

REV. NO. 1 APPROVED
 BUREAU OF EXPLOSIVES
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 DATE 3/4/65

LOADING & BRACING ON "LOW-BOY WELL HOLE" TYPE TRAILER OF AFT SECTION, CONTROL SURFACE KIT, AND ROCKET MOTOR FIN, PACKED IN RELATED CONTAINERS, FOR THE NIKE-HERCULES GUIDED MISSILE.

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CAUTION
 READ GENERAL NOTES, PAGE 2, PRIOR TO BEGINNING LOADING OPERATIONS.

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DRAFTER F.W.M.	ANCPH-RE-SHM <i>[Signature]</i>	ENGINEER DIW / R6E	SUBMITTED <i>[Signature]</i>
CHECKER GWP	CHECKER	ANSHI-SMIP	COMMANDER, SAVANNA ARMY DEPOT
REVISIONS			APPROVED <i>[Signature]</i>
1	2 MAY 64	<i>[Signature]</i>	ARMY MISSILE COMMAND
			APPROVED BY ORDER OF COMMANDER, ARMY MATERIEL COMMAND <i>[Signature]</i>
			ARMY SUPPLY & MAINTENANCE COMMAND
			U.S. ARMY MATERIEL COMMAND
			9 NOVEMBER 1959
			CLASS DIVISION DRAWING FILE
			19 48 5584 GM IIMIO

DO NOT SCALE

GENERAL NOTS

- A. LOADS AS SHOWN ARE BASED ON A "LOW-BOY WELL-HOLE" TYPE TRAILER 33'-0" LONG X 8'-0" WIDE WITH WOOD, WOOD AND/OR METAL FLOORS, WITH 23'-11" LONG X 7'-1" WIDE WELL HOLE.
CAUTION: LADING HEIGHT, PAGE 3 5'-1/2"
 LADING HEIGHT, PAGE 4 10'-1"
 LADING HEIGHT, PAGE 5
- B. NOTICE: TO USE THE DEPICTED OUTLOADING PROCEDURES, THE CARRIER MUST FURNISH A TRAILER WITH A SUFFICIENT QUANTITY OF TIE DOWN STRAP ANCHOR DEVICES PROPERLY LOCATED TO FACILITATE STRAP APPLICATION AS SHOWN. EACH DEVICE MUST BE OF AN ADEQUATE WIDTH TO RECEIVE 2" STRAPPING WITHOUT DEFORMING THE STRAP ACROSS ITS WIDTH, AND OF A STRENGTH EQUAL TO OR GREATER THAN THE 2" TIE DOWN STRAPPING.
- C. GROSS WEIGHT AND AXLE DISTRIBUTION OF WEIGHT WILL BE IN ACCORDANCE WITH PARAGRAPH 8, 346.4 OF ORDM 3-4, VOL 3.
- D. NOTICE: A SHIPMENT WILL BE LOADED ON THE TRAILER CONSISTENT WITH STATE WEIGHT LAWS. THE NUMBER OF UNITS MAY BE ADJUSTED TO FIT THE DIMENSIONS OF THE VEHICLE CONCERNED OR THE QUANTITY TO BE SHIPPED; HOWEVER, THE APPROVED METHODS SHOWN HEREIN, FOR FULL OR PARTIAL TRUCKLOAD MUST BE FOLLOWED FOR BLOCKING, BRACING, AND STAYING OF THESE ITEMS.

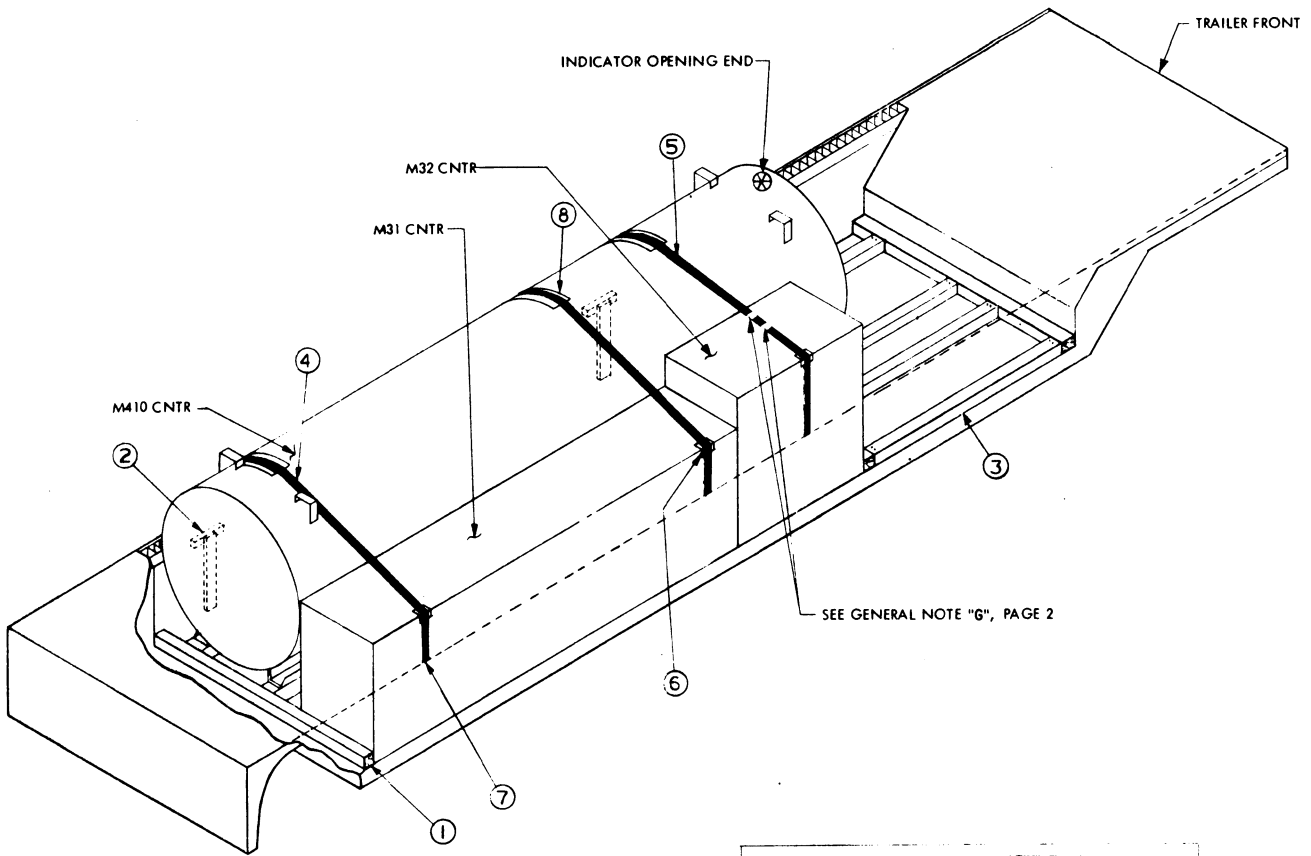
E. CONTAINER DATA:

<u>CONTAINER</u>	<u>DIMENSIONS</u>	<u>GROSS WT (APPROX)</u>	<u>DWG. NO.</u>
M410	223-1/2" X 54-3/4" X 61-1/2"	4,606	9031007
CONTROL SURFACE KIT IN			
M31 CONTAINER	147-1/2" X 29" X 42-1/8"	1,050	8524211
ROCKET MOTOR FIN IN:			
M39 CNTR	51-1/4" X 29-1/2" X 51-3/4"	581	9031178
M32 CNTR	62-5/8" X 29-5/16" X 51-3/4"	644	8524212

- F. IF EDGE PROTECTORS FOR 2" STRAPPING ARE NOT COMMERCIALY AVAILABLE, THEY MAY BE FORMED FROM 18 (MIN) GAGE SHEET STEEL 9" LONG X 6" WIDE.
- G. WHEN ANY STRAP IS SEALED AT AN END-OVER-END LAP JOINT, A MINIMUM OF (2) SEALS WITH (2) CRIMPS PER SEAL MUST BE USED.
CAUTION: EXERCISE CARE DURING TENSIONING TO PREVENT DAMAGE TO CONTAINERS.
- H. LOAD WILL BE SECURED WITH CHAINS AND/OR LOAD BINDERS IN LIEU OF SPECIFIED DUNNAGE.
- J. TIE BAR FACILITIES, TOGETHER WITH 1-1/4" X .035" STEEL STRAPPING, WILL BE USED TO UNITIZE CONTAINERS AS SHOWN. IF THE CAPACITY OF THE MHE PERMITS, IT IS RECOMMENDED THAT CONTAINERS BE UNITIZED PRIOR TO PLACEMENT ABOARD THE TRAILER.
- K. SPECIFIED OUTLOADING PROCEDURES CAN ALSO BE UTILIZED FOR THE SHIPMENT OF THE DEPICTED CONTAINERS WHEN THEY ARE EMPTY OR LOADED WITH AN ITEM WHICH IS IDENTIFIED DIFFERENTLY BY NOMENCLATURE THAN THE ITEM DESIGNATED WITHIN THE DRAWING TITLE.

MATERIAL SPECIFICATIONS

- LUMBER: SEE PARAGRAPH 8400, ORDM 3-4, VOL 3.
- NAILS: COMMON, CEMENT COATED FED SPEC FF-N-105.
 ALT: ANNULAR-RING TYPE NAILS OF SAME SIZE.
- STRAPPING: STEEL, TYPE 1, CLASS A OR C, FED SPEC QQ-S-781.
 (FOR FSN SEE SB-38-100).
- ANTI-CHAFING MATERIAL, NEUTRAL BARRIER MATERIAL MIL-B-121.



ISOMETRIC VIEW

KEY NUMBERS

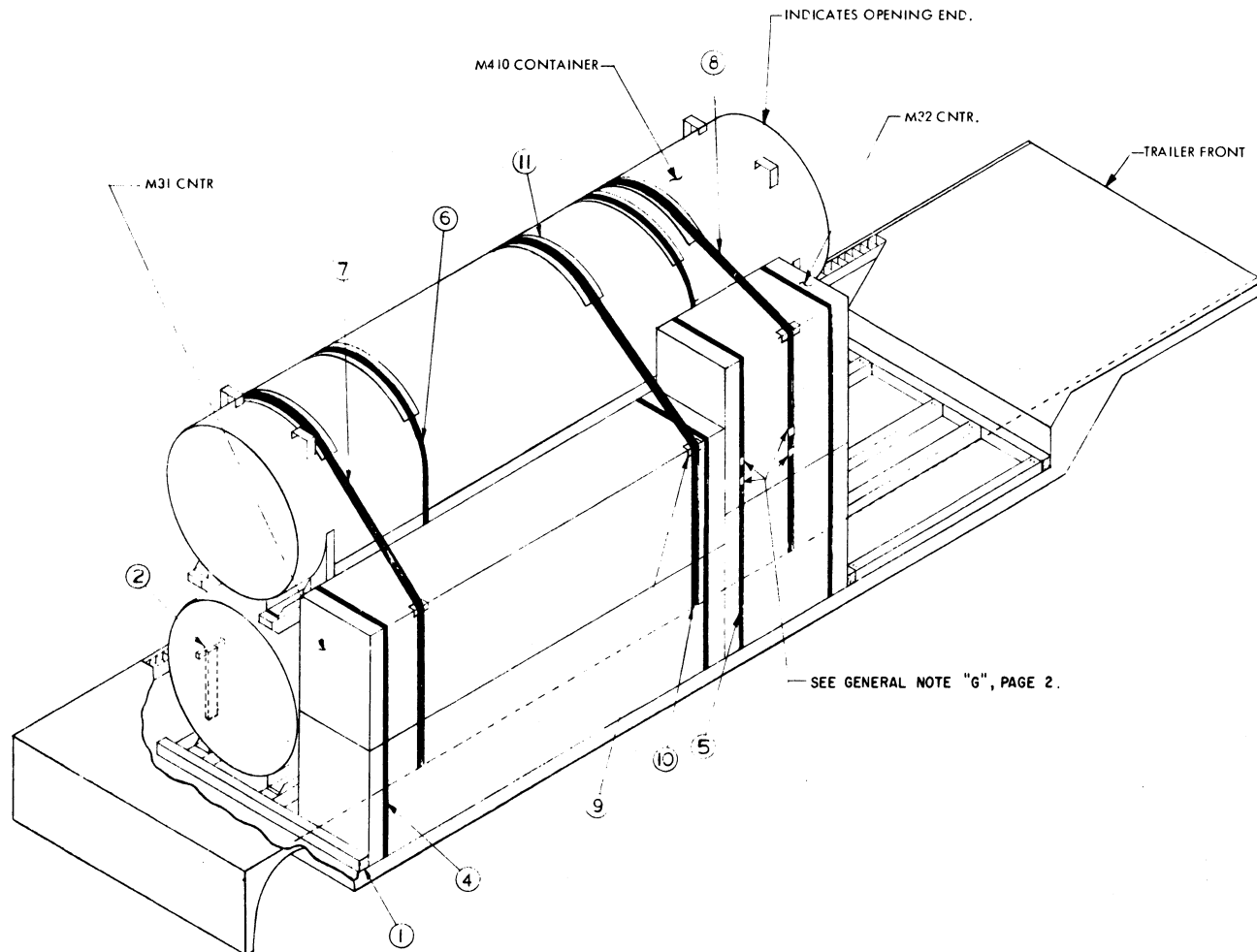
- ① 4" X 4" X TRAILER WIDTH (CUT TO FIT) (1 REQD).
- ② ANTI-CHAFING ASSEMBLY (2 REQD). SEE DETAIL "C", PAGE 6. POSITION BETWEEN M410 CONTAINER AND TRAILER SIDE WALL.
- ③ "FORWARD FLOOR DUNNAGE" (1 REQD). SEE DETAIL, PAGE 6.
- ④ STEEL STRAPPING, 2" X .050" X 18'-0" (2 REQD).
- ⑤ STEEL STRAPPING, 2" X .050" X 19'-0" (1 REQD).
- ⑥ EDGE PROTECTOR FOR 2" STRAPPING (3 REQD). SEE GENERAL NOTE "L", PAGE 2.
- ⑦ PAD, 2" X .050" STRAP 18" LONG (6 REQD). POSITION UNDER AND SEAL TO ④ AND ⑤. SEE DETAIL "A", PAGE 6.
ALT: STAKE POCKET PROTECTORS, SIGNODE NO. 1 (OR EQUAL) (12 REQD). TWO (2) USED UNDER EACH STRAP ANCHOR DEVICE WITH ④ AND ⑤. SEE DETAIL "B", PAGE 6.
- ⑧ ANTI-CHAFING, NEUTRAL BARRIER MATERIAL, PLACE UNDER STRAPPING AT ALL POINTS OF CONTACT WITH METAL CONTAINERS.

BILL OF MATERIAL		
LUMBER	LINEAL FEET	BOARD FEET
2" X 2"	2	1
4" X 4"	45	60
NAILS		POUNDS
6d (2")	4	--
16d (3-1/2")	16	1/2
1/2" X 4" MATERIAL-----5'-0" REQD		
STEEL STRAPPING, 2" X .050" X 64'-0" REQD-----21 LBS		
EDGE PROTECTORS-----3 REQD		
ANTI-CHAFING MATERIAL-----AS REQD		

LOAD AS SHOWN

ITEM	QUANTITY	WEIGHT (APPROX)
M410 CNTR-----	1-----	4,606 LBS
M31 CNTR-----	1-----	1,050 LBS
M32 CNTR-----	1-----	644 LBS
DUNNAGE-----	-----	172 LBS
TOTAL WEIGHT-----		6,472 LBS (APPROX)

ONE UNIT LOAD



ISOMETRIC VIEW

KEY NUMBERS

- (1) 4" X 4" X TRAILER WIDTH (CUT TO FIT) (1 REQD).
- (2) ANTI-CHAFING ASSEMBLY (2 REQD). SEE "DETAIL C", PAGE 6. POSITION BETWEEN M410 CONTAINER AND TRAILER SIDE WALL.
- (3) "FORWARD FLOOR DUNNAGE" (1 REQD). SEE DETAIL, PAGE 6.
- (4) STEEL STRAPPING, 1-1/4" X .035" X 21'-0" (2 REQD).
- (5) STEEL STRAPPING, 1-1/4" X .035" X 23'-0" (2 REQD).
- (6) STEEL STRAPPING, 1-1/4" X .035" X 28'-0" (2 REQD).
- (7) STEEL STRAPPING, 2" X .050" X 26'-0" (2 REQD).
- (8) STEEL STRAPPING, 2" X .050" X 27'-0" (1 REQD).
- (9) EDGE PROTECTORS, FOR 2" STRAPPING (3 REQD). SEE GENERAL NOTE "L", PAGE 2.
- (10) PAD, 2" X .050" STRAP 18" LONG (6 REQD). POSITION UNDER AND SEAL TO (7) AND (8). SEE DETAIL "A", PAGE 6.
ALT: STAKE POCKET PROTECTOR, SIGNODE NO. 1 (OR EQUAL) (12 REQD). TWO (2) USED UNDER EACH STRAP ANCHOR DEVICE WITH (7) AND (8). SEE DETAIL "B", PAGE 6.
- (11) ANTI-CHAFING, NEUTRAL BARRIER MATERIAL, PLACE UNDER STRAPPING AT ALL POINTS OF CONTACT WITH METAL CONTAINERS.

BILL OF MATERIAL

LUMBER	LINEAL FEET	BOARD FEET
2" X 2"	2	1
4" X 4"	45	60
NAILS	NO. REQD	POUNDS
6d (2")	4	--
16d (3-1/2")	16	1/3
1/2" X 4" MATERIAL -----		5' REQD
STEEL STRAPPING, 1-1/4" X .035"-----		144' REQD--21 LBS
STEEL STRAPPING, 2" X .050"-----		88' REQD--30 LBS
EDGE PROTECTORS-----		3 REQD
ANTI-CHAFING MATERIAL-----		AS REQD

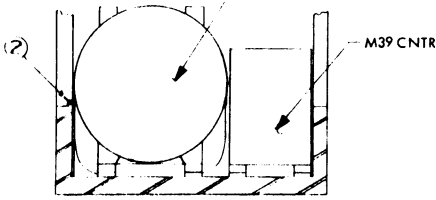
LOAD AS SHOWN

ITEM	QUANTITY	WEIGHT (APPROX)
M410 CNTR-----	2-----	9,212 LBS
M31 CNTR-----	2-----	2,100 LBS
M32 CNTR-----	2-----	1,288 LBS
DUNNAGE-----		203 LBS
TOTAL WEIGHT-----		12,803 LBS (APPROX)

TWO UNIT LOAD

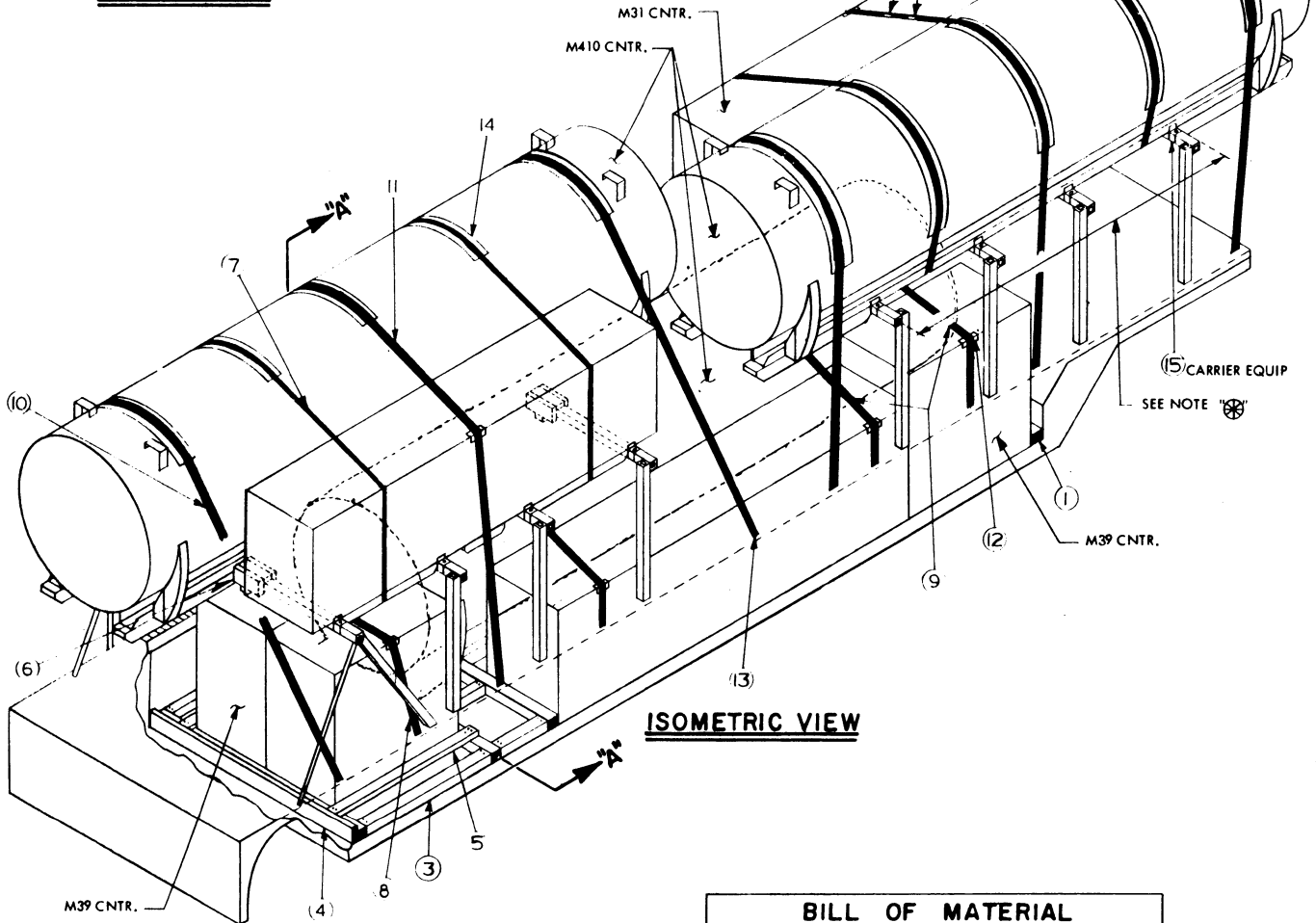
OPENING END M410 CNTR.

NOTE: CROSS MEMBER TO CONTACT CONTAINER SKIDS AS SHOWN TO PREVENT SHIFTING OF CONTAINERS IN TRANSIT.



SECTION "A-A"

SEE GENERAL NOTE "G", PAGE 2.



ISOMETRIC VIEW

KEY NUMBERS

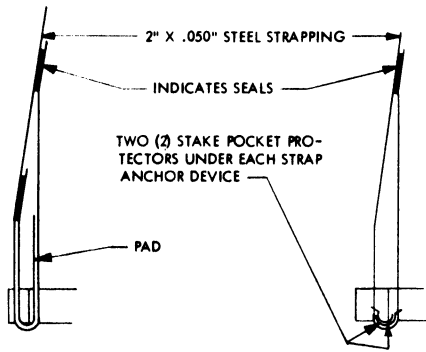
- (1) 4" X 4" X TRAILER WIDTH (CUT TO FIT) (1 REQD).
- (2) ANTI-CHAFING ASSEMBLY (2 REQD). SEE DETAIL "C", PAGE 6. POSITION BETWEEN M410 CONTAINER AND TRAILER SIDE WALL. SEE SECTION "A-A".
- (3) "REAR FLOOR DUNNAGE" (1 REQD). SEE DETAIL, PAGE 6. TOENAIL TO (4) W/12d NAILS.
- (4) SOLID FILL, 6" WIDE X TRAILER WIDTH. AS REQUIRED TO FILL VOID BETWEEN (3) AND TRAILER REAR WALL.
- (5) 2" X 4" X 58-1/2" (2 REQD). NAIL TO (3) W/3-12d NAILS.
- (6) "SPACER" (4 REQD). SEE DETAIL, PAGE 6. TO BE POSITIONED ON CARRIER CROSS MEMBER BETWEEN M410 AND M31 CONTAINER.
- (7) STEEL STRAPPING, 1-1/4" X .035" X 23'-0" (4 REQD).
- (8) STEEL STRAPPING, 2" X .050" X 17'-0" (1 REQD).
- (9) STEEL STRAPPING, 2" X .050" X 19'-0" (3 REQD).
- (10) STEEL STRAPPING, 2" X .050" X 28'-0" (4 REQD).
- (11) STEEL STRAPPING, 2" X .050" X 31'-0" (2 REQD).
- (12) EDGE PROTECTOR, FOR 2" STRAPPING (7 REQD). SEE GENERAL NOTE "L", PAGE 2.
- (13) PAD, 2" X .050" STRAP 18" LONG (14 REQD). POSITION UNDER AND SEAL TO (8), (9), AND (10). SEE DETAIL "A", PAGE 6.
- ALT: STAKE POCKET PROTECTORS, SIGNODE NO. 1 (OR EQUAL) (28 REQD). TWO USED UNDER EACH STRAP ANCHOR DEVICE WITH (8), (9), AND (10). SEE DETAIL "B", PAGE 6.
- (14) ANTI-CHAFING, NEUTRAL BARRIER MATERIAL, PLACE UNDER ALL STRAPPING AT POINTS OF CONTACT WITH METAL CONTAINERS.
- (15) ADJUSTABLE STOP (CARRIER EQUIPMENT) (16 REQD). POSITION AGAINST M410 AND M31 CONTAINERS.

BILL OF MATERIAL		
LUMBER	LINEAL FEET	BOARD FEET
2" X 2"	2	1
2" X 4"	16	11
2" X 6"	14	14
4" X 4"	38	52
NAILS	NO. REQD	POUNDS
6d (2")	4	--
10d (3")	40	314
12d (3-1/4")	18	1/4
16d (3-1/2")	16	1/4
1/2" X 4" MATERIAL		5' REQD
STEEL STRAPPING, 1-1/4" X .035" X 92'-0" REQD-----		14 LBS
STEEL STRAPPING, 2" X .050" X 269'-0" REQD-----		90 LBS
EDGE PROTECTORS-----		7 REQD
ANTI-CHAFING MATERIAL-----		AS REQD

LOAD AS SHOWN

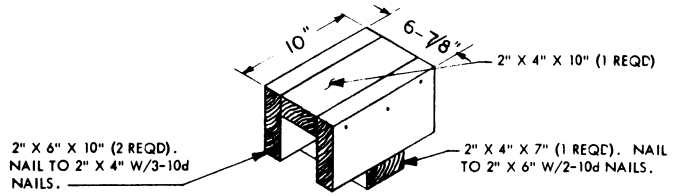
ITEM	QUANTITY	WEIGHT (APPROX)
M410 CNTR-----	3-----	3,818 LBS
M31 CNTR-----	3-----	3,150 LBS
M39 CNTR-----	3-----	1,162 LBS
DUNNAGE-----	-----	302 LBS
TOTAL WEIGHT-----		18,432 LBS (APPROX)

THREE UNIT LOAD



DETAIL "A"

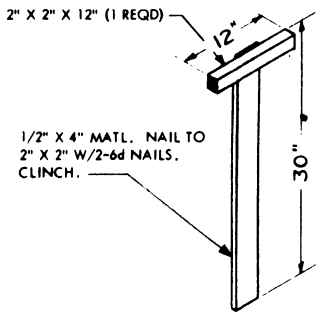
METHOD OF THREADING 2" STRAPPING AND PAD



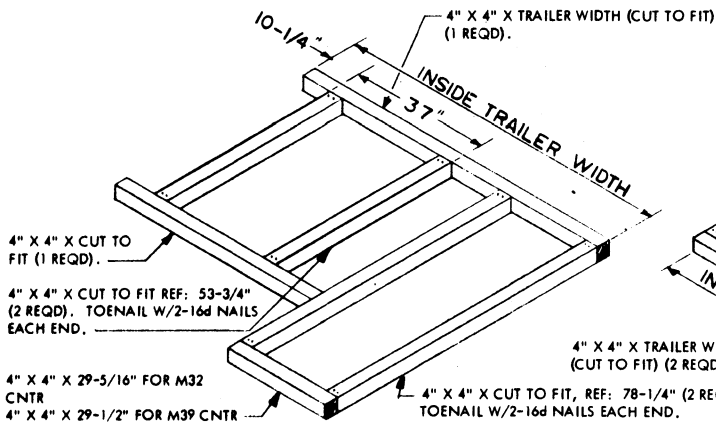
DETAIL "B"

METHOD OF INSTALLING STAKE POCKET PROTECTORS. (ALTERNATIVE PAD)

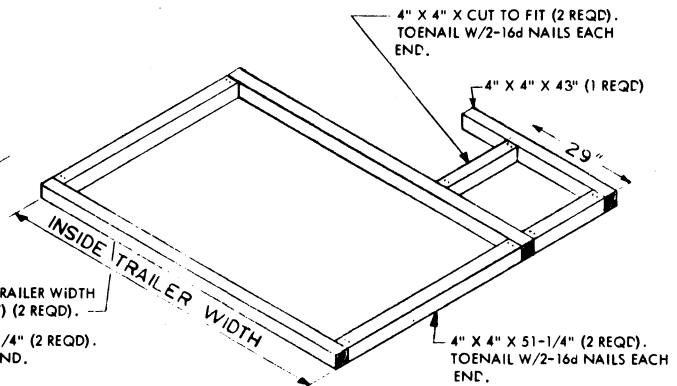
SPACER



DETAIL "C"



FORWARD FLOOR DUNNAGE



DETAIL REAR FLOOR DUNNAGE

DETAILS