



Project: Assembly Modelling (Day 2 AM)

Time: 3 Hours

Marks: 25 points

Given:

Secondary and Post-Secondary

- CAD files required to complete the assembly (minus #4-Gasket)
- Detail part drawing of #4-Gasket
- Part Dimensioning and Detail Key for #2-Keypad

1. Task:

Create the following:

Secondary and Post-Secondary

1.1 Constrained assembly model of fish finder that includes #4-Gasket and all other provided CAD models

1.2 Assembly Drawings (2 Sheets)

- Sheet 1 – Orthographic and isometric views of assembled models with overall dimensions for Width, Height and Depth
- Sheet 2 – Exploded view and isometric view of assembly, complete with parts list and balloons

1.3 Part Detail Drawings (2 Sheets)

- Sheet 1 – Recreated details of #4-Gasket (additional note for volume of part to be included)
- Sheet 2 – Detail drawing of #2-Keypad, with views and dimensions based on key provided

1.4 Use your Skills Canada B-size template for final layout and detail drawings

1.5 Visually appealing rendered image of fully assembled fish finder, exported as .jpg

- Leave the rendering open on the PC for evaluation upon completing the competition

1.6 Animated video (30 seconds) of full assembly, exported as .mp4 or .avi, that follows the timeline stated below:

- 1-5 Seconds: 360 degree revolution of unit
- 6-19 Seconds: Step-by-step disassembly of unit
- 20-25 Seconds: 360 degree revolution of unit disassembled
- 26-30: Full Re-assembly of unit

2 Output:

Secondary and Post-Secondary

2.1 Create a single PDF file of your final drawings requested in the tasks specified above

2.2 Name your file: ### Day2AM.pdf (### is your unique contestant number.)

- **Files using wrong names will be penalized 3 points per file**

2.3 Create a visually appealing rendering of the fish finder assembly and export as a .jpg in 1280 x

720 format

2.4 Create a 30-second animated video as outlined in 1.6 and export as .mp4 or .avi

3 General:

3.1 Each task throughout the competition is independent from the others.

3.2 DO NOT include any part of your name, school, province/territory in documents, or when naming files and folders being submitted.

- Any file, identified by any part of a competitors' name, school, province/ territory, will not be judged.

3.3 When you have finished working on a specific day, do not close project files or turn off your computer, Judges will view and mark your work on screen as needed.

3.4 Ask the judges before leaving the competition area as the judges may require your assistance accessing your work.

4 Assessment:

Task 1.2 Assembly Drawings

- Full orthographic/isometric representation of assembly with accurate overall dimensions: 4 points
- Assembly exploded in correct order, complete with balloons and parts list: 6 points

Task 1.3 Part Detail Drawings

- Faithful recreation of #4-Gasket part detail drawing provided: 4 points
- Accurate volume of #4-Gasket: 1 point
- Drawing of #2-Keypad, detailed in accordance with key provided: 4 points

Task 1.5 Visually appealing rendered image of fully assembled fish finder

- Judged based on visual appeal and conformity to specifications provided: 3 points

Task 1.6 Animated video (30 seconds) of full assembly

- Judged based on visual appeal, proper assembly sequence and conformity to specifications provided: 3 points