## FOREWORD [SKYACTIV-G 2.0, SKYACTIV-G 2.5]

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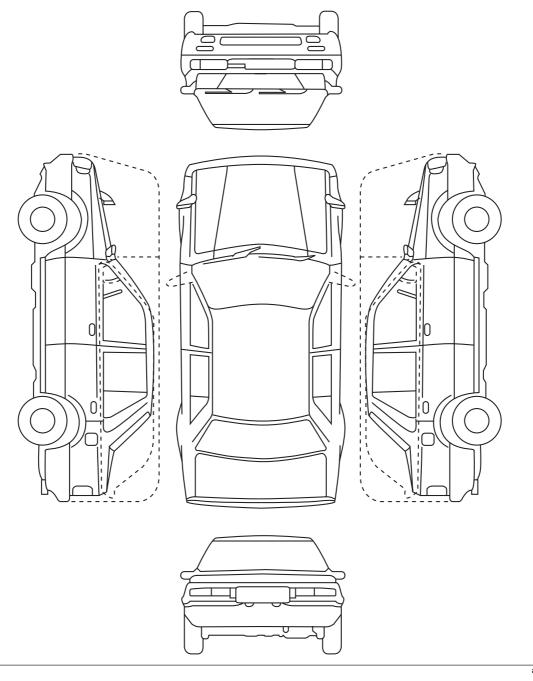
• If there is any vehicle malfunction complaint lodged by a customer, perform malfunction diagnosis according to the troubleshooting procedure.

**Troubleshooting Procedure** MALFUNCTIONING VEHICLE ARRIVES ACCURATELY VERIFY CUSTOMER COMPLAINT VERIEV REPAIR ORDER AND SYMPTOM IN REPAIR ORDER FORM. BROWSE TECHNICAL INFORMATION AND SEARCH VERIFY SERVICE INFORMATION. SERVICE INFORMATION. DOES ANY SERVICE VERIFY MALFUNCTION USING MALFUNCTION YES INFORMATION MATCH VERIFICATION PROCEDURE IN SERVICE INFORMATION. SYMPTOM AND CAUSE? AND REPAIR ACCORDING TO SERVICE INFORMATION. NO DOES NO MALFUNCTION SEE ACTION FOR NON-REPEATABLE MALFUNCTION. RECUR? YES VERIFY MALFUNCTION SYMPTOM. VERIFY MALFUNCTION SYMPTOM ON ACTUAL VEHICLE. SEE "CAN MALFUNCTION DIAGNOSIS FLOW"\*1 AND PERFORM PERFORM CAN MALFUNCTION DIAGNOSIS. DIAGNOSIS FOR CAN RELATED MALFUNCTION. PERFORM DTC INSPECTION. INSPECT FOR ANY DTCs USING M-MDS. YES SEE ON-BOARD DIAGNOSIS SYSTEM AND PERFORM ARE ANY DTCs **OUTPUT?** DTC TROUBLESHOOTING. NO USE M-MDS DATA MONITOR FUNCTION TO PID/DATA MONITOR PERFORM INSPECTION WHILE MONITORING INSPECTION INPUT/OUTPUT SIGNALS. SYMPTOM TROUBLESHOOTING USE M-MDS FUNCTIONS ON THE USE M-MDS SIMULATION FUNCTION TO INSPECT RIGHT TO PERFORM DIAGNOSIS ACTIVE COMMAND FOR INCOMPLETE ELECTRICAL CIRCUIT OR EFFICIENTLY. MODES INSPECTION VALVE STICKING WHILE OPERATING EACH OUTPUT PART WITH THE IGNITION SWITCHED ON. VERIFY MALFUNCTION IS REPAIRED. SERVICE COMPLETED

\*1 : CONTROLLER AREA NETWORK (CAN) MALFUNCTION DIAGNOSIS FLOW [SKYACTIV-G 2.0, SKYACTIV-G 2.5 (L.H.D.)]/CONTROLLER AREA NETWORK (CAN) MALFUNCTION DIAGNOSIS FLOW [SKYACTIV-G 2.0, SKYACTIV-G 2.5 (R.H.D.)]

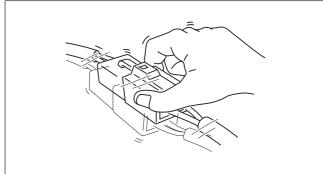
Repair order	foi	m						
Explanation to customer			km {mpn}			Pattern of use	Work % Work Work Winor use % Trips % Other % Between ENG. start + Stop: Distance, time Approx Hirs. No. of occupants: Load condition kg Other	
Repair			Odometer reading		Claidoy	speed	5 kmh (3 mph) 20 kmh (12 mph) 20 kmh (12 mph) 30 kmh (13 mph) 40 kmh (13 mph) 60 kmh (3 mph) 70 kmh (3 mph) 70 kmh (6 mph) 70 kmh (6 mph) 70 kmh (6 mph) 710 kmh (68 mph) 710 kmh (74 mph) 710 kmh (74 mph) 710 kmh (89 mph)	
Œ			(F)(0)(F)			Eng RPM	Idle Less than 1,000 Less than 1,500 Less than 2,000 Less than 2,000 Less than 2,000 Less than 4,000 Less than 4,500 Less than 5,000 Less than 6,000 Less than 6,000 T,000 or more	
Diagnosis			:currence: Transmission (MAT/LAT/EC AT/CVT)			Shift position	AT	
					nditions Accelerate	opening angle	0.8	
Check with customer		Dato of malfundion ground	Date of mairunction o		Driving conditions Acce		Sum	
Сhеск		licate problem?)				Driving posture	Veraitie stopped Veraight-on driving Reversing Right turn Left turn Other Other	
Repair order		illumination? Can anyone replicate problem?)				Driving operation	After starting Re-starting Re-starting (min. after stopped) (iding Accel. from stop Normal driving Beding Soft braking Clutch disengage Sudden accel. Shiffing (kmh/ (mph)) Other	
Repa		ht illumination?	on date:	( 11013		Warm-up condition	Half-wonld Half-warmed Fully warmed NAA Other  Water temp. gauge H C C	
ont/lime	Date/Ilfrie In-charge	/arning lig	Hegistration			Fuel	Hegular Hegular Hegular Hegular Diesel Libes Ofter Other Other Fuel gauge	
sheet		ere it occurs. V	7,001,010,010	30000	Occurrence	frequency	Once/day 2-3 times/day 4-5 times/day May times/day May times/day Once/week 4-5 times/week 4-5 times/month 4-5 times/month 4-5 times/month 4-5 times/month 4-5 times/month 6-6 times/month 6-7 times/month 6-7 times/month 6-8 times/month 6-8 times/month 6-9 times/mo	
n check		чм ¿(s)е	Alina / Ody				Plat Degrade Down Down NA NA Other Other	
unction symptor	•	What? What tim	T / 10 11 4 4 0 7 / 1		onditions	Drive scenario	Depart farrive Depart farrive Suburbs Suburbs Highway Uneven road Dry road surface Snow bound road loy road Other Itake manifold vacuum, it	
Repair order form and malfunction symptom check sheet		Customer statement (When? What? What time(s)? Where it occurs. Warning light in the control of t	Venicle body number:   hegistration da		Environmental conditions	Ambient temp.	100-0 (141-32 P) 100-0 (141-32 P) 100-10 (141-32 P) 100-10 (180-59 P) 100-15 (180-59 P) 100-15 (180-59 P) 100-15 (180-9 P) 100-10 (113 P) 100	
Repair on		Custome	Venicie DC			Weather	Suriny Cloudy Rain Srow High wind Wind gasts WA Other DTC, measur	

Dealer nan	ie:		Vehicle body n	umber:		Odometer reading:						
Vehicle-in o	late:		Estimated repa	air completion d	ate:	Person in-charge:						
Subject (Co	Subject (Content):											
Audio mem	ory											
	1	2	3	4	5	6	Fuel level					
FM1							E , , F					
FM2												
AM							1					

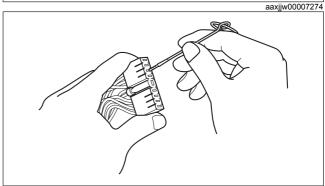


## **Action for Non-repeatable Malfunction**

- If the malfunction does not recur, verify the malfunction cause by performing the following actions:
   Based on the repair order form, attempt to drive the vehicle or perform tests to replicate the malfunction, record the data (such as PCM circuit voltage) at that time, and detect the malfunction cause.
  - Shake the wiring harness or connector of the electrical component which is suspected to be the cause of the malfunction, and inspect for malfunction or occurrence of any DTCs.



Inspect the female terminals on the connector of the electric component which is suspected to be the cause of the malfunction for poor connection.



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