MERCURY OUTBOARDS **service bulletin**

NUMBER: 84-2

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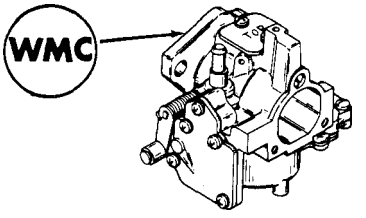
SUPPLEMENTARY SERVICE INFORMATION FOR MERCURY MODELS 18XD-25XD

MODELS WITH "WMC" TYPE CARBURETORS TIMING/SYNCHRONIZING/ADJUSTING

MODELS 18 THRU 25 WITH NUMBER "WMC- " STAMPED ON CARBURETOR FLANGE



	Models 18 and 20	Model 25
Full Throttle RPM Range	5000-5500	**5400-6000**
Idle RPM (in Forward Gear)	700-800	
Full Throttle Timing	25°/.141" (3.58mm) BTDC @ WOT (3 Dots on Flywheel)	
Throttle Pickup	2° ATDC (One Mark to the Right of Single Dot)	

STEP 1

1. Place engine in a test tank and connect fuel line.
2. Electric start model: Install shift and throttle cables and wiring harness.
3. Manual start model: Check cables from steering handle for any unnecessary slack. Remove slack from cables by adjusting jam nuts.
4. Properly adjust the carburetor low speed mixture screw. Refer to "Carburetor Adjustments" Section **3** of this Manual.

STEP 2

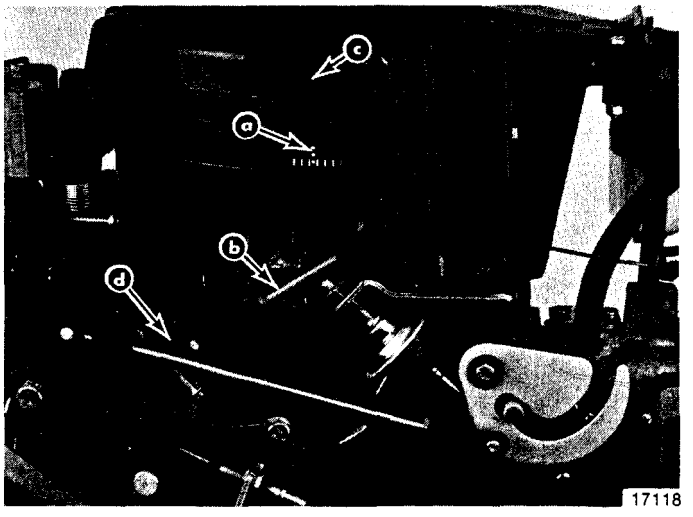
Full Throttle Timing Adjustment

1. Connect timing light to No.1 (top) spark plug lead.
2. Start engine and shift into forward gear. Advance engine speed to full throttle. The full throttle **(3** dot) timing mark on flywheel (a) should line up with timing pointer (c) at full throttle.

⚠WARNING

DO NOT try to remove, install or adjust the spark advance link rod while engine is running. Possible injury could result from making contact with flywheel.

3. If **3** dot timing mark does not line up with timing pointer (c), stop en ine Use a screwdriver to pry end of spark advance in rod (b) off of throttle lever (d), then adjust length of link rod. Lengthening link rod will advance the timing, (timing mark will move to the right); shortening link rod will retard the timing (timing mark will move to the left).



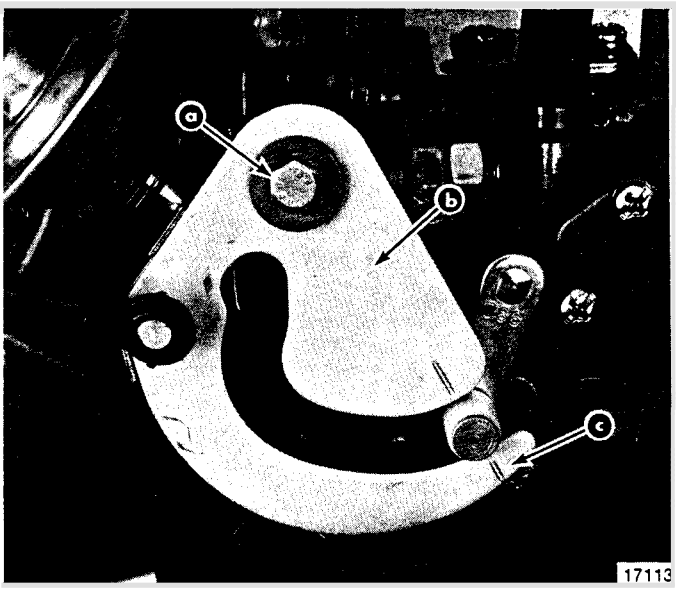
a - Full Throttle Timing Mark (3 **Dots)**
b - Spark Advance Link **Rod**
c -Timing Pointer
d - Throttle Lever

STEP 3

Carburetor Throttle Cam Adjustment

1. With engine stopped, use your hand and move the throttle cam to check cam adjustment. The bottom line on the cam should just be able to touch the throttle roller.

2. If cam adjustment is required, loosen hex bolt and reposition the throttle cam. The throttle cam bushing has an elongated slot which enables the cam to be moved forward and backward. Retighten hex nut.



a - Hex Bolt
b - Throttle Cam
c - Loosen Hex Bolt and Adjust Cam So That Straight Line Just Touches Roller

STEP 4

Throttle Pickup Timing Adjustment

IMPORTANT: The throttle cam must be correctly adjusted, see STEP 3 before checking throttle pickup.

1. Connect timing light to engine.

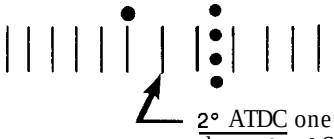
2. With engine running, advance throttle lever (a) until the (2° ATDC) timing mark on flywheel (b) lines up with timing pointer (c). At this point the straight line (d) on the throttle cam should be touching the throttle roller as shown.

3. If throttle pickupadjustment is required, adjust the length of the throttle link rod (e). (Use a screwdriver to pry link rod off of throttle lever anchor ball.)

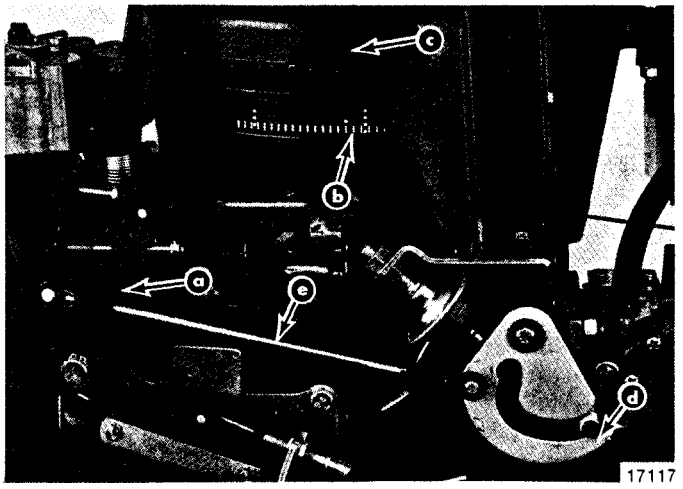
⚠CAUTION

DO NOT pry throttle link rod (e) off from the throttle cam end. The throttle cam may get damaged.

TIMING MARKS



2° ATDC one Mark to the Right of Single Dot

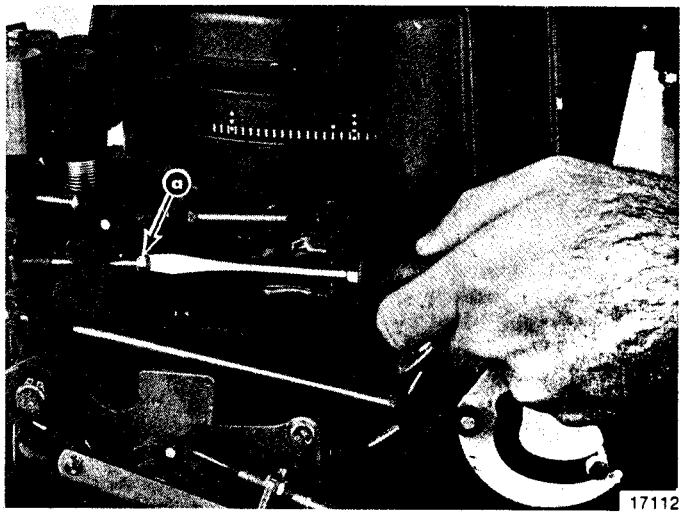


STEP 5

Idle Speed Adjustment

1. Adjust idle speed adjustment screw **(a)** to obtain 700-800 RPM in "Forward Gear".

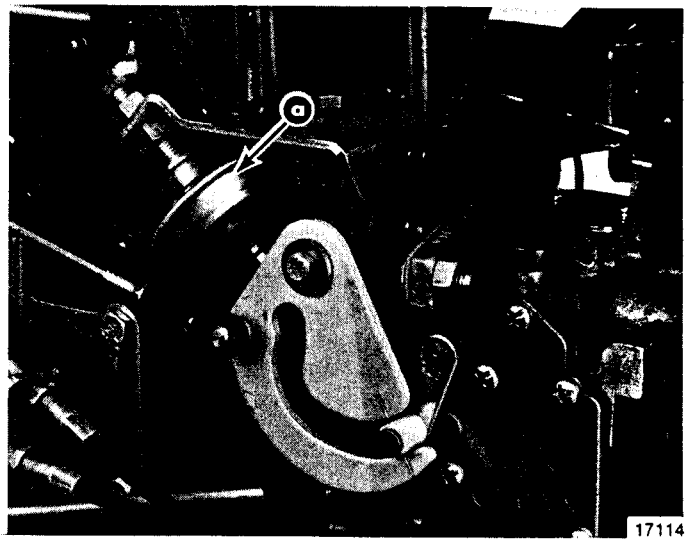
2. Recheck idle mixture adjustment for freedom from **4-** cycling between idle and 2000 RPM.



STEP 6

Dashpot Adjustment

Adjust dashpot (a) so that stem of dashpot is fully depressed when engine is idling at specified idle RPM.



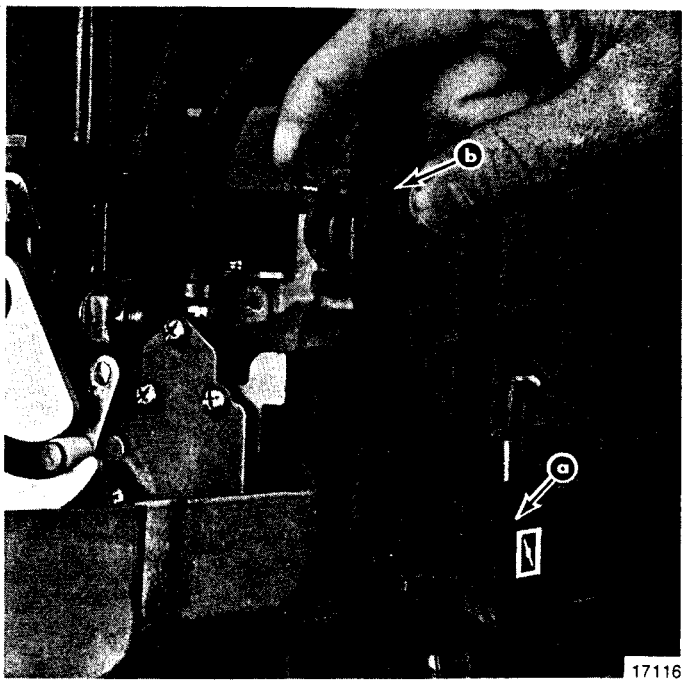
STEP 7

Neutral RPM Adjustment

1. Start engine.

2. With engine in Neutral position primer knob (a) in the middle detent position.

3. Adjust ratchet (b) to obtain 1400 to 1700 RPM.



STEP 8

Starter Interlock Adjustment

1. Stop engine. Pull Primer Enrichner Knob to the full out position.

2. Adjust interlock screw (a) so interlock lever (b) clears ratchet on starter sheave. Pull starter cord to assure engine can be manually started.