TRUSS USER INSTRUCTIONS

A. DESIGN REQUIREMENTS FOR TRUSS

Determine the type of truss required to do the job. Check the load requirements for the job carefully to determine the exact load on any truss run. Make sure that the truss is capable of lifting the required loads. Refer to the structural engineering report for loading information.

Make sure you have the loading figures for your truss, which is in the back of the structural report book, if you do not have the information contact James Thomas Engineering.

Make sure you fully understand the loading figures, if in doubt ask.

When mixing the old flat Camloc plate truss with the newer flanged Camloc plate truss, ensure that loading figures are taken from the flat Camloc plate truss structural engineering report.

Determine the amount of weight loading on flying points as this will have a bearing on the truss type used. Do not forget to take the whole weight of the rig including the hoists into consideration, when determining how much weight is to be suspended from each flying point.

If the truss is being rigged permanently, then we suggest that high tensile M16 nut and bolt sets (or the U. S. equivalent to these sets) are used to join the truss sections.

B. HANDLING AND TRANSPORTATION

Truss is generally a reliable maintenance free product. When used within its designed loading parameters and handled with care, truss will have a long operating life.

Do not drop truss as this will cause ends to deform. If dropped the truss will not operate correctly. Each section is designed to transfer load through the top tubes as well as the Camloc fixings. Therefore it is imperative that the ends are circular,

Do not drag the truss as this will cause the tubes to pit and aluminum to be shaved off.

When possible store truss upright with the female Camlocs facing down (never the male). If truss is to be stored horizontally it is advisable to stack the truss with pieces of wood in between each section.

When loading or unloading be sure you have enough people to load the truss so that the above doesn't happen. Additionally there are recommendations for the weights that an individual should carry without harm. Stick to those limits. Do not drag truss over other trusses as this will cause damage to tubes and diagonals.

C. GENERAL INSPECTION OF TRUSS BEFORE EACH USE

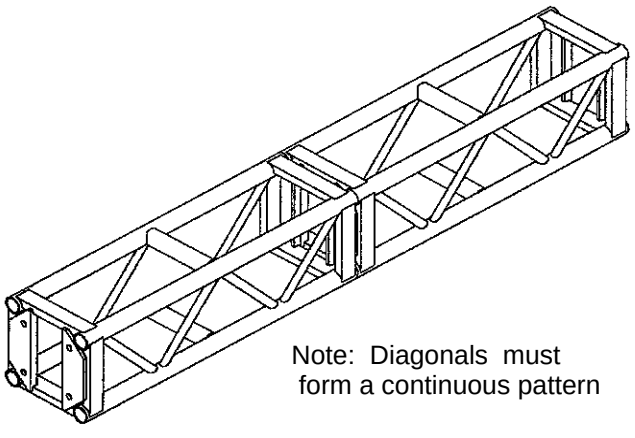
Do not use truss if:	ACTION
i. Any welds have cracks in them.	Refer to JTE
ii. Any of the end Camloc plates are bent.	Refer to JTE
iii. Camloc male studs show visible sign of twist.	Replace as necessary
iv. Camloc crosspins are bent or missing.	Replace as necessary
v. Female Camloc receptacles are loose.	Tighten retaining screws and nuts
vi. Crosspins in new QRB Camlocs are bent or missing (These are designed to break before bolt is damaged)	Replace as necessary
vii. High tensile M16 nuts & bolts are worn. (Every time any nut & bolt is used some thread is lost)	Replace as necessary
viii. There are any dents in the main tubes and diagonals.	Refer to JTE
ix. Truss is badly chewed by wing bolts. (Exercise care when using Hook clamps)	Refer to JTE

D. RIGGING

Assembly of truss should be done by competent personnel who are familiar with the use and assembly of aluminum truss.

Ensure that one person is responsible for making sure all the Camlocs, nuts and bolts are tightened correctly. Ensure that this person is responsible for rigging the span sets and flying points so as not to put the truss in any danger of being overloaded. One individual should be overall responsible for the whole rig.

Truss must run with the diagonals visible at the sides. Where sections are joined the diagonals "must form a continuous pattern" see figure here.

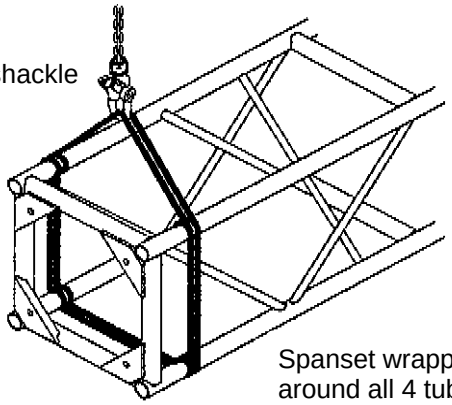


Note: Diagonals must form a continuous pattern

Never mix different makes or types of truss.

Truss should be rigged to the underside tubes with suitable spansets that will not damage tubes. Alternatively truss lifting points can be used to allow safe rigging of truss. See figures below

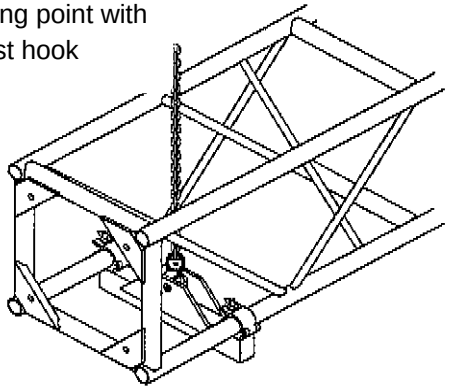
Hoist hook and shackle



Spanset wrapped around all 4 tubes

Note:
The spanset must be next to a horizontal cross member which can support the compression resulting from the spanset

Lifting point with hoist hook



Lifting point used in box configuration only

Refer to operating instructions for safe rigging of spansets or lifting points.
Ensure that all the hoists used to lift the rigged truss operate simultaneously before lifting. If they do not the truss must not be lifted.

When rigging light fixtures to the truss ensure that they are safely supported by using the correct fixing medium. Do not screw the wing bolts so tight as to damage the tubes. Always undo the wing bolt before adjusting the fixture, then retighten. With heavier equipment, it would be advisable to use half couplers in place of the hook clamps. Safety chains are recommended.

E. USE OF CAMLOCS

CAMLOC 34F QUARTER TURN

To assemble, Line up truss male end to female receptacle end correctly so that all main truss tubes align, push male Camlocs into female receptacles. Use a 3/4" spanner to turn the male stud through 90 degrees onto the stop position on the female receptacle. Turn the adjusting screw with 3/16" hexagonal wrench to give the desired compression. Do not exceed 75 FP torque.

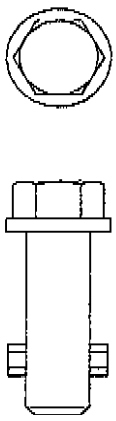
To disassemble the truss: loosen the camloc adjusting screw, then rotate male camloc through 90 degrees counter-clockwise. Then pull truss apart.

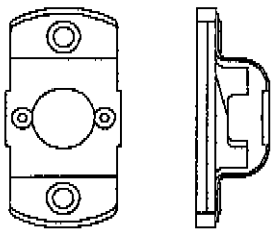
QRB CAMLOC (QUICK RELEASE BOLT)

To assemble truss with the QRB, use the custom camloc spanner. Line up the truss male end to female receptacle end correctly so that all main truss tubes align, push male QRB Camlocs into female receptacles. Using the custom Camloc spanner castleated end turn the QRB through 90 degrees to engage the lugs into the female receptacle. Using the 3/4" end of the spanner tighten the locking nut until it is a snug fit against the spacing washer

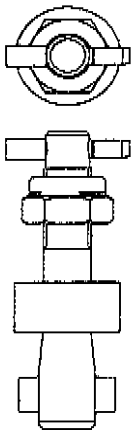
To disassemble, Use 3/4" spanner to slacken off the locking nut, then use the castleated end of spanner to release the QRB by turning counter-clockwise.

Male Camloc 34F





Female Camloc receptacle for use with both types of Male Camlocs.



QRB Male Camloc

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