Kawasaki

KZ400-H1 LTD

Motorcycle Service Manual Supplement

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This Supplement is designed to be used in conjunction with the KZ400 Service Manual, Part No. 99924-1005-01.

All information contained in this Supplement is based on the latest product information available at the time of publication. The right is reserved to make changes at any time without prior notice and without incurring an obligation to make such changes to products manufactured previously.
Published by Product Services.

1979 Printed in U.S.A. First Issue June 1979.

Model Identification

LEFT SIDE VIEW

BEGINNING

Engine No. K4E139801
Frame No. KZ400H-000101

RIGHT SIDE VIEW

QUICK REFERENCE GUIDE

To use, bend the manual back and match the desired section below against the black spot showing at the edge of these pages. See the KZ400 Service Manual for sections not included in this Supplement.

Specifications		**A**
Adjustment	**Chassis**	**C**
Disassembly	**Engine/Chassis**	**E**
Maintenance & Theory	**Chassis**	**J**
Appendix	**Wiring Diagram Cable Routing Periodic Maint. Chart Torque Table**	**M**

NOTE:

Page numbers starting with "S-" refer to pages in this supplement. All other page numbers refer to the basic KZ400 Service Manual (P/N 99924-1005-01)

Dimensions		
Overall length		2,080 mm
Overall width		810 mm
Overall height		1,180 mm
Wheel base		1,390 mm
Road clearance		140 mm
Dry weight		170 kg
Fuel tank capacity		12 ℓ
Performance		
Climbing ability		24°
Braking distance		13.5 m @50 kph
Minimum turning radius		2.4 m
Engine		
Type		SOHC, 2 cylinder, 4 stroke, air-cooled
Bore and stroke		64.0 x 62.0 mm
Displacement		398 cc
Compression ratio		9.5
Maximum horsepower		36 HP @8,500 rpm
Maximum torque		3.2 kg-m @7,000 rpm
Valve timing		
Inlet	Open	27° BTDC
	Close	73° ABDC
	Duration	280°
Exhaust	Open	70° BBDC
	Close	30° ATDC
	Duration	280°
Carburetors		Keihin VB32 x 2
Lubrication system		Forced lubrication (wet sump)
Engine oil		SE class SAE 10W40, 10W50, 20W40, or 20W50
Engine oil capacity		2.9 ℓ
Starting system		Electric and kick
Ignition system		Battery and coil
Ignition timing		From 10° BTDC @1,100 rpm to 35° BTDC @3,200 rpm
Spark plugs		NGK B7ES or ND W22ES-U
Transmission		
Type		6-speed, constant mesh, return shift
Clutch		Wet, multi disc
Gear ratio:	1st	2.54 (33/13)
	2nd	1.75 (28/16)
	3rd	1.32 (25/19)
	4th	1.10 (23/21)
	5th	0.96 (22/23)
	6th	0.88 (21/24)

Primary reduction ratio		2.43 (56/23)
Final reduction ratio		3.00 (45/15)
Overall drive ratio		6.39 (Top gear)
Electrical Equipment		
Alternator		Nippon Denso 5-037000-373
Regulator/Rectifier		Shindengen SH221-12
Ignition coil		Nippon Denso 029700-3881
Battery		Yuasa 12N 12A-4A-1 (12V 12AH)
Starter		Mitsuba SM-223
Headlight type		Sealed beam
Headlight		12V 50/35W
Tail/Brake light		12V 8/27W (8/32 CP)
Meter lights		12V 3.4W
Indicator lights		12V 3.4W
Turn signal lights		12V 23W
Horn		12V 2.5A
Frame		
Type		Tubular, double-cradle
Steering angle		40° to either side
Castor		27.5°
Trail		112 mm
Tire size	Front	3.25S-19 4PR
	Rear	130/90-16 67S
Suspension	Front	Telescopic fork
	Rear	Swing arm
Suspension stroke	Front	150 mm
	Rear	95 mm
Front fork oil capacity (each fork)		145~155 cc
Front fork oil type		SAE 5W20
Brakes		
Type	Front	Disc brake
	Rear	Internal expansion, leading-trailing
Effective disc diameter		230 mm
Brake drum inside diameter and width		160 x 30 mm

Specifications subject to change without notice.

A

Adjustment

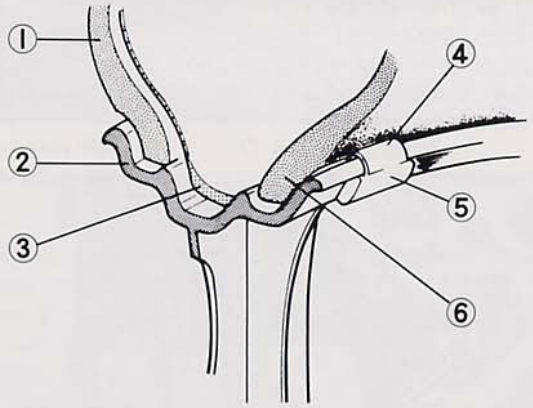
WHEEL BALANCE (For Cast Wheel)

Refer to Pgs. 29~30, noting the following:

1. To install the balance weights on the rim of cast wheels:

- First reduce the tire pressure, pry the tire bead from the rim, and then insert the blade part of the balance weight between the rim and the tire bead until the stepped portions of the rim and the weight is hooked over the rim.
- Inflate the tire to standard pressure (Pg. S-15).

Balance Weight Installation (N1)



1. Tire
2. Rim
3. Tube
4. Blade
5. Weight
6. Tire Bead

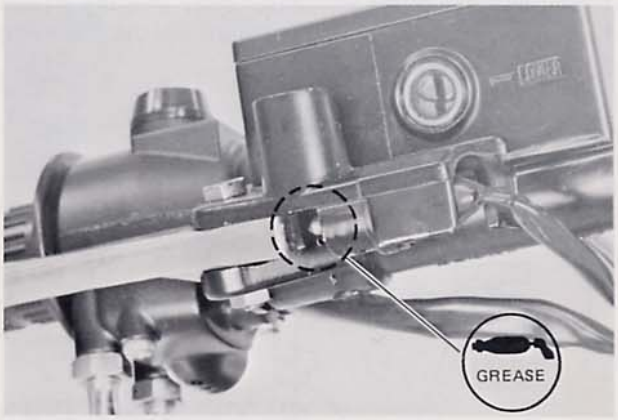
2. Balance weights are available from Kawasaki Dealers in 10, 20, and 30 gram sizes. An imbalance of less than 10 grams will not usually affect running stability.

LUBRICATION (KZ400-H)

In addition to the points listed on Pgs. 31~32, check and lubricate regularly the following area.

Front Brake Lever

Apply a light coat of grease to the surface that the push rod of the front brake light switch pushes against.



C

E

Disassembly

TORQUE AND LOCKING AGENT (KZ400-H)

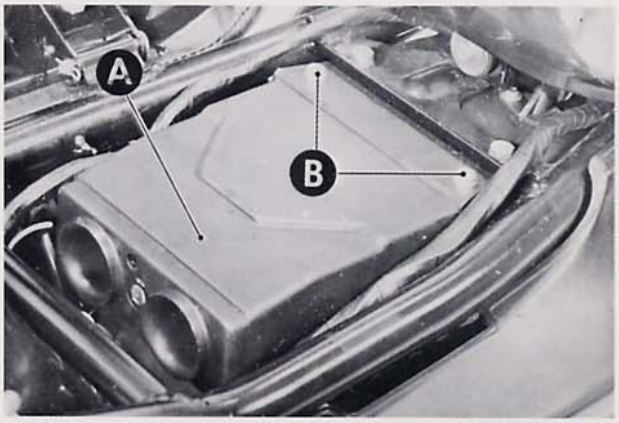
Tighten the engine parts of KZ400-H to the specified amount of torque listed on Pgs. 37~38. But tighten the chassis parts of KZ400-H to the specified torque listed in Table N1.

NOTE: Parts marked with an asterisk (*) must be retorqued according to the Periodic Maintenance Chart (Pg. S-19). One at a time, loosen each bolt or nut ½ turn, then tighten it to the specified torque. Follow the sequence if specified. For engine fasteners, retorque them when the engine is cold (at room temperature).

AIR CLEANER ELEMENT (KZ400-H)

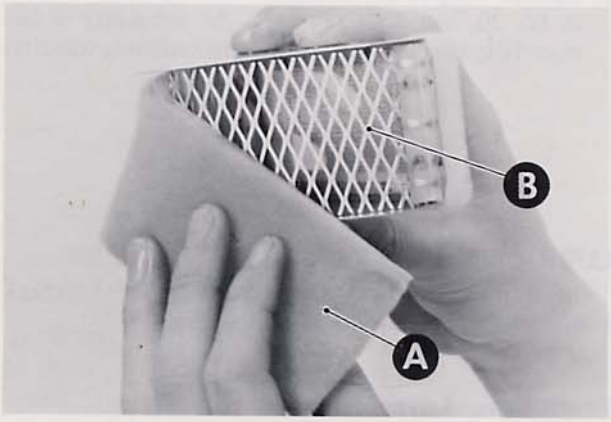
Removal

- Unlock the seat, and swing it open.
- Unscrew the mounting screws and flat washers (2 ea), and take off the air cleaner body.



A. Air Cleaner Body **B. Mounting Screws**

●Pull out the element.
●Unhook the sponge filter at both ends, and remove it from the wire frame.

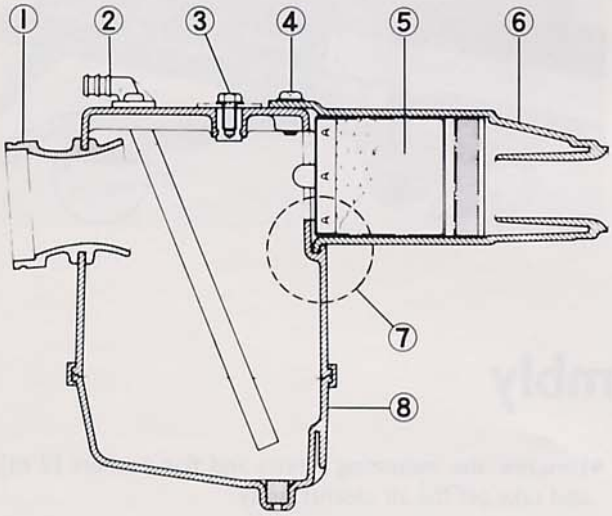


A. Sponge Filter **B. Wire Frame**

Installation Notes:

1. Fit the ridge of the air cleaner body into the groove in the air cleaner housing, and secure the mounting screws (2).

Air Cleaner Body Installation N5

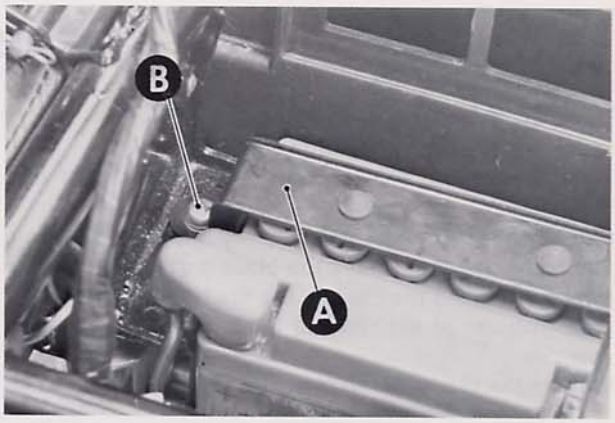


1. Air Cleaner Duct
2. Breather Hose Fitting
3. Housing Mounting Bolts
4. Body Mounting Screws
5. Air Cleaner Element
6. Air Cleaner Body
7. Fit the ridge into the groove.
8. Air Cleaner Housing

AIR CLEANER HOUSING (KZ400-H)

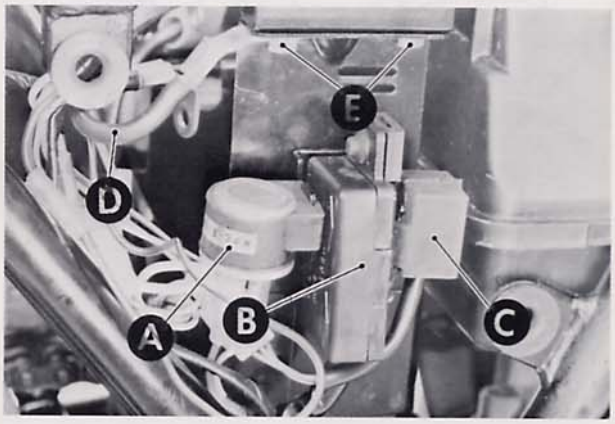
Removal:

●Remove the fuel tank (Pg. 43).
●Unscrew the mounting screws, and remove the air cleaner body.
●Unscrew the screw, and remove the battery stay plate.



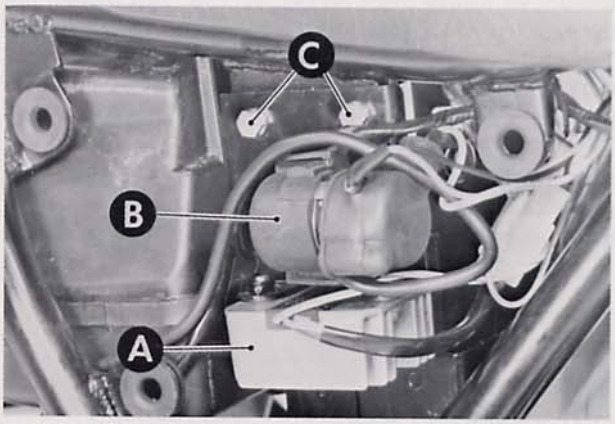
A. Stay Plate **B. Screw**

●Disconnect first the negative (–) lead, and then positive (+) lead from the battery.
●Remove the battery.
●Pull off the right side cover, and free the turn signal relay, fuse box, and brake light failure indicator switch from the battery case.



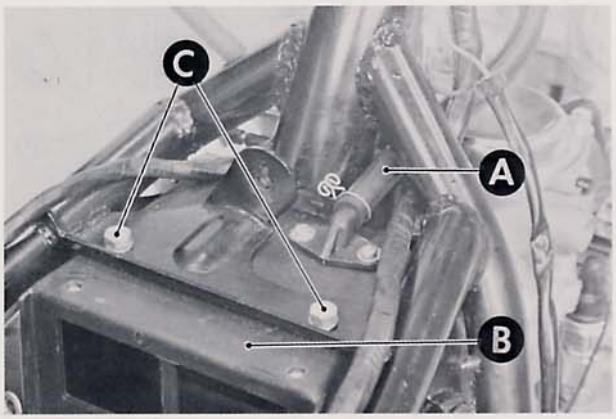
A. Turn Signal Relay **D. Battery Ground Lead**
B. Fuse Box **E. Battery Case Mounting Bolts**
C. Indicator Switch

●Pull off the left side cover, disconnect the 3-pin connector and white/red lead from the regulator/rectifier, and free the starter relay from the battery case.



A. Regulator/Rectifier **B. Starter Relay**
C. Battery Case Mounting Bolts

- Unscrew the battery mounting bolts (4), and remove the battery case. The front of the battery case bottom is caught in the air cleaner housing, and the rear is caught on the bottom end of the rear fender.
- Loosen the air cleaner duct clamps (2), slide the hose clamp forward, and pull the breather hose off the fitting on the air cleaner housing.

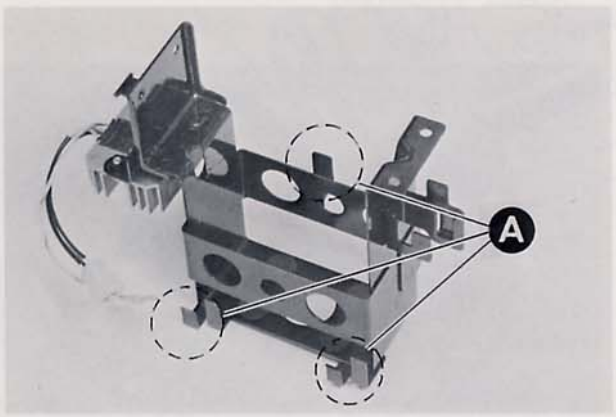


A. Breather Hose
B. Air Cleaner Housing
C. Mounting Bolts

- Unscrew the mounting bolts (2), and remove the air cleaner housing rearward.
- Cover the carburetor bores with a clean cloth to keep dirt out of the carburetors.

Installation Notes:

1. Hook the pawls at the front and the rear of the battery case on the rear fender and in the air cleaner housing.



A. Pawls

2. Secure the battery ground lead together with the battery case. See Fig. N7.
3. Route the battery vent hose as shown on the caution label.

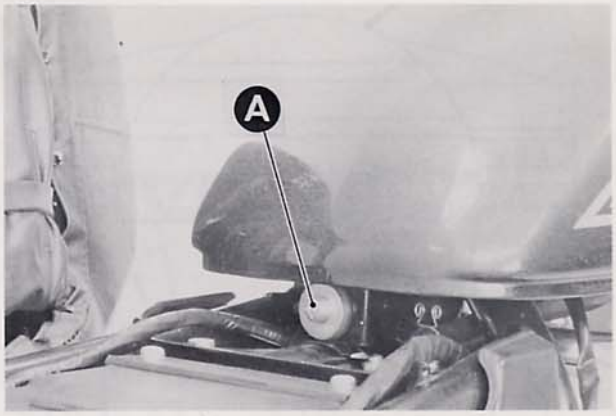
CAUTION **Make sure the battery vent hose is kept away from the chain and exhaust system. Battery electrolyte can corrode and dangerously weaken the chain. Do not let the vent hose become folded, pinched, or melted by the exhaust system. An unvented battery will not keep a charge and it may crack from built-up gas pressure.**

FUEL TANK (KZ400-H)

Removal and Installation:

Refer to Pgs. 43~44, noting the following:

1. The fuel tank is secured on the frame with the screw at the rear end.



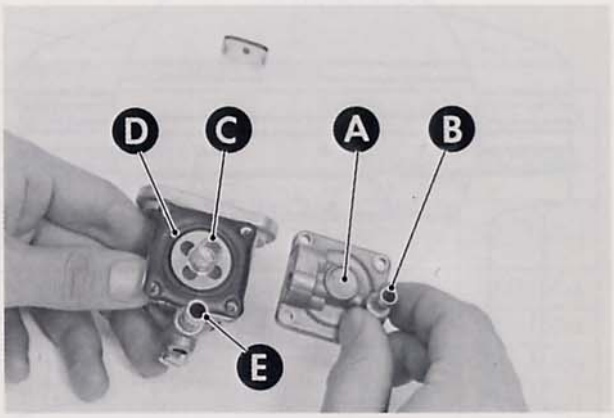
A. Mounting Screw

FUEL TAP (KZ400-H)

Disassembly and Assembly Note:

Refer to Pgs. 44~45, noting the following:

1. The location of the vacuum hose fitting is different from that of KZ400-B. Install the diaphragm cover in the direction shown in Fig. N12, making sure that the spring is compressed at the center of the diaphragm between the diaphragm and the cover.



A. Diaphragm Cover
B. Vacuum Hose Fitting
C. Spring
D. Diaphragm
E. Fuel Hose Fitting

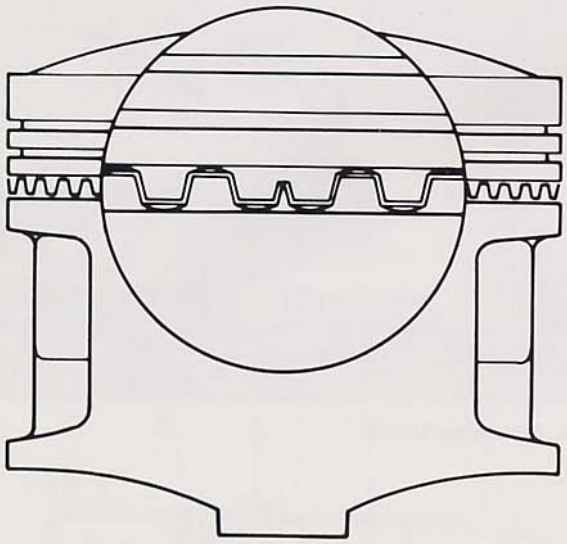
CYLINDER BLOCK, PISTON, PISTON RINGS
Removal and Installation:

The piston rings are changed. When installing them on the piston, and installing the cylinder block, refer to Pgs. 57~60 noting the following:

1. The oil rings are of three-piece construction using two steel rails and one expander.

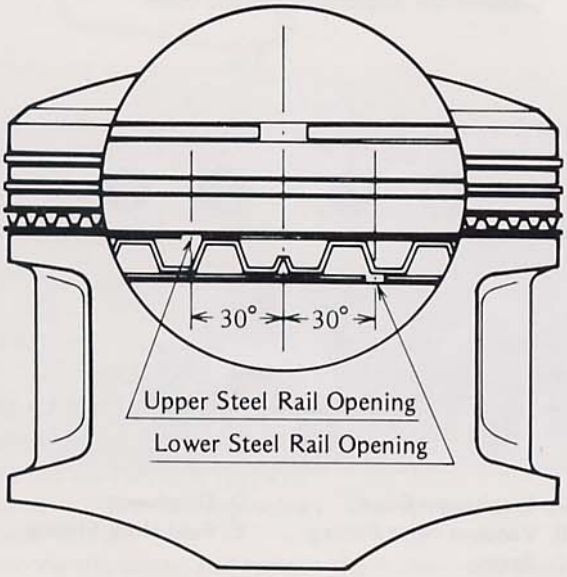
●To install the oil ring, first install the expander so that the expander ends butt together, and then install the upper and lower steel rails. There is no "up" or "down" to the rails: they can be installed either way.

Oil Ring Installation (N13)



●The openings of the oil ring steel rails must be positioned so that one is about 30° on one side of the opening of the expander, and the other about 30° on the other side of the expander opening.

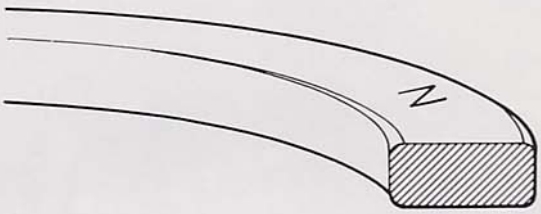
Piston Rings (N14)



2. Install the second and top rings so that the "N" mark faces up. Do not mix up the top and second rings. Both the inner and outer edges of the top ring are chamfered. The second rings are of taper face, and the edges of the second ring are not chamfered.

Top and Second Rings (N15)

Top Ring

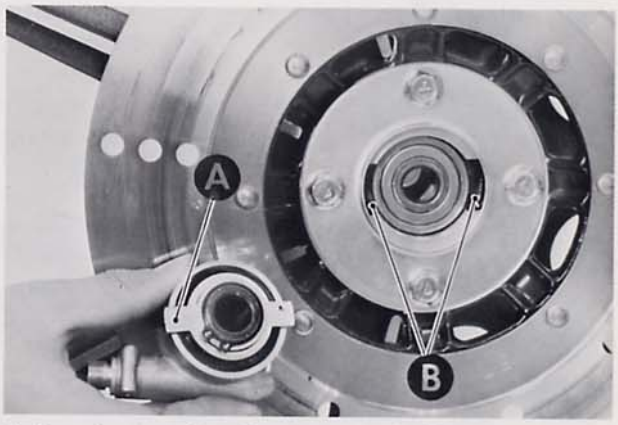


Second Ring

FRONT WHEEL (KZ400-H)
Removal and Installation:

Refer to Pgs. 107~108, noting the following:

1. Fit the speedometer gear housing onto the front hub so that the speedometer gear receiver fits in the hub recesses.



A. Speedometer Gear Receiver **B. Recesses**

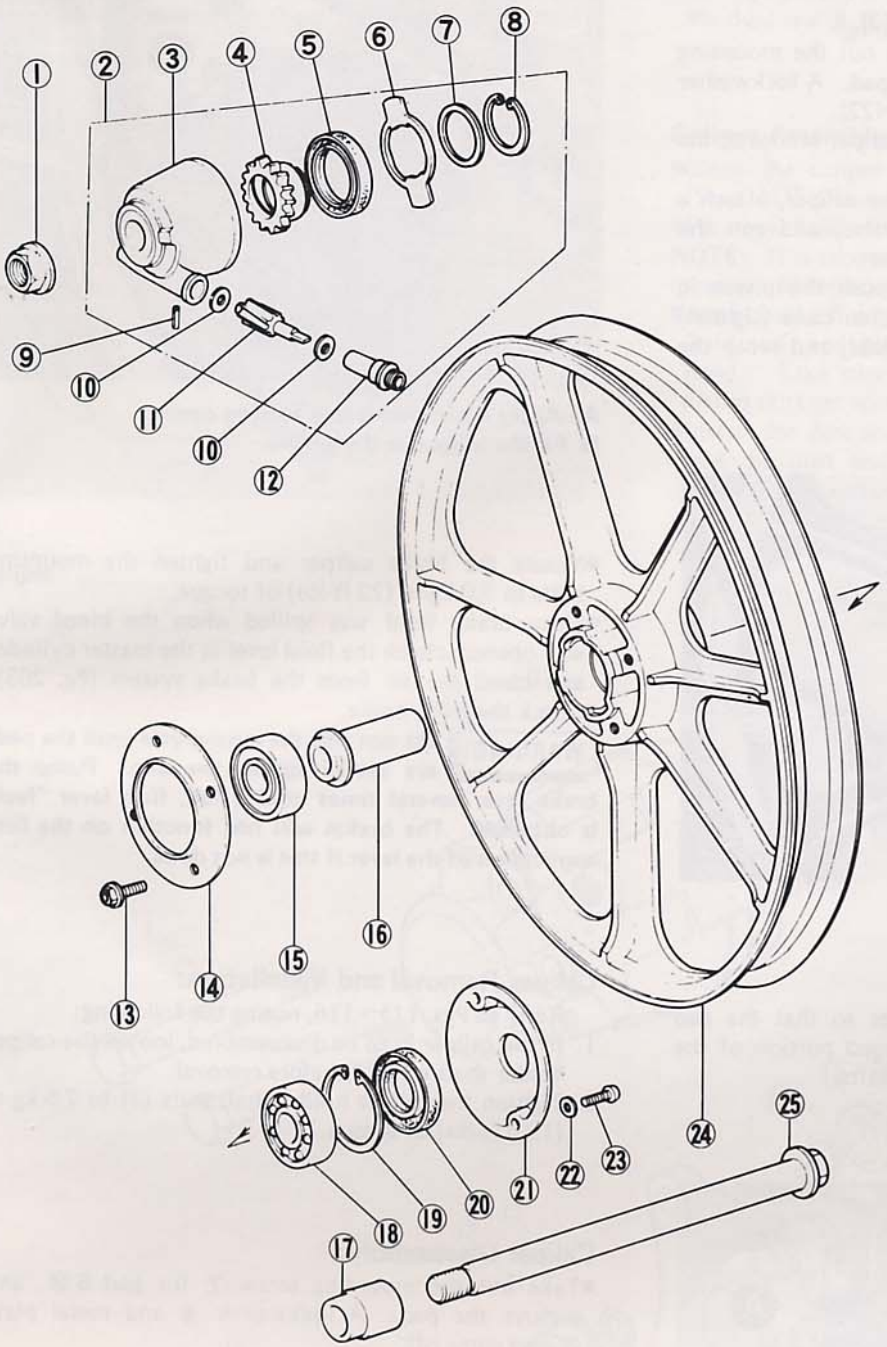
Front Hub Disassembly and Disassembly (Including disc removal):

Fig. N17 shows the construction of the front hub. Refer to Pgs. 109~110, noting the following:

1. Install the ball bearings with the shield of each bearing facing outside.

Front Hub

N17



1. Axle Nut
2. Speedometer Gear Housing Assembly
3. Speedometer Gear Housing
4. Speedometer Gear
5. Grease Seal
6. Gear Receiver
7. Washer
8. Circlip
9. Pin
10. Washer
11. Speedometer Pinion
12. Bushing
13. Disc Mounting Bolts
14. Plate
15. Ball Bearing
16. Distance Collar
17. Collar
18. Ball Bearing
19. Circlip
20. Grease Seal
21. Wheel Cap
22. Washer
23. Screws
24. Front Hub
25. Front Axle

2. Use the bearing driver and the holder (special tools: P/N 57001-288, 57001-139) to press the ball bearings in.
3. Use the bearing driver and the holder (special tools: P/N 57001-296, 57001-139) to press the grease seal in.

FRONT DISC BRAKE (KZ400-H)

Observe carefully the caution on Pg. 114 and the torque table below before working on the disc brake.

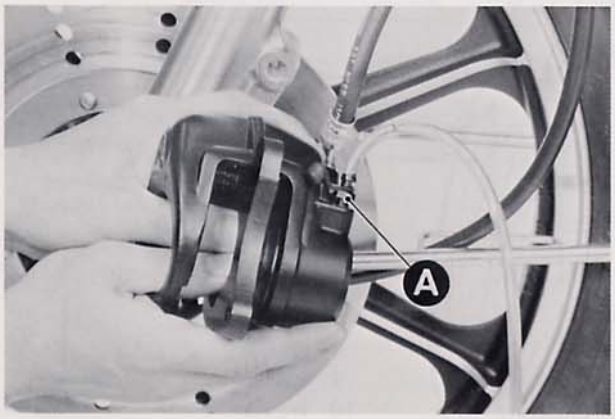
Table N2 Disc Brake Torque

Bleed valve	0.80 kg-m	69 in-lbs
Brake lever pivot bolt	0.30 kg-m	26 in-lbs
Brake lever pivot bolt locknut	0.60 kg-m	52 in-lbs
Caliper holder shaft nuts	2.6 kg-m	19.0 ft-lbs
*Caliper mounting bolts	3.0 kg-m	22 ft-lbs
Disc mounting bolts	3.0 kg-m	22 ft-lbs
Fitting (banjo) bolts	3.0 kg-m	22 ft-lbs
*Master cylinder clamp bolts	0.90 kg-m	78 in-lbs

*: Retorque these parts regularly (Pg. S-20).

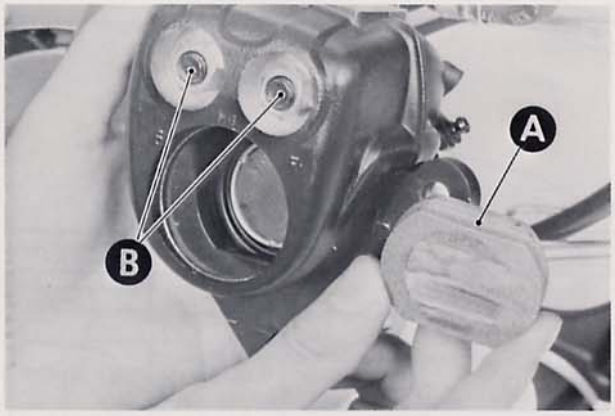
Pad Replacement:

- Remove the caliper mounting bolts (2).
- Lift the caliper off the disc, take out the mounting screw for pad B, and remove the pad. A lockwasher and metal plate also come off (Fig. N22).
- After pad B is removed, slide the caliper holder to the piston side and remove pad A.
- Remove the bleed valve cap on the caliper, attach a clear plastic hose to the bleed valve, and run the other end of the hose into a container.
- Open (loosen) the valve slightly, push the piston in by hand as far as it will go, and then close (tighten) the valve. Wipe up any spilled fluid, and recap the bleed valve.



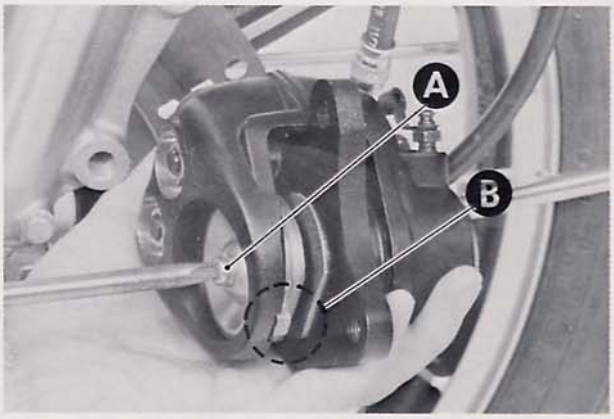
A. Bleed Valve

- Install pad A in the caliper holder so that the pad lining is toward the disc and stepped portion of the lining is toward the caliper holder shafts.



A. Stepped Portion **B. Caliper Holder Shafts**

- Fit pad B, aligning the tongue on the pad with the groove in the caliper. Install the metal plate, lockwasher, and mounting screw; using a non-permanent locking agent on the screw.



A. Apply a non-permanent locking agent.
B. Fit the tongue in the groove.

- Mount the brake caliper and tighten the mounting bolts to 3.0 kg-m (22 ft-lbs) of torque.
- Since brake fluid was spilled when the bleed valve was opened, check the fluid level in the master cylinder and bleed the air from the brake system (Pg. 203).
- Check the front brake.

WARNING **Do not ride the motorcycle until the pads are seated against the disc. Pump the brake lever several times until a full, firm lever "feel" is obtained. The brakes will not function on the first application of the lever if this is not done.**

Caliper Removal and Installation:

Refer to Pgs. 115~116, noting the following:

1. If the caliper is to be disassembled, loosen the caliper holder shaft nuts (2) before removal.
2. Tighten the caliper holder shaft nuts (2) to 2.6 kg-m (19.0 ft-lbs) of torque.

Caliper Disassembly:

- Take out the mounting screw ⑦ for pad B ⑭, and remove the pad. A lockwasher ⑥ and metal plate ⑮ also come off.
- Remove pad A ⑪.
- Remove the caliper holder shaft nuts ⑤ (2), and pull out the caliper holder shafts ① (2) and the spacers ④ (2) taking care not to damage the dust covers ⑫ (4). Remove the caliper holder ⑰.

CAUTION **To avoid damage to the dust covers and O rings, unscrew each shaft in turn a little at a time.**

- Remove the dust seal ⑩ around the piston ⑨.
- Cover the caliper opening with a clean, heavy cloth, and remove the piston by lightly applying compressed air to where the brake line fits into the caliper.

WARNING **To avoid serious injury, never place your fingers or palm inside the caliper opening. If you apply compressed air into the caliper, the piston may crush your hand or fingers.**

NOTE: If compressed air is not available, reconnect the brake line and pump the piston out with the brake lever.

- Taking care not to damage the cylinder surface, remove the fluid seal (8) with a hook.

Caliper Assembly:

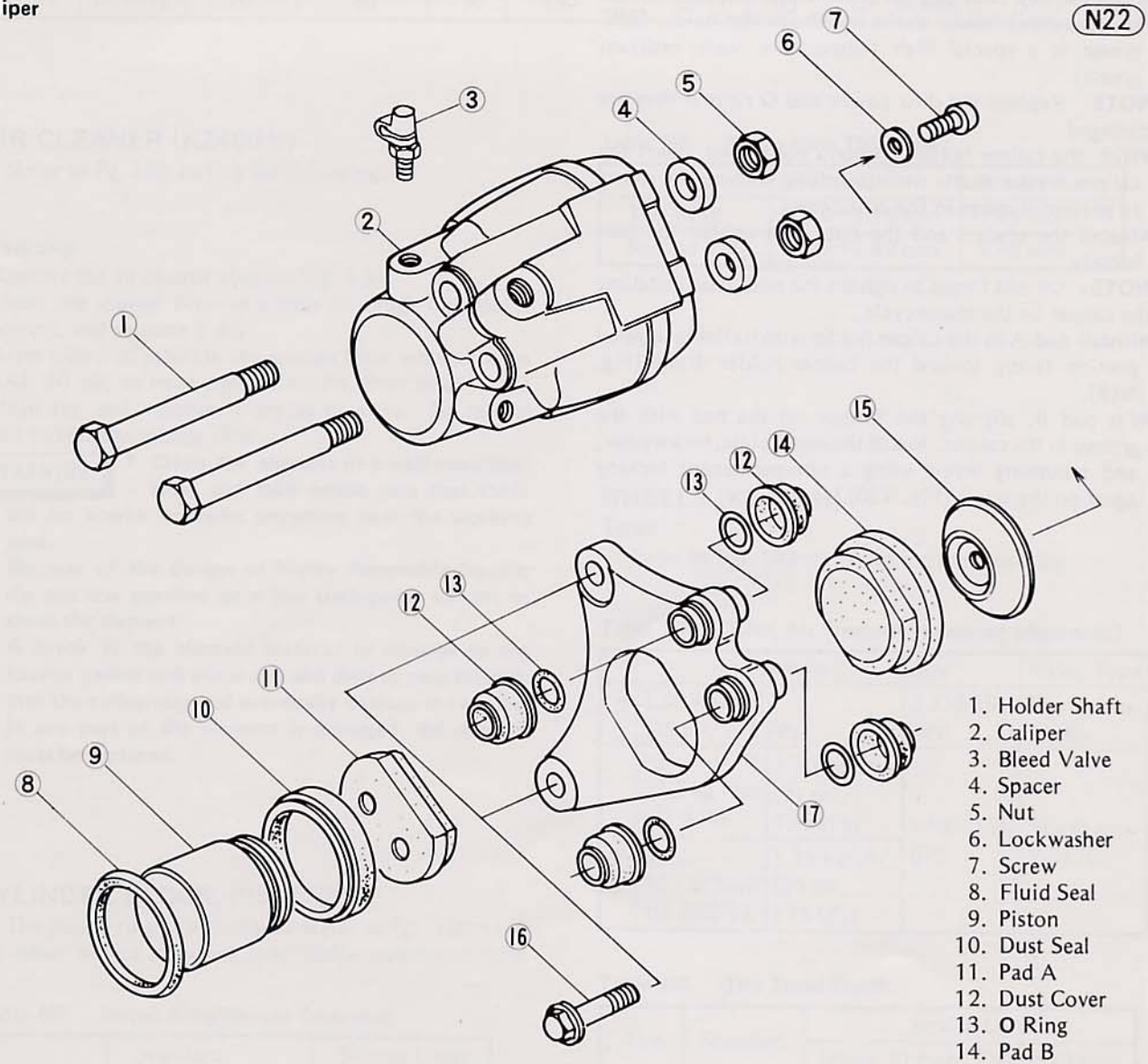
- Clean the caliper parts with brake fluid or alcohol (See CAUTION – Pg. 114).
- Fit a new fluid seal in place inside the cylinder.

NOTE: It is recommended that the fluid seal, which is removed, be replaced with a new one.

- Apply brake fluid to the outside of the piston and the fluid seal, and push the piston into the cylinder by hand. Take care that neither the cylinder nor the piston skirt get scratched.
- Install the dust seal around the dust seal stop. Check that the dust seal is properly fitted into the groove in the piston and on the dust seal stop.

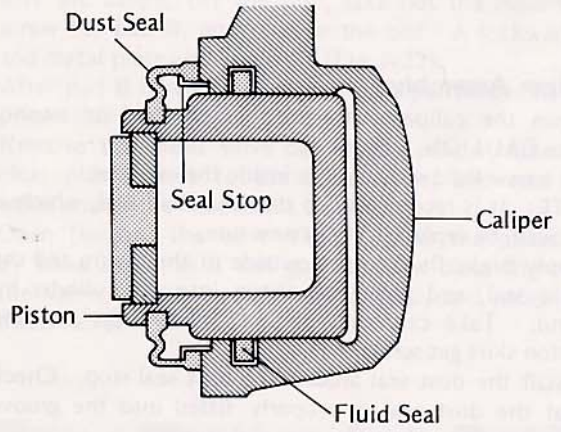
Caliper

N22



1. Holder Shaft
2. Caliper
3. Bleed Valve
4. Spacer
5. Nut
6. Lockwasher
7. Screw
8. Fluid Seal
9. Piston
10. Dust Seal
11. Pad A
12. Dust Cover
13. O Ring
14. Pad B
15. Metal Plate
16. Mounting Bolt
17. Caliper Holder

Caliper Dust Seal (N23)



- Apply a thin coat of PBC (Poly Butyl Cuprysil) grease to the caliper holder shafts and the holder holes. (PBC grease is a special high temperature, water-resistant grease).

NOTE: Replace the dust covers and **O** rings if they are damaged.

- With the caliper holder properly positioned, insert the caliper holder shafts while carefully turning the shafts to prevent damage to the dust covers.
- Install the spacers and the nuts, and tighten the nuts loosely.

NOTE: Do not forget to tighten the nuts after installing the caliper on the motorcycle.

- Install pad A in the caliper holder with its lining stepped portion facing toward the caliper holder shafts (Fig. N19).
- Fit pad B, aligning the tongue on the pad with the groove in the caliper. Install the metal plate, lockwasher, and mounting screw using a non-permanent locking agent on the screw (Fig. N20).

Maintenance

CARBURETORS

Refer to Pgs. 150~157, noting the following:

1. Table N3 and N4 show the carburetor specifications.

Table N3 Carburetor Specifications (KZ400-B, C)

Type	Jet Needle	Main Jet		Air Jet			Pilot Jet	Fuel Level	
		Primary	Secondary	Pilot	Primary Main	Secondary Main		Design	Service
VB32	003001	70	90	130	120	50	35	32~34 mm	1.5~3.5 mm

Table N4 Carburetor Specifications (KZ400-H)

Type	Jet Needle	Main Jet		Air Jet			Pilot Jet	Fuel Level	
		Primary	Secondary	Pilot	Primary Main	Secondary Main		Design	Service
VB32	003002	70	80	130	150	50	35	32~34 mm	1.5~3.5 mm

AIR CLEANER (KZ400-H)

Refer to Pg. 149, noting the following:

Cleaning

- Remove the air cleaner element (Pg. S-8).
- Clean the sponge filter in a bath of a high flash-point solvent, and squeeze it dry.
- After cleaning, saturate the sponge filter with SE class SAE 30 oil, squeeze out the excess, then wrap it in a clean rag and squeeze it dry as possible. Be careful not to tear the sponge filter.

WARNING

1. Clean the element in a well-ventilated area, and take ample care that there are no sparks or flame anywhere near the working area.

2. Because of the danger of highly flammable liquids, do not use gasoline or a low flash-point solvent to clean the element.

3. A break in the element material or damage to the sponge gasket will allow dirt and dust to pass through into the carburetor and eventually damage the engine. If any part of the element is damaged, the element must be replaced.

CYLINDER BLOCK, PISTONS

The piston rings are changed. Refer to Pgs. 166~170 for other service data not specifically mentioned here.

Table N5 Piston Ring/Groove Clearance

	Standard	Service Limit
Top	0.05~0.09 mm	0.19 mm
Second	0.01~0.05 mm	0.15 mm

Table N6 Piston Ring Thickness

	Standard	Service Limit
Top Ring	1.16~1.18 mm	1.09 mm
Second Ring	1.47~1.49 mm	1.40 mm

WHEELS (KZ400-H)

Tires

Refer to Pgs. 192~195, noting the following:

Table N7 Tires, Air Pressure (measured when cold)

	Air Pressure		Size	Make, Type
Front	1.75 kg/cm² (25 psi, 175 kPa)		3.25S-19 4PR	Yokohama Y-986
Rear	Up to 97.5 kg load (21.5 lb)	1.50 kg/cm² (21 psi, 150 kPa)	130/90-16 67S	Yokohama Y-987C
	97.5~ 155 kg load (to 342 lb)	1.75 kg/cm² (25 psi, 175 kPa)		

Table N8 Tire Tread Depth

Tire	Standard	Service Limit	
		Under 70 mph	Over 70 mph
Front	4.4 mm	1 mm	1 mm
Rear	9.2 mm	2 mm	3 mm

J

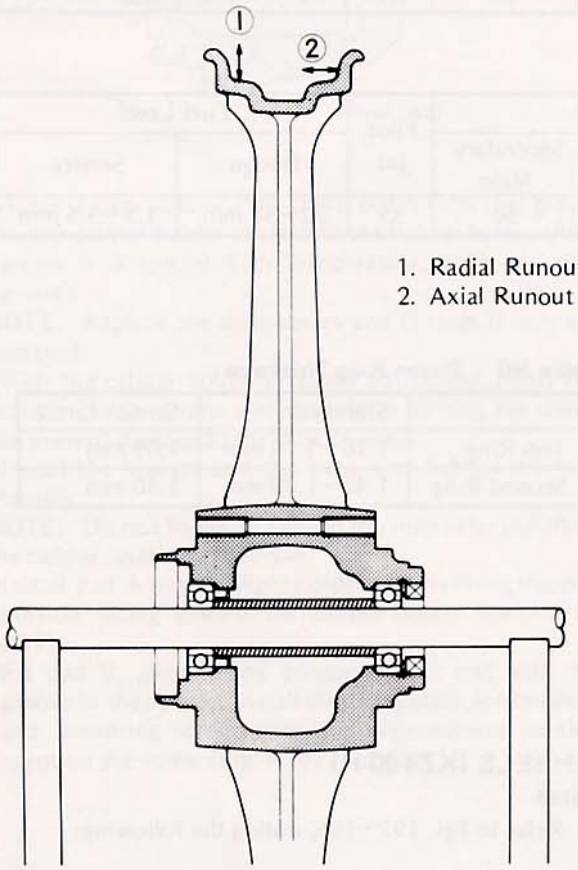
Rims

Rim runout measurement

If there is any doubt as to the condition of the wheel, or if the wheel has received a heavy impact, check the rim runout as follows:

Remove the tire and suspend the wheel by the axle. Set a dial gauge against the side of the rim, and rotate the wheel to measure the axial runout. The difference between the highest and lowest dial readings is the amount of runout.

Rim Runout Measurement (N24)



1. Radial Runout
2. Axial Runout

Set the dial gauge against the outer circumference of the rim, and rotate the wheel to measure radial runout. The difference between the highest and lowest dial readings is the amount of runout.

If rim runout exceeds the service limit, check the wheel bearings first. Replace them if they are damaged. If the problem is not due to the bearings, the wheel must be replaced. Do not attempt to repair a damaged wheel.

Table N9 Rim Runout (With tire removed)

	Axial	Radial
Service Limit	0.5 mm	0.8 mm

Rim damage

Carefully inspect the wheel for small cracks, dents, bents, or warp. If there is any damage to the wheel, it must be replaced. The rim sizes are shown in Table N10.

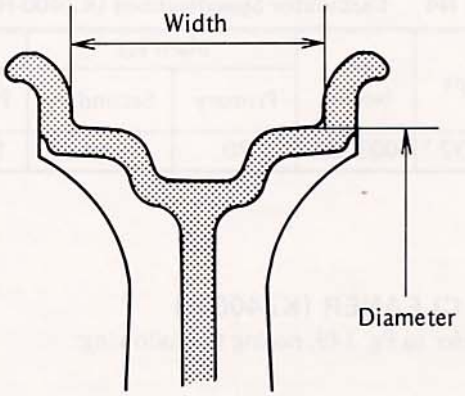
WARNING **Never attempt to repair a damaged wheel. If there is any damage besides wheel bearings, the wheel must be replaced to insure safe operational condition.**

Table N10 Rim Size*

Front	Rear
19 x 1.85	16 x 2.50

* The rim size shown in the table is the bead seat diameter and inner width of the rim flanges, both in inches.

Rim Sizes (N25)



Axle

Use the service data for KZ400-B (Table J5 on Pg. 196).

Wheel Bearings, Grease Seals

The front wheel bearings and grease seals of KZ400-H are the same ones as of KZ400-C. See Table J6 on Pg. 197.

DRIVE CHAIN (KZ400-H)

Refer to Pgs. 197~199, noting the following:

1. The standard chain for KZ400-H is shown in the table below.

Table N11 Drive Chain

Make	Type	Link
Enuma	EK530DG	104 link

2. See Table J8 on Pg. 198 for the chain length.

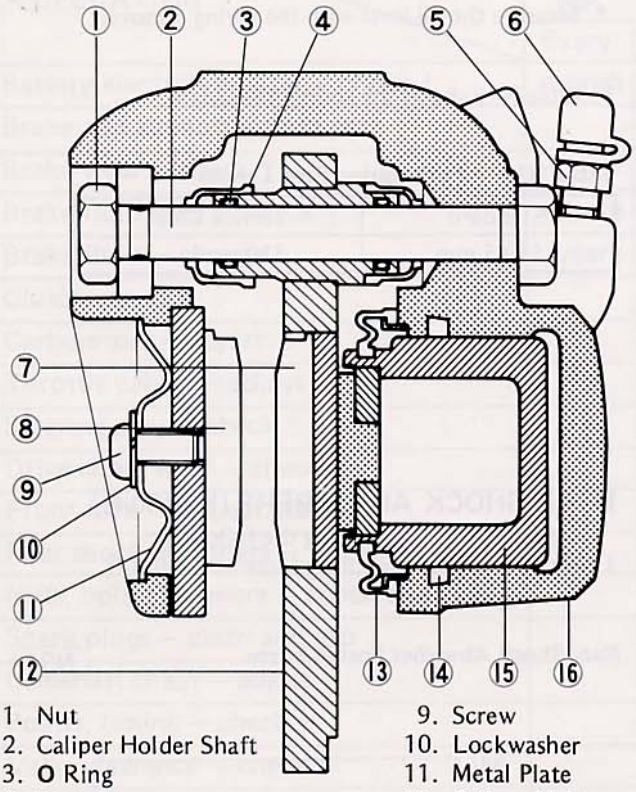
DISC BRAKE (KZ400-H)

Refer to Pgs. 200~205 for other service information not specifically mentioned here.

The front wheel of KZ400-H has a sliding-type caliper. The caliper assembly includes pad A ⑦, pad B ⑧, and the piston ⑮, which is inside the caliper cylinder.

Through the caliper run two shafts ②, which also pass through the caliper holder ⑫ to mount the assembly to the left front fork. When the piston forces pad A against the disc, the shaft portion of the caliper assembly slides through the holder such that pad B is also forced against the disc, both brake pads being kept parallel to the disc.

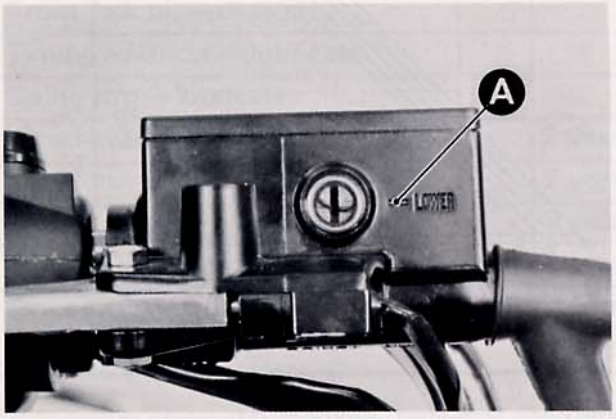
Caliper N26



1. Nut
2. Caliper Holder Shaft
3. O Ring
4. Dust Cover
5. Bleed Valve
6. Bleed Valve Cap
7. Pad A
8. Pad B
9. Screw
10. Lockwasher
11. Metal Plate
12. Caliper Holder
13. Dust Seal
14. Fluid Seal
15. Piston
16. Caliper

Disc brake fluid

Fill the reservoir up to more than lower level line (reservoir held horizontal).



A. Lower Level Line

Caliper parts wear

Check the thickness of the pad linings, and replace both pads as a set if the thickness of either pad is less than the service limit.

Lining Thickness N28

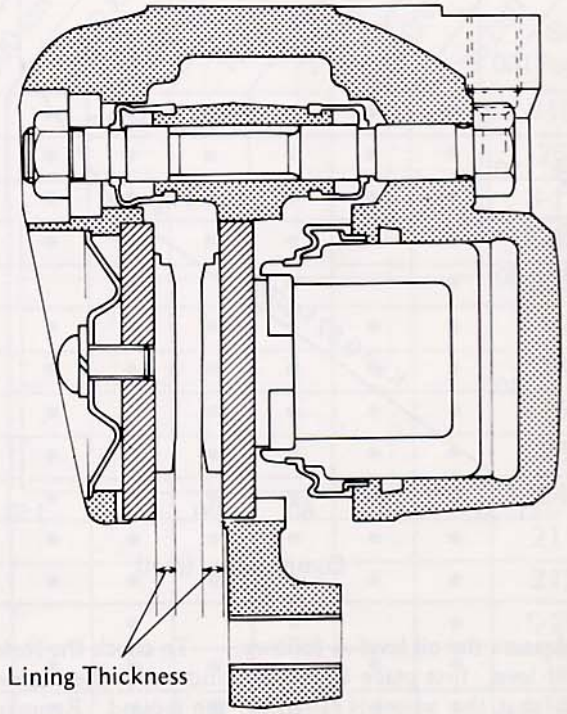


Table N12 Lining Thickness

Service Limit	1 mm

Measure the cylinder inside diameter and piston outside diameter.

Replace the cylinder and piston if they are worn out of tolerance, badly scored, or rusty.

Table N13 Caliper Parts

	Standard	Service Limit
Cylinder inside diameter	42.850~42.900 mm	42.92 mm
Piston outside diameter	42.788~42.820 mm	42.75 mm

Disc wear, warp

Table N14 Disc Thickness

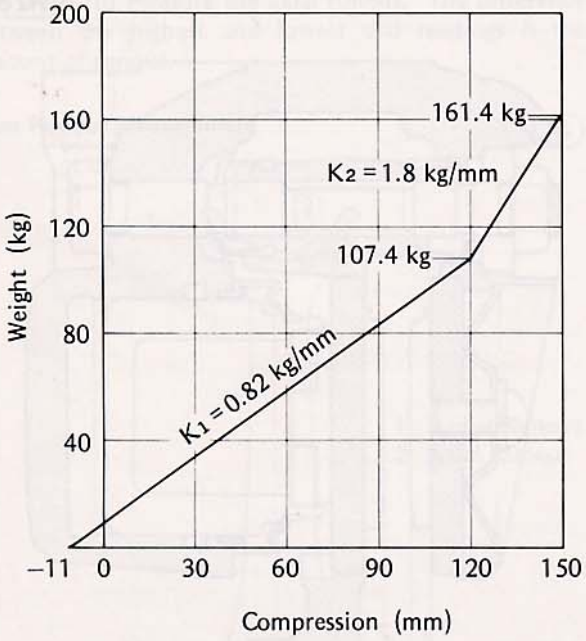
Standard	Service Limit
4.8~5.1 mm	4.5 mm

FRONT FORK (KZ400-H)

Refer to Pgs. 209~212, noting the following:

1. Fig. N29 shows the spring force of KZ400-H.

Front Fork Spring Force (N29)



2. Measure the oil level as follows: To check the fork oil level, first place a jack or stand under the engine so that the wheel is raised off the ground. Remove the top plug from the inner tube, and pull out the fork spring. Insert a thin rod down into the tube, and measure the distance from the top of the inner tube to the oil level. If the oil is below the correct level, add enough oil to bring it up to the proper level, taking care not to overfill.

Fork Oil Level (N30)

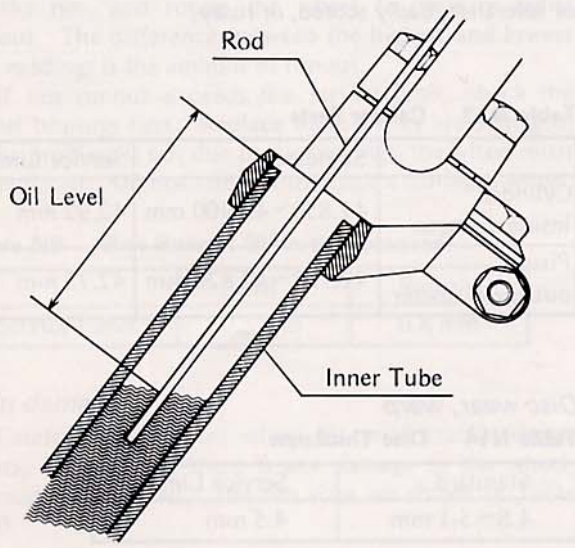


Table N15 Fork Oil

Filling fork oil capacity			
Type	When charging oil	After disassembly and completely dry	Oil Level*
SAE 5W20	about 125 cc	145~155 cc	475 mm from top of inner tube

*: Measure the oil level with the spring removed.

3. Table N16 shows the spring free length.

Table N16 Fork Spring Free Length

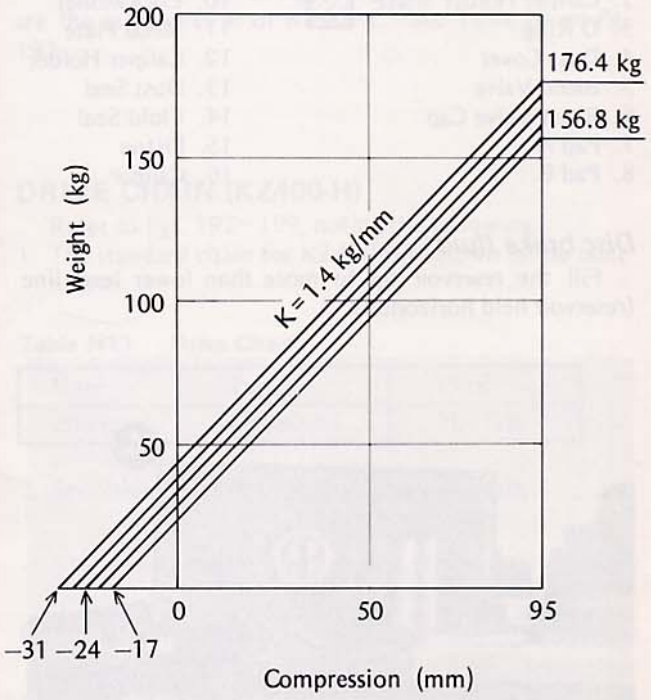
Standard	Service Limit
519.5 mm	510 mm

REAR SHOCK ABSORBERS (KZ400-H)

See Pgs. 212~213, noting the following:

1. Fig. N31 shows the spring force of KZ400-H.

Rear Shock Absorber Spring Force (N31)



PERIODIC MAINTENANCE CHART

The maintenance and adjustments for KZ400-H must be done in accordance with this chart to keep the motorcycle in good running condition. **The initial maintenance is vitally important and must not be neglected.**

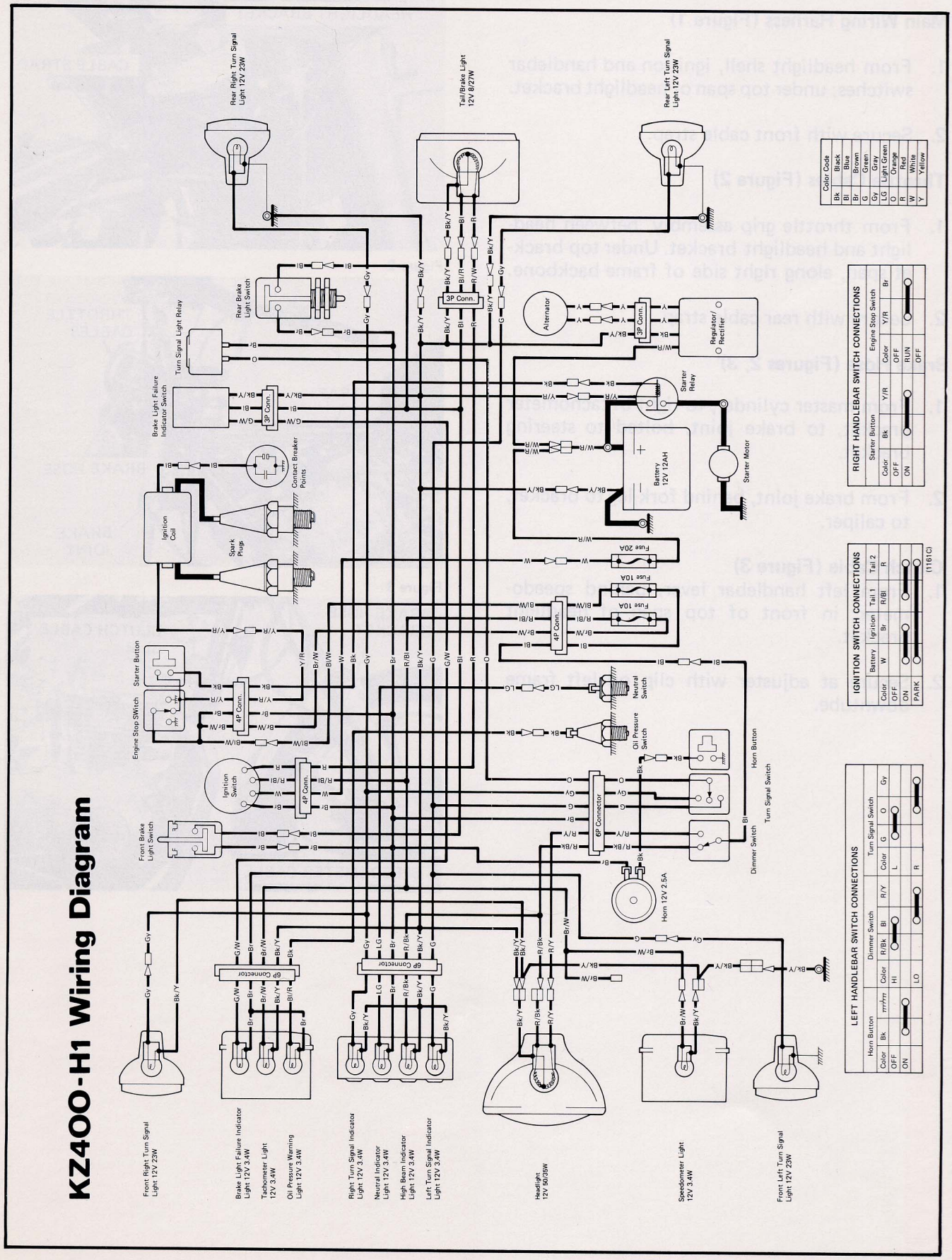
OPERATION \ FREQUENCY	Whichever comes first ➡ / Every ⬇	ODOMETER READING* 800 km	5,000 km	10,000 km	15,000 km	20,000 km	25,000 km	30,000 km	See Page
Battery electrolyte level — check †	month	•	•	•	•	•	•	•	218
Brake adjustment — check †		•	•	•	•	•	•	•	25
Brake wear — check †			•	•	•	•	•	•	S-17
Brake fluid level — check †	month	•	•	•	•	•	•	•	S-17
Brake fluid — change	year			•		•		•	202
Clutch — adjust		•	•	•	•	•	•	•	19
Carburetors — adjust		•	•	•	•	•	•	•	16
Throttle cables — adjust		•	•	•	•	•	•	•	15
Steering play — check †		•	•	•	•	•	•	•	28
Drive chain wear — check †			•	•	•	•	•	•	24
Front fork — inspect/clean		•	•	•	•	•	•	•	211
Rear shock absorbers — inspect		•	•	•	•	•	•	•	212
Nuts, bolts, fasteners — check and torque		•		•		•		•	S-20
Spark plugs — clean and gap †		•	•	•	•	•	•	•	12
Camshaft chain — adjust		•	•	•	•	•	•	•	14
Points, timing — check †		•	•	•	•	•	•	•	12
Valve clearance — check †		•	•	•	•	•	•	•	15,162
Air cleaner element — clean			•		•		•		S-15
Air cleaner element — replace	5 cleanings		•		•		•		S-15
Fuel system — clean		•	•	•	•	•	•	•	21
Tire tread wear — check †			•	•	•	•	•	•	S-15
Engine oil — change	year	•	•	•	•	•	•	•	20
Oil filter — replace		•		•		•		•	20,189
General lubrication — perform			•	•	•	•	•	•	
Front fork oil — change				•		•		•	271
Timing advancer — lubricate				•		•		•	226
Swing arm — lubricate				•		•		•	214
Wheel bearings — grease	2 years					•			196
Speedometer gear housing — grease	2 years					•			197
Brake camshaft — grease	2 years					•			207
Steering stem bearings — grease	2 years					•			208
Drive chain — lubricate	Every 300 km								198
Drive chain — adjust	Every 800 km								24

*For higher odometer readings, repeat at the frequency interval established here.
†Replace, add or adjust if necessary.

Table N1 Tightening Torque (KZ400-H)

Chassis Part (ϕ Indicates diameter)	Locking Agent (●), Liquid Gasket (★) Required	Quantity	Metric (kg-m)	English (ft-lbs)	See Pg.
*Brake cam lever bolt	–	1	–	–	–
*Brake pedal pivot nut	–	1	–	–	–
*Clutch lever holder bolt ϕ6 P1.0	–	1	–	–	–
*Disc brake parts	See Table N2 on Pg. S-11				
*Front axle nut ϕ14 P1.5	–	1	8.0	58	107
*Front fender mounting bolts ϕ8 P1.25	–	4	–	–	–
*Front footpeg mounting bolts	–	2	–	–	–
Front fork bottom Allen bolts ϕ10 P1.0	●,★	2	1.8	13.0	142
*Front fork clamp bolts					
upper ϕ8 P1.25	–	2	1.8	13.0	138,140
lower ϕ10 P1.25	–	2	3.0	22	29,138,140
Handlebar clamp bolts ϕ8 P1.25	–	4	1.8	13.0	135
*Kick pedal bolt	–	1	–	–	–
Pad mounting screw	●	1	–	–	S-12
*Rear axle nut ϕ16 P1.5	–	1	12.0	87	25
*Rear footpeg (muffler) mounting bolts	–	2	–	–	50
*Rear shock absorber mounting					
bolts ϕ10 P1.25	–	2	3.0	22	120,143,144
nuts ϕ10 P1.25	–	2	3.0	22	143
Rear sprocket nuts ϕ10 P1.25	–	4	4.0	29	122
*Shift pedal bolt ϕ6 P1.0	–	1	–	–	–
*Steering stem head bolt ϕ16 P1.5	–	1	4.5	33	29,138
*Steering stem head clamp bolt ϕ8 P1.25	–	1	1.8	13.0	29,138
Steering stem locknut ϕ30 P1.0	–	1	3.0	22	29,138
*Swing arm pivot shaft nut ϕ14 P1.5	–	1	8.0	58	143
*Torque link nuts ϕ10 P1.25	–	2	3.0	22	25,111,145

KZ400-H1 Wiring Diagram



Color Code	
Bk	Black
Bl	Blue
Br	Brown
G	Green
Gy	Gray
LG	Light Green
O	Orange
R	Red
W	White
Y	Yellow

RIGHT HANDLEBAR SWITCH CONNECTIONS

	Starter Button		Y/R		Engine Stop Switch	
Color	Bk			Color	Y/R	Br
OFF				OFF		
ON				RUN		
				OFF		

IGNITION SWITCH CONNECTIONS

	Battery	Ignition	Tail 1	Tail 2
Color	W	Br	R/Bl	R
OFF				
ON				
PARK				

(1161C)

LEFT HANDLEBAR SWITCH CONNECTIONS

	Horn Button		Dimmer Switch			Turn Signal Switch			
Color	Bk		Color	R/Bk	Bl	R/Y	Color	G	O	Gy
OFF			HI				L			
ON										
			LO				R			

Main Wire and Cable Routing

Main Wiring Harness (Figure 1)

1. From headlight shell, ignition and handlebar switches; under top span of headlight bracket.
2. Secure with front cable strap.

Throttle Cables (Figure 2)

1. From throttle grip assembly, between headlight and headlight bracket. Under top bracket span, along right side of frame backbone.
2. Secure with rear cable strap.

Brake Hose (Figures 2, 3)

1. From master cylinder, to right of tachometer bracket, to brake joint, bolted to steering bracket.
2. From brake joint, behind fork leg to bracket, to caliper.

Clutch Cable (Figure 3)

1. From left handlebar lever, behind speedometer; in front of top span of headlight bracket.
2. Secure at adjuster with clip on left frame downtube.

Figure 1

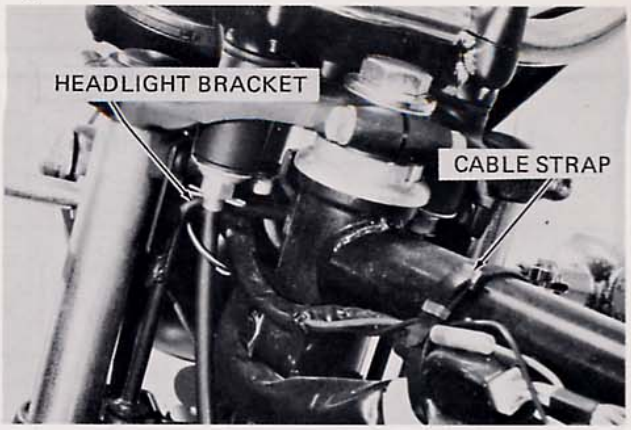


Figure 2

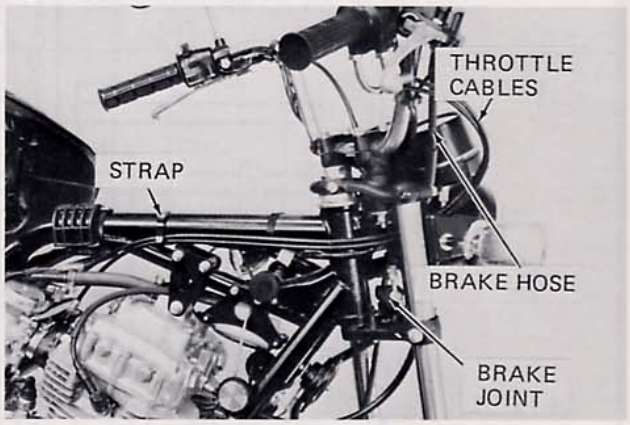
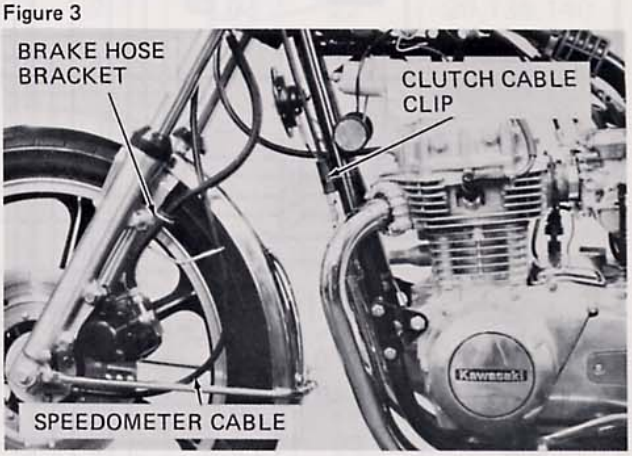


Figure 3



KZ400-H1
LTD

Kawasaki Motors Corp., U.S.A.

Part No. 99963-0027-01 Printed in U.S.A. First Printed July 1979 (3M) KMC GS-RR