Student Name: ­­­­­­­­­­­­­­­­­\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Unit 3: Systems**

Lesson 4: Troubleshooting

**File 3.4.2: Troubleshooting Diagram**

**Background:**

To ensure proper use of systems and products, manufacturers often insert troubleshooting diagrams and documentation within a user manual for a product. These diagrams/tables allow the user to quickly try to solve a problem when it occurs without the need for technical support. At a certain point in the process, it may be necessary for the user to seek out technical support or additional resources beyond their capacity.

**Design Problem:**

You have been hired by the manufacturer of the product you reverse engineered in the previous lesson to design and create a troubleshooting diagram to be included in the newest user manual, which will be provided on its website.

**Specifications:**

1. Your troubleshooting diagram may not exceed two pages in length and should be submitted in Microsoft Word.
2. Your troubleshooting diagram must be designed for the target consumer to use (do not use extremely technical terms).
3. Your troubleshooting diagram must include additional resources beyond the user as suggestions at appropriate points within the troubleshooting sequence.
4. You may include additional images, as appropriate, other than the troubleshooting diagram (such as schematics).
5. Your troubleshooting diagram must include a minimum of six levels a consumer could investigate to solve the malfunction.

The following rubric will be used to evaluate your work:

|  |  |  |  |
| --- | --- | --- | --- |
| **Category** | **Below Average** | **Average** | **Excellent** |
| **Steps** | The student included fewer than six levels of steps a consumer could investigate to solve the malfunction. | The student included six levels of steps a consumer could investigate to solve the malfunction. | The student included more than six levels of steps a consumer could investigate to solve the malfunction. |
| **Accuracy** | The identified steps of troubleshooting diagram are unrealistic for a user to perform and do not move the user closer to solving the malfunction. | The identified steps of troubleshooting diagram are realistic for a user to perform and move closer to solving the malfunction. | The identified steps of troubleshooting diagram are realistic and accurately presented for a user to perform and move closer to solving the malfunction. |
| **Clarity** | The identified steps are understood by the user, and graphically represented. | The identified steps are easily understood by the user, graphically represented, and no longer than two pages in length. | The identified steps are easily understood by the user, graphically represented, and no longer than two pages in length, with additional documentation as necessary. |