

DESCRIPTION

This work shall consist of repainting the motor, and removing, furnishing, installing and repairing associated electrical equipment and components of the span lock in accordance with the contract documents and as directed by the Engineer.

MATERIALS

A. General.

The Contractor shall submit the following documents:

- a. Manufacturer's shop drawings, catalog cuts, product specification and dimension sheets
- b. Drawings showing mounting details, dimensions and clearances.

B. Limit Switch. The limit switch shall be of the spring-return, lever arm type, U.L. listed, rated 600 volts A.C., heavy-duty, gasketed, factory-prewired and sealed for liquid-tight and submersible performance. The enclosure shall be zinc die cast. Contacts shall consist of one normally-open and one normally closed, and shall be of the wiping type contact rated 10 amps continuous at 120 volts A.C.. The lever arm head shall be keyed with capability of four-direction head positioning, and field convertible for clock-wise or counter clock-wise operation with 5-degree travel and 90-degree total travel. The switch shall be provided with a 3.5 meter long, factory-prewired cable and have an operating range from -40 degrees Celsius to 105 degrees Celsius. The lever arm shall be as shown in plans.

CONSTRUCTION DETAILS

This work shall be in accordance with the applicable requirements of the latest edition of the following codes and standards:

1. National Fire Protection Association, National Electrical Code (NEC)
2. New York State Department of Transportation Standard Specifications
3. National Electrical Contractors Association, NECA 1, Standard Practices for Good Workmanship in Electrical Contracting.

Basis of Acceptance

All shop drawings submitted shall follow the general guidelines and procedures given in the New York State Steel Construction Manual. No installation or rehabilitation work may take place until the shop drawings and procedures have been approved by the Engineer.

The work shall include, but not be limited to, the following:

A. Removal.

Existing equipment required for replacement shall be removed by the Contractor. The removed equipment shall become the properties of the Contractor and shall be properly disposed of away from the construction site.

B. Hand Crank Limit Switch.

The Contractor shall:

- a. Remove and replace the existing limit switch for the control interlock of the hand crank operation of the span lock with the bridge control system. Mounting of the limit switch shall be as shown in plans.

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- b. Install and adjust the limit switch such that, when removing the cover of the hand crank shaft for the manual operation of the span lock, the limit switch will be activated to prevent the span lock from being operated electrically.
- c. Test the interlocking function of the limit switch after installation until at least two positive tests are resulted, indicating that the limit switch is properly interlocked with the bridge control system to the satisfaction of the Engineer.
- d. Coordinate this work with the other work of the project.

C. Limit Switches.

The Contractor shall:

- a. Mark and record the existing setting of each switch of the limit switch assembly.
- b. Remove the existing limit switch assembly.
- c. Prepare the surface of the limit switch mount, install the new limit switch assembly, adjust and test the operational performance for proper indication of the lock bar positions to the satisfaction of the Engineer.
- d. Coordinate this work with the other work of the project.

METHOD OF MEASUREMENT

This work will be measured for payment on a lump sum basis.

BASIS OF PAYMENT

The lump sum price bid shall include the cost of furnishing all labor, materials, and equipment necessary to satisfactorily complete the work, including the cost of the removal of existing equipment.