

SECTION 16682

VEHICLE AND PEDESTRIAN SIGNAL HEADS

PART 1 DESCRIPTION

- A. Furnish and install vehicle and pedestrian signal heads.

PART 2 MATERIALS

- A. Furnish only new materials.

2.01 DEFINITIONS

- A. Back Plate - A thin strip of material extending outward from all sides of a signal head.
- B. Incandescent Optical Unit - The lens, reflector, lamp, lamp receptacle, and associated supporting parts in a signal section
- C. LED Optical Unit - The LED lens and associated supporting parts in a signal section.
- D. Louver - A device mounted to the visor restricting signal face visibility.
- E. Signal Section - One housing case, housing door, visor, and optical unit.
- F. Signal Face - One section or an assembly of two or more sections facing one direction.
- G. Signal Head - A unidirectional face or a multidirectional assembly of faces, including back plates and louvers when required, attached at a common location on a support.

2.02 GENERAL

- A. Supply either aluminum or polycarbonate signal head components that are of the same material and manufacturer for any one project.
- B. Use galvanized steel, stainless steel, or dichromate sealed aluminum bolts, nuts, washers, lock washers, screws, and other assembly hardware. When dissimilar metals are used, ensure the metals are selected or insulated to prevent corrosion.
- C. Use closed-cell silicone or closed-cell neoprene gaskets.

PART 3 CONSTRUCTION

3.01 ASSEMBLY

- A. Assemble individual signal sections in multi-section faces in accordance with the manufacturer's recommendations to form a rigid signal face. Assemble and mount signal heads as shown on the plans. Install louvers and back plates in accordance with the manufacturer's recommendations. Close any openings in an assembled signal head with a plug of the same material and color as the head.
- B. When installing a retrofit replacement LED traffic signal or pedestrian signal lamp unit into an existing signal housing, only remove the existing lens, reflector, and incandescent lamp; fit the new unit securely in the housing door; and connect the new housing unit to the existing electrical wiring or terminal block by means of simple connectors.

3.02 WIRING

- A. Wire each optical unit to the terminal block located in that signal section by means of solderless wire connectors or binding screws and spade lugs. Wire all sections of a multi-section signal face to the section terminal blocks in which the traffic signal cable is terminated. Maintain the color coding on leads from the individual optical units throughout the signal head, except for the traffic signal cable. Use solderless wire connectors or binding screws and spade lugs for connections to terminal blocks. Use binding screws and spade lugs for field wiring.

PART 4 MEASUREMENT

- A. This Item will be measured by each vehicle signal section, pedestrian signal section, back plate, or louver.

PART 5 PAYMENT

- A. The work performed and materials furnished in accordance with this Item and measured as provided under "Measurement" will be paid for at the unit price bid for "Pedestrian Signal Section," "Vehicle Signal Section," "Back Plate," or "Louver," of the types and sizes specified. This price is full compensation for furnishing, assembling, and installing the signal sections, back plates and louvers, and lenses and optics; mounting attachments; and equipment, labor, tools, and incidentals.

END OF SECTION