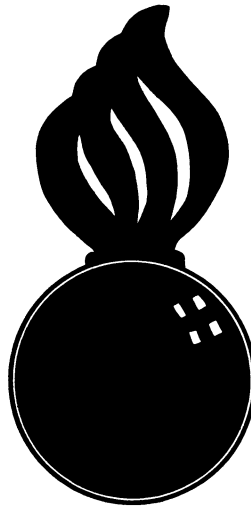


APPROVED
BUREAU OF EXPLOSIVES

A. J. Grassmuck
INSPECTOR
DATE *9/20/62*



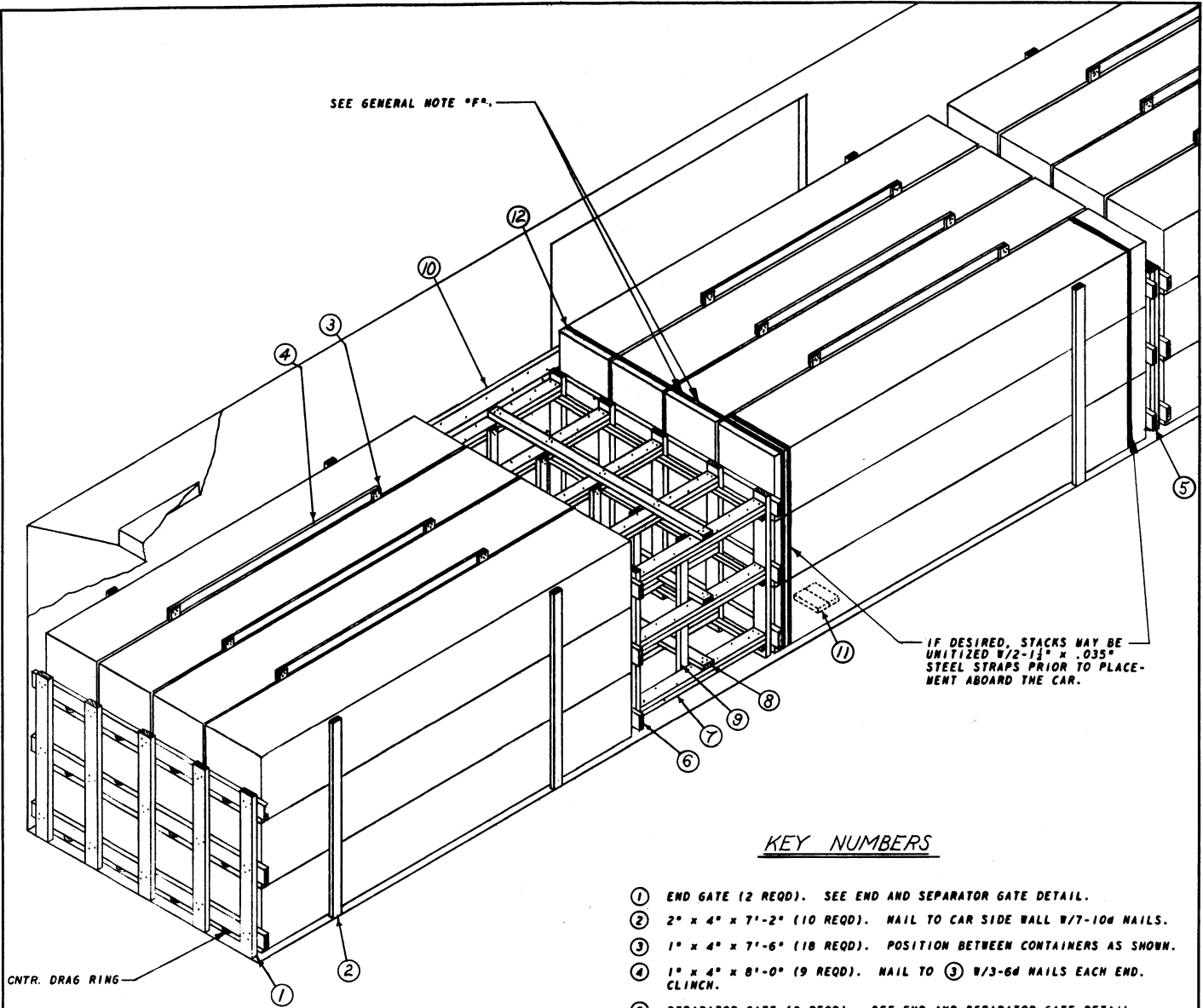
LOADING & BRACING (CL & LCL) IN BOX CAR OF ROCKET MOTOR, M5 AND/OR M5E1, PACKED ONE PER WOODEN SHIPPING CONTAINER, M13 AND/OR M13A1, FOR THE NIKE-AJAX AND NIKE-HERCULES GUIDED MISSILES

LOADING & BRACING (CL & LCL) IN BOX CAR OF ROCKET MOTOR, M5 AND/OR M5E1, PACKED ONE PER WOODEN SHIPPING CONTAINER, M13 AND/OR M13A1, FOR THE NIKE-AJAX AND NIKE-HERCULES GUIDED MISSILES

MANUFACTURER <i>GBF</i>	TRADE <i>GBF</i>	DESIGN <i>DIW / 73</i>	QUANTITY <i>1</i>
ENGINEER <i>GWP/RHA</i>	DESIGNER <i>GBF</i>	INSPECTOR <i>A. J. Grassmuck</i>	EXAMINED <i>John H. Taylor</i> COLONEL, ORD. CORPS U.S.A.
REVISIONS			APPROVED BY ORDER OF THE CHIEF OF ORDNANCE <i>Arthur W. Reid</i> ORD. CORPS U.S.A.
<i>3</i>	<i>16 OCT 61</i>	<i>601 GWP</i>	<i>Arthur W. Reid</i> ORD. CORPS U.S.A.
			ORDNANCE CORPS U.S.A.
			14 JULY 1954
CLASS	DIVISION	DRAWING	FILE
19	48	5057	GM5A7

DO NOT SCALE

SEE GENERAL NOTE "F".



ISOMETRIC VIEW

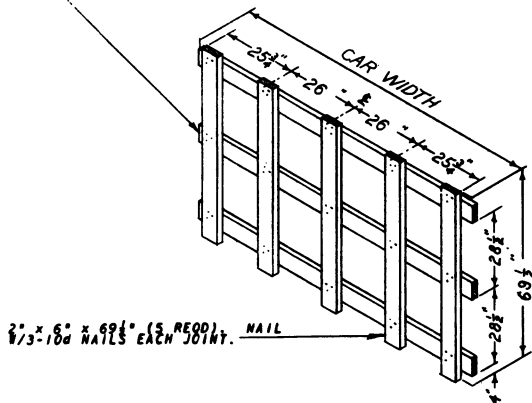
IF DESIRED, STACKS MAY BE
UNITIZED W/2-1 1/2" x .035"
STEEL STRAPS PRIOR TO PLACE-
MENT ABOARD THE CAR.

KEY NUMBERS

- ① END GATE (2 REQD). SEE END AND SEPARATOR GATE DETAIL.
 - ② 2" x 4" x 7'-2" (10 REQD). NAIL TO CAR SIDE WALL W/7-10d NAILS.
 - ③ 1" x 4" x 7'-6" (18 REQD). POSITION BETWEEN CONTAINERS AS SHOWN.
 - ④ 1" x 4" x 8'-0" (9 REQD). NAIL TO ③ W/3-6d NAILS EACH END. CLINCH.
 - ⑤ SEPARATOR GATE (2 REQD). SEE END AND SEPARATOR GATE DETAIL.
 - ⑥ CENTER GATE (2 REQD). SEE DETAIL.
 - ⑦ STRUTS, 2" x 6" x CUT TO FIT (DOUBLED) (15 REQD). LAMINATE W/1-10d NAIL EVERY 6". TOENAIL TO ⑥ W/2-12d NAILS EACH END.
 - ⑧ STRUT BRACING, 2" x 4" x 9'-0" (3 REQD). NAIL TO ⑦ W/3-12d NAILS EACH JOINT.
 - ⑨ STRUT BRACING, 2" x 4" x 66" (5 REQD). NAIL TO ⑦ W/3-12d NAILS EACH JOINT.
 - ⑩ GATE HOLD DOWN, 2" x 6" x 7'-0" (2 REQD). NAIL TO CAR WALL W/1-10d NAIL EVERY 8".
 - * ⑪ 2" x 6" x CUT TO FIT BETWEEN CONTAINER SKIDS (4 REQD). PRE-POSITION AS SHOWN. NAIL TO CAR FLOOR W/4-16d NAILS.
 - * ⑫ STEEL STRAPPING, 1 1/2" x .035" x 34'-0" (1 REQD). PRE-POSITION.
- * THESE PIECES REQUIRED FOR DOORWAY PROTECTION.

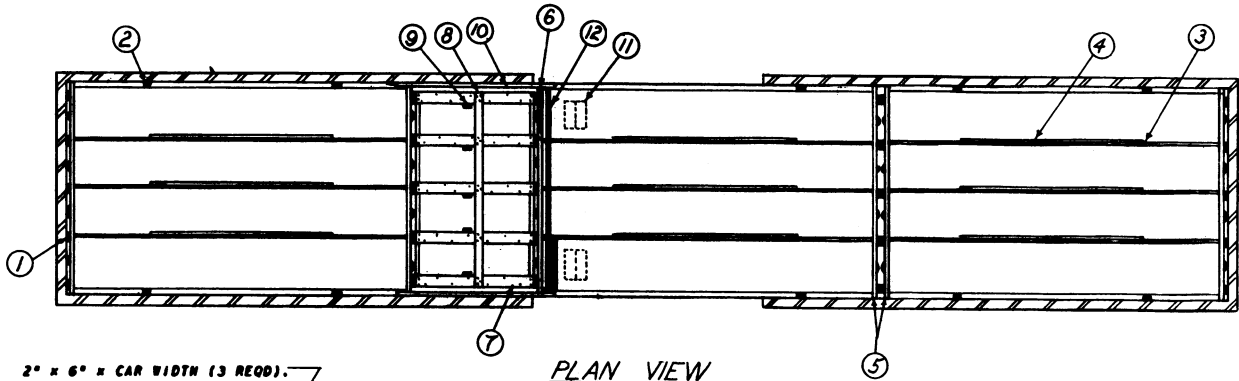
CNTR. DRAG RING

2" x 6" x CAR WIDTH (3 REQD).



END & SEPARATOR GATE

(4 REQD)

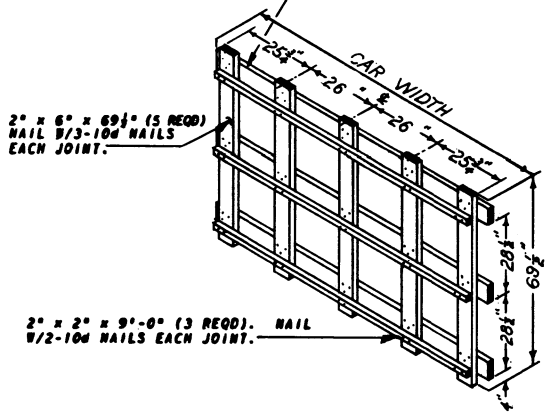


2" x 6" x CAR WIDTH (3 REQ).

PLAN VIEW

50'-6" LONG x 9'-2" WIDE BOX CAR

GENERAL NOTES



CENTER GATE

(2 REQ)

- A. LOAD AS SHOWN IS BASED ON BOX CAR 50'-6" LONG x 9'-2" WIDE (WITH 10'-0" MINIMUM DOORWAY OPENING).
- B. SELECTION OF RAIL CAR FOR THE TRANSPORT OF THIS ITEM WILL BE IN ACCORDANCE WITH PARAGRAPH 8,300.4, ORDM 3-4, VOL 3.
- C. NOTICE: SHIPMENT WILL BE POSITIONED IN THE RAIL CAR IN COMPLIANCE WITH THE WEIGHT DISTRIBUTION REQUIREMENTS OF THE AAR. THE NUMBER OF UNITS MAY BE ADJUSTED TO FIT THE RAIL CAR CONCERNED OR THE QUANTITY TO BE SHIPPED; HOWEVER, THE APPROVED METHODS CONTAINED HEREIN, FOR FULL OR PARTIAL CARLOAD, MUST BE FOLLOWED FOR BLOCKING, BRACING, AND STAYING OF THIS ITEM.
- D. FOR DETAIL OF M13 CONTAINER SEE DRAWING NO. 8026310. FOR DETAIL OF M13A1 CONTAINER SEE DRAWING NO. 8030062. CONTAINER DIMENSIONS - 177" LONG x 25 1/2" WIDE x 31 1/2" HIGH. GROSS WEIGHT - M13 CONTAINER, 1,883 POUNDS (APPROX) M13A1 CONTAINER, 1,949 POUNDS (APPROX).
- E. FOR AUTHORIZED METHODS OF BRACING PARTIAL LAYERS, SEE ORD CORPS DRAWING 19-48-2213-5P38.
- F. ALL 1/2" STRAPPING WILL BE SEALED WITH TWO (2) SEALS AND TWO (2) CRIMPS PER SEAL.
- G. THIS ITEM IS AN ICC CLASS "B" EXPLOSIVE. PROCEDURES SHOWN HEREIN ARE APPLICABLE FOR THE SHIPMENT OF CONTAINERS WITH INERT LOADED, EMPTY OR PRACTICE MOTORS AND OF EMPTY CONTAINERS.

BILL OF MATERIAL

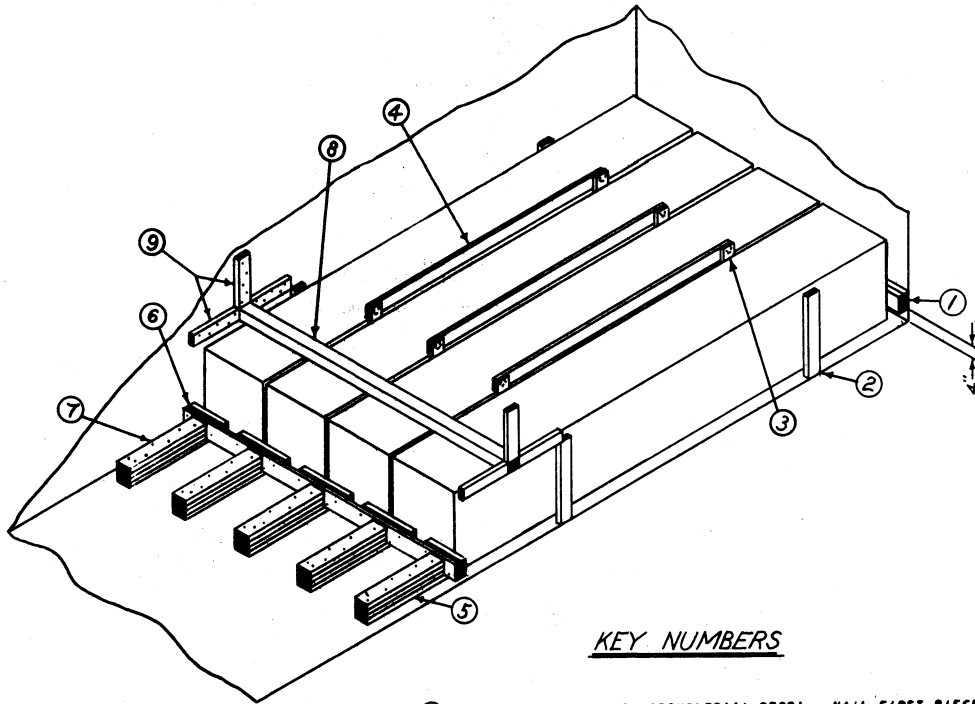
LUMBER	LINEAL FEET	BOARD FEET
1" x 4"	207	69
2" x 2"	54	18
2" x 4"	127	84
2" x 6"	527	527
NAILS	NO. REQD	POUNDS
6d (2")	34	1/2
10d (3")	587	9 1/2
12d (3 1/2")	150	2
16d (3 1/2")	16	1/2
STRAPPING, STEEL, 1/2" x .035" - 34' REQD - 5 LBS		

MATERIAL SPECIFICATIONS

- LUMBER: SEE PARAGRAPH 8400, ORDM 3-4, VOL 3.
- NAILS: COMMON, CEMENT COATED, FED SPEC FF-N-105.
ALT: ANNULAR-RING TYPE NAIL OF SAME SIZE.
- STRAPPING: STEEL, TYPE 1, CLASS "A" OR "C", FED SPEC QQ-S-701.
FOR FSN SEE 58-30-100.

LOAD AS SHOWN

ITEM	QUANTITY	WEIGHT
ROCKET MOTOR, M13 CNTR	36	67,780 LBS (APPROX)
DUNNAGE		1,927 LBS
TOTAL WEIGHT		69,713 LBS (APPROX)
● ROCKET MOTOR, M13A1 CNTR		76,140 LBS (APPROX)



TYPICAL LCL

9'-2" WIDE BOX CAR

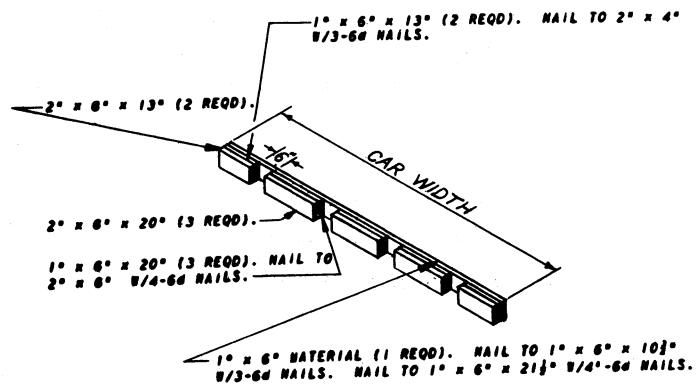
NOTE *

FOR A LOAD LESS THAN FOUR (4) CNTRS WIDE, SUBSTITUTE 2" x 6" x 18" (DOUBLED) POSITIONED LENGTHWISE ON FLOOR NEAR CONTAINER ENDS FOR PIES ② AS REQUIRED. NAIL FIRST PIECE TO CAR FLOOR W/3-16d NAILS. NAIL SECOND PIECE TO FIRST IN LIKE BANNER. ADJUST CONSTRUCTION OF PIECE ⑥ TO SUIT LOAD WIDTH.

FIVE (5) BACK UP CLEATS, SHOWN AS PIECES ③ AND ⑦, ARE ADEQUATE FOR RETAINING A MAXIMUM LCL LOAD OF 17,000 POUNDS.

KEY NUMBERS

- ① 2" x 6" x CAR WIDTH (DOUBLED) (1 REQD). NAIL FIRST PIECE TO CAR WALL W/1-10d NAIL EVERY 12". NAIL SECOND PIECE TO FIRST IN LIKE BANNER.
- ② 2" x 4" x 20 1/2" (4 REQD). NAIL TO CAR SIDE WALL W/3-10d NAILS. SEE NOTE "*" .
- ③ 1" x 4" x 33" (6 REQD). POSITION BETWEEN CONTAINERS AS SHOWN.
- ④ 1" x 4" x 8'-0" (3 REQD). NAIL TO ③ W/3-6d NAILS EACH END. CLINCH.
- ⑤ 2" x 6" x 42" (5 REQD). EXTEND 3" UNDER CONTAINER. NAIL TO CAR FLOOR W/7-16d NAILS.
- ⑥ HEADER (1 REQD). SEE DETAIL. FABRICATE TO SUIT LADING WIDTH. TOENAIL TO ⑤ W/2-12d NAILS EACH JOINT. SEE NOTE *
- ⑦ 2" x 6" x 36" (TRIPLED) (5 REQD). NAIL FIRST PIECE TO ⑤ W/8-40d NAILS. NAIL EACH ADDITIONAL PIECE IN LIKE BANNER. SEE NOTE *
- ⑧ 4" x 4" x CAR WIDTH (1 REQD).
- ⑨ 2" x 4" x 18" (6 REQD). POSITION AS SHOWN AND NAIL TO CAR WALL W/5-10d NAILS.



HEADER

(1 REQD)