

RAILCAR VIBRATORS

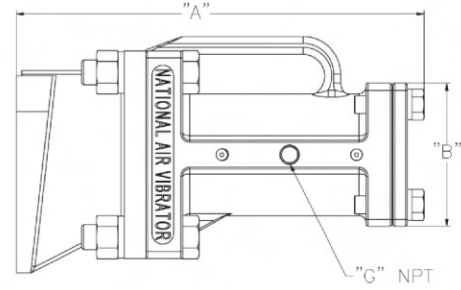
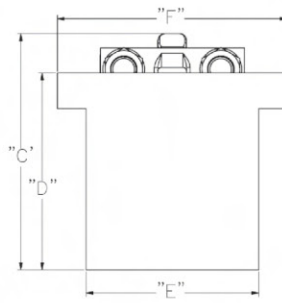
Hopper Car/Portable



NAVCO[®]
Houston, Texas

HCP Specifications

The NAVCO Hopper Car Portable (HCP) pneumatic piston vibrator is designed to provide reliable and effective performance in difficult applications and harsh environments. The size and operating characteristics of the HCP make it ideal for solving heavy duty railcar unloading problems.



Model	A	B	C	D	E	F	G	Weight (lbs)	Air Consumption
HCP 2.00	11 3/4	3 1/4	11	7	6 1/8	8	1/4	42	8.5 S.C.F.M.
HCP 3.00	14 1/4	5	8	7	6 1/8	8	3/8	72	14 S.C.F.M.
HCP 3.L0	16 1/2	5	8	7	6 1/8	8	3/8	80	18 S.C.F.M.
HCP 4.00	16 1/4	8	9 1/4	7	6 1/8	8	1/2	115	26 S.C.F.M.

- **Free Ride Design** Uses the entire mass of the vibrator, the most efficient means to transmit vibration energy into the railcar.
- **Teflon Coated** Teflon coating of all internal surfaces comes standard – guaranteeing maximum performance life in harsh environments.
- **Better Performance with Less Air** The HCP consumes less air than comparable rotary pneumatic vibrators.
- **Easy to Handle** Special mounting head prevents the HCP from becoming stuck in the railcar bracket—a common problem with other brands.
- **Universal Mounting Head** Fits all dovetail brackets found on North American hopper cars.
- **HCP Models are Powerful** HCP Models produce greater vibration energy than rotary pneumatic vibrators.

Handling Carts

HCP Manual Cart



The *HCP Manual Cart* makes installation, removal and transportation of HCP units safe and easy! The Manual Cart is designed to minimize operator exertion by maximizing leverage.

HCP Auto-Lift Cart

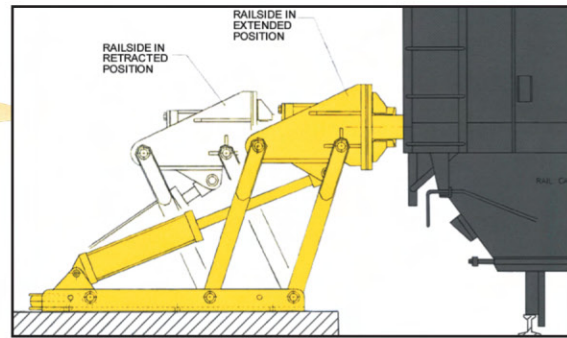


The *Auto-Lift Cart* offers benefits similar to the Manual Cart, but is fully automated. Simply attach an air supply line to the cart and a pneumatic cylinder lifts and lowers the HCP into position.

Other Railcar Products from NAVCO



Railside Car Shaker



The NAVCO Railside Car Shaker is a permanently mounted pneumatic vibration system designed to maximize the efficiency of the loading and unloading of bulk materials from railcars.

Advantages of the Railside Car Shaker include:

■ Safety	Eliminates hazardous, labor intensive duties associated with manual methods of flow facilitation.
■ Labor Savings	Operation of the Railside Car Shaker can easily be performed by one person in conjunction with other duties.
■ Faster Unloading	The NAVCO Railside Car Shaker has successfully reduced unloading time by more than 75% in several applications.
■ Increased Tonnage	Effective in the densification of material during loading – increasing process efficiency.
■ Low Installation Cost	The compact design and dampening features of the Railside Car Shaker minimize anchoring requirements.

Overhead Car Shaker



Special Features:

- **Unitized Exciter Drive** Simply bolts to the mounting base
- **Cardan Shaft Drive** No belts to replace or adjust
- **Long Service Life** Constructed of stress-relieved heavy steel plate
- **Rugged Construction** Designed for continuous 24 hour duty
- **Isolation System** Reduces vibration transmitted to the drive motor

The NAVCO Overhead Car Shaker is designed for very heavy duty unloading of open top railcars. The Overhead Car Shaker operates by lifting its mass and bumping back onto the railcar sidewalls. This action creates an impulse throughout the railcar – initiating and maintaining material flow for even the most stubborn of materials.

NAVCO has been solving material flow problems in industrial applications since 1955. The high amplitude, low frequency, linear impulse generated by NAVCO pneumatic piston vibrators is ideal for dislodging and facilitating the flow of bulk materials in a broad range of industries – including:

- Power
- Steel
- Plastics
- Chemicals
- Concrete & Aggregate
- Pulp & Paper
- Food Processing
- Feed & Grains
- Pharmaceuticals
- Foundry
- Automotive
- Mining
- Ceramics
- Textiles

