2012 ATV and ROV Updates

- New Graphics on all 2012 models
- HDX Transmission improvments
- All other models remain unchanged

2012 ATV and Prowler Update

DVX and Utility 90

- 150
- DVX and utility 300
- 350 (366)
- 425 H1(450)
- 450 H1
- 450 H1 XC
- 550 H1
- 700 H1
- 1000 H2 (950)

2012 450 H1

2012 TRV 450

2012 550 H1

2012 TRV 550 H1

2012 700 H1

2012 Mud Pro 700 H1

Mud Pro LTD models have power steering.

2012 TRV 700 H1

2012 1000 H2

2012 Prowler XT 550 H1

2012 Prowler XTX 700 H1

2012 Prowler HDX 700 H1

2012 Prowler XTZ 1000 H2

HDX Transmission Improvements

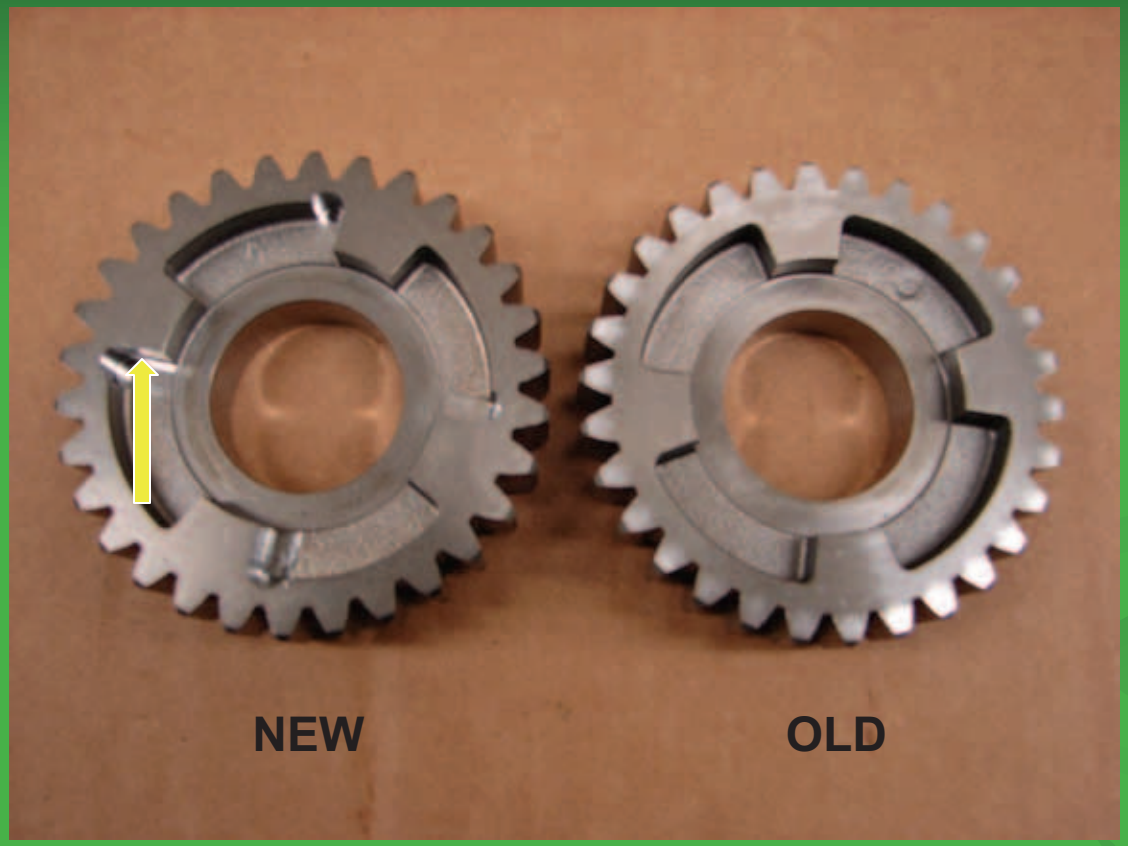
Drive Shaft

Wider gears on drive shaft

Secondary Drive Gear

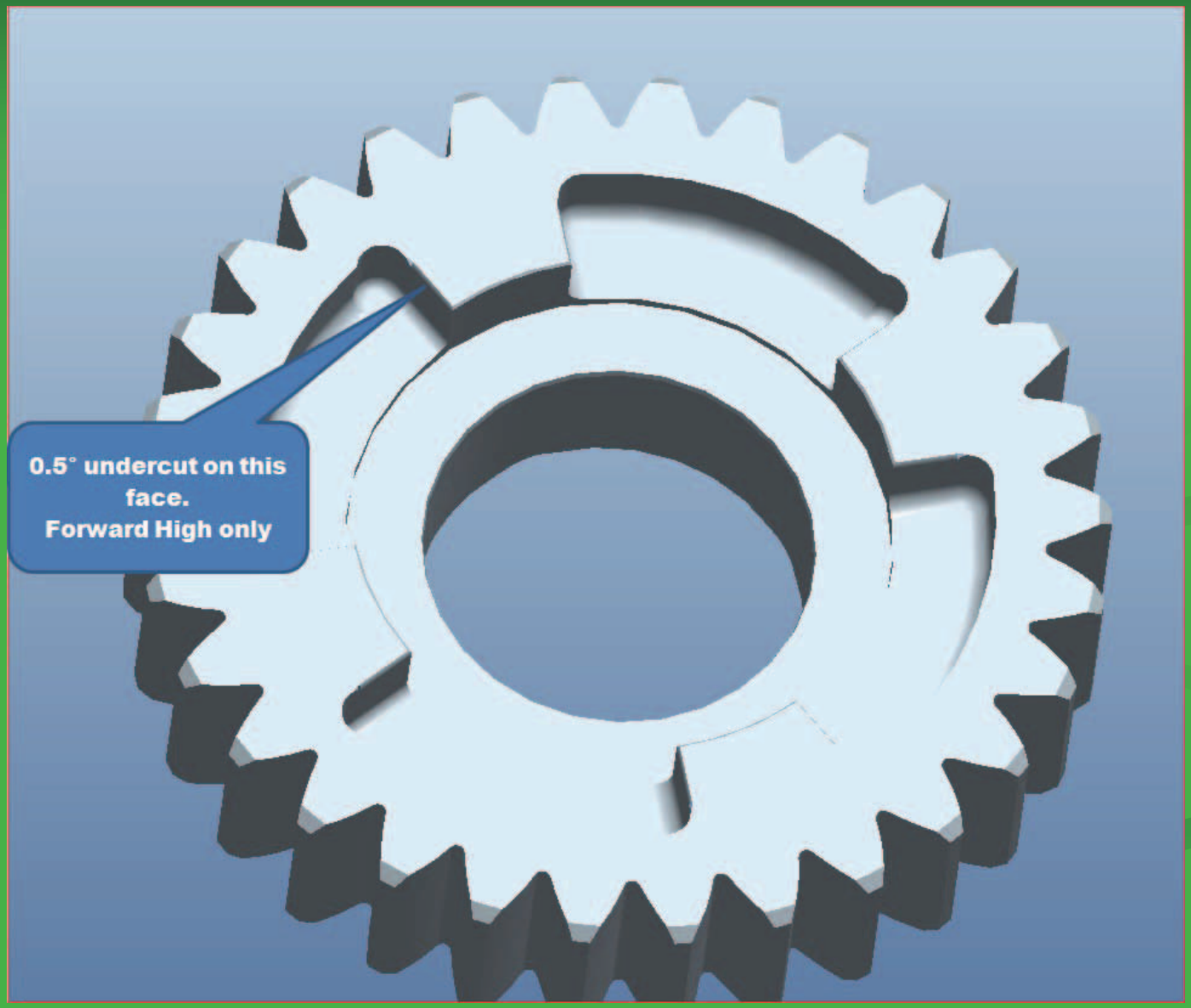
Wider gears on the secondary drive.

Driven High Range Gear



Engagement surface on the driven high range gear has 0.5˚ undercut to keep the gear and slider engaged

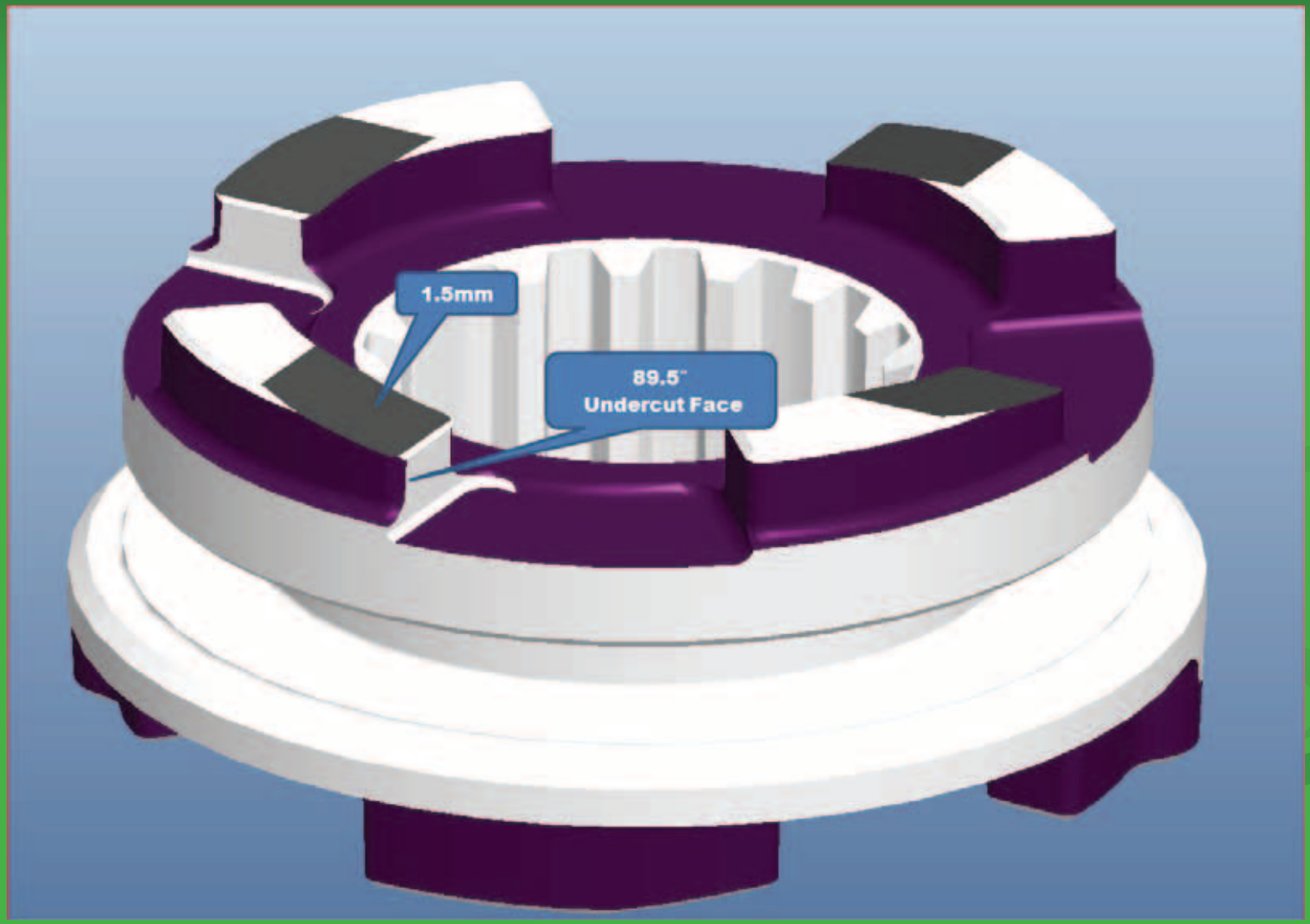
CAD of High Range Gear



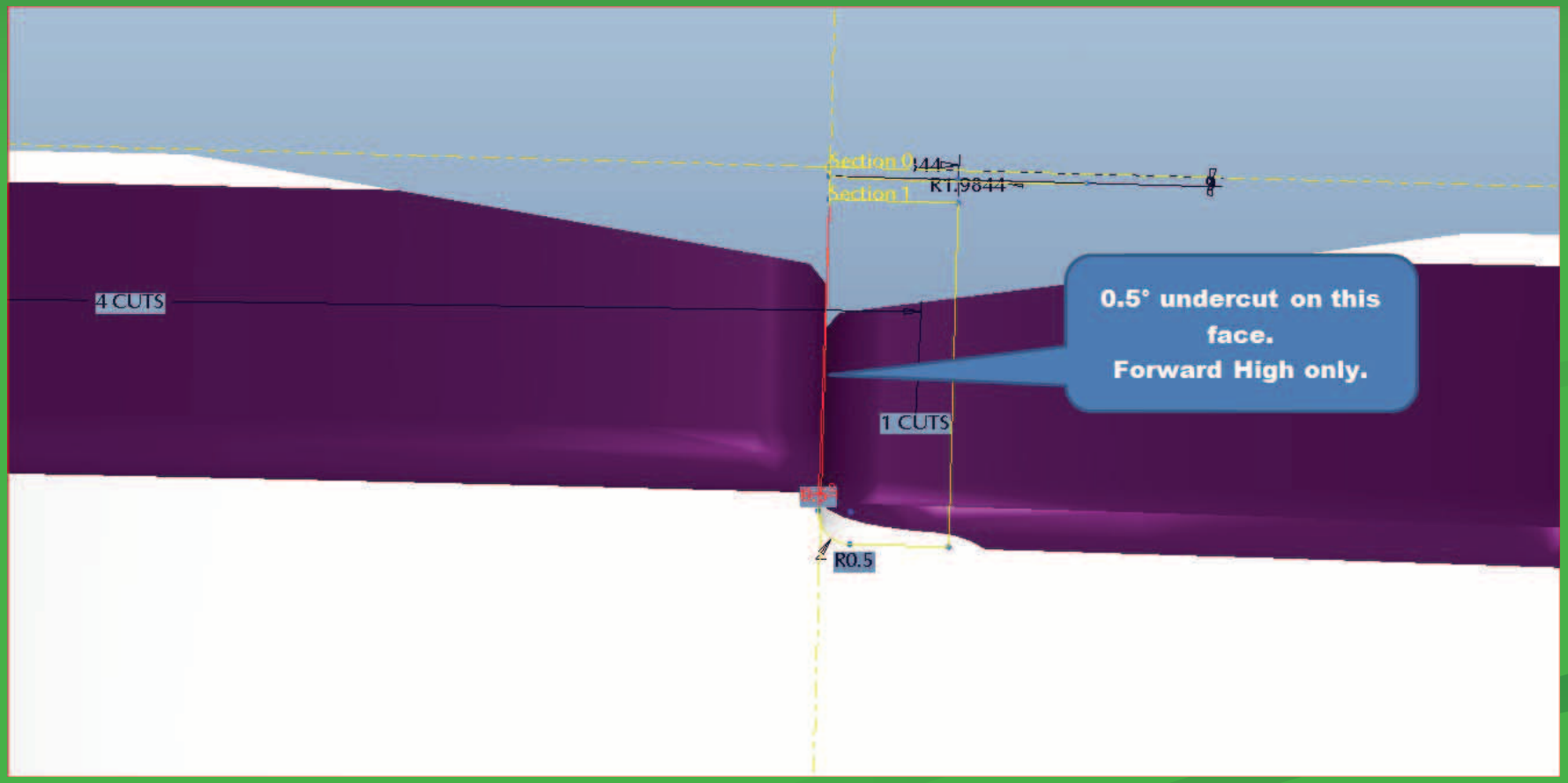
Sliding High Range / Reverse Gear Selector

The gear selector has an undercut of 89.5˚ to accommodate the modified area on the high range gear.

CAD of High Range /Reverse Gear Selector



CAD Profile of the Selector and Gear Engaged



Driven Low Range Gear

Low range gear now has a forged chamfer, this will help against breaking.

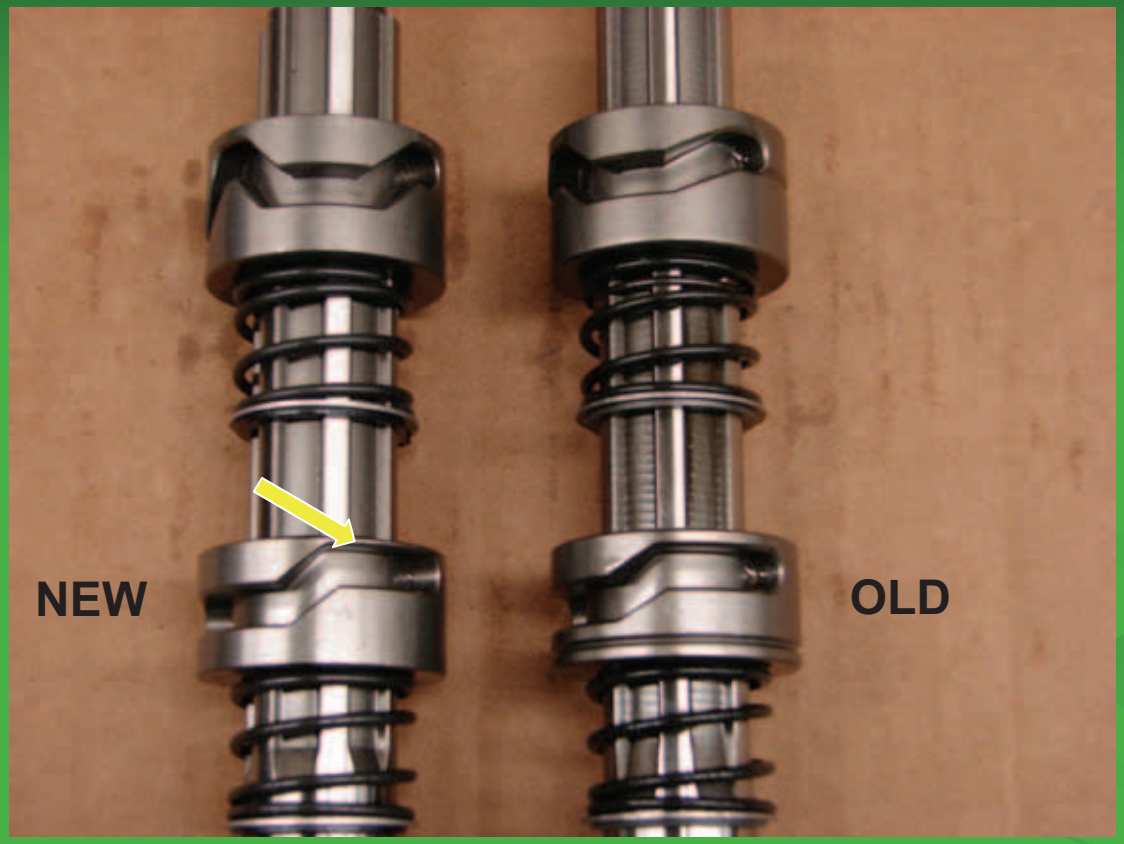
Gear Shift Plate

Taller and steeper detents in High and Park for a more positive feeling shift.

Cam Stopper Spring

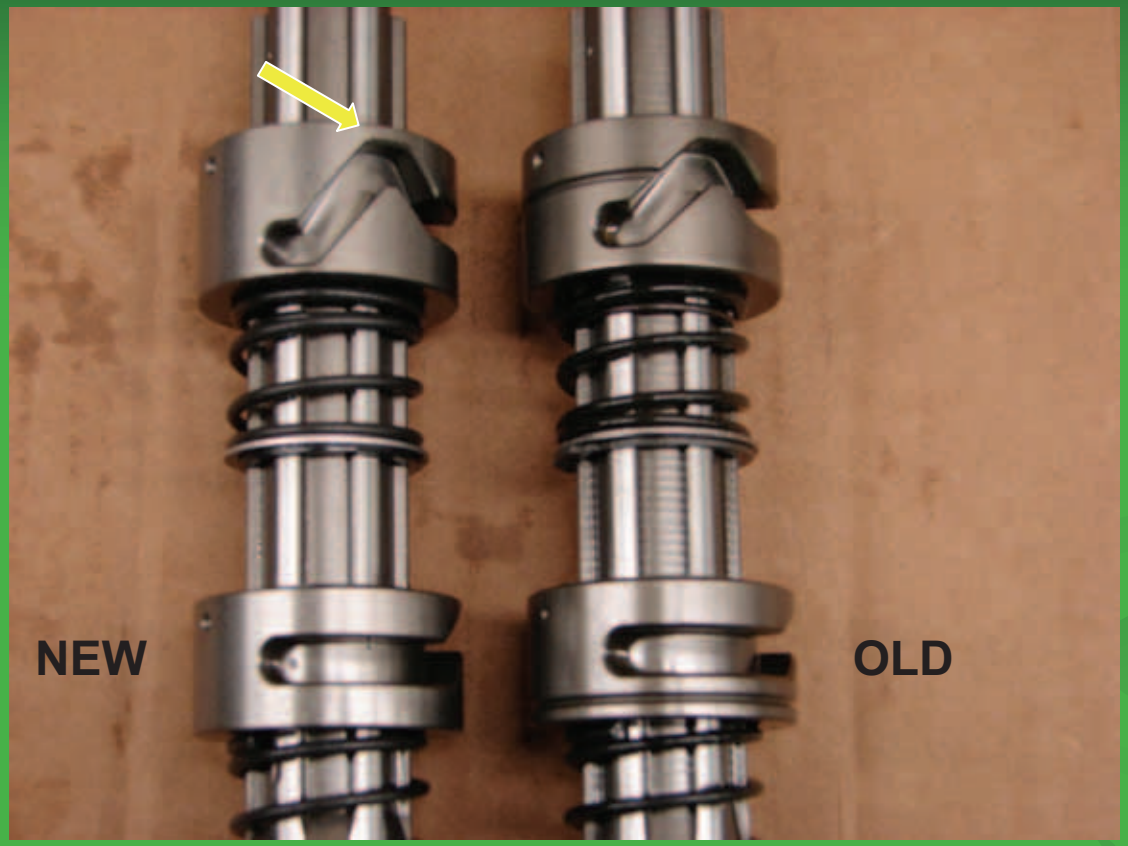
Heavier gage wire and decreased the angle of the spring to gain more pressure against the detent.

Gear Shift Shaft Assembly



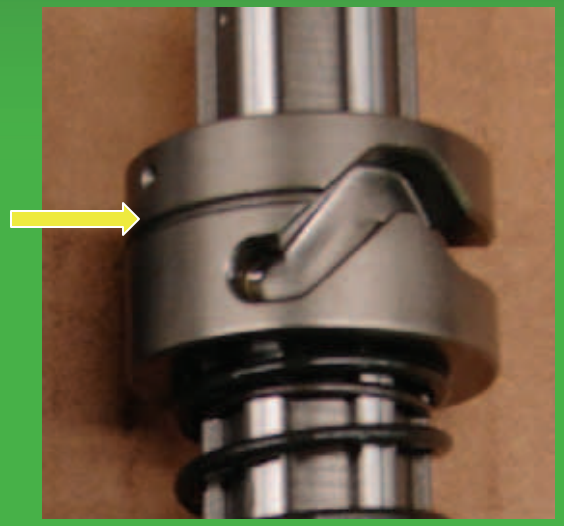
Changed gear shift cams to accommodate changes made to transmission high and low gears. Notice the changes to the shift cam groove.

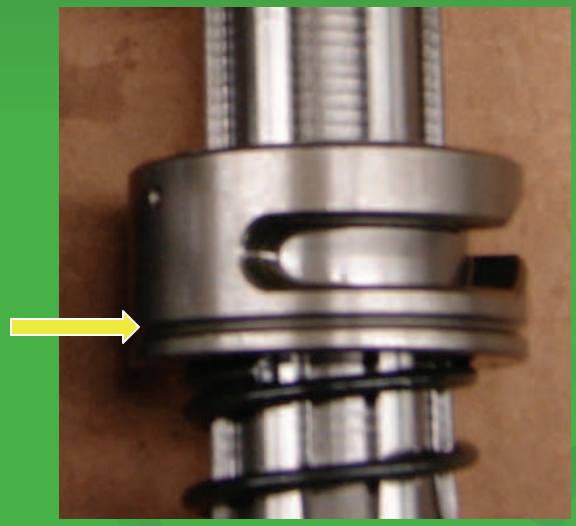
Gear Shift Cams



The changes are made to the gear shift cam, making up for the added travel needed to engage the selector and the gear.

Additional Changes to the Shift Cams



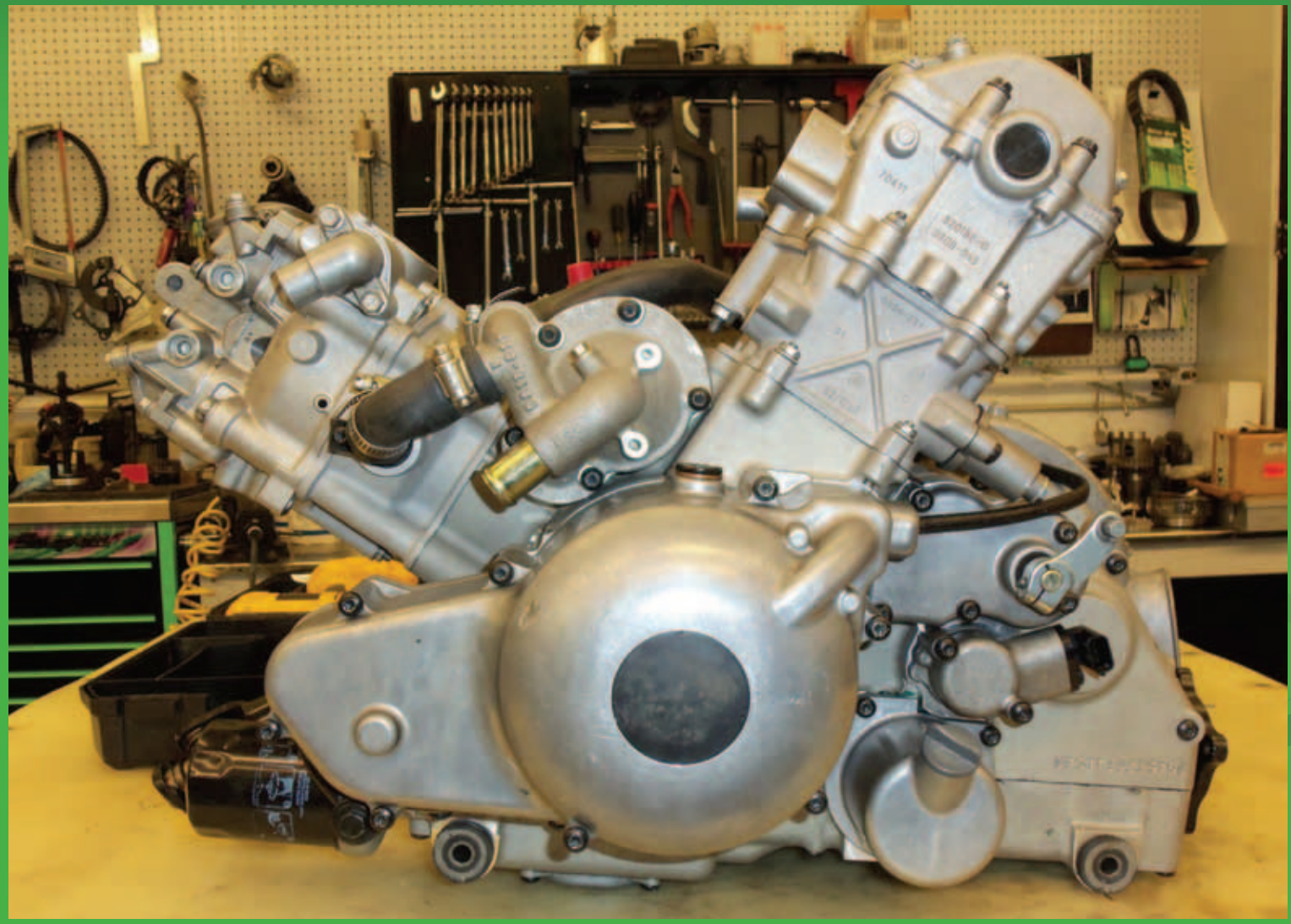


These machined grooves have also been omitted.

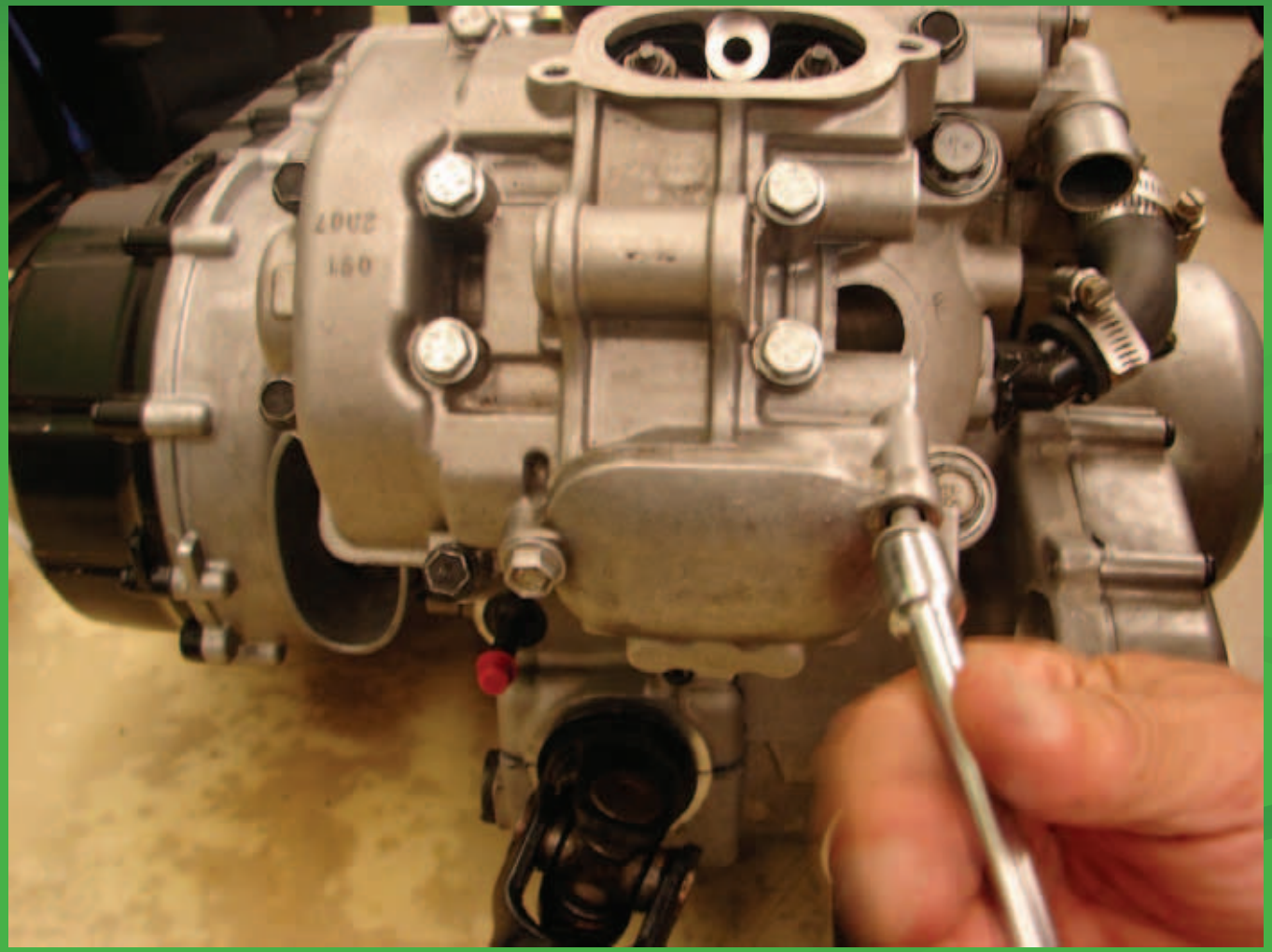
ATV Service Tech Tips

- Checking engine timing on the 1000 H2
- 450 belt failure
- One-way bearing orientation
- Fuel pressure troubleshooting
- Checking TPS with TPS Analyzer
- Clutch cover seal replacement
- EPS Tool (Electronic Power Steering)

Checking 1000 H2 Engine Timing

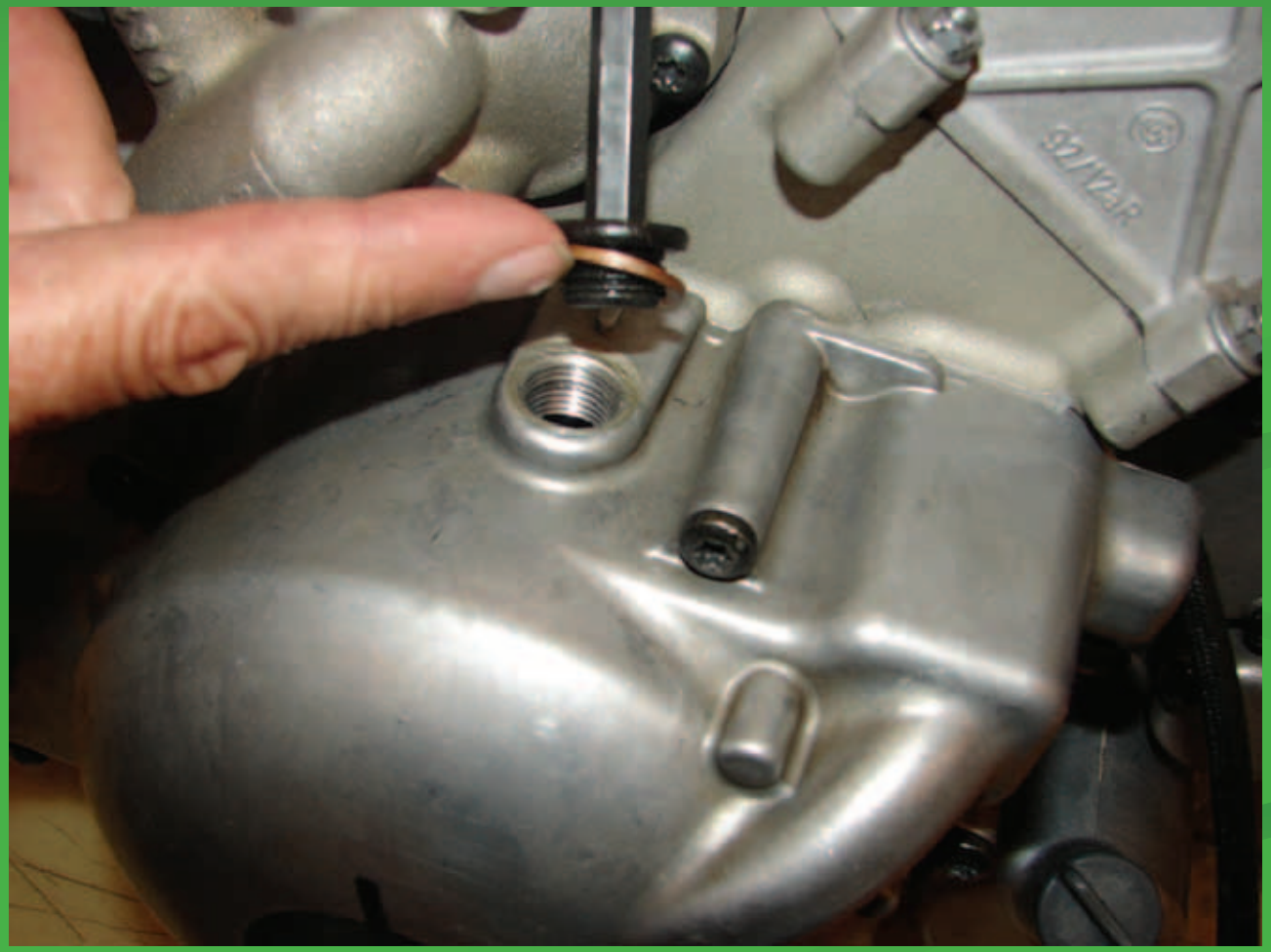


Remove valve covers on front and rear cylinders.

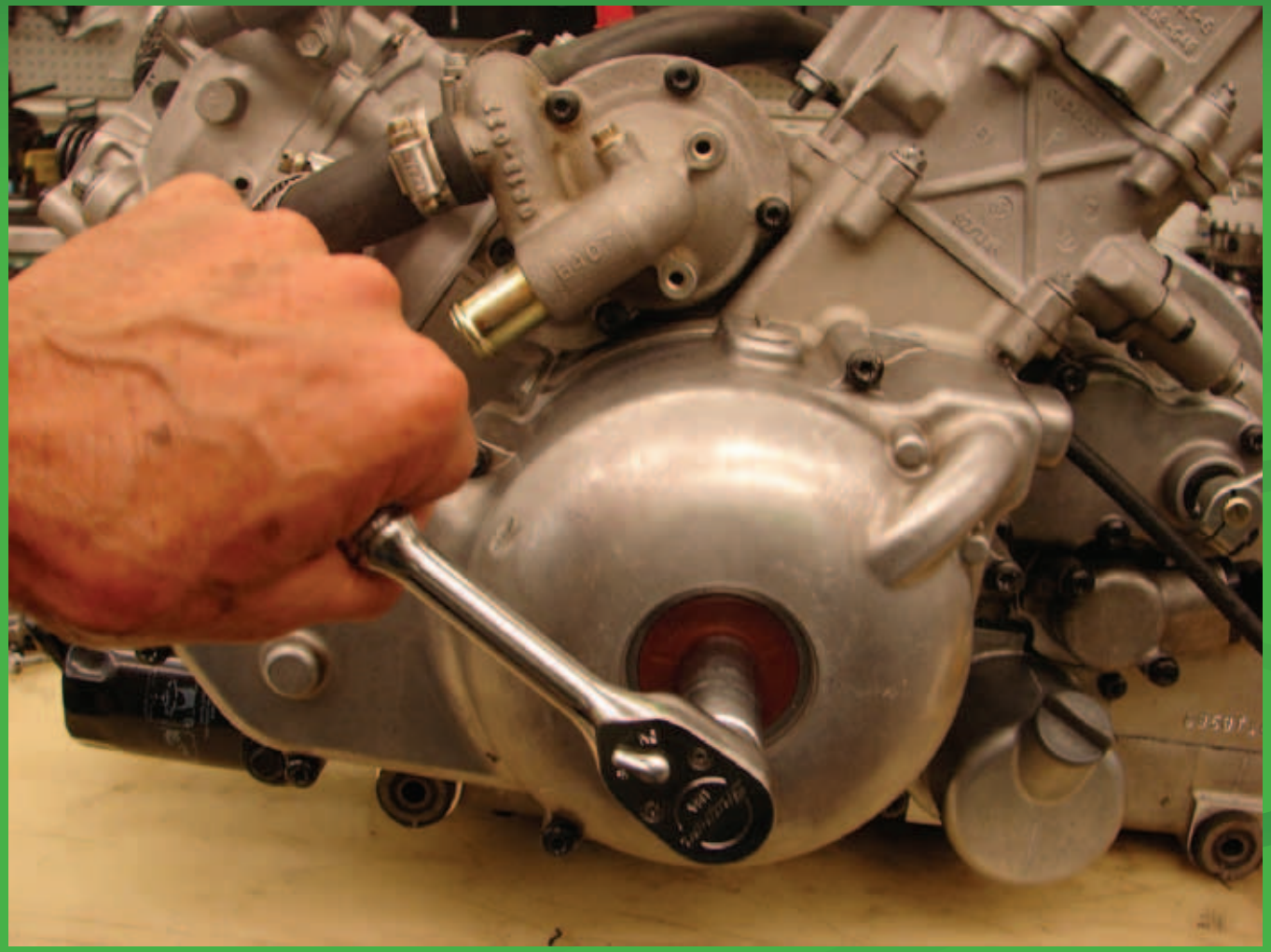


Remove Mag Cover Plug
Insert LH crankshaft rotation bolt
(p/n 0444-249)

Remove the timing inspection plug from the mag cover. Be sure to retain the brass washer.

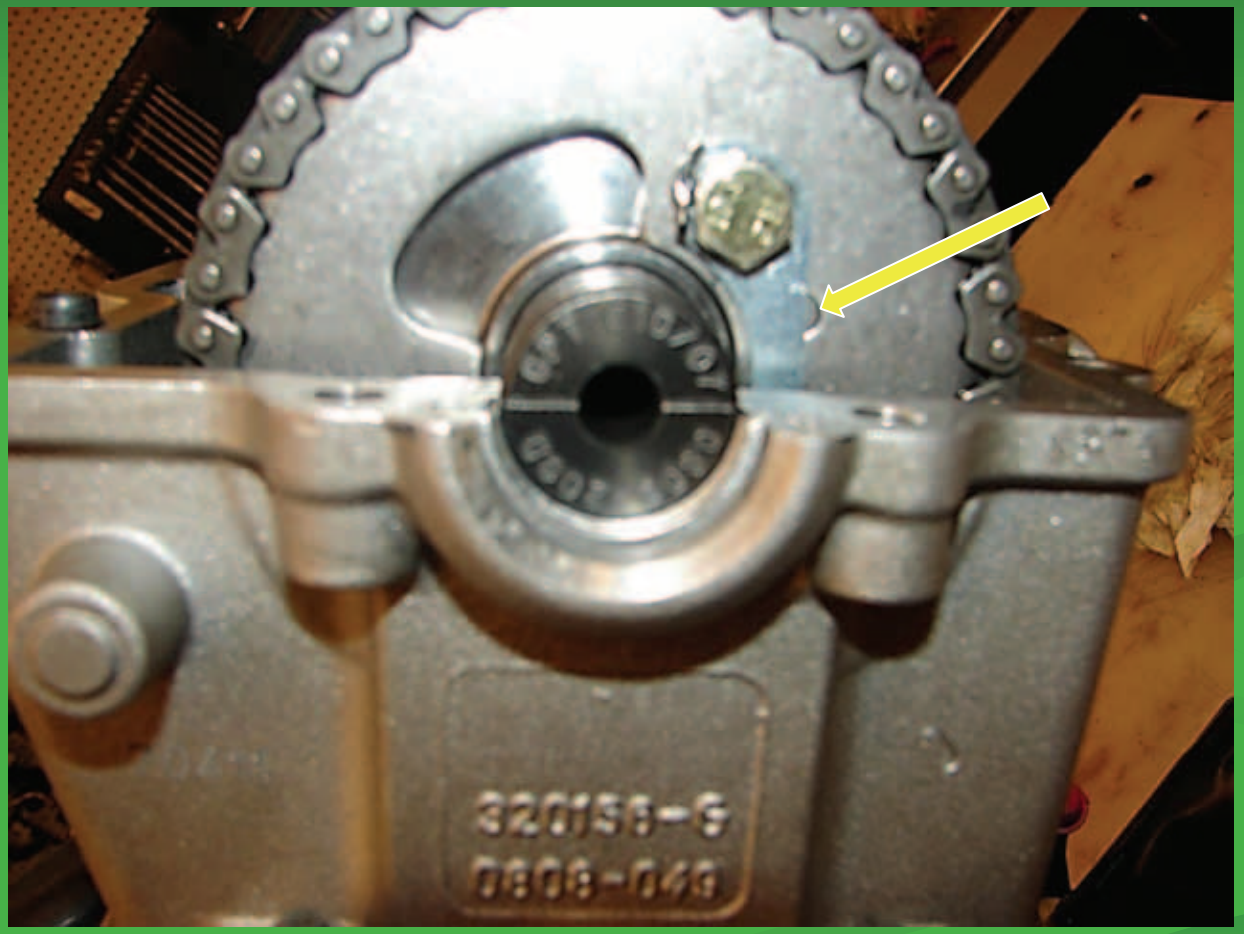


Rotate crank shaft counterclockwise until front piston is at TDC compression stroke.



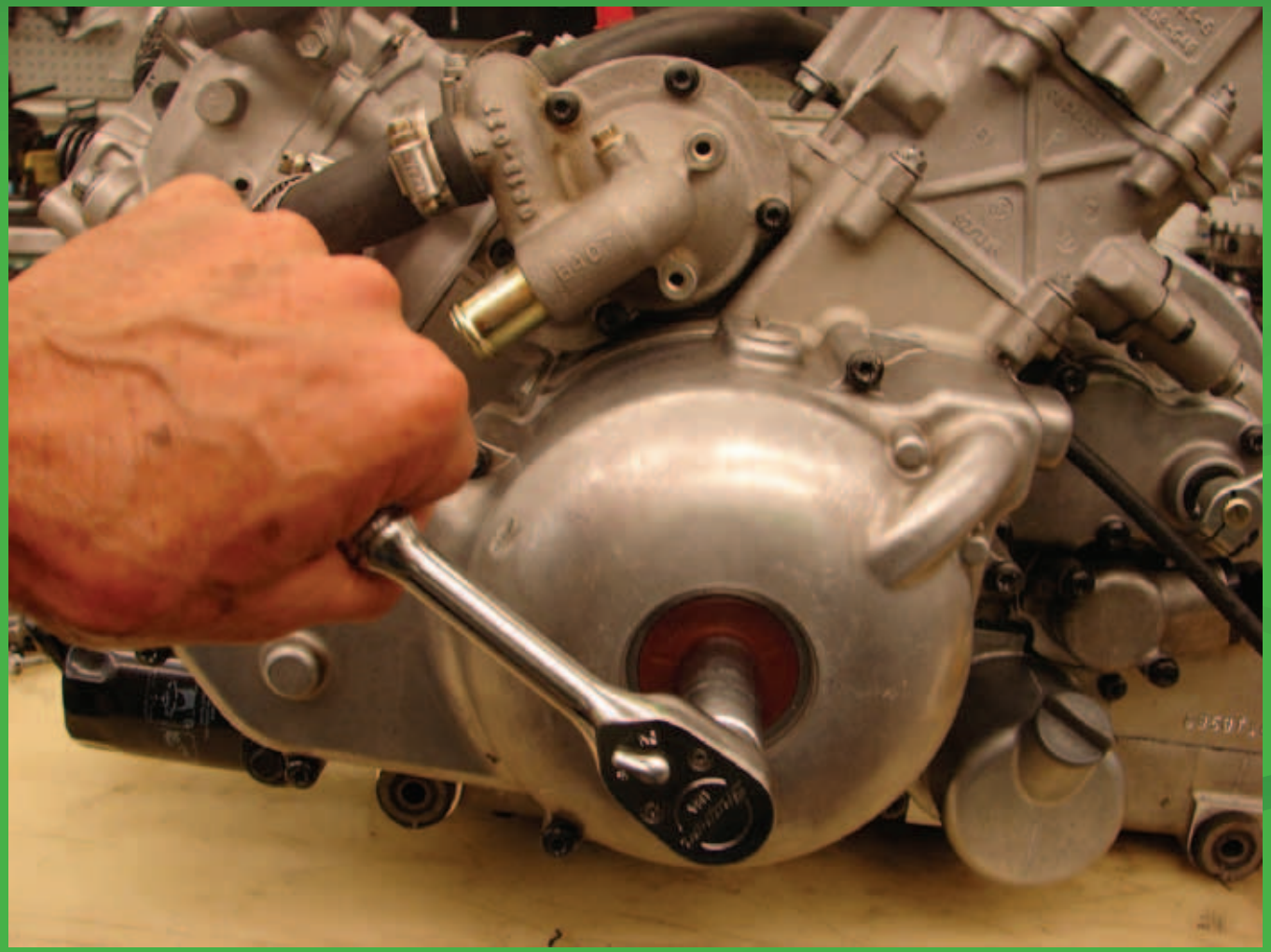
The F timing mark should be aligned with the mark on the mag cover.

Timing marks on the front cylinder camshaft at TDC should be aligned with the top of the cylinder head.

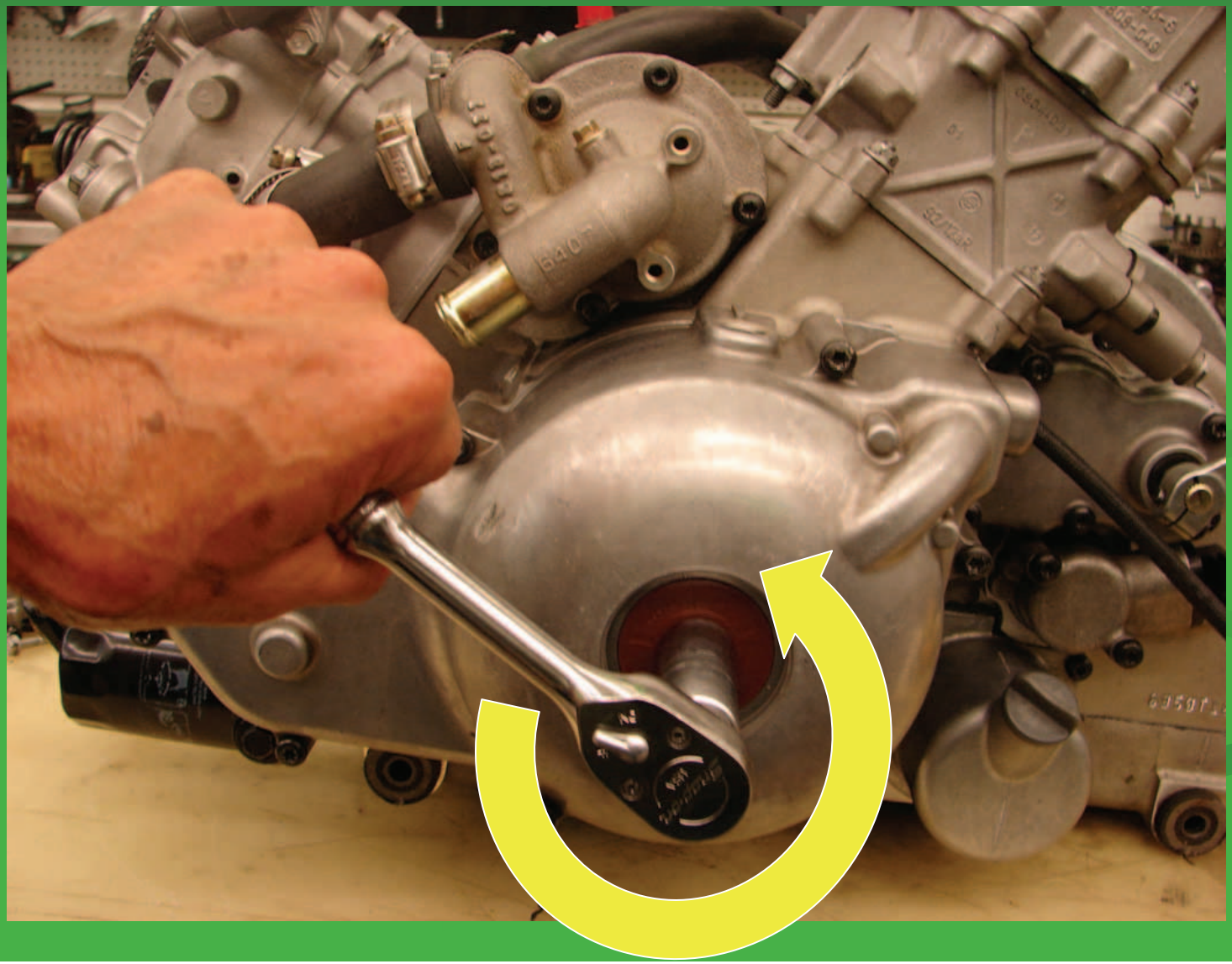


Note: the cam lobes will be down and the locking plate is over the cam alignment pin.

With the front cylinder timing marks lined up correctly, align your tool handle with the center line of the front cylinder.

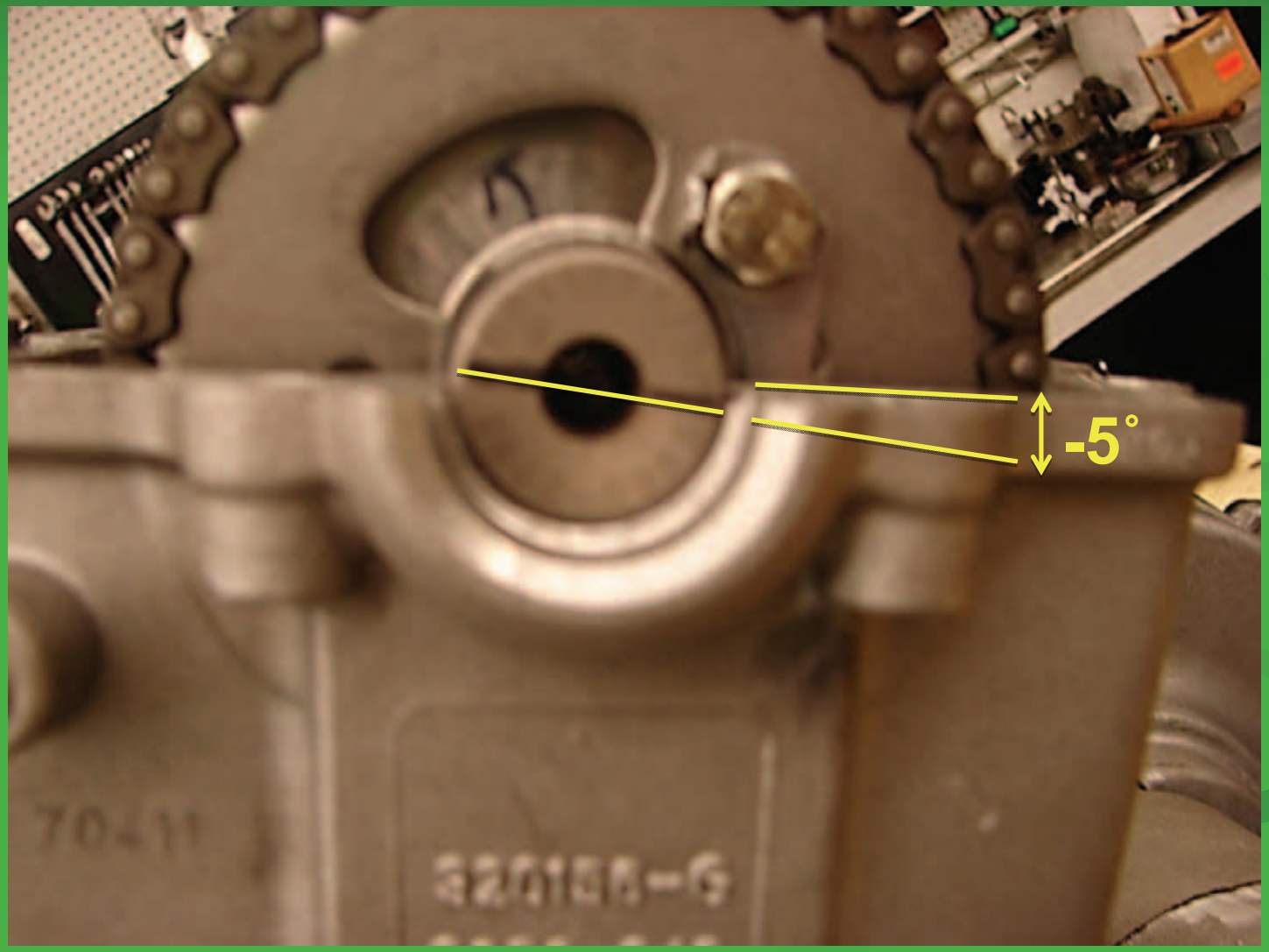


Rotate the tool handle counter clockwise 270˚ until it is lined up with the centerline of the rear cylinder.

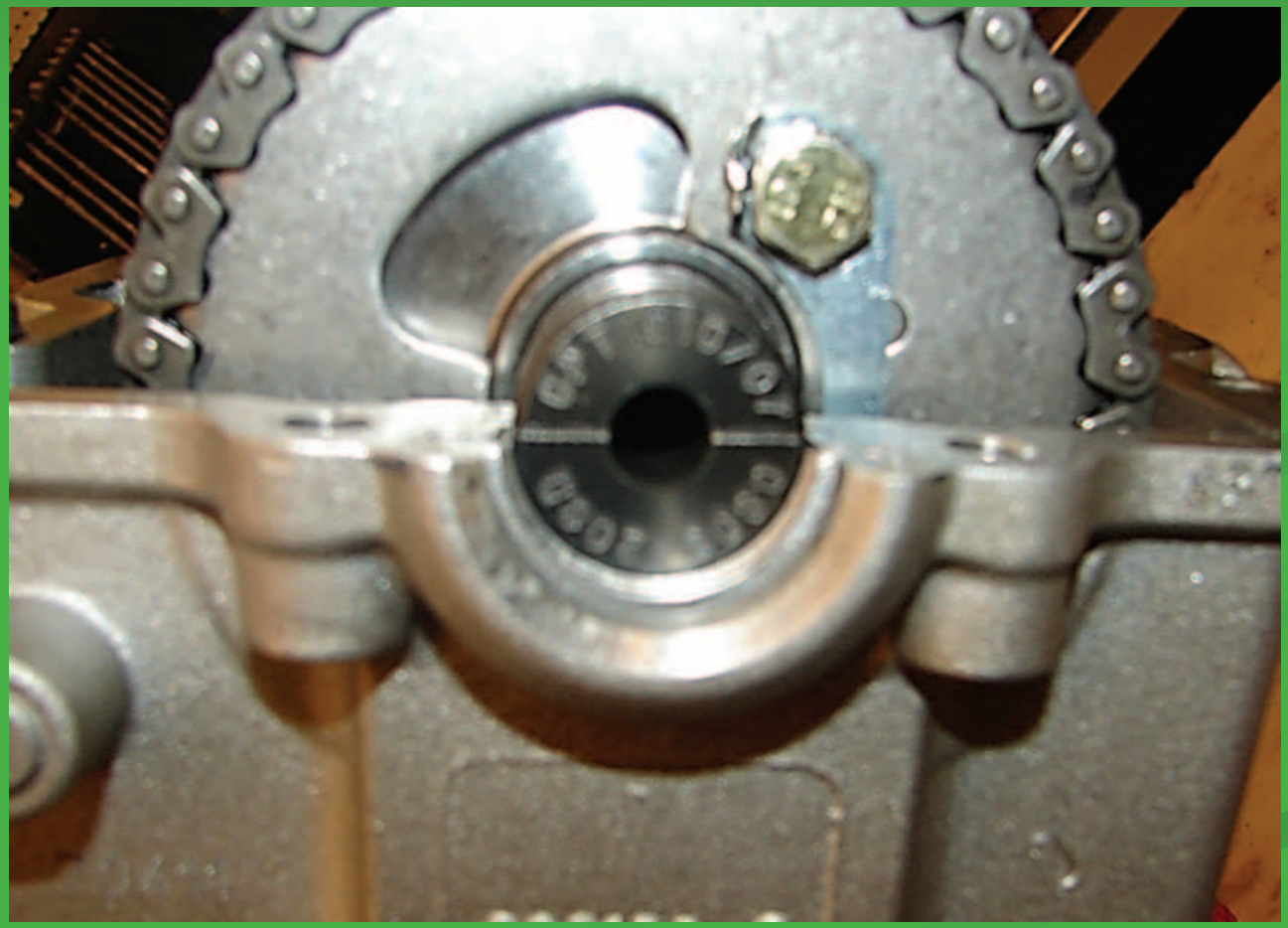


The R timing mark should now be aligned with the timing mark on the mag cover. If you go past the R mark, start over from TDC front cylinder.

On 2008 Engines set the cam so we have approx -5 degree from parallel on the exhaust port side.

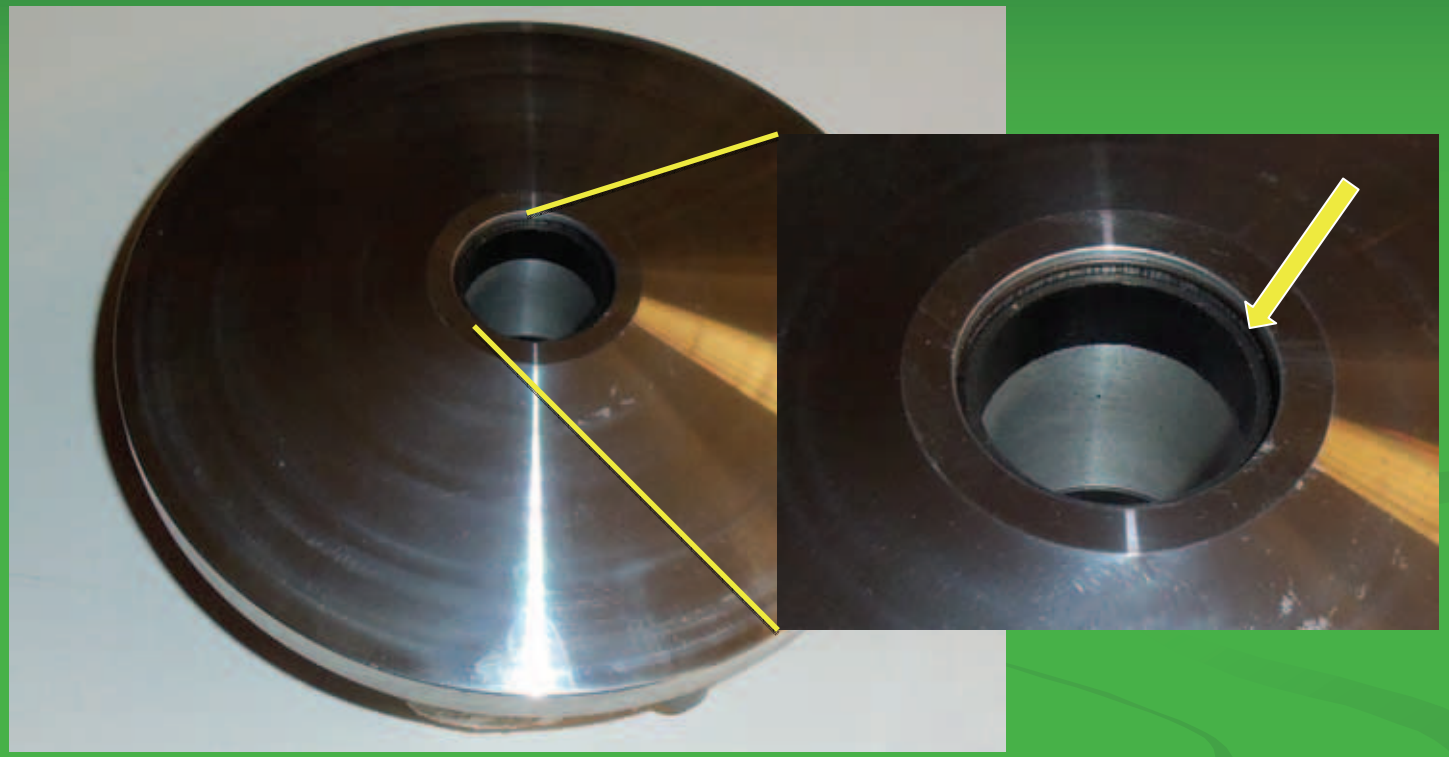


On 2009 – Current 1000 Engines, the timing marks will be parallel to the cam cover sealing surface.



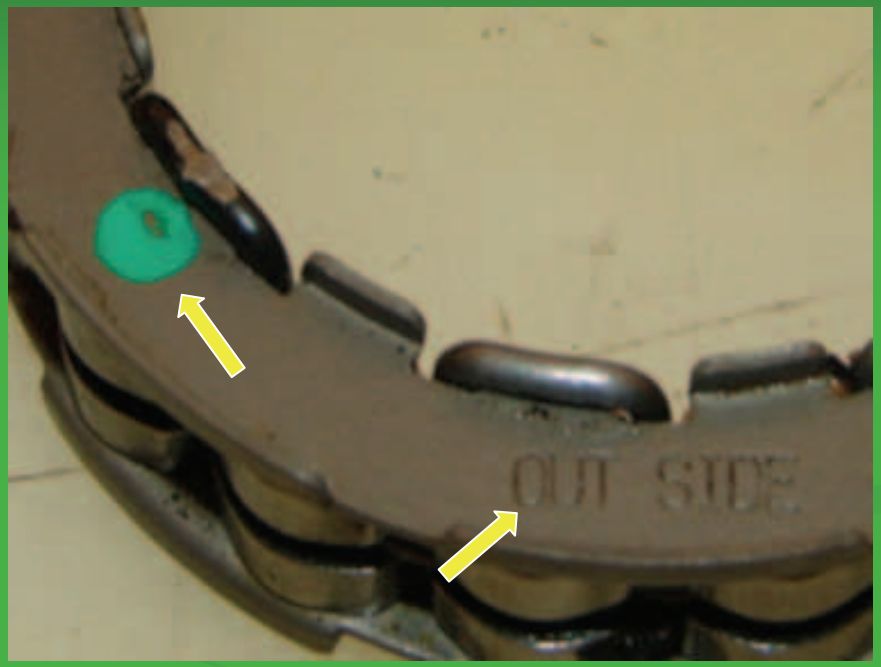
Check again that the R timing mark is aligned.
If it is, your engine timing is correct.

450 Belt Failure



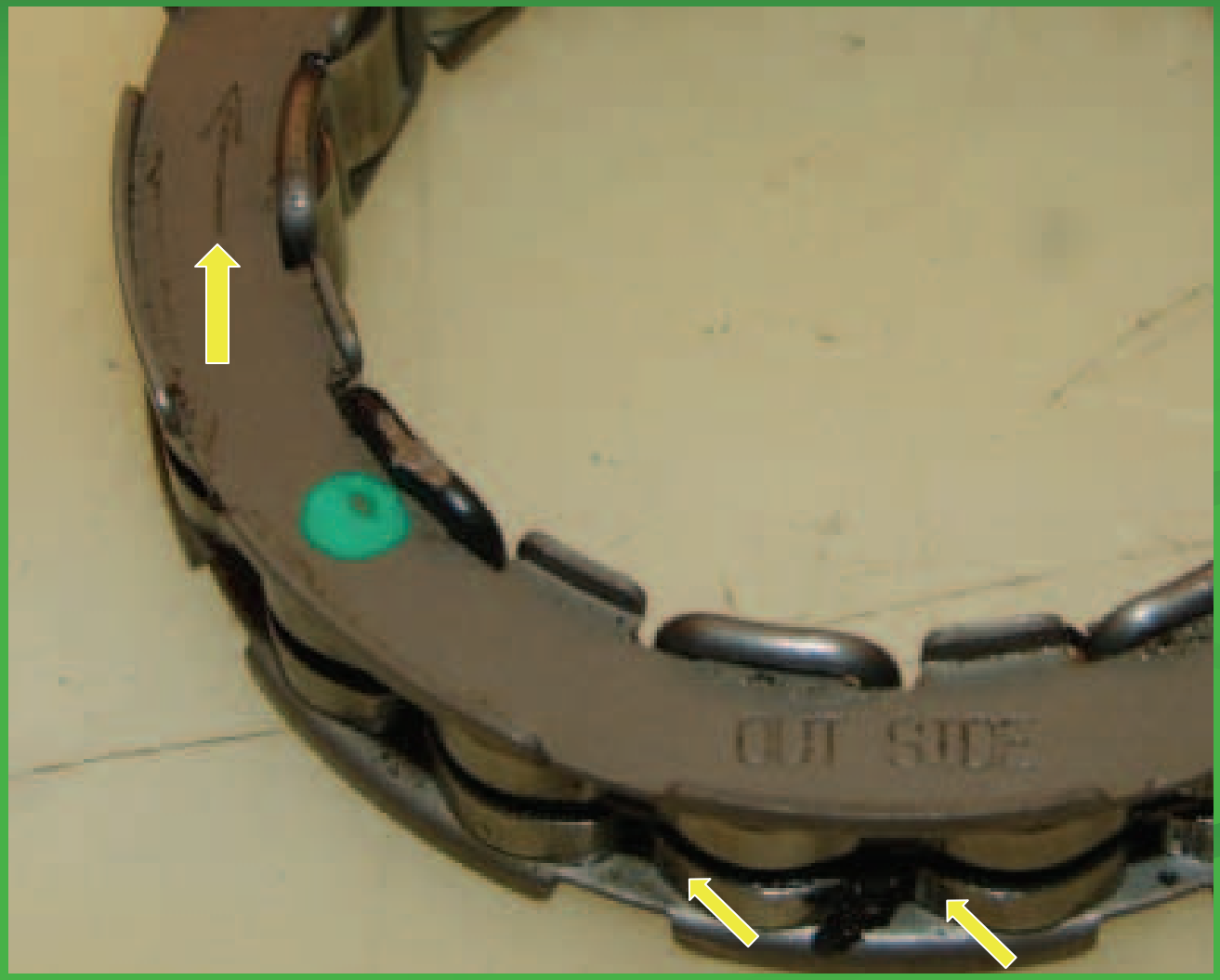
The bushing may slip past the retaining ring causing the sheaves to stay apart and the drive belt to slip, producing heat, resulting in belt failure.

One Way Bearing (Sprague Bearing)



The words “OUT SIDE” along with the Green dot face away from the engine, when installed on the centrifugal clutch.

The arrow will indicate the direction of rotation.
If you look at the pawls you will see they will be in the same direction as the arrow.



Note the marks in the pawls

EFI Troubleshooting

- Symptoms of low and high fuel pressure.
- Fuel Pressure tester.
- How to check fuel pressure.
- 450 H1 / 950 H2 DTC (Diagnostic Trouble Codes)
- Checking TPS 450 H1, Mud Pro 1000 H2, TRV 1000 H2.

High Fuel Pressure

- Hard starting (Hot or Cold)
- Spark plug fouling
- High fuel usage
- No Idle or Surging idle (ISC constantly changing)
- Overall poor performance and acceleration
- Build up of raw gasoline in the oil

Low Fuel Pressure

- Hard starting (Hot or Cold)
- No Idle or Surging idle (ISC constantly changing)
- Engine sputters on acceleration
- Overall poor performance and acceleration
- Detonation causing piston and cylinder damage
- Excessive engine and exhaust heat

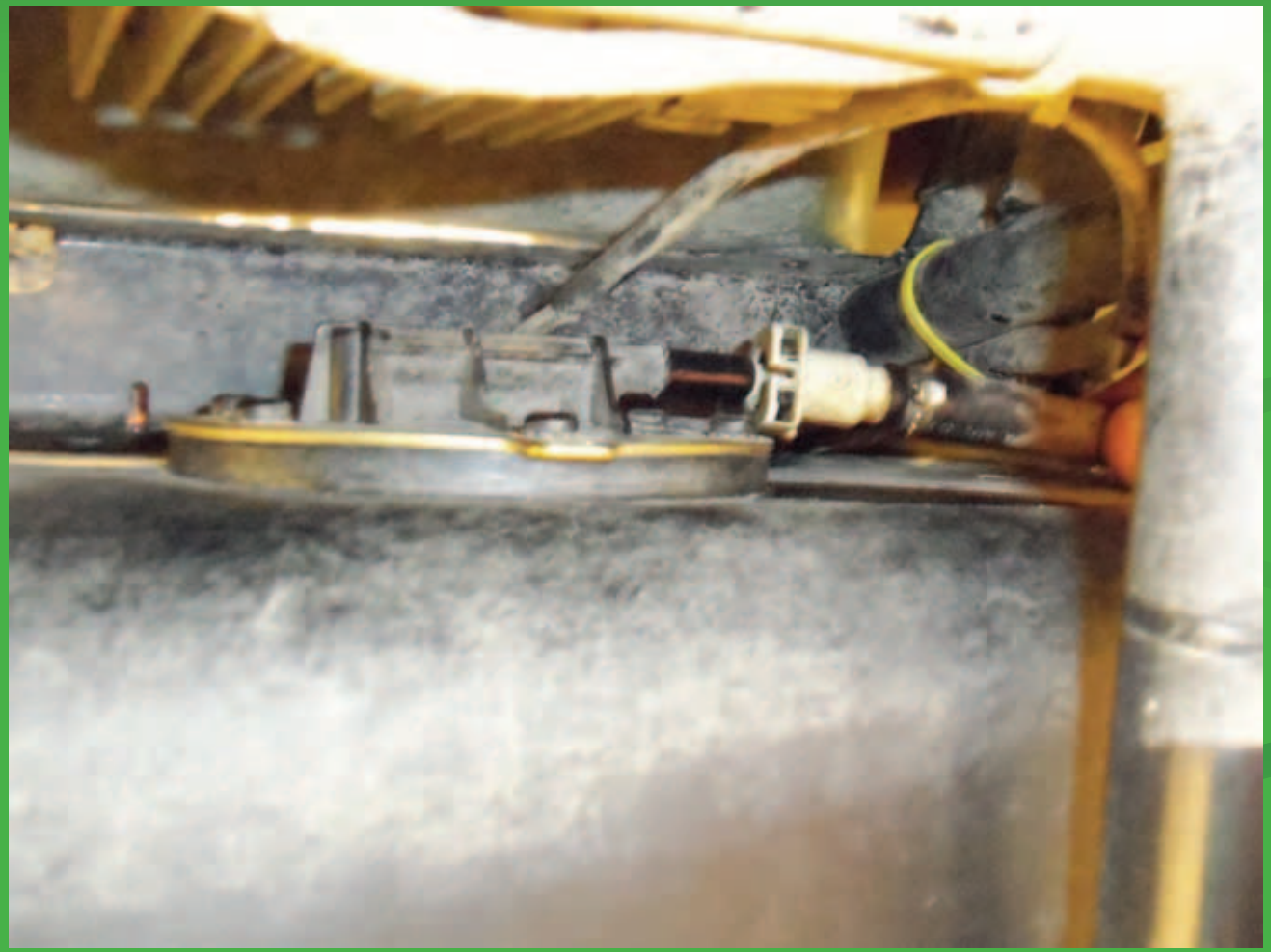
Fuel Pressure Tool

Fuel pressure can be easily checked using Arctic Cat EFI Fuel Pressure test kit.

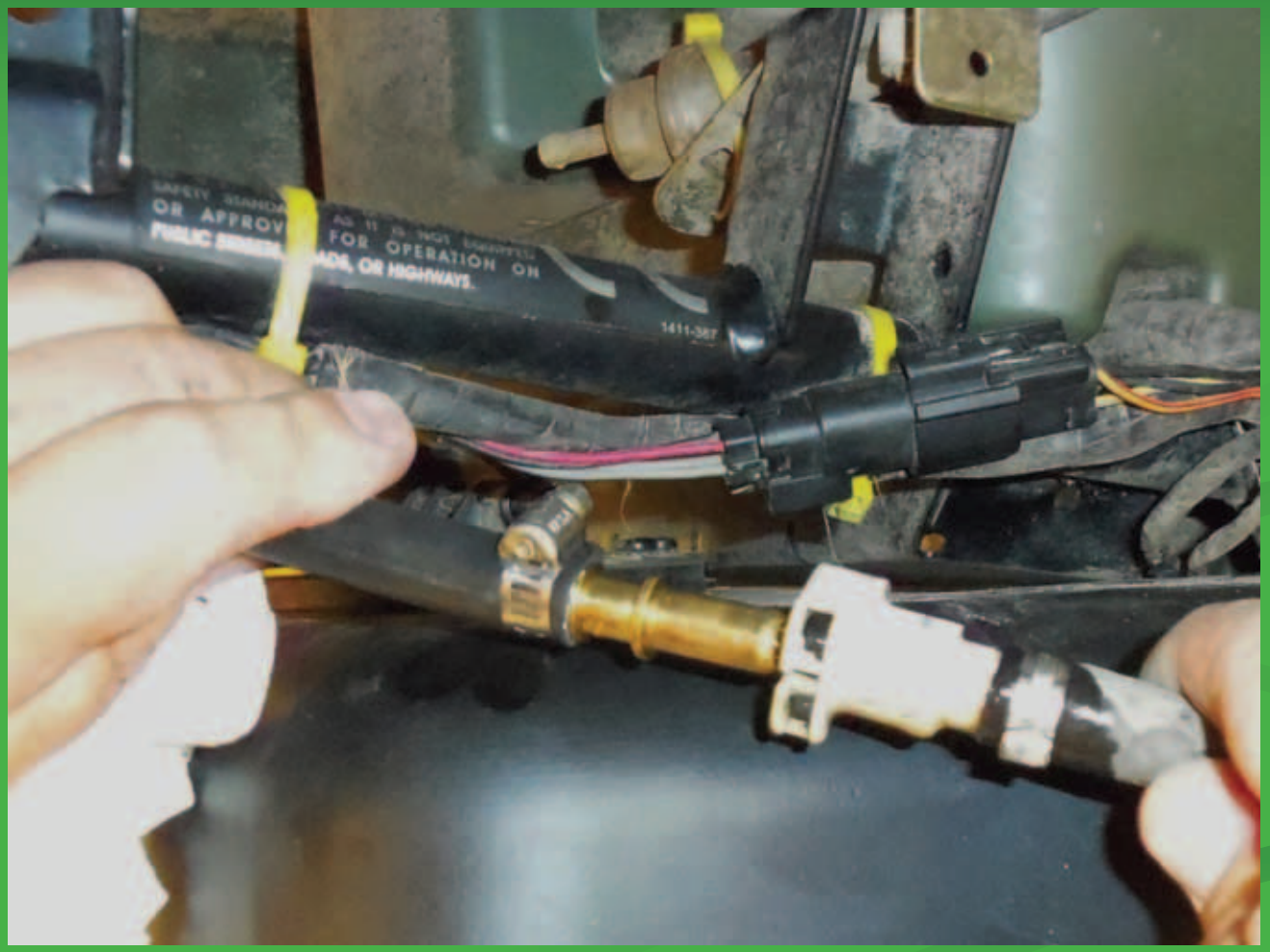
(p/n 0644-571)

Checking Fuel Pressure

From the rear of the ATV, remove the fuel line from the fuel pump.



Push the female end of the tester into the male end of the fuel supply line.



Push the female end of the tester on the male outlet on the fuel pump.

The fuel pressure must now stay consistent while turning the engine over or when the engine is running.

Refer to the specific model year manual, or CAT Quest, for the correct pressure specification.

450 H1 / 950 H2 DTC

2012 450 H1 and 950 H2 DTC

Gauge DTC	Wrench Icon Status	ECU PIN	Input/ Output	High/Low Variable	ARCTIC CAT DESCRIPTION
B0050	ON	E2	I	L	Driver Seatbelt Sensor/Switch
C0063(1)		D2	I	V	Tilt Sensor Circuit High
C0064(1)	ON	D2	I	V	Tilt Sensor Circuit Low/SG/Open
P0107	ON	F2	I	V	MAP Sensor Circuit Low/SG/Open
P0108	ON	F2	I	V	MAP Sensor Circuit High/SP
P0112	ON	F3	I	V	Intake Air Temp Sensor Circuit Low/SG
P0113	ON	F3	I	V	Intake Air Temp Sensor Circuit High/Open
P0114(1)	OFF	F3	I	V	Intake Air Temp Sensor Circuit Intermittent
P0116	ON	F4	I	V	Engine Coolant Temp Sensor Circuit Range/Performance
P0117	ON	F4	I	V	Engine Coolant Temp Sensor Circuit Low/SG
P0118	ON	F4	I	V	Engine Coolant Temp Sensor Circuit High/Open/SP
P0119(1)	OFF	F4	I	V	Engine Coolant Temp Sensor Circuit Intermittent
P0121		G3	I	V	Throttle Position Sensor Range/Performance
P0122	ON	G3	I	V	Throttle Position Sensor Circuit Low/SG
P0123	ON	G3	I	V	Throttle Position Sensor Circuit High
P0219		N/A	N/A	N/A	Engine Over-Speed Condition
P0231	ON	J1	O	L	Fuel Pump Relay Circuit Low/SG/Open
P0232		J1	O	L	Fuel Pump Relay Circuit High
P0233(1)		J1	O	L	Fuel Pump Relay Circuit
P0261(2)	ON	L4	O	L	Rear Cylinder Injector Circuit Low/SG (H1 & H2)
P0262(2)	ON	L4	O	L	Rear Cylinder Injector Circuit High (H1 & H2)
P0263(2)	ON	L4	O	L	Rear Cylinder Injector Balance/Open (H1 & H2)
P0264(2)	ON	K4	O	L	Front Cylinder Injector Circuit Low/SG (H2 Only)
P0265(2)	ON	K4	O	L	Front Cylinder Injector Circuit High (H2 Only)
P0266(2)	ON	K4	O	L	Front Cylinder Injector Balance/Open (H2 Only)
P0336(1)	ON	D1/E1	I	V	Crankshaft Angle Sensor Synchronization
P0337(1)	ON	D1/E1	I	V	Crankshaft Angle Sensor Circuit/SG
P0339(1)	ON	D1/E1	I	V	Crankshaft Angle Sensor Intermittent/Erratic
P0480		K2	O	L	Fan-Primary/Right Relay Control Circuit
P0481		B2	O	L	Fan-Secondary/Left Relay Control Circuit High
P0482	ON	B2	O	L	Fan-Secondary/Left Relay Control Circuit Low/SG/Open
P0483		B2	O	L	Fan-Secondary/Left Relay Control Circuit
P0484		K2	O	L	Fan-Primary/Right Relay Control Circuit High
P0485	ON	K2	O	L	Fan-Primary/Right Relay Control Circuit Low/SG/Open
P0500	ON	H3	I	V	Vehicle Speed-Sensor
P0508	ON	C4/D3/D4/E4	I/O	V	Idle Air Control System Circuit Low/SG
P0509	ON	C4/D4	I/O	V	Idle Air Control System Circuit High/Open
P0520	ON	E2	I	L	Engine Oil Sensor/Switch
P0562		L1	I	H	System Voltage Low
P0563		L1	I	H	System Voltage High
P0601		N/A	N/A	N/A	ECU Memory Check-Sum Error
P0615(1)		L3	O	L	Starter Relay Circuit
P0616	ON	L3	O	L	Starter Relay Circuit Low
P0617		L3	O	L	Starter Relay Circuit High
P0630	ON	N/A	N/A	N/A	VIN Not Programmed or Incompatible
P0631	OFF	N/A	N/A	CAN	Vehicle not Registered
P0635	Gauge Direct Error-Code	N/A	N/A	N/A	Power-Steering Controller Circuit
P0642		A1	O	H	Sensor Power Circuit Low
P0643	ON	A1	O	H	Sensor Power Circuit High
P0856	Gauge Direct Error-Code	N/A	N/A	N/A	Traction Controller Circuit
P2300(2)	ON	M1	O	L	Rear Ignition Coil Primary Circuit Low/SG/Open (H1 & H2)
P2301(2)	ON	M1	O	L	Rear Ignition Coil Primary Circuit High (H1 & H2)
P2303(2)	ON	M2	O	L	Front Ignition Coil Primary Circuit Low/Open (H2 Only)
P2304(2)	ON	M2	O	L	Front Ignition Coil Primary Circuit High (H2 Only)
P2531		A4	I	H	Ignition Switch Circuit Low
P2532		A4	I	H	Ignition Switch Circuit High
U0155		B1/C1	I/O	H/L	LCD Gauge Communication Lost
"FUEL OFF"	Gauge Direct Error-Code		N/A	N/A	Tilt Sensor Activation Operator-Code

High = Signal Level is too High (Possible Short-to-Battery (+))
Low = Signal Level is too Low (Possible Short-to-Ground or Short-to-Chassis)
SG = Possible Short-to-Ground or Short-to-Chassis
SP = Possible Short-to-Power or Short-to-Battery
Open = Open-Circuit (Possible Broken-Wire or No-Connection)
(1): These codes cleared by one complete power-cycle only (key-off, power-latch, key-on):
C0063, C0064, P0114, P0119, P0233, P0336, P0337, P0339, P0615
(2): These codes cleared by one complete starting-cycle only (key-off, power-latch, key-on, start, key-off, power-latch, key-on):
C0261, P0262, P0263, P0264, P0265, P0266, P2300, P2301, P2303, P2304

Click to Open DTC list.

Checking the TPS

1000 Cruiser, 1000 Mud Pro, 450 Engine

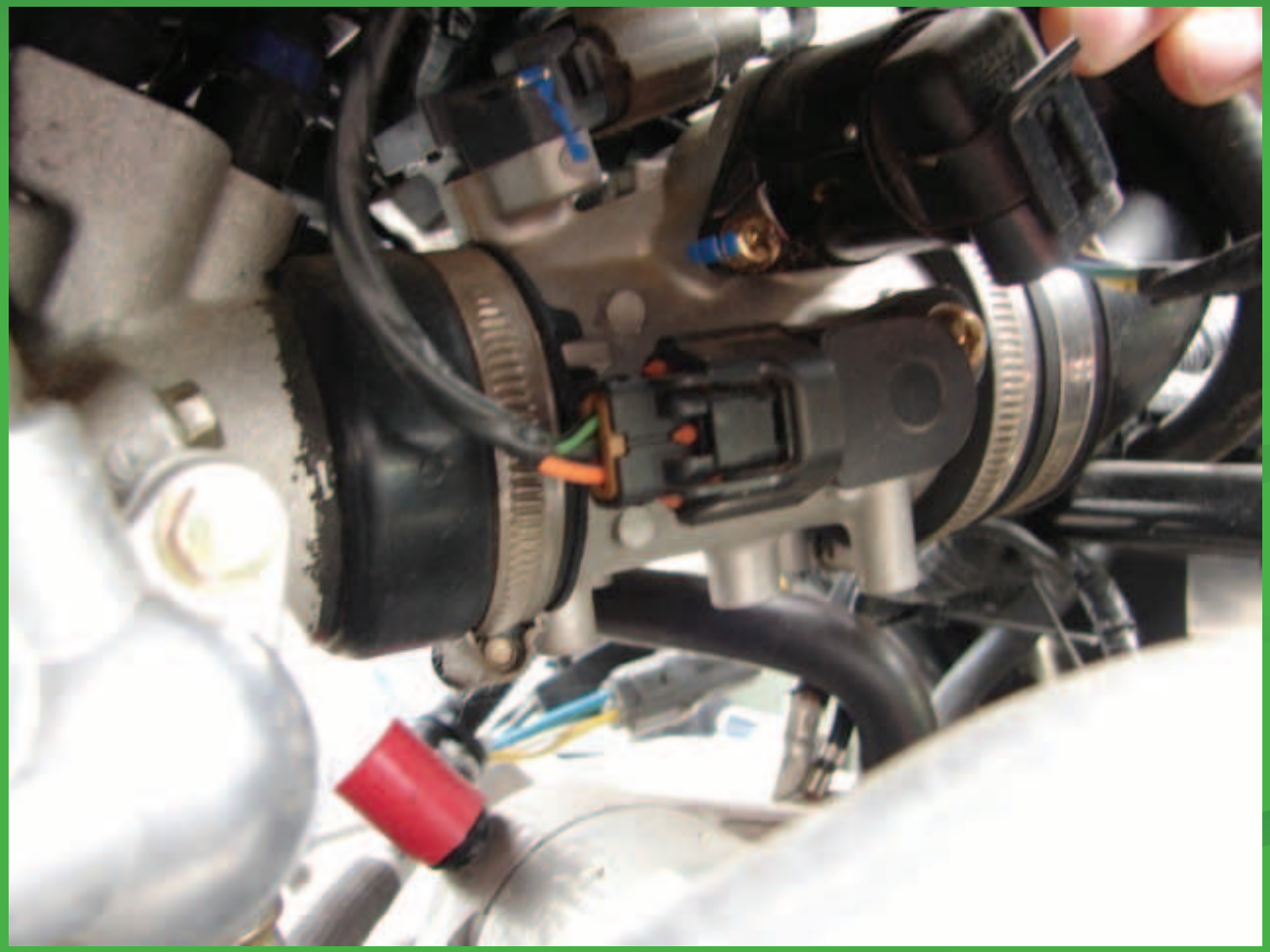
- **Using TPS Analyzer**
- **(p/n 3639-891)(Does not include Fluke DOM)**

Plug test harness into the analyzer, this will illuminate the “Power” indicator light.

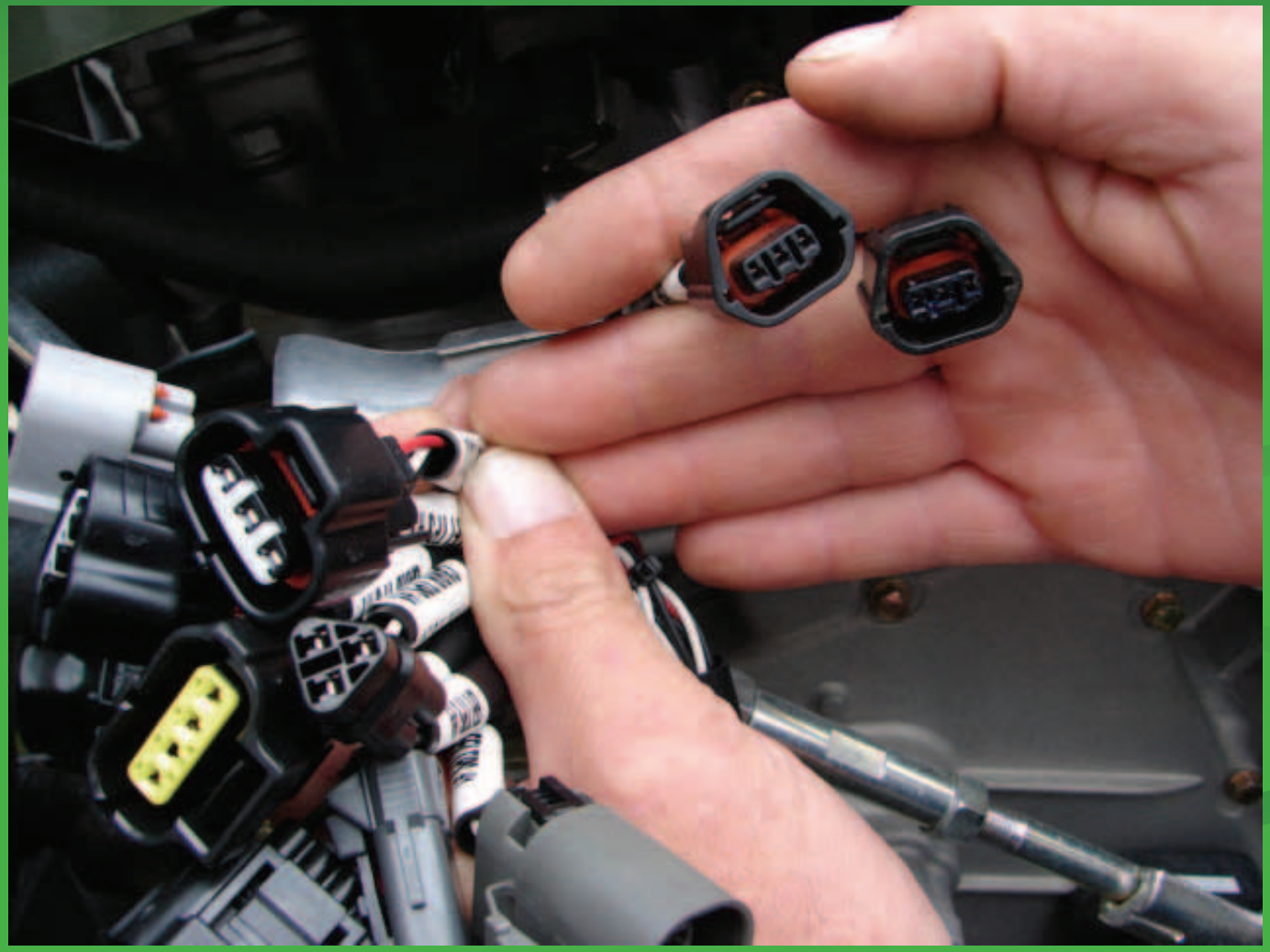
Check the analyzer battery voltage by placing the DOM black lead into (BLK) and the DOM red lead into (RED).

Verify a minimum of 4.19 DC volts to achieve the proper readings.

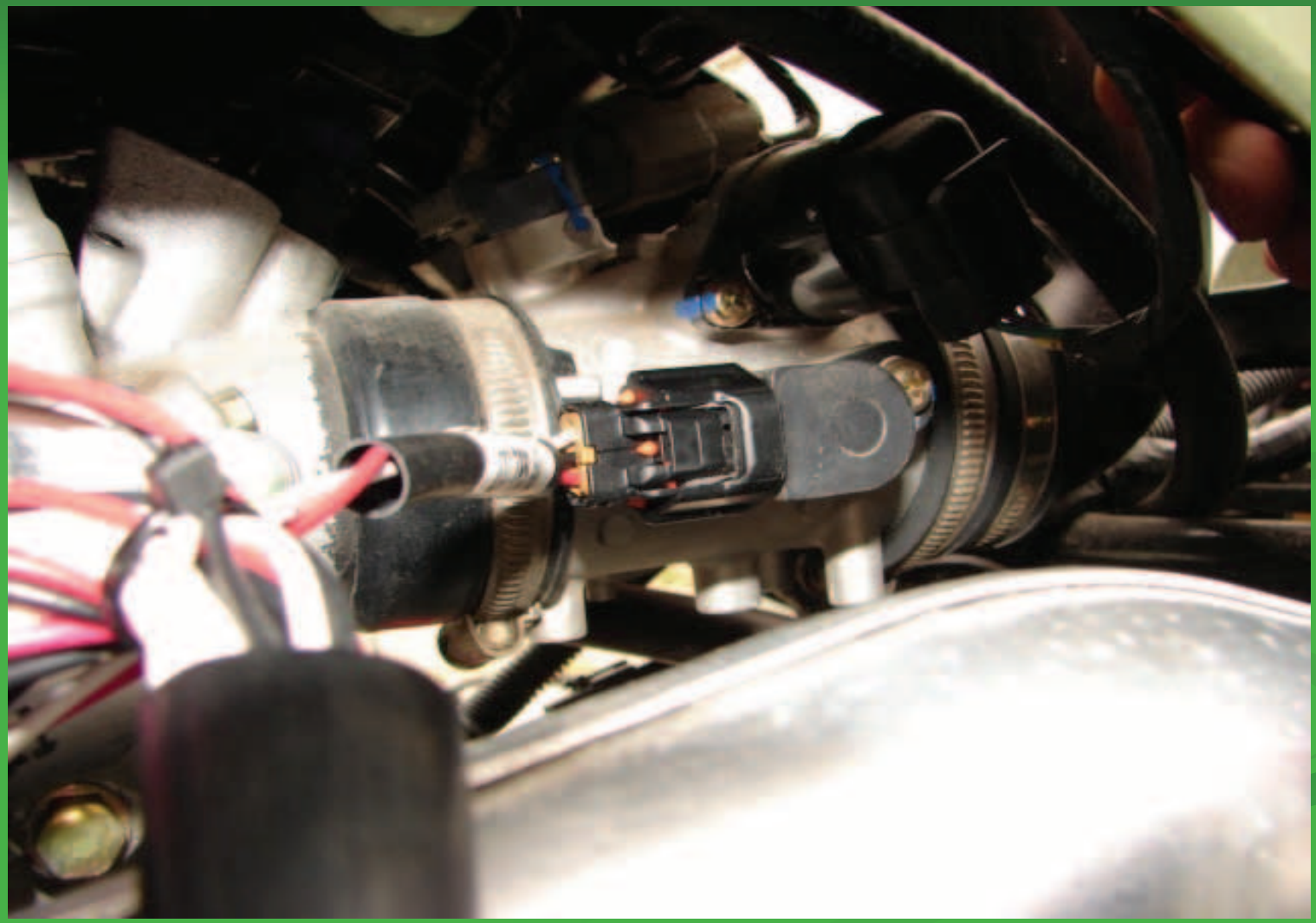
Locate TPS and unplug the main harness from TPS.



Select the matching connector from the analyzer harness.



Plug analyzer harness into the TPS



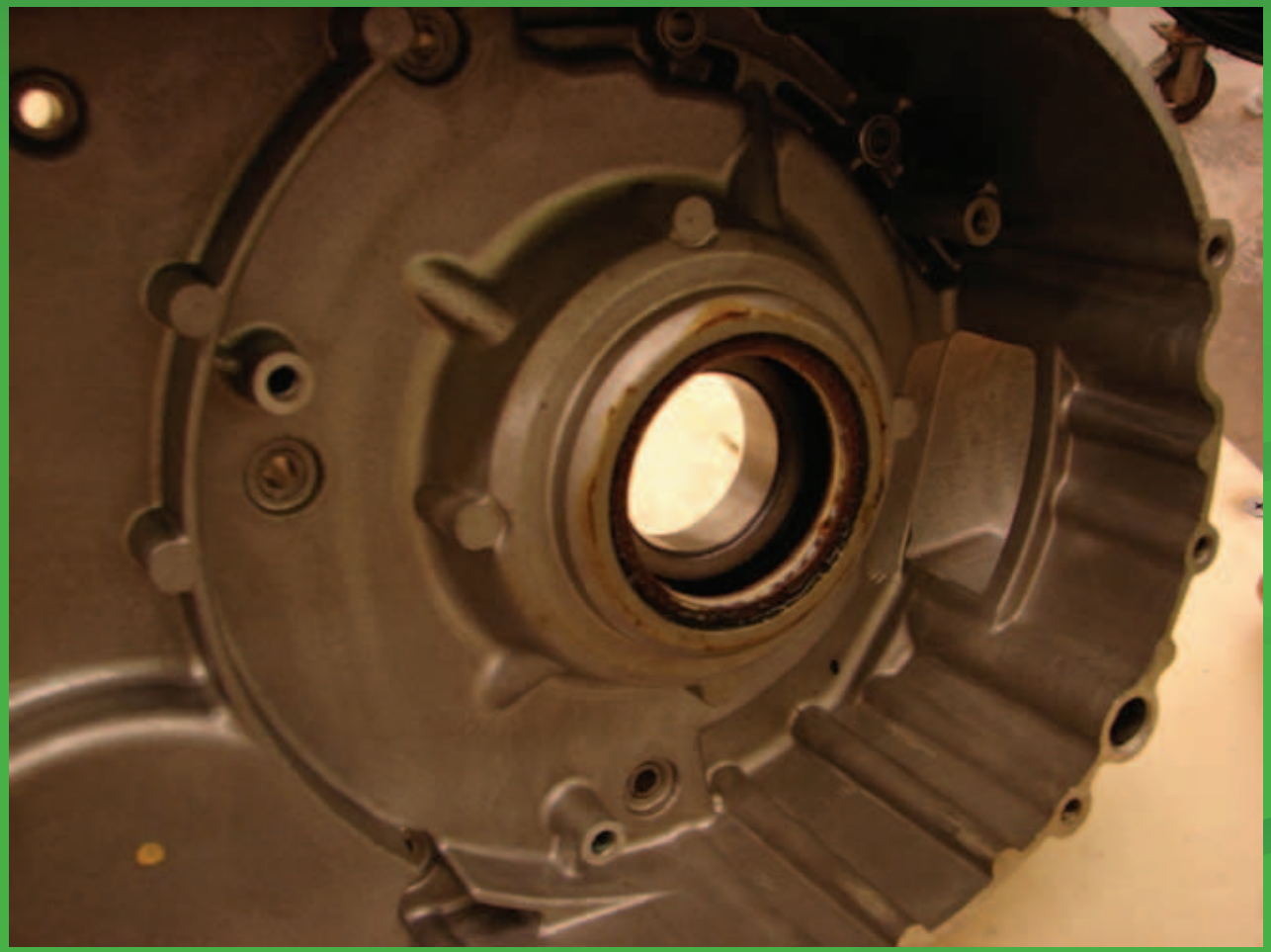
Move the red DOM lead to the white (VAR) on the analyzer. Record the reading with the throttle closed.

Record the reading at wide open throttle and compare results to the Service Manual.

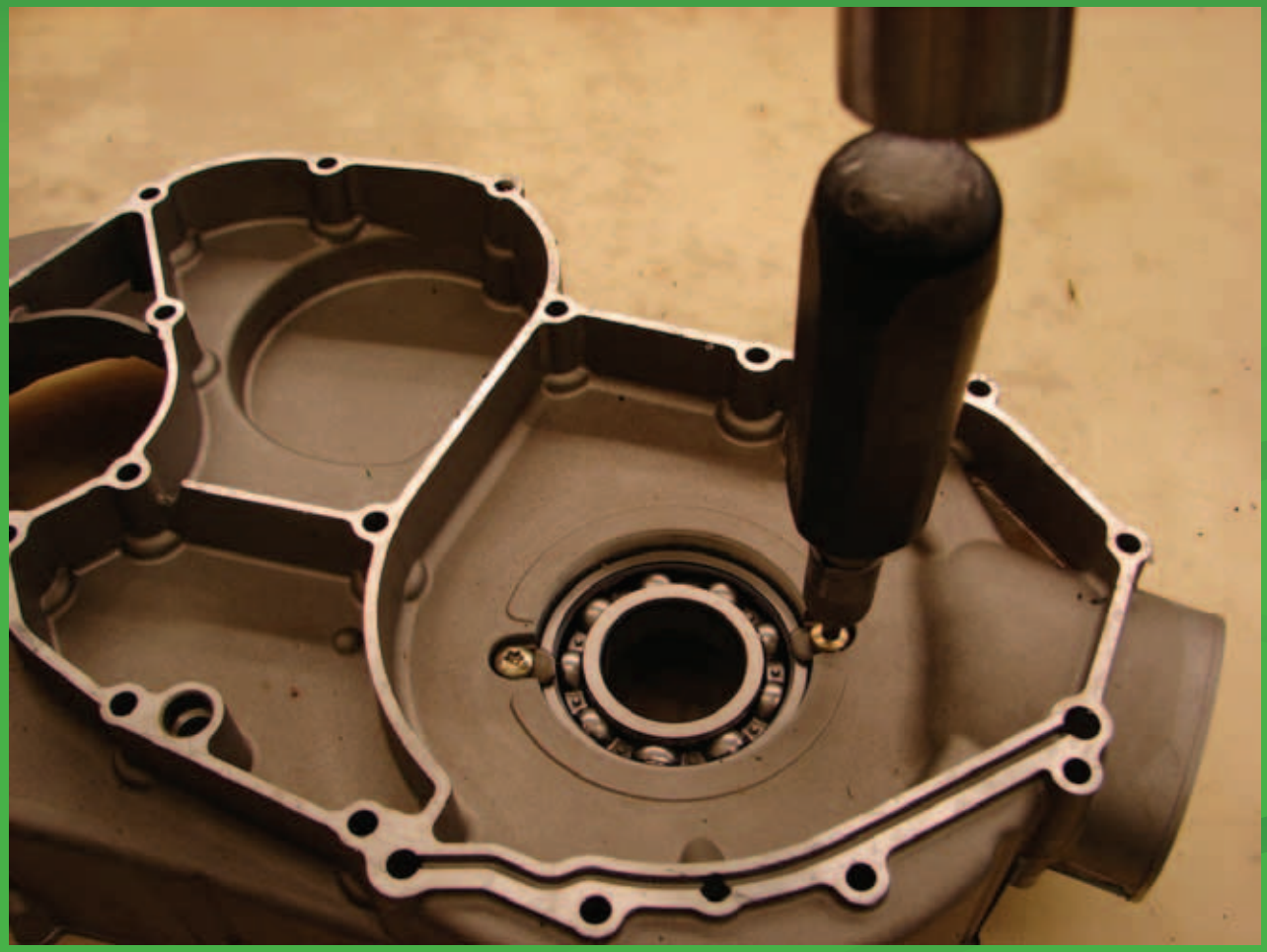
Replacing the Clutch Cover Seal

- Information to change the seal
- Special tool (p/n 0444-256)

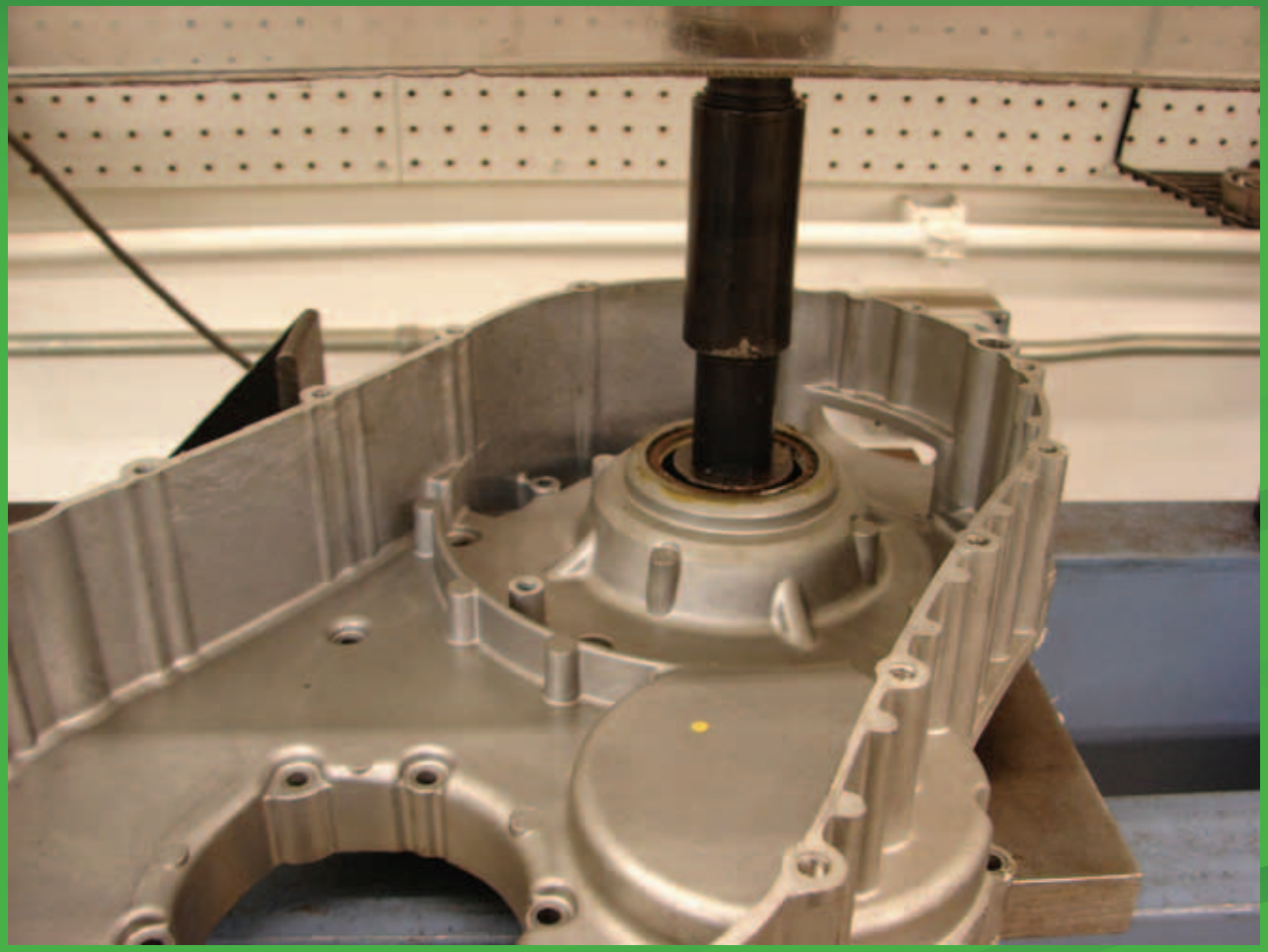
Remove the inner clutch cover from the engine case, and remove the shoe clutch housing assembly.



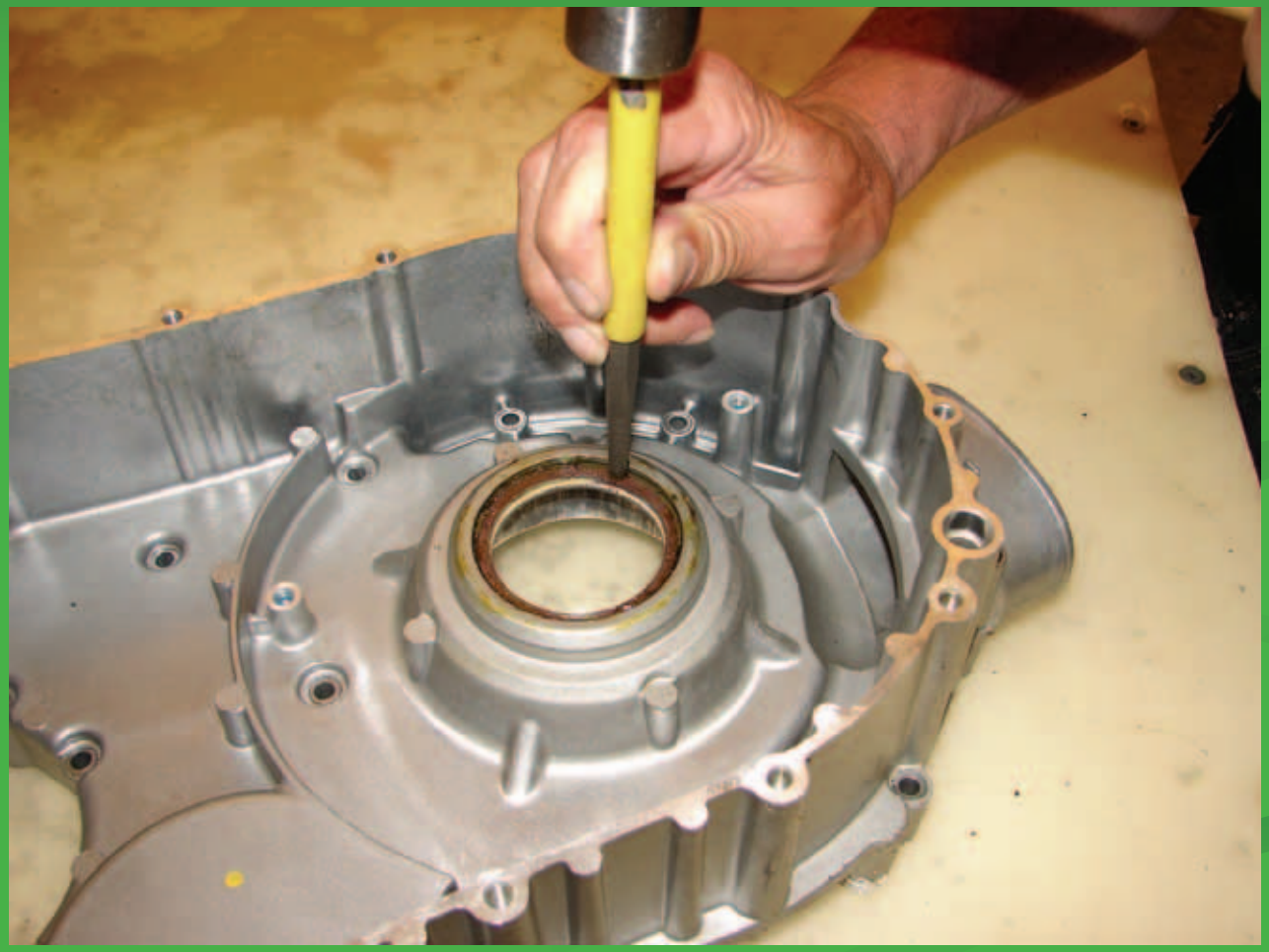
Remove the two fasteners securing the bearing retainers.
An impact driver will aid with removal.



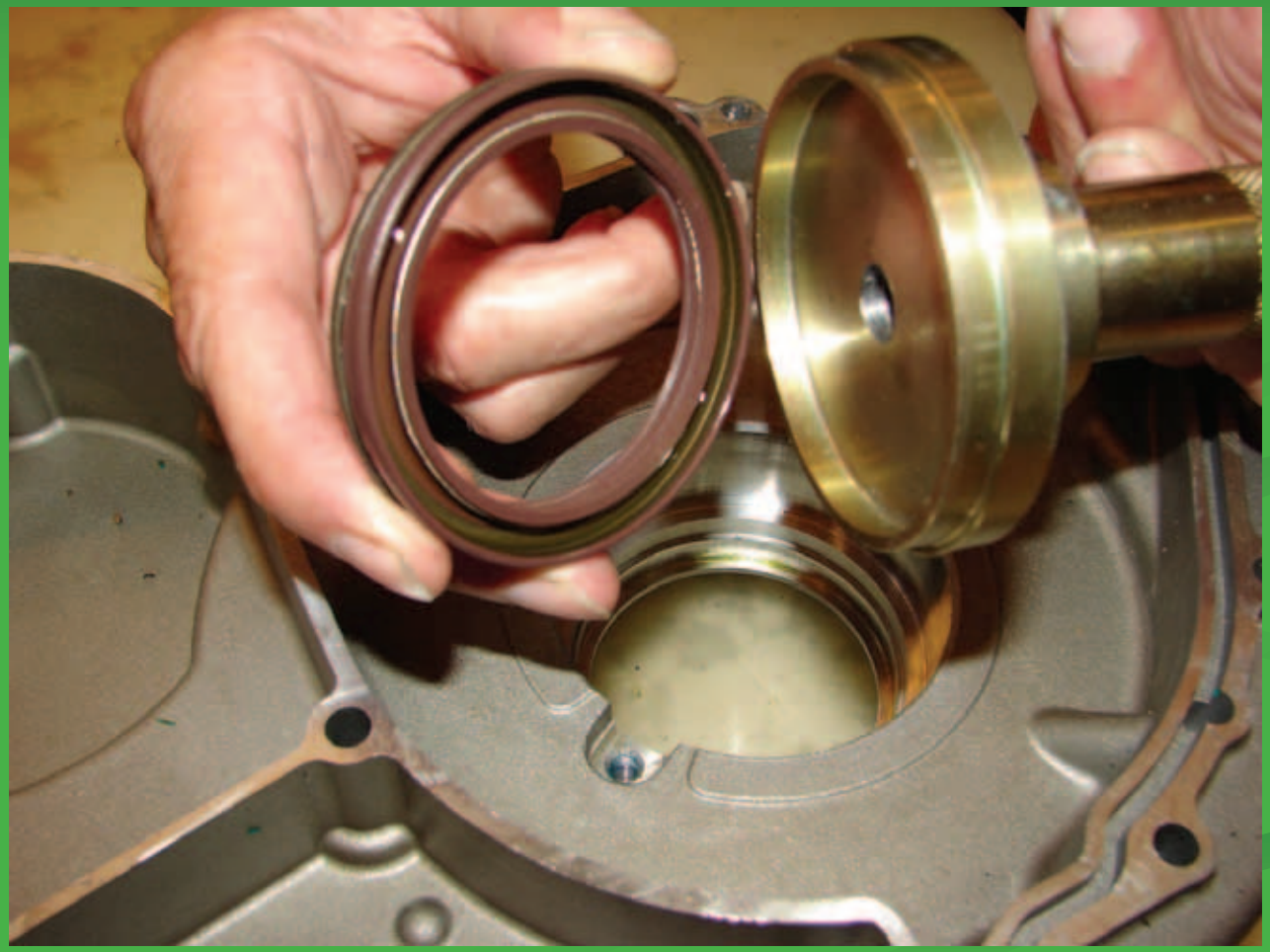
Press the old bearing from the case using a suitable press and fixture.



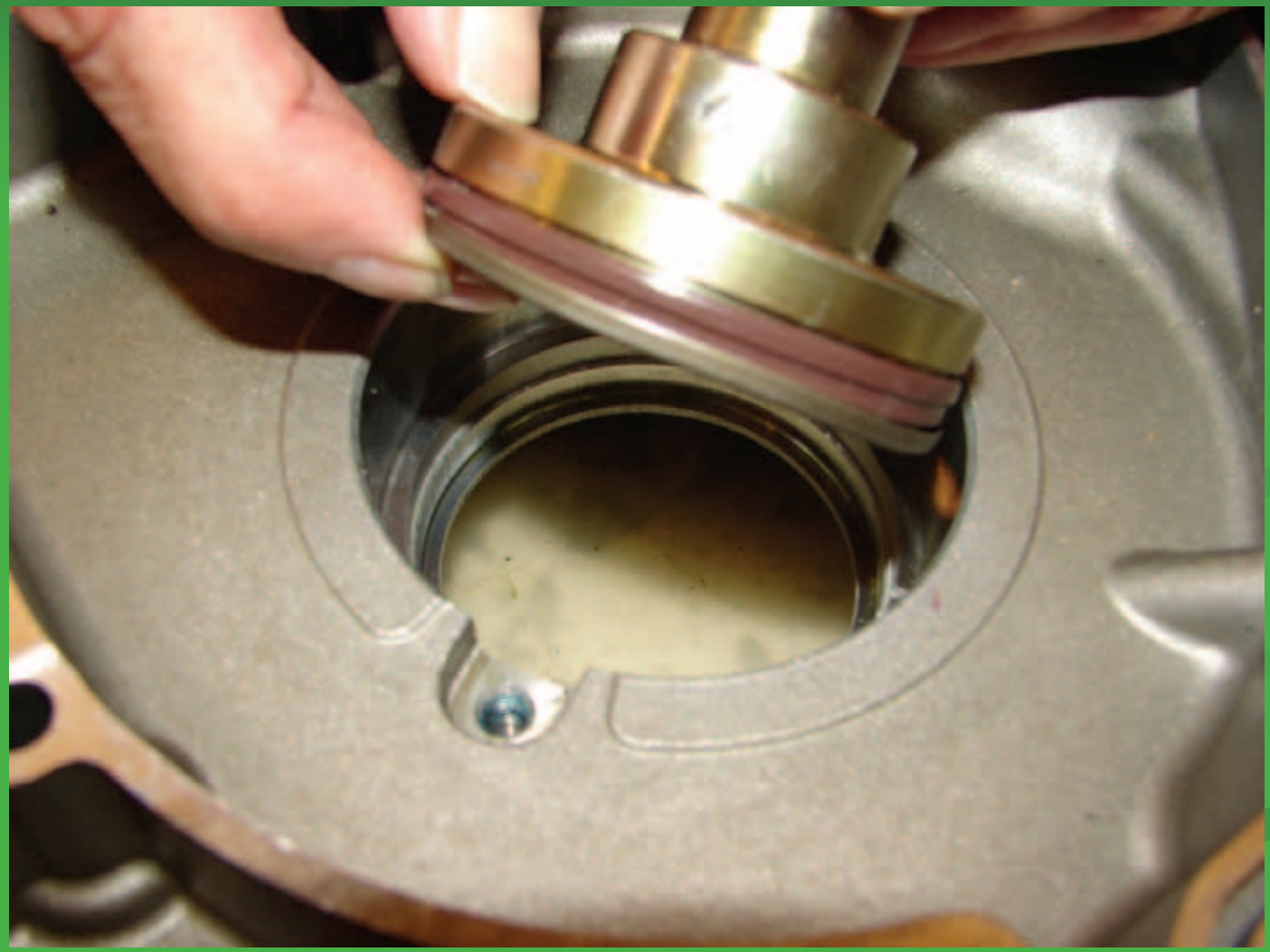
Carefully remove the old seal.
Do not damage the sealing surface of the cover.



Place the seal with the spring side facing the special tool (p/n 0444-256).

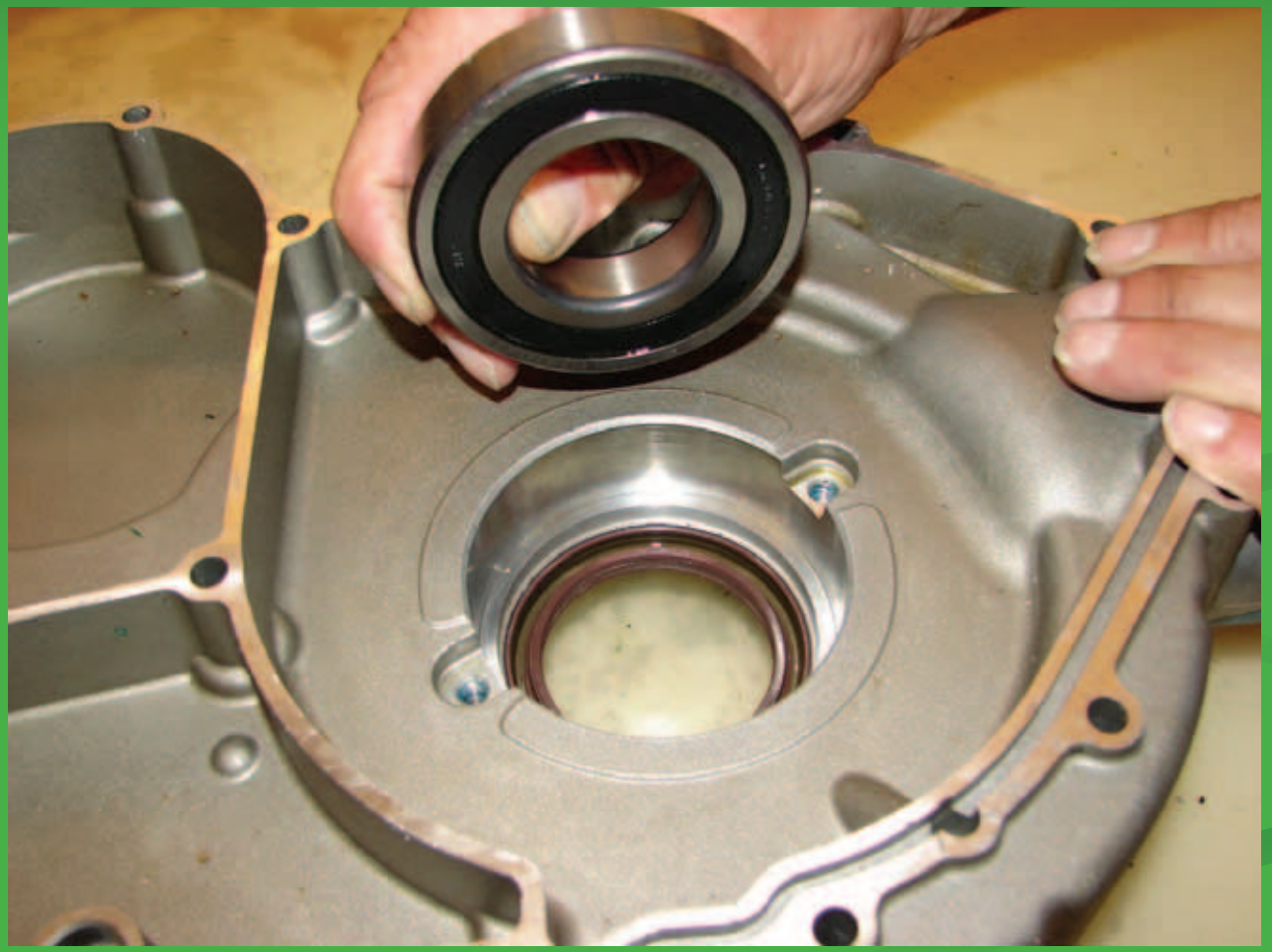


With the seal placed on the installation tool, set the seal into position.



With a mallet or press, push the seal into place being sure to keep it square.

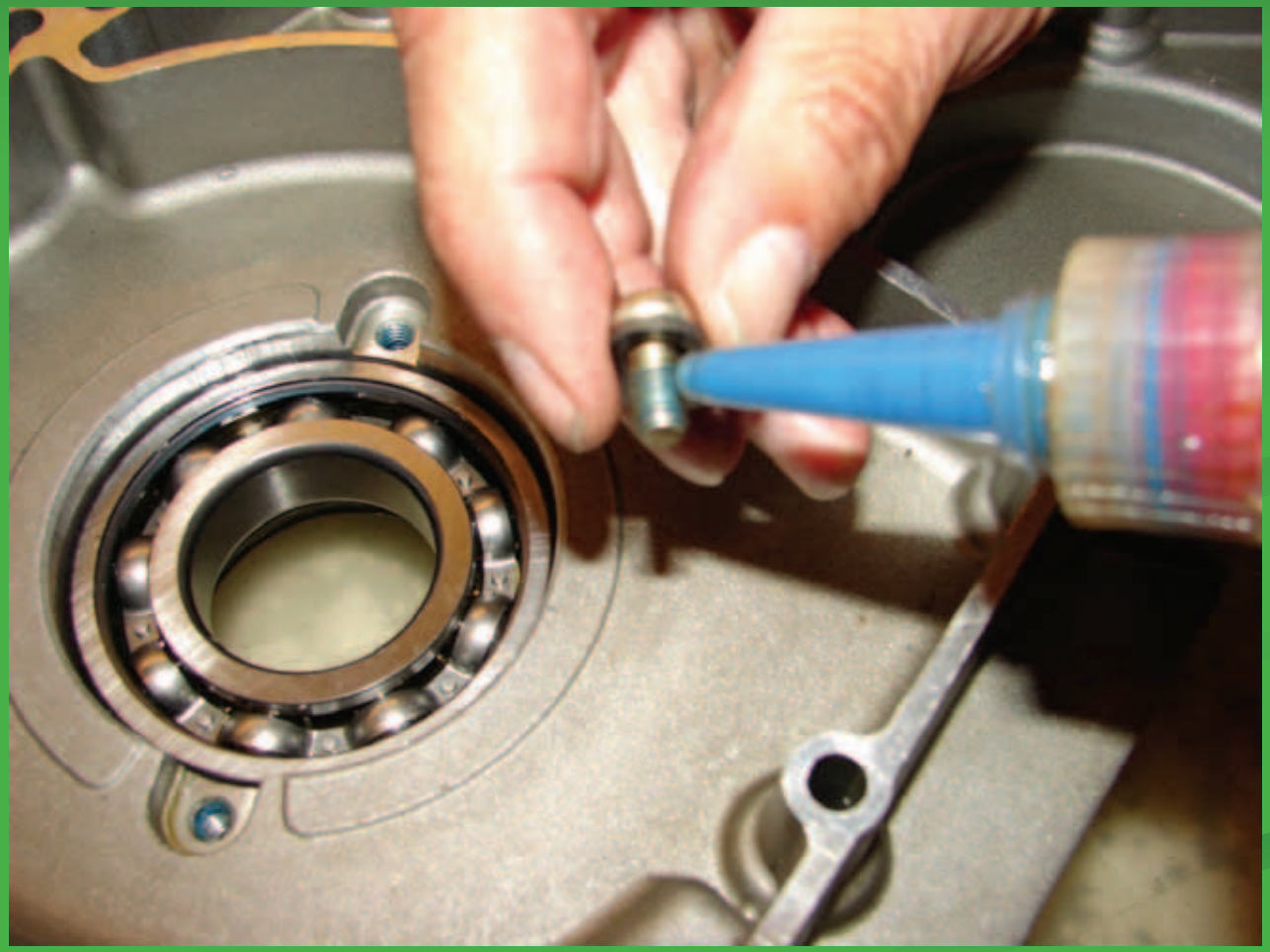
The bearing must be installed with the seal side of the bearing toward the clutch cover seal or a catastrophic lubrication issue will occur.



Press the new bearing into the case with a proper fixture pressing against the outer bearing race.

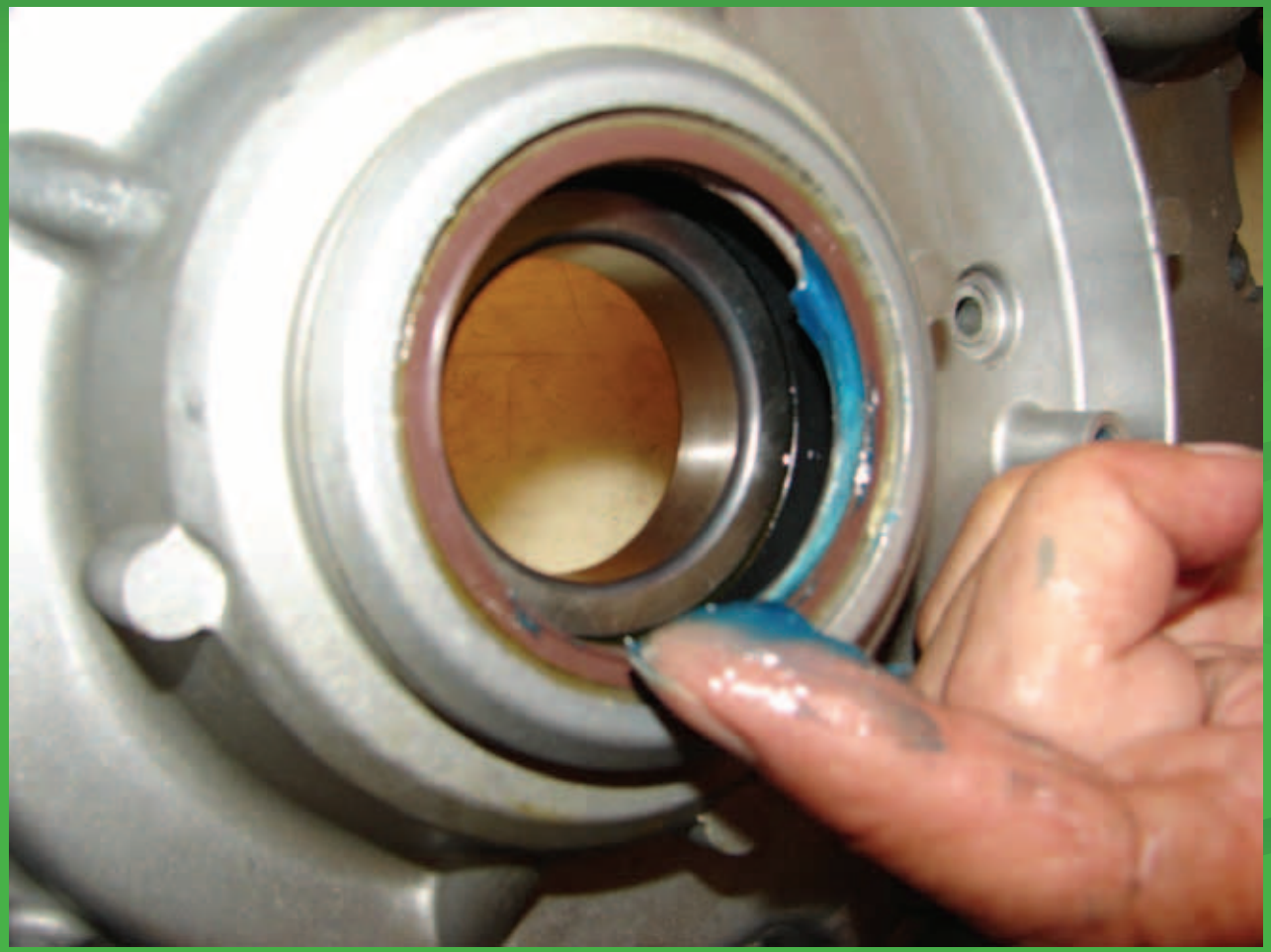
It is critical to make sure again that the seal on the bearing faces the clutch cover seal.

Apply Loctite™ 242 BLUE to the bearing retainer fasteners and secure the bearing tabs in place.



The seal should now look like this if everything was done correctly

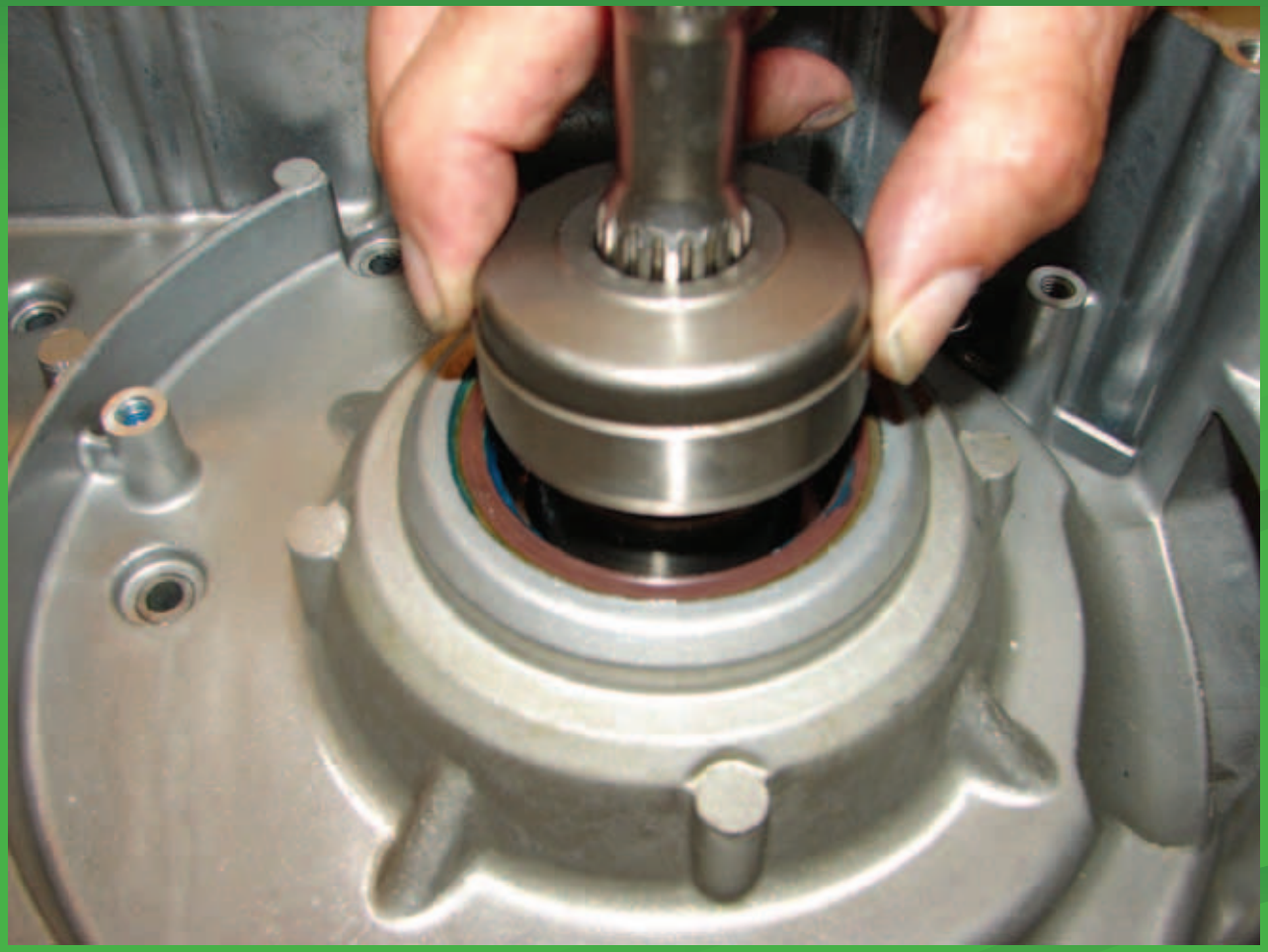
Apply a small coating of grease to seal lips. Too much grease may result in a seal that appears to leak and/or belt slippage.



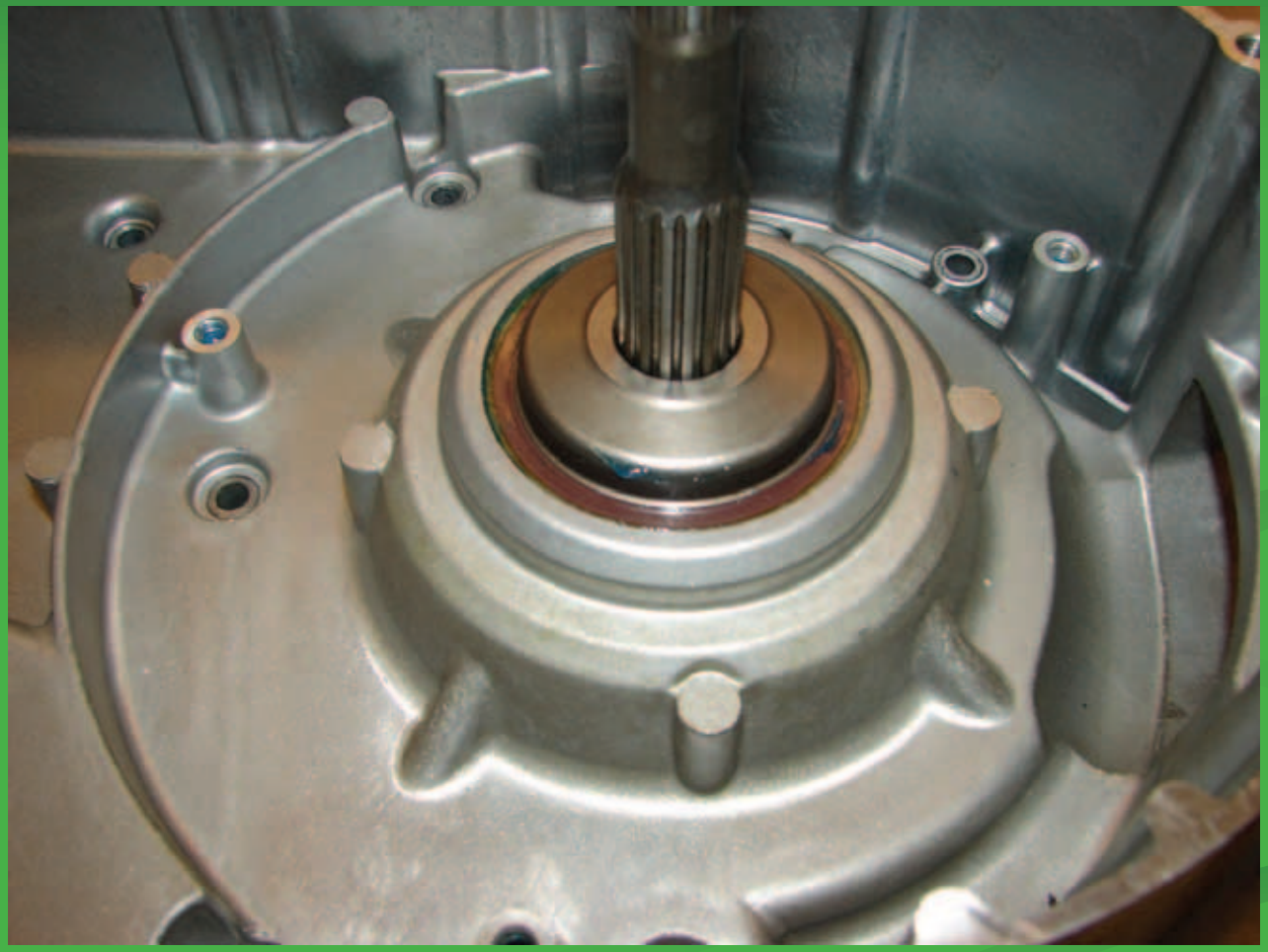
Press the shoe clutch housing assembly until it is seated against the bearing.

Apply a thin coat of grease to the inner O-ring and outside sealing surface of the fixed drive spacer.

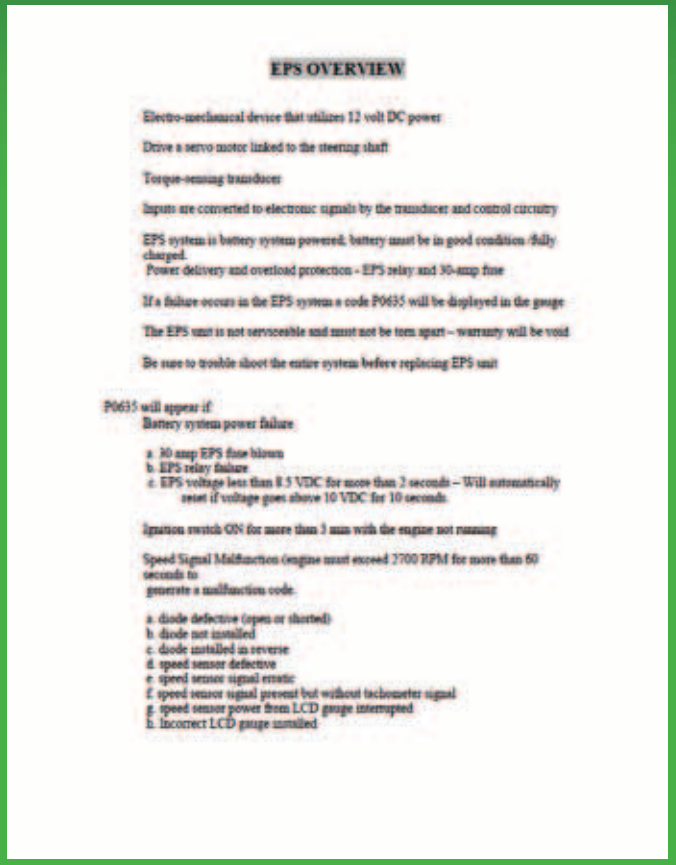
Install the fixed drive spacer carefully, so the seal lips are not damaged.



The seal and spacer should look like this when finished.



EPS Tool Information



EPS OVERVIEW

Electro-mechanical device that utilizes 12 volt DC power

Drive a servo motor linked to the steering shaft

Torque-sensing transducer

Inputs are converted to electronic signals by the transducer and control circuitry

EPS system is battery system powered; battery must be in good condition /fully charged.
Power delivery and overload protection - EPS relay and 30-amp fuse

If a failure occurs in the EPS system a code P0635 will be displayed in the gauge

The EPS unit is not serviceable and must not be torn apart – warranty will be void

Be sure to trouble shoot the entire system before replacing EPS unit

P0635 will appear if:
Battery system power failure

a. 30 amp EPS fuse blown
b. EPS relay failure
c. EPS voltage less than 8.5 VDC for more than 2 seconds – Will automatically reset if voltage goes above 10 VDC for 10 seconds

Ignition switch ON for more than 3 min with the engine not running

Speed Signal Malfunction (engine must exceed 2700 RPM for more than 60 seconds to
generate a malfunction code.

a. diode defective (open or shorted)
b. diode not installed
c. diode installed in reverse
d. speed sensor defective
e. speed sensor signal erratic
f. speed sensor signal present but without tachometer signal
g. speed sensor power from LCD gauge interrupted
h. Incorrect LCD gauge installed

p/n 2258-048

ARCTIC CAT ATV
SERVICE MANUAL - ADDENDUM

(Electronic Power Steering)

NOTE: Certain models have been produced with electronic power steering. The following sub-sections are intended to be used when servicing these models identified by an "S" on the side of the ATV.

NOTE: This information should be used in conjunction with the 2010 ATV Service Manual (p/n 2258-676).

The electronic power steering (EPS) system is an electro-mechanical device that utilizes 12 volt DC power to drive a motor linked to the steering shaft to assist the rider when steering the handlebar. Rider steering inputs are detected by a torque-sensing transducer assembly within the EPS housing. These inputs are converted to electronic signals by the transducer and control circuitry to tell the motor which way to drive the steering shaft. When no steering input (pressure on the handlebar) is detected, no torque signal is generated, and no steering assist is provided by the motor.

The EPS system is battery-system powered, therefore, the battery must be in good condition and fully charged. Power delivery and overload protection is provided by an EPS relay and 30-amp fuse, located under the seat in the Power Distribution Module (PDM).

If a system malfunction occurs, a malfunction code "P0635" will be displayed on the LCD gauge. Initially, the gauge will go blank for 30 seconds and the code will flash; then the gauge will return to normal except the code will continue to be displayed.

The following is a list of conditions that can generate a malfunction code. All conditions with the exception of item 5 are external to the EPS assembly and therefore can be cleared without replacement of the EPS assembly. Make sure to thoroughly troubleshoot the entire system before replacing the EPS assembly.

NOTE: The EPS assembly is not serviceable and no service parts or parts lists are available. The EPS is only serviceable as an assembly and must not be disassembled or EPS warranty will be voided.

CAUTION

Do not attempt to check resistance of the EPS motor (2 pin input receptacle). There are internal capacitors holding a charge that can cause internal damage to an ohmmeter.

Malfunction code P0635 will appear if one of the following six conditions occur:

1. Battery system power failure:
   - A. 30 amp EPS fuse blown
   - B. EPS relay failure
   - C. EPS voltage less than 8.5 DC volts for more than two seconds
2. Ignition switch ON for more than five minutes with the engine not running
3. Vehicle Speed Signal Malfunction (engine speed must exceed 2700 RPM for more than 60 seconds to generate a malfunction code - timer resets if engine drops below 2700 RPM).
   - A. Diode defective (open or shorted)
   - B. Diode not installed
   - C. Diode installed in reverse
   - D. Speed sensor defective
   - E. Speed sensor signal erratic
   - F. Speed sensor signal present but without tachometer signal
   - G. Speed sensor power from LCD gauge interrupted
   - H. Incorrect LCD gauge installed
4. Engine Speed Signal Malfunction (vehicle speed must exceed 5 MPH for more than two seconds - timer resets if speed drops below 5 MPH.
   - A. No engine speed signal
   - B. Erratic engine speed signal
5. EPS Control Circuit Malfunction
6. Engine Stop Switch in Stop position with Ignition Key switch ON.

The following procedures may be helpful in determining the source of a malfunction code:

Condition: Ignition Key Switch ON and NO EPS assist when moving the handlebar. Code "P0635" flashing.

NOTE: Prior to troubleshooting below, make sure that Ignition Key Switch has not been left on with the engine not started. After five minutes, this will deactivate the EPS and display the malfunction code. Turn Ignition Key Switch OFF and back to ON to reset and reactivate the EPS. If code and symptom persists, continue as follows:

1. Check system voltage at the EPS power connector. It must be more than 8.5 DC volts (fully charge battery).
2. Check 30 amp EPS fuse (see PDM in this addendum - replace fuse if blown).
3. Check EPS relay (may be switched with any other 4-pin relay on PDM - replace relay if EPS normal after switching).

EPS SERVICE MANUAL ADDENDUM

EPS Diagnostic Trouble Codes

2012 M-Y ARCTIC CAT DTC LIST for GLOBE ELECTRIC POWER ASSIST STEERING

Gauge DTC	Wrench Icon Status	Description	Conditions	Operating State	Recovery	Possible cause / corrective action. This column is if the DTC stays active	Creates an Inactive DTC
C1301	ON	Over Current	Phase On and Off currents are checked every 50us. If the on/off current is greater than +/-100 Amps for 150uS, the unit moves to the Severe operating state.	Severe	Non-recoverable	Replace EPS unit	yes
C1302	ON	Excessive Error Current	PID Control Error Current is checked every time. If the current error value is greater than 20 Amps for 1s the unit moves to the Severe operating state.	Severe	Non-recoverable	Replace EPS unit	yes
C1303	ON	Torque Sensor Range Fault	The Torque sensor is read and checked for plausability and linearity every time. If the T1 or T2 signal voltage is outside of 10% to 90% of the supply voltage the unit moves to the Severe operating state.	Severe	Non-recoverable	Replace EPS unit	yes
C1304	ON	Torque Sensor Linearity Fault	The Torque sensor is read and checked for plausability and linearity every time. If the supply voltage or T1+T2 outside 90% to 110% of the supply voltage the unit moves to the Severe operating state.	Severe	Non-recoverable	Replace EPS unit	yes
C1305	ON	Rotor Position Encoder	This error is checked every 10ms. The error will be set if incorrect bits are received on the SPI bus from the as5040 or there is an error between the geo count and the as5040 absolute position. This will move the unit to the Severe operating state.	Severe	Non-recoverable	Replace EPS unit	yes
C1306	ON	Battery Voltage Low	The error is checked every 100ms. The error will set when the battery voltage has been below the calibratable limit for 10s. This error moves the unit to the Silent operating state.	Silent	The unit will recover and move to the Run operating state once the battery voltage has gone above the calibratable recovery limit for 10s.	Battery voltage is low. Wire harness issue. Faulty voltage regulator. Battery measures < 11.0vdc. Recharge battery	yes
C1307	ON	Battery Voltage High	This error is checked every 100ms. The error will set when the battery voltage has been above the calibratable limit for 10s. This error moves the unit to the Silent operating state.	Silent	The unit will recover and move to the Run operating state once the battery voltage has gone below the calibratable recovery limit for 10s.	Faulty voltage regulator. Wire harness issue. Loose battery connection. > 16vdc at the EPS	yes
C1308	ON	Temperature Above 110 C	The temperature of the unit is read every 1s and checked against a limit of 110C. If the temperature is above 110 C the unit moves to the Safe operating state.	Safe	The unit will recover and move to the Run operating state once the temperature is below 105 C.	Clean EPS cooling fins. Excessive engine cooling temperature.	yes
C1309	ON	Temperature Above 120 C	The temperature of the unit is read every 1s and checked against a limit of 120C. If the temperature is above 120 C the unit moves to the Silent operating state.	Silent	The unit will recover and move to the Safe operating state once the temperature is below 115 C.	Clean EPS cooling fins. Excessive engine cooling temperature.	yes
C1310	ON	Vehicle Speed	Digital input or CAN based, this error is checked every 100 ms and is triggered by receiving a Vehicle Speed above the calibrated limit. This error moves the unit to the Silent operating state.	Silent	Reception of a valid vehicle speed will return the unit to the Run operating state.	Faulty harness, dirty connection, unplugged connection, faulty speed sensor, faulty trigger wheel	yes
C1311	ON	Vehicle Speed	Digital input only. This error is checked every 100ms, and is set by the vehicle speed being 0MPH or the ecap count has kept the vehicle within 0.00001 MPH of the same speed for 60s. This will move to the Safe state if no rpm error is active and the Silent operating state if the rpm is flawed.	Safe/Silent	Non-recoverable	Faulty harness, dirty connection, unplugged connection, faulty speed sensor, faulty trigger wheel	yes
C1312	ON	Vehicle Speed	CAN only, this error is checked every 100ms. This error is triggered by receiving an errored speed(greater than 0xFE00) or by not receiving the DDVS message for 2s. This error moves the unit to the Silent operating state.	Silent	Reception of a valid vehicle speed will return the unit to the Run operating state.	Faulty harness, dirty connection, unplugged connection, faulty speed sensor, faulty trigger wheel	yes
C1313	ON	Engine RPM	UV or ATV, this error is checked every 100 ms and is triggered by receiving a Engine RPM above the calibrated limit. This error moves the unit to the Safe operating state.	Safe	Reception of a valid engine RPM will return the unit to the Run operating state.	Faulty harness, loose connection, dirty connection, faulty voltage regulator, unplugged regulator, unplugged stator, faulty stator	yes
C1314	ON	Engine RPM	UV only, this error is set when the engine RPM has been above 500 RPM and then suddenly drops below 500RPM. This error moves the unit to the Safe operating state.	Safe	Reception of a valid engine RPM will return the unit to the Run operating state.	Turning engine off with emergency stop switch. Faulty harness, loose connection, dirty connection, faulty voltage regulator, unplugged regulator, unplugged stator, faulty stator.	yes

Click to Open Page 1 and Page 2

2012 Snowmobile Update

All MODELS

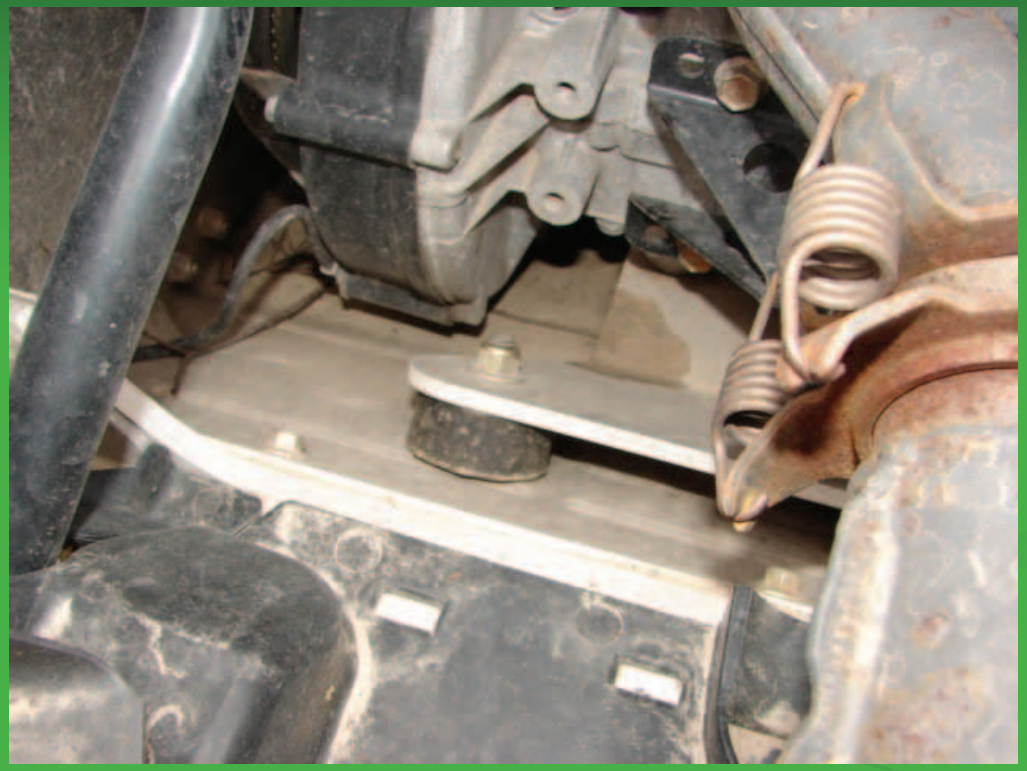
EXCEPT ProCross and ProClimb

(Unless Noted)

SNOPRO 120

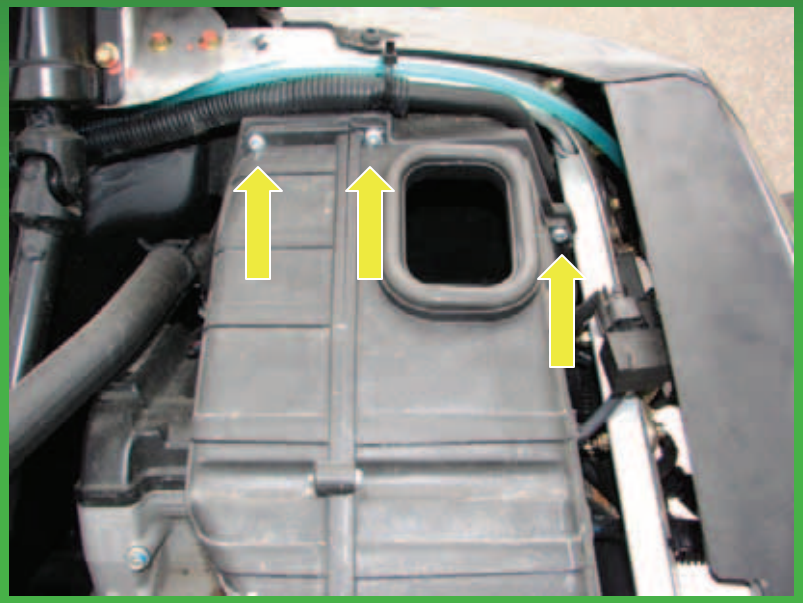
Unchanged

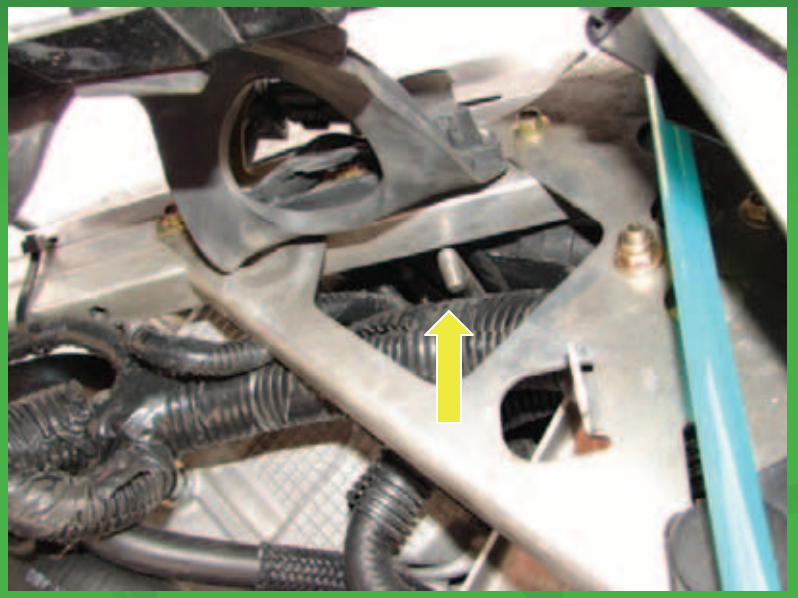
Engine Mounts



- Engine Mounts – Switching to PN 0608-496, Same mount characteristics, but no longer SAE.
- (570's Only)

Air Box and Steering Support Gusset





- Air box was split into two halves. This was done for serviceability allowing for the spark plugs to be changed with the tools provided in the tool kit.
- A larger hole was added to the steering support gusset to access the pin for splitting the air box.
- (Z1 Models Only)

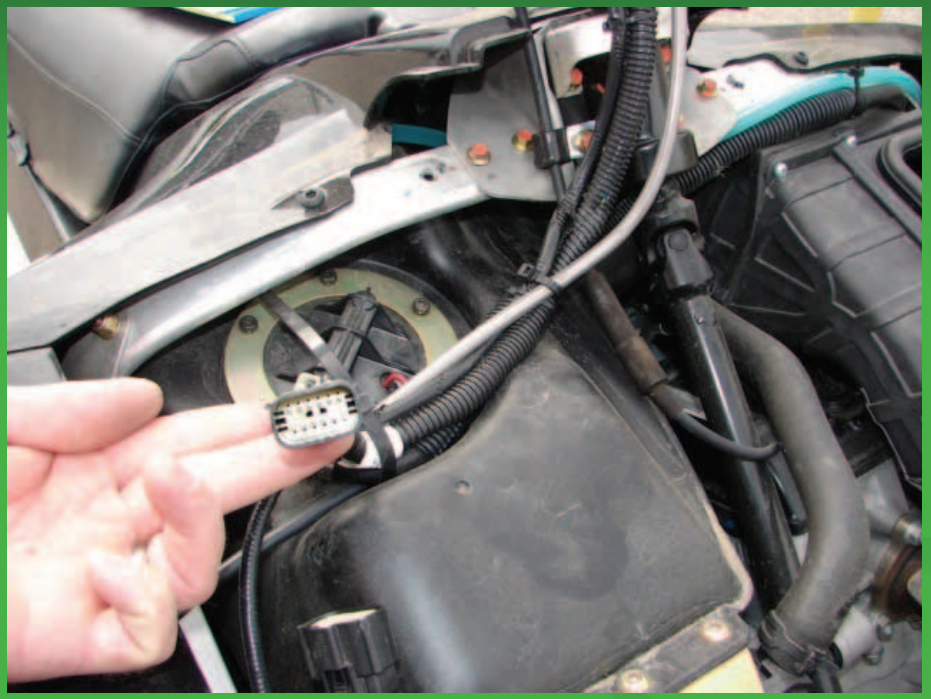
Air Box Shown Split

- Allowing the access needed for a plug change on the trail.

Key Switch

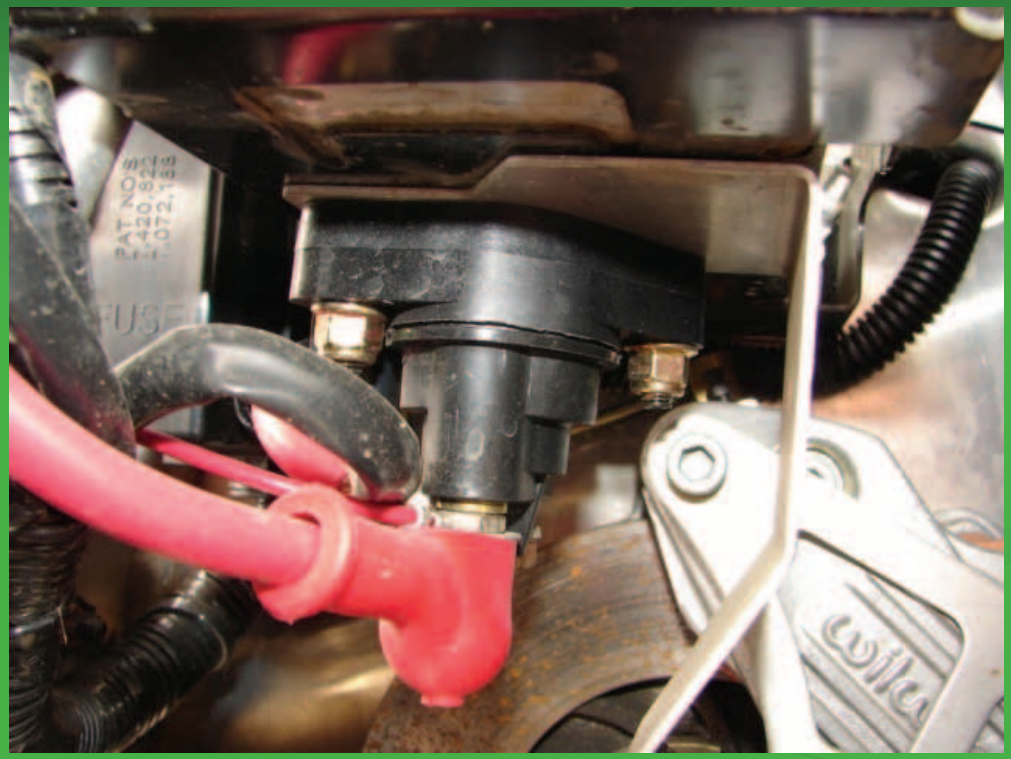
- Better seal.
- More key combinations for the 570s. (300 +)
- Z1 (Normally closed)
- 570 (Normally open)

Handlebar Harnesses



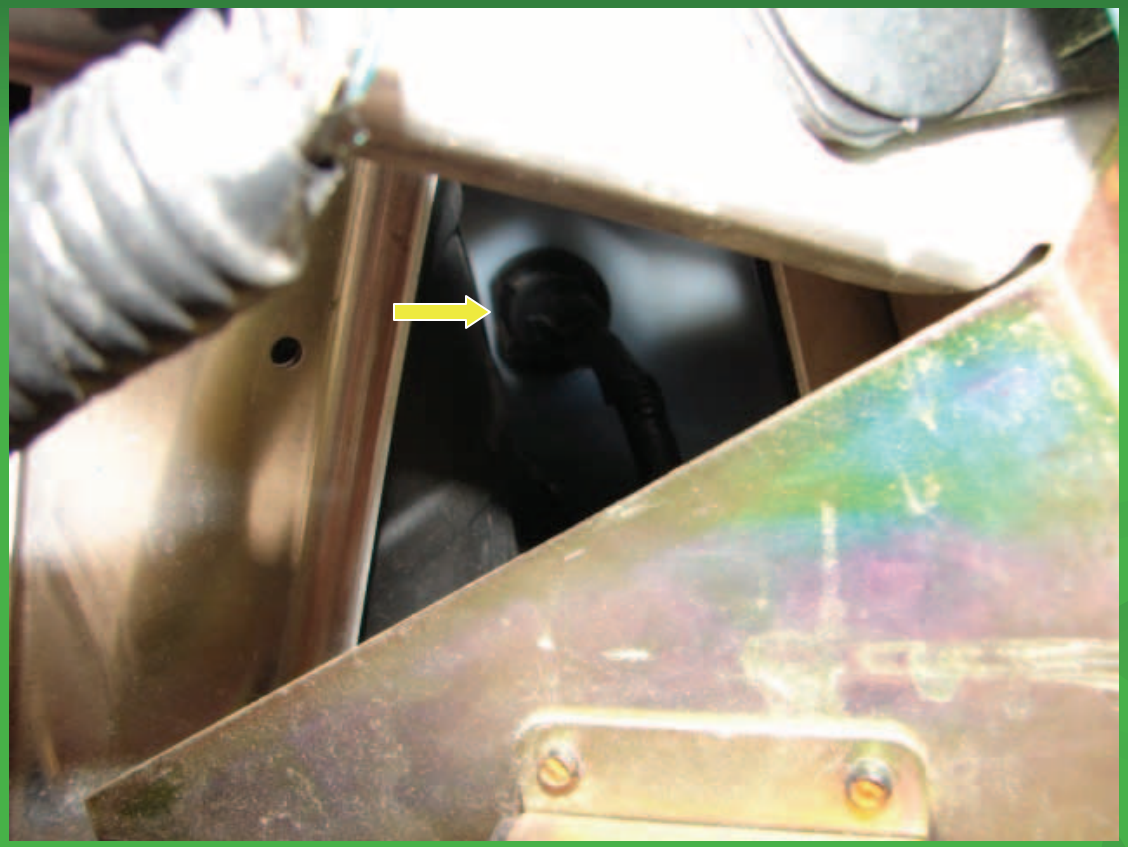
- Circuit was changed to draw less current when the E-stop is switched on. When the E-stop is used to stop the engine the current draw will be reduced to < 2 mA vs. 9 – 12 mA previously.

Solenoid



- NEW Solenoid
- Improved construction of the contacts.
- (Z1 and Z1Turbo Models Only)

Oil Level Switch

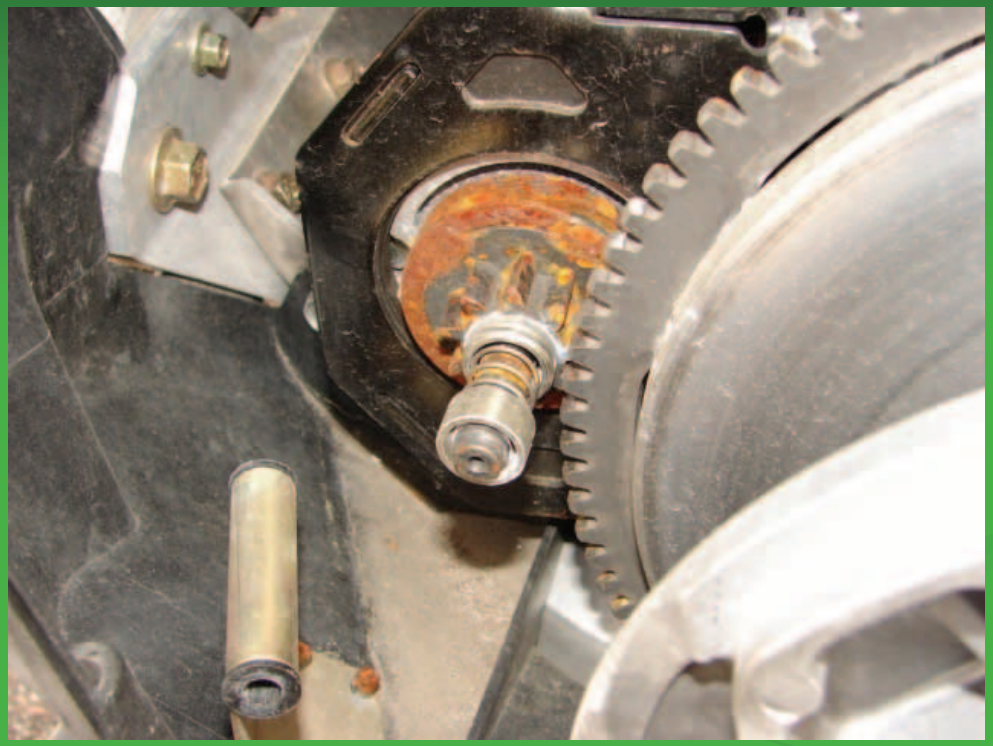


- Improved Function.
- Reed switch was moved within the housing for a more accurate reading.

Idler Wheels

- Now using NSK Bearings.
- NSK Bearings have a better seal and are held to a better tolerance.

Pinion Gear



- Added mass to help engage at colder temperatures.
- Spring/Stop : Increased spring rate slightly to keep from binding.
- (570 only)

Right Hand Skid Plate

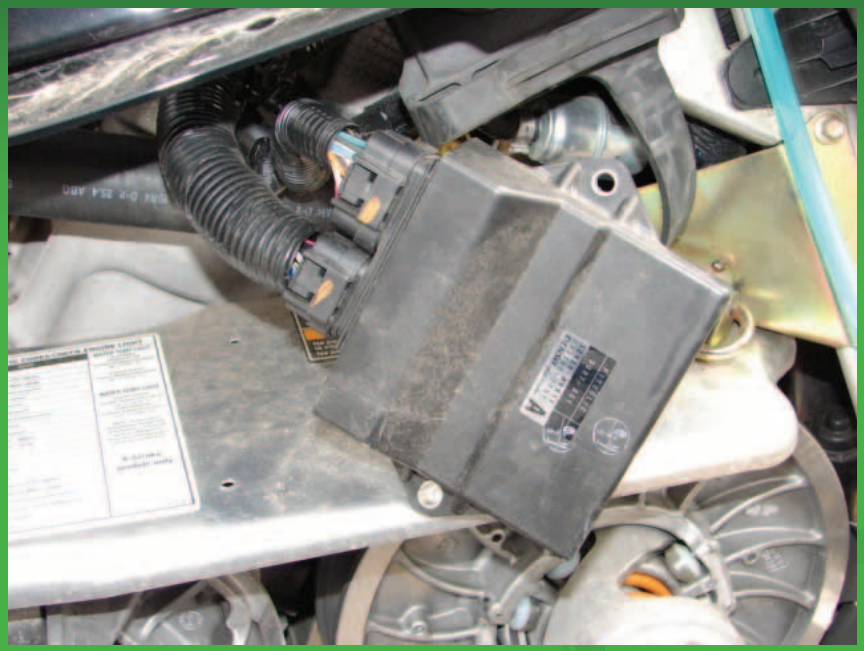
- Heat shield added to RH belly pan. Stays in place and eliminates the foil tape.
- (570 Only)

Muffler

- Sound reduction measure : Including a wider muffler with more internal packing
- Quieter, but looks the same
- (570 Only)

ECU PROGRAM CHANGE

Over-temperature Warning!!

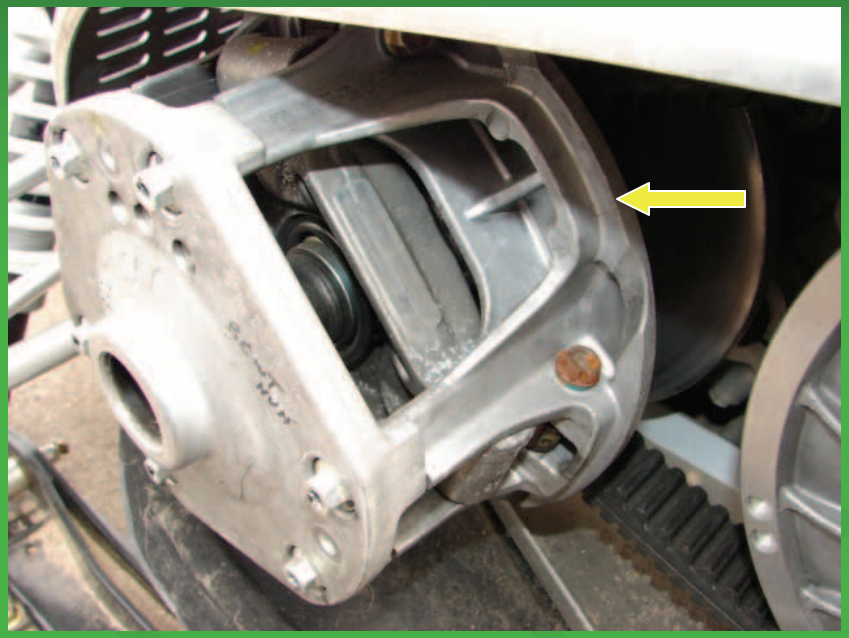


- Illuminates coolant light and flashes TEMP icon 5 degrees F sooner than previous.
- Cuts more fuel than previous causing a more noticeable decrease in performance.
- Improves chances that customer will notice and remedy high heat scenario, preventing damage to the engine.
- (Z1's Only)

Speed Sensor Mounting Bracket

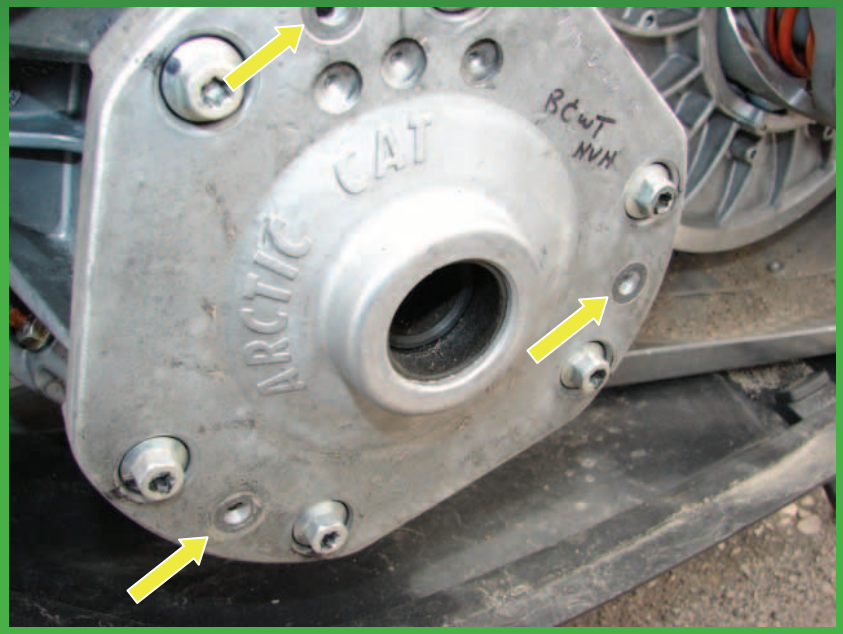
- New bracket that allows the sensor to be located further from the exhaust preventing failures due to heat. (Z1's Only)

Drive Clutch Bearing



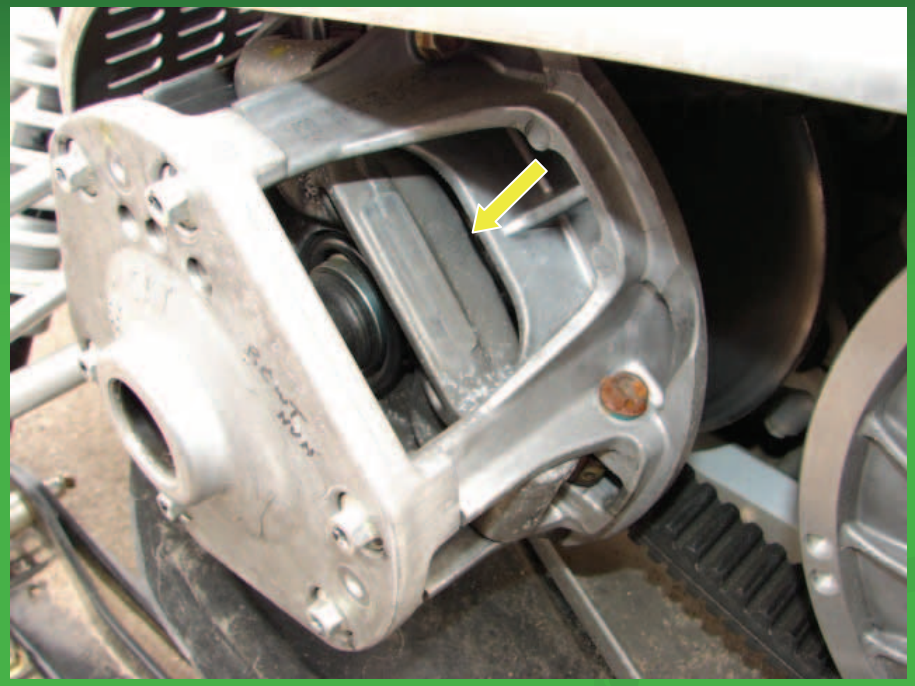
- NEW Material – Better heat resistance and durability.
- Used in the cover and movable sheave.
- (Used in 2011 on 800cc Models)

Drive Clutch Cover



- Mounting holes added to mount accessory drive clutch fan.

Drive Clutch Spider



- NEW material used (357 Aluminum)
- 357 Aluminum is 20% stronger, 4 times the elongation (8% vs. 4%)
- Increased spider life for extended use and high-load applications, like running at elevation.
- (570's are excluded)

Brake Fluid

Changed to DOT 4 from DOT 3

- This was done to commonize the brake fluid used in the Twin Spar Chassis and the ProCross/ProClimb Chassis.

Model Specific Updates

No changes have been made to the following models unless stated previously.

- **F570**
- **T570**
- **TZ1**
- **TZ1 Turbo LXR**

  (Except) The use of Fox IFP gas shocks on overseas models only.
- **BC 570**

BEARCAT MODELS

BC 570 XT

BC Z1 XT

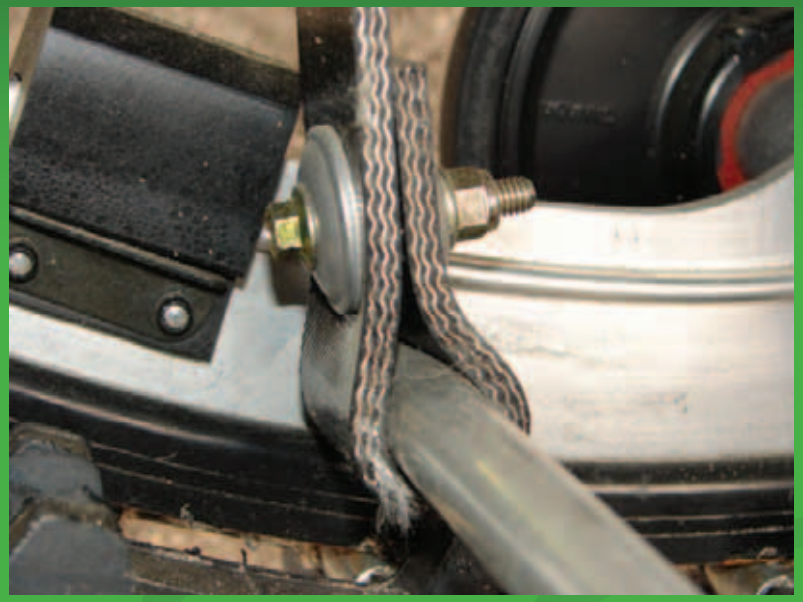
BC Z1 XT LTD

BC XT GROOMER SPECIAL

Handlebar Riser and Wrap

- 2 inch riser added.
- Better ergonomics and leverage when riding while standing.
- Wrap changed to accommodate 2 inch riser.

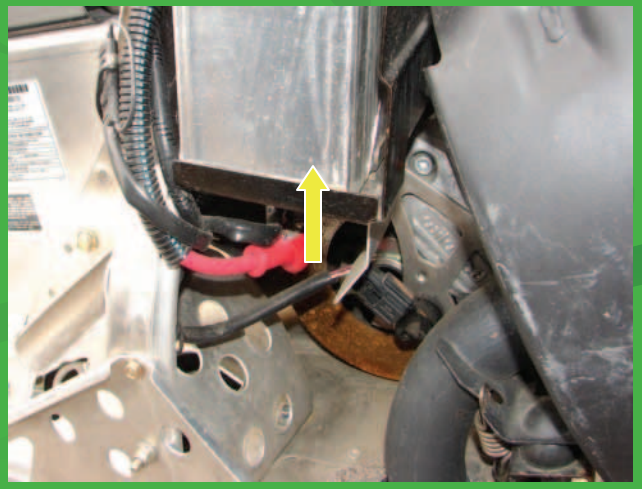
Limiter Strap / Limiter Strap Hardware (All XT Models)



- Heavy/Stronger material.
- Hole spacing at bottom mounting axle decreased to provide a secure fitting.
- Both the material change and hole locations help prevent the limiter strap from contacting the track.
- Fastener changed from a hex head to a pan head on top of the arm to prevent track wear. (Not Pictured)

Right Hand Side Panel / Belly Pan (Z1 Only)

- Added foam to the upper RH side panel for sound reduction.
- Added foil tape to the RH side panel, RH skid plate and battery tray for heat protection.



Resonator (Z1 Only)

- Internal perforated tubes changed as a sound reduction measure.

Track Drive Sprockets

- Larger radius and more material added around the spokes for improved durability.

Engine Heater (Z1 Only)

LOCTITE™ 565 (p/n 1049-277)

- Thread sealant change from teflon tape to a liquid sealant (LOCTITE™ 565) around the heater element threads.
- Liquid thread sealant offers a much better seal.
- 2nd run Z1 XT OS/Z1 XT LTD for 2011 were built using LOCTITE™ 565.

NEW MODEL BEARCAT

2012 Bearcat XT Groomer Special

Key Features

- Radiator
- 2500 lb Winch
- Front 2 inch receiver bumper and winch transport mounting bracket
- Engine heater
- Extra tall windshield
- Quick detach light bar
- LED flood/work light
- Safety beacon/strobe light
- Groomer control switches
- Wired to mate with Mountain Grooming Equipment brand groomer (plug and play)
- Safety orange color package
- Groomer (optional)

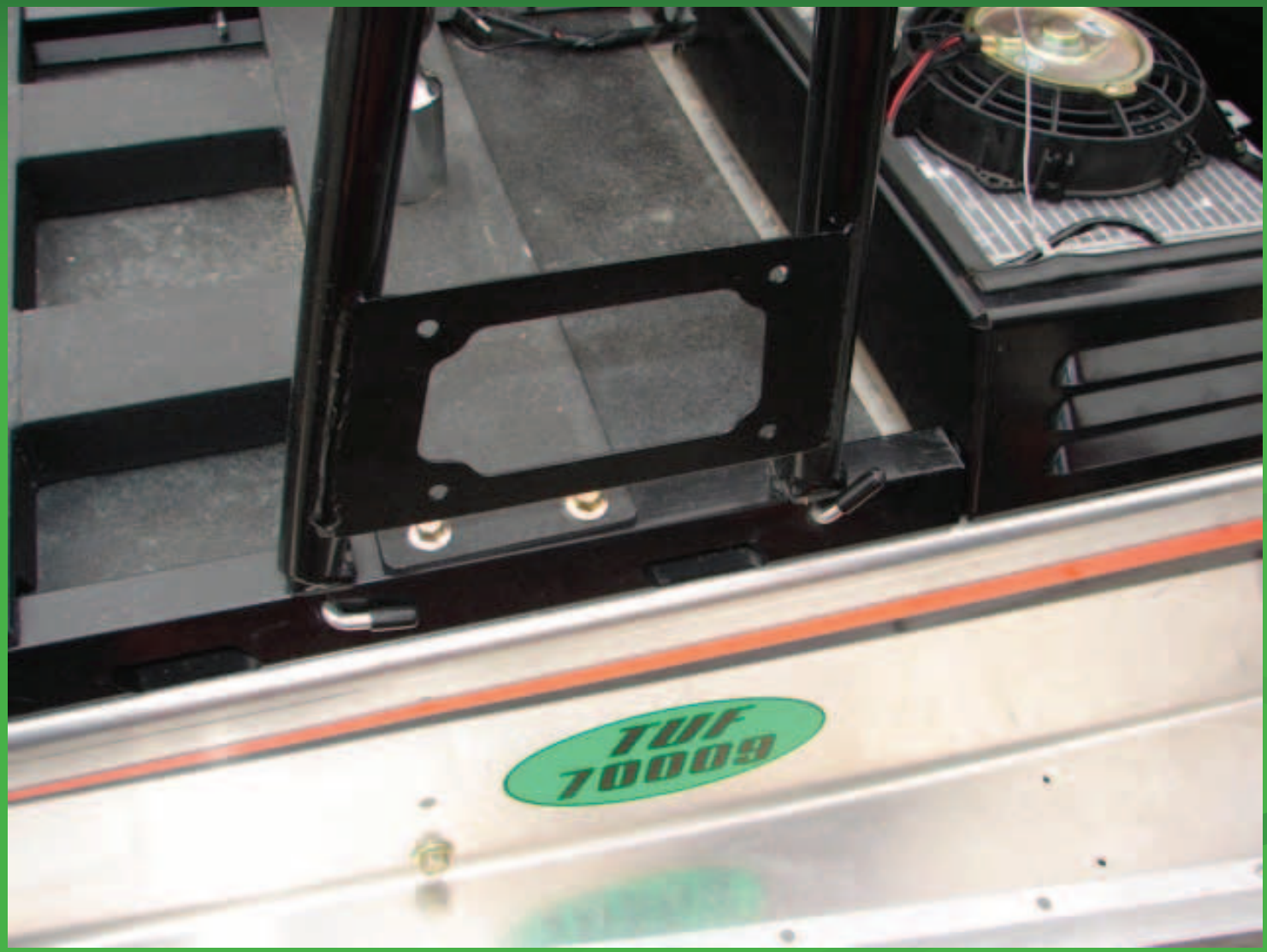
Radiator

2500 lb Winch

Front Receiver Bumper and Winch Transport Mounting Bracket

Extra Tall Windshield

Quick Detach Light Bar



Safety Beacon/Strobe Light
LED flood/work light

Groomer Actuator Switches

- Two switches to control front and rear height actuators of the groomer.

Pre-wired for Mountain Grooming Equipment Brand Groomer

- Plug and Play

Safety Orange Color Package

Groomer

- Made by Mountain Grooming Equipment
- Two actuators

2012 ProCross/ProClimb Chassis Technical Information

All New Chassis Design

2012 Chassis

PROCROSS

PROCLIMB

800cc H.0 2-Stroke

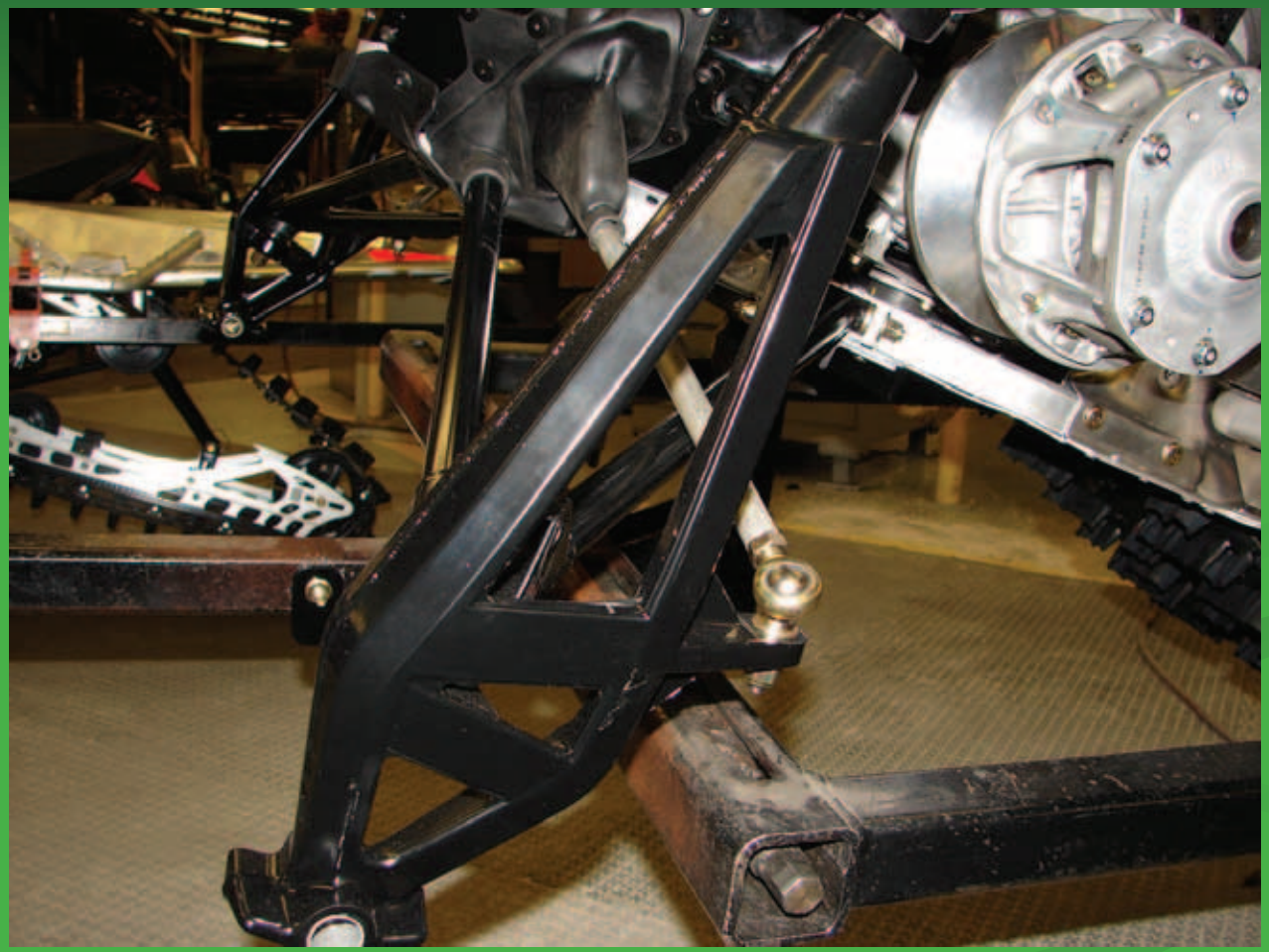
1100cc N/A 4-Stroke

1100cc Turbo 4-Stroke

ProCross / ProClimb

- ProCross and ProClimb Features
- Service Information and tips

New Forged Spindles

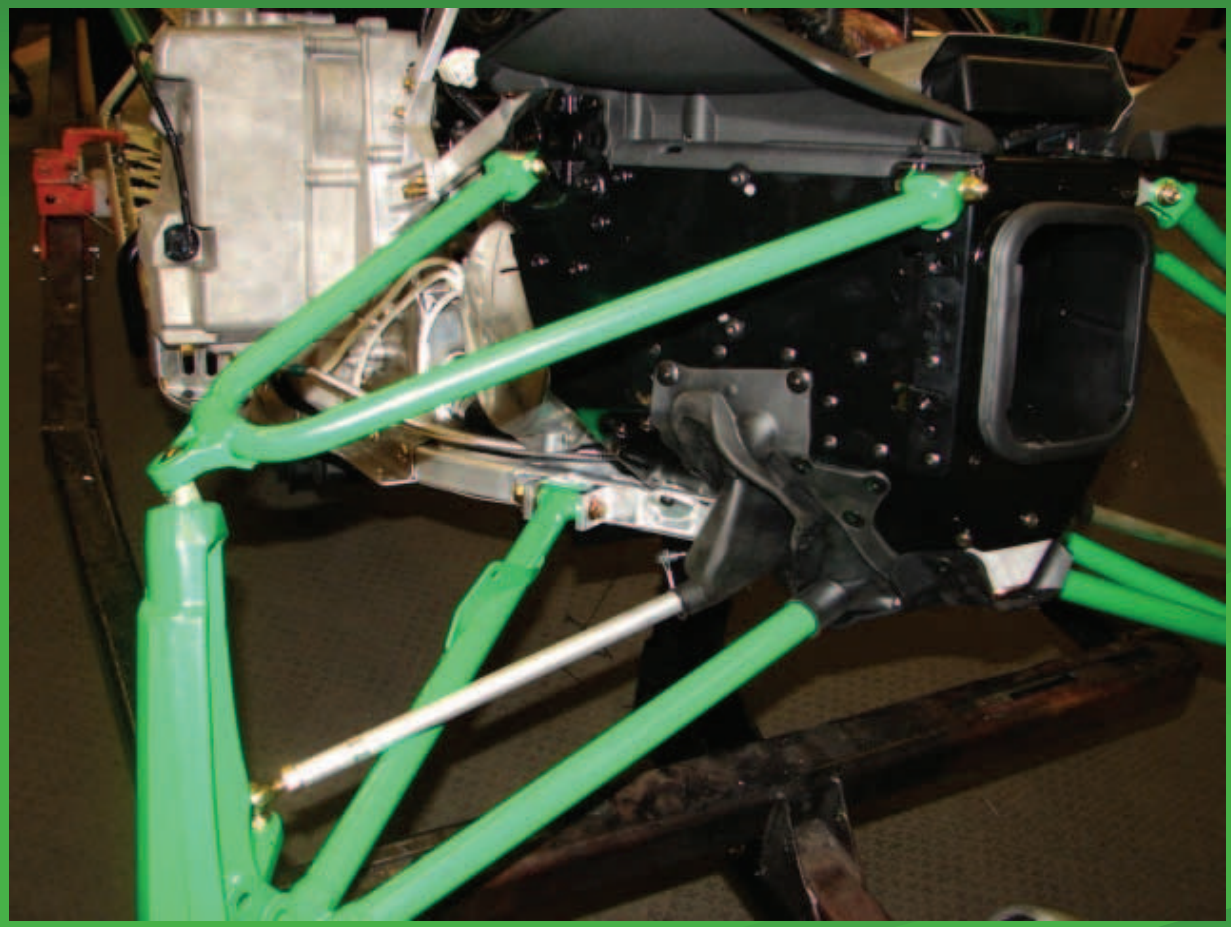


Forged one piece design for strength, added height for chassis strength and to keep the engine low in the chassis.

Ball Joint Suspension

Loosen nut till it is flush with the stud, then strike the head of the nut with a hammer.

A-Arms / Shock mounted 30˚ from chassis centerline



Front suspension impact is sent through chassis rather than twisting chassis.

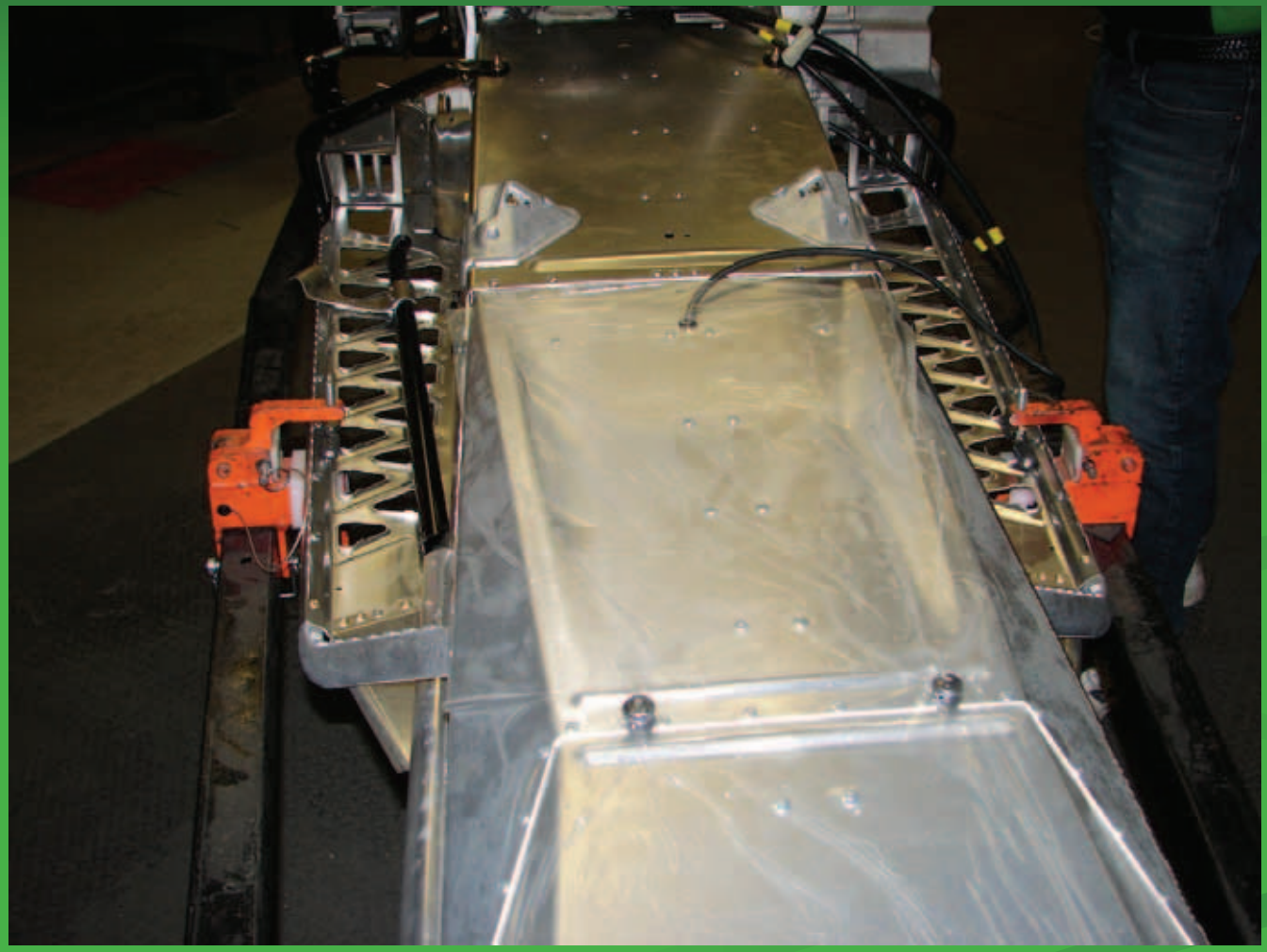
Lower Chassis A-Frame

Replaceable, held on by both, rivets and fasteners.

Rear spar support

Helps transfer suspension impact away from the rider.

Two Piece Tapered Tunnel

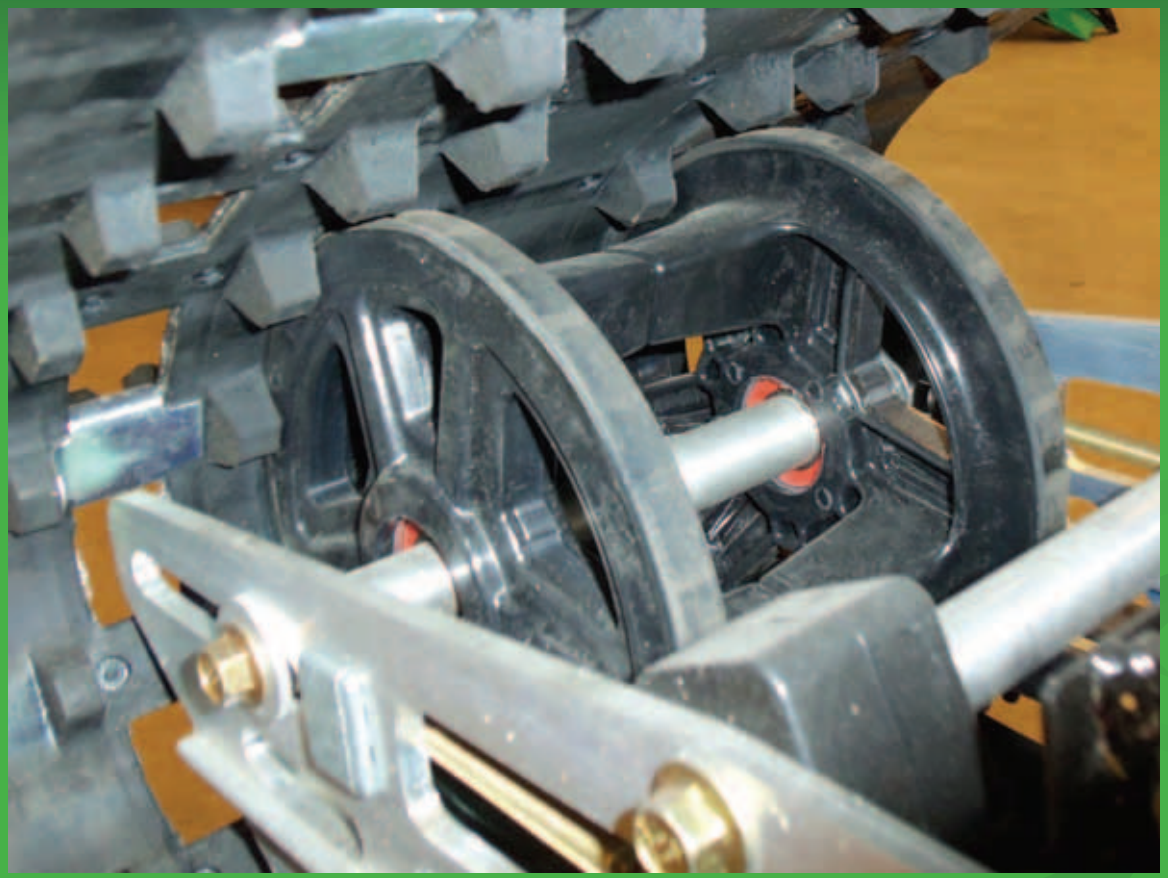


Added Strength and Comfort

Stamped Tunnel

Increases strength and rigidity

Tri-Hub Rear Axle



Tri hub rear wheel design, stronger and lighter that 3 and 4 wheel rear axles.

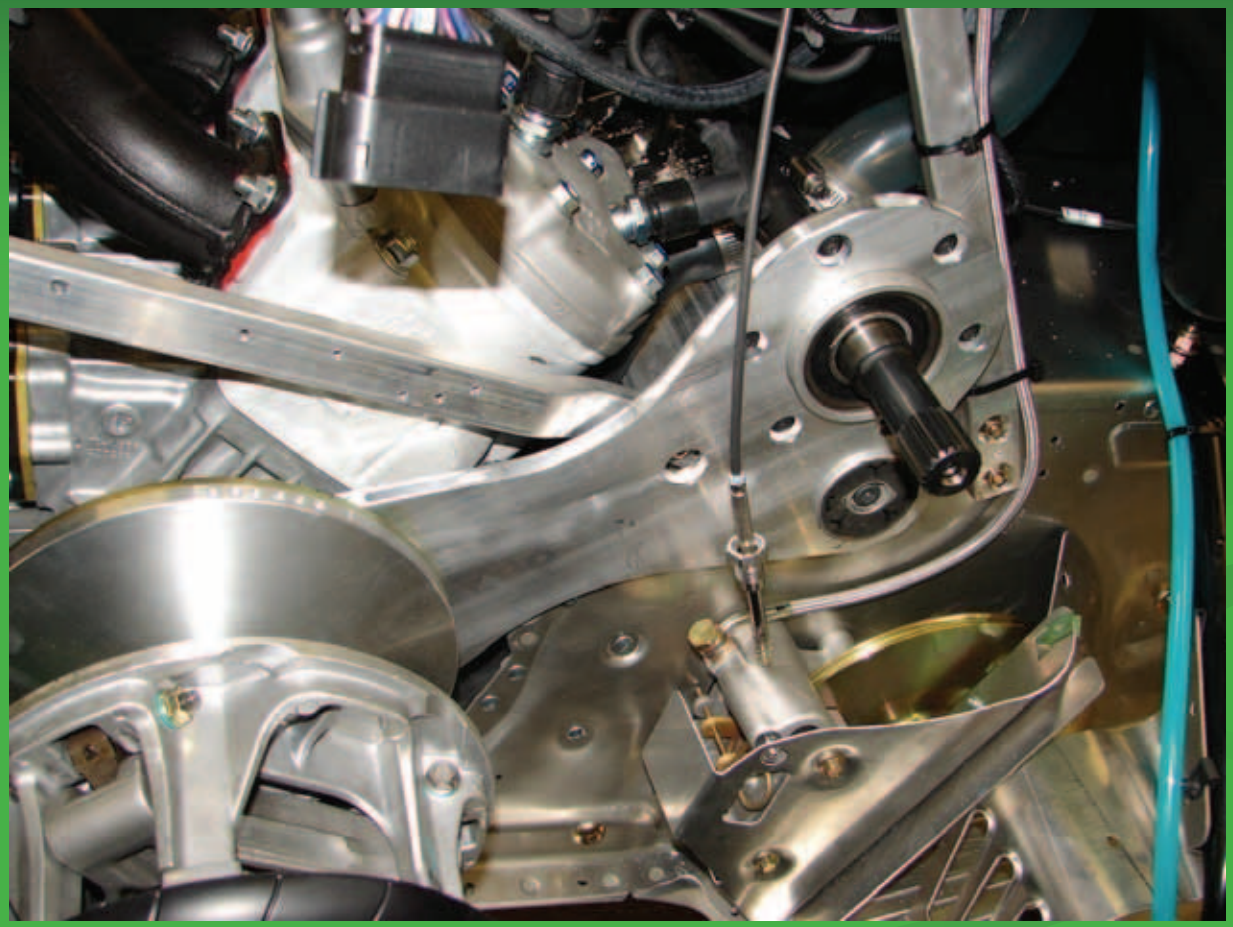
Exvolute/Involute Drivers

ProClimb and XF 3.0 pitch tracks only.

1100cc Coolant Tank

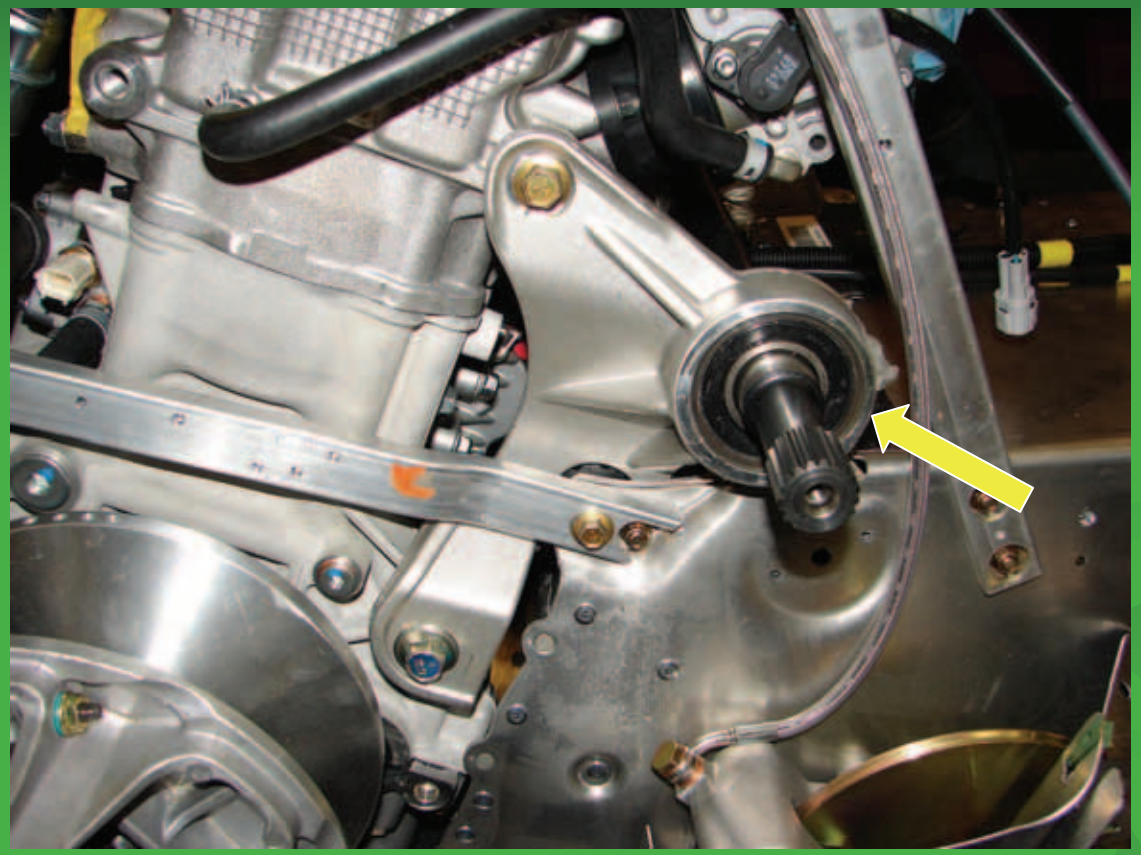
Formed to fit in available chassis space.

Arctic Drive System (ADS)



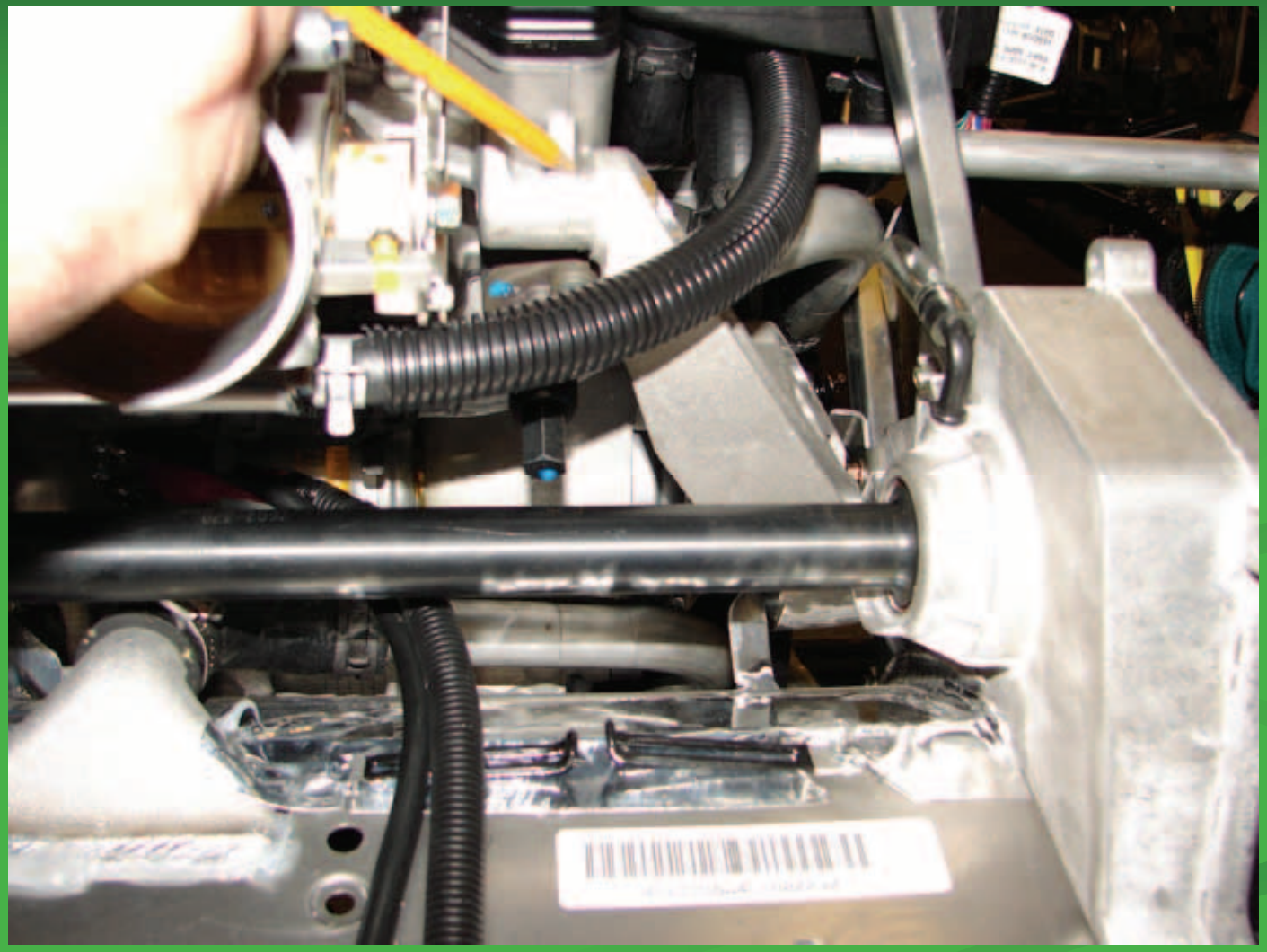
Torque Control Link (TCL) provides consistent center to center distance.

Jackshaft



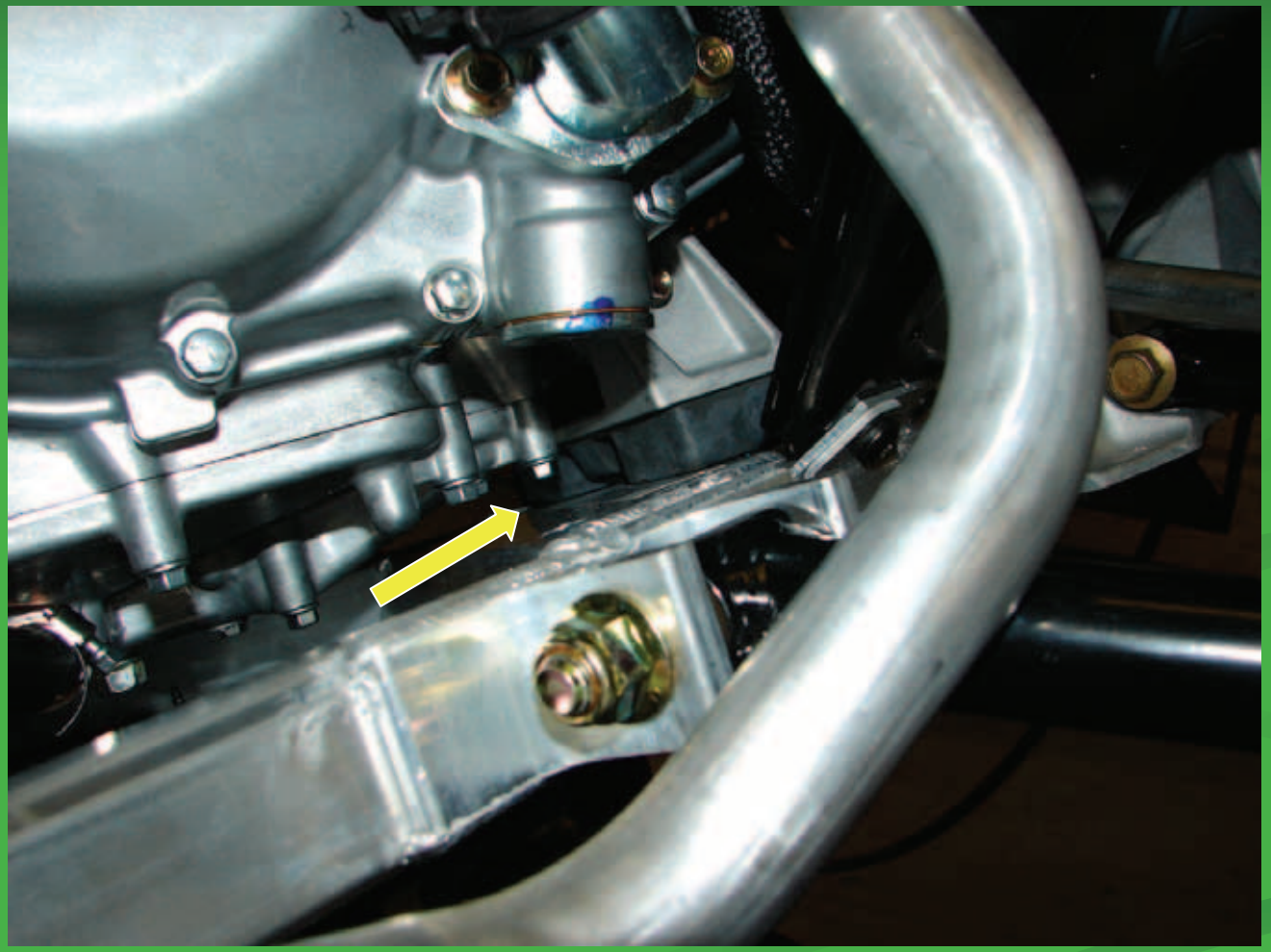
Sealed bearing requires no greasing, seals can be reinstalled if they come out in engine removal.

Right Rear Engine Mount



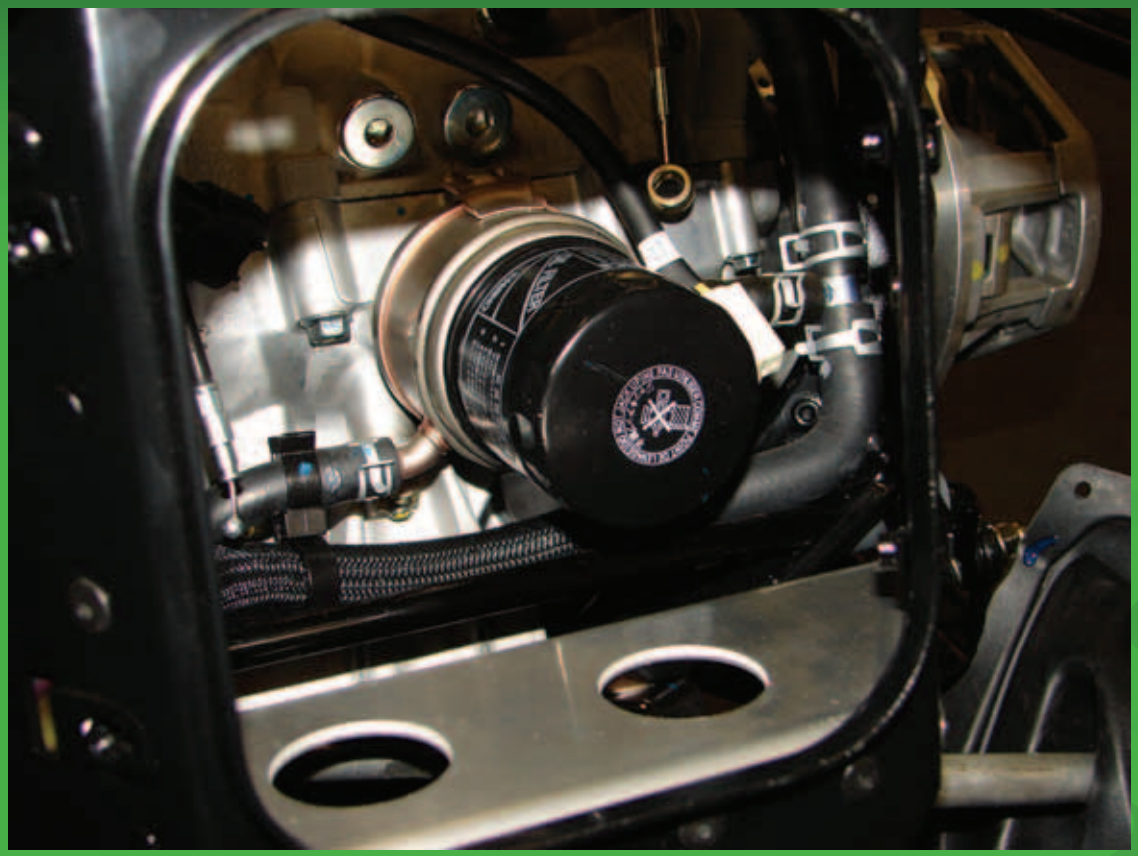
1100 N/A and 1100 Turbo

Front Right Engine Mount



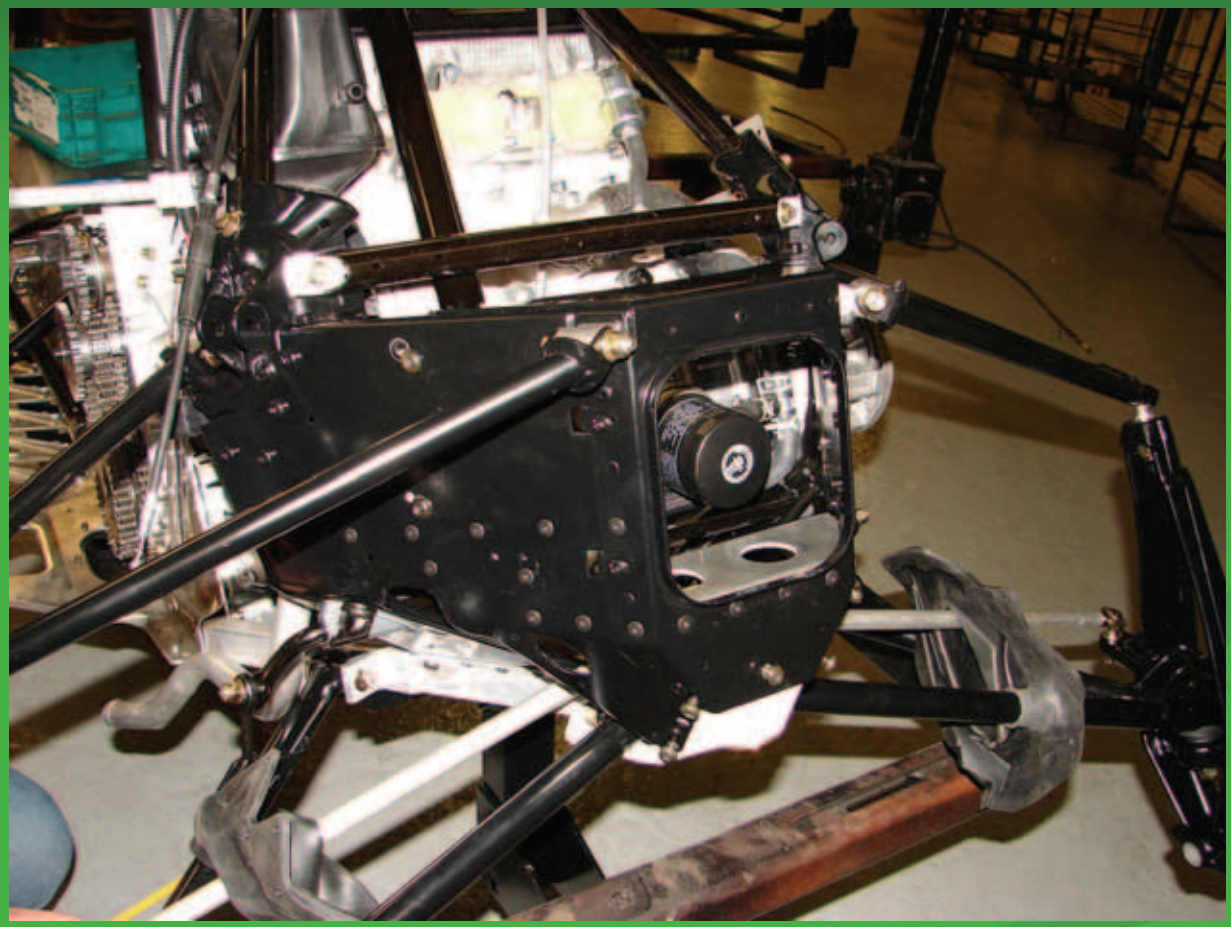
1100 N/A and 1100 Turbo

Oil Filter Location



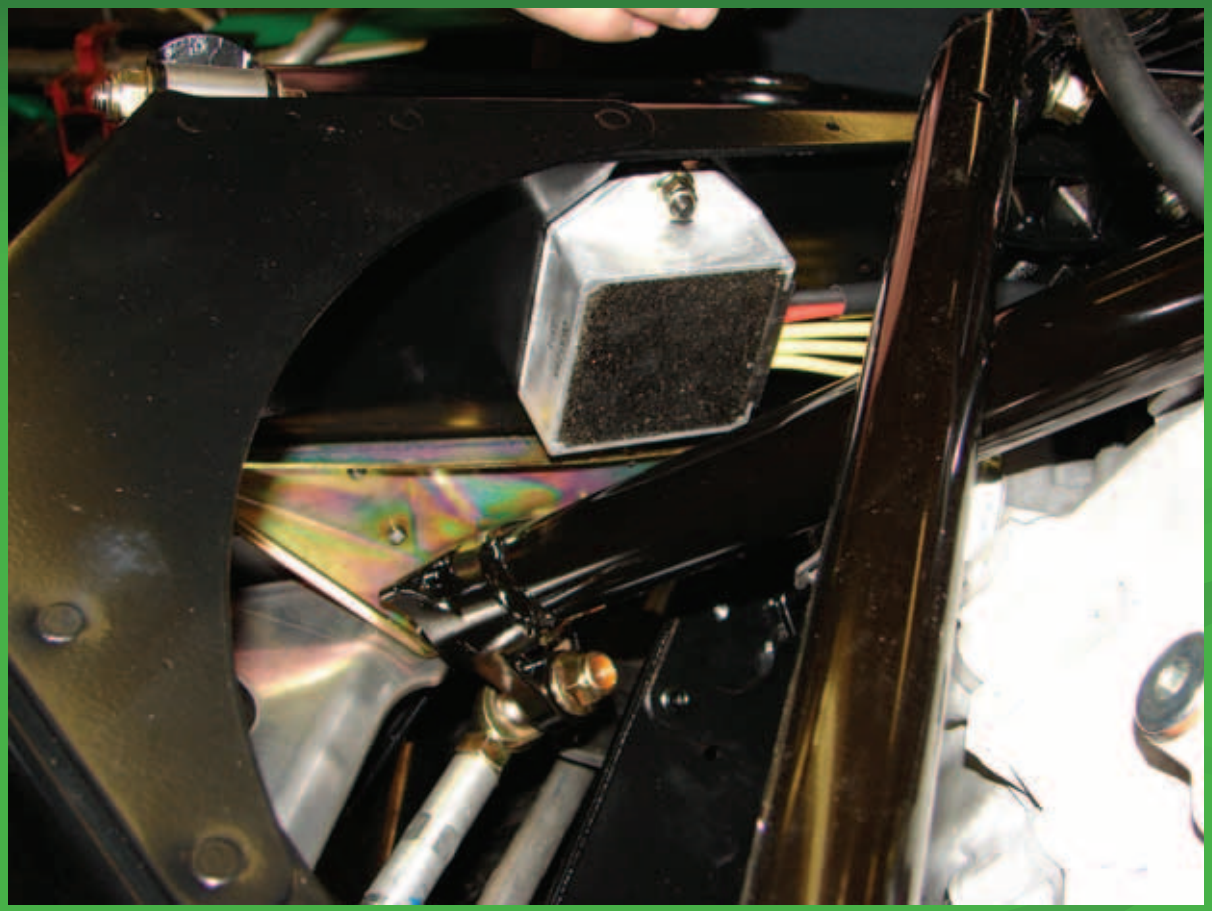
1100 N/A and 1100 Turbo

Front Bulkhead



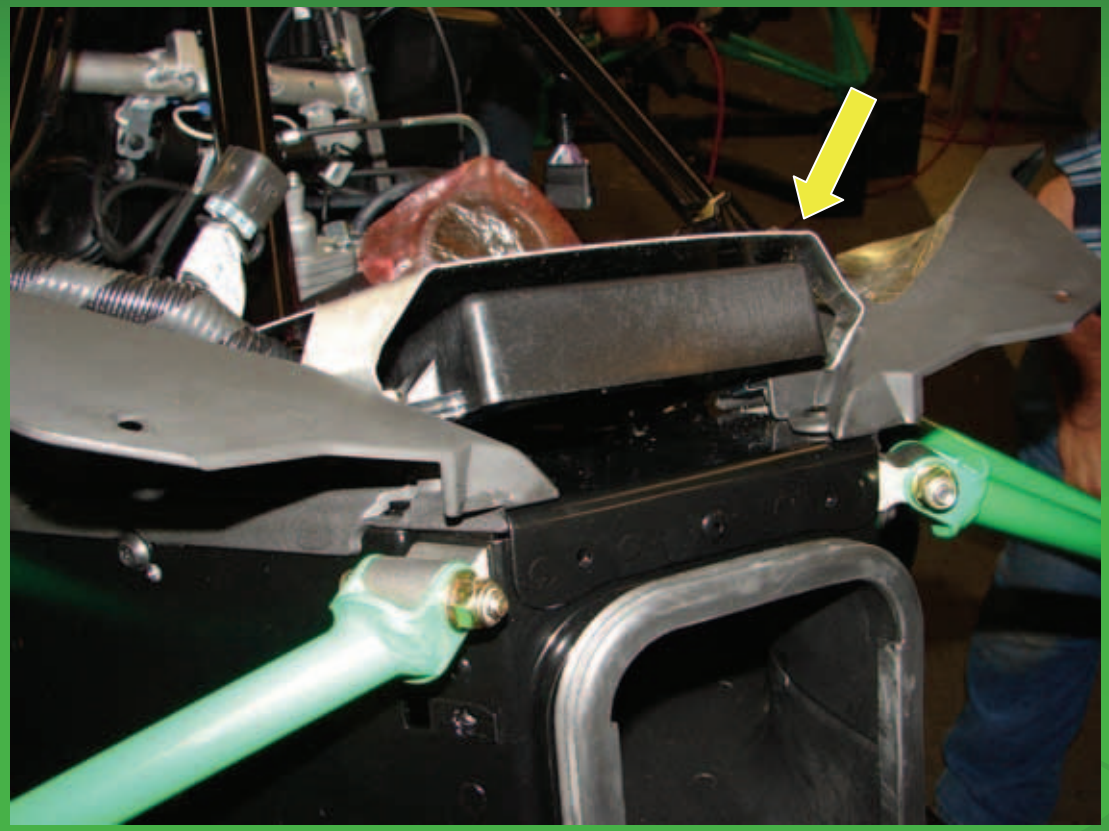
Replaceable

Voltage Regulator



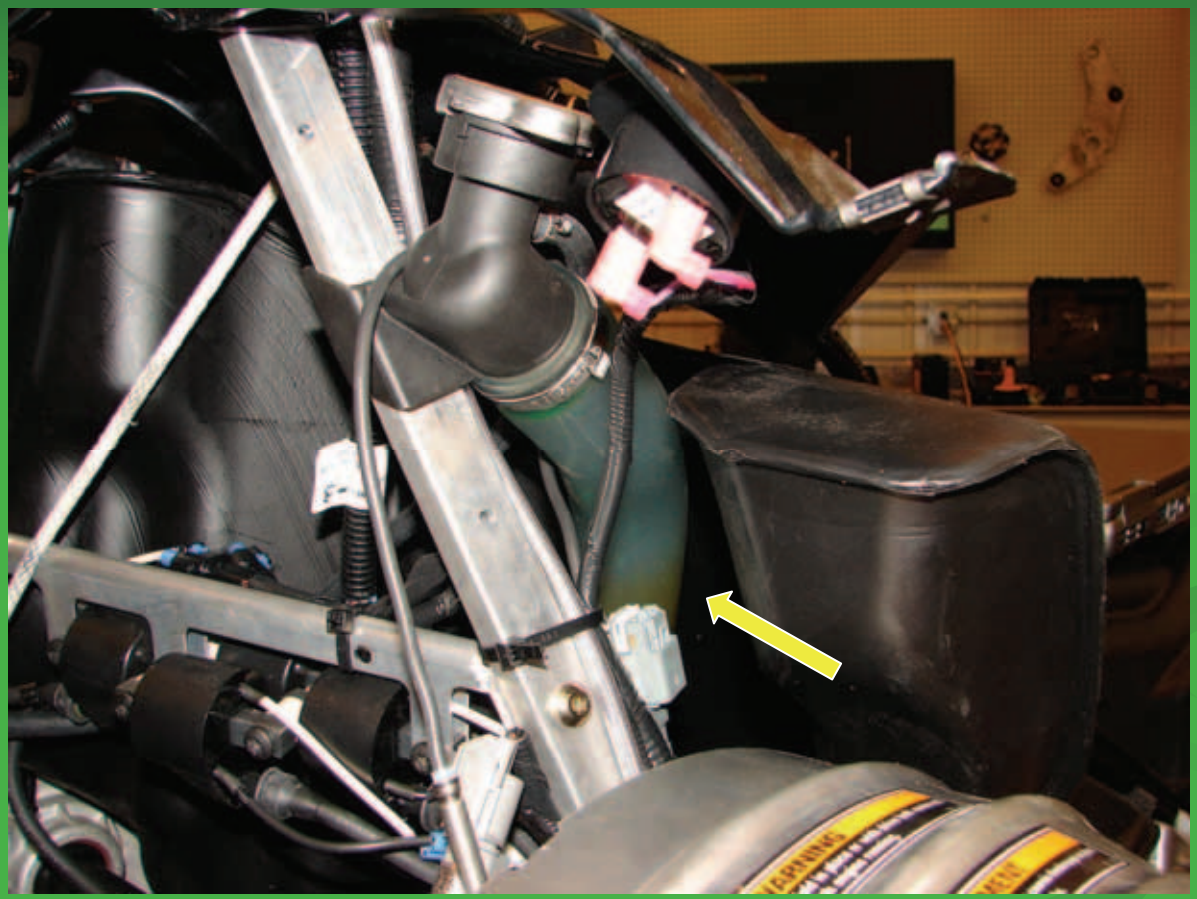
Located right of the steering post on all ProCross/ProClimb models.

ECU Heat Shield



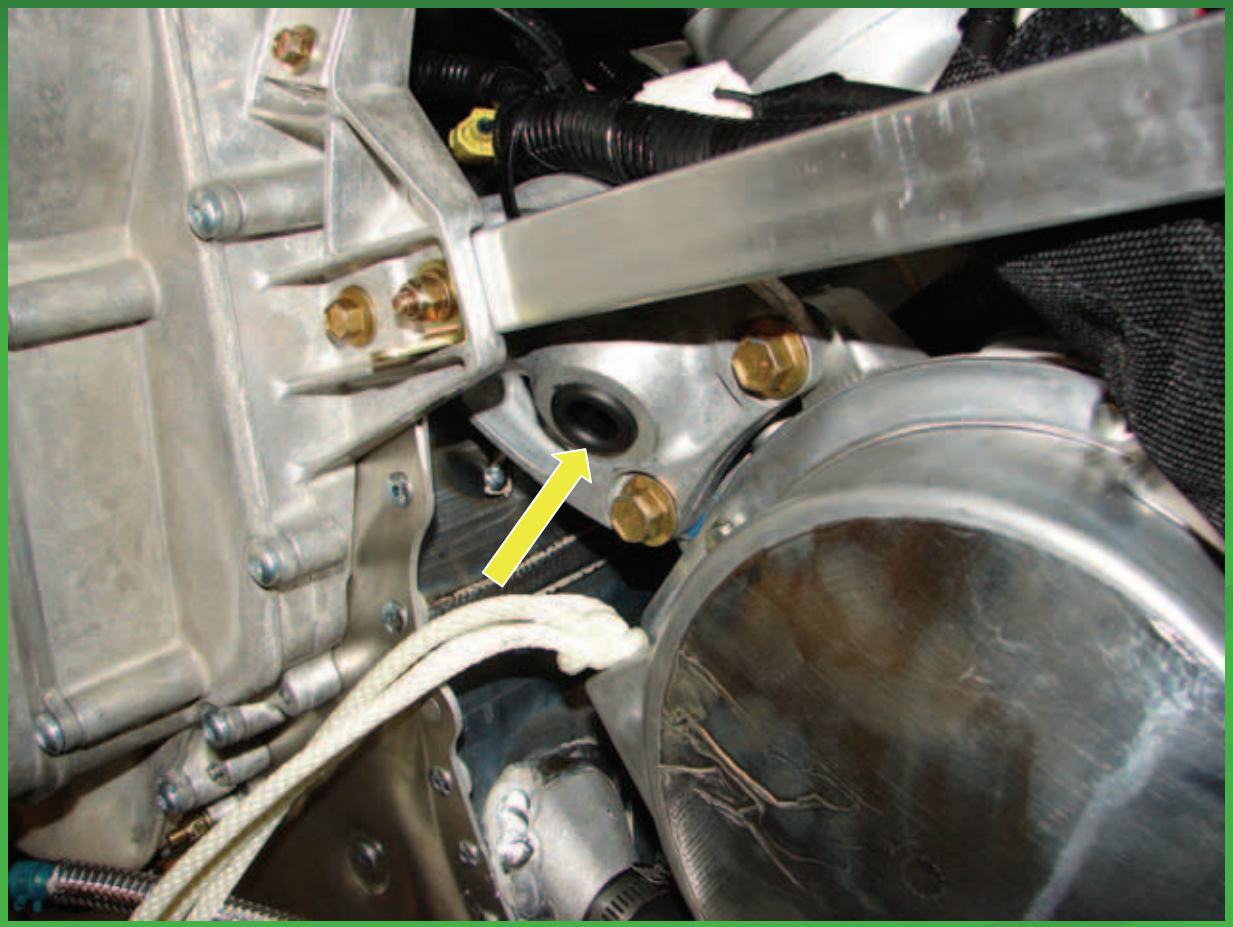
Protects vital electronics from heat

Coolant Reservoir



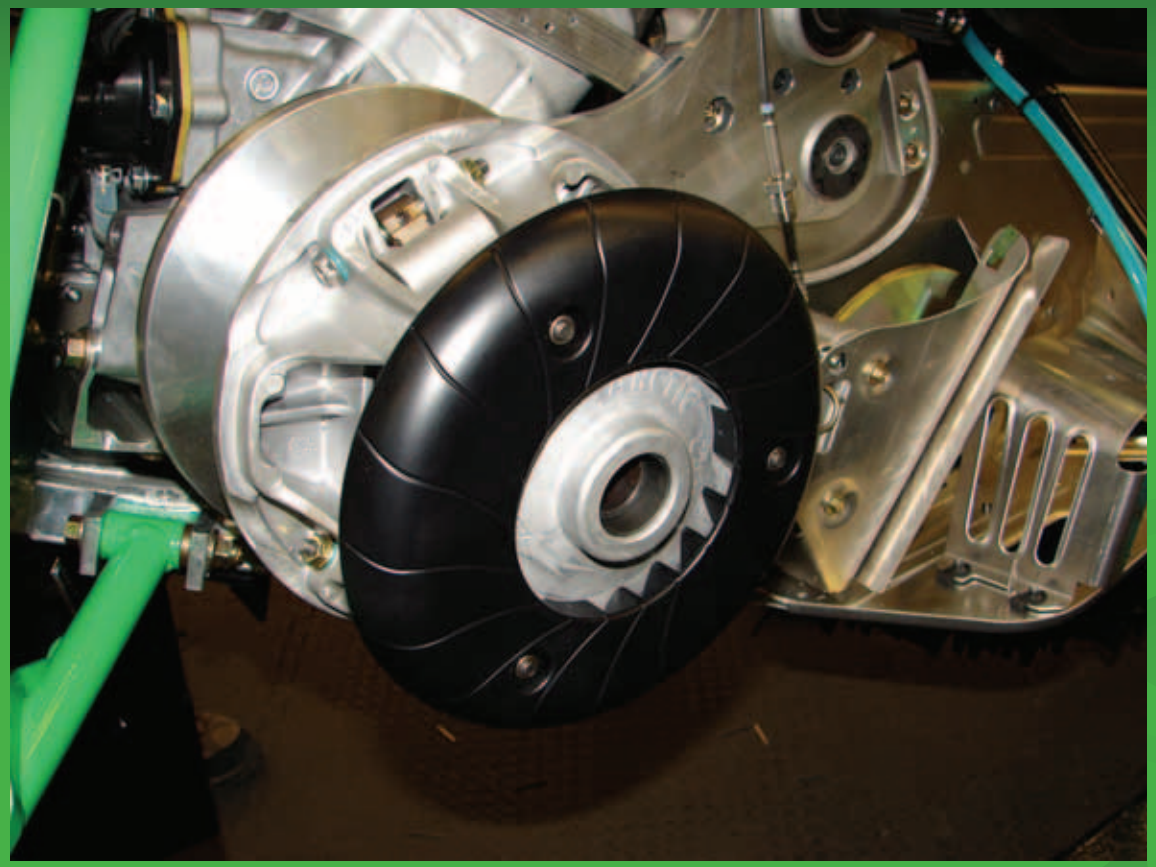
An extra large clear hose, high visibility and resistive to leaks vs. molded tanks in the past

Recoil Rope Guide



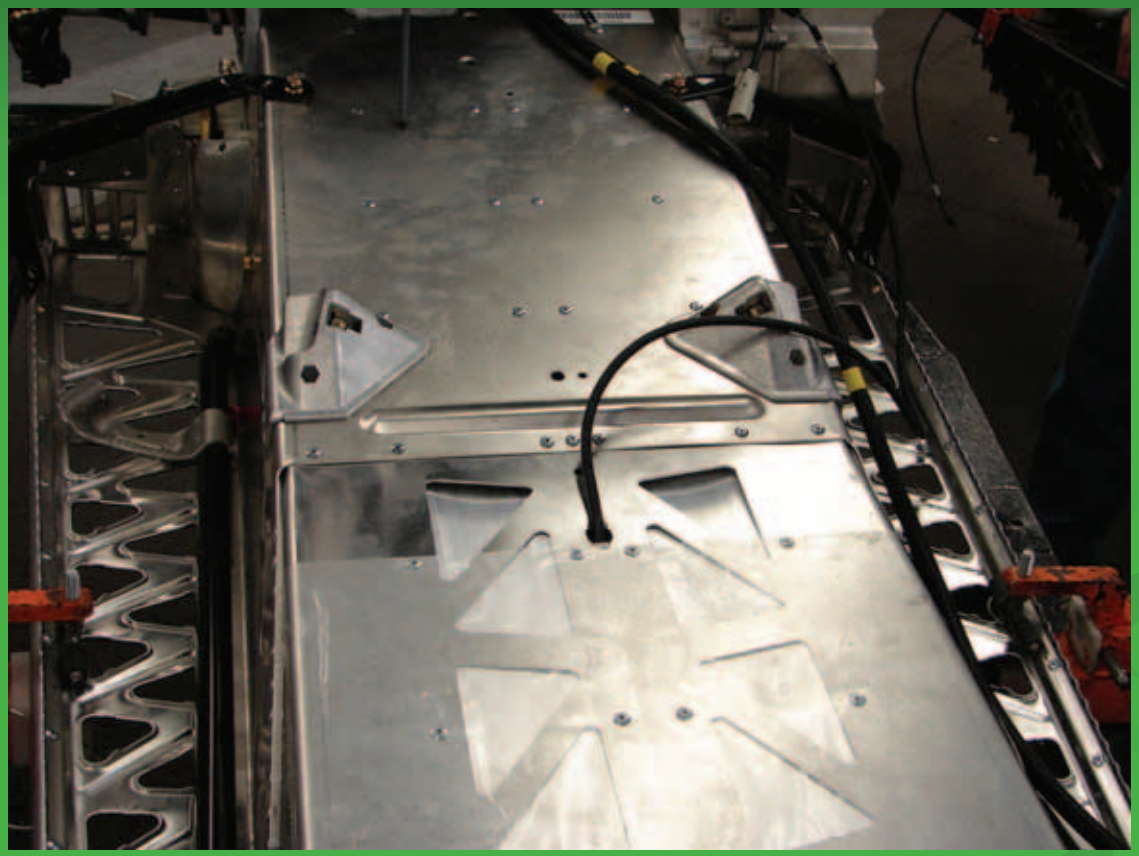
Recoil rope guide is routed through the right rear engine mount on the 800cc H.O Models.

Drive Clutch Fan



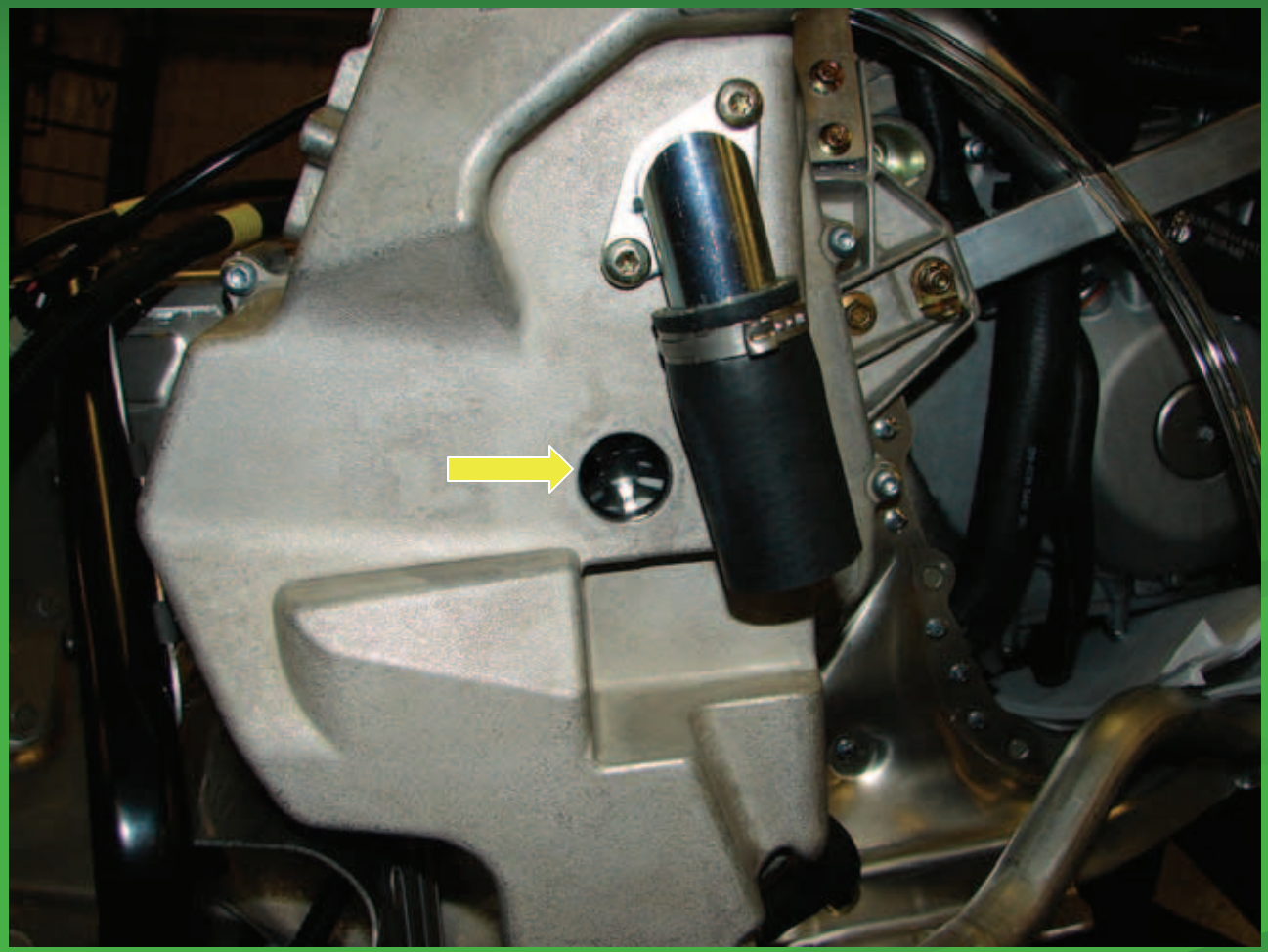
Lowers CVT temperatures, extends drive belt life. It will be standard on some models and available as an accessory.

Tail Light Harness



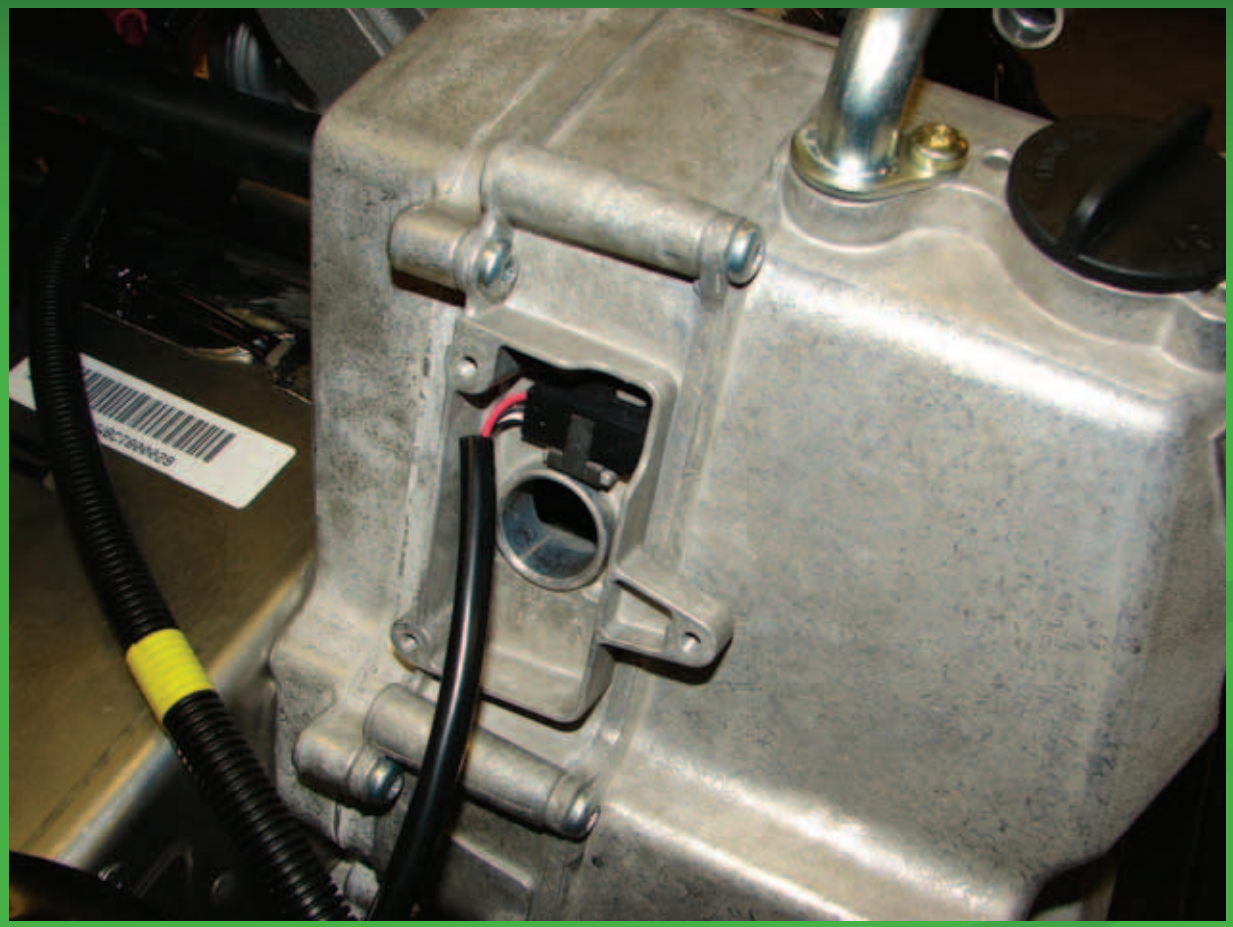
Routed through a hole in the tunnel and under the gas tank.

Oil Tank Sight Glass



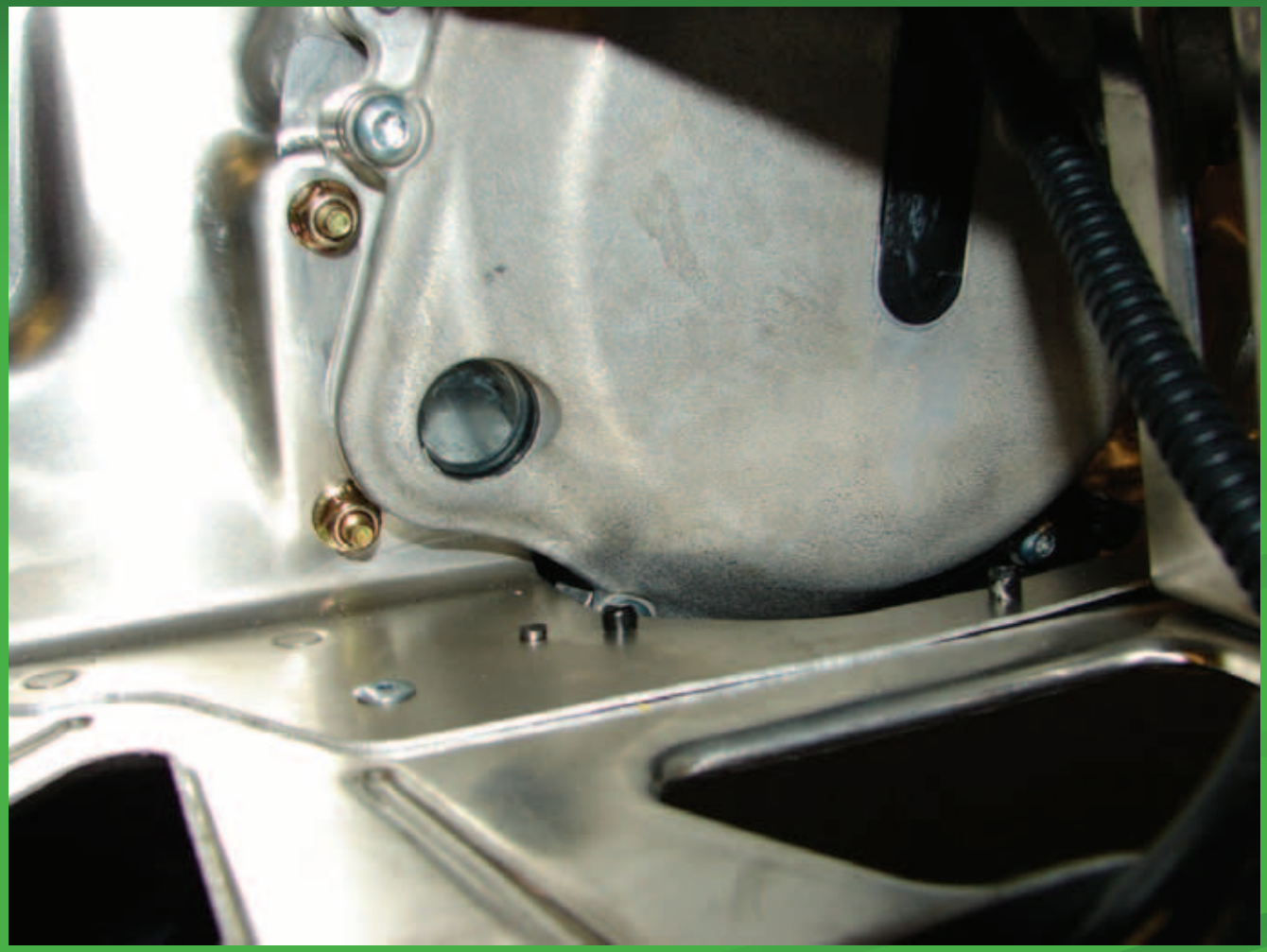
All ProCross/ProClimb models.

Gear Position Sensor



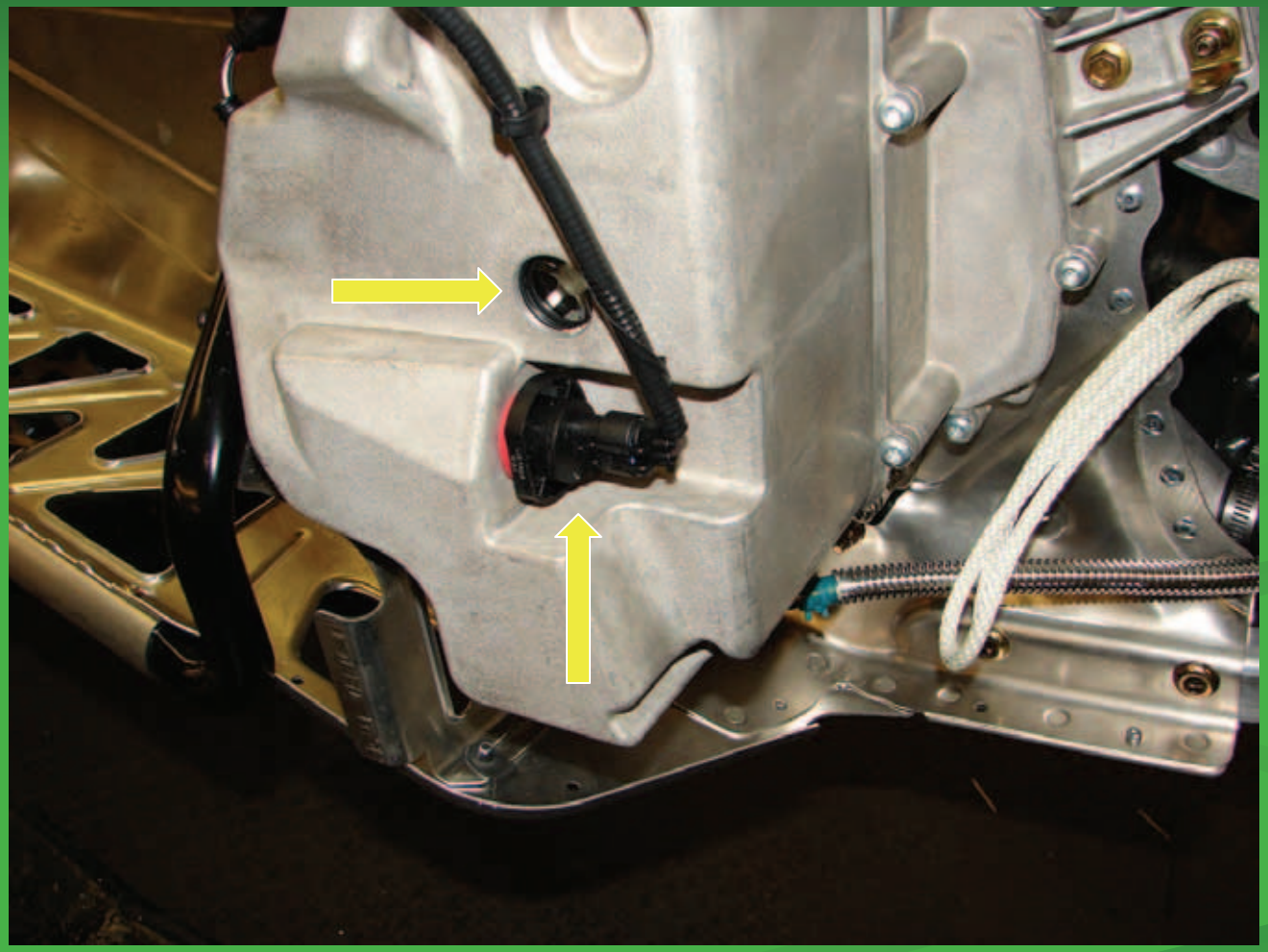
Located under the reverse actuator on 4 stroke models.

Drop Case Cover



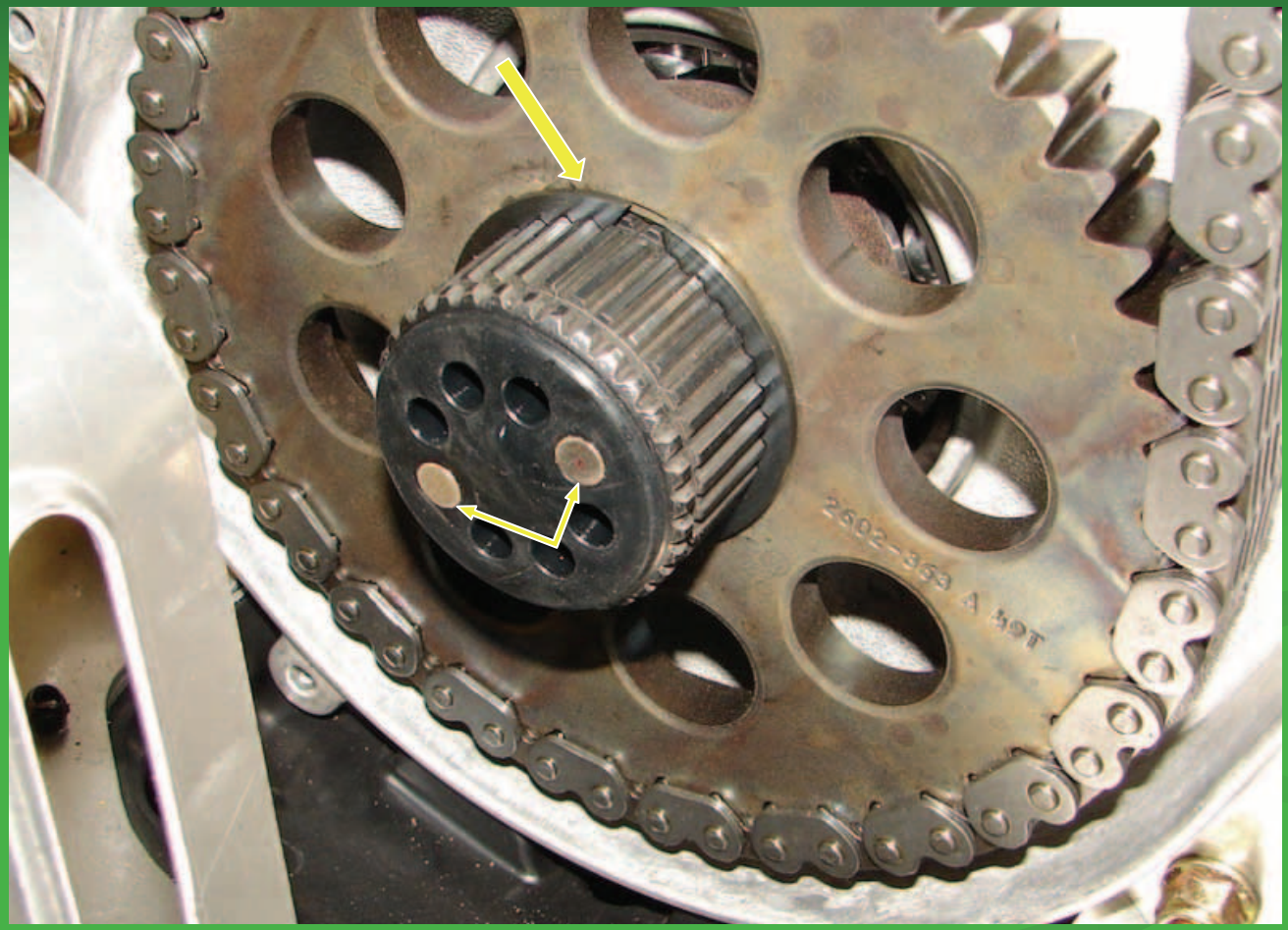
Sight glass for ease of checking drop case oil level.

Oil Level Sensor and Sight Glass



Reed switch has been improved.

Drop Case



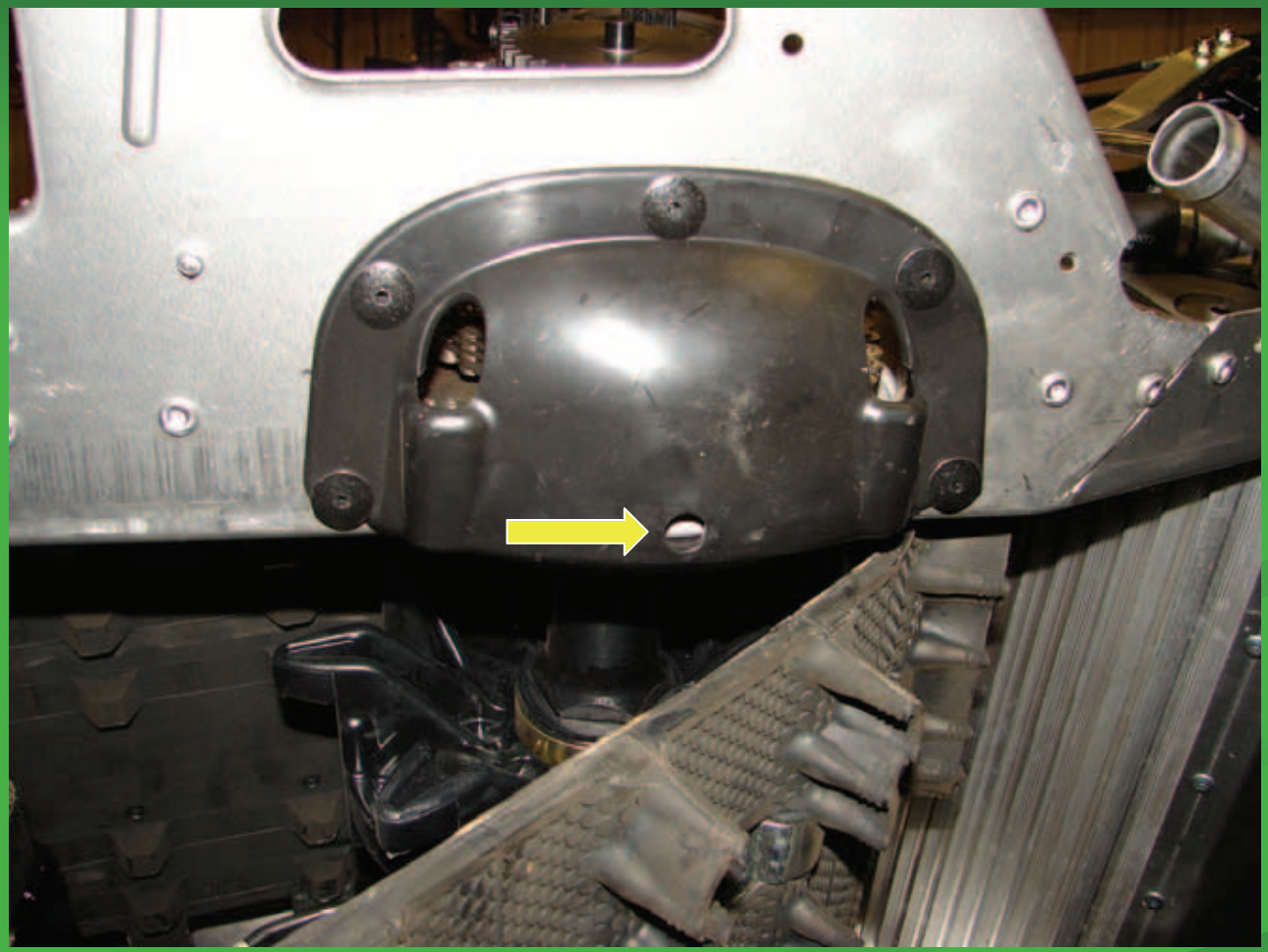
Bottom sprocket held on by a snap ring.

Speed sensor pick-ups located in the drive shaft.

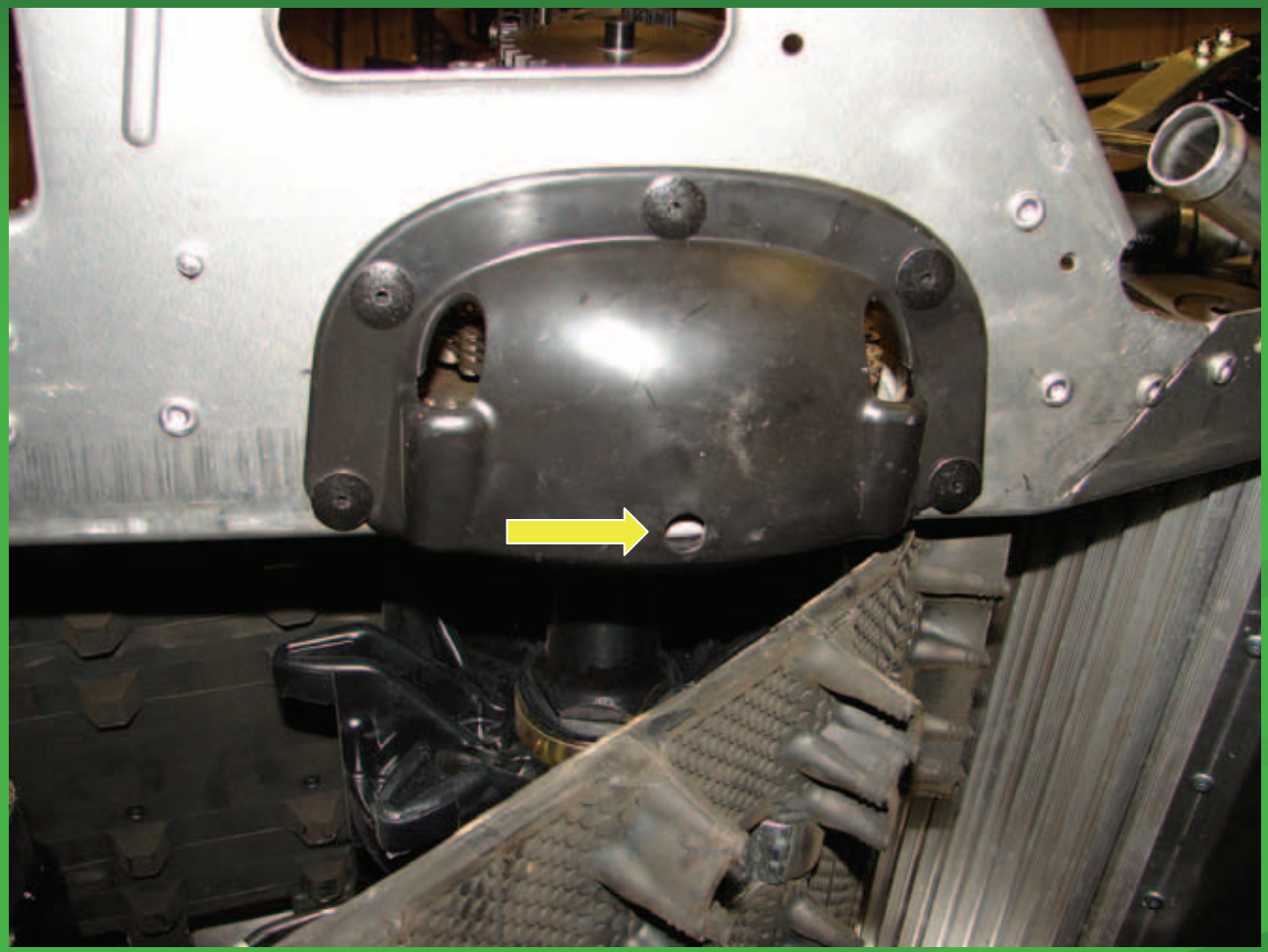
Speed Sensor

All new speed sensor, adheres into molded location on the drop case with a Loctite™ sealant.

Drop Case Drain Pan



Drop Case Drain Pan

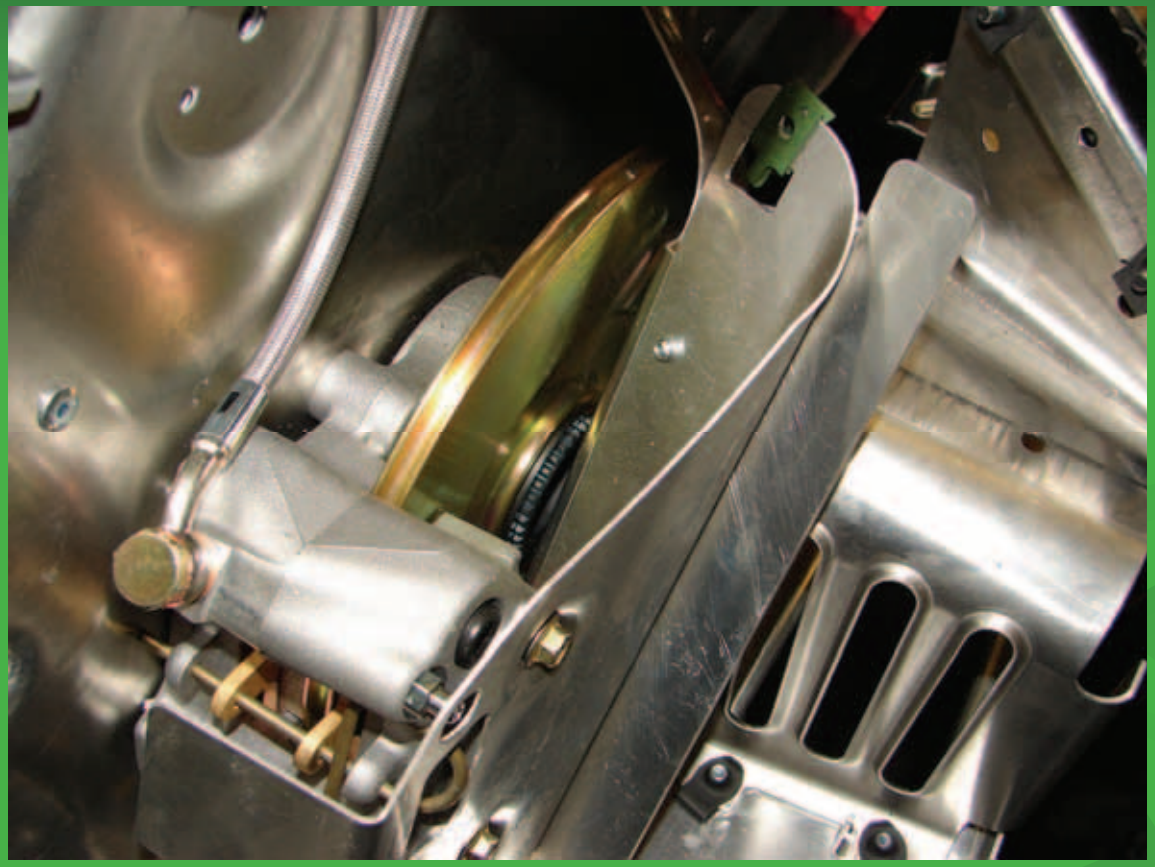


Drain hole for fluid change.

Radial Master Cylinder (RMC)

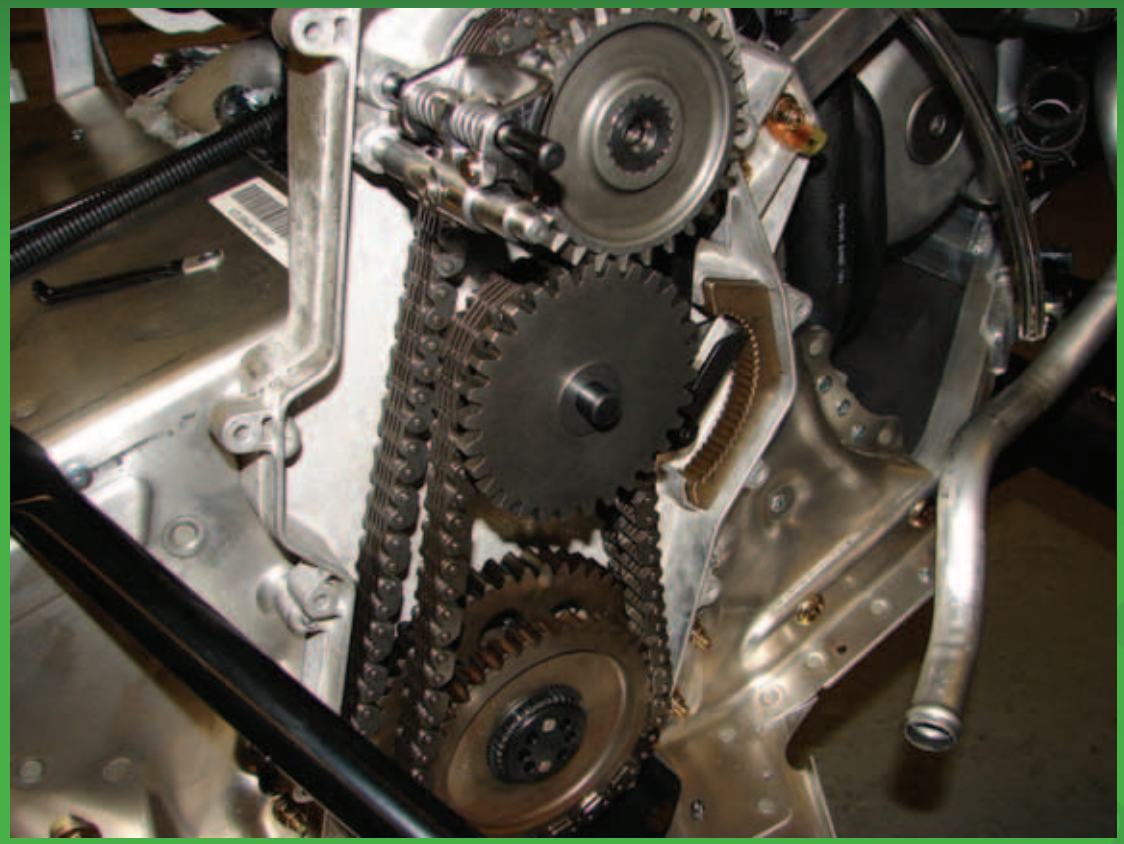
RMC coupled with a longer brake lever requires less effort.

Drive Shaft Mounted Brake Rotor



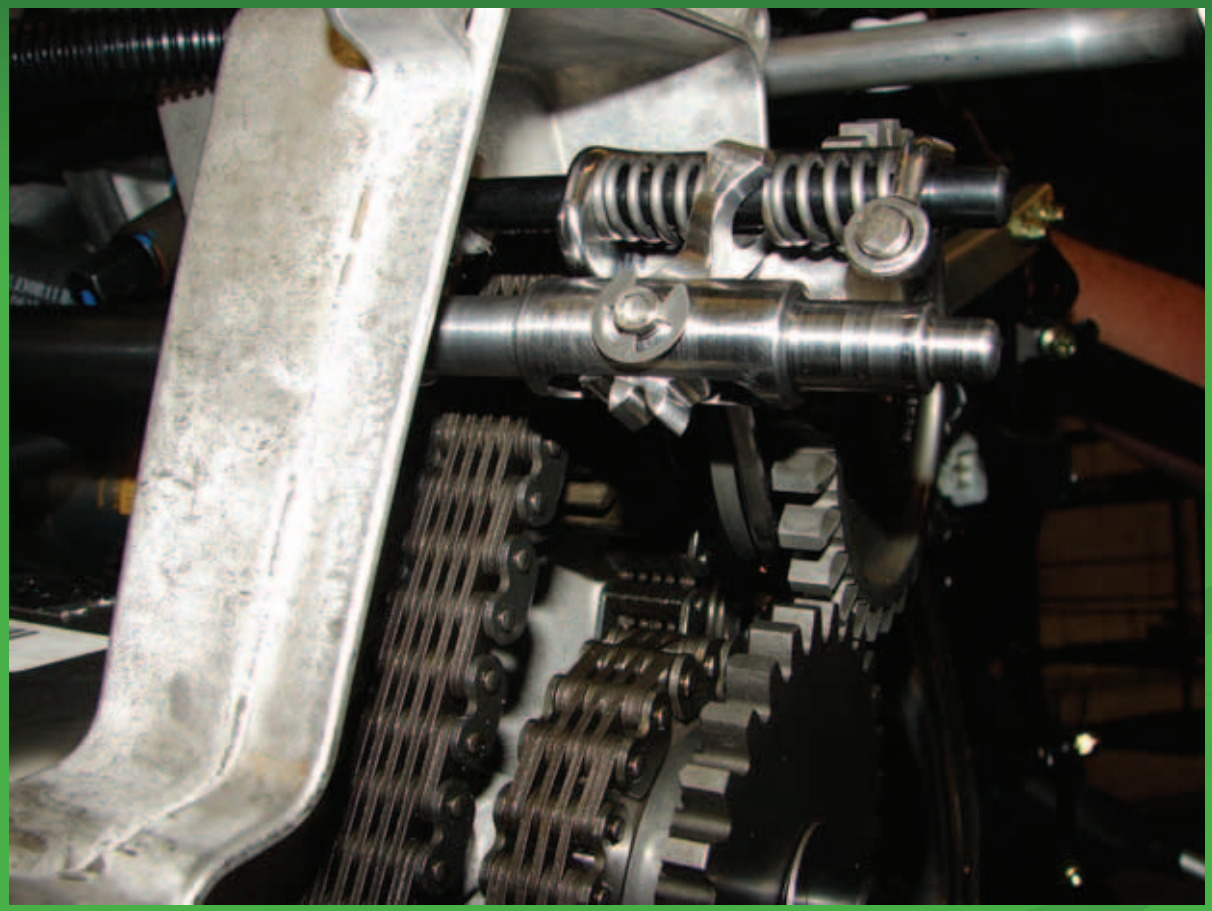
Located on the left side of the drive shaft on ProCross/ProClimb models.

Electric Mechanical Reverse



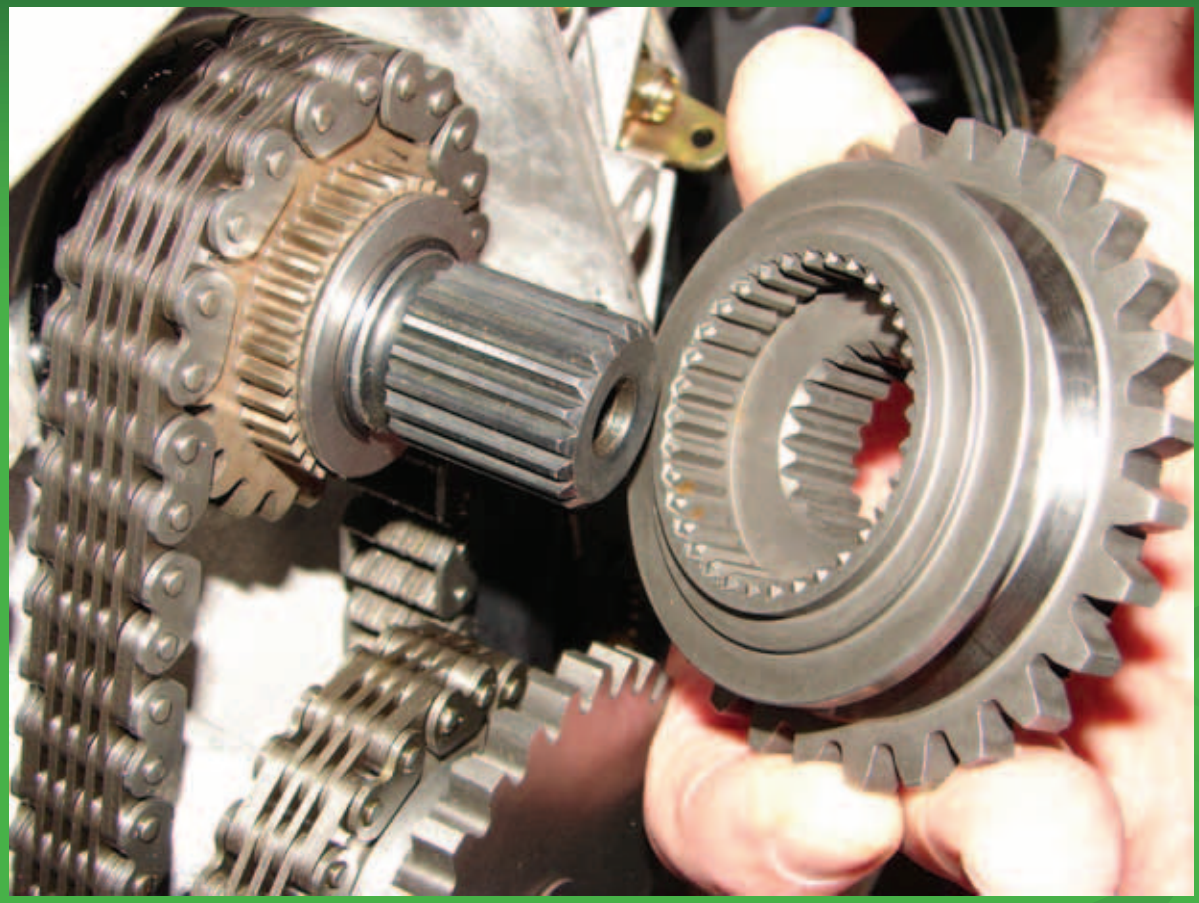
4 Stroke Models only. System uses 2 chains and 2 sets of gears shifted by a shift actuator.

Actuator Shift Mechanism

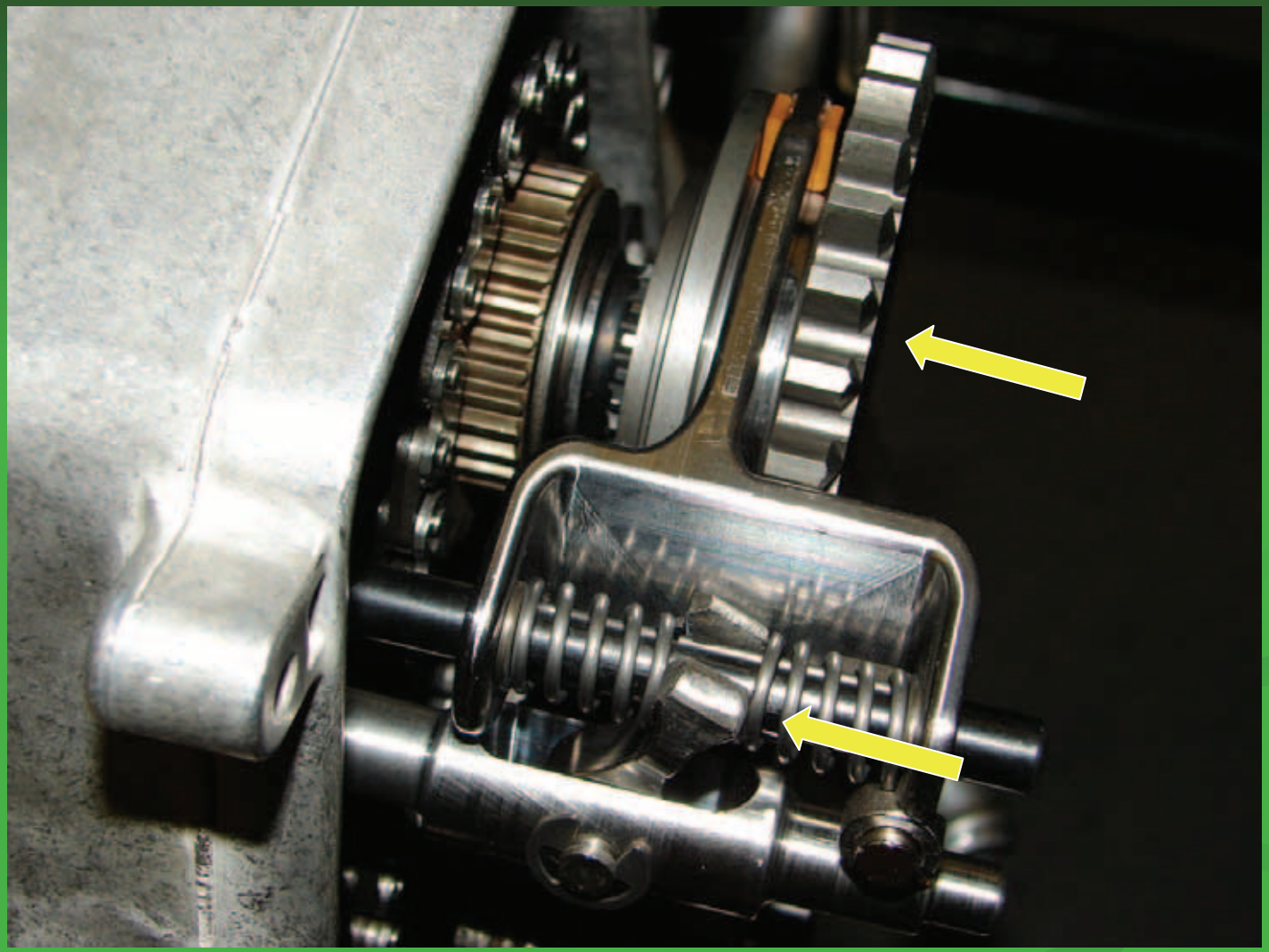


Slides drive gear into reverse gear.

Reverse Drive Gear

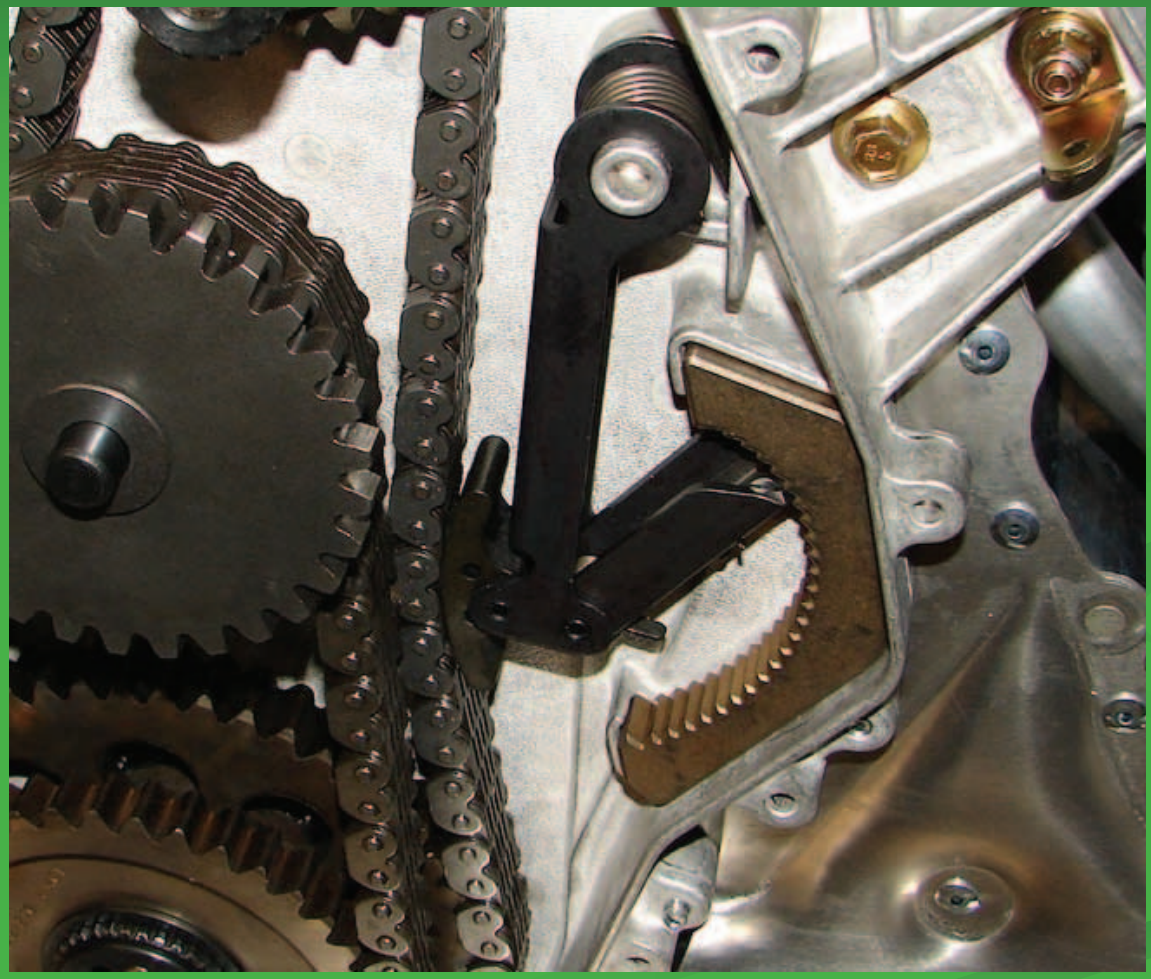


Reverse drive gear engages jackshaft to drive sprocket for forward. Reverse drive gear slides over to engage reverse driven gear for reverse.



Another view of shift fork. It is in reverse, shifting the direction of the arrows would be forward.

Automatic Chain Tensioner



Tool kit location

Behind oil tank.

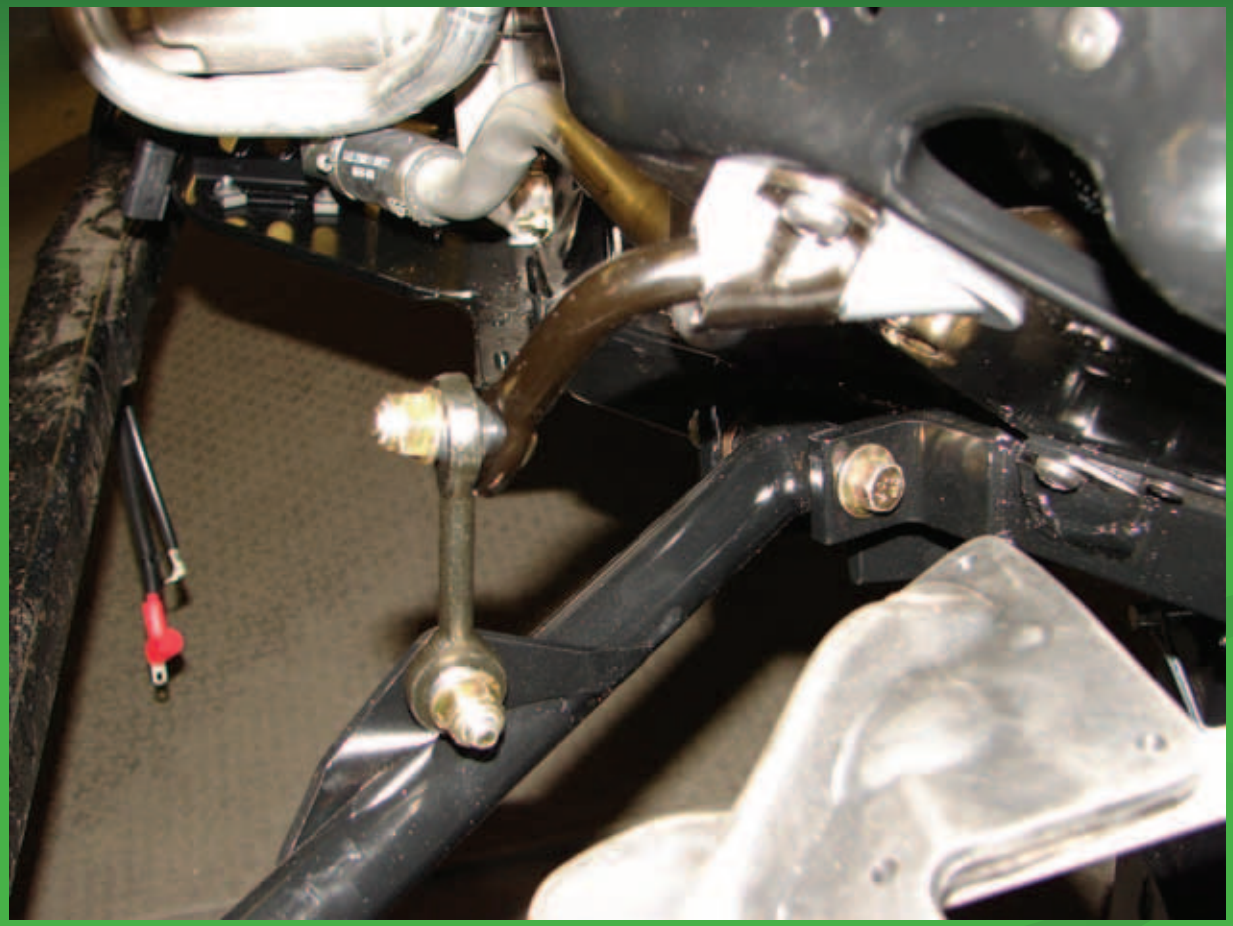
12 Volt Accessory Plug

Located behind the oil tank.

ProCross Features

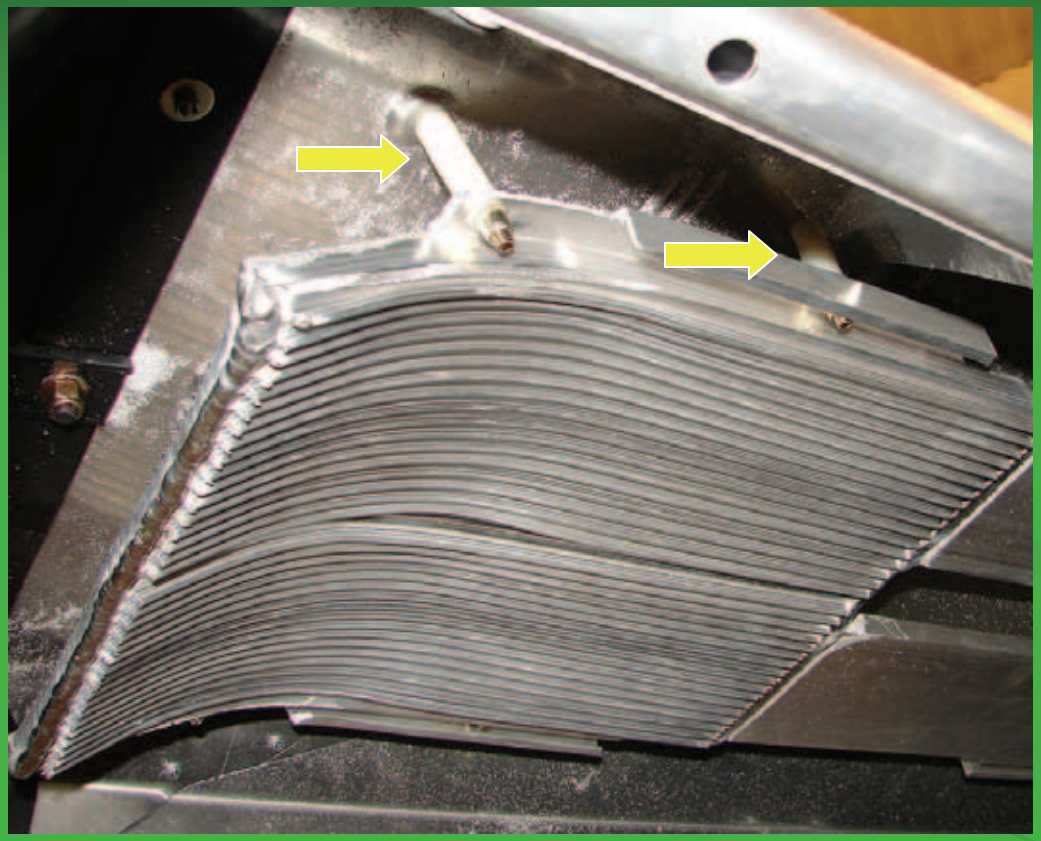
F800 H.O / LXR / Sno Pro
XF 800 H.O / LXR / Sno Pro
F 1100 / LXR / Sno Pro
XF 1100 / LXR / Sno Pro
F 1100 Turbo / LXR / Sno Pro
XF 1100 Turbo / LXR / Sno Pro

Sway-bar



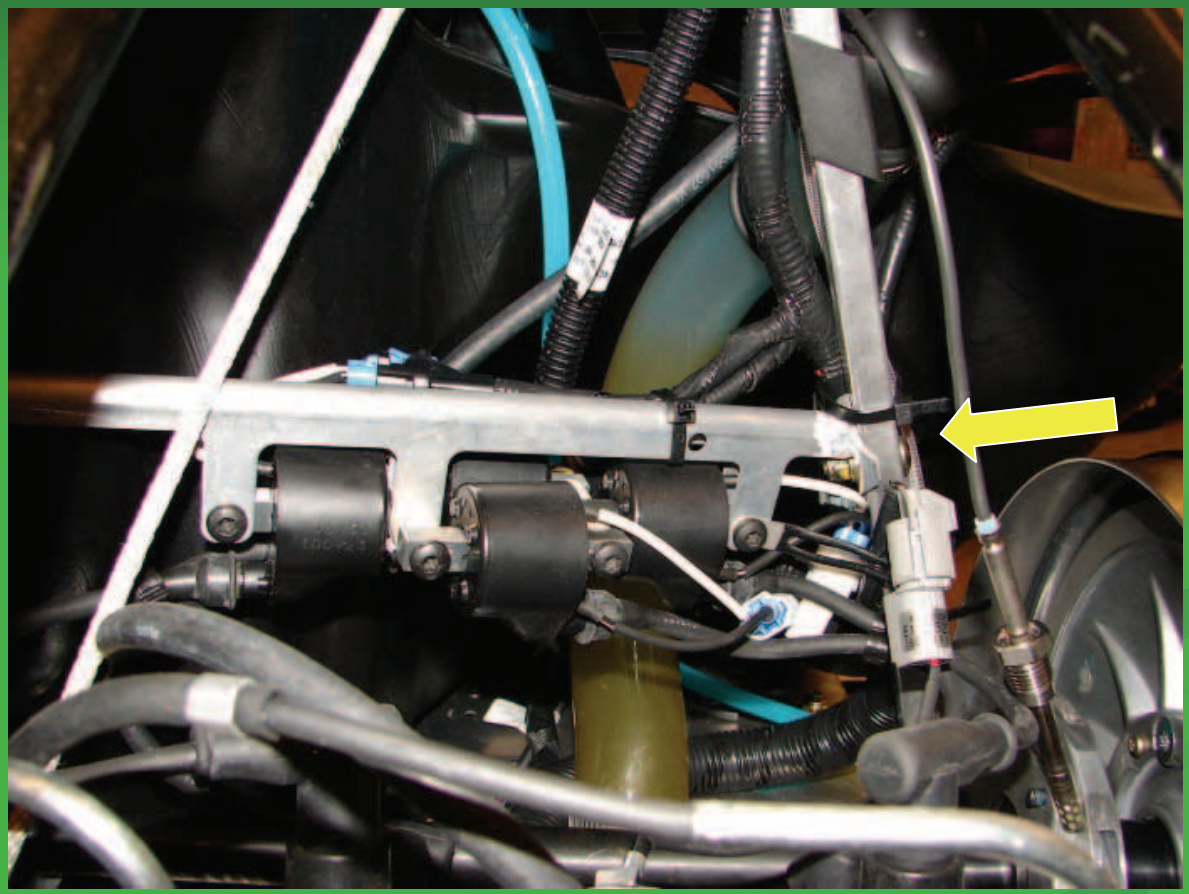
Sway-bar runs through the chassis fastened with hardware.

Rear Heat Exchanger Spacers



Spacer allow for snow to cool from top and bottom.

ProCross Ignition Coil Location

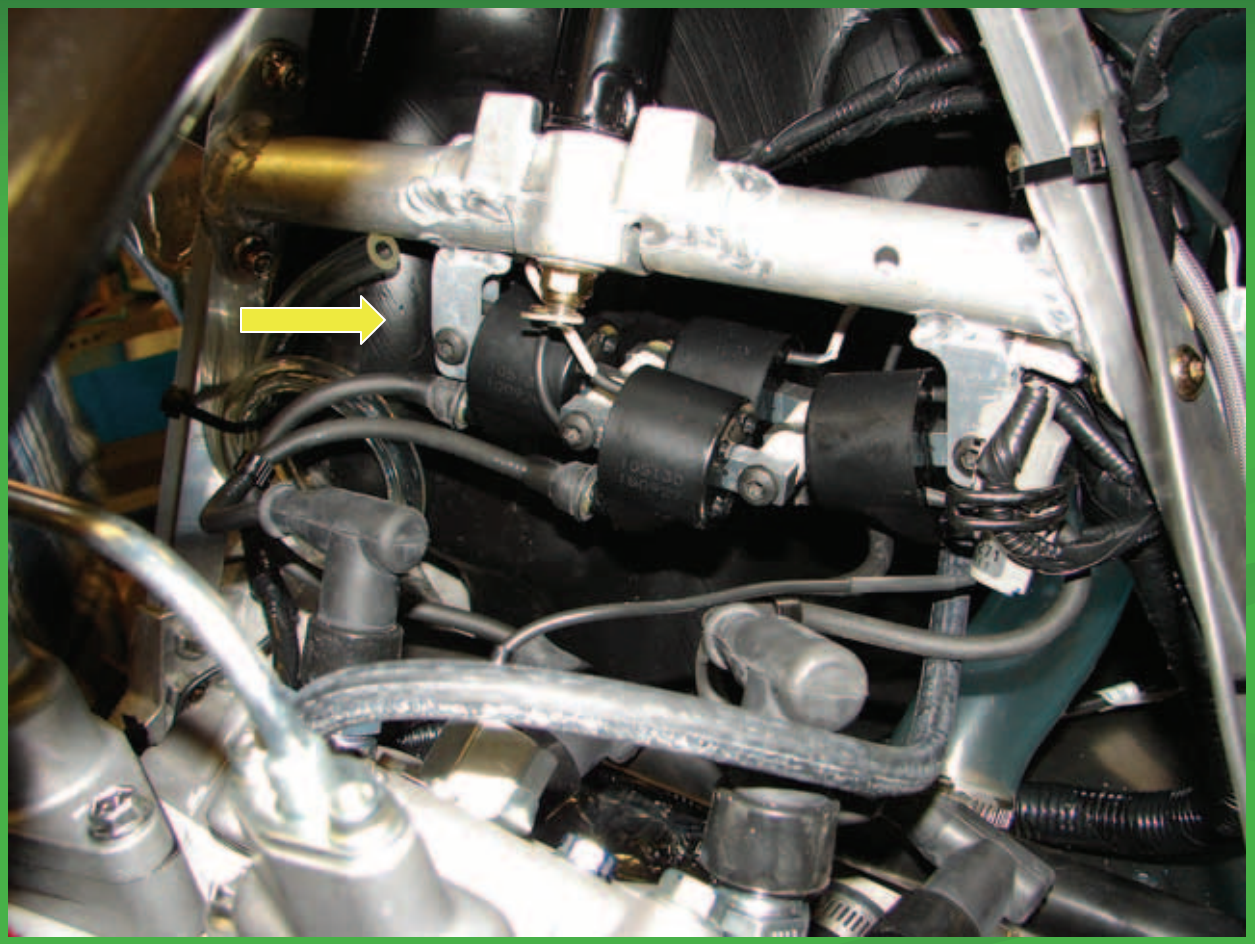


Fastened between the two support posts for the steering.

ProClimb Features

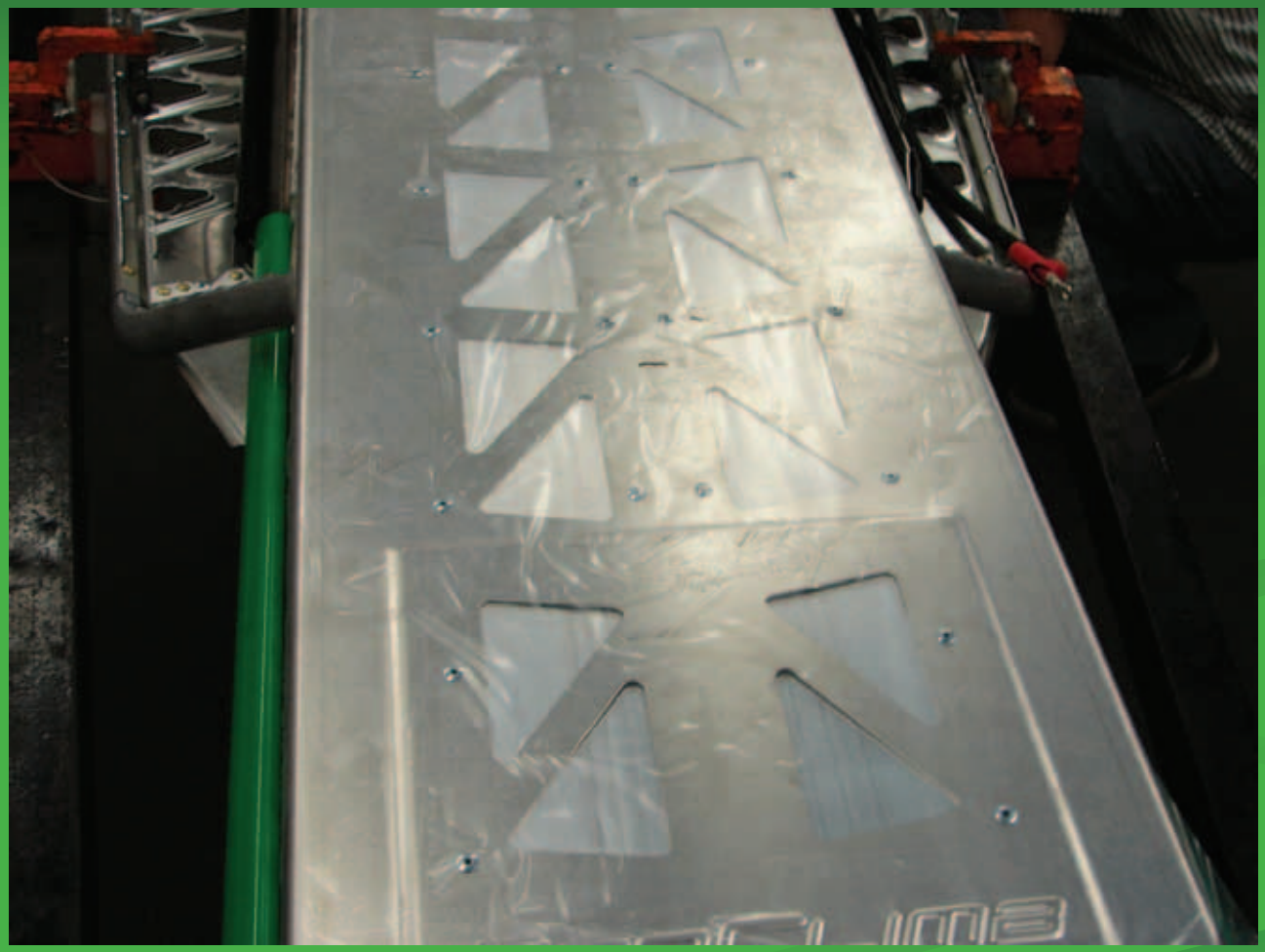
XF 800 High Country
M800 H.O / Sno Pro / HCR
M1100 / Sno Pro
M1100 Turbo / Snopro / HCR

ProClimb Coil Location



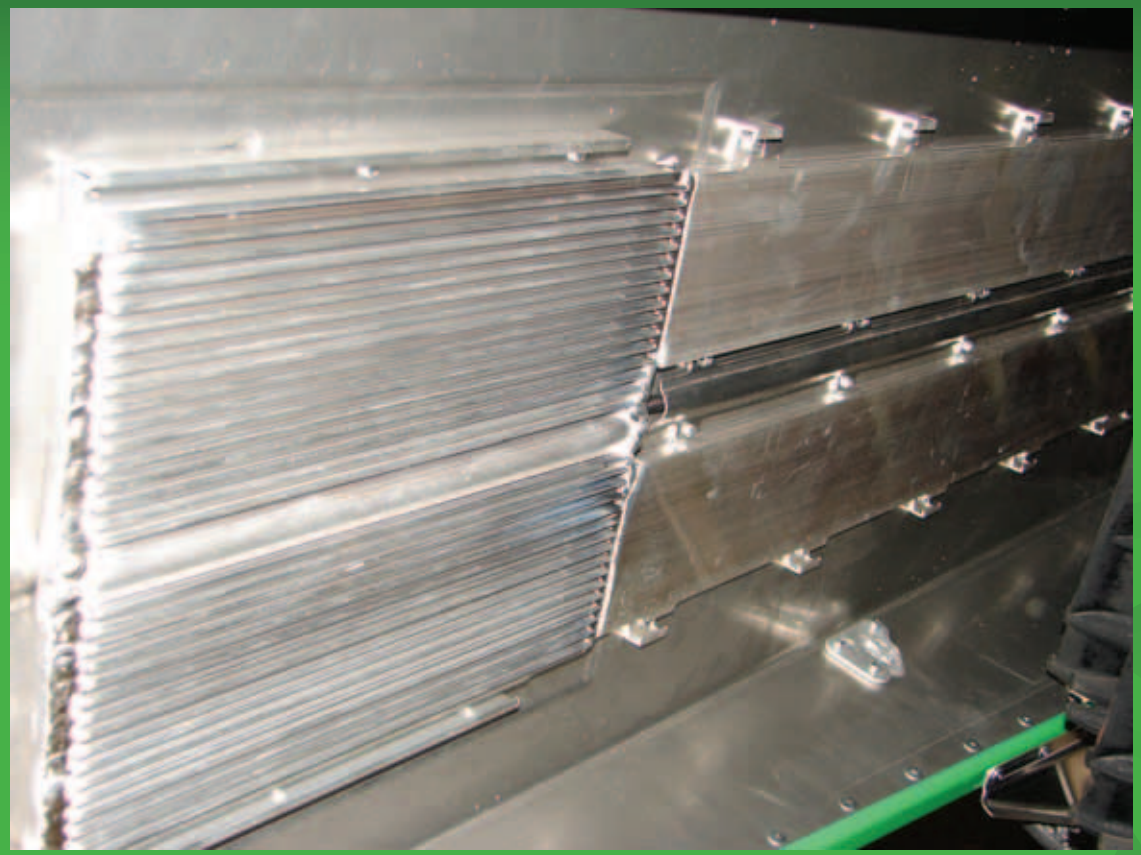
Fastened to the steering support.

Light Weight Tunnel



Provides Structure with weight savings.

Rear Heat Exchanger



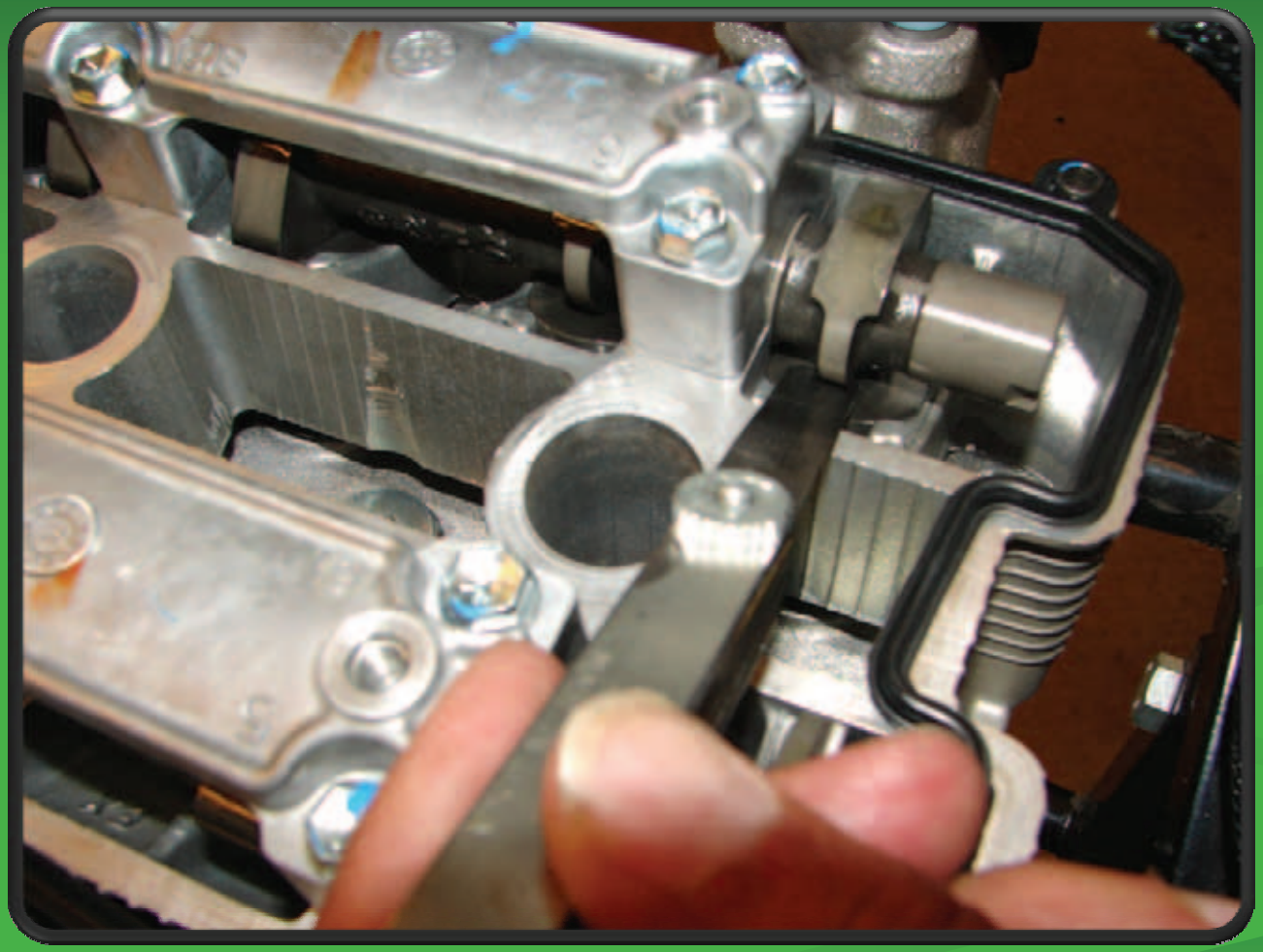
Mounted against the tunnel on ProClimb. Customers riding ProClimb models in trail conditions must use ice scratchers.

ProCross and ProClimb Service Information

Contents

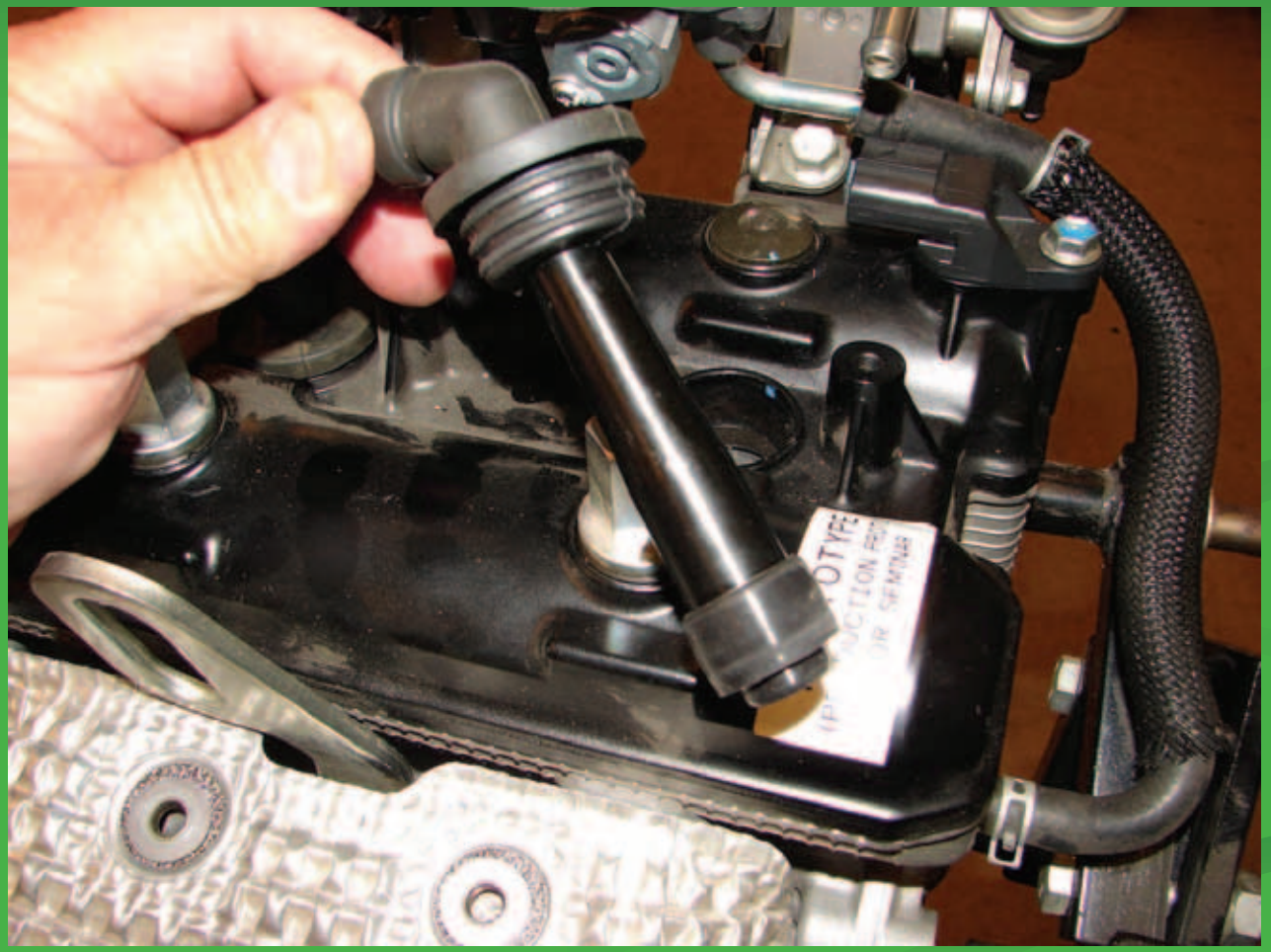
- Valve Lash 1100 4 stroke models
- Performing a head gasket leak down test
- Turbo Charger System 1100 4 stroke
- ADS (Arctic Diagnostic System)
- Changing oil on the 1100 4 Stroke
- Removing the drop case cover / oil reservoir
- Automatic Chain Tensioner
- Removing drive chain and sprockets
- Upper drop case bearing
- Track removal
- Team driven pulley
- Removal of the Seat, Hood, and Side Panels
- 800cc H.O engine removal and installation tips
- 1100 N/A engine removal and installation tips

Checking Valve Lash

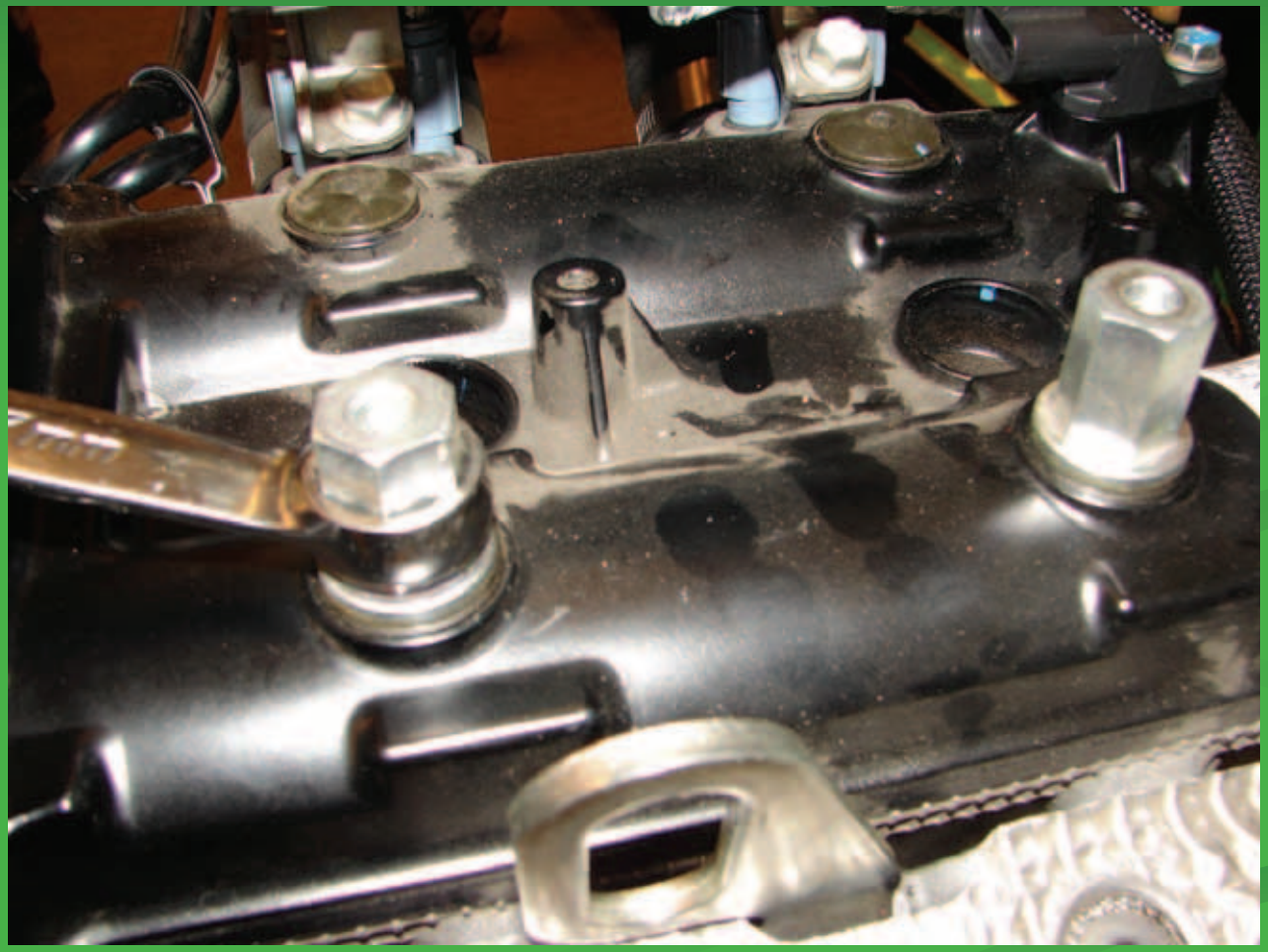


Valve lash should be checked every 5000 miles.

With the valve cover accessible, remove the spark plug caps.



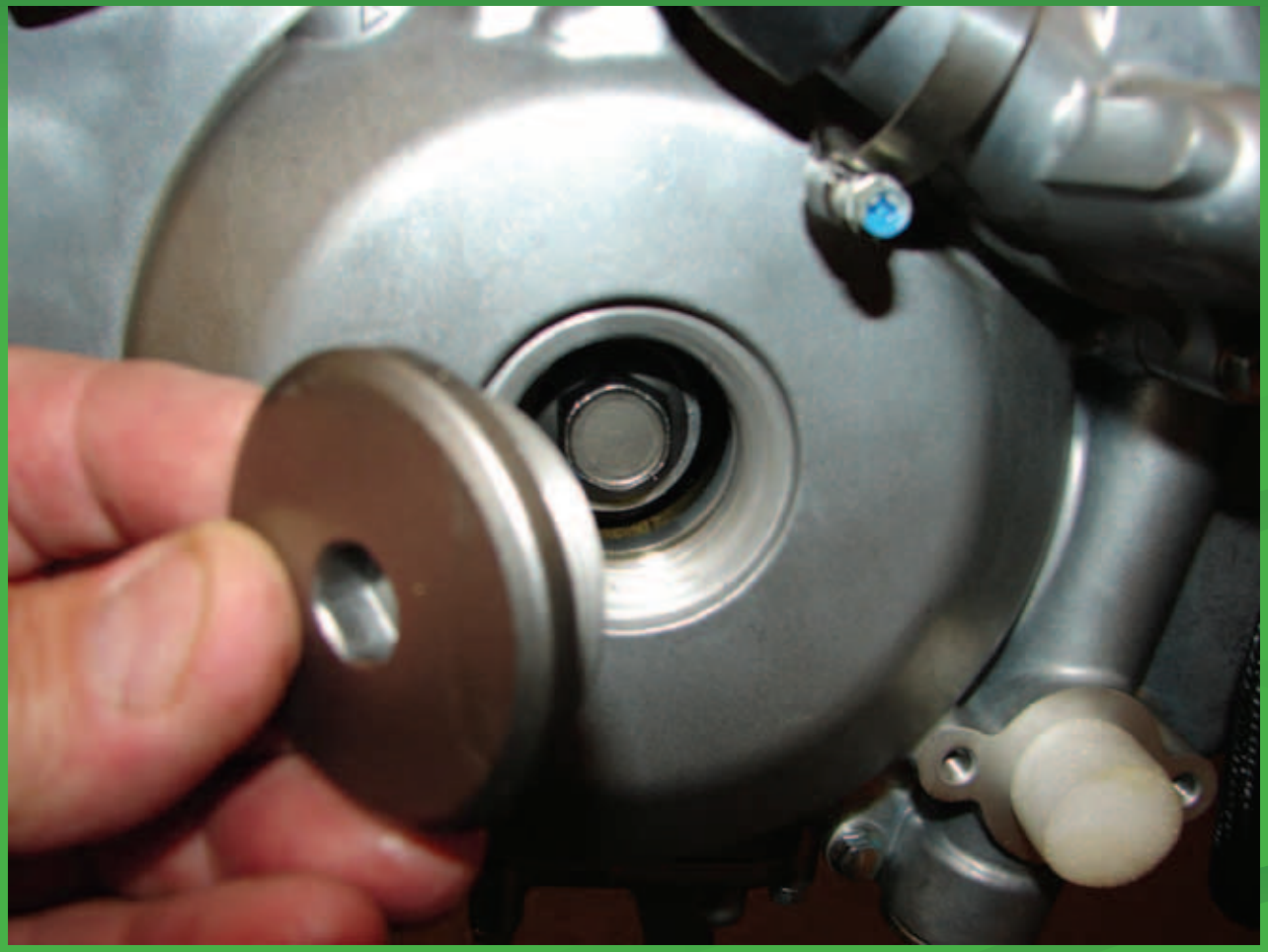
Remove the valve cover fasteners and account for the fastener seals.



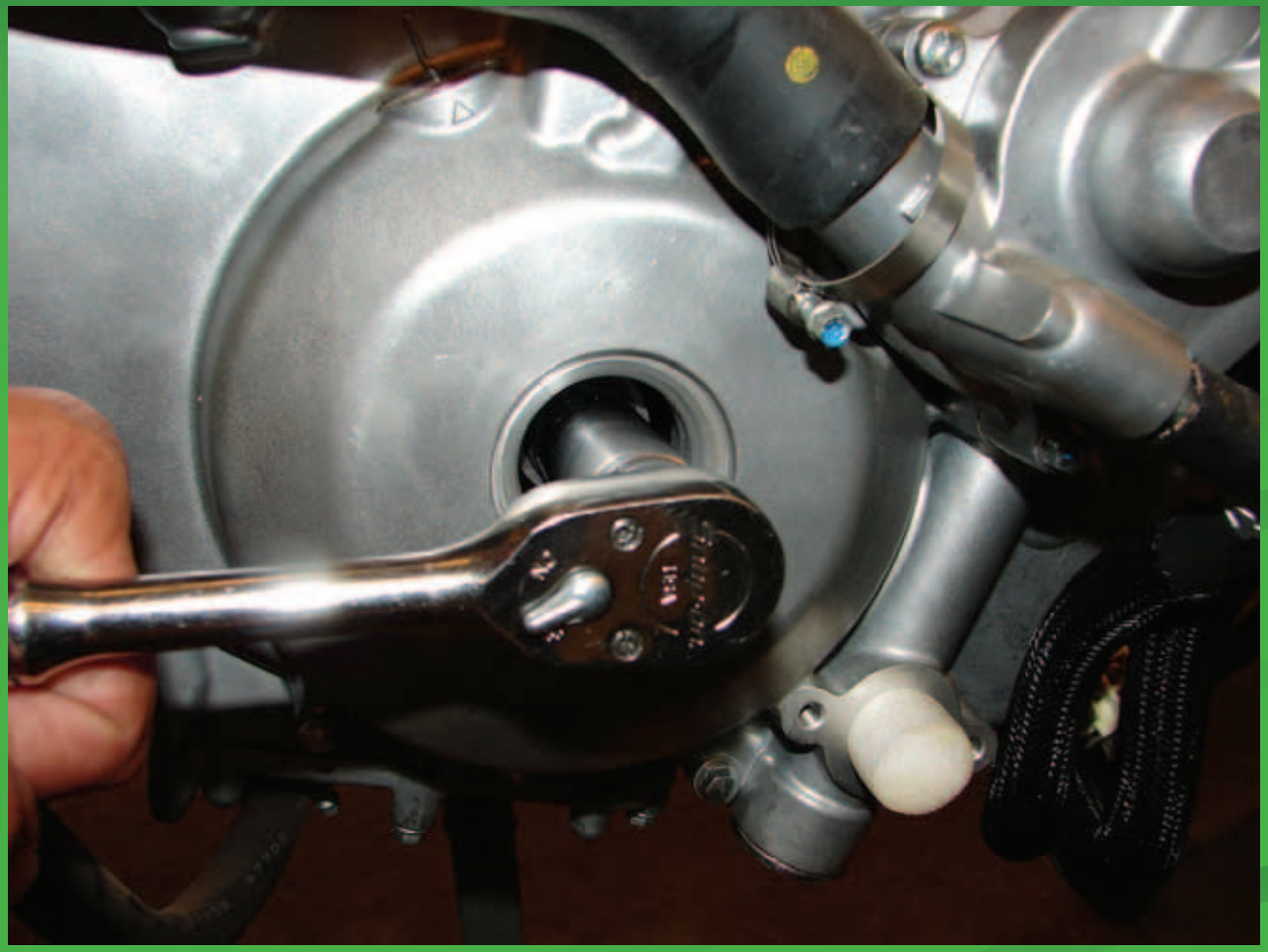
Remove the valve cover and account for the gasket.

Remove the timing inspection plug. Account for the copper gasket.

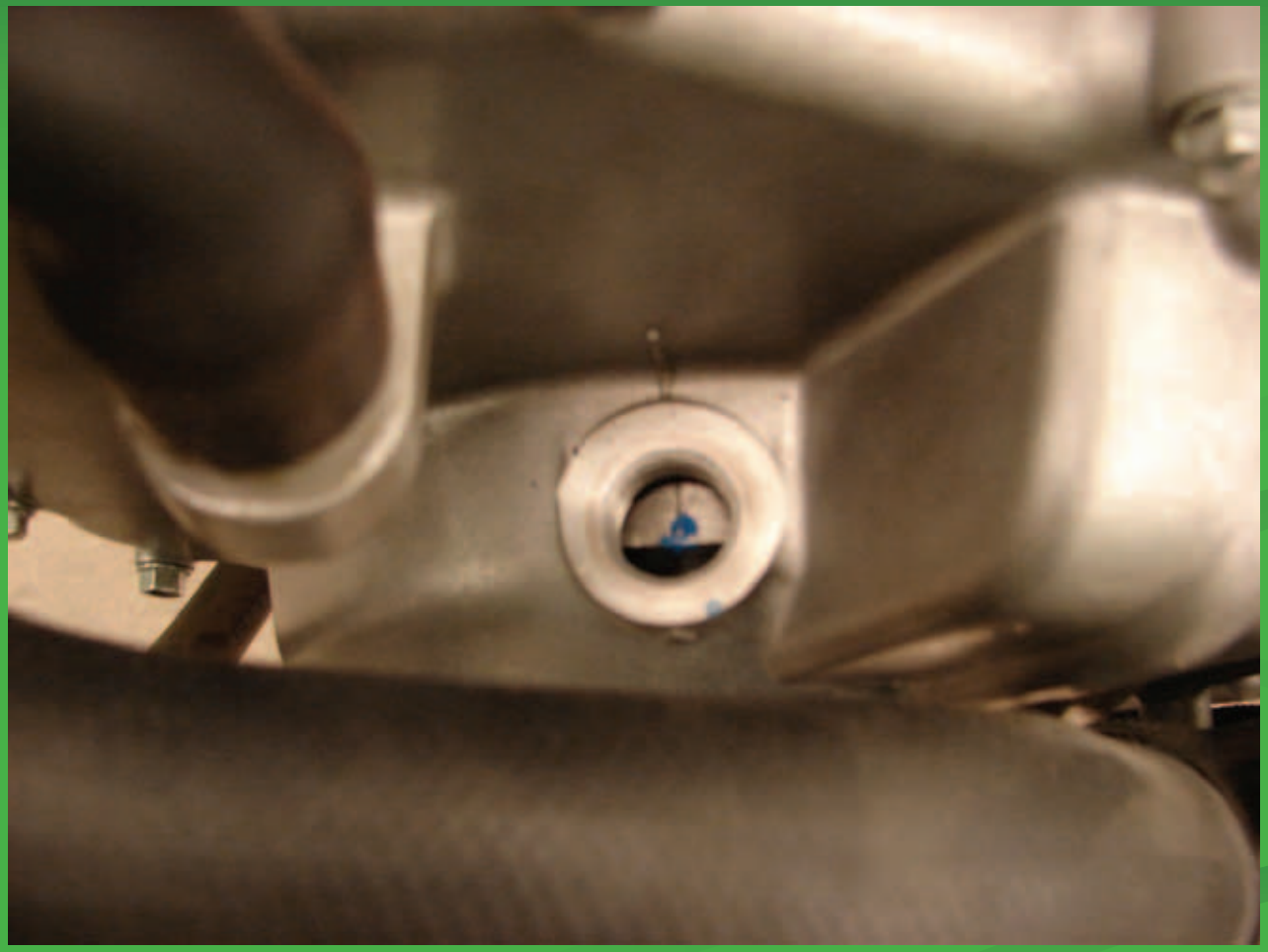
Remove the mag access cover.



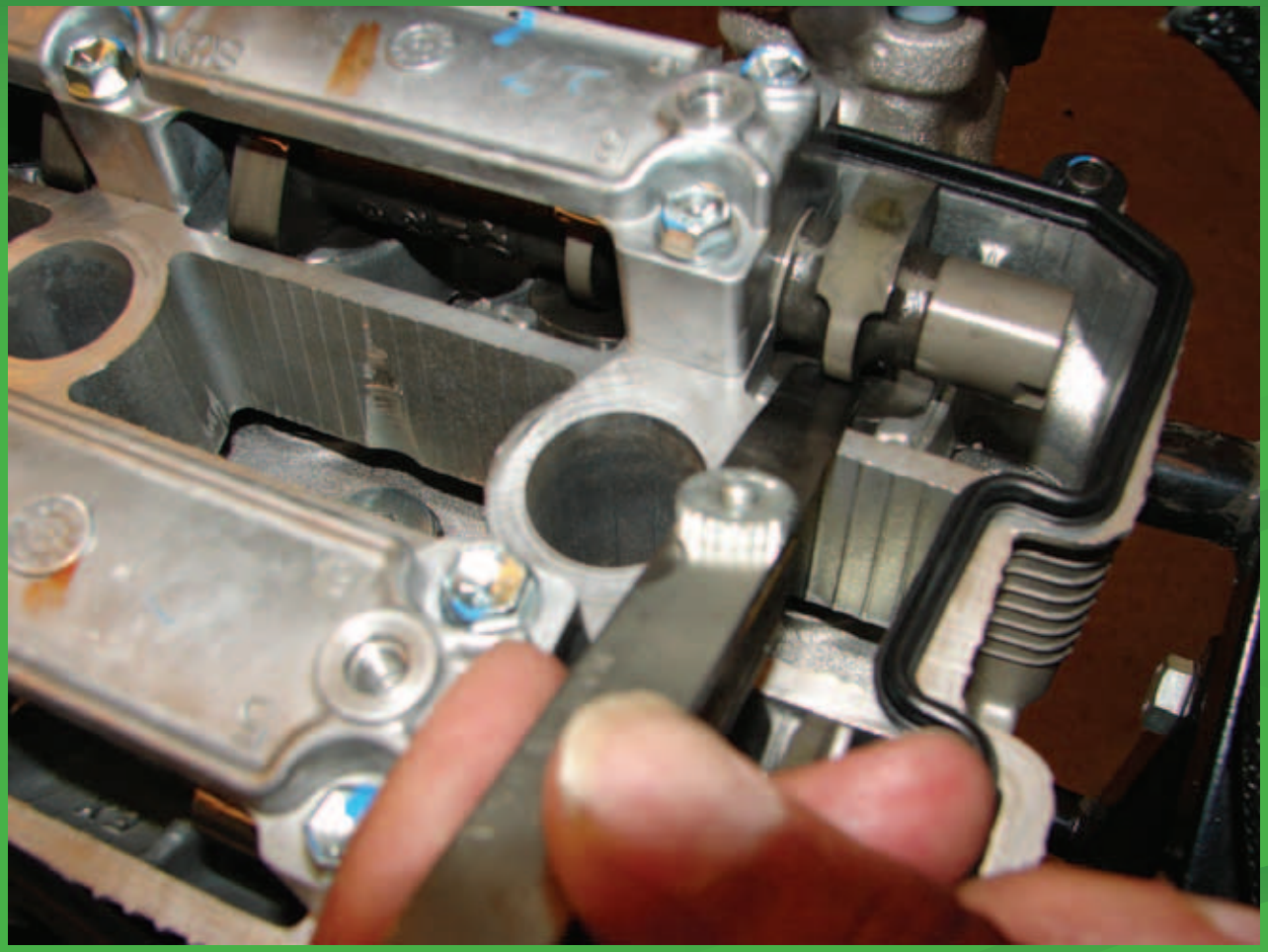
Rotate the engine to top dead center compression stroke on the mag side.



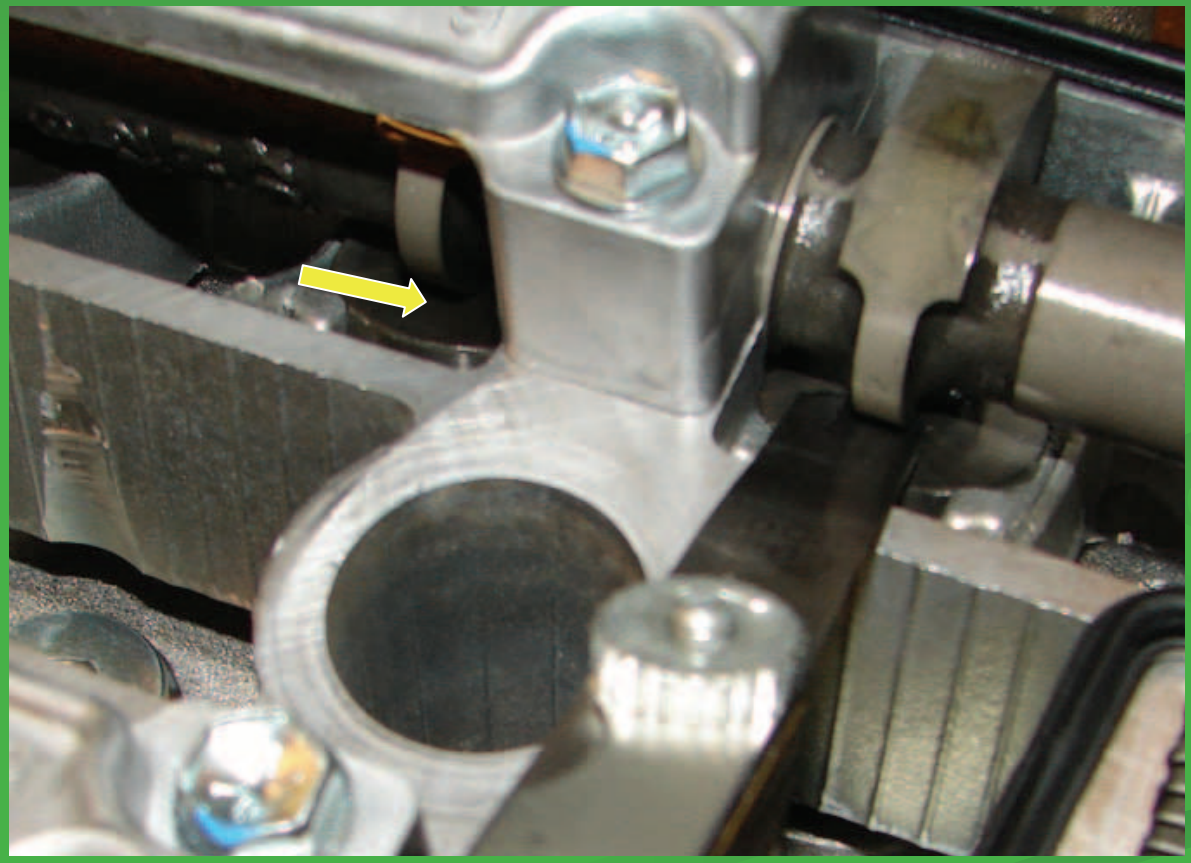
Timing mark on the flywheel must align with indicator mark on the mag cover.



With the cam lobes up away from the valve bucket, check valve lash using a feeler gauge.



Ensure the decompressor is not contacting the valve bucket. If it is contacting, rotate the crankshaft clockwise slightly.

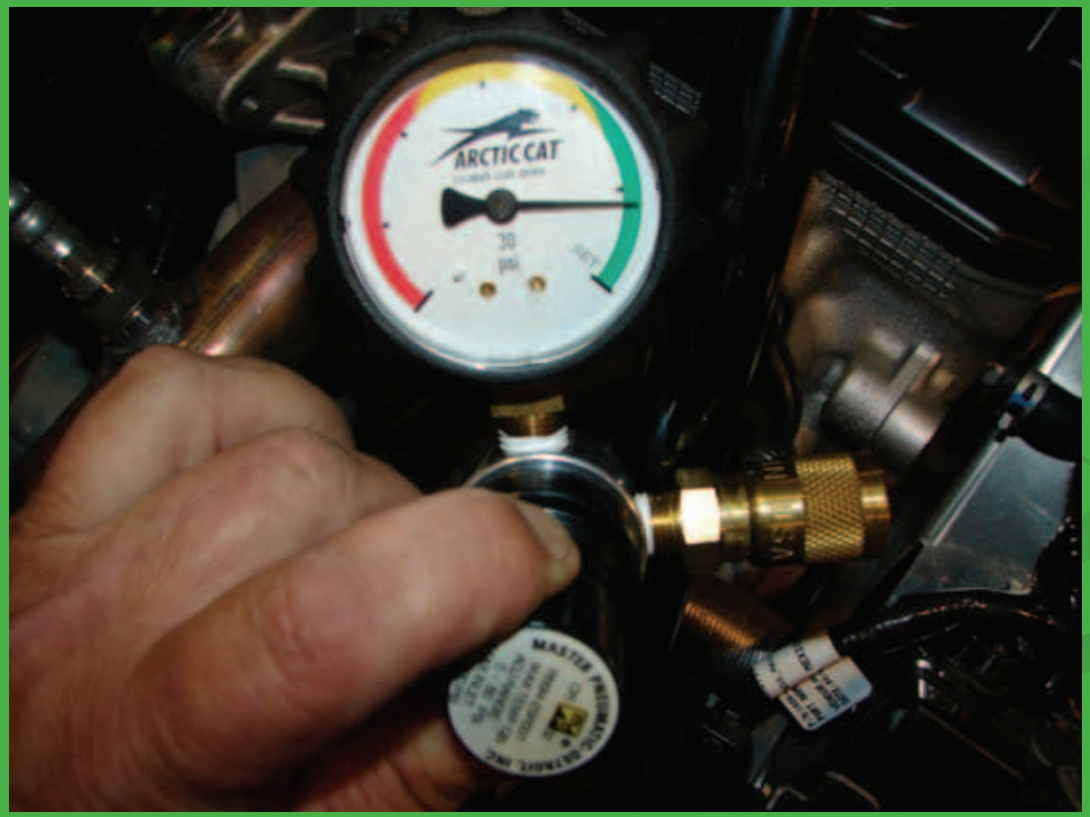


Head Gasket Leak Down Test

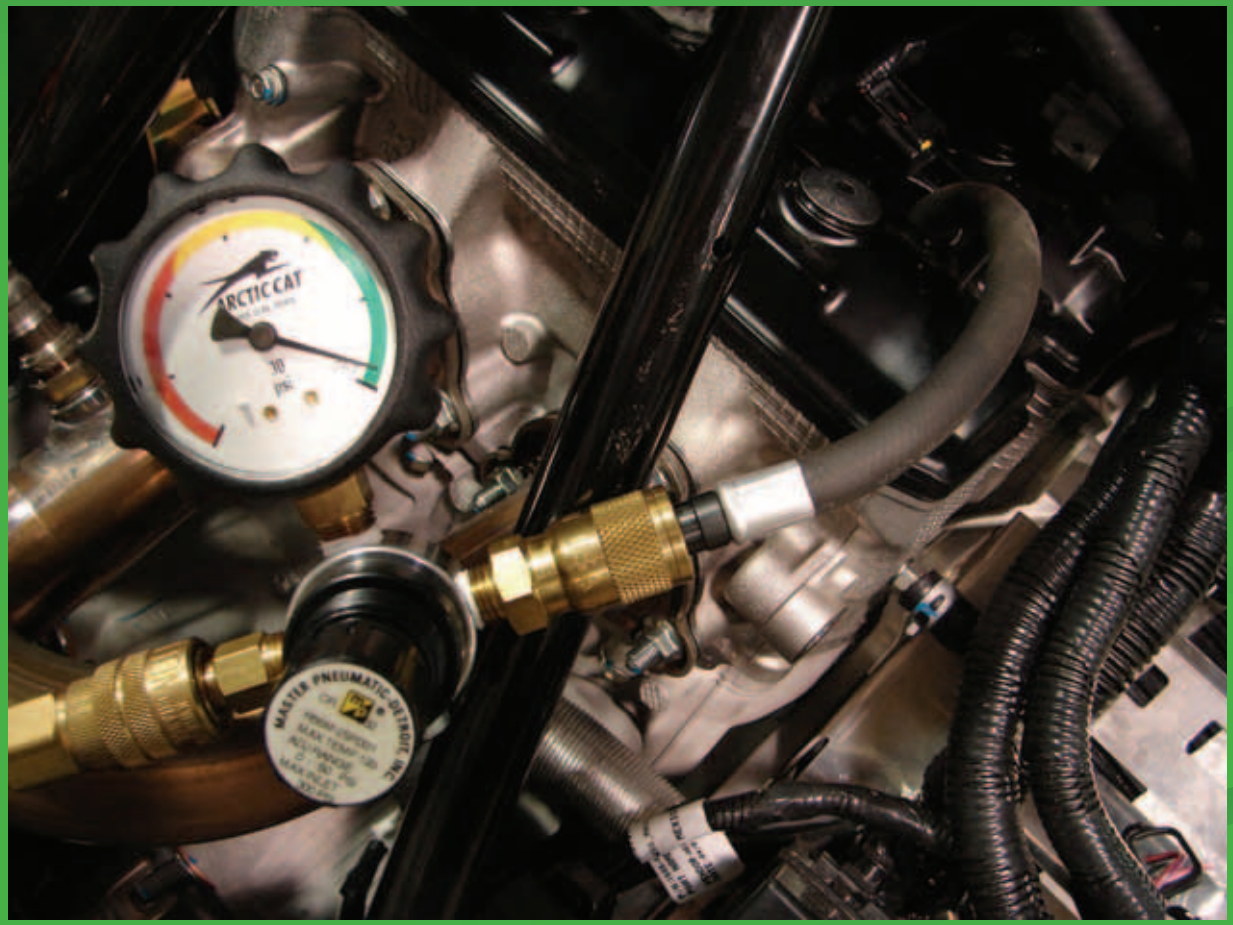
- Leak down tool (p/n 0644-522) needed for this test.

Remove a spark plug and

rotate engine to TDC using a breaker bar on the drive clutch bolt. Install hose from tool (p/n 0644-522) into spark plug hole. Turn the regulator knob until the Leak Down Gage reaches “SET”. Push in on the regulator knob to lock it.

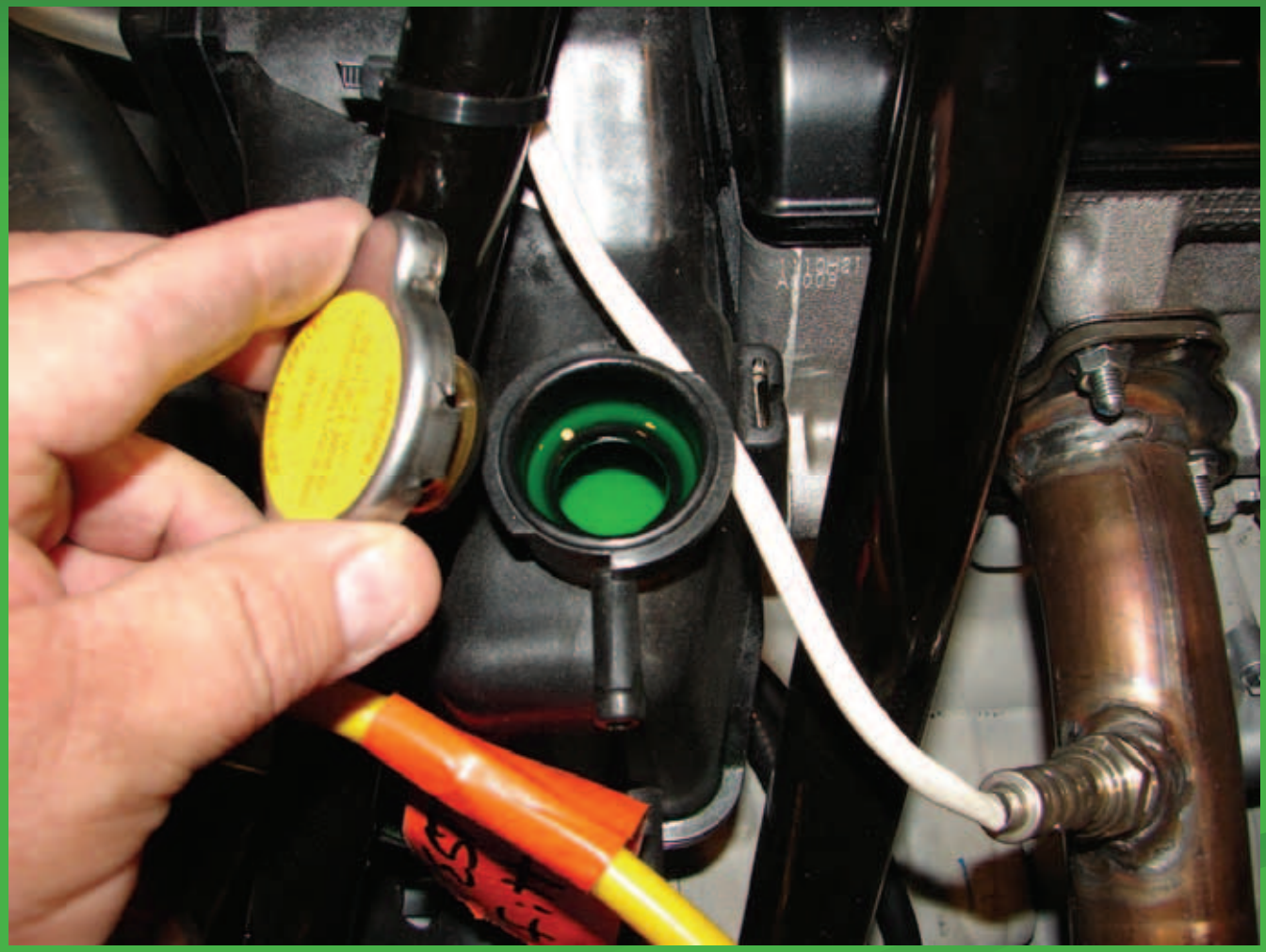


While holding the engine from rotating, attach the regulator to the hose. The needle should stay in the green.



If bubbles are present when checking at the coolant reservoir, the head gasket has failed.

Repeat on the opposite cylinder.



Causes of Head Gasket Failure

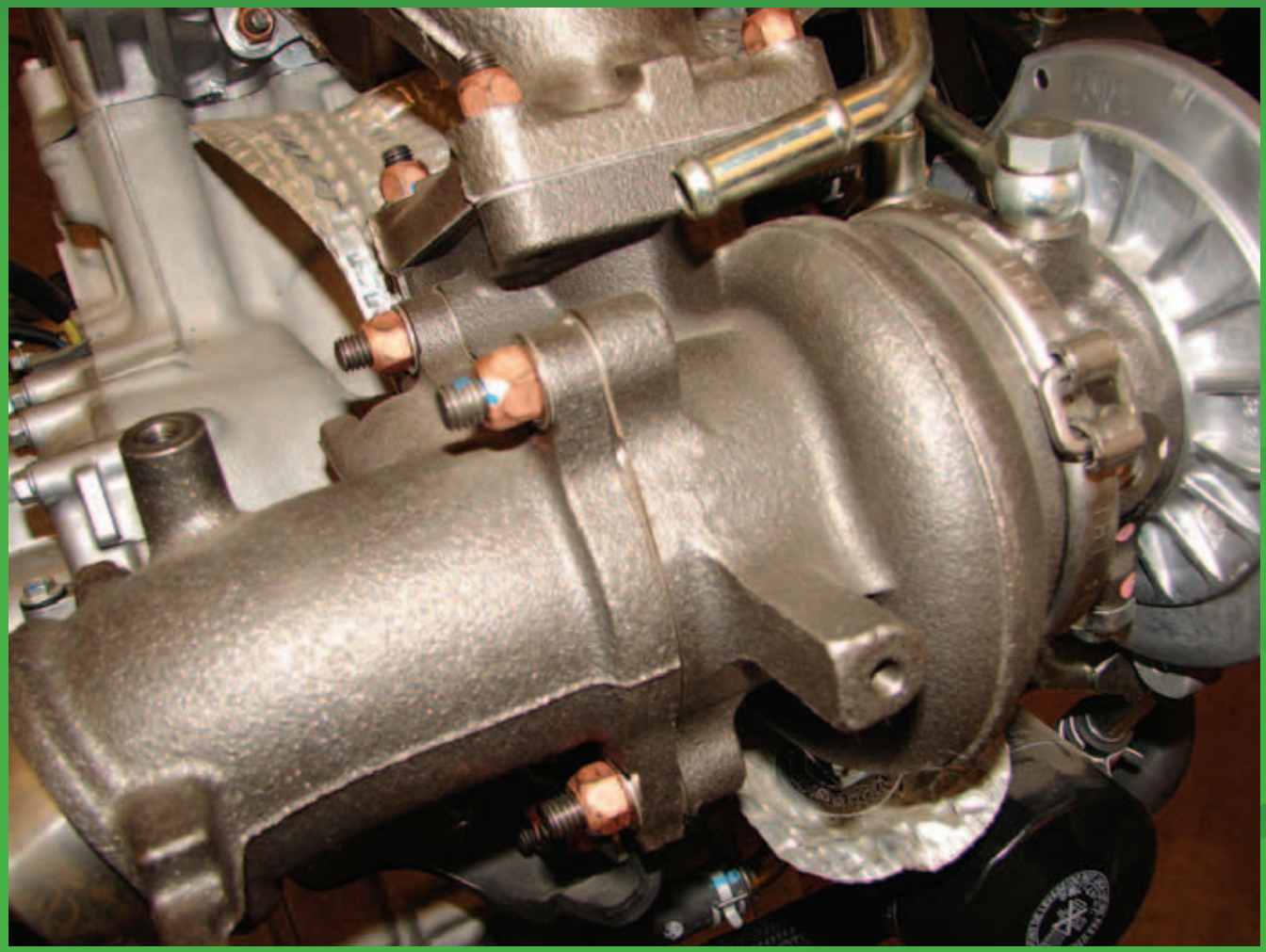
OVERHEATING **the engine is the #1 cause of head gasket failure!**

- **Improper cooling system bleeding.**
- **Low snow operation.**
- **Hard snow operation (Ice Scratchers will help operation on hard snow or ice).**
- **Cold temperatures causing ice to build up around rear cooler resulting in a hot air pocket around the rear cooler.**
- **Slow driving, not allowing snow to be thrown on the rear cooler.**
- **Excessive idle time.**
- **Low coolant level.**

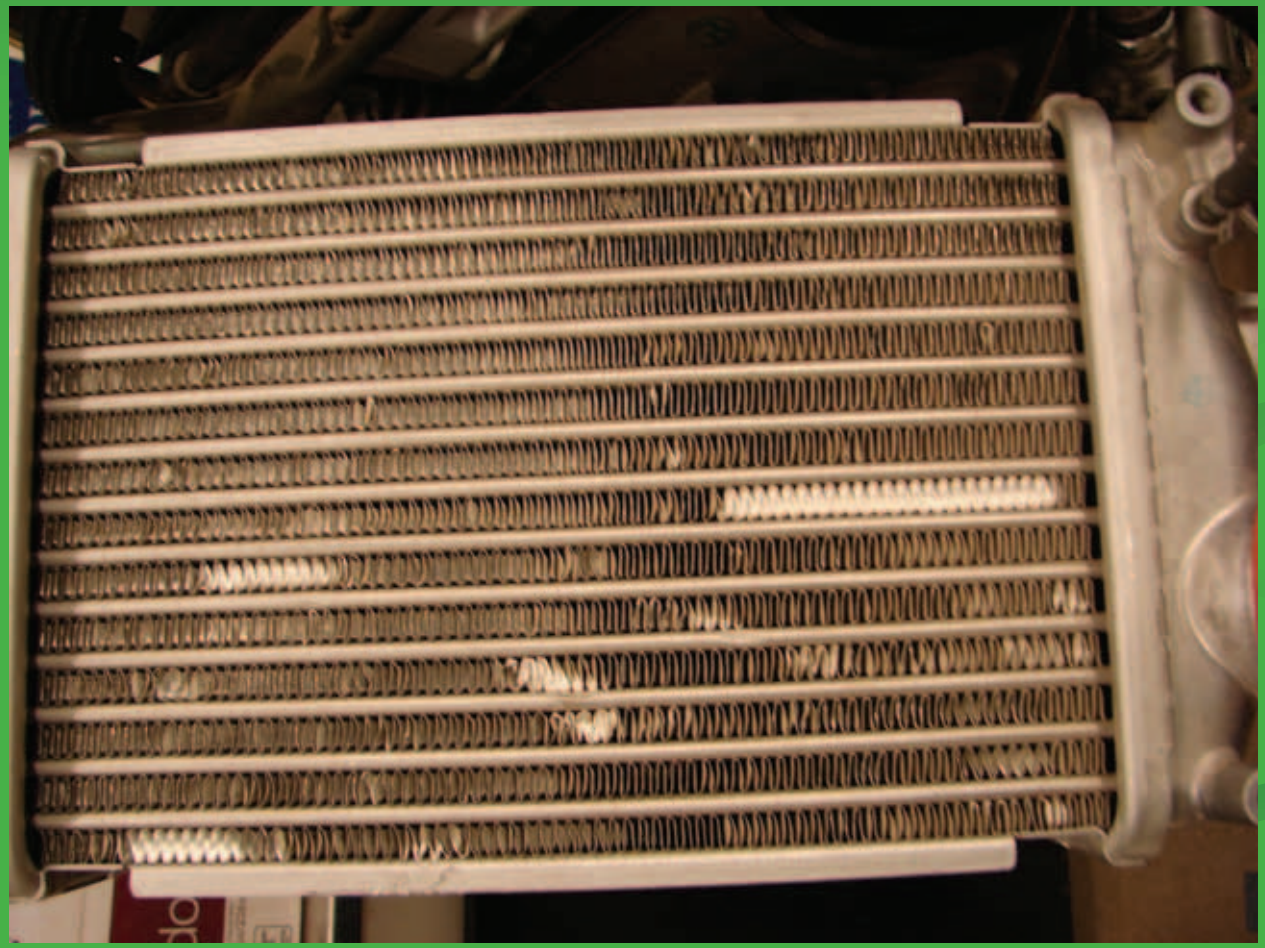
Turbo Charger System

1100 4 Stroke

The turbocharger uses exhaust gases to spin a turbine attached to the compressor to force more air into the combustion chamber.



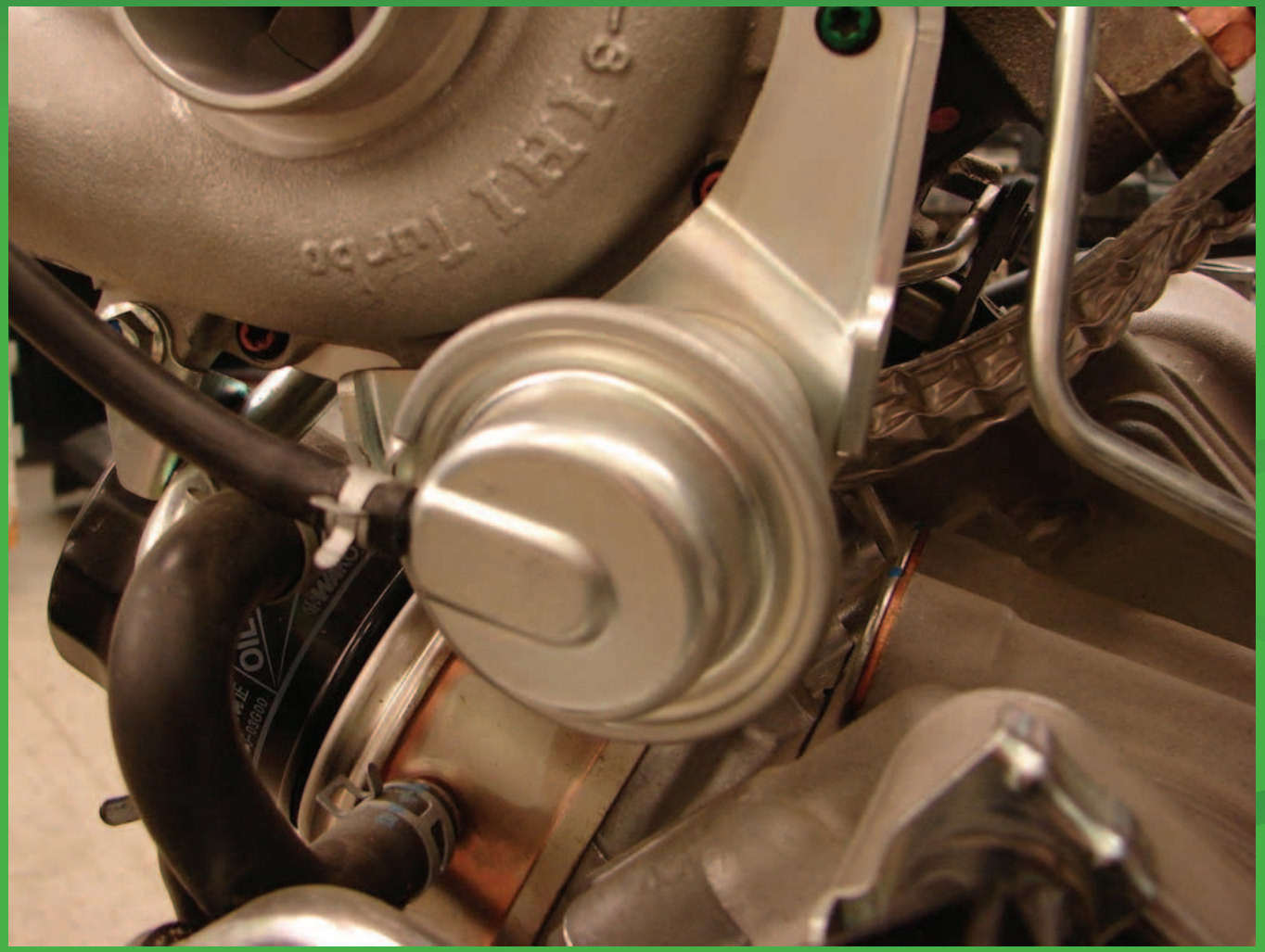
The rapid compaction of the air by the turbo increases the air temperature, an intercooler is used after the compressor to cool the intake air.



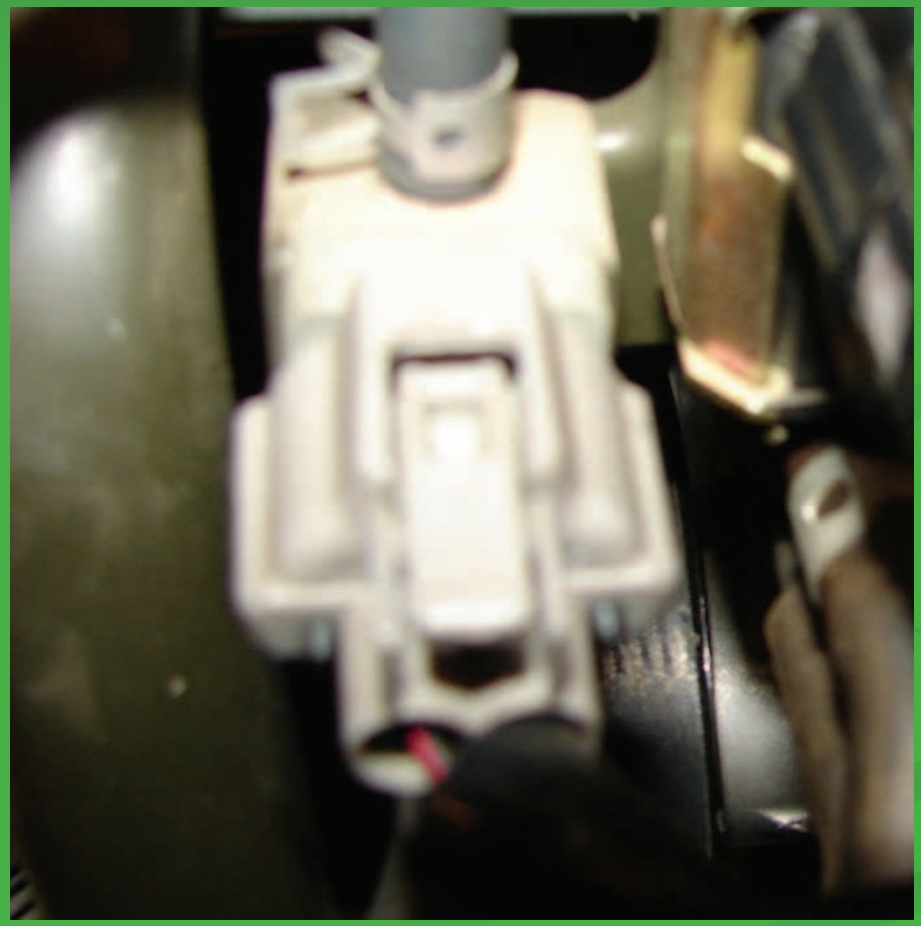
The air pressure sensor on the intake manifold sends a message to the ECU with manifold pressure.

The ECU then activates the waste-gate control valve once the boost pressure has been met controlling the vacuum to the waste-gate diaphragm.

The waste-gate diaphragm pulls the waste-gate open to maintain boost pressure.



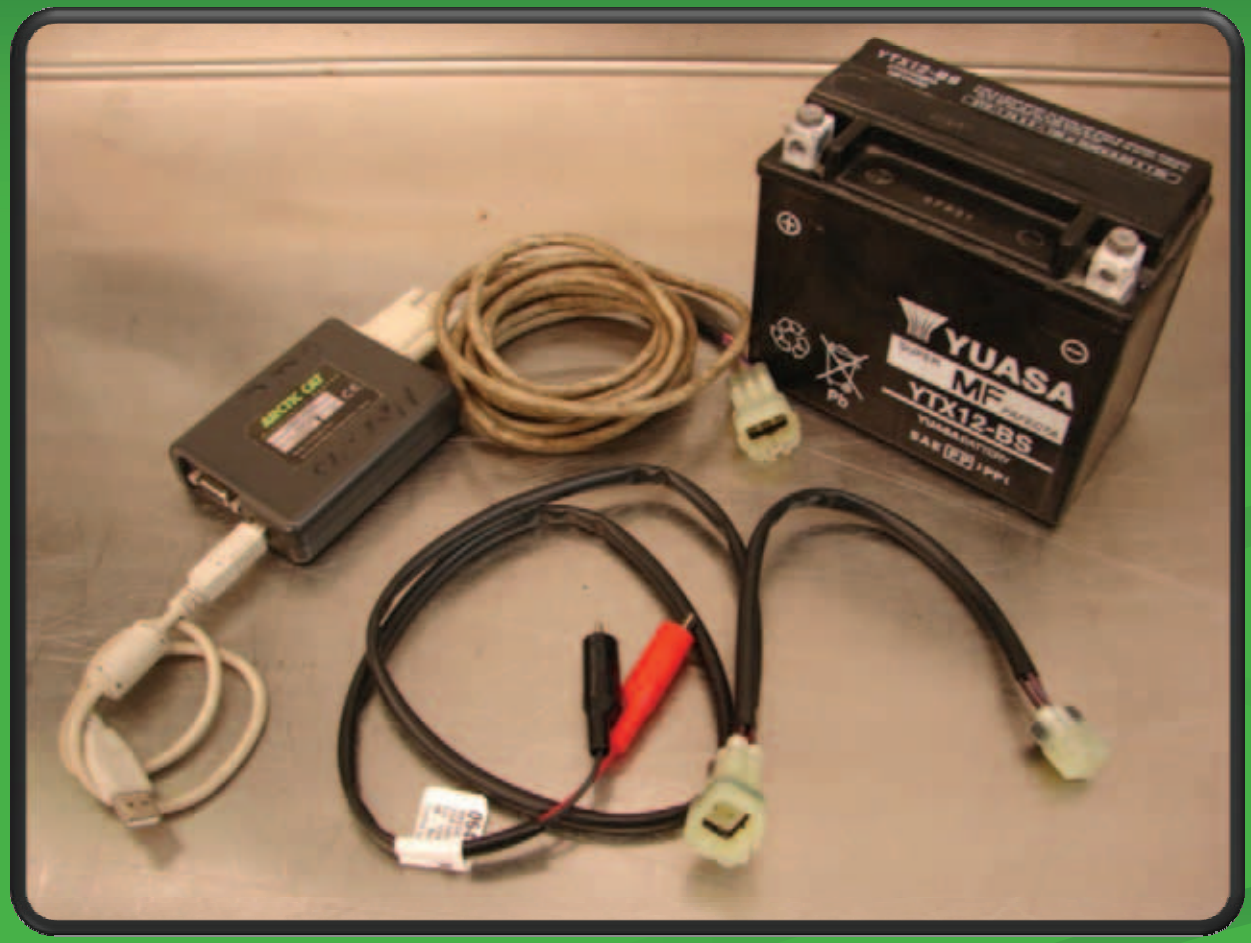
The ABV (Air Bypass Valve) controller receives a message from the ECU when throttle valve angle decreases.



The vacuum from the ABV controller opens the ABV to redirect compressed intake air back to the compressor to neutralize intake manifold pressure during deceleration.

ADS Tool

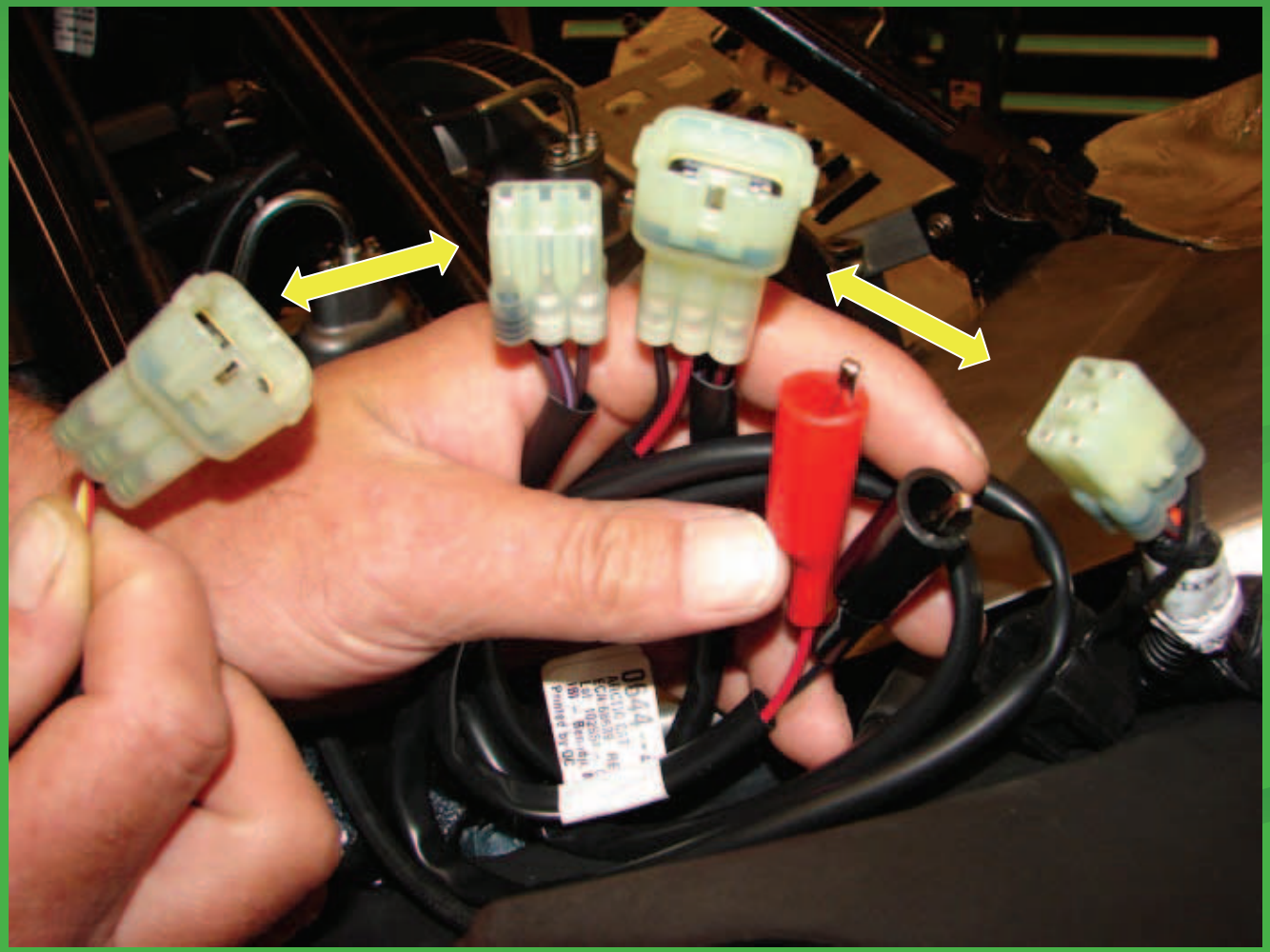
(Arctic Diagnostic System)



(p/n 0744-060)

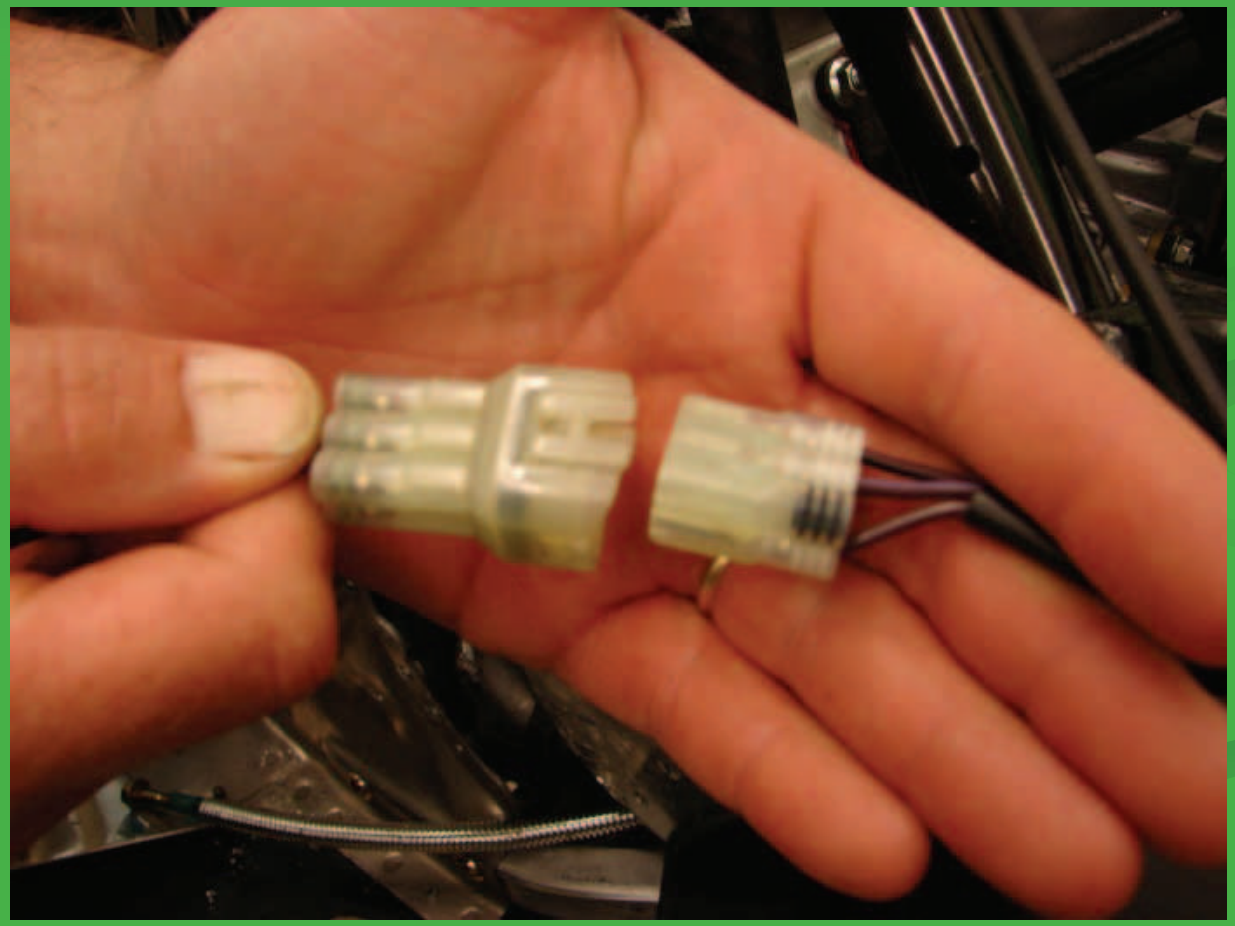
Battery not included.

Connecting the 2-stroke adapter harness from the ADS to the snowmobile.

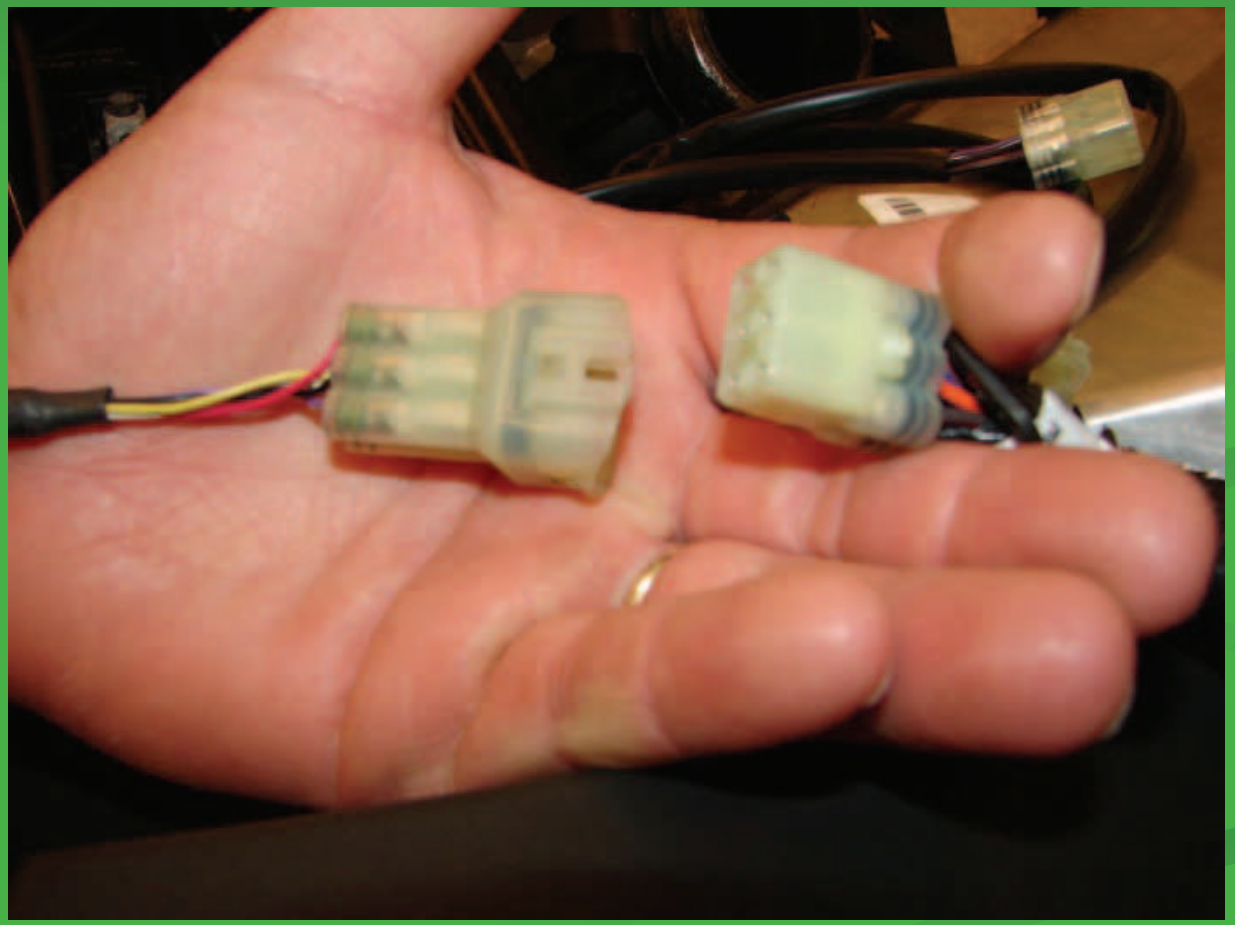


On 2007-Current 800/1000 2 stroke Engines.

Connect communication cable with the adapter harness with red and black alligator clips.

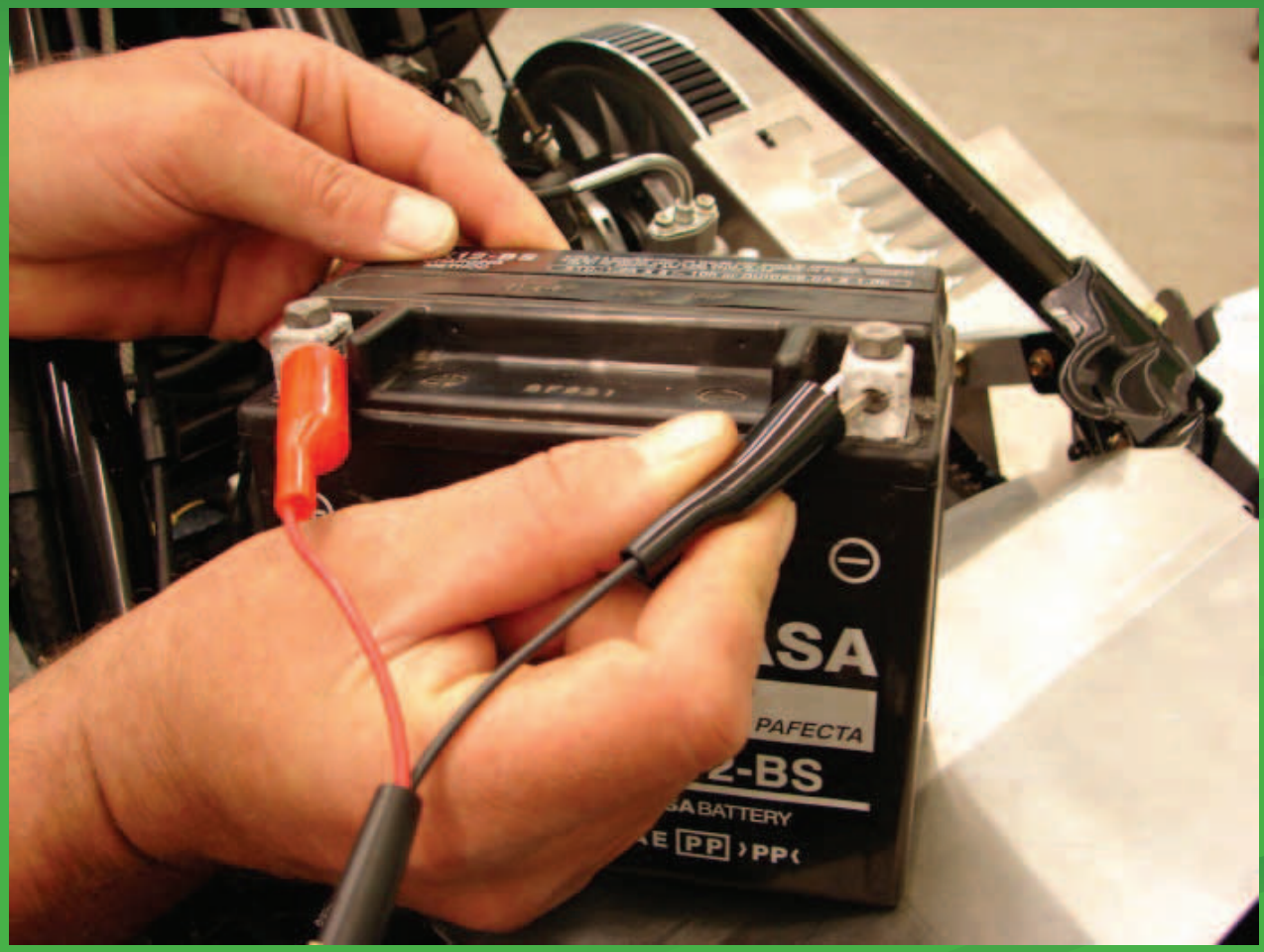


Connect the adapter harness to the diagnostic connector on the snowmobile.



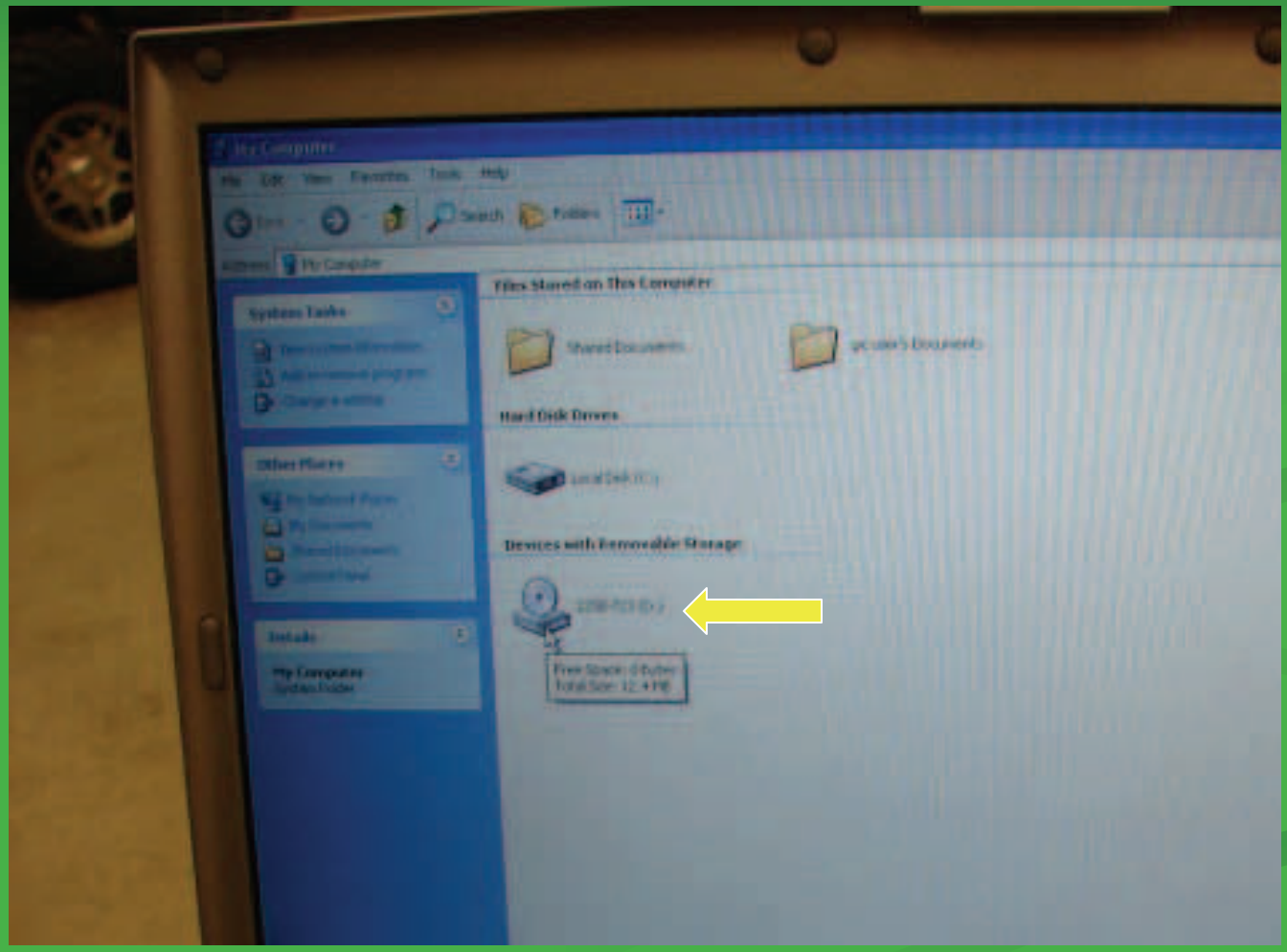
With the computer on, connect the interface box to the USB port on the computer with the USB cable.

Connect the adapter cable to a fully charged 12v battery supply (12.5 + Volts).

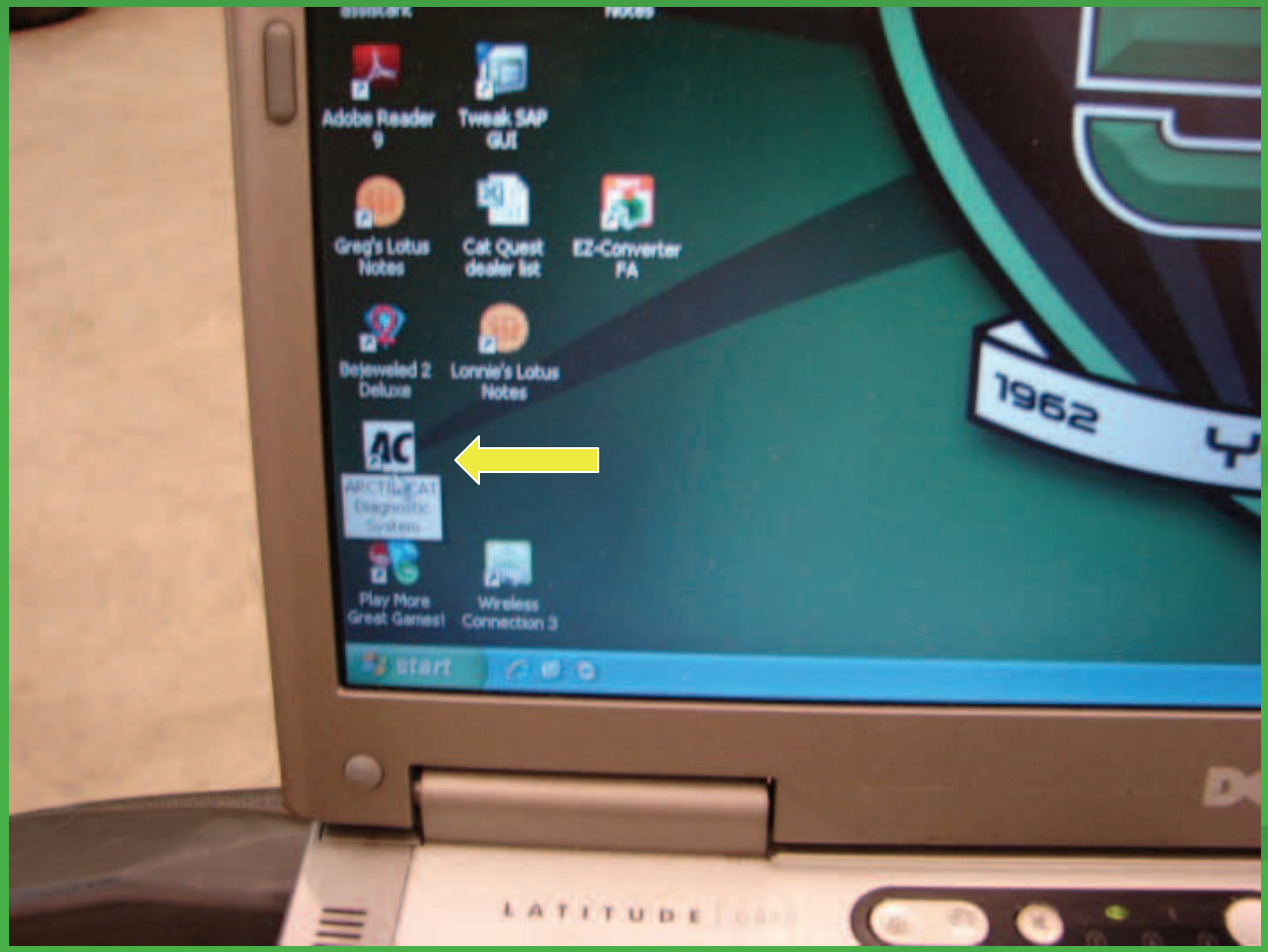


Insert software CD into the CD drive.

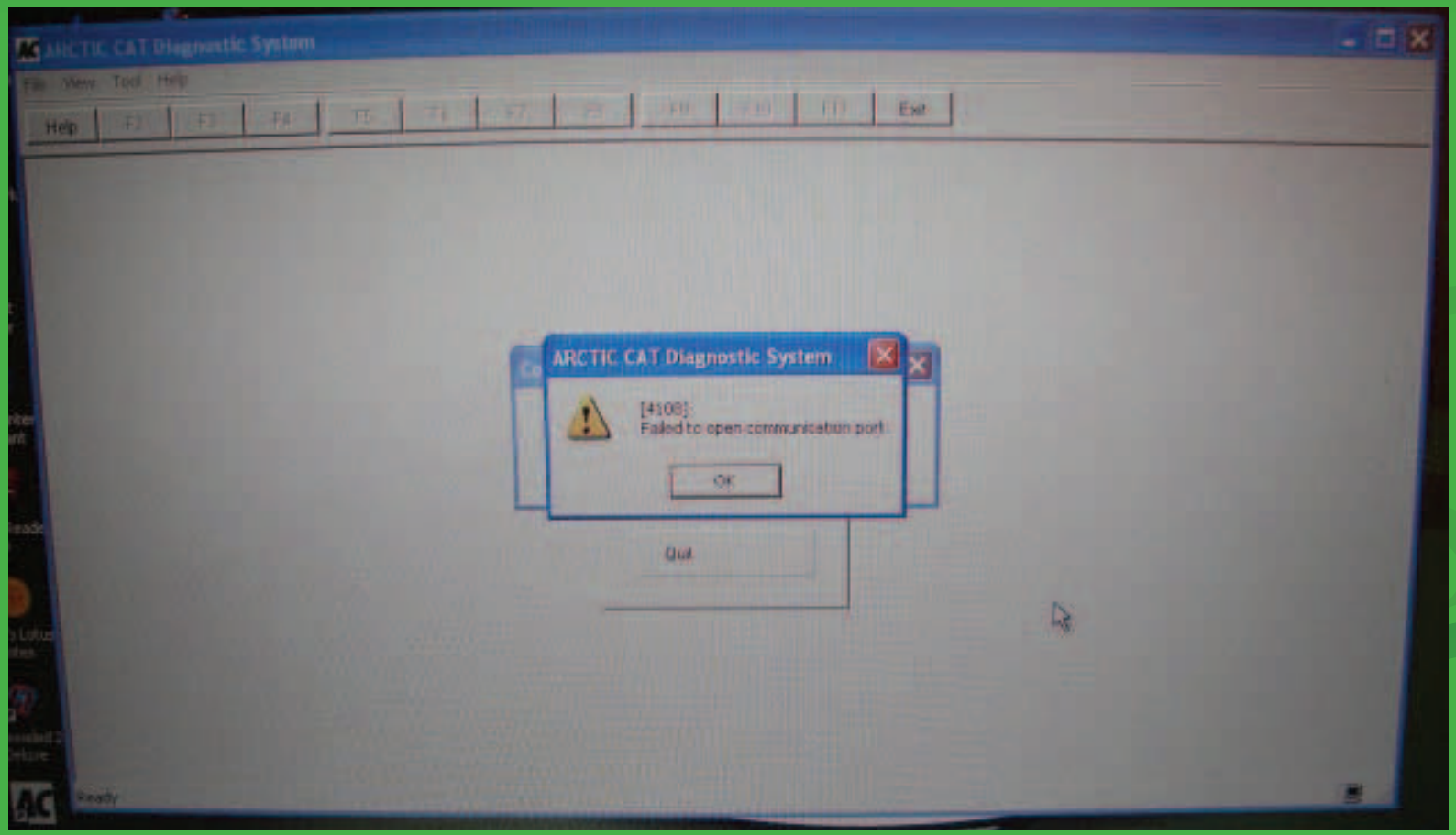
Go to “My Computer” on your laptop and install the software. Choose the option to save to the desktop.



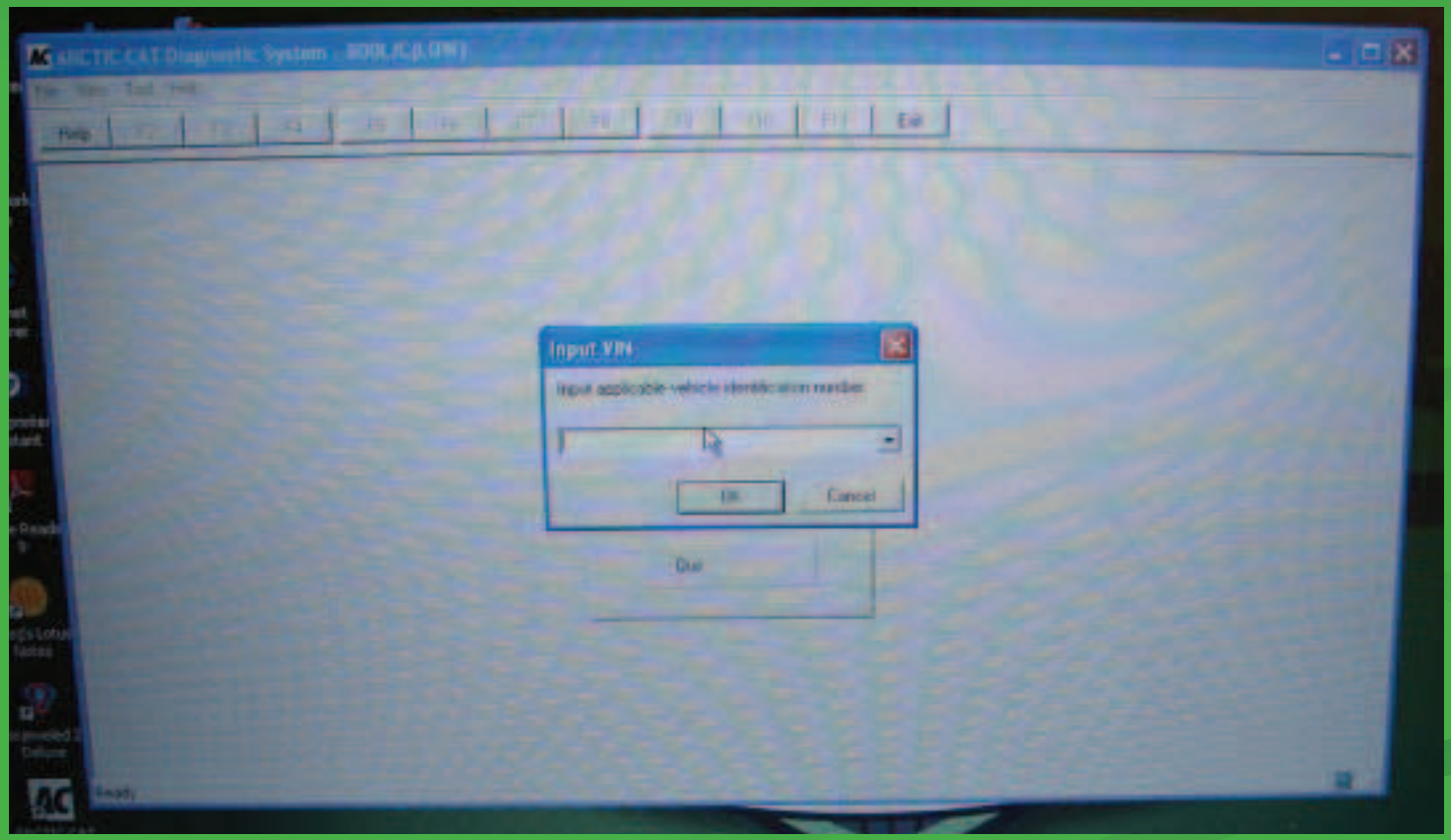
Once the software is installed, use the icon on the desktop to launch the ADS program.



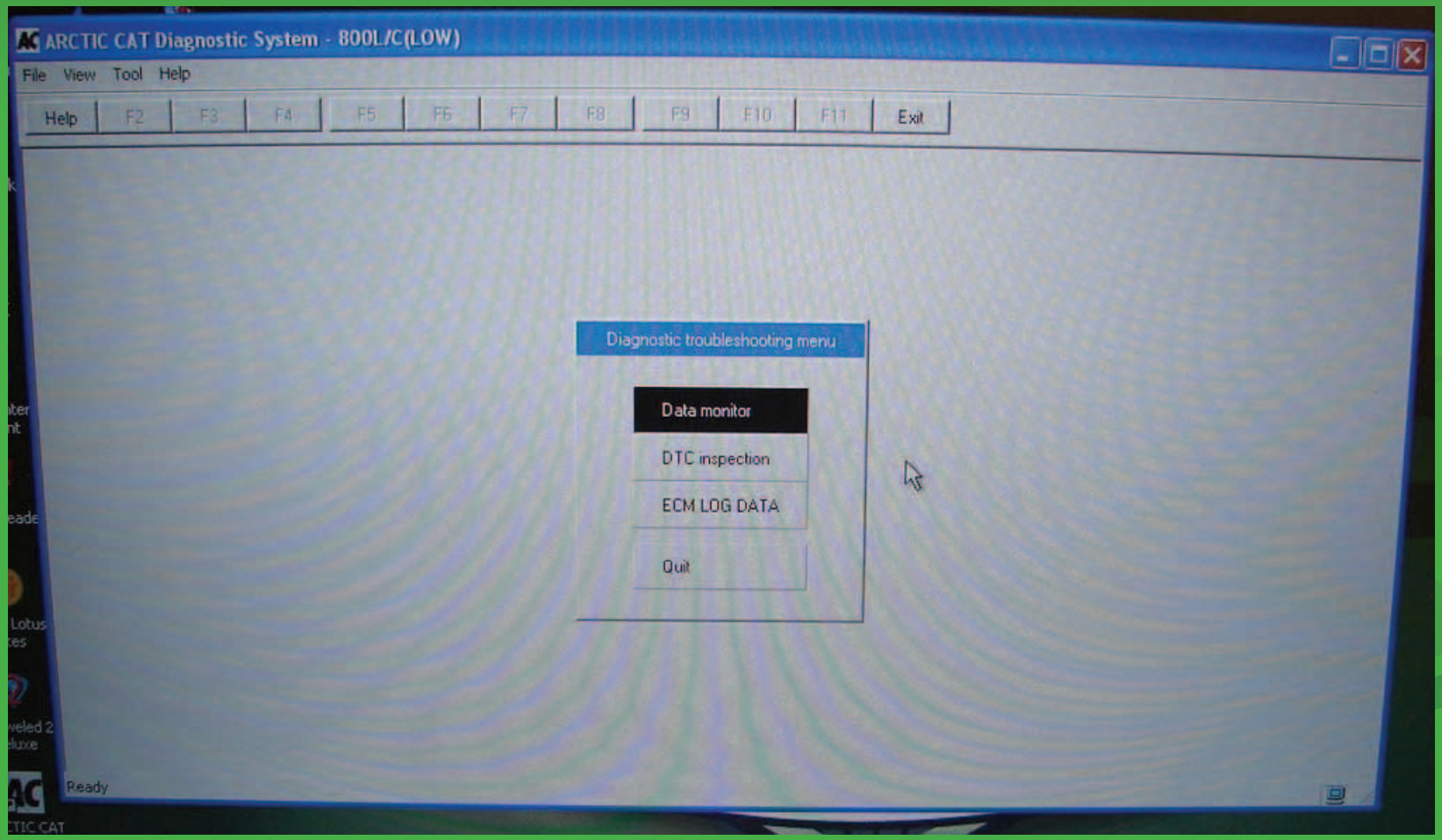
A “failed to open communication port” message may be from not having installed the software with everything connected. (on 2-stroke battery connected and 4-stroke stop switch and ignition key in run position)



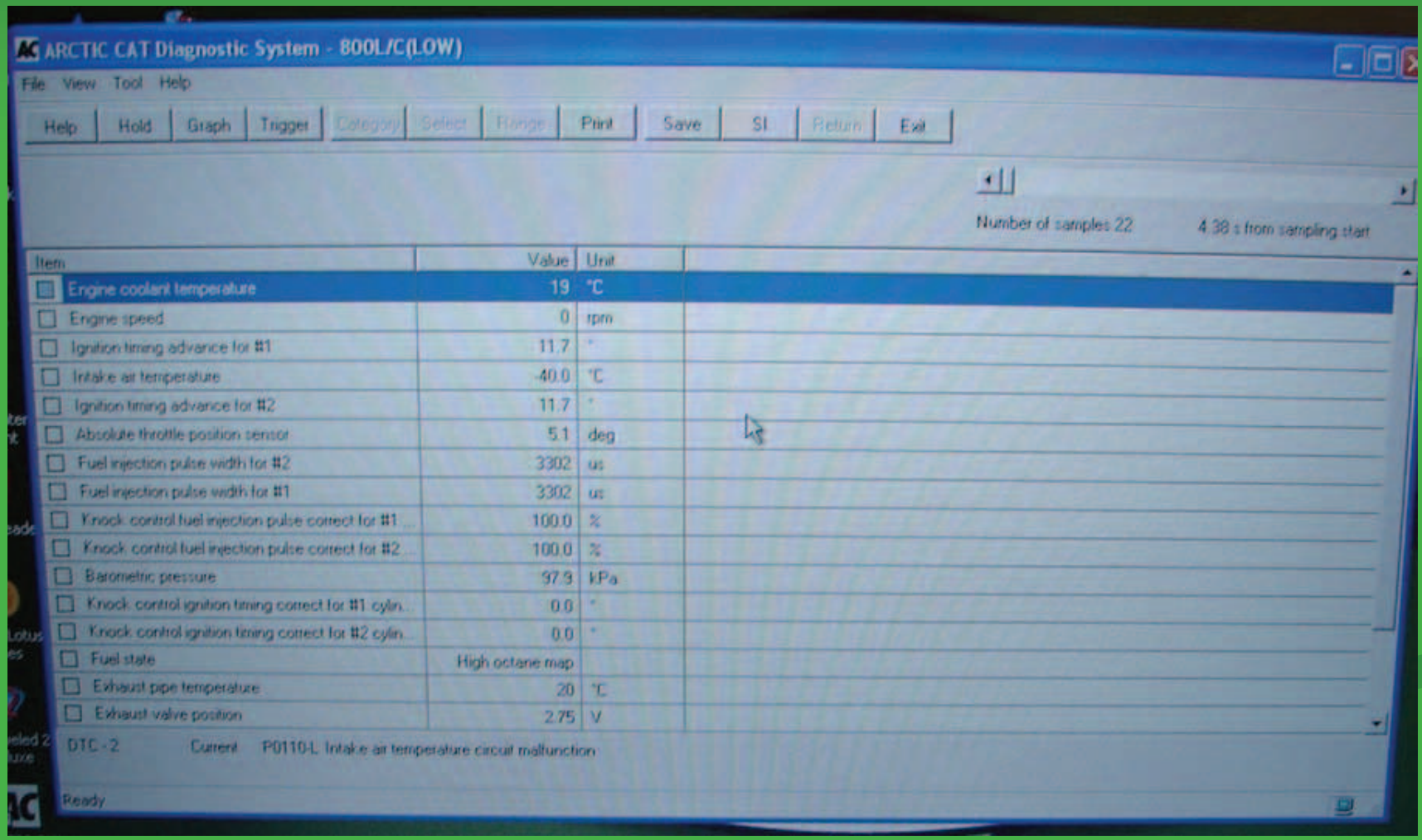
Input the vin number.



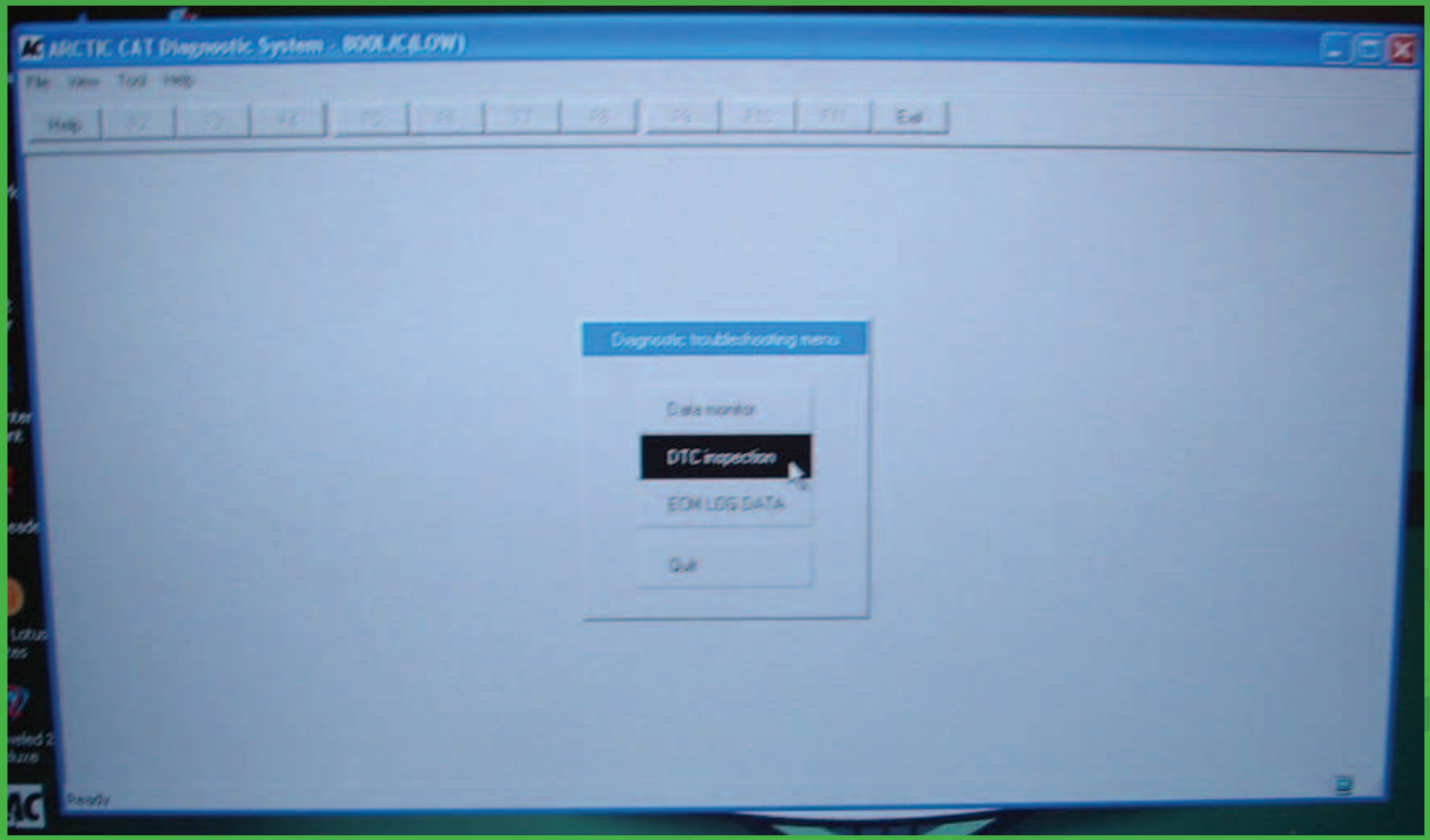
Data monitor



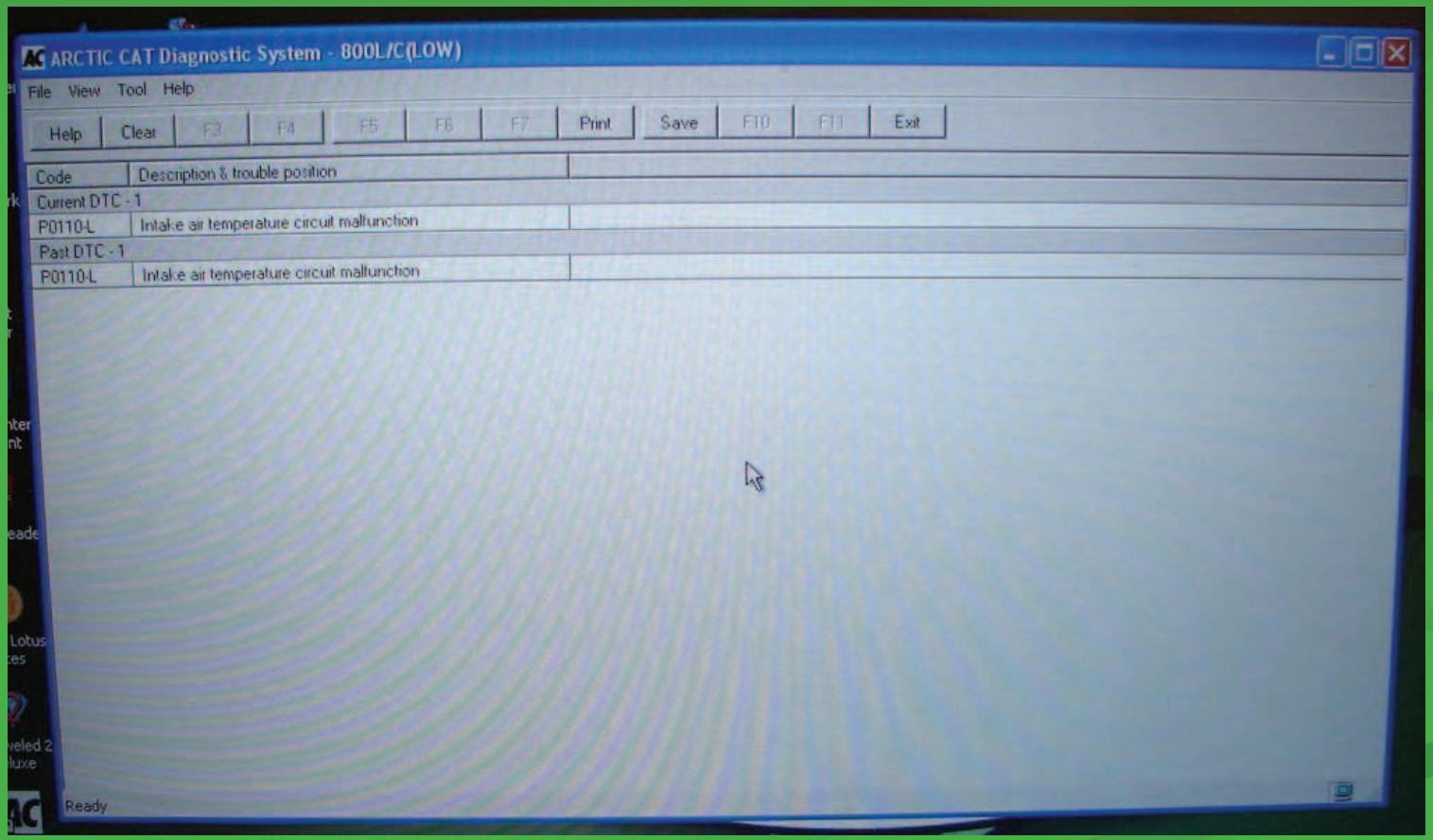
Data monitor is real time engine sensor data.



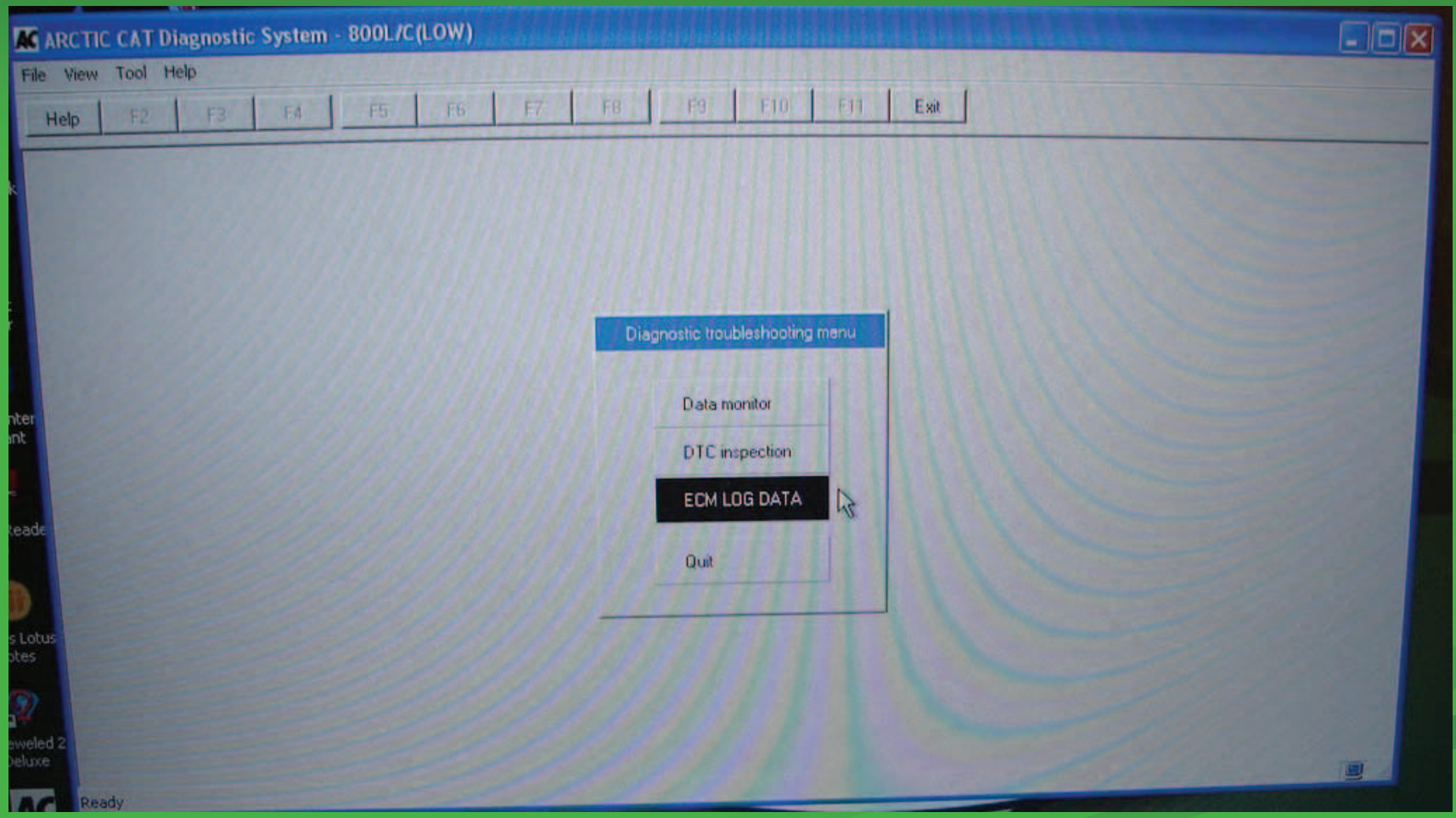
DTC inspection.
(Diagnostic Trouble Code)



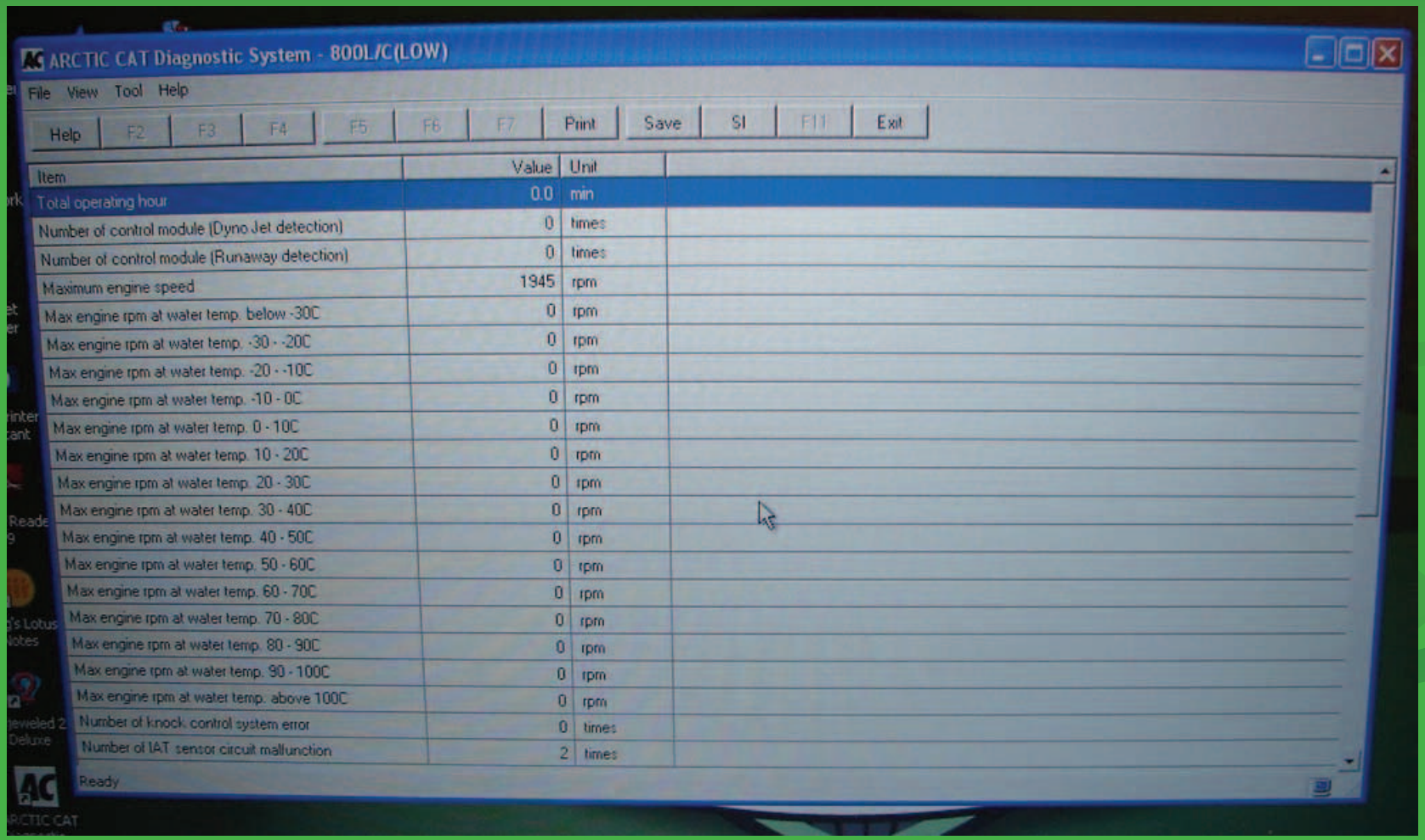
DTC inspection shows any past or current codes.



ECM LOG DATA


ARCTIC CAT Diagnostic System - 800L/C(LOW)
File View Tool Help
Help F2 F3 F4 F5 F6 F7 F8 F9 F10 F11 Exit
Diagnostic troubleshooting menu
Data monitor
DTC inspection
ECM LOG DATA
Quit
Ready

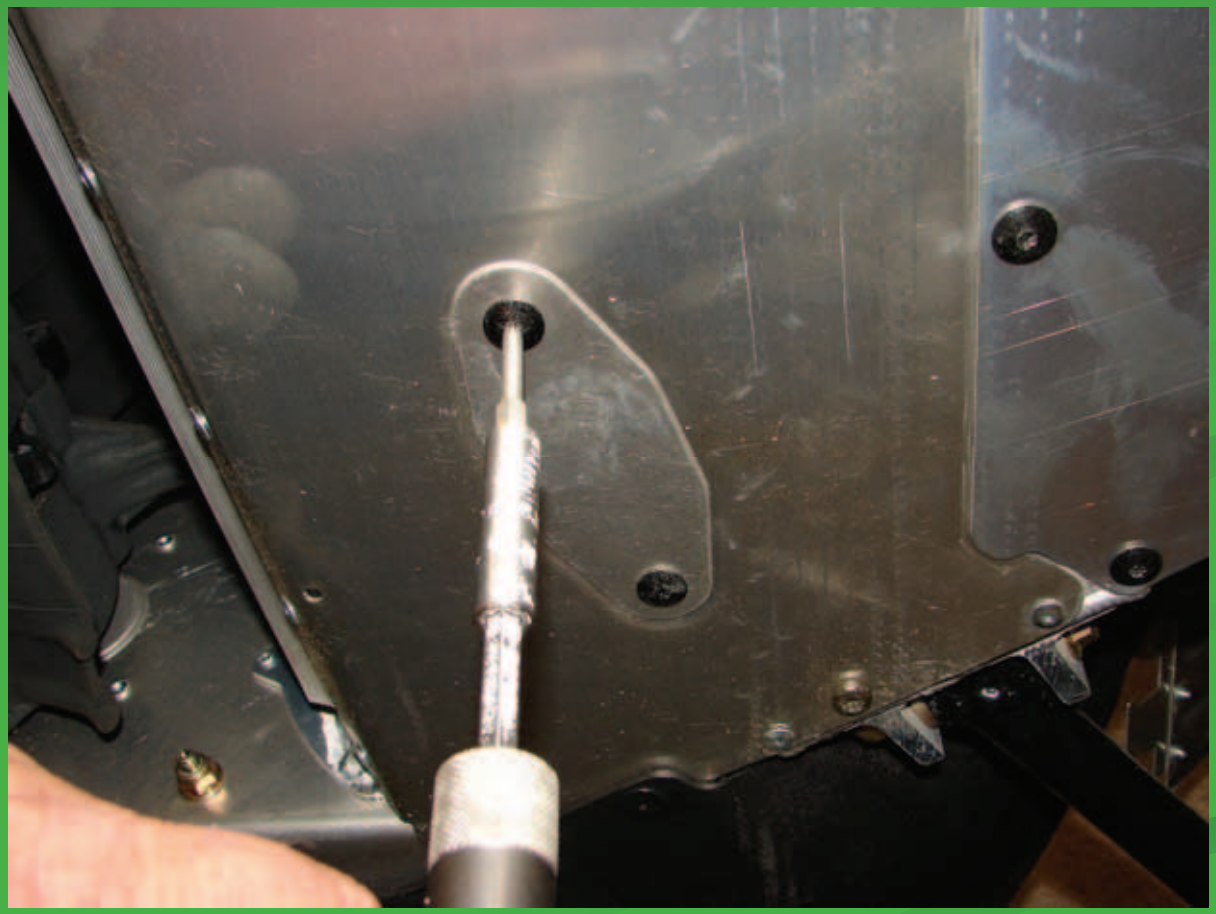
ECM Log Data screen shows engine running history and permanently records the number of DTC malfunctions.



Changing Oil on the 2012 4-Stroke

- 1100 ProCross/ProClimb N/A
- 1100 ProCross/ProClimb Turbo

Remove two screws from drain cover located on the underside of the front chassis.



Remove the drain plug from engine sump and allow engine oil to drain.

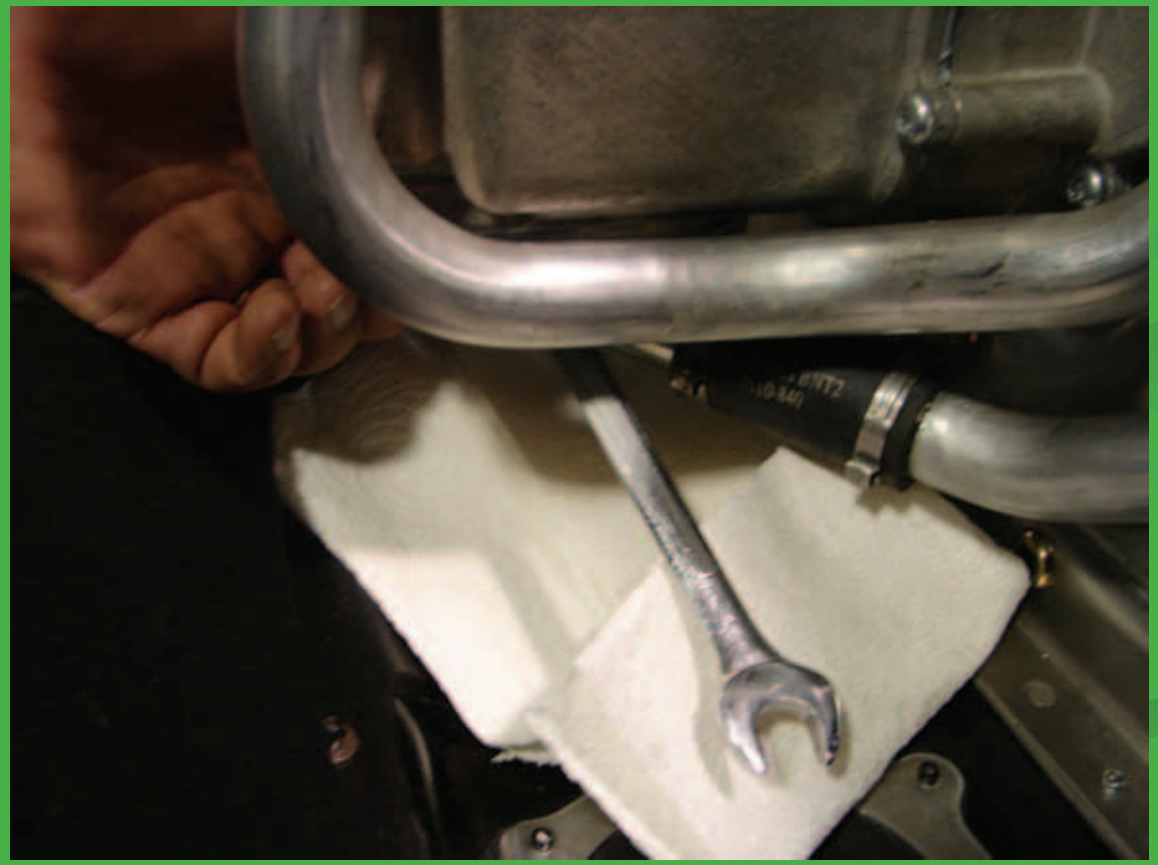
Loosen oil bleed screw the from crank case.

This will allow all the engine oil to drain out properly.

Remove exhaust resonator and the screw holding the plastic belly pan at the foot well.

Hold the belly pan away from the oil tank

Using a 14mm wrench loosen the oil tank drain plug.



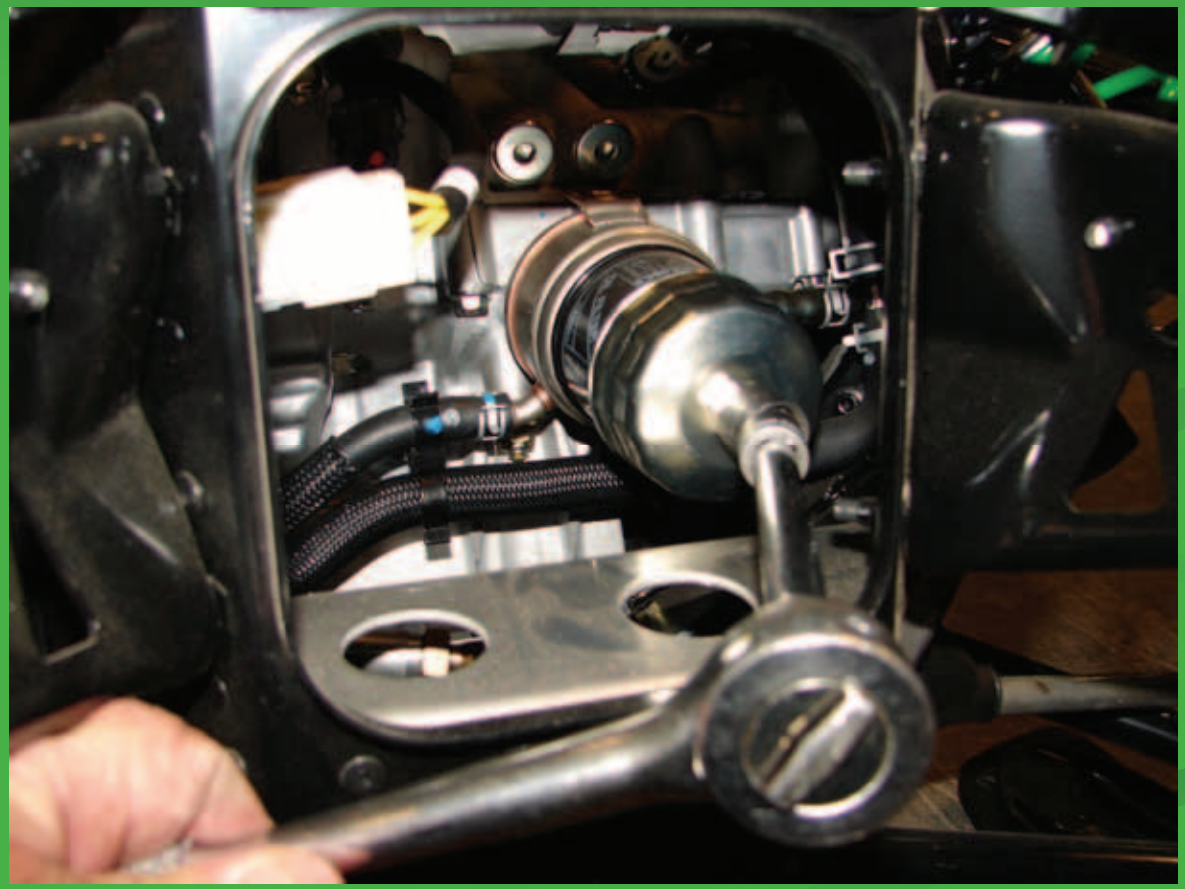
To avoid a mess and increase efficiency, cut a hole in an empty 1qt oil container to use as a funnel.

Place the funnel under the oil tank. Remove the drain plug completely, allowing oil to drain through the resonator hole into an oil pan.

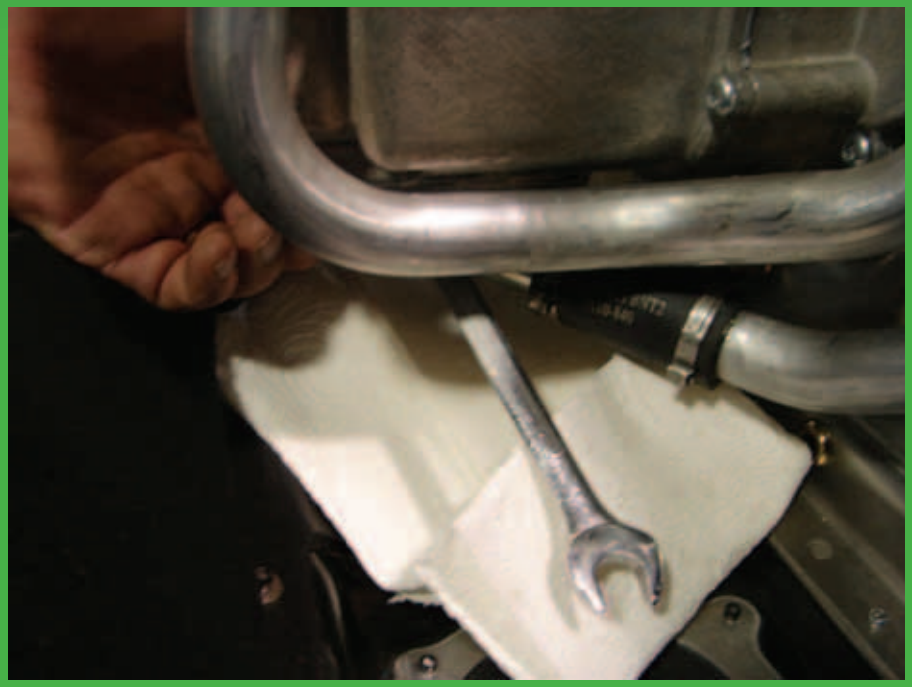
Remove the oil filter/seal.

Lube new oil filter seal and install by hand

Torque to 15 ft/lb.



Install oil reservoir/engine sump drain plugs. Torque both to 16 ft/lbs.

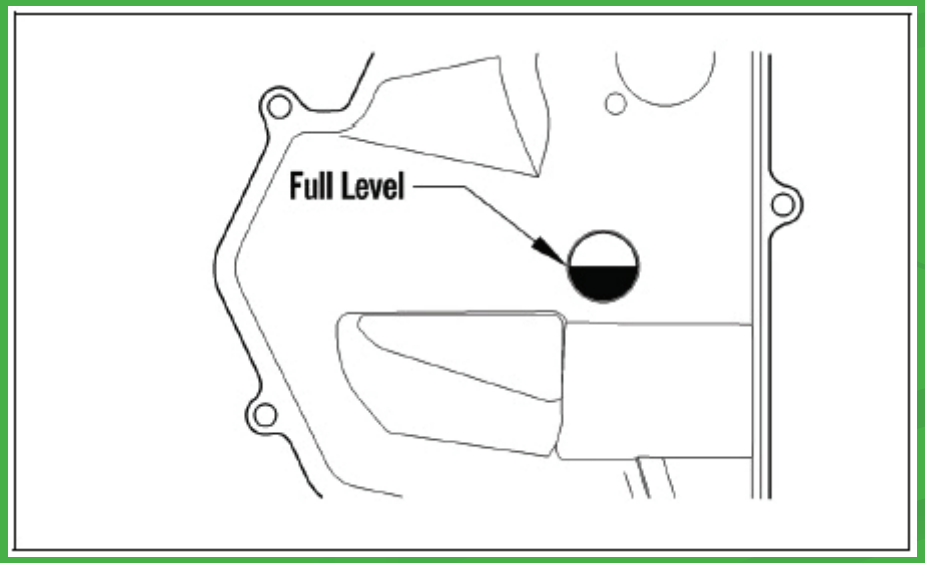


Tighten the oil pump bleed screw, then pour 3 quarts of oil into the oil reservoir.

Loosen the oil pump bleed screw to purge air from the oil pump hose.

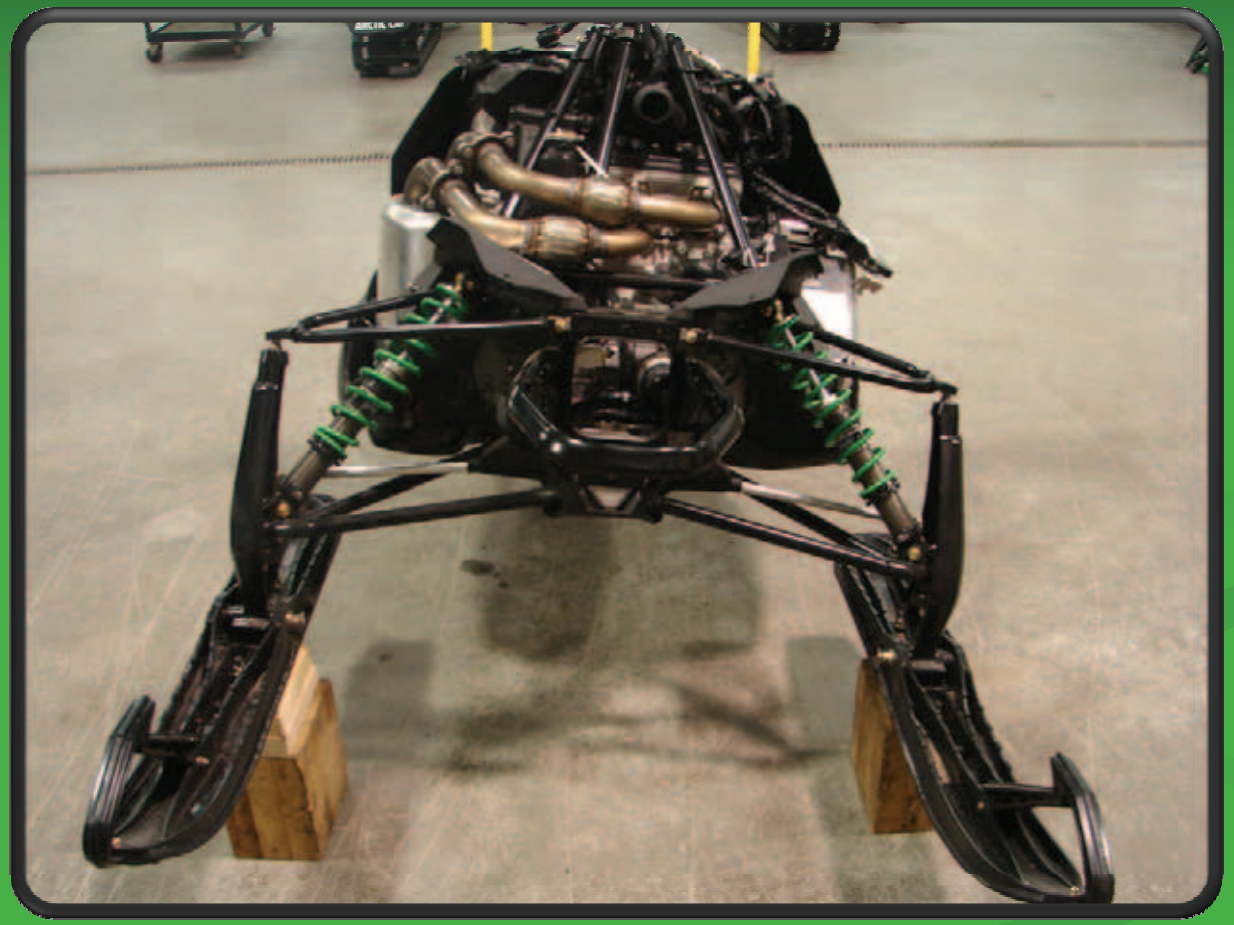
When air can no longer be heard torque the oil pump bleed screw to 96 in/lbs.

- With the key on make sure the oil pressure warning light illuminates.
- Now run the engine to make sure the oil pressure warning light goes away.
- Shut engine off.
- Fill the oil tank to the center of engine oil reservoir sight glass.



Oil capacity specification is available on Cat Tracker.

Coolant Bleeding

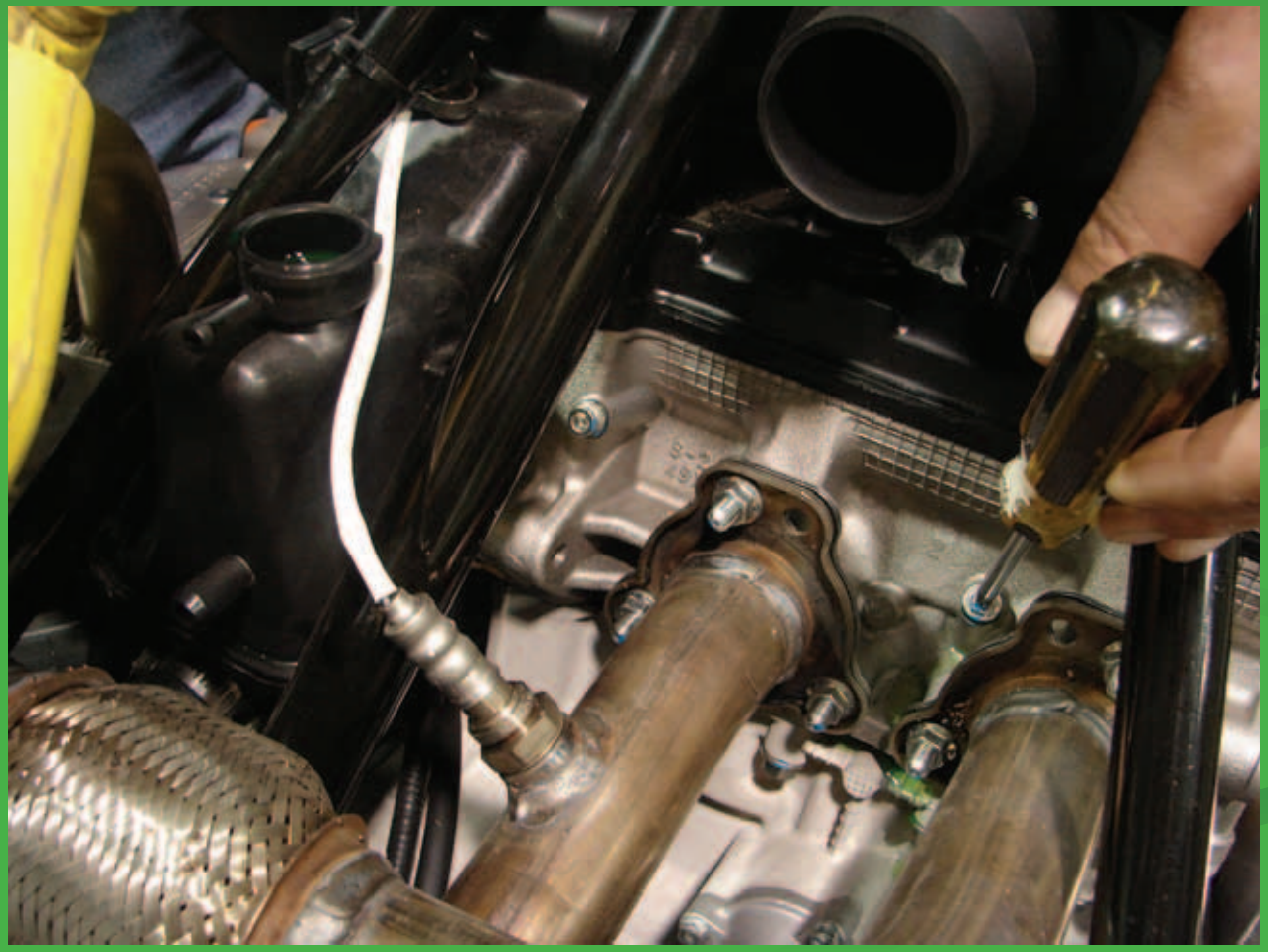


Lift the front of the snowmobile up approximately 12 -14 inches with the right side higher than the left.

Reason: The front heat exchanger outlet is on the bottom right. This is why we want the front elevated and higher on the right. This will help remove any air trapped in the rear heat exchanger.

Fill the coolant reservoir with 50/50 antifreeze.

Open the bleeder bolt between the exhaust manifolds until antifreeze is present with out air then close the coolant bleeder bolt.



With the coolant bleeder bolt tightened. Start the engine and let run until the rear heat exchanger is hot.

After the engine has cooled down recheck coolant level.

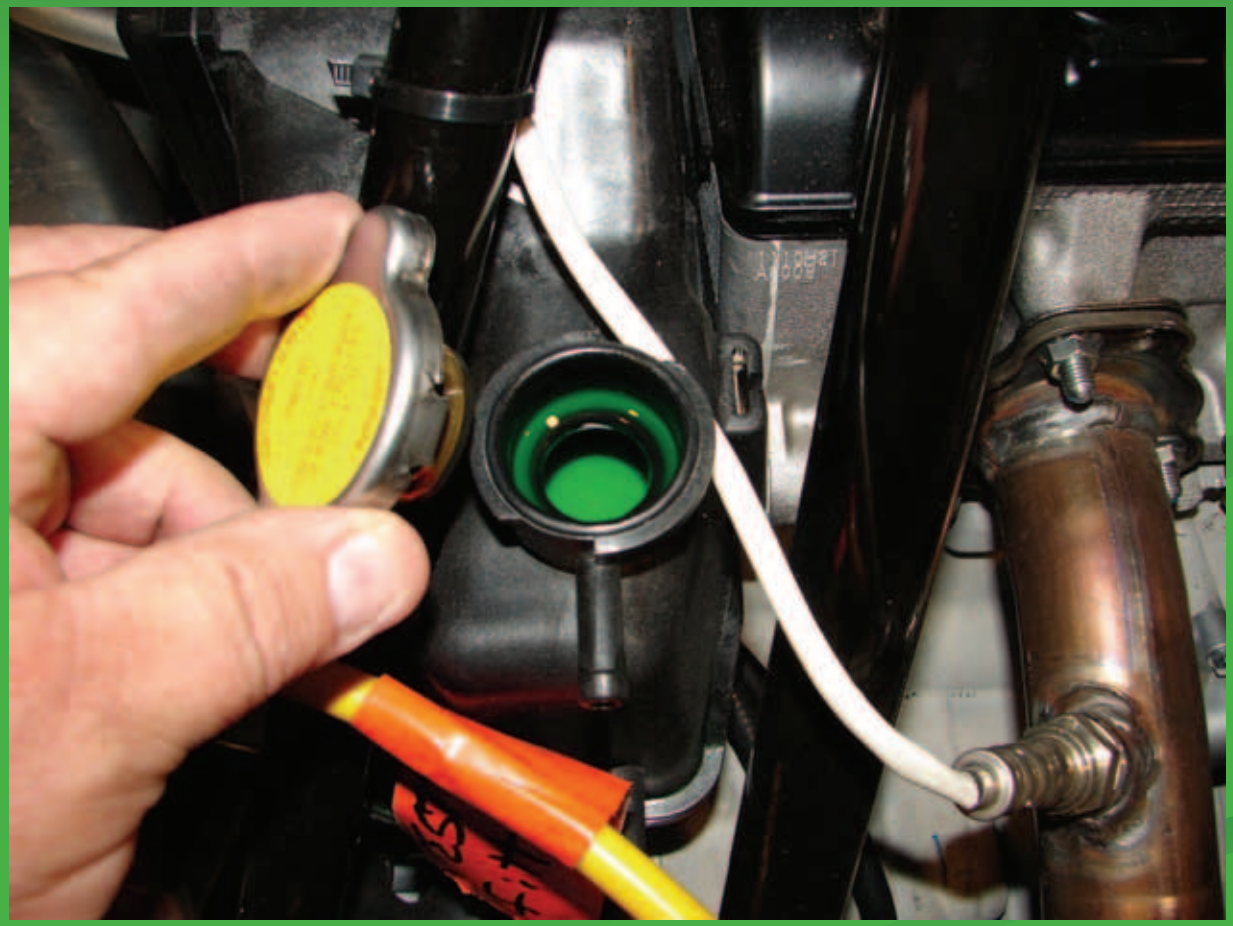
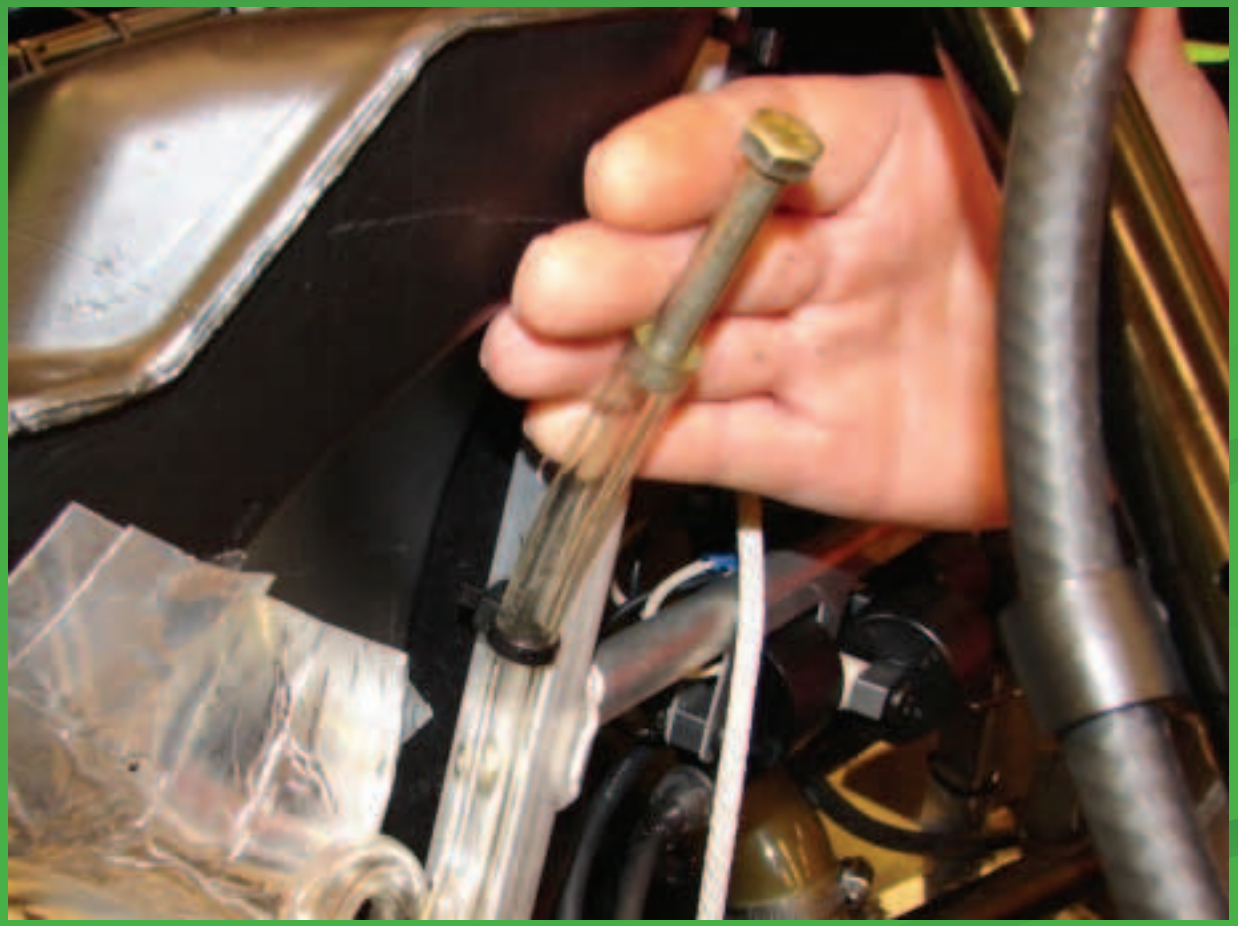


Photo of Coolant Bleed Screw

The bleed screw has two vents cut into the bolt.

Removing the Oil Reservoir / Drop Case Cover Assembly

Plug the drop case vent if tipping the machine on its side or chain oil will run out into the engine compartment.

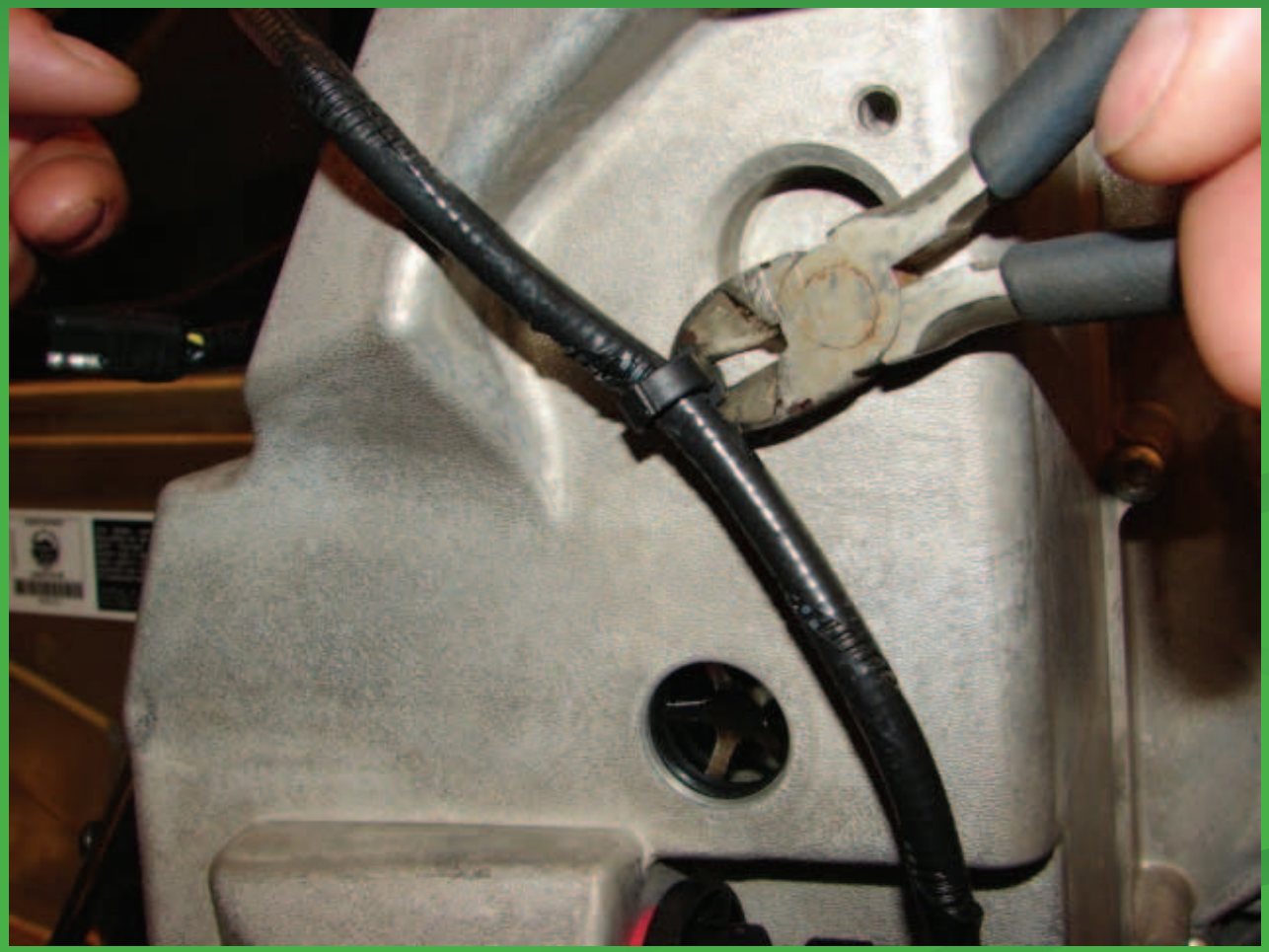


Cut an old hyfax to 7.5” long.

Remove the rear belly pan fastener and hold the pan away with the piece of hyfax. This will allow room for the drop case cover to be removed.

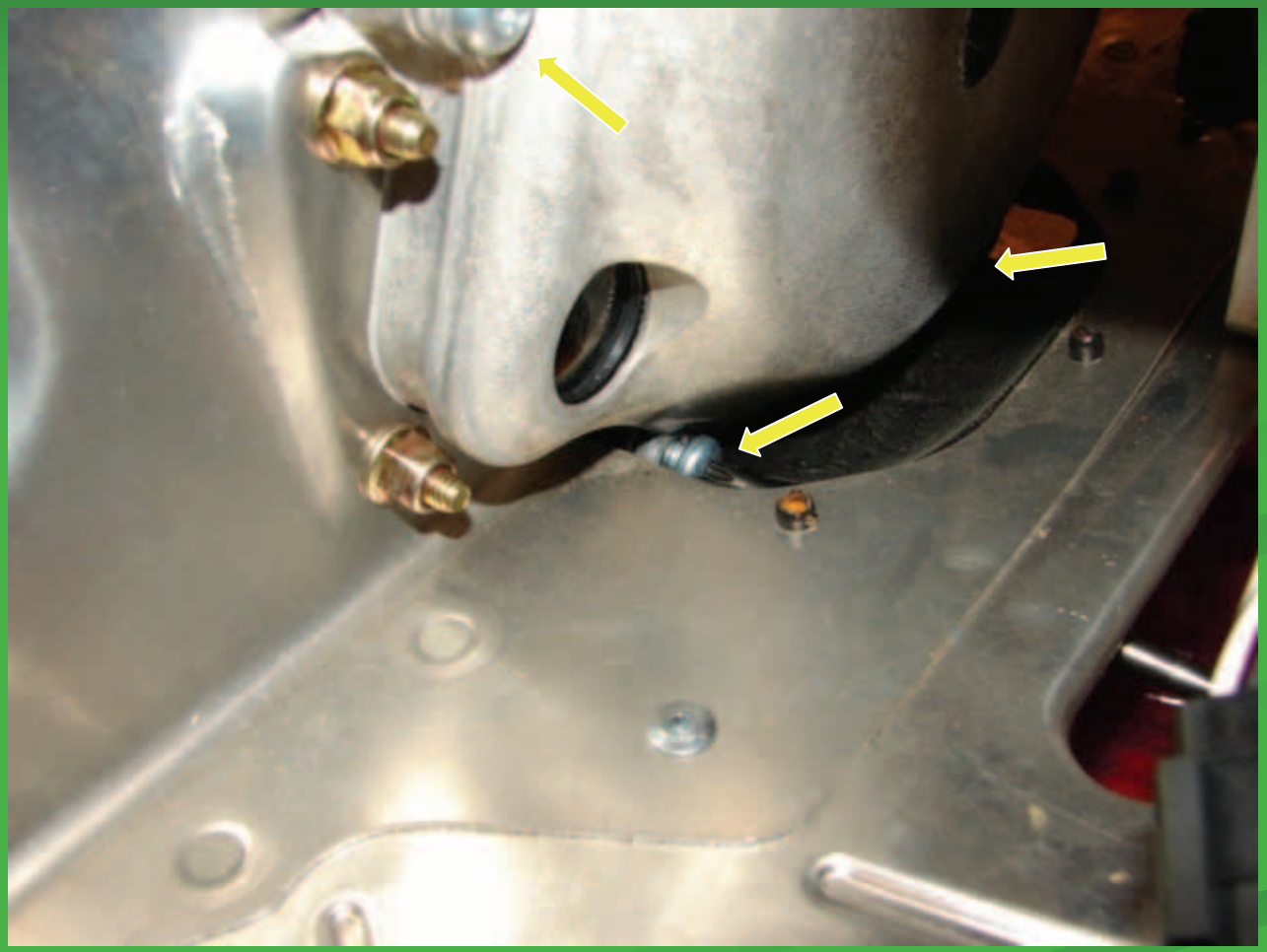
Take note of the wire harness routing then remove it from the cover.

Pull the wire holder from the reservoir.

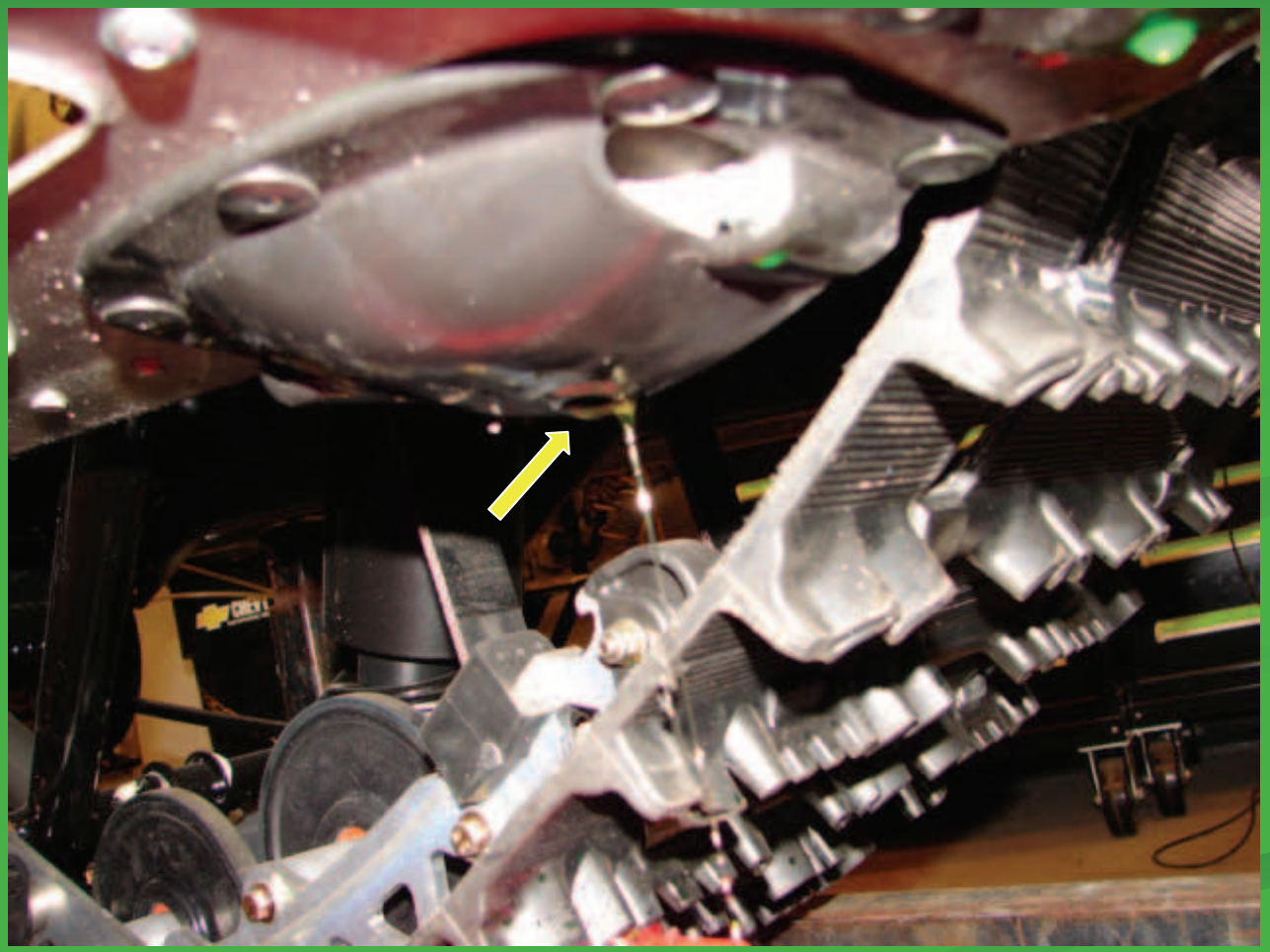


Place a drain pan under drop case.

Remove the bottom 6 torx fasteners, then loosen the rest of the cover screws.

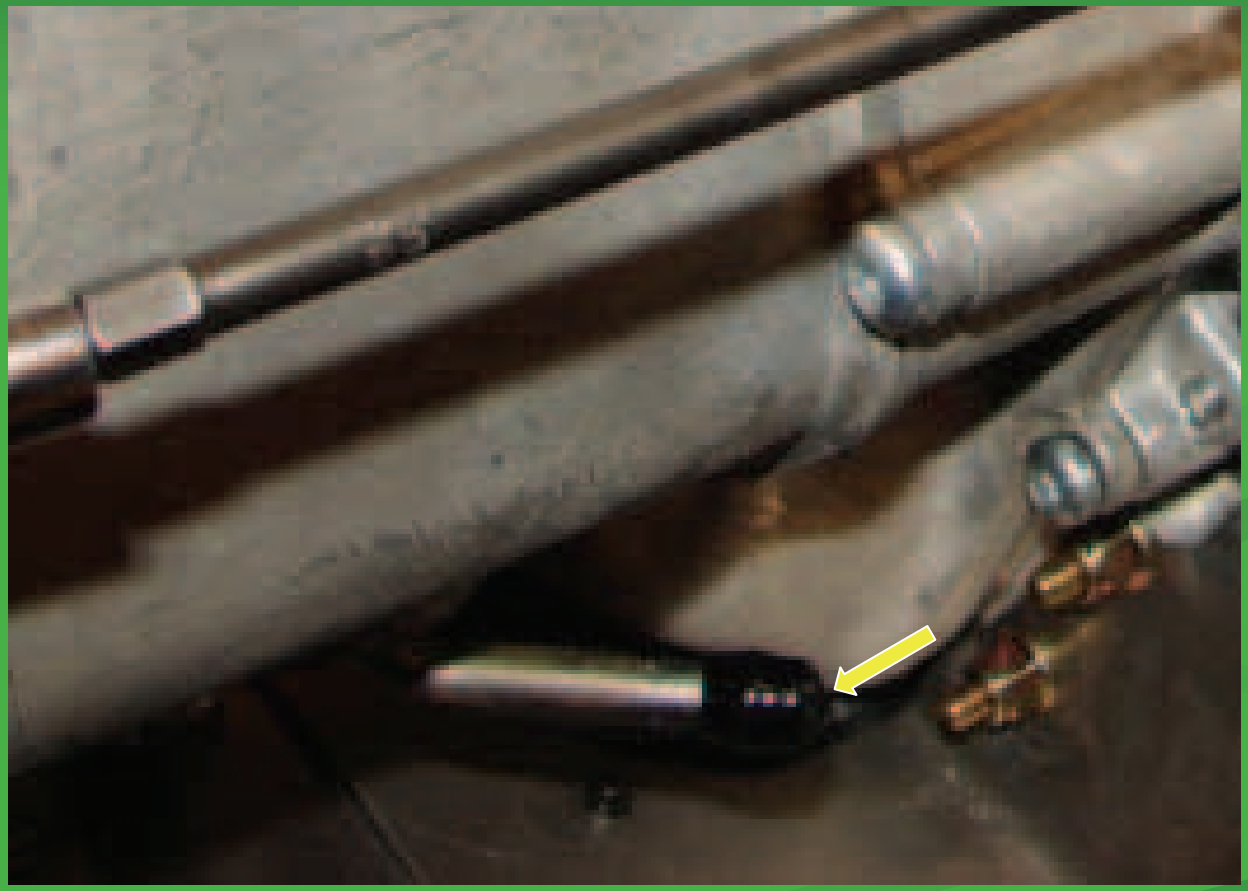


Oil will drain from a hole in the drop case protector.



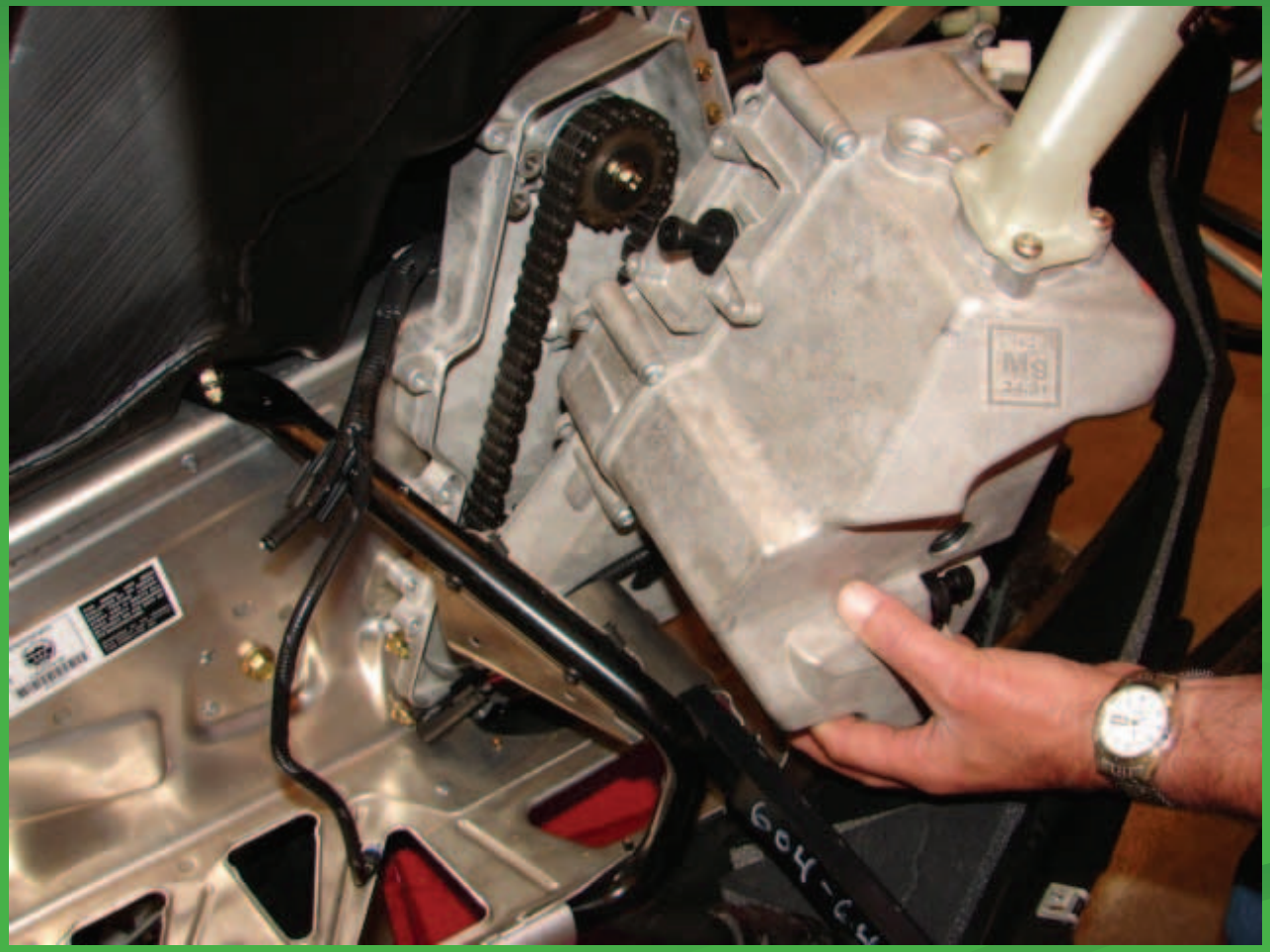
Once oil has drained, remove the remaining fasteners from the cover. Be sure to only remove the cover fasteners, not the reservoir fasteners.

Remove the oil line and plug it with a rubber cap.



When reinstalling the cover remove the cap and reinstall the oil line!!

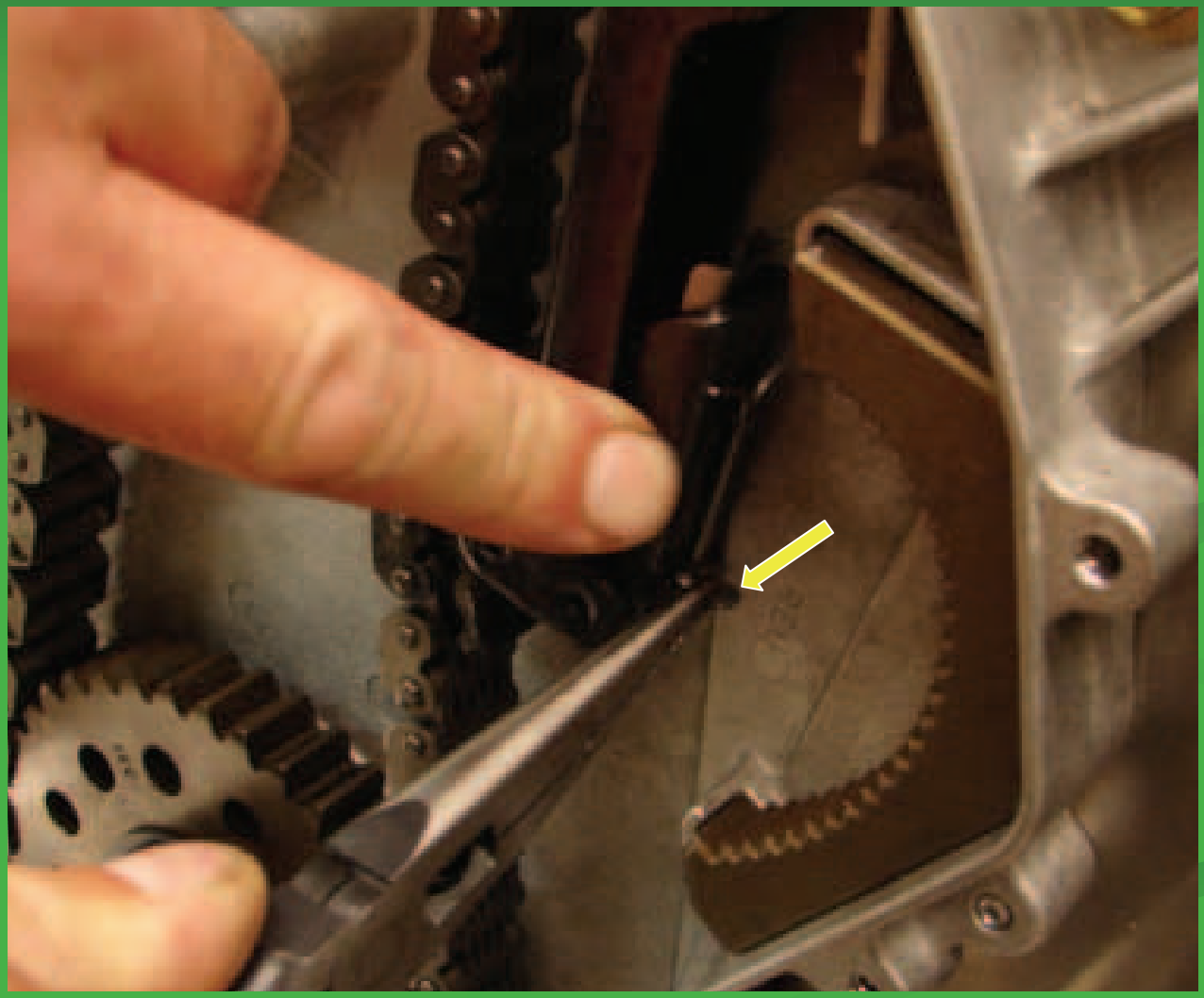
Rotate the assembly up and out of the chassis.



Removing the Drive Chain / Sprockets.

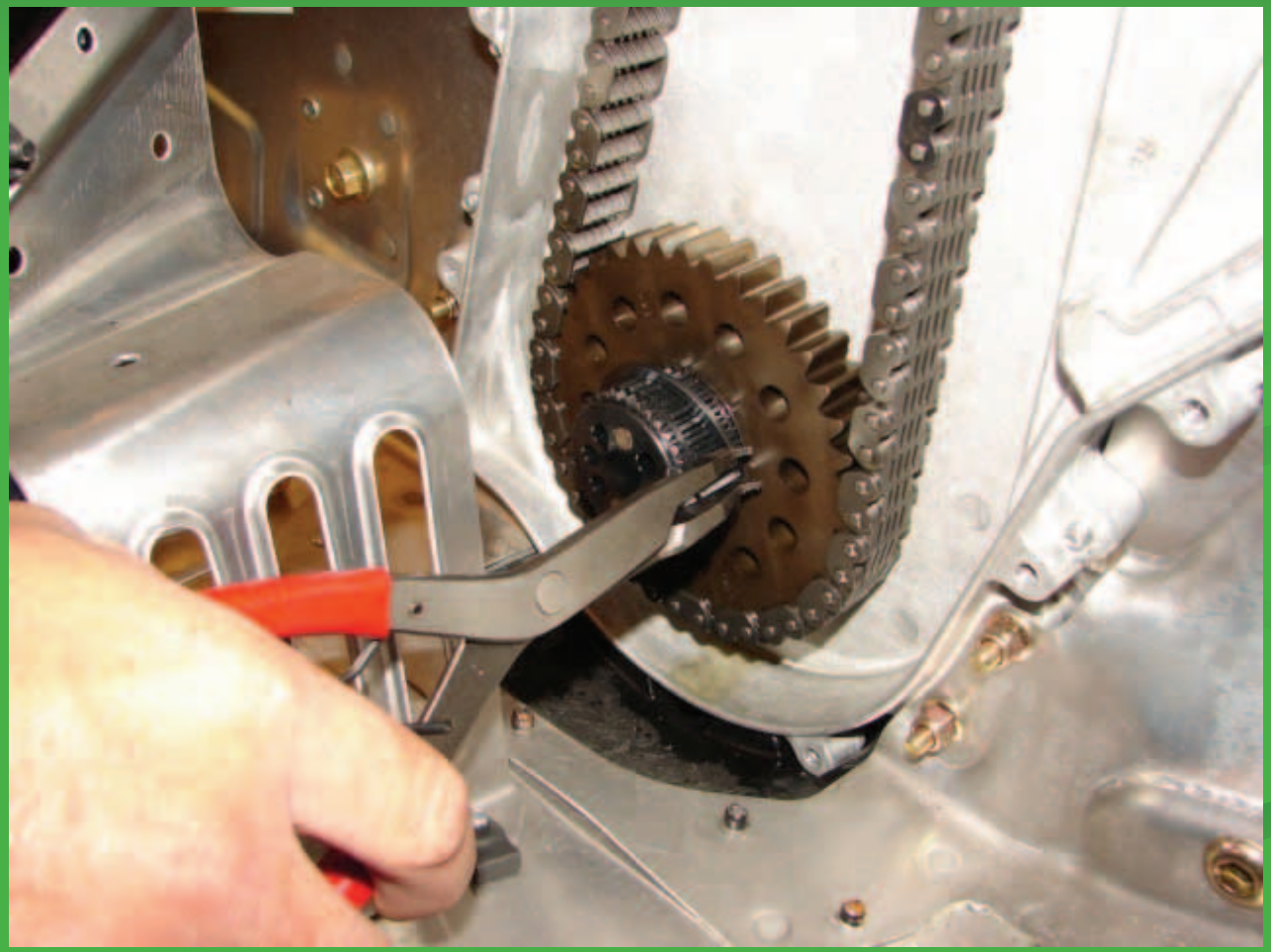
- All New procedure for the 2012 ProCross/ProClimb models.

The self adjusting tensioner has a tab to pull back so you can remove the tensioner cam.

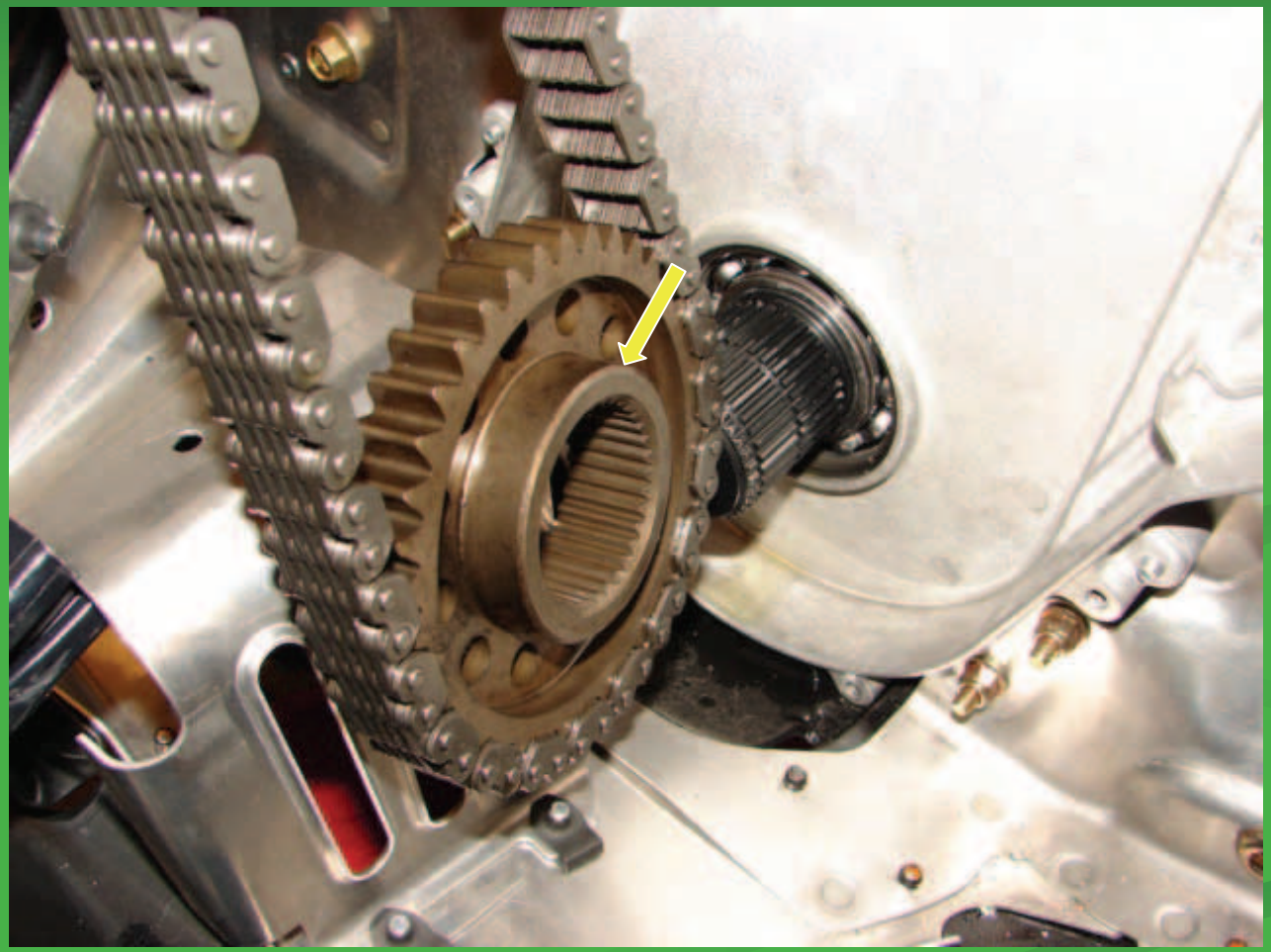


Remove the tensioner arm and spring.

Remove the snap ring from the drive shaft with snap ring pliers (p/n 0644-581), and the bolt from drive sprocket.

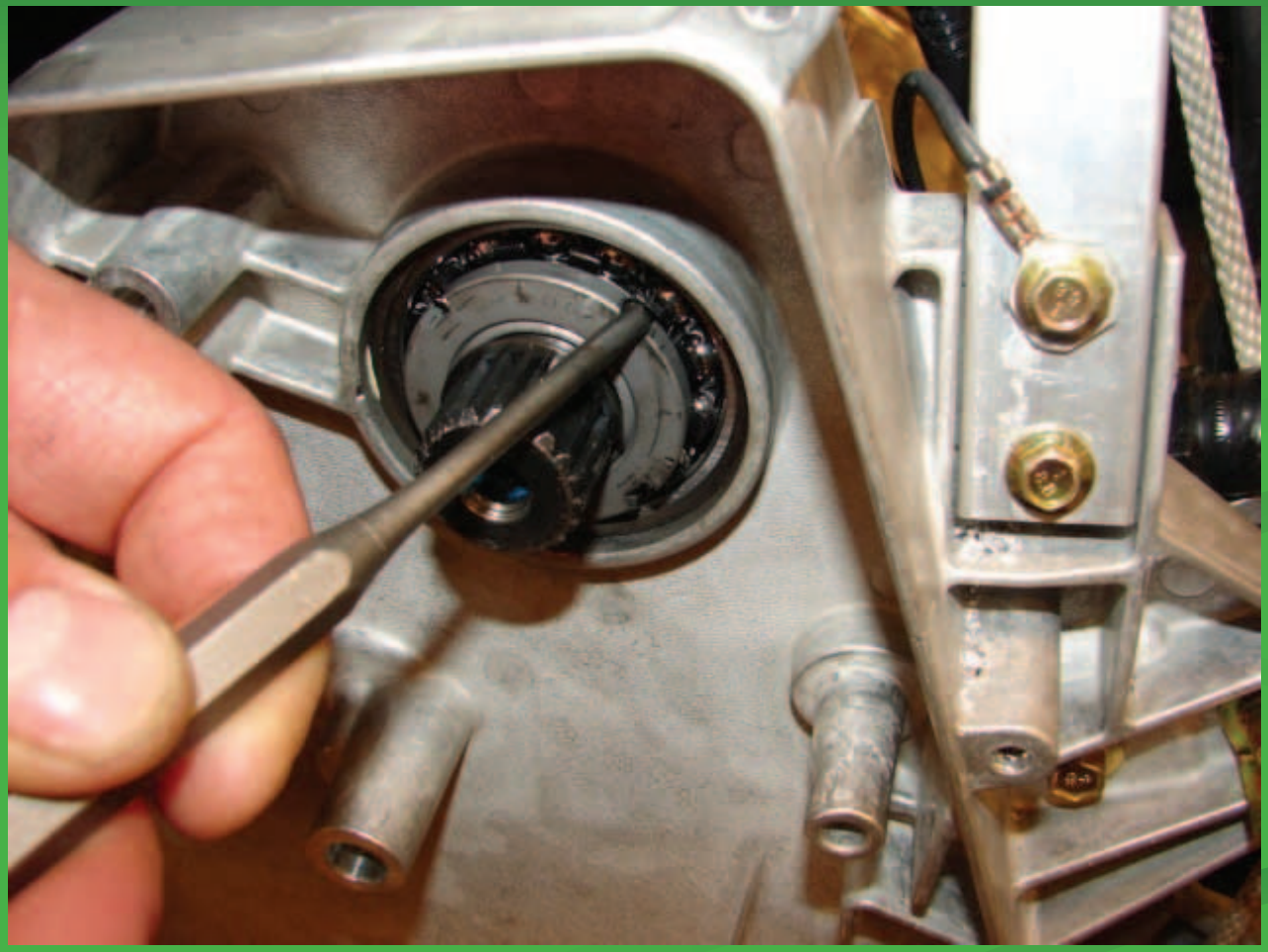


Remove the top and bottom sprockets together. Take note that the flange is to the inside.

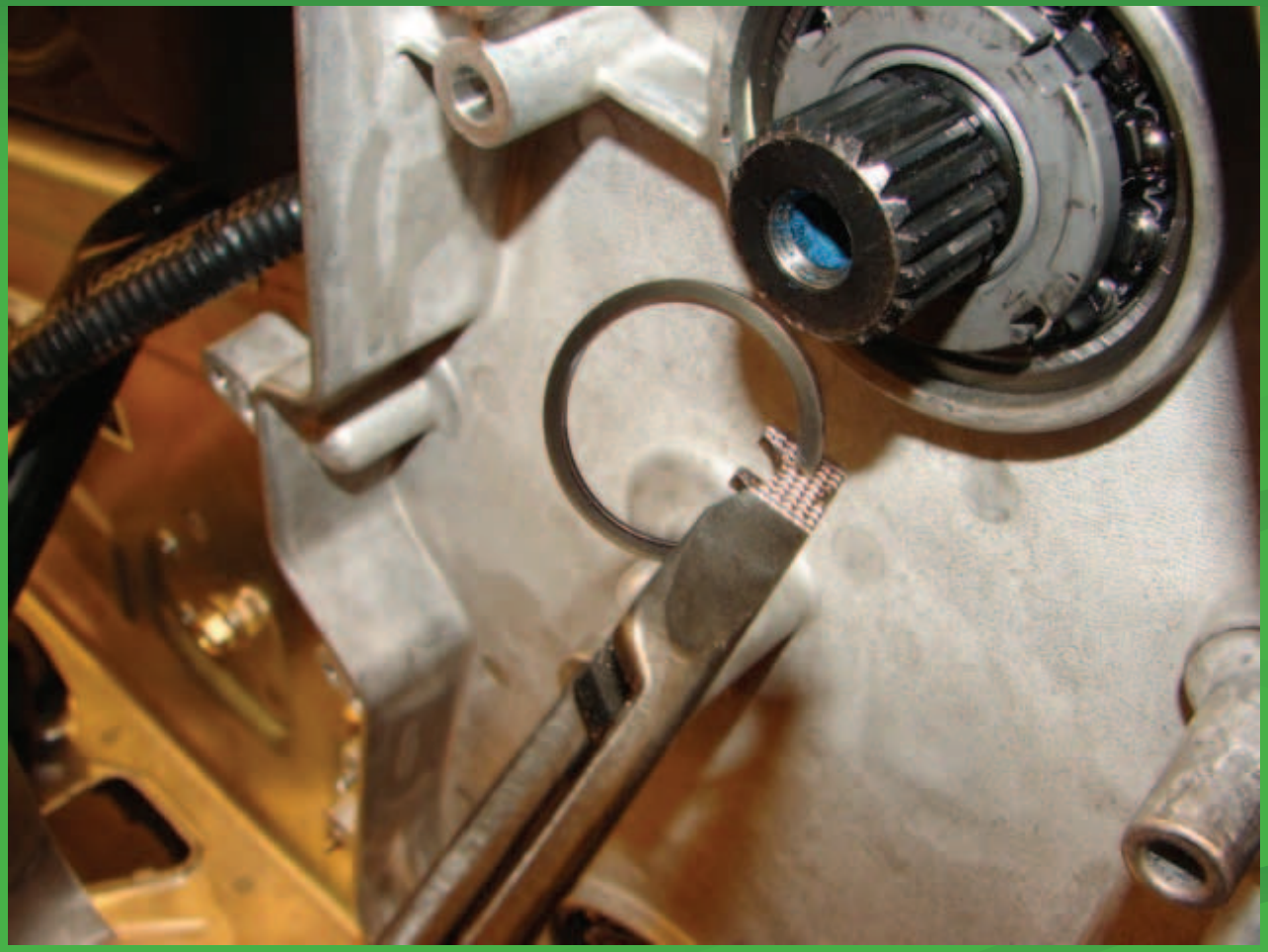


Removing the Jack Shaft / Drive Shaft / Track

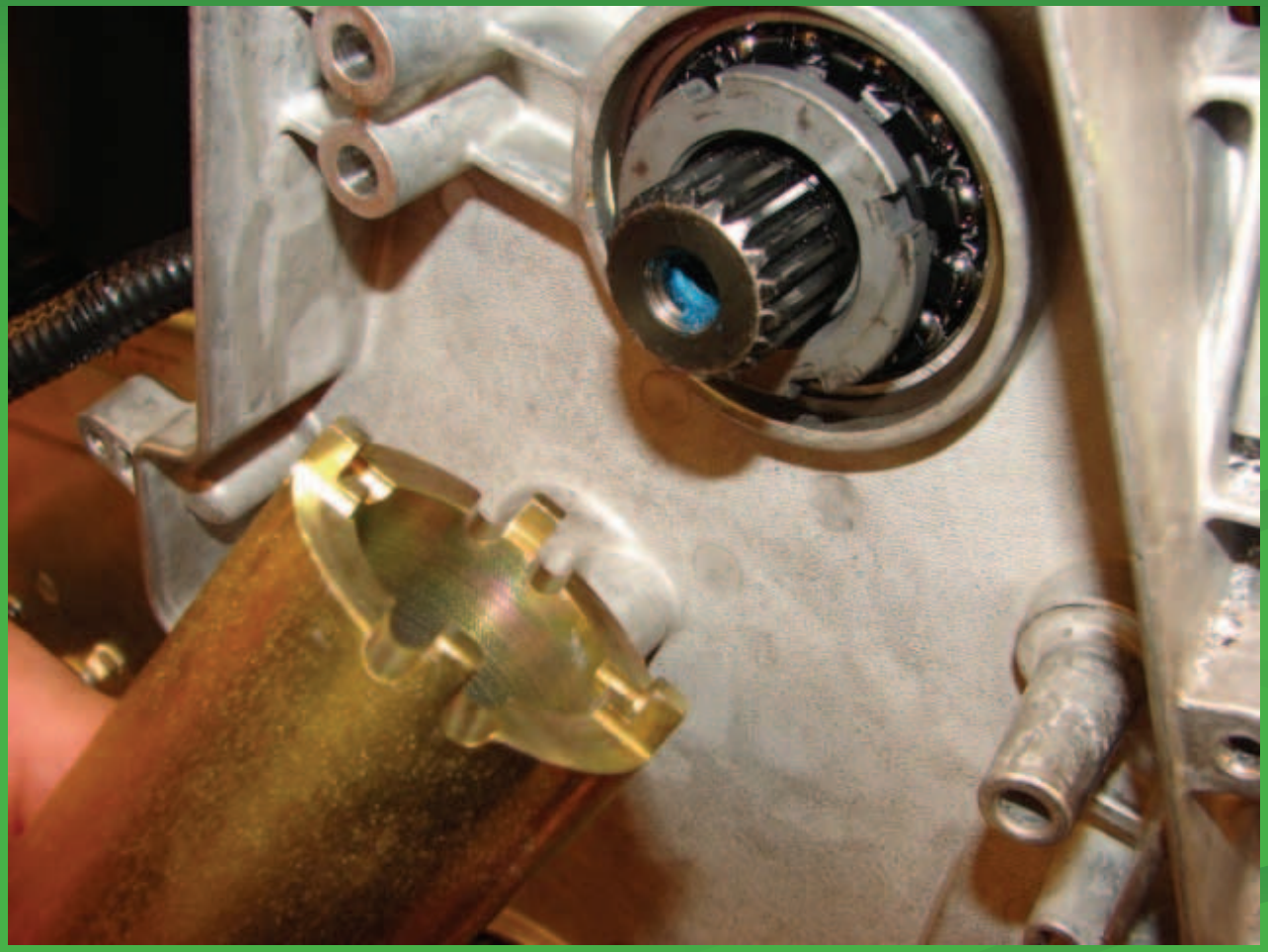
With a punch bend the locking tabs on retainer.



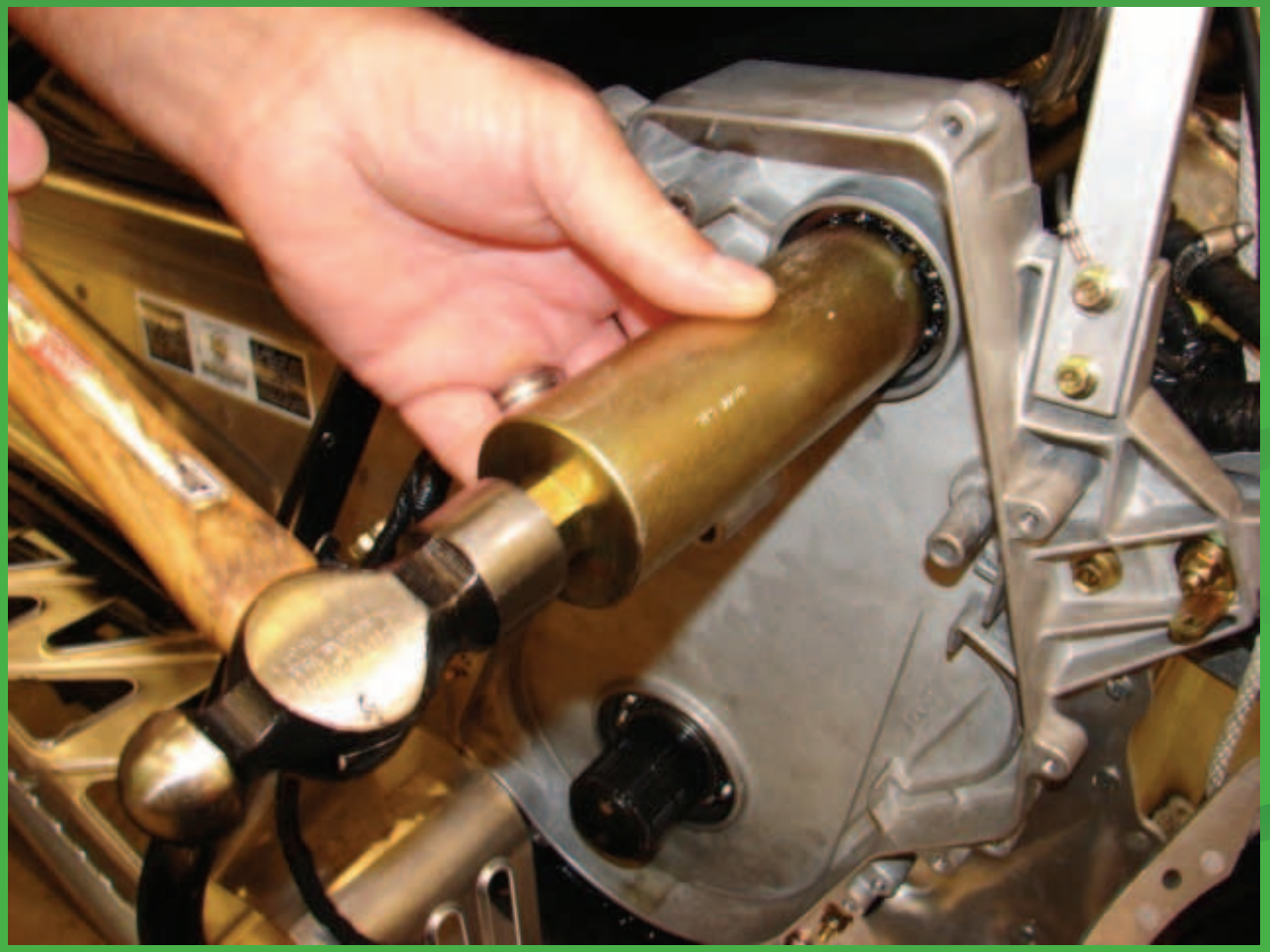
Remove the snap ring with snap ring pliers (p/n 0644-581).



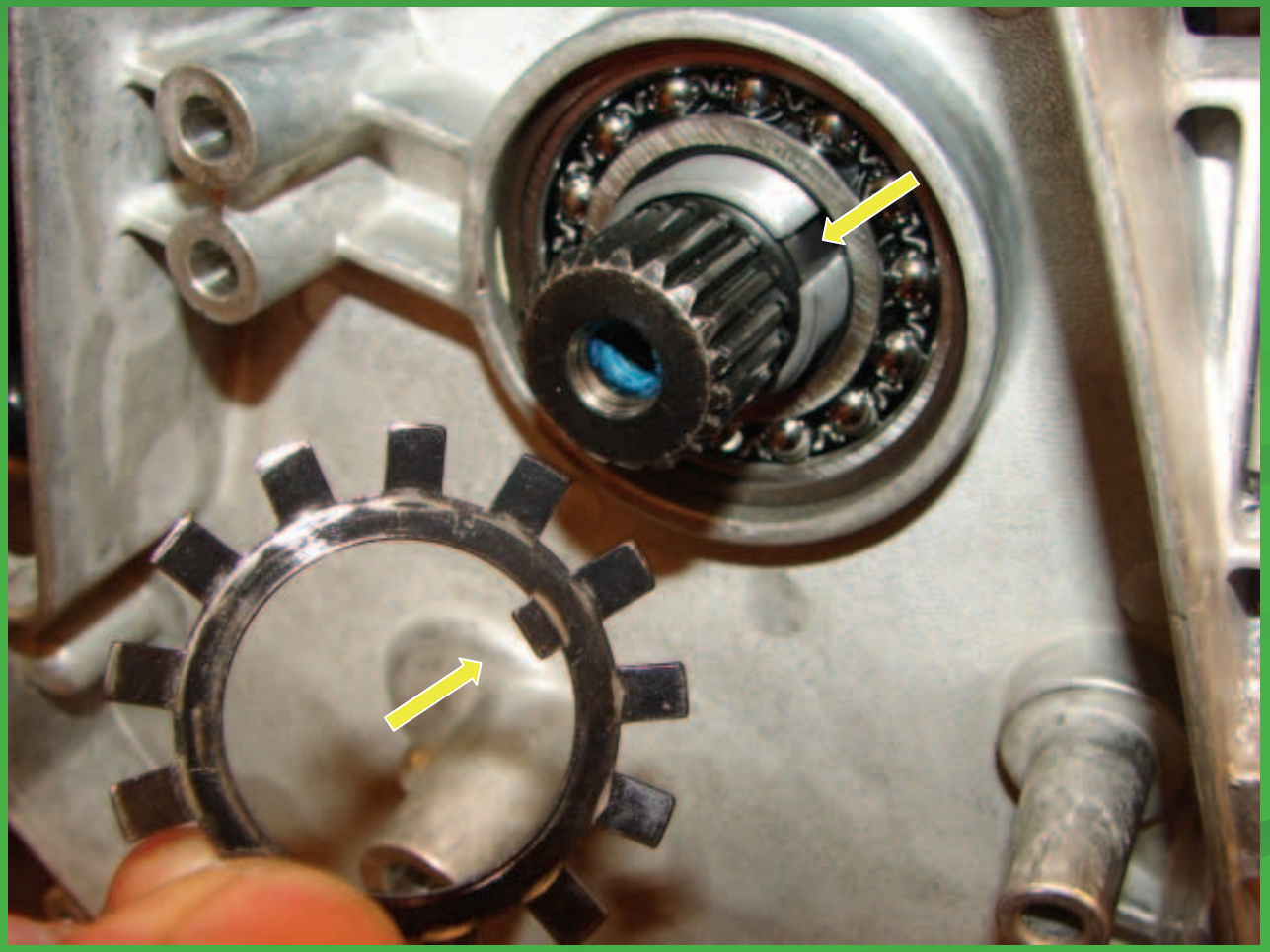
Loosen the nut with socket (p/n 0644-516)



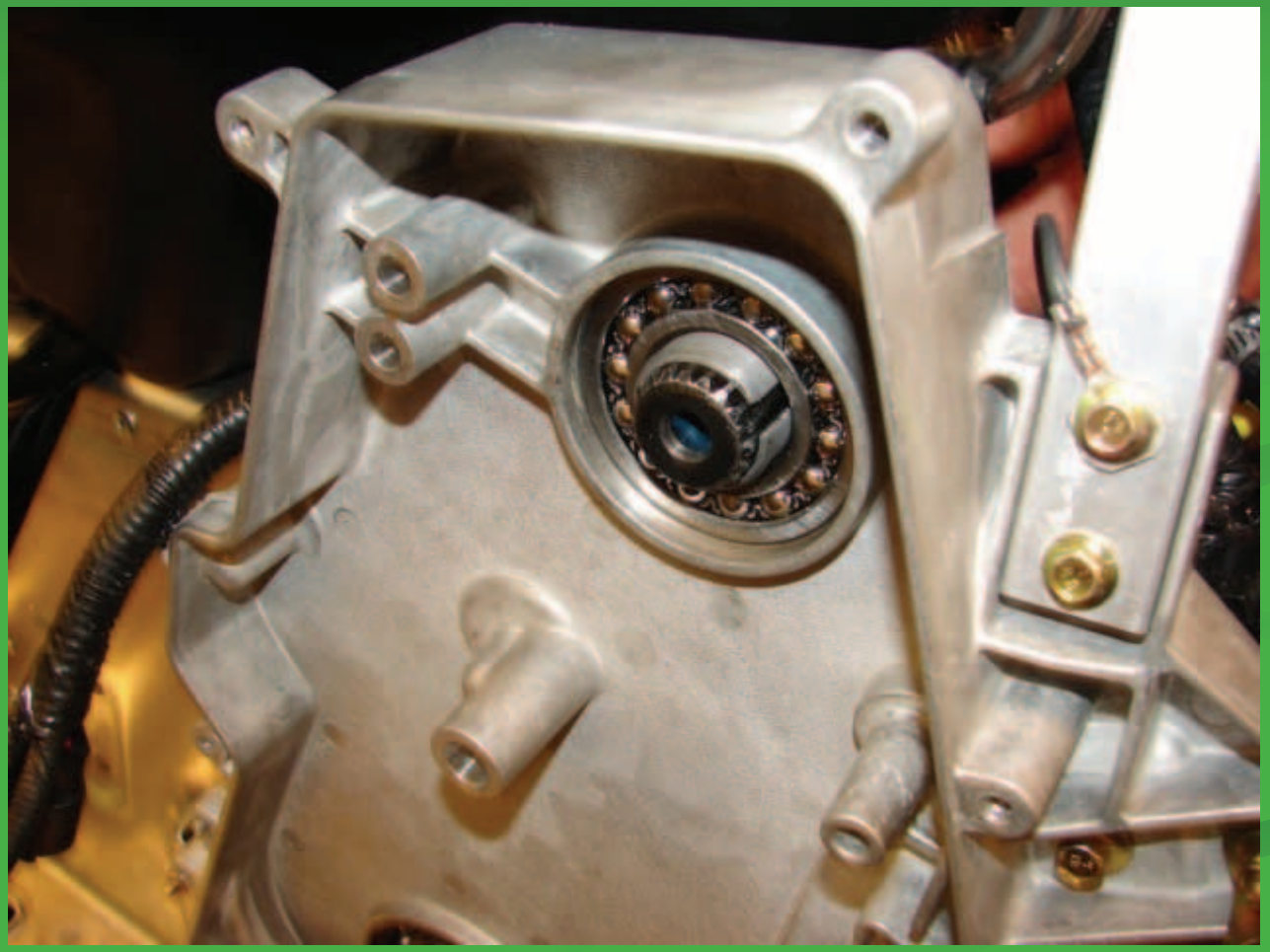
With nut backed off 2 full turns.
Tap on the tool with enough force to loosen the eccentric collar from the bearing, then remove the nut.



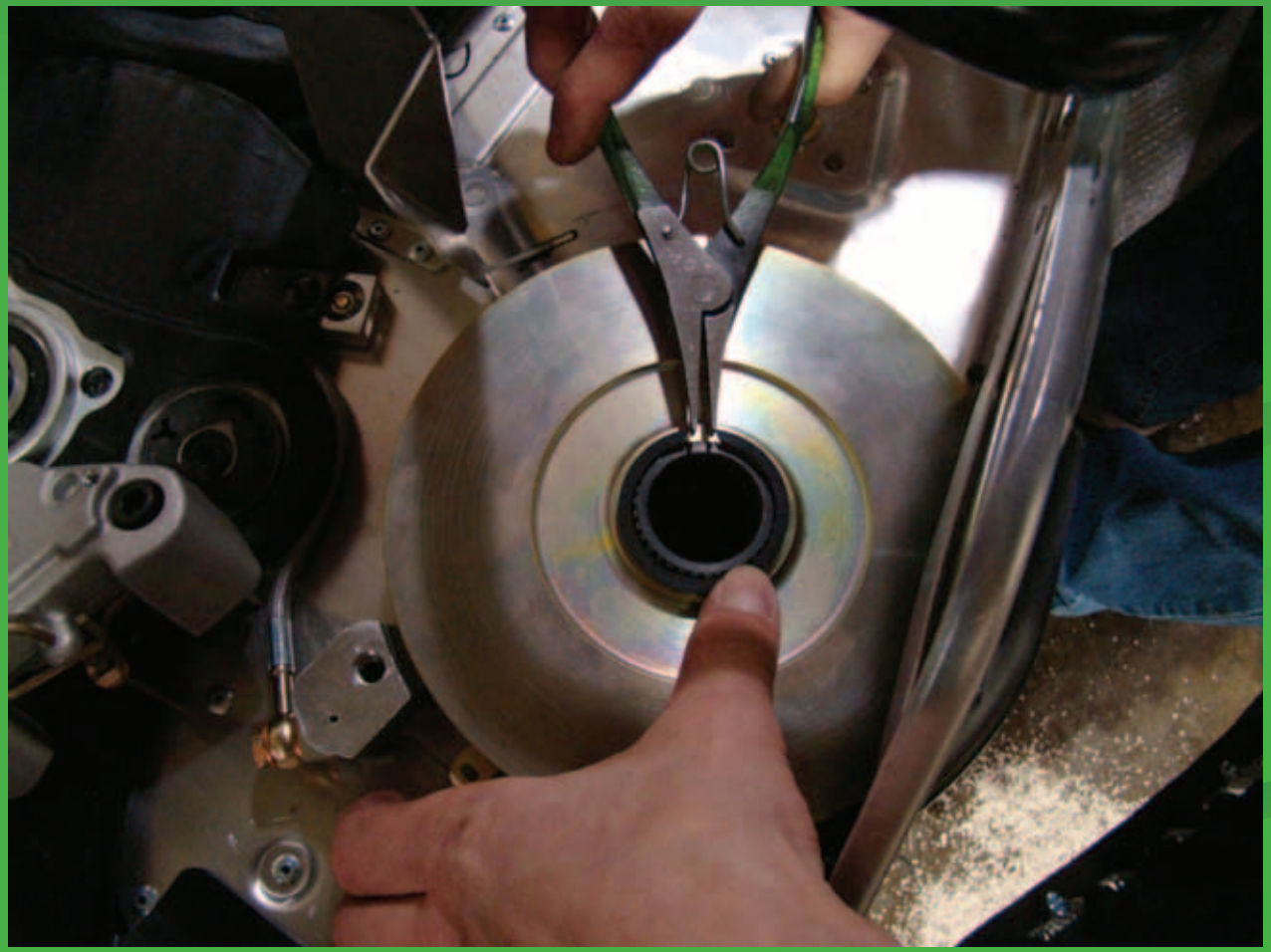
Remove the retainer.
There is a tab on the retainer that aligns with the bearing keeper.



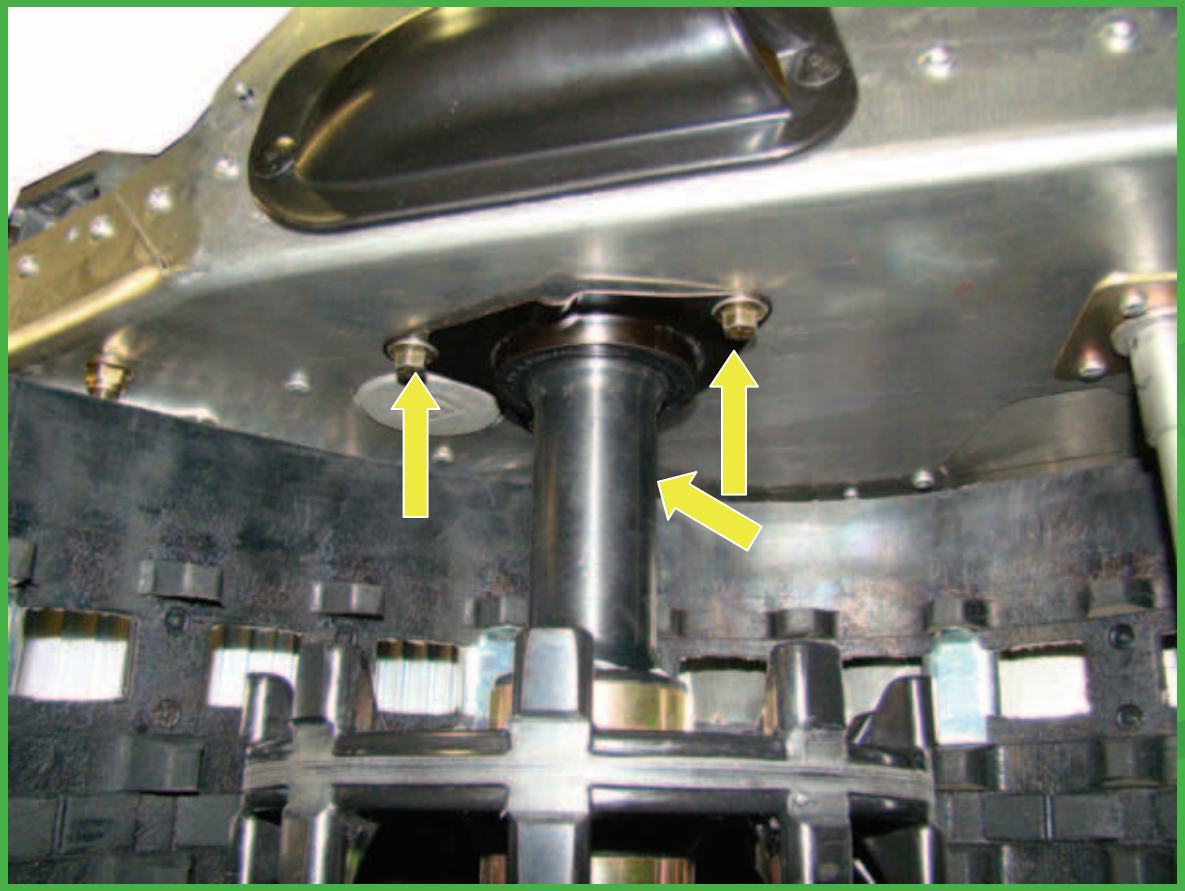
With the left rear motor mount bracket unbolted, remove the jackshaft out the left side.



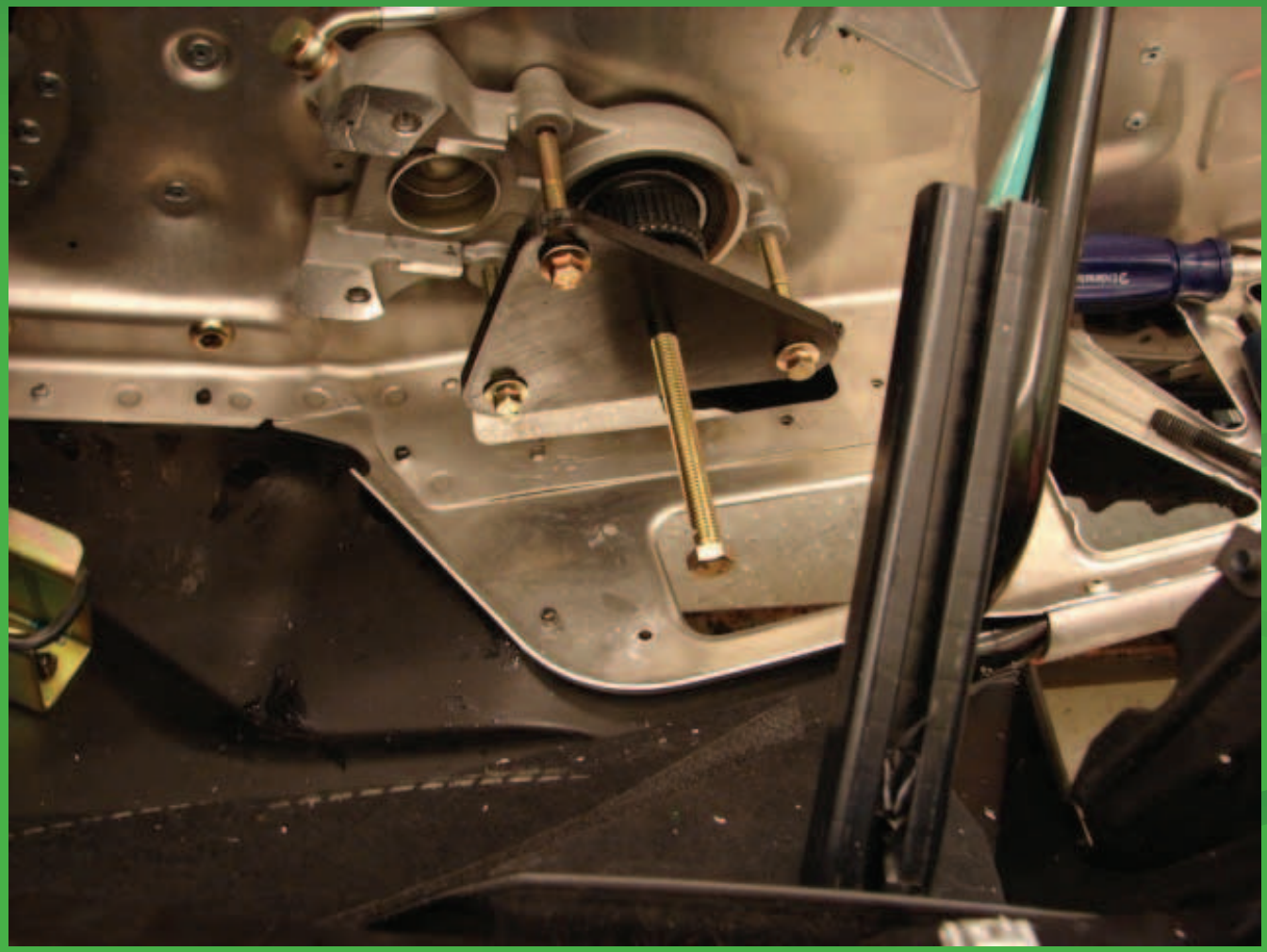
Remove left side toe guard and brake disc guard. Remove caliper bolts then split the brake caliper. Remove the snap ring securing brake disc then remove the disc.



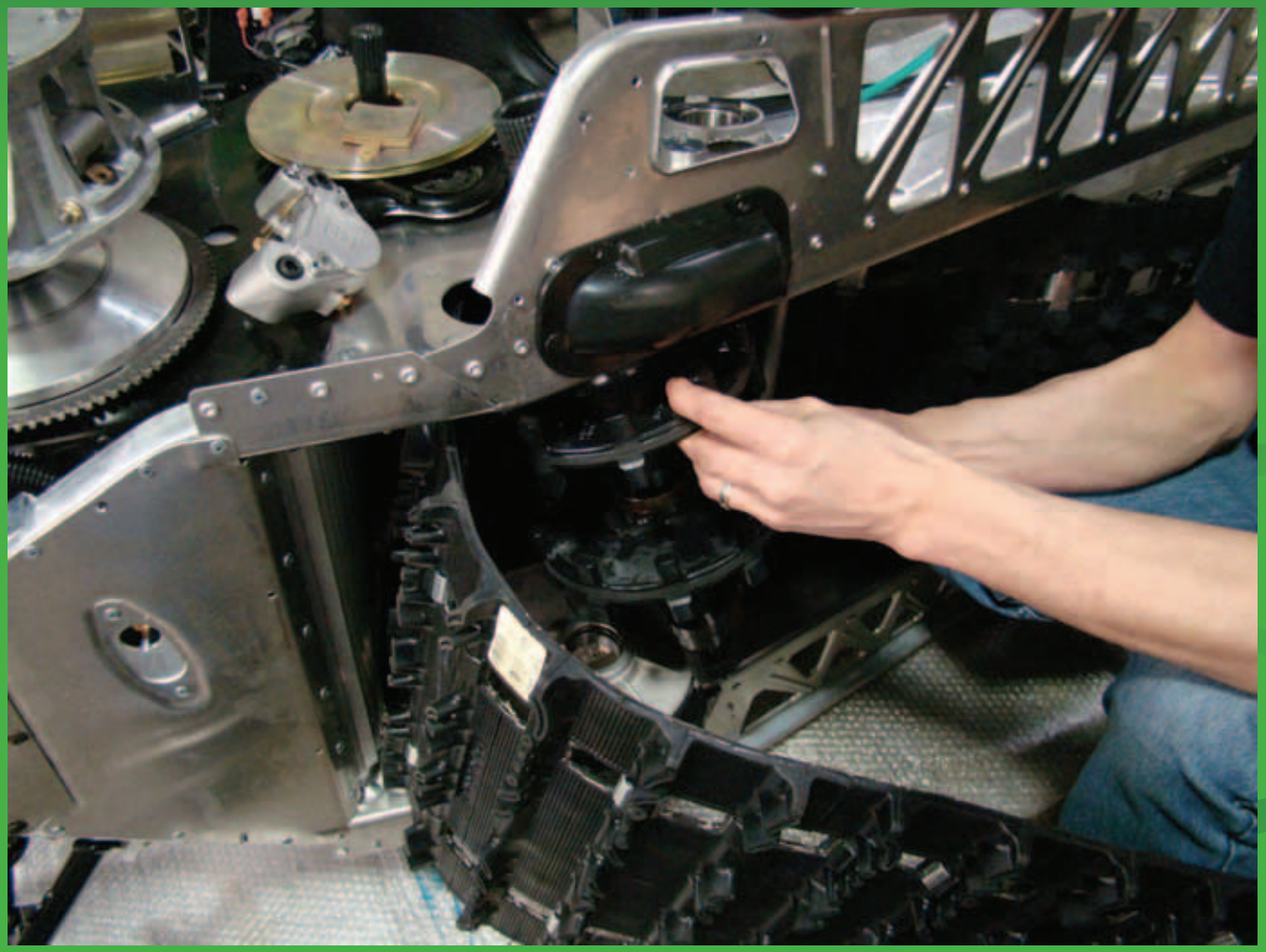
With the skid frame removed, remove the three cap screws on the inside of the tunnel securing the brake caliper to the tunnel.



Using tool (p/n 0744-067) pull the brake caliper/bearing assembly off the drive shaft.

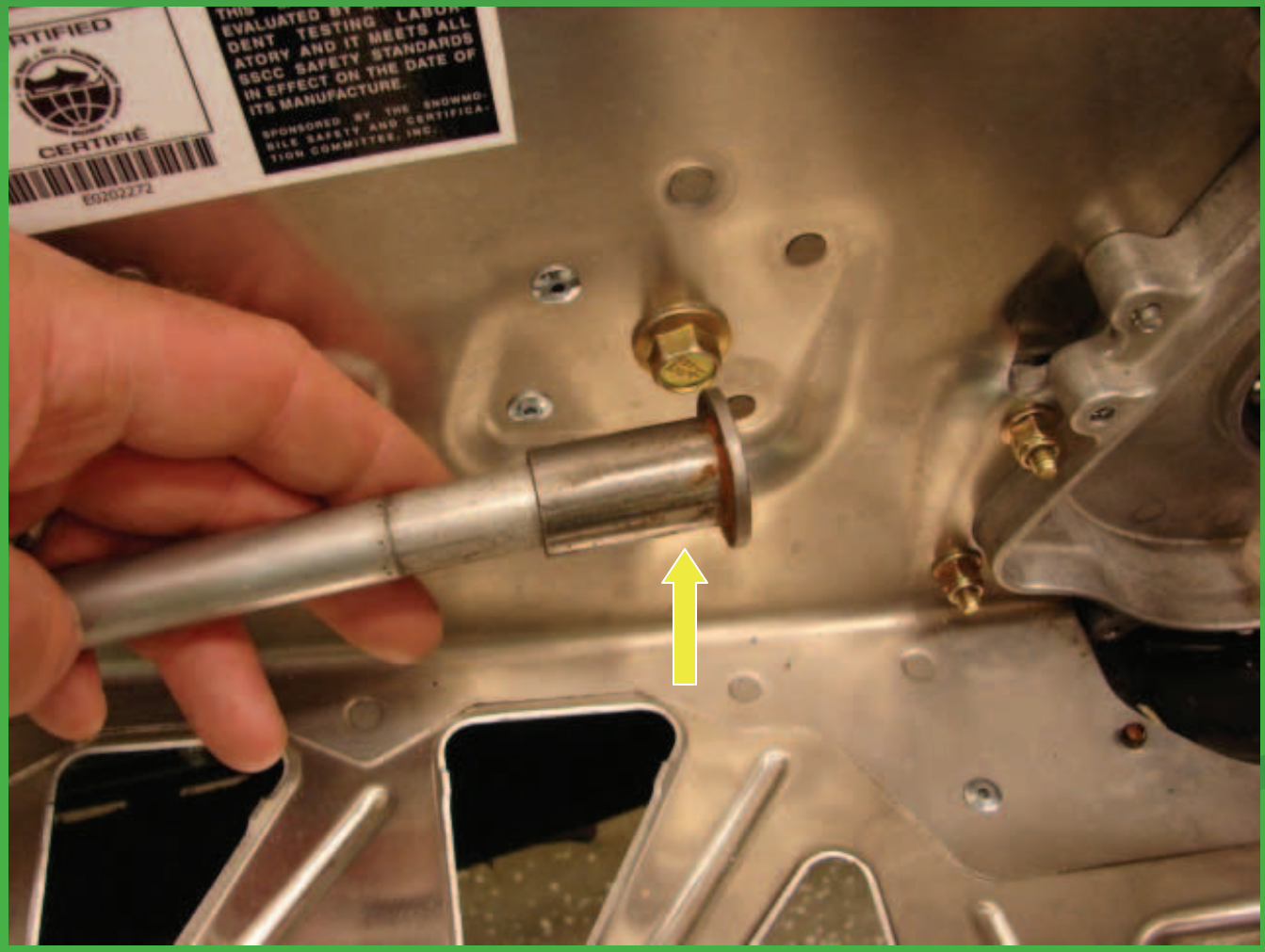


Remove the drive shaft.

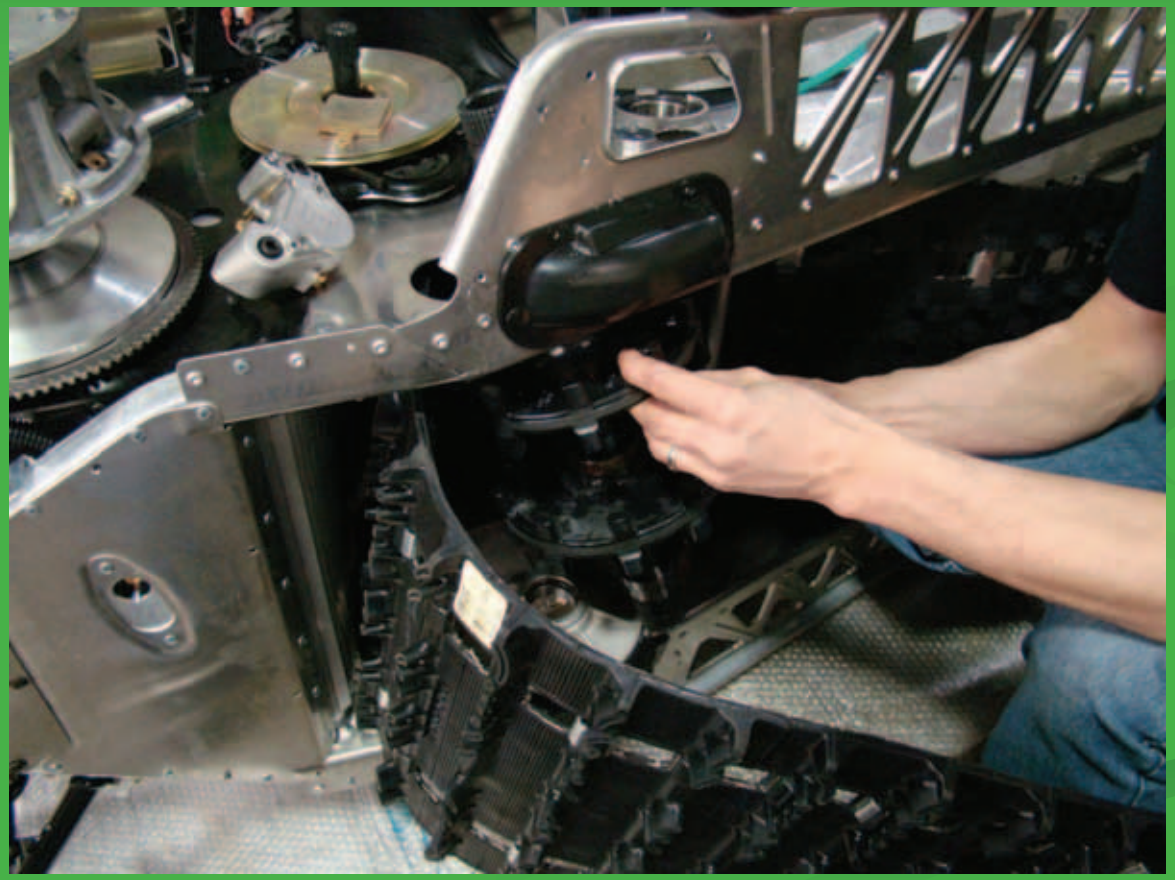


Installing Track / Drive Shaft / Jack Shaft

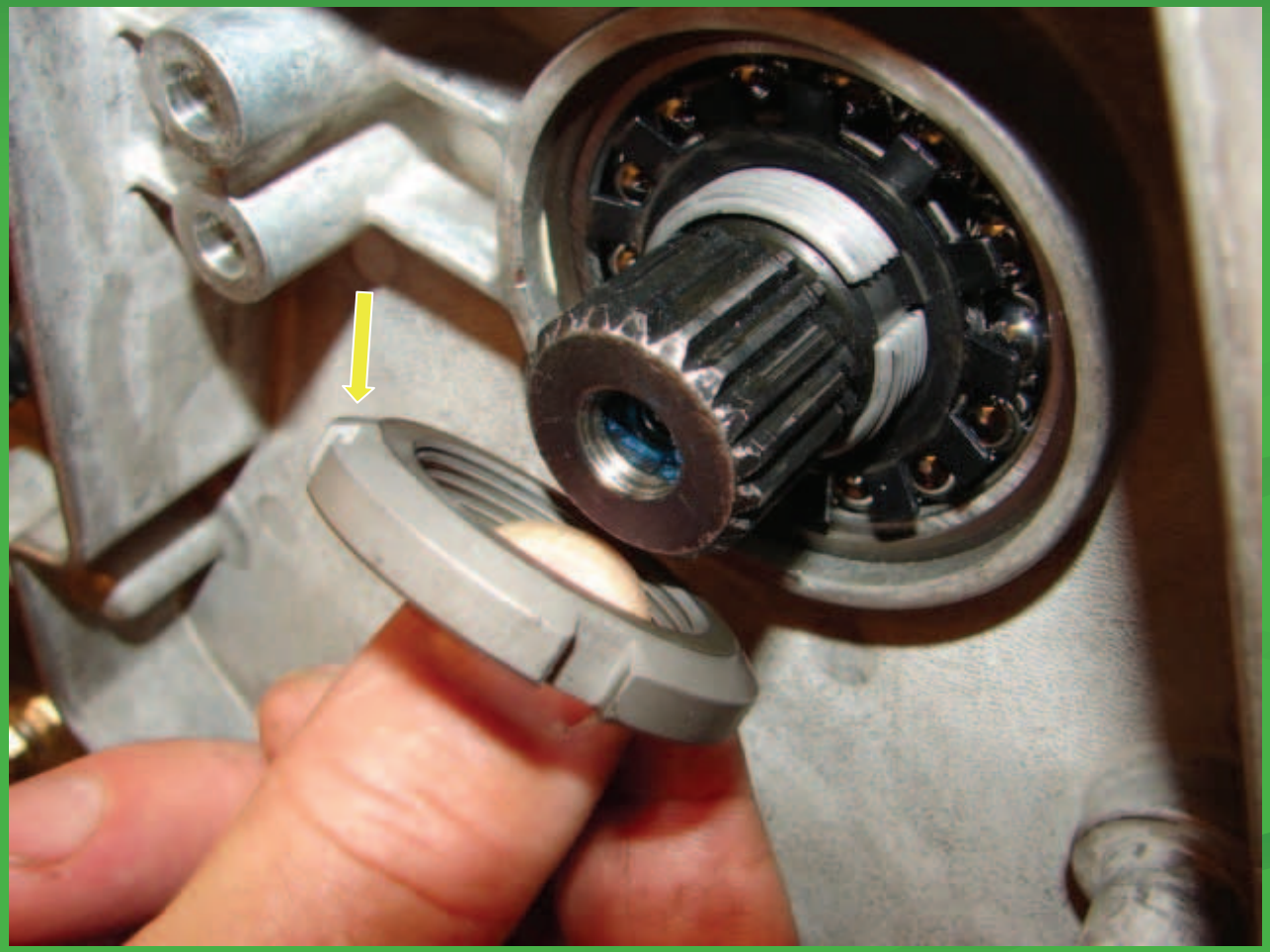
For track removal this shaft is removed. Here we are installing the drive shaft. For ease of installation we removed the end caps and only installed the slider axle.



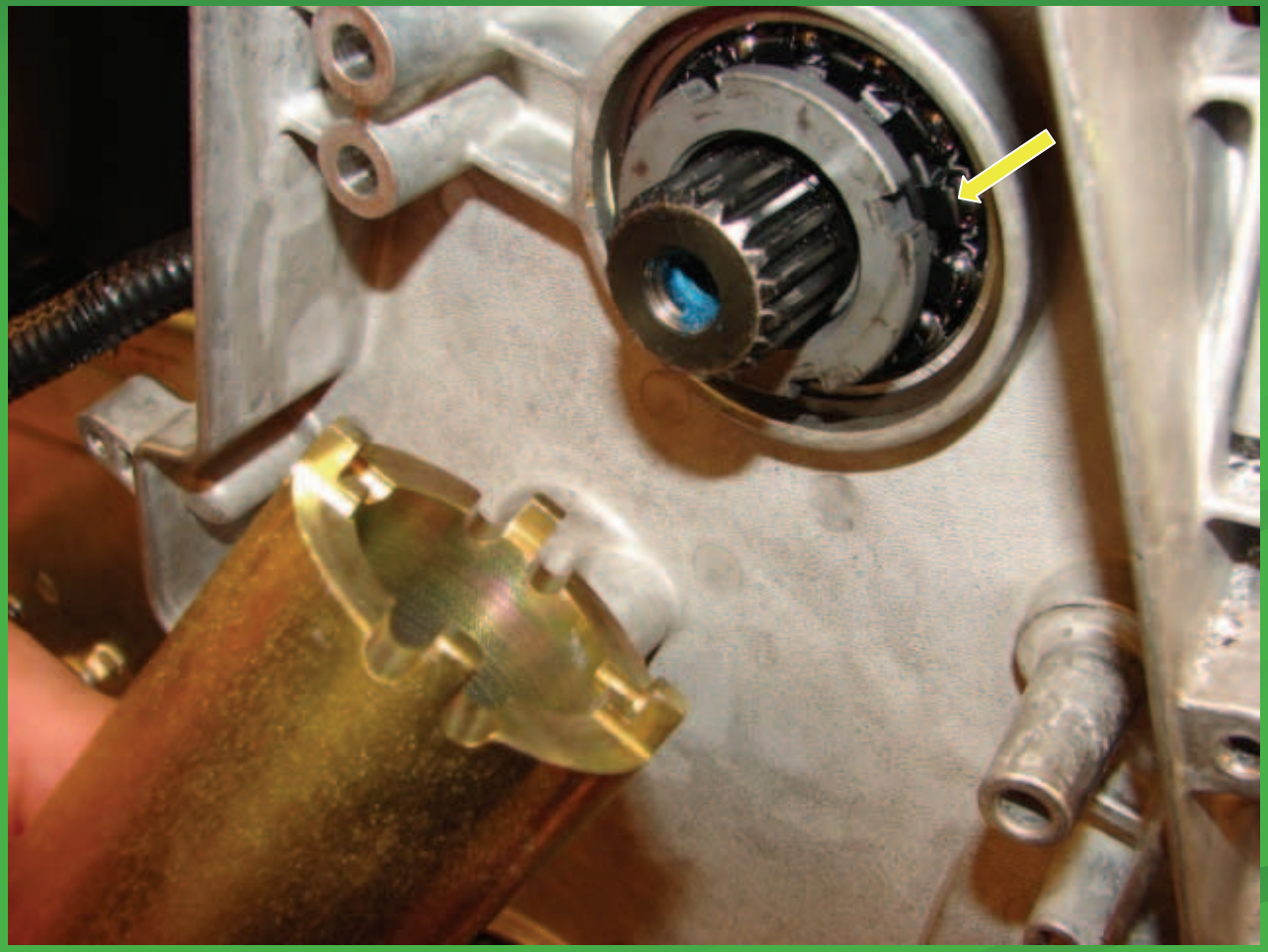
This allows the tunnel to be pulled together for ease of drive shaft installation. It will help locate the snap ring grooves that secure the brake disc and drive shaft sprocket.



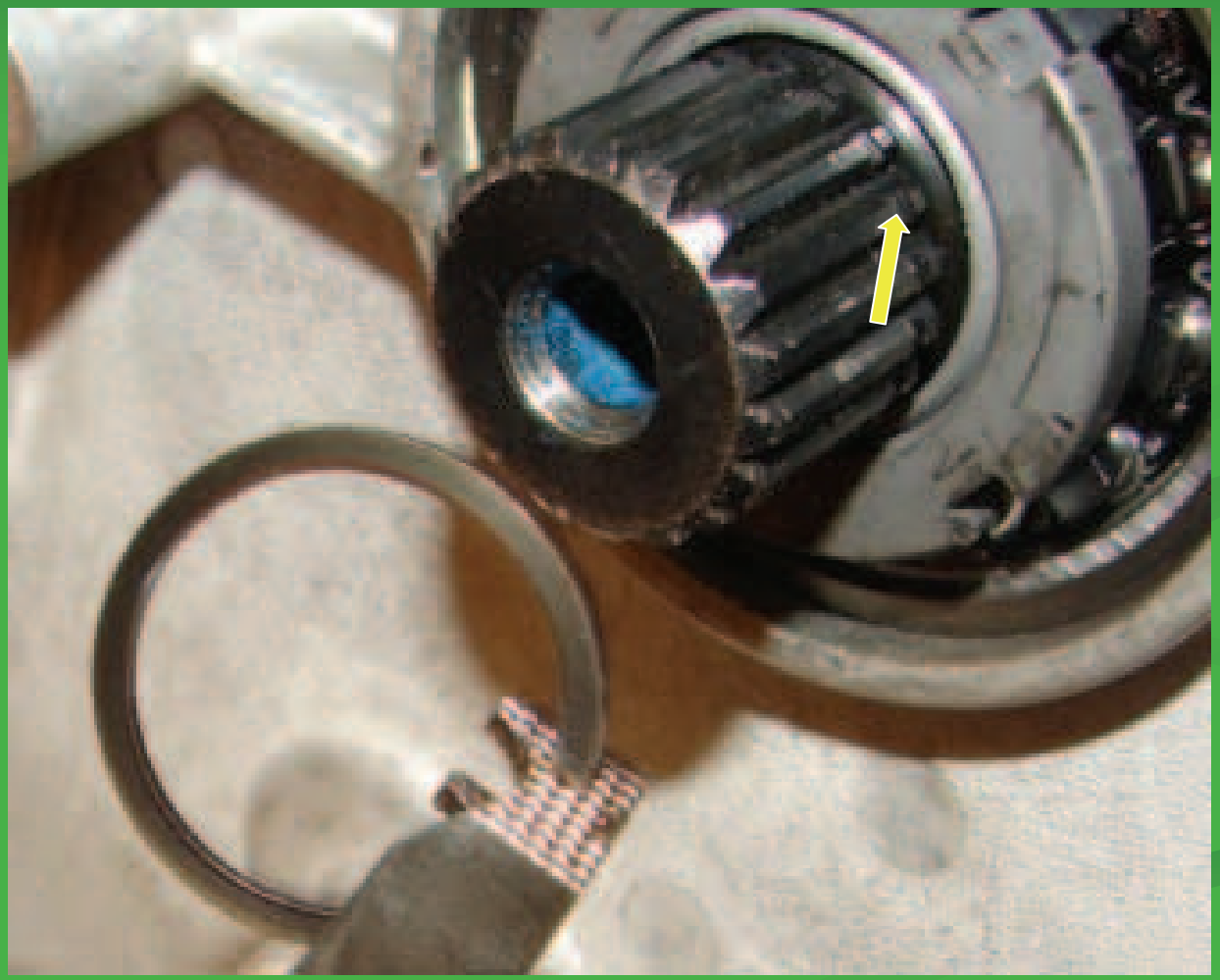
Reinstall the keeper, retainer and nut, the bevel on the nut should face towards the bearing.



Torque the nut to 35 ft/lbs with special tool (p/n 0644-516) and bend the retainer tab to lock the nut.

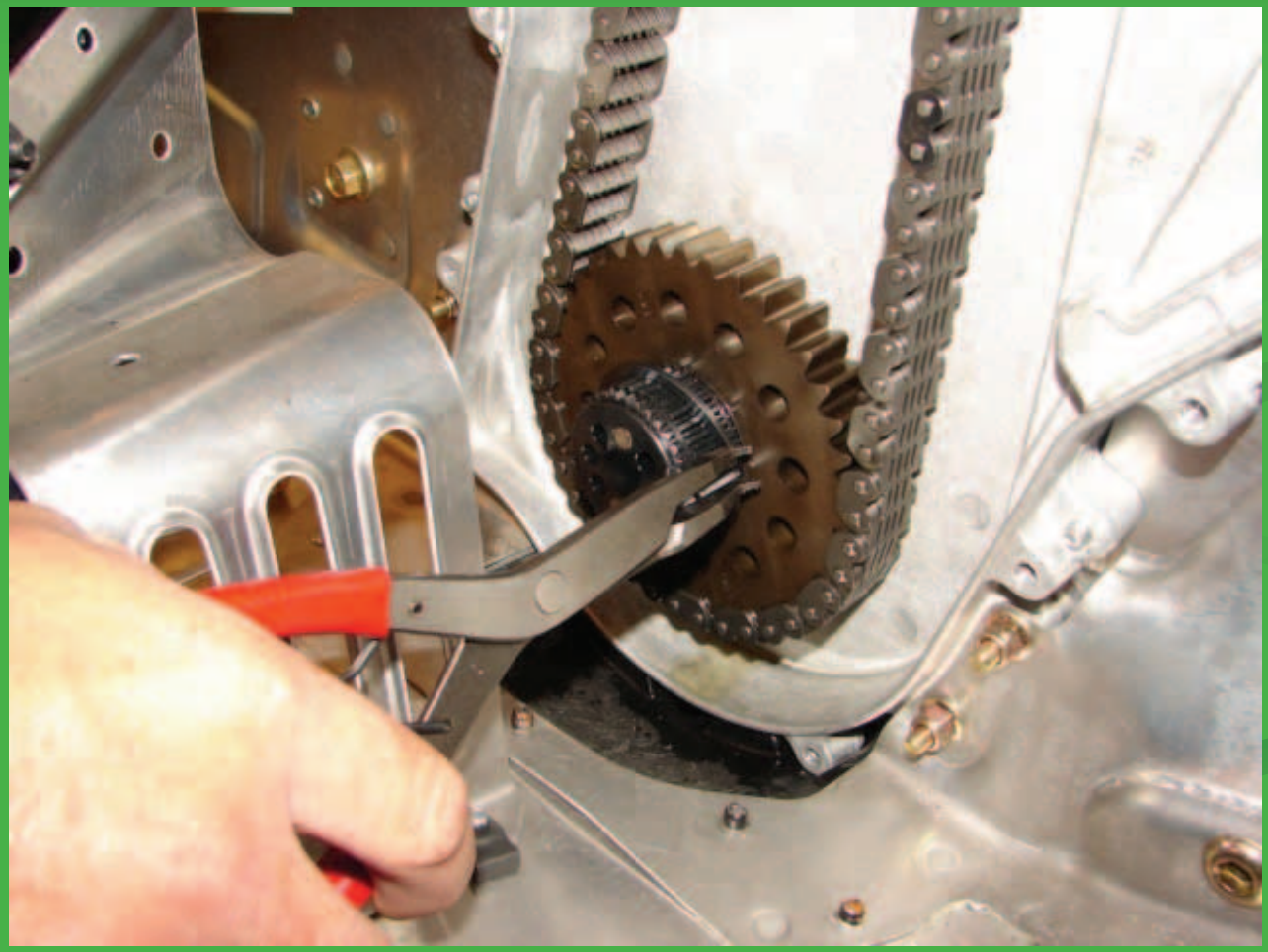


Reinstall the snap ring with the flat side of the snap ring facing inward.

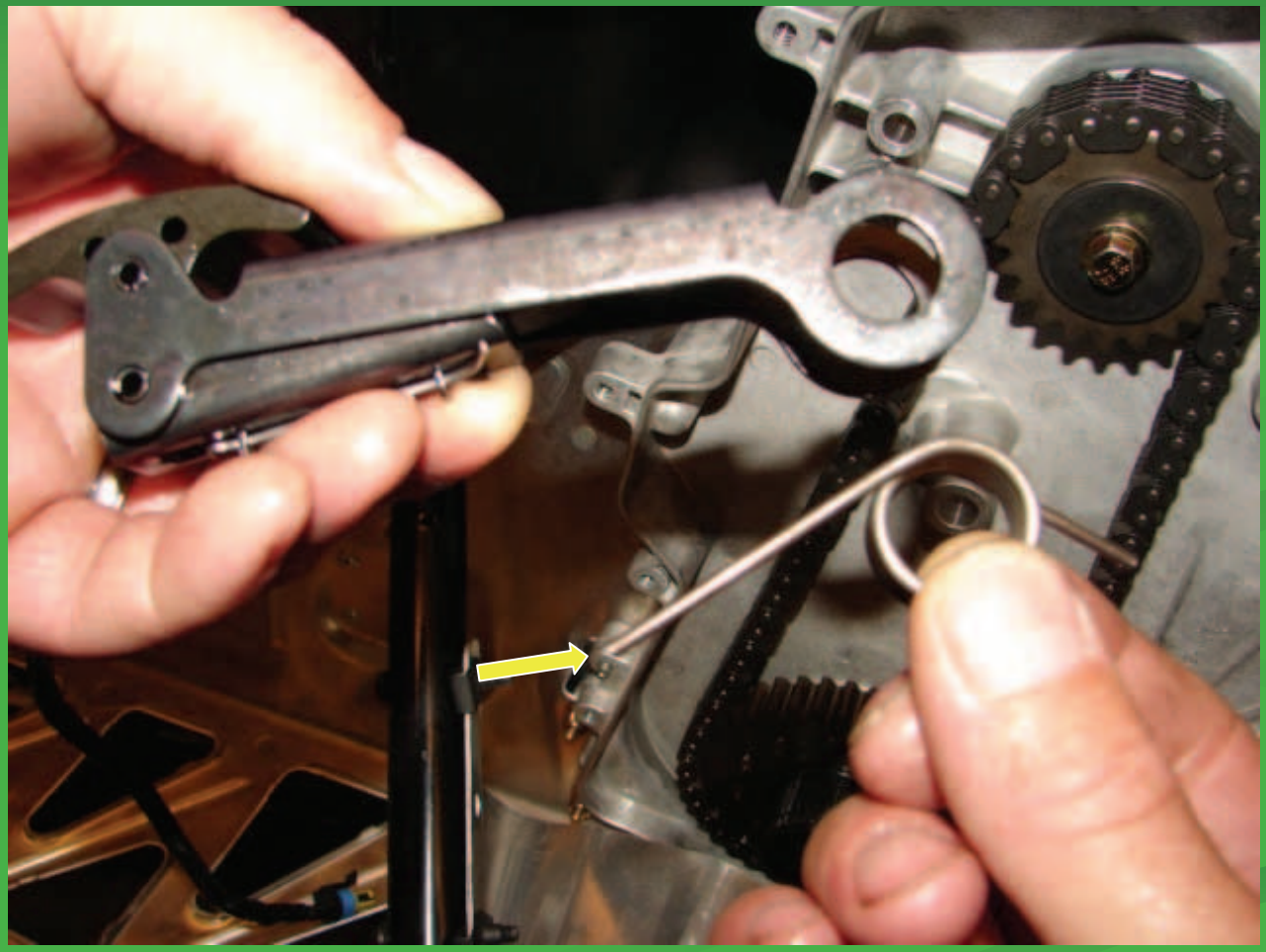


Installing Chain & Sprockets / Tensioner Assembly

Install the top/bottom sprocket and chain together on to the shafts. Then install the snap ring on the drive shaft, and the bolt/washer into jack shaft to secure drive sprocket.

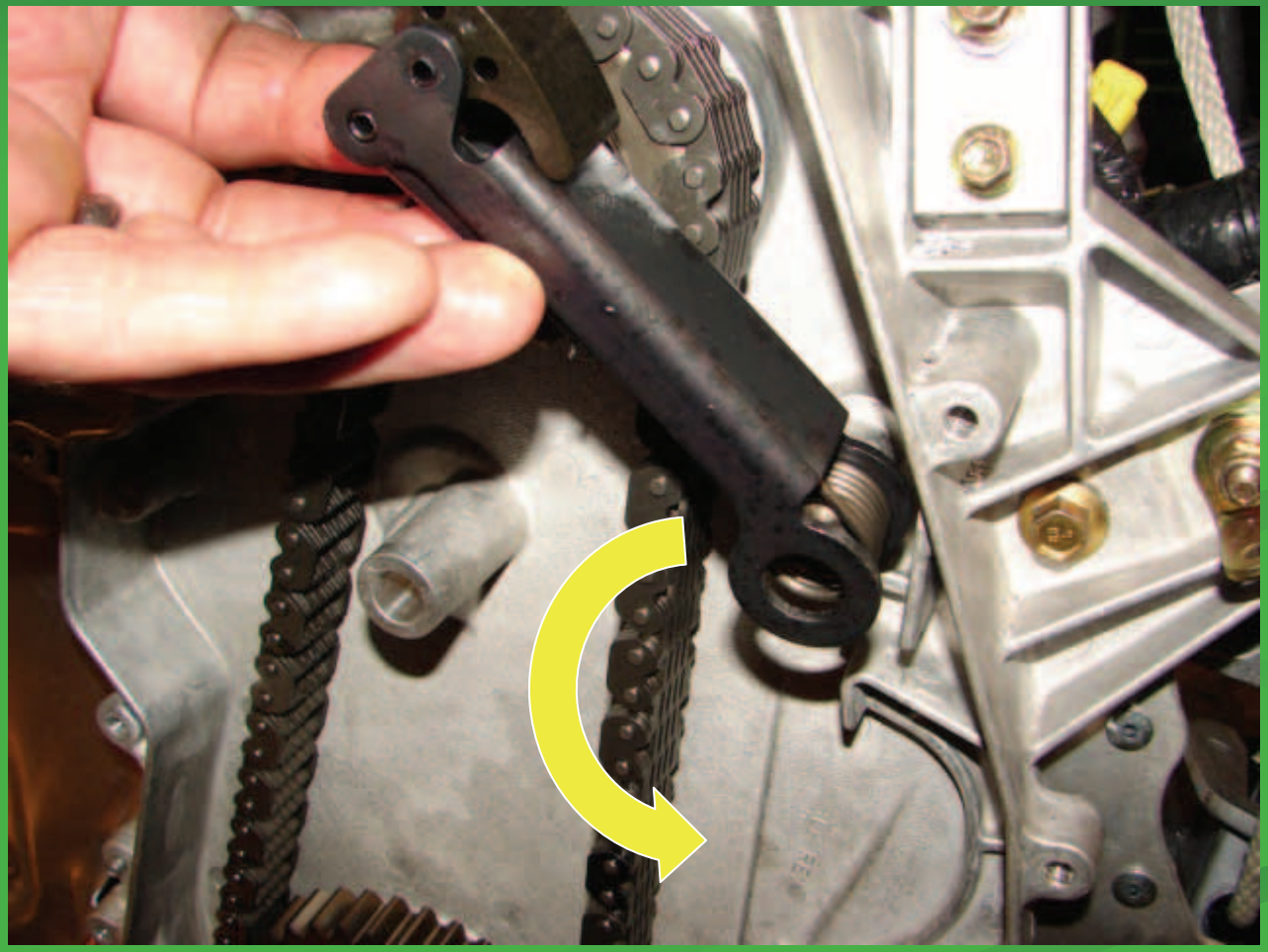


Take note that the long arm of the spring will go along the inside of the tensioner arm.

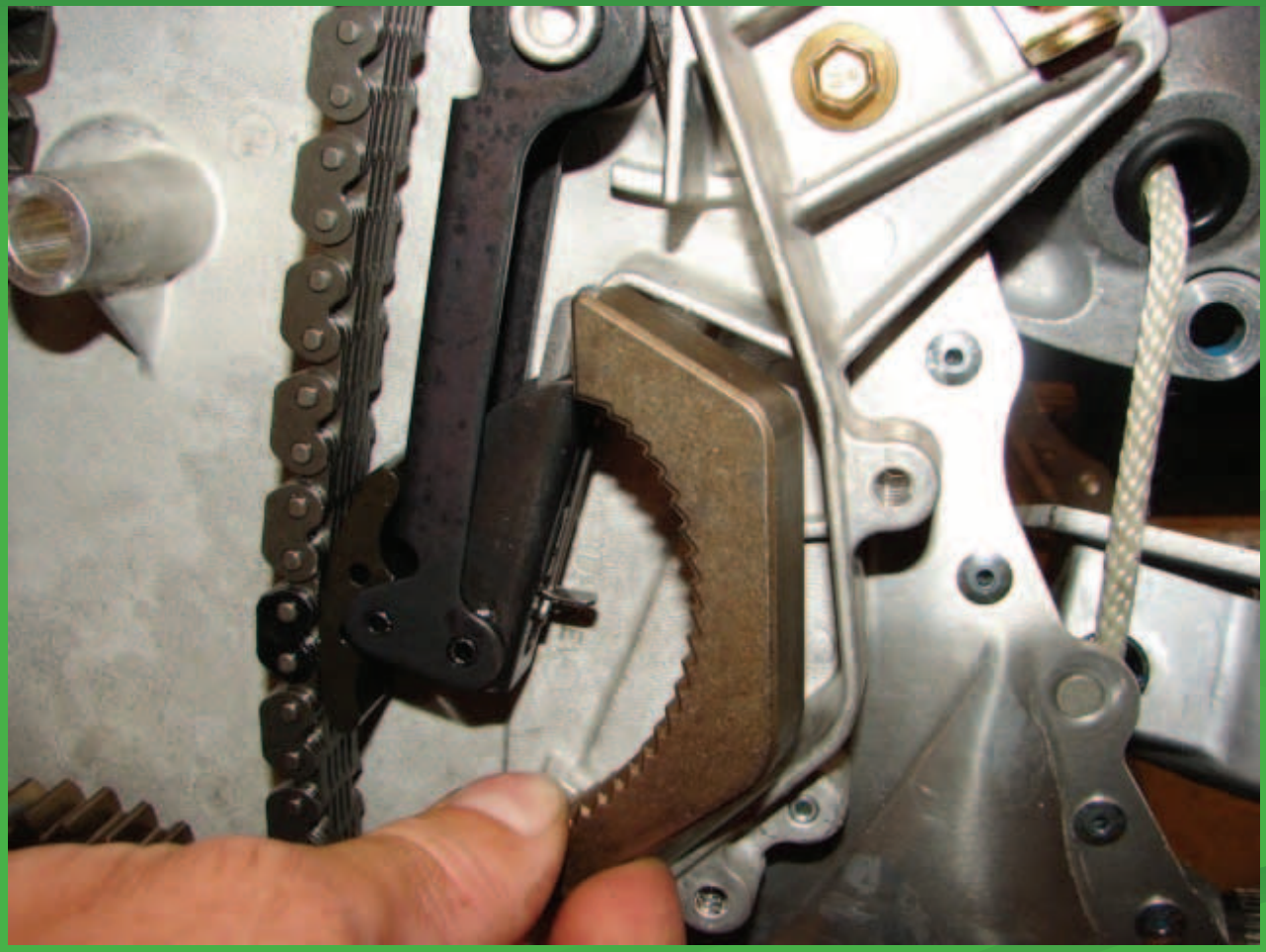


Reinstall the tensioner arm and spring.

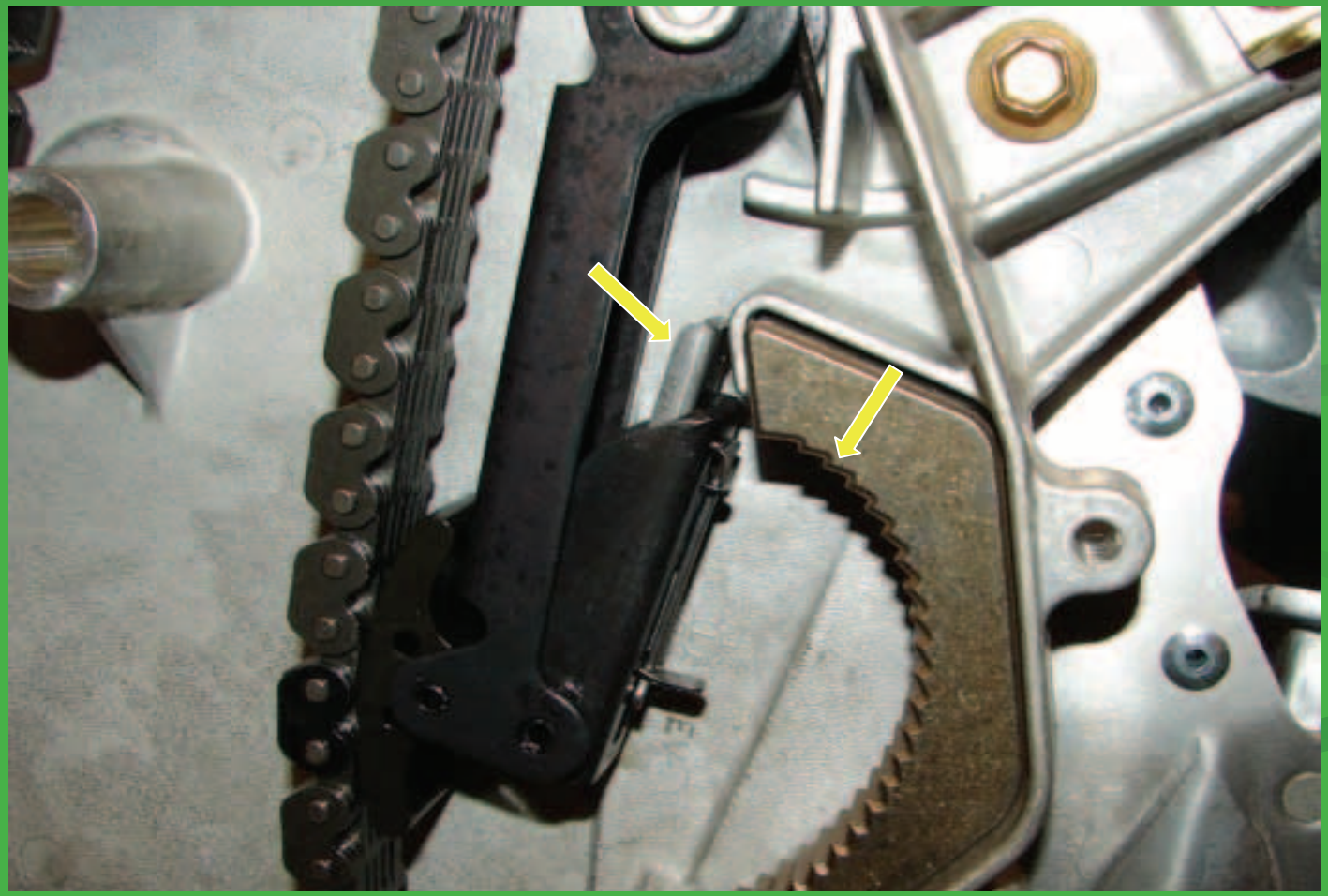
Once the spring arms are in place, rotate the arm down until it is in position.



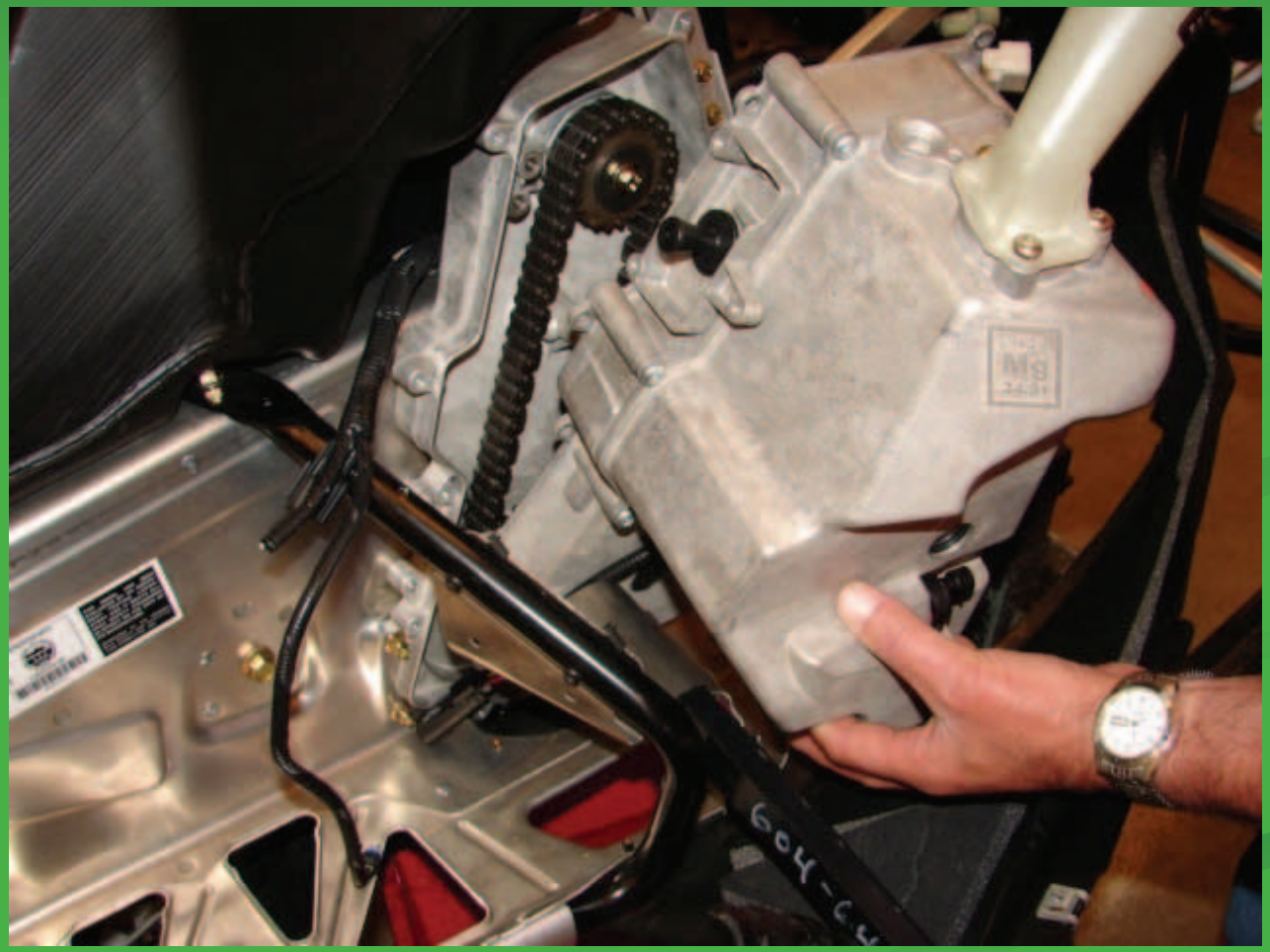
Place the cam into its position.



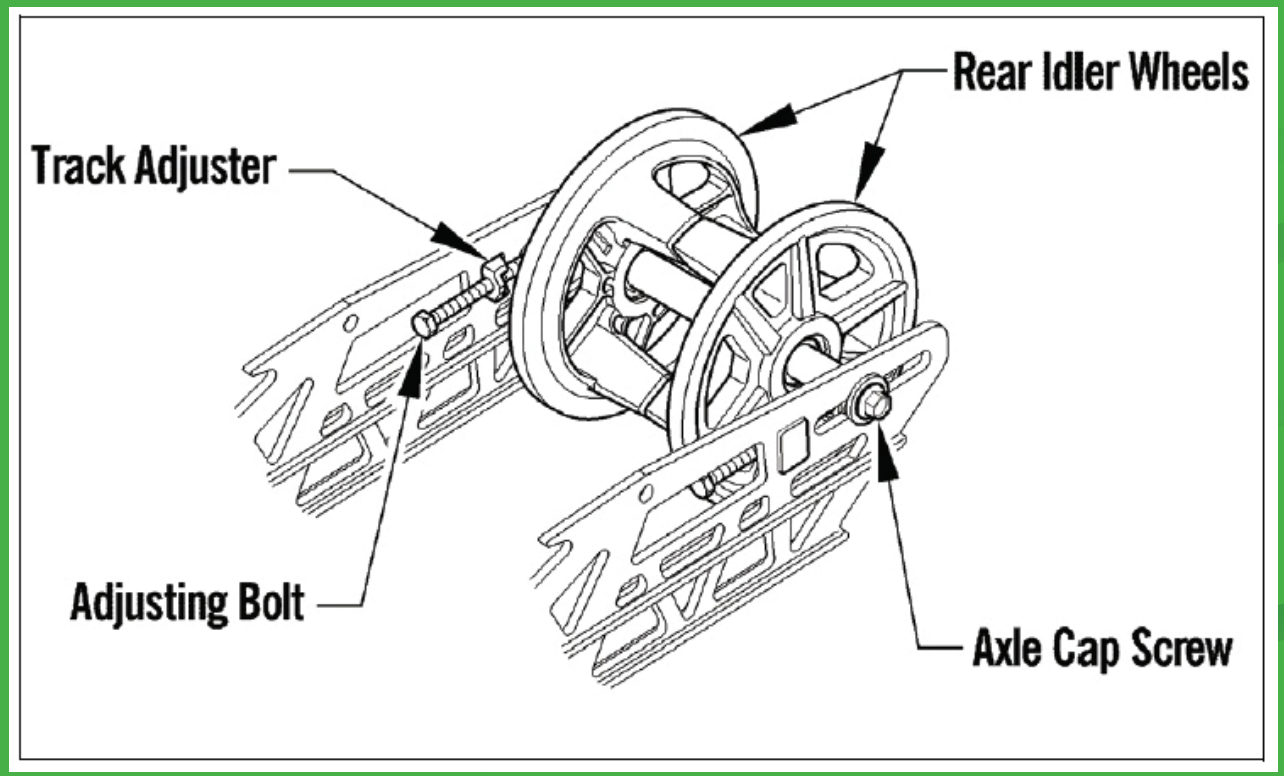
Push the tensioning mechanism in and rotate the arm to the 2nd or 3rd position.
The tensioner will automatically tension when driven.



Reinstall the drop case cover. Then add synthetic chain lube to half way up the sight glass. Install the belly pans, side panels and hood.



The final step to track installation is tensioning the track and setting the track alignment.
The adjuster bolts will be used to set the tension and alignment.
Torque the axle cap screws to 34 ft/lbs.
Then torque the adjusting bolts to 6 ft/lbs.

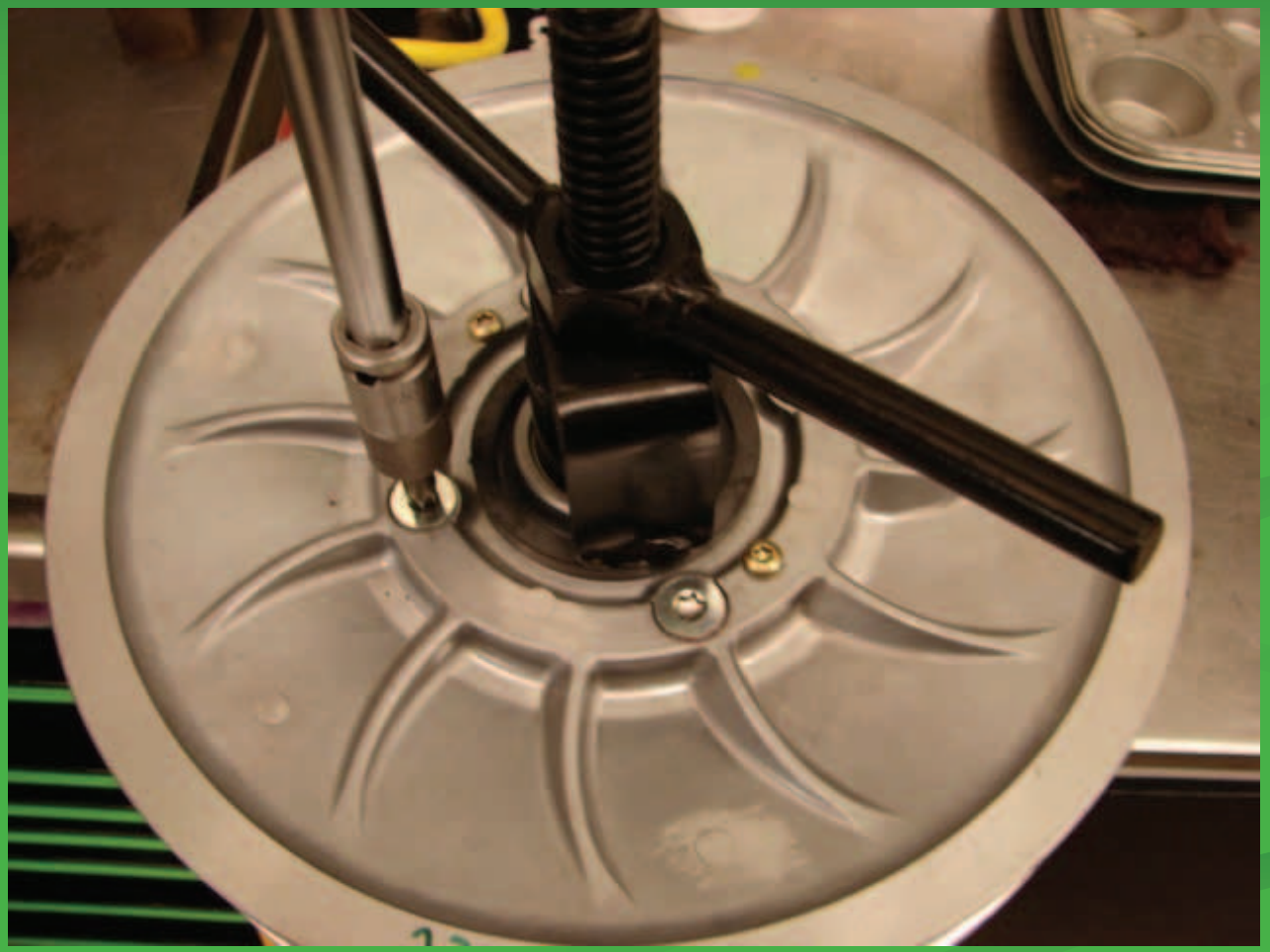


Disassembling Team Driven Pulley

You will need a clutch compressing tool.
Tool (p/n 0644-444)

Mark the parts of the driven pulley to keep the balance correct for reassemble.

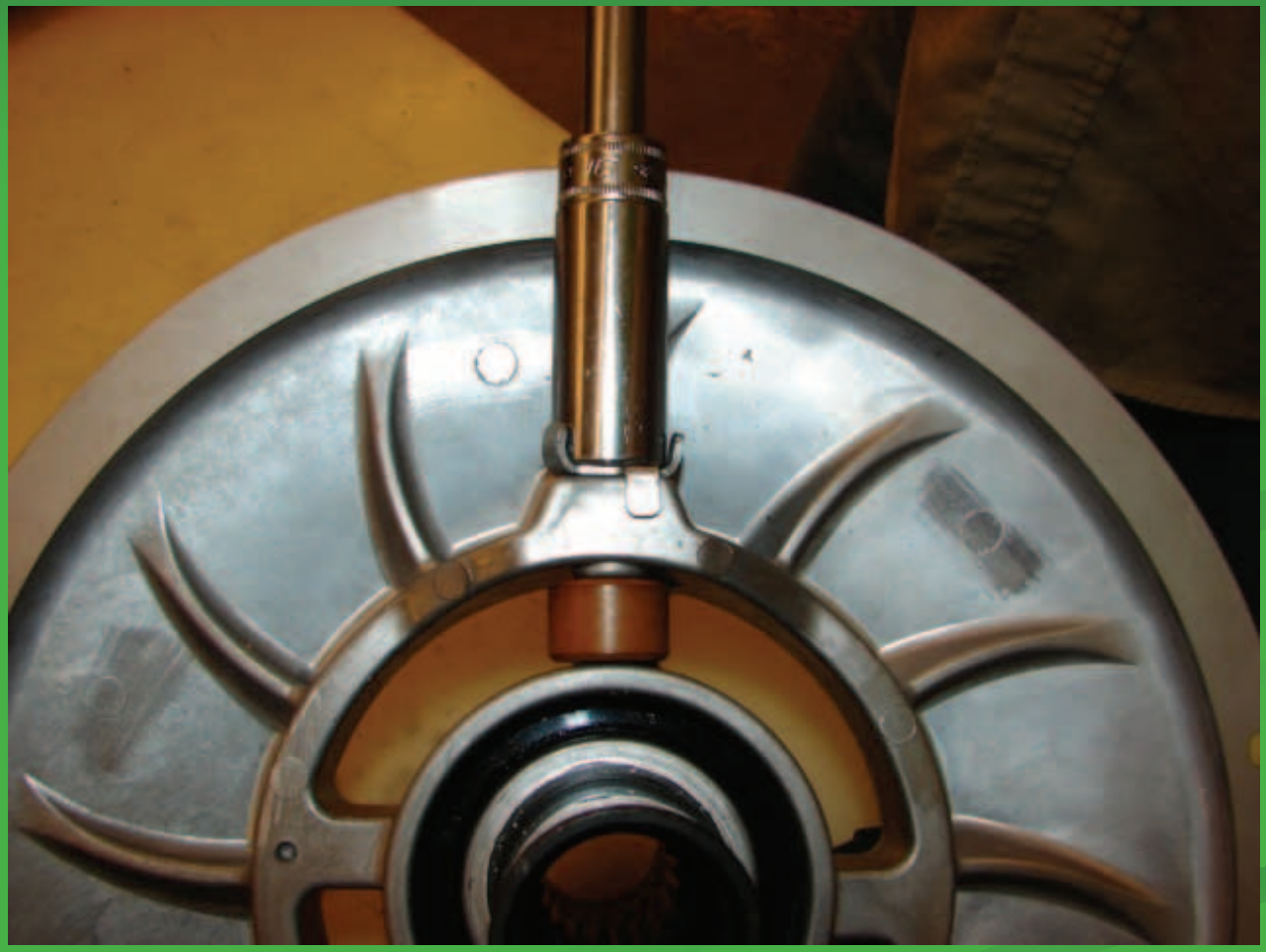
Compress the driven pulley and remove the 4 large machine screws.



Release the compressor and lift the movable sheave from the stationary post.

To remove the rollers use a chisel to unlock the locking tabs of the retainer.

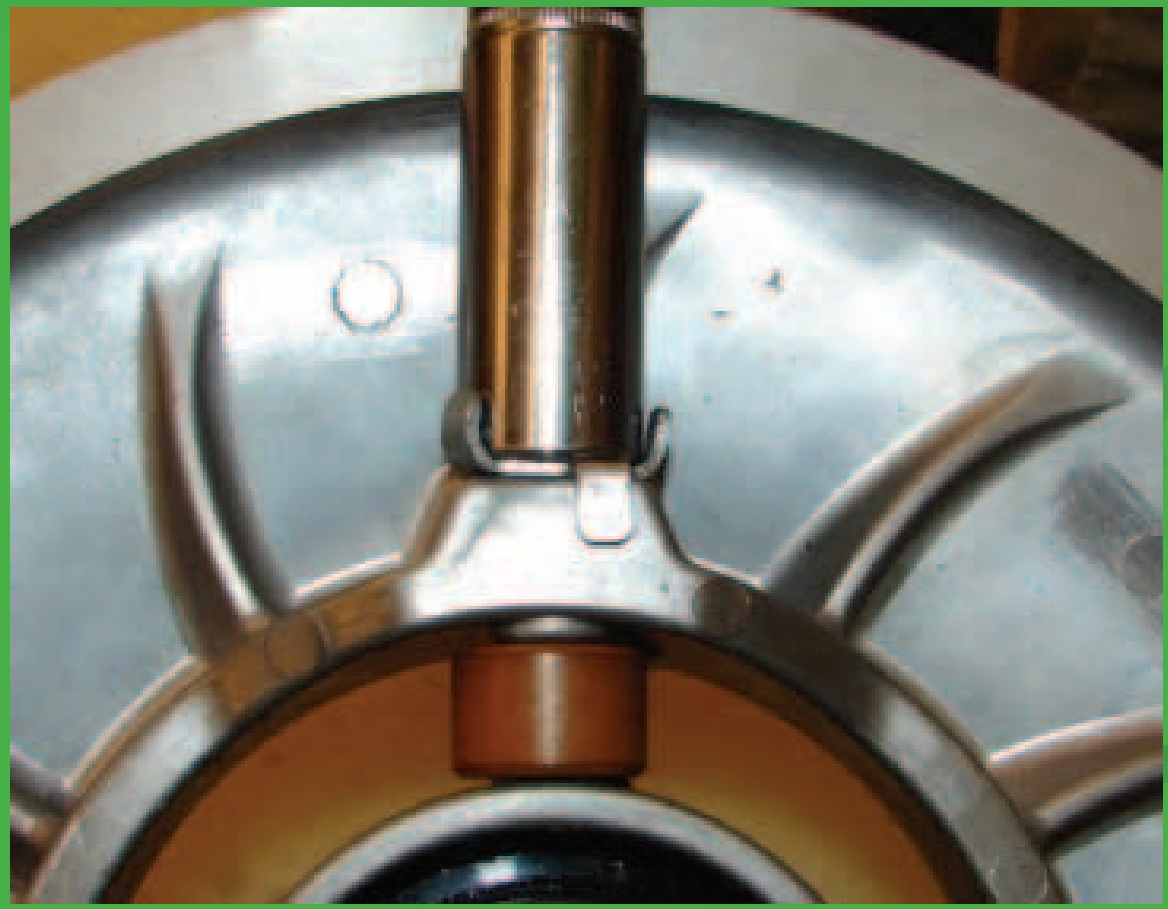
Remove the cap screw that holds the rollers.



The rollers can be changed without disassembly of the driven pulley.

When installing the roller cap screw. Apply Loctite™ 262 RED

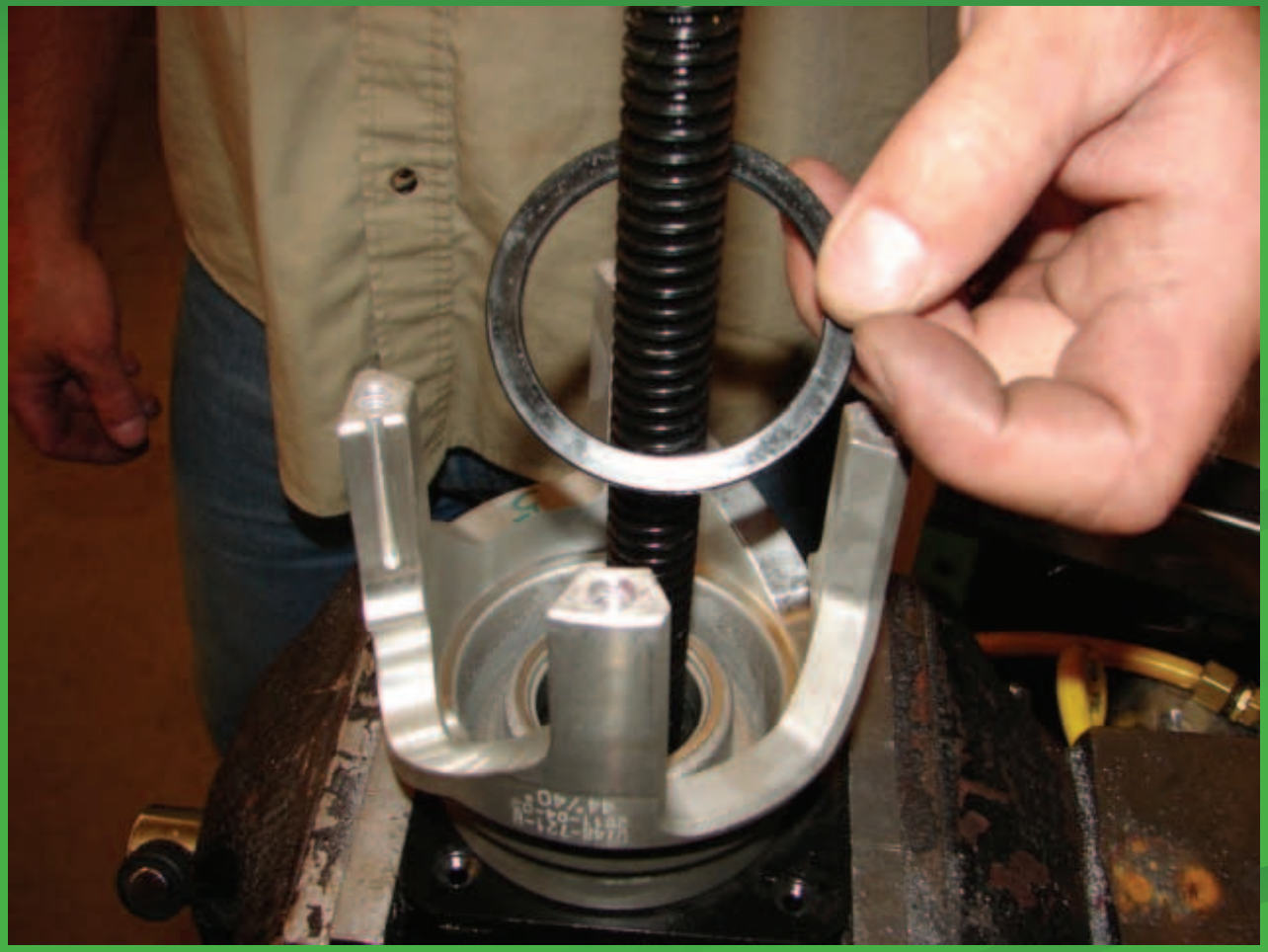
Bring the cap screw in tight to the tabbed locking washer, then turn the cap screw clockwise until the flats of the retaining washer and cap screw align. Bend the locking tabs up on the retaining washer to secure the screw.



The back side cams are for dampening the reverse action of the pulley. If your belt tension is to much, they will not engage.

Ensure the back side cam engages the groove in the helix when installing.

Place the plastic washer into the helix. The washer is part of the calibration.



Place the spring in after the plastic washer.

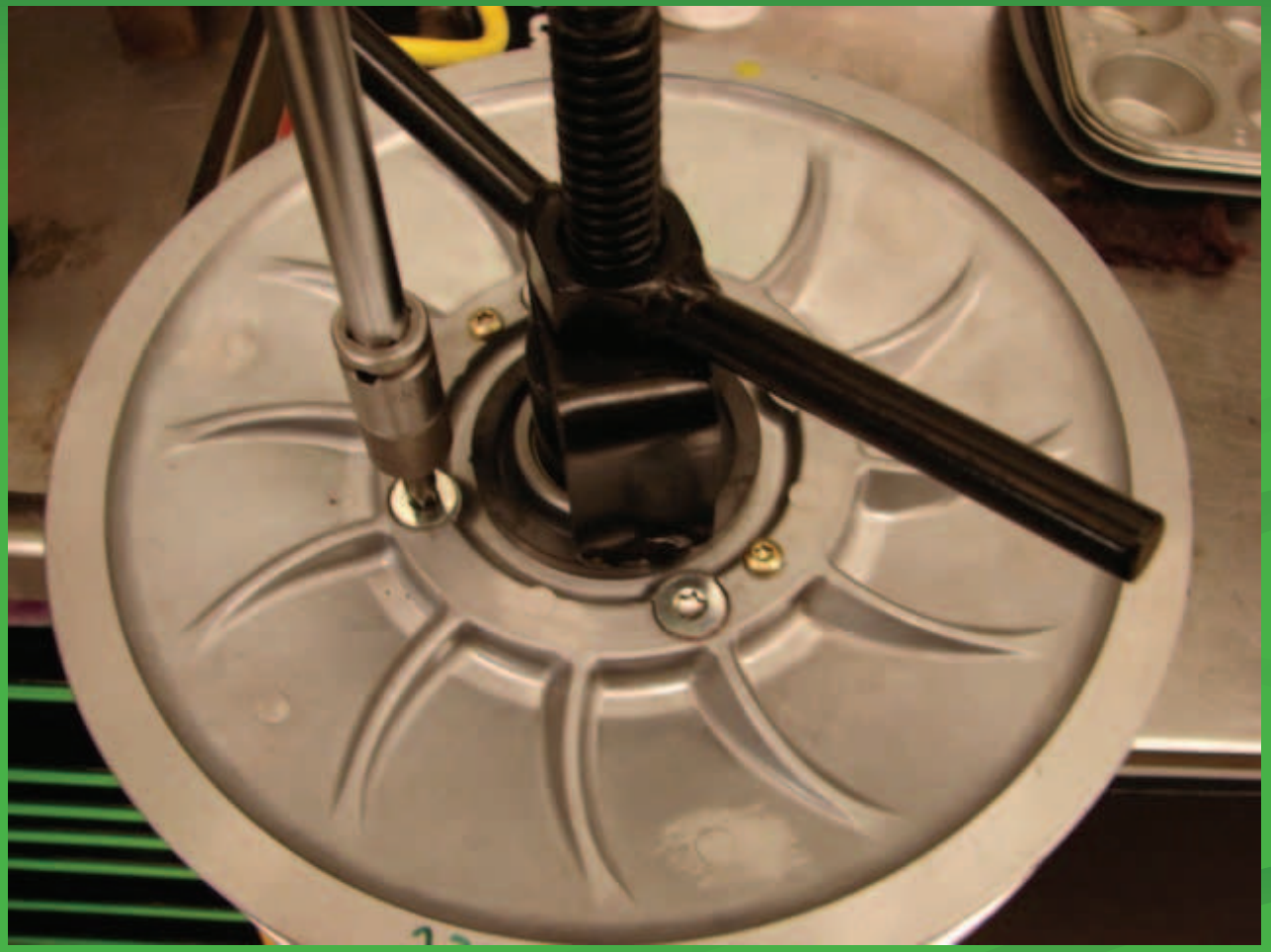
Set the stationary sheave into place making sure to align the timing marks.

Compress the driven pulley sheaves together.

The rollers should come down into the ramp area and not bind.

When installing the large machine screws apply Loctite™ 262 RED

Torque the large machine screws to 20 ft/lbs. Remove the driven pulley from the compressor.



ProClimb Seat Removal

- Remove fastener
- Release locking tab
- Lift the rear of the seat and pull it back from the tank

ProClimb Seat Installation

- Align front tab with the bracket
- Make sure seat locks in place
- Reinstall fastener

ProCross Seat Removal

- Release Velcro strap
- Push forward to release the clip
- Pull back to remove the bag

ProCross Seat Removal

- Remove fastener
- Release metal clip holding the seat in place

Important Info

- For seat removal on LXR 1100 Models disconnect, heated seat harness.

ProCross Seat Installation

- Align plastic tab at the front of the seat with bracket.

Important Info

- On LXR 1100 Models re-connect, the heated seat harness.

Procross Seat Installation

- Make sure the metal clip seats into place
- Install and tighten fastener to secure the seat

Procross Seat Installation

- Push rear bag into place
- Snap clip over the hub on the tunnel
- Tighten Velcro strap

Hood / Side Panel Removal and Installation

Side Panel Removal

- Remove cotter key from left and right side panels
- Lift up and pull out on the front side of the side panels to release them
- Swing the side panels out to remove from sled

Side Panel Installation

- Align top and bottom tabs at the rear of the side panel into the fuel tank cover.
- Swing side panel forward, and twist to insert bottom tab into the belly pan

Side Panel Installation

- Push top of the side panel in allowing for the pin to come through the hole
- Secure with the cotter key

Hood Removal

- With the side panels removed.
- On the left and right side remove the front and rear fasteners
- On Turbo models there are 2 more fasteners located under the front nose of the hood.

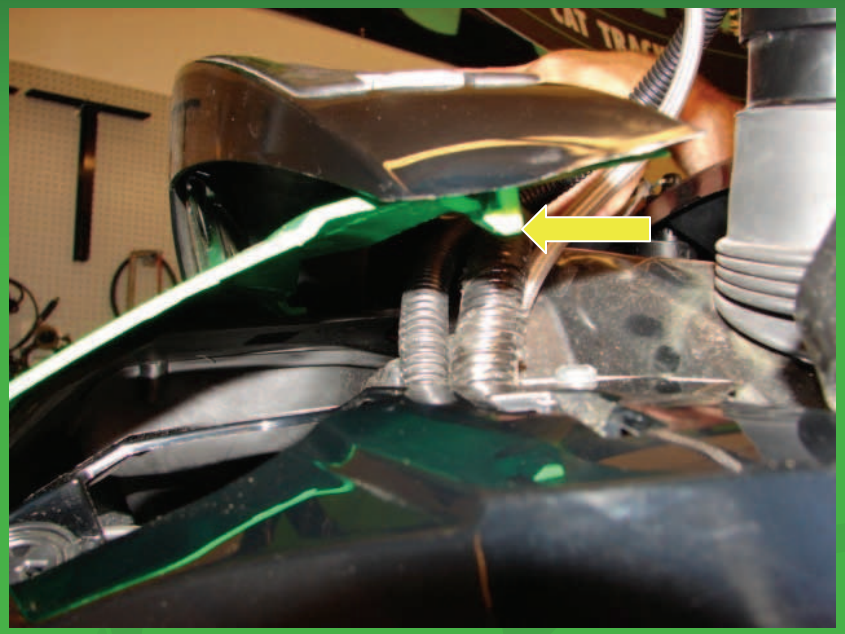
Hood Removal

- Separate hood harness from main harness.

Hood Removal

- Grab hood accordingly and pull forward on the hood, this releasing it from the air intake boot and two rear mounting tabs.
- Lift entire hood straight up to avoid contact with the bumper

Hood Installation



- Making sure console harness is routed up
- Carefully place hood into position
- Take note of the tabs at the rear of the hood that will need to slide into place

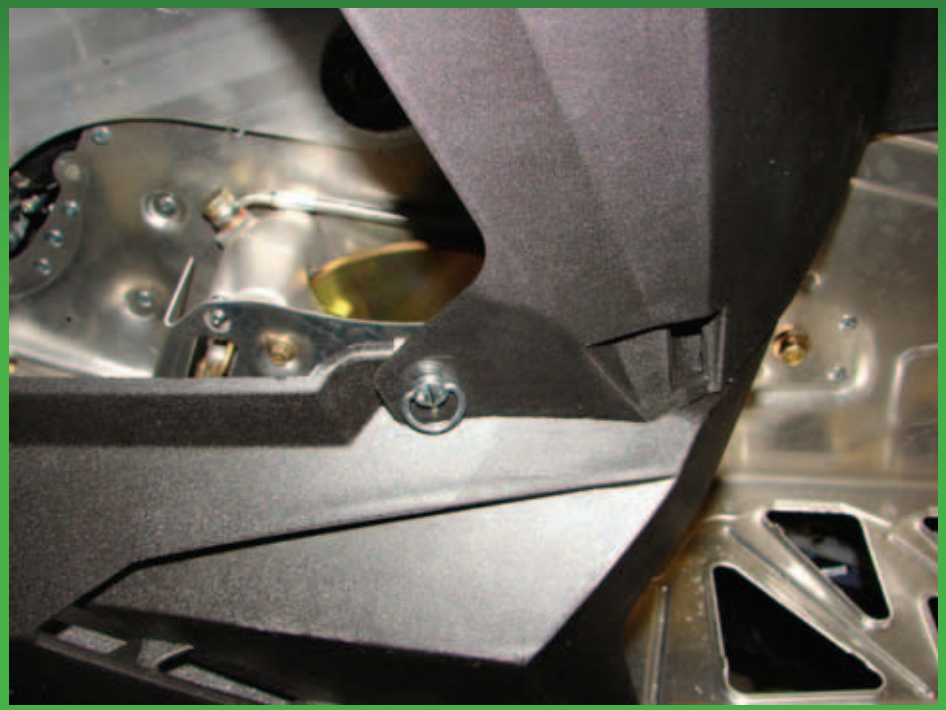
Hood Installation

- Check to make sure air intake boot is seated on the throttle body
- Align air box with air intake boot and push rearward making sure the rear tabs slide into their receptacles

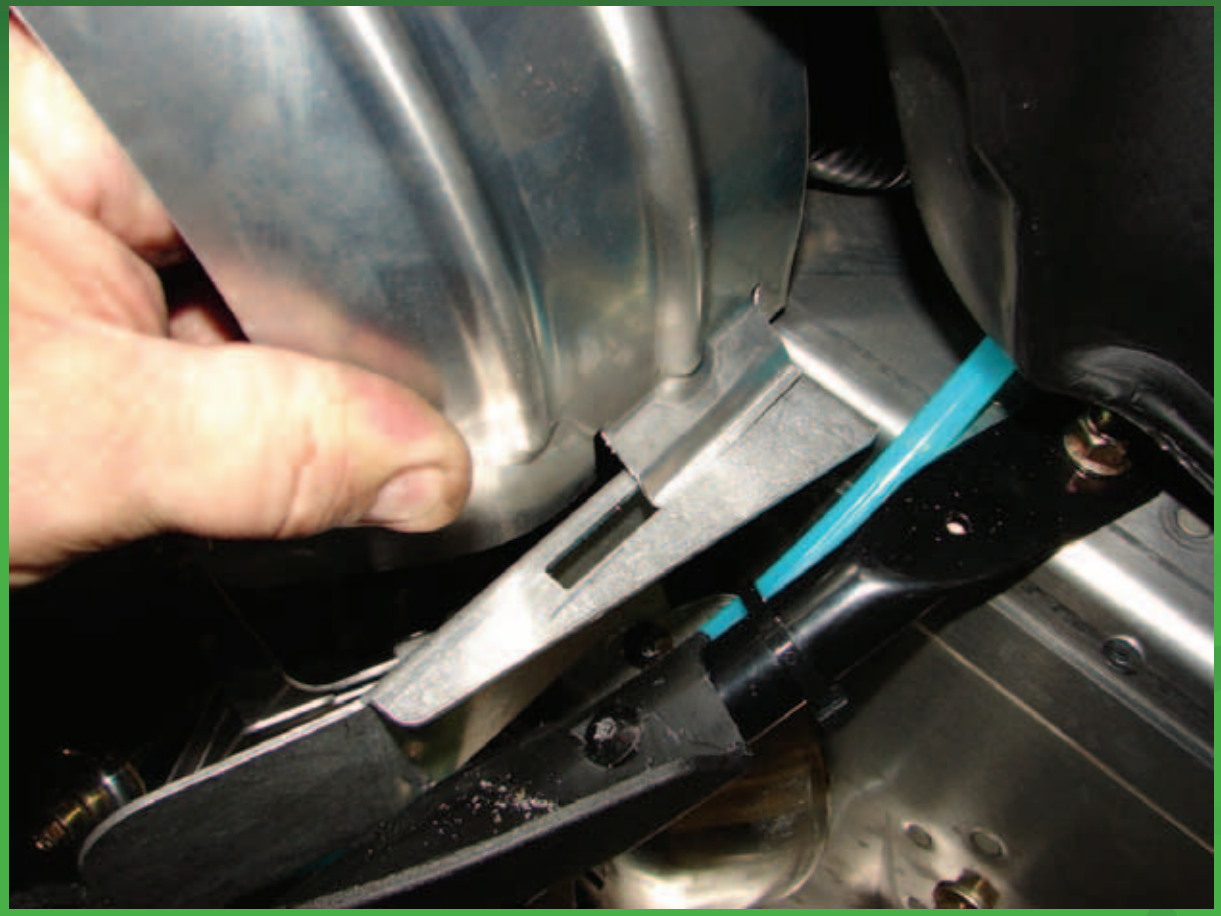
Hood Installation

- Install the front and rear fasteners on both sides
- On Turbo models reinstall the 2 fasteners located under the front nose of the hood
- Connect the console harness to the main harness

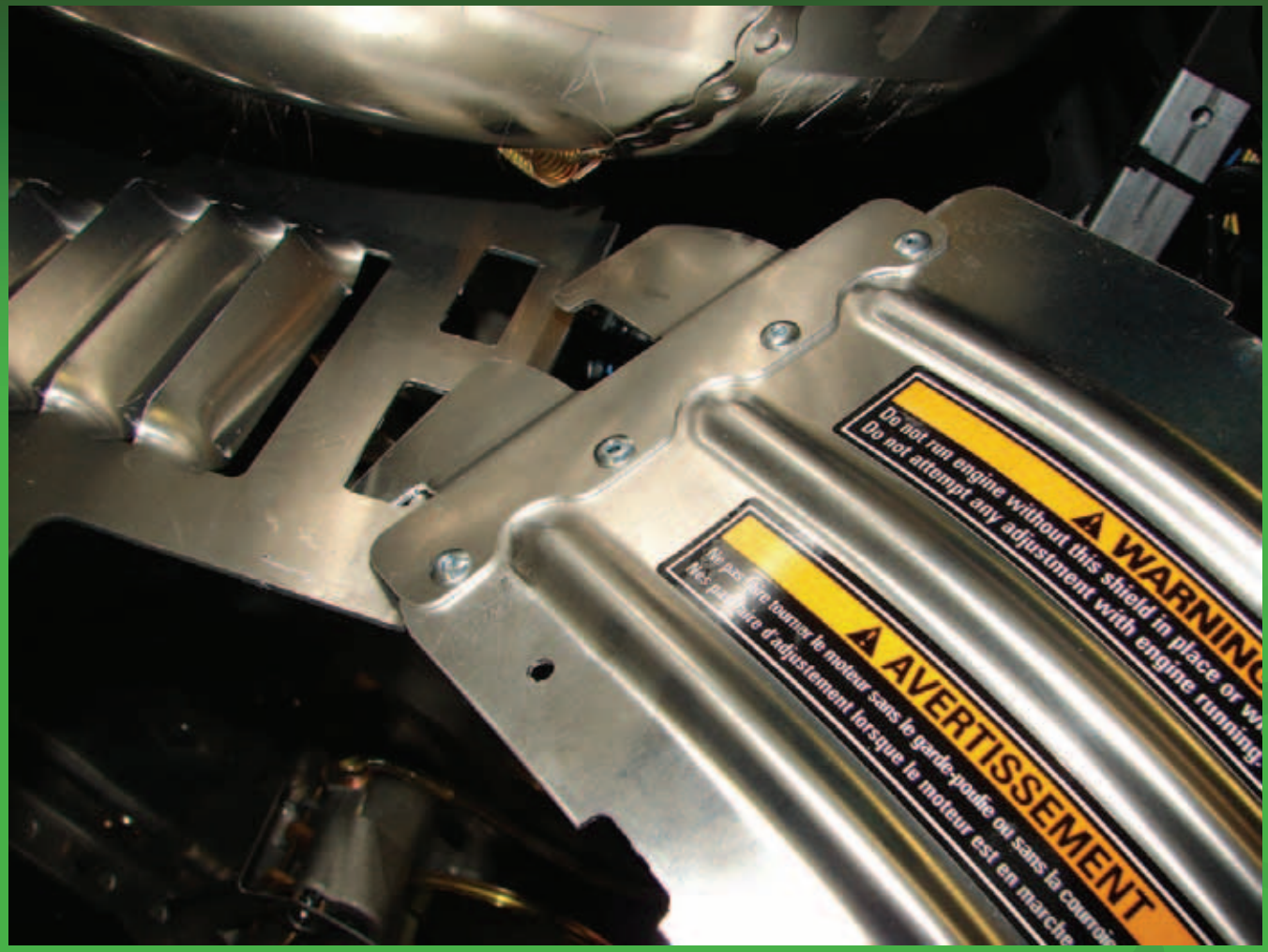
Belt guard removal



- After removing the side panel, disengage the fastener.
- Hold open the fuel tank cover.



Remove the rear locking tab



Rotate the belt guard toward you so the inside comes out of its receiving hole prior to the outside.

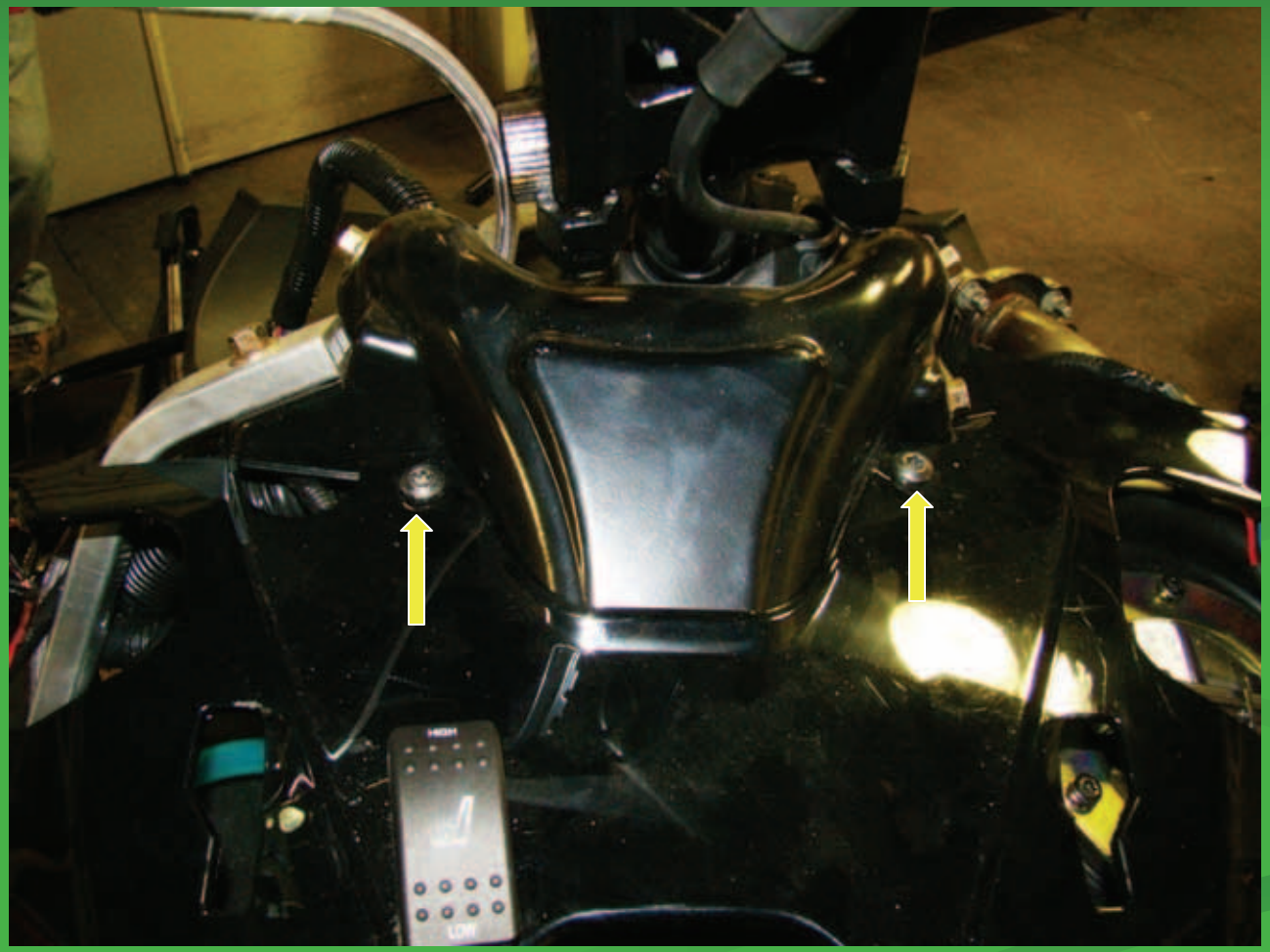
1100 N/A Engine Removal and Installation Tips

Remove the hood and side panels.

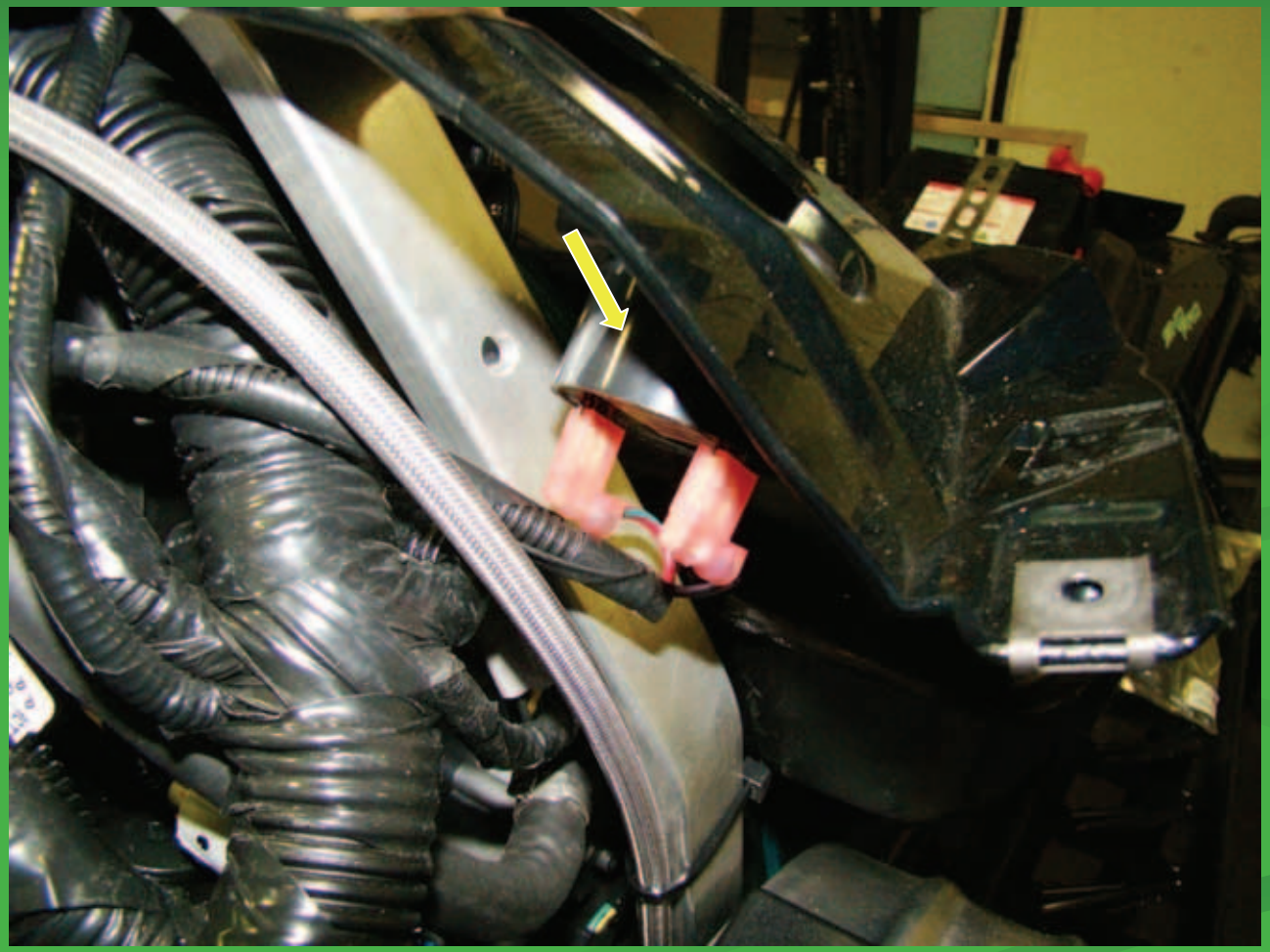
Remove the seat.

Lift the back of the seat on LXR 1100s and disconnect the heated seat

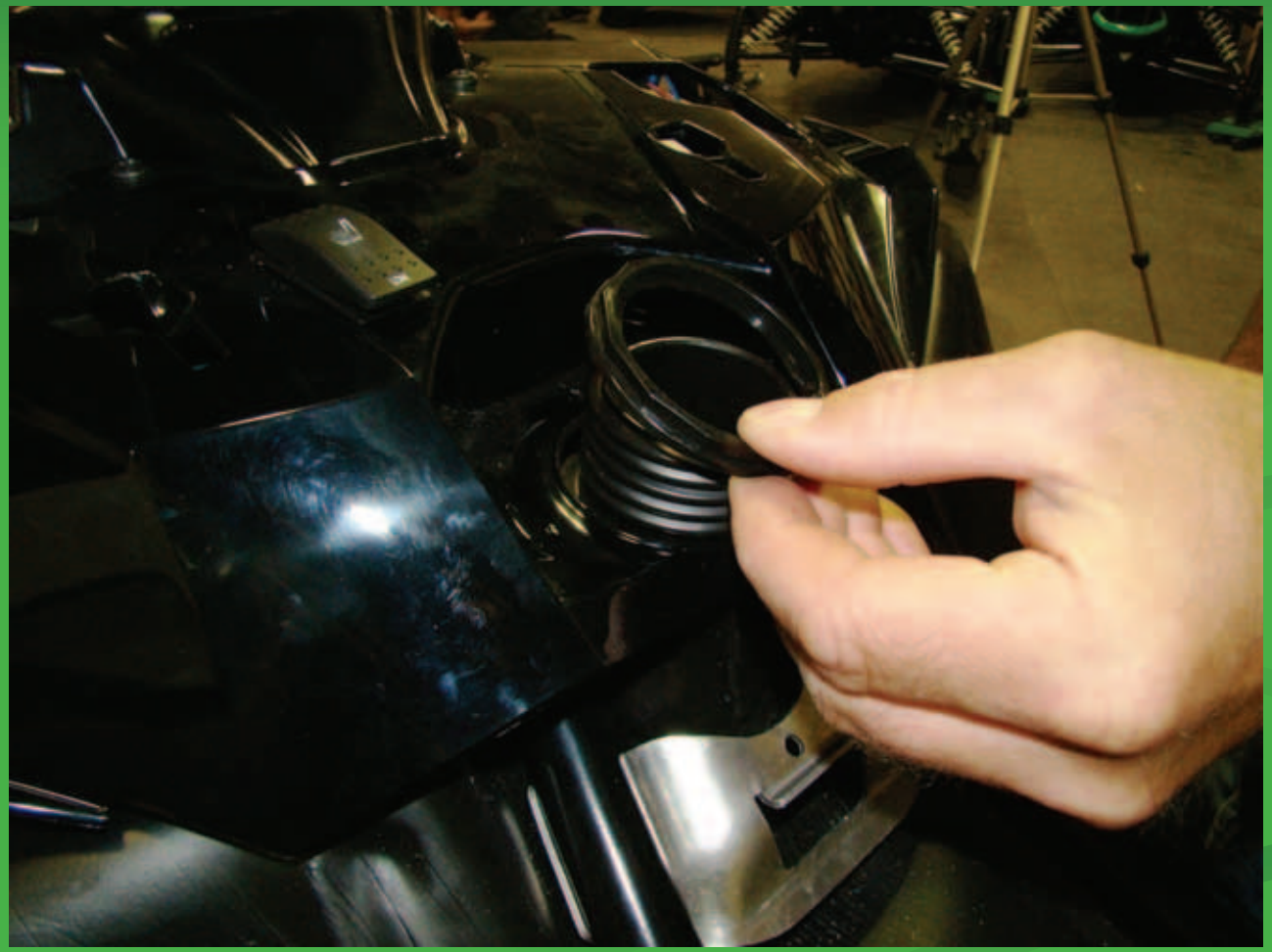
Remove 2 shoulder torx on the counsel panel.



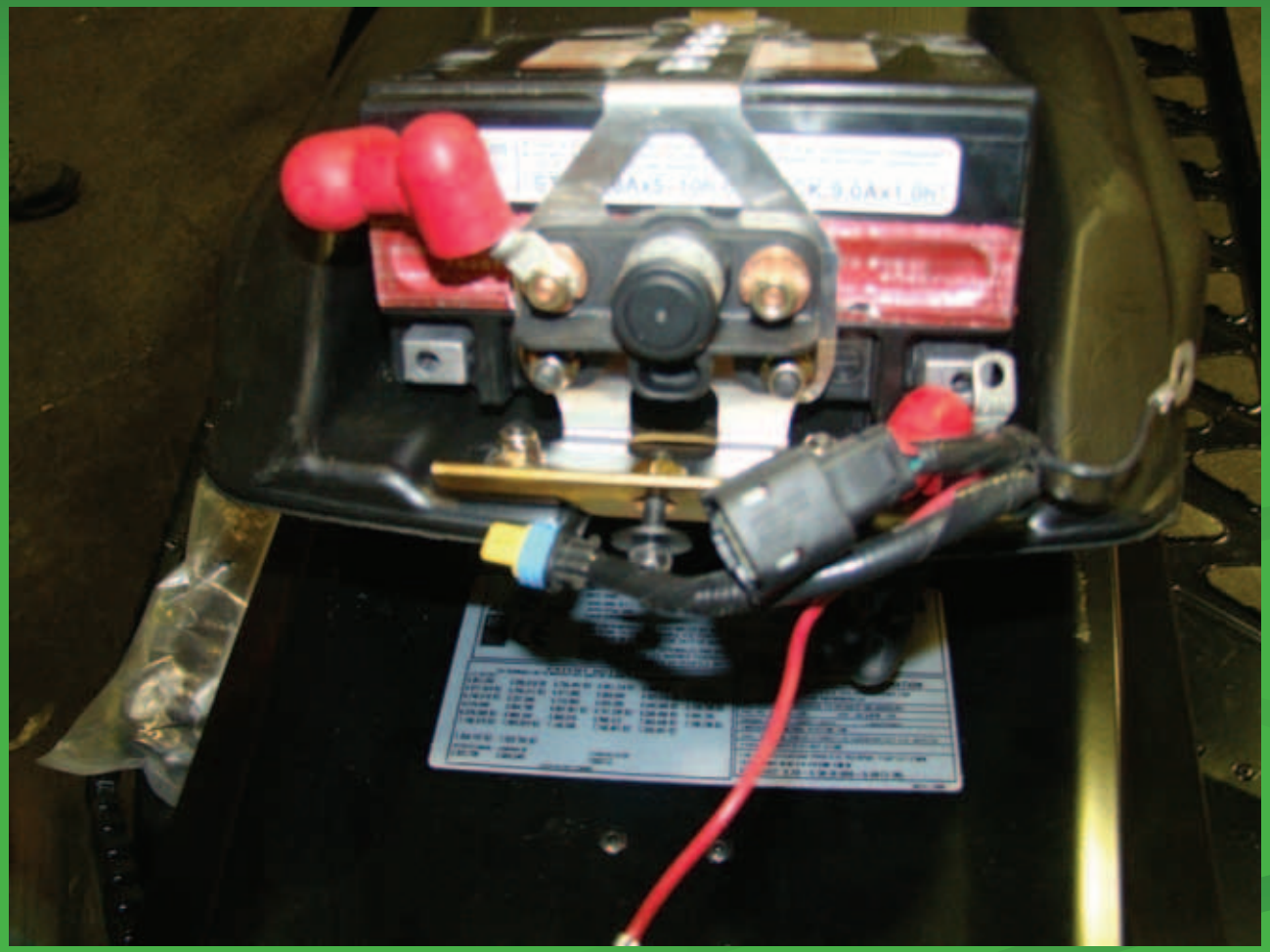
Disconnect the reverse beeper.



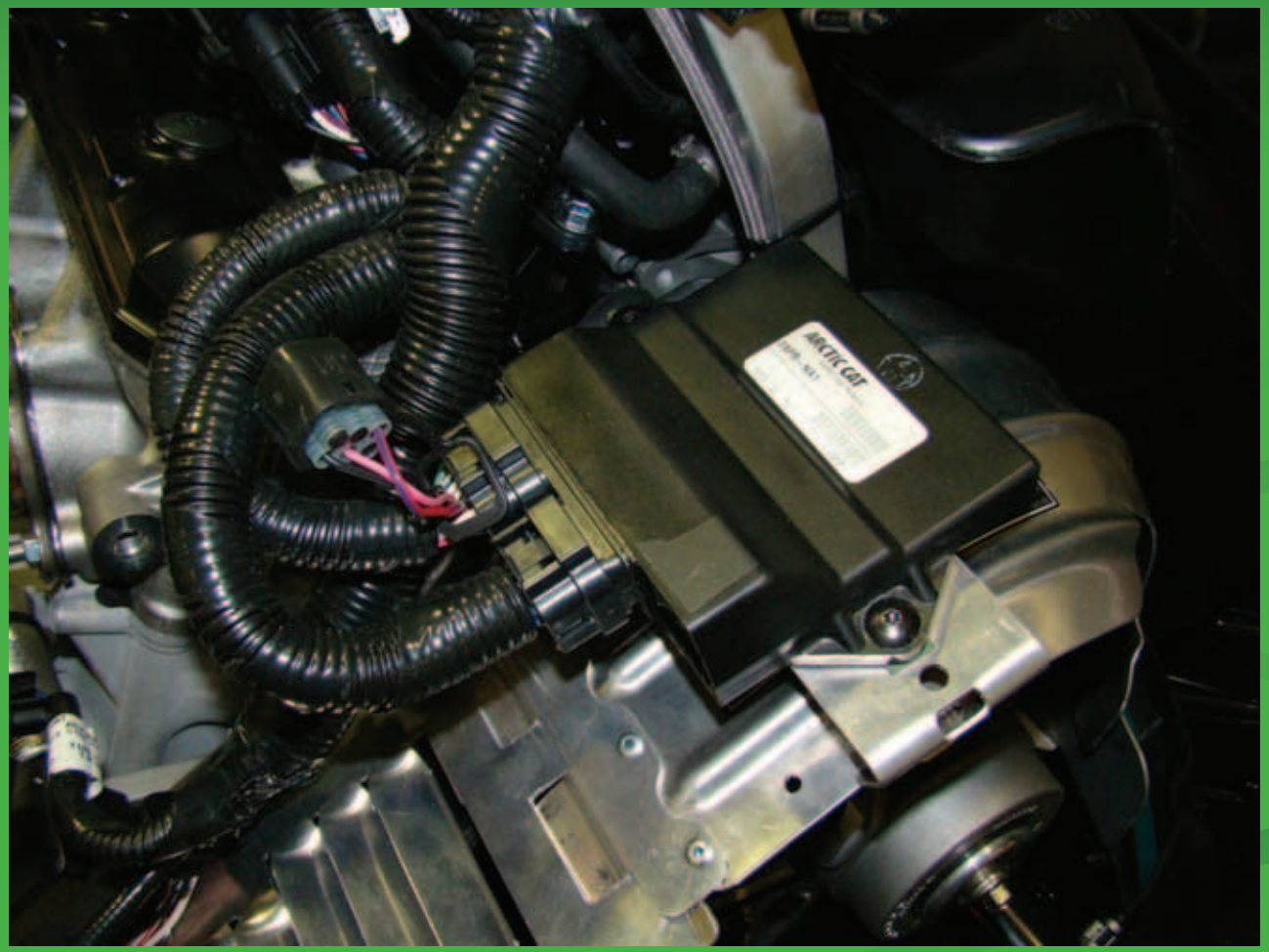
Remove panel retainer nut from fuel tank. Lift up on the panel and disconnect the seat heater switch. Then remove the upper panel.



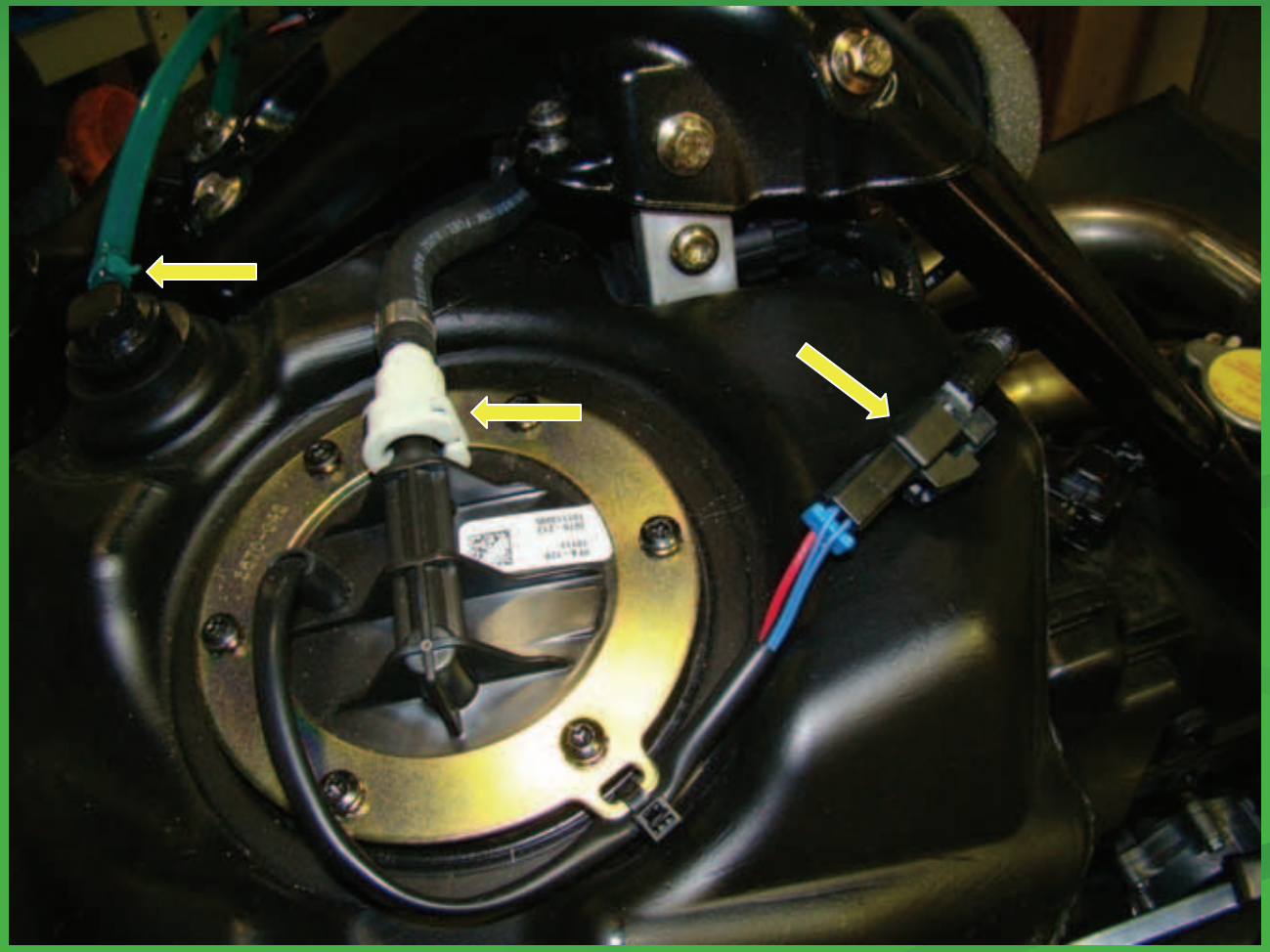
Disconnect main harness from the battery.



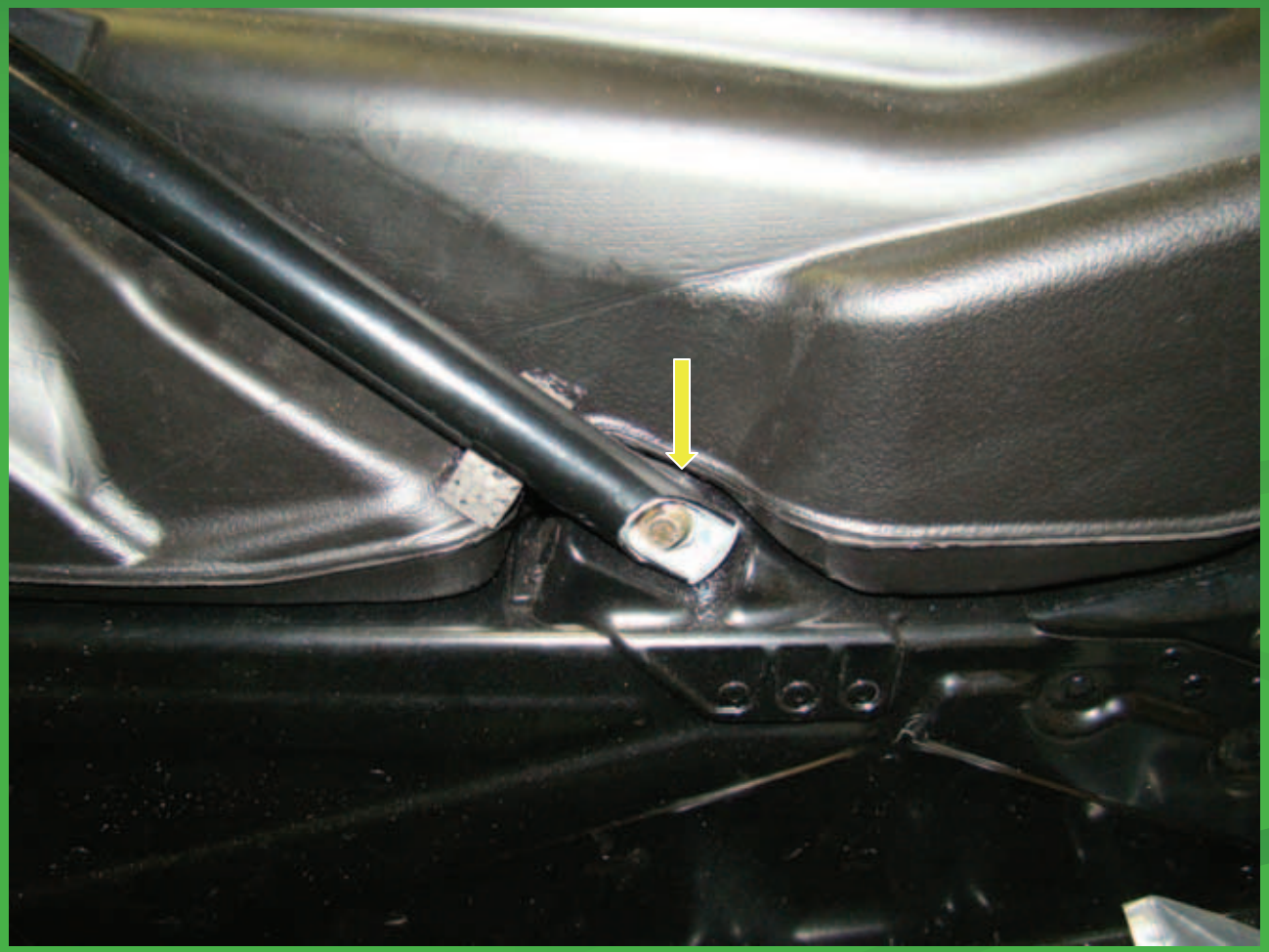
Unplug the ECU and remove from the belt guard.



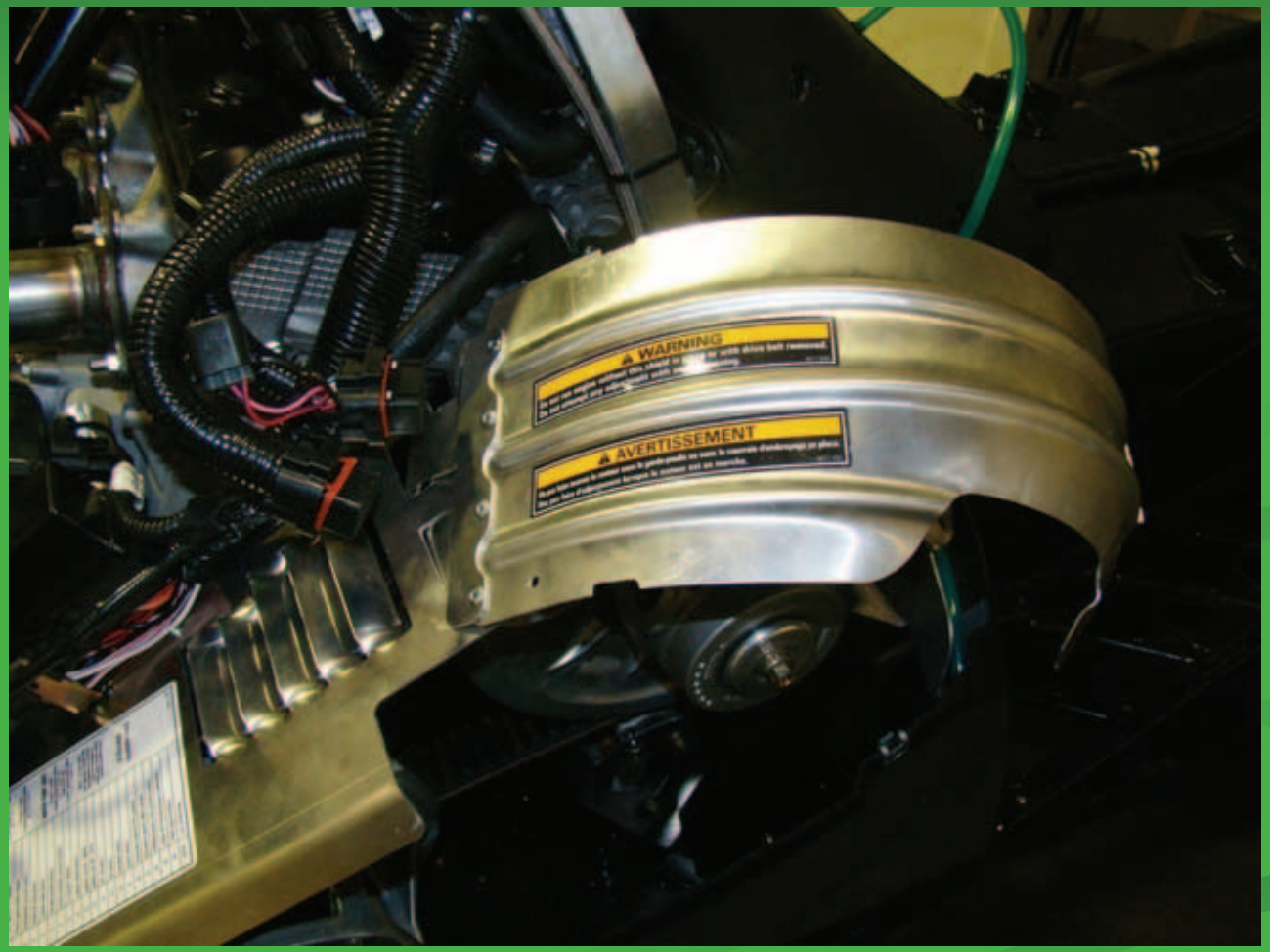
Disconnect: Fuel pump hose, fuel pump electrical connector and vent line.



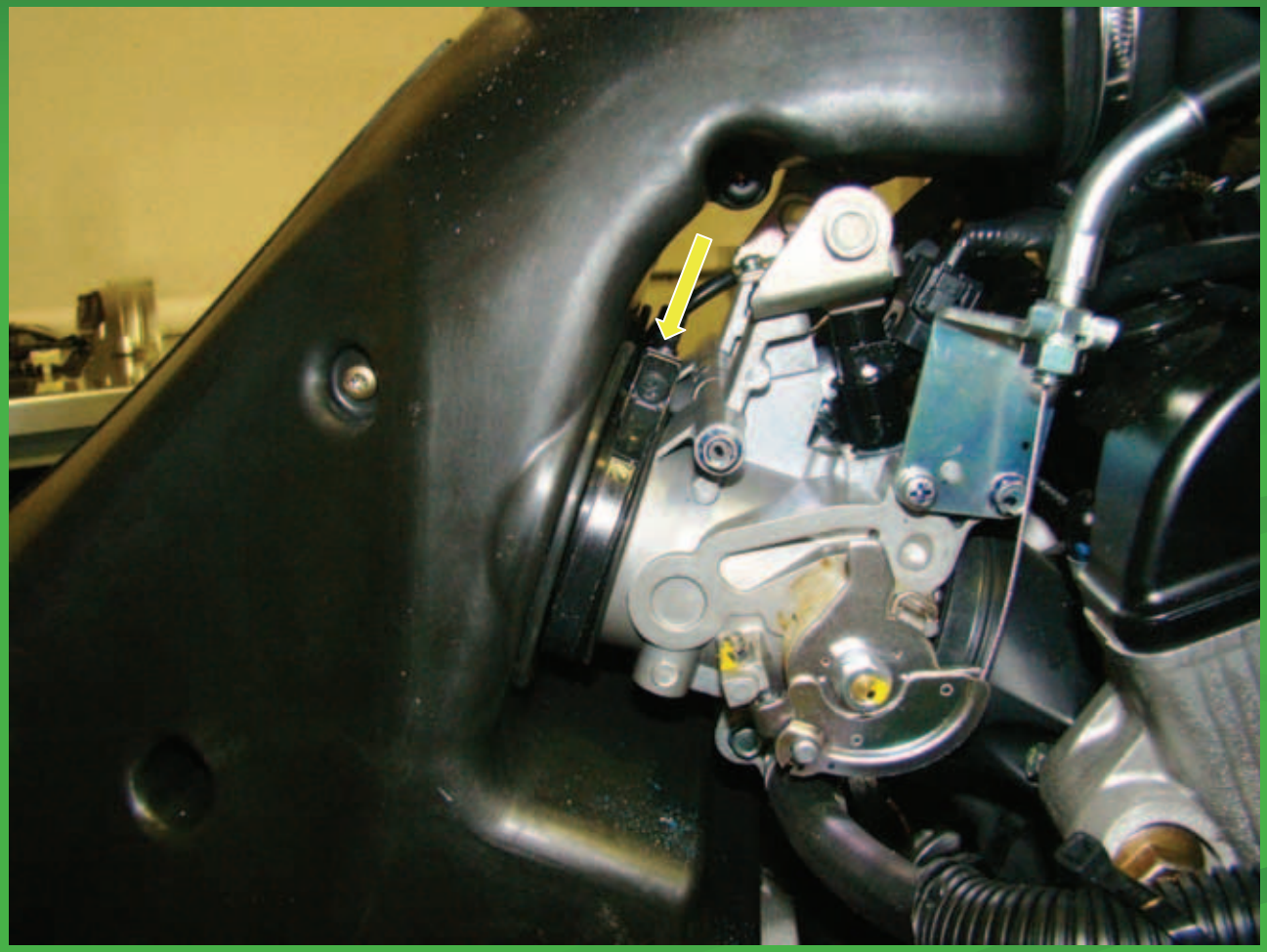
Remove the lower rear spar bolt on both sides fuel tank.



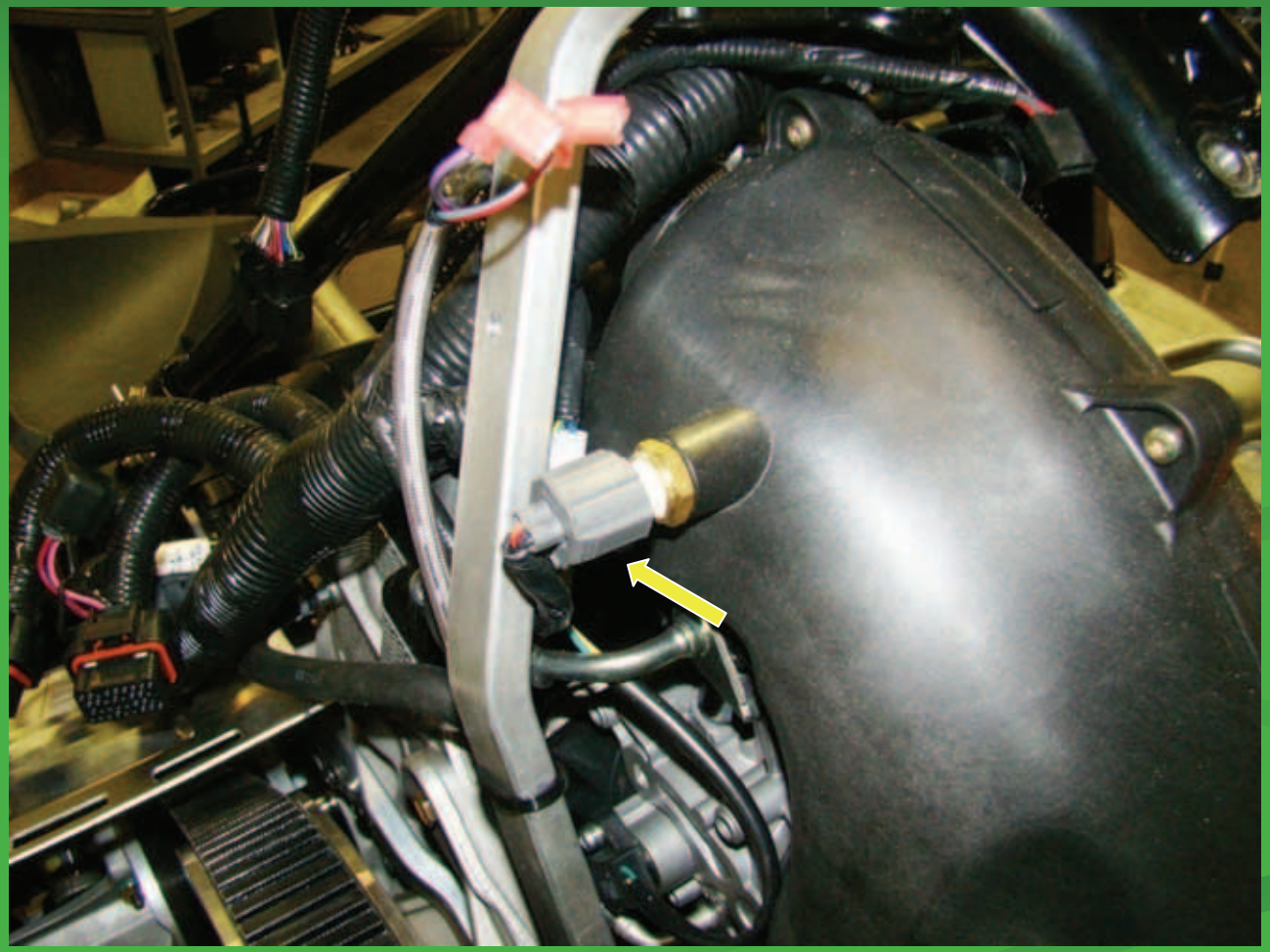
Remove the rear portion of the belt guard.



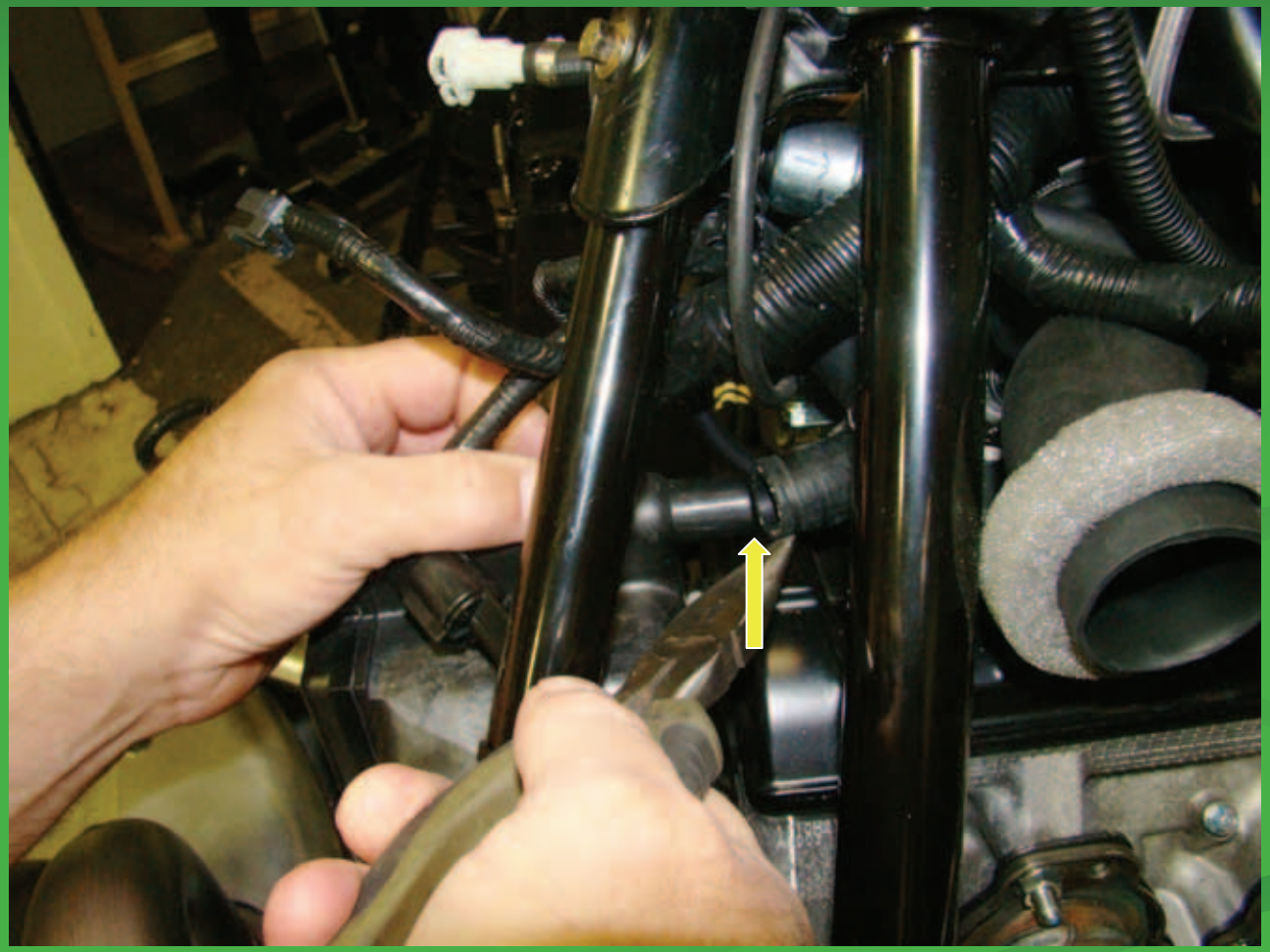
Loosen air box clamps from throttle body



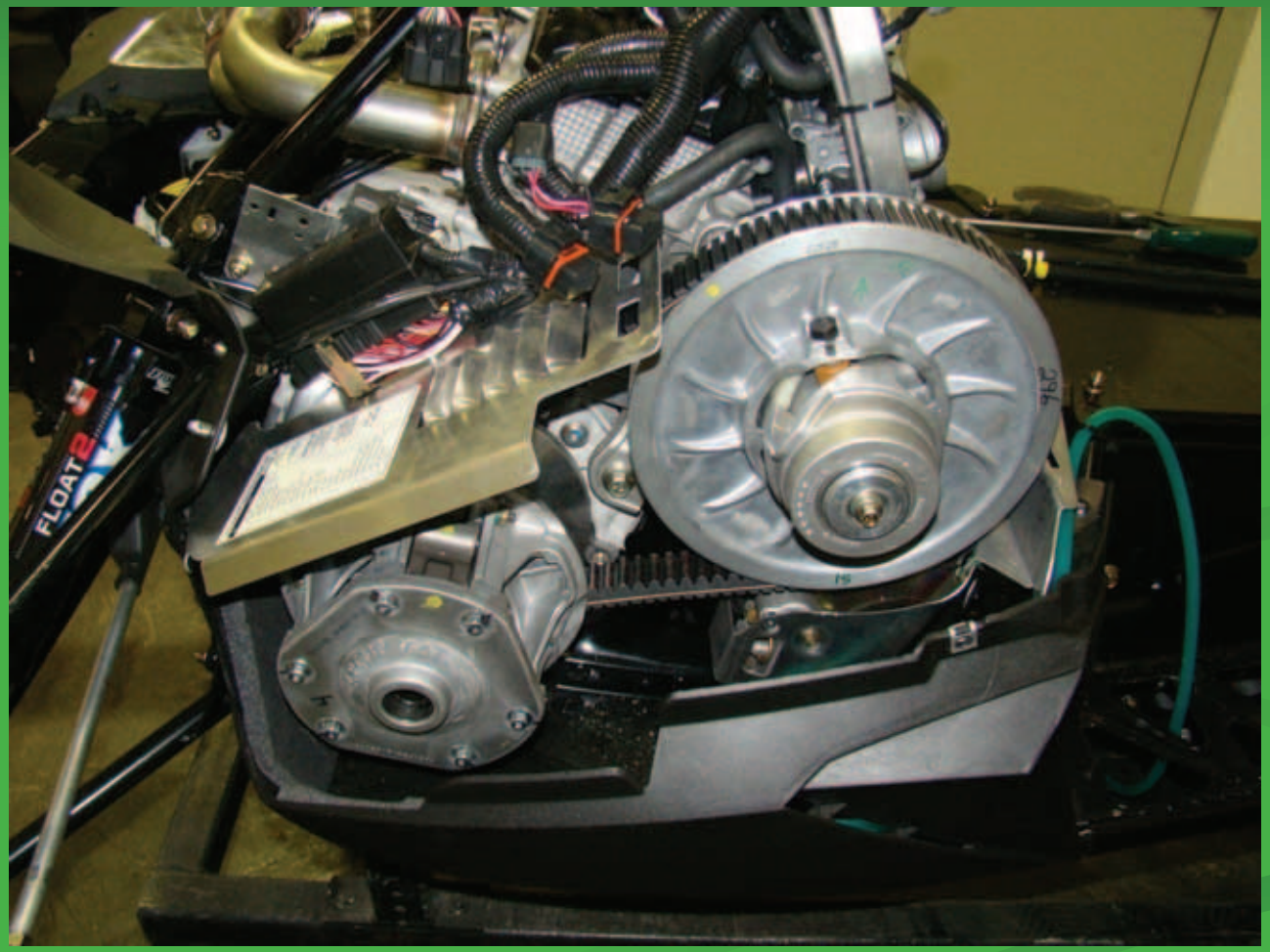
Disconnect the air temp sensor.



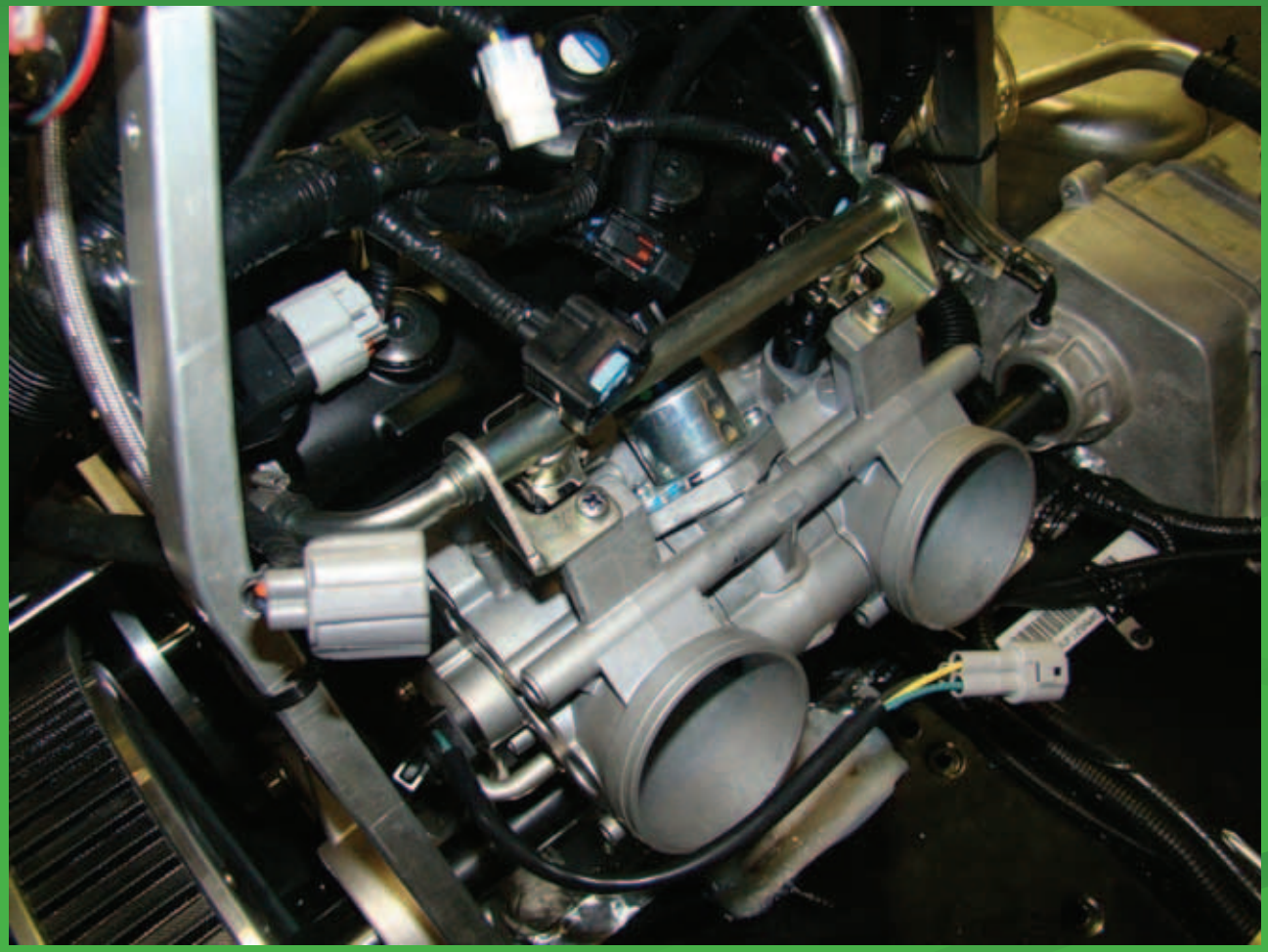
Disconnect the breather line from the separator tank and then remove the air box.



Remove the drive clutch and driven pulley.

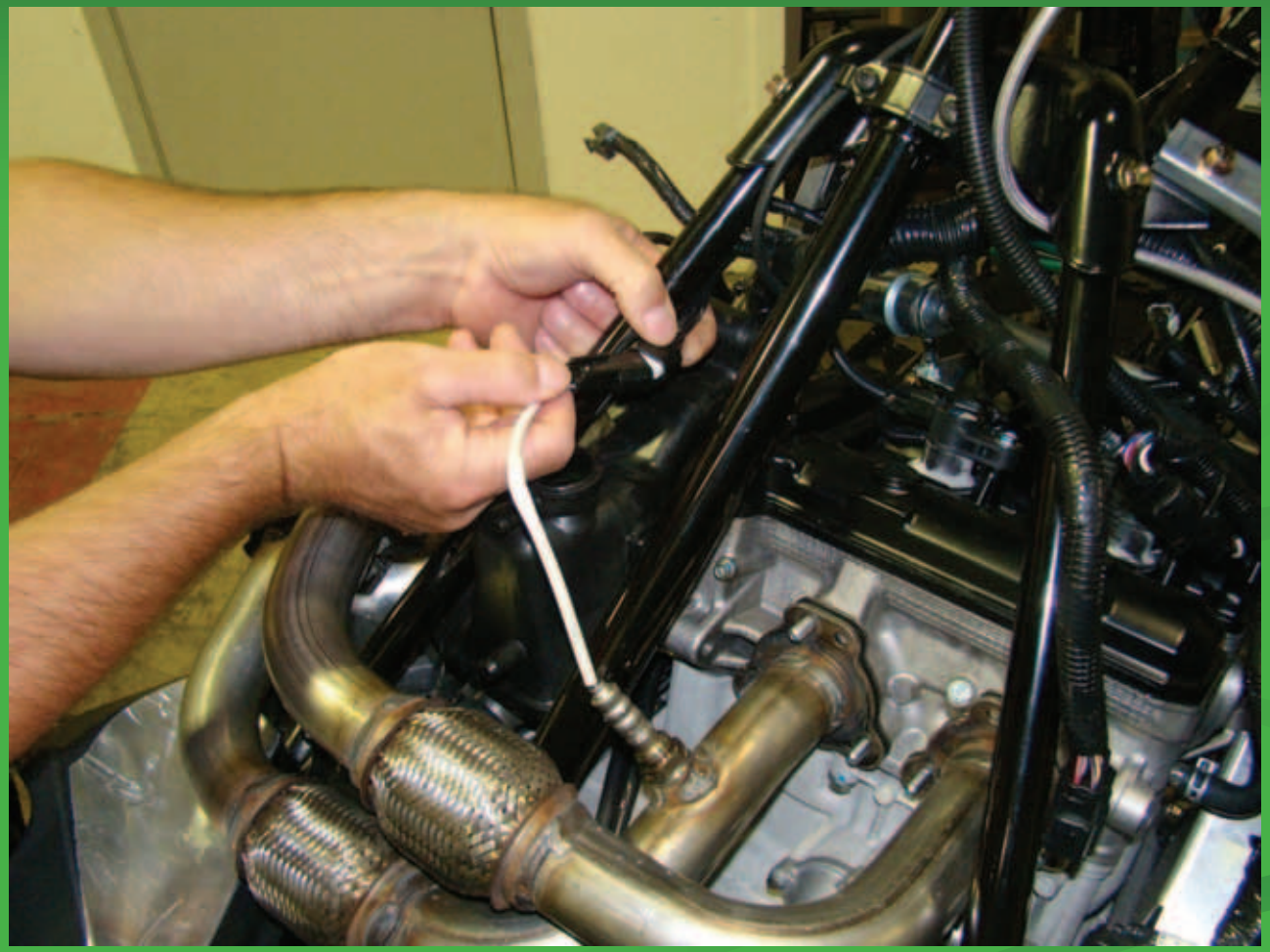


Disconnect all of the connectors from throttle body and engine.

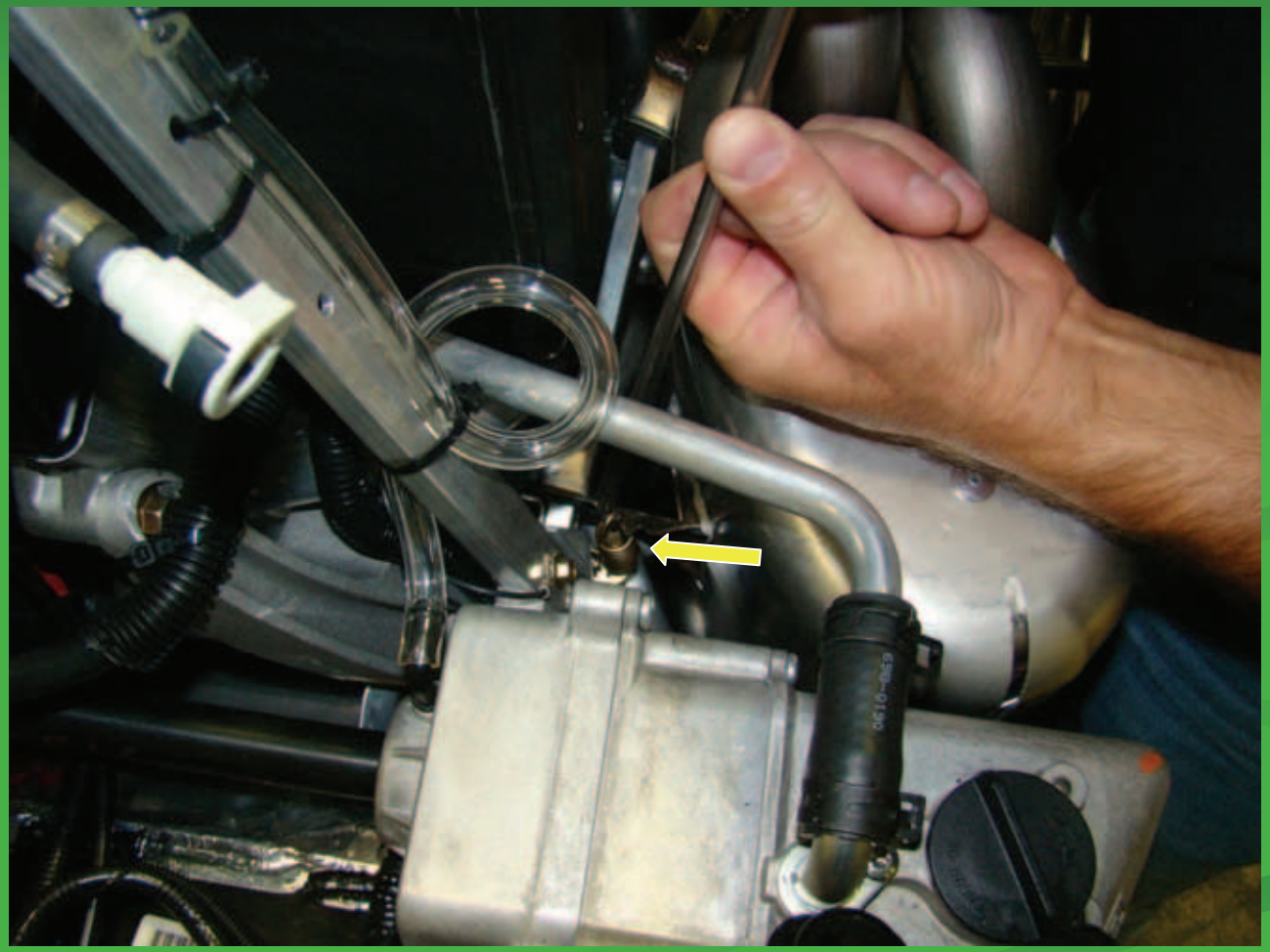


Remove the 6 header pipe nuts from the cylinder assembly.

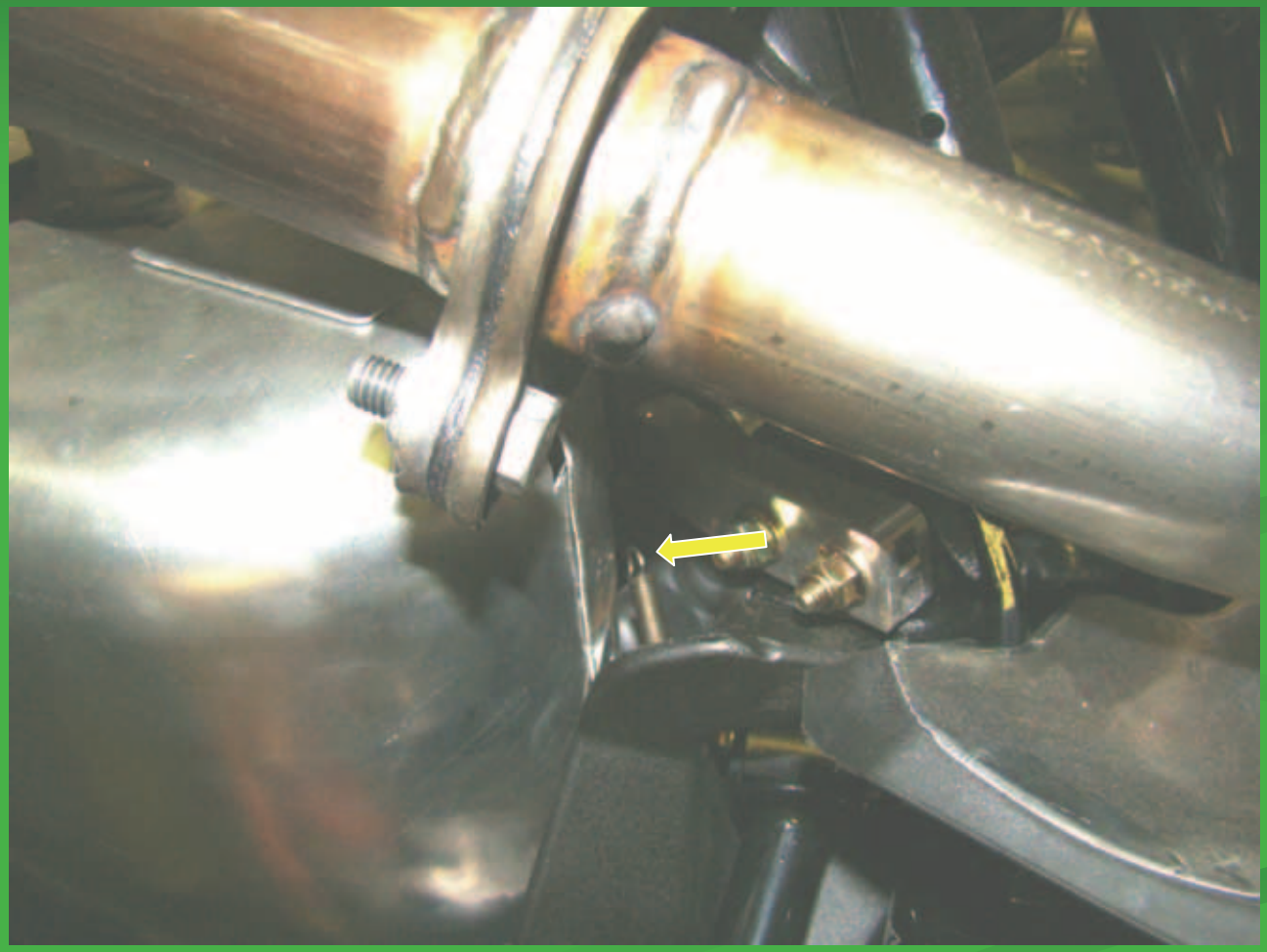
Disconnect the oxygen sensor.



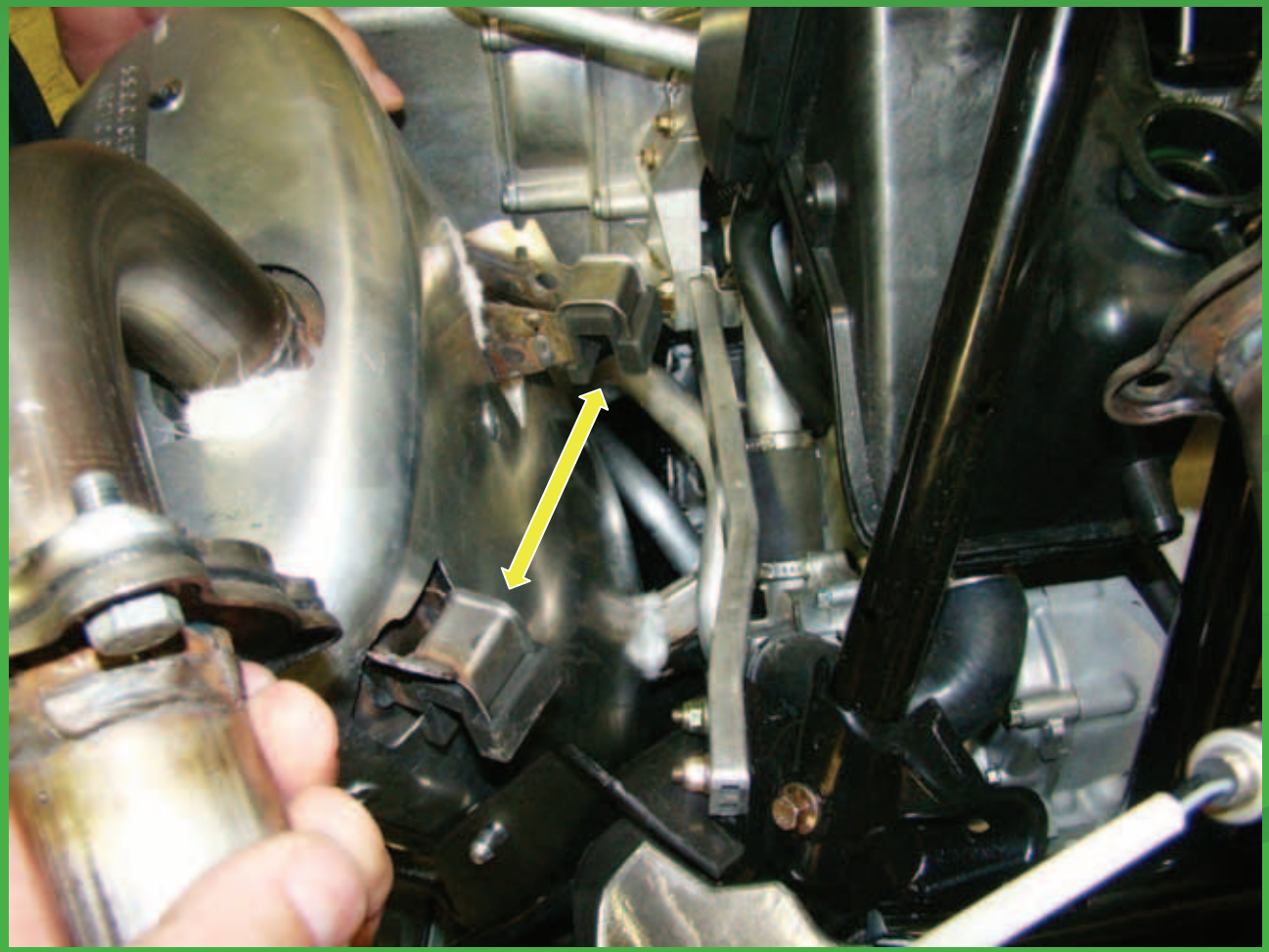
Remove the rear resonator spring.



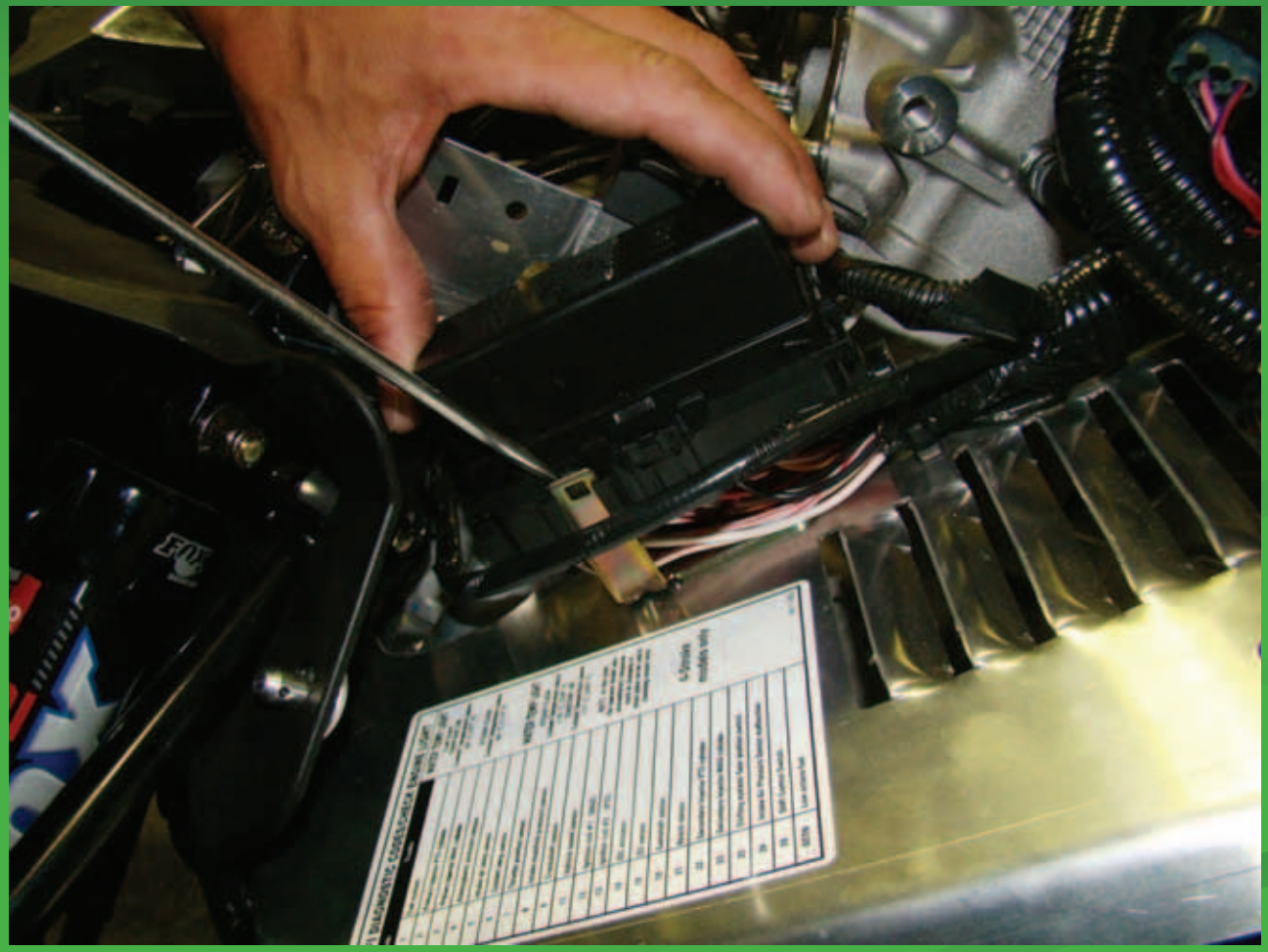
Remove the front resonator spring.



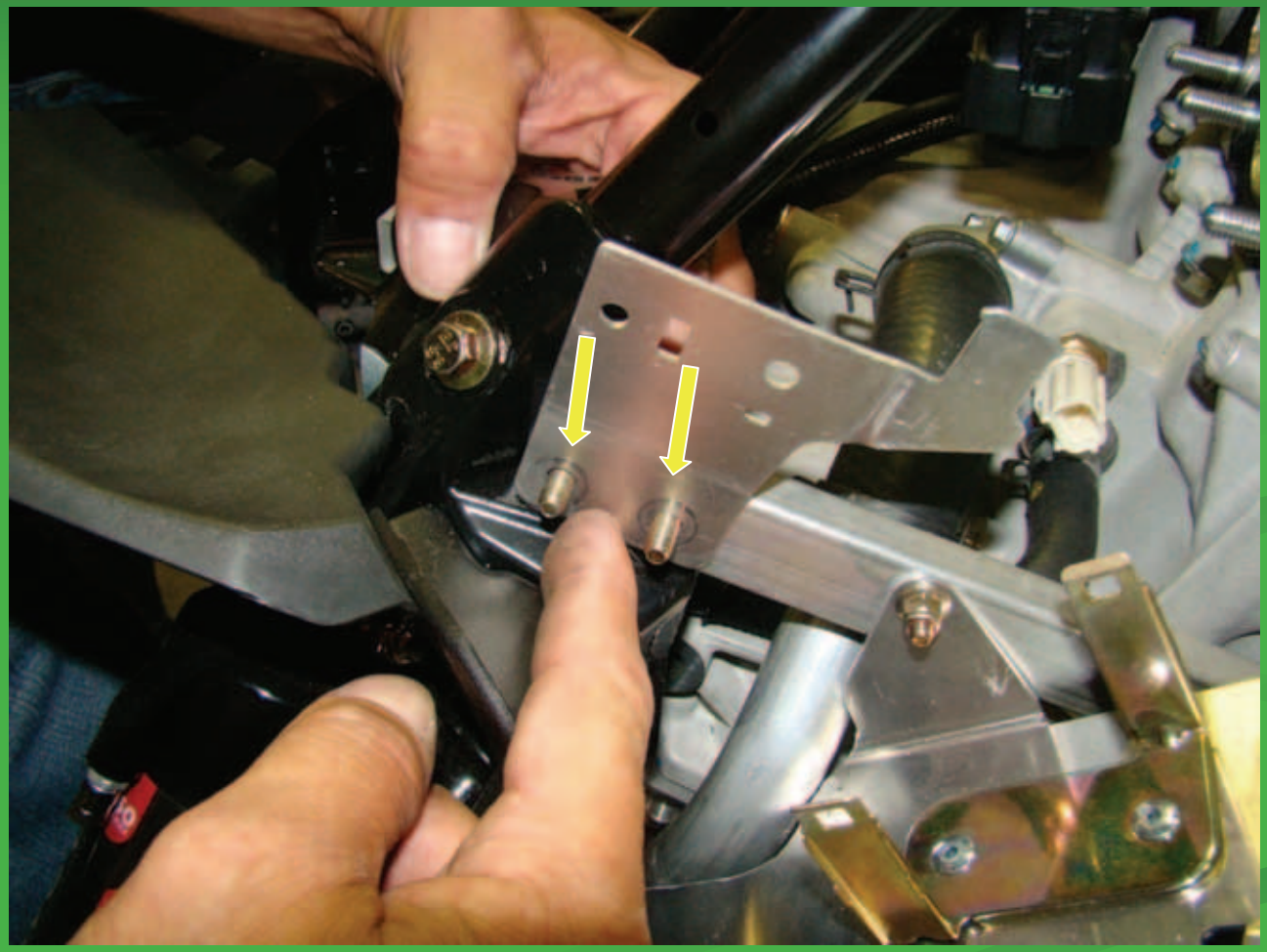
Remove the Resonator/Header Pipe Assembly and account for 2 rubber bumpers on resonator.



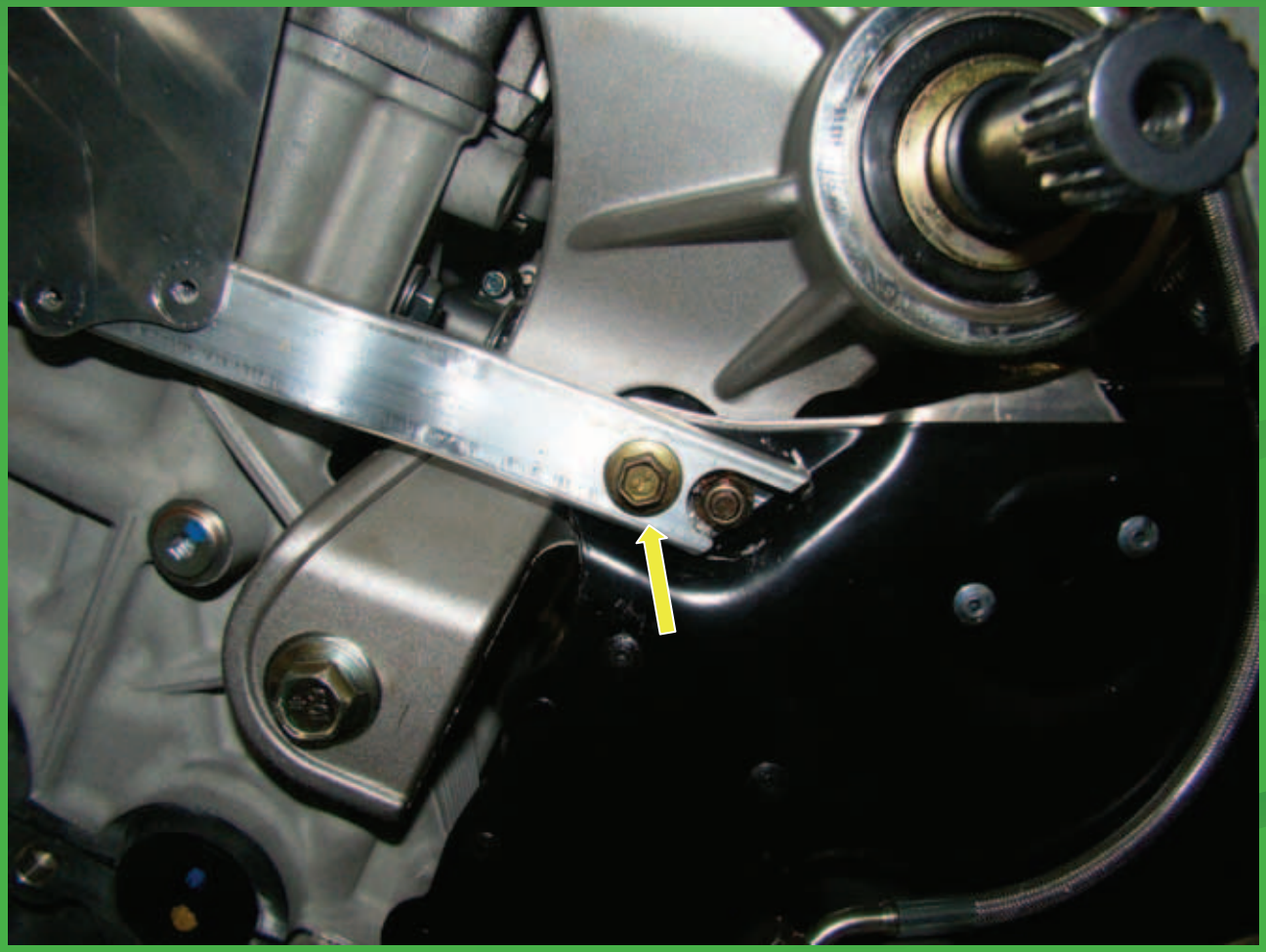
Remove PDM from and the front belt cover.



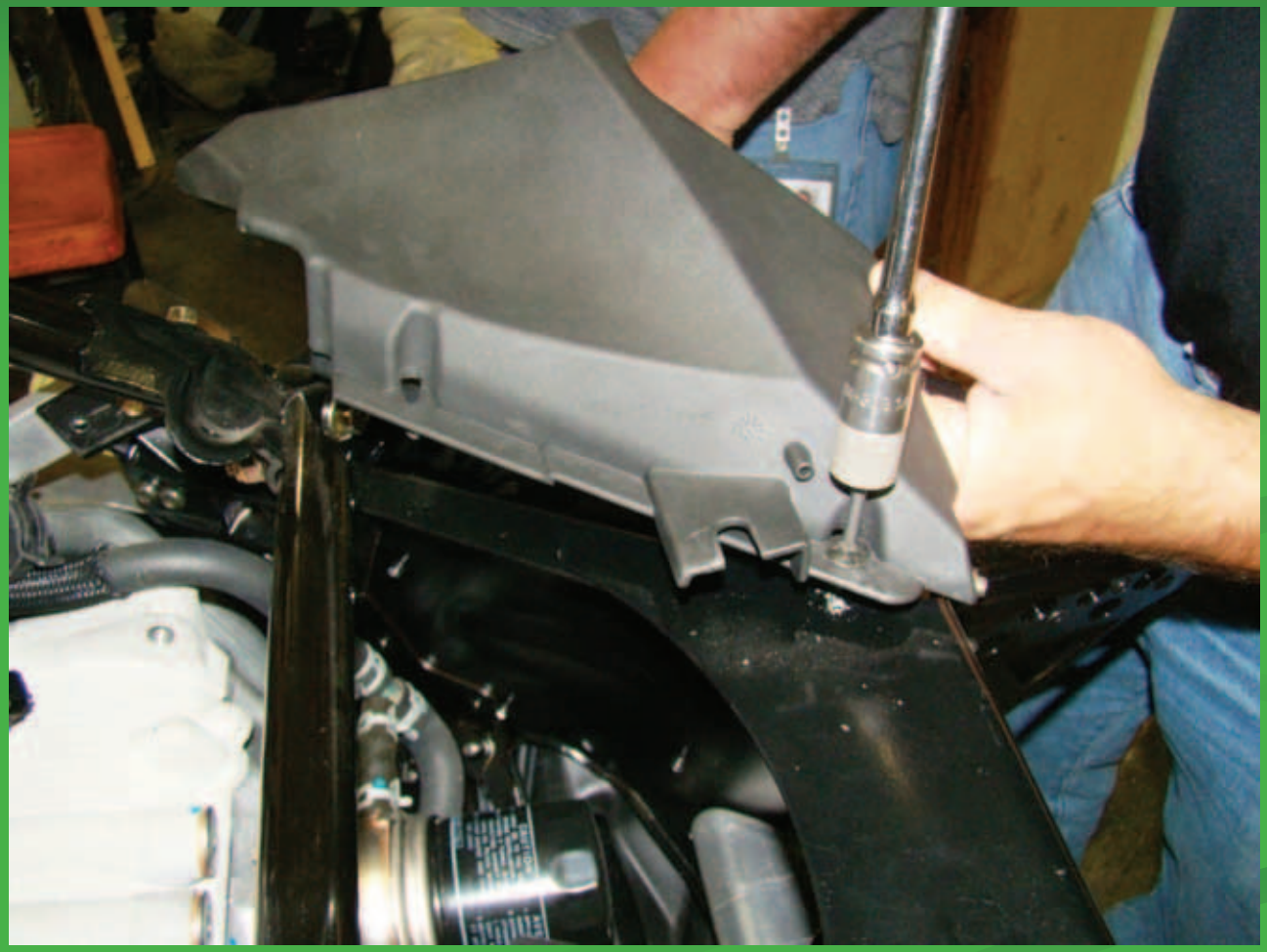
Remove the fasteners from front of LH support brace.



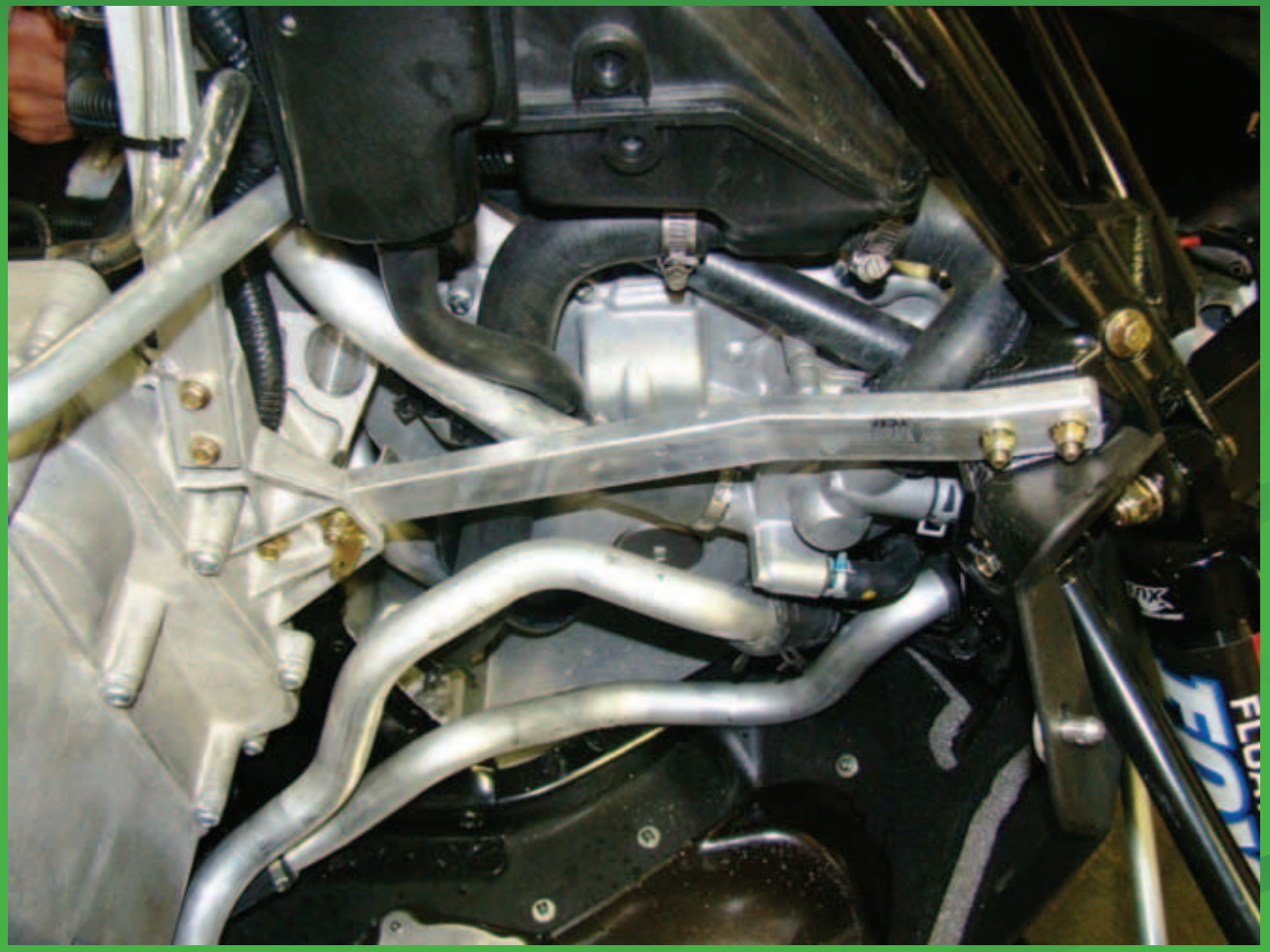
Remove the two fasteners from the rear of LH support bar and then remove the support bar.
Reinstall the center engine mount bolt after removal of support bar.



Remove the fastener from LH/RH nose panels.

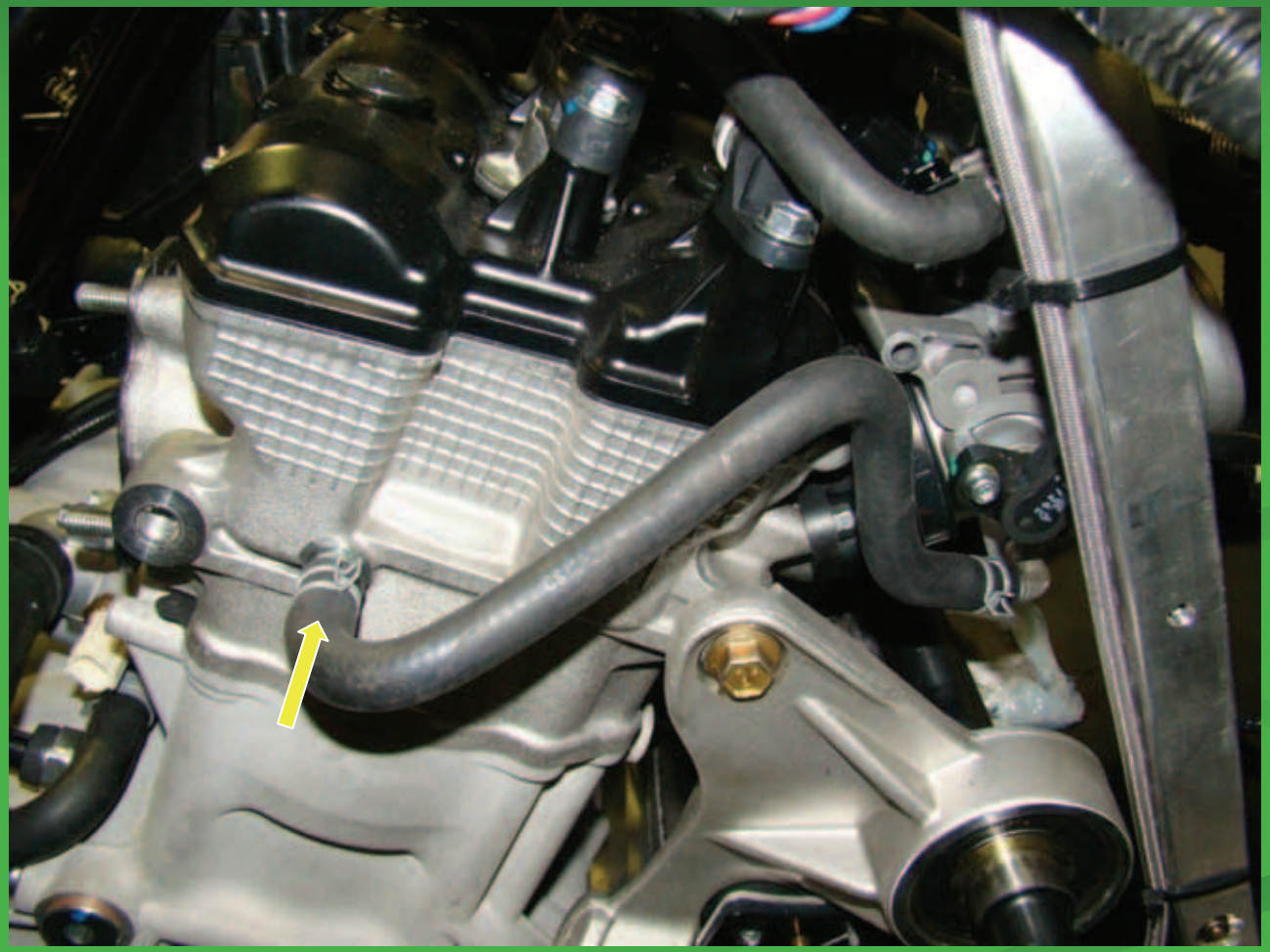


Take note of the oil and coolant line orientation on RH side of engine



Remove both fasteners from horizontal front frame tube.

Remove the coolant line from cylinder.

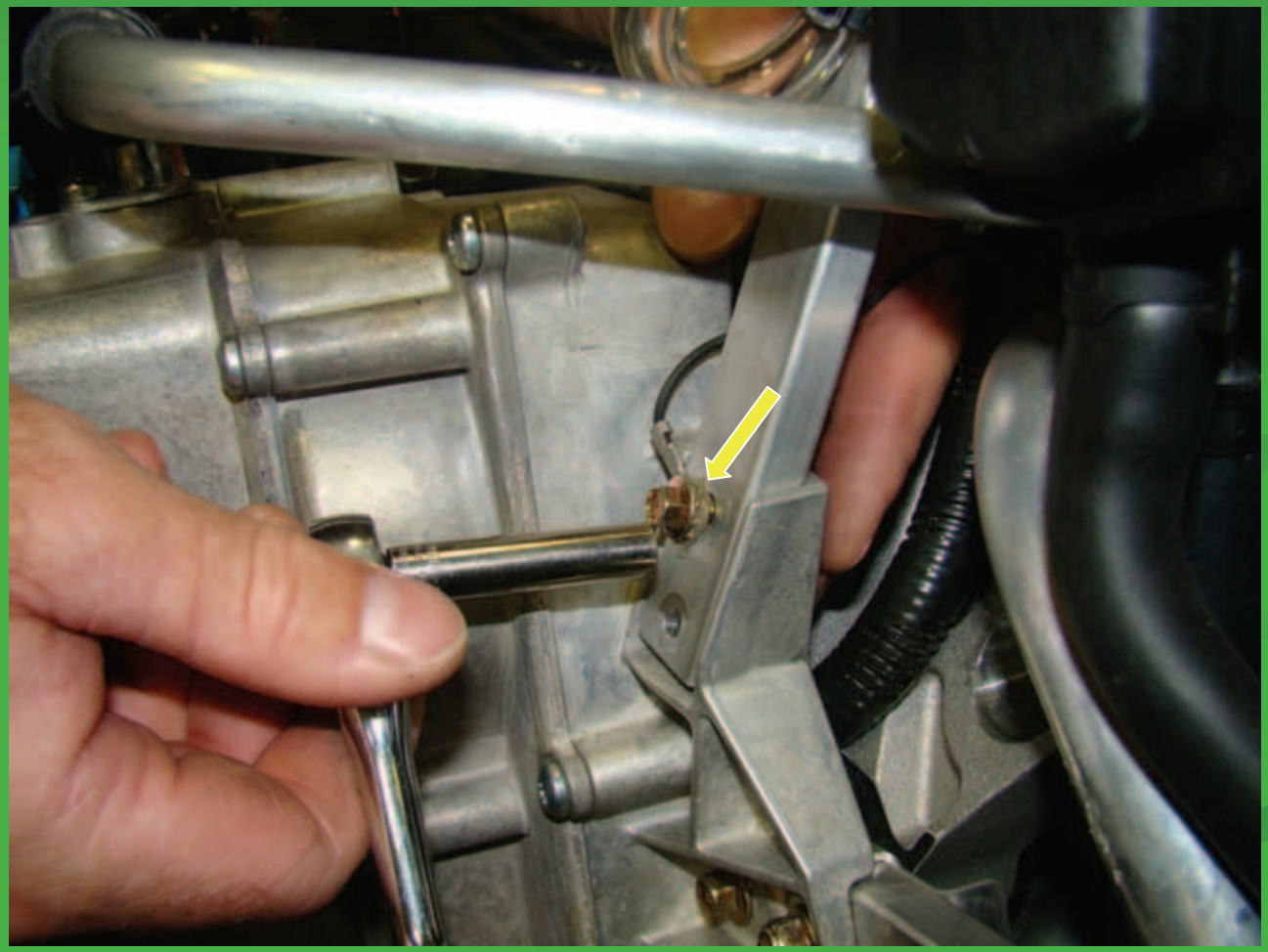


Keep LH/RH vertical spar tube retainer nut in position by placing a piece of tape over the end of it.

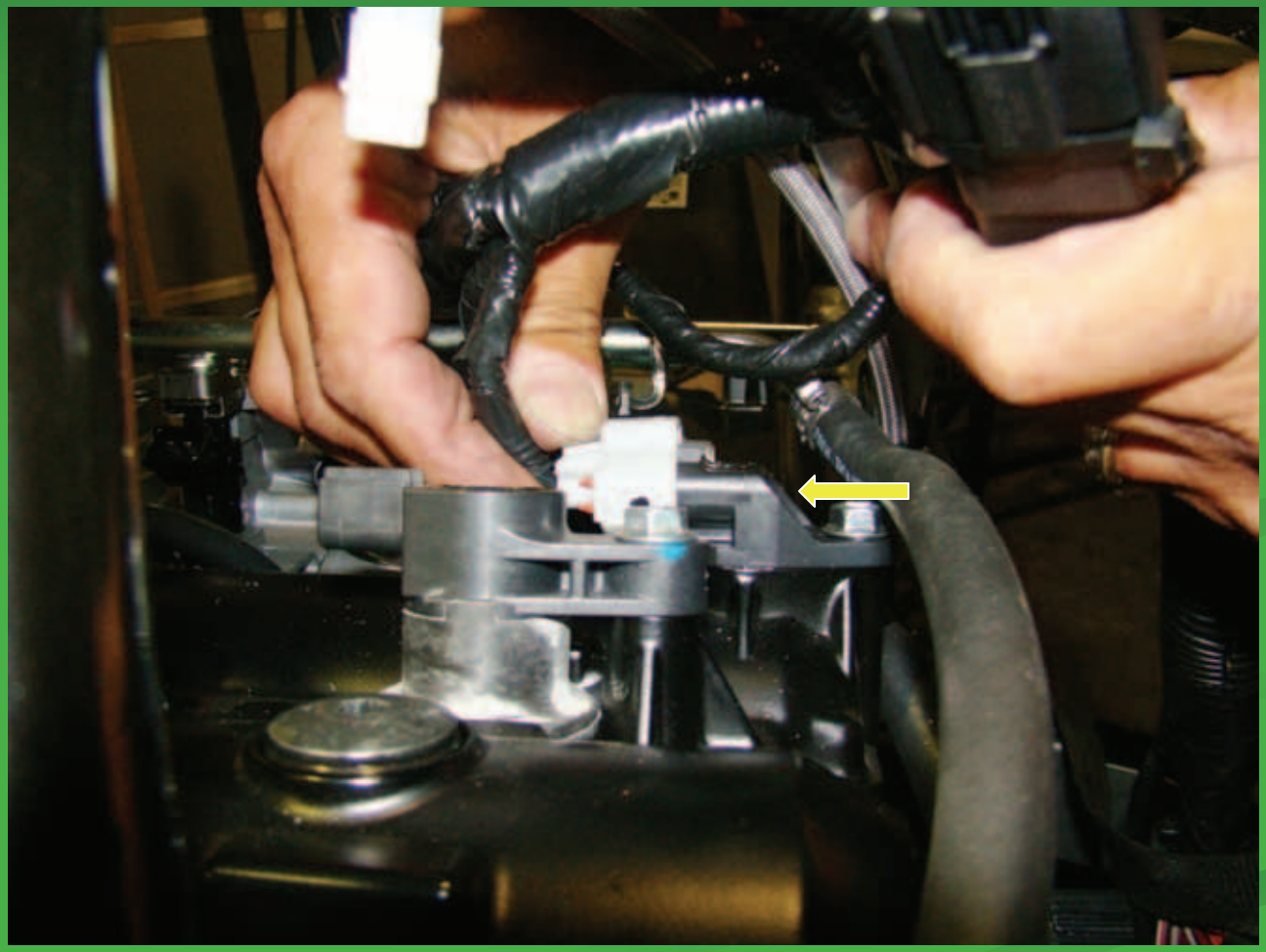
Remove lower fasteners from LH/RH front vertical spar tubes.

Remove the fastener and nut from upper end of LH rear steering support.

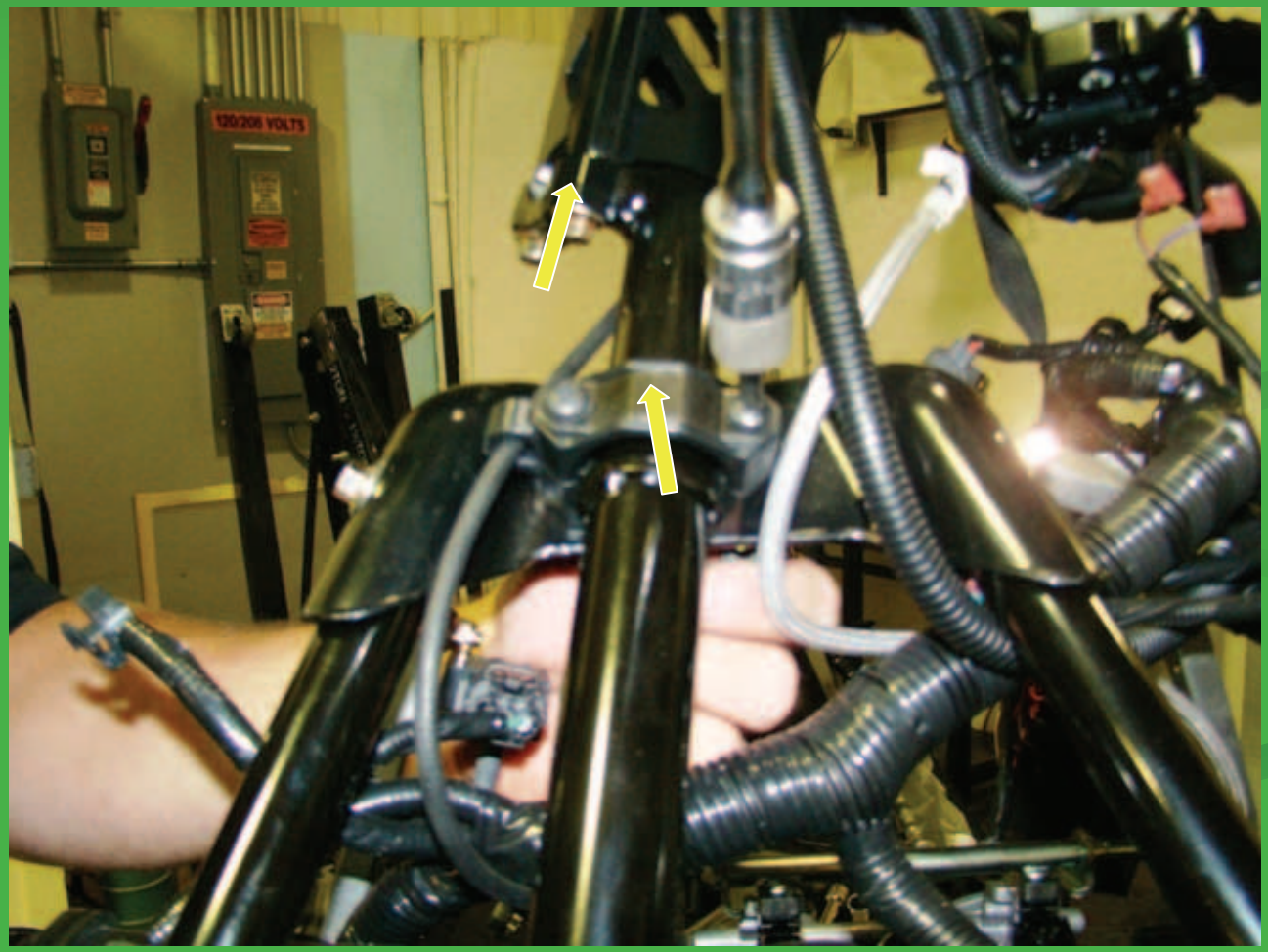
Remove fasteners from RH rear lower end of steering support.
Take note of the ground strap on top bolt.



Disconnect the ignition coil connectors.

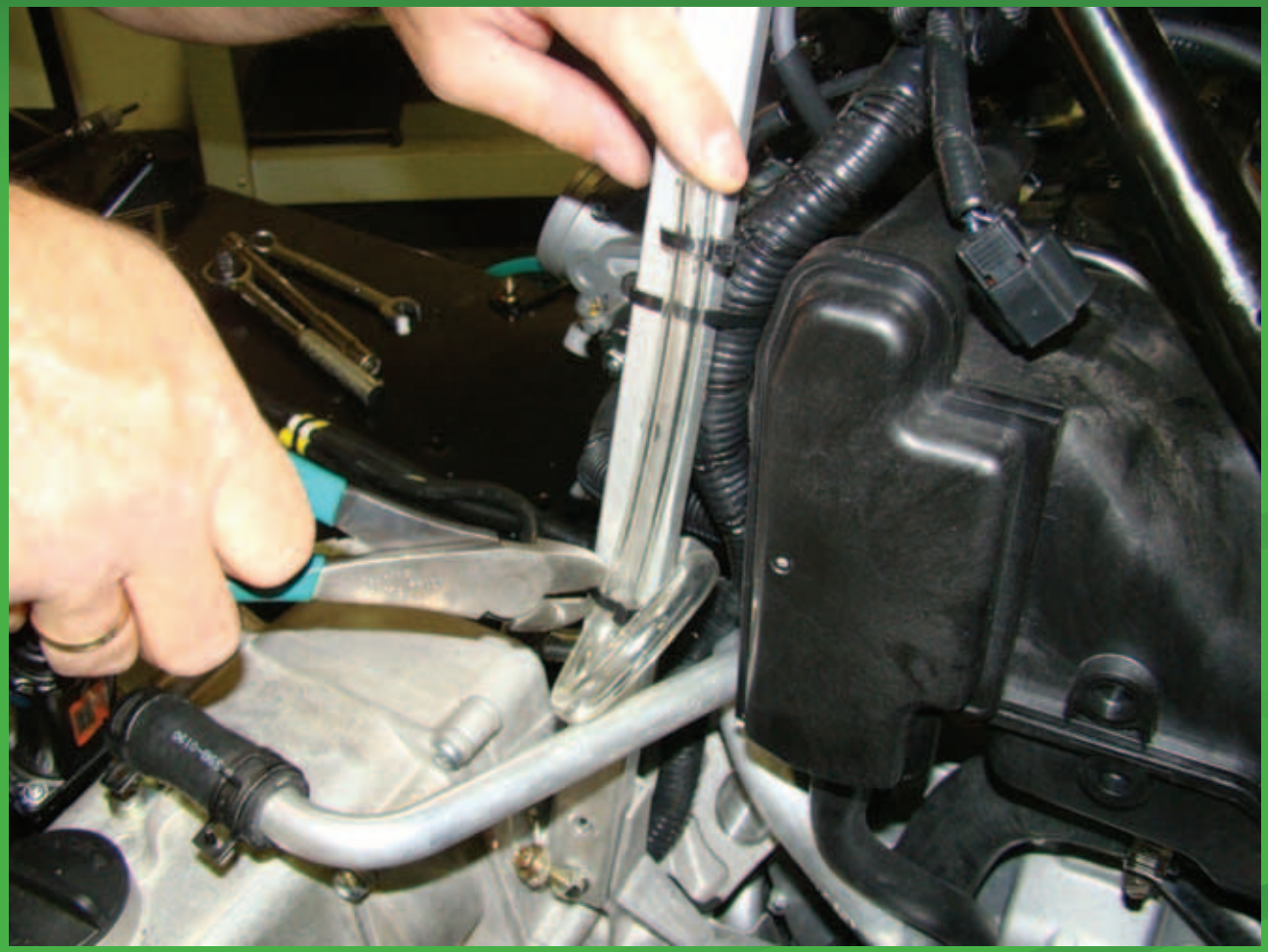


Remove the handle bar assembly from steering post and lay on the LH side of tunnel.
Loosen upper steering post clamp and remove the throttle cable.

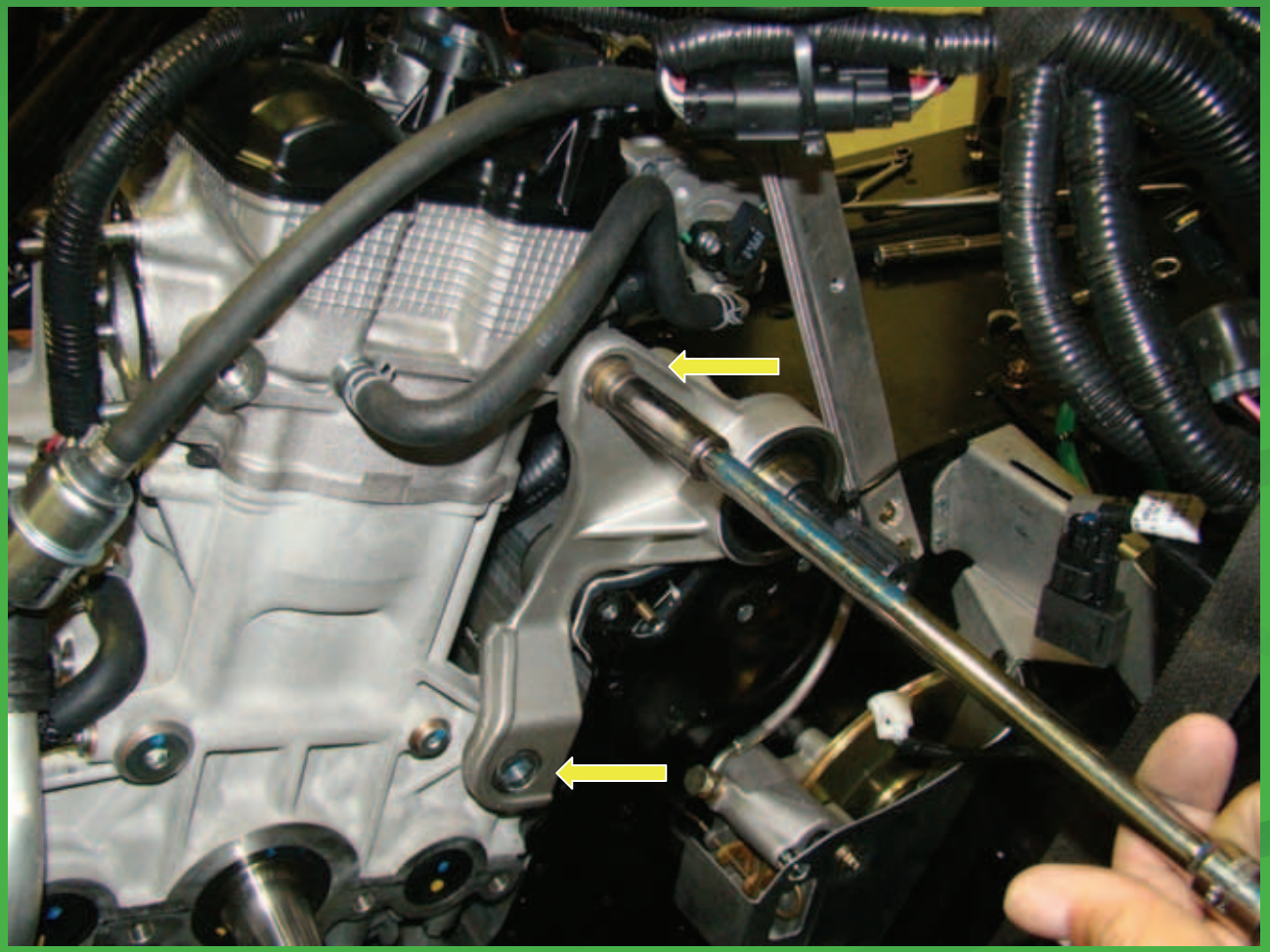


Secure the steering post to the RH front portion of chassis.

Remove zip ties from gear case vent tube.

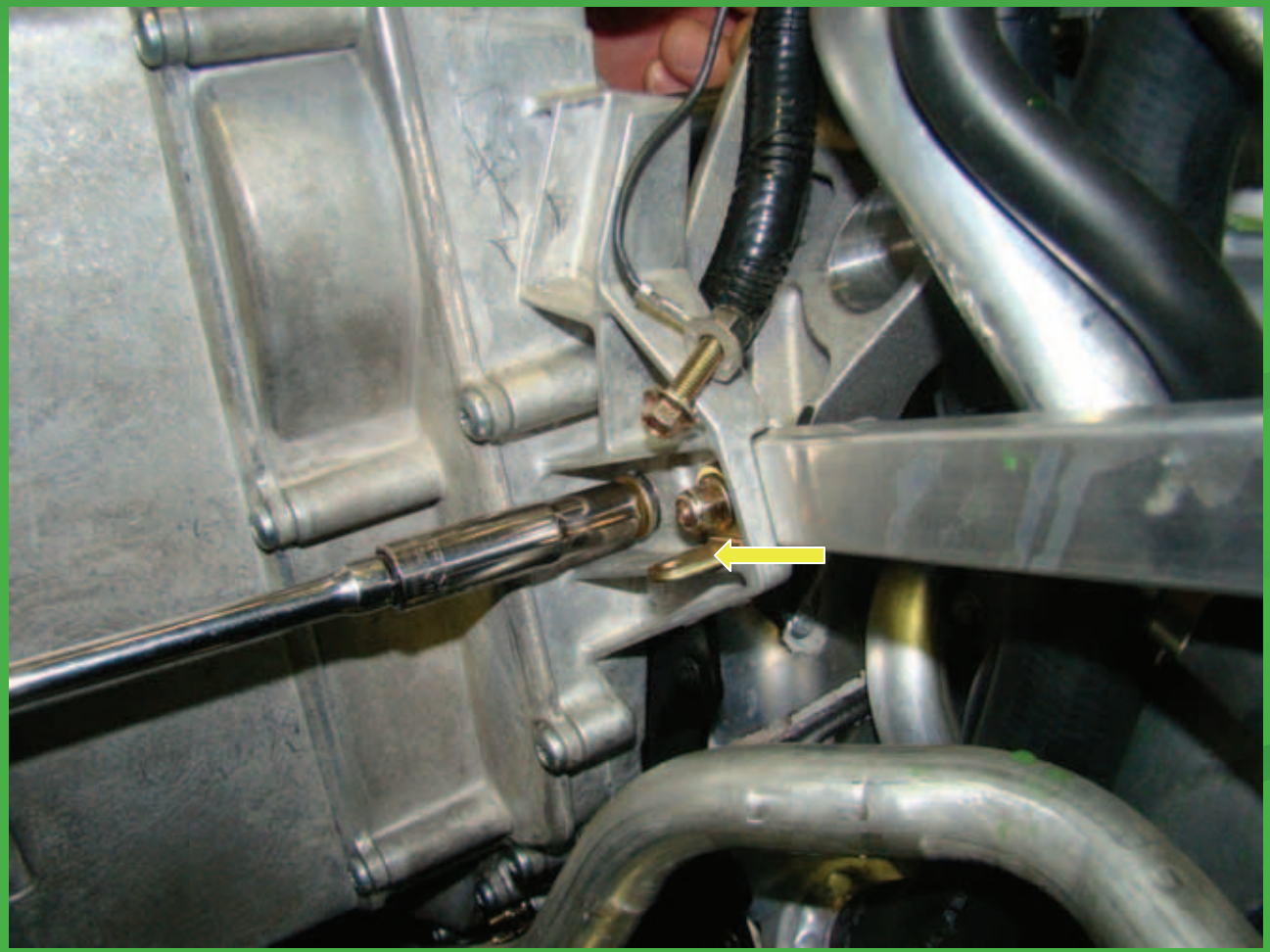


Remove both upper and lower engine mount bolts from the LH rear engine mount.

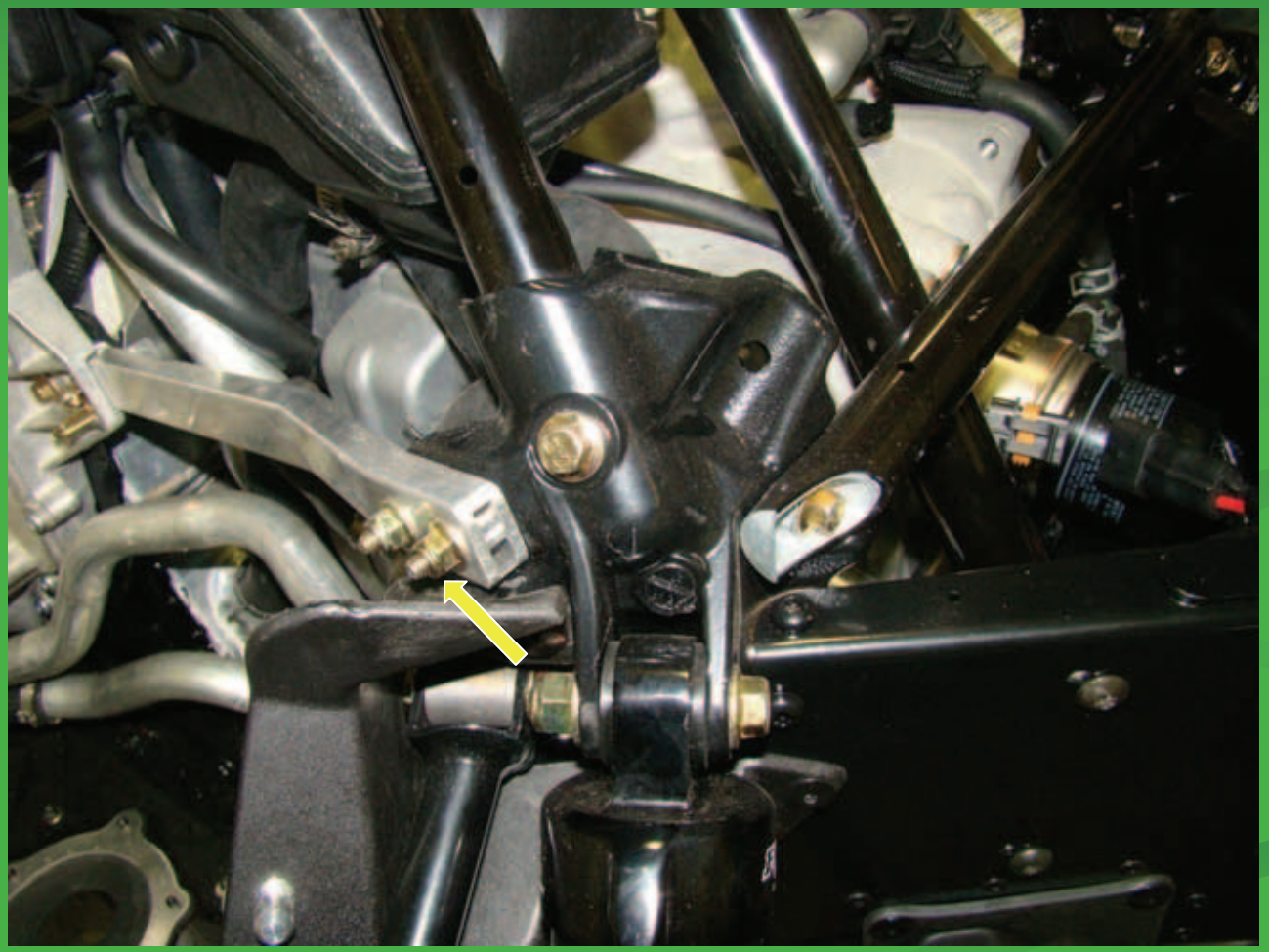


There is an alignment grove to keep the spar nut and retainer aligned.

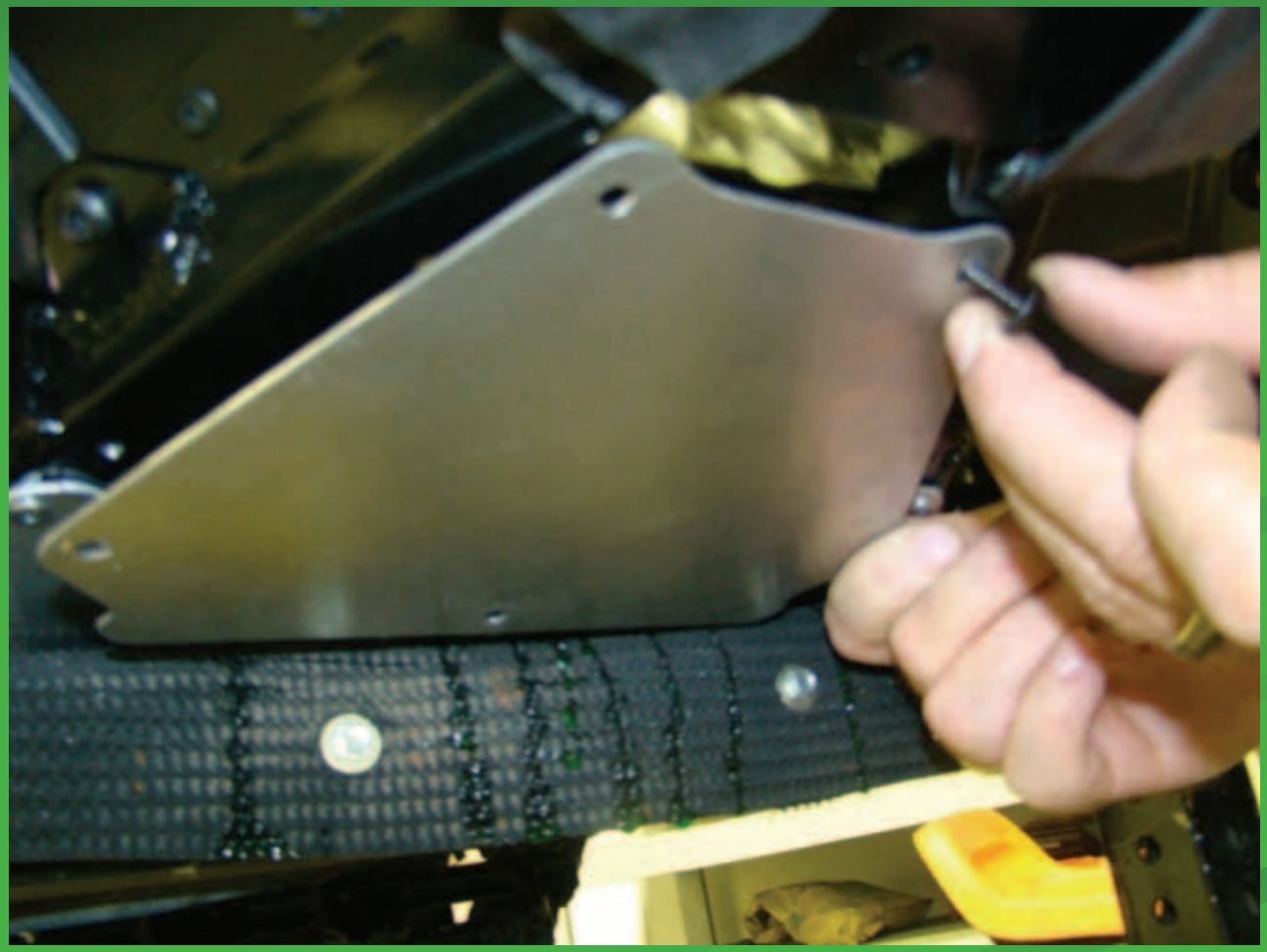
Remove fasteners from the RH rear engine mount attaching the support bar. Take note that the spring tab is on the forward bolt at the 6 O'clock position.



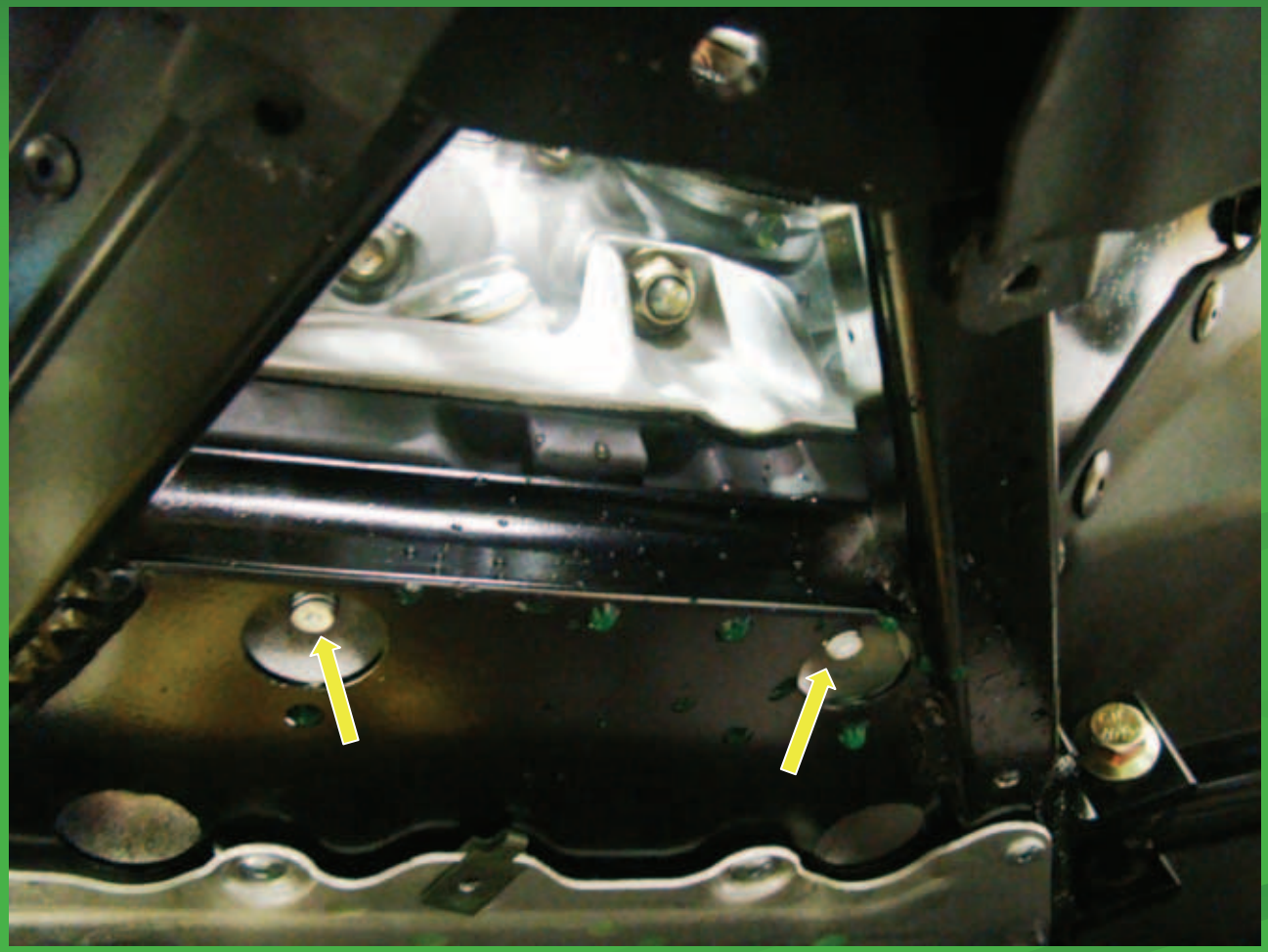
Remove the front fasteners from RH support bar and then remove support bar.



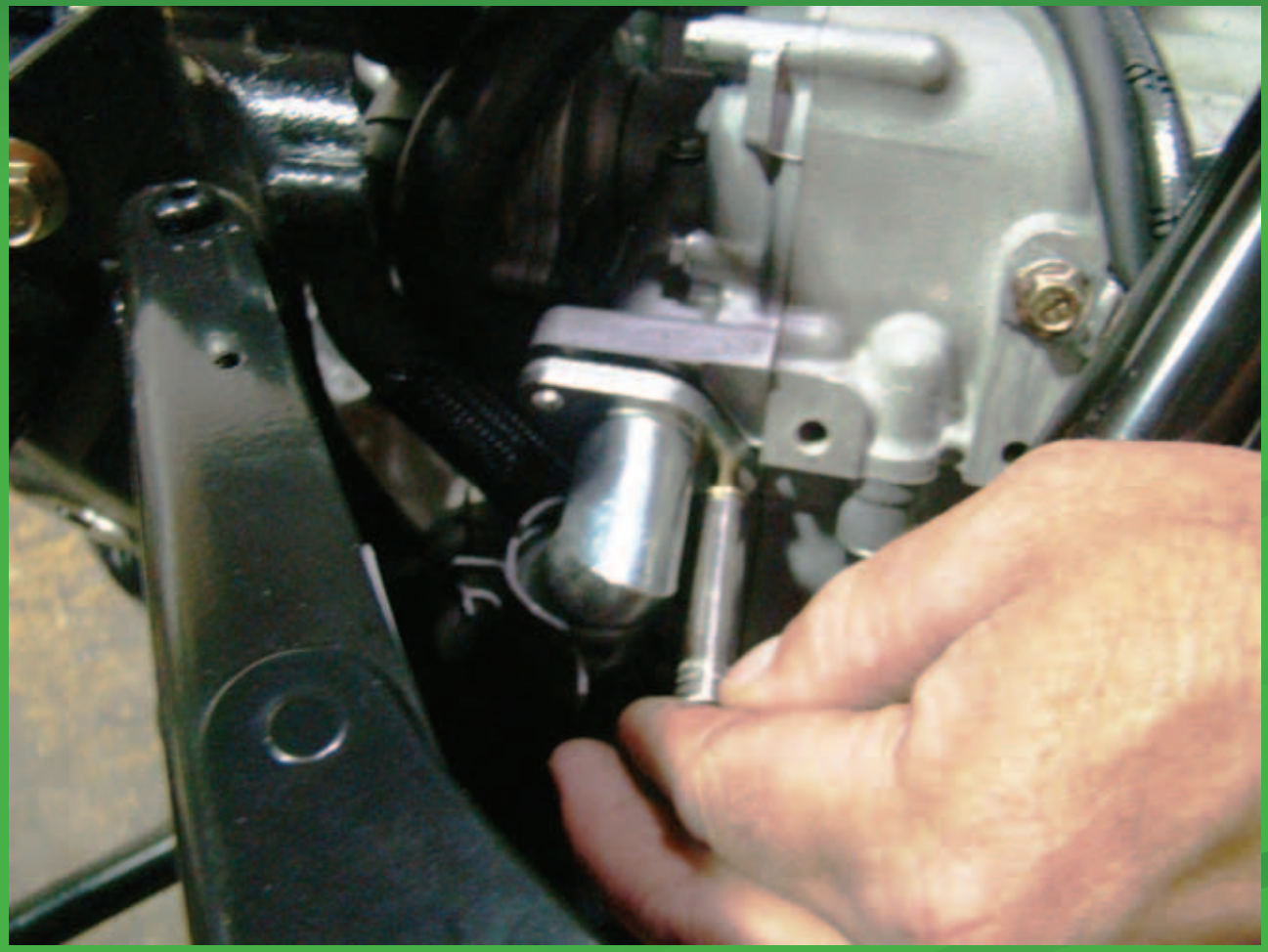
Remove the belly panel to access engine mount nuts.



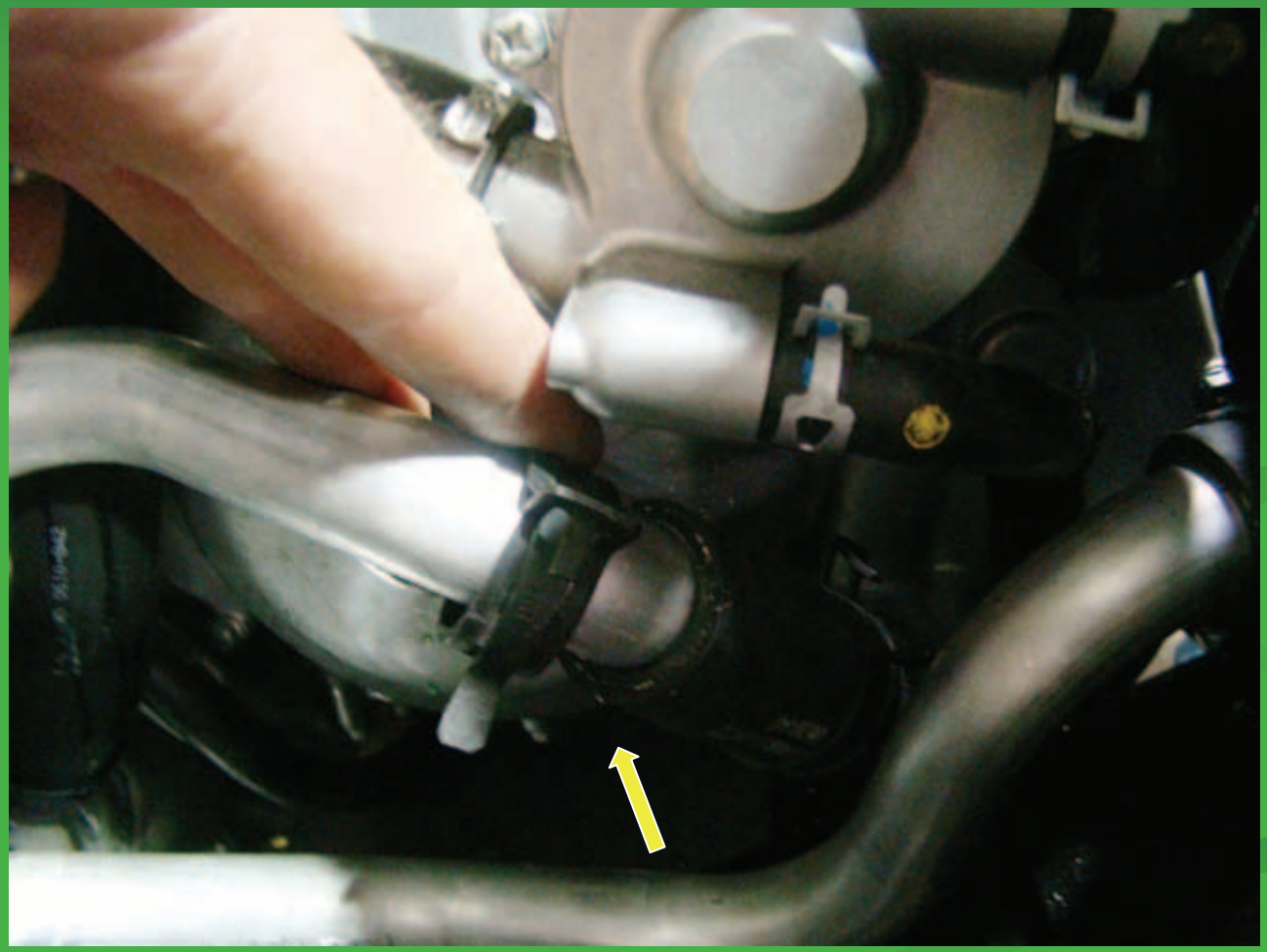
Remove front two engine mount nuts.



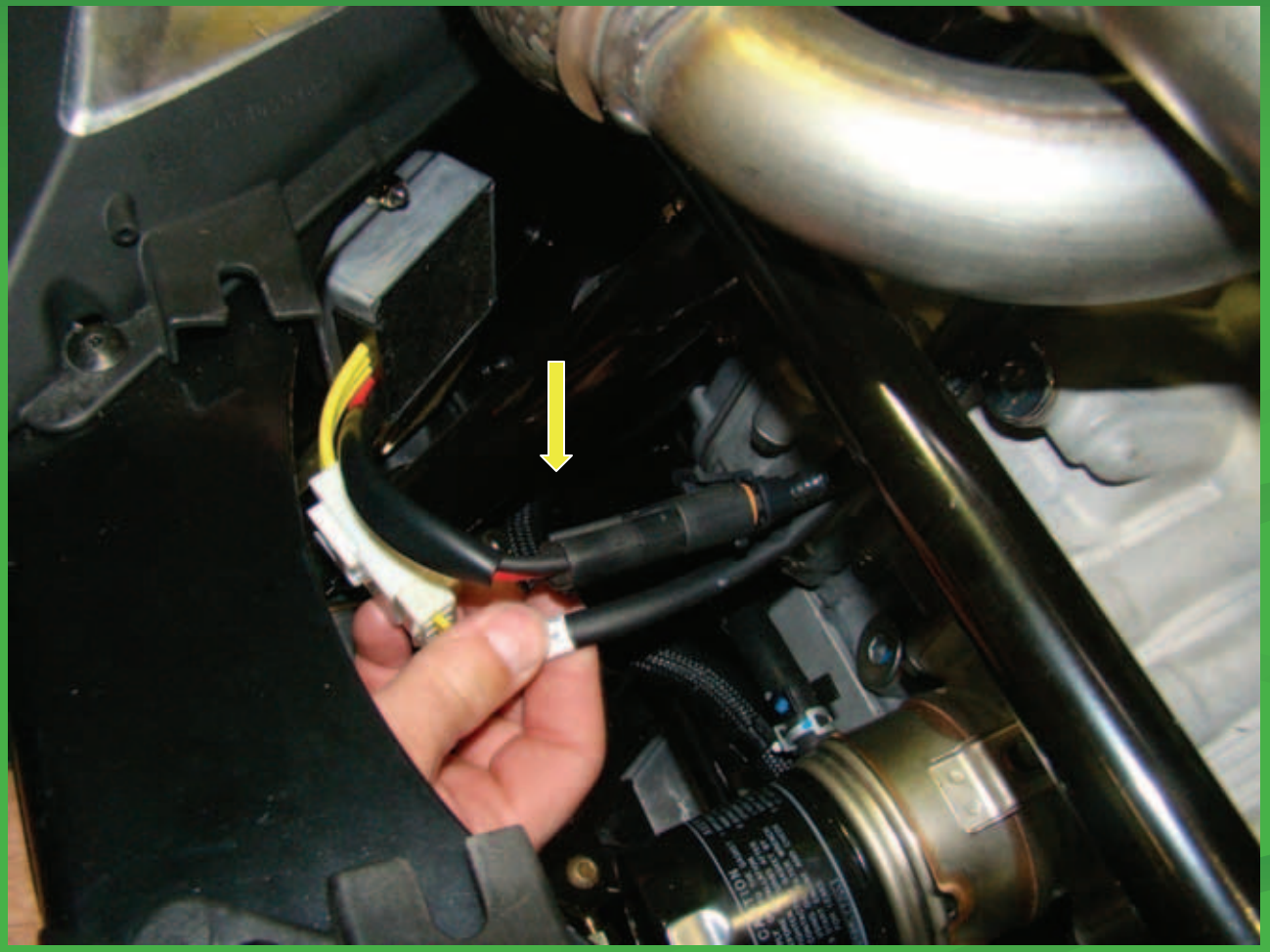
Remove fasteners for oil line elbow from the RH front of engine.



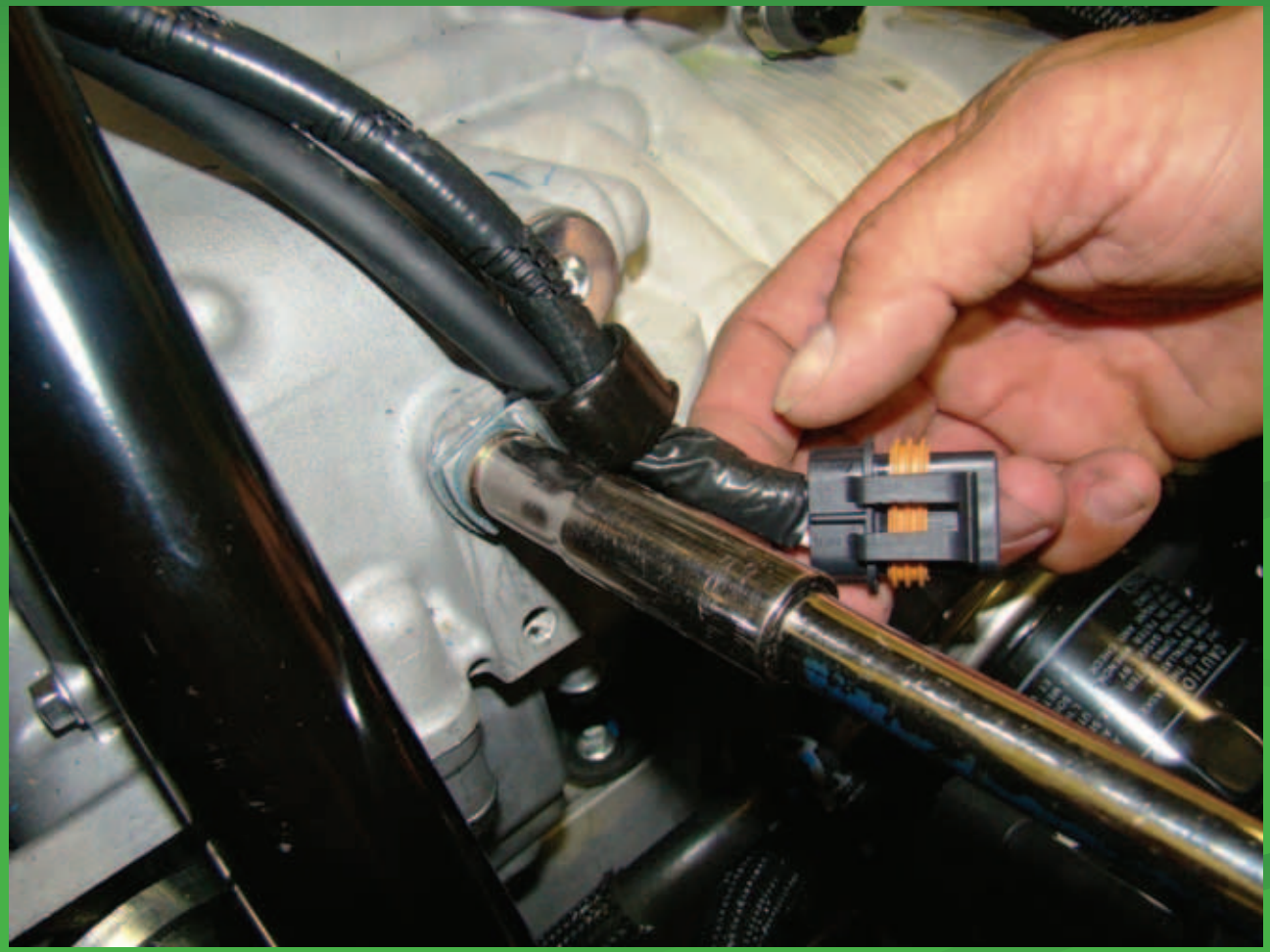
Remove clamp on oil return line, then pull the return oil line out of rubber hose.



Disconnect the voltage regulator connectors in front of the engine.

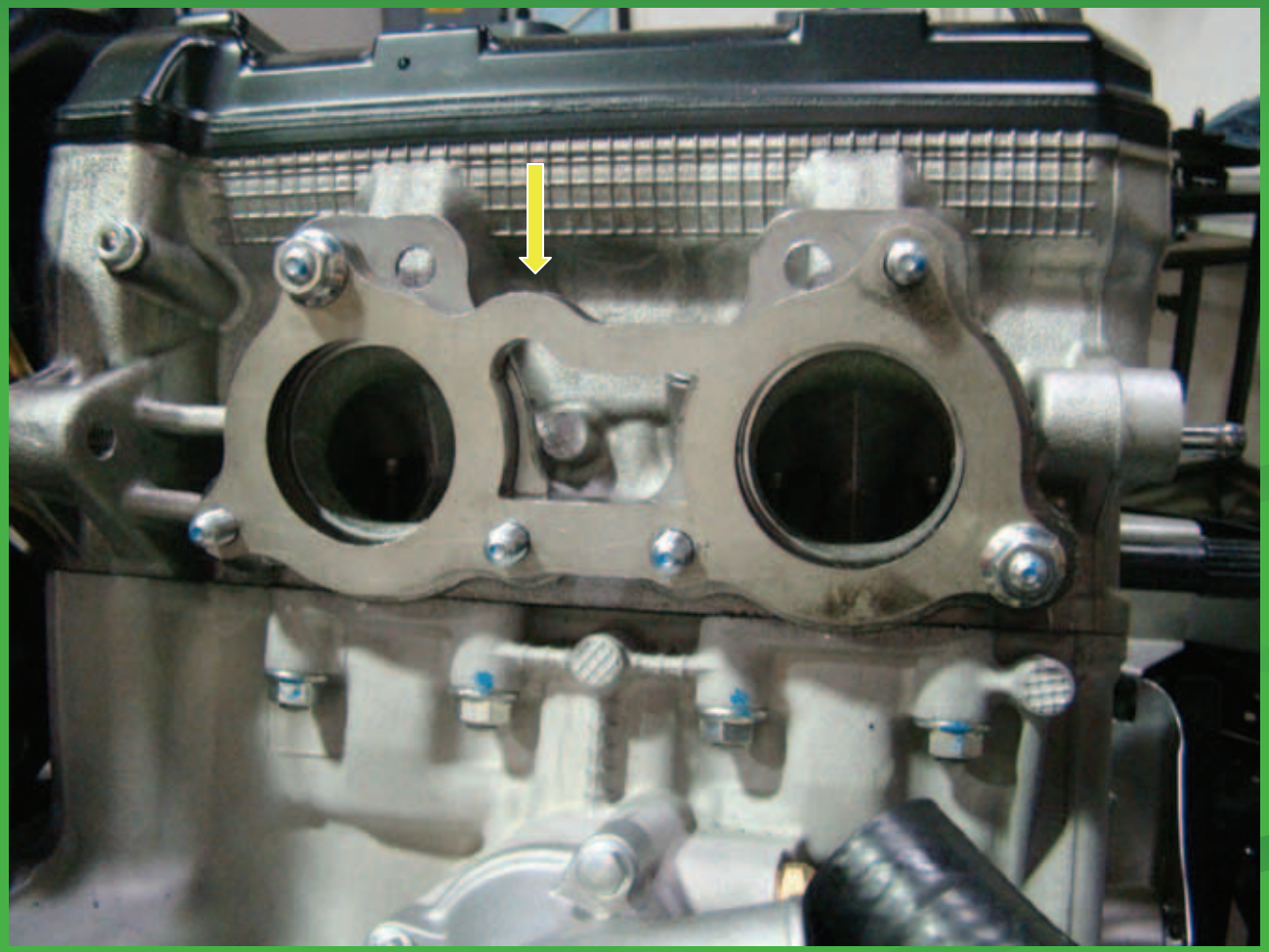


Remove the harness clamp from engine block.

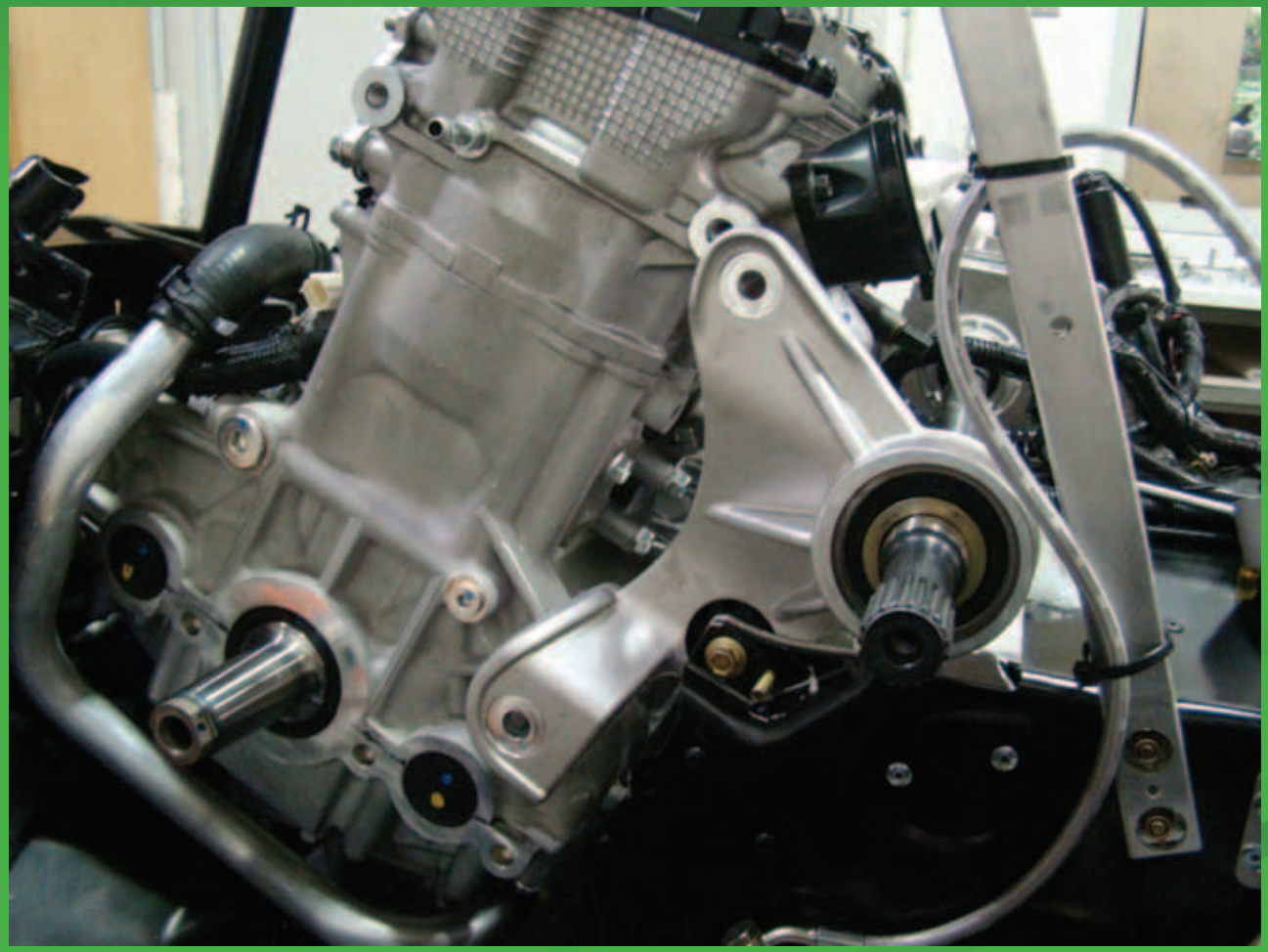


Remove the fasteners from RH rear engine mount and then remove the mount.

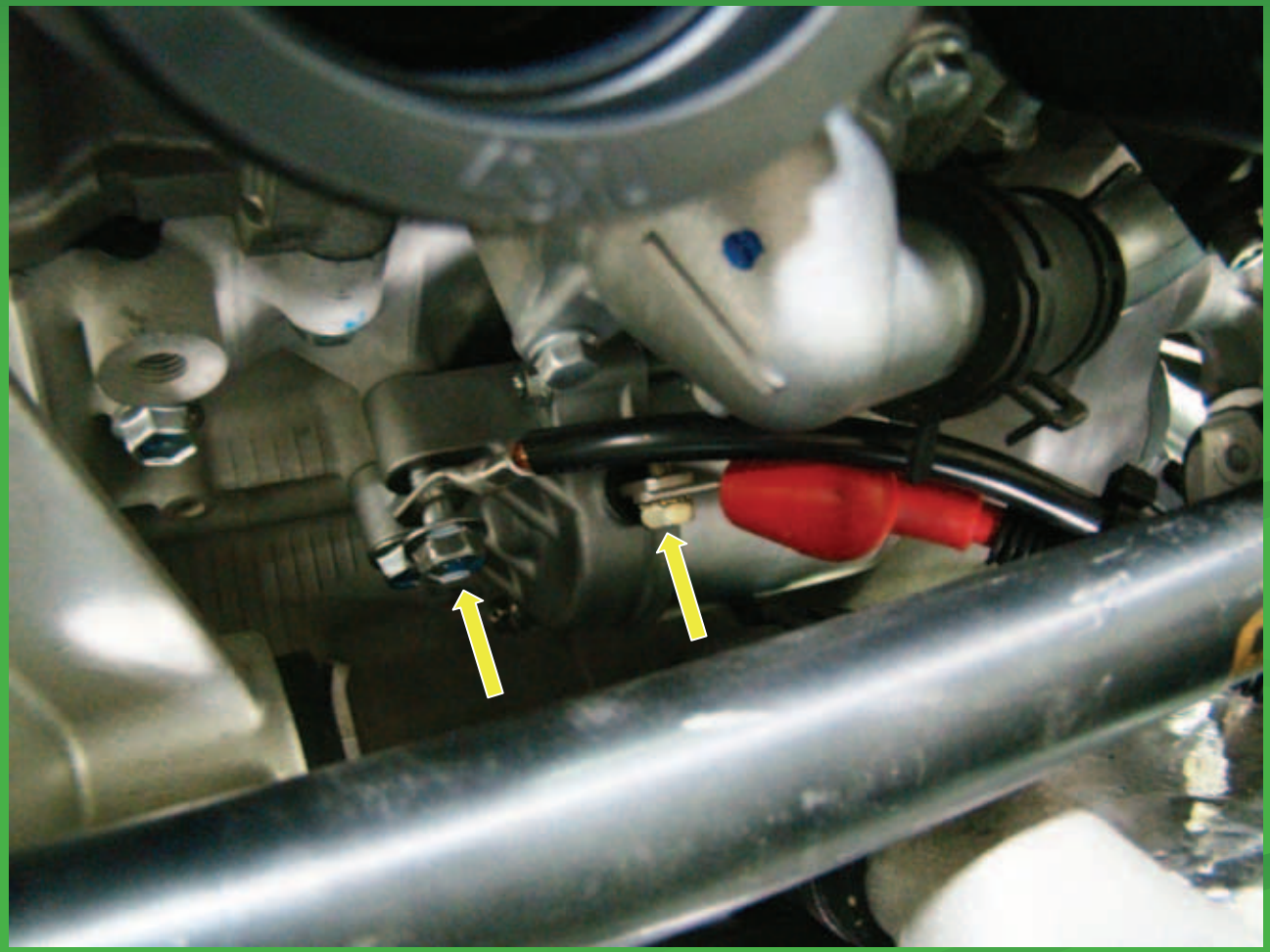
1100 N/A engine removal lift plate. (p/n 0744-073)



Lift slowly up on engine enough to get front engine mount studs out of chassis to gain access to the starter.

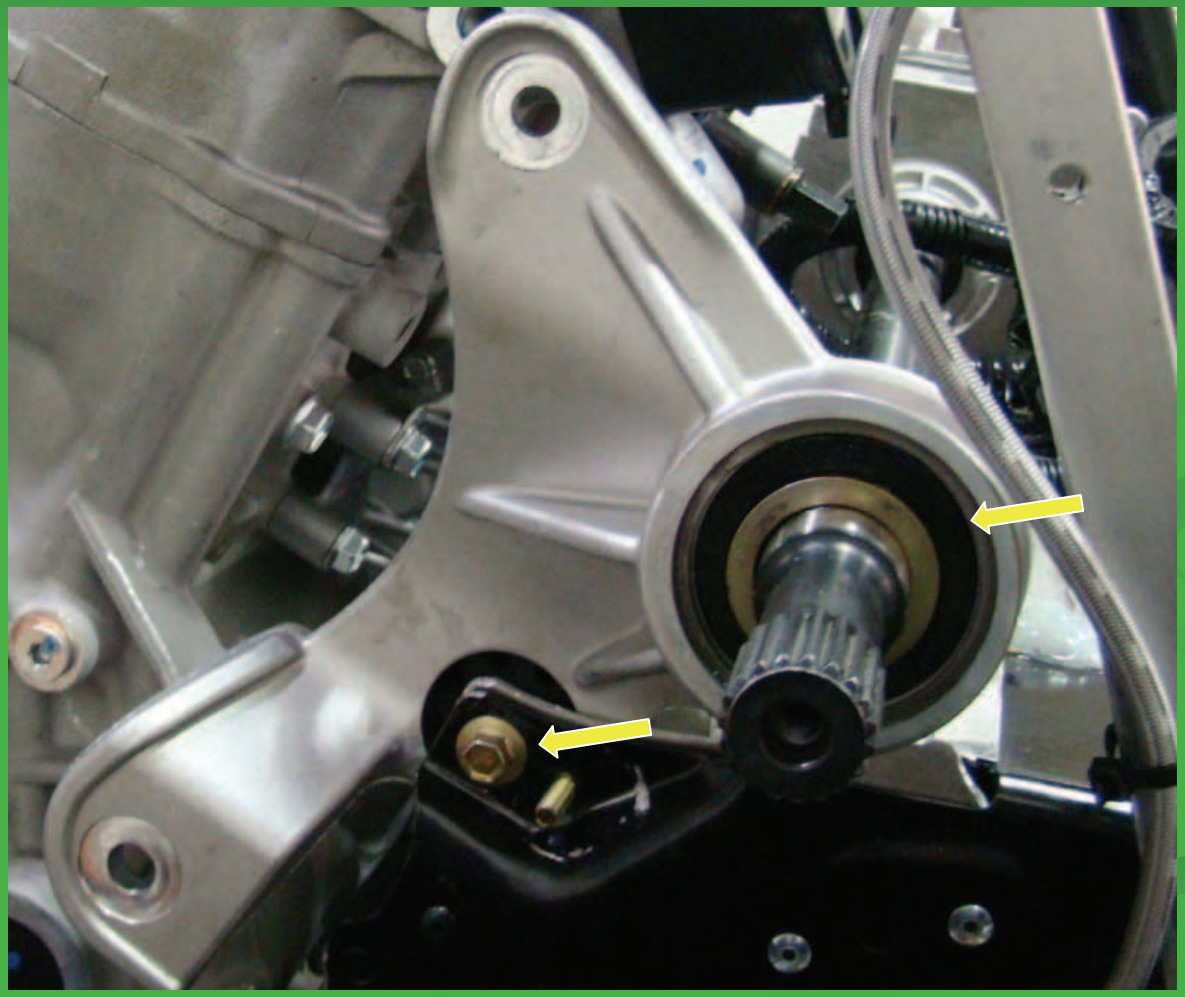


Remove the ground cable and positive cable from starter.

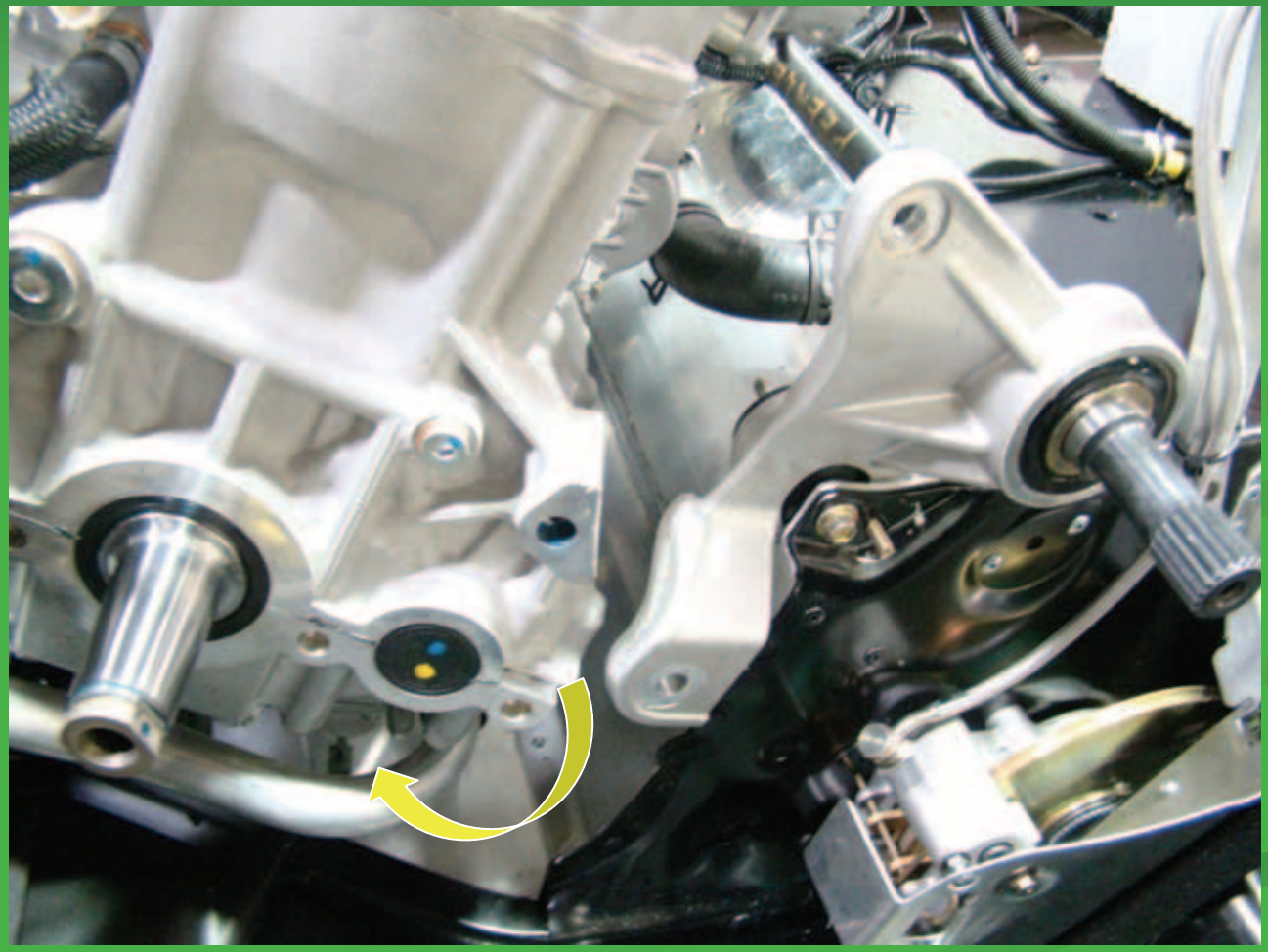


Remove the coolant hose from heat exchanger.

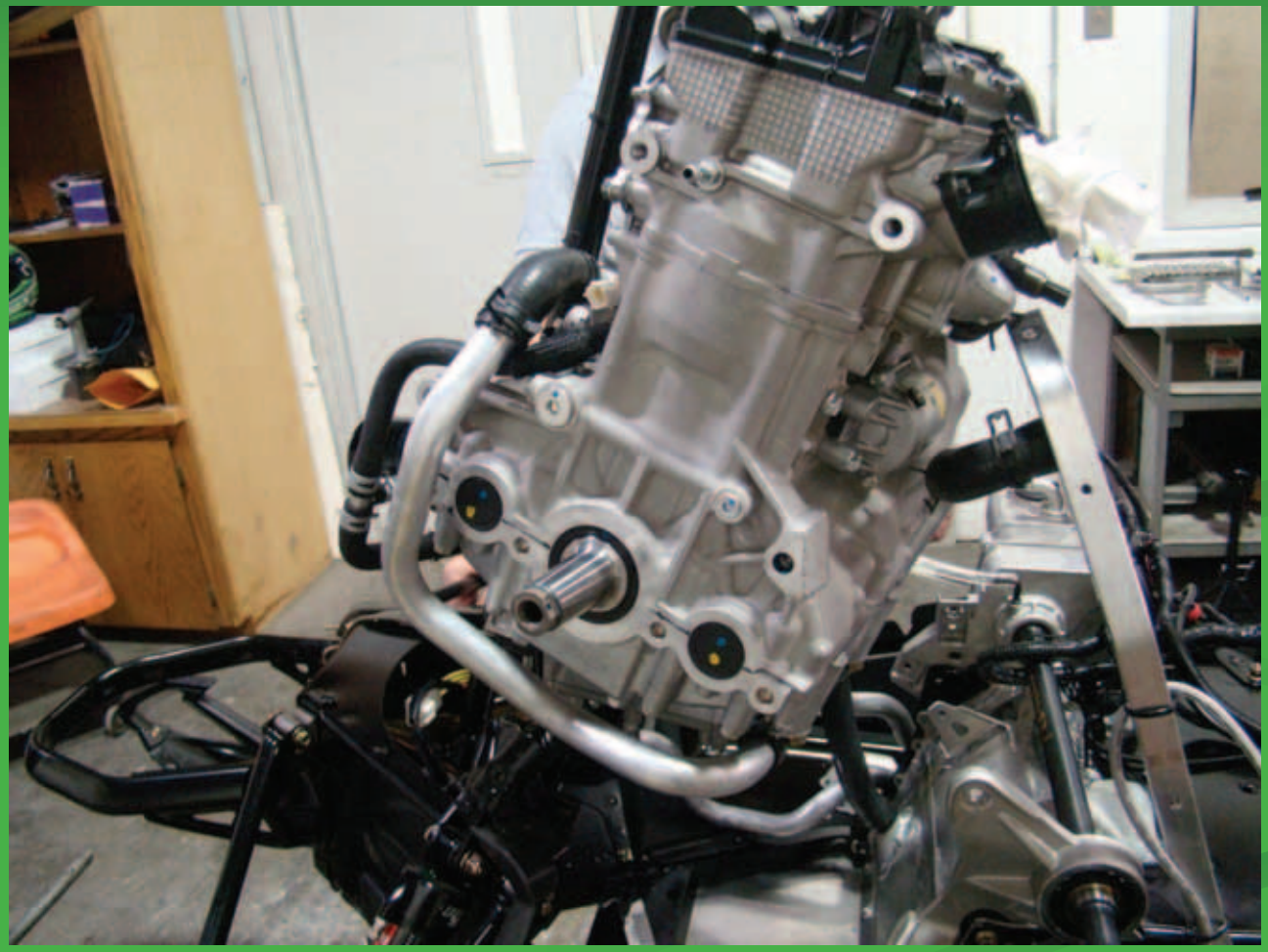
If LH rear mount is pried against, you risk having the bearing seals come out. Carefully press them back into place.



Turn the entire engine clockwise, enough to disengage from LH rear engine mount.

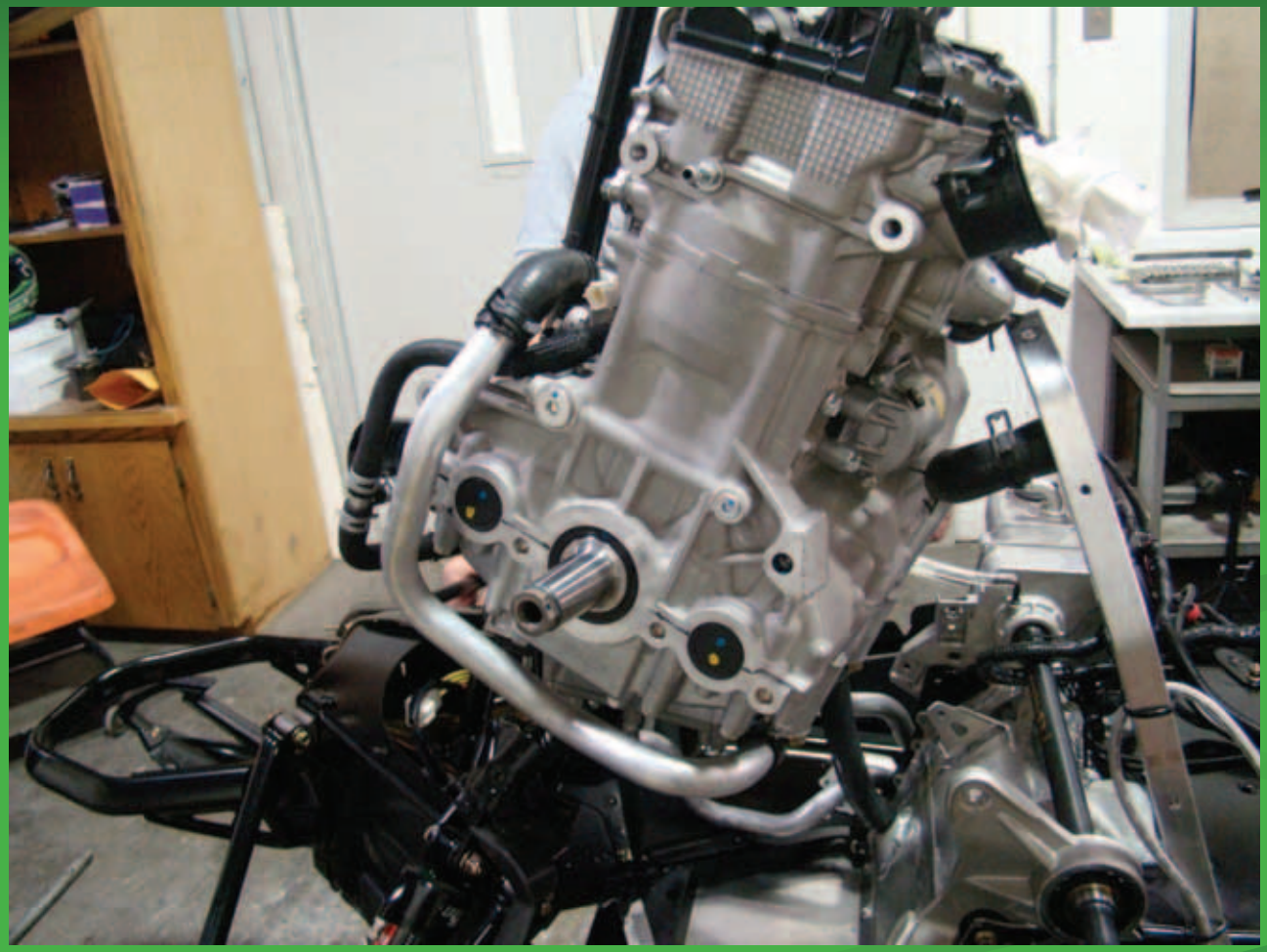


Carefully maneuver engine up and out of the chassis.



Check the inner side of the bearing to be sure the seal is still in place.

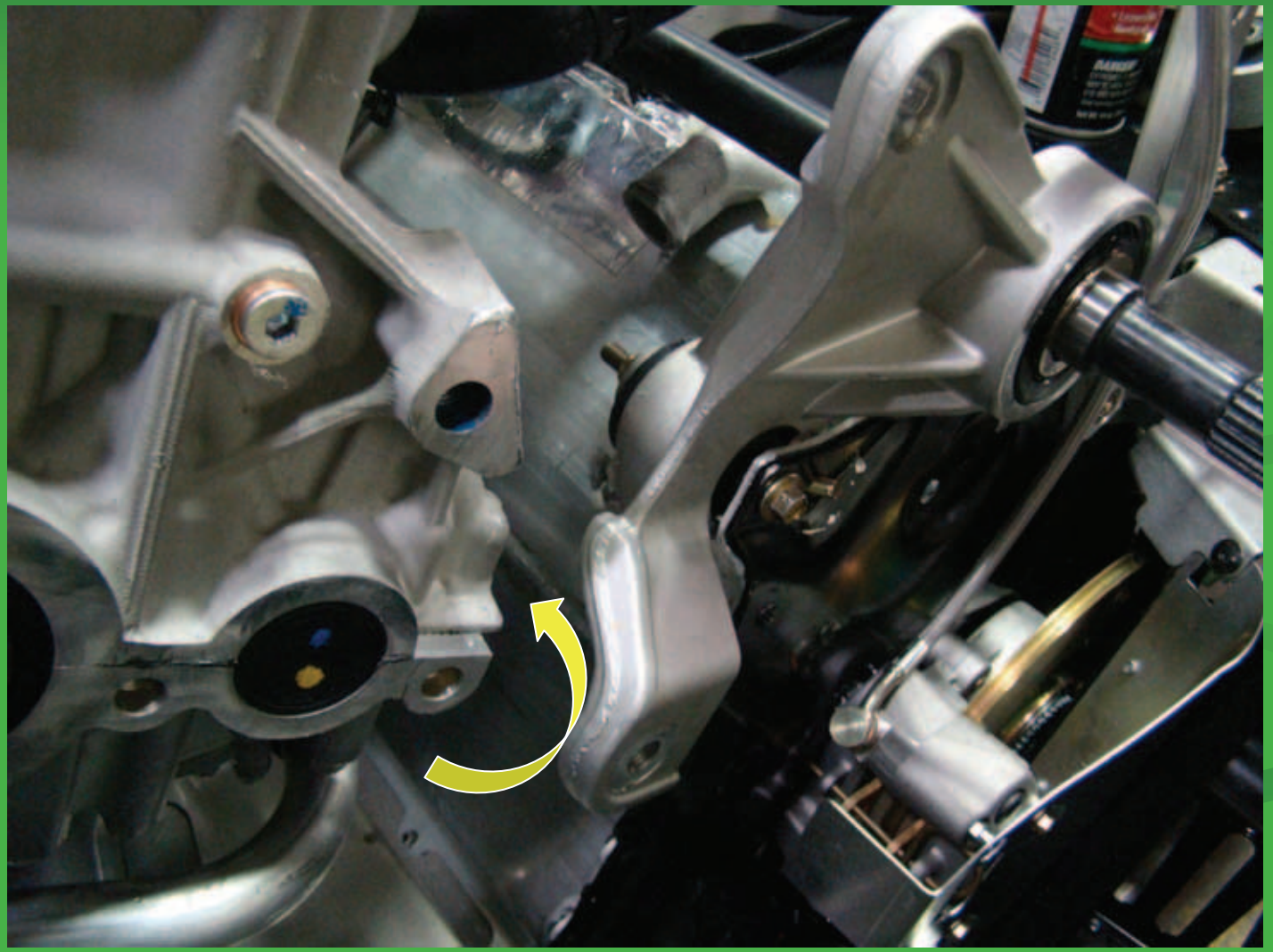
1100 N/A Installation Tips



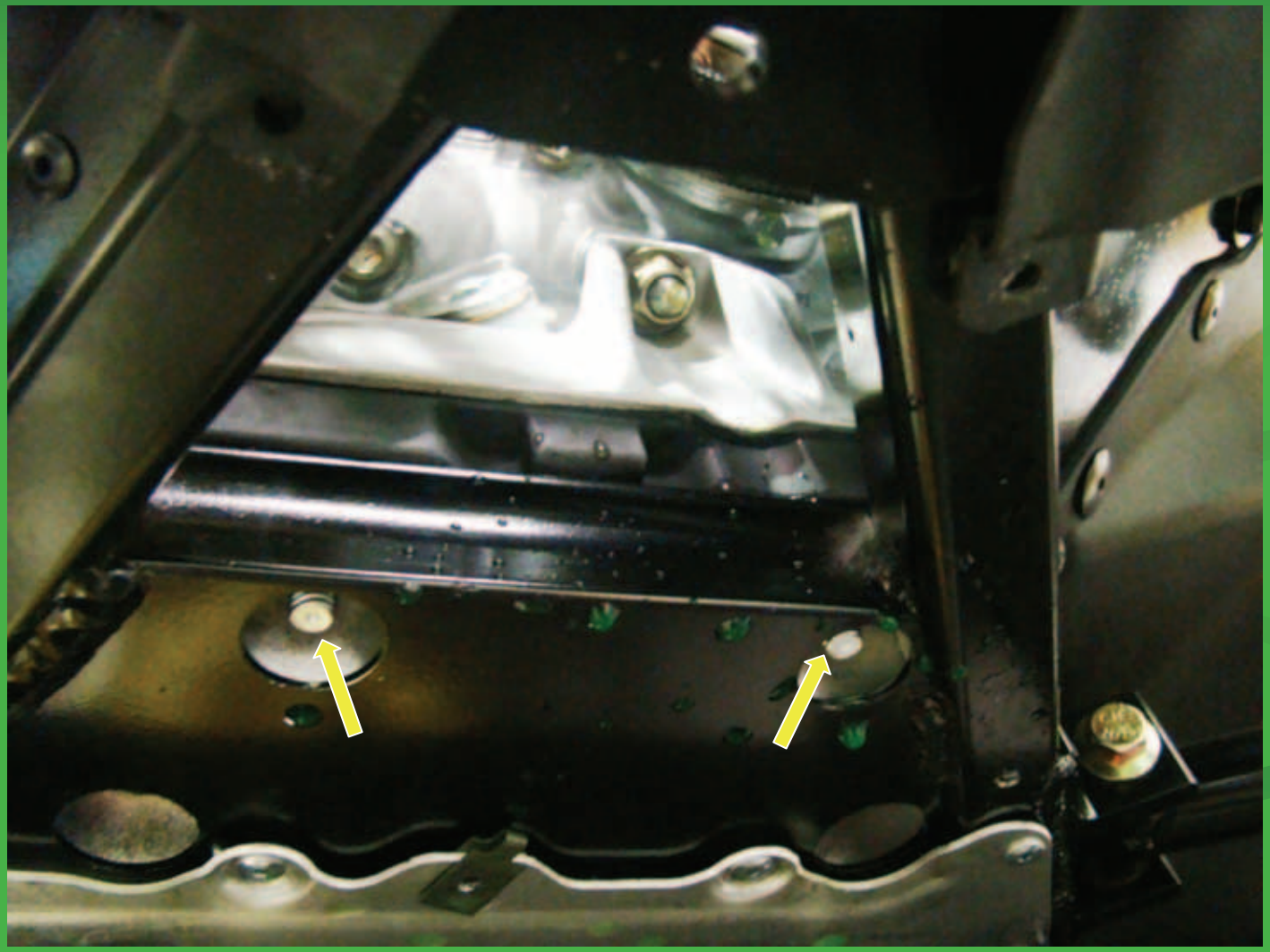
Follow removal slides backwards for installation.

The rear coolant line needs to be on the LH side of the tab for the RH rear engine mount when re-installing engine.

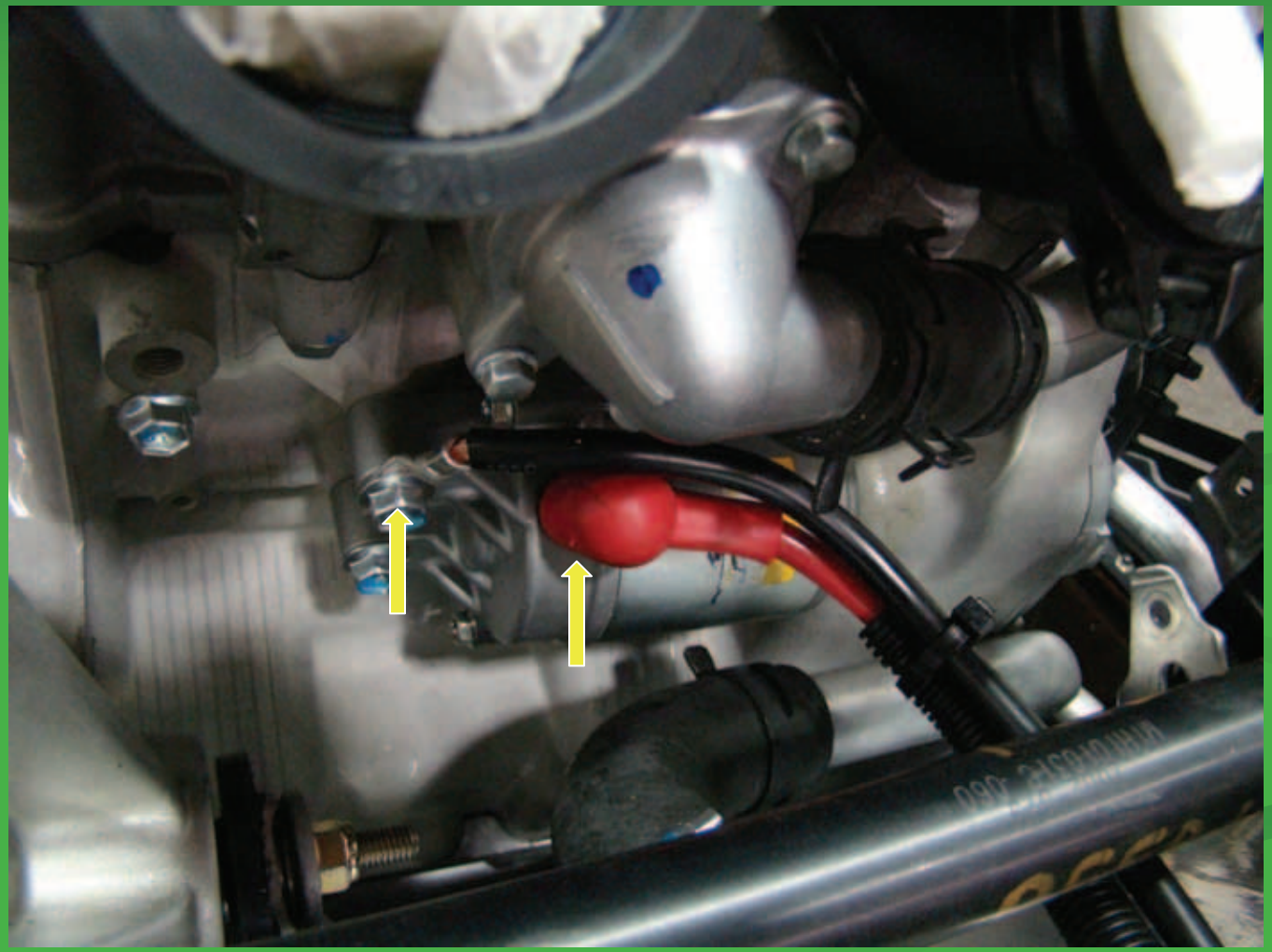
Slide the LH Rear engine mount out enough to gain clearance for the engine to be swung counterclockwise into place.



When the engine is low enough, align front engine mount studs into chassis and hand tighten nuts on them.

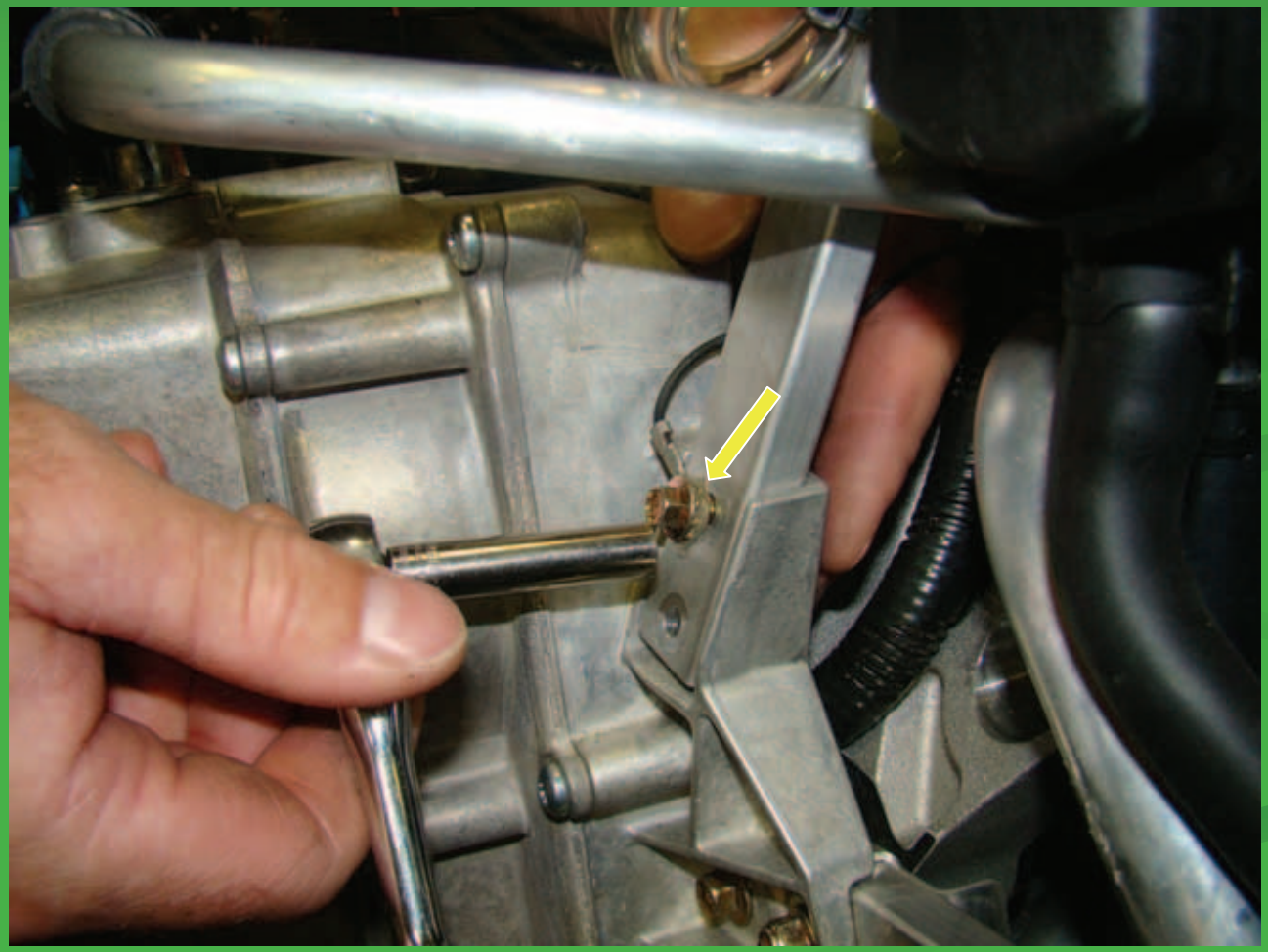


Lift the engine enough to gain access to connect the ground and positive wire to starter.

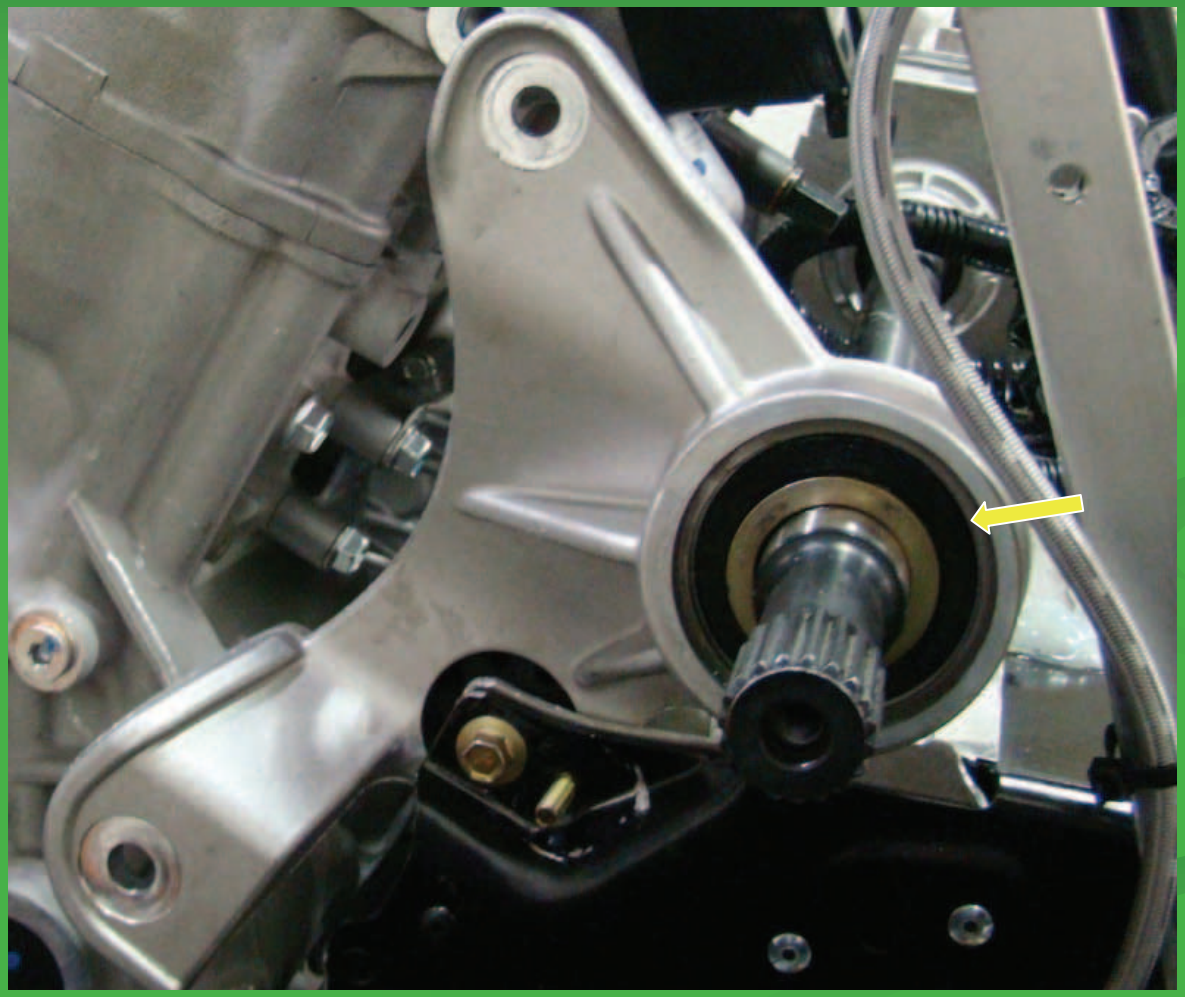


Install the coolant hose on the heat exchanger and secure the hose clamp, while the engine is still lifted.

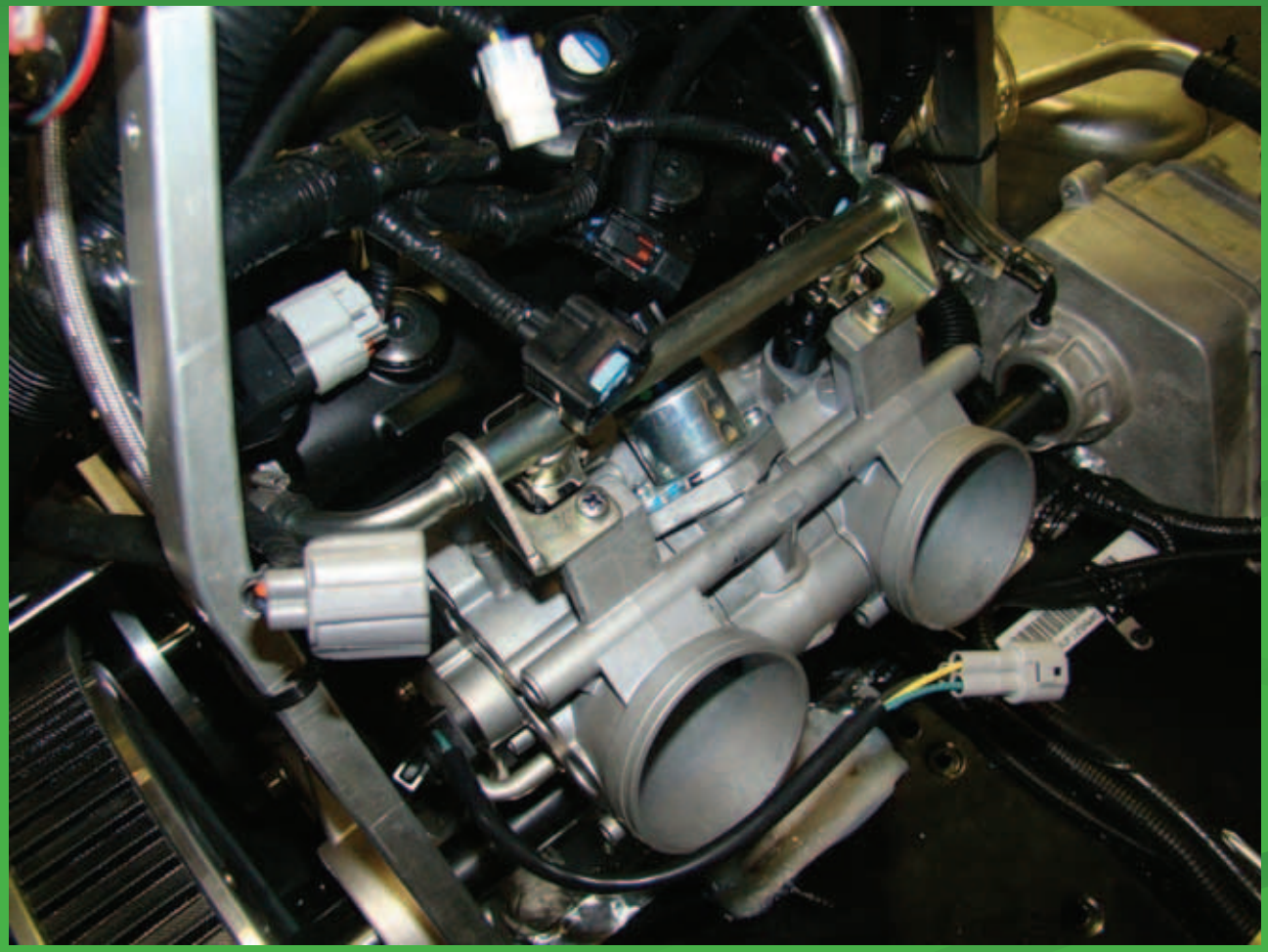
Make sure the chassis ground gets grounded to the chassis.



Check to see if either bearing seals where disturbed during engine installation.



Reconnect all of the connectors to the throttle body and engine.

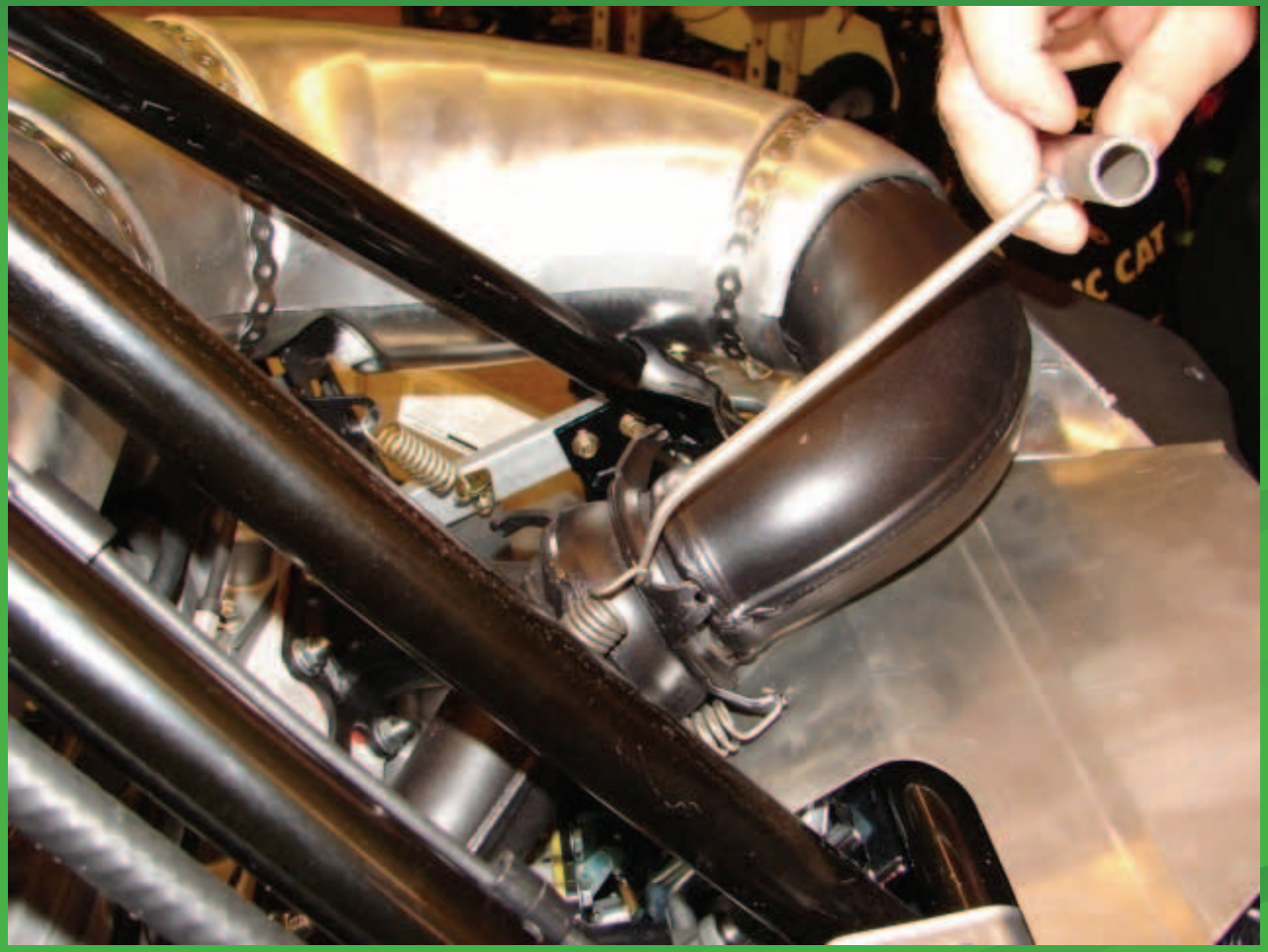


Make sure all fasteners are properly torqued and that the proper Loctite™ products are used.

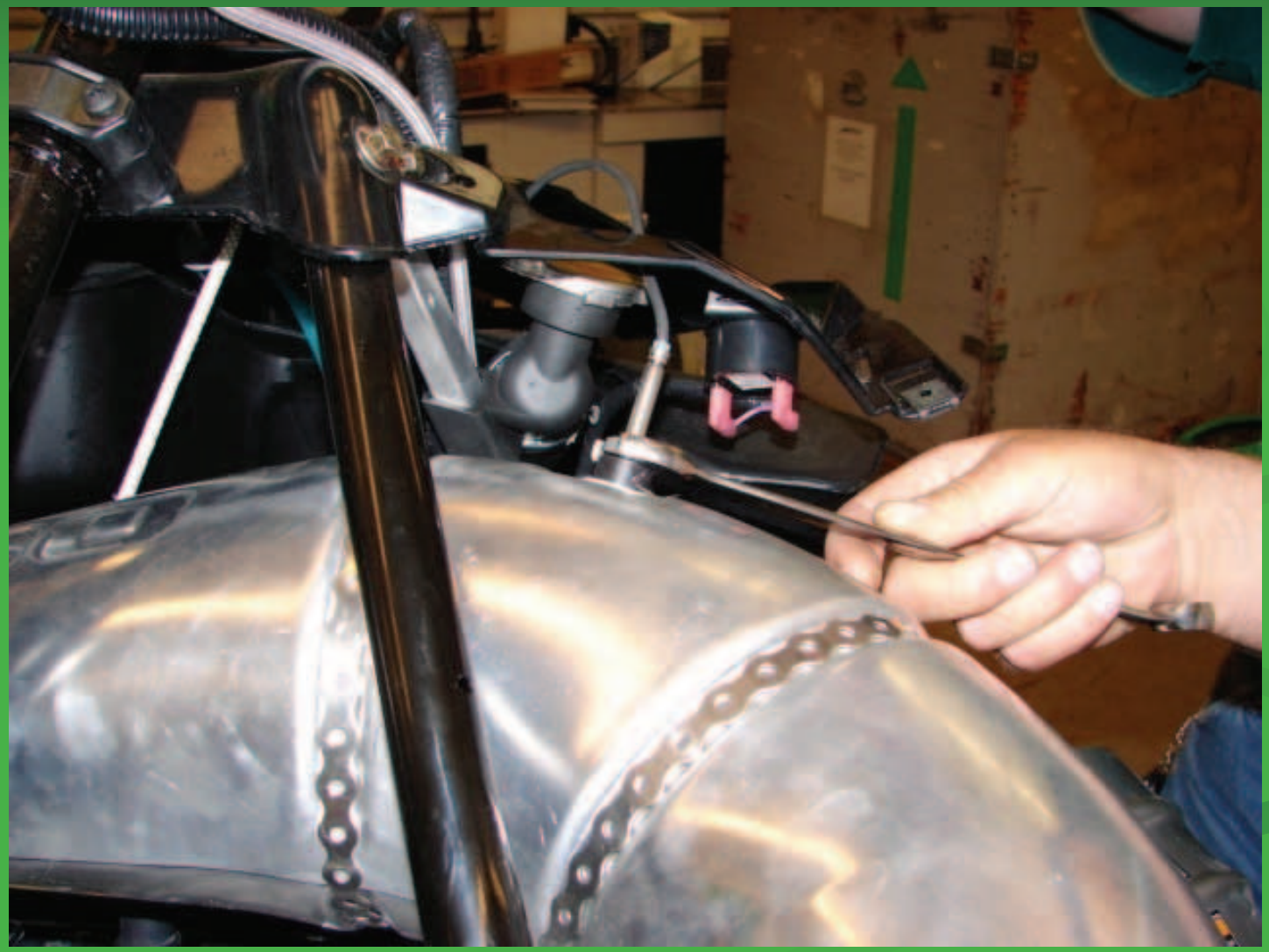
Tight hardware is key to chassis strength and rigidity.

800 Engine Removal and Installation Tips

Remove exhaust springs

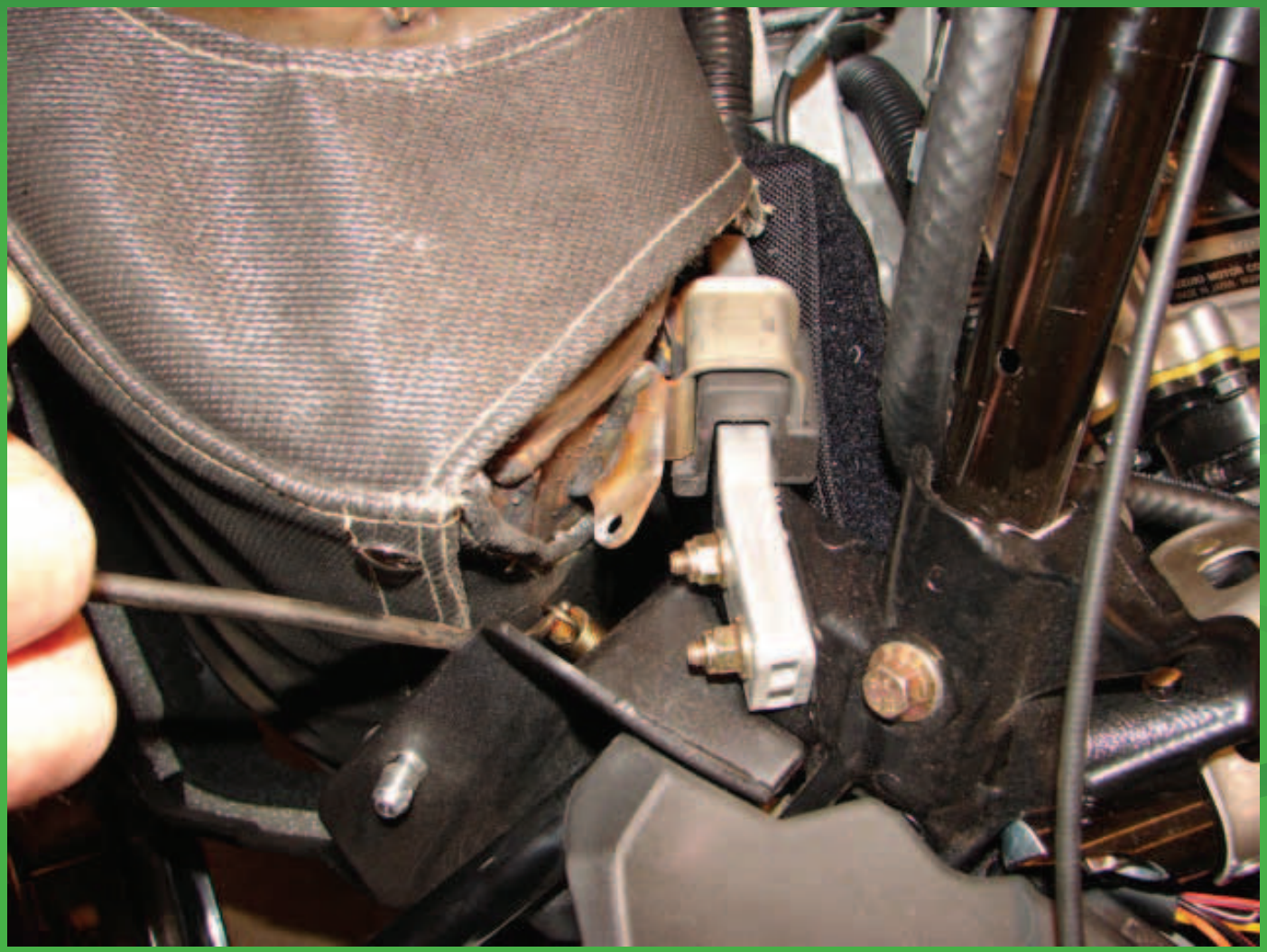


Remove the exhaust temperature sensor.

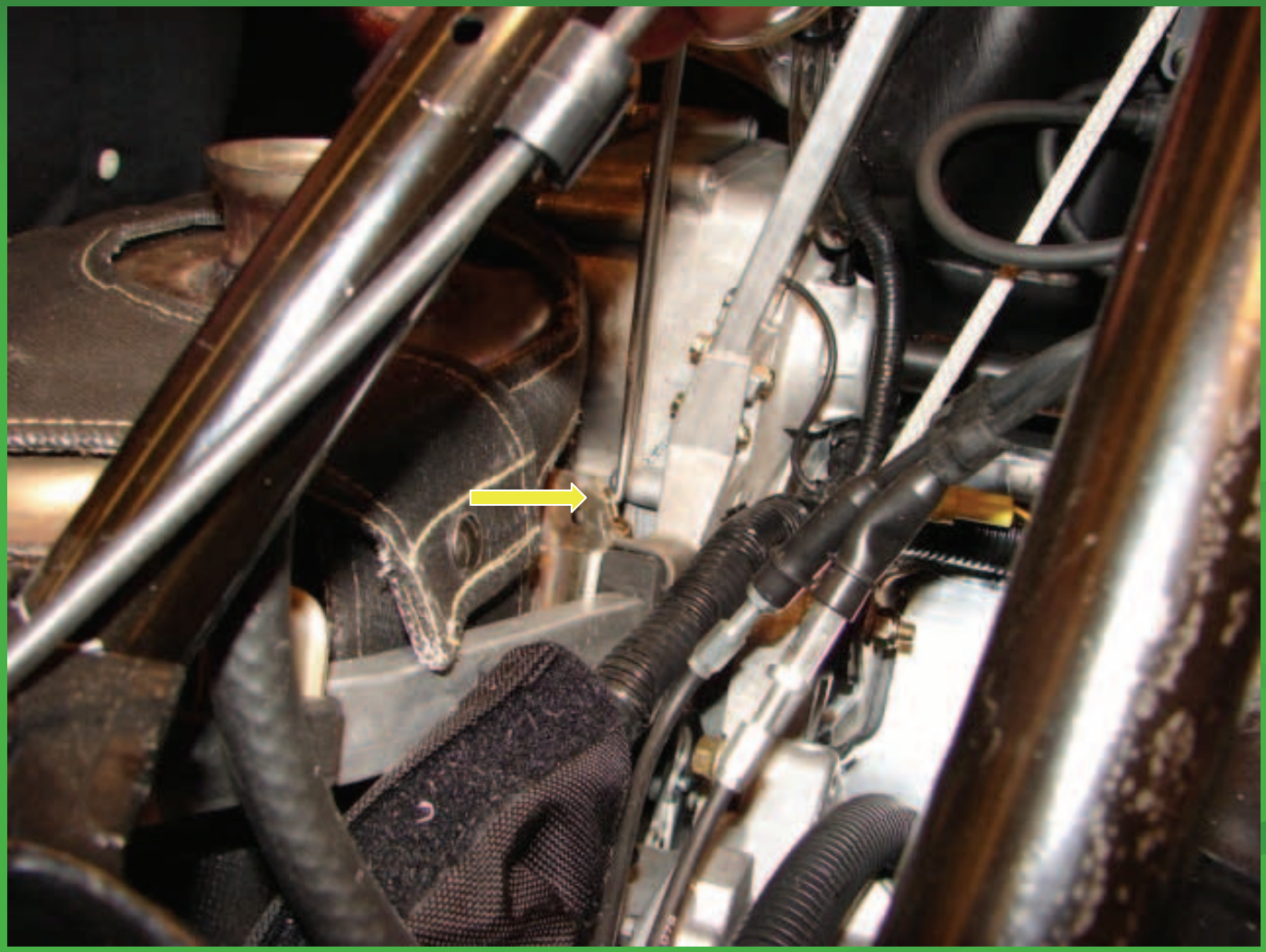


Remove the exhaust pipe from the left side of the chassis

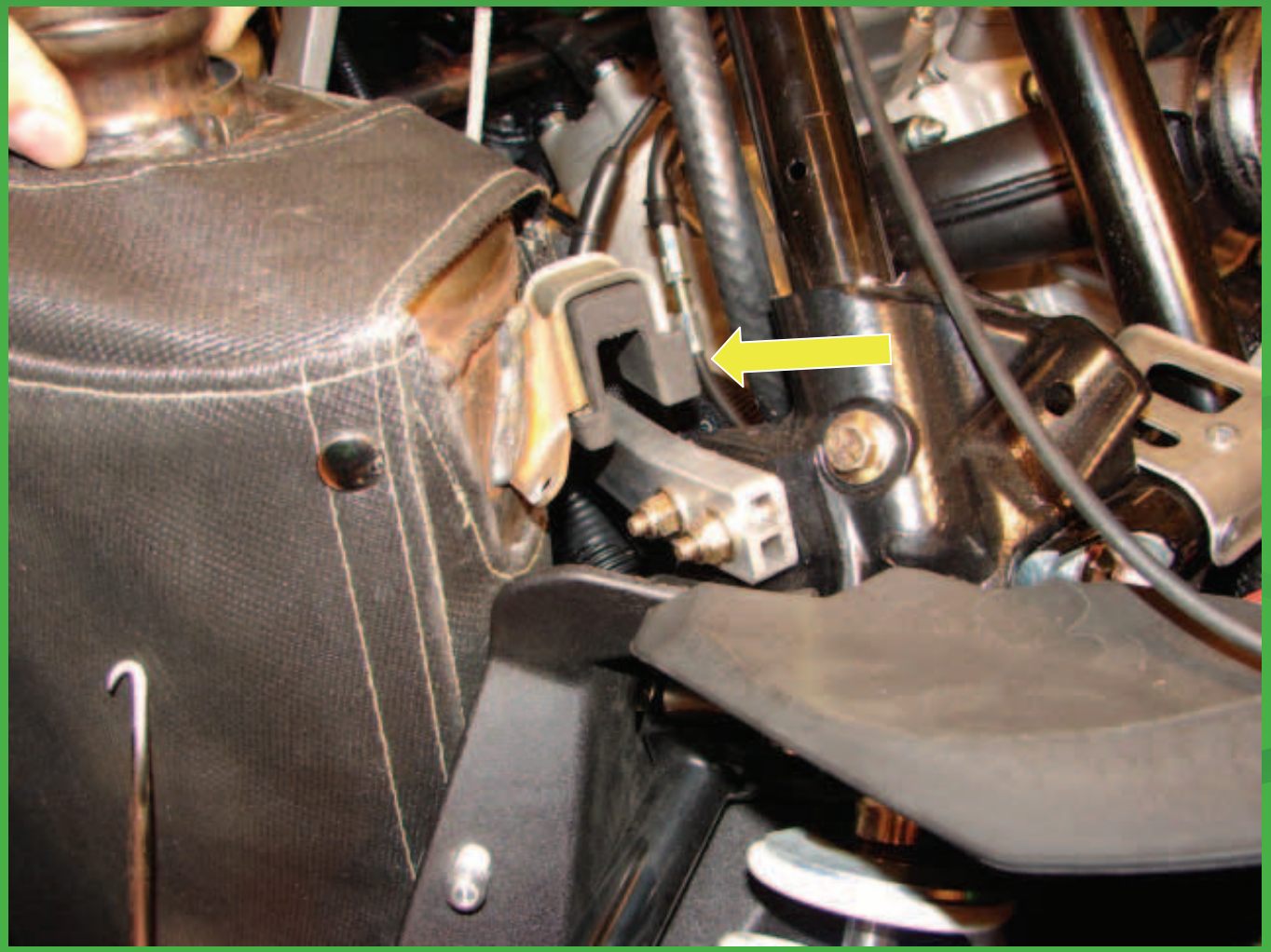
Remove the springs holding the resonator to the chassis with a spring tool.



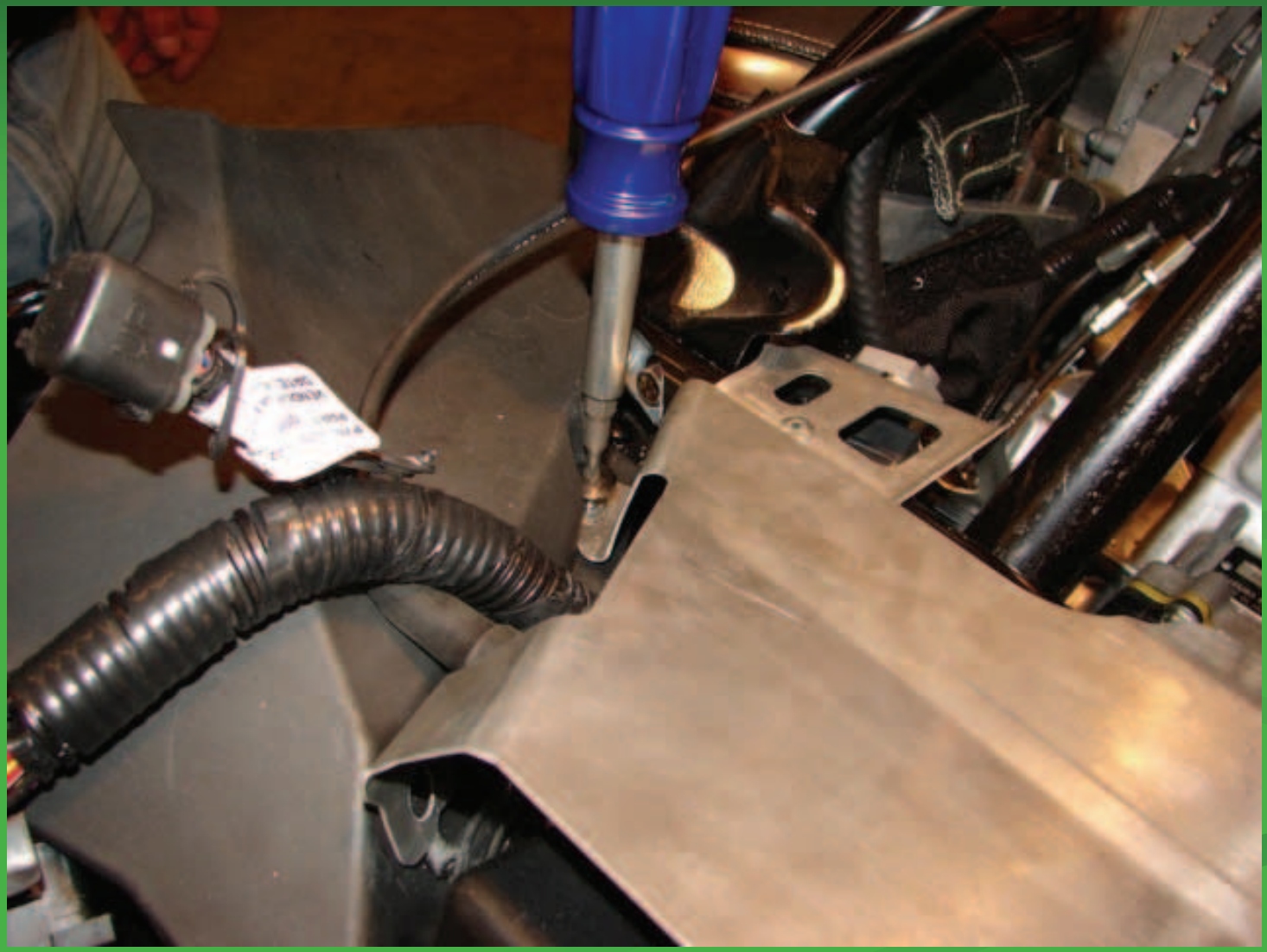
Take note to the orientation of the spring tabs.



Remove the resonator, note how it hangs on the RH support bar. Account for two rubber mounts.



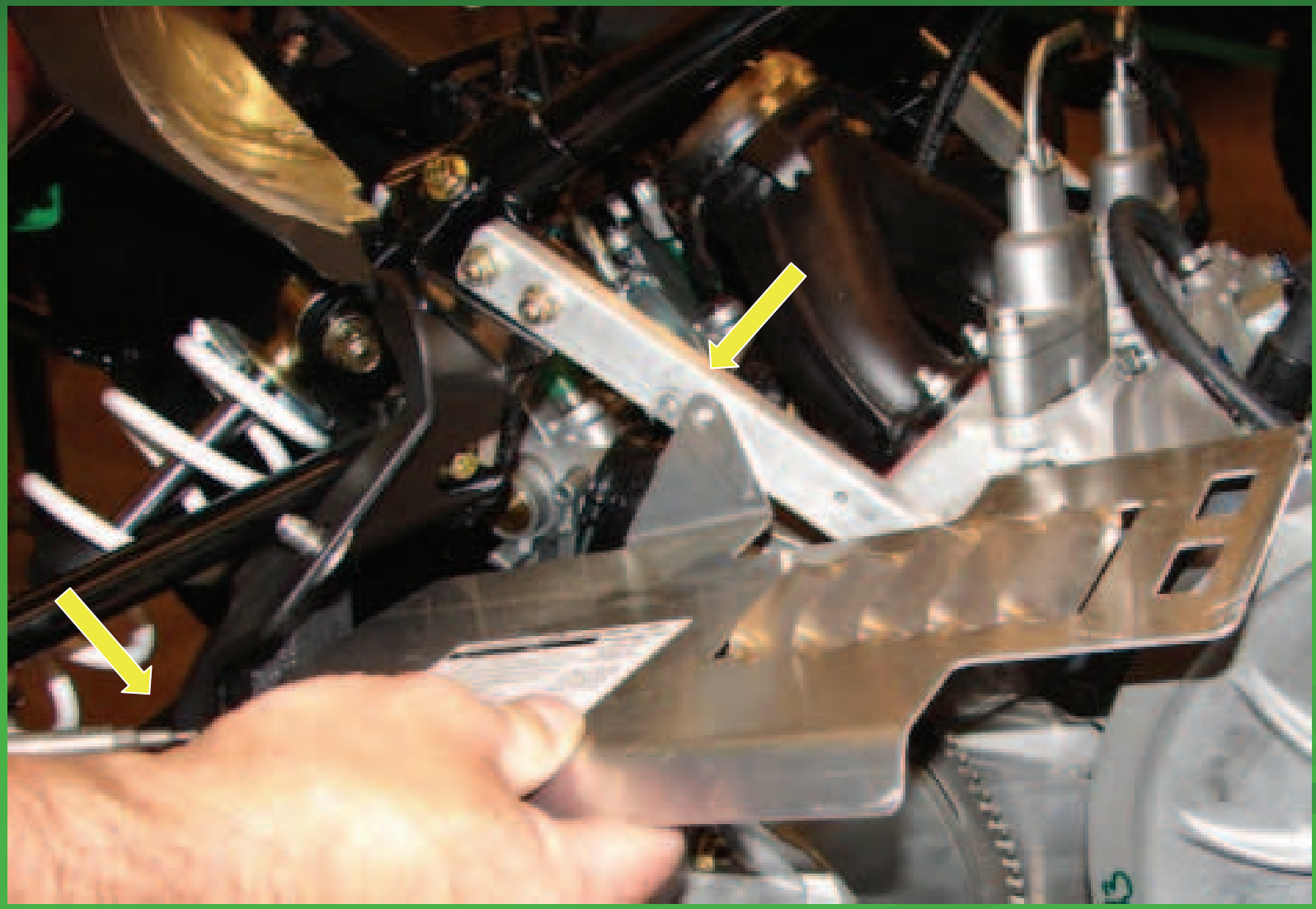
Remove the ECU and heat shield.



Remove the ECU heat shield by pushing in, releasing it from the pin.

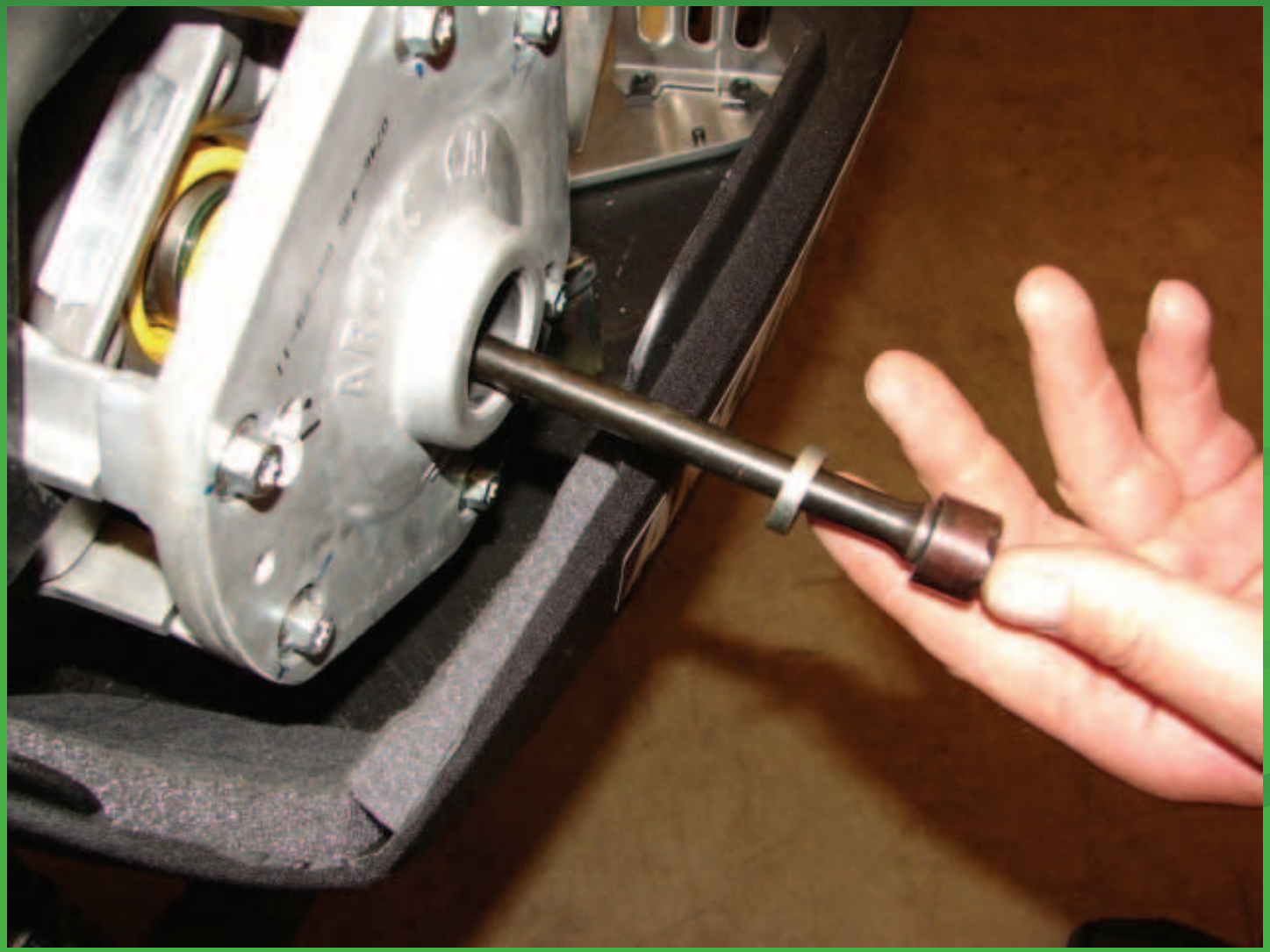
Remove the fasteners for the stationary clutch guard.

Note the location of all the fasteners.

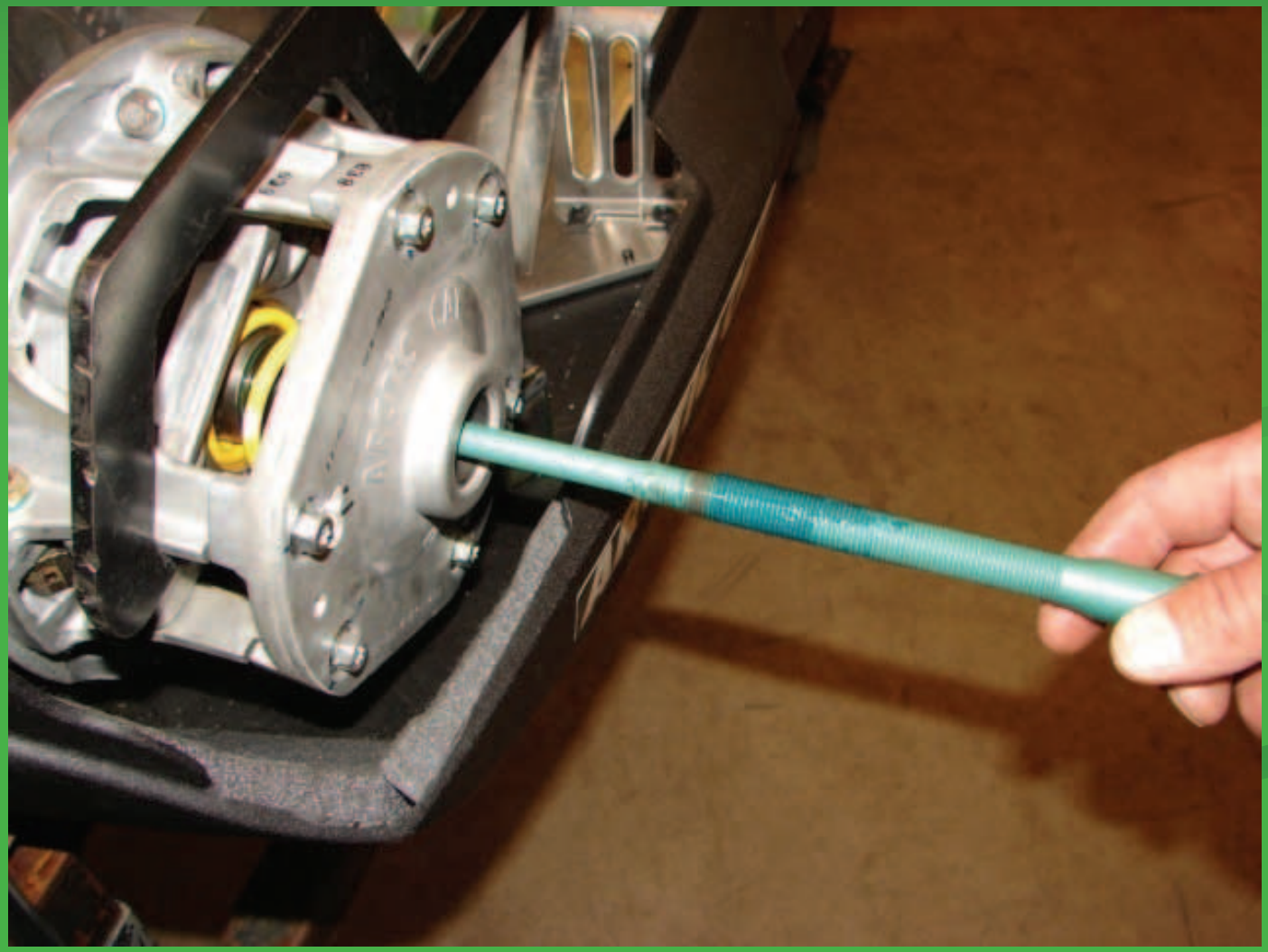


Use clutch holder and breaker bar to loosen the #60 Torx.

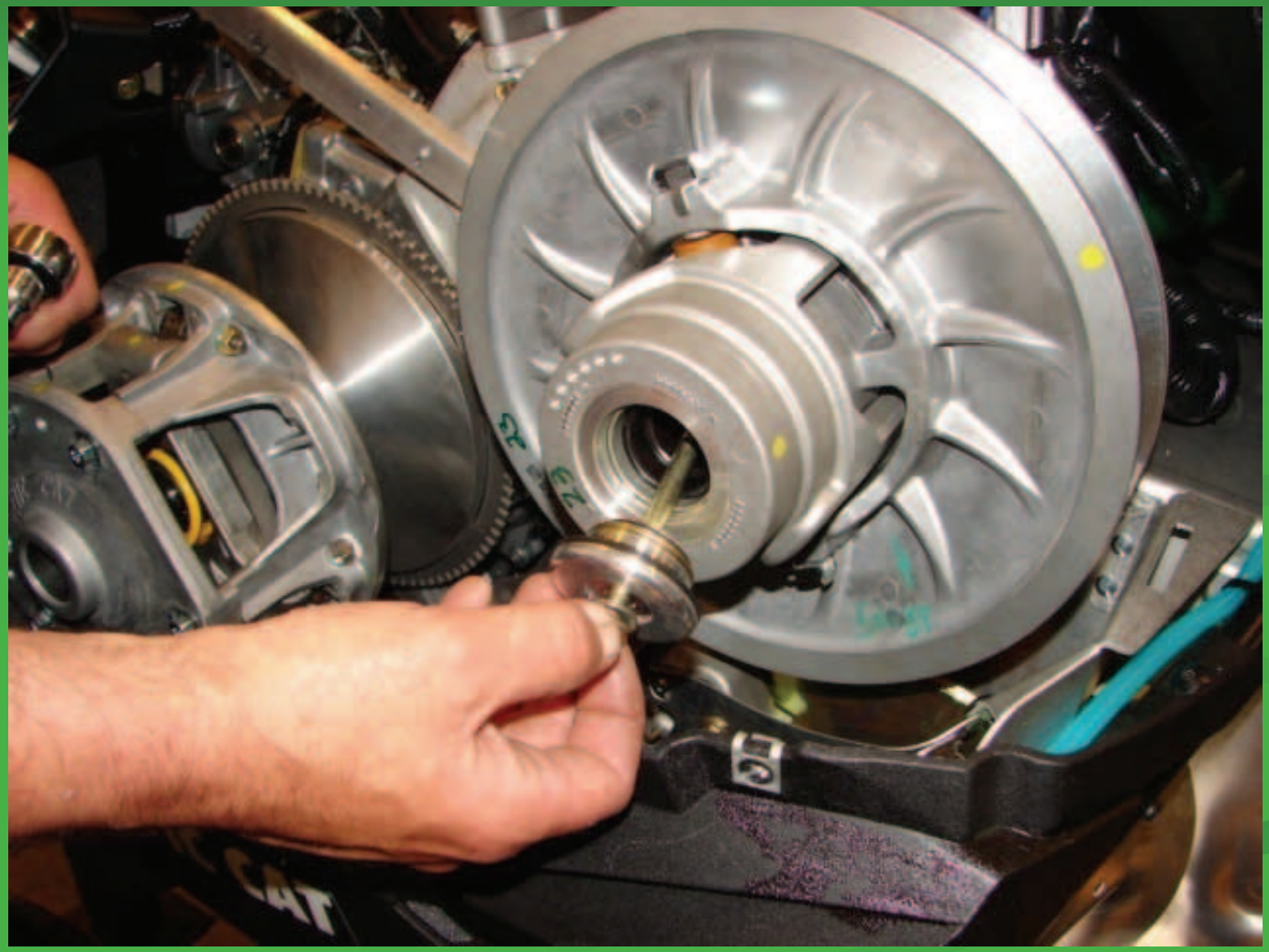
Take note to the washer on the drive clutch bolt.



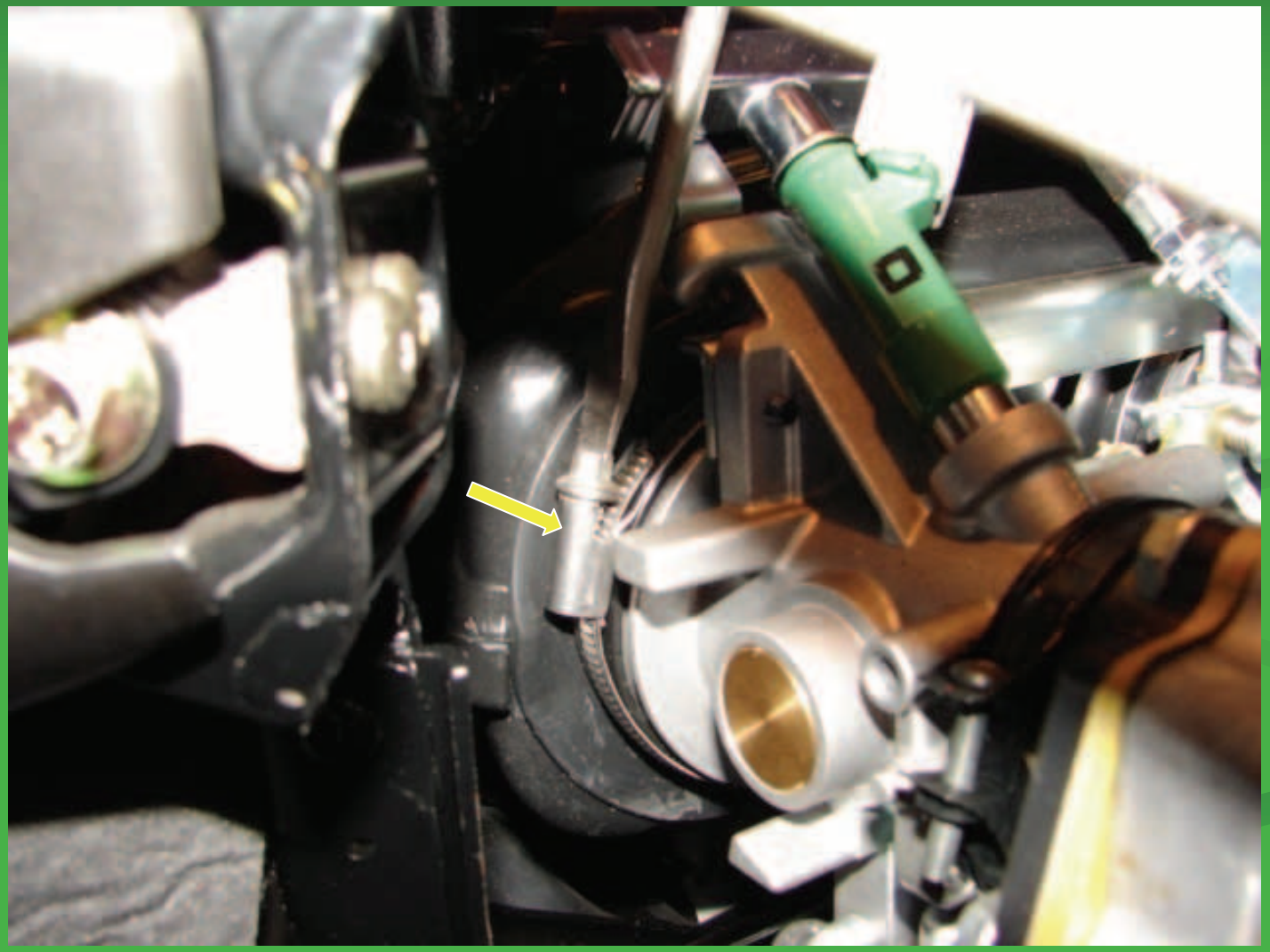
Use the GREEN clutch puller (p/n 0744-062). Apply grease to aid in removal to the puller threads and tip.



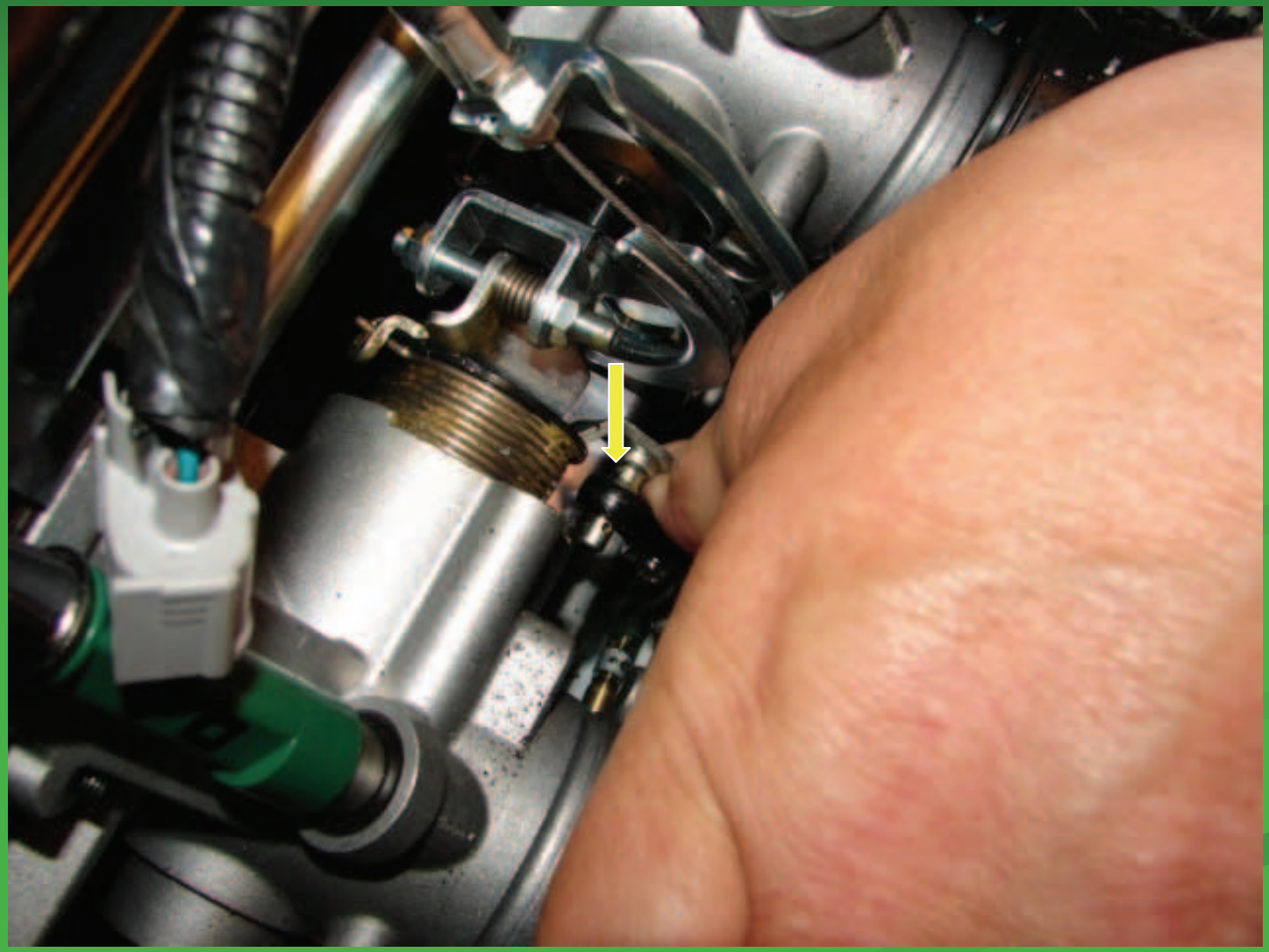
Remove the driven pulley bolt and the driven pulley.



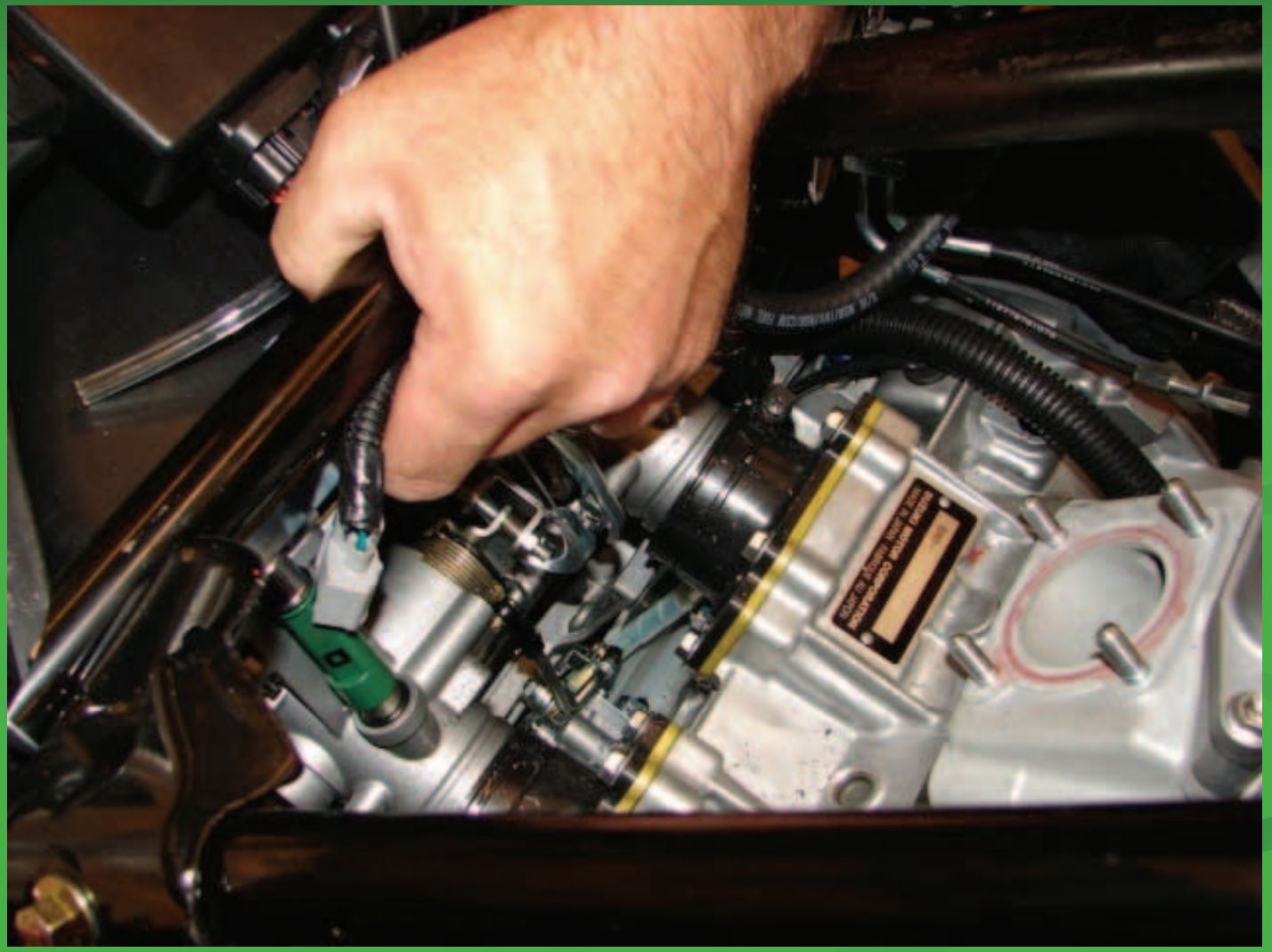
Loosen the clamps holding the air intake to the throttle body.



Disconnect the oil pump rod.

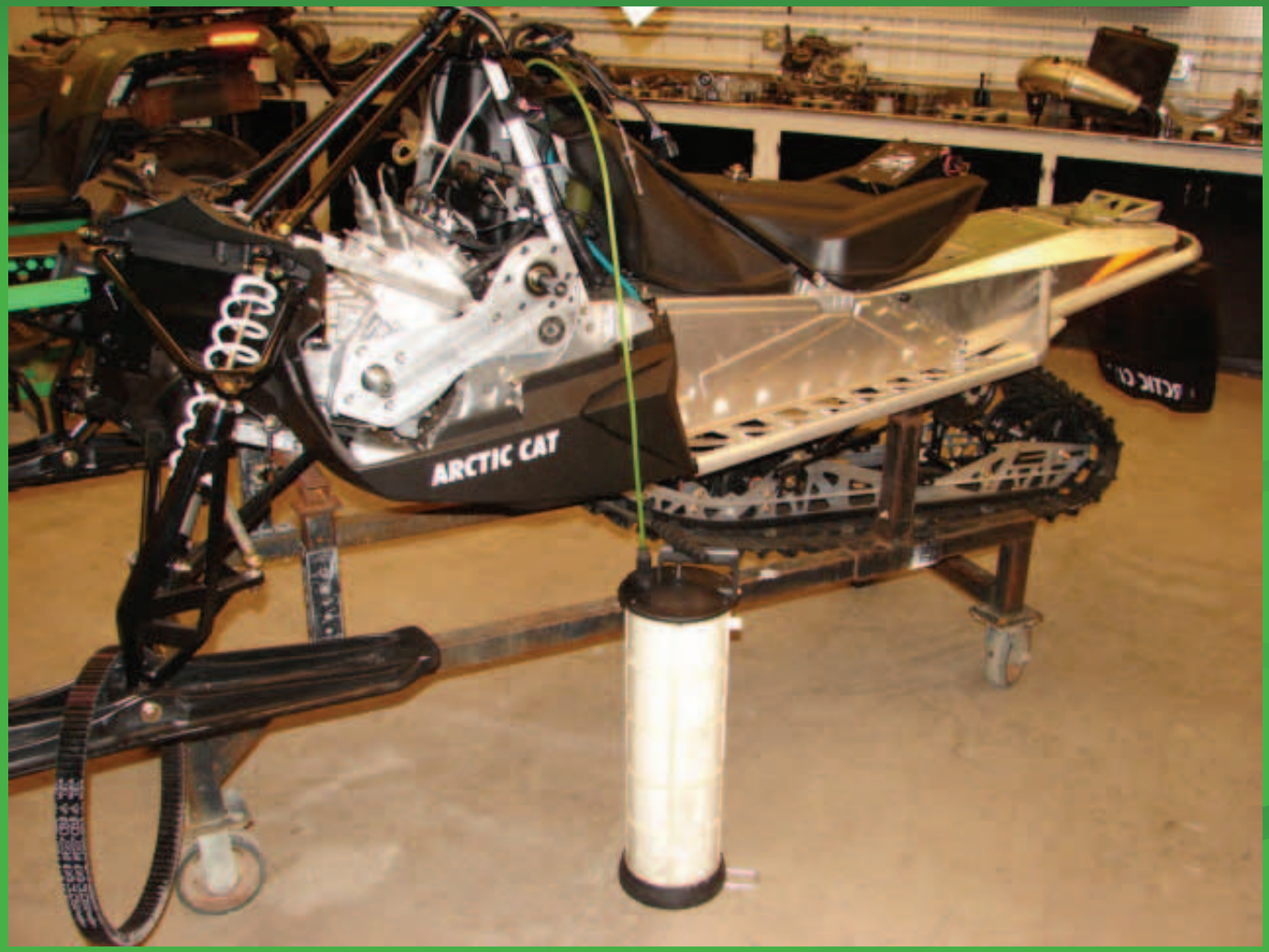


Remove the throttle body from the intake flanges.

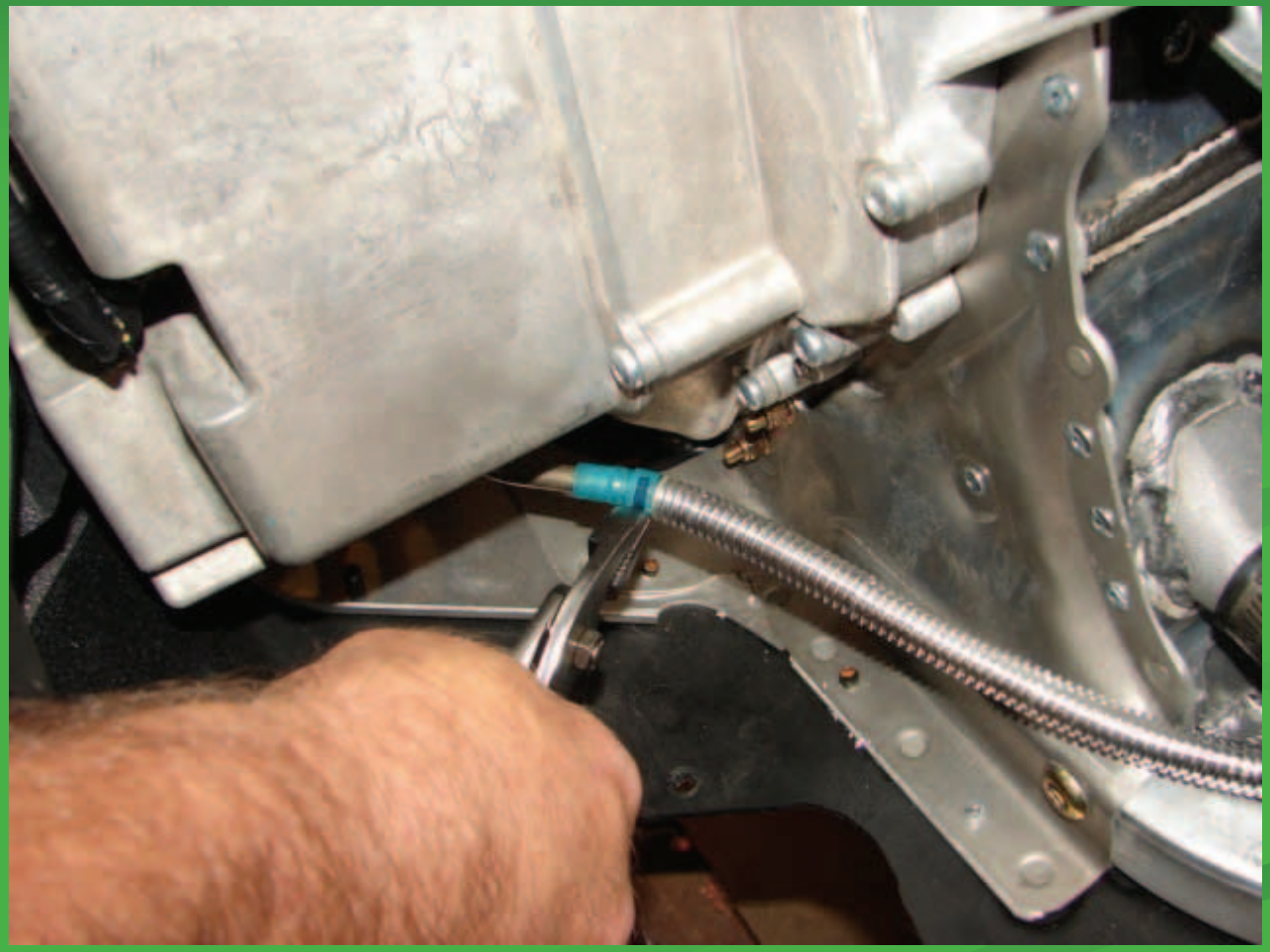


Remove exhaust manifold

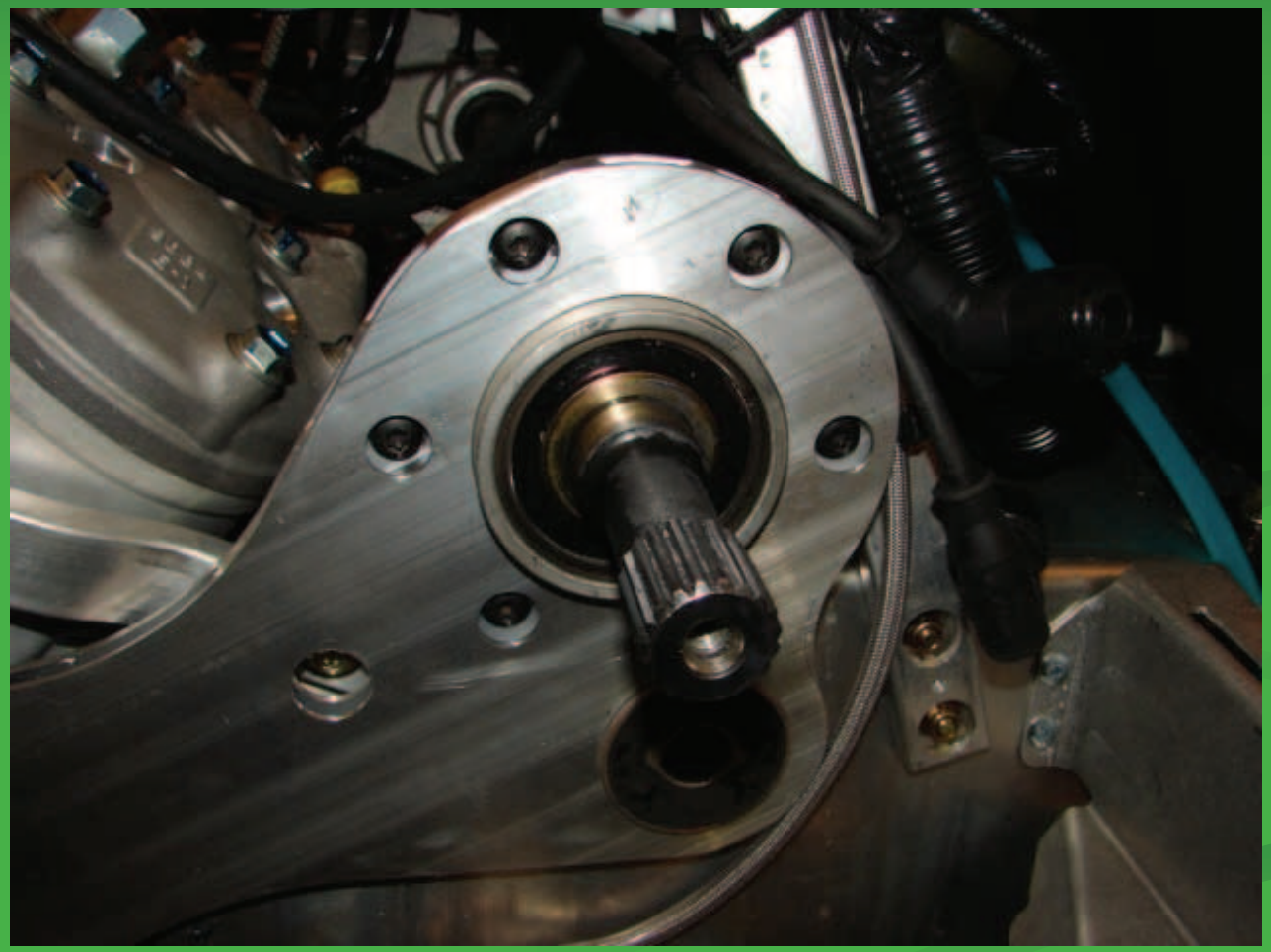
Drain coolant or Use a vacuum style pump to syphon it out.



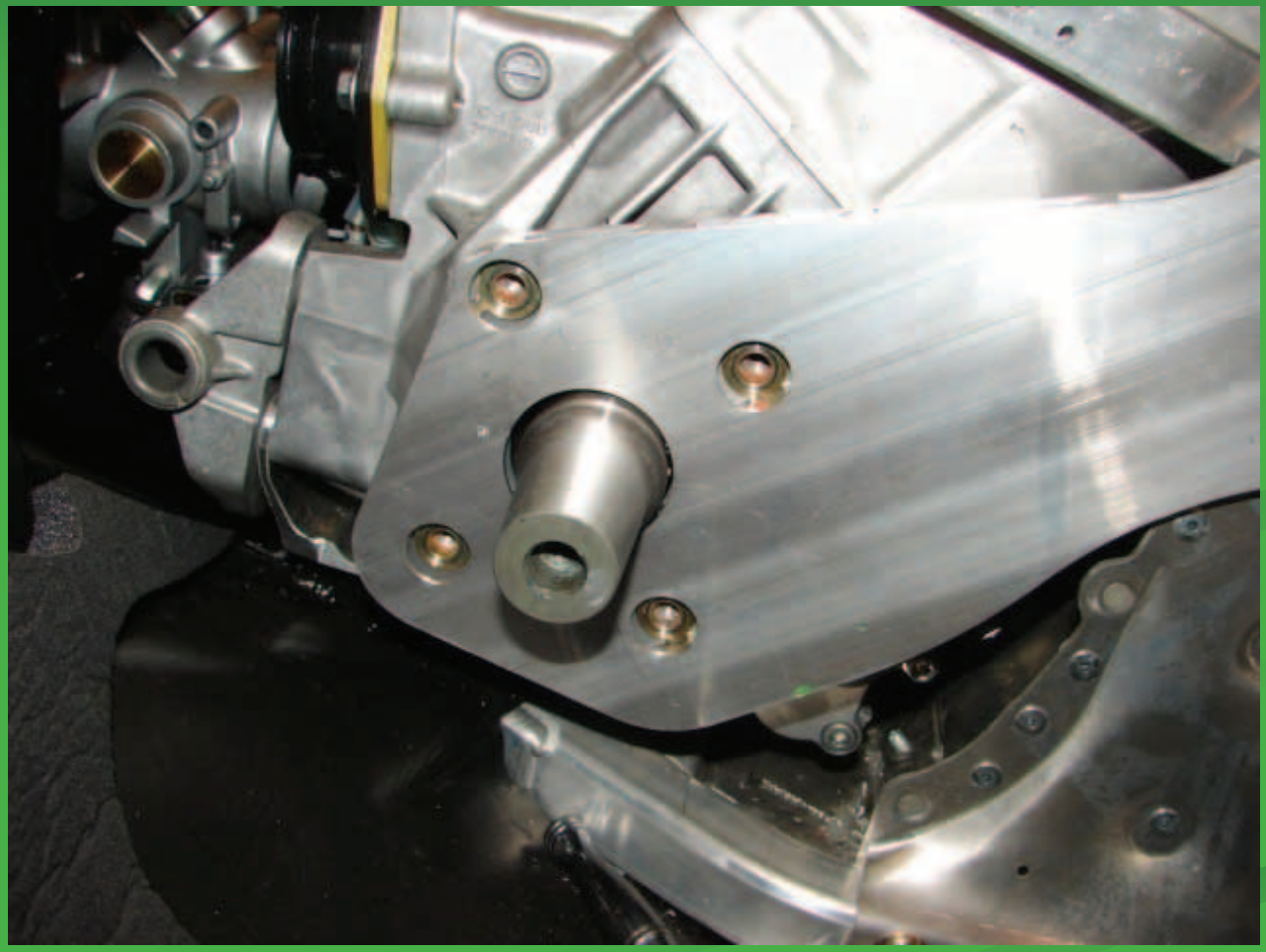
Remove oil line. Plug oil line and oil tank outlet.



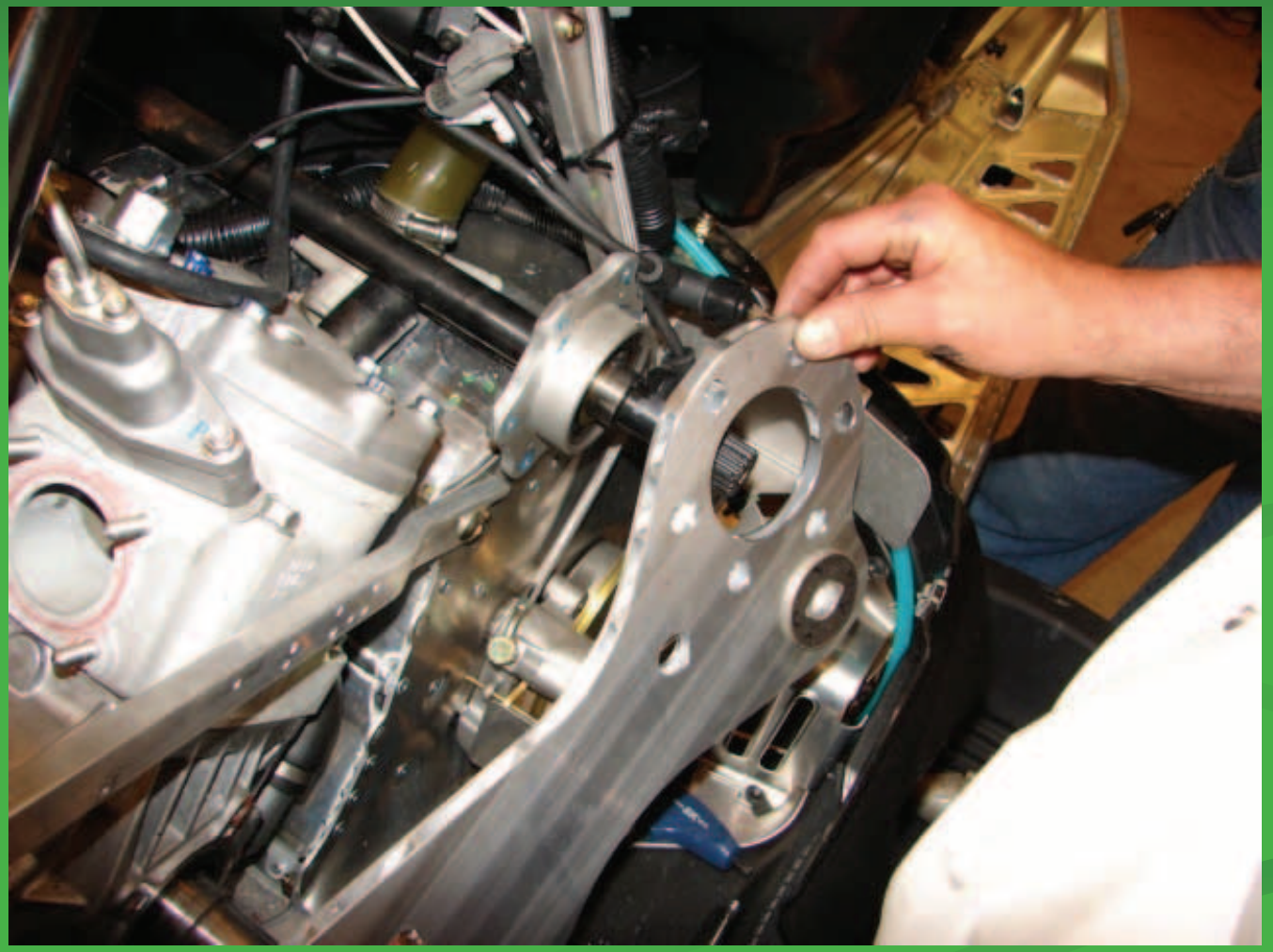
Remove Torque Control Link (TCL) plate screws.



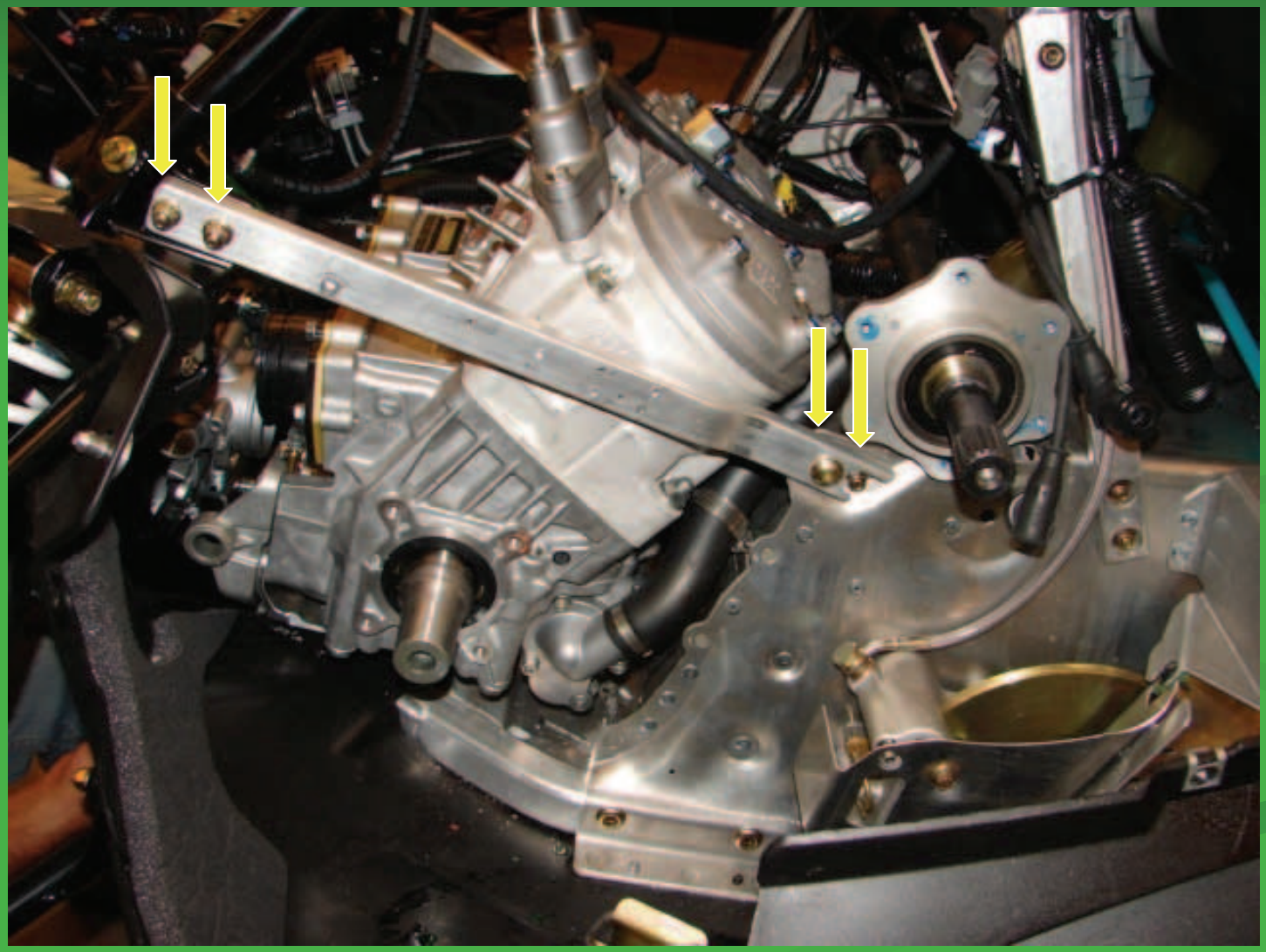
Remove 4 screws securing the TCL to the engine.



Remove the TCL plate / Engine mount.



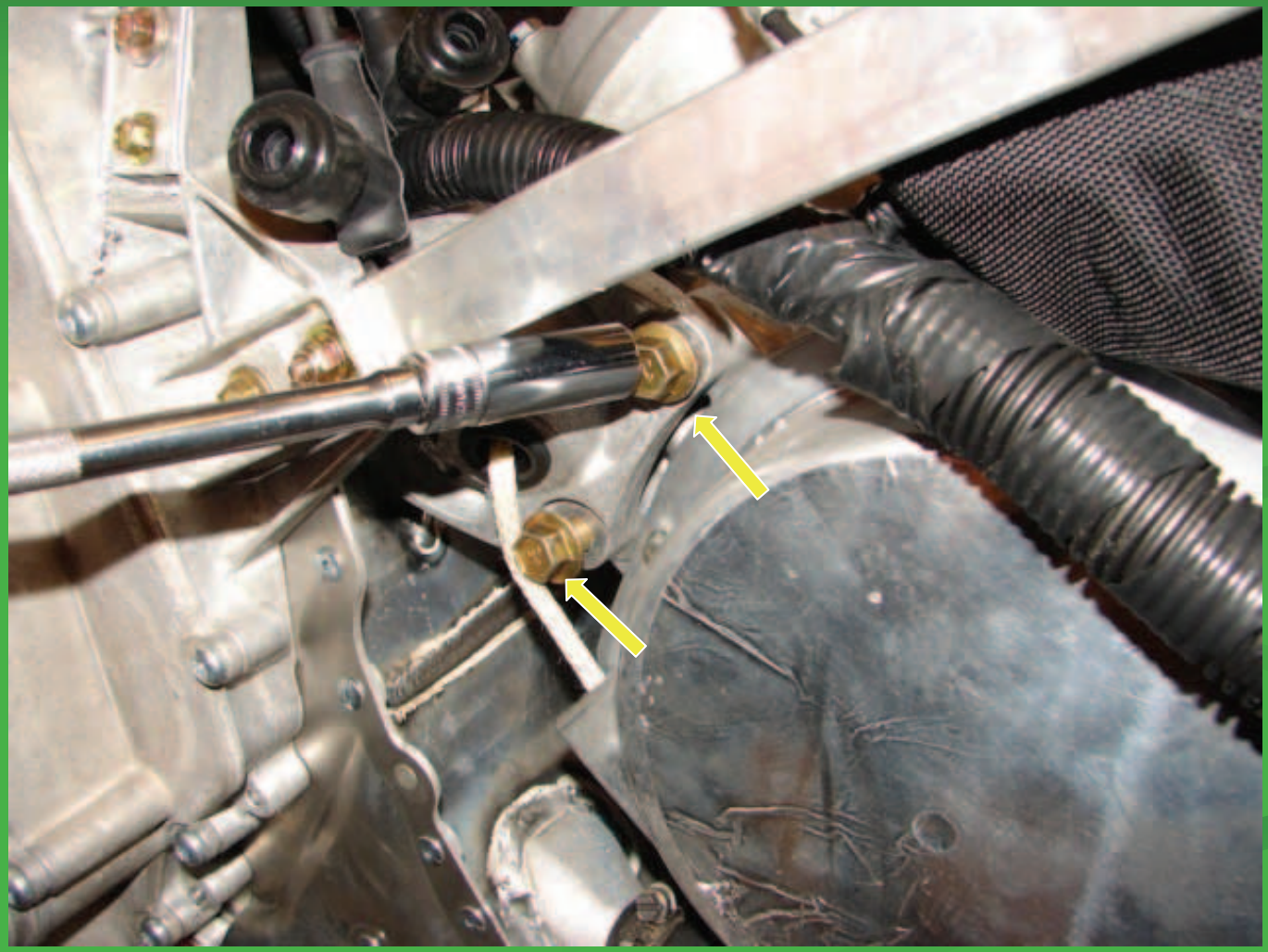
Remove the LH support bar taking note of the direction of the fasteners.



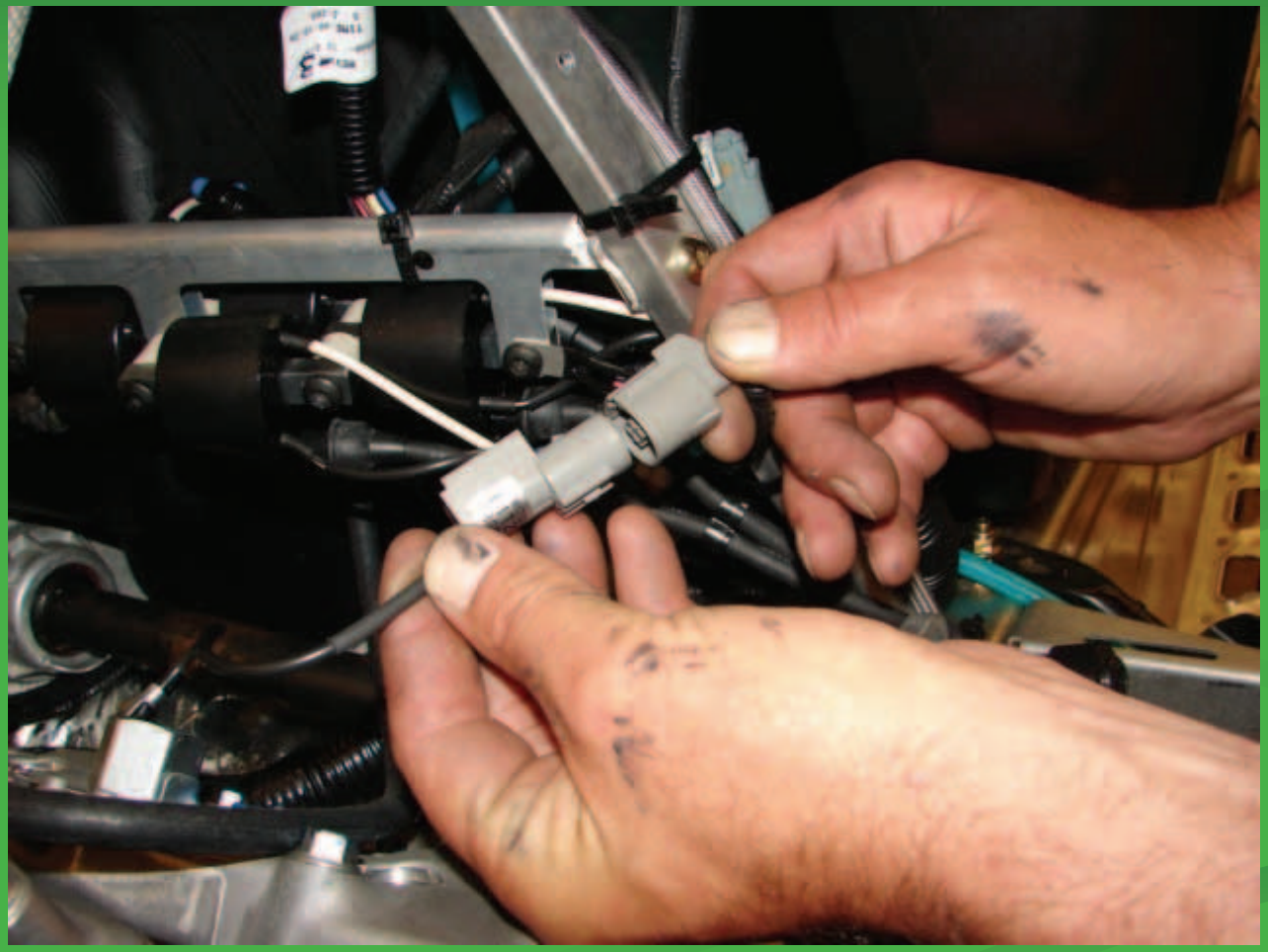
Remove the lower access plate.

Remove the two nuts and one bolt from the lower engine mounts.

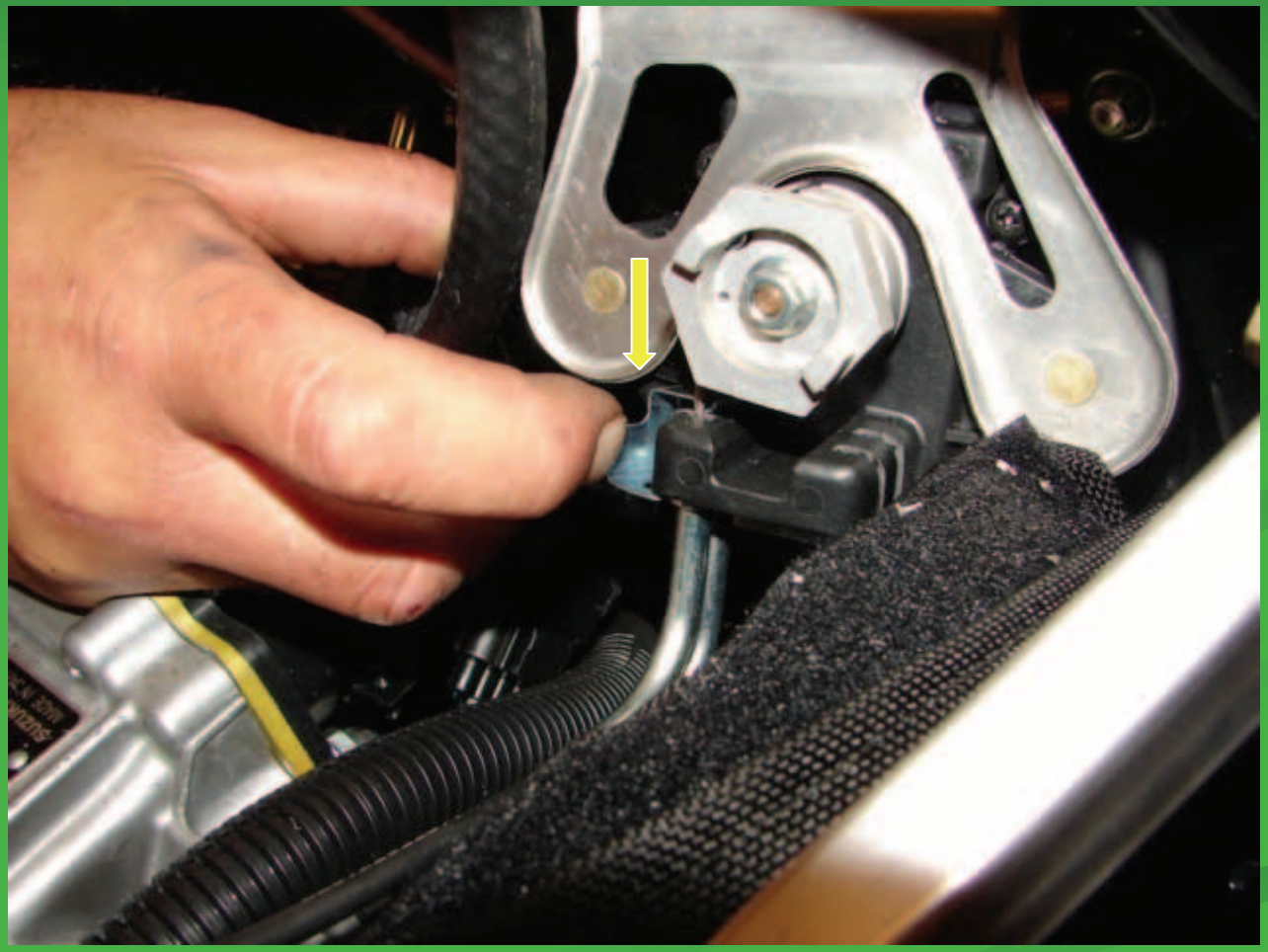
Remove the right side mounting bolts, leaving the mount in the chassis.



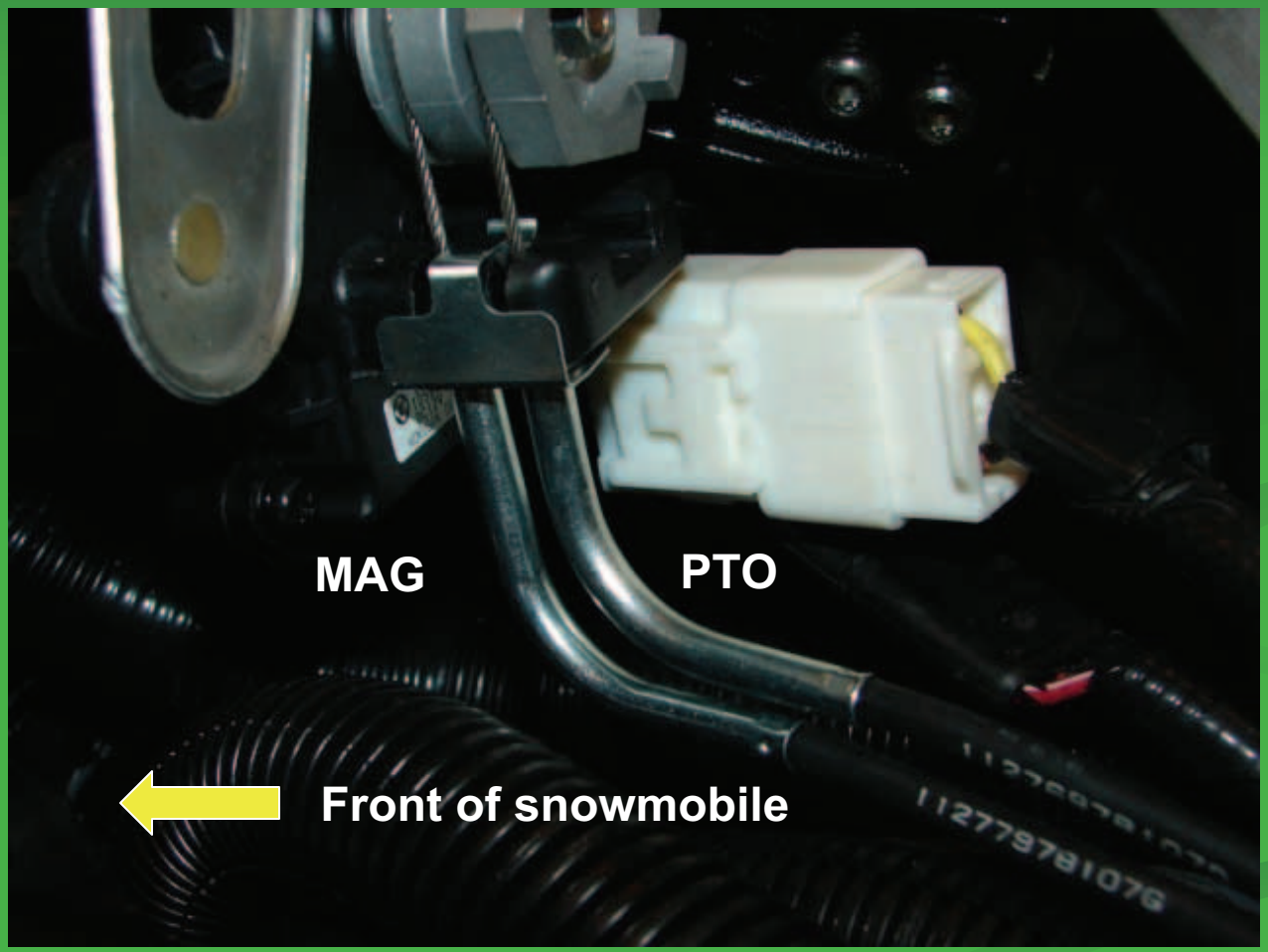
Unplug the knock sensor.



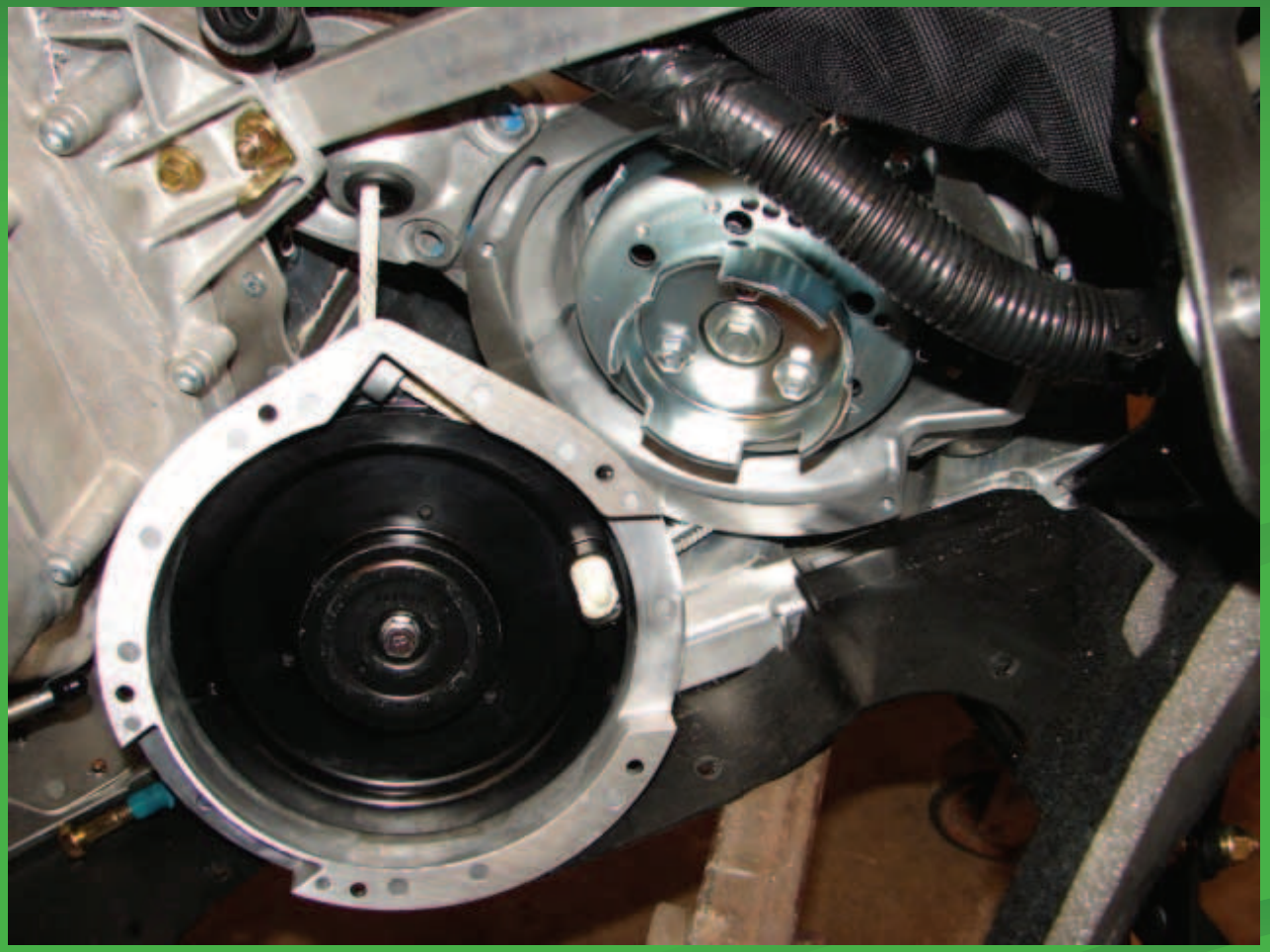
Remove the servo motor cable retainer.



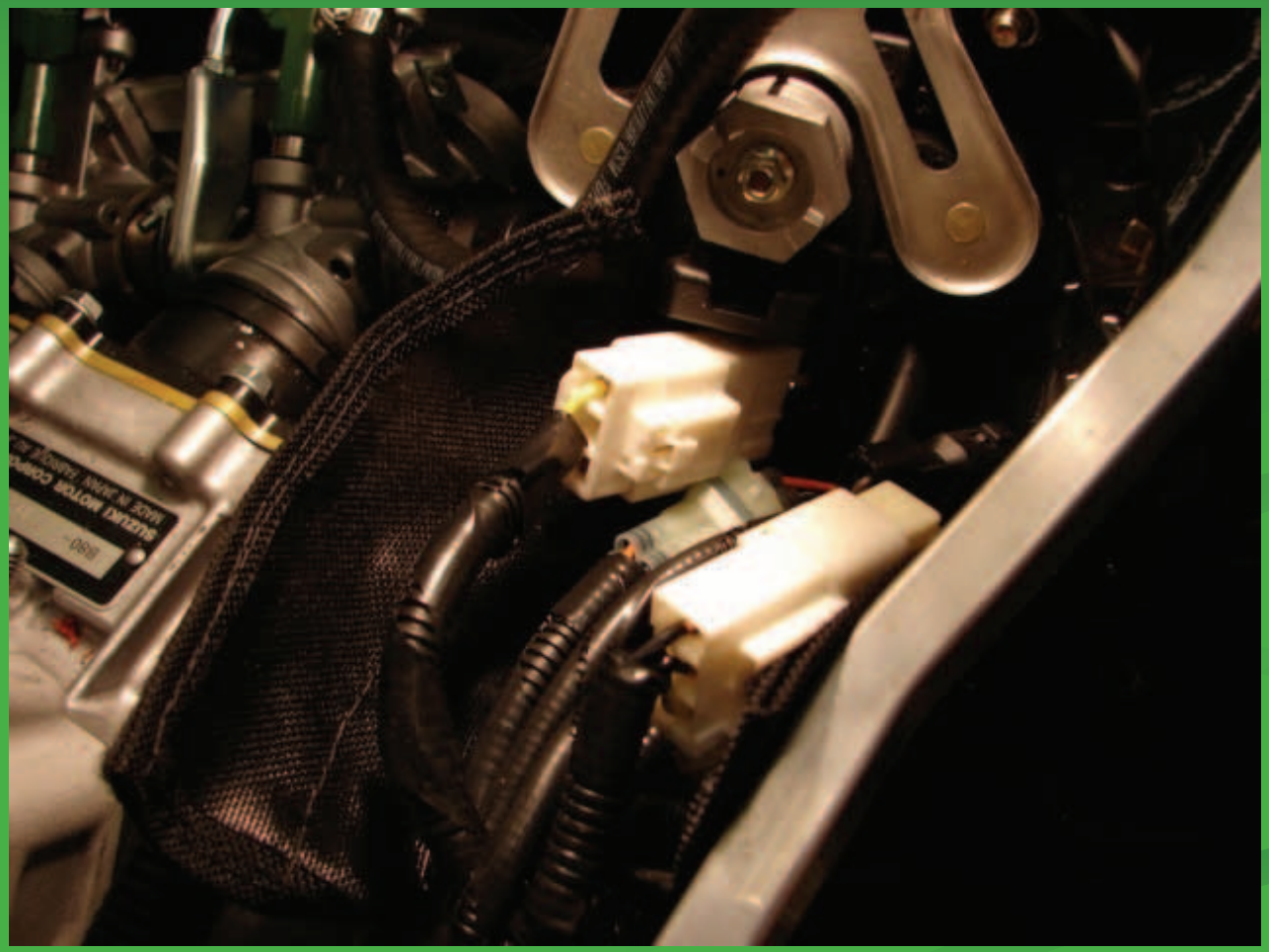
Remove the APV cables. The rear cable is the PTO side and front cable is the MAG side.



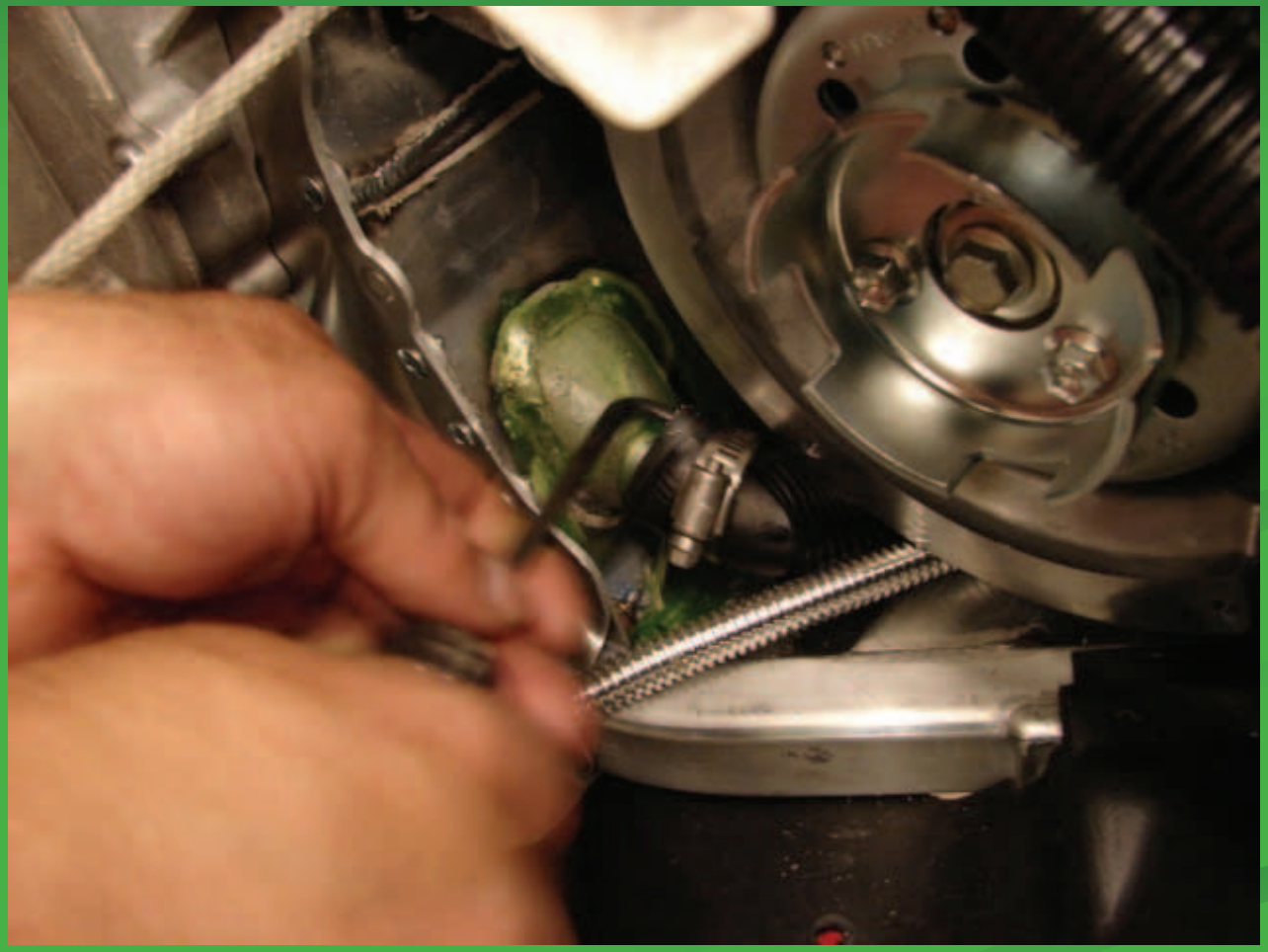
Remove the recoil from the engine.



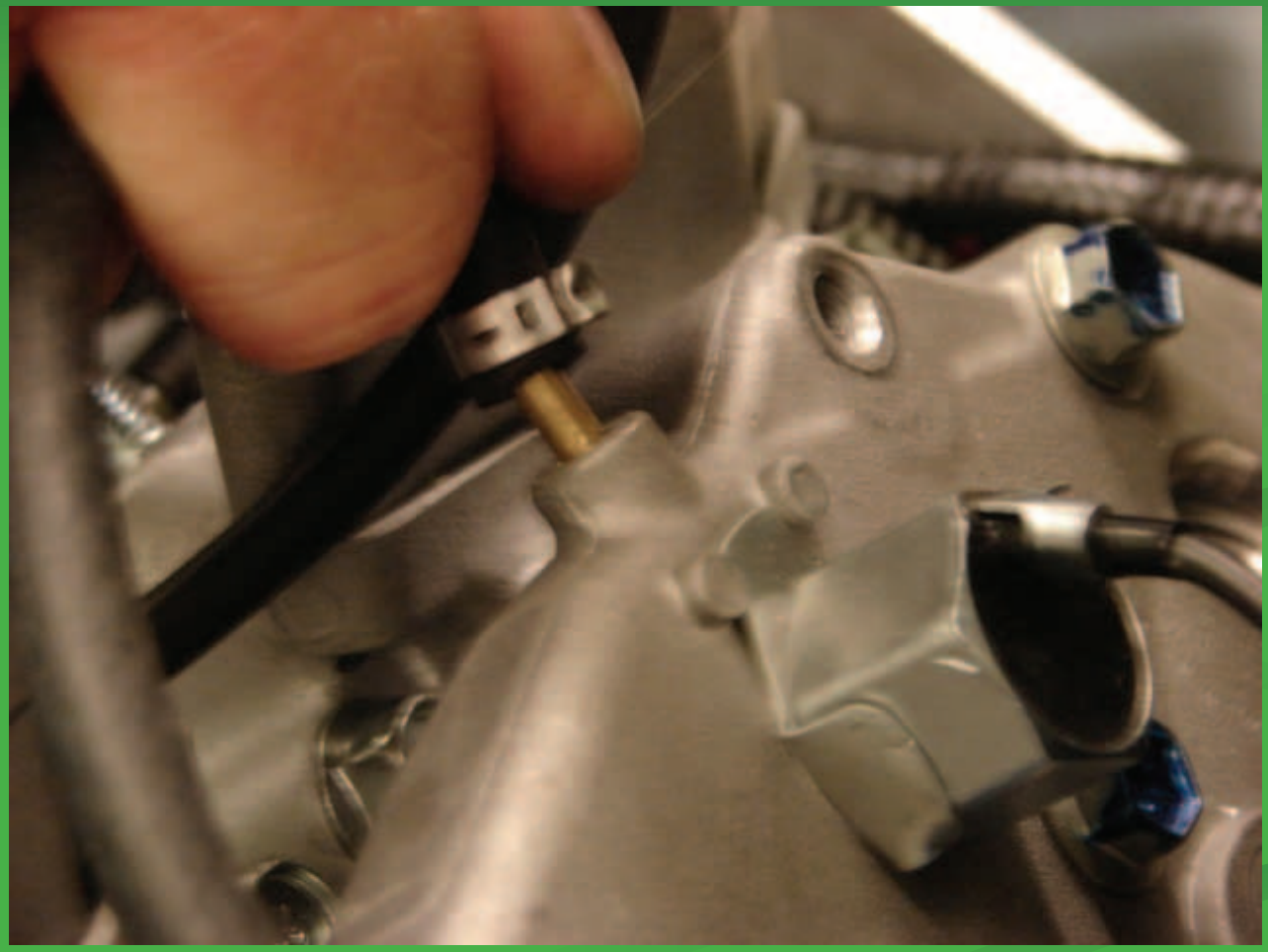
Unplug the engine electrical connectors under the protective cover, near the APV motor.



Remove the lower coolant hose.

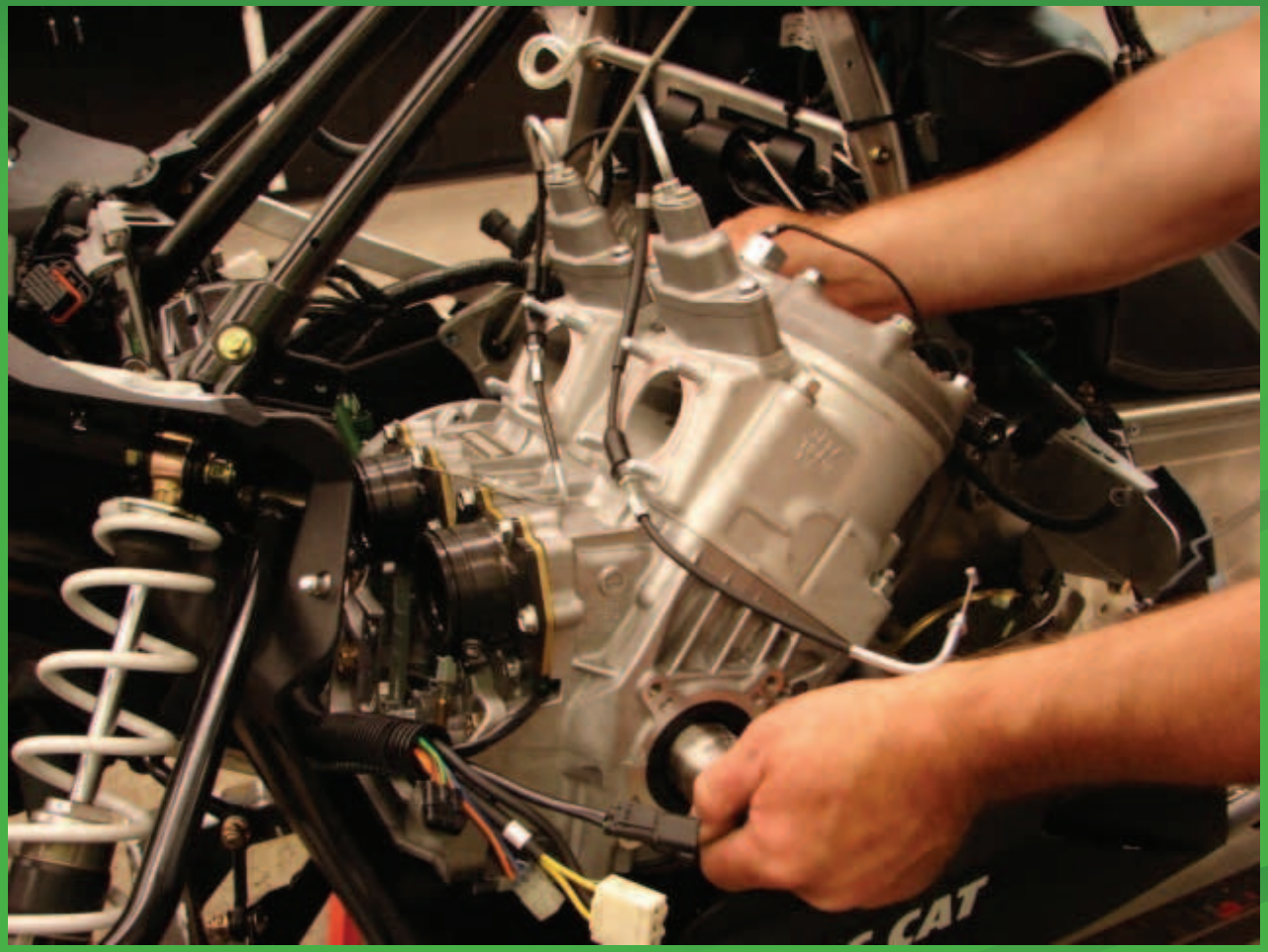


Remove the coolant line from head taking note of the non-reusable clamp.

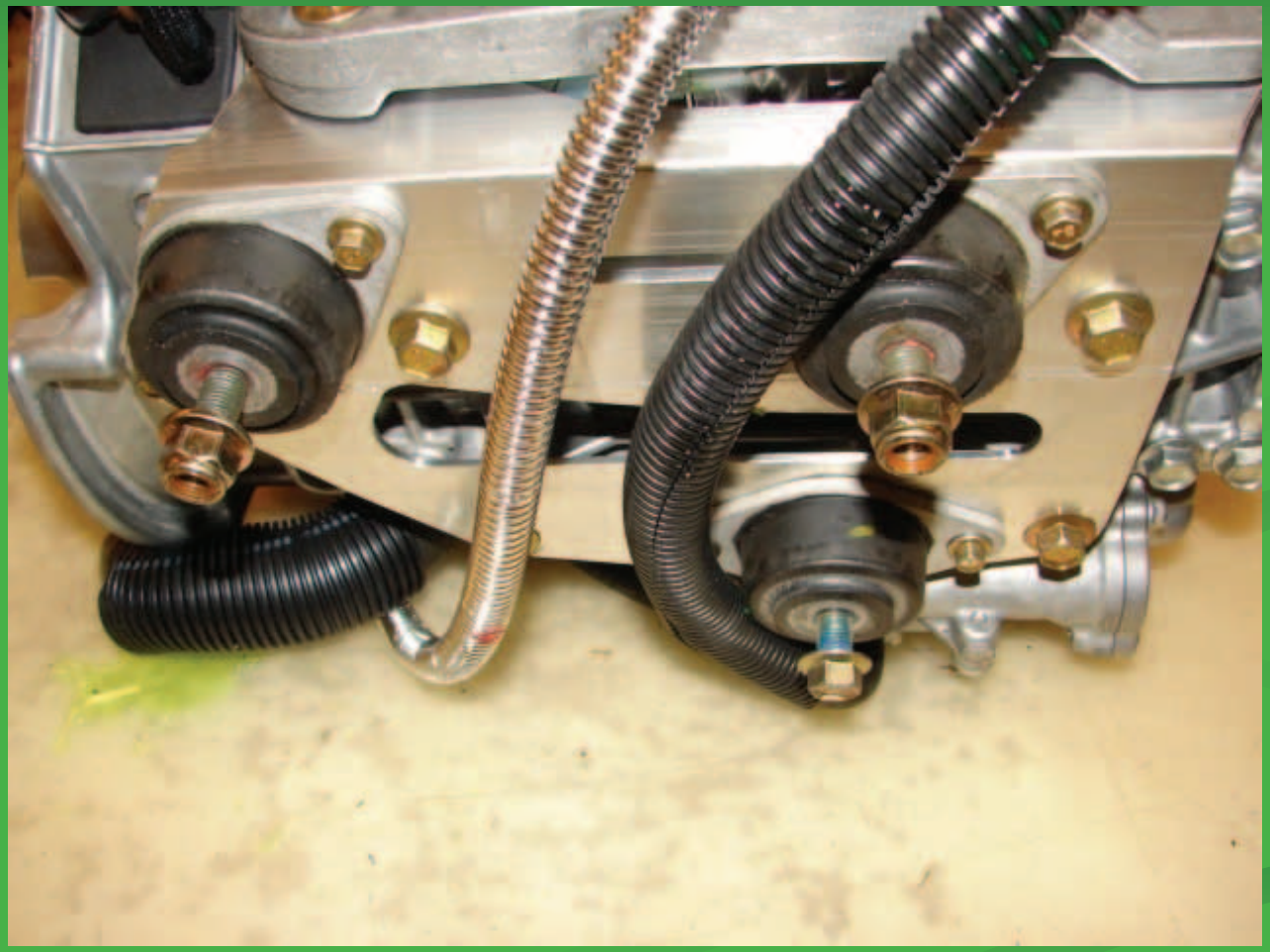


Unplug the coolant temp sensor.

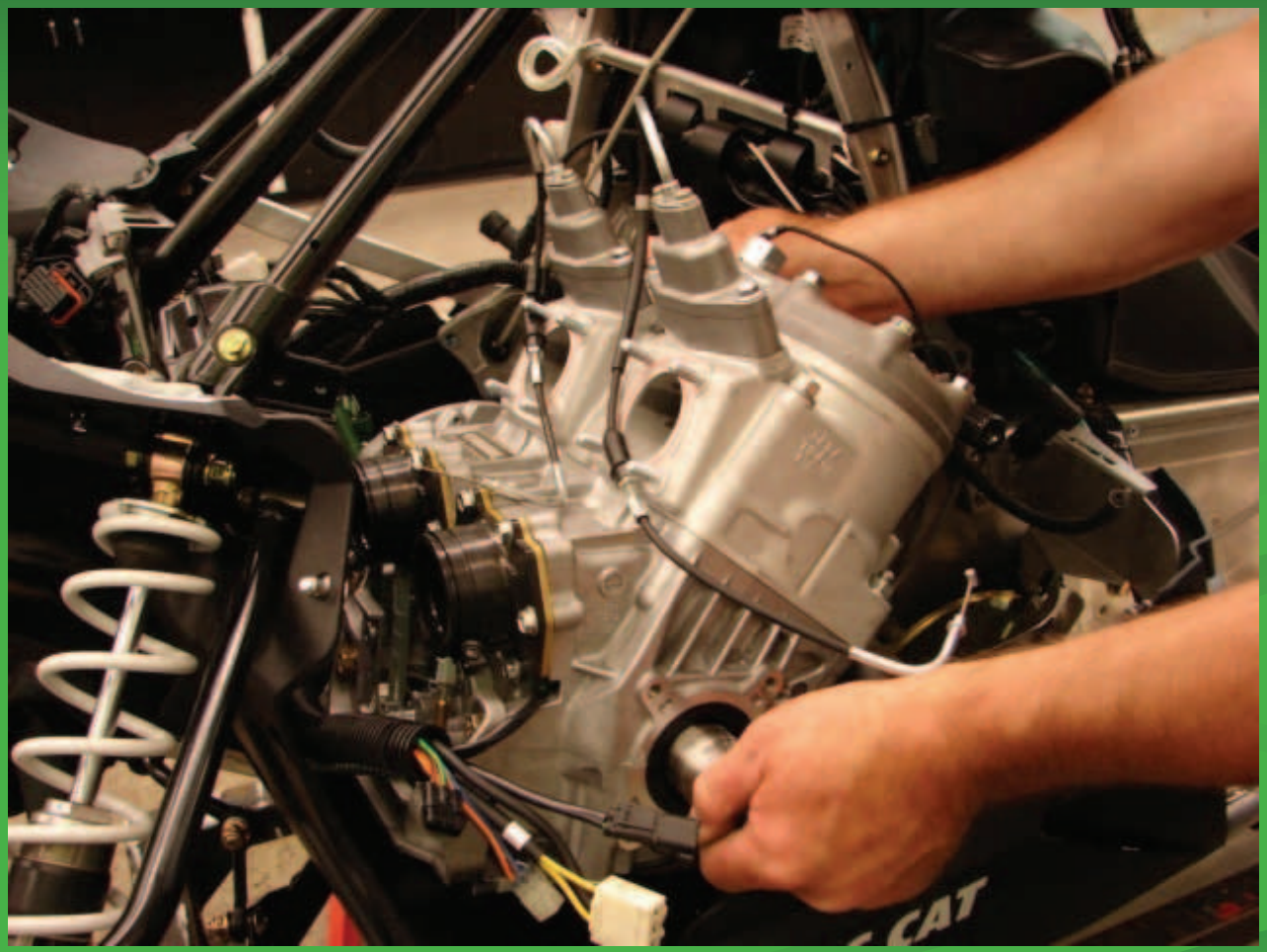
Remove the engine from the left side of the chassis.



Note the routing of the oil and coolant lines.

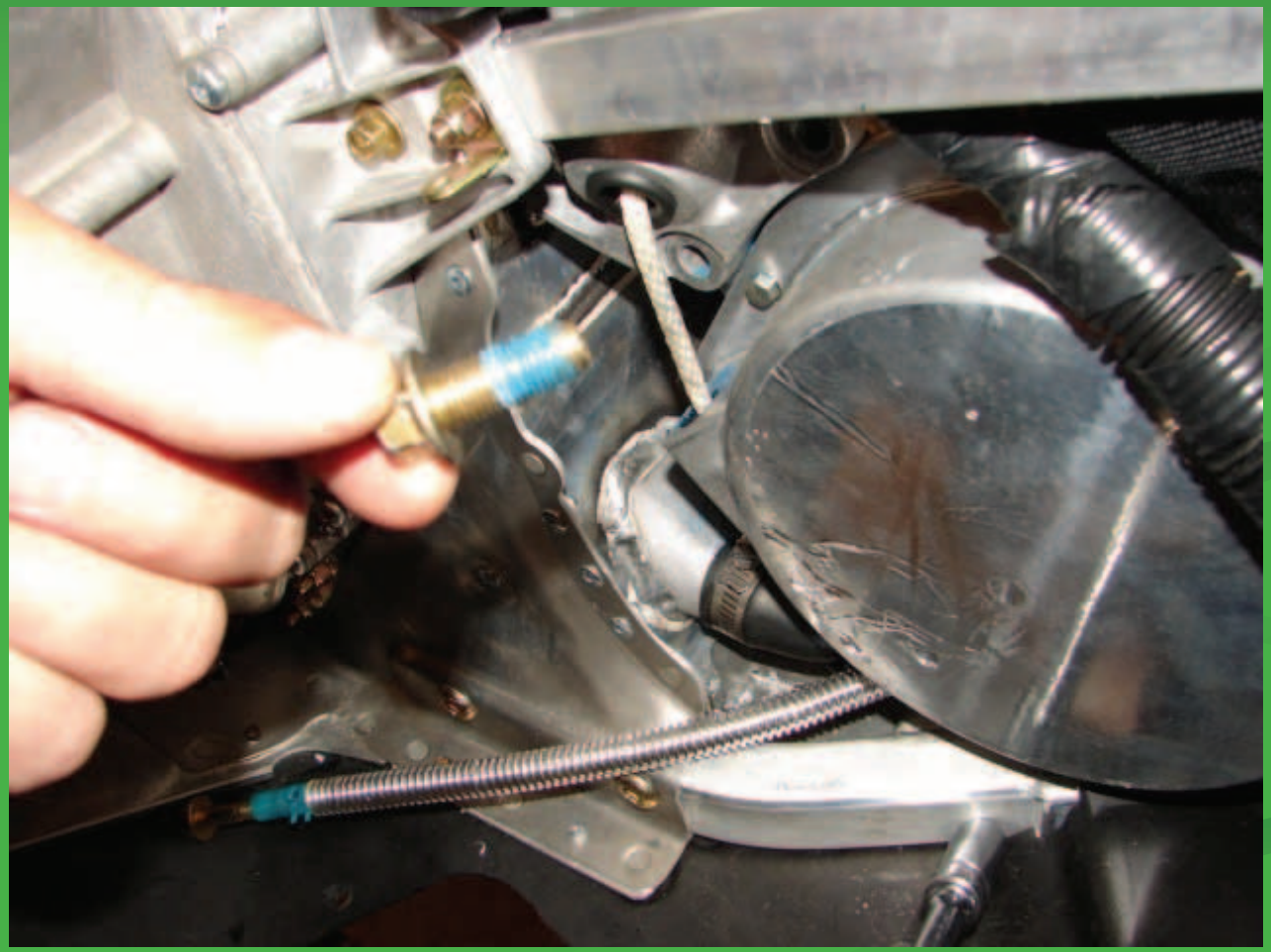


800 Installation Tech Tips

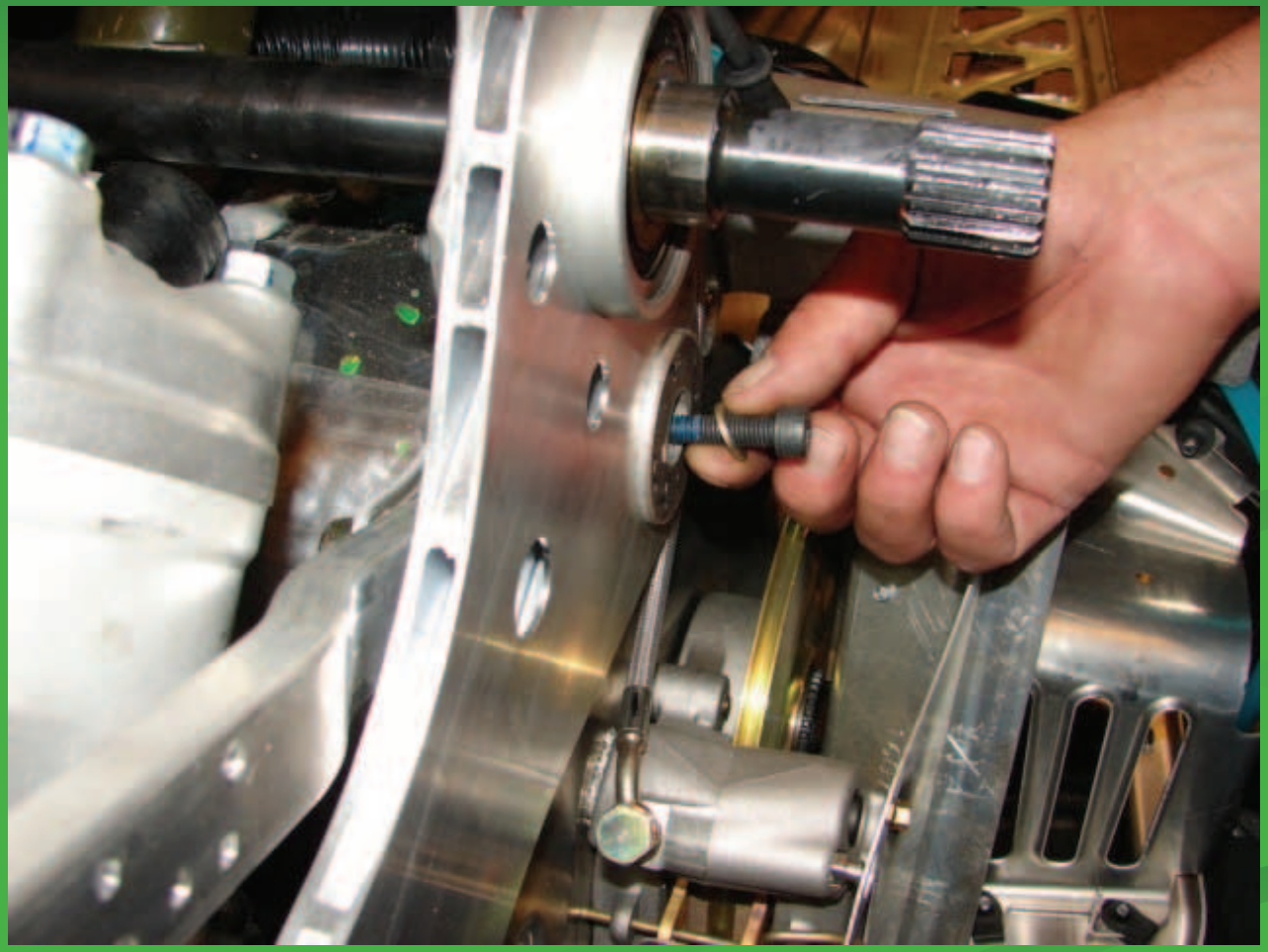


Follow the removal steps backwards for installation.

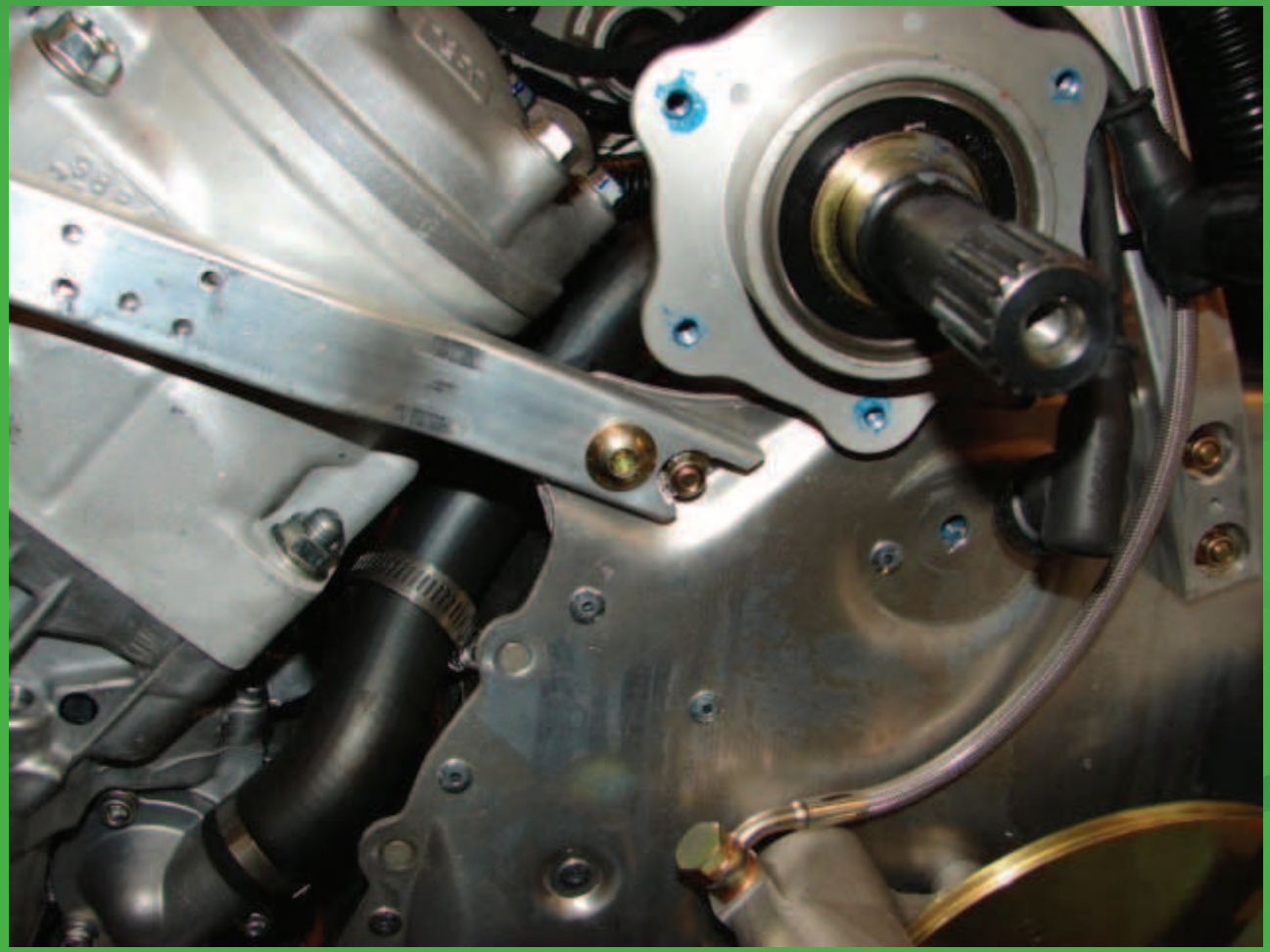
ALL fasteners need to have proper thread locking products applied, including those with the blue nylon patch lock.



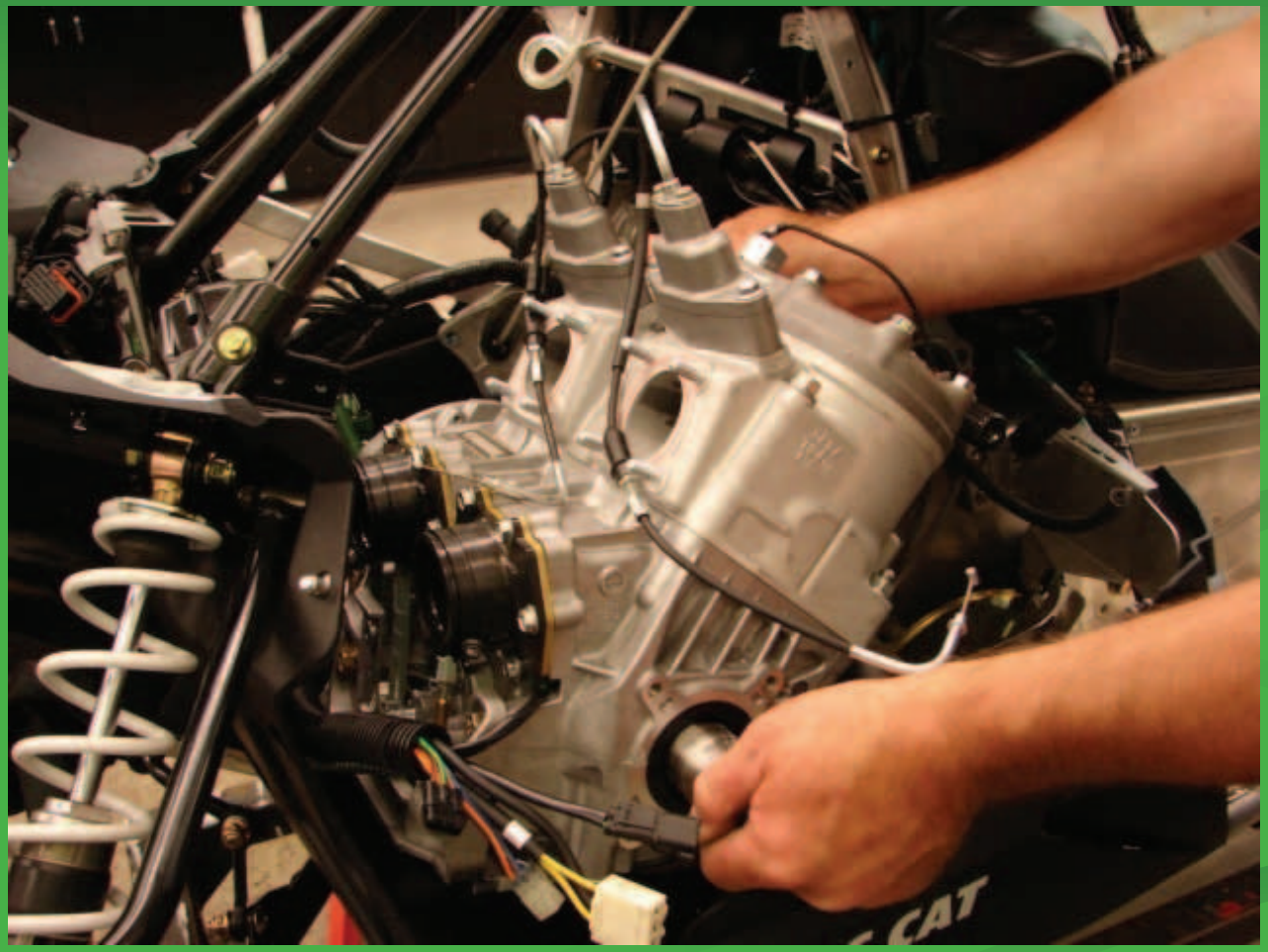
Loctite™ 242 Blue was applied to all fasteners and torqued to specification.



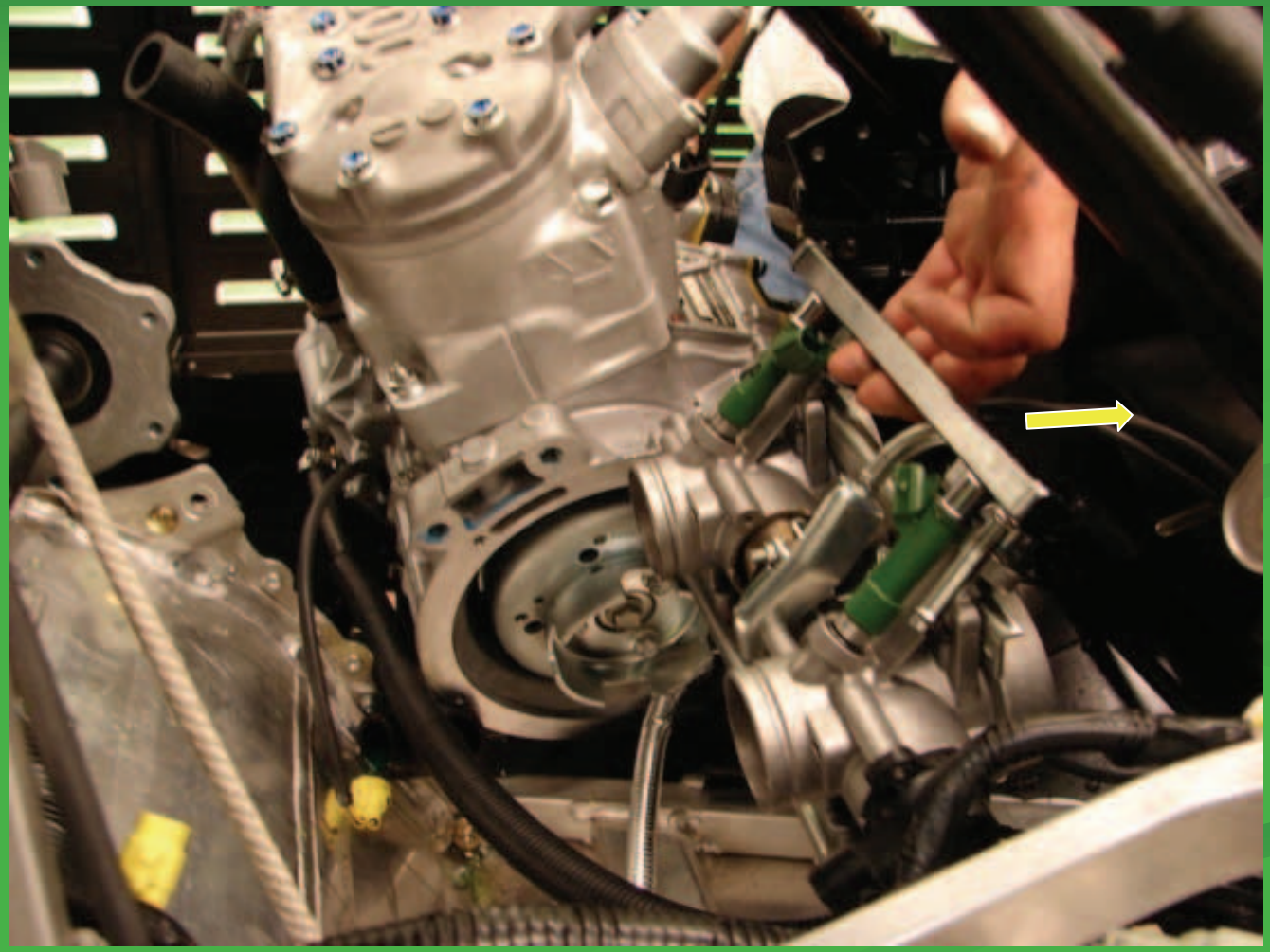
As explained before, it is critical for all fasteners to be torqued and remain tight, for the rider to get the best ride and performance.



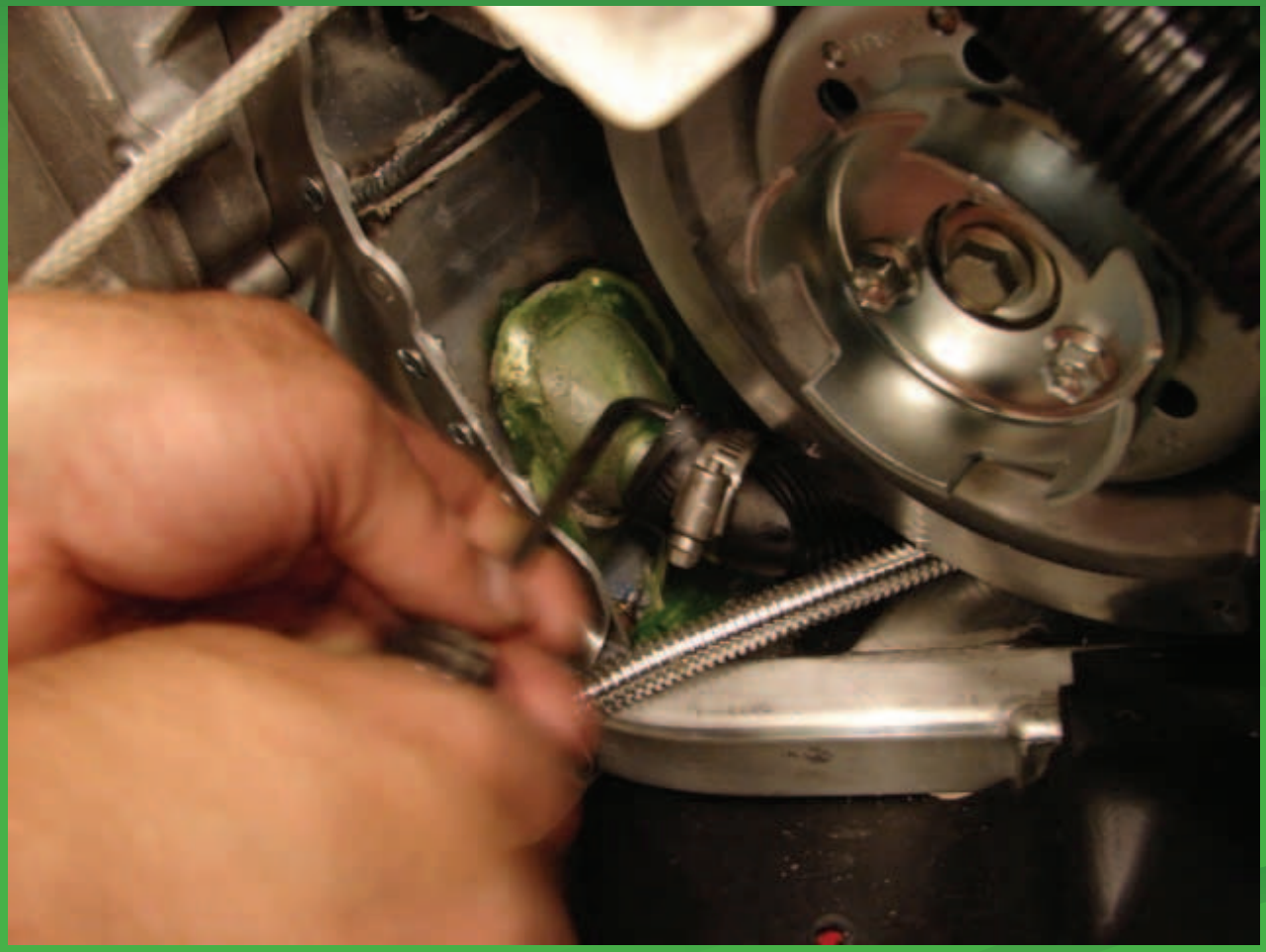
Install the engine from the left side of the chassis.



While installing the engine, pull the throttle body forward to gain clearance.



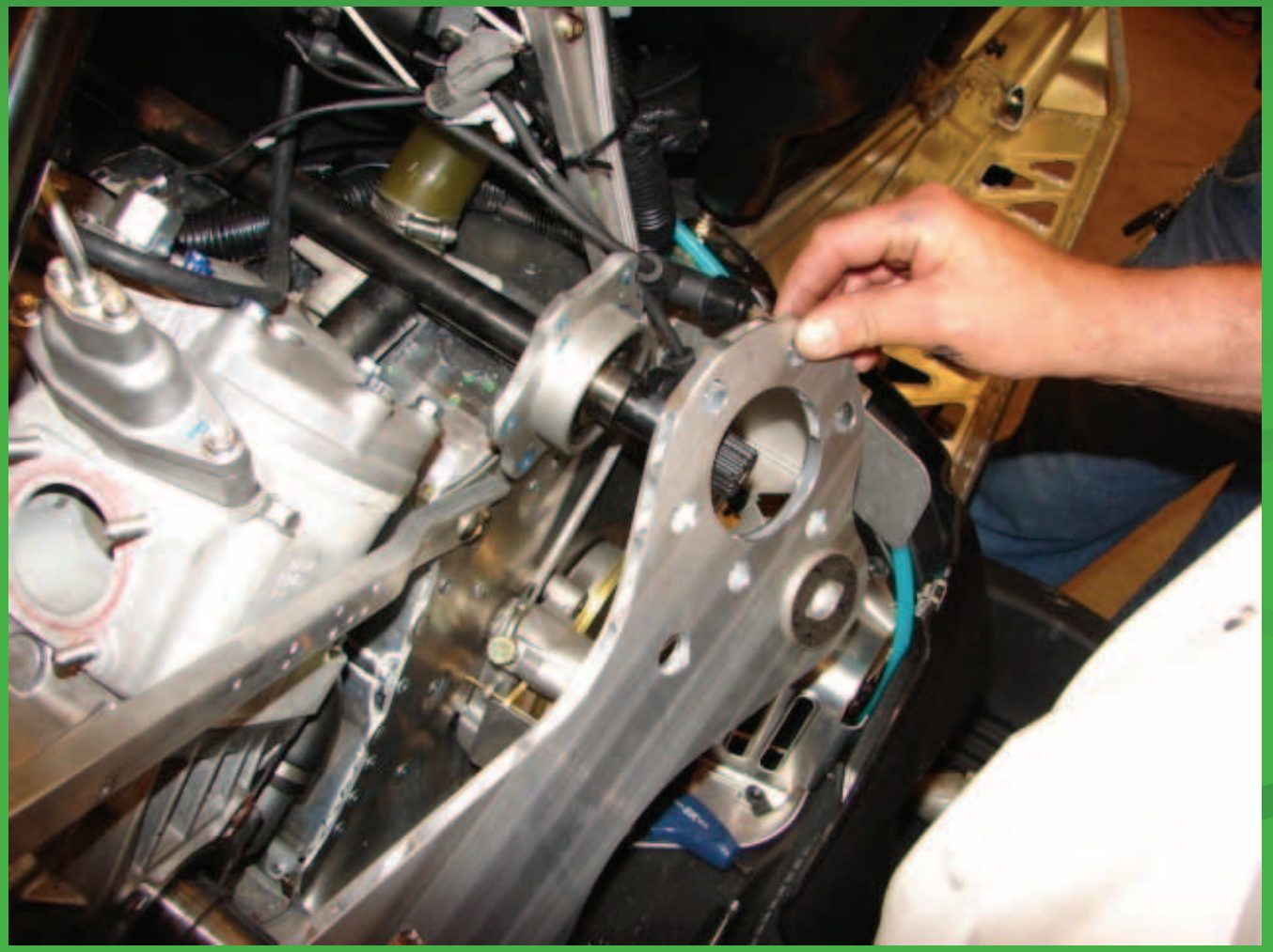
Install and tighten the lower coolant hose.



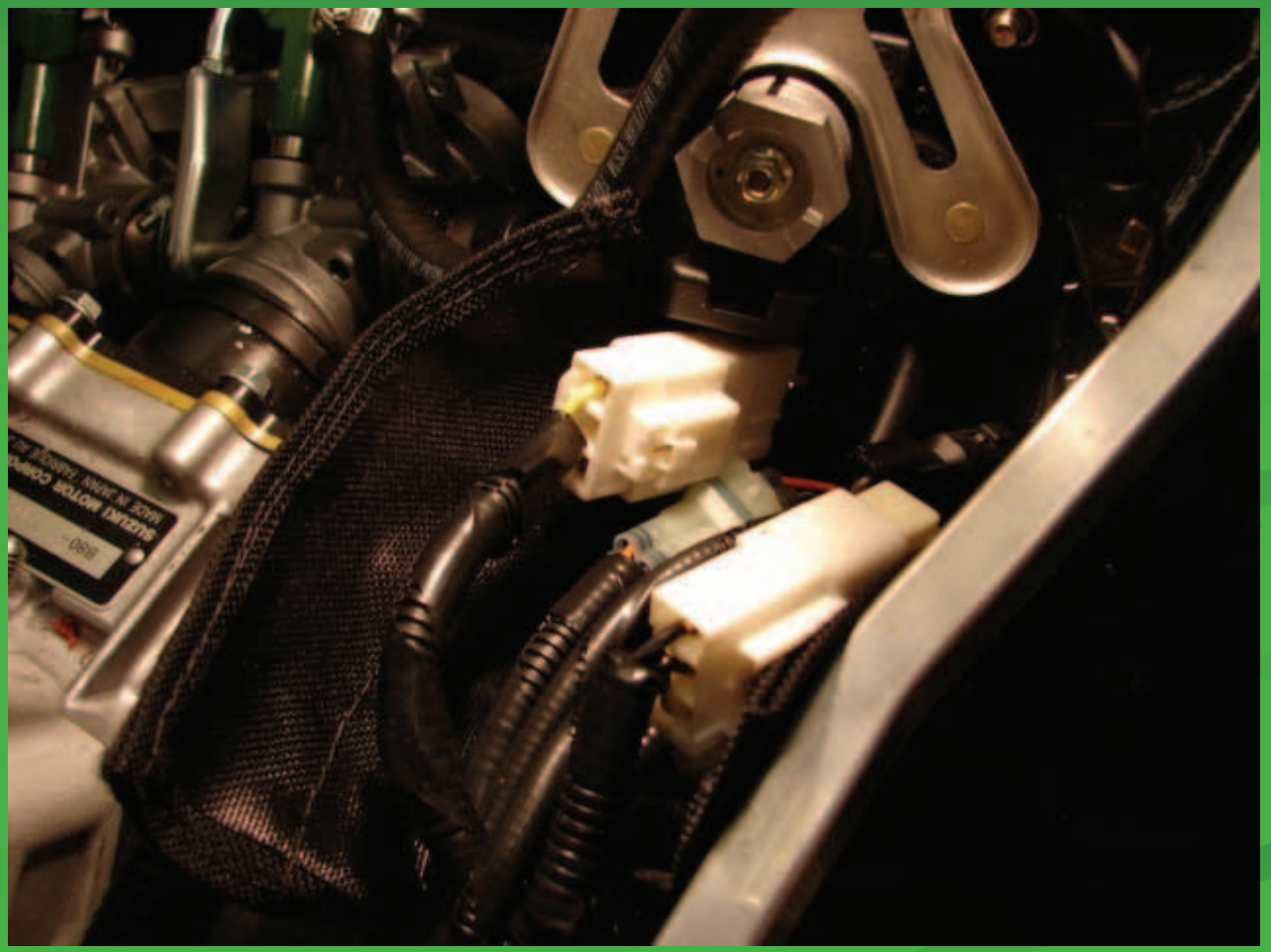
Start the two nuts and one bolt for the lower engine mounts.

Start the right side mounting bolts into the right rear mount. You may have to lift the motor with a suitable bar to align the holes.

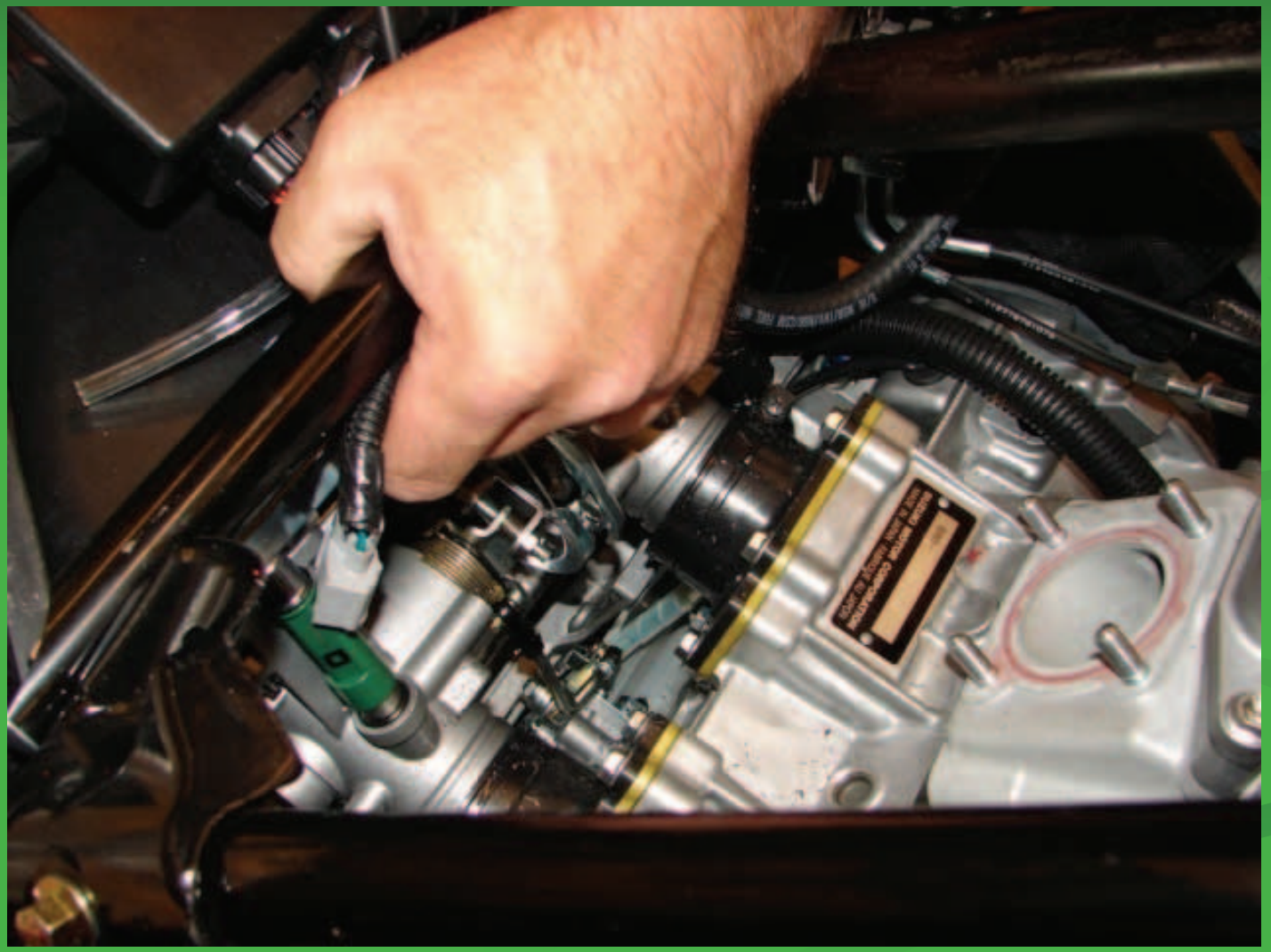
After installing and torqueing the LH support bar. Install the TCL plate / engine mount, and torque all engine mounting hardware.



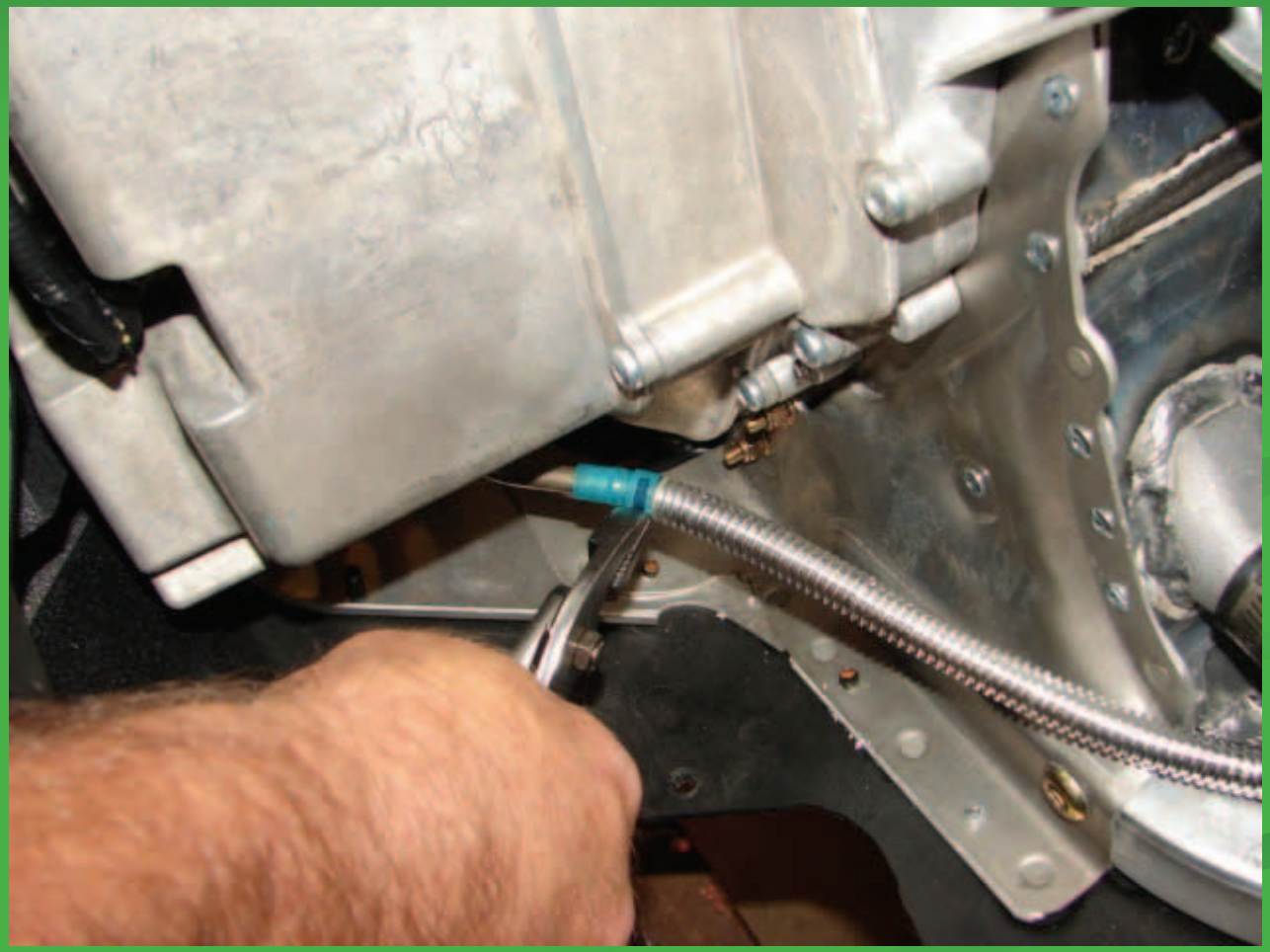
Reconnect all the engine electrical connectors and install the APV cables per removal instructions.



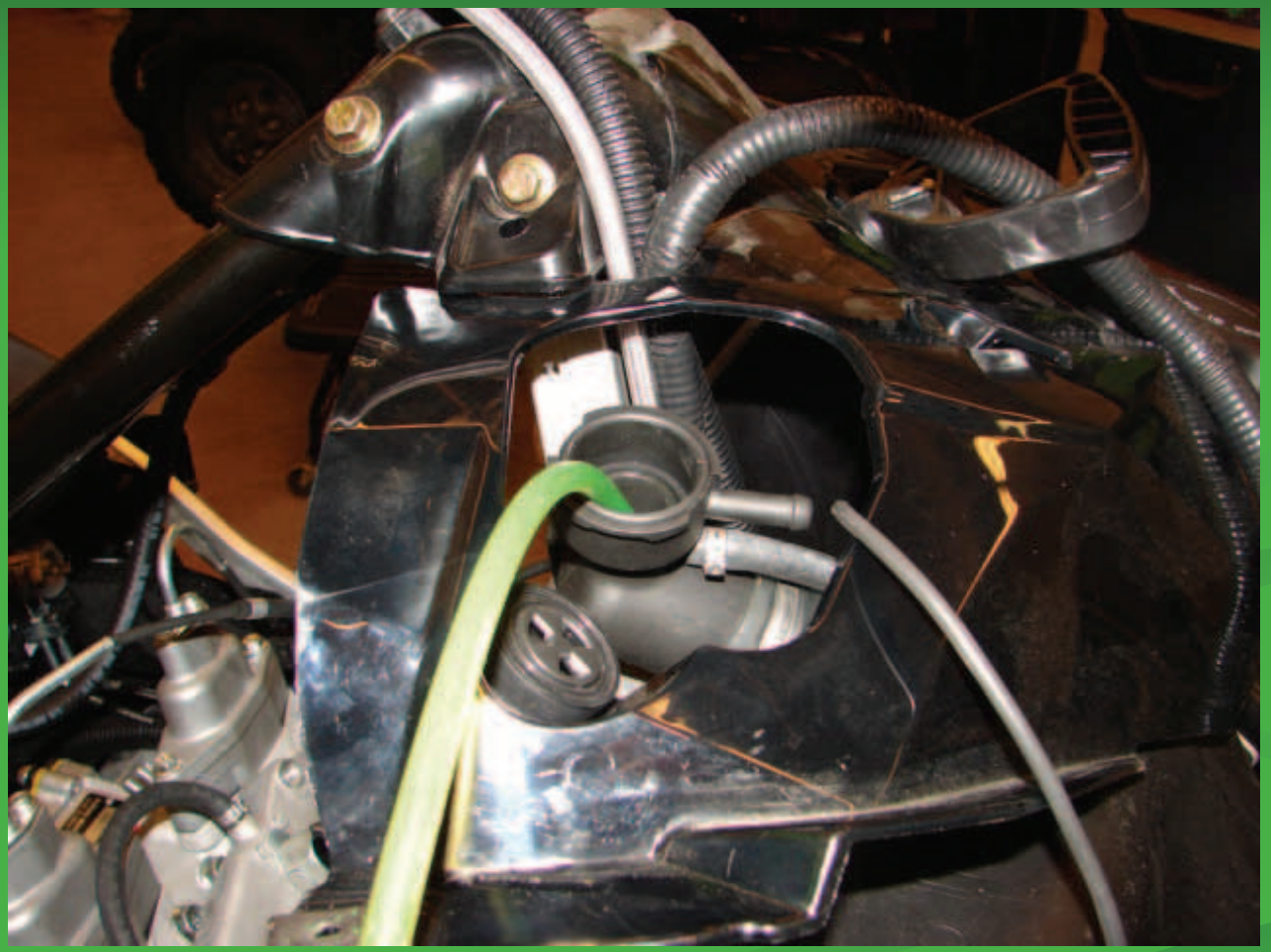
Insert the throttle body into the intake flanges and reinstall the oil pump rod.



Make sure the oil line is reconnected to the oil reservoir and the throttle body coolant lines are secure.



Lastly the engine coolant will need to be added and the air bled from the system.



Additional Update Information

- 2012 Models Sprockets and chains
- New Special Tools
- ATV Service and Safety Bulletins
- ROV Service and Safety Bulletins
- Snowmobile Service and Safety Bulletins

2012 Models Sprockets & Chains

2012 MODELS SPROCKETS & CHAINS

2 – Stroke Top Sprockets		
Description		Part Number
21 Tooth (2-Stroke)	13 Wide / 19 Spline	2602-377
21 Tooth (2-Stroke)	15 Wide / 19 Spline	2602-212
22 Tooth (2-Stroke)	13 Wide / 19 Spline	2602-335
22 Tooth (2-Stroke)	15 Wide / 19 Spline	2602-461
23 Tooth (2-Stroke)	13 Wide / 19 Spline	2602-403

4 – Stroke Top Sprockets		
Description		Part Number
21 Tooth	13 Wide / 33 Spline	2602-392
21 Tooth	15 Wide / 33 Spline	2602-402
22 Tooth	13 Wide / 33 Spline	2602-271
22 Tooth	15 Wide / 33 Spline	2602-213
23 Tooth	13 Wide / 33 Spline	2602-445
23 Tooth	15 Wide / 33 Spline	2602-446
24 Tooth	15 Wide / 33 Spline	2602-404

2 & 4 - Stroke Bottom Sprockets		
Description		Part Number
35 Tooth	13 Wide / 34 Spline	2602-405
36 Tooth	13 Wide / 34 Spline	2602-406
37 Tooth	13 Wide / 34 Spline	2602-371
38 Tooth	13 Wide / 34 Spline	2602-372
48 Tooth	13 Wide / 34 Spline	2602-364
49 Tooth	13 Wide / 34 Spline	2602-363
40 Tooth **	11 Wide / 34 Spline	2602-276

** 4-Stroke Reverse Sprocket only

2 & 4 - Stroke Chains		
Description		Part Number
13 Wide	84 Pitch	2602-369
11 Wide	68 Pitch	2602-342
15 Wide	84 Pitch	2602-365
13 Wide	90 Pitch	2602-370
15 Wide	90 Pitch	2602-373

Click here to Open

New Special Tools

- Shock Spanner Tool (p/n 0744-072) Universal
- Bearing Puller (p/n 0744-067) Snowmobile
- Track Clip Tool (p/n 0744-068) Snowmobile
- Snap Ring Pliers (p/n 0644-587) Snowmobile
- 1100 N/A Lift Plate (p/n 0744-073) Snowmobile
- Compression Test Adapter (p/n 0544-014) Diesel ATV
- Clutch Spanner (p/n 0544-015) ATV

ATV Safety and Service Bulletins

Bulletins released during the 2011 model year.

- **BA201101** Magneto Cover Assembly.
- **BA201102** Intake Boot Clamp.
- **BA201103** Camshaft Decompression Spring.
- **BA201104** Storage Box.
- **BA201105** Windshield Brackets.

BA201101

ARCTIC CAT

Service Bulletin

Date: May 20, 2010 **Product Line:** ATV

Bulletin No: 2011-2-01 **Subject:** Magneto Cover Assembly

Affected Models: 2010 H2 models - See attached VIN list for affected models.

■ **NOTE: For identification purposes, it is necessary to refer to only the last six digits of the VIN.**

Condition: On the affected models, the stator may come in contact with the mounting screws on the inside of the magneto cover resulting in damage to the stator.

Solution: Install Magneto Cover Kit (p/n 0837-012) according to the instructions provided in the kit.

■ **NOTE: Once the replacement of the magneto cover kit has been completed, the existing magneto cover (with stator) assembly must be returned to Arctic Cat in the shipping box in which the new one was shipped.**

Parts: Order an appropriate number of Magneto Cover Kits (p/n 0837-012) through normal parts-ordering channels. Your dealership Parts Account will be billed and then credited upon receipt of a Warranty Claim Request.

Warranty: A labor allowance of 0.6 hr will be paid per affected ATV.

■ **NOTE: Please remember that when submitting a claim, make sure to always enter the current mileage of each affected vehicle.**

ATTENTION

To ensure that the necessary service work is completed in a timely manner and that this issue can be resolved, Arctic Cat is requesting that all service work be completed prior to May 20, 2011. All warranty claims directly related to this issue will not be honored after May 20, 2011 without prior approval.

Click here to Open

BA201102

ARCTIC CAT

Service Bulletin

Date: July 14, 2010

Product Line: ATV

Bulletin No: BA201102

Subject: Intake Boot and Clamp

Affected Models: All 2009-2010 700 Mud Pro models

Condition: The existing intake boot and clamps securing the throttle body to the intake manifold do not meet Arctic Cat standards and need to be replaced.

Solution: Install Intake Boot Clamp Kit (p/n 0437-069) according to the instructions provided in the kit.

Parts: Order an appropriate number of Intake Boot Clamp Kits (p/n 0437-069) through normal parts-ordering channels. Your dealership Parts Account will be billed and then credited upon receipt of a Warranty Claim Request.

Warranty: A labor allowance of 0.4 hr will be paid per affected vehicle.

■ **NOTE: Please remember that when submitting a claim, make sure to always enter the current mileage of each affected vehicle.**

ATTENTION

To ensure that the necessary service work is completed in a timely manner and that this issue can be resolved, Arctic Cat is requesting that all service work be completed prior to July 14, 2011. All warranty claims directly related to this issue will not be honored after July 14, 2011 without prior approval.

Click here to Open

BA201103

ARCTIC CAT

Service Bulletin

Date: September 28, 2010 **Product Line:** ATV

Bulletin No: BA201103 **Subject:** Camshaft Decompression Spring

Affected Models: Specific 2011 550 TRV models (see attached VIN list and/or refer to Cat Tracker to verify if a VIN is affected by this Service Bulletin).

■ **NOTE: For identification purposes, it is necessary to refer to only the last six digits of the VIN.**

Condition: The existing camshaft decompression spring orientation allows the spring to become disconnected resulting in hard starting.

Solution: Install Camshaft Decompression Spring Update Kit (p/n 0437-077) according to the instructions provided in the kit.

Parts: Order an appropriate number of Camshaft Decompression Spring Update Kits (p/n 0437-077) through normal parts-ordering channels. Your dealership Parts Account will be billed and then credited upon receipt of a Warranty Claim Request.

Warranty: A labor allowance of 1.3 hr will be paid per affected ATV.

■ **NOTE: Please remember that when submitting a claim, make sure to always enter the current mileage of each affected vehicle.**

ATTENTION

To ensure that the necessary service work is completed in a timely manner and that this issue can be resolved, Arctic Cat is requesting that all service work be completed prior to September 28, 2011. All warranty claims directly related to this issue will not be honored after September 28, 2011 without prior approval.

Click here to Open

BA201104

ARCTIC CAT

Service Bulletin

Date: November 8, 2010 **Product Line:** ATV

Bulletin No: BA201104 **Subject:** Storage Box

Affected Models: All 2008-2010 Cruiser models

Condition: The storage box on the affected models does not meet Arctic Cat standards and should be updated.

Solution: Install Storage Box Strap Update Kit (p/n 1436-421) according to the instructions provided in the kit.

Parts: Order an appropriate number of Storage Box Strap Update Kits (p/n 1436-421) through normal parts-ordering channels. Your dealership Parts Account will be billed and then credited upon receipt of a Warranty Claim Request.

Warranty: A labor allowance of 0.2 hr will be paid per affected vehicle.

■ **NOTE: Please remember that when submitting a claim, make sure to always enter the current mileage of each affected vehicle.**

ATTENTION

To ensure that the necessary service work is completed in a timely manner and that this issue can be resolved, Arctic Cat is requesting that all service work be completed prior to November 8, 2011. All warranty claims directly related to this issue will not be honored after November 8, 2011 without prior approval.

■ **NOTE: In addition to this service bulletin, Arctic Cat will provide a storage box strap update kit for all accessory cruiser rear cargo boxes. After your dealership has ordered a Storage Box Strap Update Kit (p/n 1436-421), submit a normal parts-only warranty claim by entering AA (Accessories ATV) in the system complaint code section indicating the quantity and part number for each affected TRV Cruiser Rear Cargo Box (p/n 1436-198/199/200/201/208/209/210/211).**

 1110

Click here to Open

BA201105

ARCTIC CAT

Service Bulletin

Date: November 8, 2010

Product Line: ATV

Bulletin No: BA201105

Subject: Windshield Brackets

Affected Models: All 2009-2010 Cruiser models

Condition: The windshield mounting brackets on the affected models may crack and break and should be replaced. Below are pictures of the old and the new mounting brackets.

■ **NOTE: Please verify the affected ATV's need the update before ordering the kit as they may already be updated. See pictures below.**

Old

New

Solution: Install Cruiser Windshield Bracket Update Kit (p/n 1436-545) according to the instructions provided in the kit.

Parts: Order an appropriate number of Cruiser Windshield Bracket Update Kits (p/n 1436-545) through normal parts-ordering channels. Your dealership Parts Account will be billed and then credited upon receipt of a Warranty Claim Request.

Warranty: A labor allowance of 0.2 hr will be paid per affected vehicle.

■ **NOTE: Please remember that when submitting a claim, make sure to always enter the current mileage of each affected vehicle.**

ATTENTION

To ensure that the necessary service work is completed in a timely manner and that this issue can be resolved, Arctic Cat is requesting that all service work be completed prior to November 8, 2011. All warranty claims directly related to this issue will not be honored after November 8, 2011 without prior approval.

■ **NOTE: In addition to this service bulletin, Arctic Cat will provide a Cruiser Windshield Bracket Update Kit for all accessory touring windshield kits. After your dealership has ordered a Cruiser Windshield Bracket Update Kit (p/n 1436-545), submit a normal parts-only warranty claim by entering AA (Accessories ATV) in the system complaint code section indicating the quantity and part number for each affected Touring Windshield (p/n 1436-233/234/235/236).**

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ATV Safety and Service Bulletins

Bulletins released during the 2012 model year as of July 2011.

- **BA201201 Steering Post Cap Screws.**

BA201201

ARCTIC CAT

Service Bulletin

Date: May 20, 2011

Product Line: ATV

Bulletin No: BA201201

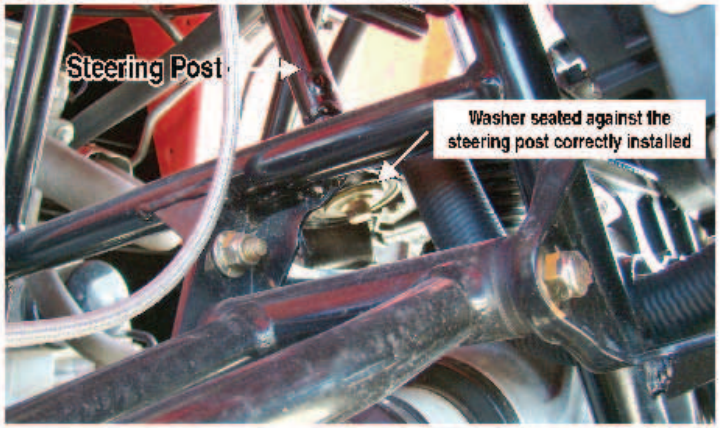
Subject: Steering Post Cap Screw

Affected Models: Specific non-power steering ATV models - See attached VIN list for affected models.

■ **NOTE: For identification purposes, it is necessary to refer to only the last six digits of the VIN.**

Condition: On the affected models, the cap screw securing the bottom of the steering post may have been improperly torqued and must be inspected. If the cap screw and washer are tight, no further action is needed. See Fig. 1. If the cap screw and washer are loose, proceed to the solution below.

Fig. 1



Solution: Apply a few drops of green Loctite #609 to the threads of the cap screw; then tighten the cap screw to 40 ft-lb using the instructions below.

Instructions: 1. Remove the cap screw and washer; then apply a few drops of green Loctite #609 to the cap screw threads.

2. Using a torque wrench, 12-in. extension, swivel, and 13 mm socket, tighten the cap screw securing the bottom of the steering post to 40 ft-lb.

■ **NOTE: To easily access the cap screw, go between the right lower A-arm and the frame.**

Warranty: A labor allowance of 0.2 hr will be paid per affected ATV.

■ **NOTE: Remember that when submitting a claim, make sure to always enter the current mileage of each affected vehicle.**

ATTENTION

To ensure that the necessary service work is completed in a timely manner and that this issue can be resolved, Arctic Cat is requesting that all service work be completed prior to May 20, 2012. All warranty claims directly related to this issue will not be honored after May 20, 2012 without prior approval.

Click here to Open

ROV Safety and Service Bulletins

Bulletins released during the 2011 model year.

- **BU201101 Magneto Cover Assembly.**
- **BU201102 Engine Mounting Cap Screws.**
- **BU201103 & 04 Rear ROPS (Roll Over Protective Structure) Support.**
- **BU201105 Camshaft Decompression Spring.**
- **BU201107 Warning Decal.**
- **BU201108 Side Restraints.**
- **BU201109 Cargo Box Panels.**
- **BU201110 Exhaust Pipe Assembly.**
- **BU201111 Side Restraint.**
- **BU201112 Shift Gate Shift Boot.**

BU201101

ARCTIC CAT

Service Bulletin

Date: May 20, 2010 **Product Line:** Prowler

Bulletin No: 2011-6-01 **Subject:** Magneto Cover Assembly

Affected Models: 2010 XTZ models - See attached VIN list for affected models.

■ **NOTE: For identification purposes, it is necessary to refer to only the last six digits of the VIN.**

Condition: On the affected models, the stator may come in contact with the mounting screws on the inside of the magneto cover resulting in damage to the stator.

Solution: Install Magneto Cover Kit (p/n 0837-012) according to the instructions provided in the kit.

■ **NOTE: Once the replacement of the magneto cover kit has been completed, the existing magneto cover (with stator) assembly must be returned to Arctic Cat in the shipping box in which the new one was shipped.**

Parts: Order an appropriate number of Magneto Cover Kits (p/n 0837-012) through normal parts-ordering channels. Your dealership Parts Account will be billed and then credited upon receipt of a Warranty Claim Request.

Warranty: A labor allowance of 0.6 hr will be paid per affected Prowler.

■ **NOTE: Please remember that when submitting a claim, make sure to always enter the current mileage of each affected vehicle.**

ATTENTION

To ensure that the necessary service work is completed in a timely manner and that this issue can be resolved, Arctic Cat is requesting that all service work be completed prior to May 20, 2011. All warranty claims directly related to this issue will not be honored after May 20, 2011 without prior approval.

Click here to Open

BU201102

ARCTIC CAT

Service Bulletin

Date: July 14, 2010 **Product Line:** Prowler

Bulletin No: BU201102 **Subject:** Engine Mounting Cap Screws

Affected Models: 2011 Prowler 550 XT - See attached VIN list for affected models.

■ **NOTE: For identification purposes, it is necessary to refer to only the last six digits of the VIN.**

Condition: The engine mounting cap screws securing the engine to the right- and left-side engine brackets may break causing the engine to become misaligned.

Solution: Install Cap Screw Update Kit (p/n 0437-074) according to the instructions provided in the kit.

Parts: Enclosed with this bulletin is an appropriate number of Cap Screw Update Kits (p/n 0437-074) for each affected vehicle. Your dealership will be credited upon receipt of a Warranty Claim Request.

Warranty: A labor allowance of 1.0 hr will be paid per affected Prowler.

■ **NOTE: Please remember that when submitting a claim, make sure to always enter the current mileage of each affected vehicle.**

ATTENTION

To ensure that the necessary service work is completed in a timely manner and that this issue can be resolved, Arctic Cat is requesting that all service work be completed prior to July 14, 2011. All warranty claims directly related to this issue will not be honored after July 14, 2011 without prior approval.

Click here to Open

BU201103 & 04

ARCTIC CAT

Service Bulletin

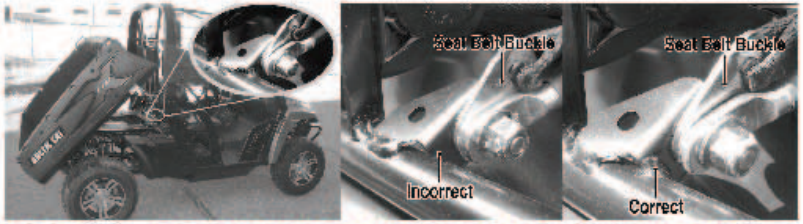
Date: September 7, 2010
Bulletin No: BU201103
Bulletin No: BU201104
Product Line: Prowler
Subject: Rear ROPS (Roll Over Protective Structure) Support

Affected Models: 2011 Prowler HDX - See attached VIN list.

■ **NOTE: For identification purposes, it is necessary to refer to only the last six digits of the VIN. Only inspect the vehicles (see attached VIN list) included in the bulletin.**

Condition: The rear ROPS support bracket on the affected Prowler has a weld missing and must be replaced. There must be three welds on the bracket where the seat belt assemblies are attached.

■ **NOTE: Some Prowlers within the VIN range may need no service work. Raise the cargo box and inspect both inside and outside of each bracket (where seat belt assemblies are attached). If all three welds on each bracket (behind the seat) are in place, no service work is needed. See pictures below.**



Solution: Install ROPS Support Bracket Update Kit (p/n 0437-075) according to the instructions provided in the kit.

Parts: If a vehicle is found with missing welds, please contact your Arctic Cat service technician and a ROPS Support Bracket Update Kit (p/n 0437-075) will be shipped directly to your dealership. Your dealership will be credited upon receipt of a Warranty Claim Request. A Fed-Ex call tag will be included with the kit to send the existing canopy support bracket back to Arctic Cat.

■ **NOTE: Please note that the new ROPS support bracket that your dealership receives (if needed) will have the weld on the inside of the bracket.**

Warranty: BU201103 - A labor allowance of 0.2 hr will be paid per inspection of weld and no need of a ROPS support update kit.

Warranty: BU201104 - A labor allowance of 1.1 hr will be paid per affected Prowler that needs a ROPS support update kit.

■ **NOTE: Please remember that when submitting a claim, make sure to always enter the current mileage of each affected vehicle.**

ATTENTION

To ensure that the necessary service work is completed in a timely manner and that this issue can be resolved, Arctic Cat is requesting that all service work be completed prior to September 7, 2011. All warranty claims directly related to this issue will not be honored after September 7, 2011 without prior approval.

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BU201105

ARCTIC CAT

Service Bulletin

Date: September 28, 2010

Product Line: Prowler

Bulletin No: BU201105

Subject: Camshaft Decompression Spring

Affected Models: Specific 2011 HDX models (see attached VIN list and/or refer to Cat Tracker to verify if a VIN is affected by this Service Bulletin).

■ **NOTE: For identification purposes, it is necessary to refer to only the last six digits of the VIN.**

Condition: The existing camshaft decompression spring orientation allows the spring to become disconnected resulting in hard starting.

Solution: Install Camshaft Decompression Spring Update Kit (p/n 0437-077) according to the instructions provided in the kit.

Parts: Order an appropriate number of Camshaft Decompression Spring Update Kits (p/n 0437-077) through normal parts-ordering channels. Your dealership Parts Account will be billed and then credited upon receipt of a Warranty Claim Request.

Warranty: A labor allowance of 0.8 hr will be paid per affected vehicle.

■ **NOTE: Please remember that when submitting a claim, make sure to always enter the current mileage of each affected vehicle.**

ATTENTION

To ensure that the necessary service work is completed in a timely manner and that this issue can be resolved, Arctic Cat is requesting that all service work be completed prior to September 28, 2011. All warranty claims directly related to this issue will not be honored after September 28, 2011 without prior approval.

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BU201107

ARCTIC CAT

Service Bulletin

Date: October 25, 2010

Product Line: Prowler

Bulletin No: BU201107

Subject: Warning Decal

Affected Models: Certain 2011 XT, XTX, XTZ models (see attached VIN list and/or refer to Cat Tracker to verify if a VIN is affected by this Service Bulletin).

■ **NOTE: For identification purposes, it is necessary to refer to only the last six digits of the VIN.**

Condition: The affected models have been manufactured without the ROPS (Roll Over Protective Structure) Warning Decal and needs to be adhered to the operator side hip restraint bar.

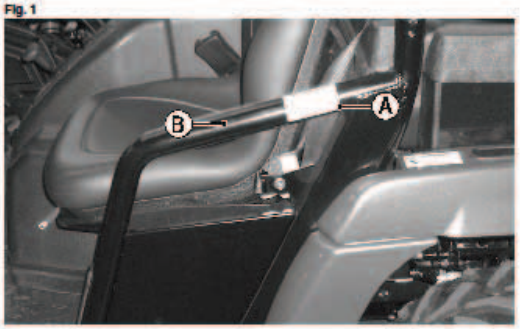
Solution: Install ROPS Warning Decal (p/n 2411-522) according to the instructions provided in this bulletin.

Parts: Enclosed with this bulletin is the appropriate Warning Decal to complete this service work. Your dealership will be credited upon receipt of a Warranty Claim Request.

Warranty: A labor allowance of 0.1 hr will be paid per affected vehicle.

Instructions: Clean the intended decal area; then remove the backing from ROPS Warning Decal (A) and adhere to the outside of the operator side hip restraint bar (B). See Fig. 1.

Fig. 1



■ **NOTE: Please remember that when submitting a claim, make sure to always enter the current mileage of each affected vehicle.**

ATTENTION

To ensure that the necessary service work is completed in a timely manner and that this issue can be resolved, Arctic Cat is requesting that all service work be completed prior to October 25, 2011. All warranty claims directly related to this issue will not be honored after October 25, 2011 without prior approval.

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BU201108

ARCTIC CAT

Service Bulletin

Date: January 17, 2011
Bulletin No: BU201108
Product Line: Prowler
Subject: Side Restraint

Affected Models: 2011 Prowler HDX within the VIN ranges of 300264-301649 and 800001-800003.

■ **NOTE: For identification purposes, it is necessary to refer to only the last six digits of the VIN. Also please refer to Cat Tracker to verify if a VIN is affected by this Service Bulletin.**

Condition: The existing right and left side restraint assemblies may break and should be replaced.

Solution: Install Side Restraint Update Kit (p/n 0437-079) according to the instructions provided in the kit.

Parts: Order an appropriate number of Side Restraint Update Kits (p/n 0437-079) through normal parts-ordering channels. Your dealership Parts Account will be billed and then credited upon receipt of a Warranty Claim Request.

Warranty: A labor allowance of 0.3 hr will be paid per affected Prowler.

■ **NOTE: Please remember that when submitting a claim, make sure to always enter the current mileage of each affected vehicle.**

ATTENTION

To ensure that the necessary service work is completed in a timely manner and that this issue can be resolved, Arctic Cat is requesting that all service work be completed prior to January 17, 2012. All warranty claims directly related to this issue will not be honored after January 17, 2012 without prior approval.

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BU201109

ARCTIC CAT

Service Bulletin

Date: January 31, 2011
Bulletin No: BU201109 (Reissue)
Product Line: Prowler
Subject: Cargo Box Panels

Affected Models: 2011 Prowler HDX with a VIN prior to 2BT301079.

■ **NOTE: For identification purposes, it is necessary to refer to only the last six digits of the VIN. Also please refer to Cat Tracker to verify if a VIN is affected by this Service Bulletin.**

Condition: The existing cargo box interior panels may warp and should be replaced.

Solution: Install Cargo Box Panel Update Kit (p/n 0437-078) according to the instructions provided in the kit.

Parts: Order an appropriate number of Cargo Box Panel Update Kits (p/n 0437-078) through normal parts-ordering channels. Your dealership Parts Account will be billed and then credited upon receipt of a Warranty Claim Request.

Warranty: A labor allowance of 0.3 hr will be paid per affected Prowler.

■ **NOTE: Please remember that when submitting a claim, make sure to always enter the current mileage of each affected vehicle.**

ATTENTION

To ensure that the necessary service work is completed in a timely manner and that this issue can be resolved, Arctic Cat is requesting that all service work be completed prior to January 31, 2012. All warranty claims directly related to this issue will not be honored after January 31, 2012 without prior approval.

 0111

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BU201110

ARCTIC CAT

Service Bulletin

Date: January 17, 2011
Bulletin No: BU201110
Product Line: Prowler
Subject: Exhaust Pipe Assembly

Affected Models: 2011 Prowler HDX within the VIN ranges of 300264 - 301061 and 800001 - 800003.

■ **NOTE: For identification purposes, it is necessary to refer to only the last six digits of the VIN. Also please refer to Cat Tracker to verify if a VIN is affected by this Service Bulletin.**

Condition: The existing exhaust pipe heat shields on the affected model may become loose resulting in vibration; therefore, the exhaust pipe assembly should be replaced.

Solution: Install Exhaust Pipe Update Kit (p/n 0437-081) according to the instructions provided in the kit.

Parts: Order an appropriate number of Exhaust Pipe Update Kits (p/n 0437-081) through normal parts-ordering channels. Your dealership Parts Account will be billed and then credited upon receipt of a Warranty Claim Request.

Warranty: A labor allowance of 0.4 hr will be paid per affected Prowler.

■ **NOTE: Please remember that when submitting a claim, make sure to always enter the current mileage of each affected vehicle.**

ATTENTION

To ensure that the necessary service work is completed in a timely manner and that this issue can be resolved, Arctic Cat is requesting that all service work be completed prior to January 17, 2012. All warranty claims directly related to this issue will not be honored after January 17, 2012 without prior approval.

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BU201111

ARCTIC CAT

Service Bulletin

Date: January 17, 2011
Bulletin No: BU201111
Product Line: Prowler
Subject: Side Restraint

Affected Models: 2011 Prowler XT, XTX, XTZ within the VIN ranges of 300001-301788 and 808012-808028.

■ **NOTE: For identification purposes, it is necessary to refer to only the last six digits of the VIN. Also please refer to Cat Tracker to verify if a VIN is affected by this Service Bulletin.**

Condition: The existing right and left side restraint assemblies may break and should be replaced.

Solution: Install Side Restraint Update Kit (p/n 0437-080) according to the instructions provided in the kit.

Parts: Order an appropriate number of Side Restraint Update Kits (p/n 0437-080) through normal parts-ordering channels. Your dealership Parts Account will be billed and then credited upon receipt of a Warranty Claim Request.

Warranty: A labor allowance of 0.3 hr will be paid per affected Prowler.

■ **NOTE: Please remember that when submitting a claim, make sure to always enter the current mileage of each affected vehicle.**

ATTENTION

To ensure that the necessary service work is completed in a timely manner and that this issue can be resolved, Arctic Cat is requesting that all service work be completed prior to January 17, 2012. All warranty claims directly related to this issue will not be honored after January 17, 2012 without prior approval.

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BU201112

ARCTIC CAT

Service Bulletin

Date: January 17, 2011
Product Line: Prowler
Bulletin No: BU201112
Subject: Shift Gate/Shift Boot

Affected Models: All 2011 Prowler HDX models up to the VIN of 303564.

■ **NOTE: For identification purposes, it is necessary to refer to only the last six digits of the VIN. Also please refer to Cat Tracker to verify if a VIN is affected by this Service Bulletin.**

Condition: The existing shift gate and shift boot on the affected models does not meet Arctic Cat standards.

Solution: Install Shift Gate/Shift Boot Update Kit (p/n 0437-085) according to the instructions provided in the kit. Kits are expected to be available the week of January 24, 2011.

Parts: Order an appropriate number of Shift Gate/Shift Boot Update Kits (p/n 0437-085) through normal parts-ordering channels. Your dealership Parts Account will be billed and then credited upon receipt of a Warranty Claim Request.

Warranty: A labor allowance of 0.3 hr will be paid per affected Prowler HDX.

■ **NOTE: Please remember that when submitting a claim, make sure to always enter the current mileage of each affected vehicle.**

ATTENTION

To ensure that the necessary service work is completed in a timely manner and that this issue can be resolved, Arctic Cat is requesting that all service work be completed prior to January 17, 2012. All warranty claims directly related to this issue will not be honored after January 17, 2012 without prior approval.

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Snowmobile Safety and Service Bulletins

Bulletins released during the 2011 model year.

- BS201101 & 02 Protective Foil and Foam.
- BS201103 500 Sno Pro ECU Reprogramming.
- BS201104 Solenoid Heat Shield.
- BS201105 Pinion Gear and Spring.
- BS201106 CCU.
- BS201107 Drive Clutch Spring.
- BS201108 Voltage Regulator.
- BS201109 Thrust Washer.
- BS201110 ECU Reprogramming.
- BS201111 & 12 ECU Reprogramming.
- BS201113 Protective Foil.

BS201101 & 02

ARCTIC CAT

Service Bulletin

Date: June 11, 2010

Product Line: Snowmobile

Bulletin No: BS201101
Bulletin No: BS201102

Subject: Protective Foil and Foam
Subject: Protective Foil and Foam

Affected Models: All 2009 T570, Bearcat 570, and Bearcat 570 XT models.

■ NOTE: Please refer to Cat Tracker to verify if a VIN is affected by this Service Bulletin.

■ NOTE: This Service Bulletin is for Canada and overseas dealers only.

Condition: Various components such as protective foil, foam, and a decal need to be either added or updated on the affected models.

Solution (01): Install new 570 cc Update Kit (p/n 0637-349) on all 2009 T570 and Bearcat 570 models. Instructions will be included in the kit.

Solution (02): Install new 570 cc Update Kit (p/n 0637-348) on all 2009 Bearcat 570 XT model. Instructions will be included in the kit.

Parts: Order an appropriate number of 570 cc Update Kit (p/n 0637-348/349) through normal parts-ordering channels. Your dealership Parts Account will be billed and then credited upon receipt of a Warranty Claim Request.

Warranty (01): A labor allowance of 0.6 hr will be paid per affected T570 and Bearcat 570 models.

Warranty (02): A labor allowance of 0.8 hr will be paid per affected Bearcat 570 XT model.

■ NOTE: It is required to enter the current mileage of each affected model at the time the claim is submitted.

⚠ ATTENTION

To ensure that the necessary service work is completed in a timely manner and that this issue can be resolved, Arctic Cat is requesting that all service work be completed prior to June 11, 2011. All warranty claims directly related to this issue will not be honored after June 11, 2011, without prior approval.

Click here to Open

BS201103

ARCTIC CAT

Service Bulletin

Date: July 13, 2010

Product Line: Snowmobile

Bulletin No: BS201103

Subject: ECU Reprogramming

Affected Models: All 2010 500 Sno Pro

■ **NOTE: Please refer to Cat Tracker to verify if a VIN is affected by this Service Bulletin.**

Condition: It has been determined that the performance of the affected model at low RPM does not meet Arctic Cat standards and/or expectations and needs to be updated.

Solution: Remove the existing ECU (if necessary); then reprogram the ECU according to the instructions enclosed with the CATT reprogramming kit.

■ **NOTE: Before attaching the supplied decal with the appropriate bulletin number to the ECU, the Dealer Name and Zip Code must be filled out after reprogramming is complete. If additional decals (p/n 9611-043) are needed, a limited number of decals are available and can be ordered by contacting your Arctic Cat service technician.**

Parts: The hardware necessary to reprogram the ECU is included in your CATT reprogramming kit. If your dealership does not have the CATT (p/n 0744-056) reprogramming kit, contact your Arctic Cat service technician.

Warranty: A labor allowance of 0.2 hr will be paid per affected snowmobile.

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BS201104

ARCTIC CAT

Service Bulletin

Date: July 15, 2010 **Product Line:** Snowmobile

Bulletin No: BS201104 **Subject:** Solenoid Heat Shield

Affected Models: All 2010 1100 cc non-turbo models.

■ **NOTE: Please refer to Cat Tracker to verify if a VIN is affected by this Service Bulletin.**

Condition: During operation of the affected models, resonator heat may cause the starter solenoid to malfunction and must be updated.

Solution: Install new Solenoid Heat Shield Kit (p/n 0637-350) using the instructions included in the kit.

Parts: Order an appropriate number of Solenoid Heat Shield Kits (p/n 0637-350) through normal parts-ordering channels. Your dealership Parts Account will be billed and then credited upon receipt of a Warranty Claim Request form.

Warranty: A labor allowance of 0.2 hr will be paid per affected snowmobile.

■ **NOTE: It is required to enter the current mileage of each affected model at the time the claim is submitted.**

⚠ ATTENTION

To ensure that the necessary service work is completed in a timely manner and that this issue can be resolved, Arctic Cat is requesting that all service work be completed prior to July 15, 2011. All warranty claims directly related to this issue will not be honored after July 15, 2011, without prior approval.

Click here to Open

BS201105

ARCTIC CAT

Service Bulletin

Date: July 26, 2010

Product Line: Snowmobile

Bulletin No: BS201105

Subject: Pinion Gear and Spring

Affected Models: All 2010 F8 LXR models

■ **NOTE: Please refer to Cat Tracker to verify if a VIN is affected by this Service Bulletin.**

Condition: When operating the affected model at high RPM, the pinion gear may move out and contact the ring gear on the drive clutch. If the pinion gear contacts the ring gear during operation of the snowmobile, damage to the pinion gear and/or the ring gear may occur.

Solution: Install new Pinion Gear Update Kit (p/n 0637-351) on all 2010 F8 LXR models. Instructions will be included in the kit.

Parts: Order an appropriate number of Pinion Gear Update Kits (p/n 0637-351) through normal parts-ordering channels. Your dealership Parts Account will be billed and then credited upon receipt of a Warranty Claim Request.

Warranty: A labor allowance of 0.4 hr will be paid per affected 2010 F8 LXR.

⚠ ATTENTION

To ensure that the necessary service work is completed in a timely manner and that this issue can be resolved, Arctic Cat is requesting that all service work be completed prior to July 26, 2011. All warranty claims directly related to this issue will not be honored after July 26, 2011, without prior approval.

Click here to Open

BS201106

ARCTIC CAT

Service Bulletin

Date: August 23, 2010

Product Line: Snowmobile

Bulletin No: BS201106

Subject: CCU

Affected Models: All 2009 1100 cc models

■ **NOTE: Please refer to Cat Tracker to verify if a VIN is affected by this Service Bulletin as it may already have been updated (example: If the snowmobile has a CCU (p/n 0630-265) the service work has been completed and a warranty claim has been credited).**

Condition: On the affected models, the service icon (wrench) may come on when shifting into reverse causing the battery not to charge. If this condition occurs, the snowmobile may lose power to restart.

Solution: Install new Chassis Control Unit (CCU) Update Kit (p/n 0637-341) on all 2009 1100 cc models. Instructions will be included in the kit.

Parts: Order an appropriate number of Chassis Control Unit (CCU) Update Kits (p/n 0637-341) through normal parts-ordering channels. Your dealership Parts Account will be billed and then credited upon receipt of a Warranty Claim Request form.

Warranty: A labor allowance of 0.3 hr will be paid per affected snowmobile.

■ **NOTE: It is required to enter the current mileage of each affected model at the time the claim is submitted.**

⚠ ATTENTION

To ensure that the necessary service work is completed in a timely manner and that this issue can be resolved, Arctic Cat is requesting that all service work be completed prior to August 23, 2011. All warranty claims directly related to this issue will not be honored after August 23, 2011, without prior approval.

Click here to Open

BS201107

ARCTIC CAT

Service Bulletin

Date: September 13, 2010 **Product Line:** Snowmobile

Bulletin No: BS201107 **Subject:** Drive Clutch Spring

Affected Models: All 2010 800 cc models

■ **NOTE: Please refer to Cat Tracker to verify if a VIN is affected by this Service Bulletin.**

Condition: On the affected models, the existing black/orange drive clutch spring may crack and break resulting in loss of engine performance and must be updated.

■ **NOTE: Please verify the affected snowmobile needs the yellow/white drive clutch spring (p/n 0646-229) before ordering this kit as it may already be updated.**

Solution: Install new Drive Clutch Spring Update Kit (p/n 0637-347) on all 2010 800 cc models. Instructions will be included in the kit.

Parts: Order an appropriate number of Drive Clutch Spring Update Kits (p/n 0637-347) through normal parts-ordering channels. Your dealership Parts Account will be billed and then credited upon receipt of a Warranty Claim Request.

Warranty: A labor allowance of 0.3 hr will be paid per affected snowmobile.

■ **NOTE: It is required to enter the current mileage of each affected model at the time the claim is submitted.**

⚠ ATTENTION

To ensure that the necessary service work is completed in a timely manner and that this issue can be resolved, Arctic Cat is requesting that all service work be completed prior to September 13, 2011. All warranty claims directly related to this issue will not be honored after September 13, 2011, without prior approval.

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BS201108

ARCTIC CAT

Service Bulletin

Date: November 10, 2010 **Product Line:** Snowmobile

Bulletin No: BS201108 **Subject:** Voltage Regulator

Affected Models: Specific 2011 M8 models (see attached VIN list and/or refer to Cat Tracker to verify if a VIN is affected by this Service Bulletin).

■ **NOTE: For identification purposes, it is necessary to refer to only the last six digits of the VIN.**

Condition: On the affected models, the voltage regulator may have been installed upside down and should be corrected.

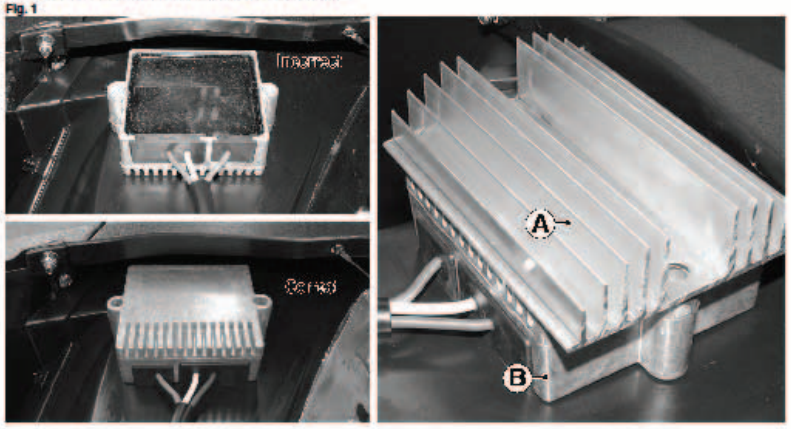
Solution: Reverse the orientation of the existing voltage regulator according to the instructions in this bulletin.

Warranty: A labor allowance of 0.2 hr will be paid per affected snowmobile.

Instructions: 1. Open the hood; then remove the two machine screws and nuts securing the voltage regulator and the heat regulator to the right-side belly pan.

2. Make sure the aluminum side of the voltage regulator is facing up; then secure the heat regulator (A) and voltage regulator (B) to the right-side belly pan using existing machine screws and nuts. Tighten securely. See Fig. 1.

Fig. 1



■ **NOTE: It is required to enter the current mileage of each affected model at the time the claim is submitted.**

⚠ ATTENTION

To ensure that the necessary service work is completed in a timely manner and that this issue can be resolved, Arctic Cat is requesting that all service work be completed prior to November 10, 2011. All warranty claims directly related to this issue will not be honored after November 10, 2011, without prior approval.

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BS201109

ARCTIC CAT

Service Bulletin

Date: November 15, 2010 **Product Line:** Snowmobile

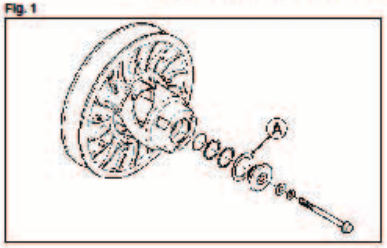
Bulletin No: BS201109 **Subject:** Thrust Washer

Affected Models: Specific 2011 F570, T570, Bearcat 570, Bearcat XT, and Bearcat Z1 XT models within the VIN range of 115368 - 116559.

■ **NOTE: For identification purposes, it is necessary to refer to only the last six digits of the VIN.**

Condition: On the affected models, the existing thrust washer (A) on the sheave adjuster may crack and should be replaced. See Fig. 1.

Fig. 1



Solution: Install new Thrust Washer Update Kit (p/n 0637-352) on all affected models. Instructions will be included in the kit.

Parts: Order an appropriate number of Thrust Washer Update Kits (p/n 0637-352) through normal parts-ordering channels. Your dealership Parts Account will be billed and then credited upon receipt of a Warranty Claim Request form.

Warranty: A labor allowance of 0.2 hr will be paid per affected snowmobile.

■ **NOTE: It is required to enter the current mileage of each affected model at the time the claim is submitted.**

⚠ ATTENTION

To ensure that the necessary service work is completed in a timely manner and that this issue can be resolved, Arctic Cat is requesting that all service work be completed prior to November 15, 2011. All warranty claims directly related to this issue will not be honored after November 15, 2011, without prior approval.

 1110

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BS201110

ARCTIC CAT

Service Bulletin

Date: December 8, 2010 **Product Line:** Snowmobile

Bulletin No: BS201110 **Subject:** ECU Reprogramming

Affected Models: All 2009 and 2010 Z1 and TZ1 Turbo models

■ **NOTE: Please refer to Cat Tracker to verify if a VIN is affected by this Service Bulletin.**

Condition: On the affected models, it has been determined that performance levels during operation at low RPM or with coolant temperature light on do not meet Arctic Cat standards and/or expectations.

Solution: Before reprogramming the ECU, your Cat Advanced Tech Tool (CATT) software must be updated by logging on to Cat Tracker Online and clicking on CATT Tool Update under Quick Links on the right side of the screen. Reprogram the ECU according to the instructions enclosed with the CATT reprogramming kit.

Parts: The hardware necessary to reprogram the ECU is included in your CATT reprogramming kit. If your dealership does not have the CATT (p/n 0744-056) reprogramming kit, contact your Arctic Cat service technician. **An additional Harness Adaptor Kit (p/n 0744-065) will be shipped directly to your dealership. This adaptor will be needed to reprogram this particular ECU. Instructions will be included with the kit.**

■ **NOTE: Before attaching the supplied decal to the ECU, the Dealer Name, Zip Code, and service bulletin number must be filled out after reprogramming is complete. If additional Decals (p/n 9611-514) are needed, a limited number of decals are available and can be ordered by contacting your Arctic Cat service technician.**

Warranty: A labor allowance of 0.2 hr will be paid per affected snowmobile. A warranty claim is automatically generated at the time the ECU is reprogrammed.

■ **NOTE: It is required to enter the current mileage of each affected model.**

 1210

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BS201111 & 12

Safety Recall Bulletin

Date: January 18, 2011 **Product Line:** Snowmobile

Bulletin No: BS201111 **Subject:** Lower A-Arm Bracket

Affected Models: All 2010 M-Series and Crossfire models

■ **NOTE: Please refer to Cat Tracker to verify if a VIN is affected by this Service Bulletin.**

⚠ WARNING

Do not operate or permit anyone to operate the affected snowmobile until the lower A-arms have been updated. Severe personal injury may result if the lower A-arm breaks and loss of control occurs.

What is the reason for this notice?

The two lower A-arms on the affected models do not meet Arctic Cat standards and must be updated.

Condition: On the affected models, the lower front A-arms may fracture during use. If this condition were to occur, it could affect steering control which in turn could cause loss of control of the snowmobile which presents the possibility of serious injury or death.

Solution: Install A-Arm Bracket Update Kit (p/n 0637-354) on all 2010 M-Series and Crossfire models. Instructions will be included in the kit.

What should you do?

Update all affected snowmobiles still at your dealership. All registered owners of affected snowmobiles will be sent a letter concerning this Safety Recall Bulletin. If a customer contacts you concerning this issue, please assist them in completing the necessary update.

Parts: Order an appropriate number of A-Arm Bracket Update Kits (p/n 0637-354) through normal parts-ordering channels. Your dealership Parts Account will be billed and then credited upon receipt of a Warranty Claim Request form.

Warranty: A labor allowance of 0.2 hr will be paid per affected snowmobile.

■ **NOTE: It is required to enter the current mileage of each affected model at the time the claim is submitted.**

Click here to Open

Safety Recall Bulletin

Date: January 18, 2011 **Product Line:** Snowmobile

Bulletin No: BS201112 **Subject:** Lower A-Arm Bracket

Affected Models: All 2010 T-Series, F-Series, and Bearcat models

■ **NOTE: Please refer to Cat Tracker to verify if a VIN is affected by this Service Bulletin.**

⚠ WARNING

Do not operate or permit anyone to operate the affected snowmobile until the lower A-arms have been updated. Severe personal injury may result if the lower A-arm breaks and loss of control occurs.

What is the reason for this notice?

The two lower A-arms on the affected models do not meet Arctic Cat standards and must be updated.

Condition: On the affected models, the lower front A-arms may fracture during use. If this condition were to occur, it could affect steering control which in turn could cause loss of control of the snowmobile which presents the possibility of serious injury or death.

Solution: Install A-Arm Bracket Update Kit (p/n 0637-353) on all 2010 T-Series, F-Series, and Bearcat models. Instructions will be included in the kit.

What should you do?

Update all affected snowmobiles still at your dealership. All registered owners of affected snowmobiles will be sent a letter concerning this Safety Recall Bulletin. If a customer contacts you concerning this issue, please assist them in completing the necessary update.

Parts: Order an appropriate number of A-Arm Bracket Update Kits (p/n 0637-353) through normal parts-ordering channels. Your dealership Parts Account will be billed and then credited upon receipt of a Warranty Claim Request form.

Warranty: A labor allowance of 0.3 hr will be paid per affected snowmobile.

■ **NOTE: It is required to enter the current mileage of each affected model at the time the claim is submitted.**

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BS201113

ARCTIC CAT

Service Bulletin

Date: February 23, 2011 **Product Line:** Snowmobile

Bulletin No: BS201113 **Subject:** Protective Foil

Affected Models: All 2010 and 2011 Sno Pro 500 models

■ **NOTE: Please refer to Cat Tracker to verify if a VIN is affected by this Service Bulletin.**

Condition: On the affected models, certain right-side belly pan foam (B) and certain right-side access panel foam (A) may come in contact with the resonator and should be replaced with protective foil. See Fig. 1.

Fig. 1

Solution: Install Protective Foil Update Kit (p/n 0637-355) on all affected 2010 and 2011 Sno Pro 500 models. Instructions will be included in the kit.

Parts: Order an appropriate number of Protective Foil Update Kits (p/n 0637-355) through normal parts-ordering channels. Your dealership Parts Account will be billed and then credited upon receipt of a Warranty Claim Request form.

Warranty: A labor allowance of 0.4 hr will be paid per affected snowmobile.

⚠ ATTENTION

To ensure that the necessary service work is completed in a timely manner and that this issue can be resolved, Arctic Cat is requesting that all service work be completed prior to February 23, 2012. All warranty claims directly related to this issue will not be honored after February 23, 2012, without prior approval.

■ **NOTE: It is required to enter the current mileage of each affected model at the time the claim is submitted.**

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