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**TR65**

# CATÁLOGO DE PARTES



 **INDUSTRIA  
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## Cylinder Head Cover Assembly (Fig. 1)

Ref.No.	Name of Part	Part No.	Quantity
1	O Seal ring 33.5×2.65	GB/T3452.1-92	1
2	Oil filling cover	N85-01002	1
3	Bolt M4×6	GB/T65-2000	4
4	Name plate	ZN390T-01009P	1
5	Cylinder head cover	4L68-010003A-3	1
6	Cylinder head cover seal	4L68-010001B	1

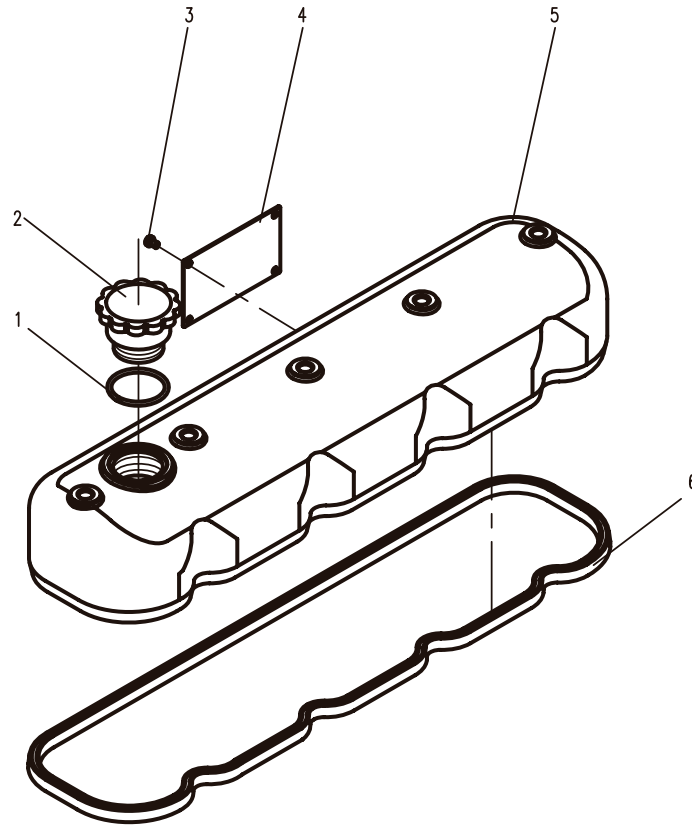


Fig.1 Cylinder Head Cover Assembly

**Cylind Head Assembly (Fig.2)**

Ref. No.	Name of parts	Part No.	Quantity
1	Sleeve	N85-02101A	4
2	Bolt M10×1.25×20	GB/T5786-2000	4
3	Lifting eye	4L88-020004	2
4	Exhaust manifold gasket	4L68-020006	4
5	Expansion plug $\phi$ 26	N85-02109	4
6	Valve guide	N85-02105	8
7	Nut M8	GB/T923-88	5
8	bonded 8	QJ/MD 05.01-90	5
9	gasket	N485Q-10002H	1
10	Nut M8	GB/T6170-2000	8
11	Stud M8×75	GB/T899-88	8
12	Washer 8	GB/T859-87	21
13	Exhaust manifold	N485T-10001E	1
14	Cylinder head	4L68-021008	1
15	Injector clamping plate	4L68-020009	4
16	Bolt M10×55	GB/T899-88	4
17	Nut M10	GB/T6170-2000	4
18	Expansion plug $\phi$ 55	N85-02104	1
19	Expansion plug $\phi$ 20	N85-02102	10
20	Intake manifold	N485T-09001K	1
21	Gasket	N485-09006	3
22	intake connect pipe	N485Q-09003R	1
23	air heater	N485Q-09100	1
24	Cover	N485-09005	2
25	Intake manifold gasket	ZN490QA-020005	1
26	Intake valve seat	4L68-021007	4
27	Exhaust valve seat	4L68-021006	4
28	Bolt M8×16	GB/T5783-2000	4
29	Bolt M8×85	GB/T5783-2000	2
30	Bolt M8×40	GB/T5783-2000	2
31	Washer 10	GB/T859-87	8
32	Bolt M8×28	GB/T5782-2000	5
33	Washer 8	GB/T97.1-85	10

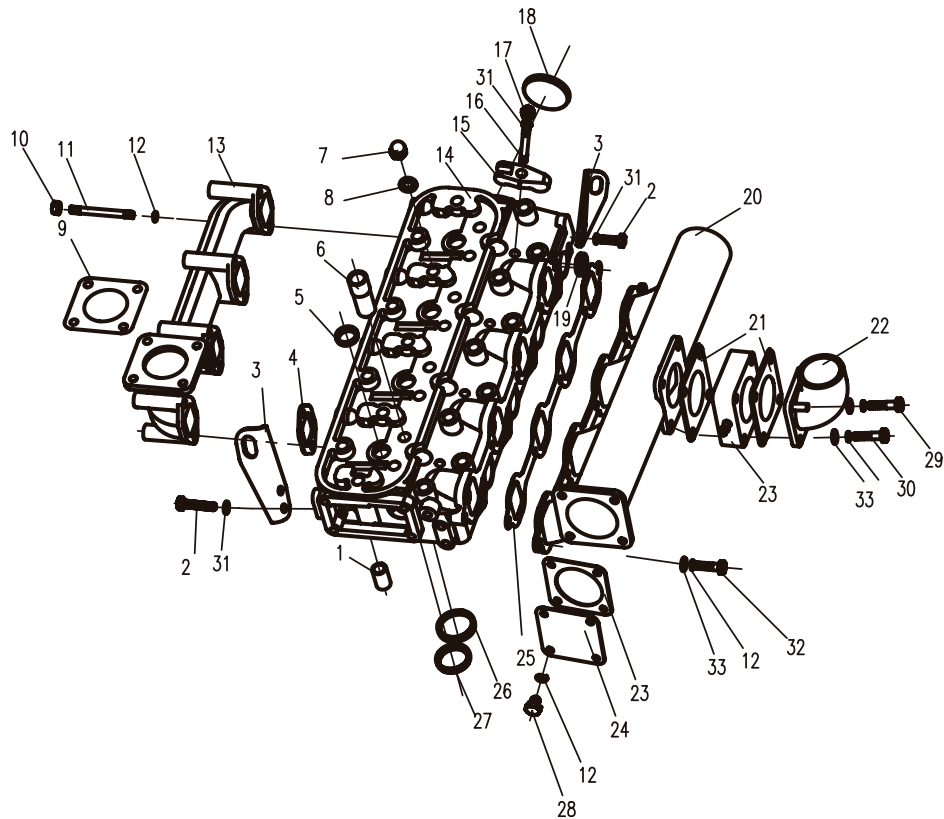


Fig.2 Cylind Head Assembly

## Cylinder Block and Gear Case Assembly(Fig.3)

Ref.No.	Name of parts	Part No.	Quantity
1	Bolt M10×35	GB/T5782-2000	14
2	Washer 10	GB/T859-87	14
3	Nut M12	GB/6710-2000	2
4	Bolt M12×35	GB/T899-1988	2
5	Washer 12	GB/T97.1-2002	2
6	Washer 12	GB/T859-87	2
7	Flywheel housing	4G33T-030012	1
		4G33T-030012A	
8	Oil seal DL85×110×12F	GB/T9877.1-1988	1
9	Bolt M8×25	GB/T5783-2000	10
10	Washer 8	GB/T859-87	47
11	Washer 8	GB/T848-85	44
12	Expansion plug	N85-03108	1
13	Camshaft rear bushing	N85-03109A	1
14	Expansion plug φ30	N85-03102	6
15	Camshaft middle bushing	N85-03112A	3
16	Cylinder head locating sleeve	N85-03017	2
17	Cylinder head bolt washer	N85-03105	10
18	Cylinder head long bolt	4B28TC-030015-1	12
19	Cylinder head long bolt	N85-03015-2	6
20	Cylinder liner	4G33-030003	4
21	Cylinder head gasket	4L68-030013A	1
22	A bonded washer 12	QJ/MD05.01-90	1
23	plug screw M12×1.5	QC/T376-1999	1
24	Gear case gasket	N85T-12001	1
25	Nut M8	GB/T6170-86	3
26	generator tighten washer	4L68-120012	3
27	Bolt M8×35	GB/T899-88	3
28	Gear case	N485T-12002	1
29	Nut M10	GB/T6170-86	1
30	Washer 10	GB/T848-2000	1
31	Washer 10	GB/T93-87	1
32	Generator bracket	N390T-12007	1
33	Bolt M8×25	GB/T5782-2000	11
34	Bolt M10×90	GB/T5782-2000	1
35	Bearing 6007	GB/T276-96	2
36	Gear case cover gasket	N85T-12003	1
37	Gear case cover	N485T-12004	1
38	Bolt M8×20	GB/T5782-2000	4

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39	Bolt M8×30	GB/T5782-2000	3
40	Hydraulic pump cover gasket	N85T-12010	2
41	Hydraulic pump cover	N85T-12009	2
42	Oil seal DR52×72×12	GB/T9877.1-1988	1
43	A 8	QJ/MD 05.01-90	4
44	Gear case front cover	N485T-12005	1
45	Gear case front cover gasket	N85T-12003	1
46	Inner hexagon cylindrical bolt M8×20	GB/T70.1-2000	3
47	Bolt M8×45	GB/T5782-2000	3
48	Bolt M8×60	GB/T5782-2000	1
49	Inner hexagon cylindrical bolt M8×55	GB/T70.1-2000	1
50	Bolt M8×50	GB/T5782-2000	3
51	Bolt M8×75	GB/T5782-2000	1
52	Bolt M8×80	GB/T5782-2000	1
53	Bolt M8×40	GB/T5782-2000	1
54	Dowel pin	N85T-03110	2
55	Camshaft bushing	N85-03103A	1
56	Blocking plug Φ14	N85-03111	2
57	Cylinder block	4G33T-031001	1
58	Main shaft cover	4G33T-031015	1
59	Main shaft cover bolt washer	N85-03105	10
60	Main shaft cover bolt	ZN490T-031016	6
61	bedplate bolt	N85T-03108	10
62	Main shaft cover bolt	N85T-03107	4
63	oil dipstick	N390T-03301A	1
64	( )Crankshaft thrust plate (lower)	4L68-030007	2
65	( )Crankshaft thrust plate (upper)	4L68-030009	2
67	Main bearing shell	4L68-030006	5
68	Oil pressure sensor	N85Q-03004	1
69	link bolt	4G33-030023	1
70	Washer	4G33-030024	1
71	fuel filter bracket	N309T-03024D	1
72	Water draining cock	ZN390TE-03200	1
73	bolt M8×20	GB/5783-2000	4
74	pin 8h8×16	GB/T119.1-2000	2
75	pin 10h8×25	GB/T119.1-2000	2
76	Rear oil seal cover gasket	N85T-03005	1
77	Rear oil seal cover	N85T-03010	1
78	Gear case locating sleeve	N85-03001	3

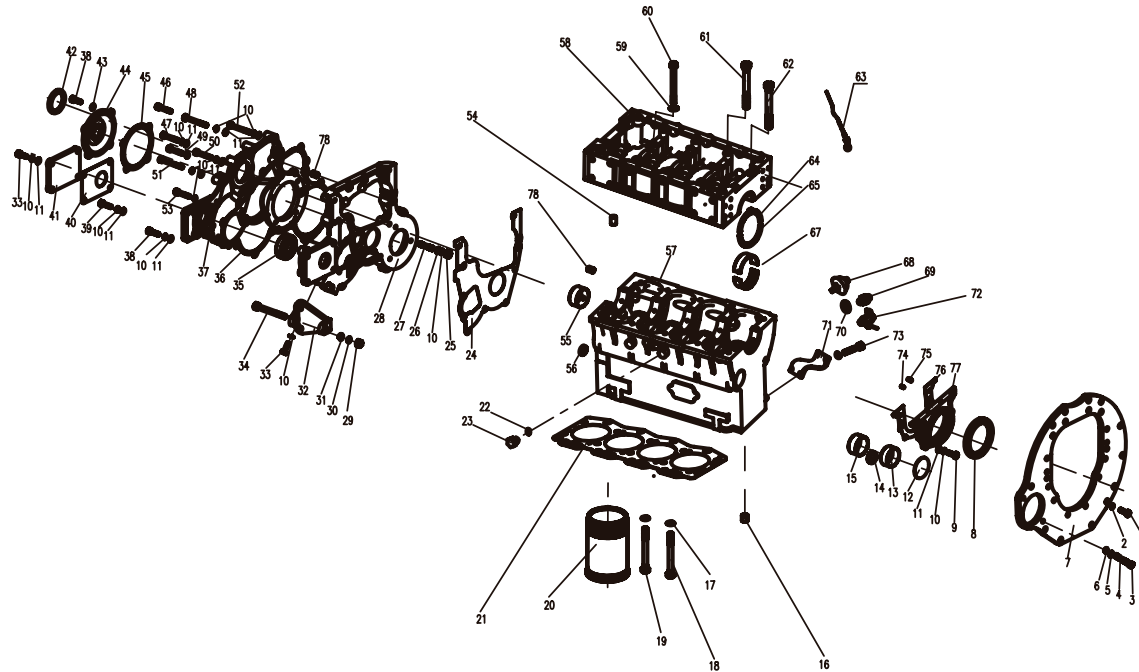


Fig.3 Cylinder Block and Gear Case Assembly



**Timing Gear Train (Fig. 4)**

Ref. No.	Name of parts	Part No.	Quantity
1	Bolt M12×30	GB/T5782-2000	1
2	Washer 12	GB/T859-87	1
3	Camshaft Washer	CC475Q-070002	1
4	Hydraulic pump gear	N85T-04011A-1 ( “-” )	1
		N85T-04011 ( “+” )	1
5	Camshaft timing gear	N85T-040007	1
6	Bolt M8×16	GB/T5783-2000	2
7	Washer 8	GB/T859-87	5
8	Washer 8	GB/T97. 1-2002	2
9	Camshaft clamp	N85-04008	1
10	Timing idle gear bushing	4L88-040002	1
11	Timing idle gear shaft	4G33-040004	1
12	Hollow bolt	N85T-04012	1
13	Washer 8	JB/T6013-2000	2
14	Oil pipe	N85T-04100	1
15	Bolt M8×55	GB/T5782-2000	3
16	Timing idle gear clamp	4G33T-040003	1
17	Lubricating oil pump driving gear	N85-04010A	1
18	Crankshaft timing gear	N85-04006	1
19	Timing idle gear	4L88-040005	1
20	Injection pump timing gear	N485T-04001	1

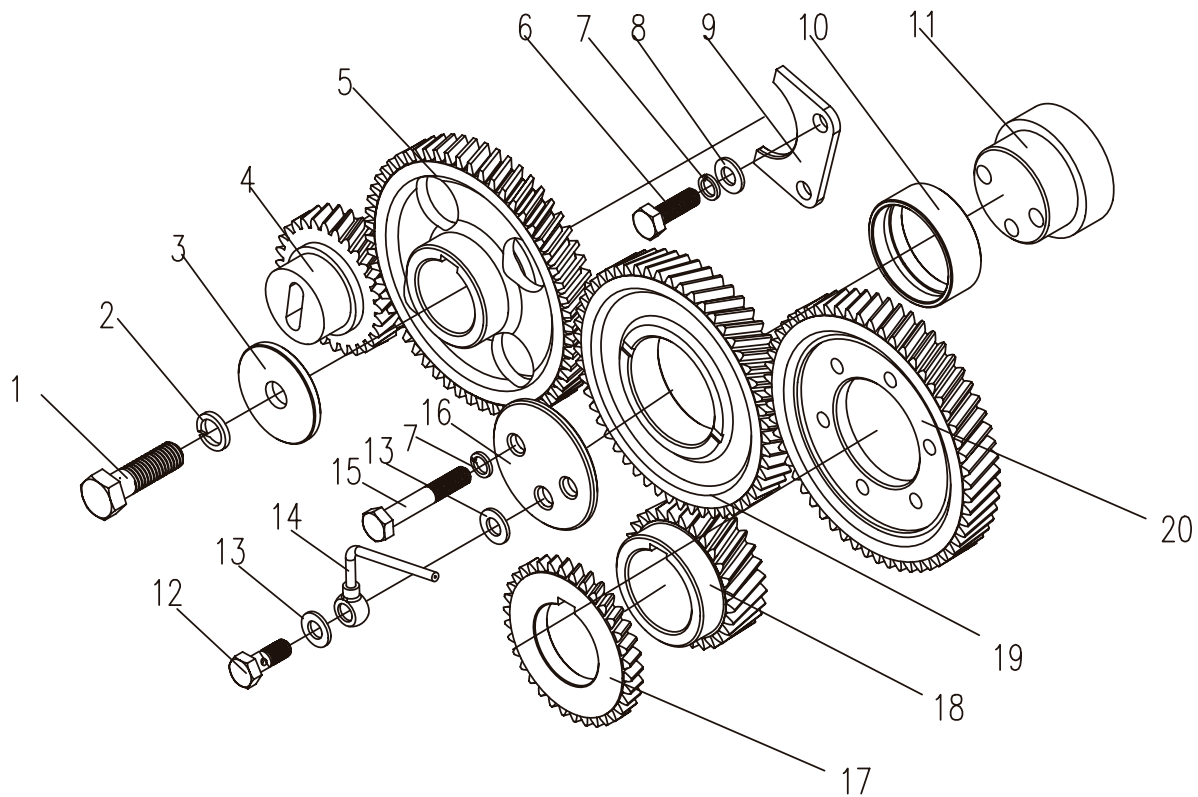


Fig.4 Timing gear train

**Piston and Connecting Rod Assembly (Fig.5)**

Ref. No.	Name of parts	Part No.	Quantity
1	1st piston ring	4L88-050002	4
2	2nd piston ring	4L88-050003	4
3	Oil ring	4L88-051000	4
4	Circlip 28	GB/T893. 2-86	8
5	Piston	4G33-050001	4
6	Connecting rod	4G33-052001	4
7	Connecting rod	4F20-052004	8
8	Connecting rod bearing shell	4G33-050005A	8
9	Connecting rod cap	4G33-052004	4
10	Connecting rod bushing	N85-05202	4
11	Piston pin	N85-05004	4

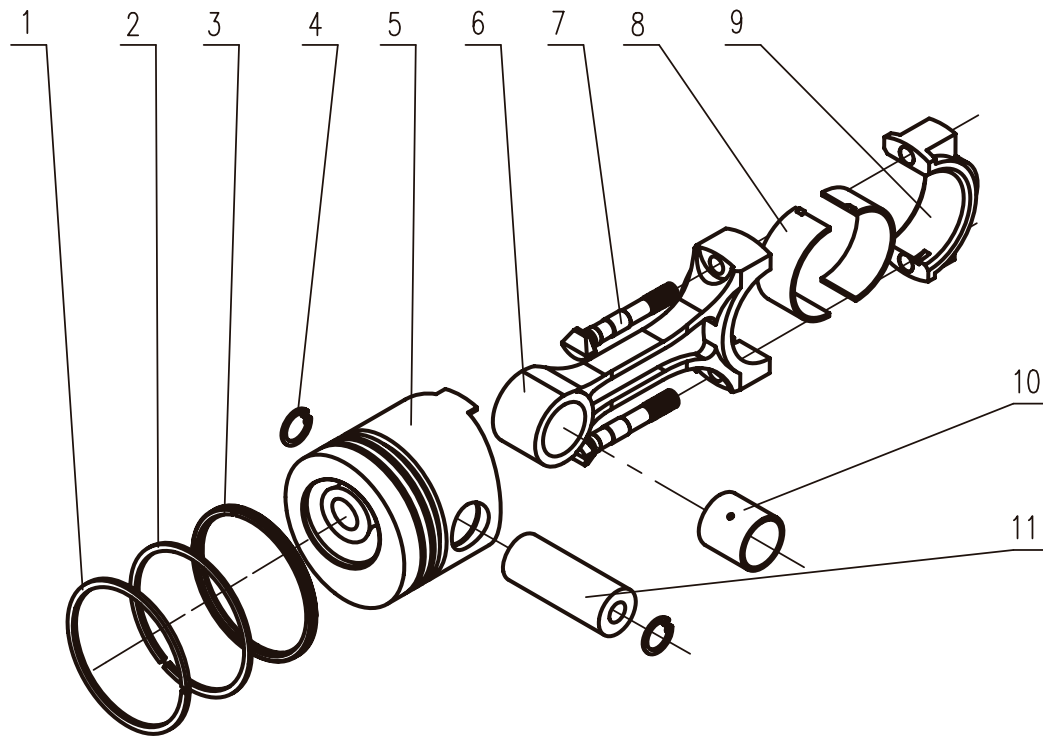


Fig.5 Piston and Connecting Rod Assembly

**Crankshaft and Flywheel Assembly (Fig. 6)**

Ref. No.	Name of parts	Part No.	Quantity
1	Crankshaft pulley bolt	N485Q-06007	1
2	Starting jaw washer	N85-06002	1
3	Crankshaft pulley	ZN485T-06001 (A)	1
		ZN485T-06001 (B)	
4	Lubricating oil pump driving gear	N485-04010 (A)	1
5	Crankshaft timing gear	N85-040006	1
6	Key C10x63	GB/T1096-2003	1
7	Crankshaft	4G33-060004	1
8	10h8x25 Cylindrical pin	GB/T119.1-2000	1
9	Flywheel	N485-06102	1
10	Flywheel	N485Q-06101N	1
		N485T-06101D	
11	Flywheel blot washer	N85-06005 (A)	1
12	Flywheel bolt	N85-06006	6

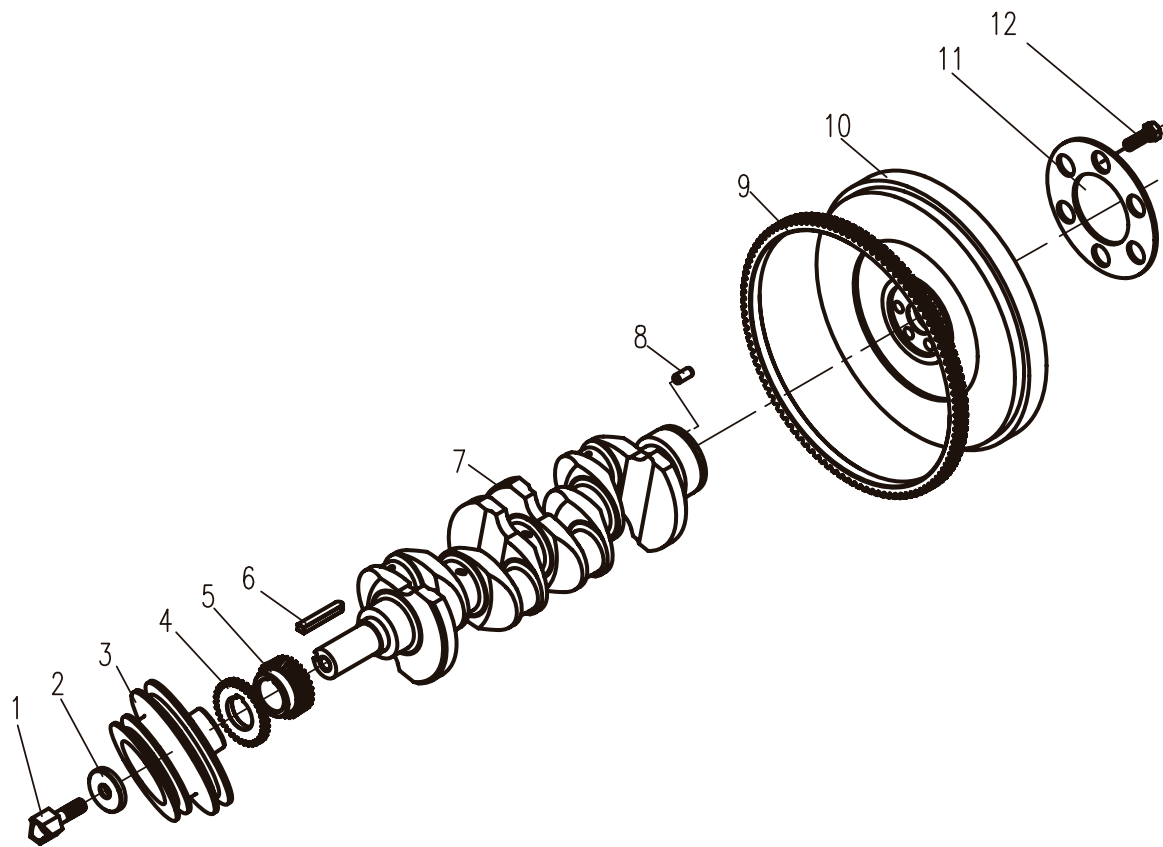


Fig.6 Crankshaft and Flywheel Assembly

**Valve Timing Mechanism(Fig.7)**

Ref.No.	Name of parts	Part No.	Quantity
1	Camshaft	4L88-070001	1
2	Falt key C10×25	GB/T1096-2003	1
3	Valve tappet	N485-07003-1	8
4	Valve push rod	4G33-070002	8
5	Blocking plug	N85-02208	2
6	Front rocker arm support	4L68-022001	1
7	Washer 8	GB/T859-87	10
8	Bolt M8×60	GB/T5782-2000	5
9	Bolt M8×45	GB/T5782-2000	5
10	Valve rocker arm bushing	N85-02212	8
11	Valve clearance adjusting nut	N85-02203	8
12	Valve clearance adjusting screw	N85-02202	8
13	Valve rocker arm spring	N85-02205	4
14	Valve rocker arm	N85-02211	8
15	Screw M8×50	GB/T79-2000	5
16	Nut M8	GB/T6170-2000	5
17	Rocker arm support	4L68-022004	4
18	Rocker arm shaft bushing	N85-02206	3
19	Rocker arm shaft	N485-02207	1
20	Valve rod seal ring	GB/T308-77	8
21	Valve spring seat (upper)	N85-02001-1	8
22	Valve collet	N85-02002	16
23	Valve outer spring	N85-02003-1	8
24	Valve inner spring	N85-02003-2	8
25	Exhaust valve	4L68-020007	4
26	Intake valve	4L68-020008	4

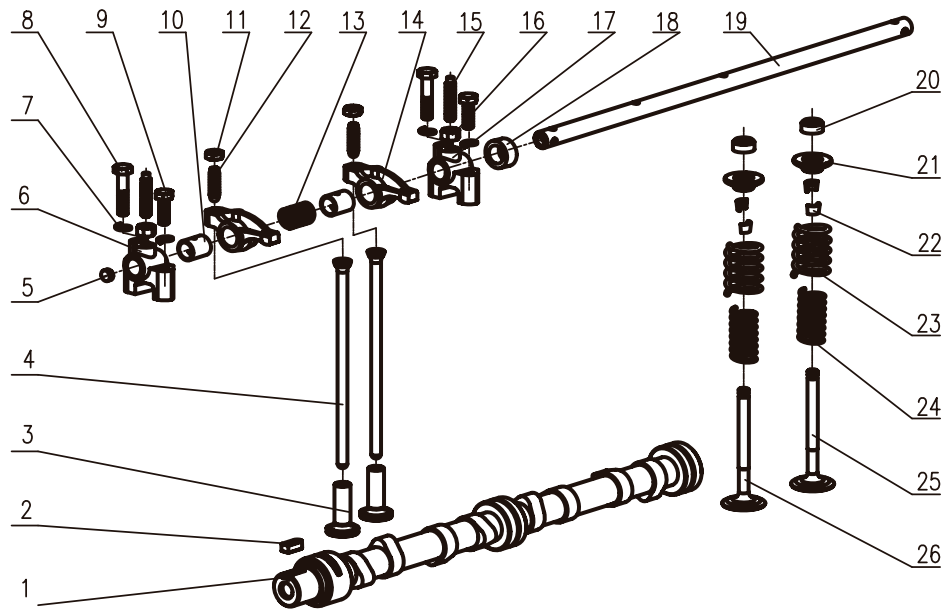


Fig.7 Valve Timing Mechanism



## Water Pump and Fan Assembly(Fig. 8)

	Name of parts	Pare No.	Quantity
1	Bolt M8×70	GB/T57822000	4
2	Washer 8	GB/T859-87	16
3	Cooling fan	N485K-08001A	1
4	fan pad	N390T-08020C	2
5	Water pump pulley	N390T-08011A	1
6	Water pump pulley housing	CC490Q-080001S	1
7	Bolt M8×25	GB/T5783-2000	1
8	Nut M8	GB/T6170-2000	4
9	Bracing	CZ475Q-080013-1	1
10	Water pump housing	4G33T-082004	1
11	Stud M8×65	GB/T898-88	1
12	generator bracing piece	4D20TCI-170005	1
13	Water temperature sensor model 306	N485Q-17008	1
14	Thermostat (Model 155B)	N85Q-17003	1
15	Oil cup M8×1	JB/T7940. 1-95	1
16	Thermostat cover gasket	N485T-08008	1
17	Thermostat cover	N485Q-17001L	1
19	connect pipe	N485Q-08015	1
18	Bolt M8×30	GB/T5783-2000	2
20	Water seal ring C12	JB/T5086-91	1
21	Water pump impeller	4L68-080009A	1
22	Water pump gasket	4G33T-080009	1
23	Water pump adapter	4G33T-080010	1
24	Water pump adapter gasket	N85T-08017	1
25	Screw M8×16	GB/T868-2000	6
26	Seal ring 34.5×3.55	GB/T3452. 1-2005	1
27	Bolt M8×20	GB/T5783-2000	2
28	Water drain connector	N85T-08013	1
29	Water drain connector gasket	N85T-08014	1
30	Washer 10	GB/T848-2000	1
31	Water drain screw	N85T-08015	1
32	Bolt M8×45	GB/T5780-2000	2
33	Stud M8×45	GB/T898-88	3
34	Fan belt AV15×690	GB/T12732-1996	1
35	Fan belt AV15×900	GB/T12732-1996	1

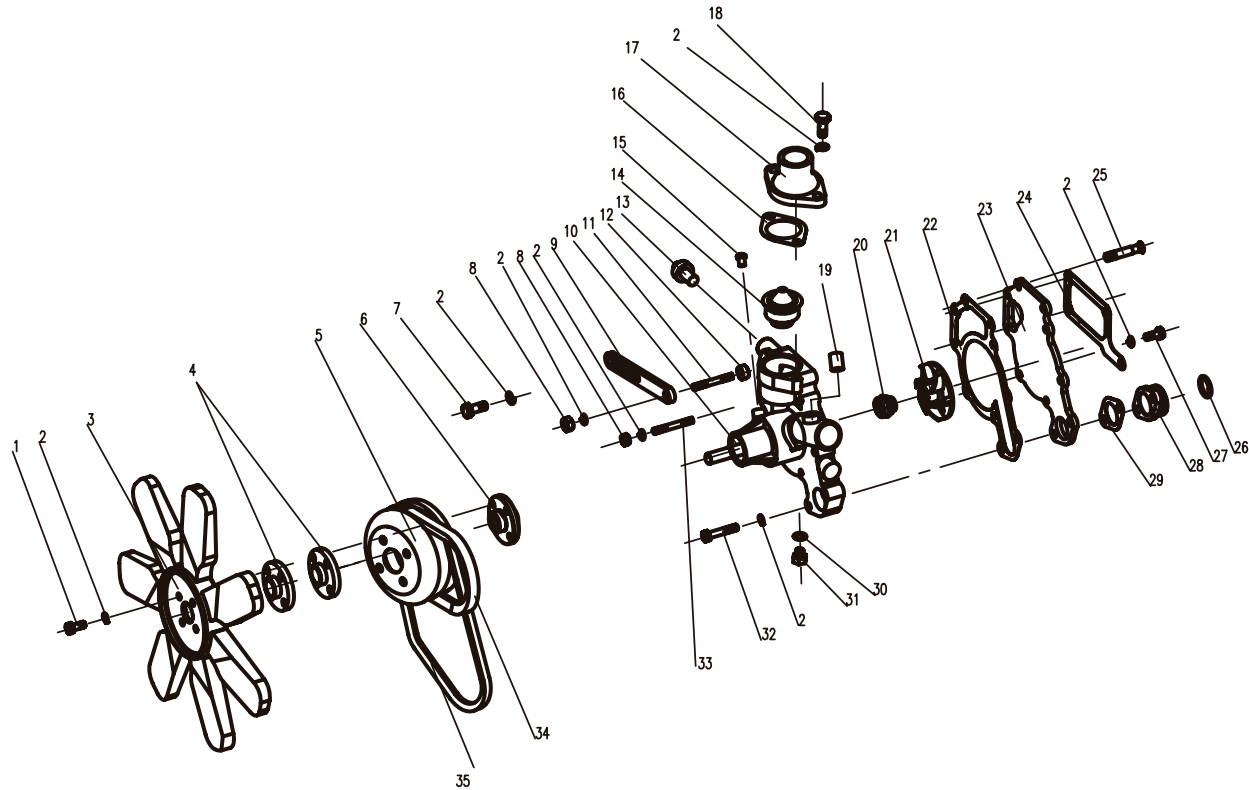


Fig.8 Water Pump and Fan Assembly

**Oil Sump Assembly (Fig.9)**

Ref. No.	Name of parts	Part No.	Quantity
1	Dowel pin	N485T-03110	2
2	Oil sump gasket	N485T-11001	1
3	Oil sump	ZN490T-11004	1
4	Washer 8	GB/T93-87	45
5	Bolt M8×55	GB/T5782-2000	6
6	OSeal ring 16×2.4	GB/T1235-1976	2
7	Plug	195-01026	2
8	Bolt M8×30	GB/T5783-2000	16
9	Washer 10-100HV	GB/T95-2002	4
10	Bolt M10×30	GB/T5783-2000	4
11	Auxiliary oil sump gasket	ZN490T-11005	1
12	Auxiliary oil sump	ZN490T-11006A	1
13	Bolt M8×65	GB/T5783-2000	16
14	Bolt M8×25	GB/T5783-2000	7

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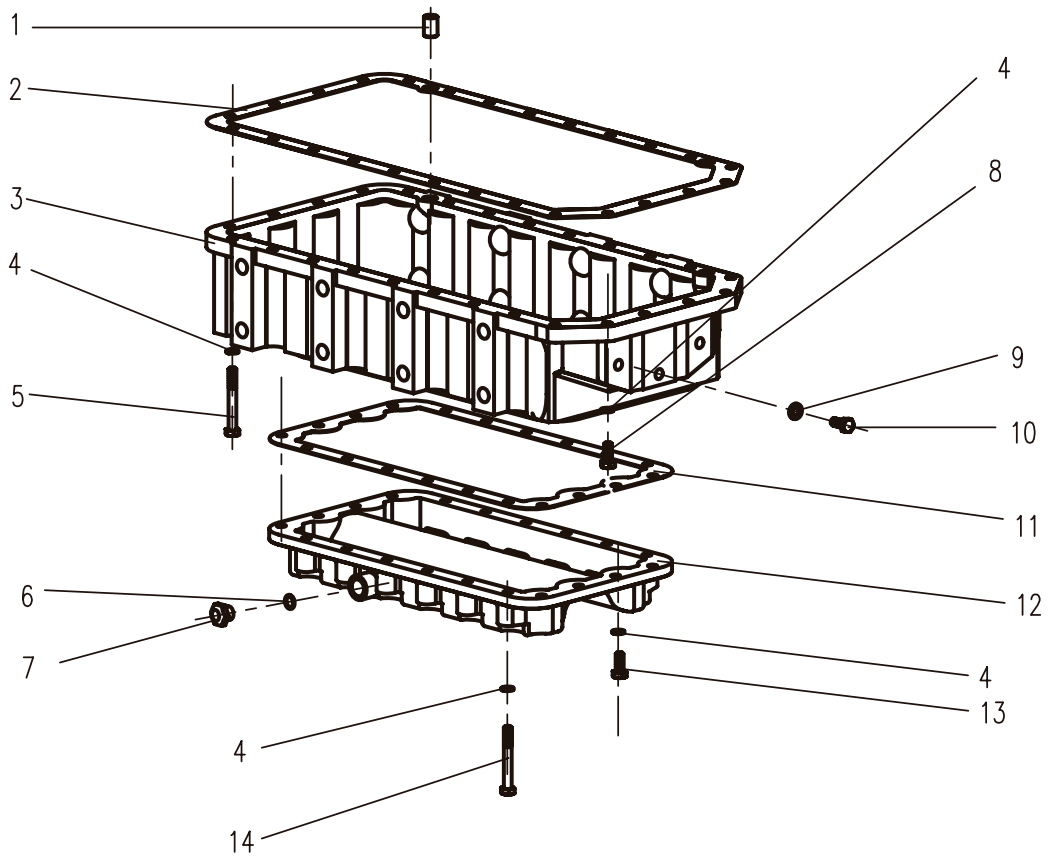


Fig.9 Oil Sump Assembly

**Lubricating Oil Pump Assembly (Fig.10)**

Ref.No.	Name of parts	Part No.	Quantity
1	Oil pump gear	N85-13007(D)	1
12	Oil pump	N485Q-13200B-1	1
18	Oil pump gasket	N85-13003	1

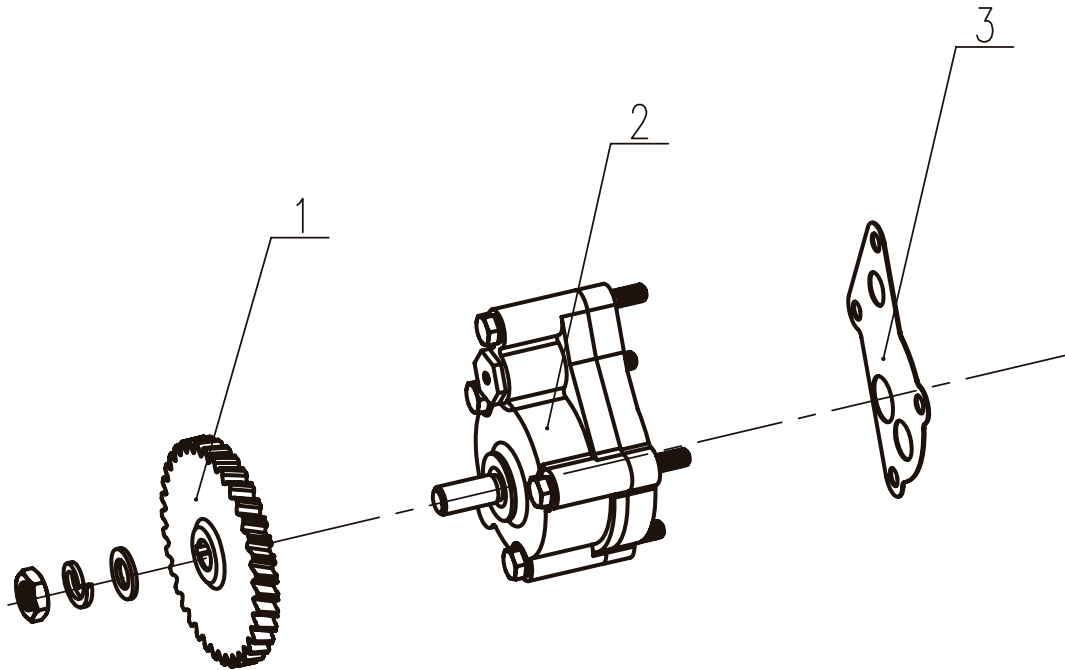


Fig.10 Oil Pump Assembly

## Fuel System(Fig.11)

Ref.No.	Name of parts	Part No.	Quantity
1	Bolt M6×25	GB/T5782-2000	6
2	Washer 6	GB/T859-1987	6
3	Injection adapter	N85T-32001D	1
4	Injection pump timing gear adapter	N85Q-18005	1
5	O 77.5×2.65	GB/T3452.1-2005	2
6	Injection pump end cover	4L68-180003	1
7	Fuel feed pump inlet pipe part	N85-15500 (A)	1
8	Injection pump	4G33-181000	1
9	Electronic flame support	N485Q-18007B-1	1
10	Fuel feed pump outlet pipe	N485-15400	1
11	Fuel filter outlet pipe	N485-15300	1
12	Injection pump oil pipe	4G33-182000	1
13	Washer 8	JB/T6013-2000	2
14	M8×1	JB/T6013-2000	1
15	Fuel filter	N485-28000(B)	1
16	Washer 8	GB/T859-87	2
17	Bolt M8×25	GB/T5782-86	2
18	Electronic flame	4L68-184000A-1	1
19	Injector fuel return pipe part	4L68-151000-3	1
20	Fuel return main pipe	4L68-150003	1
21	Injector	4L68-250000	4
22	1 <sup>st</sup> cylinder high pressure fuel pipe	4G33-141000	1
23	2 <sup>nd</sup> cylinder high pressure fuel pipe	4G33-142000	1
24	3 <sup>rd</sup> cylinder high pressure fuel pipe	4G33-143000	1
25	Fuel return pipe	4L68-150002	3
26	4 <sup>th</sup> cylinder high pressure fuel pipe	4G33-144000	1
27	Injector fuel return cover	4L68-150001-3	1

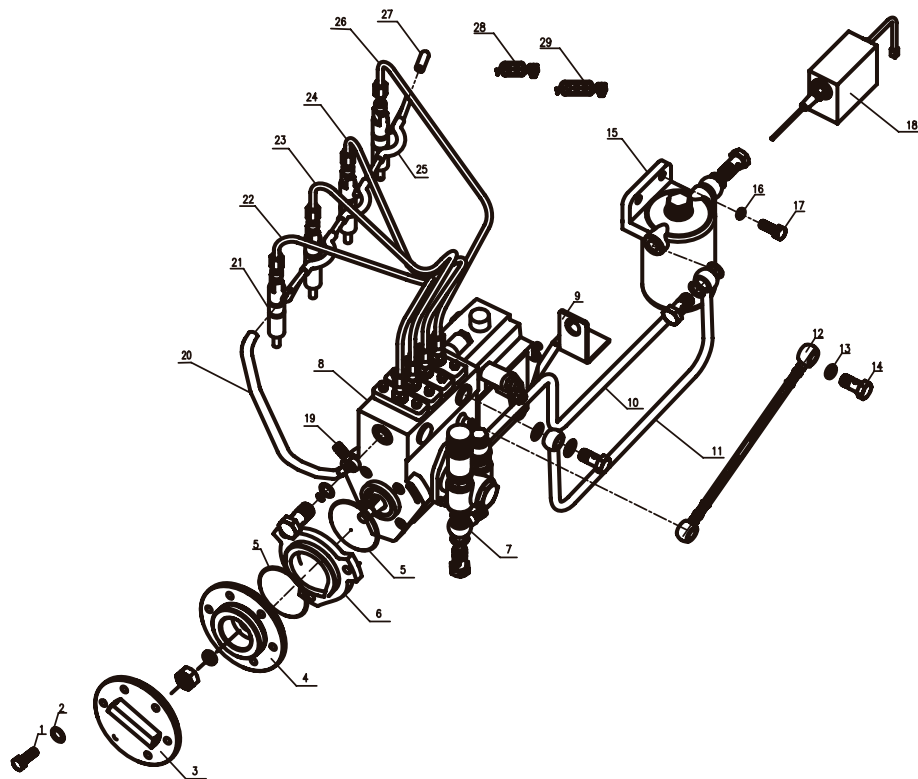


Fig.11 Fuel System



**Oil Suction Strainer Assembly (Fig.12)**

Ref. No.	Name of parts	Part No.	Quantity
1	suction strainer gasket	ZN490T-160002	1
2	Oil suction strainer	ZN490T-161000	1
3	Washer 8	GB/T859-87	2
4	Bolt M8×35	GB/T5782-2000	2
5	Bolt M8×16	QC/T340-1999	2

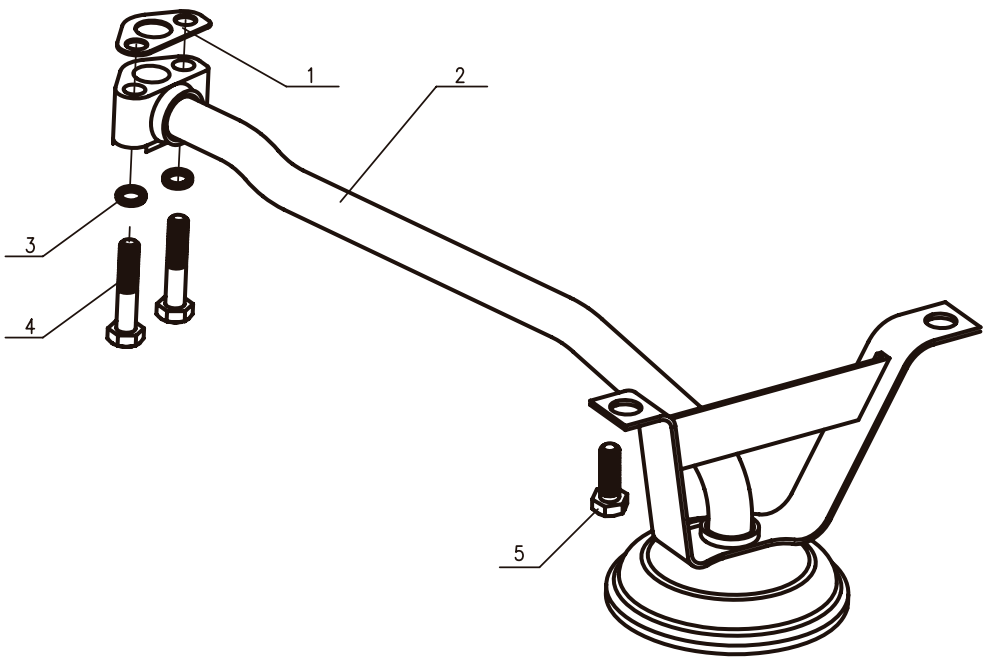


Fig.12 Oil Suction Strainer Assembly

Ref. no	Name of Part	Part	Quantity
1	nut M5	GB62-88	1
2	Washer 5	GB971-85	1
3	Breather cover	N85-19001	1
4	Seal ring	N85-19002	1
5	Cartridge	N85-19003	1
6	Cartridge retainer	N85-19004	1
7	Breather body	N390T-19100B	1
8	Bolt M8×16	GB5782-86	2
9	Washer 8	GB859-87	2
10	Push rod case cover gasket	N85-19005	1

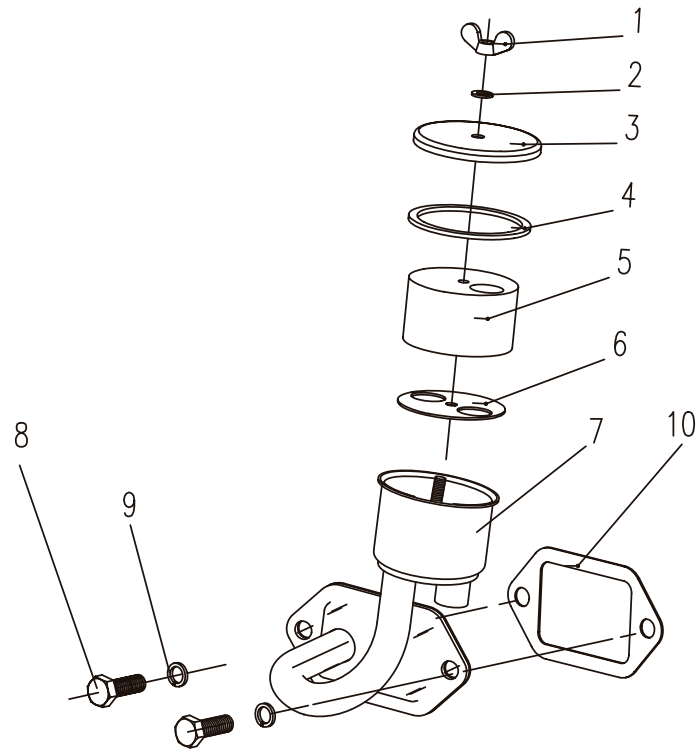


Fig.13 Breather Assembly

( 13 )

Ref. no	Name of Part	Part	Quantity
1	nut M5	GB62-88	1
2	Washer 5	GB971-85	1
3	Breather cover	N85-19001	1
4	Seal ring	N85-19002	1
5	Cartridge	N85-19003	1
6	Cartridge retainer	N85-19004	1
7	Breather body	N390T-19100B	1
8	Bolt M8×16	GB5782-86	2
9	Washer 8	GB859-87	2
10	Push rod case cover gasket	N85-19005	1

**Tension pulley assembly (Fig.14)**

Ref.No.	Name of parts	Part No.	Quantity
1	Tension pulley bracket	N390T-21002	1
2	Tension pulley shaft	N390T-21004	1
3	Bush ring	N390T-21003	2
4	Tension pulley	N390T-21001	1
5	Bearing 6302E-2RS	GB/T276-94	1
6	Thrust ring 42	GB/T893.1-86	1
7	Washer 12	GB/T93-87	1
8	Nut M12	GB/T6170-2000	1
9	Washer 8	GB/T97.1-85	2
10	Washer 8	GB/T93-87	2
11	Bolt M8×20	GB/T5783-2000	2

**Oil Filter/ Generator/Starting Motor (Fig.15)**

Ref. No.	Name of parts	Part No.	Quantity
1	Lubricating oil filter	4G33-260000	1
2	Starting motor	4G33T-300000	1
		4L88-300000B	
3	Charging generator	N485Q-29000	1
		4G33T-290000	



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