AUTODESK[®] INVENTOR[®] Trial Projects

Exploded Views and Animation Build technical documentation

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After starting Inventor, click the 'Projects' icon in the ribbon. Navigate to where you saved the project files and select *Ember-BS-PRE.ipj*.

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	File name:	Base Assembly (New).iam		~	
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	Project File:	Ember-BS-PRE.ipj		Projects	
Quick Launch					

Choose **Base Assembly (New).iam** as the assembly file to import.



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In the ribbon, select 'New'. Select the 'Metric' folder and create a new file using the 'Standard (mm).ipn' template.



4.

In the model window, right click to bring up the marking menu. Select 'Tweak Components'. Change the selection option to 'Component'.



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6.

Select the projector subassembly shown and use the arrow pointing up to drag it approximately 210mm from the base. Click the green checkmark to complete the tweak.



Right click in the model window to open the marking menu and select 'Tweak Components'. Use the arrow pointing up (Z-direction) and move them approximately 40mm.



Using the model browser, expand the model tree using the arrows next to 'Scene1' and 'Ember-BS-PRE.iam'. Select the 8 components as shown.



Again using the model browser, select the two fans and the same 8 screws moved in the previous operation.



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10

Restart the 'Tweak Components' command from the marking menu. Move the screws and fans 170mm up in the Z-direction. Click the green checkmark to complete the command.

11.



Select the same two screws and 'Control Panel Assembly v4' in the model tree and restart 'Tweak Components'. Use the arrows to move them up (Z-dir) 100mm and away (Y-dir) -100mm.



Select the two mounting screws for the control panel subassembly, and then restart 'Tweak Command' to drag them up about 17mm.



Select the 6 screws that are used to hold down the projector assembly as shown.



13.

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Restart 'Tweak Components' and move the screws up 310mm, above the projector assembly.



Using the same methods from Steps 11 and 12, offset the Connecter PCB and its mounting screws, up and away 100mm each from the assembly as shown.

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14.

16.

Using the Storyboard panel at the bottom of the screen, move the 6 tweaks shown to the beginning of the timeline so they are in the correct assembly sequence.



The final step is to move the main PCB board and its attachment screws using the same approach.



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17.

At the top of the Storyboard panel, press the 'Play Current Storyboard' button to review the assembly sequence.

Publish Scope		
All Storyboards		
Selected Storyboards		
 Current Storyboard 	From	То
Current Storyboard Range	30.000 s	0.000 s
Reverse		
Video Resolution		
Current Document Window Size		
Width 1602	Pixels	
Height 471	Pixels	
Resolution 72	Pixels/In	ich
Output		
File Name		
Storyboard1		
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C:\Users\miheld\Box Sync\Working	folder \Trial working	folder \Cre
File Format		

In the publish dialog, select the box next to 'Reverse' to publish the video in the order of assembly (rather than disassembly) and then select OK to create the video.



In the 'Publish' section of the ribbon, pick 'Video'.

2.

4.

To begin creating assembly instruction views, select all of the Tweaks from the browser, and then select 'Hide Trails' from the marking menu.

🗯 Grid Light 🚱 Reflections 🔹 🕜 Perspective 🔹 visual Stv User Clean Interface Second Plane Realistic Shaded Smooth shaded model Shaded with Edges ooth shaded model with visible edge 🕋 Shaded with Hidden Edges ooth shaded model with hidden edge Wirefram Model edges only Wireframe with Hidden Edges Andel edges with hidden edges sho reframe with Visible Edges Only lodel edges with hidde mplified mono land painted water Sketch Illustration land drawn appearance chnical Illustration ical shaded app

In the ribbon, select the 'View' tab. Click the 'Visual Style' drop down and choose 'Wireframe with Visible Edges Only'.



In the Storyboard panel, select the left arrow for 'Back to Storyboard Beginning' and position the assembly in the model window for the first snapshot.



Right click in the model window to open the marking menu, and select 'New Snapshot View'.



page: /

6.

Storyboard1 +			
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In the Storyboard panel, move the marker forward to 2.5s to setup the snapshot of the first assembly step.

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- Previous Vie Home View Help Topic Follow the same steps to move the marker in the storyboard panel to 7.5s to capture the fan disassembly and create another snapshot.

Hide All Trails



Reposition the model as needed to see the entire exploded view and use the marking menu to create the next snapshot.



Move the timeline to show the Control Panel Subassembly tweak and create another snapshot.



10.

12.

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Create the final snapshot at the end of the timeline with the PCBs in their final positions.

11.



In the ribbon, select Raster to bring up the dialog to publish images for use in assembly documentation.



You can now double click on any snapshot in the 'Snapshot Views' panel to change the view in the model window.

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Choose the desired Image Resolution, File Location, and File Format to publish out the snapshots created as images.



14.

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13.

Right click the snapshot of the fully exploded view in the 'Snapshot Views' panel, and choose 'Create Drawing View'.

Change the 'Scale' to 1:1 and drag the view to an appropriate location on the sheet. Click 'OK' to create the view.



When the 'Drawing Template' dialog appears, select the 'Metric' tab and choose 'ANSI (mm).dwg' as the drawing template.



In the 'Annotate' tab in the ribbon, select 'Parts List'.



17.

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In the 'Annotate' tab in the ribbon, select 'Auto Balloon'.



Click to place the parts list in the desired location on the sheet.



First select the exploded view as the 'Select View Set' and then shift-select all the components in the model browser for 'Add or Remove Components'.





Click the 'Select Placement' icon, change the alignment to 'Vertical' and choose where the balloons should be located on the drawing. Click 'OK' to finish. page: 12



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