

TaT's a fact

problem solving

TOYCA96413
TOYOTA CAMRY

3-1996
3VZ-FE 4 cylinder



Customer complaint

Vehicle started and then stalled, won't restart.

Problem summary

Vehicle towed in. Confirmed vehicle won't start. Engine cranks over, no sign of engine firing.

Diagnostic sequence

Test battery earths and power connections.

Test for ignition spark at plugs and fuel injection pulse at injectors using a spark tester and oscilloscope [1] or injector noid light.

Injector pulse good but no spark [2]

Test for primary pattern at ignition coil with oscilloscope [3] - LED test light if scope not available.

test with spark tester - good spark.

Remove distributor cap and remove rotor button. Inspect both cap and rotor [4]. Notice bad burn mark on rotor near distributor shaft mounting [5]

Fault description

After finding that the rotor button had failed, it is important to inspect and test ignition leads, spark plugs and check on the service history of the vehicle. In most cases it will be that the vehicle has not been regularly serviced.

This causes the coil to have to produce increased voltage to ignite the spark plugs and over time the spark will find a easier path in this case through the rotor button.

Fault solution

Replacement of rotor button will enable the vehicle to start and run.

The vehicle in this case also required major servicing to ensure the fault did not occur again.

Recommended time

Labour time was 2 hours, taking into account research time, location of parts and actual time spent fixing the problem

Tips for TaT

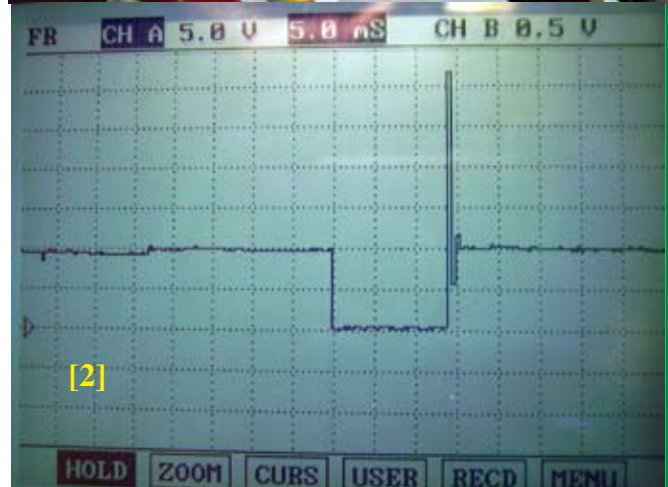
This vehicle repair highlights the need for good diagnostic sequences.

The advice this client had received in regard to the fault in their vehicle, ranged from ECU, fuel

pump, distributor and even timing belt.



[1]



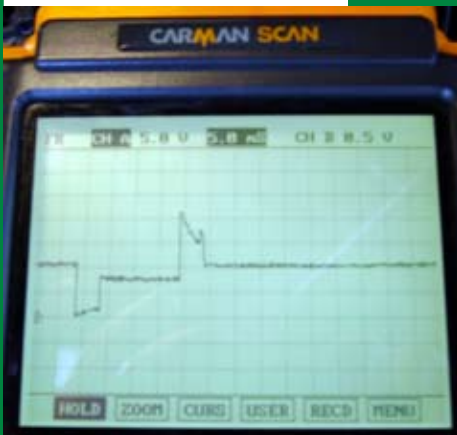
[2]



[4]



[5]



Good primary pattern. Remove coil high tension lead from distributor and

[3]