

INSTALLATION PROCEDURE

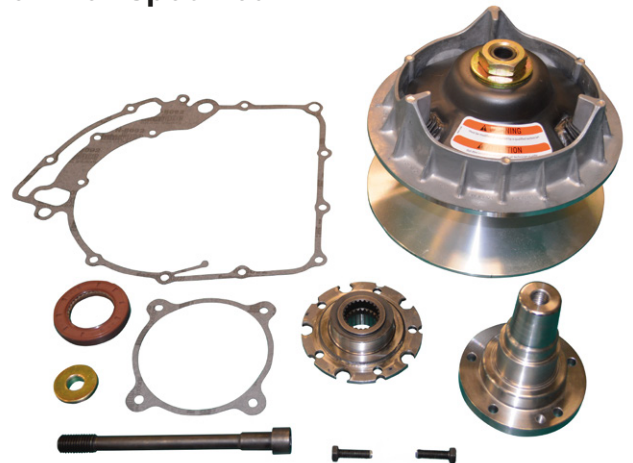
FOR R800 CLUTCH KIT

Applicable models: UFORCE 800, ZFORCE 800 / EX, CFORCE 800

These instructions must be completed by an experienced mechanic with proper tools available. Also, certain sections from the Shop Manual which are required for the installation are annexed to this document.

To install the R800 clutch kit correctly, please follow the instruction as described in this manual and use the correct torque when specified.

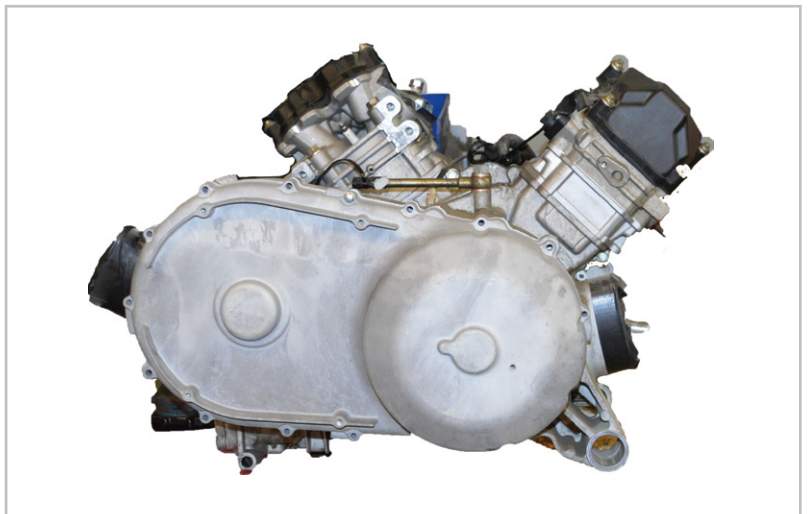
ATTENTION! Read the instruction manual carefully before starting the installation process. Make sure you have all the proper tools to do the work correctly. In order to avoid internal engine contamination, clean the vehicle before disassembly. Clean all other parts prior to assemble.



1 Empty the engine of oil.

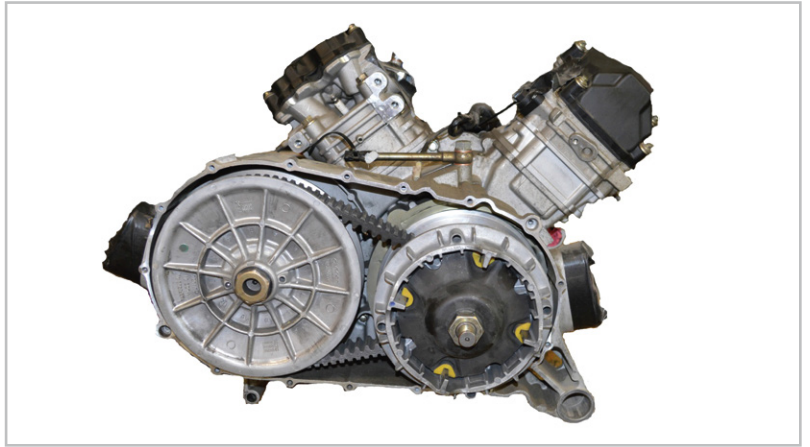
2 Empty the coolant from the engine as per section 4 of the Shop manual. (Annexed)

Attention: Never drain the coolant while the engine is hot.

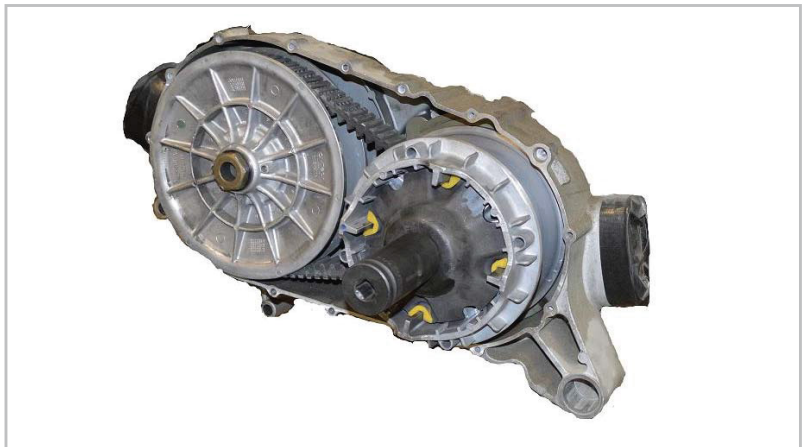


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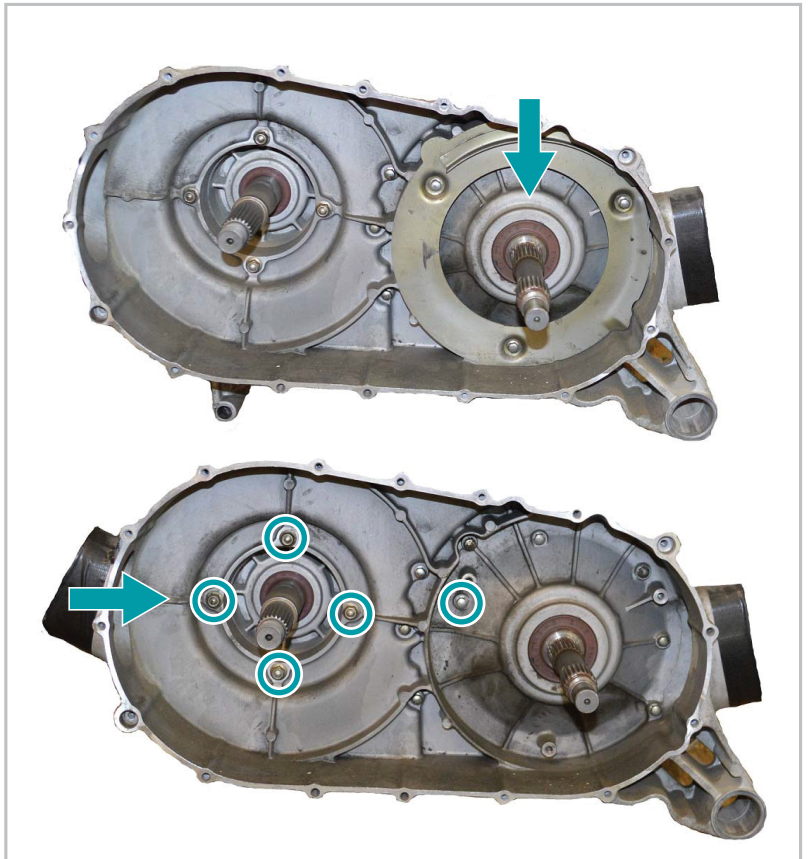
3 Remove the clutch cover.



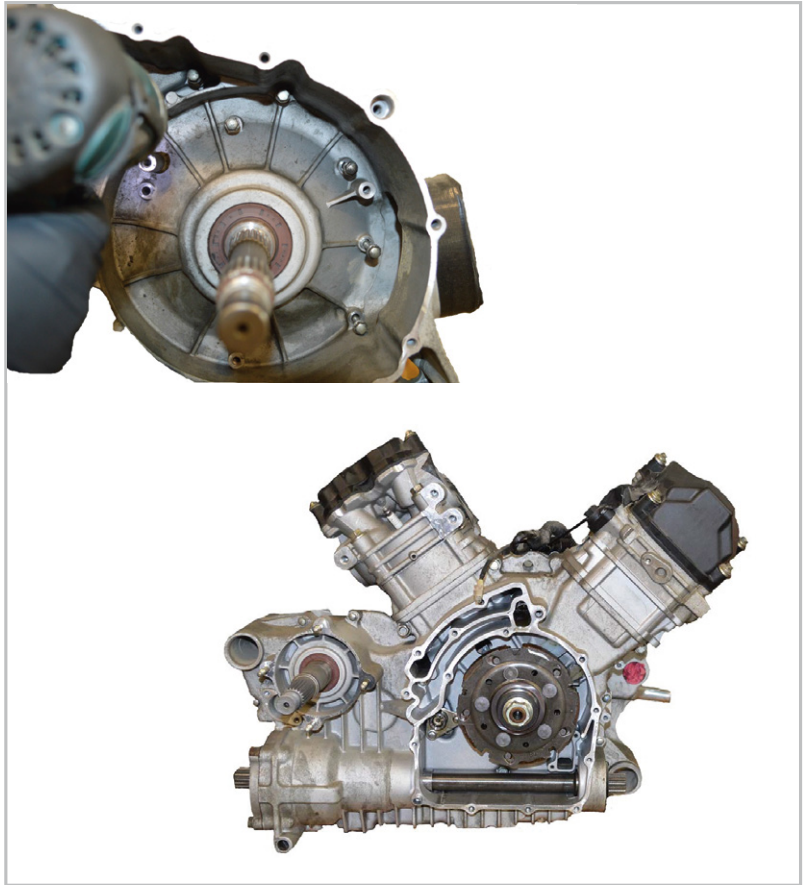
4 Loosen and remove the primary and secondary clutches.



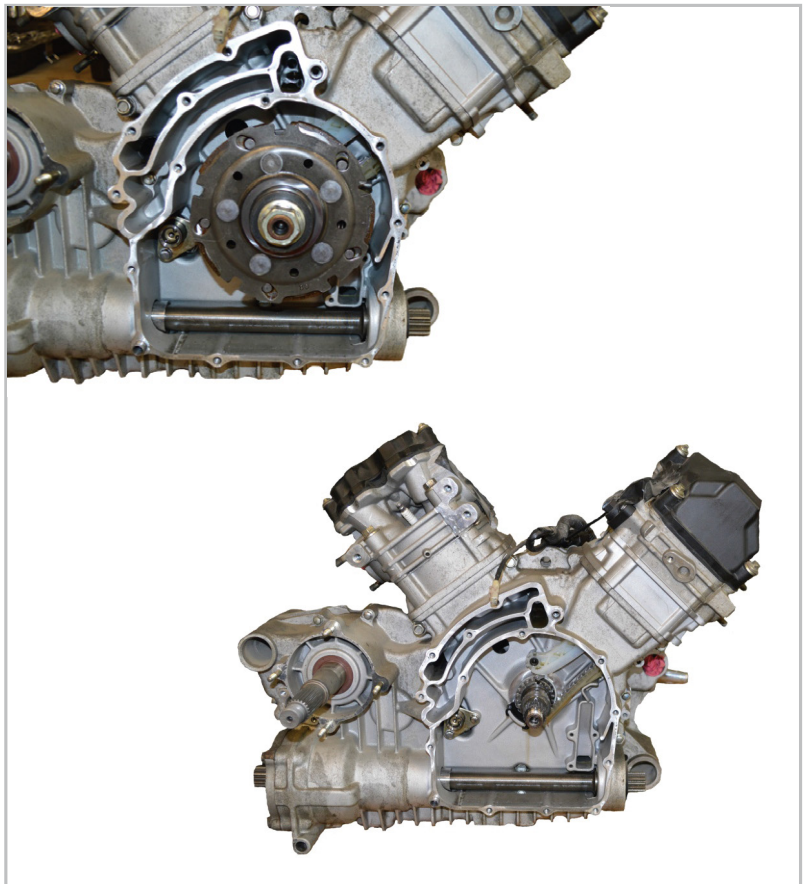
5 Remove the Air guide, CVT. Remove the 6mm screws.



6 Remove the CVT case.



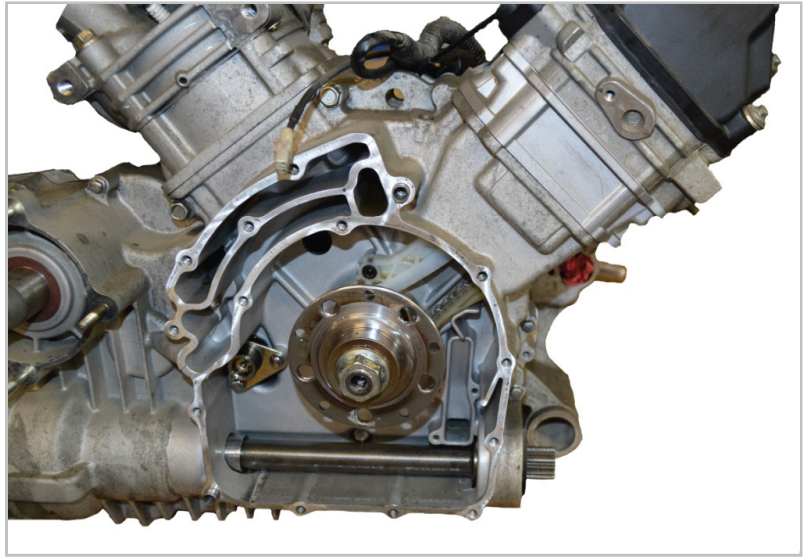
7 Remove the centrifugal clutch nut then remove the centrifugal clutch carrier assembly.
Note: the clutch carrier nut has left-handed threads.



8

Install the output shaft adaptor on the crankshaft with the shoulder facing outside as shown. Clean the threads on the crankshaft and the nut using oil free solvent. Use blue Loctite on the crankshaft threads then install the nut. Torque the nut to 619 ft-in (70 Nm) while holding the crankshaft by the opposite side. Do not use an impact wrench!

Note: Left-handed threads

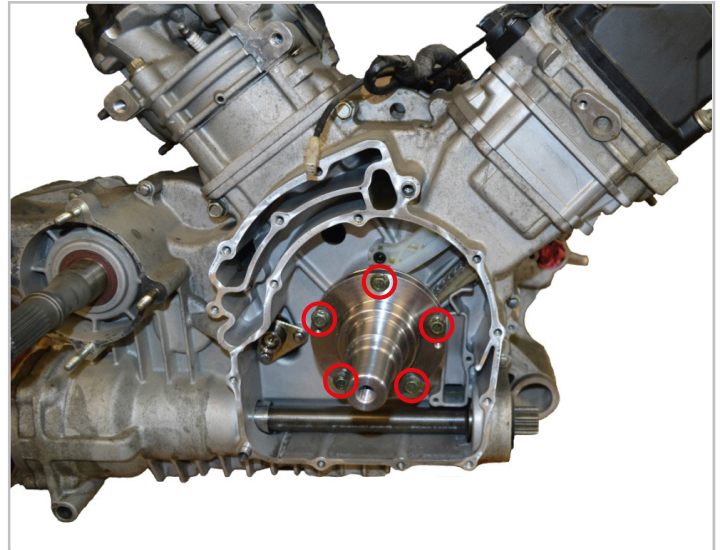


9

Install the output shaft on the output shaft adaptor by aligning the dowel pins and the holes. Use the 5 shoulder bolts making sure the Allen head is facing outside and the nut is facing inside. Make sure the bolt and nut threads are clean using an oil free solvent. Use blue Loctite on the bolts shoulder threads then torque the bolts in a crisscross pattern in two (2) sequences.

1- Initial torque: 35.4 lb-in (4 Nm)

2- Final torque: 84 lb-in (9.5 Nm)



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Remove the oil seal from the CVT casing.

Note: Be careful not to damage the seal sitting surface.



- 11 Remove the snapping from the primary clutch shaft.



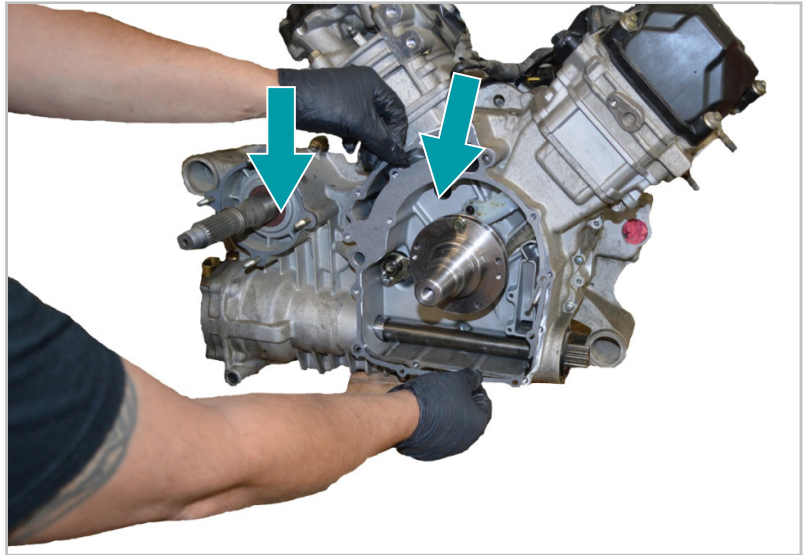
- 12 Using a press, place pressure on the primary clutch shaft to remove it.
Attention: Before putting pressure on the shaft, make sure there is enough space between the base of the press and the primary clutch housing.



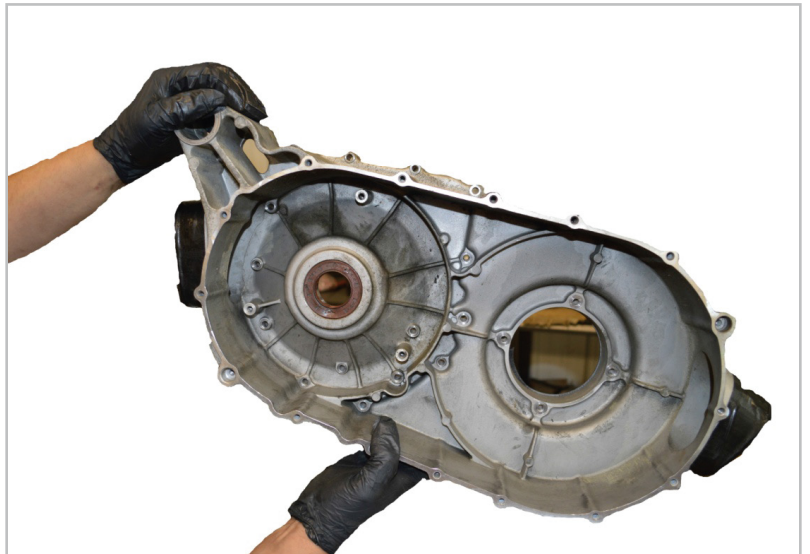
- 13 Verify that the bearing is still turning correctly. Replace if necessary.



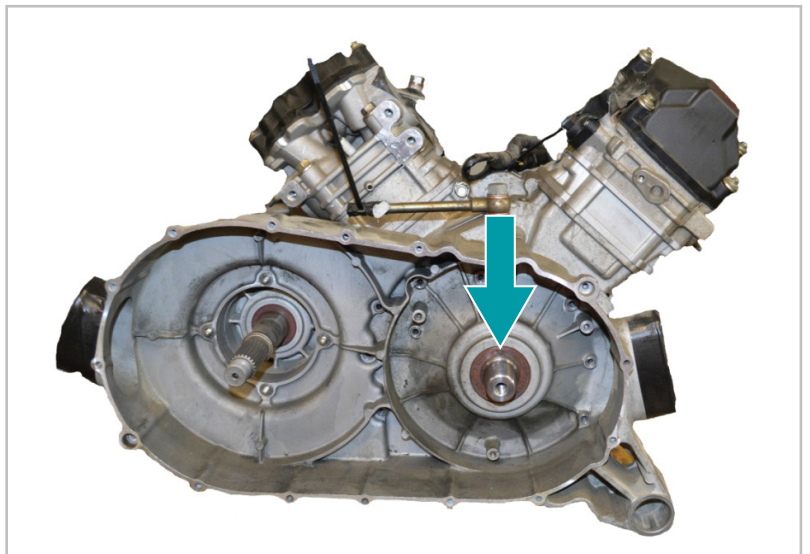
14 Install the gaskets.



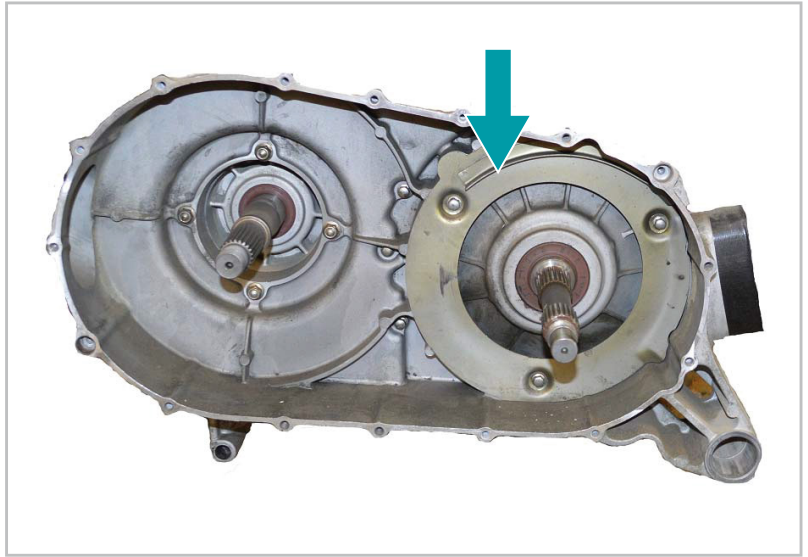
15 Install the new seal using a suitable tool.
Note that the top surface of the oil seal must be installed flush with the casing surface. Discard the snap ring.



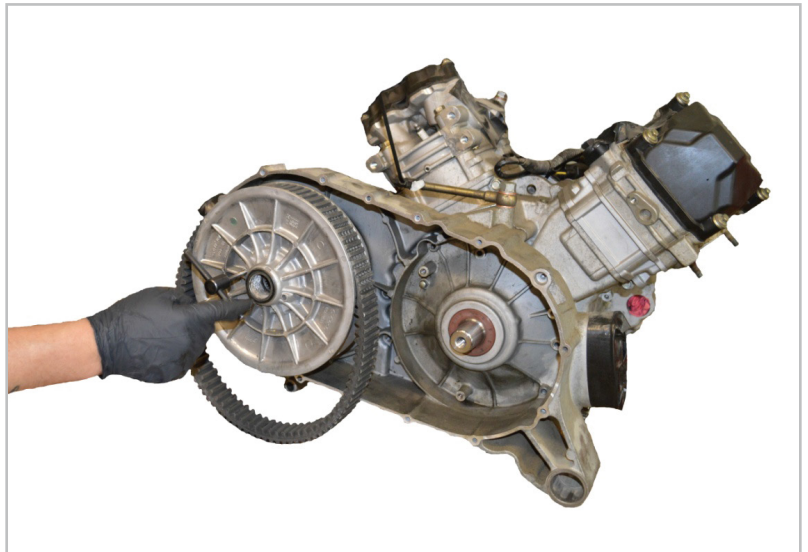
16 Install the CVT casing and torque the bolts and the nuts to 89 lb-in (10 Nm).



- 17 Install the air guide and use blue Loctite on the 3 holding bolts. Torque the bolts to 78 lb-in (8.8 Nm)



- 18 Before installing the secondary clutch, open the 2 sheaves using a suitable tool so it will allow the belt to "sink" into the secondary clutch in order to ease the assembly process of the primary clutch.
- Note: Make sure the taper on the output shaft is free of contaminant such as oil.**



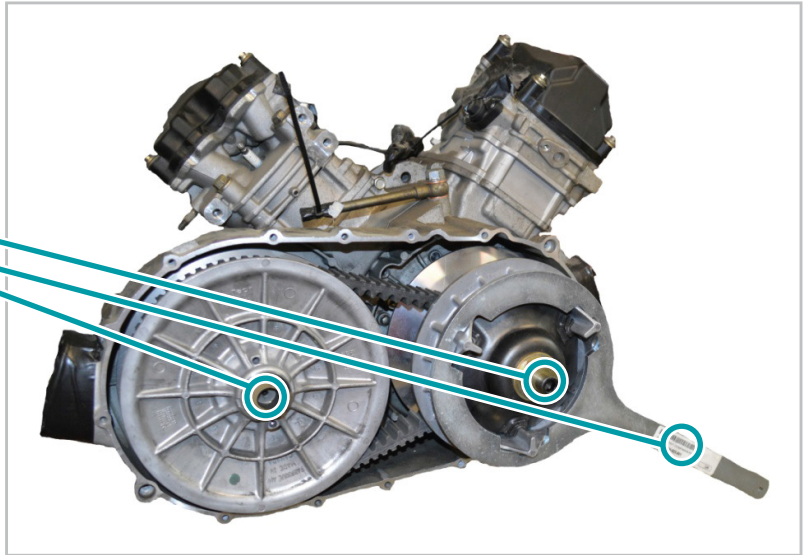
- 19 Position the belt correctly and install the primary clutch. (Make sure the clutch inner taper is clean before installing)



20

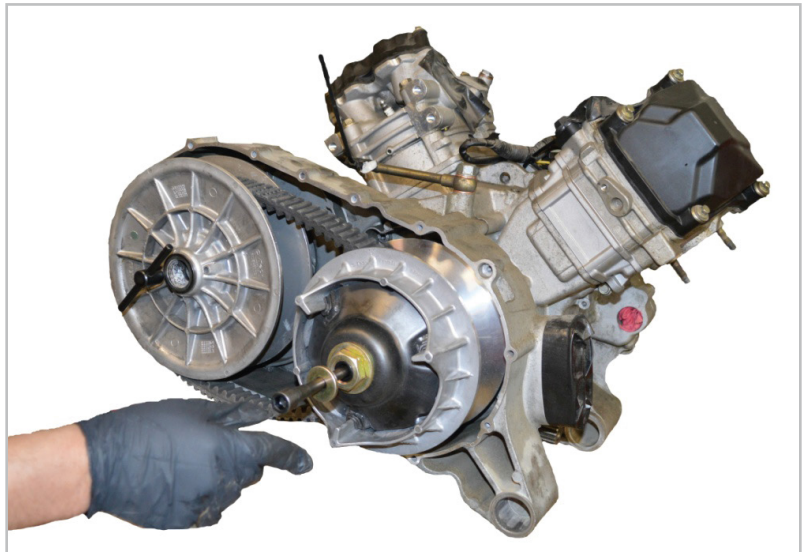
Tighten the primary clutch bolt to 659 lb-in (74.5 Nm)
Use the special tool P/N 0GRB-051000-923-001 or a suitable tool to hold the primary clutch.

IMPORTANT: Do not use an impact wrench



21

Tighten the nut at 659 lb-in (74.5 Nm).



22

Remove the seal protector using an impact driver.



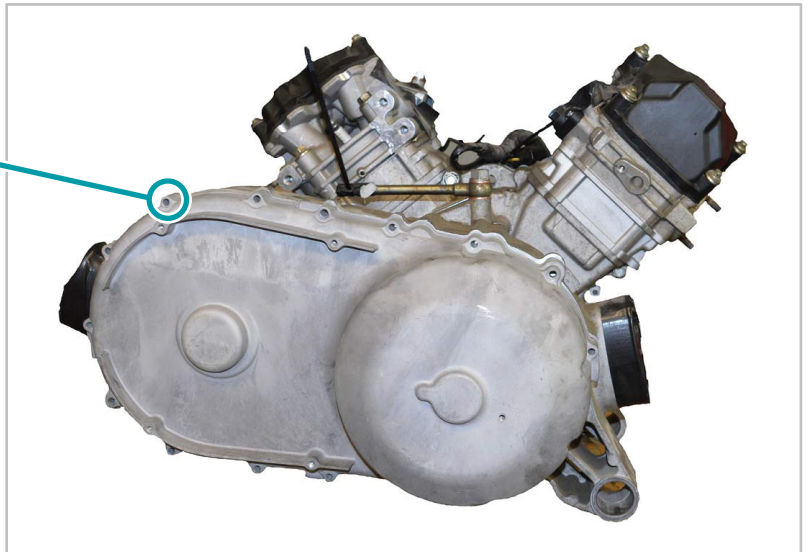
23

Use a proper tool for the bearing removal.



24

Install the CVT cover.
Torque the bolts to 89 lb-in (10 Nm) Fill up the crankcase with fresh oil and change the oil filter. Fill up the coolant and bleed the system as described in the shop manual under section 4 (Annexed)
Start the engine and check for leaks.



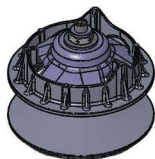
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EXTRACTEUR / PULLER
0155-1080

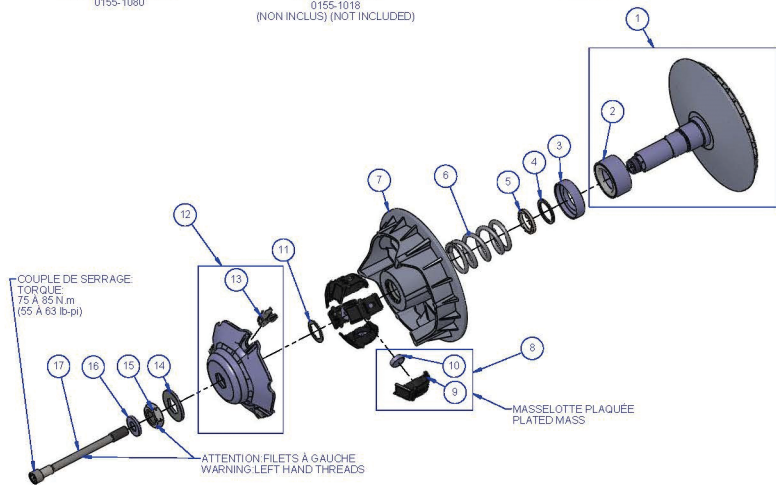


CLÉ DE MAINTIEN /
RETAINING TOOL
0155-1018
(NON INCLUS) (NOT INCLUDED)



0900-0167

#	PIECE / PART #	DESCRIPTION	DESCRIPTION	QTE / QTY
1	0905-0079	FLASQUE FIXE	FIXED SHEAVE	1
2	0940-0008	ROUE LIBRE	FREEWHEEL	1
3	0950-1011	SIÈGE DE RESSORT	SPRING SEAT	1
4	0080-0822	CALE	SHIM	1
5	0940-0057	LIMITEUR DE COURSE	STROKE LIMITER	1
6	0951-1013	RESSORT	SPRING	1
7	0910-0018	FLASQUE COULISSANT	SLIDING SHEAVE	1
8	0930-0103	MASSE CENTRIFUGE	CENTRIFUGAL MASS	6
9	0930-3001	BLOC	BLOCK	1
10	0935-1059	MASSELOTTE	MASS	1
11	0080-0813	RONDELLE	WASHER	1
12	0915-0011	CAPOT	CAP	1
13	0930-3013	PATIN	SHOE	3
14	0080-0809	RONDELLE	WASHER	1
15	0080-0114	ECROU	NUT	1
16	0080-0829	RONDELLE	WASHER	1
17	0080-1115	VIS DE FIXATION	SCREW	1



1

MAINTENANCE COOLANT REPLACEMENT

WARNING
To avoid potential burns, don't remove the radiator cap or loosen the cooling drain plug if the engine is hot.

Use CFMOTO premixed coolant or a blend of 50% antifreeze with 50% water.

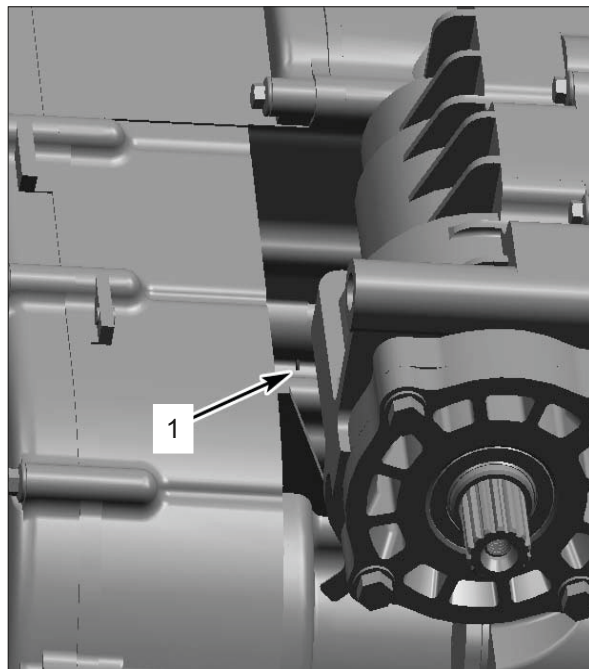
To avoid antifreeze deterioration, always use the same brand. Never mix different brands unless cooling system is completely flushed and refilled.

CAUTION: To prevent rust formation or freezing condition, always fill the system with the CFMOTO premixed coolant or with 50% antifreeze and 50% water. Don't use tap water, straight antifreeze or straight water in the system. Tap water contains minerals and impurities which build up in the system. During cold weather, straight water causes the system to freeze while straight antifreeze thickens and does not have the same efficiency. Always use ethylene glycol antifreeze containing corrosion inhibitors specifically recommended for aluminum engines.

Draining the System

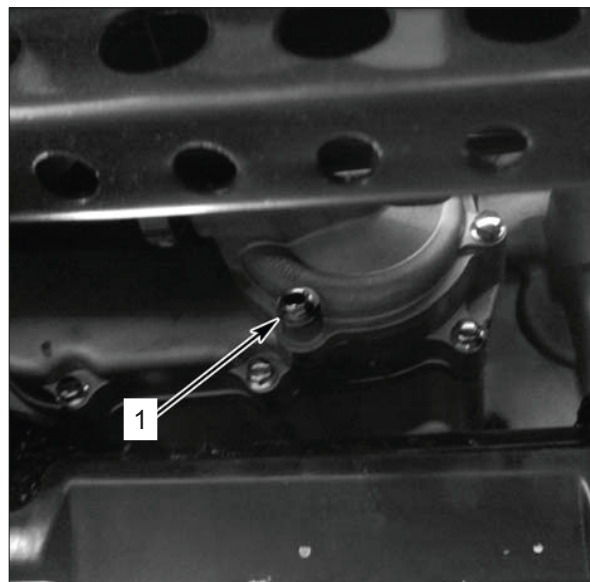
WARNING
Never drain or refill cooling system when engine is hot.

Remove the radiator cap.



1. Leak Indicator Hole

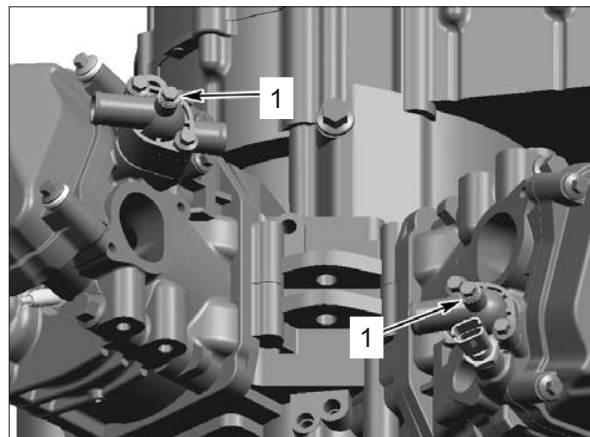
- 2** Partially unscrew cooling drain plug located below water pump housing. When cooling system is drained completely, remove cooling drain plug completely and install a new washer. Screw the cooling drain plug and torque it to 10N m (89lbf.in)



Under LH Footrest
1. Cooling Drain Plug

- 3** **Refilling the System**
Remove related parts.
Unscrew bleeding screws on top of thermostat housing

NOTE: Both two cylinders must be bled

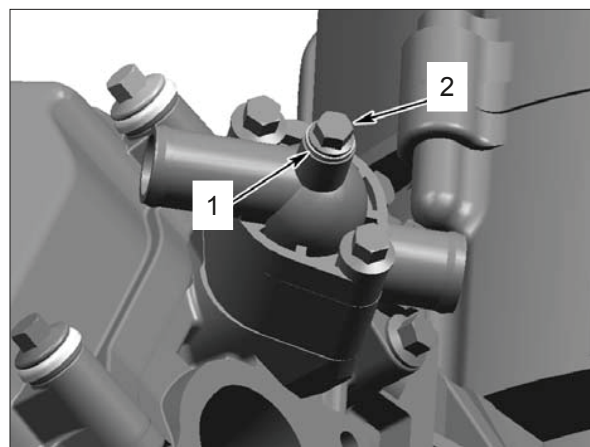


1. Bleeding Screws

- 4** With vehicle on a flat surface, engine cold, refill radiator. When the coolant comes out by the thermostat housing hole, install the bleeding screw with its washer and torque to 5 N.m (44 lbf.in).

Fill up the radiator and install radiator cap.
Fill the reservoir tank and keep the coolant level even at "LOWER" mark, then install reservoir tank cap.
Run the engine until thermostat opens, then shut off the engine.
Recheck the coolant level in reservoir tank after the engine is completely cooled down. Refill coolant if necessary.
Maintain coolant level between "LOWER" and "UPPER".

NOTE: Each year or every 100 hours or when vehicle reaches 3000km(1865mi), check coolant concentration (freezing point) with proper tester.



1. Washer
2. Bleeding Screw

INSTALLATION PROCEDURE

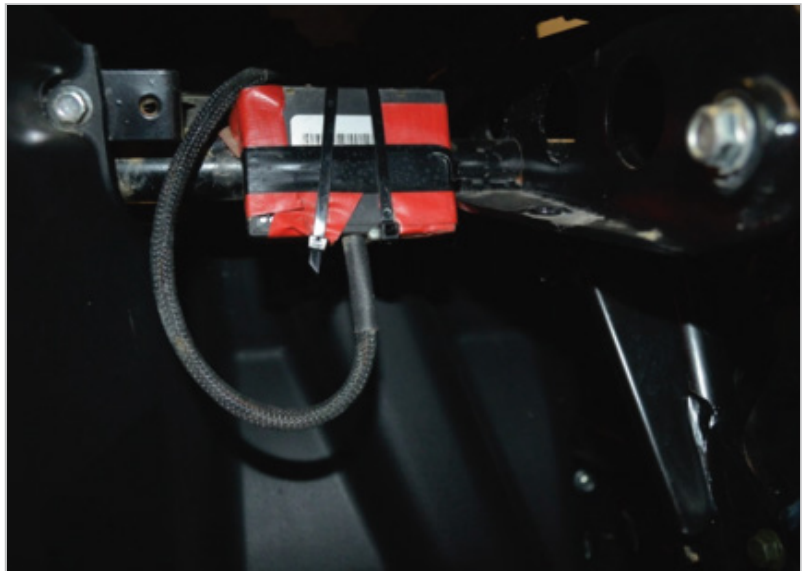
FOR POWER COMMANDER V

The Power commander V is very simply to install. Simply unplug the ECU and plug the Power commander V in its place. Next, plug the ECU in the Power commander V connections.

The programming will already be set for your vehicle.



We suggest placing it in a spot that will be protected from water and mud and to use tape to keep it in place.



INSTALLATION PROCEDURE

FOR S1R SLIP-ON

1 Make sure the UTV is completely cool before starting the installation.
Make sure the UTV is secure on a level surface and the wheels are chocked to prevent the unit from rolling.

2 Remove the OEM springs from the muffler joint.



3 Remove OEM muffler mounting bolts.
These will not be used with TBR system.



4 Slide the muffler back and to the right side to remove.



- 5 Remove right side muffler mounting bracket.



- 6 Apply a thin layer of anti-seize to S1R inlet and attach to slip tube using supplied hook springs.



- 7 Slide OEM mounting bracket over TBR muffler tab on inlet side.



- 8 Slide tab on outlet side of muffler into OEM bracket.

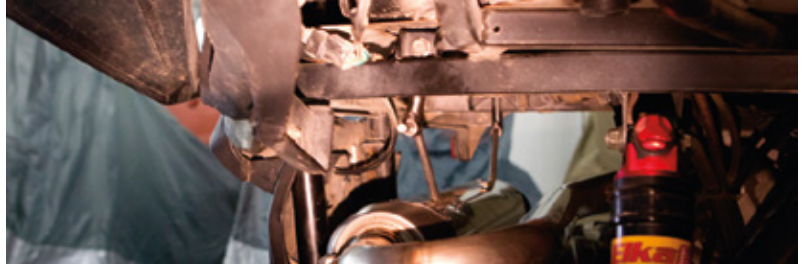


- 9 Re-use OEM gasket and springs and attach TBR slip-tube to OEM header pipe.



11

Re-position OEM mounting bracket and secure with OEM bolt.



12

Double check your work and enjoy.

13

Re-check hardware after each use.

Care & Cleaning

Keep system free of dirt and moisture. Store in a cool, dry place. Make sure vehicle is completely cool before maintenance.

Stainless Header System: Polished stainless steel pipes will turn a light golden hue after a few heat cycles, this is a normal characteristic of high quality stainless steel. Clean using a mild water based spray cleaner. Always apply cleaner or polish with a soft, clean cloth.

Titanium Header System: Polished titanium pipes will experience color shift ranging from deep blue/purple through amber after a few heat cycles. This is a normal characteristic of high quality titanium. Clean using a mild water based spray cleaner. Always apply cleaner or polish with a soft, clean cloth.

Polished Aluminum Canisters: Use an aluminum or mag wheel polish to restore the bright finish to factory spec.

Brushed Aluminum Canisters: Clean using a mild water based spray cleaner. Always apply cleaner or polish with a soft, clean cloth.

Carbon Fiber Canisters: Clean using a mild water based spray cleaner. Always apply cleaner or polish with a soft, clean cloth. Always make sure the fiberglass packing inside is in good condition and not burned out, as exhaust heat inside an empty canister will deteriorate the carbon fiber sleeve.

TBR sells repack kits (Road - #005-10038, Offroad - #005-10038MX) that include everything you need to easily do it yourself.

Titanium Mufflers: For cleaning use a mild water based spray cleaner. Always apply cleaner or polish with a soft, clean cloth. Always make sure the fiberglass packing inside is in good condition and not burned out, as exhaust heat inside an empty canister will deteriorate the carbon fiber sleeve.

TBR sells repack kits (Road - #005-10038, Offroad - #005-10038MX) that include everything you need to easily do it yourself.

Repack all road canisters at the first signs of packing material deterioration. Part #005-10038

Repack all offroad canisters after every 10 hours of use. Part #005-10038MX

NEVER dyno test your bike with carbon fiber or titanium canisters installed - the intense heat and lack of cooling air can quickly burn through the canister material. Two Brothers Racing does not provide a warranty for burned canisters.