## THROTTLE POSITION SENSOR (TPS)

## Inspection

- 1. Disconnect battery negative cable at battery.
- 2. Disconnect TPS coupler.
- Using ohmmeter, check resistance between each terminals under each condition given in below table.

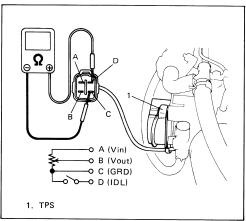


Fig. 6E-121 Checking TPS

TERMINALS	CONDITION	RESISTANCE
Between C and D terminals (Idle switch)	When throttle lever-to-stop screw clearance is 0.3 mm (0.012 in.)	0 — 500 Ω
	When throttle lever-to-stop screw clearance is 0.9 mm (0.035 in.)	∞
Between C and A terminals		$3.5-6.5~\mathrm{k}\Omega$
Between C and B terminals	Throttle valve is at idle position	0 – 500 Ω
	Throttle valve is fully opened	$3.5-6.5~\mathrm{k}\Omega$

If idle switch check result is not satisfactory, adjust installation angle of TPS and if found defective in the other check, replace TPS.

- 4. Connect TPS coupler securely.
- 5. Connect battery negative cable.

## Adjustment

- Disconnect battery negative cable and disconnect TPS coupler.
- 2. Loosen TPS screws.
- 3. Insert 0.65 mm (0.025 in) thickness gauge between throttle stop screw and throttle lever.

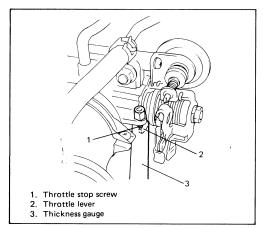


Fig. 6E-122 Inserting Thickness Gauge

- Connect ohmmeter between C and D terminals.
- 5. First, turn TPS clockwise fully and then counterclockwise gradually to find position where ohmmeter reading changes from 0 (Zero, continuity) to  $\infty$  (no continuity).

Then fix TPS at that position by tightening screws to specified torque.

Tightening torque of TPS screw	N∙m	kg-m	lb-ft
	3.5	0.35	2.5

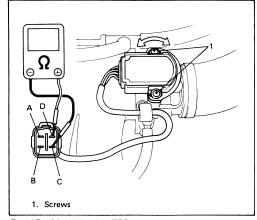


Fig. 6E-123 Adjusting TPS

- Check that there is no continuity between terminals C and D when 0.9 mm (0.035 in) thickness gauge is inserted.
- 7. Check that there is continuity between terminals C and D when 0.3 mm (0.012 in) thickness gauge is inserted.

If check result is unsatisfactory in steps 6 and 7, it means that installation angle of TPS is not adjusted properly. Therefore, start all over again from step 1.

## **CAUTION:**

As throttle stop screw is factory adjusted precisely, don't remove or adjust it.

8. Connect coupler to TPS securely and connect battery negative cable.