Dewey Hoist

DIW ENGINEERING AND FABRICATION, LLC

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918.534.0000 918.534.0700 fax

Dewey hoist were developed by Energy Manufacturing, Monticello, Iowa. They have a great reputation for reliability and are undoubtedly one of the most rigid on the market. They are an icon by which many measure the competition. The unique toggle or "Advantage" link sets it apart from others in the ability to lift the maximum height with the shortest, lowest overall size. The Advantage link effectively changes the pivot point of the hoist providing the maximum power at the beginning of the lift where it is most needed.

Developed in 1955 these hoists have stood the *"test of time"* and provide economical truck conversions for many industries including agriculture, landscape, and construction. All models were redesigned in 1988-1990 to provide a greater safety margin and improved reliability.

Dewey Hoists are conversion kits. That is they contain 95% of the hardware and hydraulics necessary for a first time installer to be successful. Each hoist kit contains: Scissor frame, cylinder(s), front hold down brackets, adjustable sill supports, welded rear hinge, guides, and body prop. Each pump kit contains: Pump, reservoir, control valve, and operating cable (12V DC for small hoist and PTO for large). The customer must provide: Hydraulic oil, hydraulic hose, hydraulic fittings, primary electric wire (12V Models) or PTO box and shaft (PTO Models).

We also manufacture one of the only hoist lines to be specifically designed for use in trailers. These trailer (bolster) hoists range in size from 4 to 10 tons.

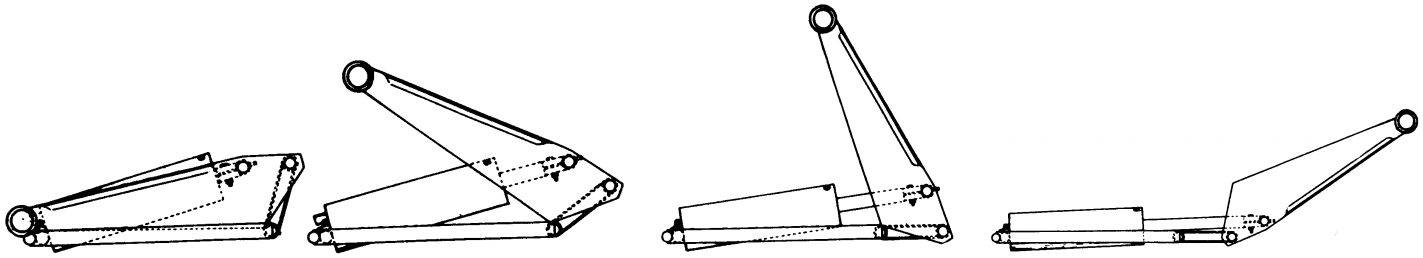
The Dewey Hoists are the Best Built, Best Priced Hoists in the Business!

www.deweyhoist.com

"High Quality Truck and Trailer Hoists"

Dewey Hoist Wagon / Trailer

High Quality, Performance, Efficiency, Strength, & Dependability



Unique "Advantage" Linkage increases the lifting power at the beginning of lift.

The center line of cylinder is at 90° to centerline of hinge point which gives maximum lifting power at the start of the lift where it is most needed.

Note ratio of lift to piston travel is increasing to maintain the most efficient leverage as hinge point is gradually changing.

Hinge point has changed smoothly as load continues to rise permitting the lifting action to continue at maximum power & efficiency.

Hinge point has moved to give maximum height. Note the extremely high lift obtainable by using the Advantage Link.

Only Dewey Hoists have the Advantage Linkage!

The "Advantage" Linkage allows the Dewey Hoist to lift heaver loads with less hydraulic pressure. The linkage actually increases the lifting power of the hoist from 20 – 50% during that difficult first few inches of rise. This means that for a hoist rated at 10 tons it may develop over 12 tons in the beginning. The linkage also allows us to produce the highest lift and lifting angles possible without sacrificing power. This insures that your load will dump where you want and when you want. Our standard hoist may lift higher than the competitions "Hi-Lift" models. The Advantage linkage also allows the hoist to be placed as far back as possible in the trailer frame without interference with the axles.

Now that is an "Advantage"

Specifications	**Dewey Trailer Hoist Models**				
	H-4	**H-5**		**HBH-5**	**TBH-5**
Ton Capacity (max.)	5	5		6	10
Box Length	8-10 ft.	8-10 ft.	.	10-12 ft.	10-14 ft.
Cylinders Required	1	1		1	2
Cylinder Bore X Stroke	4 X 13	5 X 14		5 X 14	5 X 14
Cylinder Action	Single	Single		Single	Single
Height Collapsed	10 in.	10 in.		11 in.	11 in.
Height Extended	57 in.	57 in.		84 in.	84 in.
Operating Pressure	1750 psi.	1500 psi.		1500 psi.	1500 psi
Oil Capacity (pump)	4.5 qt.	4.5 qt.		5 qt.	5 qt.
Bracket Kit (optional)	BHK-70	BHK-70		BHK-72	BHK-73
Ship Weight Hoist	122#	134#		218#	359#
Ship Weight Bracket Kits	27#	27#		47#	56#

Chart Based on the following conditions:

1. Load being equally distributed in box
2. Operating pressure is correct.
3. Hoist is mounted as per the instructions.

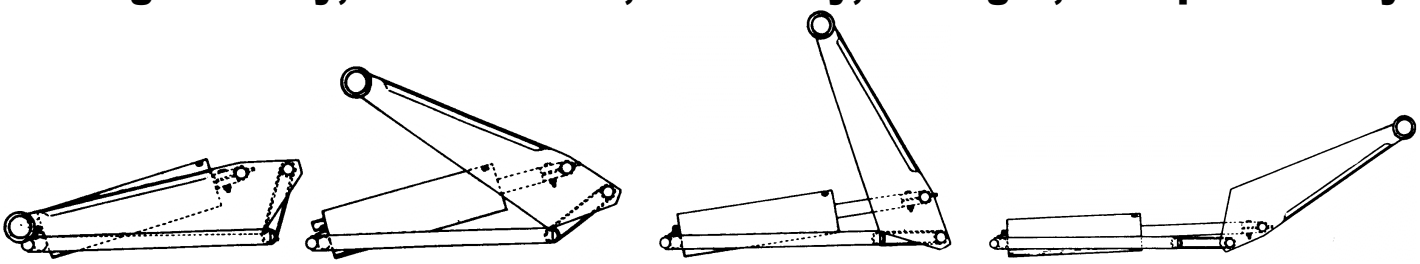
Designed Just for Trailers

Our trailer hoists are the only dump hoist designed specifically with the high lift necessary for trailer applications. There is nothing hanging under the trailer to hang up or be damaged. We can supply complete trailer hoist kits including Frame, Cylinder, Brackets, and 12V pump.

See us on the Internet: *www.deweyhoist.com*

Dewey Hoist Single Cylinder

High Quality, Performance, Efficiency, Strength, & Dependability



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Only Dewey Hoists have the Advantage Linkage!

The "Advantage" Linkage allows the Dewey Hoist to lift heaver loads with less hydraulic pressure. The linkage actually increases the lifting power of the hoist from 20 – 50% during that difficult first few inches of rise. This means that for a hoist rated at 22 tons it may develop over 27 tons in the beginning. The linkage also allows us to produce the highest lift and lifting angles possible without sacrificing power. This insures that your load will dump where you want and when you want. Our standard hoist may lift higher than the competitions "Hi-Lift" models. The Advantage linkage also allows the hoist to be placed as far back as possible in the truck frame without interference with the axle housing.

Now that is an "Advantage"

Specifications	Dewey Single Models					
	S-4	S-5	S-10			S-20
TBEA Class	A	A	B			E
Truck Usage	¾-1 Ton	¾-1 Ton	Single Axle			Tandem Axle
Cab / Axle (Inch.)	60	60	80			102-138
Box Length (Ft.)	8-10	8-10	8-12			12-18
3.Bore + Stroke	4 X 13	5 X 14	5 X 14			7 X 21
Cylinder Action	Single	Single	Single			Single
Unloading Valve	No	No	Yes			Yes
Height Collapsed	10"	10"	11"			14 ¾"
Height Extended	54 5/8"	57 ½"	62 3/8"			91 ¾"
Dump Angle	40°	40°	40°			45°
Lift Time (Sec.)	49	22	22			28
Pump Kit	14282A	12873A	12873A			12875A
Pump GPM	.85	3.3	3.3			8.5
Operating Press.	1700	1500	1500			1500
Oil Required	10 Qt.	15 Qt.	15 Qt.			40 Qt.
Ship Weight Hoist	215#	225#	350#			665#
Ship Weight Pump	64#	60#	60#			101#

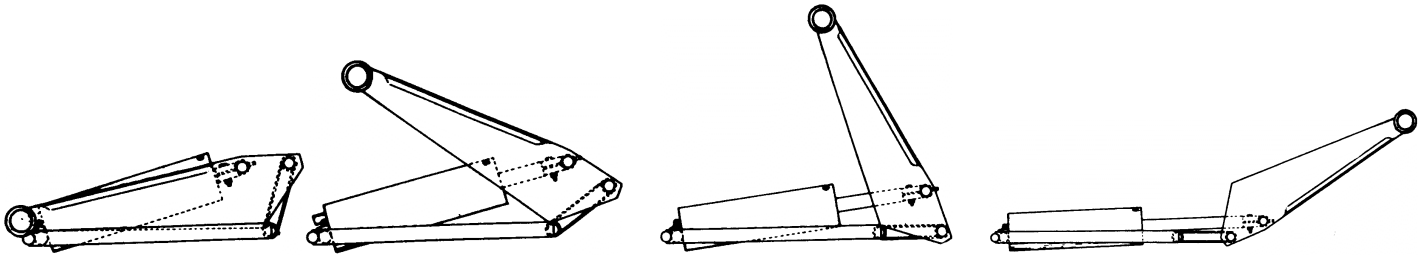
MAXIUMUM LIFT CAPACITY (TONS of Payload and Body)						
Box Overhang	Length of Box (Feet)					
	8	10	12	14	16	18
S-4 & S-5 Dewey Hoist						
None	4 ¾	3 ¾	3			
1	5+	4 ¾	3 3/4			
2		5+	4 3/4			
3			5+			
S-10 Dewey Hoist						
None	6 ½	5 ¼	4 ¼			
1	8 ¾	6 ½	5 ¼			
2	10+	8 ¾	6 ½			
3		10+	8 ¾			
4			10+			
S-20 Dewey Hoist						
1			14 ½	12	10 ¼	
2			18 ¼	14 ½	12	10 ¼
3			20+	18 ¼	14 ½	12
4				20+	18 ¼	14 ½

Chart Based on the following conditions:

1. Load being equally distributed in box
2. Operating pressure is correct.
3. Hoist is mounted as per instructions

Dewey Hoist Twin Cylinder

High Quality, Performance, Efficiency, Strength, & Dependability



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Now that is an "Advantage"

Specifications	Dewey Twin Model
	D-22H
TBEA Class	G
Truck Usage	Tandem Axle
Cab / Axle (Inches)	170
Box Length (Feet)	20
Bore + Stroke (Inches)	6 X 26
Cylinder Action	Single
Unloading Valve	Yes
Height Collapsed (Inches)	16
Height Extended (Inches)	108 ¼
Dump Angle	45°
Lift Time (Seconds)	44
Pump Kit	12875A
Pump Gallons Per Minute	8.5
Operating Pressure	1500
Oil Volume Required	40 Qt.
Ship Weight Hoist	850#
Ship Weight Pump	101#

MAXIMUM LIFT CAPACITY (TONS of Payload and Body)					
Box Overhang			Box Length (Feet)		
D-22 H			16	18	20
None			15	13	12
1			17	15	13
2			20	17	15
3			22+	20	17
4				22+	20

Chart based on the following conditions:

1. Load being equally distributed in box.
2. Operating pressure of 1500 psi.
3. Hoist Mounted as per the instructions.

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Hoist Selection

Truck hoists, and the act of dumping heavy loads is dangerous. We can prevent accidents by carefully selecting the CORRECT hoist for a given application. Our catalog pages are designed to provide the necessary information to match an application with a hoist kit.

To select the correct hoist you must know the following information:

1. **Length of cargo box in feet.**
2. **Maximum payload.** _____

3. **Weight of the cargo box.** _____

4. **Overhang from rear of box to the hinge pin in feet.** _____

5. **Desired dumping angle.** _____

Next refer to the catalog pages and match first the box length. Add the max payload to box weight and match the column, box length at top to the total payload. Be sure to refer to the box length with overhang. Now check the dump angle to see if the percent of rating is still above the total weight.

As a safety factor we use the next size heaver hoist if the ideal selection is marginal. All dump hoists are rated with an evenly distributed load, sometimes called a "water load". Since we have no control over the customers load we like to have a hoist BIGGER that their estimated load. Also many times the customer will forget that hoist are rated for total load (cargo box + payload) and overload their truck.

If you have questions please call us at 918-534-0000, Be Safe not Sorry!

Check our website: http://www.deweyhoist.com