

PowertrainComponent is a base class for all powertrain components: EngineComponent, ClutchComponent, TransmissionComponent, etc.

- All the PowertrainComponents have the following common fields in the inspector:
  - Name - name of the component. Changing the Name of a component will reset Output on any components that are using that component.
  - Inertia - inertia of the component. Inertia of each component contributes to the total system inertia. How much depends on the clutch engagement and current gear ratio.
  - Output - Powertrain Component to which the torque is forwarded. In cases such as Differential Component there can be multiple outputs (e.g. left and right wheel).



Common PowertrainComponent fields.

- Changing the name field on component will reset all the Outputs on other PowertrainComponents that use that component as an output.
- Increasing Inertia will make the component spin up slower if the same torque is applied.
- Inertia of WheelComponent is calculated from WheelControllers mass and radius settings.

**Inertia must always be larger than 0!**

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