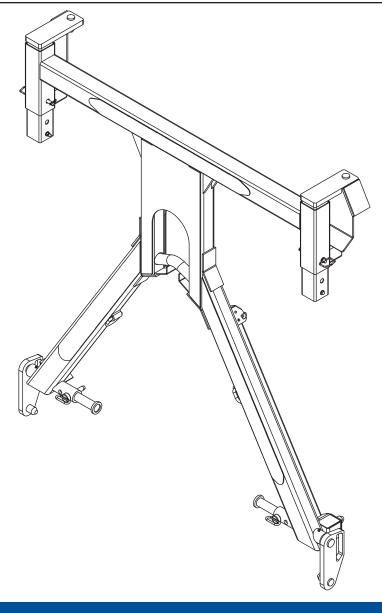


Spider Attachment Owner's Manual

Installation • Assembly Drawings • Parts



Stellar Industries, Inc. 190 State Street PO Box 169 Garner, IA 50438 800-321-3741 Fax: 641-923-2811

Fax: 641-923-2811 www.stellarindustries.com

Warnings / Notices

WARNING

Operating, maintaining, and servicing a Stellar product may expose you to chemicals including, but not limited to, engine exhaust, carbon monoxide, phthalates, and lead. These chemicals are known to the State of California to cause cancer and birth defects (or other reproductive harm). To keep your exposure to a minimum, be sure to avoid breathing exhaust and service your Stellar product in a well-ventilated area while wearing gloves or washing your hands frequently. For more information, go to www.P65Warnings.ca.gov/passenger-vehicle.



NOTICE

Cold Weather Performance

Although clear data on cold weather performance from every steel manufacturer is not available for all types and thicknesses of steel, Stellar Industries is confident that the weldments on our products will operate to 100% of their intended purpose to temperatures down to -40° F / C.

It is recommended if Stellar manufactured equipment needs to be used in temperatures below -40° F / C, the operator should pull the unit into a climate-controlled area and allow the weldments to warm up to and then maintain a temperature above this level.

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Introduction

A copy of this manual is provided with every hooklift attachments and can be found in the hard plastic manual case that is installed on the chassis. A copy of this manual shall remain with the hooklift at all times.

Throughout the manual, three signal words will be used to bring attention to important items:

NOTICE

A NOTICE signal word indicates a practice not related to physical injury.

AWARNING

A WARNING signal word indicates a hazardous situation which, if not avoided, could result in death or serious injury.



A DANGER signal word indicates a hazardous situation which, if not avoided, will result in death or serious injury.

This manual is not binding. Stellar Industries, Inc. reserves the right to change, at any time, any or all of the items, components, and parts deemed necessary for product improvement or commercial/production purposes. This right is kept with no requirement or obligation for immediate mandatory updating of this manual.

If more information is required or technical assistance is needed, or if you feel that any part of this manual is unclear or incorrect, please contact the Stellar Customer Service Department by phone at 800-321-3741 or email at service@stellarindustries.com.

For Technical Questions, Information, Parts, or Warranty, Call Toll-Free at 800-321-3741

Hours: Monday - Friday, 8:00 a.m. - 5:00 p.m. CST

Or email at the following addresses:

Technical Questions, and Information

service@stellarindustries.com

Order Parts

parts@stellarindustries.com

Warranty Information

warranty@stellarindustries.com

Chapter 1 - Operations / Installation

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Maintenance / Inspections

Please read the following before performing any maintenance on the Spider Attachment.

- 1. Only qualified service personnel are to perform maintenance on the Spider attachment.
- 2. Disengage the PTO before any service or repair is performed.
- 3. Do not disconnect hydraulic components while there is any energy/pressure in the system.
- 4. Before disconnecting hydraulic components, shut off the engine, release any air pressure on the hydraulic reservoir, and move control levers repeatedly through their operating positions to relieve all pressures.
- 5. Keep the Spider attachment clean and free from grease build-up, oil and dirt to prevent slippery conditions.
- 6. Perform all safety and maintenance checks before each period of use.
- 7. Immediately repair/replace damaged components with Stellar Industries, Inc. approved parts / repair procedures.

Maintenance Procedures:

- 1. Position the Spider attachment where it will be out of the way of other operations or vehicles in the area.
- 2. Place all controls in the off position and secure operating features from inadvertent motion.
- 3. Relieve hydraulic oil pressure from all hydraulic circuits before loosening or removing hydraulic components.
- 4. Label or tag parts when disassembling.

Periodic Inspection:

Periodic Inspection should occur while the Spider attachment is in use. For the duration of the usage, inspect the Spider attachment for all of the following:

- 1. Loose bolts and fasteners.
- 2. All pins, bushings, shafts, and gears for wear, cracks, or distortion to include all pivot points, and bushings.
- 3. Hydraulic systems for proper operating pressure.
- 4. Main frame mount bolts.
- 5. Cylinders for:
 - A. Damaged rods.
 - B. Dented barrels.
 - C. Drift from oil leaking internally.
 - D. Leaks at rod seals or holding valves.
- 6. PTO and hydraulic pump(s) for leaks.
- 7. Hydraulic hose and tubing for evidence of damage such as blistering, crushing, or abrasion.
- 8. Presence of this owner's manual.

Daily Inspection:

Daily Inspection should occur each day before the Spider attachment is put into use. Each day, inspect the Spider attachment for all of the following:

- 1. Hydraulic oil level.
- 2. Loose parts or damage to structures or weld.
- 3. Cylinder movement due to leakage.
- 4. Hoses for evidence of oil leaks.
- 5. Controls for malfunction or adjustment.
- 6. Parking brake operation.
- 7. All securing hardware such as cotter pins, snap rings, hairpins, and pin keepers for damage / wear.
- 8. All safety covers for proper installation.
- 9. Cylinder holding valves for proper operation.
- 10. Equipment for missing, illegible, or defaced operating decals and safety signs.

Maintenance / Inspections - continued

Monthly Inspection:

Monthly Inspection should occur at the beginning f every work month. Each month, inspect the Spider attachment for all of the following:

- 1. Frame bolt tightness turn barrel nuts and mounting bolts during the first month of operation on new machines and then quarterly thereafter.
- 2. Cylinders and valves for leaks.
- 3. Jib hook for cracks.
- 4. Structural weldments for bends, cracks, or breaks.
- 5. All pins and keepers for proper installation.
- All control, safety, and capacity placards for readability and secure attachment.
 Inspect all electrical wires and connections for worn, cut, or deteriorated insulation and bare wire. Replace or repair wires as required.
 Lubrication of all moving parts.

Lubrication for DX Bearing

GREASE RECOMMENDED					
GREASE TYPE DESRIPTION					
PREMIUM QUALITY MULTI-PURPOSE	STABILIZED, ANTI-OXIDANT LITHIUM BASE LITHIUM BASE WITH 3% MOLYBDENUM DISULFIDE HIGH DROP POINT				
MULTI-PURPOSE	CALCIUM BASED, FOR GENERAL AUTOMOTIVE AND INDUSTRIAL USE CALCIUM GREASE, WATER STABILIZED, HIGH DROP POINT				
ANTI-FRICTION BEARING	CALCIUM BASED WITH EP ADDITIVESLITHIUM BASEDSODIUM BASED				
EXTREME PRESSURE (EP)	LITHIUM BASED WITH EP ADDITIVES CALCIUM BASED WITH EP ADDITIVES				
HIGH TEMPERATURE	MODIFIED SODIUM BASED, HIGH DROP POINT				
TRANSMISSION	SEMI-FLUID, CALCIUM BASED				
MOLYBDENUM FILLED	LITHIUM BASED WITH 2% MOLYBDENUM DISULFIDE				
GRAPHITE FILLED	LITHIUM BASED WITH 2% MOLYBDENUM DISULFIDE GRAPHITE FILLED SODIUM BASED WITH 2% GRAPHITE				
BLOCK GREASE	SODIUM BASED SOLID GREASE				
WHITE GREASE	 ALUMINUM COMPLEX BASED WITH ANTI-OXIDANT & RUST INHIBITORS & ZINC OXIDE ADDITIVES 				
SILICONE	LITHIUM BASED WITH SILICONE OIL LUBRICANT				
AEROSOL LUBRICANT	SILICONE-BASED LUBRICANT				
GREASE NOT RECOMMENDED					
CUP GREASE	LIGHT SERVICE CALCIUM OR SODIUM BASED GREASE				
GRAPHITE FILLED	GREASES WITH MORE THAN 10% GRAPHITE				
MOLYBDENUM FILLED	GREASES WITH MORE THAN 10% MOLYBDENUM DISULFIDE				
FLUOROCARBON	LOW MOLECULAR WEIGHT CHLOROFLUOROETHYLENE POLYMER WITH INERT THICKENERS				
WHITE GREASE	CALCIUM BASED, ZINC OXIDE FILLED				

NOTICE

Cleanliness is an important item in preserving the long life of the Spider attachment. Keeping dirt, grime, and corrosive material out of the working parts, and thoroughly washing and greasing the Spider attachment periodically.

Every six (6) months, remove the hydraulic pump from the PTO and lubricate the splines using Chelsea Lubricant #379831 or Stellar PN 42042 (packet) or PN 20885 (tube). Failure to lubricate shaft splines will cause damage to the PTO and Hydraulic pump.

General Installation

This chapter is designed to serve as a general guide for the installation of a Stellar[®] Spider Attachment. Each installation is considered unique so certain portions of this chapter may or may not apply to your direct application. If a question should arise during the installation process, please contact Stellar Customer Service at (800) 321 3741.

PTO and Pump installation instructions are provided by the corresponding manufacturers. For more information on which PTO and Pump fit your application, please contact your local Stellar Distributor or Stellar Customer Service.

AWARNING Do not install this hooklift on a chassis not capable of handling the loads imposed on it. Failure to do so may result in serious injury or death.

NOTICE Do not weld or drill holes into the side wall of the base tubes.

Mounting and Assembly

Study names and locations of the parts and familiarize yourself with the spider attachment before starting the assembly. Reading the step-by-step instructions that follow will be helpful.

Assembly

Select an area for assembly that will be large enough to accommodate the completed unit. The surface of the work area should be as level as possible. Use the proper hand tools to ensure proper bolt tightness. Refer to the torque data chart in this chapter for the recommended torque values for different sizes of bolts.

Model Number

Know the model number of the Stellar[®] Spider Attachment being mounted. Use this model number whenever referring to the assembly or parts listing pages. The number is stamped on the name plate which is located on the front frame member.

Installer Notice

According to Federal Law (49 cfr part 571), each final-stage manufacturer shall complete the vehicle in such a manner that it conforms to the standards in effect on the date of manufacture of the incomplete vehicle, the date of final completion, or a date between those two dates. This requirement shall, however, be superseded by any conflicting provisions of a standard that applies by its terms to vehicles manufactured in two or more stages.

Therefore, the installer of Stellar® Hooklifts is considered one of the manufacturers of the vehicle. As such a manufacturer, the installer is responsible for compliance with all applicable federal and state regulations. They are required to certify that the vehicle is in compliance with the Federal Motor Vehicle Safety Standards and other regulations issued under the National Traffic and Motor Vehicle Safety Act.

Please reference the Code of Federal Regulations, title 49 - Transportation, Volume 5 (400-999), for further information, or visit http://www.gpoaccess.gov/nara/index.html for the full text of Code of Federal Regulations.

Torque Data Chart

When using the torque data in the chart, the following rules should be observed:

- Bolt manufacturer's particular specifications should be consulted when provided.
- Flat washers of equal strength must be used.
- All torque measurements are given in foot-pounds. To convert to inchpounds, multiply by 12.
- Torque values specified are for bolts with residual oils or no special lubricants applied. If special lubricants of high stress ability, such as Never-Seez compound graphite and oil, molybdenum disulphite, colloidal

		GRADE 5		GRADE 8		GRADE 9
Size	Bolt DIA	Plain	Plated	Plain	Plated	Plated
(DIA-TPI)	(Inches)	(Ft-Lb)	(Ft-Lb)	(Ft-Lb)	(Ft-Lb)	(Ft-Lb)
5/16-18	0.3125	17	13	25	18	22
3/8-16	0.3750	31	23	44	33	39
7/16-14	0.4375	49	37	70	52	63
1/2-13	0.5000	75	57	105	80	96
9/16-12	0.5625	110	82	155	115	139
5/8-11	0.6250	150	115	220	160	192
3/4-10	0.7500	265	200	375	280	340
7/8-9	0.8750	395	295	605	455	549
1-8	1.000	590	445	910	680	823
1 1/8-7	1.1250	795	595	1290	965	1167
1 1/4-7	1.2500	1120	840	1815	1360	1646
1 3/8-6	1.3750	1470	1100	2380	1780	2158
1 1/2-6	1.500	1950	1460	3160	2370	2865

copper or white lead are applied, multiply the torque values in the charts by the factor .90. The use of Loctite does not affect the torque values listed above.

- Torque values for socket-head capscrews are the same as for Grade 8 capscrews.
- Do not use these values if a different torque value or tightening procedure is given for a specific application. Torque values listed are for general use only. Check tightness of fasteners periodically.
- Sheer bolts are designed to fail under predetermined loads. Always replace shear bolts with identical grade.
- Fasteners should be replaced with the same or higher grade. If higher grade fasteners are used, these should only be tightened to the strength of the original.
- Tighten plastic insert or crimped steel-type lock nuts to approximately 110 percent of the dry torque values shown in the chart below, applied to the nut, not to the bolt head. Tighten toothed or serrated-type lock nuts to the full torque value. Note: "Lubricated" means coated with a lubricant such as engine oil, or fasteners with phosphate and oil coatings. "Dry" means plain or zinc plated without lubrication. Tighten lubricated bolts to approximately 80% of dry bolts.

Installation Note

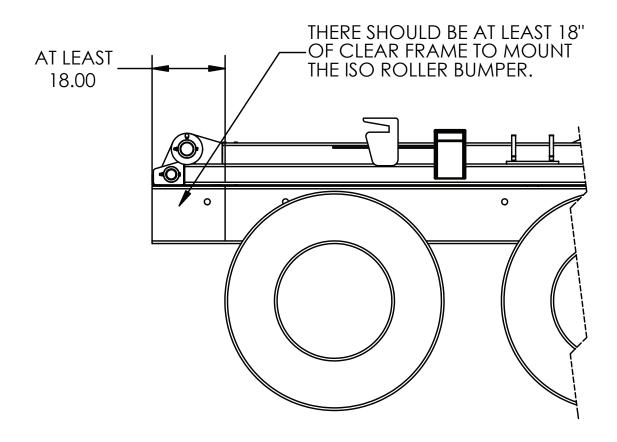
Every installation is unique. However, certain guidelines exist that apply to every model. Listed below is a general set of chronological steps that may be followed when installing a Stellar Spider Attachment. If any questions arise during the installation process, feel free to contact your local dealer or Stellar Customer Service at 800-321-3741.

Step 1: Set the hooklift onto the truck frame.

• Set the hooklift on the truck frame. Place it in the approximate location to optimize weight distributions, mounting locations, etc. Refer to the installation instructions of the hooklift for more detailed instructions.

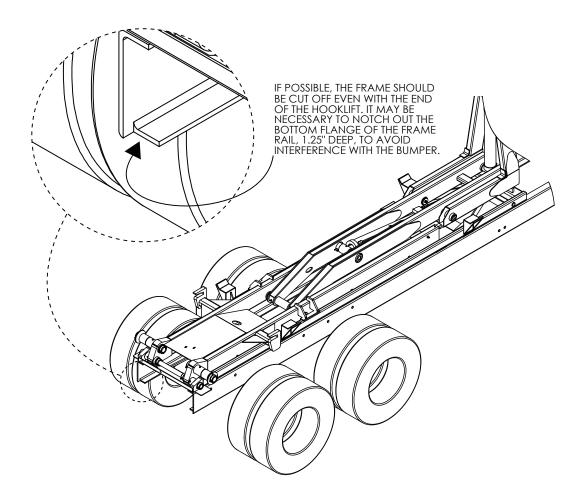
Step 2: Check end of frame for bumper clearance

Check the end of the frame to ensure that there is enough clear frame rail to mount the ISO roller bumper. The bumper requires a minimum of 18" of clear frame in order to bolt on the shear plates. Allow adequate clearance for spring shackles, air bags, air canisters, or anything else related to the rear suspension. Note: If there is insufficient frame to mount the bumper, it may be necessary to move the hooklift further back. This would leave more space between the back of the cab and the front of the hooklift base.



Step 3: Cut off extra truck frame

Once the hooklift and bumper are properly set, cut off any extra truck frame. Ideally, the back of the frame would end at the back of the hooklift base.



Step 4: Fit bumper and drill holes.

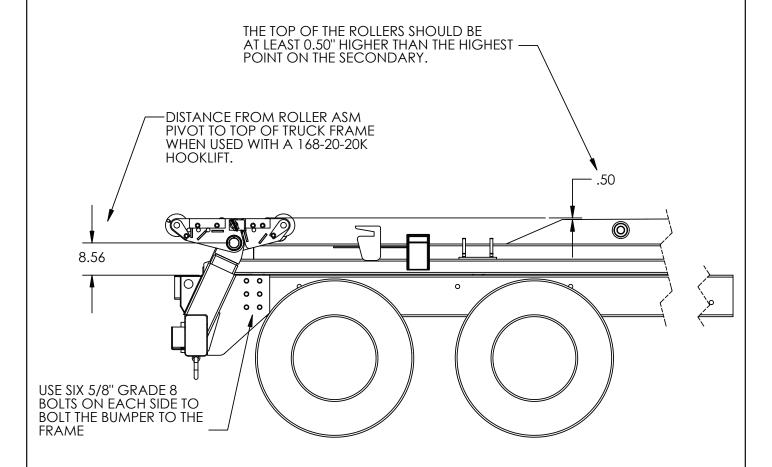
Fit the bumper to the frame and move it as far forward as possible. Drill six (6) 5/8" mounting holes through the frame. You should be able to use the existing holes in the shear plates as a guide. Depending on the width of the frame rails, it may be necessary to use shims between the shear plates of the bumper and the frame.

Step 5: Install bumper.

Bolt the bumper to the frame using six (6) 5/8" grade 8 bolts per side. Each bolt should be torqued to 160 ft-lb.

Step 6: Weld roller supports

After the bumper is fully mounted, it is then possible to weld on the roller supports. The placement of these supports is dependent on which hooklift it is being used with. Refer to the layout for the proper height requirement:

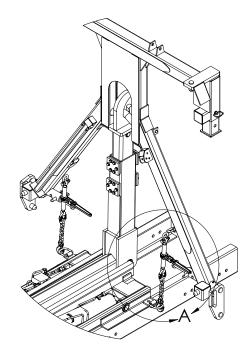


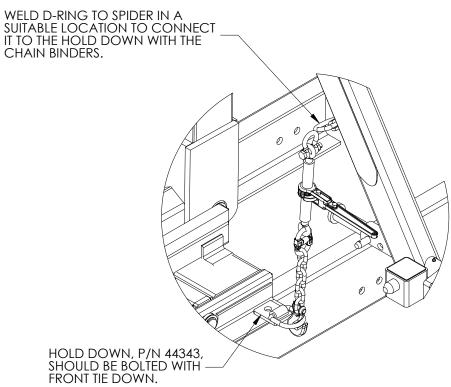
Step 7: Install hydraulic reservoir and valve bank.

After the bumper is mounted, you may then proceed with mounting the hooklift. See applicable hooklift installation manual for details.

Step 8: Install Spider tie-down kit.

Install the Spider Tie-Down Kit as shown below:



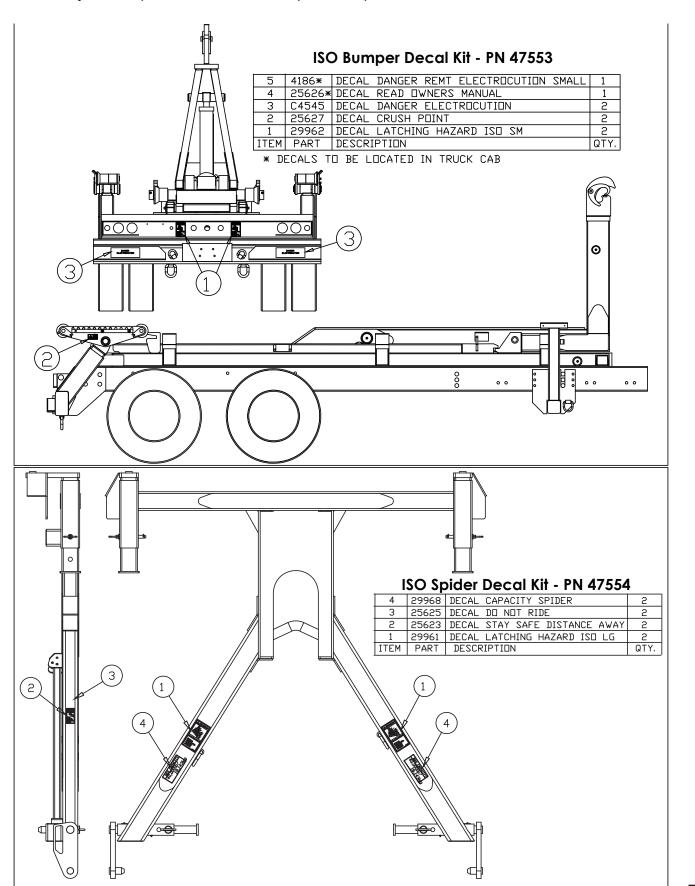


NOTE:

WHEN USING THE SPIDER AND SPIDER BUMPER ASSEMBLY, ALWAYS USE THE TIE DOWN KIT. THIS WILL PREVENT MOVEMENT OF THE ISO SHIPPING CONTAINER AND SPIDER WHEN STOWED ON THE TRUCK.

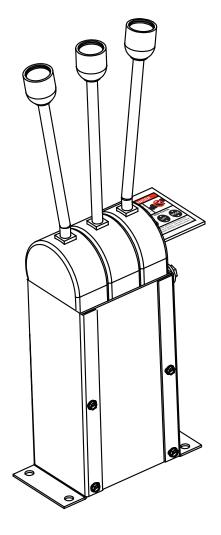
Step 9: Apply decals.

Affix all safety decals provided with the bumper and spider:



Spider Attachment Controls

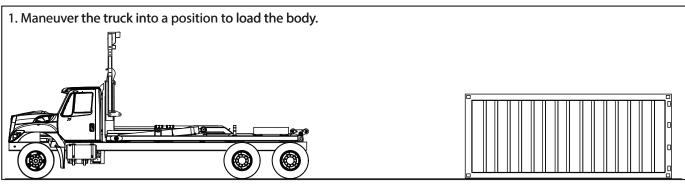
- 1. Be familiar with the sequence and operation of the Spider attachment controls.
- 2. Each individual Spider attachment function should have control function decals. Replace them immediately if they are missing or illegible.
- 3. Keep hands, feet and control levers free from mud, grease and oil.
- 4. Be familiar with the control levers and how they operate before attempting to operate the Spider attachment.
- 5. Be prepared before beginning operation of the Spider attachment:
 - · All protective guards must be in place.
 - Be aware of the surroundings: low branches, power lines, unstable ground.
 - Be sure all safety devices provided are in place and in good operating condition.
 - Be prepared for all situations. Keep fire extinguisher and first aid kit near.
 - · Be sure all regular maintenance has been performed.
 - Visually inspect all aspects of the Spider attachment for physical damage.
 - · Check for fluid leaks.

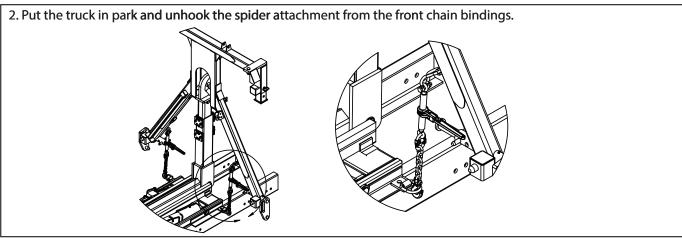




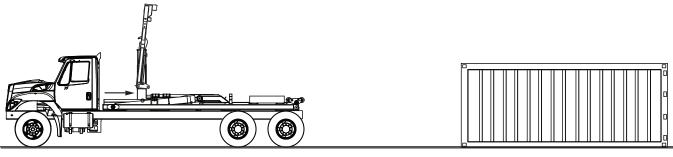
Loading Operations

NOTE: HOOK AND BALL HEIGHTS MUST MATCH.



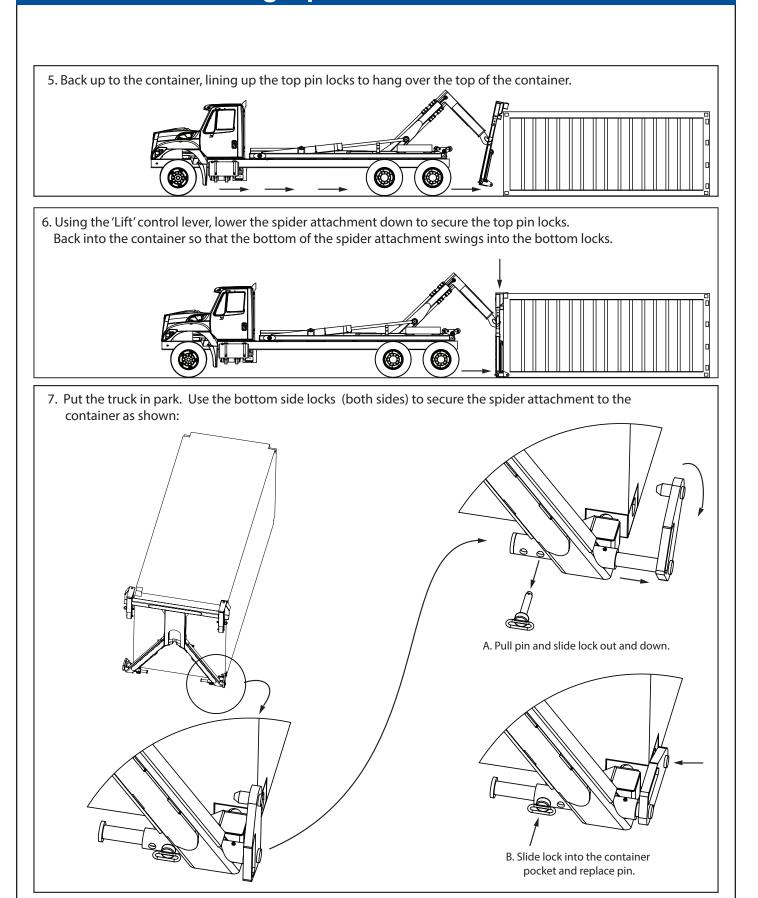


3. Put the truck in neutral and engage the PTO. Pull the control lever labeled 'Jib' to slide the jib as far back as it will go, effectively releasing the dump latches.



4. Pull the control lever labeled 'Lift' until the hook is in a position to attach to the body.

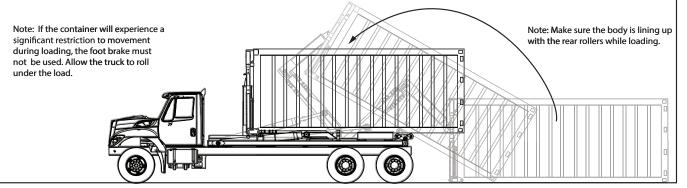
Loading Operations - continued



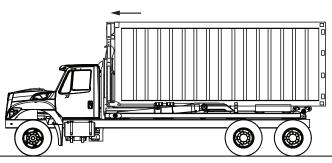
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Loading Operations - continued

10. Once fully attached, return to the cab, put the truck into neutral, and push the 'Lift' control lever to load the body.



11. Finally, push the control lever labeled 'Jib' to slide the jib forward until the body latches fully engage. Disengage the PTO. O



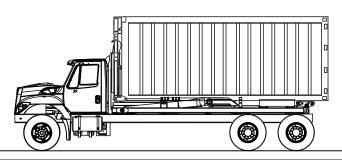
12. Put the truck in park and secure the container using the rear chain binders. The truck is now ready for travel.

ATTACH ONE END OF CHAIN
BINDERS TO DERINGS ON BUMPER,
AND THE REND OF CHAINER.

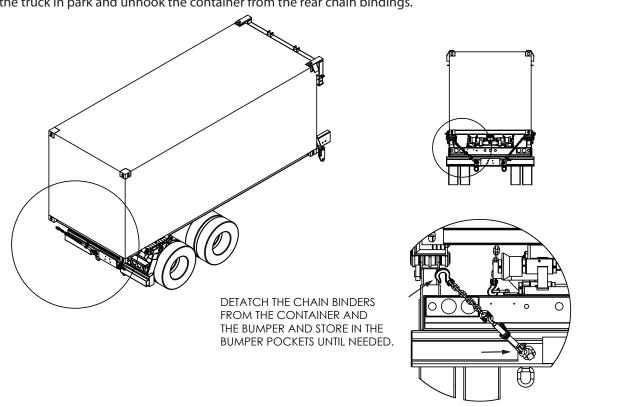
CORNER BLOCKS ONTHE CONTAINER.

Unloading Operations

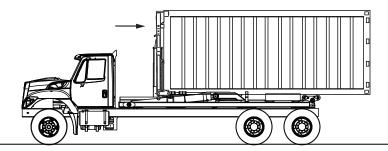
1. Maneuver the truck into a position to unload the body.



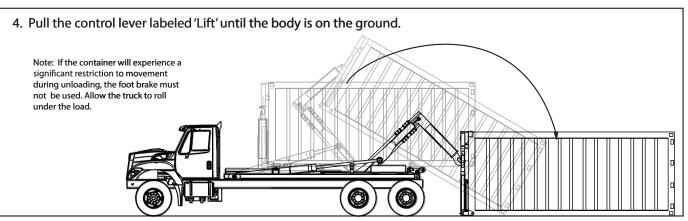
2. Put the truck in park and unhook the container from the rear chain bindings.

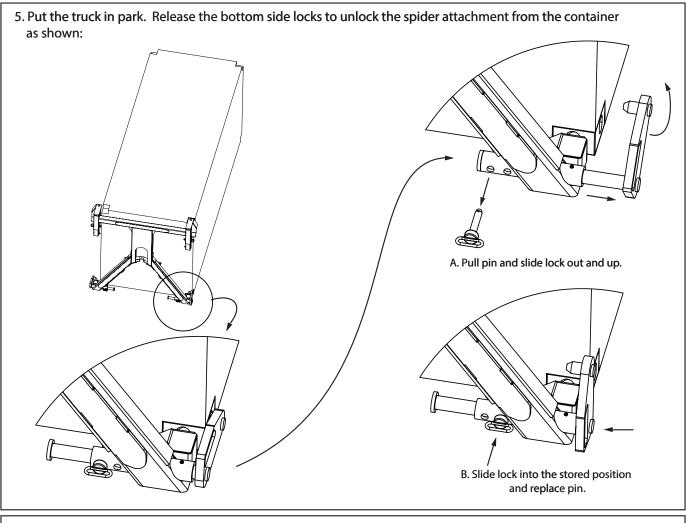


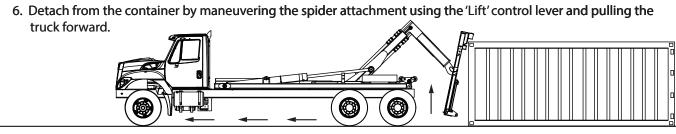
3. Put the truck in neutral and engage the PTO. Pull the control lever labeled 'Jib' to slide the jib as far back as it will go, effectively releasing the dump latches.



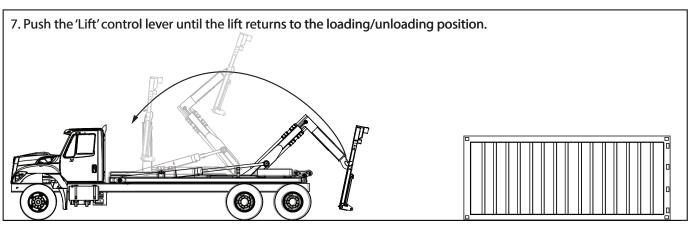
Unloading Operations - continued

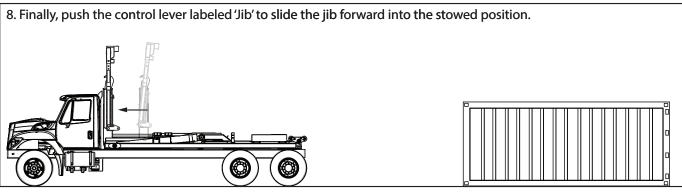


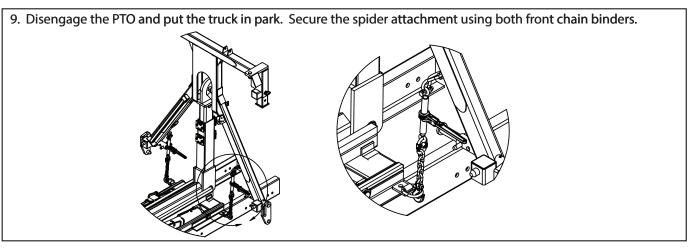


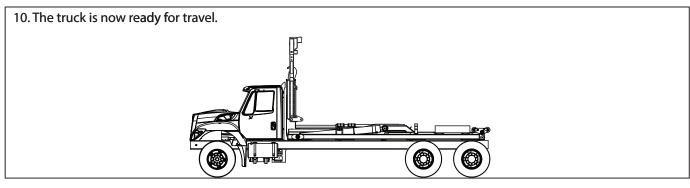


Unloading Operations - continued









Chapter 2 - Assembly Drawing

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Spider Attachment Assembly - PN 46853 Parts List

ITEM	PART	DESCRIPTION	QTY.
1	46854	SPIDER WLDMT ISO ADJUSTABLE 40K	1
2	12824	PIN HITCH 1.00X4.50	2
3	18778	PIN HITCH 0.75X6.25 W\ LANYARD	2
4	C1592	ZERK 1/8 NPT STRAIGHT	4
5	7891	PIN .50X3.00 QUICK RELEASE	2
6	C1002	CAP SCR 0.50-13X6.00 HHGR5	2
7	D0790	WASHER 0.50 SAE FLAT YELLOW GR8	4
8	C6106	NUT 0.50-13 HHGR5 NYLOC	2
9	137600	LEFT UPPER LATCH WLDMT ISO SPIDER 40K	1
10	137599	RIGHT UPPER LATCH WLDMT ISO SPIDER 40K	1
REV. B			·

PN 46853			
PART	DESCRIPTION	QTY	
44344	KIT ISO SPIDER TIE DOWN	1	
47554	DECAL KIT ISO SPIDER 40K	1	



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