Carburetor Adjustments

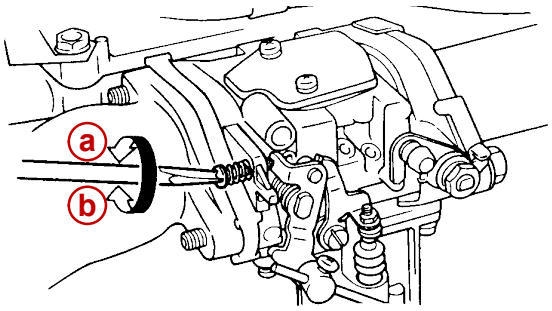
Idle Speed

NOTE: *Before adjusting the idle speed make sure the throttle link rod has been properly adjusted.*

1. Measure the idle speed using the procedure below, adjust if necessary:
   - Start engine and allow it to warm up.
   - Attach a tachometer to the spark plug lead of cylinder #1.
   - Measure idle rpm with outboard in neutral.
   - Turn throttle stop screw in direction A or B until the specified idle speed is obtained.

NOTE: *Turning throttle stop screw in (a) will increase idle speed while turning screw out (b) will decrease speed.*

Idle rpm (Out Of Gear)
950 ± 50 RPM

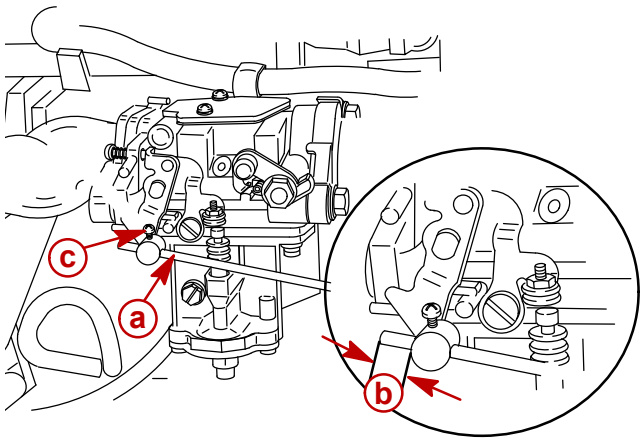


Linkage

REMOTE CONTROL MODELS

1. Connect throttle linkage and secure with screw.

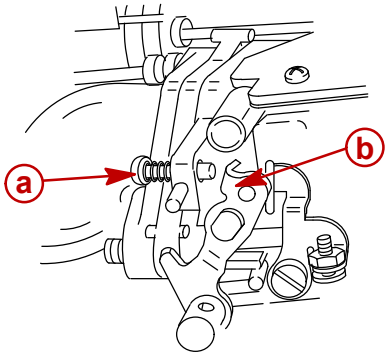
NOTE: *Linkage should extend 0.28 in. (7 mm) beyond barrel. Over-tightening screw may damage throttle linkage.*



a-Throttle Linkage
b-0.28 in. (7 mm) Length
c-Screw

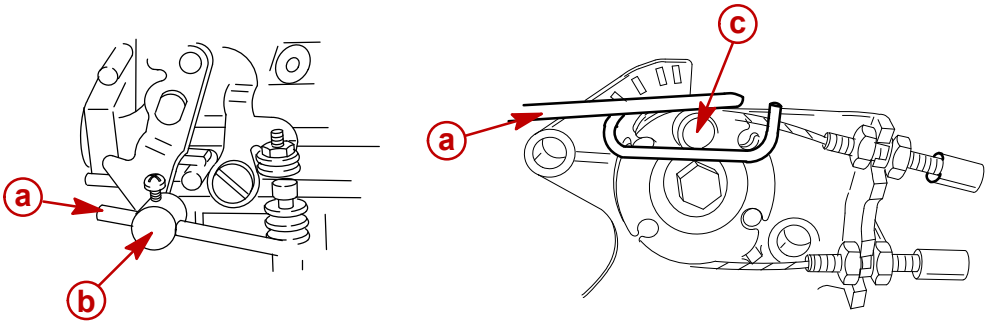
TILLER HANDLE MODELS (SIDE SHIFT SHOWN)

1. Turn idle speed screw counterclockwise until screw is not touching throttle shaft arm.



a-Idle Speed Screw
b-Throttle Shaft Arm

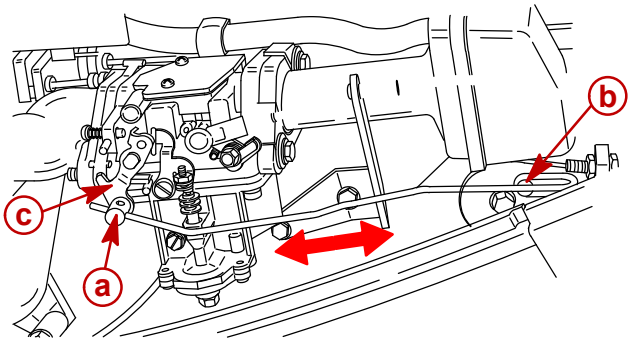
2. Install throttle linkage on pulley and throttle barrel.



a-Throttle Linkage
b-Throttle Barrel
c-Pulley

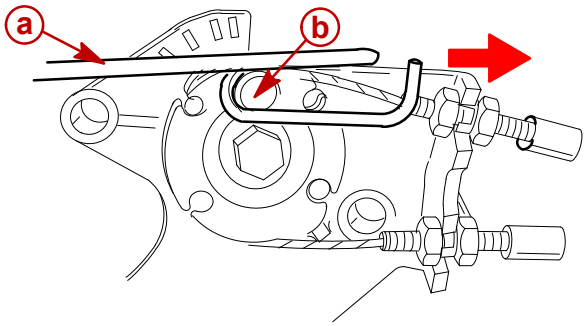
3. Check to make sure throttle linkage is has free movement between throttle barrel and pulley.

NOTE: *The throttle arm should remain stationary while checking for free movement of throttle linkage.*



a-Throttle Barrel
b-Pulley
c-Throttle Arm

4. Move throttle linkage forward until linkage comes to rest on the pulley boss.

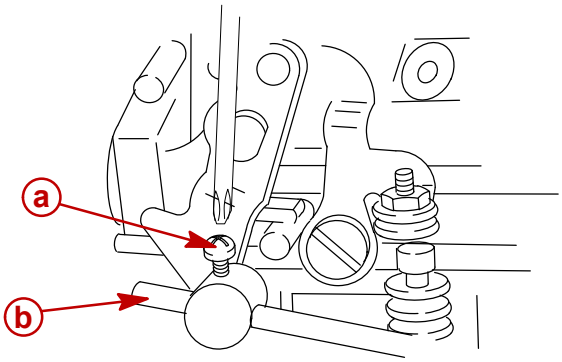


a-Throttle Linkage
b-Pulley Boss

5. Tighten screw on throttle barrel to secure linkage.

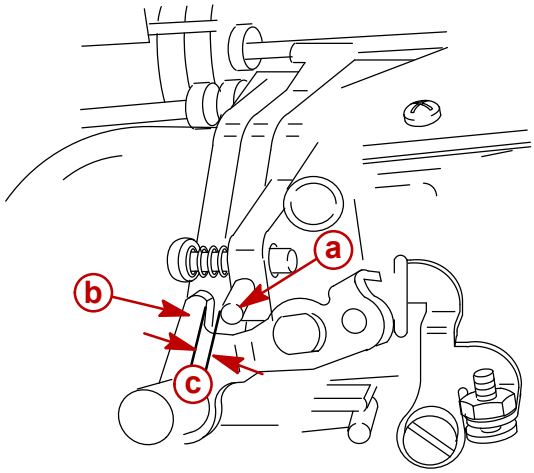
NOTE: *Over-tightening screw may damage throttle linkage.*

NOTE: *Check linkage for free movement on pulley. Verify throttle shaft arm in not sticking and returns to idle position.*



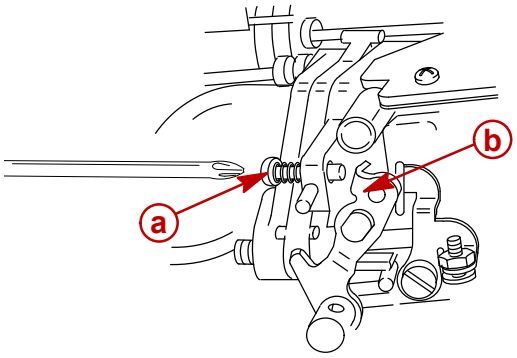
a-Screw
b-Linkage

6. Verify throttle arm does not hit the full throttle stop at wide open throttle. Gap between stop and throttle arm should be no more than 0.1 in. (2.54 mm).



a-Throttle Stop
b-Throttle Arm
c-Approximately 0.1 in. (2.54 mm) Gap

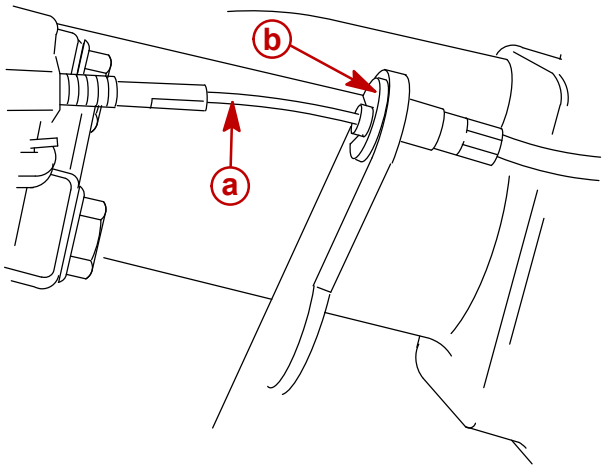
7. Turn idle speed screw in (clockwise) until it touches the throttle shaft arm, then turn an additional 1/2 turn for initial setting.



a-Idle Speed Screw
b-Throttle Shaft Arm

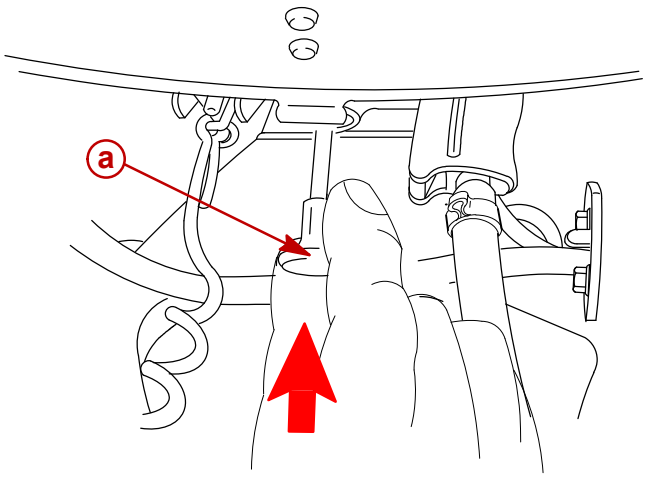
Choke

1. Route choke cable through cable bracket and install retaining ring.



a-Choke Cable
b-Retaining Ring

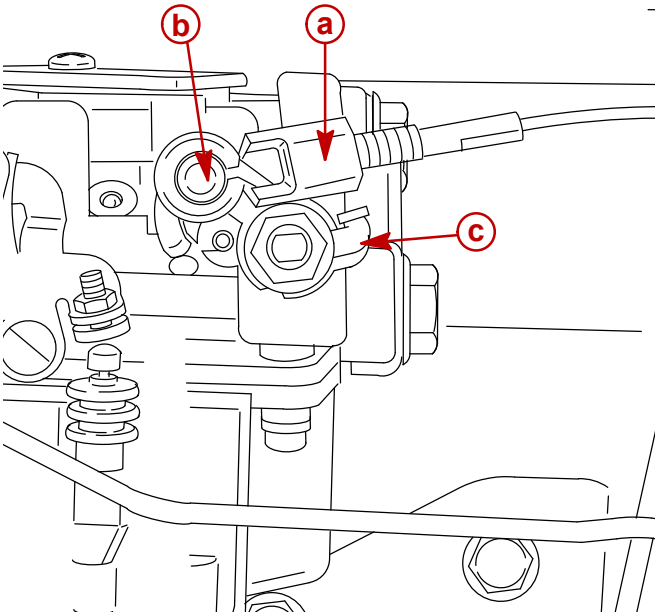
2. Set the choke cable to the off position (cable fully pushed in).



a-Choke Cable

3. Set choke shutter to the off position (shutter lever rotated fully counterclockwise).
4. Thread the ball socket end on shaft until ball socket aligns with ball on carburetor. Snap socket onto ball.

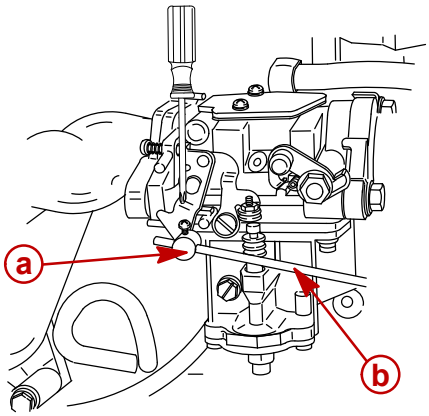
NOTE: *Verify choke goes to full choke with cable pulled out and returns to off position with cable pushed in.*



a-Threaded Ball Socket
b-Ball
c-Shutter Lever

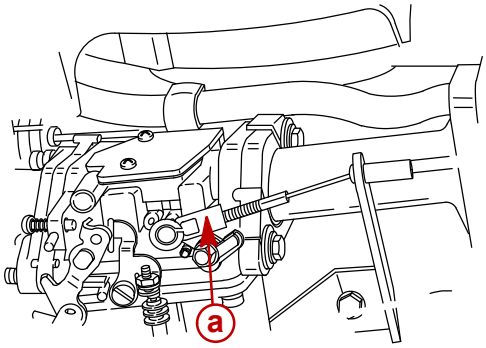
Carburetor Removal

1. Remove throttle linkage from carburetor barrel.



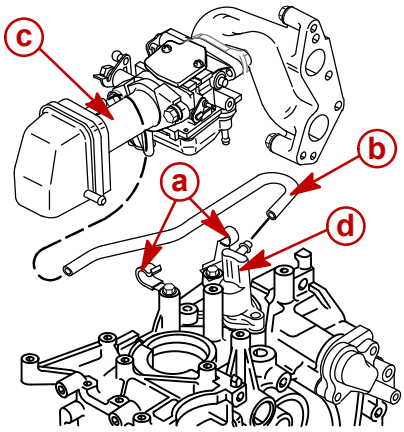
a-Barrel
b-Throttle Link

2. Remove choke linkage (tiller handle models only).



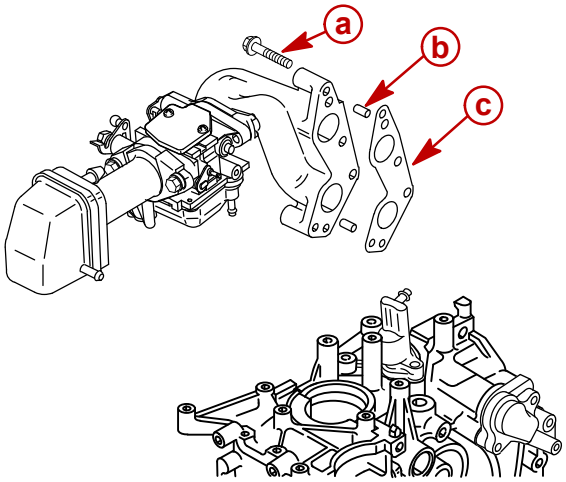
a-Choke Linkage

3. Remove j-clips.
4. Disconnect breather hose from air intake and breather cover.



a-J-Clips (2)
b-Breather Hose
c-Air Intake
d-Breather Cover

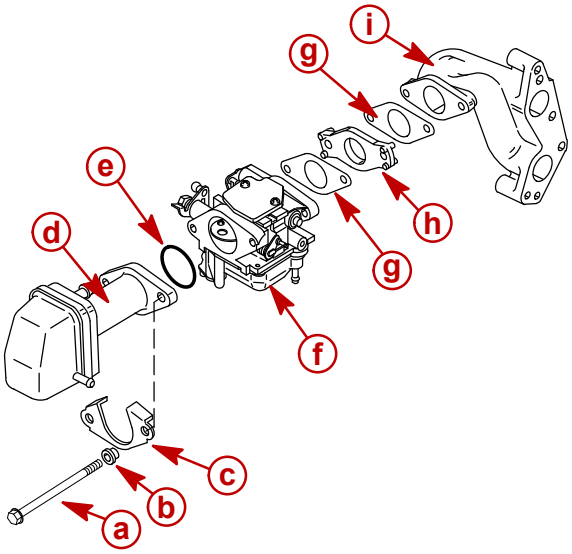
5. Remove bolts.
6. Separate intake/carburetor assembly from powerhead.



56601

a-Bolts M8x40 (4)
b-Dowel Pin (2)
c-Gasket-Manifold (Discard)

7. Remove air intake bolts.
8. Separate intake/manifold components from carburetor assembly.



56601

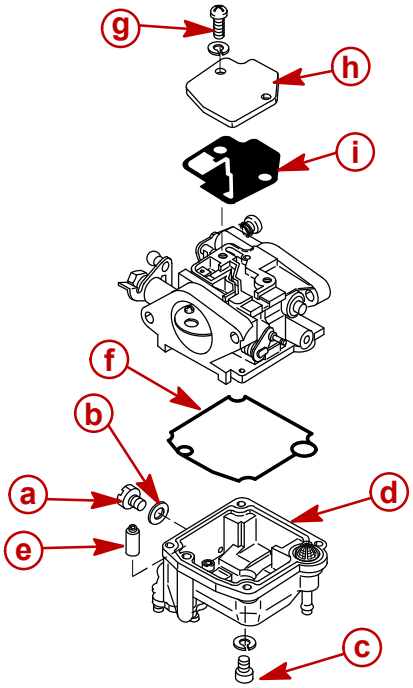
a-Bolts-Air Intake M6x76 (2)
b-Spacers (2)
c-Plate
d-Air Intake
e-O-Ring (Discard)
f-Carburetor Assembly
g-Gasket (2) (Discard)
h-Insulator
i-Manifold

Carburetor Disassembly

1. Remove drain screw.

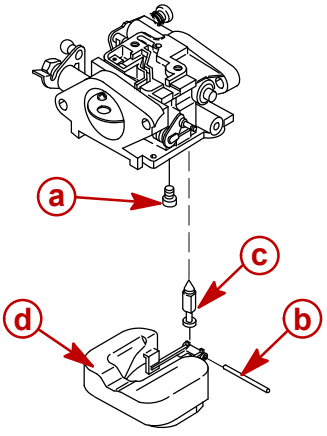
NOTE: *Use an acceptable container to hold gas when draining float bowl.*

2. Remove float bowl.
3. Remove cover.



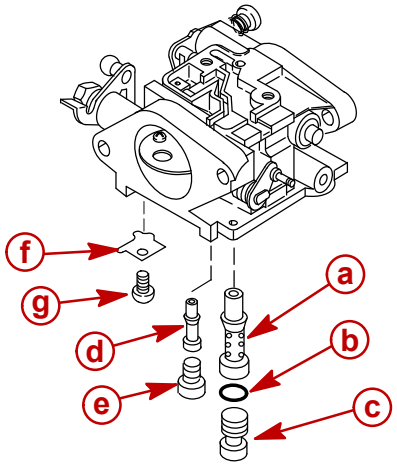
a-Drain Screw-M5x6
b-Gasket-Drain Screw
c-Screws (4)-M4x12
d-Float Bowl
e-Valve
f-Gasket-Float Bowl
g-Screw(2)-M4x10
h-Cover
i-Gasket

4. Remove float assembly.



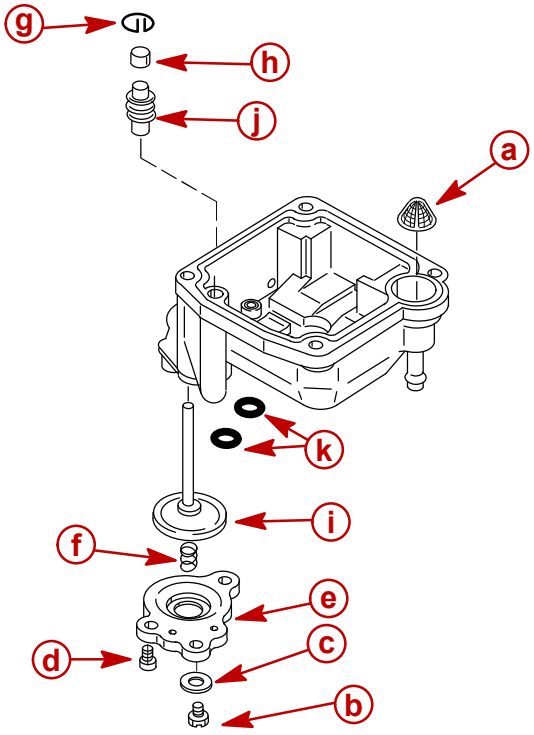
a-Screw-M4x5
b-Pin
c-Needle Valve
d-Float Assembly

5. Remove jets and nozzle.



a-Main Nozzle
b-O-Ring
c-Main Jet
d-Pilot Jet
e-Seal Cap
f-Plate
g-Screw-M3x5

6. Remove diaphragm and filter.

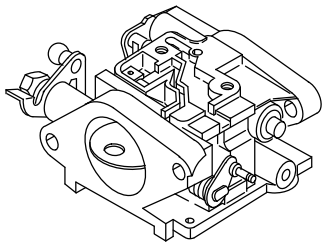


a-Filter
b-Screw-M4x5
c-Gasket-Drain Screw
d-Screws (3)-M4x8
e-Base
f-Spring
g-Ring
h-Cap
i-Diaphragm
j-Plunger
k-O-Rings (2)

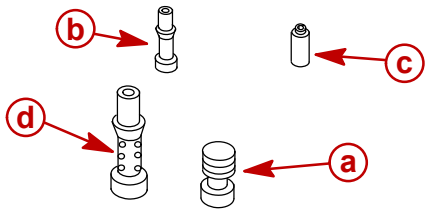
Cleaning/Inspection/Repair

1. Inspect carburetor body for cracks/damage/contamination. Replace/clean as necessary.

NOTE: *Use a petroleum based solvent for cleaning. Blow out all passages with compressed air, never use a wire.*



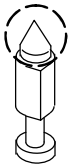
2. Inspect jets and nozzle for contamination. Replace if necessary.



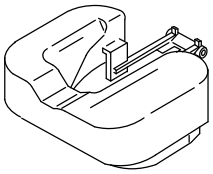
a-Main Jet
b-Pilot Jet
c-Valve
d-Main Nozzle

3. Inspect needle valve for wear. Replace if necessary.

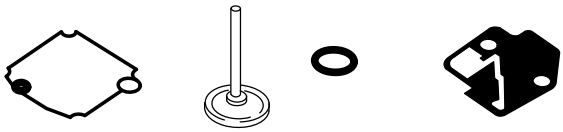
NOTE: *Check tip of needle valve for wear.*



4. Inspect float for cracks/damage. Replace if necessary.



5. Inspect diaphragm, o-rings and gaskets for damage. Replace if necessary.



6. Inspect filter for contamination/damage. Clean/replace if necessary.