

NOTE: For LRST40's, mounting to this frameless trailer kit and ordered with the optional Rear Impact Guard: for the Rear Impact Guard to meet the new FMVSS 223 (effective 7/15/2024), this kit and Rear Impact Guard are reliant on Z-brackets of trailer, staying joined to rest of trailer and acting like a rigid structure. Consult with trailer manufacturer to ensure that is the case before proceeding.

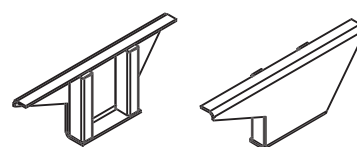
THIEMAN

TAILGATES, INC.

KIT 238

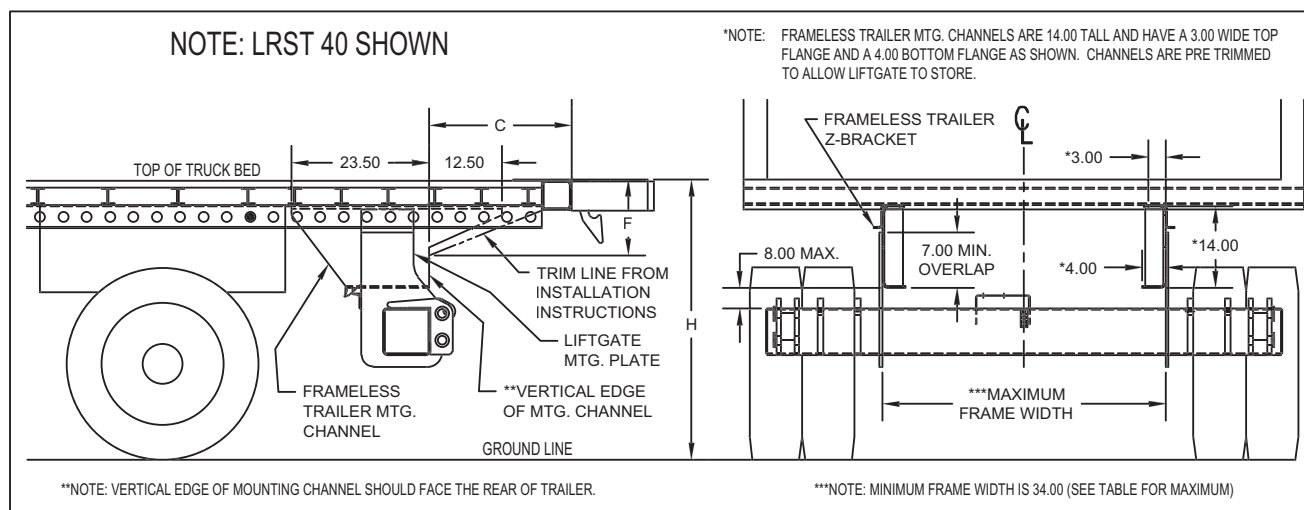
FRAMELESS TRAILER MOUNTING KIT

LRST 40
PART NO. 3745



FOR LRST 40 LIFTGATES 46.00 TO 56.00 INCH BED HEIGHTS .			
BED HEIGHT-H	C	F	MAX. FRAME WIDTH
46.00-49.88	24.50	13.00	50.00
49.00-51.88	23.50	17.50	50.00
51.00-56.00	22.50	18.50	50.00

NOTE: All dimensions in inches, unless specified otherwise.



- STEP 1. Consult with trailer mfr. to ensure Z-brackets are joined to rest of trailer to act as a rigid structure, such that the LRST40 liftgate and its optional Rear Impact Guard (if so equipped), when attached to this frameless trailer kit (which is solely joined to the trailer Z-brackets), could be subjected to loads required in the new FMVSS (effective 7/15/2024) and the Z-brackets would not detach from any portion of the trailer structure.
- STEP 2. Read through and understand the standard liftgate "Installation Instructions" for the LRST40 before proceeding. Notch rear structure of trailer body according to pages 2 and 3 of liftgate "Installation Instructions". Note that in tables and drawings above, lettered dimensions (C, F and H) correspond to those in liftgate "Installation Instructions" on pages 2 and 3.
- STEP 3. Position frameless trailer mounting channels as shown in drawings above. Note that 3.00" wide flanges of channels face up as shown. Also the side of channels with vertical edge face rear of trailer as shown. Position this vertical edge of mounting channels using "C" dimension as shown. With 3.00" flanges tight against Z-brackets, mounting channels should not interfere with trim line (as shown) from liftgate "Installation Instructions". Outside of mounting channels should be no less than 34.00" apart and no wider than maximum frame width (see table above).

NOTES:

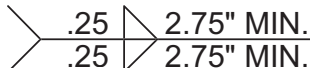
1. Initially, tack weld the mounting channels securely to the trailer's Z-brackets, until the entire liftgate has been mounted and is operating properly. Check for any interference before completing welds as shown below. Trailer mfr. welds between trailer crossmembers and trailer Z-brackets and Initial tack welds must be strong enough to support entire liftgate.
2. **DO NOT** weld directly to cross members in a direction perpendicular to the cross member at any point. Any welds to cross members should be in a direction parallel with the length of the cross members.

STEP 4. Consult trailer mfr. to ensure Z-brackets act like rigid structure through loading associated with new FMVSS 223. Thieman Minimum recommendations: Within 6ft. of rear of trailer, Z-brackets **MUST** be welded to each cross member passing over them, using .25" welds on both front and back sides of each cross member (each weld 2.75" long minimum). Trailer mfr. to supply additional braces from cross members to Z-brackets as required, to create rigid structure for FMVSS 223 compliance. Also, Z-brackets must be welded or bolted securely to main trailer structure at rear of trailer. All these welds and connections are required to prevent Z-brackets from peeling away from trailer, if liftgate is impacted in a rear end collision. A minimum of four cross members must be welded to Z-brackets, in area directly over mounting channels (8 inch minimum center-to-center cross member spacing). Closer cross member spacings will require that more than four cross members be welded to Z-brackets in this area. Cross member that overlaps front of mounting channel and cross member that overlaps rear of mounting channel must be spaced a minimum of 24" apart on center. Weld each mounting channel to inside and outside edges of its mating Z-bracket, using two .25 welds the entire length of the mounting channels (two 36.00 inch long welds).

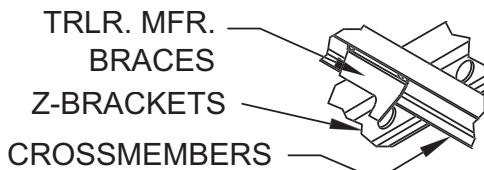
CAUTION

WHEN WELDING Z-BRACKETS DIRECTLY TO TRAILER CROSS MEMBERS, DO **NOT** WELD PERPENDICULAR TO CROSS MEMBERS. THIS COULD WEAKEN THE TRAILER STRUCTURE. WELD ONLY PARALLEL TO CROSS MEMBER LENGTH AS SHOWN. TRAILER MFR. TO CONFIRM Z-BRACKET AND CONNECTION TO TRAILER, ACT LIKE RIGID STRUCTURE DURING LOADS ASSOCIATED WITH FMVSS 223.

WELDS BETWEEN Z-BRACKETS
AND 4 CROSSMEMBERS MIN.,
IN AREA OVER MTG. CHANNELS.

4X MIN. 

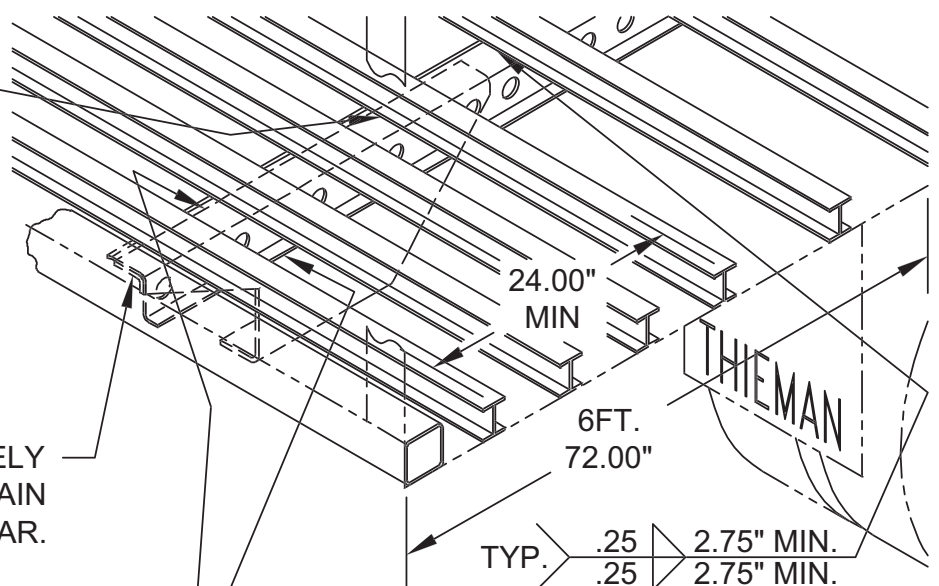
TRAILER MFR. TO SUPPLY
ADDITIONAL BRACING AS REQ'D.



Z-BRACKETS MUST BE SECURELY
WELDED OR BOLTED INTO THE MAIN
TRAILER STRUCTURE, AT THE REAR.

WELDS REQUIRED BETWEEN Z-BRACKET
AND FRAMELESS TRAILER MTG. CHANNELS

 .25 36.00" LONG CONTINUOUS



WELDS BETWEEN Z-BRACKETS
AND CROSSMEMBERS, IN REAR
6FT. OF TRAILER.

TYP. 