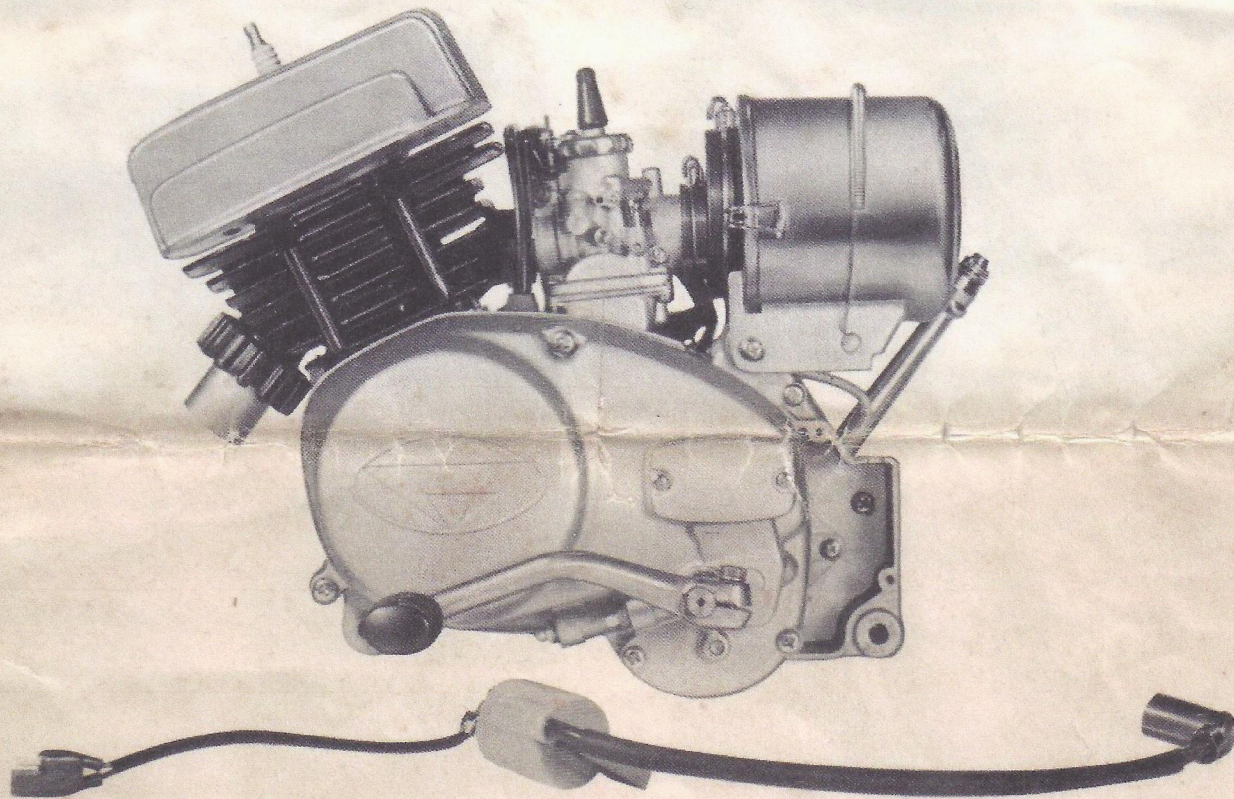


F500K ENGINE OWNERS HANDBOOK AND ILLUSTRATED PARTS LIST

100 CC FUJI



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I. Specifications

Engine:	Type:	25° inclined single cylinder two-stroke air-cooled gasoline engine
	Piston displacement:	97cc(5.92cu.in)
	Bore X Stroke:	53mm X 44mm(2.09" X 1.73")
	Maximum output:	10.0HP/8000RPM
	Maximum torque:	1.00kgm/7500RPM
	Compression ratio:	7:1
	Engine fuel:	Gasoline 20:1 oil mixture
	Carburetor:	MIKUNI VM22 (22mm)
	Starting system:	Kick system (Primary kick)
	Ignition system:	KOKUSAN DENKI FP-TYPE flywheel magneto with 6V-45W lighting coil external ignition coil
Spark plug: NGK B-8S		
Transmission:	Type (pat. 495715):	5 speed foot operated with constant mesh
	Driving system:	Primary drive by helical gear
	Final drive by choice of 13, 14, 15 tooth sprocket (for No.41 roller chain)	
	Gearbox lubrication:	Motor oil SAE 30 wt. (1 1/4 pints)
	Reduction gear ratio:	1 speed (low) 8.71
		2 speed (2nd) 5.89
		3 speed (3rd) 4.07
		4 speed (4th) 3.17
		5 speed (5th) 2.69

II. "Breaking in" your Engine

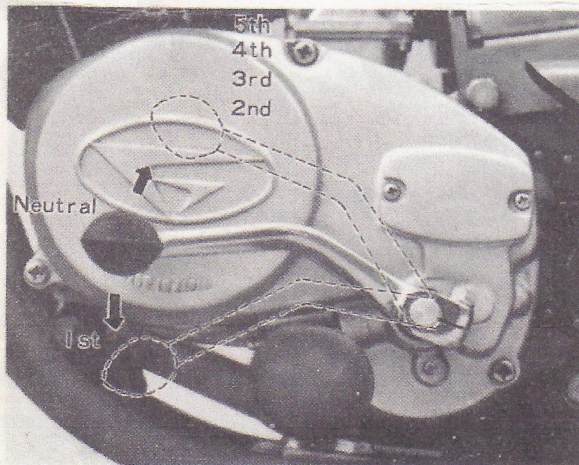
(Please keep the following points well in mind before operating your engine and it will give you long and trouble-free service.)

BREAKING IN YOUR F500K

Great care is taken during the manufacture to ensure the accuracy of fit, it is very important to allow the moving parts a certain minimum running period to "wear in" before operating the engine, and transmission to full loads, and to permit operation at maximum speeds. The efficiency of the engine and length of useful service greatly depends upon the care given during the early period of operation.

Item	Method
Break in period	- For the first 5 hours the throttle should not be opened more than two thirds of full movement, and use should be made of the gearbox especially when climbing hills. Much harm may be done to the engine by allowing it to labor in too high gear. On the other hand the engine must not be raced in a low gear. - After the first 5 hours the throttle may be opened progressively wider until 10 hours has been reached. Remember the rule of not racing or lugging the engine.
Fuel Mix for Break-in	Use 1 pint SAE 30 two-cycle oil in 2 gallons of premium gasoline (16:1 ratio)
Gear oil	Use high quality motor oil. SAE 30 in summer and SAE 20 in winter.

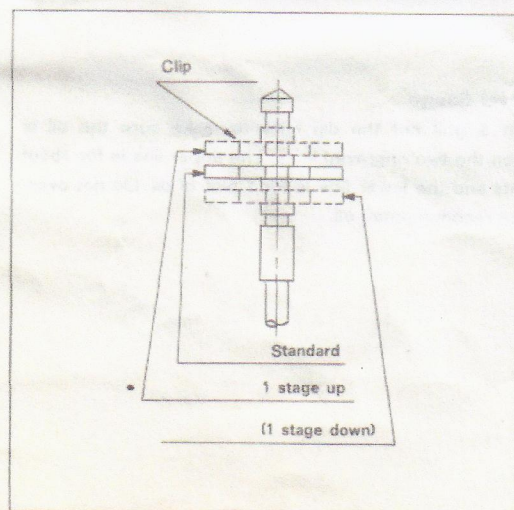
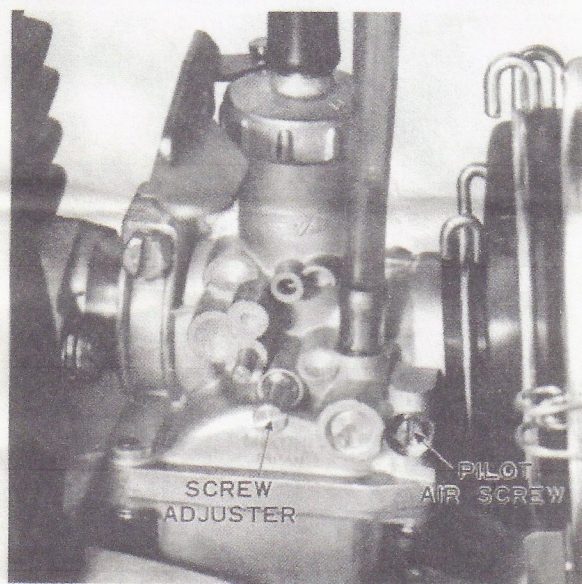
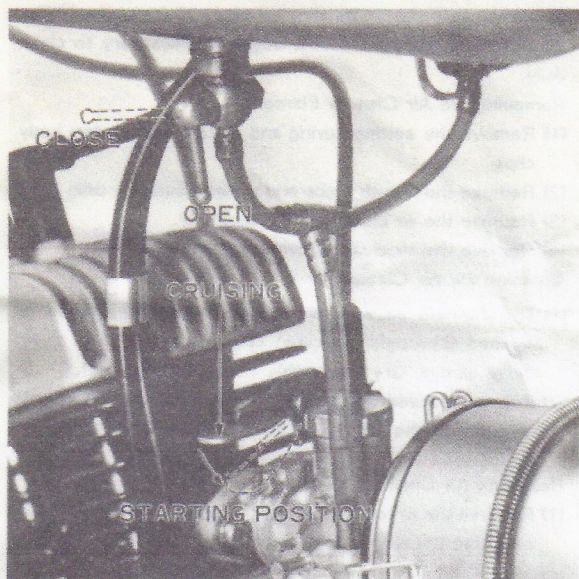
III. Operation



Gear change operation of transmission.

	ACCELERATE	DECELERATE
Low gear	Push down from neutral	Push down from neutral Push down strongly from 2nd
Neutral	Lift up lightly from low	Push down lightly from 2nd
2nd gear	Lift up from neutral Lift up strongly from low	Push down from 3rd
3rd gear	Lift up from 2nd	Push down from 4th
4th gear	Lift up from 3rd	Push down from 5th
5th gear	Lift up from 4th	

IV. Checking and maintenance



1. Starting procedure

- (1) Open the fuel cock completely.
- (2) Set the starter lever on the carburetor to starting position. When the engine is warm as in summer, it is not necessary.

2. Adjustment & Inspection of Carburetor

(1) Adjustment of Slow (Idling).

First of all return the throttle grip fully.

Turn the slow adjust screw in a clockwise direction to increase speed.

(2) Throttle cable adjustment.

Turn the adjuster in a counter-clockwise direction to remove cable slack.

Note: The carburetor has an extremely delicate and important duty to perform, and it has been adjusted at the factory with a great deal of care, therefore, careless adjustment should be avoided.

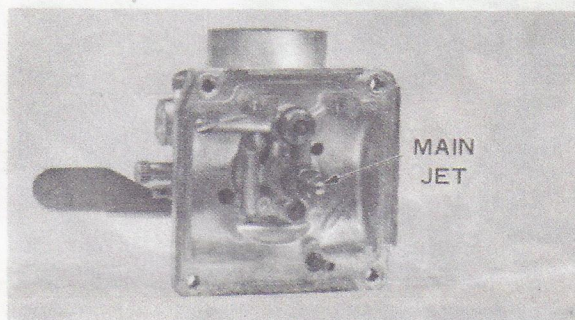
(3) Adjustment of fuel

(a) Adjust the carburetor pilot air screw for low speed to intermediate speed. When this screw is tightened the mixture becomes rich and when loosened, the mixture is lean. Open approximately $1\frac{1}{4}$ turn after being fully tightened for normal position.

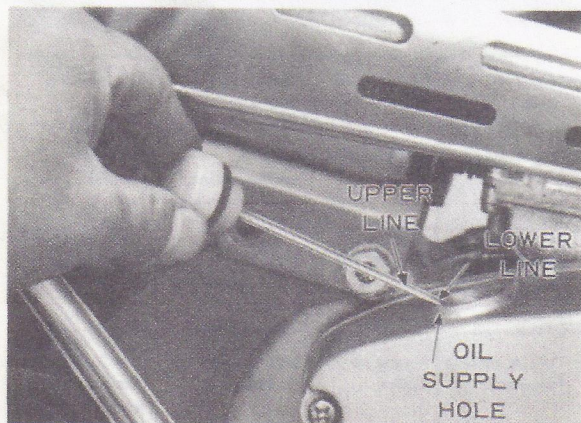
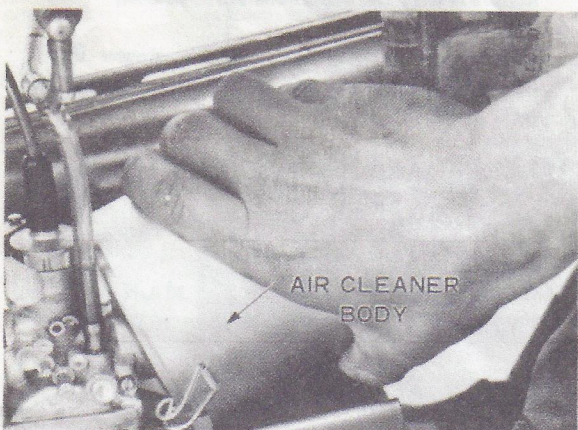
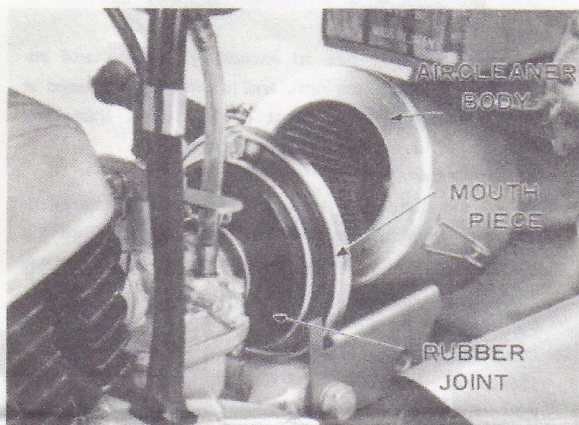
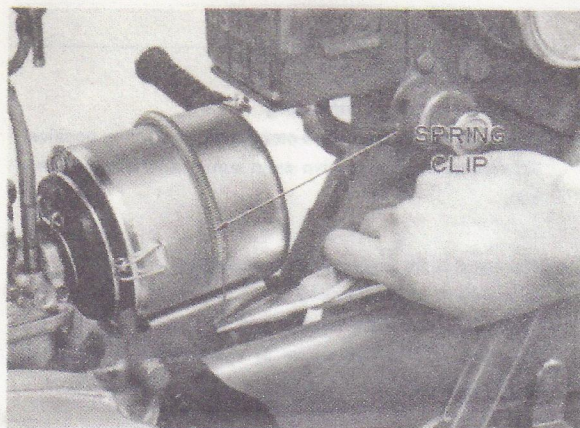
(b) Intermediate speed to high speed is determined by the stages of jet needle. Raise the jet needle and the fuel mixture becomes rich, lower the jet needle and fuel mixture is lean. The standard is in 3rd position.

(c) High speed

Adjusted by changing main jet. The greater the jet number, the richer the gas mixture. The standard main jet is a #90.



Fuel intake volume	Color of spark plug	Condition of exhaust smoke	Condition of engine	Clip position
Correct	Light-brown.	A little purple.	low fuel consumption good combustion	As it is, correct mixture
Too rich	Dark-brown or black.	Very smoky	High fuel consumption low speed.	1 or 2 stage up, lean mixture
Too lean	White surface blistered.	Almost no smoke.	Low speed overheating.	1 or 2 stage down, enrichen mixture



3. Air Cleaner

In order to assure maximum engine efficiency and long life, the air cleaner should be cleaned every 10-20 hours. Under conditions of extreme dust it might be necessary to clean daily.

Removing the Air Cleaner Element.

- (1) Remove the setting spring and disconnect the two body clips.
- (2) Remove the mouth piece and rubber joint in a unit.
- (3) Remove the air cleaner body assembly.
- (4) Remove the air cleaner element from the body.

Cleaning the Air Cleaner

- (1) The element as well as the felt inner liner are to be washed thoroughly in clean solvent or kerosene to remove all dirt. Dry thoroughly after cleaning.
- (2) Before re-assembling, carefully spread SAE 30 motor oil throughout the felt inner liner and element. Drain off any excess oil.

Replacing Air Cleaner

- (1) Reverse the procedure of removing the air cleaner. (Take care that the rubber joint is correctly installed).

4. Oil Level Gauge

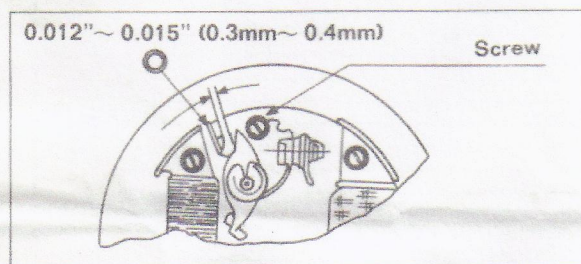
Loosen & pull out the dip stick to make sure the oil is between the two engraved lines. The upper line is for about $1\frac{1}{4}$ pints and the lower line is for 1 pint of oil. Do not over-fill. Use recommended oil.

0.024" ~ 0.027" (0.6mm ~ 0.7mm)



TAIL PIPE SCREWS

0.012" ~ 0.015" (0.3mm ~ 0.4mm)



Screw

7. Ignition

The contact breaker (points) should open when the mark on the flywheel is in line with the mark on the crankcase. The point gap should be 0.012-0.015". To adjust, loosen the point screw with a screw driver and move point assembly. The standard ignition timing is 25° B.T.D.C., 0.102" (2.6mm) measured at the piston.

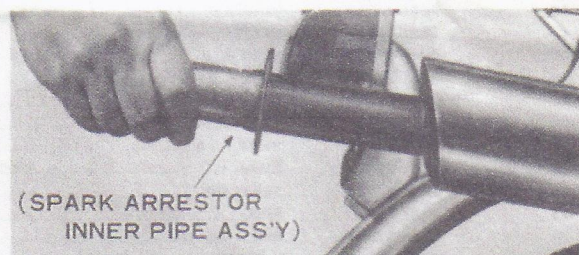
5. Spark Plug

The spark plug may be cleaned by using a small wire brush and cleaning solvent. After the plug is thoroughly cleaned and dried, the gap should be reset to 0.024"-0.027". Always use the recommended plug (N.G.K. B-8S).

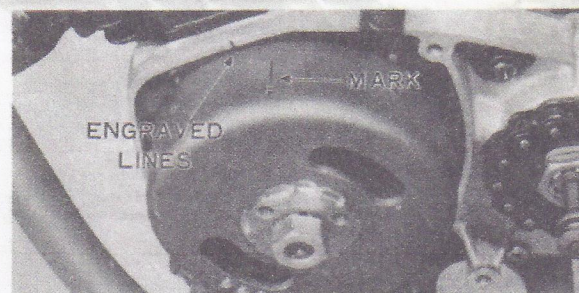
6. Muffler

Cleaning the Spark Arrester and Inner Pipe

- (1) Pull out the spark arrester inner pipe assembly.
- (2) Clean the spark arrester inner pipe assembly with a wire brush and cleaning solvent.
- (3) Replace spark arrester inner pipe assembly.



(SPARK ARRESTOR
INNER PIPE ASS'Y)



ENGRAVED
LINES

REGULAR CHECKING AND MAINTENANCE

		Every riding time	Running time in hours									
			25	50	75	100	125	150	175	200	225	250
Gearbox oil change and inspection			○		○		○			○		
Clutch	operation	○										
	inspect parts					○			○			○
Carburetor	inspect parts						○					
	Air cleaner		○	○	○	○	○	○	○	○	○	○
To De-Carbonize cylinder head, and cylinder.							○					○
To clean exhaust pipe and muffler.								○				
Magnet, point inspection.				○		○			○		○	

FIG. NO.	PART NO.	DESCRIPTION	QTY
A- 1	2537-11110	CYLINDER HEAD	1
- 2	2537-11210	NUT, cylinder head	4
- 3	01641-20812	WASHER, cylinder head	4
- 4	2537-15110	GASKET, cylinder head	1
- 5	2546-12110	CYLINDER	1
- 6	2531-13110	NUT, exhaust	1
- 7	2531-13120	GASKET, exhaust	1
- 8	2537-15120	GASKET, cylinder base	1
- 9	2546-15130	GASKET, inlet pipe	1
-10	2546-15140	INLET PIPE	1
-11	0260-30620	SCREW	2
-12	2531-19110	JOINT, exhaust	1
-13	2535-22000	COVER, magneto, assy. (14 - 43)	1
-14	2535-22110	COVER, magneto	1
-15	2531-22630	NIPPLE, grease	2
-16	2531-22640	WASHER	1
-17	2531-22730	COVER, shifter	1
-18	0260-00410	SCREW	2
-19	2531-22210	GUIDE, shifter	1
-20	2531-22220	ARM, shifter	1
-21	2531-22230	PIN, shifter	1
-22	2531-22240	SHIM, t=0.2	0-2
-23	2531-22250	SHIM, t=0.3	0-2
-24	2531-22260	SLIDE PIN	1
-25	2531-22270	RING	1
-26	2531-22280	BOLT, adjust	1
-27	0290-20615	WASHER	1
-28	0280-10605	NUT	1
-29	2531-22310	SHAFT, foot change	1
-30	2531-22410	CHANGE KEY	1
-31	2531-22320	PIN	1
-32	2531-22420	SNAP RING	1
-33	2535-22510	RACHET, foot change	1
-34	2531-22520	SPRING, change ratchet	1
-35	2531-22530	CENTER SCREW	1
-36	2531-22540	SHIM, t=0.2	0-2
-37	2531-22550	SHIM, t=0.3	0-2
-38	04064-01410	SNAP RING	1
-39	2531-22610	PLUNGER	1
-40	2531-22620	PLUNGER SPRING	1
-41	2531-22710	COVER, inside	1
-42	2531-22740	PACKING, inside cover	1
-43	0260-10510	SCREW	2
-44	2531-22720	DUST SEAL	1
-45	2531-22911	LEVER, foot change	1
-46	2546-22920	RUBBER, foot change lever	1
-47	0224-10620	BOLT	1
-48	0260-00650	SCREW	2
-49	0260-00660	SCREW	1
-50	2541-23100	COVER, clutch assy. (51 - 56)	1
-51	2541-23110	COVER clutch	1
-52	2531-23120	BUSHING	1
-53	2531-23140	LEVER, clutch	1
-54	2531-23150	O RING, clutch lever	1
-55	2531-23160	RIVET	1
-56	2531-23130	STOP RUBBER	1
-57	2531-23210	PIECE, clutch pressure	1
-58	2531-23240	GASKET, clutch cover	1
-59	2531-23220	OIL GAUGE	1
-60	2531-23230	GASKET, oil gauge	1
-61	0260-00640	SCREW	3
-62	0260-00650	SCREW	2
-63	2531-23310	ADJUSTER, clutch cable	1
-64	0280-10605	NUT	1
-65	2531-23330	SPRING, cable adjuster	1
	2537-06010	GASKET KIT (A-4, 7, 8, 9, 58)	1 set

A

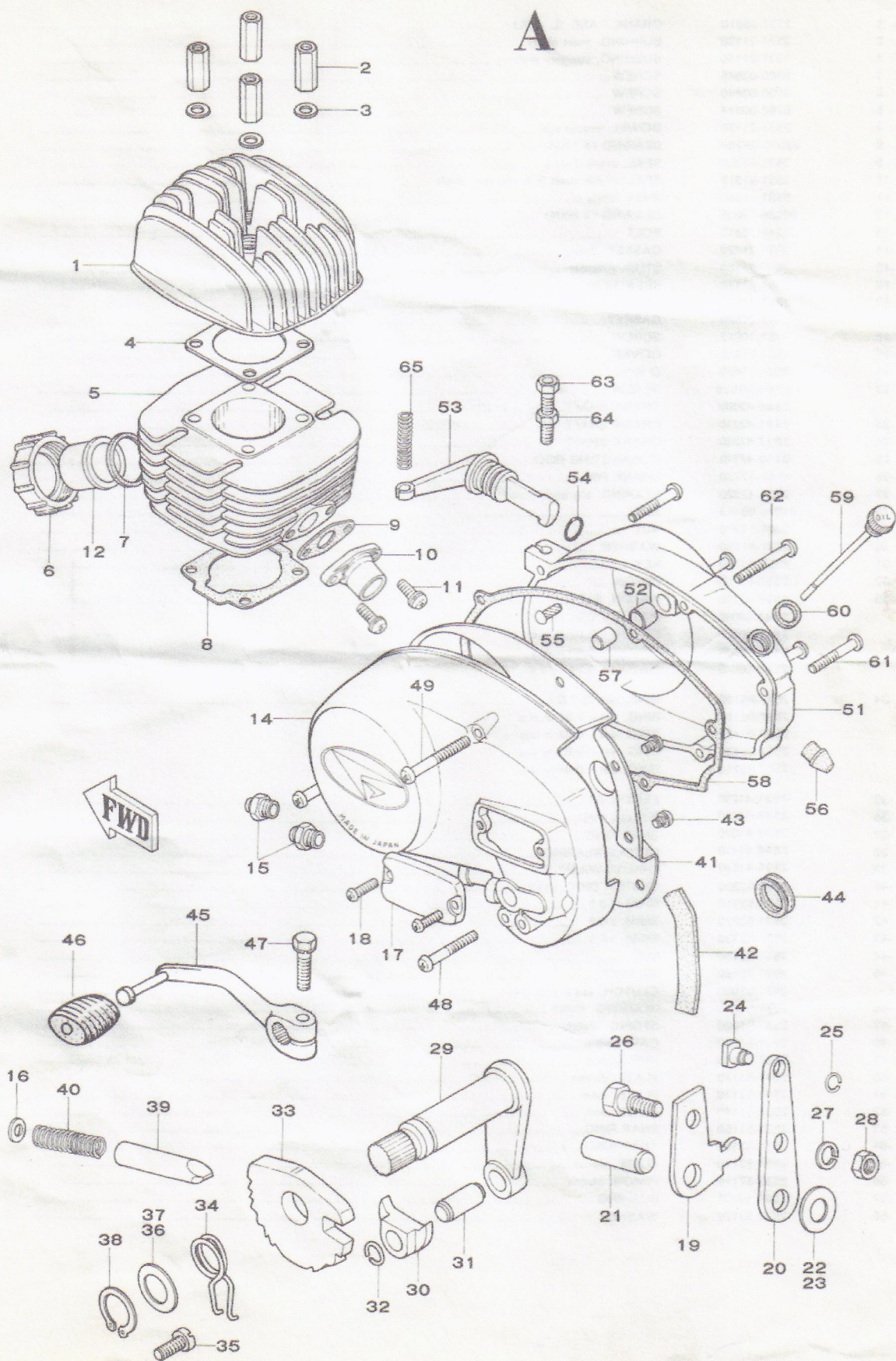


FIG.NO.	PART NO.	DESCRIPTION	QTY
B- 1	2537-05010	CRANK CASE, (L. & R.)	1
- 2	2531-21130	BUSHING, main shaft	1
- 3	2531-21140	BUSHING, counter shaft	1
- 4	0260-00645	SCREW	8
- 5	0260-00640	SCREW	1
- 6	0260-00614	SCREW	1
- 7	2531-21150	DOWEL, crankcase	2
- 8	06030-06204	BEARING (# 6204)	3
- 9	2531-21320	SEAL, crankshaft L	1
-10	2531-21310	SEAL, crank shaft R & counter shaft	2
-11	2531-21380	SNAP RING	2
-12	06030-06005	BEARING (# 6005)	1
-13	0212-20810	BOLT	1
-14	2531-21420	GASKET, drain	1
-15	2537-21160	STUD, cylinder	4
-16	2531-21170	BREATHER	1
-17	2537-21510	BOSS	1
-18	2537-21520	GASKET	1
-19	0262-10612	SCREW	2
-20	2537-21610	COVER	1
-21	2537-21620	O RING	1
-22	0260-30525	SCREW	2
	2546-42000	CRANK SHAFT, ass'y, (23-27)	1
-23	2531-42210	CRANK SHAFT, (M)	1
-24	2537-42220	CRANK SHAFT, (C)	1
-25	2546-42110	CONNECTING ROD	1
-26	1740-42230	CRANK PIN	1
-27	2531-42320	BEARING, big end	1
-28	04010-00413	KEY	1
-29	0281-11210	NUT	1
-30	2531-61130	WASHER	1
-31	2537-43120	KEY	1
-32	2537-43110	PINION	1
-33	2546-41110	PISTON, Std	1
	2546-08010	PISTON+ 0.01 in o.s.	
	2546-08020	PISTON+ 0.02 in o.s.	
	2546-08030	PISTON+ 0.03 in o.s.	
	2546-08040	PISTON+ 0.04 in o.s.	
-34	2537-06100	RING, set (S.T.D.)	1
	2537-06110	RING, set+ 0.01 in o.s.	
	2537-06120	RING, set+ 0.02 in o.s.	
	2537-06130	RING, set+ 0.03 in o.s.	
	2537-06140	RING, set+ 0.04 in o.s.	
-35	2537-41230	EXPANDER	1
-36	2546-41310	PISTON PIN	1
-37	2546-41320	SNAP RING	2
-38	2546-41410	NEEDLE BEARING	1
-39	2546-41510	THRUST WASHER	2
-40	2531-52200	CLUTCH DISC, ass'y	1
-41	2531-52310	SHIM, t-0.2	0-2
-42	2531-52320	SHIM, t-0.3	0-2
-43	2531-52330	SHIM, t-0.5	0-2
-44	2531-52150	NUT	1
-45	2531-52160	WASHER	1
	2531-51000	CLUTCH, ass'y (46-54)	1
-46	2531-51210	HOUSING, clutch	1
-47	2531-51220	SPRING, clutch	6
-48	2531-51230	CAP, spring	6
-49	2531-51110	HUB, clutch	1
-50	2531-51170	PLATE, driven	2
-51	2531-51130	PLATE, inner	1
-52	2531-51140	PLATE, end	1
-53	2531-51150	SNAP RING	1
-54	2531-51160	SNAP RING	1
-55	2531-52140	PLATE, thrust	1
-56	2535-52110	PINION, clutch	1
-57	2531-52131	BUSHING	1
-58	2531-52120	WASHER	1

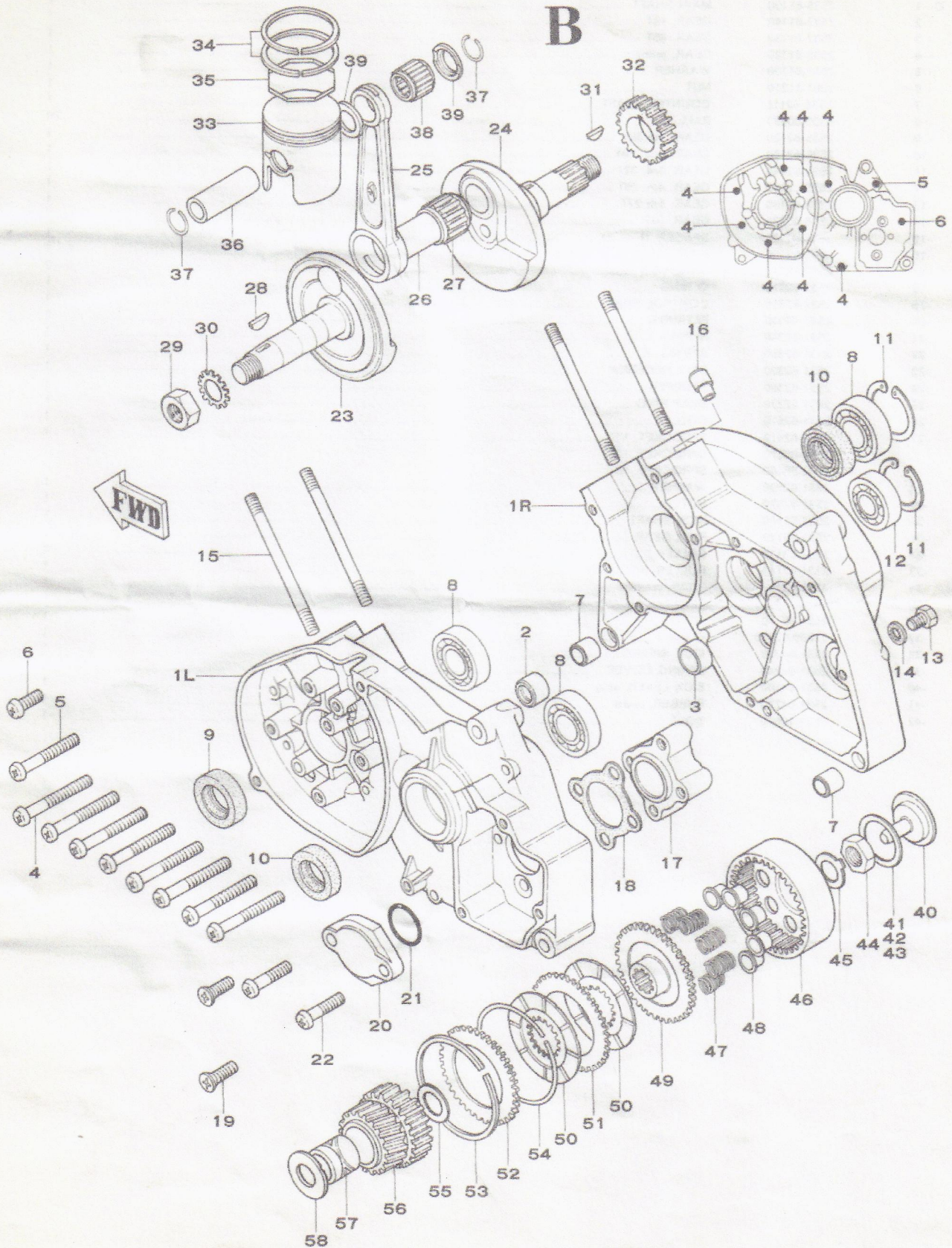
B

FIG. NO.	PART NO.	DESCRIPTION	QTY
C- 1	2535-61100	MAIN SHAFT	1
- 2	2537-61140	GEAR, 19T	1
- 3	2537-61150	GEAR, 65T	1
- 4	2535-61190	GEAR, primary	1
- 5	2531-61130	WASHER	1
- 6	0281-11210	NUT	1
- 7	2535-62111	COUNTER SHAFT	1
- 8	0300-00793	BALL.....	20
- 9	2535-62120	GEAR, 1st 38T	1
-10	2535-62130	GEAR, 2nd, 36T	1
-11	2535-62140	GEAR, 3rd, 32T	1
-12	2535-62150	GEAR, 4th, 29T	1
-13	2535-62160	GEAR, 5th 27T	1
-14	2535-62220	GEAR, 30T	1
-15	2531-62160	SPACER, R	1
-16	2531-62180	SHIM, t-0.2	0-2
-17	2531-62190	SHIM, t-0.3	0-2
-18	2531-62210	O RING	1
-19	2531-62310	CONTROL SHAFT	1
-20	2535-62370	RETAINER	2
-21	2531-62340	SPRING, L.....	1
-22	2531-62350	SPRING, R	1
-23	2531-62320	BALL RECEIVER	1
-24	2531-62360	STOPPER	1
-25	2531-22270	SNAP RING	1
-26	2531-62510	COLLAR.....	1
-27	2531-62410	SPROCKET, 14T	1
	2531-08070	SPROCKET, 13T	
	2531-08080	SPROCKET, 15T	
-28	2531-62530	WASHER	1
-29	2531-62520	NUT	1
-30	2537-63110	KICK SHAFT	1
-31	2537-63120	KICK GEAR	1
-32	2531-63130	ROLLER	5
-33	2531-63140	ROLLER, RETAINER	1
-34	2531-63150	SNAP, retainer	1
-35	04064-01610	RING.....	1
-36	2531-63170	PLATE	1
-37	07000-02016	O RING	1
-38	2531-64230	KICK SPRING	1
-39	2531-64240	SPRING COVER	1
-40	2531-64100	KICK LEVER, assy	1
-41	2531-64210	RUBBER, pedal	1
-42	0224-10620	BOLT	1

C

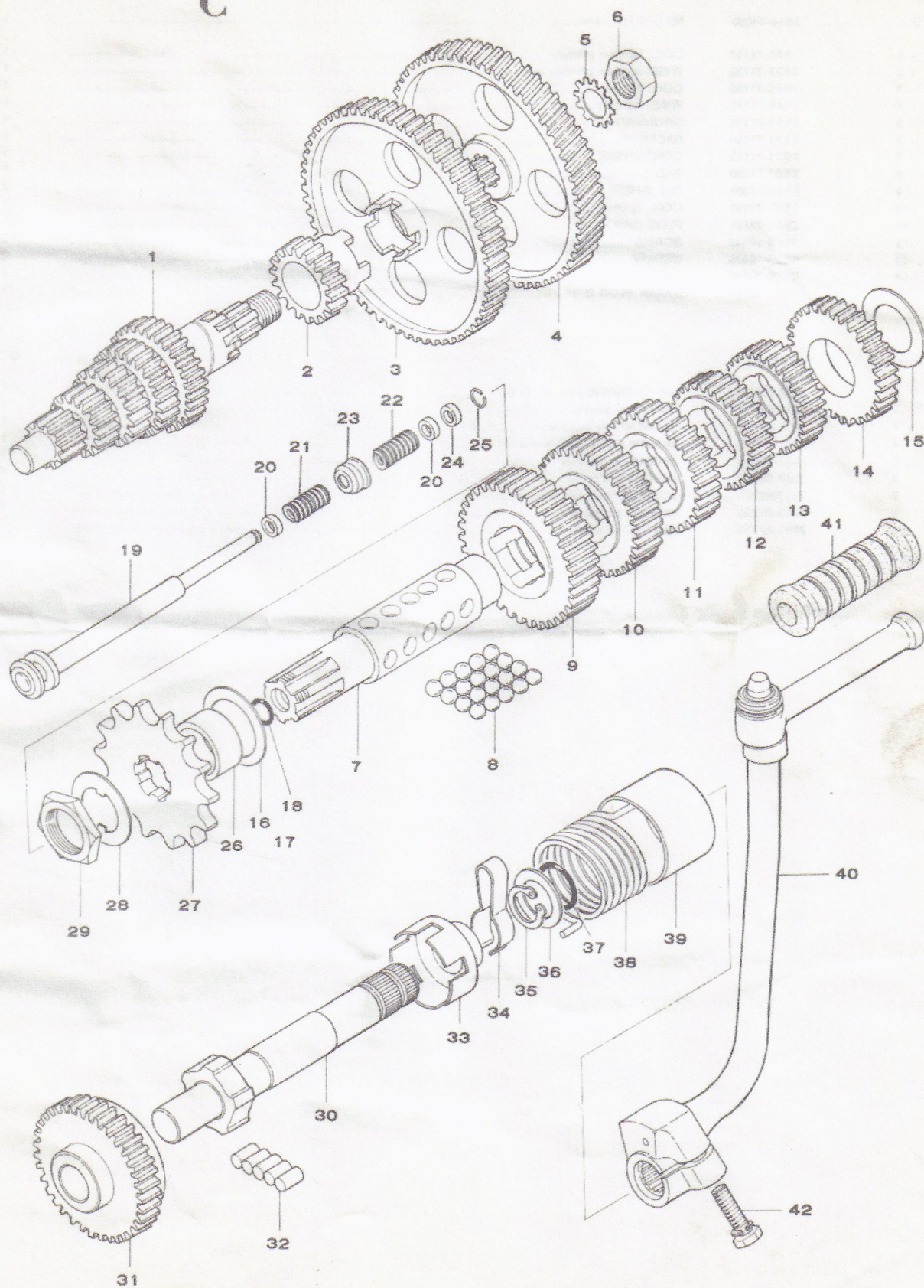


FIG NO	PART NO	DISCRIPTION	QTY
D	2546-71000	MAGNETO, assy.....	1
- 1	2536-71110	COIL, ignition primary	1
- 2	2531-71130	WIRE, ignition primary coil	1
- 3	2546-71150	COIL, lighting.....	1
- 4	2546-71160	WIRE, lighting	1
- 5	2531-71170	GROMMET	1
- 6	2531-71180	BREAKER	1
- 7	2531-71110	CONDENSER	1
- 8	2531-71220	PAD	1
- 9	2546-71300	FLY WHEEL	1
-10	2531-72110	COIL, ignition	1
-11	2531-72121	PLUG CAP	1
-12	0260-10430	SCREW	2
-13	0260-10435	SCREW	2
-14	0260-30412	SCREW	2
-15	0400-02104	SPARK PLUG B-8S.....	1

FIG NO	PART NO		QTY
E	2537-82100	AIR CLEANER, assy (2, 3, 4).....	1
- 2	2537-82110	BODY, air cleaner.....	1
- 3	2537-82120	ELEMENT, air cleaner.....	1
- 4	2537-82130	MOUTH PIECE, air cleaner	1
- 5	2537-82250	SPRING, air cleaner	1
- 6	2537-82240	BRACKET, cleaner	1
- 7	2537-82210	JOINT, air cleaner.....	1
- 8	2537-82220	CLIP, S., air cleaner	1
- 9	2531-82230	CLIP, L., air cleaner	1

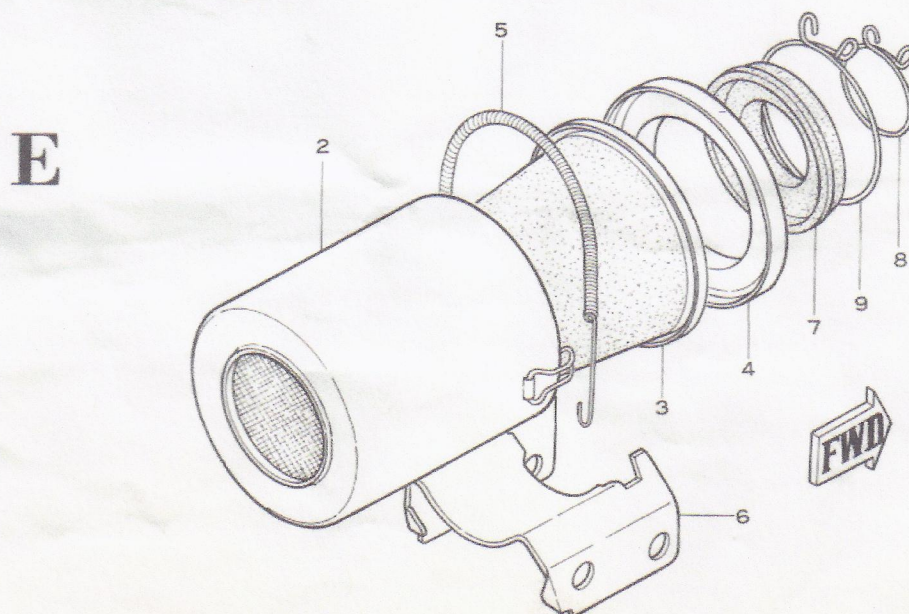
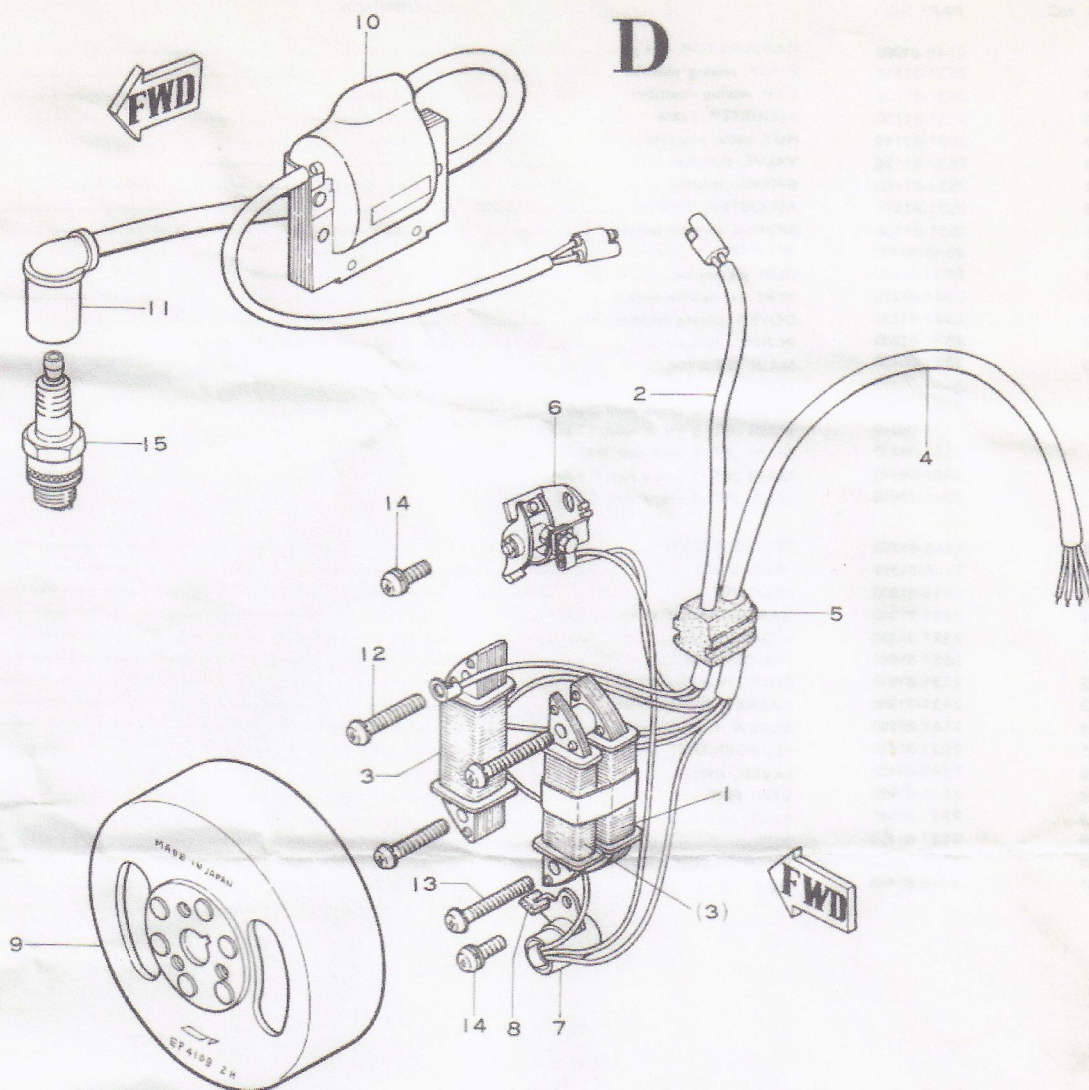


FIG. NO.	PART NO.	DESCRIPTION	QTY
F	2546-81000	CARBURETOR, ass'y.....	1
- 2	2537-81110	BODY, mixing chamber	1
- 3	2537-81120	CAP, mixing chamber	1
- 4	2531-81130	ADJUSTER, cable	1
- 5	2537-81140	NUT, cable adjuster.....	1
- 6	2537-81150	VALVE, throttle.....	1
- 7	2537-81160	SPRING, throttle	1
- 8	2531-81170	ADJUSTER, throttle	1
- 9	2531-81180	SPRING, throttle adjuster	1
-10	2546-81190	JET NEEDLE	1
-11	2531-81210	CLIP, jet needle	1
-12	2537-81220	SEAT, jet needle spring	1
-13	2537-81230	COVER, mixing chamber top	1
-14	2531-81240	SCREW, pilot air	1
-15	2531-08420	MAIN JET #100.....	1
	2531-08410	MAIN JET, 1 step lean #90	
	2531-81260	MAIN JET, 2 steps lean #80	
	2531-08310	MAIN JET, 3 steps lean #70	
	2531-08430	MAIN JET, 1 step rich #110	
	2535-08440	MAIN JET, 2 steps rich #120	
	2546-08450	MAIN JET, 3 steps rich #130	
-16	2546-81310	NEEDLE VALVE	1
-17	2546-81320	NEEDLE JET	1
-18	2546-81330	PILOT JET	1
-19	2531-81340	GASKET, needle valve	1
-20	2537-81350	FLOAT	1
-21	2531-81360	PIN, float arm	1
-22	2531-81370	BODY, float chamber.....	1
-23	2531-81380	GASKET, float chamber.....	1
-24	2531-81390	SCREW, float chamber.....	4
-25	2531-81410	PLUNGER UNIT, starter	1
-26	2546-81420	LEVER, starter	1
-27	2531-81430	VENT PIPE.....	1
-28	2537-81440	BOLT, carburetor setting.....	1
-29	2537-81450	NUT	1
-30	2531-81460	SPRING, starter lever set.....	1
-31	2546-81480	PIPE	1

F