

SPARE PARTS LIST AND EXPLOSION VIEW



Marine Propulsion Systems

SPARE PARTS CATALOGUE

ZF 15 MIV (HBW 150 V)

Cod. 310.01.0100

Plus d'informations sur : www.dbmoteurs.fr



1. Spare Parts List

1.1 Preface

The spare parts list is only valid for the type and versions of transmission, as shown below. You will find the transmission type and version on your transmission name plate. If the type and version indicated differs from that printed in this Manual, the relative Spare Parts List should be ordered from ZF Marine Arco S.p.A.

The indicated dimensions and standards are as such not enough for ordering parts.

When ordering parts, please state:

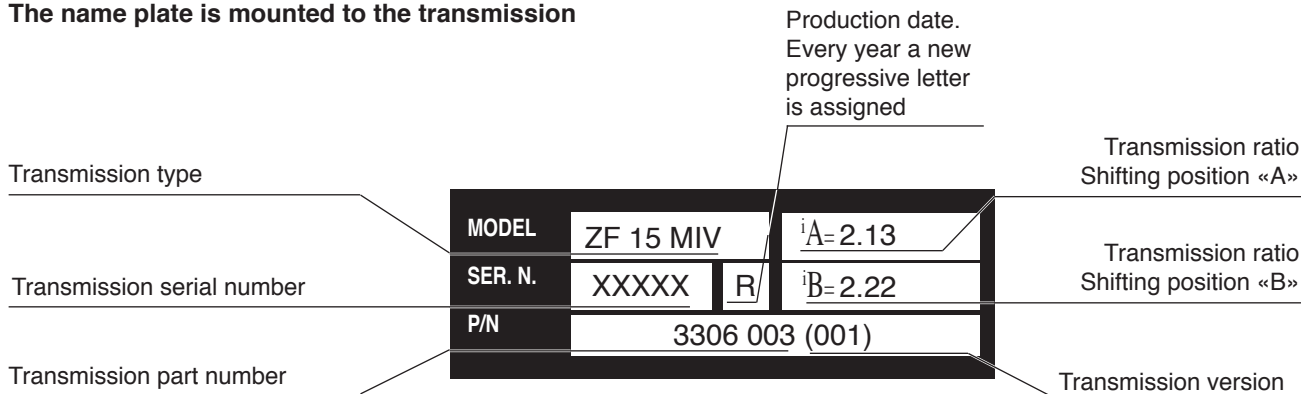
- transmission type
- serial number
- item no. part name, ident no. and quantity of parts required.

The spare parts list is referring to the following versions:

| | | | |
|-----------|-------------------------------|-----------|--------------------------------|
| ZF 15 MIV | versions 001; 002; 003 | HBW 150 V | versions 08; 09; 10; 11 |
|-----------|-------------------------------|-----------|--------------------------------|

Name Plate

The name plate is mounted to the transmission



| Item No | Part name | Number per gearbox | ZF 15 MIV | |
|---------|---|--------------------|---------------|---------|
| | | | Part No | Old p/n |
| 1 | HOUSING ASSY | 1 | 3306 201 004 | 344768 |
| 2 | COVER | 1 | 3306 301 010 | 206450 |
| 3 | COVER | 1 | 3306 301 023 | 326369 |
| 4 | SPRING WASHER | 37 | 0630 302 090 | 442372 |
| 5 | HEX SCREW | 8 | 0636 015 289 | 215870 |
| 6 | ACTUATING LEVER * | 1 | 947.23.006.01 | 195062 |
| 6 | ACTUATING LEVER | 1 | 3306 308 001 | 500635 |
| 7 | HEX HEAD SCREW * | 1 | 0636 015 299 | 199807 |
| 7 | HEX HEAD SCREW (Actuating lever) ** | 1 | 0636 101 727 | 442377 |
| 7 | SCREW (actuating lever) *** | 1 | 0636 103 204 | 500113 |
| 8 | SHAFT SEAL RING | 1 | 0634 502 009 | 106864 |
| 9 | COVER | 1 | 3306 308 002 | 388242 |
| 10 | DOWEL PIN | 1 | 0631 329 032 | 104559 |
| 11 | ACTUATING CAM ASSEMBLY | 1 | 3306 199 008 | 407211 |
| 12 | SHIFT COVER ASSEMBLY | 1 | 3306 108 002 | 407210 |
| 15 | SHIFT FORK | 1 | 3306 208 001 | 223563 |
| 16 | SHIFT ROD | 1 | 3307 301 012 | 288673 |
| 17 | PLUG | 1 | 0636 301 041 | 442373 |
| 18 | SEALING RING | 1 | 3306 301 016 | 326578 |
| 19 | DIPSTICK | 1 | 3306 201 006 | 345480 |
| 20 | OIL DRAIN PLUG | 1 | 3306 301 013 | 228566 |
| 21 | HEX SCREW | 14 | 0636 010 376 | 215869 |
| 22 | HEX NUT | 15 | 0637 006 157 | 455785 |
| 23 | PLUG | 1 | 0630 361 101 | 322382 |
| 24 | INTERMEDIATE SHAFT | 1 | 3306 303 006 | 468772 |
| 25 | DISC | 2 | 3307 303 002 | 288702 |
| 26 | INTERMEDIATE GEAR | 1 | 3306 303 001 | 254730 |
| 27 | NEEDLE BEARING | 1 | 3306 303 007 | 215878 |
| 28 | GASKET | 2 | 3306 301 014 | 254715 |
| 29 | GASKET (or LOCTITE 518) | 1 | 3306 301 015 | 254716 |
| 30 | SHAFT SEAL, INPUT | 1 | 0634 301 833 | 215875 |
| 31 | SEAL RING | 2 | 0634 300 146 | 401647 |
| 32 | TAPERED ROLLER BEARING | 2 | 0635 501 597 | - |
| 34 | TAPERED ROLLER BEARING | 1 | 0635 370 050 | - |
| 36 | INPUT SHAFT HBW 150 V - 1.8R «08» Z1/Z3=27/22 | 1 | 3306 302 006 | 304088 |
| 36 | INPUT SHAFT ZF 15 MIV - 2.13R «001» Z1/Z3=24/22 | 1 | 3306 302 008 | 325811 |
| 36 | INPUT SHAFT ZF 15 MIV - 2.72R «003» Z1/Z3=18/22 | 1 | 3306 302 009 | 439197 |
| 36 | INPUT SHAFT ZF 15 MIV - 2.99R «002» Z1/Z3=19/22 | 1 | 3306 302 021 | - |
| 37 | SHIM 0.10 mm | 2 | 3306 302 011 | 206474 |
| 38 | SHIM 0.15 mm | 2 | 3306 302 012 | 206475 |
| 38 | SHIM 0.20 mm | 2 | 3306 302 013 | 206476 |
| 38 | SHIM 0.30 mm | 2 | 3306 302 014 | 206477 |
| 39 | SHIM 0.50 mm | 2 | 3306 302 015 | 228540 |
| 40 | SHIM 1.00 mm | 2 | 3306 302 016 | 228539 |
| 41 | HEX HEAD SCREW | 1 | 3306 304 057 | 420280 |
| 42 | SPACER | 1 | 3306 303 004 | 326257 |
| 43 | THRUST RING | 2 | 3306 304 029 | 344787 |
| 44 | GEAR HBW 150 V - 1.8R «08» Z2=42 | 1 | 3306 304 015 | 407221 |
| 44 | GEAR ZF 15 MIV - 2.13R «001» Z2=45 | 1 | 3306 304 014 | 407220 |
| 44 | GEAR ZF 15 MIV - 2.72R «003» Z2=43 | 1 | 3306 304 016 | 439198 |
| 44 | GEAR ZF 15 MIV - 2.99R «002» Z2=50 | 1 | 3306 304 013 | 407219 |
| 45 | NEEDLE BEARING | 2 | 0635 300 148 | 201187 |
| 46 | NEEDLE BEARING | 2 | 3306 304 021 | 251524 |
| 47 | SPACER | 2 | 3306 304 025 | 250992 |
| 48 | SPRING | 4 | 3306 304 026 | 387391 |

* Production date (see name plate description pag. 2)

** Up to s/n 56480 N

*** From s/n 11532 P

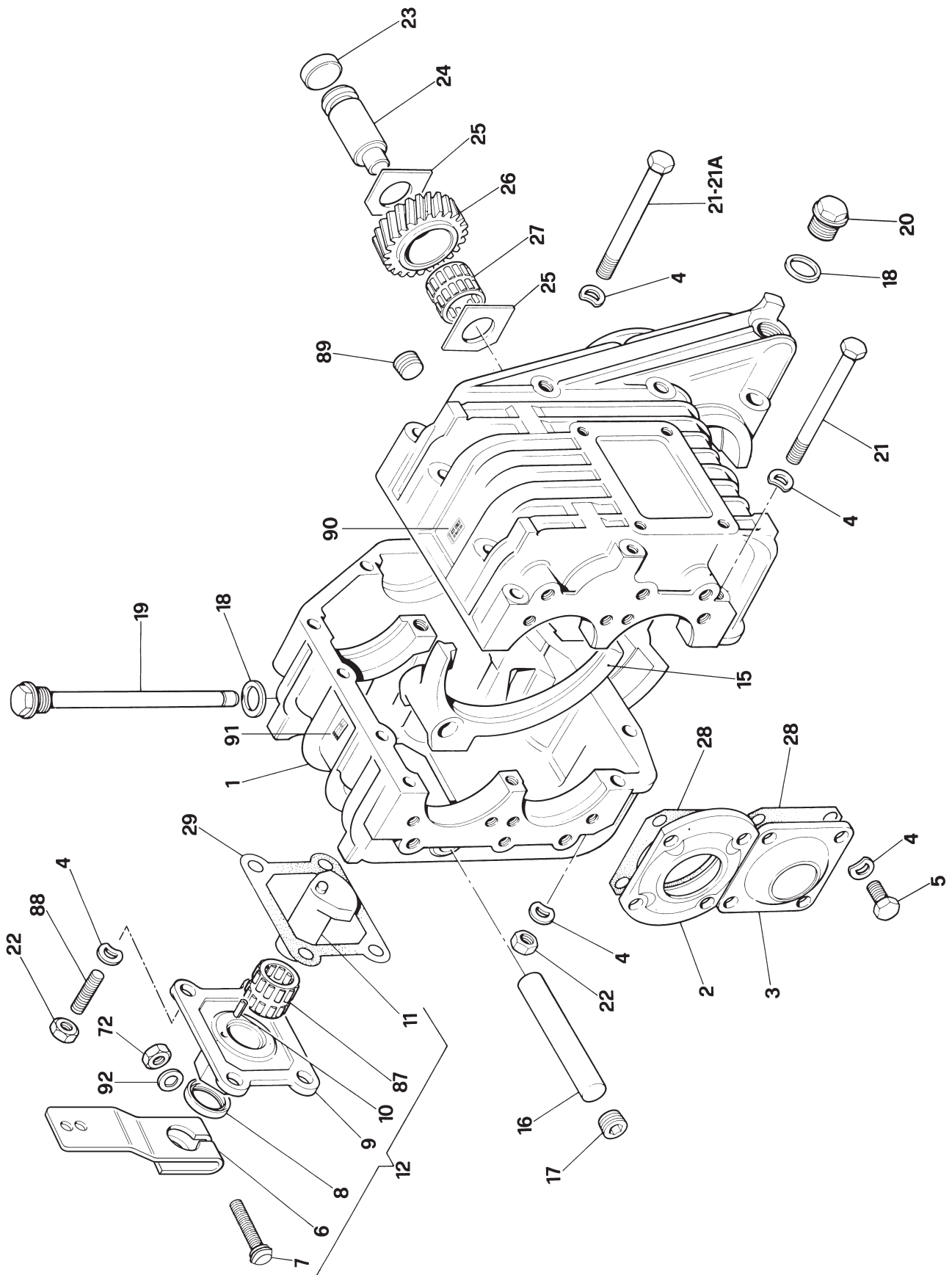
| Item No | Part name | Number per gearbox | ZF 15 MIV | |
|---------|------------------------------|--------------------|--------------|---------|
| | | | Part No | Old p/n |
| 49 | DISC | 2 | 3306 304 030 | 407139 |
| 50 | RING HALF | 4 | 3306 304 011 | 326830 |
| 51 | INTERNAL CLUTCH DISC | 8 | 3306 304 027 | 407231 |
| 52 | EXTERNAL CLUTCH DISC | 8 | 3306 304 031 | 407230 |
| 53 | SHIM 0.3 mm | 2 | 3306 304 034 | 500254 |
| 53 | SHIM 0.4 mm | 2 | 3306 304 035 | 195714 |
| 54 | SHIM 0.5 mm | 2 | 3306 304 036 | 195715 |
| 55 | SHIM 0.6 mm | 2 | 3306 304 037 | 195716 |
| 56 | SHIM 0.7 mm | 2 | 3306 304 038 | 195717 |
| 57 | DISC CARRIER | 2 | 3306 304 032 | 407233 |
| 58 | BALL | 6 | 0635 460 015 | 106700 |
| 59 | GUIDE SLEEVE | 1 | 3306 304 022 | 439603 |
| 60 | CHANGE SELECTOR | 1 | 3306 304 023 | 206817 |
| 61 | PRESSURE SPRING | 3 | 3306 304 006 | 287401 |
| 62 | STOP PIN | 3 | 3306 304 033 | 187840 |
| 63 | GUIDE PIN | 3 | 3306 304 008 | 195271 |
| 64 | TORSION SPRING | 3 | 3306 304 024 | 206798 |
| 65 | GEAR Z5=43 | 1 | 3306 304 018 | 407235 |
| 66 | INTERMEDIATE SHAFT Z6=29 | 1 | 3306 303 005 | 388411 |
| 67 | COTTER | 2 | 3306 304 007 | 187841 |
| 68 | TAPERED ROLLER BEARING | 1 | 0635 370 053 | - |
| 70 | SHIM 0.1 mm | 2 | 0630 004 260 | 280839 |
| 71 | SHIM 0.3 mm | 1 | 0630 004 259 | 280840 |
| 72 | SHIM 0.5 mm | 1 | 0630 004 258 | 280841 |
| 72 | NUT (Actuating lever) | 1 | 0637 006 157 | 455785 |
| 73 | RING | 1 | 3306 304 054 | 344690 |
| 74 | TAPERED ROLLER BEARING | 2 | 0635 501 936 | - |
| 76 | SPACER RING | 2 | 3306 304 009 | 327115 |
| 78 | SHIM 1.1 mm | 2 | 3306 304 002 | - |
| 78 | SHIM 1.2 mm | 2 | 3306 304 060 | - |
| 78 | SHIM 1.3 mm | 2 | 3306 304 042 | 345469 |
| 78 | SHIM 1.4 mm | 2 | 3306 304 043 | 345470 |
| 78 | SHIM 1.5 mm | 2 | 3306 304 044 | 344673 |
| 78 | SHIM 1.6 mm | 2 | 3306 304 045 | 344674 |
| 78 | SHIM 1.7 mm | 2 | 3306 304 046 | 344675 |
| 78 | SHIM 1.8 mm | 2 | 3306 304 047 | 344676 |
| 78 | SHIM 1.9 mm | 2 | 3306 304 048 | 344677 |
| 78 | SHIM 2.0 mm | 2 | 3306 304 049 | 344678 |
| 78 | SHIM 2.1 mm | 2 | 3306 304 050 | 344679 |
| 78 | SHIM 2.2 mm | 2 | 3306 304 051 | 344680 |
| 78 | SHIM 2.3 mm | 2 | 3306 304 052 | 344681 |
| 78 | SHIM 2.4 mm | 2 | 3306 304 053 | 344682 |
| 80 | GEAR Z=33 | 1 | 3306 304 039 | 388410 |
| 81 | KEY | 1 | 0631 501 182 | 105334 |
| 82 | OUTPUT SHAFT | 1 | 3306 304 041 | 344670 |
| 83 | RING NUT | 1 | 3306 304 010 | 195413 |
| 84 | RING | 2 | 3306 304 040 | 344644 |
| 85 | O-RING | 1 | 0634 306 072 | 105590 |
| 86 | O-RING | 2 | 0634 303 690 | 291618 |
| 87 | NEEDLE BEARING | 2 | 0635 303 056 | 268620 |
| 88 | STUD | 4 | 0636 610 232 | 396330 |
| 89 | PLUG | 4 | 0636 301 039 | 338805 |
| 90 | NAME PLATE | 1 | 3306 301 005 | - |
| 91 | OIL NAME PLATE | 1 | 3304 301 016 | 387428 |
| 92 | WASHER (actuating lever) *** | 1 | 0630 001 085 | 167010 |

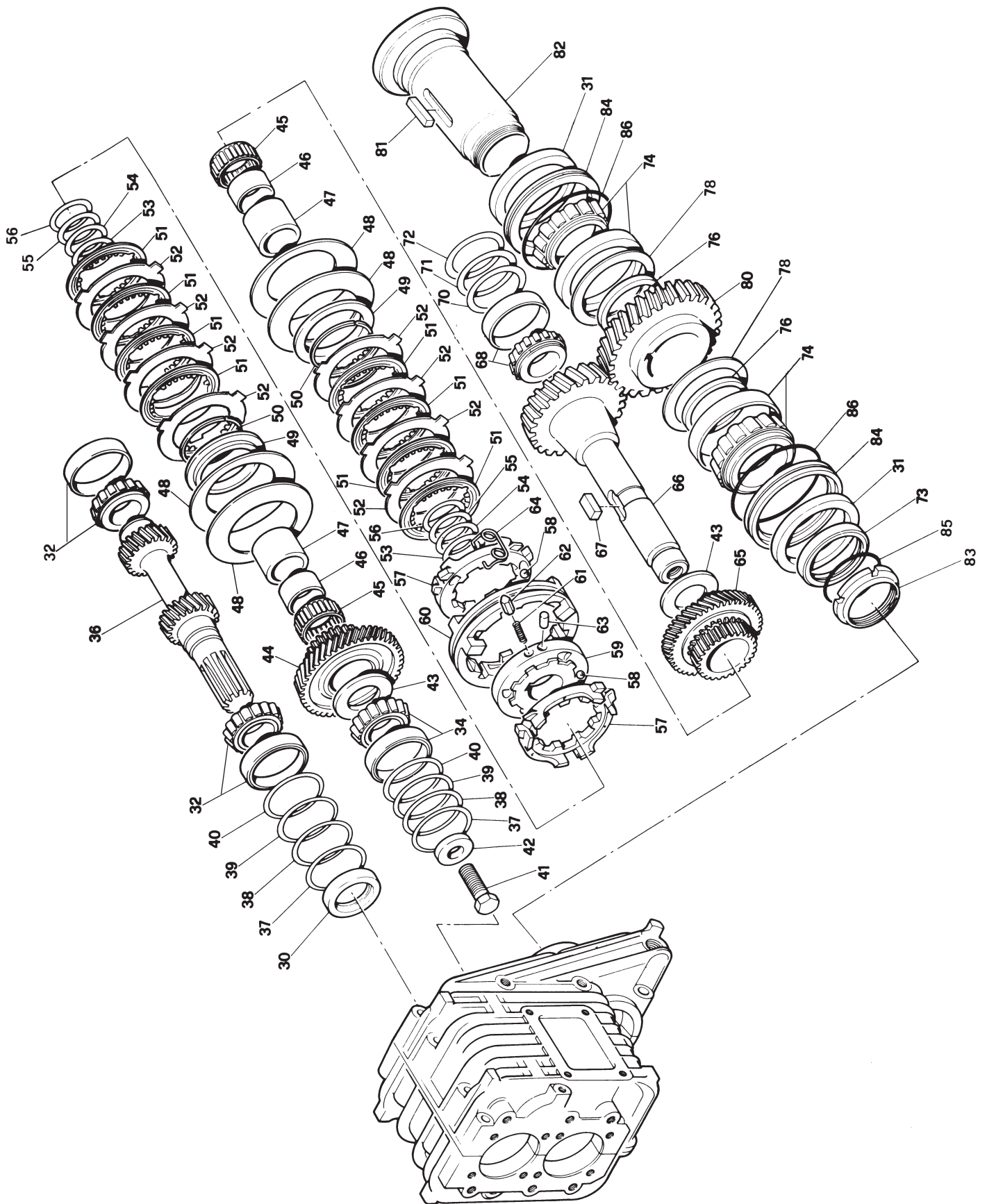
* Production date (see name plate description pag. 2)

** Up to s/n 56480 N

*** From s/n 11532 P

2. Drawings (Explosion view)







Marine Propulsion Systems

ZF Marine GmbH
Ehlerstr. 50
D-88046 Friedrichshafen
GERMANY
Phone +49 (0) 7541 77-2207
Fax +49 (0) 7541 77-4222
E-mail: info.zfmarine@zf.com

ZF Padova S.p.A.
Via Penghe, 48
I-35030 Caselle di Selvazzano
(Padova) ITALY
Phone (+39) 049 8299-311
Fax (+39) 049 8299-550
E-mail: info.zfpadova@zf.com

ZF Marine Arco S.p.A.
Via S. Andrea, 16
I-38062 Arco
(Trento) ITALY
Phone (+39) 0464 580-555
Fax (+39) 0464 580-544
E-mail: info.zfhurth@zf.com

ZF do BRASIL Ltda
Avenida conde Zeppelin 1935
Cep. 18103-905
Sorocaba - SP - BRASIL
Phone +55 (0) 15 4009 2389
Fax +55 (0) 15 4009 2233
E-mail: marine.info@zf-group.com.br

Plus d'informations sur : www.dbmoteurs.fr