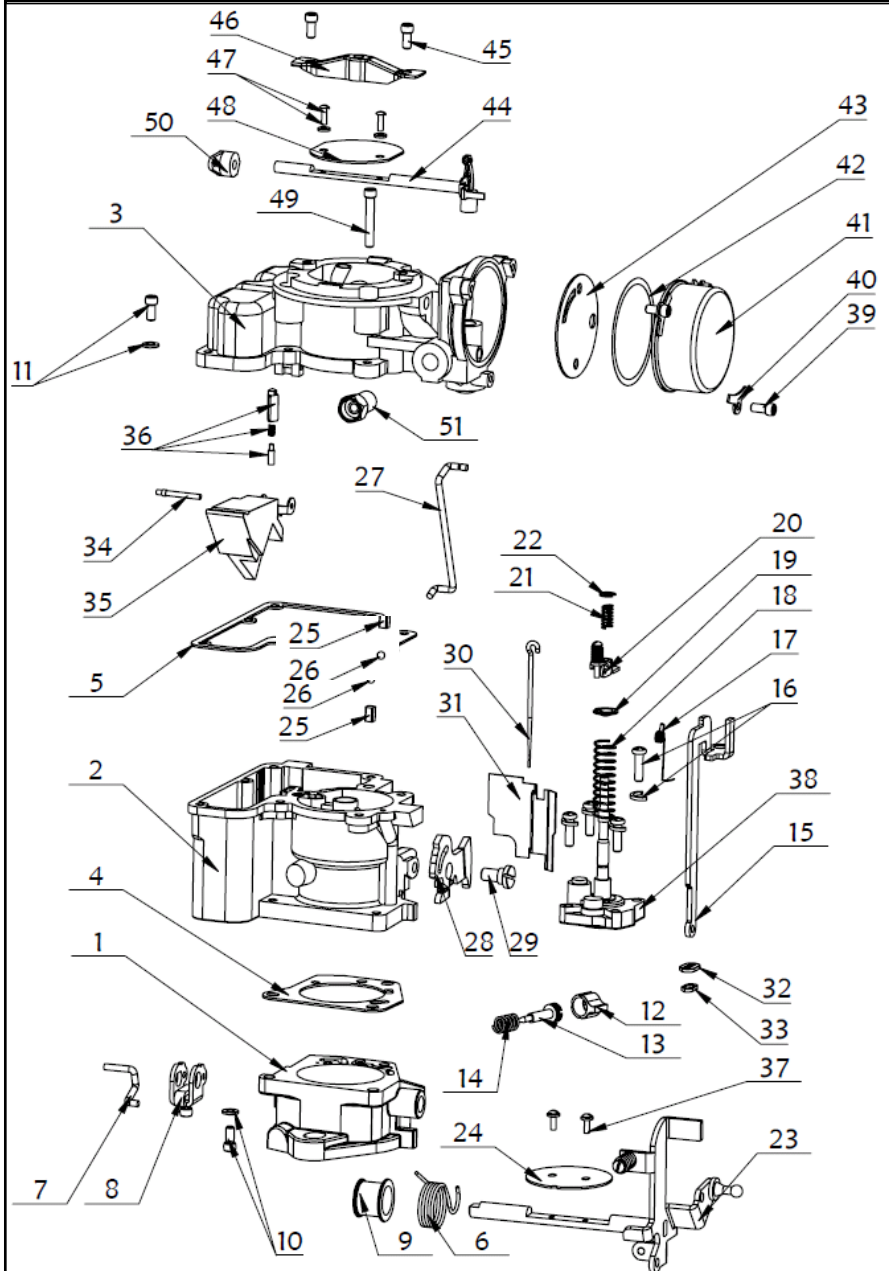


Carburetor Adjustment Instructions

❖ **Note:** Before proceeding with carburetor adjustment, verify that all ignition components are working properly, including checking engine timing. Also check for adequate fuel pressure, clean air filter element, and that there are no vacuum leaks.

PARTS LIST

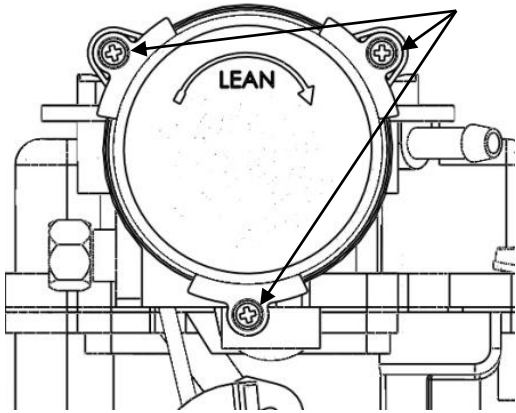


- | | |
|--|---|
| 1. Throttle Body Assembly | 25. Outlet Check Weight |
| 2. Main Body Assembly | 26. Outlet Check Ball |
| 3. Air Horn Assembly | 27. Choke Rod |
| 4. Throttle Body Gasket | 28. Fast Idle Cam |
| 5. Air Horn Gasket | 29. Fast Idle Cam Screw |
| 6. Throttle Return Spring | 30. Metering Rod |
| 7. Pump | 31. Baffle Plate |
| 8. Throttle Shaft Arm | 32. Splash Cover |
| 9. Throttle Return Spring Bushing | 33. Splash Gasket |
| 10. Throttle Body Screw (3) | 34. Float Pin |
| 11. Short Air Horn Screw & Lock Washer (3) | 35. Float |
| 12. Limiter Cap | 36. Needle Seat Assembly |
| 13. Idle Mix Screw | 37. Throttle Plate Screw (2) |
| 14. Idle Mix Spring | 38. Accelerator Pump Assembly |
| 15. Pump Lifter Link | 39. Choke Cover Screw (3) |
| 16. Pump Housing Screw & Lock Washer (4) | 40. Choke Cover Retainer (3) |
| 17. Metering Rod Spring | 41. Choke Cover / Spring Assembly |
| 18. Lower Pump Spring | 42. Choke Cover Gasket |
| 19. Lower Pump Retainer | 43. Choke Baffle Plate |
| 20. Metering Arm Assembly | 44. Choke Shaft Assembly |
| 21. Upper Pump Spring | 45. Air Cleaner Bracket Screw (2) |
| 22. Upper Pump Spring Retainer | 46. Air Cleaner Bracket |
| 23. Throttle Shaft Assembly | 47. Choke Plate Screw & Lock Washer (2) |
| 24. Throttle Plate | 48. Choke Plate |
| | 49. Long Air Horn Screw & Lock Washer (3) |
| | 50. Choke Lever |
| | 51. Choke Fitting |

REQUIRED ADJUSTMENTS AFTER CARBURETOR INSTALLATION

Automatic Choke Adjustment

Choke Cover Screws

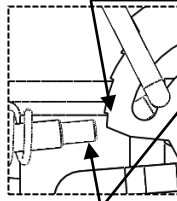


- 1) Check that engine is starting cold. Adjustment applies for cold engine only.
- 2) Loosen the Choke Cover Screws and adjust the Choke Cover to obtain the desired cold start mixture.

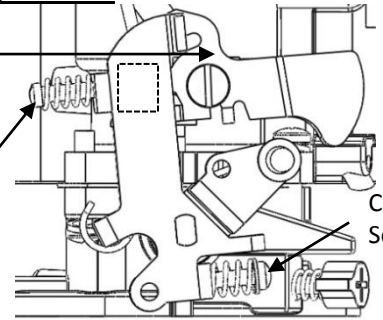
Note: If engine is flooding during startup, hold the choke open manually to start the engine and then adjust the choke.

Idle Speed Adjustment

Fast Idle Cam



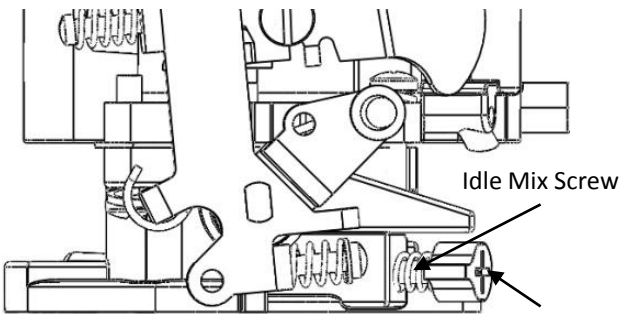
Fast Idle Screw



- 1) Run the engine a minimum of 20 min at 1500 RPM to reach operating temperature.
- 2) Verify that the choke is in the full-open position and the Fast Idle Screw is not touching the Fast Idle Cam.
- 3) Turn the headlights on.
- 4) Adjust the Curb Idle Screw to obtain the recommended engine idle speed of 800 RPM.

Note: Idle Speed and Idle Mixture adjustments can be done at the same time to prevent engine stall due to a too lean or too rich air/fuel mixture at idle.

Idle Mixture Adjustment

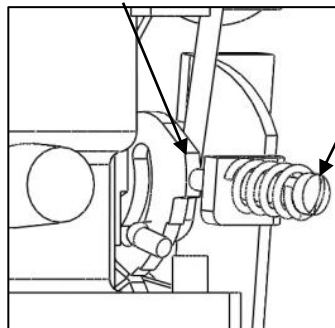


- 1) Verify that Idle speed is set to 800 RPM and engine is warmed up to operating temperature.
- 2) Remove limiter cap and adjust the Idle Mix Screw until engine idle is smoothest (turn in for lean or out for rich). Reinstall limiter cap when done.

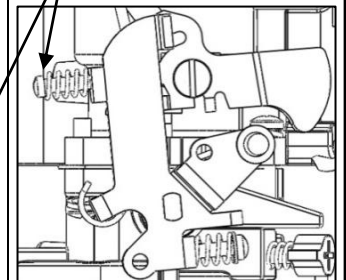
Alternative to Step 2: Attach a vacuum gauge to read manifold vacuum. Remove the limiter cap and adjust the Idle Mix Screw until the gauge reads a steady vacuum between 17-21 in-Hg. Reinstall limiter cap when done.

Fast Idle Speed Adjustment

Fast Idle Cam



Fast Idle Screw



- 1) Verify that both Idle speed and mixture have been properly adjusted and engine is warmed up to operating temperature.
- 2) Place the Fast Idle Screw on the top step of the Fast Idle Cam as shown above.
- 3) Adjust the Fast Idle Screw to obtain the required fast idle RPM.

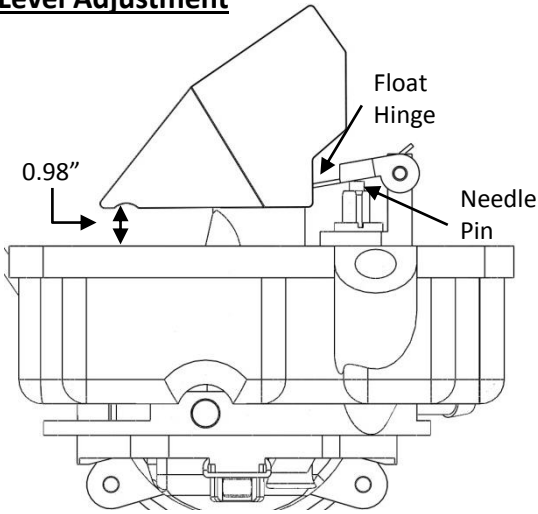


ADVANCED SETTINGS



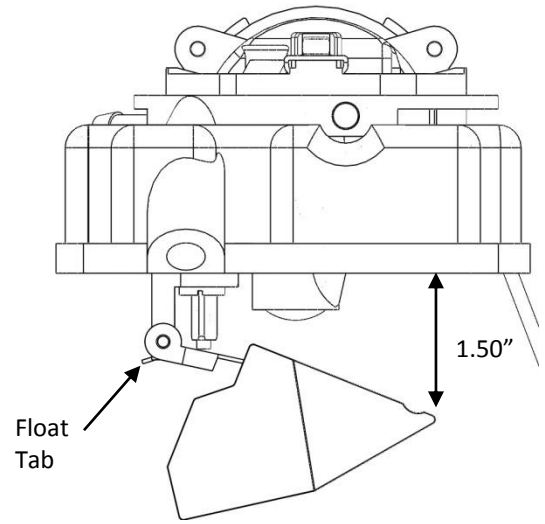
To be performed by experienced users only. Use only if carburetor is malfunctioning.

Float Level Adjustment

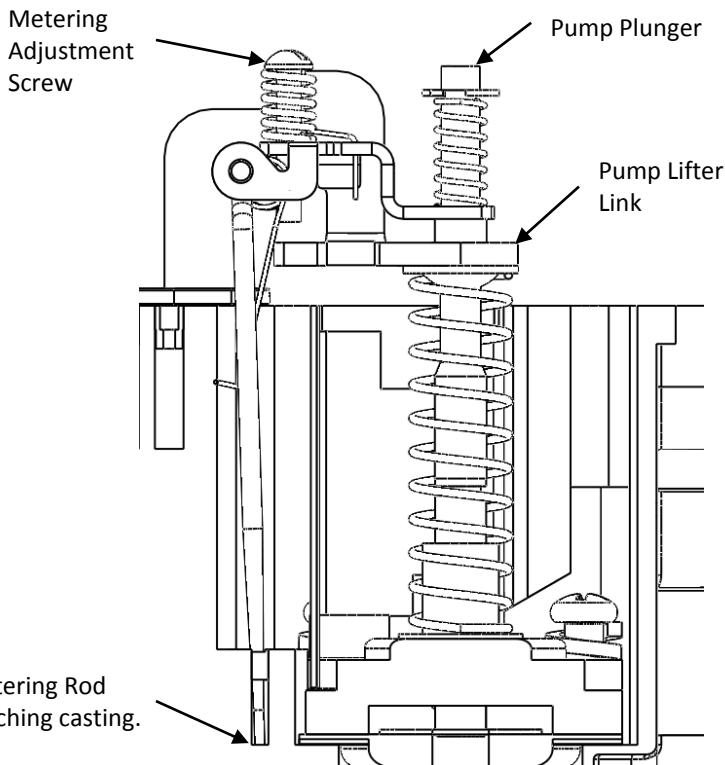


- 1) Turn the Air Horn Assembly upside down without gasket and allow the Float Hinge to touch the Needle Pin without compressing the spring. DO NOT exert pressure.
- 2) Bend the Float Hinge so the distance is equal to 0.98" as shown above.

Float Drop Adjustment



- 1) Hold the Air Horn Assembly horizontally in the upright position as shown above, without gasket and allow the float to hang free.
- 2) Bend the Float Tab so the distance is equal to 1.50" as shown above.



Metering Rod Assembly Adjustment Process

- 1) Back out Curb Idle Screw until Throttle Plate is fully closed.
- 2) Press down on the Pump Plunger all the way and hold.
- 3) Turn Metering Adjustment Screw counterclockwise until the Metering Rod just bottoms the casting (don't move anymore)
- 4) Turn the Metering Adjustment Screw clockwise until it contacts Pump Lifter Link, then in 1 additional turn.