



MARUYAMA U.S., INC.

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ILLUSTRATED PARTS LIST

**MODEL MS045
MODEL MS045D**

BACKPACK SPRAYER

Effective 1-4-93

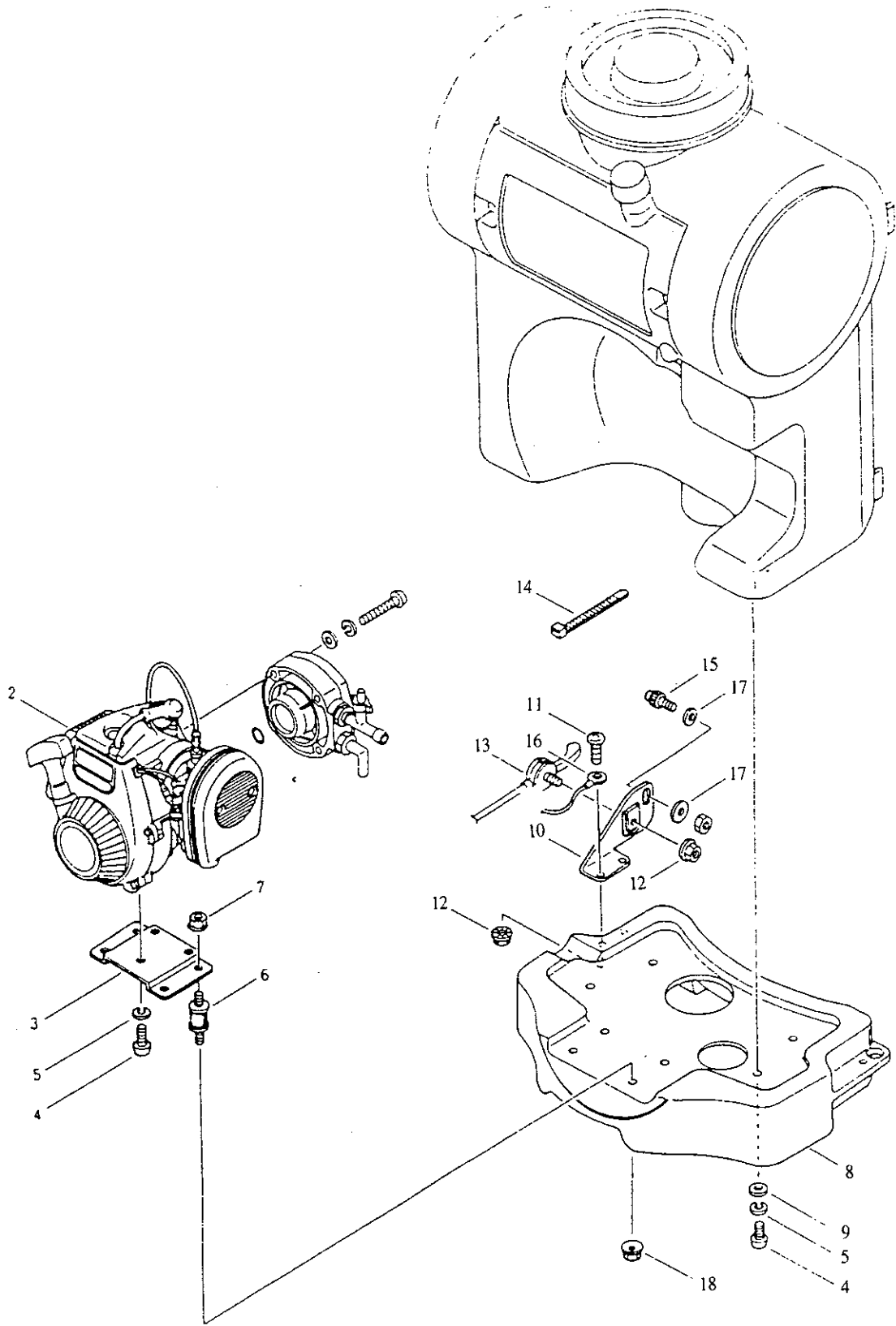


Maruyama — Manufacturing quality agricultural sprayers and equipment since 1895.

PARTS LIST

MODEL MS045 & MS045D

1. MAIN BODY

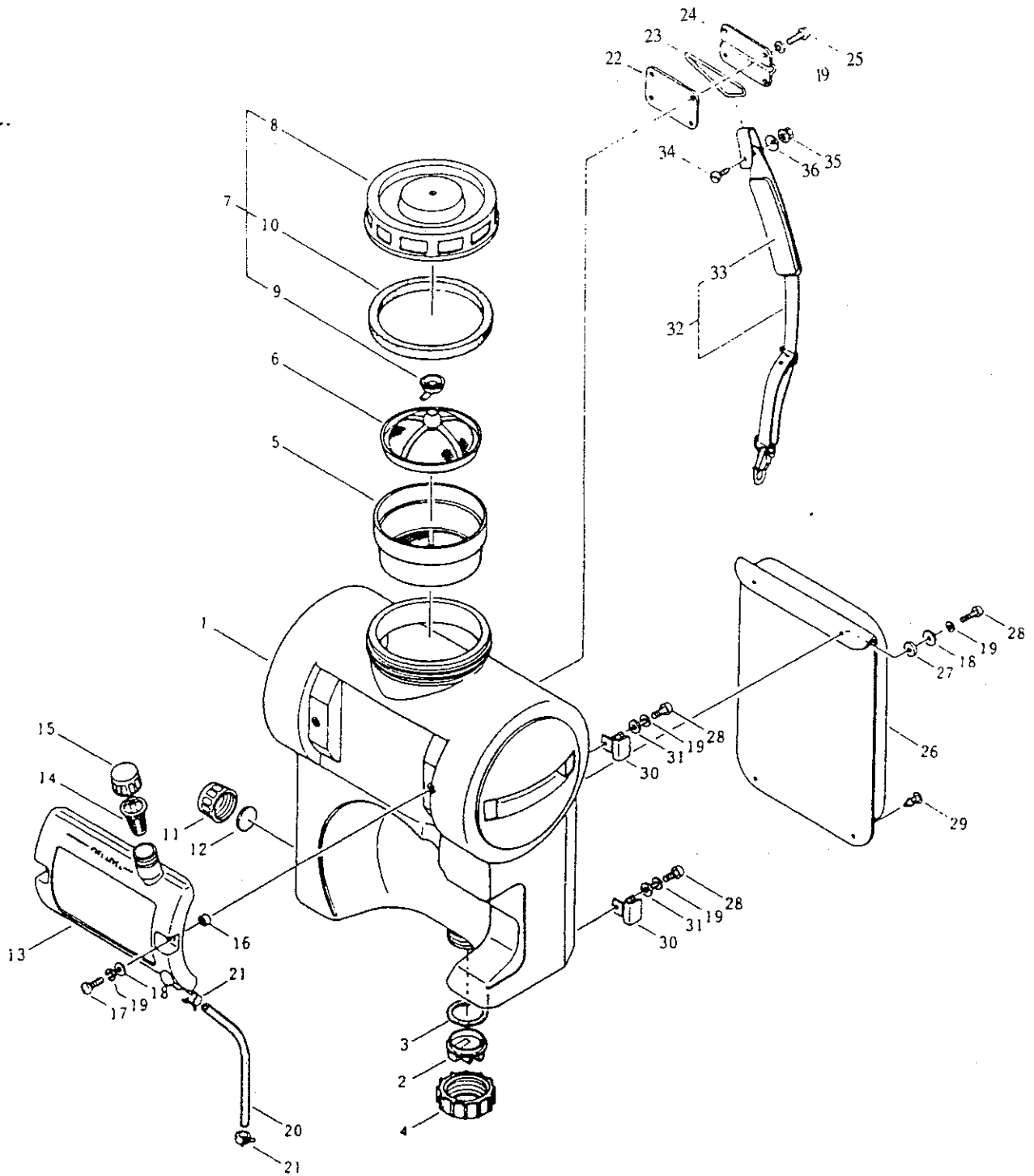


MARUYAMA U.S., INC.

PARTS LIST

MODEL MS045 & MS045D

2. CHEMICAL TANK

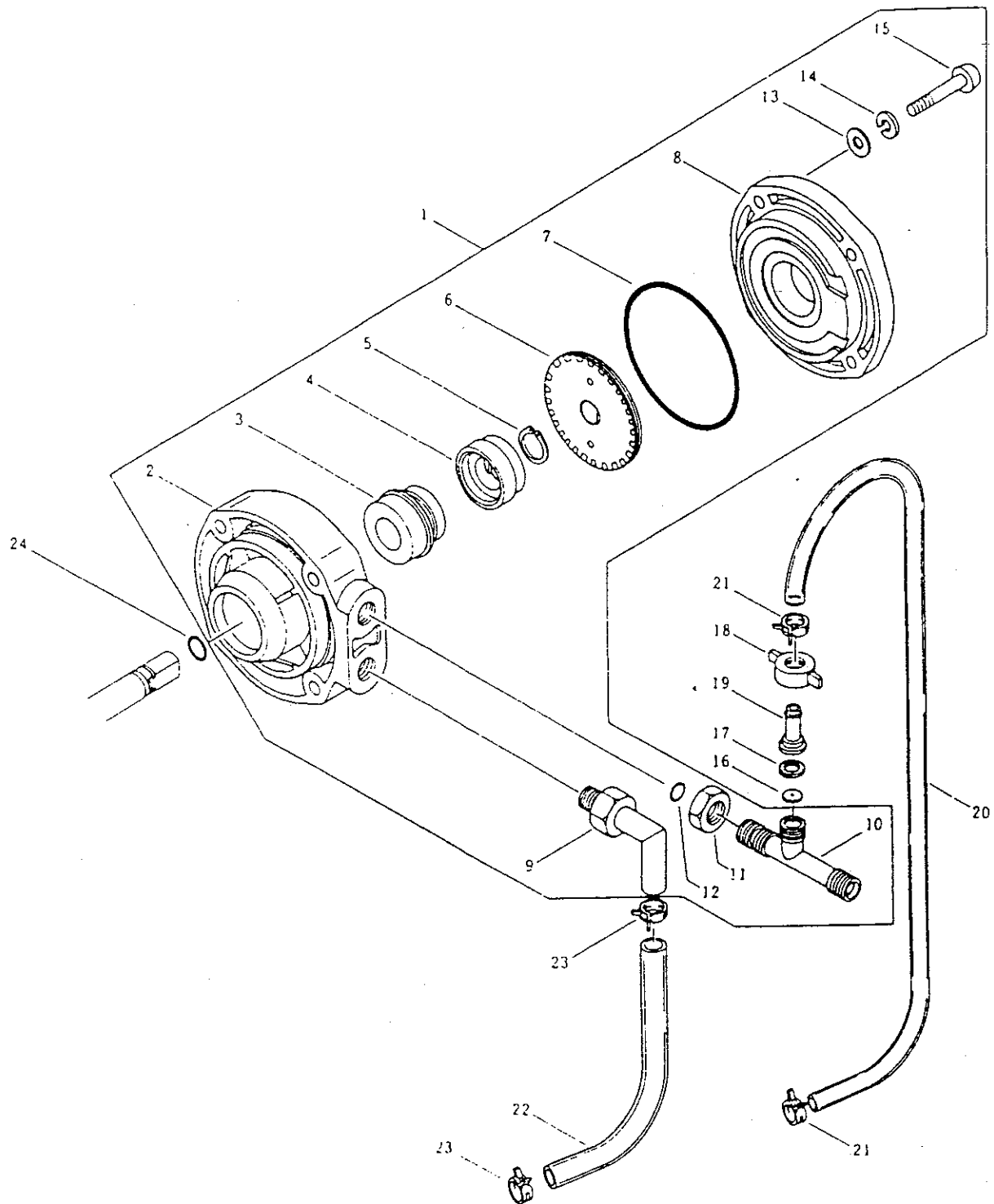


Ref.No.	Parts No.	Parts Name	Q'ty	Ref.No.	Parts No.	Parts Name	Q'ty
2-1	106327	Chemical tank	1				
2-2	106329	Connector	1				
2-3	107176	Packing ($\phi 50 \times \phi 60 \times t3$)	1				
2-4	100466	Cap	1				
2-5	106330	Strainer	1				
2-6	102623	Strainer	1				
2-7	106331	Cap, chemical tank, ass'y	1				
2-8	106332	• Cap, chemical tank	1				
2-9	022363	• Inner cap	1				
2-10	022362	• Packing ($\phi 150 \times \phi 170 \times t10$)	1				
2-11	106333	Blind cap	1				
2-12	029299	Blind packing ($\phi 36 \times t3$)	1				
2-13	106335	Fuel tank	1				
2-14	106920	Strainer	1				
2-15	028391	Cap	1				
2-16	106344	Collar	2				
2-17	081465	Screw (M6 \times 18)	2				
2-18	019056	Washer ($\phi 6.5 \times \phi 18 \times t1$)	4				
2-19	012502	Spring washer (M6)	10				
2-20	105334	Vinyl hose ($\phi 7 \times \phi 11 \times 125L$)	1				
2-21	105335	Hose band (# 10)	2				
2-22	106349	Plate	1				
2-23	029306	Strap hook	1				
2-24	106350	Bracket	1				
2-25	081452	Screw (M6 \times 10)	4				
2-26	106351	Cushion pad	1				
2-27	106352	Packing ($\phi 5.5 \times \phi 16 \times t1.5$)	2				
2-28	081453	Screw (M6 \times 12)	4				
2-29	101863	Fastener	2				
2-30	106353	Clip	2				
2-31	013754	Washer (M6)	2				
2-32	108466	Knapsack strap, ass'y	2				
2-33	019874	• Shoulder pad	2				
2-34	020654	Bolt (M6)	2				
2-35	100420	Nut (M6)	2				
2-36	100603	Washer (M6)	2				

PARTS LIST

MODEL MS045 & MS045D

3. POWER SPRAYER



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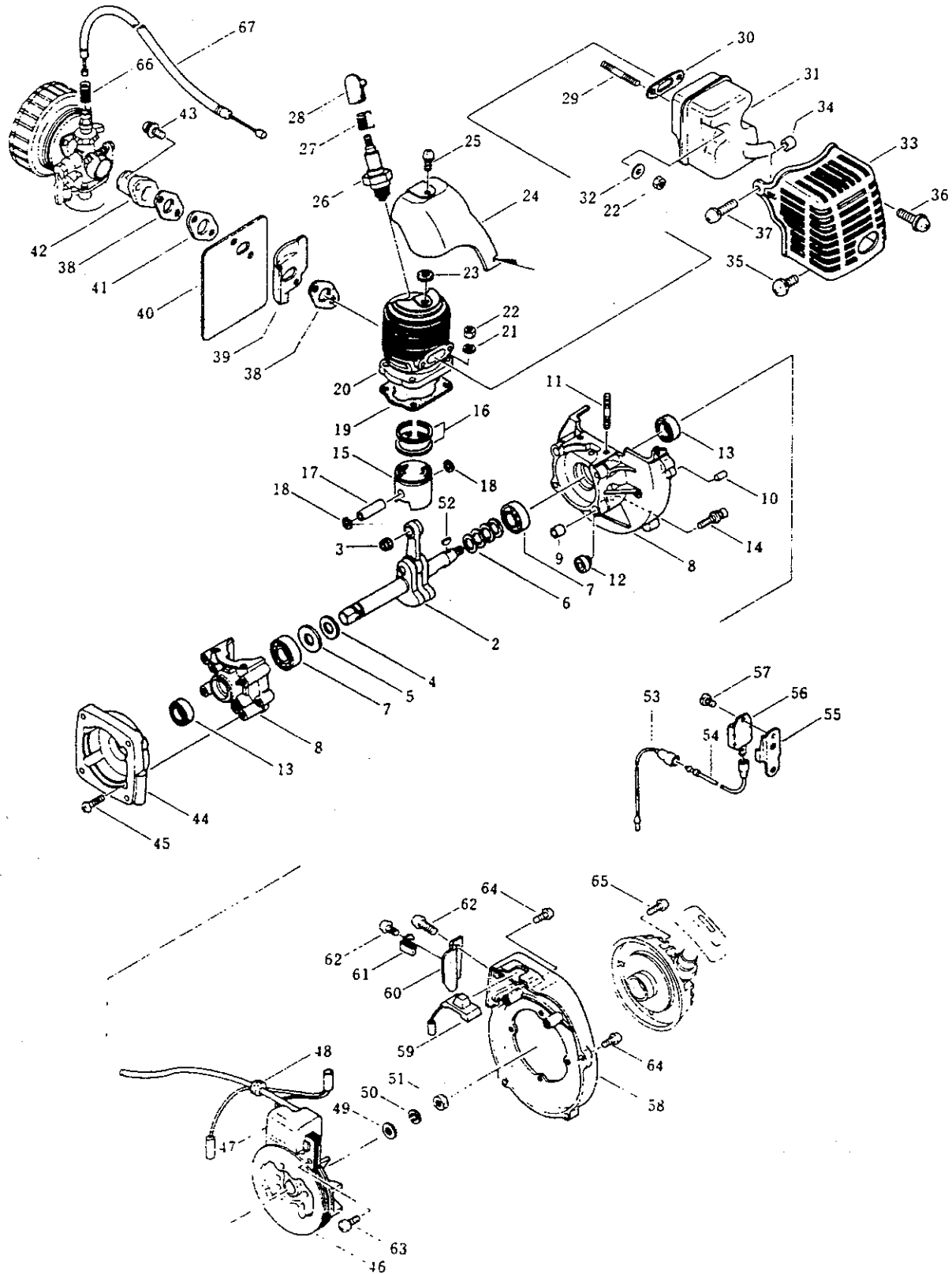
Ref.No.	Parts No.	Parts Name	Q'ty	Ref.No.	Parts No.	Parts Name	Q'ty
3-1	106320	Pump, ass'y	1				
3-2	106275	• Casing	1				
3-3	107421	• Mechanical seal	1				
3-4	107201	• Holder	1				
3-5	106323	• C-shaped snap ring (S12)	1				
3-6	107202	• Impeller (57x3.5Tx12)	1				
3-7	014033	• O-ring (S67)	1				
3-8	106276	• Casing cover	1				
3-9	106325	• Elbow (PT1/4)	1				
3-10	106326	• T-joint (PF1/4)	1				
3-11	025604	• Nut (PF1/4)	1				
3-12	011343	• O-ring (P10A)	1				
3-13	065005	• Washer (M6)	4				
3-14	105849	• Spring washer (M6)	4				
3-15	088348	• Screw (M6 × 45)	4				
3-16	100704	Nozzle plate (ϕ 1.0 × ϕ 8.2 × t1)	1				
3-17	100703	Packing (ϕ 6 × ϕ 11.5 × t2.5)	1				
3-18	023266	Hose coupling (F) (PF1/4)	1				
3-19	106346	Inner core	1				
3-20	106347	Vinyl hose (ϕ 5 × ϕ 8 × 400L)	1				
3-21	106348	Hose band (# 4)	2				
3-22	105336	Vinyl hose (ϕ 10 × ϕ 15 × 180L)	1				
3-23	103033	Hose band (# 27)	2				
3-24	013963	O-ring (S10)	1				

PARTS LIST

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4. ENGINE (CRANKCASE, CYLINDER)

(KT12X)



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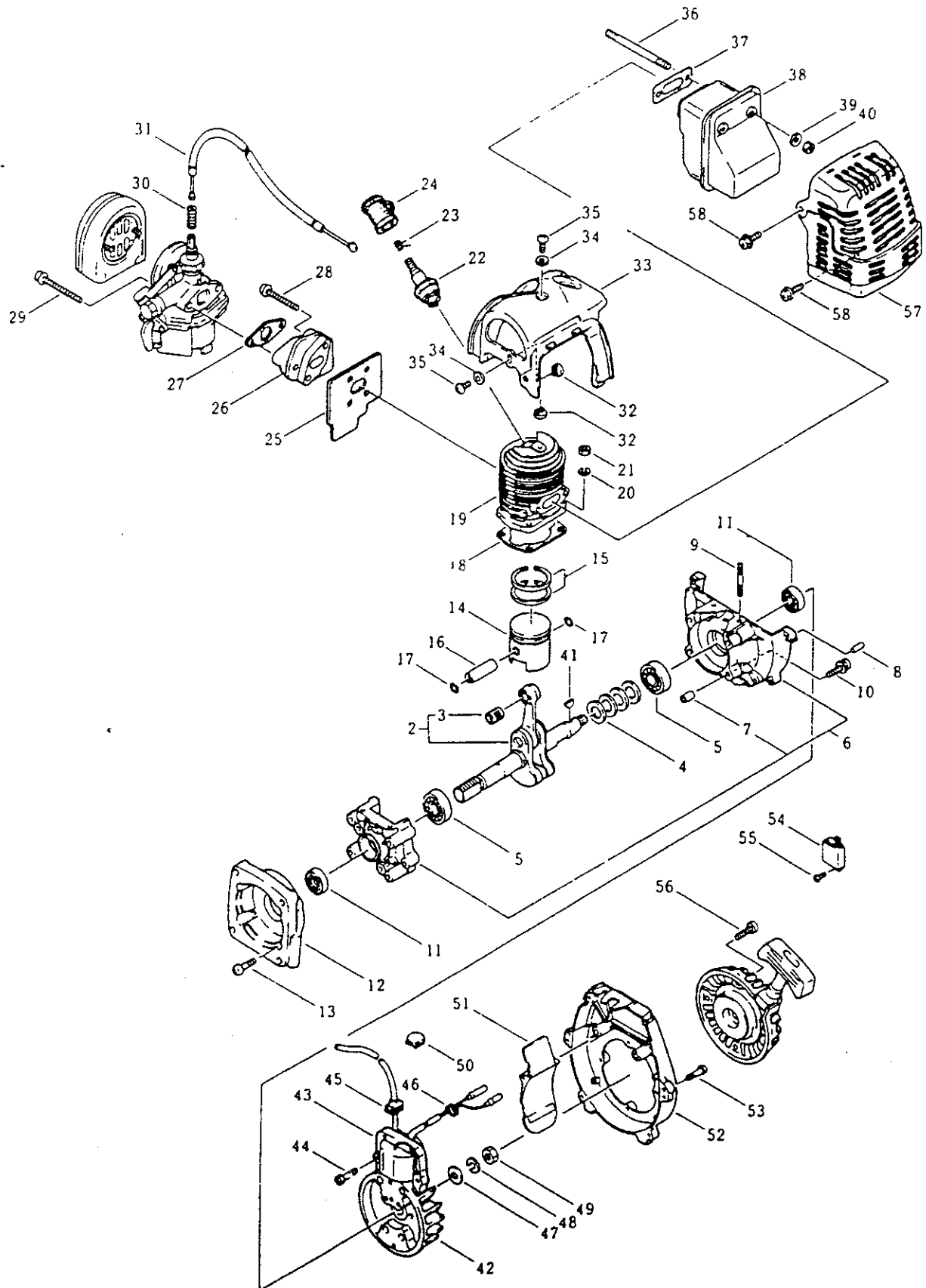
Ref.No.	Parts No.	Parts Name	Q'ty	Ref.No.	Parts No.	Parts Name	Q'ty
4-1	107367	Engine (KT12X)	1	4-38	943170	Gasket	2
4-2	944788	Crankshaft, ass'y	1	4-39	944091	Cylinder cover	1
4-3	943597	Needle bearing	1	4-40	944101	Gasket	1
4-4	911322	Washer	1	4-41	943992	Insulator	1
4-5	911323	Washer	1	4-42	943169	Inlet pipe	1
4-6	911320	Shim (t0.1)	AR	4-43	943978	Screw	2
4-6	943128	Shim (t0.2)	AR	4-44	943650	Case	1
4-6	943129	Shim (t0.4)	AR	4-45	943575	Screw	4
4-6	943130	Shim (t0.6)	AR	4-46	944583	Flywheel	1
4-7	944111	Ball bearing (6001V3)	2	4-47	944584	Ignition coil	1
4-8	944789	Crankcase, ass'y	1	4-48	943994	Grommet	1
4-9	071098	Dowel pin	2	4-49	901564	Washer	1
4-10	071100	Dowel pin	2	4-50	943142	Spring washer	1
4-11	071554	Stud	4	4-51	943173	Nut	1
4-12	944790	Damper	1	4-52	071090	Key	1
4-13	911325	Oil seal	2	4-53	943998	Lead wire	1
4-14	943190	Screw	4	4-54	944110	Lead wire	1
4-15	943580	Piston	1	4-55	944109	Bracket	1
4-16	073343	Piston ring set	1	4-56	944108	Igniter	1
4-17	943943	Piston pin	1	4-57	943894	Screw	1
4-18	943581	Snap ring	2	4-58	944793	Spiral case	1
4-19	943589	Gasket	1	4-59	943161	Stop switch	1
4-20	944582	Cylinder	1	4-60	943995	Cylinder cover	1
4-21	901518	Spring washer	4	4-61	944113	Clamp	1
4-22	943265	Nut	6	4-62	943458	Screw	2
4-23	943188	Gasket	1	4-63	943644	Screw	2
4-24	943197	Cylinder cover	1	4-64	943574	Screw	4
4-25	943987	Screw	1	4-65	944794	Screw	4
4-26	943643	Spark plug (BM6)	1	4-66	944004	Spring	1
4-27	943771	Spring	1	4-67	944795	Throttle cable	1
4-28	943773	Plug cap	1				
4-29	943571	Stud	2				
4-30	943468	Gasket	1				
4-31	944791	Muffler, ass'y	1				
4-32	071104	Washer	2				
4-33	944585	Muffler cover	1				
4-34	944586	Collar	1				
4-35	944792	Screw	1				
4-36	944125	Screw	1				
4-37	944126	Screw	1				

PARTS LIST

MODEL MS045D

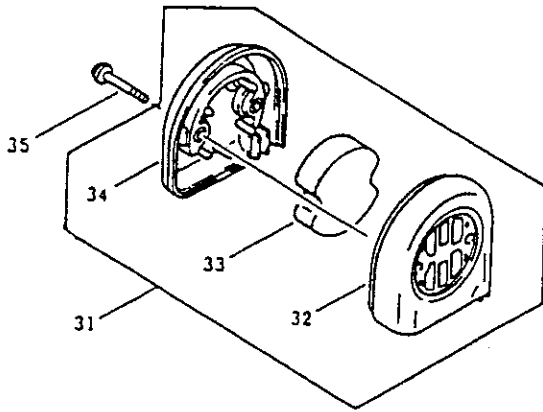
5. ENGINE (CRANKCASE, CYLINDER)

(TF022H)



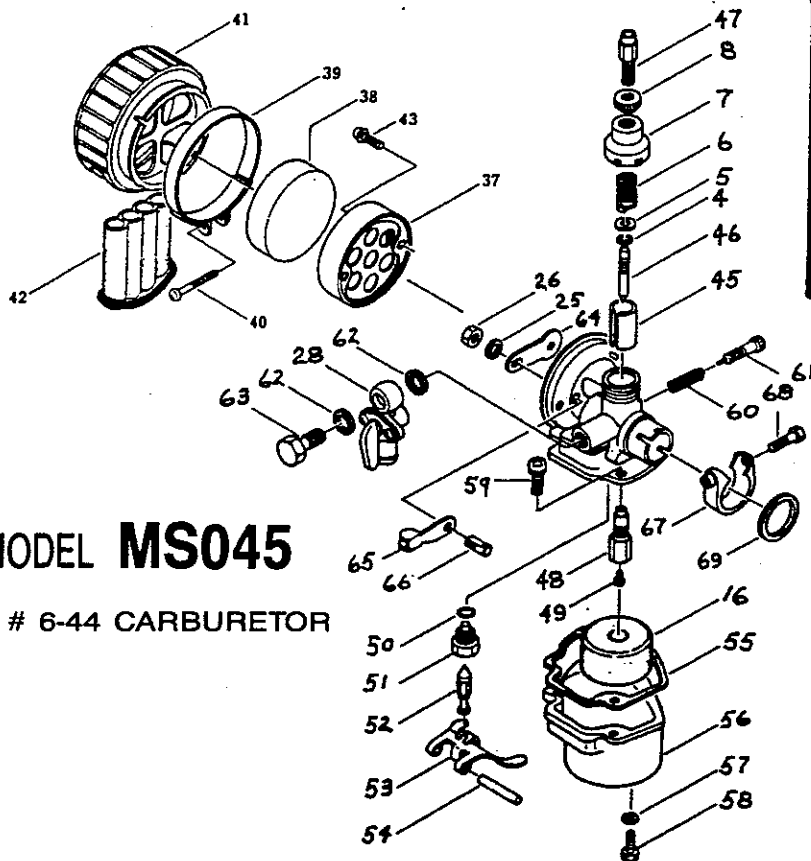
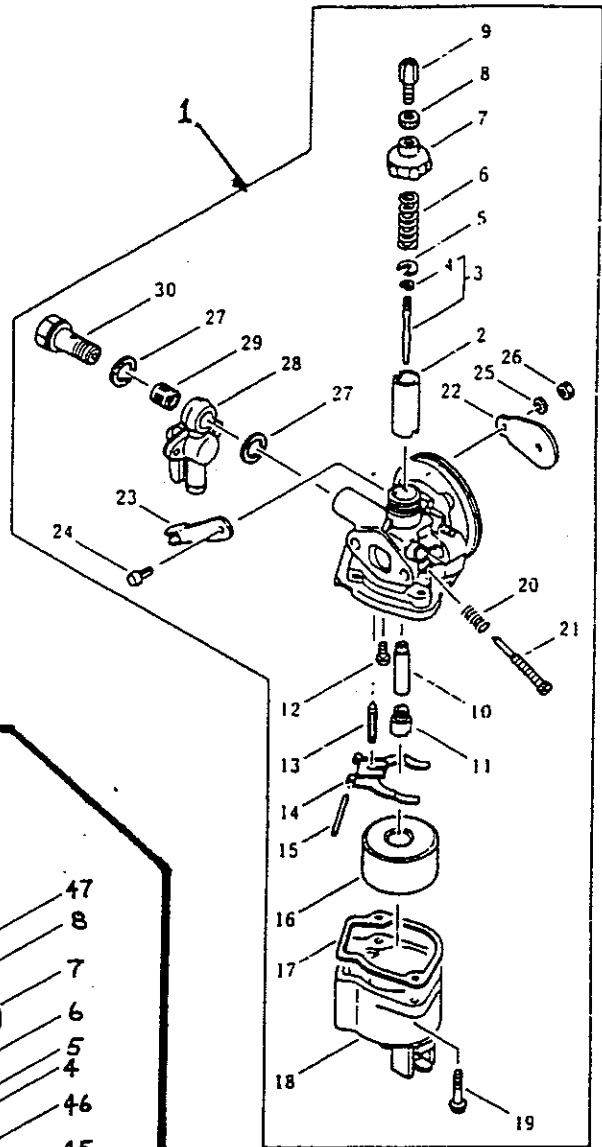
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Ref.No.	Parts No.	Parts Name	Q'ty	Ref.No.	Parts No.	Parts Name	Q'ty
5-1	111151	Engine, ass'y (TF022H-AG22)	1	5-38	577352	Muffler, ass'y	1
5-2	577347	Crankshaft, ass'y	1	5-39	573952	Washer	2
5-3	943597	• Needle bearing	1	5-40	577353	Nut (M5)	2
5-4	911320	Shim (t = 0.1)	AR	5-41	071090	Key	1
5-4	943128	Shim (t = 0.2)	AR	5-42	573964	Flywheel	1
5-4	943129	Shim (t = 0.4)	AR	5-43	573965	Ignition coil	1
5-4	943130	Shim (t = 0.6)	AR	5-44	943644	Bolt (M4 × 20)	2
5-5	944111	Ball bearing (6001V3)	2	5-45	573966	Grommet	1
5-6	577348	Crankcase, ass'y	1	5-46	943968	Grommet	1
5-7	573908	• Dowel pin	2	5-47	071190	Washer (M8)	1
5-8	071100	Dowel pin	2	5-48	071615	Spring washer (M8)	1
5-9	071099	Stud	4	5-49	943173	Nut (M8)	1
5-10	573179	Screw	4	5-50	573967	Grommet	1
5-11	573958	Oil seal	2	5-51	573985	Plate	1
5-12	577349	Flange	1	5-52	577354	Fan housing	1
5-13	573973	Screw (M5 × 16)	4	5-53	573986	Screw (M4 × 16)	4
5-14	573955	Piston	1	5-54	573079	Igniter	1
5-15	073343	Piston ring set	1	5-55	943579	Screw (M4 × 8)	1
5-16	943943	Piston pin	1	5-56	944794	Screw	4
5-17	943581	Snap ring	2	5-57	577355	Muffler protector	1
5-18	943589	Cylinder gasket	1	5-58	577356	Bolt	2
5-19	573948	Cylinder	1				
5-20	071692	Spring washer (M5)	4				
5-21	944415	Nut (M5)	4				
5-22	571472	Spark plug (BM7A)	1				
5-23	943771	Terminal	1				
5-24	943773	Plug cap	1				
5-25	573961	Gasket	1				
5-26	573960	Insulator	1				
5-27	573962	Gasket	1				
5-28	572912	Screw (M5 × 20)	2				
5-29	943738	Screw (M5 × 43)	2				
5-30	944004	Spring	1				
5-31	944795	Throttle wire	1				
5-32	577350	Washer	2				
5-33	573984	Shroud	1				
5-34	573989	Washer (φ 4.5 × φ 10 × t1.2)	2				
5-35	573988	Screw (M4 × 16)	2				
5-36	577351	Stud	2				
5-37	573951	Gasket	1				



6. MODEL MS045D

Ref. # 6-1 CARBURETOR



6. MODEL MS045

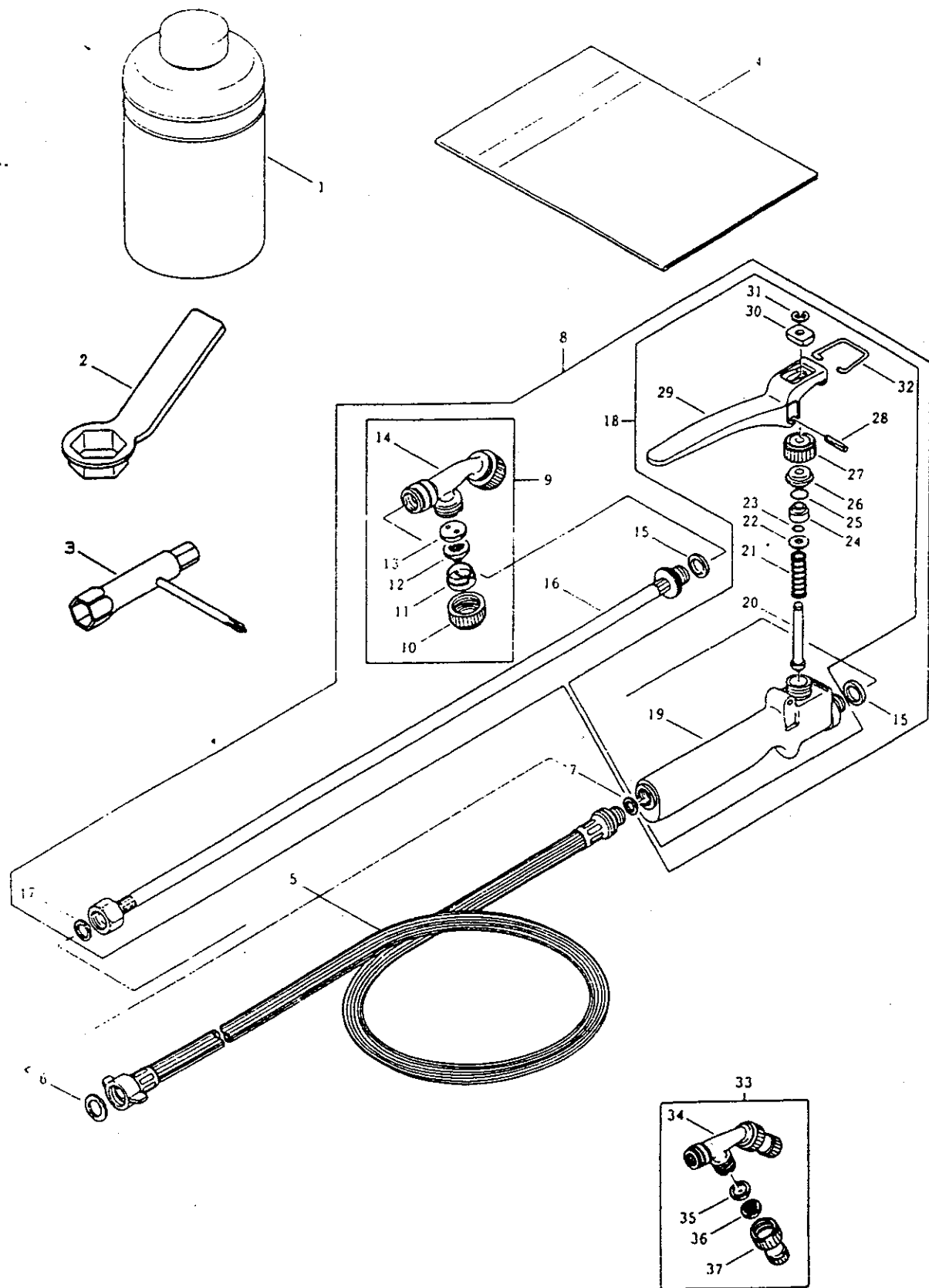
Ref. # 6-44 CARBURETOR

Ref. No.	Parts No.	Parts Name	Q'ty	Ref. No.	Parts No.	Parts Name	Q'ty
6-1	544357	Carburetor, ass'y	1	6-41	943591	Air cleaner cap	1
6-2	573994	• Throttle valve	1	6-42	943592	Air duct	1
6-3	573993	• Jet needle	1	6-43	943577	Screw	2
6-4	071145	• Snap ring	1	6-44	944796	Carburetor ass'y complete	1
6-5	943167	• Retainer valve	1	6-45	944588	Throttle valve	1
6-6	071253	• Throttle spring	1	6-46	944107	Jet needle	1
6-7	071252	• Body cap	1	6-47	944096	Adjuster	1
6-8	071149	• Lock nut	1	6-48	943658	Needle jet	
6-9	573992	• Cable adjuster	1	6-49	943166	Main jet	
6-10	577358	• Needle jet	1	6-50	943656	O-ring	
6-11	577359	• Main jet (#50)	1	6-51	944103	Valve seat	
6-12	944322	• Screw (M3x6)	1	6-52	944090	Needle valve	
6-13	944320	• Needle valve	1	6-53	943277	Float lever	
6-14	573189	• Arm	1	6-54	943063	Float pin	
6-15	943512	• Hinge pin	1	6-55	943184	Gasket	
6-16	944106	• Float	1	6-56	944100	Float chamber	
6-17	944323	• Gasket	1	6-57	071131	Gasket	
6-18	944324	• Float chamber	1	6-58	071434	Drain screw	
6-19	943896	• Screw (M4x16)	2	6-59	943577	Screw	
6-20	943196	• Spring	1	6-60	943192	Spring	
6-21	944316	• Slow stop screw	1	6-61	943211	Idle stop screw	
6-22	944314	• Valve	1	6-62	944105	Gasket	
6-23	944478	• Choke lever	1	6-63	944097	Banjo bolt	
6-24	944313	• Bolt	1	6-64	944092	Choke valve	
6-25	944102	• Washer	1	6-65	944094	Choke lever	
6-26	071153	• Nut	1	6-66	071263	Bolt	
6-27	944482	• Gasket	2	6-67	944093	Body Band	
6-28	944104	• Fuel valve, ass'y	1	6-68	071259	Bolt	
6-29	944481	• Filter	1	6-69	944089	Gasket	
6-30	944480	• Eye bolt	1				
6-31	574002	Air cleaner, ass'y	1				
6-32	574003	• Air cleaner case	1				
6-33	943483	• Air filter	1				
6-34	574004	• Air filter cap	1				
6-35	574005	Screw (M4x40)	2				
6-36	943590	Air Cleaner, ass'y	1				
6-37	943193	Air cleaner case	1				
6-38	943194	Element	1				
6-39	944797	Band	1				
6-40	944798	Screw	1				

PARTS LIST

MODEL MS045 & MS045D

7. ACCESSORIES, OPTIONAL ACCESSORIES



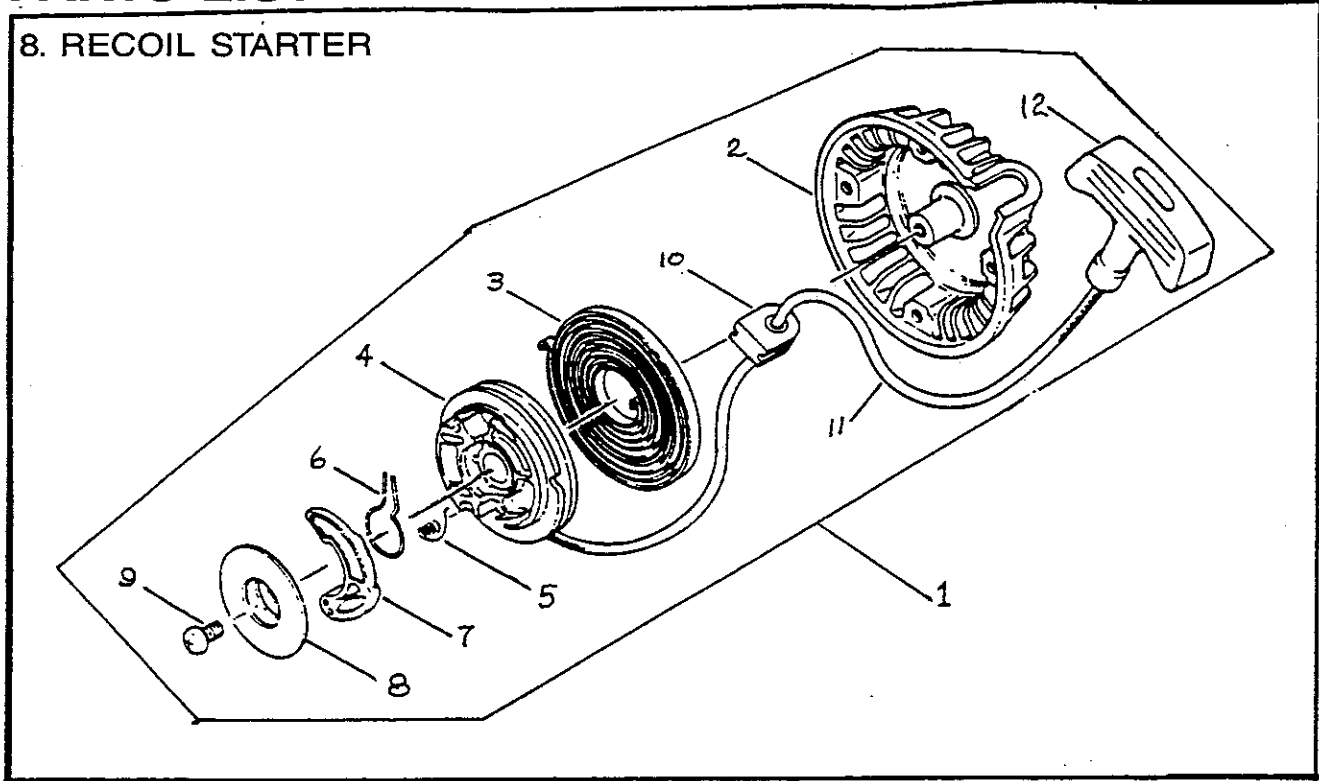
MARUYAMA U.S., INC.

Ref. No.	Parts No.	Parts Name	Q'ty	Ref. No.	Parts No.	Parts Name	Q'ty
7-1	022540	Fuel blending bottle (0.50)	1			OPTIONAL ACCESSORIES	
7-2	022097	Box spanner (21)	1	7-33	996084	Nozzle ass'y (Driftless)	1
7-3	210418	Box spanner (19)	1	7-34	107487	• Nozzle pipe	1
7-4	113046	Instruction manual (MS045D)	1	7-35	107488	• Packing	2
	106372	Instruction manual (MS045)	1	7-36	107489	• Strainer	2
7-5	105633	Hose ass'y (7.5x1300L)	1	7-37	107490	• Nozzle tip, ass'y	2
7-6	100707	• Packing (01i.5x016xt2)	1				
7-7	100712	• Packing (07x010.5xt1.5)	1				
7-8	106357	Nozzle/wand ass'y					
7-9	814267	• Nozzle, ass'y	1				
7-10	103173	•• Cap	2				
7-11	103172	•• Orifice disc	2				
7-12	106358	•• Strainer	2				
7-13	106359	•• Packing	2				
7-14	103170	•• Nozzle pipe	1				
7-15	028819	• Packing (012x016xt2)	2				
7-16	106360	• Nozzle pipe (PF1/4)	1				
7-17	107615	• Packing (07.5x011xt2)	1				
7-18	814268	• Grip, ass'y	1				
7-19	106361	•• Grip (PF1/4)	1				
7-20	106362	•• Valve rod	1				
7-21	106363	•• Spring	1				
7-22	106364	•• Washer (05.5x09.7xt1)	1				
7-23	014180	•• O-ring (P5)	1				
7-24	106365	•• Bush	1				
7-25	011681	•• O-ring (P7)	1				
7-26	106366	•• Guide	1				
7-27	106367	•• Cap	1				
7-28	106368	•• Spring pin	1				
7-29	106369	•• Lever	1				
7-30	106370	•• Washer	1				
7-31	020381	•• E-ring	1				
7-32	106371	•• Lock	1				

PARTS LIST

MODEL MS045 & MS045D

8. RECOIL STARTER



Ref. No.	Parts No.	Parts Name	Q'ty	Ref. No.	Parts No.	Parts Name	Q'ty
8-1	573970	Recoil starter, ass'y	1	8-6	943221	• Spring, brake	1
8-2	574008	• Recoil starter case	1	8-7	943220	• Pawl	1
8-3	574007	• Recoil spring	1	8-8	944328	• Retainer	1
8-4	944724	• Reel	1	8-9	944801	• Screw	1
8-5	943467	• Spring, pawl	1	8-10	944239	• Rope guide	1
				8-11	944240	Rope (890L)	1
				8-12	944241	• Grip	1