# Carburetor Adjustments

### INITIAL STARTING ADJUSTMENT

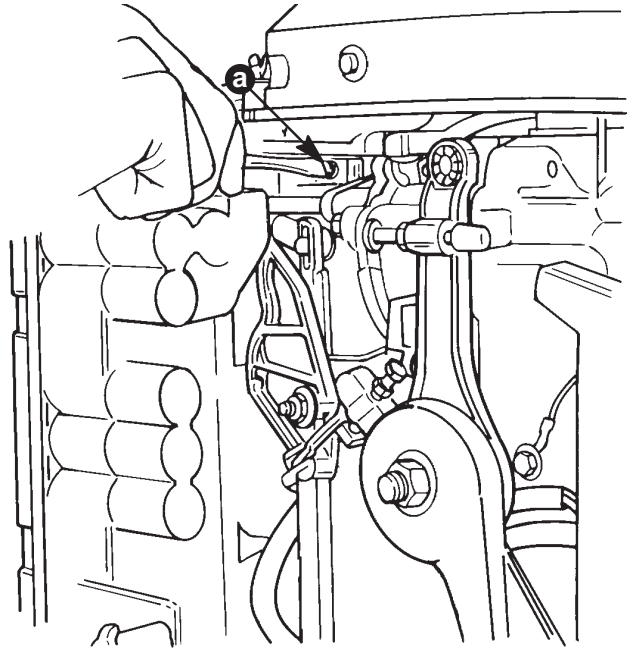
Turn idle mixture screw in (clockwise) until it seats LIGHTLY--then back-off (each carburetor) 1-1/4 turns.

### IDLE SEED ADJUSTMENT

1. Adjust engine idle RPM as outlined in Section 2C "Timing/Synchronizing/Adjusting."

### IDLE MIXTURE SCREW ADJUSTMENT

1. Start engine and allow to warm-up. Throttle back engine to idle for about one minute.
2. With engine running at idle speed in "Forward" gear -- turn idle mixture screw IN (clockwise) until engine starts to "bog" down and misfire. Back out 1/4 turn or more.



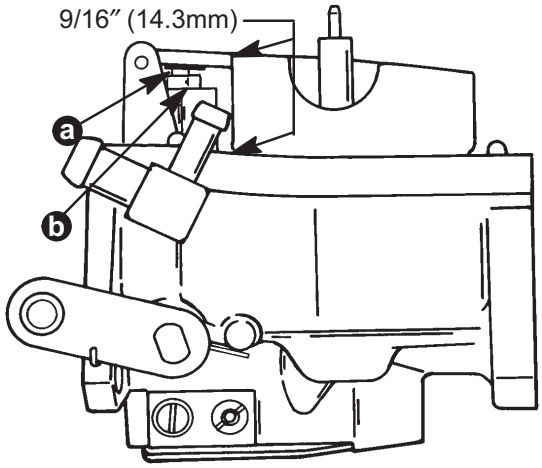

50555

a - Idle Mixture Screw (on each carburetor)

3. Check for too lean mixture on acceleration.
4. DO NOT adjust leaner than necessary to attain reasonably smooth idling. When in doubt, stay on the slightly rich side of the adjustment.

### CARBURETOR FLOAT ADJUSTMENT

1. Remove carburetor as outlined in "Carburetor Removal," following.
2. Remove fuel bowl and gasket and check float level using a carburetor scale.
3. If necessary, adjust float level by bending metal tab (on float) to which inlet needle is clipped.

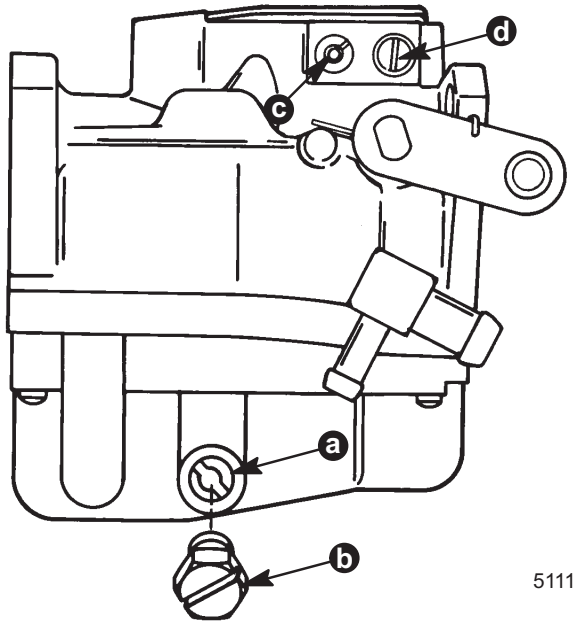



51046

a - Metal Tab
b - Inlet Needle

### MAIN (HIGH SPEED) JET ADJUSTMENT

The carburetor has a fixed high speed jet. Extreme changes in weather (temperature and humidity) and/or elevation may result in a too lean or rich fuel mixture at wide-open-throttle, which may require a change in the high speed jet. A smaller size main jet will lean the fuel mixture, and a larger size jet will enrich the fuel mixture.




51118

a - High Speed Jet
b - Bowl Drain Plug
c - Bowl Vent Jet
d - Idle Mixture Screw

# WME Carburetor Specifications

| Carburetor Number Stamped at TOP of carburetor mounting flange. | | | |
|---|---|---|---|
| Carburetor Number | Model H.P. | Main Jet | Bowl Vent Jet |
| WME-23 | 50 | .052 | .092 |
| WME-26 | 50 | .048 | .090 |
| WME-27 | 55 | .060 | None |
| WME-22 A or B | 60 | .070 | .090 |
| WME-35 | 60 | .068 | None |
| WME-28 | 60 | .062 | .090 |
| WME-43 | 50 | .048 | .090 |
| WME-44 | 55/60 | .060 | None |
| WME-45 | 45/60 | .062 | .090 |

## REJETTING CARBURETORS FOR HIGH ALTITUDE OPERATION

The carburetor jet installed at the manufacturer is for engine operation at sea level through an elevation of 2500 feet (762m) above sea level. If the engine is to be operated at an altitude higher than 2500 feet above sea level, it will be necessary to rejet (remove the carburetor jets and install jets with a different orifice size) the carburetors. Each time the engine is to be operated at a different elevation from the previous time, refer to the "Carburetor Jet Charts" following, and rejet the carburetors for elevation engine will be operated at.

| HIGH ALTITUDE JET CHART | |
|---|---|
| **Engine Operation Elevation (Above Sea Level)** | **High Speed Jet Size** |
| 2500'-5000' (750-1500m) | .002" smaller (than standard jet) |
| 5000'-7500' (1500-2250m) | .004" smaller (than standard jet) |
| 7500' and Up (2250m and Up) | .006" smaller (than standard jet) |

*Standard Jets listed are for operation of engine from 0 ft. – 2500 ft. (0–762 M) of elevation.

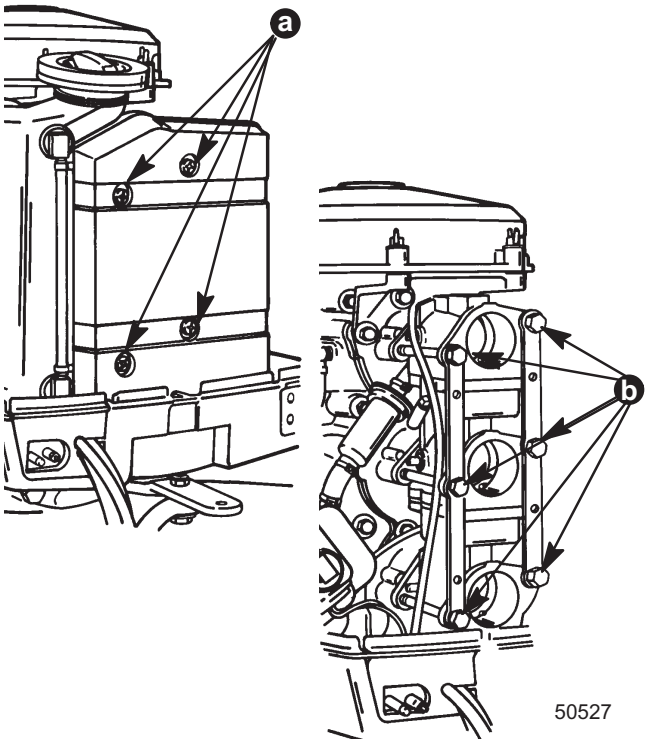
## JET ORIFICE SIZE/PART NUMBER CHART

***NOTE:*** *Thread size for jets is 10-32.*

| JET ORIFICE SIZE/PART NUMBER CHART | | | |
|---|---|---|---|
| **Jet Orifice Size (inch)** | **Part Number** | **Jet Orifice Size (inch)** | **Part Number** |
| .040 | 19266040 | .058 | 1395-7831 |
| .042 | 1399-5315 | .060 | 1395-6487 |
| .044 | 1395-7394 | .062 | 1399-4217 |
| .046 | 1399-5317 | .064 | 1399-4216 |
| .048 | 1395-6246 | .066 | 1399-4215 |
| .050 | 1395-6028 | .068 | 1395-6029 |
| .052 | 1395-6359 | .070 | 1395-6030 |
| .054 | 1399-5225 | .072 | 1395-6207 |
| .056 | 1399-5213 | .074 | 1399-3794 |
| .076 | 1399-3796 | .094 | 1395-8423 |
| .078 | 1395-6680 | .096 | 1399-6249 |
| .080 | 1395-6201 | .098 | 1395-7335 |
| .082 | 1399-3518 | | |
| .084 | 1399-3517 | | |
| .086 | 1395-5815 | | |
| .088 | 1395-6202 | | |
| .090 | 1395-6247 | | |
| .092 | 1395-5733 | | |

## Carburetor Removal

- Remove four screws and lift off attenuator.
- Remove six screws and remove carburetors. Disconnect linkages and fuel and primer lines.

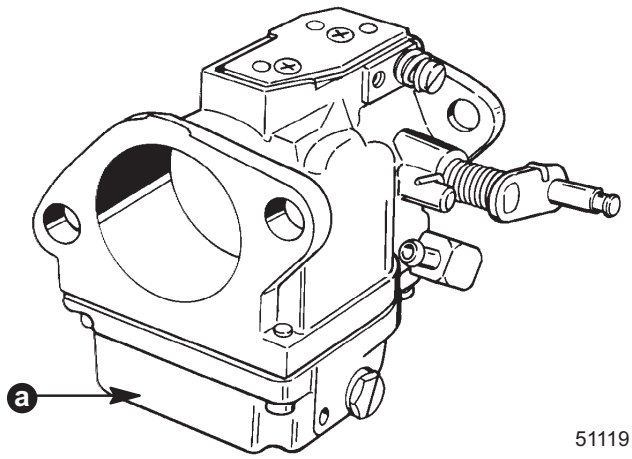



50527

a - Attenuator Screw (4)
b - Carburetor Screw (6)

## Carburetor Disassembly

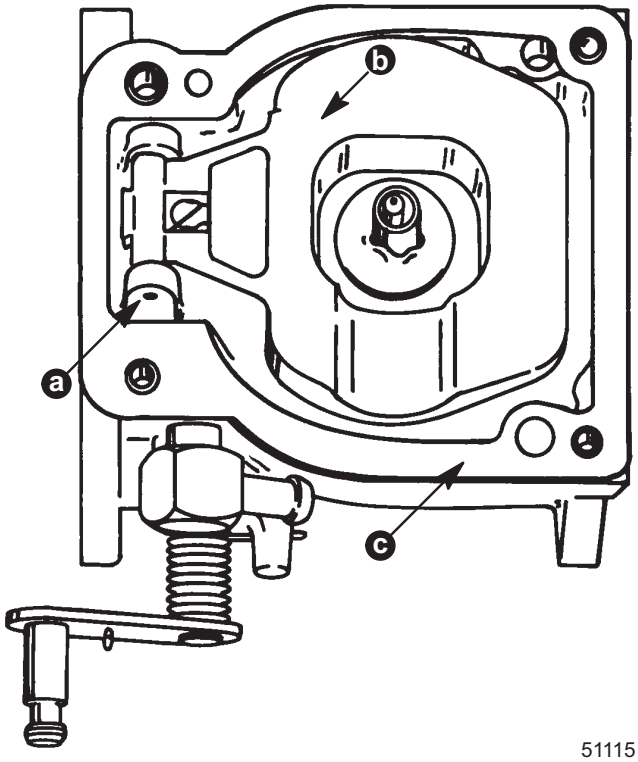
- Remove fuel bowl.




51119

a - Fuel Bowl

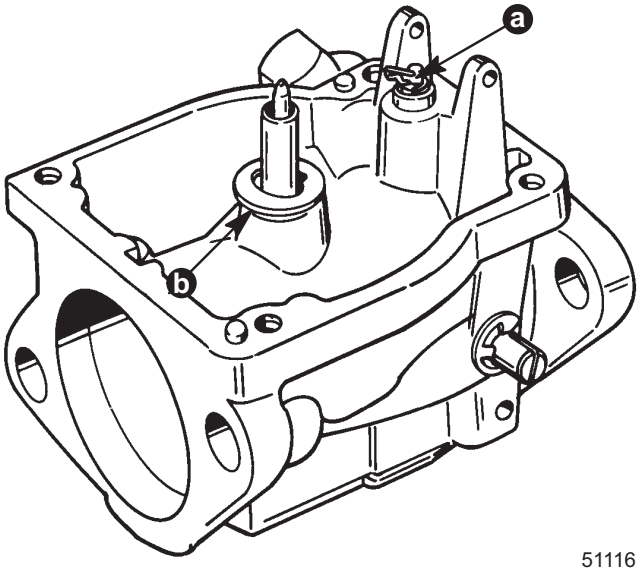
- Remove float pin and remove float.
- Remove fuel bowl gasket.




51115

a - Float Pin
b - Float
c - Gasket

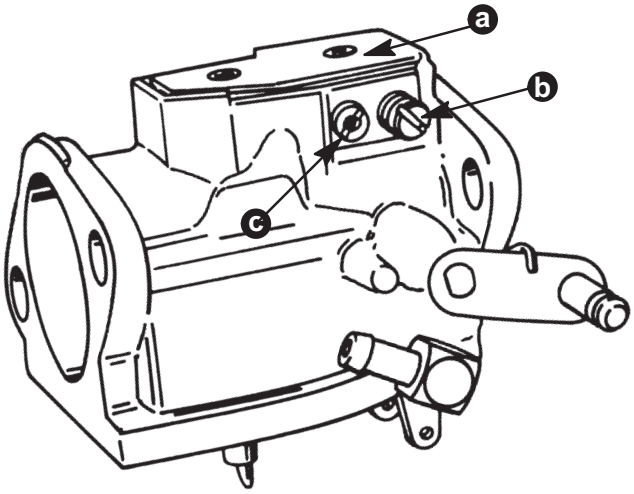
- Remove fuel inlet needle.
- Remove stem gasket.




51116

a - Fuel Inlet Needle
b - Stem Gasket

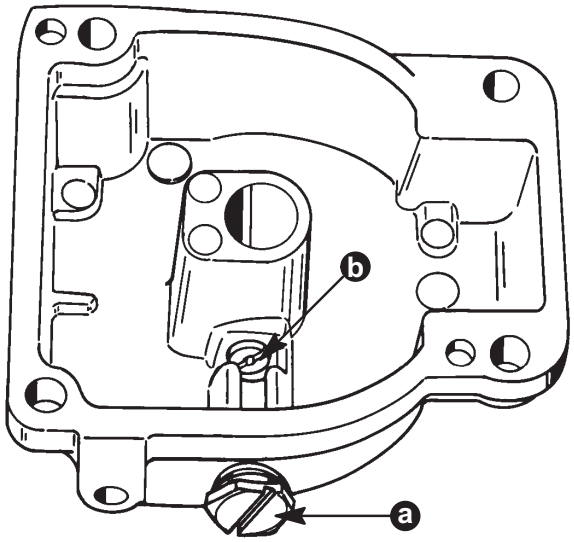
- Remove mixing chamber cover and gasket.
- Remove idle mixture screw.
- Remove bowl vent jet




51116

a - Mixing Chamber Cover and Gasket
b - Idle Mixture Screw
c - Bowl Vent Jet

- Remove main jet plug and gasket.
- Remove main jet.

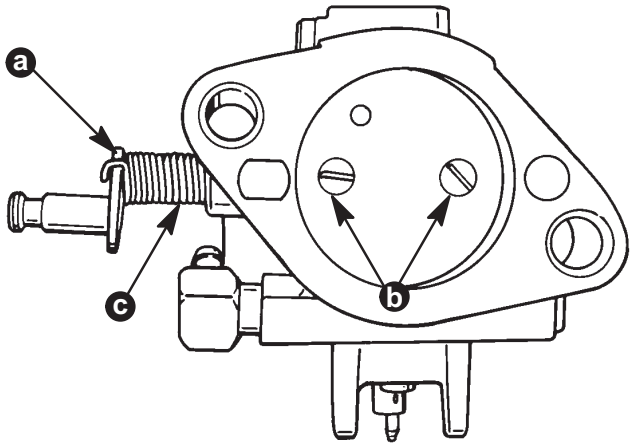



51116

a - Main Jet Plug and Gasket
b - Main Jet

***NOTE:*** *It is not necessary to disassemble carburetor beyond this point for cleaning. Examine throttle shaft for wear and inspect for damaged throttle shutter plate.*

If removal of throttle shaft and/or throttle shutter plate is necessary, remove 2 screws, which secure throttle shutter plate to throttle shaft. Remove retaining clip from end of throttle shaft, then pull shaft out of carburetor.




51117

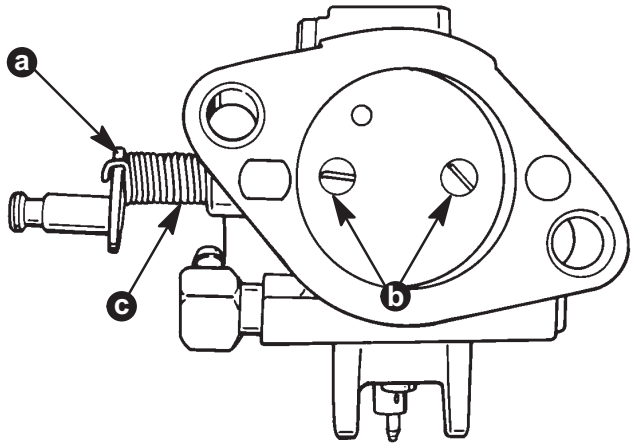
a - Throttle Shaft
b - Screw (2)
c - Throttle Shaft Spring

## Cleaning and Inspection

1. Carefully inspect carburetor body and fuel bowl for cracks, stripped threads, plugged or restricted passages and passage plugs that show signs of leakage.
2. Thoroughly clean all carburetor parts with a mild cleaning solution (that will not damage rubber or plastic) to remove dirt, and varnish that may have accumulated.
3. After washing parts, blow parts dry with compressed air. Be sure to blow air thru all passages, orifices and nozzles.
4. Check float hinge in the float pin area for wear and check float for leaks. Replace parts as necessary.
5. Examine inlet needle for wear. If worn, replace with new inlet needle.

## Carburetor Reassembly

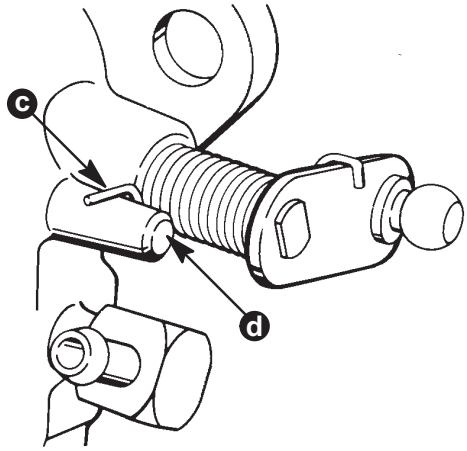
- If removed, install throttle shaft, throttle shutter plate, 2 screws (use Loctite Grade 'A'), and throttle shaft spring as shown. Install retaining clip on other end of shaft.




51117

a - Throttle Shaft
b - Screws (2) (Torque 6 lb. in. (0.7 N·m)
c - Throttle Shaft Spring

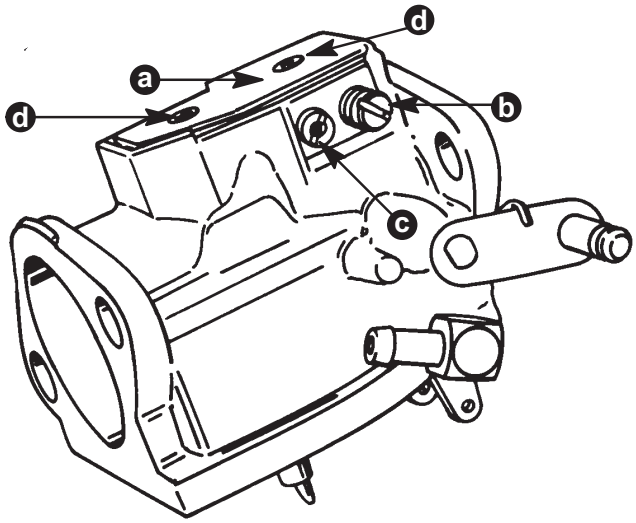
- Spring tension on stud.




51259

c - Spring
d - Stud

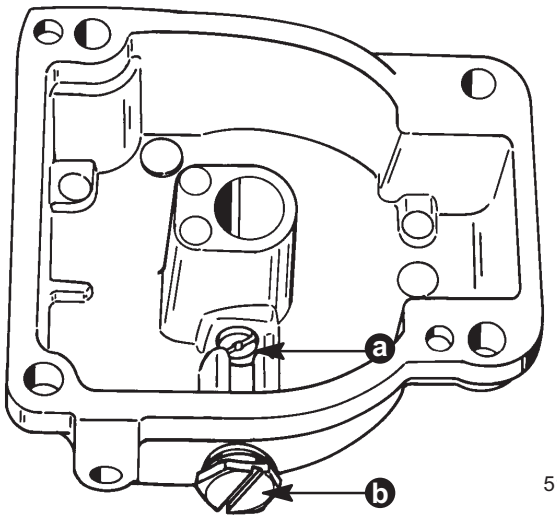
- Install mixing chamber cover and gasket as shown.
- Install idle mixture screw.
- Install bowl vent jet




51116

a - Mixing Chamber Cover and Gasket
b - Idle Mixture Screw
c - Bowl Vent Jet
d - Screw (2) Torque 18 lb. in. (2.1 N·m)

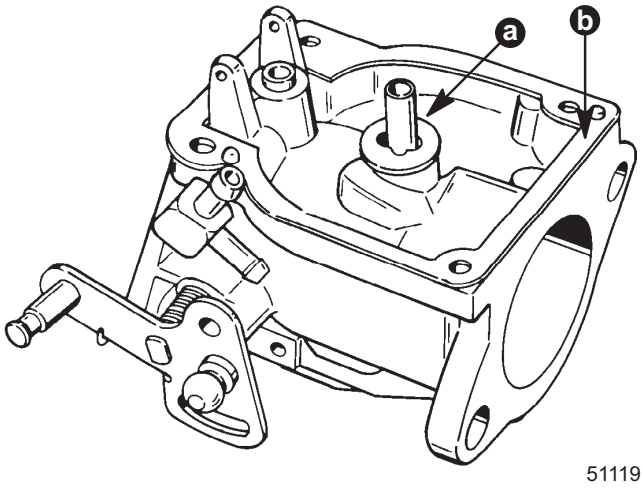
- Install main jet.
- Install main jet plug and gasket.



51116

a - Main Jet [Torque 14 lb. in (1.6 N·m)]
b - Main Jet Plug and Gasket [Torque 22 lb. in. (2.5 N·m)]

- Install stem gasket.
- Install fuel bowl gasket.

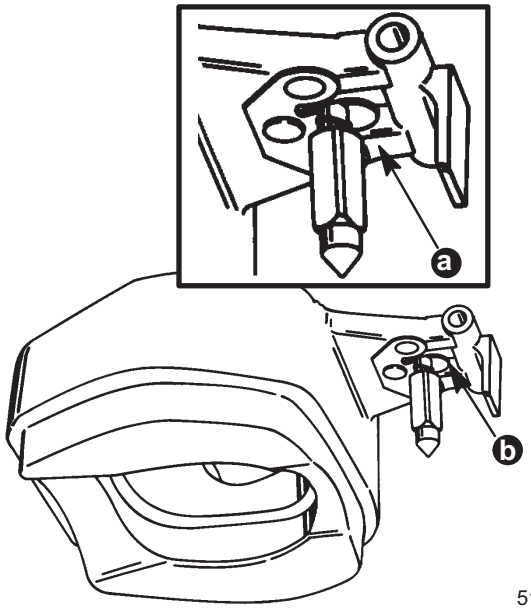


51119

a - Stem Gasket
b - Fuel Bowl Gasket

***NOTE:*** *If Spring Clip on Inlet Needle was removed, or if needle was replaced, be sure spring clip is reattached.*

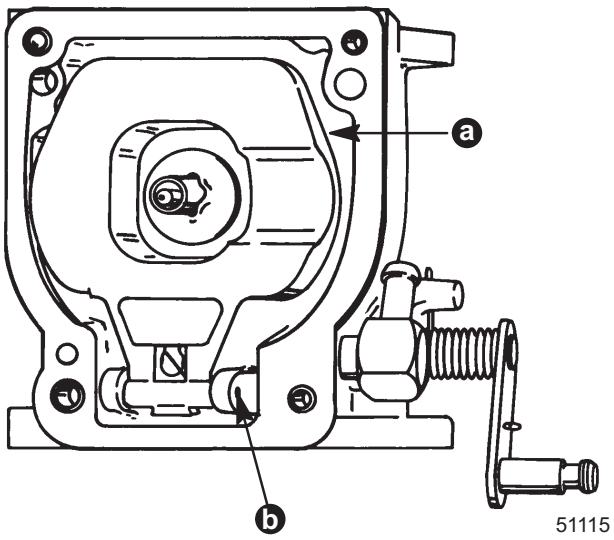
- Attach Spring Clip on Inlet Needle to metal float tab and place needle into its seat.



51115

a - Spring Clip
b - Float Tab

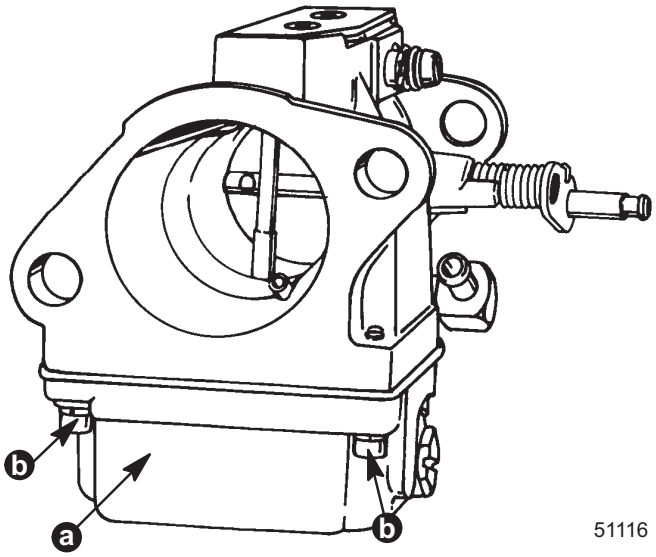
- Install float into carburetor with float pin.
- Adjust float following “Carburetor Float Adjustment,” Page 3A-13.



51115

a - Float
b - Float Pin

• Install float bowl.

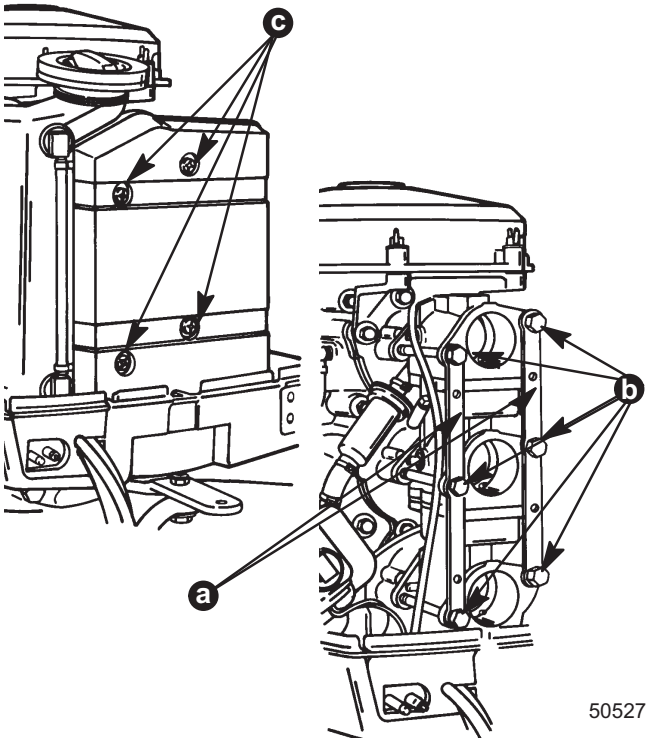



51116

a - Fuel Bowl
b - Screw (4) Torque 18 lb in. (2.1 N·m)

## Carburetor Installation

- Install carburetors, attenuator plate, connect linkages, and fuel and primer lines.
- Install sound attenuator.




50527

a - Attenuator Brackets (2)
b - Carburetor Screw (6) Torque 100 lb. in. (11.5 N·m)
c - Attenuator Screw (4)