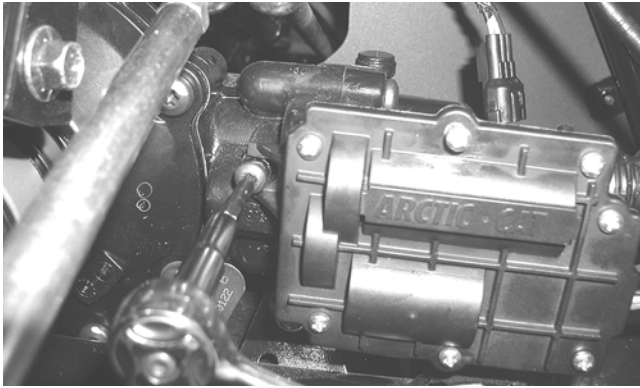


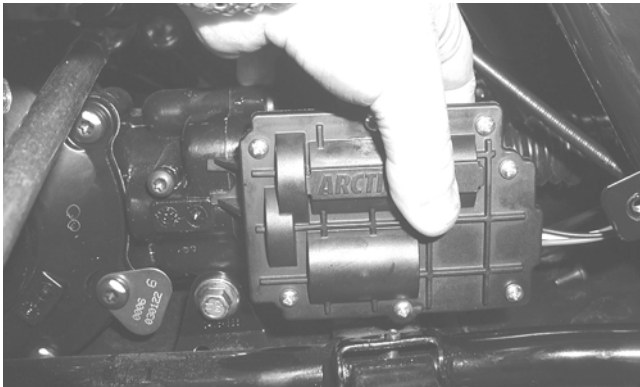


AG928

INSTALLING

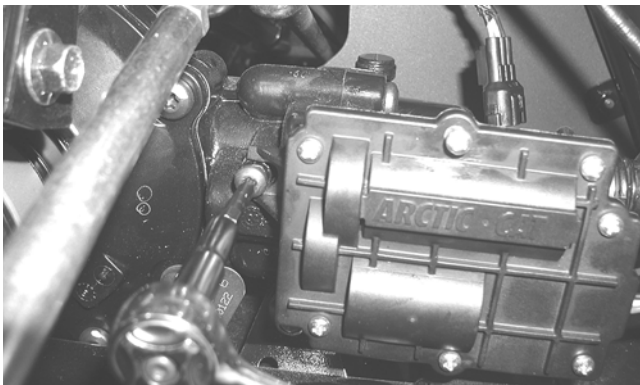
1. Lubricate the O-rings on the actuator; then ensure that all mounting surfaces are clean and free of debris.
2. Align the actuator with the selector shaft and slide it forward onto the shaft taking care to engage the cap screw in the slot of the front mounting tab.

■**NOTE:** On the Prowler/XTX, make sure to properly align the differential lock actuator lever with the hole in the differential lock plunger.



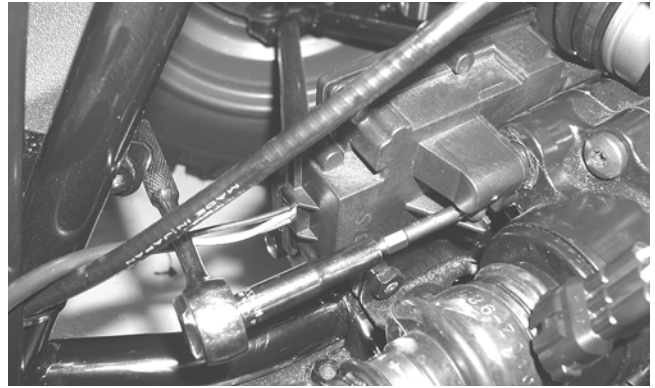
AG925

3. While holding the actuator firmly forward, tighten the front cap screw to hold the actuator in place; then install but do not tighten the two remaining cap screws.



AG928

rew; then tighten the cap
ide.



AG926

■**NOTE:** It is important to tighten this cap screw while the others are loose to ensure proper seating of the actuator.

5. Tighten the remaining cap screws; then connect the electrical plug to the main harness.
6. Turn the ignition switch to the ON position and check the operation by shifting the selector switch several times.
7. Secure the wiring harness to the frame with a nylon cable tie; then install the inner fender panel.

Front Differential

REMOVING

1. Remove the belly panel; then place the vehicle on jack stands adjusted high enough to allow working from the underside of the vehicle.

■**NOTE:** The jack stands should be placed under the main frame to avoid contact with front suspension components.

WARNING

Make sure the vehicle is solidly supported on the jack stands to avoid injury.

2. Remove the drain plug and drain the gear lubricant into a drain pan; then install the plug and tighten to 45 in.-lb.

Servicing Valves/Valve Guides/Valve Seats

If valves, valve guides, or valve seats require servicing or replacement, Arctic Cat recommends that the components be taken to a qualified machine shop for servicing.

⚠ CAUTION

If valves are discolored or pitted or if the seating surface is worn, the valve must be replaced. Do not attempt to grind the valves or severe engine damage may occur.

Measuring Rocker Arm (Inside Diameter)

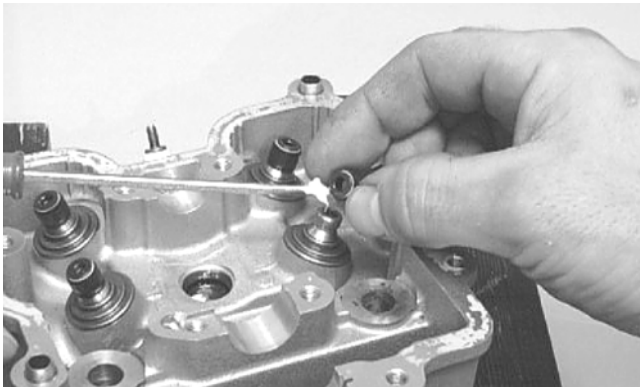
1. Using a dial calipers, measure the inside diameter of the rocker arm.
2. Acceptable inside diameter must not exceed specification.

Measuring Rocker Arm Shaft (Outside Diameter)

1. Using a micrometer, measure the outside diameter of the rocker arm shaft.
2. Acceptable outside diameter must be at or above specification.

Installing Valves

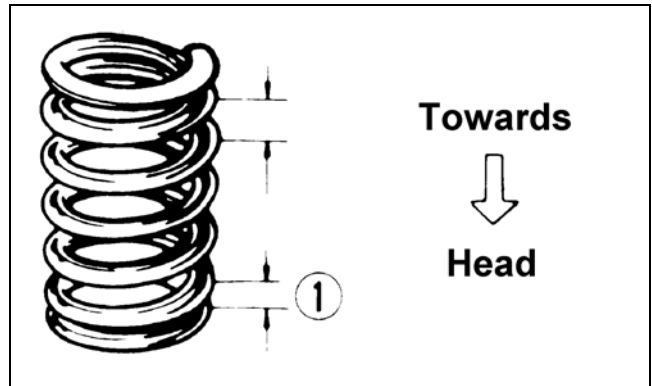
1. Apply grease to the inside surface of the valve seals; then place a lower spring seat and valve guide seal over each valve guide.



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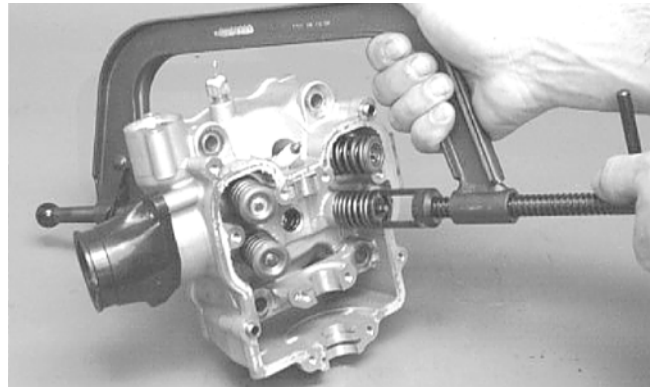
2. Insert each valve into its original location.
3. Install the valve springs with the painted end of the spring facing away from the cylinder head.

■NOTE: If the paint is not visible, install the ends of the springs with the closest wound coils toward the head.



ATV-1011A

4. Place a spring retainer over the valve springs; then using the valve spring compressor, compress the valve springs and install the valve cotters.



CC132D

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PISTON ASSEMBLY

■NOTE: Whenever a piston, rings, or pin are out of tolerance, they must be replaced.

Cleaning/Inspecting Piston

1. Using a non-metallic carbon removal tool, remove any carbon buildup from the dome of the piston.
2. Inspect the piston for cracks in the piston pin, dome, and skirt areas.
3. Inspect the piston for seizure marks or scuffing. Repair with #400 grit wet-or-dry sandpaper and water or honing oil.

■NOTE: If scuffing or seizure marks are too deep to correct with the sandpaper, replace the piston.

4. Inspect the perimeter of each piston for signs of excessive "blowby." Excessive "blowby" indicates worn piston rings or an out-of-round cylinder.

Removing Piston Rings

1. Starting with the top ring, slide one end of the ring out of the ring-groove.