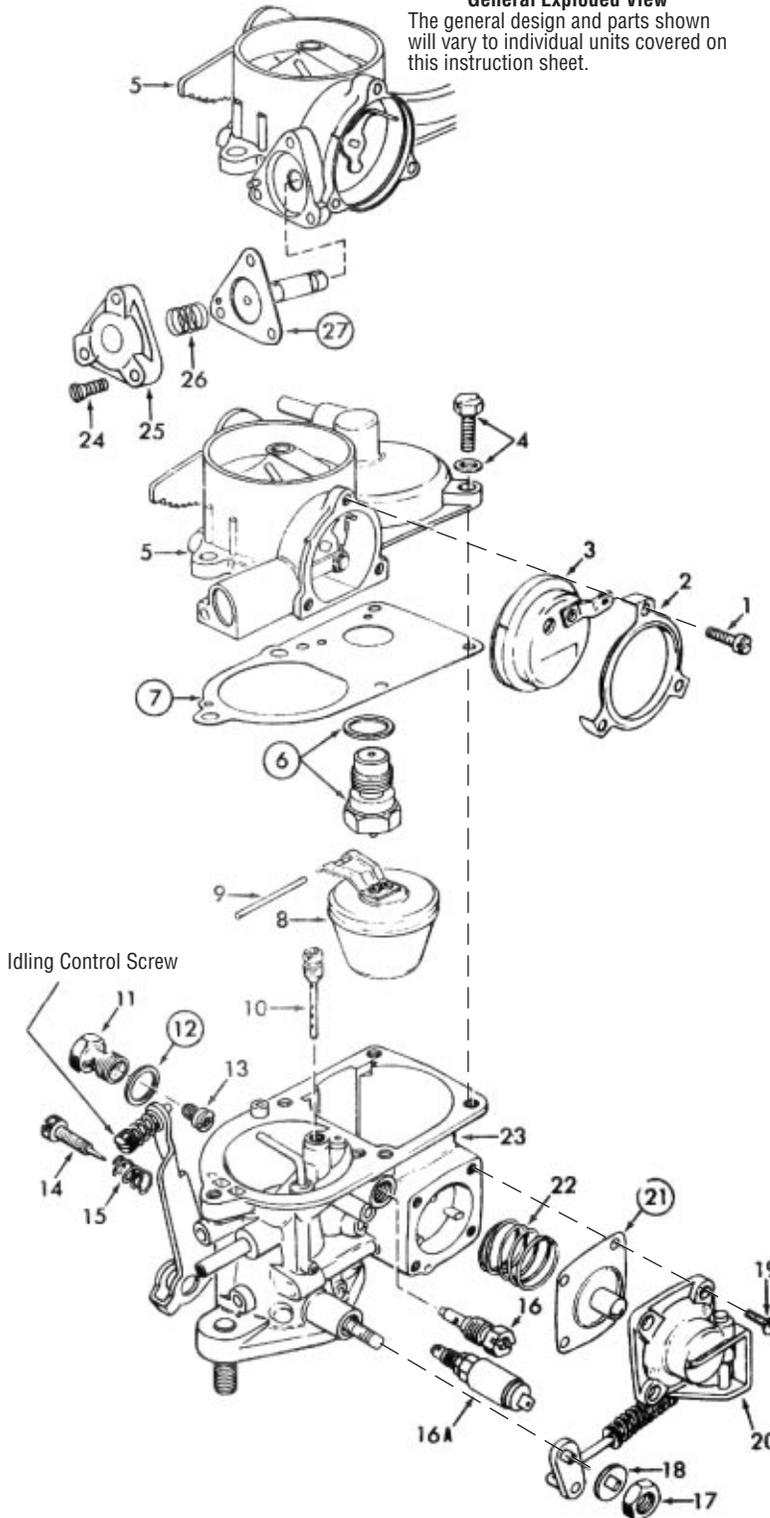


## 28 PICT -1, -2 30 PICT -1 Solex Carburetor

### General Exploded View

The general design and parts shown will vary to individual units covered on this instruction sheet.



### IDLING ADJUSTMENT 28 PICT, -1, -2. 30 PICT-1

1. Warm up engine: check if the automatic choke is fully open.
2. Set idling speed to 850 RPM with the idling control screw. (see exploded view)
3. Turn volume control screw (item #14) to right until speed starts to drop.
4. From this position, turn volume control screw (item #14) to the left until engine runs fastest.
5. If necessary, regulate the engine speed (800-900 RPM) again, with the idling control screw.

### NOMENCLATURE

Ref. No.

1. Screw (3) - retaining ring
2. Retaining ring - cover
3. Cover with spring and heater element
4. Screw & lockwasher (5) - upper body
5. Upper body assembly
6. Needle, seat & gasket assembly
7. Gasket - carburetor body
8. Float
9. Pin - float lever
10. Jet - air correction
11. Carrier - main jet
12. Gasket - carrier
13. Jet - main
14. Screw - volume control
15. Spring - volume control screw
16. Jet - pilot
- 16A. Valve - idling cut-off 30 PICT-1
17. Nut - throttle shaft lever
18. Washer - throttle shaft lever
19. Screw (4) - cover
20. Cover - with lever & linkage
21. Diaphragm - pump
22. Spring - pump diaphragm
23. Carburetor main body assembly
24. Screw (3) - cover
25. Cover - vacuum diaphragm
26. Spring - vacuum diaphragm
27. Vacuum diaphragm - choke
28. Plug main jet
29. Gasket - plug
30. Jet - main
31. Air screw - bypass
32. O-Ring - volume control screw
33. Valve - bypass air cut-off
34. Plug - volume control screw
35. Screw - volume control
36. O-Ring - volume control screw
37. Cotter pin
38. Washer (2)
39. Spring - connector rod
40. Screw (4) - cover
41. Cover - with lever & pin
42. Diaphragm - pump
43. Spring - diaphragm
44. Carburetor main body assembly.

### CLEANING

Cleaning must be done with carburetor disassembled. Soak parts long enough to soften and remove all foreign material. Use a carburetor cleaning solvent. Make certain the throttle body is free of all hard carbon deposits. Wash off in suitable solvent. Blow out all passages in castings with compressed air and check carefully to insure thorough cleaning of obscure areas. **CAUTION:** Do not soak solenoids, switches, float, or rubber parts in solvents.

### REASSEMBLY

Using essentially the reverse order of disassembly giving special attention to the following special instructions.

### SPECIAL INSTRUCTIONS

Make sure all jet orifices are clean and open. Clean with compressed air. Do not use wires to check for clogged orifices.

When installing the pump diaphragm and spring (22) make sure the larger end of spring is properly seated in the carburetor body cavity. Be sure to install the diaphragm (21) with plunger toward pump cover (20).

Check for a worn spot (depression) on the float lever where it makes contact with the fuel inlet needle valve. Replace float assembly if necessary.

Check if the thermostat spring in housing (item #3) for damage. If it is distorted or "kinked", replace the assembly.

Also, make sure the electrical heating element is not broken. This can be checked with an ohmmeter or connected to a correct voltage battery for a few minutes to see if it warms up. (Be sure to ground the inside metal part of the housing in order to complete the circuit.) When installing assembly with spring and heater element, carefully rotate assembly counterclockwise, being sure the hook on coil end engages with the lever on choke shaft. Continue rotating approximately 1/8 - turn more until index marks align. Then tighten screws securely.

# 30 PICT -2, -3 34 PICT -3, -4 SOLEX CARBURETOR

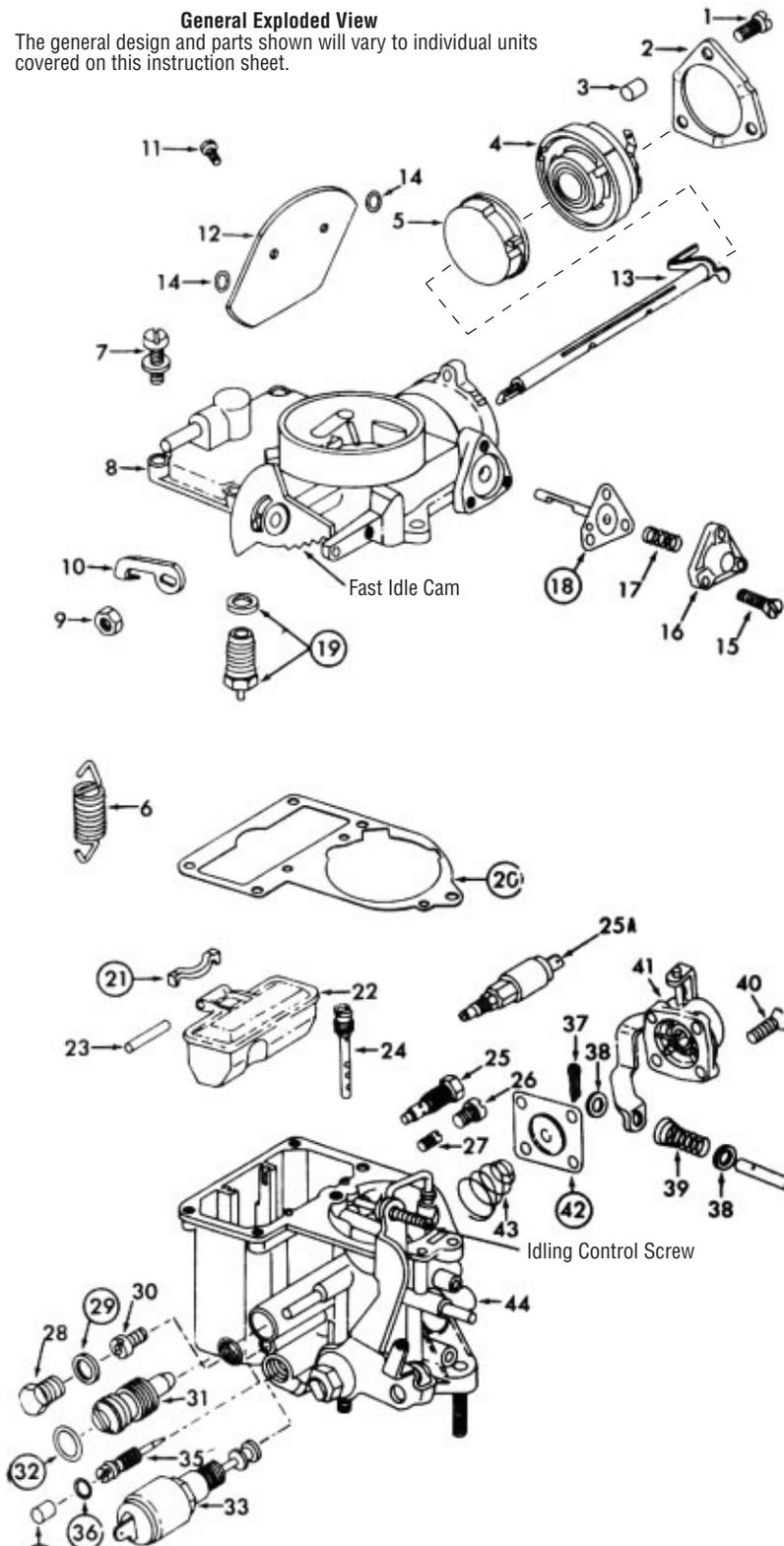
2121 Harbor Blvd. , Costa Mesa, CA 92627  
 Phone (949)642-1835 • Fax (949)642-1847  
 Internet address: www.KymcoVW.com



## 30 PICT -2, -3 34 PICT -3, -4 Solex Carburetor

### General Exploded View

The general design and parts shown will vary to individual units covered on this instruction sheet.



### NOMENCLATURE

- Ref. No.
1. Screw (3) - retaining ring
  2. Retaining ring - cover
  3. Spacer bush - retaining ring
  4. Cover - with spring and heater element
  5. Plastic cap
  6. Spring - throttle return
  7. Screw & Lockwasher (5) - upper body
  8. Upper body assembly.
  9. Nut - choke shaft
  10. Operating lever - fast idle cam
  11. Screw (2) - choke valve
  12. Valve - choke
  13. Shaft - choke
  14. Spacewasher (2) - choke valve
  15. Screw (3) - cover
  16. Cover - vacuum diaphragm
  17. Spring - vacuum diaphragm
  18. Vacuum diaphragm - choke
  19. Needle, seat & gasket assembly.
  20. Gasket - carburetor body
  21. Lug - float pin
  22. Float
  23. Pin - float lever
  24. Jet - air correction
  25. Jet - aux. idle speed fuel
  - 25A. Valve - idle cut off (30 PICT -2, -3)
  26. Plug - aux. fuel jet
  27. Jet - auxiliary fuel
  28. Plug main jet
  29. Gasket - plug
  30. Jet - main
  31. Air screw - bypass
  32. O-Ring - volume control screw
  33. Valve - bypass air cut-off
  34. Plug - volume control screw
  35. Screw - volume control
  36. O-Ring - volume control screw
  37. Cotter pin
  38. Washer (2)
  39. Spring - connector rod
  40. Screw (4) - cover
  41. Cover - with lever & pin
  42. Diaphragm - pump
  43. Spring - diaphragm
  44. Carburetor main body assembly.

### CLEANING

Cleaning must be done with carburetor disassembled. Soak parts long enough to soften and remove all foreign material. Use a carburetor cleaning solvent. Make certain the throttle body is free of all hard carbon deposits. Wash off in suitable solvent. Blow out all passages in castings with compressed air and check carefully to insure thorough cleaning of obscure areas. **CAUTION:** Do not soak solenoids, switches, float, or rubber parts in solvents.

### REASSEMBLY

Using essentially the reverse order of disassembly giving special attention to the following special instructions.

### SPECIAL INSTRUCTIONS

Make sure all jet orifices are clean and open. Clean with compressed air. Do not use wire to check for clogged orifices.

When installing the pump diaphragm and spring (43) make sure the larger end of spring is properly seated in the carburetor body cavity. Be sure to install the diaphragm (42) with plunger toward pump cover (41).

Check for a worn spot (depression) on the float lever where it makes contact with the fuel inlet needle valve. Replace float assembly, if necessary. Float assembly may be purchased at local VW dealer. P/N 113-129-391 rectangular shaped float (22).

Proper needle seat gasket must be used for specific carburetor. Use the following chart to determine the correct gasket. Carburetor model

|           |       |                               |
|-----------|-------|-------------------------------|
| 30 PICT-2 | 1.0mm | .040"                         |
| 30 PICT-3 | 1.5mm | combine 1.0 and .5 mm gaskets |
| 34 PICT-3 | 0.5mm | .020"                         |

Check the thermostatic spring in housing (item #40 for damage. If it is distorted or "kinked", replace the assembly.

Also, make sure the electrical heating element is not broken. This can be checked with an ohmmeter or connected to a correct voltage battery for a few minutes to see if it warms up. (Be sure to ground the inside metal part of the housing in order to complete the circuit.) When installing assembly with spring and heater element, carefully rotate assembly counterclockwise, being sure the hook on coil end engages with the lever on choke shaft. Continue rotating approximately 1/8 - turn more until index marks align. Then tighten screws securely.

### IDLING ADJUSTMENT 30 PICT-3 34 PICT-3

1. Check if the automatic choke is fully open.
  2. Turn idling control screw (see exploded view) out until there is clearance between screw and fast idle cam.
  3. Then turn idling control screw in until it just touches the fast idle cam.
  4. From third position, turn screw in further 1/4 of a turn.
  5. Turn volume control screw (item #35) in slowly until it comes to a stop, and then turn it back 2.5 to 3 complete turns.
  6. Start engine and set idle speed (900 RPM) by turning the bypass screw (item #31).
  7. By turning volume control screw (item #35), adjust to the highest idle speed, then turn in until the engine speed drops by 20-30 RPM.
  8. Reset the correct idle speed by turning the bypass screw (item #31).
- (Note 30 PICT-2 use procedure)