearbox. If necessary, refer to the appropriate *ATV SHOP MANUAL* for complete procedure.

- 1. Park vehicle straight on a level surface.
- 2. Select NEUTRAL position.
- 3. Apply parking brakes.
- 4. Remove the gearbox filler plug.
- 5. Get a piece of 16-18 gauge clean wire, 305 mm to 380 mm (12 in to 15 in) long.
- 6. Insert approximately 203 mm (8 in) in a down-ward angle into the filler hole.



INSERT WIRE INTO FILLER HOLE

- 7. Pull wire out the filler hole.
- 8. Check gearbox oil level as per the following illustration.



GEARBOX OIL LEVEL VERIFICATION

- 9. Ensure there is a MINIMUM of 25 mm (1 in) of oil on the wire.
- 10. Reinstall and screw in filler plug completely.

Engine Coolant

A WARNING

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

Recommended Engine Coolant

Use BRP PREMIXED COOLANT (P/N 219 700 362) or a mix of ethylene-glycol/water (50% coolant, 50% distilled water).

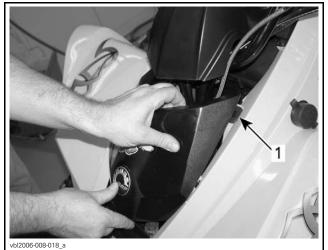
Coolant Level Verification

NOTICE Do not overfill coolant reservoir.

NOTE: When checking level at temperatures below 20°C (68°F), level may be slightly below MIN mark.

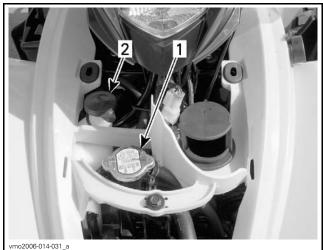
Canada and USA models

- 1. Park vehicle straight on a level surface.
- 2. Lift out front fascia from both sides rubber grommets.
- 3. Carefully pull front fascia toward front.
- 4. Remove front fascia from vehicle.



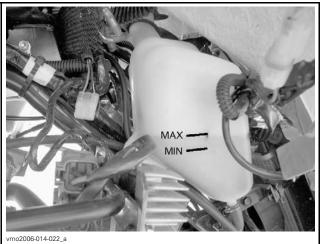
1. Rubber grommets

- 5. Check that radiator is filled with coolant by removing the radiator cap.
- 6. If necessary, add recommended coolant.
- 7. Reinstall radiator cap.



1. Radiator cap

- 2. Coolant reservoir cap
- 8. Locate coolant reservoir underneath RH front fender.
- 9. Check coolant reservoir level.
- 10. Ensure that fluid is between MIN. and MAX. marks.



COOLANT RESERVOIR

11. If necessary, add recommended coolant.

12. Reinstall front fascia on vehicle.

Other Countries models

Note that other countries models do not have the front fascia installed on the vehicle at delivery. The front fascia is located on the cardboard box. Follow the above procedure to verify radiator level and coolant reservoir level then install front fascia on vehicle.

Brake Fluid

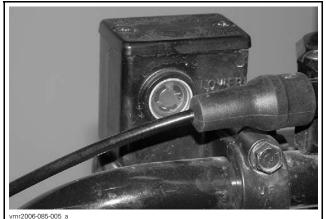
Recommended Brake Fluid

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

NOTICE Use DOT 4 brake fluid from a sealed container only.

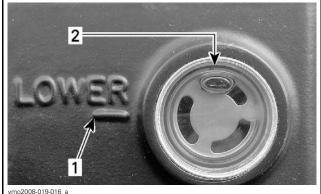
Front Brake Fluid Verification

- 1. Park vehicle straight on a level surface.
- 2. Place steering in the straight ahead position.
- 3. Locate front brake fluid reservoir on the right side of handlebar.



FRONT BRAKE FLUID RESERVOIR (RH)

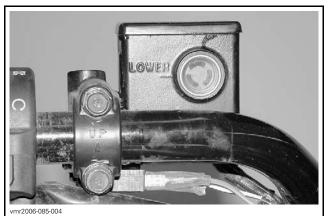
4. Check brake fluid through the window.



- 1. MIN. mark 2. MAX. mark
- 5. Ensure fluid reaches top of the window.
- 6. If necessary, add recommended brake fluid.

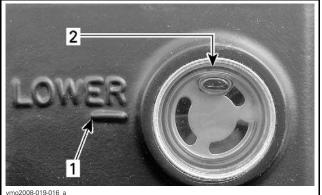
Rear Brake Fluid Verification

- 1. Park vehicle straight on a level surface.
- 2. Place steering in the straight ahead position.
- 3. Locate rear brake fluid reservoir on the left side of handlebar.



REAR BRAKE FLUID RESERVOIR (LH)

4. Check brake fluid through the window.



MIN. mark MAX. mark 1. 2

- 5. Ensure that fluid reaches the top of window.
- 6. If necessary, add recommended brake fluid.
- 7. Locate rear brake fluid reservoir on the right side of vehicle.



1. Rear brake fluid reservoir (RH)

- 8. Check brake fluid level.
- 9. Ensure that fluid is between LOWER and UP-PER marks.
- 10. If necessary, add recommended brake fluid.

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.

Carburetor

Inspect the following items and adjust if required:

- Idle speed
- Throttle cable
- Choke cable.

Drive Chain

WARNING

Place ignition switch to OFF before checking, adjusting or lubricating the drive chain.

NOTICE Never operate this vehicle with the drive chain too loose or too tight as severe damage to the drive components can occur.

NOTE: This vehicle is equipped with O-ring sealed permanently greased pins and rollers chain.

Drive Chain Inspection

Check for damaged O-rings or rollers.

Drive Chain Cleaning and Lubrication

NOTICE Never wash the chain with a high pressure washer or gasoline; damage to the O-rings will result, causing premature wear and drive chain failure.

NOTICE Never use commercial chain lubricants containing solvent which could damage the O-rings.

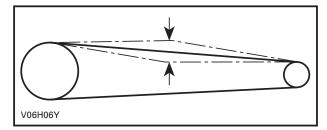
- 1. Clean the side surfaces of the chain with a dry cloth; DO NOT BRUSH CHAIN.
- 2. Lubricate with an appropriate O-ring chain lubricant.

Drive Chain Free Play Verification

NOTICE Always check and adjust drive chain with the driver, or equivalent weight, seated on the vehicle.

- 1. Select a level surface and set transmission to NEUTRAL.
- 2. Ensure that the driver, or equivalent weight, is seated on the vehicle.
- 3. Check drive chain free play at midway between sprockets, on upper run of drive chain.
- 4. Drive chain free play must allow the following vertical movement by hand.

DRIVE CHAIN FREE PLAY	
15 mm to 25 mm (.6 in to 1 in)	



CHAIN DEFLECTION

5. Adjust if required.

Transmission Lever

Verify that transmission lever works properly and adjust if required.

Suspension

Swing Arm Pivot Lubrication

- 1. Grease rear swing arm using SUSPENSION GREASE (P/N 293 550 033).
- 2. Pump grease in, through grease fitting, until grease starts squirting out on sides.

NOTE: Grease fitting (shown by arrow) is located on swing arm pivot on left side near CVT air outlet hose.



GREASE FITTING

Brake

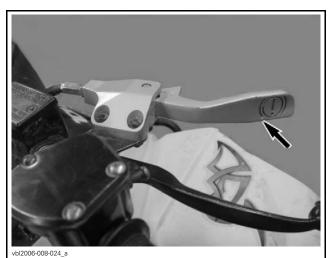
Brake System Pressurization

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

Parking Brake Adjustment

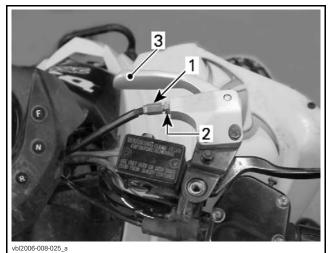
Other Countries Only

1. Apply parking brake lever.



PARKING BRAKE LEVER

- 2. Try pushing vehicle forward and backward.
- 3. If vehicle does not move, parking brake adjustment is correct.
- 4. If vehicle moves, release parking brake lever and adjust cable using cable adjuster nut.



- 1. Cable adjuster nut
- Lock nut
 Parking brake lever
- 5. Apply parking brake and recheck.
- 6. Repeat operation until vehicle stops moving forward and backward when parking brake is applied.

NOTE: Vehicle should move freely when parking brake is released.

ASSEMBLY INSPECTION

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

- Handlebar tightness
- Wheel nut torque
- Drive chain lubrication

- Tubes/hoses routing and condition
- Steering column cotter pin
- Suspension arm ball joint cotter pins
- Tie rod end nuts and cotter pins
- Wheel lug nuts and cotter pins
- 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

Before Delivery the Vehicle

Complete the PREDELIVERY CHECK LIST.

The customer must read and sign the *PREDELIV-ERY 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

VEHICLE MODEL		DS 250	
ENGINE			
Туре		4-stroke. Single overhead camshaft engine, liquid cooled	
Number of cylinders		Single cylinder	
Number of valves		4 valves with mechanical lifters (adjustable)	
Displacement		249.4 cm ³ (15.2 in ³)	
Bore		71 mm (2.8 in)	
Stroke		63 mm (2.5 in)	
Starting system		Electric starter	
Compression ratio		10.6:1	
Lubrication		Forced circulation and splashing	
Air filter		Sponge wet type	
TRANSMISSION			
Transmission		Continuously Variable Transmission (CVT) HI range (F), neutral and reverse	
COOLING			
Туре		Liquid cooled	
Radiator		Front mounted	
CARBURETION			
Carburetor Type		KEHIN PTG-23	
Choke		Variable manual choke	
Idle speed		1700 ± 100 RPM	
ELECTRICAL SYSTE	M		
Magneto generator	Туре	338 W @ 5000 RPM	
Ignition type		CDI (Capacitor Discharge Ignition)	
Ignition timing		Not adjustable	
	Make	NGK	
	Туре	CR8E	
Spark plug	Gap	0.8 mm (.031 in)	
	Quantity	1	
	Туре	Wet type battery	
Battery	Volt	12 volts, 10 A•h (Ampere hour)	
Starting system		Electric start	
Headlight bulbs		2 x 35 W	
Taillight bulb		1 x 5/21 W	
Indicator lamps		1.7 W	
	Fan motor	10 A	
F ire -	Headlights	15 A	
Fuses	Other lights	15 A	
	Main fuse	30 A	

VEHICLE MODEL		DS 250	
DRIVE SYSTEM	L.		
Rear axle		Chain driven/solid axle	
STEERING SYSTEM			
Turning radius		3.5 m (11.5 ft) at low speed	
SUSPENSION			
Front	Туре	Independent suspension — double A-arm, 2 shock absorbers (oil)	
	Travel	140 mm (5.5 in)	
Rear	Туре	Rigid swing-arm, 1 shock absorber (oil)	
	Travel	170 mm (6.7 in)	
TIRES			
Pressure	Front Rear	Maximum: 34 kPa (5 PSI) Minimum: 26 kPa (3.8 PSI)	
	Front	22 x 7–10	
Size	Rear	20 x 11–9	
WHEELS	· ·		
Ci	Front	AT 10 x 5.5	
Size	Rear	AT 9 x 8	
Wheel nut torque		50 N•m ± 5 N•m (37 lbf•ft ± 4 lbf•ft)	
BRAKES			
Front		Hydraulic, 2 discs	
Rear		Hydraulic, 1 disc	
Parking device		RH brake lever includes a parking brake	
WEIGHT AND LOADING C	APACITY		
Dry weight		195 kg (430 lb)	
Total vehicle load allowed		150 kg (330 lb) (includes operator, all other loads and added accessories)	
DIMENSIONS			
Overall length		183 cm (72 in)	
Overall width		103 cm (40.6 in)	
Overall height		110.5 cm (43.5 in)	
Seat height		80 cm (31.5 in)	
Wheelbase		118.7 cm (47 in)	
Ground clearance	Center of vehicle	26 cm (10.2 in)	

VEHICLE MODEL		DS 250
FLUIDS		
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). Refer to <i>OIL VISCOSITY CHART</i>
Gearbox oil		XPS CHAINCASE OIL (P/N 415 129 500) or an equivalent 75W 90 chaincase oil
Coolant		Ethylene-glycol/water mix (50% coolant, 50% distilled water). Use BRP PREMIXED COOLANT (P/N 219 700 362) or an equivalent coolant specially designed for aluminum engines
	Туре	Regular unleaded gasoline
Fuel	Octane	Inside North America: (87 (R + M)/2) Outside North America: 92 RON or higher
Brake fluid		DOT 4 brake fluid
CAPACITIES		
Fuel tank		12.5 L (3.3 U.S. gal.)
Engine		1.2 L (1.3 qt (U.S. liq.)) (oil change)
Gearbox oil		800 ml (.8 qt (U.S. liq.)) (oil change)
Coolant		850 ml (.9 qt (U.S. liq.)) (engine and radiator)