

SkillsUSA 2015 Contest Projects

Mobile Electronics Installation

Click the “Print this Section” button above to automatically print the specifications for this contest. Make sure your printer is turned on before pressing the button.

CUSTOMER SERVICE SCENARIO

A CUSTOMER COMES INTO YOUR SERVICE CENTER HE HANDS YOU HIS CAR KEYS .HE STATES THAT HE PAID TO HAVE A NEW RADIO INSTALLED INTO HIS CAR.THEN HE SAYS THAT HE IS GOING ACROSS THE STREET TO HAVE LUNCH AND THAT HIS CHILD IS ASLEEP IN THE BACK SEAT HE WON'T BE A PROBLEM.

HOW DO YOU DEAL WITH THIS

Contestant

CUSTOMER SERVICE SCORING SHEET

50 points possible 25 each

_____ How did contestant react (defensive-, angry - positive +)

_____ Did they have offer to get a Manager

Contestant _____

INTERVIEW

SCORE SHEET

0-15 points each

1. What qualifications do you have for this position? _____

2. Why should I pick you over another applicant? _____

3. What experience do you have in this field? _____

4. What can you bring to this company? _____

5. Where do you see yourself in 5years? _____

6. _____

7. _____

Total _____

Judges can use their own questions these are samples(must use same with all

SPEAKER WIRING

JUDGING SHEET

When contestant is done with each configuration check with dmm. scoring 0 or 10 per each task

1 ohm _____

32 ohms _____

4 ohms _____

4 ohms _____

16 ohms _____

2 ohms _____

2 ohms _____

8 ohms _____

8 ohms _____

12 ohms _____

Total points _____

Contestant number _____

Contestant _____

SOLDERING

5 of each connection

10 points possible each connection.

Must be separate

Connections

1. T- spice _____

2. End to End (lineman spice) _____

3. Resistors on circuit board _____

TOTAL _____

SOLDERING TASK

DO THE THREE SOLDERING TASKS AS
PER M.E.C.P. GUIDELINES FOR EACH
TYPE OF WIRE CONNECTION

Ignition switch wiring

Wire switch per wiring colors below

12 volt constant (battery)	Yellow
12 volt accessory	Red
Ignition 1	Gray
Start (crank)	Black

Test contacts with DMM

CONTESTANT _____

RADIO TEST

WIRE RADIO CONNECT TO FOUR SPEAKERS

Judges score 0-25 on each

150 points possible

Testing 25 _____

Power 25 _____

Speaker 25 _____

Connections 25 _____

Adjustments 25 _____

Demonstration 25 _____

Safety violations - _____

TOTAL _____

Mobile Electronics Installation - Head Unit and Amplifier Installation Score Sheet

Score Head Unit separately from Amplifier
 Head Unit Sections = 10 Max Points Each
 Amplifier Sections = 15 Max Points Each
 Total of All Sections is Max of 150 Points

An "Average" score is considered completed basic activity
 An "Average" score is half of the maximum points available
 An "Above Average" score is extra attention to detail
 Any "Safety Violations" deduct from point totals

Head Unit

Score (10 Max)

Amplifier

Score (15 Max)

Testing - Use of DMM to test wires and accurately identify +12v Constant, Ignition, etc.

Testing - Use of DMM to test wires and accurately identify Power, Ground and Remote

Power - Does the unit hold memory (+12v) and does it come on with the Key (ACC)?

Power - Accurate connection of Batt +12v (incl Fuse), GND and Remote Turn-On

Speakers - Are the speaker wires connected to the harness and ALL correctly wired (+ & -)?

Speakers - Are the speaker wires connected to amplifier and ALL correctly wired (+ & -)?

Connections - General quality and integrity of the crimped connections at the harness?

Connections - General quality and integrity of the connections specifically at the amp, battery, fuse holder, etc?

Adjustments - Is the balance correct? (Requires amp connected to verify). Fader is not applicable in this activity.

Adjustments - Xover settings to Full Range, Input switch to 2 ch, gains level matched for speaker pairs.

Demonstration - Shows Judge an operational clock with the set time. Shows some basic operation as if you were a customer. Shows his work.

Demonstration - Shows Judge an operational amplifier playing four speakers. Shows the work, incl connections, fuse, settings and explains why.

Safety Violations - Mark any safety issues with dash disassembly, where dash parts were placed (get scratched) head unit face positioned on the table to scuff, etc. Also any wiring w/o good connections or proper fusing.

Safety Violations - Mark any safety issues with amplifier high current power/ground wiring, fuse integrity, speaker or RCA connections, etc. Wires should be neat and easily identifiable.

Total (Head Unit)

Total (Amplifier)

Overall Total