

ERECTING FRAMES
SHOP EQUIPPED CABLE DUCT TYPE BAYS
UNEQUAL FLANGE UPRIGHT FRAMES
AT HOISTING CENTER

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1. GENERAL

1.1 Scope

1.11 This section describes installation procedures for erecting unequal flange, single and double bay, shop equipped cable duct type frames at a hoisting center.

1.111 This covers 11' 6", 10' 6" and 9' 0", single and double bay framework per ED-97170-50 and ED-97171-50 respectively. Also, included are floor supported 7' 0" frames per ED-97162-50 and ED-97163-50.

1.112 Top heavy 9', 10' 6" and 11' 6" single bay frames having 19" mounting plates are erected in-place per Handbook 30, Section 19F.

1.12 The most distinguishing difference between the old equal flange and the new unequal flange frames is the upright of the new frame which has unequal flanges of 7' 8" and 2' 7' 16". The older frame has equal 1" upright flanges.

1.121 The new frame can be equipped with 19" or 23" mounting plates in either single or double bay versions. The older frame was available only in a single bay with 19" mounting plates.

1.122 Unlike the older frame (universal) the new frames do not have duct cover plates. When two frames are placed side by side the wider flange forms a 5" covered duct with the narrow flange side open.

1.123 The unequal flange frame is grounded by a wire to the 1" junction pipe. The grounding set screws in the top angle of the equal flange frames are not used in the unequal flange frames.

1.2 Associated Information

1.21 Specifications, floor plans and framework drawings furnished the job.

2. INSTALLING EQUIPMENT

2.1 The tools listed below will be required for the operations listed in this section. Other tools, available in the General Tool Kits, may also be needed.

Kit 72	Duct Type Bay Erecting Kit
R-3431	Bar, Hoisting, Portable
R-2384	Bar, Pinch, 30"
R-1496	Hoist, Chain, 1 Ton
R-2599	Trunk, Dolly
R-2849	Strap

3. FLOOR PLAN LAYOUT

3.1 Mark guard rail line and floor bolt hold locations on the floor according to Figure 1.

3.2 Use one floor bolt and hole in each single bay on the side nearest to the direction of lineup growth.

3.3 Use two floor bolts in each double bay frame, one at each end.

4. ERECTING FRAMES

4.1 Assemble a hoisting center using existing high auxiliary framing or per Handbook 30, Section 19A2.

4.11 Locate the hoist's "U" bolt between 13' 2" and 13' 7" above the floor.

4.2 Erect double bays with the eyebolt of the R-3709 Hoisting Fixture centered above the framework with the captive bolts through holes in the top channel. Place the two nut assemblies inside the top channels and fasten wrench tight to the captive bolts.

4.3 Erect double bays transported in a horizontal side position in the following manner.

4.31 Attach load hook of hoist.

4.32 Raise top end 1/2" above the floor.

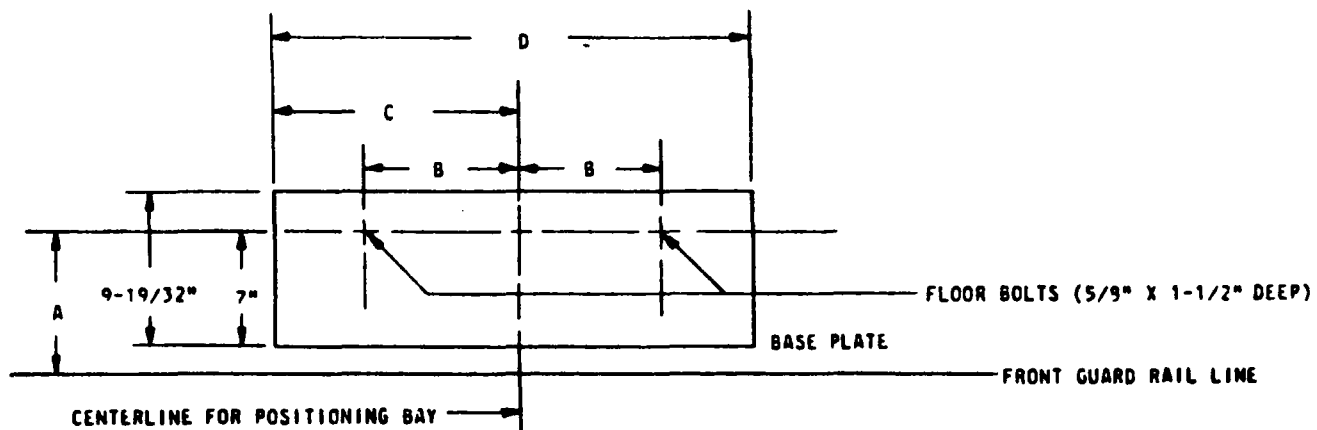
4.33 With four men, pivot the bay to a flat position.

4.4 Erect single bays by placing the R-3709 nut assembly inside the top channel, under the center hole, and screwing in the R-3739 eyebolt until it is firm against the top of the top channel.

4.5 Attach load hook of hoist and partially raise frame to remove packing details. Raise frame to a vertical position to mount R-3728 Dolly.

5. TRANSPORTING TO FINAL LOCATION

5.1 Transport the erect framework with the R-3728 Dolly Truck which consists of four caster assemblies and two adapters. Refer to Figure 2 to secure assemblies and adapters to the framework as follows.



SINGLE BAY FRAME						DOUBLE BAY FRAME					
GUARD RAIL	A	MOUNTING PLATE WIDTH	B	C	D	DISTANCE BETWEEN CENTERLINES 5" DUCT	MOUNTING PLATE WIDTH	B	C	D	DISTANCE BETWEEN CENTERLINES 5" DUCT
5"	7-3/16"	19"	6-3/4"	11-3/16"	1'10-3/8"	1'10-1/2"	19"	1'6"	1'10-7/16"	3'8-7/9"	3'9"
6"	9-3/16"										
7"	9-3/16"	23"	8-3/4"	1'1-3/16"	2'2-3/8"	2'2-1/2"	23"	1'10"	2'2-7/16"	4'4-7/8"	4'5"

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FIG. 1 UNEQUAL FLANGE DUCT TYPE BAY FLOOR PLAN LAYOUT

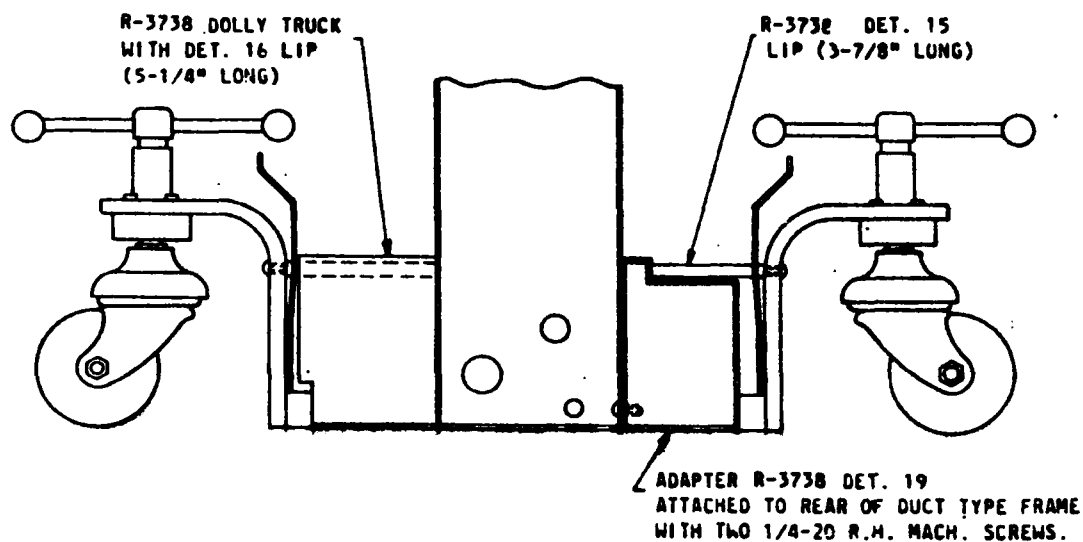


FIG. 2 ATTACHING R-3738 DOLLY TO FRAME

- 5.11 Screw Details 15 and 16 into the caster assemblies.
- 5.12 Screw Detail 19 Adapters to the back of framework.
- 5.13 Attach the caster assembly to the framework and adapter.
- 5.2 After all four caster assemblies are secured to the framework, raise the frame slightly above the floor to allow easy movement. One-eighth inch is normally adequate.
- 5.21 Disengage the load hook of the hoist, and remove the hoisting fixture.
- 5.22 Convey the bay to its final location in the lineup.

CAUTION: Single duct bays are relatively unstable and should be rolled on the floor by pulling from one end on an R-2849 Strap wrapped around the bottom of the framework. At the other end of the frame another installer should hold the bay stable and on course without pushing.

6. FASTENING TO SUPERSTRUCTURE

- 6.1 Secure the top of the frame to the superstructure or junction pipe temporarily with an R-2649 strap. The strap should be left attached until the frame is fastened at the top with "V" bolts.
- 6.2 Lower the frame to the floor. Remove the dolly and adapter details.
- 6.3 Loosely attach the top fastenings and floor bolts. Final tightening of these fastenings should be made in connection with the aligning operations.
- 6.4 Use the R-2384 pinch bar for shifting the bays as required for aligning.

7. ATTACHING MOULDING

- 7.1 Straighten moulding with a reverse turn.
- 7.2 Attach moulding in the following sequence after the bay is in its final position.
 - 7.21 Attach double sided tape to moulding.
 - 7.22 Cut moulding to size. Use the longest possible lengths up to 10 feet.
 - 7.23 Remove paper protection on tape, and press moulding evenly to welded guard rail support.

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