

CAPABILITIES AND FEATURES

The Hydraulic Kneeling / Erecting Cart is used for the purpose of kneeling and raising the aircraft for transportability into cargo aircraft, rail or truck by removing and replacing hydraulic fluid in the helicopter landing gear struts.

The Cart delivers MIL-H-5606 Hydraulic Fluid. The Cart is mounted on two wheels with semi-pneumatic tires for easy travel on the flight line.

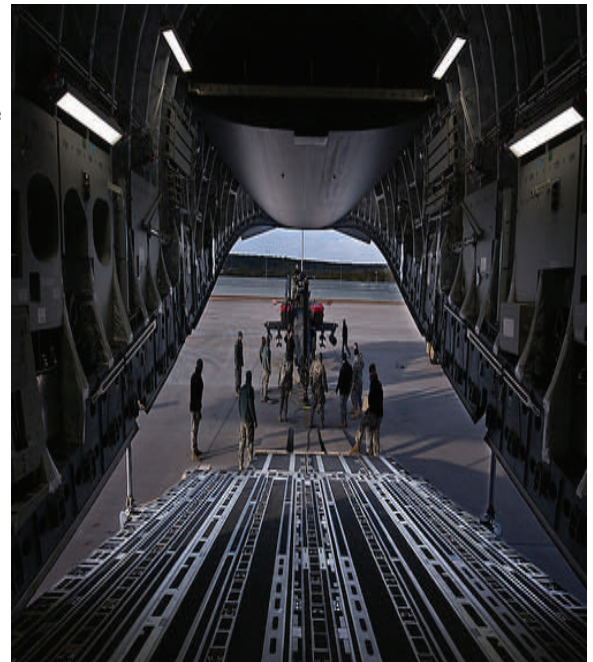
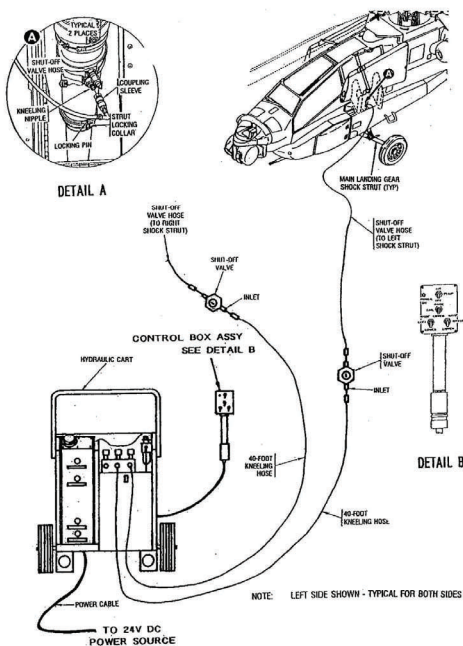
The operator's controls and indicators are located on the front side of the cart for easy viewing and operation.

Major Components: The major components of the hydraulic / erecting cart are Frame and Cabinet, Manifold Assembly, Motor and Pump Assembly, Reservoir Assembly, Hydraulic Piping Assembly, and Electrical Wiring Components.

Frame and Cabinet is manufactured of welded steel and supported on semi-pneumatic tires at the rear corners and legs at the front corners. A hinged door at the rear of the cabinet allows for easy access to internal components and cables. A hinged panel cover on top of the cabinet provides access to manifold controls.

The Manifold Assembly includes a majority of the controls and indicators used on the cart. Six Solenoid valves permit / receive fluid flow to and from the aircraft. A seventh solenoid valve allows fluid flow to re-circulate to the oil reservoir. Three manual flow regulators control the amount of fluid. Three quick disconnect for easy coupling to the hoses. A liquid filled 5000 psi gauge to read pump pressure and a variable pressure relief valve to adjust flow pressures between 100 and 3000 psi.

Motor and Pump Assembly receives 24 vdc from either the aircrafts auxiliary power unit or batteries. The motor, starter, breakers and electromagnetic interference filter are enclosed in a case to protect them from the environment.



Reservoir Assembly is made from welded aluminum and can store up to 5 gallons of hydraulic fluid. Four level site glasses are placed strategically to indicate fluid levels. A breather/ filler with removable cap and an internal filter.

Hydraulic Piping Assembly consists of tubing, tees, elbows and connectors.

Electrical Wiring / Components consist of a 30 foot 24 vdc shielded power cable with power receptacle to mate with aircraft power plug. An adapter cable and power plug with battery clips connectors used for battery connecting. A 50 foot cable connected at one end to the Motor / Starter and at the other to the controller. The Controller has four toggle switches and a Power On indicating light. One toggle used for Pump On/Off operations, the other three toggles switches are for momentary contact used for tail, left and right Raise / Lower operations. These toggles switches are fail-safe controls to prevent a fully loaded aircraft from lowering / kneeling without proper switches being actuated.