

# Tat's a fact

problem solving

**NISXT02112**  
**NISSAN**  
**X-TRAIL**  
**2002**  
**4 cylinders**



## Fault description

Due to sensor 2 not working correctly at certain throttle positions, the ECU picked up the low voltage as compared to

sensor 1.

When the malfunction is detected, the ECU enters fail-safe mode and the MIL lights up.

## Fault solution

Fit new accelerator pedal position sensor,  
**Part number 1800-8H706**  
 Lever complete-accel

### Re-learn procedure

- Accelerator pedal in rest position
- Switch ignition switch on for at least 3 seconds
- Switch ignition switch off for at least 10 seconds
- Switch ignition switch on for at least 3 seconds
- Switch ignition switch off for at least 10 seconds
- Released position re-learned

Clear all fault codes and road test.

## Recommended time

Labour time was 4 hours, taking into account research time, location of parts and actual time spent fixing the problem

## Customer complaint

Vehicle lost power while driving. Vehicle was towed in.

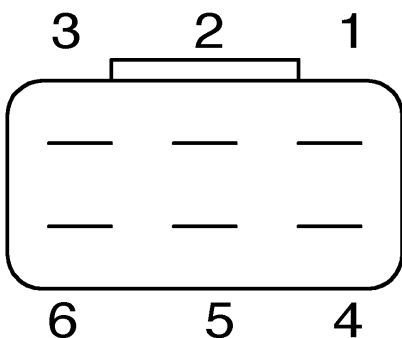
## Problem summary

Vehicle will start and idle, but as accelerator is applied, the vehicle stalls. Will restart again and idle.

## Diagnostic sequence

- 1) General inspection of engine components, especially the air intake pipes and vacuum hoses around inlet manifold.
- 2) Extract codes, codes P2127, indicating throttle pedal position sensor #2 voltage low.
- 3) Hook up oscilloscope to pins of throttle position sensor and test outputs.

Pins 1,2 and 4 are for sensor 2 and pins 3, 5 and 6 are for sensor 1.  
 The 5 volt reference pins are 6 and 4.  
 Ground signal are 1 and 3.  
 Throttle pedal position signal are from pins 2 and 5.  
 View is into TPS



- 4) After checking with an oscilloscope, it was found that the signal from sensor two was faulty.

