

STANFORD LINEAR ACCELERATOR CENTER

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IR-2 RIGGING PROCEDURE and JOB HAZARD ANALYSIS FOR SPECIAL PURPOSE HANDLING FIXTURE FWD LOWER CORNER BLOCK ADAPTOR

1.0 Loads:

FWD Lower Corner Block Adaptor	181 lbs
Fixture	344 lbs
Total Load (excluding rigging)	525 lbs

2.0 Rigging Layout:

Drawing number SK-HJK080104-8

3.0 Rigging Equipment:

The 10 ton hoist shall support a 4-ft long sling of 2,000 lb minimum working load rating with a 6.5 ton minimum capacity screw pin shackle. The 50 ton main hoist is not used for this operation.

4.0 Installation Procedure:

Refer to drawing number SK-HJK080104-8. The fixture is designed such that the CGZ of the unloaded fixture is located at point A. Point B represents the CGZ of the combined fixture plus the FWD Lower Corner Block Adaptor weight.

- 4.1 Connect the sling shackle to Point A on the fixture.
- 4.2 Lift the fixture and position same to mate with the appropriate FWD Lower Corner Block Adaptor.
- 4.3 Bolt the fixture to the FWD Lower Corner Block Adaptor.
- 4.4 Move the sling from Point A on the fixture to Point B.
- 4.5 Bring the fixture/adaptor assembly to the detector area.
- 4.6 Position FWD Lower Corner Block Adaptor to mate with the appropriate FWD Lower Corner Block.
- 4.7 Bolt the FWD Lower Corner Block Adaptor to the FWD Lower Corner Block.
- 4.8 Lower the hoist slightly and move the rigging from Point B on the fixture to Point A on the fixture. The fixture will be cantilevered off of the FWD Lower Corner Block Adaptor at this time.
- 4.9 Reposition the trolley over Point A on the fixture.
- 4.10 Raise the hoist to remove the slack from the sling.
- 4.11 Gently unbolt the fixture from the FWD Lower Corner Block Adaptor.
- 4.12 Bring fixture to the IR-2 assembly area.

5.0 Removal Procedure:

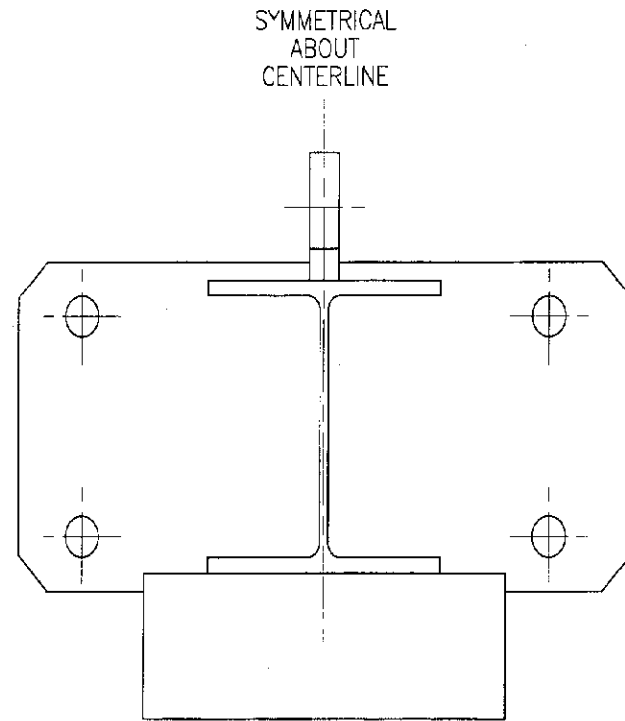
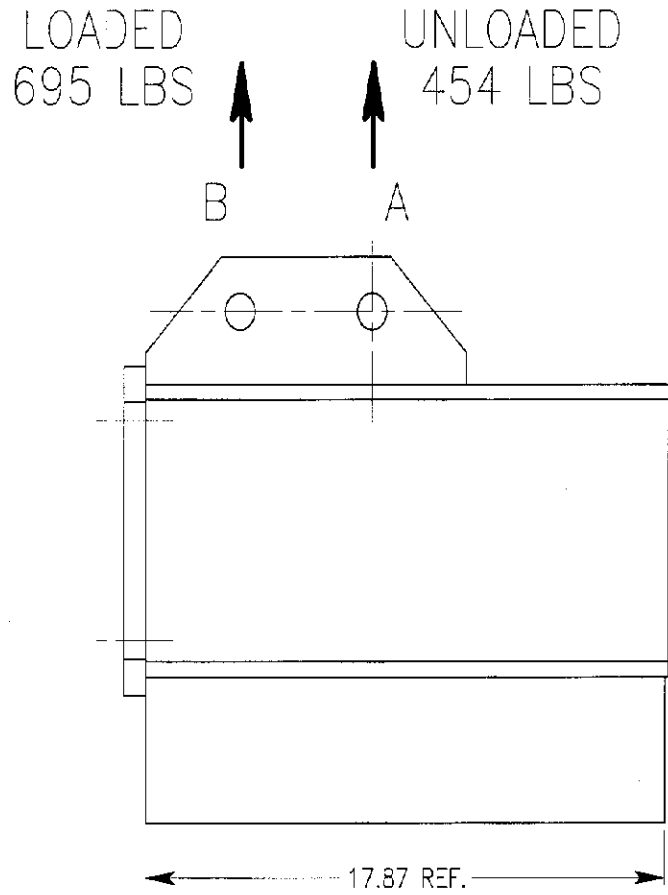
- 5.1 Connect the sling shackle to Point A on the fixture.
- 5.2 Lift the fixture and bring the fixture to the detector area.
- 5.3 Position the fixture to mate with the appropriate FWD Lower Corner Block Adaptor.
- 5.4 Bolt the fixture to the FWD Lower Corner Block Adaptor.
- 5.5 Lower the hoist slightly and move the sling from Point A on the fixture to Point B. The fixture will be cantilevered off of the FWD Lower Corner Block Adaptor at this time.
- 5.6 Reposition the trolley over Point B on the fixture.
- 5.7 Raise the hoist to remove the slack from the sling.
- 5.8 Gently unbolt the FWD Lower Corner Block Adaptor from the FWD Lower Corner Block.
- 5.9 Take fixture/adaptor assembly back to IR-2 assembly area and set on dunnage.
- 5.10 Lower the hoist and move the sling from Point B on the fixture to Point A.
- 5.11 Take the fixture away.

6.0 Potential Hazards:

- 6.1 Crushed extremities.
- 6.2 Personnel in path of load movement or under load.
- 6.3 Unexpected load movement.
- 6.4 Operator error.
- 6.5 Equipment failure.

7.0 Hazard Controls:

- 7.1 Crane Operator shall be a SLAC-certified (EFD) rigger or pre-qualified crane operator.
- 7.2 Crane operator shall be Person-in-Charge of lift.
- 7.3 A minimum of two experienced technical support staff is required. An experienced technician is assumed to be an individual that has significant experience working with SLAC riggers and has been pre-qualified by the Project engineer and the SLAC rigger.
- 7.4 No one will be allowed under a suspended load or in the path of a load.
- 7.5 Casual observers will not be allowed in area.
- 7.6 Strict controls of crane control box and rigging procedures.
- 7.7 Inspection of equipment prior to use.
- 7.8 Inspection of crane functions.
- 7.9 Current training of personnel.
- 7.10 Crane maintenance current.
- 7.11 Review of procedures with rigging and technical support personnel.
- 7.12 Appropriate use of personnel protection equipment.
- 7.13 Continuous engineering oversight is required.
- 7.14 Continuous safety oversight is required.
- 7.15 Continuous supervision of technical support personnel is required.



SK-HJK080104-8
FWD MIDDLE CORNER BLOCK ADAPTOR
RIGGING LAYOUT