

Remove Doubles

Access:

Keyboard shortcut: None

Mode: 3D Editor: Edit Mode

Panel: Tool Shelf > Tools Tab > Remove > Remove Doubles

Menu: Mesh > Vertices > Remove Doubles
Specials > Remove Doubles
Vertex > Remove Doubles

Description:

Remove Double deletes vertices that are closer together than a specified distance. The default distance is 0.0001 Blender Units but may be specified in the Operator Pane.

The “Unselected” option in the Operator Pane allows selected vertices to be merged with unselected vertices. When disabled (by default) selected vertices will e merged only with selected vertices.

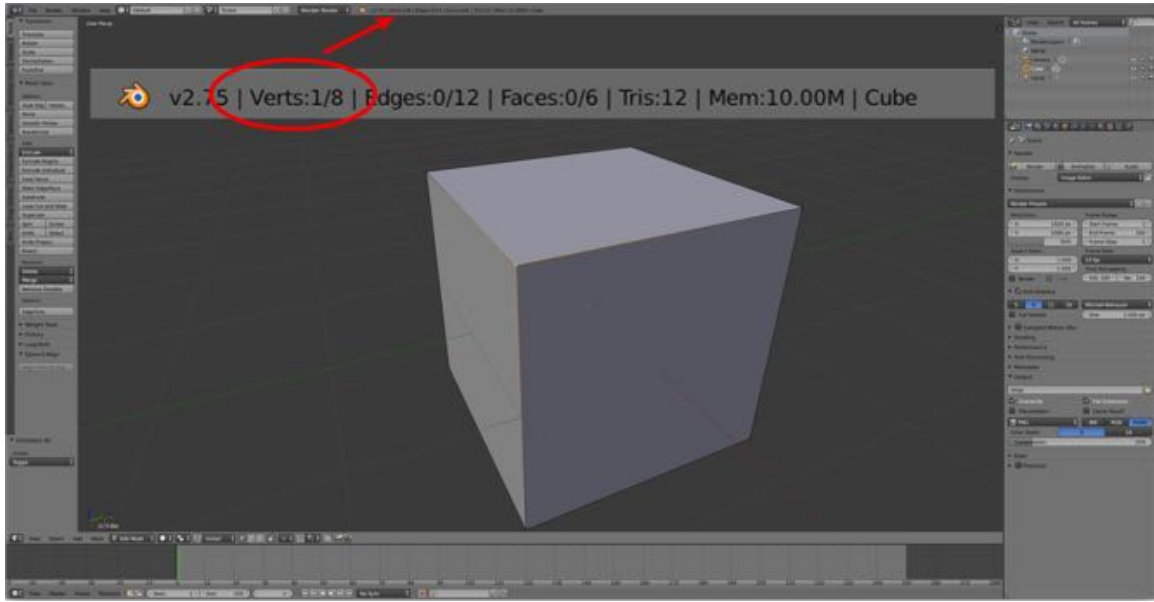
To Use the Tool:

- **Switch** to the 3D Editor’s **Edit Mode** and **Vertex Selection Mode**.
- **Select** a **mesh** or parts thereof.
- In the 3D Editor’s Tool Shelf under Remove **select** “**Remove Double**”.

Let’s Try It:

- **Open Blender** and in the 3D Editor select **Edit Mode** and **Vertex Selection Mode**.
- **Select** (RMB) the **upper left vertex** of the **default cube**.

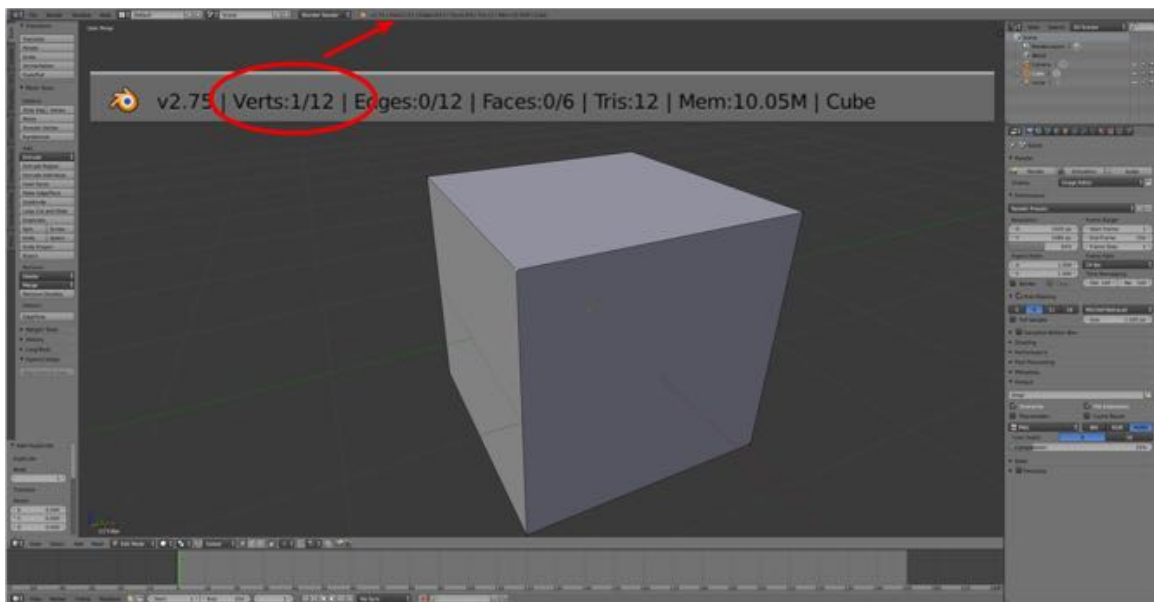
Notice in the Information Editor Header that the default cube has 8 vertices with one selected (1/8).



210

- **Duplicate** the selected vertex **four times** by pressing the sequence **SHIFT + D-KEY > ENTER** four times.

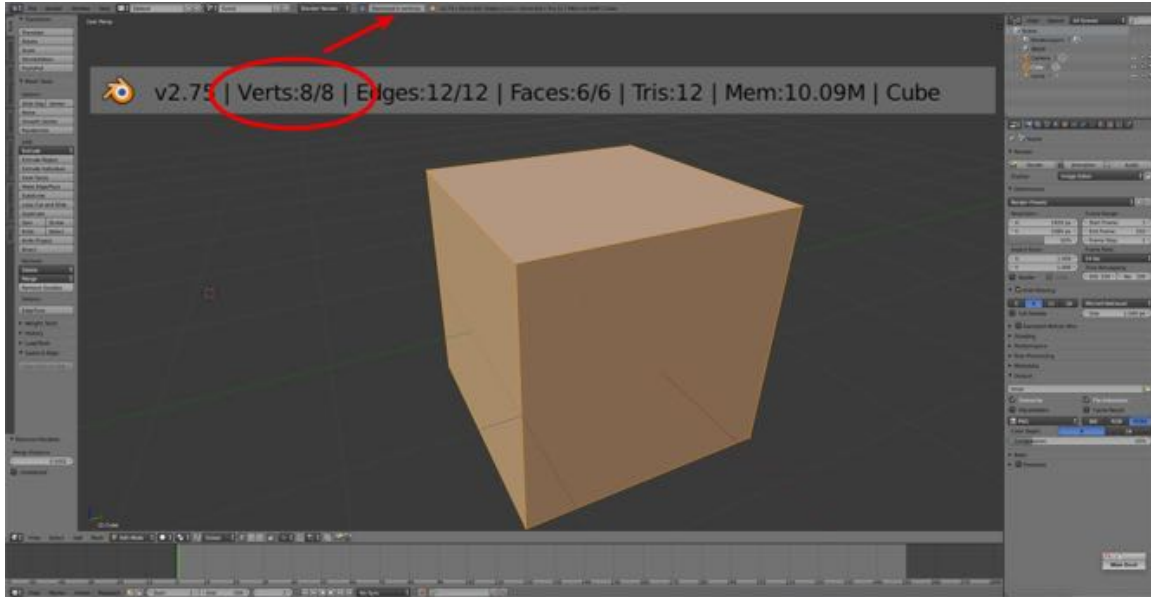
Notice in the Information Editor Header that the scene now has 12 vertices with one selected (1/12), the eight vertices of the default cube and the four individual vertices created by the duplication.



211

- **Select all** of the vertices (**A-KEY**).
- In the 3D Editor's Tool Shelf under Remove select "**Remove Double**".

Notice in the Information Editor Header that the scene now has 8 vertices with one selected (1/8) These are the 8 vertices of the default cube, the remaining four having been delete.



212

Additional Comments:

Remove Doubles (multiple vertices in the same location) is an important tool for cleaning up meshes. It should always be applied before exporting a model from Blender and importing it into Trainz. Indeed, it is good practice to apply it regularly while constructing complex models.

For More Information:

Blender Reference Manual, **Remove Doubles**

<https://www.blender.org/manual/modeling/meshes/editing/vertices.html#merging>