DAILY REPAIR MANUAL MECHANICAL ELECTRICAL ELECTRIONIC



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This publication describes the characteristics, the data, the correct methodology of the repairs that can be made on each individual component of the vehicle.

By complying with the instructions supplied and using the specific tools it is possible to perform any repair intervention correctly, within the specified time frames, while protecting the technicians against incidents.

Before starting any repair work, make sure that all accident prevention devices are ready at hand.

Check and wear the protective personal equipment provided for by the safety standards: goggles, helmet, gloves, shoes.

Check the efficiency of all processing, lifting and transport tools before using them.

The data contained in this publication might fail to reflect the latest changes which the Manufacturer may introduce at any time, for technical or sales purposes, or to meet the requirements of local legislation.

Copy, even partial, of text and drawings is forbidden.

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| l | SPECIAL REMARKS |
|---|--|
| The workshop manuals fo are indicated in the Gene The subjects usually dealt Technical data table, Driv Where possible, the same Diagrams and symbols hav next page) instead of givin | or mechanical parts have been divided into Sections, each of which has a number and its relevant contents eral Specifications. Each section features a main Unit (e.g. engine, gears etc.). t with in each section are: ving torques, Equipment, Diagnostic, Removal and Fitting in place, Repair operations. e sequence of procedures has been followed for easy reference. ve been widely used to give a clearer and more immediate illustration of the subject being dealt with, (see ng descriptions of some operations or procedures. |
| Example | |
| ØI ØI | \emptyset = housing for connecting rod small end bush \emptyset 2 = housing for connecting rod bearings \Im_{α} Tighten to torque Tighten to torque + angular value |
| Furthermore, within each digit number. This numbe and in the FAULT CODE For quick reference the ir | n section, every heading or sub-heading concerning the operations to be carried out is preceded by a six r is the Product Code that is to be found in the repair operation described in the REPAIR TIMES CHARTS ES. ndication of how to read this code is described below (see the Repair time charts also). |
| Product Code: | 5 0 UNIT SUB-ASSEMBLY COMPONENT |
| Example: Product 50 = Product 52 = Product 53 = | Frame; Axles; Gears etc. |
| Unit Code: | PRODUCT UNIT SUB-ASSEMBLY COMPONENT |
| Figures three and four ide Example: Product 50 = Unit 01 = Unit 02 = | entify the ASSEMBLY within the PRODUCT Frame; Chassis; Bumpers etc . |
| Sub-assembly Code: | PRODUCT UNIT SUB-ASSEMBLY COMPONENT |
| Example: Product 50 = Unit 01 = Sub-assembly 40 = | Frame; Chassis; Chassis cross members etc. |

Graphs and symbols

| • | |
|------------------------|---|
| | Removal Disconnection |
| | Refitting Connection |
| | Removal Disassembly |
| | Fitting in place Assembly |
| \bigcirc | Tighten to torque |
| $\widehat{\bigcirc}_a$ | Tighten to torque + angle value |
| | Press or caulk |
| 84 | Regulation Adjustment |
| | Warning Note |
| | Visual inspection Fitting position check |
| F | Measurement Value to find Check |
| P | Equipment |
| 4 | Surface for machining Machine finish |
| Ś | Interference Strained assembly |
| | Thickness Clearance |
| | Lubrication Damp Grease |
| | Sealant Adhesive |
| | Air bleeding |
| | |

| | Intake |
|------------------------------|---|
| | Exhaust |
| $\langle \downarrow \rangle$ | Operation |
| Q | Compression ratio |
| | Tolerance Weight difference |
| ÷ | Rolling torque |
| IVECO PARIS | Replacement Original spare parts |
| | Rotation |
| \triangleleft | Angle Angular value |
| | Preload |
| | Number of revolutions |
| (JE) | Temperature |
| bar | Pressure |
| > | Oversized Higher than Maximum, peak |
| < | Undersized Less than Minimum |
| A | Selection Classes Oversizing |
| | Temperature < 0° Cold Winter |
| | Temperature > 0° Hot Summer |

DAILY

 $\begin{array}{l} \mbox{Print 603.43.351} - 3^{rd} \mbox{ edition} \\ 3^{rd} \mbox{ Edition - February 2002} \end{array}$

UPDATE DATA

| Section | Description | Page | Revision date |
|---------|-------------|------|---------------|
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SECTION I

General

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2 GENERAL

IDENTIFICATION DATA

Vehicle Identification Plate

Plate legend

- Type-approval number marking, a) manufacturer's code and general vehicle data.
- Total tractor weight. b)
- Total weight of tractor + trailer (if applicable). c)
- d) Permissible weight limit on front axle.
- Permissible weight limit on middle axle (if applicable). e)
- f)
- Permissible weight limit on rear axle. Permissible weight limit on 4th axle (if applicable). g)
- h) Specific identification of type.
- Wheelbase in mm. i)
- Engine type. I)
- m) Engine power.
- No. of axles. n)
- Place of manufacture. o)
- * Permissible grade of smoke



Admissible smoke value



COMPOSITION OF MODELS

| | | MODELS | | 0 | | 5 | • | 0 | _ | 5 | m | 6 | 0 | _ | 5 | m | * | 0 | _ | 2 | m |
|------------------|---|-----------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-------------|-------------|-------------|-------------|-------------|------------|------------|-------------------|-------------------------|------------|
| | | | 6 T 6 |) L I(| | | S 2 | S I(| S - | SIS | S 1.3 | U U | Ü | Ū | U | U | U O | Ű | $\overline{\cup}$ | $\overline{\mathbf{U}}$ | υ |
| ASSEMBLIES | | | 2 | 29 | 29 | 29 | З, | 50 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 4 | 4 | 4 | 4 | 4 |
| | 8140.63.4 (85 CV PC/NA + EGR + C | DXICAT) | : | | | | : | | | | | : | | | | | : | | | | |
| | 8140.43R (90 CV ID/TCA*) | | ø | | | | Ø | | | | | Ø | | | | | ø | | | | |
| | 8140.43B.43XX (105 CV ID/TCA*) | | | | 0 | | | | o | | | | | 0 | | | | | 0 | | |
| | 8140.43C.40XX (105 CV ID/TCA + C | DXICAT) | | | 0 | | | | 0 | | | | | 0 | | | | | 0 | | |
| | 8140.43S.41XX (125 CV ID/TCA* E.C | G.R. + OXICAT) | | | | | | | | | | | | | | | | | | | |
| | 8140.43S.43XX (125 CV ID/TCA*) | | | | | | | | | | 0 | | | | | 0 | | | | | 0 |
| | 8140.43N.43XX (150 CV ID/TCA*) | | | | | | | | | | | | | | | | | | | | |
| | FIAE048IA*A (96 CV) | | | 0 | | | | o | | | | | 0 | | | | | 0 | | | |
| | FIAE0481B*A (116 CV) | | | | | 0 | | | | 0 | | | | | 0 | | | | | 0 | |
| | FIAE0481B*B (116 CV + E.G.R. + O) | XICAT) | | | | | | | | | | | | | | | | | | | |
| | Single disc 9" 1/4 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | |
| | Single disc 10" 1/2 | | | | | | | | | | 0 | | | | | 0 | | 0 | | 0 | 0 |
| | Single disc 11 | | | | | | | | | | | | | | | | | | | | |
| | ZF 5S 200 | | o | o | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | o | 0 | o | | 0 | 0 | 0 | 0 | |
| | ZF 6S 300 | | | | | | | | | | 0 | | | | | ο | | | | | 0 |
| | FRONT AXLES: | | | | | | | | | | | | | | | | | | | | |
| а ь | 5817 | | o | o | o | o | o | o | o | o | o | | | | | | | | | | |
| | 5818 | | | | | | | | | | | | | | | | | | | | |
| ۹ ۵ , | 5819 | | | | | | | | | | | 0 | \otimes | ο | \otimes | 0 | o | o | 0 | 0 | o |
| | 5823 | | | | | | | | | | | | | | | | | | | | |
| | 450210 | | 0 | 0 | 0 | o | 0 | 0 | 0 | 0 | 0 | | | | | | | | | | |
| | 450311/1 | | | | | | | | | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 450511 | | | | | | | | | | | | | | | | | | | | |
| | 450517/2 | | | | | | | | | | | | | | | | | | | | |
| Rack-and-pinion | Power steering | | 0 | 0 | 0 | 0 | 0 | o | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | o | 0 | 0 | 0 | 0 |
| | FRONT MECHANICAL SUSPENSION independent with transverse leaf sprin | NS: ng (MK3) | o | o | o | o | o | o | o | o | o | ο | o | o | ο | ο | | | | | |
| | independent with torsion bars | | | | | | | | | | | (\bullet) | (\bullet) | (\bullet) | (\bullet) | (\bullet) | o | 0 | 0 | 0 | o |
| | REAR | Parabolic | | | | | | | | | | \diamond | \diamond | \diamond | \diamond | \diamond | \diamond | \diamond | \diamond | \diamond | \diamond |
| م پ ^و | SUSPENSIONS: | - single leaf | • | • | • | • | • | • | • | • | • | | | | | | | | | | |
| | | - double-leaf | • | • | 0 | 0 | • | 0 | 0 | 0 | igodot | | | | | | | | | | |
| | | Semi-elliptic | | | | | | | | | | :: | :: | :: | :: | :: | :: | :: | :: | :: | :: |
| | | Semi-elliptic with leaf spring | | | | | | | | | | ٠ | ٠ | ٠ | ٠ | ٠ | ٠ | ٠ | ٠ | ٠ | ٠ |
| | REAR AIR SUSPENSIONS | | \otimes | \otimes | \otimes | \otimes | \otimes | \otimes | \otimes | \otimes | \otimes | \otimes |

ID = Direct injection

NA = Aspirated

PC = Indirect injection (pre-combustion chamber)

TCA = Turbocharged with intercooler OXICAT = Catalytic silencer

- (•) Optional extra (with max load of 1900 kg)
- Standard ò Alternative
- With Common Rail electronic injection system

- EGR = Anti-pollution device Vehicle category M1 produced until 31/12/01 О
- Non-EU markets
- : Vehicles made until 9/01
- Vehicles made since 9/01 ullet
- Vehicles with front suspension with transverse leaf spring $\overline{\otimes}$
- Vehicles with front suspension with torsion bars

Standard on chassis cabs and vans 40C ::

Standard on Chassis cabs and varis 40C
Alternatively on Vans – Chassis Cowls and Cut Aways
Standard on Vans (excluding 40C) – Chassis Cowls and Cut
Aways – Alternatively on Chassis Cabs
Excluding 35 S chassis cabs and chassis cowls – Combi
Only 35 S chassis cabs and chassis cowls – Combi
Chassis cabs and chassis cowls – Combi

- ٠ Chassis cabs only, as an alternative
- Alternatively, excluding 35C (with max. load of 1900 kg and tyres 195/75 R16) and 40 C Chassis cabs 40 C Vans and Cut Aways \otimes
- S Single rear wheels
- L = Light with single rear wheels C = Twin rear wheels
- BUS Glazed vans Glazed Vendor Chassis Cowls Cut Aways, bodied or adaptable to carry passengers

COMPOSITION OF MODELS

| | | MODELS | _ | ω | _ | ω | D | ى ا | BUS | BUS | BUS | BUS |
|-----------------|--|-----------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| | | | Ū | Ū | Ū | Ū | Ū | Ū | 131 | <u>m</u> | 15 | 15 |
| ASSEMBLIES | | | 4 | 4 | 50 | 50 | 90 | 65 | 35 S | 40 C | 50 C | 65 C |
| | 8140.63.4 (85 CV PC/NA + EGR + C | DXICAT) | | | | | | | | | | |
| | 8140.43R (90 CV ID/TCA*) | | | | | | | | | | | |
| | 8140.43B.43XX (105 CV ID/TCA*) | | 0 | | 0 | | | | | | | |
| | 8140.43C.40XX (105 CV ID/TCA + C | DXICAT) | 0 | | 0 | | | | | | | |
| | 8140.43S.41XX (125 CV ID/TCA* E.C | G.R. + OXICAT) | | | | | | | | | | |
| | 8140.43S.43XX (125 CV ID/TCA*) | | | | | 0 | | | 0 | 0 | | |
| | 8140.43N.43XX (150 CV ID/TCA*) | | | | | | 0 | 0 | | | 0 | 0 |
| | FIAE048IA*A (96 CV) | | | | | | | | | | | |
| | FIAE0481B*A (116 CV) | | | | | | | | | | | |
| | FIAE0481B*B (116 CV + E.G.R. + O | XICAT) | | | | | | | | | | |
| | Single disc 9" 1/4 | | | | | | | | | | | |
| ÷ | Single disc 10" 1/2 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | Single disc II | | | | | | | | | | 0 | 0 |
| | ZE 55 200 | | | | | | | | | | | |
| | 21 33 200 | | | | | | | | | | | |
| | ZF 6S 300 | | o | ο | o | o | o | o | o | ο | ο | o |
| | FRONT AXLES: | | | | | | | | | | | |
| | 5817 | | | | | | | | | | | |
| | 5818 | | | | | | | | | | | |
| :llooli: | 5819 | | 0 | 0 | 0 | 0 | | | 0 | 0 | 0 | |
| | 5823 | | - | - | - | - | 0 | 0 | - | - | - | 0 |
| | 450210 | | | | | | - | - | | | | |
| | 450311/1 | | | | | | | | 0 | 0 | | |
| | 450511 | | 0 | 0 | 0 | 0 | | | - | - | 0 | |
| | 450517/2 | | - | - | - | - | 0 | 0 | | | - | |
| Rack-and-pinion | Power steering | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | FRONT MECHANICAL SUSPENSION | NS: | - | - | - | - | - | - | - | - | _ | |
| | independent with transverse leaf sprir | ng (MK3) | | | | | | | | | | |
| | independent with torsion bars | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | REAR | Parabolic | \diamond |
| Q 0 | SUSPENSIONS: | - single leaf | | | | | | | | | | |
| | | - double-leaf | | | | | | | | | | |
| | | Semi-elliptic | :: | ** | :: | | :: | :: | :: | :: | :: | :: |
| | | Semi-elliptic with leaf spring | • | • | • | • | • | • | • | • | • | • |
| | REAR AIR SUSPENSIONS | | \otimes |

- ID = Direct injection
- NA = Aspirated

PC = Indirect injection (pre-combustion chamber)

- TCA = Turbocharged with intercooler OXICAT = Catalytic silencer
- (•) Optional extra (with max load of 1900 kg)
- Standard ò
- Alternative
- With Common Rail electronic injection system EGR = Anti-pollution device
- Vehicle category MI produced until 31/12/01
- 0 Non-EU markets
- Vehicles made until 9/01
- Ø Vehicles made since 9/01
- \bullet Vehicles with front suspension with transverse leaf spring
- \otimes Vehicles with front suspension with torsion bars

Standard on chassis cabs and vans 40C

Standard on Chassis cabs and varis 40C
Alternatively on Vans – Chassis Cowls and Cut Aways
Standard on Vans (excluding 40C) – Chassis Cowls and Cut Aways
Alternatively on Chassis Cabs
Excluding 35 S chassis cabs and chassis cowls – Combi
Only 35 S chassis cabs and chassis cowls – Combi
Chassis cabs and chassis cowls – Combi

- ٠ Chassis cabs only, as an alternative
- Alternatively, excluding 35C (with max. load of 1900 kg and tyres 195/75 R16) and 40 C Chassis cabs 40 C Vans and Cut \otimes Áways
- Single rear wheels S
- L = Light with single rear wheels C = Twin rear wheels

BUS Glazed vans – Glazed Vendor – Chassis Cowls – Cut Aways, bodied or adaptable to carry passengers







GENERAL

ENGINE

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DAILY



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| I 2 3 4 | 5 6 7 8 | 9 10 11 12 13 14 |
|------------------|---|---|
| A B C D | Mechanical suspension: front with trar Mechanical suspension: front with tor Mechanical front suspension with trar Mechanical front suspension with tors | nsverse leaf spring. rsion bars. nsverse leaf spring – rear air suspension. sion bars – rear air suspension. |
| VERSION | | |
| | F (7) | |
| 1 2 3 4 | 5 6 7 8 | <u> </u> |
| | | 35 S.9 - 29 L.9 - 35 S.11 - 29 L.10 29 L.11 29 L.12 - 35 S.10 - 35 S.12 35 S.13 - 35 C.9 - 35 C.10 - 35 C.11 35 C.12 - 35 C.13 - 40 C.9 - 40 C.11 40 C.12 - 40 C.13 - 45 C.11 - 45 C.13 50 C.11 - 50 C.13 - 60 C.15 - 65 C.15 |
| | 6 6 6 6 6 6 6 6 7 6 | 29 L.9 D - 29 L.11 D - 35 S.9 D - 35 S.1 35 S.11 D 35 S.12 D - 35 S.12 D 35 S.13 D - 35 C.9 D - 35 C.10 D 35 C.11 D - 40 C.9 D - 40 C.10 D 40 C.11 D - 35 C.13 D - 40 C.12 D 40 C.13 D - D 45 C.11 D - 45 C.13 D 50 C.11 - 50 C.13 D - 60 C.15 D 65 C.1 |
| | 0 0 0 0 CHASSIS COWL | 29 L. 9 CC - 29 L.11 CC - 35 S.9 CC 3 S.10 CC - 35 S.11 CC - 35 S.12 CC 35 C.11 CC - 35 C.12 CC - 35 C.13 CC 40 C. 9 CC - 40 C.10 CC - 40 C.11 CC 40 C.12 CC - 40 C.13 CC - 50 C.11 CC 4! |





