

Advanced Service Information

A. Mercury 15 HP Timing/Synchronizing/Adjusting

B. Mercury 15 HP Propellers

A. MERCURY 15 HP TIMING/SYNCHRONIZING/ADJUSTING

Specifications

Horsepower	15
Propshaft Kilowatts	11.2
Piston Displacement	16.0 cu. in. (262cc)
Bore	2.375 in. (60.3mm)
Stroke	1.800 in. (45.7mm)
RPM Range at Full Throttle	5000–6000
Idle Speed RPM (In "Forward" Gear)	700–750
Maximum Timing (W.O.T.)	36° BTDC (3 Dots)
Idle Timing	6° BTDC (2 Dots)
Spark Plug	NGK <u>BP8 HS-15</u>
Spark Plug Gap	0.060 in. (1.5mm)

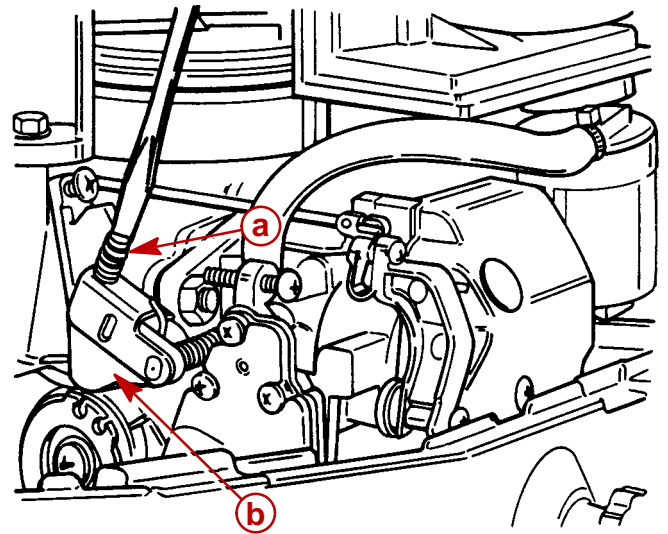
1. Place outboard in water.
2. Check tiller handle cable adjustment for full throttle movement in both "forward" and "reverse" gears. Adjust jam nuts for proper travel and to eliminate any slack.

APPROXIMATE INITIAL CARBURETOR ADJUSTMENTS

Idle Speed Screw

1. Shift outboard to "NEUTRAL" and place throttle twist grip to "SLOW".
2. Push primer/fast idle knob completely in and rotate knob fully counterclockwise.
3. Back idle speed screw (a) off of cam follower (b).

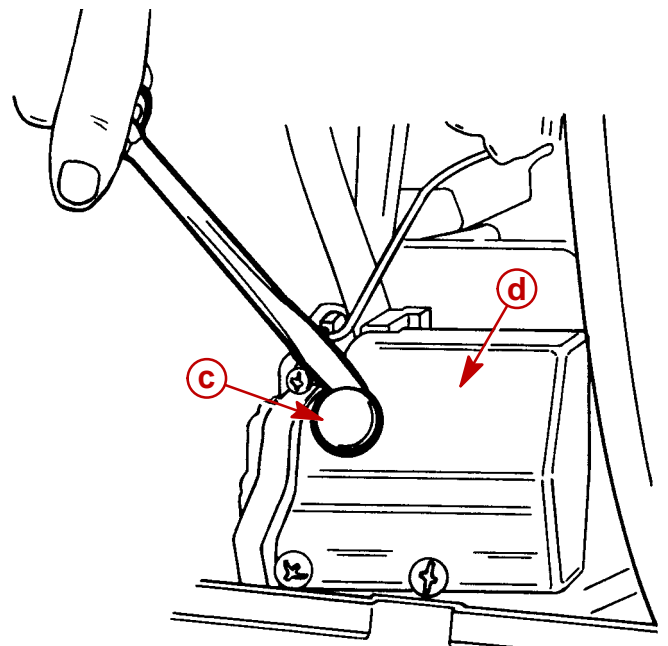
4. Turn idle speed screw inward (clockwise) until it "just touches" cam follower, then inward an additional 1/2 turn to slightly open throttle plate.



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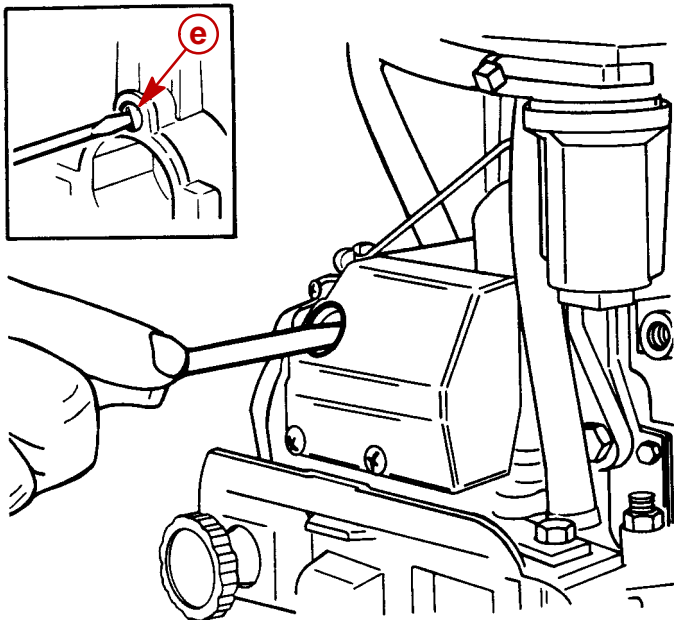
Low Speed Mixture Screw

1. Remove access plug (c) from carburetor air intake cover (d).



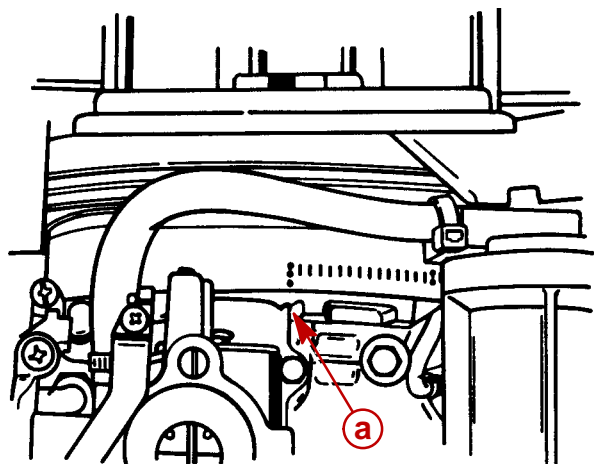
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- Turn low speed mixture screw (e) slowly inward (clockwise) until it seats lightly, then back screw out (counterclockwise) 1–1/2 turns (turning mixture screw in tight will damage needle and seat).
- Do not install access plug at this time.



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Timing Pointer Location

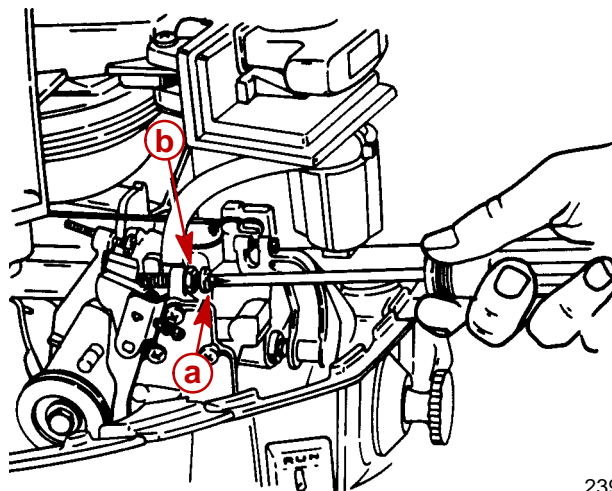


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a - Timing Pointer

Maximum Timing Adjustment

- Connect timing light (91–99379) to No. 1 (top) spark plug lead.
- With engine running in “Forward” gear, fully advance throttle to W.O.T. position.
- Adjust maximum spark advance screw (a) to align the 36° B.T.D.C. timing mark (3 Dots) on flywheel with timing pointer. Tighten jam nut (b) if so equipped.



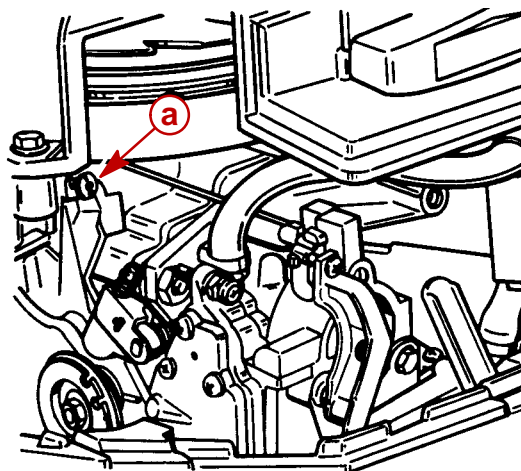
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Idle Timing Adjustment

- Push primer/fast idle knob completely in and rotate knob fully counterclockwise.
- With engine running in “Forward” gear, reduce engine speed to idle.

IMPORTANT: It may be necessary to adjust idle speed screw to obtain a reasonably stabilized idle.

- Adjust idle timing adjustment screw (a) to align the 6° B.T.D.C. timing mark (2 Dots) on flywheel with timing pointer.

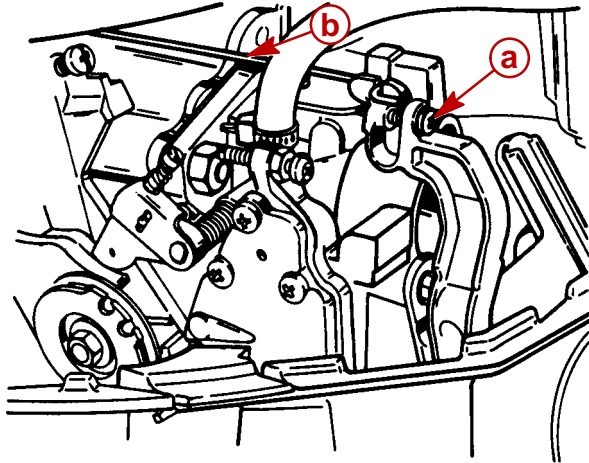


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- Shift to “Neutral” gear and stop engine.

Idle Wire Adjustment

1. Push primer/fast idle knob completely in and rotate knob fully counterclockwise.
2. Shift outboard to "Neutral".
3. Adjust screw (a) to remove all clearance between idle wire (b) and trigger.

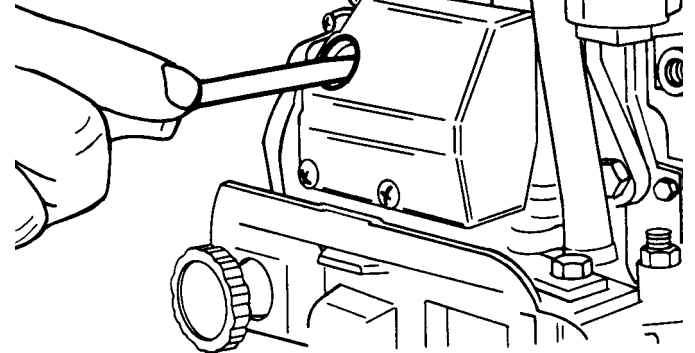
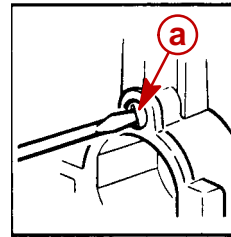


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Idle Adjustment

Low Speed Mixture Adjustment

1. Start engine and allow to warm up (run for several minutes). Throttle engine back to idle for about one minute to allow RPM to stabilize.
2. Push primer/fast idle knob completely in and rotate knob fully counterclockwise.
3. With engine running at idling speed while in forward gear, turn low speed mixture screw (a) counterclockwise until engine starts to "load up" or fire unevenly from over-rich mixture.

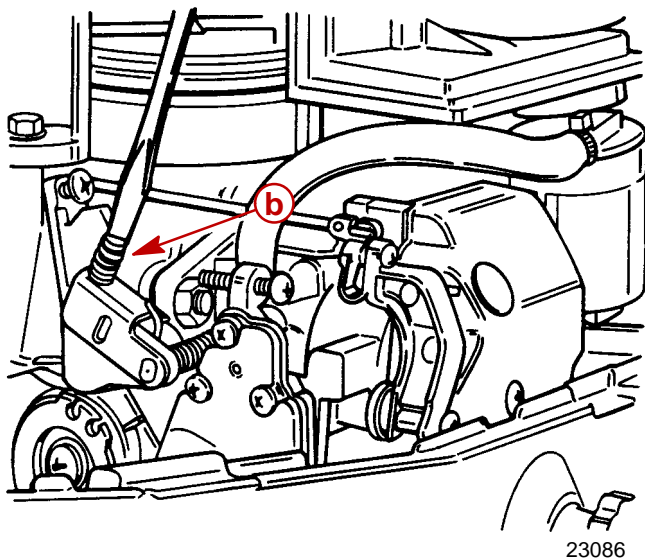


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4. Slowly turn low speed mixture screw clockwise until cylinders fire evenly and engine picks up speed.
5. Continue turning mixture screw clockwise until too lean a mixture is obtained and engine slows down and misfires.
6. Set low speed mixture screw halfway between rich and lean.
7. Do not adjust leaner than necessary to attain reasonably smooth idling. When in doubt, set mixture slightly rich rather than too lean.
8. Check for freedom from 4 cycling between idle and 2000 RPM (in forward gear).

Idle Speed Adjustment

1. With engine running at idle in forward gear, make sure primer/fast idle knob is pushed completely in and rotated fully counterclockwise to stop.
2. Adjust idle speed screw (b) to obtain an engine idle speed of 700–750 RPM.
3. Install access plug into opening in carburetor air intake cover.



B. MERCURY 15 HP PROPELLERS

The new Mercury 15 HP model has a new line of propellers.

Diameter	Pitch	No. of Blades	Material	Part Number
9"	10-1/2"	3	Alum.	48-17874A12*
9"	9"	3	Alum.	48-42522A12
9-1/4"	7"	3	Alum.	48-42520A12
9-3/4"	6-1/2"	3	Alum.	48-42524A12

* Standard with Engine

IMPORTANT: For fast–easy identification the pitch and A12 assembly number will be stamped on the propeller. This is necessary because the 15 HP propellers (A12) have a firmer rubber hub than the 6–8–9.9 (All) propellers. Other than this the propellers appear identical and could be inadvertently interchanged.