



YAMAHA

PARTS CATALOGUE

XJ650LH (4W5)

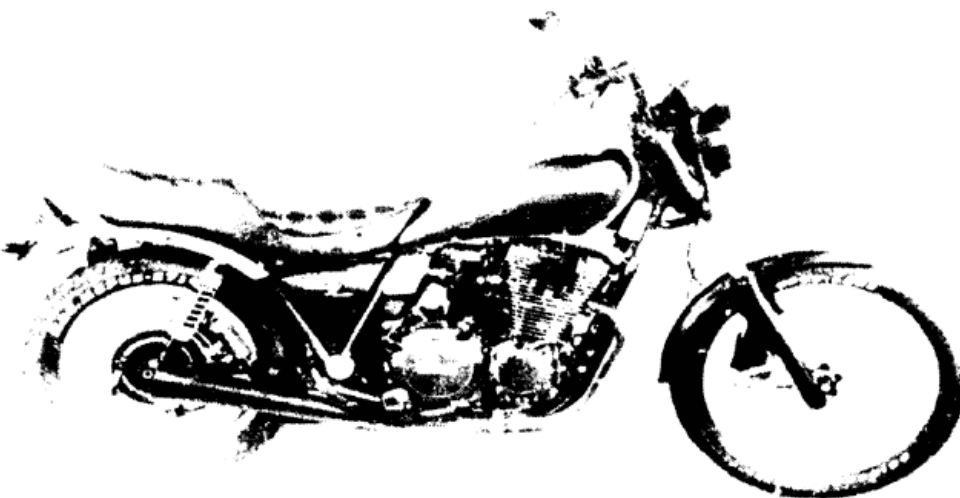
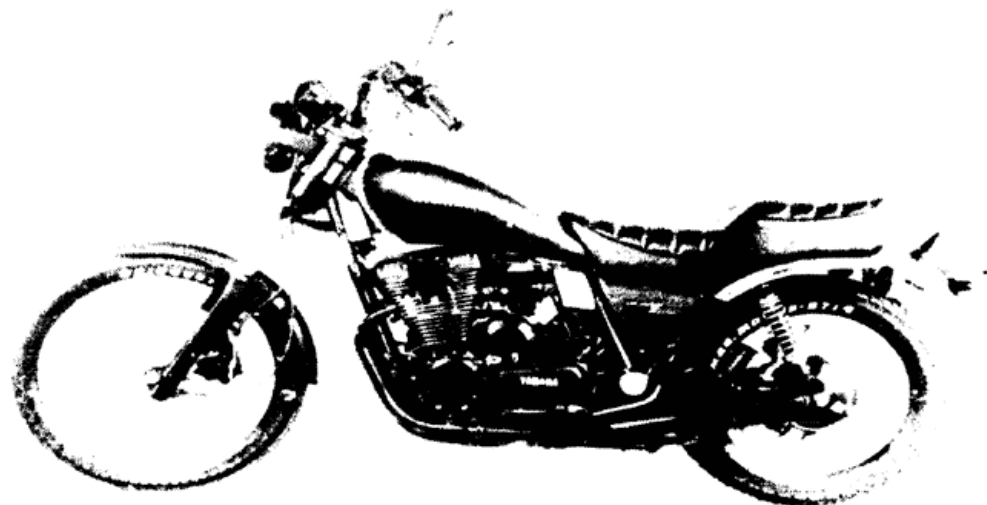
MODEL YEAR 1981

Initial Serial No. and Color Code

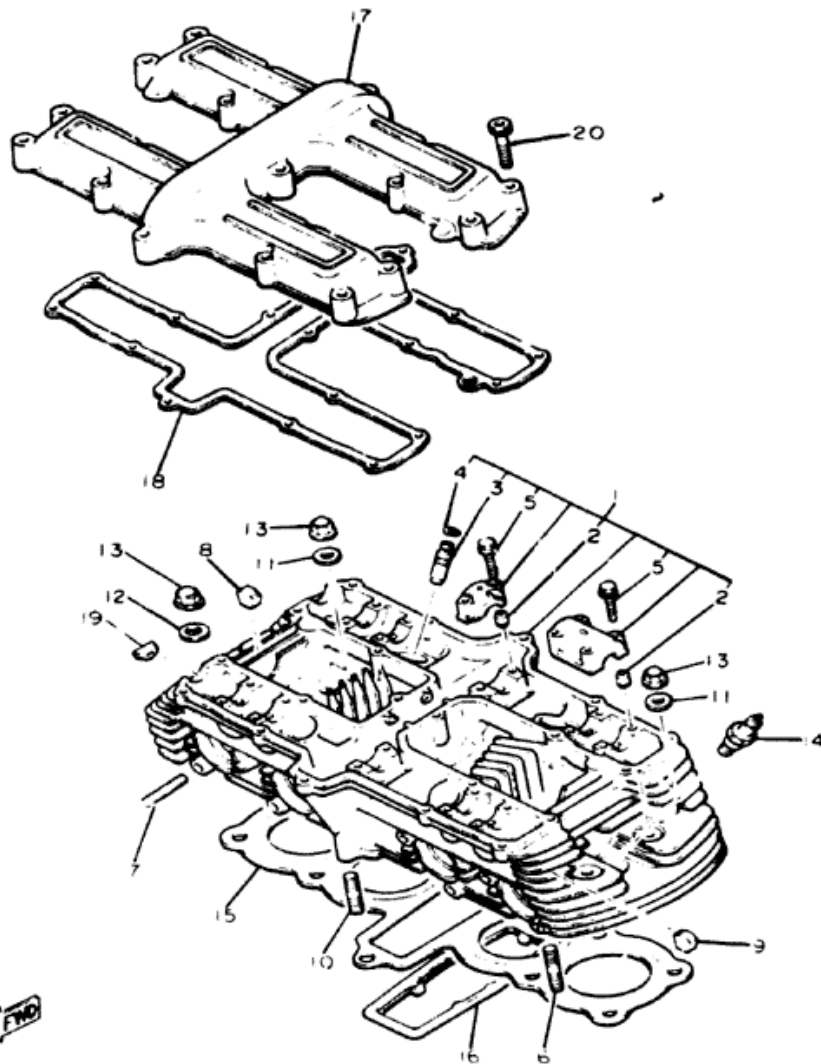
(A) Frame Serial No.	4W5 000001 and following
(B) Engine Serial No.	4W5 000001 and following

MODEL - IBM I.D. NUMBER	XJ650LH	4W5
Initial Engine Number / Frame Number	4W5-000001 / 4W5-000001	
Basic Color(s)	New Yamaha Black	
Fuel Type / Fuel Tank Capacity / Reserve Capacity	Regular / 13 Lt. (3.4 Gal.) / 3.4 Lt. (0.9 Gal.)	
Dry Vehicle Weight	203 kg (447 lbs.)	
ENGINE TYPE	4-Stroke, Air-Cooled, Parallel Four	
Bore/Stroke/Number Cylinders/Displacement (cc)	63mm / 52.4mm / 4 / 663cc	
Compression Ratio/Compression Pressure Min~Max	9.2:1 / 7.0 ~ 10.0 kg/cm ²	

PUBLICATION	PART NUMBER	REMARKS
OWNER'S MANUAL	LIT-11626-02-33	
SERVICE MANUAL	LIT-11616-01-94	SAME AS XJ650G
ASSEMBLY MANUAL	LIT-11666-01-94	SAME AS XJ650G
CONSUMER INFORM.	LIT	
LEAFLET	LIT	
DEALER ASS'Y & PRE-DELIVERY CHECKLIST	LIT 12588-00-78	



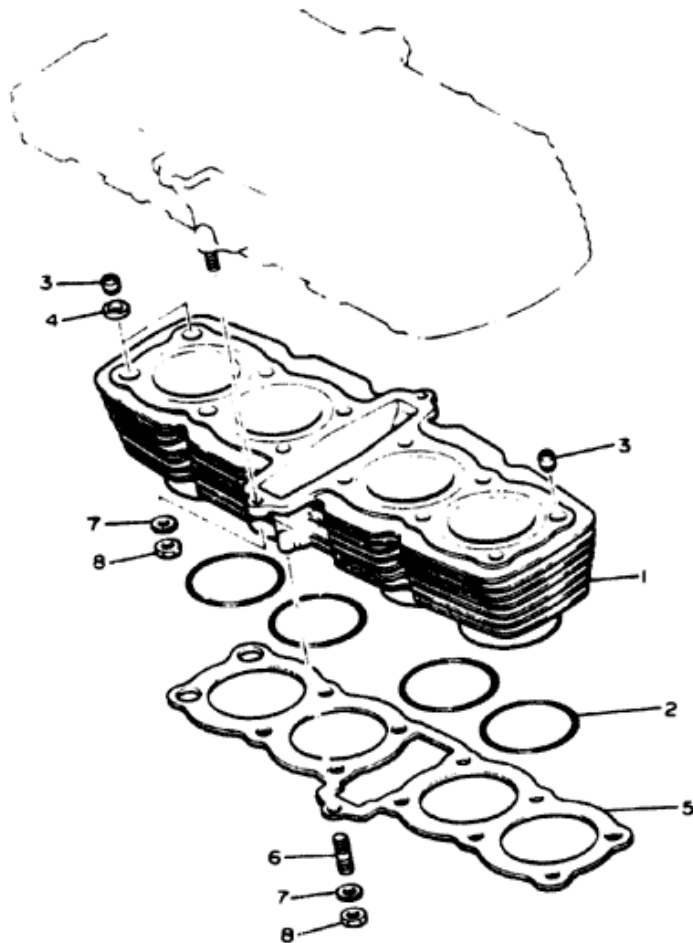
CYLINDER HEAD



Ref. No.	Part Number	Description	Qty.	Remarks
1	4W5-11101-00-00	CYLINDER HEAD ASS'Y	1	
2	91810-13016-00	PIN, dowel	12	
3	4H7-11133-10-00	GUIDE, intake valve (1st O/S)	8	
4	93440-12052-00	CIRCLIP	8	
5	90105-06153-00	BOLT, washer based	20	
6	95621-08325-00	BOLT, stud	1	
7	95611-06630-00	BOLT, stud	8	
8	434-11161-00-00	ABSORBER 1	8	
9	4H7-11161-00-00	ABSORBER 1	14	
10	4H7-11363-00-00	BOLT, stud	1	
11	4H7-11364-00-00	WASHER, plate	10	
12	90201-10128-00	WASHER, plate	2	
13	4H1-11171-00-00	NUT, holding	12	
14	NGK-BP7ES-00-00	PLUG, spark (94701-00117)	4	
15	4H7-11181-02-00	GASKET, cylinder head 1	1	
16	4H7-11355-00-00	SEAL, cylinder 1	1	
17	4W5-11191-00-00	COVER, cylinder head 1	1	
18	4H7-11193-00-00	GASKET, head cover 1	1	
19	1J7-11138-00-00	PLUG	2	
20	91316-06035-00	BOLT	20	
	4H7-W0001-00-XX	TOP END GASKET KIT		SEE GRID G-1

Spark Plug Type	NGK BP7ES or Nippon Denso W22EP
Spark Plug Gap / Torque / Cap R	0.7~0.8mm/2.8 m·kg/Cyl. 1&4 SK Ω 11%/Cyl. 2&3 HK Ω 11%
Cylinder Head Cover	6 x 1.0 1.0 m·kg
Cylinder Head	10 x 1.25 3.2 m·kg

CYLINDER

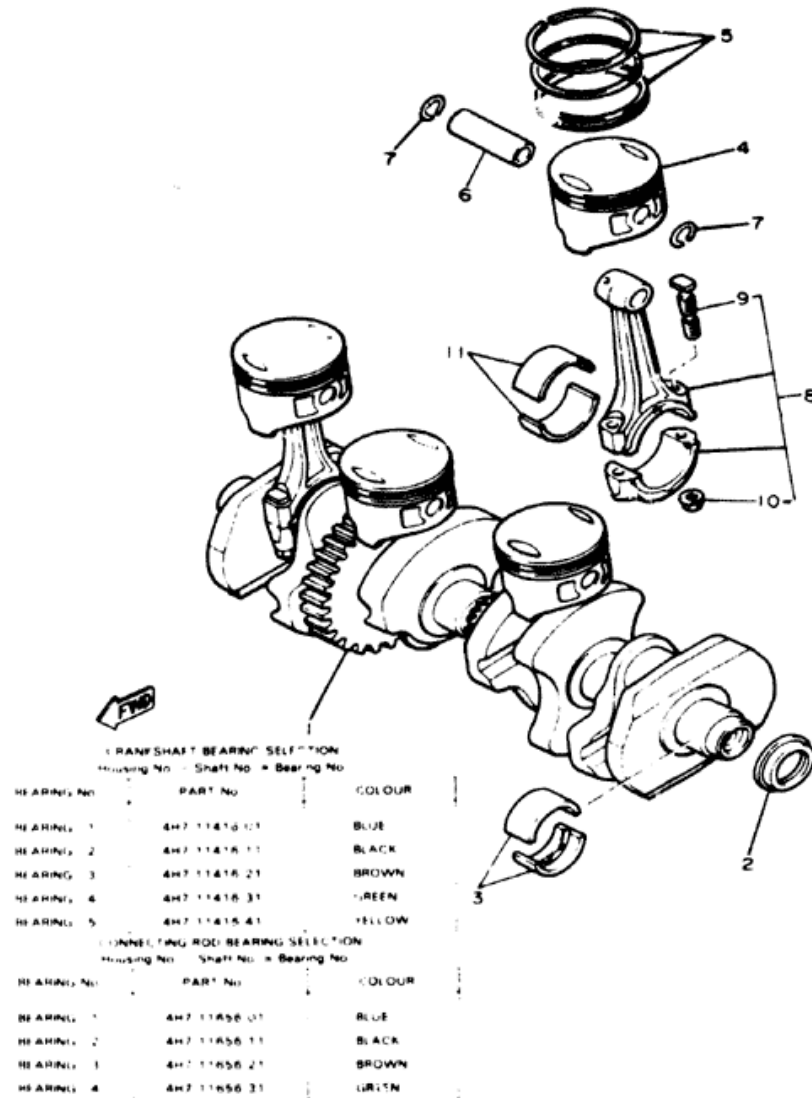


Ref. No.	Part Number	Description	Qty.	Remarks
1	4W5-11310-00-00	CYLINDER	1	
2	93210-69434-00	O-RING	4	
3	91830-24016-00	PIN, dowel	4	
4	90430-14131-00	GASKET	2	
5	4H7-11351-00-00	GASKET, cylinder	1	
6	95621-08330-00	BOLT, stud	1	
7	90201-08382-00	WASHER, plate	3	
8	95316-08600-00	NUT		



ENGINE TYPE	4-Stroke, Air-Cooled, Parallel Four
Bore/Stroke/Number Cylinders/Displacement (cc)	63mm / 62.4mm / 4 / 653cc
Compression Ratio/Compression Pressure Min~Max	9.2:1 / 7.0 ~ 10.0 kg/cm ²

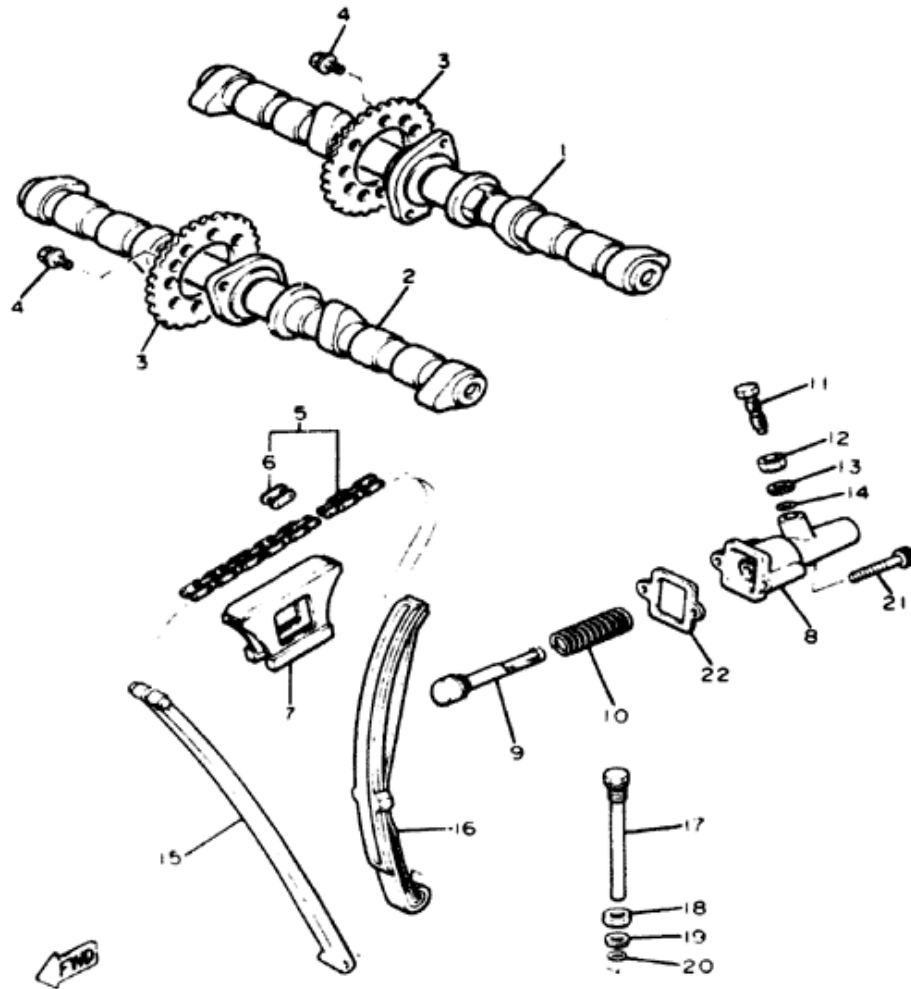
CRANKSHAFT - PISTON



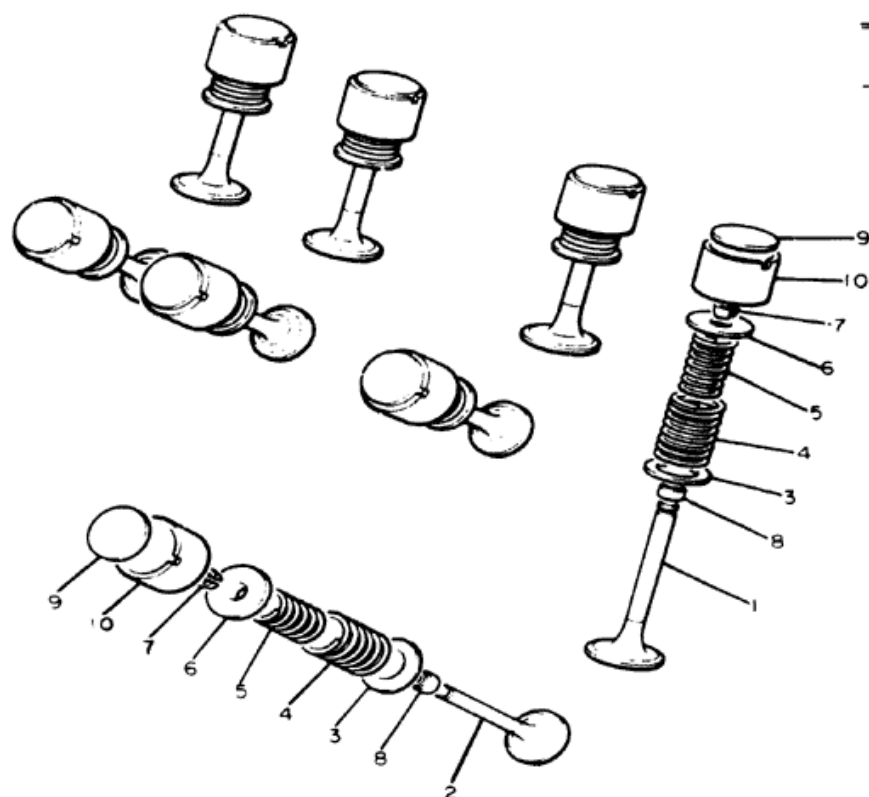
Ref. No.	Part Number	Description	Qty.	Remarks
1	4H7-11411-10-00	CRANKSHAFT	1	
2	93101-32088-00	OIL SEAL	1	
3	4H7-11416-01-00	PLANE BEARING, crankshaft 1	10	U.R.
	4H7-11416-11-00	PLANE BEARING, crankshaft 1	10	U.R.
	4H7-11416-21-00	PLANE BEARING, crankshaft 1	10	U.R.
	4H7-11416-31-00	PLANE BEARING, crankshaft 1	10	U.R.
	4H7-11416-41-00	PLANE BEARING, crankshaft 1	10	U.R.
4	4H7-11631-00-00	PISTON (STD)	4	
	4H7-11635-00-00	PISTON (1st O/S 0.25mm)	4	Alternate Part
	4H7-11636-00-00	PISTON (2nd O/S 0.50mm)	4	Alternate Part
	4H7-11637-00-00	PISTON (3rd O/S 0.75mm)	4	Alternate Part
	4H7-11638-00-00	PISTON (4th O/S 1.00mm)	4	Alternate Part
5	4H7-11610-00-00	PISTON RING SET (STD)	4	
	4H7-11610-10-00	PISTON RING SET (1st O/S)	4	Alternate Part
	4H7-11610-20-00	PISTON RING SET (2nd O/S)	4	Alternate Part
	4H7-11610-30-00	PISTON RING SET (3rd O/S)	4	Alternate Part
	4H7-11610-40-00	PISTON RING SET (4th O/S)	4	Alternate Part
6	4H7-11633-00-00	PIN, piston	4	
7	93450-17044-00	CIRCLIP	8	
8	4H7-Y1165-00-00	CONNECTING ROD ASS'Y	4	
9	4H7-11654-00-00	BOLT, connecting rod	2	
10	90179-07307-00	NUT	2	
11	4H7-11656-01-00	PLANE BEARING, connecting rod	8	U.R.
	4H7-11656-11-00	PLANE BEARING, connecting rod	8	U.R.
	4H7-11656-21-00	PLANE BEARING, connecting rod	8	U.R.
	4H7-11656-31-00	PLANE BEARING, connecting rod	8	U.R.

Piston Skirt Clearance New / Max	0.030 ~ 0.050mm / 0.1mm
Ring End Gap Top / 2nd / 3rd	0.15 ~ 0.35mm / 0.15 ~ 0.35mm / 0.3 ~ 0.5mm

CAMSHAFT - CHAIN



Ref. No.	Part Number	Description	Qty.
1	4H7-12171-00-00	CAMSHAFT 1	1
2	4H7-12181-00-00	CAMSHAFT 2	1
3	4H7-12176-01-00	SPORCKET, cam chain (32T)....	2
4	90105-07087-00	BOLT, washer based	4
5	94500-02120-00	CHAIN (BF05M-120L)	1
6	94600-02001-00	. JOINT, chain.	1
7	4H7-12241-00-00	GUIDE, stopper 2	1
8	4K0-12212-00-00	CASE, chain tensioner	1
9	4H7-12217-01-00	ROD, chain tensioner	1
10	90501-16417-00	SPRING, compression	1
11	4H1-12228-00-00	BOLT.....	1
12	95306-08700-00	NUT.....	1
13	92906-06600-00	WASHER, plate	1
14	93210-06001-00	O-RING.....	1
15	4H7-12251-00-00	DAMPER, chain 1	1
16	4H7-12252-00-00	DAMPER, chain 2	1
17	4W5-12228-00-00	BOLT.....	1
18	95306-10700-00	NUT.....	1
19	92901-08600-00	WASHER, plate	1
20	93210-08006-00	O-RING.....	1
21	91316-06040-00	BOLT.....	2
22	4H7-12213-00-00	GASKET, tensioner case.....	1



VALVE

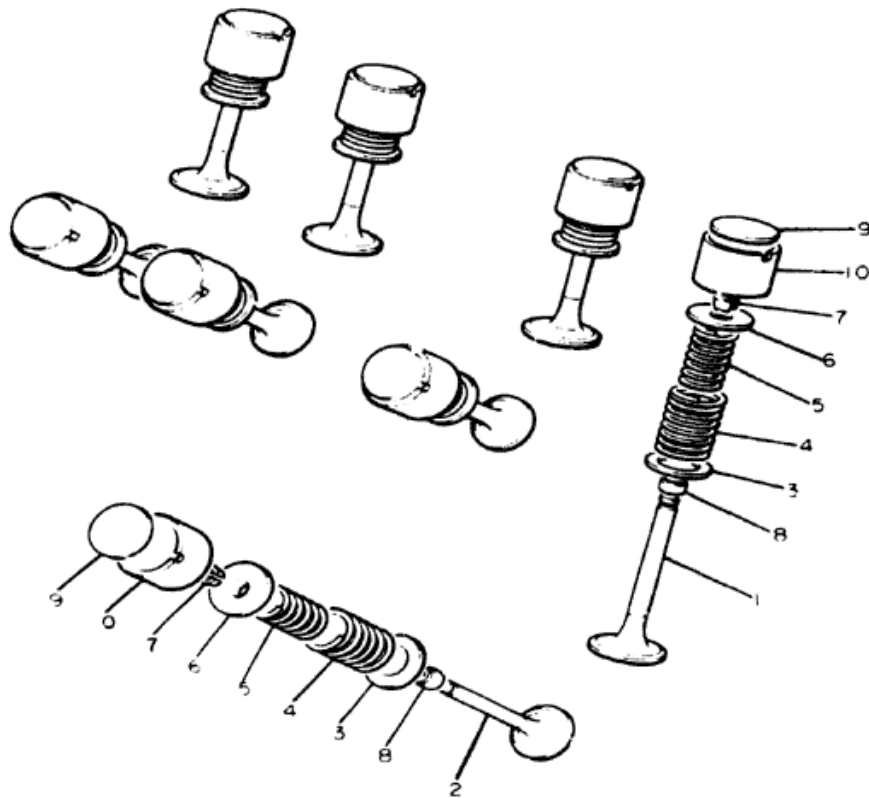
Ref. No.	Part Number	Description	Qty.	Remarks
1	4H7-12111-00-00	VALVE, intake	4	
2	4H7-12121-00-00	VALVE, exhaust	4	
3	4H7-12116-00-00	SEAT, valve spring.	8	
4	4H7-12114-00-00	SPRING, valve outer.	8	
5	4H7-12113-00-00	SPRING, valve inner.	8	
6	2F3-12117-00-00	RETAINER, valve spring.	8	
7	1J7-12118-00-00	COTTER, valve.	16	
8	1J7-12119-01-00	SEAL, valve stem.	8	
9	1J7-12169-01-00	PAD, adjusting (2.00)	8	U.R.
	1J7-12169-11-00	PAD, adjusting (2.05)	8	U.R.
	1J7-12169-21-00	PAD, adjusting (2.10)	8	U.R.
	1J7-12169-31-00	PAD, adjusting (2.15)	8	U.R.
	1J7-12169-41-00	PAD, adjusting (2.20)	8	U.R.
	1J7-12169-51-00	PAD, adjusting (2.25)	8	U.R.
	1J7-12169-61-00	PAD, adjusting (2.30)	8	U.R.
	1J7-12169-71-00	PAD, adjusting (2.35)	8	U.R.
	1J7-12169-81-00	PAD, adjusting (2.40)	8	U.R.
	1J7-12169-91-00	PAD, adjusting (2.45)	8	U.R.



Valve Clearance (Cold) Intake / Exhaust

0.11mm ~ 0.15mm / 0.16mm ~ 0.20mm

VALVE



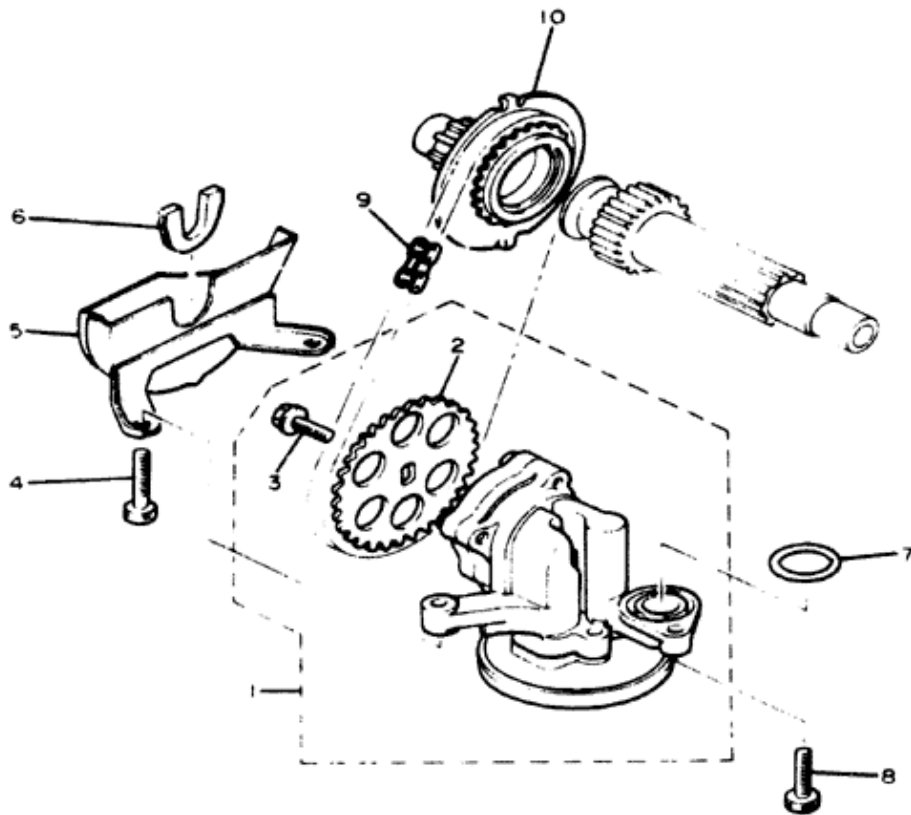
Ref. No.	Part Number	Description	Qty.	Remarks
	1J7-12169-A1-00	PAD, adjusting (2.50)	8	U.R.
	1J7-12169-E1-00	PAD, adjusting (2.55)	8	U.R.
	1J7-12169-F1-00	PAD, adjusting (2.60)	8	U.R.
	1J7-12169-G1-00	PAD, adjusting (2.65)	8	U.R.
	1J7-12169-H1-00	PAD, adjusting (2.70)	8	U.R.
	1J7-12169-J1-00	PAD, adjusting (2.75)	8	U.R.
	1J7-12169-K1-00	PAD, adjusting (2.80)	8	U.R.
	1J7-12169-L1-00	PAD, adjusting (2.85)	8	U.R.
	1J7-12169-M1-00	PAD, adjusting (2.90)	8	U.R.
	1J7-12169-N1-00	PAD, adjusting (2.95)	8	U.R.
	1J7-12169-R1-00	PAD, adjusting (3.00)	8	U.P.
	1J7-12169-T1-00	PAD, adjusting (3.05)	8	U.R.
	1J7-12169-U1-00	PAD, adjusting (3.10)	8	U.R.
	1J7-12169-V1-00	PAD, adjusting (3.15)	8	U.R.
	1J7-12169-W1-00	PAD, adjusting (3.20)	8	U.R.
10	4H7-12153-01-00	LIFTER, valve	8	

Valve Clearance (Cold) Intake / Exhaust

0.11mm ~ 0.15mm / 0.16mm ~ 0.20mm

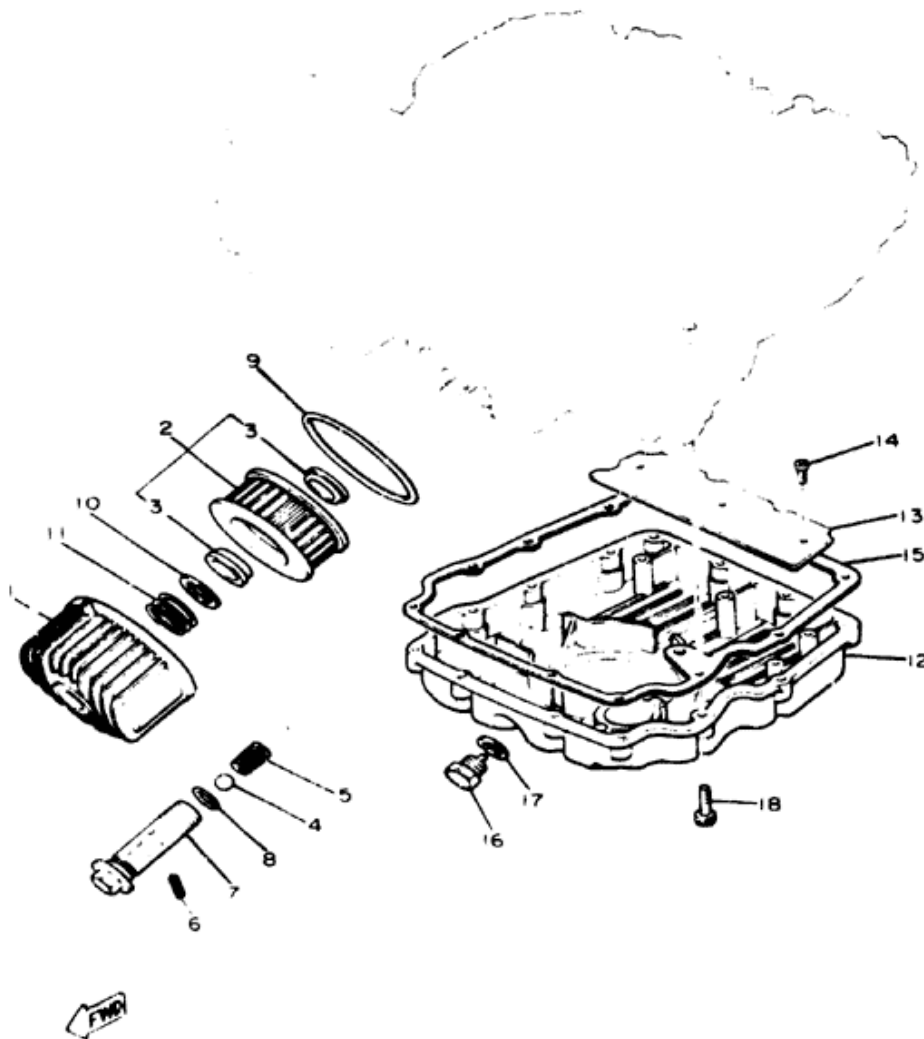
OIL PUMP

Ref. No.	Part Number	Description	Qty.
1	5G2-13300-00-00	OIL PUMP ASS'Y (4H7-13300-00)	1
2	4H7-13355-00-00	SPROCKET, driven (38T)	1
3	90105-06154-00	BOLT, washer based	1
4	90110-06035-00	BOLT, hexagon socket head.	2
5	4H7-13327-00-00	COVER, pump gear	1
6	4H7-13328-00-00	GROMMET, gear cover.	1
7	93210-18319-00	O-RING	1
8	91316-06025-00	BOLT	1
9	94580-25066-00	CHAIN	1
10	4H7-13354-00-00	SPROCKET, drive (25T)	1

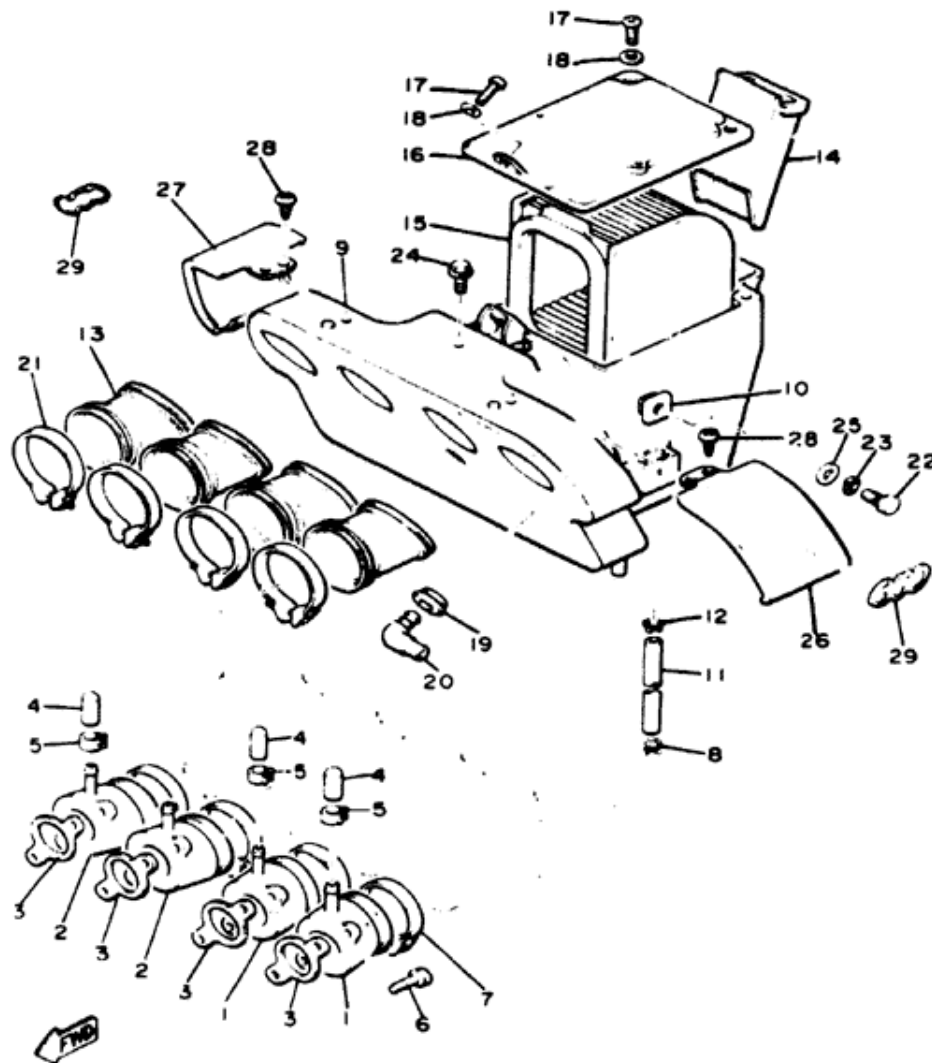


OIL CLEANER

Ref. No.	Part Number	Description	Qty.
1	4K0-13447-00-00	COVER, oil element.	1
2	1L9-13440-91-00	ELEMENT ASS'Y, oil cleaner.	1
3	90480-23193-00	. GROMMET.	2
4	93501-02018-00	BALL.	1
5	90501-12413-00	SPRING, compression.	1
6	91609-20018-00	PIN, spring.	1
7	90401-20064-00	BOLT, union.	1
8	93210-16325-00	O-RING.	1
9	93210-88324-00	O-RING.	1
10	90201-21608-00	WASHER, plate.	1
11	90501-20422-00	SPRING, compression.	1
12	4H7-13417-01-00	COVER, strainer.	1
13	4H7-13337-00-00	PLATE, baffle lower.	1
14	92503-06010-00	SCREW, panhead (92501-06010)	3
15	4H7-13414-01-00	GASKET, strainer cover (4H7-13414-00).	1
16	90340-14042-00	PLUG, straight screw.	1
17	214-11198-01-00	GASKET.	1
18	91316-06030-00	BOLT.	13

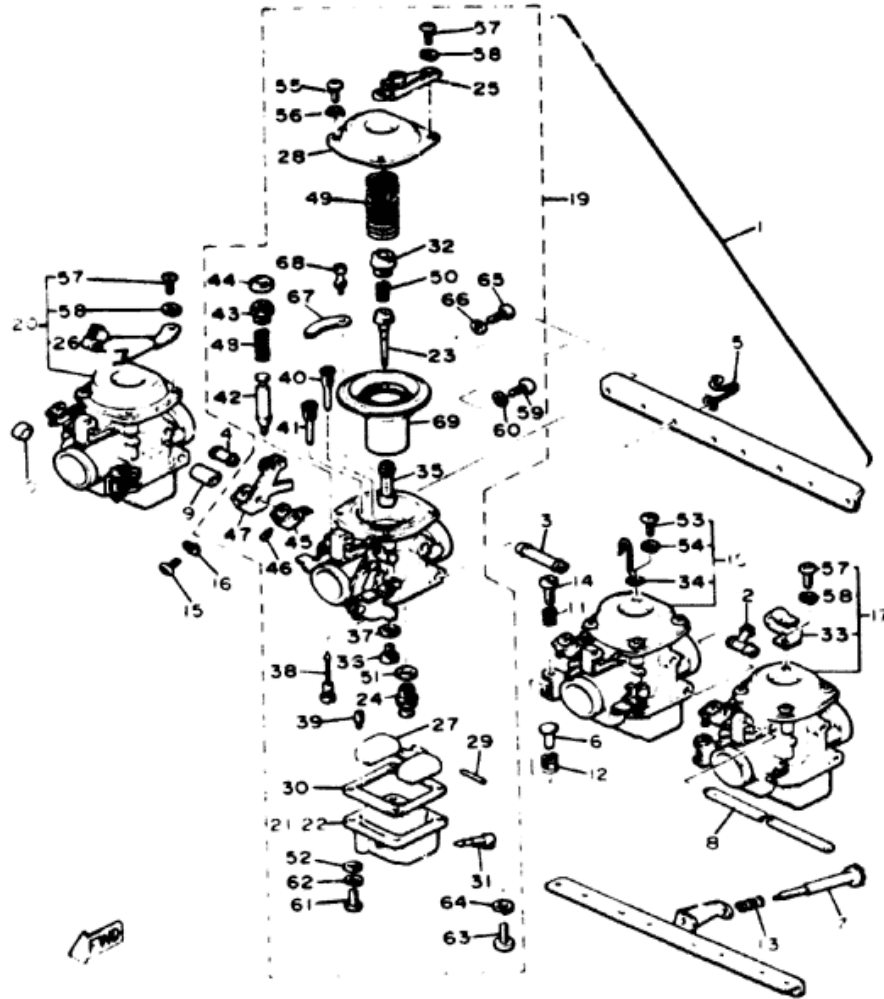


INTAKE



Ref. No.	Part Number	Description	Qty.
1	4H7-13586-02-00	JOINT, carburetor 1	2
2	4H7-13596-01-00	JOINT, carburetor 2	2
3	4H7-13556-01-00	GASKET, manifold	4
4	1J7-13569-00-00	PLUG, blind	3
5	4W5-13577-00-00	CLIP	3
6	91316-06020-00	BOLT	8
7	90460-49160-00	CLAMP, hose	4
8	4W5-14438-00-00	CLIP, drain cleaner	1
9	4H7-14401-00-00	AIR CLEANER CASE ASS'Y.	1
10	4H7-14484-00-00	PLATE, cleaner case fitting	1
11	90446-11021-00	HOSE	1
12	4W5-14438-00-00	CLIP, drain cleaner	1
13	4H7-14453-00-00	JOINT, air cleaner 1	4
14	4H7-14437-00-00	DUCT	1
15	4H7-14451-00-00	ELEMENT, air cleaner	1
16	4H7-14412-00-00	CAP, cleaner case 1	1
17	92503-06012-00	SCREW, panhead (92501-06012)	3
18	92902-06600-00	WASHER	3
19	90460-16278-00	GROMMET	1
20	4H7-14419-00-00	PIPE	1
21	90460-56105-00	CLAMP, hose	4
22	97301-06018-00	BOLT	1
23	92903-06100-00	WASHER, spring (92901-06100)	1
24	90119-06029-00	BOLT, with washer	1
25	90201-06067-00	WASHER, plate	1
26	4W5-1441A-00-00	COVER, cleaner case 1	1
27	4W5-1441E-00-00	COVER, cleaner case 2	1
28	97701-50110-00	SCREW, tapping	4
29	4W5-1441K-00-00	EMBLEM	2

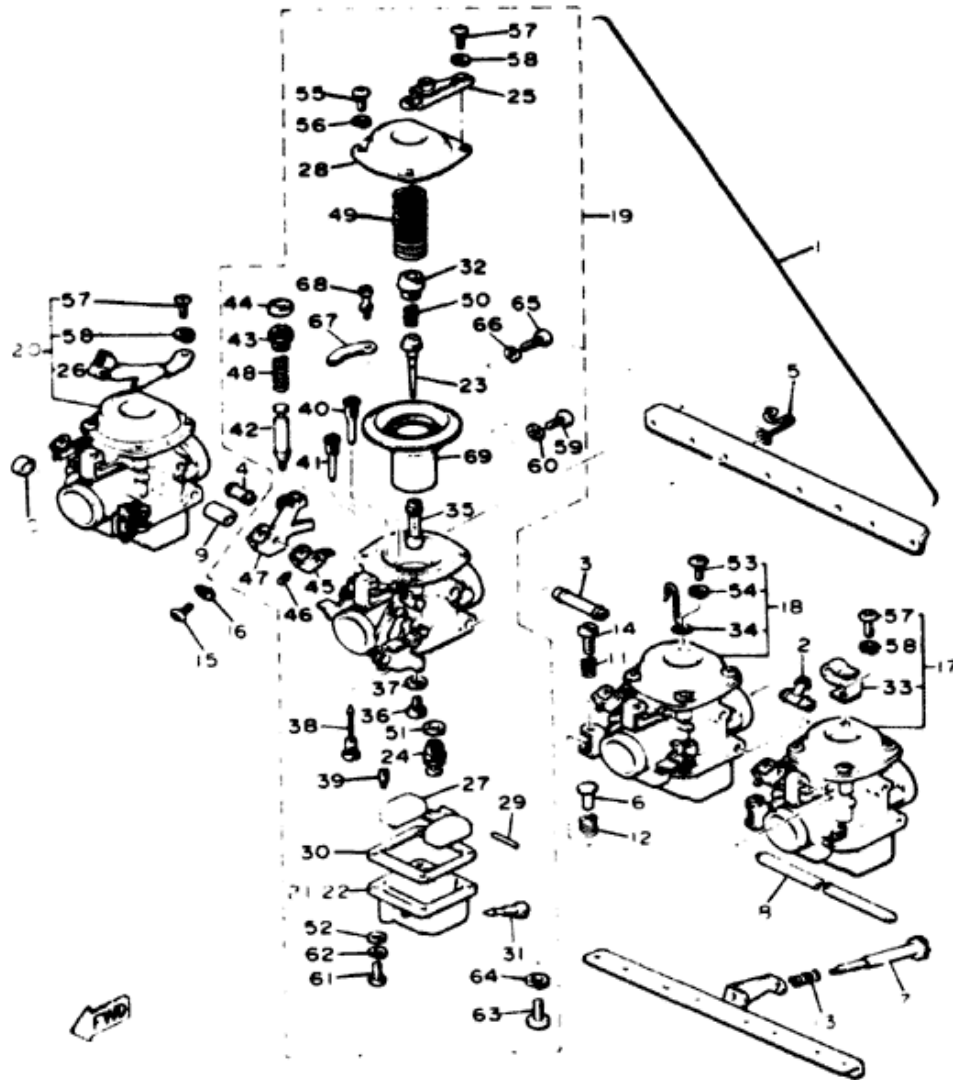
CARBURETOR



Ref. No.	Part Number	Description	Qty.	Remarks
1		CARBURETOR.....	1	N/A
2	4H7-14988-00-00	PIPE, starter connecting	1	
3	4H7-14188-00-00	CONNECTOR	1	
4	4H7-14189-00-00	CONNECTOR	1	
5	4H7-14919-00-00	CLIP.....	1	
6	4H7-14992-00-00	ROD	3	
7	3J3-14122-00-00	SCREW, throttle.....	1	
8	4W5-14978-00-00	SHAFT, starter lever.....	1	
9	4H7-14998-00-00	BUSH.....	1	
10	4H7-14973-00-00	WASHER.....	1	
11	4H7-14133-00-00	SPRING, throttle stop	3	
12	4H7-14934-00-00	SPRING, throttle stop	3	
13	3J3-14934-00-00	SPRING, throttle stop	1	
14	4H7-14922-00-00	SCREW, throttle.....	3	
15	98506-03016-00	SCRW, pan head	1	
16	92903-03100-00	WASHER (92901-03100)	1	
	92906-03100-00	WASHER.....	1	
17	4W5-14901-00-00	CARBURETOR ASS'Y 1	1	
18	4W5-14902-00-00	CARBURETOR ASS'Y 2	1	
19	4W5-14903-00-00	CARBURETOR ASS'Y 3	1	
20	4W5-14904-00-00	CARBURETOR ASS'Y 4	1	
21	4H7-14981-00-00	BODY, float chamber (1,2) ...	2	
22	4H7-14982-00-00	BODY, float chamber (3,4) ...	2	
23	4H7-14917-10-00	JET, needle	4	

CARBURETOR - Mfr. / Type / I.D. Number	Hitachi / HSC32 / 4W5-00
Main Jet / Pilot Jet	110 / 40
Needle Jet / Jet Needle-Clip Position	3.2 / Y-10 Fixed
Slide Cutaway or Throttle Valve	130
Float Level / Fuel Level	17.5 ± 0.5mm / 2 ~ 4mm
Idle rpm	1060 rpm
Max CO* / Max HC* / Set CO	5.0 % / 800 ppm / 3.0 % (All settings @ Idle)

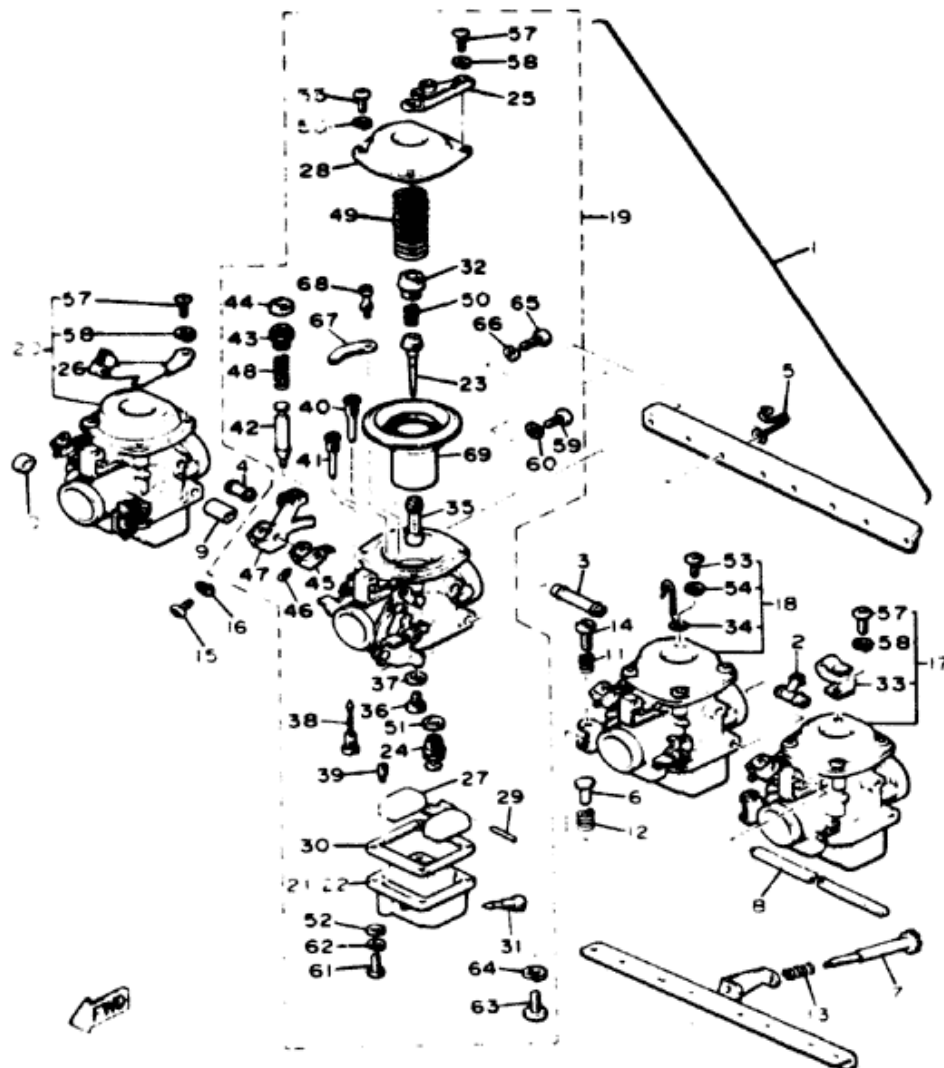
CARBURETOR



Ref. No.	Part Number	Description	Qty.
24	4H7-14990-00-00	NEEDLE VALVE AS'S'Y.....	4
25	4H7-14926-00-00	BRACKET, throttle 1.....	1
26	4H7-14995-00-00	BRACKET.....	1
27	4H7-14985-00-00	FLOAT.....	4
28	4W5-14958-00-00	COVER, diaphragm.....	4
29	4H7-14186-00-00	PIN, float.....	4
30	4H7-14984-00-00	GASKET, float chamber.....	4
31	4W5-14191-01-00	PLUG, drain.....	4
32	4H7-14936-00-00	SEAT, spring.....	4
33	4H7-14159-00-00	CLIP.....	1
34	4H7-14139-00-00	CLIP, pipe.....	1
35	4H7-14921-32-00	NOZZLE, main.....	4
36	4H7-14925-10-00	JET, main (#110).....	4
37	4H7-14945-00-00	WASHER, jet main.....	4
38	4H7-14948-40-00	JET, pilot (#40).....	4
39	4H7-14961-40-00	JET, starter (#40).....	4
40	4H7-14928-10-00	JET, main air (#50).....	4
41	4H7-14949-39-00	JET, pilot air (#195).....	4
42	4H7-14171-00-00	PLUNGER, starter.....	4
43	4H7-14174-00-00	CAP, plunger.....	4
44	4H7-14173-00-00	COVER, plunger cap.....	4
45	4W5-14975-00-00	LEVER, starter 1.....	4
46	4W5-14991-00-00	SCREW.....	4

CARBURETOR - Mfr. / Type / I.D. Number	Hitachi / HSC32 / 4W5-00
Main Jet / Pilot Jet	110 / 40
Needle Jet / Jet Needle-Clip Position	3.2 / Y-10 Fixed
Slide Cutaway or Throttle Valve	130
Float Level - Fuel Level	17.5 ± 0.5mm / 2 ~ 4mm
Idle rpm	1080 rpm
Max CO ² / Max HC ² / Set CO	5.0 % / 800 ppm / 3.0 % (All settings @ Idle)

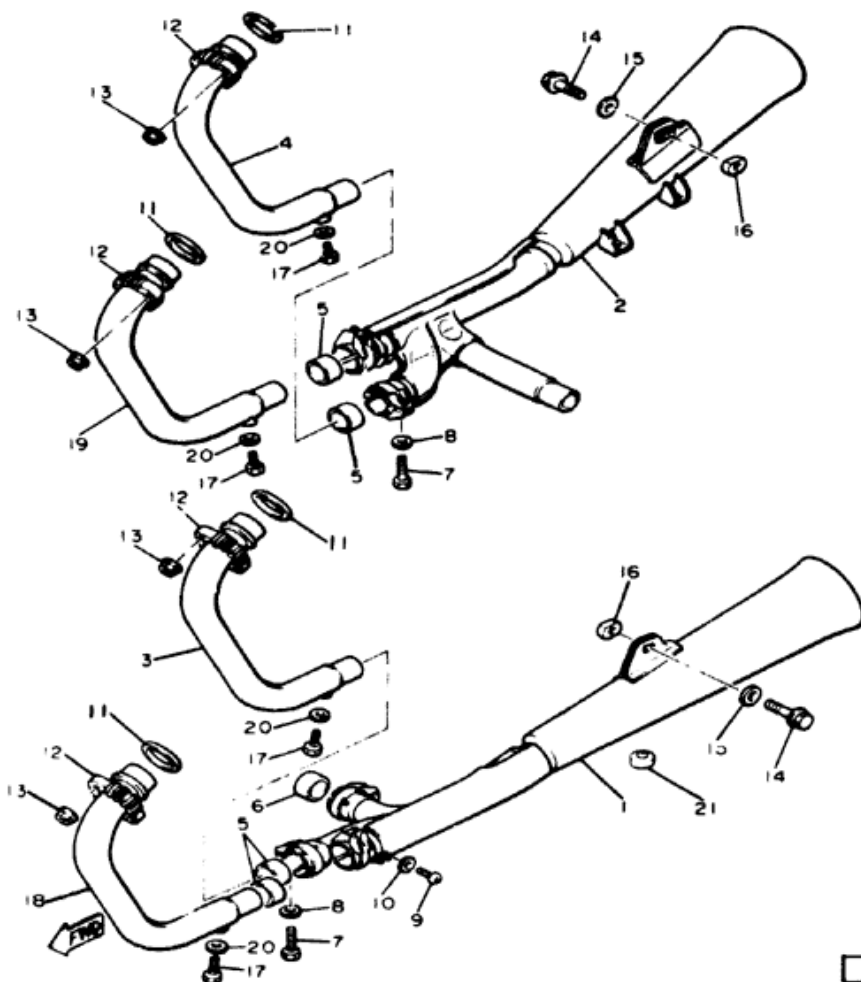
CARBURETOR



Ref. No.	Part Number	Description	Qty.
47	4W5-14976-00-00	LEVER, starter 2	1
48	4H7-14135-00-00	SPRING, plunger	4
49	4H7-14933-00-00	SPRING, diaphragm	4
50	4H7-14589-00-00	SPRING	4
51	4H7-14952-00-00	WASHER	4
52	4H7-14955-00-00	WASHER	16
53	98503-04010-00	SCREW, pan head (98501-04010)	1
54	92901-04100-00	WASHER, spring (92903-04100)	1
55	98501-04008-00	SCREW, panhead (98502-04008)	10
56	92901-04100-00	WASHER, spring (92903-04100)	10
57	98503-04010-00	SCREW, pan head (98501-04010)	5
58	92901-04100-00	WASHER, spring (92903-04100)	5
59	98506-05010-00	SCREW, pan head	3
60	92906-05100-00	WASHER, spring	3
61	98501-05016-00	SCREW, pan head (98506-05016)	16
62	92906-05100-00	WASHER, spring	16
63	92506-06012-00	SCREW, pan head	4
64	92906-06100-00	WASHER, spring	4
65	98506-05012-00	SCREW, pan head	1
66	92906-05100-00	WASHER, spring	1
67	4H7-14527-00-00	PLATE	4
68	4H7-14325-00-00	SCREW, pan head	4
69	4H7-14940-00-00	DIAPHRAGM ASS'Y	4

CARBURETOR - Mfr. / Type / I.D. Number	Hitachi / HSC32 / 4W5-00
Main Jet / Pilot Jet	110 / 40
Needle Jet / Jet Needle-Clip Position	3.2 / Y-10 Fixed
Slide Cutaway or Throttle Valve	130
Float Level / Fuel Level	17.5 ± 0.5mm / 2 ~ 4mm
Idle rpm	1080 rpm
Max CO* / Max HC* / Set CO	5.0 % / 800 ppm / 3.0 % (All settings @ Idle)

EXHAUST



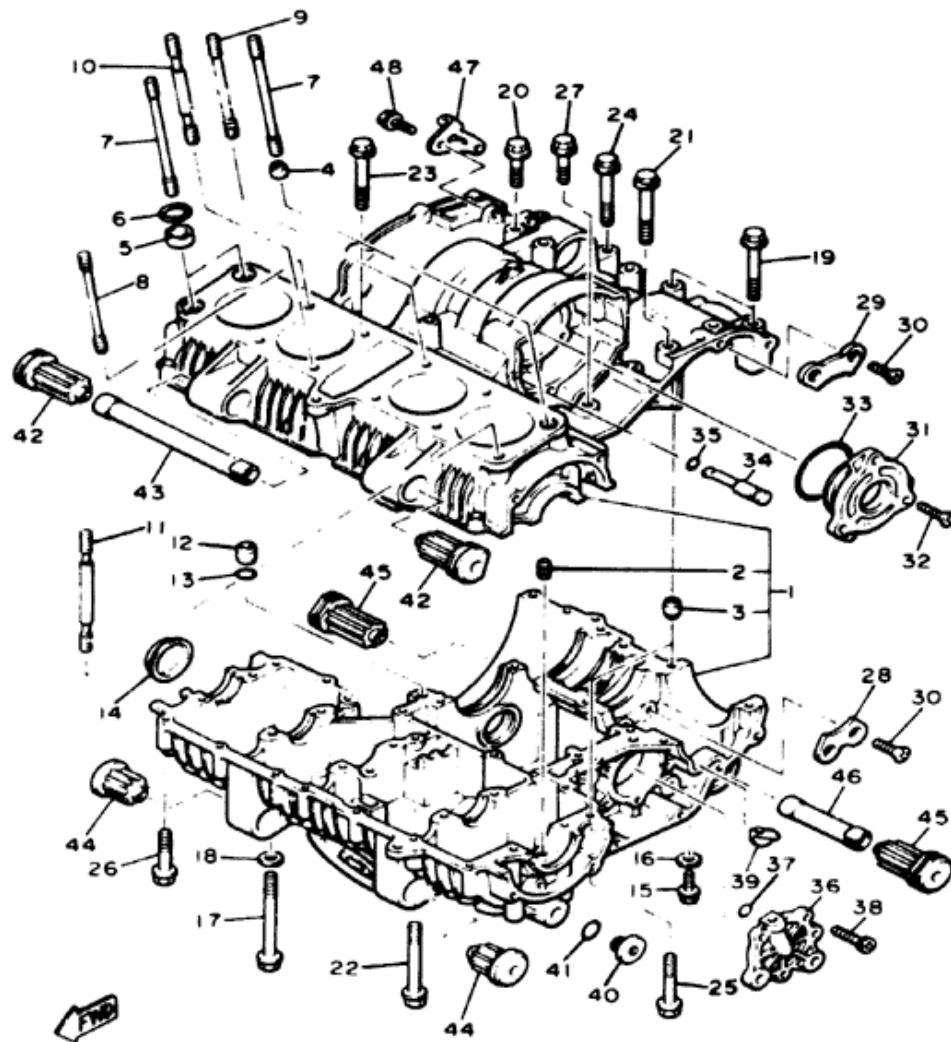
Ref. No.	Part Number	Description	Qty.	Remarks
1	4W5-14710-00-00	MUFFLER ASS'Y1.....	1	
2	4W5-14720-00-00	MUFFLER ASS'Y 2.....	1	
3	4W5-14621-00-00	PIPE, exhaust 2.....	1	
4	4W5-14631-00-00	PIPE, exhaust 3.....	1	
5	4H7-14755-00-00	GASKET, silencer.....	4	
6	4H7-14714-00-00	GASKET, muffler.....	1	
7	97316-08025-00	BOLT.....	5	
8	92906-08600-00	WASHER, plate.....	5	
9	92506-06025-00	SCREW, pan head.....	2	
10	92906-06600-00	WASHER, plate.....	2	
11	4H7-14613-00-00	GASKET, exhaust pipe.....	4	
12	4W5-14612-00-00	NUT, ring.....	4	
13	4W5-14681-00-00	NUT.....	8	
14	95806-10040-00	BOLT, flange.....	2	
15	4H3-14759-00-00	WASHER.....	2	
16	4W5-14761-00-00	NUT.....	2	
17	97316-06012-00	BOLT.....	4	
18	4W5-14611-00-00	PIPE, exhaust 1.....	1	
19	4W5-14641-00-00	PIPE, exhaust 4.....	1	
20	92906-06600-00	WASHER, plate.....	4	
21	1A0-27114-00-00	STOPPER, main stand.....	1	

Max CO* / Max HC* / Set CO

5.0 % / 800 ppm / 3.0 % (All settings @ Idle)

"These replacement parts comply with all Florida laws and regulations requiring testing and certification of exhaust system replacement parts."

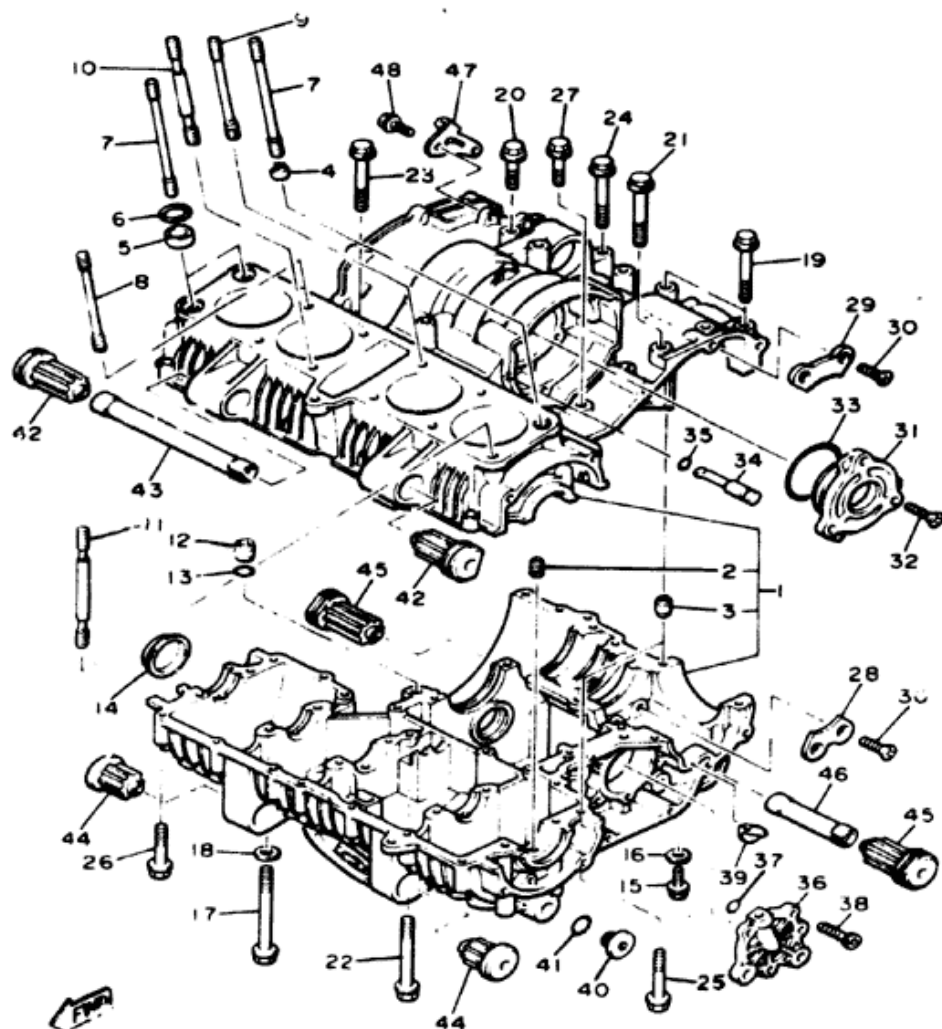
CRANKCASE



Ref. No.	Part Number	Description	Qty.
1	4W5-15100-00-00	CRANKCASE ASS'Y	1
2	4H7-15138-00-00	NOZZLE 1	3
3	91830-22016-00	PIN, dowel	3
4	91830-24016-00	PIN, dowel	1
5	90387-16547-00	COLLAR	2
6	93210-18322-00	O-RING	2
7	4H7-11364-00-00	BOLT, cylinder holding 4	3
8	4H7-11363-00-00	BOLT, cylinder holding 3	3
9	90116-10328-00	BOLT, stud	1
10	4H7-11363-00-00	BOLT, cylinder holding 3	4
11	4H7-11364-00-00	BOLT, cylinder holding 4	1
12	91830-22016-00	PIN, dowel	1
13	93210-11124-00	O-RING	1
14	90338-48105-00	PLUG	1
15	90105-08003-00	BOLT, washer based	1
16	90201-08087-00	WASHER, plate	1
17	95816-08105-00	BOLT, flange	10
18	90201-08366-00	WASHER, plate	8
19	95816-08065-00	BOLT, flange	2
20	95816-06135-00	BOLT, flange	2
21	94816-06120-00	BOLT, flange	1
22	95811-06080-00	BOLT, flange	3
23	95816-06070-00	BOLT, flange	3
24	95816-06060-00	BOLT, flange	6

Oiling System	Wet Sump
Capacity: Dry	3600cc
Oil and Filter Change	2860cc
Oil Change	2380cc
Lubricant: Temp. Above 5°C (40°F)	Yamakebe 4° or SAE 20W40 SE
Temp. Below 15°C (60°F)	Yamakebe 4° or SAE 10W30 SE
Drain Plug	14 x 1.5: 4.3 m·kg

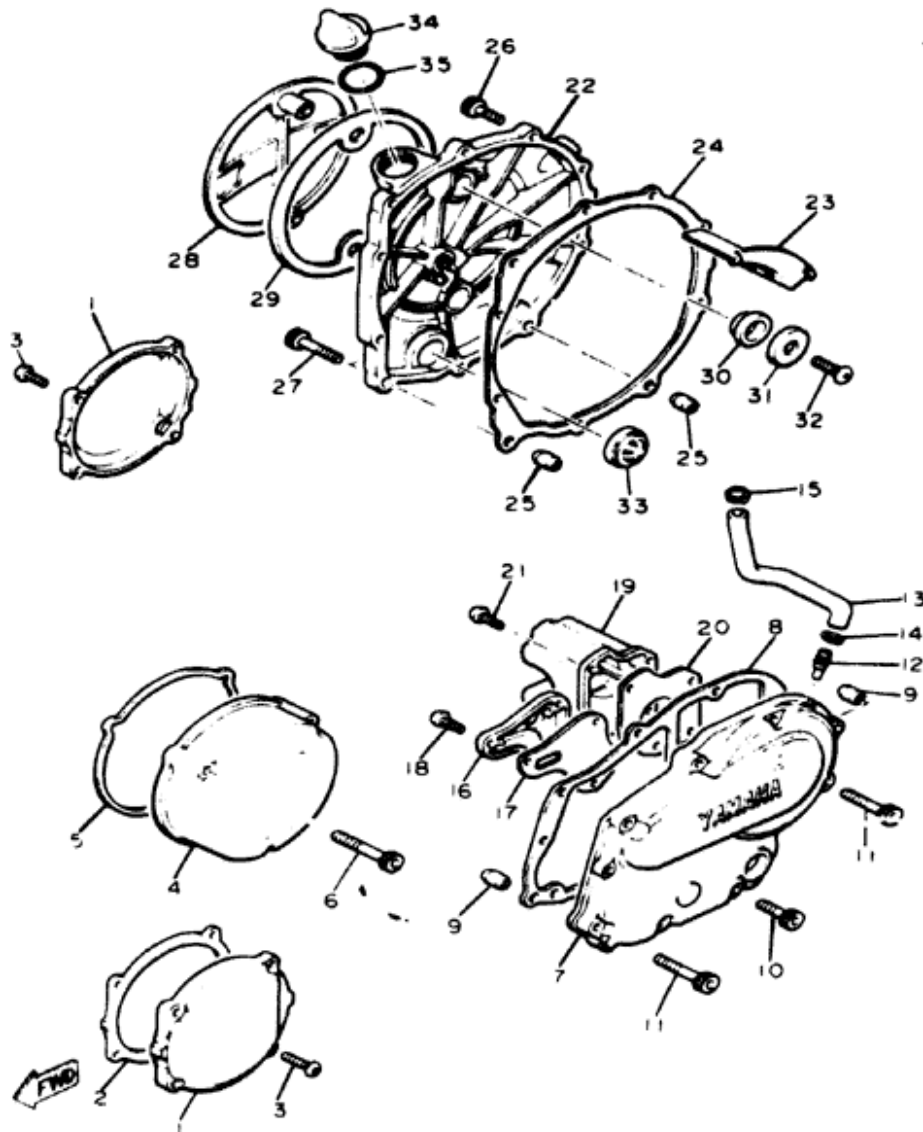
CRANKCASE



Ref. No.	Part Number	Description	Qty.
25	95816-06055-00	BOLT, flange.	2
26	95816-06045-00	BOLT, flange.	7
27	95816-06035-00	BOLT, flange.	3
28	4H7-15381-00-00	PLATE, bearing cover	1
29	4H7-15383-00-00	PLATE, bearing cover	1
30	90149-08152-00	SCREW.	4
31	4H7-15163-01-00	HOUSING, bearing 1 (4H7-15163-00).....	1
32	90151-06014-00	SCREW.	3
33	93210-62439-00	O-RING.	1
34	4H7-13454-00-00	NOZZLE.	1
35	93210-07423-00	O-RING.	1
36	5G2-15164-00-00	HOUSING, bearing 2 (4H7-15164-00).....	1
37	93210-07438-00	O-RING.	1
38	91311-06020-00	BOLT.	3
39	4H7-15365-00-00	GROMMET.	1
40	4K0-15189-00-00	PLUG.	2
41	93210-21276-00	O-RING.	2
42	4H7-15326-00-00	DAMPER, engine mount 2	2
43	4W5-15317-00-00	SPACER, engine mount	1
44	4H7-15316-00-00	DAMPER, engine mount 1	2
45	2H7-15326-01-00	DAMPER, engine mount 2	2
46	4W5-15327-00-00	SPACER, engine mount	1
47	4K0-15441-00-00	HOLDER, clutch cable	1
48	91316-06012-00	BOLT.	2

Oiling System	Wet Sump
Capacity: Dry	3500cc
Oil and Filter Change	2550cc
Oil Change	2350cc
Lubricant: Temp. Above 5°C (40°F)	Yamalube 4° or SAE 20W40 SE
Temp. Below 15°C (60°F)	Yamalube 4° or SAE 10W30 SE
Drain Plug	14 x 1.5: 4.3 m-kg

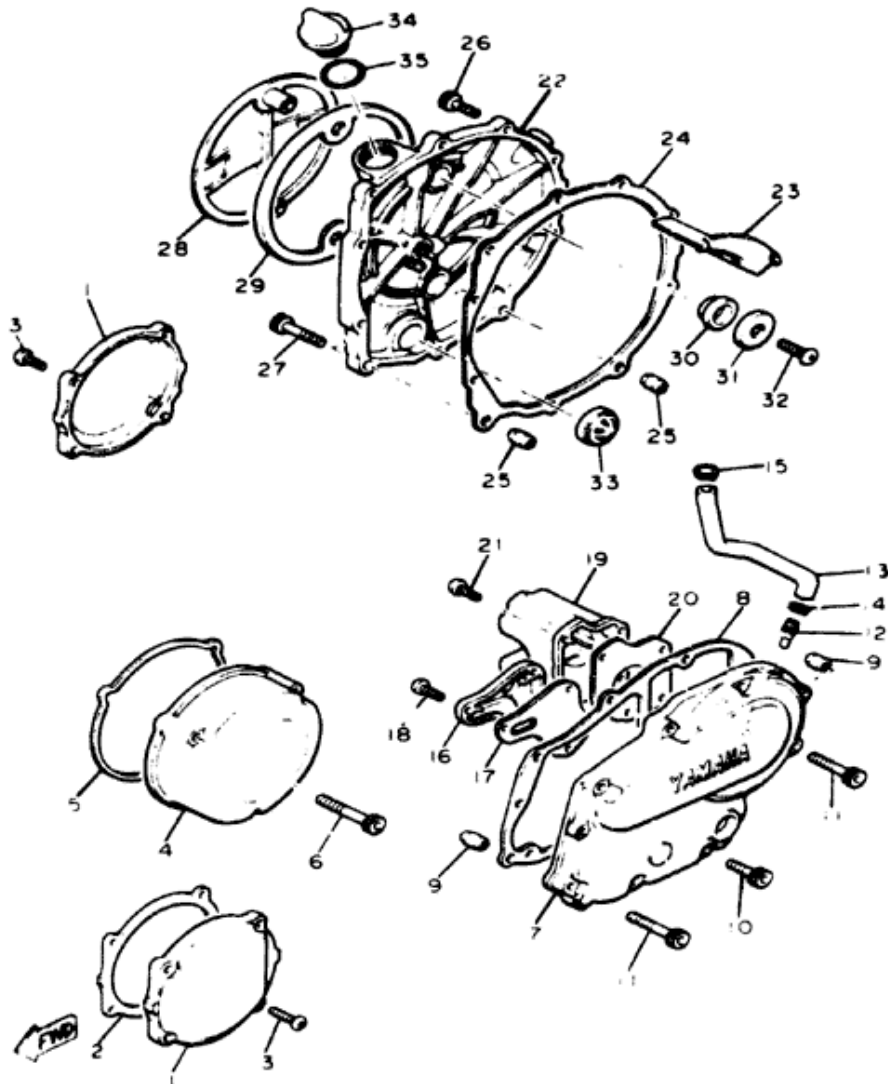
CRANKCASE COVER



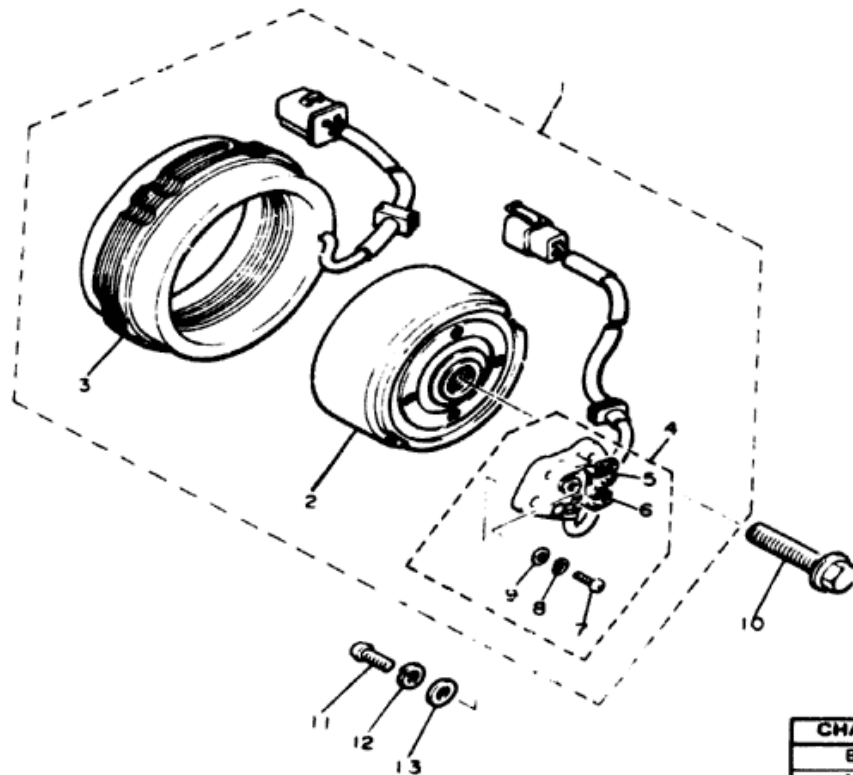
Ref. No.	Part Number	Description	Qty.
1	4W5-15416-00-00	COVER, oil pump.	2
2	4H7-15456-00-00	GASKET, oil pump cover 1.	1
3	98906-06020-00	SCREW, bind.	8
4	4W5-15415-00-00	COVER, generator.	1
5	4H7-15455-00-00	GASKET 1.	1
6	91316-06070-00	BOLT.	3
7	4W5-15411-00-00	COVER, crankcase 1.	1
8	4H7-15451-00-00	GASKET, crankcase cover.	1
9	91830-21014-00	PIN, dowel.	2
10	91316-06025-00	BOLT.	8
11	91316-06040-00	BOLT.	2
12	371-11167-01-00	COVER, breather 2.	1
13	4H7-11166-01-00	PIPE, breather 1.	1
14	4H1-11189-00-00	CLIP, pipe.	1
15	90468-08104-00	CLIP.	1
16	4H7-15346-00-00	BREATHER 1.	1
17	4H7-15457-00-00	GASKET.	1
18	92503-06015-00	SCREW, panhead (92501-06015).	3

CRANKCASE COVER

Ref. No.	Part Number	Description	Qty.
19	4H7-15347-00-00	BREATHER 2	1
20	4H7-15467-00-00	GASKET	1
21	92503-06015-00	SCREW, panhead (92501-06015)	4
22	4W5-15421-00-00	COVER, crankcase 2	1
23	4H7-15412-01-00	COVER, oil pump	1
24	4H7-15461-01-00	GASKET, crankcase cover 2	1
25	91830-21014-00	PIN, dowel	2
26	91316-06025-00	BOLT	8
27	91316-06040-00	BOLT	2
28	4W5-15417-00-00	COVER, cap	1
29	4H7-15449-00-00	RING, rubber	1
30	4H7-15486-00-00	GROMMET	2
31	90209-06096-00	WASHER	2
32	92503-06015-00	SCREW, panhead (92501-06015)	2
33	2H7-15361-00-00	GAUGE, level	1
34	2H9-15363-00-00	PLUG, oil	1
35	93210-27370-00	O-RING	1



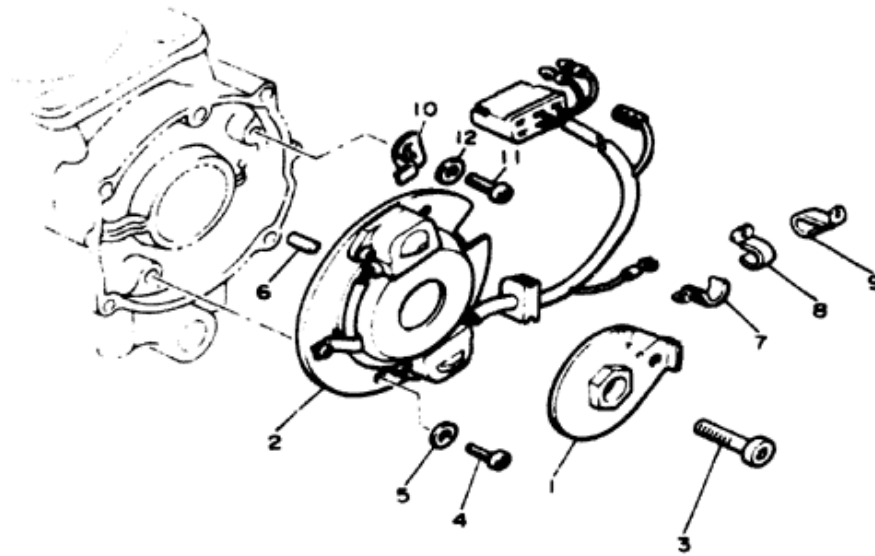
A.C. GENERATOR



Ref. No.	Part Number	Description	Qty.	Remarks
1	4H7-81600-10-00	A.C. GENERATOR ASS'Y.....	1	
2	4H7-81650-10-00	ROTOR ASS'Y.....	1	
3	4H7-81610-10-00	STATOR ASS'Y.....	1	
4	4H7-81619-10-00	BRUSH HOLDER ASS'Y.....	1	
5	4H7-81611-10-00	BRUSH 1.....	1	
6	4H7-81612-10-00	BRUSH 2.....	1	
8	98501-04012-00	SCREW, pan head (98502-04012).....	2	
8	92901-04100-00	WASHER, spring (92903-04100).....	2	
9	92901-04600-00	WASHER, plate.....	2	
10	90105-10152-00	BOLT, washer based.....	1	
11	92503-06015-00	SCREW, panhead (92502-06016).....	2	
12	92903-06100-00	WASHER, spring (92902-06100).....	2	
13	92901-06600-00	WASHER (92902-06600).....	2	

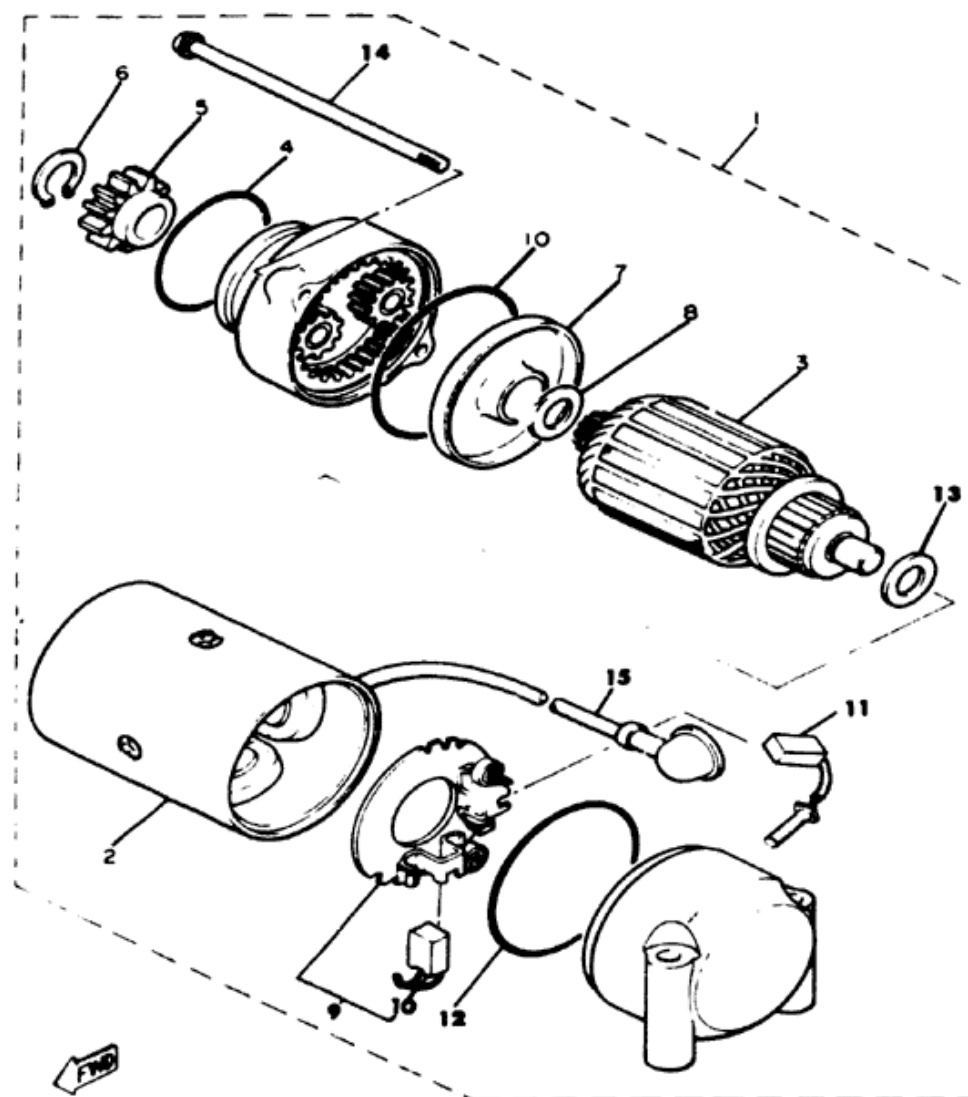
CHARGING SYSTEM		AC Generator / 3-Phase / Full Wave
Battery, Model / Specific Gravity / Charge Rate		Yussu 12N12A-4A-1 (12V 12AH) / 1.28 / 1.2A
Maximum Output		14V 19A @ 5000 rpm
TROUBLESHOOTING		
Field Coil Color Code / Ω		Rotor: Brn ~ Brn / 4.8 $\Omega \pm 10\%$ Stator: Wht ~ Wht / 8.48 $\Omega \pm 10\%$
Charge Coil Color Code / Ω		\emptyset
IGNITION SYSTEM		Transistor-Controlled Ignition
Ignition Timing		10° Mark
Spark Plug Type		Std: 10° @ 1050 rpm Adv: 37.5 \pm 2° @ 4100 rpm
Spark Plug Gap / Torque / Cap Ω		NGK BP7ES or Nippon Denso W22EP
Point Gap / Condenser Capacitance		0.7 ~ 0.8mm / 2.2 mkg/Cyl 164 SK Ω : 11% / Cyl 263 10K Ω : 11%
TROUBLESHOOTING		
Ignition Coil Test Gap Primary Ω / Secondary Ω		6mm / 2.5 $\Omega \pm 10\%$ / 11K $\Omega \pm 20\%$
Pulser Coil or Pickup Coil Color Code / Ω		Org ~ Blk, Gry ~ Brn / 650 $\Omega \pm 20\%$

PICKUP COIL - GOVERNOR



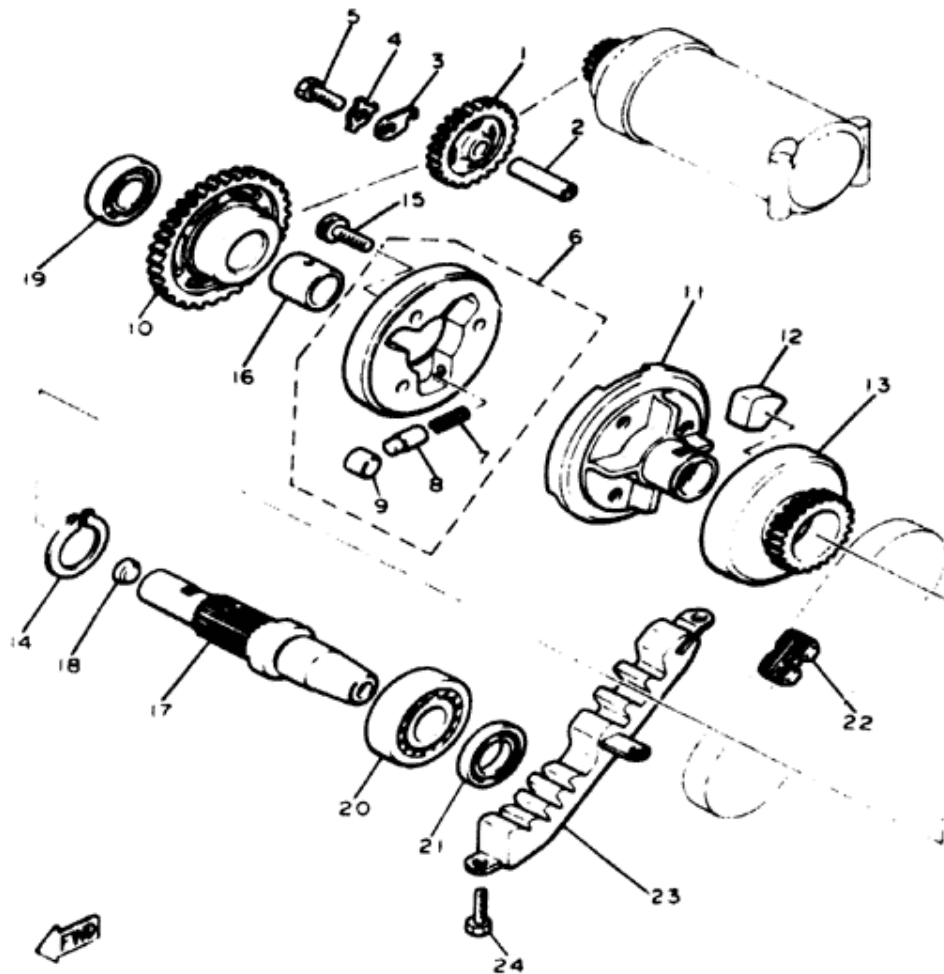
Ref. No.	Part Number	Description	Qty.
1	4H7-81673-10-00	ROTOR	1
2	4H7-81671-10-00	BASE, pick up	1
3	91316-08030-00	BOLT	1
4	92503-06012-00	SCREW, panhead (92501-06012)	2
5	92903-06200-00	WASHER, plain (92901-06200)	2
6	93604-08071-00	PIN, dowel	1
7	90465-08122-00	CLAMP	1
8	90465-08156-00	CLAMP	1
9	90465-12160-00	CLAMP	1
10	4H7-81632-00-00	PLATE, timing	1
11	92503-06012-00	SCREW, panhead (92501-06012)	1
12	92903-06200-00	WASHER, plain (92901-06200)	1

STARTING MOTOR



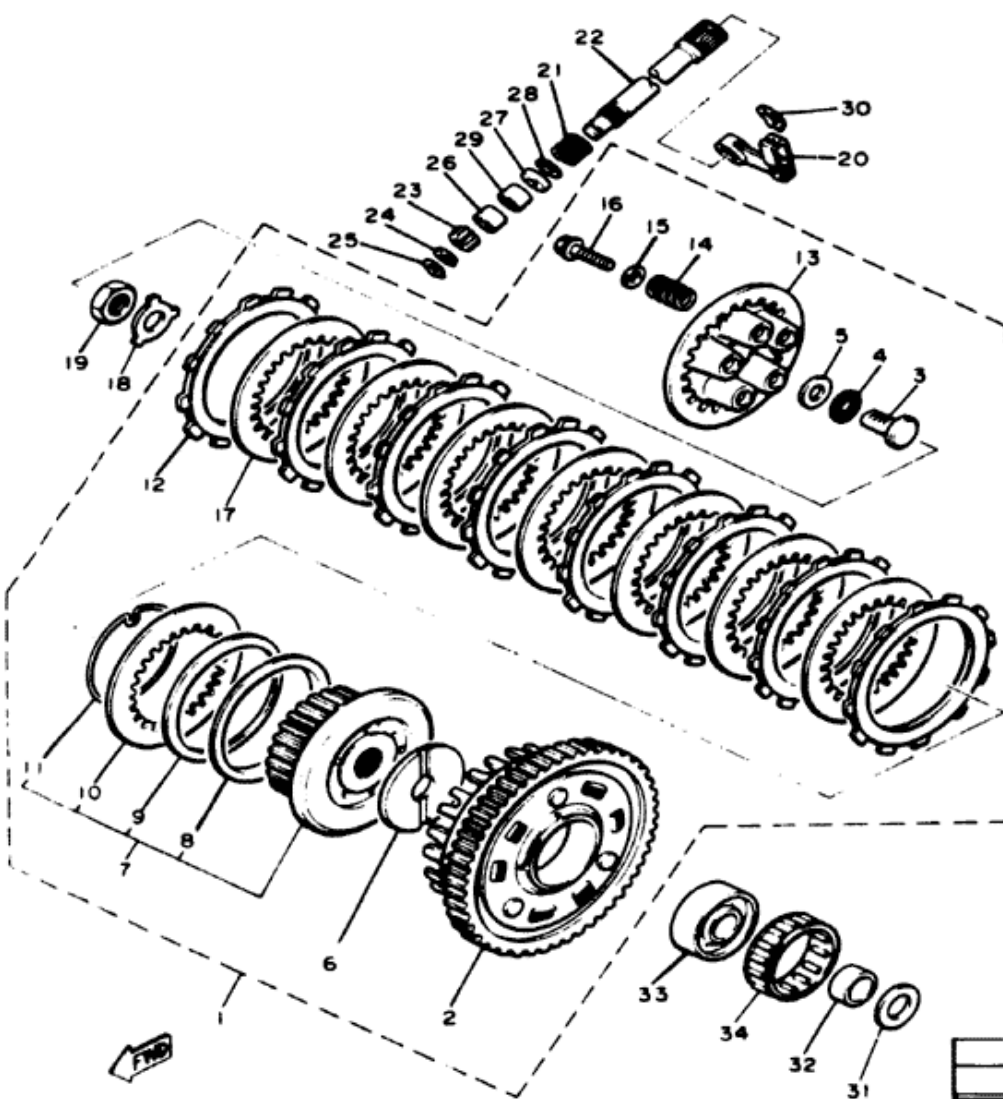
Ref. No.	Part Number	Description	Qty.
1	4H7-81800-50-00	STARTING MOTOR ASS'Y	1
2	4H7-81810-01-00	STATOR ASS'Y (4H7-81810-00)	1
3	4H7-81850-00-00	ARMATURE ASS'Y	1
4	4H7-81847-00-00	O-RING	1
5	4H7-15511-00-00	GEAR, starting motor (13T)	1
6	4H7-81819-00-00	CIRCLIP	1
7	4H7-81845-00-00	PLATE	1
8	4H7-81843-00-00	WASHER 1	1
9	4H7-81840-00-00	BRUSH HOLDER ASS'Y	1
10	4H7-81811-00-00	BRUSH 1	1
11	4H7-81812-00-00	BRUSH 2	1
12	4H7-81844-00-00	GASKET	2
13	4H7-81824-00-00	WASHER 2	1
14	4H7-81826-01-00	BOLT	2
15	4H7-81815-00-00	LEAD WIRE ASS'Y	1

STARTER CLUTCH



Ref. No.	Part Number	Description	Qty.
1	4H7-15512-00-00	GEAR, idler 1 (27T)	1
2	4H7-15521-00-00	SHAFT 1	1
3	2H7-15531-00-00	PLATE, stopper	1
4	90215-06040-00	WASHER, lock.	1
5	97301-06016-00	BOLT (97301-06015)	1
6	4H7-15580-10-00	STARTER CLUTCH OUTER ASS'Y (4H7-15580-00)	1
7	90501-04596-00	. SPRING, compression	3
8	341-15583-05-00	. CAP, starter clutch spring	3
9	93615-12088-00	. PIN, dowel	3
10	4H7-15517-00-00	GEAR, idler 2 (43T)	1
11	4H7-15524-00-00	WHEEL, starter	1
12	4H7-16155-00-00	ABSORBER 1	8
13	4H7-15519-00-00	SPROCKET, starter 2	1
14	93410-32052-00	CIRCLIP	1
15	91316-08014-00	BOLT	3
16	90387-202A7-00	COLLAR	1
17	4H7-15522-00-00	SHAFT 2	1
18	90331-12028-00	PLUG	1
19	93306-00401-00	BEARING (B6004)	1
20	93306-20541-00	BEARING (B6205)	1
21	93102-25218-00	OIL SEAL	1
22	4H7-11456-00-00	CHAIN, primary	1
23	4H7-11474-00-00	GUIDE, upper	1
24	97301-06014-00	BOLT	3

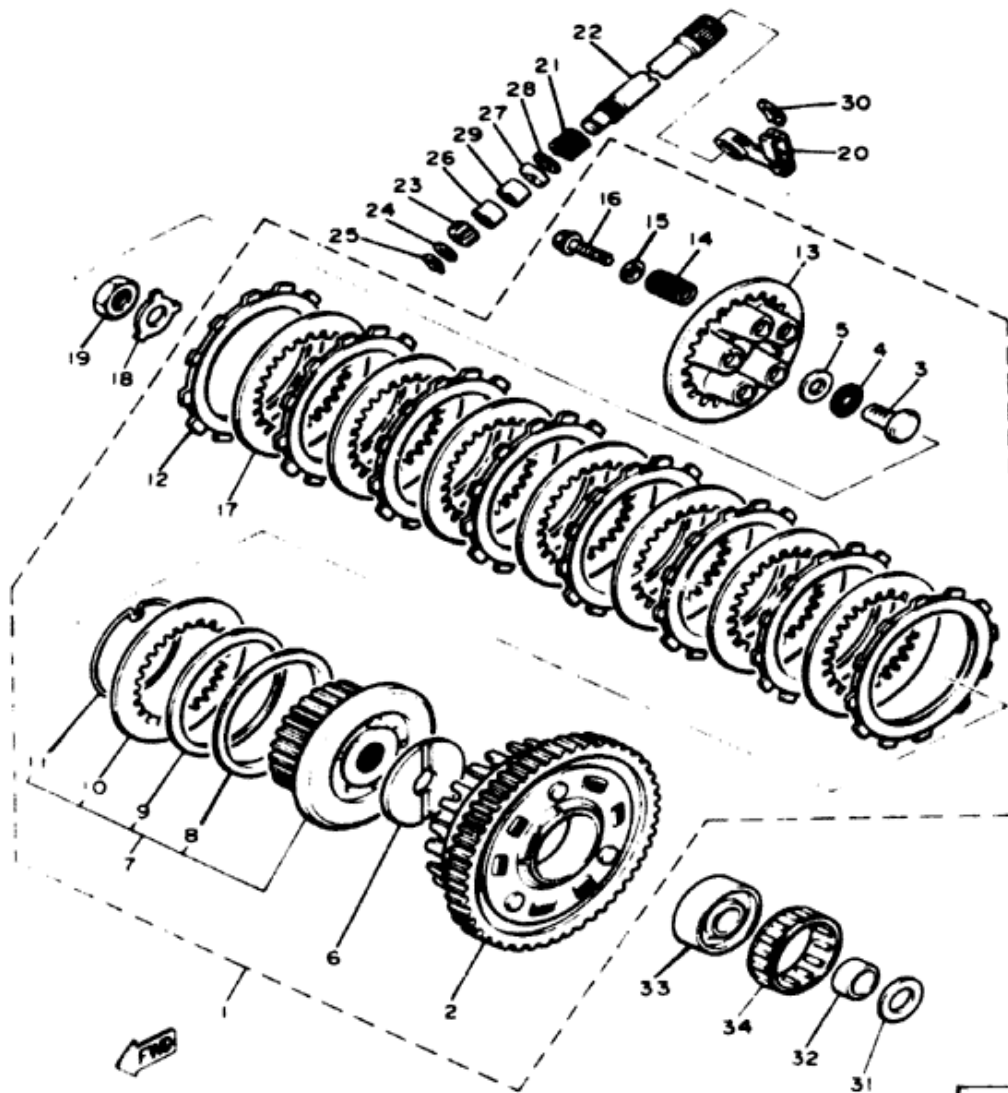
CLUTCH



Ref. No.	Part Number	Description	Qty.
1	4H7-16300-10-00	CLUTCH ASS'Y	1
2	4H7-16150-10-00	PRIMARY DRIVEN GEAR COMP. (97T)	1
3	4H7-16356-00-00	ROD, push 1	1
4	93340-21505-00	BEARING	1
5	90201-151A7-00	WASHER, plate	1
6	4H7-16154-00-00	PLATE, thrust 1	1
7	4H7-16370-00-00	CLUTCH BOSS ASS'Y	1
8	1J7-16384-00-00	PLATE, seat	1
9	1J7-16383-01-00	SPRING, clutch boss	1
10	168-16324-00-00	PLATE, clutch 1	1
11	1J7-16385-00-00	RING, clutch boss	1
12	4H7-16321-00-00	PLATE, friction	8
13	4H7-16351-00-00	PLATE, pressure 1	1
14	90501-23598-00	SPRING, compression	5
15	90201-061A5-00	WASHER, plate	5
16	95821-06025-00	BOLT, flange	5
17	4H7-16325-00-00	PLATE, clutch 2	7
18	90215-20170-00	WASHER, lock	1
19	90170-20257-00	NUT	1

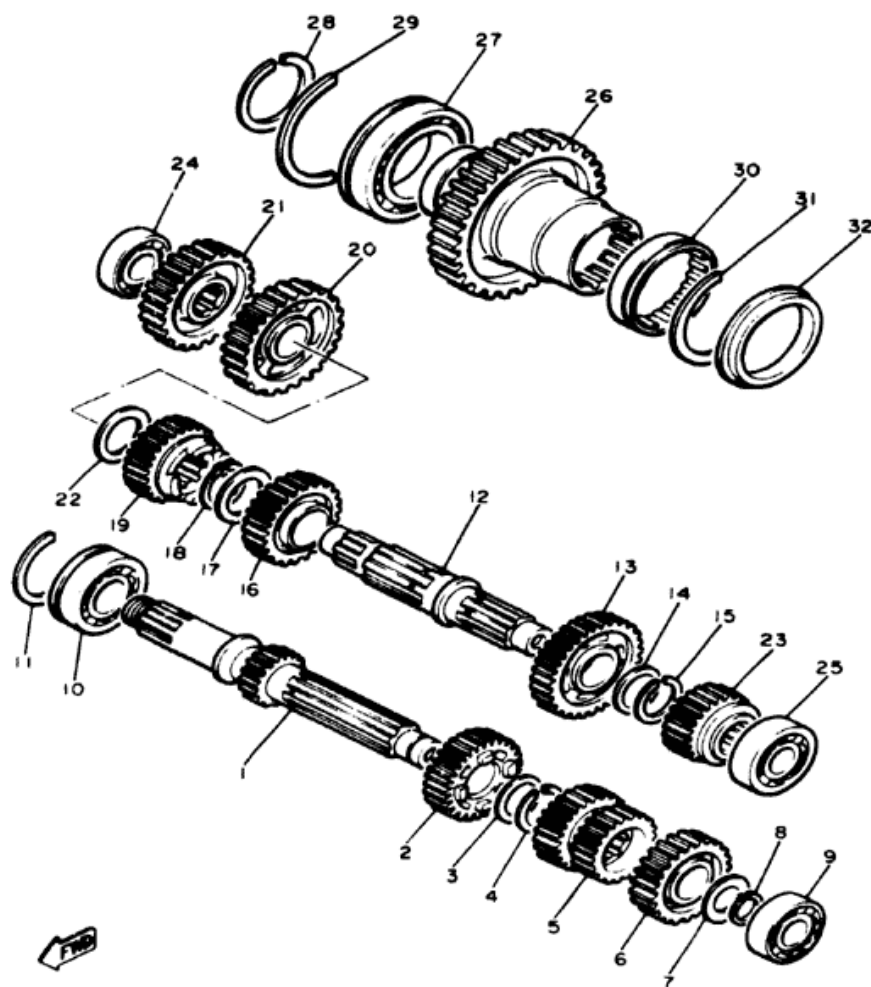
Clutch Friction Plate Thickness Std ~ Min	3.0 ~ 2.8mm
Clutch Spring Length Std ~ Min	40.1 ~ 39.1mm
Clutch Nut	20 x 1.0 7.0 m/kg

CLUTCH



Ref. No.	Part Number	Description	Qty.
20	4W5-16340-00-00	PUSH LEVER ASS'Y	1
21	4W5-16345-00-00	SPRING, return	1
22	4W5-16382-00-00	AXLE, push lever	1
23	4H7-16398-00-00	PINION, release (16T)	1
24	92901-08600-00	WASHER, plate	1
25	93430-07012-00	CIRCLIP	1
26	93317-11020-00	BEARING, cylindrical	1
27	93102-12224-00	OIL SEAL	1
28	4W5-16144-00-00	WASHER, plate	1
29	93315-11206-00	BEARING	1
30	4W5-16328-00-00	CIRCLIP	1
31	2K7-16154-00-00	PLATE, thrust 1	1
32	90387-252A8-00	COLLAR	1
33	4H7-16181-00-00	SPACER 1	1
34	93310-365H3-00	BEARING, cylindrical	1

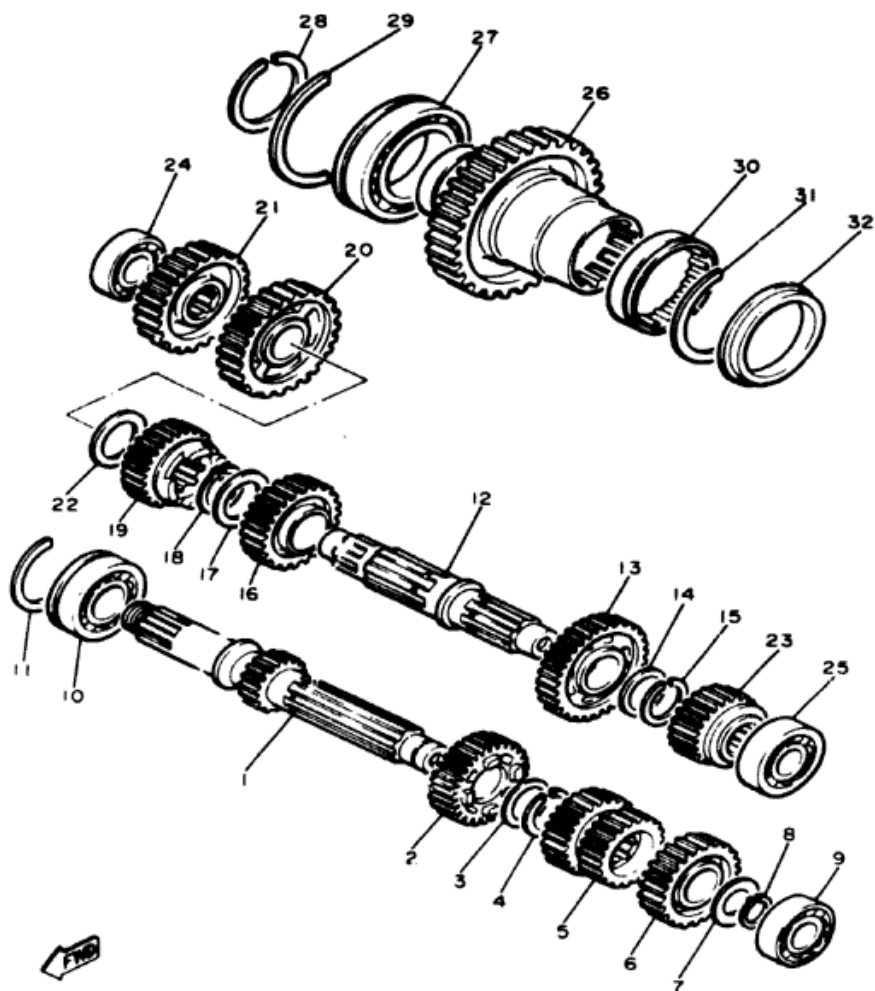
Clutch Friction Plate Thickness Std ~ Min	3.0 ~ 2.8mm
Clutch Spring Length Std ~ Min	40.1 ~ 39.1mm
Clutch Nut	20 x 1.0 7.0 m·kg



TRANSMISSION

Ref. No.	Part Number	Description	Qty.	Remarks
1	4H7-17401-00-00	MAIN AXLE ASS'Y (16T)	1	
2	4H7-17141-00-00	GEAR, 4th pinion (30T)	1	
3	90209-22191-00	WASHER	1	
4	93440-25019-00	CIRCLIP (93440-25008)	1	
5	4H7-17121-00-00	GEAR, 2nd/3rd pinion (20/26T)	1	
6	4H7-17151-00-00	GEAR, 5th pinion (32T)	1	
7	90201-20276-00	WASHER, plate	1	
8	93410-20009-00	CIRCLIP	1	
9	93306-20434-00	BEARING (B6204)	1	
10	93306-30528-00	BEARING (B6305Z)	1	
11	278-17424-00-00	CIRCLIP 1	1	
12	4H7-17402-00-00	DRIVE AXLE ASS'Y	1	
	4H7-17402-01-00	DRIVE AXLE ASS'Y	1	002134~
13	4H7-17221-00-00	GEAR, 2nd wheel (30T)	1	
	4H7-17221-01-00	GEAR, 2nd wheel (30T)	1	
	4H7-17221-01-00	GEAR, 2nd wheel (30T)	1	002134~
14	90209-22191-00	WASHER	1	
15	93440-25019-00	CIRCLIP (93440-25008)	1	
16	4H7-17231-00-00	GEAR, 3rd wheel (30T)	1	
	4H7-17231-01-00	GEAR, 3rd wheel (30T)	1	002134~
17	90209-25196-00	WASHER	1	

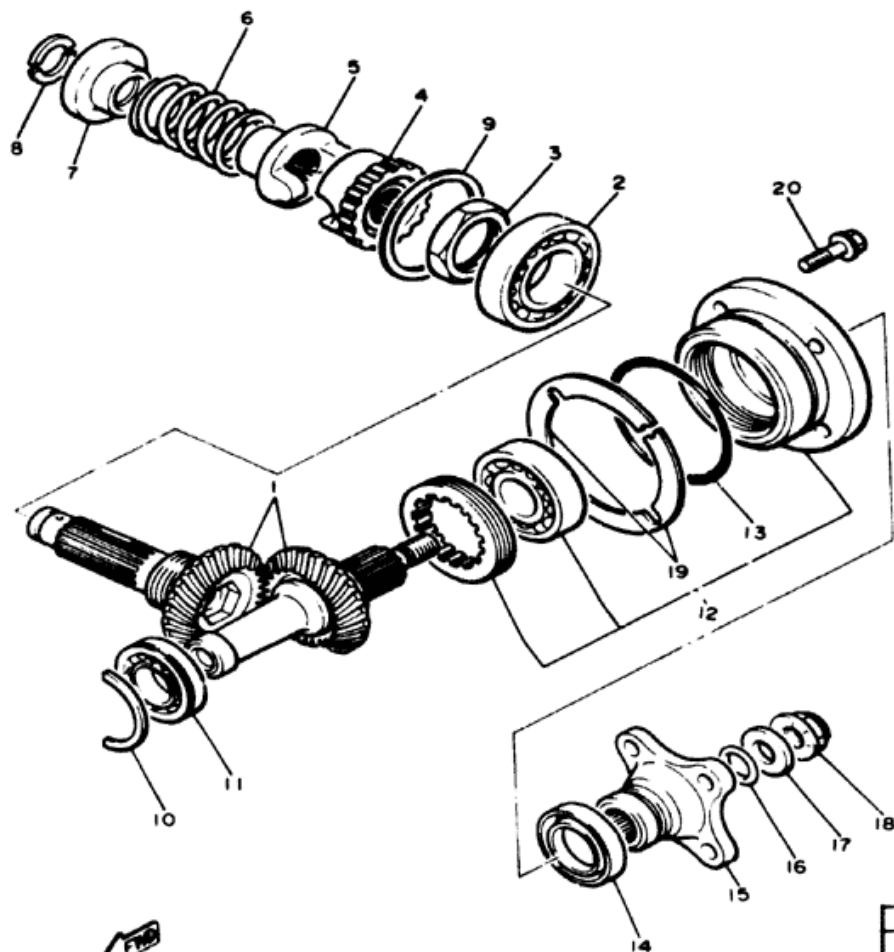
TRANSMISSION - Oil Type / Qty Chg / Qty Reassemble	See ENGINE Above
Primary Drive Type / Teeth / Ratio	Spur Gears / 97-58 / 1.672
Secondary Drive Type / Teeth / Chain	Shaft Drive / 48-36 x 18-18 x 32-11 / 2



TRANSMISSION

Ref. No.	Part Number	Description	Qty.	Remarks
18	93440-28062-00	CIRCLIP	1	
19	4H7-17241-00-00	GEAR, 4th wheel (28T)	1	
20	4H7-17211-01-00	GEAR, 1st wheel (35T)	1	
21	4H7-17582-00-00	GEAR, middle drive (36T)	1	
22	90201-243A2-00	WASHER, plate	1	
23	4H7-17251-00-00	GEAR, 5th wheel (26T)	1	
	4H7-17251-01-00	GEAR, 5th wheel (26T)	1	002134~
24	93306-30301-00	BEARING (B6303)	1	
25	93306-30425-00	BEARING (83A581A)	1	
26	4H7-17583-00-00	GEAR, middle driven (49T)	1	
27	93306-91101-00	BEARING (B6911)	1	
28	93410-55057-00	CIRCLIP	1	
29	93440-80082-00	CIRCLIP	1	
30	93311-36042-00	BEARING, cylindrical	1	
31	93440-72049-00	CIRCLIP	1	
32	93104-60066-00	OIL SEAL	1	

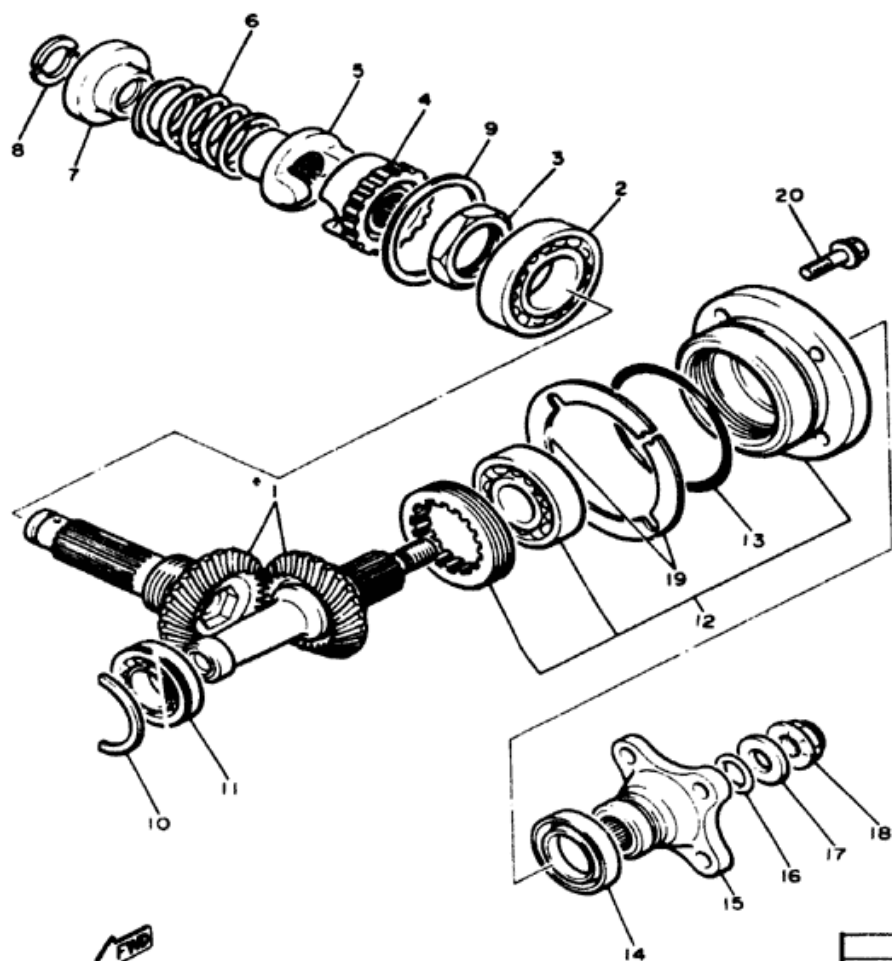
TRANSMISSION - Oil Type / Qty Chg / Qty Reassemble	See ENGINE Above
Primary Drive Type / Teeth / Ratio	Spur Gears / 97-68 / 1.672
Secondary Drive Type / Teeth / Chain	Shaft Drive / 48-36 x 19-18 x 32-11 / 8



MIDDLE DRIVE GEAR

Ref. No.	Part Number	Description	Qty.	Remarks
1	4H7-W1751-00-00	MIDDLE GEAR SET	1	
2	93306-20709-00	BEARING (B6207).....	1	
3	90179-34304-00	NUT.....	1	
4	4H7-17526-01-00	CAM, drive.....	1	
5	4H7-17527-00-00	CAM, driven.....	1	
6	90501-65575-00	SPRING, compression	1	
7	4H7-17524-00-00	HOLDER.....	1	
8	3H5-17529-00-00	WASHER, thrust	2	
9	4H7-17537-00-15	SHIM, thrust (0.15T).....	1	U.R.
	4H7-17537-00-20	SHIM, thrust (0.20T).....	1	U.R.
	4H7-17537-00-30	SHIM, thrust (0.30T).....	1	U.R.
	4H7-17537-00-40	SHIM, thrust (0.40T).....	1	U.R.
	4H7-17537-00-50	SHIM, thrust (0.50T).....	1	U.R.
10	93440-47081-00	CIRCLIP	1	
11	93306-00508-00	BEARING (B6005).....	1	
12	4H7-W1752-00-00	HOUSING COMP	1	
13	93210-71360-00	O-RING.....	1	

Final Gear Case Capacity	200cc
Gear Case Lubricant: Temp. Above 5°C (40°F)	SAE 80 API Hypoid Gear Oil GL-4
Temp. Below 15°C (60°F)	SAE 80 API Hypoid Gear Oil GL-4
All Weather Conditions	SAE 80 API Hypoid Gear Oil GL-4

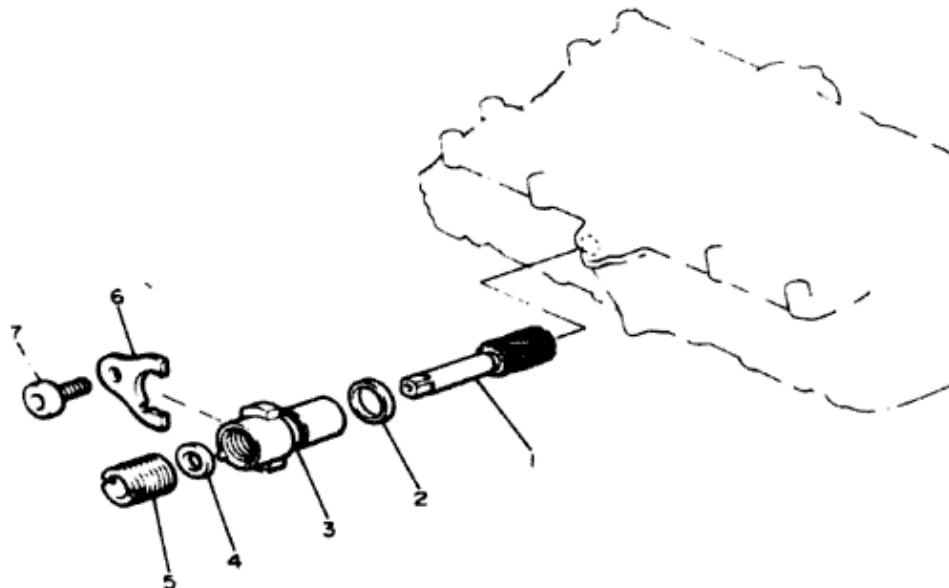


MIDDLE DRIVE GEAR

Ref. No.	Part Number	Description	Qty.	Remarks
14	93101-35097-00	OIL SEAL	1	
15	4H7-17555-00-00	FLANGE, middle gear	1	
16	93210-14359-00	O-RING	1	
17	90201-14633-00	WASHER, plate	1	
18	90179-14317-00	NUT	1	
19	4H7-17531-00-10	SHIM, pinion (0.10T)	2	U.R.
	4H7-17531-00-15	SHIM, pinion (0.15T)	2	U.R.
	4H7-17531-00-20	SHIM, pinion (0.20T)	2	U.R.
	4H7-17531-00-30	SHIM, Pinion (0.30T)	2	U.R.
	4H7-17531-00-40	SHIM, pinion (0.40T)	2	U.R.
	4H7-17531-00-50	SHIM, pinion (0.50T)	2	U.R.
20	95821-08030-00	BOLT, flange.	4	

Final Gear Case Capacity	200cc
Gear Case Lubricant: Temp. Above 5°C (40°F)	SAE 80 API Hypoid Gear Oil GL-4
Temp. Below 15°C (60°F)	SAE 80 API Hypoid Gear Oil GL-4
All Weather Conditions	SAE 80 API Hypoid Gear Oil GL-4

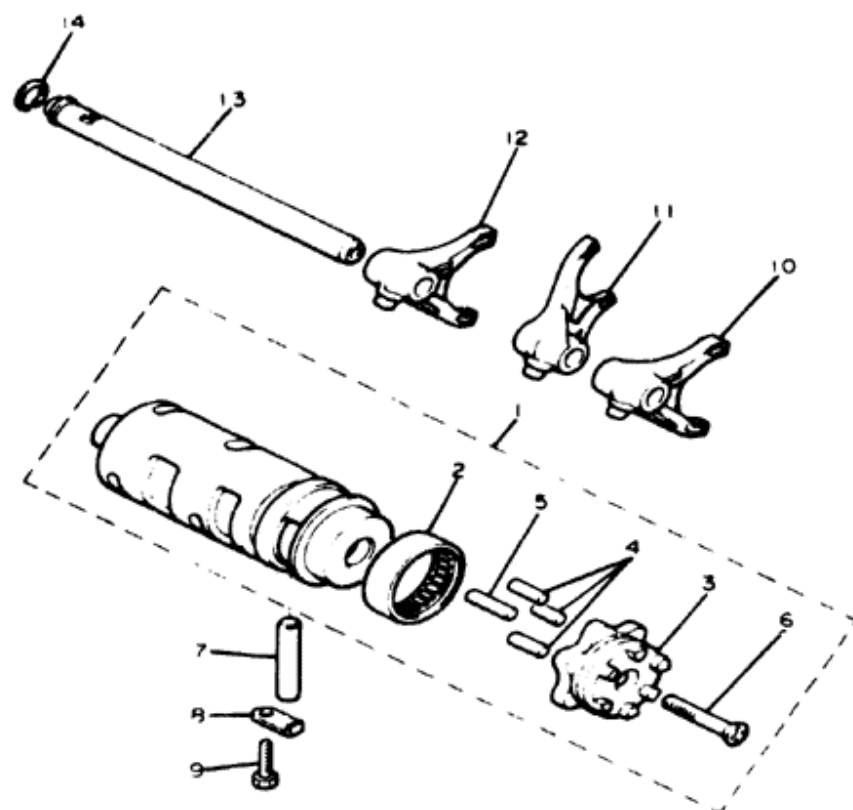
TACHOMETER GEAR

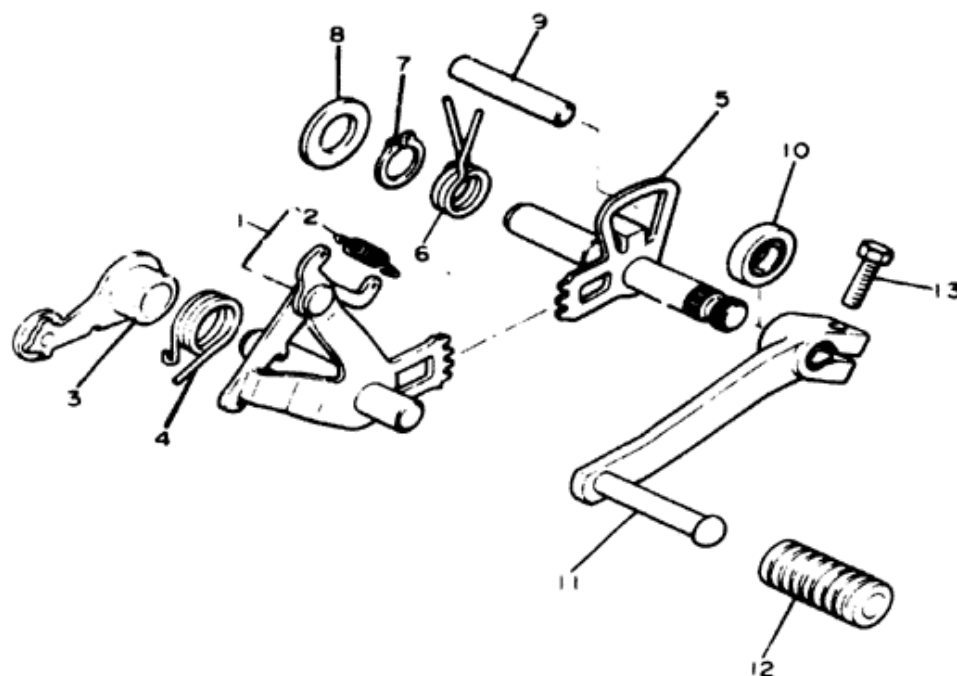


Ref. No.	Part Number	Description	Qty.
1	4H7-17841-00-00	GEAR, driven	1
2	93210-11437-00	O-RING	1
3	4H7-17811-01-00	HOUSING, tachometer gear.....	1
4	93104-07036-00	OIL SEAL	1
5	256-17848-00-00	ADAPTER	1
6	4W5-17812-00-00	STOPPER	1
7	91316-06012-00	BOLT	1

SHIFT CAM - FORK

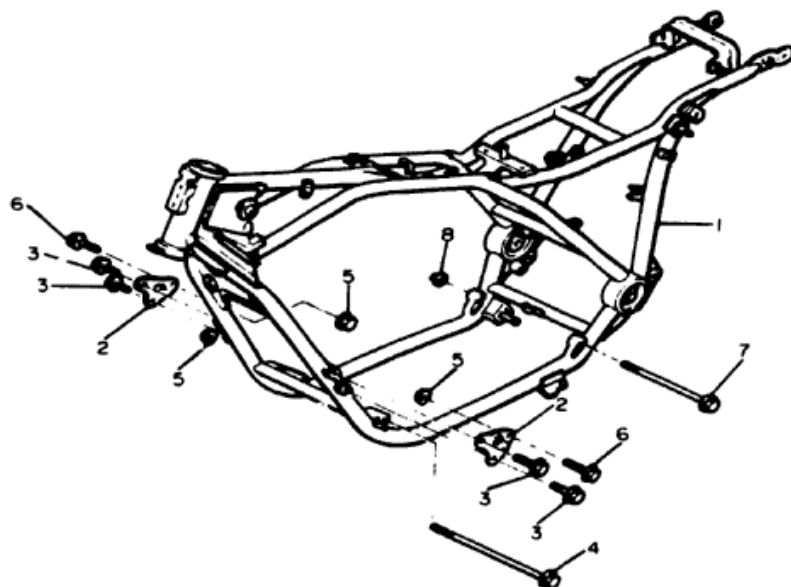
Ref. No.	Part Number	Description	Qty.
1	4H7-18540-00-00	SHIFT CAM ASS'Y	1
2	93315-23612-00	. BEARING, cylindrical.....	1
3	4H7-18185-00-00	. SEGMENT.....	1
4	93604-18092-00	. PIN, dowel	3
5	93604-20156-00	. PIN, dowel	1
6	98701-05035-00	. SCREW, flat head.....	1
7	93608-43157-00	PIN, dowel	1
8	2H7-15531-00-00	PLATE, stopper	1
9	97301-06016-00	BOLT (97301-06015)	1
10	4H7-18511-01-00	FORK, shift 1	1
11	4H7-18512-01-00	FORK, shift 2	1
12	4H7-18513-01-00	FORK, shift 3	1
13	4H7-18531-00-00	BAR, shift fork guide 1	1
14	93440-11029-00	CIRCLIP	1





SHIFT SHAFT - PEDAL

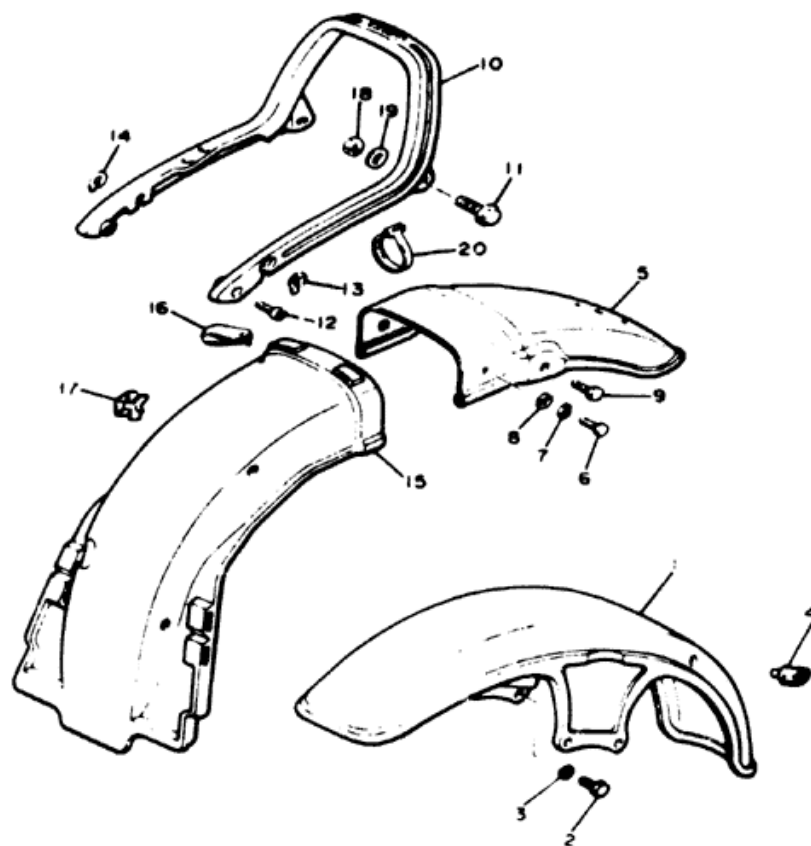
Ref. No.	Part Number	Description	Qty.
1	4H7-18101-00-00	SHIFT SHAFT ASS'Y	1
2	90506-08227-00	. SPRING, tension	1
3	4H7-18140-00-00	STOPPER LEVER ASS'Y	1
4	90508-29530-00	SPRING, torsion (90508-29448)	1
5	4W5-18120-00-00	SHIFT LEVER ASS'Y.....	1
6	99999-01179-00	SPRING, torsion (90508-32449)	1
	90508-32535-00	. SPRING, torsion.....	1
	90387-124F4-00	. COLLAR.....	1
7	93430-10016-00	CIRCLIP	1
8	90201-12588-00	WASHER, plate	1
9	93608-50158-00	PIN, dowel	1
10	93102-12106-00	OIL SEAL	1
11	4W5-18111-00-00	PEDAL, shift.....	1
12	132-18113-01-00	COVER, shift pedal	1
13	97316-06020-00	BOLT.....	1



FRAME

Ref. No	Part Number	Description	Qty.	Remarks
1	99999-01341-00	FRAME COMP. (4W5-21110-00-98)	1	Low Gloss Blk
	4W5-21110-02-98	. FRAME COMP	1	
	4H7-2134Y-00-00	. STAY, horn	1	
	97306-08016-00	. BOLT	2	
	92906-08100-00	. WASHER, spring	2	
2	4H7-21315-00-00	STAY, engine 2	2	
3	90105-08177-00	BOLT, washer based	4	
4	90105-10178-00	BOLT, washer based	1	
5	90179-10321-00	NUT.....	3	
6	90105-10179-00	BOLT, washer based	2	
7	90105-12180-00	BOLT, washer based	1	
8	90179-12323-00	NUT.....	1	

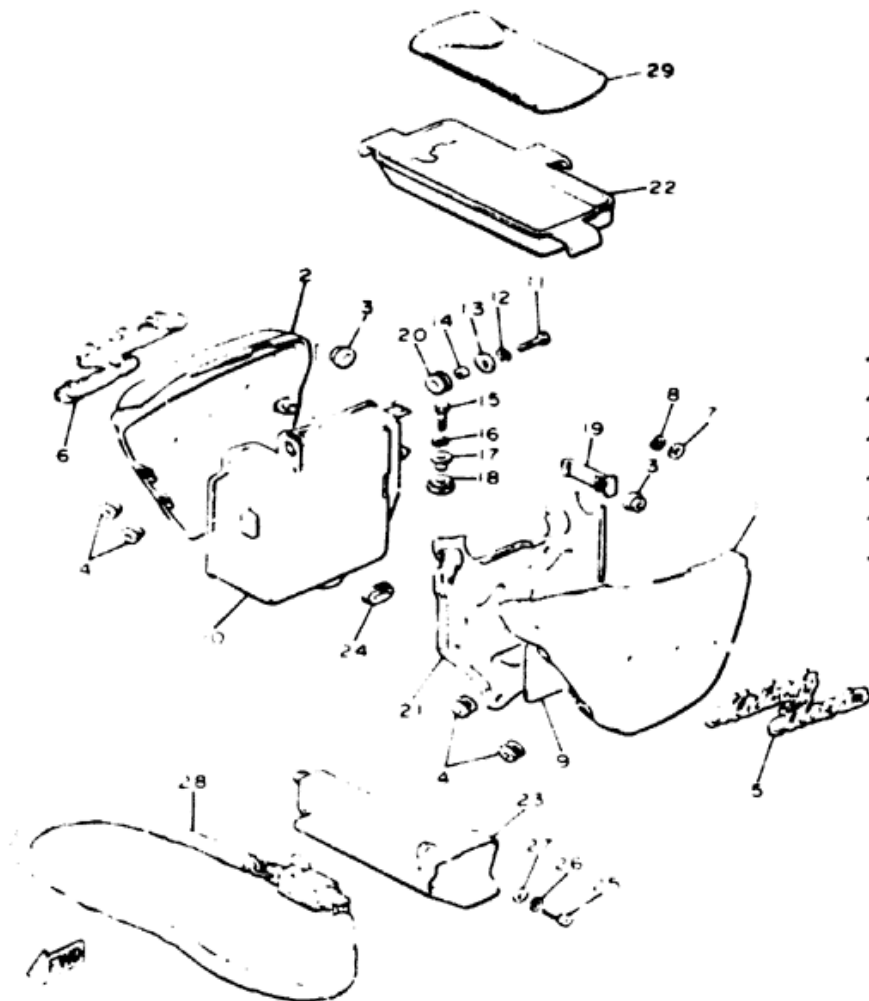
MODEL - IBM I.D. NUMBER		XJ650LH	4W5
Initial Engine Number / Frame Number		4W5-000001 / 4W5-000001	
Engine Mounting Bolts: Front, Upper		10 x 1.25: 4.0 m-kg	
Front, Lower		10 x 1.25: 4.0 m-kg	
Rear		12 x 1.25: 7.0 m-kg	



FRONT FENDER - REAR FENDER

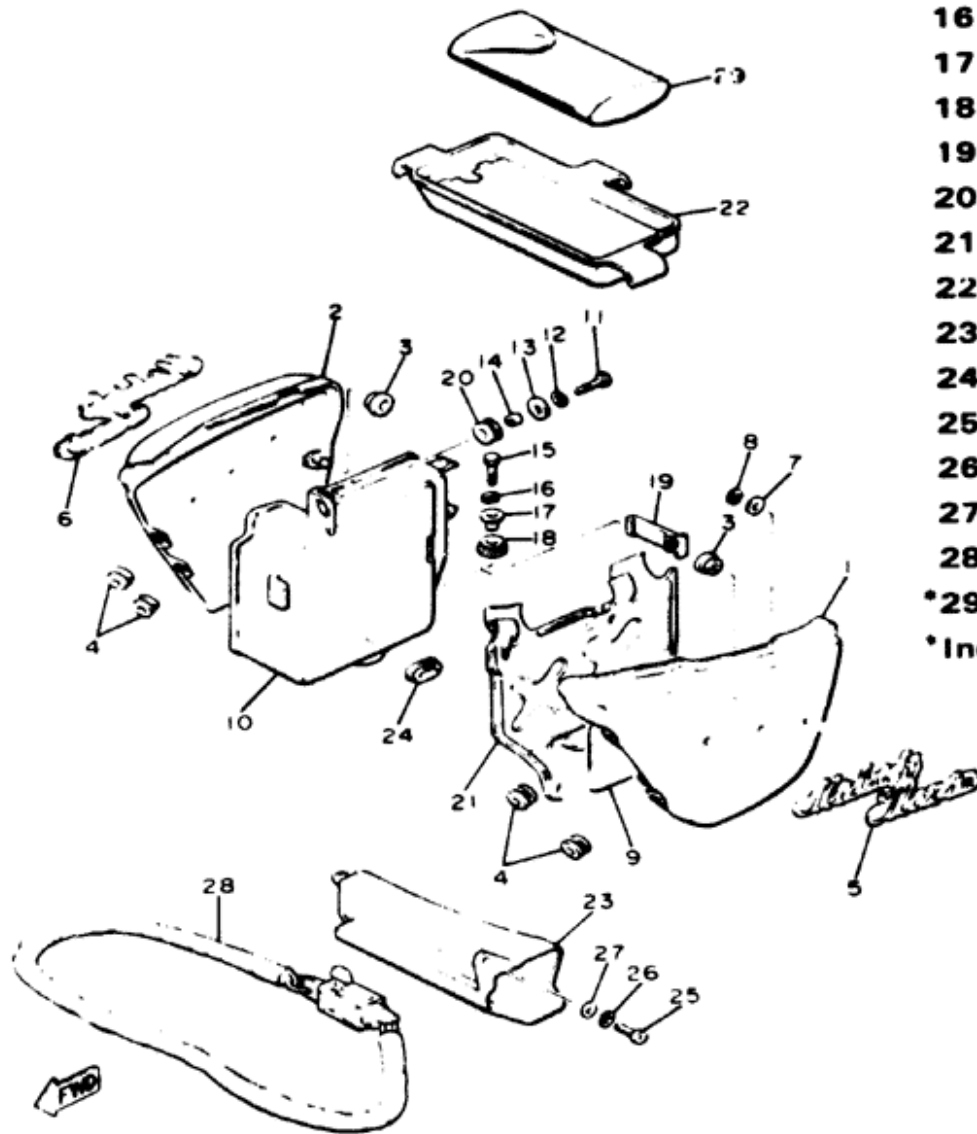
Ref. No.	Part Number	Description	Qty.	Remarks
1	4H7-21510-01-6G	FRONT FENDER COMP.	1	New Yamaha Blk
2	97306-08020-00	BOLT.	4	
3	92906-08100-00	WASHER, spring.	4	
4	1A0-21518-00-00	HOLDER, cable.	1	
5	4H7-21610-00-6G	REAR FENDER COMP.	1	New Yamaha Blk
6	97321-06012-00	BOLT.	2	
7	92903-06100-00	WASHER, spring (92903-06100)	2	
8	92901-06600-00	WASHER, plate.	2	
9	97326-10035-00	BOLT.	2	
10	4W5-21645-00-00	STAY, rear.	1	
11	95821-10025-00	BOLT, flange.	2	
12	91312-08030-00	BOLT.	2	
13	4W5-22243-00-00	WASHER 1.	1	
14	4W5-22244-00-00	WASHER 2.	1	
15	4H7-21629-00-00	GUARD, mud.	1	
16	90464-12027-00	CLAMP.	1	
17	90464-16021-00	CLAMP.	1	
18	95380-10600-00	NUT.	2	
19	92903-10200-00	WASHER (92902-10200).	2	
20	3L8-83936-00-00	BAND, switch cord.	1	

SIDE COVER - TOOL



Ref. No.	Part Number	Description	Qty.	Remarks
1	4W5-21711-00-6G	COVER, side (L.H)	1	New Yamaha Blk
2	4W5-21721-00-6G	COVER, side (R.H)	1	New Yamaha Blk
3	90480-01141-00	GROMMET	2	
4	90480-12053-00	GROMMET	4	
5	4W5-21781-00-00	EMBLEM 1	1	
6	4W5-21782-00-00	EMBLEM 2	1	
7	90202-04003-00	WASHER, plate	6	
8	90183-04005-00	NUT, spring	6	
9	4H7-21683-10-00	PLATE, specification	1	
10	4H7-21240-01-00	BOX COMP	1	
11	97321-06025-00	BOLT	1	
12	92903-06100-00	WASHER, spring (92902-06100)	1	
13	90201-06407-00	WASHER, plate	1	
14	90387-060A7-00	COLLAR	1	
15	97321-08025-00	BOLT (97322-08025)	1	

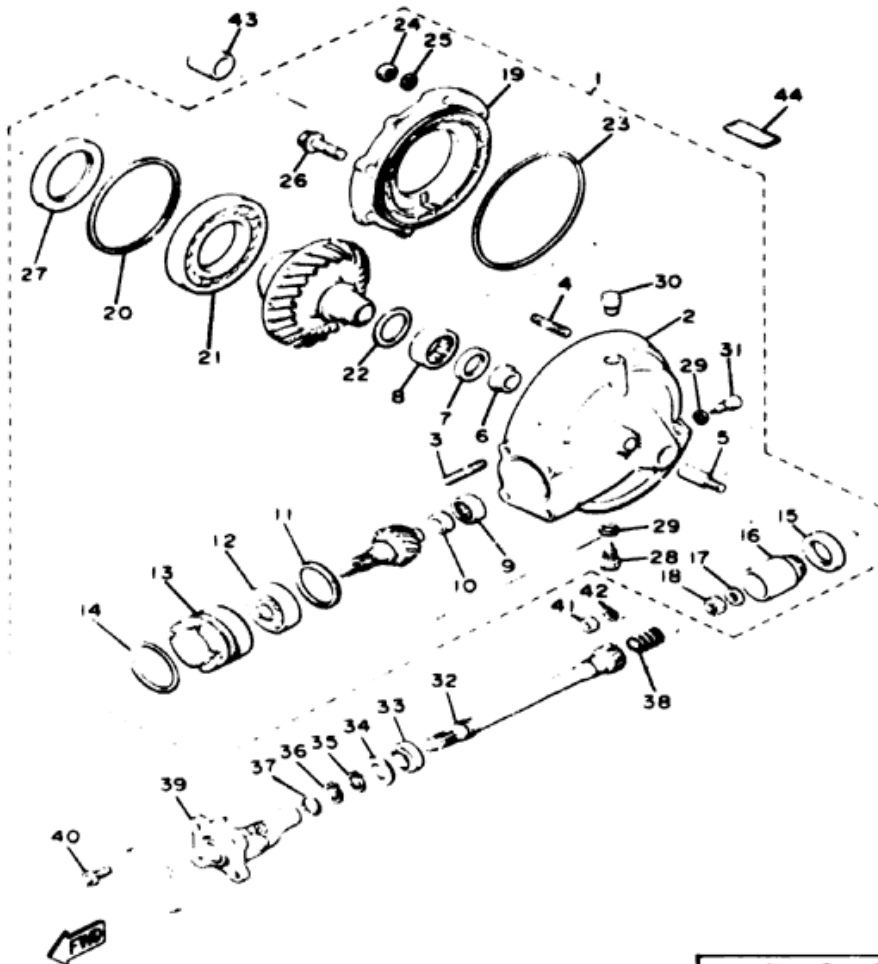
SIDE COVER - TOOL



Ref. No.	Part Number	Description	Qty.
16	92903-08100-00	WASHER, spring (92902-08100)	1
17	90387-09617-00	COLLAR	1
18	4H7-21746-00-00	DAMPER	1
19	4H7-2175R-00-00	HOOX, bank	1
20	90480-16233-00	GROMMET	1
21	4H7-21243-01-00	PLATE, bridge	1
22	4H7-21170-00-00	BOX COMP	1
23	4H7-21258-00-00	BOX	1
24	90480-22084-00	GROMMET	1
25	92503-06020-00	SCREW, panhead (92501-06020)	1
26	92903-06100-00	WASHER, spring (92902-06100)	1
27	90201-06557-00	WASHER, plate	1
28	4W5-W2171-00-00	WHEEL LOCK ASS'Y	1
*29	4H7-28100-00-00	TOOL KIT (4H7-28100-10)	1

* Indicates new part numbers activated from March, 1983.

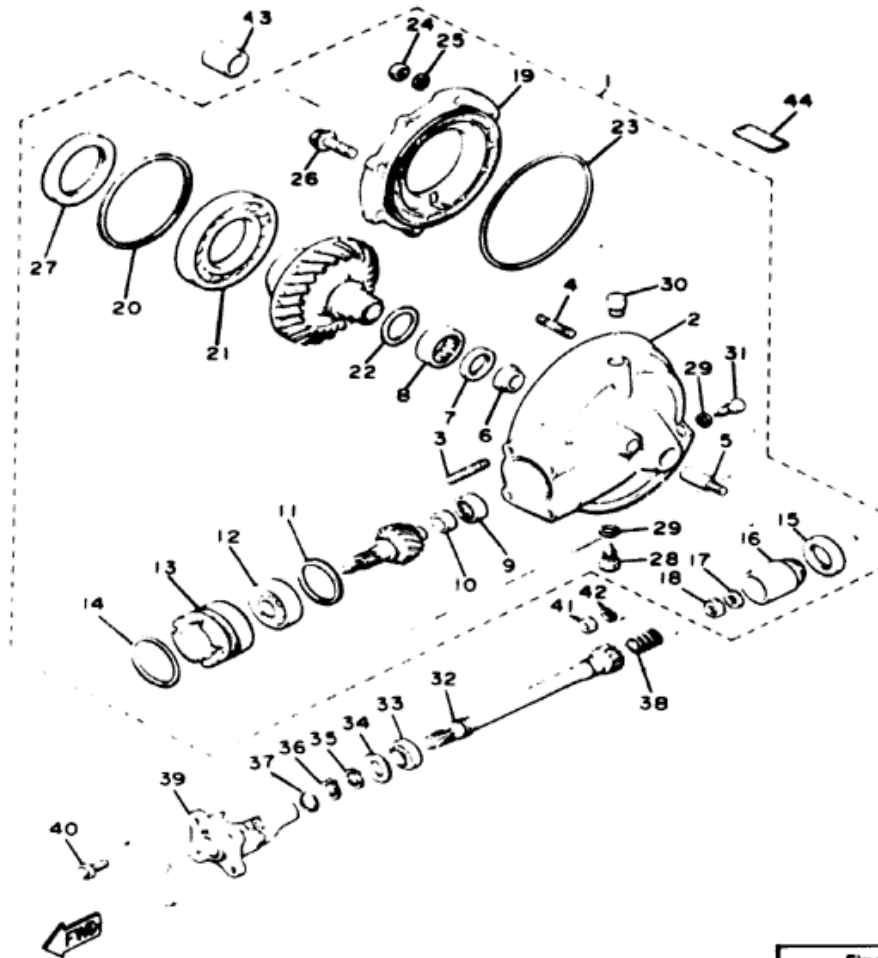
DRIVE SHAFT



Ref. No.	Part Number	Description	Qty.	Remarks
1	4W5-46101-00-00	REAR AXLE GEAR CASE ASS'Y	1	
2	4W5-46151-00-00	HOUSING, drive shaft	1	
3	90116-10342-00	BOLT, stud	4	
4	90116-08247-00	BOLT, stud	6	
5	90116-10249-00	BOLT	1	
6	4H7-46153-00-00	COLLAR, guide	1	
7	93101-30084-00	OIL SEAL	1	
8	93311-43729-00	BEARING, cylindrical	1	
9	93317-41510-00	BEARING, cylindrical	1	
10	2H7-46122-00-00	RACE, inner	1	
11	1J7-17537-Y0-15	SHIM, thrust (0.15T)	1	U.R.
	1J7-17537-Y0-30	SHIM, thrust (0.30T)	1	U.R.
	1J7-17537-Y0-40	SHIM, thrust (0.40T)	1	U.R.
	1J7-17537-Y0-50	SHIM, thrust (0.50T)	1	U.R.
	1J7-17537-Y0-60	SHIM, thrust (0.60T)	1	U.R.
12	93306-30524-00	BEARING (B6305)	1	
13	4H7-46125-00-00	RETAINER, bearing	1	
14	93210-60426-00	O-RING	1	
15	93101-38098-00	OIL SEAL	1	
16	4H7-46123-00-00	COUPLING, gear	1	
17	90201-14632-00	WASHER, plate	1	

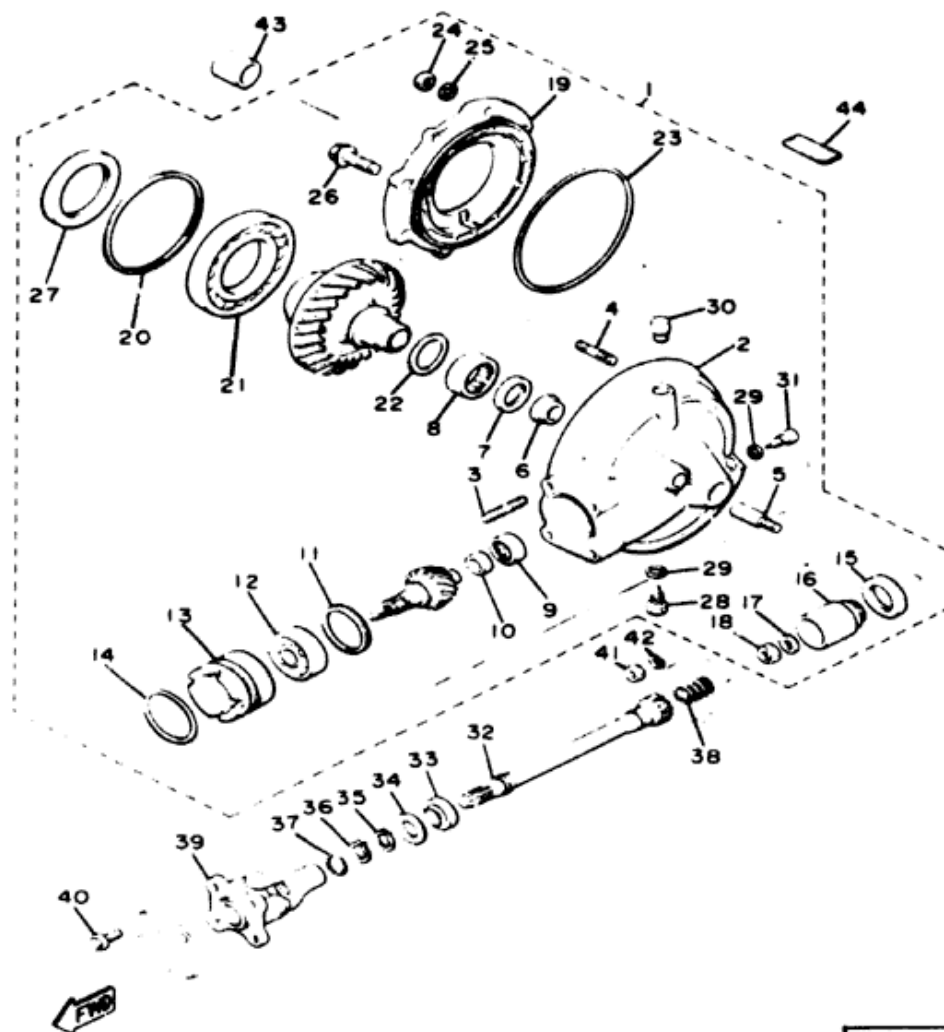
Final Gear Case Capacity	200cc
Gear Case Lubricant: Temp. Above 5°C (40°F)	SAE 80 API Hypoid Gear Oil GL-4
Temp. Below 15°C (60°F)	SAE 80 API Hypoid Gear Oil GL-4
All Weather Conditions	SAE 80 API Hypoid Gear Oil GL-4

DRIVE SHAFT



Ref. No.	Part Number	Description	Qty.	Remarks
18	90185-14070-00	NUT, self-locking	1	
19	4H7-46152-00-00	HOUSING, bearing	1	
20	1J7-46117-Y0-25	SHIM, ring gear (0.25T)	1	U.R.
	1J7-46117-Y0-30	SHIM, ring gear (0.30T)	1	U.R.
	1J7-46117-Y0-35	SHIM, ring gear (0.35T)	1	U.R.
	1J7-46117-Y0-40	SHIM, ring gear (0.40T)	1	U.R.
	1J7-46117-Y0-45	SHIM, ring gear (0.45T)	1	U.R.
	1J7-46117-Y0-50	SHIM, ring gear (0.50T)	1	U.R.
21	93316-01403-00	BEARING, cylindrical	1	
22	1J7-46118-Y0-18	WASHER, thrust (1.8T)	1	U.R.
	1J7-46118-Y0-19	WASHER, thrust (1.9T)	1	U.R.
	1J7-46118-Y0-20	WASHER, thrust (2.0T)	1	U.R.
	1J7-46118-Y0-21	WASHER, thrust (2.1T)	1	U.R.
	4H7-46118-00-14	WASHER, thrust (1.4T)	1	U.R.
	4H7-46118-00-15	WASHER, thrust (1.5T)	1	U.R.
	4H7-46118-00-16	WASHER, thrust (1.6T)	1	U.R.
	4H7-46118-00-17	WASHER, thrust (1.7T)	1	U.R.
	4H7-46118-00-22	WASHER, thrust (2.2T)	1	U.R.
	4H7-46118-00-23	WASHER, thrust (2.3T)	1	U.R.
23	93211-44348-00	O-RING	1	
24	95311-08600-00	NUT	6	

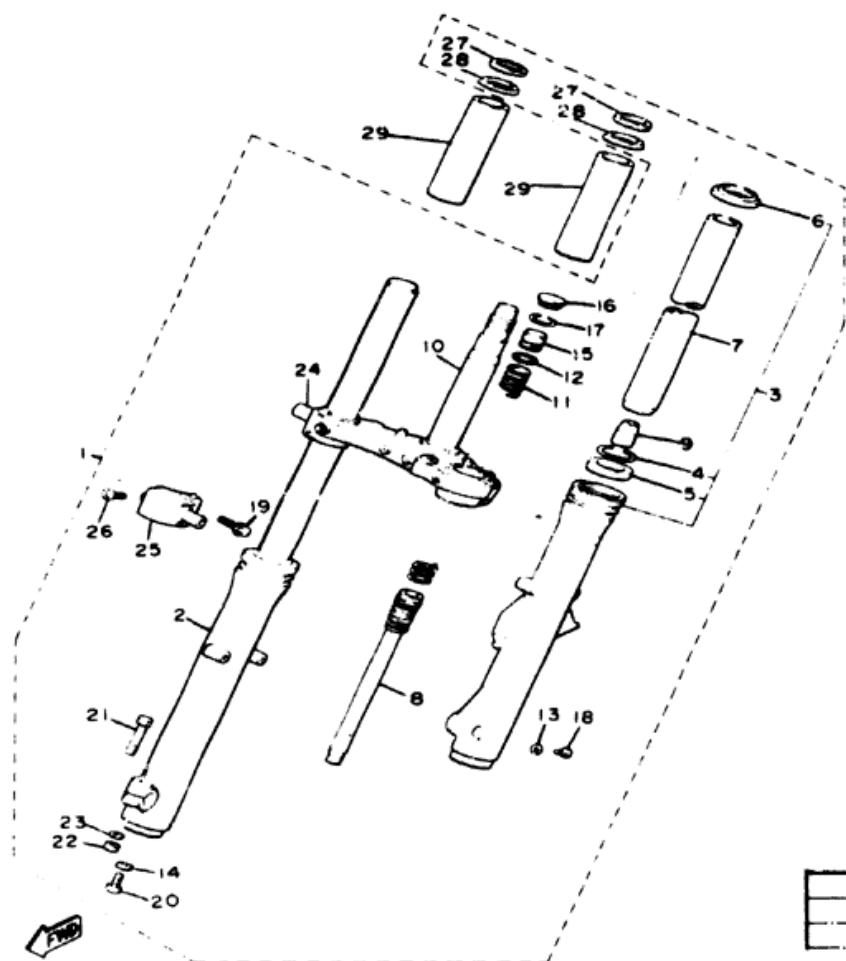
Final Gear Case Capacity	200cc
Gear Case Lubricant: Temp. Above 5°C (40°F)	SAE 80 API Hypoid Gear Oil GL-4
Temp. Below 15°C (60°F)	SAE 80 API Hypoid Gear Oil GL-4
All Weather Conditions	SAE 80 API Hypoid Gear Oil GL-4



DRIVE SHAFT

Ref. No.	Part Number	Description	Qty.
25	92901-08700-00	WASHER, wave	6
26	95821-10025-00	BOLT, flange	2
27	93102-70167-00	OIL SEAL	1
28	90340-14063-00	PLUG, straight screw	1
29	214-11198-01-00	GASKET	2
30	4H3-17590-00-00	BREATHER COMP.	1
31	90340-14042-00	PLUG, straight screw	1
32	4H7-46172-00-00	SHAFT, drive	1
33	93108-23007-00	OIL SEAL	1
34	90201-231A2-00	WASHER, plate	1
35	93410-23056-00	CIRCLIP	1
36	93410-22039-00	CIRCLIP	1
37	90468-14067-00	CLIP	1
38	90501-16491-00	SPRING, compression	1
39	4H7-46180-00-00	CROSS JOINT COMP.	1
40	90105-08066-00	BOLT, washer based	4
41	95316-10600-00	NUT	4
42	92906-10100-00	WASHER, spring	4
43	90387-172A5-00	COLLAR	1
44	4H7-46181-10-00	LABEL, oil caution	1

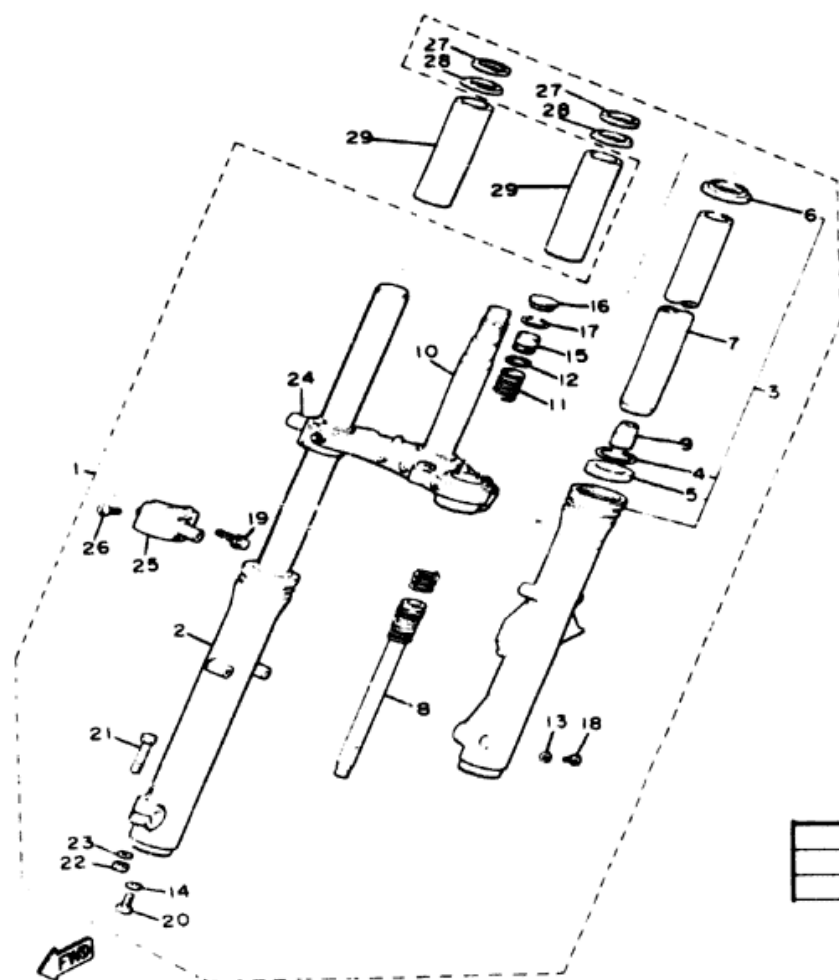
Final Gear Case Capacity	200cc
Gear Case Lubricant. Temp. Above 5°C (40°F)	SAE 80 API Hypoid Gear Oil GL-4
Temp. Below 15°C (60°F)	SAE 80 API Hypoid Gear Oil GL-4
All Weather Conditions	SAE 80 API Hypoid Gear Oil GL-4



FRONT FORK

Ref. No.	Part Number	Description	Qty.	Remarks
1	4W5-23101-00-00	FRONT FORK ASS'Y.....	1	
2	4W5-23136-00-6G	TUBE, outer 2.....	1	New Yamaha Blk
3	4W5-23126-00-6G	TUBE, outer 1.....	1	New Yamaha Blk
4	4A1-23156-00-00	CLIP, oil seal.....	2	
5	3J2-23145-00-00	OIL SEAL.....	2	
6	15R-23144-00-00	SEAL, dust (4H7-23144-00)	2	
7	4H7-23110-00-00	INNER TUBE COMP. 1.....	2	
8	4H7-23170-00-00	CYLINDER COMP., front fork	2	
9	1W1-23173-L0-00	SPINDLE, taper.....	2	
10	4H7-23340-00-00	UNDERBRACKET COMP.....	1	
11	4H7-23141-00-00	SPRING, front fork.....	2	
12	3J2-23114-00-00	O-RING.....	2	
13	122-23129-00-00	GASKET, drain plug.....	2	
14	509-23158-L0-00	GASKET.....	2	
15	3Y1-23111-00-00	BOLT, cap.....	2	
16	3Y1-23168-00-00	CAP, front fork.....	2	

Front Forks. Oil Type / Level / Qty	10 Wt. Fork Oil* / 8 / 262cc
Gas Pressure	8
Spring Length Std	506mm

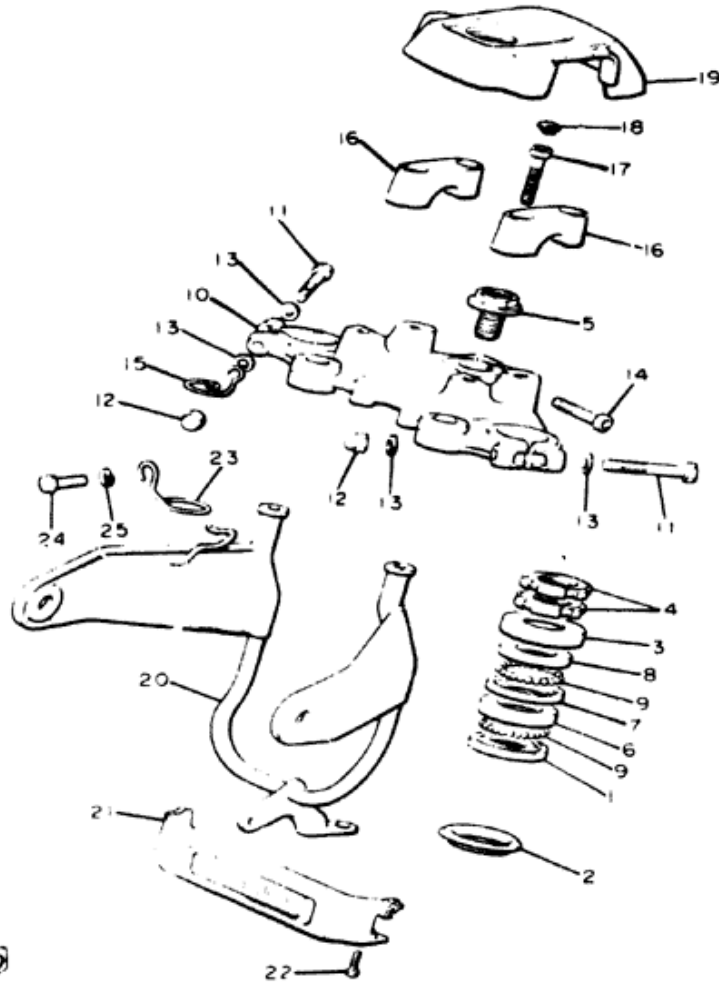


FRONT FORK

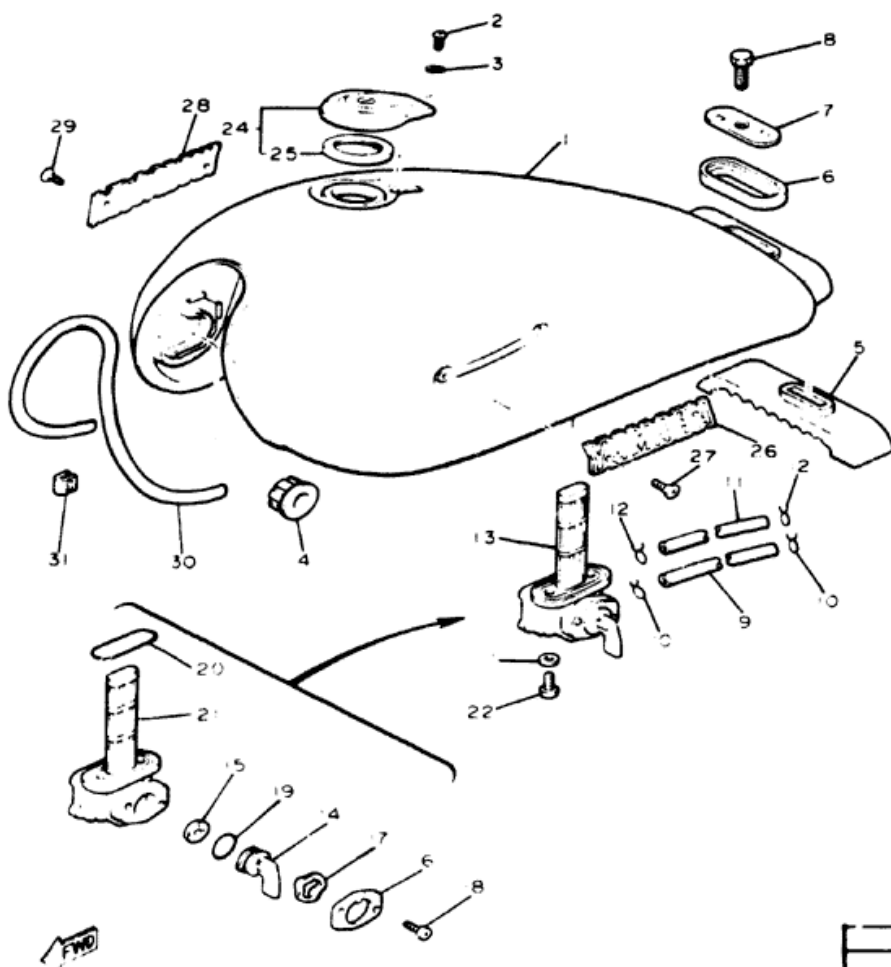
Ref. No.	Part Number	Description	Qty.	Remarks
17	3J2-23183-00-00	CIRCLIP.	2	
18	4W5-23119-00-00	PLUG, drain.	2	
19	90116-08012-00	BOLT, stud	4	
20	278-23181-50-00	BOLT, hexagon socket head . . .	2	
21	97326-08045-00	BOLT	1	
22	95316-08600-00	NUT	1	
23	92906-08100-00	WASHER, spring	1	
24	4W5-23132-00-6G	COVER, outer 2	1	New Yamaha Blk
25	4W5-23122-00-6G	COVER, outer 1	1	New Yamaha Blk
26	4H7-23181-00-00	BOLT, hexagon socket head . . .	2	
27	1T3-23163-50-00	GASKET.	2	
28	4W5-23115-00-00	GUIDE, cover upper.	2	
29	4W5-23131-00-6G	COVER, upper 2.	2	New Yamaha Blk

Front Forks: Oil Type / Level / Qty	10 Wt. Fork Oil* / \varnothing / 262cc
Gas Pressure	\varnothing
Spring Length Std	806mm

STEERING



Ref. No.	Part Number	Description	Qty.	Remarks
1	256-23411-00-00	RACE, ball 1.....	1	
2	164-23462-00-00	SEAL, steering.....	1	
3	4K0-23415-00-00	COVER, ball race 1.....	1	
4	4H3-23454-00-00	NUT, fitting 2.....	2	
5	90105-14137-00	BOLT, washer based.....	1	
6	256-23412-00-00	RACE, ball 2.....	1	
7	256-23413-00-00	RACE, ball 3.....	1	
8	256-23414-00-00	RACE, ball 4.....	1	
9	93501-04011-00	BALL.....	38	
10	4W5-23435-00-00	CROWN, handle.....	1	
11	97326-08055-00	BOLT.....	2	
12	95306-08800-00	NUT.....	2	
13	92906-08600-00	WASHER, plate.....	4	
14	91316-08040-00	BOLT.....	1	
15	4H7-23317-00-00	HOLDER, cable.....	1	
16	4H7-23441-00-98	HOLDER, handle upper.....	2	Low Gloss Blk
17	91316-08030-00	BOLT.....	4	
18	341-23469-00-00	CAP, bolt.....	4	
19	4H7-26213-00-00	COVER, upper.....	1	
20	4W5-23174-00-00	STAY, headlight.....	1	
21	4W5-23395-00-00	EMBLEM.....	1	
22	98606-05012-00	SCREW, oval head.....	2	
23	4H3-23318-00-00	HOLDER, cable 1.....	1	
24	97306-06012-00	BOLT.....	1	
25	92906-06100-00	WASHER, spring.....	1	

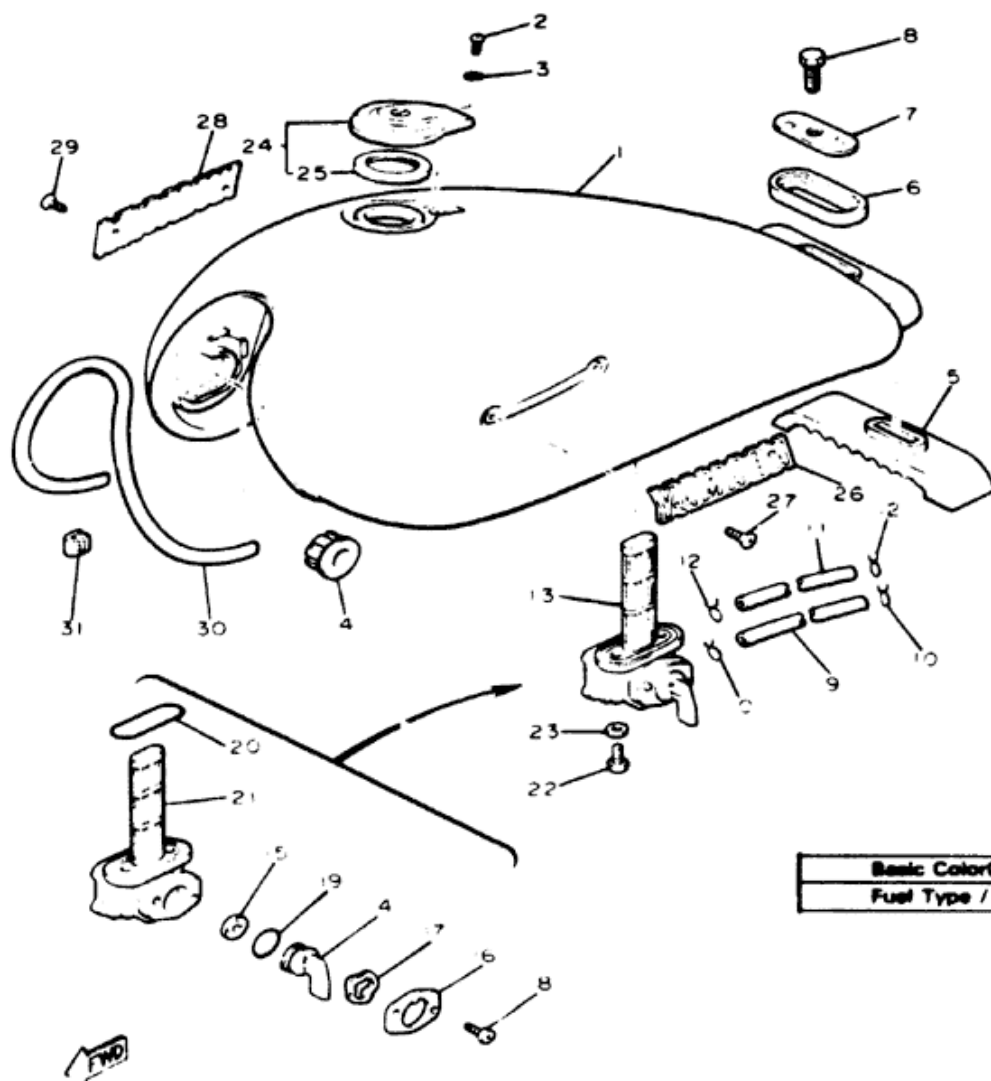


FUEL TANK

Ref. No.	Part Number	Description	Qty	Remarks
1	4H7-24110-00-6G	FUEL TANK COMP	1	New Yamaha Blk
2	98501-05010-00	SCREW, panhead (98503-05008)	1	
3	92903-05100-00	WASHER, spring (92901-05100)	1	
4	4H7-24181-00-00	DAMPER, locating 1	2	
5	4H7-24182-01-00	DAMPER, locating 2	1	
6	4H7-24183-00-00	DAMPER, locating 3	1	
7	4H7-24186-00-00	WASHER, special	1	
8	97302-08016-00	BOLT	1	
9	90445-11501-00	HOSE	1	
10	90467-10041-00	CLIP	2	
11	90445-09500-00	HOSE	1	
12	90467-08040-00	CLIP	2	
13	4W5-24500-01-00	FUEL COCK ASS'Y 1	1	
14	4W5-24524-00-00	LEVER, cock	1	
15	3H3-24523-00-00	VALVE	1	
16	4W5-24525-00-00	PLATE, lever fitting	1	
17	3H3-24518-00-00	WASHER, valve	1	
18	98506-03008-00	SCREW, pan head	2	
19	3H3-24534-00-00	O-RING	1	
20	2W6-24512-00-00	O-RING	1	
21	3Y1-24514-20-00	NET, filter 1	1	

Basic Color(s)	New Yamaha Black
Fuel Type / Fuel Tank Capacity / Reserve Capacity	Regular / 13 Ltr. (3.4 Gal.) / 3.4 Ltr. (0.9 Gal.)

FUEL TANK

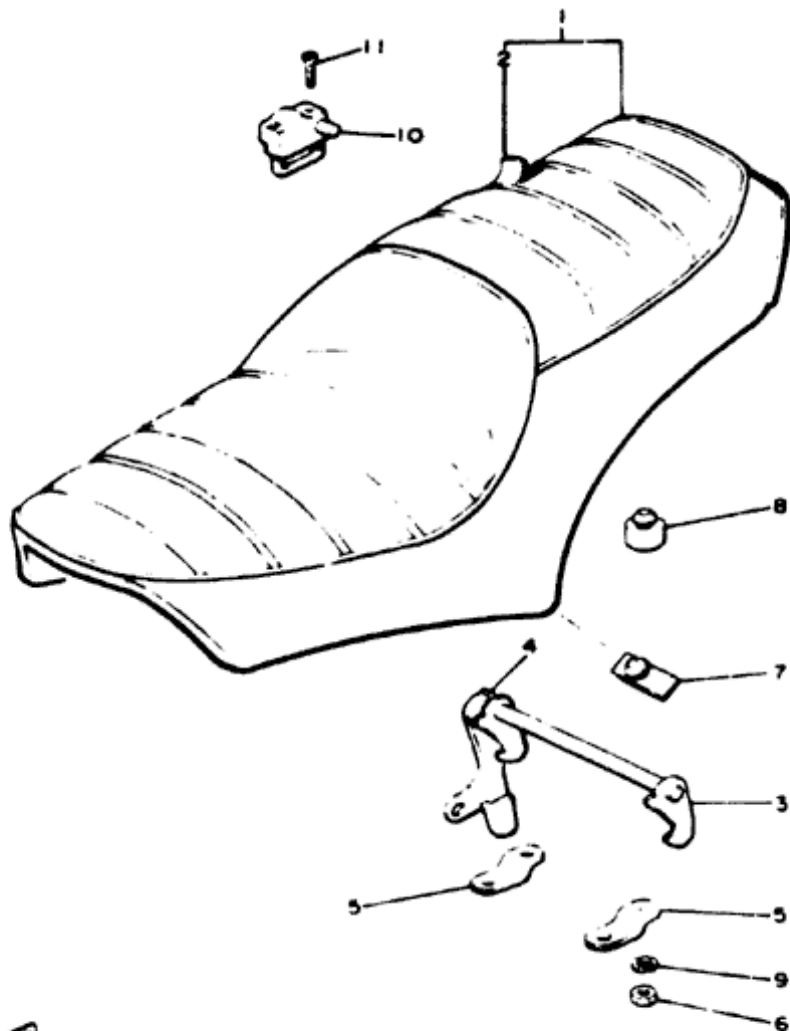


Ref. No.	Part Number	Description	Qty.
22	90157-06018-00	SCREW, pan head	2
23	90202-06010-00	WASHER, plate	2
24	4W5-24602-01-00	CAP ASS'Y	1
25	4H7-24612-00-00	GASKET, cap	1
26	4W5-24161-00-00	EMBLEM 1	1
27	90152-04006-00	SCREW, countersunk	2
28	4W5-24162-00-00	EMBLEM 2	1
29	90152-04006-00	SCREW, countersunk	2
30	4W5-24189-00-00	PLATE, mold	1
31	90468-03107-00	CLIP	5

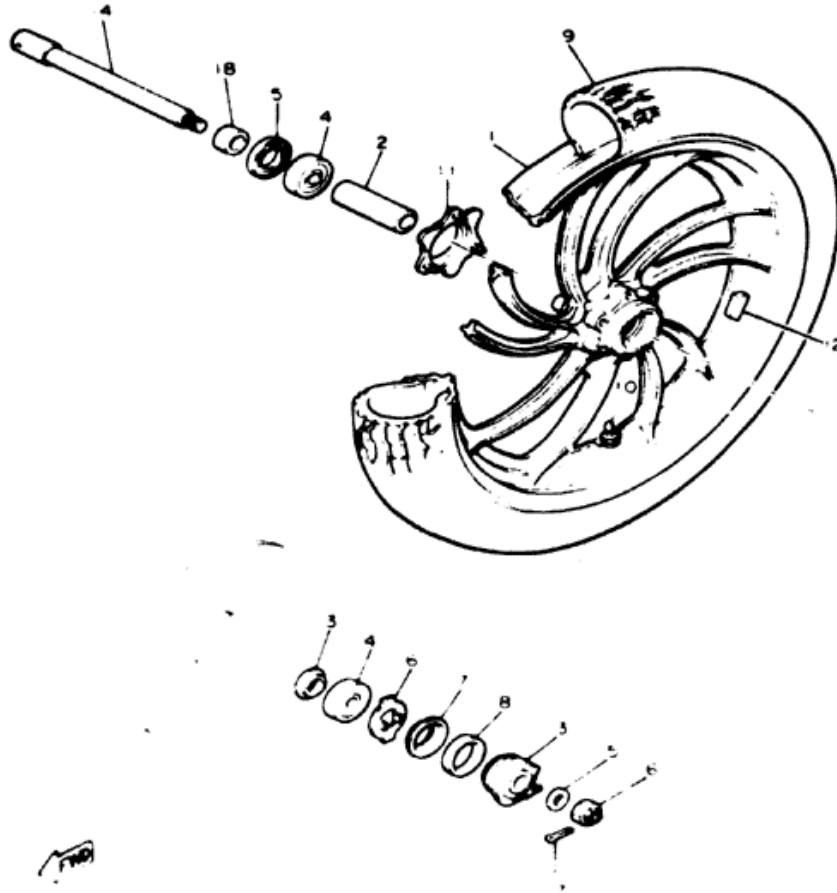
Basic Color(s)	New Yamaha Black
Fuel Type / Fuel Tank Capacity / Reserve Capacity	Regular / 13 Lt. (3.4 Gal.) / 3.4 Lt. (0.9 Gal.)

SEAT

Ref. No.	Part Number	Description	Qty.
1	4W5-W2472-00-00	DOUBLE SEAT ASS'Y.	1
2	4W5-24731-00-00	COVER, double seat.	1
3	4H7-24776-00-00	LEVER, seat.	1
4	90508-20412-00	SPRING, torsion.	1
5	4H7-24775-00-00	BRACKET, seat lever.	2
6	95302-06600-00	NUT.	4
7	4H7-24723-00-00	DAMPER, seat.	2
8	278-27114-00-00	STOPPER, main stand.	2
9	92903-06100-00	WASHER, spring (92902-06100) .	4
10	4W5-24705-00-00	SEAT LOCK ASS'Y.	1
11	98701-04016-00	SCREW, flat head.	2



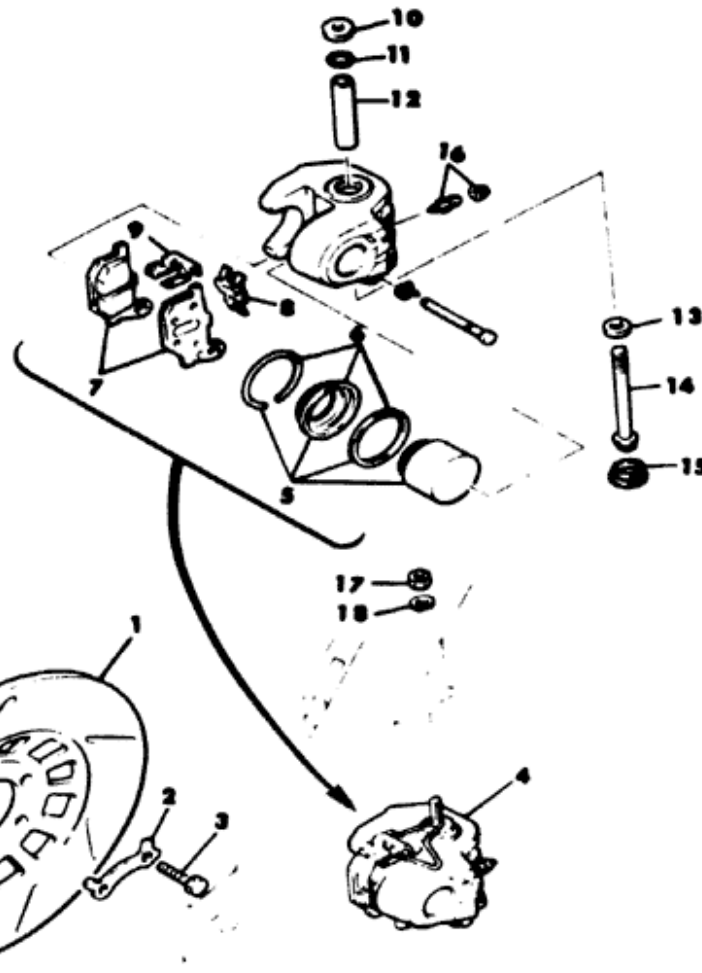
FRONT WHEEL



Ref. No.	Part Number	Description	Qty.	Remarks
1	4H7-25168-20-8L	CAST WHEEL, front	1	Nebular Gold
2	90560-15116-00	SPACER	1	
3	146-25115-00-00	FLANGE, spacer 1	1	
4	93306-30203-00	BEARING (B6302Z)	2	
5	93102-22014-00	OIL SEAL	1	
6	341-25149-00	CLUTCH, meter	1	
7	341-25846-00-00	RETAINER, clutch	1	
8	93105-45017-00	OIL SEAL	1	
9	94132-19428-00	TIRE (3.25-19)	1	
10	93900-00001-00	VALVE, rim	1	
11	1U4-25847-00-00	COVER, housing	1	
12	1A1-25398-01-00	BALANCER, wheel (20G)	1	U.N.
	1A1-25399-00-00	BALANCER, wheel (10G)	1	U.N.
	2M0-25399-00-00	BALANCER, wheel (30G)	1	U.N.
13	4H7-25190-00-00	GEAR UNIT ASS'Y	1	
14	4H7-25181-01-00	AXLE, wheel	1	
15	92901-14200-00	WASHER, plain	1	
16	90171-14020-00	NUT, castle	1	
17	91401-30030-00	PIN, cotter	1	
18	90387-15734-00	COLLAR	1	

Tire Size (Nominal Pressure)	F-3.25H19 (1.8 kg/cm ² /28 psi) R-130/90-19 67H (2.0 kg/cm ² /28 psi)
Front Axle Nut	14 x 1.5 10.0 m.kg
Front Axle Holder Nut	8 x 1.25 2.0 m.kg

FRONT BRAKE - CALIPER

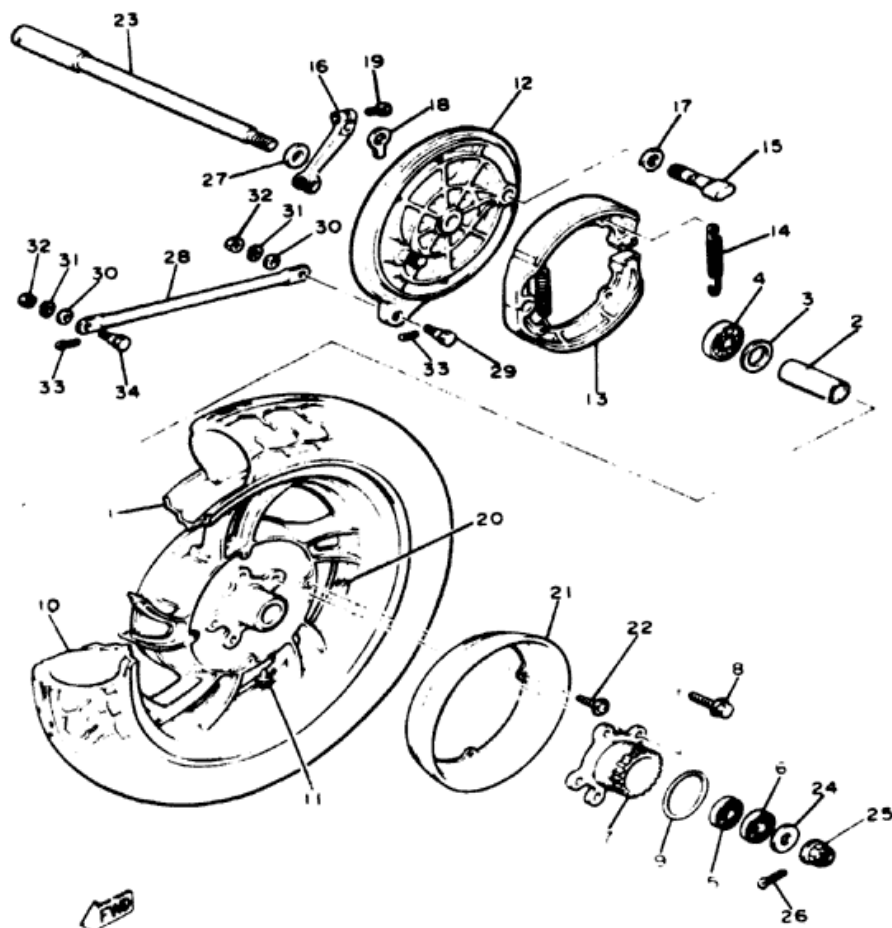


Ref. No.	Part Number	Description	Qty.
1	4H3-25831-10-00	DISC, brake	1
2	1J3-25834-01-00	WASHER, lock.	3
3	90101-08312-00	BOLT	6
4	4W5-25810-10-00	CALIPER ASS'Y (left)	1
5	2G2-W0057-00-00	. PISTON SEAL KIT	1
6	2G2-W0047-00-00	. . CALIPER SEAL KIT.	1
7	4W5-W0045-00-00	. BRAKE PAD KIT, front.	1
8	2G2-25919-00-00	. PAD SPRING, caliper.	1
9	2G2-25849-01-00	. RETAINER, caliper.	1
10	90201-086A5-00	. WASHER, plate	1
11	2G2-W0044-00-00	. O-RING KIT caliper.	1
12	2G2-25838-00-00	. SLEEVE, caliper	1
13	90201-09690-00	. WASHER, plate	1
14	4W5-25821-00-00	. BOLT 1.	1
15	2G2-25916-00-00	. CAP, pivot bolt	1
16	4W5-W0048-00-00	. BREED SCREW KIT.	1
17	95336-08600-00	NUT.	1
18	92906-08100-00	WASHER, spring	1

Minimum Brake Lining Thickness

Front: 1.2mm

Rear: 2mm

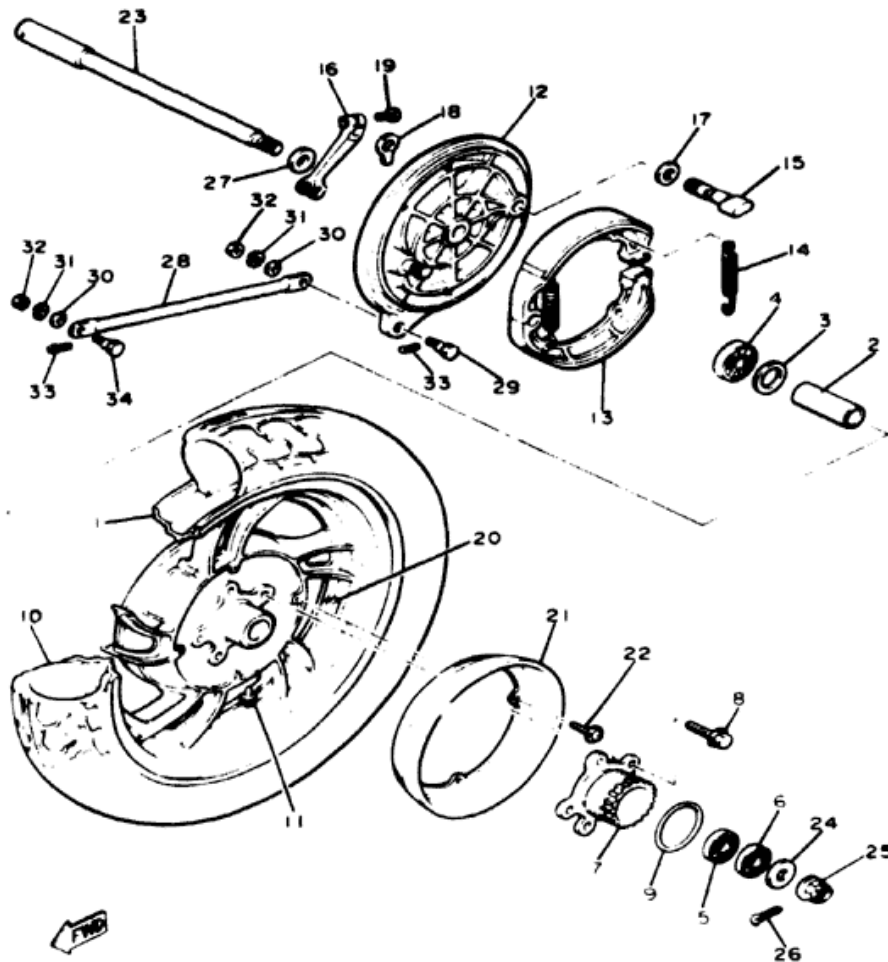


REAR WHEEL

Ref. No.	Part Number	Description	Qty.	Remarks
1	4H7-25338-20-8L	CAST WHEEL, rear	1	Nebular Gold
2	90560-17125-00	SPACER	1	
3	148-25315-00-00	FLANGE, spacer	1	
4	93306-30306-00	BEARING (B6303)	1	
5	93306-20316-00	BEARING (B6203)(93306-20309)	1	
6	93306-20310-00	BEARING (B6203RS)	1	
7	4H7-25366-01-00	CLUTCH, hub	1	
8	95812-10025-00	BOLT, flange	5	
9	93210-57428-00	O-RING	1	
10	94113-16425-00	TIRE	1	
11	93900-00001-00	VALVE, rim	1	
12	4W5-25321-00-00	PLATE, brake shoe	1	
13	4H7-25330-01-00	BRAKE SHOE COMP	2	
14	90507-20002-00	SPRING, tension	2	
15	4W5-25351-00-00	CAMSHAFT	1	
16	4W5-25355-00-00	LEVER, camshaft	1	
17	90201-14577-00	WASHER, plate	1	
18	4H7-2533A-02-00	PLATE, indicator	1	
19	90101-06495-00	BOLT	1	

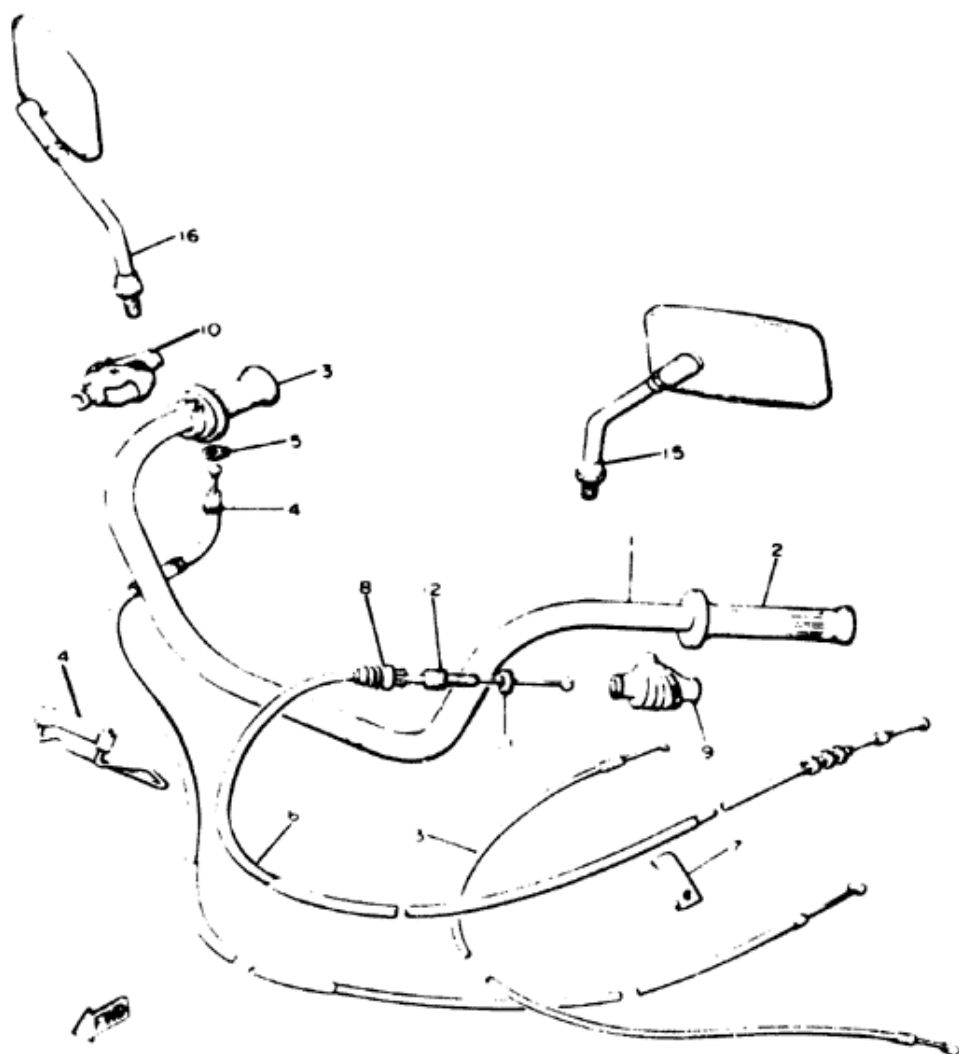
Minimum Brake Lining Thickness	Front: 1.2mm Rear: 2mm
Tire Size (Nominal Pressure)	F: 3.25H19 (1.8 kg/cm ² /25 psi) R: 13B/19-19 67H (2.8 kg/cm ² /25 psi)
Rear Axle Nut	14 x 1.5 10 m·kg
Rear Axle Pinch Bolt	8 x 1.25 0.6 m·kg

REAR WHEEL



Ref. No.	Part Number	Description	Qty.	Remarks
20	1A1-25398-01-00	BALANCER, wheel (20G)	1	U.N.
	1A1-25399-00-00	BALANCER, wheel (10G)	1	U.N.
	2M0-25399-00-00	BALANCER, wheel (30G)	1	U.N.
21	4W5-25327-00-00	COVER, plate	1	
22	90159-05018-00	SCREW, with washer	4	
23	4H7-25381-00-00	AXLE, wheel	1	
24	90201-141A3-00	WASHER, plate	1	
25	90179-14217-00	NUT	1	
26	91401-30030-00	PIN, cotter	1	
27	4H7-25377-00-00	COLLAR, wheel	1	
28	3H0-25371-00-00	BAR, tension	1	
29	90109-08406-00	BOLT	1	
30	92901-08600-00	WASHER, plate	2	
31	92903-08100-00	WASHER, spring (92901-08100)	2	
32	95301-08700-00	NUT	2	
33	91401-20015-00	PIN, cotter (91401-20012)	2	
34	90109-08368-00	BOLT	1	

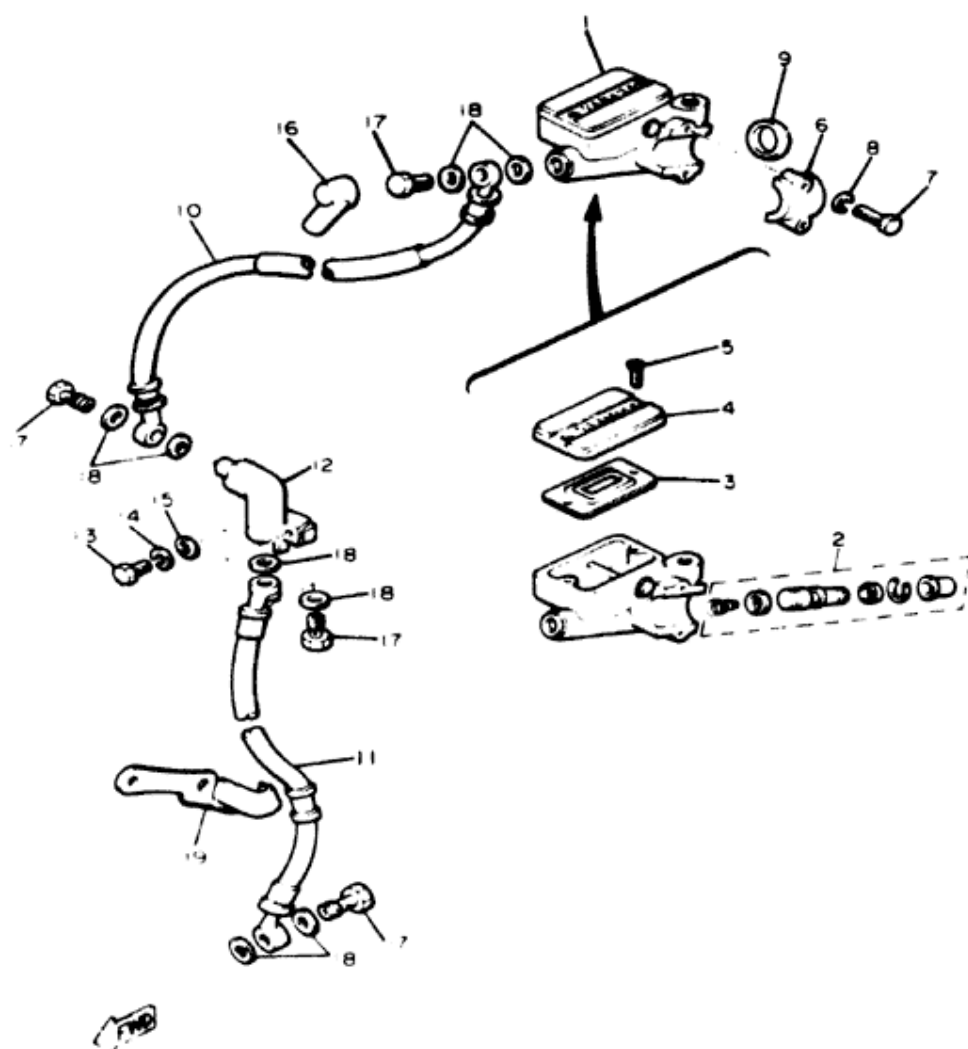
Minimum Brake Lining Thickness	Front: 1.2mm	Rear: 2mm
Tire Size (Nominal Pressure)	F-3.25H18 (1.8 kg/cm ² /28 psi) R-130/80-16 87H (2.8 kg/cm ² /28 psi)	
Rear Axle Nut	14 x 1.5 10 m-kp	
Rear Axle Pinch Bolt	8 x 1.25 0.6 m-kp	



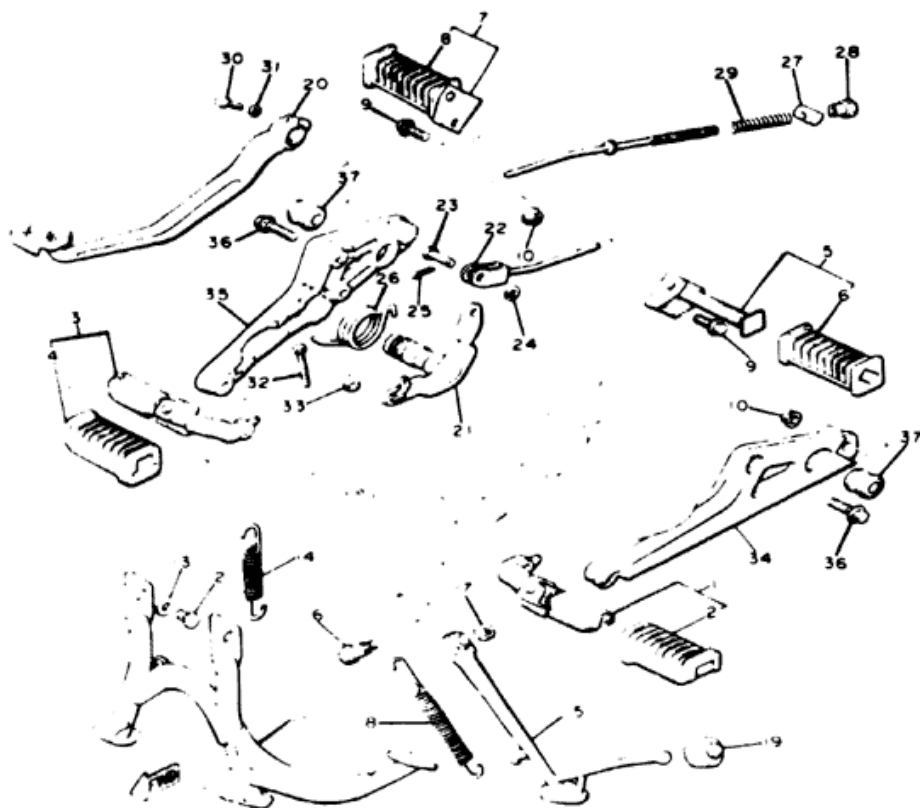
HANDLEBAR - CABLE

Ref. No.	Part Number	Description	Qty.
1	4W5-26111-00-00	HANDLEBAR	1
2	2H7-26241-00-00	GRIP (L.H)	1
3	2H7-26240-00-00	GRIP ASS'Y	1
4	4W5-26311-00-00	CABLE, throttle 1.....	1
5	584-26393-02-00	HOLDER	1
6	4W5-26335-00-00	CABLE, clutch	1
7	4H7-26393-00-00	HOLDER	1
8	1E6-26342-00-00	BOOT, cable	1
9	1E6-26372-00-00	COVER, handle lever.....	1
10	1T5-26372-00-00	COVER, handle lever.....	1
11	90179-08148-00	NUT.....	1
12	90123-08046-00	BOLT	1
13	4W5-26331-00-00	CABLE, starter 1	1
14	1J7-26399-00-00	GUIDE, cable	1
15	4W5-26290-10-00	MIRROR ASS'Y.....	1
16	4W5-26290-00-00	MIRROR ASS'Y.....	1

FRONT MASTER CYLINDER

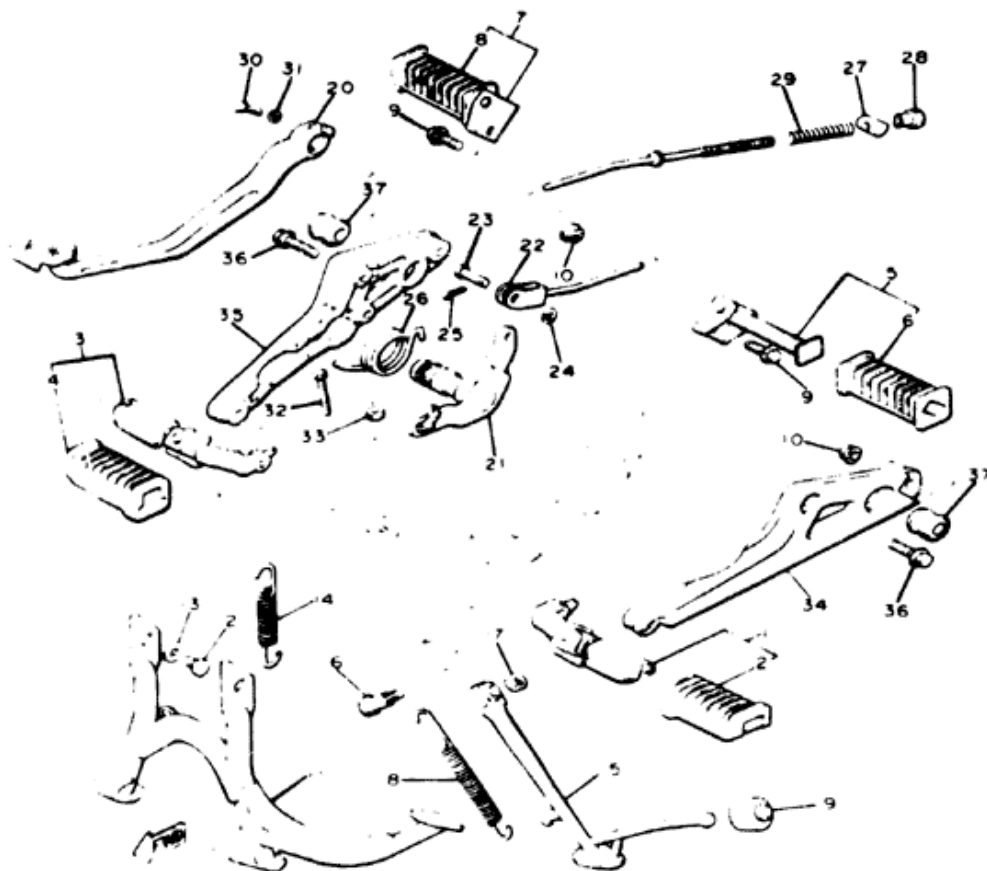


Ref. No.	Part Number	Description	Qty.
1	4H7-25850-01-00	MASTER CYLINDER ASS'Y (4H7-258501-01).....	1
2	4H7-W0041-00-00	. CYLINDER KIT, master	1
3	4L0-25854-00-00	. DIAPHRAGM, reservoir.....	1
4	4L0-25852-00-00	. CAP, reservoir.....	1
5	98706-04010-00	. SCREW, flat head.....	2
6	4L0-25867-00-00	BRACKET, master cylinder.....	1
7	97326-06025-00	BOLT.....	2
8	92906-06100-00	WASHER, spring.....	2
9	90387-22660-00	COLLAR	1
10	2G2-25872-01-00	HOSE, brake 1.....	1
11	4H7-25873-00-00	HOSE, brake 2.....	1
12	1J7-25885-01-00	JOINT.....	1
13	97306-06025-00	BOLT.....	1
14	92906-06100-00	WASHER, spring.....	1
15	92906-06600-00	WASHER, plate.....	1
16	306-25862-00-00	BOOT, master cylinder	1
17	4H3-25877-00-00	BOLT, oil 1	4
18	90201-10118-00	WASHR, plate	8
19	4W5-25876-00-00	HOLDER, brake hose 2.....	1



STAND - FOOTREST

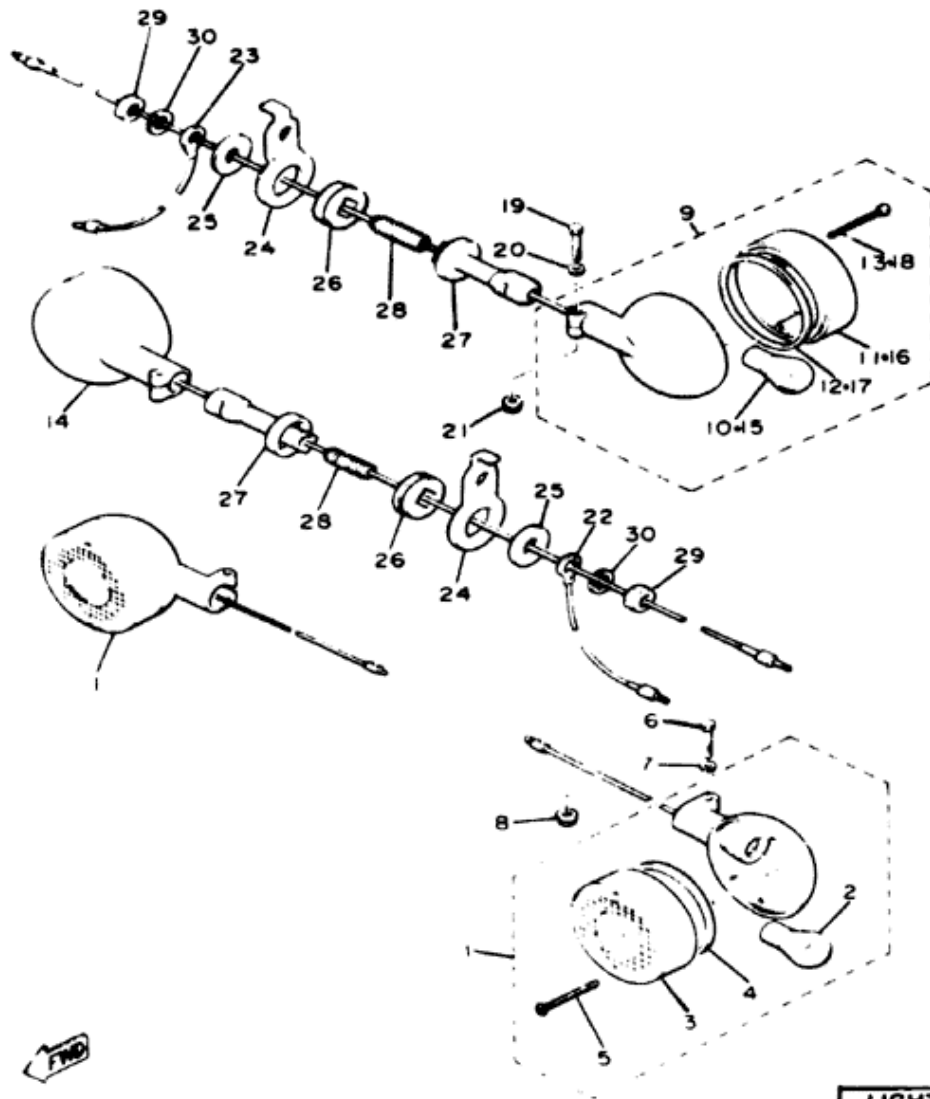
Ref. No.	Part Number	Description	Qty.	Remarks
1	4W5-27410-00-00	FRONT FOOTREST ASS'Y (L.H)	1	
2	1J7-27413-01-00	. COVER, footrest.	1	
3	4W5-27420-00-00	FRONT FOOTREST ASS'Y (R.H)	1	
4	1J7-27413-01-00	. COVER, footrest.	1	
5	4W5-27430-00-00	REAR FOOTREST ASS'Y 1	1	
6	1J7-27433-00-00	. COVER, rear footrest.	1	
7	4W5-27440-00-00	REAR FOOTREST ASS'Y 2	1	
8	1J7-27444-00-00	. COVER, rear footrest.	1	
9	95826-10035-00	BOLT, flange.	2	
10	90179-10321-00	NUT.	2	
11	4H7-27111 00-R4	STAND, main.	1	Black
12	97306-10016-00	BOLT.	2	
13	90201-104A6-00	WASHER, plate.	2	
14	90506-35149-00	SPRING, tension.	1	
15	4H7-27311-01-R4	STAND, side.	1	Black
16	90109-10590-00	BOLT.	1	
17	95306-10700-00	NUT.	1	
18	90506-28146-00	SPRING, tension.	1	
19	1A0-27114-00-00	STOPPER, main stand.	1	



STAND - FOOTREST

Ref. No.	Part Number	Description	Qty.
20	4W5-27211-00-00	PEDAL, brake.	1
21	4W5-27212-00-00	SHAFT, brake pedal	1
22	4W5-27231-00-00	ROD, brake.	1
23	90240-06079-00	PIN, clevis	1
24	92906-06200-00	WASHER, plain	1
25	91401-20015-00	PIN, cotter (91401-20012).	1
26	90501-10609-00	SPRING, compression	1
27	90249-12143-00	PIN	1
28	90179-06324-00	NUT.	1
29	90508-45446-00	SPRING, torsion	1
30	90101-06494-00	BOLT.	1
31	92906-06100-00	WASHER, spring	1
32	90153-06031-00	SCREW, hexagon	1
33	90170-06273-00	NUT.	1
34	4W5-27442-00-00	BRACKET 2	1
35	4W5-27443-00-00	BRACKET 3	1
36	95826-10030-00	BOLT, flange.	3
37	3H3-27414-00-00	DAMPER, footrest.	2

FLASHER LIGHT



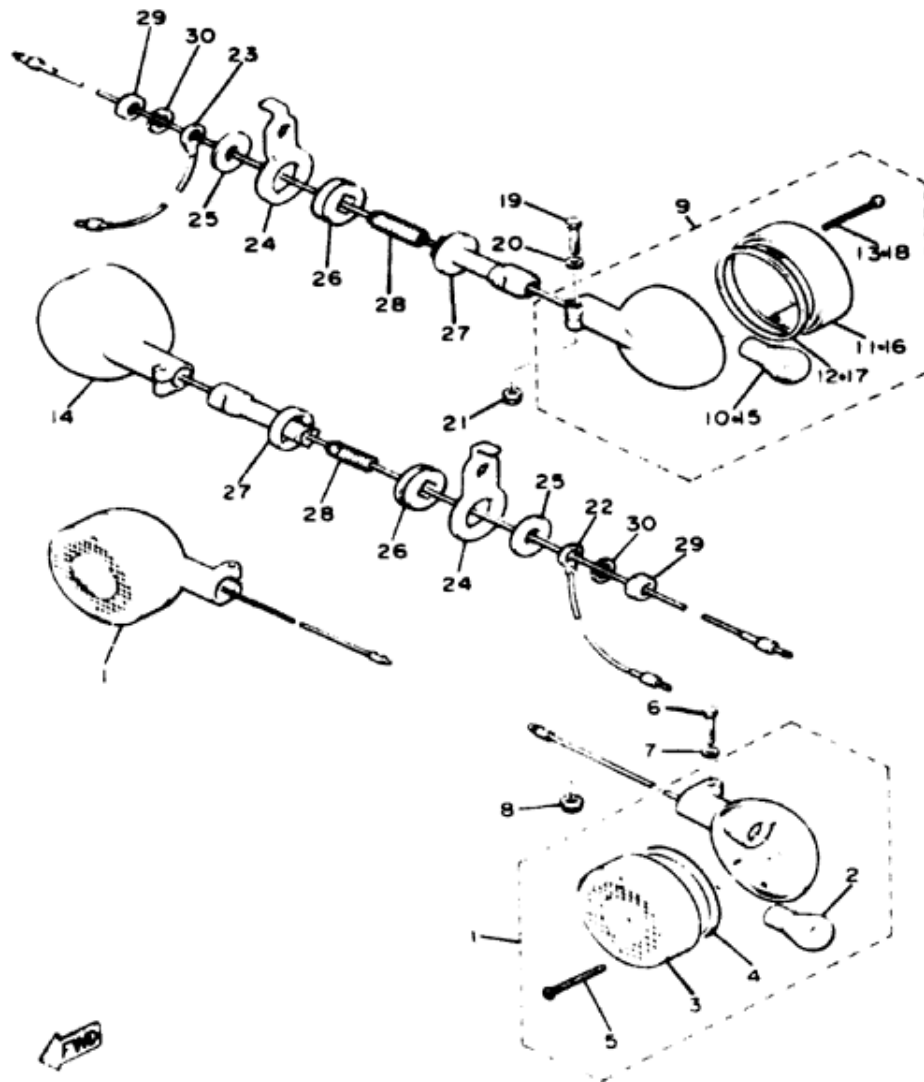
Ref. No.	Part Number	Description	Qty.
1	4W5-83310-K0-00	FRONT FLASHER LIGHT ASS'Y 1	2
2	256-83311-70-00	BULB (12V-27W)	1
3	4H7-83312-00-00	LENS, flasher	1
4	4H7-83313-00-00	GASKET, flasher lens	1
5	98502-03030-00	SCREW, pan head	2
6	97306-06030-00	BOLT	2
7	92906-06600-00	WASHER, plate	2
8	95706-06100-00	NUT, flange	2
9	4W5-83330-K0-00	REAR FLASHER LIGHT ASS'Y 1	1
10	256-83311-70-00	BULB (12V-27W)	1
11	4H7-83312-00-00	LENS, flasher	1
12	4H7-83313-00-00	GASKET, flasher lens	1
13	98502-03030-00	SCREW, pan head	2

LIGHTING SYSTEM

Headlight Taillight Signal Rating

12V50-40W 12V27-8W 12V27W

FLASHER LIGHT

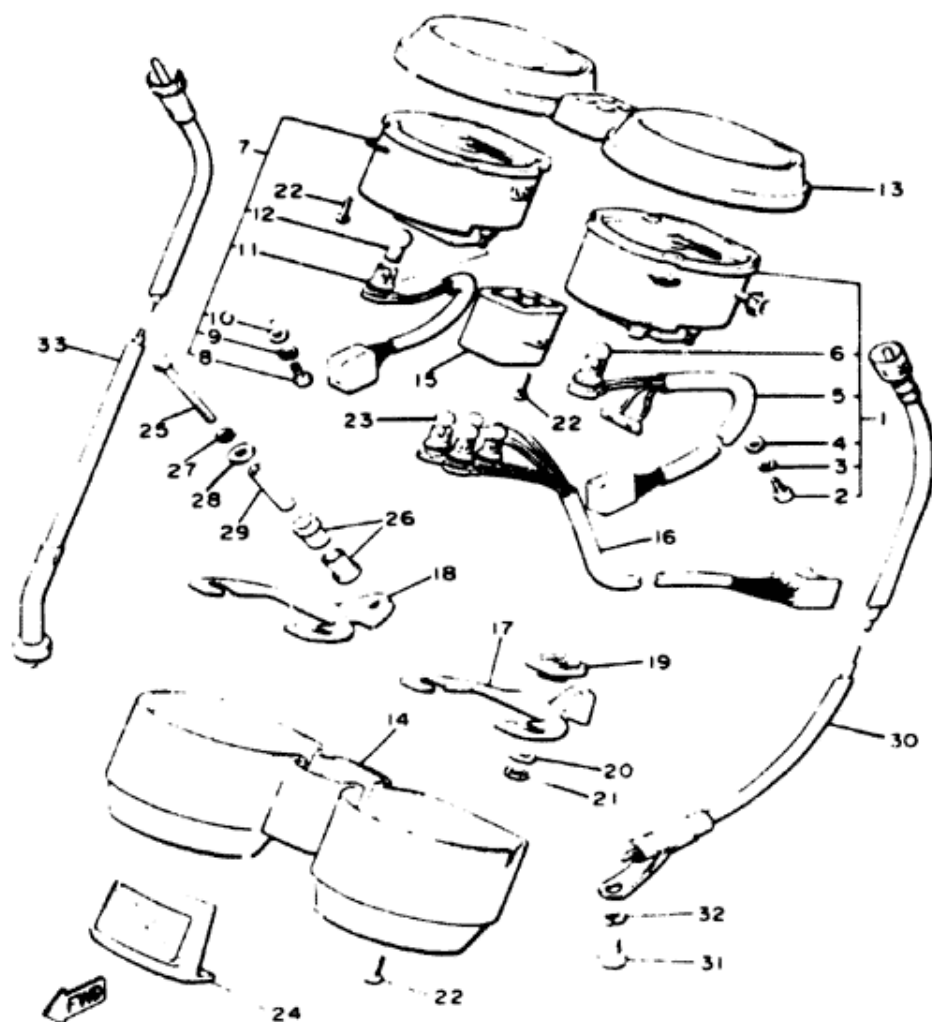


Ref. No.	Part Number	Description	Qty.
14	4W5-83340-K0-00	REAR FLASHER LIGHT ASS'Y	1
15	256-83311-70-00	BULB (12V-27W)	1
16	4H7-83312-00-00	LENS, flasher	1
17	4H7-83313-00-00	GASKET, flasher lens	1
18	98501-03030-00	SCREW, pan head	2
19	97306-06030-00	BOLT	2
20	92906-06600-00	WASHER, plate	2
21	95706-06100-00	NUT, flange	2
22	4H7-83364-00-00	WIRE, earth lead 2	1
23	4H7-83354-00-00	WIRE, earth lead 1	1
24	4W5-83318-00-00	STAY, flasher 1	2
25	90201-104A3-00	WASHER, plate	2
26	341 83321-01-00	DAMPER, flasher 1	2
27	4W5-83328-00-00	STAY, flasher 2	2
28	2H7-83325-00-00	BOLT, flasher stay fitting	2
29	95306-10600-00	NUT	2
30	92906-10100-00	WASHER, spring	2

LIGHTING SYSTEM

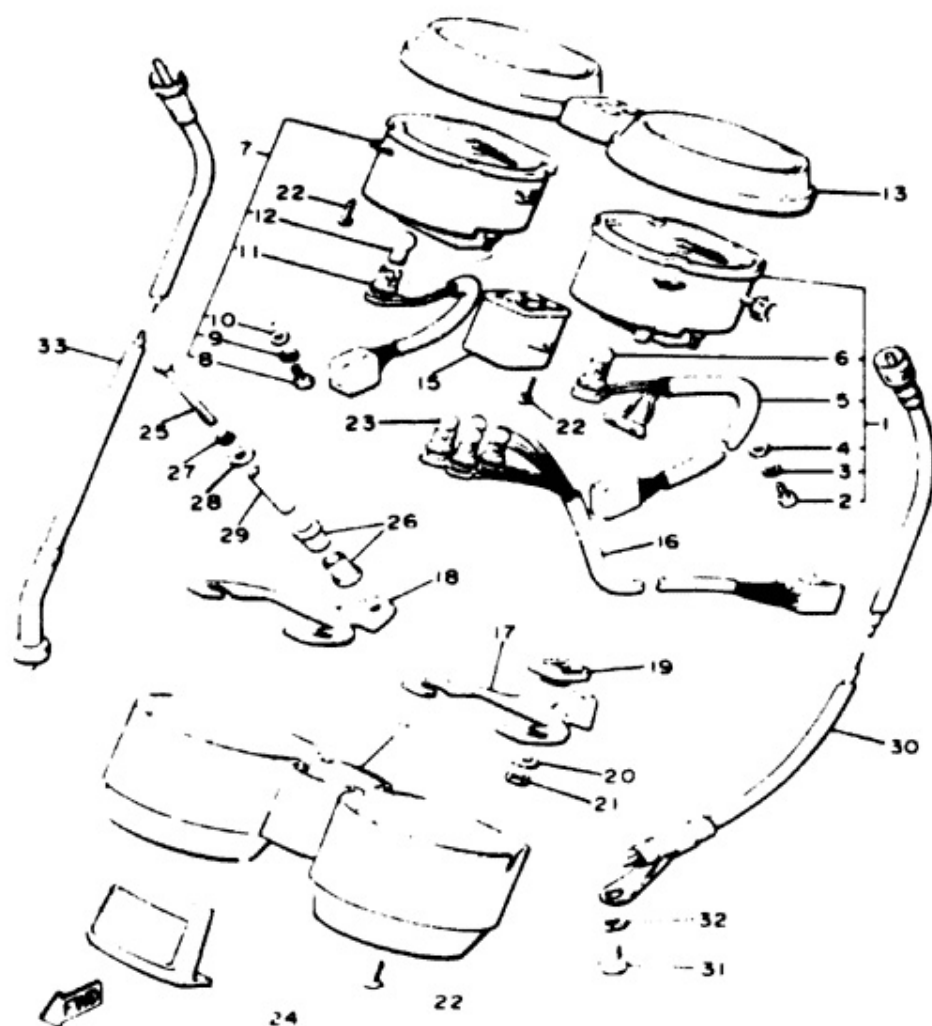
Headlight Taillight Signal Rating

12V50-40W 12V27-8W 12V27W



SPEEDOMETER - TACHOMETER

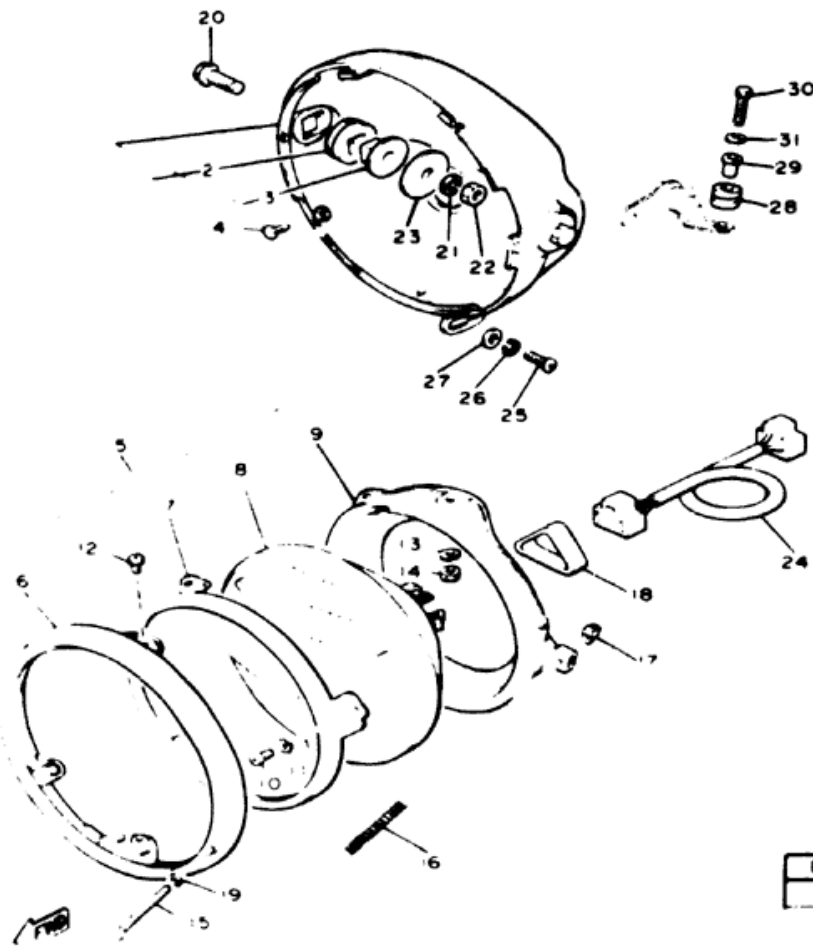
Ref. No.	Part Number	Description	Qty.
1	4H7-83570-A0-00	SPEEDOMETER ASS'Y	1
2	98501-04008-00	. SCREW, pan head	2
3	92901-04100-00	. WASHER, spring	2
4	92901-04600-00	. WASHER, plate	2
5	4H7-83536-00-00	. SOCKET, meter.	1
6	123-83516-21-00	. BULB (12V-3.4W).	1
7	4H7-83540-00-00	TACHOMETER ASS'Y	1
8	98501-04008-00	. SCREW, pan head	2
9	92901-04100-00	. WASHER, spring	2
10	92901-04600-00	. WASHER, plate	2
11	4H7-83520-00-00	. SOCKET ASS'Y.	1
12	123-83516-21-00	. BULB (12V-3.4W).	1
13	4H7-83559-A0-00	COVER, meter	1
14	4W5-83579-00-00	COVER, meter 2	1
15	4H7-83587-00-00	BODY, pilot light	1



SPEEDOMETER - TACHOMETER

Ref. No.	Part Number	Description	Qty
16	4H7-83509-00-00	SOCKET CORD ASS'Y	1
17	4H7-83519-00-00	BRACKET, meter	1
18	4H7-83545-00-00	BRACKET, tachometer	1
19	4H7-83523-00-00	DAMPER	4
20	1E6-83524-60-00	WASHER, special	4
21	95301-05600-00	NUT	4
22	4H7-83616-00-00	SCREW, tapping	10
23	123-83516-21-00	BULB (12V-3.4W)	4
24	4W5-21787-00-00	EMBLEM 7	1
25	97306-06045-00	BOLT	2
26	584-83541-00-00	DAMPER	4
27	92906-06100-00	WASHER, spring	2
28	90201-06067-00	WASHER, plate	2
29	90387-06249-00	COLLAR	2
30	4W3-83550-00-00	SPEEDOMETER CABLE ASS'Y	1
31	90153-06004-00	SCREW, hexagon	1
32	92903-06100-00	WASHER, spring (92901-06100)	1
33	4W5-83560-00-00	TACHOMETER CABLE ASS'Y	1

HEADLIGHT



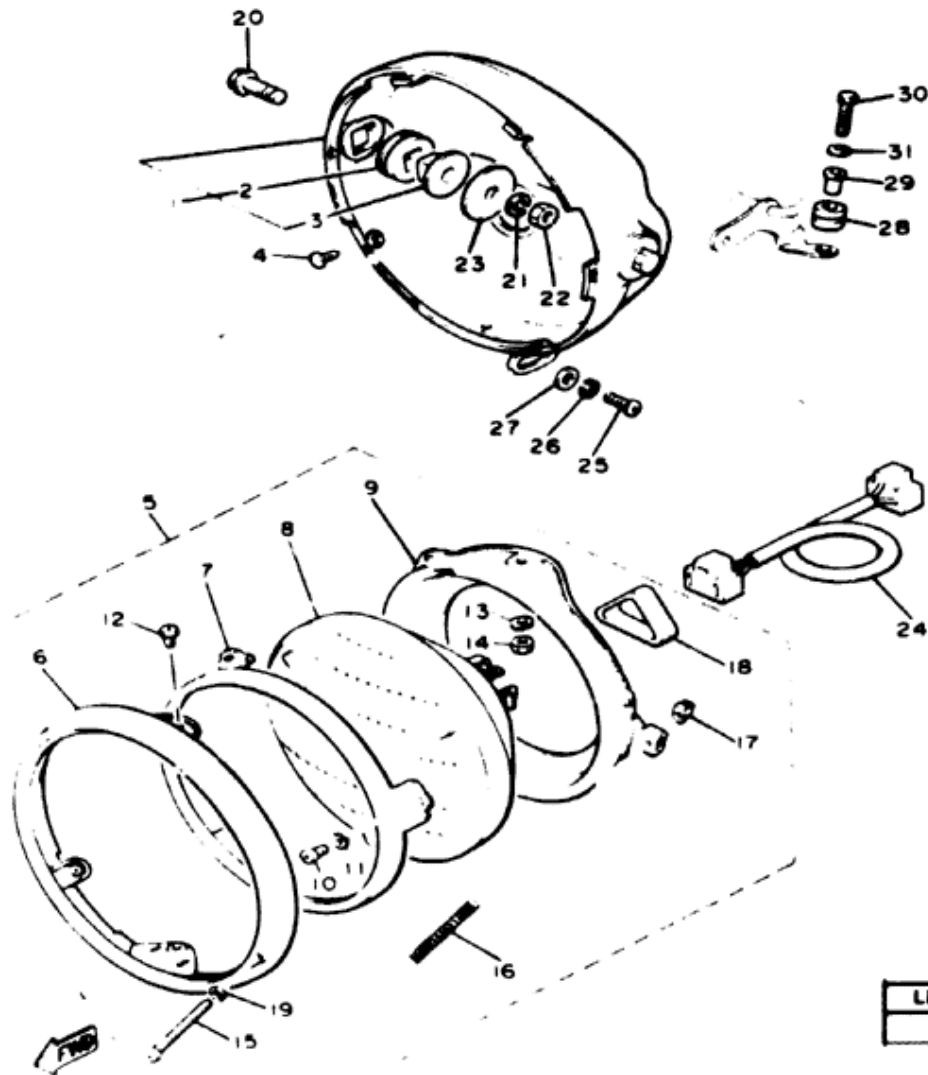
Ref. No.	Part Number	Description	Qty.	Remarks
1	3J6-84330-00-6G	BODY ASS'Y	1	New Yamaha Blk
2	584-84345-60-00	DAMPER, headlight	2	
3	584-84338-60-00	COLLAR, body fitting	2	
4	90152-05005-00	SCREW, countersunk	2	
5	4W5-84310-60-00	HEADLIGHT UNIT ASS'Y	1	
6	4H1-84315-00-00	RIM, headlight	1	
7	2F9-84395-00-00	RING, retaining	1	
8	341-84320-60-00	LENS ASS'Y (12V-50/40W)	1	
9	2F9-84394-00-00	RING, mounting	1	
10	98501-04008-00	SCREW, panhead (98502-04008)	3	
11	92901-04100-00	WASHER, spring (92903-04100)	3	
12	98501-05010-00	SCREW, pan head	2	
13	92903-05100-00	WASHER, spring (92902-05100)	2	
14	95301-05600-00	NUT (95302-05600)	2	
15	4H1-84331-00-00	SCREW, rim adjusting	1	
16	341-84332-60-00	SPRING, screw	1	

LIGHTING SYSTEM

Headlight Taillight Signal Rating

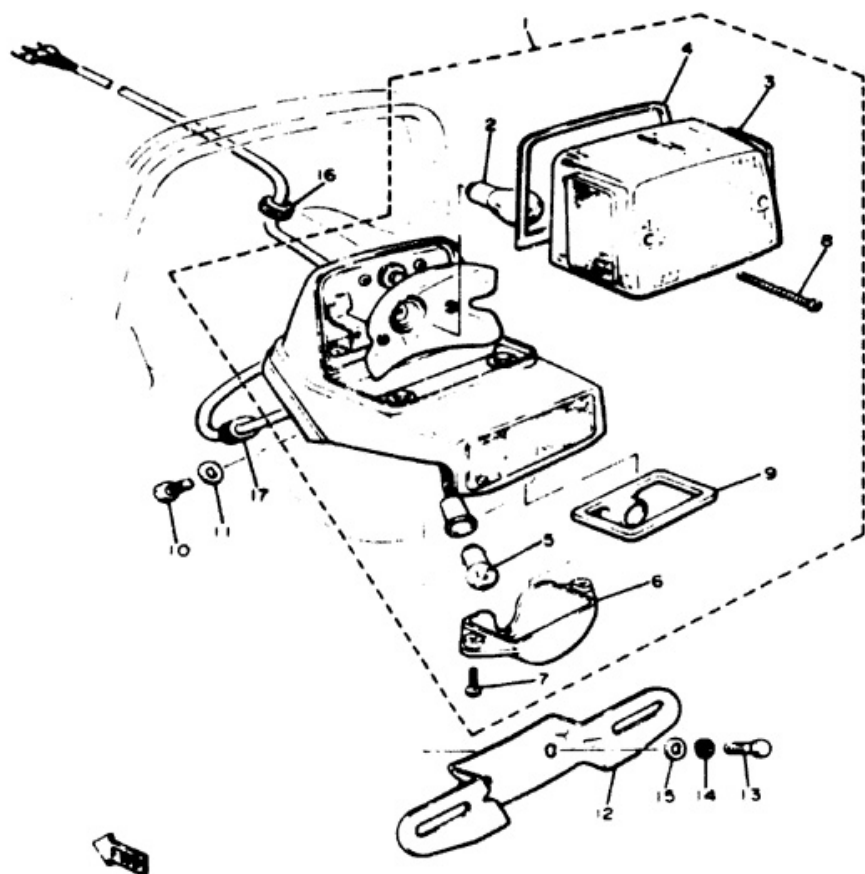
12V50-40W 12V27-8W 12V27W

HEADLIGHT



Ref. No.	Part Number	Description	Qty.
17	198-84334-60-00	NUT, adjusting	1
18	341-84397-61-00	COVER, socket.	1
19	233-84127-60-00	WASHER, special.	1
20	90105-08172-00	BOLT, washer based	2
21	92903-08100-00	WASHER, spring (92901-08100)	2
22	95301-08600-00	NUT.	2
23	90209-08098-00	WASHER	2
24	2H7-84359-00-00	CORD, headlight	1
25	92506-06016-00	SCREW, pan head.	1
26	92906-06100-00	WASHER, spring	1
27	90201-06552-00	WASHER, plate	1
28	90480-14101-00	GROMMET.	1
29	90387-063E6-00	COLLAR	1
30	97206-06025-00	BOLT.	1
31	92906-06600-00	WASHER, plate	1

LIGHTING SYSTEM		
Headlight	Tailight / Signal Rating	12V50-40W / 12V27-8W 12V27W



TAILLIGHT

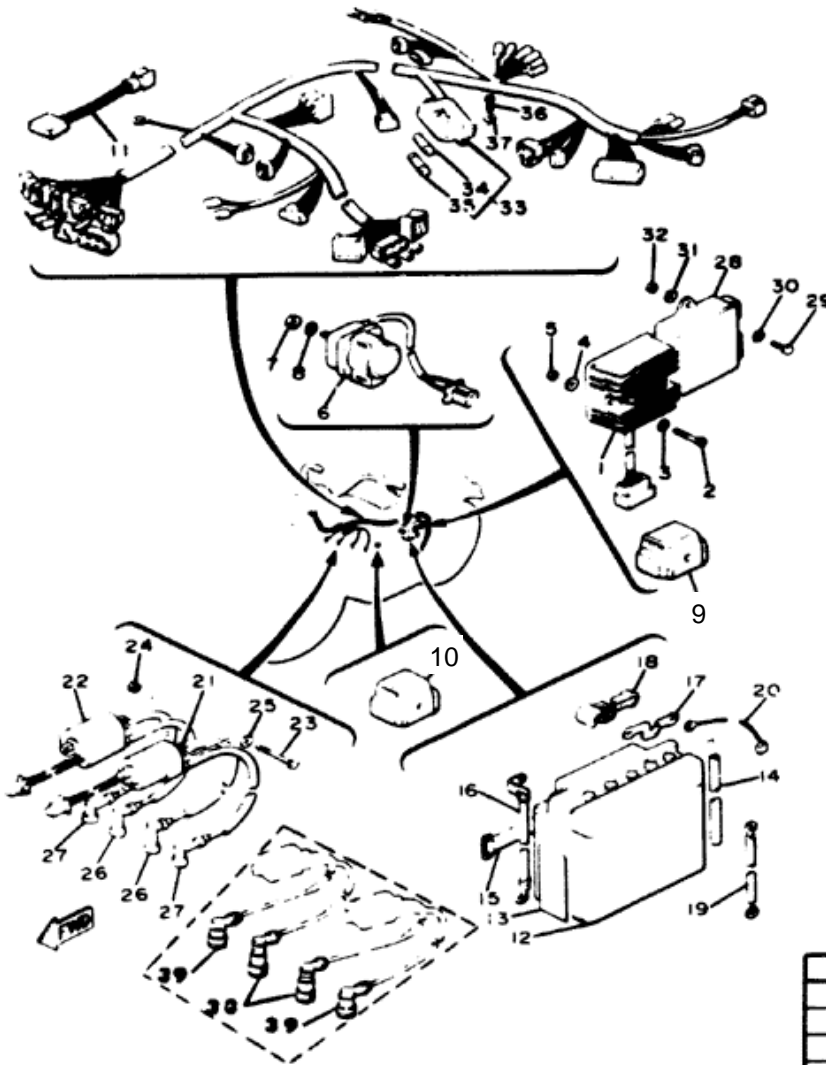
Ref. No.	Part Number	Description	Qty.	Remarks
1	4W5-84700-60-6G	TAILLIGHT ASS'Y	1	New Yamaha Blk
2	256-84714-61-00	BULB (12V-27/8W)	1	
3	4H7-84721-60-00	LENS, taillight	1	
4	4H7-84723-00-00	GASKET, tail lens	1	
5	4H7-84744-00-00	BULB (12V 38W)	1	
6	4H7-84743-00-00	LENS, license light	1	
7	98503-04014-00	SCREW, panhead (98503-04015)	2	
8	802-84131-00-00	SCREW, rim adjuster	2	
9	4H7-84753-60-00	DAMPER	1	
10	97301-06016-00	BOLT	3	
11	92901-06600-00	WASHER, plate	3	
12	4W5-84751-00-00	BRACKET, license	1	New Yamaha Blk
13	97306-06016-00	BOLT	2	
14	92906-06100-00	WASHER, spring	2	
15	92906-06600-00	WASHER, plate	2	
16	90480-16112-00	GROMMET	1	
17	90480-15061-00	GROMMET	1	

LIGHTING SYSTEM

Headlight / Taillight / Signal Rating

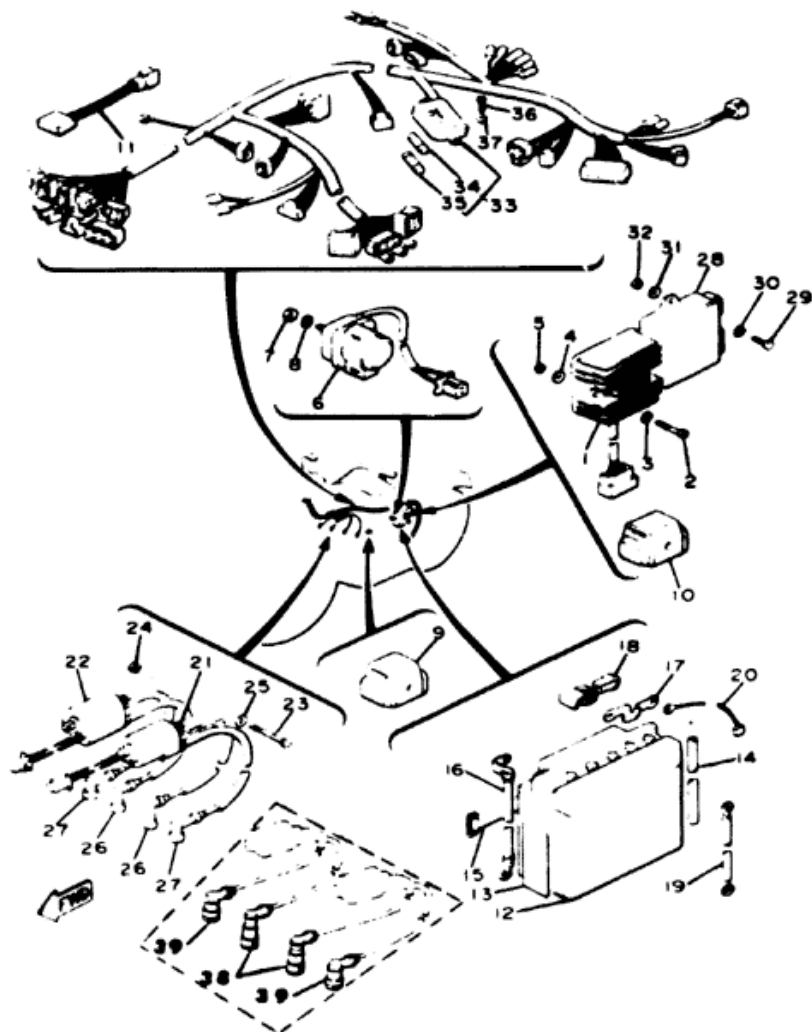
12V50-40W / 12V27-8W / 12V27W

ELECTRICAL 1



Ref. No.	Part Number	Description	Qty.	Remarks
1	4H7-81960-50-00	RECTIFIER & REGULATOR ASS'Y	1	
2	92501-06030-00	SCREW, pan head	2	
3	92903-06100-00	WASHER, spring (92902-06100)	2	
4	92901-06600-00	WASHER (92902-06600)	2	
5	95301-06700-00	NUT (95302-06700)	2	
6	3H5-81940-00-00	STARTER SWITCH ASS'Y	1	
7	95301-06700-00	NUT	2	
8	92903-06100-00	WASHER, spring (92901-06100)	2	
9	3H5-81950-00-00	HEADLIGHT RELAY ASS'Y	1	
10	12R-81950-00-00	STARTER CIRCUIT CUT-OFF RELAY (4H7-81950-01)	1	
11	4H7-81980-M0-00	DIODE	1	
12	366-82110-79-00	BATTERY ASS'Y (12N12A-4A)	1	
13	LIT-82141-09-00	LABEL, battery (118-82141-09)	1	
14	90445-08336-00	HOSE	1	
15	137-82131-01-00	BAND, battery	1	
16	4H7-82115-00-00	WIRE, minus lead	1	
17	4H7-82103-00-00	TERMINAL 1	1	
18	4H7-82119-00-00	COVER, lead wire	1	
19	4H7-82519-00-00	WIRE, earth lead	1	
20	4H7-82116-00-00	WIRE, plus lead	1	

CHARGING SYSTEM		AC Generator / 3-Phase / Full Wave
Battery Model / Specific Gravity / Charge Rate		Yusa 12N12A-4A-1 (12V 12AH) / 1.28 / 1.2A
Maximum Output		14V 19A @ 5000 rpm
TROUBLESHOOTING		
Field Coil Color Code / Ω		Rotor: Grn ~ Grn: $4.8 \Omega \pm 10\%$ Stator: Wht ~ Wht: $8.48 \Omega \pm 10\%$
Charge Coil Color Code / Ω		\emptyset
IGNITION SYSTEM		Transistor-Controlled Ignition
Ignition Timing		10° Mark
		Std: 10° @ 1050 rpm Adv: $37.5 \pm 2^\circ$ @ 4100 rpm
Ignition Coil Test Gap / Primary Ω / Secondary Ω		6mm / $2.5 \Omega \pm 10\%$ / $11K \Omega \pm 20\%$
Pulser Coil or Pickup Coil Color Code / Ω		Org ~ Blk, Gry ~ Brn: $650 \Omega \pm 20\%$



ELECTRICAL 1

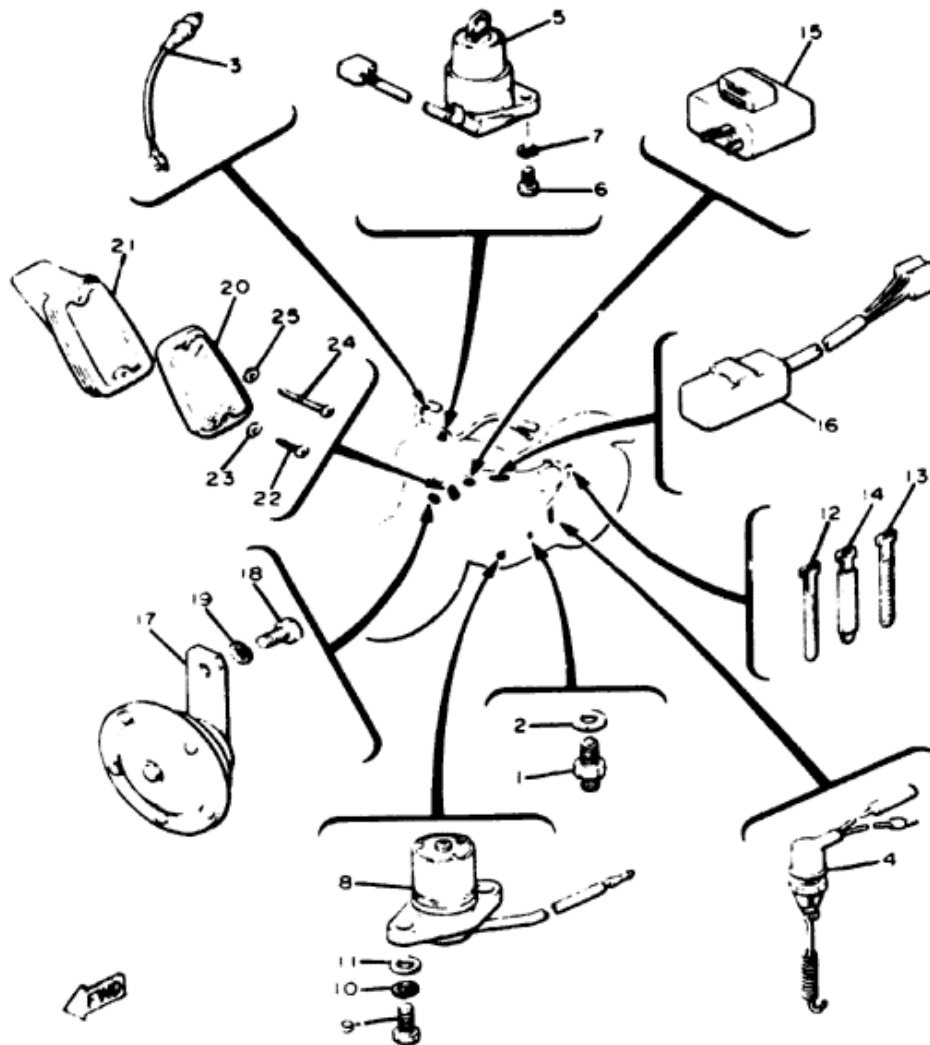
Ref. No.	Part Number	Description	Qty.	Remarks
21	4H7-82310-60-00	IGNITION COIL ASS'Y	1	
22	4H7-82320-60-00	IGNITION COIL ASS'Y	1	
23	97301-06080-00	BOLT	2	
24	95302-06600-00	NUT	2	
25	92903-06200-00	WASHER, plain (92901-06200)	2	
26	1J7-82370-00-00	PLUG CAP ASS'Y	2	
27	256-82370-00-00	PLUG CAP ASS'Y	2	
28	4H7-82305-10-00	IGNITION UNIT ASS'Y	1	
29	92503-06015-00	SCREW, panhead (92502-06016)	2	
30	92903-06100-00	WASHER, spring (92902-06100)	2	
31	92901-06600-00	WASHER (92902-06600)	2	
32	95301-06700-00	NUT (95302-06700)	2	
33	4H7-82590-50-00	WIRE HARNESS ASS'Y	1	
34	1A0-82151-00-00	FUSE (12V-10A)	3	
35	1A0-82161-00-00	FUSE (12V-20A)	1	
36	97701-50516-00	SCREW, pan head tapping	2	
37	92901-05600-00	WASHER, plate	2	

ALTERNATE PARTS

38	1J7-82370-10-00	PLUG CAP ASS'Y	2	w/noise suppressor
39	2H8-82370-10-00	PLUG CAP ASS'Y	2	w/noise suppressor

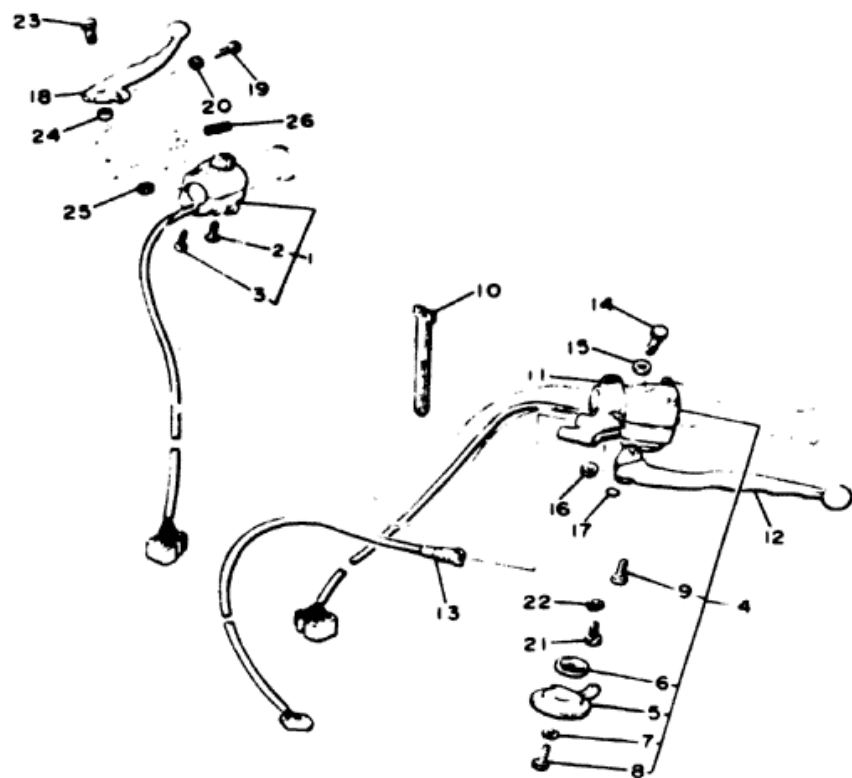
CHARGING SYSTEM	AC Generator / 3-Phase / Full Wave
Battery: Model / Specific Gravity / Charge Rate	Jess 12N12A-4A-1 (12V 12AH) / 1.28 / 1.2A
Maximum Output	14V 19A @ 5000 rpm
TROUBLESHOOTING	
Field Coil Color Code / Ω	Red: Gr ~ Br / 4.8 Ω \pm 10% Blue: Wh ~ Wh / 8.8 Ω \pm 10%
Charge Coil Color Code / Ω	5
IGNITION SYSTEM	Transistor-Controlled Ignition
Ignition Timing	10° Mark
	Std: 10° @ 1050 rpm Adv: 37.5 \pm 2° @ 4100 rpm
Ignition Coil Test Gap Primary Ω Secondary Ω	6mm / 2.5 Ω \pm 10% / 11K Ω \pm 20%
Pulse Coil or Pickup Coil Color Code / Ω	Org ~ Blk, Gry ~ Brn / 650 Ω \pm 20%

ELECTRICAL 2



Ref. No.	Part Number	Description	Qty
1	2H7-82540-00-00	NEUTRAL SWITCH ASS'Y.	1
2	90430-10148-00	GASKET	1
3	1A0-83980-30-00	FRONT STOP SWITCH ASS'Y. ...	1
4	1E9-82530-00-00	STOP SWITCH ASS'Y	1
5	4H7-82508-50-00	MAIN SWITCH ASS'Y	1
6	97321-06016-00	BOLT (97322-06016)	2
7	92901-06600-00	WASHER (92902-06600)	2
8	4H7-85720-00-00	OIL LEVEL GAUGE ASS'Y	1
9	97321-06020-00	BOLT	2
10	92903-06100-00	WASHER, spring (92901-06100)	2
11	92901-06600-00	WASHER, plate	2
12	437-83936-10-00	BAND, switch cord	2
13	447-82591-00-00	BAND	1
14	341-26397-01-00	BAND	1
15	4H7-83350-70-00	FLASHER RELAY ASS'Y.	1
16	1A0-83395-03-00	FLASHER CANCELLING UNIT	1
17	1J7-83371-22-00	HORN	1
18	97306-08014-00	BOLT	1
19	92906-08100-00	WASHER, spring	1
20	4H1-85110-00-00	FRONT REFLECTOR ASS'Y.	2
21	4H7-85127-01-00	BASE, reflector	2
22	98501-04018-00	SCREW, pan head	2
23	92901-04600-00	WASHER, plate	2
24	97602-04114-00	SCREW, panhead (98502-04040)	2
25	92901-04600-00	WASHER, plate	2

Field Coil Color Code / Ω	Refer: Grn ~ Grn / 4.5 $\Omega \pm 10\%$ Blue ~ Blue / 8.8 $\Omega \pm 10\%$
Charge Coil Color Code / Ω	\emptyset
IGNITION SYSTEM	Transistor-Controlled Ignition
Ignition Timing	10° Mark
	Std: 10° @ 1050 rpm Adv: 37.5 ± 2° @ 4100 rpm
Spark Plug Type	NGK BP7ES or Nippon Denso W22EP
Spark Plug Gap / Torque / Cap Ω	0.7~0.8mm/2.8 m·kg/Dyn 18-4 BK Ω : 11% / Dyn 28-3 BK Ω : 11%
Point Gap / Condenser Capacitance	\emptyset / \emptyset
TROUBLESHOOTING	
Ignition Coil Test Gap / Primary Ω / Secondary Ω	6mm / 2.5 $\Omega \pm 10\%$ / 11K $\Omega \pm 20\%$
Pulse Coil or Pickup Coil Color Code / Ω	Org ~ Blk, Gry ~ Brn / 650 $\Omega \pm 20\%$



HANDLE SWITCH - LEVER

Ref. No.	Part Number	Description	Qty.	Remarks
1	2H7-83975-01-00	SWITCH, handle 2.	1	Low Gloss Blk
2	98506-05030-00	. SCREW, pan head	1	
3	98506-05040-00	. SCREW, pan head	1	
4	4H7-83973-00-00	SWITCH, handle 3.	1	
5	4H7-83941-00-00	. LEVER, starter	1	
6	90209-10131-00	. WASHER.	1	
7	92903-06200-00	. WASHER, plain (92901-06200)	1	
8	97323-06008-00	. BOLT	1	
9	98506-05030-00	. SCREW, pan head	2	
10	437-83936-00-00	BAND, switch cord	4	
11	4H7-82911-00-00	HOLDER, lever 1	1	
12	2H0-83912-20-00	LEVER 1	1	
13	3Y6-82917-00-00	SWITCH	1	
14	2H7-83945-00-00	BOLT, lever.	1	
15	90201-08083-00	WASHER, plate	1	
16	95601-06100-00	NUT, u	1	
17	93210-11368-00	O-RING.	1	
18	2H7-83922-00-00	LEVER 2	1	
19	90149-06131-00	SCREW.	1	
20	90170-06010-00	NUT.	1	
21	97306-06022-00	BOLT.	1	
22	92906-06100-00	WASHER, spring	1	
23	90109-06465-00	BOLT.	1	
24	90386-08094-00	BUSH	1	
25	95601-06100-00	NUT, u	1	
26	90501-10510-00	SPRING, compression	1	

TOP END GASKET KIT

Ref. No.	Part Number	Description	Qty.	Remarks
*	4H7-W0001-00-XX	TOP END GASKET KIT		
	4H7-11181-02-00	CYLINDER HEAD GASKET	1	
	4H7-11355-00-00	CYLINDER HEAD SEAL	1	
	4H7-11193-00-00	HEAD COVER GASKET	1	
	1J7-11138-00-00	SEMI-CIRCULAR PLUG	2	
	93210-69434-00	CYLINDER BASE O-RING	4	
	90430-14131-00	DOWEL PIN GASKET	2	
	4H7-11351-00-00	CYLINDER BASE GASKET	1	
	93210-06001-00	TENSIONER CASE O-RING	1	
	93210-08006-00	TENSIONER O-RING	1	
	4H7-12213-00-00	TENSIONER CASE GASKET	1	
	1J7-12119-01-00	VALVE STEM SEAL	8	
	4H7-13556-01-00	INTAKE GASKET	4	
	4H7-14613-00-00	EXHAUST GASKET	4	

NOTE: This set does not include two cylinder stud o-rings, P/N 93210-18322-00, which should be replaced when performing top end repairs.

SERVICE DATA

FILE MOTORCYCLE — 650 SECTION

DATE 10/3/80

SUL M80-050

XJ650LH 1981 SERVICE DATA

FILE MOTORCYCLE — 650 SECTION

DATE 10/3/80

SUL M80-050

MODEL - IBM I.D. NUMBER	XJ650LH 4WS
Initial Engine Number / Frame Number	4W5-000001 / 4W5-000001
Basic Color(s)	New Yamaha Black
Fuel Type / Fuel Tank Capacity / Reserve Capacity	Regular / 13 Lt. (3.4 Gal.) / 3.4 Lt. (0.9 Gal.)
Dry Vehicle Weight	203 kg (447 lbs.)
ENGINE TYPE	4-Stroke, Air-Cooled, Parallel Four
Bore/Stroke/Number Cylinders/Displacement (cc)	63mm / 52.4mm / 4 / 653cc
Compression Ratio/Compression Pressure Min~Max	9.2:1 / 7.0 ~ 10.0 kg/cm ²
Piston Skirt Clearance New / Max	0.030 ~ 0.050mm / 0.1mm
Ring End Gap Top / 2nd / 3rd	0.15 ~ 0.35mm / 0.15 ~ 0.35mm / 0.3 ~ 0.9mm
Valve Clearance (Cold) Intake / Exhaust	0.11mm ~ 0.15mm / 0.16mm ~ 0.20mm
Oil Pressure Hot / rpm	NA
Oiling System	Wet Sump
Capacity: Dry	3500cc
Oil and Filter Change	2960cc
Oil Change	2360cc
Lubricant: Temp. Above 5°C (40°F)	Yamalube 4* or SAE 20W40 SE
Temp. Below 15°C (60°F)	Yamalube 4* or SAE 10W30 SE
AUTOLUBE - Min Stroke / Color Code	ø
Minimum Output @ 200 Cycles	ø
Maximum Output @ 200 Cycles	ø
CARBURETOR - Mfr. / Type / I.D. Number	Hitachi / HSC32 / 4W5-00
Main Jet / Pilot Jet	110 / 40
Needle Jet / Jet Needle-Clip Position	3.2 / Y-10 Fixed
Slide Cutaway or Throttle Valve	130
Float Level / Fuel Level	17.5 ± 0.5mm / 2 ~ 4mm
Idle rpm	1060 rpm
Max CO* / Max HC* / Set CO	5.0 % / 800 ppm / 3.0 % (All settings @ Idle)
SUSPENSION	
Front Forks: Oil Type / Level / Qty	10 Wt. Fork Oil* / ø / 262cc
Gas Pressure	ø
Spring Length Std	606mm
Monoshock: Oil Type / Qty	ø
Gas Pressure	ø
Minimum Brake Lining Thickness	Front: 1.2mm Rear: 2mm
Tire Size (Nominal Pressure)	F:3.25H19 (1.8 kg/cm ² /26 psi) R:130/90-18 57H (2.0 kg/cm ² /29 psi)
TRANSMISSION - Oil Type/Qty Chg/Qty Reassemble	See ENGINE Above
Primary Drive Type / Teeth / Ratio	Spur Gears / 97-58 / 1.672
Secondary Drive Type / Teeth / Chain	Shaft Drive / 49-36 x 19-18 x 32-11 / ø
Clutch Friction Plate Thickness Std ~ Min	3.0 ~ 2.8mm
Clutch Spring Length Std ~ Min	40.1 ~ 39.1mm
Middle Gear Case Capacity	ø
Final Gear Case Capacity	200cc
Gear Case Lubricant: Temp. Above 5°C (40°F)	SAE 80 API Hypoid Gear Oil GL-4
Temp. Below 15°C (60°F)	SAE 80 API Hypoid Gear Oil GL-4
All Weather Conditions	SAE 80 API Hypoid Gear Oil GL-4

PAGE 1 OF 2

CHARGING SYSTEM	AC Generator / 3-Phase / Full Wave
Battery: Model / Specific Gravity / Charge Rate	Yuasa 12N12A-4A-1 (12V 12AH) / 1.28 / 1.2A
Maximum Output	14V 19A @ 5000 rpm
TROUBLESHOOTING	
Field Coil Color Code / Ω	Rotor: Gm~Bm / 4.0 Ω ± 10% Stator: Wht~Wht / 8.45 Ω ± 10%
Charge Coil Color Code / Ω	ø
IGNITION SYSTEM	Transistor-Controlled Ignition
Ignition Timing	10° Mark
	Std: 10° @ 1050 rpm Adv: 37.5 ± 2° @ 4100 rpm
Spark Plug Type	NGK BP7ES or Nippon Denso W22EP
Spark Plug Gap / Torque / Cap Ω	0.7~0.8mm/2.0 m~kg/Cyl 164 5K Ω ±11%/Cyl 263 10K Ω ±11%
Point Gap / Condenser Capacitance	ø / ø
TROUBLESHOOTING	
Ignition Coil Test Gap / Primary Ω / Secondary Ω	6mm / 2.5 Ω ± 10% / 11K Ω ± 20%
Pulser Coil or Pickup Coil Color Code / Ω	Org ~ Blk, Gry ~ Bm / 650 Ω ± 20%
Source Coil Color Code / Ω	ø
LIGHTING SYSTEM	
Headlight / Taillight / Signal Rating	12V50-40W / 12V27-8W / 12V27W
TROUBLESHOOTING	
Lighting Coil Color Code / Ω	ø
TORQUE VALUES	
Front Axle Nut	14 x 1.5: 10.0 m~kg
Front Axle Holder Nut	8 x 1.25: 2.0 m~kg
Rear Axle Nut	14 x 1.5: 10 m~kg
Rear Axle Pinch Bolt	8 x 1.25: 0.6 m~kg
Clutch Nut	20 x 1.0: 7.0 m~kg
Drain Plug	14 x 1.5: 4.3 m~kg
Cylinder Head Cover	6 x 1.0: 1.0 m~kg
Cylinder Head:	10 x 1.25: 3.2 m~kg
Engine Mounting Bolts: Front, Upper	10 x 1.25: 4.0 m~kg
Front, Lower	10 x 1.25: 4.0 m~kg
Rear	12 x 1.25: 7.0 m~kg

ø = Does Not Apply To This Model

NA = Information Not Available

*Available From Yamaha Parts Distributors Inc.

*For Diagnostic Use Only