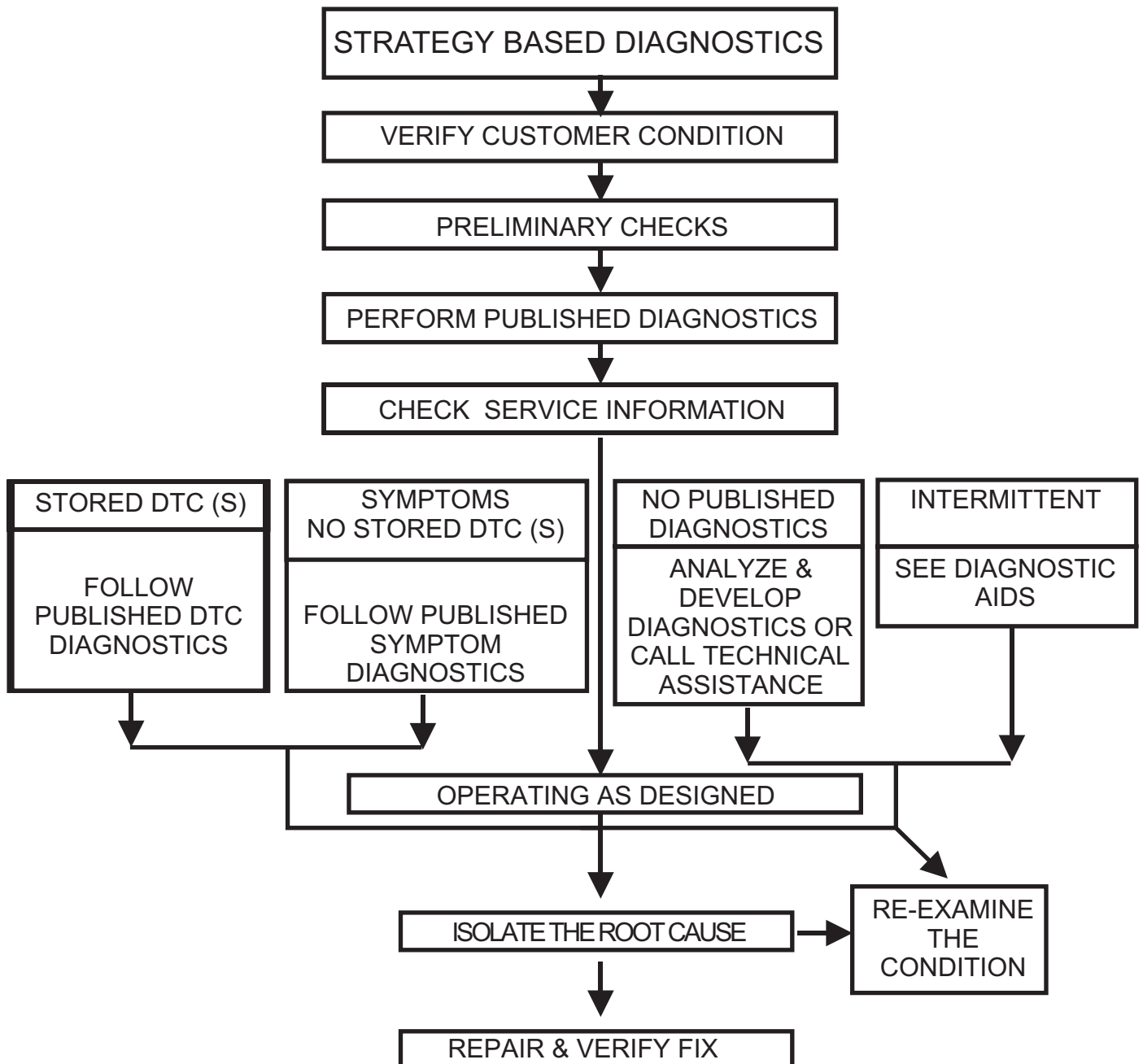


Diagnostic Approach

“VORTEC OBDII”



“Diagnostic Approach...”

VERIFY CUSTOMER CONDITION

Verify the customer condition

This can be very time consuming and irritating step. Unless the MIL is on or the vehicle does what you want when you start it. Obvious problems are quite easily located and repaired. It is when the trouble is not easily duplicated and does not appear to be happening at the moment of testing that we have the most trouble. Understanding why the customer is there and understanding the conditions when the condition occurs is still vital information. Often we get work orders that are vague, with little or no detail about the what, when, where, how often, hot, cold, wet, dry, all of which helps us get to the problem more accurately. Service advisors need to become more investigative and diligent in asking questions... Without good information we might as well guess. At the dealership level the information woes are the same. For example repair for MIL lamp “On” That was it nothing more. All you can do is verify that the MIL is on and the hope that the trouble is obvious. That is the beauty of being familiar with a system. We have the benefit of seeing the same vehicle and models day after day. Yes there are pattern repairs. Sometimes we get situations that require extra input from the customer to solve the problem or valuable time is wasted looking for problems in circuits with no fault. Get GOOD information... Talk to the customer yourself but get the whole story.

Here is an example of good communication with the customer.

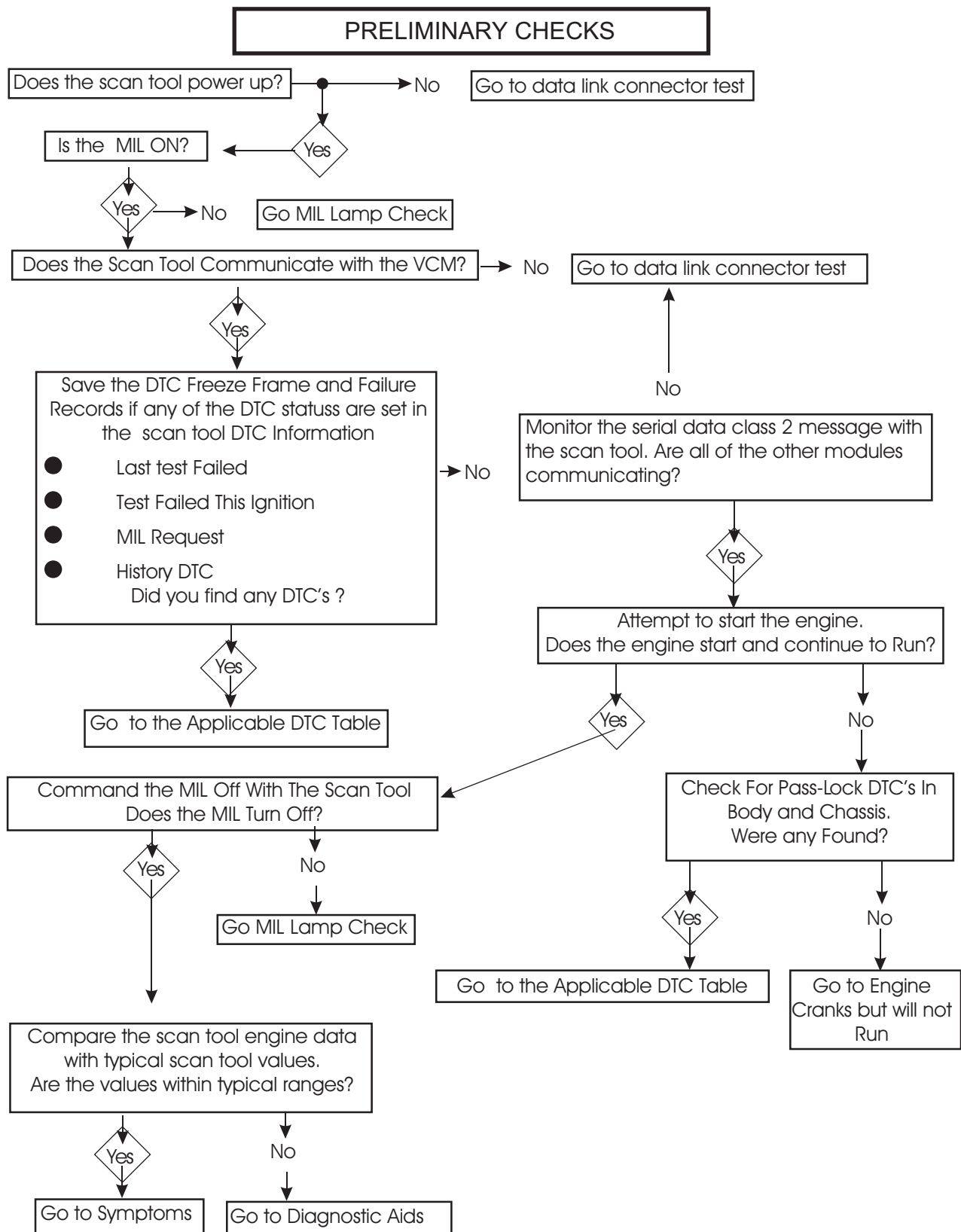
Vehicle 1998 Yukon 4x4 5.7L Automatic Trans 4 speed 4L60E

Customer description of problem:

Lacks power, hot, when pulling a hill the engine will not rev up past 2500 rpm. When I manually shift to a lower gear I get up the hill easier but the engine still won’t rev up. MIL comes ON. On level terrain the MIL does not come ON.

So there, what about that on a repair order... I like it.

“Diagnostic Approach...”



“Diagnostic Approach...”

VIN _____

Freeze Frame Code _____

Air Fuel Ratio	: 1	_____
Calc. Air Flow	g/s	_____
ECT	°C	_____
BARO	kPa	_____
Base PWM Cyl. 1	ms	_____
Short Term FT	%	_____
Long Term FT	%	_____
MAP	kPa	_____
Engine Speed	RPM	_____
Loop Status		_____
Vehicle Speed	km/h	_____
Engine Load	%	_____
TP Angle	%	_____
Mileage Since First Failure	km	_____
Mileage Since Last Failure	km	_____

Failure Record Code _____

Air Fuel Ratio	: 1	_____
Calc. Air Flow	g/s	_____
ECT	°C	_____
BARO	kPa	_____
Base PWM Cyl. 1	ms	_____
Short Term FT	%	_____
Long Term FT	%	_____
MAP	kPa	_____
Engine Speed	RPM	_____
Loop Status		_____
Vehicle Speed	km/h	_____
Engine Load	%	_____
TP Angle	%	_____
Mileage Since First Failure	km	_____
Mileage Since Last Failure	km	_____

Failure Record Code _____

Air Fuel Ratio	: 1	_____
Calc. Air Flow	g/s	_____
ECT	°C	_____
BARO	kPa	_____
Base PWM Cyl. 1	ms	_____
Short Term FT	%	_____
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Engine Speed	RPM	_____
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Failure Record Code _____

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Failure Record Code _____

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TP Angle	%	_____
Mileage Since First Failure	km	_____
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Failure Record Code _____

Air Fuel Ratio	: 1	_____
Calc. Air Flow	g/s	_____
ECT	°C	_____
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Short Term FT	%	_____
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