

0CD50-M00930EN

P R E F A C E

This parts catalog is the 1st edition of 4TNV98-ZNMS3R for Manitou Americas, Inc.

Published : November, 2014

Contents

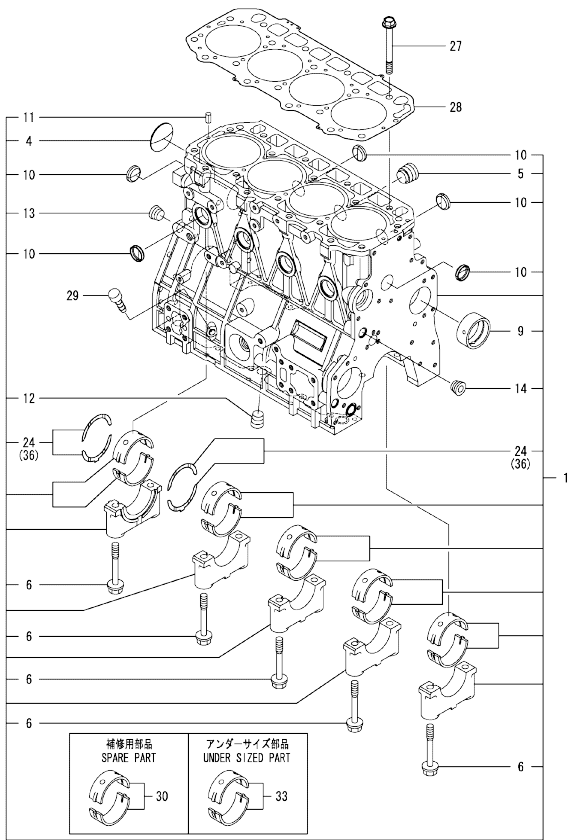
OCD50-M00930

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|----------|------------------------------|----------|-----------|
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Fig.1. CYLINDER BLOCK

(A)=4TNV98-ZNMS3R
(B)=
(C)=

(D)=
(E)=
(F)=

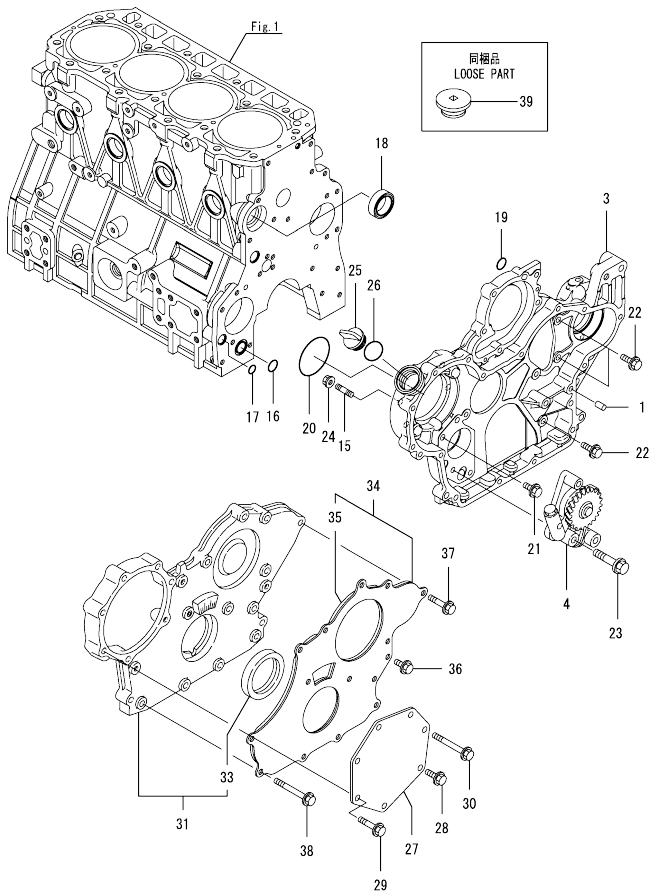


| No. | Lev. | Parts No. | Description | Q'ty | | | | | | I | R | |
|-----|------|--------------|----------------------|------|-----|-----|-----|-----|-----|---|---|---|
| | | | | (A) | (B) | (C) | (D) | (E) | (F) | | | |
| 1 | 1 | 729927-01560 | BLOCK ASSY, CYLINDER | 1 | | | | | | | | |
| 4 | 2 | 129900-01250 | PLUG, DISH TYPE 55 | 1 | | | | | | | | |
| 5 | 2 | 171051-01921 | PLUG, NPTF1 | 1 | | | | | | | | |
| 6 | 2 | 129900-02020 | BOLT, METAL CAP | 10 | | | | | | | | |
| 9 | 2 | 129900-02410 | BUSH, CAMSHAFT | 1 | | | | | | | | |
| 10 | 2 | 27241-300000 | PLUG 30 | 8 | | | | | | | | |
| 11 | 2 | 22351-060012 | PIN, SPRING 6.0X12 | 2 | | | | | | | | |
| 12 | 2 | 23876-030000 | PLUG, R03 | 1 | | | | | | | | |
| 13 | 2 | 23876-030000 | PLUG, R03 | 1 | | | | | | | | |
| 14 | 2 | 23876-030000 | PLUG, R03 | 1 | | | | | | | | |
| 24 | 2 | 129900-02931 | BEARING ASSY, THRUST | 2 | | | | | | | | |
| 27 | 1 | 129900-01200 | BOLT, CYLINDER HEAD | 18 | | | | | | | | |
| 28 | 1 | 129907-01331 | GASKET, HEAD | 1 | | | | | | | | |
| 29 | 1 | 124976-34850 | PLUG | 1 | | | | | | | | |
| 30 | 1 | 729900-02801 | BEARING, MAIN | 5 | | | | | | | | 1 |
| 33 | 1 | 129900-02341 | BEARING ASSY, MAIN | 5 | | | | | | | | 2 |
| 36 | 1 | 129900-02941 | BEARING, THRUST 0.25 | 2 | | | | | | | | 3 |

Remarks
(1)Spare parts.
(2)Under-sized(U.S.=0.25) parts.
(3)Over-sized(O.S.=0.25) parts.

OCD50-M00930 4TNV98-ZNMS3R
 Fig.2. GEAR HOUSING

OCD50-M00930 Fig.2



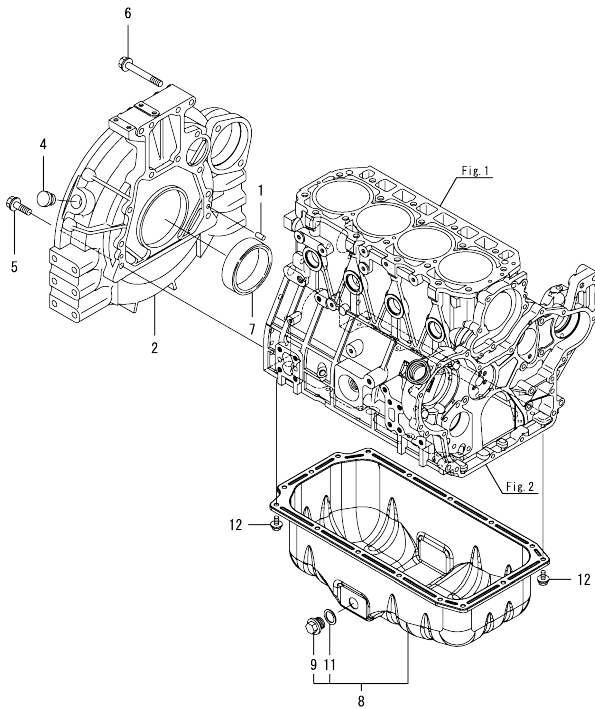
(A)=4TNV98-ZNMS3R
 (D)=
 (E)=
 (F)=

(A) (B) (C) (D) (E) (F) I R

| No. | Lev. | Parts No. | Description | Q'ty | | | | | |
|-----|------|--------------|----------------------|------|-----|-----|-----|-----|-----|
| | | | | (A) | (B) | (C) | (D) | (E) | (F) |
| 1 | 1 | 129100-01580 | PIN, PARALLEL 8X16 | 4 | | | | | |
| 3 | 1 | 129938-01500 | CASE ASSY, GEAR | 1 | | | | | |
| 4 | 1 | 129900-32001 | PUMP ASSY, OIL | 1 | | | | | |
| 15 | 1 | 26216-100302 | STUD, M10X 30 | 4 | | | | | |
| 16 | 1 | 129900-32030 | O-RING, P20 | 1 | | | | | |
| 17 | 1 | 129900-32040 | O-RING, P14 | 1 | | | | | |
| 18 | 1 | 129927-42140 | GASKET, CW-P OUT | 1 | | | | | |
| 19 | 1 | 24311-000070 | O-RING, 1AP7.0 | 1 | | | | | |
| 20 | 1 | 24351-030750 | O-RING, 1A3075 | 1 | | | | | |
| 21 | 1 | 26106-080162 | BOLT, M8X 16 PLATED | 1 | | | | | |
| 22 | 1 | 26106-080202 | BOLT, M8X 20 PLATED | 3 | | | | | |
| 23 | 1 | 26106-080452 | BOLT, M8X 45 PLATED | 3 | | | | | |
| 24 | 1 | 26306-100002 | NUT, M10 | 4 | | | | | |
| 25 | 1 | 124160-01751 | CAP, FILLER | 1 | | | | | |
| 26 | 1 | 24311-000320 | O-RING, 1AP32.0 | 1 | | | | | |
| 27 | 1 | 129951-01740 | COVER | 1 | | | | | |
| 28 | 1 | 26106-080202 | BOLT, M8X 20 PLATED | 1 | | | | | |
| 29 | 1 | 26106-080452 | BOLT, M8X 45 PLATED | 5 | | | | | |
| 30 | 1 | 26106-080752 | BOLT, M8X 75 PLATED | 1 | | | | | |
| 31 | 1 | 729907-01559 | COVER ASSY,GEAR CASE | 1 | | | | | |
| 33 | 2 | 129916-01800 | SEAL, OIL | 1 | | | | | |
| 34 | 1 | 129900-01850 | COVER ASSY,GEAR CASE | 1 | | | | | |
| 35 | 2 | 129900-01870 | SPONGE, GEAR CASE | 1 | | | | | |
| 36 | 1 | 26106-080162 | BOLT, M8X 16 PLATED | 3 | | | | | |
| 37 | 1 | 26106-080402 | BOLT, M8X 40 PLATED | 5 | | | | | |
| 38 | 1 | 26106-080702 | BOLT, M8X 70 PLATED | 6 | | | | | |
| 39 | 1 | 119807-11770 | PLUG | 1 | | | | | |

N:Old $\frac{100}{100}$ New, Q:Old $\frac{100}{100}$ New, R:Old $\frac{100}{100}$ New, S:Old $\frac{100}{100}$ New, W:Add, Z:Discontinued, F:Interchangeable by set, K:Q'ty Change
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Fig.3. FLYWHEEL HOUSING & OIL SUMP

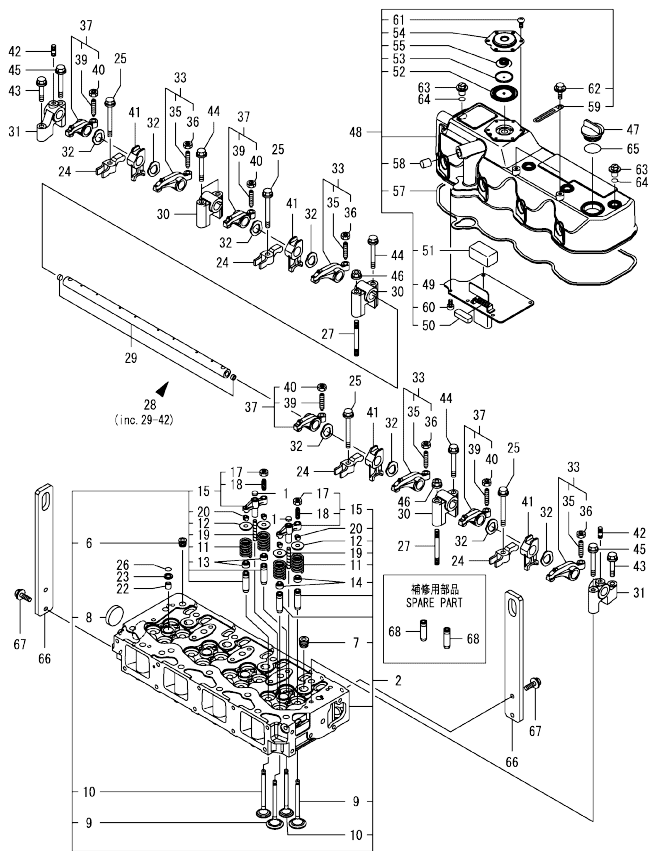


(A)=4TNV98-ZNMS3R
(B)=
(C)=

(D)=
(E)=
(F)=

| No. | Lev. | Parts No. | Description | Q'ty | | | | | | I | R |
|-----|------|--------------|----------------------|------|-----|-----|-----|-----|-----|---|---|
| | | | | (A) | (B) | (C) | (D) | (E) | (F) | | |
| 1 | 1 | 129100-01580 | PIN, PARALLEL 8X16 | 2 | | | | | | | |
| 2 | 1 | 129900-01620 | HOUSING, FLYWHEEL | 1 | | | | | | | |
| 4 | 1 | 119620-01750 | CAP | 1 | | | | | | | |
| 5 | 1 | 26206-100352 | BOLT, M10X 35 PLATED | 9 | | | | | | | |
| 6 | 1 | 26206-100702 | BOLT, M10X 70 PLATED | 4 | | | | | | | |
| 7 | 1 | 129916-01790 | SEAL, D115/95XT11 | 1 | | | | | | | |
| 8 | 1 | 129902-01710 | OIL PAN ASSY | 1 | | | | | | | |
| 9 | 2 | 119640-01640 | PLUG, DRAIN M22 | 1 | | | | | | | |
| 11 | 2 | 22190-220002 | WASHER, SEAL 22 | 1 | | | | | | | |
| 12 | 1 | 26106-080122 | BOLT, M8X 12 PLATED | 16 | | | | | | | |

Fig.4. CYLINDER HEAD & BONNET



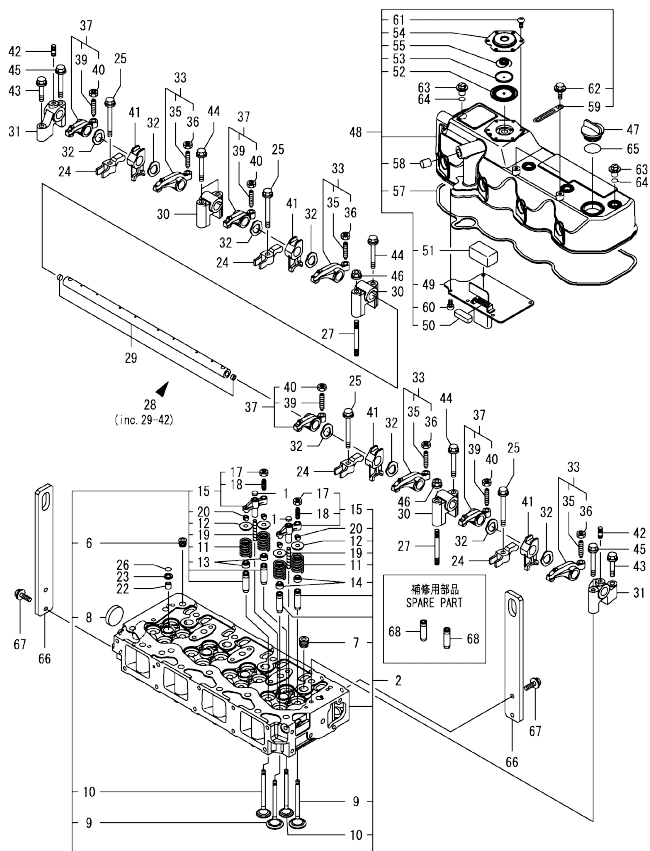
(A)=4TNV98-ZNMS3R
(B)=
(C)=

(D)=
(E)=
(F)=

| No. | Lev. | Parts No. | Description | Q'ty | | | | | | I | R |
|-----|------|--------------|---------------------|------|-----|-----|-----|-----|-----|---|---|
| | | | | (A) | (B) | (C) | (D) | (E) | (F) | | |
| 1 | 1 | 123907-11550 | SEAT, VALVE BRIDGE | 8 | | | | | | | |
| 2 | 1 | 129927-11700 | HEAD ASSY, CYLINDER | 1 | | | | | | | |
| 6 | 2 | 23876-020000 | PLUG, R02 | 1 | | | | | | | |
| 7 | 2 | 23876-030000 | PLUG, R03 | 4 | | | | | | | |
| 8 | 2 | 27241-400000 | PLUG, 40 | 1 | | | | | | | |
| 9 | 2 | 129907-11100 | VALVE, SUCTION | 8 | | | | | | | |
| 10 | 2 | 129907-11110 | VALVE, EXHAUST | 8 | | | | | | | |
| 11 | 2 | 129907-11120 | SPRING, VALVE | 16 | | | | | | | |
| 12 | 2 | 119620-11180 | RETAINER, SPRING | 16 | | | | | | | |
| 13 | 2 | 119803-11340 | SEAL, VALVE STEM | 8 | | | | | | | |
| 14 | 2 | 124160-11340 | SEAL, VALVE STEM | 8 | | | | | | | |
| 15 | 2 | 129907-11510 | BRIDGE ASSY, VALVE | 8 | | | | | | | |
| 17 | 3 | 129150-11750 | NUT, M8 | 8 | | | | | | | |
| 18 | 3 | 123907-11830 | ADJUSTER | 8 | | | | | | | |
| 19 | 2 | 123907-11820 | GUIDE, BRIDGE | 8 | | | | | | | |
| 20 | 2 | 27310-070001 | COTTER, 7 | 16 | | | | | | | |
| 22 | 1 | 119802-11870 | PROTECTOR, NOZZLE | 4 | | | | | | | |
| 23 | 1 | 119625-11880 | SEAT, NOZZLE | 4 | | | | | | | |
| 24 | 1 | 129907-11910 | RETAINER, NOZZLE | 4 | | | | | | | |
| 25 | 1 | 129907-11950 | BOLT, M8X75 | 4 | | | | | | | |
| 26 | 1 | 24311-000120 | O-RING, 1AP12.0 | 4 | | | | | | | |
| 27 | 1 | 119593-11301 | BOLT, STUD M8X80 | 2 | | | | | | | |
| 28 | 1 | 129907-11341 | SHAFT ASSY, ROCKER | 1 | | | | | | | |
| 29 | 2 | 129907-11250 | SHAFT, ROCKER ARM | 1 | | | | | | | |
| 30 | 2 | 129907-11260 | SUPPORT, ROCKER ARM | 3 | | | | | | | |
| 31 | 2 | 129907-11270 | SUPPORT, ROCKER ARM | 2 | | | | | | | |
| 32 | 2 | 123907-11280 | WASHER | 8 | | | | | | | |
| 33 | 2 | 129907-11650 | ARM ASSY, ROCKER | 4 | | | | | | | |
| 35 | 3 | 129150-11230 | SCREW, VALVE ADJUST | 4 | | | | | | | |
| 36 | 3 | 129150-11750 | NUT, M8 | 4 | | | | | | | |
| 37 | 2 | 129907-11660 | ARM ASSY, ROCKER | 4 | | | | | | | |
| 39 | 3 | 129150-11230 | SCREW, VALVE ADJUST | 4 | | | | | | | |
| 40 | 3 | 129150-11750 | NUT, M8 | 4 | | | | | | | |
| 41 | 2 | 129907-11920 | RETAINER, NOZZLE | 4 | | | | | | | |
| 42 | 2 | 26226-080222 | STUD, M8X 22 | 2 | | | | | | | |
| 43 | 1 | 26106-080402 | BOLT, M8X 40 PLATED | 2 | | | | | | | |
| 44 | 1 | 26106-080602 | BOLT, M8X 60 PLATED | 4 | | | | | | | |
| 45 | 1 | 26106-080602 | BOLT, M8X 60 PLATED | 2 | | | | | | | |
| 46 | 1 | 26306-080002 | NUT, M8 | 2 | | | | | | | |
| 47 | 1 | 124160-01751 | CAP, FILLER | 1 | | | | | | | |
| 48 | 1 | 129927-11320 | BONNET ASSY, HEAD | 1 | | | | | | | |
| 49 | 2 | 129907-03011 | PLATE, BAFFLE | 1 | | | | | | | |
| 50 | 2 | 129907-03061 | BAFFLE, BREATHER | 1 | | | | | | | |
| 51 | 2 | 129907-03070 | BAFFLE, BREATHER | 1 | | | | | | | |
| 52 | 2 | 123907-03100 | DIAPHRAGM | 1 | | | | | | | |
| 53 | 2 | 123907-03110 | PLATE | 1 | | | | | | | |
| 54 | 2 | 123907-03120 | PLATE, BREATHER | 1 | | | | | | | |
| 55 | 2 | 123907-03140 | SPRING, DIAPHRAGM | 1 | | | | | | | |
| 57 | 2 | 129933-11310 | GASKET, BONNET | 1 | | | | | | | |
| 58 | 2 | 119640-61400 | PLUG | 1 | | | | | | | |
| 59 | 2 | 175339-79700 | CLIP | 2 | | | | | | | |

Remarks
(1)Spare parts.

Fig.4. CYLINDER HEAD & BONNET



(A)=4TNV98-ZNMS3R
(B)=
(C)=

(D)=
(E)=
(F)=

| No. | Lev. | Parts No. | Description | Q'ty | | | | | | I | R |
|-----|------|--------------|---------------------|------|-----|-----|-----|-----|-----|---|---|
| | | | | (A) | (B) | (C) | (D) | (E) | (F) | | |
| 60 | 2 | 22857-500100 | SCREW, 5X10 | 6 | | | | | | | |
| 61 | 2 | 22857-500100 | SCREW, 5X10 | 6 | | | | | | | |
| 62 | 2 | 26106-060122 | BOLT, M6X 12 PLATED | 2 | | | | | | | |
| 63 | 1 | 124160-11360 | KNOB | 4 | | | | | | | |
| 64 | 1 | 24311-000120 | O-RING, 1AP12.0 | 4 | | | | | | | |
| 65 | 1 | 24311-000320 | O-RING, 1AP32.0 | 1 | | | | | | | |
| 66 | 1 | 129973-07910 | LIFTER | 2 | | | | | | | |
| 67 | 1 | 26106-080202 | BOLT, M8X 20 PLATED | 4 | | | | | | | |
| 68 | 1 | 129907-11800 | GUIDE, VALVE | 16 | | | | | | | 1 |

Remarks

(1) Spare parts.

Fig.5. SUCTION MANIFOLD

(A)=4TNV98-ZNMS3R
(B)=
(C)=

(D)=
(E)=
(F)=

| No. | Lev. | Parts No. | Description | Q'ty | | | | | |
|-----|------|--------------|---------------------|------|-----|-----|-----|-----|-----|
| | | | | (A) | (B) | (C) | (D) | (E) | (F) |
| 1 | 1 | 129968-12102 | MANIFOLD,INTAKE | 1 | | | | | |
| 2 | 1 | 129907-12110 | GASKET, MANIFOLD | 1 | | | | | |
| 3 | 1 | 26106-080552 | BOLT, M8X 55 PLATED | 5 | | | | | |
| 4 | 1 | 26106-080852 | BOLT, M8X 85 PLATED | 5 | | | | | |
| 5 | 1 | 119129-77020 | GASKET | 1 | | | | | |
| 6 | 1 | 121850-77021 | GASKET, AIR HEATER | 1 | | | | | |
| 7 | 1 | 119005-77051 | HEATER, AIR | 1 | | | | | |
| 8 | 1 | 119129-77520 | BEND | 1 | | | | | |
| 9 | 1 | 26106-080402 | BOLT, M8X 40 PLATED | 2 | | | | | |
| 10 | 1 | 26106-080902 | BOLT, M8X 90 PLATED | 2 | | | | | |

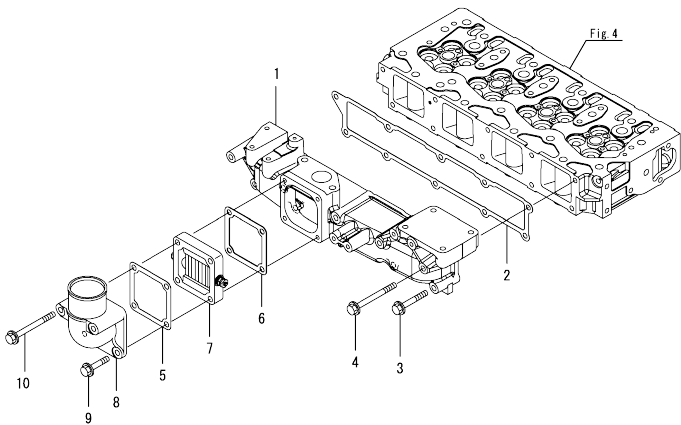
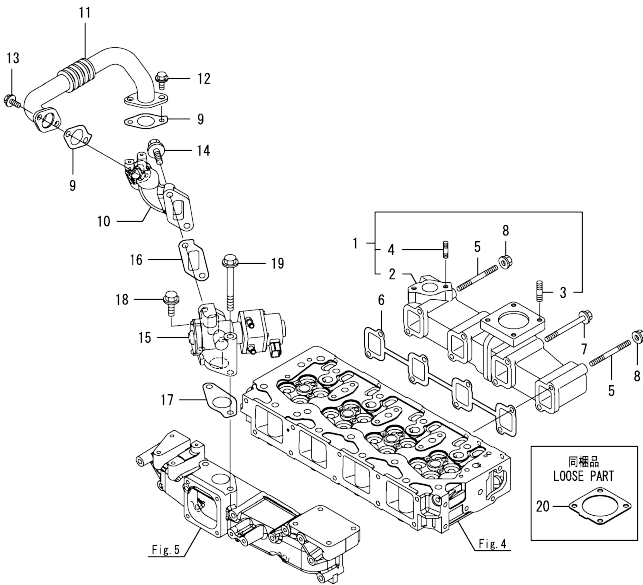


Fig.6. EXHAUST MANIFOLD

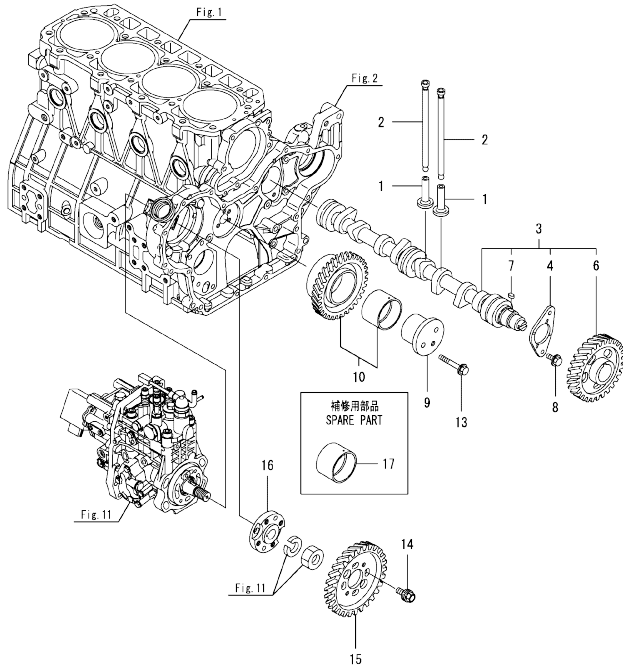


(A)=4TNV98-ZNMS3R
(B)=
(C)=

(D)=
(E)=
(F)=

| No. | Lev. | Parts No. | Description | Q'ty | | | | | | I | R |
|-----|------|--------------|----------------------|------|-----|-----|-----|-----|-----|---|---|
| | | | | (A) | (B) | (C) | (D) | (E) | (F) | | |
| 1 | 1 | 129968-13150 | MANIFOLD ASSY, EXH. | 1 | | | | | | | |
| 2 | 2 | 129968-13100 | MANIFOLD, EXHAUST | 1 | | | | | | | |
| 3 | 2 | 119131-18320 | BOLT, STUD M8X22 | 4 | | | | | | | |
| 4 | 2 | 129418-18320 | BOLT, STUD M8X20 | 2 | | | | | | | |
| 5 | 1 | 129263-13210 | BOLT, STUD M8X90 | 2 | | | | | | | |
| 6 | 1 | 129900-13251 | GASKET, EXH.MANIFOLD | 1 | | | | | | | |
| 7 | 1 | 129E00-13650 | BOLT, M8X90 10.9T | 6 | | | | | | | |
| 8 | 1 | 26306-080002 | NUT, M8 | 2 | | | | | | | |
| 9 | 1 | 129927-13810 | GASKET | 2 | | | | | | | |
| 10 | 1 | 129973-13840 | PIPE | 1 | | | | | | | |
| 11 | 1 | 129968-13850 | PIPE ASSY | 1 | | | | | | | |
| 12 | 1 | 26106-080162 | BOLT, M8X 16 PLATED | 2 | | | | | | | |
| 13 | 1 | 26106-080162 | BOLT, M8X 16 PLATED | 2 | | | | | | | |
| 14 | 1 | 26106-100302 | BOLT, M10X 30 PLATED | 2 | | | | | | | |
| 15 | 1 | 129928-13900 | VALVE, EGR | 1 | | | | | | | |
| 16 | 1 | 129927-13910 | GASKET, EGR | 1 | | | | | | | |
| 17 | 1 | 129927-13920 | GASKET, EGR | 1 | | | | | | | |
| 18 | 1 | 26106-100302 | BOLT, M10X 30 PLATED | 1 | | | | | | | |
| 19 | 1 | 26106-100952 | BOLT, M10X 95 PLATED | 1 | | | | | | | |
| 20 | 1 | 129930-13201 | GASKET, SILENCER | 1 | | | | | | | |

Fig.7. CAMSHAFT & DRIVING GEAR



(A)=4TNV98-ZNMS3R
(B)=
(C)=

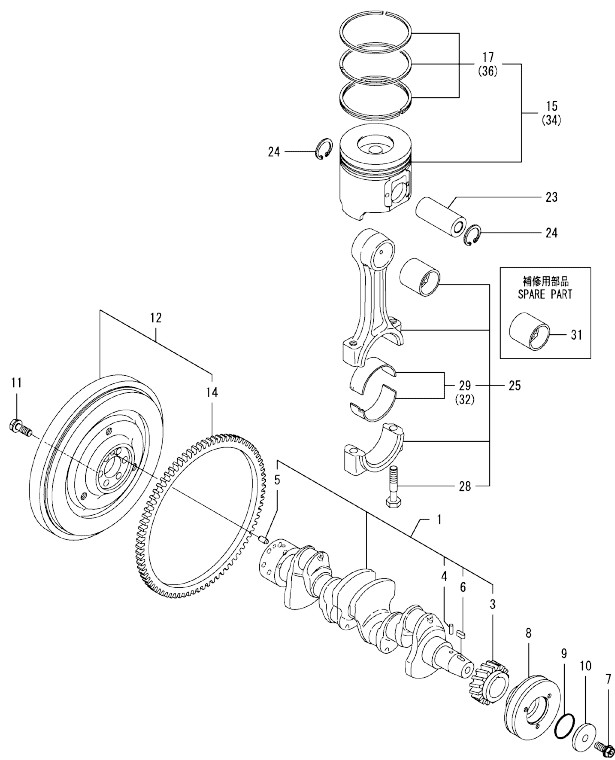
(D)=
(E)=
(F)=

| No. | Lev. | Parts No. | Description | Q'ty | | | | | | I | R |
|-----|------|--------------|---------------------|------|-----|-----|-----|-----|-----|---|---|
| | | | | (A) | (B) | (C) | (D) | (E) | (F) | | |
| 1 | 1 | 129150-14200 | TAPPET | 8 | | | | | | | |
| 2 | 1 | 129907-14400 | PUSH-ROD | 8 | | | | | | | |
| 3 | 1 | 129908-14581 | CAMSHAFT ASSY | 1 | | | | | | | |
| 4 | 2 | 129150-02450 | BEARING, THRUST | 1 | | | | | | | |
| 6 | 2 | 129900-14100 | GEAR, CAMSHAFT | 1 | | | | | | | |
| 7 | 2 | 22512-070140 | KEY, 7X 14 | 1 | | | | | | | |
| 8 | 1 | 26106-080142 | BOLT, M8X 14 PLATED | 2 | | | | | | | |
| 9 | 1 | 123900-25060 | SHAFT, IDLE GEAR | 1 | | | | | | | |
| 10 | 1 | 129900-25100 | GEAR ASSY, IDLE | 1 | | | | | | | |
| 13 | 1 | 26106-080552 | BOLT, M8X 55 PLATED | 3 | | | | | | | |
| 14 | 1 | 129953-25300 | BOLT | 4 | | | | | | | |
| 15 | 1 | 129907-25900 | GEAR, PUMP | 1 | | | | | | | |
| 16 | 1 | 158563-51150 | FLANGE | 1 | | | | | | | |
| 17 | 1 | 129150-25920 | BUSH, IDLE GEAR | 1 | | | | | | | 1 |

Remarks

(1)Spare parts.

Fig.8. CRANKSHAFT & PISTON



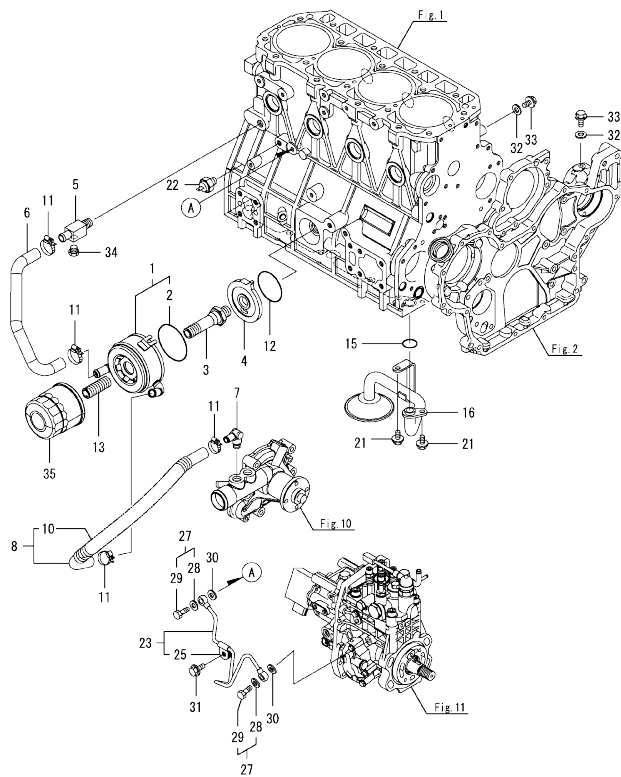
(A)=4TNV98-ZNMS3R
(B)=
(C)=

(D)=
(E)=
(F)=

| No. | Lev. | Parts No. | Description | Q'ty | | | | | | I | R |
|-----|------|--------------|----------------------|------|-----|-----|-----|-----|-----|---|---|
| | | | | (A) | (B) | (C) | (D) | (E) | (F) | | |
| 1 | 1 | 129902-21000 | CRANKSHAFT ASSY | 1 | | | | | | | |
| 3 | 2 | 129900-21200 | GEAR, CRANKSHAFT | 1 | | | | | | | |
| 4 | 2 | 121850-21290 | PIN | 1 | | | | | | | |
| 5 | 2 | 121850-21920 | PIN, PARALLEL 10X22 | 1 | | | | | | | |
| 6 | 2 | 22512-070140 | KEY, 7X 14 | 1 | | | | | | | |
| 7 | 1 | 129916-21610 | BOLT | 1 | | | | | | | |
| 8 | 1 | 129944-21650 | V-PULLEY, CRANK 130B | 1 | | | | | | | |
| 9 | 1 | 129960-21930 | GASKET, WASHER | 1 | | | | | | | |
| 10 | 1 | 129960-21940 | WASHER, V-PULLEY | 1 | | | | | | | |
| 11 | 1 | 121850-21130 | BOLT, FLYWHEEL | 6 | | | | | | | |
| 12 | 1 | 129953-21570 | FLYWHEEL ASSY | 1 | | | | | | | |
| 14 | 2 | 129900-21600 | GEAR, RING | 1 | | | | | | | |
| 15 | 1 | 129927-22080 | PISTON ASSY | 4 | | | | | | | |
| 17 | 2 | 129927-22050 | RING SET, PISTON | 4 | | | | | | | |
| 23 | 1 | 120130-22301 | PIN, PISTON | 4 | | | | | | | |
| 24 | 1 | 22252-000300 | RING, 30 | 8 | | | | | | | |
| 25 | 1 | 129900-23001 | ROD ASSY, CONNECTING | 4 | | | | | | | |
| 28 | 2 | 129900-23200 | BOLT, CONNECTING ROD | 8 | | | | | | | |
| 29 | 2 | 129900-23601 | BEARING, CRANK PIN | 4 | | | | | | | |
| 31 | 1 | 129900-23911 | BEARING, PISTON PIN | 4 | | | | | | | 1 |
| 32 | 1 | 129900-23611 | BEARING ASSY, 0.25US | 4 | | | | | | | 2 |
| 34 | 1 | 729927-22900 | PISTON ASSY, 0.25 OS | 4 | | | | | | | 3 |
| 36 | 2 | 729927-22950 | RING SET, 0.25 OS | 4 | | | | | | | 3 |

Remarks
(1)Spare parts.
(2)Under-sized(U.S.=0.25) parts.
(3)Over-sized(O.S.=0.25) parts.

Fig.9. LUB. OIL SYSTEM



(A)=4TNV98-ZNMS3R
(B)=
(C)=

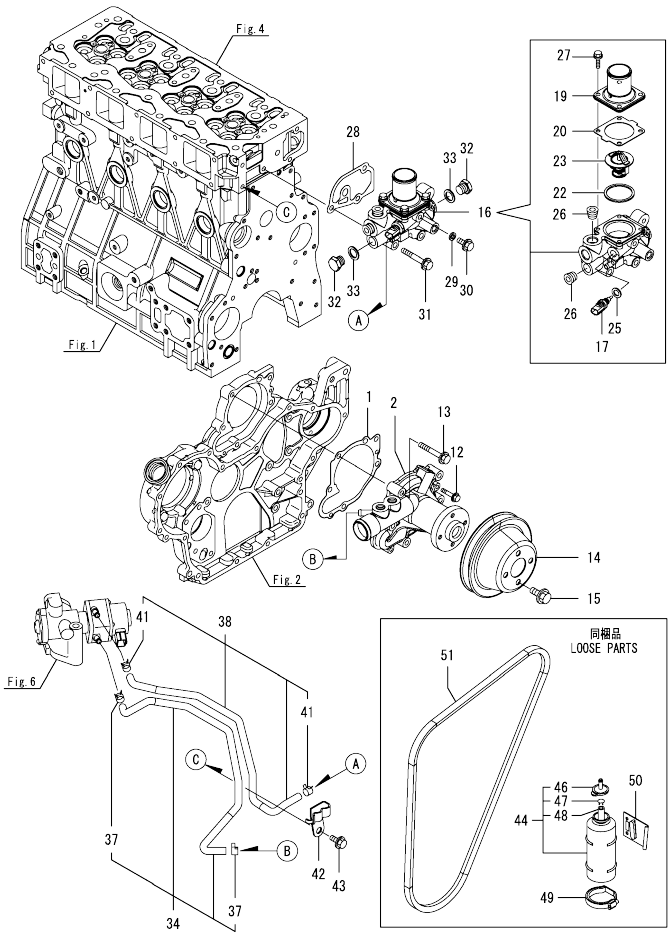
(D)=
(E)=
(F)=

| No. | Lev. | Parts No. | Description | Q'ty | | | | | | I | R |
|-----|------|--------------|----------------------|------|-----|-----|-----|-----|-----|---|---|
| | | | | (A) | (B) | (C) | (D) | (E) | (F) | | |
| 1 | 1 | 129908-33010 | COOLER ASSY, OIL | 1 | | | | | | | |
| 2 | 2 | 123912-33050 | O-RING | 1 | | | | | | | |
| 3 | 1 | 123912-33100 | BOLT, COOLER | 1 | | | | | | | |
| 4 | 1 | 129908-33101 | BRACKET, OIL COOLER | 1 | | | | | | | |
| 5 | 1 | 129006-44480 | JOINT | 1 | | | | | | | |
| 6 | 1 | 129908-49060 | HOSE, WATER | 1 | | | | | | | |
| 7 | 1 | 129466-49300 | ELBOW, PT3/8 | 1 | | | | | | | |
| 8 | 1 | 123910-49600 | HOSE ASSY WATER | 1 | | | | | | | |
| 10 | 2 | 123910-49610 | TUBE, CORRUGATED | 1 | | | | | | | |
| 11 | 1 | 23000-025000 | CLAMP, 25 | 4 | | | | | | | |
| 12 | 1 | 24321-000600 | O-RING, 1AG60.0 | 1 | | | | | | | |
| 13 | 1 | 119000-35140 | BOLT, STUD FILTER | 1 | | | | | | | |
| 15 | 1 | 129900-32030 | O-RING, P20 | 1 | | | | | | | |
| 16 | 1 | 129900-35000 | PIPE ASSY, OIL INLET | 1 | | | | | | | |
| 21 | 1 | 26106-080122 | BOLT, M8X 12 PLATED | 2 | | | | | | | |
| 22 | 1 | 119761-39450 | SWITCH, HYDRAULIC | 1 | | | | | | | |
| 23 | 1 | 129927-39060 | PIPE ASSY, OIL | 1 | | | | | | | |
| 25 | 2 | 123907-39500 | RETAINER, PIPE | 1 | | | | | | | |
| 27 | 1 | 129005-59830 | BOLT ASSY, JOINT M8 | 2 | | | | | | | |
| 28 | 2 | 22190-080002 | WASHER, SEAL 8 | 2 | | | | | | | |
| 29 | 2 | 23857-030000 | BOLT, JOINT 3 | 2 | | | | | | | |
| 30 | 1 | 22190-080002 | WASHER, SEAL 8 | 2 | | | | | | | |
| 31 | 1 | 26106-080122 | BOLT, M8X 12 PLATED | 1 | | | | | | | |
| 32 | 1 | 22190-080002 | WASHER, SEAL 8 | 2 | | | | | | | |
| 33 | 1 | 26106-080122 | BOLT, M8X 12 PLATED | 2 | | | | | | | |
| 34 | 1 | 171056-49120 | PLUG, DRAIN R1/4 | 1 | | | | | | | |
| 35 | 1 | 129150-35153 | FILTER ASSY, D80X80L | 1 | | | | | | | 1 |

Remarks

(1)Spare parts.

Fig.10. COOLING WATER SYSTEM



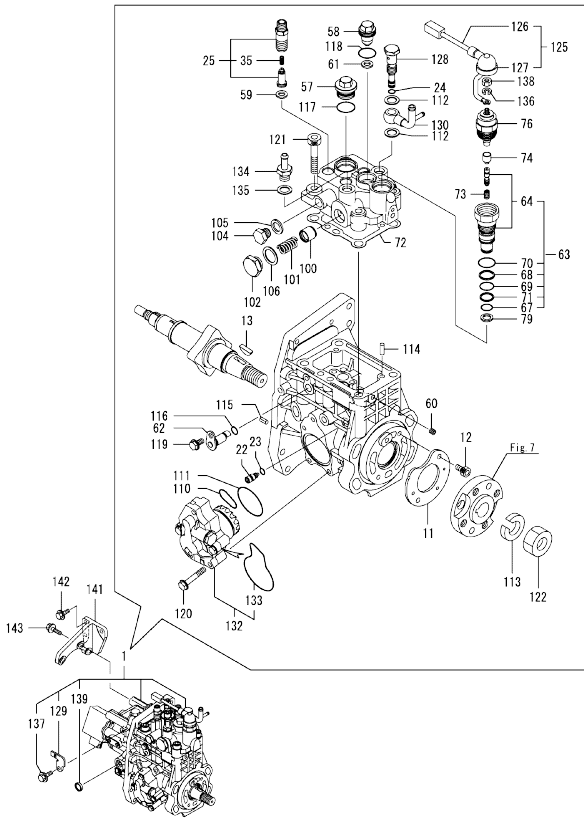
| No. | Lev. | Parts No. | Description | Q'ty | | | | | | I | R |
|-------------|------|--------------|-----------------------|------|-----|-----|-----|-----|-----|---|---|
| | | | | (A) | (B) | (C) | (D) | (E) | (F) | | |
| 1 | 1 | 129900-42020 | GASKET, WATER PUMP | 1 | | | | | | | |
| 2 | 1 | 129948-42110 | PUMP ASSY, WATER | 1 | | | | | | | |
| 2-1 | 1 | 129948-42111 | PUMP ASSY, CW | 1 | | | | | | | N |
| (A=E179975) | | | | | | | | | | | |
| 12 | 1 | 26106-060302 | BOLT, M6X 30 PLATED | 2 | | | | | | | |
| 13 | 1 | 26106-080552 | BOLT, M8X 55 PLATED | 5 | | | | | | | |
| 14 | 1 | 123900-42450 | V-PULLEY, PUMP | 1 | | | | | | | |
| 15 | 1 | 26106-100182 | BOLT, M10X 18 PLATED | 4 | | | | | | | |
| 16 | 1 | 129938-49800 | CASE ASSY, THERMOSTAT | 1 | | | | | | | |
| 17 | 2 | 129927-44900 | SENSOR, TEMPERATURE | 1 | | | | | | | |
| 19 | 2 | 129916-49530 | COVER, THERMOSTAT | 1 | | | | | | | |
| 20 | 2 | 121850-49540 | GASKET, THERMOSTAT | 1 | | | | | | | |
| 22 | 2 | 121850-49550 | GASKET, THERMOSTAT | 1 | | | | | | | |
| 23 | 2 | 121850-49801 | THERMOSTAT, 82C | 1 | | | | | | | |
| 25 | 2 | 22190-120002 | WASHER, SEAL 12 | 1 | | | | | | | |
| 26 | 2 | 23875-030000 | PLUG, R03 | 2 | | | | | | | |
| 27 | 2 | 26106-060202 | BOLT, M6X 20 PLATED | 4 | | | | | | | |
| 28 | 1 | 129900-49870 | GASKET, THERMOSTAT | 1 | | | | | | | |
| 29 | 1 | 23414-080000 | GASKET, 8X1.0 | 1 | | | | | | | |
| 30 | 1 | 26106-080122 | BOLT, M8X 12 PLATED | 1 | | | | | | | |
| 31 | 1 | 26106-080602 | BOLT, M8X 60 PLATED | 3 | | | | | | | |
| 32 | 1 | 121450-42450 | PLUG, M16 | 2 | | | | | | | |
| 33 | 1 | 124465-44950 | GASKET, 16 | 2 | | | | | | | |
| 34 | 1 | 129968-49610 | PIPE ASSY, EGR-V A | 1 | | | | | | | |
| 37 | 2 | 23080-012000 | CLAMP, 12 | 2 | | | | | | | |
| 38 | 1 | 129968-49620 | PIPE ASSY, EGR-V B | 1 | | | | | | | |
| 41 | 2 | 23080-012000 | CLAMP, 12 | 2 | | | | | | | |
| 42 | 1 | 129968-49850 | RETAINER, PIPE | 1 | | | | | | | |
| 43 | 1 | 26106-080142 | BOLT, M8X 14 PLATED | 1 | | | | | | | |
| 44 | 1 | 124450-44510 | TANK ASSY, SUB | 1 | | | | | | | |
| 46 | 2 | 124450-44530 | CAP, SUB TANK | 1 | | | | | | | |
| 47 | 2 | 124450-44560 | CLAMP, PIPE | 1 | | | | | | | |
| 48 | 2 | 23061-070230 | PIPE, 7X 230 | 1 | | | | | | | |
| 49 | 1 | 124450-44550 | BAND, SUB TANK | 1 | | | | | | | |
| 50 | 1 | 121256-44600 | BRACKET, SUB TANK | 1 | | | | | | | |
| 51 | 1 | 25153-004500 | V-BELT, B45 | 1 | | | | | | | |

N:Old $\frac{100}{100}$ New, Q:Old $\frac{100}{100}$ New, R:Old $\frac{100}{100}$ New, S:Old $\frac{100}{100}$ New, W:Add, Z:Discontinued, F:Interchangeable by set, K:Q'ty Change
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Fig.11. FUEL INJECTION PUMP

(A)=4TNV98-ZNMS3R
(B)=
(C)=

(D)=
(E)=
(F)=



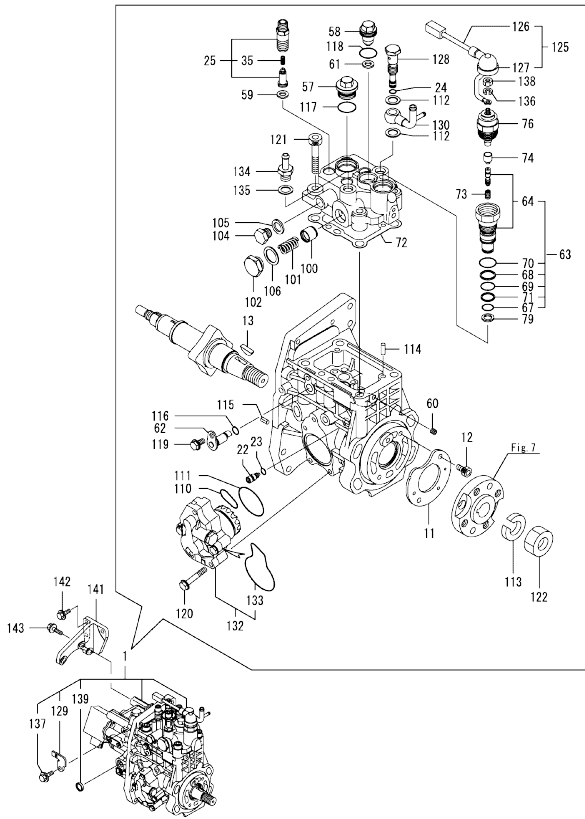
| No. | Lev. | Parts No. | Description | Q'ty | | | | | | I | R |
|-----|------|----------------------------|----------------------|------|-----|-----|-----|-----|-----|---|-----|
| | | | | (A) | (B) | (C) | (D) | (E) | (F) | | |
| 1 | 1 | 729939-51320 | PUMP ASSY, INJECTION | 1 | | | | | | | 1 |
| 1-1 | 1 | 729939-51380 (A=EU4713) | FIE ASSY | 1 | | | | | | | N 1 |
| 11 | 2 | 129928-51900 | COVER, OIL | 1 | | | | | | | |
| 12 | 2 | 129008-51920 | BOLT, M6X10 | 2 | | | | | | | |
| 13 | 2 | 144626-51090 | KEY, FEATHER 5X19 | 1 | | | | | | | |
| 22 | 2 | 158600-51270 | STOPPER, TAPPET | 1 | | | | | | | |
| 23 | 2 | 158563-51281 | O-RING, 4D S6 | 1 | | | | | | | |
| 24 | 2 | 158563-51281 | O-RING, 4D S6 | 1 | | | | | | | |
| 25 | 2 | 129927-51390 | VALVE ASSY, DELIVERY | 4 | | | | | | | |
| 35 | 3 | 158563-51330 | SPRING, DELIVERY | 4 | | | | | | | |
| 57 | 2 | 158601-51550 | PLUG, M22 | 1 | | | | | | | |
| 58 | 2 | 129907-51560 | PLUG, M16 | 1 | | | | | | | |
| 59 | 2 | 158552-51571 | GASKET, BARREL PLUG | 4 | | | | | | | |
| 60 | 2 | 158557-51570 | PLUG, RACK | 1 | | | | | | | |
| 61 | 2 | 129906-51580 | GASKET, BARREL PLUG | 1 | | | | | | | |
| 62 | 2 | 158552-51580 | LIFTER, LINK | 1 | | | | | | | |
| 63 | 2 | 129657-51590 | TIMER ASSY | 1 | | | | | | | |
| 64 | 3 | 129657-51600 | TIMER ASSY | 1 | | | | | | | |
| 67 | 3 | 158553-51670 | O-RING, PUMP TIMER | 1 | | | | | | | |
| 68 | 3 | 119802-51680 | RING, BACKUP | 1 | | | | | | | |
| 69 | 3 | 119802-51690 | O-RING, 1016 | 1 | | | | | | | |
| 70 | 3 | 24356-190200 | O-RING, 4D19020 | 1 | | | | | | | |
| 71 | 3 | 24372-000150 | RING, BACK UP T2P15 | 1 | | | | | | | |
| 72 | 2 | 158560-51600 | GASKET, HEAD | 1 | | | | | | | |
| 73 | 2 | 119852-51630 | SPRING, TIMER | 1 | | | | | | | |
| 74 | 2 | 119852-51640 | CAP, TIMER | 1 | | | | | | | |
| 76 | 2 | 119852-51650 | VALVE ASSY, SOLENOID | 1 | | | | | | | |
| 79 | 2 | 158553-51680 | GASKET, TIMER | 1 | | | | | | | |
| 100 | 2 | 158601-51770 | PISTON, ACCUMULATOR | 1 | | | | | | | |
| 101 | 2 | 158552-51781 | SPRING, ACCUMULATOR | 1 | | | | | | | |
| 102 | 2 | 158601-51790 | PLUG, ACCUMULATOR | 1 | | | | | | | |
| 104 | 2 | 158553-51930 | PLUG, M12 | 1 | | | | | | | |
| 105 | 2 | 22190-120002 | WASHER, SEAL 12 | 1 | | | | | | | |
| 106 | 2 | 22190-180002 | WASHER, SEAL 18 | 1 | | | | | | | |
| 110 | 2 | 158552-52311 | O-RING, FEED PUMP | 1 | | | | | | | |
| 111 | 2 | 158552-52400 | O-RING, 4E S42 | 1 | | | | | | | |
| 112 | 2 | 22190-120002 | WASHER, SEAL 12 | 2 | | | | | | | |
| 113 | 2 | 22217-180000 | WASHER, SPRING 18 | 1 | | | | | | | |
| 114 | 2 | 22312-050140 | PIN, PARALLEL 5X14 | 2 | | | | | | | |
| 115 | 2 | 22351-050010 | PIN, SPRING 5.0X10 | 2 | | | | | | | |
| 116 | 2 | 24311-000070 | O-RING, 1AP7.0 | 1 | | | | | | | |
| 117 | 2 | 24356-190200 | O-RING, 4D19020 | 1 | | | | | | | |
| 118 | 2 | 24356-240210 | O-RING, 4D24021 | 1 | | | | | | | |
| 119 | 2 | 26106-060102 | BOLT, M6X 10 PLATED | 1 | | | | | | | |
| 120 | 2 | 26106-060352 | BOLT, M6X 35 PLATED | 4 | | | | | | | |
| 121 | 2 | 26450-100452 | BOLT, M10X 45 | 4 | | | | | | | |
| 122 | 2 | 26776-180002 | NUT, LOCK M18 | 1 | | | | | | | |
| 125 | 2 | 129927-51650 | HARNESS ASSY, WIRE | 1 | | | | | | | |
| 126 | 3 | 129927-51660 | HARNESS | 1 | | | | | | | |
| 127 | 3 | 129263-77941 | CAP, RUBBER | 1 | | | | | | | |

Remarks
 (1)Governor(Fig.12) is incorporated in this Fuel Injection Pump(No.1).
 (1)Eco pump
 Make sure to update the engines ECU information when replacing the Eco pump.
 Failing to do so will result in engine malfunction.

Fig.11. FUEL INJECTION PUMP

(A)=4TNV98-ZNMS3R
(B)=
(C)=

(D)=
(E)=
(F)=

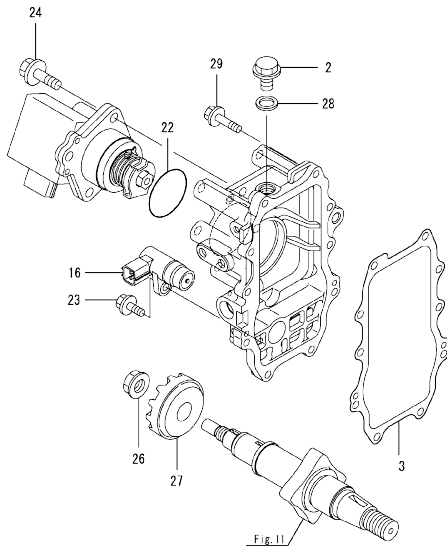


| No. | Lev. | Parts No. | Description | Q'ty | | | | | | I | R |
|-----|------|--------------|----------------------|------|-----|-----|-----|-----|-----|---|---|
| | | | | (A) | (B) | (C) | (D) | (E) | (F) | | |
| 128 | 2 | 158601-51650 | JOINT, OVERFLOW | 1 | | | | | | | |
| 129 | 2 | 129927-51670 | BRACKET | 1 | | | | | | | |
| 130 | 2 | 158552-51670 | JOINT, OVERFLOW | 1 | | | | | | | |
| 132 | 2 | 158552-52100 | PUMP ASSY, FUEL FEED | 1 | | | | | | | |
| 133 | 3 | 158552-52500 | O-RING, PUMP INNER | 1 | | | | | | | |
| 134 | 2 | 119934-59910 | JOINT, PIPE | 1 | | | | | | | |
| 135 | 2 | 22190-120002 | WASHER, SEAL 12 | 1 | | | | | | | |
| 136 | 2 | 22217-050000 | WASHER, SPRING 5 | 1 | | | | | | | |
| 137 | 2 | 26106-060122 | BOLT, M6X 12 PLATED | 1 | | | | | | | |
| 138 | 2 | 26716-050002 | NUT, M5 | 1 | | | | | | | |
| 139 | 2 | 27241-160000 | PLUG, 16 | 1 | | | | | | | |
| 141 | 1 | 129927-51250 | RETAINER, FUEL PUMP | 1 | | | | | | | |
| 142 | 1 | 26106-080202 | BOLT, M8X 20 PLATED | 3 | | | | | | | |
| 143 | 1 | 26106-080302 | BOLT, M8X 30 PLATED | 3 | | | | | | | |

Remarks

(1)Governor(Fig.12) is incorporated in this Fuel Injection Pump(No.1).
(1)Eco pump
Make sure to update the engines ECU information when replacing the Eco pump.
Failing to do so will result in engine malfunction.

Fig.12. GOVERNOR



(A)=4TNV98-ZNMS3R
(B)=
(C)=

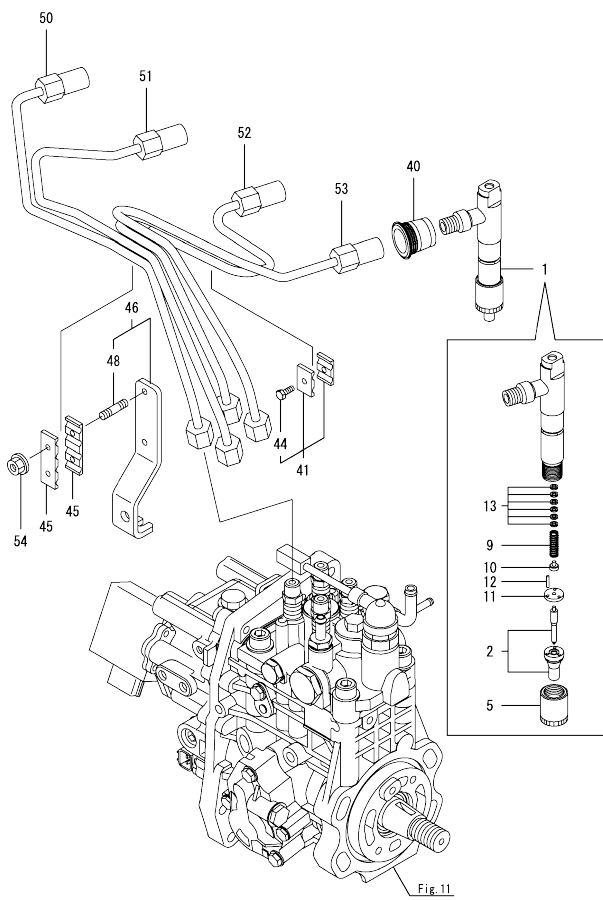
(D)=
(E)=
(F)=

| No. | Lev. | Parts No. | Description | Q'ty | | | | | |
|-----|------|--------------|---------------------|------|-----|-----|-----|-----|-----|
| | | | | (A) | (B) | (C) | (D) | (E) | (F) |
| 2 | 2 | 158553-51930 | PLUG, M12 | 1 | | | | | |
| 3 | 2 | 158560-61050 | GASKET | 1 | | | | | |
| 16 | 2 | 158557-61720 | SENSOR | 1 | | | | | |
| 22 | 2 | 24341-000480 | O-RING, 1AS48.0 | 1 | | | | | |
| 23 | 2 | 26106-060162 | BOLT, M6X 16 PLATED | 1 | | | | | |
| 24 | 2 | 26106-080252 | BOLT, M8X 25 PLATED | 3 | | | | | |
| 26 | 2 | 129008-61301 | NUT | 1 | | | | | |
| 27 | 2 | 158553-61780 | GEAR, SENSOR | 1 | | | | | |
| 28 | 2 | 22190-120002 | WASHER, SEAL 12 | 1 | | | | | |
| 29 | 2 | 26106-060252 | BOLT, M6X 25 PLATED | 10 | | | | | |

Remarks

* This figure(Governor) is incorporated in the Fuel Injection Pump(Fig.11).

Fig.13. FUEL INJECTION VALVE

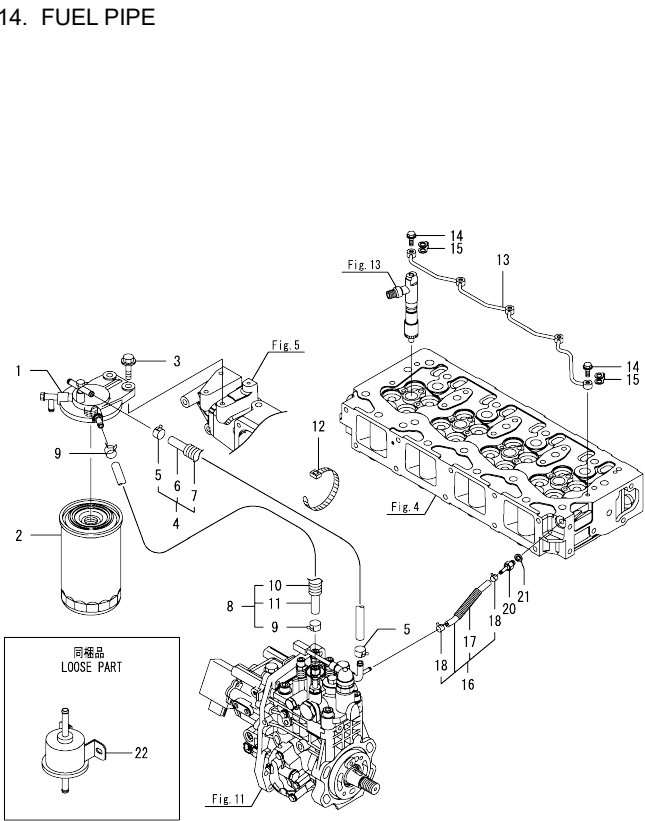


(A)=4TNV98-ZNMS3R
(B)=
(C)=

(D)=
(E)=
(F)=

| No. | Lev. | Parts No. | Description | Q'ty | | | | | | I | R |
|-----|------|--------------|----------------------|------|-----|-----|-----|-----|-----|---|---|
| | | | | (A) | (B) | (C) | (D) | (E) | (F) | | |
| 1 | 1 | 729927-53100 | FUEL INJECTOR ASSY | 4 | | | | | | | |
| 2 | 2 | 129927-53000 | NOZZLE ASSY, F.I. | 4 | | | | | | | |
| 5 | 2 | 114250-53080 | NUT, NOZZLE | 4 | | | | | | | |
| 9 | 2 | 114250-53120 | SPRING, NOZZLE | 4 | | | | | | | |
| 10 | 2 | 114250-53130 | SEAT, SPRING | 4 | | | | | | | |
| 11 | 2 | 114250-53140 | SPACER | 4 | | | | | | | |
| 12 | 2 | 114250-53210 | PIN | 8 | | | | | | | |
| 13 | 2 | 119803-53400 | SHIM SET | 4 | | | | | | | |
| 40 | 1 | 123907-11601 | SEAL, PIPE | 4 | | | | | | | |
| 41 | 1 | 119305-59120 | RETAINER, PIPE | 1 | | | | | | | |
| 44 | 2 | 129150-59131 | BOLT, M4X14 | 1 | | | | | | | |
| 45 | 1 | 123472-59120 | RETAINER, PIPE | 2 | | | | | | | |
| 46 | 1 | 129973-59700 | SUPPORT ASSY | 1 | | | | | | | |
| 48 | 2 | 26216-060202 | STUD, M6X 20 | 2 | | | | | | | |
| 50 | 1 | 129973-59810 | PIPE ASSY, INJECTION | 1 | | | | | | | |
| 51 | 1 | 129973-59820 | PIPE ASSY, INJECTION | 1 | | | | | | | |
| 52 | 1 | 129973-59830 | PIPE ASSY, INJECTION | 1 | | | | | | | |
| 53 | 1 | 129973-59840 | PIPE ASSY, INJECTION | 1 | | | | | | | |
| 54 | 1 | 26366-060002 | NUT, M6 | 2 | | | | | | | |

Fig.14. FUEL PIPE

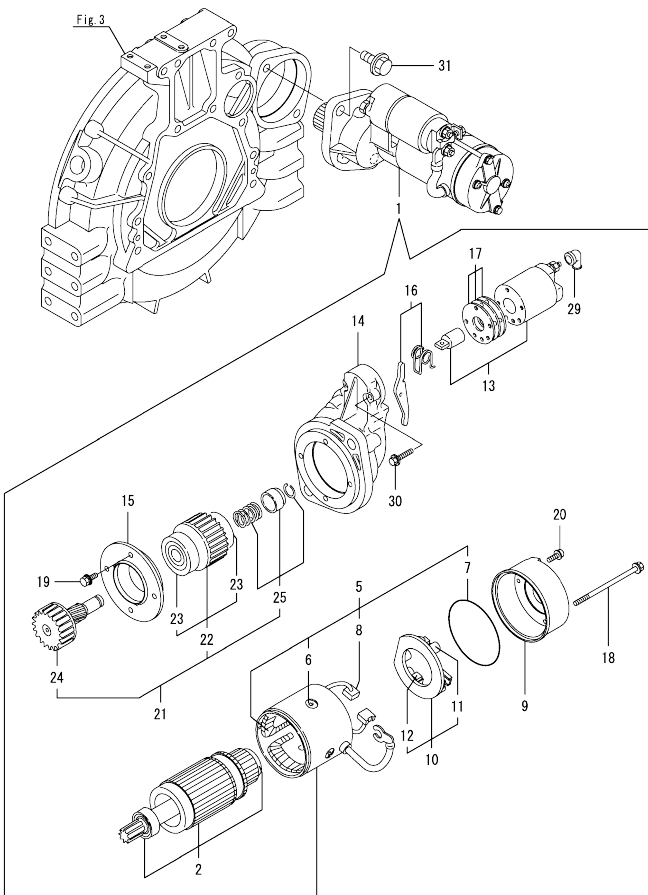


(A)=4TNV98-ZNMS3R
(B)=
(C)=

(D)=
(E)=
(F)=

| No. | Lev. | Parts No. | Description | Q'ty | | | | | | I | R |
|-----|------|--------------|---------------------|------|-----|-----|-----|-----|-----|---|---|
| | | | | (A) | (B) | (C) | (D) | (E) | (F) | | |
| 1 | 1 | 129004-55612 | BRACKET, FILTER | 1 | | | | | | | |
| 2 | 1 | 129907-55801 | FILTER, FUEL | 1 | | | | | | | |
| 3 | 1 | 26106-080302 | BOLT, M8X 30 PLATED | 2 | | | | | | | |
| 4 | 1 | 129467-59010 | HOSE ASSY, FUEL | 1 | | | | | | | |
| 5 | 2 | 124766-59050 | CLAMP, HOSE 11.5 | 2 | | | | | | | |
| 6 | 2 | 129335-59090 | HOSE, FUEL D13X500 | 1 | | | | | | | |
| 7 | 2 | 119560-59110 | TUBE, CORRUGATED 15 | 1 | | | | | | | |
| 8 | 1 | 129950-59211 | HOSE ASSY, FUEL | 1 | | | | | | | |
| 9 | 2 | 124766-59050 | CLAMP, HOSE 11.5 | 2 | | | | | | | |
| 10 | 2 | 129950-59221 | TUBE, CORRUGATED 15 | 1 | | | | | | | |
| 11 | 2 | 105025-59530 | HOSE, FUEL D13X400 | 1 | | | | | | | |
| 12 | 1 | 121750-59890 | BAND, NYLON | 1 | | | | | | | |
| 13 | 1 | 129907-59140 | PIPE ASSY, RETURN | 1 | | | | | | | |
| 14 | 1 | 123907-59540 | BOLT, PIPE JOINT M6 | 5 | | | | | | | |
| 15 | 1 | 123907-59550 | GASKET | 5 | | | | | | | |
| 16 | 1 | 129927-59550 | HOSE ASSY RETURN | 1 | | | | | | | |
| 17 | 2 | 129263-49750 | TUBE, CORRUGATED | 1 | | | | | | | |
| 18 | 2 | 124722-59050 | CLAMP, HOSE 9 | 2 | | | | | | | |
| 20 | 1 | 123907-59560 | JOINT, HOSE | 1 | | | | | | | |
| 21 | 1 | 22190-080002 | WASHER, SEAL 8 | 1 | | | | | | | |
| 22 | 1 | 129612-52100 | PUMP, FUEL FEED | 1 | | | | | | | |

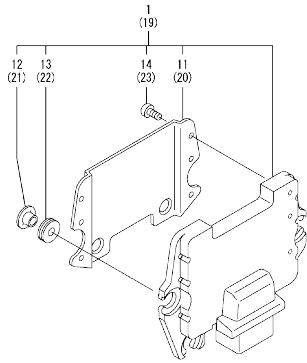
Fig.15. STARTER MOTOR



| No. | Lev. | Parts No. | Description | Q'ty | | | | | | I | R |
|-----|------|--------------|----------------------|------|-----|-----|-----|-----|-----|---|---|
| | | | | (A) | (B) | (C) | (D) | (E) | (F) | | |
| 1 | 1 | 129940-77011 | STARTER ASSY | 1 | | | | | | | |
| 2 | 2 | 129940-77100 | ARMATURE ASSY | 1 | | | | | | | |
| 5 | 2 | 129940-77130 | COIL ASSY, FIELD | 1 | | | | | | | |
| 6 | 3 | 129940-77140 | SCREW, CORE SET | 4 | | | | | | | |
| 7 | 3 | 129940-77150 | O-RING | 1 | | | | | | | |
| 8 | 3 | 129940-77160 | BRUSH | 2 | | | | | | | |
| 9 | 2 | 129940-77171 | COVER | 1 | | | | | | | |
| 10 | 2 | 129940-77181 | HOLDER ASSY, BRUSH | 1 | | | | | | | |
| 11 | 3 | 129940-77190 | SPRING, BRUSH | 1 | | | | | | | |
| 12 | 3 | 129940-77200 | BRUSH | 2 | | | | | | | |
| 13 | 2 | 129940-77210 | SWITCH ASSY, MAGNET | 1 | | | | | | | |
| 14 | 2 | 129940-77221 | CASE, GEAR | 1 | | | | | | | |
| 15 | 2 | 129940-77230 | RETAINER, BEARING | 1 | | | | | | | |
| 16 | 2 | 129940-77240 | LEVER SET | 1 | | | | | | | |
| 17 | 2 | 129940-77250 | COVER KIT, DUST | 1 | | | | | | | |
| 18 | 2 | 129940-77260 | BOLT, THROUGH | 2 | | | | | | | |
| 19 | 2 | 129940-77270 | BOLT | 4 | | | | | | | |
| 20 | 2 | 129940-77280 | SCREW | 2 | | | | | | | |
| 21 | 2 | 123900-77510 | PINION ASSY | 1 | | | | | | | |
| 22 | 3 | 123900-77520 | CLUTCH ASSY | 1 | | | | | | | |
| 23 | 4 | X2240610100 | BEARING, BALL | 2 | | | | | | | |
| 24 | 3 | 123900-77540 | SHAFT, PINION | 1 | | | | | | | |
| 25 | 3 | 119131-77550 | STOPPER SET, PINION | 1 | | | | | | | |
| 29 | 2 | 121254-77810 | COVER, TERMINAL | 1 | | | | | | | |
| 30 | 2 | 114371-79070 | BOLT | 2 | | | | | | | |
| 31 | 1 | 26106-120252 | BOLT, M12X 25 PLATED | 2 | | | | | | | |

N:Old $\frac{100}{100}$ New, Q:Old $\frac{100}{100}$ New, R:Old $\frac{100}{100}$ New, S:Old $\frac{100}{100}$ New, W:Add, Z:Discontinued, F:Interchangeable by set, K:Q'ty Change
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Fig.16. ELECTRONIC CONTROL UNIT(ECU)

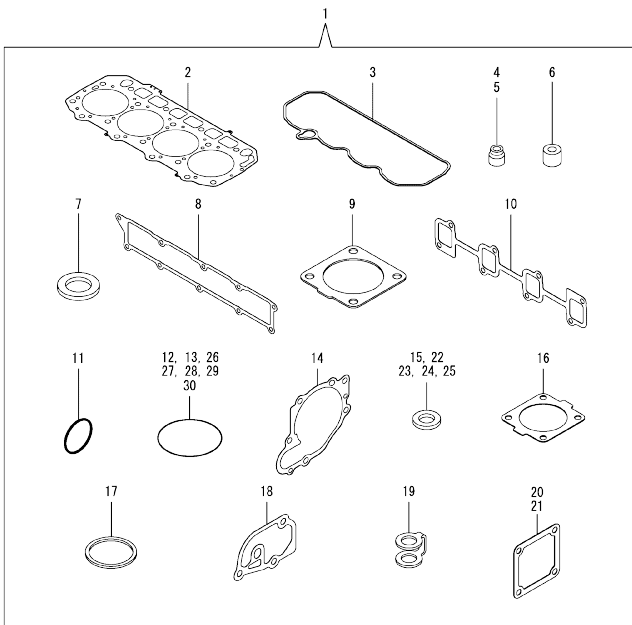


| No. | Lev. | Parts No. | Description | Q'ty | | | | | | I | R |
|-----|------|--------------|----------------------|------|-----|-----|-----|-----|-----|---|---|
| | | | | (A) | (B) | (C) | (D) | (E) | (F) | | |
| 1 | 1 | 129922-75030 | ECU ASSY,4TNV98-ZNMS | 1 | | | | | | | 1 |
| 11 | 2 | 129927-77600 | SHIELD, ECU | 1 | | | | | | | |
| 12 | 2 | 129927-77680 | COLLAR, CONTROL | 3 | | | | | | | |
| 13 | 2 | 119578-91351 | ABSORBER | 3 | | | | | | | |
| 14 | 2 | 22877-500080 | SCREW, 5X 8 | 6 | | | | | | | |
| 19 | 1 | 129927-75900 | ECU ASSY, SERVICE | 1 | | | | | | | 2 |
| 20 | 2 | 129927-77600 | SHIELD, ECU | 1 | | | | | | | |
| 21 | 2 | 129927-77680 | COLLAR, CONTROL | 3 | | | | | | | |
| 22 | 2 | 119578-91351 | ABSORBER | 3 | | | | | | | |
| 23 | 2 | 22877-500080 | SCREW, 5X 8 | 6 | | | | | | | |

Remarks

- (1)Eco ECU
- This part cannot be ordered.
- Replace the part using a Service ECU with the proper engine information installed.
- (2)Service ECU
- If the proper information is not installed, the engine will not operate.
- To install proper information, go to an authorized distributor.

Fig.17. GASKET SET



(A)=4TNV98-ZNMS3R
(B)=
(C)=

(D)=
(E)=
(F)=

| No. | Lev. | Parts No. | Description | Q'ty | | | | | | I | R |
|-----|------|--------------|----------------------|------|-----|-----|-----|-----|-----|---|---|
| | | | | (A) | (B) | (C) | (D) | (E) | (F) | | |
| 1 | 1 | 129923-92610 | PACKING | 1 | | | | | | | 1 |
| 2 | 2 | 129907-01331 | GASKET, HEAD | 1 | | | | | | | |
| 3 | 2 | 129933-11310 | GASKET, BONNET | 1 | | | | | | | |
| 4 | 2 | 119803-11340 | SEAL, VALVE STEM | 8 | | | | | | | |
| 5 | 2 | 124160-11340 | SEAL, VALVE STEM | 8 | | | | | | | |
| 6 | 2 | 119802-11870 | PROTECTOR, NOZZLE | 4 | | | | | | | |
| 7 | 2 | 119625-11880 | SEAT, NOZZLE | 4 | | | | | | | |
| 8 | 2 | 129907-12110 | GASKET, MANIFOLD | 1 | | | | | | | |
| 9 | 2 | 129930-13201 | GASKET, SILENCER | 2 | | | | | | | |
| 10 | 2 | 129900-13251 | GASKET, EXH.MANIFOLD | 1 | | | | | | | |
| 11 | 2 | 129960-21930 | GASKET, WASHER | 1 | | | | | | | |
| 12 | 2 | 129900-32030 | O-RING, P20 | 2 | | | | | | | |
| 13 | 2 | 129900-32040 | O-RING, P14 | 1 | | | | | | | |
| 14 | 2 | 129900-42020 | GASKET, WATER PUMP | 1 | | | | | | | |
| 15 | 2 | 124465-44950 | GASKET, 16 | 2 | | | | | | | |
| 16 | 2 | 121850-49540 | GASKET, THERMOSTAT | 1 | | | | | | | |
| 17 | 2 | 121850-49550 | GASKET, THERMOSTAT | 1 | | | | | | | |
| 18 | 2 | 129900-49870 | GASKET, THERMOSTAT | 1 | | | | | | | |
| 19 | 2 | 123907-59550 | GASKET | 5 | | | | | | | |
| 20 | 2 | 119129-77020 | GASKET | 1 | | | | | | | |
| 21 | 2 | 121850-77021 | GASKET, AIR HEATER | 1 | | | | | | | |
| 22 | 2 | 22190-080002 | WASHER, SEAL 8 | 7 | | | | | | | |
| 23 | 2 | 22190-120002 | WASHER, SEAL 12 | 1 | | | | | | | |
| 24 | 2 | 22190-220002 | WASHER, SEAL 22 | 1 | | | | | | | |
| 25 | 2 | 23414-080000 | GASKET, 8X1.0 | 1 | | | | | | | |
| 26 | 2 | 24311-000070 | O-RING, 1AP7.0 | 1 | | | | | | | |
| 27 | 2 | 24311-000120 | O-RING, 1AP12.0 | 8 | | | | | | | |
| 28 | 2 | 24311-000320 | O-RING, 1AP32.0 | 2 | | | | | | | |
| 29 | 2 | 24321-000600 | O-RING, 1AG60.0 | 1 | | | | | | | |
| 30 | 2 | 24351-030750 | O-RING, 1A3075 | 1 | | | | | | | |

Remarks

(1)Optional parts.

Parts No. Index

| Parts No. | Fig. No. | Ref. No. |
|--------------|----------|----------|
| 105025-59530 | 14 | 11 |
| 114250-53080 | 13 | 5 |
| 114250-53120 | 13 | 9 |
| 114250-53130 | 13 | 10 |
| 114250-53140 | 13 | 11 |
| 114250-53210 | 13 | 12 |
| 114371-79070 | 15 | 30 |
| 119000-35140 | 9 | 13 |
| 119005-77051 | 5 | 7 |
| 119129-77020 | 5 | 5 |
| | 17 | 20 |
| 119129-77520 | 5 | 8 |
| 119131-18320 | 6 | 3 |
| 119131-77550 | 15 | 25 |
| 119305-59120 | 13 | 41 |
| 119560-59110 | 14 | 7 |
| 119578-91351 | 16 | 13 |
| | | 22 |
| 119593-11301 | 4 | 27 |
| 119620-01750 | 3 | 4 |
| 119620-11180 | 4 | 12 |
| 119625-11880 | 4 | 23 |
| | 17 | 7 |
| 119640-01640 | 3 | 9 |
| 119640-61400 | 4 | 58 |
| 119761-39450 | 9 | 22 |
| 119802-11870 | 4 | 22 |
| | 17 | 6 |
| 119802-51680 | 11 | 68 |
| 119802-51690 | 11 | 69 |
| 119803-11340 | 4 | 13 |
| | 17 | 4 |
| 119803-53400 | 13 | 13 |
| 119807-11770 | 2 | 39 |
| 119852-51630 | 11 | 73 |
| 119852-51640 | 11 | 74 |
| 119852-51650 | 11 | 76 |
| 119934-59910 | 11 | 134 |
| 120130-22301 | 8 | 23 |
| 121254-77810 | 15 | 29 |
| 121256-44600 | 10 | 50 |
| 121450-42450 | 10 | 32 |
| 121750-59890 | 14 | 12 |
| 121850-21130 | 8 | 11 |
| 121850-21290 | 8 | 4 |
| 121850-21920 | 8 | 5 |
| 121850-49540 | 10 | 20 |
| | 17 | 16 |
| 121850-49550 | 10 | 22 |
| | 17 | 17 |

| Parts No. | Fig. No. | Ref. No. |
|--------------|----------|----------|
| 121850-49801 | 10 | 23 |
| 121850-77021 | 5 | 6 |
| | 17 | 21 |
| 123472-59120 | 13 | 45 |
| 123900-25060 | 7 | 9 |
| 123900-42450 | 10 | 14 |
| 123900-77510 | 15 | 21 |
| 123900-77520 | 15 | 22 |
| 123900-77540 | 15 | 24 |
| 123907-03100 | 4 | 52 |
| 123907-03110 | 4 | 53 |
| 123907-03120 | 4 | 54 |
| 123907-03140 | 4 | 55 |
| 123907-11280 | 4 | 32 |
| 123907-11550 | 4 | 1 |
| 123907-11601 | 13 | 40 |
| 123907-11820 | 4 | 19 |
| 123907-11830 | 4 | 18 |
| 123907-39500 | 9 | 25 |
| 123907-59540 | 14 | 14 |
| 123907-59550 | 14 | 15 |
| | 17 | 19 |
| 123907-59560 | 14 | 20 |
| 123910-49600 | 9 | 8 |
| 123910-49610 | 9 | 10 |
| 123912-33050 | 9 | 2 |
| 123912-33100 | 9 | 3 |
| 124160-01751 | 2 | 25 |
| | 4 | 47 |
| 124160-11340 | 4 | 14 |
| | 17 | 5 |
| 124160-11360 | 4 | 63 |
| 124450-44510 | 10 | 44 |
| 124450-44530 | 10 | 46 |
| 124450-44550 | 10 | 49 |
| 124450-44560 | 10 | 47 |
| 124465-44950 | 10 | 33 |
| | 17 | 15 |
| 124722-59050 | 14 | 18 |
| 124766-59050 | 14 | 5 |
| | | 9 |
| 124976-34850 | 1 | 29 |
| 129004-55612 | 14 | 1 |
| 129005-59830 | 9 | 27 |
| 129006-44480 | 9 | 5 |
| 129008-51920 | 11 | 12 |
| 129008-61301 | 12 | 26 |
| 129100-01580 | 2 | 1 |
| | 3 | 1 |
| 129150-02450 | 7 | 4 |

| Parts No. | Fig. No. | Ref. No. |
|--------------|----------|----------|
| 129150-11230 | 4 | 35 |
| | | 39 |
| 129150-11750 | 4 | 17 |
| | | 36 |
| | | 40 |
| 129150-14200 | 7 | 1 |
| 129150-25920 | 7 | 17 |
| 129150-35153 | 9 | 35 |
| 129150-59131 | 13 | 44 |
| 129263-13210 | 6 | 5 |
| 129263-49750 | 14 | 17 |
| 129263-77941 | 11 | 127 |
| 129335-59090 | 14 | 6 |
| 129418-18320 | 6 | 4 |
| 129466-49300 | 9 | 7 |
| 129467-59010 | 14 | 4 |
| 129612-52100 | 14 | 22 |
| 129657-51590 | 11 | 63 |
| 129657-51600 | 11 | 64 |
| 129900-01200 | 1 | 27 |
| 129900-01250 | 1 | 4 |
| 129900-01620 | 3 | 2 |
| 129900-01850 | 2 | 34 |
| 129900-01870 | 2 | 35 |
| 129900-02020 | 1 | 6 |
| 129900-02341 | 1 | 33 |
| 129900-02410 | 1 | 9 |
| 129900-02931 | 1 | 24 |
| 129900-02941 | 1 | 36 |
| 129900-13251 | 6 | 6 |
| | 17 | 10 |
| 129900-14100 | 7 | 6 |
| 129900-21200 | 8 | 3 |
| 129900-21600 | 8 | 14 |
| 129900-23001 | 8 | 25 |
| 129900-23200 | 8 | 28 |
| 129900-23601 | 8 | 29 |
| 129900-23611 | 8 | 32 |
| 129900-23911 | 8 | 31 |
| 129900-25100 | 7 | 10 |
| 129900-32001 | 2 | 4 |
| 129900-32030 | 2 | 16 |
| | 9 | 15 |
| | 17 | 12 |
| 129900-32040 | 2 | 17 |
| | 17 | 13 |
| 129900-35000 | 9 | 16 |
| 129900-42020 | 10 | 1 |
| | 17 | 14 |
| 129900-49870 | 10 | 28 |

| Parts No. | Fig. No. | Ref. No. |
|--------------|----------|----------|
| 129900-49870 | 17 | 18 |
| 129902-01710 | 3 | 8 |
| 129902-21000 | 8 | 1 |
| 129906-51580 | 11 | 61 |
| 129907-01331 | 1 | 28 |
| | 17 | 2 |
| 129907-03011 | 4 | 49 |
| 129907-03061 | 4 | 50 |
| 129907-03070 | 4 | 51 |
| 129907-11100 | 4 | 9 |
| 129907-11110 | 4 | 10 |
| 129907-11120 | 4 | 11 |
| 129907-11250 | 4 | 29 |
| 129907-11260 | 4 | 30 |
| 129907-11270 | 4 | 31 |
| 129907-11341 | 4 | 28 |
| 129907-11510 | 4 | 15 |
| 129907-11650 | 4 | 33 |
| 129907-11660 | 4 | 37 |
| 129907-11800 | 4 | 68 |
| 129907-11910 | 4 | 24 |
| 129907-11920 | 4 | 41 |
| 129907-11950 | 4 | 25 |
| 129907-12110 | 5 | 2 |
| | 17 | 8 |
| 129907-14400 | 7 | 2 |
| 129907-25900 | 7 | 15 |
| 129907-51560 | 11 | 58 |
| 129907-55801 | 14 | 2 |
| 129907-59140 | 14 | 13 |
| 129908-14581 | 7 | 3 |
| 129908-33010 | 9 | 1 |
| 129908-33101 | 9 | 4 |
| 129908-49060 | 9 | 6 |
| 129916-01790 | 3 | 7 |
| 129916-01800 | 2 | 33 |
| 129916-21610 | 8 | 7 |
| 129916-49530 | 10 | 19 |
| 129922-75030 | 16 | 1 |
| 129923-92610 | 17 | 1 |
| 129927-11320 | 4 | 48 |
| 129927-11700 | 4 | 2 |
| 129927-13810 | 6 | 9 |
| 129927-13910 | 6 | 16 |
| 129927-13920 | 6 | 17 |
| 129927-22050 | 8 | 17 |
| 129927-22080 | 8 | 15 |
| 129927-39060 | 9 | 23 |
| 129927-42140 | 2 | 18 |
| 129927-44900 | 10 | 17 |

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| Parts No. | Fig. No. | Ref. No. |
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| 129927-51250 | 11 | 141 |
| 129927-51390 | 11 | 25 |
| 129927-51650 | 11 | 125 |
| 129927-51660 | 11 | 126 |
| 129927-51670 | 11 | 129 |
| 129927-53000 | 13 | 2 |
| 129927-59550 | 14 | 16 |
| 129927-75900 | 16 | 19 |
| 129927-77600 | 16 | 11 |
| | | 20 |
| 129927-77680 | 16 | 12 |
| | | 21 |
| 129928-13900 | 6 | 15 |
| 129928-51900 | 11 | 11 |
| 129930-13201 | 6 | 20 |
| | | 17 |
| | | 9 |
| 129933-11310 | 4 | 57 |
| | | 17 |
| | | 3 |
| 129938-01500 | 2 | 3 |
| 129938-49800 | 10 | 16 |
| 129940-77011 | 15 | 1 |
| 129940-77100 | 15 | 2 |
| 129940-77130 | 15 | 5 |
| 129940-77140 | 15 | 6 |
| 129940-77150 | 15 | 7 |
| 129940-77160 | 15 | 8 |
| 129940-77171 | 15 | 9 |
| 129940-77181 | 15 | 10 |
| 129940-77190 | 15 | 11 |
| 129940-77200 | 15 | 12 |
| 129940-77210 | 15 | 13 |
| 129940-77221 | 15 | 14 |
| 129940-77230 | 15 | 15 |
| 129940-77240 | 15 | 16 |
| 129940-77250 | 15 | 17 |
| 129940-77260 | 15 | 18 |
| 129940-77270 | 15 | 19 |
| 129940-77280 | 15 | 20 |
| 129944-21650 | 8 | 8 |
| 129948-42110 | 10 | 2 |
| 129948-42111 | 10 | 2 |
| 129950-59211 | 14 | 8 |
| 129950-59221 | 14 | 10 |
| 129951-01740 | 2 | 27 |
| 129953-21570 | 8 | 12 |
| 129953-25300 | 7 | 14 |
| 129960-21930 | 8 | 9 |
| | | 17 |
| | | 11 |
| 129960-21940 | 8 | 10 |
| 129968-12102 | 5 | 1 |

| Parts No. | Fig. No. | Ref. No. |
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| 129968-13100 | 6 | 2 |
| 129968-13150 | 6 | 1 |
| 129968-13850 | 6 | 11 |
| 129968-49610 | 10 | 34 |
| 129968-49620 | 10 | 38 |
| 129968-49850 | 10 | 42 |
| 129973-07910 | 4 | 66 |
| 129973-13840 | 6 | 10 |
| 129973-59700 | 13 | 46 |
| 129973-59810 | 13 | 50 |
| 129973-59820 | 13 | 51 |
| 129973-59830 | 13 | 52 |
| 129973-59840 | 13 | 53 |
| 129E00-13650 | 6 | 7 |
| 144626-51090 | 11 | 13 |
| 158552-51571 | 11 | 59 |
| 158552-51580 | 11 | 62 |
| 158552-51670 | 11 | 130 |
| 158552-51781 | 11 | 101 |
| 158552-52100 | 11 | 132 |
| 158552-52311 | 11 | 110 |
| 158552-52400 | 11 | 111 |
| 158552-52500 | 11 | 133 |
| 158553-51670 | 11 | 67 |
| 158553-51680 | 11 | 79 |
| 158553-51930 | 11 | 104 |
| | | 12 |
| | | 2 |
| 158553-61780 | 12 | 27 |
| 158557-51570 | 11 | 60 |
| 158557-61720 | 12 | 16 |
| 158560-51600 | 11 | 72 |
| 158560-61050 | 12 | 3 |
| 158563-51150 | 7 | 16 |
| 158563-51281 | 11 | 23 |
| | | 24 |
| 158563-51330 | 11 | 35 |
| 158600-51270 | 11 | 22 |
| 158601-51550 | 11 | 57 |
| 158601-51650 | 11 | 128 |
| 158601-51770 | 11 | 100 |
| 158601-51790 | 11 | 102 |
| 171051-01921 | 1 | 5 |
| 171056-49120 | 9 | 34 |
| 175339-79700 | 4 | 59 |
| 22190-080002 | 9 | 28 |
| | | 30 |
| | | 32 |
| | | 21 |
| | | 22 |
| | | 17 |
| | | 22 |
| 22190-120002 | 10 | 25 |

| Parts No. | Fig. No. | Ref. No. |
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| 22190-120002 | 11 | 105 |
| | | 112 |
| | | 135 |
| | | 12 |
| | | 28 |
| | | 17 |
| | | 23 |
| 22190-180002 | 11 | 106 |
| 22190-220002 | 3 | 11 |
| | | 17 |
| | | 24 |
| 22217-050000 | 11 | 136 |
| 22217-180000 | 11 | 113 |
| 22252-000300 | 8 | 24 |
| 22312-050140 | 11 | 114 |
| 22351-050010 | 11 | 115 |
| 22351-060012 | 1 | 11 |
| 22512-070140 | 7 | 7 |
| | | 8 |
| | | 6 |
| 22857-500100 | 4 | 60 |
| | | 61 |
| 22877-500080 | 16 | 14 |
| | | 23 |
| | | 9 |
| | | 11 |
| 23000-025000 | 10 | 48 |
| 23061-070230 | 10 | 48 |
| 23080-012000 | 10 | 37 |
| | | 41 |
| | | 29 |
| 23414-080000 | 10 | 29 |
| | | 17 |
| | | 25 |
| 23857-030000 | 9 | 29 |
| 23875-030000 | 10 | 26 |
| 23876-020000 | 4 | 6 |
| 23876-030000 | 1 | 12 |
| | | 13 |
| | | 14 |
| | | 7 |
| | | 4 |
| | | 19 |
| 24311-000070 | 2 | 19 |
| | | 11 |
| | | 116 |
| | | 17 |
| | | 26 |
| 24311-000120 | 4 | 26 |
| | | 64 |
| | | 17 |
| | | 27 |
| 24311-000320 | 2 | 26 |
| | | 4 |
| | | 65 |
| | | 17 |
| | | 28 |
| 24321-000600 | 9 | 12 |
| | | 17 |
| | | 29 |
| 24341-000480 | 12 | 22 |
| 24351-030750 | 2 | 20 |
| | | 17 |
| | | 30 |
| 24356-190200 | 11 | 70 |
| | | 117 |
| 24356-240210 | 11 | 118 |

| Parts No. | Fig. No. | Ref. No. |
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| 24372-000150 | 11 | 71 |
| 25153-004500 | 10 | 51 |
| 26106-060102 | 11 | 119 |
| 26106-060122 | 4 | 62 |
| | | 11 |
| | | 137 |
| 26106-060162 | 12 | 23 |
| 26106-060202 | 10 | 27 |
| 26106-060252 | 12 | 29 |
| 26106-060302 | 10 | 12 |
| 26106-060352 | 11 | 120 |
| 26106-080122 | 3 | 12 |
| | | 9 |
| | | 21 |
| | | 31 |
| | | 33 |
| | | 10 |
| | | 30 |
| 26106-080142 | 7 | 8 |
| | | 10 |
| | | 43 |
| 26106-080162 | 2 | 21 |
| | | 36 |
| | | 12 |
| | | 6 |
| | | 13 |
| 26106-080202 | 2 | 22 |
| | | 28 |
| | | 4 |
| | | 67 |
| | | 11 |
| | | 142 |
| 26106-080252 | 12 | 24 |
| 26106-080302 | 11 | 143 |
| | | 14 |
| | | 3 |
| 26106-080402 | 2 | 37 |
| | | 4 |
| | | 43 |
| | | 5 |
| | | 9 |
| 26106-080452 | 2 | 23 |
| | | 29 |
| 26106-080552 | 5 | 3 |
| | | 7 |
| | | 13 |
| | | 10 |
| | | 13 |
| 26106-080602 | 4 | 44 |
| | | 45 |
| | | 10 |
| | | 31 |
| 26106-080702 | 2 | 38 |
| 26106-080752 | 2 | 30 |
| 26106-080852 | 5 | 4 |
| 26106-080902 | 5 | 10 |
| 26106-100182 | 10 | 15 |
| 26106-100302 | 6 | 14 |
| | | 18 |
| | | 18 |
| 26106-100952 | 6 | 19 |
| 26106-120252 | 15 | 31 |
| 26206-100352 | 3 | 5 |
| 26206-100702 | 3 | 6 |

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| 26216-060202 | 13 | 48 |
| 26216-100302 | 2 | 15 |
| 26226-080222 | 4 | 42 |
| 26306-080002 | 4 | 46 |
| | 6 | 8 |
| 26306-100002 | 2 | 24 |
| 26366-060002 | 13 | 54 |
| 26450-100452 | 11 | 121 |
| 26716-050002 | 11 | 138 |
| 26776-180002 | 11 | 122 |
| 27241-160000 | 11 | 139 |
| 27241-300000 | 1 | 10 |
| 27241-400000 | 4 | 8 |
| 27310-070001 | 4 | 20 |
| 729900-02801 | 1 | 30 |
| 729907-01559 | 2 | 31 |
| 729927-01560 | 1 | 1 |
| 729927-22900 | 8 | 34 |
| 729927-22950 | 8 | 36 |
| 729927-53100 | 13 | 1 |
| 729939-51320 | 11 | 1 |
| 729939-51380 | 11 | 1 -1 |
| X2240610100 | 15 | 23 |

| Parts No. | Fig. No. | Ref. No. |
|-----------|----------|----------|
|-----------|----------|----------|

| Parts No. | Fig. No. | Ref. No. |
|-----------|----------|----------|
|-----------|----------|----------|

| Parts No. | Fig. No. | Ref. No. |
|-----------|----------|----------|
|-----------|----------|----------|