



N485J-3 Marine Diesel Engine Set Parts Catalogue

N485J-3 船用柴油机组零件图册

ZHENJIANG SIYANG DIESEL ENGINE MANUFACTURING CO.,LTD CHINA

(East China Shipbuilding Institute Factory)

镇江四洋柴油机制造有限公司（原华东船院工厂）

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Fig. 1 Cylinder Head Cover Assembly

Series No.	Parts No. Or Specification	Parts Description	Quantity	Remarks
1	GB3452.1-82	“O” Rubber seal washer	1	
2	N85-01002	Oil filler cap	1	
3	N485-01003	Cylinder head cover	1	
4	N85C-01004A	Gas outlet pipe	1	
5	HG4-404-82	Rubber hose $\Phi 10 \times 300$	1	
6	N485-01001	Cylinder head cover sealing ring	1	
7	N485C-01005	Check valve seat	1	
8	GB308-89	Steel ball $\Phi 22$	1	
9	N485C-01006	Baffle	1	
10	GB859-87	Spring washer 6	2	
11	GB65-85	Screw $M6 \times 12$	2	

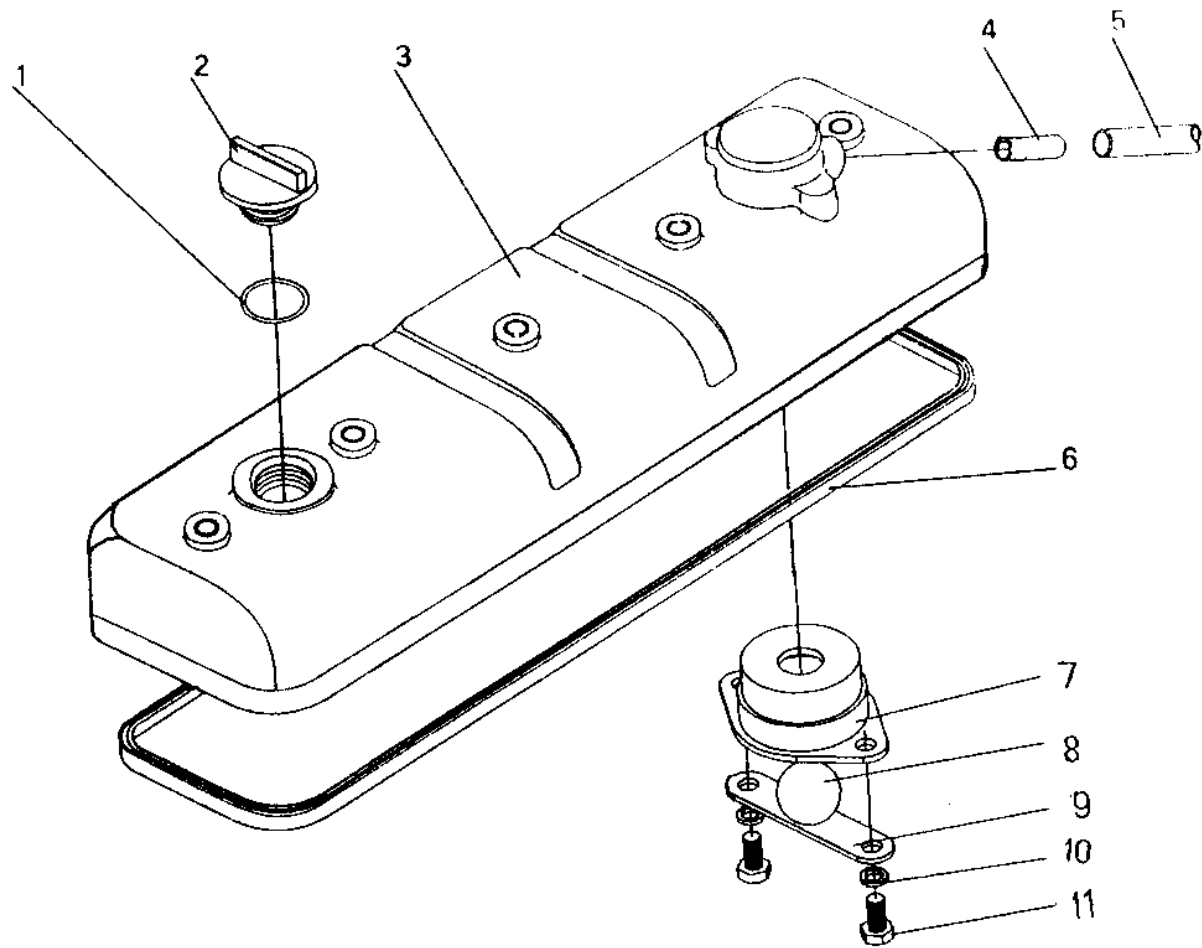


Fig.1 Cylinder Head Cover Assembly

Fig. 2 Cylinder Head Assembly

Series No.	Parts No. Or Specification	Parts Description	Quantity	Remarks
1	GB5782-86	Bolt M8×35	4	
2	GB5782-86	Bolt M8×45	1	
3	GB859-87	Spring washer 8	46	
4	GB848-85	Plain washer 8	11	
5	N85-17006	Bracing piece	1	
6	WB9311	Water temperature alarming sensor	1	
7	N85-17004	Thermostat housing gasket	1	
8	N85-17003	Thermostat (model 1052A)	1	
9	N85-17002	Thermostat cover gasket	1	
10	N485Q-17001A	Thermostat cover	1	
11	GB5782-86	Bolt M8×22	2	
12	GB899-88	Stud M8×75	8	
13	GB6170-86	Nut M8	18	
14	N85-02101A	Sleeve	4	

Fig. 2 Cylinder Head Assembly

Series No.	Parts No. Or Specification	Parts Description	Quantity	Remarks
15	N85-02006	Exhaust manifold gasket	4	
16	N85-02105	Valve guide	4	
17	GB97.1-85	Plain washer 8	14	
18	GB923-88	Button head cap nut M8	5	
19	N485-02108	Cylinder head	1	
20	N85-02109	Expansion plug $\Phi 26$	4	
21	N85-08007	Water pipe connector	1	
22	N85-02011	Injector clamping plate	4	Not applicable in direct chamber
23	GB899-88	Stud M8 \times 50	8	
24	N85-02104	Expansion plug $\Phi 55$	1	
25	N85-02004	Hoisting hold	2	
26	N85-02102	Expansion plug $\Phi 20$	4	
27	GB5782-86	Bolt M8 \times 20	4	
30	GB5782-86	Bolt M8 \times 28	5	

Fig. 2 Cylinder Head Assembly

Series No.	Parts No. Or Specification	Parts Description	Quantity	Remarks
31	GB97.1-85	Plain washer 8	14	
32	N85-02106	Exhaust valve seat	4	
33	N85-02107	Intake valve seat	4	
34	N85-17005	Thermostat housing	1	
35	HG4-549-67	Radiator water pipe $\Phi 19 \times \Phi 27 \times 90$	1	
36	Q68026	Clamp $\Phi 26$	1	

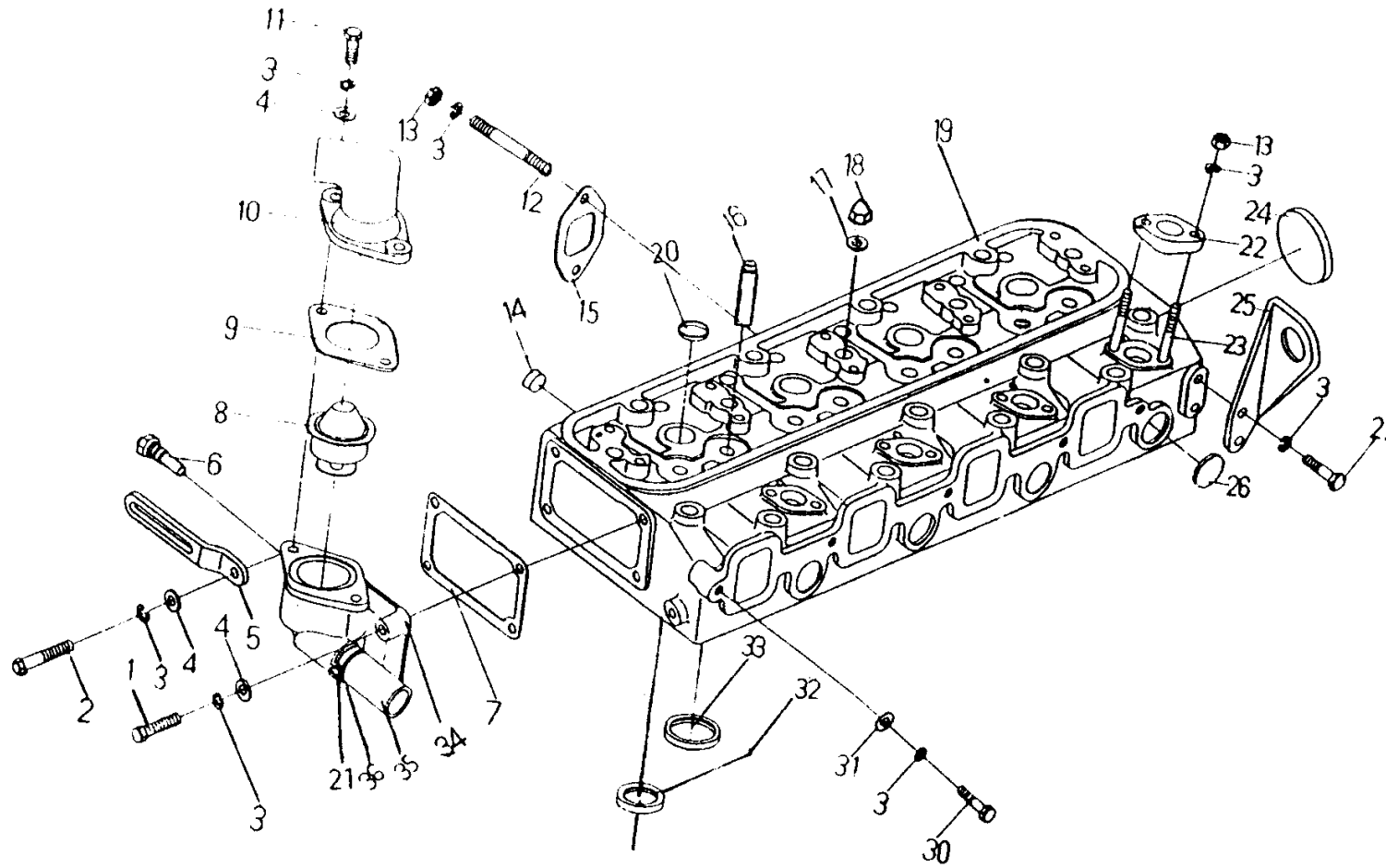


Fig.2 Cylinder Head Assembly

Fig. 3 Cylinder Block Assembly

Series No.	Parts No. Or Specification	Parts Description	Quantity	Remarks
1	N485-03101	Engine block	1	
2	N85-03008	Main bearing shell (upper)	5	
3	N85-03006	Main bearing shell (lower)	5	
4	N85-03104	Main bearing cap	4	
5	N85-03106	Main bearing cap bolt	10	
6	N85-03105	Main bearing cap bolt washer	10	
7	N85-03107	Rear main bearing cap	1	
8	N85-03007	Crankshaft thrust plate (lower)	2	
9	N85-03009	Crankshaft thrust plate (upper)	2	
10	GB5782-86	Bolt M8×45	3	
11	GB5782-86	Bolt M8×25	10	
12	GB859-87	Spring washer 8	32	
13	GB848-85	Plain washer 8	30	
14	N85-03020	Lubricating oil filter gasket	1	

Fig. 3 Cylinder Block Assembly

Series No.	Parts No. Or Specification	Parts Description	Quantity	Remarks
15	N85-03200	Water draining cock	1	
16	YB1011	Oil pressure alarming sensor	1	
17	GB119-86	Dowel pin B8×16	2	
18	GB119-86	Dowel pin B10×22	2	
19	N85-03110	Plug	4	
20	N85-03102	Expansion plug $\Phi 30$	9	
21	N85-03111	Blocking plug $\Phi 14$	5	
22	N85-03109	Camshaft rear bushing	1	
23	N85-03108	Expansion plug	1	
24	N485-03103	Cylinder head gasket	1	
25	N85-03104	Cylinder head bolt washer	18	
26	N85-03015	Cylinder head long bolt	14	
27	N85-03016	Cylinder head short bolt	4	
28	N85-03003	Cylinder liner	4	

Fig. 3 Cylinder Body Assembly

Series No.	Parts No. Or Specification	Parts Description	Quantity	Remarks
29	N85-03002	Water seal ring	8	
30	N85-03017	Cylinder head locating sleeve	2	
31	N85-03103	Camshaft bushing	1	
31	N485-03112	Camshaft middle bushing	1	
32	N85-12001	Gear case gasket	1	
33	N85-03001	Gear case locating sleeve	3	
34	GB6170-86	Nut M8	3	
35	GB898-88	Stud M8×35	3	
36	N85-12002	Gear case	1	
37	N85-12003	Gear case cover gasket	1	
38	N85-12004	Gear case cover	1	
39	GB5782-86	Bolt M8×80	2	
40	N85-12006	Advancer cover gasket	1	
41	N85-12005 (A)	Advancer cover	1	

Fig. 3 Cylinder Body Assembly

Series No.	Parts No. Or Specification	Parts Description	Quantity	Remarks
42	GB5782-86	Bolt M8×85	3	
43	GB5782-86	Bolt M8×50	5	
44	HG4-692-67	Oil seal SG 52×72×12	1	
45	GB5782-86	Bolt M8×30	2	
46	GB5782-86	Bolt M8×65	2	
47	GB5782-86	Bolt M8×20	2	
48	N85-12007	Generator bracket	1	
49	GB6170-86	Nut M10	1	
50	GB93-87	Spring washer 10	1	
51	GB5782-86	Bolt M10×90	1	
52	N85-03005	Rear oil seal cover gasket	1	
53	N85-03010	Rear oil seal cover	1	
54	HG4-692-67	Oil seal SG 85×110×12	1	
55	N485-03012	Flywheel housing	1	

Fig. 3 Cylinder Body Assembly

Series No.	Parts No. Or Specification	Parts Description	Quantity	Remarks
56	GB848-85	Plain washer 10	8	
57	GB859-87	Spring washer 10	8	
58	GB5782-86	Bolt M10×30	8	
59	N85-03011	Flywheel housing seal ring	1	
60	GB5782-86	Bolt M6×12	2	
61	GB93-87	Spring washer 6	2	
62	GB97.1-85	Plain washer 6	2	
63	N85-03019	Inspecting hole cover	1	
64	N85-03018	Inspecting hole cover gasket	1	
65	GB898-86	Stud M12×30	2	
66	GB848-85	Plain washer 12	2	
67	GB859-87	Spring washer 12	2	
68	GB6170-86	Nut M12	2	
69	N485-03102B	Engine front support	2	
70	N485-03103B	Engine rear support	2	

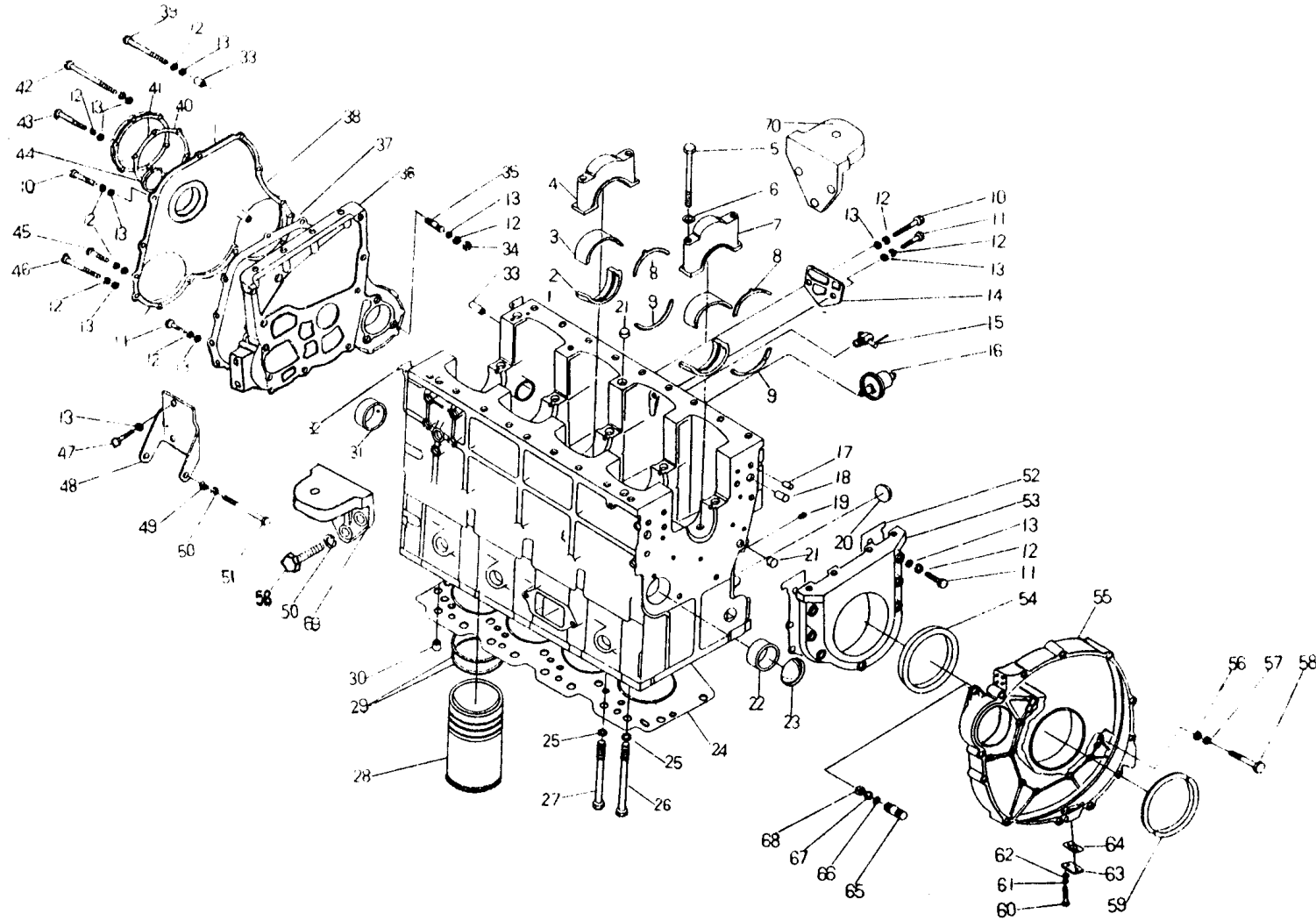


Fig.3 Engine Block Assembly

Fig.4 Timing Gear Train Assembly

Series No.	Parts No. Or Specification	Parts Description	Quantity	Remarks
1	N85-04001	Injecting pump timing gear	1	
2	GB5782-86	Bolt M8×50	2	
3	GB859-87	Spring washer 8	4	
4	N85-04003	Timing idle gear retainer	1	
5	N85-04005	Timing idle gear	1	
6	GB5782-86	Bolt M12×30	1	
7	GB859-87	Spring washer 12	1	
8	N85-04009	Camshaft timing gear retainer	1	
9	N85-04001	Lubricating oil pump driving gear	1	
10	N85-04006	Crankshaft timing gear	1	
11	N85-04007	Camshaft timing gear	1	
12	GB5782-86	Bolt M8×16	2	
13	GB97.1-85	Plain washer 8	2	
14	N85-04008	Camshaft retainer	1	
15	N85-04002	Timing idle gear bushing	1	
16	N85-04004	Timing idle gear shaft	1	

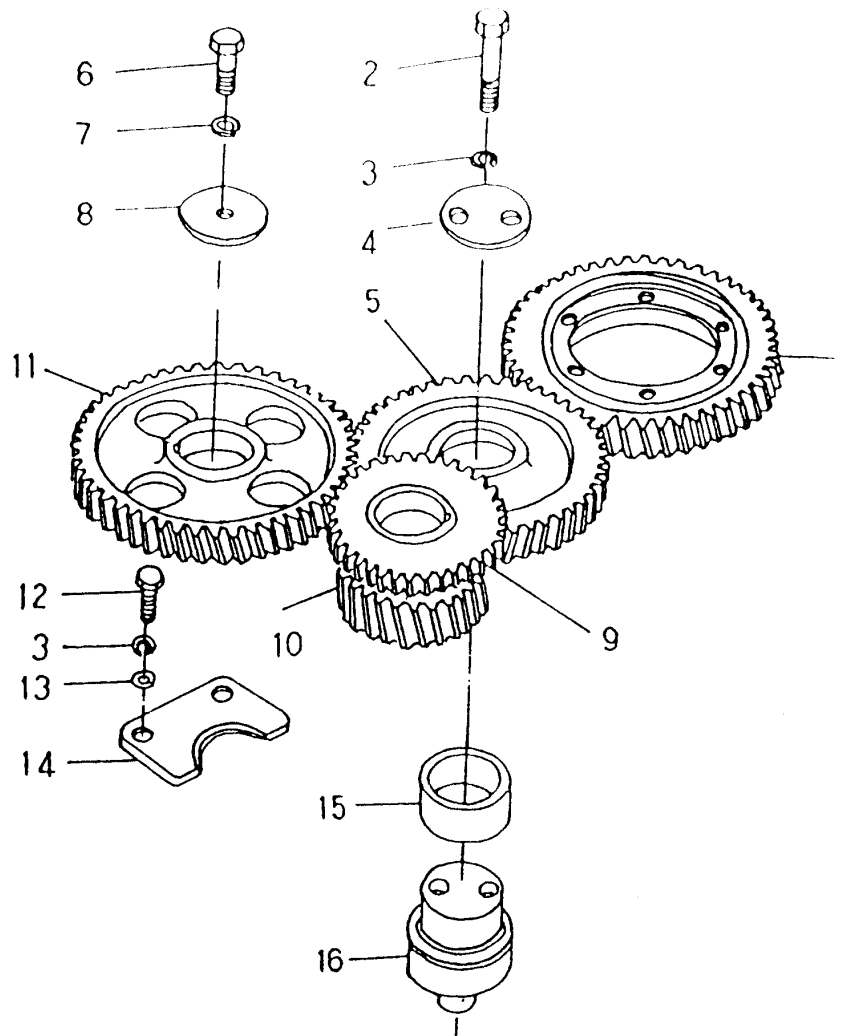


Fig.4 Timing Gear Train Assembly

Fig. 5 Piston and Connecting Rod Assembly

Series No.	Parts No. Or Specification	Parts Description	Quantity	Remarks
1	N85-05002	1 st piston ring	4	
2	N85-05003	2 nd piston ring	4	
3	N85-05100	Oil ring	4	
4	GB893.2-86	Circlip 28	8	
5	N85-05001	Piston	4	
6	N85-05201	Connecting rod	4	
7	N85-05203	Connecting rod bolt	8	
8	N85-05005	Connecting rod bearing shell	8	
9	N85-05204	Connecting rod cap	4	
10	N85-05205	Connecting rod nut	8	
11	N85-05202	Connecting rod bushing	4	
12	N85-05004	Piston pin	4	

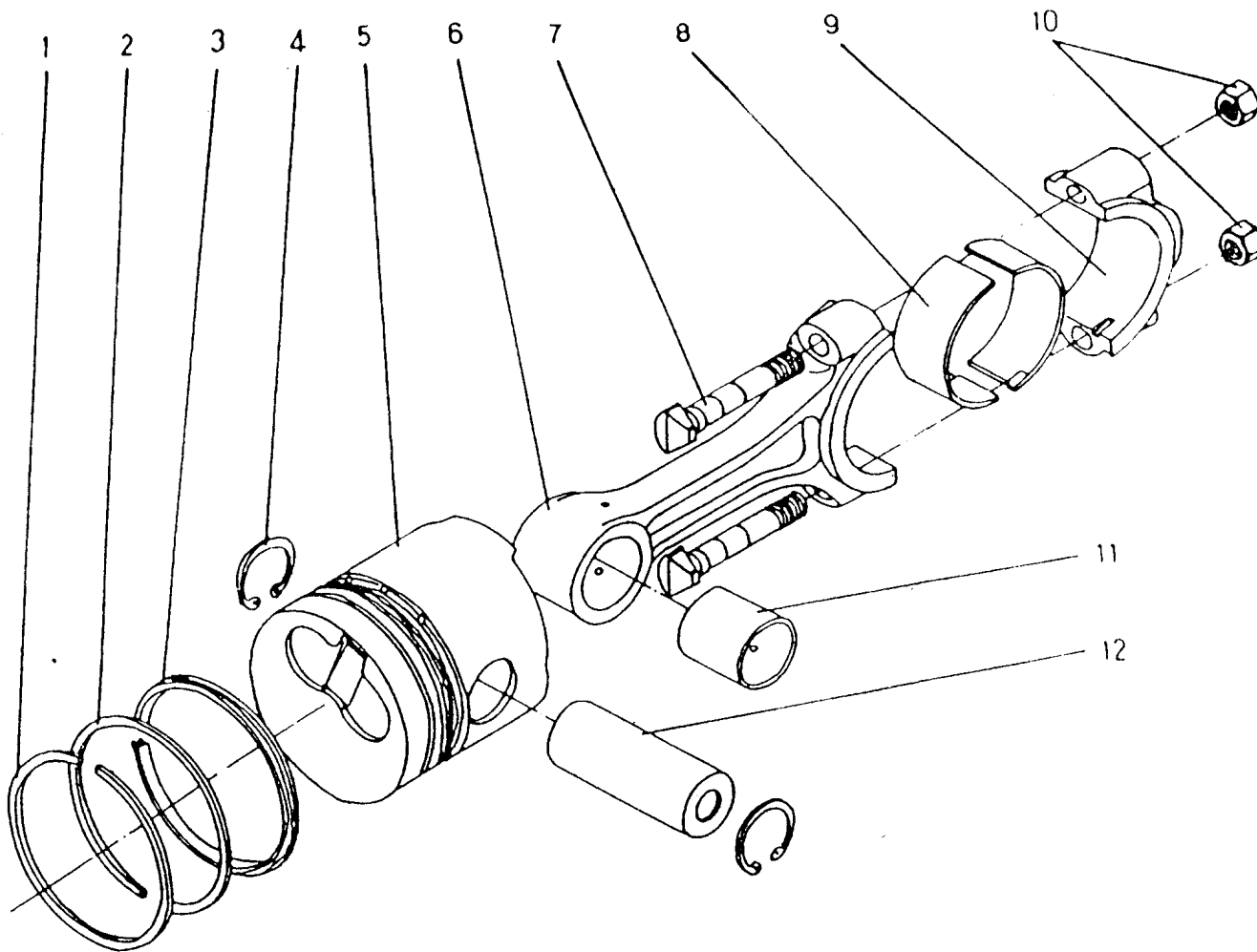


Fig.5 Piston and Connreting Rod Assembly

Fig. 6 Crankshaft and Flywheel Assembly

Series No.	Parts No. Or Specification	Parts Description	Quantity	Remarks
1	N85-06003	Starting jaw	1	
2	N85-06002	Starting jaw washer	1	
3	N485-06001	Crankshaft pulley	1	
4	N85-04010	Lubricating oil pump driving gear	1	
5	N85-04006	Crankshaft timing gear	1	
6	GB1096-79	Flat key C10×6.3	1	
7	N485-06004	Crankshaft	1	
8	GB119-86	Cylinder pin B10×20	1	
9	GB276-64	Single row radial ball bearing 203	1	
10	N485-06102	Flywheel ring gear	1	
11	N485-06101	Flywheel	1	
12	N85-06005	Flywheel bolt gasket	3	
13	N85-06006	Flywheel bolt	6	
14	N85C-06103 (D)	Coupling flange	1	

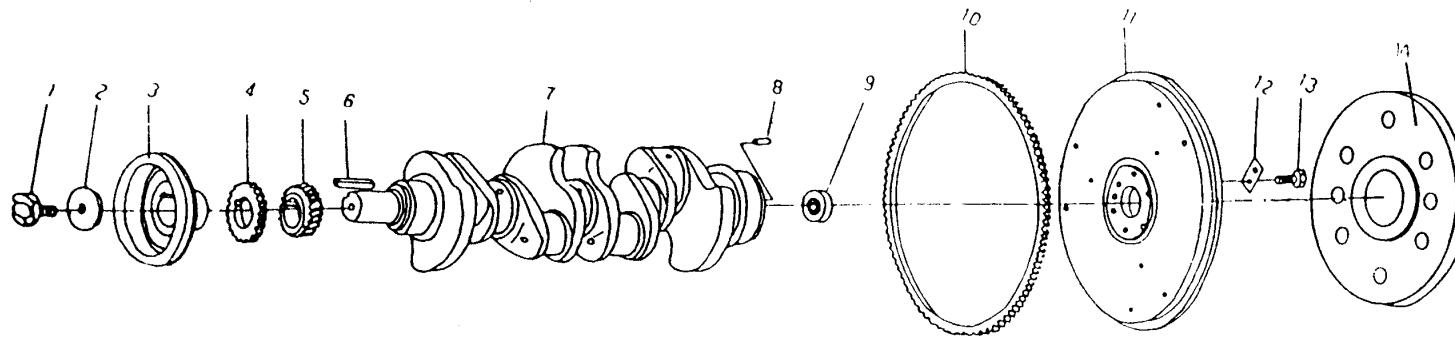


Fig.6 Crankshaft and Flywheel Assembly

Fig. 7 Valve Timing Mechanism

Series No.	Parts No. Or Specification	Parts Description	Quantity	Remarks
1	N485-07001	Camshaft	1	
2	GB1096-79	Flat key C10×25	1	
3	N85-07003	Valve tappet	8	
4	N85-07002	Valve push rod	8	
5	GB73-85	Tightening screw M10×1×10	2	
6	N85-02201	Front rocker arm support	1	
7	GB859-87	Spring washer 8	10	
8	GB5782-86	Bolt M8×45	5	
9	N85-02212	Valve rocker arm bushing	8	
10	N85-02211	Valve rocker arm	8	
11	N85-02202	Valve clearance adjusting screw	8	
12	N85-02203	Valve clearance adjusting nut	8	
13	N85-02205	Valve rocker arm spring	4	
14	GB5782-86	Bolt M8×60	5	

Fig. 7 Valve Timing Mechanism

Series No.	Parts No. Or Specification	Parts Description	Quantity	Remarks
15	GB6170-86	Nut M8	5	
16	GB79-85	Tightening screw M8×45	5	
17	N85-02206	Rocker arm shaft bushing	3	
18	N485-02207	Rocker arm shaft	1	
19	N85-02201	Valve spring seat(upper)	8	
20	N85-02202	Valve collet	16	
21	N85-02203(1)	Valve outer spring	8	
22	N85-02003(2)	Valve inner spring	8	
23	N85-02009	Exhaust valve	4	
24	N85-02008	Intake valve	4	
25	N85-02204	Rocker arm support	4	

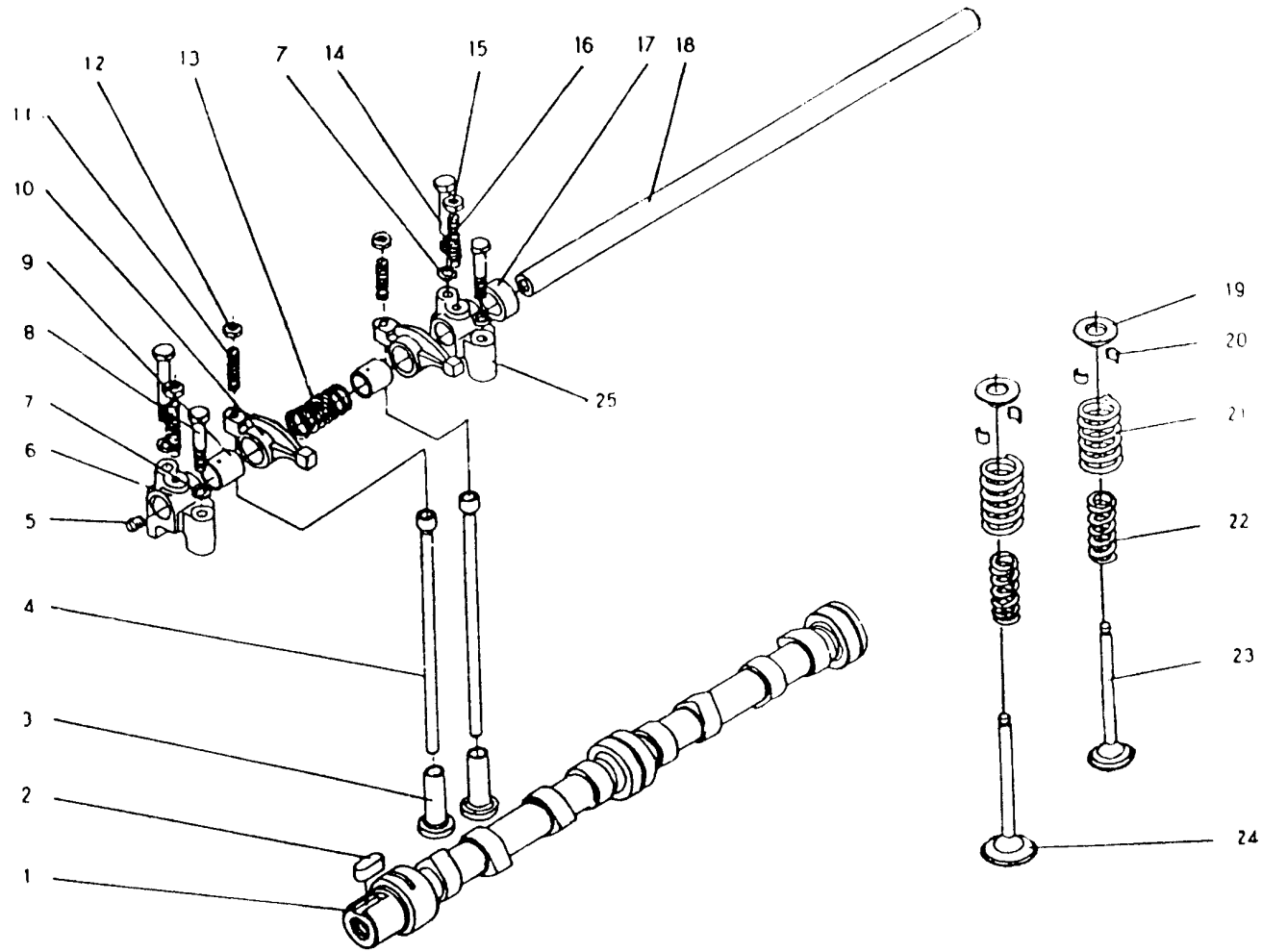


Fig.7 Valve Timing Mechanism

Fig. 8 Water Pump Assembly

Series No.	Parts No. Or Specification	Parts Description	Quantity	Remarks
1	GB5872-86	Bolt M8×20	4	
2	GB859-87	Spring washer 8	8	
3	N85-08011(1)	Water pump pulley	1	
4	15A-1020	V-belt	1	
5	GB6170-86	Nut M10	1	
6	GB93-87	Spring washer 10	1	
7	GB97.1-85	Plain washer 10	1	
8	N85-08012	Water pump pulley housing	1	
9	GB893.2-86	Circlip 35	1	
10	GB278-89	Bearing 60202	2	
11	N85-08002	Bearing spacing sleeve	1	
12	GB1099-79	Woodruff key 4×16	1	
13	N85-08006	Water pump shaft	1	
14	GB6170-86	Nut M8	4	

Fig. 8 Water Pump Assembly

Series No.	Parts No. Or Specification	Parts Description	Quantity	Remarks
15	GB898-88	Stud M8×45	4	
16	GB848-85	Plain washer 8	4	
17	N85-08004	Water pump housing	1	
18	GB1152-79	Oil cup M8×1	1	
19	N85-08010	Water pump gasket	1	
20	N85-08007	Water pipe connector	1	
21	GB68-85	Countersunk head bolt M6×16	2	
22	N85-08008	Water pump adapter gasket	1	
23	N85-08009	Water pump adapter	1	
24	N85-08005	Water pump impeller	1	
25	N85-08003	Water seal ring II F-12	1	

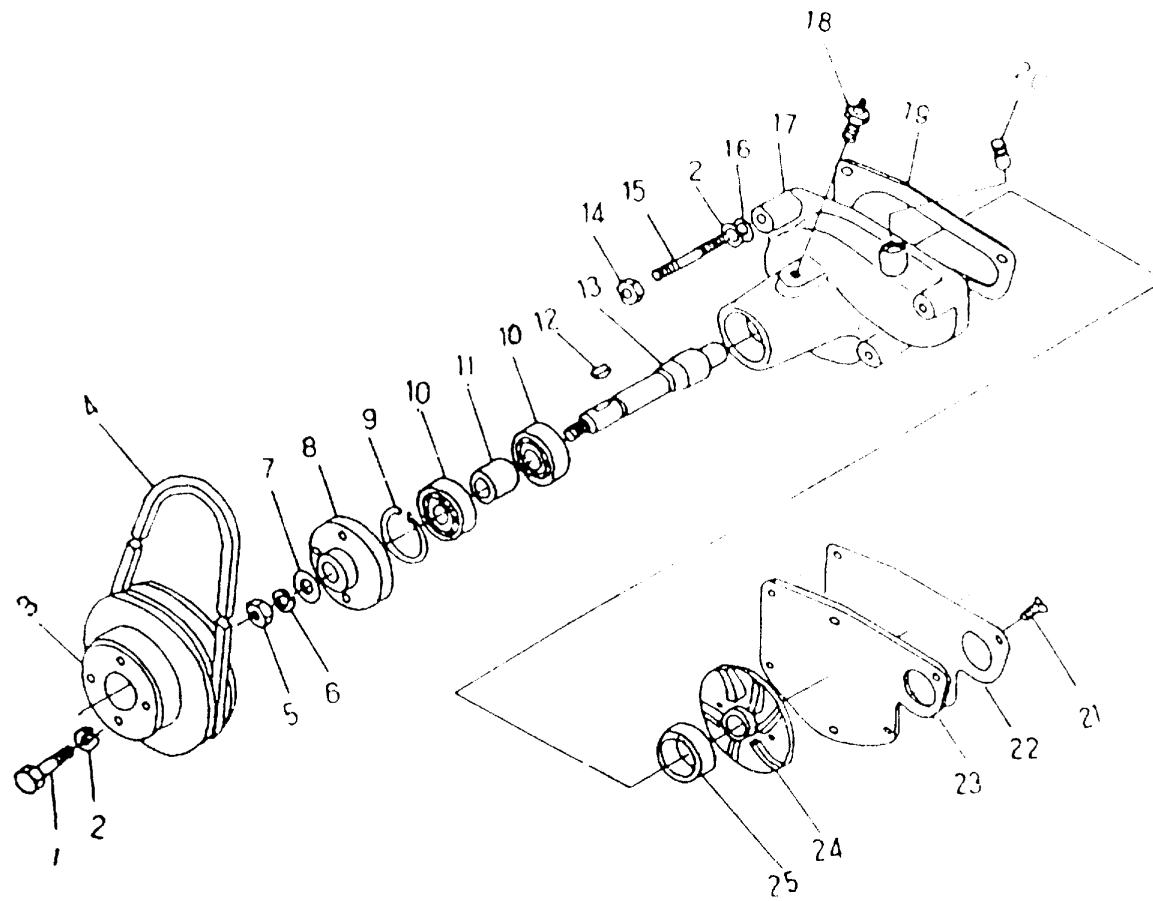


Fig.8 Water Pump Assembly

Fig. 9 Oil Sump Assembly

Series No.	Parts No. Or Specification	Parts Description	Quantity	Remarks
1	N485C-11006	Oil sump gasket	2	
2	380C3-01702	Breather pipe	1	
3	N485C-11005	Oil sump partition	1	
4	380C3-01703	Breather valve seat	1	
5	GB91-76	Pin 3 × 20	1	
6	GB308-89	Steel ball Φ 12	1	
7	2C3-F08501	Check valve housing	3	
8	GB308-89	Steel ball Φ 32	3	
9	GB893-76	Check ring 35	3	
10	N485C-11004	Oil sump	1	
11	N85C-11009	Dipstick	1	
12	N85C-11010	Dipstick pipe	1	
13	A-10706	Plain washer	1	
14	A-20402	Oil outlet screw	1	

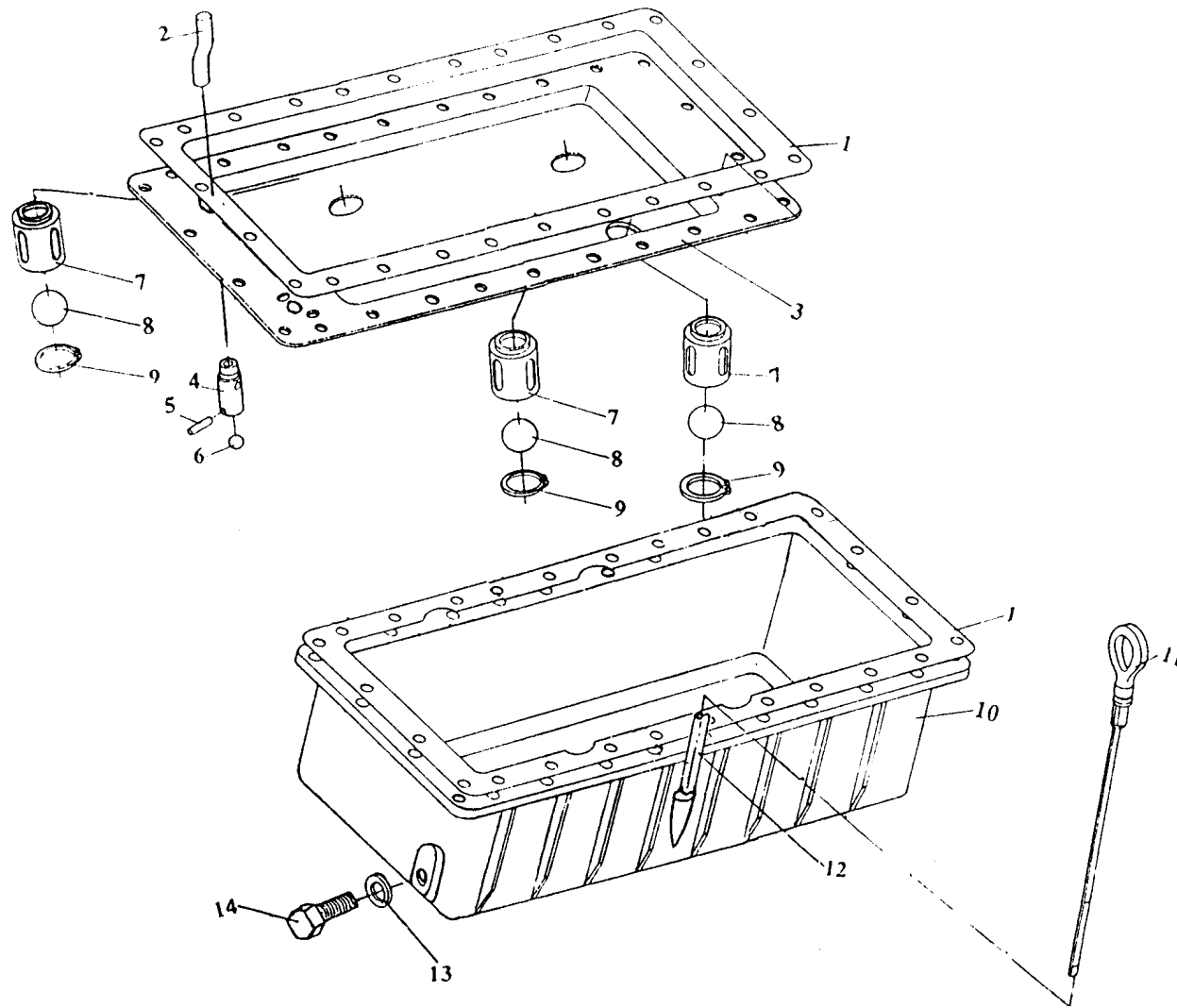


Fig.9 Oil Sump Assembly

Fig. 10 Lubricating Oil Pump Assembly

Series No.	Parts No. Or Specification	Parts Description	Quantity	Remarks
1	GB6172-86	Nut M10	1	
2	GB59-87	Spring washer 10	1	
3	GB848-85	Plain washer 10	1	
4	N85-13007	Oil pump gear	1	
5	GB5782-86	Bolt M6×55	1	
6	GB859-87	Spring washer 6	5	
7	N85-13006	Pressure_limiting plug	1	
8	N85-13005	Pressure_limiting spring	1	
9	GB308-89	Steel ball Φ10	1	
10	GB5782-86	Bolt M6×35	1	
11	GB5782-86	Bolt M6×50	3	
12	N485-13001	Oil pump body	1	
13	N485-13004	Outer rotor	1	
14	N485-13102	Inner rotor	1	

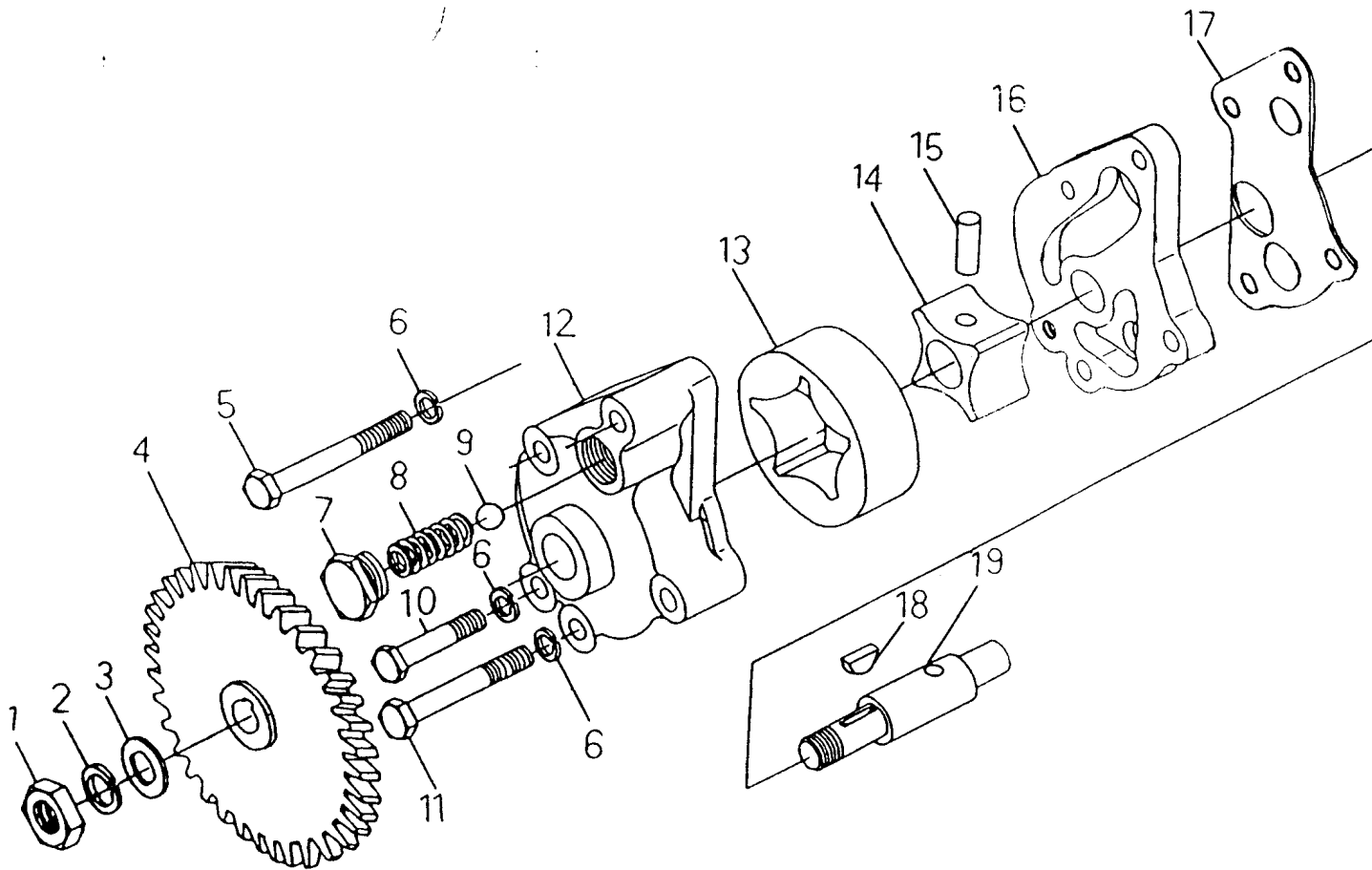


Fig.10 Lubrication Oil Pump Assembly

Fig. 11 Fuel System

Series No.	Parts No. Or Specification	Parts Description	Quantity	Remarks
1	GB1099-79	Woodruff 3 × 16	1	
2	N485-18001	Injection pump	1	
3	GB65-85	Button head cap bolt M5 × 20	2	
4	N85-14001	Fuel pipe clip (A)	4	
5	N85-18005	Injection pump timing gear adapter	1	
6	GB859-87	Spring washer 5	2	
7	GB6170-86	Nut M5	2	
8	N485-14100	1 st cylinder high pressure fuel pipe	1	
9	N485-14200	2 nd cylinder high pressure fuel pipe	1	
10	N485-14300	3 rd cylinder high pressure fuel pipe	1	
11	N485-14400	4 th cylinder high pressure fuel pipe	1	
12	N485-15300	Fuel filter outlet pipe	1	
13	N485-15400	Fuel feed pump outlet pipe	1	
15	GB859-87	Spring washer 8	2	

Fig. 11 Fuel System

Series No.	Parts No. Or Specification	Parts Description	Quantity	Remarks
16	GB848-85	Plain washer 8	2	
17	N485-28000	Fuel filter	1	
18	N85-25000	Injector	4	
19	N485-15100(A)	Injector fuel return pipe	1	
20	N485-15200	Injection pump fuel return pipe	1	
21	N485-18002	Fuel pump flange gasket	1	
22	N485-18003	Injection pump end cover	1	
23	N485-18004	Injection pump adapter gasket	1	
24	GB93-87	Spring washer 6	6	
25	GB5782-86	Bolt M6×16	6	
26	GB93-87	Spring washer 12	1	
27	GB6170-86	Nut M12	1	
28	N85-15500	Fuel feed pump inlet connector	1	

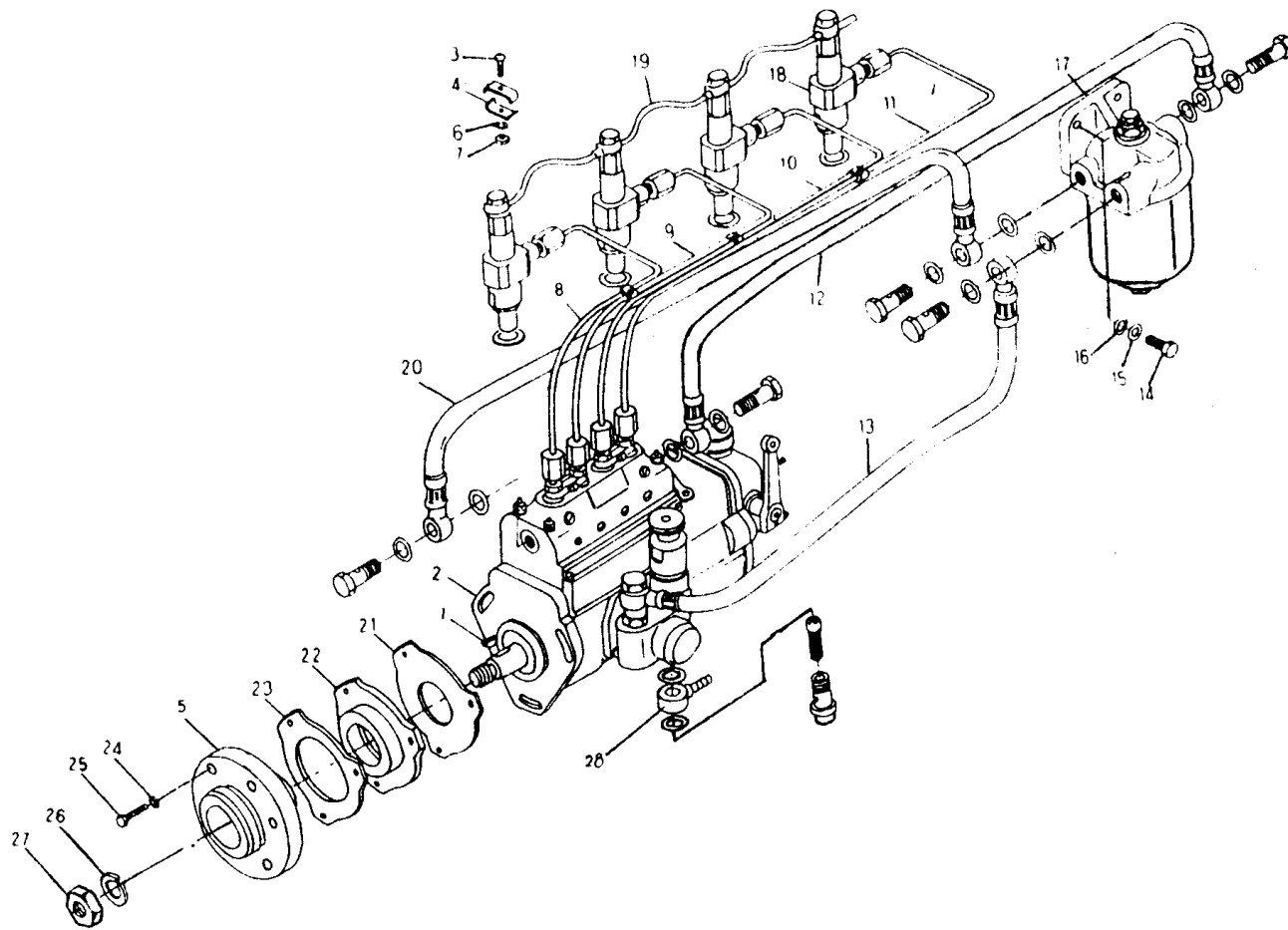


Fig.11 Furl System

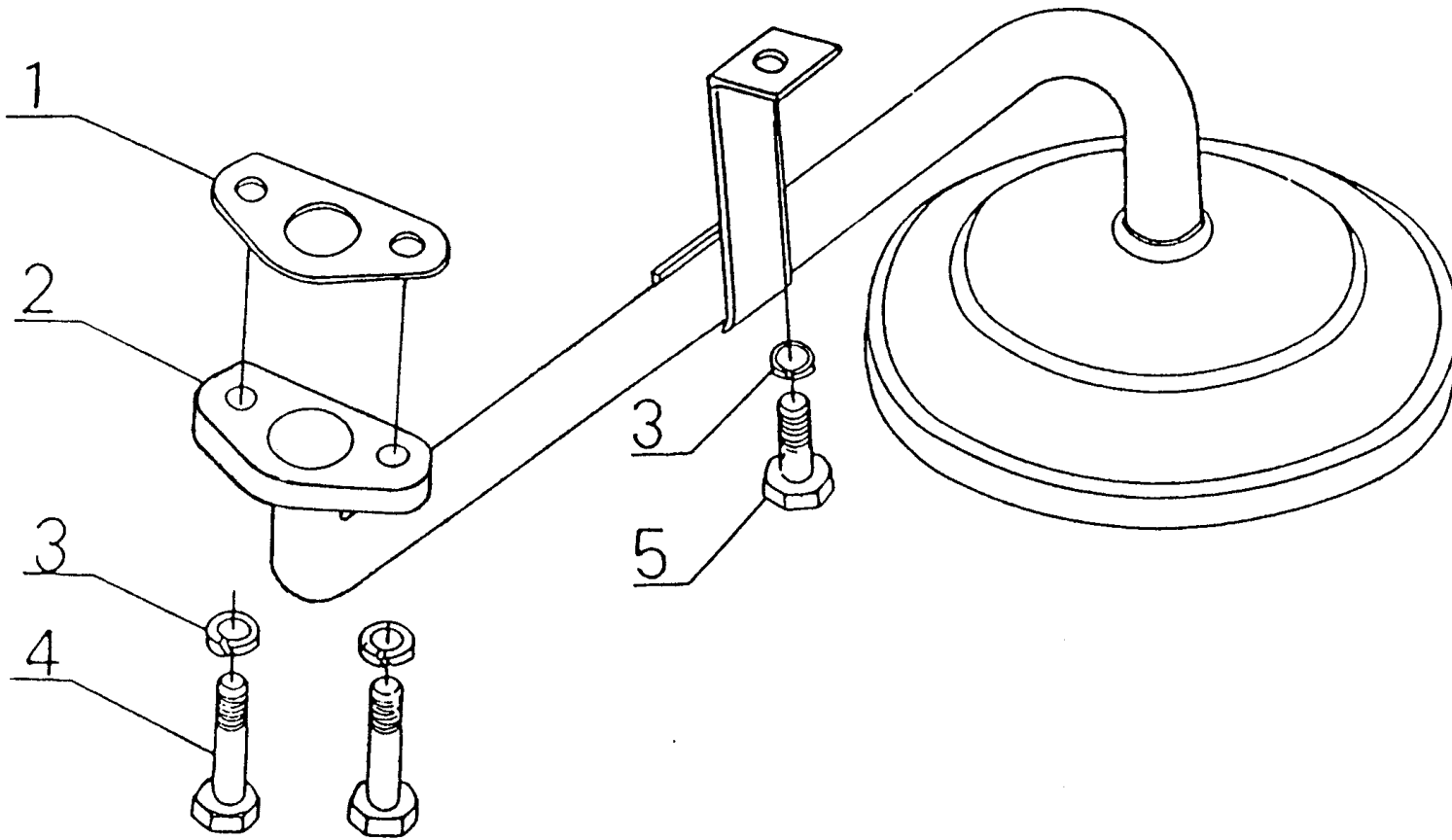


Fig.6 Lube Oil Suction Strainer

Fig. 13 Exhaust Pipe and Expansion Tank Assembly

Series No.	Parts No. Or Specification	Parts Description	Quantity	Remarks
1	GB5782-86	Bolt M6×84	10	
2	GB93-87	Spring washer 6	10	
3	GB97.1-85	Plain washer 6	10	
4		Complex radiator cover	1	
5		Complex radiator cover seat	1	
6	N485C-10002(A)	Expansion radiator	1	
7	N485C-10007	Gasket	1	
8	N485C-10001(A)	Exhaust pipe body	1	
9	GB6170-86	Nut M8	4	
10	GB93-87	Spring washer 8	4	
11	GB5872-86	Bolt M8×112	8	
12	N485C-10003	Gasket	1	
13	N485C-10004	Exhaust flange pipe	1	
14	GB899-88	Stud M8×20	4	
15	GB97.1-85	Plain washer 8	8	
16	Z380-17006	Outlet pipe connector	1	

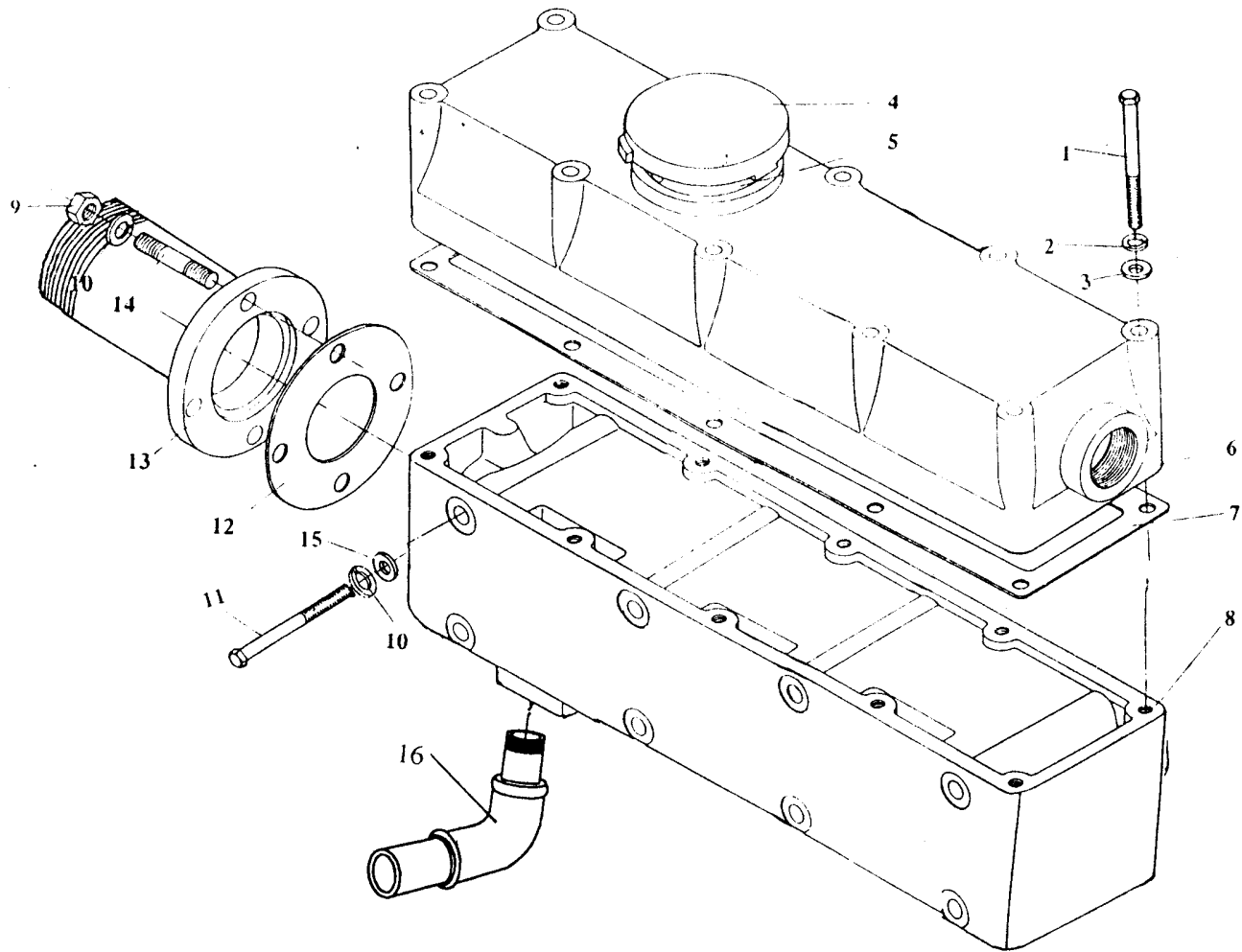


Fig.13 Exhaust Pipe and Expansion Assembly

Fig. 14 Lube oil filter /Generator /Starting motor

Series No.	Parts No. Or Specification	Parts Description	Quantity	Remarks
1	JX0706P1	Oil filter	1	
2	380C3-09301	Filter seat	1	
3	JFW17C3	Generator	1	
4	QD138	Starting motor	1	
5	YZ90ZH6	Lube cooler	1	
6		Pressure adjusting screw set J0810	1	
7	GB77-85	Setting screw M12×12	1	Or GB73-85

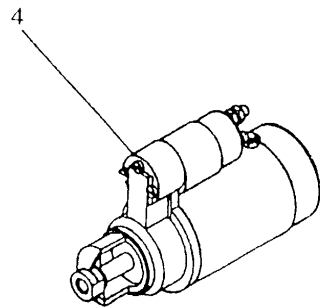
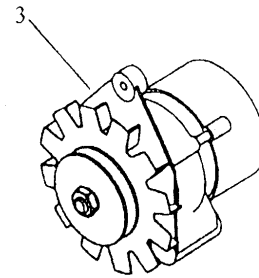
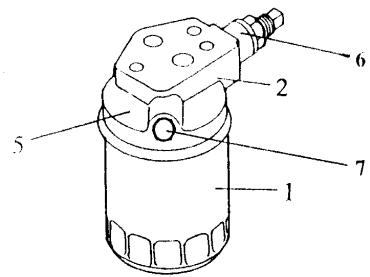


Fig.14 Lube Oil Filter/Generator/Starting Motor

Fig. 15 Intake Pipe Assembly

Series No.	Parts No. Or Specification	Parts Description	Quantity	Remarks
1	GB5782-86	Screw M8×28	5	
2	GB859-87	Spring washer 8	17	
3	GB848-85	Plain washer 8	17	
4	N485C-10100 (A)	Intake pipe	1	
5	N485-02005	Intake pipe gasket	1	
6	N485C-01101	Cold starting filler bracket	1	
7	GB5783-86	Screw M8×28	4	
8	N85C-09003	Intake pipe mouth	1	
9	N485-09006	Gasket	3	
10	GB5782-86	Screw M8×16	8	
11	N485-09005	Cover	2	
12	FJ-30	Cold starting liquid filler	1	

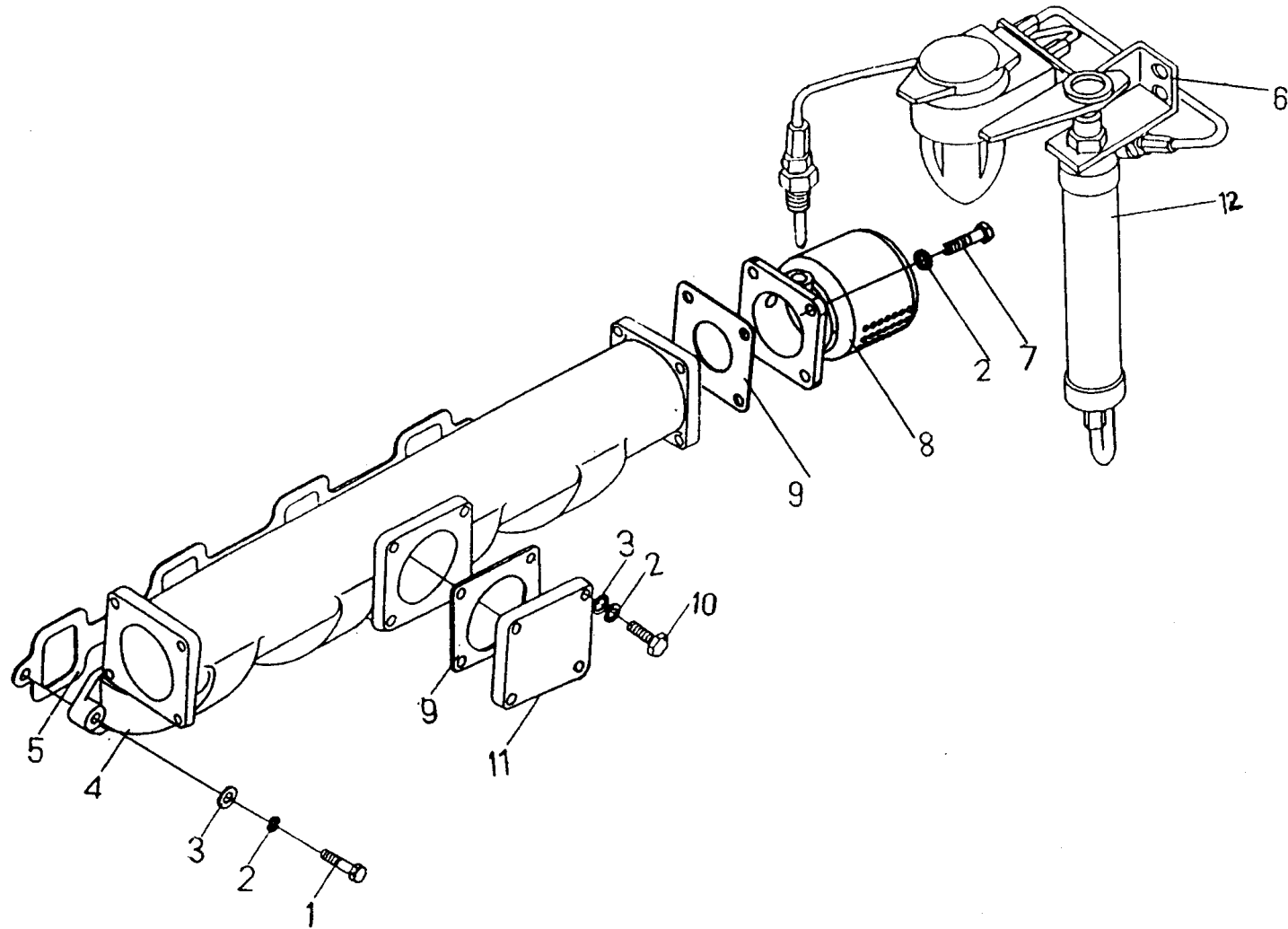


Fig.15 Intake Pipe Assembly

Fig. 16 End Cover Assembly

Series No.	Parts No. Or Specification	Parts Description	Quantity	Remarks
1	GB52-76	Nut M10	12	
2	GB848-85	Plain washer 10	12	
3	GB93-76	Spring washer 10	12	
4	GB898-88	Stud M10×30	12	
5	380C3-01805	Bracket	1	
6	N85C-03103A	End cover	1	ZF25M Vs N85C-03103B
7	GB898-88	Stud M8×25	6	ZF25M Vs Stud M10×30
8	GB848-85	Plain washer 8	6	ZF25M Vs Plain Washer 10
9	GB93-76	Spring washer 8	6	ZF25M Vs Spring Washer 10
10	ZF25M	Reduction gearbox	1	ZF25M

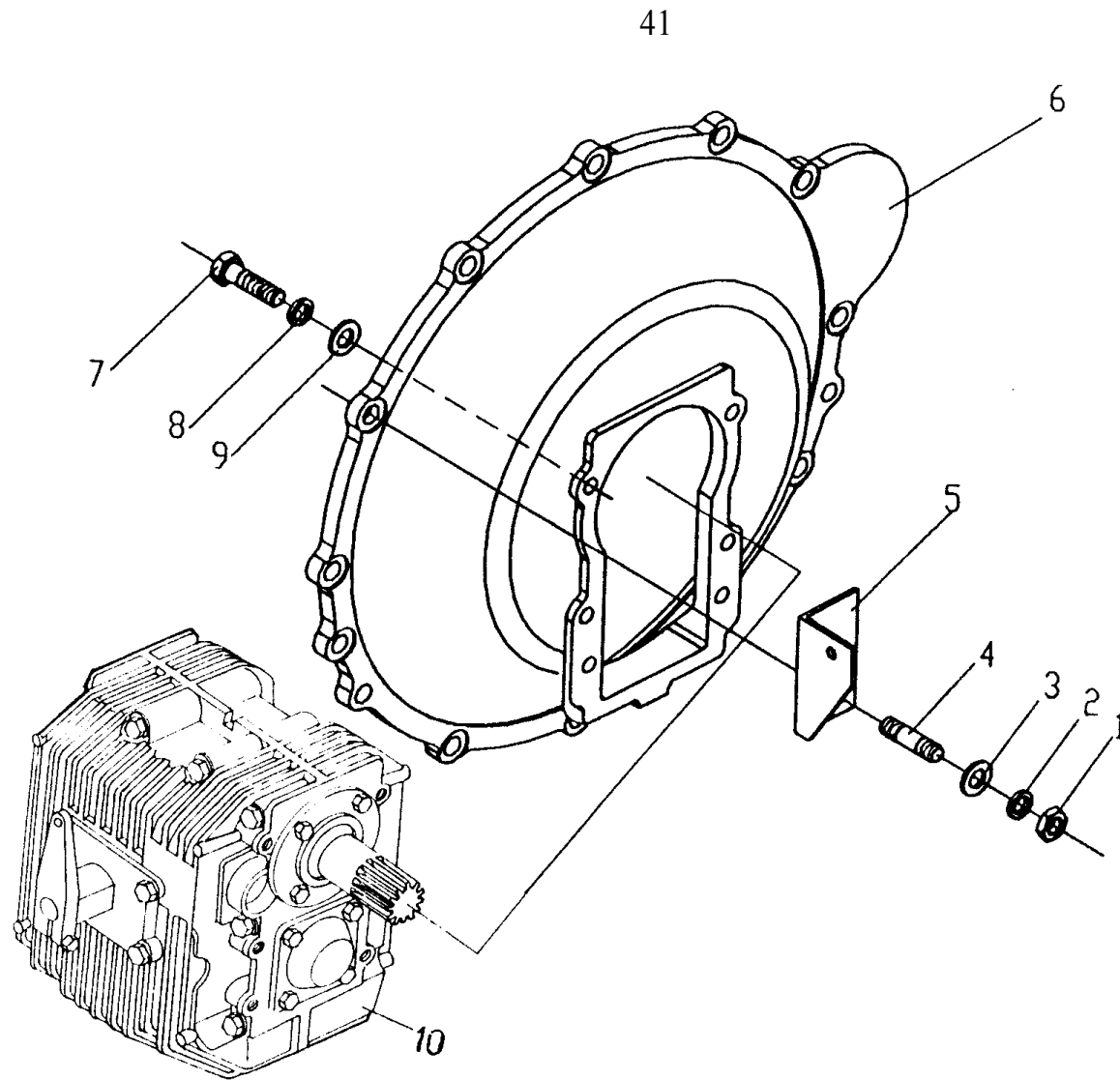


Fig.16 End Cover Assembly

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