



PARTS CATALOG

Published

2011/5 (May.)

0CR10-G74700

P R E F A C E

1.This parts catalog is a first edition of the 4BY2-150, 4BY2-150Z, 4BY2-180, 4BY2-180Z Diesel engine.

	Parts catalog No.	Date of issue	Remarks
First edition	0CR10-G74700	Jan.,2009	No need

2.This parts catalog dose not contain the technical data needed for maintenance service.

3.The illustrations used in this parts catalog have been simplified for clarity.

4.The contents of this parts catalog are subject to change without notice.

5.Be sure to use only Yanmar genuine parts for repairs. If imitation parts are used, it may cause engine defects.

Directions for the Parts Catalog.

- The parts stipulated in this Parts Catalog are not necessarily standard equipped parts.
- Parts may change without prior notice.
- The following is an example of the Parts Catalog format.

REF.	LEV.	PARTS NO.	DESCRIPTION	Q'TY						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	729595-51390	FUEL INJECTION PUMP	1	1	1	1	1			1
1-1	1	729595-51391	FUEL INJECTION PUMP	1	1	1	1	1		N	1
		(A=E00185) (B=E00200)									
3	2	26022-060162	SCREW M 6X 16	9	9	9	9	9			
3-1	2	26022-060162	SCREW M 6X 16	4	4	4	4	4		K	
		(A=E00156) (B=E00156) (C=E00156) (D=E00156) (E=E00156)									
4	2	129470-51040	CAMSHAFT	1	1	1	1	1			
5	2	122710-51050	BEARING, ROLLER	2	2	2	2	2			
6	2	129470-51060	RETAINER	1	1	1	1	1			

Remarks
(1) BOOST COMPEMSATOR TYPE. OPTIONAL PART, TO E00155,(4JH-DT, 4JH-DTZ

① Ref. No.

The Ref. No. listed may not be in accordance with the illustration Ref. No.

(Ex.) Illustration No.

List Ref No.

1

1

(Before change)

1-1

(After change)

For interchangeable symbols N, R and K, illustrations for new parts may be abbreviated.

② Lev. (Level)

Level indication

The numbers below indicate the level of relativity towards the main part.

1 ----- Main parts (Assembly parts)

2 ----- Sub component included in " 1 ".

3 ----- Sub component included in " 2 ".

Note) Parts that are not for sale are partially illustrated but not listed.

③ Interchangeability Mark

When a part change takes place, one of the following interchangeability symbols is indicated beside the part.

Symbol	Interchangeability	Contents note
N	Old $\begin{matrix} \leftarrow \text{Yes} \\ \text{No} \rightarrow \end{matrix}$ New	New Part is interchangeable for Old Part but Old Part is not interchangeable for New Part.
Q	Old $\begin{matrix} \leftarrow \text{No} \\ \text{Yes} \rightarrow \end{matrix}$ New	New Part is not interchangeable for Old Part but Old Part is interchangeable for New Part.
R	Old $\begin{matrix} \leftarrow \text{Yes} \\ \text{Yes} \rightarrow \end{matrix}$ New	New/ Old Parts are both interchangeable.
S	Old $\begin{matrix} \leftarrow \text{No} \\ \text{No} \rightarrow \end{matrix}$ New	New/ Old Parts are both not interchangeable.
W		Part newly added.
Z		Part discontinued.
F		Not interchangeable by a single part but interchangeable together with related parts.
K		Changes only for used parts quantities.

④ Effective Machine No.

When a part changes, the effective Machine No. will be indicated in the (A)-(F) column.

Product Symbol	Product No.	Product Symbol	Product No.
C	Clutch No. Compressor No.	F	Machine No. (Agricultural Equip.)
D	Drive No.	M	Machine No.
E	Engine No.		

Note 1) A date may follow the symbol. (Ex.) 1996.01

Note 2) "XXXXX" and "ZZZZZ" are for parts that could not be predicted or for engine models that could not be identified.

Note 3) (A=E00185) is the E (Engine Serial Number) for the column (A) model (in this case 4JH-DT) after the parts design change.

⑤ Remarks Mark

Figures or alphabets (symbols) are entered in the remarks column.

The comments (remarks) on parts that are indicated at the bottom of the illustration are the same symbols as those stated above.

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PC NO : 0CR10-G74700

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5.	ENGINE BRACKET
6.	LABEL
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8.	CYL.HEAD ATTACHED/GLOW PLUG
9.	CYLINDER HEAD COVER
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11.	TURBOCHARGER
12.	CRANKSHAFT WITH BEARING SHELLS
13.	FLYWHEEL & CYL.MOUNTING PARTS
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15.	TIMING CHAIN LOWER P/DAMPER
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23.	AIR COOLER(INNER PARTS)
24.	WATER PUMP
25.	COOLING SEA WATER PUMP
26.	HEAT EXCHANGER
27.	HEAT EXCHANGER(INNER PARTS)
28.	HOSE, FW PUMP
29.	MIXING ELBOW

Fig.No.	GROUP NAME
30.	BILGE PUMP(OPTION)
31.	STEERING OIL COOLER
32.	STEERING PUMP/PIPE
33.	FUEL OIL FILTER/PIPE
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36.	FUEL FILTER
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38.	ALTERNATOR
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42.	ECU
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44.	M.ELBOW HIGH RISER(OPTION)
45.	FUEL FILTER (OPTION)
46.	VDO GAUGE (OPTION)
47.	C.S.W.PIPE&COUPLING (ZT SPEC)
48.	C.S.W.PIPE&EXHAUST BEND(OPTION)

Fig.1. CYLINDER BLOCK

OCR10-G74700 1. CYLINDER BLOCK

(A)=4BY2-150
 (B)=4BY2-180
 (C)=4BY2-150Z

(D)=4BY2-180Z
 (E)=
 (F)=

REF.	LEV.	PARTS NO.	DESCRIPTION	QTY						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	165000-67770	BOLT, HEX M10X80	10	10	10	10				
2	1	165000-67790	STUD, M8X42	3	3	3	3				
3	1	165000-67730	BOLT, BEARING	3	3	3	3				
4	1	165000-67760	BOLT, BEARING	1	1	1	1				
5	1	165000-67780	NOZZLE, OIL SPRAYING	1	1	1	1				
6	1	165000-67750	GASKET, PROFILE	1	1	1	1				
7	1	165000-67400	SCREW, HEAD M6X16	1	1	1	1				
8	1	165000-67290	PLUG, SCREW M14X1.5	1	1	1	1				
9	1	165000-67470	RING, GASKET 14X20	1	1	1	1				
10	1	165000-67880	DOWEL, D=10.5MM	6	6	6	6				
11	1	165000-67720	DOWEL, D=14.5MM	2	2	2	2				
12	1	165000-67740	DOWEL, D=14.5MM	2	2	2	2				
13	1	165000-69480	NOZZLE, OIL SPRAYING	4	4	4	4				
14	1	165000-67410	SCREW, HEAD M6X10	8	8	8	8				

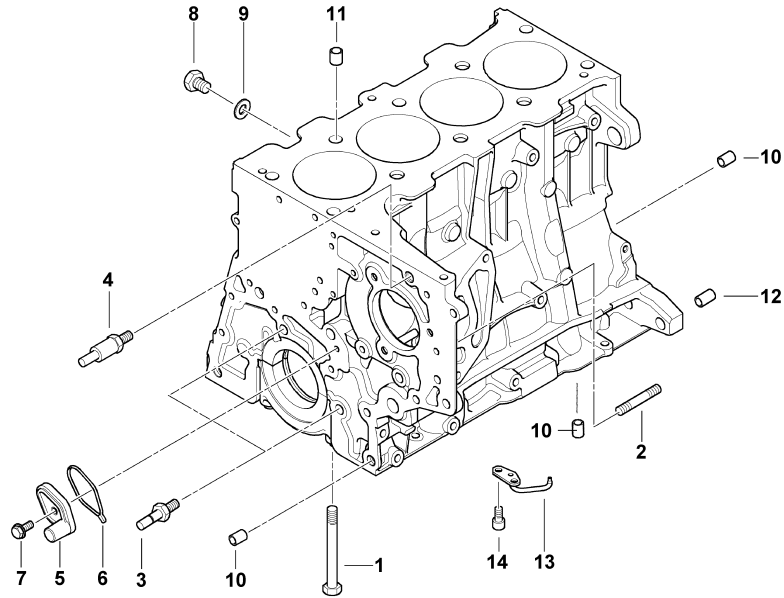
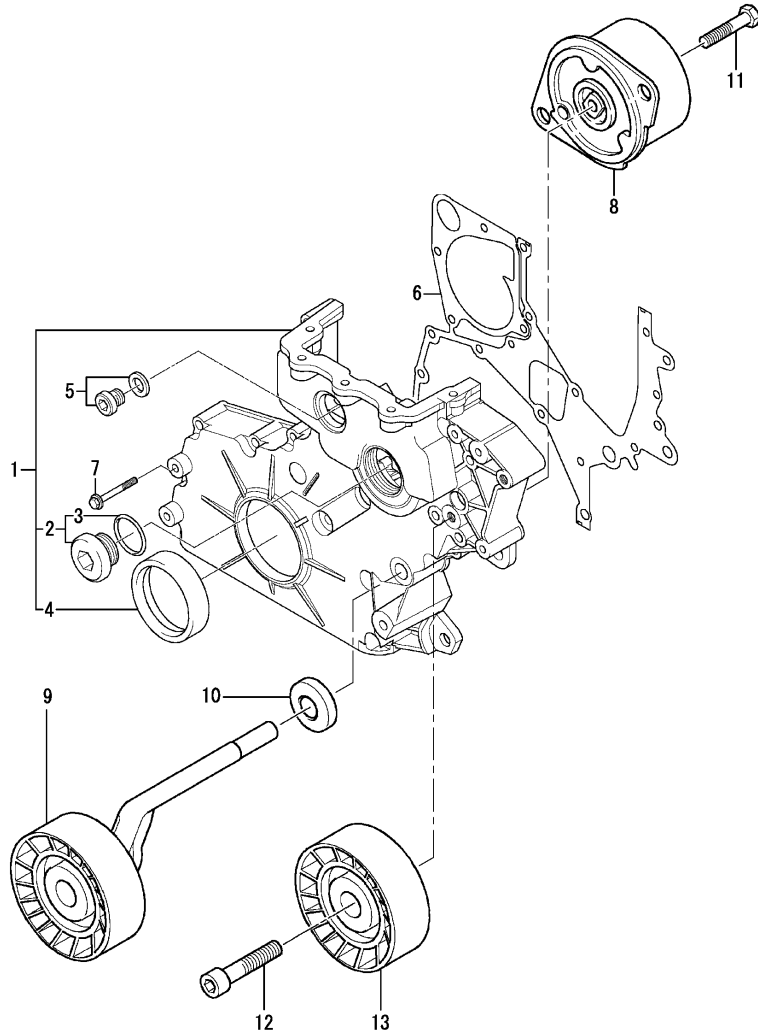


Fig.2. LOWER TIMING CASE/BELT W PUMP

(A)=4BY2-150
(B)=4BY2-180
(C)=4BY2-150Z

(D)=4BY2-180Z
(E)=
(F)=

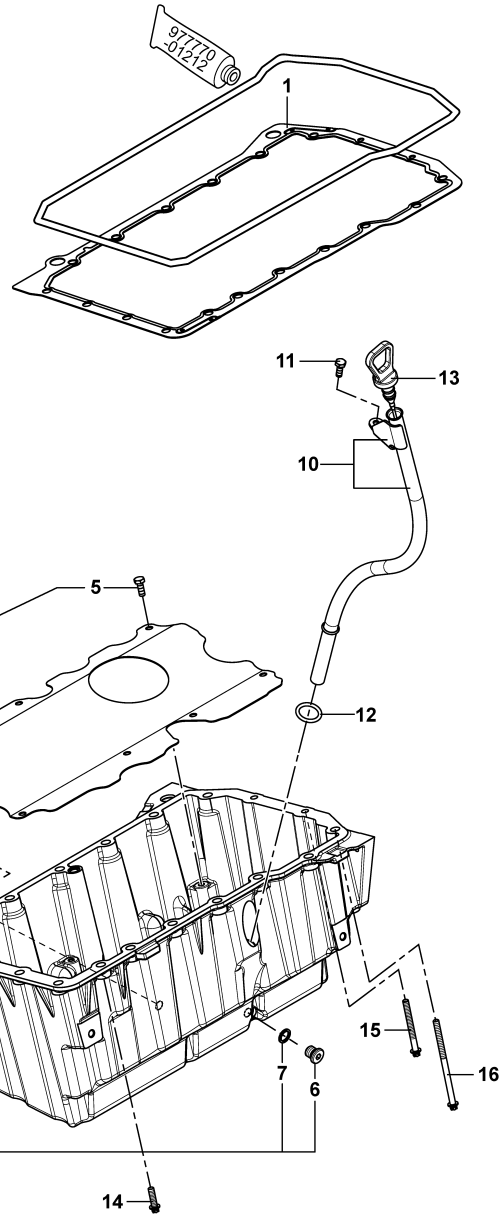
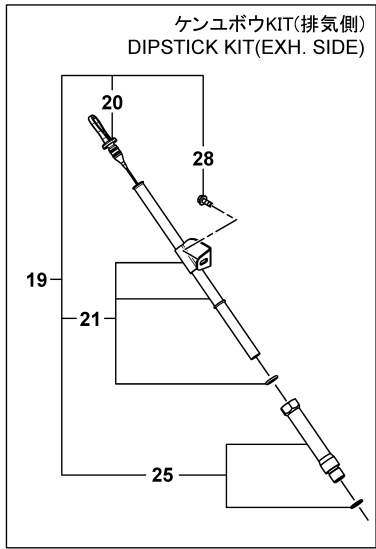


REF.	LEV.	PARTS NO.	DESCRIPTION	Q'TY						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	165000-68430	COVER, TIMING CASE	1	1	1	1				
2	2	165000-68390	PLUG, SCREW M40X1.5	1	1	1	1				
3	2	165000-68400	O-RING, 35 2.0	1	1	1	1				
4	2	165000-68420	SEAL, SHAFT 55 68 8	1	1	1	1				
5	1	165000-68410	PLUG, SCREW M30X1	1	1	1	1				
6	1	165000-68450	GASKET, STEEL	1	1	1	1				
7	1	165000-69690	SCREW, TORX M7X38	14	14	14	14				
8	1	165000-69130	TENSIONER, BELT	1	1	1	1				
9	1	165001-35850	TENSIONER, BELT	1	1	1	1				
10	1	165000-69120	SEALING	1	1	1	1				
11	1	165000-67230	BOLT, HEX M6 30	1	1	1	1				
12	1	165000-67330	SCREW, HEAD M8X35	1	1	1	1				
13	1	165000-69170	PULLEY, DEFLECTION	1	1	1	1				

Fig.4. OIL PAN/LUB. OIL SUMP

(A)=4BY2-150
(B)=4BY2-180
(C)=4BY2-150Z

(D)=4BY2-180Z
(E)=
(F)=



REF.	LEV.	PARTS NO.	DESCRIPTION	Q'TY						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	165000-68300	GASKET	1	1	1	1				
2	1	165000-93250	SUMP,LUB.OIL	1	1	1	1				
5	2	120650-51620	TAPPING BOLT, 6X16	7	7	7	7				
6	2	120640-00190	PLUG, M12	2	2	2	2				
7	2	120640-01230	GASKET, 12X1.5	2	2	2	2				
8	2	165000-93270	PLUG, M18	1	1	1	1				
10	1	120650-34840	GUIDE ASSY, DIPSTICK	1	1	1	1				
11	1	120640-02080	FLANGE BOLT, 6X16	1	1	1	1				
12	1	120650-34890	O-RING, 14X3	2	2	2	2				
13	1	120650-34800	DIPSTICK, OIL	1	1	1	1				
14	1	165001-25170	BOLT, TORX	15	15	15	15				
15	1	165001-35810	BOLT, TORX M6X60	2	2	2	2				
16	1	165001-22370	BOLT, TORX M8X110	2	2	2	2				
17	1	165000-93230	PLUG,SCREW M10X1	1	1	1	1				
18	1	165000-93240	RING,GASKET	1	1	1	1				
19	1	120650-34700	DIPSTICK KIT, STBD	1	1	1	1				
20	2	120650-34810	DIPSTICK	1	1	1	1				
21	2	120650-34850	GUIDE ASY, DIPSTICK	1	1	1	1				
25	2	120650-34910	ADAPTOR ASY, GUIDE D	1	1	1	1				
28	2	26106-060122	BOLT, 6 X 12	1	1	1	1				

Fig.5. ENGINE BRACKET

OCR10-G74700 5. ENGINE BRACKET

(A)=4BY2-150
(B)=4BY2-180
(C)=4BY2-150Z

(D)=4BY2-180Z
(E)=
(F)=

REF.	LEV.	PARTS NO.	DESCRIPTION	Q'TY						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	120650-08100	FOOT, MOUNTING FL	1	1	1	1				
2	1	120640-01880	FLANGE BOLT, 8X50	4	4	4	4				
3	1	120640-01860	FLANGE BOLT, 8X30	2	2	2	2				
4	1	120650-08110	FOOT, MOUNTING FR	1	1	1	1				
5	1	120640-01920	FLANGE BOLT, 8X70	4	4	4	4				
6	1	120640-01880	FLANGE BOLT, 8X50	2	2	2	2				
7	1	120650-08401	MOUNT, ENGINE HS55	2	2	2	2				

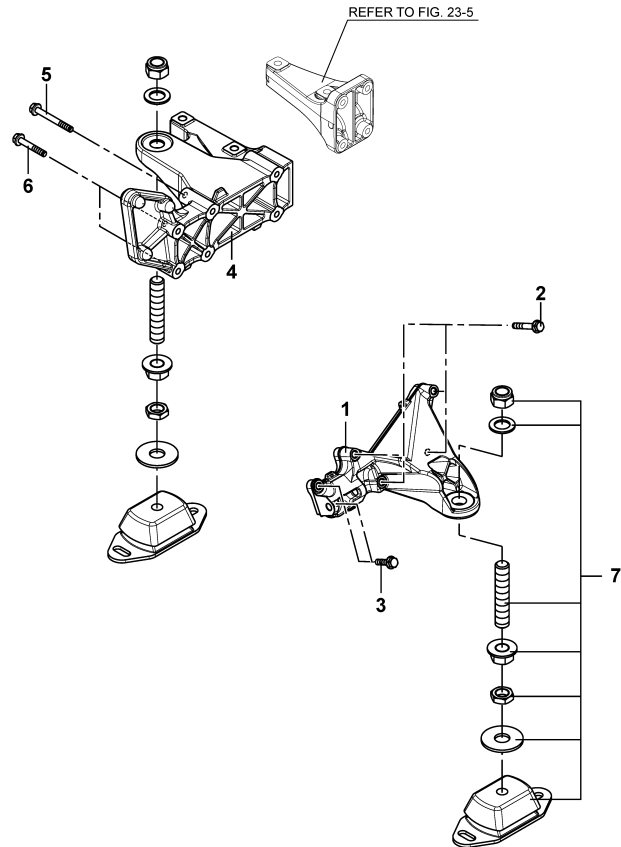
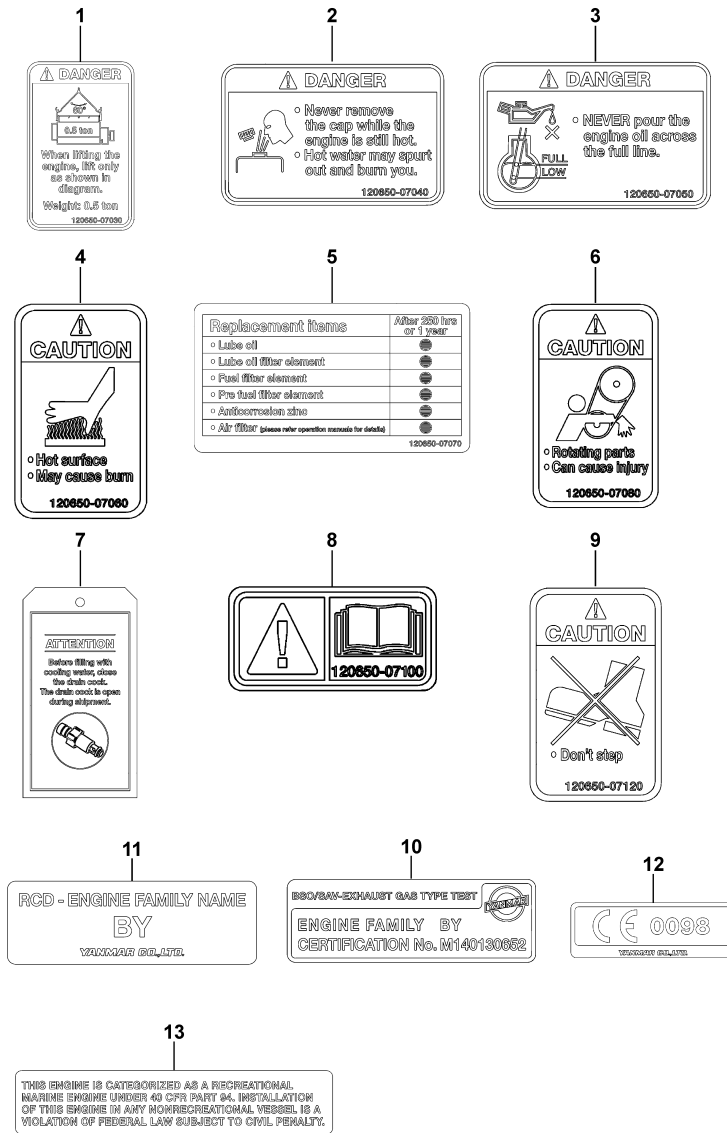


Fig.6. LABEL



(A)=4BY2-150
(B)=4BY2-180
(C)=4BY2-150Z

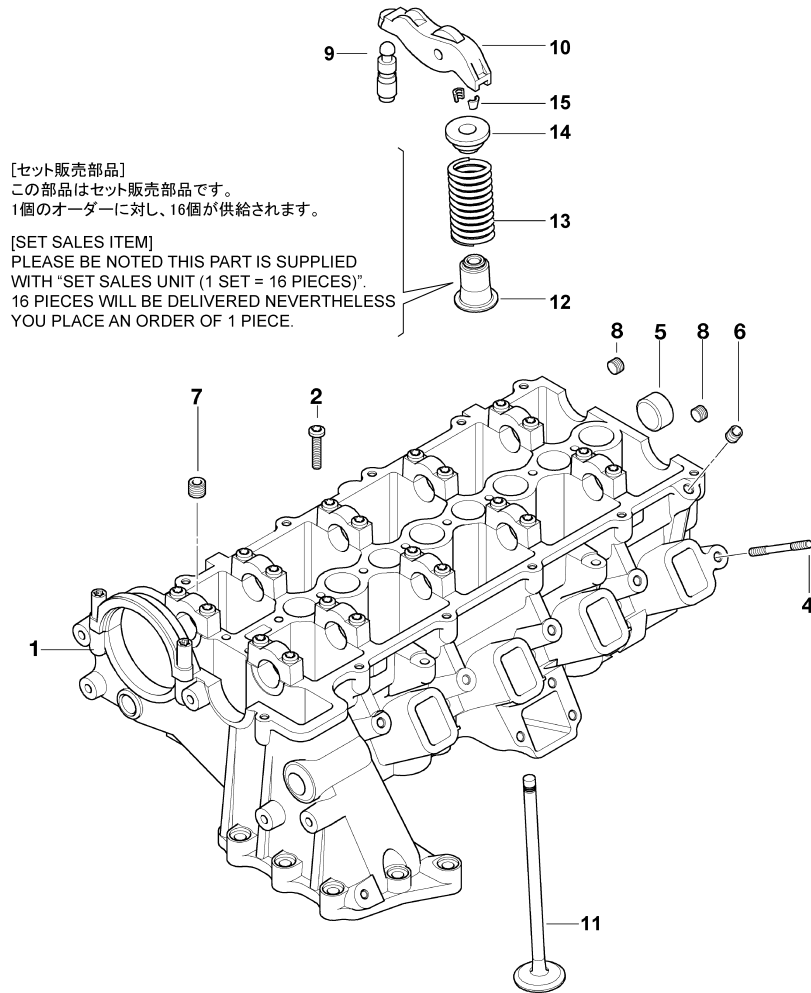
(D)=4BY2-180Z
(E)=
(F)=

REF.	LEV.	PARTS NO.	DESCRIPTION	QTY						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	120650-07030	LABEL, LIFTER	2	2	2	2				
2	1	120650-07040	LABEL, PRESSURE CAP	1	1	1	1				
3	1	120650-07050	LABEL, OIL DANGER	1	1	1	1				
4	1	120650-07060	LABEL, CAUTION HOT	1	1	1	1				
5	1	120650-07070	LABEL, INTERVAL	1	1	1	1				
6	1	120650-07080	LABEL, CAUTION ROTAT	1	1	1	1				
7	1	120650-07090	LABEL, CAUTION DRAIN	1	1	1	1				
8	1	120650-07100	LABEL, CAUTION MANUA	1	1	1	1				
9	1	120650-07121	LABEL, CAUTION NO ST	1	1	1	1				
10	1	120650-07150	LABEL, BSO	1	1	1	1				
11	1	120650-07161	LABEL,RCD	1	1	1	1				
12	1	120650-07171	LABEL,RCD-CE	1	1	1	1				
13	1	120650-07191	LABEL,RECREATIONAL	1	1	1	1				

Fig.7. CYL.HEAD/VALVE TRAIN-CAMSHAFT

(A)=4BY2-150
(B)=4BY2-180
(C)=4BY2-150Z

(D)=4BY2-180Z
(E)=
(F)=



[セット販売部品]
この部品はセット販売部品です。
1個のオーダーに対し、16個が供給されます。

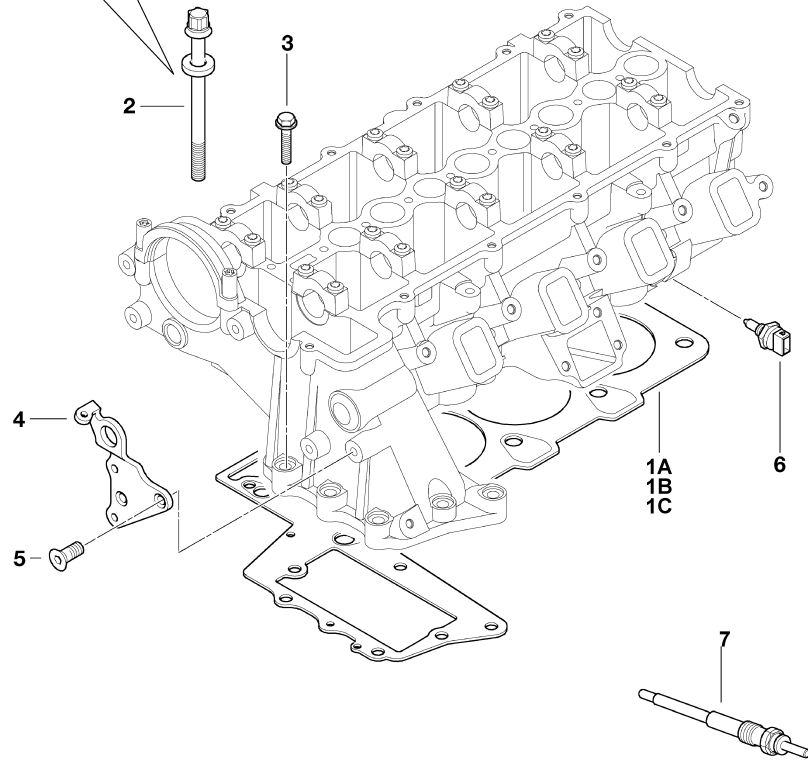
[SET SALES ITEM]
PLEASE BE NOTED THIS PART IS SUPPLIED
WITH "SET SALES UNIT (1 SET = 16 PIECES)".
16 PIECES WILL BE DELIVERED NEVERTHELESS
YOU PLACE AN ORDER OF 1 PIECE.

REF.	LEV.	PARTS NO.	DESCRIPTION	QTY						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	165001-35860	HEAD, CYLINDER	1	1	1	1				
2	1	165000-67920	BOLT, TORX M6X30	20	20	20	20				
2-1	1	165001-66900	BOLT, TORX M6X30	20	20	20	20				R
4	1	165001-39240	STUD, M7X65	5	5	5	5				
5	1	165000-67420	COVER, D=24MM	2	2	2	2				
5-1	1	165001-66880	COVER, D=24MM	2	2	2	2				R
6	1	165000-67870	PLUG, SCREW M8X1	2	2	2	2				
6-1	1	165001-59970	PLUG, SCREW M8X1	2	2	2	2				R
7	1	165000-67910	PLUG, SCREW M12X1.5	1	1	1	1				
7-1	1	165001-71670	PLUG, SCREW M12X1.5	1	1	1	1				R
8	1	165001-35970	PLUG, SCREW M14X1.5	2	2	2	2				
9	1	165000-69290	ROD, VALVE PUSH	16	16	16	16				
10	1	165000-69280	LEVER, DRAG	16	16	16	16				
11	1	165000-69320	VALVE, 25.9/5.92MM	16	16	16	16				
12	1	165000-69340	SEAL RING SET, VALVE	1	1	1	1				
13	1	165000-69330	SPRING, VALVE	16	16	16	16				
14	1	165000-69310	PLATE, SPRING UPPER	16	16	16	16				
15	1	165000-69300	COLLET, VALVE D=6	32	32	32	32				

Fig.8. CYL.HEAD ATTACHED/GLOW PLUG

[セット販売部品]
この部品はセット販売部品です。
1個のオーダーに対し、10個が供給されます。

[SET SALES ITEM]
PLEASE BE NOTED THIS PART IS SUPPLIED
WITH "SET SALES UNIT (1 SET = 10 PIECES)".
10 PIECES WILL BE DELIVERED NEVERTHELESS
YOU PLACE AN ORDER OF 1 PIECE.



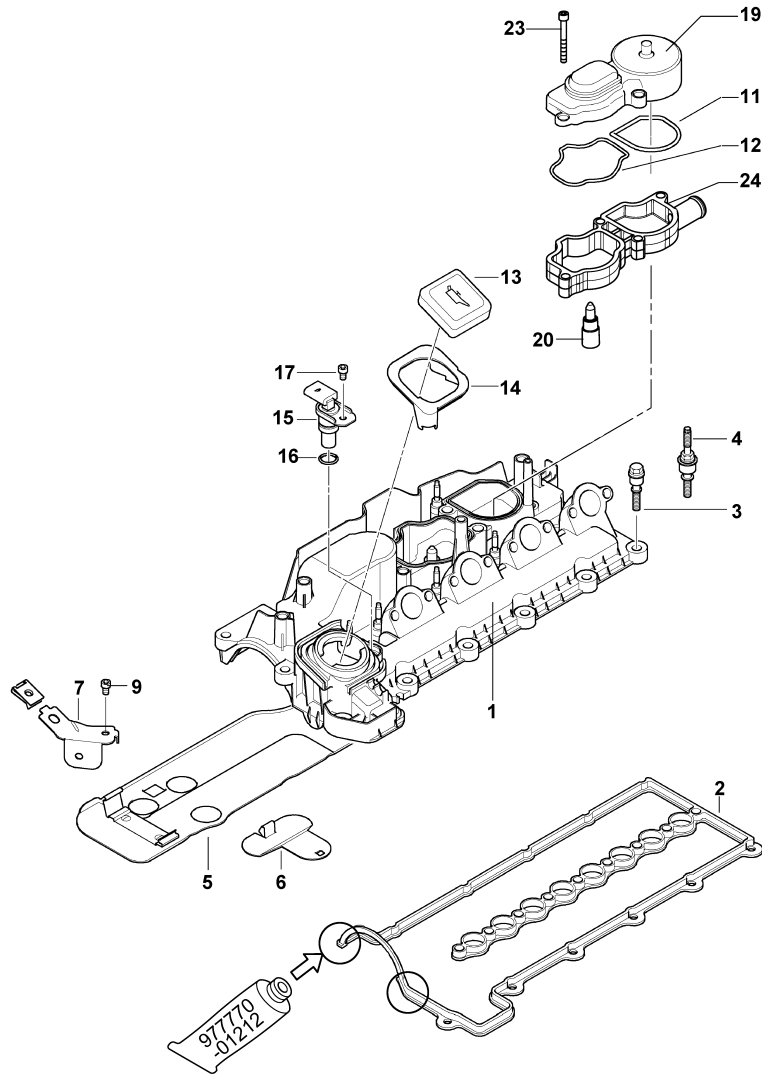
OCR10-G74700 8. CYL.HEAD ATTACHED/GLOW PLUG

(A)=4BY2-150
(B)=4BY2-180
(C)=4BY2-150Z

(D)=4BY2-180Z
(E)=
(F)=

REF.	LEV.	PARTS NO.	DESCRIPTION	Q'TY						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1A	1	165000-68080	GASKET, HEAD 1-HOLE	1	1	1	1				
1B	1	165000-68090	GASKET, HEAD 2-HOLE	1	1	1	1				
1C	1	165000-68100	GASKET, HEAD 3-HOLE	1	1	1	1				
2	1	165000-68290	BOLT, M12X1.5X147	1	1	1	1				
3	1	165001-35680	SCREW, M8X35	7	7	7	7				
4	1	165000-67990	LOOP	1	1	1	1				
5	1	165000-68000	SCREW, COUNTERSUNK	2	2	2	2				
5-1	1	165001-66910	SCREW, COUNTERSUNK	2	2	2	2				R
		(A=EZZZZZ)	(B=EZZZZZ)	(C=EZZZZZ)	(D=EZZZZZ)						
6	1	165000-70660	SENSOR, TEMPERATURE	1	1	1	1				
7	1	165000-70000	PLUG, GLOW	4	4	4	4				

Fig.9. CYLINDER HEAD COVER



OCR10-G74700 9. CYLINDER HEAD COVER

(A)=4BY2-150
(B)=4BY2-180
(C)=4BY2-150Z

(D)=4BY2-180Z
(E)=
(F)=

REF.	LEV.	PARTS NO.	DESCRIPTION	Q'TY						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	120650-11510	COVER, CYLINDER HEAD	1	1	1	1				
2	1	165000-68190	GASKET, PROFILE	1	1	1	1				
3	1	165000-67820	ELEMENT, OUTER	1	1	1	1				
3-1	1	165001-59960	ELEMENT, OUTER	1	1	1	1				R
		(A=EZZZZZ)	(B=EZZZZZ)	(C=EZZZZZ)	(D=EZZZZZ)						
4	1	165001-39230	ELEMENT, INNER	1	1	1	1				
5	1	165000-68140	SHIELD, HEAT PROTECT	1	1	1	1				
6	1	165000-67970	COVER	1	1	1	1				
7	1	165000-68030	HOLDER, COVER	1	1	1	1				
9	1	165000-67360	SCREW, M6X12	1	1	1	1				
9-1	1	165001-66870	SCREW, M6X12	1	1	1	1				R
		(A=EZZZZZ)	(B=EZZZZZ)	(C=EZZZZZ)	(D=EZZZZZ)						
11	1	165000-68160	GASKET, PROFILE	1	1	1	1				
12	1	165000-68170	GASKET, PROFILE	1	1	1	1				
13	1	165000-71020	COVER	1	1	1	1				
14	1	165000-68020	GASKET, PROFILE	1	1	1	1				
15	1	165000-70700	GENERATOR, PULSE	1	1	1	1				
16	1	165000-70730	O-RING, 17X2.8	1	1	1	1				
17	1	165000-68120	BOLT, PLASTIC M5X19.5	1	1	1	1				
17-1	1	165001-66920	BOLT, PLASTIC M5X19.5	1	1	1	1				R
		(A=EZZZZZ)	(B=EZZZZZ)	(C=EZZZZZ)	(D=EZZZZZ)						
19	2	120650-11410	SPACER, ELEMENT	1	1	1	1				
20	2	120650-11420	PIN, REFERENCE	1	1	1	1				
23	1	120640-01500	CAP BOLT, 6X45	4	4	4	4				
24	1	120650-11410	SPACER, ELEMENT	1	1	1	1				

Fig.10. INTAKE MANIFOLD

(A)=4BY2-150
(B)=4BY2-180
(C)=4BY2-150Z

(D)=4BY2-180Z
(E)=
(F)=

REF.	LEV.	PARTS NO.	DESCRIPTION	Q'TY						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	165000-69880	MANIFOLD ASSY, INT.	1	1	1	1				
2	1	165000-69860	GASKET, PROFILE	4	4	4	4				
3	1	165000-69810	GASKET, PROFILE	4	4	4	4				
4	1	165000-69800	SEALING, RUBBER	1	1	1	1				
5	1	165000-69830	FASTEN, ELEMENT 6X42	8	8	8	8				
6	1	165000-69820	MOUNTING, RUBBER	5	5	5	5				
7	1	165000-69840	RING, BACKUP	5	5	5	5				
8	1	165001-35790	NUT, FLANGE M7	5	5	5	5				
9	1	165000-69850	BOX, VACUMM	1	1	1	1				

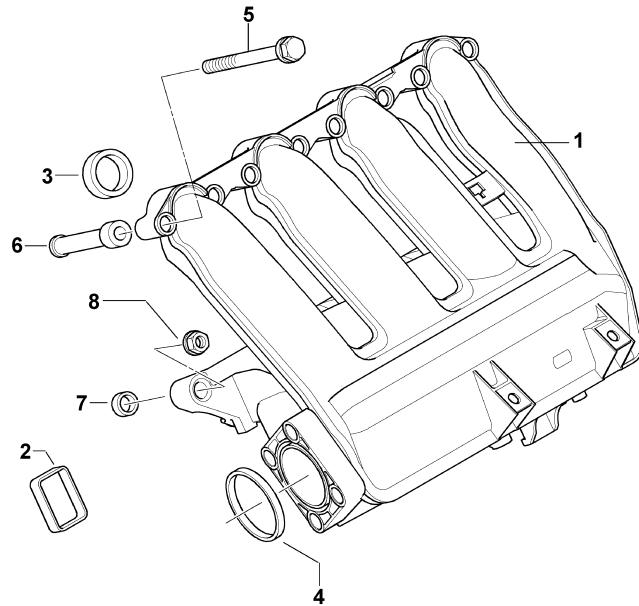
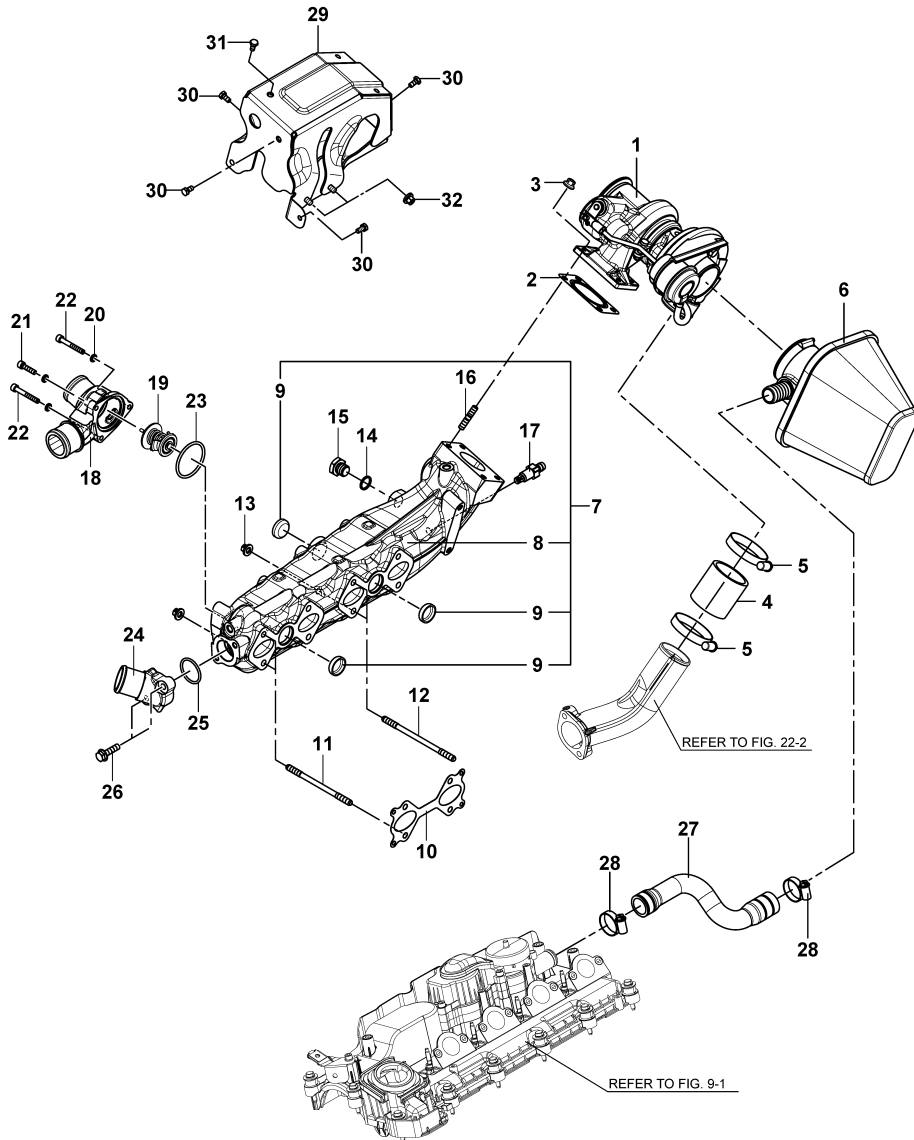


Fig.11. TURBOCHARGER

(A)=4BY2-150
(B)=4BY2-180
(C)=4BY2-150Z

(D)=4BY2-180Z
(E)=
(F)=

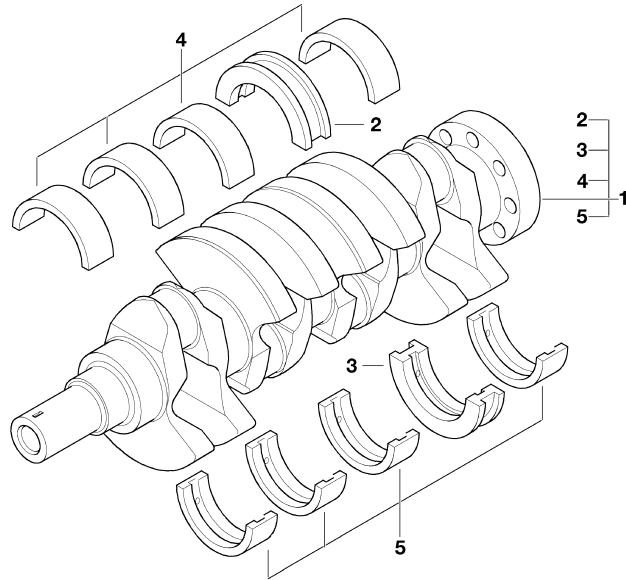


REF.	LEV.	PARTS NO.	DESCRIPTION	QTY						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	120651-18050	TURBINE, TD04HL13T-5	1	1	1	1				
2	1	120660-18200	GASKET, TURBINE IN	1	1	1	1				
3	1	120650-13070	FLANGE NUT, 8	4	4	4	4				
4	1	120650-18900	HOSE, COMPRESSOR OUT	1	1	1	1				
5	1	120650-49720	CLAMP, HOSE 40-60 C	2	2	2	2				
6	1	120650-12510	FILTER, AIR	1	1	1	1				
7	1	120650-13160	MANIFOLD ASSY, EXH.	1	1	1	1				
8	2	120650-13040	MANIFOLD, EXHAUST	1	1	1	1				
9	2	120650-13150	PLUG, 28	3	3	3	3				
10	1	120640-00040	GASKET, EXH.MANIFOLD	2	2	2	2				
11	1	120650-13130	STUD,BOLT 8 X 129	4	4	4	4				
12	1	120650-13140	STUD,BOLT 8 X 144	4	4	4	4				
13	1	120650-13070	FLANGE NUT, 8	8	8	8	8				
14	1	120640-01260	GASKET, 17X1.5	1	1	1	1				
15	1	120650-13330	PLUG, G 3/8 HEAT R	1	1	1	1				
16	1	120650-13090	STUD,BOLT 8 TURBO	4	4	4	4				
17	1	120650-49610	COCK, DRAIN	1	1	1	1				
18	1	120650-44560	COVER,THERMOSTAT	1	1	1	1				
19	1	120650-44570	THERMOSTAT	1	1	1	1				
20	1	120640-02220	WASHER, 6	3	3	3	3				
21	1	120640-01590	CAP BOLT, 6X25	1	1	1	1				
22	1	120640-01500	CAP BOLT, 6X45	2	2	2	2				
23	1	120650-44580	O-RING, THERMOSTAT	1	1	1	1				
24	1	120650-44540	ELBOW, EXHAUST MANIF	1	1	1	1				
25	1	120650-44590	O-RING, ELBOW EXHAUS	1	1	1	1				
26	1	120640-02130	FLANGE BOLT, 8X30	2	2	2	2				
27	1	120650-11430	HOSE, BLOWBY	1	1	1	1				
28	1	120640-01030	CLAMP, HOSE 40X13	2	2	2	2				
29	1	120651-18300	PROTECTOR, HEAT TURB	1	1	1	1				
30	1	120640-01460	BOLT, 6X12	4	4	4	4				
31	1	120640-02080	FLANGE BOLT, 6X16	1	1	1	1				
32	1	120640-00320	FLANGE NUT, 6	2	2	2	2				

Fig.12. CRANKSHAFT WITH BEARING SHELLS

(A)=4BY2-150
(B)=4BY2-180
(C)=4BY2-150Z

(D)=4BY2-180Z
(E)=
(F)=



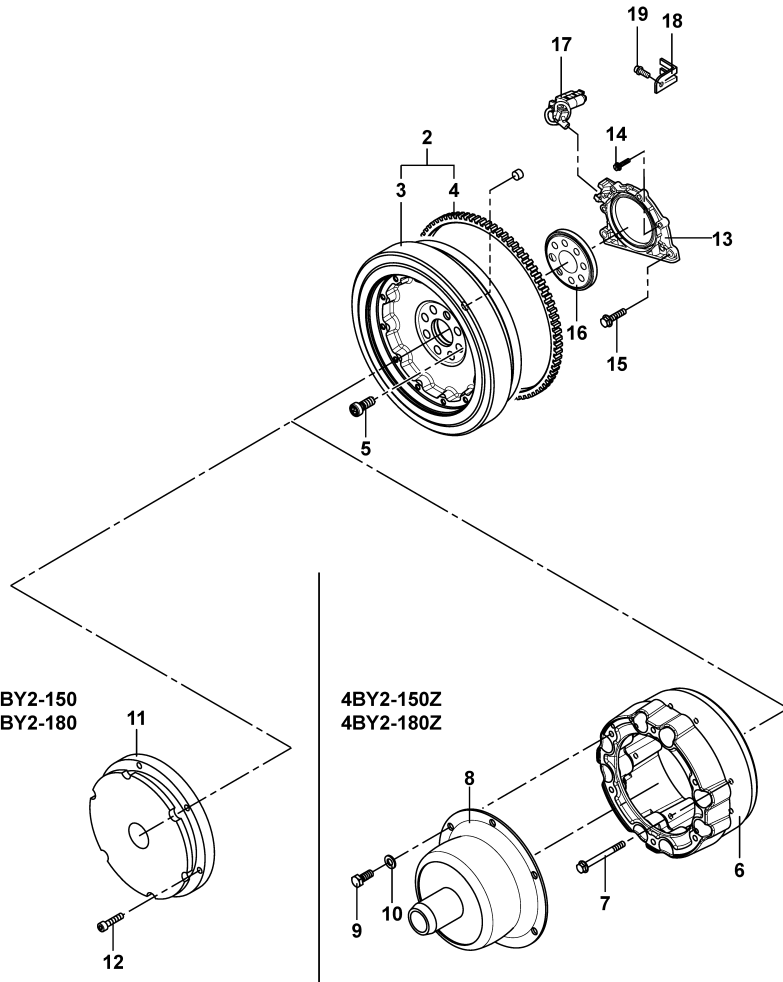
REF.	LEV.	PARTS NO.	DESCRIPTION	QTY						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	165000-68830	CRANKSHAFT ASSY	1	1	1	1				
2AG	1	165000-68650	GUIDE, SHILL 60.00MM	1	1	1	1				2
2AW	1	165000-68660	GUIDE, SHILL 60.00MM	1	1	1	1				3
2AY	1	165000-68640	GUIDE, SHILL 60.00MM	1	1	1	1				1
2BG	1	165000-68680	GUIDE, 59.75MM +0.25	1	1	1	1				2
2BW	1	165000-68690	GUIDE, 59.75MM +0.25	1	1	1	1				3
2BY	1	165000-68670	GUIDE, 59.75MM +0.25	1	1	1	1				1
2CG	1	165000-68710	GUIDE, 59.50MM +0.50	1	1	1	1				2
2CW	1	165000-68720	GUIDE, 59.50MM +0.50	1	1	1	1				3
2CY	1	165000-68700	GUIDE, 59.50MM +0.50	1	1	1	1				1
3AG	1	165000-68740	GUIDE, SHILL 60.00MM	1	1	1	1				2
3AW	1	165000-68750	GUIDE, SHILL 60.00MM	1	1	1	1				3
3AY	1	165000-68730	GUIDE, SHILL 60.00MM	1	1	1	1				1
3BG	1	165000-68770	GUIDE, 59.75MM +0.25	1	1	1	1				2
3BW	1	165000-68780	GUIDE, 59.75MM +0.25	1	1	1	1				3
3BY	1	165000-68760	GUIDE, 59.75MM +0.25	1	1	1	1				1
3CG	1	165000-68800	GUIDE, 59.50MM +0.50	1	1	1	1				2
3CW	1	165000-68810	GUIDE, 59.50MM +0.50	1	1	1	1				3
3CY	1	165000-68790	GUIDE, 59.50MM +0.50	1	1	1	1				1
4AG	1	165000-68560	SHELL, BEARING 60.00	4	4	4	4				2
4AW	1	165000-68570	SHELL, BEARING 60.00	4	4	4	4				3
4AY	1	165000-68550	SHELL, BEARING 60.00	4	4	4	4				1
4BG	1	165000-68590	SHELL, 59.75MM +0.25	4	4	4	4				2
4BW	1	165000-68600	SHELL, 59.75MM +0.25	4	4	4	4				3
4BY	1	165000-68580	SHELL, 59.75MM +0.25	4	4	4	4				1
4CG	1	165000-68620	SHELL, 59.50MM +0.50	4	4	4	4				2
4CW	1	165000-68630	SHELL, 59.50MM +0.50	4	4	4	4				3
4CY	1	165000-68610	SHELL, 59.50MM +0.50	4	4	4	4				1
5AG	1	165000-68470	SHELL, BEARING 60.00	4	4	4	4				2
5AW	1	165000-68480	SHELL, BEARING 60.00	4	4	4	4				3
5AY	1	165000-68460	SHELL, BEARING 60.00	4	4	4	4				1
5BG	1	165000-68500	SHELL, 59.75MM +0.25	4	4	4	4				2
5BW	1	165000-68510	SHELL, 59.75MM +0.25	4	4	4	4				3
5BY	1	165000-68490	SHELL, 59.75MM +0.25	4	4	4	4				1
5CG	1	165000-68530	SHELL, 59.50MM +0.50	4	4	4	4				2
5CW	1	165000-68540	SHELL, 59.50MM +0.50	4	4	4	4				3
5CY	1	165000-68520	SHELL, 59.50MM +0.50	4	4	4	4				1

Remarks
(1)YELLOW
(2)GREEN
(3)WHITE

Fig.13. FLYWHEEL & CYL.MOUNTING PARTS

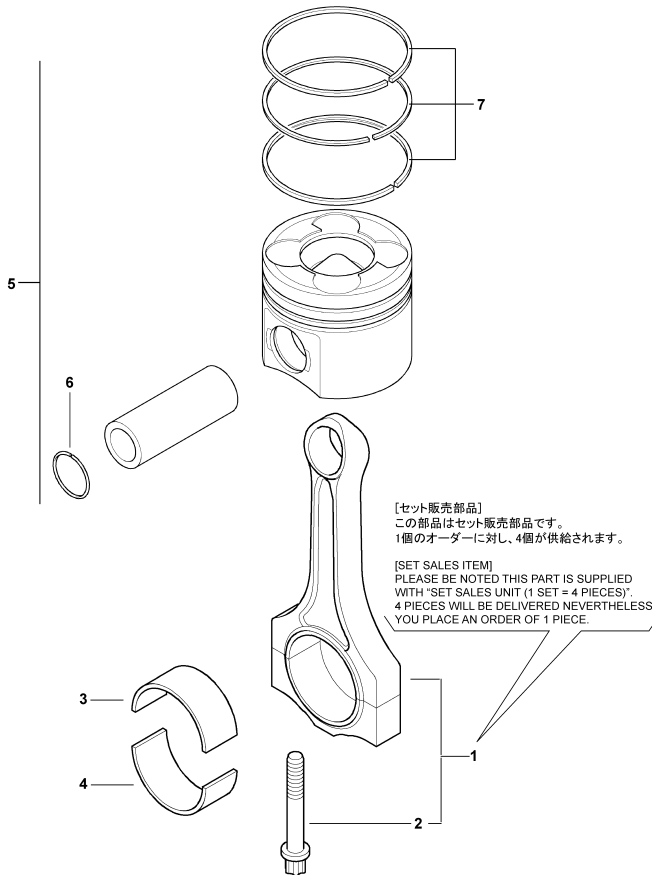
(A)=4BY2-150
(B)=4BY2-180
(C)=4BY2-150Z

(D)=4BY2-180Z
(E)=
(F)=



REF.	LEV.	PARTS NO.	DESCRIPTION	Q'TY						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
2	1	120651-21400	FLYWHEEL ASSY	1	1	1	1				
3	2	120651-21410	FLYWHEEL	1	1	1	1				
4	2	120650-21420	GEAR, RING	1	1	1	1				
5	1	120640-00240	CAP BOLT, FLYWHEEL	8	8	8	8				
6	1	120651-21470	FLYWHEEL ADAPTER					1	1		
7	1	120640-01920	FLANGE BOLT, 8X70					8	8		
8	1	120650-21500	COUPLING, DAMPER					1	1		
9	1	120640-01560	BOLT, 10X25					6	6		
10	1	120640-02210	WASHER, 10					6	6		
11	1	120652-21603	COUPLING, DAMPER DS22	1	1						
12	1	120640-01540	CAP BOLT, 8X35	6	6						
13	1	165000-68440	CAP, W/SEAL	1	1	1	1				
14	1	165000-66930	BOLT, HEX M6 25	4	4	4	4				
15	1	165000-67120	BOLT, HEX M8 28	2	2	2	2				
15-1	1	165001-66850	BOLT, HEX M8X28	2	2	2	2				R
		(A=EZZZZZ)	(B=EZZZZZ)	(C=EZZZZZ)	(D=EZZZZZ)						
16	1	165000-93310	WHEEL, GENERATOR	1	1	1	1				
17	1	165001-35910	SENSOR, CRANKSHAFT	1	1	1	1				
18	1	165000-70690	TERMINAL, PLUG	1	1	1	1				
18-1	1	165001-71750	TERMINAL, PLUG	1	1	1	1				R
		(A=EZZZZZ)	(B=EZZZZZ)	(C=EZZZZZ)	(D=EZZZZZ)						
19	1	165000-67360	SCREW, M6X12	1	1	1	1				
19-1	1	165001-66870	SCREW, M6X12	1	1	1	1				R
		(A=EZZZZZ)	(B=EZZZZZ)	(C=EZZZZZ)	(D=EZZZZZ)						

Fig.14. PISTON & CONNECTING ROD



Remarks

- (1)COLOR BLUE S MARK
ONLY IN CONJUNCTION WITH
P/N 165000-69000
- (2)COLOR RED S MARK
ONLY IN CONJUNCTION WITH
P/N 165000-69010
- (3)COLOR BLUE S MARK
ONLY IN CONJUNCTION WITH
P/N 165000-69020
- (4)COLOR RED S MARK
ONLY IN CONJUNCTION WITH

OCR10-G74700 14. PISTON & CONNECTING ROD

(A)=4BY2-150
(B)=4BY2-180
(C)=4BY2-150Z

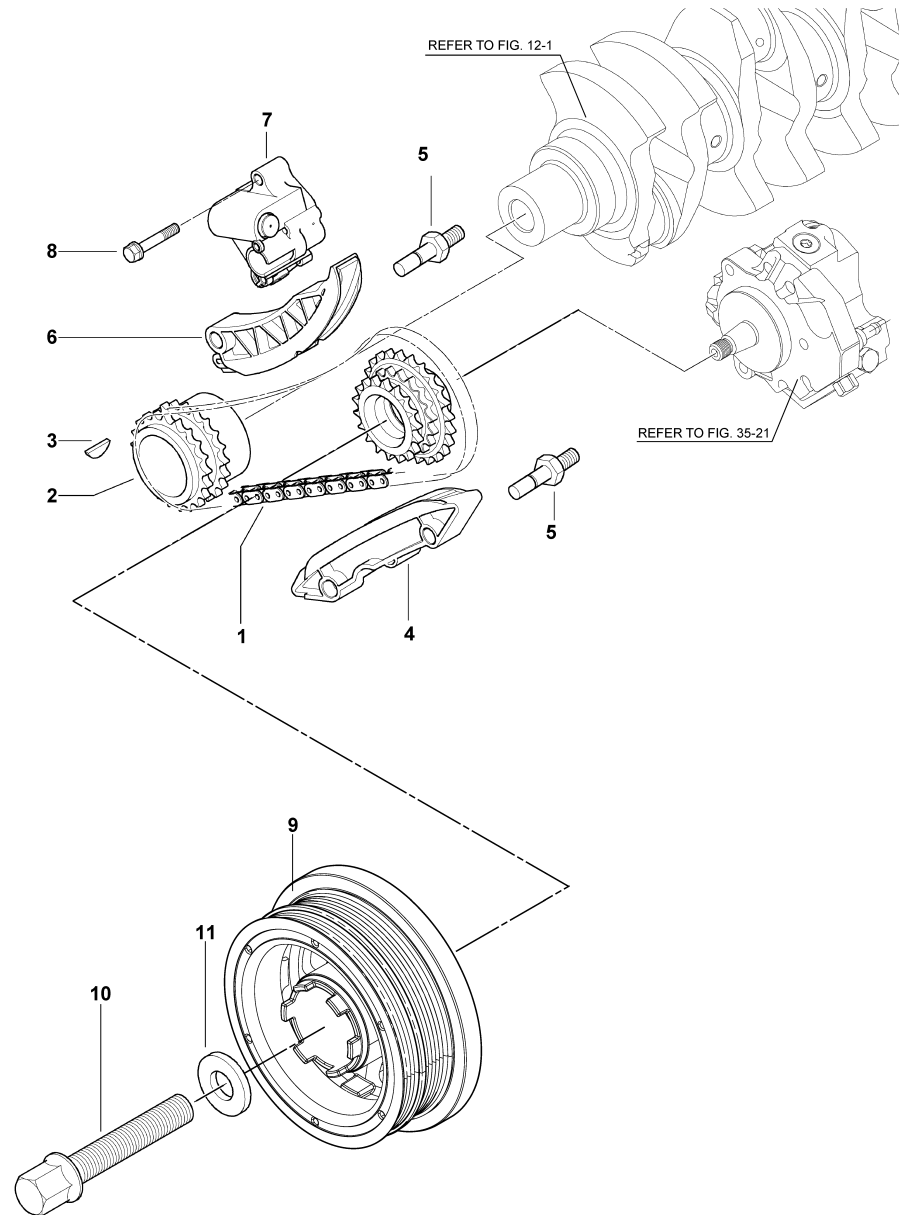
(D)=4BY2-180Z
(E)=
(F)=

REF.	LEV.	PARTS NO.	DESCRIPTION	Q'TY						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	165000-68920	ROD, RMFD CONNECTING	1	1	1	1				
2	2	165000-68930	BOLT, CONNECTING ROD	8	8	8	8				
3A	1	165000-68950	SHELL, BEARING 45.00	4	4	4	4				1
3A-1	1	165001-71680 (A=EZZZZZ) (B=EZZZZZ) (C=EZZZZZ) (D=EZZZZZ)	SHELL, BEARING 45.00	4	4	4	4				S D
3B	1	165000-68940	SHELL, BEARING 45.00	4	4	4	4				2
3B-1	1	165001-71680 (A=EZZZZZ) (B=EZZZZZ) (C=EZZZZZ) (D=EZZZZZ)	SHELL, BEARING 45.00	4	4	4	4				S D
3C	1	165000-68970	SHELL, 44.75MM +0.25	4	4	4	4				3
3C-1	1	165001-71690 (A=EZZZZZ) (B=EZZZZZ) (C=EZZZZZ) (D=EZZZZZ)	SHELL, 44.75MM +0.25	4	4	4	4				S E
3D	1	165000-68960	SHELL, 44.75MM +0.25	4	4	4	4				4
3D-1	1	165001-71690 (A=EZZZZZ) (B=EZZZZZ) (C=EZZZZZ) (D=EZZZZZ)	SHELL, 44.75MM +0.25	4	4	4	4				S E
3E	1	165000-68990	SHELL, 44.50MM +0.50	4	4	4	4				5
3E-1	1	165001-71700 (A=EZZZZZ) (B=EZZZZZ) (C=EZZZZZ) (D=EZZZZZ)	SHELL, 44.50MM +0.50	4	4	4	4				S F
3F	1	165000-68980	SHELL, 44.50MM +0.50	4	4	4	4				6
3F-1	1	165001-71700 (A=EZZZZZ) (B=EZZZZZ) (C=EZZZZZ) (D=EZZZZZ)	SHELL, 44.50MM +0.50	4	4	4	4				S F
4A	1	165000-69000	SHELL, BEARING 45.00	4	4	4	4				7
4A-1	1	165001-71710 (A=EZZZZZ) (B=EZZZZZ) (C=EZZZZZ) (D=EZZZZZ)	SHELL, BEARING 45.00	4	4	4	4				S G
4B	1	165000-69010	SHELL, BEARING 45.00	4	4	4	4				8
4B-1	1	165001-71710 (A=EZZZZZ) (B=EZZZZZ) (C=EZZZZZ) (D=EZZZZZ)	SHELL, BEARING 45.00	4	4	4	4				S G
4C	1	165000-69020	SHELL, 44.75MM +0.25	4	4	4	4				9
4C-1	1	165001-71720 (A=EZZZZZ) (B=EZZZZZ) (C=EZZZZZ) (D=EZZZZZ)	SHELL, 44.75MM +0.25	4	4	4	4				S H
4D	1	165000-69030	SHELL, 44.75MM +0.25	4	4	4	4				A
4D-1	1	165001-71720 (A=EZZZZZ) (B=EZZZZZ) (C=EZZZZZ) (D=EZZZZZ)	SHELL, 44.75MM +0.25	4	4	4	4				S H
4E	1	165000-69040	SHELL, 44.50MM +0.50	4	4	4	4				B
4E-1	1	165001-71730 (A=EZZZZZ) (B=EZZZZZ) (C=EZZZZZ) (D=EZZZZZ)	SHELL, 44.50MM +0.50	4	4	4	4				S I
4F	1	165000-69050	SHELL, 44.50MM +0.50	4	4	4	4				C
4F-1	1	165001-71730 (A=EZZZZZ) (B=EZZZZZ) (C=EZZZZZ) (D=EZZZZZ)	SHELL, 44.50MM +0.50	4	4	4	4				S I
5	1	165000-69100	PISTON, MAHLE	4	4	4	4				
6	2	165000-69070	RING, LOCK	8	8	8	8				
7	2	165000-69080	RING SET, PISTON	4	4	4	4				
7A	1	165000-69090	RING SET, PISTON .25	4	4	4	4				

Fig.15. TIMING CHAIN LOWER P/DAMPER

(A)=4BY2-150
(B)=4BY2-180
(C)=4BY2-150Z

(D)=4BY2-180Z
(E)=
(F)=



REF.	LEV.	PARTS NO.	DESCRIPTION	Q'TY						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	165000-70260	CHAIN, TIMING	1	1	1	1				
1-1	1	165001-60000	CHAIN, TIMING	1	1	1	1				R
		(A=EZZZZZ) (B=EZZZZZ) (C=EZZZZZ) (D=EZZZZZ)									
2	1	165001-35990	SPROCKET, CRANKSHAFT	1	1	1	1				
3	1	165000-67430	KEY, WOODRUFF 5X6.5	1	1	1	1				
4	1	165000-70230	RAIL, GUIDE	1	1	1	1				
5	1	165000-67730	BOLT, BEARING	3	3	3	3				
6	1	165000-70220	TENSIONER, CHAIN	1	1	1	1				
7	1	165000-70250	TENSIONER, CHAIN	1	1	1	1				
8	1	165000-67110	BOLT, HEX M6 30	3	3	3	3				
9	1	165001-35660	VIBRATION DAMPER	1	1	1	1				
10	1	165000-68890	BOLT, M18X1.5X85.5	1	1	1	1				
11	1	165000-68880	WASHER, FLAT	1	1	1	1				

Fig.19. LUB.OIL FILTER

(A)=4BY2-150
(B)=4BY2-180
(C)=4BY2-150Z

(D)=4BY2-180Z
(E)=
(F)=

REF.	LEV.	PARTS NO.	DESCRIPTION	Q'TY						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	165000-69490	FILTER ASSY, OIL	1	1	1	1				
2	2	165000-69520	ELEMENT, OIL FILTER	1	1	1	1				
3	2	165000-69510	COVER, OIL FILTER	1	1	1	1				
4	3	165000-69440	O-RING, 18.64 3.53MM	1	1	1	1				
5	3	165000-69460	O-RING, 7.0 2.5MM	1	1	1	1				
7	2	165001-35740	SWITCH, OIL PRESSURE	1	1	1	1				
8	2	165000-69500	GASKET, PROFILE	1	1	1	1				
9	1	165000-66950	BOLT, HEX M8X45	3	3	3	3				
10	1	165000-69530	EXCHANGER, HEAT	1	1	1	1				
11	2	165000-69540	GASKET, PROFILE	1	1	1	1				
12	2	165000-69470	SCREW	3	3	3	3				

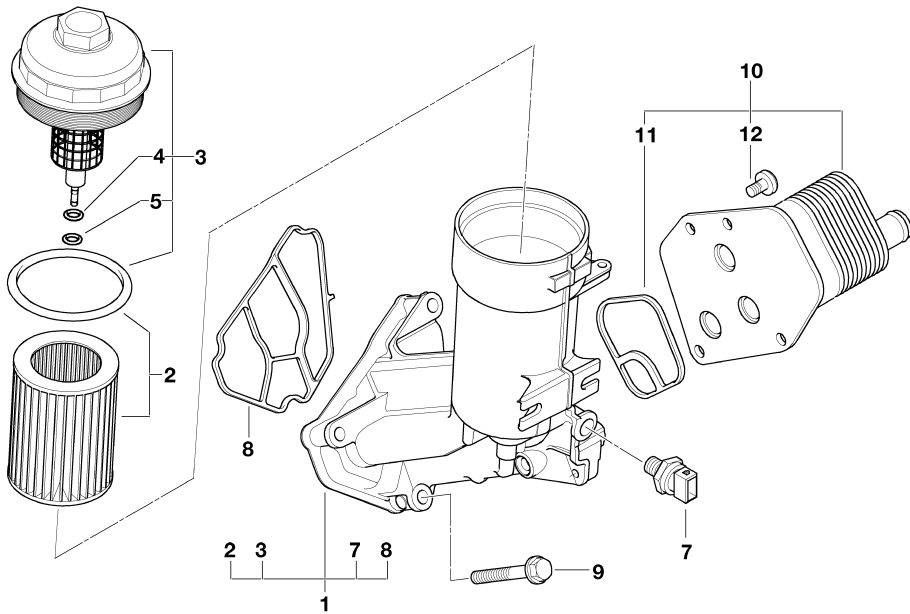


Fig.20. ROTARY PUMP(OPTION)

OCR10-G74700 20. ROTARY PUMP(OPTION)

(A)=4BY2-150
(B)=4BY2-180
(C)=4BY2-150Z

(D)=4BY2-180Z
(E)=
(F)=

REF.	LEV.	PARTS NO.	DESCRIPTION	Q'TY						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	124413-39100	PUMP, OIL SUMP	1	1	1	1				
2	1	120130-39990	HOSE,OIL DRAIN 3M	1	1	1	1				

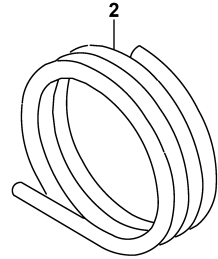
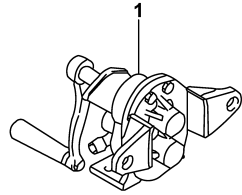
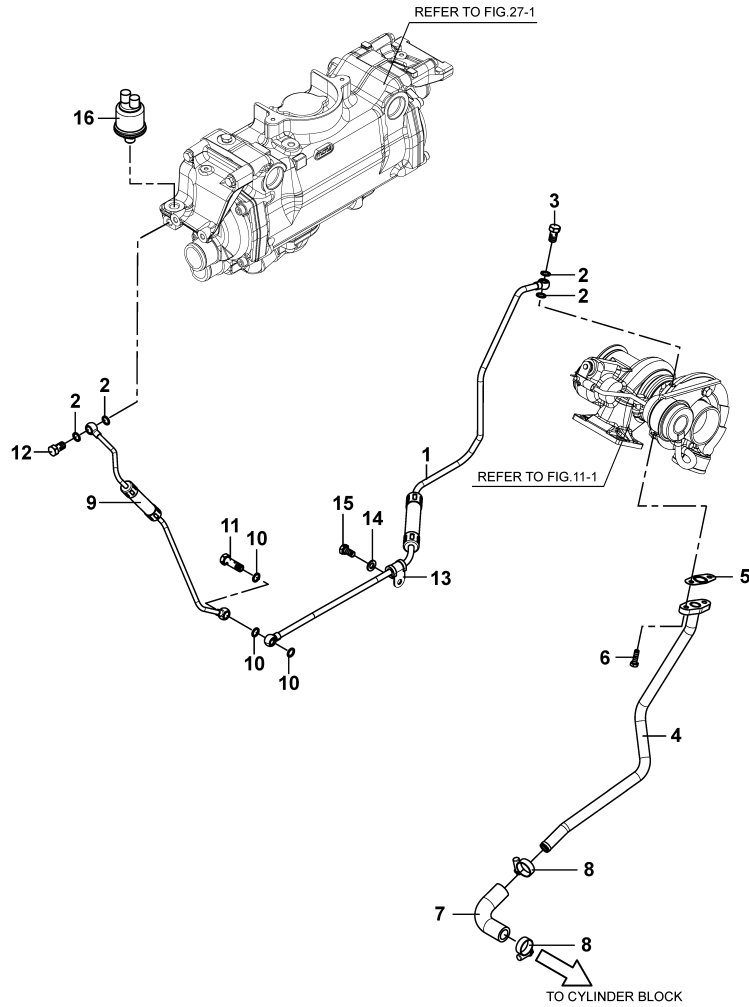


Fig.21. LUB.OIL PIPE(TURBOCHARGER)

(A)=4BY2-150
(B)=4BY2-180
(C)=4BY2-150Z

(D)=4BY2-180Z
(E)=
(F)=

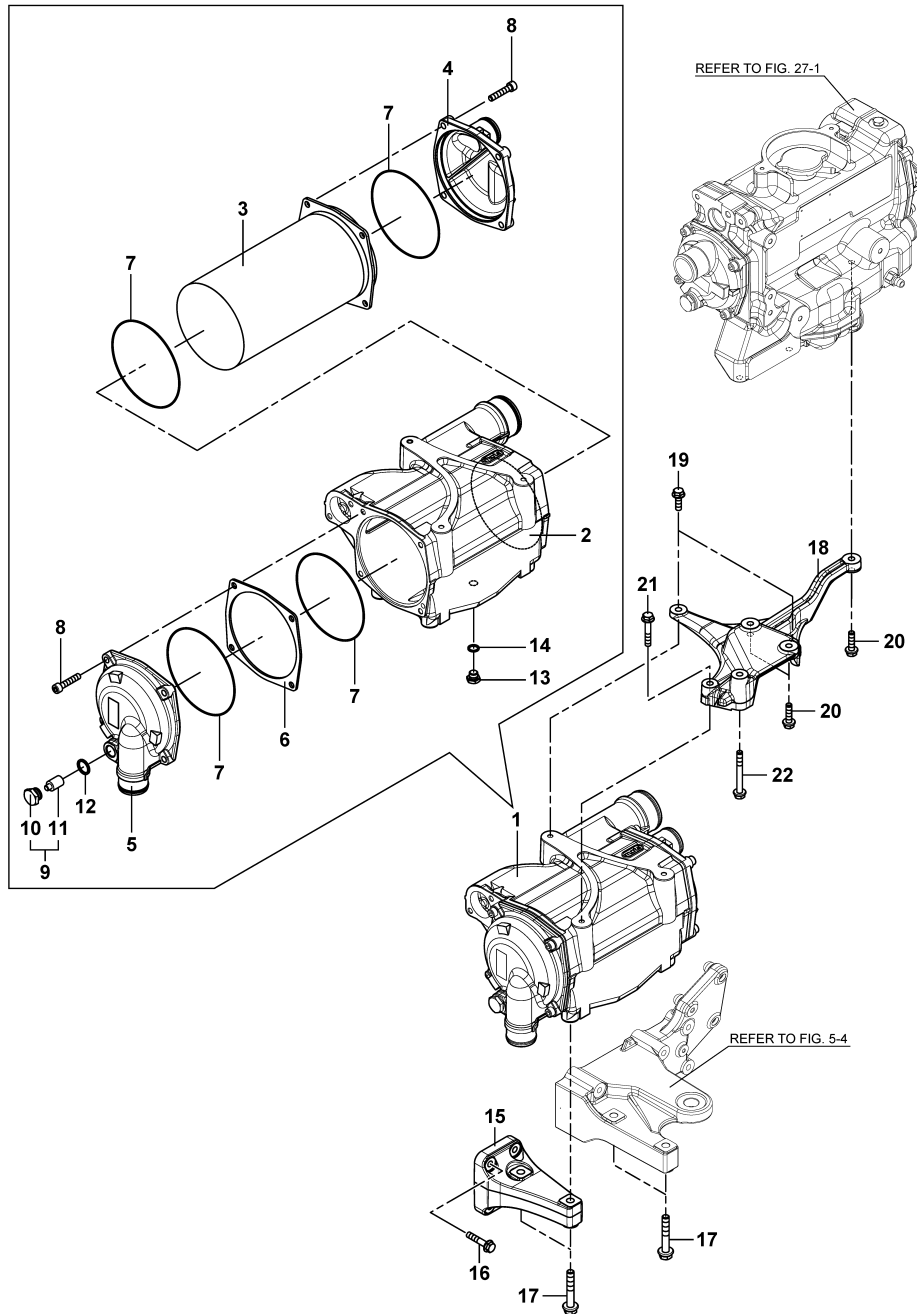


REF.	LEV.	PARTS NO.	DESCRIPTION	Q'TY						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	120651-39610	PIPE, OIL TURBO IN	1	1	1	1				
2	1	120640-01210	GASKET, 10X1	4	4	4	4				
3	1	120640-01410	BANJO BOLT, 10	1	1	1	1				
4	1	120651-39620	PIPE, OIL TURBO OUT	1	1	1	1				
5	1	120650-39630	GASKET, OIL RETURN	1	1	1	1				
6	1	120640-01470	BOLT, 6X16	2	2	2	2				
7	1	120650-39250	HOSE, TURBINE RETURN	1	1	1	1				
8	1	120640-01020	CLAMP, HOSE 16-27	2	2	2	2				
9	1	120651-39350	PIPE, OIL SENSOR	1	1	1	1				
10	1	120640-01210	GASKET, 10X1	3	3	3	3				
11	1	120650-39290	BANJO BOLT,10 DOUBLE	1	1	1	1				
12	1	120640-01410	BANJO BOLT, 10	1	1	1	1				
13	1	120650-85410	CLAMP, PIPE 10	1	1	1	1				
14	1	120640-02230	WASHER, 8	1	1	1	1				
15	1	120640-01510	BOLT, 8X16	1	1	1	1				
16	1	120650-39270	SENSOR, OIL PRESSURE	1	1	1	1				

Fig.23. AIR COOLER(INNER PARTS)

(A)=4BY2-150
(B)=4BY2-180
(C)=4BY2-150Z

(D)=4BY2-180Z
(E)=
(F)=

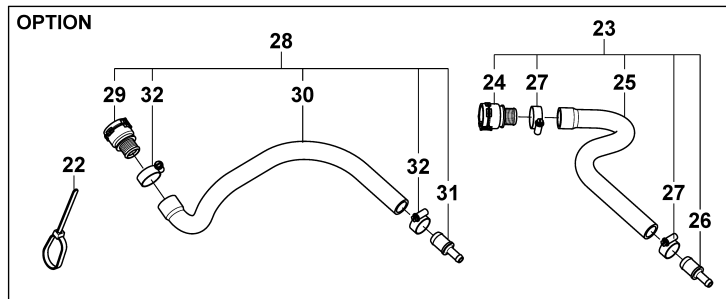
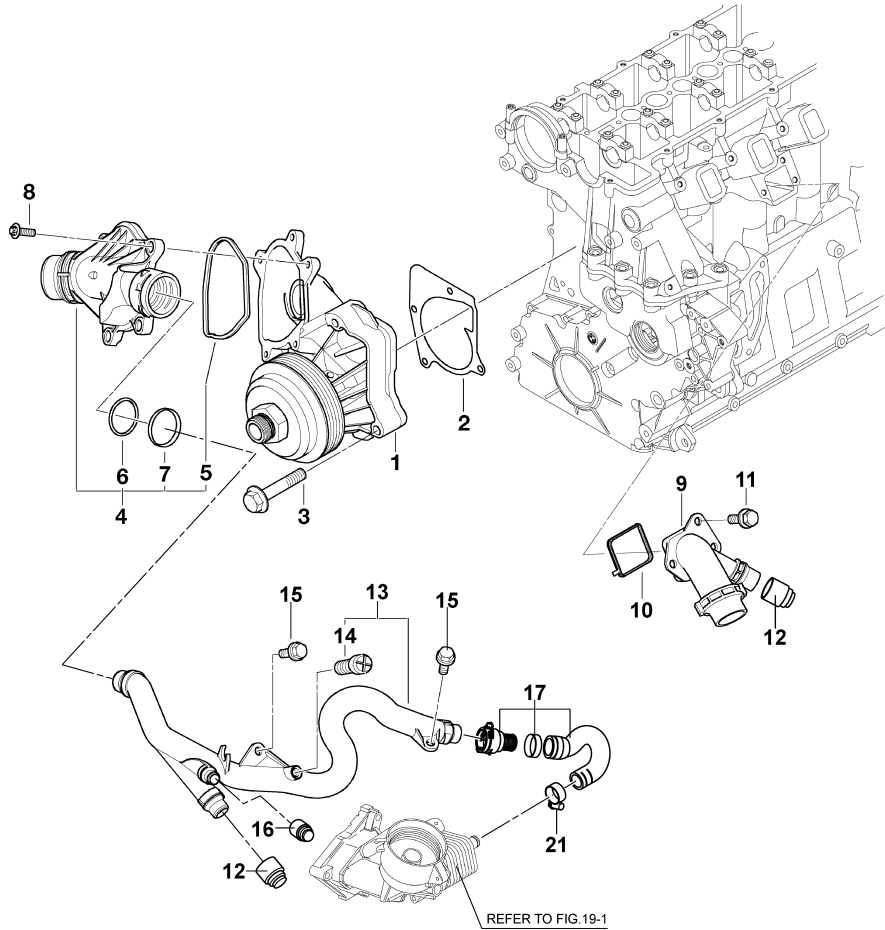


REF.	LEV.	PARTS NO.	DESCRIPTION	QTY						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	120651-18400	COOLER ASSY, AIR	1	1	1	1				
2	2	120651-18410	HOUSING, CAC 4BY	1	1	1	1				
3	2	120650-18420	TUBE STACK, 4BY	1	1	1	1				
4	2	120650-18430	COVER, CAC REAR	1	1	1	1				
5	2	120650-18440	COVER, CAC FRONT	8	8	8	8				
6	2	120650-18450	SPACER, CAC	1	1	1	1				
7	2	120650-18470	O-RING, CAC	4	4	4	4				
8	2	120650-18480	BOLT, M8X40	8	8	8	8				
9	2	120650-18490	ZING	1	1	1	1				
10	3	120650-18530	ZINC PLAG	1	1	1	1				
11	3	120650-18540	ZINC ANODE	1	1	1	1				
12	2	120650-18500	GASKET, CUPPER	1	1	1	1				
13	2	120650-18510	PLUG, DRAIN	1	1	1	1				
14	2	120650-18520	GASKET, CUPPER	1	1	1	1				
15	1	120650-18460	BRACKET, CAC REAR	1	1	1	1				
16	1	120640-01870	FLANGE BOLT, 8X40	4	4	4	4				
17	1	120640-01990	FLANGE BOLT, 10X60	4	4	4	4				
18	1	120650-44400	BRACKET, HEAT EXCHAN	1	1	1	1				
19	1	120640-02150	FLANGE BOLT, 8X25	2	2	2	2				
20	1	120640-02130	FLANGE BOLT, 8X30	3	3	3	3				
21	1	120640-02160	FLANGE BOLT, 8X45	1	1	1	1				
22	1	120640-01920	FLANGE BOLT, 8X70	1	1	1	1				

Fig.24. WATER PUMP

(A)=4BY2-150
(B)=4BY2-180
(C)=4BY2-150Z

(D)=4BY2-180Z
(E)=
(F)=



REF.	LEV.	PARTS NO.	DESCRIPTION	QTY						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	165001-35720	PUMP, RMFD WATER	1	1	1	1				
2	1	165000-69720	GASKET, STEEL	1	1	1	1				
3	1	165000-69690	SCREW, TORX M7X38	4	4	4	4				
4	1	165001-35710	THERMOSTAT ASSY	1	1	1	1				
5	2	165000-69650	GASKET, PROFILE	1	1	1	1				
6	2	165000-69660	O-RING	1	1	1	1				
7	2	165000-69670	RING, BACKUP	1	1	1	1				
8	1	165000-69640	SCREW, TORX M6X20	4	4	4	4				
9	1	165001-35800	CONNECTOR	1	1	1	1				
10	1	165000-67960	GASKET, PROFILE	1	1	1	1				
11	1	165000-66930	BOLT, HEX M6 25	3	3	3	3				
12	1	120650-49390	COUPLING, QUICK	2	2	2	2				
13	1	165000-93330	PIPE, RETURN	1	1	1	1				
14	2	165000-69780	SCREW, VENT	1	1	1	1				
15	1	165000-69360	SCREW, COLLAR M6X18	2	2	2	2				
15-1	1	165001-59980	SCREW, COLLAR M6X18	2	2	2	2				R
		(A=EZZZZZ)	(B=EZZZZZ)	(C=EZZZZZ)	(D=EZZZZZ)						
16	1	120650-49380	COUPLING, QUICK	1	1	1	1				
17	1	120650-49400	HOSE ASSY, OIL COOLER	1	1	1	1				
21	1	120640-01020	CLAMP, HOSE 16-27	1	1	1	1				
22	1	120640-09130	TIE, STRAP 550	1	1	1	1				
23	1	120650-49850	HOSE ASSY, HEATER SU	1	1	1	1				
24	2	120650-49310	COUPLING, RAPID	1	1	1	1				
25	2	120650-49810	HOSE, HEATER SUPPLY	1	1	1	1				
26	2	120650-49830	HOSE, RESTRICTOR	1	1	1	1				
27	2	23000-028000	CLAMP 28	2	2	2	2				
28	1	120650-49860	HOSE ASSY, HEATER RE	1	1	1	1				
29	2	120650-49310	COUPLING, RAPID	1	1	1	1				
30	2	120650-49820	HOSE, HEATER RETURN	1	1	1	1				
31	2	120650-49830	HOSE, RESTRICTOR	1	1	1	1				
32	2	23000-028000	CLAMP 28	2	2	2	2				

Fig.25. COOLING SEA WATER PUMP

OCR10-G74700 25. COOLING SEA WATER PUMP

(A)=4BY2-150
(B)=4BY2-180
(C)=4BY2-150Z

(D)=4BY2-180Z
(E)=
(F)=

REF.	LEV.	PARTS NO.	DESCRIPTION	Q'TY						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	120650-42300	PUMP, SEAWATER ASSY	1	1	1	1				
3	2	120650-42310	IMPELLER, PUMP	1	1	1	1				
17	1	120640-01550	TORX BOLT E10X80	3	3	3	3				
18	1	120650-42360	V-BELT, 4PK 964	1	1	1	1				

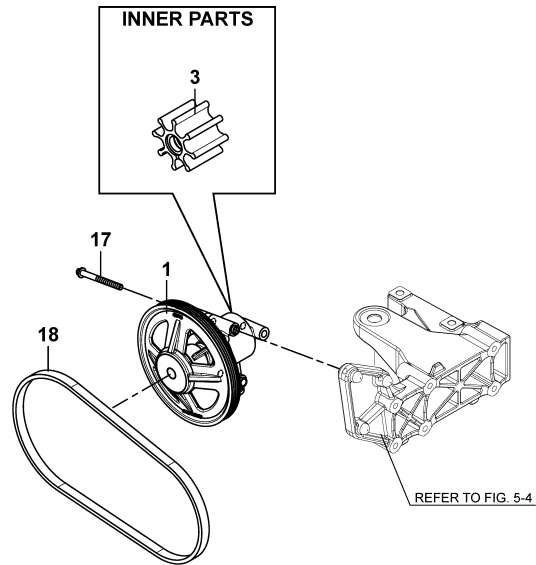
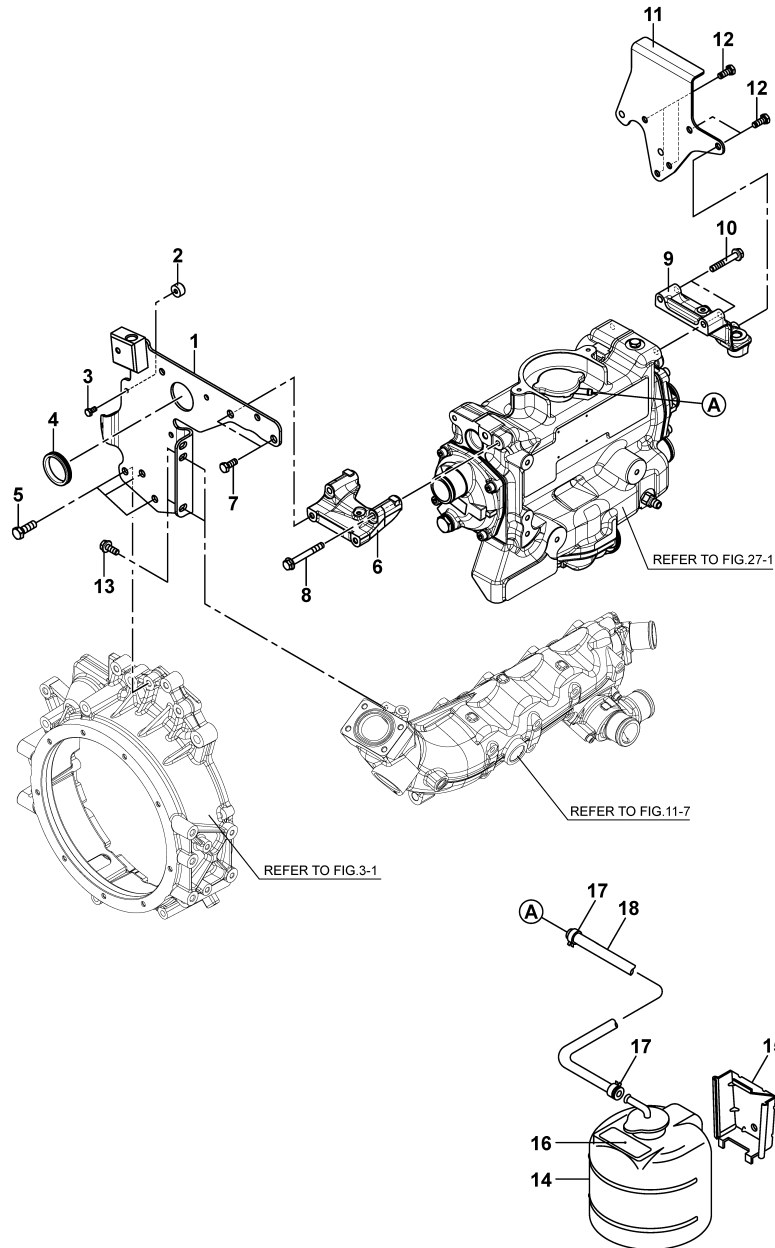


Fig.26. HEAT EXCHANGER

(A)=4BY2-150
(B)=4BY2-180
(C)=4BY2-150Z

(D)=4BY2-180Z
(E)=
(F)=

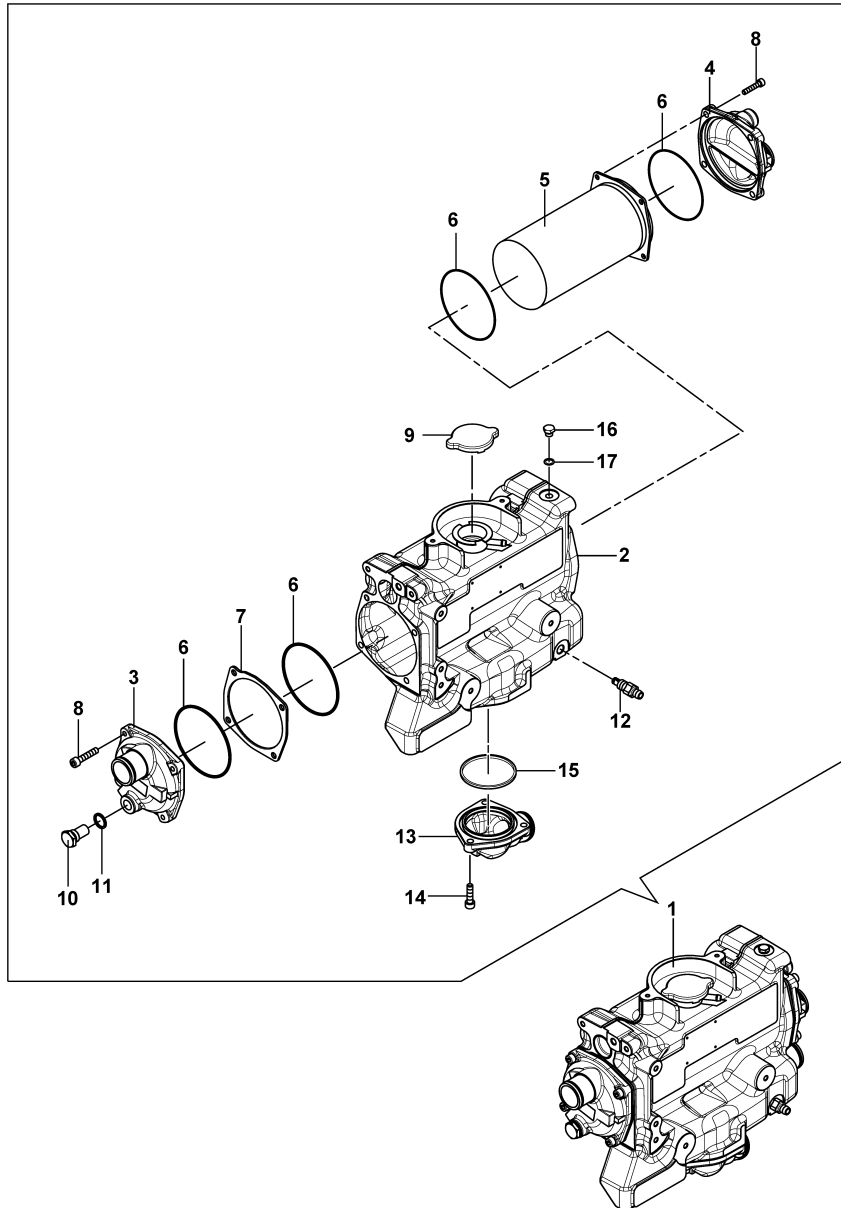


REF.	LEV.	PARTS NO.	DESCRIPTION	Q'TY						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	120650-44150	BRACKET, H/E REAR	1	1	1	1				
2	1	120650-11440	SPACER, BRACKET REAR	1	1	1	1				
3	1	120640-01460	BOLT, 6X12	1	1	1	1				
4	1	120650-44220	SLEEVE, PROTECTING	1	1	1	1				
5	1	120640-01960	FLANGE BOLT, 10X30	3	3	3	3				
6	1	120650-44180	SPACER, H/E REAR	1	1	1	1				
7	1	120640-01520	BOLT, 8X20	2	2	2	2				
8	1	120640-01910	FLANGE BOLT, 8X65	2	2	2	2				
9	1	120650-44210	SPACER, H/E FRONT	1	1	1	1				
11	1	120651-44190	BRACKET, H/E FRO	1	1	1	1				
12	1	120640-01520	BOLT, 8X20	5	5	5	5				
13	1	120640-02140	FLANGE BOLT, M8X20	2	2	2	2				
14	1	128397-44500	TANK ASSY, RESERVE	1	1	1	1				
15	1	128397-44510	BRACKET, SUB-TANK	1	1	1	1				
16	1	129670-44570	LABEL	1	1	1	1				
17	1	23010-013000	CLAMP 13	2	2	2	2				
18	1	129270-44501	PIPE,OVER FLOW	1	1	1	1				

Fig.27. HEAT EXCHANGER(INNER PARTS)

(A)=4BY2-150
(B)=4BY2-180
(C)=4BY2-150Z

(D)=4BY2-180Z
(E)=
(F)=

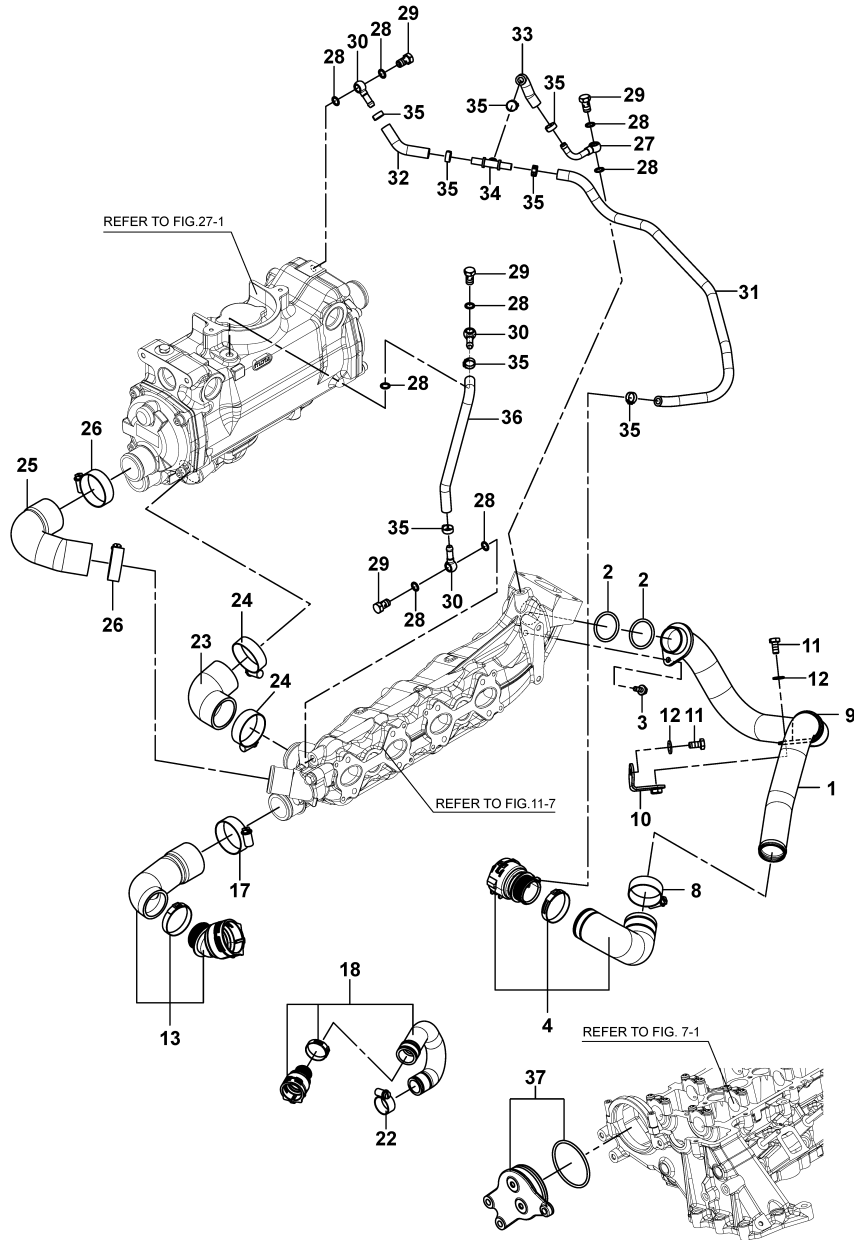


REF.	LEV.	PARTS NO.	DESCRIPTION	Q'TY						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	120651-44000	HEAT EXCHANGER ASSY	1	1	1	1				
2	2	120651-44010	HOUSING, H/E	1	1	1	1				
3	2	120650-44040	COVER,H/E FRONT	1	1	1	1				
4	2	120650-44030	COVER,H/E REAR	1	1	1	1				
5	2	120650-44020	CORE, H/E 4BY	1	1	1	1				
6	2	120650-44070	O-RING,H/E	4	4	4	4				
7	2	120650-44050	SPACER,H/E	1	1	1	1				
8	2	120650-18480	BOLT, M8X40	8	8	8	8				
9	2	120650-44090	CAP,FILLER	1	1	1	1				
10	2	120650-18490	ZING	1	1	1	1				
11	2	120650-18500	GASKET, CUPPER	1	1	1	1				
12	2	120650-49610	COCK, DRAIN	1	1	1	1				
13	2	120651-44500	BEND, H/E	1	1	1	1				
14	2	120651-44510	BOLT, 8X30	3	3	3	3				
15	2	120651-44520	O-RING, THERMOSTAT	1	1	1	1				
16	2	120651-44100	PLUG, H/E	1	1	1	1				
17	2	120651-44110	GASKET, CUPPER	1	1	1	1				

Fig.28. HOSE, FW PUMP

(A)=4BY2-150
(B)=4BY2-180
(C)=4BY2-150Z

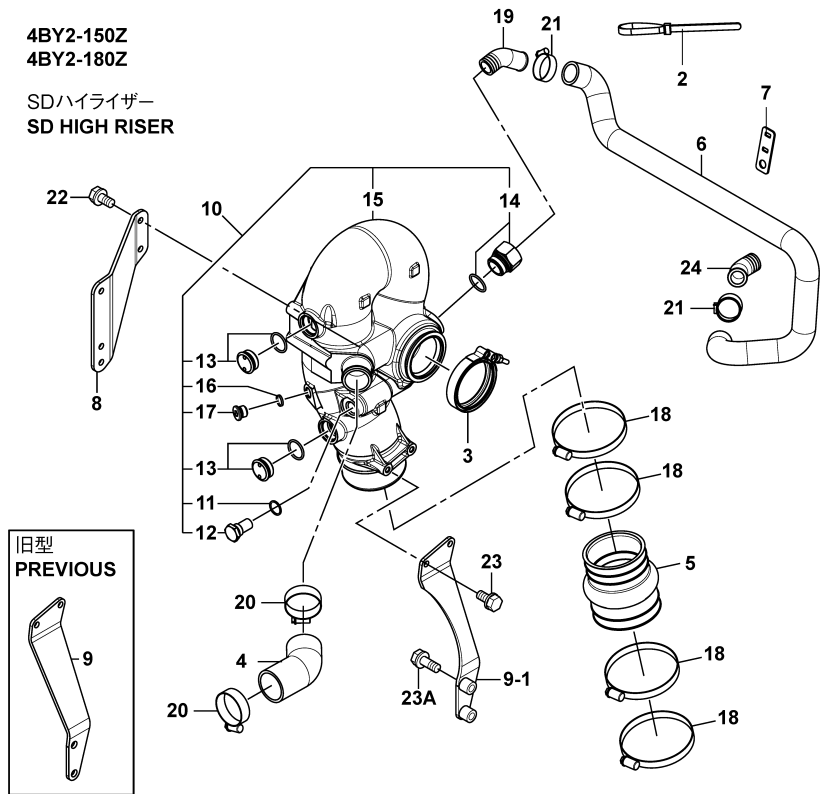
(D)=4BY2-180Z
(E)=
(F)=



REF.	LEV.	PARTS NO.	DESCRIPTION	Q'TY						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	120651-49250	PIPE ASSY, HEAD OUT	1	1	1	1				
2	1	120650-49260	O-RING, 36X3.5	2	2	2	2				
3	1	120640-02080	FLANGE BOLT, 6X16	1	1	1	1				
4	1	120650-49200	HOSE ASSY, HEAD OUT	1	1	1	1				
8	1	120650-49710	CLAMP, HOSE 35-50 C	1	1	1	1				
9	1	120650-49650	CLAMP, PIPE 38	1	1	1	1				
10	1	120650-49270	SUPPORT, PIPE WATER	1	1	1	1				
11	1	120640-01510	BOLT, 8X16	2	2	2	2				
12	1	120640-02230	WASHER, 8	2	2	2	2				
13	1	120651-49100	HOSE ASSY, ENGINE IN	1	1	1	1				
17	1	120650-49710	CLAMP, HOSE 35-50 C	1	1	1	1				
18	1	120650-49400	HOSE ASSY,OIL COOLER	1	1	1	1				
22	1	120640-01020	CLAMP, HOSE 16-27	1	1	1	1				
23	1	120650-44351	HOSE, H/E-THERMO	1	1	1	1				
24	1	120650-49710	CLAMP, HOSE 35-50 C	2	2	2	2				
25	1	120650-44530	HOSE, MANIFOLD-H/E	1	1	1	1				
26	1	120650-49710	CLAMP, HOSE 35-50 C	2	2	2	2				
27	1	120650-49421	PIPE, AIR BLEEDING	1	1	1	1				
28	1	120640-01210	GASKET, 10X1	8	8	8	8				
29	1	120640-01410	BANJO BOLT, 10	4	4	4	4				
30	1	120650-49350	JOINT, BANJO 10	3	3	3	3				
31	1	120651-49330	HOSE,AIR BLEEDING	1	1	1	1				
32	1	120650-49430	HOSE,AIR BLEEDING	1	1	1	1				
33	1	120650-49450	HOSE,AIR BLEEDING	1	1	1	1				
34	1	120650-49460	JOINT,AIR BLEEDING T	1	1	1	1				
35	1	120650-55850	CLAMP, HOSE1EAR14.0	8	8	8	8				
36	1	120650-49440	HOSE,AIR BLEEDING	1	1	1	1				
37	1	120650-11650	COVER ASSY, PUMP	1	1	1	1				

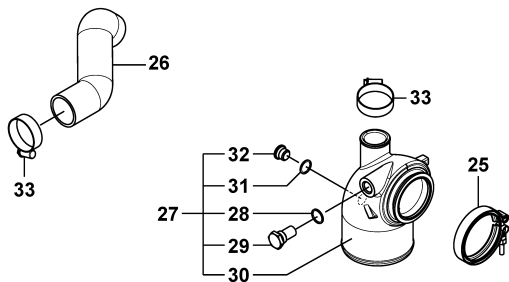
Fig.29. MIXING ELBOW

4BY2-150Z
4BY2-180Z
SDハイライザー
SD HIGH RISER



4BY2-150
4BY2-180

Lタイプ
L TYPE



OCR10-G74700 29. MIXING ELBOW

(A)=4BY2-150
(B)=4BY2-180
(C)=4BY2-150Z

(D)=4BY2-180Z
(E)=
(F)=

REF.	LEV.	PARTS NO.	DESCRIPTION	Q'TY						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	120640-00390	NUT, ISO7/16			1	1				
2	1	120640-09130	TIE STRAP			1	1				
3	1	120650-13450	V-CLAMP, TURBINE OUT			1	1				
4	1	120650-13510	HOSE, MIXING DRIVE			1	1				
5	1	120650-13520	HOSE, EXH PIPE			1	1				
6	1	120660-13810	HOSE, BYPASS			1	1				
7	1	120660-13820	SHEET, RETAINING			1	1				
8	1	120650-13881	BRACKET A, MIXING			1	1				
9	1	120650-13890	BRACKET B, MIXING DR			1	1				
I	9-1	120650-13891	BRACKET B, MIXING DR			1	1				S
		(A=E*****) (B=E*****) (C=E*****) (D=E*****)									
10	1	120650-13901	ELBOW ASY, MIXING DR			1	1				
11	2	120640-01270	RING, SEALING A18X22			1	1				
12	2	120650-13420	ZINC, ANTI-CORROSIVE			1	1				
13	2	120650-13430	PLUG, MIXING ELBOW			2	2				
14	2	120660-13470	ADAPTOR, BYPASS			1	1				
15	2	120650-13911	ELBOW, MIXING DRIVE			1	1				
16	2	23414-130000	GASKET, 13 X 1.0			1	1				
17	2	23893-020002	PLUG, G 1/4			1	1				
18	1	119172-48010	CLIP, HOSE			4	4				
19	1	119175-49550	BEND			1	1				
20	1	120650-49720	CLAMP, HOSE			2	2				
21	1	120650-49750	CLAMP, HOSE			2	2				
22	1	26106-080202	BOLT M 8X 20 PLATED			5	5				
23	1	26106-080202	BOLT M 8X 20 PLATED			4	4				
I	23-1	26106-080202	BOLT M 8X 20 PLATED			2	2				K
		(C=E*****) (D=E*****)									
I	23A	26106-080402	BOLT M 8X 40 PLATED			2	2				W
		(C=E*****) (D=E*****)									
24	1	119175-49550	BEND			1	1				
25	1	120650-13450	V-CLAMP, TURBINE OUT			1	1				
26	1	120650-13870	HOSE, MIXING IN L45			1	1				
27	1	120650-13930	ELBOW ASSY, MIXING L			1	1				
28	2	120640-01270	RING, SEALING A18X22			1	1				
29	2	120650-13420	ZINC, ANTI-CORROSIVE			1	1				
30	2	120650-13940	ELBOW, MIXING L TYPE			1	1				
31	2	23414-130000	GASKET, 13 X 1.0			1	1				
32	2	23893-020002	PLUG, G 1/4			1	1				
33	1	120650-49720	CLAMP, HOSE			2	2				

Fig.30. BILGE PUMP(OPTION)

OCR10-G74700 30. BILGE PUMP(OPTION)

(A)=4BY2-150
(B)=4BY2-180
(C)=4BY2-150Z

(D)=4BY2-180Z
(E)=
(F)=

REF.	LEV.	PARTS NO.	DESCRIPTION	Q'TY						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	127675-46012	PUMP,BILGE (12V	1	1	1	1				

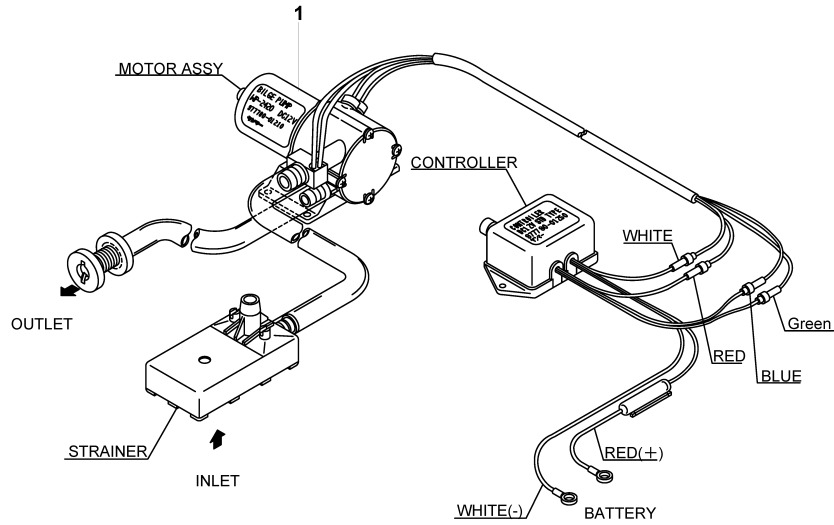
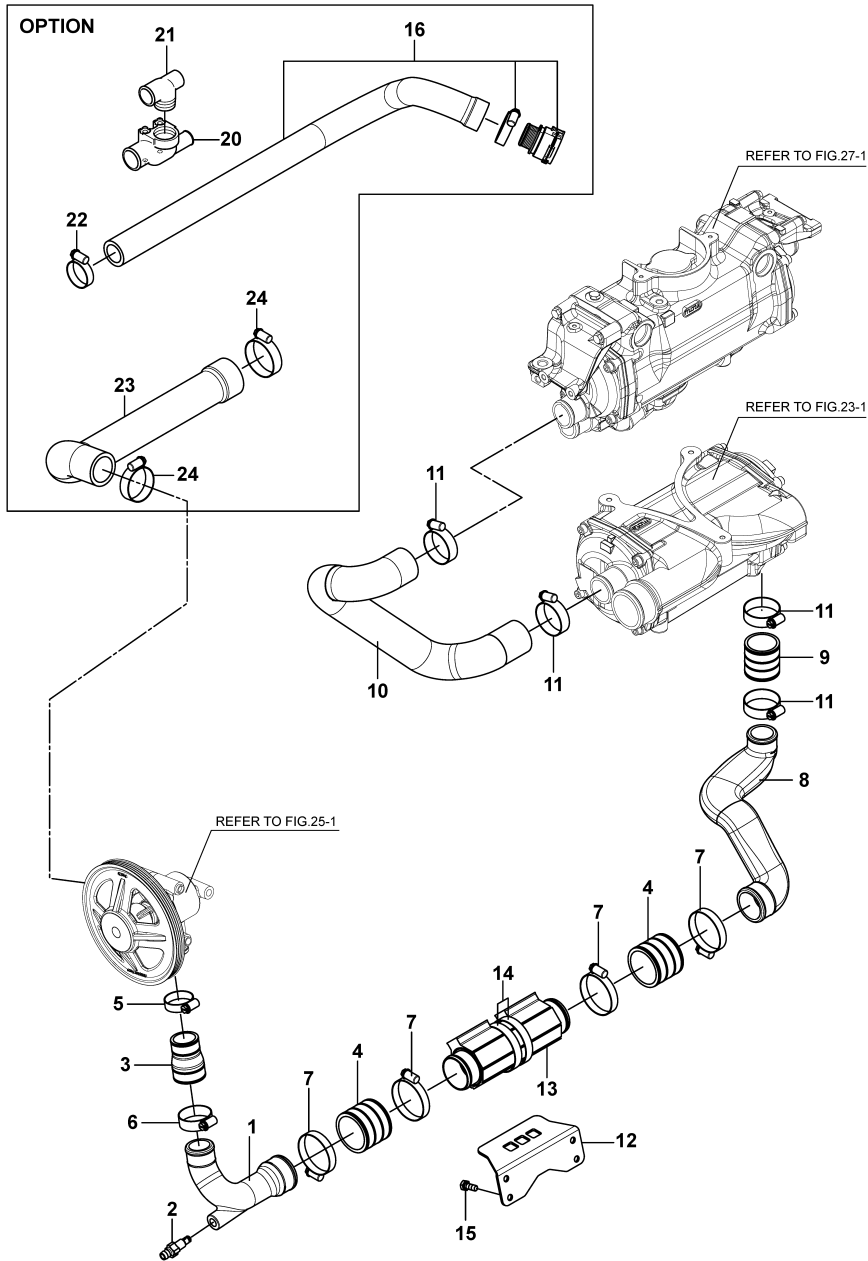


Fig.31. STEERING OIL COOLER

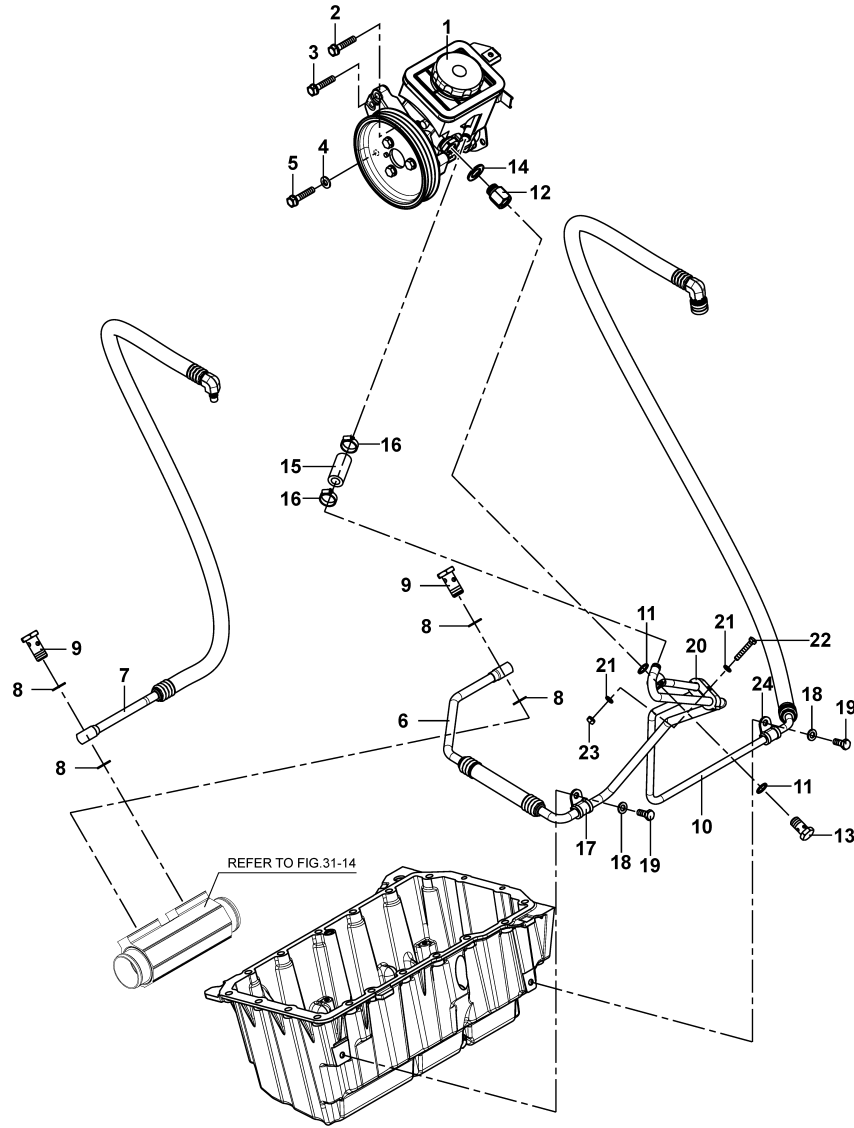
(A)=4BY2-150
(B)=4BY2-180
(C)=4BY2-150Z

(D)=4BY2-180Z
(E)=
(F)=



REF.	LEV.	PARTS NO.	DESCRIPTION	Q'TY						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	120650-49540	PIPE, WATER PUMP OUT	1	1	1	1				
2	1	120650-49610	COCK, DRAIN	1	1	1	1				
3	1	120650-49520	HOSE, PUMP JOINT	1	1	1	1				
4	1	120650-49550	HOSE, COOLER JOINT	2	2	2	2				
5	1	120650-49710	CLAMP, HOSE 35-50 C	1	1	1	1				
6	1	120650-49710	CLAMP, HOSE 35-50 C	1	1	1	1				
7	1	120650-49720	CLAMP, HOSE 40-60 C	4	4	4	4				
8	1	120650-49580	PIPE, CAC IN	1	1	1	1				
9	1	120650-49590	HOSE, CAC IN	1	1	1	1				
10	1	120651-49560	HOSE, CAC-HE	1	1	1	1				
11	1	120650-49710	CLAMP, HOSE 35-50 C	4	4	4	4				
12	1	120650-33300	BRACKET, OIL COOLER	1	1	1	1				
13	1	120650-57010	COOLER, ATF GEAR OIL	1	1	1	1				
14	1	120640-01050	CLAMP, HOSE 50-70	2	2	2	2				
15	1	120640-01520	BOLT, 8X20	4	4	4	4				
16	1	120650-42620	HOSE ASSY, PUMP IN				1	1			
20	1	119775-48640	BEND, ELBOW				1	1			
21	1	119779-49050	BEND, WATER				1	1			
22	1	120650-49710	CLAMP, HOSE				1	1			
23	1	120650-42650	HOSE ASSY, PUMP IN	1	1	1	1				
24	1	120650-49720	CLAMP, HOSE	2	2	2	2				

Fig.32. STEERING PUMP/PIPE



OCR10-G74700 32. STEERING PUMP/PIPE

(A)=4BY2-150
(B)=4BY2-180
(C)=4BY2-150Z

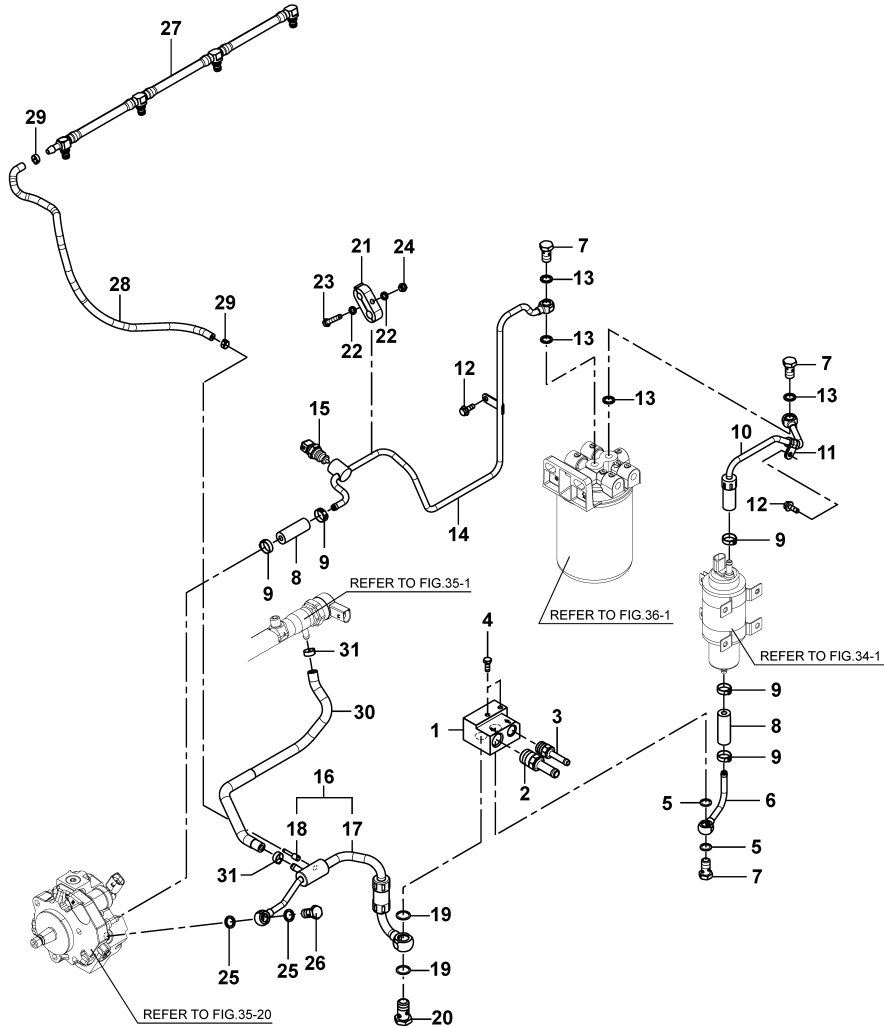
(D)=4BY2-180Z
(E)=
(F)=

REF.	LEV.	PARTS NO.	DESCRIPTION	Q'TY						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	120640-00150	PUMP ASSY, STEERING			1	1				
2	1	120640-01930	FLANGE BOLT, 8X80			1	1				
3	1	120640-01870	FLANGE BOLT, 8X40			1	1				
4	1	120640-02220	WASHER, 6			1	1				
5	1	120640-01570	BOLT, 6X80			1	1				
6	1	120650-85320	ATF-T, COOLER-PUMP			1	1				
7	1	120650-85360	ATF-T, DRIVE-COOLER			1	1				
8	1	120640-01260	GASKET, 17X1.5			4	4				
9	1	120650-85370	BANJO BOLT, G3/8			2	2				
10	1	120650-85330	ATF-T, PUMP-DRIVE			1	1				
11	1	120640-01240	GASKET, 14X1.5			2	2				
12	1	120650-57410	ADAPTER, ATF PUMP			1	1				
13	1	120640-01420	BANJO BOLT, 14			1	1				
14	1	120640-00300	GASKET, 16X1.5			1	1				
15	1	120650-57440	HOSE, ATF PUMP INLET			1	1				
16	1	120640-01020	CLAMP, HOSE 16-27			2	2				
17	1	120650-85390	CLAMP, PIPE 12			1	1				
18	1	120640-02230	WASHER, 8			2	2				
19	1	120640-01520	BOLT, 8X20			2	2				
20	1	120650-85430	CLAMP, PIPE DOUBLE			1	1				
21	1	120640-02220	WASHER, 6			2	2				
22	1	120640-01830	BOLT, 6X35			1	1				
23	1	120640-00200	NUT, M6			1	1				
24	1	120650-85410	CLAMP, PIPE 10			1	1				

Fig.33. FUEL OIL FILTER/PIPE

(A)=4BY2-150
(B)=4BY2-180
(C)=4BY2-150Z

(D)=4BY2-180Z
(E)=
(F)=



REF.	LEV.	PARTS NO.	DESCRIPTION	QTY						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	120650-55220	BLOCK ASSY, FO JOINT	1	1	1	1				
2	1	120650-55730	NIPPLE, FUEL RETURN	1	1	1	1				
3	1	120650-55720	NIPPLE, FUEL SUPPLY	1	1	1	1				
4	1	120640-01470	BOLT, 6X16	2	2	2	2				
5	1	120640-01230	GASKET, 12X1.5	2	2	2	2				
6	1	120650-55311	PIPE, FUEL BLOCK-PUM	1	1	1	1				
7	1	120640-01430	BANJO BOLT, 12	3	3	3	3				
8	1	120650-55320	HOSE, FUEL	2	2	2	2				
9	1	120650-55840	CLAMP,HOSE1EAR19.2	5	5	5	5				
10	1	120651-55340	PIPE, FUEL FILTER IN	1	1	1	1				
11	1	120650-39190	CLAMP, PIPE 8	1	1	1	1				
12	1	120640-02080	FLANGE BOLT, 6X16	2	2	2	2				
13	1	120640-01300	GASKET, 12X1.5	4	4	4	4				
14	1	120650-55300	PIPE,FUEL FILTER OUT	1	1	1	1				
15	1	120650-55710	SENSOR, FUEL TEMPERA	1	1	1	1				
16	1	120651-55330	PIPE, FO LINE RETURN	1	1	1	1				
17	2	120650-55290	PIPE,FO LINE RETURN	1	1	1	1				
18	2	120650-55660	VALVE,FUEL RETURN	1	1	1	1				
19	1	120640-01310	GASKET, 16X1.5	2	2	2	2				
20	1	120640-01400	BANJO BOLT, 16	1	1	1	1				
21	1	120650-85430	CLAMP, PIPE DOUBLE	1	1	1	1				
22	1	120640-02220	WASHER, 6	2	2	2	2				
23	1	120640-01830	BOLT, 6X35	1	1	1	1				
24	1	120640-00200	NUT, M6	1	1	1	1				
25	1	120640-01300	GASKET, 12X1.5	2	2	2	2				
26	1	120640-01430	BANJO BOLT, 12	1	1	1	1				
27	1	120650-55810	HOSE ASSY,FO RETURN	1	1	1	1				
28	1	120650-55820	HOSE,INJECTOR RETURN	1	1	1	1				
29	1	120650-55830	CLAMP,HOSE1EAR 11.9	2	2	2	2				
30	1	120650-55630	HOSE,FO RAIL RETURN	1	1	1	1				
31	1	120650-55850	CLAMP,HOSE1EAR 14.0	2	2	2	2				

Fig.34. PUMP, FUEL LOW

OCR10-G74700 34. PUMP, FUEL LOW

(A)=4BY2-150
(B)=4BY2-180
(C)=4BY2-150Z

(D)=4BY2-180Z
(E)=
(F)=

REF.	LEV.	PARTS NO.	DESCRIPTION	Q'TY						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	120650-51500	PUMP ASSY, FUEL LOW	1	1	1	1				
2	1	120650-51630	CLAMP BRACKET 61	2	2	2	2				
3	1	120650-55540	SPACER, FUEL PUMP CL	2	2	2	2				
4	1	120640-02220	WASHER, 6	4	4	4	4				
5	1	120640-01450	CAP BOLT, 6X10	4	4	4	4				

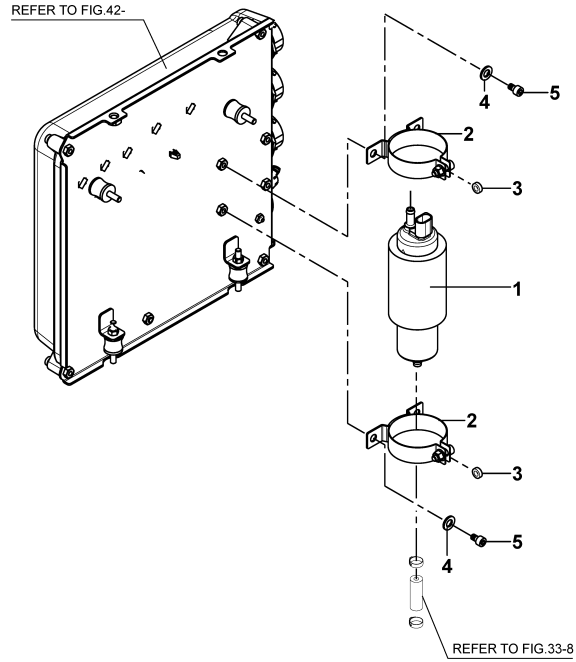
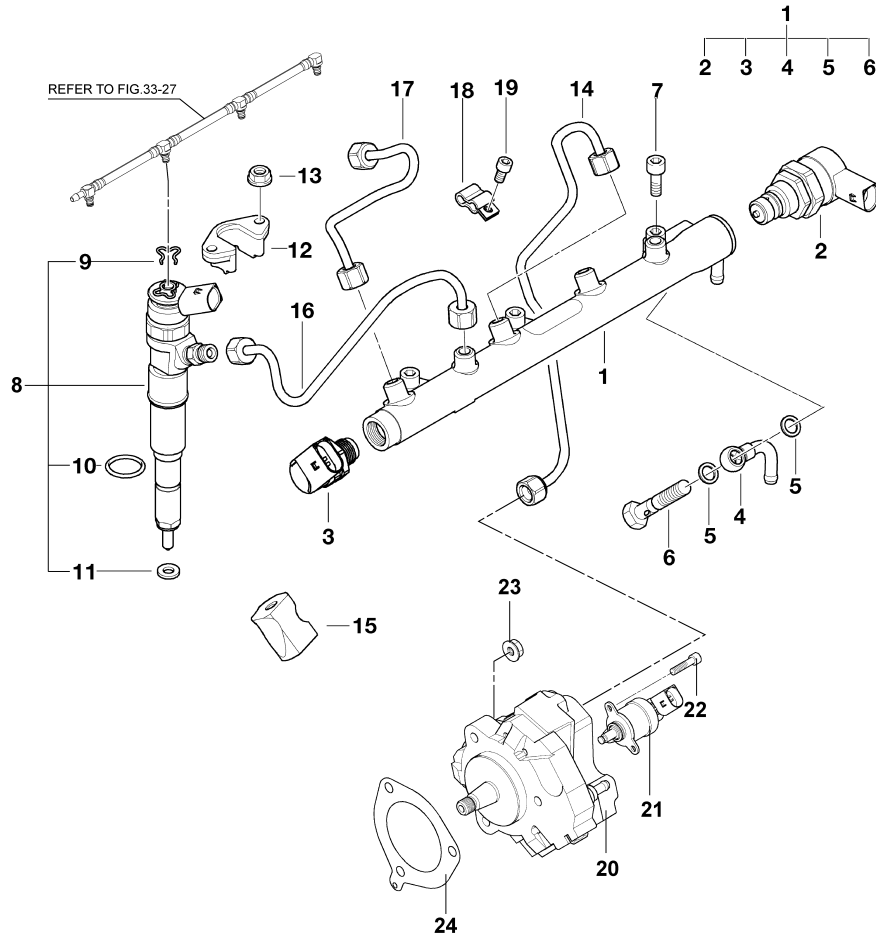


Fig.35. HIGH-PRESSURE PUMP/INJECTOR

(A)=4BY2-150
(B)=4BY2-180
(C)=4BY2-150Z

(D)=4BY2-180Z
(E)=
(F)=



REF.	LEV.	PARTS NO.	DESCRIPTION	QTY						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	165001-35750	ACCUMULATOR,PRESSURE	1	1	1	1				
2	2	165001-35650	VALVE, REGULATING	1	1	1	1				
3	2	165000-70390	SENSOR, PRESSURE	1	1	1	1				
4	2	165000-70580	CONNECTOR	1	1	1	1				
5	2	165000-70160	RING, GASKET	2	2	2	2				
6	2	165000-70400	BOLT, HOLLOW	1	1	1	1				
6-1	2	165001-60010	BOLT, HOLLOW	1	1	1	1				R
7	1	165001-35540	SCREW, HEAD M8X25	3	3	3	3				
8	1	165000-70560	INJECTOR, RMFD	4	4	4	4				
9	2	165000-70290	CLAMP	4	4	4	4				
10	2	165000-70430	O-RING, 22 2	4	4	4	4				
11	2	165000-70270	RING, GASKET	4	4	4	4				
12	1	165000-70420	FLANGE	4	4	4	4				
13	1	165000-70640	NUT, FLANGE M6	8	8	8	8				
14	1	165000-70450	HOSE ASSY, PRESSURE	1	1	1	1				
15	1	165000-70300	MOUNTING, RUBBER	1	1	1	1				
16	1	165000-70460	HOSE ASSY, PRESSURE	2	2	2	2				
17	1	165000-70470	HOSE ASSY, PRESSURE	2	2	2	2				
18	1	165000-70410	CLAMP	2	2	2	2				
19	1	165000-70570	SCREW, HEAD M5X12	2	2	2	2				
20	1	165000-70190	PUMP, HIGH PRESSURE	1	1	1	1				
20-1	1	165001-71740	RMFD HIGH PRES PUMP	1	1	1	1				R
21	1	165000-70180	MEASURING, UNIT	1	1	1	1				
22	1	165000-70170	SCREW	2	2	2	2				
22-1	1	165001-66930	SCREW	2	2	2	2				R
23	1	165000-67490	NUT, HEX AM8	3	3	3	3				
23-1	1	165001-66890	NUT, HEX AM8	3	3	3	3				R
24	1	165000-70150	GASKET, STEEL	1	1	1	1				

Fig.36. FUEL FILTER

OCR10-G74700 36. FUEL FILTER

(A)=4BY2-150
(B)=4BY2-180
(C)=4BY2-150Z

(D)=4BY2-180Z
(E)=
(F)=

REF.	LEV.	PARTS NO.	DESCRIPTION	Q'TY						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	120651-55010	FILTER ASSY,FO FINE	1	1	1	1				
2	2	120651-55020	ELEMENT, FUEL FILTER	1	1	1	1				
3	2	120651-55050	HEAD, FUEL FILTER	1	1	1	1				
4	1	120640-01970	FLANGE BOLT, 10X35	2	2	2	2				

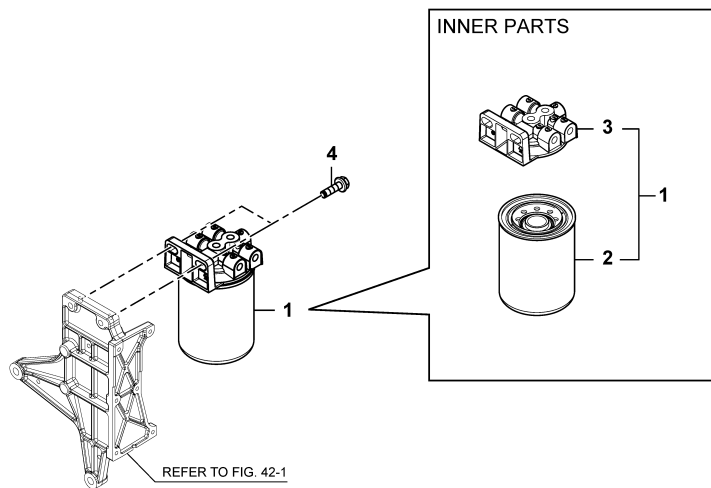


Fig.37. STARTING MOTOR

OCR10-G74700 37. STARTING MOTOR

(A)=4BY2-150
(B)=4BY2-180
(C)=4BY2-150Z

(D)=4BY2-180Z
(E)=
(F)=

REF.	LEV.	PARTS NO.	DESCRIPTION	Q'TY						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	165000-70090	MOTOR, STARTER 2.0KW	1	1	1	1				
2	1	165000-70080	SWITCH, SOLENOID	1	1	1	1				

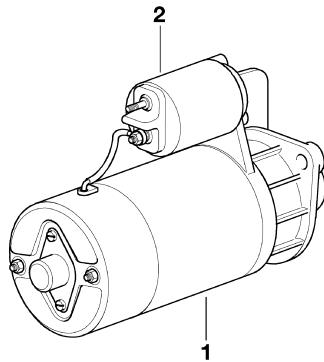


Fig.38. ALTERNATOR

OCR10-G74700 38. ALTERNATOR

(A)=4BY2-150
(B)=4BY2-180
(C)=4BY2-150Z

(D)=4BY2-180Z
(E)=
(F)=

REF.	LEV.	PARTS NO.	DESCRIPTION	Q'TY						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	165001-25180	ALTERNATOR	1	1	1	1				
1A	1	165001-25190	ALTERNATOR, RMFD	1	1	1	1				
1A-1	1	165001-60020	ALTERNATOR, RMFD	1	1	1	1				R
		(A=EZZZZZ)	(B=EZZZZZ)	(C=EZZZZZ)	(D=EZZZZZ)						
2	1	165000-67180	BOLT,HEX M10X70	1	1	1	1				
3	1	165000-67300	BOLT, HEX M10X125	1	1	1	1				
3-1	1	165001-66860	BOLT, HEX M10X125	1	1	1	1				R
		(A=EZZZZZ)	(B=EZZZZZ)	(C=EZZZZZ)	(D=EZZZZZ)						

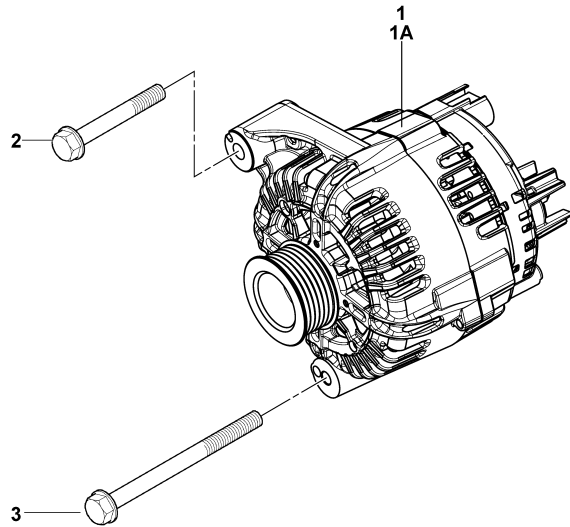


Fig.41. AIR HEATER

OCR10-G74700 41. AIR HEATER

(A)=4BY2-150
(B)=4BY2-180
(C)=4BY2-150Z

(D)=4BY2-180Z
(E)=
(F)=

REF.	LEV.	PARTS NO.	DESCRIPTION	Q'TY						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	120651-75870	BRACKET,HEATER CONTR	1	1	1	1				
1-1	1	120651-75871	BRACKET,HEATER UNIT	1	1	1	1				N
		(A=*2010.05)	(B=*2010.05)	(C=*2010.05)	(D=*2010.05)						
2	1	120650-78240	CONTROLLER,HEATER4BY	1	1	1	1				
3	1	120640-02080	FLANGEBOLT, 6X16	2	2	2	2				
4	1	120640-00200	NUT, M6	2	2	2	2				
5	1	120650-78260	HARNESS, HEATER POS	1	1	1	1				
6	1	120650-75890	BATTERY TERMINAL			1	1				W
			(C=*2010.05)	(D=*2010.05)							
7	1	120650-78280	CABLE, TERMINAL PLUS			1	1				W
			(C=*2010.05)	(D=*2010.05)							
8	1	120650-78290	CABLE TERMINAL MINUS			1	1				W
			(C=*2010.05)	(D=*2010.05)							
9	1	26455-050102	BOLT, 5 X 10			2	2				W
			(C=*2010.10)	(D=*2010.10)							

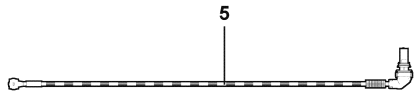
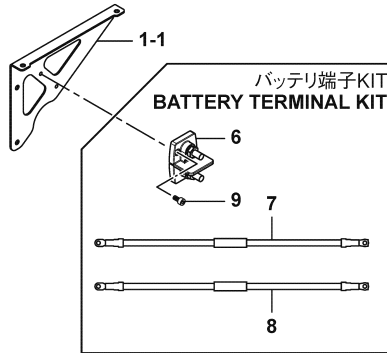
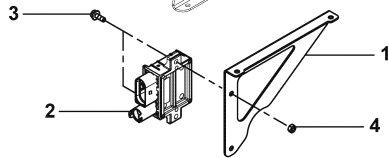
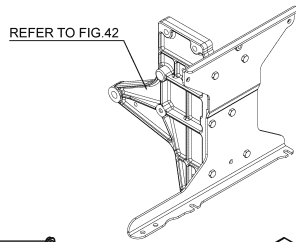
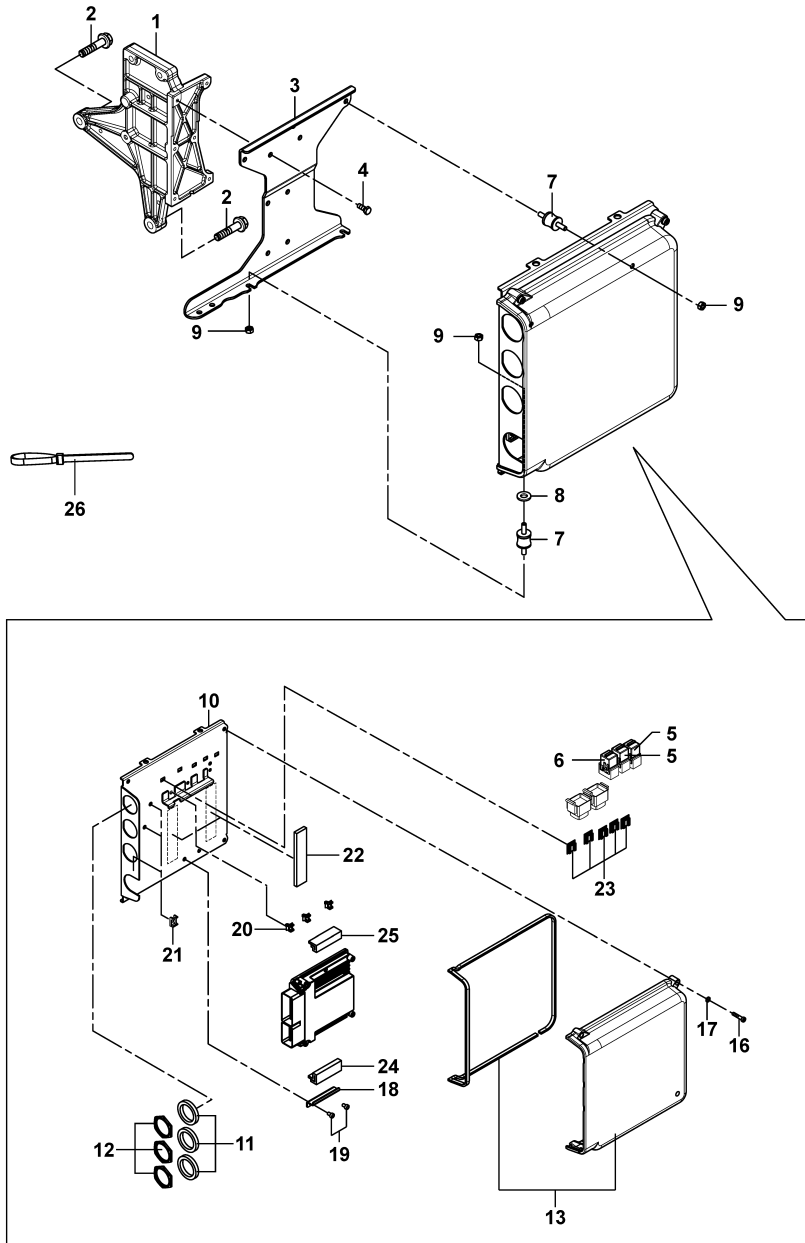


Fig.42. ECU

(A)=4BY2-150
(B)=4BY2-180
(C)=4BY2-150Z

(D)=4BY2-180Z
(E)=
(F)=

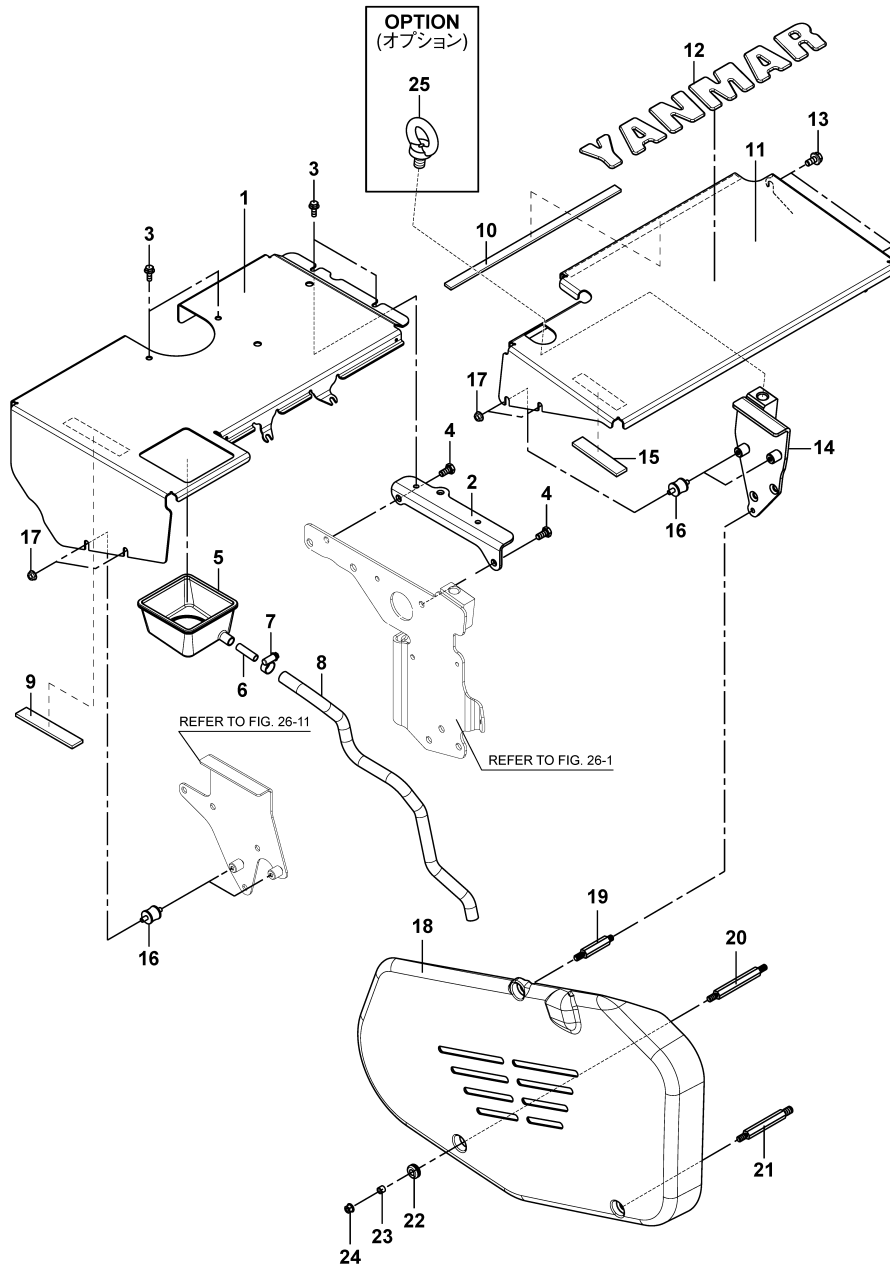


REF.	LEV.	PARTS NO.	DESCRIPTION	Q'TY						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	120651-75410	SUPPORT, ECU BOX	1	1	1	1				
2	1	120640-01980	FLANGE BOLT, 10X45	2	2	2	2				
3	1	120651-75290	BRACKET, ECU BOX	1	1	1	1				
4	1	120640-01470	BOLT, 6X16	6	6	6	6				
7	1	120650-75450	INSULATOR, ECU BOX	4	4	4	4				
8	1	120640-02220	WASHER, 6	2	2	2	2				
9	1	120640-00200	NUT, M6	8	8	8	8				
10	1	120650-75250	BASE PLATE, ECU	1	1	1	1				
11	1	120650-75380	GASKET, CONNECTOR	3	3	3	3				
12	1	120650-75360	NUT, CONNECTOR	3	3	3	3				
13	1	120650-75700	COVER ASSY, ECU BOX	1	1	1	1				
16	1	120640-01490	CAP BOLT, 6X30	4	4	4	4				
17	1	120640-02220	WASHER, 6	4	4	4	4				
18	1	120650-75350	RETAINER, ECU	1	1	1	1				
19	1	120640-01450	CAP BOLT, 6X10	2	2	2	2				
20	1	120650-75810	CLIP, WIRE	3	3	3	3				
21	1	120650-75820	RETAINER, WIRE	3	3	3	3				
22	1	120651-75830	RUBBER SHEET, ECU	2	2	2	2				
23	1	120650-75320	CLIP, FUSE BOX	5	5	5	5				
24	1	120650-75930	ISOLATOR, ECU LOWER	1	1	1	1				
25	1	120650-75940	ISOLATOR, ECU UPPER	1	1	1	1				
26	1	120640-09050	TIE STRAP	4	4	4	4				

Fig.43. TOP COVER & V-BELT COVER

(A)=4BY2-150
(B)=4BY2-180
(C)=4BY2-150Z

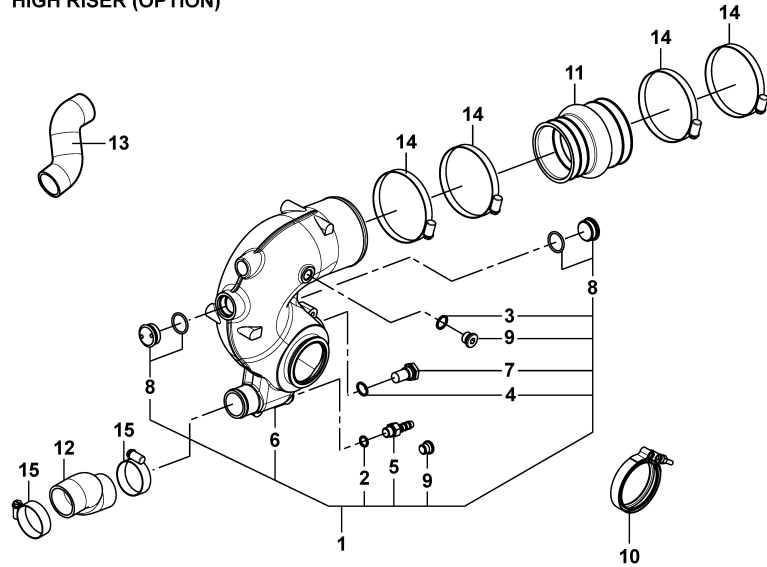
(D)=4BY2-180Z
(E)=
(F)=



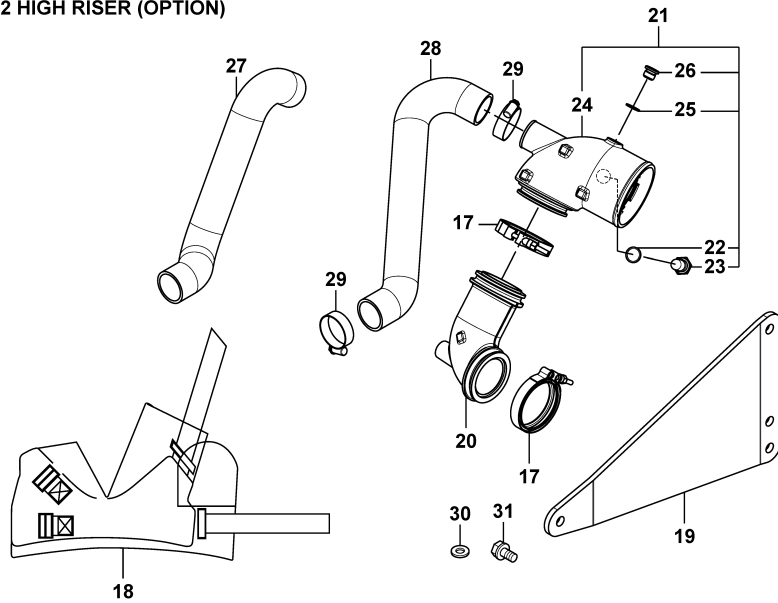
REF.	LEV.	PARTS NO.	DESCRIPTION	QTY						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	120651-17000	TOP COVER, A	1	1	1	1				
2	1	120650-44270	BRACKET, TOP COVER R	1	1	1	1				
3	1	120640-02080	FLANGE BOLT, 6X16	4	4	4	4				
4	1	120640-01510	BOLT, 8X16	2	2	2	2				
5	1	120651-17020	BOOT, OIL FILLER	1	1	1	1				
6	1	120650-11660	PIPE, FILLER DRAIN	1	1	1	1				
7	1	120640-01020	CLAMP, HOSE 16-27	1	1	1	1				
8	1	120650-11670	HOSE, FILLER DRAIN	1	1	1	1				
9	1	120650-17380	RUBBER SHEET A	1	1	1	1				
10	1	120650-17360	GROMMET, TOP COVER	1	1	1	1				
11	1	120651-17010	TOP COVER, B	1	1	1	1				
12	1	120650-07130	LABEL, YANMAR LOGO	1	1	1	1				
13	1	120640-01850	FLANGE BOLT, 8X16	1	1	1	1				
14	1	120650-17320	BRACKET, TOP COVER F	1	1	1	1				
15	1	120650-17390	RUBBER SHEET B	1	1	1	1				
16	1	120650-17410	INSULATOR, TOP COVER	4	4	4	4				
17	1	120640-00320	FLANGE NUT, 6	4	4	4	4				
18	1	120650-17170	COVER, BELT	1	1	1	1				
19	1	120650-17200	BOLT, BELT COVER 1	1	1	1	1				
20	1	120650-17220	BOLT, BELT COVER 3	1	1	1	1				
21	1	120650-17210	BOLT, BELT COVER 2	1	1	1	1				
22	1	120640-00280	INSULATOR, BELT COVE	3	3	3	3				
23	1	120640-00270	COLLAR, BELT COVER	3	3	3	3				
24	1	120640-00330	FLANGE NUT, 8	3	3	3	3				
I	25	1	120650-07350	LIFTER	2	2	2	2			

Fig.44. M.ELBOW HIGH RISER(OPTION)

ハイライザー (オプション)
HIGH RISER (OPTION)



2ハイライザー (オプション)
2 HIGH RISER (OPTION)



(A)=4BY2-150
(B)=4BY2-180
(C)=4BY2-150Z

(D)=4BY2-180Z
(E)=
(F)=

REF.	LEV.	PARTS NO.	DESCRIPTION	QTY						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	120652-13400	ELBOW, MIXING HIGHRI	1	1	1	1				
2	2	120640-01250	RING, SEALING A14X18	1	1	1	1				
3	2	120640-01260	GASKET, 17X1.5	1	1	1	1				
4	2	120640-01270	RING, SEALING A18X22	1	1	1	1				
5	2	120650-13390	JOINT, DRAIN HIGHRIS	1	1	1	1				
6	2	120652-13410	ELBOW, MIXING HIGHRI	1	1	1	1				
7	2	120650-13420	ZINC, ANTI-CORROSIVE	1	1	1	1				
8	2	120650-13430	PLUG, MIXING ELBOW	2	2	2	2				
9	2	120650-13490	PLUG	1	1	1	1				
10	1	120650-13450	V-CLAMP, TURBINE OUT	1	1	1	1				
11	1	120650-13520	HOSE, EXH PIPE	1	1	1	1				
12	1	120650-13750	HOSE, MIXING 10 HIGH	1	1	1	1				
13	1	120650-13760	HOSE, MIXING 40 HIGH	1	1	1	1				
14	1	119172-48010	CLIP, HOSE	4	4	4	4				
15	1	120650-49720	CLAMP, HOSE	2	2	2	2				
17	1	120650-13450	V-CLAMP, TURBINE OUT	2	2	2	2				
18	1	120651-13640	COVER, EXH MANIFOLD	1	1	1	1				
19	1	120652-13881	BRACKET A, MIXING 2P	1	1	1	1				
20	1	120650-13920	BEND, 2PIECE HIGHRIS	1	1	1	1				
21	1	120650-13930	ELBOW ASSY, MIXING L	1	1	1	1				
22	2	120640-01270	RING, SEALING A18X22	1	1	1	1				
23	2	120650-13420	ZINC, ANTI-CORROSIVE	1	1	1	1				
24	2	120650-13940	ELBOW, MIXING L TYPE	1	1	1	1				
25	2	23414-130000	GASKET, 13 X 1.0	1	1	1	1				
26	2	23893-020002	PLUG, G 1/4	1	1	1	1				
27	1	120650-13951	HOSE, MIXING 40 2PIE	1	1	1	1				
28	1	120650-13980	HOSE, MIXING PORT 2P	1	1	1	1				
29	1	120650-49720	CLAMP, HOSE	2	2	2	2				
30	1	22137-100000	WASHER, 10	1	1	1	1				
31	1	26106-080202	BOLT, 8 X 20	3	3	3	3				

Fig.45. FUEL FILTER (OPTION)

OCR10-G74700 45. FUEL FILTER (OPTION)

(A)=4BY2-150
(B)=4BY2-180
(C)=4BY2-150Z

(D)=4BY2-180Z
(E)=
(F)=

REF.	LEV.	PARTS NO.	DESCRIPTION	Q'TY						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
I	1	1	120651-55440	JOINT, FO FILTER IN	1	1	1	1			
I	2	1	120650-55010	FILTER ASSY, FUEL	1	1	1	1			
I	3	2	120650-55020	ELEMENT, FUEL FILTER	1	1	1	1			
I	4	2	120650-55050	HEAD, FO FILTER	1	1	1	1			
I	5	2	120650-55060	BOWL, FO FILTER	1	1	1	1			
I	6	2	120650-55070	PROBE, FO FILTER	1	1	1	1			

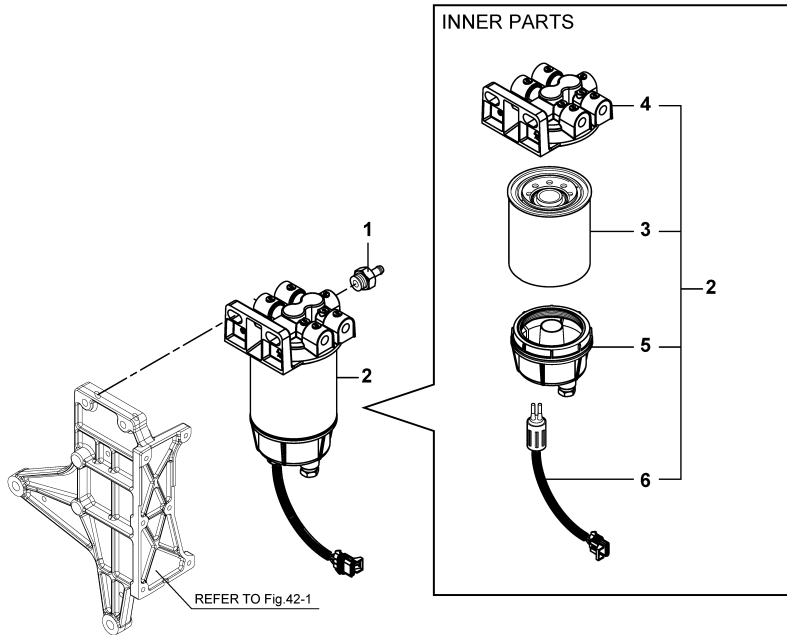


Fig.46. VDO GAUGE (OPTION)

OCR10-G74700 46. VDO GAUGE (OPTION)

(A)=4BY2-150
(B)=4BY2-180
(C)=4BY2-150Z

(D)=4BY2-180Z
(E)=
(F)=

REF.	LEV.	PARTS NO.	DESCRIPTION	Q'TY						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	120650-91900	TACHOMETER,(V 5000	1	1	1	1				
2	1	120650-91960	HARNES,V TACHO	1	1	1	1				
3	1	120650-91910	GAUGE,(V WATER TEMP	1	1	1	1				
4	1	120650-91920	GAUGE,(V OIL PRESS	1	1	1	1				
5	1	120650-91930	GAUGE,(V BOOST	1	1	1	1				
6	1	120650-91940	GAUGE,(V VOLT 12	1	1	1	1				
7	1	120650-91950	GAUGE,(V FUEL	1	1	1	1				
8	1	120650-91970	GAUGE, V TRIM	1	1	1	1				W
		(A=EZZZZZ)	(B=EZZZZZ)	(C=EZZZZZ)	(D=EZZZZZ)						

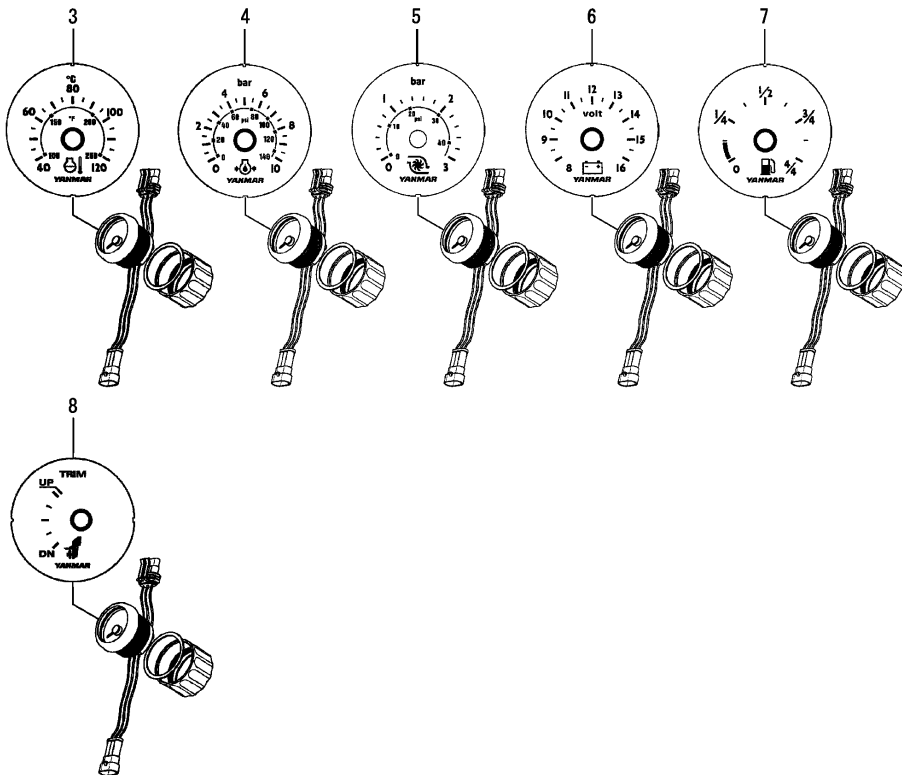
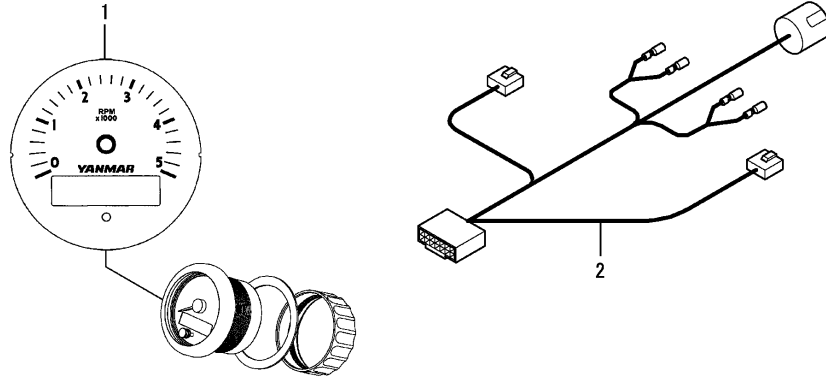
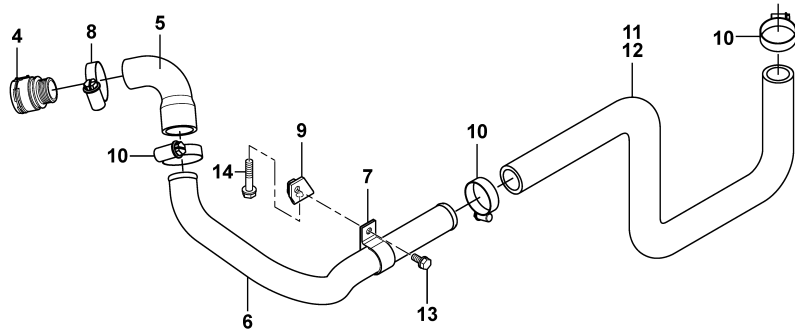
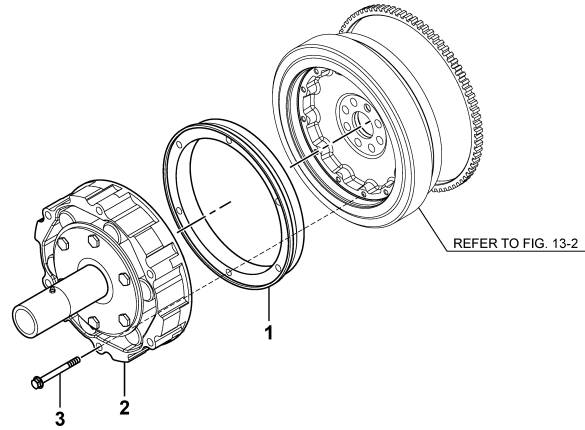


Fig.47. C.S.W.PIPE&COUPLING (ZT SPEC)

(A)=4BY2-150
(B)=4BY2-180
(C)=4BY2-150Z

(D)=4BY2-180Z
(E)=
(F)=



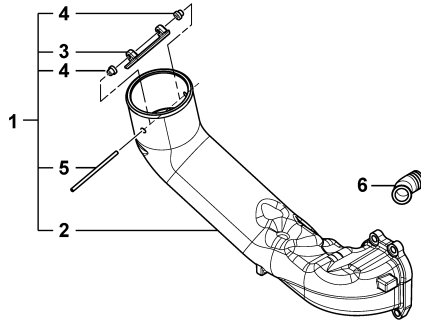
REF.	LEV.	PARTS NO.	DESCRIPTION	QTY						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
I	1	1	120651-21560						1		
I	2	1	120661-81050						1		
I	3	1	26106-080852						6		
I	4	1	120650-42630						1		
I	5	1	119779-49190						1		
I	6	1	119779-49200						1		
I	7	1	119779-49210						1		
I	8	1	120650-49710						1		
I	9	1	120651-49710						1		
I	10	1	120650-49720						3		
I	11	1	119779-49900						1		
I	12	1	119779-49910						1		
I	13	1	26106-100162						1		
I	14	1	26106-100652						1		

Fig.48. C.S.W.PIPE&EXHAUST BEND(OPTION)

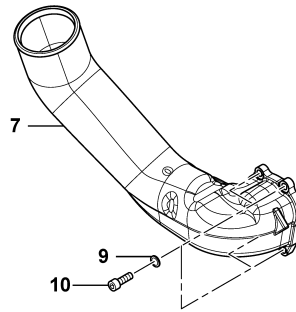
(A)=4BY2-150
(B)=4BY2-180
(C)=4BY2-150Z

(D)=4BY2-180Z
(E)=
(F)=

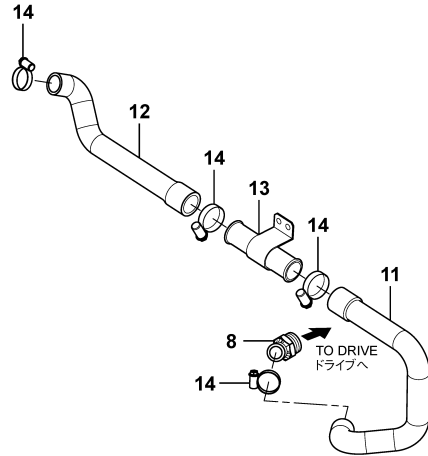
ブラボー仕様
BRAVO SPEC



ZT仕様
ZT SPEC



バイパス排水
DRAIN BY-PASS



REF.	LEV.	PARTS NO.	DESCRIPTION	QTY						I	R	
				(A)	(B)	(C)	(D)	(E)	(F)			
I	1	1	120650-13601	PIPE, EXHAUST CMP			1	1				
I	2	2	120650-13610	PIPE, EXHAUST			1	1				
I	3	2	120650-13660	FLAP, EXHAUST PIPE			1	1				
I	4	2	120650-13670	BUSH, EXHAUST PIPE			2	2				
I	5	2	120650-13680	PIN, EXHAUST PIPE			1	1				
I	6	1	119175-49550	JOINT			1	1				
I	7	1	120651-13600	PIPE, EXHAUST							1	
I	8	1	119779-49550	ELBOW, SEA WATER							1	
I	9	1	22113-100000	WASHER 10							4	
I	10	1	26453-100302	BOLT M10X30							4	
I	11	1	119779-49120	HOSE, DRIVE IN			1	1				
I	12	1	120651-49130	HOSE, BYPASS			1	1				
I	13	1	119778-49200	TUBE, DRIVE			1	1				
I	14	1	129670-49500	CLIP, HOSE			4	4				

Part Number Index

All parts are stipulated in the order of part numbers.

(Depending on the area in which the part is used.)

This index will display the location of the part according to each part number.

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119779-49190	47	5
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120640-00130	22	13
120640-00140	22	12
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120640-00300	32	14
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120640-00330	40	3
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120640-00390	29	1
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120640-01270	29	11
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120640-01310	33	19
120640-01400	33	20
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120640-01420	32	13
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120640-01460	3	12
	11	30
	26	3
120640-01470	21	6
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	42	4
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120650-07150	6	10
120650-07161	6	11
120650-07171	6	12
120650-07191	6	13
120650-07250	39	7
120650-07260	39	8
120650-07270	39	9
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120650-08100	5	1
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120650-13890	29	9
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120650-13901	29	10
120650-13911	29	15
120650-13920	44	20
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120650-32620	18	12
120650-33300	31	12
120650-34700	4	19
120650-34800	4	13
120650-34810	4	20
120650-34840	4	10
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120650-34890	4	12
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120650-44020	27	5
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120650-44270	43	2
120650-44351	28	23
120650-44400	23	18
120650-44530	28	25
120650-44540	11	24
120650-44560	11	18
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120650-49400	24	17
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120650-49421	28	27
120650-49430	28	32
120650-49440	28	36
120650-49450	28	33
120650-49460	28	34
120650-49520	31	3
120650-49540	31	1
120650-49550	31	4
120650-49580	31	8
120650-49590	31	9
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120650-49650	28	9
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120650-55290	33	17
120650-55300	33	14
120650-55311	33	6
120650-55320	33	8
120650-55540	34	3
120650-55630	33	30
120650-55660	33	18
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120650-55810	33	27
120650-55820	33	28
120650-55830	33	29
120650-55840	33	9
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120650-75320	42	23
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120650-75510	39	3
120650-75520	39	4
120650-75530	39	5
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120650-91910	46	3
120650-91920	46	4
120650-91930	46	5
120650-91940	46	6
120650-91950	46	7
120650-91960	46	2
120650-91970	46	8
120651-01710	3	13
120651-13600	48	7
120651-13640	44	18
120651-17000	43	1
120651-17010	43	11
120651-17020	43	5
120651-18050	11	1
120651-18300	11	29
120651-18400	23	1
120651-18410	23	2
120651-21400	13	2
120651-21410	13	3
120651-21470	13	6
120651-21560	47	1
120651-39350	21	9
120651-39610	21	1
120651-39620	21	4
120651-44000	27	1
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120651-44100	27	16
120651-44110	27	17
120651-44190	26	11
120651-44500	27	13
120651-44510	27	14
120651-44520	27	15
120651-49100	28	13
120651-49130	48	12
120651-49250	28	1
120651-49330	28	31
120651-49560	31	10
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120651-75290	42	3
120651-75410	42	1
120651-75830	42	22
120651-75870	41	1
120651-75871	41	1 -1
120652-13400	44	1
120652-13410	44	6
120652-13881	44	19
120652-21603	13	11
120653-01710	3	17
120660-13470	29	14
120660-13810	29	6
120660-13820	29	7
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120661-81050	47	2
124413-39100	20	1
127675-46012	30	1
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165000-67330	2	12
165000-67360	9	9
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165000-67400	1	7
165000-67410	1	14
165000-67420	7	5
165000-67430	15	3
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165000-67780	1	5
165000-67790	1	2
165000-67800	18	1
165000-67820	9	3
165000-67870	7	6
165000-67880	1	10
165000-67910	7	7
165000-67920	7	2
165000-67960	24	10
165000-67970	9	6
165000-67990	8	4
165000-68000	8	5
165000-68020	9	14
165000-68030	9	7
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165000-68090	8	1 B
165000-68100	8	1 C
165000-68120	9	17
165000-68140	9	5
165000-68160	9	11
165000-68170	9	12
165000-68190	9	2
165000-68290	8	2
165000-68300	4	1
165000-68320	18	11
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165000-68400	2	3
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165000-68450	2	6
165000-68460	12	5 AY
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165000-68480	12	5 AW
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165000-68640	12	2 AY
165000-68650	12	2 AG
165000-68660	12	2 AW
165000-68670	12	2 BY
165000-68680	12	2 BG
165000-68690	12	2 BW
165000-68700	12	2 CY
165000-68710	12	2 CG
165000-68720	12	2 CW
165000-68730	12	3 AY
165000-68740	12	3 AG
165000-68750	12	3 AW
165000-68760	12	3 BY
165000-68770	12	3 BG
165000-68780	12	3 BW
165000-68790	12	3 CY
165000-68800	12	3 CG
165000-68810	12	3 CW
165000-68830	12	1
165000-68880	15	11
165000-68890	15	10
165000-68920	14	1
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165000-68980	14	3 F
165000-68990	14	3 E
165000-69000	14	4 A
165000-69010	14	4 B
165000-69020	14	4 C
165000-69030	14	4 D
165000-69040	14	4 E
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165000-69310	7	14
165000-69320	7	11
165000-69330	7	13
165000-69340	7	12
165000-69360	18	4
	24	15
165000-69370	18	5
165000-69380	18	10
165000-69390	18	6
165000-69400	18	8
165000-69440	19	4
165000-69460	19	5
165000-69470	19	12
165000-69480	1	13
165000-69490	19	1
165000-69500	19	8
165000-69510	19	3
165000-69520	19	2
165000-69530	19	10
165000-69540	19	11
165000-69640	24	8
165000-69650	24	5
165000-69660	24	6
165000-69670	24	7
165000-69690	2	7
	24	3
165000-69720	24	2
165000-69780	24	14
165000-69800	10	4
165000-69810	10	3
165000-69820	10	6
165000-69830	10	5
165000-69840	10	7
165000-69850	10	9
165000-69860	10	2
165000-69880	10	1
165000-70000	8	7
165000-70080	37	2
165000-70090	37	1
165000-70150	35	24
165000-70160	35	5
165000-70170	35	22
165000-70180	35	21

PARTS No.	Fig.	Ref.No.
165000-70190	35	20
165000-70210	16	3
165000-70220	15	6
165000-70230	15	4
165000-70240	16	2
165000-70250	15	7
	16	10
165000-70260	15	1
165000-70270	35	11
165000-70290	35	9
165000-70300	35	15
165000-70390	35	3
165000-70400	35	6
165000-70410	35	18
165000-70420	35	12
165000-70430	35	10
165000-70450	35	14
165000-70460	35	16
165000-70470	35	17
165000-70560	35	8
165000-70570	35	19
165000-70580	35	4
165000-70640	35	13
165000-70660	8	6
165000-70690	13	18
165000-70700	9	15
165000-70730	9	16
165000-71020	9	13
165000-93230	4	17
165000-93240	4	18
165000-93250	4	2
165000-93270	4	8
165000-93310	13	16
165000-93330	24	13
165001-22370	4	16
165001-25170	4	14
165001-25180	38	1
165001-25190	38	1 A
165001-35540	35	7
165001-35650	35	2
165001-35660	15	9
165001-35680	8	3
165001-35710	24	4
165001-35720	24	1
165001-35740	19	7
165001-35750	35	1
165001-35790	10	8
165001-35800	24	9
165001-35810	4	15
165001-35830	16	9

PARTS No.	Fig.	Ref.No.
165001-35850	2	9
165001-35860	7	1
165001-35910	13	17
165001-35970	7	8
165001-35990	15	2
165001-36010	18	3
165001-39230	9	4
165001-39240	7	4
165001-59960	9	3 -1
165001-59970	7	6 -1
165001-59980	24	15 -1
165001-59990	16	1 -1
165001-60000	15	1 -1
165001-60010	35	6 -1
165001-60020	38	1 A-1
165001-66850	13	15 -1
165001-66860	38	3 -1
165001-66870	9	9 -1
	13	19 -1
165001-66880	7	5 -1
165001-66890	35	23 -1
165001-66900	7	2 -1
165001-66910	8	5 -1
165001-66920	9	17 -1
165001-66930	35	22 -1
165001-71670	7	7 -1
165001-71680	14	3 A-1
		3 B-1
165001-71690	14	3 C-1
		3 D-1
165001-71700	14	3 E-1
		3 F-1
165001-71710	14	4 A-1
		4 B-1
165001-71720	14	4 C-1
		4 D-1
165001-71730	14	4 E-1
		4 F-1
165001-71740	35	20 -1
165001-71750	13	18 -1

PARTS No.	Fig.	Ref.No.
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YANMAR CO., LTD.