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SOLD TO SHIP TO

VSA 2022 GAlbreath Single Pivot Hooks VSA

**PROPOSAL** 

Remittance Address for Deposits:

10641 Cordova Road Easton, MD 21601

Quote #: RSSQ37745

Account: Terms:

Date: 07/06/22

Sales Rep Fred Seitz

QTY	DESCRIPTION	UNIT PRICE	EXT PRICE
1.00	SINGLE AXLE SINGLE PIVOT HOOK HOIST 13K Capacity on 144 MODELS - Fixed 35.5" Hook Height	\$41,095.00	\$41,095.00
1.00	SINGLE AXLE SINGLE PIVOT HOOK HOIST 20K or 13K Capacity on 144 MODELS - Adj. 35.5" or 54" Hook Height	\$44,373.00	\$44,373.00
1.00	SINGLE AXLE SINGLE PIVOT HOOK HOIST 20K Capacity on 144 MODELS - Adj. 54" or 62" Hook Height	\$43,579.00	\$43,579.00
1.00	SINGLE AXLE SINGLE PIVOT HOOK HOIST 25K or 18K Capacity on 144 MODELS - Adj. 35.5" or 54" Hook Height	\$45,368.00	\$45,368.00
1.00	SINGLE AXLE SINGLE PIVOT HOOK HOIST 30K Capacity on 176 MODELS - Adj. 54" or 62" Hook Height	\$53,267.00	\$53,267.00
1.00	Factory Mounting - Single Axle Hoist / Container Handler - Includes Huck Bolts - Dual Viscosity Oil - Two Part Epoxy Primer & Paint		
1.00	Steel Half Round 44" Fenders (3114) - w/ Mounting Brackets (9616AO) - Single Axle - 8486BO prev. p/n		
1.00	freight		
1.00	SINGLE AXLE DUAL PIVOT HOOK HOIST 30K Capacity on 176 MODELS - Fixed 54" Hook Height	\$51,241.00	\$51,241.00
1.00	SINGLE AXLE DUAL PIVOT HOOK HOIST 20K Capacity on 144 MODELS - Fixed 54" Hook Height	\$43,074.00	\$43,074.00
1.00	SINGLE AXLE DUAL PIVOT HOOK HOIST 20K Capacity on 120 MODELS - Fixed 54" Hook Height	\$43,304.00	\$43,304.00
1.00	Single Axles - Muncie DS PTO for (Allison direct mount) Automatic Transmission - Hot Shift	:	
1.00	Galbreath U3-DPHK-160 30000# Hook Hoist; 54" Hook Height; Inside Controls; Air Controls; Outside Controls; Bumper with Recessed LED Lights (Reverse lighting also included); Direct Mount Pump; Steel Oil Reservoir; 2 Year Warranty on all Hydraulic Components; Operations - Installations - Service & Parts Manuals - Tandem Axle; Mid-body LED Lights - Hoist Up Alarm with Warning Light - Back Up Alarm Maximum Hook Height Above Truck (Frame- Loading/Unloading)- 119 1/16"; Maximum Hook Height Above Truck (Frame Dumping)- 160 3/4"; Cab to Hoist- 3 15/16"; Raised Angle- 57 Degrees (16')- 46 Degrees (18')- 39 Degrees (20'); Rated Capaicty- 30000 lbs; Lift Cylinders- 6"x 3 1/2"x 78"; Jib Cylinder- 4" x 2 1/2"x 48"; Recommended Container Length- 14' - 18 '; Approx Weight- 3768 lbs; Shipped in Black Primer; Stationary Rear Hold Down; Contoured Steel Fenders; HD Rear Hinge - Hoist Maintenance Props		\$62,560.00
1.00	Galbreath U4/U5-DPHK-176 40000#/50000# Hook Hoist; 54" or 61-3/4" Hook Height; Inside Controls; Inside Air Controls; Outside Controls; Bumper with Recessed LED Lights (Reversed lighting also included); Steel Oil Reservoir; Contour Steel Fenders; Direct Moun Pump; Steel Tank; Mid-Body Turn Signals - Hoist Up Alarm with Warning Light - Back Up	\$68,885.00 t	\$68,885.00
1 of 1		D#	DCC02774

QTY	DESCRIPTION	UNIT PRICE	EXT PRICE
	Alarm; 2 Year Warranty on all Hydraulic Components; Hoist Maintenance Props; Stationary Rear Hold Down; Operations - Installations - Service & Parts Manuals - Black Primer Paint; Maximum Hook Height Above Truck (Frame-Loading/Unloading)- 132 5/8"; Maximum Hook Height Above Truck (Frame Dumping)- 203 5/16"; Cab to Hoist-3"; Raised Angle- 58 Degrees; After Frame- 40"; Hoist Length- 213"; Hook Height- Adjustable (See Drawing & Dimensions); Rated Capacity- 40000 lbs; Lift Cylinders- 7" x 3 1/2"x 81"; Jib Cylinder- 4"x 2 1/2"x 48"; Recommended Container Length- 16'-20'; Approximate Weight- 6839 lbs 54" Hook Height Rates @ 40000# 61 3/4" Hook Height Rates @ 50000#		
	***22' (Container Lengths will Overhang Between 24" & Under 48")***		
1.00	Galbreath U4/U5-DPHK-200 40000#/50000# Hook Hoist; 54" or 61-3/4" Hook Height; Inside Controls; Inside Air Controls; Black Primer Paint; Outside Controls; Bumper with Recessed LED Lights; Contour Steel Fenders; Direct Mount Pump; Steel Tank; Mid-Body Turn Signals - Hoist Up Alarm with Warning Light - Hoist Maintenance Props; Back Up Alarm; 2 Year Warranty on all Hydraulic Components; Operations - Installations - Service & Parts Manuals - Steel Oil Reservior; Maximum Hook Height Above Truck (Frame-Loading/Unloading)- 132 5/8"; Maximum Hook Height Above Truck (Frame Dumping)- 203 5/16"; Cab to Hoist-3"; Raised Angle- 49 Degrees; After Frame- 40"; Hoist Length- 237"; Hook Height- Adjustable (See Drawing & Dimensions); Rated Capacity-40000 lbs; Lift Cylinders- 7" x 3 1/2"x 81"; Jib Cylinder- 4"x 2 1/2"x 48"; Recommended Container Length- 18'-22'; Approximate Weight- 7483 lbs 54" Hook Height Rates @ 40000# 61 3/4" Hook Height Rates @ 50000#	\$69,627.00	\$69,627.00
	***24' (Container Lengths will Overhang Between 24" & Under 48"); ***		
1.00	Galbreath U5-DPHK-176 50000# Hook Hoist; 61-3/4" Hook Height; ; Inside Controls; Inside Air Controls; Hoist Up Alarm with Signal Light; Hoist Maintenance Props; Black Primer Paint; Stationary Rear Hold DownOutside Controls; Bumper with Recessed LED Lights; Direct Mount Pump; Steel Tank: Mid-Body LED Lights - Bumper with Recessed LED Lighting (Reverse Lighting also Included) Steel Oil Reservior - HD Rear Hinge - Back Up Alarm 18' to 20' Container Length.	\$68,477.00	\$68,477.00
	***22' (Container Lengths will Overhang Between 24" & Under 48"); ***		
1.00	Galbreath U5-DPHK-200 50000# Hook Hoist; 61-3/4" Hook Height; ; Inside Controls; Inside Controls; Hoist Maintenance Props; Inside Air Controls; Outside Controls; Black Primer Paint; Stationary Rear Hold Down; Bumper with Recessed LED Lighting (Reverse lighting also included); Rear Stabilizer; Operation / Service / Parts Manuals; Steel Oil Reservior; Direct Mount Pump; Steel Tank: Mid-Body LED Lights - Hoist Up Alarm with Signal Light - Back Up Alarm; HD Rear Hinge; 2 Year Hydraulic Warranty 18' to 20' Container Length.	\$69,290.00	\$69,290.00
	***24' (Container Lengths will Overhang Between 24" & Under 48"); ***		
1.00	Galbreath U6-DPHK-176 60000# Hook Hoist; 61-3/4" Hook Height; Inside Controls;Inside Air Controls; Outside Controls; Bumper with Recessed LED Lighting (Reverse Lighting also Included); Hoist Maintenance Props; Black Primer Paint; Stationary Rear Hold Down; Rear Stabilizer; Contoured Steel Fenders; Operation / Service / Parts Manual; Steel Oil Reservior; Mid-Body LED Lights; HD Rear Hinge; Direct Mount Pump; Poly Tank: Mid-Body Turn Signal - Hoist Up Alarm with Signal Light - Back Up Alarm; 16' to 20' Container Length.	\$76,573.00	\$76,573.00
	***22' (Container Lengths will Overhang Between 24" & Under 48"); ***		
1.00	Galbreath U6-DPHK-200 60000# Hook Hoist; 61-3/4" Hook Height; ; Inside Controls; Hoist Maintenance Props; Inside Air Controls; Outside Controls; Black Primer Paint; Stationary Rear Hold Down; Bumper with Recessed LED Lighting (Reverse lighting also included); Rear Stabilizer; Contoured Steel Fenders; Operation / Service / Parts Manuals; Steel Oil Reservior; Direct Mount Pump; Poly Tank: Mid-Body LED Lights - Hoist Up Alarm with Signal Light - Back Up Alarm; HD Rear Hinge; 2 Year Hydraulic Warranty; 18' to 22' Container Length.	\$77,384.00	\$77,384.00
2 of 4		Doc#	RSSQ37745

QTY	DESCRIPTION	UNIT PRICE	EXT PRICE
	***24' (Container Lengths will Overhang Between 24" & Under 48"); ***		
1.00			
1.00	Steel Half Round 44" Fenders (3114) - w/ Mounting Brackets (9616AO) - Single Axle - 8486BO prev. p/n		
1.00	Aluminum Toolbox - 18" X 18" X 24" - Opens from the Front - A4819 - Toolbox Mounting Brackets Included		
1.00	FACTORY MOUNT - Any PTO option pick (labor only)		
1.00	FACTORY MOUNT - Install Toolbox on Hoist when hoist comes with a Side Mount Oil Reservoir using Combo Brackets - (labor only) - 2260W & 0340BO - U/AH-Series Cables and Hook Hoists Only		
1.00	Factory Mounting - Single Axle Hoist / Container Handler - Includes Huck Bolts - Dual Viscosity Oil - Two Part Epoxy Primer & Paint		
1.00	freight		

\*Total does not include optional items

F.E.T will be charged on all applicable items unless current F.E.T Exemption form is on file.

Any cancellation or modification of order will result in a 20% restocking charge to Buyer.

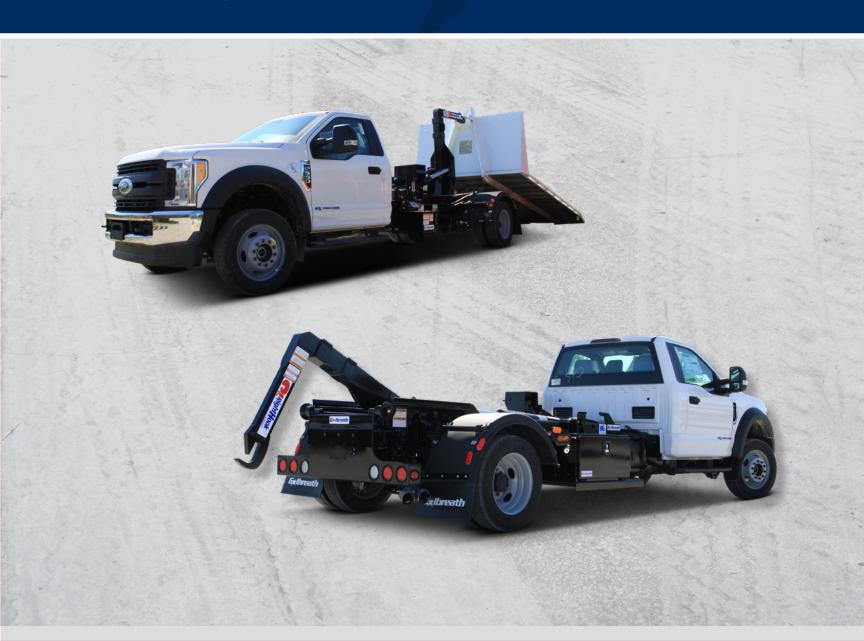


### SINGLE PIVOT HOOK HOISTS

36 1/2" HOOK HEIGHT

MODELS: U09-HK & U13-HK

**Single Pivot Hook Hoists** are designed for a variety of industry applications including waste, construction, recreation, auto, and more. Purpose-built with a fixed 36 ½" hook height, the U09-HK & U13-HK models haul short containers with a lower overall weight. The simple design of the single pivot hook hoist means fewer moving parts and less maintenance.



- Inside air controls mounted in ergonomic power tower featuring Plug And Play™ wiring
- · Back-up alarm & hoist up alarm with signal light in cab
- Secondary manual controls mounted outside on driver's side
- Inside frame rail stationary front & rear container hold downs
- Rear transition container supports
- Rear roller is ductile cast iron with bronze bushing
- T1 Steel Hook, Fixed hook height at 36 1/2"
- Welded & bolted on roller stools with 4" OD rollers & bronze bushings
- Rear apron & bumper assembly complete with LED lighting and pintle / reese adaptable
- Steel tank with dual sight / temp gauge and internal return filtration
- Warranty: 2-year limited on hydraulic system
- Customized engineering layouts ensure the best fit for each customer
- Engineered and manufactured in the U.S.

FEATURE	U09-HK & U13-HK
Hoist main frame	Adjustable - structural tubing A500 grade C
Jib frame/pivot tube	Structural tubing A500 grade C & A514 - T1 steel
Hydraulic pump	Gear type 17.5 GPM @1,500 RPM
Operating pressure	3,500 PSI
Hydraulic valve	2 spool / 25 GPM w/ safety bypass
Oil reservoir	13-gallon steel tank w/ internal return filtration
Lift cylinders	(2) dual acting rod type
Jib cylinders	(1) dual acting rod type
Hinge shaft	2" solid steel
Front stops	Jib fully extended
Hold downs	Stationary front and rear
Container stools	Rollers w/ bronze bearings
Rear Roller	4" flared rear tail rollers; 6" on U13-HK
Pickup Hook	A514 - T1 steel
Adjustable hook height	Fixed at 36 1/2"



Inside air controls in power tower



Secondary outside manual control valve with protective cover



Steel tank with dual sight/ temp gauge and internal return filtration



T1 steel hook fixed at 36 1/2"



One piece rear apron / bumper with LED lighting and pintle / reese hitch adaptable



Inside frame rail stationary front & rear container hold downs



Rear transition container supports



Welded & bolted on roller stools with 4" OD rollers & bronze bushings



### **Available Options**

- Pioneer tarping systems
- · Additional container hold downs
- Auxiliary hydraulic hook-ups / wet kits
- Variety of fenders (steel, aluminum & poly)
- Toolbox styles and sizes (steel, aluminum & poly)
- Pintle hook and reese style hitch assemblies
- Scale systems
- · Add air for non-air trucks
- Additional LED safety and work light configurations
- · Lift axles, tires and rims
- Rear view / back-up camera systems



Pioneer tarping systems



Toolbox styles and sizes (steel, aluminum & poly)



Pintle hook & reese style hitch assemblies



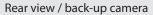


Add air for non-air trucks











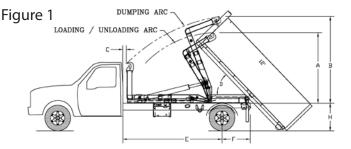
Variety of fenders (steel, aluminum and poly)

**U13-HK-120** shown with Pioneer HR2000PTO tarper and poly fender options

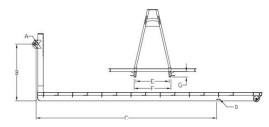


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Model	Lift Bar Dia.	Hook Ht.	Bar to Hold Down	Hold Down Locations	Inside Sill Width	Outside Sill Width	Long Sill Ht.
	Α	В	c	D	E	F	G
U09	1 ½"	36"	95 ¼" min.	Inside	37 ½" min.	41 ½" max.	4 ¼" min.
U13	1 ½"	36"	138" min.	Inside	37 ½" min.	41 ½" max.	4 ¼" min.

#### **Notes for Figure 1**

- When recommending container lengths, weight distribution, fender interference and overhang are factors.

  Please consult your local ordinances when determining the model of hoist needed to suit your container needs.
- 2 Factory tested with recommended container length and water level load.
- 3 Total maximum height will depend on the container and frame height. Consult engineering for clearance.
- 4 Frame Height = Top of truck chassis frame to ground. Using 17 ½" & 22 ½" tires. Any truck frame higher than 42" will change hoist capacities, dump angle and its ability to snatch onto the bar; consult engineering if higher than 42". Optimized dump angle is achieved with the following conatiners: 12' on 120" CA and 14' on 132/144" CA's
- 5 This distance does not allow for a behind the cab (BTC) oil reservoir, tarper platform and or room to add a tarper; must add space for those items.
- 6 Air ride suspensions require up to 25" minimum after frame.

#### Minimum Truck Requirements (Single Axle)

Axle rating: U09 = 6,000 front / 12,000 rear; U13 = 8,000 front / 15,000 rear Truck torque: 212 ft. lbs.

\*The chart below is an example of how to calculate the chassis section modulus (RBM / PSI = SM). Regardless of the frame YIELD and RBM, the min. SM must be  $13.42 \, \text{in}^3$  or more per each frame rail.

Truck Channel Ht.	RBM	Yield (PSI)	RBM/PSI = SM in <sup>3</sup>
10" or more (single wall)	1,610,000-3,000,000	120,000 psi	13.42 in <sup>3</sup> - 25 in <sup>3</sup>
10" or more (double wall)	1,500,000-3,000,000	100,000 psi	13.42 in <sup>3</sup> - 30 in <sup>3</sup>

Note: the single walled 120k psi with RBM less than 1,610,000 would not be acceptable because its SM would fall below the  $13.42 \, \text{in}^3$  minimum specification (1,605,000 / 120,000 =  $13.38 \, \text{in}^3$ ). For frames less than  $10^\circ$  consult engineering.

Specifications (Single Axle)	U09-HK-84	U09-HK-120	U13-HK-120	U13-HK-132	U13-HK-144
Recommended Container Size – 1	6' to 10'	8' to 12'	10' to 14' or 12' to 16'	12' to 16'	12' to 16'
Rated Hoist Capacity @ Hook Height 2	9,000 lbs	9,000 lbs	13,000 lbs	13,000 lbs	13,000 lbs
A – Max. Hook Height (Load/Unloading) <sup>3</sup> , <sup>4</sup>	86 5/16"	86 5/16"	91 %"	91 %"	91 1/8"
B – Max. Hook Height (Dumping) <sup>3</sup> , <sup>4</sup>	95 11/16"	104 5/16"	120 ¼"	120 1/4"	120 ¼"
C – Back of Cab to Hoist <sup>5</sup>	5"	8"	3 1/2"	3 1/2"	3 ½"
D – Dump Angle (per recommended container range) <sup>4</sup>	60° - 50°	64º - 46º	56º - 42º	49° - 35°	49º - 35º
E – (CA) Cab to Axle <sup>5</sup>	84"	120"	120"	132"	144"
F – After Frame <sup>6</sup>	35"	35"	38 ½" or 62 ½"	50 ½"	38 1/2"
G – Hoist Length	116 1/4"	144 3/16"	155 or 179"	179"	179"
H – Frame Height ⁴	42" or less	42" or less	42" or less	42" or less	42" or less
I – Hook Height	36 ½"	36 ½"	36 ½"	36 ½"	36 ½"
Lift Cylinders - (2) dual acting	5" x 3" x 45"	5" x 3" x 45"	5" x 3" x 45"	5" x 3" x 52"	5" x 3" x 52"
Jib Cylinder - (1) dual acting	3" x 2" x 16"	3" x 2" x 16"	3" x 2" x 37"	3" x 2" x 37"	3" x 2" x 37"
Approximate Weight w/ Standard Features	2,060 lbs.	2,460 lbs.	2,758 lbs.	2,758 lbs.	2,758 lbs.
Cycle Times @ 1,500 RPM (PSI / GPM)	3,500 / 17.5	3,500 / 17.5	3,500 / 17.5	3,500 / 17.5	3,500 / 17.5
Extending Dump	26 sec.	26 sec.	30 sec.	30 sec.	30 sec.
Retracting Dump	17 sec.	17 sec.	19 sec.	19 sec.	19 sec.
Extending Jib	2 sec.	2 sec.	4 sec.	4 sec.	4 sec.
Rectracting Jib	1 sec.	1 sec.	2 sec.	2 sec.	2 sec.

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### **SINGLE PIVOT HOOK HOISTS**

54" OR 61 3/4" HOOK HEIGHT (BOLT ON) MODELS: U20-HK & U30-HK

**Single Pivot Hook Hoists** feature a universal fit for nearly any chassis. The simple design of the single pivot hook hoist means fewer moving parts and less maintenance. Designed to operate in a variety of applications, single pivot hook hoists can be used in the waste, construction, recreation, landscaping, and auto industries. The U20-HK & U30-HK models offer benefits through their versatility and dual hook height capabilities.



- Inside air controls mounted in ergonomic power tower featuring Plug And Play™ wiring
- Backup alarm & hoist up alarm with signal light in cab
- Secondary manual controls mounted outside on driver's side
- Outside frame rail stationary rear container hold downs
- Rear flanged rollers with rear transition container supports
- Rear roller is ductile cast iron with bronze bushing
- T1 steel hook, bolt on hook height 54" or 61 34"
- Welded & bolted on roller stools with 4" OD rollers & bronze bushings
- Rear apron & bumper assembly complete with LED lighting & pintle/reese adaptable
- · Steel tank with dual sight / temp gauge air breather
- Hoist maintenance / safety prop
- Warranty: 2-year limited on hydraulic system
- Customized engineering layouts ensure the best fit for each customer
- Engineered and manufactured in the U.S.



Inside air controls in power tower



Secondary outside manual control valve with protective cover



Rear apron & bumper assembly

complete w/ LED lighting & pintle/

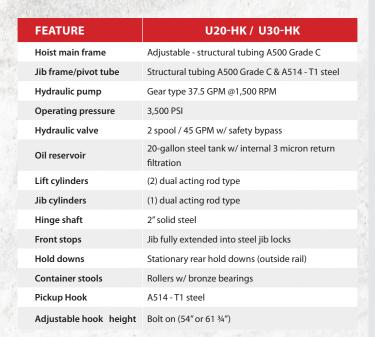
Solid steel front jib locks



Steel tank with dual sight/temp gauge and air breather



Welded & bolted on roller stools with 4" OD rollers & bronze bushings





Outside frame rail stationary rear container hold downs



Rear flanged rollers with rear transition container supports



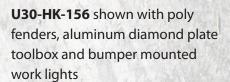


T1 steel hook, adjustable bolt on from 54" to 61 34"



### **Available Options**

- Pioneer tarping systems
- · Additional container hold downs
- Auxiliary hydraulic hook-ups / wet kits
- Variety of fenders (steel, aluminum & poly)
- Toolbox styles and sizes (steel, aluminum)
- Pintle hook and reese style hitch assemblies
- Safety and LED work lights
- Scale systems
- · Add air for non-air trucks
- Rear view / backup camera systems
- Additional LED safety & work light configurations
- · Lift axles, tires and rims





Pioneer tarping systems



Toolbox styles and sizes (steel, aluminum)



Pintle hook & reese style hitch assemblies



Add air for non-air trucks









Variety of fenders (steel, aluminum and poly)



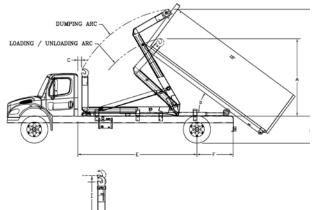
LED work lights

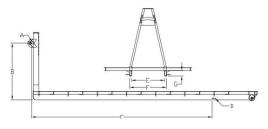


Rear view/backup camera systems



#### Figure 1





Lift Bar Dia.	Hook Ht.	Bar to Hold Down	Hold Down Locations	Inside Sill Width	Outside Sill Width	Long Sill Ht.
Α	В	c	D	E	F	G
2 ½"	54" & 61 ¾"	127 ½" min.	Outside	36 ½" min.	41 ¾" max.	6" min.

#### **Notes for Figure 1**

- 1 When recommending container lengths, weight distribution, fender interference and overhang are factors. Please consult your local ordinances when determining the model of hoist needed to suit your container needs.
- 2 Factory tested with recommended container length and water level load.
- 3 Total maximum height will depend on the container and frame height. Consult engineering for clearance.
- 4 Frame Height = Top of truck chassis frame to ground. Using 17 ½" & 22 ½" tires. Any truck frame higher than 42" will change hoist capacities, dump angle and its ability to snatch onto the bar; consult engineering if higher than 42". Optimized dump angle is achieved with conatiners that are the same length as the overall block.
- 5 This distance does not allow for a behind the cab (BTC) oil reservoir, tarper platform and or room to add a tarper; must add space for those items.
- 6 Air ride suspensions require up to 25" maximum after frame.

#### **Minimum Truck Requirements (Single Axle)**

Axle rating: U20 = 8,000 front / 18,000 rear; U30 = 12,000 front / 26,000 rear Truck torque: U20 = 212 ft. lbs.; U30 = 418 ft. lbs.

\*The chart below is an example of how to calculate the chassis section modulus (RBM / PSI = SM). Regardless of the frame YIELD and RBM, the min. SM must be  $15.5 \, \mathrm{in^3}$  (U20) &  $17.5 \, \mathrm{in^3}$  (U30) or more per each frame rail.

Truck Channel Ht.	RBM	Yield (PSI)	RBM/PSI = SM in <sup>3</sup>
10" or more	1,860,000-3,000,000	120,000 psi	15.5 in <sup>3</sup> - 25 in <sup>3</sup>
(single wall)	2,100,000-3,600,000		17.5 in <sup>3</sup> - 30 in <sup>3</sup>
10" or more	1,550,000-3,000,000	100,000 psi	15.5 in <sup>3</sup> - 30 in <sup>3</sup>
(double wall)	1,750,000-3,000,000		17.5 in <sup>3</sup> - 30 in <sup>3</sup>

Note: The single walled 120k psi with RBM less than 1,860,000 would not be acceptable because its SM would fall below the 15.5 in  $^3$  minimum specification on the U20-HK (1,850,000 / 120,000 = 15.42 in  $^3$ ). For frames less than  $10^\circ$  consult engineering.

Specifications (Single Axle)	U20-HK-120	U20-HK-132	U20-HK-144	U30-HK-138	U30-HK-156	U30-HK-176
Recommended Container Size – 1	10' to 14' or 12' to 16'	12'to 16'	12 to 16'	12' to 16' or 14' to 18'	14' to 18' or 16' to 20'	16' to 20'
Rated Hoist Capacity @ Hook Height 2	20,000 lbs	20,000 lbs	20,000 lbs	30,000 lbs	30,000 lbs	30,000 lbs
A – Max. Hook Height (Load/Unloading) 3,4	106"	106"	106"	119 3/16"	119 ¾16″	119 3/16"
B – Max. Hook Height (Dumping) <sup>3</sup> , <sup>4</sup>	131 %"	131 %"	131 %"	156 3/16"	156 ¾16″	156 3/16"
C – Back of Cab to Hoist <sup>5</sup>	2 1/4"	2 1/4"	2 1/4"	3 ½"	3 ½"	3 1/2"
D – Dump Angle (per recommended container range) <sup>4</sup>	56º - 42º	50° - 35°	50° - 35°	680 - 410	56º - 38º	49º - 35º
E – (CA) Cab to Axle <sup>5</sup>	120"	132"	144"	138"	156"	176"
F – After Frame <sup>6</sup>	38 ½" or 62 ½"	50 ½"	38 ½"	44 ¾" or 68 ¾"	50 ¾" or 74 ¾"	54 ¾"
G – Hoist Length	155 %" or 179 5/16"	179 5/16″	179 5/16"	179 3/16" or 203 3/16"	203 %" or 227 %"	227 3/8"
H – Frame Height <sup>4</sup>	42" or less	42" or less	42" or less	42" or less	42" or less	42" or less
l – Hook Height	54" <b>or</b> 61 ¾"	54" <b>or</b> 61 ¾"	54" <b>or</b> 61 ¾"	54" <b>or</b> 61 ¾"	54" <b>or</b> 61 ¾"	54" <b>or</b> 61 ¾"
Lift Cylinders - (2) dual acting	5" x 3" x 52"	5" x 3" x 52"	5" x 3" x 52"	6" x 3 ½" x 78"	6" x 3 ½" x 78"	6" x 3 ½" x 78"
Jib Cylinder - (1) dual acting	3" x 2" x 37"	3" x 2" x 37"	3" x 2" x 37"	4" x 2 ½" x 48"	4" x 2 ½" x 48"	4" x 2 ½" x 48"
Approximate Weight w/ Standard Features	3,427 lbs.	3,427 lbs.	3,427 lbs.	4,321 lbs.	4,321 lbs.	4,321 lbs.
Cycle Times @ 1,500 RPM (PSI / GPM)	3,500 / 37.5	3,500 / 37.5	3,500 / 37.5	3,500 / 37.5	3,500 / 37.5	3,500 / 37.5
Extending Dump	30 sec.	30 sec.	30 sec.	31 sec.	31 sec.	31 sec.
Retracting Dump	19 sec.	19 sec.	19 sec.	20 sec.	20 sec.	20 sec.
Extending Jib	4 sec.	4 sec.	4 sec.	4 sec.	4 sec.	4 sec.
Rectracting Jib	2 sec.	2 sec.	2 sec.	3 sec.	3 sec.	3 sec.

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### **SINGLE PIVOT HOOK HOISTS**

**DUAL HOOK HEIGHTS** 

MODELS: U20/13-HK & U25/18-HK

**Single Pivot Hook Hoists** are purpose-built for several industry applications including waste, construction, recreation, auto, and more. With dual hook height capabilities, the U20/13-HK and U25/18-HK models provide versatility for the user to lift containers of varying heights and weights. Equipped with ergonomic air controls, these models improve operator safety and efficiency.



- Inside air controls mounted in ergonomic Power Tower featuring Plug And Play™ wiring
- Backup Alarm & Hoist Up Alarm with signal light in cab
- Secondary manual controls mounted outside on driver's side
- · Steel front jib locks
- Rear transition container support with rear ratchet hold downs
- Rear roller is ductile cast iron 6" OD and flared sides with bronze bushing
- Slide-out rear frame for mounting on various chassis & to haul longer containers
- Adjustable hook heights 36.5" & 54"
- Bolt on roller stools with 4" OD rollers & bronze bushings allow for smooth loading/unloading
- Rear apron & bumper assembly complete with LED lighting and pintle/reese ready
- 3 Micron return filtration inside of steel tank with dual sight/temp gauge
- · Warranty: 2-year limited on hydraulic system
- Customized engineering layouts ensure the exact fit for each customer
- Engineered and manufactured in the U.S.

FEATURE	
Hoist main frame	Adjustable - structural tubing A500 Grade C
Jib frame/pivot tube	Structural tubing A500 Grade C & A514 - T1 steel
Hydraulic pump U20/13-HK	Gear type 17.5 GPM @ 1,500 RPM
Hydraulic pump U25/18-HK	Bent Axis Piston Pump 24 GPM @ 1,500 RPM
Operating pressure	US20/13 - 3,800 PSI
Hydraulic valve	2 spool / 25 gpm with safety bypass
Oil reservoir	20-gallon steel tank with internal 3 micron return filtration
Lift cylinders	(2) dual acting rod type
Jib cylinders	(1) dual acting rod type
Hinge shaft	2" solid steel
Front stops	Jib fully extended
Hold downs	Heavy duty nylon ratchets
Container stools	Rollers with bronze bearings
Pickup hook	A514 - T1 steel
Adjustable hook height	Pull pin - 36" & 54"



3 Micron return filtration inside of tank



Front jib lock



Pull (2) pins to slide in/out dual hook height adjustment



Rear bumper with LED lights



20-gallon steel hydraulic tank side mounted w/ dual sight/ temp gauge



Inside air controls center mounted in ergonomic Power Tower featuring Plug And Play™ wiring



Outside controls

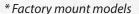




Flared rear roller and roller stools



Rear container support & hold downs





### **Available Options**

- Pioneer tarping systems
- Toolbox in various sizes
- Pintle hook or reese style hitch for trailer packages
- Fenders in various sizes and shapes made with steel, aluminum or poly
- Hard plumbing
- Auxiliary hydraulic hook ups/wet kits
- Cable controls
- Container hold downs
- Lift axles
- Tires and rims (steel, aluminum)



Pintle hook & reese style hitch



Fender options in steel, aluminum or poly



Pioneer tarping systems

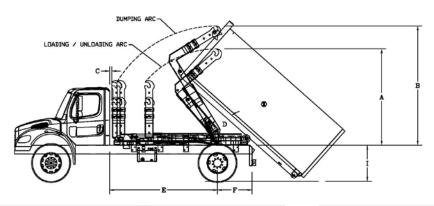


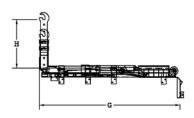
Toolbox styles and sizes

**U25/18-HK** shown with optional Pioneer HR2500 PowerGlide Tarp System and steel half round fenders



SW SW





#### **Notes for Chart**

- 1 When recommending container lengths, weight distribution, fender interference and overhang are all factors that need to be considered.
- 2 Factory tested with recommended container length and water level load.
- 3 Total maximum height will depend on the container and frame height. Consult engineering for clearance
- 4 Frame Height = Top of truck chassis frame to ground. Using 22.5" tires only. Tested with 42" frame height; any truck frame higher than 42" will change hoist capacities, dump angle and its ability to snatch onto the bar. For higher truck frames or using larger tires, consult engineering for clearance and capacity rations. Optimized dump angle is achieved with the following containers: 12' on 120" CA and 14' on 132/144" CA's.
- 5 This distance does not allow for a behind the cab (BTC) oil reservoir, tarper platform and or room to add a tarper; must add distance for those items.
- **6** Air ride suspensions require 25" of after frame.

SPECIFICATIONS	U20/13-HK-120	U20/13-HK-132	U20/13-HK-144
(SINGLE AXLE)	U25/18-HK-120	U25/18-HK-132	U25/18-HK-144
Recommended container size	10' to 14' or 12' to 16'	12' to 16'	12' to 16'
Rated hoist capacity @ hook height <sup>2</sup> (U20/13)	13,000 lbs. @ 36" 20,000 lbs. @ 54"	13,000 lbs. @ 36" 20,000 lbs. @ 54"	13,000 lbs. @ 36" 20,000 lbs. @ 54"
Rated hoist capacity @ hook height <sup>2</sup> (U25/18)	18,000 lbs. @ 36" 25,000 lbs. @ 54"	18,000 lbs. @ 36" 25,000 lbs. @ 54"	18,000 lbs. @ 36" 25,000 lbs. @ 54"
A – Max. hook height (loading/unloading) <sup>3,4</sup>	96" or 107"	96" or 107"	96" or 107"
B – Max. hook height (dumping) <sup>3,4</sup>	124" or 132"	124" or 132"	124" or 132"
C – Back of cab to hoist 5	2 1/4"	2 1/4"	2 1/4"
D – Dump angle (depends on container length) <sup>4</sup>	60° - 41°	60° - 41°	60° - 41°
E – (CA) cab to axle <sup>5</sup>	120"	132"	144"
F – After frame <sup>6</sup>	38 ½" or 62 ½"	50 1/2"	38 ½"
G – Hoist length	156"	180"	180"
H – Hook length	36" & 54"	36" & 54"	36" & 54"
I – Frame Height <sup>4</sup>	42" or less	42" or less	42" or less
Lift Cylinders - (2) dual acting (U20/13)	5" x 3" x 52"	5" x 3" x 52"	5"x 3"x 52"
Lift Cylinders - (2) dual acting (U25/18)	5" x 2 ½" x 52"	5" x 2 ½" x 52"	5" x 2 ½" x 52"
Jib Cylinder - (1) dual acting	3" x 2" x 37"	3" x 2" x 37"	3" x 2" x 37"
Approx. weight with standard features (U20/13)	3,719 lbs.	3,719 lbs.	3,719 lbs.
Approx. weight with standard features (U25/18)	3,730 lbs.	3,730 lbs.	3,730 lbs.

CYCLE TIMES	3,800/17.5 (U20/13) & 4,000/17.5 (U25/18)
Extending Dump	30 sec. (U20/13) & 22 sec. (U25/18)
Retracting Dump	19 sec. (U20/13) & 14 sec. (U25/18)
Extending Jib	4 sec. (U20/13) & 3 sec. (U25/18)
Retracting Jib	2 sec. (Both models)

#### **Minimum Truck Requirements (Tandem Axle)**

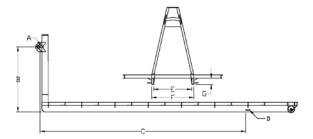
Axle Rating: 8,000 Front / 18,000 Rear

Truck Torque: 212 ft. lbs.

\*The chart below is an example of how to calculate the chassis section modulus (RBM/PSI = SM). Regardless of the frame YIELD and RBM, the min. SM must be 15.5 in<sup>3</sup> or more per each frame rail.

Truck Channel Ht.	RBM	Yield (PSI)	RBM/PSI = SM in <sup>3</sup>
10" or More (single wall)	1,500,000 – 3,000,000	120,000 psi	12.5 in <sup>3</sup> - 25 in <sup>3</sup>
10" or More (double wall)	1,500,000 – 3,000,000	100,000 psi	15 in <sup>3</sup> - 30 in <sup>3</sup>

**Note:** the single walled 120k psi with RBM less than 1,860,000 would not be acceptable because its SM would fall below the 15.5 in<sup>3</sup> minimum specification  $(1,850,000/120,000 = 15.42 \text{ in}^3)$ . For frames less than 10" consult engineering.



Lift Bar Dia.		Bar to front of hold down		Inside Sill Width	Outside Sill Width	Long Sill Ht.
Α	В	С	D	Е	F	G
2 1/2"	36"	138" min.	Inside & Outside	36 ½" min.	41 ½" min.	4 1⁄4"
2 1/2"	54"	127 ½" min.	Inside & Outside	37 ½" min.	41 ¾" min.	6"

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### **DUAL PIVOT HOOK HOISTS**

MODELS: U4/5 & U5-DPHK

(DPHK) – Dual Pivot Hook Hoists are ideal for the waste, recycling, landscaping, construction and roofing industries by offering greater versatility than traditional roll-off cable hoists. With adjustable hook heights, the U4/5-DPHK models have the advantage of essentially two hoists in one. Dual pivot hook hoists keep containers safely secured to the hoist frames during the dump cycle with rear container hold downs and a rear pivoting hinge. Through the ease of in-cab hoist operation, the U4/5-DPHK and U5-DPHK models improve operator safety and efficiency through faster cycle times.



- Inside air controls mounted in ergonomic power tower featuring Plug And Play™ wiring
- · Back-up alarm & hoist up alarm with signal light in cab
- Secondary manual controls mounted outside on driver's side
- · Stationary rear hold downs
- Dual rear rollers are ductile cast iron 6" OD and flared sides with bronze bushing
- Adjustable hook heights via pull pin design (54" & 61 ¾" U4/5-DPHK only)
- In frame rail rollers and bronze bushings allow for smooth loading/unloading)
- Twin locking mechanism for dual pivot activation
- Pintle adaptable rear apron and bumper assembly complete with DOT approved LED Lighting
- 3 micron return filtration inside of 50-gallon steel tank with dual sight/temp gauge
- Warranty: Lifetime on hoist frame and 2-year limited on hydraulic system
- Customized engineering layouts ensure the exact fit for each customer
- Engineered and manufactured in the U.S.

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FEATURE	
Hoist main frame	Structural tubing A500 grade C
Jib frame/pivot tube	Structural tubing A500 grade C & A514 - T1 steel
Hydraulic pump	Gear type 37.5 GPM @1,500 RPM
Operating pressure	3,500 PSI
Hydraulic valve	2 spool / 45 GPM w/ safety bypass
Oil reservoir	50-gallon steel tank w/ internal 3 micron return filtration
Lift cylinders	(2) dual acting rod type
Jib cylinders	(1) dual acting rod type
Hinge shaft	2" solid steel
Front stops	Jib fully extended
Hold downs	Stationary rear hold downs
Container stools	Rollers w/ bronze grease grooved bearings
Pickup Hook	A514 - T1 steel
Hook height	U4/5 - adjustable 54" to 61.75"; U5 - fixed @ 61.75"
Rear stabilizer	Optional (10" ground roller, hyd. activated)



Inside air controls mounted in ergonomic power tower featuring Plug And Play™ wiring



3 micron return filtration inside of steel tank



In frame rail rollers and bronze bushings allow for smooth loading / unloading



Dual rear rollers are ductile cast iron 6" OD and flared sides w/ bronze bushing



Secondary manual controls mounted outside on driver's side



50-gallon steel hydraulic tank side mounted with dual sight / temp gauge



Twin locking mechanism for dual pivot activation





Pintle adaptable rear apron; Stationary rear hold downs



### **Available Options**

- Pioneer tarping systems
- Toolbox (various sizes and styles: steel, aluminum and poly)
- · Pintle hook tow packages
- · Back-up camera systems
- Hydraulics / wet kits to the rear (single & dual acting)
- Fenders (various sizes and styles: steel, aluminum and poly)
- Safety and work light packages
- · Pass through hold downs
- Short stops for shorter containers
   \*U5-DPHK-200 only
- Rear hydraulic activated stabilizer with 10" ground roller

**U5-DPHK-200** shown with Pioneer RP4500SARG; Full length bumper; (2) lift axles; 4" work lights and quad axle poly fenders



Pioneer tarping systems



Toolbox (various sizes and styles: steel, aluminum and poly)



Pintle hook tow packages; Back-up camera systems



Fenders (various sizes and styles: steel, aluminum and poly)



Safety and work light packages



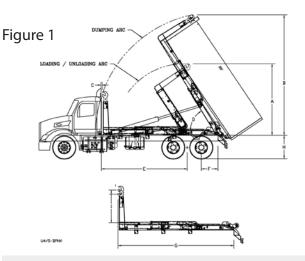
Back-up camera system





Rear hydraulic activated stabilizer with 10" ground roller





		Bar to Hold Down	Hold Down Locations	Inside Sill Width	Outside Sill Width	Long Still Ht.
A	В	С	D	E	F	G
2 ½"	54"	197 ½" min.	Inside & Outside	36 ½" min.	41 ¾" max.	6"
2 ½"	61 ¾"	197 ½" min.	Inside & Outside	36 ½" min.	41 ¾" max.	6"

#### **Notes for Figure 1**

- 1 When recommending container lengths, weight distribution, fender interference and overhang are factors. Please consult your local ordinances when determining the model of hoist needed to suit your container needs.
- 2 Factory tested with recommended container length and water level load.
- 3 Total maximum height will depend on the container and frame height. Consult engineering for clearance.
- 4 Frame Height = Top of truck chassis frame to ground. Using 22 ½" tires only. Tested w/ 43 ½" frame height; any truck frame higher than 43 ½" will change hoist capacities, dump angle and its ability to snatch onto the bar. For higher truck frames or using larger tires, consult engineering for clearance and capacity ratings.
- 5 This distance does not allow for a behind the cab (BTC) oil reservoir, tarper platform and or room to add a tarper; must add space for those items.
- **6** Air ride suspensions require up to 25" maximum after frame.

#### Minimum Truck Requirements (Tandem Axle)

Axle rating: 18,000 front / 44,000 rear

Truck torque: 418 ft. lbs.

\*The chart below is an example of how to calculate the chassis section modulus (RBM/PSI = SM). Regardless of the frame YIELD and RBM, the min. SM must be 20 in<sup>3</sup> or more per each frame rail.

Truck Channel Ht.	RBM	Yield (PSI)	RBM/PSI = SM in <sup>3</sup>
10" or more (single wall)	2,400,000-4,500,000	120,000 psi	20 in <sup>3</sup> - 37.5 in <sup>3</sup>
10" or more	2,000,000- 4,000,000	100,000 psi	20 in <sup>3</sup> - 40 in <sup>3</sup>

Note: The single walled 120k psi with RBM less than 2,400,000 would not be acceptable because its SM would fall below the  $20 \, \text{in}^3$  minimum specification (2,300,000 / 120,000 = 19.17 in<sup>3</sup>). For frames less than  $10^{\prime\prime}$  consult engineering.

Specifications (Tandem Axle)	U4/5-DPHK-176	U4/5-DPHK-200	U5-DPHK-176	U5-DPHK-200	U5-DPHK-224
Recommended Container Size – 1	16' to 20'	18' to 22'	16' to 20'	18' to 22'	20' to 24'
Rated Hoist Capacity @ Hook Height <sup>2</sup>	40k lbs. @ 54" 50k lbs. @ 61 ¾"	40k lbs. @ 54" 50k lbs. @ 61 ¾"	50k lbs. @ 61 ¾"	50k lbs. @ 61 ¾"	50k lbs. @ 61 ¾"
A – Max. Hook Height (Load/Unloading) <sup>3</sup> , <sup>4</sup>	128 %" or 132 %"	128 ¾" or 132 ¾"	133 ¼"	133 ¼"	149 ½"
B – Max. Hook Height (Dumping) 3,4	220 5%" or 224 34"	220 %" or 224 ¾"	224 ¾"	232 1/16"	250 ½"
C – Back of Cab to Hoist <sup>5</sup>	3"	3"	3"	3"	3"
D – Dump Angle	580	490	580	490	490
E – (CT) Cab to Trunnion <sup>5</sup>	176"	200"	176"	200"	224"
F – After Frame <sup>6</sup>	14 ½" to 25" max.	14 ½" to 25" max.	14 ½" to 25" max.	14 ½" to 25" max.	14 ½" to 25" max.
G – Hoist Length	213"	232"	213"	232"	252"
H – Frame Height <sup>4</sup>	43 %" or less	43 %" or less	43 %" or less	43 %" or less	43 %" or less
l – Hook Height	54" or 61 3/4"	54" or 61 ¾"	61 ¾"	61 ¾"	61 ¾"
Lift Cylinders - (2) dual acting	7" x 3 ½" x 81"	7" x 3 ½" x 81"	7" x 3 ½" x 81"	7" x 3 ½" x 81"	7" x 3 ½" x 81"
Jib Cylinder - (1) dual acting	4" x 2 ½" x 48"	4" x 2 ½" x 48"	4" x 2 ½" x 48"	4" x 2 ½" x 48"	4" x 2 ½" x 52"
Rear Stabilizer	Optional	Optional	Optional	Optional	Optional
Approximate Weight w/ Standard Features	7,234 lbs.	7,403 lbs.	7,194 lbs.	7,363 lbs.	7,789 lbs.
Cycle Times @ 37.5 GPM & 1,500 RPM					
Extending Dump	43 sec.	43 sec.	43 sec.	43 sec.	43 sec.
Retracting Dump	32 sec.	32 sec.	32 sec.	32 sec.	32 sec.
Extending Jib	4 sec.	4 sec.	4 sec.	4 sec.	4 sec.
Rectracting Jib	3 sec.	3 sec.	3 sec.	3 sec.	3 sec.

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### **DUAL PIVOT HOOK HOISTS**

61 ¾" HOOK HEIGHT MODELS: U6-DPHK

(**DPHK**) – **Dual Pivot Hook Hoists** are designed for higher hauling capacities and ease of use with the advantage of set hook heights. Ideal for the waste, recycling, landscaping, construction, and roofing industries, dual pivot hook hoists offer greater versatility and easier maneuverability than traditional roll-off cable hoists. Dual pivot hook hoists keep containers safely secured to the hoist frames during the dump cycle with rear container hold downs and a rear pivoting hinge. With simpler in-cab hoist operation, the U6-DPHK models improve operator safety and efficiency through faster cycle times.



- Inside air controls mounted in ergonomic power tower featuring Plug And Play™ wiring
- · Back-up alarm & hoist up alarm with signal light in cab
- · Secondary manual controls mounted outside on driver's side
- · Outside frame rail stationary rear container hold downs
- · Dual rear flanged rollers
- · Ductile cast iron rear roller with bronze bushing
- · Rear hydraulic stabilizer with 10" ground roller
- T1 steel fabricated fixed hook height at 61 ¾"
- In frame 6" O.D. rollers with bronze bushings
- Pintle adaptable rear apron and bumper assembly complete with DOT approved LED lighting
- Steel hydraulic tank side mounted with 3 micron filtration, dual sight/temp. gauge & air breather
- Dual hoist maintenance / safety props
- Warranty: limited lifetime on frame & 2-year limited on hydraulic system
- Customized engineering layouts ensure the best fit for each customer

U6-DFHK
DOMEX 11" formed Z-Rail
Structural tubing A500 grade C & A514 - T1 steel
Gear type 37.5 GPM @1,500 RPM
3,800 PSI
2 Spool / 45 GPM w/ safety bypass
50-gallon steel tank w/ internal 3 micron return filtration
(2) Dual acting rod type
(1) Dual acting rod type
2" Solid steel
Jib fully extended
Stationary rear container hold downs
Inside rail 6" rollers w/ bronze bearings
A514 - T1 steel
10" Roller w/ bronze bearing - hydraulic cylinder actuated



Inside air controls in power tower



Secondary outside manual control valve



Outside frame rail stationary rear container hold downs



HD rear apron that is pintle adaptable with back up alarm and split bumpers with LED lighting and mud flaps



Steel hydraulic tank side mounted with 3 micron filtration, dual sight/temp gauge & air breather



Twin pivot assembly locks for dual pivot activation



Rear hydraulic stabilizer with 10" ground roller



T1 steel fabricated fixed hook height at 61 ¾"



Dual safety / maintenance props and inside rail rollers



Dual rear flanged rollers

<sup>\*</sup>Only needed if uplift calculation is too high; chassis dependent



### **Available Options**

- · Pioneer® tarping systems
- · Lift axles, tires and rims
- · Additional containers hold downs
- Auxiliary hydraulic hook-ups / wet kits
- · Steel, aluminum or poly fenders
- Toolbox styles and sizes (steel & aluminum)
- Pintle hook with gladhands
- Safety and LED work lights
- · Back-up camera systems
- Scale systems
- · Pass through hold downs
- Short stop option for hauling shorter containers



Pioneer® tarping systems



Toolbox styles and sizes (steel & aluminum)



Pintle hook with gladhands



Steel, aluminum or poly fenders

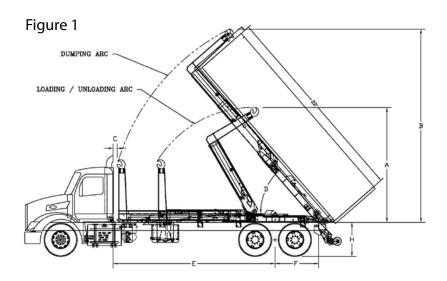


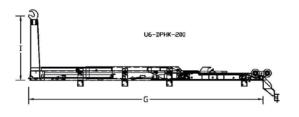
LED work lights



Back-up camera systems



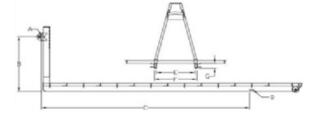




#### **Notes for Figure 1**

- 1 When recommending container lengths, weight distribution, fender interference and overhang are factors. Please consult your local ordinances when determining the model of hoist needed to suit your container needs.
- 2 Factory tested with recommended container length and water level load.
- 3 Total maximum height will depend on the container and frame height. Consult engineering for clearance.
- 4 Frame Height = Top of truck chassis frame to ground. Using 22 ½" tires only. Tested w/ 43 %" frame height; any truck frame higher than 43 %" will change hoist capacities, dump angle and its ability to snatch onto the bar. For higher truck frames or using larger tires, consult engineering for clearance and capacity ratings.
- 5 This distance does not allow for a behind the cab (BTC) oil reservoir, tarper platform and or room to add a tarper; must add space for those items.
- **6** Air ride suspensions require up to 25" maximum after frame.
- **7** The rear stabilizer may not be necessary on all models. This will depend upon uplift calculations that can vary depending upon chassis configurations.

Specifications (Tandem Axle)	U6-DPHK-176	U6-DPHK-200	U6-DPHK-224
Recommended Container Size – 1	16' to 20'	18' to 22'	20 to 24'
Rated Hoist Capacity @ Hook Height <sup>2</sup>	60k lbs. @ 61 ¾"	60k lbs. @ 61 ¾"	60k lbs. @ 61 ¾"
A – Max. Hook Height (Load/Unloading) 3,4	133 ¼"	133 ¼"	133 ¼"
B – Max. Hook Height (Dumping) 3,4	224 ¾"	232 1/16"	250 ½"
C – Back of Cab to Hoist <sup>5</sup>	3"	3"	3"
D – Dump Angle	58°	49º	490
E – (CT) Cab to Trunnion <sup>5</sup>	176"	200"	224"
F – After Frame <sup>6</sup>	14 ½" to 25"	14 ½" to 25"	14 ½" to 25"
G – Hoist Length	213"	232"	252"
H – Frame Height <sup>4</sup>	43 %" or less	43 %" or less	43 %" or less
I – Hook Height	61 ¾"	61 ¾"	61 ¾"
Lift Cylinders - (2) dual acting	7" x 3 ½" x 81"	7" x 3 ½" x 81"	7" x 3 ½" x 81"
Jib Cylinder - (1) dual acting	4" x 2 ½" x 48"	4" x 2 ½" x 48"	4" x 2 ½" x 52"
Rear Stabilizer <sup>7</sup>	Standard*	Standard*	Standard*
Approximate Weight w/ Standard Features <sup>7</sup>	7,800 lbs.	7,969 lbs.	8,395 lbs.
Cycle Times @ 37.5 GPM & 1,500 RPM			
Extending Dump	43 sec.	43 sec.	43 sec.
Retracting Dump	32 sec.	32 sec.	32 sec.
Extending Jib	4 sec.	4 sec.	4 sec.
Rectracting Jib	3 sec.	3 sec.	3 sec.



Lift Bar Dia.	Hook Ht.	Bar to Hold Down	Hold Down Locations	Inside Sill Width	Outside Sill Width	Long Still Ht.
Α	В	c	D	E	F	G
2 ½"	61 ¾"	138" min.	Outside	36 ½" min.	41 ½" max.	6"

#### Minimum Truck Requirements (Tandem Axle)

Axle rating: 18,000 front / 44,000 rear

Truck torque: 418 ft. lbs.

\*The chart below is an example of how to calculate the chassis section modulus (RBM/PSI = SM). Regardless of the frame YIELD and RBM, the min. SM must be 20 in<sup>3</sup> or more per each frame rail.

Truck Channel Ht.	RBM	Yield (PSI)	RBM/PSI = SM in <sup>3</sup>
10" or more (single wall)	2,400,000- 4,500,000	120,000 psi	20 in <sup>3</sup> - 37.5 in <sup>3</sup>
10" or more (double wall)	2,000,000- 4,000,000	100,000 psi	20 in <sup>3</sup> - 40 in <sup>3</sup>

Note: The single walled 120k psi with RBM less than 2,400,000 would not be acceptable because its SM would fall below the  $20\,\text{in}^3$  minimum specification (2,300,000/120,000 = 19.17 in $^3$ ). For frames less than  $10^\circ$  consult engineering.

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### **DUAL PIVOT HOOK HOISTS**

# 54" FIXED HOOK HEIGHT **MODELS:** U20, U30 & U3-DPHK

Dual Pivot Hook Hoists are designed for higher hauling capacities and ease of use with the advantage of set hook heights. Ideal for the waste, recycling, landscaping, construction, and roofing industries, Dual Pivot Hook Hoists offer greater versatility and maneuverability than traditional roll-off cable hoists. Dual Pivot Hook Hoists keep containers safely secured to the hoist frames during the dump cycle with rear container hold downs and a rear pivoting hinge. These features allow for greater dumping angles to release the most stubborn loads. With the ease of in-cab controls, the U20, U30 & U3-DPHK models improve operator safety and efficiency through faster cycle times.



- Inside air controls mounted in our ergonomic power tower featuring Plug and Play™ wiring
- Back-up alarm & hoist up alarm with signal light in cab
- Secondary manual controls mounted outside on driver's side
- Outside frame rail pass through rear container hold downs
- Rear flanged rollers w/ rear transition container supports
- · Rear rollers are ductile cast iron with bronze bushing
- T1 steel hook, fixed hook height @ 54"
- Welded & bolted on roller stools with 4" o.d. rollers & bronze bushings
- Rear apron & bumper assembly complete w/ LED lighting & pintle/reese adaptable
- Steel tank with dual sight/temp gauge and air breather
- · Hoist maintenance/safety prop
- · Warranty: 2-year limited on hydraulic system
- Customized engineering layouts ensure the best fit for each customer

FEATURES	U20-DPHK	U30/U3-DPHK
Hoist main frame	Structural tubing A500 Grade C	Structural tubing A500 Grade C
Jib frame / Pivot tube	Structural tubing A500 Grade C & A514 - T1 steel	Structural tubing A500 Grade C & A514 - T1 steel
Hydraulic pump	Gear type 17.5 GPM @1,500 RPM	Gear type 37.5 GPM @1,500 RPM
Operating pressure	3,500 PSI	3,500 PSI
Hydraulic valve	2 spool / 25 GPM w/ safety bypass	2 spool / 45 GPM w/ safety bypass
Oil reservoir	20-gallon steel tank w/ internal 3 micron return filtration	50-gallon steel tank w/ internal 3 micron return filtration
Lift cylinders	(2) Dual acting rod type	(2) Dual acting rod type
Jib cylinder	(1) Dual acting rod type	(1) Dual acting rod type
Hoist Props	Single safety prop	Single safety prop
Hinge shaft	2" solid steel	2" solid steel
Rear Roller	6" O.D. flanged ductile cast iron	6" O.D. flanged ductile cast iron
Front stops	Jib fully extended	Jib fully extended
Hold downs	Stationary pass through	Stationary pass through
Container stools	Rollers w/ bronze bearings	Rollers w/ bronze bearings
Pickup Hook	A514 - T1 steel set to 54" hook height	A514 - T1 steel set to 54" hook height



3 Micron return oil filtration inside tank



20-Gallon steel hyd. tank w/ dual sight/temp. gauge (U20-DPHK)



50-Gallon steel hyd. tank w/ dual sight/temp. gauge (U30/U3-DPHK)



Inside air controls in power tower



T-1 steel fixed hook height @ 54"



Secondary outside manual control valve



Rear container transition supports w/ pass through rear hold downs



Pass through rear hold downs



Flanged rear rollers w/ bronze bushings



Rear apron & bumper assembly complete w/ LED lighting & pintle/reese adaptable



## **Optional Equipment**

- · Pioneer® tarping systems
- · Additional container hold downs
- Manually adjustable hook height from 54" to 61 3/4" (U3 & U30 models only)
- · Auxiliary hydraulic hook-ups/wet kits
- Variety of fenders (steel, alum. & poly)
- Toolbox styles and sizes (steel, alum. & poly)
- · Pintle hook & reese style hitch assemblies
- · Scale systems
- · Add air for non-air trucks
- Rear view/back-up camera systems
- Additional LED safety and work light configurations
- · Lift axles, tires & rims

**U30-DPHK-176** shown w/ aluminum tread plate fenders, oil tank mounted on passenger side and custom red painted hook options





Pioneer® tarp systems





Back-up camera systems



Steel, aluminum & poly fenders



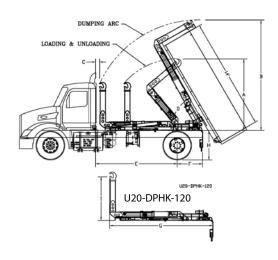
Toolbox styles and sizes (steel, alum. & poly)

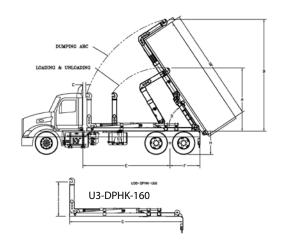


Pintle hook and reese hitch towing packages

U20-DPHK-144 with poly fender option







#### **Notes for chart below:**

- 1 When recommending container lengths, weight distribution, fender interference and overhang are factors. Please consult your local ordinances when determining the model of hoist needed to suit your container needs.
- 2 Factory tested with recommended container length and a water level load.
- ${\bf 3}\ \ {\bf Total\ maximum\ height\ will\ depend\ on\ the\ container\ and\ frame\ height.\ Consult\ engineering\ for\ clearance.}$
- 4 Frame Height = Frame Height = Top of truck chassis frame to ground. Using 22.5" tires only. Tested w/ 42" frame height; any truck frame higher than 42" will change hoist capacities, dump angle and its ability to snatch onto the bar. For higher truck frames or using larger tires, consult engineering for clearance and capacity ratings.
- 5 This distance does not allow for a behind the cab (BTC) oil reservoir, tarper platform and or room to add a tarper; must add distance for those items.

Models	U20-DPHK-120	U20-DPHK-144	U30-DPHK-176	U3-DPHK-160
FEATURES	SINGLE AXLE	SINGLE AXLE	SINGLE AXLE	TANDEM AXLE
Recommended Container Size <sup>1</sup>	12'to 14'	14' to 16'	14' to 18'	14' to 18'
Rated Hoist Capacity @ Hook Height 2	20k lbs. @ 54"	20k lbs. @ 54"	30k lbs. @ 54"	30k lbs. @ 54"
A – Max. Hook Height (Load/Unloading) <sup>3</sup> , <sup>4</sup>	107 1/16"	107 1/16"	120 5/16″	120 5/16"
B – Max. Hook Height (Dumping) <sup>4</sup>	166 1/16"	166 1/16"	212 3/8"	212 3/8"
C – Back of Cab to Hoist	4"	4"	4"	4"
D – Dump Angle	61°	46°	57°	57°
E – (CA/CT) cab to axle/trunnion <sup>5</sup>	121"	145"	177"	162"
F – After Frame	38 ½"	38 ½"	42"	57"
G - Hoist Length	155 ½"	179 ½"	215"	215"
H – Frame Height <sup>4</sup>	42" or less	42" or less	42" or less	42" or less
I – Hook Height	54"	54"	54"	54"
Pick Up Hook Below Grade	16"	16"	13"	13"
Lift Cylinders - (2) dual acting	5"x 3"x 52"	5"x 3"x 52"	6"x 3 ½"x 78"	6"x 3 ½"x 78"
Jib Cylinder - (1) dual acting	3"x 2" x 37"	3"x 2" x 37"	4"x 2 ½"x 48"	4"x 2 ½"x 48"
Approximate Weight w/ Standard Features	3,025 lbs.	3,190 lbs.	5,630 lbs.	5,630 lbs.
Cycle Times @ 1,500 RPM	@ 17.5 GPM & 1,500 RPM		@ 37.5 GPM & 1,500 RPM	
Extending Dump	30 sec.		31 sec.	
Retracting Dump	19 sec.		20 sec.	
Extending Jib	4 sec.		4 sec.	
Retracting Jib	2 sec.		3 sec.	

#### Minimum Truck Requirements (20k lb.)

Axle Rating: 8k Front / 18k Rear Transmission Torque: 212 ft. lbs.

The chart below is an example of how to calculate the chassis section modulus (RBM / PSI = SM). Regardless of the frame YIELD and RBM, the min. SM must be  $15.5 \, \text{in}^3$  or more per each frame rail.

Truck Channel Ht.	RBM	Yield (PSI)	RBM/PSI = SM in <sup>3</sup>
10" or More (single wall)	1,860,000 – 3,000,000	120,000 psi	15.5 in <sup>3</sup> – 25 in <sup>3</sup>
10" or More (double wall)	1,550,000 – 3,000,000	100,000 psi	15.5 in <sup>3</sup> – 30 in <sup>3</sup>

Note: The single walled 120k psi with RBM less than 1,860,000 would not be acceptable because its SM would fall below the 15.5 in  $^3$  minimum specification on the U20-DPHK (1,850,000 / 120,000 = 15.42 in  $^3$ ). For frames less than 10", consult engineering.

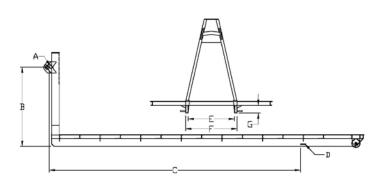
#### Minimum Truck Requirements (30k lb.)

Axle Rating: 12k Front / 20k Rear Transmission Torque: 418 ft. lbs.

The chart below is an example of how to calculate the chassis section modulus (RBM / PSI = SM). Regardless of the frame YIELD and RBM, the min. SM must be  $17.5 \text{ in}^3$  or more per each frame rail.

ı	Truck Channel Ht.	RBM	Yield (PSI)	RBM/PSI = SM in <sup>3</sup>	
	10" or More (single wall)	2,100,000 – 3,600,000	120,000 psi	17.5 in <sup>3</sup> – 30 in <sup>3</sup>	
	10" or More (double wall)	1,750,000 - 3,000,000	100,000 psi	17.5 in <sup>3</sup> – 30 in <sup>3</sup>	

Note: The single walled 120k psi with RBM less than 1,860,000 would not be acceptable because its SM would fall below the 17.5 in minimum specification on the U20-DPHK (1,850,000 / 120,000 = 16.67 in  $^3$ ). For frames less than 10", consult engineering.



LIFT BAR DIA.	ноок нт.	BAR TO HOLD DOWN	HOLD DOWN LOCATIONS	INSIDE SILL WIDTH	OUTSIDE SILL WIDTH	LONG SILL HT.
А	В	С	D		F	G
2.5 in	54"	138" min.	Outside	36 ½" min.	41 ½" max.	6"