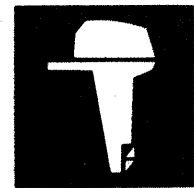


# YAMAHA

parts list 1977

## CONTENTS



outboard  
motor

# 20A

serial no.

20A S : 07616 and up

L : 37211 and up

20AES : 25326 and up

L : 55226 and up

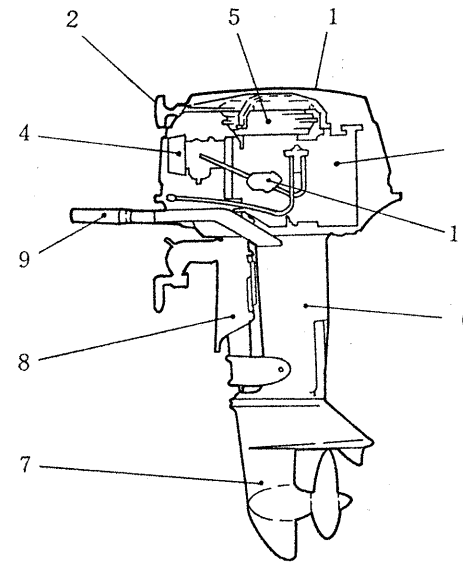


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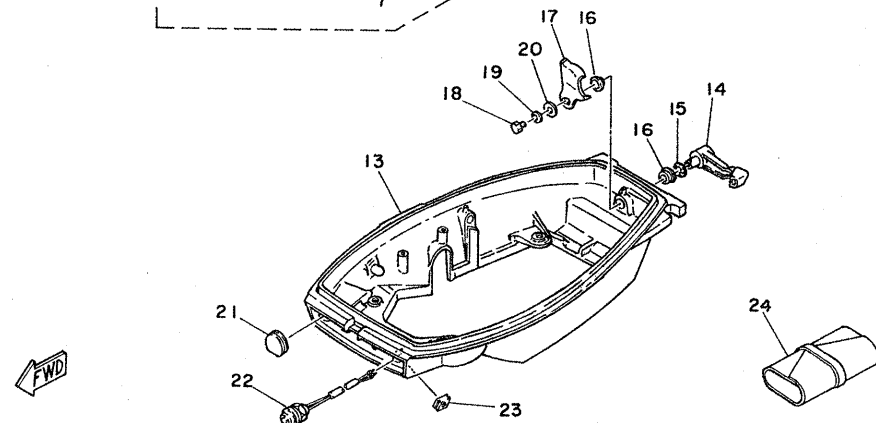
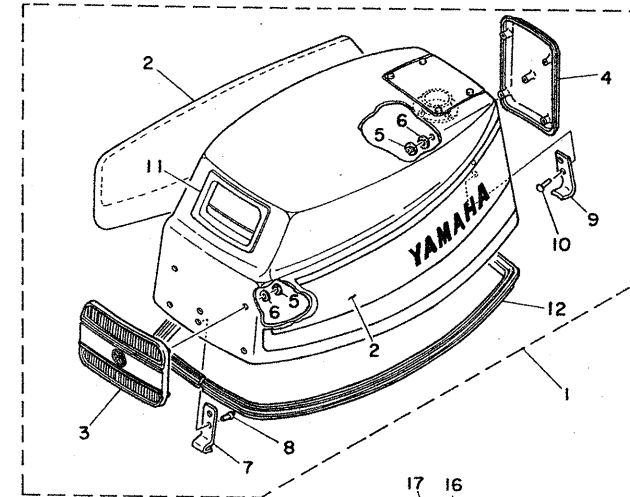
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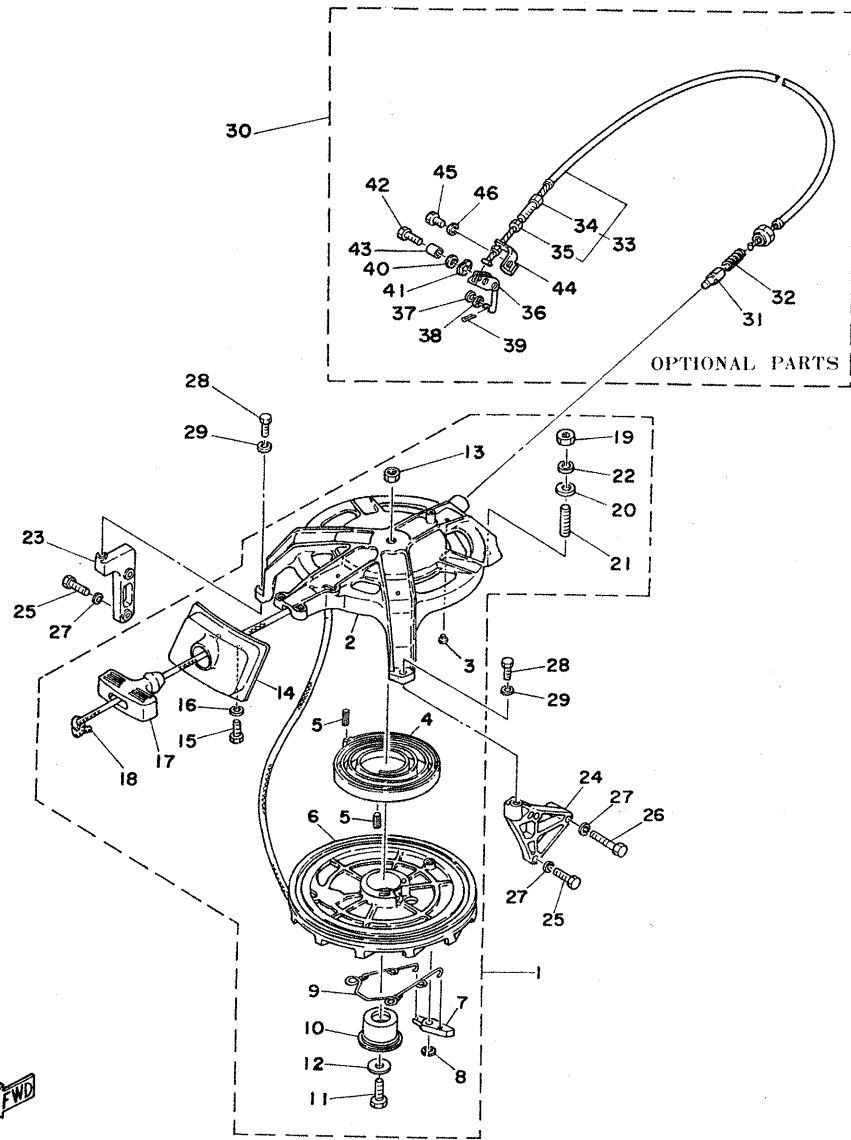


Ref.No.	Parts No.	Description	Q'ty	Ref.No.	Parts No.	Description	Q'ty
1-1	*657-42610-03-F6	TOP COWLING ASS'Y	1	1-13	664-42711-00-F6	COWLING, bottom	1
2	*99999-00921	. GRAPHIC, side set	1s	14	664-42815-00-F6	LEVER, clamp 1	1
3	648-42686-00	. EMBLEM, front	1	15	90206-12052	WASHER, wave (12.5φ-19φ-0.5mm)	1
4	653-42687-00	. EMBLEM, rear	1	16	90386-12069	BUSHING	2
5	90183-05003	. NUT, spring	10	17	656-42816-00	LEVER, clamp 2	1
6	650-42693-00	. DAMPER, emblem	10	18	97323-06010	BOLT	1
7	648-42651-00	. HOOK	1	19	92990-06100	WASHER	1
8	90266-04002	. RIVET	2	20	90201-06068	WASHER (6.5φ-20φ-2.0mm)	1
9	656-42647-00	. HOLDER, clamp band	1	21	664-42724-00	GROMMET 1	1
10	90266-04012	. RIVET	2	22	664-82550-00	STOP SWITCH ASS'Y	1
11	648-15761-00	. SEAL, rubber	1	23	90480-12156	GROMMET 3	1
12	648-42615-00	. SEAL	1	24	670-28100-60	TOOL ASS'Y	1

\* New parts number

Fig. 2 STARTER

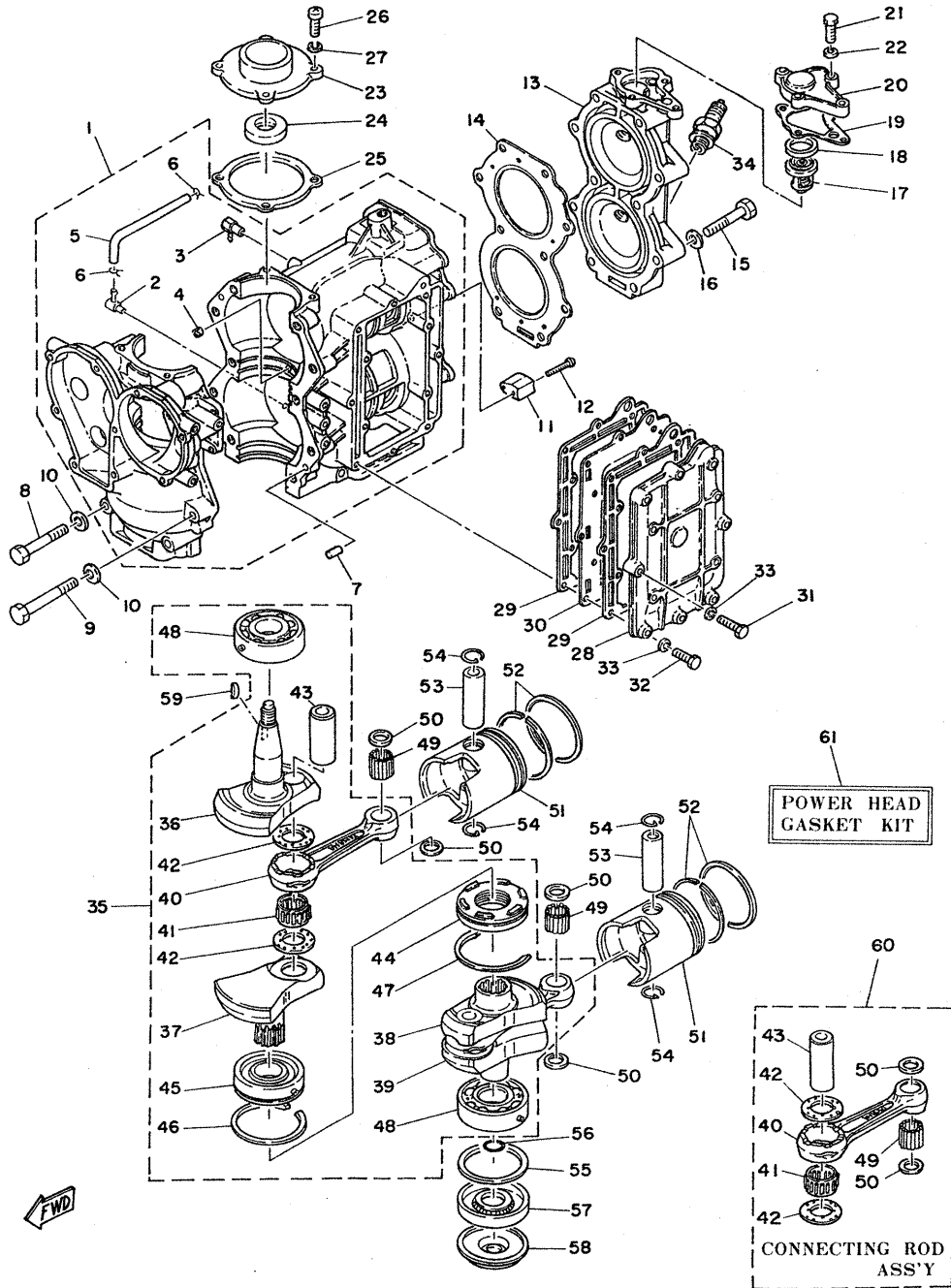
STARTER



Ref.No.	Parts No.	Description	Q'ty	Ref.No.	Parts No.	Description	Q'ty
2-1	656-15710-02-F6	STARTER ASS'Y	1	2-25	97323-06025	BOLT	4
2	656-15711-02-F6	CASE, starter	1	26	97323-06040	BOLT	1
3	648-15773-00	STAY 3	6	27	92903-06100	WASHER	5
4	90510-08002	SPRING, spiral	1	28	97323-06020	BOLT	2
5	91690-40020	PIN, spring	2	29	92903-06100	WASHER	2
6	656-15714-00-94	DRUM, sheave	1	<b>SAFETY STARTER</b>			
7	648-15741-01	PAWL, drive	1	30	656-W0079-00	SAFETY STARTER KIT	1
8	93430-06005	CIRCLIP (E-6φ)	1	31	656-15748-00	PLUNGER, starter stop	1
9	656-15705-00	SPRING DRIVE PAWL ASS'Y	1	32	90501-10227	SPRING, compression	1
10	648-15717-00	SHAFT	1	33	656-15770-00	WIRE COMP., starter stop	1
11	97323-08025	BOLT	1	34	90123-06049	BOLT, wire adjusting	1
12	90201-08309	WASHER (8φ-23φ-3.0mm)	1	35	95303-06600	NUT	2
13	95303-08600	NUT	1	36	656-15749-00	LINK COMP., starter stop	1
14	648-15758-00-F6	GUIDE, wire	1	37	92903-05600	WASHER	1
15	97323-06016	BOLT	2	38	90206-05005	WASHER (5.5φ-11φ-0.3mm)	1
16	92903-06100	WASHER	2	39	91490-16010	PIN, cotter	1
17	619-15755-01	HANDLE, starter	1	40	92903-06600	WASHER	1
18	+	WIRE (2050mm)	1	41	90206-08010	WASHER (8.7φ-16φ-0.3mm)	1
19	95303-08600	NUT	1	42	97323-06020	BOLT	1
20	92903-08200	WASHER	1	43	90387-06568	COLLAR (6φ-8φ-7.5mm)	1
21	90116-08M01	BOLT, stud	1	44	656-15774-00	STAY 4	1
22	92903-08100	WASHER	1	45	97323-06012	BOLT	1
23	648-15771-00-94	STAY 1	1	46	92903-06100	WASHER	1
24	648-15772-00-94	STAY 2	1				

+ Cut from 50m roll, Parts No. 90890-44373, cutting length 2.05m

Fig. 3 CRANKCASE, CYLINDER & PISTON



CRANKCASE, CYLINDER & PISTON

Ref.No.	Parts No.	Description	Q'ty	Ref.No.	Parts No.	Description	Q'ty
3-1	657-15100-62-94	CRANKCASE ASS'Y	1	3-35	653-11400-01	CRANK ASS'Y	1
2	650-14485-02	PIPE, joint	1	36	653-11412-01	CRANK 1	1
3	650-11370-00	CHECK VALVE ASS'Y	1	37	648-11422-01	CRANK 2	1
4	624-11379-00	VALVE, check 1	1	38	648-11432-01	CRANK 3	1
5	90445-07258	HOSE (2.5φ-7φ-200mm)	1	39	648-11442-02	CRANK 4	1
6	90467-06016	CLIP	2	40	648-11651-01	ROD, connecting	2
7	93606-12019	PIN, dowel B (6φ-12mm)	2	41	93310-522A4	BEARING, con-rod big end	2
8	97313-08055	BOLT	8	42	90209-22071	WASHER	4
9	97313-08060	BOLT	2	43	648-11681-00	PIN, crank	2
10	648-11175-00	WASHER	10	44	656-11515-00	SEAL, labyrinth	1
11	656-11325-01	ANODE	1	45	93390-00009	BEARING, roller	1
12	90150-04008	SCREW, special	2	46	93440-62021	CIRCLIP (62φ special)	1
13	657-11111-01-94	HEAD, cylinder	1	47	93440-62057	CIRCLIP (62φ special)	1
14	657-11181-03	GASKET, cylinder head	1	48	93306-30516	BEARING (B6305)	2
15	97313-08045	BOLT	10	49	93602-20M02	BEARING, con-rod small end	62
16	648-11175-00	WASHER	10	* 93602-20115	BEARING, con-rod small end	62	
17	656-12411-01	THERMOSTAT	1	50	90201-18522	WASHER (18.2φ-21.5φ-1.2mm)	4
18	90201-21567	WASHER (21.5φ-27.5φ-2mm)	1	51	657-11631-00-96	PISTON (Standard 66.96mm)	} U.R. 2
19	648-12414-01	GASKET, cover	1	657-11631-00-97	PISTON (Standard 66.97mm)	2	
20	656-12413-01-94	COVER, thermostat	1	* 657-11635-00	PISTON (Over Size 67.25mm)	2	
21	97323-06020	BOLT	3	* 657-11636-00	PISTON (Over Size 67.50mm)	2	
22	92903-06100	WASHER	3	52	653-11610-01	PISTON RING SET (Standard)	2s
23	656-15359-00-94	HOUSING, oil seal	1	* 653-11610-11	PISTON RING SET (Over Size 67.25mm)	2s	
24	93102-23096	OIL SEAL (SD-23φ-38φ-7mm)	1	* 653-11610-21	PISTON RING SET (Over Size 67.50mm)	2s	
25	648-15369-00	GASKET, oil seal housing	1	53	818-11633-00	PIN, piston	2
26	92503-06020	SCREW, panhead	4	54	93450-20026	CLIP, piston pin	4
27	92903-06100	WASHER	4	55	90201-50306	WASHER (50φ-66φ-1.5mm)	1
28	656-41113-00-94	OUTER COVER, exhaust	1	* 56	93210-14167	O-RING (1.9φ-14.0φ)	1
29	656-41114-02	GASKET, exhaust cover	2	57	93102-25114	OIL SEAL (SD-25φ-62φ-7mm)	1
30	656-41111-01	INNER COVER, exhaust	1	58	93104-14047	OIL SEAL (SD-14φ-62.5φ-12mm)	1
31	97323-06030	BOLT	9	59	90280-05013	KEY, woodruff	1
32	97323-06025	BOLT	3	60	648-11650-00	CONNECTING ROD ASS'Y	2
33	92903-06100	WASHER	12	* 61	657-W0001-10	POWER HEAD GASKET KIT	1
34	94701-00039	PLUG, spark (B-6HS) NGK	2				

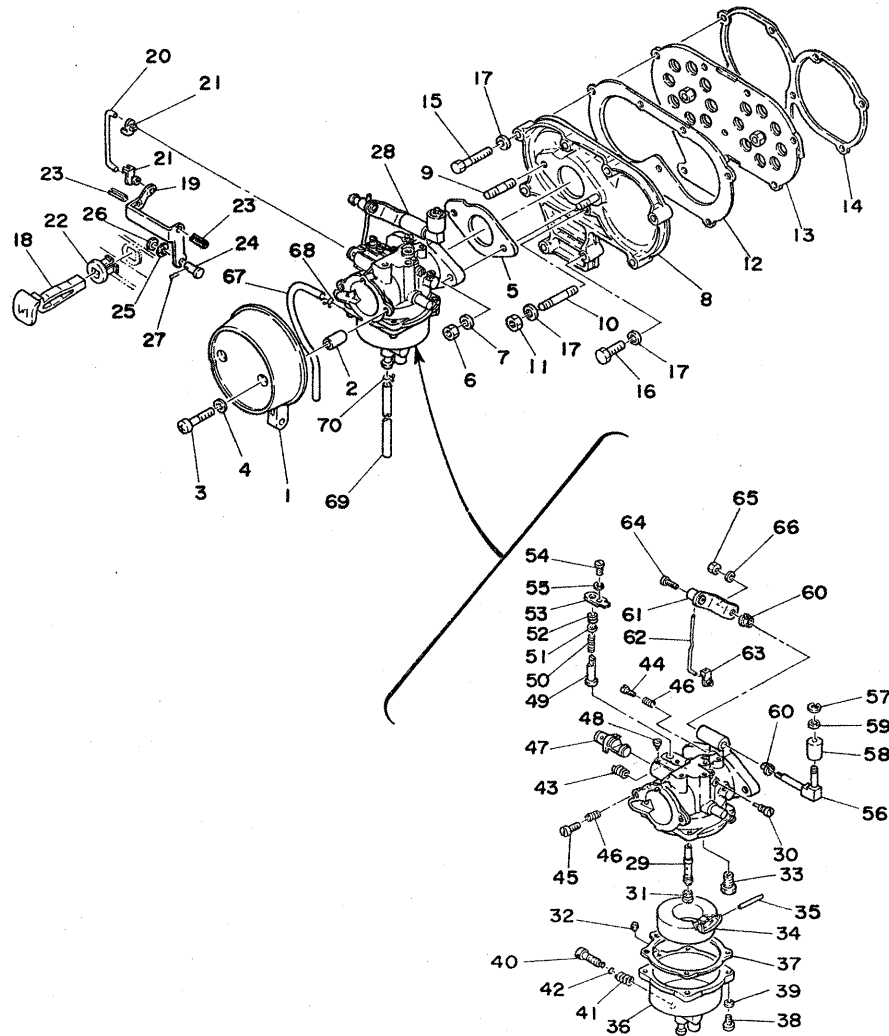
◀ { 20A S: 12170 and below L: 39090 and below    20AE S: 25465 and below L: 55385 and below    ▶ { 20A S: 653000101 and up L: 653300101 and up    20AE S: 653250101 and up L: 653550101 and up

\* New parts number  
 \* Not shown  
 ■ Contents of power head gasket kit



Fig. 4 INTAKE

INTAKE

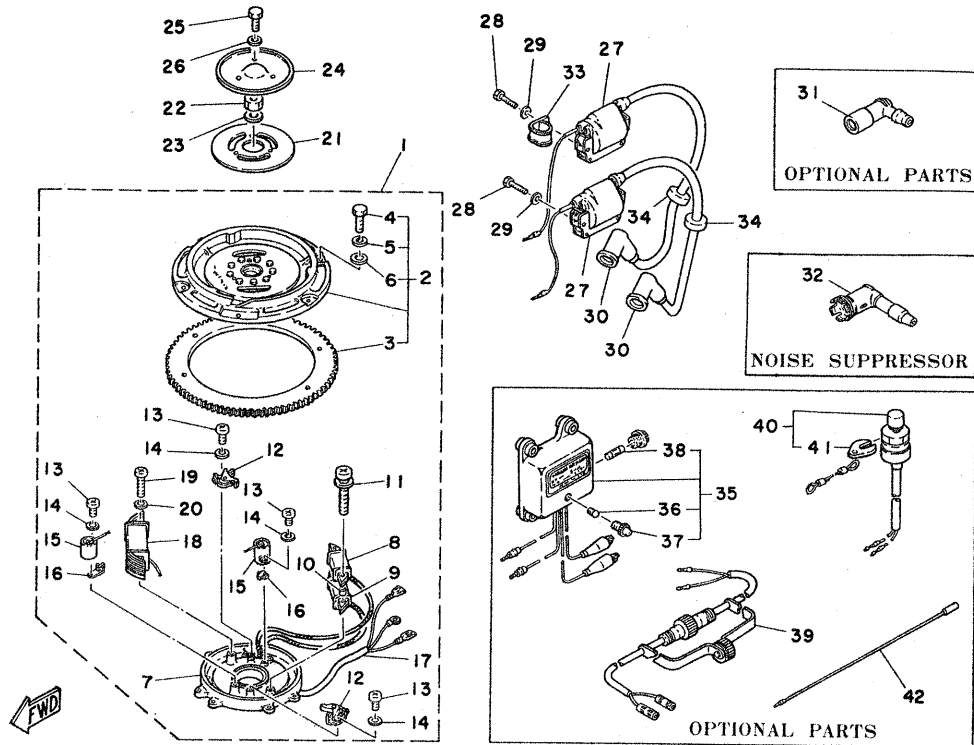


Ref.No.	Parts No.	Description	Q'ty	Ref.No.	Parts No.	Description	Q'ty
4-1	664-14417-00	COVER	1	4-34	648-14385-00	FLOAT	1
2	90387-06494	COLLAR (6.5φ-10.5φ-24.5mm)	2	35	648-14386-00	PIN, float	1
3	98503-05035	SCREW, panhead	2	36	656-14381-02	BODY, float chamber	1
4	92903-05300	WASHER, tooth	2	37	648-14384-01	GASKET, float chamber	1
5	648-14198-00	GASKET	1	38	98503-04012	SCREW, panhead	4
6	95303-06600	NUT	2	39	92990-04100	WASHER	4
7	92903-06600	WASHER	2	40	646-14394-00	VALVE, drain	1
8	648-13641-01-94	MANIFOLD, intake	1	41	646-14223-01	SPRING, drain valve	1
9	90116-06122	BOLT, stud	2	42	646-14397-00	O-RING	1
10	90116-06147	BOLT, stud	1	43	648-14331-00	SPRING, throttle valve	1
11	95303-06600	NUT	1	44	647-14323-00	SCREW, air adjusting	1
12	648-13645-00	GASKET, intake manifold 1	1	45	648-14321-00	SCREW, throttle	1
13	648-13610-00	REED VALVE ASS'Y	1	46	648-14334-00	SPRING, air adjusting	2
14	648-13621-00	PACKING, valve seat	1	47	656-14375-00	LEVER, starter 1	1
15	97323-06035	BOLT	7	48	626-14326-00	SCREW, guide	1
16	97323-06020	BOLT	2	49	648-14371-01	PLUNGER, starter	1
17	92903-06100	WASHER	9	50	656-14335-00	SPRING, plunger	1
18	656-41271-00	KNOB, choke 1	1	51	648-14378-00	PLATE, starter lever 1	1
19	656-41252-01	LEVER, choke 1	1	52	648-14372-02	SEAL, plunger	1
20	656-41256-00	ROD, choke link 1	1	53	648-14374-01	CAP, plunger	1
21	661-41262-02	JOINT, choke lever	2	54	98503-04008	SCREW, panhead	1
22	90480-12154	GROMMET	1	55	92990-04100	WASHER	1
23	91690-40016	PIN, spring	2	56	648-41216-01	SHEAVE SHAFT, accel. link	1
24	90240-05044	PIN, with hole	1	57	93430-04031	CIRCLIP (E-4φ)	1
25	90206-05005	WASHER (5.5φ-11φ-0.3mm)	1	58	626-41231-00	COLLAR, guide pin	1
26	90201-05560	WASHER (5.5φ-13φ-0.8mm)	1	59	92990-05200	WASHER	1
27	90468-10005	CLIP	1	60	626-41291-01	BUSHING	2
28	657-14301-03	CARBURETOR ASS'Y	1	61	648-41210-01	ACCEL. ARM ASS'Y	1
29	648-14341-00	NOZZLE, main	1	62	656-41241-00	ROD 1	1
30	648-14342-30	JET, pilot (#60)	1	63	661-41262-02	JOINT, choke lever	1
31	648-14343-68	JET, main (#135)	1	64	98503-05010	SCREW, panhead	1
32	648-14344-35	JET, starter (#70)	1	65	95303-05700	NUT	1
33	648-14390-14	VALVE SEAT ASS'Y	1	66	92990-05100	WASHER	1
67	90446-05005	HOSE (3φ-5φ-300mm)	1				
68	90467-05001	CLIP	1				
69	90445-09105	HOSE (5φ-9φ-300mm)	1				
70	90467-08004	CLIP	1				

■ Contents of power head gasket kit (Parts No. 657-W0001-10)

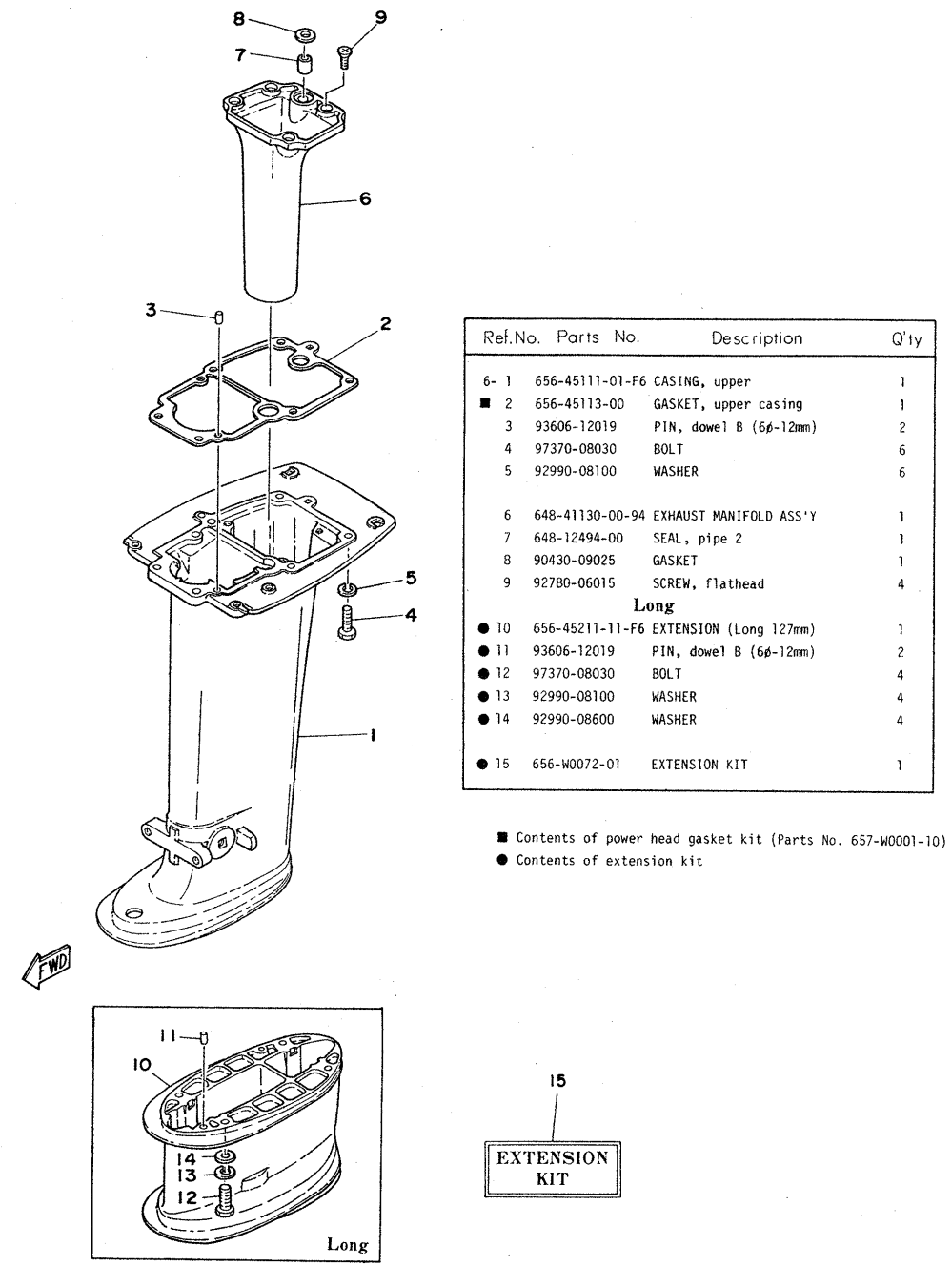


Fig. 5 FLYWHEEL MAGNETO



Ref.No.	Parts No.	Description	Q'ty	Ref.No.	Parts No.	Description	Q'ty
5-1	648-81300-63	FLYWHEEL MAGNETO ASS'Y	1	5-22	90170-12066	NUT	1
2	648-81350-11	ROTOR ASS'Y	1	23	90201-12472	WASHER (12.2φ-26φ-3.2mm)	1
3	648-81891-00	GEAR, ring	1	24	648-81362-00	COVER, hole	1
4	97303-06018	BOLT	6	25	97323-06012	BOLT	3
5	92903-06100	WASHER	6	26	92990-06600	WASHER	3
6	92903-06600	WASHER	6	27	655-82310-11	IGNITION COIL ASS'Y	2
7	648-81309-12	BASE, magneto	1	28	97323-06025	BOLT	4
8	647-81311-10	COIL, ignition 1	1	29	92903-06600	WASHER	4
9	647-81312-10	COIL, ignition 2	1	30	663-82370-01	PLUG CAP ASS'Y	2
10	647-81318-10	TUBE	2	31	638-82370-00	PLUG CAP ASS'Y	2
11	647-81323-10	SCREW 1 (M5-35mm)	2	32	650-82370-00	PLUG CAP ASS'Y(Noise suppressor)	2
12	650-81321-10	CONTACT BREAKER ASS'Y	2	33	90465-06038	CLAMP	1
13	164-81246-21	SCREW, panhead (M4-8mm)	4	34	90480-25161	GROMMET	2
14	92901-04100	WASHER	4	<b>OPTIONAL PARTS</b>			
15	647-81325-11	CONDENSER	2	35	648-81970-41	RECTIFIER ASS'Y	1
16	207-81331-10	LUBRICATOR	2	36	648-81977-40	BULB, rectifier (12V-3W)	1
17	648-81315-10	LEAD WIRE ASS'Y	1	37	648-81978-40	LENS, rectifier	1
18	647-81313-41	COIL, lighting	1	38	648-82151-41	FUSE, rectifier (12V-7A)	1
19	98502-05030	SCREW, panhead	2	39	616-83180-30	CONCENT 2P ASS'Y	1
20	92990-05100	WASHER	2	40	664-82575-41	KILL SWITCH ASS'Y	1
21	648-81365-00	PACKING	1	41	663-82556-70	STOPPER	1
				42	664-82521-00	WIRE, lead 1	2

Fig. 6 UPPER CASING

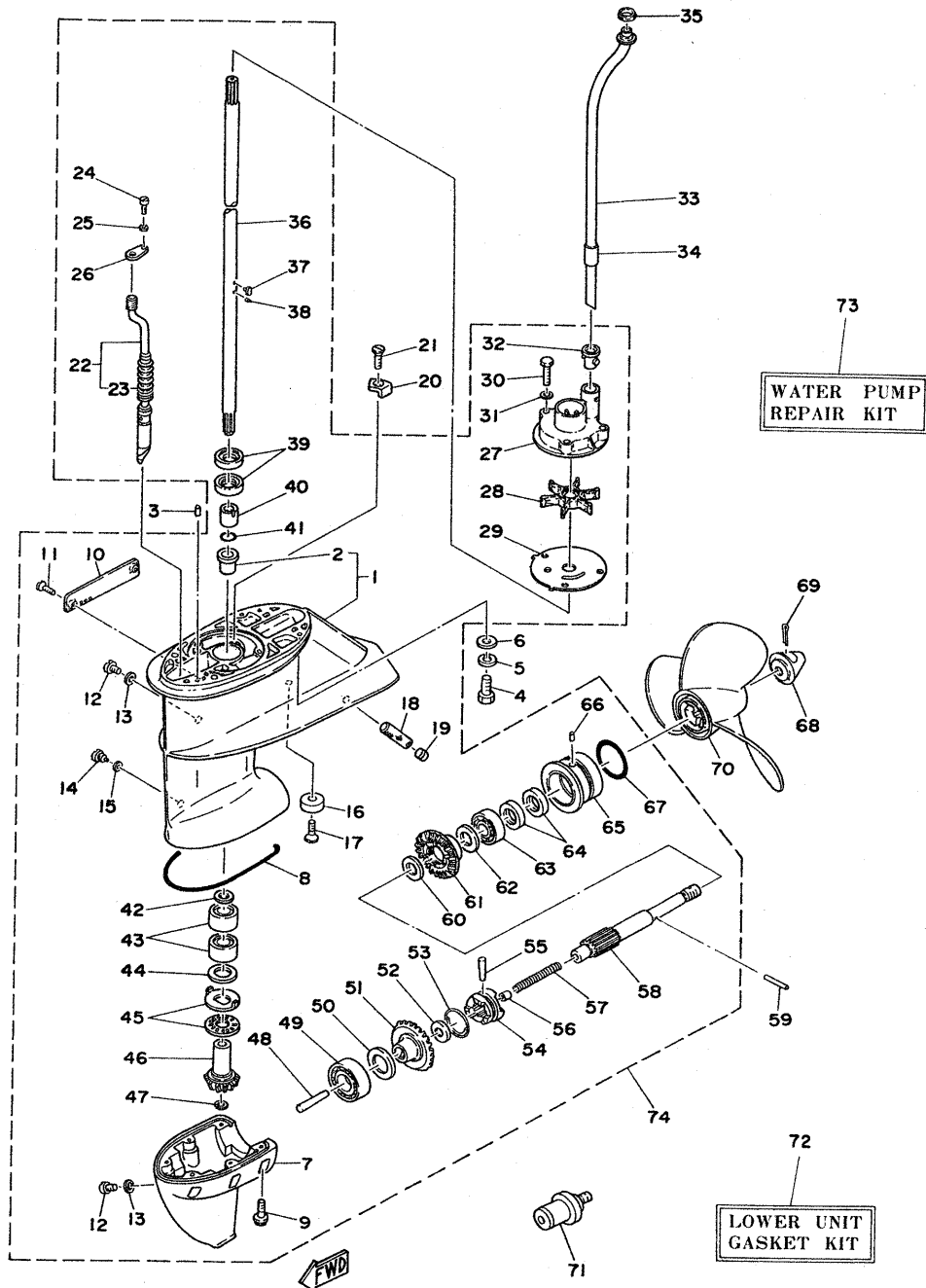


Ref.No.	Parts No.	Description	Q'ty
6-1	656-45111-01-F6	CASING, upper	1
2	656-45113-00	GASKET, upper casing	1
3	93606-12019	PIN, dowel B (6φ-12mm)	2
4	97370-08030	BOLT	6
5	92990-08100	WASHER	6
6	648-41130-00-94	EXHAUST MANIFOLD ASS'Y	1
7	648-12494-00	SEAL, pipe 2	1
8	90430-09025	GASKET	1
9	92780-06015	SCREW, flathead	4
<b>Long</b>			
10	656-45211-11-F6	EXTENSION (Long 127mm)	1
11	93606-12019	PIN, dowel B (6φ-12mm)	2
12	97370-08030	BOLT	4
13	92990-08100	WASHER	4
14	92990-08600	WASHER	4
15	656-W0072-01	EXTENSION KIT	1

■ Contents of power head gasket kit (Parts No. 657-W0001-10)  
● Contents of extension kit

Fig. 7 LOWER & DRIVE

LOWER & DRIVE



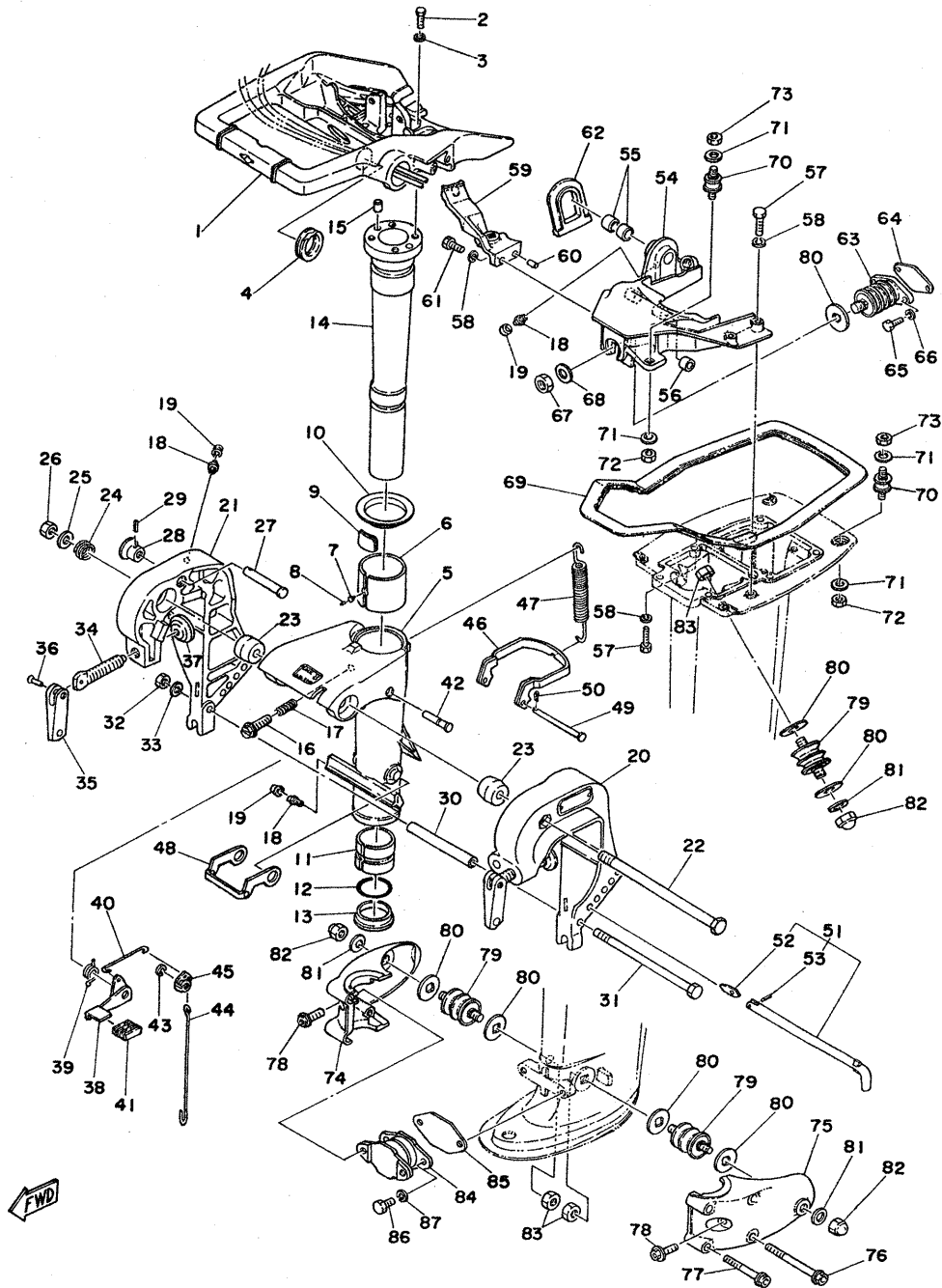
Ref.No.	Parts No.	Description	Q'ty	Ref.No.	Parts No.	Description	Q'ty
◆7-1	656-45301-00-F6	LOWER CASING COMP. 1	1	◆7-42	626-45534-00-04	WASHER, thrust (14.3φ-19φ-0.4mm)	U.R.
◆2	648-45316-09	BUSHING, drive shaft	1	◆43	93318-32204	BEARING, needle	2
3	93606-12019	PIN, dowel B (6φ-12mm)	2	◆44	648-45533-00-02	WASHER, thrust (22.5φ-31φ-0.2mm)	U.R.
4	97370-08030	BOLT	4	◆	648-45533-00-03	WASHER, thrust (22.5φ-31φ-0.3mm)	U.R.
5	92990-08100	WASHER	4	◆45	93341-22008	BEARING, thrust needle	1
6	92990-08600	WASHER	4	◆46	648-45551-00	PINION (13T)	1
◆7	648-45312-00-F6	CASING, lower 2	1	◆47	93410-12003	CIRCLIP (S-12φ)	1
▲◆8	648-45314-00	SEAL, lower casing 2	1	◆48	648-45635-00	PLUNGER, shift	1
◆9	97470-06025	BOLT	6	◆49	93306-20529	BEARING (B6205)	1
◆10	656-45214-00-F6	COVER, water inlet 1	1	◆50	648-45567-00-02	SHIM 1 (25.5φ-38φ-0.2mm)	} U.R.
◆11	98180-05015	SCREW, ovalhead	2	◆	648-45567-00-03	SHIM 1 (25.5φ-38φ-0.3mm)	
◆12	90340-08014	PLUG, straight	3	◆51	648-45560-01	GEAR 1 ASS'Y (23T)	1
▲◆13	90430-08020	GASKET	3	◆52	90201-14482	WASHER (14.4φ-23.5φ-1.5mm)	1
◆14	90149-06003	SCREW, detent	1	◆53	648-45633-00	RING, cross pin	1
▲◆15	90430-06015	GASKET	1	◆54	656-45631-00	CLUTCH, dog	1
◆16	616-45251-30	ANODE	1	◆55	90250-05010	PIN, straight	1
◆17	90142-06M00	SCREW, ovalhead	1	◆56	648-45634-00	SLIDE, shift	1
◆18	626-45215-00	COVER, water inlet 2	1	◆57	90501-10065	SPRING	1
◆19	90334-10008	PLUG, straight	1	◆58	648-45611-01	SHAFT, propeller	1
▶20	*656-45251-01	ANODE	1	59	90250-05011	PIN, straight	1
▶21	*92280-06018	SCREW, flathead	1	◆60	90201-17485	WASHER (17.4φ-25φ-1.5mm)	1
◆22	656-44150-01	SHIFT CAM ASS'Y (Short 291.5mm)	1	◆61	648-45570-01	GEAR 2 ASS'Y (23T)	1
●◆*	656-44150-11	SHIFT CAM ASS'Y (Long 418.5mm)	1	◆62	648-45577-00-13	SHIM 2 (17φ-30φ-1.3mm)	} U.R.
23	650-44147-00	BOOT, shift rod	1	◆	648-45577-00-15	SHIM 2 (17φ-30φ-1.5mm)	
◆24	92590-06010	SCREW, cylinderhead	1	◆	648-45577-00-17	SHIM 2 (17φ-30φ-1.7mm)	
◆25	92990-06600	WASHER	1	◆63	93306-20309	BEARING (B6203)	1
◆26	650-45321-00	PLATE	1	◆64	93101-17054	OIL SEAL (S-17φ-30φ-6mm)	2
★◆27	648-44311-00	HOUSING, water pump	1	◆65	648-45361-01-94	CAP, lower casing	1
*◆	656-44311-40	HOUSING, water pump (Chromate)	1	◆66	93604-09068	PIN, dowel B (3.5φ-9mm)	1
★◆28	656-44352-02	IMPELLER	1	▲◆67	93210-45161	O-RING (3.5φ-45φ)	1
★◆29	656-44323-00	OUTER PLATE, cartridge	1	68	650-45616-00	NUT, propeller	1
*◆	656-44323-40	OUTER PLATE, cartridge(Chromate)	1	69	91490-30030	PIN, cotter	1
★30	90101-06M03	BOLT	3	70	648-45941-01-36	PROPELLER ASS'Y 1 (3x9"x11"-D)	} U.R.
◆31	92990-06600	WASHER	3		650-45941-01-36	PROPELLER ASS'Y 1 (3x9"x8"-D)	
★◆32	626-44365-01	RUBBER, water seal 1	1		626-45943-02-36	PROPELLER ASS'Y 2 (3x9"x10½"-D)	
33	656-44361-00	TUBE, water 1 (Short 370mm)	1		650-45943-01-36	PROPELLER ASS'Y 2 (3x9"x7"-D)	
●◆	656-44361-10	TUBE, water 1 (Long 497mm)	1		653-45941-01-36	PROPELLER ASS'Y 2 (3x9"x11¼"-D)	
34	90445-11285	HOSE (9φ-11φ-25mm)	1		626-45949-01-36	PROPELLER ASS'Y 5 (3x9"x9"-D)	
■35	648-44365-01	RUBBER, water seal 1	1		648-45926-01-36	PROPELLER ASS'Y 8 (2x9"x10"-D)	
◆36	656-45511-00	SHAFT, drive 1 (Short 635mm)	1	71	626-28193-01-94	PLUG, water check 1	
●◆*	656-45511-10	SHAFT, drive 1 (Long 762mm)	1	▲72	656-W0001-30	LOWER UNIT GASKET KIT	1
★◆37	656-44355-00	PIN, impeller	1	★73	656-W0078-00	WATER PUMP REPAIR KIT	1
◆38	90249-04023	PIN	1	*◆	656-W0078-0A	WATER PUMP REPAIR KIT (Chromate)	1
◆39	93101-20048	OIL SEAL (S-20φ-30φ-6mm)	2	◆74	656-45300-00-F6	LOWER UNIT ASS'Y (Short)	1s
◆40	626-45526-00	COLLAR, drive shaft 1	1	◆*	656-45300-10-F6	LOWER UNIT ASS'Y (Long)	1s
▲◆41	93210-14106	O-RING (1.9φ-14φ)	1				

▶ (20A S: 653-000101 and up 20AE S: 653-250101 and up  
 L: 653-300101 and up L: 653-550101 and up)

- \* New parts number
- \* Not shown
- Contents of power head gasket kit (Parts No. 657-W0001-10)
- ▲ Contents of lower unit gasket kit
- ★ Contents of water pump repair kit
- Contents of extension kit (Parts No. 656-W0072-01)
- ◆ Contents of lower unit ass'y

Fig. 8 BRACKET

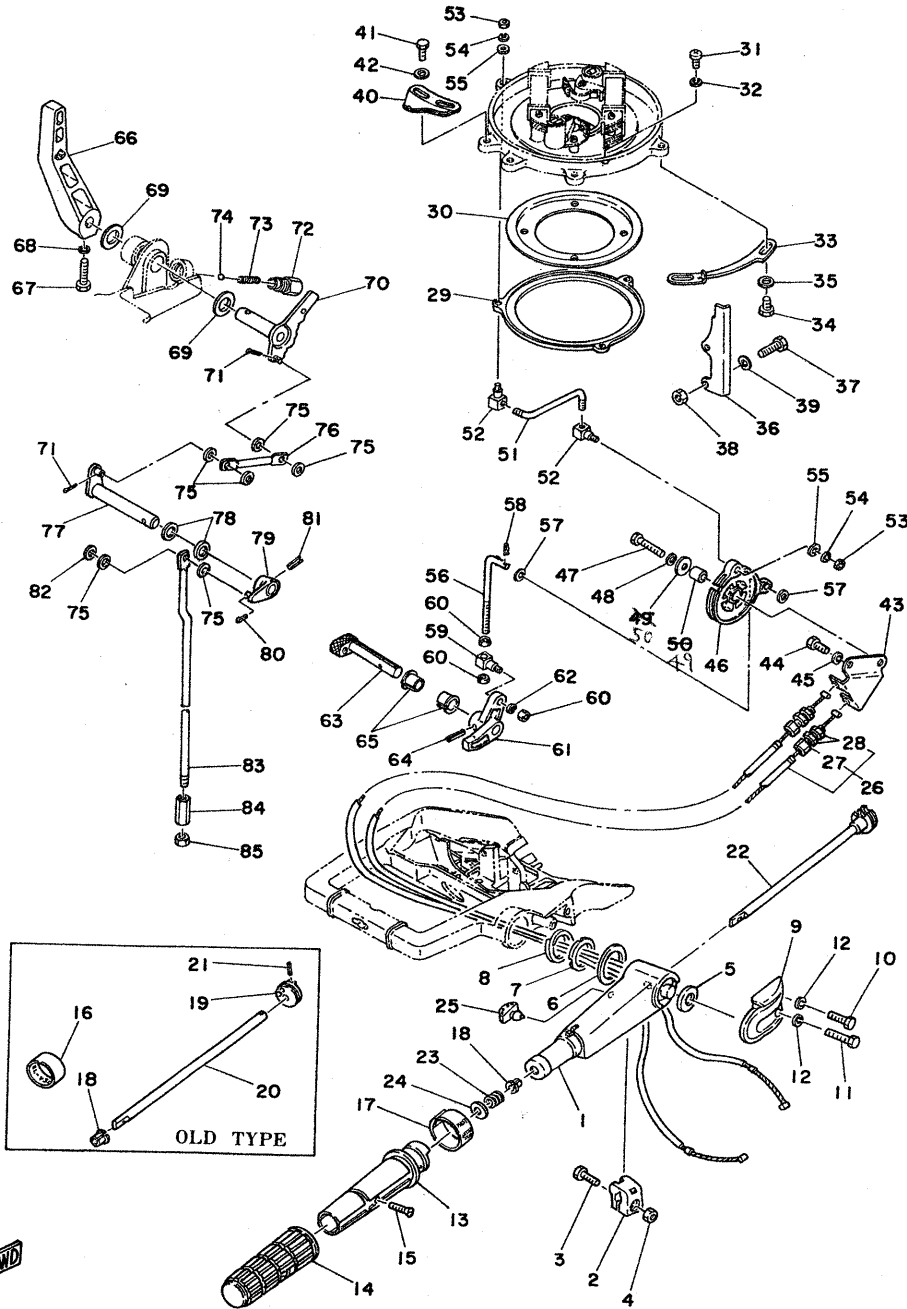
BRACKET



Ref.No.	Parts No.	Description	Q'ty	Ref.No.	Parts No.	Description	Q'ty
8-1	656-42511-01-F6	BRACKET, steering	1	8-45	648-43642-00	LEVER, tilt lock 2	1
2	97370-06020	BOLT	4	46	648-43614-00-F6	PLATE, tilt lock 1	1
3	92990-06100	WASHER	4	47	90506-30055	SPRING, tension	1
4	90480-29045	GROMMET	1	48	648-43615-00-F6	PLATE, tilt lock 2	1
5	656-43311-00-F6	BRACKET, swivel 1	1	49	90240-05046	PIN, with hole	1
6	90386-47092	BUSHING	1	50	91490-16010	PIN, cotter	1
7	90241-03001	PIN, with head	1	51	656-43160-01	TILT ROD ASS'Y	1
8	90334-04002	PLUG	1	52	656-43165-01	STOPPER PLATE	1
9	648-42528-00	PIECE, friction 1	1	53	91690-30008	PIN, spring	1
10	90209-47016	WASHER	1	54	648-44508-01-F6	BRACKET COMP.	1
11	90386-38090	BUSHING	1	55	90380-12012	BUSHING, solid	2
12	93210-37160	O-RING (2.5φ-37φ)	1	56	90380-10M01	BUSHING, solid	2
13	90386-38022	BUSHING	1	57	97370-06025	BOLT	4
14	648-42521-01-F6	SHAFT, steering pivot 1	1	58	92990-06100	WASHER	5
15	93608-12063	PIN, dowel B (8φ-12mm)	2	59	648-44519-00-F6	BRACKET 2	1
16	90149-08005	SCREW	1	60	93606-12019	PIN, dowel B (6φ-12mm)	1
17	90501-16099	SPRING	1	61	97370-06018	BOLT	1
18	93700-06004	NIPPLE, grease	3	62	648-42718-00	SEAL RUBBER 3	1
19	663-45119-00	CAP, grease nipple	3	63	648-44516-02	MOUNT RUBBER, upper front	1
20	656-43111-01-F6	BRACKET, clamp 1	1	64	648-44592-00	GASKET, mount rubber 2	1
21	656-43112-02-F6	BRACKET, clamp 2	1	65	97370-06016	BOLT	2
22	656-43131-00	BOLT, clamp bracket	1	66	92990-06100	WASHER	2
23	648-43136-00	PIECE, friction	2	67	92880-10200	NUT	1
24	90504-59006	SPRING	1	68	92990-10200	WASHER	1
25	90201-10130	WASHER (10.5φ-20φ-1.5~1.6mm)	1	69	648-42716-00	SEAL RUBBER 1	1
26	95380-10600	NUT	1	70	648-44517-00	MOUNT RUBBER, upper	4
27	656-43191-00	SHAFT, stopper	1	71	92990-08600	WASHER	8
28	648-43192-00-F6	KNOB, stopper	1	72	95303-08700	NUT	4
29	91690-30016	PIN, spring	1	73	95380-08700	NUT	4
30	90387-09074	COLLAR (9.2φ-13.8φ-103mm)	1	74	648-44551-01-F6	HOUSING, lower mount rubber 1	1
31	90101-08339	BOLT	1	75	648-44552-01-F6	HOUSING, lower mount rubber 2	1
32	95380-08600	NUT	1	76	97470-08080	BOLT	2
33	92990-08100	WASHER	1	77	97470-08050	BOLT	2
34	90149-14030	SCREW	2	78	97470-08020	BOLT	2
35	616-43118-00-F6	HANDLE, transom clamp	2	79	648-44555-02	MOUNT RUBBER, lower side	4
36	90243-04001	PIN	2	80	648-44591-00	GASKET, mount rubber 1	9
37	648-43114-01	PAD, transom clamp	2	81	92990-10200	WASHER	4
38	656-43631-00	LEVER, tilt 1	1	82	92890-10700	NUT, crown	4
39	90508-16018	SPRING, torsion	1	83	92880-10200	NUT	4
40	648-43616-00	ROD, tilt lock 1	1	84	648-44557-03	MOUNT RUBBER, lower front	1
41	648-43633-00	COVER, tilt lock 1	1	85	648-44593-00	GASKET, mount rubber 3	1
42	90249-06120	PIN	1	86	97370-08016	BOLT	2
43	93430-05027	CIRCLIP (E-5φ)	1	87	92990-08100	WASHER	2
44	648-43617-00	ROD, tilt lock 2	1				



Fig. 9 CONTROL



CONTROL

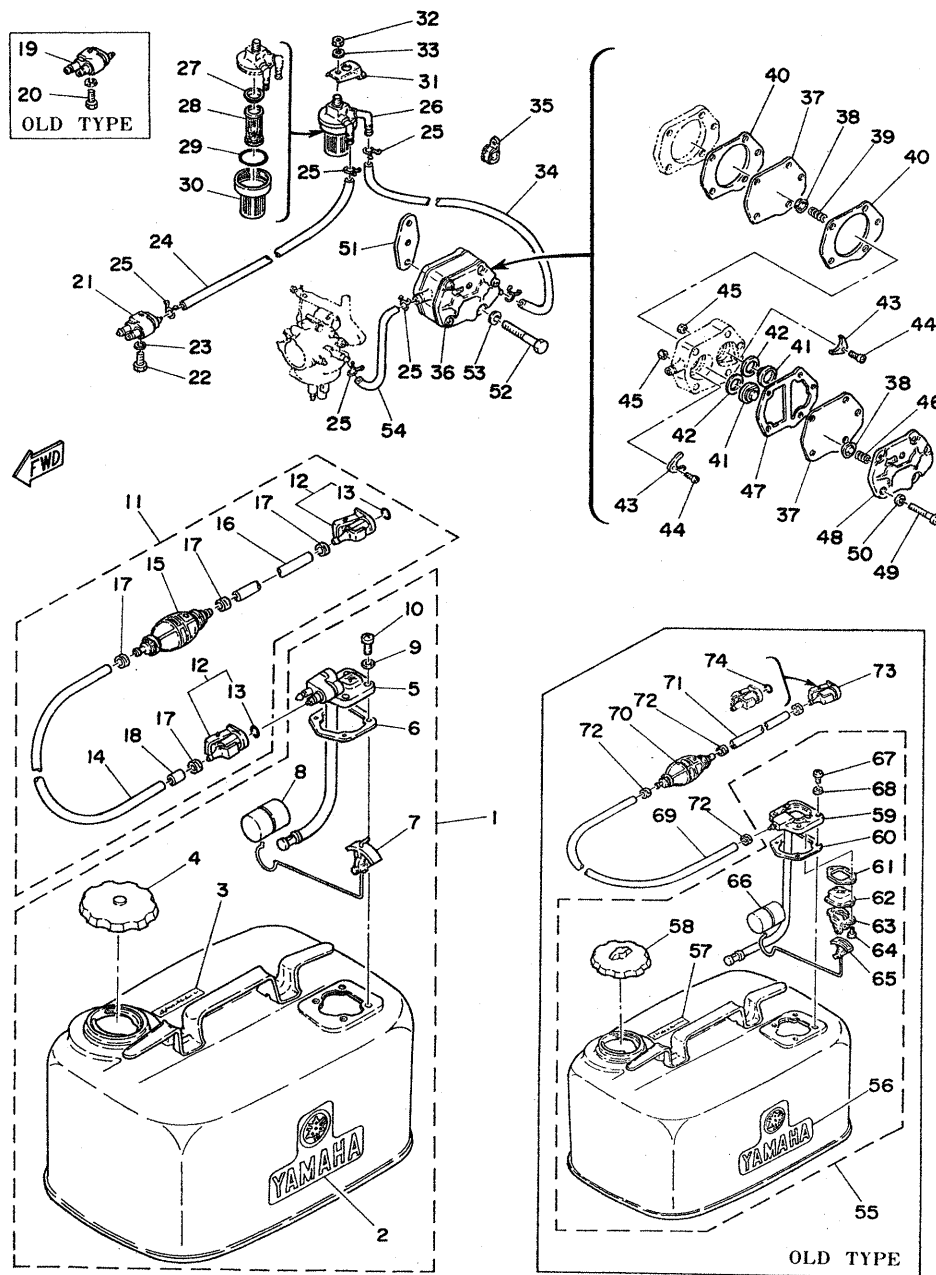
Ref.No.	Parts No.	Description	Q'ty	Ref.No.	Parts No.	Description	Q'ty
9-1	656-42111-02-F6	HANDLE, steering 1	1	9-43	656-14497-00	STAY, throttle wire	1
2	656-42126-01	PIECE, friction	1	44	97323-06014	BOLT	1
3	97370-06020	BOLT	1	45	92903-06100	WASHER	1
4	90185-06062	NUT, self-locking	1	46	648-41631-00-94	LEVER, magneto control 1	1
5	90560-14076	SPACER	1	47	97323-06030	BOLT	1
6	90202-34043	WASHER (34φ-42φ-1.5mm)	1	48	92903-06100	WASHER	1
7	656-42155-00	SPACER, handle 1	1	49	90387-06M02	COLLAR (6.3φ-10φ-10.5mm)	1
8	90501-20001	SPRING, compression	1	50	90387-06298	COLLAR (6.5φ-17φ-1.6mm)	1
9	656-42112-00-F6	HANDLE, steering 2	1	51	648-41636-01	ROD, magneto control 1	1
10	97323-06020	BOLT	1	52	648-41635-00	SHAFT, link connecting	2
11	97323-06035	BOLT	1	53	95303-05600	NUT	2
12	92990-06100	WASHER	2	54	92903-05100	WASHER	2
13	647-42119-02	GRIP, steering handle	1	55	92903-05600	WASHER	2
14	647-42177-00	RUBBER, handle	1	56	648-42169-01	JOINT	1
15	98180-05025	SCREW, ovalhead	1	57	92903-05600	WASHER	2
▶16	647-42137-02	INDICATOR, throttle	1	58	90468-10005	CLIP	1
▶17	*656-42137-00	INDICATOR, throttle	1	59	90249-05014	PIN	1
▶18	90386-08032	BUSHING	1	60	95303-05600	NUT	3
▶	90386-08032	BUSHING	2	61	656-42154-00-94	LEVER, throttle control	1
▶19	648-42138-00	LEVER, throttle	1	62	92903-05100	WASHER	1
▶20	656-42115-00	SHAFT, steering handle	1	63	656-42153-00-F6	SHAFT, throttle control	1
▶21	91690-30025	PIN, spring	1	64	91690-40018	PIN, spring	1
▶22	*656-42138-00	LEVER, throttle	1	65	90386-10009	BUSHING 2	2
23	90501-23215	SPRING, compression	1	66	656-44111-01-F6	HANDLE, gear shift	1
24	92903-10600	WASHER	1	67	97370-06025	BOLT	1
25	606-42591-00	HOLDER, shear pin	1	68	92990-06100	WASHER	1
26	664-26311-01	THROTTLE WIRE COMP.	2	69	90202-12031	WASHER (12.2φ-24φ-0.7mm)	2
27	90123-06065	BOLT, wire adjusting	2	70	656-44113-01	CAM, plate handle	1
28	90170-06183	NUT	4	71	91490-16010	PIN, cotter	2
29	648-41611-00-94	RETAINER, magneto base 1	1	72	648-42715-00	BUSHING 2	1
30	648-41612-01	RETAINER, magneto base 2	1	73	90501-12082	SPRING	1
31	97803-05010	SCREW, panhead	3	74	93501-04011	BALL (1/4")	1
32	92903-05100	WASHER	3	75	90202-06007	WASHER (6φ-13φ-0.5mm)	6
33	648-41615-01	STOPPER, magneto base 1	1	76	648-44142-00	JOINT	1
34	97323-06010	BOLT	2	77	648-44121-00	LEVER, shift rod 1	1
35	92990-06600	WASHER	2	78	90202-10024	WASHER (10.2φ-16φ-0.7mm)	2
36	648-41616-00	STOPPER, magneto base 2	1	79	648-44125-00	LEVER, shift rod 2	1
37	97323-06020	BOLT	2	80	91490-25012	PIN, cotter	1
38	95303-06600	NUT	2	81	91690-40016	PIN, spring	1
39	92903-06100	WASHER	2	82	92990-05600	WASHER	1
40	648-41213-00-94	CAM, accel.	1	83	648-44143-00	ROD, shift 1	1
41	97323-05012	BOLT	2	84	648-44146-00	CONNECTOR, shift rod 2	1
42	92903-05600	WASHER	2	85	90170-07021	NUT	1

▶ { 20A S: 12170 and below L: 39090 and below } 20AE S: 25465 and below L: 55385 and below , ▶ { 20A S: 653-000101 and up L: 653-300101 and up } 20AB S: 653-250101 and up L: 653-550101 and up

\* New parts number



# Fig. 10 FUEL SECTION



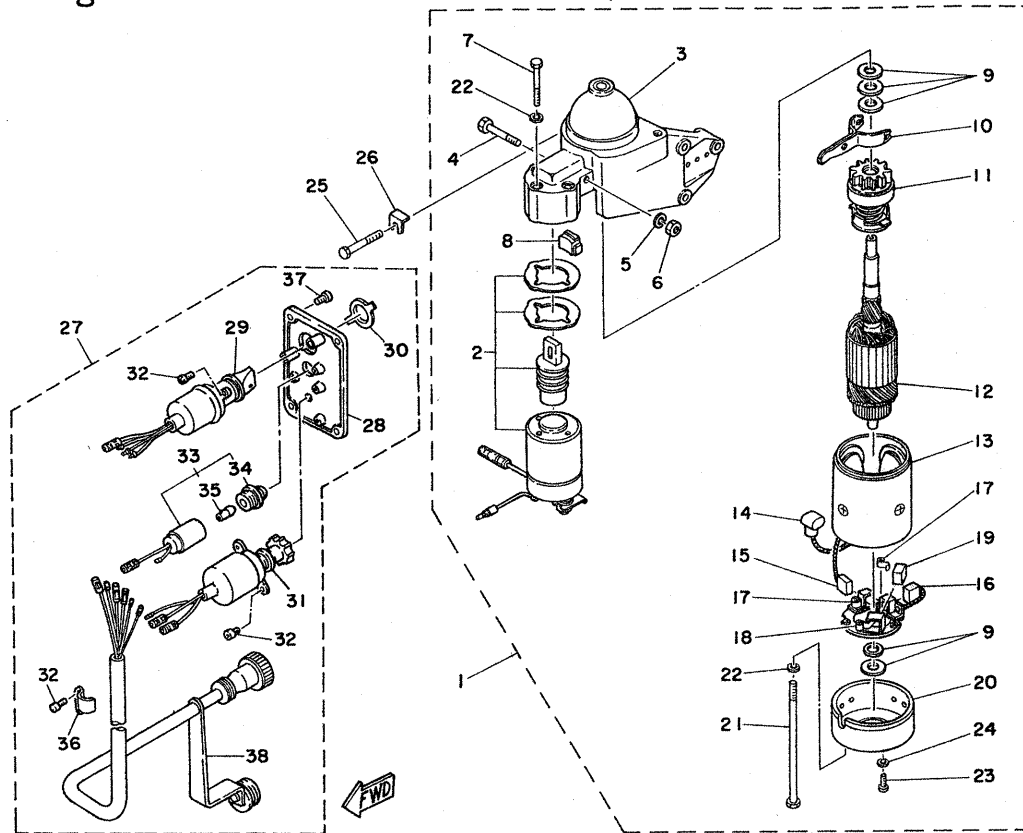
# FUEL SECTION

Ref.No.	Parts No.	Description	Q'ty	Ref.No.	Parts No.	Description	Q'ty
▶ 10-	1	*656-24202-03-24 FUEL TANK ASS'Y	1	10-39	648-24423-00	. SPRING, pump diaphragm	1
2	656-24244-01	. GRAPHIC, side	2	40	648-24434-00	. GASKET, body 1	2
3	656-24245-00	. GRAPHIC	1	41	648-24421-00	. VALVE SUB-ASS'Y	2
▶ 4	*802-24610-00	. CAP ASS'Y	1	42	648-24431-00	. GASKET	2
▶ 5	*656-24275-03	. FUEL METER COMP.	1	43	648-24422-01	. PLATE	2
6	663-24268-00	. GASKET, fuel meter housing	1	44	98503-03008	. SCREW, panhead	2
▶ 7	*656-24241-03	. INDICATOR	1	45	95313-03600	. NUT	2
8	663-24264-00	. FLOAT	1	46	648-24454-00	. SPRING	1
9	630-24329-00	. SEAL	4	47	648-24435-02	. GASKET, body 2	1
▶ 10	*98380-05018	. SCREW, cylinderhead	4	48	648-24413-01	. COVER, pump	1
▶ 11	*663-24310-60	FUEL PIPE ASS'Y	1	49	98503-05028	. SCREW, panhead	3
12	655-24305-00	. FUEL PIPE JOINT COMP. 2	2	50	92990-05100	. WASHER	3
13	93210-08287	. O-RING (3.0φ-8.0φ)	2	■ 51	650-24431-00	GASKET, fuel pump	1
14	90445-12207	. HOSE (6φ-11.5φ-2400mm)	1	52	97323-06040	BOLT	2
15	650-24360-01	. PRIMARY PUMP ASS'Y	1	53	92903-06100	WASHER	2
16	90445-12155	. HOSE (6φ-11.5φ-1000mm)	1	54	648-24312-01	HOSE 2 (6φ-10φ-150mm)	1
17	650-24351-00	. BAND, fuel pipe	4	<b>OLD TYPE</b>			
▶ 18	*663-24397-00	. COLLAR	1	◀ 55	656-24202-60-24 FUEL TANK ASS'Y	1	
▶ 19	655-24304-01	FUEL PIPE JOINT COMP. 1	1	56	656-24244-01	. GRAPHIC, side	2
▶ 20	97323-06018	BOLT	1	57	656-24245-00	. GRAPHIC	1
▶ 21	*655-24304-02	FUEL PIPE JOINT COMP.	1	◀ 58	647-24610-02	. CAP ASS'Y	1
▶ 22	*97323-06020	BOLT	1	◀ 59	656-24275-60	. FUEL METER COMP.	1
23	92990-06100	WASHER	1	60	663-24268-00	. GASKET, housing fuel meter	1
24	90445-09082	HOSE (5φ-9φ-150mm)	1	◀ 61	630-24269-01	. GASKET, support indicator	1
25	90467-08004	CLIP	6	◀ 62	630-24263-01	. LENS, indicator	1
26	655-24560-00	FILTER ASS'Y	1	◀ 63	630-24262-01	. SUPPORT, indicator	1
■ 27	655-24564-00	. PACKING, filter	1	◀ 64	98503-05010	. SCREW, panhead	2
28	655-24563-00	. ELEMENT, filter	1	◀ 65	663-24241-00	. INDICATOR 1	1
■ 29	93210-35339	. O-RING (2.0φ-34.5φ)	1	66	663-24264-00	. FLOAT	1
30	655-24521-00	. CUP, filter	1	◀ 67	98580-05015	. SCREW, panhead	4
31	648-24566-01	BRACKET, filter	1	68	630-24329-00	. SEAL	4
32	95303-08600	NUT	1	69	90445-12207	HOSE (6φ-11.5φ-2400mm)	1
33	92903-08100	WASHER	1	70	650-24360-01	PRIMARY PUMP ASS'Y	1
34	656-24311-00	HOSE 1 (5φ-9φ-390mm)	1	71	90445-12155	HOSE (6φ-11.5φ-1000mm)	1
35	90461-06015	CLAMP	1	72	650-24351-00	BAND, fuel pipe 1	4
36	663-24410-00	FUEL PUMP ASS'Y	1	73	655-24305-00	FUEL PIPE JOINT COMP. 2	1
37	648-24411-00	. DIAPHRAGM, pump	2	74	93210-08287	. O-RING (3.0φ-8.0φ)	1
38	648-24424-00	. PLATE, spring guide	2				

◀ ( 20A S: 12170 and below L: 39090 and below ) 20AE S: 25465 and below L: 55385 and below , ▶ ( 20A S: 653-000101 and up L: 653-300101 and up ) 20AE S: 653-250101 and up L: 653-550101 and up

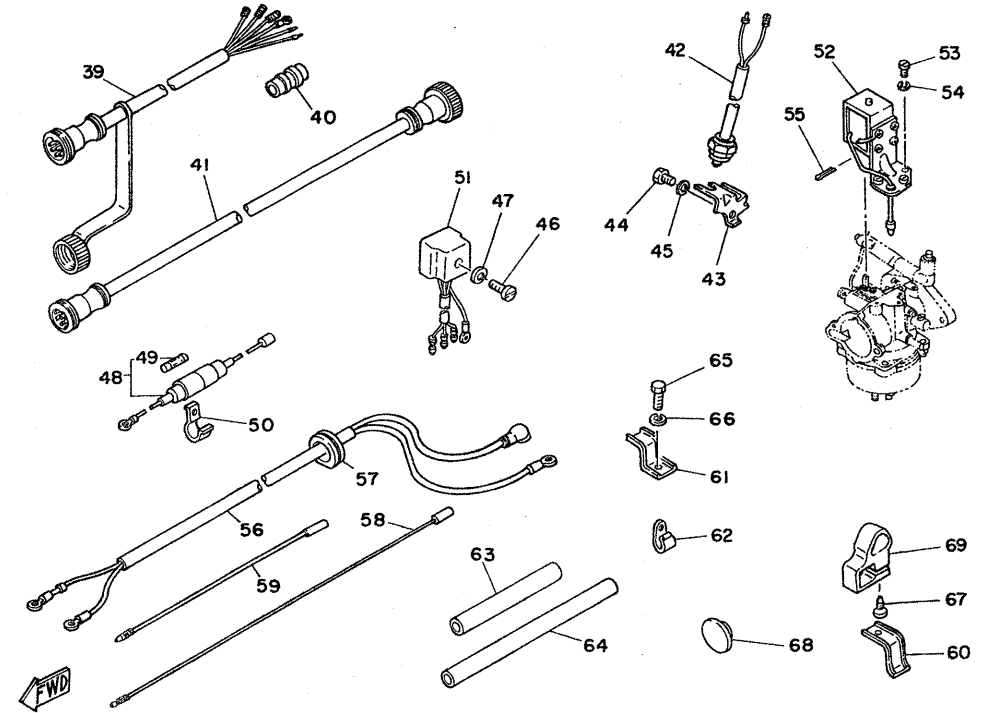
\* New parts number  
 ■ Contents of power head gasket kit (Parts No. 657-W0001-10)

Fig. 1 | OPTIONAL PARTS I (ELECTRIC STARTER)



Ref.No.	Parts No.	Description	Q'ty	Ref.No.	Parts No.	Description	Q'ty
11-1	648-81800-41	ELECTRIC MOTOR ASS'Y	1	11-20	648-81820-40	. REAR COVER ASS'Y	1
2	648-81860-40	. MAGNETIC SWITCH 1	1	21	648-81826-40	. BOLT	2
3	648-81830-41	. GEAR CASE ASS'Y	1	22	92903-05100	. WASHER	5
4	648-81828-40	. BOLT 2	1	23	98503-04012	. SCREW, panhead	2
5	92903-06100	. WASHER	1	24	92901-04100	. WASHER	2
6	95301-06600	. NUT	1	25	97323-06040	BOLT	1
7	648-81846-40	. BOLT 3	3	26	648-81893-40	SHIM, gear adjusting	1
8	648-81829-40	. GROMMET	1	27	648-82570-40	SWITCH PANEL ASS'Y	1
9	648-81809-40	. WASHER KIT	1	28	648-82571-40	. PANEL, switch	1
10	648-81839-40	. LEVER, shift	1	29	648-82508-40	. MAIN SWITCH ASS'Y	1
11	648-81832-40	. GEAR ASS'Y	1	30	648-82584-40	. CAP, switch	1
12	648-81850-40	. ARMATURE ASS'Y 1	1	31	648-82502-40	. SUB-SWITCH ASS'Y	1
13	648-81810-40	. STATOR ASS'Y	1	32	648-82573-40	. SCREW, special 2	6
14	648-81862-40	. CAP	1	33	648-84301-40	. PILOT LAMP ASS'Y	1
15	648-81811-40	. BRUSH 1 (+)	1	34	648-83583-40	. . LENS, pilot	1
16	648-81812-40	. BRUSH 2 (-)	1	35	123-83516-21	. . BULB, pilot (12V-3W)	1
17	648-81813-40	. SPRING, brush	2	36	648-82594-40	. CLAMP, wire harness	1
18	648-81814-40	. SPRING, friction piece	1	37	648-82572-40	. SCREW, special 1	4
19	648-81827-40	. PIECE, friction	1	38	648-82580-40	. WIRE HARNESS ASS'Y 2	1

OPTIONAL PARTS I (ELECTRIC STARTER)

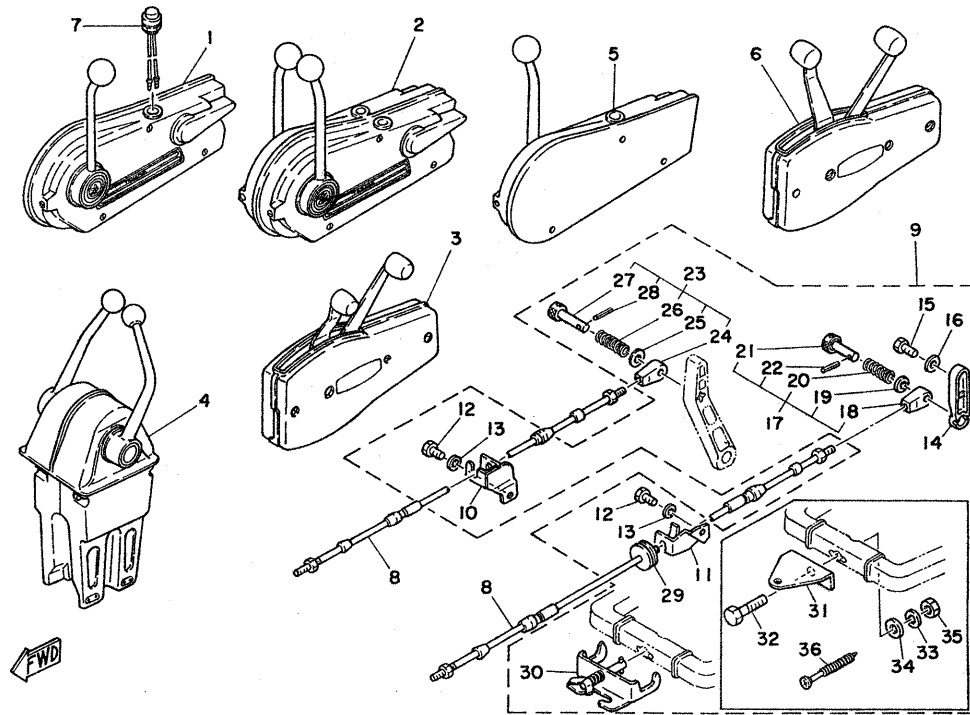


Ref.No.	Parts No.	Description	Q'ty	Ref.No.	Parts No.	Description	Q'ty
11-39	664-82590-00	WIRE HARNESS ASS'Y 1	1	11-55	91490-20015	. PIN, cotter	1
40	90480-16024	GROMMET	1	56	664-82105-00	LEAD WIRE ASS'Y	1
41	656-82586-40	EXTENSION, wire harness	1	57	664-42724-40	GROMMET 1	1
42	656-82540-41	NEUTRAL SWITCH ASS'Y	1	58	664-82521-00	WIRE, lead 1	2
43	656-15774-41	STAY 4	1	59	664-82531-00	WIRE, lead 2	1
44	97303-06012	BOLT	1	60	90465-10071	CLAMP	1
45	92903-06100	WASHER	1	61	90462-10018	CLAMP	2
46	97803-05025	SCREW, panhead	1	62	90461-06015	CLAMP	1
47	92903-05100	WASHER	1	63	90446-15105	HOSE (13ø-15ø-150mm)	1
48	664-82150-01	FUSE HOLDER ASS'Y	1	64	90446-15104	HOSE (13ø-15ø-200mm)	1
49	663-82151-00	. FUSE	1	65	97323-06014	BOLT	3
50	90462-10021	CLAMP	1	66	92903-06100	WASHER	3
51	664-81970-60	RECTIFIER ASS'Y	1	67	90161-06001	SCREW, flathead tapping	1
52	656-86110-40	SOLENOID ASS'Y	1	68	90480-17165	GROMMET	1
53	98303-04008	. SCREW, cylinderhead	3	69	90464-18018	CLAMP	1
54	92990-04100	. WASHER	3				

The following parts are not used when using the electric starter.

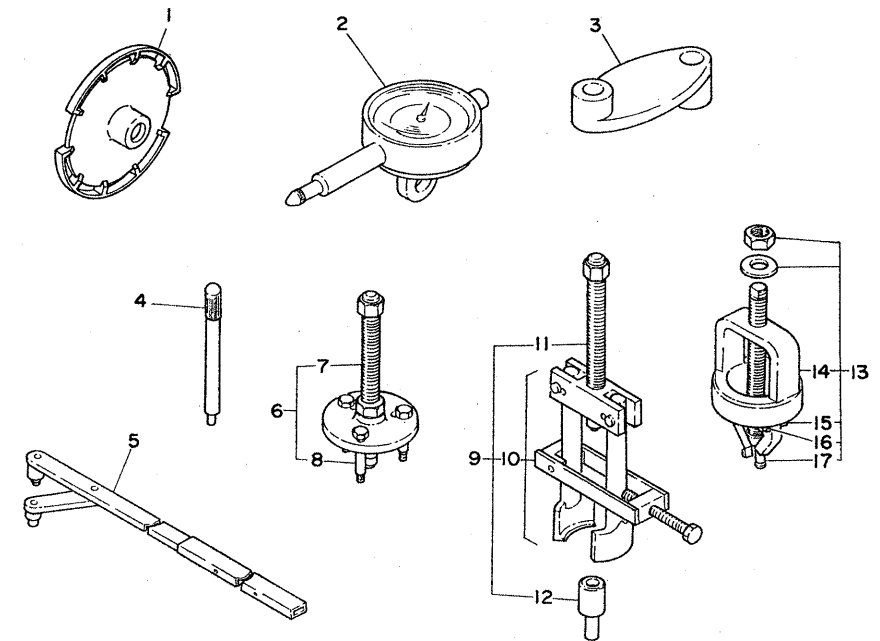
1-21	664-42724-00	GROMMET 1	1	2-44	656-15774-00	STAY 4	1
1-22	664-82550-00	STOP SWITCH ASS'Y	1	4-15	97323-06035	BOLT	1
2-24	648-15772-00-94	STAY 2	1	4-17	92903-06100	WASHER	1

Fig. 12 OPTIONAL PARTS 2 (REMOTE CONTROL)



Ref.No.	Parts No.	Description	Q'ty	Ref.No.	Parts No.	Description	Q'ty
12- 1	701-48110-10	REMOTE CONTROL ASS'Y 1	1	12-14	648-48534-50-94	. THROTTLE LEVER, control	1
2	701-48110-20	REMOTE CONTROL ASS'Y 2	1	15	97370-06012	. BOLT	1
3	701-48110-30	REMOTE CONTROL ASS'Y 3	1	16	92990-06600	. WASHER	1
4	701-48110-80	REMOTE CONTROL ASS'Y 8	1	17	617-48340-90	. CABLE END ASS'Y	1
5	701-48120-10	REMOTE CONTROL ASS'Y 1	1	18	617-48346-90	. . CABLE END, remote control	1
6	701-48120-30	REMOTE CONTROL ASS'Y 3	1	19	92990-08200	. . WASHER	1
7	701-82550-50	STOP SWITCH ASS'Y	1	20	90501-10264	. . SPRING, cable hook	1
8	701-48310-10	CABLE, remote control 6F	2	21	617-48361-90	. . HOOK, cable 2	1
	701-48310-20	CABLE, remote control 7F	2	22	91690-30012	. . PIN, spring	1
	701-48310-40	CABLE, remote control 8F	2	23	648-48330-50	. CABLE END ASS'Y	1
	701-48310-60	CABLE, remote control 9F	2	24	648-48346-50	. . CABLE END, remote control 3	1
	701-48310-90	CABLE, remote control 11F	2	25	92990-08200	. . WASHER	1
	701-48320-00	CABLE, remote control 12F	2	26	90501-10071	. . SPRING, cable hook	1
	701-48320-20	CABLE, remote control 13F	2	27	617-48331-90	. . HOOK, cable 1	1
	701-48320-30	CABLE, remote control 14F	2	28	91690-30012	. . PIN, spring	1
	701-48320-50	CABLE, remote control 15F	2	29	90480-22039	. GROMMET	1
	701-48320-60	CABLE, remote control 16F	2	30	700-48510-12	. STEERING HOOK ASS'Y	1
	701-48320-80	CABLE, remote control 17F	2	<b>MECHANICAL STEERING</b>			
	701-48320-90	CABLE, remote control 18F	2	31	648-48511-00	. HOOK, steering	1
9	656-48501-01	ATTACHMENT ASS'Y	1	32	97370-10040	. BOLT	1
10	656-48531-50	. BRACKET, remote control 1	1	33	92990-10100	. WASHER	1
11	656-48532-50	. BRACKET, remote control 2	1	34	92990-10600	. WASHER	1
12	97370-06016	. BOLT	2	35	95380-10600	. NUT	1
13	92990-06600	. WASHER	2	36	95480-51175	. SCREW, ovalhead wood	2

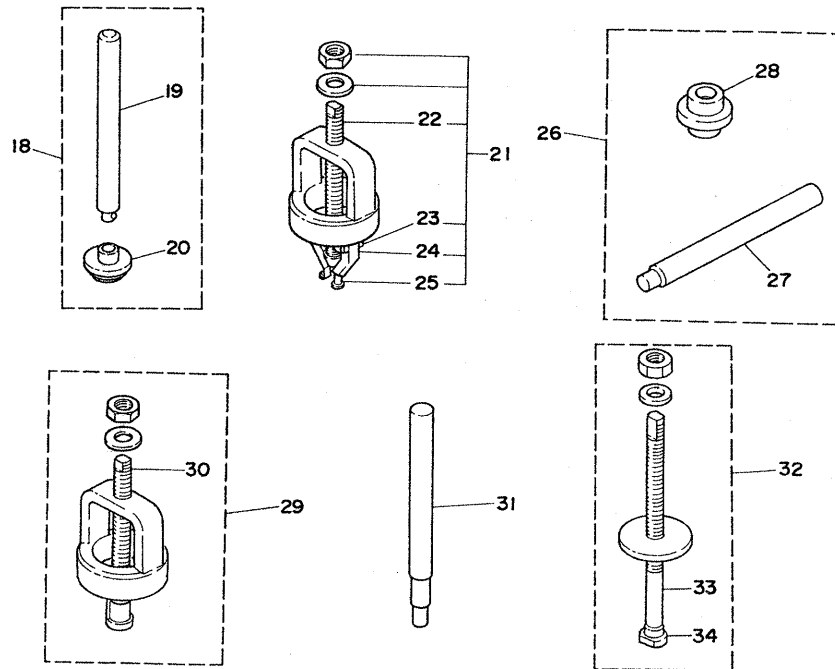
Fig. 13 SPECIAL SERVICE TOOLS



Ref. No.	Parts No.	Description	Q'ty	Applicable Machine	Remarks
13- 1	90890-01616	TEST PROPELLER	1	※	
2	90890-03097	DIAL GAUGE (1/100mm)	1	※※	
3	90890-01037	STAND 1, dial gauge	1	※※	
4	90890-03098	PLUNGER, dial gauge (56mm)	1	※※	
5	90890-06139	FLYWHEEL MAGNETO HOLDER ASS'Y	1s	※※	
6	90890-06117	FLYWHEEL MAGNETO PULLER ASS'Y	1s	※※	
7	90890-06003	. BOLT, center	1	※※	
8	90890-06118	. CENTER BOLT, flywheel puller	3	※※	
9	90890-06136	CRANK SHAFT BEARING PULLER ASS'Y	1s	※※	
10	90890-06137	. HANGER, bearing puller	1	※※	
11	90890-06003	. BOLT, center	1	※※	
12	90890-06007	. CASE, adjusting	1	※※	
13	90890-06120	BEARING PULLER ASS'Y	1s	※※	
14	90890-06033	. BOLT, center	1	※※	
15	90890-06009	. HANGER, claw	1	※※	
16	90890-06034	. PIN	2	※※	
17	90890-06036	. CLAW B	2	※※	

Tools with ※ marks are for the use of 20A/25A.  
Tools with ※※ marks are for common use.

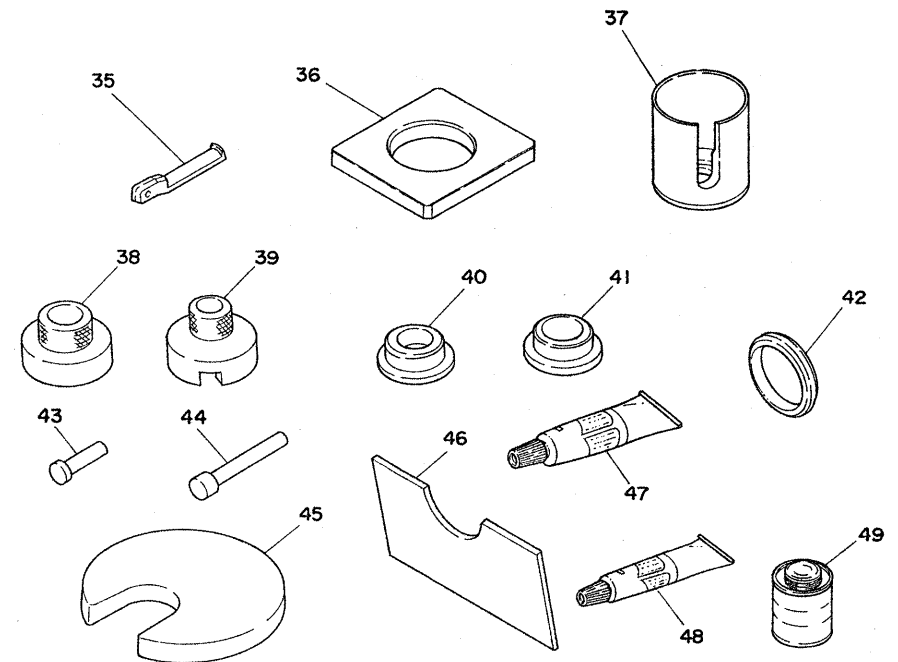
# SPECIAL SERVICE TOOLS



Ref. No.	Parts No.	Description	Q'ty	Applicable Machine	Remarks
13-18	90890-06121	BEARING INSTALLING TOOL ASS'Y	1s	※※	
19	90890-06013	. HANDLE	1	※※	
20	90890-06017	. ATTACHMENT D	1	※※	
21	90890-06010	OIL SEAL PULLER ASS'Y	1s	※※	
22	90890-06033	. BOLT, center	1	※※	
23	90890-06009	. HANGER, claw	1	※※	
24	90890-06034	. PIN	2	※※	
25	90890-06036	. CLAW B	2	※※	
26	90890-06020	OIL SEAL PUSHING-IN TOOL ASS'Y	1s	※※	
27	90890-06013	. HANDLE	1	※※	
28	90890-06022	. ATTACHMENT F	1	※※	
29	90890-06026	BUSHING PULLER ASS'Y	1s	※	
30	90890-06037	. BOLT, center	1	※	
31	90890-06028	TOOL B, bushing pushing-in	1	※※	
32	90890-06029	BUSHING PUSHING-IN TOOL ASS'Y	1s	※※	
33	90890-06038	. BOLT, center	1	※※	
34	90890-06030	. SUPPORT, bushing	1	※※	

Tools with ※ marks are for the use of 20A/25A.  
Tools with ※※ marks are for common use.

# SPECIAL SERVICE TOOLS



Ref. No.	Parts No.	Description	Q'ty	Applicable Machine	Remarks
13-35	90890-06089	CLAW	1	※	20A,25A,28A
36	90890-06073	PLATE	1	※	20A,25A,28A
37	90890-02329	BODY 1	1	※※	
38	90890-02330	BODY, press 1	1	※※	
39	90890-02331	BODY, press 2	1	※※	
40	90890-02333	SPACER B (d=25φ)	2	※※	
41	90890-02334	SPACER C (d=33φ)	1	※※	20A,25A,28A
42	90890-02337	RING, spacer B (t=16mm)	1	※※	20A,25A,28A
43	90890-02340	PIN, press A	1	※※	
44	90890-02341	PIN, press B	1	※※	
45	90890-02343	PLATE B	2	※※	20A,25A,28A
46	90890-02345	SUPPORT A	2	※※	
<b>YAMAHA BOND</b>					
47	90890-05143	YAMAHA BOND 4	1		200g
48	90890-05144	YAMAHA BOND 5	1		150g
49	90890-05074	YAMAHA BOND 7	1		100g

Tools with ※ marks are for the use of 20A/25A.  
Tools with ※※ marks are for common use.

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5-13	164-81246-21	4- 8	648-13641-01-94	1-12	648-42615-00	12-23	648-48330-50	1- 6	650-42693-00
5-16	207-81331-10	4-12	648-13645-00	1- 7	648-42651-00	12-24	648-48346-50	7-23	650-44147-00
9-25	606-42591-00	4- 5	648-14198-00	1- 3	648-42686-00	12-31	648-48511-00	7-26	650-45321-00
8-35	616-41318-00-F6	4-45	648-14321-00	9-72	648-42715-00	12-14	648-48534-50-94	7-68	650-45616-00
7-16	616-45251-30	4-43	648-14331-00	8-69	648-42716-00	5- 1	648-81300-63	7-70	650-45941-01-36
5-39	616-83180-30	4-46	648-14334-00	8-62	648-42718-00	5- 7	648-81309-12	7-70	650-45943-01-36
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8-20	656-43111-01-F6	10-60	663-24268-00	10-11	663-24310-60	9-27	90123-06065	8-11	90386-38090
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8-27	656-43191-00	11-49	663-82151-00	3-12	90150-04008	2-43	90387-06568	13-39	90890-02331
8- 5	656-43311-00-F6	5-30	663-82370-01	11-67	90161-06001	8-30	90387-09074	13-40	90890-02333
8-38	656-43631-00	5-41	663-82556-70	9-28	90170-06183	7-15	90430-06015	13-41	90890-02334
9-66	656-44111-01-F6	4- 1	664-14417-00	9-85	90170-07021	7-13	90430-08020	13-42	90890-02337
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13-18	90890-06121	10-53	92903-06100	10-74	93210-08287	3- 8	97313-08055	10-44	98503-03008
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7-69	91490-30030	9-24	92903-10600	7-45	93341-22008	2-28	97323-06020		
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12-28	91690-30012	4-55	92990-04100	4-57	93430-04031	4-16	97323-06020		
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9-64	91690-40018	9-82	92990-05600	3-54	93450-20026	3-32	97323-06025		
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7-24	92590-06010	8-66	92990-06100	7-66	93604-09068	4-15	97323-06035		
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