

Engine Hard Starting – DiagnosisMODEL 1997 MY-ON
XK8 RangeVIN
001001-ON**Issue:**

This bulletin provides a diagnosis procedure to follow in case of a customer complaint of poor or hard starting.

To assist in a methodical diagnosis, this bulletin includes an Engine Start Report Form which should be copied and filled out.

Action:

Make a copy of the Engine Start Report Form at the back of this bulletin. Fill in the details of the occurrence on the copy and fax it to the Product Investigation Dept at (201-818-9763). There are four areas which should be checked when a starting problem is encountered and they are listed below in order of possibility.

- Tank Pressure Control Valve, (TPCV), known as a ‘Rochester Valve’.
- Spark Plugs
- On 1998 MY-ON vehicles, the Key Transponder Module, (KTM).
- Transmission Rotary Switch/Harness

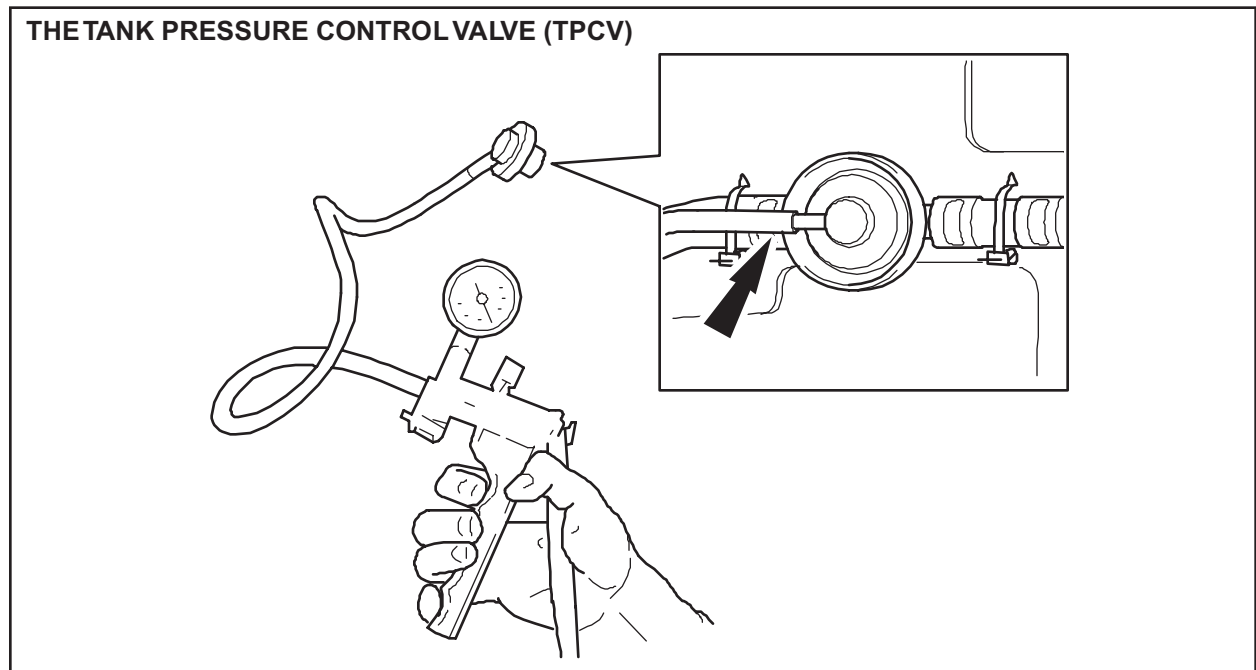


ILLUSTRATION 1

TANK PRESSURE CONTROL VALVE, (TPCV)

Connect a hand vacuum tester to the TPCV vacuum port, as shown in Illustration 1 and follow the flow chart below.

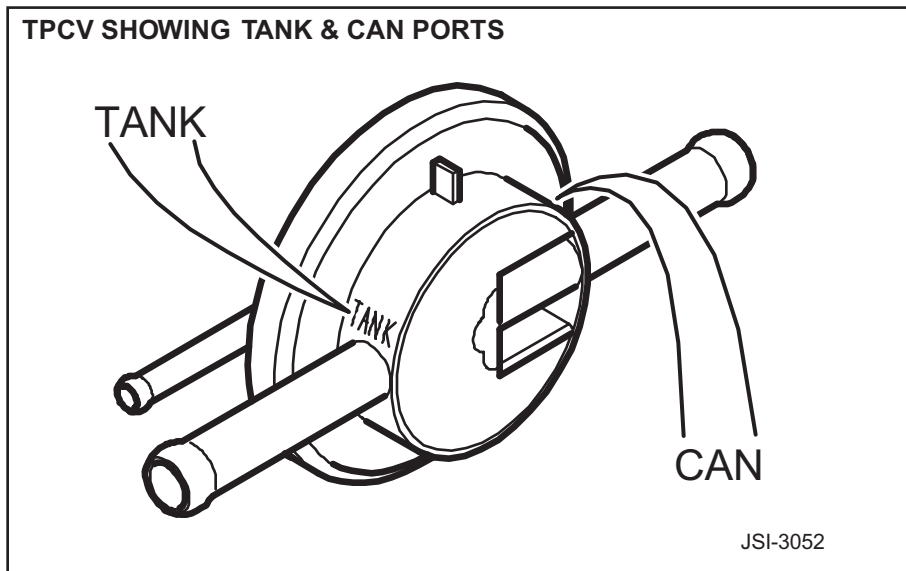
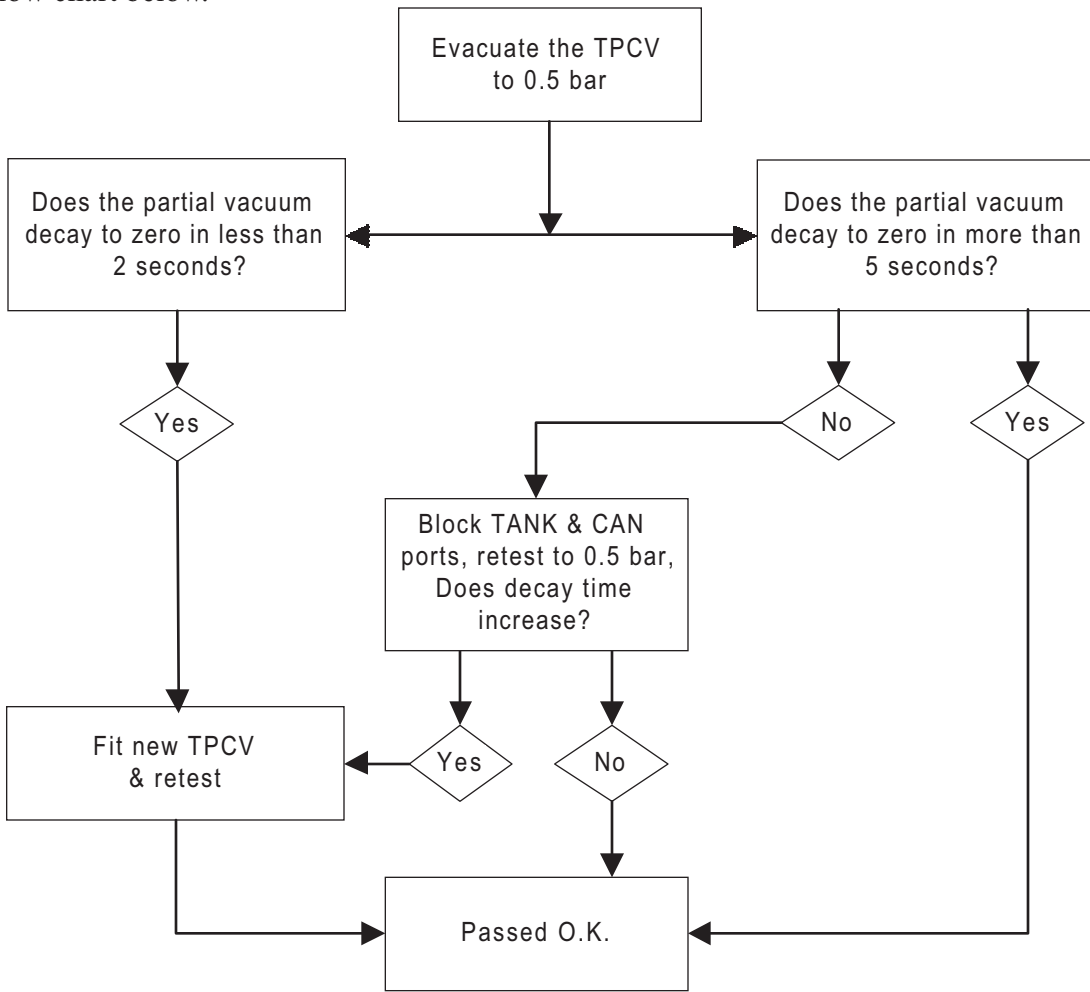


ILLUSTRATION 2

SPARK PLUGS

If the engine failed to start, check the spark plugs for carbon buildup. If carbon buildup is found, the spark plugs must be changed. Set the spark plug to a revised gap of 1.3 mm (0.051 in). Check the throttle linkage to ensure that wide open throttle is possible.

KEY TRANSPONDER MODULE (KTM) 1998 MY-ON

- If the engine failed to start, the exact conditions of the start procedure **must** be reproduced before the KTM is replaced.
- A failure to start due to a KTM problem occurs when the ignition key is turned quickly through position I & II to then operate the starter motor to turn the crank, without waiting for the instrument panel warning lights to light up.
- The starter motor will turn the crank normally without the ignition firing.
- If the key is then released and turned again, as described above, then the engine will fire and run normally.
- If the faulty start procedure can be reproduced, the KTM should be replaced by latest version KTM, Part Number LNC 2665AA.
- The keys must be reprogrammed to match the replacement KTM.

TRANSMISSION ROTARY SWITCH/HARNESS

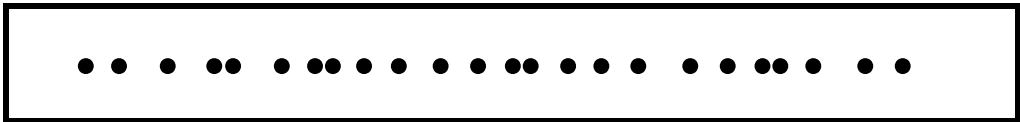
If an engine can be turned by the starter motor, but fails to start and the gearchange 'J gate' is not illuminated, the fault could be in the rotary switch harness. This fault can be intermittent or continuous.

DTC P0706 will be stored and DTCs P1516 and P1517 may be stored.

The cause of this fault is the entry of water into either the rotary switch or the rotary switch harness connector, either of which will require the replacement of the rotary switch and harness.

Warranty Information:

This bulletin is issued to assist in diagnosis only. Refer to the Warranty Codes and Repair Operation Times manual for fault codes and labor times.



MODEL	CUSTOMER	VIN	MILES/KMS
DEALER NUMBER		CUSTOMER DETAILS & COMMENTS	
DESCRIPTION OF COMPLAINT			
DATE		LOCATION	
WEATHER CONDITIONS		CRANK TIME , OVER 3 SECS BUT RAN CLEAN AFTER START?	
WAS START QUALITY POOR ROUGH?		DID IT FAIL TO START?	
DETAILS OF START			
HOW LONG SINCE ENGINE LAST RAN?		ENGINE TEMP: COLD? PART WARM? HOT?	
KEY THROUGH TO START POSITION OR PAUSE AT IGNITION-ON POSITION?		DID IT FIRE?	
HOW LONG TO FIRST FIRING?		WAS IT A CLEAN START?	
HOW MANY ATTEMPTS?		HOW LONG CRANKING?	
WAS CRANK SPEED UNUSUALLY FAST?		THROTTLE ASSIST? HOW MUCH? %	
BLACK SMOKE?		FUEL SMELL?	
PREVIOUS JOURNEY PRIOR TO PRESENT DIAGNOSIS			
FROM COLD?		DISTANCE/TIME?	
WARNING LIGHTS?		TYPE OF JOURNEY?	
FUELLING DETAILS			
LEVEL DURING EVENT?		LAST FILLED? TYPE OF FUEL	
LEVEL BEFORE FILLING?		LEVEL AFTER FILLING	

Fax a copy of this form to Jaguar Cars, Product Investigation Dept. 201-818-9763