

FURNISH AND INSTALL JOINT BARS

****From Rutland - Leicester FRT11(024)
Rutland-Burlington VTRY(5)**

- xx. DESCRIPTION. This work shall consist of removing a defective joint bar and installing an acceptable similar replacement bar at the locations indicated in the Contract Documents or as directed by the Engineer.
- xx. GENERAL REQUIREMENTS. All existing bolts, nuts, and washers shall be loosened, removed, reinstalled, and tightened in order to permit replacement of a defective bar, unless otherwise ordered by the Engineer.

Joint bars may be judged defective by the Engineer for the following reasons:

- (a) Cracks, breaks, or other flaws that impair its proper functioning or where integrity of the bar has been compromised.
- (b) Bolt holes with excessive wear.
- (c) Excessive deterioration from rust, scale, or brine.
- (d) If they permit any vertical movement of either rail when all the bolts are tight.

Removed material not reinstalled shall remain in the property of the Contractor.

- xx. MATERIALS. Used joint bars will be acceptable providing they fit and are compatible with the rails to be connected and have, in the opinion of the Engineer, no defects.
- (a) If new joint bar assemblies are to be furnished, they shall meet the Specification entitled: Chapter 4, Section 3.4 Specification for High Carbon Steel Joint Bars, AREMA Manual - current edition.
 - (b) If new nuts, bolts, or washers are required, they shall be properly sized to fit the bolt holes in which they will be installed. Joint bar bolts and nuts shall meet the material requirements of the Specification entitled: Chapter 4, Section 3.5 Specifications for Heat Treated Carbon Steel Track Bolts and Carbon Steel Nuts, AREMA Manual - current edition.
 - (c) Spring washers shall meet the material requirements of the Specification entitled: Chapter 4, Section 3.6 Specifications of Spring Washers, AREMA Manual - current edition.

- xx. CONSTRUCTION REQUIREMENTS. When it is necessary to replace a joint bar, a conscientious effort shall be made to remove nuts and bolts without damage and to reinstall them for use in the replacement joint bar.

If the existing bolt sets cannot be salvaged, flame cutting of the existing bolts will be permitted provided no damage is done to the other track components.

Upon removal of the defective joint bar and the fitting of the replacement bar, the bolts shall be inserted. Driving of bolts will not be permitted.

All the bolts for a joint bar assembly shall have a washer and a nut and shall be tightened by means of a mechanical bolt tightening machine.

- xx. METHOD OF MEASUREMENT. The quantity of Special Provision (Furnish and Install Joint Bars) to be measured for payment will be the actual number of joint bars installed in the complete and accepted work.

In the event the Engineer determines the existing joint bars on both sides of the rail at a joint are defective, or when it is necessary to connect replacement rail, separate payment will be made for each joint bar installed.

- xx. BASIS OF PAYMENT. The accepted quantity of Special Provision (Furnish and Install Joint Bars) will be paid for at the Contract unit price per each. Payment will be full compensation for furnishing and installing the joint bar and for furnishing all labor, tools, equipment, and incidentals necessary to complete the work.

New bolt sets required and ordered by the Engineer will be paid for separately under Contract item 900.620 Special Provision (Furnish and Install Bolt Sets).

Payment will be made under:

<u>Pay Item</u>	<u>Pay Unit</u>
900.620 Special Provision (Furnish and Install Joint Bars)	Each