

MALABAR

INTERNATIONAL

Model 705C & 745B Tail Support Stanchion for B747 Freighter & Combi

Tail Support Stanchion dampens aircraft movement during ground operations.

Malabar Models 705C and 745B are for use on the Boeing 747 Freighter and Combi during cargo operations to dampen aircraft movement caused by changes in center of gravity and weight. Nose door sill movement is reduced **50-80%**. Model 705C is designed for **Fixed** location operations while the 745B is a **Flyaway** unit for ULD air transport on a 125 in. x 88 in. pallet.

Model 705C & 745B are "Unipod" type units with a tripod support structure. The stanchions are rated at 15 tons and may be pre-loaded with the integral hand pump to any load up to 25,000 pounds. The stanchion load ram is then a solid column at loads up to 25,000 pounds. When the load exceeds the limit, a pressure relief valve opens to a gradual retracting of the load ram. The ram will return to a solid column when the load reduces to approx. 22,500 pounds. This hydraulic dampening effect occurs slowly to restrain aircraft vertical movement.

As aircraft center of gravity shifts forward, or weight decreases, the stanchion ram extends with the aircraft until a compressive load is reapplied; thus acting to restrain the aircraft **against tipping**.

Malabar Head Stock Attached to Aircraft



Model 705C & 745B include a head stock (as shown above) that clamps to the 747 freighter/combi tail ball fitting. The head stock jaws are operated by an integral hydraulic cylinder for opening and closing the jaws around the ball fitting. The head stock jaws travel over center to the closed and lock position to ensure a positive connection even in the event of a loss of hydraulic pressure in the jaw cylinder.

The stanchion cylinder assembly is supported by the tripod leg structure for towing and positioning. Once in operation, with the head stock engaged around the ball fitting, the stanchion footpad is lowered to the ground and aircraft load is transmitted through the stanchion to the single footpad.

Both Malabar models meet or exceed Boeing recommendations. Specify either model for applications requiring Boeing Tool #ME65B16362.

Model 705C Tail Support Stanchion Fixed Base Type Unit



Model 745B Tail Support Stanchion Flyaway, ULD Type Unit



705C & 745B Specifications:

Rated Capacity:	15 US Tons (13.6 MT)
Low Height:	210 inches (5334 mm)
Hydraulic Lift:	70 inches (1778 mm)
Total Extended Height:	280 inches (7112 mm)
External Relief Valve Set Point:	25,000 lbs. (11,360 kgs.)
Internal Relief Valve Set Point:	16.5 US Tons (14.9 MT)
Factory Proof Load Test:	22.5 US Tons (20.4 MT)
Minimum Horizontal Displacement:	9 inch radius (228 mm), (18 inch diameter)
Head Stock Relief Valve Pressure:	1000 psig (70 kg/cm ²)
Equipment Included:	
Head Stock:	Hydraulic operated with integral hand pump. (includes over center lock & 2 inch ball receptacle)
"Unipod" Foot Pad:	14 inch diameter with ball swivel & adj. screw.
Towbar:	3 inch lunette eye with automatic parking brake.
Ram Hand Pump Ass'y.:	3 position fulcrum for low-medium-high pressure.
Load Gauge:	4 1/2 inch dia. dual scale dial (Tons & psig)
Skydrol Resistant Paint:	Standard color: Yellow (other colors are available)

Additional Specifications:

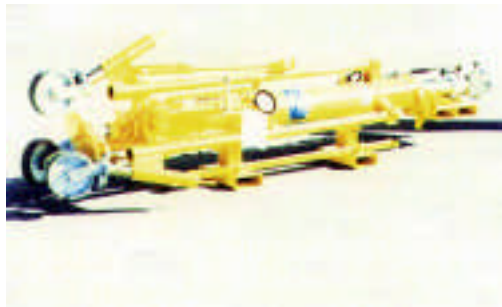
Model 705C:

Tripod Leg Base Radius:	64 inches (1625 mm)
Ladder & Platform Assembly:	Furnished as standard equipment.
Standard Running Gear:	14 inch diameter wheels with swivel locks
Hydraulic Reservoir Capacity:	8.75 gallons (33.1 liters)
Unit Net Weight (wet):	2750 lbs. (1247 kgs.)
Options Available:	Foam filled wheels for rough ground conditions Air operated hydraulic pump
Shipping Data:	
Standard Skid, KD:	200"L x 40"W x 50"H, 3000 lbs.
Export Crate, KD:	202"L x 45"W x 53"H, 3500 lbs.

Model 745B:

Air Transportable (ULD):	Fits standard 88 inch x 125 inch pallet.
Tripod Leg Base Radius:	54 inches (1372 mm)
Hydraulic Reservoir Capacity:	5.3 gallons (20 liters)
Unit Net Weight (wet):	1450 lbs. (659 kgs.)
Shipping Data:	
Standard Skid, KD:	141"L x 40"W x 46"H, 1400 lbs.
Export Crate, KD:	143"L x 45"W x 48"H, 1600 lbs.

Model 745B (in air transport position)



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Malabar Tail Support Stanchions are built to withstand harsh environmental conditions, rugged use and to provide many years of continuous service. Our customers are guaranteed a quality product with each purchase and are assured of our continued product support whenever and wherever the need arises.

MALABAR International

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