SUZUKI

SV1000

SUPPLEMENTARY SERVICE MANUAL

USE THIS MANUAL WITH:
SV1000S SERVICE MANUAL (99500-39250-01E)

99501-39540-01E

SV1000K3

FOREWORD

This manual describes service data, service specifications and servicing procedures which differ from those of the SV1000SK3.

NOTE:
** Any differences between the SV1000SK3 ('03-model) and SV1000K3 in specifications and service data are indicated with an asterisk mark (*).*
** Please refer to the SV1000S Service Manual for details which are not given in this manual.*

CONTENTS

SUZUKI MOTOR CORPORATION

SPECIFICATIONS

DIMENSIONS AND DRY MASS

Overall length	* 2 135 mm (84.1 in)	
Overall width	* 785 mm (30.9 in)	
Overall height	* 1 080 mm (42.5 in)	
Wheelbase	* 1 445 mm (56.9 in)	
Ground clearance	150 mm (5.9 in)	
Seat height	* 800 mm (31.5 in)	
Dry mass	* 187 kg (412 lbs)	For E-33
	* 186 kg (410 lbs)	For the others

ENGINE

Type	4-stroke, liquid-cooled, DOHC, 90° degree V-twin
Number of cylinders	2
Bore	98.0 mm (3.858 in)
Stroke	66.0 mm (2.598 in)
Displacement	996 cm³ (60.8 cu. in)
Compression ratio	11.3 : 1
Fuel system	Fuel injection
Air cleaner	Non-woven fabric element
Starter system	Electric
Lubrication system	Wet sump
Idle speed	1 200 ± 100 r/min

DRIVE TRAIN

Clutch	Wet multi-plate type
Transmission	6-speed constant mesh
Gearshift pattern	1-down, 5-up
Primary reduction ratio	1.838 (57/31)
Gear ratios, Low	2.666 (32/12)
2nd	1.933 (29/15)
3rd	1.500 (27/18)
4th	1.227 (27/22)
5th	1.086 (25/23)
Top	1.000 (24/24)
Final reduction ratio	2.352 (40/17)
Drive chain	* RK50SMOZ1, 110 links

CHASSIS

Front suspension	Telescopic, coil spring, oil damped
Rear suspension	Link type, coil spring, oil damped
Front suspension stroke	120 mm (4.7 in)
Rear wheel travel	* 130 mm (5.1 in)
Caster	* 25.0°
Trail	* 107 mm (4.2 in)
Steering angle	* 32° (right & left)
Turning radius	* 3.0 m (9.84 ft)
Front brake	Disc brake, twin
Rear brake	Disc brake
Front tire size	120/70 ZR17M/C (58W), tubeless
Rear tire size	180/55 ZR17M/C (73W), tubeless

ELECTRICAL

Ignition type	Electronic ignition (Transistorized)
Ignition timing	5° B. T. D. C at 1 200 r/min
Spark plug	NGK: CR8EK or DENSO: U24ETR
Battery	12 V 43.2 kC (12 Ah)/10 HR
Generator	Three-phase A.C. Generator
Main fuse	30 A
Fuse	10/10/10/15/10/15 A
Headlight	12 V 60/55 W
Position light	12 V 5 W.....For E-02, 19
License plate light	12 V 5 W
Turn signal light	12 V 21 W × 4
Brake light/Taillight	LED
Speedometer/Tachometer light	LED
Fuel level indicator light	LED
Turn signal indicator light	LED
Neutral indicator light	LED
High beam indicator light	LED
Oil pressure/Coolant temperature/Fuel injection warning light	LED

CAPACITIES

Fuel tank	16 L (4.2/3.5 US/Imp gal)	For E-33
	17 L (4.5/3.7 US/Imp gal)	For the others
Engine oil, oil change	2 700 ml (2.9/2.4 US/Imp qt)	
with filter change	2 900 ml (3.1/2.6 US/Imp qt)	
overhaul	3 300 ml (3.5/2.9 US/Imp qt)	
Front fork oil (each leg)	* 508 ml (17.2/17.9 US/Imp oz)	
Coolant	2.2 L (2.3/1.9 US/Imp qt)	

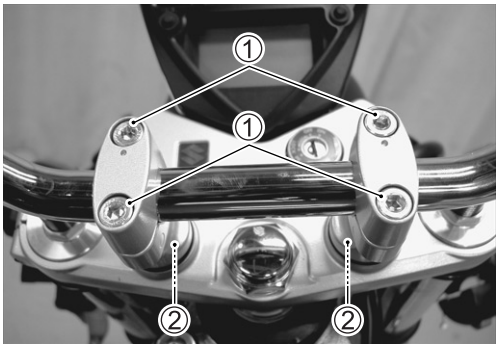
These specifications are subject to change without notice.

PERIODIC MAINTENANCE
CHASSIS BOLT AND NUT

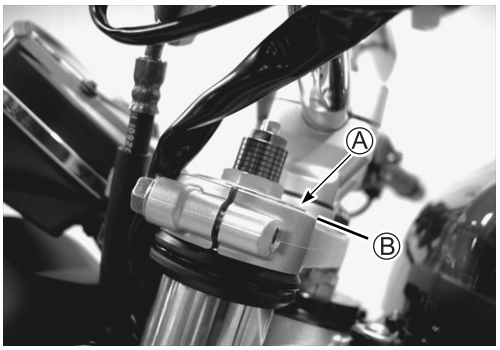
Tighten initially at 1 000 km (600 miles, 1 month) and every 6 000 km (4 000 miles, 6 months) thereafter.

Check that all chassis bolts and nuts are tightened to their specified torque. (Refer to below and page 2-29 of SV1000S Service manual for the locations of the following nuts and bolts on the motorcycle.)

ITEM	N·m	kgf-m	lb-ft
① Handlebar clamp bolt	23	2.3	16.5
② Handlebar holder set nut	45	4.5	32.5

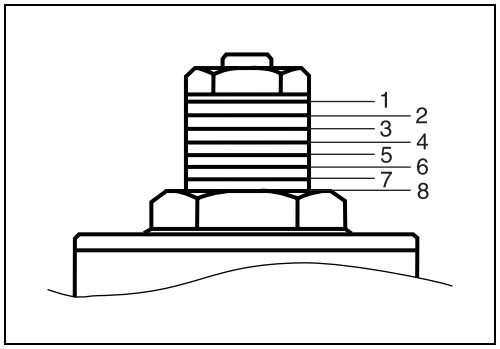


CHASSIS
FRONT FORK
REMOUNTING
- Align the upper surface Ⓐ of the inner tube with the upper surface Ⓑ of the steering stem upper bracket.



SUSPENSION SETTING

After installing the front fork, adjust the spring pre-load and damping force as follows.



SPRING PRE-LOAD ADJUSTMENT

There are eight grooves on the spring adjuster. Position 1 provides the maximum spring pre-load and position 8 provides the minimum spring pre-load.

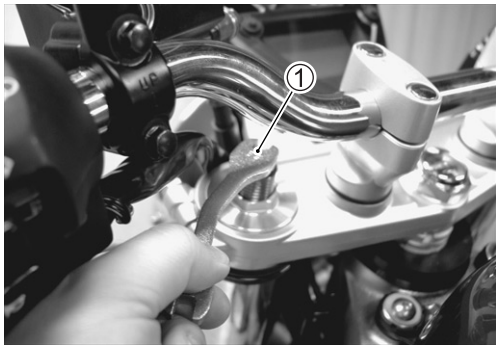
STD position: 7

DAMPING FORCE ADJUSTMENT

Rebound damping force

Fully turn the damping force adjuster ① clockwise. It is at stiffest position and turn it out to standard setting position.

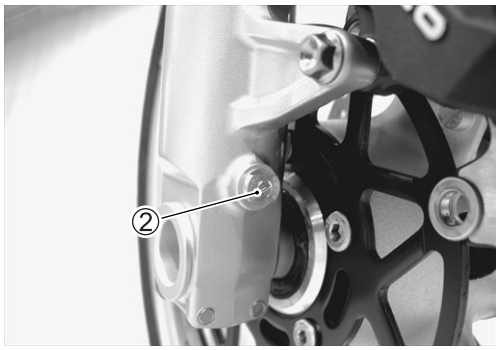
STD position: 1 and 1/4 turns out from stiffest position



Compression damping force

Fully turn the damping force adjuster ② clockwise. It is at stiffest position and turn it out to standard setting position.

STD position: 1 turn out from stiffest position



STANDARD FRONT SUSPENSION SETTING

	FRONT		
	Spring pre-load adjuster	Damping force adjuster	
		Rebound	Compression
Solo and dual riding	7	1 and 1/4 turns out from stiffest position	1 turn out from stiffest position

⚠ WARNING

Be sure to adjust the spring pre-load and damping force on both front fork legs equally.

HANDLEBARS

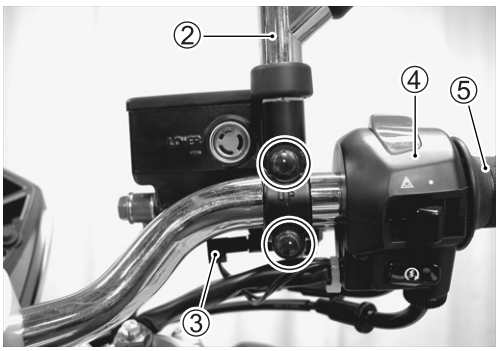
REMOVAL AND DISASSEMBLY

- Remove the handlebar balancer ①.

NOTE:

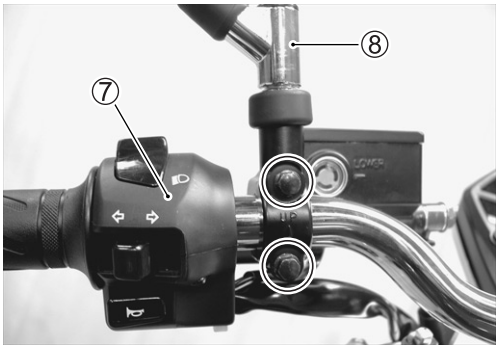
Do not remove the handlebar balancer mounting screw before removing the handlebar balancer. Slightly loosen the mounting screw, and then pull the balancer assembly out of handlebars.

- Remove the rear view mirror ②.
- Disconnect the front brake light switch coupler ③.
- Remove the front brake master cylinder.
- Remove the right handlebar switch ④ and throttle grip ⑤.



- Disconnect the clutch switch lead wires ⑥.

- Remove the left handlebar switch ⑦.
- Remove the rear view mirror ⑧.
- Remove the clutch master cylinder.

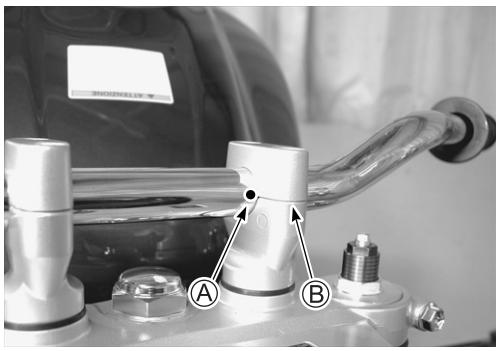


- Remove the handlebar clamp caps.

• Remove the handlebars by removing the handlebar clamp bolts.

REASSEMBLY AND REMOUNTING

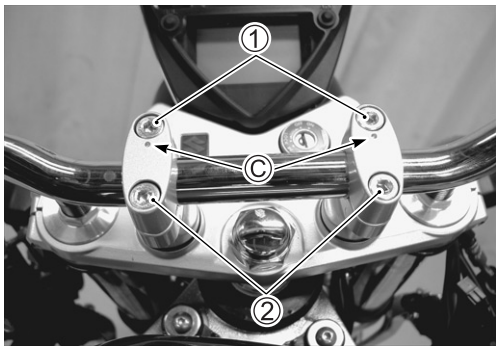
• Install the handlebars with the punch mark Ⓐ aligned with the mating surface Ⓑ of the handlebar holder.



• Set the punch mark Ⓒ on the handlebar clamp forward.
• Tighten the handlebar clamp bolts to the specified torque.

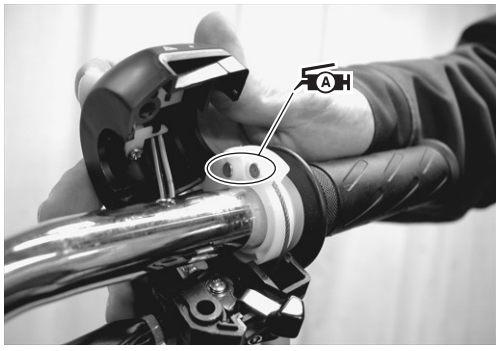
Handlebar clamp bolt: 23 N·m (2.3 kgf-m, 16.5 lb-ft)

NOTE:
When tightening the handlebar clamp bolts, first tighten the bolt ① and then tighten the bolt ②.



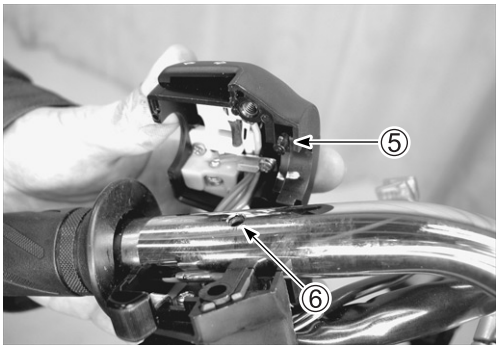
• Install the throttle grip and cables.
(Throttle cable routing: ☞11)
• Apply SUZUKI SUPER GREASE to the throttle cables and their holes.

99000-25030: SUZUKI SUPER GREASE "A" (USA)
99000-25010: SUZUKI SUPER GREASE "A" (Others)



• Install the right handlebar switch to the handlebar by engaging the stopper ③ with the handlebar hole ④.
• Install the front brake master cylinder.
(☞SV1000S 6-75 and 8)

- Install the left handlebar switch to the handlebars by engaging the stopper ⑤ with the handlebar hole ⑥.
- Install the clutch master cylinder. (☞SV1000S 6-94 and below)
- Install the handlebar balancers and rear view mirrors. (Handlebar balancer installation: ☞16)

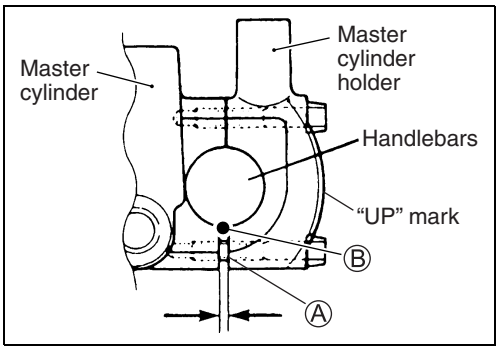


MASTER CYLINDER REMOUNTING

FRONT BRAKE

- When remounting the brake master cylinder onto the handlebars, align the master cylinder holder's mating surface Ⓐ with punch mark Ⓑ on the handlebars and tighten the upper clamp bolt first as shown.

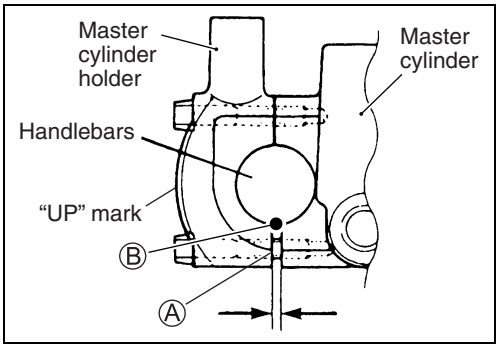
Front brake master cylinder mounting bolt:
10 N·m (1.0 kgf-m, 7.0 lb-ft)



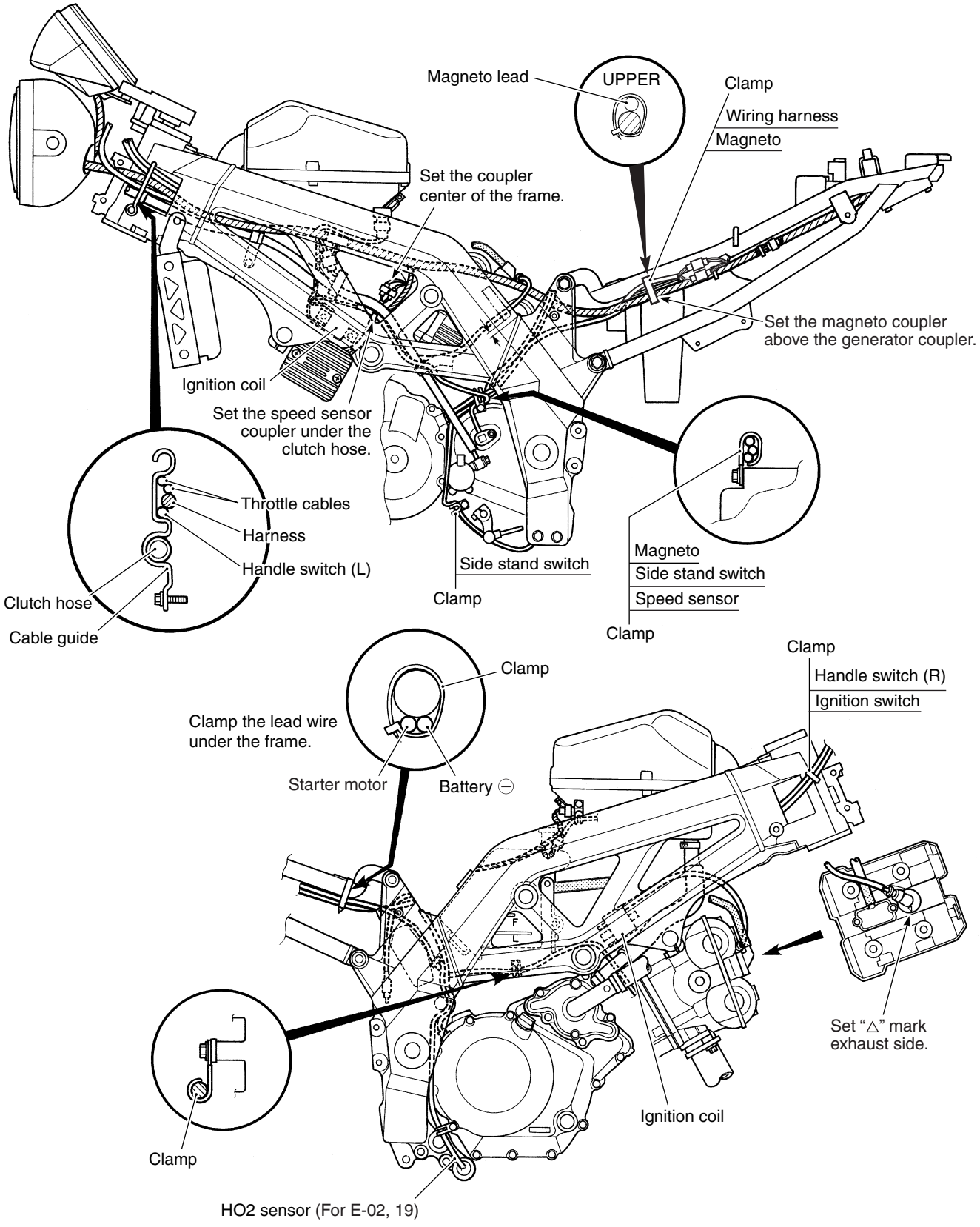
CLUTCH

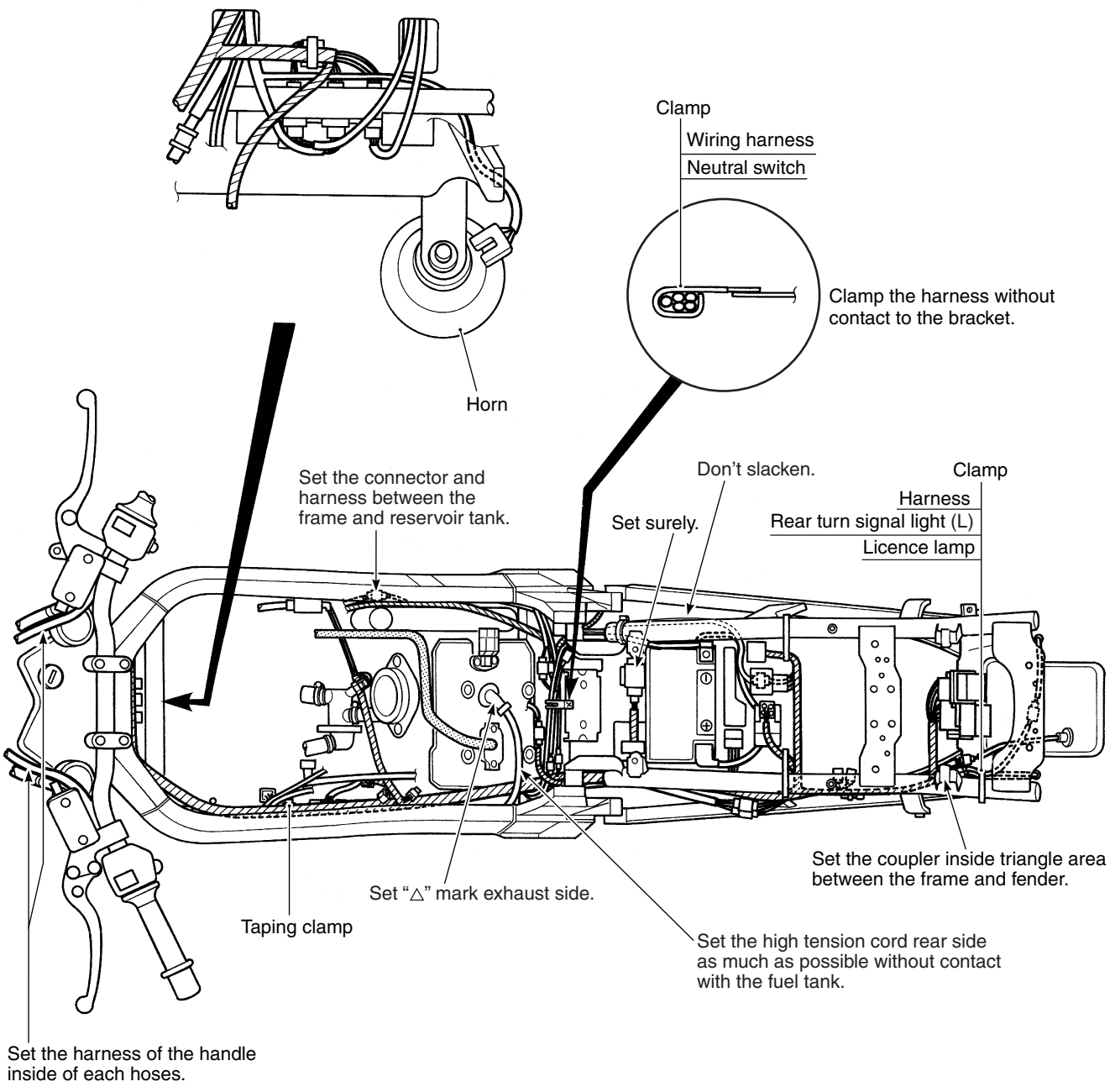
- When remounting the clutch master cylinder on the handlebars, align the master cylinder holder's mating surface Ⓐ with punched mark Ⓑ on the handlebars and tighten the upper clamp bolt first.

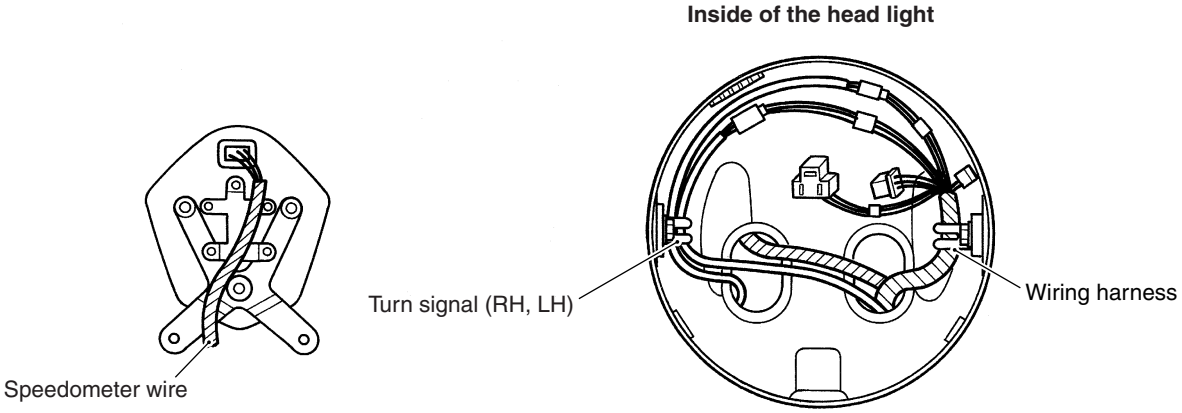
Clutch master cylinder mounting bolt:
10 N·m (1.0 kgf-m, 7.0 lb-ft)



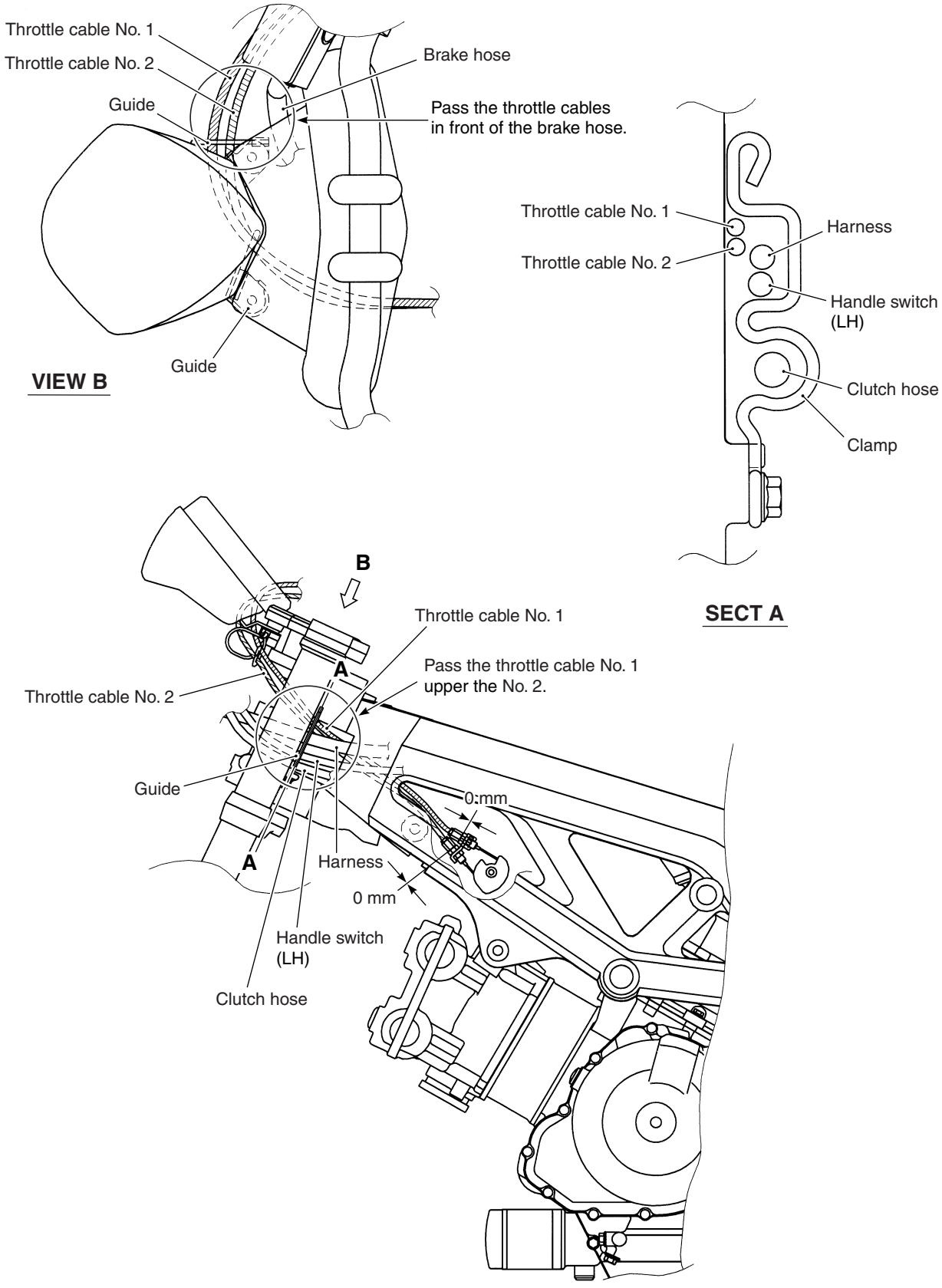
WIRING HARNESS, CABLE AND HOSE ROUTING
WIRING HARNESS ROUTING



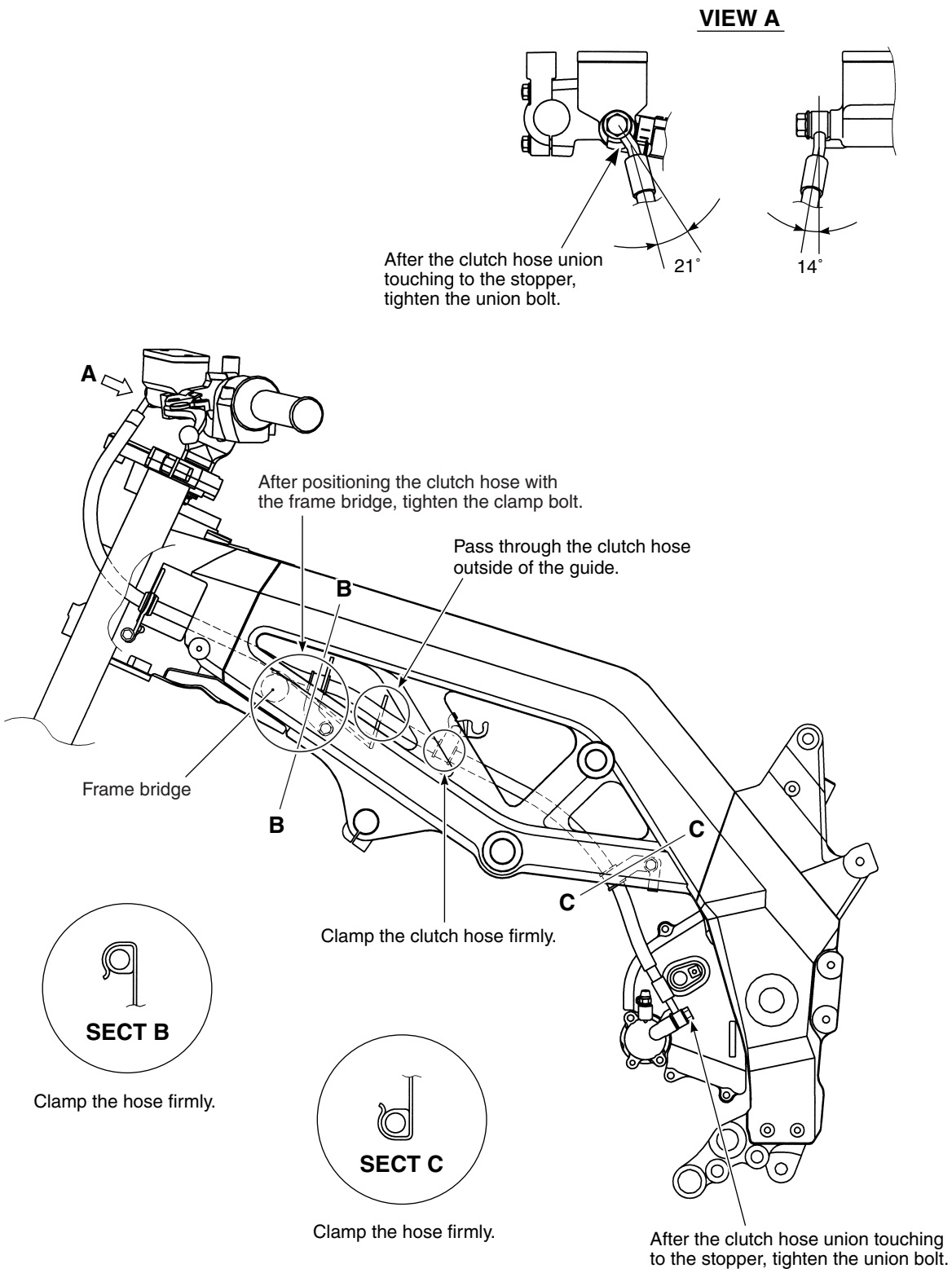

Clamp
Wiring harness
Neutral switch
Clamp the harness without contact to the bracket.
Horn
Set the connector and harness between the frame and reservoir tank.
Don't slacken.
Clamp
Harness
Rear turn signal light (L)
Licence lamp
Set surely.
Set the coupler inside triangle area between the frame and fender.
Set "△" mark exhaust side.
Taping clamp
Set the high tension cord rear side as much as possible without contact with the fuel tank.
Set the harness of the handle inside of each hoses.


Inside of the head light
Turn signal (RH, LH)
Wiring harness
Speedometer wire

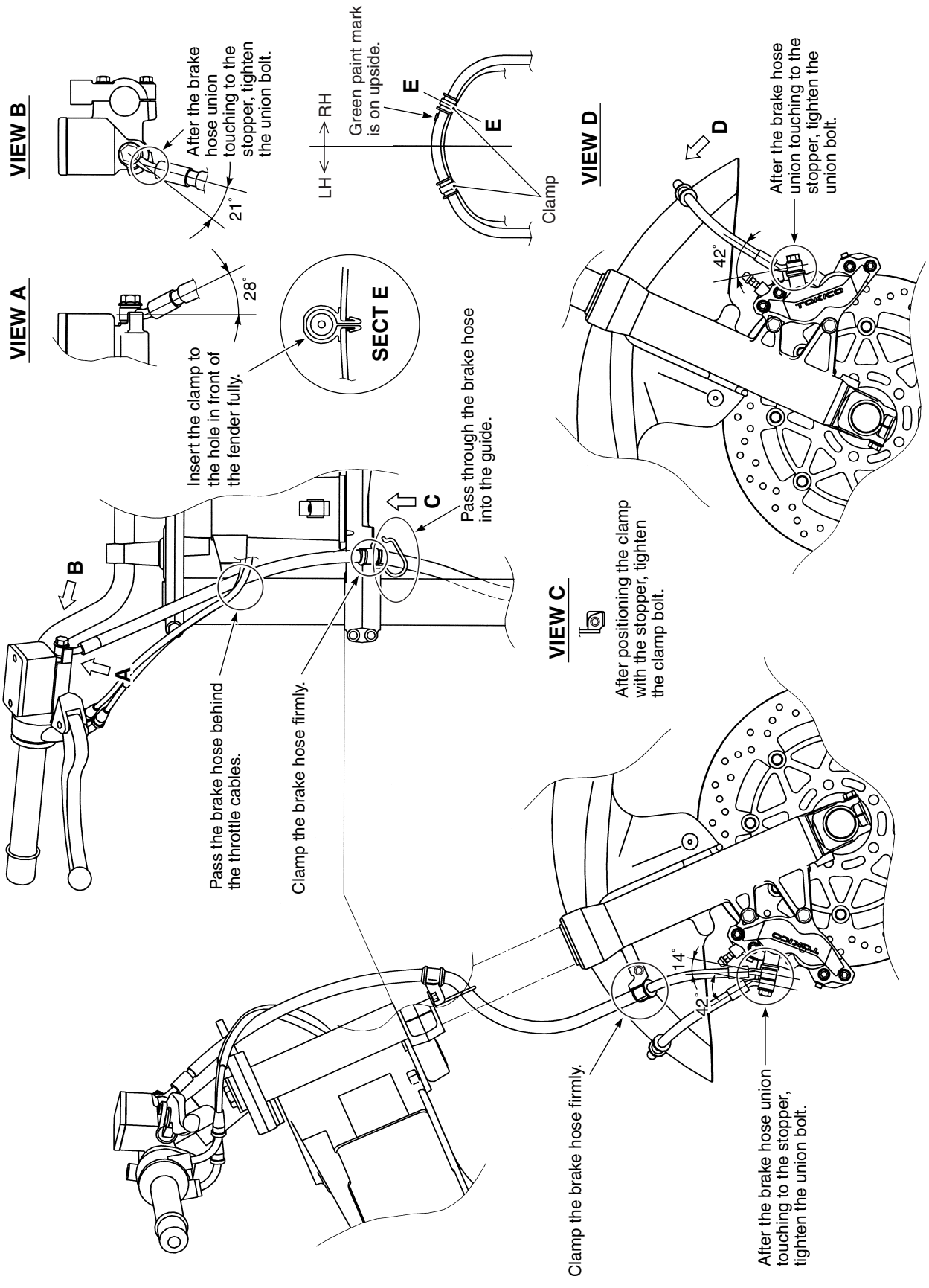
THROTTLE CABLE ROUTING



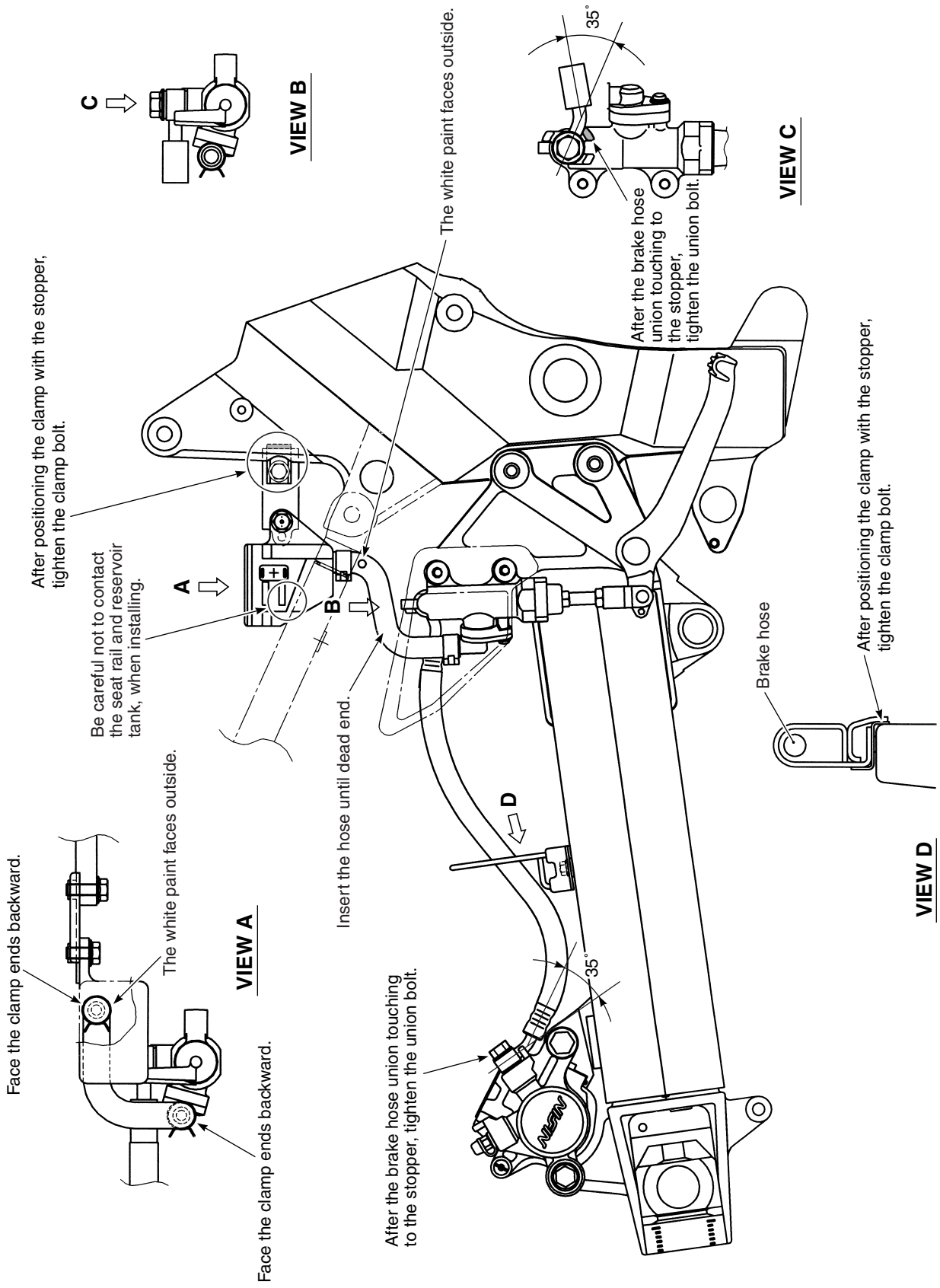
CLUTCH HOSE ROUTING



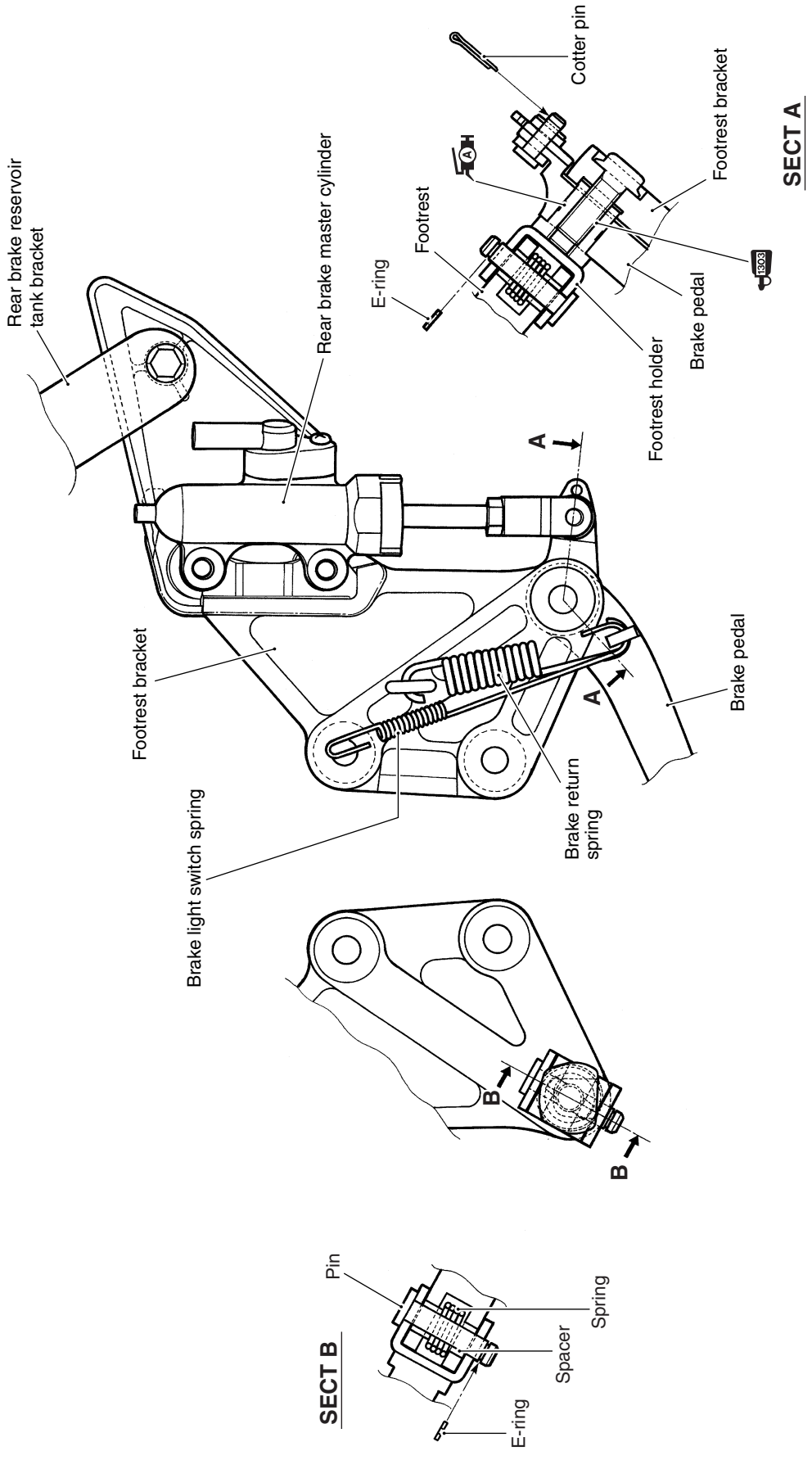
FRONT BRAKE HOSE ROUTING



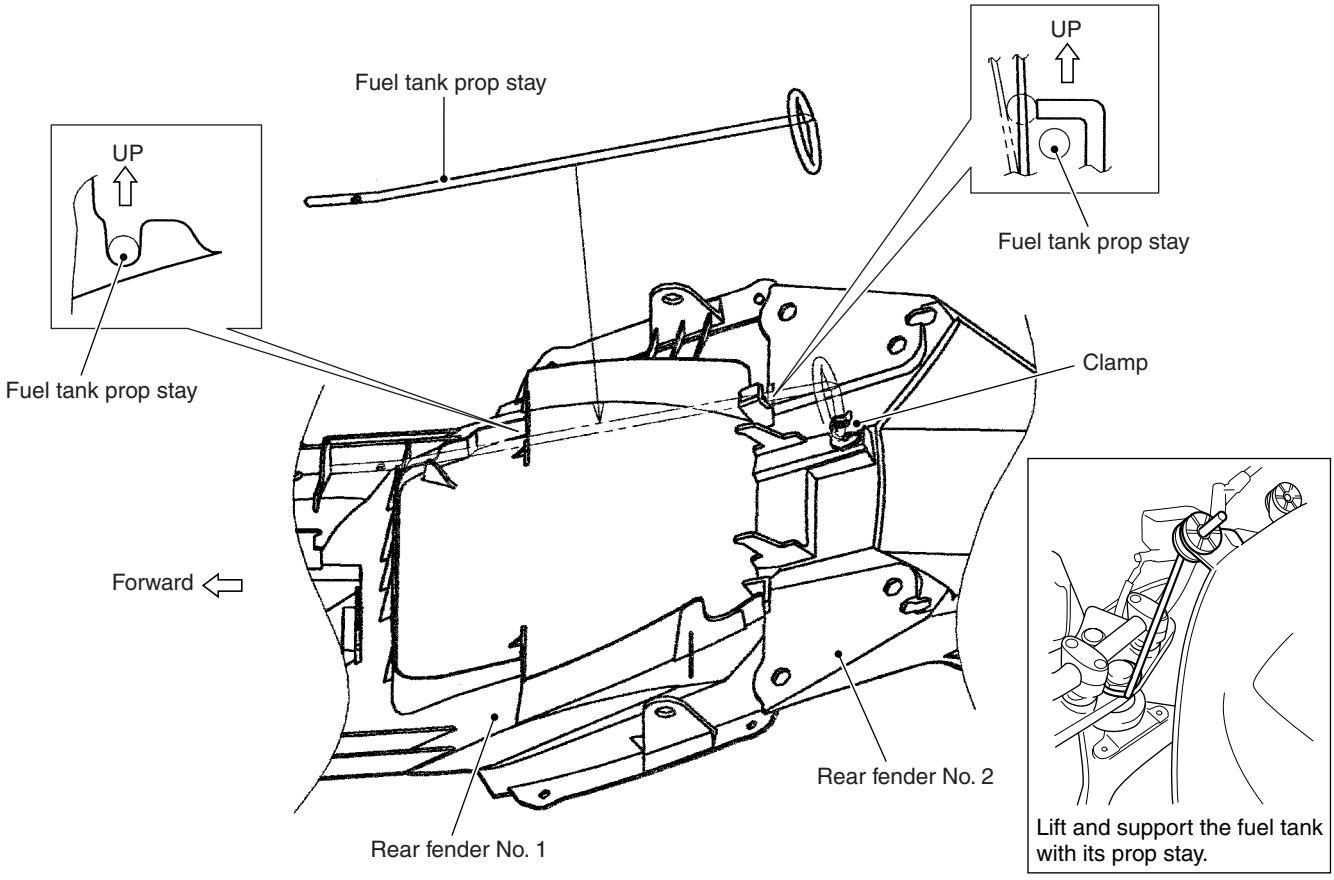
REAR BRAKE HOSE ROUTING



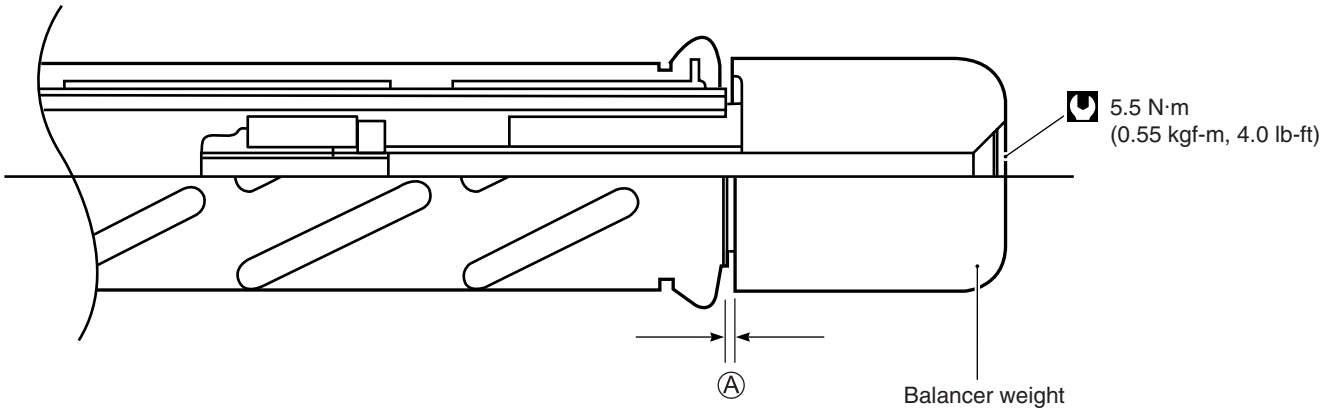
BRAKE PEDAL/FOOTREST SET-UP



PROP STAY SET-UP



HANDLE BALANCER INSTALLATION



LH clearance Ⓐ is 0 mm.
RH clearance Ⓐ is 0.5 – 1.5 mm.

NOTE:
After installing the RH balancer weight, check that throttle grip rotate smoothly by turning it.

TIGHTENING TORQUE
CHASSIS

ITEM		N·m	kgf-m	lb-ft
Steering stem head nut		90	9.0	65.0
Steering stem lock nut		80	8.0	58.0
Front fork upper clamp bolt		23	2.3	16.5
Front fork lower clamp bolt		23	2.3	16.5
Front fork cap bolt		23	2.3	16.5
Front fork inner rod lock nut		15	1.5	11.5
Front fork damper rod bolt		23	2.3	16.5
Front axle		100	10.0	72.5
Front axle pinch bolt		23	2.3	16.5
Handlebar clamp bolt		23	2.3	16.5
Handlebar holder set nut		45	4.5	32.5
Front brake master cylinder mounting bolt		10	1.0	7.0
Front brake caliper mounting bolt		26	2.6	19.0
Front brake caliper housing bolt		23	2.3	16.5
Front brake pad mounting pin		16	1.6	11.5
Brake hose union bolt		23	2.3	16.5
Clutch master cylinder mounting bolt		10	1.0	7.0
Clutch hose union bolt		23	2.3	16.5
Air bleeder valve (Clutch)		5.4	0.54	4.0
Air bleeder valve (Front)		7.5	0.75	5.5
Air bleeder valve (Rear)		6	0.6	4.4
Front brake disc bolt		23	2.3	16.5
Rear brake caliper mounting bolt		23	2.3	16.5
Rear brake caliper sliding pin		27	2.7	20.5
Rear brake master cylinder mounting bolt		10	1.0	7.0
Rear brake master cylinder rod lock nut		18	1.8	13.0
Rear brake pad mounting pin		18	1.8	13.0
Rear brake pad mounting pin plug		2.5	0.25	1.8
Front footrest bracket mounting bolt		23	2.3	16.5
Front footrest bolt		39	3.9	28.0
Swingarm pivot shaft		15	1.5	11.0
Swingarm pivot nut		100	10.0	70.0
Swingarm pivot shaft lock nut		90	9.0	65.0
Rear shock absorber mounting nut (Upper and lower)		50	5.0	36.0
Cushion lever mounting nut (Front)		78	7.8	56.5
Cushion rod mounting nut (Upper and lower)		78	7.8	56.5
Rear brake disc bolt		35	3.5	25.5
Rear axle nut	(For E-03, 28, 33)	100	10.0	72.5
	(For the others)	120	12.0	87.0
Rear sprocket nut		60	6.0	43.5
Seat rail bolt		55	5.5	40.0

ITEM	N·m	kgf-m	lb-ft
Steering damper bolt	23	2.3	16.5
Steering damper nut	23	2.3	16.5
Steering stem nut	45	4.5	32.5

SERVICE DATA

VALVE + GUIDE

Unit: mm (in)

ITEM	STANDARD		LIMIT
Valve diam.	IN.	36 (1.42)	—
	EX.	33 (1.30)	—
Tappet clearance (when cold)	IN.	0.10 – 0.20 (0.004 – 0.008)	—
	EX.	0.20 – 0.30 (0.008 – 0.012)	—
Valve guide to valve stem clearance	IN.	0.010 – 0.046 (0.0004 – 0.0018)	—
	EX.	0.030 – 0.066 (0.0012 – 0.0026)	—
Valve guide I.D.	IN. & EX.	5.500 – 5.512 (0.2165 – 0.2170)	—
Valve stem O.D.	IN.	5.475 – 5.490 (0.2156 – 0.2161)	—
	EX.	5.455 – 5.470 (0.2148 – 0.2154)	—
Valve stem deflection	IN. & EX.	—	0.35 (0.014)
Valve stem runout	IN. & EX.	—	0.05 (0.002)
Valve head thickness	IN. & EX.	—	0.5 (0.02)
Valve seat width	IN. & EX.	0.9 – 1.1 (0.035 – 0.043)	—
Valve head radial runout	IN. & EX.	—	0.03 (0.001)
Valve spring free length	IN. & EX.	—	41.2 (1.62)
Valve spring tension	IN. & EX.	197 – 227 N (20.1 – 23.1 kgf, 44.3 – 51.0 lbs) at length 35.6 mm (1.40 in)	—

CAMSHAFT + CYLINDER HEAD

Unit: mm (in)

ITEM	STANDARD		LIMIT
Cam height	IN.	37.78 – 37.82 (1.487 – 1.489)	37.48 (1.476)
	EX.	36.38 – 36.42 (1.432 – 1.434)	36.08 (1.420)
Camshaft journal oil clearance	IN. & EX.	0.019 – 0.053 (0.0007 – 0.0021)	0.150 (0.0059)
Camshaft journal holder I.D.	IN. & EX.	22.012 – 22.025 (0.8666 – 0.8671)	—
Camshaft journal O.D.	IN. & EX.	21.972 – 21.993 (0.8650 – 0.8659)	—
Camshaft runout	IN. & EX.	—	0.10 (0.004)

ITEM	STANDARD	LIMIT
Cam drive idle gear/sprocket thrust clearance	0.15 – 0.29 (0.006 – 0.011)	—
Cylinder head distortion	—	0.05 (0.002)

CYLINDER + PISTON + PISTON RING

Unit: mm (in)

ITEM	STANDARD		LIMIT
Compression pressure (Automatic de-comp. actuated)	1 000 – 1 400 kPa (10 – 14 kgf/cm², 142 – 199 psi)		800 kPa (8 kgf/cm², 114 psi)
Compression pressure difference	—		200 kPa (2 kgf/cm², 28 psi)
Piston to cylinder clearance	0.015 – 0.025 (0.0006 – 0.0010)		0.12 (0.0047)
Cylinder bore	98.000 – 98.015 (3.8583 – 3.8589)		Nicks or Scratches
Piston diam.	97.980 – 97.995 (3.8575 – 3.8581) Measure at 10 mm (0.4 in) from the skirt end.		97.880 (3.8535)
Cylinder distortion	—		0.05 (0.002)
Piston ring free end gap	1st	Approx. 8.8 (0.35)	7.0 (0.28)
	2nd	Approx. 10.1 (0.40)	8.1 (0.32)
Piston ring end gap	1st	0.15 – 0.35 (0.006 – 0.014)	0.7 (0.03)
	2nd	0.30 – 0.45 (0.012 – 0.018)	0.7 (0.03)
Piston ring to groove clearance	1st	—	0.18 (0.0071)
	2nd	—	0.15 (0.0059)
Piston ring groove width	1st	0.93 – 0.95 (0.0366 – 0.0374)	—
		1.55 – 1.57 (0.0610 – 0.0618)	—
	2nd	1.01 – 1.03 (0.0398 – 0.0406)	—
	Oil	2.51 – 2.53 (0.0988 – 0.0996)	—
Piston ring thickness	1st	0.86 – 0.91 (0.034 – 0.036)	—
		1.38 – 1.40 (0.054 – 0.055)	—
	2nd	0.97 – 0.99 (0.038 – 0.039)	—
Piston pin bore I.D.	22.002 – 22.008 (0.8662 – 0.8665)		22.030 (0.8673)
Piston pin O.D.	21.993 – 22.000 (0.8658 – 0.8661)		21.980 (0.8654)

CONROD + CRANKSHAFT

Unit: mm (in)

ITEM	STANDARD	LIMIT
Conrod small end I.D.	22.010 – 22.018 (0.8665 – 0.8668)	22.040 (0.8677)
Conrod big end side clearance	0.17 – 0.32 (0.007 – 0.013)	0.50 (0.020)
Conrod big end width	21.95 – 22.00 (0.864 – 0.866)	—
Crank pin width	44.17 – 44.22 (1.739 – 1.741)	—
Conrod big end oil clearance	0.040 – 0.064 (0.0016 – 0.0025)	0.080 (0.0031)
Crank pin O.D.	44.976 – 45.000 (1.7707 – 1.7717)	—
Crankshaft journal oil clearance	0.002 – 0.029 (0.0008 – 0.0011)	0.080 (0.0031)
Crankshaft journal O.D.	47.985 – 48.000 (1.8892 – 1.8898)	—
Crankshaft runout	—	0.05 (0.002)

OIL PUMP

ITEM	STANDARD	LIMIT
Oil pressure (at 60 °C, 140 °F)	Above 350 kPa (3.5 kgf/cm^2, 50 psi) Below 650 kPa (6.5 kgf/cm^2, 92 psi) at 3 000 r/min	—

CLUTCH

Unit: mm (in)

ITEM	STANDARD		LIMIT
Drive plate thickness	No. 1	2.92 – 3.08 (0.115 – 0.121)	2.62 (0.103)
	No. 2 and 3	3.72 – 3.88 (0.146 – 0.153)	3.42 (0.135)
Drive plate claw width	No. 1	13.85 – 13.96 (0.545 – 0.550)	13.05 (0.514)
	No. 2 and 3	13.90 – 14.00 (0.547 – 0.551)	13.10 (0.516)
Driven plate distortion	—		0.10 (0.004)
Clutch spring free length	28.1 (1.11)		26.7 (1.05)
Clutch master cylinder bore	14.000 – 14.043 (0.5512 – 0.5528)		—
Clutch master cylinder piston diam.	13.957 – 13.984 (0.5495 – 0.5505)		—
Clutch release cylinder bore	35.700 – 35.762 (1.4055 – 1.4079)		—
Clutch release cylinder piston diam.	35.650 – 35.675 (1.4035 – 1.4045)		—
Clutch fluid type	DOT 4		

THERMOSTAT + RADIATOR + FAN + COOLANT

ITEM	STANDARD		LIMIT
Thermostat valve opening temperature	86.5 – 89.5 °C (188 – 193 °F)		—
Thermostat valve lift	Over 8.0 mm (0.31 in) at 100 °C (212 °F)		—
Radiator cap valve opening pressure	110 kPa (1.1 kgf/cm^2, 15.6 psi)		—
Cooling fan thermo-switch operating temperature	OFF →ON	Approx. 105 °C (221 °F)	—
	ON →OFF	Approx. 100 °C (212 °F)	—
Engine coolant temperature sensor resistance	20 °C (68 °F)	Approx. 2.45 kΩ	—
	40 °C (104 °F)	Approx. 1.15 kΩ	—
	60 °C (140 °F)	Approx. 0.58 kΩ	—
	80 °C (176 °F)	Approx. 0.32 kΩ	—
Engine coolant type	Use an anti-freeze/coolant compatible with aluminum radiator, mixed with distilled water only, at the ratio of 50:50.		
Engine coolant	Reservoir tank side	Approx. 250 ml (0.3/0.2 US/Imp qt)	
	Engine side	Approx. 1 950 ml (2.1/1.7 US/Imp qt)	

DRIVE TRAIN

Unit: mm (in) Expect ratio

ITEM		STANDARD		LIMIT
Primary reduction ratio		1.838 (57/31)		—
Final reduction ratio		2.352 (40/17)		—
Gear ratio	Low	2.666 (32/12)		—
	2nd	1.933 (29/15)		—
	3rd	1.500 (27/18)		—
	4th	1.227 (27/22)		—
	5th	1.086 (25/23)		—
	Top	1.000 (24/24)		—
Shift fork to groove clearance		0.1 – 0.3 (0.004 – 0.012)		0.50 (0.020)
Shift fork groove width		5.0 – 5.1 (0.197 – 0.201)		—
Shift fork thickness		4.8 – 4.9 (0.189 – 0.193)		—
Drive chain		Type	RK50SMOZ1	—
		Links	* 110 links, ENDLESS	—
		20-link length	—	319.4 (12.6)
Drive chain slack		20 – 30 (0.8 – 1.2)		—
Gearshift lever height		* 55 – 65 (2.17 – 2.56)		—

INJECTOR + FUEL PUMP + FUEL PRESSURE REGURATOR

ITEM	SPECIFICATION	NOTE
Injector resistance	11 – 13 Ω at 20 °C (68 °F)	
Fuel pump discharge amount	168 ml and more (5.7/5.9 US/Imp oz) for 10 seconds at 300 kPa (3.0 kgf/cm^2, 43 psi)	
Fuel pressure regulator operating set pressure	Approx. 300 kPa (3.0 kgf/cm^2, 43 psi)	

FI-SENSORS

ITEM	SPECIFICATION		NOTE
CMP sensor peak voltage	3.7 V and more		
CKP sensor resistance	130 – 240 Ω		
CKP sensor peak voltage	5.0 V and more (When cranking)		
IAP sensor input voltage	4.5 – 5.5 V		
IAP sensor output voltage	Approx. 2.5 V at idle speed		
TP sensor input voltage	4.5 – 5.5 V		
TP sensor resistance	Closed	Approx. 1.12 kΩ	
	Opened	Approx. 4.26 kΩ	
TP sensor output voltage	Closed	Approx. 1.12 V	
	Opened	Approx. 4.26 V	
ECT sensor input voltage	4.5 – 5.5 V		
ECT sensor resistance	Approx. 2.45 kΩ at 20 °C (68 °F)		
IAT sensor input voltage	4.5 – 5.5 V		
IAT sensor resistance	Approx 2.45 kΩ at 20 °C (68 °F)		
AP sensor input voltage	4.5 – 5.5 V		
AP sensor output voltage	Approx. 4.0 V at 100 kPa (760 mmHg)		
TO sensor resistance	19.1 – 19.7 kΩ		
TO sensor voltage	1.4 V and less		
GP switch voltage	0.6 V and more (From 1st to top)		
Injector voltage	Battery voltage		
Ignition coil primary peak voltage	200 V and more (When cranking)		
STP sensor input voltage	4.5 – 5.5 V		
STP sensor resistance	Closed	Approx. 0.58 kΩ	
	Opened	Approx. 4.38 kΩ	
STP sensor output voltage	Closed	Approx. 0.58 V at input voltage is 5.0 V	
	Opened	Approx. 4.38 V at input voltage is 5.0 V	
STV actuator resistance	7 – 14 Ω		
Heated oxygen sensor output voltage	0.4 V and less at idle speed		E-02, 19
	0.6 V and more at 3 000 r/min		E-02, 19
Heated oxygen sensor resistance	4 – 5 Ω at 23 °C (73.4 °F)		E-02, 19
PAIR solenoid valve resistance	20 – 24 Ω at 20 °C (68 °F)		

THROTTLE BODY

ITEM	SPECIFICATION
ID No.	* 16G1 (For E-33), 16G2 (Others)
Bore size	52 mm
Fast idle r/min	1 900 – 2 500 r/min at 25 °C (77 °F)
Idle r/min	1 200 ± 100 r/min/Warmed engine
Throttle cable play	2.0 – 4.0 mm (0.08 – 0.16 in)

ELECTRICAL

Unit: mm (in)

ITEM			SPECIFICATION		NOTE
Firing order			1·2		
Spark plug			Type	NGK: CR8EK DENSO: U24ETR	
			Gap	0.6 – 0.7 (0.024 – 0.028)	
Spark performance			Over 8 (0.3) at 1 atm.		
Crankshaft position sensor resistance			130 – 240 Ω		Bl – G
Ignition coil resistance			Primary	2.8 – 4.2 Ω	⊕ tap – ⊖ tap
			Secondary	24 – 36 kΩ	⊕ tap – Plug cap
Crankshaft position sensor peak voltage			5.0 V and more		When cranking
Ignition coil primary peak voltage			200 V and more		When cranking
Generator coil resistance			0.2 – 0.7 Ω		Y – Y
Generator Max. output			Approx. 400 W at 5 000 r/min		
Generator no-load voltage (When the engine is cold)			75 V and more (AC) at 5 000 r/min		
Regulated voltage			14.0 – 15.5 V at 5 000 r/min		
Starter relay resistance			3 – 6 Ω		
Battery	Type designation		FTX14-BS		
	Capacity		12 V 43.2 kC (12 Ah)/10 HR		
Fuse size	Headlight	HI	10 A		
		LO	10 A		
	Fuel		10 A		
	Ignition		15 A		
	Turn signal		10 A		
	Fan motor		15 A		
	Main		30 A		

WATTAGE

Unit: W

ITEM		SPECIFICATION
Headlight	HI	60
	LO	55
Position light (For E-02, 19)		5
Brake light/Taillight		LED
Turn signal light		21 × 4
Speedometer/Tachometer light		LED
Turn signal indicator light		LED
High beam indicator light		LED
Neutral indicator light		LED
Fuel indicator light		LED
Coolant temperature/oil pressure/FI indicator light		LED
License light		5

BRAKE + WHEEL

Unit: mm (in)

ITEM		STANDARD		LIMIT
Rear brake pedal height			55 – 65 (2.17 – 2.56)	—
Brake disc thickness		Front	5.0 ± 0.2 (0.197 ± 0.008)	4.5 (0.18)
		Rear	5.0 ± 0.2 (0.197 ± 0.008)	4.5 (0.18)
Brake disc runout (Front & Rear)			—	0.30 (0.012)
Master cylinder bore		Front	15.870 – 15.913 (0.6248 – 0.6265)	—
		Rear	14.000 – 14.043 (0.5512 – 0.5529)	—
Master cylinder piston diam.		Front	15.827 – 15.854 (0.6231 – 0.6242)	—
		Rear	13.957 – 13.984 (0.5495 – 0.5506)	—
Brake caliper cylinder bore	Leading	Front	30.230 – 30.280 (1.1902 – 1.1921)	—
	Trailing		33.960 – 34.010 (1.3370 – 1.3389)	—
		Rear	38.180 – 38.230 (1.5031 – 1.5051)	—
Brake caliper piston diam.	Leading	Front	30.167 – 30.200 (1.1876 – 1.1890)	—
	Trailing		33.901 – 33.934 (1.3346 – 1.3360)	—
		Rear	38.115 – 38.148 (1.5005 – 1.5019)	—
Brake fluid type			DOT 4	—

ITEM	STANDARD		LIMIT
Wheel rim runout (Front & Rear)	Axial	—	2.0 (0.08)
	Radial	—	2.0 (0.08)
Wheel axle runout	Front	—	0.25 (0.010)
	Rear	—	0.25 (0.010)
Wheel rim size	Front	17M/C × MT 3.50	—
	Rear	17M/C × MT 5.50	—
Tire size	Front	120/70 ZR17M/C (58W), tubeless	—
	Rear	180/55 ZR17M/C (73W), tubeless	—
Tire type	Front	MICHELIN: PILOT ROAD B	—
	Rear	MICHELIN: PILOT ROAD B	—
Tire tread depth	Front	—	1.6 (0.06)
	Rear	—	2.0 (0.08)

SUSPENSION

Unit: mm (in)

ITEM	STANDARD		LIMIT
Front fork stroke	120 (4.7)		—
Front fork spring free length	* 305 (12.0)		* 298.9 (11.8)
Front fork oil level (without spring, inner tube fully compressed)	* 147 (5.8)		—
Front fork spring adjuster	* 7th groove from top		
Front fork damping force adjuster	Rebound	* 1 and 1/4 turns out from stiffest position	
	Compression	1 turn out from stiffest position	
Rear shock absorber spring pre-set length	* 202 (8.0)		—
Rear shock absorber damping force adjuster	Rebound	3/4 turn out from stiffest position	—
	Compression	* 1 and 3/4 turns out from stiffest position	
Rear wheel travel	* 130 (5.1)		—
Swingarm pivot shaft runout	—		0.3 (0.01)

TIRE PRESSURE

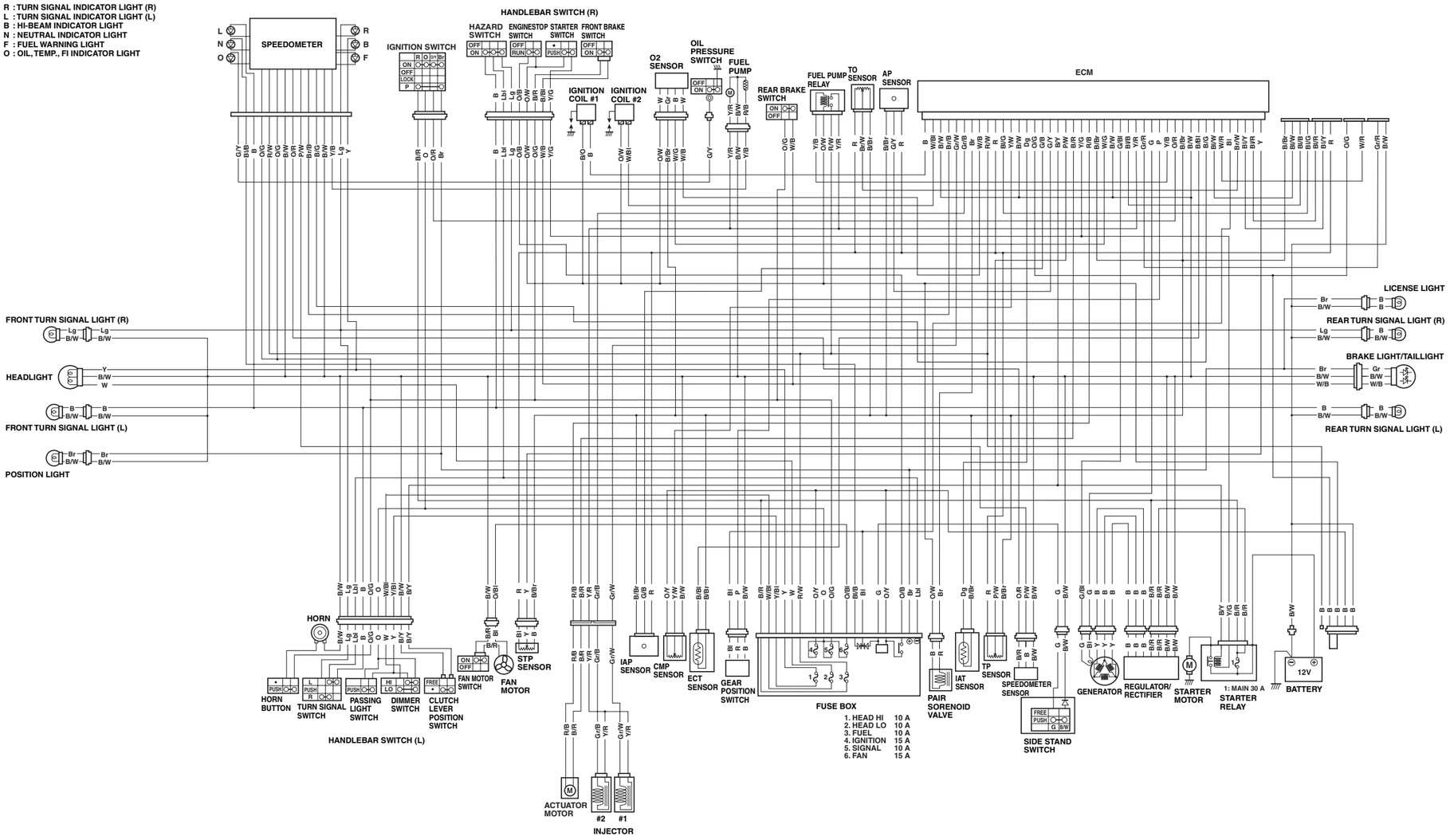
COLD INFLATION TIRE PRESSURE	SOLO RIDING			DUAL RIDING		
	kPa	kgf/cm²	psi	kPa	kgf/cm²	psi
FRONT	250	2.50	36	250	2.50	36
REAR	250	2.50	36	290	2.90	42

FUEL + OIL

ITEM	SPECIFICATION		NOTE
Fuel type	Use only unleaded gasoline of at least 87 pump octane (R/2 + M/2) or 91 octane or higher rated by the research method. Gasoline containing MTBE (Methyl Tertiary Butyl Ether), less than 10 % ethanol, or less than 5 % methanol with appropriate cosolvents and corrosion inhibitor is permissible.		E-03, 28, 33
	Gasoline used should be graded 91 octane or higher. An unleaded gasoline is recommended.		The others
Fuel tank	16 L (4.2/3.5 US/Imp gal)		E-33
	17 L (4.5/3.7 US/Imp gal)		The others
Engine oil type	SAE 10W-40, API SF or SG		
Engine oil capacity	Change	2 700 ml (2.9/2.4 US/Imp qt)	
	Filter change	2 900 ml (3.1/2.6 US/Imp qt)	
	Overhaul	3 300 ml (3.5/2.9 US/Imp qt)	
Front fork oil type	SUZUKI FORK OIL L01 or an equivalent fork oil		
Front fork oil capacity (each leg)	* 508 ml (17.2/17.9 US/Imp oz)		

WIRING DIAGRAM

E-02, 19



WIRE COLORS

B : Black	B/Bl : Black with Blue tracer	Br/W : Brown with White tracer	O/Y : Orange with Yellow tracer
Bl : Blue	B/Br : Black with Brown tracer	Br/Y : Brown with Yellow tracer	P/W : Pink with White tracer
Br : Brown	B/G : Black with Green tracer	G/B : Green with Black tracer	R/B : Red with Black tracer
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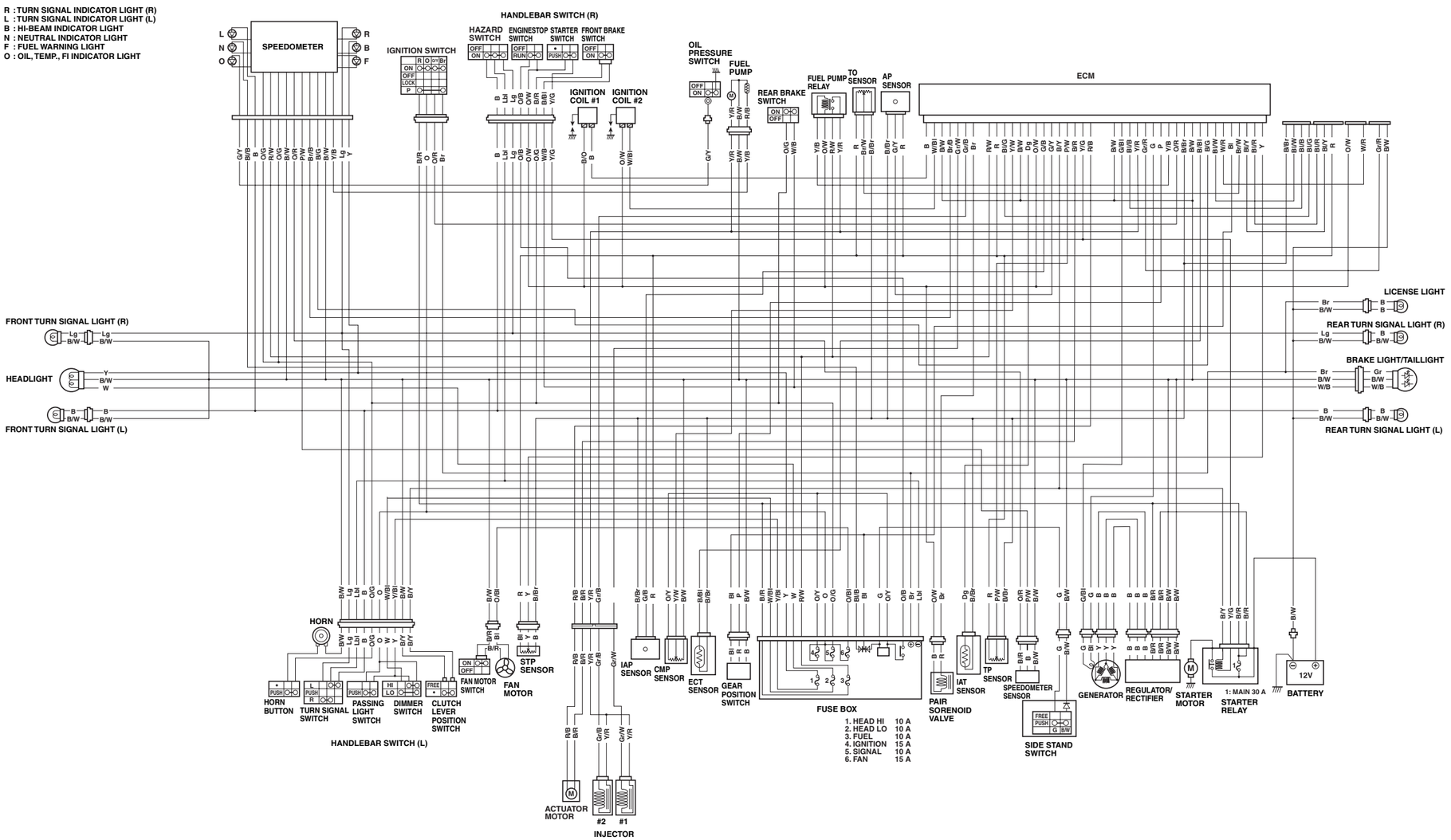
R : Red	Bl/W : Blue with White tracer	O/G : Orange with Green tracer	Y/G : Yellow with Green tracer
W : White	Bl/Y : Blue with Yellow tracer	O/R : Orange with Red tracer	Y/R : Yellow with Red tracer
Y : Yellow	Br/B : Brown with Black tracer	O/W : Orange with White tracer	Y/W : Yellow with White tracer

E-03, 24, 28, 33

R : TURN SIGNAL INDICATOR LIGHT (R)
L : TURN SIGNAL INDICATOR LIGHT (L)
B : HI-BEAM INDICATOR LIGHT
N : NEUTRAL INDICATOR LIGHT
F : FUEL WARNING LIGHT
O : OIL, TEMP., FI INDICATOR LIGHT



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