



PERKINS
MANUFACTURING COMPANY

**INSTRUCTION MANUAL
CARRY CAN XF510, XF540 & XF570
WITH D6071-27K CART LIFTER**



PERKINS

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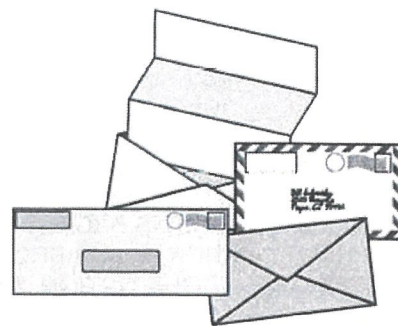
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SERVICE AND CONTACT INFORMATION

WELCOME TO THE WORLD OF PERKINS MANUFACTURING. CONGRATULATIONS ON YOUR PURCHASE OF THE FINEST EQUIPMENT IN RESIDENTIAL WASTE COLLECTION. PLEASE READ THIS MANUAL CAREFULLY. IT IS MEANT TO GUIDE YOU THROUGH THE INSTALLATION PROCESS AND CAN ANSWER MOST OF YOUR QUESTIONS. PLEASE BE SURE THAT ALL PERSONNEL THAT OPERATE OR MAINTAIN THIS EQUIPMENT HAVE READ AND UNDERSTAND THE MANUAL. CUSTOMER SATISFACTION IS OUR NUMBER ONE PRIORITY!



1 (708) 482-9500
OR
1 (800) 882-5292

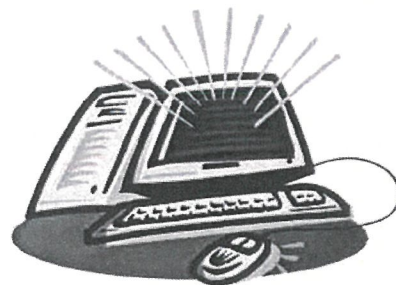


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ARRAY OF INFORMATION AND PICTURES
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WARRANTY POLICY

PLEASE FILL IN THE INFORMATION BELOW FOR FUTURE REFERENCE

MODEL NO. _____

SERIAL NO. _____

ACTUATOR SERIAL NO. _____

WARRANTY

YOUR CART LIFTER IS BACKED BY PERKINS 2-YEAR WARRANTY, WHICH IS OUR PROMISE TO REPAIR OR REPLACE AT OUR OPTION, ANY PART THAT PROVES TO HAVE BEEN DEFECTIVE IN WORKMANSHIP, WHILE DURING NORMAL SERVICE. YOUR WARRANTY DOES NOT COVER ANY PART THAT FAILS DUE TO NEGLECT ABUSE OR MISUSE OF THE LIFTER, NOR DOES THE WARRANTY COVER PARTS THAT HAVE BEEN SERVICED BY PERSONNEL OTHER THAN PERKINS' OWN SERVICE TECHNICIANS. USING THE LIFTER WITHOUT ADHERING TO THE OPERATIONAL AND SAFETY GUIDELINES CAN VOID THIS WARRANTY. PERKINS WILL REMAIN FREE OF ANY LIABILITY RESULTING FROM THE MISUSE OF OUR PRODUCTS.



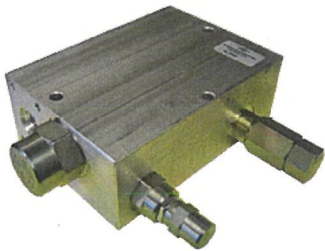
WARRANTY CLAIMS PROCEDURE

IF A PART IS SUSPECTED TO BE COVERED BY WARRANTY, YOU MUST CALL PERKINS FOR A RETURN GOODS AUTHORIZATION NUMBER (RGA). YOU WILL NEED THE SERIAL NUMBER OF THE LIFTER IN ORDER TO GET THE RGA NUMBER. SHIP THE PART IN QUESTION BACK TO PERKINS WITH THE RGA NUMBER CLEARLY WRITTEN ON THE BOX IN SEVERAL PLACES. PARTS RETURNED WITHOUT RGA NUMBERS WILL NOT BE CREDITED. IF NEW PARTS ARE REQUIRED, THEY WILL BE SHIPPED AND BILLED NORMALLY. WHEN THE OLD PARTS ARRIVE THEY WILL BE INSPECTED BY PERKINS SERVICE TECHNICIANS TO DETERMINE THE CAUSE OF FAILURE, AND IF THE RESULTING INSPECTION INDICATES THE PART HAD FAULTY WORKMANSHIP, THE OLD PARTS WILL BE CREDITED TO YOUR ACCOUNT, THEREBY CANCELLING OUT THE BILL FOR THE NEW PARTS. WARRANTY PARTS ARE SENT VIA STANDARD UPS GROUND SHIPPING. IF FASTER DELIEVERY SERVICE IS REQUIRED, THE CUSTOMER WILL BE RESPONSIBLE FOR ANY ADDITIONAL COSTS.

INSTALLATION PREPARATION

- 1) PLEASE READ THROUGH THIS ENTIRE MANUAL AND FAMILIARIZE YOURSELF WITH ALL THE NECESSARY PROCEDURES AND PARTS. IF AT ANY TIME THERE IS A QUESTION, PLEASE CONTACT PERKINS MANUFACTURING.
- 2) PROPER INSTALLATION MEASUREMENTS RELY ON THE EMPTY HEIGHT OF THE TRUCK, WHILE THE TRUCK IS PARKED ON A SMOOTH AND LEVEL SURFACE.
- 3) REMOVE ANY FLAMMABLE MATERIALS OR LIQUIDS NEAR THE INSTALLATION AREA OR IN THE HOPPER.
- 4) PERFORM A CHECK OF THE TRUCK'S ELECTRICAL SYSTEM (LIGHTS, HORN, ETC) FOR PROPER OPERATION, AND MAKE NOTE OF ANYTHING NON-FUNCTIONAL PRIOR TO INSTALLATION
- 5) UNPACK AND INSPECT THE LIFTER AND THE CONTENTS OF YOUR ORDER. SHIPPING DAMAGE OR PARTS MISSING DUE TO BROKEN BOXES SHOULD BE REPORTED PROMPTLY.
- 6) MARK THE CENTERLINE OF THE TRUCK HOPPER SILL OR CARRY CAN FACE THIS CENTERLINE LOCATES YOUR LIFTERS.
- 7) LOOSEN THE LOCKNUTS HOLDING THE REAR MOUNTING PLATE ONTO THE LIFTER AND SLIDE OFF THE PLATE. MARK A CENTERLINE ON THE REAR MOUNTING PLATE. THIS LINE WILL MATCH UP WITH THE CENTERLINES DRAWN ON THE HOPPER SILL.
- 8) BEFORE OPENING ANY HYDRAULIC FITTINGS, MAKE SURE THE TRUCK IS OFF AND THE HYDRAULIC SYSTEM IS DEPRESSURIZED.

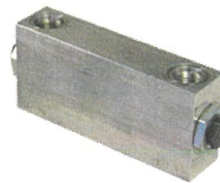
KNOW YOUR HARDWARE



DIVERTER VALVE



HAND VALVE



P.O. CHECK VALVE



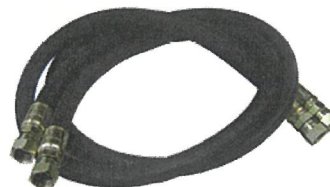
ADJUSTABLE
FLOW CONTROL--



ASSORTED FITTINGS



HOSE CLAMP



ASSORTED HOSES



INSTALLATION INSTRUCTIONS

- 1) ADD ADDITIONAL SUPPORTS BEHIND THE LIFTER AS NEEDED TO PREVENT THE HOPPER AREA OR LIFTER COMPONENTS FROM FLEXING.
- 2) CENTER THE REAR MOUNTING PLATE ON THE LINES MARKED IN STEP 6 OF PRE-INSTALLATION. LEVEL THE PLATE AND TACK WELD IT SECURELY IN PLACE AT THE CORRECT MOUNTING HEIGHT FOR YOUR MODEL, OR FOR CARRY CANS, MOUNT THE TOP EDGE OF THE LIFTER TO THE TOP EDGE OF THE CAN. INCORRECTLY PLACED LIFTERS WILL HAVE TROUBLE GRABBING CARTS.
- 3) SLIDE THE LIFTER ASSEMBLY ONTO THE STUDS ON THE REAR MOUNTING PLATE AND TIGHTEN THE NUTS. THE DIMENSION FROM THE INSIDE OF THE HOOK TO THE GROUND SHOULD BE 34", WHEN THE FACEPLATE IS 5 DEGREES TILTED BACK PRIOR TO VERTICAL. THE DIMENSION TO THE TOP OF THE MTG PLATE WILL VARY FROM MODEL TO MODEL.
- 4) FIND THE POSITION FOR THE HAND VALVE THAT PROTECTS IT FROM ACCIDENTAL ACTIVATION AND WELD IN PLACE.
- 5) CONNECT PORT "A" OF HAND VALVE TO THE LH PORT OF THE ROTARY ACTUATOR AND CONNECT PORT "B" TO THE RH SIDE.
- 6) USING 175" HOSES, CONNECT HAND VALVE'S "OUT" PORT TO THE RETURN LINE FITTING IN FIG 2-6, AND CONNECT PORT "IN" TO THE "PORT "P" OF THE DIVERTER VALVE.
- 7) LOCATION SUITABLE POSITIONS FOR THE HOSE CLAMP ASSEMBLIES AND WELD THEM IN PLACE.
- 8) USE FIG 2-2, 2-4 AND 2-5 AS GUIDES TO LOCATE AND CONNECT THE REMAINING HYDRAULICS
- 9) GREASE LIFTER AND TEST CART GRABBING FUNCTIONS. IF LIFTER DUMPS PROPERLY, CONTINUE WELDING THE LIFTER AND SILL EXTENSIONS FULLY IN PLACE.

INSTALLATION SETUP FIG 1-1 & 1-2

Mounting of the Lifter should be done so that the centerline of the hopper or container and the centerline of the lifter match. When the lifter is installed on a corner mount carry can, or split body, then the centerline of the face the lifter is to be installed on should be used instead.

For carry cans, the lifter should always be mounted so that the mounting plate is even and level with the top edge of the carry can wall. On sideloaders, it is important to follow the mounting height recommendations for your particular lifter. As a reference, the part of the upper hook that is flat to the ground should be 34" above ground level.





HYDRAULIC PACKAGE CONTENTS (SOLD SEPERATELY FROM LIFTER)

FLOW DIVERTER VALVE

THIS VALVE ACCEPTS UP TO 50 GPM INPUT FROM THE MAIN PACKER LINE AND DIVERTS BETWEEN 0-8 GPM (ADJUSTABLE) TO THE CART LIFTER SYSTEM, SENDING THE REMAINING FLOW TO THE PACKER BLADE. BOTH PACKER AND LIFTER CAN BE OPERATED SIMULTANEOUSLY. THE DIVERTER VALVE SHOULD BE MOUNTED BEHIND THE CAB ON THE BODY SIDE FOLLOWING THE MAIN PRESSURE LINE..

50/50 SPLITTER VALVE (DOUBLE INSTALL ONLY)

THIS VALVE MOUNTS ATOP THE DIVERTER VALVE VIA AN O-RING AND 4 BOLTS. IT EVENLY DIVIDES THE OUTPUT FROM THE DIVERTER INTO THE TWO HAND VALVES, ALLOWING THE LIFTERS TO OPERATE AT THE SAME SPEED.

P.O. CHECK VALVE (CARRY-CAN MOUNTED LIFTERS & TUCKAWAY MODELS ONLY)

THIS VALVE MOUNTS BELOW THE HAND VALVE, OR IN SOME INSTANCES, CAN BE MOUNTED DIRECTLY UNDER THE ROTARY ACTUATOR. IT PREVENTS MOVEMENT TO THE LIFTER IN THE INSTANCES OF EITHER A SUDDEN LINE BURST, OR IN TYPICAL VIBRATION OF ROAD CONDITIONS THAT OTHERWISE MIGHT ALLOW THE LIFTER TO "CREEP" INTO A DIFFERENT POSITION. IN GENERAL, IT PREVENTS UNDESIRE MOTION AND ACTS AS AN IMPORTANT SAFETY MECHANISM.

HOSES

SINGLE INSTALLATIONS WILL HAVE (2) 175" HOSES AND (2) 114" HOSES. SIDELOAD TRUCKS WILL REQUIRE (2) ADDITIONAL 54" HOSES.

DOUBLE INSTALLATIONS WILL HAVE (4) 175" HOSES AND (4) 114" HOSES. SIDELOAD TRUCKS WILL REQUIRE (4) ADDITIONAL 54" HOSES.

ALL HOSES ARE TESTED TO WITHSTAND 3000 PSI OF PRESSURE.

HOSE CLAMP SET

SINGLE INSTALLATIONS WILL REQUIRE (5) CLAMP SETS, DOUBLE INSTALLATIONS WILL REQUIRE (10). THERE ARE (5) WIRE TIES INCLUDED FOR ADDITIONAL HOSE MANAGEMENT AS NECESSARY.

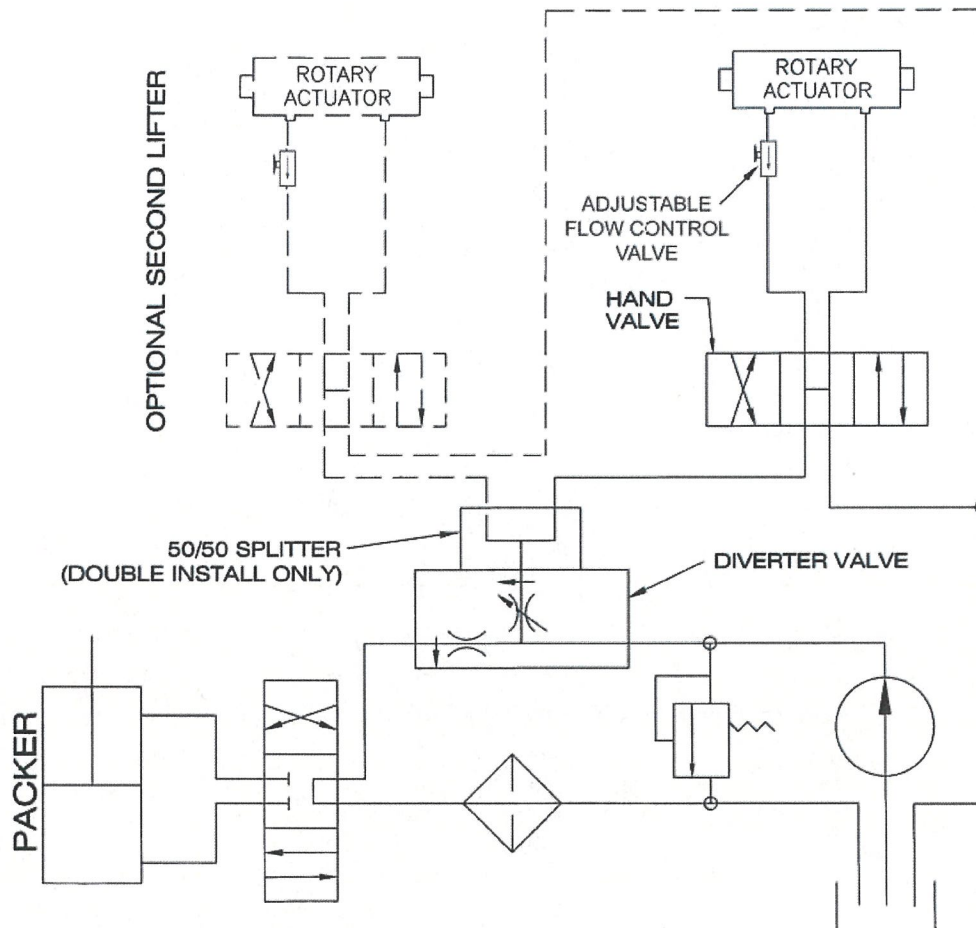
FITTINGS

FITTINGS REQUIRED WILL VARY FROM TRUCK MODEL TO MODEL. PERKINS KITS WILL INCLUDE MOST/ALL OF THE FITTINGS REQUIRED FOR MOST INSTALLATIONS, ON THE TRUCK SPECIFIED IN THE ORDER. HOWEVER, SOME TRUCK MODELS MAY REQUIRE AN ADDITIONAL FITTING NOT INCLUDED IN THE KIT.

DECALS

THE KIT CONTAINS (1) HANDLE CONTROL LABEL AND (1) CAUTION LABEL PER LIFTER

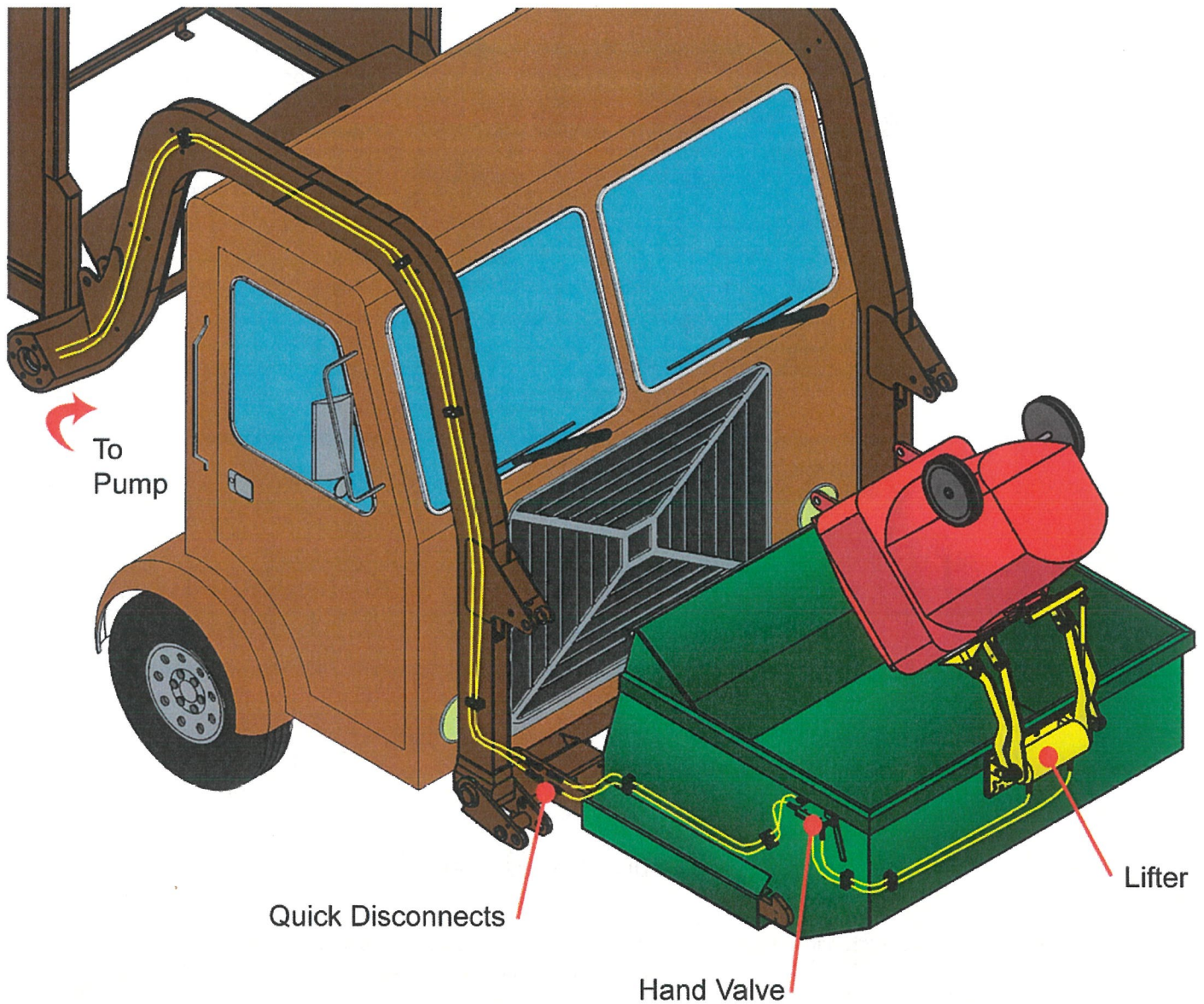
HYDRAULIC SCHEMATIC FIG 2-1



HYDRAULIC DESCRIPTION

The concept of the Perkins hydraulic system is to always keep back pressure / heat to a minimum, to achieve the maximum service life from the hydraulic seals, valves, and of course, the hydraulic oil itself. The Perkins diverter valve has been specifically designed with this in mind, delivering an even and controlled amount of flow to the lifters, with minimum back pressure and with minimum impact to the packer blade operation. The diverter valve is completely adjustable, allowing full system flow through its body, with flow-compensated take-off to the lifters that can be tuned to be between zero and eight GPM. For double installations, a special 50/50 splitter is mounted atop the diverter valve. This 50/50 splitter keeps the flow between the two lifters even, so that they will operate at the same speed. The hand valves that control the lifters are open-center style valves, which also help to keep the system pressure low. They feature a dead-man stop handle that stops all lifter motion when the handle is released, as well as a full-pressure capable relief valve to protect the lifter components from undesired pressures.

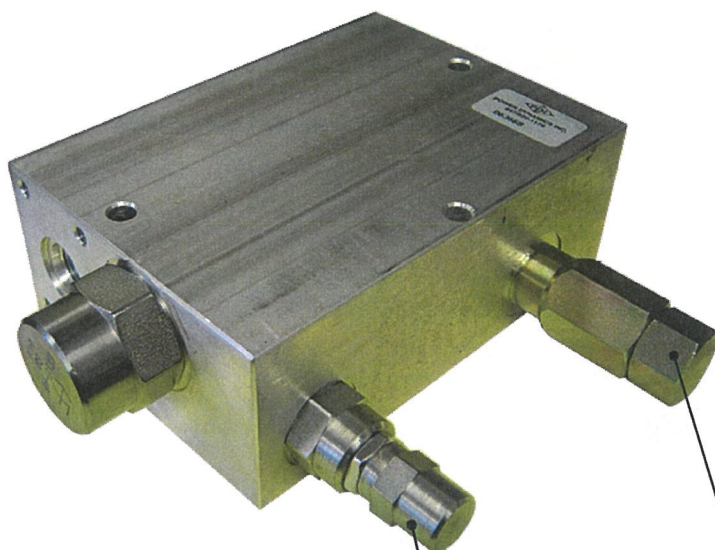
HYDRAULIC OVERVIEW FIG 2-2



HYDRAULIC LINES CAN ALSO BE ROUTED UNDER THE ARM. PRIORITY FLOW VALVE (DIVERTER) SHOULD BE INSTALLED BEHIND THE CAB ON THE BODY SIDE, TAKING THE MAIN PRESSURE LINE FROM THE PUMP.



VALVE ADJUSTMENTS FIG 2-3



**FLOW ADJUSTMENT
UNDER CAP**

**PRESSURE
ADJUSTMENT
UNDER CAP**

DIVERTER VALVE - FLOW CONTROL #D63668

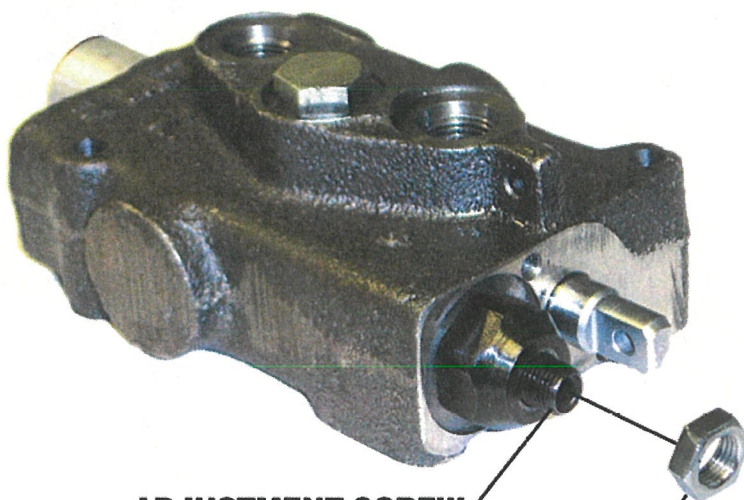
If your system has an adjustable flow control, open it completely. Insert a flow meter between the diverter valve and the hand valve. Loosen cap nut over the flow adjustment. Using a screwdriver, turn the adjustment screw clockwise until flow stops. Then slowly turn the screw counter-clockwise in 1/2 turn increments until the flow reaches between 2-3 GPM per lifter, or achieves a complete cycle time of 6-8 seconds. Re-tighten the locking nut and remove flow meter.

Replacement Seal Kit #D63668-4
Flow Cartridge #D63668-1
Relief Cartridge #D63668-2
Main Spool #D63668-3

HAND VALVE'S BUILT-IN RELIEF #D63228

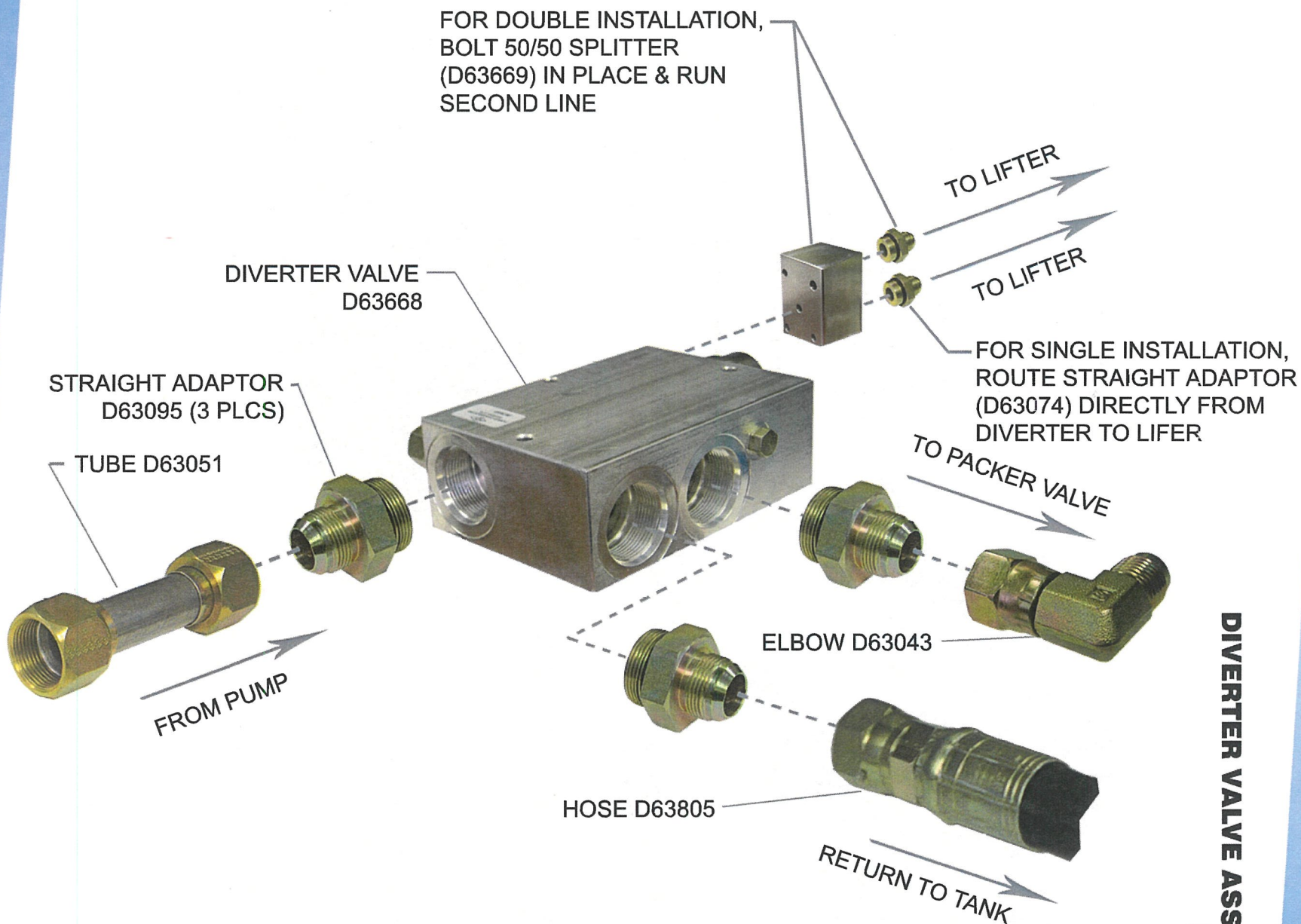
Loosen the locking nut on the adjustment screw. Turning the adjustment screw clockwise will increase available pressure to the lifters, limited by the truck's main relief valve setting. The relief should be set to allow the lifter to dump a 350 lb load, the required pressure will vary between lifter models. The hand valve's relief must be set at least 100 PSI difference than the truck's main relief, or the valves may "chatter". Re-tighten the locking nut.

Replacement Seal Kit #D63127
Spring Kit #D63192
Relief Cartridge Kit #D63672



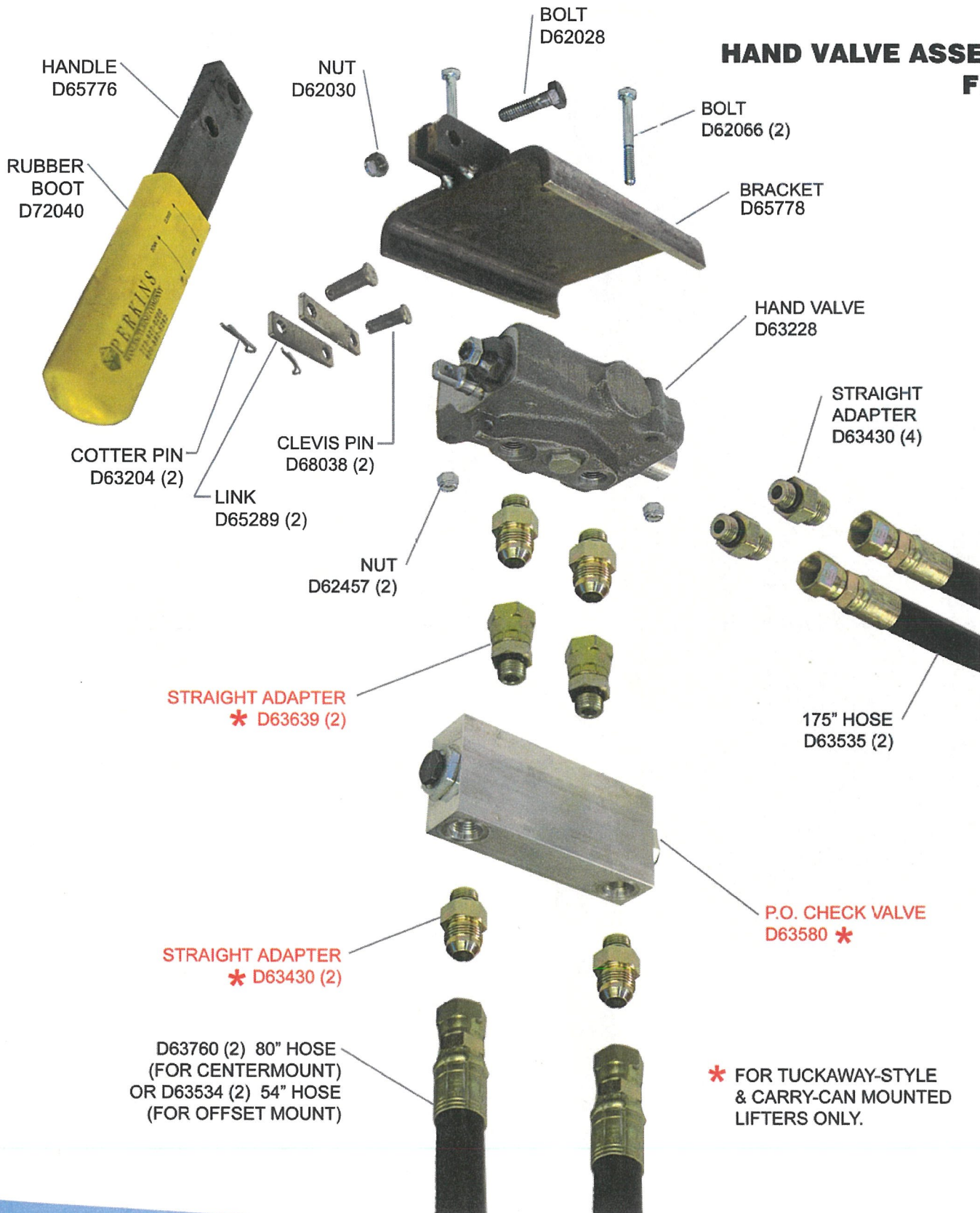
ADJUSTMENT SCREW

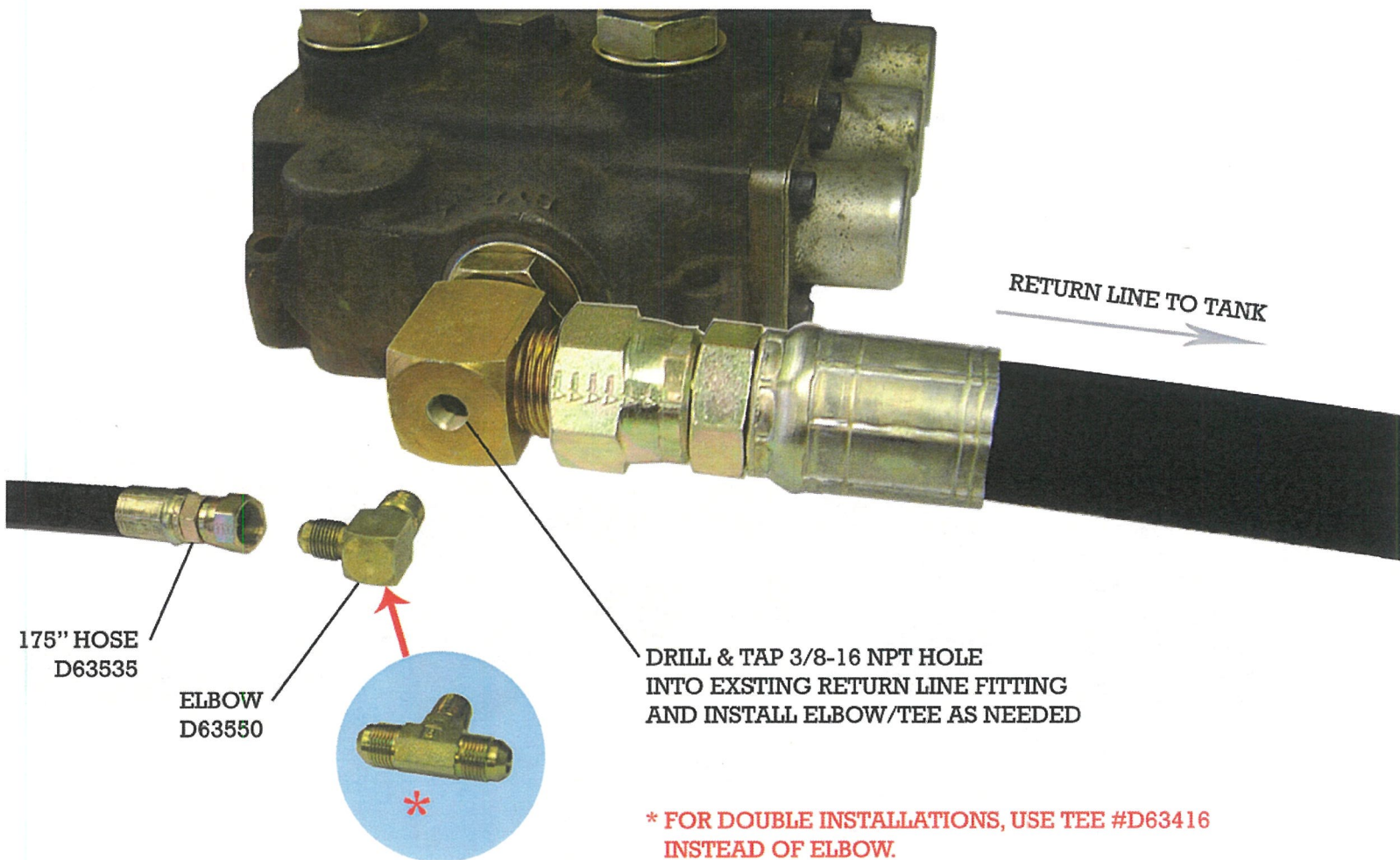
LOCKING NUT



DIVERTER VALVE ASSEMBLY
FIG 2-4

HAND VALVE ASSEMBLY FIG 2-5





FIND ANY LINE THAT RETURNS TO TANK AND DRILL & TAP
INTO A LARGE FITTING IN THAT LINE TO INSTALL RETURN
ELBOW OR TEE

RETURN LINE SETUP
FIG 2-6

OPERATING & SAFETY INSTRUCTIONS

OPERATION

- 1) START ENGINE AND ACTIVATE PUMP
- 2) CYCLE LIFTER SEVERAL TIMES TO PURGE THE AIR FROM THE LINES (FIRST TIME ONLY)
- 3) ROLL A CART TO THE LIFTER, PLACING THE CART SO THAT THE UPPER HOOK WILL GRASP THE TOP BAR OF THE CART
- 4) PULL HANDLE OF HAND VALVE TO RAISE AND DUMP CART
- 5) ONCE WASTE IS DUMPED, REVERSE THE LIFTER BY PUSHING DOWN ON HAND VALVE, RETURNING THE CART TO THE GROUND
- 6) REPLACE THE EMPTY CART WITH A LOADED CART AND REPEAT PROCESS

SAFETY

- 1) ALWAYS KEEP YOUR HANDS AND BODY AWAY FROM THE LIFTER WHILE IT IS IN OPERATION
- 2) NEVER REACH INTO THE HOPPER WHILE LIFTER IS IN OPERATION
- 3) BE SURE ALL PERSONS ARE CLEAR OF LIFTER AND CART PRIOR TO OPERATION
- 4) NEVER TRY TO LIFT CART THAT ARE BROKEN OR IN NEED OF REPAIR
- 5) DO NOT OPERATE THE LIFTER OUTSIDE OF THE 6-10 CYCLE TIME. FASTER SPEEDS MAY NOT BE SAFE.
- 6) NEVER LIFT AN OVERLOADED CART
- 7) DO NOT USE THE LIFTER AS A STEP
- 8) DO NOT USE THE LIFTER WITH CARTS THAT ARE NOT COMPATIBLE WITH THE LIFTER
- 9) WHEN NOT IN USE, MAKE SURE THE HAND VALVE IS IN IT'S NEUTRAL POSITION
- 10) INSPECT THE LIFTER DAILY, PRIOR TO USE, FOR LEAKS, WORN HOSES, OR ANYTHING THAT MIGHT INDICATE THE LIFTER IS NOT IN GOOD REPAIR

MAINTENANCE

LUBRICATION

PROPER GREASING OF THE LIFTER IS IMPORTANT. USING THE GREASE ZERKS INSTALLED ON THE LIFTER, SQUEEZE GREASE INTO ALL THE MAJOR PIVOT POINTS SUCH AS ARM PIVOTS, HOOK PIVOTS, AND ESPECIALLY ON SLIDE POINTS / SLIDE GUIDES. CHECK YOUR LIFTER FOR PROPER LUBRICATION ONCE PER WEEK OR AS NEEDED BASED ON YOUR WEATHER / USAGE CONDITIONS.

BEARINGS

PERKINS HAS USED OIL-IMPREGNATED BRONZE BEARINGS ON OLDER MACHINES, AND FIBERGLIDE "GREASELESS" BEARINGS ON MANY NEWER MODELS. WHEN A LIFTER APPEARS TO MOVE LOOSELY, AS THOUGH THE JOINTS ARE NO LONGER TIGHT, IT MAY BE A SIGN THAT THE BEARINGS HAVE BECOME WORN OUT AND NEED REPLACEMENT. BEARINGS THAT HAVE BEEN SCARRED HEAVILY, OR NO LONGER PROVIDE A SNUG FIT SHOULD BE REPLACED IMMEDIATELY.

FASTENERS

A VARIETY OF FASTENERS ARE USED ON LIFTERS, DEPENDING ON THE APPLICATION AND MODEL. WHEN CHECKING THE LIFTER FOR PROPER LUBRICATION, CHECK THE LOCKNUTS, BOLTS, SET SCREWS, AND SNAP RINGS. ALL FASTENERS ARE GRADE 5 OR GRADE 8, AND SHOULD BE REPLACED IF MISSING.

LIFTER COMPONENTS

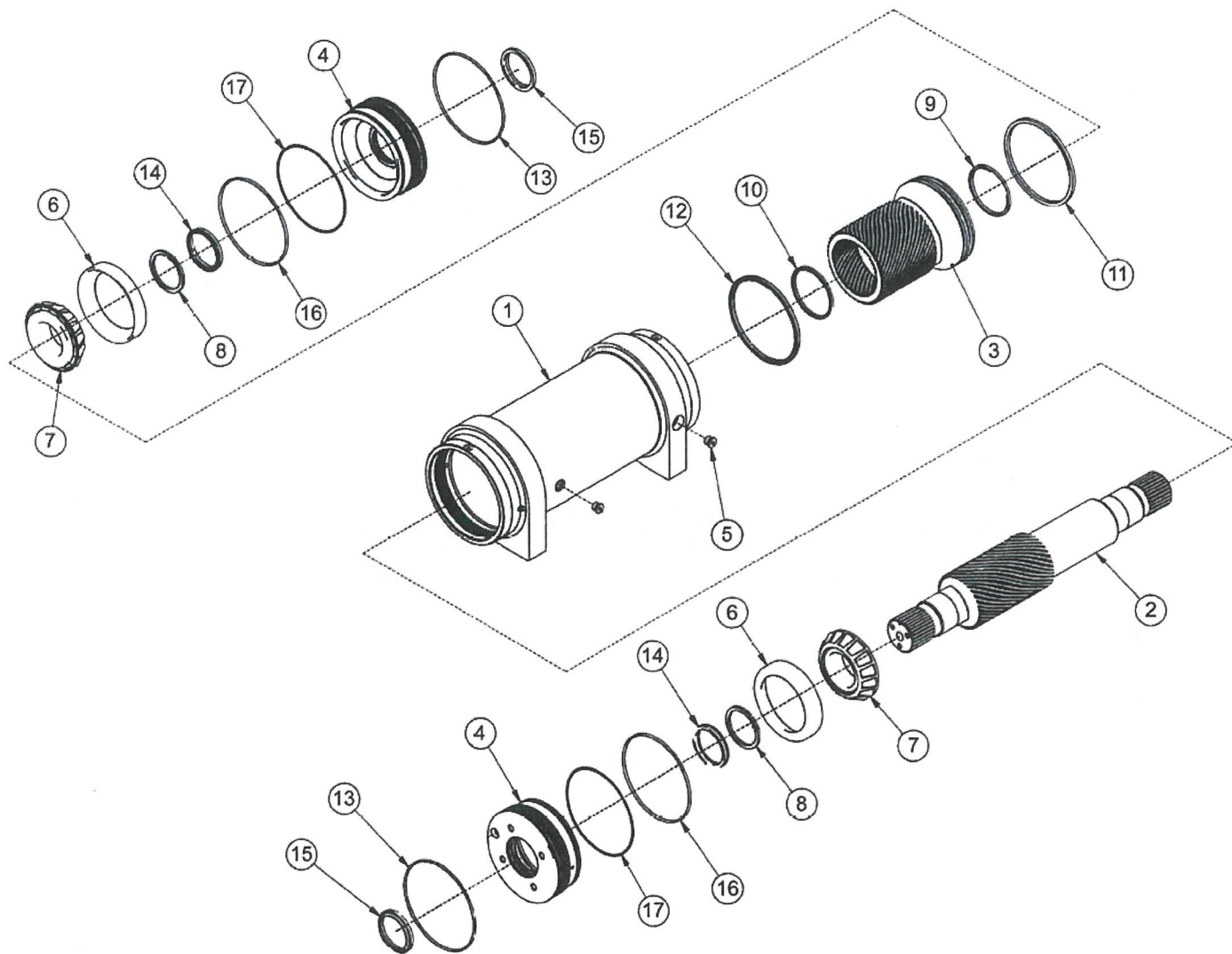
USE A SPOT CHECK OF THE LIFTER DURING WEEKLY MAINTENANCE CHECK-UP TO LOOK FOR ANY PARTS THAT MAY HAVE BECOME DAMAGED DURING THE COURSE OF TYPICAL USAGE. LINKAGES DESIGNED TO MOVE THE LOWER LATCH AND LOCK CARTS MAY NOT OPEN OR CLOSE PROPERLY IF THEY HAVE BECOME BENT, EVEN IF THE REST OF THE LIFTER MOVES NORMALLY. CHECK THE HOOKS TO MAKE SURE THEY MOVE FREELY AND THAT THE LOWER LATCH SPRINGS INTO POSITION FREELY. CHECK ANY SLIDE MECHANISM FOR CLEAR AND UNOBSTRUCTED MOVEMENT.

HYDRAULIC COMPONENTS

INSPECT THE HOSES AND REPLACE ANY THAT HAVE BECOME FRAYED, WORN OR KINKED. LOOK FOR ANY SIGNS OF OIL LEAKAGE AND TIGHTEN THE APPROPRIATE FITTINGS OR REPLACE O-RINGS AS NECESSARY. TAKE NOTICE OF ANY LEAKAGE FROM OR AROUND THE ROTARY ACTUATOR AND/OR CYLINDER. SEAL KITS FOR THE ACTUATORS AND CYLINDERS ARE AVAILABLE. **NOTE: NEVER CHECK FOR OIL LEAKS USING YOUR BARE HANDS WITH THE SYSTEM PRESSURE ON. OIL LEAK STREAMS CAN PIERCE THE SKIN AND CAUSE SEVERE DAMAGE. ALWAYS TAKE THE PROPER PRECAUTIONS.** PLEASE NOTE THAT FOR PROPER OPERATION OF THE VALVES AND LIFTER COMPONENTS, THE HYDRAULIC SYSTEM MUST BE BLEED OF AIR EVERYTIME THE SYSTEM IS OPENED. THIS CAN BE DONE BY RUNNING THE LIFTER UP AND DOWN SEVERAL TIMES AFTER THE SYSTEM IS CLOSED AND TIGHTENED.



REPAIRING THE ROTARY ACTUATOR 20K MODEL - FIG 3-1



ITEM	PERKINS #	VENDOR #	DESCRIPTION	ITEM	PERKINS #	VENDOR #	DESCRIPTION
1	D63238-5	29146	HOUSING	10	D63238-3	919780	CUP SEAL
2	D63238-6	28463	SHAFT	11	D63238-3	919146	CUP SEAL
3	D63238-7	28837	PISTON SLEEVE	12	D63238-3	919642	CUP SEAL
4	D63238-8	28857	END CAP	13	D63238-3	925099	O-RING SEAL
5	D63238-4	977009	#6 PLUG	14	D63238-3	919781	CUP SEAL-SHAFT
6	D63238-4	932155	CUP BEARING	15	D63238-3	927020	WIPER SEAL
7	D63238-4	932156	CONE BEARING	16	D63238-3	925097	O-RING SEAL
8	D63238-3	28827	RING SPACER	17	D63238-3	926068	B/U RING SEAL
9	D63238-3	919492	CUP SEAL				

SOLD AS HARDWARE KIT ONLY

SOLD AS SEAL KIT ONLY



PERKINS

Trouble Shooting Guide



PERKINS

MANUFACTURING COMPANY

Perkins Manufacturing – Lifter Trouble Shooting Guide

	Symptom	Possible Causes	Solution
a.	Lifter operation is very erratic.	<ol style="list-style-type: none"> 1. Air is trapped in the system. 1. Low flow in the system. 1. Adjustable flow valve is not working properly. 	<ol style="list-style-type: none"> 1. Bleed all air from lifter hydraulic system. 2. Increase flow from the diverter valve. 3. Adjust, clean or replace the flow valve.
b.	Cart lifter will not pick up the weight.	<ol style="list-style-type: none"> 1. Cart is overweight. 2. Lifter system hydraulic pressure is too low. 3. Truck system hydraulic pressure is too low. 1. Faulty hand valve. 2. Rotary actuator or cylinder leaking internally (bypassing oil). 	<ol style="list-style-type: none"> 1. Reduce weight of cart. 2. Check and adjust pressure relief on hand valve. 3. Check, adjust or fix pressure on truck system relief (reference manufacturer's specified pressure). 4. Replace hand valve. 5. Rebuild or send to Perkins for rebuild.
c.	Lifter operates slowly.	<ol style="list-style-type: none"> 1. Adjustment screw is closed all the way on the diverter valve. 1. Engine idle is too low. 2. Faulty hand valve. 3. Faulty truck hydraulic pump. 1. Trash in the diverter valve. 	<ol style="list-style-type: none"> 2. Try adjusting the drive screw on the diverter valve to increase the flow in to the lifters. 3. Adjust engine idle. 4. Replace hand valve. 5. Check the truck maintenance manual. 6. Carefully clean all components and the orifice of the diverter valve, or replace.
d.	Lifter operates fast.	<ol style="list-style-type: none"> 1. Adjustment screw is open all the way. 1. Engine idle is too high. 	<ol style="list-style-type: none"> 1. Try adjusting the drive screw on the diverter valve to decrease the flow in to the lifter. 2. Adjust the engine idle.
e.	Diverter valve is leaking oil around cartridges.	<ol style="list-style-type: none"> 1. Worn or damaged seals on cartridge valves. 	<ol style="list-style-type: none"> 2. Replace seal kit for diverter valve (replacement seal kit P/N D63477).
f.	Hand valve lever sticks in the up or down position.	<ol style="list-style-type: none"> 1. Worn or broken spring center device. 1. Trash or rust in or around the hand valve shift spool. 2. Pressure (in) and tank (out) ports are hooked up backwards. 	<ol style="list-style-type: none"> 3. Install spring center kit (replacement spring kit P/N D63192). 4. Disassemble and clean spool and housing. 5. Make sure all hoses are plumbed according to the hydraulic schematic.

Perkins Manufacturing Co.

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PERKINS

MANUFACTURING COMPANY

Perkins Manufacturing – Lifter Trouble Shooting Guide

	Symptom	Possible Causes	Solution
g.	Hand valve is leaking oil around the shift spool.	1. Worn or damaged seals. 1. Worn spool.	1. Install hand valve seal kit (replacement seal kit P/N D63217). 2. Replace hand valve.
h.	Not able to set pressure settings of rotary type units to 1,950 p.s.i.	1. Truck settings are between 1,500 and 1,700 p.s.i.	2. Need to install a pressure speed up switch (customer must request).
i.	Not able to set pressure settings of cylinder type units to 1,200 p.s.i.	1. Truck pressure is lower than 1,400 p.s.i.	2. Call the manufacturer.
j.	Lifter speed on rotary units is not 8 to 10 sec. cycle time.	1. Flow setting may not be set at 2.0 g.p.m.	2. Adjust Perkins diverter valve to 2.0 g.p.m. If operated w/ other, call Perkins for alternatives.
k.	Lifter speed on cylinder units is not 8 to 10 sec. cycle time.	1. Flow setting may not be set at 4.0 g.p.m.	2. Adjust Perkins diverter valve to 4.0 g.p.m. If operated w/ other, call Perkins for alternatives.
l.	Lifter breaking bottom or upper bars on carts (applicable lifter M/N's: D6000, D6020, D6035, D6040, D6044, D6045, D6046, D6047, D6049, D6051, D6056, D6070, D6071, D6073, D6080).	1. Check for damage or bent face-plate on the lifter or the parts for the latch hook mechanism. 2. Check the adjustments on the rod latch. 1. Check spring loaded plunger to work properly. 2. Check the mounting height of the lifter as specified on lifter manual for proper operation.	1. Replace all damaged or bent parts. 1. Adjust rod latch dimension from center to center of rod eye bearings. 2. Grease or replace if needed. 1. If not mounted at proper mount height, remount to specified height.
m.	Lifter breaking bottom or upper bars on carts (applicable lifter M/N's: D6202, D6220).	1. Check dimension from upper to lower hook if over 15" or under 14 1/2", possible damage or bent parts on slide mechanism. 2. Check if lower hook is bent. 1. Check grease points.	2. Replace all damaged or bent parts, adjust to 15" max and 14 1/2" min. 1. Replace lower hook and check dimensions again to confirm. 2. Grease all grease points if needed.

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P E R K I N S
MANUFACTURING COMPANY

423 East Elm Avenue La Grange, IL 60525 Phones (708) 482-9500 (800) 882-5292 Fax (708) 354-5878

TWO-YEAR LIMITED WARRANTY

**BEFORE ANY WARRANTY CAN BE ALLOWED ON ANY NEW EQUIPMENT,
THE APPLICABLE REGISTRATION FORM MUST BE ON FILE WITH
PERKINS MANUFACTURING COMPANY.**

PERKINS MANUFACTURING COMPANY warrants its ROTARY lifters to be free from defects in material and workmanship under normal use for a period of two (2) years from the date of delivery to the first purchaser. This warranty covers all ROTARY lifters shipped after December 1, 1997.

This warranty is expressly limited to the repair or replacement of any component or part of any ROTARY lifter unit manufactured by PERKINS which is proven to PERKINS' satisfaction to have been defective in material or workmanship. This warranty does 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 improper use, substitution of parts not approved by PERKINS, modifications other than those done at the factory or as authorized in writing by the factory, or any alteration or repair by others in such a manner which, in PERKINS judgement, materially and adversely affects the product shall void this warranty.

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 assumes no liability for any incidental, consequential, direct, or indirect damages, losses or delays, including , but not limited to, loss of profits, product or time.

Any service parts sold by PERKINS shall have a ninety (90) day warranty for replacement only. The warranty item must be returned to PERKINS for evaluation upon it's request. Labor to replace such part shall be the responsibility of the owner. There is no warranty on 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 supersedes and is in lieu of all other express or implied warranties, including, but not limited to, any implied warranties of merchantability or fitness. No employee or any other representative of PERKINS is authorized to change this warranty in any way or to grant any other warranty.





Installation & Operational Manual

Model D6034

Hydraulic Cart Lifter

Protected by US Patents 6,921,239 & 7,273,340



D6034 Lifter Specifications

Cart Compatibility	ANSI Type B, US-Style two-bar carts having a bar to bar dimension of 14 ¾ - 15 ¼".
Typical Mounting Application	Rear Loader, Side Loader and Stationary
Tipper Bar Compatible?	No.
Flow Rate Requirement	4 gpm
Cycle Time	6-8 seconds (up and down)
Recommended Pressure Setting*	1,550 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)	38" up to 42".
Approximate Unit Weight (not counting packaging)	350 lbs
Hydraulic Package	Tap-In kits are sold separately
Warranty	1-year ***

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 enclosed in this manual for full details of coverage

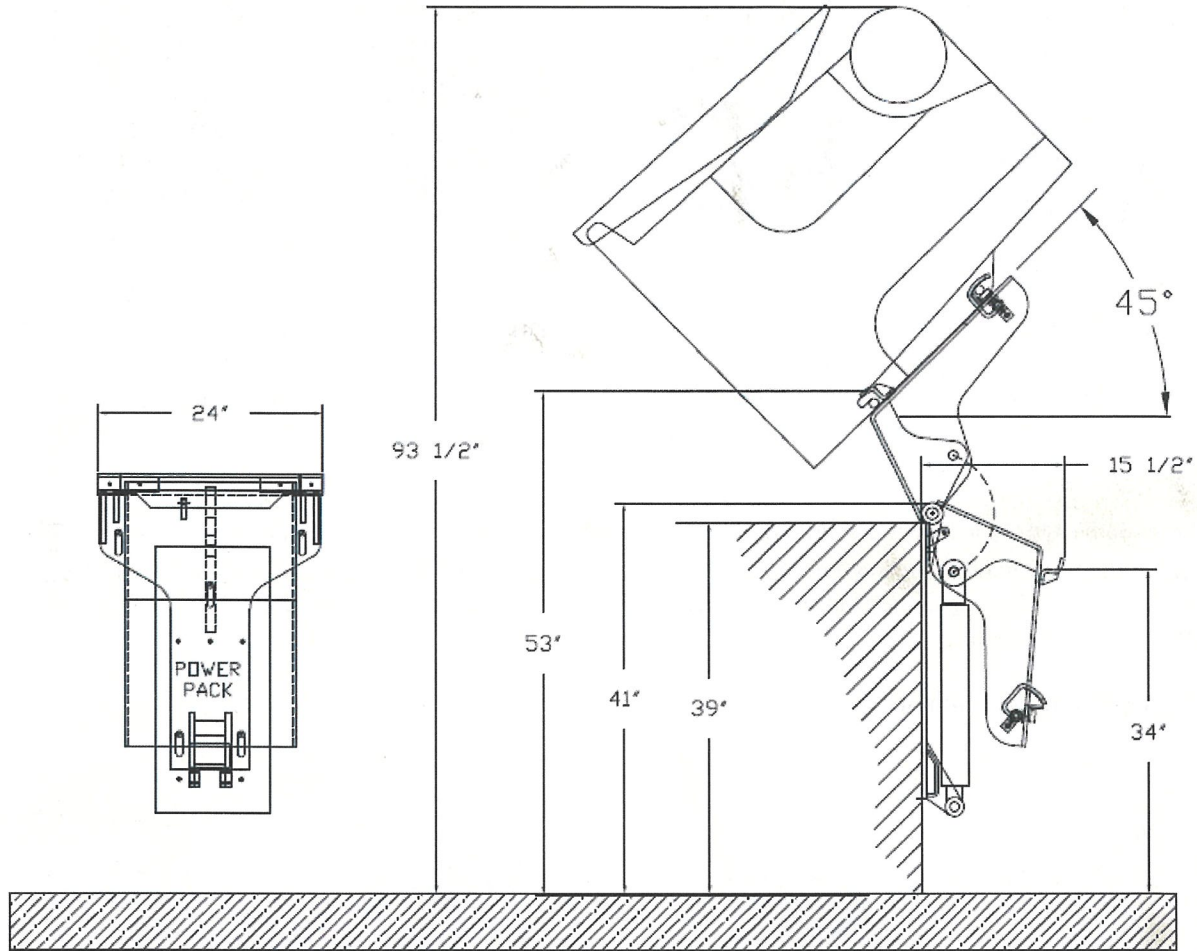


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Overall Dimensions



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



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Glossary of Terms

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.



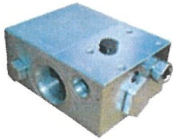
ANSI Type D Carts (Diamond-Type)



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.

Key Hydraulic Components



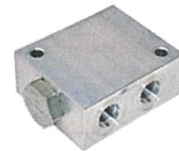
Diverter Valve



Hand Valve



PO Check Valve



50/50 Splitter



Double Diverter Valve



Adjustable Flow Control

Valves are sold separately or as part of a tap-in kit. The valves are shown for reference / identification purposes only. Your specific installation may require other equipment not shown.



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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.
- ★ Cart lifters weigh, on average, between 185 to 300 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.



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

Begin by selecting whether the installation will be centered on the truck, or offset, or a double installation. Draw a centerline on the truck's loading sill.

A centered installation will place the lifter directly centered on the centerline of the truck.

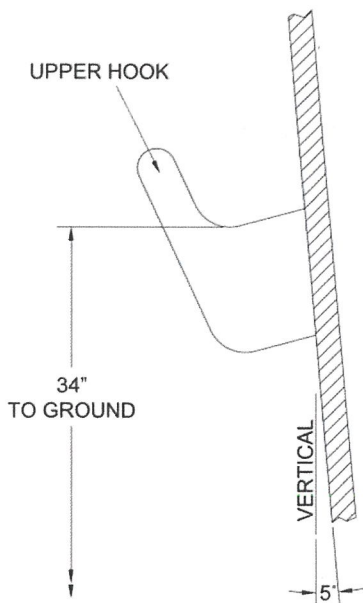
An offset installation will place the lifter 17 ½" from the center of the truck, (usually to the curb side) as shown in the picture at right.

A double installation will place a lifter 17 ½" to the left and 17 ½" to the right of the truck's centerline.



A typical offset installation.

Determine the Mounting Height



Upper hook mounting height

The mounting height is critical to the proper function of any cart lifter. The ideal location for the upper hook is 34" off the ground, when the lifter is positioned so that the faceplate is 5 degrees tilted back from vertical as shown in the diagram at left.

It is important that the packer 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 has been positioned too low may kick carts away before successfully engaging them.

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.



Non-Perkins Hydraulics

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 6-8 seconds (3-4 seconds up and 3-4 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. Typical lifters with a cylinder will require approximately 4 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 D6034 requires 1900 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.



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Perkins Hydraulic Installation

(Sold Separately)

(Hydraulic instructions for when is mounted in a truck only, if your unit is meant for stationary use see power pack specs of your specific machine. Stationary units use many variations of pumps)

Locate the Hand Valve Assembly

A suitable location for the hand valve assembly should be found on the side of the truck. Its placement should not interfere with any existing truck components. The handle should be a comfortable distance from the ground (typically about 48" high) so that repeated ergonomics is easy to use and safe.

The Perkins hand valve assembly comes with a mounting bracket which may be welded directly to the side of the truck. Typically, the hand valve's handle will point to the back of the truck and the ports A & B which feed the lifter will be pointing to the ground.

This position should allow the operator holding the handle to still be within arm's reach of the cart that is being lifted. This keeps the steps back and forth to a minimum for best efficiency.

Tack-weld the valve bracket in place temporarily until all the hoses have been routed.



Note the hoses feeding the lifter are pointing straight down. The hoses leading back to the pressure supply and tank and pointing towards the front of the truck and all hoses are neatly routed for a clean look and best hose protection.

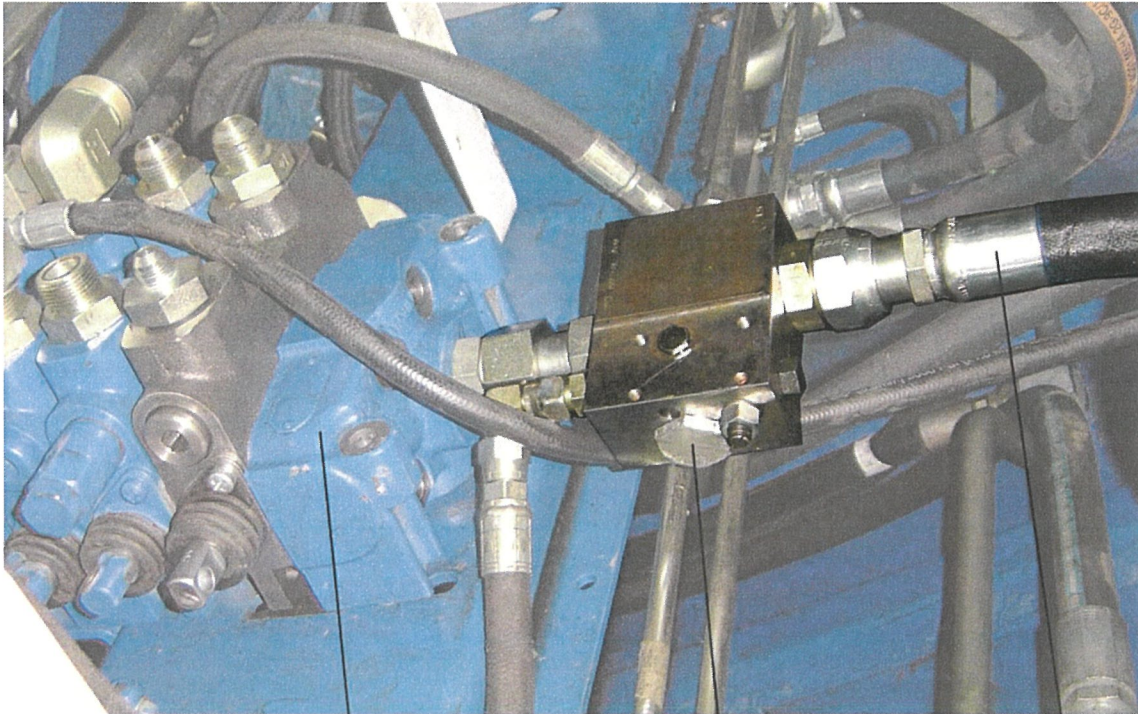


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Locate and Connect the Diverter Valve



**PACKER BLADE
CONTROL VALVE**

DIVERTER VALVE

PRESSURE LINE

The diverter valve is designed to accept full system flow, continuously divert a portion of that flow to the lifter(s), and pass the remaining flow on to the packer control valve. The amount of flow that is diverted is adjustable, so the same valve that feeds one lifter can also be adjusted to feed two lifters.

Adding the Perkins diverter valve to your system will slow down your packer cycle by several seconds, whether you are actively using the lifters or not. However, this is usually an acceptable tradeoff, since the Perkins diverter valve doesn't generate much backpressure or heat, and it allows you to use the packer and the lifters simultaneously.

With the system off and depressurized, find the pressure line that feeds the packer valve and disconnect it. Connect this pressure line to the "IN" port of the Perkins diverter valve. Connect the "OUT" port of the diverter valve back to the packer control valve where the pressure line originally was.

The fittings to do this will vary from truck to truck. The Perkins Tap-in Kit generally gives you the required fittings, but due to the wide variety of trucks, changes made by the OEM, as well as the possibility of other aftermarket parts, especially on used trucks, the fittings you need to make these connections may not be included in your kit and will have to be purchased separately.



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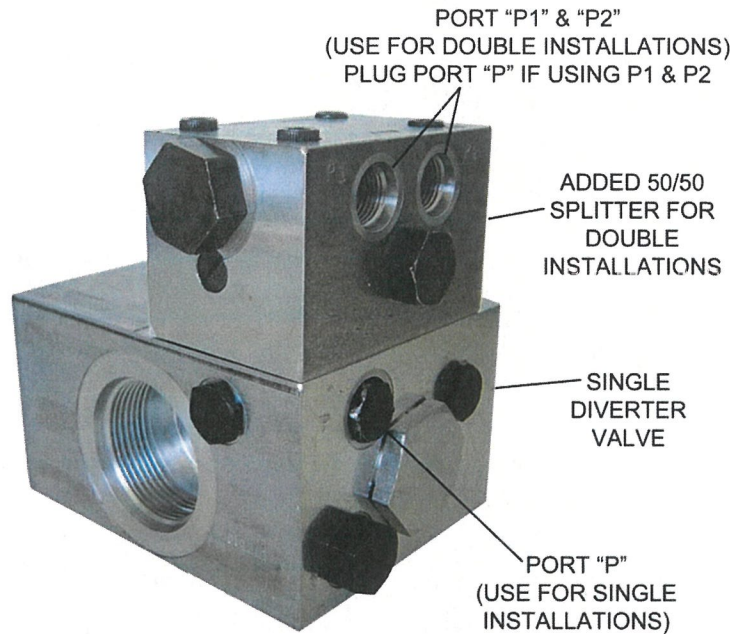
The Perkins Diverter Valve

Ordinarily, the diverter valve's port "P" will feed the lifter.

But, if you have two lifters, then you will use the Perkins Double Diverter Valve.

It's the same valve, except port "P" is plugged, and a 50/50 splitter valve is mounted on top.

In this case, ports "P1" and "P2" will feed the lifters an equal amount of flow each.



Making the Hose Connections

All the primary valves are now in place for a typical installation.

The tap-in kit would have come with 2 short hoses and 2 long hoses (single installation) or 4 short and 4 long for double installation.

Connect one short hose from the lifter's left side to the hand valve port "A".

Connect another short hose from the lifter's right side to hand valve port "B".

Note: If the handle's operation is not as desired, you may switch the hoses to reverse the handle's operation

Connect one long hose from the hand valve's "IN" port to the diverter valve's "P" port. (or if performing a dual installation, to port "P1" or "P2")

Connect the last long hose from the hand valve's "OUT" port to a tank line. *

Note: See photo of tank line connection on following page for more details.

Make sure all the hoses have been routed neatly. The hoses must be protected from rubbing or pinching.

If performing a double installation, repeat this process for the second lifter.



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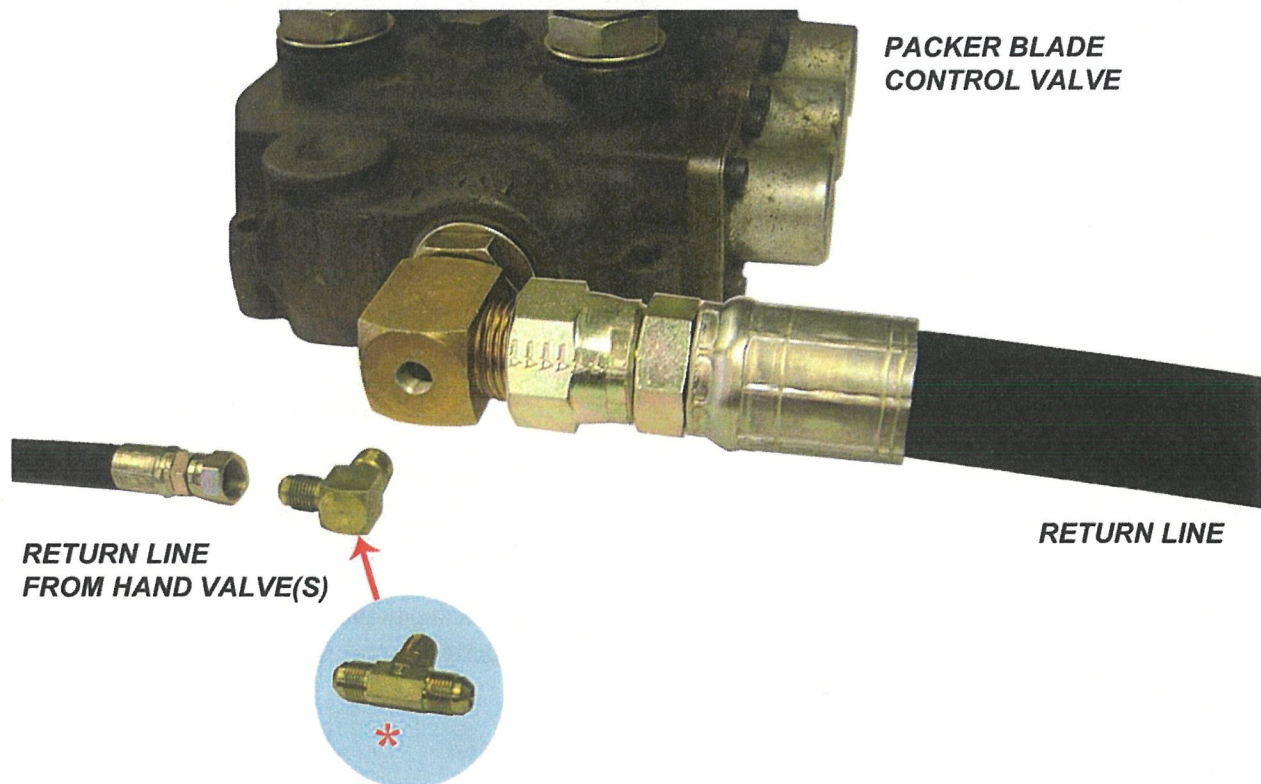
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Tapping into the Tank Line

There are two ways to run the oil back to tank. Perkins does not suggest allowing the return oil to get pushed back into the packer control valve, because this generates back pressure and heat.

Recommended Method: Locate the return line coming off the packer control valve and find a suitable large fitting as shown in the photo below. Remove this fitting and drill and tap into it to fit an adapter (or tee for a double installation) to allow the oil to flow back into the return line.

Be sure to clean the fitting of metal shavings before returning it to the system.



Alternative Method: On some trucks, it is not possible to tap into a return line fitting. In some instances, everything is hard-piped and there are no fittings to tap into. If this is the case, the return lines may be feed into the "T" port of the Perkins Diverter Valve. This tends to create some backpressure in the system, but otherwise does work.



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Adjusting the Perkins Hydraulics

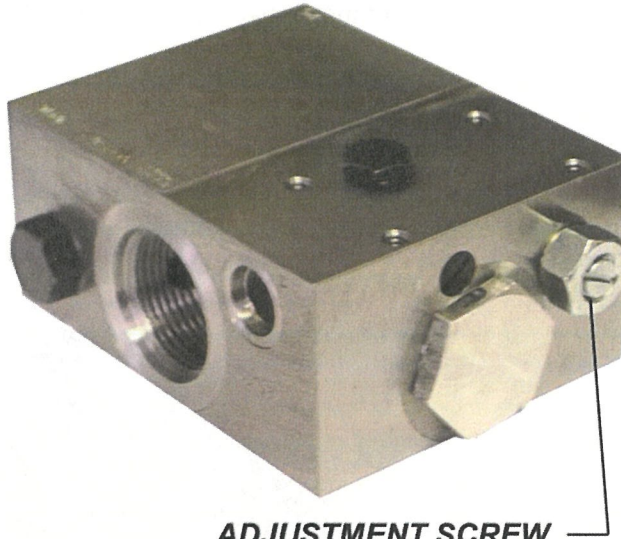
Adjusting the Speed

Single Diverter: D63237s
Double Diverter: D63411s

This valve's adjustment controls the flow going to the lifter. The flow controls the speed of the lifter.

To adjust, turn off the system and loosen the locking nut. Turn the adjustment screw clockwise all the way in. This will stop flow to the lifter completely. From this position, make counter-clockwise adjustments ½ turn at a time. When the correct position is found, tighten the locking nut to hold the adjustment in place.

CAUTION ADJUST THIS VALVE WITH
THE HYDRAULIC PUMP OFF OR VALVE
DAMAGE COULD OCCUR



ADJUSTMENT SCREW

Replacement Parts:
D63477 – Seal Kit
D63565 – Adjustment Screw

To convert a Single Diverter to a Double:
D63236 – 50/50 Splitter (comes with mounting hardware).

Troubleshooting the Diverter Valve

This diverter valve does not affect lifting power / weight capacity!

Only check this valve if your lifter stops moving, or moves to fast or too slow.

Maintaining the Diverter Valve

The valve requires no periodic maintenance.

If a problem is thought to exist in the diverter valve, turn the system off and check the cartridge by unscrewing either of the large caps from the ends and removing the cartridge. The cartridge may then be cleaned and inspected. Flush the valve out to remove any contaminants, return the cartridge and reinstall.

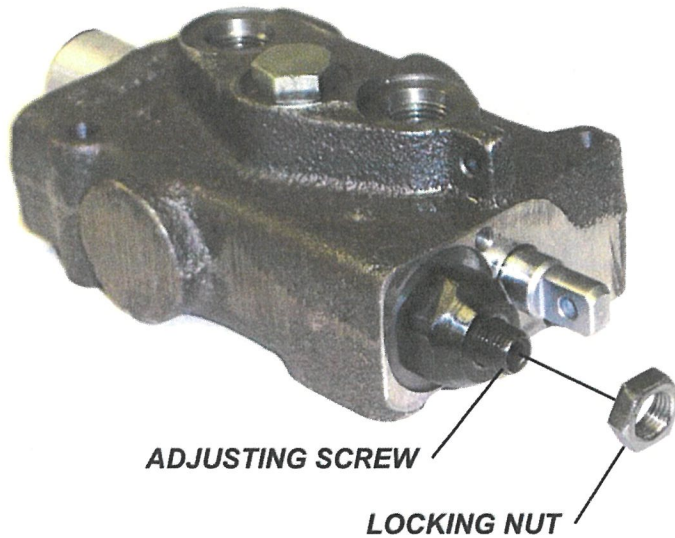


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Adjusting the Lifting Capacity



Note: The setting for the D6034-27k is approximately 1650 psi to lift 400 lbs.

Hand Valve: D63228 (valve only)

This valve directs the flow to the lifter to make it move up or down. It features a "deadman" stop. Release the handle and the lifter should stop moving.

The valve has a built-in pressure relief valve. To increase the lifting capacity, loosen the locking nut and turn the adjusting screw clockwise. It is recommended to use a pressure gauge to achieve the right setting. Raise the lifter until it stops and continue to pull the handle. Note the pressure on the gauge and adjust the screw accordingly.

When the pressure is correct, retighten the locking nut.

Replacement Parts:

D63127 – Seal Kit

D63192 – Spring Kit

D63672 – Cartridge Kit

Troubleshooting the Hand Valve

This valve does not affect lifter speed!

Only adjust this valve if the lifter won't pick-up the desired weight, or if a chattering noise is heard.

Don't be fooled! Containers full of water, concrete, rocks, dirt, wet grass or other materials can easily weigh far more than the capacity of the lifter. Just because the lifter doesn't pick up that heavy cart, doesn't mean the lifter needs adjustment! If there is doubt, try weighing the container in question.

Maintaining the Hand Valve

This valve requires no periodic maintenance.

If a problem is traced to the hand valve, turn the system off and remove the cartridge. Clean and inspect the cartridge. Make sure the handle returns to center on its own. If it doesn't, it may need a spring kit.

There are usually multiple relief valves within the same system. They must be set at least 100 psi apart from each other or they will "chatter". Adjusting one valve to be set differently than another should eliminate the problem. Example: Pump relief valve 2100 psi, packer relief valve 2000 psi, lifter relief valve 1900 psi.



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Maintaining the PO Check Valve

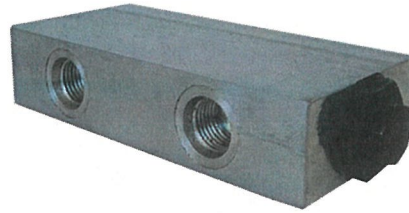
PO Check Valve: D63580

The valve locks the oil from escaping unless the hand control is activated. This locks equipment in position and prevents drifting when equipment is idle. It also acts as a safety, in the event of a broken hose, the valve stops the movement of the equipment.

This valve is not adjustable.

This valve requires no periodic maintenance.

If a problem is traced back to the PO check, turn off the system and remove the cartridge. Clean and inspect for damage. Replace cartridge if needed, flush the valve, rebuild and install.



Maintaining the Adjustable Flow Control

Adjustable Flow Control Valve: D63575



The valve is located on the left-hand side port of the rotary actuator. Its purpose is to restrict oil coming out of the actuator when the lifter is moving back down. By restricting the oil, the lifter is prevented from “getting ahead” of the oil and slamming into the ground.

This valve only works in one direction, so adjusting it does not affect the speed of the upwards direction.

The valve has a small arrow stamped into its body. The arrow should point away from the actuator.

If the lifter comes down too quickly, try turning this valve in clockwise ¼ turn at a time until the down direction is smooth and under control.



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Operating the Lifter

Operating Instructions

The recommended cycle is 3-4 seconds to travel up and 3-4 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: Roll a loaded cart to the lifter and position the upper bar of the cart on the upper saddle of the lifter or in a position where the lifter will engage the bar once it starts its motion.

Step 2: Look and make sure no one is in the area of the lifter or cart, then operate the hand valve by pulling up on the handle. The lifter will rotate and engage the cart and raise it to 45 degrees above the horizon.

Safety Note: The hand valve operates like a deadman switch. Releasing the handle at any time will stop motion of the lifter. Normal operation may be resumed by operating the handle again.

Step 3: At the operator preference, the cart may be “shook” back and forth to help discharge the contents of the cart by moving the hand valve back and forth rapidly. Shaking the cart is not harmful to the lifter, however, cart damage can result if the lifter speed is too great. Make sure the speed adjustment of the lifter is set slow enough to allow for safe cart shaking, if you plan to regularly shake the cart.

Step 4: Lower the cart by reversing the hand valve handle (pushing down), until the cart is safely returned to the ground and the lifter has disengaged the cart.

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



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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 6-8 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.

Lifters can hang very low to the ground at certain points of their lift cycle. It is the operator's responsibility to move the lifter to a safe position while going down the road, such as putting the lifter all the way up or fully into the storage position. Lifters left hanging low risk bottoming out on the street, which will cause serious lifter damage. 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.

If the lifter is installed in such a way that the lifter or cart can make contact with the packer blade, then it is critical to pay attention and make sure the lifter is not operated when the packer blade is down or coming down.



Adjusting the Lifter

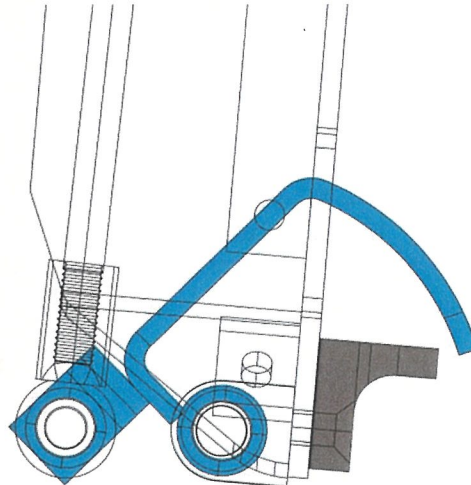
Correct Position of the Lower Latch

Shown at right is the correct position of the lower latch when the plunger assembly and threaded rod assembly are both adjusted properly and when the faceplate is 5 degrees prior to vertical.

The key is to make sure the tip of the latch is above the lower edge of the lower stop.

This position ensures that the latch is still open at the time of cart engagement to the lower bar.

The latch may be adjusted to be slightly higher than shown, but not lower, or else carts may not latch.



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.

There is a wide variety of carts, some of which do not meet ANSI standards. Customers may experience engagement issues with some particular brands of carts and in circumstances like these, spacers can be added behind the upper saddle or behind the lower stop to extend them out from the faceplate. This helps certain brands/sizes of carts to lock to the lifter better. 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.

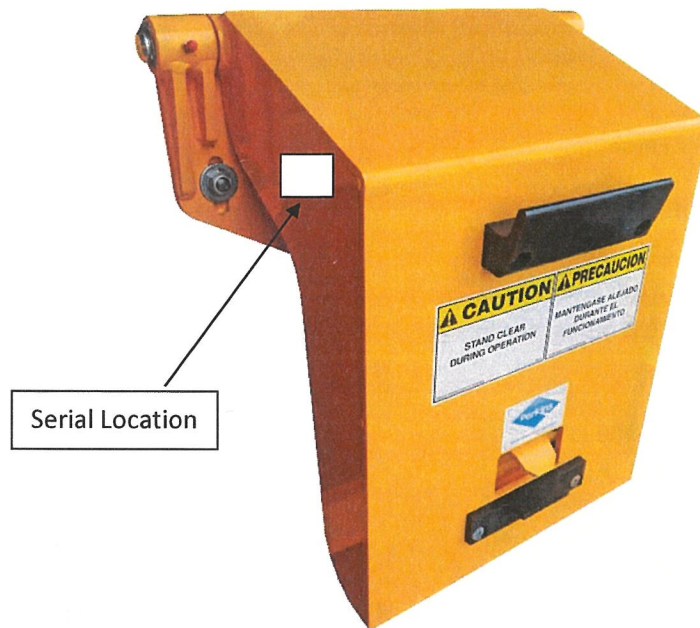


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Making a Warranty Claim



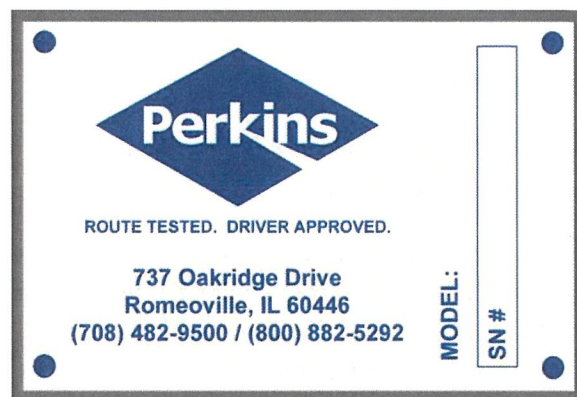
For complete warranty coverage details, please see the warranty page at the end of this manual.

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.

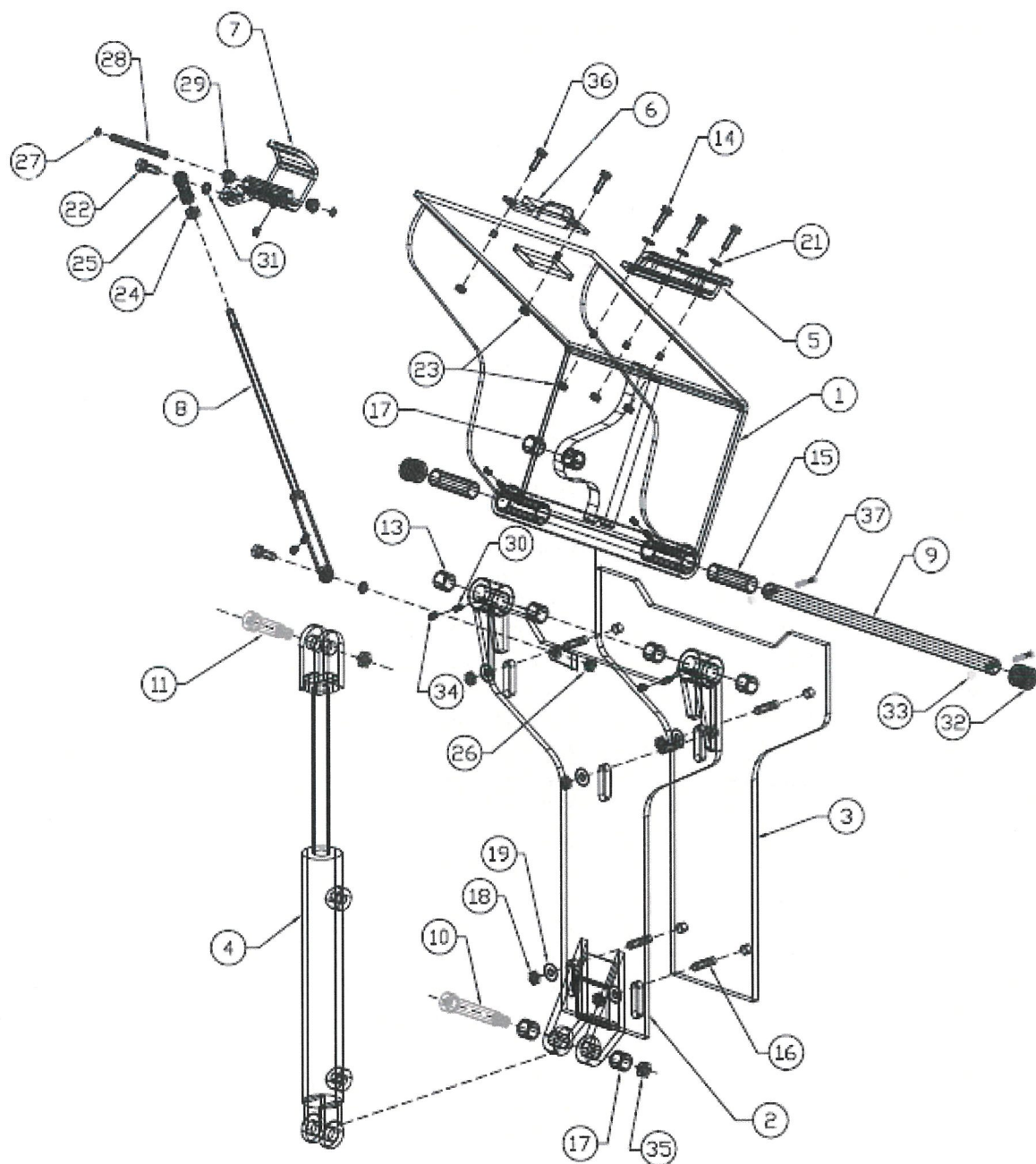


Perkins Manufacturing Company
Creators of the TuckAway® Cart Lifter

800-882-5292
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Exploded View



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Parts Key

Item#	Part#	Description	QTY.
1	D66051	FACEPLATE WELD	1
2	D66010	MTG PLATE WELD	1
3	D67235	PLATE MTG REAR	1
4	D66030	CYLINDER WELD	1
5	D65255P	PLASTIC UPPER HOOK REV A	1
6	D75043	LWR STOP-WELD	1
7	D65805	LOWER LATCH WELD H.D.	1
8	D66057	PLUNGER 20 13/32" LONG	1
9	D66126	SHAFT-MAIN PIVOT	1
10	D72231	Shoulder Bolt 1 x 4.5	1
11	GC3483	Shoulder Bolt 1 x 2.5	1
12		N/A	
13	D66021	Steel Bushing	4
14	D62085	BOLT HHCS 3/8-16 X 1 3/4	3
15	D63206	Brass Bushing	2
16	D62448	STUD 5/8-11 X 2 LG	5
17	D66013	Steel Bushing	3
18	D62001	LOCKNUT 5/8-11	5
19	D62467	FLATWASHER STD 5/8"	5
20	D62008	SAE Flatwasher 1/2 Zinc Plate	3
21	D62060	Flatwasher 3/8 ID x 13/16 OD x 1/8	3
22	D62073	BOLT BHCS 1/2-13 X 2 GR8	2
23	D62080	LOCK NUT 3/8-16	5
24	D62009	THIN JAM NUT 1/2-20	1
25	D63019	BEARING ROD EYE	1
26	D62081	LOCKNUT 1/2-13	2
27	D72003	5/8" Snap ring	2
28	D75115	PIN LATCH (REV H)	1
29	D78814	Bearing	2
30	D62014	STRAIGHT GREASE ZERK 1/8"	5
31	D62008	SAE FLATWASHER 1/2"	2
32	D72103	FLATWASHER 1 1/4"	8
33	D62030	Locknut 5/16-18 grade 8	2
34	D63029	PLASTIC GREASE ZERK CAP	5
35	D72132	Locknut 3/4-10 zinc plate grade 8	2
36	D62420	FHCS 3/8-16 x 1 1/2 grade 8	2
37	D72247	HHCS 5/16-18 x 2	2



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.

OSHA 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.

Large Safety Label # D62474

Small English Label # D72114

Small Spanish Label # D72115

ATTENTION
TO MAINTAIN WARRANTY ON DUMPER:
LUBRICATE WEEKLY
OPERATE IN AN 6-8 SEC. CYCLE.

CAUTION

STAND CLEAR WHILE OPERATING
NEVER OPERATE DUMPER TO FULL UP POSITION
WHILE BLADE IS IN DOWN MOTION.

CALL (800) 882-5292 PERKINS MFG. ROMEOVILLE, IL. PART # D72114

DO NOT PAINT OVER THIS LABEL / NO PINTAR ENCIMA DE ESTA ETIQUETA

**THIS EQUIPMENT IS RATED FOR 3,000 PSI MAX.
RECOMMENDED PRESSURE SETTINGS CAN BE
FOUND IN THE INSTRUCTION MANUAL.**

400 LB MAX LOAD RATING

EL EQUIP TIENE UNA CAPACIDAD NOMINAL MAXIMA DE 3000 PSI
PARA SABER CUAL ES LA REGULACION DE PRESION RECOMENDADA,
CONSULTE EL MANUAL DE INSTRUCCIONES.

CAPACIDAD DE CARGA MAXIMA 400 LB

CAUTION
STAY CLEAR DURING OPERATION

PRECAUCION
**MANTENASE ALEJADO CUANDO
ESTA EN FUNCIONAMIENTO**

NOTE
RUNNING THE LIFTER TOO FAST, OVERLOADING THE LIFTER,
COLLISIONS WITH THE LIFTER, MODIFYING THE LIFTER,
OR NEGLECTING TO MAINTAIN THE LIFTER

VOIDS THE WARRANTY

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WWW.PERKINSMFG.COM

ATENCION
PARA MANTENER LA GARANTIA DE EL LEVANTADOR:
LUBRIQUE SEMANALMENTE
OPERE ENTRE 6-8 SEG. POR CYCLO

PRECAUCION

MANTENGASE ALEJADO MIENTRAS ESTA EN
FUNCIONAMIENTO NUNCA OPERE EL LEVANTADOR
HACIA ARRIBA CUANDO LA PLACA EMPACADORA
ESTA ABAJO Ó BAJANDO

CALL (708) 482-9500 PERKINS MFG. ROMEOVILLE, IL. PART # D72115



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