

ACCESSORIES | **Perkins** | AUTOMATED SYSTEMS | HYDRAULIC LIFTERS | INDUSTRIAL LIFTERS | ACCESSORIES

D6237 Instruction Manual

Route tested. Driver approved.



Model D6237 American Low Mount Lifter

Specifications subject to change without notice

Check out our website!

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Perkins Manufacturing Company
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An ISO 9001:2000 Company

(HYDRAULICS SOLD SEPARATELY)



**FLOW DIVERTER
VALVE
PART # D63237S**



**P.O. CHECK
VALVE
PART # D63580**



**DUAL FLOW
DIVERTER VALVE
PART # D63411S**



**ADJUSTABLE
FLOW CONTROL
PART # D63575**



**4-WAY
DIRECTIONAL
HAND CONTROL
PART # D63228**



**AEROQUIP
HYDRAULIC
HOSES**



**FLOW DIVERTER
WITH PRESSURE
RELIEF VALVE
PART # D63471**



**HOSE
CLAMP
PART # D63014**

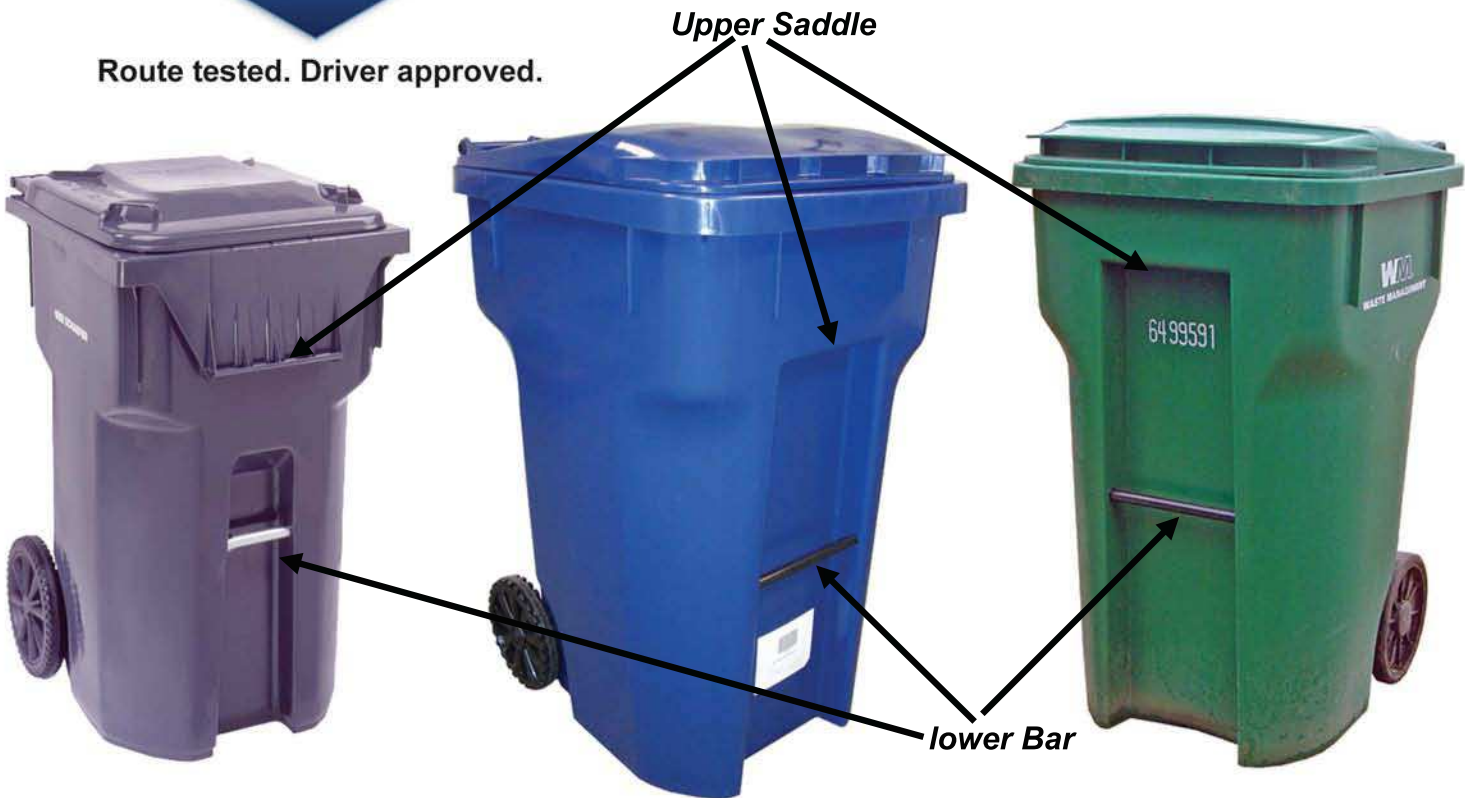


**SPLITTER
VALVE
PART # D63595**

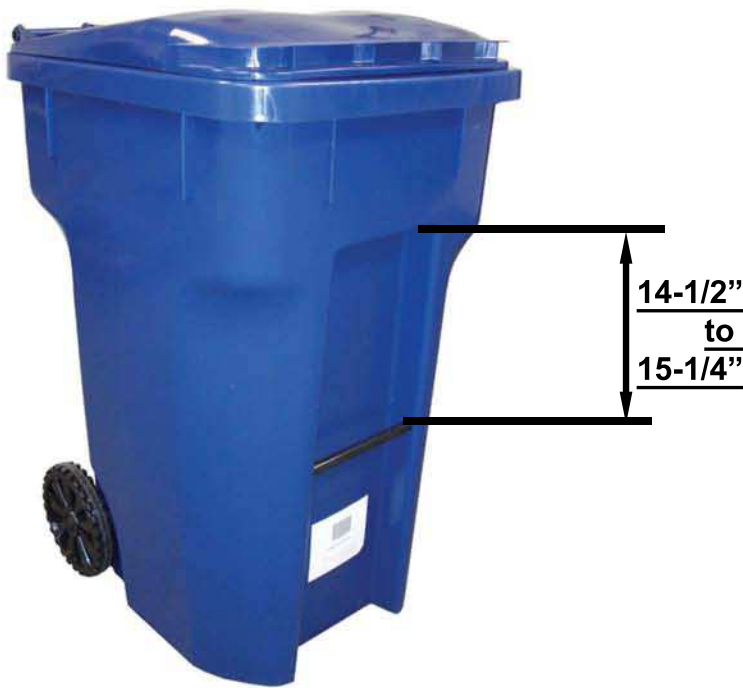


**ASSORTED
FITTINGS**

Route tested. Driver approved.

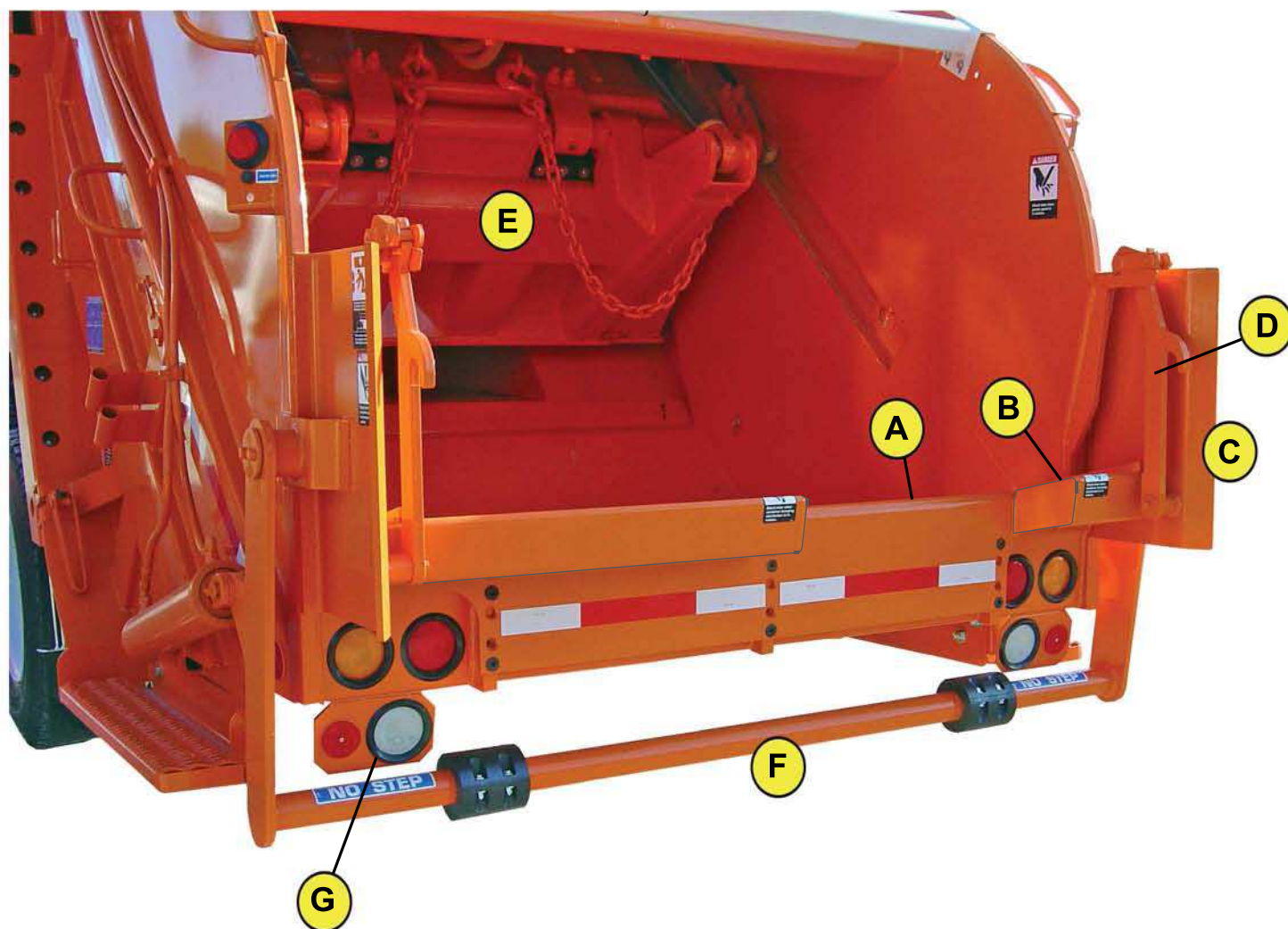


ANSI Type B American Carts





Truck Component Glossary



- A ORIGINAL SILL / MOUNTING HEIGHT
- B SILL EXTENSION / BUMPER
- C ELEPHANT EAR
- D CONTAINER LOCKS
- E PACKER BLADE
- F KICK BAR / TIPPER BAR
- G LIGHT PANEL

Installation Preparation & Safety

- 1) PLEASE READ THIS MANUAL COMPLETELY AND FAMILIARIZE YOURSELF WITH ALL THE NECESSARY PROCEDURES. CONTACT PERKINS MANUFACTURING IF AT ANY TIME THERE IS A QUESTION.
- 2) CORRECT INSTALLATION DIMENSIONS DEPEND ON AN EMPTY TRUCK, PARKED ON A SMOOTH AND LEVEL SURFACE.
- 3) REMOVE ANY FLAMMABLE MATERIALS FROM THE WORK AREA AND HOPPER.
- 4) DO NOT WELD ON THE TRUCK UNLESS THE GROUND IS IN PLACE AND THE BATTERY IS DISCONNECTED.
- 5) LIFTING THE MACHINE WITHOUT THE USE OF ADECUATE EQUIPMENT MAY HURT YOUR BACK. ALWAYS USE A HOIST TO LIFT AND SECURE THE LIFTERS INTO PLACE.
- 6) DURING INSTALLATION, SECURE THE LIFTER WITH A CHAIN TO PREVENT ACCIDENTS.
- 7) TURN THE TRUCK OFF AND DEPRESSURIZE THE HYDRAULIC LINES BEFORE LOOSENING ANY FITTINGS OR HOSES.
- 8) ALWAYS USE APPROPRIATE PERSONAL SAFETY GEAR.



INSTALLERS NOTE: IT IS NOT RECOMMENDED TO INSTALL A LIFTER ONTO A TAILGATE THAT IS NOT ALREADY MOUNTED TO A CHASSIS. THIS CAN LEAD TO LIFTERS MOUNTED TOO LOW OR TOO HIGH, DUE TO CHASSIS HEIGHT VARIATIONS.



INSTALLERS NOTE: THE REAR MOUNTING PLATE IS INCLUDED WITH EVERY LIFTER AND IS ATTACHED TO THE LIFTER FOR SHIPPING PURPOSES. REMOVE THE REAR PLATE TO INSTALL IT TO THE TRUCK.



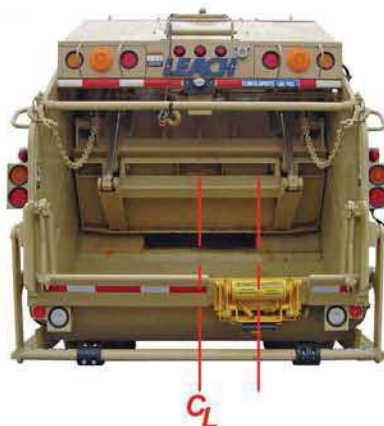
INSTALLERS NOTE: YOUR LIFTER WILL COME WITH ADJUSTABLE VALVE ATTACHED ALL OTHER HYDRAULICS ARE SOLD SEPARATELY.

Rearload Configurations

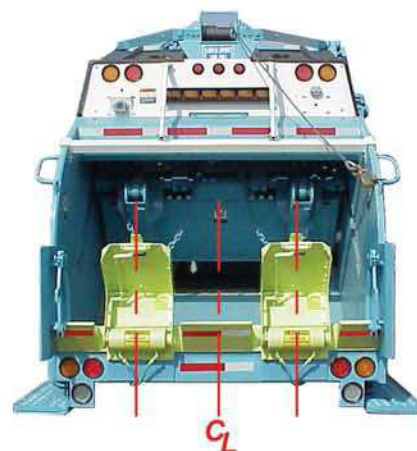
Route tested. Driver approved.
CENTER MOUNT



OFFSET MOUNT



DOUBLE MOUNT



LIFTERS ARE SPACED 17 1/2" OFF CENTERLINE OF TRUCK



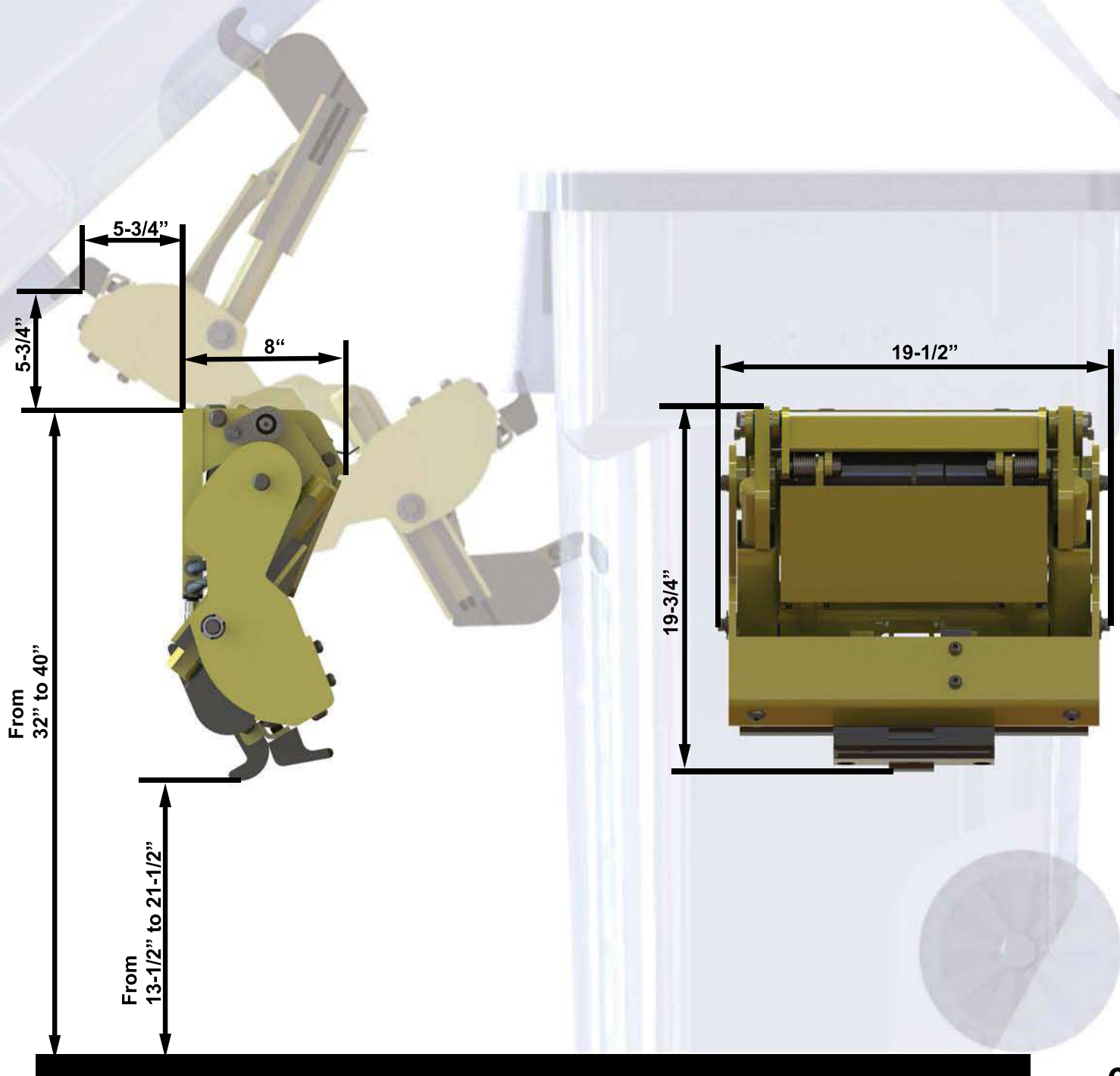
INSTALLERS NOTE: AT LEFT IS A D6226 ADAPTABLE LIFTER. THE ADAPTABLE IS NECESSARY IN THE INSTALLATION AT LEFT BECAUSE THE HOPPER WALL & LIGHT BAR HANG DOWN IN EXCESS OF 12". THE ADAPTABLE CAN HUG TIGHTLY UP AGAINST A HOPPER WALL WHERE A STANDARD TUCKAWAY CANNOT BE USED. THIS WILL BE THE SAME CASE OF THE D6237 WITH THE EXCEPTION THAT D6237 CAN BE MOUNTED ON BOTH ILLUSTRATED SCENARIOS.



Mounting & Over All Dimensions

Route tested. Driver approved.

Lifter Weight 190 Lbs.



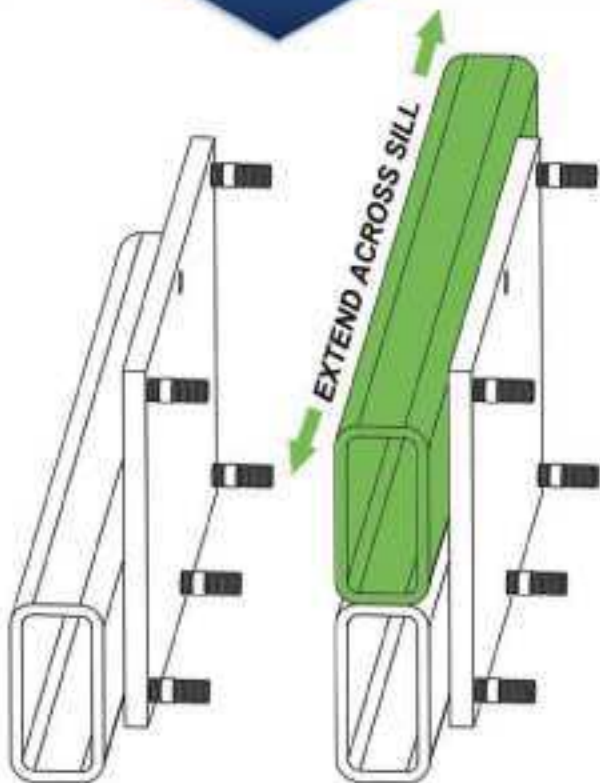
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Welding the Rear Mounting Plate



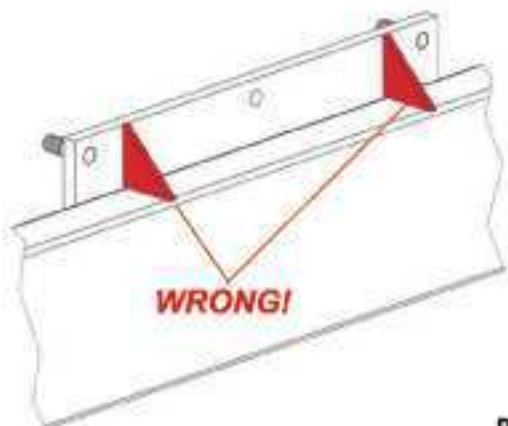
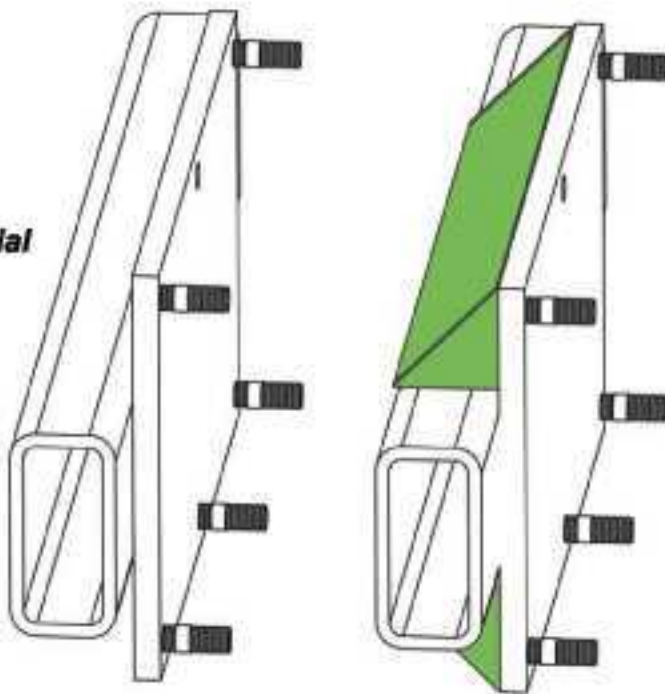
The Rear Mounting Plate of all lifters must be completely supported around all edges of the plate.

Unsupported plates will lead to premature lifter failure.

In the example at left, the mounting plate is well above the original height of the sill. A steel tube of appropriate size is cut and placed on top of the sill, extending it up and meeting with the top edge of the mounting plate. This additional piece would extend across the entire length of the hopper sill. Weld fully, leaving no portion of the mounting plate hanging above or below the original sill without support

In the example at right, the mounting plate is shown to be slightly above (or slightly below) the sill edge. In this case, add a strip of material and endcaps to the exposed mounting plate rear and weld fully.

Installations will vary from truck to truck. Custom cut pieces will likely be required to properly support the mounting plate.



The drawing at left is an example of inadequate support. The gussets will not help add rigidity to the mounting plate and the mounting plate will deform over time, leading to premature lifter failure. Never leave any portion of the mounting plate hanging without proper backing material.

STEP 1

FIND A SUITABLE LOCATION FOR THE HAND VALVE BRACKET. THE VALVE SHOULD BE LOCATED TO PREVENT ACCIDENTAL ACTIVATION, WITHIN ARMS REACH OF THE LIFTER AND AT A COMFORTABLE HEIGHT. MAKE SURE THAT IF YOU ARE USING THE HOSES PROVIDED IN THE TAP-IN KIT THAT THEY WILL REACH BOTH LIFTER AND DIVERTER VALVE FROM THIS LOCATION. TACK WELD HAND VALVE BRACKET IN PLACE.



HAND VALVE CONTROL



STEP 2

RUN THE HYDRAULIC HOSES ALONG THE TAILGATE AND HOPPER UNDERBELLY, MARK SUITABLE LOCATIONS FOR THE HOSE CLAMPS. TACK WELD THESE IN PLACE.



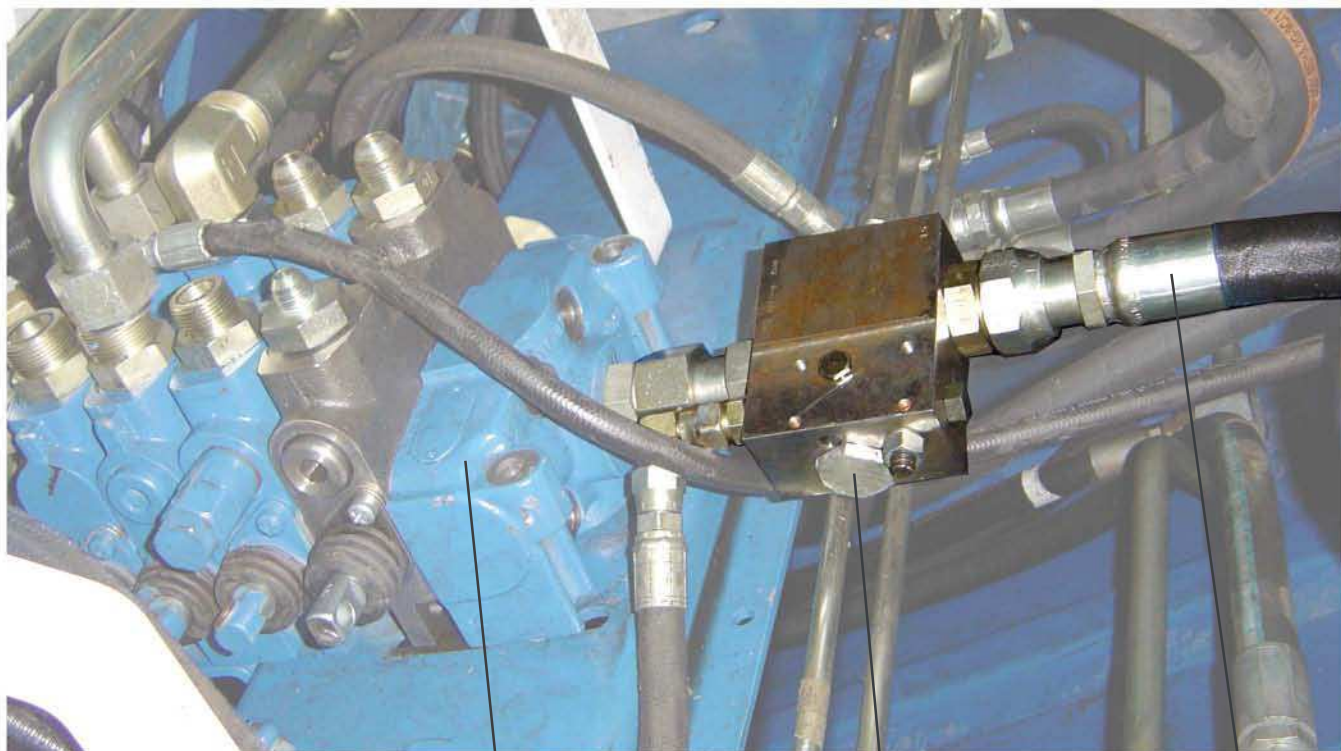
INSTALLER'S NOTE: RUN THE HOSES SO THEY CAN BE PROTECTED AS MUCH AS POSSIBLE FROM CASUAL ABRASION. HOSES SHOULD HAVE MINIMAL MOVEMENT AND NOT REST ON ANY SHARP EDGES.

STEP 3

ATTACH TWO HOSES FROM BOTTOM OF LIFTER TO HAND VALVE. PORT "A" AND PORT "B" ANY ORDER, IF DIRECTION IS NOT ADECUATE REVERSE CONNECTIONS



Hydraulic Installation



**PACKER BLADE
CONTROL VALVE**

DIVERTER VALVE

PRESSURE LINE

STEP 4

LOCATE THE PACKER CONTROL VALVE ON THE TOP OF THE TAILGATE. (SEE PICTURE) DISCONNECT THE PRESSURE LINE THAT FEEDS THE PACKER VALVE AND ATTACH IT TO THE PERKINS DIVERTER VALVE'S "IN" PORT. ATTACH THE "OUT" PORT BACK TO THE PACKER BLADE CONTROL VALVE.

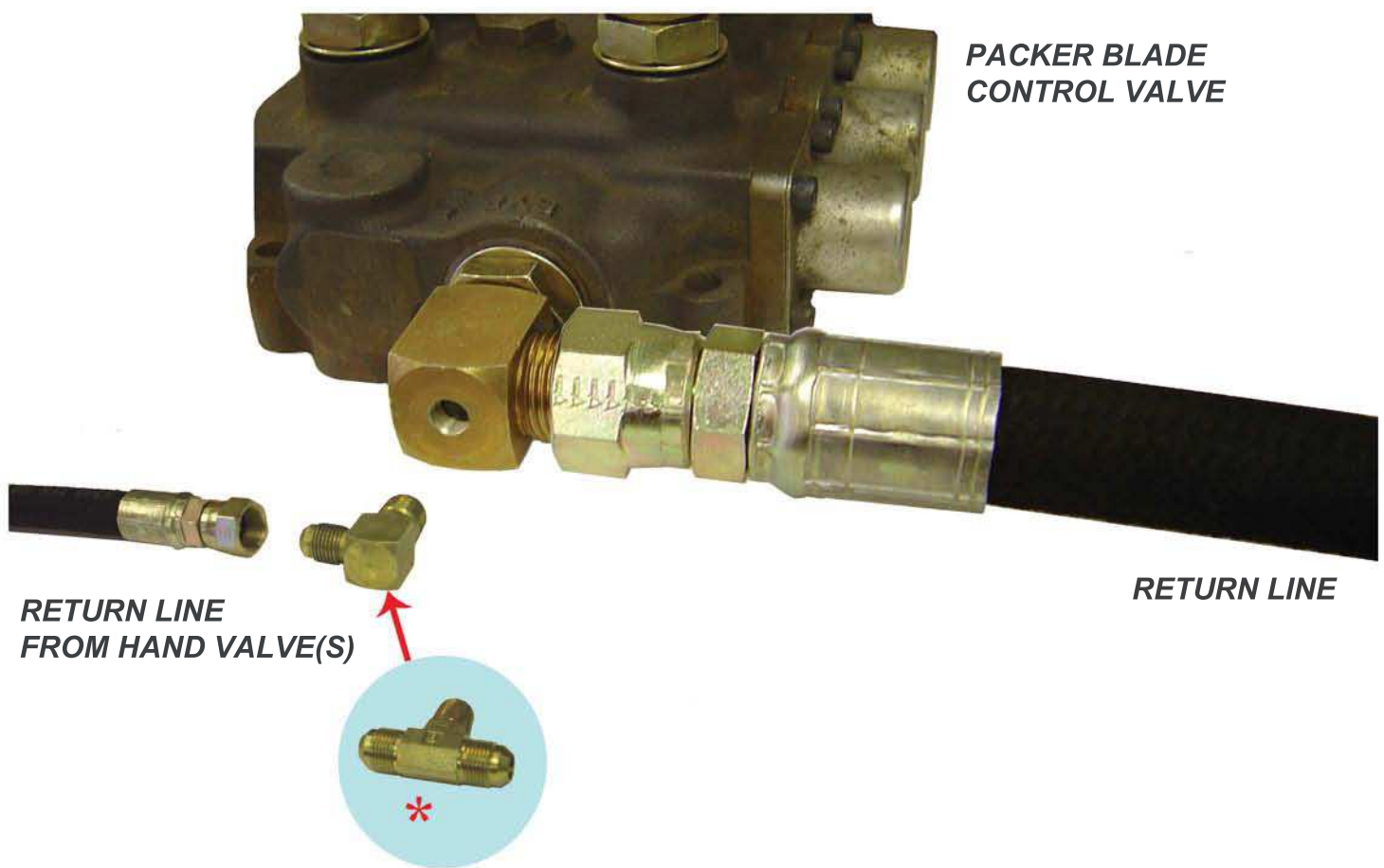
STEP 5

ATTACH THE PRESSURE LINE (S) THAT WILL FEED THE LIFTER. IF YOU ARE INSTALLING TWO LIFTERS, THE DIVERTER VALVE WILL HAVE A 50/50 SPLITTER MOUNTED ON TOP OF IT. FOR ONE LIFTER, USE PORT "P" OF DIVERTER VALVE TO HAND VALVE "IN" PORT. FOR TWO LIFTERS, PORT "P" IS PLUGGED. INSTEAD USE PORTS "1" & "2" ON THE ATTACHED 50/50 SPLITTER.



STEP 6 (OPTION A) ** PREFERRED METHOD OF OIL RETURN **

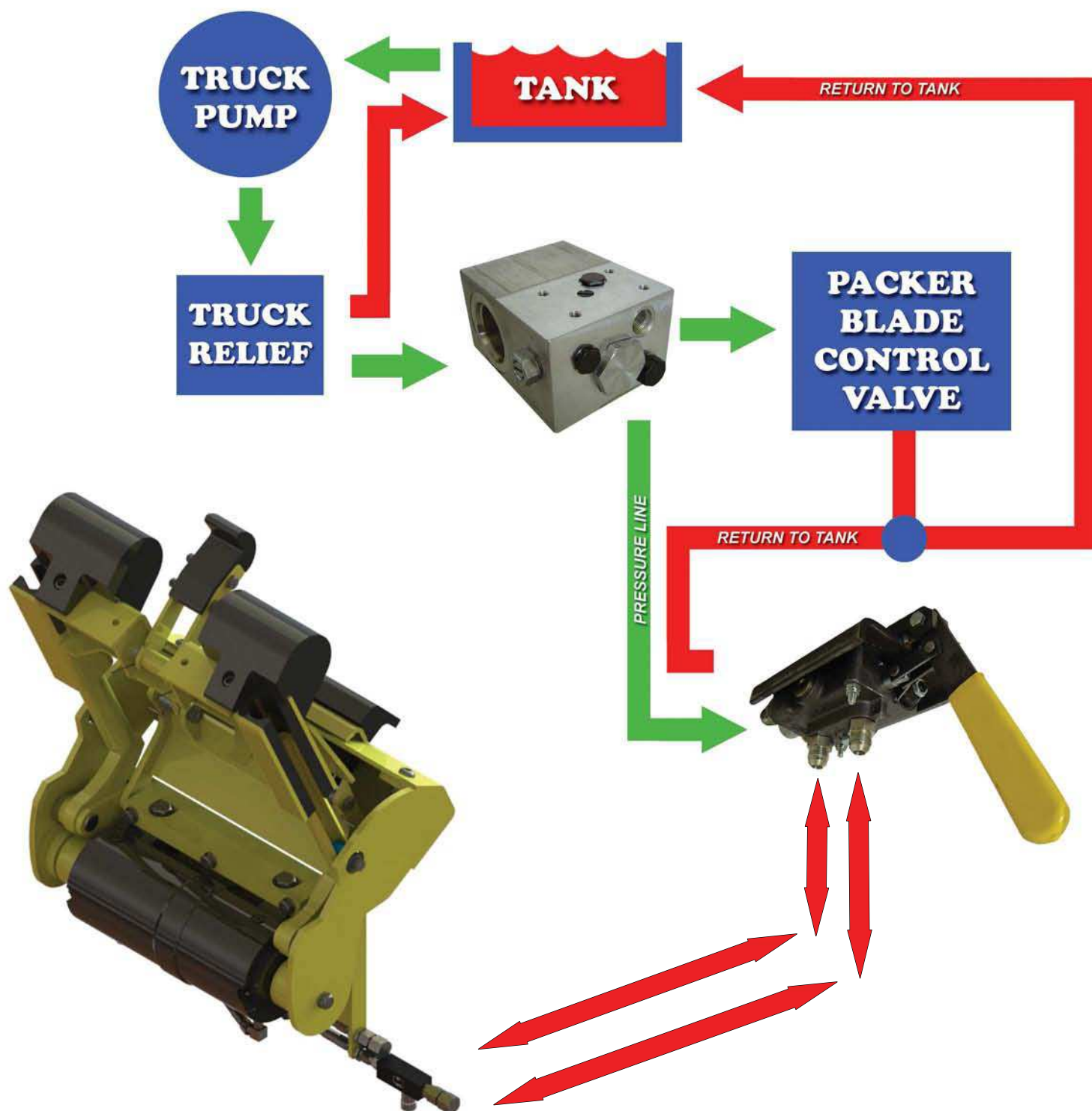
RUN THE RETURN LINE FROM THE HAND VALVE (S) (OUT" PORT (S) UP TO THE PACKER BLADE CONTROL VALVE. LOCATE THE PACKER BLADE CONTROL VALVE'S RETURN TO TANK LINE. SELECT A LARGE FITTING ON THE RETURN LINE AND DRILL AND TAP INTO IT'S BODY FOR 3/8 NPT INSTALL A ELBOW OR TEE TO ATTACH THE RETURN LINES.



STEP 6 (OPTION B) **ALTERNATE METHOD **

RUN THE RETURN LINE FROM THE HAND VALVE (S) (OUT" PORTS UP TO THE DIVERTER VALVE AND CONNECT TO THE "R" RETURN PORT. THIS OPTION ALLOWS THE OIL TO BE RETURNED TO THE PACKER BLADE, KEEPING THE BLADE SPEED THE SAME AS IT WOULD BE WITHOUT THE DIVERTER VALVE, BUT AT THE EXPENSE OF A SLIGHT INCREASE IN OPERATING TEMPERATURE/BACK PRESSURE.

1. Determine lifter configuration: either dual or single lifter and if is single customer preference location, curb side or street side or any other custom location.
1. Mark the center of the hoper.
2. Remove the mounting plates from the machine by removing the 6 bolts.
3. Measure the heigth of the hoper and add extension heavy duty material to it if is under the specified height, in some cases the extension material may be necesary under the sill. This extension material is necessary to weld the mounting plates all around to the hoper (as is shown in page 7).
4. From center line, dimension your lifter position, commonly used 17-1/2" to center of lifters at either side when offside mounting or in the case when center mount your center line will be the center of the lifter (as shown in page 5), mark the center of the lifters and line up lifters on the truck, level the unit and tack weld, review your dimensions and levels and correct it if is necessary, weld the plates all around.
5. Weld the hand valve bracket to the side of the truck in a comfortable position to the opeartor, hand valve must be with in the reach of operator in a way that operator can properly monitor function of the unit
6. Connect "A" port of hand valve to one port of the unit and port "B" to the second port.
7. Connect a hose from port marqued as "out" on the hand valve to the return hose of the truck system (see hyd. inst. page) by using an adapter. Drill and thread the ftg. in some cases return line has to go all the way back to the tank.
8. Relief any oil pressure from the truck's system and unplug hose from port "in" on packer valve, connect diverter valve to packer blade valve. (see hydraulics instalation page)
9. Connect a hose from "P" port of diverter valve to "IN" port on hand valve.
10. Weld hose clamps to the side and under of the hoper in a way that hoses are not in the way of anything and keeping a good looking of the truck.
11. Grease the lifter before moving or during the first movements to ensure proper lubrication.
12. Test the lifter with an empty cart to to make sure proper operation and to make the necesary hydraulic adjustments. (see page for hydarulic adjusments)
13. if the lifter works properly finalize welding and instalation.
14. Test the unit speed with the use of a cronometer. (The packer blade will probably slows down by 3 to 5 sec.)



Hydraulic Parts Kit (Sold Separate)

Perkins

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LOADMASTER
EZ-PACK
DEMPSTER
PAK-MOR
MCNEILUS

LEACH

HEIL/NUWAY

	SINGLE - OFFSET KIT # D60311 / (-2R3)	DOUBLE INSTALL KIT # D60321 / (-2R3)	SINGLE - CENTER KIT # D60393 / (-2R3)	SINGLE - OFFSET KIT # D60312	DOUBLE INSTALL KIT # D60322	SINGLE - CENTER KIT # D60394	SINGLE - OFFSET KIT # D60313	DOUBLE INSTALL KIT # D60323	SINGLE - CENTER KIT # D60395
1 D63236		1			1			1	
2 D63237S	1	1	1	1	1	1	1	1	1
3 D63606	1	1	1				1	1	1
3a D63292	1	1	1				1	1	1
4 D63044	1	1	1				1	1	1
4a D63291	1	1	1				1	1	1
5 D63429				2	2	2			
6 D63591	1	2	1	1	2	1	1	2	1
7 D63580	1	2	1	1	2	1	1	2	1
8 D63639	2	4	2	2	4	2	2	4	2
9 D63430	2	4	2	2	4	2	2	4	2
10 D63490				1	1	1			
11 D63051							1	1	1
12 D63489				1	1	1			
13 D63550	1		1	1		1	1		1
14 D63416		1			1			1	
15 D63635	1	1	1	1	1	1	1	1	1
16 D63074		1			1			1	
17 D63431		1			1			1	
18 D63014	5	10	5	5	10	5	5	10	5
19 D63535	2	4	2	2	4	2	2	4	2
20 D63760			2			2			2
21 D63534	2	4		2	4		2	4	
22 D62460	1	2	1	1	2	1	1	2	1
23 D62063	5	10	5	5	10	5	5	10	5

TEST THE LIFTER WITH THE FULL VARIETY OF CARTS YOU EXPECT TO USE WITH THIS TRUCK. MAKE SURE THEY ALL WORK AS INTENDED.

WHEN SATISFIED, WELD FULLY ALL NECESSARY LOCATIONS AROUND CONTAINER LOCKS, BUMPER EXTENSIONS, LIFTER MOUNTING PLATE, HOSE CLAMPS, BRACKETS AND SUPPORT PIECES.

WHEN PAINTING, MASK CAUTION LABELS SO THEY WILL BE VISIBLE AFTERWARDS. ADDITIONAL CAUTION LABELS ARE AVAILABLE BY CALLING CUSTOMER SERVICE.

REINSTALL BATTERY TERMINAL CONNECTION AFTER ALL NECESSARY WELDING IS COMPLETE.

TIGHTEN ALL HYDRAULICS AND CHECK FOR LEAKS.



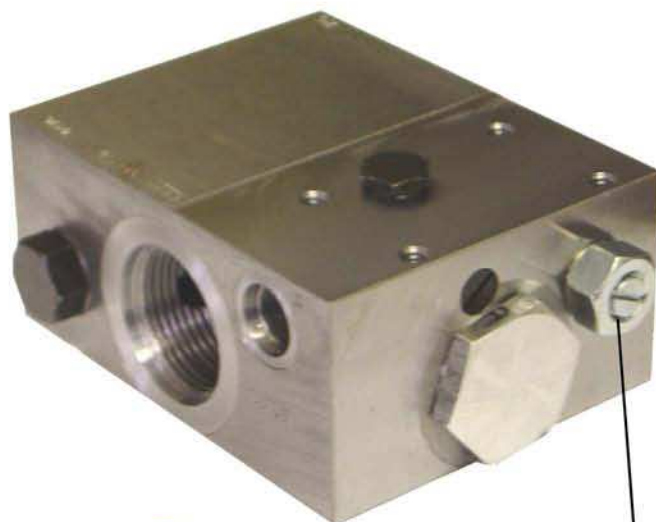
INSTALLER'S NOTE: NEVER CHECK FOR HYDRAULIC LEAKS WITH YOUR BARE HANDS. A PIN-HOLE LEAK CAN BE PRESSURIZED ENOUGH TO PIERCE THE SKIN AND CAUSE INFECTION / INJURY.

OPERATE THE LIFTER. IT'S MOVEMENT WILL BE ERATIC THE FIRST FEW CYCLES BECAUSE OF AIR IN THE SYSTEM. CONTINUOUS BACK AND FORTH CYCLING SHOULD CLEAR THE LAST OF THE BUBBLES AFTER A DOZEN CYCLES.

AFTER THE AIR IS PURGED, IT IS TIME TO ADJUST THE HYDRAULIC VALVES.

Adjusting the Hydraulics

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



DIVERTER VALVE - FLOW CONTROL #D63237S

OPEN THE ADJUSTABLE FLOW CONTROL, COMPLETELY. LOOSEN THE LOCKING NUT ON THE DIVERTER. USING A SCREWDRIVER, TURN THE ADJUSTMENT SCREW CLOCKWISE UNTIL FLOW TO THE LIFTER STOPS. THEN SLOWLY TURN COUNTER-CLOCKWISE 1/2 TURN AT A TIME UNTIL FLOW IS APPROX. 3 GPM PER LIFTER, OR THE LIFTERS HAVE A COMPLETE CYCLE TIME OF 6-10 SECONDS. RE-TIGHTEN THE LOCKING NUT.

SEAL KIT #D63477
ADJUSTABLE SCREW #D63565



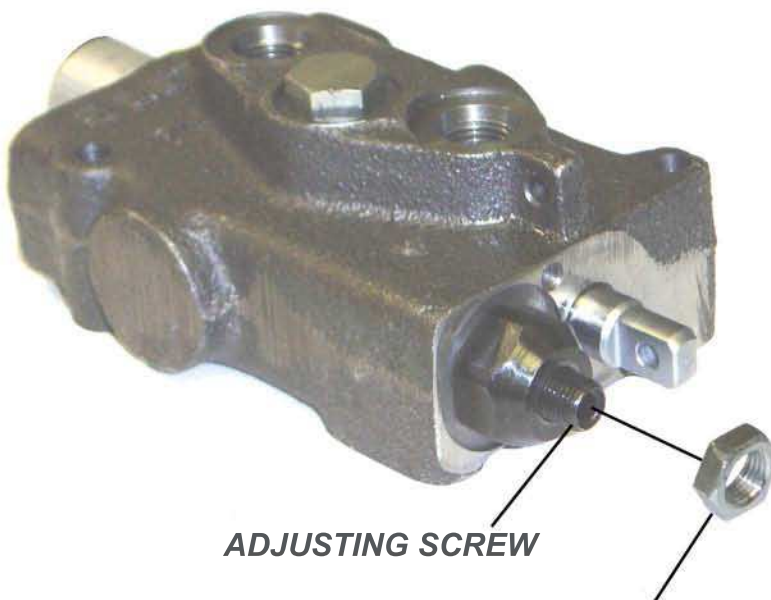
ADJUSTMENT SCREW

FLOW=LIFTER SPEED. ADJUST WITH DIVERTER VALVE
PRESSURE = LIFTING POWER. ADJUST WITH HAND VALVE

HAND VALVE'S BUILT-IN RELIEF #D63228

LOOSEN THE LOCKING NUT. TURN THE ADJUSTING SCREW CLOCKWISE TO INCREASE THE PRESSURE, LIMITED BY THE TRUCK'S MAIN RELIEF SETTING. THE RELIEF SHOULD BE SET TO ALLOW THE LIFTER TO DUMP A 350LB LOAD. THE ACTUAL PSI REQUIRED WILL VARY FROM MODEL TO MODEL. THE HAND VALVE'S RELIEF MUST BE SET AT LEAST 100 PSI LESS THAN THE TRUCK'S MAIN RELIEF OR THEY MAY "CHATTER". RE-TIGHTEN THE LOCKING NUT.

SEAL KIT #D63127
SPRING KIT #D63192
CARTRIDGE KIT#D63672



ADJUSTING SCREW

LOCKING NUT

15

START THE ENGINE AND ACTIVATE THE PUMP.

ROLL A CART TO THE LIFTER, PLACING IT SO THE UPPER HOOK WILL GRASP THE TOP BAR / POCKET OF THE CART.

PULL HANDLE OF HAND VALVE TO RAISE AND DUMP CART.

ONCE WASTE IS DUMPED, REVERSE THE HANDLE TO RETURN THE CART TO THE GROUND.

REPLACE THE EMPTY CART WITH A LOADED CART AND REPEAT.



OPERATOR'S NOTE: GIVING THE CART A SHAKE BACK AND FORTH IS A COMMON WAY TO HELP GET ALL THE GARBAGE OUT. IT IS ALSO A COMMON WAY TO CAUSE DAMAGE TO THE CART IF DONE EXCESSIVELY. SHAKING A DAMAGED CART CAN CAUSE IT TO FALL OR BE THROWN. USE CAUTION AND COMMON SENSE.



OPERATOR'S NOTE: THE MOST COMMON WAY TO DAMAGE YOUR CART INVESTMENT IS TO RUN THE LIFTERS TO FAST. MAINTAIN THE LIFTER CYCLE OF 8-12 SECONDS. USE LOCK-OUT PROCEDURES TO PREVENT IN-FIELD ADJUSTMENTS.



OPERATOR'S NOTE: OVER-LOADED CARTS, BROKEN CARTS, CARTS NOT WITHIN ANSI STANDARD, AND BULK ITEMS SHOULD NOT BE LIFTED WITH THE CART LIFTER.

Safety Procedures



ALWAYS KEEP YOUR HANDS AND BODY AWAY FROM THE LIFTER WHILE IT IS IN OPERATION.



NEVER REACH INTO THE HOPPER WHILE LIFTER IS IN OPERATION.



MAKE SURE ALL PERSONS ARE CLEAR OF LIFTER BEFORE AND DURING OPERATION.



DO NOT LIFT BROKEN CARTS OR BULK ITEMS WITH THE LIFTER.



DO NOT OPERATE THE LIFTER FASTER THAN 8 SECONDS PER CYCLE.



DO NOT LIFT OVER-LOADED CARTS. THEY CAN BREAK AND FALL OR BE THROWN/DROPPED AFTER BREAKING.



DO NOT LIFT CARTS THAT ARE NOT MEANT FOR THIS LIFTER.



DO NOT PERFORM MAINTANANCE ON THE LIFTER UNLESS IT IS PROPERLY SECURED WITH A CHAIN



INSPECT THE LIFTER DAILY BEFORE USE, FOR ANYTHING OBVIOUSLY IN NEED OF REPAIR OR UNSAFE.

WASHING

A SIMPLE AND QUICK POWER-WASH WILL REMOVE FILTH & GRIME FROM THE LIFTER'S CRITICAL COMPONENTS, MAKING THEM LAST LONGER AND MAKING INSPECTION FOR DAMAGES EASIER.

LUBRICATION

PROPER GREASING OF THE LIFTER IS IMPORTANT. CHECK THE LIFTERS WEEKLY AND GREASE AS NECESSARY ANY PIVOT OR SLIDE POINTS THAT DO NOT MOVE SMOOTHLY. SOME NEWER MACHINES HAVE FIBERGLIDE BEARINGS THAT DO NOT REQUIRE GREASE. YOUR LOCAL WEATHER CONDITIONS WILL VARY THE FREQUENCY OF YOUR NECESSARY GREASING.

BEARINGS

THE LIFTER SHOULD MOVE FREELY, BUT SNUGLY. ANY PLAY OR LOOSENESS INDICATES BEARING WEAR. BEARINGS THAT ARE WORN OR SCARRED SHOULD BE REPLACED IMMEDIATELY.

LIFTER COMPONENTS

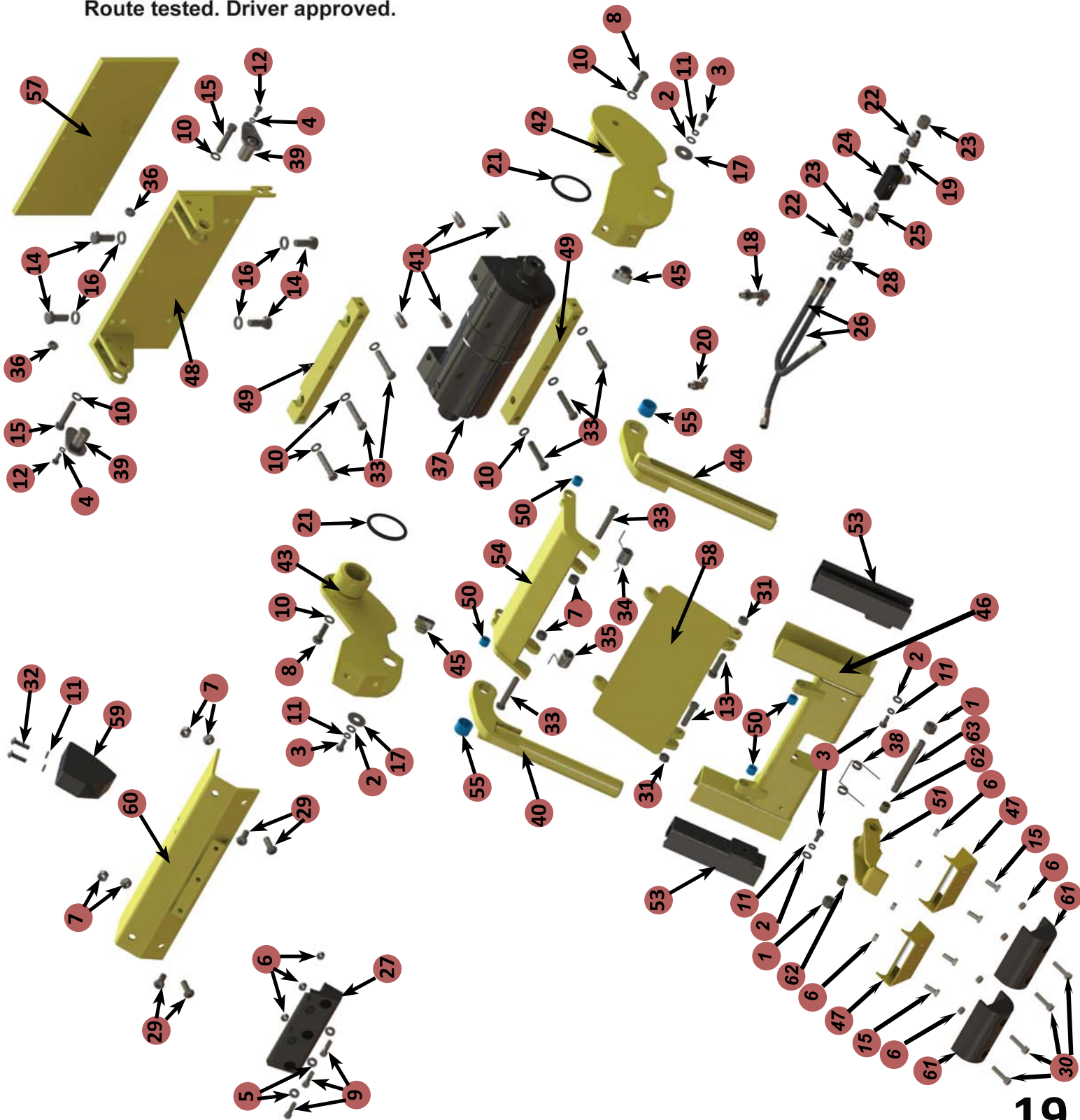
USE THE WEEKLY GREASING AS A TIME TO PERFORM A SPOT CHECK OF THE PARTS ON THE LIFTER, ENSURING NOTHING IS BENT OR SHOWING FATIGUE. A DAMAGED LIFTER MAY STILL DUMP CARTS, BUT IT MAY DAMAGE THEM TOO. PROTECT YOUR CARTS BY KEEPING YOUR LIFTERS IN GOOD CONDITION.

HYDRAULIC COMPONENTS

INSPECT ALL HOSES AND REPLACE ANY THAT ARE WORN OR FRAYED. LOOK FOR SIGNS OF LEAKS AND TIGHTEN THE APPROPRIATE FITTINGS. LIFTERS THAT DRIFT WHEN NOT IN USE MAY NEED A NEW SEAL KIT FOR THE ACTUATOR, OR HAND VALVE. DON'T FORGET TO BLEED THE AIR AFTER ANY HYDRAULIC WORK.



Route tested. Driver approved.



Route tested. Driver approved.

ITEM	Part#	Description	Qty.
1	D62001	LOCKNUT 5/8-11	2
2	D62004	FLATWASHER 3/8"	4
3	D62043	BOLT HHCS 3/8-16 X 3/4	4
4	D62053	SPLIT LOCKWASHER 5/16"	2
5	D62060	WASHER 3/8ID x 13/16OD X 1/8	3
6	D62080	LOCKNUT 3/8-16	7
7	D62081	LOCKNUT 1/2-13	6
8	D62082	BOLT HHCS 1/2-13 X 1 1/2	2
9	D62085	BOLT HHCS 3/8-16 x 1 3/4	3
10	D62105	SPLIT LOCKWASHER 1/2"	10
11	D62106	SPLIT LOCKWASHER 3/8"	6
12	D62113	BOLT HHCS 5/16-18 X 3/4	2
13	D62405	BOLT HHCS 1/2-13 X 2,	2
14	D62410	BOLT HHCS 5/8-11 X 1 1/2	4
15	D62079	BOLT HHCS 3/8-16 x 1" LG	
16	D62458	SPLIT LOCKWASHER 5/8"	4
17	D62484	USS FLATWASHER 1/2"	2
18	D63015	Elbow 90 #6MT - #6MO long	1
19	D63074	ADAPTER #6MT-#6MO	1
20	D63147	ELBOW 45 6MT-6MO	1
21	D63238-9	External O' Ring Seal	2
22	D63431	REDUCER #6FT-#8MT	2
23	D63562	CAP #8 JIC	2
24	D63575	VALVE FLOW CONTROL	1
25	D63597	ADAPTER #6MO-#6FT	1
26	D63744	Hose assembly #4 x 15"	2
27	D65255P	PLASTIC UPPER HOOK	1
28	D68081	BULKHEAD ADAPTER #6MT-#6MT	2
29	D72021	BOLT BHCS 1/2-13 X 1 1/4	4
30	D72023	BOLT SHCS 3/8-16 X 1 1/2	4
31	D72030	NYLOCK LOCKNUT THIN 1/2-13	4
32	D72033	BOLT BHCS 3/8-16 X 1 1/4	2



D6237 Parts Key

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Route tested. Driver approved.

ITEM	Part#	Description	Qty.
33	D72042	BOLT HHCS 1/2-13 X 2 1/2	8
34	D72049	TORSION SPRING L.H.	1
35	D72050	TORSION SPRING R.H	1
36	D72075	JAM NUT 1/2-13	2
37	D73060	27k Helical Actuator	1
38	D76677	SPRING- LATCH	1
39	D77130	PIN FASTENER WELDMENT	2
40	D77213	RH Pin Weldment	1
41	D77216	Dowel Pin	4
42	D77217	Driver Weld LH	1
43	D77219	Driver Weld RH	1
44	D77222	LH Pin Weldment	1
45	D77274	Brass Swivel Pin	2
46	D77231	Slide Weldment	1
47	D77270	Bumper Bracket	2
48	D77235	Mounting Plate Weld	1
49	D77237	Mounting Bar	2
50	D77240	Plastic Bushing Small	4
51	D77275	Latch Weldment	1
52			
53	D77245	Slide Plastic	2
54	D77246	Link weldment	1
55	D77247	Plastic Bushing	2
56			
57	D77249	Back Plate	1
58	D77253	Lower Link Weldment	1
59	D77260	Plastic Center Stop	1
60	D77262	Front Weldment	1
61	D77259	Plastic Bumper	2
62	D78814	Fiberglide Bushing 5/8"	2
63	D79344	Short Latch Rod	1

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20b

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TROUBLESHOOTING

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	SYMPTOM	POSSIBLE CAUSES	SOLUTION
A	LIFTER OPERATION IS VERY ERRATIC	AIR COULD BE TRAPPED IN SYSTEM. FLOW IS TOO LOW ADJUSTABLE FLOW VALVE IS NOT WORKING PROPERLY	BLEED ALL AIR OUT INCREASE FLOW FROM DIVERTER VALVE ADJUST, CLEAN OR REPLACE THE FLOW DIVERTER VALVE.
B	CART LIFTER WILL NOT PICK UP THE WEIGHT	CART IS OVERWEIGHT HAND VALVE PRESSURE SET TO LOW TRUCK PRESSURE SET TOO LOW FAULTY HAND VALVE ACTUATOR/CYLINDER HAS INTERNAL LEAKAGE	REDUCE WEIGHT OF CART CHECK AND ADJUST PRESSURE RELIEF ON HAND VALVE ADJUST TRUCK'S MAIN RELIEF (SEE MANUFACTURER'S INSTRUCTIONS) REPLACE HAND VALVE REBUILD ACTUATOR OR RETURN TO PERKINS FOR SERVICE
C	LIFTER OPERATES SLOWLY	FLOW ADJUSTMENT SCREW ON DIVERTER IN TOO MUCH ENGINE IDLE IS TOO LOW FAULTY HAND VALVE FAULTY TRUCK PUMP DEBRIS CLOGGING DIVERTER VALVE	ADJUST SCREW OUT TO INCREASE FLOW ADJUST ENGINE IDLE REPLACE HAND VALVE CHECK TRUCK MANUFACTURER'S INSTRUCTIONS DISASSEMBLE AND CLEAN DIVERTER



TROUBLESHOOTING

ACCESSORIES | AUTOMATED SYSTEMS | HYDRAULIC LIFTERS | INDUSTRIAL LIFTERS | ACCESSORIES

Route tested. Driver approved.

	SYMPTOM	POSSIBLE CAUSES	SOLUTION
D	LIFTER OPERATES TOO FAST	ADJUSTMENT SCREW IS OPEN TOO MUCH ENGINE IDLE TOO HIGH	ADJUST DIVERTER FLOW DOWN ADJUST ENGINE IDLE DOWN
E	DIVERTER VALVE IS LEAKING OIL	WORN OR DAMAGED SEALS	REPLACE SEAL KIT, PART #D63477
F	HAND VALVE LEVER STICKS IN THE UP OR DOWN POSITION	WORN OR BROKEN SPRING CENTER DEVICE DEBRIS OR RUST AROUND SPOOL PRESSURE "IN" & "OUT" HOSES REVERSED	INSTALL NEW SPRING PART #D63192 DISASSEMBLE AND CLEAN SPOOL & HOUSING REVERSE HOSES TO CORRECT ORDER
G	HAND VALVE IS LEAKING OIL AROUND SPOOL	WORN OR DAMAGED SEALS WORN SPOOL	INSTALL NEW SEALS PART # D63217 REPLACE HAND VALVE
H	UNABLE TO ACHIEVE 1950 PSI	TRUCK PRESSURE TOO LOW	ADJUST PRESSURE RELIEF OF TRUCK HIGHER IF IT IS ALREADY AS HIGH AS POSSIBLE, INSTALL A PRESSURE SPEED UP SWITCH
I	UNABLE TO ACHIEVE OVER 1400 PSI	TRUCK PRESSURE TOO LOW	CALL YOUR TRUCK MANUFACTURER



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	SYMPTOM	POSSIBLE CAUSES	SOLUTION
M	LIFTER RETURNS TO GROUND TOO FAST	IN-LINE ADJUSTABLE FLOW CONTROL NOT ADJUSTED IN-LINE ADJUSTABLE FLOW CONTROL NOT POSITIONED CORRECTLY	ADJUST VALVE IN UNTIL LIFTER'S DOWNWARD MOTION IS DESIRABLE CHECK THAT IN-LINE ADJUSTABLE FLOW CONTROL IS UNDER LEFTHAND ACTUATOR PORT, SMALL ARROW POINTS AWAY FROM ACTUATOR
N	LIFTER DRIFTS OUT OF POSITON WHEN NOT IN USE	P.O. CHECK VALVE NOT PRESENT P.O. CHECK VALVE NOT WORKING INTERNAL LEAKAGE IN HAND VALVE. INTERNAL LEAKAGE IN ACTUATOR	INSTALL A P.O. CHECK VALVE CLEAN VALVE CARTRIDGE, RETEST AND REPLACE IF NECESSARY CLEAN SPOOL AND REPLACE SEAL KIT AS NECESSARY REBUILD ACTUATOR WITH NEW SEAL KIT
O	THERE IS NO LIFTER DAMAGE AND LATCH ADJUSTMENTS ARE CORRECT, BUT LIFTER STILL BREAKS LOWER BARS OF CARTS.	LIFTER OPERATING FASTER THAN 6 SECONDS OPERATOR SHAKING CART BACK AND FORTH EXCESSIVELY OVERLOADED CART	SLOW THE LIFTER BY ADJUSTING THE FLOW DOWN TRAIN USERS TO LIMIT CART SHAKING TO A MINIMUM REDUCE CART WEIGHT

Route tested. Driver approved.

TO CLAIM A WARRANTY ISSUE, CALL PERKINS AND SPEAK TO A TECHNICIAN. A SHIPMENT OF REPLACEMENT PARTS WILL BE ARRANGED AND YOU WILL BE BILLED FOR THESE PARTS. YOU WILL RECEIVE A RGA NUMBER WHICH MUST BE LABELED ONTO THE RETURN BOX. CREDIT WILL BE ISSUED AFTER THE PARTS ARE INSPECTED BY THE TECHNICIAN.

PERKINS ASSUMES NO LIABILITY FOR SHIPPING COSTS OR LABOR.

PERKINS MANUFACTURING COMPANY WARRANTS ITS LIFTERS TO BE FREE FROM DEFECTS IN MATERIAL AND WORKMANSHIP UNDER NORMAL USE FOR:

**TWO (2) YEARS FOR ROTARY UNITS OR ONE (1) YEAR FOR CYLINDER UNITS.
THIS WARRANTY COVERS ALL LIFTERS SHIPPED AFTER JULY 1, 2006.**

THIS WARRANTY IS EXPRESSLY LIMITED TO THE REPAIR OR REPLACEMENT OF ANY COMPONENT 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. PERIODICAL MAINTENANCE IS REQUIRED TO MAINTAIN WARRANTY, PLEASE REFER TO THE MAINTENANCE SECTION OF THIS 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 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 90 DAY WARRANTY FOR REPLACEMENT ONLY. THE WARRANTY ITEM MUST BE RETURNED TO PERKINS FOR EVALUATION UPON REQUEST. LABOR TO REPLACE SUCH PARTS SHALL BE THE RESPONSIBILITY OF THE OWNER. THERE IS NO WARRANTY ON USED PARTS.

PERKINS, WHOSE POLICY IS ONE OF CONTINUOUS IMPROVEMENTS, RESERVES THE RIGHT TO IMPROVE IT'S 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 GRANT ANY

OTHER WARRANTY.

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Perkins Manufacturing Company