



Operational Manual

Models C796, C568 & C121

Hydraulic Cane-Type Cart Lifter



Perkins Manufacturing Company
Creators of the TuckAway® Cart Lifter
www.perkinsmfg.com

800-882-5292

Revised: 5/1/2019

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C796, C568 & C121 Lifter Specifications

Cart Compatibility	Carts that meet ANSI Type "G" Automated-compatible specifications & 55 gallon barrels
Typical Mounting Application	Side-loader
Tipper-Bar Compatible?	No.
Flow Rate Requirement	8-10 gpm
Cycle Time	12 seconds up, 12 seconds down, @ 8 gpm
Recommended Pressure Setting*	2,000 psi at the pressure relief valve
Maximum System Pressure	3,000 psi
Weight Capacity**	400 lbs
Dump Angle	45 degrees from the horizon
Mounting Height (ground level to top of mounting plate)	n/a
Approximate Unit Weight (not counting packaging)	480 lbs
Hydraulic Package	Tap-In kits are sold separately
Warranty	***

Perkins regularly makes product improvements. Specifications are subject to change without notice.

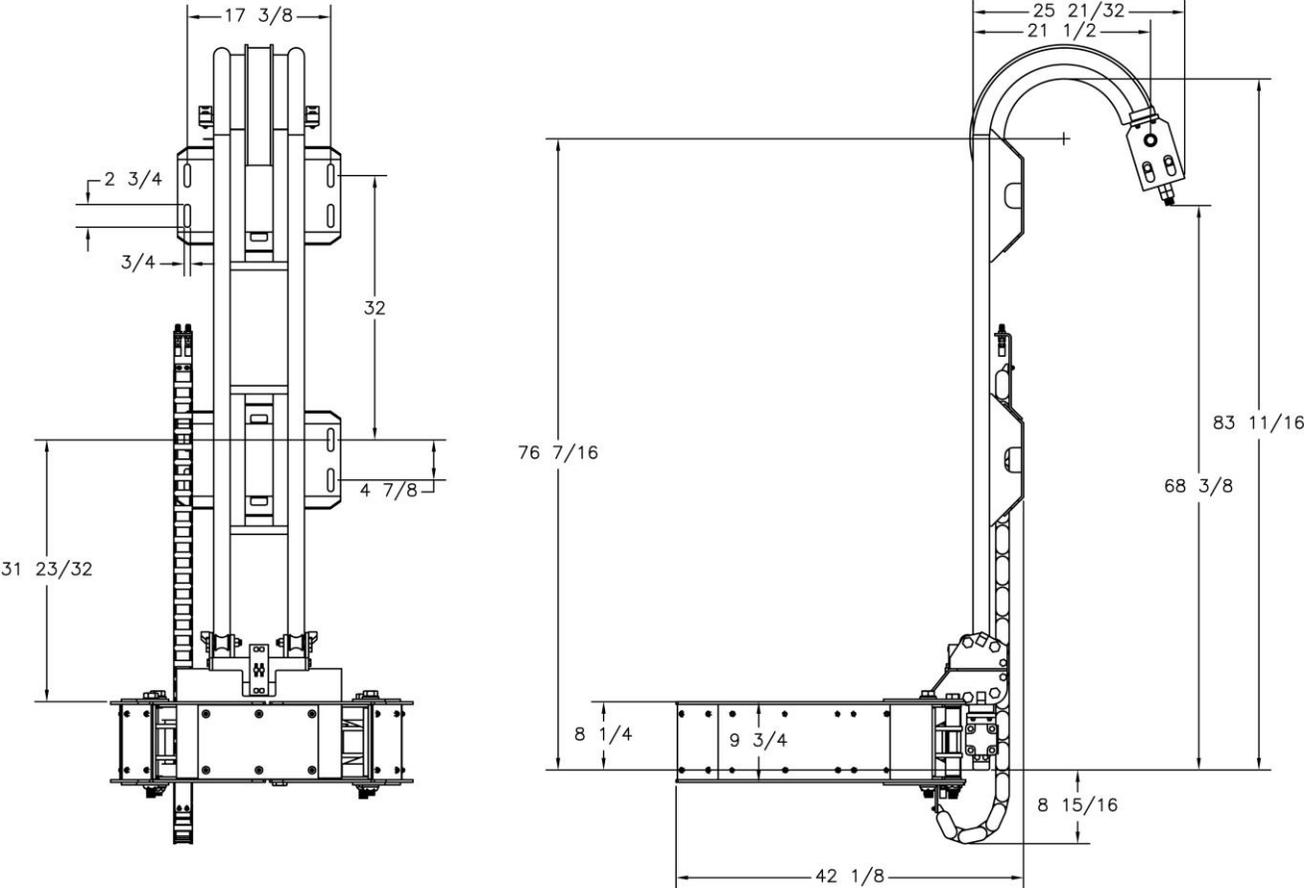
* Actual pressure required to lift a load can vary.

** Do not lift more than the recommended amount printed on the cart by the cart manufacturer or damage or injury may result.

*** See Warranty page for full details of coverage



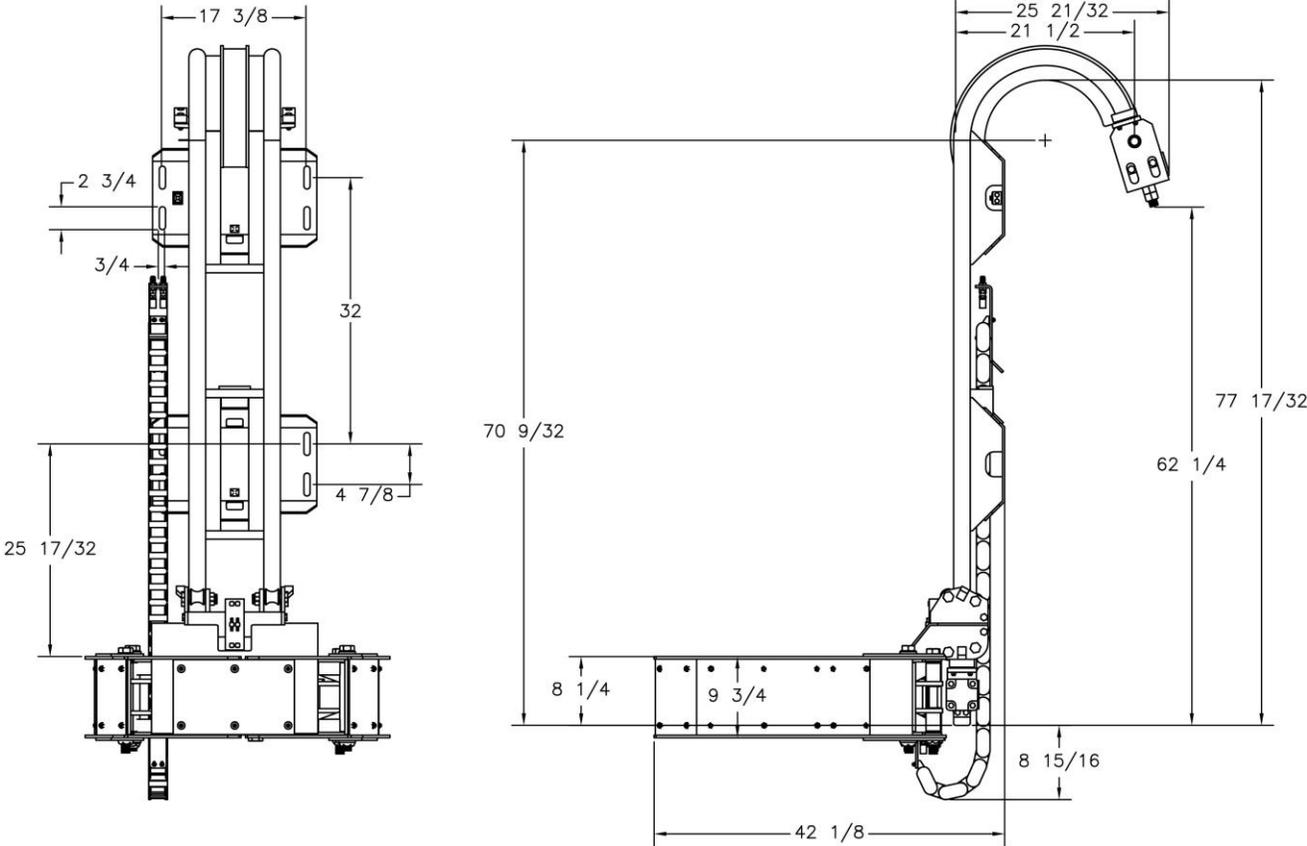
C796 Overall Dimensions



Perkins regularly makes product improvements. Dimensions are subject to change without notice.



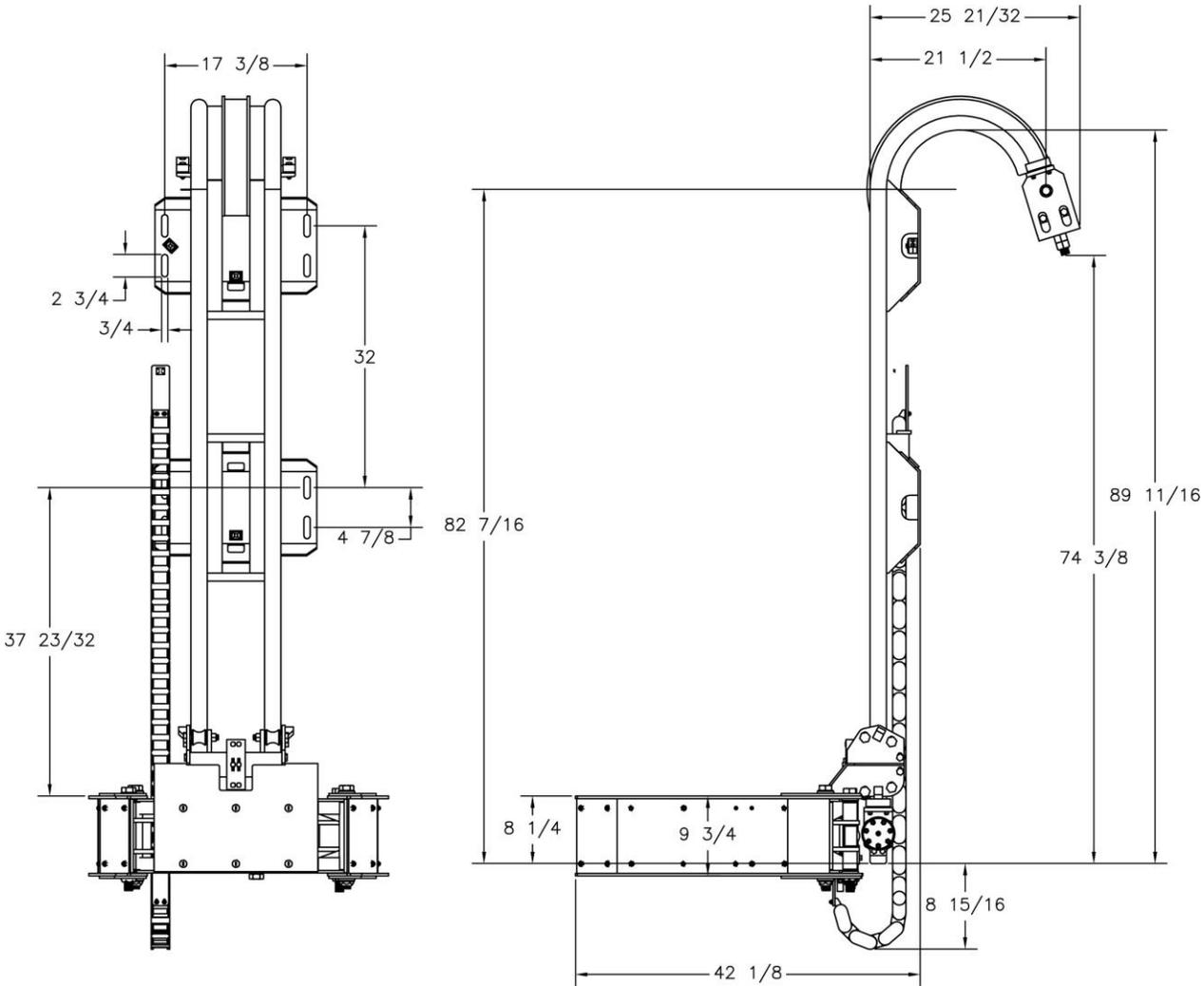
C568 Overall Dimensions



Perkins regularly makes product improvements. Dimensions are subject to change without notice.



C121 Overall Dimensions



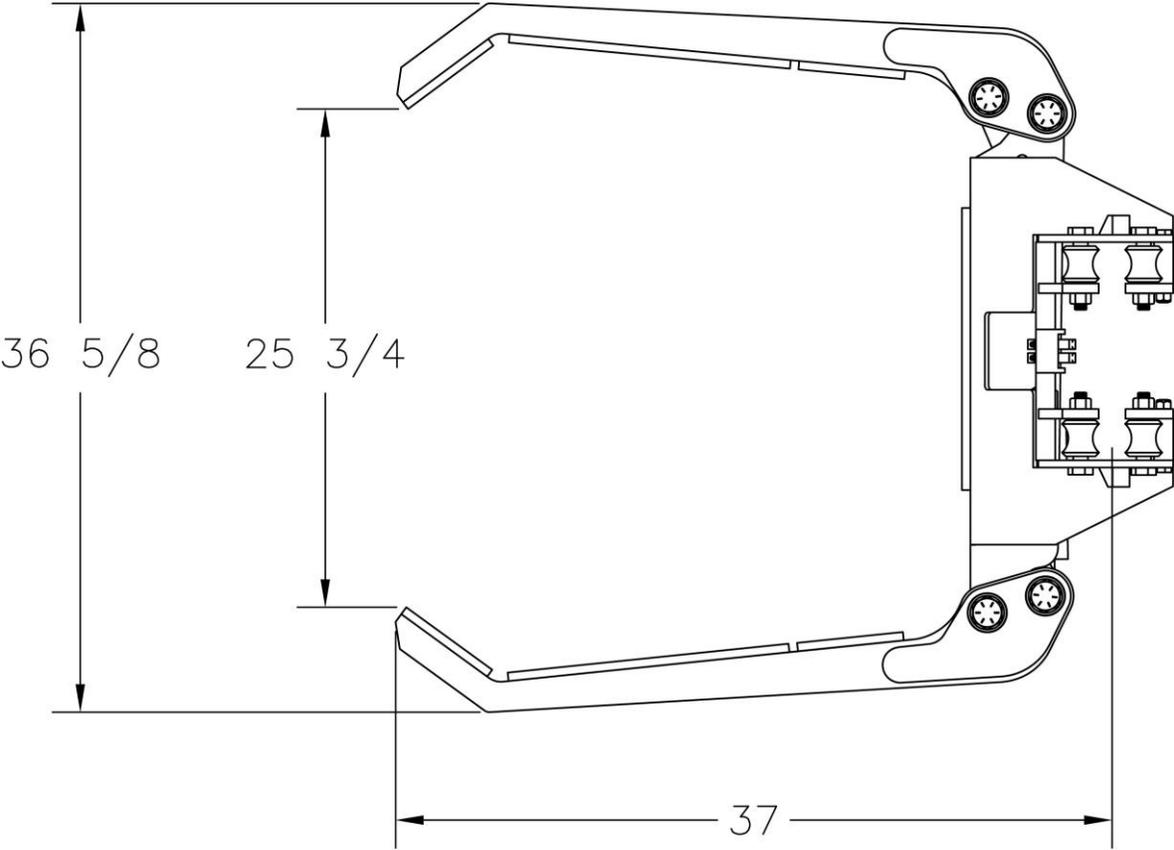
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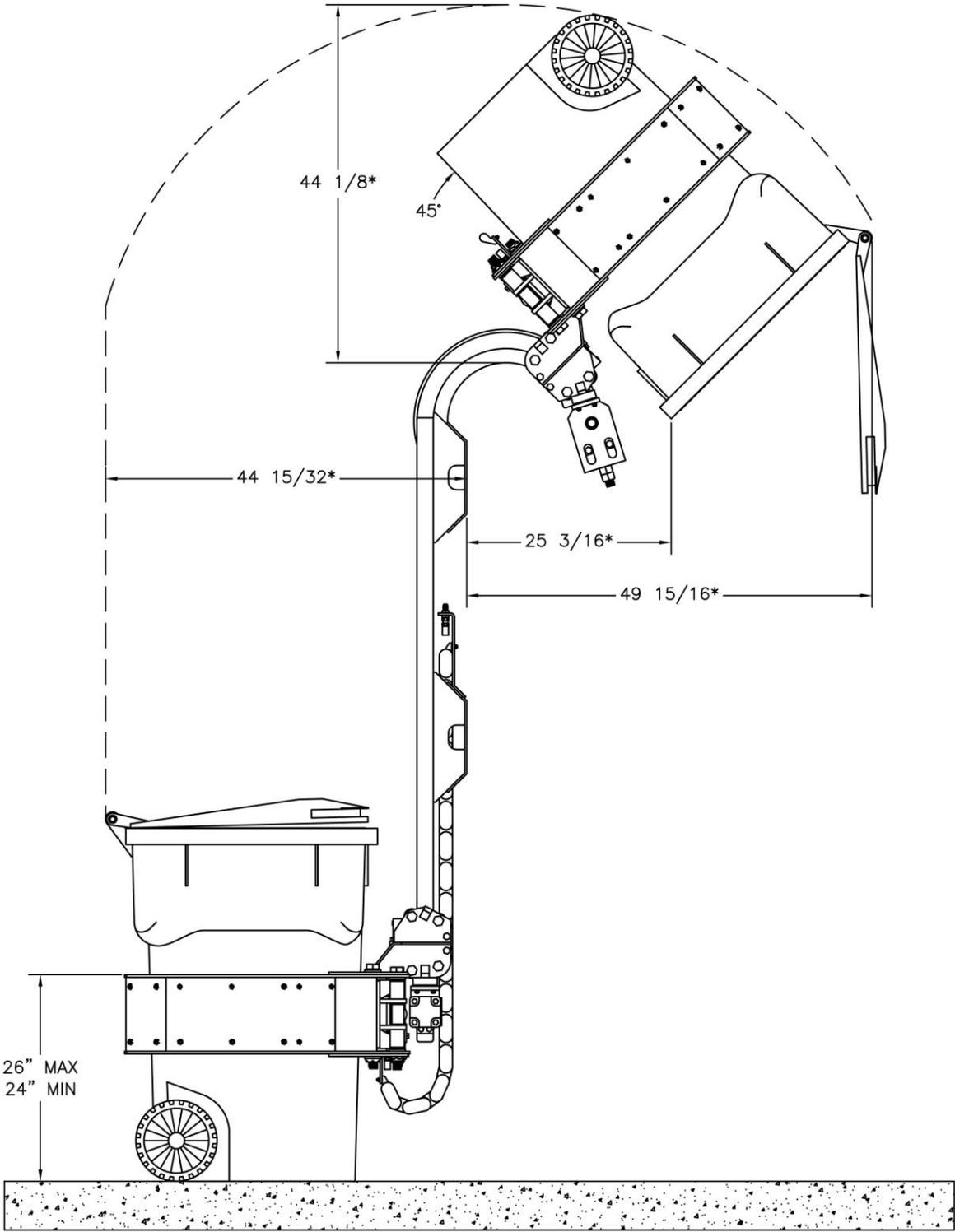
Overall Dimensions



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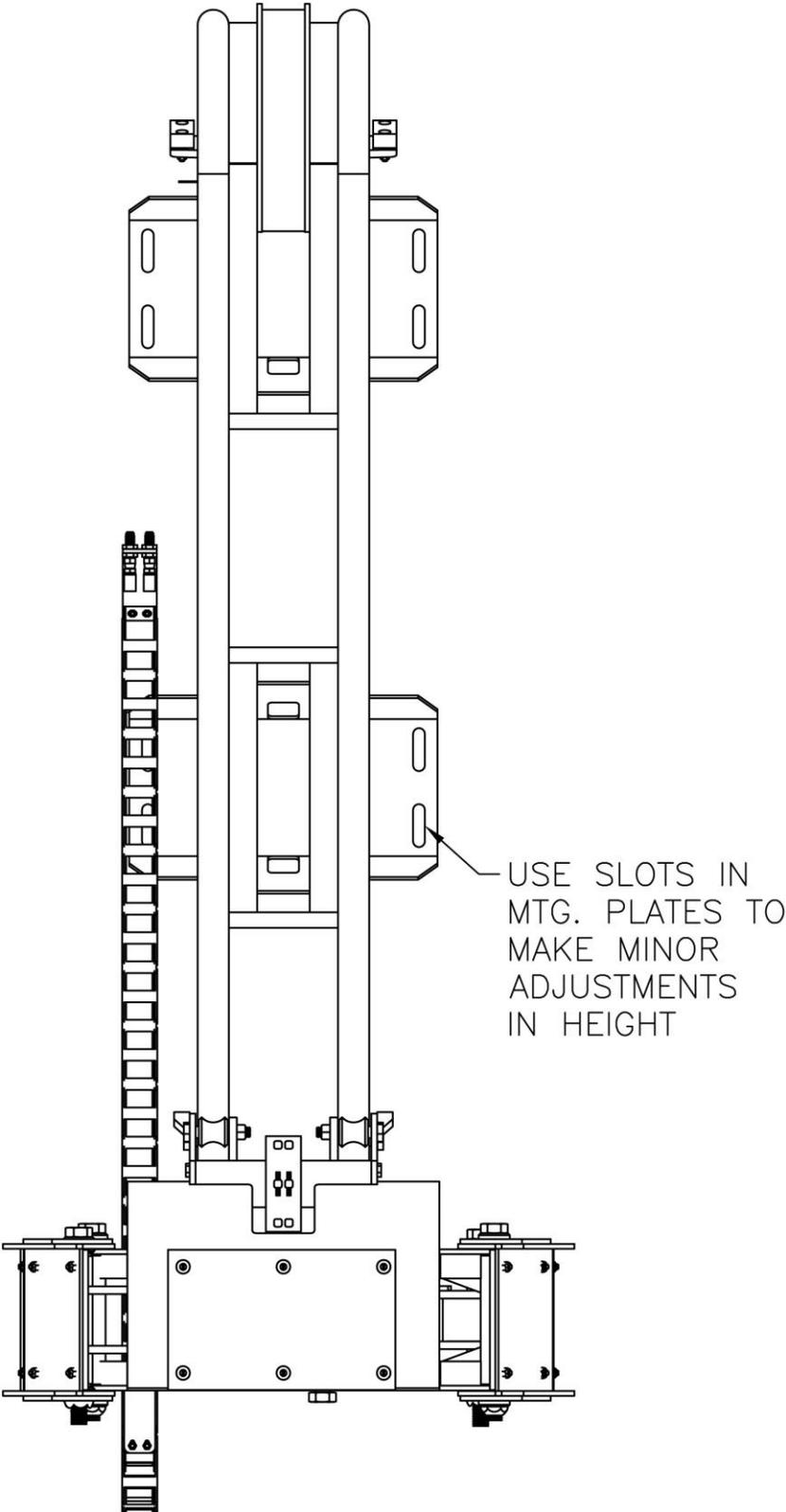
Overall Dimensions



* DIMENSIONS SHOWN FOR REFERENCE,
THESE WILL VARY DEPENDING ON TYPE OF CART USED.



Overall Dimensions



Cart Types



ANSI Type B carts (US-Style two-bar carts) with a dimension of 14 $\frac{3}{4}$ - 15 $\frac{1}{4}$ " bar to bar spacing.



ANSI Type C Carts (European-type) Using an upper lip for lifting. Height to ground varies with size of cart.



ANSI Type D Carts (Diamond-Type)



ANSI Type G Carts (Automated Collection) Having a rounded body ideal for gripper arms to clasp around.

Note: Some ANSI Type B carts are also Type G compatible, but some carts, particularly older designs, are not. This affects gripper-arm type of lifters that rely on grasping the cart around it's body. If using a gripper arm type of lifter, check your carts and see if they have rounded corners (look for approximately 6" radius). If so, they are likely ANSI Type G compatible.



Installation Safety

Please read this manual prior to installing, repairing or using this cart lifter.

- ✦ Installation of this equipment requires welding, painting, grinding, torching and working with high- pressure hydraulic systems. The appropriate safety equipment should be used at all times.
- ✦ Always follow OSHA specified lock-out procedures while working with a truck.
- ✦ Cane lifters weigh, on average, between 400-500 lbs. Do not lift the lifter onto the mounting plate by hand. Always use proper lifting equipment.
- ✦ Always use a chain or strap to secure the lifter in the upright position during the installation process. Unsecured lifters may fall suddenly causing injury.
- ✦ The truck to which the lifter is to be installed should be empty of waste. Torching and welding can ignite the contents of the truck and cause a fire.
- ✦ Do not weld on the truck unless a ground is in place and the battery is disconnected.
- ✦ Do not open/loosen any hydraulic lines unless the system is off and depressurized.
- ✦ Always double-check hydraulic fittings and hoses for tightness prior to reactivating the pump.
- ✦ Always relocate lights that need to be moved due to the position of the cart lifter to a clear and unobstructed area clearly visible to drivers.
- ✦ All painting of the truck/lifter after installation is complete should be done with proper ventilation and per local regulations. Do not paint over caution and warning labels.
- ✦ If there are any questions about the proper installation or use of the cart lifter not covered in the manual, it is recommended to call Perkins at 800-882-5292.



Please be aware of the risks of working with welding equipment and consumables. Always use safety protection equipment. The sparks may ignite fire, always clean the area from flammable material or flammable chemicals, do not weld close to gas lines or on top of electrical cords or installations. Disconnect battery cables from the battery and make sure the vehicle is perfectly grounded prior to attempt to do any weld. Always weld in a ventilated area.



WHEN WELDING, WEAR APPROPRIATE EYE AND SKIN PROTECTION. WELDING LIGHT CAN BLIND. WELDING LIGHT CAN SUNBURN THE SKIN. LONG TERM EXPOSURE TO WELDING LIGHT CAN CAUSE CANCERS. ALWAYS WEAR PPE WHEN WELDING. PROPER PPE SHOULD ALSO BE WORN BY ANYONE IN THE THE WORK ZONE WHO MIGHT ALSO BE EXPOSED.

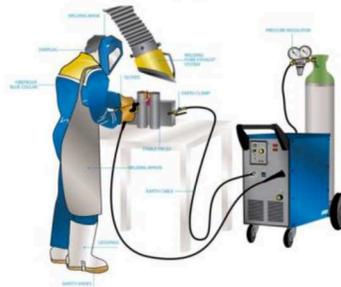
**WATCH YOUR SPARKS!
HELP PREVENT WILDFIRES**

Precautions to take when you use welding equipment outdoors.

- Remove vegetation from the work area.
- Where vegetation can't be removed, use a sprayer to wet down the work area prior to starting welding operations. Wet a wider area on the down-wind side from the welding location. If working in the same area for an extended period, re-wet the vegetation surrounding the work site.
- Keep water handy.
- Post a fire watch in wind any fires that sparks ignite so that they can be caught while small.
- Avoid parking vehicles in dry grass tall enough to reach the catalytic converter on the underside of your vehicle.



Correct and safe electric welding station



HYDRAULIC SYSTEMS CAN LEAK OUT HIGH PRESSURE WHICH CAN CAUSE SERIOUS INJURY, GANGRENE OR DEATH. DO NOT CHECK FOR LEAKS WITH YOUR BARE HANDS AND AVOID CONTACT WITH LEAKING OIL STREAMS.

HYDRAULIC OIL CAN ENTER THE BLOODSTREAM. SEEK MEDICAL ATTENTION IMMEDIATELY IF YOUR SKIN IS PUNCTURED BY HYDRAULIC OIL.

HYDRAULIC SYSTEMS CAN BECOME HOT (GENERALLY UP TO 170-180 DEG. F.) TO AVOID BURNS, DO NOT TOUCH VALVES, ACTUATORS, CYLINDERS, AND OTHER HOT COMPONENTS, EVEN AFTER THE SYSTEM IS SHUT OFF IT WILL REMAIN HOT AND TAKE TIME TO COOL DOWN.

ALWAYS TURN OFF A SYSTEM BEFORE SERVICING IT. DEPRESSURIZE THE CIRCUIT BY ACTIVATING THE CONTROLS WITH THE SYSTEM OFF TO RELIEVE ANY BUILT UP PRESSURE.

NEVER WORK UNDER A RAISED LOAD. RAISED EQUIPMENT CAN SUDDENLY FALL WHEN A VALVE OR LINE IS OPENED (LIKE A MOUSETRAP). IF THE EQUIPMENT MUST BE SERVICED IN THE RAISED POSITION, SECURE THE EQUIPMENT WITH CHAIN OR STRAP TO HOLD IT UP SAFETY.



Installation Tips

Do not mount the lifter to a refuse body which is not already mounted to a chassis. Chassis heights can vary, and this will affect the final installed height of the cart lifter.

Tack weld only until all positions and clearances are verified to work well for your application.

Always work on a smooth level surface with an empty truck.

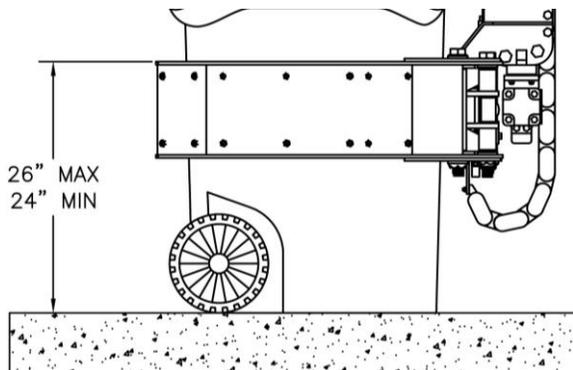
Mark Your Centerlines

Draw a centerline on the truck's body where the lifter is to be placed, making sure the centerline is vertical. Make sure the placement of the lifter in this location will offer structural support needed for the lifter's mounting plates. If there is not structural support, add steel channel and/or tube to reinforce the wall of the truck as needed.

Also double check that the placement of the lifter in this location will not interfere with any equipment the truck may have (swinging doors, tarps, storage boxes, fuel tanks, control lines, etc). Relocate the lifter or equipment as necessary.

In the event of double-install on opposite sides, it may be ideal to offset the position of the lifters so that should they be operated at the same time, the carts will not collide with each other at the top. Also, offsetting the position of the lifters helps distribute trash within the dump body for a more evenly dispersed load and increasing capacity.

Determine the Mounting Height of Candy-Cane Series



Gripper Arm mounting height

The mounting height is critical to the proper function of any cart lifter. The ideal location for the gripper arm is 24" off the ground minimum, when the lifter is bottomed out with the cane as shown in the diagram at left.

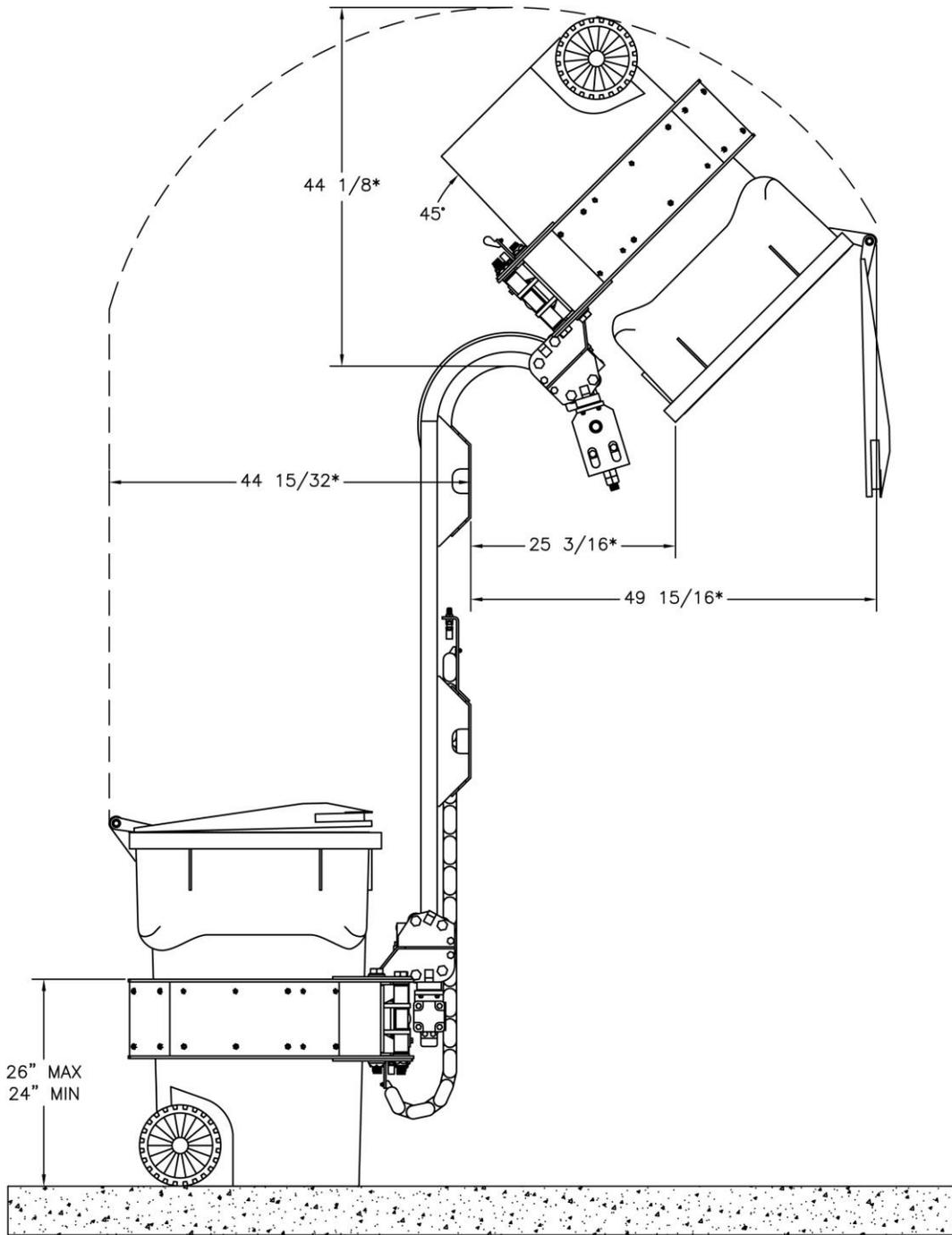
It is important that the body be mounted to a chassis, and the truck is empty and parked on a smooth and level surface when this mounting height is determined.

A cart lifter which is mounted too high will make it difficult for the operator to latch the cart at all, causing the operator to have to lift the cart onto the latch.

A good mounting height will make latching carts effortless with no lifting or holding the cart in place.



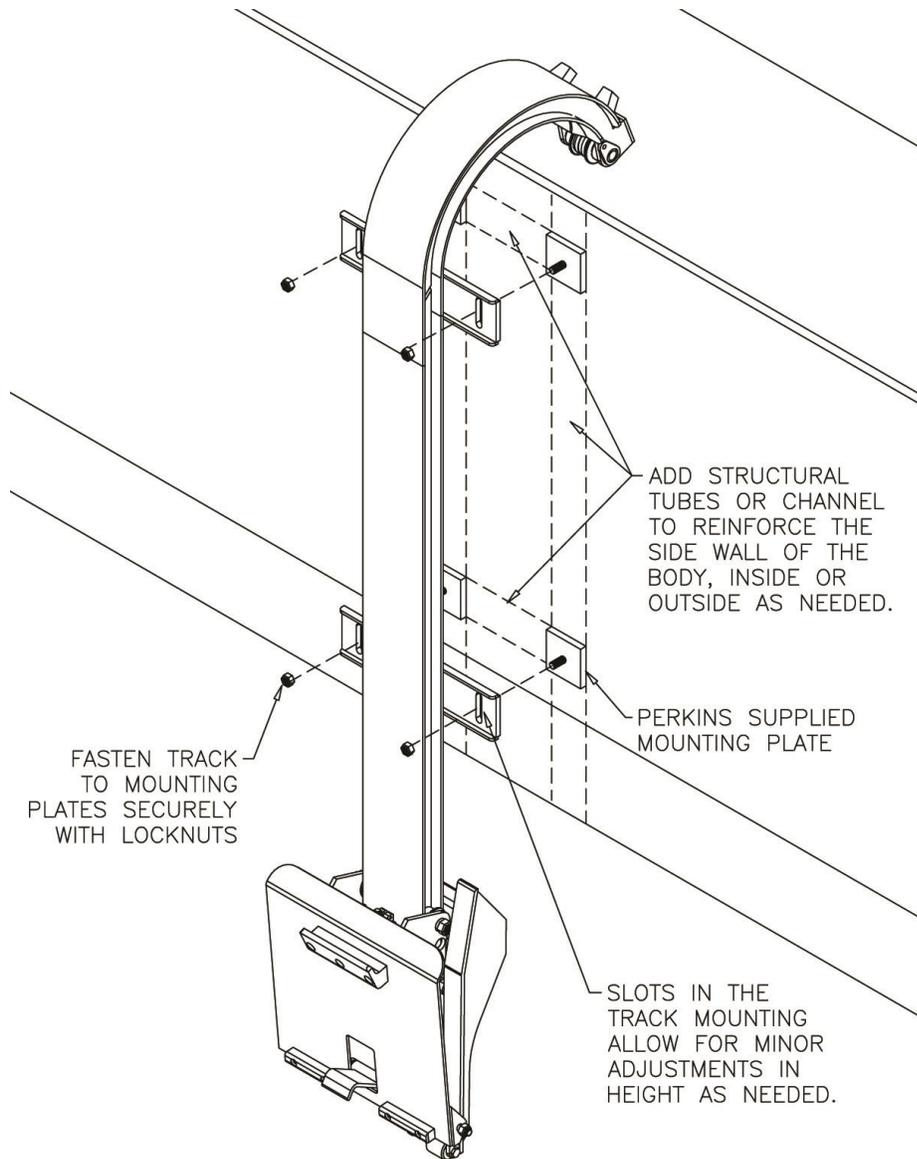
Positioning the Gripper Arms



* The gripper arms should be positioned so that the top of the gripper is 24" minimum to the ground, as shown.
The mounting plate itself should be vertical and level.



Reinforce the Mounting Plate



The sidewall of a truck is not typically designed to accommodate lifters and their loads. It is necessary to add additional supporting structure, in the form of channel or tubing, so that the mounting plates are anchored on a rigidly fixed surface. Due to vehicle width restrictions, it may be necessary to reinforce this area from within the body of the truck.

Failure to fully support the mounting plate can lead to rapid premature failure of the cart lifter.

Dimensions shown above are an example only and will vary from truck to truck

After the cart lifter and supports are tack welded in place, move the cart lifter by hand up and down carefully, making sure there are no interferences. Double check the hook height to the ground. If everything appears satisfactory, the lifter's mounting plate and supports may be welded fully.

The mechanical portion of the installation is complete.



Hydraulic Oil

The most important component of any hydraulic system is the oil. Perkins cart lifters use standard seal materials and should therefore be compatible to most grades of hydraulic oils, operating in typical weather conditions for most of North America. However, the condition of the oil is an important consideration that should not be overlooked.

Hydraulic oil may be dirty, contaminated, lost its viscosity, burned up, or have too high a concentration of absorbed water and/or air. While these things are unlikely to cause an immediate performance issue with your cart lifter, these issues can lead to premature wear and tear in the longer term.

Perkins would like to take this opportunity to remind you to check the quality of your hydraulic oil periodically and make sure it meets your standards. Oil that is maintained in good condition will help your equipment last longer.

Non-Perkins Controls

Some customers with new trucks may choose to use hydraulic controls provided by the OEM. As long as the GPM and pressure settings used match the specifications required, then the lifter should operate fine. Perkins cart lifters do not require special Perkins valves to operate.

In other cases, a Perkins cart lifter may be replacing a competitive lifter for which controls are already installed. Again, Perkins cart lifters should work just fine with competitive equipment, as long as the GPM and pressure settings are adjusted within the specified ranges.

Lifter Speed

The cycle time of the lifter is very important for safe operation. Perkins suggests a complete cycle time of 24 seconds (12 seconds up and 12 seconds down). Faster cycle times may be dangerous. Running a lifter too fast can damage the cart, or make a cart break loose off the lifter and fall, resulting in damage and/or injury.

The speed of the cart lifter is determined by the rate of oil (gpm) going to the unit. The cane lifter will require approximately 8-10 gpm in order to meet this speed. A gauge is recommended but not needed to determine proper lifter speed. Counting the cycle time using a stop watch is adequate to determine proper flow rate. Running a lifter too fast will void the warranty.

Weight Capacity

The maximum amount of weight that can be lifted is limited by the pressure relief valve. The settings must be determined with a pressure gauge. The c796 & c568 requires a max pressure of 2,000 psi to lift a 400 lb load. Place a pressure gauge after the hand valve and run the actuator until it stops, continue activating the handle and note the pressure on the gauge. Adjust the relief valve according to the manufacturer's instructions.



Operating the Lifter

Operating Instructions

The recommended cycle is 10-12 seconds to travel up and 10-12 seconds to travel down. This cycle time is based on the safe and smooth movement that the plastic cart can be swung about at without risking damage to the cart or injury to the operator. Therefore, operating the lifter faster than this time will void the warranty.

It is recommended that the lifter be visually inspected on a daily basis to ensure that there is nothing obviously in need of repair. Broken or missing parts/hardware should be attended to immediately to avoid risk of further damage to the lifter, damage to the cart, or injury to the operator. Operating a cart lifter that is not properly maintained is hazardous.

Step 1: Bring the lifter out of the storage position and into the pick-up position, with carriage fully down and gripper arms fully opened.

Step 2: Roll a loaded cart to the lifter and position the cart within the gripper arms.

Step 3: Look and make sure no one is in the area of the lifter or cart, then operate the controls per instructions. Always keep a watchful eye to ensure all personal are clear of the work area. Watch the camera/monitors as well to ensure normal operation.

Step 4: Using the control, lower the cart until the cart is safely returned to the ground and the gripper arms have opened.

Step 5: Remove the empty cart and repeat the process as needed.



Safe Operating Tips

Always follow your company's safety policy during the use of this lifter, including use of proper clothing/ personal protective gear, reflective clothing, etc. Remember, you are operating the lifter on a public road/alley among moving traffic. Always be aware of your surroundings and watch for cars and pedestrians.

Do not lift anything with the lifter other than ANSI approved carts which are in good condition. Non-approved carts may not lock properly, causing them to fall from the lifter, which can cause damage or injury and will void the warranty.

Do not use the lifter for any purpose other than lifting a cart. Lifters are not meant as steps, they are not to be used to help lift a commercial container, or used to crush/breakdown an item. Doing so can cause serious damage or injury and will void the warranty.

Speeding up the lifter beyond the recommended cycle time of 10-12 seconds and/or adjusting the relief valve to pick up weights heavier than 400 lbs can lead to damage or injury and will void the warranty.

Do not operate the lifter unless the area around it is clear of personnel. This means do not touch the lifter while it is in operation and do not stand or sit under/near the lifter while it is moving. Lifters have pinch points which can cause serious injury. Stay clear at all times.

Damage caused by bottoming out is not covered by warranty.

Lifters of all kinds can be struck by utility poles, walls, other vehicles, backed into earthen hills, etc. It is the operator's responsibility to position the cart lifter in a safe position prior to coming close to any other foreign object. If the lifter is damaged by collision, the damage will not be covered by warranty.



Adjusting the Chain

CRITICAL NOTE ON CHAIN:

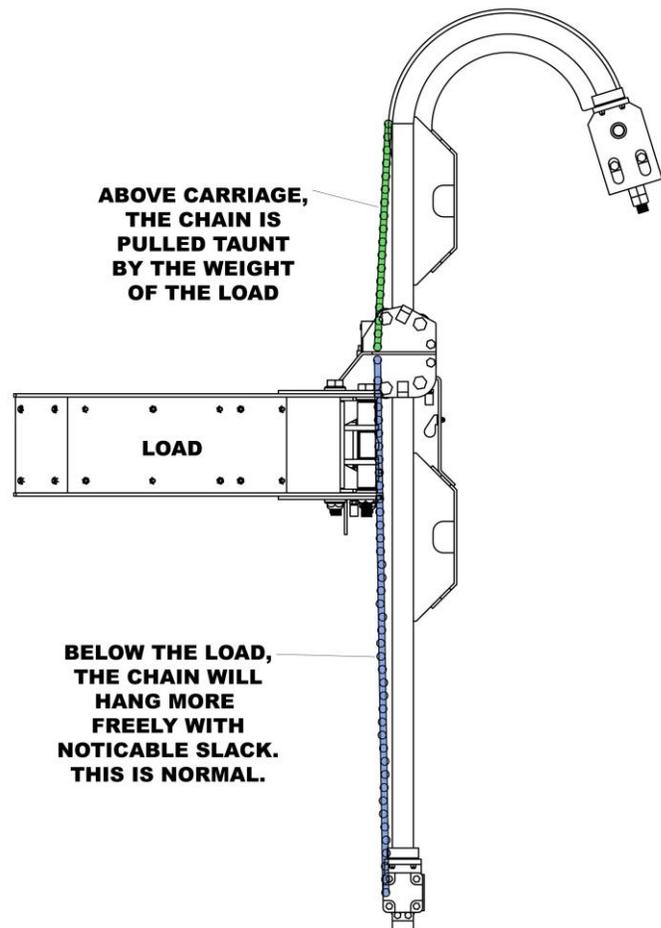
ROLLER CHAIN CAN BE PERMANENTLY DAMAGED BY BEING OVERTIGHTENED. NEVER OVER TIGHTEN THE CHAIN. FOLLOW THE INSTRUCTIONS BELOW CAREFULLY.

ROLLER CHAIN IS NOT MEANT TO BE REPAIRED, WELDED, OR PATCHED. IF CHAIN DAMAGE OCCURS, IT IS NECESSARY TO REPLACE THE ENTIRE CHAIN ASSEMBLY.

Normal Chain Behavior

Shown at right is the carriage mid-position. Above the carriage, the chain is held tight (taunt) by the weight of the load pulling on it.

Below the carriage, the chain carries no load, so the chain will appear to have some slack to it. This is normal.

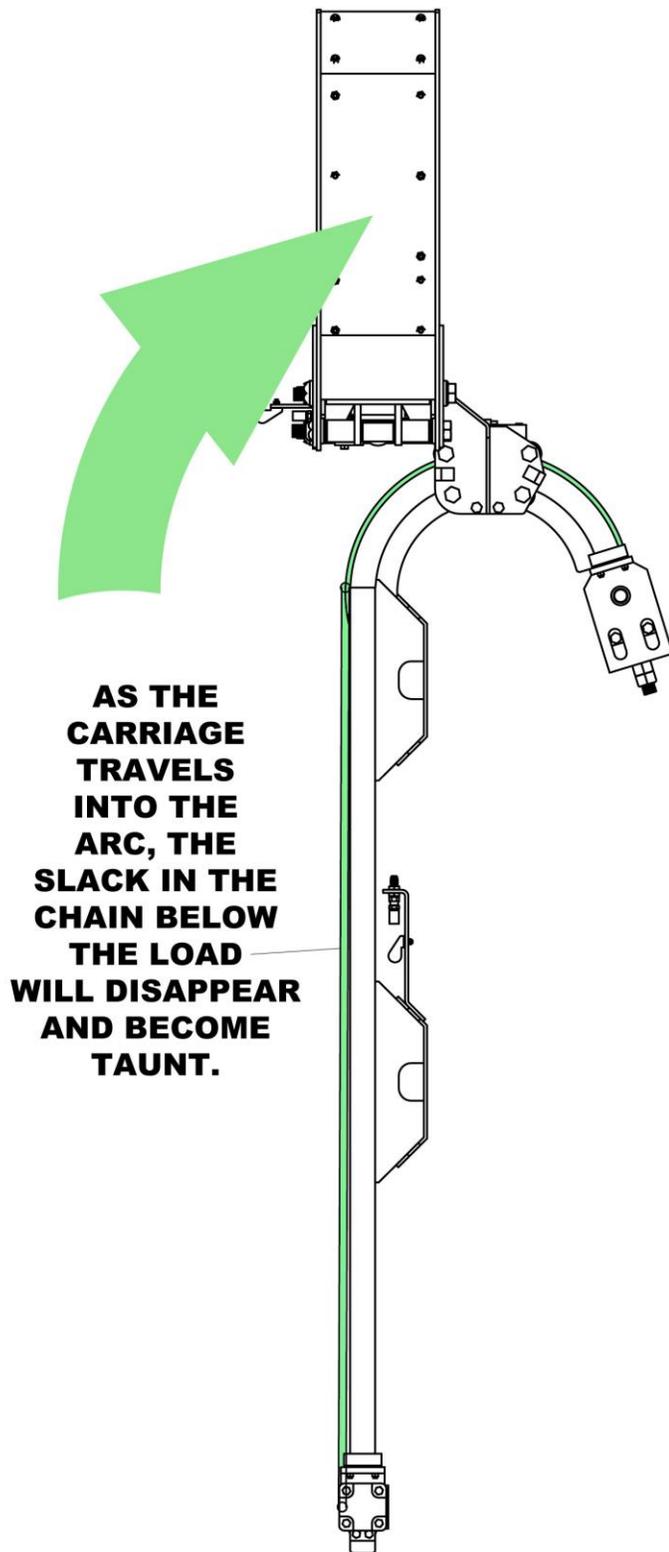


Normal Chain Behavior

As the carriage travels into the arc position, the chain below the carriage will lose its slack and become taut.

The chain below the carriage will always be taut when the carriage is traveling in the arc.

This is normal. When the carriage returns to the vertical leg portion of the track, the chain below the carriage will regain its normal slack amount.



Chain Adjustment

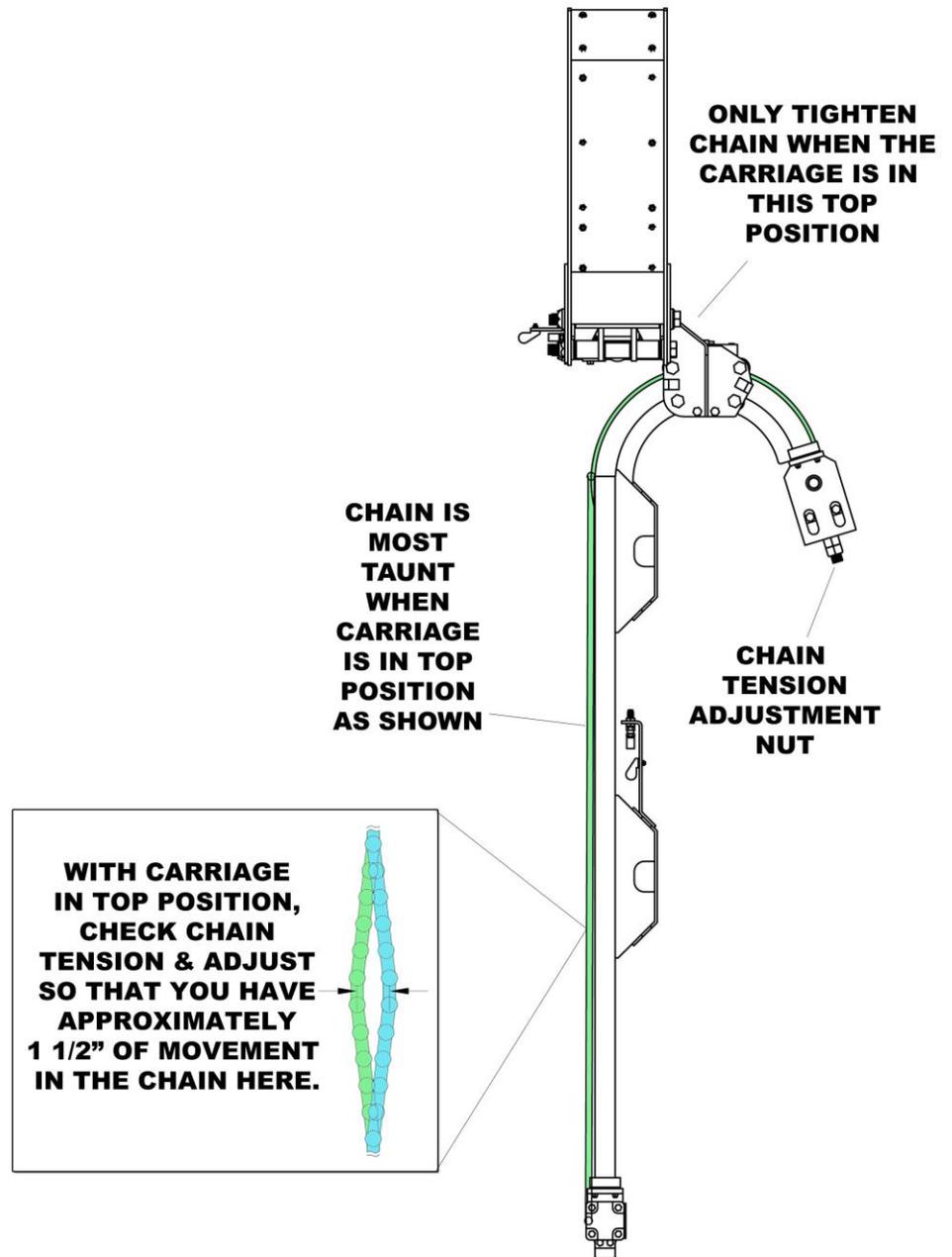
To check the chain tension, it is critical to place the carriage in the correct position first. Operate the lifter and stop the movement when the carriage is in the top position as shown at right.

Stop the hydraulics for safety.

Using your hand, grasp the roller chain that hangs at eye shoulder level. Pull it forward and back. The chain should have movement equal to approximately 1 ½" as shown at right. It is not an exact amount.

Tighten the adjustment nut indicated in the top right of the image until the desired amount of slack is achieved.

Mark the adjustment with a paint marker for future reference



Chain Maintenance Addendum

For outdoor applications, it is necessary to lubricate the roller chain once per week.

For indoor applications, it is necessary to lubricate the roller chain once per month.

Lubrication may be performed via aerosol, spray, or brush. The grease used should be a penetrating type that can get into the rollers and crevices of the chain. Move the carriage up and down to be able to lubricate both front and back sections of the chain as well as hidden, inaccessible portions of chain.



When a chain is damaged, the entire chain should be replaced. It is not recommended to repair sections or portions of chain. This can lead to additional failures, which can be hazardous.

When checking the tension of the chain, follow the chain tensioning procedure in the manual. Do not over-tighten chain. Some slack hanging under the carriage is a necessary part of operation.



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Grease Addendum

Power Cut Off Circuit

Your Perkins cane lifter **REQUIRES** a power cut-off circuit, which comes installed on the cane. It must be wired up at the time of installation and working, or else component damage will occur!

All Perkins canes are sold with a separate line item: The power cut-off circuit. There are four different kits available, depending on the type of controls you will have:

- DC4460 For use with hand valve operated canes (12v circuit)
- DC4460+24v For use with hand valve operated canes (24v circuit)
- DC4645 For use with pendant push button operated canes (12v circuit)
- DC4645+24v For use with pendant push button operated canes (24v circuit)

The purpose of the power cut-off circuit is to stop hydraulic power to the lift motor when the carriage reaches the end of the track. When the carriage is about to reach the physical stops, the sensor will detect the carriage position and send a signal that interrupts power to the lift motor, allowing the carriage to coast gently into the stops. This prevents damage to the motor, driveshaft and chain.

For instructions on how to hook up and adjust the power cut-off circuit, please refer to the separate manual detailing that process.

Operating the cane without the power cut-off circuit installed and working will lead to damage that will NOT be covered by warranty. If the sensors stop working, or the wires get damaged, they must be replaced immediately. Do not operate the cane lift without the power cut off circuit, damage will result!



Other Adjustments

Make sure all hardware is firmly tightened. If any hardware loosens they may be affixed with Blue Loc-tite type 242 thread locker.

The Pilot-operated Check valve in the gripper cylinder is not adjustable, however, if problems occur where the gripper appears to not retain it's grip, the cartridge of the valve may be removed and inspected. Clean and replace the cartridge and proper operation should be restored.

If gripper pressure cannot be maintained and the check valve is not the problem, consider checking for bypass in the cylinder. The cylinder may require a new seal kit to restore gripping power.

The motor carries no adjustment. However, if bypass is suspected, a replacement seal kit may be the answer.

Loose fitting parts may require a change in the bushings to restore firmness in machine.

The composite rollers which ride on the track may require replacement periodically.

One Page 23, Item # 43 is a grease zerk. Lubrication-free bushings are used throughout this product. Perkins advises to apply grease to item # 43 using a standard grease gun, until grease appears out from where the drive shaft becomes exposed from the boss it rides within every 3 months.

If you experience any difficulties with the cart type you have, please call Perkins at 800-882-5292 to discuss the problem and Perkins will advise the best solution to meet your needs.



Lifter operation is erratic, lifter does not move smoothly

When the lifter does not move smoothly, there is typically air in the system. This is usually an issue after the initial installation or a recent repair where the hydraulic lines may have been opened. Bleed air out of the system by loosening a fitting very slightly and running the hand valve to create flow. Excess air should bleed out of the opening in the fitting. Retighten when complete done.

In rare instances, the flow may be too low. This would also be noticeable if the lifter was also very slow. Try adjusting the diverter valve to increase the flow.

Cart lifter will not pick up the weight

The cart may be overweight. If the cart is obviously very heavy and hard to move, try removing a few items from the top to lighten the load.

The hand valve relief pressure setting may be set too low. Check and adjust the pressure using a pressure gage. Note the pressure being delivered and adjust accordingly.

If adjusting the hand valve's relief does not bring the pressure up to where it should be, then the truck's relief pressure setting may be set too low. Try adjusting the truck's relief valve (see manufacturer's instructions on how to do this for your vehicle)

If all pressures are set properly and the hand valve works, then the actuator may have internal leakage. Test for internal leakage by running the lifter all the way up and dead-head the lifter up. Note the pressure gage and see that the pressure stays constant as the hand valve is held depressed. If the pressure falls, you may have internal leakage and the actuator should be repaired/rebuilt with new seals.

Lifter operates slowly

Check the flow adjustment on the diverter valve. Use a flow meter to make sure each lifter receives approximately 8-10 gpm. Adjust the hydraulics as needed following instructions in the manual.

Engine idle may be too low to provide adequate flow. Following the manufacturer's instructions, adjust the engine idle. Remember increasing engine idle will increase fuel consumption.

The hand valve may be faulty. Check, clean and/or replace as needed.

The truck's pump may be faulty, unable to deliver the desired flow. Contact your truck manufacturer.



Lifter operates too fast

Check truck's valve adjustment screw. Adjust in to lower the flow delivered to the lifters.

Engine idle speed may be too high. Adjust per the manufacturer instructions.

Lifter breaks the carts

First, make sure there is no damage to the lifter. Replace damaged components as needed.

If the pressure to the grippers is separately controlled from the rotary lift motor, check the adjustment of this control. It should probably be around 900 psi.

Lifter drops carts

Carts which are damaged may not be secured properly and should be repaired or replaced.

Some carts do not meet ANSI standards. Make sure the cart is ANSI Type "G" compatible.

Verify that the gripper cylinder and the PO check on the gripper cylinder are functioning properly with no bypass.

Check the control sequence triggers and ensure than all are programmed accordingly.



Making a Warranty Claim

For complete warranty coverage details, please see the warranty page at the end of this manual.

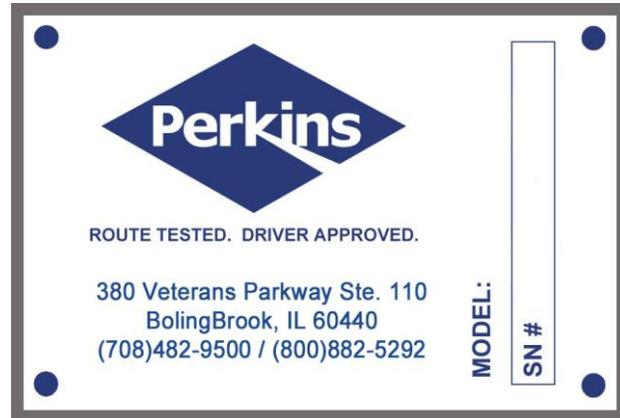
If you suspect that failure of the lifter to operate is due to a defect, please take a moment to locate the serial number of your lifter.

Warranty cannot be honored on lifters or individual pieces unless a serial number is provided. Since the tag is frequently lost, damaged, or painted over, it is a good idea to note the serial number in this manual at the time of installation.

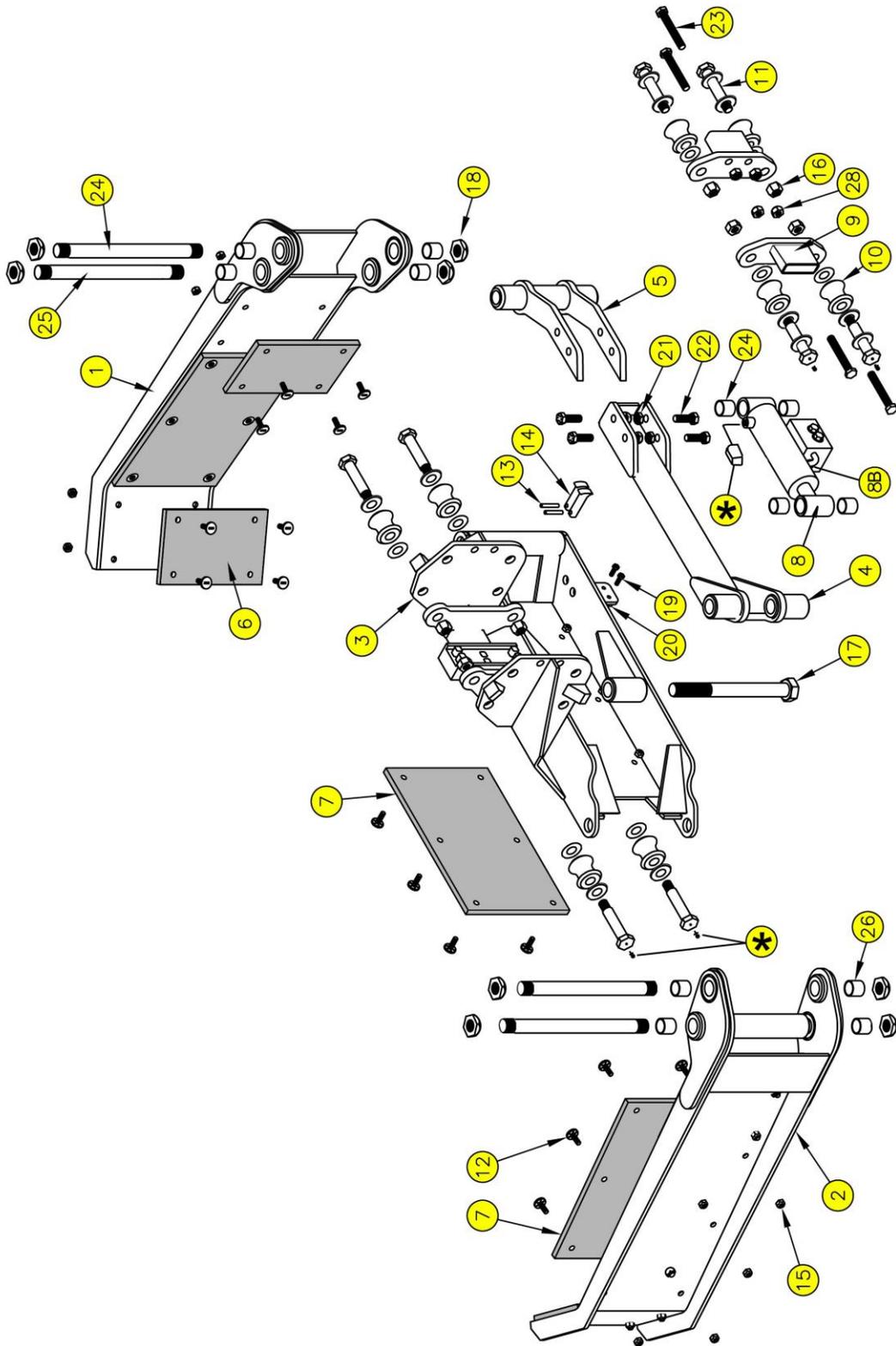
At right is an example of the serial number plate. It will be stamped with a model number and serial number.

Once you have the number, please call Perkins Manufacturing at 800-882-5292 for additional instructions.

Photos of the lifter and/or parts may be requested to allow the service team to form an opinion on the nature of the damage. In some cases, the customer may be asked to return a part for inspection.



Exploded Parts View – Carriage



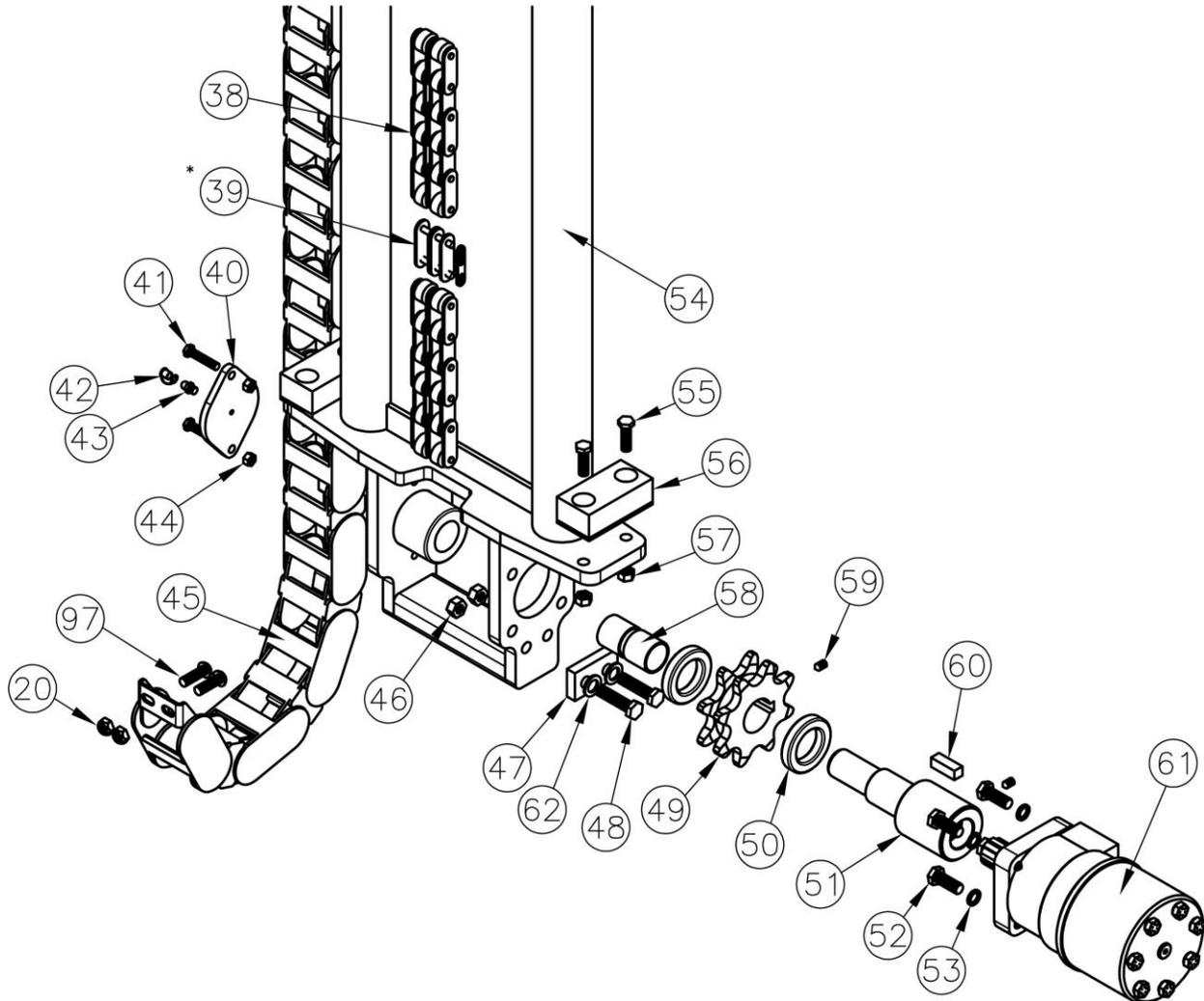
Carriage Parts List

1	CC7202	LH GRIPPER ARM WELDMENT	1
2	CC7203	RH GRIPPER ARM WELDMENT	1
3	CC7201	FACEPLATE WELDMENT	1
4	CC7204	LINK WELDMENT	1
5	CC7205	LINKAGE CONNECTION WELDMENT	1
6	CC3094	RUBBER PAD –SMALL	4
7	CC3095	RUBBER PAD – LARGE	3
8	CC7242	CYLINDER W/ BUILT IN PO CHECK	1
8b	D72398	REPLACEABLE CHECK CARTRIDGE	1
9	CC7104	REAR ROLLER BRACKET WELDMENT	2
10	CC7111	COMPOSITE ROLLER	8
11	D72232	SHOULDER BOLT ¾ DIA X 3 LONG	8
12	D72173	FLUSH HEAD RIBBED BOLT 5/16-18	34
13	D62013	¼" ROLL PIN	2
14	DC4281	CHAIN LOCK	2
15	D62030	LOCKNUT 5/16-18	34
16	D62001	LOCKNUT 5/8-11	8
17	D72260	BOLT HHCS 1-8 X 10, SPECIAL CUT	1
18	D72208	LOCKNUT 1-8 -THIN	8
19	D72234	BOLT HHCS ¼-20 X 3/4	4
20	CC3310	LOCKNUT ¼-20	6
21	D62081	LOCKNUT ½-13	4
22	CC3300	BOLT HHCS ½-13 X 1 1/2	4
23	D62021	BOLT HHCS ½-13 X 3 1/2	4
24	CC7260	LONG 1" THREADED PIN	2
25	CC7259	SHORT 1" THREADED PIN	2
*	D63523	Tee #6MJIC-#6MJIC-#6FEMALE	2
27	D72240	BRONZE BUSHING 1X1	8
28	D72030	LOCKNUT ½-13 THIN	4
29	D62071	Locknut 1-8	1
30	D72036	Flatwasher ¾ x .062" thick	8
31	D72037	Flatwasher ¾ x .125" thick	12
*	D63124	Bulkhead #6mt-#6mo	2
*	D63106	Elbow 90 - #6mt-#6ft	1
*	D63744	Hose #4 x 15" w/#6 ends	2
*	D72268	Elbow 90 - #4mo-#6fo	1
*	CC517323	Pressure Sensor for triggering operations	1
*	D72242	ADAPTER #4MO-#6MT	1
*	D72243	ELBOW 90 DEG #6MT- #4MO	1
*	Z102	GREASE ZERK	8
*	D72397	Test Coupling with Cap	2

* = not shown



Exploded Parts View – Cane Track Lower



Note on Item 39: when re-attaching the carriage to the roller chain, always position the roller chain's master link about 8-10 links BELOW the carriage's locking key (Item 14 on the carriage breakdown)



Lower Cane Parts List

38	*	Roller Chain, 1.25" pitch, 3/4" dia roller, heavy duty plates, coated	1
39	CC3177	Master Link - chain	1
40	CC7216	Endcap for Drive Shaft	1
41	D72043	Bolt HHCS 1/4-20 X 1 1/4	2
42	D63029	Grease Zerk Cap	1
43	Z102	Grease Zerk	1
44	D62060	Washer	2
45	*	Plastic Chain Track for hose management	1
46	CC3312	Locknut 3/8-16	2
47	CC7114	Motor Anti-Spin Stop Plate	1
48	D62038	Bolt HHCS 3/8-16 X 1 1/2	2
49	CC3017	Keyed Double Sprocket	2
50	CC7108	Plastic Ring	2
51	CC7215	Drive Shaft	1
52	CC3334	Bolt HHCS 3/8-16 X 1 1/4	4
53	D72465	Nordlock Lock-washer 3/8	4
54	*	Cane Track Weldment, See chart below	1
55	D62110	Bolt SHCS 3/8-16 X 1	4
56	CC7150	Rubber Stop w/backing plate	4
57	D62080	Locknut 3/8-16	8
58	D72240	Composite IGUS Bearing 1 X 1	4
59	D65925	Set Screw 1/4-28 X 3/8	2
60	CC3016	Key	1
61	CC3002	Rotary Motor - Lift	1
62	D62004	Flat washer 3/8	2
*	CC3056	Fitting #10MO - #10 MT	2
*	D72158	#10 Cap	2
*	D72397	Test / Bleed Port Fitting	2

*=Not Shown

Roller Chain Lengths

38	CC3099	Specifically for C796 – 173 links	1
38	CC7249	Specifically for C568 – 164 links	1
38	CC3098	Specifically for C121 – 181 links	1

Cane-Track Weldments

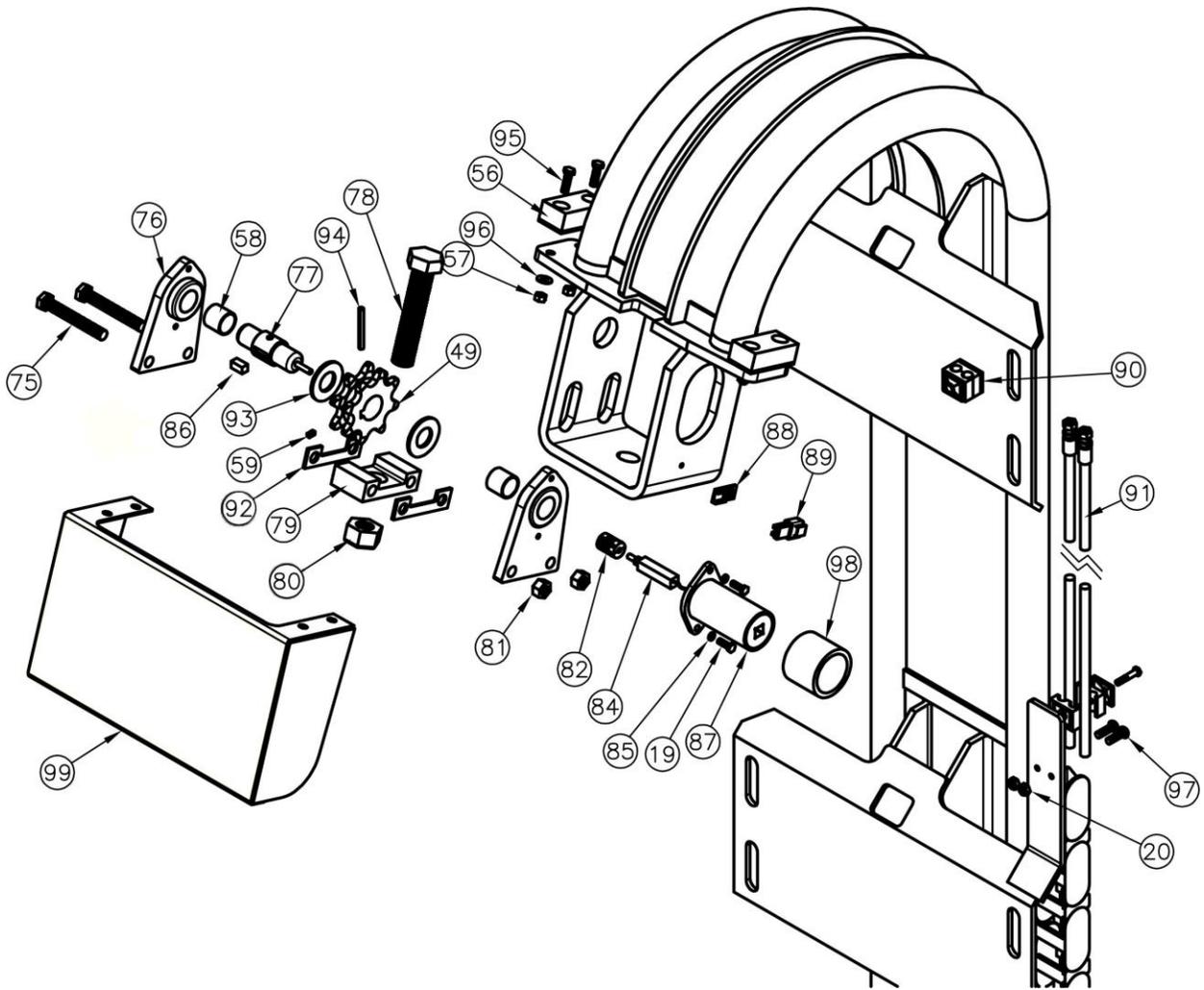
54	CC7113	Specifically for C796 – 87 13/16" LONG	1
54	CC7156	Specifically for C568 – 81 5/8" LONG	1
54	CC7247	Specifically for C121 – 93 13/16" LONG	1

Plastic Hose Guides

45	CC3150	Specifically for C796	1
45	CC3150+2	Specifically for C568	1
45	CC3150+5	Specifically for C121	1



Exploded Parts View – Cane Track upper



Upper Cane Parts List

75	D72248	Bolt HHCS 1/2 -13 x 4	2
76	CC7222	Tension Plate Weldment	2
77	CC7294	Top Shaft Adjusted	1
78	D72271	Bolt HHCS 1-8 x 4 ½ - FULLY THREADED	1
79	CC7219	Tensioner Base	1
80	D62071	Locknut 1-8	1
81	D62081	Locknut ½-13	2
82	CC5018	Coupler	1
83	CC5019	Encoder Drive Shaft * OBSOLETE * 77 & 83 ARE NOW ONE-PIECE	1
84	CC3328	Encoder	1
85	D62018	Split Lock-washer 1/4	2
86	CC7293	Short Key Adjusted	1
87	CC7109	Encoder Cover Weldment	1
88	CC3332	Base Mount - Plug	1
89	CC3331	Plug	1
90	D72147	Hose Clamp #4	2
91	D63647	Hose Assy #4 w/ #6ends	2
92	CC7292	Shims	2
93	CC7296	Rings	2
94	CC7299	Pin	1
95	D72023	BOLT SHCS 3/8-16 X 1 1/2 GR8	4
96	D62463	LOCKNUT 3/8-16 THIN	4
97	D72455	BHCS 1/4-20 X 3/4 GR8 ZP	4
98	CC7169	Encoder Window Sleeve	1
99	CC7265	ENCODER COVER	1
*	CC3333	BLACK CABLE COVER SHEATH MAT'L	1
*	A90266	HEAT-SHRINK HOSE PROTECTION	2
*	D63238-45	#6 PLUG	2

* = not shown



Protective Safety Labeling

Perkins provides each finished cart lifter with ANSI-specified caution labels. They are clearly placed directly on the machine for easy viewing by the operators.

Should the cart lifter ever be re-painted, or if the labels are damaged beyond recognition, it is advised to replace the labels immediately to help keep your crew safe.

OHSA requires these labels to be in clear sight on the machine at all times. Responsibility to maintain proper caution and warning labels is the responsibility of the end-user.



You should make sure that all pressure is bled/released from the hydraulic or pneumatic system; for some systems it may be possible to work on a part of the system by using line-breaking or blanking procedures. Never loosen or tighten a hydraulic connection when the system is under pressure. The connection could fail catastrophically and cause an injection injury and/or damage to property. Inspect hoses regularly for wear then replace hoses before leaks can develop. Hydraulics systems should look clean and dry. You can typically see leaks where the machine is collecting dirt and debris that is sticking to the oil. Look for wet-looking areas that are collecting dirt. Check for abraded/scuffed hoses, loose or damaged fittings, or worn out seals, or other physical damage that may have led to creating the leak.



 ATENCIÓN		 CAUTION
Punta Peligrosa. Mantenga las manos alejadas.		Pinch point hazard. Keep hands clear.
<small>© Perkins Manufacturing Company 800-882-5292</small>		<small>Label # D72496</small>

 PELIGRO		 DANGER
Manténgase alejado del levantador. Un golpe causaría lesiones o la muerte.		Stand clear of lift. Contact will cause injury or death.
<small>©Clarion Safety Systems, LLC clarionsafety.com 17039</small>		<small>Reorder No. D72497</small>

Dress appropriately for work with pants and sleeves that are not too long or too loose. Shirts should be fitted or tucked in. Avoid wearing loose and dangling jewelry. Tie back long hair and tuck braids and ponytails behind you or into your clothing. Wear the appropriate, well-fitting gloves for your job.

Look for possible pinch points before you start a task. Take the time to plan out your actions and decide on the necessary steps to work safely. Read and follow warning signs posted on equipment.

Machinery can pose a hazard with moving parts, conveyors, rollers, and rotating shafts. NEVER reach into a moving machine. Turn equipment off and use lockout/tagout procedures before adjusting, clearing a jam, repairing, or servicing a machine.



NOTICE

Maintenance Requirements



Read and understand manual prior to operating this equipment.

Follow maintenance guidelines per the manual.

Inspect machine daily prior to use and report any problems to service immediately.

Failure to operate and maintain the unit within guidelines will void the warranty.



Perkins Manufacturing Company
800-882-5292 www.perkinsmfg.com

©Clarion Safety Systems, LLC clarionsafety.com 17039

Reorder No. D72499

Maintaining the lifter is vital to ensure proper operation of the equipment and for warranty to be valid. Inspection of the lifter is also important to make sure there are no loose parts and that the chain is tightened properly. Not inspecting or maintaining the machine regularly can pose a hazard of parts coming loose, parts not moving properly or wear items to become too worn to not move properly. If any issues occur please contact service immediately.

NOTICE



Grease all zerks on a weekly basis to maintain warranty.

Re-grease after power washing.

Visit www.perkinsmfg.com for important updates.

Please read the manual prior to operating or adjusting this machine for important information.

Perkins Manufacturing Company 708 482 9500

Label # D72163



Perkins Manufacturing Company
Creators of the TuckAway® Cart Lifter
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800-882-5292

Revised: 9/13/2023

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NOTE

RUNNING THIS LIFTER TOO FAST, OVERLOADING THE LIFTER, COLLISIONS WITH THE LIFTER, MODIFYING THE LIFTER, OR NEGLECTING TO MAINTAIN THE LIFTER VOIDS THE WARRANTY COMPATIBLE WITH ANSI Z245, TYPE B, C, D, & G CONTAINERS.

NOTA

CORRER EL MONTACARGAS MUY RAPIDO, SOBRECARGAR EL MONTACARGAS, CHOCAR CON EL MONTACARGAS, MODIFICA, EL MONTACARGAS, O NEDLÍGENCIA PARA MANTENER EL MONTACARGAS ANULA LA GARANTÍA.

COMPATIBLE CON ANSI Z245, TYPE B, C, D, & G CONTENEDORES.

D72188

Running the lifter too fast or overloading will endanger the operator. Running the lifter too fast will cause the chain to jump possibly breaking the chain lock which will cause the lifter to drop straight down. Overloading the lifter can cause multiple issues with the hydraulic motor not running properly or the chain max weight capacity which could break the chain.

The power-cut off circuit MUST BE operational or damage will occur which will not be covered by warranty.





Perkins Mfg. Co.

Label # D72277

The Perkins cane style lifter dumps high overhead. Make sure the cane is properly mounted to ensure the debris is dumped in the proper location as to avoid debris falling over or onto the operator. As well as ensure the tension on the chain is as stated within the manual as to not cause damage or breakage cause the lifter portion to fall or drop the container it was lifting.



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Creators of the TuckAway® Cart Lifter
www.perkinsmfg.com

800-882-5292

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Safety Labeling and Training Requirements

Perkins provides safety labeling on all outgoing product per ANSI regulations, seen below.

19-01 Warning, Label and Safety Instructions.

Include standard safety instructions as one of the first items in a manual. This helps emphasize safe use of the product and can help the user understand the hazards, the consequences of the hazards and how to avoid the hazards. Priority placement also increases the likelihood that the information will be read. Any symbols or pictograms physically on the product should be included in the appropriate section of the manual to reinforce the association between the nature and severity of the hazard and the correct behavior.

The American National Standards Institute (ANSI) standard Z535.6, *Product Safety Information in Product Manuals, Instructions, and Other Collateral Materials*, should also be applied.

To help ensure the product user sees and understands warnings and safety instructions, you should make them conspicuous. It is critical that you make proper use of the signal words "*danger*", "*warning*", "*caution*" and "*notice*" and their corresponding signal colors *red*, *orange*, *yellow*, and *blue*.

Choosing the appropriate signal words and colors are based on an estimate of the likelihood of exposure to the hazardous situation and what could happen as a result of exposure to the hazard. The American National Standards Institute (ANSI) standard Z535.4, *Product Safety Signs and Labels*, defines the hazard signal words as follows:

DANGER: Indicates an imminently hazardous situation which, if not avoided, "will" result in death or serious injury. This signal word is to be limited to the most extreme situations.

WARNING: Indicates a potentially hazardous situation which, if not avoided, "could" result in death or serious injury.

CAUTION: Indicates a potentially hazardous situation, which, if not avoided, "may" result in minor or moderate injury. It may also be used to alert against unsafe practices.

NOTICE: Indicates information considered important, but not hazard related (e.g., messages relating to property damage).

It is the responsibility of owner of this product to maintain the safety labels, keep them clear & visible to all users, and replace the safety labels when they become worn or missing.

All users must read and understand this manual and the safety precautions before using this product.



Manufacturing Company

Perkins Return Policy:

If, within 30 days of receipt of the item(s), a customer would like to return an unused item(s), the customer may contact Perkins for a return authorization (RGA#). The item must be shipped within 2 weeks of the return authorization. The customer will pay the return freight and a 15% restocking fee on the return(s). The item must be in new / unused condition, and any damage or clean up required to restore the product to resalable condition will be charged to the customer.

Packages received without an RGA# on the packaging identifying who the product is from may be discarded or refused and credit may not be issued. Always make sure the RGA# is displayed on the box and on any included paperwork.

If Perkins shipped the wrong item(s), the incorrect item(s) may be returned within 30 days of receipt of the item by contacting Perkins for a return authorization (RGA#). The item(s) must be shipped within 2 weeks of the return authorization. Perkins will pay the return freight and waive the restocking fee.

If the return results in a net debit, the customer will be invoiced. If the return results in a net credit, the credit can be used against the replacement item(s) or a future purchase.

Special Notes:

Perkins does offer customized solutions and due to the customization of these items, Perkins cannot accept returns or refunds on anything custom ordered. This includes industrial units, cane lifters, and other items which have been specially fabricated to the customer's specifications. Unfortunately returns on these products cannot be accepted.

Manufacturing Company

Perkins Warranty Procedure

This procedure for claiming warranty must be followed or warranty will not be approved, credit will not be issued, and replacement parts will not be shipped. This document is not a replacement for the warranty policy. Please refer to the last page of your manual, which describes the warranty policy in detail.

If you believe your Perkins lifter has suffered from a failure that could be covered by warranty, immediately lock out any equipment that has failed per OSHA guidelines.

Take photographs of the lifter, including overall views of the unit and some close-ups, as necessary to properly record the failure in a way our engineering staff can examine. While taking photos of the lifter, record the serial number of the lifter.

Call Perkins at (800) 882-5292 and ask to speak to the service department. Requests for warranty can also be emailed to svaldez@perkinsmfg.com. Attach any photos to the email, as necessary. The service department will use the photos to determine if the return of parts for inspection is necessary or not. If the return of parts is required, the service department will issue you an RGA number.

Your replacement parts will be shipped at the time of your warranty request, but they will require a purchase order number/payment in order to ship. (Credit will be issued later, after warranty status is determined.) Your replacement parts will feature RGA numbers on the documentation referencing your warranty request. Replacements are sent UPS ground. For faster shipping, the customer will be charged.

Clearly mark the box of any returns with the provided RGA number in a prominent place. This helps our shippers identify your items. When your returned parts arrive, our service and engineering teams will inspect your shipment and determine if the failure is a defect covered by the warranty or not. If the item(s) are covered by warranty, credit will be issued. If the item(s) were not covered by warranty, a report will be generated that fully describes the reasoning behind the decision.

Common Warranty Mistakes:

Please do not ship lifters/parts to Perkins without first obtaining an RGA number. Parts received without prior authorization or without RGA markings will be discarded and credit will not be issued.

Orders that are placed without discussing warranty status will be treated as a typical order and will be billed accordingly. Credit will not be issued for warranty requests after the order is placed.

No warranty is allowed on lifters/parts not having a serial number.

Perkins Manufacturing One-Year Limited Warranty

PERKINS MANUFACTURING COMPANY warrants its products to be free from defects in material and workmanship under normal use for a period of **one (1) year** from the date of delivery to the first purchaser.

Any claim under this warranty must be handled in accordance with PERKINS' warranty procedure.

This warranty is expressly limited to the repair or replacement in PERKINS' discretion of any component or part of any PERKINS product unit manufactured by PERKINS which is brought to PERKINS attention promptly after discovery and is proven to PERKINS' satisfaction to have been defective in material or workmanship.

This warranty shall not obligate PERKINS to bear the cost of labor or transportation charges in connection with the repair or replacement of defective parts, and it shall not apply to a product upon which repairs, or alterations have been made unless authorized in writing by PERKINS.

Any damage, wear & tear or improper use, substitution of parts not approved by PERKINS, modifications other than those done by PERKINS or as authorized in writing by PERKINS, or any alteration or repair by others in such a manner which, in PERKINS' judgment, materially and adversely affects the product shall void this warranty. Operation at an actuator cycle time of less than six seconds shall void this warranty. Wear items used for anti-friction purposes are not covered by this warranty.

Periodic maintenance is required in order to maintain warranty but is not covered by warranty. Please refer to the maintenance section of the service manual for instructions.

PERKINS makes no warranty of products manufactured by others and supplied by PERKINS, the same being subject to warranties, if any, of their respective manufacturers.

PERKINS shall not assume any liability for any incidental, consequential, direct, or indirect damage, loss or delay of any kind, including, but not limited to, the loss of profits, product or downtime.

PERKINS warrants any service parts it may sell for a period of ninety (90) day from the date of delivery for replacement only. The item being replaced must be returned to PERKINS for evaluation upon its request. The cost of labor to replace such part shall be the responsibility of the owner. PERKINS does not warrant any used parts.

PERKINS, whose policy is one of continuous improvement, reserves the right to improve its products through changes in design or materials as it may deem desirable without obligation to incorporate such changes in products of prior manufacture.

THE ABOVE WARRANTY SUPERCEDES AND IS IN LIEU OF ALL OTHER EXPRESS OR IMPLIED WARRANTIES INCLUDING, WITHOUT LIMITING, ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. NO EMPLOYEE OR ANY OTHER REPRESENTATIVE OF PERKINS IS AUTHORIZED TO CHANGE THIS WARRANTY IN ANY WAY OR TO GRANT ANY OTHER WARRANTY. THESE TERMS WILL BE CONSTRUED ACCORDING TO THE LAWS OF THE STATE OF ILLINOIS WITHOUT REGARD TO ITS CONFLICTS OF LAWS PROVISIONS. ALL ACTIONS OR PROCEEDINGS IN ANY WAY, MANNER OR RESPECT ARISING OUT OF OR RELATED TO THE GOODS WILL BE LITIGATED ONLY IN STATE OR FEDERAL COURTS, AS APPROPRIATE, LOCATED IN WILL COUNTY, ILLINOIS. BUYER CONSENTS AND SUBMITS TO JURISDICTION IN THE STATE OF ILLINOIS AND WAIVES ANY RIGHT TO TRANSFER THE VENUE OF ANY SUCH ACTION OR PROCEEDING.