# SECTION 9 - CONTROLS/INDICATORS



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# Hand Brake Lever/ Master Cylinder Assembly

**■NOTE: The master cylinder is a non-serviceable component; it must be replaced as an assembly.**

## REMOVING

1. Slide a piece of flexible tubing over one of the wheel bleeder valves and direct the other end into a container. Remove the reservoir cover; then open the bleeder valve. Allow the brake fluid to drain completely.

**■NOTE: Compressing the brake lever several times will quicken the draining process.**

AF637D

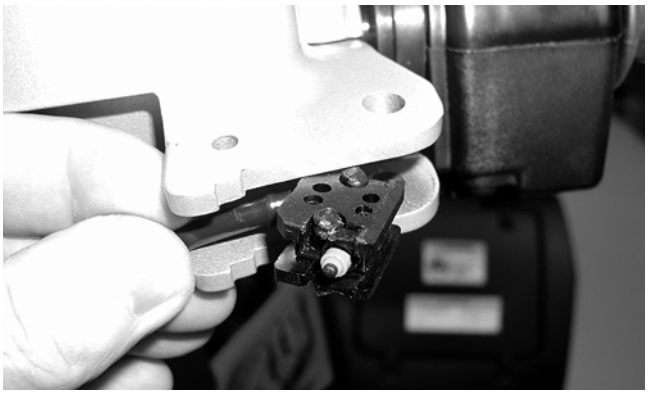
2. Place an absorbent towel around the connection to absorb brake fluid. Remove the brake hose from the master cylinder.

AG929

**⚠ CAUTION**

**Brake fluid is highly corrosive. Do not spill brake fluid on any surface of the ATV.**

3. Remove the circlip and pivot pin securing the brake lever to the master cylinder housing; then remove the brake lever and set aside.
4. Dislodge the brakelight switch from the master cylinder housing by gently pressing it toward the pivot pin hole in the housing; then lay it aside leaving the switch and wiring harness connected.



BC205

5. Remove the clamp screws securing the brake housing to the handlebar; then remove the assembly from the handlebar.

AG924

## INSPECTING

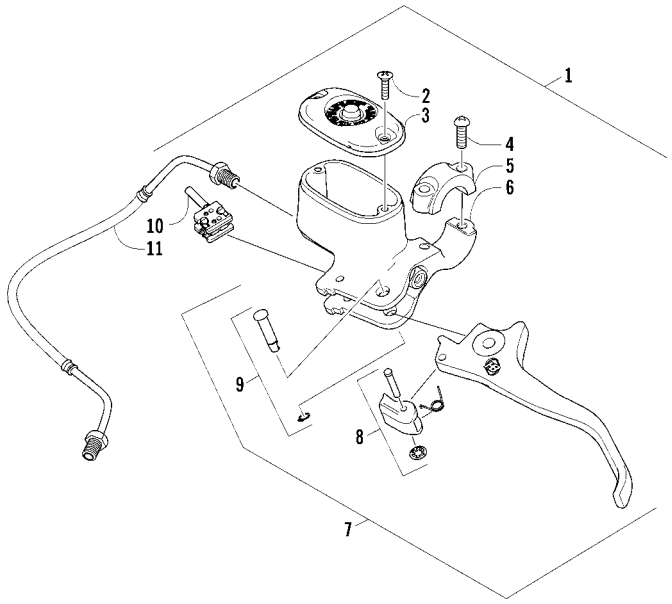
**■NOTE: Whenever a part is worn excessively, cracked, or damaged in any way, replacement is necessary.**

1. Inspect the pin securing the brake lever for wear.
2. Inspect the brake lever for elongation of the pivot hole.
3. Inspect the reservoir for cracks and leakage.
4. Inspect the brake hose for cracks and deterioration and the condition of the fittings (threaded and compression).
5. Inspect the brakelight switch for corrosion, cracks, missing or broken mounting tabs, or broken and frayed wiring.

**■NOTE: If the brakelight switch is determined to be not serviceable, see Section 5.**

## INSTALLING

KEY
1. Brake Assy
2. Screw
3. Cover
4. Screw
5. Clamp
6. Master Cylinder
7. Brake Lever
8. Brake Lever Lock
9. Pin
10. Brake Switch
11. Hose

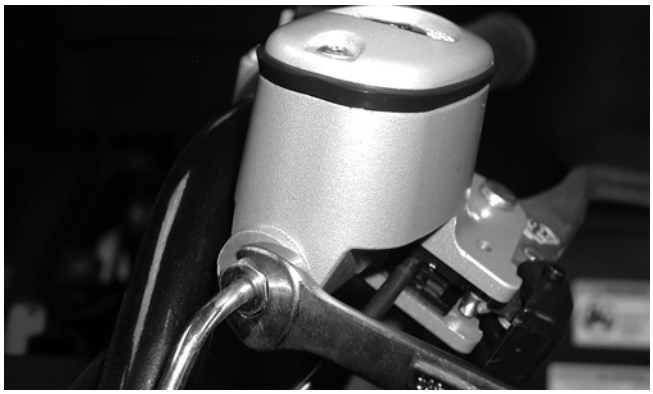



0738-331

1. Position the brake housing on the handlebar. Secure with clamp screws; then tighten securely.

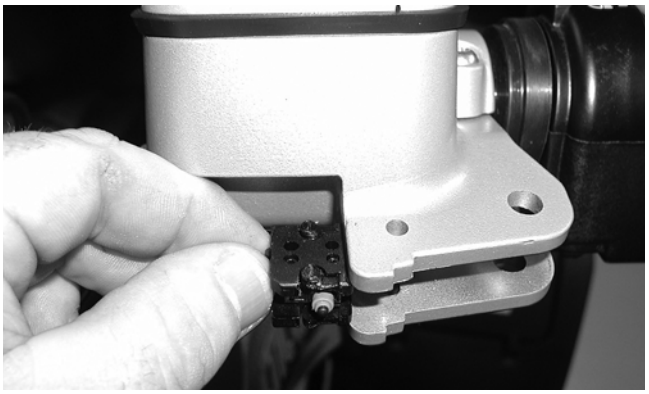
AG924

2. Install the brake hose on the master cylinder. Tighten to 0.8 kg-m (6 ft-lb).



AG929

3. Gently press the brakelight switch into the housing (left to right) until the mounting tabs snap into the four locating holes; then install the brake lever, pivot pin, and circlip.



BC206

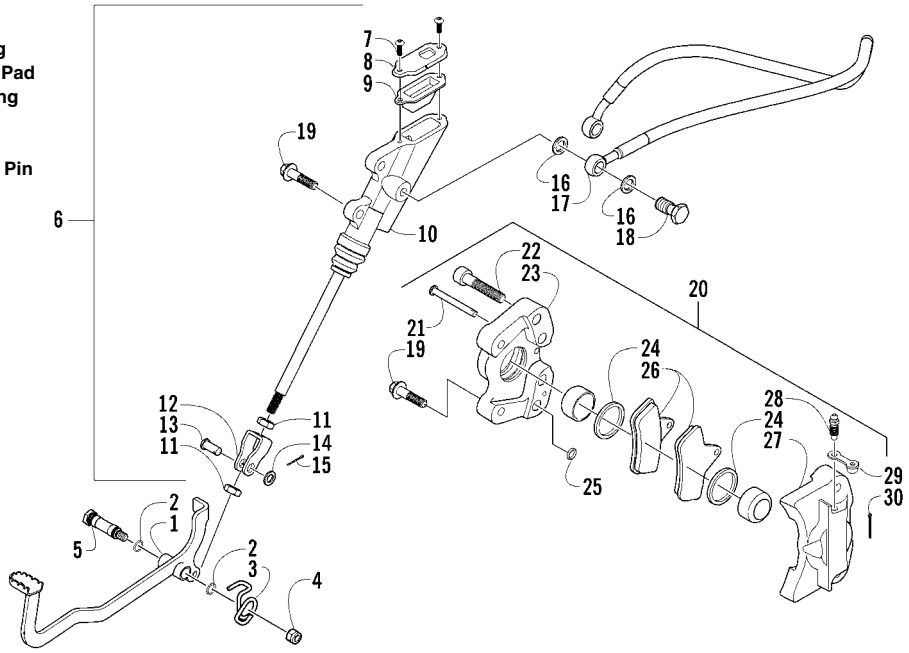
4. Bleed the brake system (see Section 2).

9

# Auxiliary Brake Assembly Schematic

Pressing the auxiliary brake pedal downward will apply the auxiliary brake to the rear wheels.

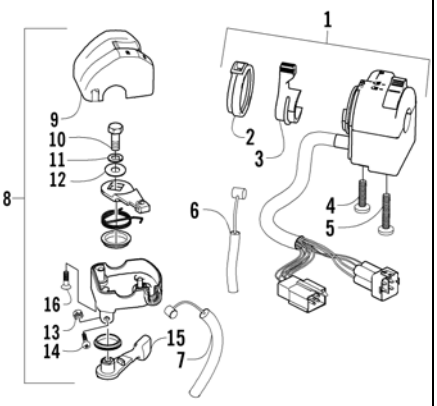
KEY
1. Brake Lever
2. O-Ring
3. Spring
4. Nut
5. Axle
6. Brake Assy
7. Screw
8. Cover
9. Bladder
10. Master Cylinder
11. Jam Nut
12. Rod Actuator
13. Clevis Pin
14. Washer
15. Cotter Pin
16. Washer
17. Hose
18. Fitting Bolt
19. Cap Screw
20. Caliper
21. Pin
22. Cap Screw
23. Housing
24. O-Ring
25. O-Ring
26. Brake Pad
27. Housing
28. Valve
29. Cap
30. Cotter Pin



0739-060

# Throttle Control

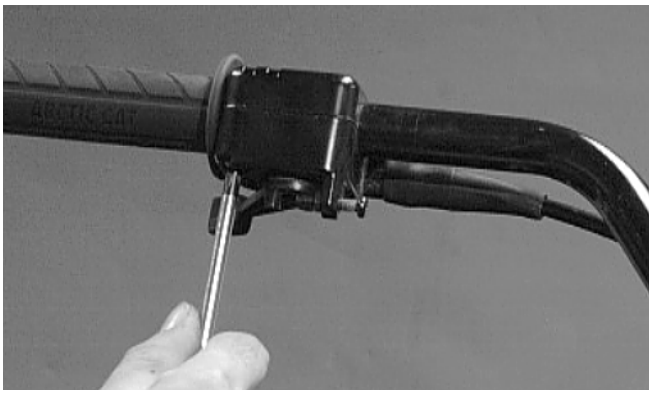
KEY
1. Control Switch Assy
2. Cover
3. Choke Lever
4. Screw
5. Cap Screw
6. Choke Cable
7. Throttle Cable
8. Throttle Case
9. Cover
10. Cap Screw
11. Lock Washer
12. Washer
13. Nut
14. Screw
15. Lever
16. Screw



739-055A

## REMOVING

1. Remove the two machine screws securing the throttle control to the handlebar.



AL610D

2. Slide the grommet out of the lower half of the throttle control; then remove the cable from the actuator arm.



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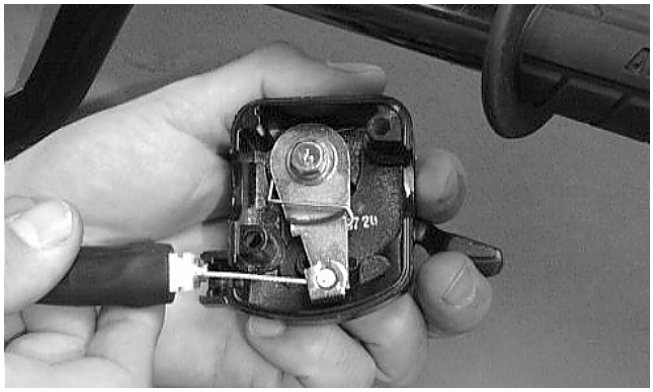
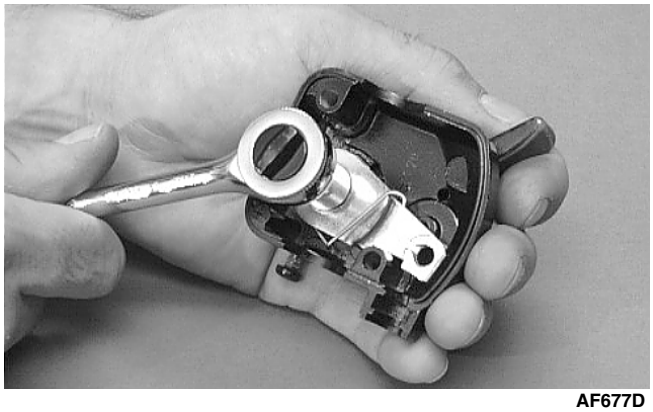


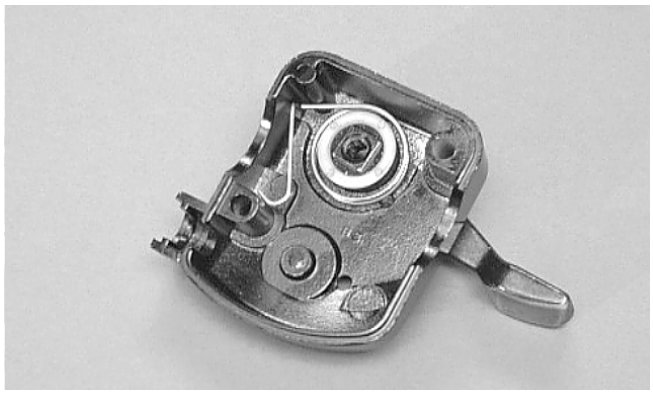
AF676D

3. Remove the cap screw, lock washer, and washer securing the actuator arm to the throttle control lever.



AF677D

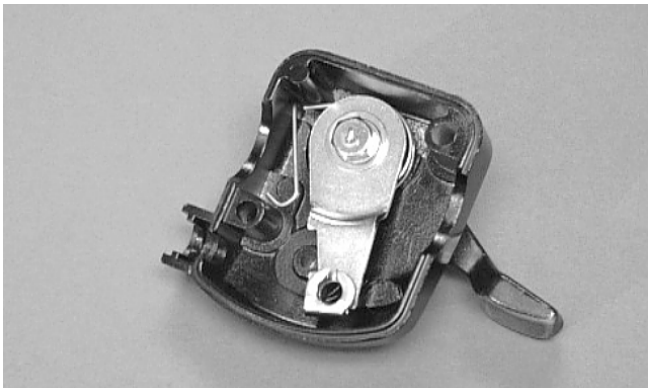
4. Remove the actuator arm and account for a bushing. Note the position of the return spring for installing purposes.



AF678D

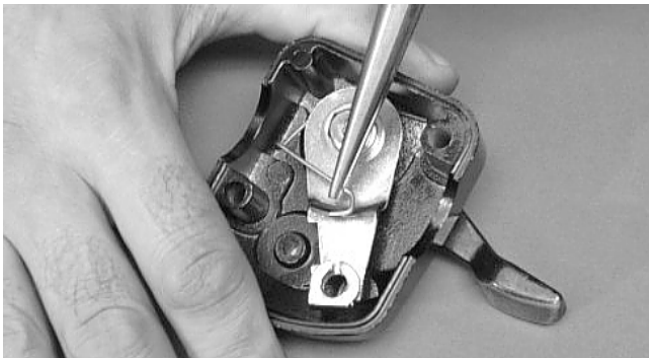
## INSTALLING

1. Place the return spring into the throttle control; then place the bushing and actuator arm into position. Secure with the cap screw, lock washer, and washer.



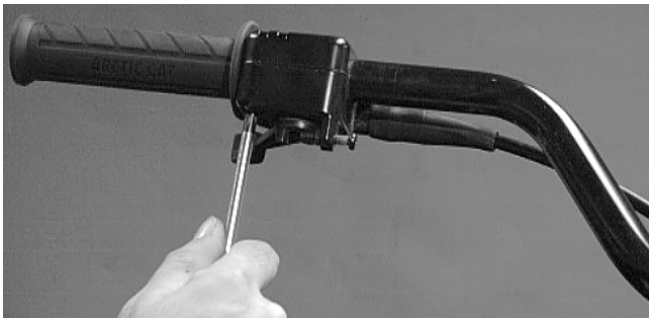
AF679D

2. Using a pair of needle-nose pliers, place the spring into position on the actuator arm.



AF680D

3. Place the two halves of the throttle control onto the handlebars and secure with the two machine screws.

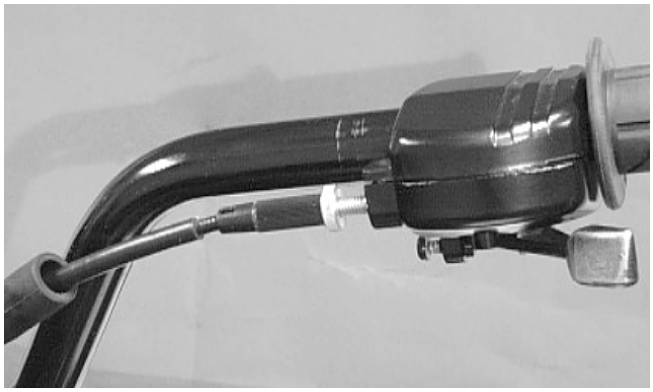


AL610D

## ADJUSTING

1. Slide the boot back to reveal the jam nut; then loosen the jam nut.

9

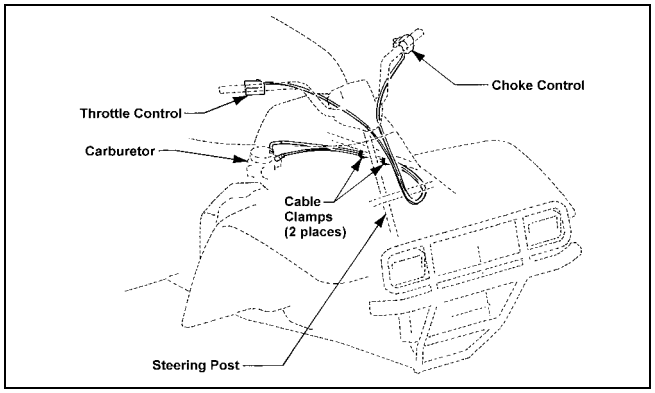


AF682D

2. Rotate the adjuster sleeve until 0.5-1.0 mm (0.02-0.04 in.) is attained.


AL611D

3. Secure the adjustment by tightening the jam nut; then slide the boot over the jam nut.

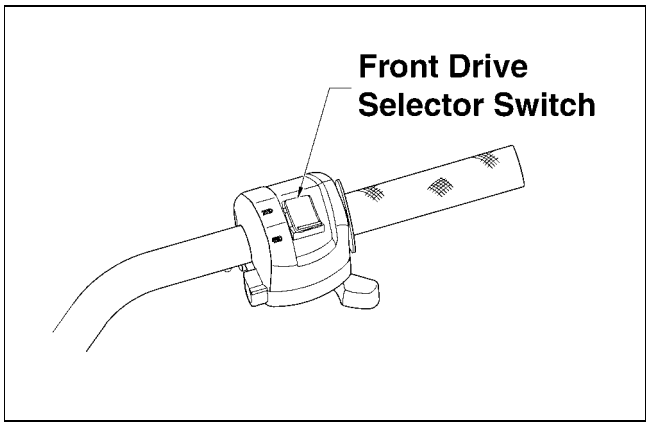



0732-412

## Drive Selector

The automatic drive selector allows the operator to operate in either 2-wheel drive (rear wheels) or 4-wheel drive (all wheels). For normal riding on flat, dry, hard surfaces, 2-wheel drive should be sufficient. In situations of aggressive trail conditions, 4-wheel drive would be the desired choice.

To either engage or disengage the front wheels, move the switch to the 4WD position or to the 2WD position.




738-422A

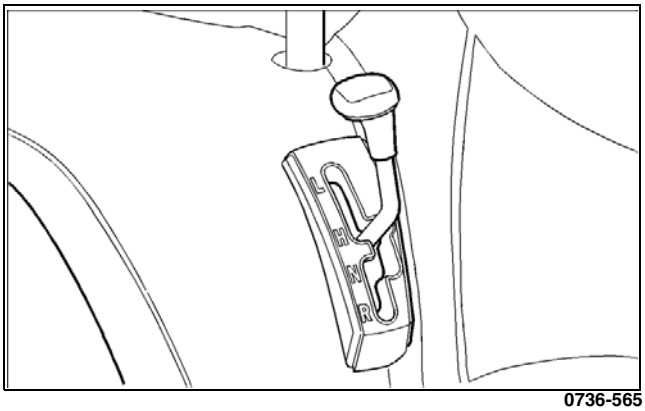
**⚠ CAUTION**

**Do not attempt to either engage or disengage the front differential while the ATV is moving.**

## Shift Lever

The ATV with an automatic transmission has a dual-range transmission with reverse. To shift the ATV, follow these steps:

1. To engage the high range from neutral, move the shift lever forward.
2. To engage the low range from high range, move the shift lever outward and forward.



0736-565

3. To engage reverse gear from neutral, move the shift lever outward and rearward into the R position.



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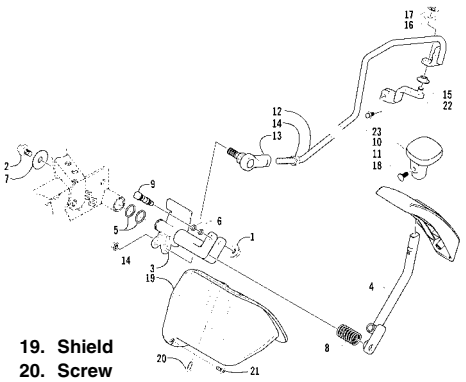
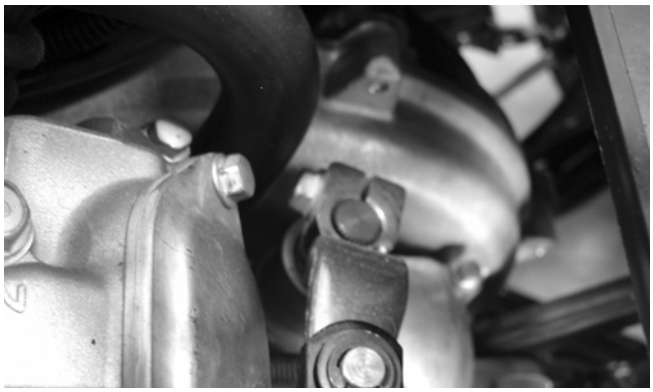
KEY
1. Nut
2. Cap Screw
3. Axle
4. Lever
5. O-Ring
6. O-Ring
7. Washer
8. Spring
9. Axle
10. Handle
11. Clip
12. Linkage
13. Rod End
14. Nut
15. Bushing
16. Washer
17. E-Ring
18. Plate
19. Shield
20. Screw
21. Screw
22. Shift Arm
23. Cap Screw



0739-083

## REMOVING

1. Remove the seat (see Section 8).
2. Remove the three machine screws securing the left-side panel to the frame and rear fender; then remove the left-side panel.
3. Remove the E-clip securing the shift rod to the engine shift arm.



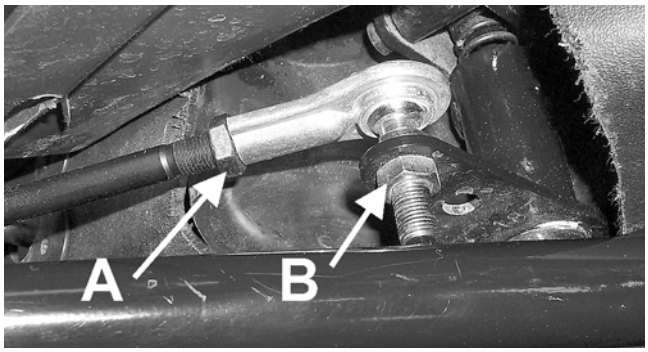
KX057

4. Remove the three machine screws securing the gear shift linkage cover to the fender and remove the cover.

**■ NOTE: The cover is located inside the left-front wheel well.**

CC851

5. Remove the axle and nut securing the shift lever to the upper shift arm; then remove the shift lever. Account for the spring and two O-rings on the axle.
6. Using two open-end wrenches, remove the lock nut (B) securing the shift rod to the upper shift arm. Remove the shift rod and discard the lock nut.

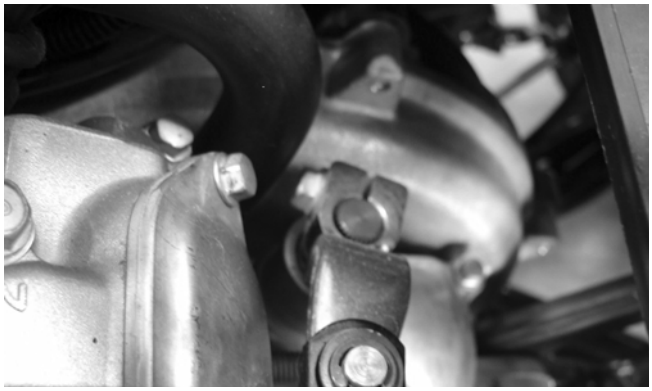



AF941A

**■ NOTE: Never reuse a lock nut. Once a lock nut has been removed, it must be replaced with a new lock nut.**

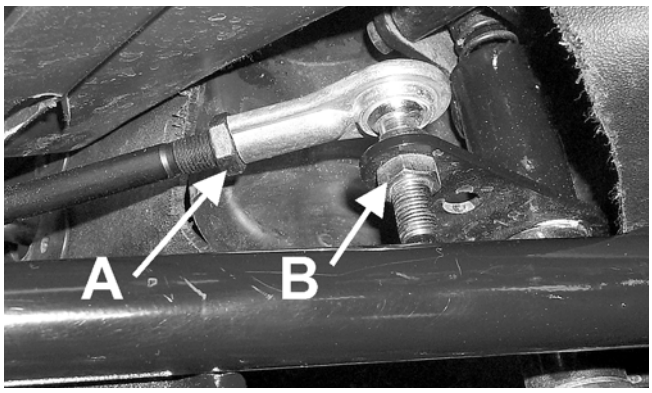
## INSTALLING

1. Place the shift rod into position on the engine shift arm and secure with the existing E-clip.



KX057

2. Using a new lock nut, secure the shift rod to the upper shift arm; then using two open-end wrenches, tighten securely.




AF941A

9

3. Place the spring into position between the upper shift arm and shift lever; then making sure the O-rings are in place on the axle, secure the shift lever to the arm with the existing axle and nut.

4. Install the gear shift linkage cover on the fender in the left-front wheel well. Tighten the three machine screws securely.

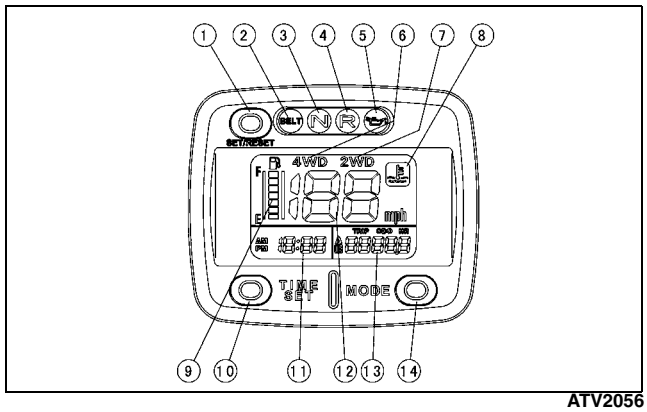
5. Place the left-side panel into position on the frame and secure with the three machine screws.

6. Install the gas tank (see Section 4); then install the seat (see Section 8).

7. Check shift lever adjustment (see Section 2).

# Speedometer (Electronic)/Indicator Lights

**■NOTE: The indicator lights will illuminate for approximately one second when the ignition switch is rotated to the ON position.**




ATV2056

1. **Set/Reset Button** — Used (in conjunction with the Time Set button) to advance the hour and minute display for setting the clock and to reset the trip meter display to zero.

2. **Belt Check Indicator** — The Belt light will flash at 0.35-second intervals when excessive belt wear or belt damage is detected. Also, light will illuminate every 100 hours of operation to indicate service requirements.

3. **Neutral Indicator** — The Neutral light will illuminate when the transmission is in neutral and the ignition switch is on. The light will go out when shifted into any gear other than neutral.

4. **Reverse Indicator** — The Reverse light will illuminate when the transmission is shifted into reverse gear. The light will go off when shifted out of reverse.

5. **Oil Pressure Indicator** — An oil pressure warning symbol LED (light emitting diode) will flash when low oil pressure is detected.

6. **4WD Indicator** — Displays 4WD when the front drive selector switch is moved to the 4WD position. Display will go off when 2WD is selected.

7. **2WD Indicator** — Displays 2WD when the front drive selector switch is moved to the 2WD position. Display will go off when 4 WD is selected.

8. **Coolant Temperature Indicator** — A red light will illuminate if the engine overheats. The light should be off during normal operation.

**⚠ CAUTION**

**Continued operation of the ATV with high engine temperature may result in engine damage or premature wear.**

**■NOTE: High engine RPM, low vehicle speed, or heavy load can raise engine temperature. Decreasing engine RPM, reducing load, and selecting an appropriate transmission gear can lower the temperature.**

**■NOTE: Debris in front of the engine (or packed between the cooling fins of the radiator) can reduce cooling capability. Using a hose, pressure-wash the radiator and the engine to remove any debris preventing air flow.**

9. **Fuel Level Indicator** — Shows amount of gasoline in the gas tank. When bottom portion flashes, 3.5 L (0.92 U.S. gal.) of gasoline remains in the tank.

10. **Time Set Button** — Press the button to set clock hours and minutes.

    A. Press the button and the minute display will blink; then adjust the hour display by pressing the Set/Reset Button. Press the Time Set Button to set hour display.

**■NOTE: If the Set/Reset Button is pressed in and held, the hour display will advance continuously.**

    B. After the hour display is set, the minute display will blink. Press the Set/Reset Button to set minute display.

11. **Clock** — Clock indicates 12-hour mode.

12. **Speedometer** — Shows approximate ATV speed in km/h and mph.

13. **Odometer/Trip Meters (A & B)/Hour Meter** — Odometer registers the total distance the ATV has traveled. Trip meters can register two different types of distances (for instance, A could register trip distance and B could register distance between stops). Trip meters can be reset. Hour meter registers total ignition switch ON time.



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14. **Mode Button** — Used (in conjunction with the Odometer/Trip Meters/Hour Meter) to shift the odometer/trip meters/hour meter display through the four modes: odometer, trip meter (A), trip meter (B), and hour meter.

## REPLACING SPEEDOMETER

To replace the speedometer, use the following procedure.

1. Remove the four nylon fasteners securing the instrument pod; then remove the ignition switch retaining nut.
2. Remove the front rack and front fenders; then disconnect the multi-pin connector.
3. Remove the three nuts securing the mounting studs; then remove the speedometer.
4. Route the new wiring harness down through the opening; then mount the speedometer and secure with the three nuts; then connect the multi-pin connector.
5. Install the front fenders and front rack; then install the instrument pod and secure with the nylon fasteners.
6. Secure the ignition switch with the retaining nut.

# NOTES



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