Kawasaki

KR-1S



Motorcycle Service Manual Supplement

Quick Reference Guide

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This quick reference guide will assist you in locating a desired topic or procedure.

- Bend the pages back to match the black tab of the desired chapter number with the black tab on the edge at each table of contents page.
- Refer to the sectional table of contents for the exact pages to locate the specific topic required.

Kawasaki

KR-1S

Motorcycle

Service Manual

Supplement

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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. See your Motorcycle dealer for the latest information on product improvements incorporated after this publication.

All information contained in this publication is based on the latest product information available at the time of publication. Illustrations and photographs in this publication are intended for reference use only and may not depict actual model component parts.

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LIST OF ABBREVIATIONS

A	ampere(s)	lb	pound(s)
ABDC	after bottom dead center	m	meter(s)
AC	alternating current	min	minute(s)
ATDC	after top dead center	N	newton(s)
BBDC	before bottom dead center	Pa	pascal(s)
BDC	bottom dead center	PS	horsepower
BTDC	before top dead center	psi	pound(s) per square inch
°C	degree(s) Celcius	r	revolution
DC	direct current	rpm	revolution(s) per minute
F	farad(s)	TDC	top dead center
°F	degree(s) Fahrenheit	TIR	total indicator reading
ft	foot, feet	V	volt(s)
g	gram(s)	W	watt(s)
h	hour(s)	Ω	ohm(s)
L	liter(s)		



This warning may apply to any of the following components or any assembly containing one or more of these components:-

Brake Shoes or Pads
Clutch Friction Material
Gaskets
Insulators

SAFETY INSTRUCTIONS

- Operate if possible out of doors or in a well ventilated place.
- Preferably use hand tools or low speed tools equipped, if necessary, with an appropriate dust extraction facility. If high speed tools are used, they should always be so equipped.
- If possible, dampen before cutting or drilling.
- Dampen dust and place it in properly closed receptacle and dispose of it safely.

Read OWNER'S MANUAL before operating.

Foreword

This KR-1S Service Manual Supplement is designed to be used in conjunction with the KR-1 Motorcycle Service Manual (P/N 99924-1084-02). The maintenance and repair procedures described in this supplement are only those that are unique to the KR-1S motorcycle. Most service operations for these models remain identical to those described in the base Service Manual. Complete and proper servicing of the KR-1S motorcycle therefore requires both this supplement and the base Service Manual.

The base Service Manual and this Supplement are designed primarily for use by motorcycle mechanics in a properly equipped shop. However, they contain enough detail and basic information to make them useful to the operator who desires to perform his own basic knowledge mechanics, the proper use of tools, and work shop procedures must be understood in order to carry out maintenance and repair satisfactorily. Whenever the operator has insufficient experience or doubts his ability to repair should be carried out only by qualified mechanics.

In order to perform the work efficiently and to avoid costly mistakes, read the text, thoroughly familiarize himself with the procedures before starting work, and then do the work carefully in a clean area. Whenever special tools or equipment are specified, makeshift tools or equipment should not be used. Precision measurements can only be made if the proper instruments are used, and the use of substitute tools may adversely affect safe operation of the motorcycle.

For the duration of your warranty period, especially, we recommend that all repairs and scheduled maintenance be performed in accordance with this service manual. Any owner maintenance or repair procedure not performed in accordance with this manual may void the warranty.

To get the longest life out of your Motorcycle:

- Follow the Periodic Maintenance Chart in the Service Manual.
- Be alert for problems and non-scheduled maintenance.
- Use proper tools and genuine Kawasaki Motorcycle parts. Special tools, gauges, and testers that are necessary when servicing Kawasaki motorcycles are introduced by the Special Tool Catalog. Genuine parts provided as spare parts are listed in the Parts Catalog.
- Follow the procedures in this manual carefully. Don't take shortcuts.
- Remember to keep complete records of maintenance and repair with dates and any new parts installed.

How to Use this Manual

In preparing this manual, we divided the product into its major systems. These systems became the manual's chapters. All information for a particular system from adjustment through disassembly and inspection is located in a single chapter.

The Quick Reference Guide shows you all of the product's systems and assists in locating their chapters. Each chapter in turn has its own comprehensive Table of Contents.

The Periodic Maintenance Chart is located in the General Information chapter. The chart gives a time schedule for required maintenance operations.

If you want spark plug information, for example, go to the Periodic Maintenance Chart first. The chart tells you how frequently to clean and gap the plug. Next, use the Quick Reference Guide to locate the Electrical System chapter. Then, use the Table of Contents on the first page of the chapter to find the Spark Plug section.

Whenever you see these WARNING and CAUTION symbols, heed their instructions! Always follow safe operating and maintenance practices.

⚠WARNING

This warning symbol identifies special instructions or procedures which, if not correctly followed, could result in personal injury, or loss of life.

⚠CAUTION

This caution symbol identifies special instructions or procedures which, if not strictly observed, could result in damage to or destruction of equipment.

This manual contains four more symbols (in addition to WARNING and CAUTION) which will help you distinguish different types of information.

NOTE

○ *This note symbol indicates points of particular interest for more efficient and convenient operation.*

● Indicates a procedural step or work to be done.
○ Indicates a procedural sub-step or how to do the work of the procedural step it follows. It also precedes the text of a Note.
★ Indicates a conditional step or what action to take based on the results of the test or inspection in the procedural step or sub-step it follows.

In most chapters an exploded view illustration of the system components follows the Table of Contents. In these illustrations you will find the instructions indicating which parts require specified tightening torque, oil, grease or a locking agent during assembly.

1

General Information

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* : Refer to Base Manual

Model Identification

KR250-C2 Left Side View:



KR250-C2 Right Side View:



General Specifications

Items		KR250-C2
Dimensions:		
Overall length		2 015 mm (A) 2 005 mm, (S) 1 945 mm
Overall width		695 mm
Overall height		1 105 mm
Wheelbase		1 365 mm (A) 1 370 mm
Road clearance		120 mm
Seat height		755 mm
Dry weight		131 kg
Curb weight:	Front	77 kg
	Rear	77 kg
Fuel tank capacity		16.0 L
Performance:		
Braking distance		12.5 m from 50 km/h
Minimum turning radius		3.2 m
Engine:		
Type		2-stroke, Crankcase Reed Valve, 2-cylinder
Cooling system		Liquid-cooled
Bore and stroke		56.0 x 50.6 mm
Displacement		249 mL
Compression ratio		7.4
Maximum horsepower		44.1 kW (60 PS) @10 500 r/min (rpm)
Maximum torque		40.2 N-m (4.1 kg-m, 29.7 ft-lb) @10 500 r/min (rpm)
Carburetion system		Carburetor, Keihin PWK28 x 2
Starting system		Primary kick
Ignition system		CDI
Timing advance		Electronically advanced
Ignition timing		From 13.5° BTDC @1 200 r/min (rpm) to 25° BTDC @7 500 r/min (rpm)
Spark plug		NGK BR10ES
Valve timing:		
Inlet	Open	–
	Close	–
	Duration	–
Exhaust	Open	93° BBDC
	Close	93° ABDC
	Duration	186°
Scavenging	Open	63° BBDC
	Close	63° ABDC
	Duration	126°
Lubrication system		Superlube (oil injection)
Engine oil:		
Type		2-stroke oil
Capacity		1.2 L
Drive Train:		
Primary reduction system:		
Type		Gear
Reduction ratio		2.541 (61/24)
Clutch type		Wet multi disc

Item		KR250-C2
Transmission:		
Type		6-speed, constant mesh, return shift
Gear ratios:	1st	2.533 (38/15)
	2nd	1.727 (38/22)
	3rd	1.315 (25/19)
	4th	1.086 (25/23)
	5th	0.962 (26/27)
	6th	0.862 (25/29)
Final drive system:		
Type		Chain drive
Reduction ratio		2.733 (41/15)
Overall drive ratio		5.988 @Top gear
Transmission oil:		
Grade		SE class
Viscosity		SAE 10W30 or 10W40
Capacity		0.85 L
Frame:		
Type		Tubular, diamond
Caster (rake angle)		24°
Trail		90 mm
Front tire:		
Type		Tubeless
Size		110/70 VR17
Rear tire:		
Type		Tubeless
Size		140/60 VR18
Front suspension:		
Type		Telescopic fork
Wheel travel		120 mm
Rear suspension:		
Type		Swing arm (uni-trak)
Wheel travel		105 mm
Brake type:		
Front		Dual disc
Rear		Single disc
Electrical Equipment:		
Battery		12 V 4 Ah
Headlight:		
Type		Semi-sealed beam
Bulb		12 V 60/55 W (quartz-halogen)
Tail/brake light		12 V 5/21 W, (S) 12 V 8/27 W
Magneto:		
Type		Three-phase AC
Rated output		14 A @8 000 r/min (rpm), 14 V
Voltage regulator:		
Type		Short-circuit

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

(A) : Australian Model
(S) : South African Model

Periodic Maintenance Chart

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.**

OPERATION \ FREQUENCY	Whichever comes first ➡ / Every ⬇	*ODOMETER READING 800 km	4 000 km	8 000 km	12 000 km	16 000 km	20 000 km	24 000 km
Idle speed – check †		•	•	•	•	•	•	•
Throttle grip play – check †		•		•		•		•
Oil pump and carburetor synchronization –check †		•	•	•	•	•	•	•
Spark plug – clean and gap †		•	•	•	•	•	•	•
Air cleaner element – clean			•		•		•	
Air cleaner element–replace	5 cleanings					•		
Fuel system–clean				•		•		•
Cylinder head bolts – check †		•		•		•		•
Battery electrolyte level – check †	month	•	•	•	•	•	•	•
Brake fluid level – check †	month	•	•	•	•	•	•	•
Brake fluid – change	2 years						•	
Brake light switch – check †		•	•	•	•	•	•	•
Brake pad wear – check †			•	•	•	•	•	•
Clutch – adjust		•	•	•	•	•	•	•
Steering play – check †		•	•	•	•	•	•	•
Drive chain wear – check †			•	•	•	•	•	•
Nuts, bolts, fasteners – check †		•		•		•		•
Tire wear – check †			•	•	•	•	•	•
Transmission oil – change	year	•		•		•		•
General lubrication – perform			•	•	•	•	•	•
Front fork oil – change								•
Swing arm pivot – lubricate				•		•		•
Coolant – change	2 years							•
Radiator hoses, connections – check †	year	•		•		•		•
Steering stem bearing – lubricate	2 years						•	
Caliper piston seal and dust seal – replace	2 years							
Master cylinder cup and dust seal – replace	2 years							
Brake hose – replace	4 years							
Fuel hose – replace	4 years							
Drive chain – lubricate	Every 300 km							
Drive chain slack – check †	Every 800 km							

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

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

Torque and Locking Agent

Tighten all bolts and nuts to the proper torque using an accurate torque wrench. In insufficiently tightened a bolt or nut may become damaged or fall off, possibly resulting in damage to the motorcycle and injury to the rider. A bolt or nut which is overtightening may become damaged, strip an internal thread, or break and then fall out. The following table lists the tightening torque for the major bolts and nuts, and the parts requiring use of a non-permanent locking agent, liquid gasket, or silicone sealant. When checking the tightening torque of the bolts and nuts, first loosen the bolt or nut by half a turn and then tighten it to specified torque.

Letters used in the "Remarks" column mean:
L : Apply a non-permanent locking agent to the threads.
LG : Apply liquid gasket – silver (Kawasaki bond: 92104-002) to the threads.
S : Tighten the fasteners following the specified sequence.
SS : Apply a silicone sealant (Kawasaki bond: 56019-120) to the threads.

Fastener	Torque			Remarks
	N-m	kg-m	ft-lb	
Cooling System:				
Coolant Temperature Sensor	15	1.5	11.0	SS
Drain Plug	17	1.7	12.0	
Impeller Shaft Nut	9.8	1.0	87 in-lb	
Engine Top End:				
Cylinder Head Bolts	25	2.5	18.0	S
Cylinder Head Nuts	22	2.2	16.0	S
Exhaust Valve Operating Unit Screw	2.9	0.3	26 in-lb	
Exhaust Valve Operating Unit Connecting-rod Screws	–	–	–	L
Cylinder Studs	9.8	1.0	87 in-lb	
Engine Right Side:				
Clutch Spring Bolts	9.8	1.0	87 in-lb	
Kick Stopper Mounting Screws	–	–	–	L
Engine Lubrication System:				
Transmission Oil Drain Plug	20	2.0	14.5	
Oil Pump Outlet Hose Banjo Bolts	4.9	0.5	43 in-lb	
Engine Removal/Installation:				
Engine Mounting Bolts	49	5.0	36	
Crankshaft/Transmission:				
Crankcase Bolts (8 mm Dia.)	25	2.5	18.0	
Crankcase Bolts (6 mm Dia.)	9.8	1.0	87 in-lb	
Shift Drum Pin Plate Bolt	22	2.2	16.0	L
Shift Drum Positioning Lever Mounting Bolt	9.8	1.0	87 in-lb	
Gear Positioning Lever Stud	22	2.2	16.0	L
Balancer Cover Mounting Bolts (8 mm Dia.)	25	2.5	18.0	
Balancer Cover Mounting Bolts (6 mm Dia.)	9.8	1.0	87 in-lb	
Wheels/Tires:				
Front Axle Nut	88	11.0	65	
Front Axle Clamp Bolts	20	2.0	14.5	

Fastener	Torque			Remarks
	N-m	kg-m	ft-lb	
Rear Axle Nut	88	9.0	65	
Final Drive:				
Engine Sprocket Holding Plate Bolts	9.8	1.0	87 in-lb	
Rear Sprocket Nuts	59	6.0	43	
Rear Coupling Studs	–	–	–	L
Brakes:				
Front Caliper Mounting Bolts	34	3.5	25	
Front Caliper Bolts	20	2.0	14.5	
Front Caliper Spring Mounting Screws	2.9	0.3	26.0 in-lb	
Rear Caliper Mounting Bolts	25	2.5	18.0	
Brake Hose Banjo Bolts	25	2.5	18.0	
Disc Mounting Allen Bolts	23	2.3	16.5	
Brake Lever Pivot Nut	5.9	0.6	52 in-lb	
Front Master Cylinder Clamp Bolts	8.8	0.9	78 in-lb	
Torque Link Nut (Front)	34	3.5	25	
Torque Link Nut (Rear)	14	1.4	10.0	
Rear Master Cylinder Mounting Bolts	25	2.5	18.0	
Bleed Valves	7.8	0.8	69 in-lb	
Brake Pedal Mounting Bolt	25	2.5	18.0	
Suspension:				
Front Fork:				
Fork Top Bolts	22	2.25	16.3	
Fork Clamp Bolts (Upper)	20	2.0	14.5	
Fork Clamp Bolts (Lower)	20	2.0	14.5	
Bottom Allen Bolts	61	6.2	45	L
Drain Screws	–	–	–	LG
Axle Clamp Bolts	20	2.0	14.5	
Rear Shock Absorber:				
Shock Absorber Bolts	49	5.0	36	
Rocker Arm Bolt	49	5.0	36	
Swing Arm Pivot Nut	93	9.5	69	
Rocker Arm Nut	49	5.0	36	
Steering:				
Steering Stem Head Nut	39	4.0	29	
Handlebar Holder Clamp Bolts	20	2.0	14.5	
Handlebar Holder Allen Bolts	9.8	1.0	87 in-lb	L
Handlebar Clamp Bolts	23	2.3	16.5	
Frame:				
Side Stand Bracket Mounting Bolts	25	2.5	18.0	L
Electrical System:				
Spark Plug	27	2.8	20	
Magneto Rotor Bolt	98	10.0	72	
Coolant Temperature Sensor	15	1.5	11.0	SS
Neutral Switch	15	1.5	11.0	
Side Stand Switch Mounting Screws	–	–	–	L

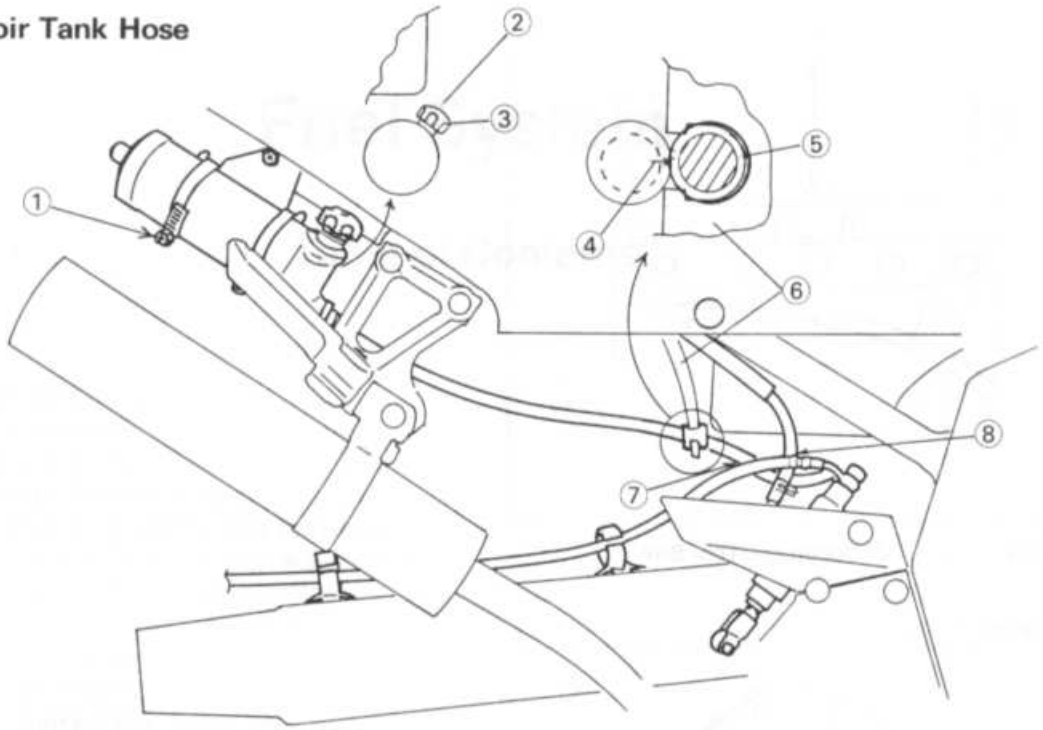
The table below, relating tightening torque to thread diameter, lists the basic torque for the bolts and nuts. Use this table for only the bolts and nuts which do not require a specific torque value. All of the values are for use with dry solvent-cleaned threads.

General Fasteners

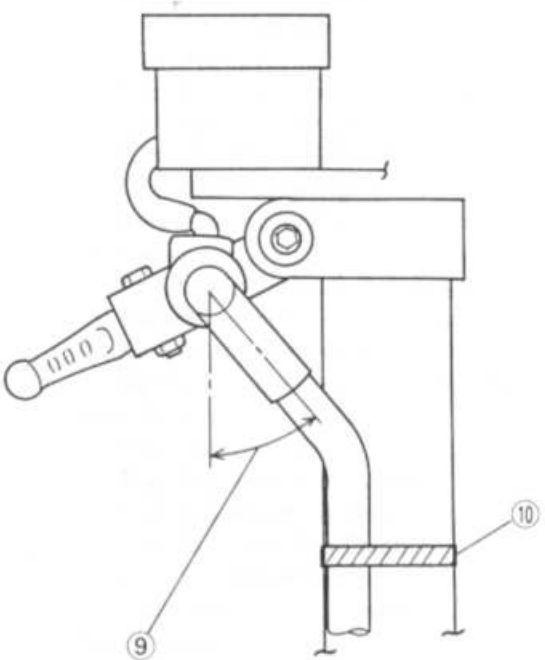
Threads dia. (mm)	Torque		
	N-m	kg-m	ft-lb
5	3.4 ~ 4.9	0.35 ~ 0.50	30 ~ 43 in-lb
6	5.9 ~ 7.8	0.60 ~ 0.80	52 ~ 69 in-lb
8	14 ~ 19	1.4 ~ 1.9	10.0 ~ 13.5
10	25 ~ 34	2.6 ~ 3.5	19.0 ~ 25
12	44 ~ 61	4.5 ~ 6.2	33 ~ 45
14	73 ~ 98	7.4 ~ 10.0	54 ~ 72
16	115 ~ 155	11.5 ~ 16.0	83 ~ 115
18	165 ~ 225	17.0 ~ 23.0	125 ~ 165
20	225 ~ 325	23 ~ 33	165 ~ 240

Cable, Wire, and Hose Routing

Gas Reservoir Tank Hose

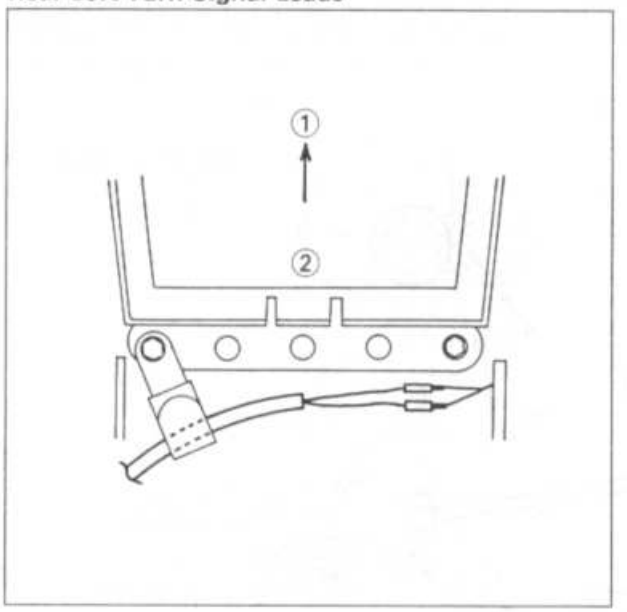


Front Brake Hose



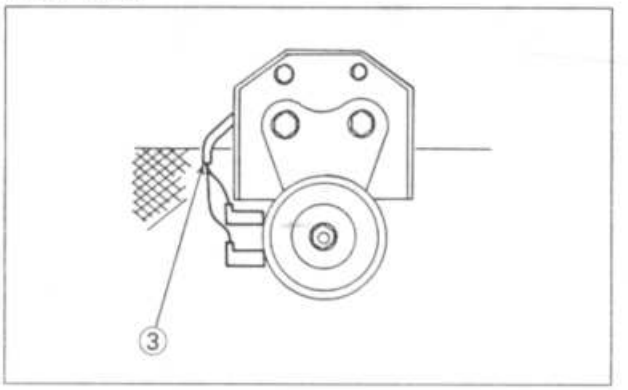
1. Come the clamp screw to lower side.
2. Come the adjusting know to the under side of the seat cover.
3. Adjusting Knob
4. Push in to the oil hose into the fender clamp.
5. Rubber Damper
6. Push in to the oil hose into the fender clamp.
7. Gas Reservoir Tank Hose
8. Brake Reservoir Tank Hose
9. 30° ~ 40°
10. Clamp the brake hose with the wiring harness.

Rear Left Turn Signal Leads



1. Foward 2. Document/Tool Box

Horn Leads



3. Route the horn leads to the radiator mounting bracket right side.

2

Fuel System

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- Fuel Tap Installation Note ..... *
- Fuel Tap Assembly Note ..... *
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- Fuel Tank and Cap Inspection ..... *

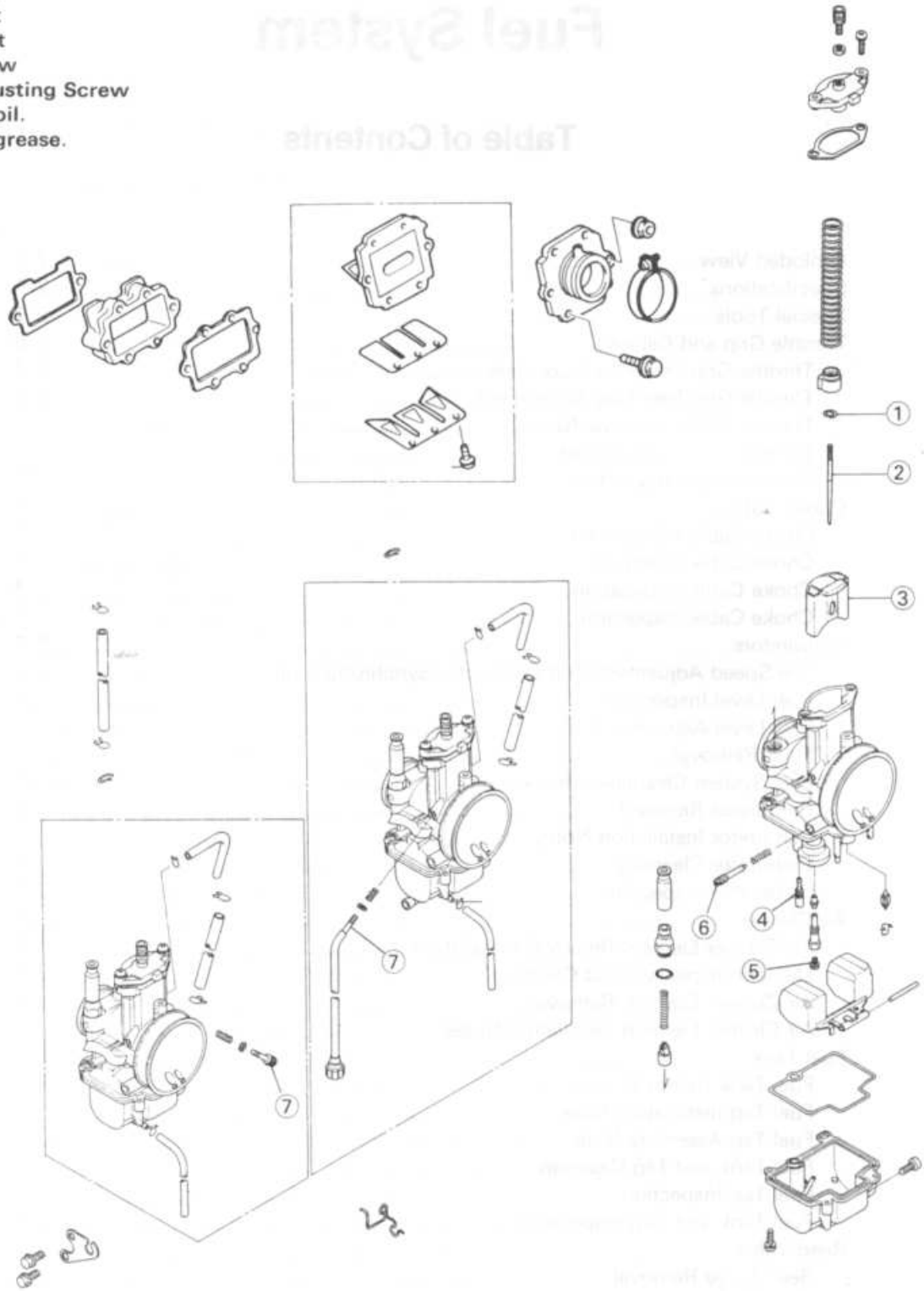
Reed Valve ..... *
- Reed Valve Removal ..... *
- Reed Valve Inspection ..... *

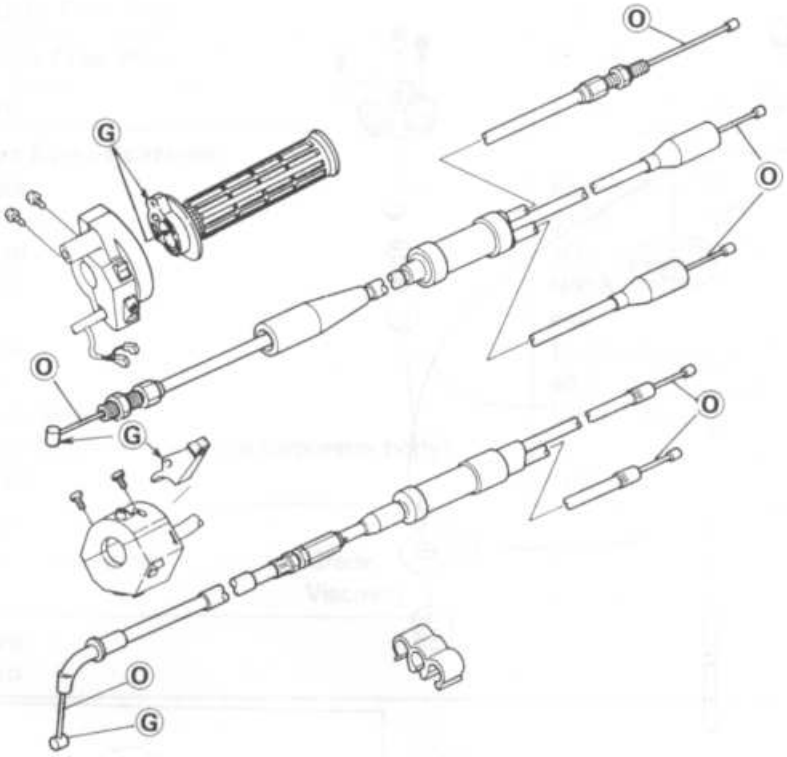
* : Refer to Base Manual

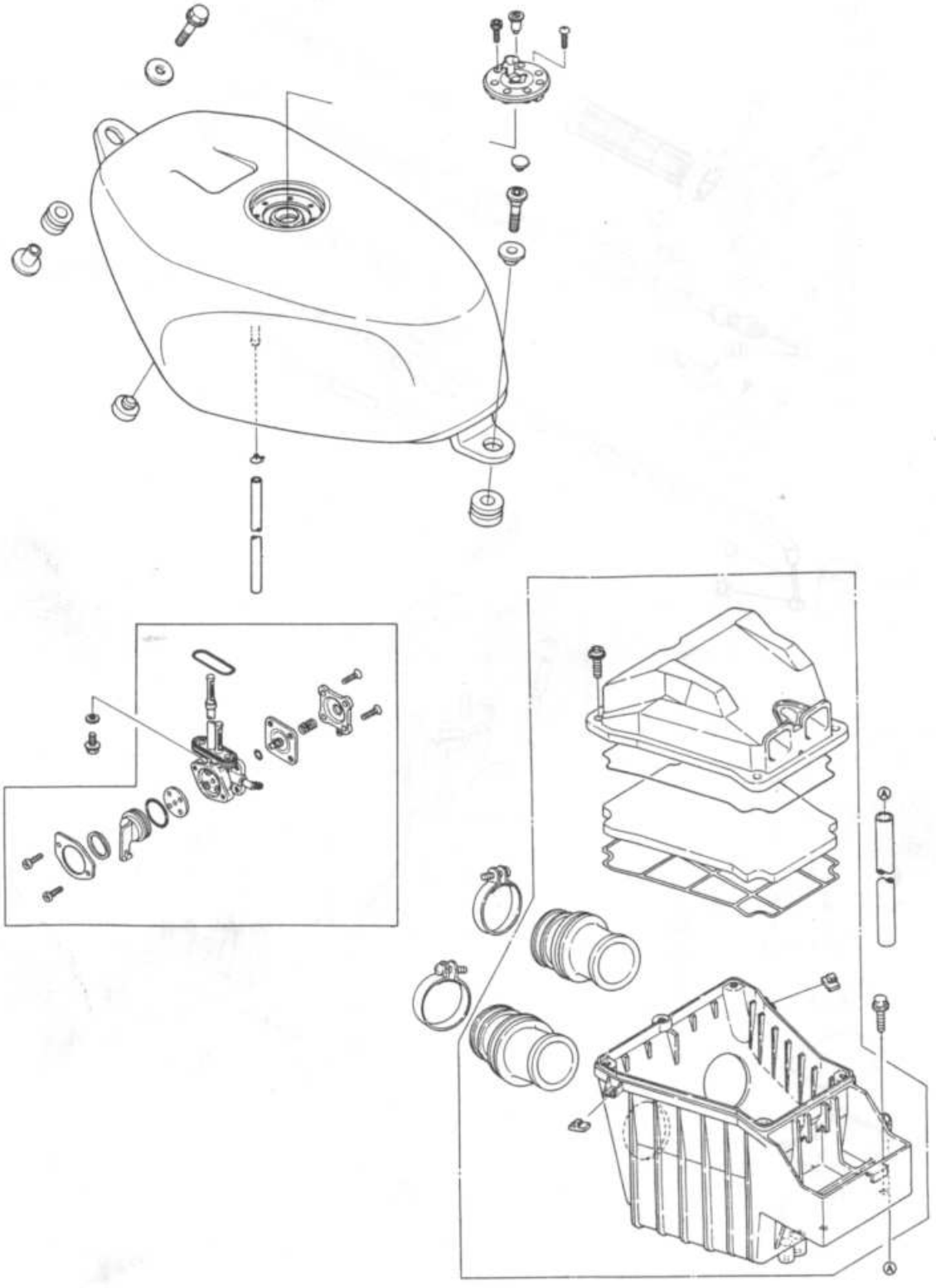
Exploded View

1. Jet Needle Clip
2. Jet Needle
3. Throttle Valve
4. Pilot Jet
5. Main Jet
6. Air Screw
7. Idle Adjusting Screw

O : Apply oil.
G : Apply grease.




O
G
O
O
G
O
O
G



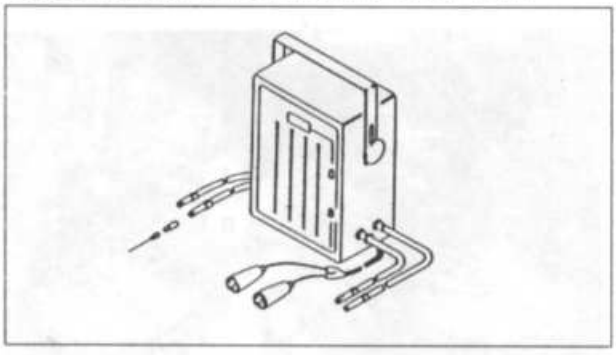
Specifications

Item		Standard	Service Limit
Throttle Grip Free Play		2 ~ 3mm	– – –
Choke Cable Free Play		2 ~ 3mm	– – –
Idle Speed		1 100 ~ 1 300 r/min (rpm)	– – –
Carburetor Specifications:			
Make/type		Keihin/PWK28	– – –
Main jet		#135	– – –
Main air jet		#60	– – –
Jet needle		N68X	– – –
Pilot jet		#40	– – –
Pilot screw		1¼ (turns out)	– – –
Starter jet		#62	– – –
Service fuel level (above the bottom edge of the carburetor body)		1.0 ± 1 mm	– – –
Float height		19.0 mm	– – –
Air Cleaner:			
Air cleaner element oil:	Grade	SE class	– – –
	Viscosity	SAE 30	– – –
Reed Valve:			
Reed warp		– – –	0.5 mm

Special Tools

Refer to the base manual, except for the following additional tool.

Vacuum Gauge & Tachometer: 57001-1291



Throttle Grip and Cables

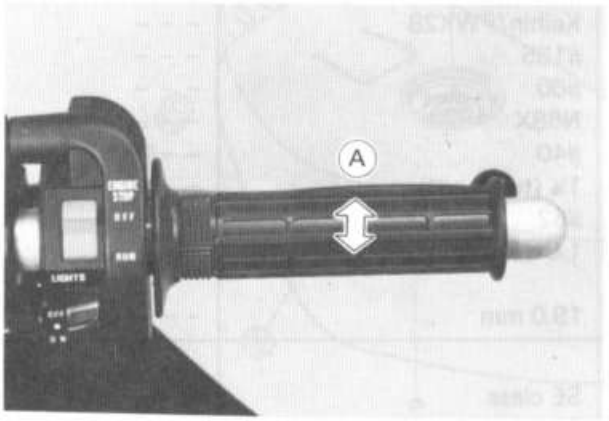
Throttle Grip Play Inspection

●Check the throttle grip free play.

★If free play is not correct, adjust the throttle cable.

Throttle Grip Free Play

2 ~ 3 mm



A. Grip Free Play

★If the free play is incorrect, make the following test.

●Start the engine.

●Turn the handlebar from side to side while idling the engine.

★If idle speed varies, the throttle control cable may be poorly routed or it may be damaged.

●Correct any problem before operating the motorcycle.

⚠WARNING

Operation with an improperly adjusted, incorrectly routed, or damaged cable could result in an unsafe riding condition.

Throttle Grip Play Adjustment

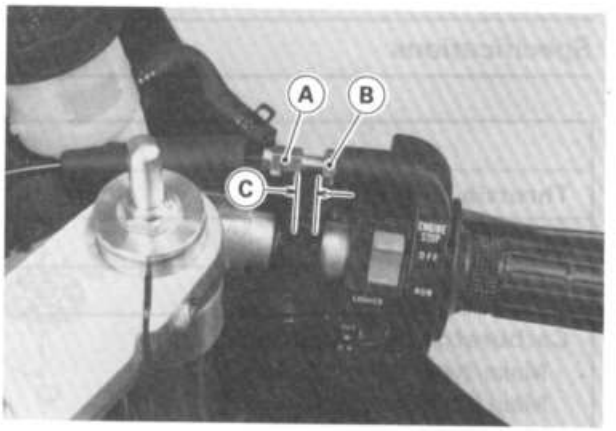
NOTE

○*If throttle grip play is adjusted, check the oil pump and carburetor synchronization.*

●Remove the following.
Seat
Side Cover
Fuel Tank
Air Cleaner Housing Cover
Air Cleaner Element
Air Cleaner Element Frame

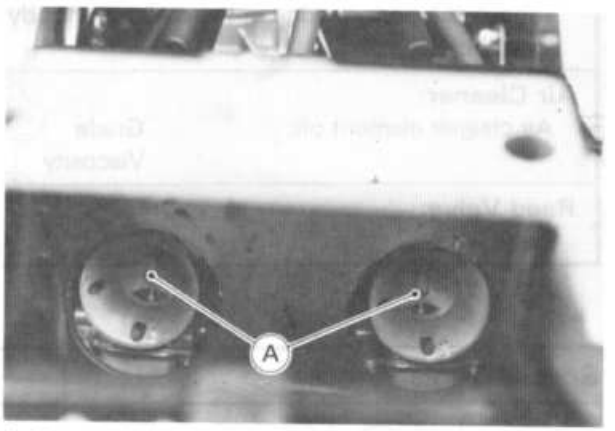
●Loosen the locknut at the throttle grip.

●Turn in the adjuster so that 5 ~ 6 mm of threads are visible. And tighten the locknut.



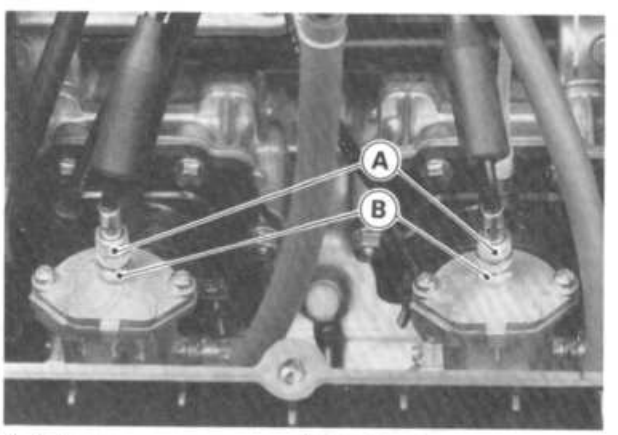
A. Adjuster
B. Locknut
C. 5 ~ 6 mm

●Adjust the throttle cables so that both throttle valves operate together and at the same level.



A. Throttle Valve

○Back out the idle adjust screws and loosen the locknuts and adjusters on the top of the carburetors.



A. Adjuster
B. Locknut

○Check that both throttle valves are resting at the bottom of the throttle bores.

○Put your finger on throttle valve and watch the other one.

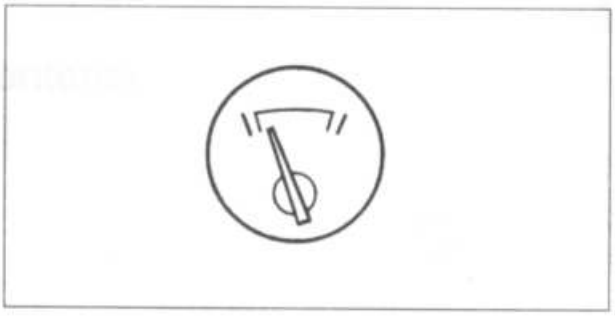
○Turn the throttle grip to open and close the throttle valves.

○Adjust the throttle cables so both throttle valves move at the same time.
○Open the throttle and raise the throttle valves in the carburetor bore until they are just about to disappear at the top of the bore. Check that they are both at the same level.
○Tighten the locknuts.
●Check that there is 2 ~ 3 mm throttle grip play.
★If there is improper play, adjust it.
●Start the engine.
●Adjust the idle speed.
●Turn the handlebar from side to side while idling the engine.
★If idle speed varies, the cable may be poorly routed or it may be damaged.
●Correct any problem before operating the motorcycle.

Carburetors

Idle Speed Adjustment and Carburetor Synchronization

●Thoroughly warm up the engine until the needle of the coolant temperature gauge indicates as shown.



⚠CAUTION

Do not run the engine over 6 000 r/min (rpm).

●With the engine idling, turn the handlebar to both sides. If handlebar movement changes the idle speed, the throttle cable may be improperly adjusted or incorrectly routed, or it may be damaged. Be sure to correct any of these conditions before riding.

⚠WARNING

Operation with an improperly adjusted, incorrectly routed, or damaged cable could result in an unsafe riding condition.

●Check idle speed.
★If the idle speed is not correct, continue with the following procedure.

Idle Speed

Standard: **1 100 ~ 1 300 r/min (rpm)**

●Move the fuel tank.
●Attach the vacuum gauge & tachometer (special tool: 57001-1291) to the fittings on the carburetor holders.
○According to the instruction of it.
●Turn the RH carburetor idle adjusting screw until idle speed is correct.

NOTE

○*Be sure to adjust the idle speed with the idle adjusting screw on the RH carburetor first. If you start off with the adjusting screw on the LH carburetor, synchronization of carburetors with be disturbed, resulting in difficult idle speed adjustment.*

●Turn the throttle grip back and forth to vary the engine revolution. Check that the idle speed comes back to 1

200 r/min (rpn) smoothly when releasing the throttle grip.

★If the idle speed is not stable or there is any problem, synchronize the carburetors by turning the RH and LH adjusting screws with the idle speed keeping 1 200 r/min (rpm).

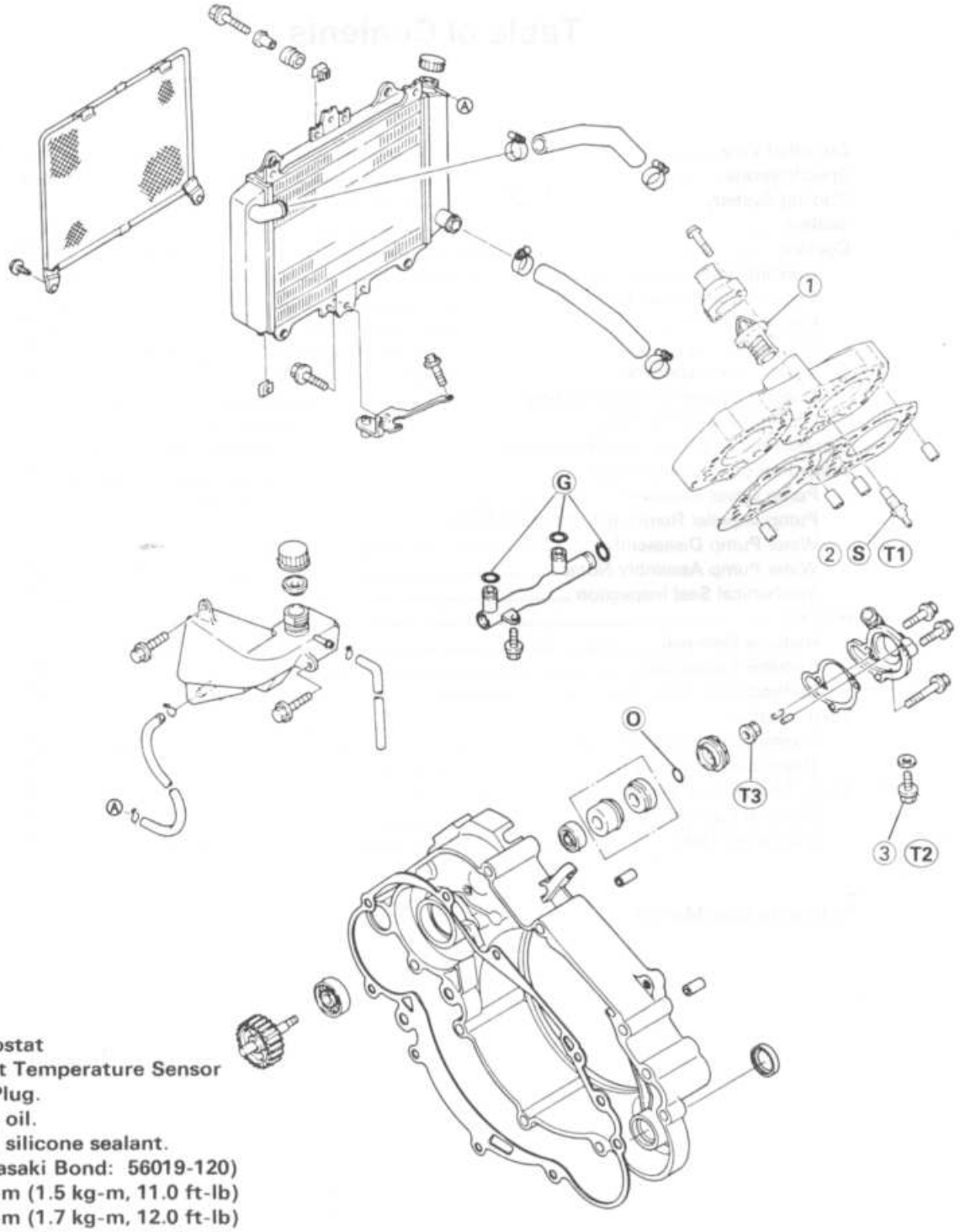
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* : Refer to Base Manual

Exploded View



1. Thermostat
2. Coolant Temperature Sensor
3. Drian Plug.

O : Apply oil.
S : Apply silicone sealant.
(Kawasaki Bond: 56019-120)
T1 : 15 N-m (1.5 kg-m, 11.0 ft-lb)
T2 : 17 N-m (1.7 kg-m, 12.0 ft-lb)
T3 : 9.8 N-m (1.0 kg-m, 87 in-lb)

Specifications

Items	Standard
Coolant Provided when shipping:	
Type	Permanent type of antifreeze for aluminum engine and radiator
Color	Green
Mixed ratio	Soft water 50%, coolant 50%
Freezing point	−35°C (−31°F)
Total amount	1.5 L (Up to reservoir tank full level)
Radiator Cap:	
Relief pressure	74 ~ 103 kPa (0.75 ~ 1.05 kg/cm², 11 ~ 15 psi)
Thermostat:	
Valve opening temperature	63.5 ~ 66.5°C (147 ~ 153°F)
Valve full opening lift	Not less than 6mm @80°C (176°F)

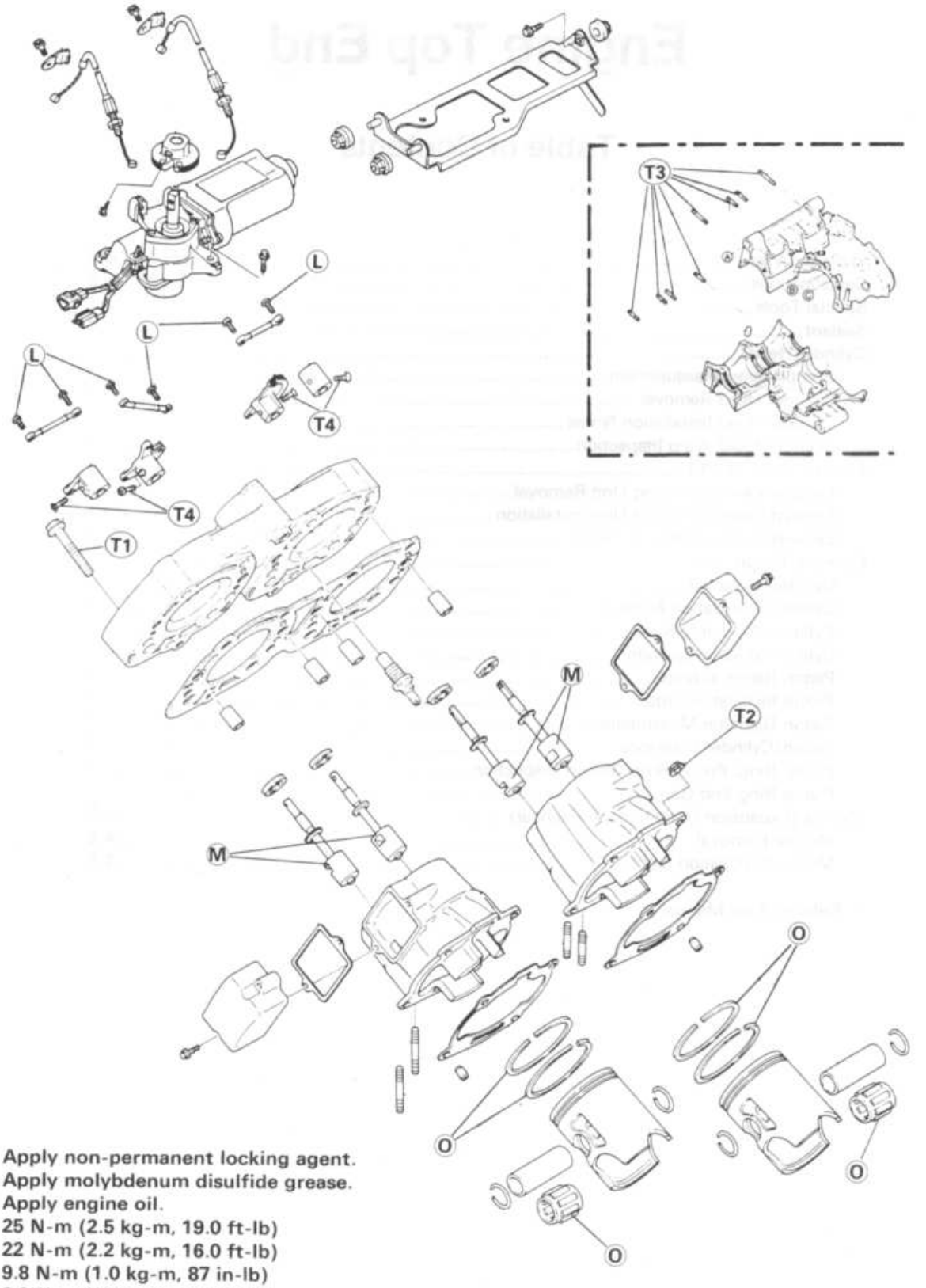
Engine Top End

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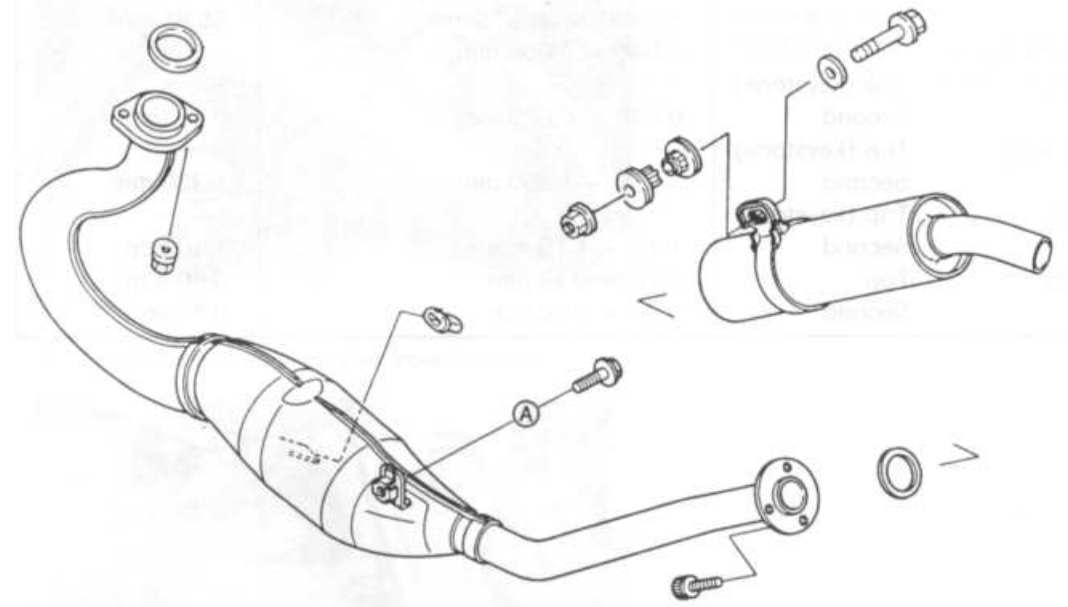
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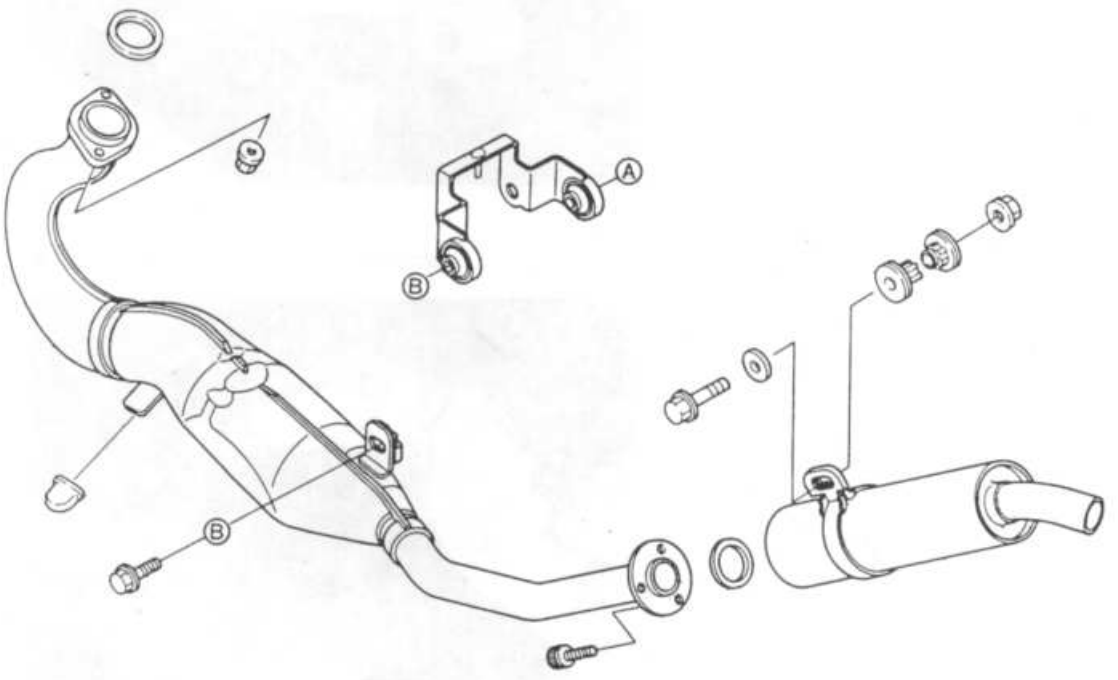
* : Refer to Base Manual

Exploded View



L : Apply non-permanent locking agent.
M : Apply molybdenum disulfide grease.
O : Apply engine oil.
T1: 25 N-m (2.5 kg-m, 19.0 ft-lb)
T2: 22 N-m (2.2 kg-m, 16.0 ft-lb)
T3: 9.8 N-m (1.0 kg-m, 87 in-lb)
T4: 2.9 N-m (0.3 kg-m, 26 in-lb)


A


A
B
B

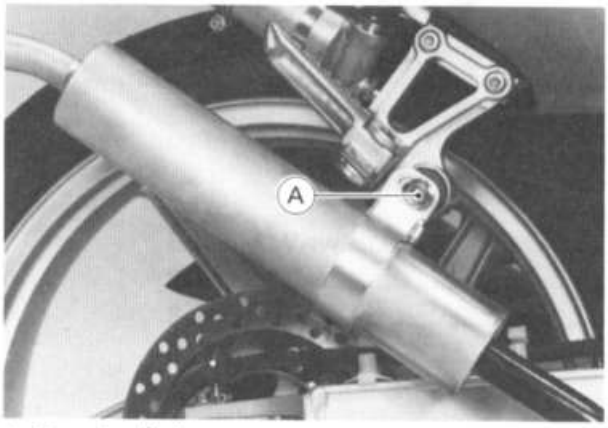
Specifications

Item		Standard	Service Limit
Cylinder compression		(usable range) 735 ~ 1 130 kPa (7.5 ~ 11.5 kg/cm², 107 ~ 164 psi)	– – –
Cylinder head warp		---	0.05mm
Cylinder Block, Piston:			
Cylinder inside diameter		56.015 ~ 56.030 mm	56.09 mm
Piston diameter		55.960 ~ 55.975 mm	55.81 mm
Piston/cylinder clearance		0.046 ~ 0.056 mm	– – –
Piston ring/groove clearance:	Top (keystone)	– – –	– – –
	Second	0.040 ~ 0.080 mm	0.18 mm
Piston ring groove width:	Top (keystone)	– – –	– – –
	Second	1.230 ~ 1.250 mm	1.330 mm
Piston ring thickness:	Top (keystone)	– – –	– – –
	Second	1.17 ~ 1.19 mm	1.10 mm
Piston ring end gap	Top	0.15 ~ 0.30 mm	0.60 mm
	Second	0.25 ~ 0.40 mm	0.7 mm

Muffler (Expansion Chamber and Silencer)

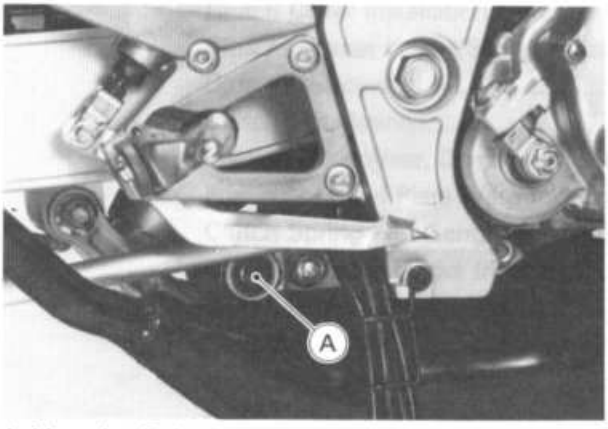
Muffler Removal

- Remove the lower fairing.
- Loosen the silencer mounting bolt.



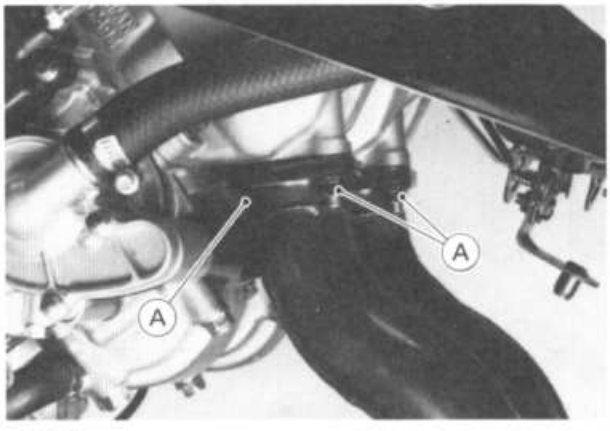
A. Mounting Bolt

- Loosen the expansion chamber mounting bolt.



A. Mounting Bolt

- Remove the exhaust pipe holder nuts.



A. Nuts

- Unscrew the expansion chamber mounting bolt and silencer mounting bolt, and remove the muffler.
- Remove the exhaust gasket.

Muffler Installation Notes

- Check the gasket at each muffler and replace it if it is damaged.
- After tightening the mounting bolt and nuts securely, thoroughly warm up the engine, wait until the engine cools down and tighten all mounting bolts and nuts.

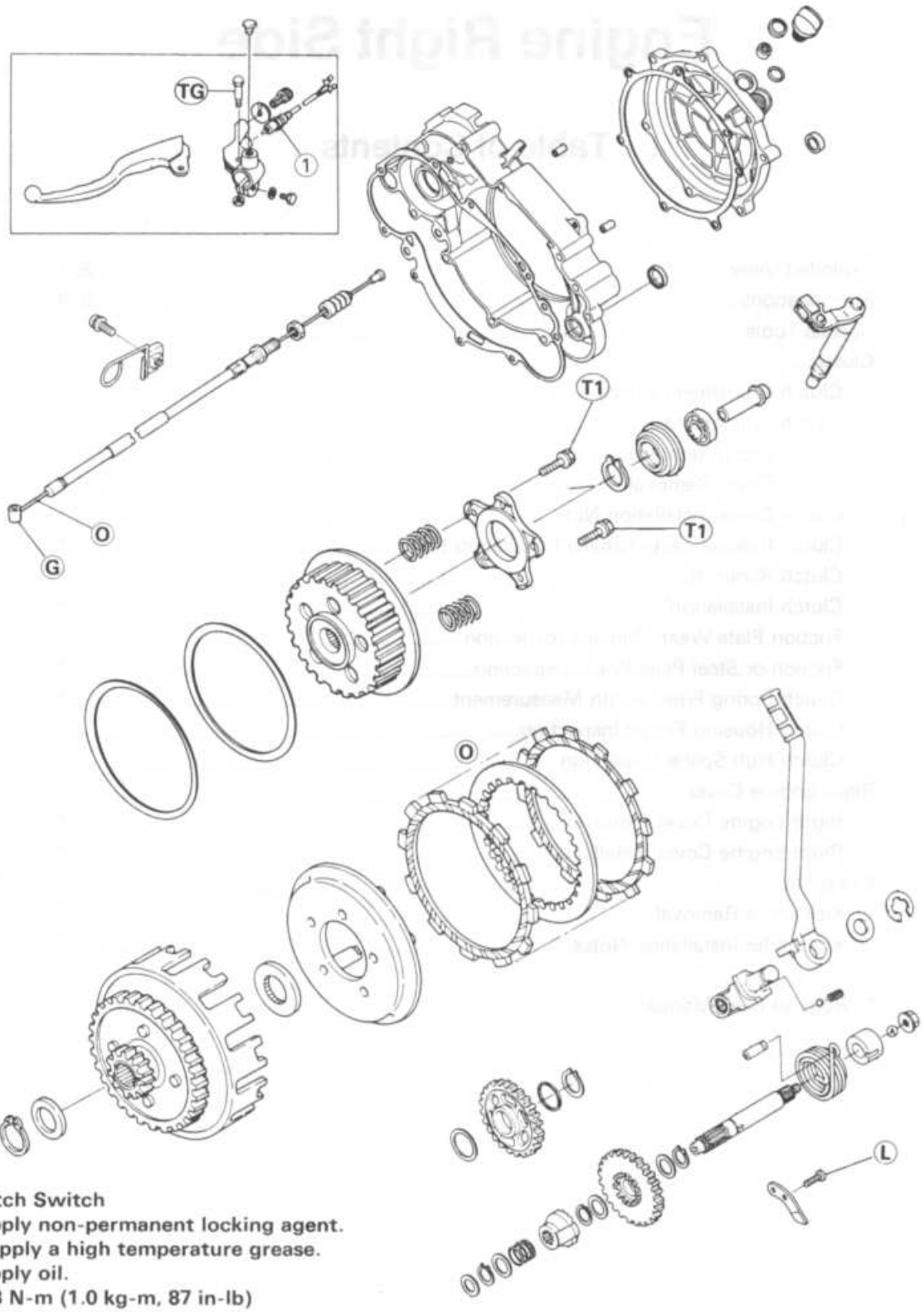
Engine Right Side

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* : Refer to Base Manual

Exploded View



1. Clutch Switch
L : Apply non-permanent locking agent.
TG : Apply a high temperature grease.
O : Apply oil.
T1: 9.8 N-m (1.0 kg-m, 87 in-lb)

Specifications

Item	Standard	Service Limit
Clutch:		
Clutch lever free play	2 ~ 3 mm	- - -
Clutch spring free length	35.34 mm	34.2 mm
Friction plate thickness	2.9 ~ 3.1 mm	2.7 mm
Friction and steel plate warp	Not more than 0.2 mm	0.3 mm

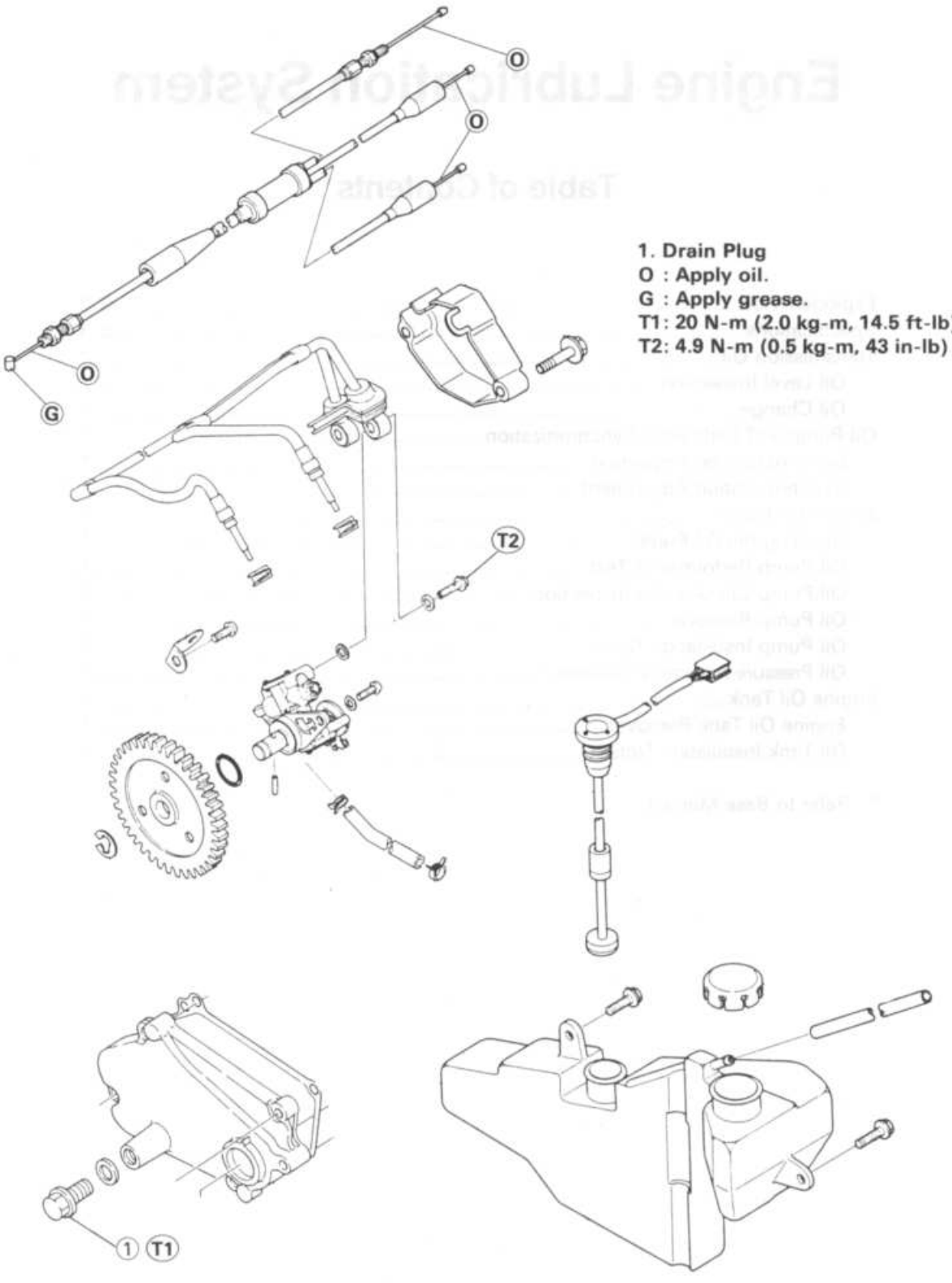
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  Oil Tank Installation Notes ..... *

* : Refer to Base Manual

Exploded View



1. Drain Plug
O : Apply oil.
G : Apply grease.
T1: 20 N-m (2.0 kg-m, 14.5 ft-lb)
T2: 4.9 N-m (0.5 kg-m, 43 in-lb)

Specifications

Item		Standard	Service Limit
Engine Lubrication System:			
Transmission oil:	Grade	SE class	
	Viscosity	SAE 10W30 or 10W40	
	Amount	0.85 L	
Engine oil pump:	Oil pump output @2 000 r/min (rpm), 3 min.	3.6 ~ 4.2 mL (per one outlet)	- - -

Engine Removal / Installation

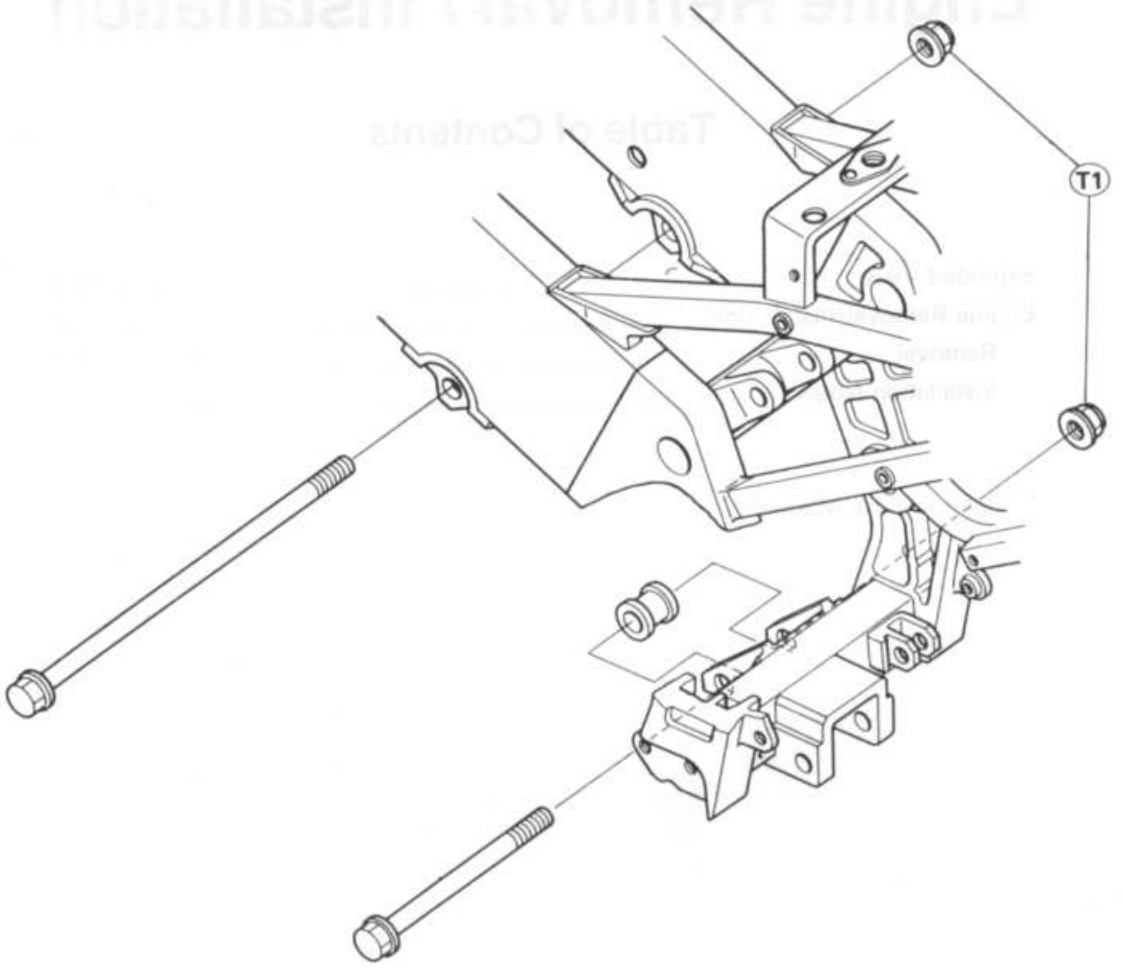
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Removal ..... *
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7

* : Refer to Base Manual

Exploded View



T1 : 49 N-m (5.0 kg-m, 36 ft-lb)

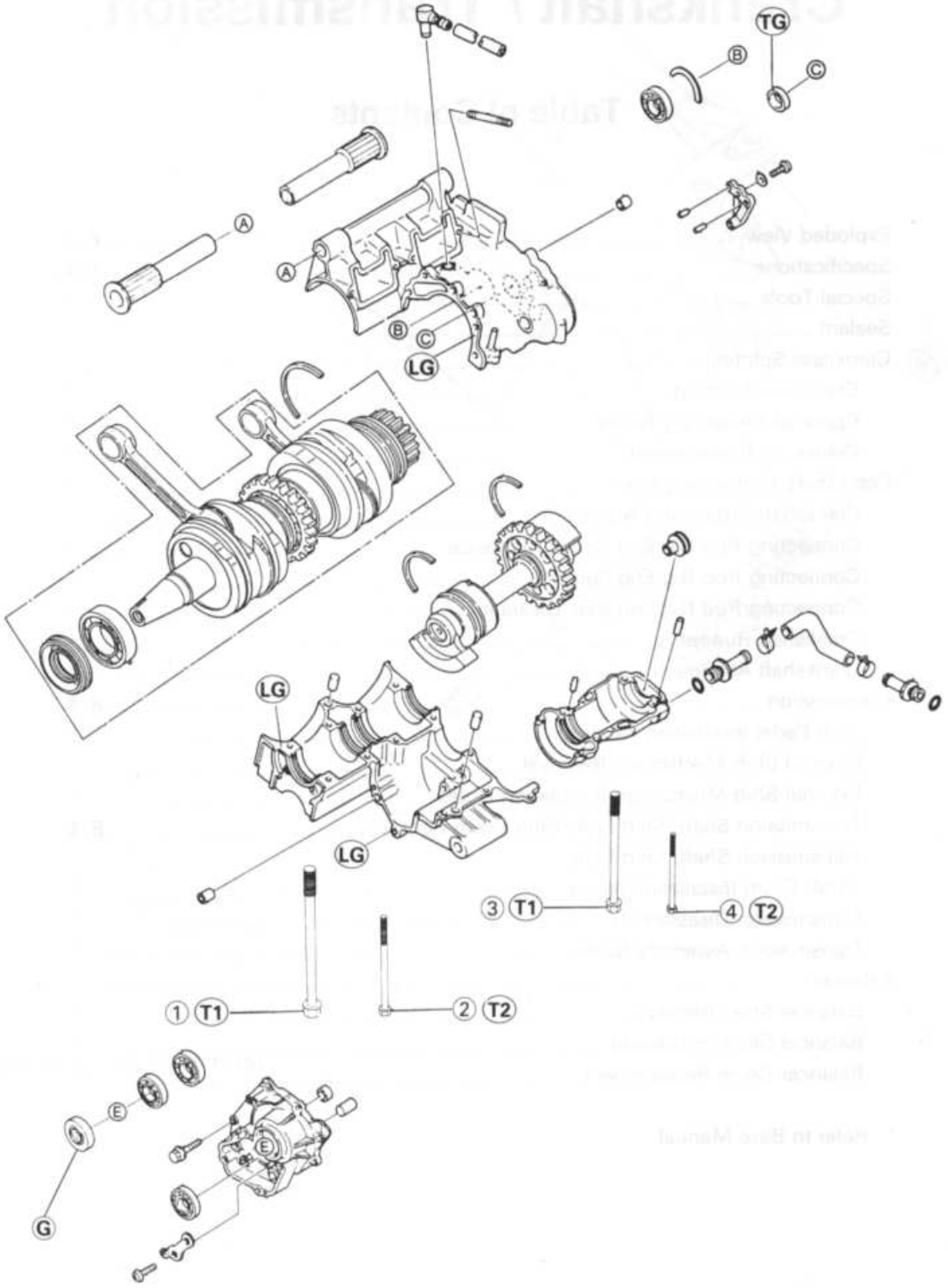
Crankshaft / Transmission

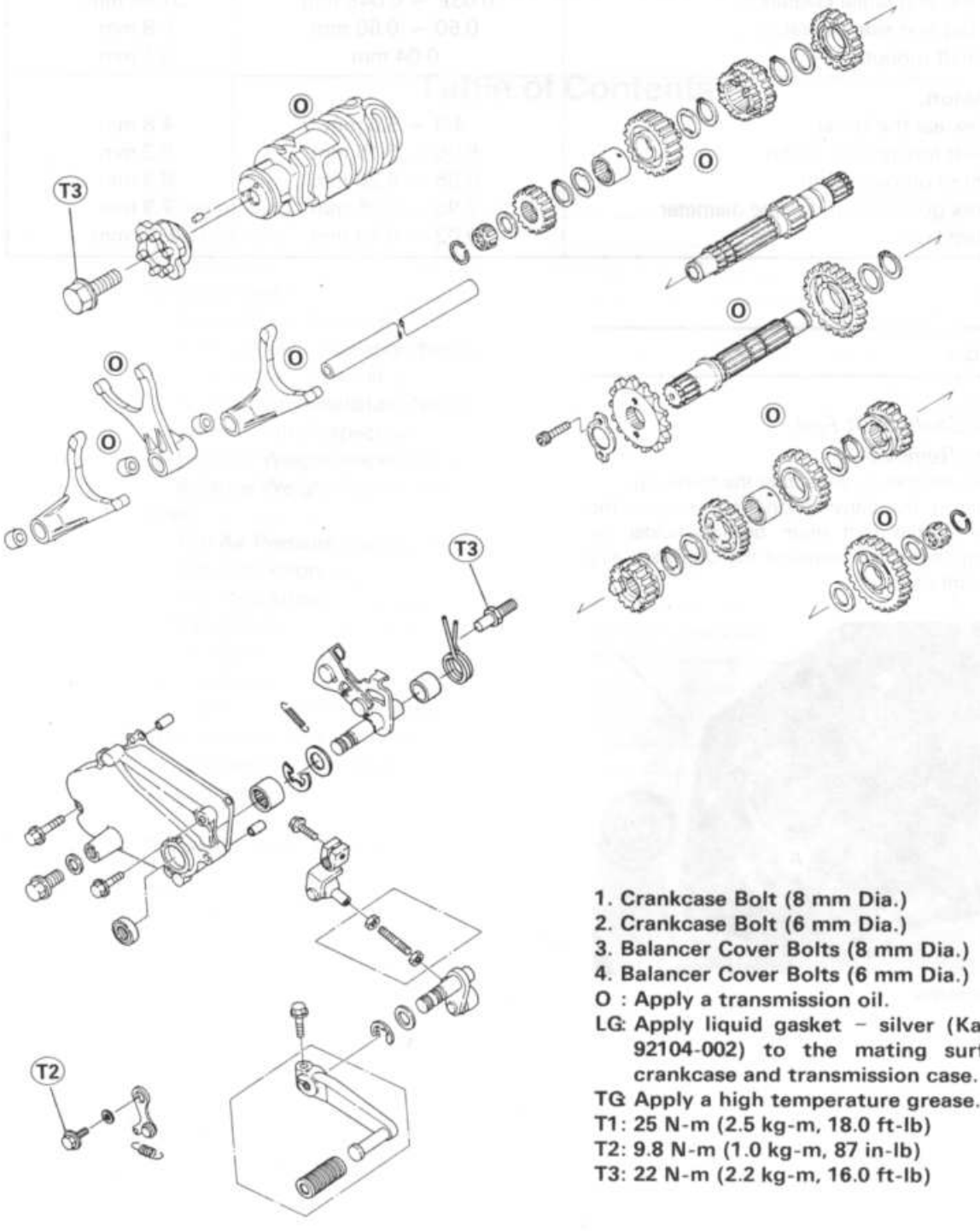
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* : Refer to Base Manual

Exploded View





1. Crankcase Bolt (8 mm Dia.)
2. Crankcase Bolt (6 mm Dia.)
3. Balancer Cover Bolts (8 mm Dia.)
4. Balancer Cover Bolts (6 mm Dia.)

O : Apply a transmission oil.
LG: Apply liquid gasket – silver (Kawasai bond: 92104-002) to the mating surface of the crankcase and transmission case.
TG: Apply a high temperature grease.
T1: 25 N-m (2.5 kg-m, 18.0 ft-lb)
T2: 9.8 N-m (1.0 kg-m, 87 in-lb)
T3: 22 N-m (2.2 kg-m, 16.0 ft-lb)

Specifications

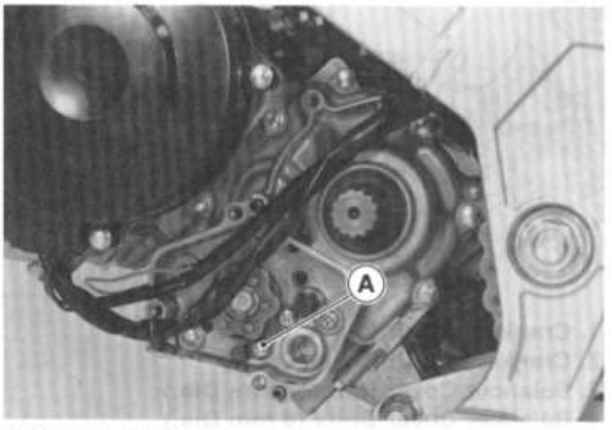
Item	Standard	Service Limit
Crankshaft, Connecting Rod:		
Connecting rod:		
Big end radial clearance	0.032 ~ 0.045 mm	0.095 mm
Big end side clearance	0.50 ~ 0.60 mm	0.8 mm
Crankshaft runout:	0.04 mm	0.1 mm
Transmission:		
Shift fork ear thickness	4.9 ~ 5.0 mm	4.8 mm
Gear shift fork groove width	5.05 ~ 5.15 mm	5.2 mm
Shift drum groove width	8.05 ~ 8.20 mm	8.3 mm
Shift fork guide collar outside diameter	7.95 ~ 8.05 mm	7.9 mm
Gear backlash	0.02 ~ 0.19 mm	0.25 mm

Transmission

Transmission Shaft, Shift Fork, Shift Drum Removal

Refer to the base manual, except for the following.

- Before removing the transmission case, remove the lower screw of the shift drum bearing holder for disconnecting connection between the crankcase and the transmission case.



A. Remove this screw.

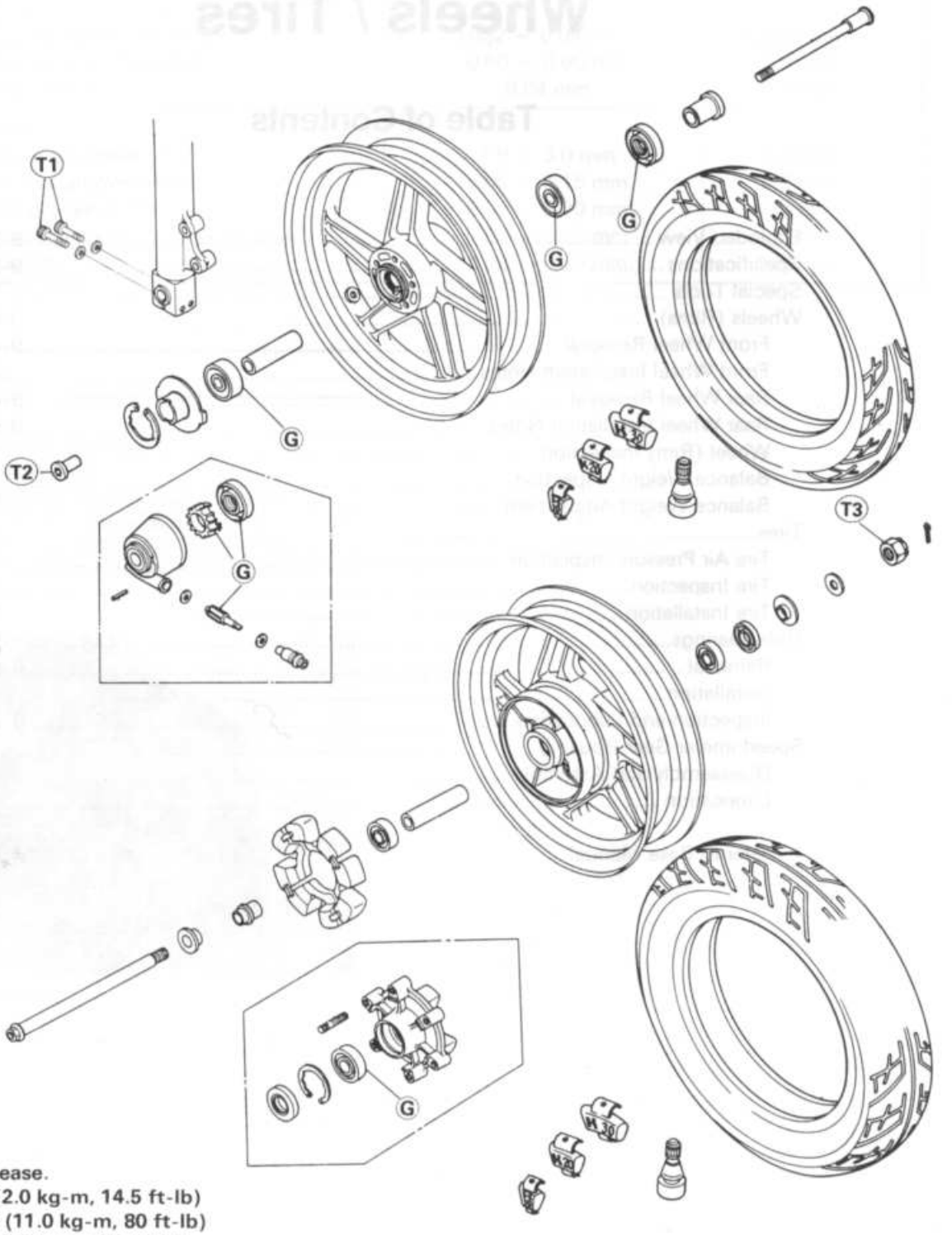
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* : Refer to Base Manual

Exploded View



G : Apply grease.
T1 : 20 N-m (2.0 kg-m, 14.5 ft-lb)
T2 : 110 N-m (11.0 kg-m, 80 ft-lb)
T3 : 88 N-m (9.0 kg-m, 65 ft-lb)

Specifications

Item		Standard	Service Limit
Wheels:			
Rim runout (with tire installed):			
Axial		– – –	0.5 mm
Radial		– – –	0.8 mm
Axle runout/100 mm		Under 0.05 mm	0.2 mm
Tires:			
Air pressure (when cold):			
Front		225 kPa (2.25 kg/cm², 32 psi)	– – –
Rear		250 kPa (2.5 kg/cm², 36 psi)	– – –
Tread Depth:			
Front		3.9 mm	1 mm
Rear		6.4 mm	2 mm: Up to 110 km/h (70 mph) 3 mm: Over 110 km/h (70 mph)
Standard Tire:			
Front	Size	110/70 VR17	– – –
	Make	DUNLOP	– – –
	Type	K510F Tubeless	– – –
Rear	Size	140/60 VR18	– – –
	Make	DUNLOP	– – –
	Type	K510 Tubeless	– – –

Wheels (Rims)

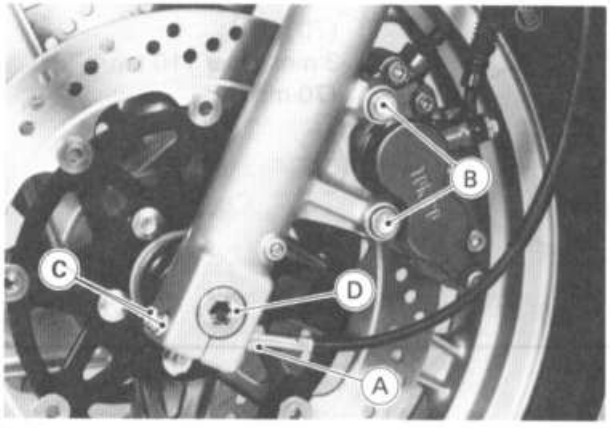
Front Wheel Removal

● Remove the following.
Speedometer Cable Lower End
RH or LH Brake Caliper Mounting Bolts

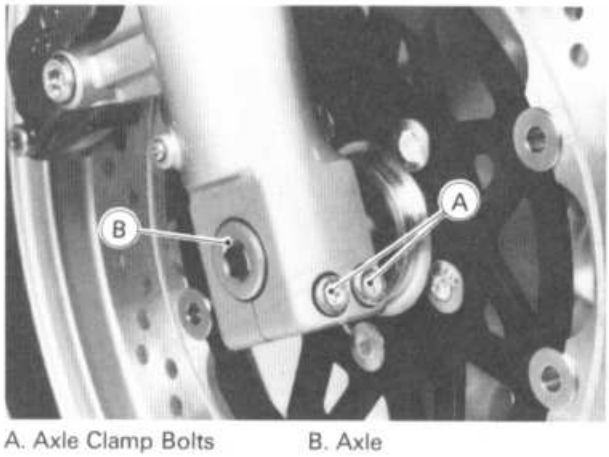
NOTE

○ *Rest the caliper on some kind of stand so that it doesn't dangle.*

Axle Clamp Bolts (Loosen)
Axle Nut



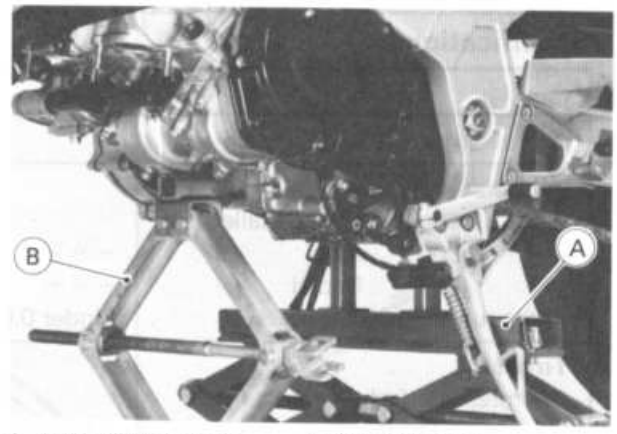
A. Speedometer Cable Lower End
B. Caliper Mounting Bolts
C. Axle Clamp Bolts
D. Axle Nut



A. Axle Clamp Bolts
B. Axle

Lower Fairing
Muffler (see Engine Top End chapter)

● Using the jack (special tool) and a stand, raise the front wheel off the ground.



A. Jack: 57001-1238
B. Suitable Jack

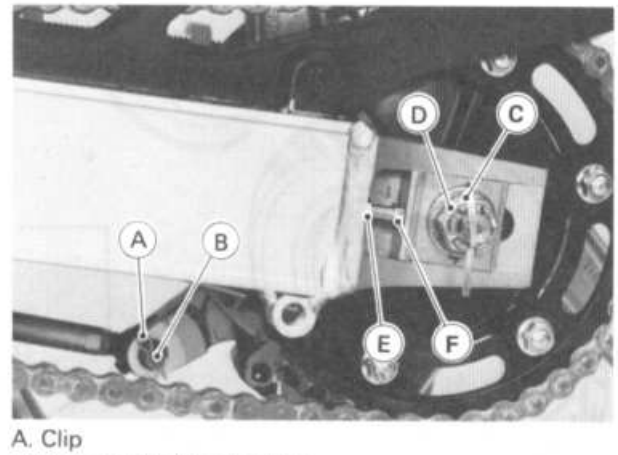
● Pull out the axle, and remove the wheel.

⚠CAUTION

Do not lay the wheel on the ground with the disc facing down. This can damage or warp the disc. Place blocks under the wheel so that the discs do not touch the ground.

Rear Wheel Removal

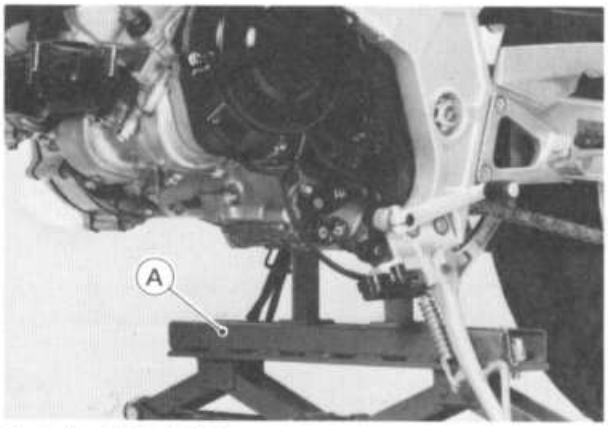
● Remove the following.
Clip
Torque link Rear End Nut (Loosen)
Cotter Pin
Rear Axle Nut
Chain Adjuster Locknuts (Loosen)
Chain Adjusting Bolts (Tighten)



A. Clip
B. Torque Link Rear End Nut
C. Cotter Pin
D. Rear Axle Nut
E. Chain Adjuster Locknuts
F. Chain Adjusting Bolts

Lower Fairing
Muffler

● Using the jack (special tool), raise the rear wheel off the ground.



A. Jack: 57001-1238

- Fully loosen the drive chain and pull out the axle.
- Remove the drive chain from the rear sprocket toward the left.
- Pull out the axle.

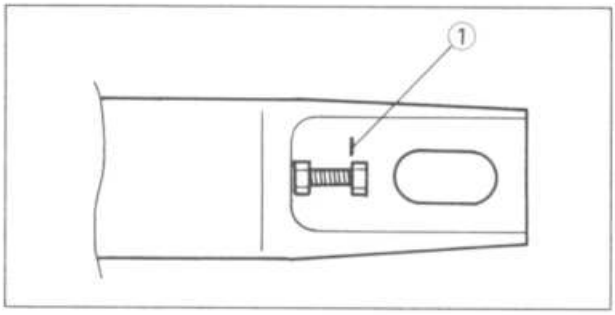
⚠CAUTION

Do not lay the wheel on the ground with the disc facing down. This can damage or warp the disc. Place blocks under the wheel so that the disc not touch the ground.

Rear Wheel Installation Notes

Refer to the base manual, except for the following.

- Before installing the rear wheels, set the adjusting bolt so that the edge of the bolt seating surface aligns with the notch on the swing arm.



1. Notch

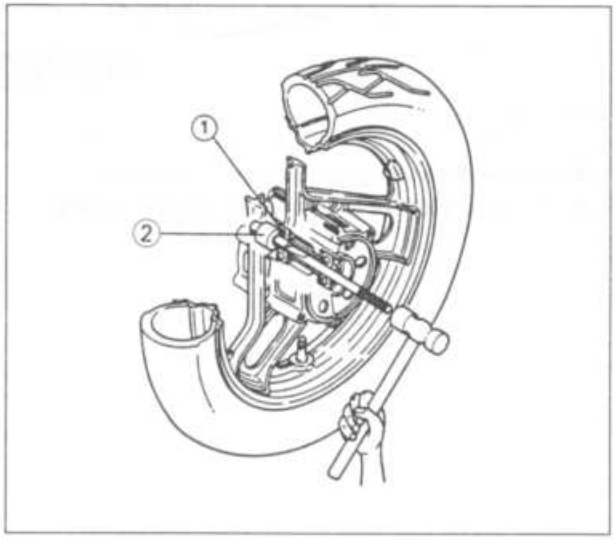
- Replace the cotter pin with a new one.

Hub Bearings

Removal

- Use the bearing remover (special tool) to remove the hub bearing.

○ Remove the bearing retainer.



1. Hub Bearing
2. Bearing Remover Set: 57001-1264

⚠CAUTION

Do not lay the wheel on the ground with the disc facing down. This can damage or warp the disc. Place blocks under the wheel so that the disc does not touch the ground.

Inspection and Lubrication

Since the wheel bearings are made to extremely close tolerances, the clearance cannot normally be measured.

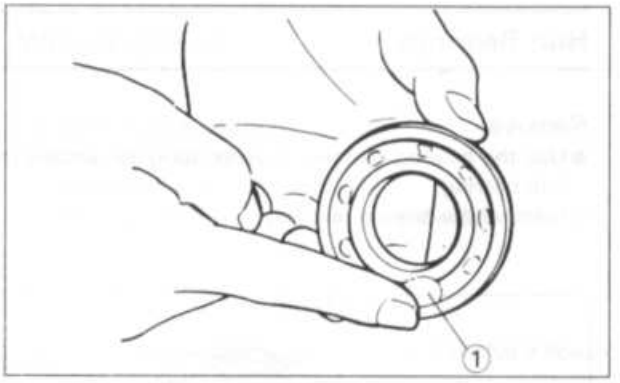
- Turn each bearing back and forth while checking for roughness or binding.

★ If roughness or binding is found, replace the bearing.

- Wash the bearing with a high flash point solvent, dry it (do not spin it while it is dry), and oil it. Spin it by hand to check its condition.

★ If it is noisy, does not spin smoothly, or has any rough spots, it must be replaced.

★ If the bearing is to be used again, rewash it with a quality flash point solvent, dry it and pack it with good bearing by hand a few times to make sure the grease is distributed uniformly inside the bearing, and wipe the oil grease out of the hub before bearing installation. Clean and grease the wheel bearings in accordance with the Periodic Maintenance Chart.



1. Grease

● Examine the bearing seal for tears or leakage.
★ If the seal is torn or is leaking, replace the bearing.

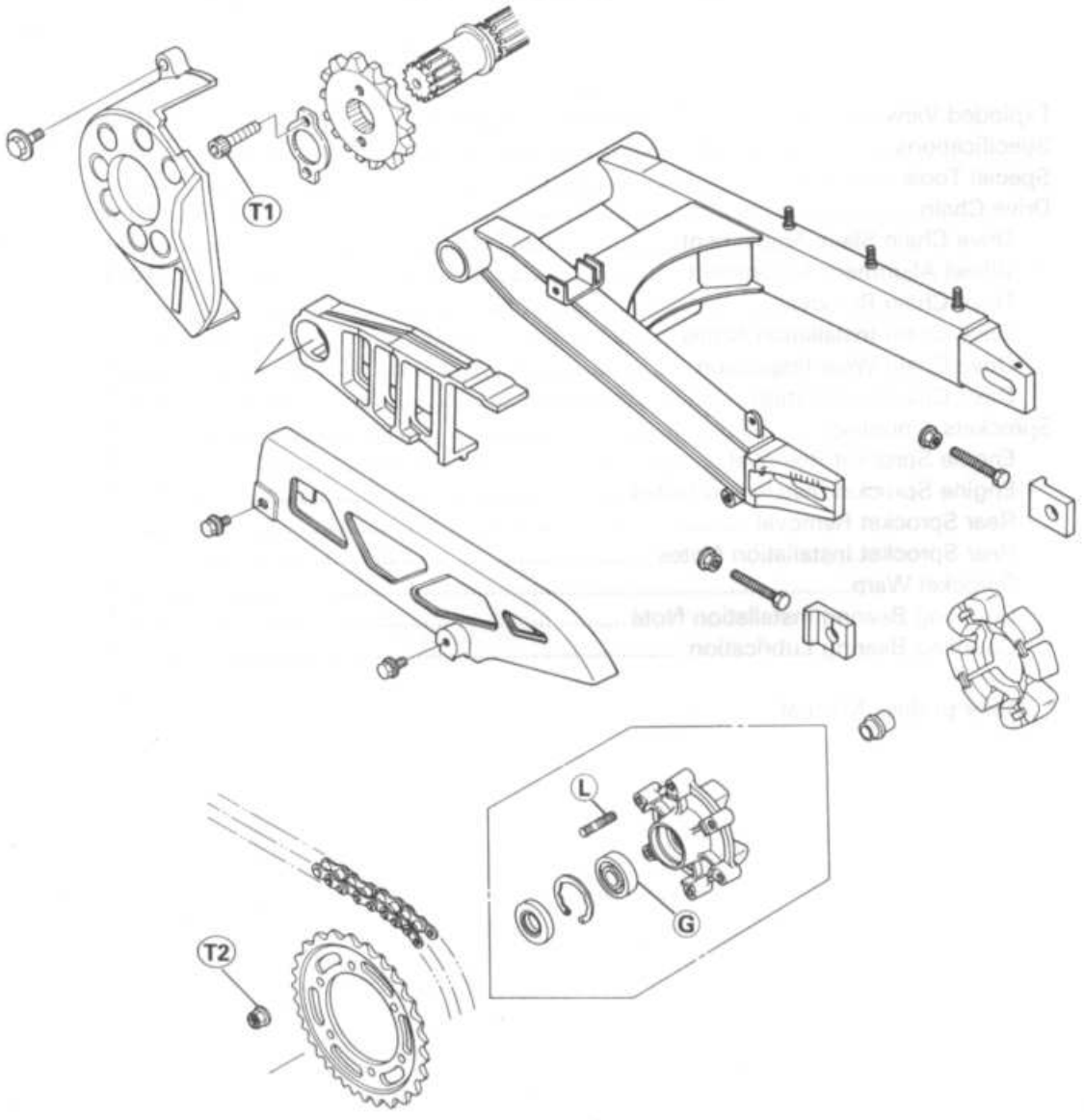
Final Drive

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* : Refer to Base Manual

Exploded View



L : Apply non-permanent locking agent.
T1 : 9.8 N-m (1.0 kg-m, 87 in-lb)
T2 : 59 N-m (6.0 kg-m, 43 ft-lb)

Specifications

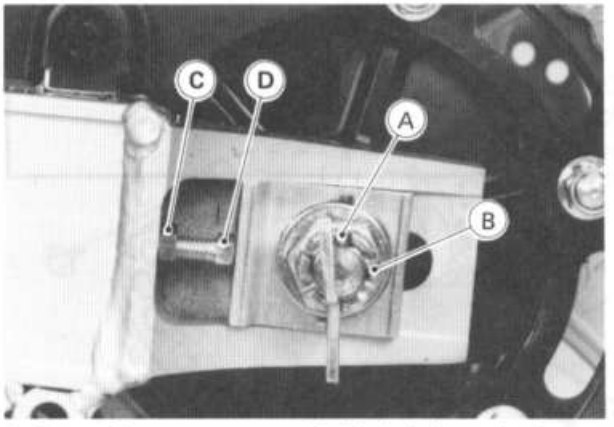
Item	Standard	Service Limit
Drive Chain:		
Chain slack	39 ~ 40 mm	Less than 30 mm, or more than 45 mm
Chain 20-link length	317.5 ~ 318.4 mm	323 mm
Standard chain		
Make	DAIDO	– – –
Type	DID520V2	– – –
Link	Endless, 108 Link	– – –

Drive Chain

Drive Chain Slack Adjustment

Refer to the base manual, except for the following.

- Pull out the cotter pin, and loosen the axle nut.
- Loosen the left and right chain adjuster locknuts.



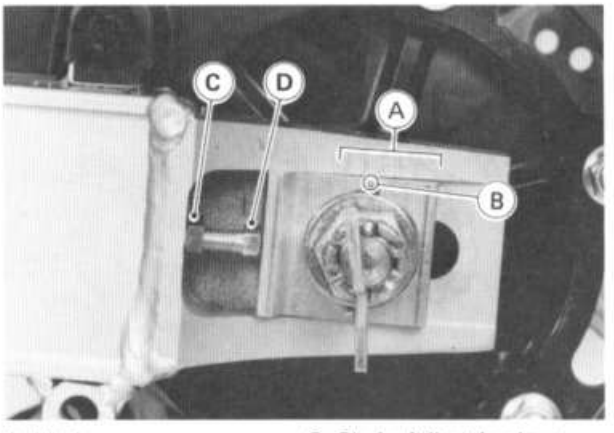
A. Cotter Pin
B. Rear Axle Nut
C. Chain Adjuster Locknut
D. Chain Adjusting Bolt

- Turn in or out both chain adjusting bolts evenly, adjust the chain so that the chain slack will be within the standard value.
- Tighten the axle nut to the specified torque (see Wheels/Tires chapter).
- Insert a new cotter pin through the axle nut and axle and spread its ends.

Wheel Alignment Adjustment

Refer to the base manual, except for the following.

- Remove the cotter pin from the rear axle and loosen the rear axle nut and chain adjuster locknut.



A. Marks
B. Notch
C. Chain Adjust Locknut
D. Chain Adjusting Nut

- Tighten the axle nut to the specified torque (see Wheels/Tires chapter).
- Insert a new cotter pin through the axle and nut, and spread its ends.

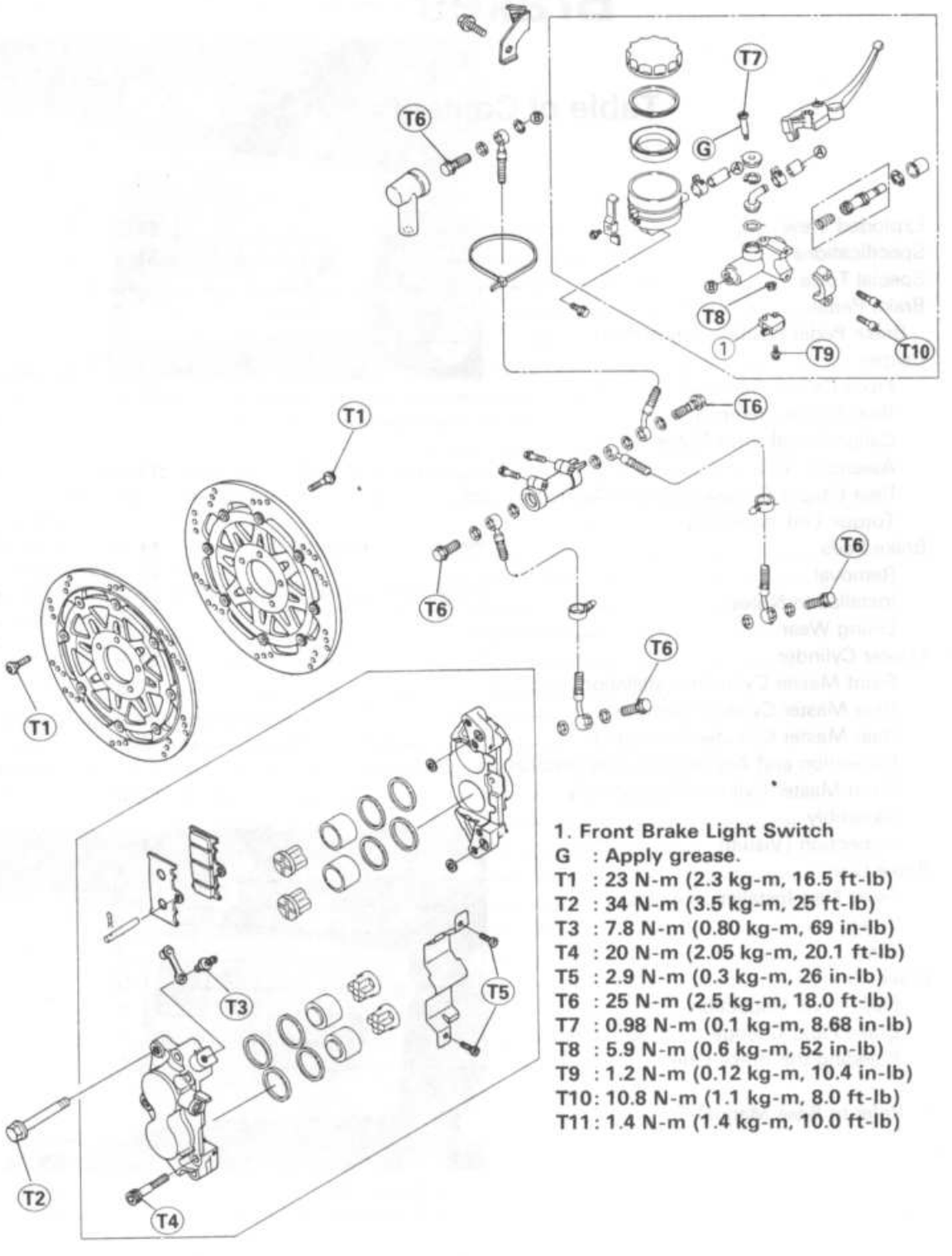
Brakes

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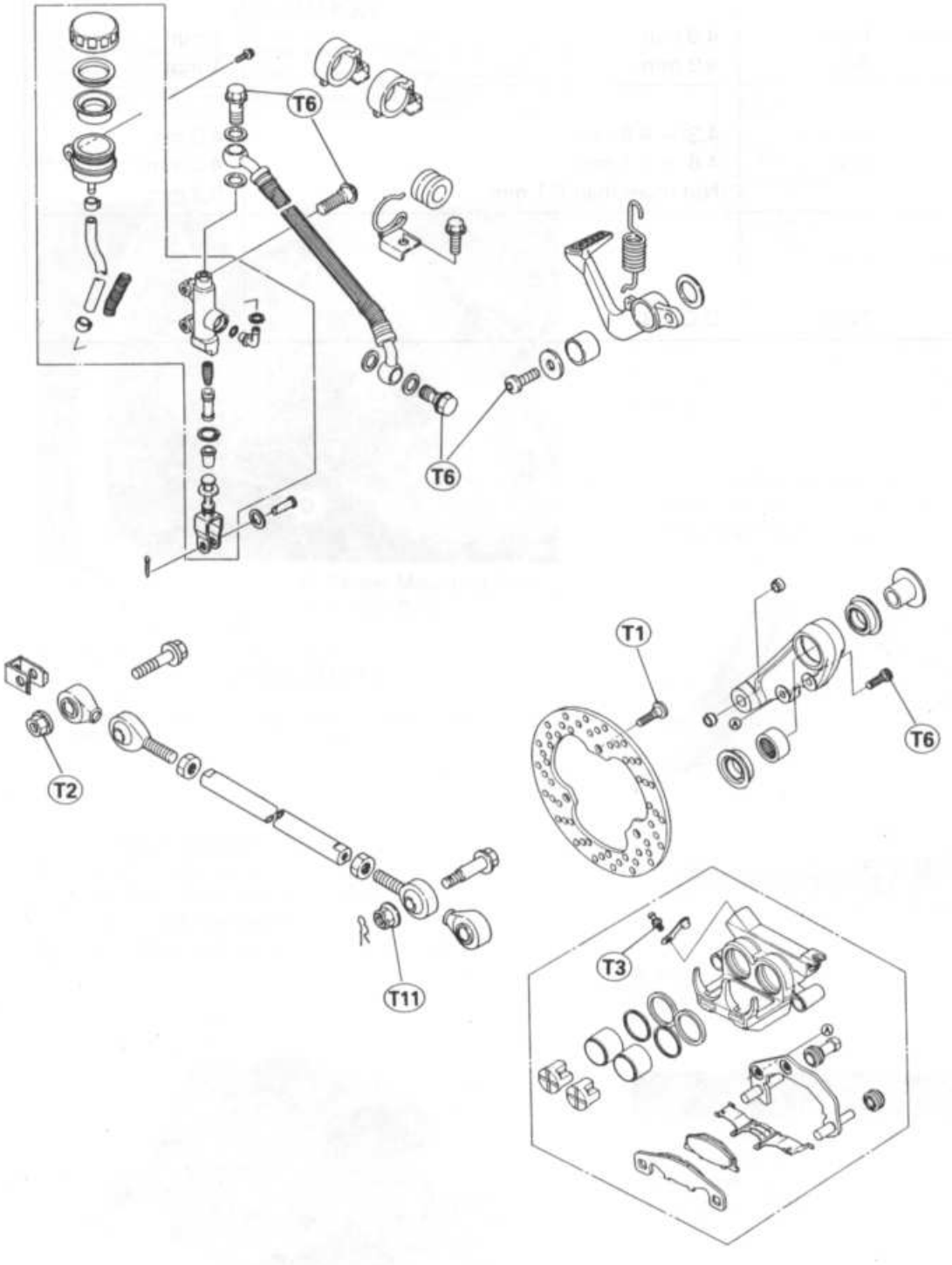
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* : Refer to Base Manual

Exploded View



1. Front Brake Light Switch
G : Apply grease.
T1 : 23 N-m (2.3 kg-m, 16.5 ft-lb)
T2 : 34 N-m (3.5 kg-m, 25 ft-lb)
T3 : 7.8 N-m (0.80 kg-m, 69 in-lb)
T4 : 20 N-m (2.05 kg-m, 20.1 ft-lb)
T5 : 2.9 N-m (0.3 kg-m, 26 in-lb)
T6 : 25 N-m (2.5 kg-m, 18.0 ft-lb)
T7 : 0.98 N-m (0.1 kg-m, 8.68 in-lb)
T8 : 5.9 N-m (0.6 kg-m, 52 in-lb)
T9 : 1.2 N-m (0.12 kg-m, 10.4 in-lb)
T10: 10.8 N-m (1.1 kg-m, 8.0 ft-lb)
T11: 1.4 N-m (1.4 kg-m, 10.0 ft-lb)


T6
T6
T1
T6
T2
T3
T11

Specifications

Item		Standard	Service Limit
Brake Adjustment:			
Brake lever and pedal		Non adjustable	- - -
Brake pedal position		30 ~ 50mm (Lower than footpeg top)	- - -
Brake Pads:			
Pad lining thickness:	Front	4.0 mm	1 mm
	Rear	4.3 mm	1 mm
Brake Disc:			
Disc thickness:	Front	4.3 ~ 4.6 mm	4.0 mm
	Rear	4.8 ~ 5.1 mm	4.5 mm
Disc runout		Not more than 0.1 mm	0.3 mm
Brake Fluid:			
Recommended disc brake fluid:			
	Type	D.O.T.3	- - -

Banjos

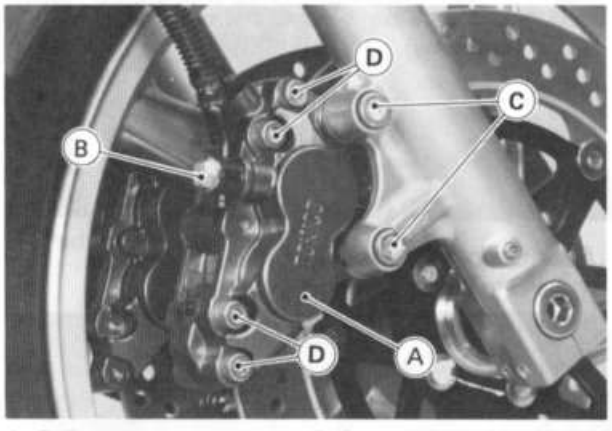
Front Banjo Removal

● Remove the following.
Banjo Bolt (at the caliper)
Banjo Mounting Bolts

⚠CAUTION

Do not loosen the caliper bolts. Take out only the caliper mounting bolts for caliper removal. Loosening the caliper bolts will cause brake fluid leakage.

● Remove the caliper.



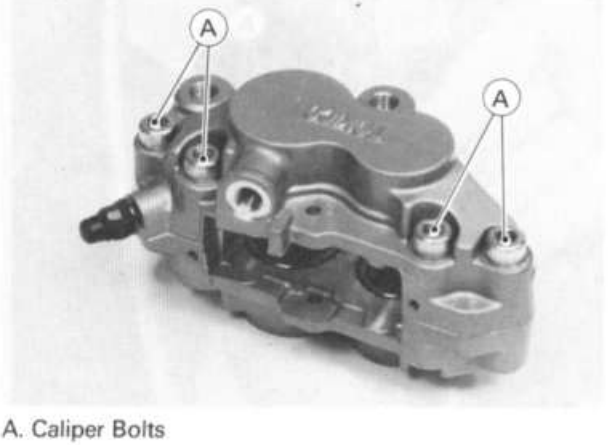
A. Caliper
B. Banjo Bolt
C. Caliper Mounting Bolts
D. Caliper Bolts

⚠CAUTION

Immediately wipe up any brake fluid that spills.

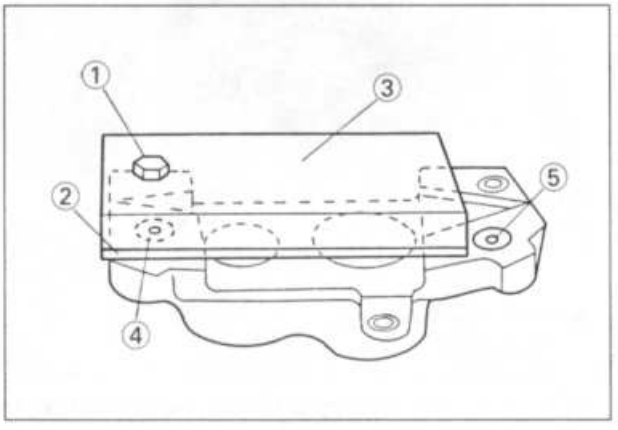
Front Caliper Disassembly

● Remove the following.
Front Brake Pads (see this chapter)
Front Caliper (see this chapter)
● Remove the caliper bolts and split the front caliper.



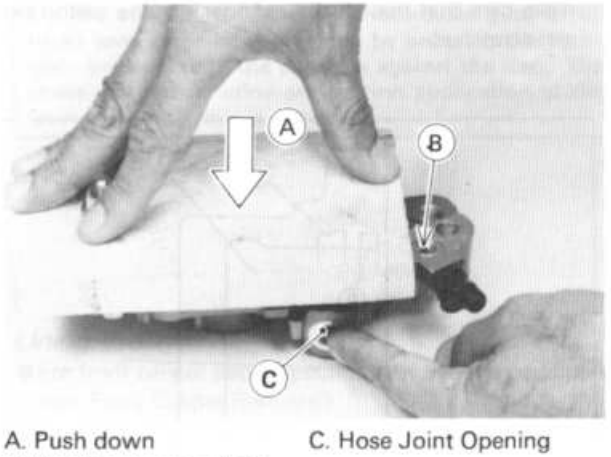
A. Caliper Bolts

● Remove the piston insulator and the O-rings.
● Using compressed air, remove the pistons. One way to remove the pistons is as follows.
○ Install a wooden board more than 10 mm thick and a rubber gasket on the caliper half as shown. Leave one of the oil passages open.



1. Bolt and Nut
2. Rubber Gasket
3. Wooden Board
4. Oil Passage sealed by Rubber Gasket
5. Oil Passage

○ Lightly apply compressed air to the oil passage until the pistons hit the rubber gasket. Block the hose joint opening during this operation.

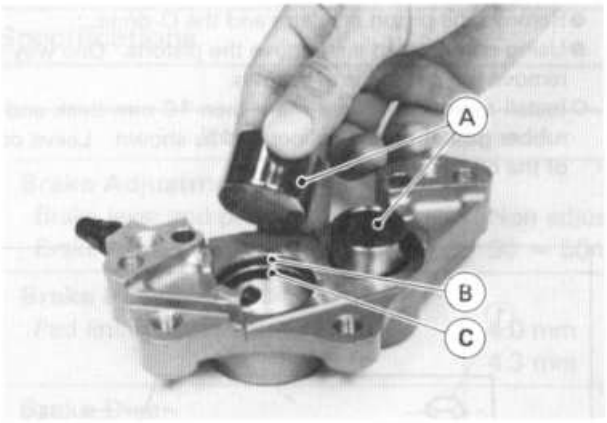


A. Push down
B. Apply compressed air.
C. Hose Joint Opening

⚠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.

○ Pull out the pistons by hand.

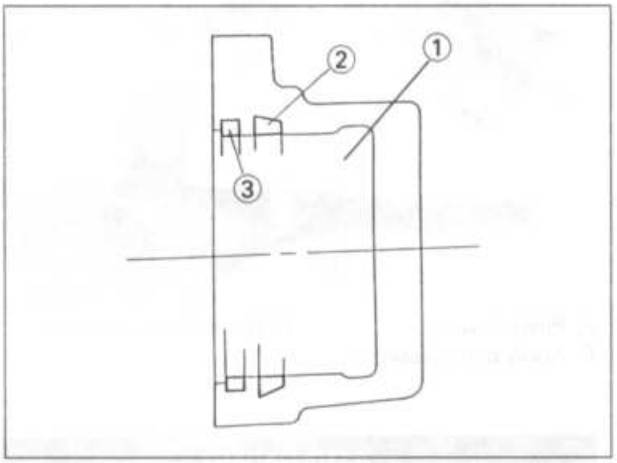


A. Piston
B. Dust Seal
C. Fluid Seal

● Remove the following.
Dust Seals
Fluid Seals
● Repeat the previous step to remove the pistons from the other side of the caliper body.

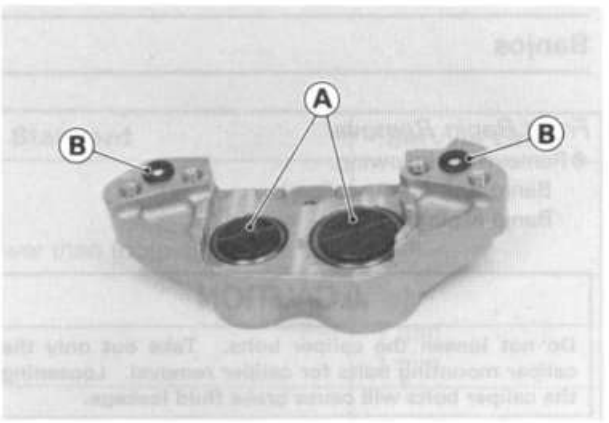
Assembly Notes

● Apply brake fluid to the cylinders, pistons, and fluid seals, and push the pistons into the cylinders by hand. Take care that neither the cylinder nor the piston skirt get scratched.



1. Piston
2. Fluid Seal
3. Dust Seal

● Be sure to install the following.



A. Piston Insulators
B. O-Rings

● Tighten the caliper bolts to the specified torque (see Exploded View).

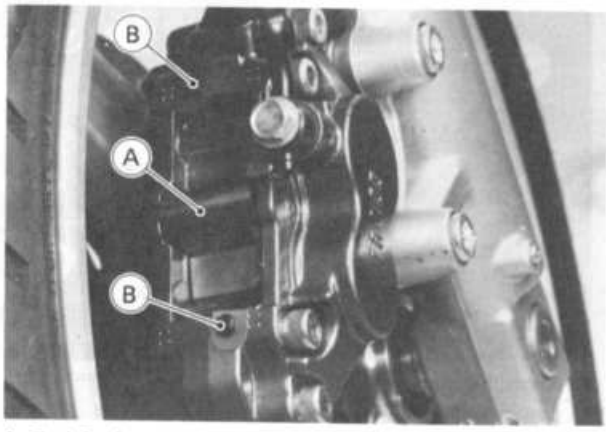
Rear Caliper Disassembly and Assembly

Refer to the base manual.

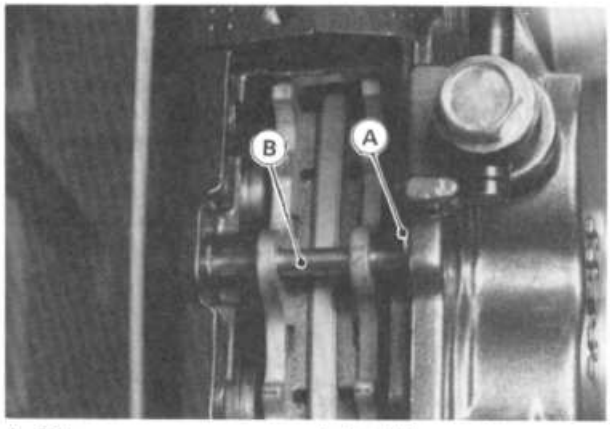
Brake Pads

Front Brake Pad Removal

- Remove the following.
  - Pad Spring
  - Clip
  - Pad Pin

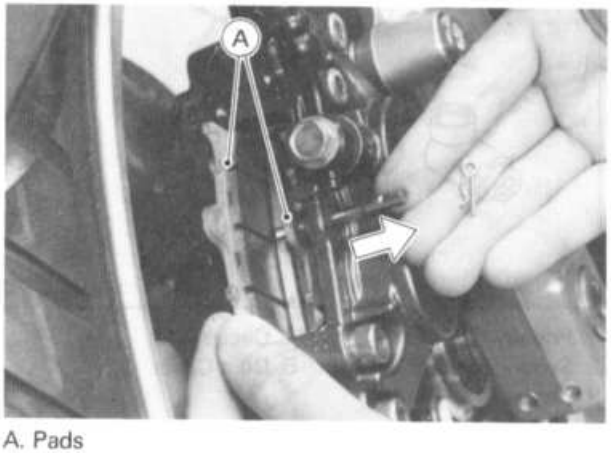


A. Pad Spring B. Screws



A. Clip B. Pad Pin

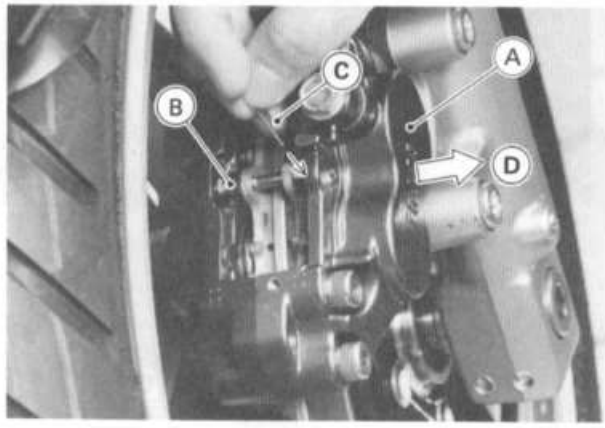
- Remove the brake pads.



A. Pads

Installation Notes

- Push the caliper pistons in by hand as far as they will go.
- Install the pad pin(s) and clip(s) as shown. The clip(s) must be "outside" of the pads.



A. Front Caliper C. Clip
B. Pad Pin D. Outside

- For the rear caliper, install the springs, pad pins, and clips on the original position shown (see Rear Caliper Pad Removal).

⚠WARNING

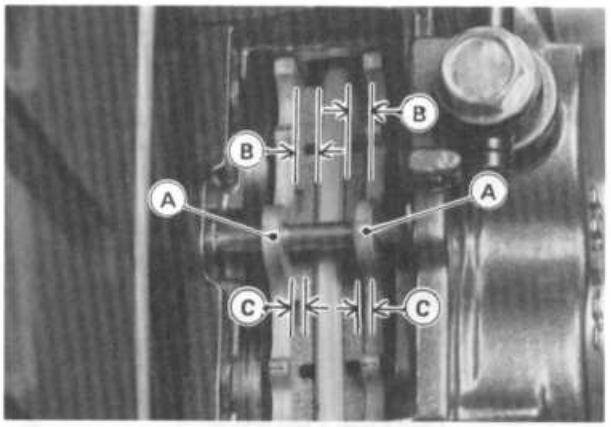
Do not attempt to drive the motorcycle until a full brake lever or pedal is obtained by pumping the brake lever or pedal until the pads are against the disc. The brake will not function on the first application of the lever or pedal if this is not done.

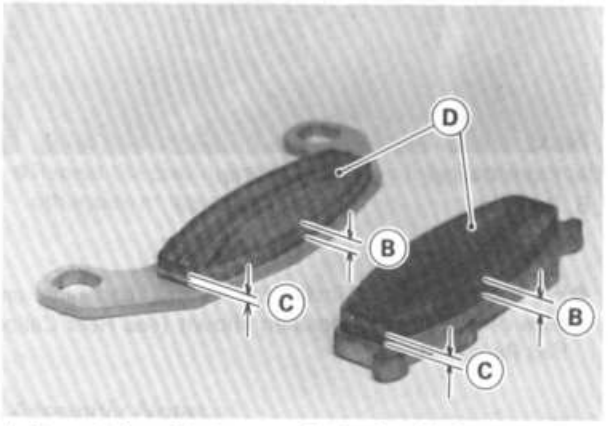
Lining Wear

- For front caliper pad inspection, remove the pad spring (see Front Caliper Removal).
- For rear caliper pad inspection, remove the rear caliper (see this chapter).
- Remove the pad cover.
- ★If the lining thickness of either pad is less than the service limit, replace both pads in the caliper as a set.

Pad Lining Thickness

Front	
Standard:	**4 mm**
Service Limit:	**1 mm**
Rear	
Standard:	**4.3 mm**
Service Limit:	**1 mm**





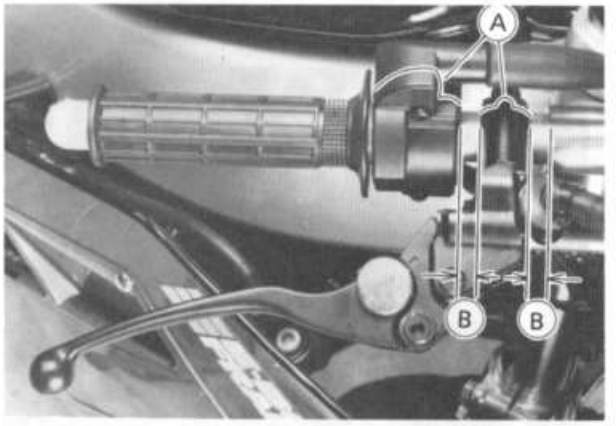
A. Front Caliper Pad
B. Lining Thickness
C. Service Limit
D. Rear Caliper Pad

Master Cylinders

Front Master Cylinder Installation

Refer to the base manual except for the following.

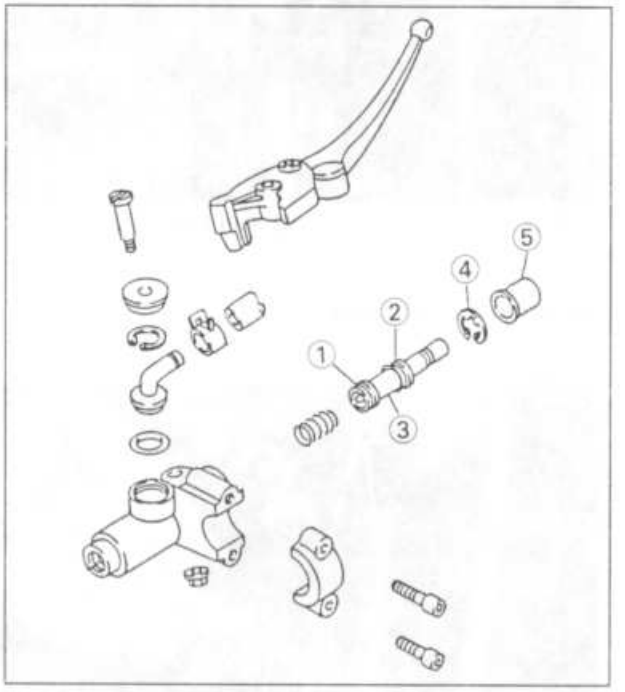
● Install the front master cylinder as shown.



A. Align the mating surface.
B. Equalize the clearances.

Front Master Cylinder Disassembly

Refer to the base manual, except for the following.

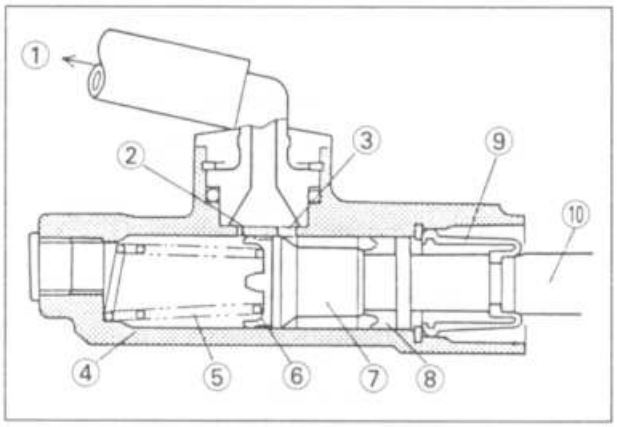


1. Primary Cup
2. Secondary Cup
3. Piston
4. Circlip
5. Dust Cover

Inspection (Visually)

- Check that there are no scratches, wear, rust, or pitting on the following parts.
  - Inside of the Master Cylinder
  - Outside of the Piston
  - Primary Cups
  - Secondary Cups
  - Dust Covers
  - Return Springs
  - Relief and Supply Port Plugged

★If they are damaged, replace them.



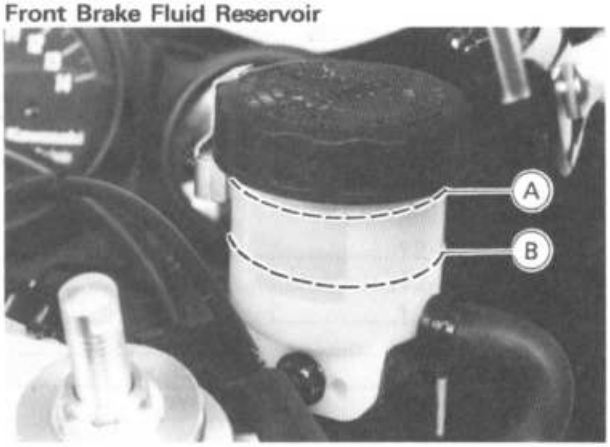
1. Reservoir
2. Relief Port
3. Supply Port
4. Cylinder
5. Return Spring
6. Primary Cup
7. Piston
8. Secondary Cup
9. Dust Cover
10. Brake Lever

Brake Fluid

Fluid Level Inspection

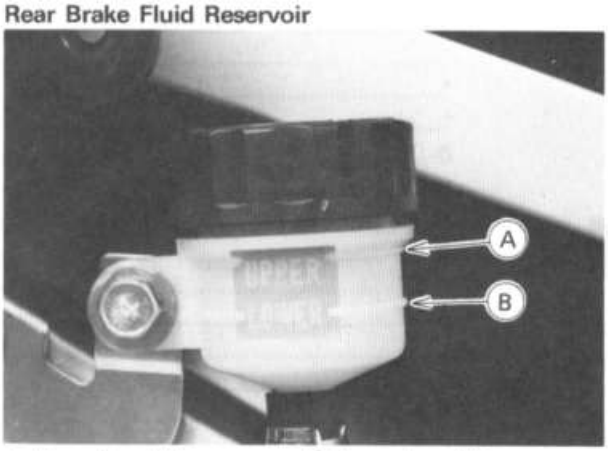
Refer to the base manual, except for the following.

Front Brake Fluid Reservoir



A. Upper Level Line B. Lower Level Line

Rear Brake Fluid Reservoir



A. Upper Level Line B. Lower Level Line

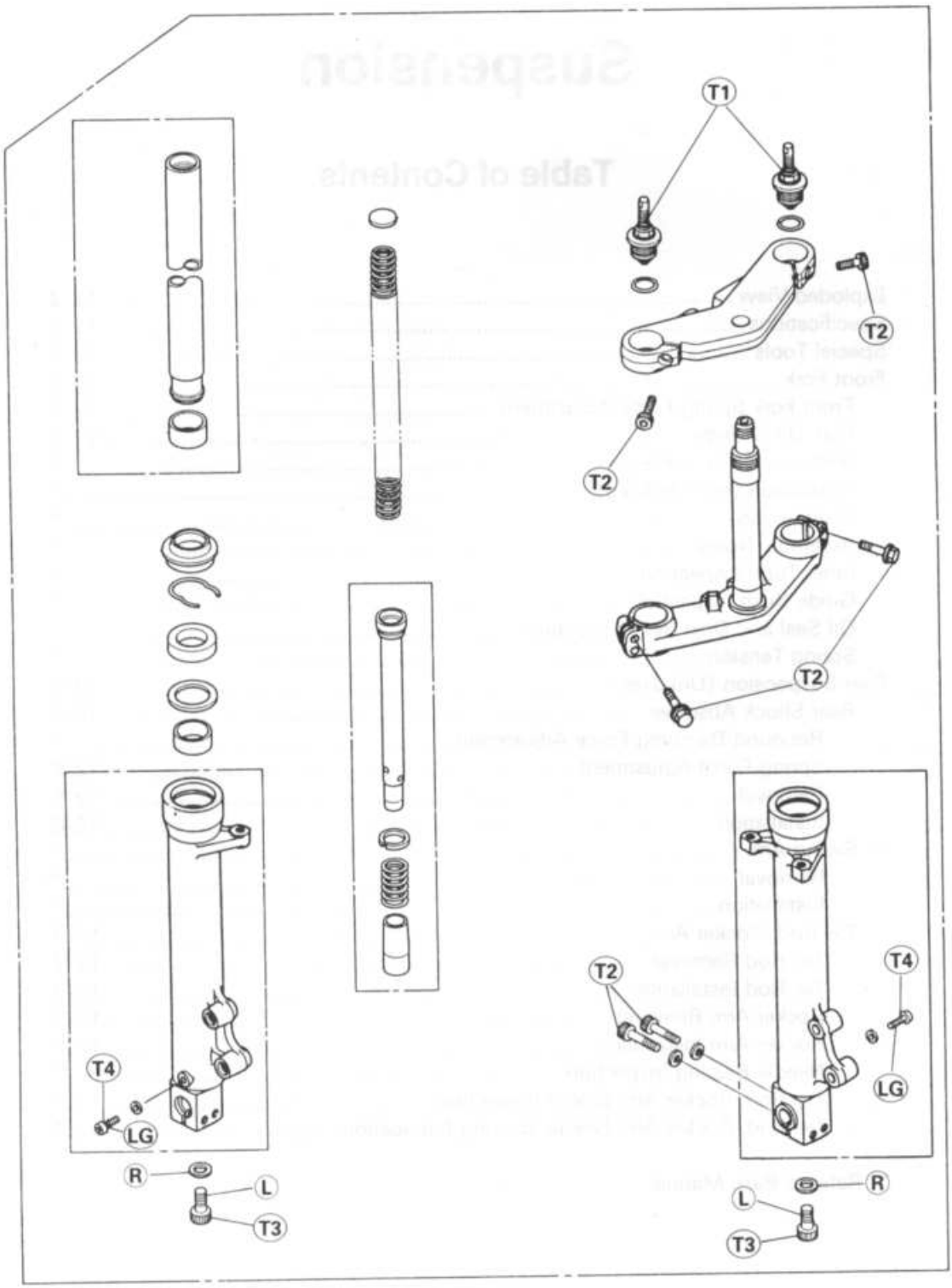
Suspension

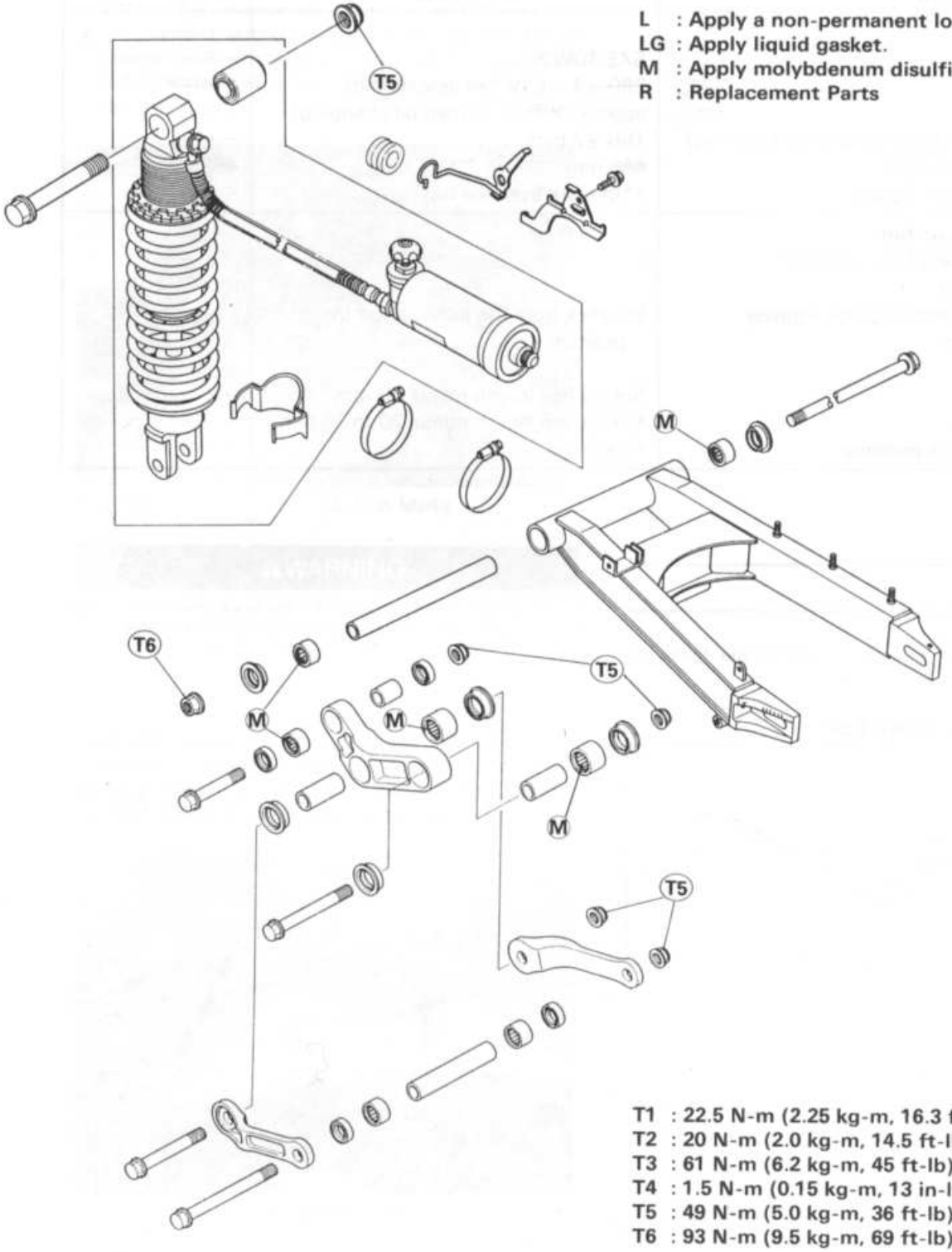
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    Tie-Rod, Rocker Arm Needle Bearing Lubrication ..... *

* : Refer to Base Manual

Exploded View





L : Apply a non-permanent locking agent.
LG : Apply liquid gasket.
M : Apply molybdenum disulfide grease.
R : Replacement Parts

T1 : 22.5 N-m (2.25 kg-m, 16.3 ft-lb)
T2 : 20 N-m (2.0 kg-m, 14.5 ft-lb)
T3 : 61 N-m (6.2 kg-m, 45 ft-lb)
T4 : 1.5 N-m (0.15 kg-m, 13 in-lb)
T5 : 49 N-m (5.0 kg-m, 36 ft-lb)
T6 : 93 N-m (9.5 kg-m, 69 ft-lb)

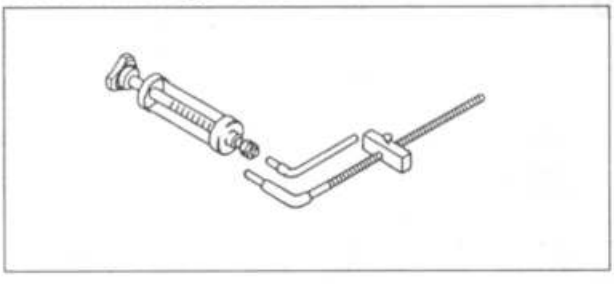
Specifications

Item	Standard	Service Limit
Front Fork:		
Oil type	SAE 10W20	– – –
Oil capacity	~~360~~ 396 ±4 mL (when assembling)	– – –
	approx. ~~306~~ 336 mL (when oil changing)	– – –
Oil level (fully compressed, without spring)	186 ±2 mm	– – –
Fork spring free length	~~468~~ mm 438 mm	~~459~~ mm 429 mm
Fork spring force adjuster	11th mark from the top	– – –
Rear Shock Absorber:		
Rebound damping force adjsuter setting position	I	– – –
Compression damping force adjuster setting position	9th click from the fully-turned-in position	– – –
Spring force:		
Standard	Spring free length minus 30 mm	– – –
Usable Range	Spring free length minus 20 to 35 mm	– – –
Gas reservoir tank pressure	10 kg/cm²	– – –

Special Tools

Refer to the base manual, except for the following additional tool.

Fork Level Gauge: 57001-1290

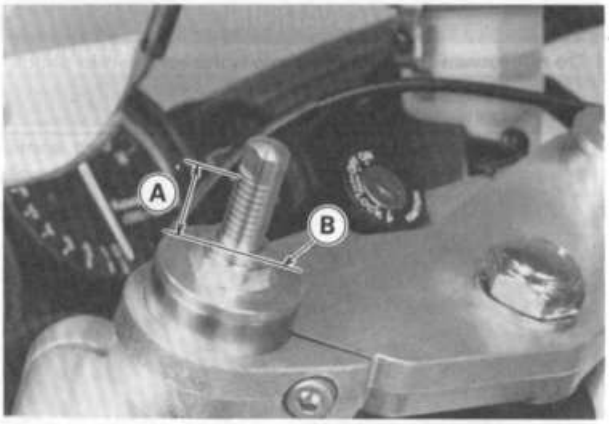


Front Fork

Front Fork Spring Force Adjustment

Refer to the base manual, except for the following.

- The standard setting position of the adjuster for an average-build rider of 68 kg (150 lb) with no passenger and no accessories is the 11th mark (20 mm) from the top.



A. 20 mm B. 11th Marks

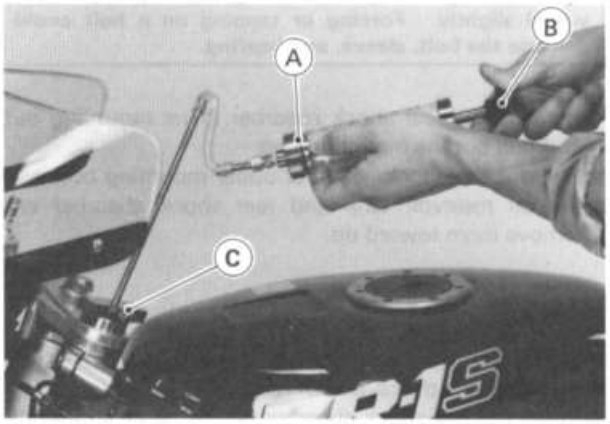
⚠WARNING

If both adjusters are not adjusted equally, handling may be impaired and a hazardous condition may result.

Fork Oil Change

Refer to the base manual, except for the following.

- Using the fork oil level gauge (special tool: 57001-1290), adjust or measure the fork oil level.



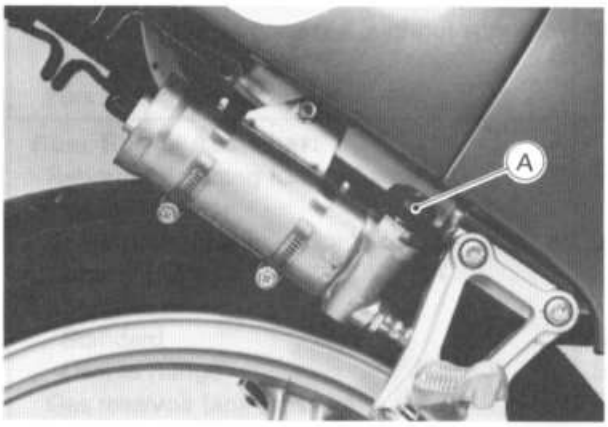
A. Fork Oil Level Gauge: 57001-1290
B. Handle
C. Stopper

Rear Suspension (Uni-Trak)

Rear Shock Absorber:

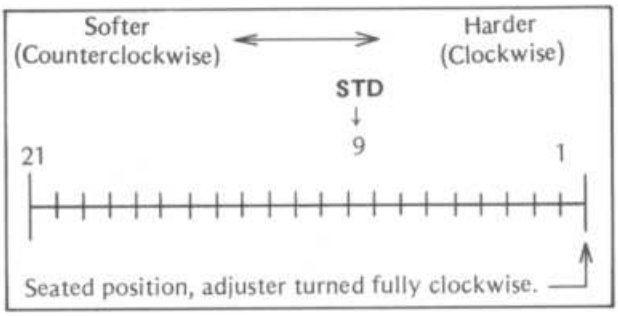
Compression Damping Force Adjustment

●To adjust the compression damping, turn the compression damping adjuster until you feel a click.



A. Adjuster

○The standard adjuster setting for an average-build rider of 68 kg (150 lb) with no passenger and no accessories is the 9th click from the fully-turned-in position.



Spring Force Adjustment

Refer to the base manual.

●the standard setting position for the average-build rider of 68 kg (150 lb) with no passenger and no accessories is 30 mm of spring preload from the free length.

Spring Preload Setting

Standard:	**Spring free length minus 30 mm**
Usable Range:	**Spring free length minus 20 to 35 mm (weaker to stronger)**

Removal

●Remove the following parts.
Lower Fairing
Muffler

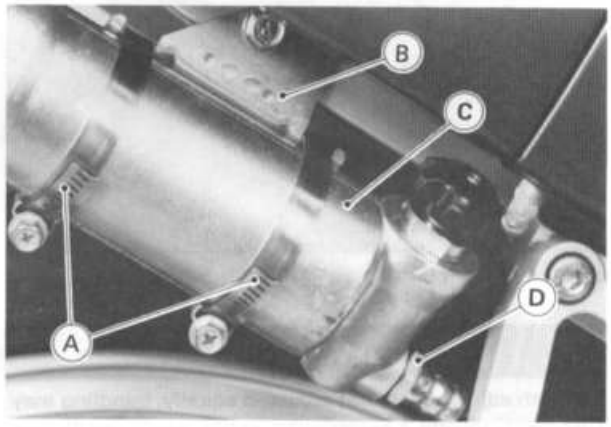
●Using the jack (special tool: 57001-1238), raise the rear wheel off the ground.

●Remove the air cleaner housing (see Air Cleaner in the FUEL SYSTEM chapter).

●Remove the oil reservoir tank from the bracket.

⚠WARNING

Do not loosen the oil hose banjo bolts on the rear shock absorber and oil reservoir tank. If loosened, spout out the oil by high pressure gas.



A. Clamps
B. Bracket
C. Oil Reservoir Tank
D. Banjo Bolt

●Loosen the rear shock absorber upper mounting bolt.

●Remove the tie-rod lower bolt.

⚠CAUTION

When pulling out the mounting bolts, lift the rear wheel slightly. Forcing or tapping on a bolt could damage the bolt, sleeve, and bearing.

●Remove the rear shock absorber lower mounting nut, and pull out the mounting bolt.

●Pull out the shock absorber upper mounting bolt with the oil reservoir tank and rear shock absorber and remove them toward up.

Installation

●Installation is the reverse of removal.

●Install the rear shock absorber on the frame so that the upper oil hose banjo bolt faces to rearward, and the rebound damping adjuster cover faces toward the rightside.

●To install the oil reservoir tank, refer to the Cable or Hose Routing in the General Information chapter.

●Tighten the following parts to the specified torque (see Exploded View).
Rear Shock Absorber Upper Mounting Nut
Rear Shock Absorber Lower Mounting Nut

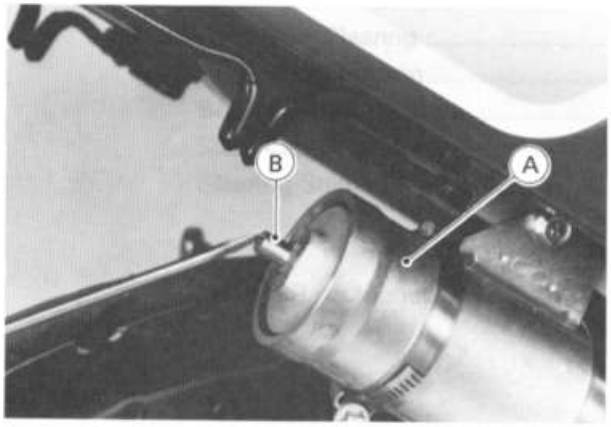
Tie-Rod Lower Nut
● After installation, check the following items.
Throttle Cable
Carburetor Cable
Oil Pump Cable
Choke Cable

Scrapping

⚠WARNING

Since the rear shock absorber contains nitrogen gas, do not scrap it by fire.

○ Before a rear shock absorber is scrapped, replace the nitrogen gas completely. Do not point the valve to your face or body then.



A. Oil Reservoir Tank B. Valve

Tie-Rod and Rocker Arm

Tie-Rod Removal

● Remove the following parts.
Lower Fairing
Muffler
● Using the jack (special tool: 57001-1238), raise the rear wheel off the ground.
● Remove the tie-rod lower bolt.

⚠CAUTION

When pulling out the mounting bolts, raise the rear wheel slightly. Forcing or tapping on a bolt could damage the bolt, sleeve, and bearing.

● Remove the tie-rod upper bolt and take off the tie-rods.

Tie-Rod Installation

● Tighten the upper and lower mounting nuts to the specified torque (see Exploded View).

Rocker Arm Removal

● Remove the following parts.
Lower Fairing
Muffler
● Using the jack (special tool: 57001-1238), raise the rear wheel off the ground.
● Remove the tie-rod lower mounting bolt.

⚠CAUTION

When pulling out the mounting bolts, lift the rear wheel slightly. Forcing or tapping on a bolt could damage the bolt, sleeve, and bearing.

● Remove the rear shock absorber lower mounting bolt.
● Pull out the rocker arm shaft, and remove the rocker arm.

Rocker Arm Installation

● Tighten the following parts.
Rocker Arm Shaft
Rear Shock Absorber Lower Mounting Nut
Tie-Rod Lower Mounting Nut

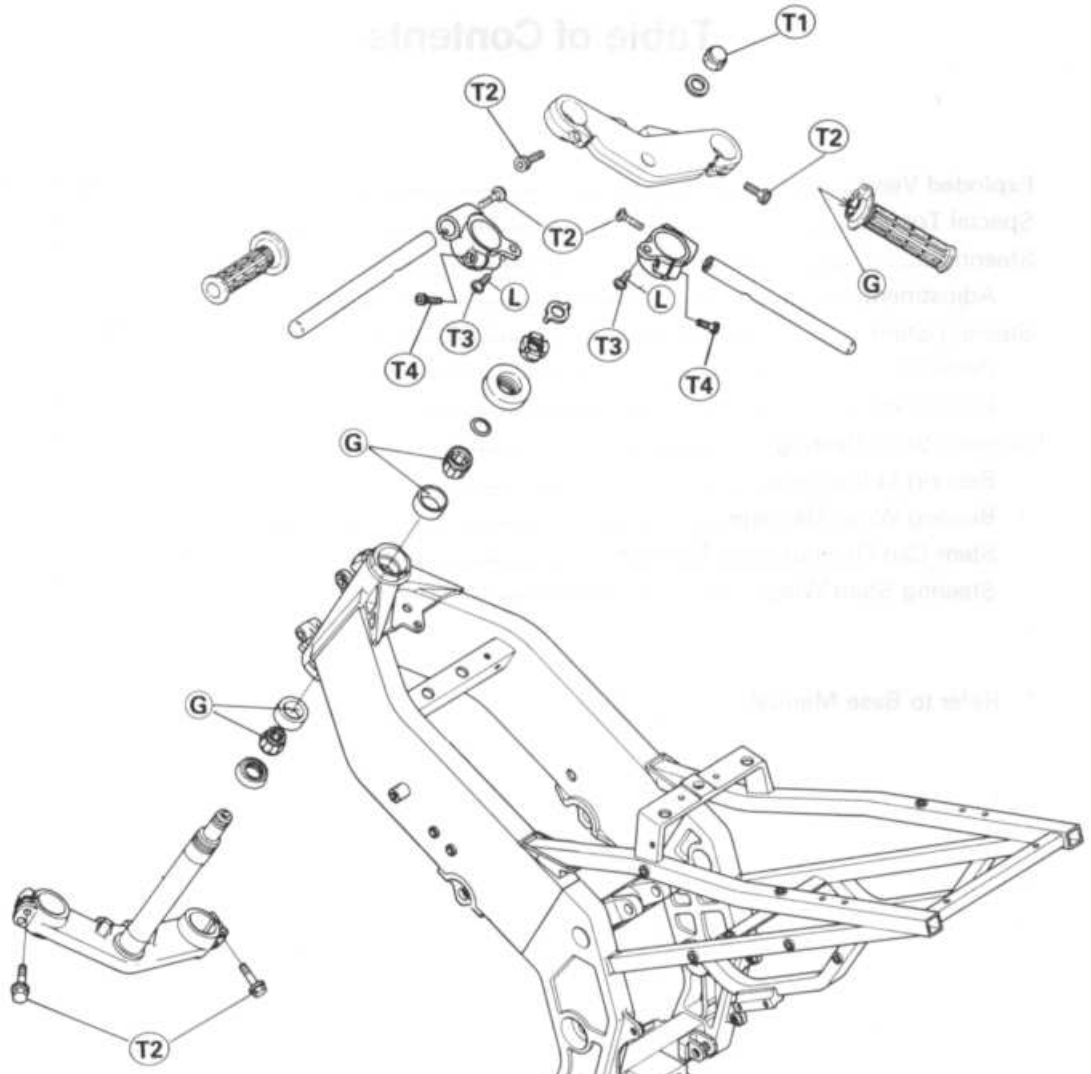
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* : Refer to Base Manual

Exploded View



L : Apply non-permanent locking agent.
G : Apply grease.
T1 : 39 N-m (4.0 kg-m, 29 ft-lb)
T2 : 23 N-m (2.3 kg-m, 16.5 ft-lb)
T3 : 9.8 N-m (1.0 kg-m, 7.0 ft-lb)
T4 : 20 N-m (2.0 kg-m, 14.5 ft-lb)

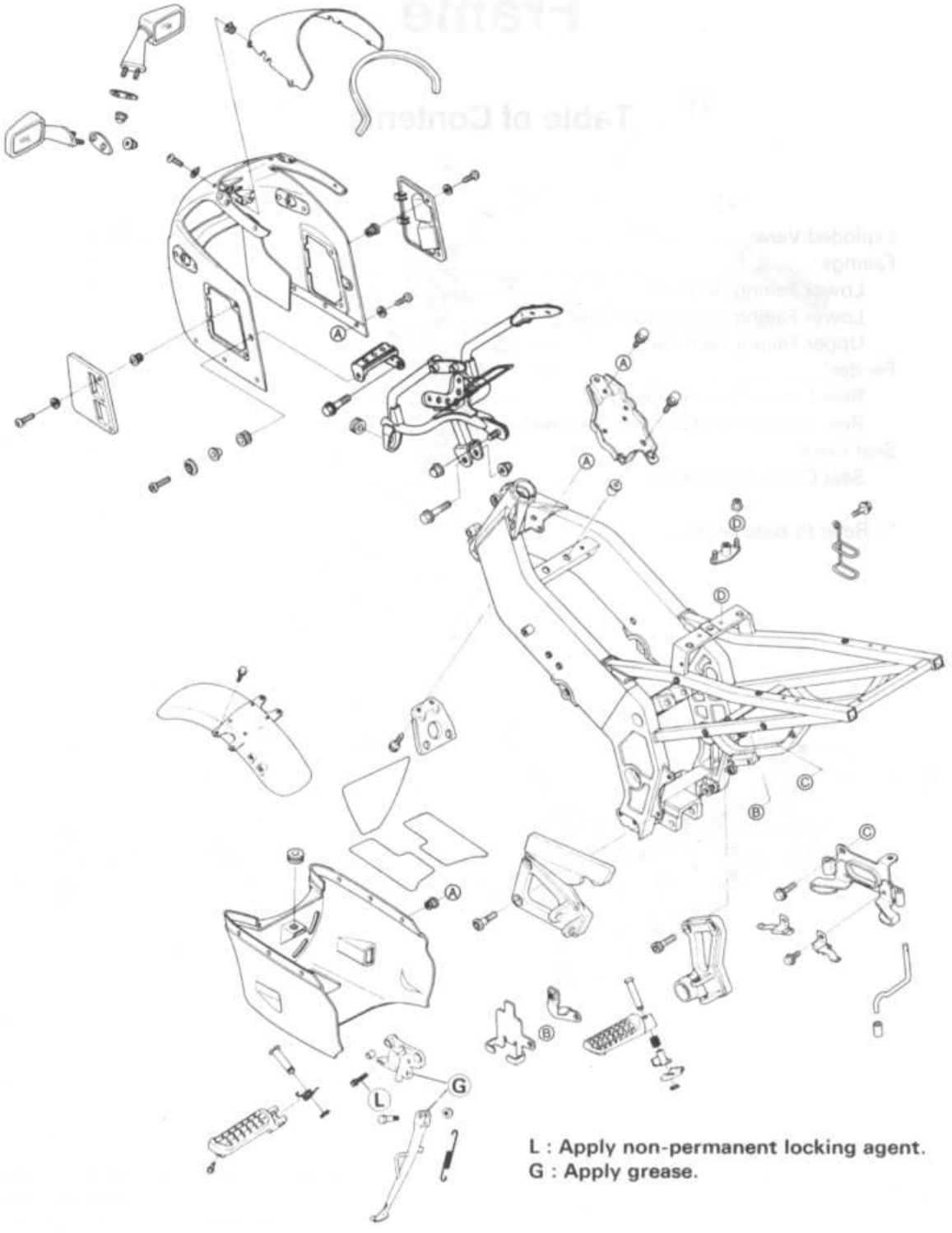
Frame

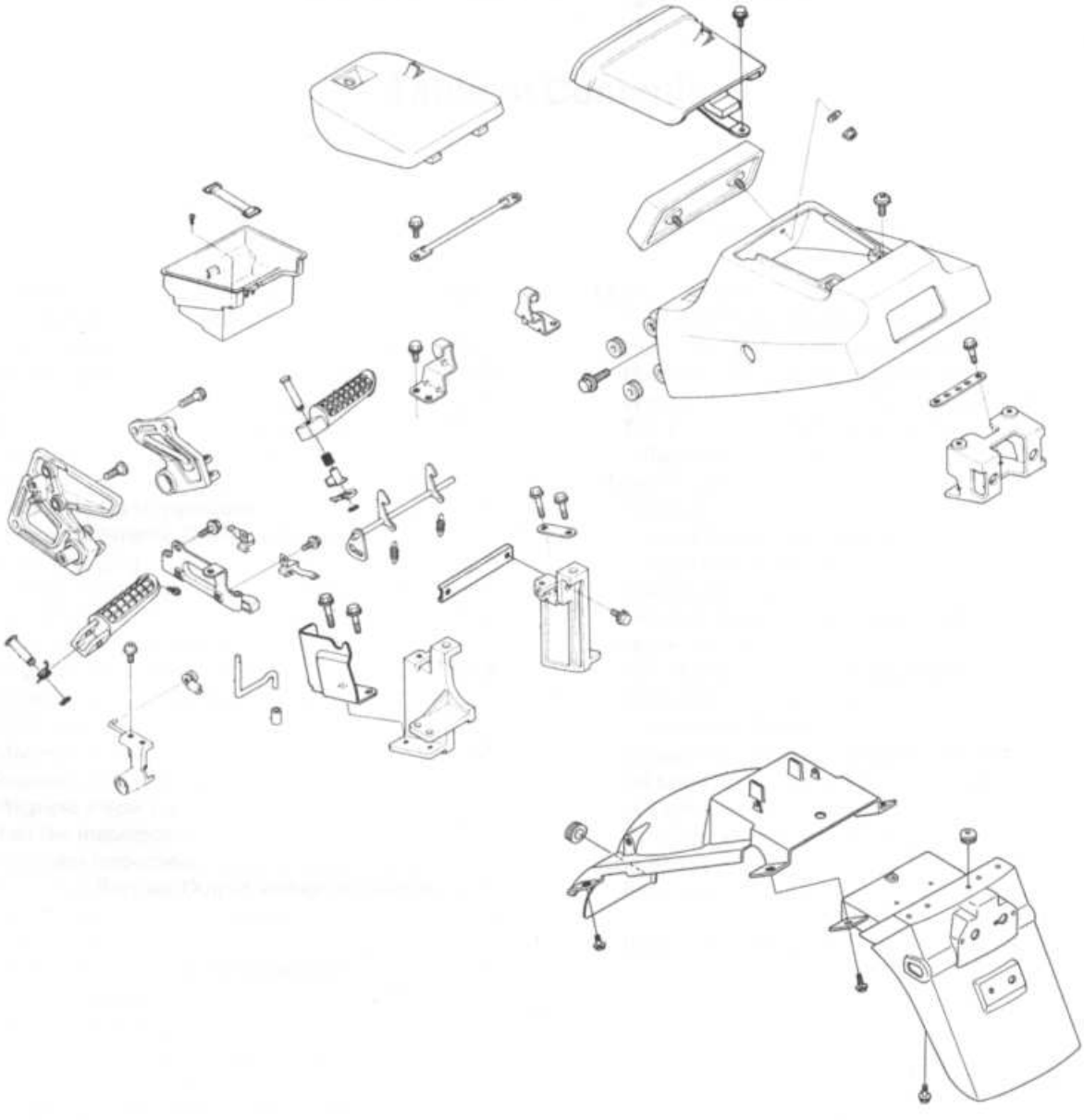
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* : Refer to Base Manual

Exploded View





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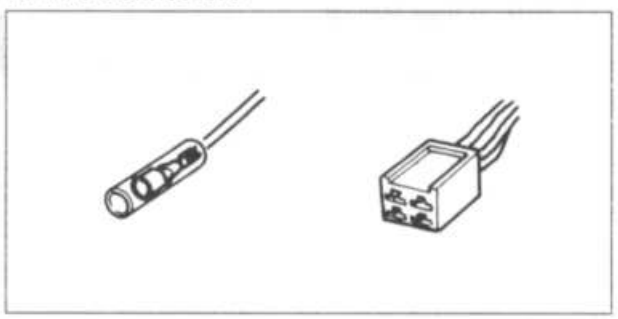
* : Refer to Base Manual

Precautions

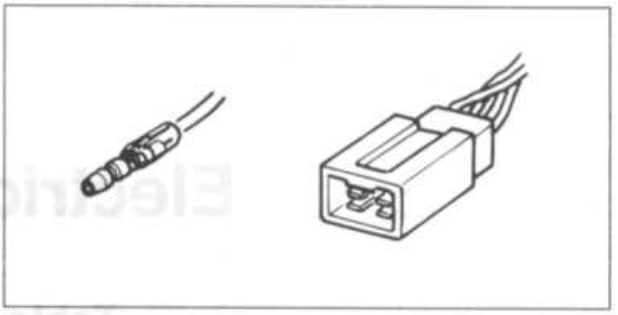
There are numbers of important precautions that are musts when servicing electrical system. Learn and observe all the rules below.

- Do not reverse the battery lead connections. This will burn out the diodes in the electrical parts.
- Always check battery condition before condemning other parts of an electrical system. A fully charged battery is a must for conducting accurate electrical system tests.
- The electrical parts should never be struck sharply, as with a hammer, or allowed to fall on a hard surface. Such a shock to the parts can damage them.
- To prevent damage to electrical parts, do not disconnect the battery leads or any other electrical connections when the ignition switch is on, or while the engine is running.
- Because of the large amount of current, never keep the starter switch pushed when the starter motor will not turn over, or the current may burn out the starter motor windings.
- Do not use a meter illumination bulb rated for other than the voltage or wattage specified in the wiring diagram, as the meter or gauge panel could be warped by excessive heat radiated from the bulb.
- Take care not to short the leads that are directly connected to the battery positive (+) terminal to the chassis ground.
- Troubles may involve one or in some cases all items. Never replace a defective part without determining what CAUSED the failure. If the failure was caused by some other item or items, they too must be repaired or replaced, or the new replacement will soon fail again.
- Make sure all connectors in the circuit are clean and tight, and examine wires for signs of burning, fraying, etc. Poor wires and bad connections will affect electrical system operation.
- Electrical Connectors

Female Connectors



Male Connectors



- Color Codes:

BK	Black
BL	Blue
BR	Brown
CH	Chocolate
DG	Dark green
G	Green
GY	Gray
LB	Light blue
LG	Light green
O	Orange
P	Pink
PU	Purple
R	Red
W	White
Y	Yellow

- Measure coil and winding resistance when the part is cold (at room temperature).

KR250-C2 Wiring Diagram (Australian and South African Models)

