



**CRANE**

## Innovation Infosheet

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### Convertible Trailer

**Track Code:** CRANE-100314

**Categories:**

- Mechanical Engineering
- NSWC Crane

**Keywords:**

- Crane
- Mechanical Engineering

Different types of hitches are used for towing trailers behind vehicles, including pintle hitches and fifth-wheel type hitches. The pintle hitch uses a pin or ball near the rear bumper of a towing vehicle to interlock with the trailer. A fifth-wheel hitch is usually supported within the bed of a pick-up truck for the purpose of distributing the load from a trailer over the axle of the towing vehicle. Trailers configured with a pintle hitch cannot be attached to a towing vehicle by means of a fifth-wheel hitch, and vice versa.

Naval Surface Warfare Center, Crane Division, has patented and prototyped a universal towing configuration that enables a trailer to be attached to a fifth-wheel or pintle mount.

**Potential Applications:**

- Farming and Agriculture
- Commercial Trucking and Transportation
- Fleet Vehicles
- Military

**People:**

- Schneider, John Felix (Project leader)

**Intellectual Property:**

**Application Date:** October 30, 2009

**Type:** Utility Patent

**Country of Filing:** United States

**Patent Number:** 8,210,557

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