

# Check List for Interview

HYBRID ELECTRIC VEHICLE (DIAGNOSTICS)

## 2. Check List for Interview

### A: CHECK

#### 1. CHECK LIST NO. 1

When a problem occurs, perform the following customer interview.

Customer's name	
Date of purchase	
Date of repair	
V.I.N.	
Engine No.	
Fuel type	
Transmission model	
Odometer reading	km (miles)
Weather	<input type="checkbox"/> Fine <input type="checkbox"/> Cloudy <input type="checkbox"/> Rainy <input type="checkbox"/> Snowy <input type="checkbox"/> Others:
Ambient air temperature	°C (°F) <input type="checkbox"/> Hot <input type="checkbox"/> Warm <input type="checkbox"/> Cool <input type="checkbox"/> Cold
Place	<input type="checkbox"/> Highway <input type="checkbox"/> Suburbs <input type="checkbox"/> Inner city <input type="checkbox"/> Uphill <input type="checkbox"/> Downhill <input type="checkbox"/> Rough road <input type="checkbox"/> Others:
Engine temperature	<input type="checkbox"/> Cold <input type="checkbox"/> During warming-up <input type="checkbox"/> After warming-up <input type="checkbox"/> Temp. of either of them <input type="checkbox"/> Others:
Engine speed	rpm
Vehicle speed	km/h (MPH)
Driving conditions	<input type="checkbox"/> No effect <input type="checkbox"/> Start-up <input type="checkbox"/> Restart <input type="checkbox"/> Idling <input type="checkbox"/> Racing <input type="checkbox"/> Accelerating <input type="checkbox"/> Cruising <input type="checkbox"/> Decelerating <input type="checkbox"/> Cornering (right/left turn) <input type="checkbox"/> Cruise control <input type="checkbox"/> Other
Vehicle conditions	<input type="checkbox"/> EV traveling <input type="checkbox"/> Auto Start Stop active
Select lever position	<input type="checkbox"/> P <input type="checkbox"/> R <input type="checkbox"/> N <input type="checkbox"/> D <input type="checkbox"/> Manual mode
Hybrid READY indicator light	<input type="checkbox"/> ON <input type="checkbox"/> OFF
EV mode lamp	<input type="checkbox"/> ON <input type="checkbox"/> OFF
Remaining high voltage battery level of MFD	
Manual mode	<input type="checkbox"/> ON <input type="checkbox"/> OFF
Headlight	<input type="checkbox"/> ON <input type="checkbox"/> OFF
Rear defogger	<input type="checkbox"/> ON <input type="checkbox"/> OFF
Blower	<input type="checkbox"/> ON <input type="checkbox"/> OFF
Audio	<input type="checkbox"/> ON <input type="checkbox"/> OFF
A/C compressor	<input type="checkbox"/> ON <input type="checkbox"/> OFF
Rear entertainment system	<input type="checkbox"/> ON <input type="checkbox"/> OFF
Radiator fan	<input type="checkbox"/> ON <input type="checkbox"/> OFF
Car phone	<input type="checkbox"/> ON <input type="checkbox"/> OFF
Front wiper	<input type="checkbox"/> ON <input type="checkbox"/> OFF
Rear wiper	<input type="checkbox"/> ON <input type="checkbox"/> OFF
Wireless device	<input type="checkbox"/> ON <input type="checkbox"/> OFF

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#### 2. CHECK LIST NO. 2

If any indicator lights illuminate, perform the following additional customer interview.

a) Warning lights or indicators illuminate.	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> ABS warning light <input type="checkbox"/> Steering control warning light <input type="checkbox"/> AT oil temperature warning light <input type="checkbox"/> AWD warning light <input type="checkbox"/> VDC warning light/VDC indicator light <input type="checkbox"/> Fuel level warning light <input type="checkbox"/> Malfunction Indicator Light <input type="checkbox"/> SRS airbag warning light <input type="checkbox"/> Water temperature warning light (red) <input type="checkbox"/> Oil pressure warning light <input type="checkbox"/> Charge warning Light <input type="checkbox"/> Security indicator light <input type="checkbox"/> Brake warning light <input type="checkbox"/> Vacuum pump fail lamp <input type="checkbox"/> Hybrid fail lamp <input type="checkbox"/> Others:	
b) 12 volt auxiliary battery	
Manufacturer's genuine battery is equipped	<input type="checkbox"/> Yes <input type="checkbox"/> No
Battery voltage	V
Battery replacement	<input type="checkbox"/> Yes <input type="checkbox"/> No
Travel distance at replacement	km (miles)
c) 12 volt engine restart battery	
Manufacturer's genuine battery is equipped	<input type="checkbox"/> Yes <input type="checkbox"/> No
Battery voltage	V
Battery replacement	<input type="checkbox"/> Yes <input type="checkbox"/> No
Travel distance at replacement	km (miles)
d) Starter	
Start count (refer to current data)	
Starter has ever been replaced	<input type="checkbox"/> Yes <input type="checkbox"/> No
e) Fuel level	
Lack of fuel	<input type="checkbox"/> Yes <input type="checkbox"/> No
Indicator position of fuel gauge	<input type="checkbox"/> FULL <input type="checkbox"/> 3/4 <input type="checkbox"/> 1/2 <input type="checkbox"/> 1/4 <input type="checkbox"/> Other
Experienced running out of fuel	<input type="checkbox"/> Yes <input type="checkbox"/> No
f) Intentional connecting or disconnecting of vehicle harness connectors	
Name of parts or points of disconnection	<input type="checkbox"/> Yes <input type="checkbox"/> No
g) Intentional connecting or disconnecting of vehicle hoses	
Name of parts or points of disconnection	<input type="checkbox"/> Yes <input type="checkbox"/> No
h) Installing parts other than genuine parts	
Parts	<input type="checkbox"/> Yes <input type="checkbox"/> No
Where	
i) Occurrence of noise	
From where	<input type="checkbox"/> Yes <input type="checkbox"/> No
What kind	
j) Occurrence of smell	
From where	<input type="checkbox"/> Yes <input type="checkbox"/> No
What kind	
k) Ingress of water into engine compartment	
l) Ingress of water into luggage room	<input type="checkbox"/> Yes <input type="checkbox"/> No
m) Ingress of water into passenger compartment	<input type="checkbox"/> Yes <input type="checkbox"/> No
n) Troubles occurred	

## Check List for Interview

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- ☐ Engine speed drops ☐ Engine speed does not drop ☐ Rough idling ☐ Slow acceleration
- ☐ Back fire ☐ After fire ☐ Shifting is wrong (specifically: ) ☐ Excessive shift shock
- ☐ Shock or judder during driving ☐ Engine speed increases abruptly during driving ☐ Shock or judder during standing start
- ☐ Unable to switch to EV traveling ☐ READY ON does not occur
- ☐ Batteries (12 volt auxiliary battery and high voltage battery) are not charged
- ☐ Auto Start Stop does not operate ☐ Engine does not restart after Auto Start Stop/EV traveling
- ☐ Buzzer sounds (intermittently or continuously) during Auto Start Stop
- ☐ When restarting, the audio/navigation system is reset (initialized).
- ☐ When restarting, the combination meter and MFD blink.
- ☐ Electrical equipment such as automatic air conditioner, audio, navigation system, or combination meter does not operate.
- ☐ Others: