

## **Mehrzylinder Dieselmotoren YSD490-Serie**

Wassergekühlte, Direkteinspritzende 4-Zylinder Reihen-Dieselmotoren

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## **Explosionszeichnungen Ersatzteilverzeichnis**

DE Y1311 Stand November 2013

Gültig für:

Kurzbezeichnung	Modell	Art.Nr.
YSD490	ED4W4R-2540-15U	-
	ED4W4R-2540-30U	-

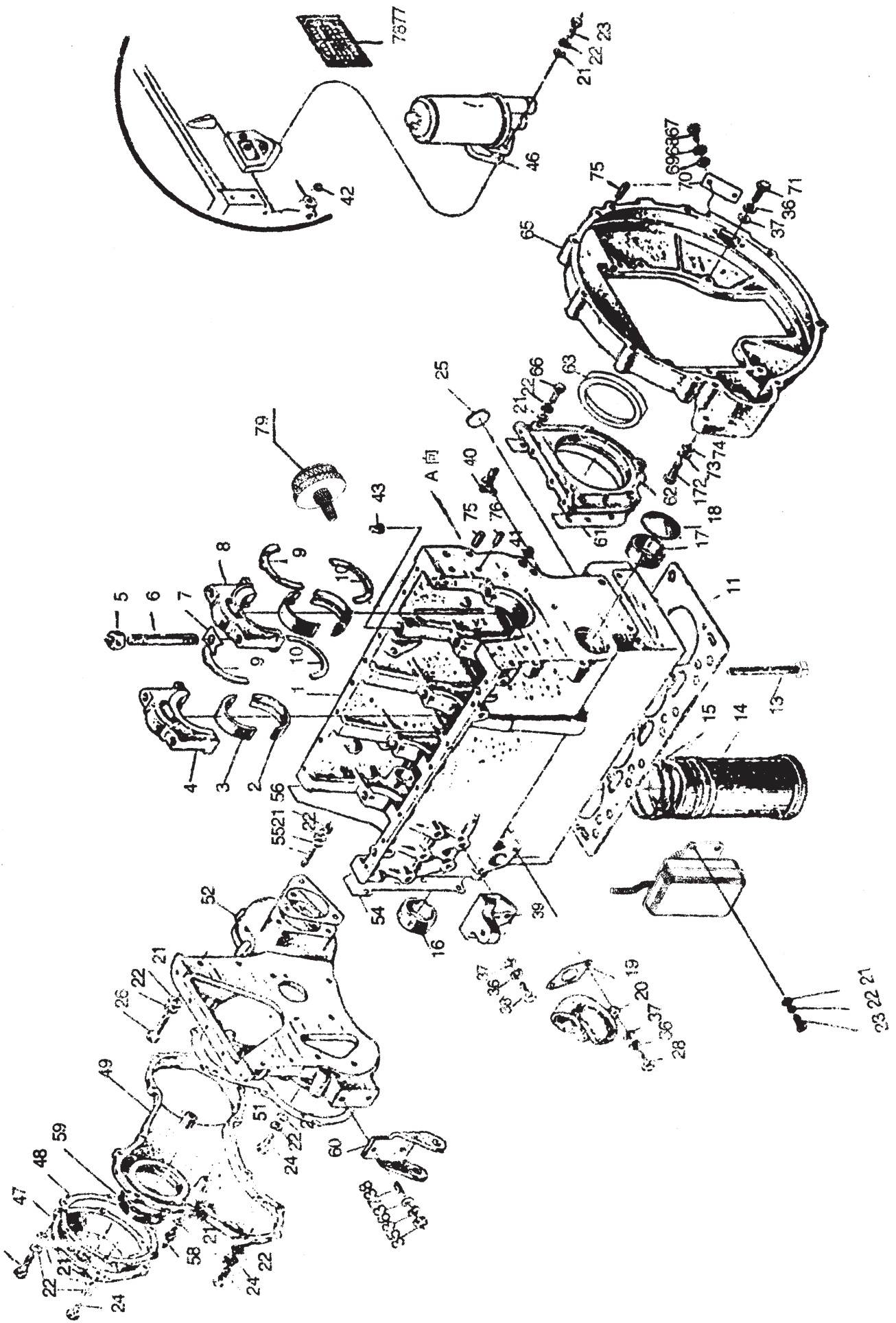


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1. Kurbelgehäuse

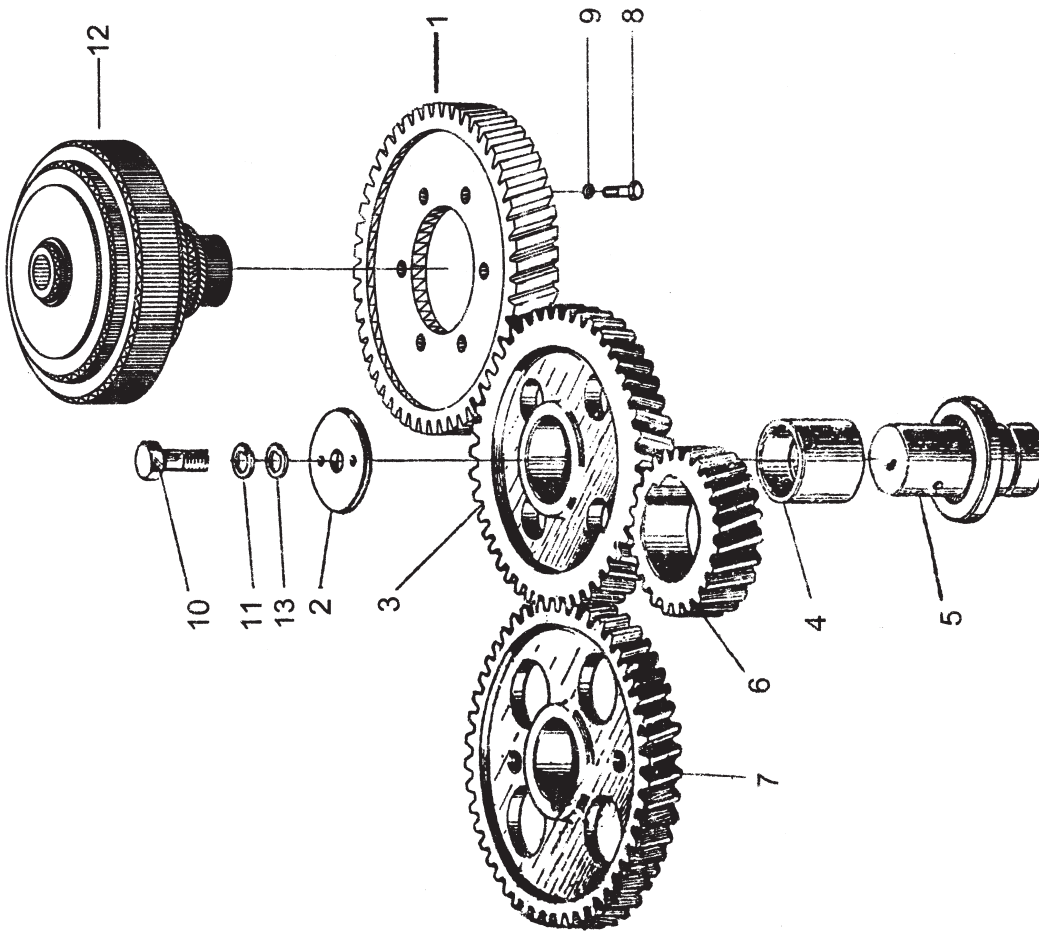
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Nr.	Parts Nr.	Description	Qty
1	YSD4900-01111C	Cylinder block	1
2	YSD4900-01015	Main bearing, upper half	5
3	YSD4900-01016	Main bearing, lower half	5
4	YSD4900-01112	Main bearing cap	4
5	YSD4900-01114	Main bearing stud	10
6	YSD4900-01115	Main bearing stud lock washer	10
7	YSD4900-01113	Rear main bearing cap	1
8	YSD4900-01008	Crankshaft thrust bearing, lower half	2
9	YSD4900-01007	Crankshaft thrust bearing, upper half	2
10	YSD4900-01020a	Cylinder head gasket	1
11	YSD4900-01004	Long cylinder head stud	14
12	YSD4900-01005	Short cylinder head stud	4
13	YSD4900-01002	Cylinder liner	4
14	YSD4900-01023	Water seal	12
15	YSD4900-01024	Front camshaft bush	1
16	YSD4900-01025b	Middle camshaft bush	1
17	YSD4900-01103	Rear camshaft bush	1
18	YSD4900-01011	Plug	1
19	YSD4900-01013	Inlet pipe gasket	1
20	GB848-85	Inlet pipe	1
21	GB93-87	Washer 8-140HV	52
22	GB5783-86	Spring washer 8	52
23	GB5783-86	Bolt M8x20	7
24	Y480G-01104	Bolt M8x16	14
25	GB5783-86	Plug	7
26	GB898-88	Bolt M8x25	5
27	YSD4900-01200a	Bolt M8x20	2
28	GB93-87	Breathing filter	1
29	GB848-85	Spring washer 10	8
30	GB5783-86	Washer 10-140HV	8
31	Y485Q-16-01300	Bolt M10x30	8
32	YSD4900-01017	Front mounting bracket	2
33	YSD4900-01014a	Drain cock	1
34	YSD4900-01105a	Union pipe	1
35	Y480G-01106a	Screw plug (I)	2
36	YSD4900-01101	Screw plug (II)	5
		Plug	1
		Oil filter gasket	1

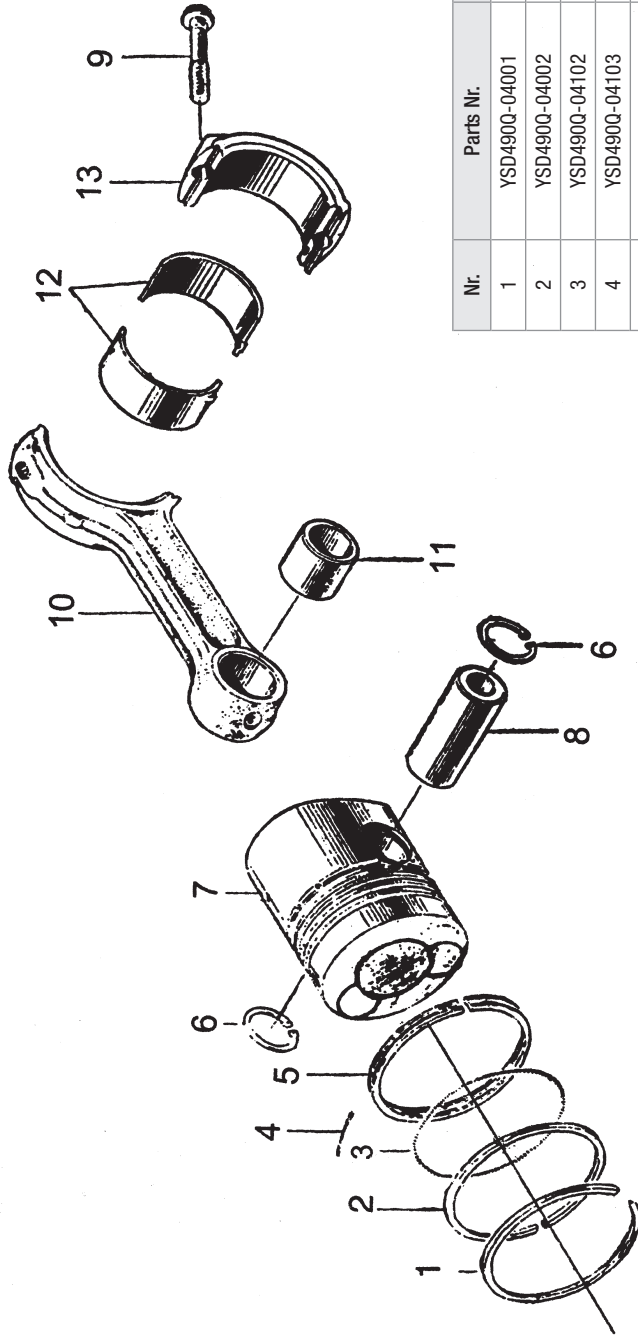
Nr.	Parts Nr.	Description	Qty
37	YSD4900-02017	Front cover	1
38	YSD4900-02016	Front cover of timing gear case	1
39	YSD4900-02013a	Front cover gasket of timing gear case	1
40	YSD4900-02014	Timing gear case cover gasket	1
41	YSD4900-02001	Timing gear casing	1
42	YSD4900-01001	Timing gear case gasket	1
43	GB898-88	Stud M8x28	3
44	GB6170-86	Nut M8	3
45	YSD4900-02015	Pointer	1
46	HG4-692-67	Oil seal SG60x80x12	1
47	YSD4900-12006	Generator bracket	1
48	YSD4900-01009a	Real oil seal cover gasket	1
49	YSD4900-01012a	Real oil seal cover	1
50	HG4-692-67	Oil seal SG100x130x12	1
51	YSD4900-01010a	Flywheel housing	1
52	GB5783-86	Bolt M8x30	5
53	GB818-85	Bolt M6x12	2
54	GB93-87	Spring washer 6	2
55	GB97.1-85	Washer 6-140HV	2
56	YSD4900-01019	Inspection cover	1
57	GB5783-86	Bolt M12x35	6
58	GB5783-86	Bolt M10x30	2
59	GB93-87	Spring washer 10	2
60	GB848-85	Washer 10-140HV	2
61	GB119-86	Pin B10x20	2
62	GB119-86	Pin B8x20	3
63	Y480G-01500	Sensor for oil gauge	1
64	GB6170-86	Nut M10	2

## 2. Zahnräder - Timing



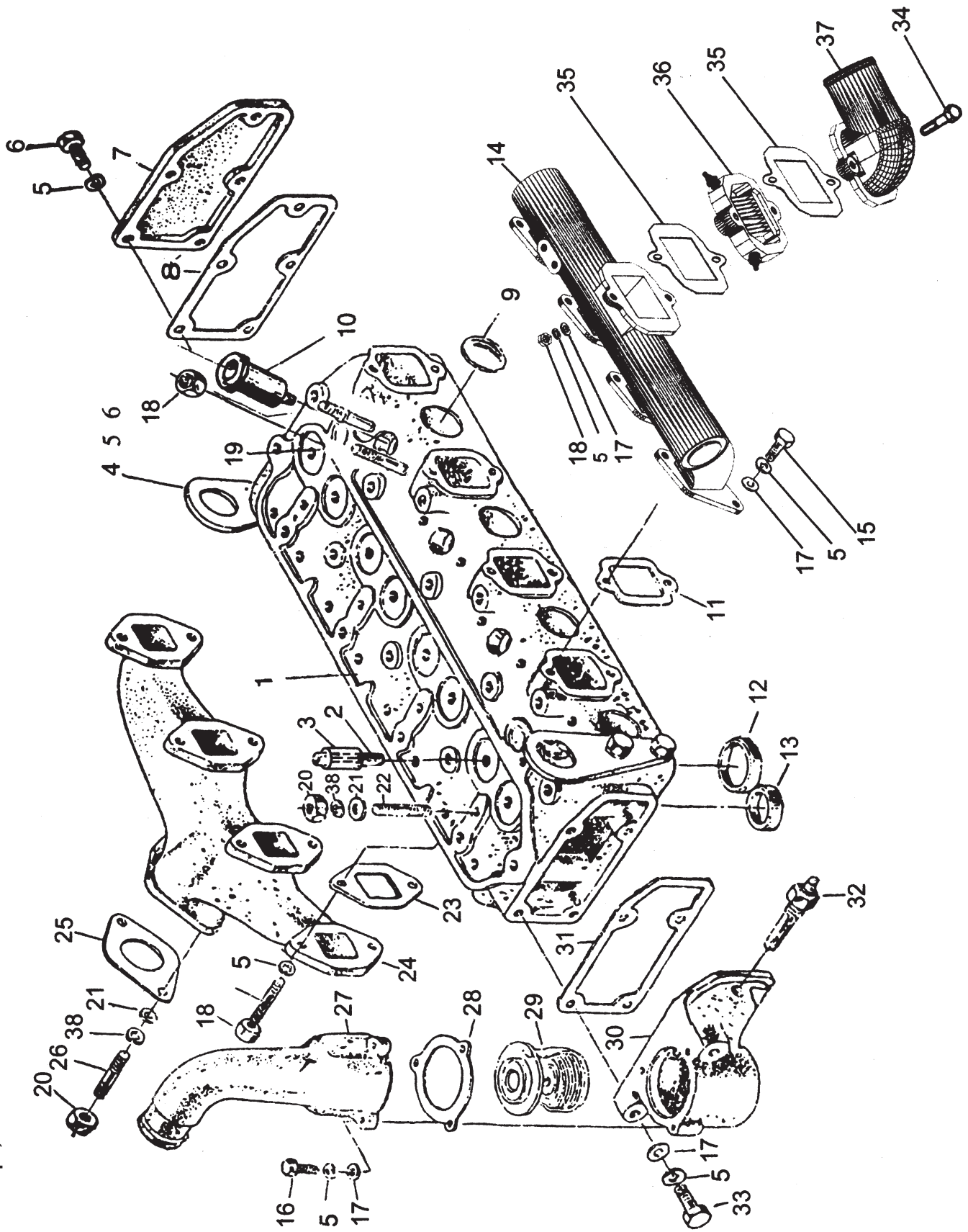
Nr.	Parts Nr.	Description	Qty
1	YSD490Q-02003a	Fuel injection pump timing gear	1
2	YSD490Q-02008	Idle gear clamp	1
3	YSD490Q-02005a	Idle gear	1
4	YSD490Q-02006	Idle gear bush	1
5	YSD490Q-02007	Idle gear shaft	1
6	YSD490Q-02009a	Crankshaft timing gear	1
7	YSD490Q-02011a	Camshaft timing gear	1
8	GB5783-86	Bolt M6x16	6
9	GB93-87	Washer 6	6
10	GB5782-86	Bolt M8x55	2
11	GB93-87	Washer 8	2
12	YSD490Q-02100	Automatic adjusting device of the fuel supply angle in advance	1
13	GB848-85	Washer 8-140HV	2

### 3. Kolben - Pleuel



Nr.	Parts Nr.	Description	Qty
1	YSD4900-04001	1st compression ring	4
2	YSD4900-04002	2nd compression ring	4
3	YSD4900-04102	Spring	4
4	YSD4900-04103	Spring lock	4
5	YSD4900-04101	Oil ring	4
6	Y488-04006	Piston pin snap ring	8
7	YSD4900-04005	Piston	4
8	YSD4900-04004	Piston pin	4
9	YSD4900-04204	Connecting rod bolt	8
10	YSD4900-04202	Connecting rod	4
11	YSD4900-04201	Connecting rod bush	4
12	YSD4900-04003	Connecting rod bearing, upper and lower halves	8
13	YSD4900-04203	Connecting rod cap	4

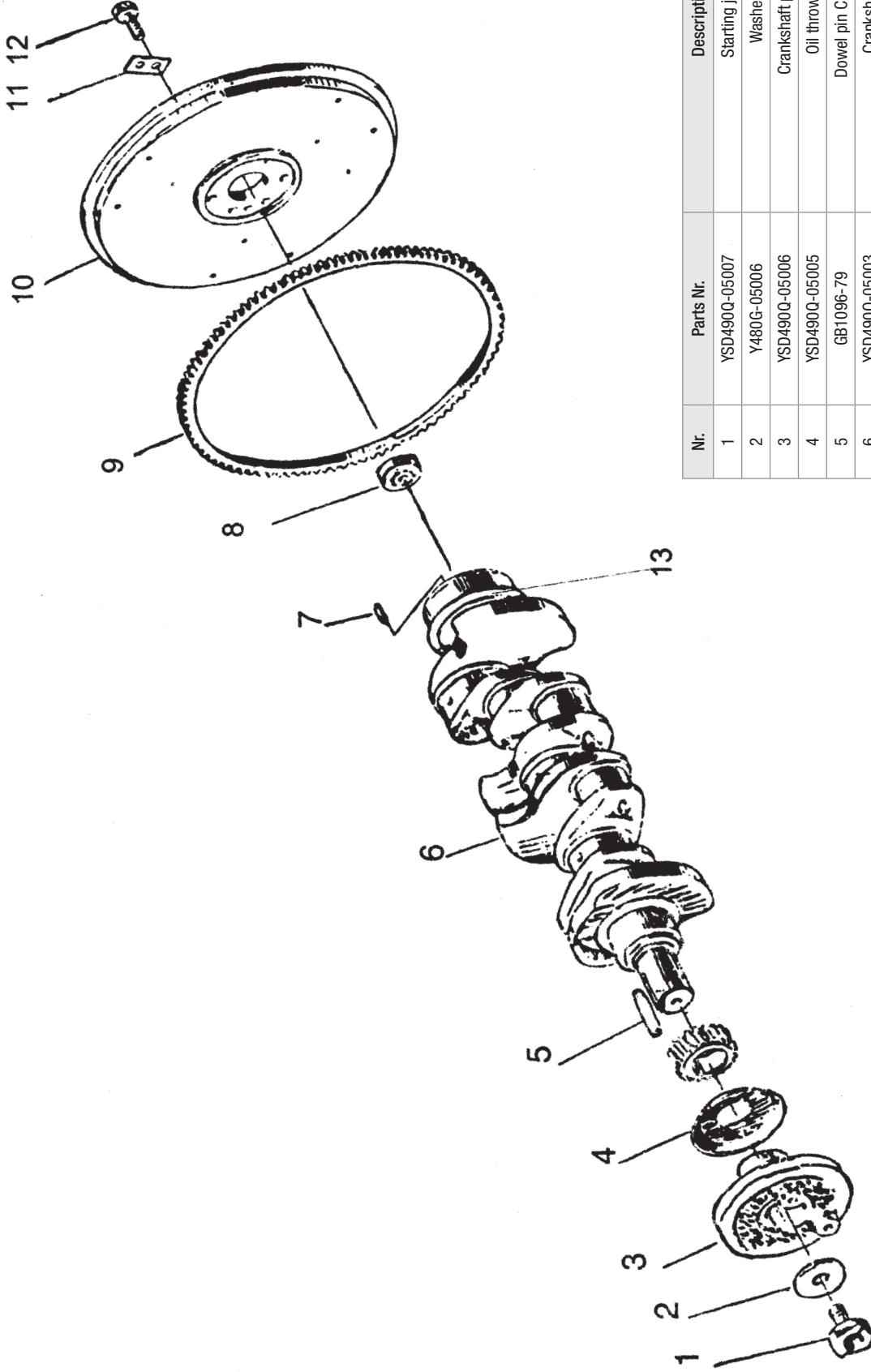
4. Zylinderkopf, Thermostat und Krümmer





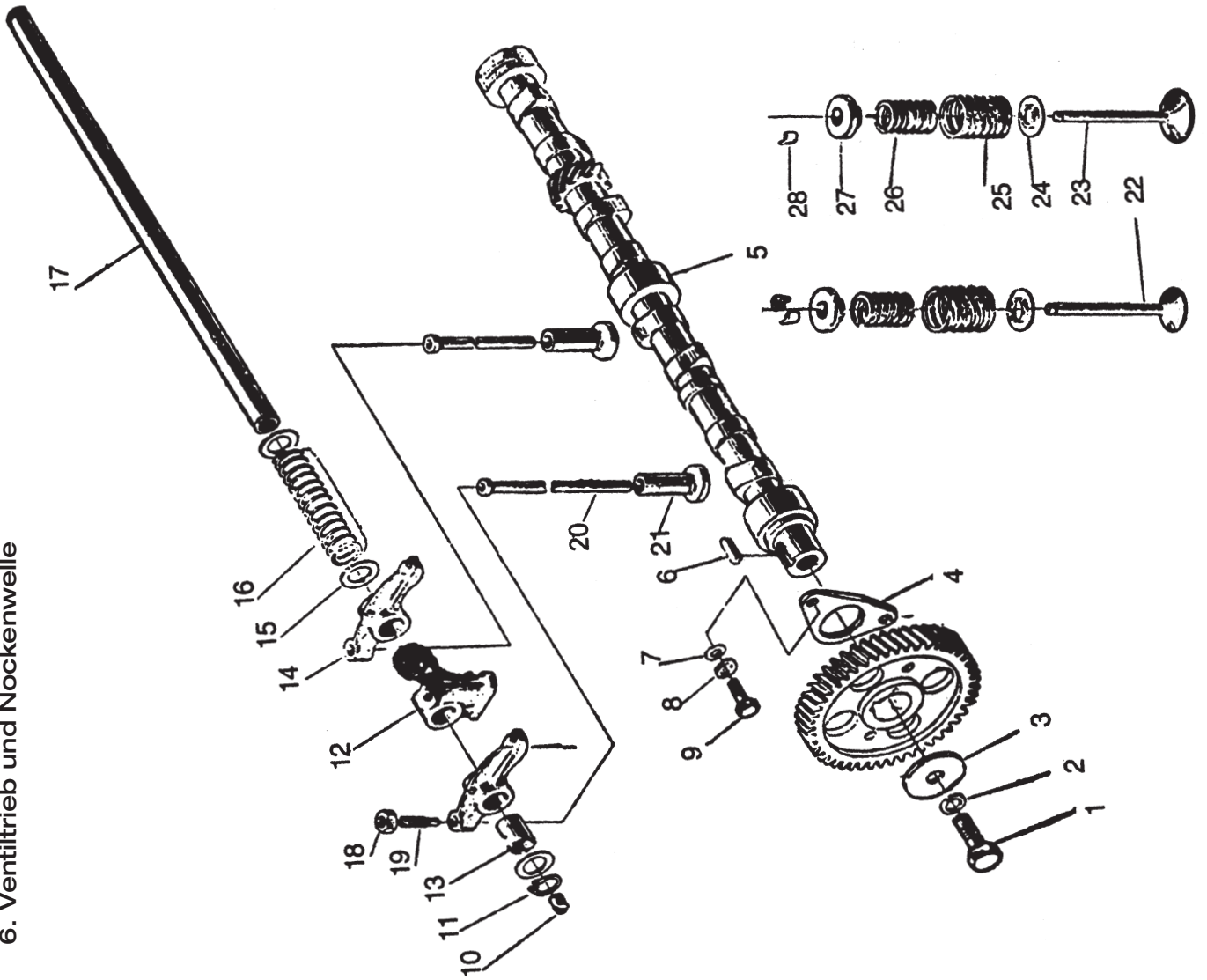
Nr.	Parts Nr.	Description	Qty
1	YSD4900-03101	Cylinder head	1
2	YSD4900-03102	Valve guide	8
3	Y485-03021	Oil seal	8
4	YSD4900-03011	Lifting eye	2
5	GB93-87	Spring washer 8	37
6	GB5783-86	Bolt M8x18	5
7	YSD4900-03002a	Rear cover	1
8	YSD4900-03023	Gasket	1
9	Y480G-01103	Plug D25	4
10	YSD4900-03105a	Injector sleeve	4
11	YSD4900-03013	Intake manifold gasket	4
12	YSD4900-03103	Intake valve seat	4
13	YSD4900-03104	Exhaust valve seat	4
14	YSD4900-07100	Intake manifold	1
15	GB5783-86	Bolt M8x20	12
16	GB5783-86	Bolt M8x25	2
17	GB848-85	Washer 8-140HV	39
18	GB6170-86	Nut M8	16
19	GB898-88	Stud M8x45	8
20	GB6170-86	Nut M10	6
21	GB848-85	Washer 10-140HV	6
22	YSD4900-03001	Valve rocker bracket stud	4
23	YSD4900-03006	Gasket	4
24	YSD4900-08001	Exhaust manifold	1
25	YSD4900-08002a	Gasket	1
26	GB5783-86	Bolt M10x30	2
27	YSD4900-11301	Thermostat cover	1
28	YSD4900-11302	Gasket	1
29	Y480G-11303a	Thermostat	1
30	YSD4900-11304	Thermostat housing	1
31	YSD4900-03016	Thermostat housing gasket	1
32	YS475-11300	Water temp sensor	1
33	GB5783-86	Bolt M8x35	3
34	GB5783-86	Bolt M8x50	1
35	YSD4900-07004	Intake bend pipe gasket	2
36	YSD4900-07200	Electricity heating unit	1
37	YSD4900-07005	Intake bend pipe	1
38	GB93-87	Washer 10	6

# 5. Kurbelwelle und Schwung

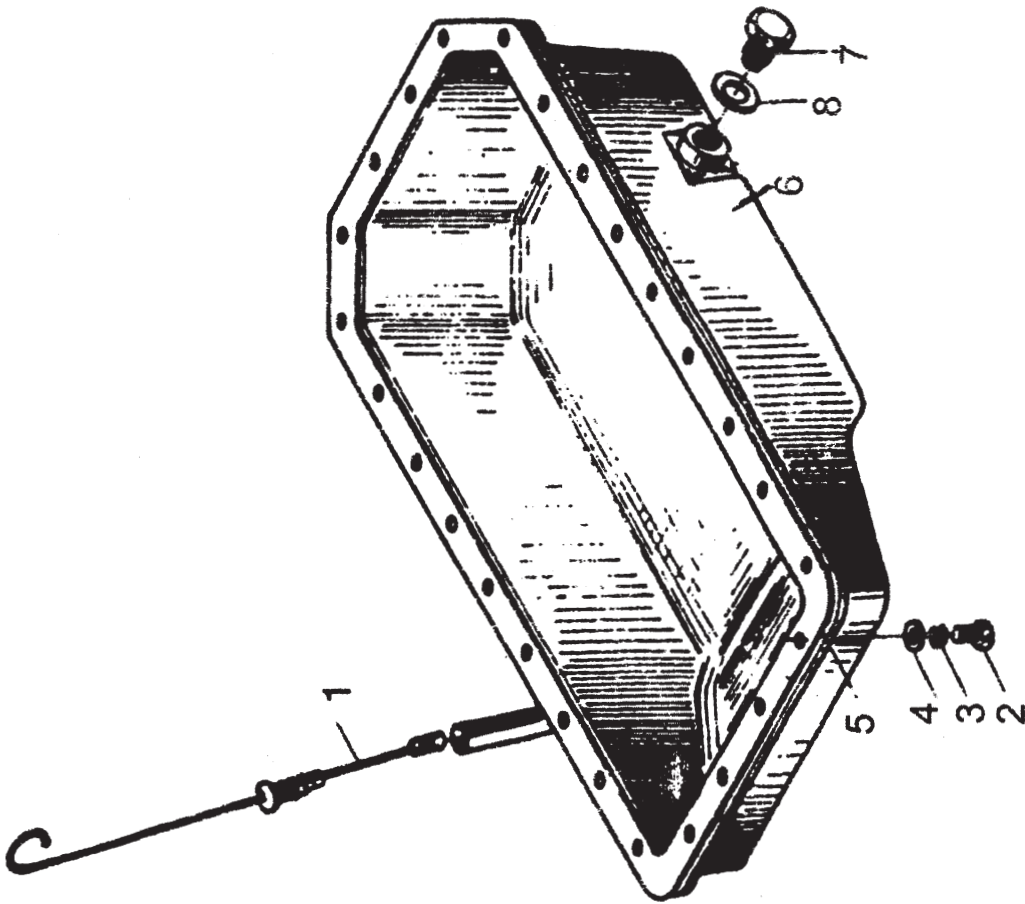


Nr.	Parts Nr.	Description	Qty
1	YSD490Q-05007	Starting jaw	1
2	Y480G-05006	Washer	1
3	YSD490Q-05006	Crankshaft pulley	1
4	YSD490Q-05005	Oil thrower	1
5	GB1096-79	Dowel pin C12x63	1
6	YSD490Q-05003	Crankshaft	1
7	GB119-86	Dowel pin B10x20	1
8	GB/T276-94	Ball bearing 6203-Z	1
9	YSD490Q-05102	Flywheel gear ring	1
10	YSD490Q-05101	Flywheel	1
11	YSD490Q-05001	Flywheel bolt lock washer	3
12	YSD490Q-05002	Flywheel bolt	6
13	YSD490Q-05004	Oil thrower (rear)	1

## 6. Ventiltrieb und Nockenwelle

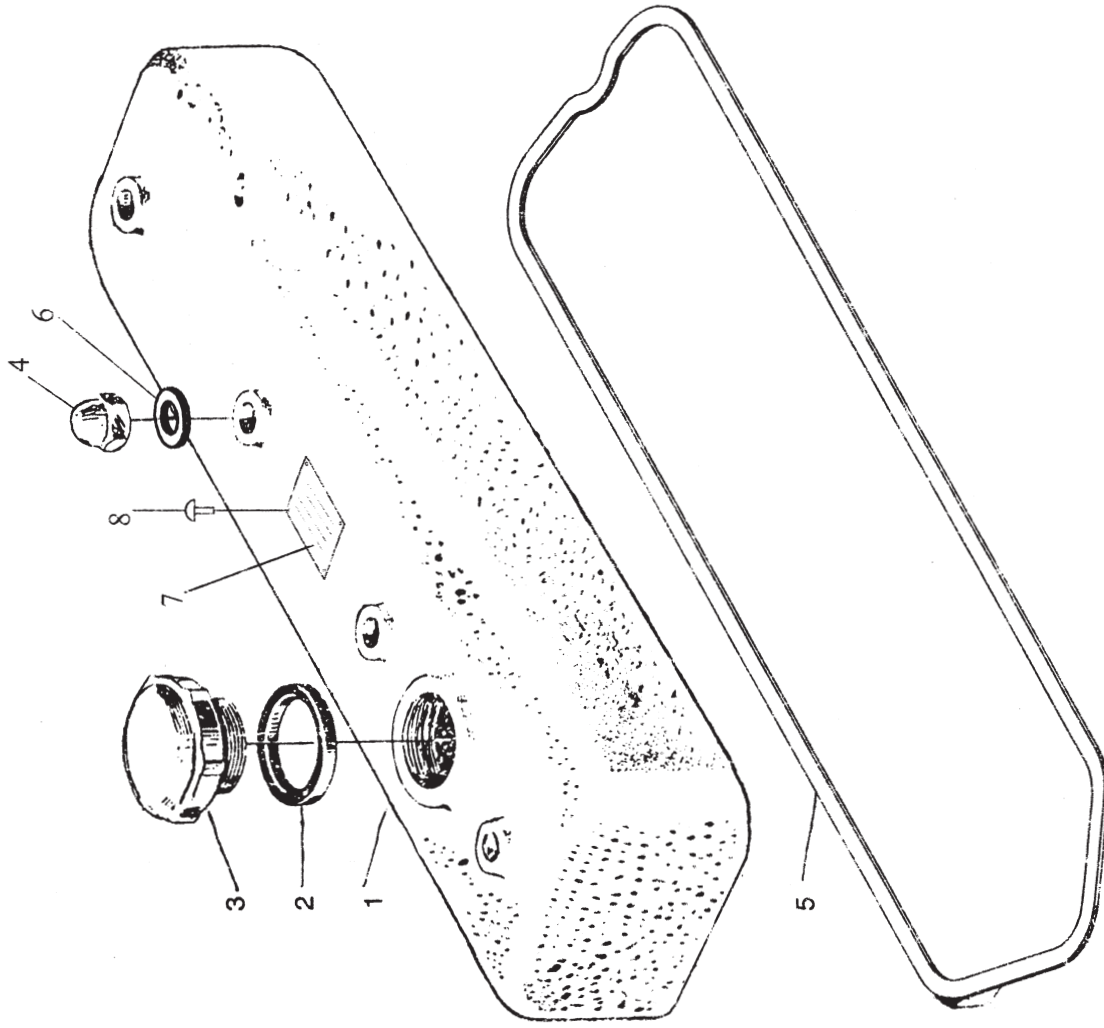


Nr.	Parts Nr.	Description	Qty
1	GB5783-86	Bolt 12x35	1
2	GB93-87	Spring washer 12	1
3	YSD490Q-02012	Camshaft timing gear damping plate	1
4	YSD490Q-02010	Camshaft thrust plate	1
5	YSD490Q-06001	Camshaft	1
6	GB1096-79	Flat key C8x22	1
7	GB848-85	Washer 8-140HV	2
8	GB93-87	Spring washer 8	2
9	GB5783-86	Bolt M8x20	2
10	Y480G-01105b	Screw plug (I)	2
11	GB894.1-86	Retainer 18	2
12	YSD490Q-03202	Rocker shaft bracket	3
13	YSD490Q-03207	Rocker shaft rear bracket	1
14	YSD490Q-03212	Rocker arm bush	8
15	YSD490Q-03206	Rocker	8
16	YSD490Q-03204	Washer	8
17	YSD490Q-03205a	Rocker shaft spacer spring	3
18	GB6171-86	Rocker shaft	1
19	YSD490Q-03201	Nut M8x1	8
20	YSD490Q-06003	Adjusting screw	8
21	YSD490Q-06002	Push rod	8
22	YSD490Q-03015	Valve tappet	8
23	YSD490Q-03014	Exhaust valve	4
24	YSD490Q-03010	Intake valve	4
25	YSD490Q-03007	Valve spring lower seat	8
26	YSD490Q-03017	Outer valve spring	8
27	YSD490Q-03009	Inner valve spring	8
28	YSD490Q-03008	Valve spring upper seat	8
		Valve collets	16



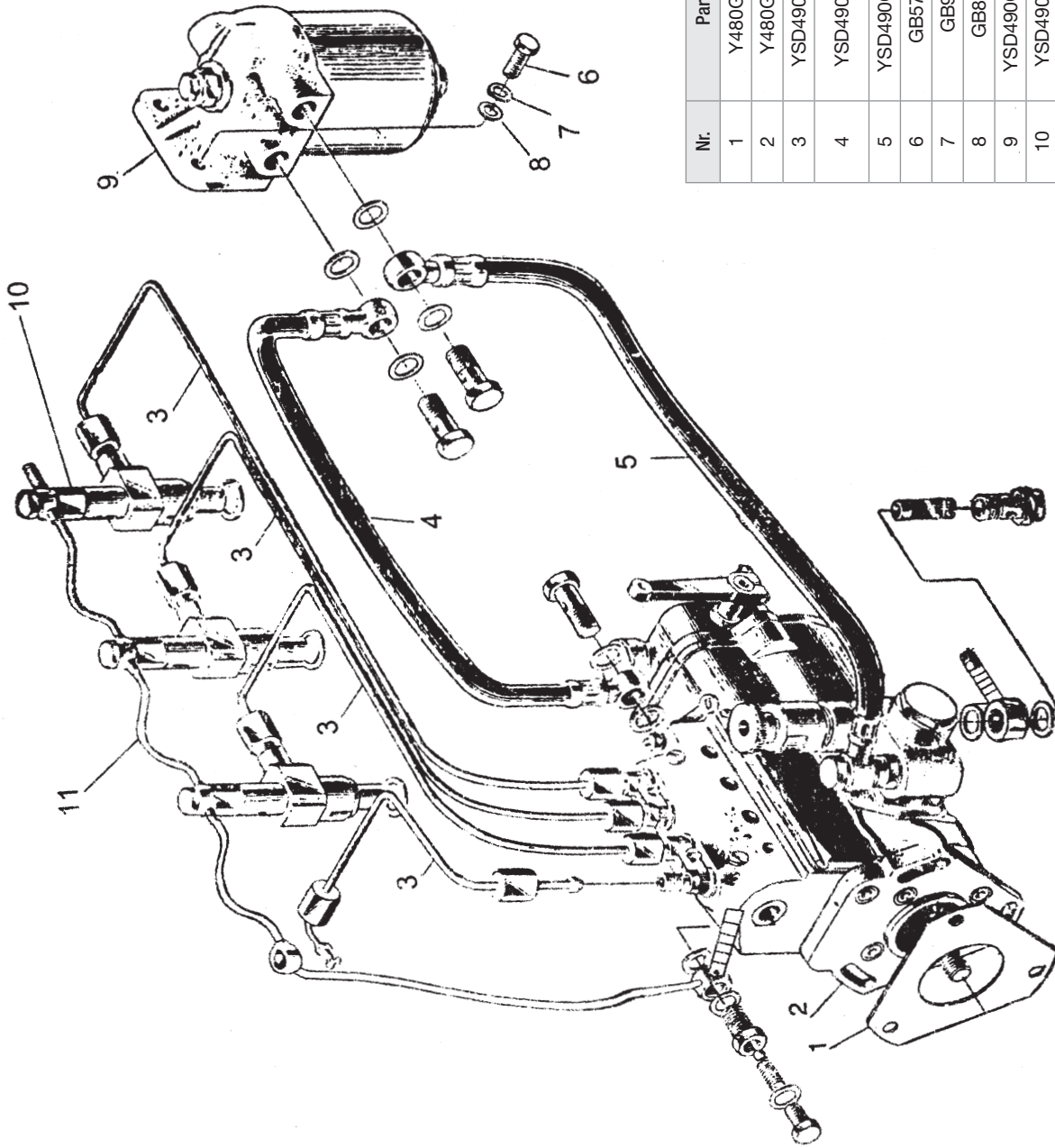
Nr.	Parts Nr.	Description	Qty
1	YSD490Q-01400b	Oil dipstick unit	1
2	GB5783-86	Bolt M8x25	25
3	GB93-87	Spring washer 8	25
4	GB848-85	Washer 8-140HV	25
5	YSD490Q-01018	Oil sump gasket	1
6	YSD490Q-01700	Oil sump unit	1
7	Y480Q-01703	Drain screw plug	1
8	Y480G-01704a	Washer	1

8. Ventildeckel



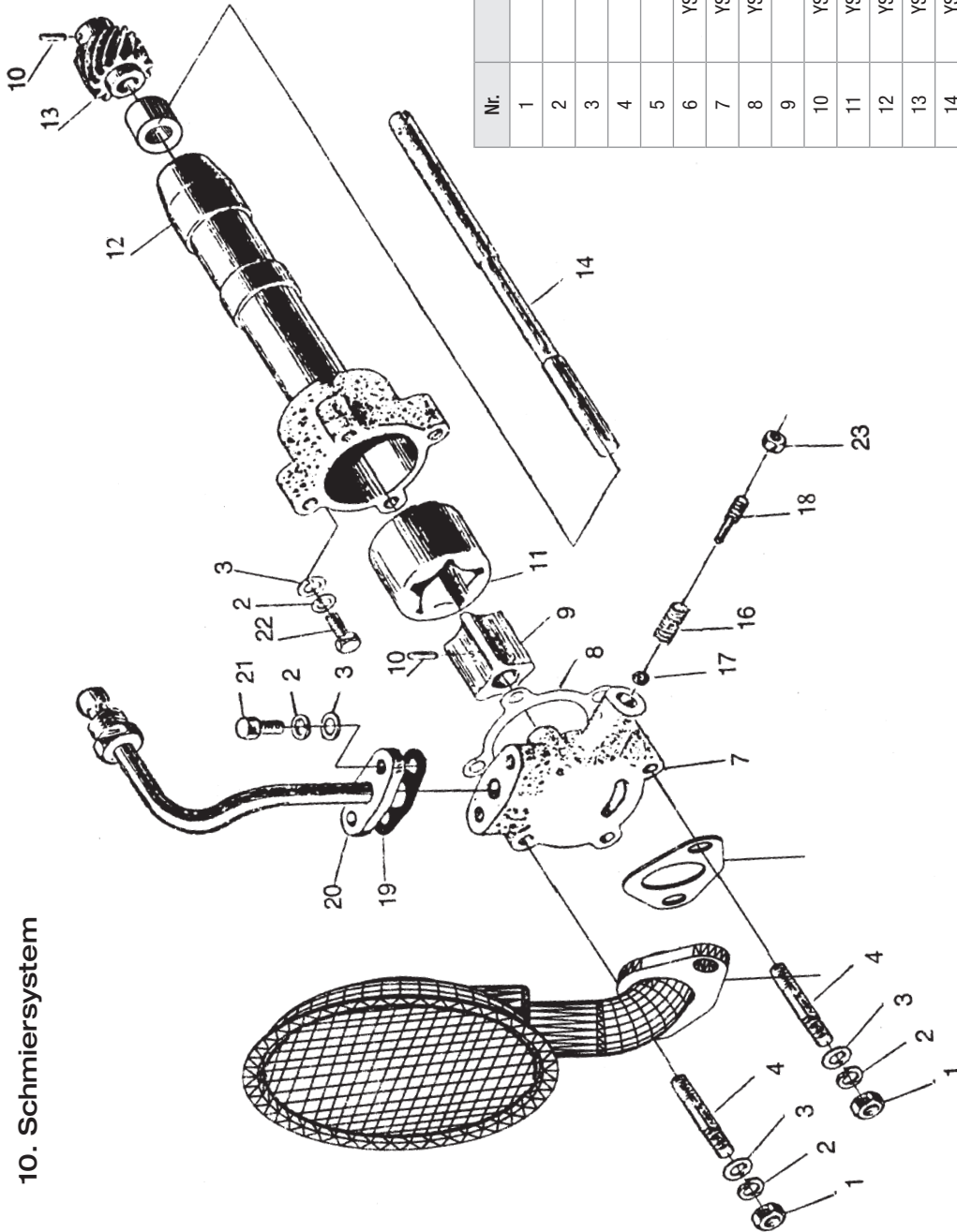
Nr.	Parts Nr.	Description	Qty
1	YSD490Q-03004	Cylinder head bonnet	1
2	Y480G-03003a	Oil filler cap gasket	1
3	Y480G-03400	Oil filler cap	1
4	GB923-88	Nut M10	4
5	YSD490Q-03005	Cylinder head bonnet gasket	1
6	GB848-85	Washer 10-140HV	4
7	YSD490Q-03021a	Name plate	1
8	GB827-86	Rivet 2x5	4

# 9. Treibstoffsystem

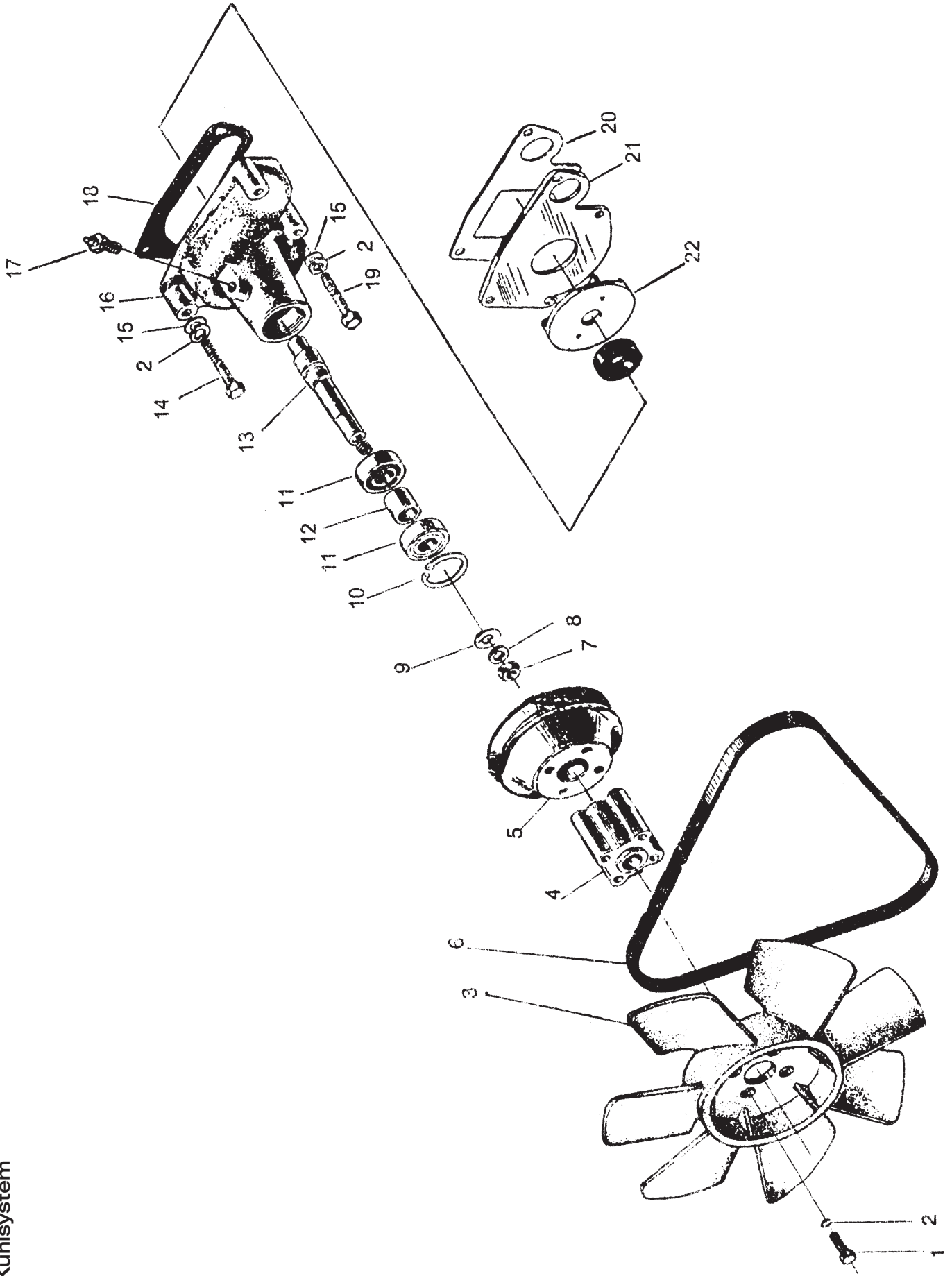


Nr.	Parts Nr.	Description	Qty
1	Y480G-02002	Fuel injection pump gasket	1
2	Y480G-10100	Fuel injection pump	1
3	YSD490Q-10500	High pressure fuel pipe	1
4	YSD490Q-10800	Fuel feed pipe from fuel filter to fuel injection pump	1
5	YSD490Q-10900a	Fuel feed from fuel supply pump to fuel filter	1
6	GB5783-86	Bolt M8x20	2
7	GB93-87	Spring washer 8	2
8	GB848-85	Washer 8-140HV	2
9	YSD490Q-10600a	C0708A Fuel filter	1
10	YSD490Q-10700	Fuel injector	4
11	Y480G-10400	Fuel return pipe	1

# 10. Schmiersystem

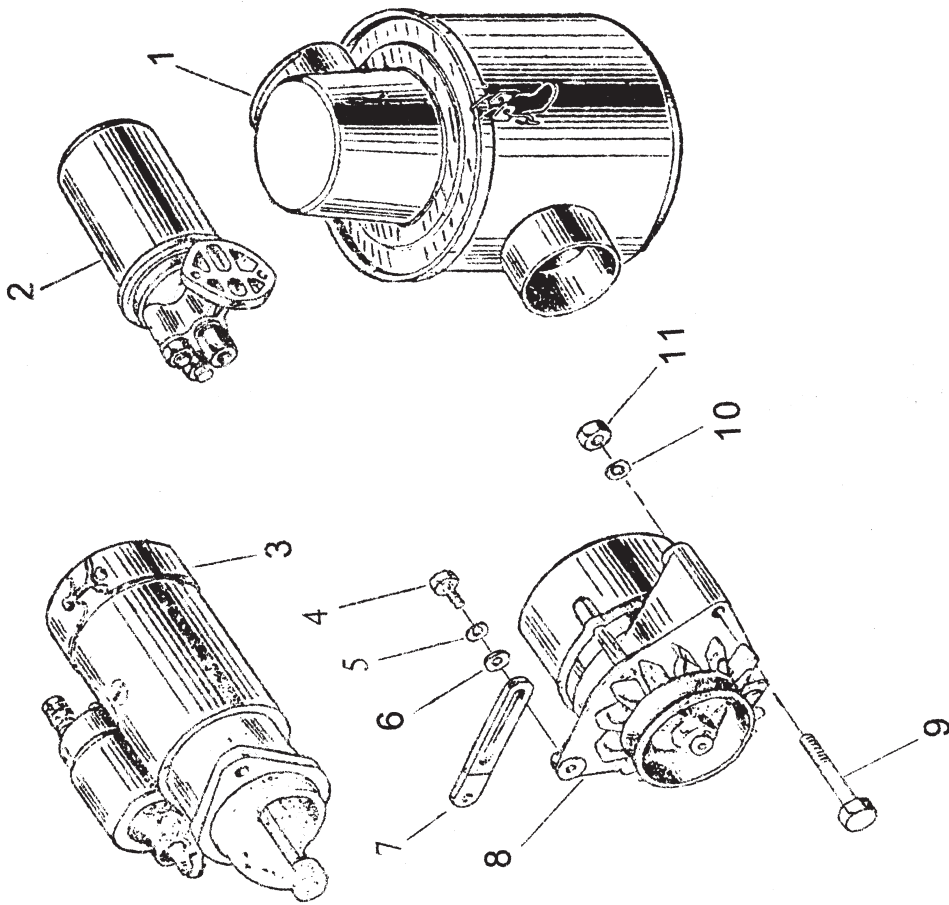


Nr.	Parts Nr.	Description	Qty
1	GB6170-86	Nut M8	4
2	GB859-87	Spring washer 8	6
3	GB848-85	Washer 8-140HV	6
4	GB899-88	Stud M8x35	2
5	GB899-88	Stud M8x40	2
6	YSD490Q-09105	Oil pump cover	1
7	YSD490Q-09107	Oil pump washer	1
8	YSD490Q-09122	Inner rotor	1
9	GB119-86	Pin A4x18	2
10	YSD490Q-09108	Outer rotor	1
11	YSD490Q-09132	Oil pump housing	1
12	YSD490Q-09101	Oil pump driving gear	1
13	YSD490Q-09121	Oil pump shaft	1
14	YSD490Q-09103	Relief valve spring	1
15	G8308-89	Steel ball	1
16	YSD490Q-09002	Oil outlet pipe flange gasket	1
17	YSD490Q-09200	Lubricating oil line unit	1
18	GB5783-86	Bolt M8x20	2
19	GB5783-86	Bolt M8x30	1
20	YSD490Q-09102	Adjusting bolt	1
21	GB6176-86	Nut M14x1.5	1
22	YSD490Q-09131	Oil pump shaft bush	1
23	YSD490Q-09104	Gasket	1
24	YSD490Q-09110	Gauze filter weldment	1



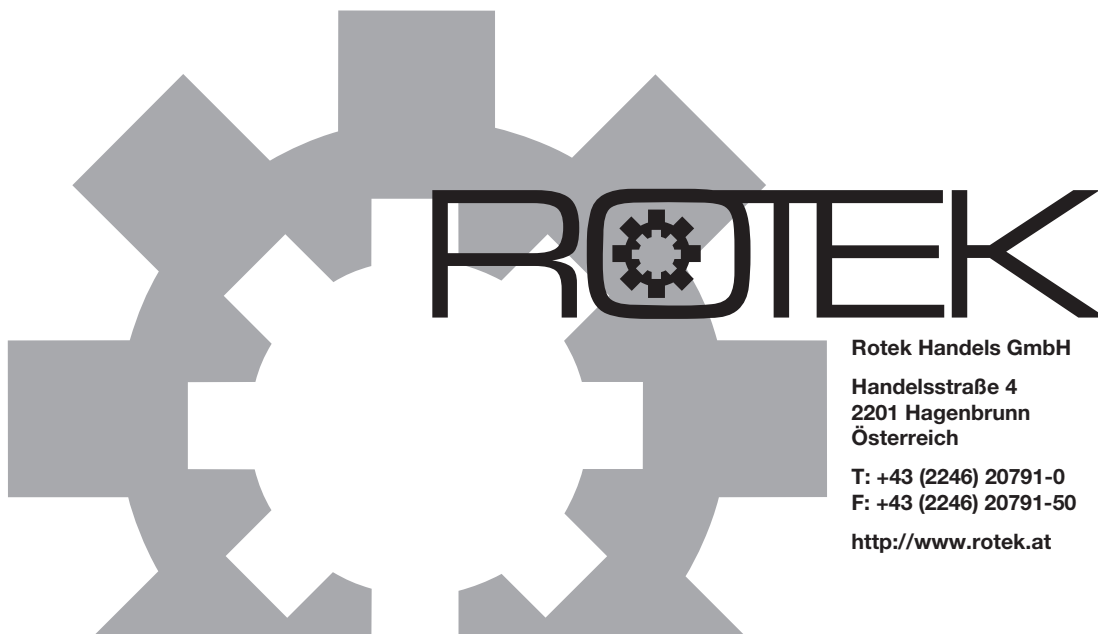


Nr.	Parts Nr.	Description	Qty
1	GB5782-86	Bolt M8x45	4
2	GB93-87	Spring washer 8	8
3	YSD490Q-11003	Fan	1
4	YSD490Q-11001	Spacer	1
5	YSD490Q-11112	Pulley	1
6	HG4-401-74	V-belt	1
7	GB6170-86	Nut M10	1
8	GB7244-87	Spring washer 10	1
9	YSD490Q-11101	Washer	1
10	GB893.1-86	Retainer 40	1
11	GB/T276-94	Ball bearing 6203-Z	2
12	YSD490Q-11104	Bearing space sleeve	1
13	YSD490Q-11106	Pump shaft	1
14	GB5783-86	Bolt M8x60	1
15	GB848-85	Washer 8-140HW	4
16	YSD490Q-11103	Pump housing	1
17	GB1152-79	Grease cup M10x1	1
18	YSD490Q-11107	Gasket	n.B.
19	GB5783-86	Bolt M8x55	3
20	YSD490Q-01022	Gasket	1
21	YSD490Q-11108	Lining plate	1
22	YSD490Q-11105a	Pump impeller	1



Nr.	Parts Nr.	Description	Qty
1	YSD490Q-15000	Air filter assy	1
2	YSD490Q-09300	Oil filter assy	1
3	Y480G-12300	Starter	1
4	GB5783-86	Bolt M8x25	1
5	GB93-87	Spring washer 8	1
6	GB848-85	Washer 8-140HV	1
7	YSD490Q-12001	Bracket	1
8	YSD490Q-12100	Generator JFT1A	1
9	GB5782-86	Bolt M10x90	1
10	GB93-87	Spring washer 10	1
11	GB6170-86	Nut M10	1





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