

200 SERIES LUTV RETRO MANUAL CHOKE KIT (15439)

Auto Choke to Manual Choke Conversion



TOOLS REQUIRED

- Side cutters
- 10mm wrench
- 12mm wrench
- Phillips screwdriver
- Drill Motor
- 1/4" Drill Bit
- 15/32" Drill Bit

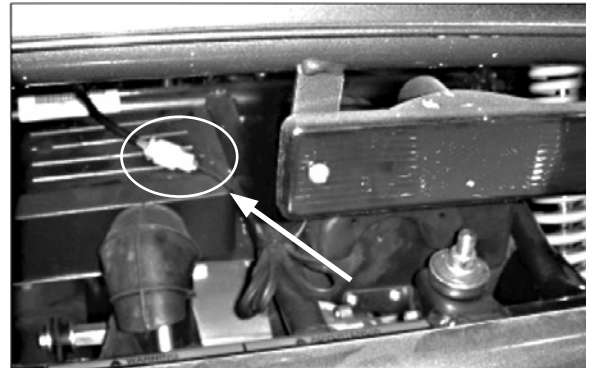
PROCEDURE:

- 1) Review document Appendix to review pictures of a completed installation and to familiarize yourself with component terminology.
- 2) Apply the parking brake.
- 3) Although not necessary, it is recommended to remove the cargo bed to allow for easier access to carburetor.
 - a. Empty the cargo bed.
 - b. Unplug the rear brake light from the main wiring harness and remove any cable ties that secure the brake light wiring to the chassis.
 - c. Using a 10mm and 12mm wrench, remove the two bed pivot bolts.
 - d. With assistance of another person, release the bed using the side levers and lift it safely out of the way.
- 4) Remove auto choke from carburetor
 - a. Disconnect from wire harness.

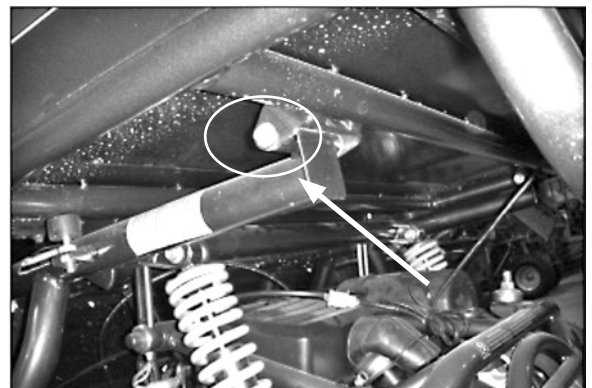
Note: The connector may be found inside or outside of the main electrical box. If it is inside the electrical box, remove the box cover by removing the two rubber plugs to reveal two Phillips screws, remove the screws, and lift the cover by pulling outward slightly on the front & back bottom of the cover. Once the auto choke is disconnected, the cover can be replaced by reversing this process. (See Picture A)

- b. Remove two Phillips screws and lock washers. Retain for later use.
- c. Separate the auto choke from carburetor.
- d. Remove and discard the special O-ring found between the auto choke and the carburetor.

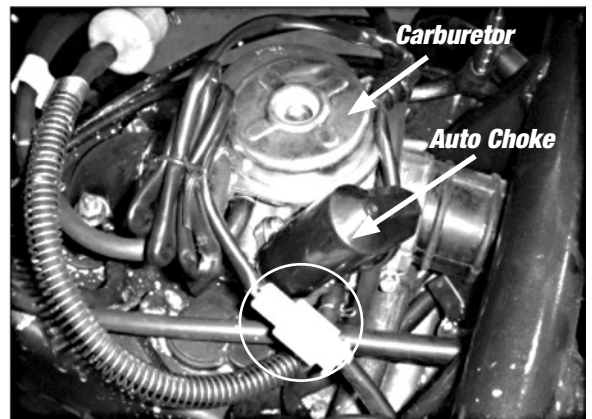
Note: Although the housings of the auto choke and the new manual choke appear similar on the outside, there are internal differences. Take caution to keep them separate



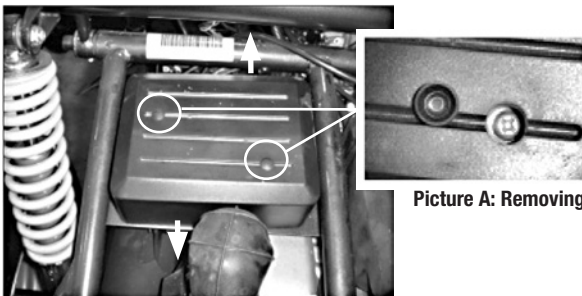
Step 3b. Unplug brake light from harness



Step 3c. Remove pivot bolts



Step 4a. Unplug autochoke from harness



Picture A: Removing the electrical box cover

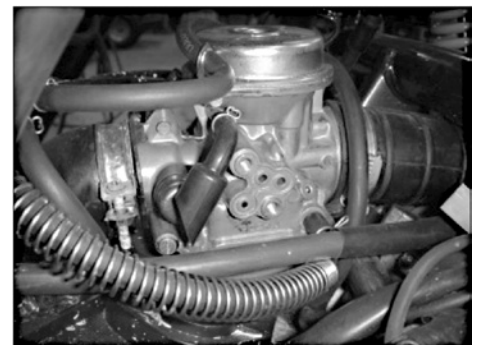
Pull the front & back bottom of the cover outward slightly in the direction of the arrows to release



Step 4b. Auto Choke Mounting Screws



Step 4c & 4d. Special O-ring



Picture B: Carburetor ready for manual choke installation

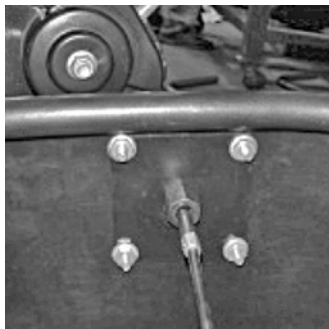
Auto Choke to Manual Choke Conversion - cont.

- 5) Install the manual choke assembly
 - a. Carefully position the special O-ring between the choke and carburetor assemblies.
 - b. Position the choke assembly on the carburetor and secure it with the two Phillips screws removed previously.
- 6) Install the choke cable

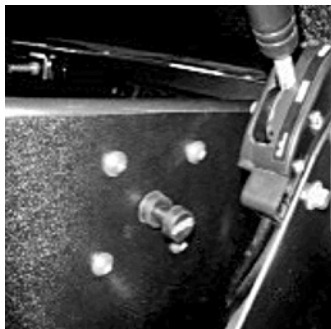
Note: Although the cable can be installed in many positions, these installation instructions outline the ASW recommended location, the left side of the under seat surround near the gear shift lever. If you would like to mount it in a different location, apply these directions to that position.

- a. Tilt the seat forward and locate a suitable position (flat and at the top of the surround.)
- b. Use the reinforcing plate as a template to mark the 4 mounting holes and the 1 choke cable hole.
- c. Set the reinforcing plate aside and using a 0.25" (1/4") drill bit, drill out the 4 mounting holes through the under seat surround.
- d. Using a 0.469" (15/32") drill bit, drill out the choke cable hole through the under seat surround.
- e. Install the reinforcing plate on the inside of the under seat surround using the #12 screws, washers, and nuts provided (Screw head and washer to the outside of the surround.)
- f. In a central position near the top of the under seat storage area, drill an additional 0.25" choke cable routing hole through the rear splash panel. Be certain that there are no components on the opposite side of the panel that will be contacted by the drill bit.
- g. Remove the nut completely from the choke cable leaving the small spacer on the cable.
- h. Pass the choke cable through the mounting hole in the surround and reinforcement plate. Re-install and tighten the nut to secure the cable. Hand tight is sufficient.
- i. Pass the other end of the cable through the routing hole in the rear splash panel.

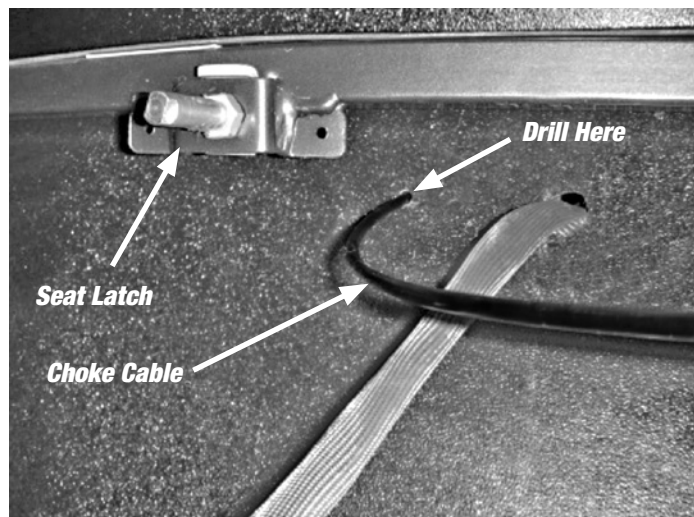
Views of completed cable installation



Step 6h.



Step 6h continued.



Step 6f - 6i.



Step 5a.



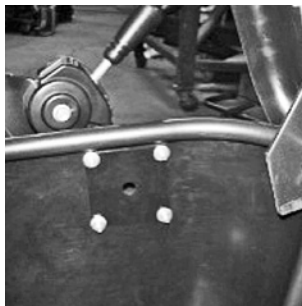
Step 5b.



Step 6b.



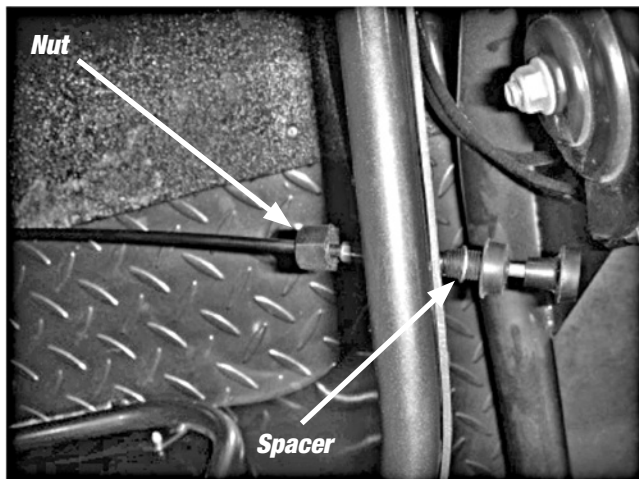
Step 6c & 6d.



Step 6e.



Step 6e continued.



Picture C: Manual Choke Cable

Auto Choke to Manual Choke Conversion - cont.

- 7) Attach the choke cable to the manual choke assembly.
 - a. Using a 14mm wrench remove choke cable fitting from the choke assembly. The spring, plunger, O-ring and choke cable seal will come with it. The wire tie is for shipping purposes only and can be discarded at this time leaving the spring and plunger as loose pieces.

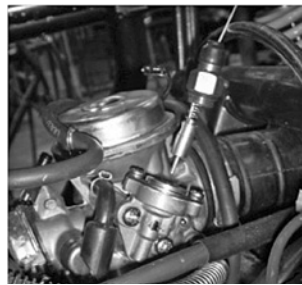
Note: To ease installation, ensure that the choke cable is fully extended past the cable sheath. To do this, make sure the choke knob is pushed in, the tension nut is fully tightened, and you are holding the cable as straight as possible.

- b. Insert the choke cable into the fitting through the seal.
 - c. Slide the spring over the cable end.
 - d. Compress the spring and insert the cable end into the plunger opening. The spring should nest on the plunger.
 - e. Find a comfortable routing (no sharp bends), and then install the entire fitting assembly back into the housing. With a 14mm wrench, tighten until the cable fitting rests against the choke fitting and the O-ring is compressed between the two.
 - f. Check cable operation by first exercising the cable multiple times. Take hold of the cable sheath and move it in and out of the choke cable fitting. There should be some free play. If there is not, try a different cable routing and make certain that the cable fitting is seated completely into the choke fitting.
- 8) Replace the cargo bed, if removed previously.
 - a. Reverse the removal instructions.
 - b. Plug the brake light back into the main wiring harness and secure any extra wire length to the swing arm tube with cable ties. Be certain to leave enough "slack" in the wire to allow for suspension travel and bed tilt.

- 9) For instruction on the proper use of the choke, see starting instructions below.

Note: The choke cable can be set to return immediately or maintain its position upon release. This can be done by adjusting the tension nut. See Appendix.

See APPENDIX on page 4 for photos of a finished installation and terminology definitions.



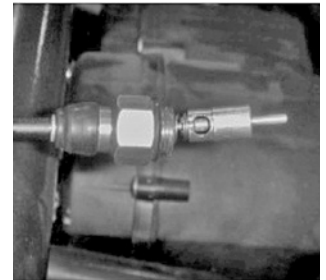
Step 7a.



Step 7b.



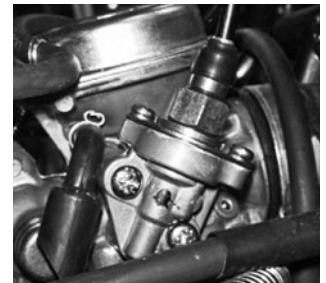
Step 7c.



Step 7d.



Step 7e.



Step 7f.



Manual Choke Starting Instructions

COLD engine

The following instructions list the proper method for starting your manual choke equipped vehicle. (A choke cable is located on dash next to the ignition key.) All models are equipped with a brake interlock switch, which requires the operator to depress the brake pedal while starting the engine. Note: Refer to the Assembly Instructions provided with this vehicle for the initial start-up procedure if this is the first time starting this unit.

1. Turn the manual fuel valve to the "ON" position. (If so equipped.)
2. Apply the park brake by depressing the brake pedal and engaging the lever located under the dash, just in front of the passenger seat.
3. Fasten seatbelt.
4. Pump the throttle pedal several times to ensure that the pedal operates and returns smoothly.
5. Pull the choke lever all the way out (fully "ON")
6. Insert the key into the ignition and turn to the "START" position allowing the engine to turn over.

Caution: Do not let the engine turn over for more than 5 seconds at a time, as this may cause starter damage.

7. Once the engine starts, let the key return to the "RUN" position.
8. Adjust the choke by pushing it in slowly. If the engine starts to run rough, pull the choke control out slightly and then continue to push the choke control in after the engine can accept small applications of the gas pedal. Continue this process until the choke control is pushed all the way in (fully "OFF"). This may require a period of several seconds to several minutes, depending on the air temperature.
9. The key switch should always be turned to the "OFF" position when the vehicle is not in use to ensure all lights are off and to prevent draining of the battery.
10. Turn the fuel valve to the "OFF" position when the vehicle is not in use. (If so equipped.)

WARM engine

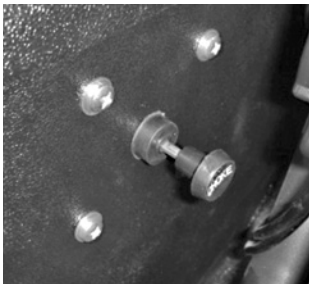
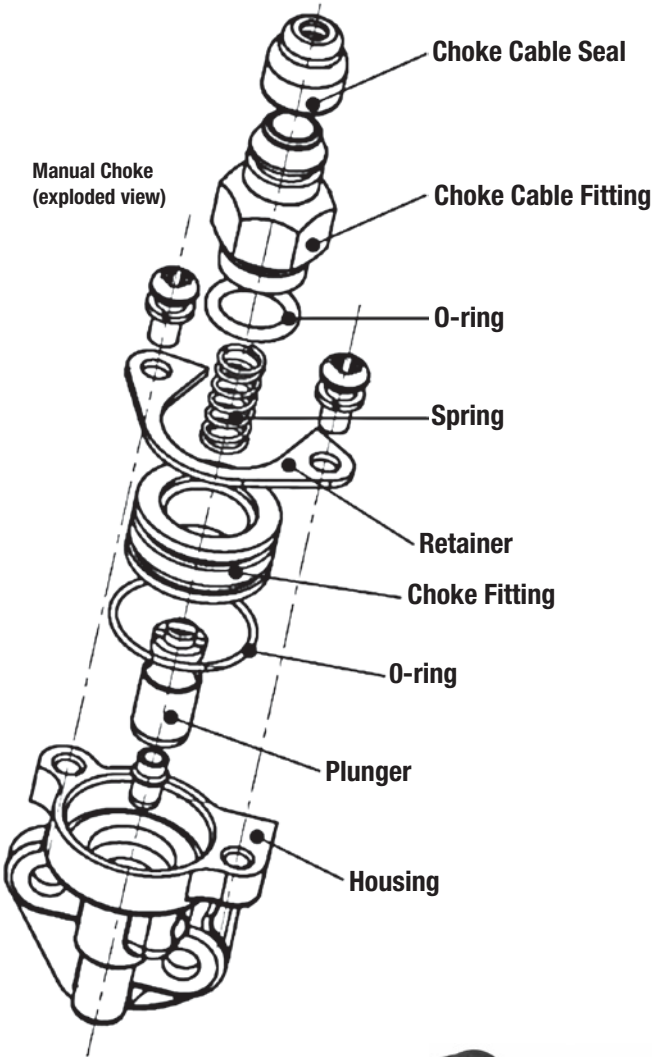
The following instructions list the proper method for starting your manual choke equipped vehicle. (A choke cable is located on dash next to the ignition key.) All models are equipped with a brake interlock switch, which requires the operator to depress the brake pedal while starting the engine. Note: Refer to the Assembly Instructions provided with this vehicle for the initial start-up procedure if this is the first time starting this unit.

1. Turn the manual fuel valve to the "ON" position. (If so equipped.)
2. Apply the park brake by depressing the brake pedal and engaging the lever located under the dash, just in front of the passenger seat.
3. Fasten seatbelt.
4. Pump the throttle pedal several times to ensure that the pedal operates and returns smoothly.
5. Ensure that the choke lever is all the way "in" (fully "OFF"). Do not use the choke with a warm engine.
6. Depress the gas pedal slightly or not at all.
7. Insert the key into the ignition and turn to the "START" position allowing the engine to turn over.

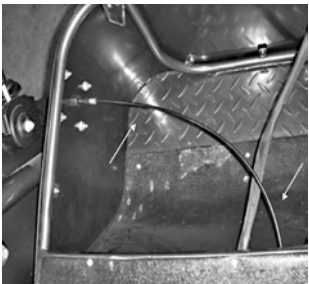
Caution: Do not let the engine turn over for more than 5 seconds at a time, as this may cause starter damage.

8. Once the engine starts, let the key return to the "RUN" position.
9. The key switch should always be turned to the "OFF" position when the vehicle is not in use to ensure all lights are off and to prevent draining of the battery.
10. Turn the fuel valve to the "OFF" position when the vehicle is not in use. (If so equipped.)

Auto Choke to Manual Choke Appendix



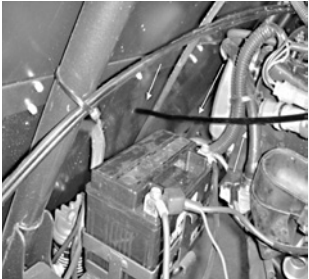
Choke shown "ON"



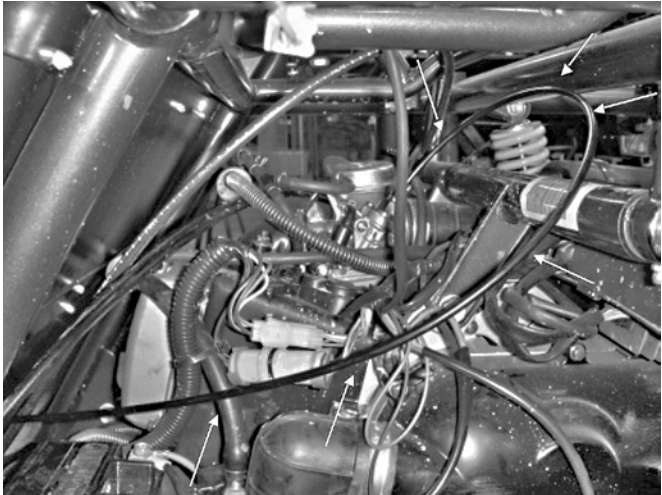
Under seat cable routing 1



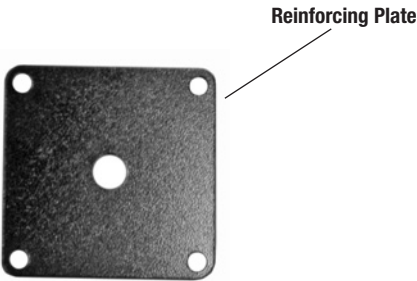
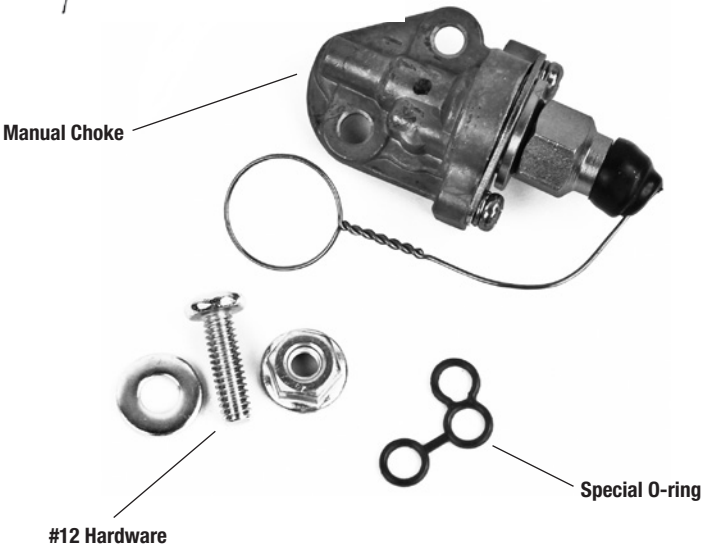
Under seat cable routing 2



Swingarm area cable routing 1



Swingarm area cable routing 2



Reinforcing Plate

