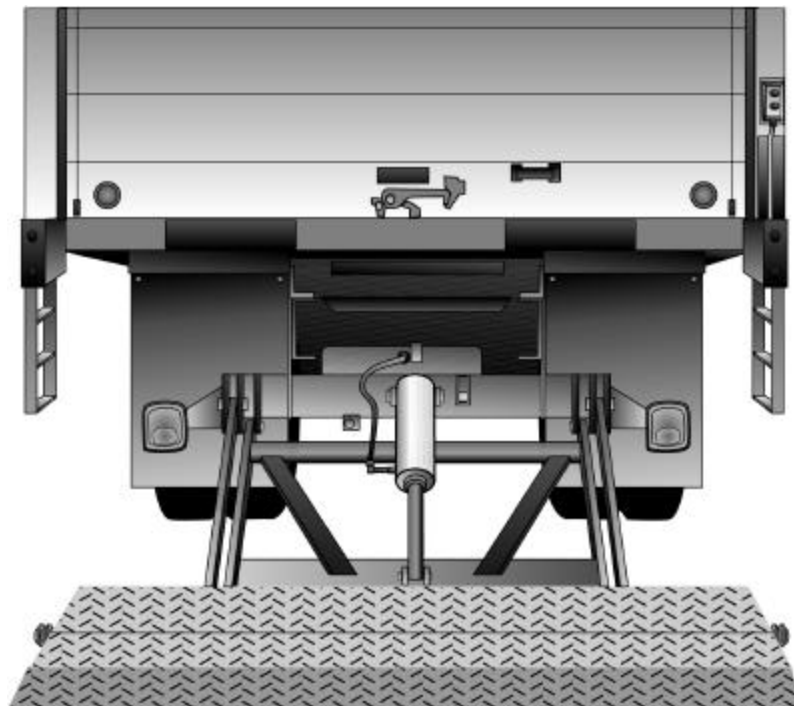




Installation Manual

SLP Hide-A-Way™ Tuckunder Style



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WORDS OF CAUTION

1. Before any maintenance is performed on this unit, read and understand this manual completely.
2. Do not stand on or behind the platform when operating gate in the folded position.
3. Make sure the ground is clear under the platform when lowering.
4. Do not stand in front of platform when lowering from vertical position or operating in any manner.
5. Never exceed the rated load capacity of this gate.
6. Do not allow persons to operate the unit unless they have been properly trained to do so.
7. Use only factory authorized parts for replacement.
8. Check the area around the unit for persons before operating the lift gate.
9. This lift gate should operate smoothly and the only noise that should be heard is the power unit. Any audible sounds other than the normal power unit operation sound should be thoroughly inspected and the cause of the noise should be pinpointed and corrected.
10. Do not over load – the maximum rated capacity is based on an evenly distributed load all over the platforms flat surface.
11. Always load as close to the center of the platform and as close to the center of the truck sill as possible.
12. 150 Amp circuit breaker (not supplied) must be installed between the starter solenoid and the battery source.
Order from factory as option #111-Circuit Breaker.

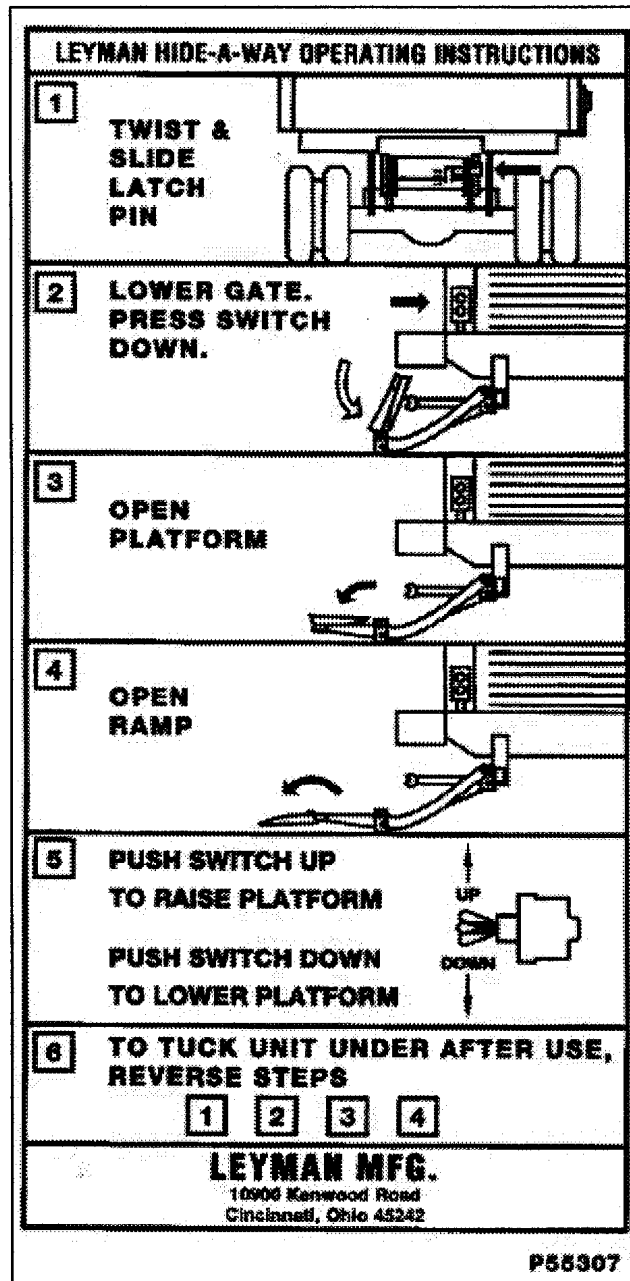
We urge the installation of a safety cut-off switch for all truck mounted lift gates. These are installed in the cab of the vehicle, so the power to the lift gate can be turned on/off.

This manual reflects most changes and updates of materials that are common to this type of lift gate. Some may differ due to individual customer requirements. This manual has been established to reflect the common items.

WARNING: Since this gate has greaseless bearings in the main pivot points, (tension and compression arms and platform parts) any welding on these parts must be grounded or you will damage the cylinder.

OPERATION OF THE LIFT GATE

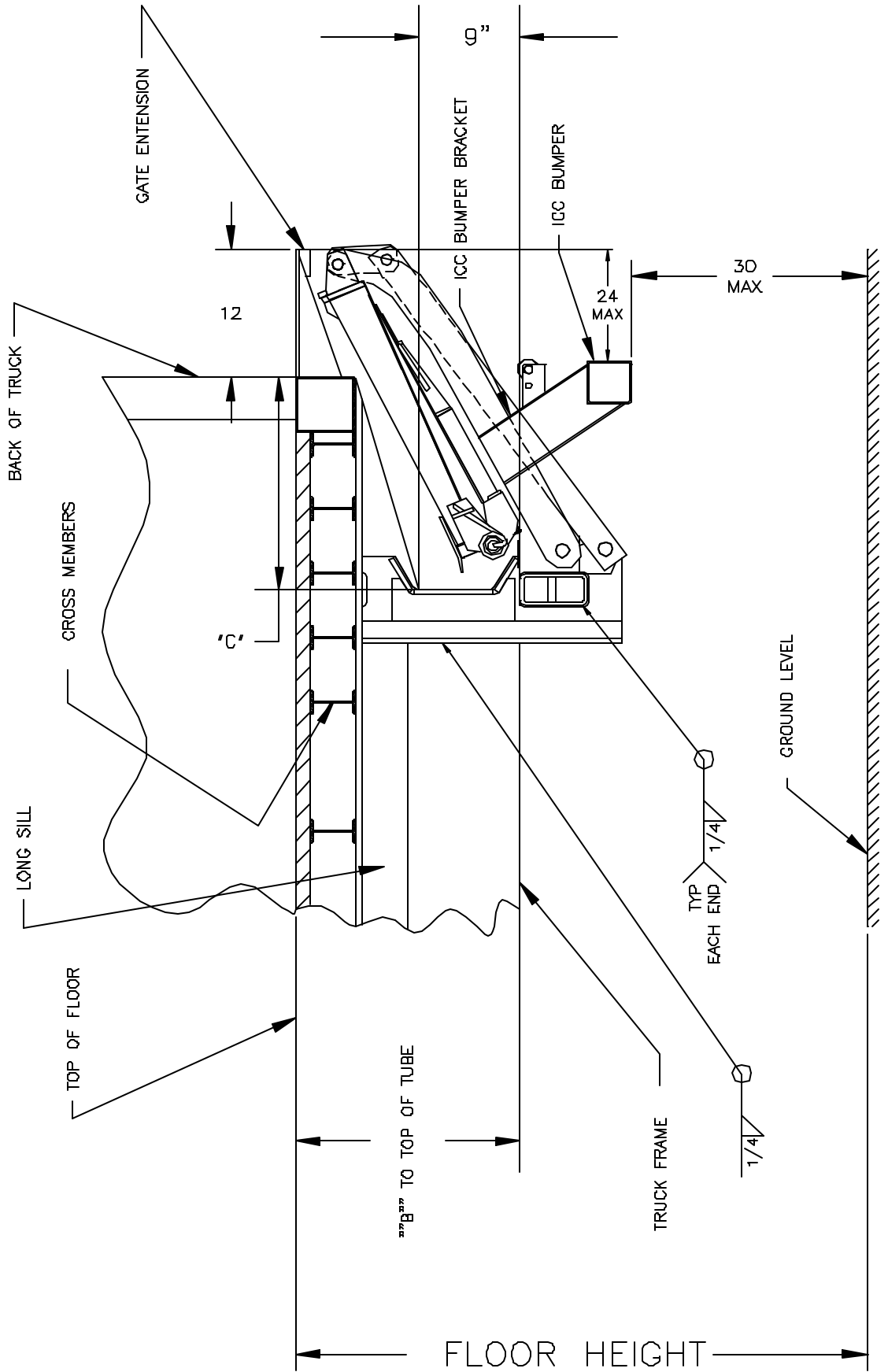
- Before operating the lift, read and understand this decal, urgent warning decal, and the Owner's Manual.
- Do not stand behind the lift gate while unfolding or using the platform.



GENERAL VIEW, TRUCK MOUNTING

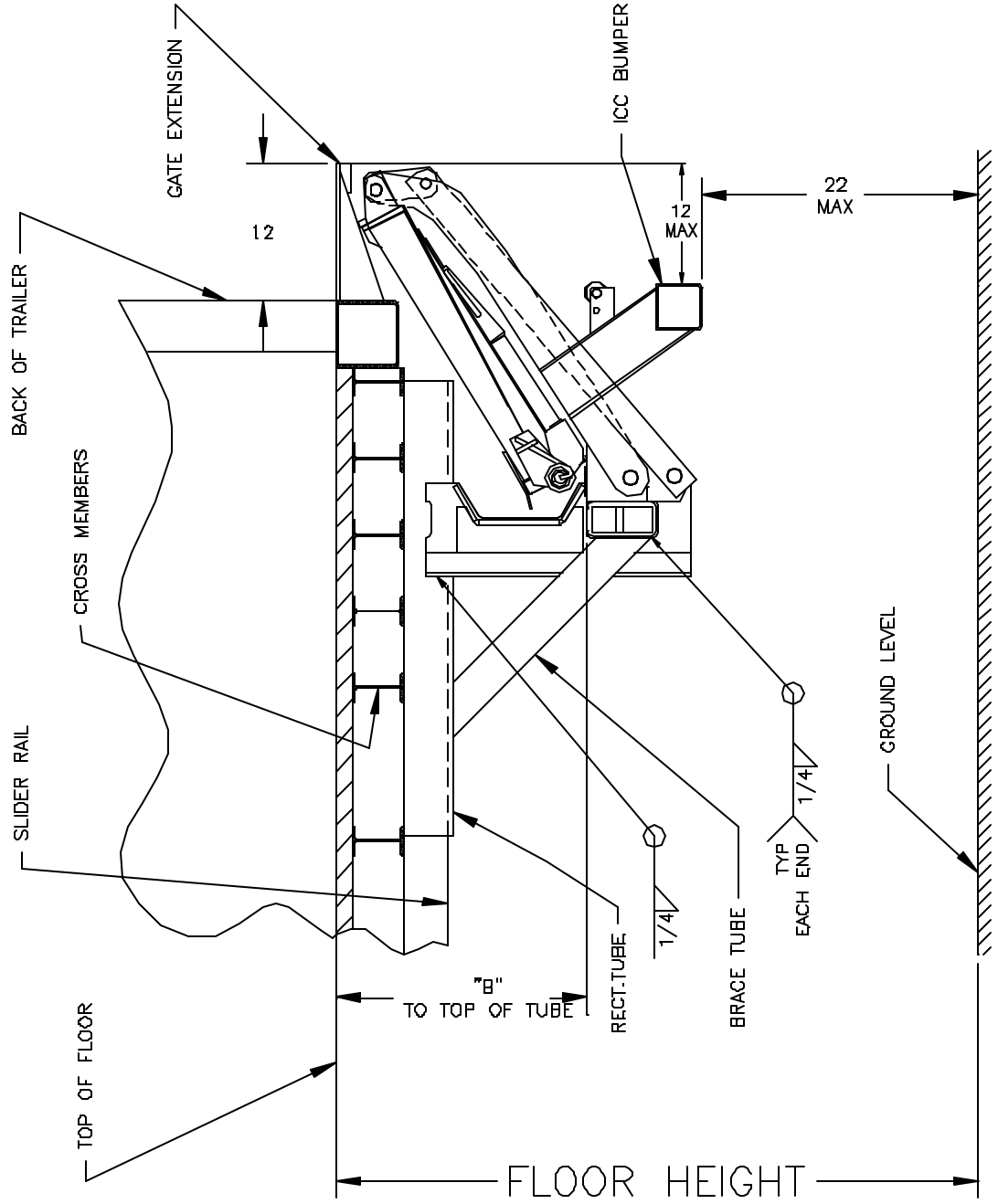
SLP GATE WITH OR WITHOUT ICC BUMPER

SEE CHART "C"



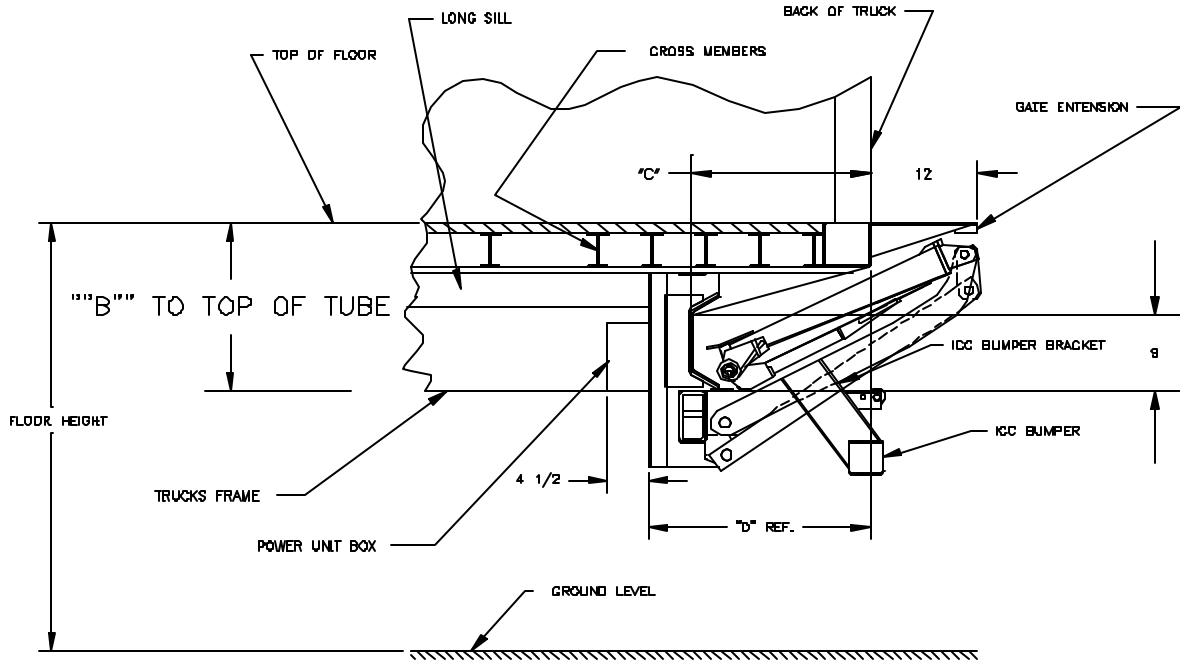
GENERAL VIEW, TRAILER MOUNTING

SLP GATE WITH ICC BUMPER MOUNTING DIMS.
SEE CHART "C"



Step 1: TRUCK-PREP BEFORE MOUNTING GATE

See Chart "C" for Mounting Dimensions - Illustration "A"



MOUNTING DIMENSIONS – CHART "C"

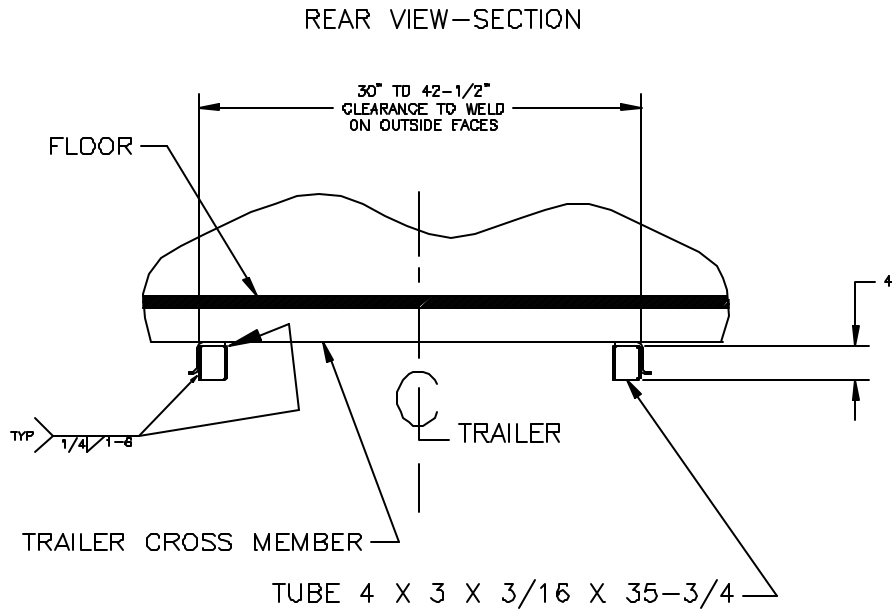
GATE	FLOOR HGTH.	"B"	"C"	"D" REF	"E" MAX
SLP2500WLB	36-40	16	18	26-1/2	3
SLP2500WLB	40-42	16	18	26-1/2	4-1/4
SLP2500WLB	42-44	19	20	24-1/2	4-1/4
SLP2500W or SLP3500W	45	19	20	24-1/2	4-1/4
SLP2500W or SLP3500W	46	19	20	24-1/2	4-1/4
SLP2500W or SLP3500W	47	19	20	24-1/2	4-1/4
SLP2500W or SLP3500W	48	19	20	24-1/2	4-1/4
SLP2500W or SLP3500W	49	19	20	24-1/2	4-1/4
SLP2500W or SLP3500W	50	20	20	23-5/8	5-1/8
SLP2500W or SLP3500W	51	20	20	23-5/8	5-1/8
SLP2500W or SLP3500W	52	21	19	22-3/4	5-3/4
SLP2500W or SLP3500W	53	21	19	22-3/4	5-3/4
SLP2500W or SLP3500W	54	23	17-1/2	20-1/2	6-1/4
SLP2500W or SLP3500W	55	23	17-1/2	20-1/2	6-1/4
SLP2500W or SLP3500W	56	23	17-1/2	20-1/2	6-1/4

NOTE: ADD 4-1/2 IN TO DIM "D" FOR OVER ALL LGTH.
 NOTE: MAX SPREAD OF GATE MOUNTING PLATES.
 42-1/2 INSIDE TO INSIDE.
 MIN SPREAD OF GATE MOUNTING PLATES.
 30 INSIDE TO INSIDE.

Step 1: TRAILER-PREP BEFORE MOUNTING GATE

Weld 4 x 3 x 3/16 x 35-3/4 rect. tube inside the trailer slider rails. Mount within 2 inches of rear sill (see sketch below). Diagonal braces must also be used for trailer mounting.

ILLUSTRATION "B"

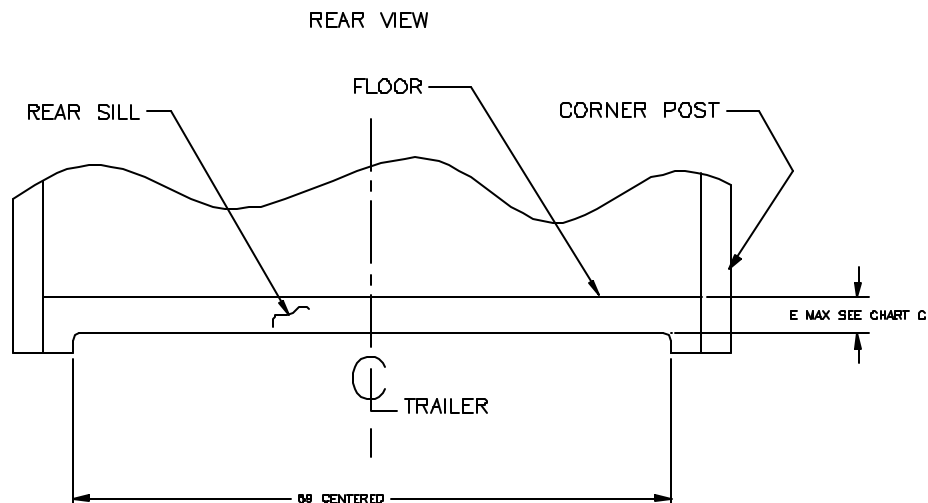


Step 2: TRUCK AND TRAILER – NOTCH REAR SILL

Notch rear sill. Check the height of the rear sill. See chart "C". If the height of the rear sill is larger than the dimension E maximum, the sill must be notched (see sketch D below).

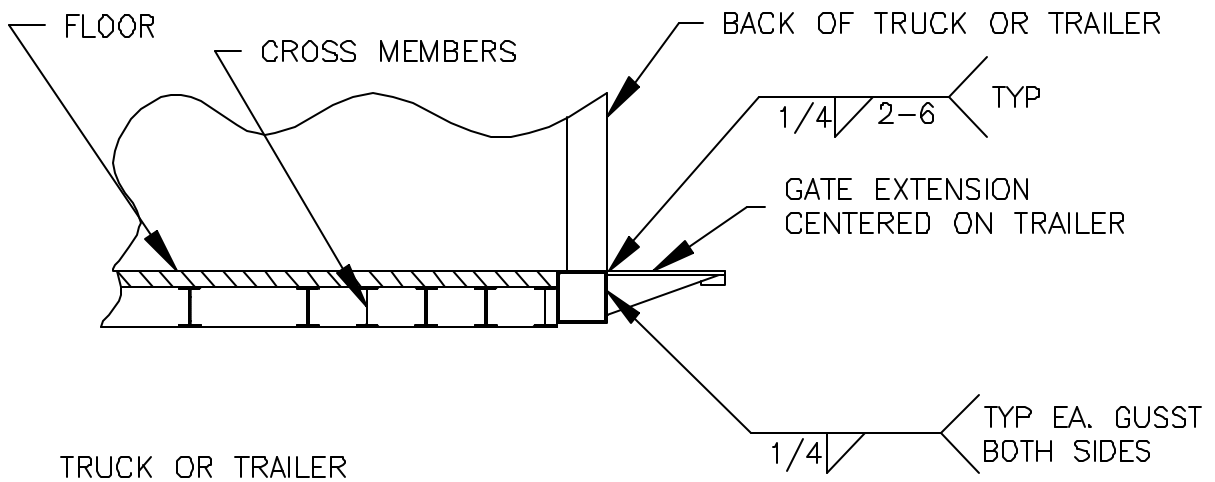
Note: After notching rear sill, add material to reinforce such as 3 x 3 x 3/8 angle or 1" square bar etc. The area cut away must be rebuilt to maintain strength.

ILLUSTRATION "D"



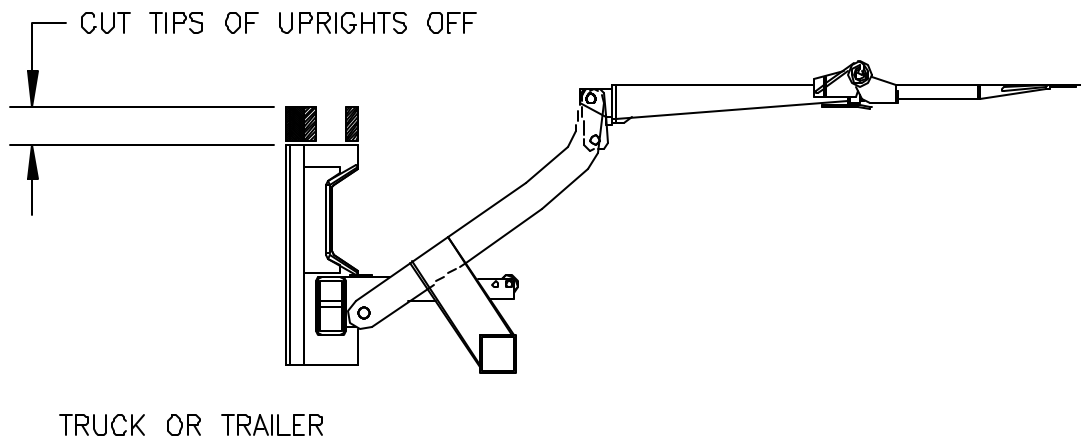
Step 3: WELD EXTENSION TO REAR SILL

Illustration "E"



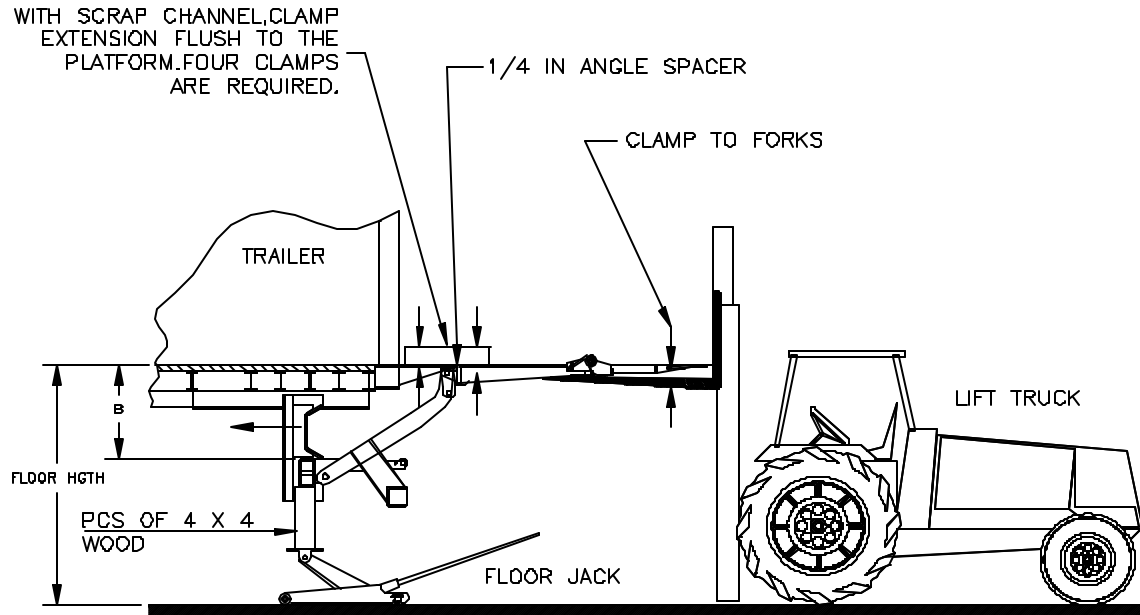
Step 4: CUT TIPS OF UPRIGHTS OFF

Illustration "F"



Step 5: MOUNTING GATE TO TRUCK OR TRAILER

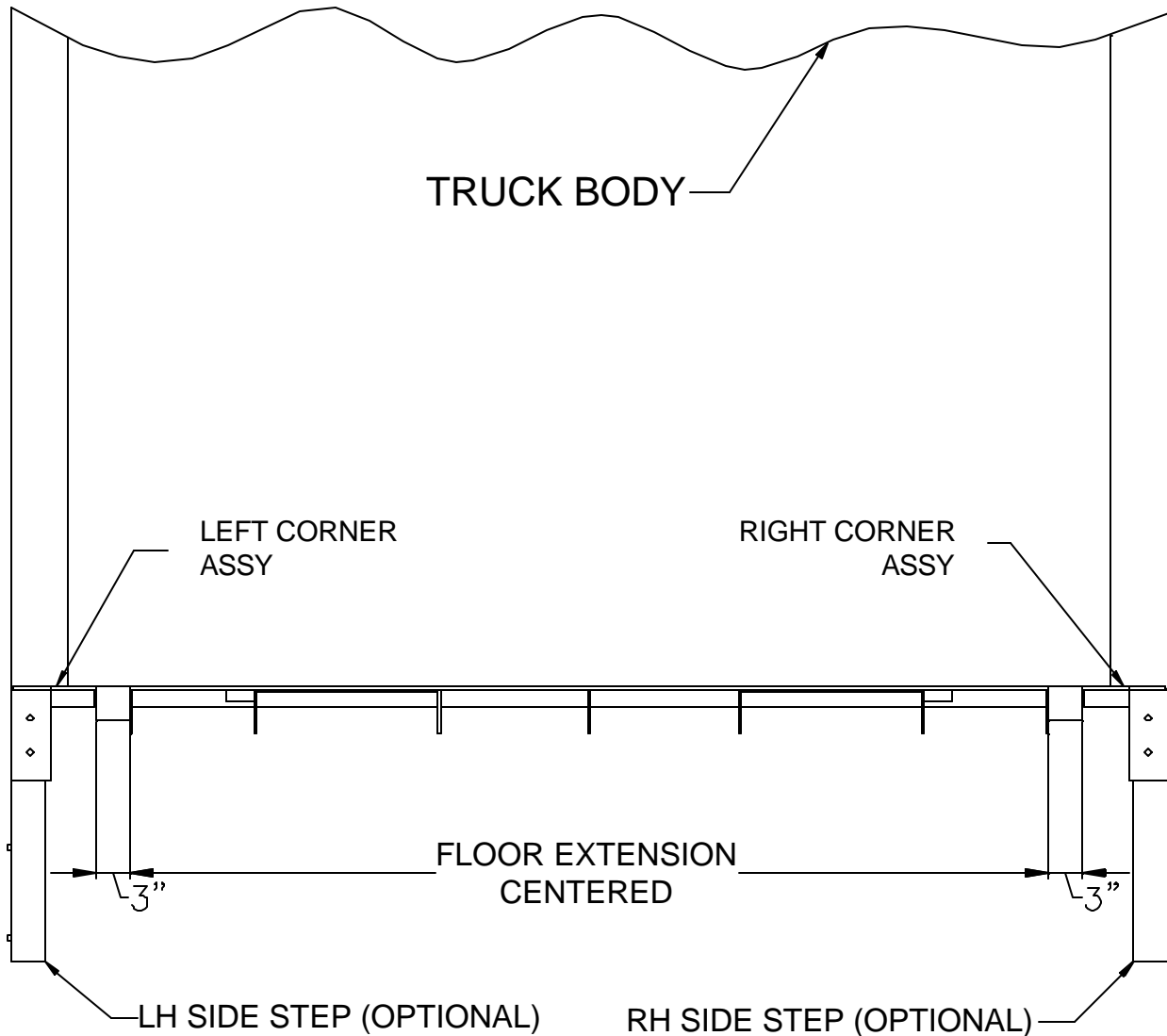
Illustration "G"



1. Unfold the secondary platform.
2. Clamp the secondary platform to the forks of the lift truck. Approximately centered (see illustration above).
3. Lay two angles on the top of the extension plate to space the platform out 1/4 inch (see sketch above). Any 1/4" thick angles or spacers will work.
4. Pick up the gate assembly, center it carefully on the floor extension and push it against the floor extension. With two pieces of scrap channels or angles, clamp platform flush with floor. Use four clamps. Clamp channels to extension and platform.
5. With a floor jack and a piece of 4 x 4 wood, swing and raise the main tube until it is at dimension "B" (NOTE: Trailer - the mounting plates should be outside the tubes that you welded near the slide rails. Trucks - these plates should be outside of the truck frame).
6. With a large pipe wrench rotate the main 4 x 6 tube, so that it is vertical then check the rod of the lifting cylinder. You should see about 1/2 inch of the shiny rod. If not, rotate the main tube back until you see this 1/2 inch shiny rod.
7. Now tack weld the main support plates and tube in position, strong enough to hold, so you can run the gate up and down without a load on it. This is to check the gate functions properly later.

8. Unclamp the four clamps holding the back of the platform next to floor extension.
Caution: Do not unclamp the tip of the platform.
9. Let the lift trucks forks down slowly until they will not go anymore. (They will stop about ½ way down, when they meet resistance from the oil in the lifting cylinder).
10. Install the gate control switch in the desired location and route the wire to the power unit. Slide a piece of supplied shrink tube over the thermal switch wire and connect the black control wire to thermal switch wire using the butt connector pre-installed on the wire. Move the shrink tube to cover the connection and heat to shrink and seal the connection. Connect the white control wire to the lowering valve in the same manner. Attach the green control wire with ring terminal to the large open post of the starter solenoid.
11. For temporary power – use a 12 volt battery as a temporary power source. Run a wire from the battery to the starter solenoid. Run a ground wire to the trailer.
12. Run the gate up and down to check its operation. If correct, finish weld the main plates and main tube.
13. Trailers – Install 45 degrees brace tubes as shown in general trailer drawing.
14. Mount switch on back, curb side corner post. Do before welding optional steps and corner assemblies (notched for wiring).
15. Weld steps and extension corners on. Steps and reinforcing gussets are optional. (See step 5-14, Illustration “H”).
16. Weld shims to stop blocks on platform for proper slope and preload. 14 Gauge shims provided in kit will give proper slope for average installation. (See step 5-15, Illustration “K”). Empty platform should slope slightly toward truck and platform tip should reach ground.
17. Weld on stop block for latch, which holds the gate up in the stored position. There should be a 1/16 gap between the block and the latch shaft. (See step 5-16, Illustration “J”).
18. Trailers – install charging line. Drill 1-7/8 diameter hole through aluminum front bottom rail. Use “0” gauge wire only. When installing charge line, ensure the cable goes through, at a minimum of three “I” beam past the 5th wheel plate and through the clear vinyl loom, (or split loom). Mount the remaining cable with loom clamps and self tapping screws to the “I” beams. Install 4 gauge ground cable from power unit to trailer frame.
19. Trucks – Run 2 gauge power line from starter on the gate to the trucks battery.
Caution: Make sure there is a ground wire from battery to chassis. Install 4 gauge ground cable from power unit to chassis.
20. Paint unit – apply decals, lubricate all grease fittings, check oil in power unit tank when platform is on ground.

INSTALLATION OF BED EXTENSION CORNER ASSEMBLIES



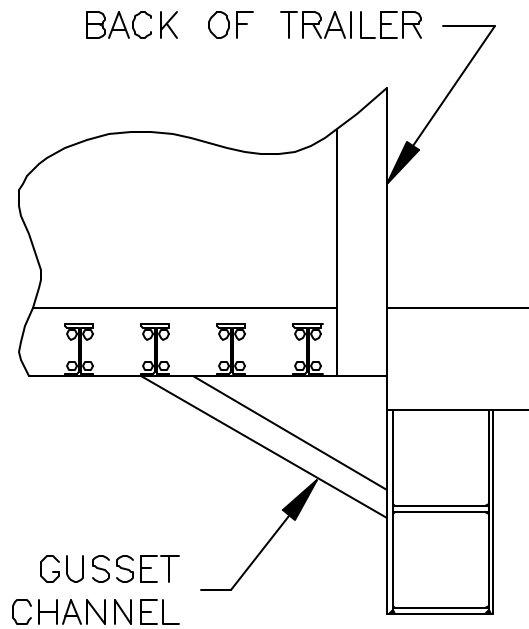
To make corner assemblies on the lift gate flush with the outside of the body on a 102" wide vehicle:

Weld a 3" spacer between the floor extension and the corner assemblies on each side. MATERIAL NOT SUPPLIED BY LEYMAN.

Spacer may need to be tapered to match bed extension on low bed height applications.

Step 5-14: WELD ON BRACES (Illustration "H")

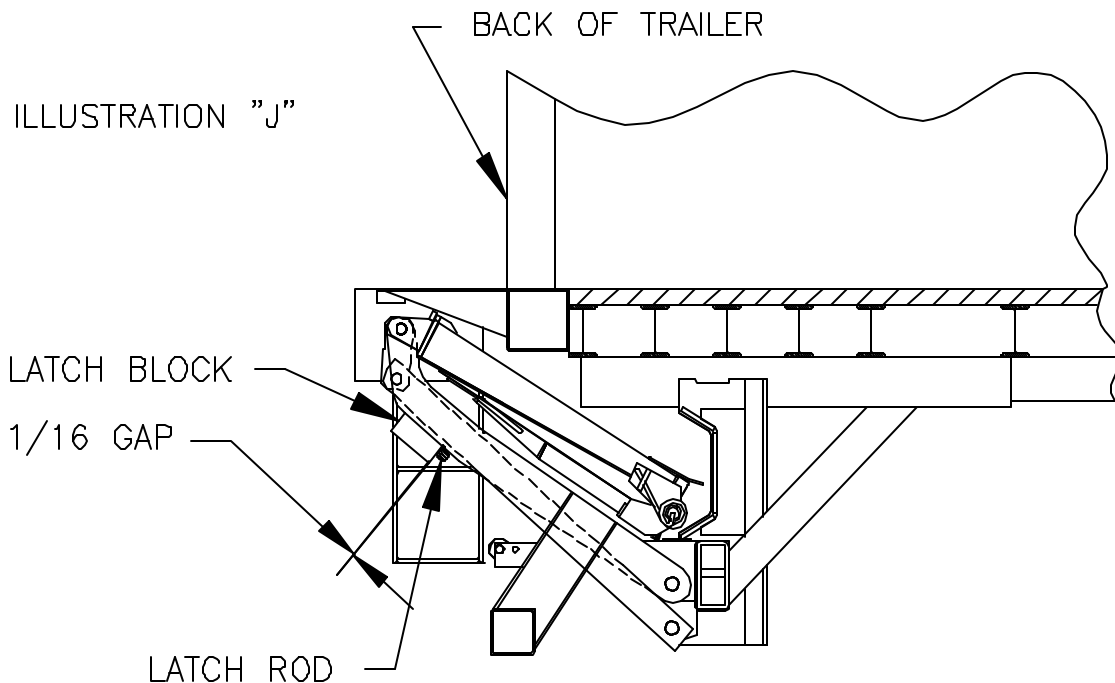
Gusset channel must be installed to reinforce dock bumpers.



Step 5-16: WELD ON LATCH

Weld latch block to tension arm, maintain 1/16 gap. This block will hold the gate in the over the road position in the event of hydraulic failure.

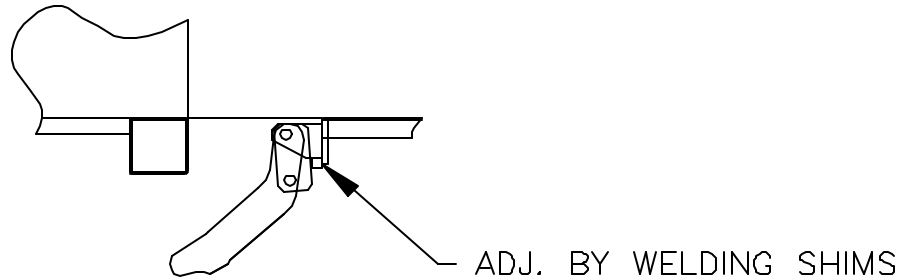
Caution: Ground arms before welding latch block.



Step 5-15: WELD PLATFORM SHIMS (Illustration “K”)

Weld shims to stop blocks on platform for proper slope and preload. View with platform unfolded and in the full up position.

Caution: Ground stop blocks before welding shims.



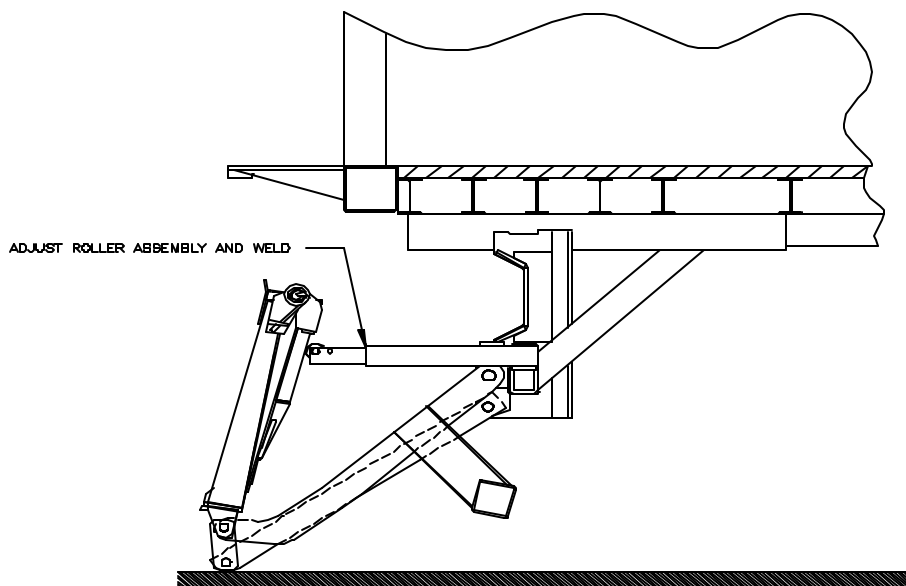
MISCELLANEOUS NOTES:

1. See page 18 for recommended hydraulic oils.
2. Use Multi-Purpose Grease#35 on all grease fittings.
3. Spray all electrical terminals with protective spray.
4. Oil all pivots not equipped with grease fittings, with light oil.

Step 6: ADJUST ROLLER (Illustration “L”)

With platform in position shown, (folded vertical, leaning slightly towards the truck) adjust and weld roller assembly. Please notice the roller assembly should be moved in or out of the square tube welded in the frame tube, depending on the different bed heights.

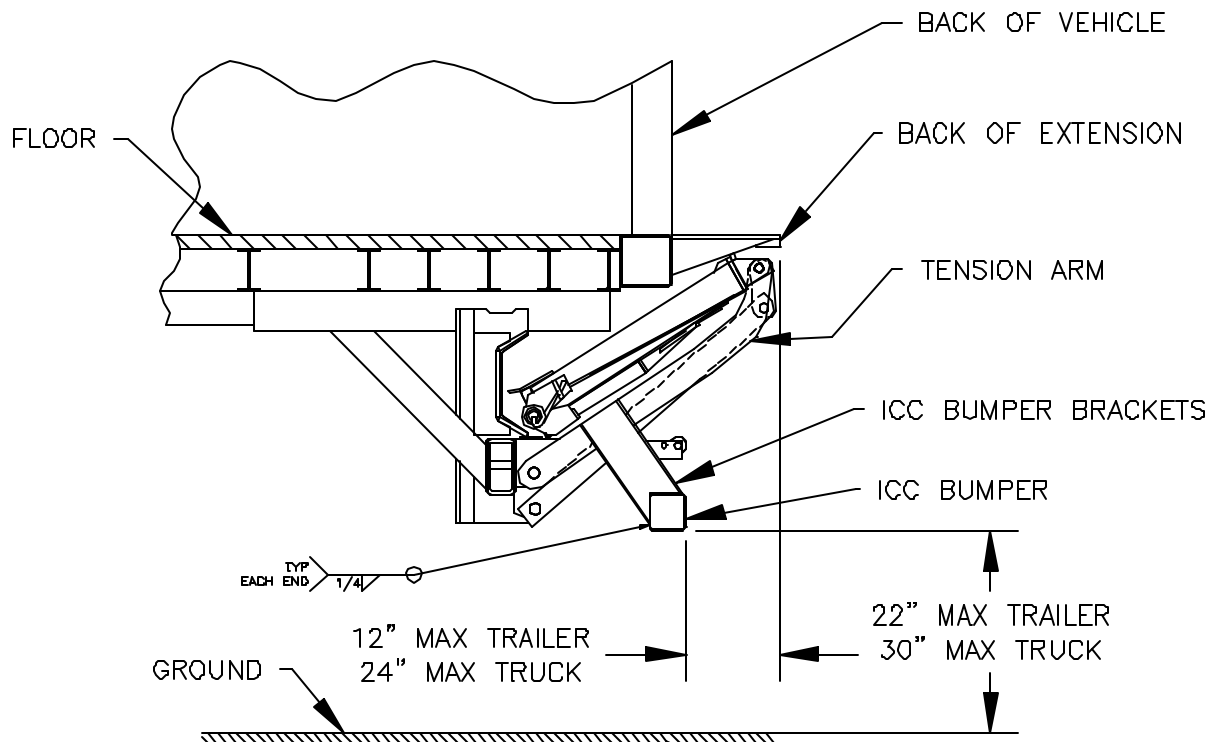
Caution: Ground frame tube before welding roller assembly.



ICC BUMPER INSTALLATION

1. Set height of bumper. Follow dimension given for trucks or trailers.
2. Center bumper with width of vehicle.
3. Set front to back dimension. Follow dimension given for trucks or trailers.
4. Tack weld together
5. Operate gate - check clearances. Bumper should clear ground when platform is on ground.
6. If ok – weld 1/4 fillets completely around all mounting points.
7. If the ICC brackets are sticking above the tension arms and are interfering with the platform, they may be cut off.
8. Paint – apply reflective tape and DOT decal.

Caution: Ground tension arms before welding ICC brackets.



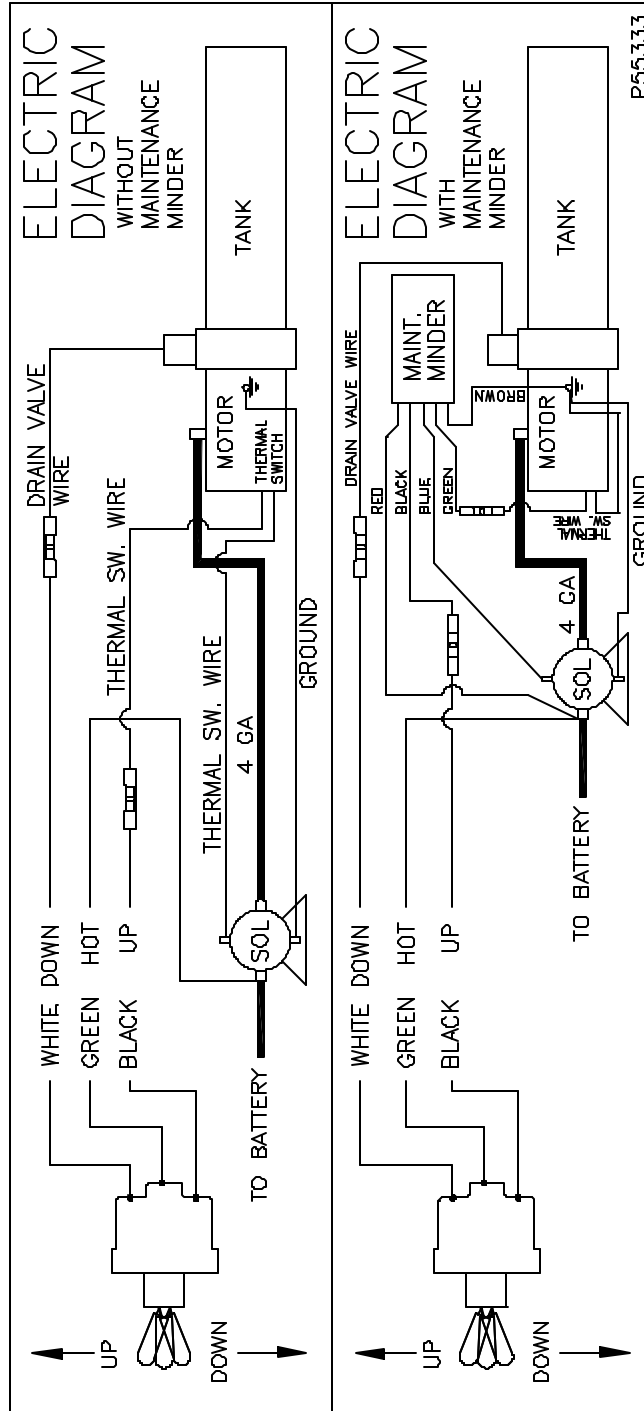
TROUBLE SHOOTING CHART

ALL SLP MODELS

PROBLEM	PROBABLE CAUSE	REMEDY
The motor is running, but the platform will not go up, or reach floor of vehicle or gate will not lift rated load.	<ol style="list-style-type: none"> 1. Insufficient oil in power unit tank. 2. Lowering valve stuck partially or fully open. 3. Power unit relief valve is set too low. 	<ol style="list-style-type: none"> 1. Fill tank. 2. Clean or replace. 3. Turn screw in all the way, then back off one turn.
The platform will not go up or reach floor level and the motor does not run.	<ol style="list-style-type: none"> 1. Battery is low. 2. Power line is loose. 3. Poor switch connections. 4. Cab switch is turned off. 5. Defective starter solenoid. 6. Tripped circuit breaker. 	<ol style="list-style-type: none"> 1. Recharge the batteries. 2. Check the connection, if loose tighten. Also, check for corrosion and clean if necessary. 3. See #2. 4. Turn the switch on. 5. Replace part. 6. Reset the circuit breaker.
Platform will not lower.	<ol style="list-style-type: none"> 1. Battery is low. 2. Bad ground or electrical connection. 3. Lowering valve is bad. 	<ol style="list-style-type: none"> 1. Recharge the batteries. 2. Check for corrosion and tighten. 3. Check the coil.
Platform creeps downward.	<ol style="list-style-type: none"> 1. Defective cylinder or piston seal. 2. Lowering valve is not seating or is partially open. 	<ol style="list-style-type: none"> 1. Remove breather – activate to see if there is a continuous flow of oil. 2. Clean and inspect.
Platform goes down slowly.	<ol style="list-style-type: none"> 1. Lowering valve not fully open or is clogged. 2. Lines are restricted or flow control is clogged. 	<ol style="list-style-type: none"> 1. Clean and replace the lowering valve. 2. Check for bent or pinched lines. Clean or replace the flow control.
Bent latch pin.	<ol style="list-style-type: none"> 1. Latch block welded too far from the latch pin- allows mechanism to bounce. 2. Cylinder piston seal leaking. 	<ol style="list-style-type: none"> 1. Weld block 1/16 away from pin. 2. Remove vent line – activate to see if there is a continuous flow of oil. Replace cylinder.
Hydraulic oil leak from cylinder rod end.	<ol style="list-style-type: none"> 1. Gland nut too loose. 2. Cylinder rod pitted. 	<ol style="list-style-type: none"> 1. Turn gland nut ½ turn – do not over tighten. Some cylinders do not have gland nuts. 2. Replace cylinder.

SLP WIRING

SLP Gates with Monarch (Gold/Silver Motor) Power Unit Thermal Switch in Motor (P33991)



LIFT GATE SPECIFICATION SHEET

HIDE-A-WAY TUCKUNDER STYLE GATE MODEL SLP

HYDRAULIC OILS	MANUFACTURER	TYPE	TEMP. RANGE
Level 1 Normal Conditions	Mobile	DTE 11	-15° F to + 150° F
	Shell	TELLUS-T15	-15° F to + 150° F
	Exxon	UNIVIS N15	-15° F to + 150° F
Level 2 Cold Conditions	Chevron	RYKON ISO-15	-15° F to + 150° F
	Mobile	AERO-HFA	-50° F to + 80° F
	Shell	AERO FLUID#4	-50° F to + 80° F
	Exxon	UNIVIS HVI 13	-50° F to + 80° F
	Chevron	AVIATION-A	-50° F to + 80° F
	Mil	H-5606	-50° F to + 80° F

HYDRAULIC TANK CAPACITY
3 quarts

LUBRICATION
Grease Multi Purpose #35

BATTERIES
Two (2) 12 V D.C. Group 31 Deep Cycles

ELECTRICAL COMPONENTS CONNECTIONS
Use Battery terminal protection Bowman Part#21948

AMPERAGE DRAW OF MOTOR
When raising platform (empty) approximately 120 AMP @ 12 volts. At bypass approximately 180 AMP @ 12 volts

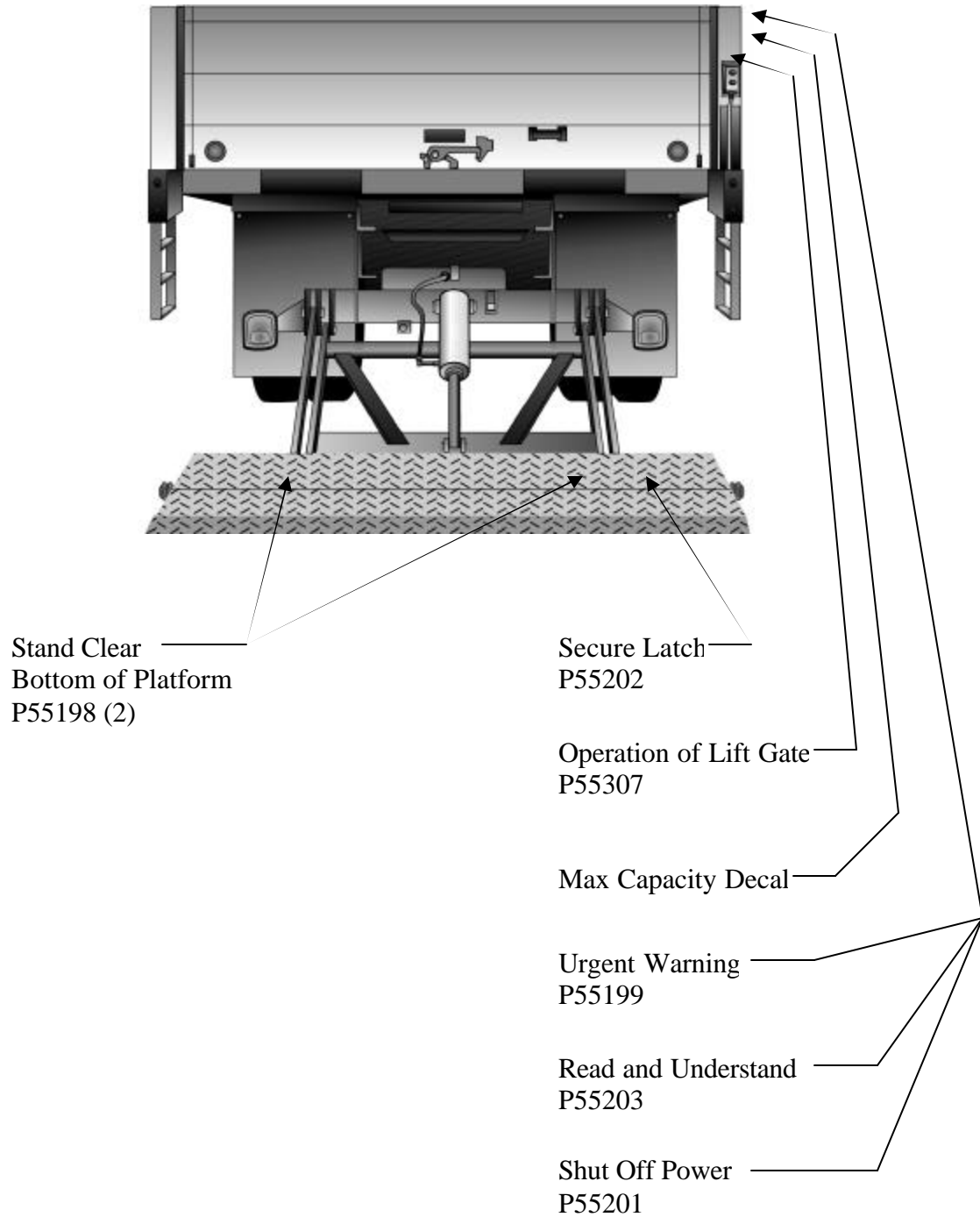
LIFTING PRESURE SETTING
With platform at floor level and pump in bypass 2500 psi

MINIMUM VEHICLE FLOOR HEIGHT LADEN
36" vehicle floor height

MAXIMUM VEHICLE FLOOR HEIGHT UNLADEN
56" vehicle floor height

APPROXIMATE TIME EMPTY AT 80° F WITH 2 153 AMP HOUR BATTERIES
Time up: 8 – 12 seconds Time down: 9 -12 seconds

DECAL PLACEMENT



SAFETY AND PREVENTIVE MAINTENANCE INSPECTION
HIDE-A-WAY™ TUCK-UNDER STYLE GATE MODEL LH/LHR/LLB/SLP
Final Installation Inspection

CUSTOMER:		
LOCATION:		
VEHICLE#:	LIFT GATE MODEL#:	LIFT GATE SERIAL#:

√ = OK

N = NOT APPLICABLE

	WELDING/ADJUSTMENTS
	Gate is welded secure to vehicle (mounting plates are welded to chassis frame).
	Mounting plates are welded to cross bar tube.
	Extension is welded to vehicle (12-2" or 3" welds across floor and gussets welded inside and out).
	Corners and steps welded to vehicle. Steps are optional.
	Reinforcement braces for corners and steps welded to cross members.
	Battery box welded or bolted secure to cross members.
	All bolts are tighten and secure.
	ICC bumper bar tube installed (optional).
	Lock block welded on tension arm right side (for safety latch rod).
	ELECTRIC'S
	Check that battery holds downs are anchored securely
	Check battery(ies) for proper charge level. PROPER CHARGE LEVEL:
	Check all wiring connections for tightness (batteries, switches, etc.)
	Inspect and check all circuit breakers/fuses.
	Charge line/power line (through cross members with rubber grommets if you prefer)
	Charge line/power line (clamped to bottom of cross members with loom clamps)
	Electric line from gate to power pack (through cross members with rubber grommets if you prefer)
	Electric line from gate to power pack (clamped to bottom of cross members with loom clamps).
	Check operation of toggle switches
	HYDRAULIC/GREASE
	Check reservoir for correct amount of fluid (platform should be open and down when checking)
	Check hydraulic hoses and fittings for leaks
	Check up and down cylinders for leaks.
	Grease safety latch rod.
	OPERATION OF GATE
	Open and close lift gate. Observe for correct operation (platform folds and unfold properly)
	Raise lift gate. (platform is level with floor of vehicle).
	Lowering lift gate (platform brackets hit the ground then platform tilts and tip of platform hit the ground).
	ICC bumper does not hit the ground when gate is all the way down with platform on the ground.
	PAINTING AND SAFETY STICKERS
	Repaint where needed
	Check hydraulic cylinder rods for over spray
	Install all safety and operation stickers

SERVICED BY:

DATE:

