Chapter 32 Cluster Wheel Vehicle
Visualize

A. Enable Visualize In SOLIDWORKS.

Step 1.   Open your **CWV ASSEMBLY** file in SOLIDWORKS.

Step 2.   Click **Isometric** on the Standard Views toolbar. **(Ctrl-7)**

Step 3.   **Turn on decals**. Use View Menu > Hide/Show > Decals.

Step 4.   If necessary, enable **SOLIDWORKS Visualize**. To enable, click the **flyout of Options** on the Standard toolbar and click **Add-Ins**.

Step 5.   In the dialog box find SOLIDWORKS Visualize and place a check in the check box under **Active Add-Ins** and **Start-Up**, **Fig. 1**. Click OK.
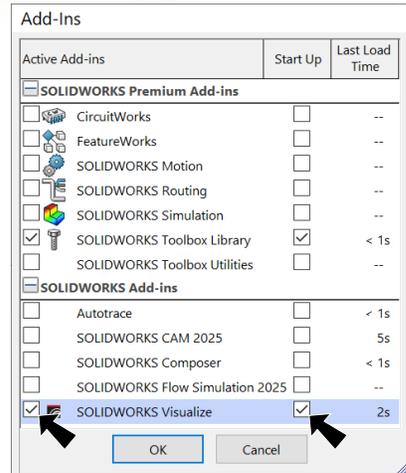
Add-Ins		
Active Add-ins	Start Up	Last Load Time
SOLIDWORKS Premium Add-ins		
CircuitWorks	☐	--
FeatureWorks	☐	--
SOLIDWORKS Motion	☐	--
SOLIDWORKS Routing	☐	--
SOLIDWORKS Simulation	☐	--
☑ SOLIDWORKS Toolbox Library	☑	< 1s
SOLIDWORKS Toolbox Utilities	☐	--
SOLIDWORKS Add-ins		
Autotrace	☐	< 1s
SOLIDWORKS CAM 2025	☐	5s
SOLIDWORKS Composer	☐	< 1s
SOLIDWORKS Flow Simulation 2025	☐	--
☑ SOLIDWORKS Visualize	☑	2s

OK   Cancel

Fig. 1

Step 6.   Click **SOLIDWORKS Visualize** on the Command Manager toolbar.

Step 7.   Click **Export Advanced** on the SOLIDWORKS Visualize toolbar.

B. Switch to Visualize and Save As.

Step 1.   In Visualize click File Menu > Save As.

Step 2.   Key-in **CWV** for filename and navigate to your CWV folder.
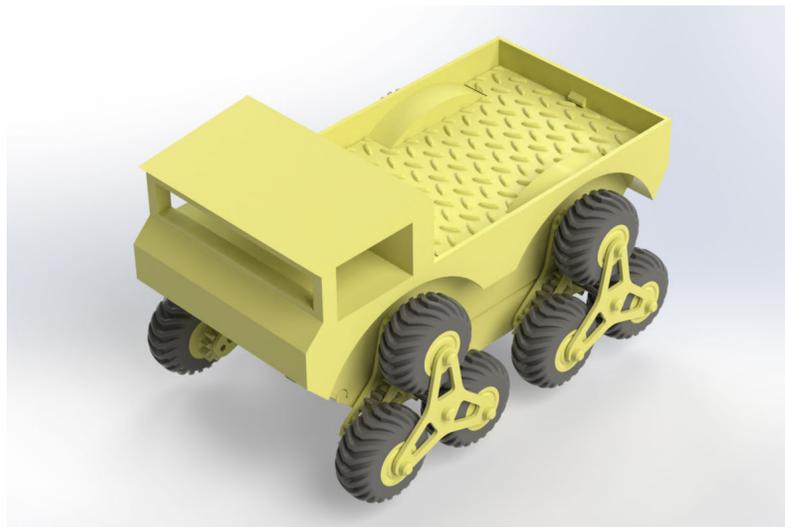Documents\Tech Ed 24-25\CWV.
Click Save.
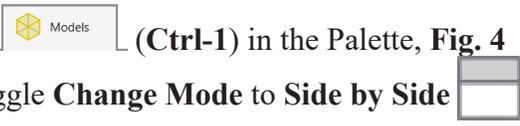
Fig. 2

C. Transform to Floor.

Step 1. Expand **View Presets** [icon] in Main toolbar
and click **Right** [icon], **Fig. 3**.

Fig. 3

Step 2. Click **Models tab** [Models icon] (**Ctrl-1**) in the Palette, **Fig. 4**

if necessary, toggle **Change Mode** to **Side by Side** [icon]

click the **CWV Assembly model** [icon] in the Model tree

click the **Transform tab** [Transform]
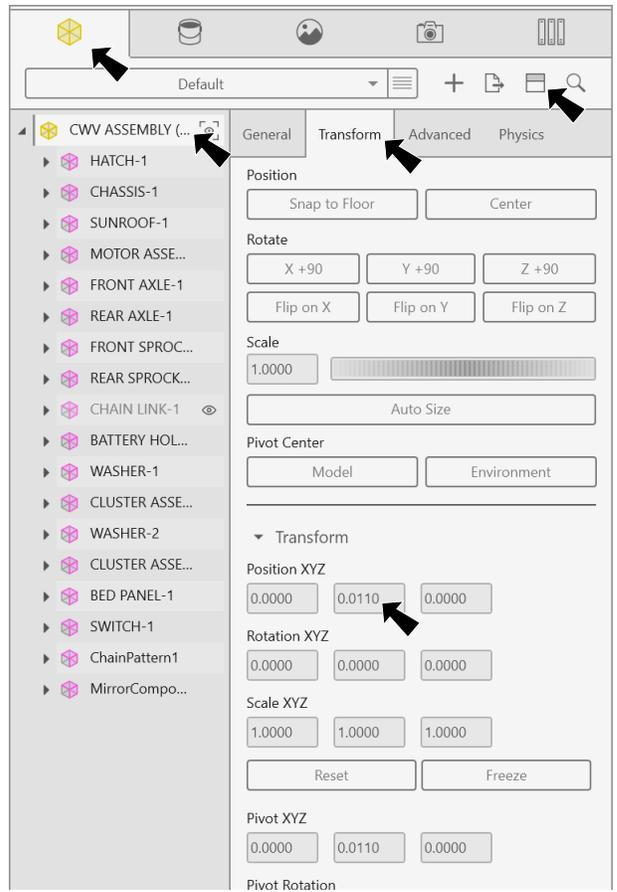under Transform
Position XYZ
Y .0110
and **press ENTER**

Step 3. Save. **Ctrl-S**.

Fig. 4
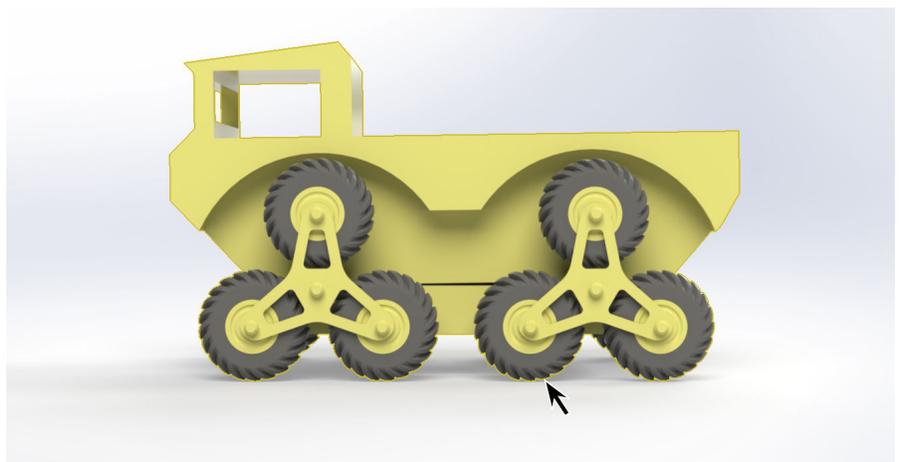
Fig. 5

D. Show Only Batteries.

Step 1.   Expand **View Presets** in Main toolbar

and click **Isometric-2** , **Fig. 6**.

Fig. 6

Step 2.   Still on **Models tab** [Models] (**Ctrl-1**) in the Palette, **Fig. 7**.
click Edit Menu > Find (**Ctrl-F**)
at top of Palette in search field **key in BATTERY**

in the Model tree **Ctrl click both BATTERY AA groups**
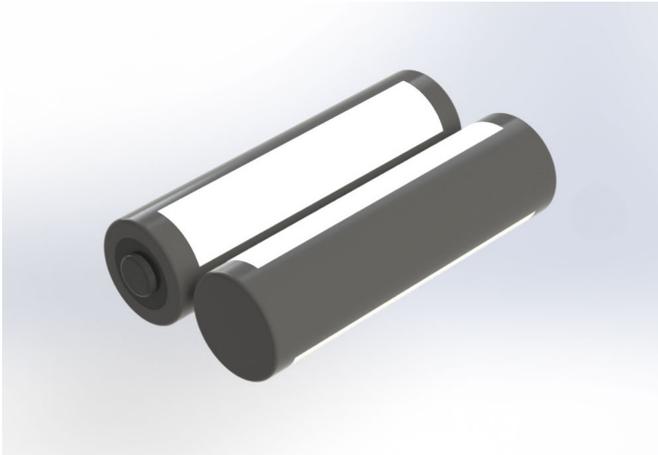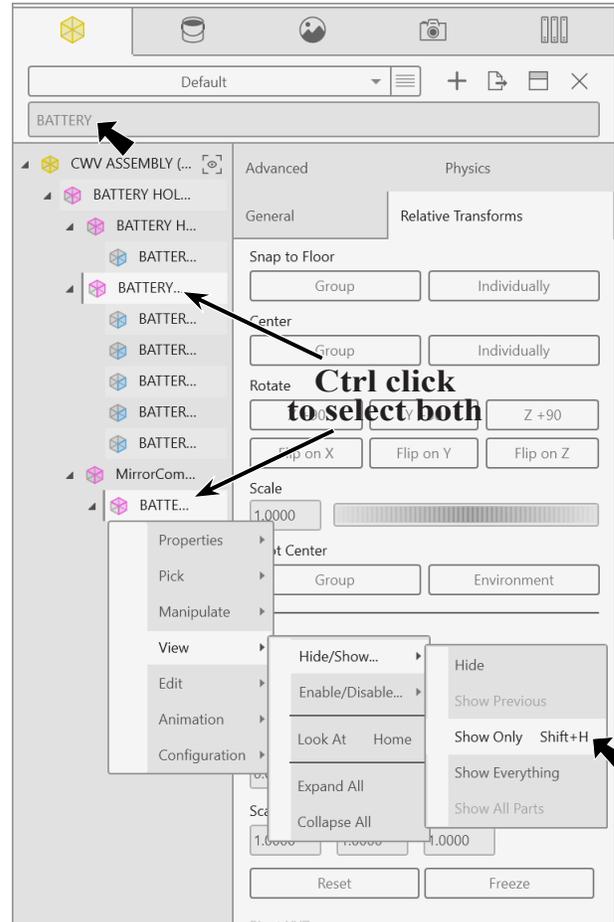**Right click** and click **View > Hide/Show > Show Only (Shift-H)**

Fig. 8

Ctrl click to select both

Fig. 7

E. Repair Decals Mask Embedded.

Step 1.   Click **Appearances tab** [Appearances icon] (**Ctrl-2**) in the Palette.

        at bottom of Appearances tree

        under Decals

          select the first **Powerowl1 decal**, **Fig. 9**

        under the **General tab** [General]

          Decal Mask Type **Embedded**

        Repeat and **set all decals to Embedded**.

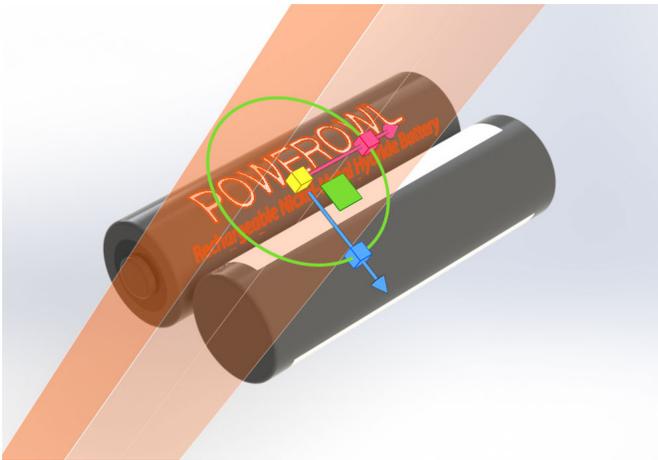Step 2.   Click Project Menu > Models > Show Everything (**Ctrl-Shift-U**).
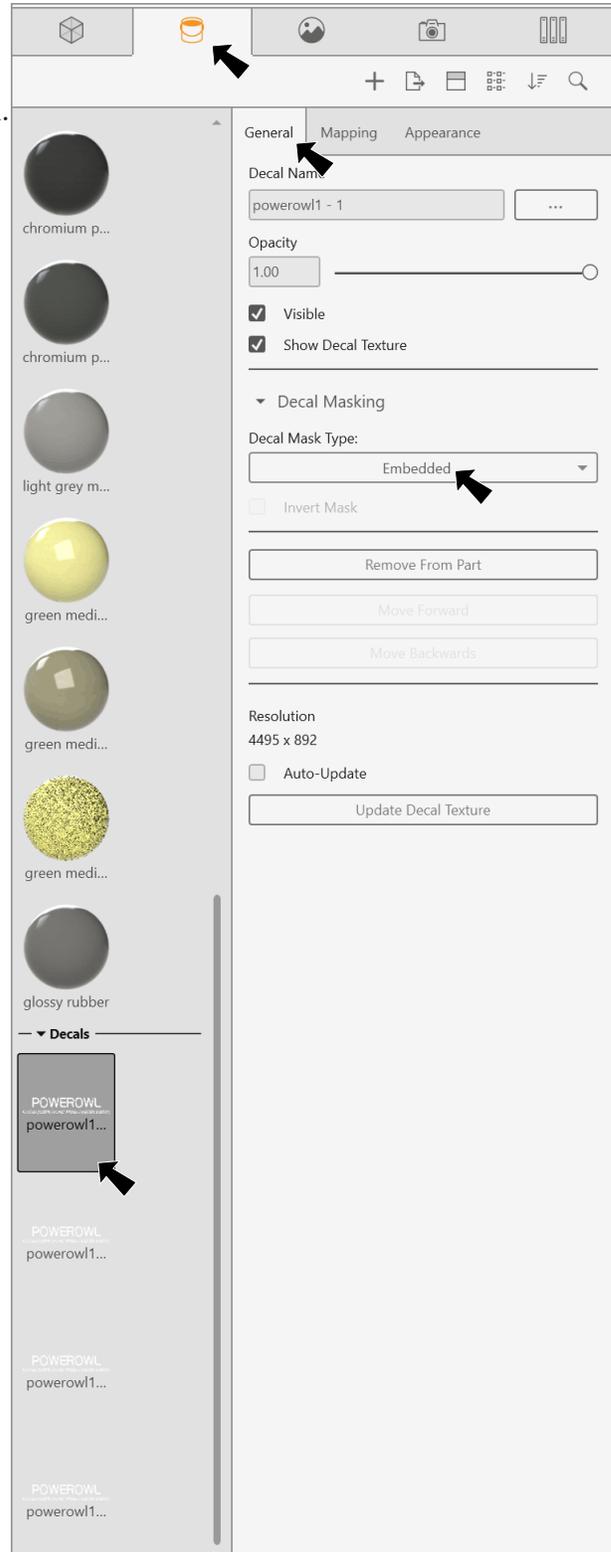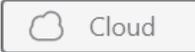
Step 3.   Save. **Ctrl-S**.

Fig. 10

Fig. 11

Fig. 9

F. Cloud Appearance: Matte Rubber.

Step 1. Click **File Libraries tab** [Libraries] (**Ctrl-0**) in the Palette, **Fig. 12**.

click **Cloud** [Cloud] to view Cloud libraries
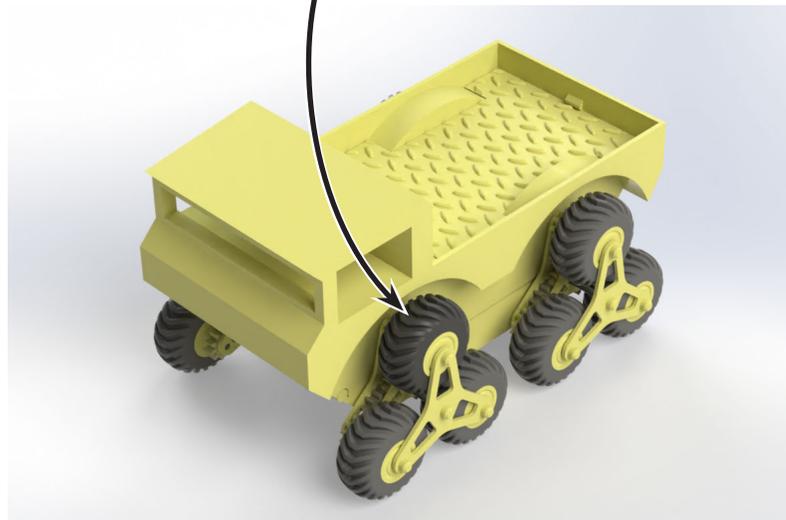change the libraries list to **Appearances**
double click Rubber folder and
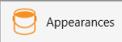click **Matte Rubber** to download ⬇
to your local library.
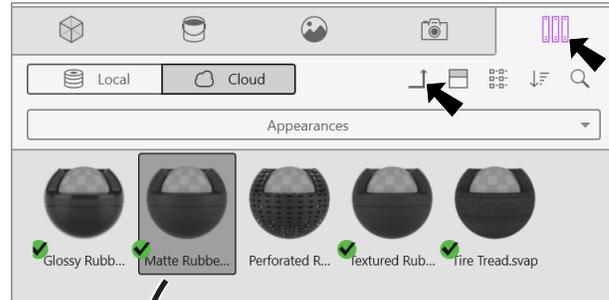
Step 2. Drag the **Matter Rubber** appearance onto a Tire, **Fig. 13**.

Fig. 12

Fig. 13

G. Replace SW Glossy Rubber.

Step 1. Click the Tire to switch to the **Appearances tab** [Appearances icon] **(Ctrl-2)**.

Step 2. Replace **SW glossy rubber** appearance with new Matte. To replace, click the new **Matte Rubber in the Appearances** and use **Ctrl-C** to copy, **Fig. 14**.

Step 3. **Right click the SW glossy rubber** and click Edit > Assign Appearance: Matte Rubber, **Fig. 15**.
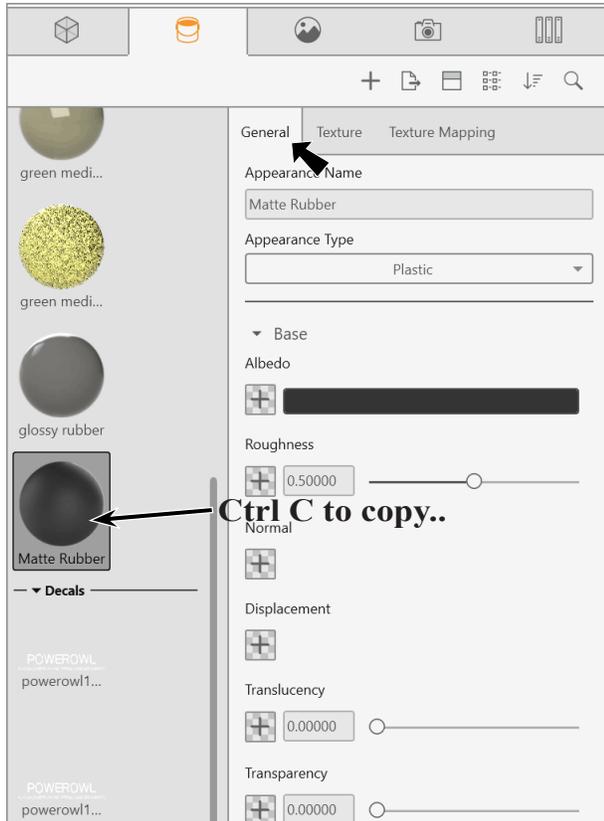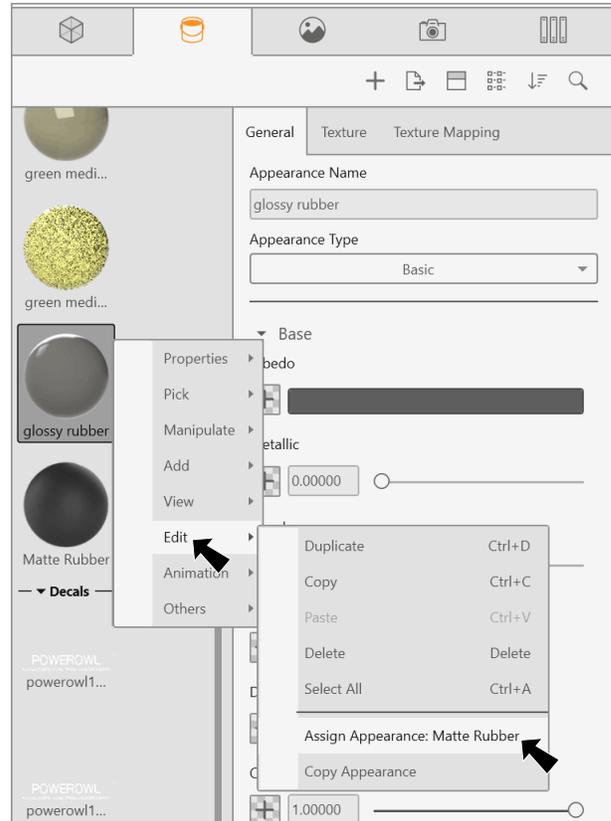
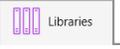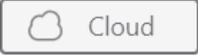Step 4. Save. **Ctrl-S**.

Fig. 14

Fig. 15

Fig. 16

H. Cloud Environment.

**Step 1.** **Right click** in Appearances and click Delete All Unused Appearance and Textures, **Fig. 17**.

Step 2. Use **Up Arrow key** ⬆ **on keyboard 5 times** to rotate view.

Step 3. Click **File Libraries tab** ⬚⬚⬚ Libraries **(Ctrl-0)** in the Palette, **Fig. 18**.
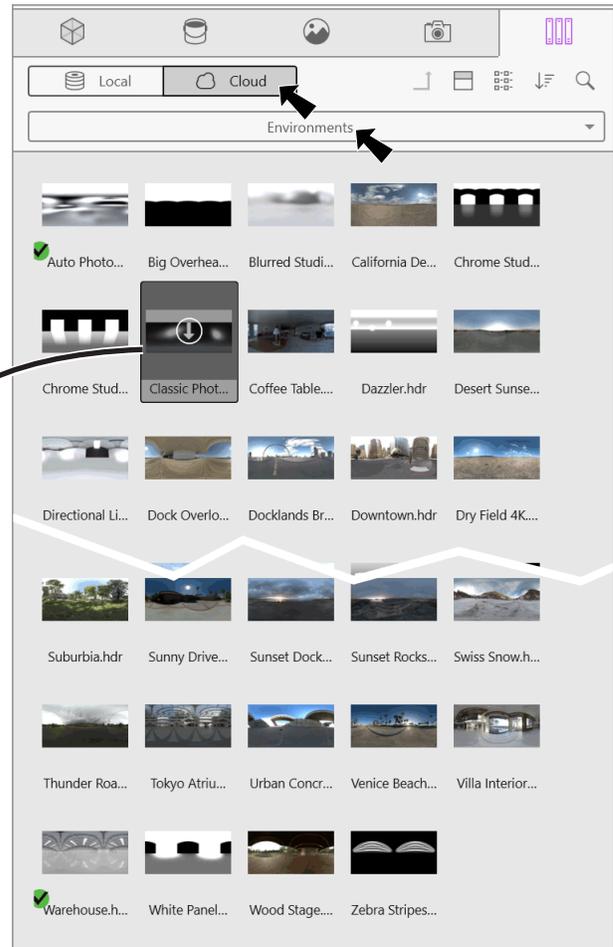
      click **Cloud** ☁ Cloud to view Cloud libraries
      change libraries list to **Environments**
      click **Classic Photo Studio.hdr** to download ⬇ to your local library.

Step 4. Drag **Classic Photo Studio.hdr** thumbnail into the viewport, **Fig. 19**.

Step 5. Save. **Ctrl-S**.
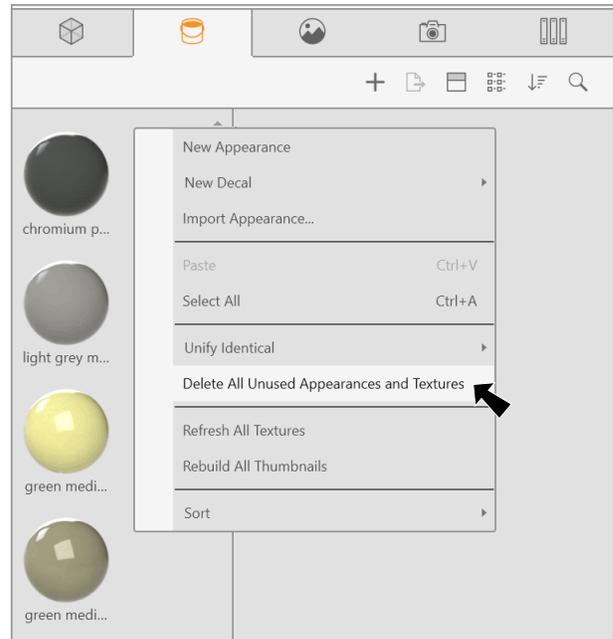
Fig. 17

Fig. 18

Fig. 19

I. Scene Backplate Off.

Step 1.   Click **Scenes tab** [Scenes] (**Ctrl-3**) in the Palette, **Fig. 20**

under Backplates

click **3 Point Faded Backplate** to select

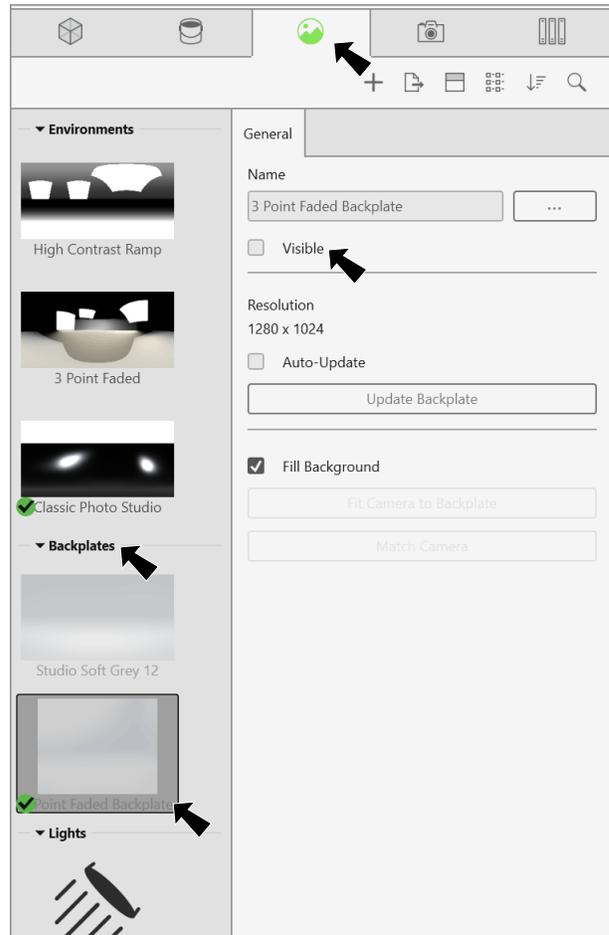under the **General tab** [General]

uncheck **Visible**.

Fig. 21

Fig. 20

J. Scene Background White.

Step 1.   Still on **Scenes tab** [Scenes] (**Ctrl-3**)
          under list of Environments, **Fig. 22**
              click **Classic Photo Studio** to select

          under the **General tab** [General]

              Background Type **Color**
              click the **Background Color** swatch

Step 2.   In the Color Picker, **Fig. 23**
              grab the **color field selector** ⬜ and
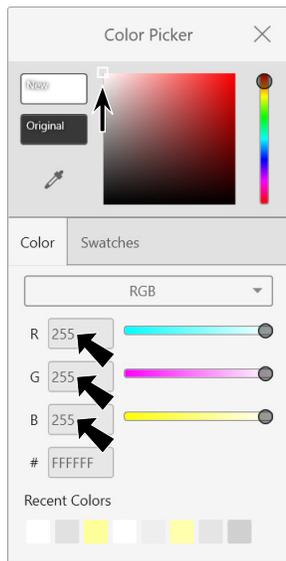   drag straight up to white 255, 255, 255
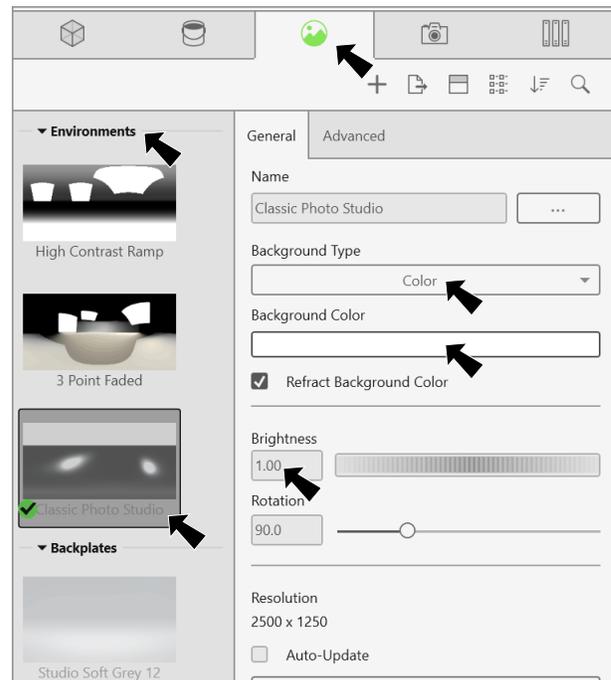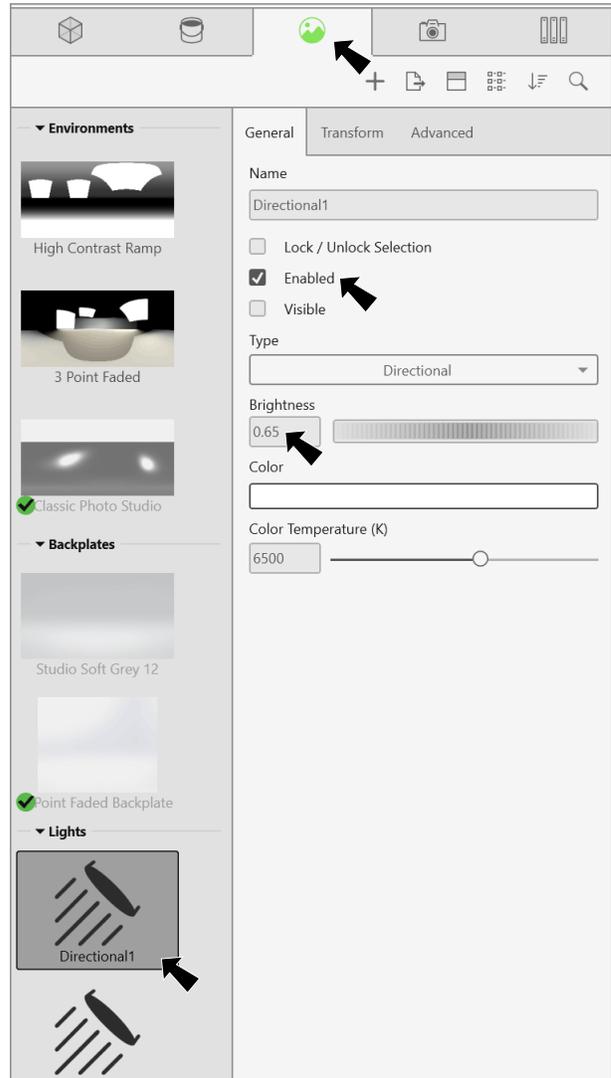   close Picker ✕.

Fig. 22

Fig. 23

Fig. 24

Step 3.   Save. **Ctrl-S**.

K. Scene Light and Shadow.

Step 1.   Still on **Scenes tab** [Scenes] (**Ctrl-3**)
            under list of Lights, **Fig. 25**
               click **Directional1** to select
            under the **General tab** [General]
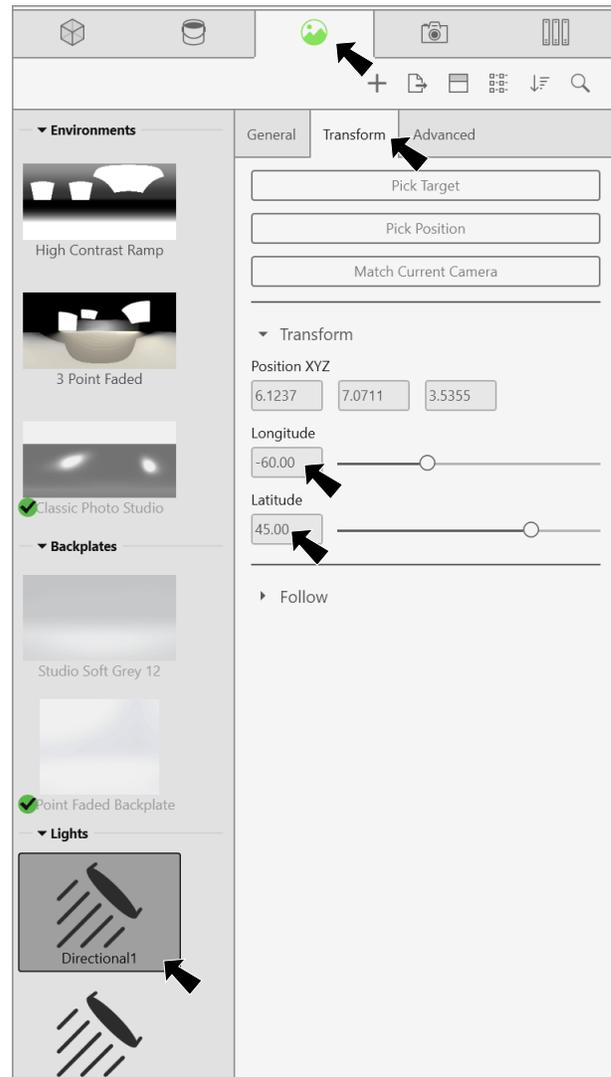   check **Enabled**

Fig. 25

Fig. 26

Brightness .65

Step 2.   Click **Transform tab** [Transform], **Fig. 27**
under Transform set
Position XYZ
Longitude -60
Latitude 45

Step 3.   Save. **Ctrl-S**.
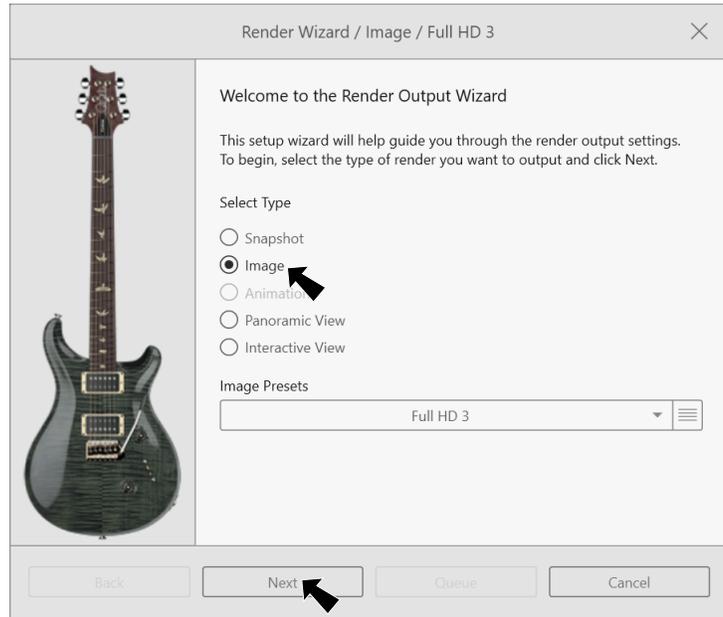

Fig. 27

Fig. 28

L. Render.

Step 1. Click **Render Wizard** 🎇 in Main toolbar, **Fig. 29**.
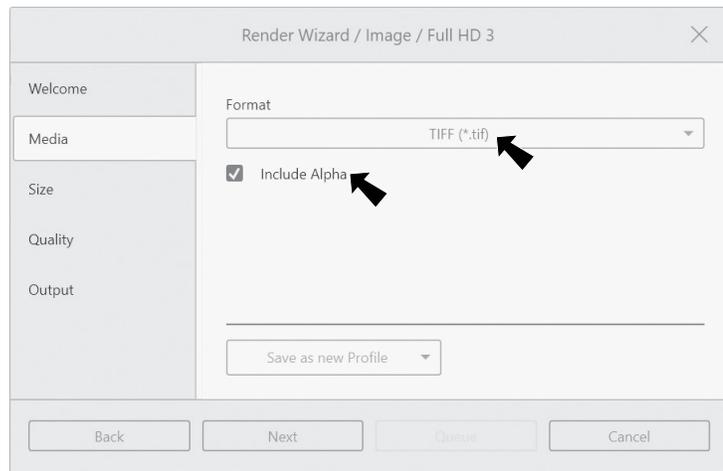

Fig. 29

Step 2. In Wizard Welcome page, **Fig. 30**
under Select Type
select **Image**
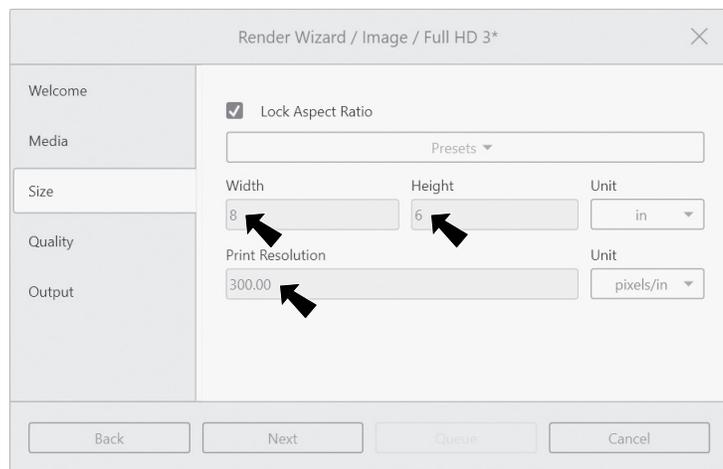click **Next**.

Fig. 30

Step 3. Media page, **Fig. 31**
Format **TIFF**
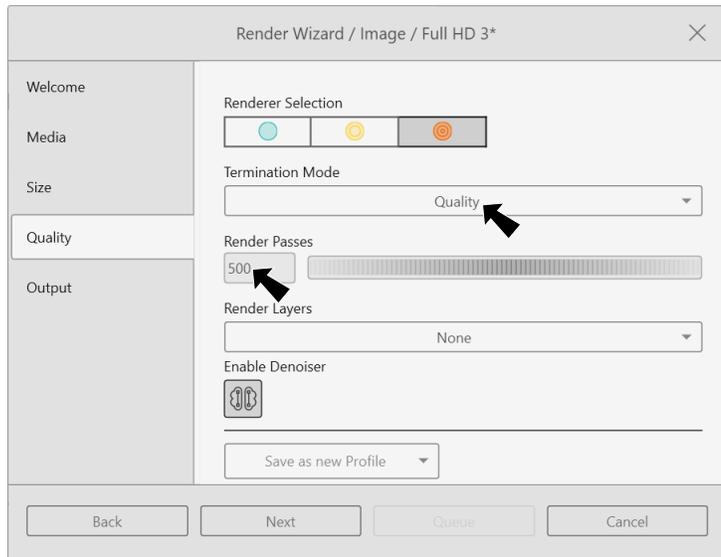check **Include Alpha**
click **Next**.

Fig. 31

Step 4. Size page, **Fig. 32**
set **Width and Height**
set **Resolution**
click **Next**.

Tip: Higher values yields better quality image but takes longer.
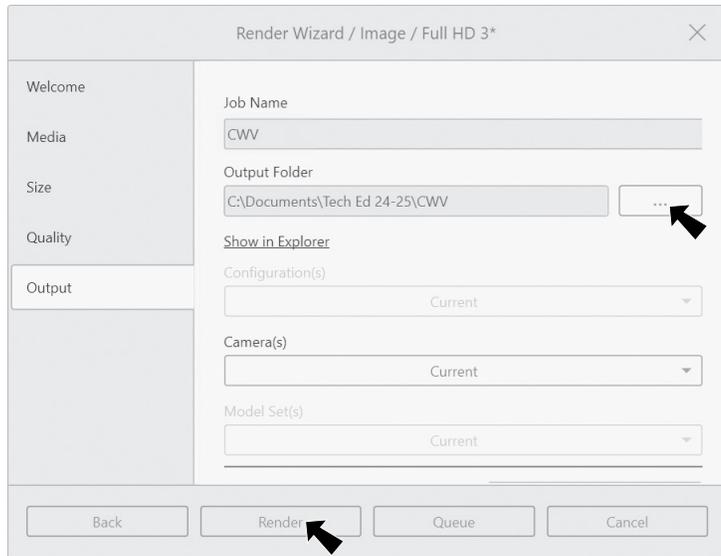

Fig. 32

Step 5.   Quality, **Fig. 33**
          Termination Mode **Quality**
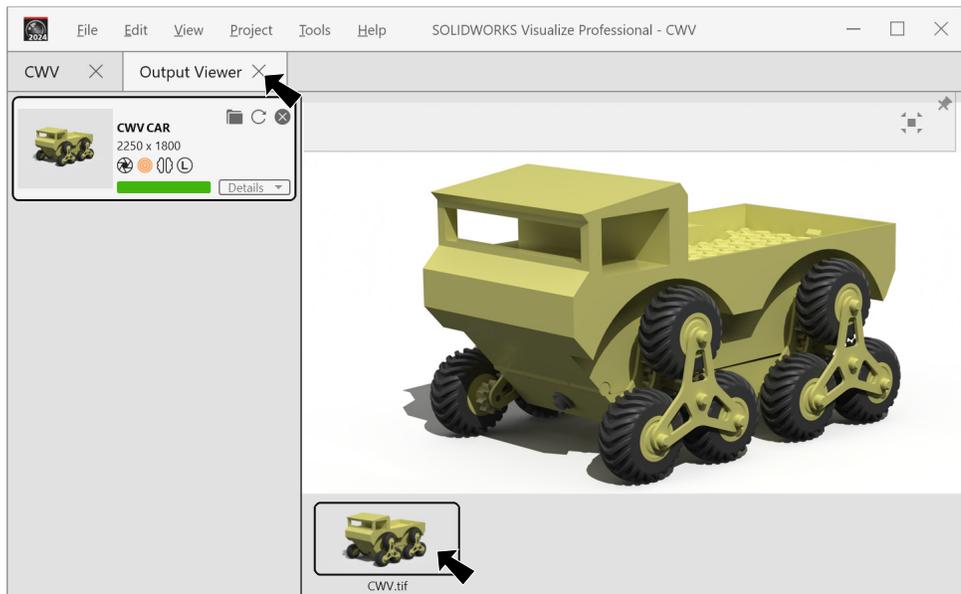   set **Render Passes**
          click **Next**.

Fig. 33

Step 6.   Output, **Fig. 34**
          set **Output Folder**
          click **Render**.

Step 7.   In the Output Viewer, **Fig. 35**
          After rendering
          click **thumbnail** to open
          image in your image software.
          Close Output Viewer ✕.

Fig. 34

Tip: Right click

Render Wizard
to directly start render-
ing.

Fig. 35