

**CER 4. REQUEST FOR EQUALS
RETURN WITH YOUR PROPOSAL**

Company Name: GILLIG LLC

Specification Section Number: TS 16.11 Hoisting

Component Item Listed:

The bus axles or jacking plates shall accommodate the lifting pads of a two-post hoist system. Jacking plates, if used as hoisting pads, shall be designed to prevent the bus from falling off the hoist. Other pads or the bus structure shall support the bus on jack stands independent of the hoist.

Proposed Item:

GILLIG requests approval to provide jacking points located on the front and rear axles, rather than jack plates. This is the standard offering from Meritor and will permit easy and safe jacking with the flat tire or dual set on a 6 in. high run-up block not wider than a single tire.

In addition, this technology is consistent with your most recent delivery of vehicles as well.

OK RC

Note: A separate form must be submitted for each request for an approved equal. Proposers are required to submit technical information for each item. Any request received without the necessary technical information will be returned.

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Company Name: GILLIG LLC

Specification Section Number: TS 20.4 Kneeling

Component Item Listed:
A warning light mounted near the curbside of the front door, a minimum 2.5 inch diameter amber lens, shall be provided that will blink when the kneel feature is activated.

Proposed Item:
GILLIG wishes to advise that the kneeling lamp is approximately 2" in diameter with a 4-second cycle time to facilitate boarding, as specified in this section.

In addition, this technology is consistent with your most recent delivery of vehicles as well.

OK RC

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Company Name: GILLIG LLC

Specification Section Number: TS 22.2 Steering Wheel

Component Item Listed: _____

The steering wheel diameter shall be approximately 18-20 inches

Proposed Item: _____

GILLIG request approval to provide a 16", 2-spoke, VIP soft grip, steering wheel manufactured by TRW. This is the traditional steering wheel application for TRW's electrically assisted steering column.

See attached.



TRW Easy Steer.pdf

OK RC

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**CER 4. REQUEST FOR EQUALS
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Company Name: GILLIG LLC

Specification Section Number: TS 23.5 Disc Brakes

Component Item Listed:

Brake assembly shall be operated by cams which in return are operated by automatic slack adjusters. Slack adjusters shall be equipped with grease fittings and be capable of automatic adjustments throughout the life of the lining and disc assembly.

Proposed Item:

The terminology "slack adjusters" and "cams" are inherently proprietary to drum brake applications only.

GILLIG's proposal will meet Tulsa's requirements, detailed in section TS 23.5, by providing disc brakes that comply with requirements of State and Federal regulations FMVSS 121.

In addition, this technology is consistent with your most recent delivery of vehicles as well.

OK RL

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**CER 4. REQUEST FOR EQUALS
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Company Name: GILLIG LLC

Specification Section Number: TS 26.3 Environmental and Mounting Requirements

Component Item Listed:
All multiple terminal connectors shall be military (cannon plug) type, fully sealed, and protected with a potting compound to prevent outside dirt and corrosives from entering the wiring, connectors, or plugs.

Proposed Item:
GILLIG and EMP wish to clarify, EMP Cooling Kit's utilize fully sealed connectors meeting IP69K. They are Delphi, Deutsch, and Molex and are the same type used by Cummins and most all bus engine compartment and chassis connectors.

In addition, this technology is consistent with your most recent delivery of vehicles as well.

OK RC

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**CER 4. REQUEST FOR EQUALS
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Company Name: GILLIG LLC

Specification Section Number: TS 26.3 Environmental and Mounting Requirements

Component Item Listed: _____

The wiring harnesses shall incorporate ten percent (10%) spare wires.

Proposed Item: _____

GILLIG requests approval to delete the requirement for 10% excess wires for spares.

GILLIG has been very successful in reducing the size of wire harnesses to ease in trouble shooting, routing of new harness and general cleanliness of the electrical compartments.

GILLIG can add specific wires where needed during the pre-production meeting at the request of the Agency.

OK RC

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**CER 4. REQUEST FOR EQUALS
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Company Name: GILLIG LLC

Specification Section Number: TS 26.3 Environmental and Mounting Requirements

Component Item Listed: _____

All inline and bulkhead connectors are to be of the weather pack sealed type.

Proposed Item: _____

GILLIG and EMP wish to clarify, EMP Cooling Kit's utilize fully sealed connectors meeting IP69K. They are Delphi, Deutsch, and Molex and are the same type used by Cummins and most all bus engine compartment and chassis connectors.

OK RC

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**CER 4. REQUEST FOR EQUALS
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Company Name: GILLIG LLC

Specification Section Number: TS 26.3 Environmental and Mounting Requirements

Component Item Listed:
Multi-pin connectors shall be protected internally from corrosion with silicone dielectric grease (Dow Corning #4).

Proposed Item:
It has been brought to GILLIG's attention by EMP that the EMP Cooling Kit's utilize dielectric grease (Dow Corning #4) on all connectors except the 15" fan. The 15" fans have been validated without and thousands in the transit bus market has yielded no issues.

GILLIG and EMP request concurrence.

DK RC

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Company Name: GILLIG LLC

Specification Section Number: TS 26.8 Jump Start Connector

Component Item Listed:
A jump-start connector, red for 24V and blue for 12V, shall be provided at a location determined at the preproduction meeting and shall be equipped with dust cap and adequately protected from moisture, dirt and debris.

Proposed Item:
GILLIG requests approval to provide the Anderson Model 350 (Red) connector mounted inside the rear engine door at the right rear of the bus. This heavy duty unit is a single connection that prevents crossed connections or other potential problems associated with jump starting buses.

This would be the same system deployed on your current vehicles being operated.

OK AL

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**CER 4. REQUEST FOR EQUALS
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Company Name: GILLIG LLC

Specification Section Number: TS 26.13 Low Voltage/Low Current Wiring and Terminals

Component Item Listed:
All wiring harnesses over 5 ft long and containing at least five wires shall include 10 percent (minimum one wire) excess wires for spares.

Proposed Item:
GILLIG requests approval to delete the requirement for 10% excess wires for spares.

GILLIG has been very successful in reducing the size of wire harnesses to ease in trouble shooting, routing of new harness and general cleanliness of the electrical compartments.

GILLIG can add specific wires where needed during the pre-production meeting at the request of the Agency.

OK AL

Note: A separate form must be submitted for each request for an approved equal. Proposers are required to submit technical information for each item. Any request received without the necessary technical information will be returned.