

FD RX-7 THROTTLE BODY Adjustments

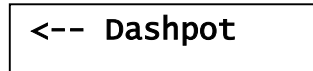
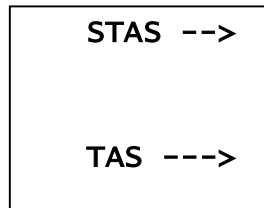
Notes by Xavier Borg

Accelerator cable adjustment, page F-80.



Make sure the cable still has a small slack when engine is warmed up

TAS adjustment



STAS: do not touch

TAS:

With engine warmed up, loosen the TAS lock nut, and turn the TAS CCW until it is no longer touching the lever. Then turn clockwise $\frac{1}{4}$ turn until it just touches. This should be just enough from stopping the throttle plates from slamming hard when closed.

Dashpot:

Make sure the dashpot is adjusted properly & not over-engaged which would hold the throttle plates slightly open.

Fast Idle Cam, wax rod, adjustment screw

Hot Wax Rod -->
protruding down with
the adjusting screw
for the **Fast Idle**
Cam touching it.



<-- TPS
Connector

The Hot Wax rod will be holding the throttle plates slightly open when engine is cold. To calibrate TPS, engine should be warm so that this will not interfere with the fully closed throttle position.

To calibrate TPS with engine cold:

Place a spacer between the top of the fast idle cam adjust screw and the wax rod which it touches. The spacer has to be thick enough to disengage the cam so it doesn't open the throttle. If you press down on the lever when the engine is cold, the throttle will close a little.

TPS/throttle position sensor

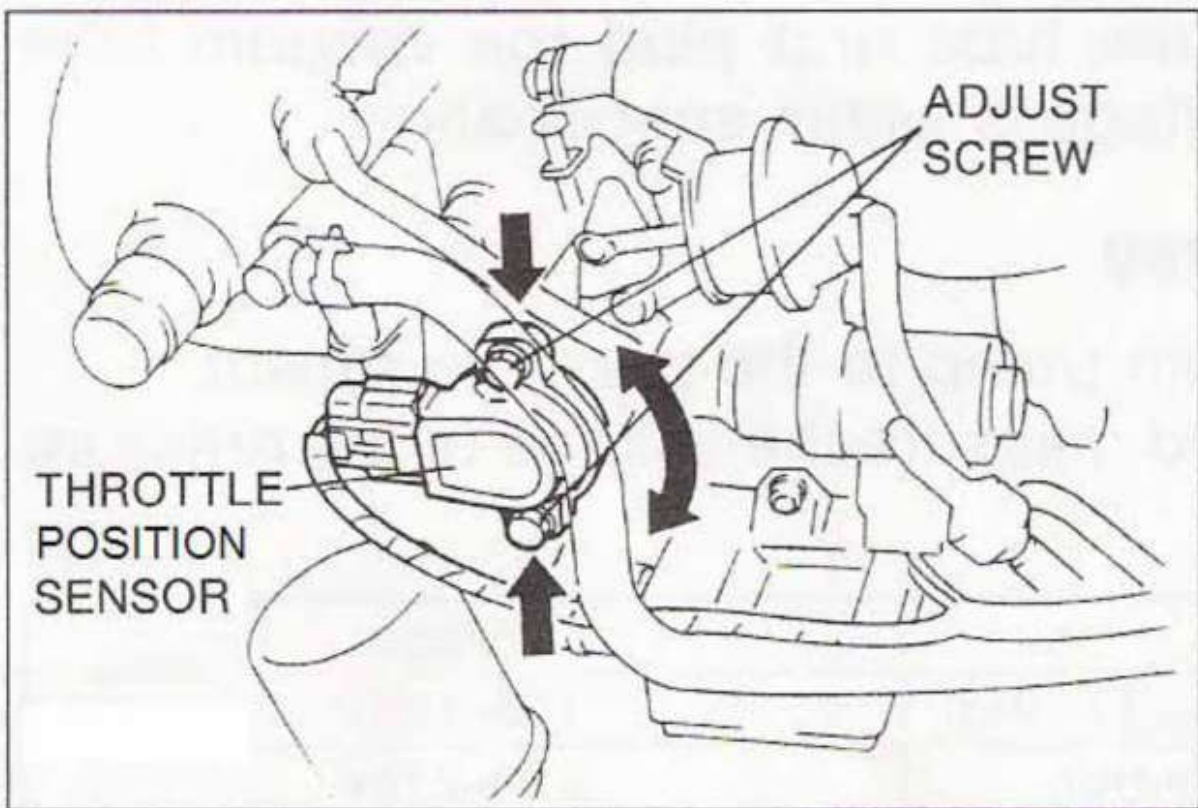
With engine fully warmed up:

Use the PFC Commander or PFC Connect to check the TPS voltages.

With Commander, got to ETC. MENU - Sensor/SW Check screen. Look at the VTA1 (TPS1) and VTA2 (TPS2) values.

With PFC Connect, go to Realtime Monitor screen

Note both voltages at closed and open throttle positions.



Picture from Mazda Factory Service Manual (FSM)

Ideal values for PFC:

TPSV1 (VTA1): closed 0.30 to 0.40. open 4.2 to 4.6.

TPSV2 (VTA2): closed 0.75 to 1.25. open 4.8 to 5.0.