WILDCAT TRAIL

2014 SERVICE MANUAL [ROV]

ARCTIC CAT®

■**NOTE: If the screen or gasket is damaged in any way, it must be replaced.**

2. Install the spark arrester assembly and gasket and secure with the cap screws. Tighten the cap screws to 72 in.-lb.

Engine Oil - Filter

OIL - FILTER

Change the engine oil and oil filter at the scheduled intervals. The engine should always be warm when the oil is changed so the oil will drain easily and completely.

1. Park the vehicle on level ground; then remove the access panel.

WT037A

2. Remove the oil level stick/filler plug.

WT035A

3. Remove the drain plug from the bottom of the engine and drain the oil into a drain pan.

WT294A

4. Using the Oil Filter Wrench and a ratchet handle (or a socket or box-end wrench), remove the old oil filter.

■**NOTE: Clean up any excess oil after removing the filter.**

5. Apply oil to a new filter O-ring and check to make sure it is positioned correctly; then install the new oil filter. Tighten securely.
6. Install the engine drain plug and tighten to 16 ft-lb. Pour the specified amount of the recommended oil in the filler hole. Install the oil level stick/filler plug.

CAUTION

Any oil used in place of the recommended oil could cause serious engine damage. Do not use oils which contain graphite or molybdenum additives. These oils can adversely affect clutch operation. Also, not recommended are racing, vegetable, non-detergent, and castor-based oils.

7. Start the engine (while the vehicle is outside on level ground) and allow it to idle for a few minutes.
8. Turn the engine off and wait approximately one minute.
9. Unscrew the oil level stick and wipe it with a clean cloth.
10. Install the oil level stick and thread into the engine case.

■**NOTE: The oil level stick should be threaded into the case for checking the oil level.**

11. Remove the oil level stick; the oil level must be within the operating range but not exceeding the upper mark.

WT066A

CAUTION

Do not over-fill the engine with oil. Always make sure that the oil level is not above the upper mark.

12. Inspect the area around the drain plug and oil filter for leaks.

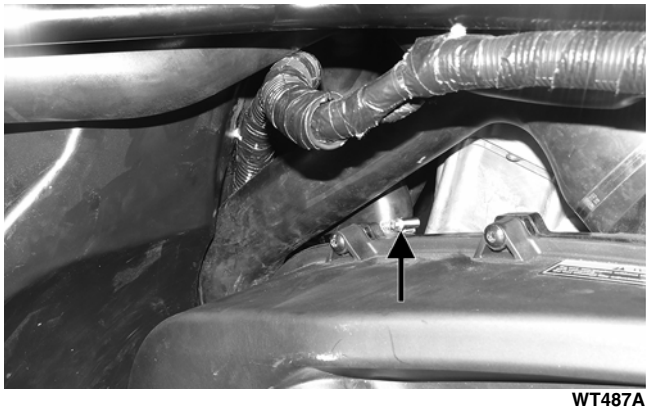
Front Differential - Transaxle Lubricant

To check front differential lubricant, use the following procedure.

1. Remove the level plug; lubricant should be level with the bottom threads.

WT028A

8. Loosen the clamp securing the clutch air intake tube to engine; then pry the tube off of engine. Account for the clamp.



WT487A

9. Remove the fasteners securing the left rear body panel.

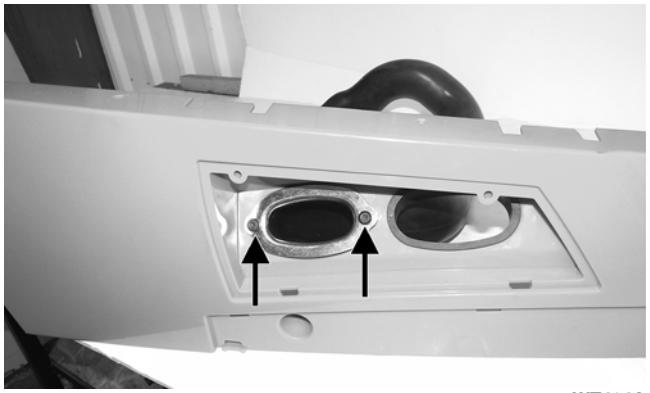
WT250A

10. Remove the panel with the air/clutch intake tubes.

WT486

INSTALLING REAR BODY PANELS

1. If removed, install the clutch air intake tube through the left rear body opening and secure it with the plate and existing cap screws. Tighten securely.



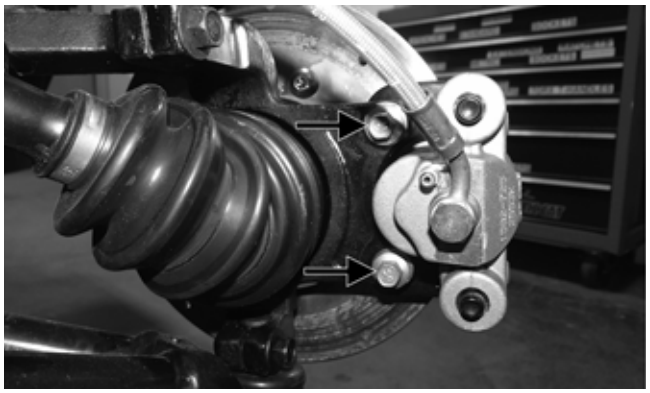
WT484A

2. Install the tabs of the body panel into the slots in the side panel; then route the air intake clutch tube to the engine.

WT490

WT486

3. With the panel tabs in place, press the panel towards the frame and maneuver the air intake tube inside the boot.



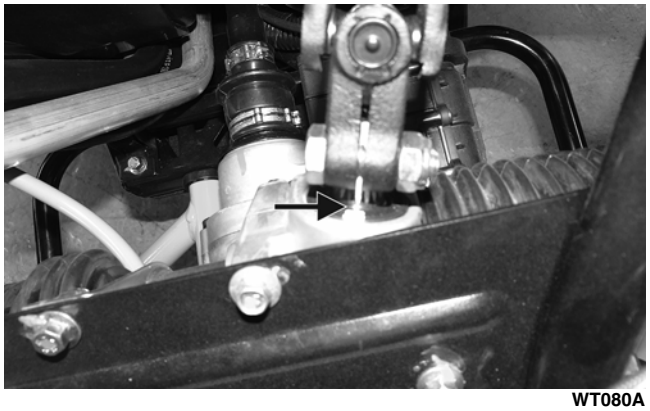
WT287A

8. Install the wheel; then using a crisscross pattern, tighten the wheel nuts in 20 ft-lb increments to a final torque factor of 40 ft-lb (steel wheel) or 80 ft-lb (aluminium wheel).
9. Remove the vehicle from the support stand.

Checking/Adjusting Front Wheel Alignment

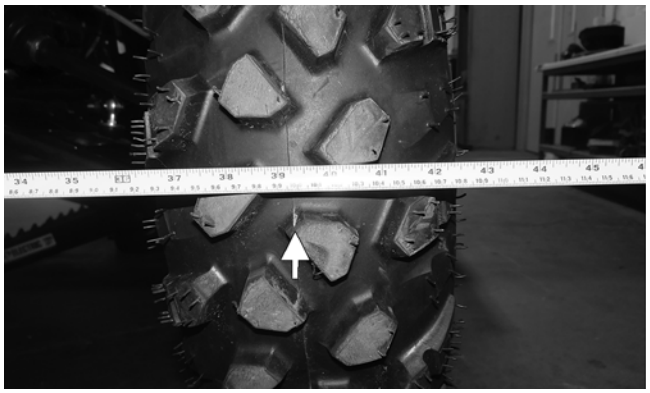
■NOTE: All measurements and adjustments must be made with the vehicle unloaded.

■NOTE: Make sure the white alignment marks of the steering rack are aligned.



WT080A

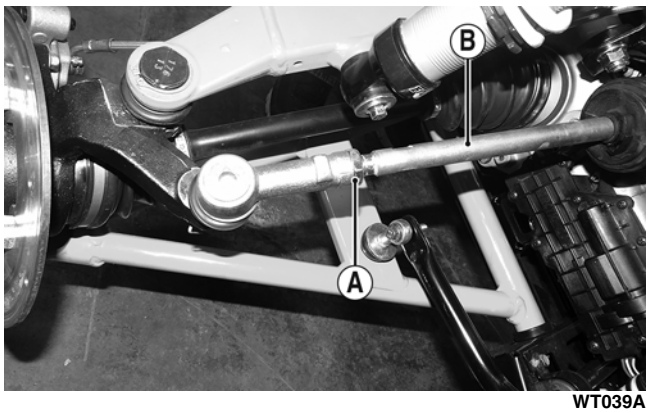
Mark the center-line of the front tires at the front and rear of the tire; then using a tape measure, measure and record the distance between the marks at the front and rear. The front measurement should be 3-6 mm (1/8-1/4 in.) greater than the rear measurement (toe-out).



WT292A

To adjust the wheel alignment, use the following procedure:

1. Center the steering rack; then using an open-end wrench to hold the tie rod (B), loosen the right-side and left-side jam nuts (A).



WT039A

CAUTION

Always use a wrench to hold the tie rod ends when loosening or tightening the jam nuts or damage to the boots could occur.

2. Turn the left-side and right-side tie rods (B) in equal increments to achieve the proper toe-out; then tighten to 25 ft-lb.

Accelerator Pedal

REMOVING

Dislodge the yellow nylon bushing of the throttle cable from the actuator arm; then remove two torx-head screws and nuts securing the accelerator pedal assembly to the splash panel and remove the accelerator pedal.

Problem: Engine idles poorly	
Condition	**Remedy**
1. **Gasoline** bad - contaminated	1. Drain gas - replace with clean gas
2. **Valve clearance** incorrect	2. Adjust clearance
3. **Valve seating** poor	3. Replace valves/cylinder head
4. **Valve guides** defective	4. Replace cylinder head
5. **Magneto** defective	5. Replace stator coil
6. **ECM** defective	6. Replace ECM
7. **Spark plug(s)** fouled - **gap** too wide	7. Adjust gap - replace plug(s)
8. **Ignition coil** defective	8. Replace ignition coil
9. **Fuel injector** obstructed	9. Replace fuel injector
10. **Throttle body** dirty	10. Clean bore and ISA passages
Problem: Engine runs poorly at high speed	
Condition	**Remedy**
1. **Gasoline** bad - contaminated	1. Drain gas - replace with clean gas
2. **High RPM "cut out"** against RPM limiter	2. Shift into higher gear - decrease speed
3. **Valve springs** weak	3. Replace springs
4. **Valve timing** incorrect	4. Retime engine
5. **Cams** worn	5. Replace cams
6. **Spark plug gap** too narrow	6. Adjust gap
7. **Ignition coil** defective	7. Replace ignition oil
8. **Air cleaner element** obstructed	8. Clean element
9. **Fuel hose** obstructed	9. Clean - prime hose
Problem: Exhaust smoke dirty or heavy	
Condition	**Remedy**
1. **Gasoline** bad - contaminated	1. Drain gas - replace with clean gas
2. **Engine oil** overfilled - contaminated	2. Drain excess oil - change oil
3. **Piston rings - cylinder** worn	3. Replace - service rings - cylinder
4. **Valve guides** worn	4. Replace cylinder head
5. **Cylinder wall** scored	5. Replace cylinder
6. **Valve stems** worn	6. Replace valves
7. **Stem seals** defective	7. Replace seals
Problem: Engine lacks power	
Condition	**Remedy**
1. **Gasoline** bad - contaminated	1. Drain gas - replace with clean gas
2. **Valve clearance** incorrect	2. Adjust clearance
3. **Valve springs** weak	3. Replace springs
4. **Valve timing** incorrect	4. Time camshaft
5. **Piston ring(s) - cylinder** worn	5. Replace - service rings - cylinder
6. **Valve seating** poor	6. Repair seats
7. **Spark plug** fouled	7. Clean - replace plug
8. **Spark plug gap** incorrect	8. Adjust gap - replace plug
9. **Fuel injector** obstructed	9. Replace fuel injector
10. **Air cleaner element** obstructed	10. Clean element
11. **Engine oil** overfilled - contaminated	11. Drain excess oil - change oil
12. **Intake manifold** leaking air	12. Tighten - replace manifold
13. **Cam chain** worn	13. Replace cam chain - sprockets
Problem: Engine overheats	
Condition	**Remedy**
1. **Carbon deposit (piston crown)** excessive	1. Clean piston
2. **Oil** low	2. Add oil
3. **Octane** low - **gasoline** poor	3. Drain - replace gasoline
4. **Oil pump** defective	4. Replace pump
5. **Oil filter** obstructed	5. Replace filter
6. **Intake manifold** leaking air	6. Tighten - replace manifold
7. **Coolant level** low	7. Fill - examine system for leaks
8. **Fan** malfunctioning	8. Check fan fuse - replace fan
9. **Fan relay** malfunctioning	9. Replace fan relay
10. **Thermostat** stuck - closed	10. Replace thermostat
11. **Radiator hoses - cap** damaged - obstructed	11. Clear obstruction - replace hoses - cap
12. **Fan fuse(s)** blown	12. Replace fuse(s)

TAPPET CLEARANCE TABLE - INTAKE

(mm)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
	180	185	190	195	200	205	210	215	220	225	230	235	240	245	250	255	260	265	270	275	280	285	290	295	300
	1.80	1.85	1.90	1.95	2.00	2.05	2.10	2.15	2.20	2.25	2.30	2.35	2.40	2.45	2.50	2.55	2.60	2.65	2.70	2.75	2.80	2.85	2.90	2.95	3.00
	1.85	1.90	1.95	2.00	2.05	2.10	2.15	2.20	2.25	2.30	2.35	2.40	2.45	2.50	2.55	2.60	2.65	2.70	2.75	2.80	2.85	2.90	2.95	3.00	
		1.80	1.85	1.90	1.95	2.00	2.05	2.10	2.15	2.20	2.25	2.30	2.35	2.40	2.45	2.50	2.55	2.60	2.65	2.70	2.75	2.80	2.85	2.90	2.95
		1.80	1.85	1.90	1.95	2.00	2.05	2.10	2.15	2.20	2.25	2.30	2.35	2.40	2.45	2.50	2.55	2.60	2.65	2.70	2.75	2.80	2.85	2.90	
			SPECIFIED CLEARANCE / NO ADJUSTMENT REQUIRED																						
	1.90	1.95	2.00	2.05	2.10	2.15	2.20	2.25	2.30	2.35	2.40	2.45	2.50	2.55	2.60	2.65	2.70	2.75	2.80	2.85	2.90	2.95	3.00		
	1.95	2.00	2.05	2.10	2.15	2.20	2.25	2.30	2.35	2.40	2.45	2.50	2.55	2.60	2.65	2.70	2.75	2.80	2.85	2.90	2.95	3.00			
	2.00	2.05	2.10	2.15	2.20	2.25	2.30	2.35	2.40	2.45	2.50	2.55	2.60	2.65	2.70	2.75	2.80	2.85	2.90	2.95	3.00				
	2.05	2.10	2.15	2.20	2.25	2.30	2.35	2.40	2.45	2.50	2.55	2.60	2.65	2.70	2.75	2.80	2.85	2.90	2.95	3.00					
	2.10	2.15	2.20	2.25	2.30	2.35	2.40	2.45	2.50	2.55	2.60	2.65	2.70	2.75	2.80	2.85	2.90	2.95	3.00						
	2.15	2.20	2.25	2.30	2.35	2.40	2.45	2.50	2.55	2.60	2.65	2.70	2.75	2.80	2.85	2.90	2.95	3.00							
	2.20	2.25	2.30	2.35	2.40	2.45	2.50	2.55	2.60	2.65	2.70	2.75	2.80	2.85	2.90	2.95	3.00								
	2.25	2.30	2.35	2.40	2.45	2.50	2.55	2.60	2.65	2.70	2.75	2.80	2.85	2.90	2.95	3.00									
	2.30	2.35	2.40	2.45	2.50	2.55	2.60	2.65	2.70	2.75	2.80	2.85	2.90	2.95	3.00										
	2.35	2.40	2.45	2.50	2.55	2.60	2.65	2.70	2.75	2.80	2.85	2.90	2.95	3.00											
	2.40	2.45	2.50	2.55	2.60	2.65	2.70	2.75	2.80	2.85	2.90	2.95	3.00												
	2.45	2.50	2.55	2.60	2.65	2.70	2.75	2.80	2.85	2.90	2.95	3.00													
	2.50	2.55	2.60	2.65	2.70	2.75	2.80	2.85	2.90	2.95	3.00														
	2.55	2.60	2.65	2.70	2.75	2.80	2.85	2.90	2.95	3.00															
	2.60	2.65	2.70	2.75	2.80	2.85	2.90	2.95	3.00																
	2.65	2.70	2.75	2.80	2.85	2.90	2.95	3.00																	
	2.70	2.75	2.80	2.85	2.90	2.95	3.00																		
	2.75	2.80	2.85	2.90	2.95	3.00																			
	2.80	2.85	2.90	2.95	3.00																				
	2.85	2.90	2.95	3.00																					
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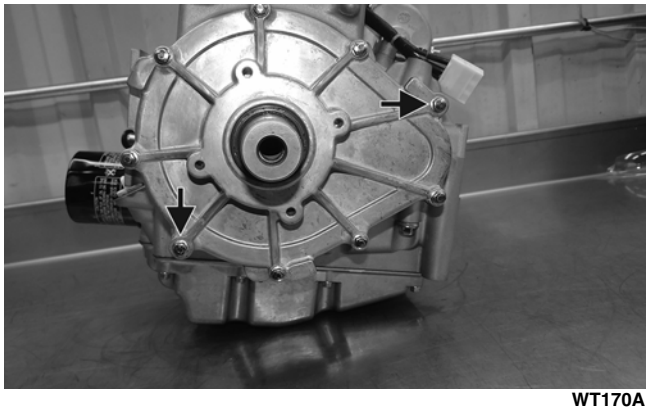


WT170A

Bottom-Side Components

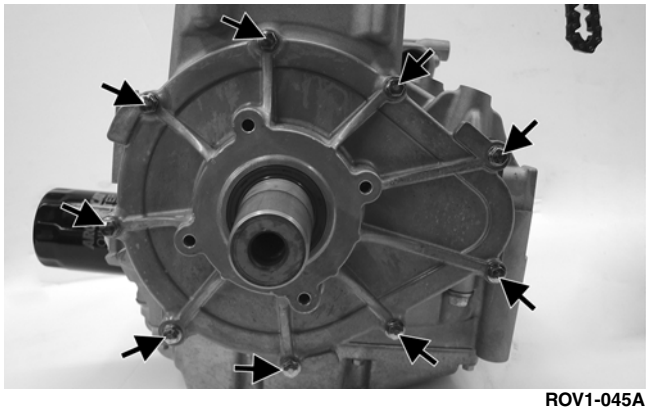
■**NOTE: For efficiency, it is preferable to remove and disassemble only those components which need to be addressed and to service only those components. The technician should use discretion and sound judgment.**

☞ AT THIS POINT
To service any one specific component, only limited disassembly of components may be necessary. Note the AT THIS POINT information in each sub-section.

■**NOTE: The engine must be removed from the frame for this procedure.**

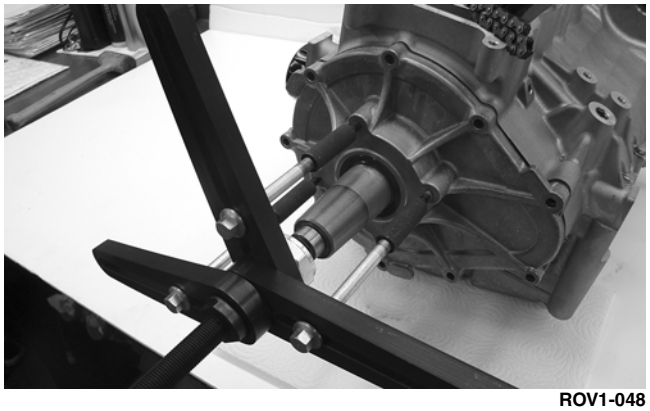
Removing Bottom-Side Components

1. Remove the cap screws securing the PTO-side cover to crankcase.



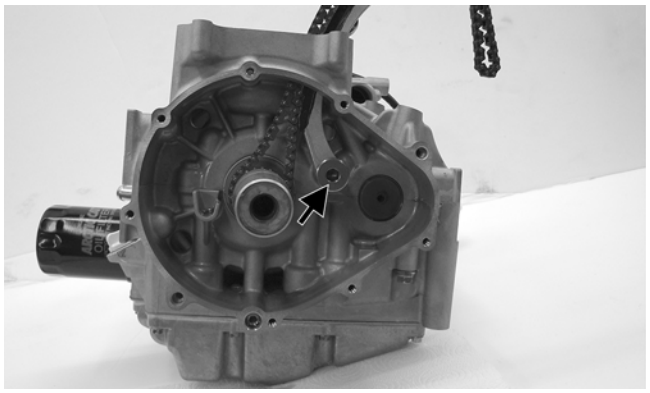
ROV1-045A

2. Using an appropriate puller if needed, remove the PTO-side cover. Account for a gasket, two dowel pins, and two longer fasteners for assembly purposes.



ROV1-048

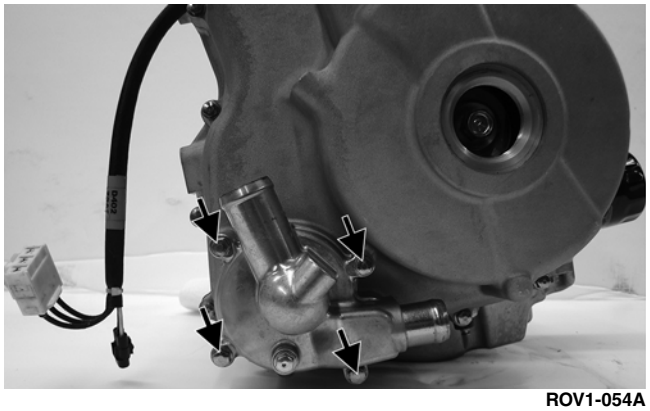
3. Remove the chain by pulling it down through the crankcase and out the PTO side.
4. Remove the fastener securing the chain guide to the crankcase.



ROV1-056A

■**NOTE: If the water pump does not require servicing, it does not have to be removed.**

5. Remove the cap screws securing the water pump cover to the crankcase. Account for two dowel pins and an O-ring.



ROV1-054A

6. Remove the cap screws securing the MAG-side cover to the crankcase. Account for two dowel pins and discard the gasket.

■**NOTE: To remove left-side components, see Engine - Removing Engine.**

DRIVE CLUTCH

Disassembling

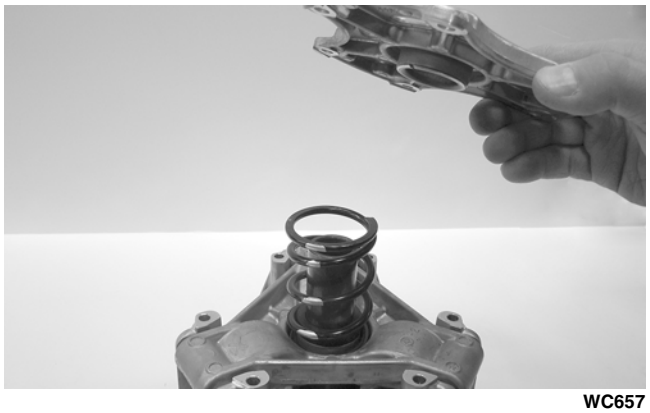
■**NOTE: Note the timing marks (X) on the cover, spider, and movable sheave. These must be aligned when assembling the drive clutch for balance purposes.**

1. Loosen the machine screws securing the cover. Remove every other cap screw from the cover; then while firmly holding the cover, remove the three remaining screws equally.

WC659

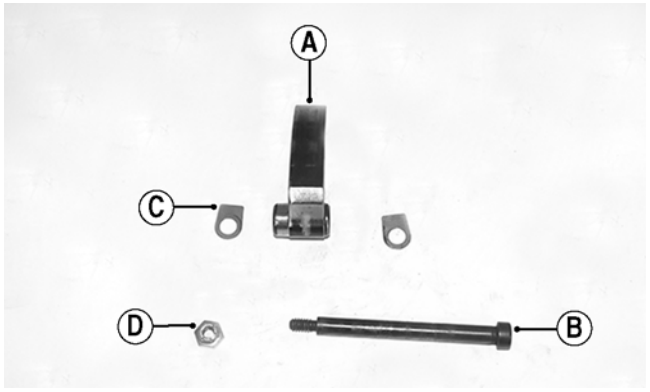
WT519

2. Remove the cover and spring.



WC657

3. Remove the lock nuts (D) from the cam arm pivot pins (B); then remove the pins and account for six thrust washers (C) and three cam arms (A).



WT518A

Cleaning and Inspecting

■**NOTE: If any components other than flyweights, pins, spring, thrust washers, or cover are damaged or worn, clutch replacement is necessary.**

1. Using parts-cleaning solvent, wash grease, dirt, and foreign matter off all components; dry with compressed air.
2. Remove any drive belt dust accumulation from the stationary sheave, movable sheave, and bushings using parts-cleaning solvent only.

CAUTION

Do not use steel wool or a wire brush to clean components having a bushing; damage to the bushing will result.

3. Inspect the cover for cracks or imperfections in the casting.
4. Inspect the cam arm pins for wear or bends.
5. Inspect the bushing in the cover for wear, damage, or cracks.
6. Inspect the spring for cracking or twisting.
7. Inspect the cam arms for grooves.

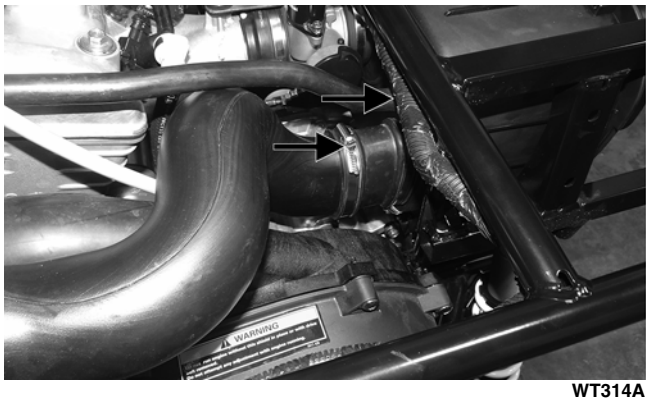
Assembling

⚠ WARNING

Never reuse the lock nuts on the cam arm pins.

1. Place the cam arms, thrust washers, and cam arm pivot pins (pivot pin heads with the direction of rotation) into the moveable drive sheave and secure with new lock nuts. Tighten to 48 in.-lb.

■**NOTE: The drive clutch rotates counterclockwise.**



WT314A

17. Install the cargo box and rear body panels.

■NOTE: If the throttle body, ECM, TPS, or ISC are replaced, the EFI system must be synchronized. Use the following procedure.

1. With the key off, depress accelerator pedal to Wide Open Throttle (WOT).
2. Place the ignition key in the ON position and wait for 10 seconds.
3. Release the accelerator pedal, and wait an additional 10 seconds.
4. Turn the key to the OFF position and allow the gauge to shut off.

Gas Tank

⚠ WARNING

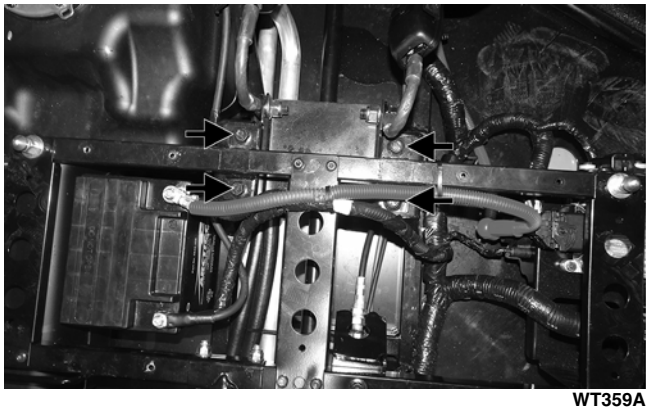
Whenever any maintenance or inspection is made on the fuel system during which there may be fuel leakage, there should be no welding, smoking, open flames, etc., in the area.

REMOVING

1. Remove the seats, engine access panel, and center console.
2. Remove the floor and side panels.
3. Remove the battery access panel and battery.
4. Remove the right rear side panel and right rear fender.
5. Remove the cap screws and discard the lock nuts securing the right side frame tube.

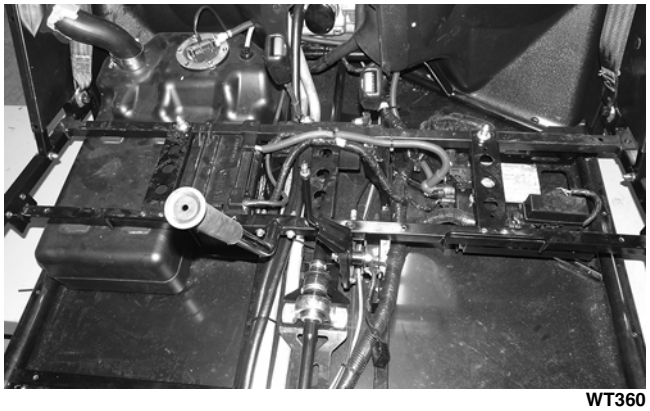
WT365A

6. Remove the four cap screws securing the seat base to the frame.



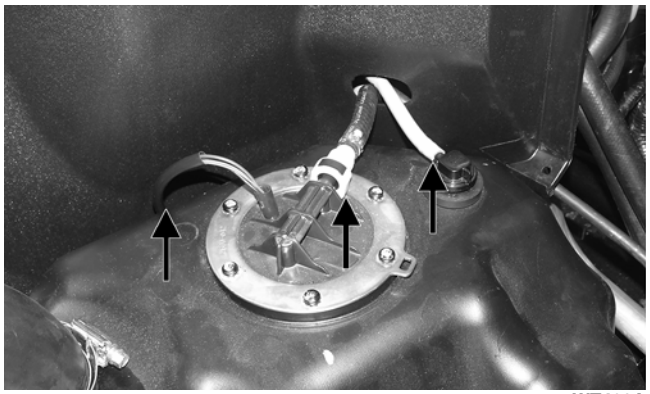
WT359A

7. Remove the remaining cap screws securing the frame tubes to the frame. Remove both frame tubes.



WT360

8. Slide the gas tank slightly forward and disconnect the gasline hose, vent hose, and fuel pump; then remove the gas tank.



WT480A

INSTALLING

1. Place the gas tank into position; then connect the gasline hose, vent hose, and fuel pump.
2. Place the two frame tubes into position and secure (but do not tighten) with new “patch-lock” cap screws.
3. Install the remaining fasteners; then tighten all fasteners securely.
4. Using new lock nuts, install the right side frame tube and tighten securely.

Electrical System

■NOTE: Certain components and sensors can be checked by using the EFI diagnostic system and digital gauge (see EFI Diagnostic System in this section for more information).

The electrical connections should be checked periodically for proper function. In case of an electrical failure, check fuses, connections (for tightness, corrosion, damage), and/or bulbs.

SPECIAL TOOLS

A number of special tools must be available to the technician when performing service procedures in this section. Refer to the current Special Tools Catalog for the appropriate tool description.

Description	p/n
Fluke Model 77 Multimeter	0644-559
Timing Light	0644-296
MaxiClips	0744-041

■NOTE: Special tools are available from the Arctic Cat Service Department.

TESTING ELECTRICAL COMPONENTS

All of the electrical tests should be made using the Fluke Model 77 Multimeter. If any other type of meter is used, readings may vary due to internal circuitry. When troubleshooting a specific component, always verify first the fuse(s) are good, the LED(s) are good, the connections are clean and tight, the battery is fully charged, and all appropriate switches are activated.

■NOTE: For absolute accuracy, all tests should be made at room temperature of 68° F.

Battery

■NOTE: Preliminary checks may be performed on this component using the diagnostic mode on the LCD gauge (see EFI Diagnostic System in this section)

The battery is located under the passenger seat.

■NOTE: To access the battery box, the battery cover must be removed.

After being in service, batteries require regular cleaning and recharging in order to deliver peak performance and maximum service life. The following procedures are recommended for cleaning and maintaining sealed batteries. Always read and follow instructions provided with battery chargers and battery products.

■NOTE: Refer to all warnings and cautions provided with the battery or battery maintainer/charger.

Loss of battery charge may be caused by ambient temperature, ignition OFF current draw, corroded terminals, self discharge, frequent start/stops, and short engine run times. Frequent winch usage, snowplowing, extended low RPM operation, short trips, and high amperage accessory usage are also reasons for battery discharge.

Maintenance Charging

■NOTE: Arctic Cat recommends the use of the CTEK Multi US 800 or the CTEK Multi US 3300 for battery maintenance charging. Maintenance charging is required on all batteries not used for more than two weeks or as required by battery drain.

800E

1. When charging a battery in the vehicle, be sure the ignition switch is in the OFF position.
2. Clean the battery terminals with a solution of baking soda and water.

■NOTE: The sealing strip should NOT be removed and NO fluid should be added.

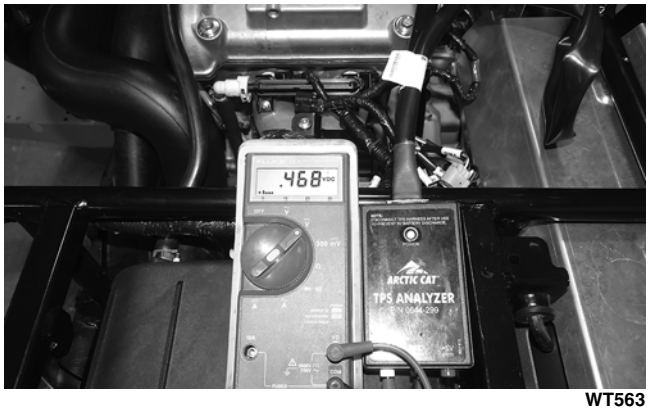
3. Be sure the charger and battery are in a well-ventilated area. Be sure the charger is unplugged from the 110-volt electrical outlet.
4. Connect the red terminal lead from the charger to the positive terminal of the battery; then connect the black terminal lead of the charger to the negative terminal of the battery.

■NOTE: Optional battery charging adapters are available from your authorized Arctic Cat dealer to connect directly to your vehicle from the recommended chargers to simplify the maintenance charging process. Check with your authorized Arctic Cat dealer for proper installation of these charging adapter connectors.

5. Plug the battery charger into a 110-volt electrical outlet.
6. If using the CTEK Multi US 800, there are no further buttons to push. If using the CTEK Multi US 3300, press the Mode button (A) at the left of the charger until the Maintenance Charge Icon (B) at the bottom illuminates. The Normal Charge Indicator (C) should illuminate on the upper portion of the battery charger.

■**NOTE: If the vehicle is in warranty, removing or adjusting the TPS will void warranty. If the TPS is tested out of specification, the throttle body must be replaced. If the vehicle is out of warranty, the TPS can be adjusted.**

2. Connect the TPS Multi-Analyzer Harness connector #8 to the TPS; then connect the harness to the TPS Analyzer Tool.
3. Using a multimeter, connect the black tester lead to the center socket (GND) on the analyzer and the red tester lead to the white socket (VAR); then select the DC Voltage position. The gauge should read 0.45-0.55 and at Wide-Open Throttle it should read up to approximately 3.6.



WT563

■**NOTE: If the throttle body, ECM, TPS, or ISC are replaced, the EFI system must be synchronized. Use the following procedure.**

1. With the key off, depress accelerator pedal to Wide Open Throttle (WOT).
2. Place the ignition key in the ON position and wait for 10 seconds.
3. Release the accelerator pedal, and wait an additional 10 seconds.
4. Turn the key to the OFF position and allow the gauge to shut off.

EFI Diagnostic System

DIGITAL GAUGE

The digital gauge can be used as a diagnostic tool for many of the DTC's displayed. To place the gauge into the diagnostic mode, use the following procedure.

1. Turn the ignition switch ON.
2. Depress and hold both left and right buttons together for approximately three seconds until "DIAGNOSTIC" appears on the LCD.

WT541

3. Press the center button (SELECT) to enter diagnostic mode; cycle the display by pressing either the left or right button to step to the desired function.

■**NOTE: The gauge can be utilized dynamically (engine running/vehicle moving) or statically (engine/vehicle stopped).**

DIAGNOSTIC MODES

Battery (BATTERY)

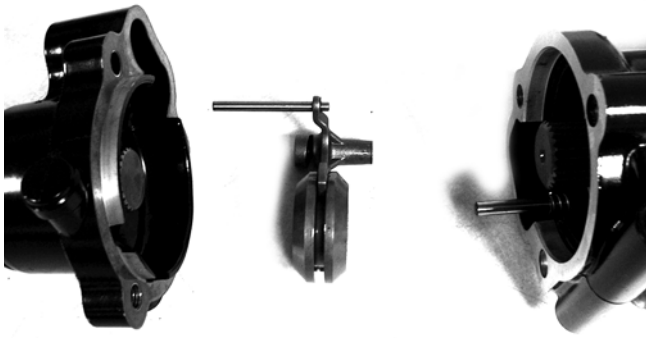
WT540

Display: System DC voltage.

DTC: P0562, P0563, P2531, P2532

Usage: Verify system voltage under following conditions.

1. Battery voltage with engine and accessories off (>12.2 VDC for fully charged).
2. Battery voltage with engine idling (charging = 13.8 VDC or greater).
3. Battery voltage with electrical accessories operating, engine idling (13.5 VDC or greater).
4. Battery voltage starter cranking (10.5-11.5 VDC).



CD106

3. Remove the snap rings from the input shaft; then remove the input shaft from the pinion housing.

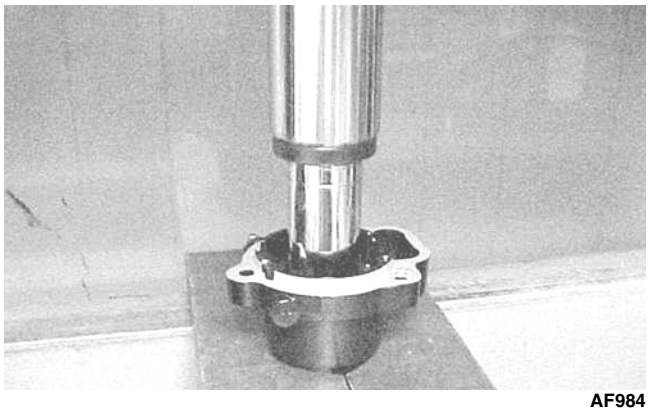
GC009A

4. Using a seal removal tool, remove the input shaft seal. Account for a spacer.

GC010

5. Remove the snap ring securing the input shaft bearing; then place the pinion housing in a press and remove the bearing.

GC011



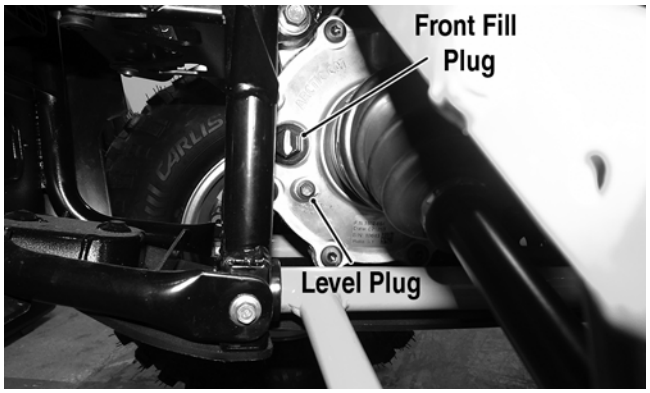
AF984

KX219

Assembling Input Shaft

1. Place the pinion housing in a press and install the input shaft bearing. Secure the bearing with the existing snap ring making sure the sharp edge of the snap ring faces to the outside.

GC012



WT041A

16. Install the plugs (with O-rings); then tighten the fill plug to 16 ft-lb and the level plug to 45 in.-lb.
17. Install the front skid plate; then install the wheels and tighten to 40 ft-lb (steel wheel) or 80 ft-lb (aluminum wheel).

Drive Axles

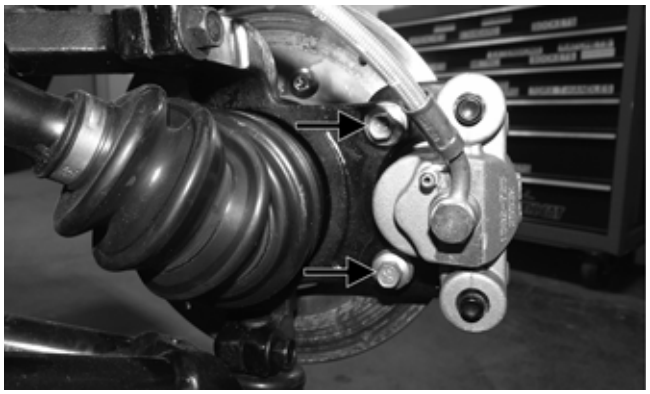
REMOVING REAR DRIVE AXLE

1. Secure the vehicle on a support stand to elevate the wheels.

⚠ WARNING

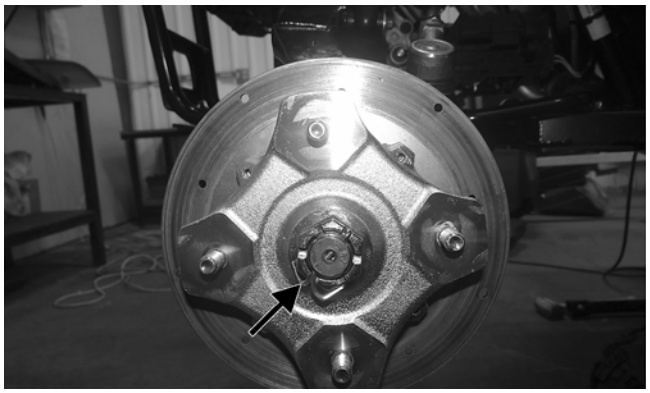
Make sure the vehicle is solidly supported on the support stand to avoid injury.

2. With the vehicle in park, remove the wheels.
3. Remove and discard the "patch lock" cap screws securing the brake calipers.



WT287A

4. Remove hub nut and discard the cotter key.



WT328A

5. Remove and discard the upper ball joint cap screw and rotate the knuckle downward away from the drive axle.
6. Place a drain pan under the vehicle to contain any oil leakage; then pushing the axle shaft in, pull the axle assembly from the transaxle.

PR729C

7. Account for the rubber O-ring.

WT509A

REMOVING FRONT DRIVE AXLE

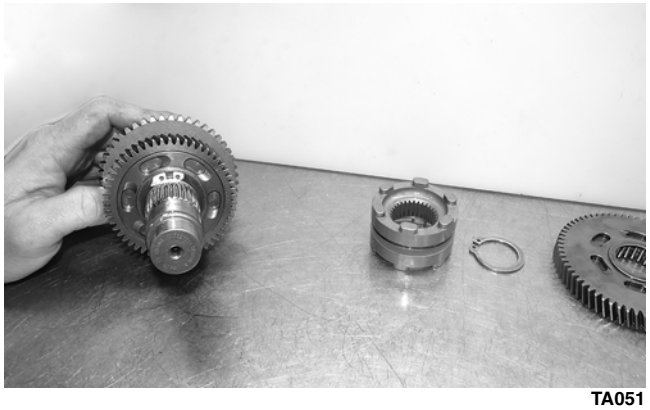
■NOTE: For removing a front drive axle, see Front Differential in this section.

CLEANING AND INSPECTING AXLES

■NOTE: Always clean and inspect the drive axle components to determine if any service or replacement is necessary.

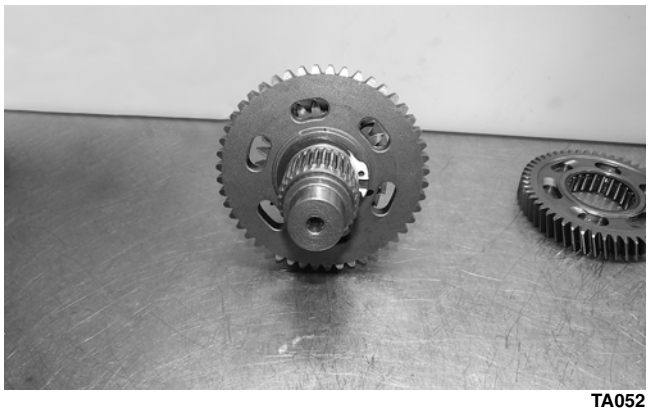
TA049

TA050



TA051

3. Inspect the shaft gear teeth for nicks, cracks, chips, or signs of wear. If any are present, the shaft must be replaced.



TA052

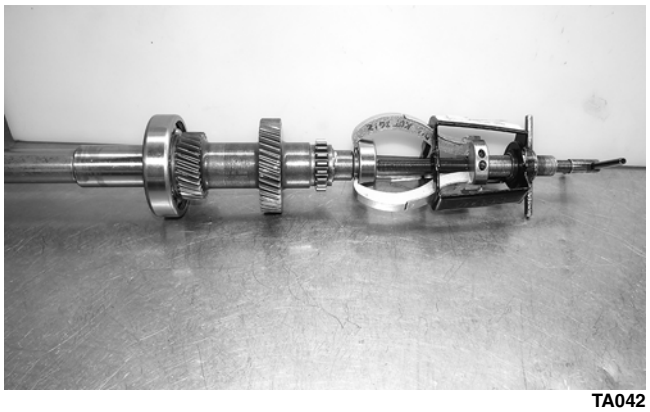
TA053

4. Inspect the dogs for nicks, cracks, chips, or signs of wear. If any are present, the dog must be replaced.

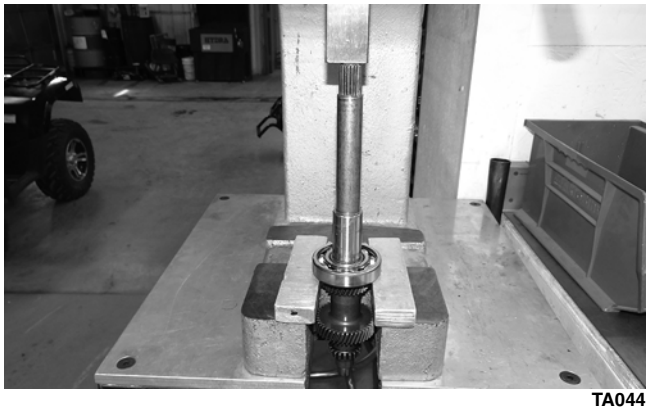
TA054

H. Input Shaft

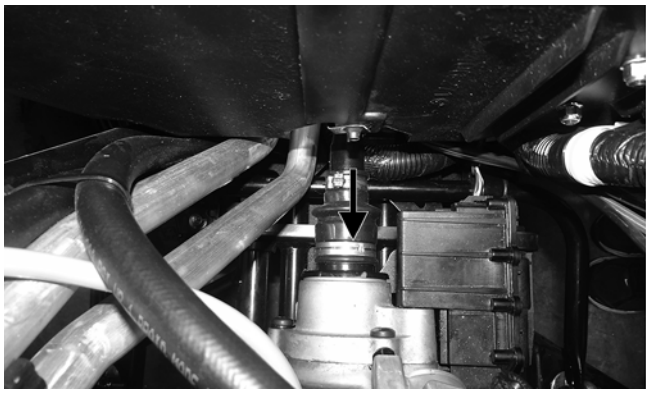
1. Inspect the bearings for free and smooth turning. If either bearing does not turn freely, it must be replaced.



TA042



TA044

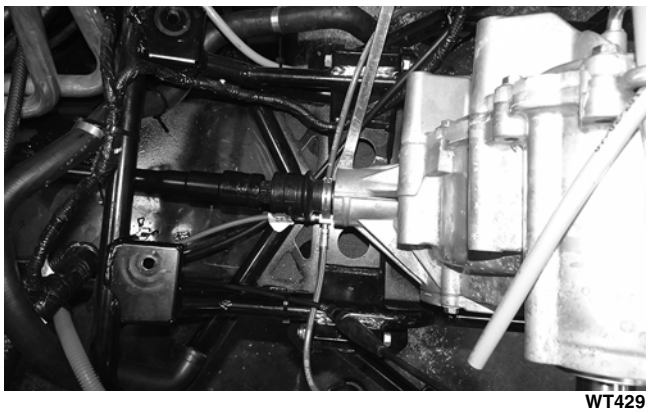


WT422A

5. Apply molybdenum grease to the splines on both ends of the rear driveshaft and insert the rear driveshaft into the mating end of front driveshaft. Tighten the clamp securely.

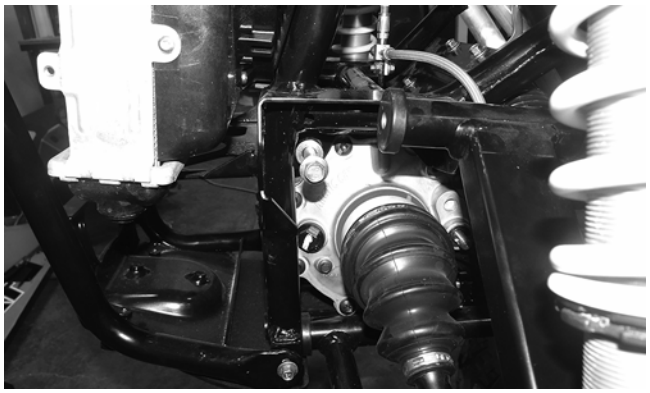
WT427

6. Mate the rear driveshaft with the output shaft of the transaxle so they are meshed together by pushing on the front axles rearward until the front differential mounting holes are aligned. Tighten the clamp securely.



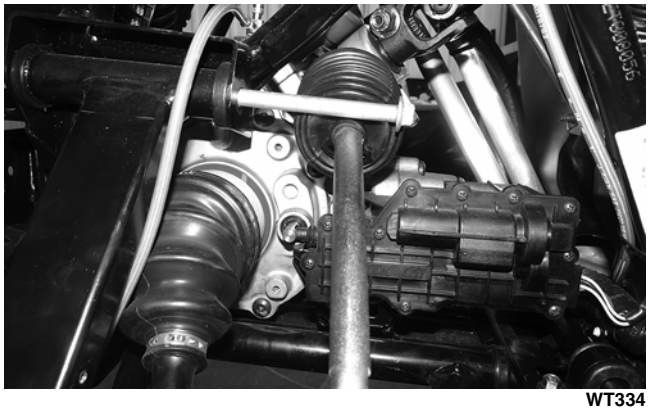
WT429

7. Using new lock nuts, secure the carrier bearing housing to the frame. Tighten to 35 ft-lb.
8. Install the front differential cap screws, washers, and new lock nuts. Tighten to 38 ft-lb.



WT425

9. With the steering rack turned all the way to the right, install the front left upper A-arm cap screw, washer, and new lock nut. Tighten to 35 ft-lb.



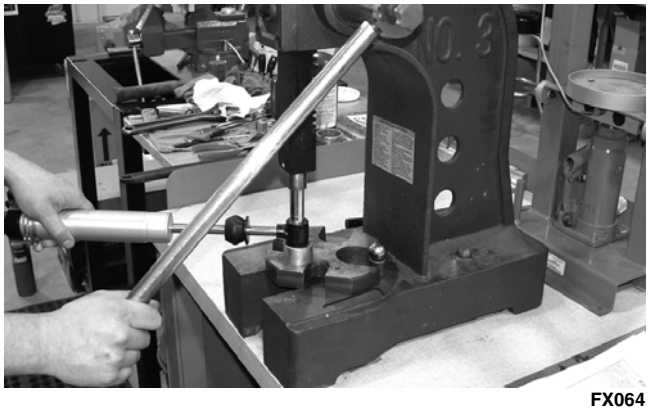
WT334

10. Install the front left shock onto the upper A-arm. With the existing washer and new patch lock cap screw, tighten to 25 ft-lb.
11. Install the front wheels. Tighten in 20 ft-lb increments to 40 ft-lb (steel wheel) or 80 ft-lb (aluminum wheel).
12. Install the hood, seats, center console, floor, and engine.
13. Remove the vehicle from the stand.

Hub

REMOVING

1. Secure the vehicle on a support stand to elevate the wheel; then remove the wheel.
2. Remove the hub nut securing the hub and discard the cotter pin.
3. Remove the brake caliper.



FX064

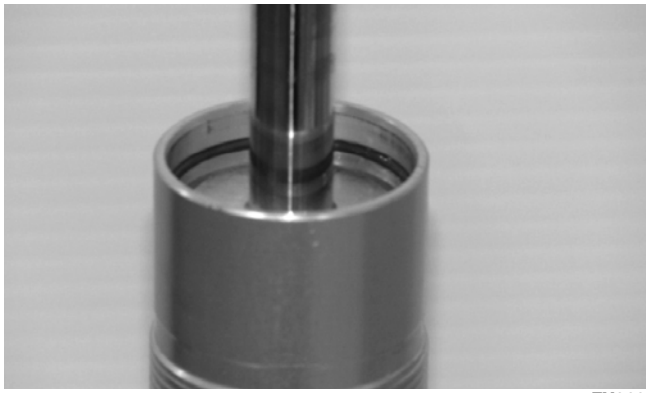
4. Secure the shock eyelet in the vise and insert the nitrogen needle. Fully depress the needle to release nitrogen pressure from the shock. After installing the appropriate body cap removal tool, insert the retaining wire into the groove between the cap and body.

FX063

FX062

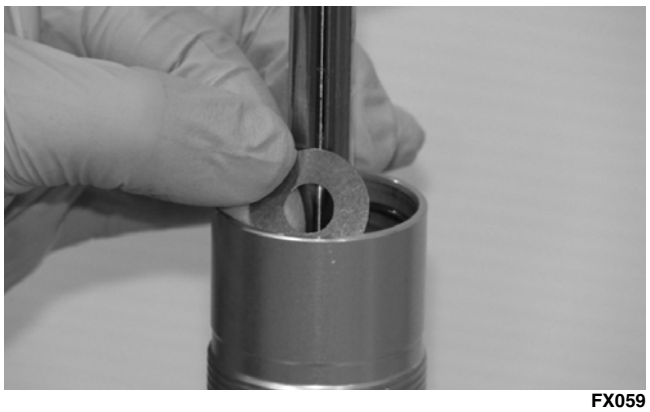
5. Tap upward on body cap removal tool to release cap; then depress the bearing assembly to full expose retaining wire.

FX061



FX060

6. Using a valve shim, remove the retaining wire and pull the shaft assembly out of the body.



FX059

FX058

7. Dispose of used oil in an environmentally-acceptable manner; then use a body clamp block to secure the body in the vise.