

Service Manual Trucks

Group **37**

Version **01**

Wiring diagram

FH12, FH16 LHD

To be inserted into the binders for FM, FH.

Foreword

The descriptions and service procedures contained in this manual are based on designs and methods studies carried out up to September 1998.

The products are under continuous development. Vehicles and components produced after the above date may therefore have different specifications and repair methods. When this is judged to have a significant bearing on this manual, supplementary service bulletins will be issued to cover the changes.

The new edition of this manual will update the changes.

In service procedures where the title incorporates an operation number, this is a reference to V.S.T. (Volvo Standard Times).

Service procedures which do not include an operation number in the title are for general information and no reference is made to V.S.T.

The following levels of observations, cautions and warnings are used in this Service Documentation:

Note: Indicates a situation, handling or circumstance which should be observed.

Important: Indicates a situation, handling or circumstance which should be emphasized so as not to lead to personal injury or damage to property.

Caution: Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury or damage to property.

Warning: Indicates a potentially hazardous situation which, if not avoided, could result in death, serious injury or major damage to property.

Danger: Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

Volvo Truck Corporation
Göteborg, Sweden

Order number: TSP119544

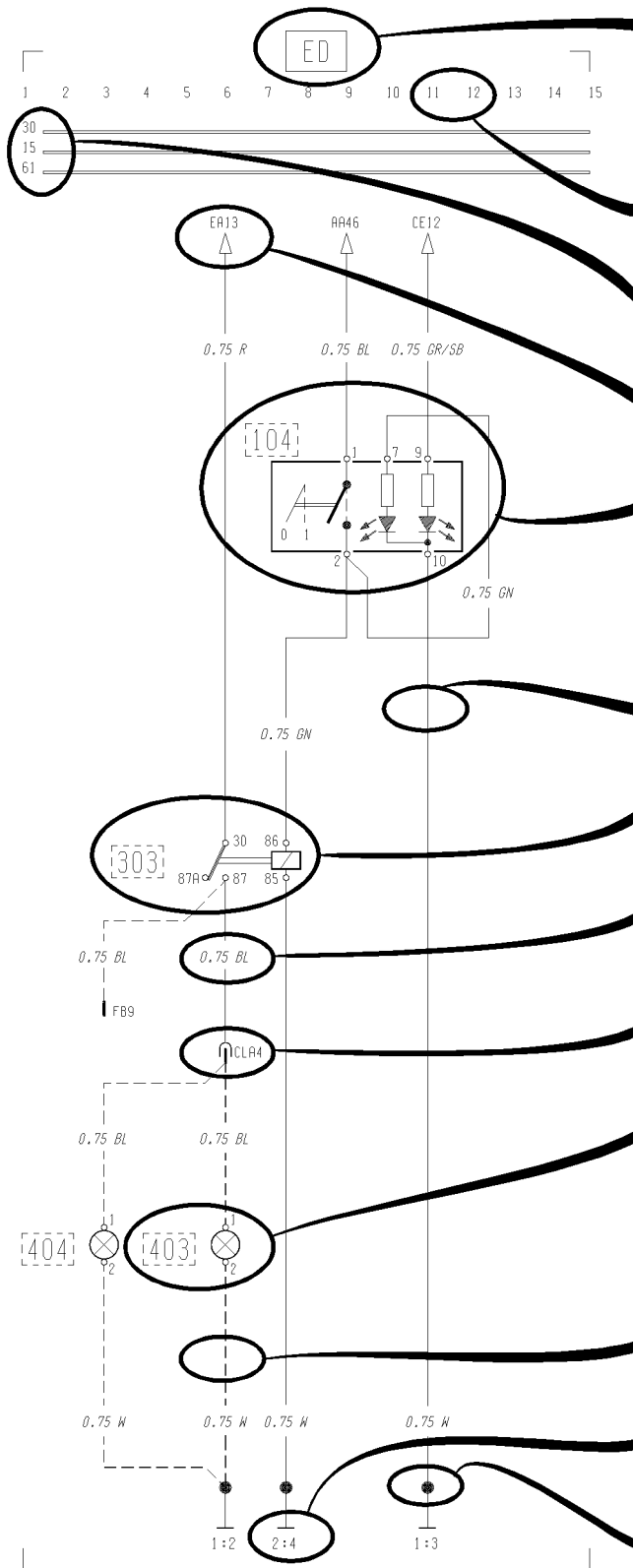
© 1998 Volvo Truck Corporation, Göteborg, Sweden

All rights reserved. No part of this publication may be reproduced, stored in retrieval system, or transmitted in any forms by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior written permission of Volvo Truck Corporation.

Contents

| | |
|---|-----|
| Example of wiring diagram | 2 |
| Examples of symbols on wiring diagram | 3 |
| Component wiring diagram index | 5 |
| Component wiring diagrams | 7 |
| Illustrations index | 48 |
| Illustrations | 49 |
| Circuit card electrical centre | 104 |
| Fuses on circuit card electrical centre | 105 |
| Relays on circuit card electrical centre | 106 |
| Cable harness illustration index | 107 |
| List of connectors | 110 |
| List of components | 117 |
| Abbreviations | 123 |
| Cable colour code | 124 |
| Feedback | |

Example of wiring diagram



Refer to the list of contents for the designation of the circuit diagram. If the circuit diagram designation is boxed in with broken lines this means that the circuit diagram is not standard on all market or vehicle models.

Seek column.

30 Voltage battery, kl.30.
 15 Voltage with starting key in drive position, kl.15.
 61 Voltage when alternator charges, kl.61.

Reference arrow (for circuit diagram EA, seek column 13).

Switch, comp. no. (104).

Single lines, cables.

Relay, comp. no. (303).

Cable area and colour (0.75 mm² blue).

Connector (CLA terminal 4).

Bulb, comp. no. (403)
 A broken line box round the component number shows that the component is not standard on all markets or vehicle models.

If the line is broken this means the cable is not standard on all markets or vehicle model.

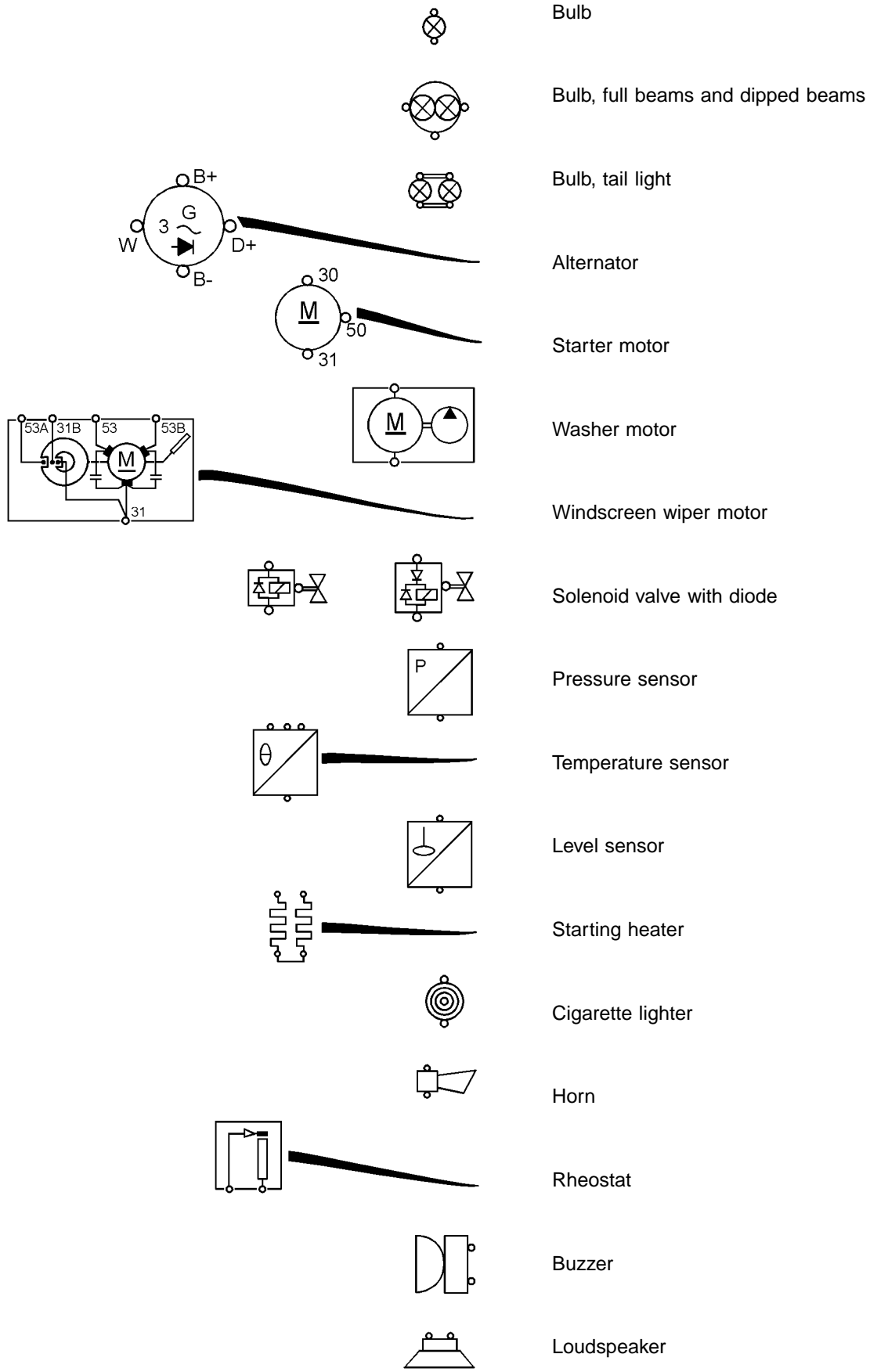
Earth connection point no: 2. and earth terminal no: 4. (see diagram Earth Connections).

Joint sleeve.

T3009608

Examples of symbols on wiring diagram

| | |
|--|---|
| | <p>Battery</p> |
| | <p>Connector</p> |
| | <p>Junktion</p> |
| | <p>Fuse</p> |
| | <p>Joint sleeve</p> |
| | <p>Cable</p> |
| | <p>Twisted cables</p> |
| | <p>Conductor on circuit card</p> |
| | <p>Earth connection and cable</p> |
| | <p>Switch</p> |
| | <p>Switch, starting switch</p> |
| | <p>Closing kontakt</p> |
| | <p>Closing kontakt, pressure-regulated</p> |
| | <p>Break kontakt, temperature-regulated</p> |
| | <p>Closing kontakt, time-regulated</p> |
| | <p>Slip kontakt, horn</p> |
| | <p>Relay</p> |
| | <p>Relay with internal circuit diagram</p> |



T3009610

Component wiring diagram index

| | | |
|-----------|---|---------|
| AA | Power supply, starting system, immobiliser | page 7 |
| AC | Vehicle ECU | page 8 |
| BL | Engine ECU, fuel injection system, preheating, FH12 | page 9 |
| BN | Engine ECU, fuel injection system, preheating, FH16 | page 10 |
| CE | Head light, parking light, marker light, DRL | page 11 |
| CG | Fog light, rear fog light | page 12 |
| CH | Spot light (STD) DRIVL2 | page 12 |
| CI | Spot light (EU) DRIVL2EC | page 12 |
| CK | Brake light | page 13 |
| CL | Trailer controlled exhaust brake | page 13 |
| CN | Direction indicator, hazard warning light | page 14 |
| EA | Reversing light, reversing warning alarm | page 14 |
| ED | Loading light, fifth wheel light | page 15 |
| EJ | Roof sign light, L1H1/L2H1 | page 15 |
| EK | Roof sign light, L2H2 | page 16 |
| EN | Beacon warning light | page 16 |
| ER | Interior light, L1H1/ L2H1, alarm clock/timer | page 17 |
| ES | Interior light, L2H2/L2H3, alarm clock/timer | page 18 |
| EV | Cigarette lighter | page 19 |
| EX | 12 V power supply | page 19 |
| FA | Horn | page 19 |
| GA | Wiper, washer | page 20 |
| HA | Climate unit | page 21 |
| HB | Cab heater, EBERSPÄCHER D1LCC, PH-CAB | page 22 |
| HC | Cab and engine heater, WEBASTO THERMO 90, PH-ENGCA | page 23 |
| HE | Electrically heated and adjusted seat | page 24 |
| HG | Electrically heated mirrors | page 24 |
| HH | Electrically operated mirrors | page 25 |
| HK | Air dryer | page 25 |
| HM | Fuel filter heater | page 25 |
| HO | Water separator heater | page 25 |
| HP | Electrically cab tilt | page 26 |
| JA | Radio | page 26 |
| KA | Electrically operated window winders | page 27 |

| | | |
|-----------|---|---------|
| KB | Electrically sunroof | page 27 |
| KE | SRS, air-bag | page 28 |
| KH | Central door lock | page 28 |
| LD | Power take-off | page 28 |
| LE | Double power take-off | page 29 |
| LG | Differential lock | page 29 |
| LJ | Bogie lift, tag axle lock, RADT-LA | page 30 |
| LL | Tag axle lock, RADT-A6S | page 30 |
| MA | Bogie lift hydraulic, RADT-AR | page 31 |
| MD | Bogie lift hydraulic, with axle load limiter, RADT-AR | page 32 |
| ME | Air suspension, 6x2/6x4/8x2/8x4, SUSPL-EC | page 33 |
| MF | Air suspension, 4x2, SUSPL-EC | page 34 |
| MG | Rear air suspension, 4x2, TRACTOR, SUSPL-EC | page 35 |
| NA | Instrument LHS module | page 36 |
| NB | Instrument central module with tachograph | page 37 |
| NC | Instrument RHS module | page 38 |
| NZ | Instrument central module without tachograph | page 39 |
| OA | Basic ABS, D-version | page 40 |
| OB | ABS/ASR, D-version | page 41 |
| PA | Headlight level control | page 42 |
| TA | Refrigerator | page 42 |
| TB | Central lubrication system | page 42 |
| XA | Extra fuses, key switch relay | page 43 |
| ZA | Earth connections | page 44 |
| ZB | Earth connections | page 45 |
| ZD | ADR battery main switch, current limiter | page 46 |
| ZE | Air heater EBERSPÄCHER TMD, ADR-FRA | page 47 |

