

Volvo FM and FH Truck Electrical Harnesses – UPDATE 2019

Compliance with Code of Practice for Mobile Processing Units (AEIGS)

General

The latest generation Volvo FM and FH trucks have an electrical system based on TEA2+ Data Bus technology. This design is significantly different from the previous generation FM and FH trucks.

Located in the chassis is a Front Input/Output Module (FCIOM), a Central Chassis Input/Output Module (CCIOM) and a Rear Chassis Input/Output Module (RCIOM). These modules control the various chassis mounted electrical components located in their region.

The chassis wiring harness shares a combination of wiring covering:

- 1) Corrugated harness cover (Monoflex) as used today
- 2) Dual Layer Protection System (DLPS) harness or commonly referred to as Super Sleeve harness cover.

Identifying new FM and FH Truck Chassis

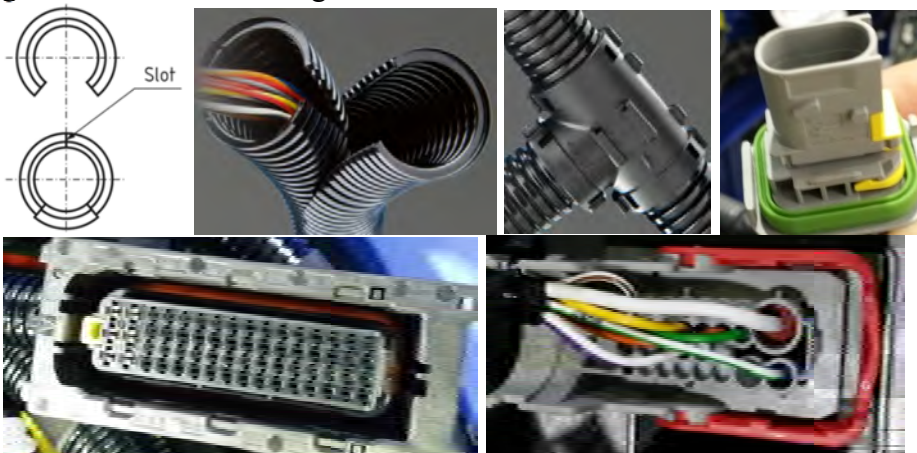
The simplest method of identification is by chassis number. The new models use a “200000” series chassis number and retain the original “D” prefix. Eg. D 201501.

Chassis number between **200001** and **209760** inclusive will use the **Monoflex** harness covering exclusively. Chassis number post **209760** will use the newly designed harness covering **DLPS Super Sleeve** in sections of the main chassis harness.

For ease of identification, the chassis VIN number is stamped into the right front chassis rail adjacent to the right front wheel. It also appears on the vehicle ID and manufacturer’s plate located in the door aperture.

Harness Design - Monoflex

The Monoflex harness material uses a 2 piece self-locking self-sealing corrugated outer covering that allows greater harness filling for a given diameter. It uses the same snap lock branch connectors as the previous generation tubular corrugated harness material.



Compliance

The Monoflex harness material has been fully tested by Volvo to meet the same high demands as the previous harness material by endurance testing, field testing and rig testing and complies with UNECE-R105 for European **Transport of Dangerous Goods by Road (ADR)**.

Harness Design – DLPS Super Sleeve

The DLPS Super Sleeve harness material was introduced because of its durable qualities for critical areas of the chassis. The harness material is more resistant to chafing, water and dirt ingress.

Electrical equipment is according with Council Directive 94/55/EC and UNECE-R105 as indicated Annex(1).

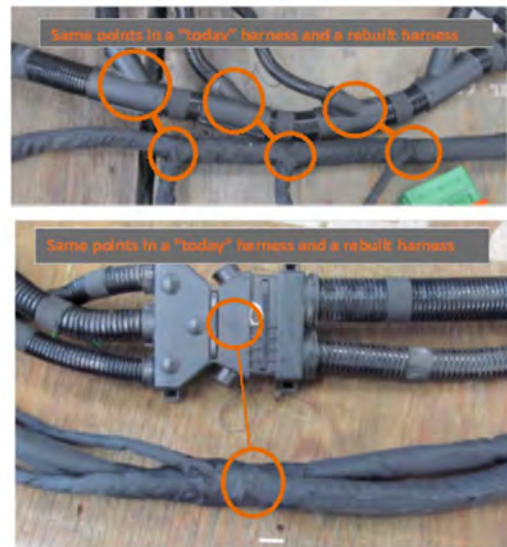
Transport of Dangerous Goods by Road (ADR)

All wiring located behind the cab is protected against impact, abrasion and chafing during normal vehicle operation, with the exception of the ABS-sensors. All wiring is protected in corrugated conduit or in polyurethane sheath or with inner metal protection.

Wiring harness with new DLPS Super Sleeve highlighted in green.



DLPS Super Sleeve Vs “traditional wiring”



To further support wiring compliance with Transport of Dangerous Goods by Road (ADR) requirements, attached Annex(1) is a signed certificate advising of its alignment with UNECE-R105 and related components in particular the wiring harness covering. This document should be read together with UNECE-R105 and associated updates released for the purpose of transporting of dangerous goods by road.

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