## Is Your Product Registered? Contact your Dealer to verify. Warranties are based on Registrations and reduced to 1 year without Registration.



301 – 30<sup>th</sup> Street NE, Suite 118, Auburn, WA 98002 PO Box 309, Auburn, WA 98071-0309 Phone (253) 735-7368 Fax (253) 735-1416

# **ILLUSTRATED PARTS LIST**

# MODEL MS153EMH

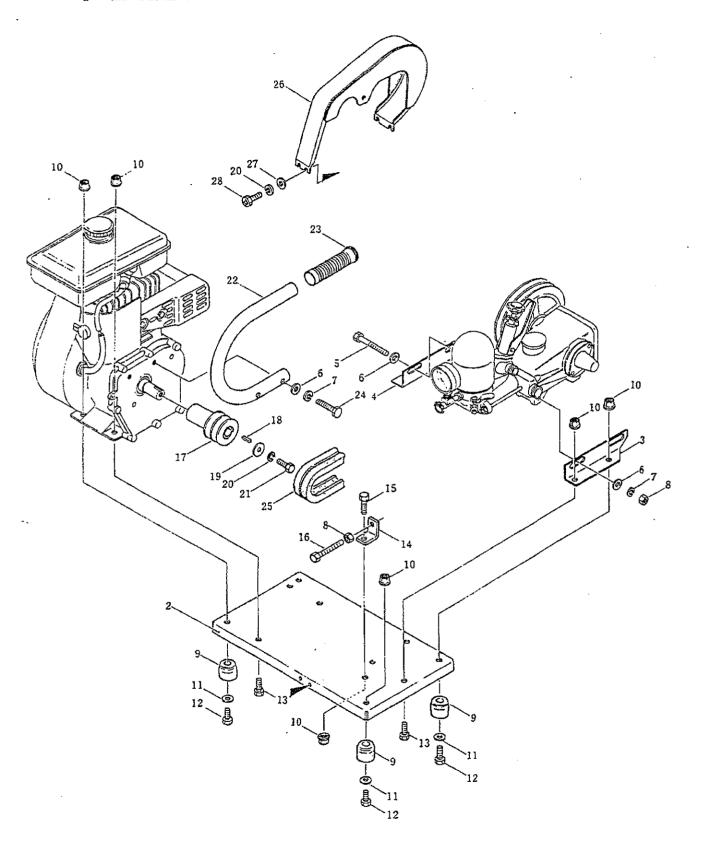
## FRAME MOUNTED SPRAYER

Effective 6-20-93



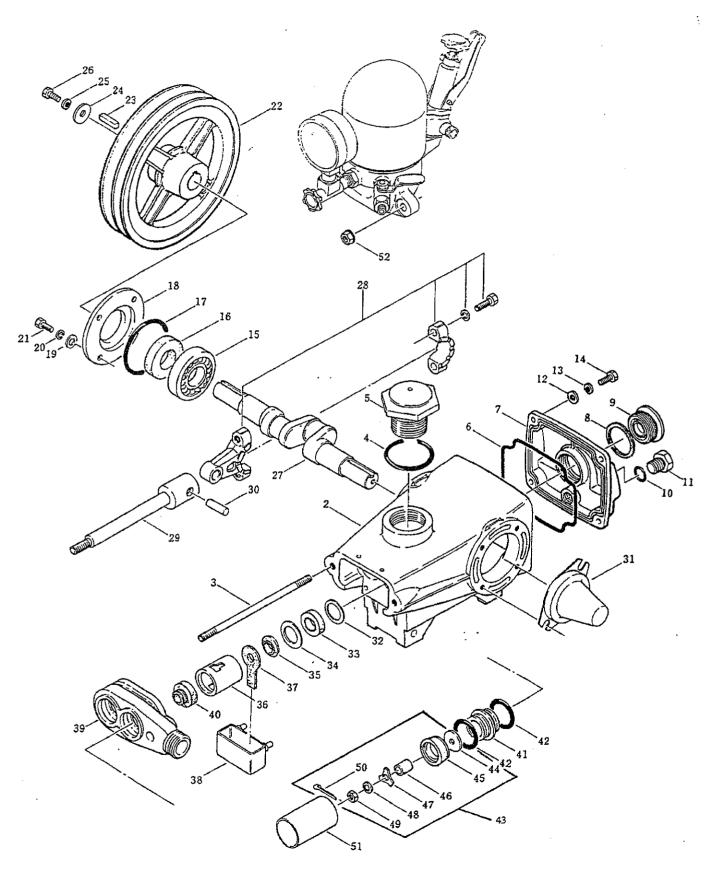
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#### 1 · ENGINE SET



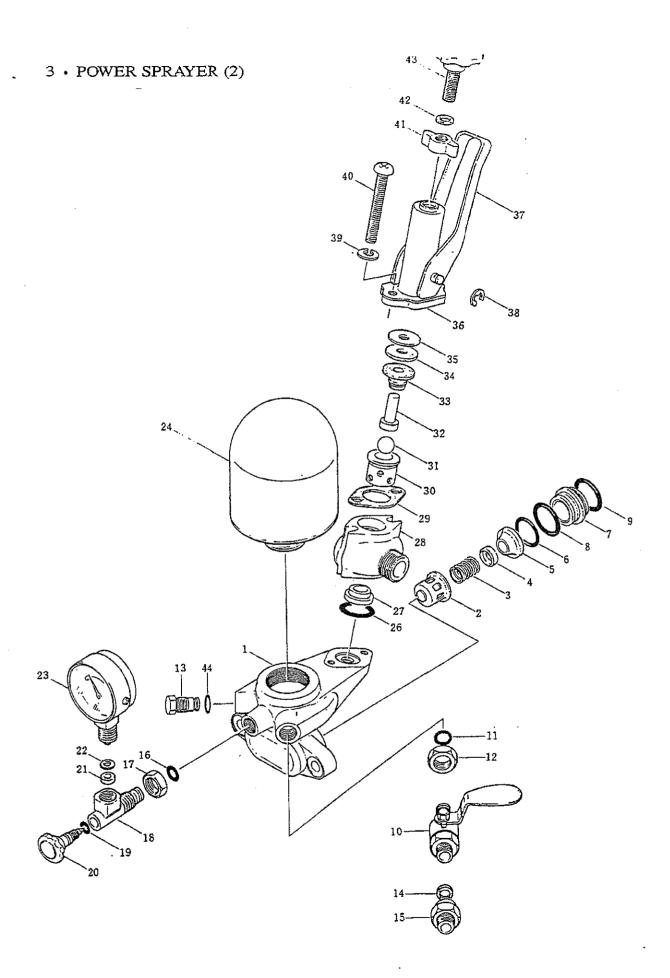
### MS153EMH PARTS LIST

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Item	Part No.		Description	Qty	Remarks
1-1	355658	MS	S153EMH	1	(355657)
1-2	104829	Se	et base	1	
1-3	101889	Ra	ail (L)	1	
1-4	101890	Ra	nil (R)	1	
1-5	080190	Bo	olt	2	M8×70×22
1-6	014085	Wa	sher	6	<b>ж</b> 8
1-7	015845	Sp	ring washer	4	М8
1-8	081039	Nu	t	3	M8
1-9	107219	Bu	ffer	4	
1-10	101804	Nu	t	11	M8
1-11	021014	₩a:	sher	4	Ø8.5 ר20×t1.6
1-12	080129	Bo	lt	4	M8×25
1-13	080126	Ba	lt	6	M8×20
1-14	054928	Be	lt tension plate	1	
1-15	080126	Bol	lt	1	M8×20
1-18	080178	Bol	1t	1	M8×60
1-17	104828	V-I	pulley	1	A ×2-51
1-18	056303	Key	ī	1	5 ×5 ×35L,カタマル
1-19	022908	Was	sher	1	Ø6.2 ר17×t3.2
1-20	012502	Spr	ing washer	5	Ж
1-21	082101	Bo 1	t	1	M6×20
1-22	102056	Han	dle	1	
1-23	062856	Kno	b .	1	
1-24	089634	Be 1	t	2	M8 ×35
1-25	103937	V-b	elt	2	LA23, オレンジ
1-26	104831	Be l	t cover	1	
1-27	013754	Was	her	4	M6
1-28	089551	Bo l	t	4	M6×18



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Item	Part No.	Description	Qty	Remarks
2-1	104822	MS153	1	
2-2	106960	Crankcase	1	Incl.3
2-3	107865	Stud bolt	2	M8×125 ×16×23
2-4	014177	O-ring	1	P35
2-5	043211	Oil inlet cap	1	
2-6	106963	0-ring	1	
2-7	106965	Crankcase lid	1	
2-8	044428	Packing	1	Ø25ר34×t2.5
2-9	043987	Oil gauge	1	
2-10	023170	0-ring	1	P12.5
2-11	025625	Blind plug	1	PF1/4
2-12	012488	Washer	4	M6
2-13	012502	Spring washer	4	M8
2-14	092520	† Bolt	4	M8×20, Incl.12, 13
2-15	014487	Bearing	2	#6304
2-16	024159	Oil seal	2	D20 40 10
2-17	026538	0-ring	2	Ø51.8ר1.5
2-18	026625	Oil seal case	2	
2-19	012488	Washer	8	M6
2-20	012502	Spring washer	8	M6
2-21	092519	Bolt	8	M6×16, Incl.19,20
2-22	100837	V-pulley	1	A ×2-152
2-23	014543	Кеу	1	5 ×5 ×25L,两角
2-24	100836	Washer	1	Ø8.5 ר30×t3.2
2-25	015845	Spring washer	1	<b>ж</b> 8
2-26	080126	Bolt	1	M8×20
2-27	103383	Crankshaft	1	
2-28	017556	Connecting rod, ass'y	2	
2-29	102280	Piston	2	
2-30	018948	Piston pin	2	
-	1		<u> </u>	<u> </u>

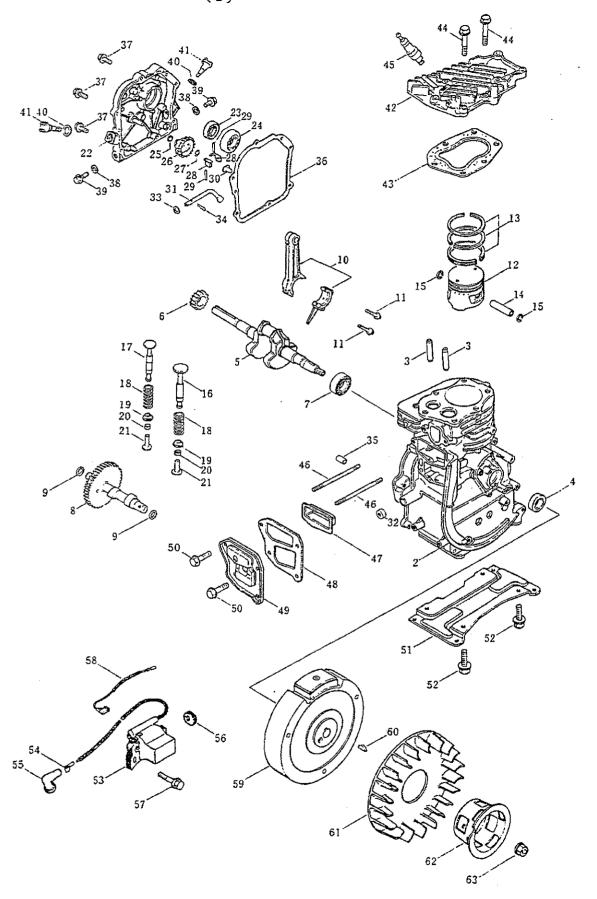
Item	Part No.	Description	Qty	Remarks
2-31	025130	Protector	1	
2-32	020017	Wsaher	2	Ø17ר24×t1.2
2-33	025461	Oil seal	2	S10.5 24 7
2-34	026854	Washer	2	Ø20ר28×t1.2
2-35	026853	Packing	2	
2-36	028033	Seal packing retainer	2	
2-37	027711	Felt packing	2	
2-38	028034	Oil pan	1	
2-39	028035	Cylinder manifold	1	
2-40	100015	Seal packing	2	
2-41	016957	Pipe receiver	2	
2-42	015862	0-ring	4	P21
2-43	092252	Piston Repair Kit	2	Incl.44 ~50
2-44	014122	Suction valve seat	2	Ø8.1 ר20×t3.8
2-45	028995	Piston packing	2	Incl.50, Ø25.5
2-46	027499	Suction valve collar	2	Ø6 ר8.5 ×11L
2-47	027500	Suction valve stopper	2	
2-48	015849	Spring washer	2	Me
2-49	081240	Nut	2	М6
2-50	014158	Cotter pin	2	ø1.8 ×8L
2-51	022929	Cylinder pipe	2	ø25×ø28.5×55L
2-52	101804	Nut	2	₩8



	,			1987. 2.27.
Item	Part No.	Description	Qty	Remarks
3-1	101910	Discherge manifold	1	
3-2	022841	Discherge valve sack	2	
3-3	022031	Discherge valve spring	2	
3-4	022842	Discherge valve	2	
3-5	105820	Discherge valve seat	2	
3-6	103575	O-ring	2	
3-7	022931	Pipe receiver	2	
3-8	023172	O-ring	2	P22
3-9	015862	0-ring	2	P21
3-10	100154	Cock, ass'y	1	PF1/4, Incl.11,12
3-11	022056	0-ring	1	
3-12	101394	Nut	1	PF1/4
3-13	080563	Blind plug	1	PF1/4
3-14	013995	Packing	1	ø8 ×ø13.5×t1.5
3-15	023505	Extension	1	PF1/4 ×SW13.8
3-16	022058	0-ring	1	P7
3-17	101394	Nut	1	PF1/4
3-18	027478	Pressure gauge protector	1	
3-19	011341	O-ring	1	ø3 ×ø? ×ø2
3-20	027441	Needle valve	1	
3-21	011241	Packing	1	ø5 ×ø11×t1.5
3-22	015453	Washer	2-3	ø5 ×ø11×t0.5
3-23	101911	Pressure gauge	1	MAX 50kgf/cm²
3-24	107752	Air chamber	1	
3-25	022933	Pressure regulator valve, ass'y	1	Incl.26 ~43
3-26	014179	0-ring	1	P20
3-27	020971	Pressure regulator valve seat	1	
3-28	023485	Pressure regulator valve dody	1	
3-29	017019	Packing	1	
3-30	012256	Pressure regulator valve sack	1	

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Item	Part No.		Description	Qts	Remarks
3-31	107238		Valve ball	1	ø12.7
3-32	016975	Pressure	e regulator valve rod	1	
3-33	011451	Pressure	e regulator valve bellows	1	
3-34	016972		Bellows packing	1 -	ø5 × ø22×t1.5
3-35	012255		Washer	1	Ø8.2 ר22×t0.6
3-36	091009	Pressure	regulator main body	1	Incl.37,38
3-37	022939	Handle, p	ressure regulator valve	1	
3-38	020299		E-shaped snap ring	1	#4
3-39	012502		Spring washer	2	M6
3-40	092017		Screw	2	M6×55, Incl.39
3-41	024988		Knob stopper	1	
3-42	022902		Washer	4-7	Ø8.5 ר13×t1
3-43	029488	Pressure	regulator valve knob	1	¥8×30
3-44	022056		O-ring	1	P7
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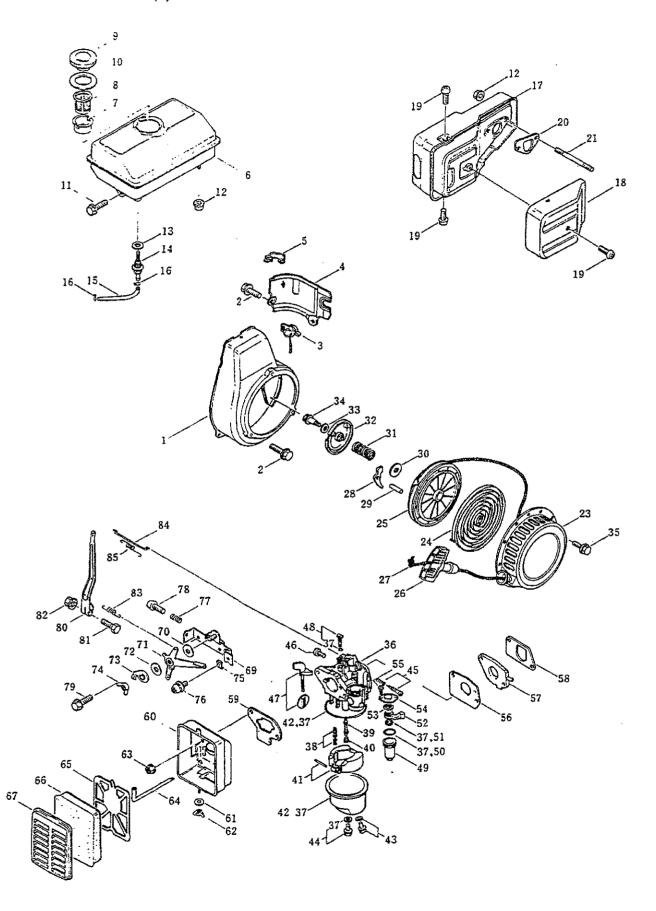


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Item	Part No.	Description	Qty	Remarks
4-1	815208	Engine	1	G100K1(SJ)
4-2	998180	Cylinder barrel, ass'y	1	Incl.3,4
4-3	990357	Valve guide	2	
4-4	990479	Oil seal	1	17 30 6
4-5	998181	Crankshaft, compl.	1	Incl.8,7
4-6	998182	Timing gear	1	
4-7	990507	Bearing	1	#6203
4-8	998183	Camshaft, compl.	1	
4-9	998184	Washer	2	M12
4-10	998185	Connecting rod, ass'y	1	Incl.11
4-11	998186	Connecting rod bolt	2	
4-12	998187	Piston	1	1
4-13	998188	Piston ring set	1	
4-14	990368	Piston pin	1	
4-15	990369	Piston pin clip	2	
4-16	998189	Intake valve	1	T A spring a second
4-17	998190	Exhaust valve	1	
4-18	990378	Valve spring	2	
4-19	998191	Valve spring retainer	2	
4-20	990380	Tappet clearance adjuster	2	3.15
4-20	990381	Tappet clearance adjuster	2	3.25
4-20	990382	Tappet clearance adjuster	2	3.34
4-20	990383	Tappet clearance adjuster	2	3.43
4-20	990384	Tappet clearance adjuster	2	3.52
4-20	990385	Tappet clearance adjuster	2	3.61
4-20	990386	Tappet clearance adjuster	2	3.72
4-20	990387	Tappet clearance adjuster	2	3.82
4-21	998192	Valve lifter	2	
4-22	998193	Crankcase cover, ass'y	1	Incl.23 ~27
4-23	990479	Oil seal	1	17 30 6
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Item	Part No.	Description	Qty	Remarks
4-24	990507	Bearing	1	#6203
4-25	990492	Washer	1	M6
4-26	ł	Governor weight holder	1	
4-27	990477	Clip	1	
4-28	990405	Governor weight	2	
4-29	998195	Governor weight pin	2	
4-30	998196	Governor slider	1	
4-31	990408	Governor arm shaft	1	
4-32	990480	Oil seal	1	
4-33	998197	Washer	1	M5
4-34	390496	Lock pin	1	8mm
4-35	990497	Knock pin	2	8 ×14
4-38	990359	Packing	i	
4-37	998198	Bolt	6	M6×28
4-38	998199	Drain plug washer	2	H10.2
4-39	998200	Drain plug bolt	2	
4-40	998201	Oil filler cap packing	2	
4-41	998202	Oil filler cap	2	
4-42	998203	Cylinder head	1	
4-43	998204	Cylinder head gasket	1	
4-44	998205	Bolt	6	N6×35
4-45	990508	Spark plug	1	BM-4A
4-46	990468	Stud bolt	2	M5×80
4-47	998206	Inner separator	1	
4-48	998207	Gasket	1	
4-49	998208	Tappet room cover	1	
4-50	990464	Bolt	4	M5×10
4-51	998209	Engine hed	1	
4-52	998210	Bo1t	4	M8×18
4-53	998211	Ignition coil, ass'y	1	Incl.54,55

1987, 2,27,

Item	Part No.		Description	Qty	Remarks
4-54	990460	]	 Plug terminal	1	
4-55	998212		Cap	1	
4-56	998213		Gronnet	1	
4-57	998214		Bolt	2	M6×25
4-58	998215		Stop switch cord	1	
4-59	998216		Flywheel, compl.	1	
4-60	990478		Key	1	
4-61	998217		Cooling fan	1	
4-62	998218		Starter pulley	1	
4-63	998219		Nut	1	M12
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1987. 2.27

Item	Part No.	Description	Qty	Remarks
5-1	998220	Fan cover, compl.	1	
5-2	990467	Bolt	5	M6×12
5-3	998221	Stop switch, ass'y	1	
5-4	998222	Shroud	1	
5-5	998223	Clip	i	
5-8	998224	Fuel tank, compl.	1	
5-7	990430	Fuel filter holder	1	
5-8	990429	Fuel filter	i	
5-9	998225	Fuel filter cap, compl.	1	Incl.10
5-10	990428	Packing	1	
5-11	998230	Bolt	1	M6×14
5-12	990487	Nut	4	MG
5-13	998226	Packing	1	
5-14	998227	Fuel tank joint, compl.	1	
5-15	998231	Fuel tube	1	
5-16	990499	Tube clip	2	
5-17	998228	Muffler, compl.	1	
5-18	990433	Muffler separator	1	
5-19	998229	Screw	3	M6×6
5-20	998232	Muffler gasket	1	
5-21	998233	Stud bolt	2	M6×50
5-22	998234	Recoil starter, ass'y	1	Incl.23 ~34
5-23	998235	Starter case, compl.	1	
5-24	998236	Return spring	1	
5-25	998237	Starter reel	1	
5-26	998238	Starter grip	1	
5-27	998239	Starter rope	1	
-28	998240	Starter ratchet	1	
5-29	998241	Ratchet shaft	1	
5-30	998242	Friction plate (A)	1	

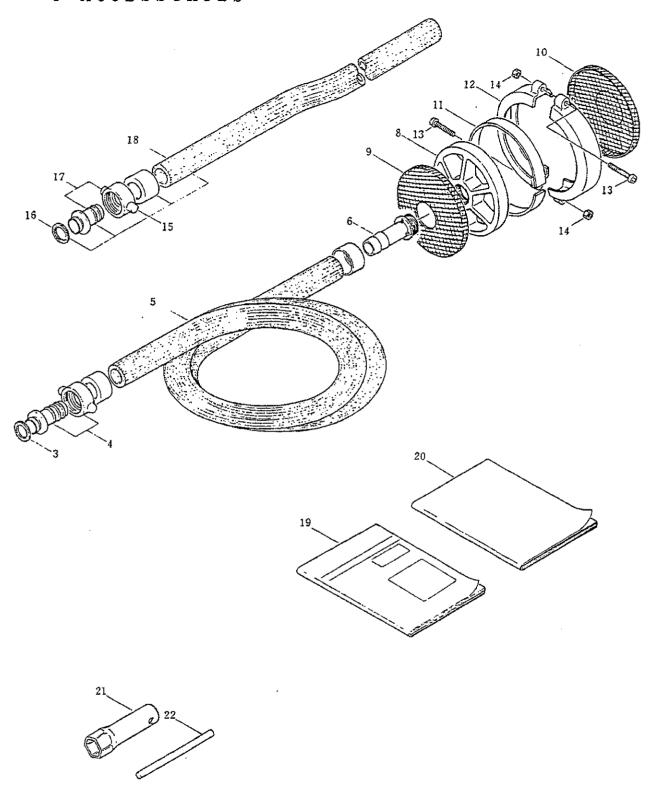
### PARTS LIST

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Item	Part No.	Description	Qty	Remarks
5-31	998243	Friction spring	1	
5-32	998244	Reel starter cover	1	
5-33	998245	Friction plate (B)	1	
5-34	998246	Bolt	1	
5-35	998247	Bolt	3	M6×8
5-36	998248	Carburetor, ass'y	1	Incl.37 ~55
5-37	998249	Gasket set	1	
5-38	998250	Float valve set	1	
5-39	998251	Main nozzle	1	
5-40	998252	Main jet	1	#62
5-41	998253	Float set	1	
5-42	998254	Float chamber set	1	
5-43	998255	Drain screw set	1	
5-44	998256	Screw set	1	
5-45	998257	Pilot screw set	1	
5-46	998258	Throttle stop screw	1	
5-47	998259	Choke set	1	
5-48	998260	Pilot jet set	1	<b>#3</b> 5
5-49	998261	Fuel strainer cup	1	
5-50	998262	O-ring	1	
5-51	998263	Packing	1	
5-52	998264	Cock lever	1	
5-53	998285	Spring	1	
5-54	998266	Lever setting plate	1	
5-55	998267	Screw	2	M3×6
5-56	998268	Packing	1	
5-57	998269	Carburetor insulator	1	
5-58	998270	Insulator packing	1	
5-59	998271	Air cleaner packing	1	
5-60	998272	Air cleaner case, compl.	1	Incl.61,62

1987. 2.27

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Item	Part No.		Description	Qty	Remarks
5-61	990492		Washer	1	M6
5-62	990471		Nut	1	
5-63	998273	·	Nut	2	Ж5
5-64	998274		Breather tube	1	
5-65	990423		Air cleaner grid	1	
5-86	890422		Air cleaner element	1	-
5-67	998275		Air cleaner cover	1	
5-68	998276		Control, ass'y	. 1	Incl.69 ~78
5-69	998277		Control base, compl.	1	
5-70	998278		Control lever spacer	1	
5-71	998279		Control lever	i	
5-72	998280		Lever spring	1	
5-73	998281		Control lever washer	1	
5-74	990471		Nut	1	
5-75	990418	-	Cable holder	1	
5-76	990486		Screw washer	1	M5×16
5-77	990419		Control adjusting spring	1	
5-78	998282		Screw	1 .	M5×20
5-79	990467		Bolt	2	M6×12
5-80	998283		Governor arm	1	The state of the s
5-81	991248		Bolt	1	M6×20
5-82	990487		Nut -	1	Ив
5-83	998284		Governor spring	1	
5-84	998285		Governor rod	1	
5-85	998286		Throttle return spring	1	

#### 6 · ACCESSORIES



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Item	Part No.	Description	Qty	Remarks
6-1	106635	Suction hose, ass'y	1	Incl.2~14
8-2	106636	Suction hose	1	Incl.3~6
6-3	103685	Packing	1	Ø12ר18.5×t1.5
6-4	098009	Hose coupling	1	PF1/2,026902+103200
6-5	103573	Hose	1	Ø13×3000 I.
6-6	106637	Hose coupling	1	PF1 × Ø 13 hose
6-7	105930	Suction strainer, ass'y	1	Incl.8~14
6-8	105931	Strainer body	1	
8-9	105933	Strainer net (A)	1	
6-10	105934	Strainer net (B)	1	
6-11	105935	Weight	1	
6-12	105932	Strainer ring	2	
3-13	089761	Screw	2	M4×20
3-14	081166	Nut	2	M4,3シュ
8-15	104344	Discharge hose, ass'y	1	Incl.18 ~18
3-18	103685	Packing	1	Ø12ר18.5×t1.5
3-17	098009	Hose coupling	1	PF1/2,026902+133200
3-18	104345	Hose	1	Ø13×3000 L
3-19		Instruction manual	1	
3-20	101913	Instruction manual	1	Engine
3-21	101900	Box spanner	1	19
-22	101912	Hand le	1	
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Maruyama U.S., Inc. 3570 Shelby Lane Denton, TX 76207 940-383-7400 voice 940-383-7466 fax