

Tail Support Stanchion

Model 705C & 745B



Model 705C



Model 745B

The Models 705C and 745B are for use on the Boeing 747 Freighter/Combi and the 747-8F during cargo operations to dampen aircraft movement caused by change in center of gravity and weight. Nose door sill movement is reduced 50-80%. Model 705C is designer for fixed location operations, while Model 745B is a flyaway unit for ULD air transport on a 125 inch x 88 inch 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 approximately 22,500 pounds. This hydraulic dampening effect occurs slowly to restrain aircraft vertical movement.

As the 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.

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

Models 705C & 745B 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.

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Malabar Head Stock Attached to Aircraft

Models 705C and 745B include a head stock (as shown above) that clamps to the B747 Freighter/Combi and the B747-8F 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.

Standard Features:

- Hydraulic operated with integral hand pump head stock (includes over center lock & 2 inch ball receptacle)
- “Unipod” foot pad ,14 inch diameter with ball swivel & adjustable screw
- Towbar with 3 inch lunette eye and automatic parking brake
- Ram hand pump assembly with 3 position fulcrum for low/medium/high pressure
- Load gauge, 4.5 inch diameter dual scale dial (tons/psig)
- Ladder/platform (705C only)
- Skydrol resistant paint (safety yellow)
- 3 year standard warranty
- Shipment on domestic skid

Optional Features:

Model 705C

- Air operated hydraulic pump
- Foam filled tires
- Export crating
- Customer specified paint color

Model 745B

- Export crating
- Customer specified paint color

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Specifications:

Rated Capacity	15 tons (13.6 m. tons)
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 kg)
Internal Relief Valve Set Point	16.5 US Tons (14.9 m. tons)
Factory Proof Load Test	22.5 tons (20.4 m. tons)
Minimum Horizontal Displacement	9 inch radius (228 mm)
Head Stock Relief Valve Pressure	1000 psig (70 kg/sq cm)

Additional Specifications:

Model 705C:

Tripod Leg Base Radius	64 inches (1625 mm)
Hydraulic Reservoir Capacity	8.75 gallons (33.1 liters)
Unit Net Weight (wet)	2750 lbs (1247 kg)

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 kg)

Models 705 & 745B Typical Applications:

Tail Support for B747 Freighter/Combi and 747-8F

Optional Equipment Codes:

(Order Separately)

- AP: Air Pump (705C only)
- FT: Foam Filled Tires (705C only)
- SPC: Specified Paint Color

Packaging Codes & Options:

(Specify with order)

- : Domestic Skid
- EC: Export Crate (Additional Cost)

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Shipping Data:

NOTE: Unless otherwise specified, Model 705C is shipped on a wood skid in the knocked down condition.

Packaging Code	Length inches (mm)	Width inches (mm)	Height inches (mm)	Weight lbs (kg)
-	200 (5080)	40 (1016)	50 (1270)	3000 (1361)
EC	202 (5131)	45 (1143)	53 (1346)	3500 (1588)

Shipping Data:

NOTE: Unless otherwise specified, Model 745B is shipped on a wood skid in the knocked down condition.

Packaging Code	Length inches (mm)	Width inches (mm)	Height inches (mm)	Weight lbs (kg)
-	141 (3582)	40 (1016)	46 (1169)	1400 (635)
EC	143 (3632)	45 (1143)	48 (1219)	1600 (726)