ELECTRICAL

Section 2C – Timing, Synchronizing & Adjusting

Table of Contents

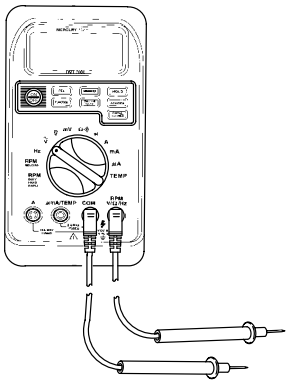
2C

Specifications

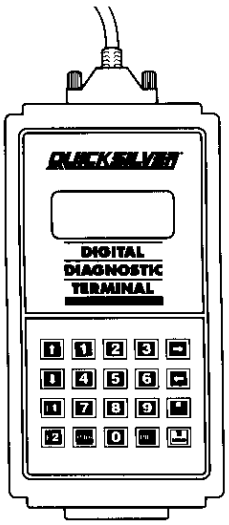
IGNITION SYSTEM	**Type**	Digital Inductive
	Spark Plug Type	NGK BPZ8HS-10
	Spark Plug Gap	0.040 in. (1.0 mm)
	Maximum Timing	Not Adjustable; Controlled by ECM
	Idle Timing	Not Adjustable; Controlled by ECM
	Throttle Position Sensor	
	@ Idle	0.19 – 1.0 VDC
	@ WOT	3.45 – 4.63 VDC
	Crank Position Sensor	Not Adjustable
	Firing Order	1-2-3-4-5-6

Special Tools

1. DMT 2000 Digital Tachometer Multi-meter P/N 91-854009A1



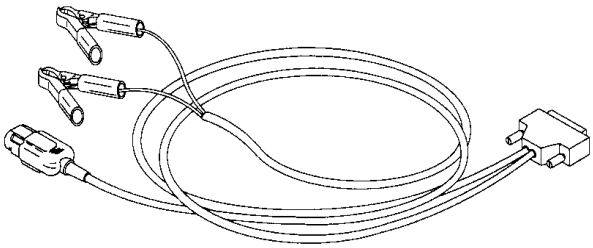
2. Digital Diagnostic Tool (DDT) 91-823686A2



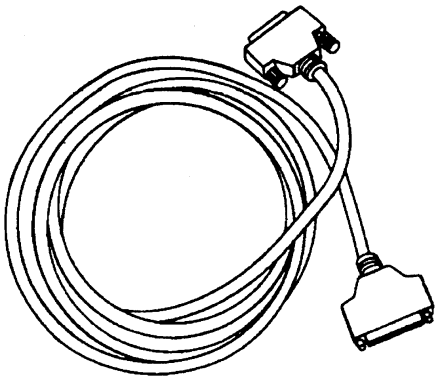
3. Software Cartridge 91-880118

4. DDT Reference Manual 90-881204 (2001 Model Year)

5. ECM Harness 84-822560A5



6. Extension Cable [10 ft. (3.05m)] 84-825003A1

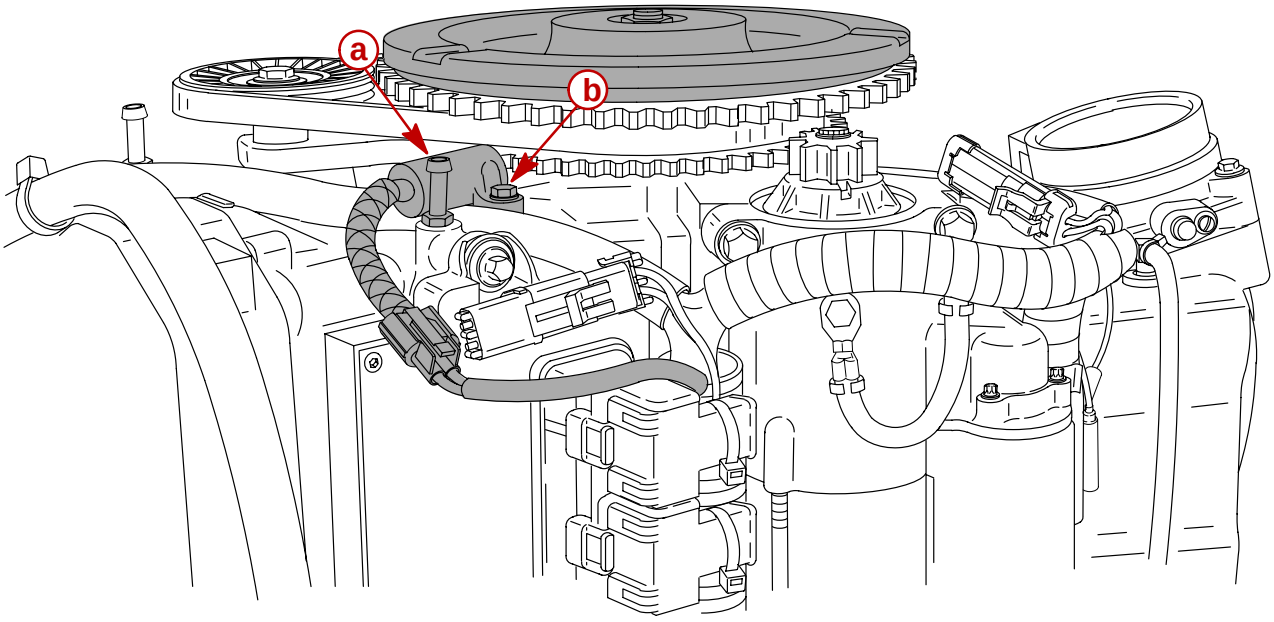


Crank Position Sensor

1. Remove flywheel cover.

IMPORTANT: Crank Position Sensor air gap (between flywheel tooth and sensor) is not adjustable. Visually inspect sensor for damage from foreign debris. Replace sensor as required.

2. Reinstall flywheel cover.



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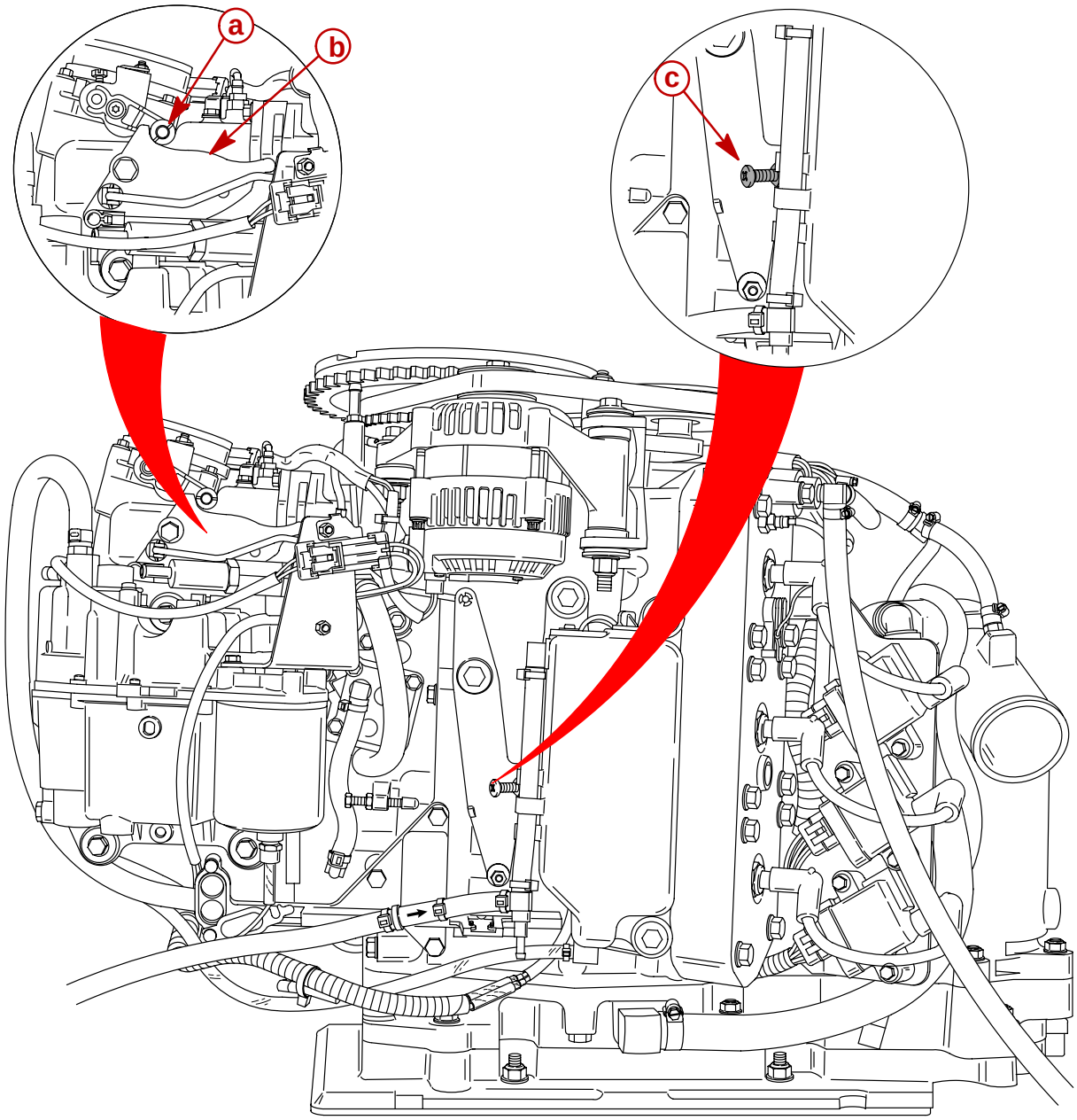
a - Crank Position Sensor
b - Bracket Screw – Torque to 45 lb. in. (5.0 Nm)

Throttle Cam Adjustment

1. Adjust idle stop screw on throttle arm to align cam roller in the pocket of the throttle cam.
2. Tighten idle stop screw to provide clearance of 0.005 in. ±0.005 in. (0.127 mm ± 0.127 mm) between roller and cam.



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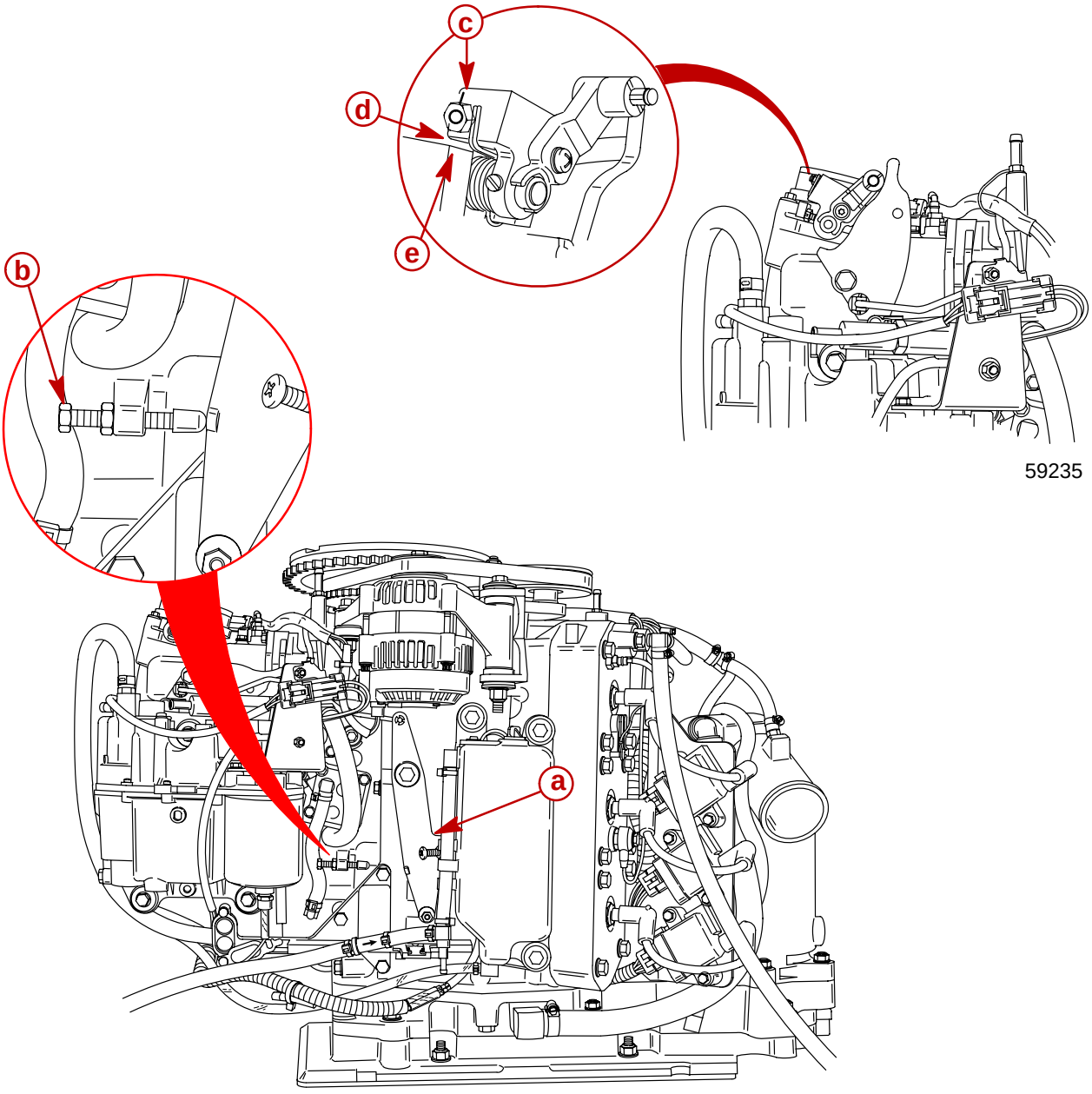
a - Roller
b - Throttle Cam
c - Idle Stop Screw

Maximum Throttle

1. Hold throttle arm against full throttle stop.
2. Adjust full throttle stop screw (located behind electric fuel pump) to allow full throttle valve opening while maintaining a 0.020 in. (0.508 mm) clearance between arm of throttle shaft and stop on attenuator box.
3. Tighten jam nut on full throttle stop screw.
4. Check for free play (roller lifts from cam) between roller and cam at full throttle to prevent linkage from binding. Readjust full throttle stop screw, if necessary.



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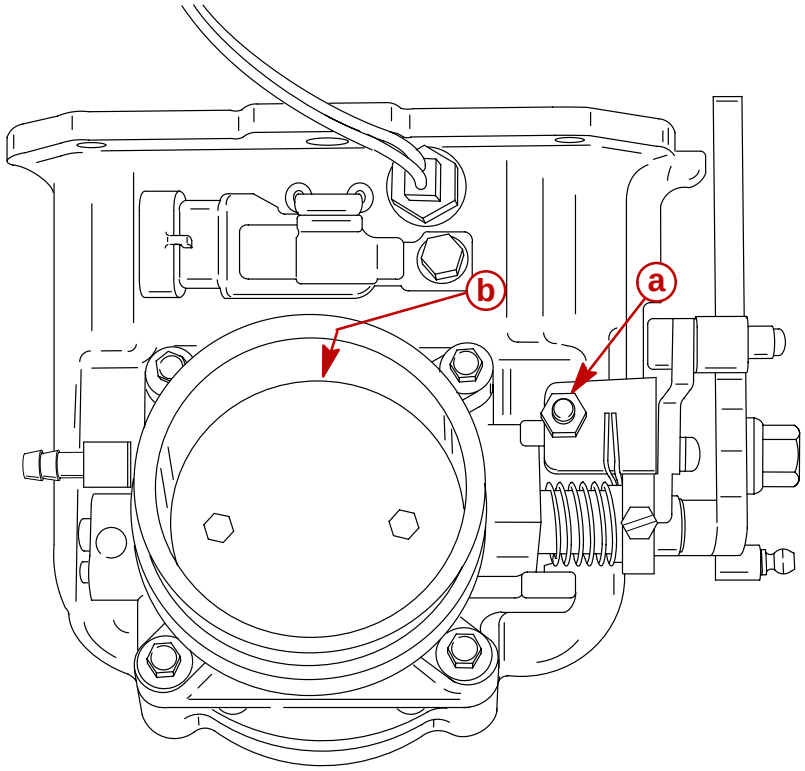
a - Throttle Arm
b - Full Throttle Stop Screw
c - Throttle Shaft Arm
d - 0.020 in. (0.508 mm) Clearance
e - Stop on Attenuator Box

Throttle Plate Screw

IMPORTANT: DO NOT adjust throttle plate stop screw from factory setting. However, should the throttle plate require adjustment, use the throttle plate stop screw to set the throttle plate clearance @ 0.029 in. (0.7366 mm) using a #69 drill.



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a - Throttle Plate Stop Screw
b - Throttle Plate Clearance

Throttle Position Sensor (TPS) Adjustment

The Throttle Position Sensor is not adjustable. TPS settings can be monitored with the Digital Diagnostic Terminal through the ECM. If TPS settings are not within specifications, refer to Section 2A.

Idle Speed

Engine idle speed is not adjustable. The parameters affecting idle speed can be checked and monitored by the DDT. Refer to the DDT Reference Manual for complete details.