Item and Method of Inspection	Reject If
1. Wiring	Truck ✓ Trailer ✓ Bus ✓
Additional Inspection Procedure(s): Inspect wiring, harnesses and connections that are accessible and visible. Pay particular attention to battery, starter and charging system circuits.	
a) security	a) loose or improperly supported, and able to contact moving parts
	 chafed section resulting from contact with vehicle parts
	 not secured at least every 1,800 mm
b) insulation	b) conductor is exposed, other than at a proper connector
c) condition	c) cut, shorted or deteriorated
	- connection is loose, abnormally corroded, burnt
d) circuit loading	d) circuit load protection is missing or bypassed
NOTE: Circuit protection requirements are based on manufacturer design and specifications. Circuit testing is not required. Inspection is visual and based on knowledge of the normal design and specifications.	 circuit is overloaded beyond normal circuit capacity circuit protection device (fuse, circuit breaker or fusible link) exceeds circuit capacity circuit is improperly grounded
e) vapour proofing	e) not present on petroleum hauling trailers
	OUT OF SERVICES
	i) Any electrical component or wiring shows signs of shorting, arcing, or a hot spot.
	In the engine compartments of a bus:
	ii) Electrical cable insulation is burnt, chafed, damaged, or frayed, exposing the conductor.
	iii) Protective grommet insulating an electrical cable through metal is damaged or missing.
	iv) Electrical component is broken or mounting is insecure.
	v) Electrical cable is unsupported, or a clamp is missing, causing chafing or fraying.
	vi) Lubricating oil is leaking from an electrical component such as the alternator or auxiliary heater.

Item and Method of Inspection	Reject If
2. Battery	Truck ✓ Trailer ✓ Bus ✓
a) posts and connections	a) corrosion or deterioration is present that prevents proper electrical contact, loose or burnt
b) mount	b) cracked or missing, perforated or weakened due to corrosion
c) cover and hold down	c) insecure, missing, does not meet OEM standard
	 battery not secured in place
d) condition	d) level 2 leak of battery fluid
	OUT OF SERVICE
	i) Any electrical component or wiring shows signs of shorting, arcing, or a hot spot.
	In the battery compartments of a bus:
	ii) Electrical cable insulation is burnt, chafed, damaged, or frayed, exposing the conductor.
	iii) Protective grommet insulating an electrical cable through metal is damaged or missing.
	iv) Electrical component is broken or mounting is insecure.
	v) Electrical cable is unsupported, or a clamp is missing, causing chafing or fraying.
3. Trailer Cord (output to towed vehicle)	Truck ✓ Trailer ✓ Bus ✓
a) insulation	a) cut, cracked, deteriorated or melted through to wire conductor
b) connection	b) cracked, ends split, improper repair or connection
NOTE: A trailer cord must be repaired only with components and materials intended for electrical purposes.	

Item and Method of Inspection	Reject If
 c) constant ABS power on auxiliary circuit NOTE: Also refer to Section 3A, Item 18 f) PLC communication). Every vehicle equipped for towing another vehicle with air brakes, manufactured after April 1, 2000, must supply constant power to the trailer auxiliary circuit (center pin, blue wire) while the ignition is in the "on" position. Additional Inspection Procedures(s): Confirm that voltage is present at the auxiliary pin in the trailer cord when the ignition is "on" by one of the following methods: Option 1 – Test with a voltmeter. 	 c) power is not continuously supplied to the auxiliary circuit when ignition is "on" a switch is installed that can interrupt power to the auxiliary circuit voltage is below required minimum when circuit is loaded to industry standard value
Option 2 – Connect to a test device.	
4. Alternator Output on a School Bus	Truck Trailer Bus ✓
NOTE: <u>Applies to school bus only</u> . Inspection must be conducted according to the requirements of the relevant jurisdiction and applicable CSA D250 Standard.	
a) output rate	 a) during Test Method #1, fails to produce 70 amps at idle or fails to produce 130 amps at 1,500 rpm during Test Method #2, voltage drops below 12.4 volts, or charge indicator shows a discharge condition charge indicator is inoperative
Additional Inspection Procedure(s): Test alternator output using Test Method #1 or Test Method #2.	
Test Method #1 – Test alternator using a load test device.	
Test Method #2 – Test the output of the charging system with all lamps, heaters, defrosters, and other electrical accessories on at highest settings, with engine operating at 1,500 rpm.	

Item and Method of Inspection	Reject If
5. Switches	Truck ✓ Trailer Bus ✓
a) headlamp switch	a) missing, broken, inoperative, not OEM or equivalent
b) dimmer switch	b) missing, inoperative
c) heater and defroster switch	c) inoperative, missing
d) windshield wiper and washer switch	d) missing, broken, inoperative