

Competitor Instructions – Automobile Technology

Competitor Name	Competitor No	Task
		E

Competitor Instructions

Task E	Charging System
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Familiarization Time	5 minutes
Task Duration	55 minutes
Total Time	60 minutes

Marking Summary

Section		Possible Mark
1.	Preparation	100
2.	Charging system Problem	300
3.	Regulator Problem	300
4.	Measuring	100
Task Total		800

You are required to

- Observe occupational health & safety standards
- Only ask necessary questions
- Not speak to the public while competing
- Comply with Experts instructions
- Ensure Competitor Number on all forms
- Use appropriate tools and procedures
- Complete all instructions on the next page

Remark: Toyota Kijang 4K Th. 1979

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1.	The engine running in normal condition. Inspect and Diagnose the faults Repair as needed.
2.	Check operating of charging system Diagnose if found faulty For repairs refer to the expert Fill in the report form
3.	Check operation of charging control lamp Diagnose if faulty Repair if necessary Fill in report form
4.	Check operation of Alternator Diagnose if faulty For repairs refer to the expert Fill in report form
5.	Measure the Charging Voltage Diagnose if faulty For repairs refer to the expert Fill in report form
6.	Measure the Charging Current Diagnose if faulty For repairs refer to the expert Fill in report form
7.	Reinstall the fault component Refer to expert before reinstall Fill in report form.

Form 5 - Automobile Technology

Competitor Name	Competitor No	Task	Marking Scale
		E	Charging System

Marking Summary

Section		Possible Mark
1.	Preparation	100
2.	Charging system Problem	300
3.	Regulator Problem	300
4.	Measuring	100
Task Total		800

TimeKeeping

Familiarization		Competition		Breaks			
Start		Start		Start			
Stop		Stop		Stop			

ExpertsSignatures

1	2	3	4

Competitor Name	Competitor No	Task	Marking Scale
		E	Charging System

1.	Preparation	Max	Actual	Comments
1.1	Check all equipments	10		
1.2	Check all instructions	10		
1.3	Select the correct test equipment	10		
1.4	Apply logical working procedure	10		
1.5	Connect the exhaust hose	10		
1.6	Proper tools handling	10		
1.7	Test the lead of multi meter	10		
1.8	Check oil level	5		

1.9	Check water level	10		
1.10	Clean up the working area	5		
1.11	Clean up tools and equipment	5		
1.12	Clean up the test models	5		
Sub-Total		100		

2.	Charging system Problem	Max	Actual	Comments
2.1	Using workshop manual	30		
2.2	Set up multimeter to correct position	30		
2.3	Check battery condition & permormance	40		
2.4	Check electric circuit and mechanical stuck	40		
2.5	Check field supply for Alternator	40		
2.6	Check Out put from Alternator	50		
2.7	Check function of the charging control lamp	20		
2.8	Problem solved	50		
Sub-Total		300		

3.	Regulator Problem	Max	Actual	Comments
3.1	Check function of the Regulator	50		
3.2	Check control lamp relay	30		
3.3	Check voltage regulator relay	30		
3.4	Check contact point	30		
3.5	Ask the right parts	30		
3.6	Install the right part correctly	30		
3.7	Check function after replacing parts	50		
3.8	Fit back the parts, problem solved	50		
Sub-Total		300		

4.	Measurement	Max	Actual	Comments
4.1	Measurement of Voltage	50		
4.2	Measurement of Current	50		
Sub-Total		100		

Competitor Report Sheet – Automobile Technology

Competitor Name	Competitor No	Task
		E

Report Sheet

1.	Did engine operated normally? Fault(s) found:	[] yes [] no
2.	Did the charging system operate normally? Fault(s) found:	[] yes [] no
3.	Did the charging control lamp operate normally? Fault(s) found:	[] yes [] no
4.	Did the regulator operate normally? Fault(s) found:	[] yes [] no
5.	Did the alternator operate normally ? Fault(s) found:	[] yes [] no

S/No	Items	Performance/ Condition of Components	
		Good	Bad
6.	Charging Voltage by 3000 rpm (50) Voltage Standard Voltage _____V _____V Charging Current by 3000 rpm (50) Current Standard Current _____A _____A		