

MILITARY STANDARD

MIL STD-1386-11

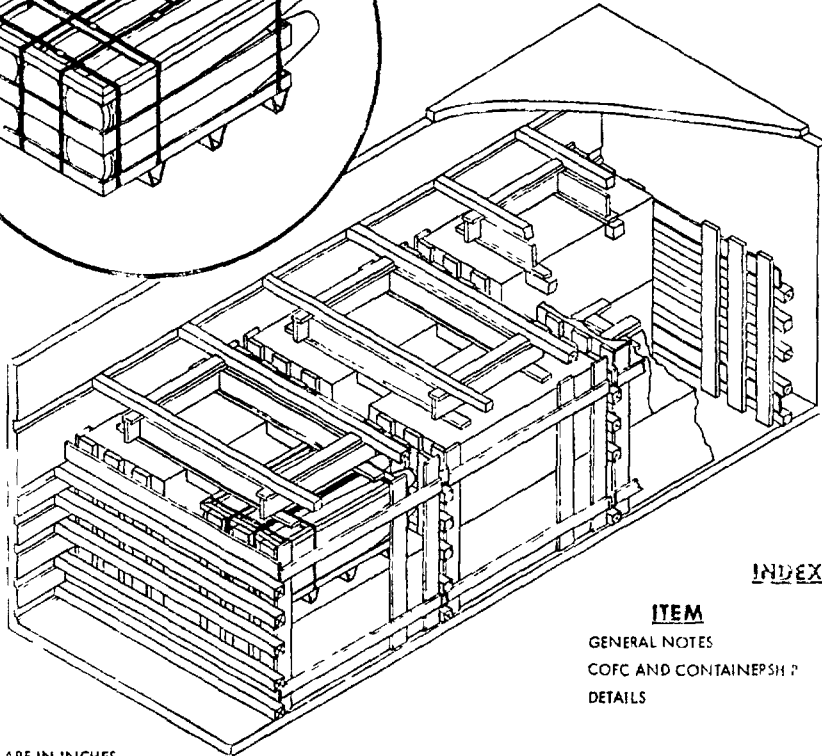
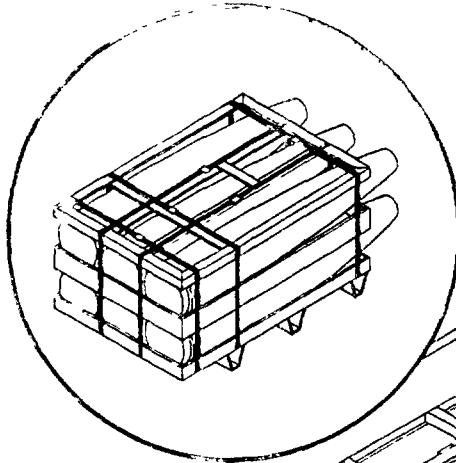
MAY 77

LOADING OF HAZARDOUS MATERIALS AND ASSOCIATED ITEMS IN MILVAN CONTAINERS

30M3, 500 LB MK 82 MOD 2 (THERMALLY PROTECTED)
OIL BOMB PALLET MK 9 MOD 0 WITH SADDLES
FLEET ISSUE UNIT LOAD

UNIT LOAD DATA

UNIT LOAD DRAWING	WR-54/225
WEIGHT	3174.5 LBS
DIMENSIONS	61 7/16 L x 33 3/4 W x 29 1/2 H
CBF	35.0 CU FT
DOT HAZARD CLASSIFICATION	EXPLOSIVES 1.1
HAZARD CLASS	1.1



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NOTES

- UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
- FOR CROSS REFERENCE TO ASSOCIATED PALLETIZING, TRUCKLOADING AND CARRIERING MILITARY STANDARDS, REFER TO THE INDEX TO STANDARDS, MIL-HDBK-236

AUTHORIZED FOR CONTAINER-ON-FLAT-CAR (COFC), CONTAINERSHIP AND MOVEMENT ABOARD DEPOT (NOT PUBLIC) ROADS ONLY.

**APPROVED BY
US COAST GUARD**

Ther...
DATE: 10/20/72

**APPROVED BY
BUREAU OF EXPLOSIVES**

...
DATE: 10/20/72

ORIGINATOR

NAVAL WEAPONS HANDLING LABORATORY
NAO 0016, NEW JERSEY

SIGNATURE: *...* DATE: *...*
SIGNATURE: *...* (AIP) BY SCHEMATIC DIRECTION DATE: *...*

MILVAN 123 14 (NAVY)

GENERAL NOTES

- 1 THIS DOCUMENT GIVES DETAILED INSTRUCTIONS FOR LOADING THE MILVAN CONTAINER WITH FLEET ISSUE UNIT LOADS OF MK. 82 MOD. 2 500 LB THERMAL COATED BOMBS. THE BOMBS SHALL BE PALLETIZED IN ACCORDANCE WITH WK-54/225. THE MILVAN SHALL BE EQUIPPED WITH A MECHANICAL LOAD-BRACING SYSTEM THAT MEETS THE REQUIREMENTS OF THE BUREAU OF EXPLOSIVES PAMPHLET 6 C.
- 2 IN ADDITION TO THE BELT RAILS REQUIRED BY PAMPHLET 6 C, THE MILVAN CONTAINER HAS BELT RAILS AT THE 72 AND 83 INCH HEIGHTS FROM THE CONTAINER FLOOR.

CAUTION

WHEN POSITIONING CROSSMEMBERS, MAKE A VISUAL CHECK TO ENSURE THAT CROSSMEMBERS ARE LOCKED SECURELY IN PLACE.

- 4 CONTAINERS ARE EQUIPPED WITH 25 CROSSMEMBERS. UNUSED CROSSMEMBERS MUST REMAIN WITH THE CONTAINER AND SHALL BE FASTENED INTO BELT RAILS FOR SHIPMENT.
- 5 THE DUNNAGE SPECIFIED IS OF NOMINAL SIZE. FOR EXAMPLE, 1 x 4 MATERIAL IS ACTUALLY 3/4 INCH THICK BY 3 5/8 INCHES WIDE AND 2 x 6 MATERIAL IS ACTUALLY 1 5/8 INCHES THICK BY 5 1/2 INCHES WIDE.
- 6 DUE TO THE HEIGHT OF THE CONTAINER FLOOR ABOVE THE GROUND WHEN THE CONTAINER IS ON THE MILVAN CHASSIS (APPROXIMATELY 60 3/4 INCHES) THE STANDARD LOADING DOCK IS TOO LOW TO USE. A LOADING PLATFORM (APPROXIMATELY 10 FT x 16 FT) MAY BE USED TO RAISE THE DOCK LEVEL. A SUITABLE FORK LIFT TRUCK IS KEPT ON THIS PLATFORM TO LOAD FROM THE PLATFORM TO THE CONTAINER.
- 7 THE UNIT LOADS ARE HANDLED FROM THE STORAGE AREA TO THE LOADING PLATFORM (SEE NOTE 6) BY A SUITABLE FORK LIFT TRUCK LIFTING FROM THE SIDE OF THE LOAD. THE UNIT LOAD IS PLACED ON THE TINES OF THE FORK LIFT TRUCK ON THE LOADING PLATFORM WITH THE BASE END AGAINST THE MAST. LOADING THE CONTAINER PROCEEDS AS FOLLOWS:
 - A WITH THE UNIT LOAD CARRIED APPROXIMATELY SIX INCHES FROM THE FLOOR AND TILTED BACK, MOVE THE UNIT LOAD INTO THE CONTAINER TO THE DESIRED LOCATION.
 - B LOWER THE UNIT LOAD WITH A 4 x 4 x 18 INCH PIECE UNDER AND 90 DEGREES TO THE BASE LATERAL SKID.
 - C WITHDRAW THE TINES, THEN RAISE THE UNIT LOAD FROM THE BASE END SUFFICIENT TO REMOVE THE 4 x 4 PIECE AND LOWER TO POSITION.
 WHEN UNLOADING THE CONTAINER THE PROCEDURE IS REVERSED.
- 8 SWAY BRACE DETAIL D, IS ASSEMBLED IN PLACE. PIECE 5 IS POSITIONED INBOARD OF THE BASE END & NOSE END PALLET SKIDS WITH PIECES 6 AGAINST PALLET SKIDS. NAIL TO PIECE 5 WITH THREE 10d NAILS PER JOINT. CUT PIECE 7 TO FIT BETWEEN PIECES 6 AND NAIL TO PIECE 5 WITH THREE 10d NAILS.
- 9 WHEN THE VOID BETWEEN THE CROSSMEMBER AND THE SEPARATOR GATES IS GREATER THAN ONE INCH, USE FILL MATERIAL TO SHIM BETWEEN CROSSMEMBERS AND GATES AS SHOWN IN DETAIL F.
- 10 HEIGHT OF HOLD DOWN ASSEMBLY, DETAIL E, MAY BE VARIED TO ACCOMMODATE DIFFERENCES IN UNIT LOAD HEIGHTS BY ADJUSTING PIECE SIZE OR OMITTING PIECES AS REQUIRED. STRUCTURAL INTEGRITY OF HOLD DOWN SHALL BE MAINTAINED. VOID BETWEEN HOLD DOWN CROSSMEMBER AND PIECE NO. 11 OF HOLD DOWN ASSEMBLY SHALL NOT EXCEED ONE HALF INCH.
- 11 SPACER, PIECE 12, SHALL FILL VOID BETWEEN UNIT LOADS.
- 12 APPLICABLE MATERIAL SPECIFICATIONS:
 - DUNNAGE LUMBER - FED. SPEC. MM-L-751
 - NAILS - FED. SPEC. FF-N-105, COMMON CEMENT COATED, ALTERNATE ANNULAR-RING OR CHEMICALLY ETCHED TYPE.
- 13 AFTER BLOCKING AND BRACING HAS BEEN INSPECTED, ATTACH SHIPPING DOCUMENTS INSIDE THE CONTAINER IN AN ACCESSIBLE AREA, CLOSE AND SEAL CONTAINER DOORS, AND ATTACH APPLICABLE PLACARDS TO THE OUTSIDE OF THE CONTAINER FOR THE APPROPRIATE MODE OF TRANSPORTATION AS PRESCRIBED IN OP 2165 (VOL. 1).

COFC AND CONTAINERSHIP

- 1 THIS CONTAINER LOAD CONSISTS OF 12 UNIT LOADS WHICH MUST BE LOADED AND DUNNAGED IN ACCORDANCE WITH THIS DOCUMENT.

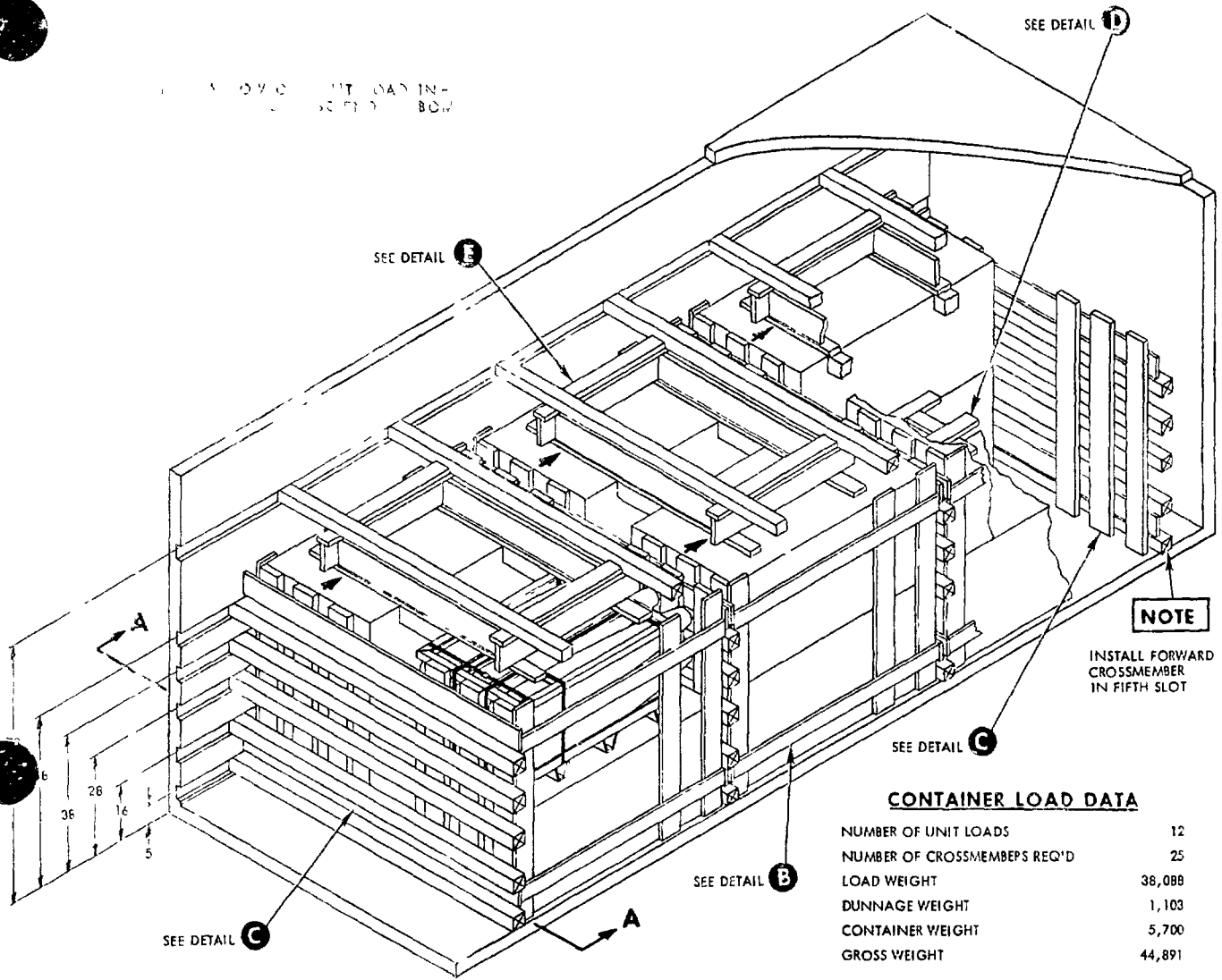
WARNING

BECAUSE THE WEIGHT LOADED INTO THIS CONTAINER EXCEEDS 34,000 LBS, THE MILVAN CHASSIS CANNOT BE USED TO TRANSPORT THE LOADED CONTAINER ON PUBLIC HIGHWAYS. THE LOADED CONTAINER MAY BE TRANSPORTED OVER DEPOT ROADS USING A MILVAN CHASSIS EQUIPPED WITH DOUBLE BOGIES OR COMMERCIAL EQUIPMENT OF APPROPRIATE CAPACITY.

- 2 WHEN SHIPPING THE LOADED MILVAN CONTAINER COFC, THE FLAT CAR SHALL MEET THE REQUIREMENTS OF BUREAU OF EXPLOSIVES PAMPHLET 6 C.
- 3 POSITION THE SEPARATOR GATES, DETAIL C, WITH VERTICAL MEMBERS, PIECE 1, AGAINST THE UNIT LOADS.
- 4 POSITION THE SWAY BRACE DETAIL B, WITH VERTICALS, PIECE 3, AGAINST UNIT LOADS AND ORIENTED AS SHOWN BY ARROW IN DETAIL.

MIL-STD-1386-14 (NAVY)

UNIT LOADS
SCHEMATIC



NOTE

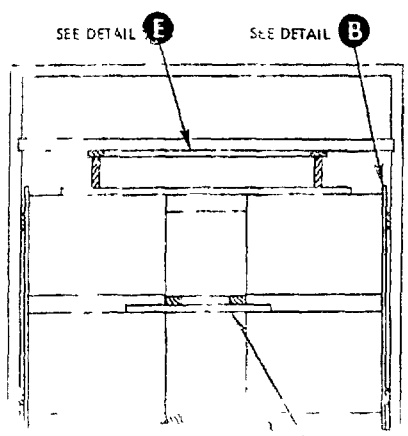
INSTALL FORWARD CROSSMEMBER IN FIFTH SLOT

CONTAINER LOAD DATA

NUMBER OF UNIT LOADS	12
NUMBER OF CROSSMEMBERS REQ'D	25
LOAD WEIGHT	38,088
DUNNAGE WEIGHT	1,103
CONTAINER WEIGHT	5,700
GROSS WEIGHT	44,891

** NAIL PIECE 8 TO PIECE 13
W/4-16d NAILS, TO PIECE 10
W/2-16d NAILS PER JOINT &
TO PIECE 9 W/6-16d NAILS

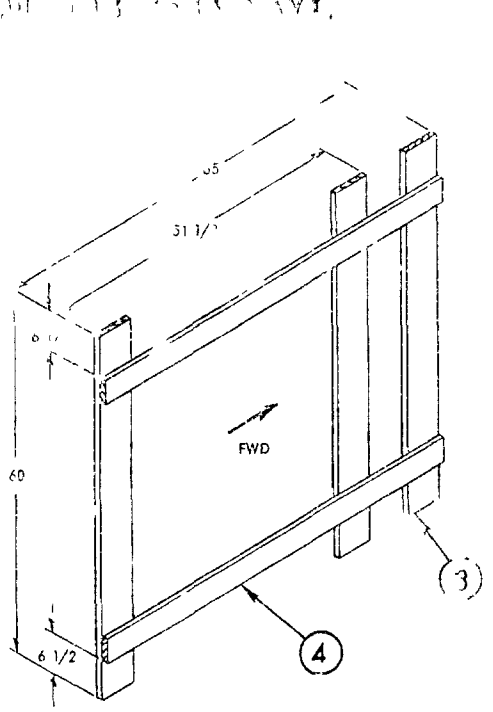
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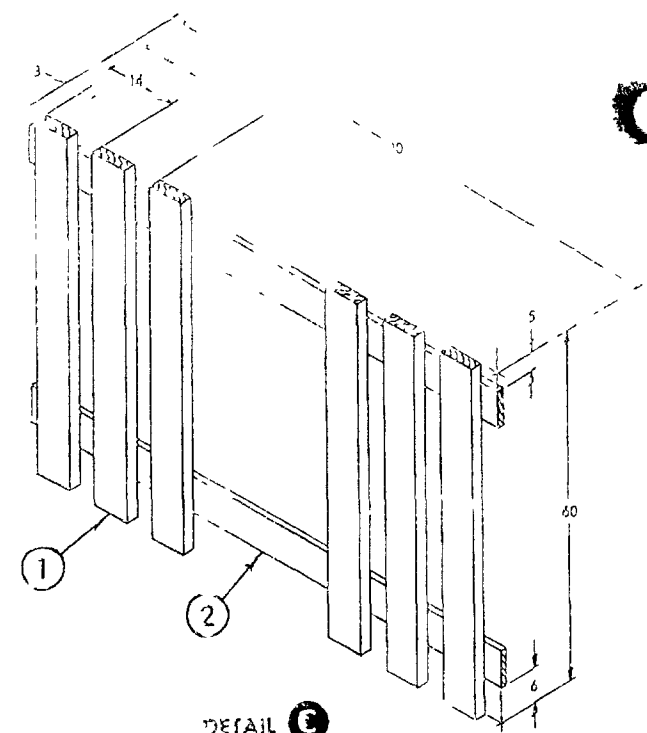
PIECE NO.	DESCRIPTION	SIZE	NO. OF PCE'S REQ'D	NAIL NO.	NUMBER OF NAILS	SIZE
13	SPACER	4 x 4 TO SUIT SEE NOTE 1'	6	SEE E	-	-
12	SPACER	2 x 4 x 31	6	11	3	10c
11	SHIM	4 WIDE x 46 THICKNESS TO SUIT	AS REQ'D	10	AS REQ'D	
10	LONGITUDINAL PIECE	2 x 8 x 46	6	9	3 PER JOINT	16d
9	LATERAL PIECE	2 x 8 x 54	6	SEE 10	-	-
8	SUPPORT	2 x 4 x 72	6	9, 10, 13	SEE NOTE**	
7	SPACER	2 x 4 TO SUIT	12	5	3	10d
6	STRINGER	2 x 4 x 40	12	5	3 PER JOINT	10d
5	SUPPORT	2 x 4 x 36	12	SEE 6	-	-
4	HORIZONTAL	1 x 4 x 65	12	3	3 PER JOINT	6d*
3	VERTICAL	1 x 6 x 60	18	SEE 4	-	-
2	HORIZONTAL	1 x 6 x 90	12	1	3 PER JOINT	6d
1	VERTICAL	2 x 6 x 60	36	5 & 2	-	-

LIST OF MATERIALS & NAILING PLAN

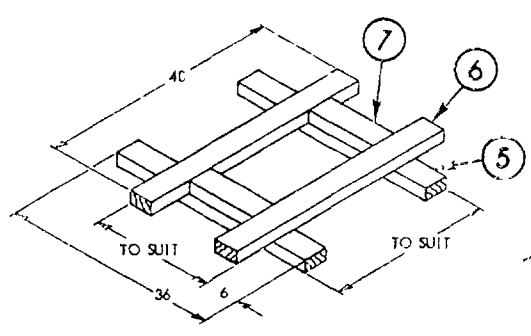
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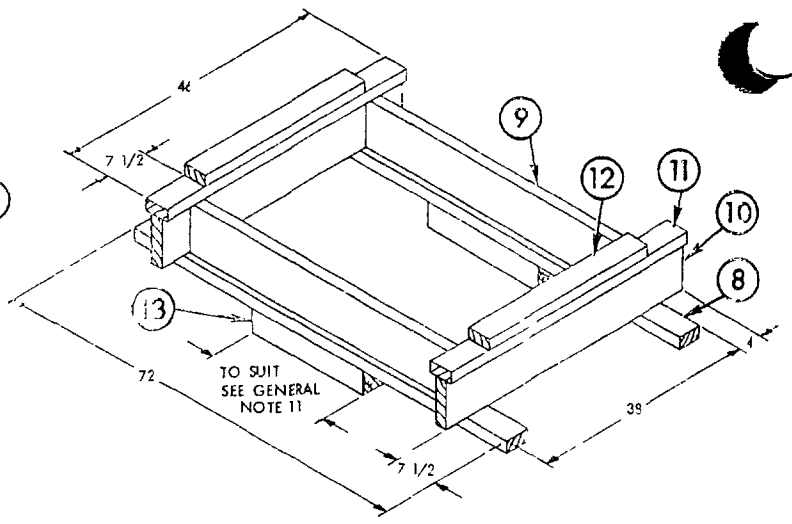
DETAIL B
 SIDE WALL FRAME
 6 REQUIRED
 SEE COFC NOTE 4
 POSITION VERTICALS, PIECE 3
 AGAINST UNIT LOAD



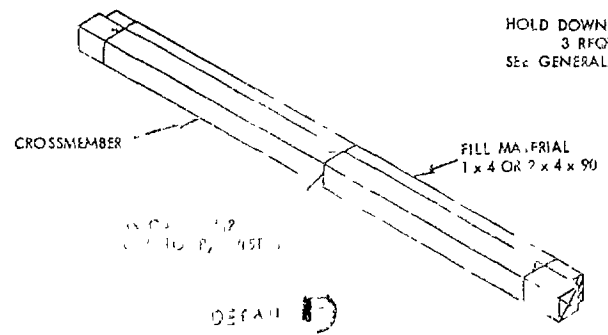
DETAIL C
 SEPARATOR GATE
 6 REQUIRED
 (SEE COFC NOTE 3)
 POSITION VERTICALS, PIECE 1,
 AGAINST UNIT LOAD



DETAIL D
 SWAY BRACE ASSEMBLY
 6 REQUIRED
 SEE GENERAL NOTE 6



DETAIL E
 HOLD DOWN ASSEMBLY
 3 REQUIRED
 SEE GENERAL NOTE 10



DETAIL F