Supplement - 1983 KZ750-K1,S2,Y2

This supplement is designed to be used in conjunction with the front part of this Service Manual (up to P. 301). The maintenance and repair procedures described in this Supplement are only those that are unique to later year units since the first publication of this Service Manual. Complete and proper servicing of later year units therefore requires mechanics to read both this Supplement and the front part of this Service Manual.

(U) : US model
(C) : Canadian model
(UK): United Kingdom
(E) : European model
(W) : West German model
(AU): Australian model

Color Codes

BK : Black
BL : Blue
BR : Brown
G : Green
GY : Gray
LB : Light Blue
LG : Light Green
O : Orange
P : Pink
R : Red
W : White
Y : Yellow

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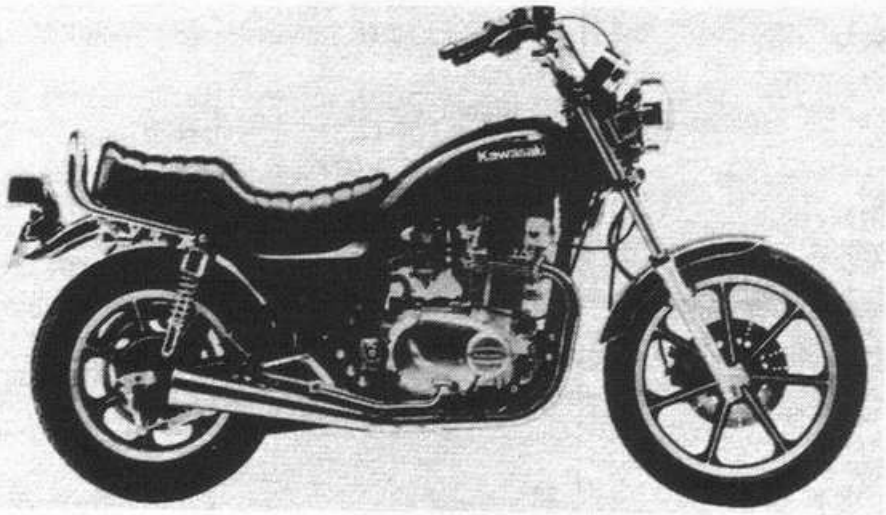
"NOTE"

High Altitude Performance Adjustment Information (US Models):

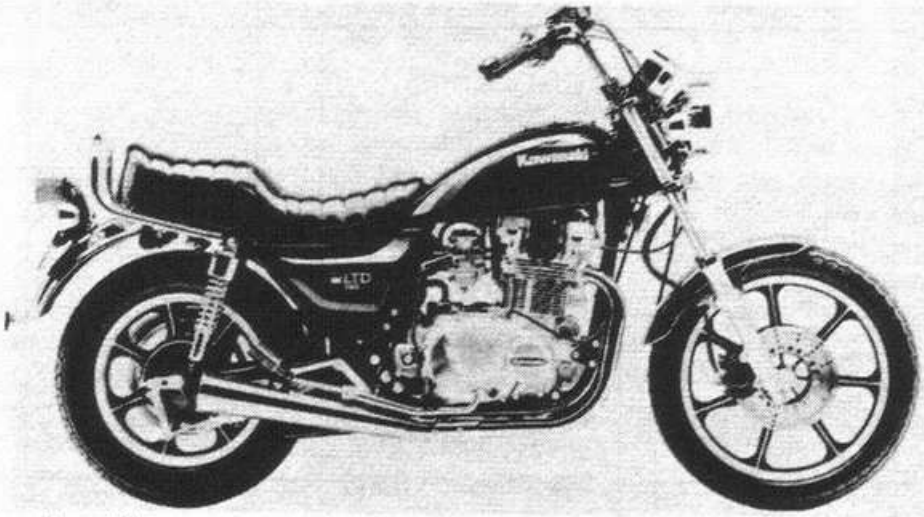
○To improve the EMISSION CONTROL PERFORMANCE of vehicles operated above 4,000 feet, an Environmental Protection Agency (EPA) approved modification may be required for some models. However, any kind of modification is not necessary for the 1983 model KZ750K.

Model Identification

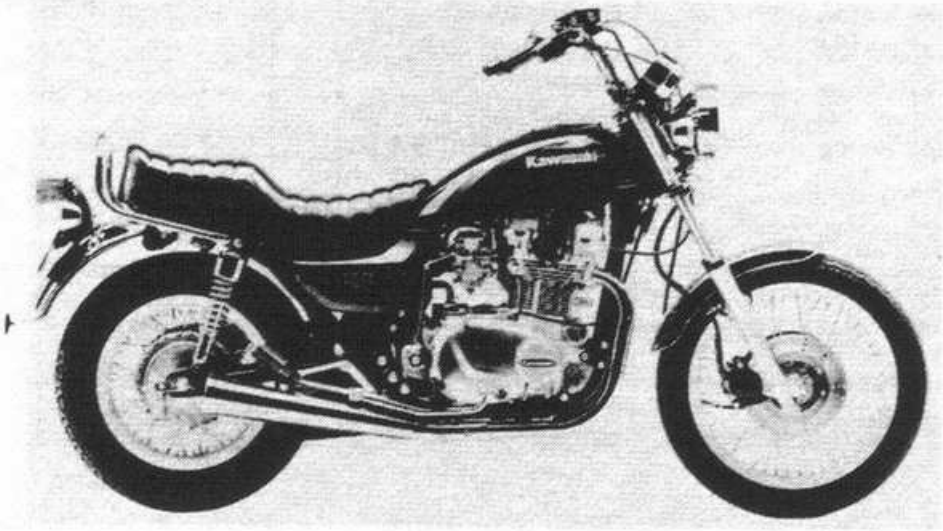
KZ750-K1 (US model)



Z750-K1 (West German model)



Z750-Y2 (General model)



Specifications

Items	(K)Z750-K1	Z750-S2	Z750-Y2
Dimensions:			
Overall length	2,190 mm	2235 mm	2235 mm
Overall width	845 mm	*	*
Overall height	1,215 mm	*	*
Wheelbase	1,475 mm	1470 mm	1470 mm
Road clearance	155 mm	*	*
Seat height	765 mm	*	*
Dry weight	2,020N(206kg) Ⓦ2070N (210.5kg)	2,080N (212kg)	2,040N (211kg)
Curb weight: Front	1,000N (102kg)	1,045N (106.5kg)	1,030N (104.5kg)
Rear	1,140N (116 kg)	1,170N (119Kg)	1,170N (119Kg)
Fuel tank capacity	10.6L	*	*
Performance			
Climbing ability	26°	*	*
Braking distance	12.5 m from 50 km/h	*	*
Minimum turning radius	2.5 m	*	*
Engine:			
Type	4 stroke, DOHC, 2 cylinder	*	*
Cooling system	Air cooled	*	*
Bore and stroke	78.0 x 78.0 mm	*	*
Displacement	745 mL	*	*
Compression ratio	8.5	*	*
Maximum horsepower	40.4 kW (55.0PS), @ 7,000 r/min (rpm)	*	Ⓤ * Ⓦ 36.1 kw (49 PS, DIN) @ 7,000 r/min (rpm)
Maximum torque	60.9 N-m (6.2kg-m, 44.9 ft-lb), Ⓦ 60.0 N-m (6.1kg-m, 44.1 ft-lb, DIN) @ 3,000 r/min (rpm)	*	Ⓤ * Ⓦ 60 N-m (6.1 kg-m 44.1 ft-lb, DIN) @ 3,000 r/min (rpm)
Carburetion system	Carburetors, Mikuni BS34 x 2	*	*
Starting system	Electric starter	*	*
Ignition system	Battery and coil (transistorized)	*	*
Timing advance	Mechanically advanced	*	*
Ignition timing	From 5°BTDC @ 1,000 r/min (rpm) to 30° BTDC @ 3,750 r/min (rpm)	*	*
Sparke plug	U NGK B6ES or ND W20ES-U Ⓒ, Ⓦ NGK BPR 6ES or ND W22EPR-U	— Ⓔ NGK BPR6ES or ND W22EPR- Ⓤ	— **
Cylinder numbering method	Left to right 1-2	*	*
Firing order	1-2	*	*

			(K) Z750-K1	Z750-S2	Z750-Y2
Valve timing:					
	Inlet	Open	30°BTDC	*	*
		Close	50°ABDC	*	*
		Duration	260°	*	*
	Exhaust	Open	70°BBDC		
		Close	30°ATDC	*	*
		Duration	280°		
Lubrication system			Forced lubrication (wet sump with cooler)	*	*
Engine oil:					
Grade			SE class		
Viscosity			SAE 10W40, 10W50, 20W40, or 20W50	*	*
Capacity			4.0L	*	*
Drive Train:					
Primary reduction system:					
Type			Chain	*	*
Reduction ratio			2.478 (57/23)	*	*
Clutch type			Wet multi disc	*	*
Transmission:					
Type			5-speed, constant mesh, return shift	*	*
Gear ratios:	1st		2.333 (35/15)	*	*
	2nd		1.631(31/19)	*	*
	3rd		1.272(28/22)	*	*
	4th		1.040(26/25)	*	*
	5th		0.875(21/24)	*	*
Final drive system:					
Type			Belt drive	Chain drive	**
Reduction ratio			2.321(65/28)	2.375(38/16)	**
Overall drive ratio			5.033 @Top gear	5.150	**
Frame:					
Type			Tubular, double cradle	*	*
Caster(rake angle)			28°	*	*
Trail			113 mm	*	*
Front tire:					
Type			Tubeless	*	Tube type
Size			3.25H–19 4PR	*	*
Rear Tire:					
Type			Tubeless	*	Tube type
Size			130/90–16 67H	*	*

	(K) Z 750-K1	Z750-S2	Z750-Y2
Front suspension:			
Type	Telescopic fork (pneumatic)	*	*
Wheel travel	160 mm	180 mm	180 mm
Rear suspension:			
Type	Swing arm	*	*
Wheel travel	96 mm	*	*
Brake type:			
Front	Ⓦ Dual disc Ⓒ,Ⓤ Single disc	Dual disc	**
Rear	Drum	*	*
Electrical Equipment:			
Battery	12V 14AH	*	*
Headlight			
Type	Ⓦ Semi-Sealed beam Ⓤ, Ⓒ Sealed beam	Semi-Sealed	**
Bulb	12 V 60/50 W		
	Ⓦ 45/40W	45/40W Ⓐⓤ 50/40W	45/40W
Tail/brake light	12V 8/27W x 2	5/21 WX2	**
Alternator:			
Type	Three-phase Ⓐⓒ	*	*
Rated output	13A @8,000 r/min (rpm), 14V	*	*
Voltage regulator:			
Type	Short-circuit	*	*

Specifications subject to change without notice, and may not apply to every country.

*: Same as KZ750-K1 Ⓤ
**: Same as Z750-S2

Periodic Maintenance Chart (KZ750–K1, S1, Y2)

The scheduled maintenance 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.**

FREQUENCY / OPERATION	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
Spark plug – clean		•	•	•	•	•	•	•	12
Spark plug – check†		•	•	•	•	•	•	•	12
Timing advancer – lubricate				•		•		•	197
Valve clearance – check†		•	•	•	•	•	•	•	15
Air suction valve – check† Ⓤ KZ750 K1			•	•	•	•	•	•	276
Air cleaner element – clean			•		•		•		130
Air cleaner element – replace	5 cleanings			•		•		•	130
Throttle grip play – check†		•	•	•	•	•	•	•	311
Idle speed – check†		•	•	•	•	•	•	•	254
Idle speed – adjust		•	•	•	•	•	•	•	254
Engine vacuum synchronization–check†		•	•	•	•	•	•	•	19
Fuel system – check†				•		•		•	21,273
Cylinder head nut tightness – check†		•		•		•		•	48
Engine oil – change	year	•	•	•	•	•	•	•	21
Oil filter – replace		•		•		•		•	21
Fuel hose – replace	4 years								–
Camshaft chain tension – adjust		•	•	•	•	•	•	•	14
Clutch – adjust		•	•	•	•	•	•	•	311
Drive chain wear – check† (750-S2, Y2)			•	•	•	•	•	•	242
Drive chain lubricate (750-S2, Y2)	300 Km								241
Drive chain slack – check† (750-S2, Y2)	800 Km								227
Drive belt tension – check† (750-K1)		•	•	•	•	•	•	•	312

FREQUENCY / OPERATION	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
Drive belt wear – check† (750-K1)		•	•	•	•	•	•	•	314
Brake lining wear – check†			•	•	•	•	•	•	239
Brake fluid level – check†	month	•	•	•	•	•	•	•	181
Brake fluid – change	year			•		•		•	179
Brake hose – replace	4 years								–
Master cylinder cup and dust seal –replace	2 years								298
Caliper piston seal and dust seal	2 years								277
Brake play – check†		•	•	•	•	•	•	•	229
Brake light switch – check†		•	•	•	•	•	•	•	26
Brake camshaft – lubricate	2 years					•			240
Steering check†		•	•	•	•	•	•	•	26
Steering stem bearing – lubricate	2 years					•			183
Front fork oil – change				•		•		•	316
Tire wear – check†			•	•	•	•	•	•	317
Wheel bearing – lubricate	2 years					•			174
Speedometer gear – lubricate	2 years					•			174
Spoke tightness and rin runout –check†	(750-Y2)	•	•	•	•	•	•	•	172
Swing arm pivot – lubricate				•		•		•	280
Battery electrolyte level – check†	month	•	•	•	•	•	•	•	190
General lubrication – perform			•	•	•	•	•	•	28,230
Nut, bolt, and fastener tightness – check†		•		•		•		•	326

*: For higher odometer readings, repeat at the frequency interval established here.

†: Replace, add, adjust, clean, or torque if necessary.

Adjustment

Throttle cable

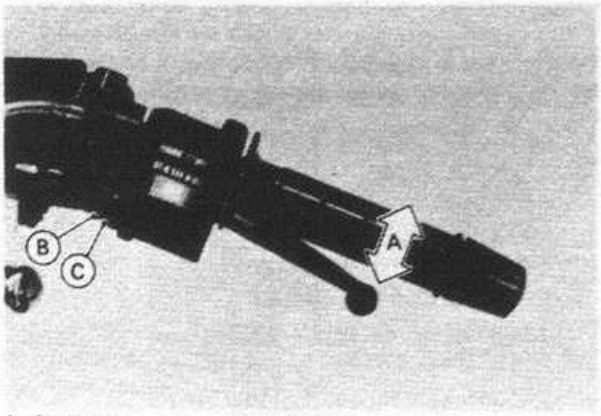
Refer to P.254, noting the following.

Inspection

★There should be 2–3 mm play measured at the grip. If the cable does not have the proper play, adjust it as follows.

Adjustment

- Loosen the locknut at the upper end of the throttle cable, and turn the adjusting nut to adjust the play.
- Tighten the locknut.



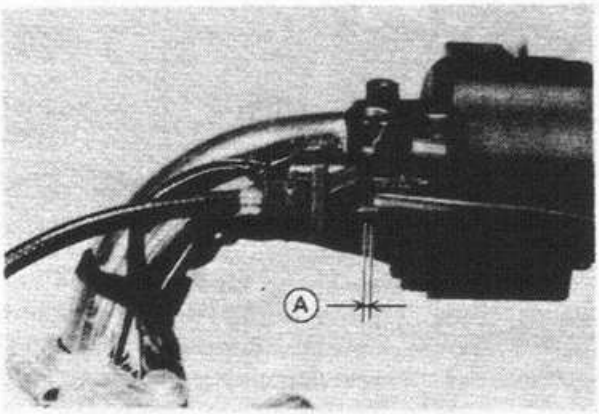
A. 2–3 mm
B. Adjustment Nut
C. Locknut

Clutch

The following adjustment procedure compensates for both cable stretch and plate wear.

To check the clutch:

- Check that the clutch lever has 2 ~3 mm of play as shown below.

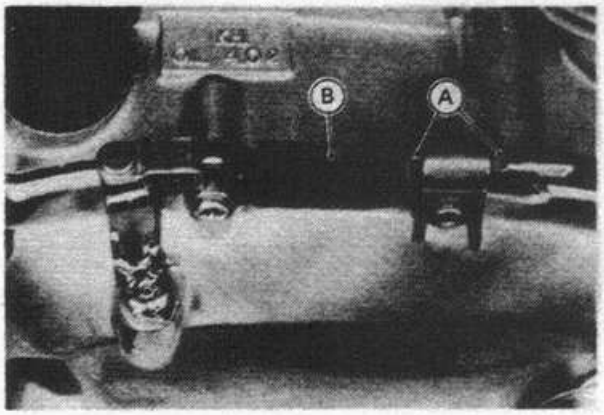


A. 2 ~ 3 mm

★If the clutch lever has improper play, adjust it as follows:

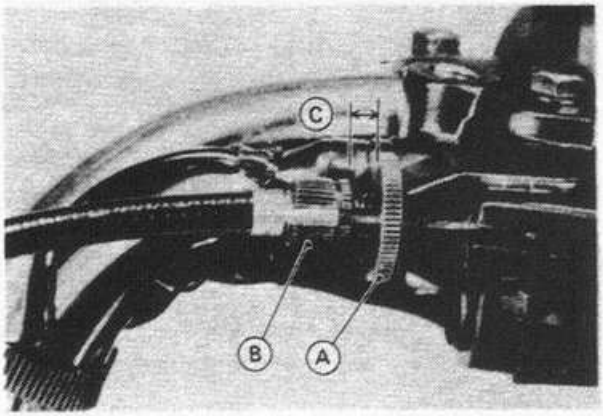
To adjust the clutch:

- Slide the dust cover at the clutch cable lower end out of place.
- Loosen the nuts, and slide the lower end of the clutch cable to give the cable plenty of play.



A. Nut
B. Dust Cover

- Loosen the knurled locknut at the clutch lever just enough so that the adjuster will turn freely, and then turn the adjuster to make a 5 ~ 6 mm gap between the adjuster and locknut.

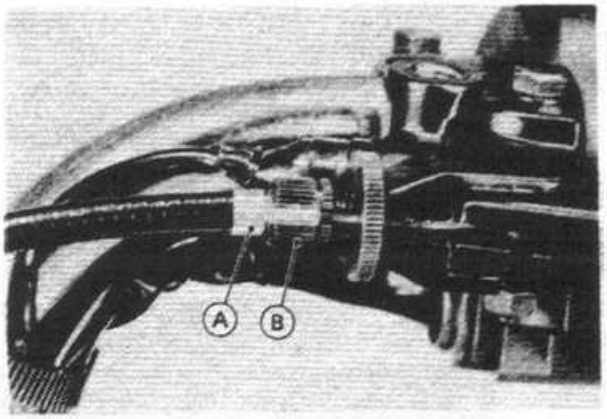


A. Locknut
B. Adjuster
C. 5~ 6 mm

- Take up all the cable play by sliding the lower end of the cable, and then tighten the nuts.

WARNING

Be sure that the outer cable end at the clutch lever is fully seated in the adjuster at the clutch lever, or it could slip into place later, creating enough cable play to prevent clutch disengagement.



A. Outer Cable B. Adjuster

- Slide back the dust cover at the clutch cable lower end.
- Turn the adjuster at the clutch lever so that the clutch lever will have 2 ~ 3 mm of play, and tighten the knurled locknut.

"NOTE"

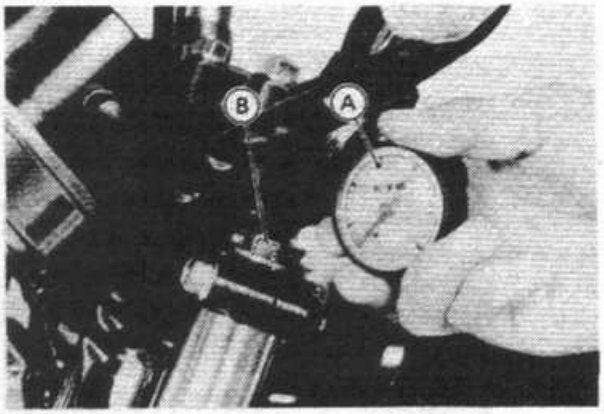
After the adjustment is made, start the engine and check that the clutch does not slip and that it releases properly.

Suspensions

Front Fork Air Pressure

Refer to P.256, noting the following.

Inspection



A. Air Pressure Gauge (52005–1003)
B. Air Valve

Rear Shock Absorber

Refer to P.275.

Drive Belt (KZ750–K1)

At all times the tension of the belt should be maintained within usable range in order to run safely and prolong the life of the belt. A belt that has been maladjusted will result in shorter belt life. A belt that has been too loosely may slip over the pulley teeth. If the belt teeth slip over the pulley teeth, adjust the tension immediately.

Drive Belt Tension:

The adjustment of the belt can be obtained through the use of either of the follwoing two procedures depending on whether or not tension gauge 57001-1155 is availabel. To obtain more reliable result, the adjustment should be performed by use of the tension gauge.

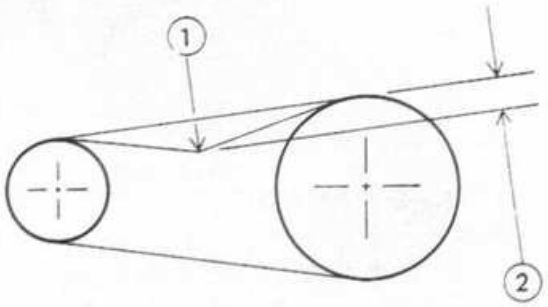
"NOTE"

- ○*Belt tension must be checked when the engine is cold (room or atomospheric temperature) and the belt is dry condition.*
- ○*Belt tension also should be checked at first 800 km ride after belt replacement.*

Tension Inspection without Tension Gauge

- Set the motorcycle up on its center stand.
- Visually inspect the belt for damage.
- ★If it is damaged, replace it with a new one.
- Apply 44 N (4.5 kg) of force on the belt midway between the pulleys and measure the deflection.

Drive Belt Tension Inspection



1. 44N (4.5 kg) of Force
2. Deflection

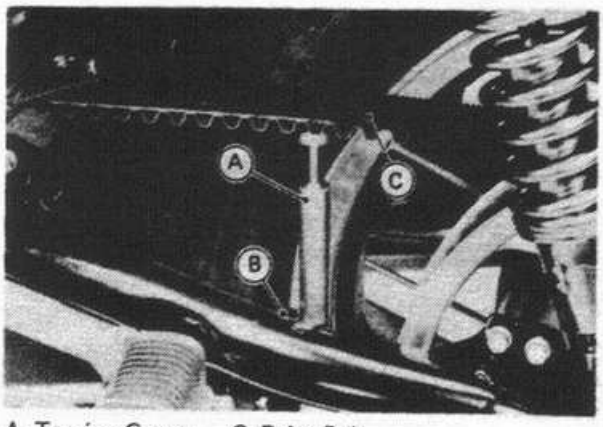
Drive Belt Tension (without tension gauge)

Usabel Range: 8.0 – 21 mm

★If the deflection is out of the usable range, adjust it.

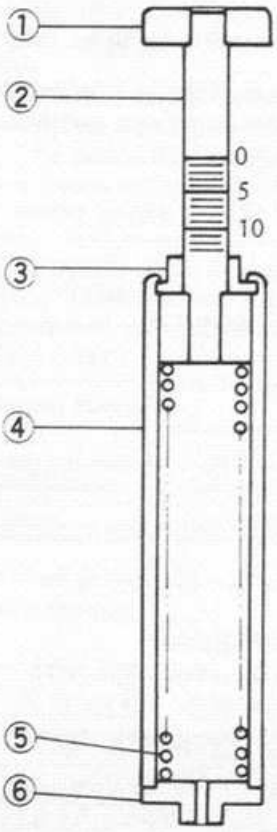
Tension Inspection with Tension Gauge

- Set the motorcycle up on its center stand.
- Visually inspect the belt for damage.
- ★If it is damaged, replace it with a new one.
- Position the tension gauge between the tension gauge positioning bracket on the swing arm and the upper run of the drive belt. Place the plate of the tension gauge on the top of the belt teeth, and the projection of the lower stop of the tension gauge into the hole of the tension gauge positioning bracket



A. Tension Gauge C. Drive Belt
B. Positioning Bracket

Construction of Tension Gauge



1. Plate
2. Rod
3. Upper Stop
4. Body
5. Spring
6. Lower Stop

●Check the tension at several positions by rotating the rear wheel. Adjustment is acceptable when the top of the upper stop is within the usable range on the rod.

Drive Belt Tension
(with tension gauge)

Usable Range: 4.0 – 11.5 mm

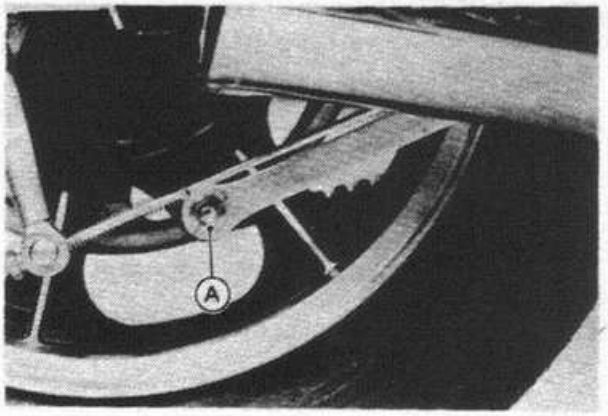
★If the tension is out of the usable range, adjust it.

Tension Adjustment

●Remove the belt guard.
●Loosen the rear torque link nut.

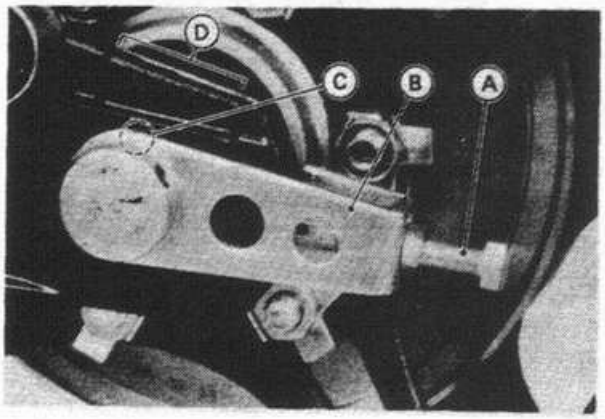
CAUTION

○If you don't loosen the torque link nut, it may lead to the brake parts damage when the adjusters are set.



A. Torque Link Nut

●Loosen the left and right belt adjuster locknuts.
●Remove the cotter pin, and loosen the axle nut.
●If the belt is too tight, back out both the belt adjusting bolts evenly, and kick the wheel forward until the belt is too loose.
●Turn in both the belt adjusting bolts evenly until the drive belt has the correct tension. To keep the belt and wheel aligned, the notch on the left belt adjuster should align with the same swing arm mark that the right belt adjuster notch aligns with.



A. Adjusting Bolts
B. Belt Adjuster
C. Notch
D. Swing Arm Marks

"NOTE"

○*Wheel alignment can also be checked using the straightedge or string method.*
○*When the belt is replaced, adjust the tension to the upper limit.*

WARNING

●**Misalignment of the wheel will result in abnormal wear, and may result in an unsafe riding condition.**
●**Tighten both belt adjuster locknuts, and make sure the axle stays aligned.**
●**Center the brake panel assembly in the brake drum. This is done by tightening the axle nut lightly, spinning the wheel, and depress the brake pedal forcerully. The partially tightened axle nut allows the brake panel assembly to center itself within the brake drum.**

"NOTE"

○*This procedure can prevent a soft, or "spongy feeling" brake.*
●Tighten the axle nut to the specified torque.

Tightening Torque

Axle Nut	: 120 N-m (12kg-m, 87ft-lb)
Torque Link Nut	: 29 N-m (3 kg-m, 22ft-lb)

●Check the tension again, and readjust if necessary.
●Insert a new cotter pin through the axle nut and axle, and spread its ends.
●Tighten the rear torque link nut to the specified torque.

WARNING

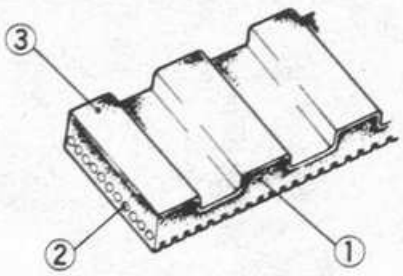
○**If the axle and torque link nuts are not securely tightened and the cotter pin is not installed, an unsafe riding condition may result.**
●**Check the rear brake play referring to the "Brakes" in this chapter.**

Drive Belt Wear

Wear Inspection

●Visually inspect the belt for wear.
★If the nylon fabric facing of any portion is worn off, and the polyurethane compound is exposed, replace the drive belt immediately with a new one. Whenever the belt is replaced, inspect the engine and rear pulleys, and replace them if necessary.

Drive Belt Construction



1. Polyurethane Compound (Black)
2. Kevlar Tensile Cord (Yellow)
3. Nylon Fabric Facing (White)

WARNING

○**A belt worn past the nylon fabric facing must be replaced. Such a worn belt may cause a serious accident.**

"NOTE"

The drive system is designed for use with the standard belt. For maximum strength and safety, the standard belt must be used for replacement.

Standard Belt

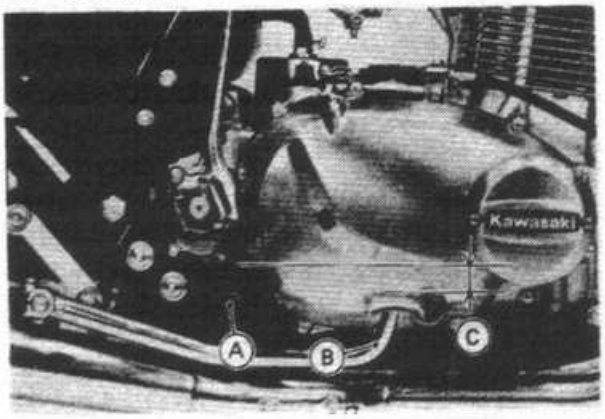
Make	: Gates
Type	: PATF
Pitch x Width	: 14 x 40 mm
Teeth No.	: 137

Brakes

Refer to P.228 – 229, noting the following.

Brake Pedal Position

●When the brake pedal is in its rest position, it should be 0 – 30 mm lower than the top of the footpeg.



A. Foot Peg
B. Brake Pedal
C. 0 ~ 30 mm

Maintenance

CYLINDER HEAD, VALVES

Valve seat cutters (special tools) are newly designed, and the repair precedures are changed a little. But, new seat cutters are available for the models before 1983 model. Refer to Pgs. 142~145, noting the following.

Valve, Valve Guide, Valve Seat

Valve seat inspection

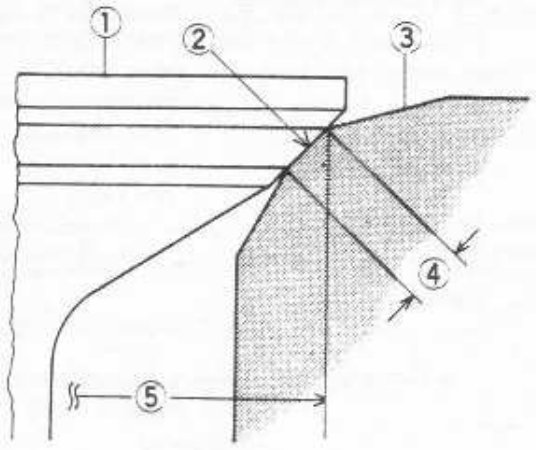
The valve must seat in the valve seat evenly around the circumference over the specified area. If the seating area is too wide, the seating pressure per unit of area is reduced, which may result in compression leakage and carbon accumulation on the seating surface. If the seating area is too narrow, heat transfer from the valve is reduced and the valve will overheat and warp. Uneven seating or seat damage will cause compression leakage.

- Remove the valve, and check to see if the valve and valve guide are in good condition before valve seat inspection.
- Apply machinist's dye to the valve seat, and then use a lapper to tap the valve lightly into place.
- Remove the valve, and note where the dye adheres to the valve seating surface. The distribution of the dye on the seating surface gives an indication of seat condition.
- If the distribution of the dye shows uneven seating or seat damage, or if the width or outside diameter of seating surface is out of the specified range, repair the valve seat.

Valve Seating Surface

	Inlet	Exhaust
Outside Diameter	40.6 mm	34.6 mm
Width	0.7 ~ 1.0 mm	0.7 ~ 1.0 mm

Valve and Valve Seat



1. Valve
2. Valve Seating Surface
3. Valve Seat
4. Width
5. Outside Diameter

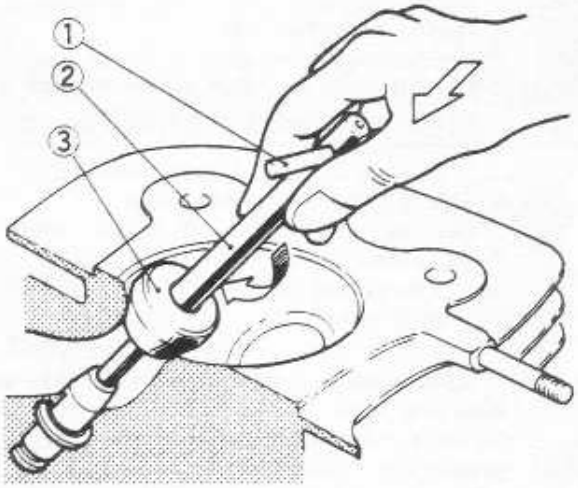
Valve seat repair

A valve seat which requires repair is cut with a set of valve seat cutters. Five seat cutters are required for complete repair; two 32°; two 45°; and one 60° seat cutters, one for the inlet and the other for the exhaust.

NOTE: When using the cutter, be sure to apply engine oil to the cutting part before grinding and also wipe off ground particles adhering to the cutter with washing oil.

- First, cut the seating surface of the valve seat with the 45° seat cutter, cutter holder and bar (special tools). Cut only the amount necessary to make a good surface; overcutting will reduce the valve clearance, possibly making it no longer adjustable.

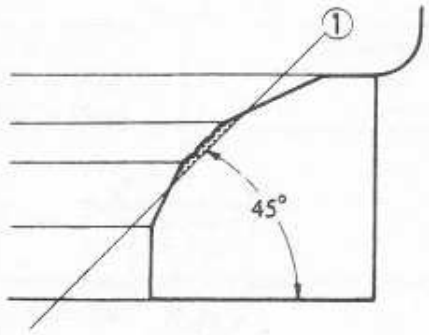
Cutting Valve Seat



1. Bar (57001-1128)
2. 8.0 mm Cutter Holder (57001-1127)
3. Seat Cutter

First Step

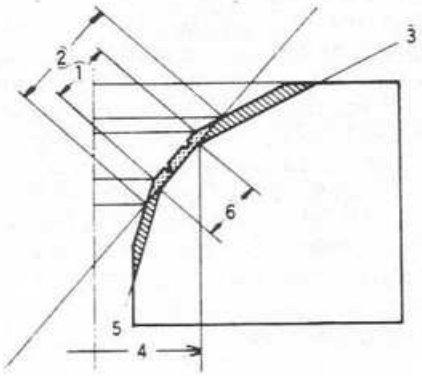
1. Cut Seating Surface with following cutters.
   Exhaust
   Inlet : #5 Seat Cutter (57001-1117)



- Next, cut the outermost surface with the outside cutter so that the valve seating surface will have the specified outside diameter.

●Then, cut the surface inside the seating surface with inside cutter so that the seating surface will have the specified **width**.

Second Step



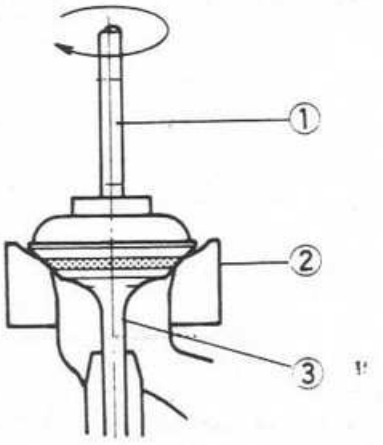
1. Original Seating Surface
2. New Seating Surface
3. Cut this surface to adjust outside diameter 4 of new seating surface with following cutters.
   Exhaust
   Inlet: #10 Outside Cutter (57001-1122)
4. Seating Surface Outside Diameter
5. Cut this surface to obtain correct width 6 with following cutters.
   Exhaust and Inlet: #12 Inside Cutter (57001-1124)
6. Seating Area Width

After cutting, lap the valve to properly match the valve and valve seat surfaces. Start off with coarse lapping compound, and finish with fine compound.

●Apply compound to the valve seat, and tap the valve lightly into place while rotating it with a lapper, repeating this until a smooth, matched surface is obtained.

●When lapping is completed, check the valve installed height and adjust if necessary.

Lapping Valve Seat



1. Lapper 2. Valve Seat 3. Valve

Carburetor

Refer to P.273 – 274, noting the followings.

Carburetor Specifications

	KZ750K1Ⓤ	KZ750K1ⒸⓌ KZ750S2, Y2
Type	BS34 *	B34–A560
Main Jet	115	←
Needle Jet	Z – 0	←
Jet Needle	5C50 (one groove)	5C48 – 3 (3rd groove from top)
Pilot Jet	45	←
Pilot Air Jet	1.6	←
Throttle Valve	165	←
Starter Jet	70	←
Pilot Screw	2 1/4 (for reference)	←

* High altitude adjustment is not required.

Clutch

See P. 154–156, noting that clutch release mechanism and clutch spring tension are modified.

Clutch Spring Tension

Length	: 23.5 mm
Standard	: 201 ~ 230N (20.5 ~ 23.5kg)
Service Limit	: 182N (18.5kg)

Front Fork (All model)

Refer to P. 278, noting the following.

Fork Oil (each fork leg)

Oil Type	:	SAE 10W20
Oil Capacity		
○when charging	:	270 mL
○after disassembly, completely dry	:	316–324 mL
Oil Level*	:	409.5 mm

Wheels

KZ750-K1, S2 : have tubeless tire and cast wheel. See P.296 ~ 298, noting the followings.

KZ750-Y2 : has tube tire and spoke wheel. See P.170 ~ 172, noting the followings.

Tire

Tire Air Pressure (when cold)

Front	:Ⓤ Ⓒ 172 kPa (1.75kg/cm², 25psi)
	Ⓔ 200 kPa (2.00 kg/cm², 28psi)
Rear	:Ⓤ Ⓒ
up to	955N (97.5 kg, 215 lb)
	172 kPa (1.75 kg/cm², 25psi)
955 ~ 1760N	(97.5 ~ 180kg, 215 ~ 397 lb)
	200 kPa (2.00kg/cm², 28psi)
Rear	:Ⓔ
up to	955N (97.5kg, 215 lb)
	200 kPa (2.0kg/cm², 28psi)
955 ~ 1760N	(97.5 ~ 180 kg, 215 ~ 397 lb)
	221 kPa (2.25kg/cm², 32 psi)

Standard Tire

	Size	Make, Type
Front	3.25H-19 4PR	DUNLOP F11
Rear	130/90-16 67H	DUNLOP K427

Tire Tread Depth

	Standard	Service Limit	
		Under 130 kph	Over 130 kph
Front	3.5 mm	1 mm	1 mm
Rear	7.4 mm	2 mm	3 mm

Rim Size

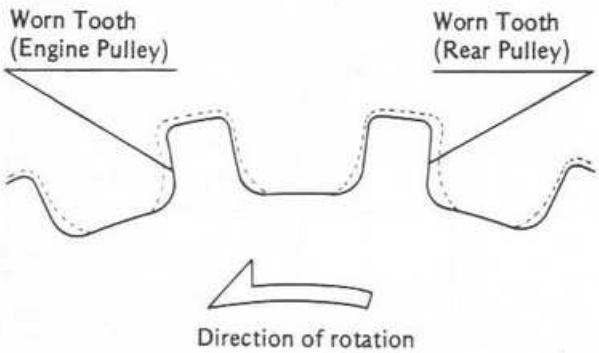
Front	MT 1.85 x 19
Rear	MT 3.00 x 16

PULLEYS (KZ750-K1)

The pulleys have a special tooth profile to transmit the engine power with high efficiency. A worn-out pulley may allow the belt teeth to slip.

Visually inspect the pulleys, and replace them if they are worn as illustrated.

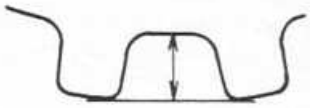
Pulley Teeth



"NOTE"

○If the pulley requires replacement, the belt is probably worn. Whenever replacing the pulley, inspect the belt.

Pulley Teeth Measurement



Pulley Teeth

	(Engine)	(Rear)
Teeth No. :	28	65
Standard:	6.4~6.6 mm	6.6~6.7 mm
Service Limit:	6.2 mm	6.2 mm

Front Disc Brake

See P.182, noting the followings.
Single disc: KZ750-K1Ⓤ Ⓒ
Dual disc: Z750-K1Ⓦ, Z750-S2, Y2

Disc Thickness

Standard	Service Limit
5.8 ~ 6.1 mm (Single)	5.5 mm
4.8 ~ 5.1 mm (dual)	4.5 mm

Caliper Pad Lining Thickness

Standard	Service Limit
4.85 mm (Single)	1 mm
3.35 mm (dual)	1 mm

Charging System

Refer to P.243 ~ 246, noting that the regulator/rectifier has 6–Pin connector.

Side Stand Switch Ⓦ Ⓤⓚ etc.

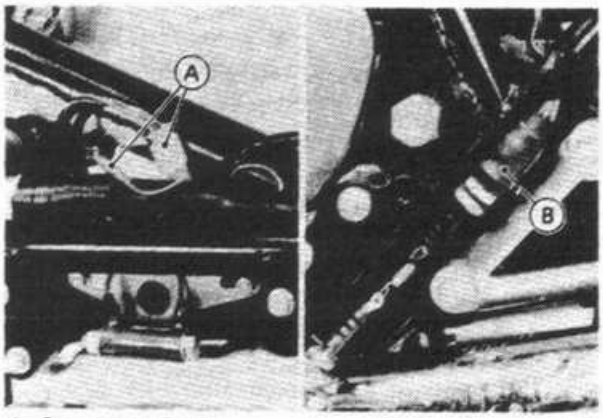
Switch Inspection

To check the switch, disconnect the connector and 3-pin plug (under the tank), and use an ohmmeter to see that the connections shown in the table have continuity (zero ohms).

★If the meter does not read as indicated in the table, check to see that the side stand switch is properly installed on the frame. If the switch is not correctly installed, re-mount it correctly. If the switch is correctly mounted, replace the side stand switch.

Side Stand Switch Connection (female)

Side Stand	BR	BL/W	R	G/W
up			○——	——○
down	○——	——○		



A. Connector, Plug B. Side Stand Switch

Automatic Turn Signal Cancelling System (KZ750-K1)

The cancelling system consists of the battery (power source), turn signal control unit, distance sensor, solenoid, and turn signal switch. When the turn signal switch is pushed to the left or right, the turn signals start flashing and the control unit starts counting off 4 seconds. At the end of this time, the control unit starts calculating distance traveled using pulses from the distance sensor in the speedometer. When the motorcycle has traveled 50 meters, the control unit operates the solenoid, which returns the turn signal switch to the off position.

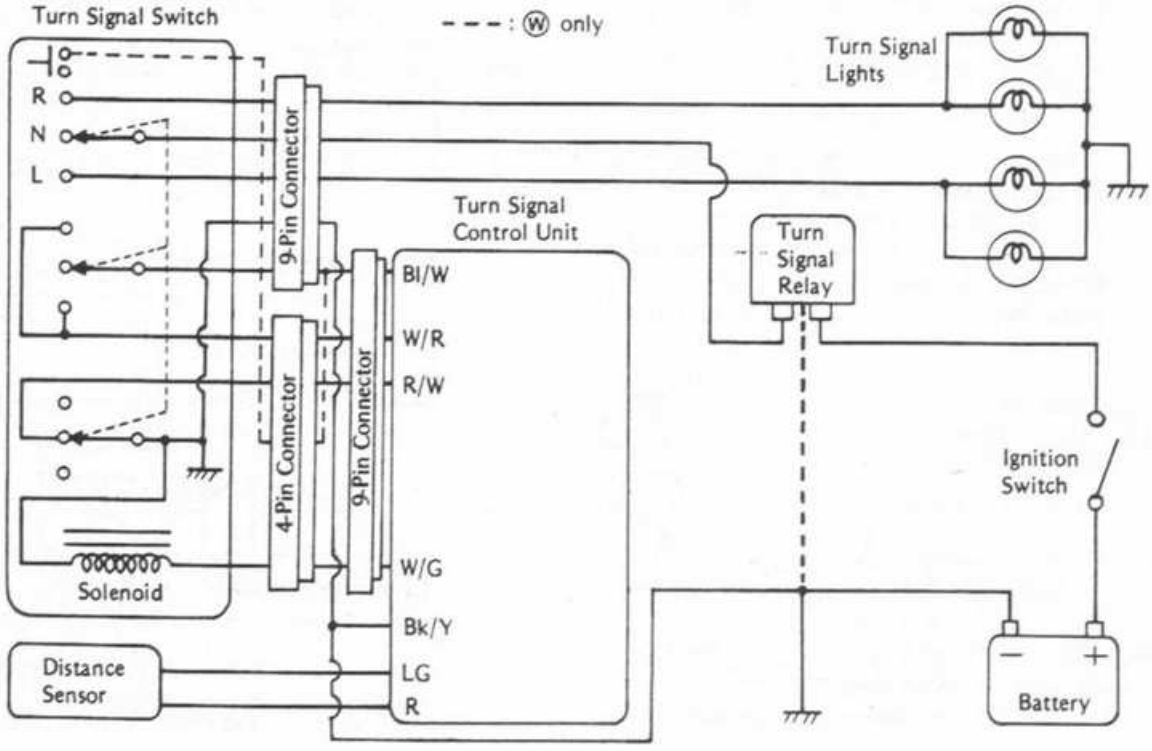
If the turn signal cancelling system does not function properly, first check all the wiring connections carefully. and then inspect the distance sensor and turn signal switch/solenoid assembly. If all these are good, replace the turn signal control unit.

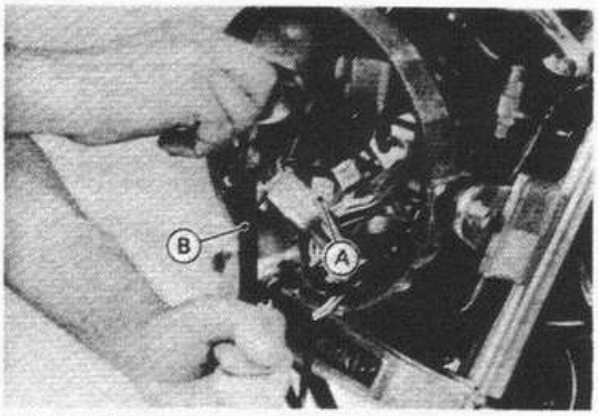
Distance sensor inspection

- Open the headlight housing, disconnect the 4-pin connector from the speedometer, and remove the speedometer cable lower end from the speedometer gear housing using pliers.
- Connect an ohmmeter across to the sensor leads (red and light green leads), and check continuity as follows.
- Turning the speedometer inner cable slowly, count how many times the sensor shows continuity. The ohmmeter should show continuity and then open four times per revolution.

★If it does not, replace the speedometer.

Turn Singal Cancelling System





A. 4-pin Connector from the speedometer
B. Turn the speedometer inner cable.

Turn signal inspection

- Open the headlight housing. Unplug the 9-pin and 4-pin connectors that leads to the left switch housing.
- Check the turn signal switch connections according to the table.
- ★If the switch has an open circuit or a short, it can be disassembled for repair. The contact surfaces may be cleaned, but no internal parts are available for replacement.
- ★If any parts are not repairable, the switch must be replaced as a unit.

Turn Signal Switch Connections

	GR	O	G	W/G	W/R	BR
R	○——	——○			○——	——○
N				○——	——○	
L		○——	——○		○——	——○

Wiring Inspection

Meter Range	Connections*	Ignition Switch	Turn Signal Switch Position	Reading
25V DC	Meter (+) → Brown, Blue/White	on	Any (R, L, Neu.)	Battery voltage
		off	Any	0V
	Meter (+) → White/Red	on	R or L	Battery voltage
		off	Neutral	0V

*Connect the meter negative (−) lead to ground.

Next check that the solenoid operates properly when it receives a pulse from the control unit.

- Switch the turn signal switch to either side, connect a wire to the positive (+) side of the battery on the motorcycle and touch it to the **white/green** lead in the male, 4-pin connector (red) that leads to the left switch housing momentarily.
- ★At this time the solenoid should return the turn signal switch to the off position. If it does not do this for both right and left positions, replace the switch assembly.

CAUTION

Do not connect the battery lead to the W/G lead for more than a few seconds, as it could burn out the solenoid.

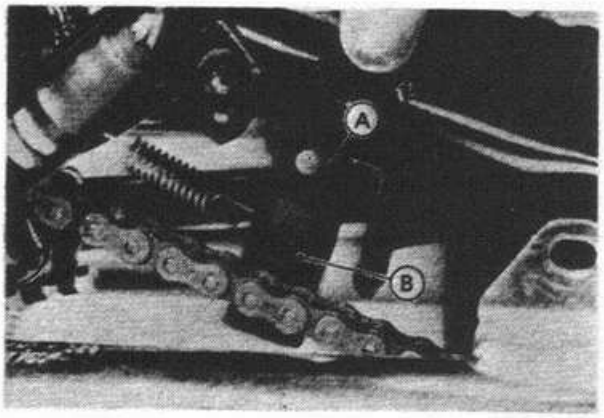
Wiring inspection

- Connect all connectors.
- Pull off the right side cover.
- Measure the voltage at the 6-pin connector from the turn signal control-unit as shown in the table.
- ★If any one of the meter readings shows an improper values, check the wiring and connections of the turn signal switch, distance sensor, and turn signal control unit. Replace the turn signal control unit if all of them turn out good.

Drive Chain (except Belt Drive)

Chain Guide wear

Visually inspect the drive chain guide rubber. If the rubber protrusion is worn down halfway or more, or damaged, replace it.



A. Chain Guide B. Rubber

Disassembly

Carburetors

Refer to PP.258 – 261, noting the following.

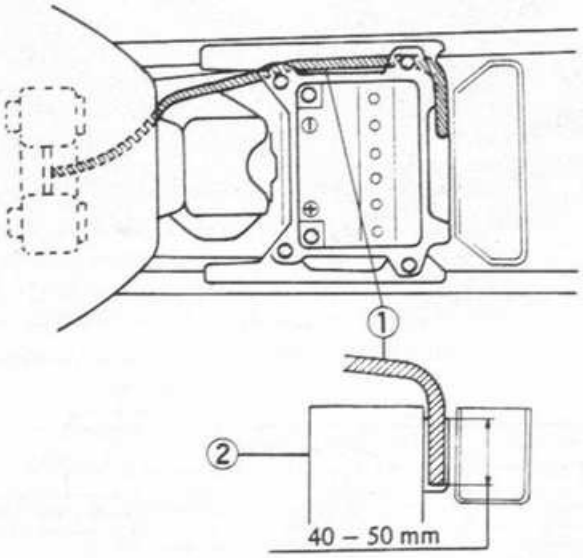
Pilot Screw (except US model)

Plug (14) is eliminated.

- When removing the pilot screw, turn in the screw and count the number of turns it seated fully but not tightly, and remove the screw.
- When assembling the pilot screw, turn in the screw fully but not tightly, and then back it out the same number of turns counted during disassembly.

Carburetor Vent Hose

- Run the hose as follows.

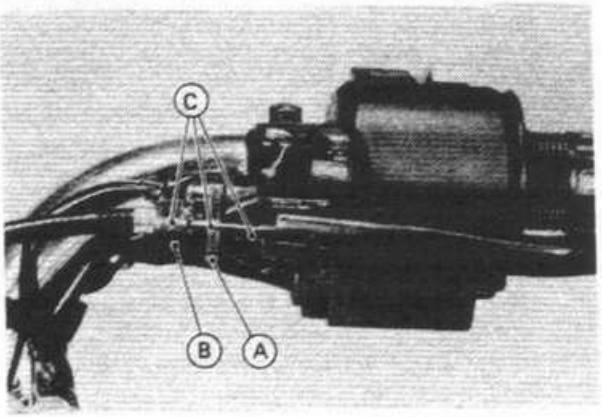


1. Carburetor Vent Hose
2. Put into the battery case

Clutch Release and Cable

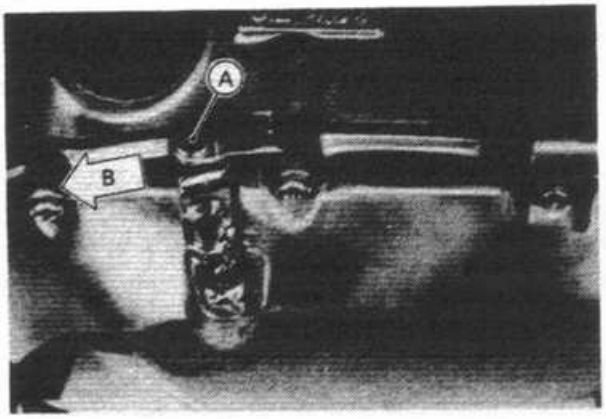
Removal:

- Slide the dust cover at the clutch cable lower end out of place.
- Loosen the nuts, and slide the lower end of the clutch cable to give the cable plenty of play.
- Loosen the knurled locknut at the clutch lever, and screw in the adjuster.
- Line up the slots in the clutch lever, knurled locknut, and adjuster, and then free the cable from the lever.



A. Knurled Locknut B. Adjuster C. Slot

- Free the clutch inner cable tip from the clutch release lever.
- Remove the timing advancer (P.63).
- Turn the release lever toward the rear as shown in the figure and remove the right engine cover.

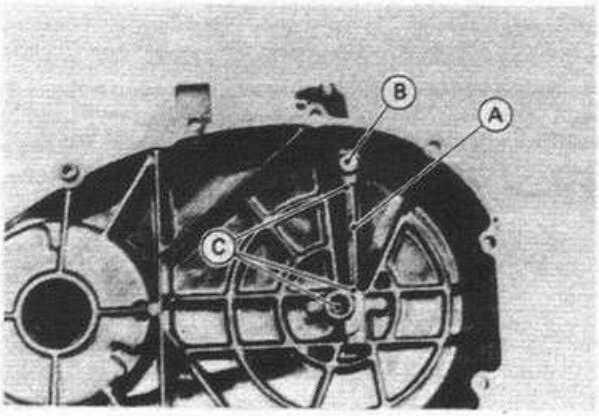


A. Release Lever B. Rear

- Remove the bolts and pull out the lever and shaft assembly.

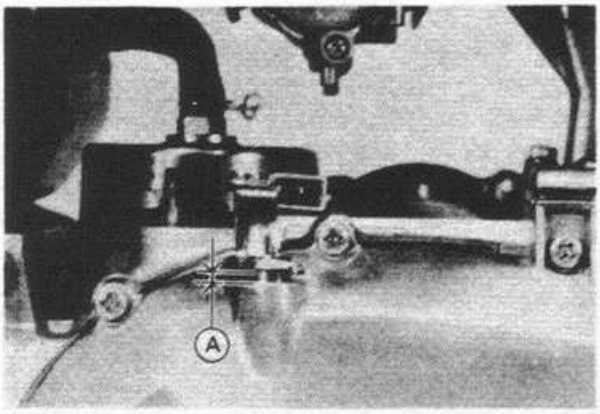
Installation Points:

- Apply oil to the release shaft as shown in the figure.
- Tighten the bolts to the specification.

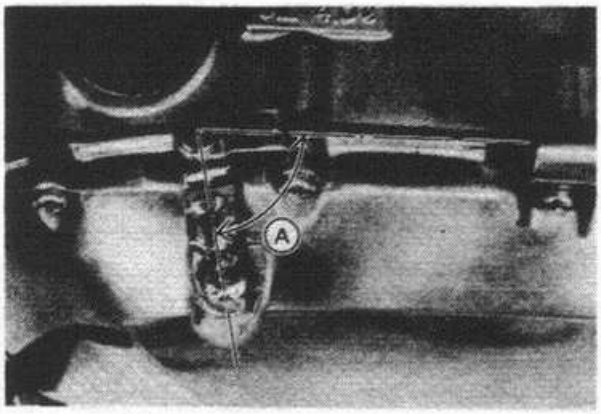


A. Release Shaft
B. Bolt : 6.9 N-m (0.7kg-m, 61 in-lb)
C. Apply oil

●Turn the release lever clockwise until it becomes hard to turn.
The release lever should have proper clearance and angle as shown.

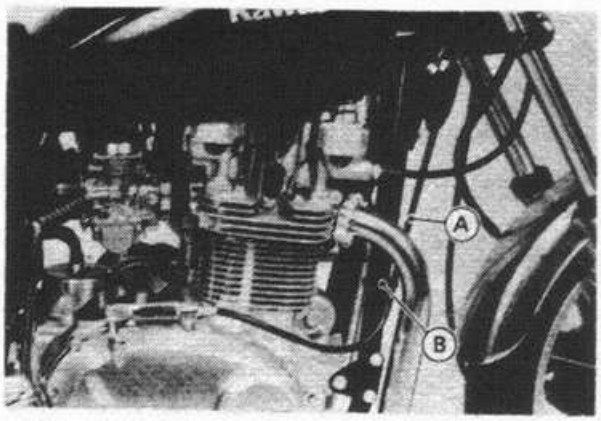


A. 2 ~ 3 mm



A. About 80°

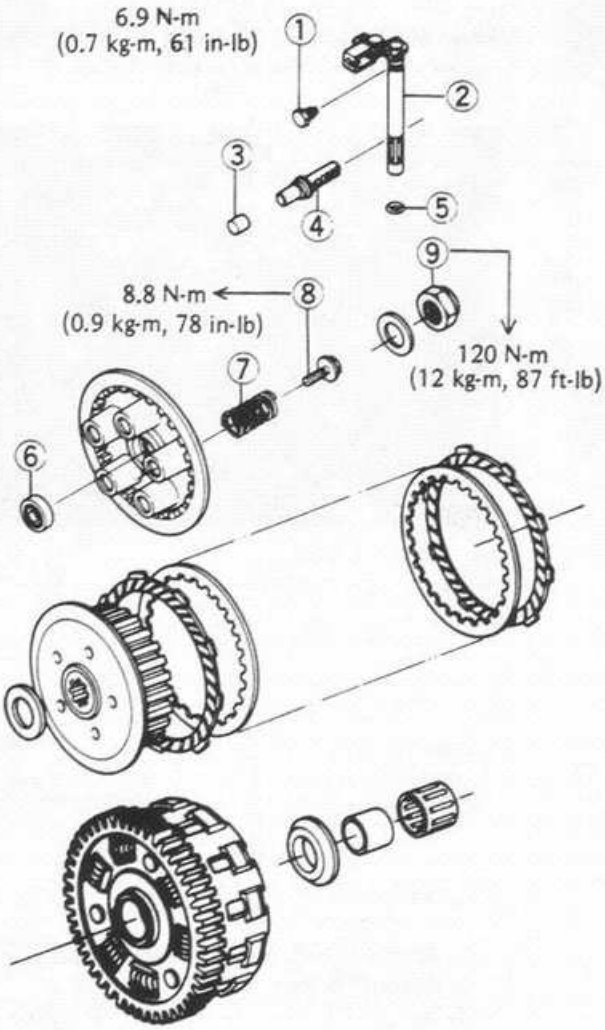
●Route the clutch cable as shown in the figure.



A. Clutch Cable
B. Clamp

●After installation, adjust the clutch lever play (P.311).

Clutch Release

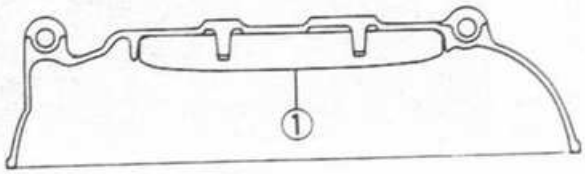


1. Release Mounting Bolt
2. Release Shaft, Lever
3. Roller
4. Rod
5. O-ring
6. Ball Bearing
7. Clutch Spring
8. Clutch Spring Bolt
9. Clutch Hub Nut

Camshaft chain Guide (Top)

Refer to P.53, noting the following.
Allen bolts and washers are discontinued.

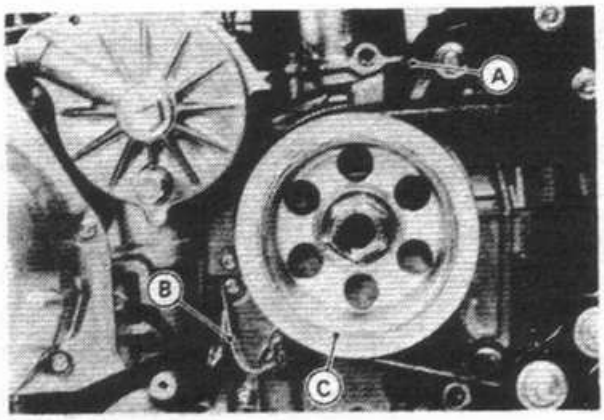
- Install the chain guide as follows.



1. Chain Guide

Alternator (KZ750-K1)

- Run the alternator lead and neutral switch lead as shown in the figure to prevent damage by the pulley.



A. Alternator Lead
B. Neutral Switch Lead
C. Pulley

Transmission

Refer to P.84 – 88, noting the following.

Assembly Points of Output Shaft

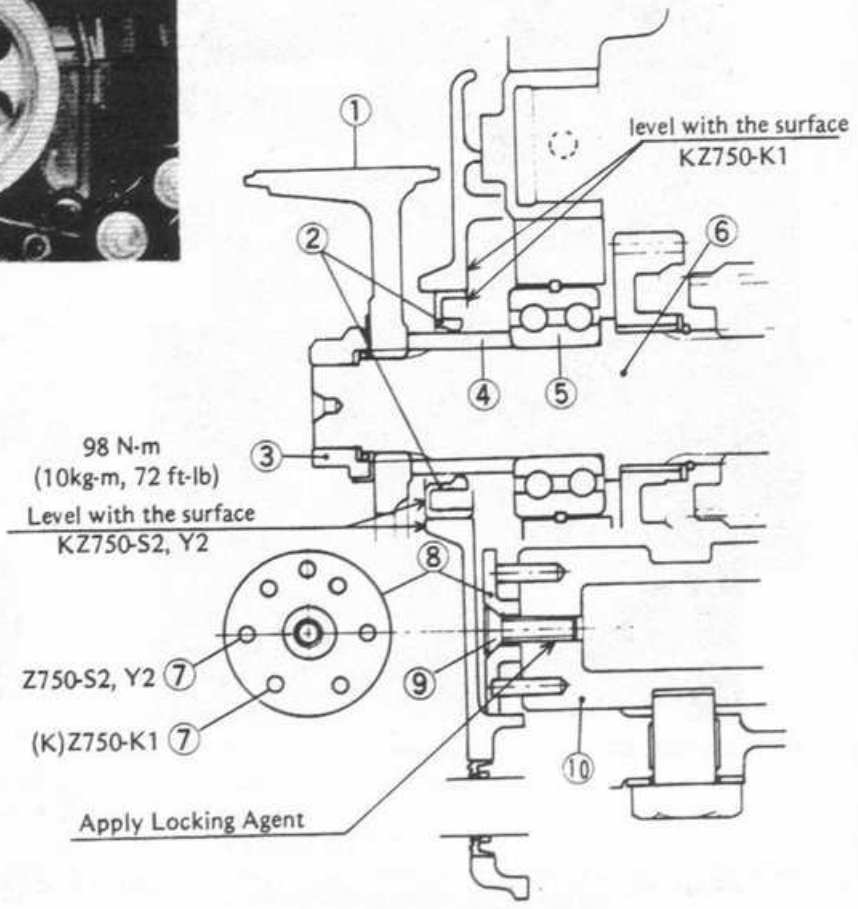
O ring (38) is discontinued.

- Press the ball bearing and collar securely in the output shaft using a bearing driver (Special tool, 57001-1129).
- Insert the output oil seal to the mission cover as shown in the following figure.

Shift Drum Assembly Points:

- Apply a locking agent to the thread of the screw.
- Install the long shift drum pin in the position as shown in the figure.

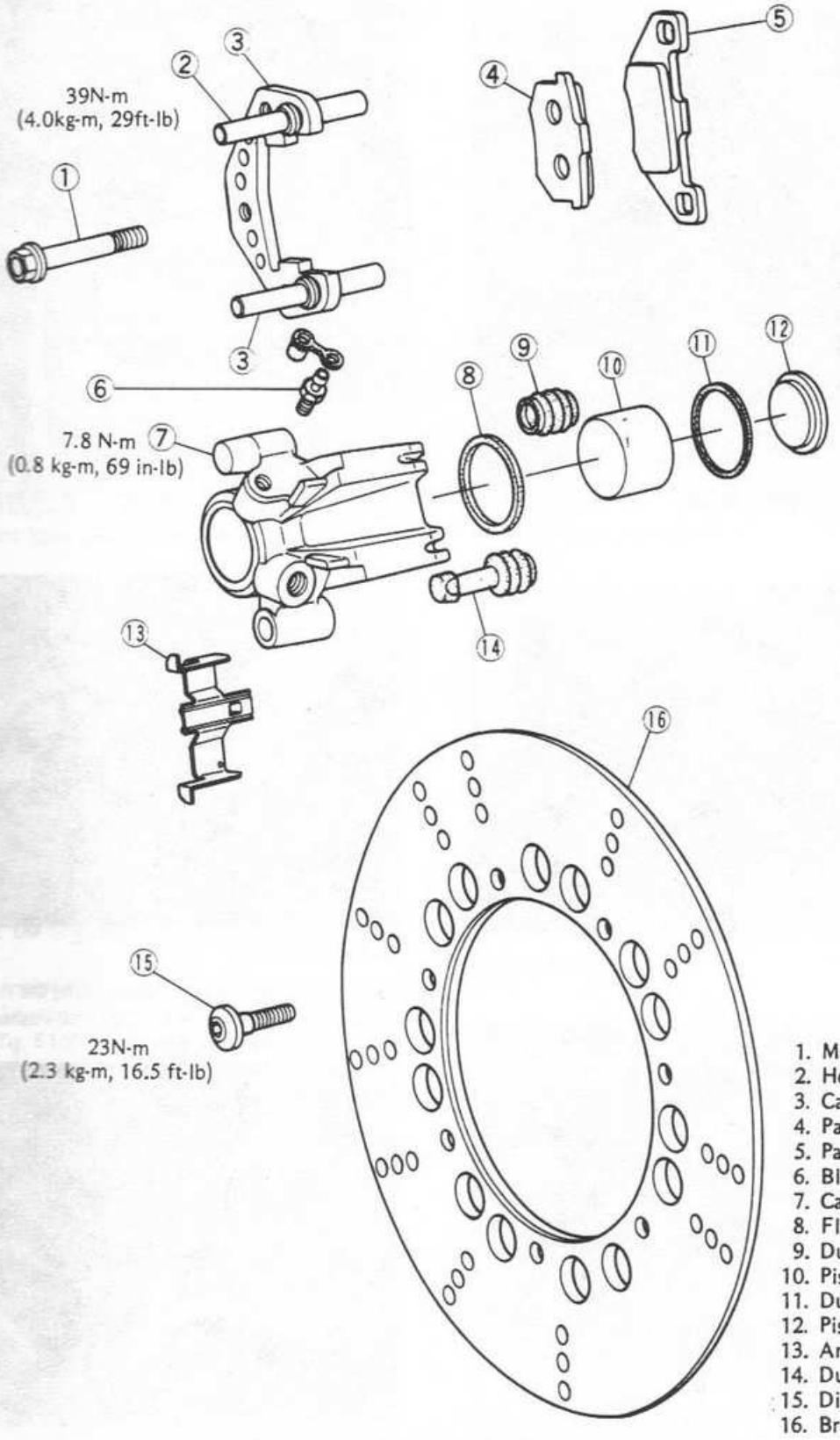
★If not, the neutral indicator light will not light at neutral position.



1. Belt Pully or Engine Sprocket
2. Output Oil Seal
3. Nut
4. Collar
5. Ball Bearing
6. Output Shaft
7. Long Shift Drum Pin
8. Pin Plate
9. Screw
10. Shift Drum

Front Disc Brake

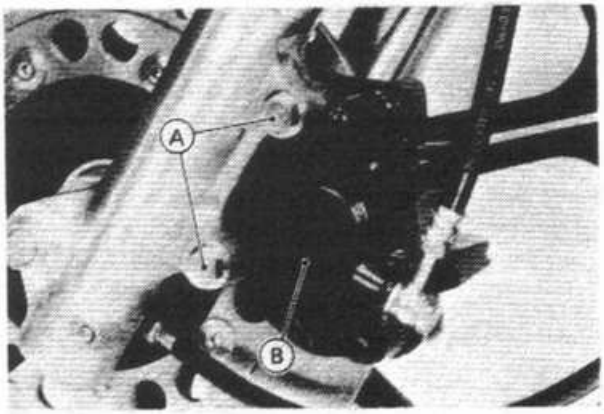
Refer to P.265–267, noting the following.



1. Mounting Bolt
2. Holder Shaft
3. Caliper Holder
4. Pad
5. Pad
6. Bleed Valve
7. Caliper
8. Fluid Seal
9. Dust Cover
10. Piston
11. Dust Seal
12. Piston Head
13. Anti-rattle Spring
14. Dust Cover
15. Disc Mounting Allen Bolt
16. Brake Disc

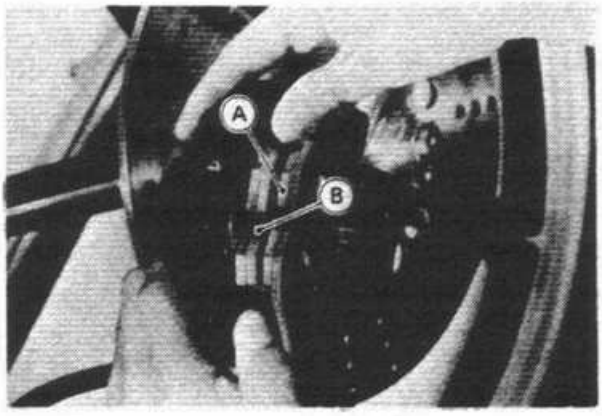
Removal Points of Pads

- Remove caliper mounting bolts(2) and lift the caliper off the disc.



A. Caliper Mounting Bolts
B. Caliper

- Push the caliper piston in by hand as far as it will go and remove pads.

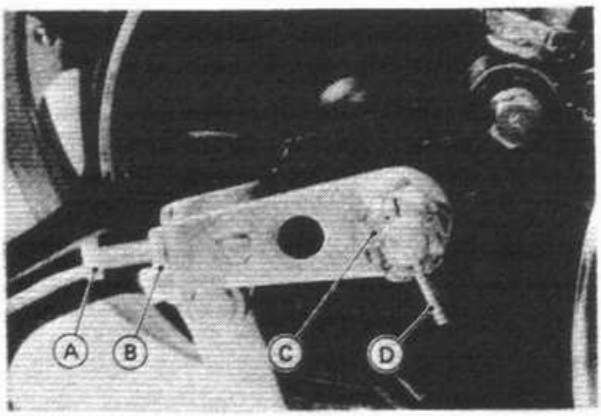


A. Pad
B. Pad

DRIVE BELT (KZ750-K1)

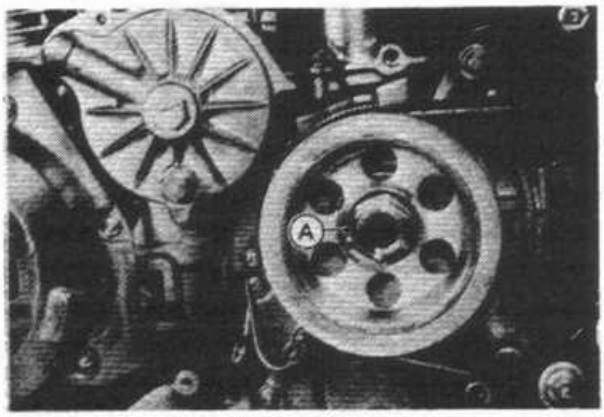
Removal:

- Set the motorcycle up on its center stand.
- Remove the belt guard.
- *Loosen the nut at the rear end of the torque link.*
- *Remove the axle cotter pin and axle nut.*
- Loosen the left and right belt adjusting bolt locknuts.



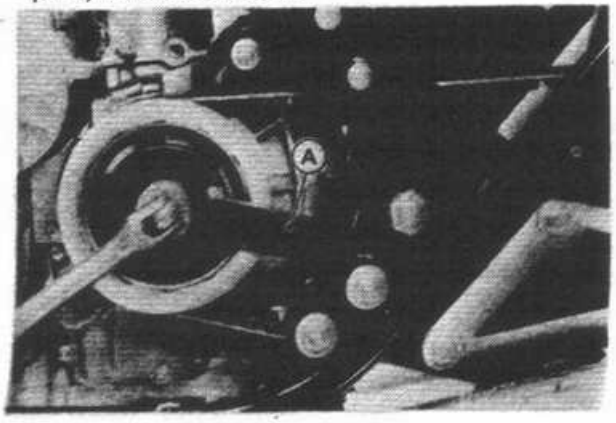
A. Adjusting Bolt B. Locknut
C. Axle Nut D. Cotter Pin

- Back out both the belt adjusting bolts evenly, and push fully the wheel forward for easier wheel removal.
- Remove the rear wheel.
- Mark the direction of belt rotation on the belt with chalk so that the belt can be reinstalled in the same direction to ensure longer belt life.
- Remove the engine pulley cover.
- Straighten the sides of the splined washer that is bent over the sides of the engine pulley nut.



A. Splined Washer

- Hold the engine pulley steady using the holder (special tool), and remove the nut, splined washer, and engine pulley with the drive belt.

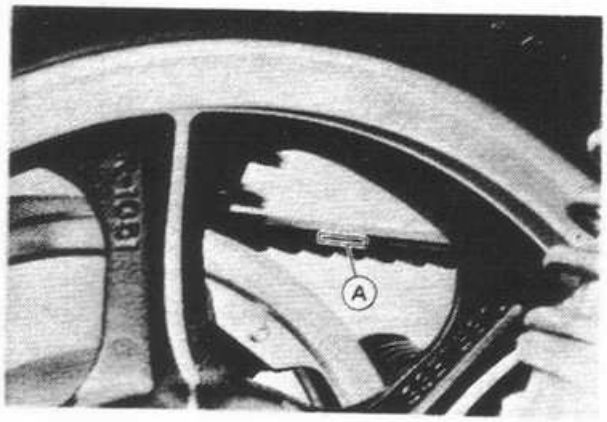


A. Holder (57001-1173)

- Take the drive belt off the engine pulley.
- Remove the swing arm (P.237).
- Free the belt from the motorcycle.

Installation Points:

- Be sure that the belt is installed in the same direction as before removal. When installing a new belt, the white paint mark on the side of the belt should face inwards of the motorcycle.



A. White Paint Mark

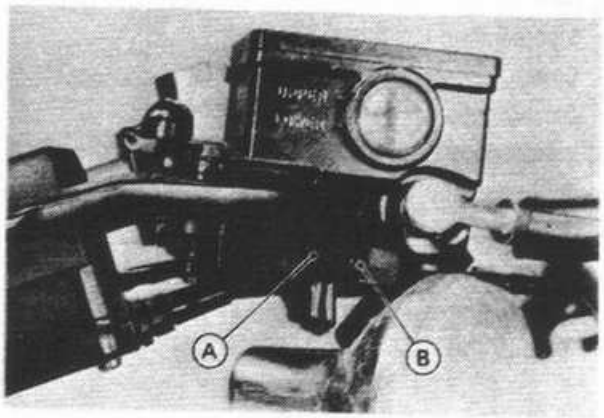
- Tighten the engine pulley nut to 98 N-m (10kg-m, 72ft-lb) of torque.
- Bend the sides of the splined washer over the sides of the engine pulley nut.
- Check that the engine pulley cover knock pins(2) are in place.
- Install the engine pulley cover using the shift shaft oil seal guide (special tool) to protect the oil seal in the cover (See fig. E100).
- Lubricate the swing arm pivot (P.280).
- Apply grease to the cap inner surfaces and install the cap on each side of the swing arm pivot.
- Tighten the pivot shaft nut to 98 N-m (10.0 kg-m, 72 ft-lbs) of torque.
- Apply a little grease to inside surface of the hole in the coupling where the rear lub fits.
- Check to see that the wheel coupling, coupling collar, coupling sleeve, rubber damper, and brake panel are in place.
- Check to see that the belt adjusters are installed with the knotch mark side facing out.
- Adjust the drive belt (P. 312).
- Adjust the rear brake (P. 314).

Front Brake Light Switch

Refer to P.265, noting the following.

Installation Points of Front Brake Light Switch

- Apply a non-permanent locking agent to the threads of the front brake light switch mounting screw, and tighten the screw to install the switch.

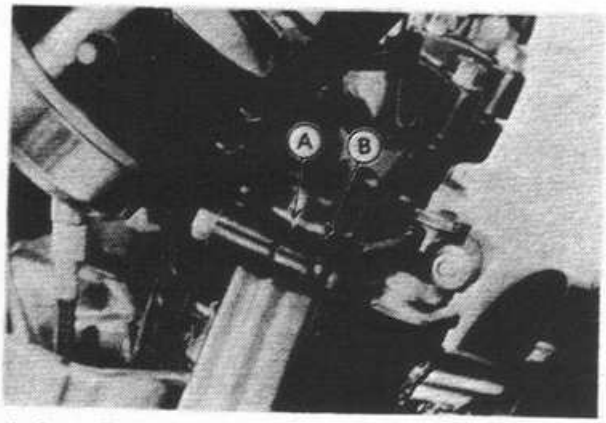


A. Front Brake Light Switch
B. Screw

Front Fork

Refer to P.269, noting that the air valve is changed.

- The inner tube upper end is even with the stem head upper surface.



A. Inner Tube Upper End
B. Stem Head Upper Surface

TORQUE AND LOCKING AGENT

See P.258 ~ 265, noting the following.

Parts	Quantity	Torque			Remark	See Page
		N-m	kg-m	ft-lb		
Engine sprocket nut φ20P1.5	1	98	10.0	72	–	322
Steering stem head bolt φ16P1.5	1	39	4.0	29	–	27,122
Steering stem locknut φ30P1.0	1	20	2.0	14.5	–	27,121
Clutch release mounting bolt φ6P1.0	1	6.9	0.7	61 in-lb	★	321
Balancer chain tensioner mounting bolts φ6P1.0	2	9.8	1.0	87 in-lb	–*	91
Oil pump mounting bolts φ6P1.0	3	9.8	1.0	87 in-lb	–*	67,83
Starter motor mounting bolts φ6P1.0	2	9.8	1.0	87 in-lb	–*	57

*: Tightening torque is the same as before but the locking agent is discontinued.

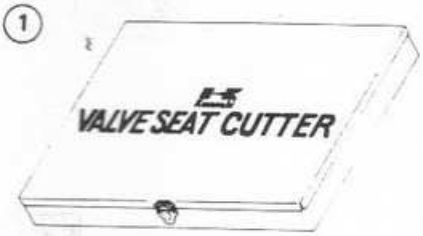
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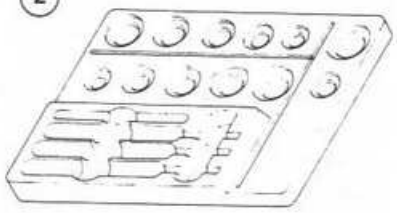
SPECIAL TOOLS

1. The following special tools are newly designed for this motorcycle, and available now. The new special tools are modified to broaden their applicability with less quantity of parts required for service. Refer to PP.214 ~ 216, noting the following.

REF. NO.	NEW PART NO.	PART NAME	Q'TY	OLD PART NO.
1	57001-1111	VALVE SEAT CUTTER CASE	1	–
2	57001-1112	SEPARATE CASE	1	–
3	57001-1117	SEAT CUTTER (#5)	1	–
4	57001-1122	OUTSIDE CUTTER (#10)	1	–
5	57001-1124	INSIDE CUTTER (#12)	1	–
6	57001-1127	CUTTER HOLDER	1	–
7	57001-1128	HANDLEBAR	1	–
8	57001-1155	TENSION GAUGE	1	–
9	57001-1173	HOLDER	1	–
10	52005-1003	AIR PRESSURE GAUGE	1	–
11	57001-1100	STEM NUT WRENCH	1	57001-134
12	57001-1091	FRONT FORK OIL SEAL DRIVER	1	57001-141
13	57001-1099	ROTOR PULLER	1	57001-254
14	57001-382	TRANSMISSION CIRCLIP DRIVER (Used to install the transmission ball bearing)	1	57001-380
15	57001-125	OIL PRESSURE GAUGE ASSEMBLY	1	57001-164
16	57001-1017	FUEL LEVEL GAUGE	1	57001-208
17	57001-1094	PISTON RING COMPRESSOR ASSEMBLY	1	57001-921

SPECIAL TOOLS

1


2


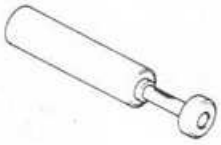
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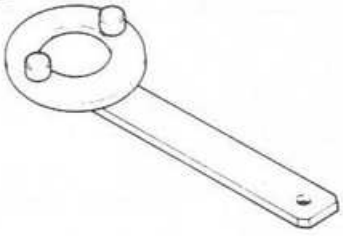

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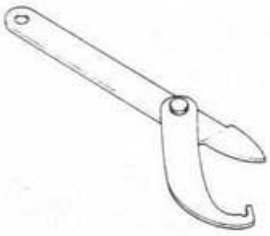

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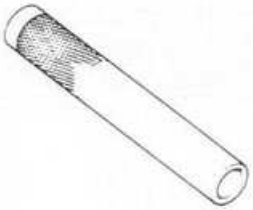
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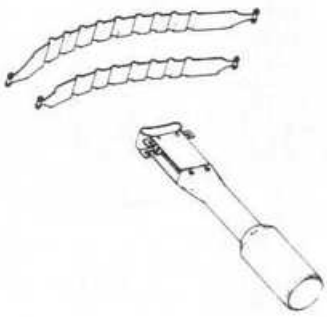
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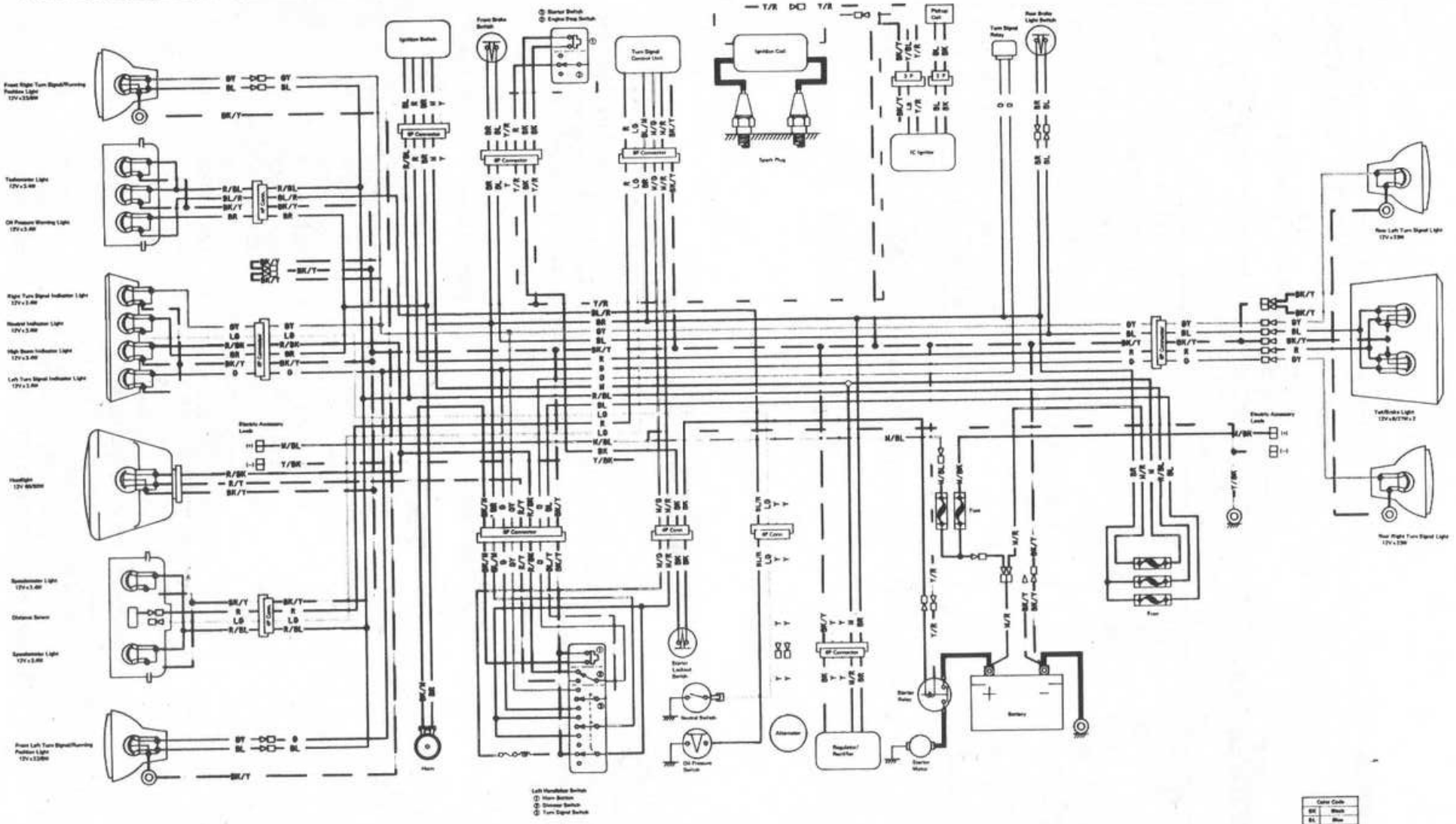

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17


KZ750-K1 Wiring Diagram (US and Canadian Model)



LEFT HANDLEBAR SWITCH CONNECTIONS

Starter Lockout Switch			Horn Button		Dimmer Switch				Turn Signal Switch					
Color	BR	BK		BK/W	BK/Y		W,Y	R/BK	R/Y		G	O	GY	BL,W	W/R	W/G	BK/Y
						HI	○—○			L		○—○			○—○		
ON	○—○		Push	○—○						R			○—○			○—○	
						LOW	○—○			N				○—○			

IGNITION SWITCH CONNECTIONS

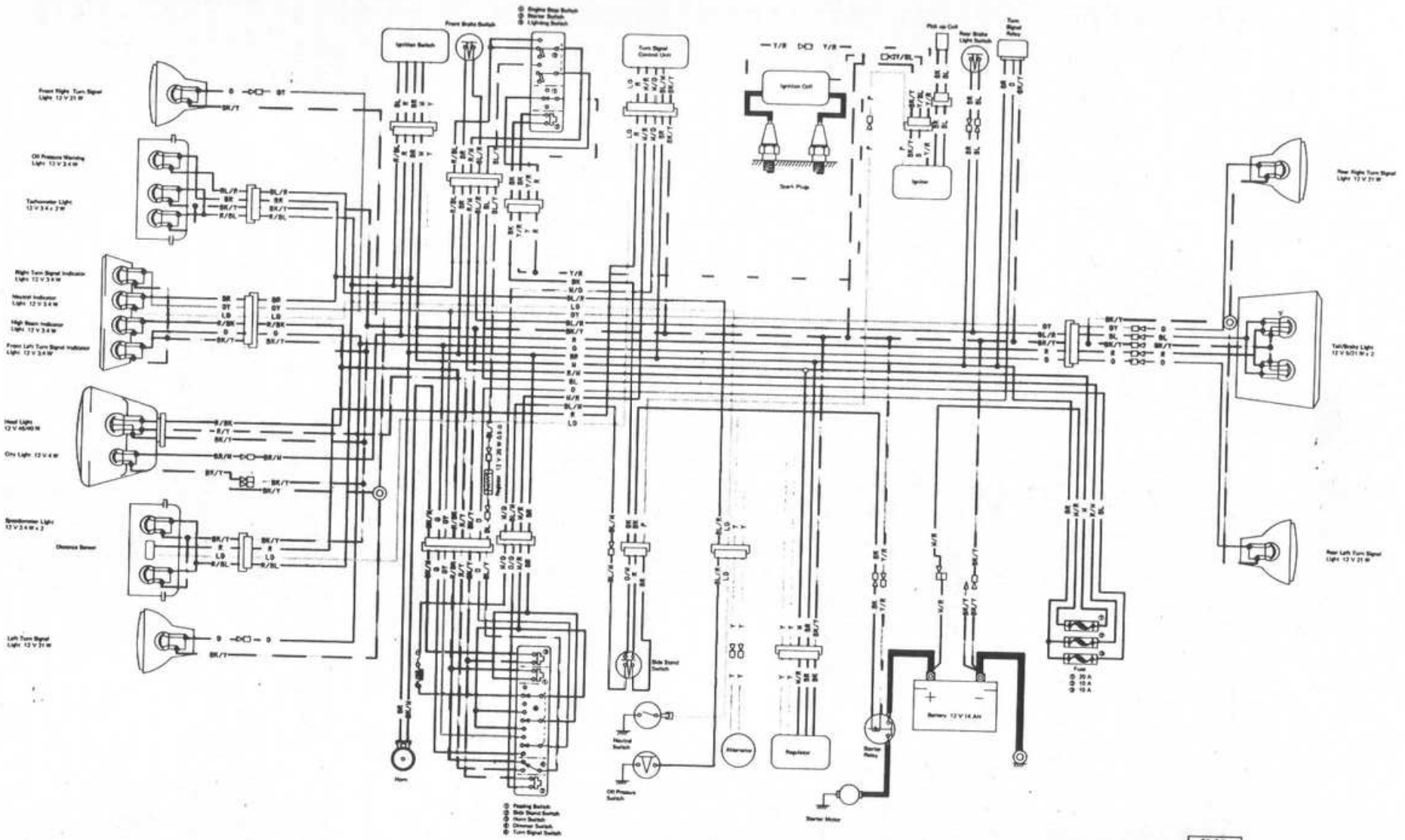
	Battery	Ignition	Light	Tail 1	Tail 2
Color	W	Y	BR	BL	R
OFF					
ON	○—○	○—○	○—○	○—○	○—○
PARK	○—○	○—○	○—○	○—○	

RIGHT HANDLEBAR SWITCH CONNECTIONS

Engine Stop Switch			Starter Button	
Color	Y/R	R	BK	BR
OFF				
RUN	○—○	Push	○—○	
OFF				

Color Code	
BK	Black
BL	Blue
BR	Brown
G	Green
GY	Gray
LB	Light Blue
LG	Light Green
P	Pink
O	Orange
R	Red
W	White
Y	Yellow

Z750-K1 Wiring Diagram (West German Model)



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