



Telescoping Cylinder Installation and Operation Instructions

Models

HCTL-37578 HCTL-37590 HCTL-375108 HCTL-44120 HCTL-44132
HCTL-44144



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HCTL-37578	7 ton, 3.75" cylinder x 78" stroke cylinder
HCTL-37590	7 ton, 3.75" cylinder x 90" stroke cylinder
HCTL-375108	7 ton, 3.75" cylinder x 108" stroke cylinder
HCTL-44120	12 ton, 4.4" cylinder x 120" stroke cylinder
HCTL-44132	12 ton, 4.4" cylinder x 132" stroke cylinder
HCTL-44144	12 ton, 4.4" cylinder x 144" stroke cylinder

RAM telescoping cylinders are designed for dump trailer applications only.

Always load and unload trailer when attached to the tow vehicle.

Pacific Rim International/Pacific Trailer Products is not responsible for damages as a result of improper use, installation and care for product.

It is the trailer manufacturers responsibility to determine trailer support member and welding size to properly support the load being lifted. Illustrations are for instructional purposes only.

Make sure trailer builder has included all proper warning instructions they should be providing as a manufacturer.

Never overload a trailer beyond the gross vehicle weight rating (GVW) or gross axle weight rating (GAW) of the trailer or vehicle.

Make sure to follow the instructions carefully that the trailer manufacturer provides with the trailer.

Make sure brake lines, electrical wiring, hydraulic lines, etc do not interfere with the operation of the hoist system. If the hoist system is allowed to rub against those items mentioned could result in damage and therefore an unsafe trailer.

Always use caution while working around hydraulic systems. Therefore, when welding always maintain a safe distance from the hydraulic system when welding.

Always keep truck exhaust heat away from the hydraulic systems as it could damage components.

Never attempt to jerk or shock the trailer with the dump in a raised position to remove a stuck load. This could cause damage which could cause serious injury.

Maximum pump load to not exceed 3200 psi.

Wear eye protection when working with hydraulic fluid.

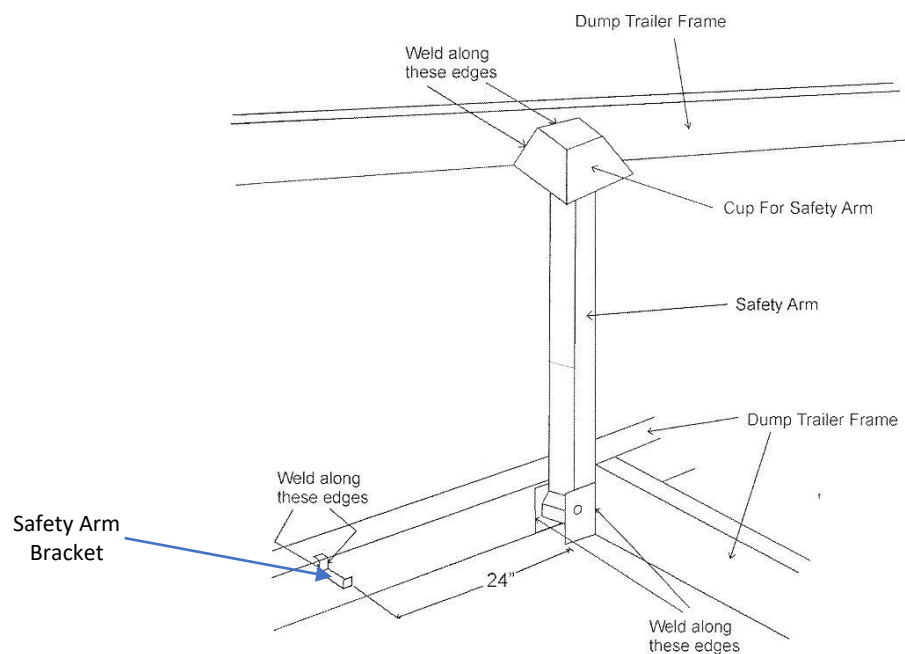
Safety Arm Installation And Use

Always support an unloaded dump trailer body with the safety arm. The safety arm is for supporting an unloaded dump trailer body only.

Never position yourself or others under a dump trailer body as it could result in serious injury or death.

Safety arm use:

- Raise dump trailer body to a sufficient height and shut off the hydraulic power to the cylinder hoist.
- Take the safety arm out of the safety arm bracket and rotate it up into a vertical position below the safety arm cup.
- Slowly lower the cylinder hoist until the top of the safety arm is seated into the safety arm cup
- To remove the safety arm, reverse this process and place the safety arm back into the safety arm bracket.



Max Unloaded Tilt Body Weight in lbs using one safety arm

Tilt Body Trailer Length In Feet

Distance from rear hinge to safety arm in inches

	8	10	12	14	16	18	20
50	3854	3083	2569	2202	1927	1713	1542
60	4625	3700	3083	2643	2313	2056	1850
70	5396	4317	3597	3083	2698	2398	2158
80	6167	4933	4111	3524	3083	2741	2467
90	6938	5550	4625	3964	3469	3083	2775
100		6167	5139	4405	3854	3426	3083
110		6783	5653	4845	4240	3769	3392
120		7400	6167	5286	4625	4111	3700
130			6681	5726	5010	4454	4008
140			7194	6167	5396	4796	4317
150				6607	5781	5139	4625
160				7048	6167	5481	4933
170					6552	5824	5242
180					6938	6167	5550
190					7323	6509	5858
200						6852	6167
210						7194	6475
220							6783
230							7092

Cylinder Installation

The telescopic cylinder is bolted in place to the bottom H bracket on the trailer frame and the brackets on the front of the dump trailer box.



H bracket base
to attached to
the trailer frame



Bracket to
attach to
the dump
trailer box.

Hydraulic Hose Attachment



Hose from Port A on hydraulic
power unit (maximum pressure
3200 psi) to attached to
hydraulic cylinder.

Use only single
acting power
up/gravity down
HPU for
telescopic
application



HPU is set up to receive 9/16-18
SAE #6 JIC 37 degree flare
fittings. Cylinder is setup to
receive SAE #8 ORB

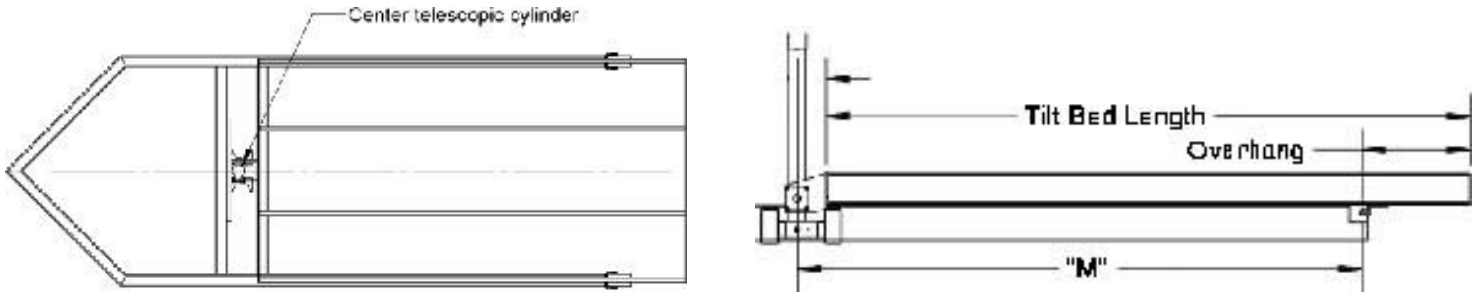
For hydraulic hose hook up to hydraulic power unit and air bleeding, refer to HPU instructions

Troubleshooting

If hoist is not extending or retracting check the following:

- Make sure all electrical connections are secure and battery is fully charged and grounded.
- Make sure hydraulic fluid is flowing from the HPU unit and through the lines. Check to make sure there are no leaks or pinch points in the hoses and all hydraulic connections are secure.
- If cylinder retracts after raised to desired location, check fluid level in the HPU unit and that all connections are secure.

Weight Ratings



All information above is a general guide. It is trailer manufacturer's responsibility as to overall capacities for a specific trailer design. These calculations are also based on a level/evenly dispersed load. Improper sizing, mounting, and welding of the cylinder supports could result in support failure.

HCTL-37578 through HCTL-375108 capable of 14,000lbs of push.

HCTL-44120 through HCTL-44144 capable of 24,000lbs of push.

HCTL-37578 (14,000 lbs. x 78" Stroke)					
Tilt Bed (Feet)	Overhang (Inches)	"M" Dimension (Inches)	Max. Dump Angle (Degrees)	Capacity (Tons)	
8	12	90.5	51	17.5	
	18	84.5	55	19.7	
	24	78.5	60	22.3	
10	12	114.5	45	16.8	
	18	108.5	48	18.1	
	24	102.5	51	20	

HCTL-37590 (14,000 lbs. x 90" Stroke)					
Tilt Bed (Feet)	Overhang (Inches)	"M" Dimension (Inches)	Max. Dump Angle (Degrees)	Capacity (Tons)	
10	12	114.5	46	16.8	
	18	108.5	49	18.1	
	24	102.5	52	20	
12	12	138.5	38	16.2	
	18	132.5	40	17.2	
	24	126.5	42	18.4	

HCTL-375108 (14,000 lbs. x 108" Stroke)					
Tilt Bed (Feet)	Overhang (Inches)	"M" Dimension (Inches)	Max. Dump Angle (Degrees)	Capacity (Tons)	
10	12	114.5	56	16.8	
	18	108.5	60	18.1	
	24	102.5	64	20	
12	12	138.5	45	16.2	
	18	132.5	47	17.2	
	24	126.5	49	18.4	
14	12	162.5	39	15.8	
	18	156.5	41	16.6	
	24	150.5	43	17.5	

Weight Ratings

HCTL-44120 (24,000 lbs. x 120" Stroke)				
Tilt Bed (Feet)	Overhang (Inches)	"M" Dimension (Inches)	Max. Dump Angle (Degrees)	Capacity (Tons)
12	12	138.5	51	27.7
	18	132.5	54	28.4
	24	126.5	57	30.1
14	12	162.5	43	27
	18	156.5	45	28.4
	24	150.5	47	30.1
16	12	186.5	37	26.6
	18	180.5	38	27.7
	24	174.5	39	29

HCTL-44132 (24,000 lbs. x 132" Stroke)				
Tilt Bed (Feet)	Overhang (Inches)	"M" Dimension (Inches)	Max. Dump Angle (Degrees)	Capacity (Tons)
12	12	138.5	51	27.7
	18	132.5	54	28.4
	24	126.5	57	30.1
14	12	162.5	43	27
	18	156.5	45	28.4
	24	150.5	47	30.1
16	12	186.5	37	26.6
	18	180.5	38	27.7
	24	174.5	39	29

HCTL-44144 (24,000 lbs. x 144" Stroke)				
Tilt Bed (Feet)	Overhang (Inches)	"M" Dimension (Inches)	Max. Dump Angle (Degrees)	Capacity (Tons)
14	12	162.5	53	27
	18	156.5	55	28.4
	24	150.5	57	30.1
16	12	186.5	45	26.6
	18	180.5	47	27.7
	24	174.5	49	29
18	12	210.5	40	26.3
	18	204.5	41	27.2
	24	198.5	42	28.3