

WR-52/114
Change Notice 1
20 October 1972

NAVAL ORDNANCE SYSTEMS COMMAND
DEPARTMENT OF THE NAVY
WEAPONS REQUIREMENT, CARLOADING

BOMB, CLUSTER CBU-55/B (FUEL AIR EXPLOSIVE)
IN CONTAINER CNU-120/E
FLEET ISSUE UNIT LOAD

This notice forms a part of WR-52/114 dated 25 July 1969 and is mandatory for use by establishments of the Naval Systems Command within the Naval Material Command.

Page 1

1. Delete title "Bomb, Cluster CBU-55/B (Fuel Air Explosive) in Container CNU-120/E, Fleet Issue Unit Load" and substitute

Bomb, Cluster CBU-55/B in Container CNU-120/E or
CBU-72/B in Container CNU-194/E (Fuel Air Explosive)
Fleet Issue Unit Load

Page 2

1. Change first sentence of General Note 5 to read "The load consists of cluster bombs CBU-55/B in containers CNU-120/E or CBU-72/B in containers CNU-194/E (Fuel Air Explosive)."

Distribution

WR-51 and WR-52
distribution list

Preparing Activity

NAD Earle (NWHL)

Code Ident
10001

Naval Ordnance Systems Command
Department of the Navy

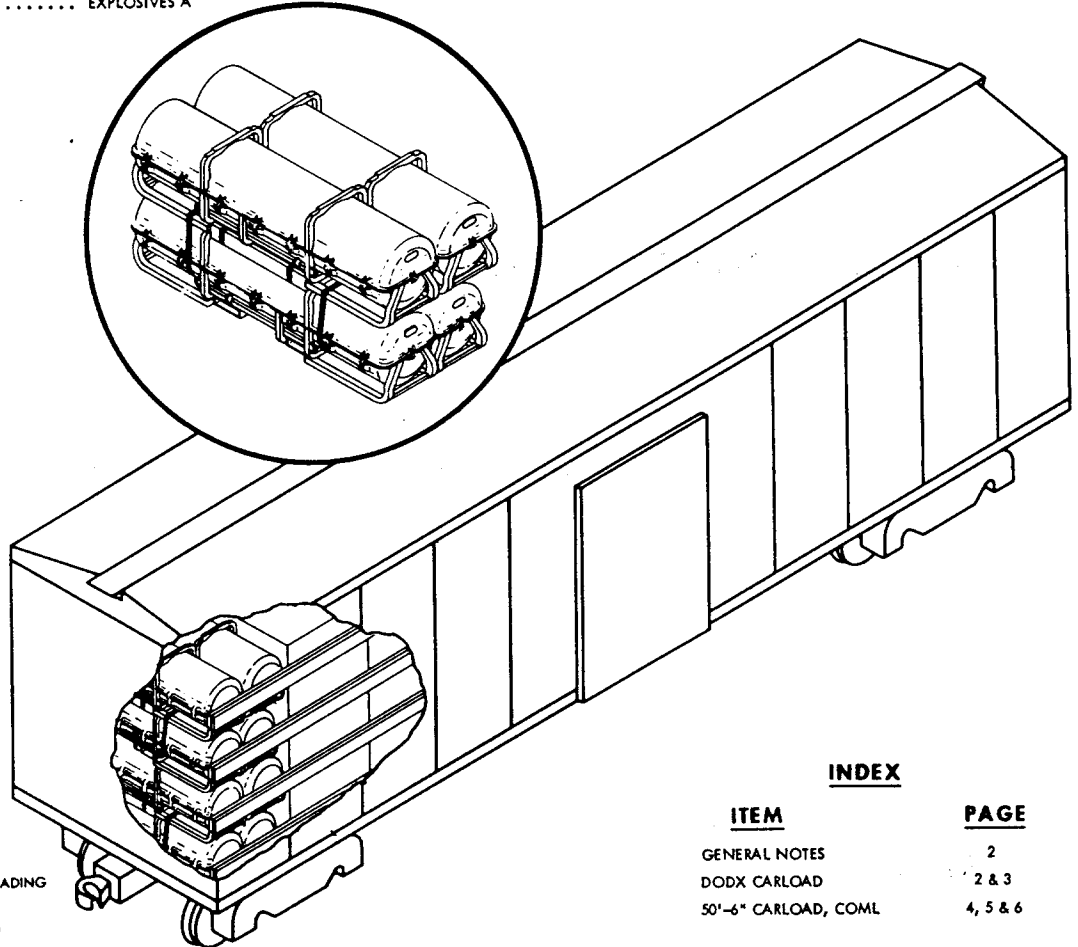
WR-52/114

25 JULY 1969

**WEAPONS REQUIREMENT, CARLOADING
BOMB, CLUSTER CBU-55/B (FUEL AIR EXPLOSIVE)
IN CONTAINER CNU-120/E
FLEET ISSUE UNIT LOAD**

UNIT LOAD DATA

WEIGHT 3808 LBS
DIMENSIONS 102 17/32 L X 46 5/16 W X 51 1/2 H
CUBE 141.5 CU FT
DOT HAZARD CLASSIFICATION EXPLOSIVES A



THIS WR SUPERSEDES
AND CANCELS ALL PRIOR
DRAWINGS COVERING CARLOADING
OF THIS ITEM
UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES

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DODX CARLOAD	2 & 3
50'-6" CARLOAD, COML	4, 5 & 6

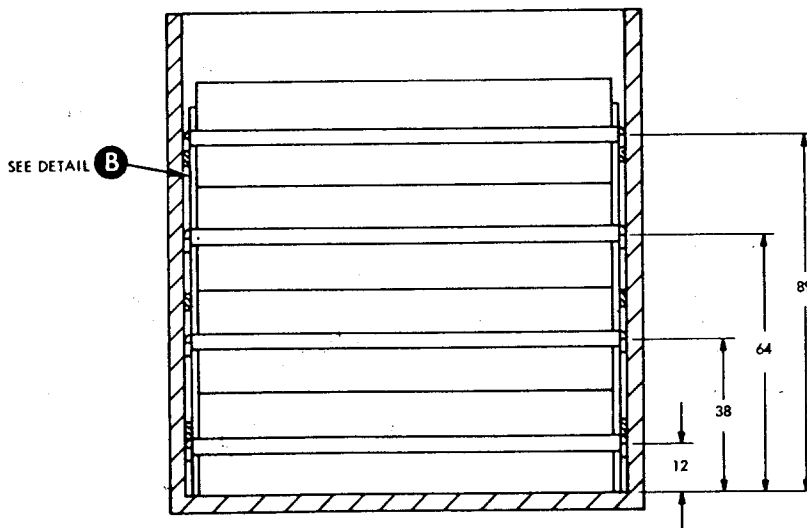
54/181	PALLETIZING	REV							
51/80	TRUCKLOADING	LTR							
WR NO.	ASSOCIATED PROCESS	REVISION DESCRIPTION	DATE	TDA	BUXPL	SYSCOM	APPROVAL		
AUTHORIZED AND RELEASED FOR GENERAL USE.			APPROVED BY BUREAU OF EXPLOSIVES						
			<i>C. F. Grassmuck</i> SIGNATURE		MILITARY ASSISTANT		4/15/69 DATE		
<i>J. P. Kelly</i> NWHL 5/22/69 SIGNATURE TECHNICAL DIRECTING ACTIVITY (TDA) DATE			ORIGINATOR <i>C. P. Troutman</i> 5/22/69 SIGNATURE						
<i>E. C. Albrecht</i> AIR-53442 6/13/69 SIGNATURE (AIR) [] SYSCOM, BY DIRECTION DATE			NAVAL WEAPONS HANDLING LABORATORY U.S.N.A.D. EARLE, NEW JERSEY						
							PAGE 1 OF 6		

GENERAL NOTES

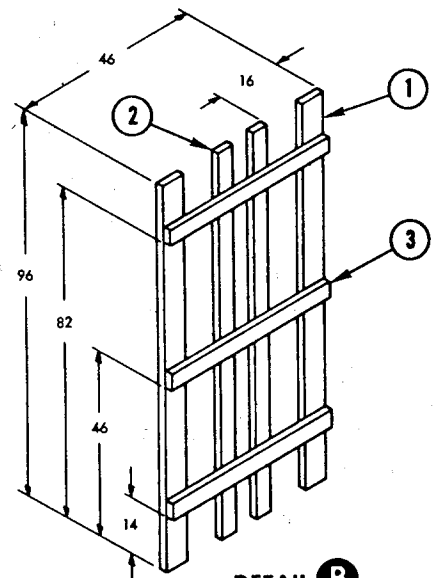
1. FOR GENERAL INFORMATION CONCERNING ORDERING, INSPECTING, AND PREPARING CARS, AND FOR DUNNAGING MATERIALS, DESIGN, AND INSTALLATION OF DUNNAGE SEE THE GENERAL DOCUMENT WR-52 "CARLOADING OF WEAPONS AND MAJOR WEAPON SYSTEM COMPONENTS."
2. WHEN PLANNING SHIPMENTS ORDER THE MINIMUM NUMBER OF CARS OF THE CAPACITY REQUIRED FOR THE SHIPMENT. UTILITY LOADER CARS SHALL BE SERIES DODX 28000.
3. LOADING PLANS SHOWN ARE FOR DODX UTILITY LOADER CAR WITH 50 FT 6 INCHES INSIDE LENGTH, 107 3/4 INCHES INSIDE WIDTH BETWEEN RAILS (111 INCHES INSIDE WIDTH BETWEEN SIDE WALLS), AND COMMERCIAL BOXCARS WITH 50 FT 6 INCHES INSIDE LENGTH, 110 INCHES INSIDE WIDTH.
4. IF END WALLS OF CARS ARE NOT SQUARE THEY MUST BE SQUARED OFF BEFORE STARTING TO LOAD CAR.
5. THE LOAD CONSISTS OF CLUSTER BOMBS CBU-55/B (FUEL AIR EXPLOSIVE) IN CONTAINERS CNU-120/E. THE CONTAINERS ARE UNITIZED FOUR TO A UNIT LOAD AS SHOWN IN WR-54/181.
6. THE UNIT LOADS ARE HANDLED AND LOADED WITH A SUITABLE FORK LIFT TRUCK.
7. UNLESS OTHERWISE SPECIFIED NAILING SHALL BE IN ACCORDANCE WITH WR-52.
8. APPLICABLE MATERIAL SPECIFICATIONS:
 - DUNNAGE LUMBER - FED. SPEC MM-L-751
 - NAILS - FED. SPEC FF-N-105
 - STRAPPING - FED. SPEC QQ-5-781, TY 1, CL A.
9. AFTER BLOCKING AND BRACING HAS BEEN INSPECTED ATTACH SHIPPING DOCUMENTS INSIDE THE CAR IN AN ACCESSIBLE AREA, CLOSE AND SEAL BOXCAR DOORS, AND ATTACH APPLICABLE PLACARDS TO THE OUTSIDE OF CAR AS PRESCRIBED IN OP 2165 (VOL 1).

50 FT 6 IN. BOXCAR, DODX

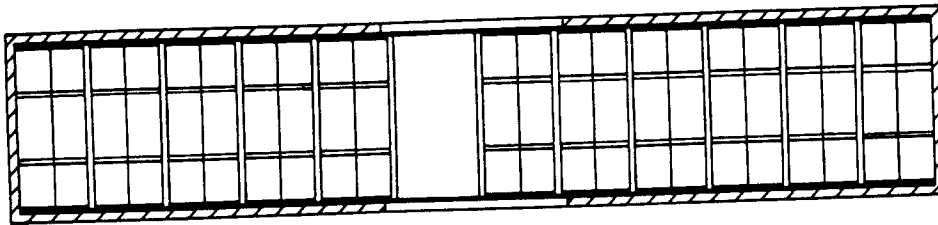
1. THE CARLOAD CONSISTS OF 22 UNIT LOADS WHICH MUST BE LOADED AND DUNNAGED IN ACCORDANCE WITH THIS PROCEDURAL DRAWING.
2. A DETAILED DESCRIPTION AND OPERATING INSTRUCTIONS FOR THE UTILITY LOADER ARE CONTAINED IN OP 1750.
3. TO PREVENT UNUSED "DF" EQUIPMENT FROM BECOMING DISLODGED DURING TRANSIT OF DODX CARS SECURE IT AT ANY LOCATION IN THE BOXCAR WHICH WILL NOT INTERFERE WITH UNLOADING.
4. WHEN LESS THAN CARLOAD (LCL) QUANTITIES ARE REQUIRED TO BE SHIPPED IN DODX BOXCARS THE SAME PROCEDURES AND METHODS OF BLOCKING ARE APPLICABLE. ANY BAYS OR PORTION THEREOF MAY BE USED PROVIDING THE WEIGHT DISTRIBUTION REQUIREMENTS OF THE AAR ARE COMPLIED WITH (SEE WR-52). EACH CROSSMEMBER WILL BE USED IN SUCH A MANNER THAT IT WILL RETAIN NOT MORE THAN 2000 LBS OF THE LADING.



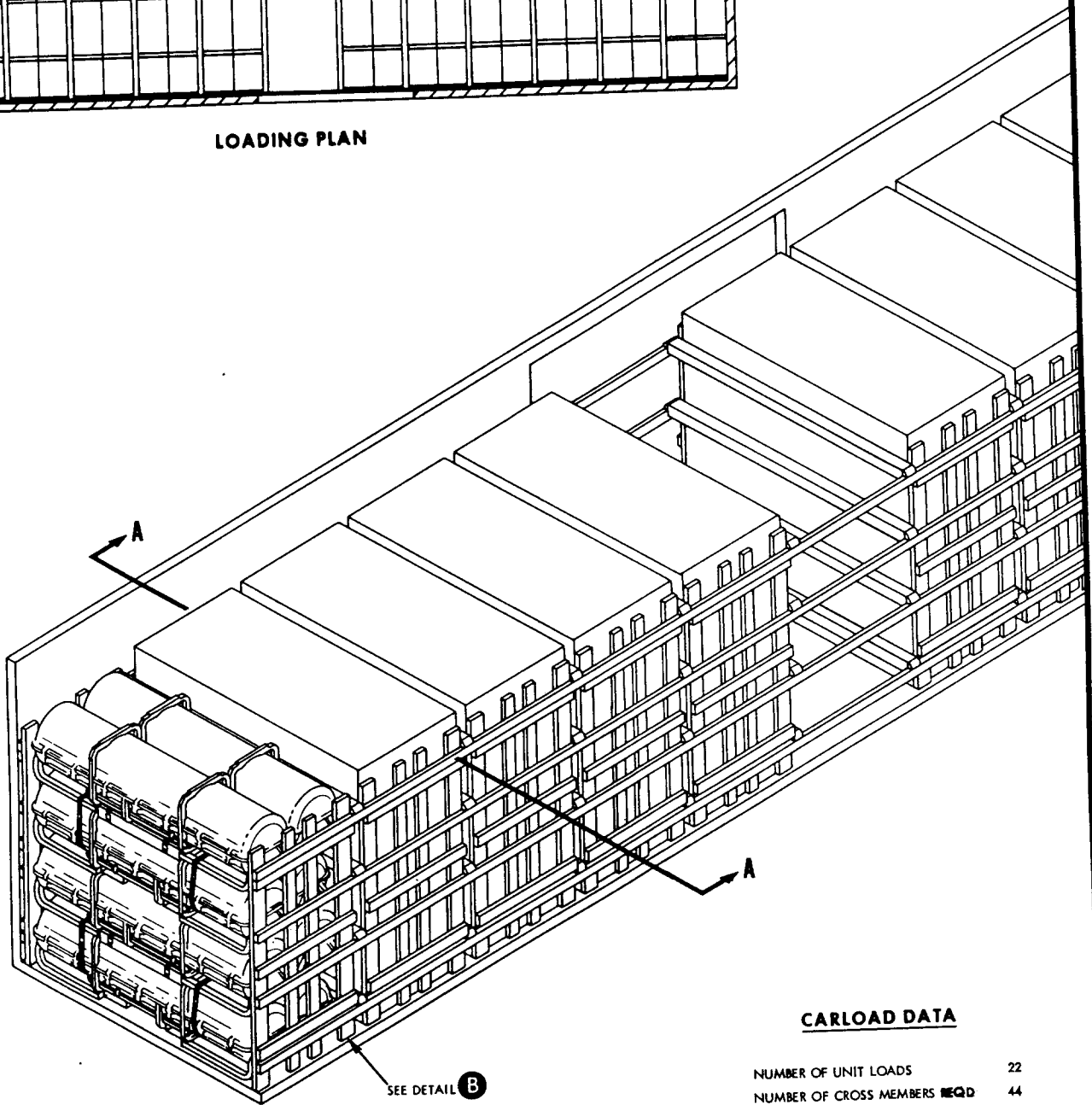
SECTION A-A
SHOWING LOCATIONS OF WALL MEMBERS
USED FOR CROSS MEMBERS



DETAIL B
SWAY BRACE
22 REQUIRED



LOADING PLAN



CARLOAD DATA

NUMBER OF UNIT LOADS	22
NUMBER OF CROSS MEMBERS REQD	44
LOAD WEIGHT	83,776 LBS
DUNNAGE WEIGHT	1,897 LBS
CARLOAD WEIGHT	85,673 LBS

SEE DETAIL **B**

PIECE NO.	DESCRIPTION	SIZE	NO. PCS REQD	NAIL TO	NUMBER	SIZE
3	SWAY BRACE HORIZONTAL	2 x 4 x 46	66	SEE 1	-	-
2	SWAY BRACE VERTICAL	2 x 4 x 96	44	3	3 PER JOINT	10d
1	SWAY BRACE VERTICAL	2 x 6 x 96	44	3	3 PER JOINT	10d

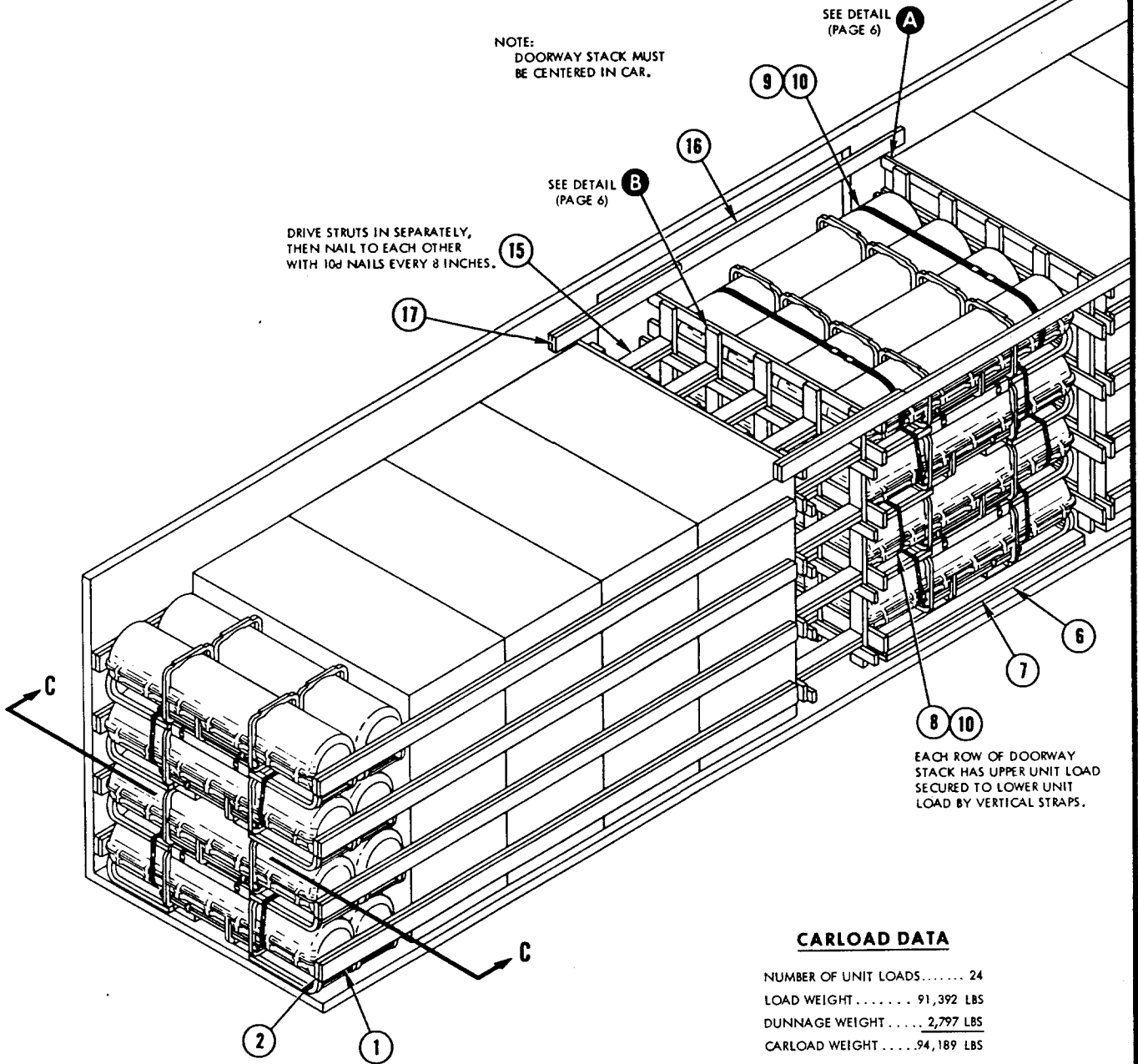
LIST OF MATERIALS AND NAILING DATA

50 FT 6 IN. BOXCAR, COMMERCIAL

1. THE CARLOAD CONSISTS OF 24 UNIT LOADS WHICH MUST BE LOADED AND DUNNAGED IN ACCORDANCE WITH THIS PROCEDURAL DRAWING.
2. WHEN LESS THAN CARLOAD (LCL) QUANTITIES ARE REQUIRED TO BE SHIPPED IN COMMERCIAL BOXCARS AND A PARTIAL LAYER RESULTS, THE PARTIAL LAYER OF LADING SHALL BE BRACED BY MEANS OF END BRACING AND/OR PARTIAL LAYER BRACING CONSTRUCTED IN ACCORDANCE WITH DETAILS PAGES 8, 9 AND 10 OF WR-52/100. SELECT THE TYPE OF BRACE TO COMPLY WITH THE WEIGHT OF THE UNITS TO BE RETAINED. THE CENTER GATE HEIGHT SHOULD BE ADJUSTED AS REQUIRED.
3. THE LOADS AS SHOWN ARE BASED ON CARS WHICH HAVE 10 FT WIDE DOORWAY OPENINGS AND ARE EQUIPPED WITH CONVENTIONAL SLIDING TYPE DOORS. THE DEPICTED PROCEDURES AND METHODS OF BLOCKING ARE APPLICABLE TO BOXCARS EQUIPPED WITH CONVENTIONAL SLIDING TYPE DOORS OTHER THAN 10 FT WIDE PROVIDING THE LENGTH OF PIECE 16 IS ADJUSTED AS REQUIRED TO SUIT THE PARTICULAR DOORWAY OPENING.
4. THE DEPICTED PROCEDURES AND METHODS OF BLOCKING ARE ALSO APPLICABLE TO BOXCARS EQUIPPED WITH PLUG TYPE DOORS PROVIDING THE LENGTH OF PIECE 16 IS ADJUSTED AS REQUIRED TO SUIT THE PARTICULAR DOORWAY OPENING. DUNNAGE MATERIAL MUST NOT BE NAILED TO ANY PLUG DOOR, WHETHER MAIN OR AUXILIARY. IF LUMBER OF SUFFICIENT LENGTH TO SPAN PLUG DOORS IS NOT AVAILABLE, RANDOM LENGTH MATERIAL, DOUBLED AND SPLICED, BUT WITH JOINTS OF SPLICES OFFSET, MAY BE USED. SECURELY CLOSE DOORS AND WIRE TOGETHER WITH A STRONG FLEXIBLE STEEL WIRE INSERTED THROUGH THE HOLES IN THE DOOR LATCH ASSEMBLY ONE OR MORE TIMES AND THE WIRE ENDS TWISTED TOGETHER.
5. WHEN BOXCARS OTHER THAN 9 FT 2 IN. WIDE ARE USED, THE DUNNAGE NAILED TO THE SIDE WALL OF THE CAR MUST BE INCREASED OR DECREASED AS NECESSARY FOR A TIGHT LOAD ACROSS THE CAR.

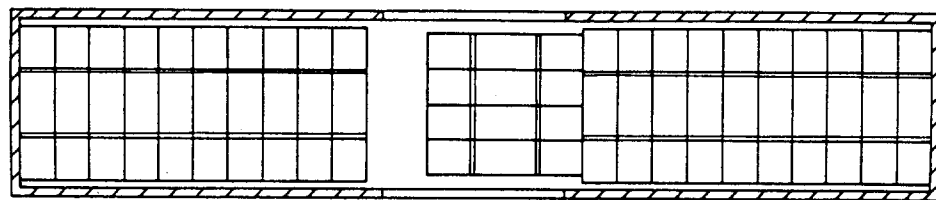
*RANDOM LENGTH PIECES MAY BE USED.
 **AS AN ALTERNATE, 4 X 4 STRUTS MAY BE SUBSTITUTED IN PLACE OF DOUBLED 2 X 6'S.

17	HOLDDOWN CLEAT	2 x 6 x 60	2	16	7	12d
16	GATE HOLDDOWN	2 x 6 x 14 FT	2	CAR WALL	5 EA END	10d
15	STRUT	2 x 6 x WEDGE FIT **	40	12	2 PER JOINT	12d
14	TOP HORIZONTAL	2 x 4 x CAR WIDTH -1	2	12	3 PER JOINT	12d
13	CENTER GATE STRUT CLEAT	2 x 4 x CAR WIDTH -1	8	12	3 PER JOINT	12d
12	CENTER GATE VERTICAL	2 x 6 x 102 1/2	10	SEE 11	-	-
11	CENTER GATE HORIZONTAL	2 x 6 x CAR WIDTH -1	8	12	3 PER JOINT	12d
10	SEAL	1 1/4 x 22 GA MIN	12	-	-	-
9	LATERAL STRAP	1 1/4 x .035 x 20 FT 6	2	-	-	-
8	VERTICAL STRAP	1 1/4 x .035 x 12 FT 6	4	-	-	-
7	SLEEPER	2 x 6 x 96	2	6	2 PER FT	30d
6	SLEEPER	2 x 6 x 96	2	CAR FLOOR	2 PER FT	16d
5	SEPARATOR TOP CLEAT	2 x 4 x CAR WIDTH -1	1	3	3 PER JOINT	12d
4	SEPARATOR HORIZONTAL	2 x 6 x CAR WIDTH -1	8	3	3 PER JOINT	12d
3	SEPARATOR VERTICAL	2 x 6 x 102 1/2	5	SEE 4	-	-
2	SIDE WALL MEMBER	2 x 6 x 19 FT *	16	1	1 PER FT	12d
1	SIDE WALL MEMBER	2 x 6 x 19 FT *	16	CAR WALL	1 PER FT	10d
PIECE NO.	DESCRIPTION	SIZE	NO. PCS REQD	NAIL TO	NUMBER	SIZE
						NAILS
LIST OF MATERIALS AND NAILING DATA						

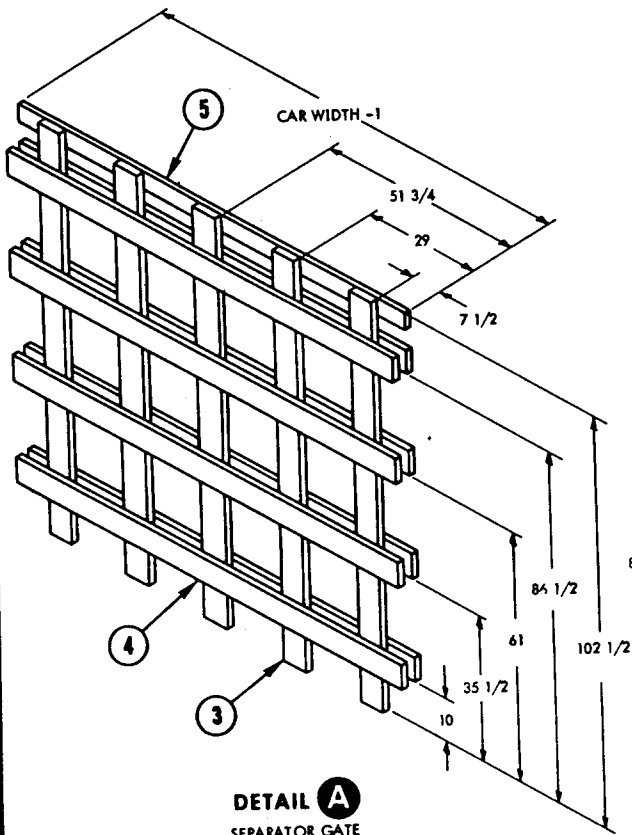


CARLOAD DATA

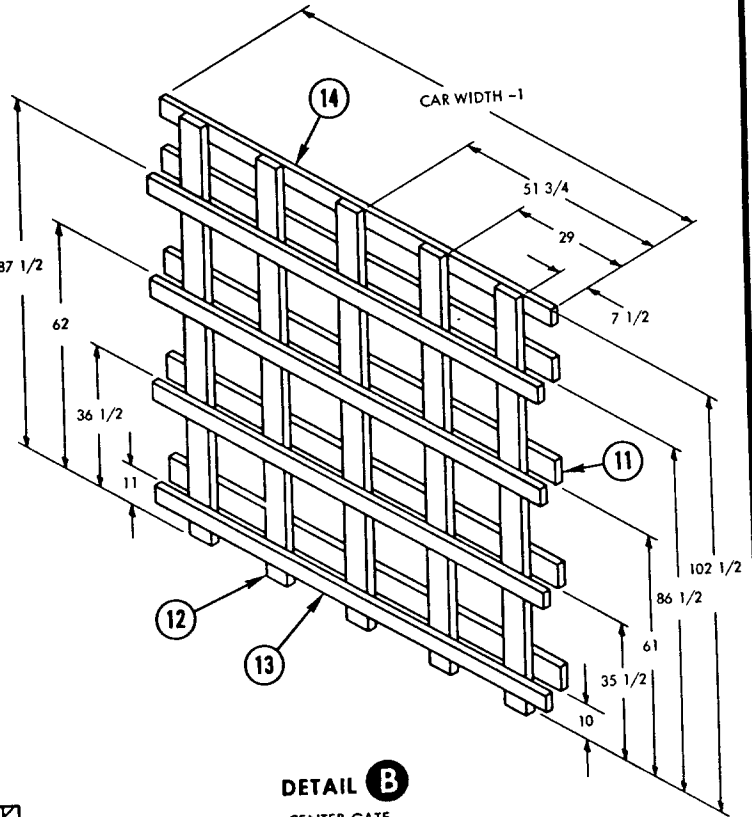
NUMBER OF UNIT LOADS.....	24
LOAD WEIGHT.....	91,392 LBS
DUNNAGE WEIGHT.....	2,797 LBS
CARLOAD WEIGHT.....	94,189 LBS



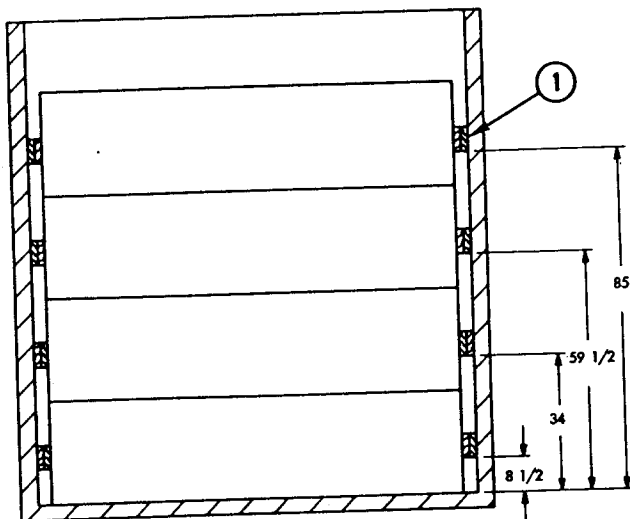
LOADING PLAN



DETAIL A
SEPARATOR GATE
1 REQUIRED



DETAIL B
CENTER GATE
2 REQUIRED



SECTION C-C