

A Few Words About Safety .....	25-2	TRANSMISSION .....	25-35
INTRODUCTION.....	25-3	BALANCER.....	25-38
MODEL IDENTIFICATION .....	25-4	CRANKSHAFT .....	25-40
SPECIFICATIONS .....	25-6	REAR WHEEL.....	25-40
TORQUE VALUES .....	25-13	SWINGARM .....	25-41
CABLE & HARNESS ROUTING .....	25-15	BRAKE FLUID REPLACEMENT/ AIR BLEEDING .....	25-44
TECHNICAL FEATURES .....	25-26	FRONT BRAKE CALIPER .....	25-46
BODY PANEL LOCATIONS .....	25-27	ABS SYSTEM LOCATION.....	25-48
FRONT SIDE COWL .....	25-28	ABS SYSTEM DIAGRAM .....	25-49
METER COVER ASSEMBLY.....	25-28	ABS TROUBLESHOOTING INFORMATION .....	25-50
REAR COWL .....	25-29	ABS INDICATOR PROBLEM CODE INDEX .....	25-52
SIDE COVER .....	25-30	ABS INDICATOR CIRCUIT TROUBLESHOOTING .....	25-53
SIDE PANEL.....	25-30	ABS TROUBLESHOOTING.....	25-56
LUGGAGE BOX .....	25-31	ABS MODULATOR .....	25-63
SIDE DUCT COVER .....	25-31	NC750D (Except TH type).....	25-65
MAINTENANCE SCHEDULE .....	25-33	NC750D (TH type) .....	25-66
DRIVE CHAIN.....	25-35		

## A Few Words About Safety

### Service Information

The service and repair information contained in this manual is intended for use by qualified, professional technicians. Attempting service or repairs without the proper training, tools, and equipment could cause injury to you or others. It could also damage the vehicle or create an unsafe condition.

This manual describes the proper methods and procedures for performing service, maintenance and repairs. Some procedures require the use of specially designed tools and dedicated equipment. Any person who intends to use a replacement part, service procedure or a tool that is not recommended by Honda, must determine the risks to their personal safety and the safe operation of the vehicle.

If you need to replace a part, use genuine Honda parts with the correct part number or an equivalent part. We strongly recommend that you do not use replacement parts of inferior quality.

### For Your Customer's Safety

Proper service and maintenance are essential to the customer's safety and the reliability of the vehicle. Any error or oversight while servicing a vehicle can result in faulty operation, damage to the vehicle, or injury to others.

#### WARNING

Improper service or repairs can create an unsafe condition that can cause your customer or others to be seriously hurt or killed.

Follow the procedures and precautions in this manual and other service materials carefully.

### For Your Safety

Because this manual is intended for the professional service technician, we do not provide warnings about many basic shop safety practices (e.g., Hot parts—wear gloves). If you have not received shop safety training or do not feel confident about your knowledge of safe servicing practice, we recommend that you do not attempt to perform the procedures described in this manual.

Some of the most important general service safety precautions are given below. However, we cannot warn you of every conceivable hazard that can arise in performing service and repair procedures. Only you can decide whether or not you should perform a given task.

#### WARNING

Failure to properly follow instructions and precautions can cause you to be seriously hurt or killed.

Follow the procedures and precautions in this manual carefully.

### Important Safety Precautions

Make sure you have a clear understanding of all basic shop safety practices and that you are wearing appropriate clothing and using safety equipment. When performing any service task, be especially careful of the following:

- Read all of the instructions before you begin, and make sure you have the tools, the replacement or repair parts, and the skills required to perform the tasks safely and completely.
- Protect your eyes by using proper safety glasses, goggles or face shields any time you hammer, drill, grind, pry or work around pressurized air or liquids, and springs or other stored-energy components. If there is any doubt, put on eye protection.
- Use other protective wear when necessary, for example gloves or safety shoes. Handling hot or sharp parts can cause severe burns or cuts. Before you grab something that looks like it can hurt you, stop and put on gloves.
- Protect yourself and others whenever you have the vehicle up in the air. Any time you lift the vehicle, either with a hoist or a jack, make sure that it is always securely supported. Use jack stands.

Make sure the engine is off before you begin any servicing procedures, unless the instruction tells you to do otherwise. This will help eliminate several potential hazards:

- Carbon monoxide poisoning from engine exhaust. Be sure there is adequate ventilation whenever you run the engine
- Burns from hot parts or coolant. Let the engine and exhaust system cool before working in those areas.
- Injury from moving parts. If the instruction tells you to run the engine, be sure your hands, fingers and clothing are out of the way.

Gasoline vapors and hydrogen gases from batteries are explosive. To reduce the possibility of a fire or explosion, be careful when working around gasoline or batteries.

- Use only a nonflammable solvent, not gasoline, to clean parts.
- Never drain or store gasoline in an open container.
- Keep all cigarettes, sparks and flames away from the battery and all fuel-related parts.

## INTRODUCTION


This addendum contains information for the NC750D-E.

Refer to NC700D-C SHOP MANUAL (No. 62MGS50) for service procedures and data not included in this addendum.

Your safety, and the safety of others, is very important. To help you make informed decisions we have provided safety messages and other information throughout this manual. Of course, it is not practical or possible to warn you about all the hazards associated with servicing this vehicle.

You must use your own good judgement.

You will find important safety information in a variety of forms including:

- Safety Labels – on the vehicle
- Safety Messages – preceded by a safety alert symbol  and one of three signal words, DANGER, WARNING, or CAUTION. These signal words mean:

** DANGER** You WILL be KILLED or SERIOUSLY HURT if you don't follow instructions.

** WARNING** You CAN be KILLED or SERIOUSLY HURT if you don't follow instructions.

** CAUTION** You CAN be HURT if you don't follow instructions.

- Instructions – how to service this vehicle correctly and safely.

As you read this manual, you will find information that is preceded by a **NOTICE** symbol. The purpose of this message is to help prevent damage to your vehicle, other property, or the environment.

ALL INFORMATION, ILLUSTRATIONS, DIRECTIONS AND SPECIFICATIONS INCLUDED IN THIS PUBLICATION ARE BASED ON THE LATEST PRODUCT INFORMATION AVAILABLE AT THE TIME OF APPROVAL FOR PRINTING. Honda Motor Co., Ltd. RESERVES THE RIGHT TO MAKE CHANGES AT ANY TIME WITHOUT NOTICE AND WITHOUT INCURRING ANY OBLIGATION WHATSOEVER. NO PART OF THIS PUBLICATION MAY BE REPRODUCED WITHOUT WRITTEN PERMISSION. THIS MANUAL IS WRITTEN FOR PERSONS WHO HAVE ACQUIRED BASIC KNOWLEDGE OF MAINTENANCE ON Honda MOTORCYCLES, MOTOR SCOOTERS OR ATVS.

© Honda Motor Co., Ltd.  
SERVICE PUBLICATION OFFICE

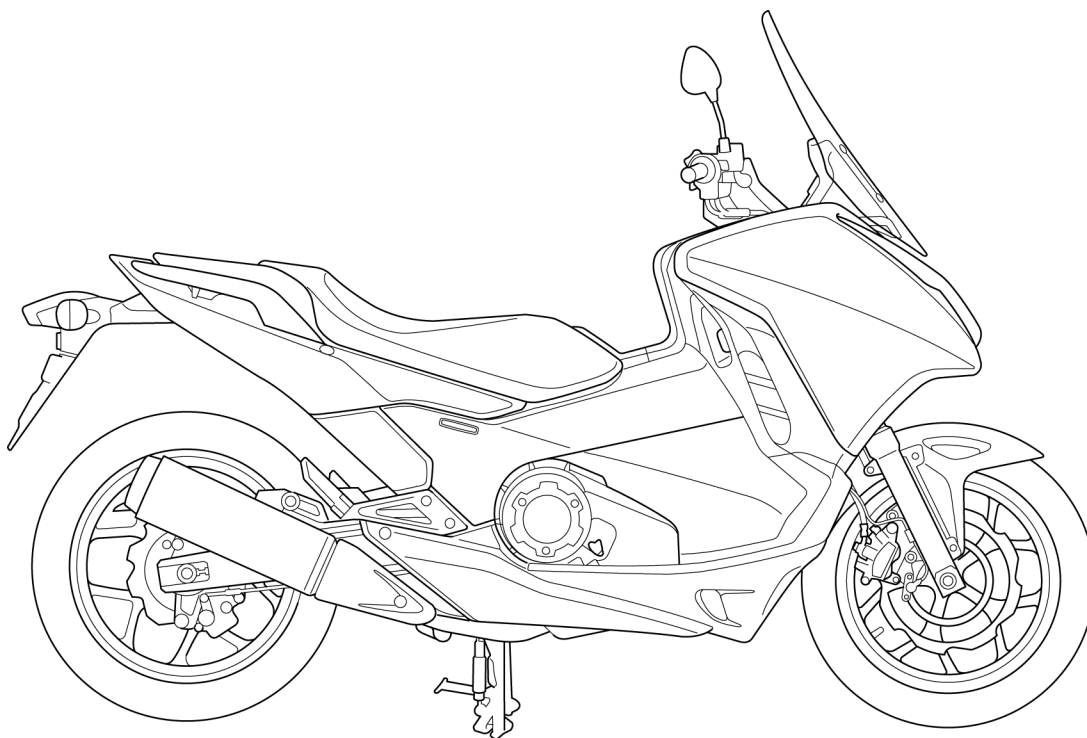
Date of Issue: November, 2013

## MODEL IDENTIFICATION

### DESTINATION CODE

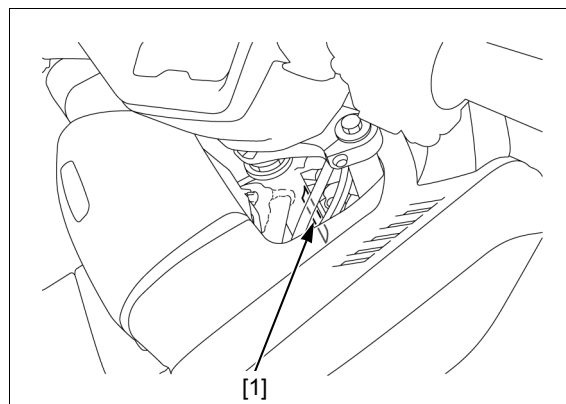
Throughout this manual, the following codes are used to identify individual types for each region.

DESTINATION CODE	REGION
E	U.K.
III E	U.K. type III
ED	European direct sales
II ED	European direct sales type II
F	France
II F	France type II
KO	South Korea
U	Australia, New Zealand
TH	Thailand
II TH	Thailand type II

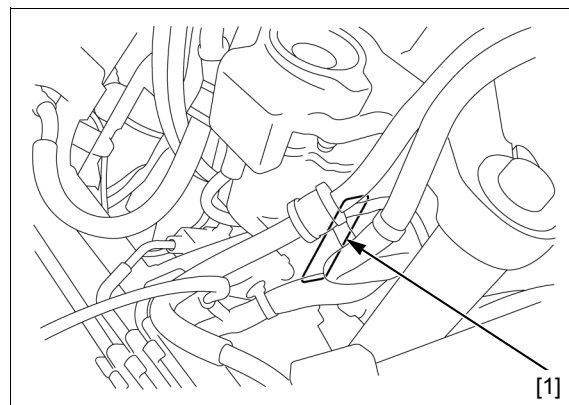


### SERIAL NUMBERS

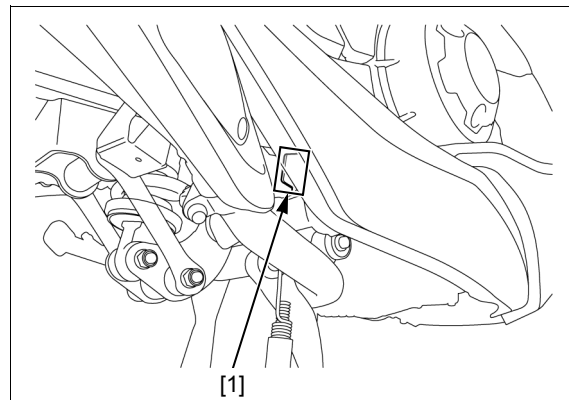
The Vehicle Identification Number (V.I.N) [1] is stamped on the right side of the steering head.



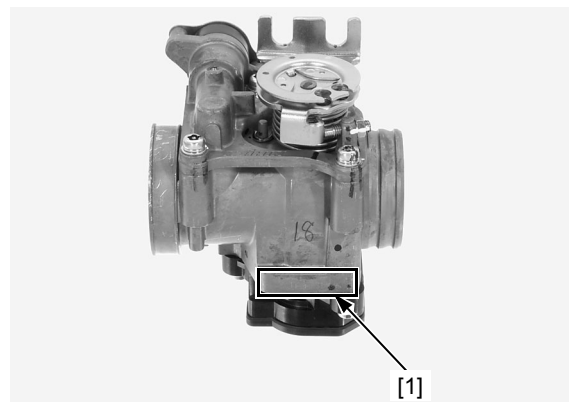
The registered number plate (E, F, ED, IIED, IIIE, IIF types) [1] and compliance plate (U type only) is attached on the left side of the steering head.



The engine serial number [1] is stamped on the lower right side of the cylinder block.

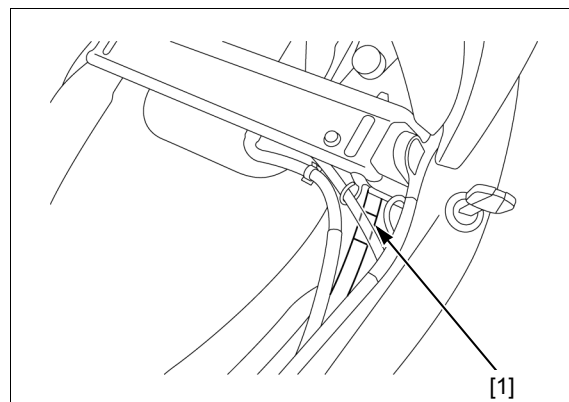


The throttle body identification number [1] is stamped on the lower left side of the throttle body as shown.



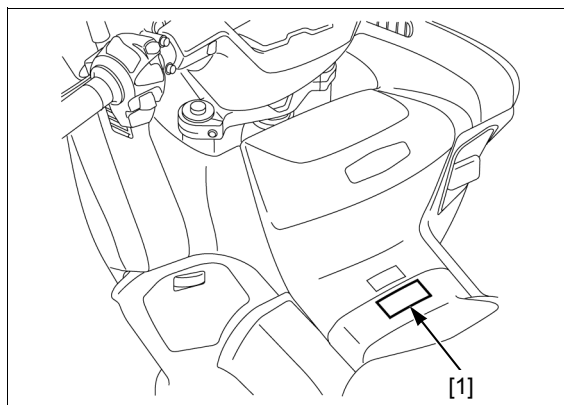
## LABELS

The color label [1] is attached on the left side of the frame. When ordering color-coded parts, always specify the designated color code.

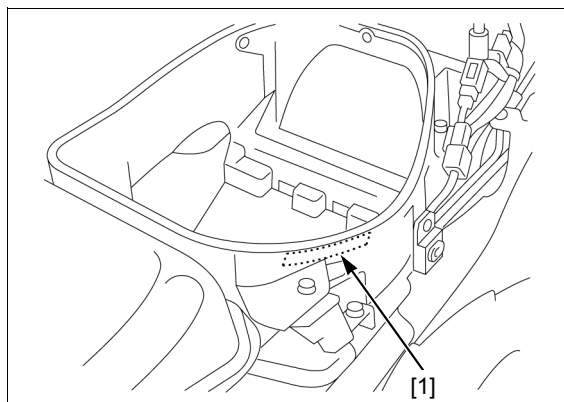


## NC750D-E ADDENDUM

The Safety Certification Label (KO type) [1] is located on the front seat cover.



The Emission Control Information Label (KO type) [1] is located on the right side of the luggage box.



## SPECIFICATIONS

### GENERAL SPECIFICATIONS

ITEM			SPECIFICATIONS
DIMENSIONS	Overall length		2,195 mm (86.4 in)
	Overall width	Except KO type	810 mm (31.9 in)
		KO type	790 mm (31.1 in)
	Overall height		1,440 mm (56.7 in)
	Wheelbase		1,525 mm (60.0 in)
	Seat height		790 mm (31.1 in)
	Footpeg height		334 mm (13.1 in)
	Ground clearance		135 mm (5.3 in)
	Curb weight	Except KO/TH types	237 kg (522 lbs)
		KO type	240 kg (529 lbs)
		TH type	238 kg (525 lbs)
FRAME	Maximum weight capacity	Except KO/TH types	195 kg (430 lbs)
		KO type	175 kg (386 lbs)
		TH type	155 kg (342 lbs)
	Frame type		Diamond
	Front suspension		Telescopic fork
	Front axle travel		107 mm (4.2 in)
	Rear suspension		Swingarm
	Rear axle travel		120 mm (4.7 in)
	Front tire size		120/70ZR17M/C (58W)
	Rear tire size		160/60ZR17M/C (69W)
	Front tire brand	BRIDGESTONE	BT023F G
		METZELER	ROADTEC Z8 INTERACT E
	Rear tire brand	BRIDGESTONE	BT023R G
		METZELER	ROADTEC Z8 INTERACT
	Front brake		Hydraulic single disc
	Rear brake		Hydraulic single disc
	Caster angle		27°
	Trail length		110 mm (4.3 in)
	Fuel tank capacity		14.1 liters (3.73 US gal, 3.10 Imp gal)

ITEM				SPECIFICATIONS
ENGINE	Cylinder arrangement			2 cylinders in-line, slant angle 55°
	Bore and stroke			77.0 x 80.0 mm (3.03 x 3.15 in)
	Displacement			745 cm <sup>3</sup> (45.4 cu-in)
	Compression ratio			10.7:1
	Valve train			Chain driven, OHC with rocker arm
	Intake valve	opens	at 1 mm (0.04 in) lift	No.1: -20° BTDC
				No.2: -25° BTDC
		closes	at 1 mm (0.04 in) lift	27° ABDC
		Exhaust valve	opens	at 1 mm (0.04 in) lift
	closes		at 1 mm (0.04 in) lift	No.1: -15° ATDC
				No.2: -20° ATDC
	Lubrication system			Forced pressure and wet sump
	Oil pump type			Trochoid
	Cooling system			Liquid cooled
	Air filtration			Paper element
Engine dry weight			69.2 kg (152.6 lbs)	
Firing order			1 - 2	
FUEL DELIVERY SYSTEM	Type			PGM-FI (Programmed Fuel Injection)
	Throttle bore			36 mm (1.4 in)
DRIVE TRAIN	Clutch system			2 Multi-plate wet clutches
	Clutch operation system			Automatic
	Transmission			Constant mesh, 6-speeds
	Primary reduction			1.921 (73/38)
	Final reduction			2.294 (39/17)
	Gear ratio	1st		2.666 (40/15)
		2nd		1.904 (40/21)
		3rd		1.454 (32/22)
		4th		1.200 (30/25)
		5th		1.033 (31/30)
		6th		0.864 (32/37)
Gearshift pattern			Automatic and electric shift (left hand operated) return system, N - 1 - 2 - 3 - 4 - 5 - 6	
ELECTRICAL	Ignition system			Full transistorized ignition
	Starting system			Electric starter motor
	Charging system			Triple phase output alternator
	Regulator/rectifier			FET shorted/triple phase full wave rectification
	Lighting system			Battery

## PGM-FI SPECIFICATIONS

ITEM	SPECIFICATIONS
ECT sensor resistance (at 40°C/104°F)	1.0 – 1.3 kΩ
IAT sensor resistance (at 20°C/68°F)	2.2 – 2.7 kΩ
Injector resistance (at 20°C/68°F)	11 – 13 Ω

## IGNITION SYSTEM SPECIFICATIONS

ITEM	SPECIFICATIONS
Spark plug (Iridium)	IFR6G-11K (NGK)
Spark plug gap	1.0 – 1.1 mm (0.039 – 0.043 in)
Ignition coil peak voltage	100 V minimum
CKP sensor peak voltage (at 20°C/68°F)	0.7 V minimum
Ignition timing ("F" mark)	12° BTDC at idle

## ELECTRIC STARTER SPECIFICATION

Unit: mm (in)

ITEM	STANDARD	SERVICE LIMIT
Starter motor brush length	12.0 – 13.0 (0.47 – 0.51)	6.5 (0.26)

## NC750D-E ADDENDUM

### FUEL SYSTEM SPECIFICATIONS

ITEM	SPECIFICATIONS
Throttle body identification number	GQ3UA
Idle speed	1,200 ± 100 min <sup>-1</sup> (rpm)
Throttle grip freeplay	2 – 6 mm (1/16 – 1/4 in)
Fuel pressure at idle	343 kPa (3.5 kgf/cm <sup>2</sup> , 50 psi)
Fuel pump flow (at 12 V)	230 cm <sup>3</sup> (7.8 US oz, 8.1 Imp oz) minimum/10 seconds

### COOLING SYSTEM SPECIFICATIONS

ITEM		SPECIFICATIONS
Coolant capacity	Radiator and engine	1.69 liters (1.79 US qt, 1.49 Imp qt)
	At draining	1.41 liters (1.49 US qt, 1.24 Imp qt)
	Reserve tank	0.13 liter (0.14 US qt, 0.11 Imp qt)
Radiator cap relief pressure		108 – 137 kPa (1.1 – 1.4 kgf/cm <sup>2</sup> , 16 – 20 psi)
Thermostat	Begin to open	80 – 84°C (176 – 183°F)
	Fully open	95°C (203°F)
	Valve lift	8 mm (0.3 in) minimum
Recommended antifreeze	Except TH type	High quality ethylene glycol antifreeze containing silicate-free corrosion inhibitors
	TH type	Honda PRE-MIX coolant
Standard coolant concentration (Except TH type)		1:1 (mixture with distilled water)

### LUBRICATION SYSTEM SPECIFICATIONS

Unit: mm (in)

ITEM			STANDARD	SERVICE LIMIT
Engine oil capacity		After draining	3.2 liters (3.4 US qt, 2.8 Imp qt)	—
		After draining/ filter change	3.4 liters (3.6 US qt, 3.0 Imp qt)	—
		After disassembly	4.1 liters (4.3 US qt, 3.6 Imp qt)	—
Recommended engine oil			Honda "4-stroke motorcycle oil" or an equivalent API classification: SG or higher (except oils labeled as energy conserving on the circular API service label) Viscosity: SAE 10W-30 JASO T 903 standard: MA	—
Oil pressure at engine oil filter			470 kPa (4.8 kgf/cm <sup>2</sup> , 68 psi) at 5,000 min <sup>-1</sup> (rpm)/(80°C/176°F)	—
Oil pump rotor	Engine oil pump side	Tip clearance	0.15 (0.006)	0.20 (0.008)
		Body clearance	0.15 – 0.21 (0.006 – 0.008)	0.35 (0.014)
		Side clearance	0.04 – 0.09 (0.002 – 0.004)	0.12 (0.005)
	Clutch oil pump side	Tip clearance	0.15 (0.006)	—
		Body clearance	0.15 – 0.21 (0.006 – 0.008)	—
		Side clearance	0.04 – 0.09 (0.002 – 0.004)	—



## CYLINDER HEAD/VALVES SPECIFICATIONS

Unit: mm (in)

ITEM			STANDARD	SERVICE LIMIT
Cylinder compression at 470 min <sup>-1</sup> (rpm)			1,775 kPa (18.1 kgf/cm <sup>2</sup> , 257 psi)	—
Valve clearance		IN	0.17 ± 0.02 (0.007 ± 0.001)	—
		EX	0.28 ± 0.02 (0.011 ± 0.001)	—
Rocker arm, rocker arm shaft	Rocker arm I.D.		20.012 – 20.030 (0.7879 – 0.7886)	20.041 (0.7890)
	Rocker arm shaft O.D.		19.972 – 19.993 (0.7863 – 0.7871)	19.961 (0.7859)
	Rocker arm-to-shaft clearance		0.019 – 0.058 (0.0007 – 0.0023)	0.08 (0.003)
Cam chain tensioner wedge B length			—	6 (0.2)
Camshaft	Cam lobe height	IN	34.7897 – 35.0297 (1.36967 – 1.37912)	34.7697 (1.36888)
		EX	34.9227 – 35.1627 (1.37491 – 1.38436)	34.9027 (1.37412)
	Runout		—	0.04 (0.002)
	Camshaft journal O.D.		41.935 – 41.950 (1.6510 – 1.6516)	41.927 (1.6507)
Valve, valve guide	Valve stem O.D.	IN	4.975 – 4.990 (0.1959 – 0.1965)	4.965 (0.1955)
		EX	4.965 – 4.980 (0.1955 – 0.1961)	4.955 (0.1951)
	Valve guide I.D.	IN/EX	5.000 – 5.012 (0.1969 – 0.1973)	5.04 (0.198)
	Stem-to-guide clearance	IN	0.010 – 0.037 (0.0004 – 0.0015)	0.075 (0.0030)
		EX	0.020 – 0.047 (0.0008 – 0.0019)	0.085 (0.0033)
	Valve guide projection above cylinder head	IN	17.7 – 18.0 (0.70 – 0.71)	—
		EX	19.6 – 19.9 (0.77 – 0.78)	—
	Valve seat width	IN	0.90 – 1.10 (0.035 – 0.043)	1.5 (0.06)
	EX	1.30 – 1.50 (0.051 – 0.059)	1.9 (0.07)	
Valve spring free length			49.07 (1.932)	48.1 (1.89)
Cylinder head warpage			—	0.10 (0.004)
Cylinder head camshaft journal I.D.			41.995 – 42.019 (1.6533 – 1.6543)	42.027 (1.6546)
Cylinder head-to-camshaft clearance			0.045 – 0.084 (0.0018 – 0.0033)	0.10 (0.004)

## DUAL CLUTCH TRANSMISSION SPECIFICATIONS

Unit: mm (in)

ITEM	STANDARD	SERVICE LIMIT
Clutch clearance	0.9 – 1.1 (0.035 – 0.043)	2.0 (0.08)
EOT sensor resistance (20°C/68°F)	2.5 – 2.8 kΩ	–

## ALTERNATOR/STARTER CLUTCH SPECIFICATIONS

Unit: mm (in)

ITEM	STANDARD	SERVICE LIMIT
Starter driven gear boss O.D.	57.749 – 57.768 (2.2736 – 2.2743)	57.73 (2.273)
Starter clutch outer I.D.	74.412 – 74.442 (2.9296 – 2.9308)	74.46 (2.931)

## NC750D-E ADDENDUM

### CRANKCASE/TRANSMISSION/BALANCER SPECIFICATIONS

Unit: mm (in)

ITEM			STANDARD	SERVICE LIMIT
Transmission	Gear I.D.	M5	33.000 – 33.025 (1.2992 – 1.3002)	33.04 (1.301)
		M6	43.000 – 43.025 (1.6929 – 1.6939)	43.04 (1.694)
		C1	31.010 – 31.035 (1.2209 – 1.2218)	31.06 (1.223)
		C2	25.000 – 25.021 (0.9843 – 0.9851)	25.03 (0.985)
		C3, C4	31.000 – 31.025 (1.2205 – 1.2215)	31.04 (1.222)
	Gear bushing O.D.	M5	32.955 – 32.980 (1.2974 – 1.2984)	32.93 (1.296)
		M6	42.950 – 42.975 (1.6909 – 1.6919)	42.93 (1.690)
		C1	30.970 – 30.995 (1.2193 – 1.2203)	30.94 (1.218)
		C2	24.959 – 24.980 (0.9826 – 0.9835)	24.94 (0.982)
		C3, C4	30.950 – 30.975 (1.2185 – 1.2195)	30.93 (1.218)
	Gear-to-bushing clearance	M5	0.020 – 0.070 (0.0008 – 0.0028)	0.10 (0.004)
		M6	0.025 – 0.075 (0.0010 – 0.0030)	0.11 (0.004)
		C1	0.015 – 0.065 (0.0006 – 0.0026)	0.10 (0.004)
		C2	0.020 – 0.062 (0.0008 – 0.0024)	0.09 (0.004)
		C3, C4	0.025 – 0.075 (0.0010 – 0.0030)	0.11 (0.004)
	Gear bushing I.D.	M5	29.985 – 30.006 (1.1805 – 1.1813)	30.03 (1.182)
		M6	40.007 – 40.028 (1.5751 – 1.5759)	40.038 (1.5763)
		C1	28.000 – 28.021 (1.1024 – 1.1032)	28.04 (1.104)
		C2	21.985 – 22.006 (0.8655 – 0.8664)	22.02 (0.867)
	Inner mainshaft O.D.	At M5	29.957 – 29.970 (1.1794 – 1.1799)	29.93 (1.178)
	Outer mainshaft O.D.	At M6	39.975 – 39.991 (1.5738 – 1.5744)	39.965 (1.5734)
	Countershaft O.D.	At C1	27.967 – 27.980 (1.1011 – 1.1016)	27.95 (1.100)
		At C2	21.952 – 21.965 (0.8643 – 0.8648)	21.94 (0.864)
	Bushing-to-shaft clearance	M5	0.015 – 0.049 (0.0006 – 0.0019)	0.09 (0.004)
		M6	0.016 – 0.053 (0.0006 – 0.0021)	0.10 (0.004)
		C1	0.020 – 0.054 (0.0008 – 0.0021)	0.08 (0.003)
		C2	0.020 – 0.054 (0.0008 – 0.0021)	0.08 (0.003)
Shift fork, fork shaft	Fork I.D.		12.000 – 12.018 (0.4724 – 0.4731)	12.03 (0.474)
	Claw thickness		5.93 – 6.00 (0.233 – 0.236)	5.9 (0.23)
	Shift fork shaft O.D.		11.957 – 11.968 (0.4707 – 0.4712)	11.95 (0.470)

### CRANKSHAFT/PISTON/CYLINDER SPECIFICATIONS

Unit: mm (in)

ITEM			STANDARD	SERVICE LIMIT
Crankshaft	Connecting rod side clearance		0.15 – 0.35 (0.006 – 0.016)	0.45 (0.018)
	Runout	Right side	–	0.03 (0.001)
		Left side	–	0.03 (0.001)
		Main journal bearing oil clearance		0.019 – 0.037 (0.0007 – 0.0015)
Cylinder	I.D.		77.000 – 77.015 (3.0315 – 3.0321)	77.07 (3.034)
	Out-of-round		–	0.10 (0.004)
	Taper		–	0.10 (0.004)
	Warpage		–	0.10 (0.004)
Piston, piston rings	Piston O.D. at 13 mm (0.5 in) from bottom		76.976 – 76.990 (3.0305 – 3.0311)	76.970 (3.0303)
	Piston pin bore I.D.		18.010 – 18.013 (0.7091 – 0.7092)	18.023 (0.7096)
	Piston pin O.D.		17.996 – 18.000 (0.7085 – 0.7087)	17.988 (0.7082)
	Piston-to-piston pin clearance		0.010 – 0.017 (0.0004 – 0.0007)	0.035 (0.0014)
	Piston ring end gap	Top	0.15 – 0.30 (0.006 – 0.012)	0.6 (0.02)
		Second	0.30 – 0.42 (0.012 – 0.017)	0.6 (0.02)
		Oil (side rail)	0.20 – 0.70 (0.008 – 0.028)	0.8 (0.03)
	Piston ring-to-ring groove clearance	Top	0.035 – 0.080 (0.0014 – 0.0032)	0.15 (0.006)
		Second	0.030 – 0.055 (0.0012 – 0.0022)	0.13 (0.005)
Cylinder-to-piston clearance			0.010 – 0.039 (0.0004 – 0.0015)	0.05 (0.002)
Crankpin bearing oil clearance			0.026 – 0.044 (0.0010 – 0.0017)	0.05 (0.002)

## FRONT WHEEL/SUSPENSION/STEERING SPECIFICATIONS

Unit: mm (in)

ITEM			STANDARD	SERVICE LIMIT
Minimum tire tread depth			—	1.5 (0.06)
Cold tire pressure	Driver only		250 kPa (2.50 kgf/cm <sup>2</sup> , 36 psi)	—
	Driver and passenger		250 kPa (2.50 kgf/cm <sup>2</sup> , 36 psi)	—
Axle runout			—	0.2 (0.01)
Wheel rim runout		Radial	—	2.0 (0.08)
		Axial	—	2.0 (0.08)
Wheel balance weight			—	60 g (2.1 oz) max.
Fork	Spring free length		310.0 (12.20)	303.8 (11.96)
	Tube runout		—	0.20 (0.008)
	Recommended fork fluid		Honda ULTRA CUSHION OIL 10W or equivalent	—
	Fluid level		100 (3.9)	—
	Fluid capacity		521 ± 2.5 cm <sup>3</sup> (17.6 ± 0.08 US oz, 18.3 ± 0.09 Imp oz)	—

## REAR WHEEL/SUSPENSION SPECIFICATIONS

Unit: mm (in)

ITEM			STANDARD	SERVICE LIMIT
Minimum tire tread depth			—	2.0 (0.08)
Cold tire pressure	Driver only		290 kPa (2.90 kgf/cm <sup>2</sup> , 42 psi)	—
	Driver and passenger		290 kPa (2.90 kgf/cm <sup>2</sup> , 42 psi)	—
Axle runout			—	0.2 (0.01)
Wheel rim runout	Radial		—	2.0 (0.08)
	Axial		—	2.0 (0.08)
Wheel balance weight			—	60 g (2.1 oz) max.
Drive chain	Size/link	DID	DID520V0-112LE	—
		RK	RK520KHO-112LE	—
	Slack		25 – 35 (1.0 – 1.4)	—

## HYDRAULIC BRAKE SPECIFICATIONS

Unit: mm (in)

ITEM			STANDARD	SERVICE LIMIT
Front	Specified brake fluid		DOT 4	—
	Brake disc thickness		4.8 – 5.2 (0.19 – 0.20)	4.0 (0.16)
	Brake disc warpage		—	0.30 (0.012)
	Master cylinder I.D.		11.000 – 11.043 (0.4331 – 0.4348)	11.055 (0.4352)
	Master piston O.D.		10.957 – 10.984 (0.4314 – 0.4324)	10.945 (0.4309)
	Caliper cylinder I.D.		27.000 – 27.050 (1.0630 – 1.0650)	27.060 (1.0654)
	Caliper piston O.D.		26.918 – 26.968 (1.0598 – 1.0617)	26.91 (1.059)
Rear	Specified brake fluid		DOT 4	—
	Brake disc thickness		4.8 – 5.2 (0.19 – 0.20)	4.0 (0.16)
	Brake disc warpage		—	0.30 (0.012)
	Master cylinder I.D.		12.700 – 12.743 (0.5000 – 0.5017)	12.755 (0.5022)
	Master piston O.D.		12.657 – 12.684 (0.4983 – 0.4994)	12.645 (0.4978)
	Caliper cylinder I.D.		38.18 – 38.23 (1.503 – 1.505)	38.24 (1.506)
	Caliper piston O.D.		38.098 – 38.148 (1.4999 – 1.5019)	38.09 (1.500)

## BATTERY/CHARGING SYSTEM SPECIFICATIONS

ITEM			SPECIFICATIONS
Battery	Type		YTZ14S
	Capacity		12 V – 11.2 Ah (10 HR)/11.8 Ah (20 HR)
	Current leakage		1.2 mA maximum
	Voltage (20°C/68°F)	Fully charged	13.0 – 13.2 V
		Needs charging	Below 12.3 V
	Charging current	Normal	1.1 A/5 – 10 h
Quick		5.5 A/1 h	
Alternator	Capacity		0.42 kW/5,000 min <sup>-1</sup> (rpm)
	Charging coil resistance (20°C/68°F)		0.1 – 0.5 Ω

## LIGHTS/METERS/SWITCHES SPECIFICATIONS

ITEM			SPECIFICATIONS
Bulbs	Headlight		12 V – 60/55 W
	Position light		12 V – 5 W x 2
	Brake/tail/license light		12 V – 21/5 W
	Turn signal light		12 V – 21 W x 4
	Instrument light		LED
	Turn signal indicator		LED
	High beam indicator		LED
	Neutral indicator		LED
	Parking brake indicator		LED
	Engine oil pressure indicator		LED
	Coolant temperature indicator		LED
	MIL		LED
	HISS indicator		LED
	ABS indicator		LED
Fuse	Main fuse		30 A
	Sub fuse		30 A x 3, 15 A x 3, 7.5 A x 6
ECT sensor resistance		40°C (104°F)	1.0 – 1.3 kΩ
		100°C (212°F)	0.1 – 0.2 kΩ
Fuel level sensor resistance		Full	4 – 6 Ω
		Empty	80 – 83 Ω

# TORQUE VALUES

## ENGINE & FRAME TORQUE VALUES

### CRANKCASE/TRANSMISSION/BALANCER

ITEM	Q'TY	THREAD DIA. (mm)	TORQUE N·m (kgf·m, lbf·ft)	REMARKS
Mainshaft bearing set plate bolt	3	6	12 (1.2, 9)	Apply locking agent to the threads. Coating width: 6.5 ± 1.0 mm (0.26 ± 0.04 in) except 2.0 ± 1.0 mm (0.08 ± 0.04 in) from tip
Shift drum bearing set plate bolt	2	6	12 (1.2, 9)	Apply locking agent to the threads. Coating width: 6.5 ± 1.0 mm (0.26 ± 0.04 in) except 2.0 ± 1.0 mm (0.08 ± 0.04 in) from tip
Front balancer shaft bearing set plate bolt	3	6	12 (1.2, 9)	Apply locking agent to the threads. Coating width: 6.5 ± 1.0 mm (0.26 ± 0.04 in) except 2.0 ± 1.0 mm (0.08 ± 0.04 in) from tip
Rear balancer shaft bearing set plate bolt	2	6	12 (1.2, 9)	Apply locking agent to the threads. Coating width: 6.5 ± 1.0 mm (0.26 ± 0.04 in) except 2.0 ± 1.0 mm (0.08 ± 0.04 in) from tip
Crankcase main journal bolt (new)	6	9	20 (2.0, 15) + 150°	See page 13-18 Replace with a new one.
Crankcase 10 mm bolt	1	10	39 (4.0, 29)	
Crankcase 8 mm bolt	3	8	24 (2.4, 18)	
Crankcase 8 x 45 mm bolt	1	8	24 (2.4, 18)	Apply locking agent to the threads. Coating width: 6.5 ± 1.0 mm (0.26 ± 0.04 in) from tip
Crankcase 6 mm bolt	8	6	14 (1.4, 10)	

### REAR WHEEL/SUSPENSION

ITEM	Q'TY	THREAD DIA. (mm)	TORQUE N·m (kgf·m, lbf·ft)	REMARKS
Driven sprocket nut	5	12	108 (11.0, 80)	U-nut
Rear brake disc bolt	5	8	42 (4.3, 31)	ALOC bolt: replace with a new one.
Rear axle nut	1	18	98 (10.0, 72)	U-nut
Shock arm-to-frame nut	1	10	44 (4.5, 32)	U-nut
Shock absorber mounting nut	2	10	44 (4.5, 32)	U-nut
Shock arm-to-shock link plate nut	1	10	44 (4.5, 32)	U-nut
Shock link plate-to-swingarm nut	1	10	44 (4.5, 32)	U-nut
Swingarm pivot nut	1	18	98 (10.0, 72)	U-nut
Drive chain slider mounting screw	2	5	4.1 (0.4, 3.0)	
Parking brake cable guide screw	2	5	1.3 (0.1, 0.7)	
Footpeg holder socket bolt	4	8	32 (3.3, 2.4)	

## NC750D-E ADDENDUM

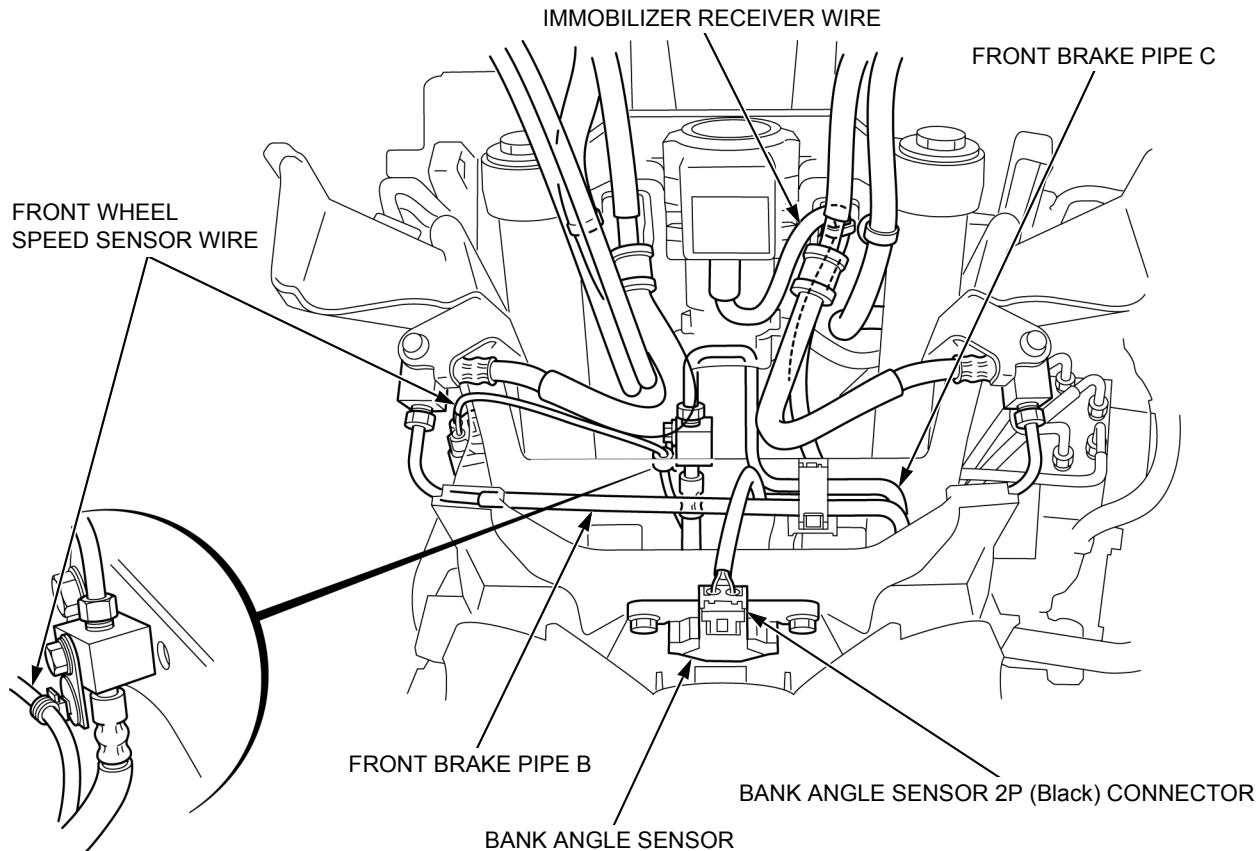
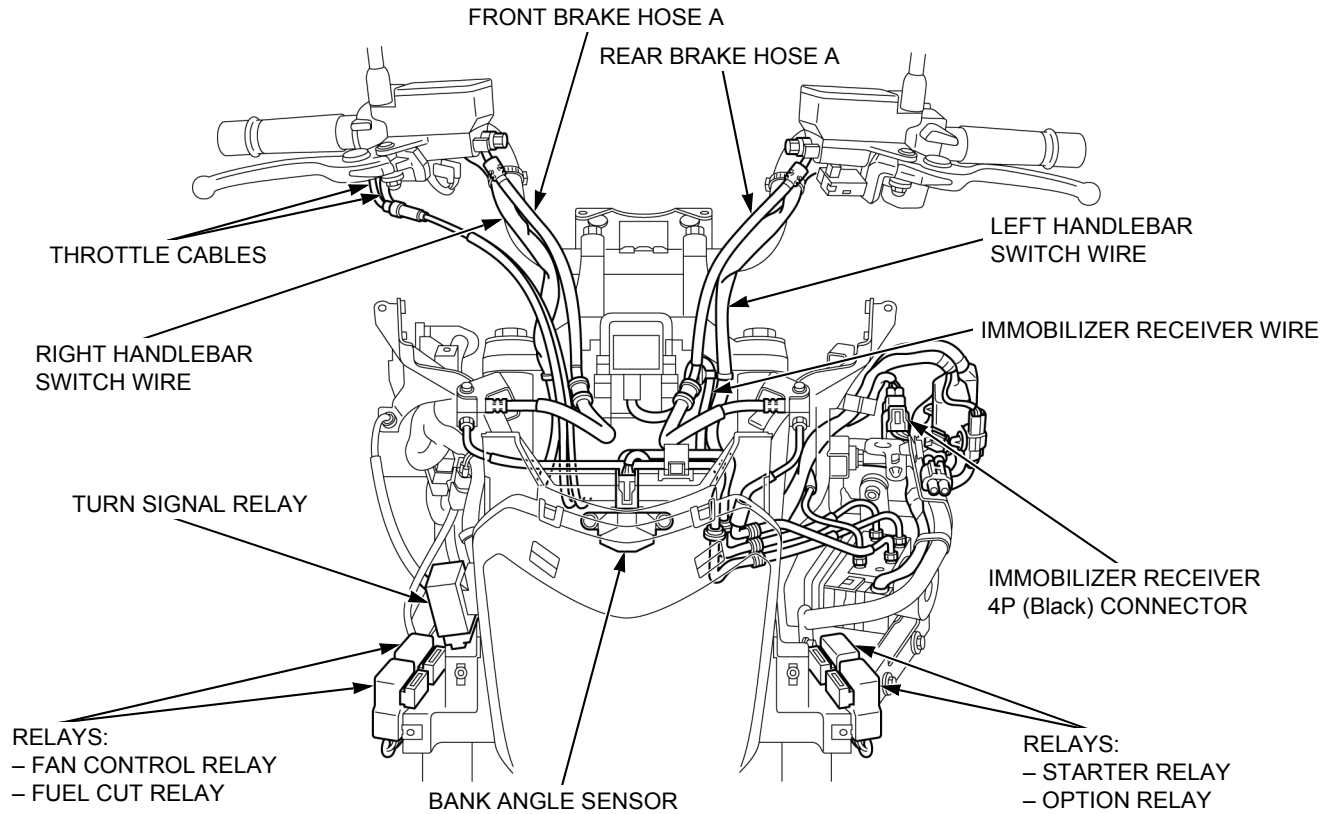
### HYDRAULIC BRAKE

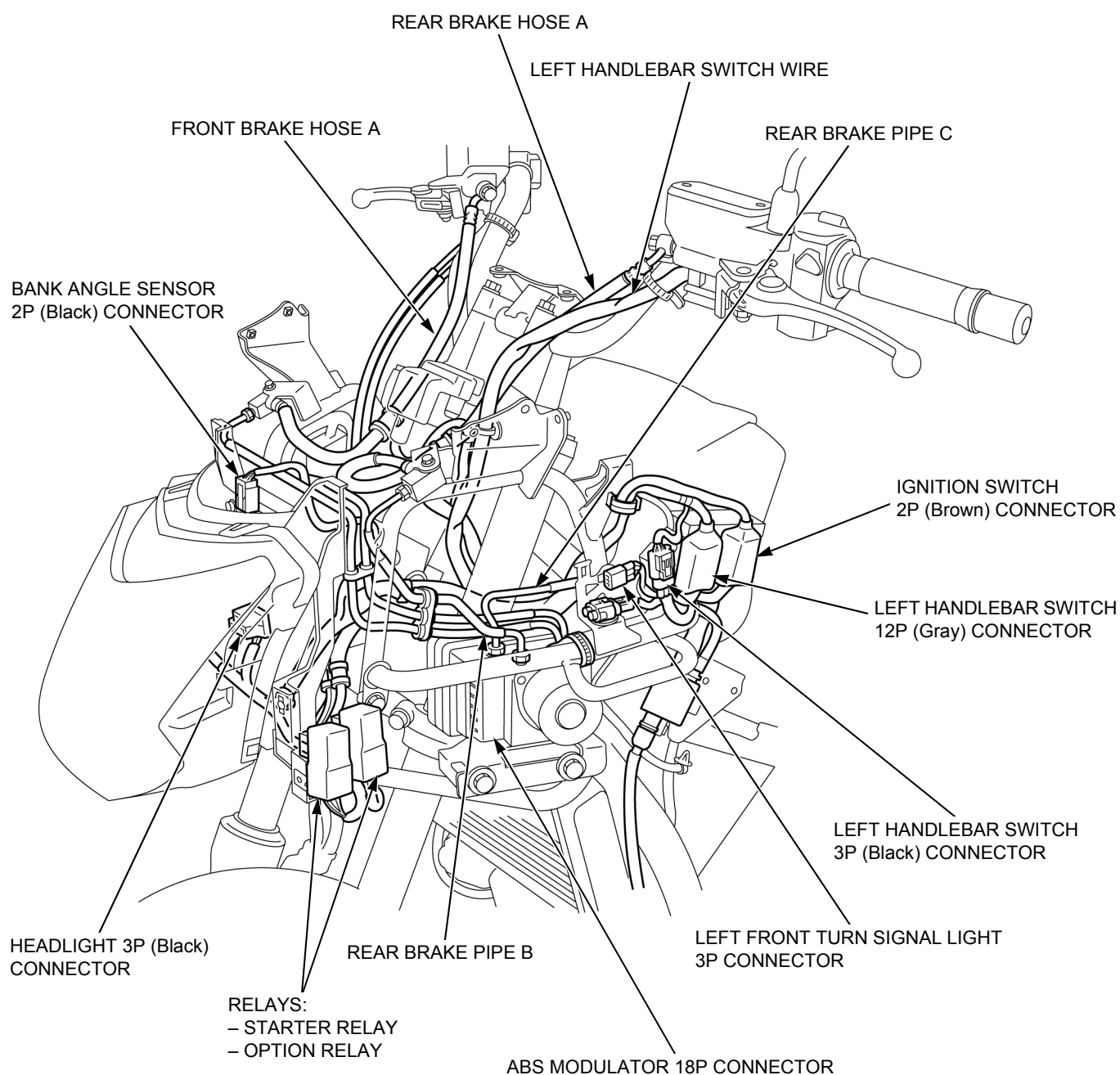
ITEM	Q'TY	THREAD DIA. (mm)	TORQUE N·m (kgf·m, lbf·ft)	REMARKS
Brake caliper bleed valve	2	8	5.4 (0.6, 4.0)	
Front brake caliper mounting bolt	2	8	30 (3.1, 22)	ALOC bolt; replace with a new one.
Brake pad pin	2	10	17 (1.7, 13)	
Rear brake caliper pin bolt	1	12	27 (2.8, 20)	
Rear brake caliper mounting bolt	1	8	22 (2.2, 16)	ALOC bolt; replace with a new one.
Brake hose oil bolt	4	10	34 (3.5, 25)	
Master cylinder holder bolt	4	6	12 (1.2, 9)	
Master cylinder reservoir cap screw	4	4	1.5 (0.2, 1.1)	
Brake lever pivot bolt	2	6	1.0 (0.1, 0.7)	Apply 0.10 g (0.004 oz) silicone grease to the sliding surface.
Brake lever pivot nut	2	6	5.9 (0.6, 4.4)	
Brake light switch screw	2	4	1.2 (0.1, 0.9)	
Front brake caliper pin bolt	1	8	22 (2.2, 16)	Apply locking agent to the threads. Apply 0.4 g (0.01 oz) silicone grease to the sliding surface.
Rear brake caliper pin bolt	1	12	27 (2.8, 20)	Apply 0.4 g (0.01 oz) silicone grease to the sliding surface.
Parking brake caliper mounting bolt	2	8	31 (3.2, 23)	ALOC bolt; replace with a new one.
Parking brake caliper pin bolt	1	8	22 (2.2, 16)	ALOC bolt; replace with a new one.
Parking brake pad pin	2	8	17 (1.7, 13)	ALOC bolt; replace with a new one.
Parking brake adjuster lock nut	1	8	17 (1.7, 13)	

### ANTI-LOCK BRAKE SYSTEM (ABS)

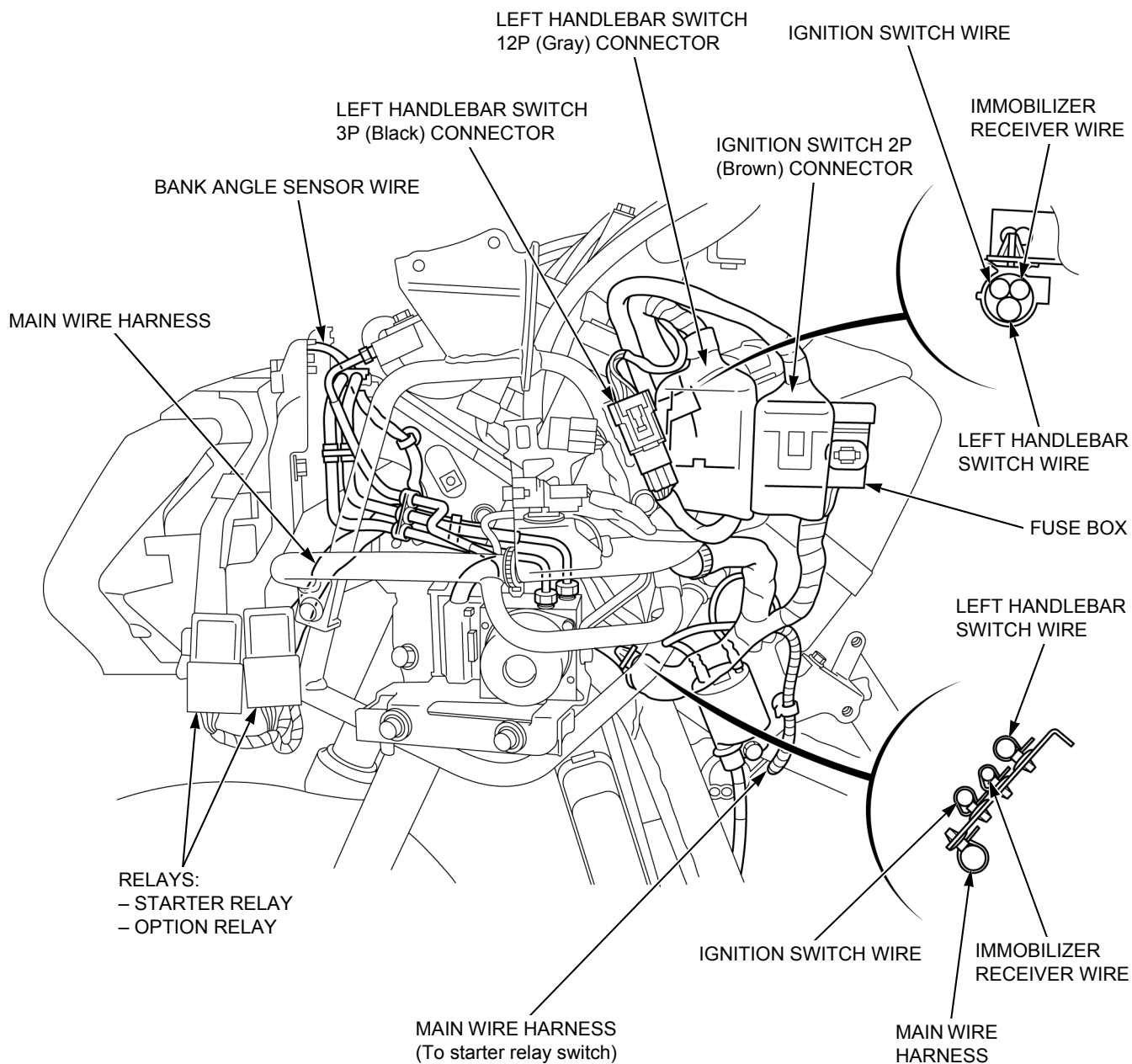
ITEM	Q'TY	THREAD DIA. (mm)	TORQUE N·m (kgf·m, lbf·ft)	REMARKS
Brake pipe joint nut	8	10	14 (1.4, 10)	Apply brake fluid to the threads.

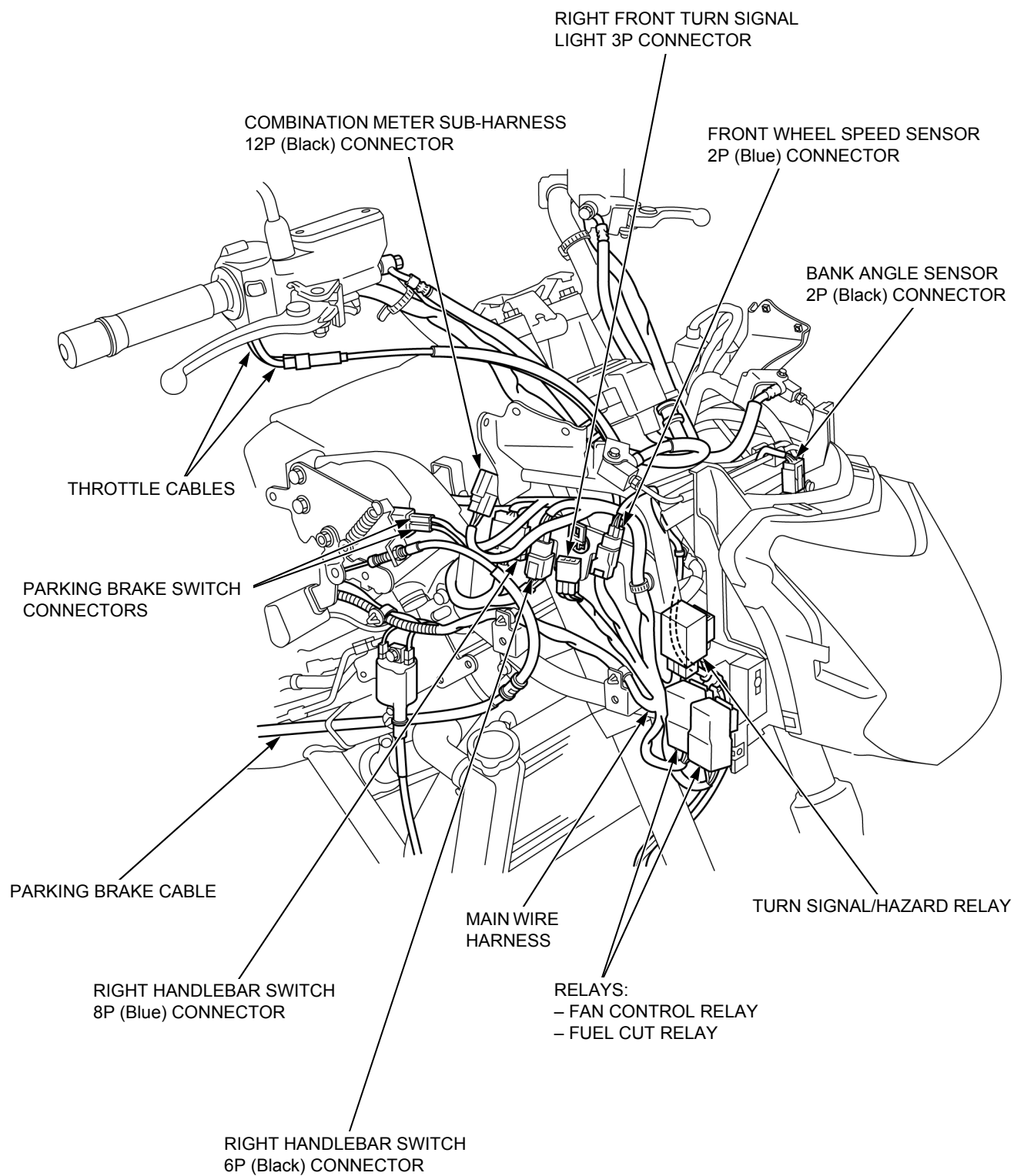
CABLE & HARNESS ROUTING

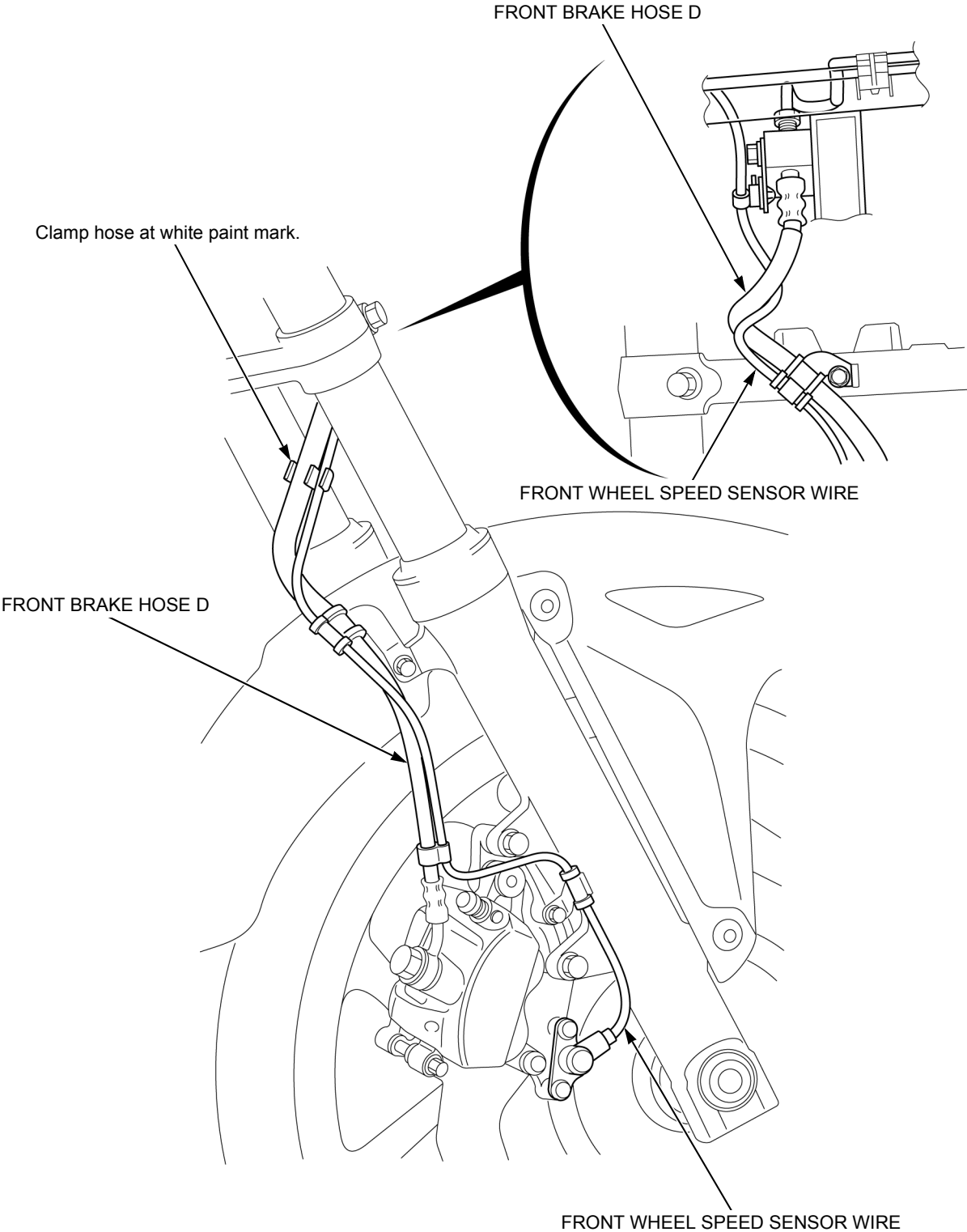


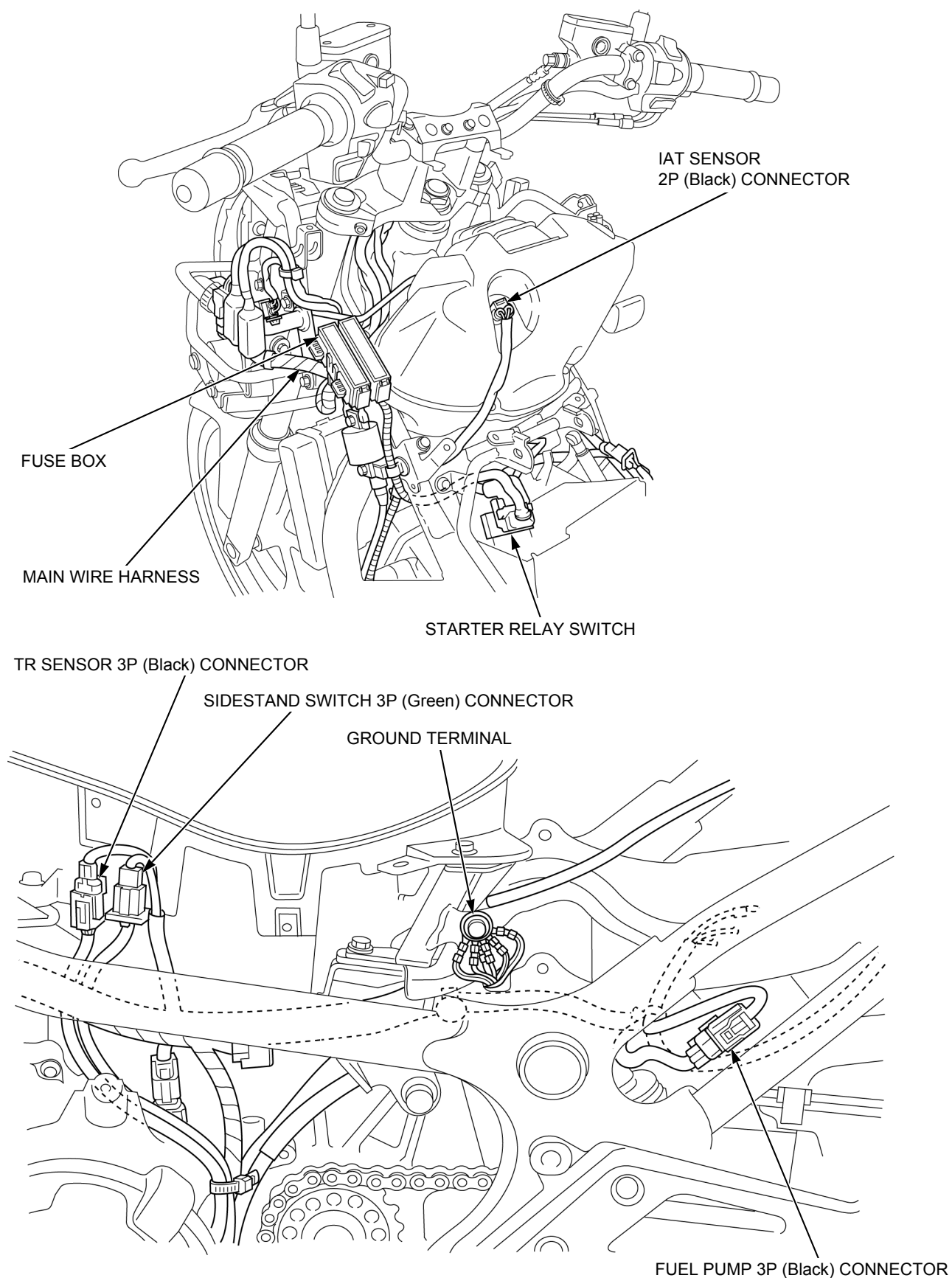


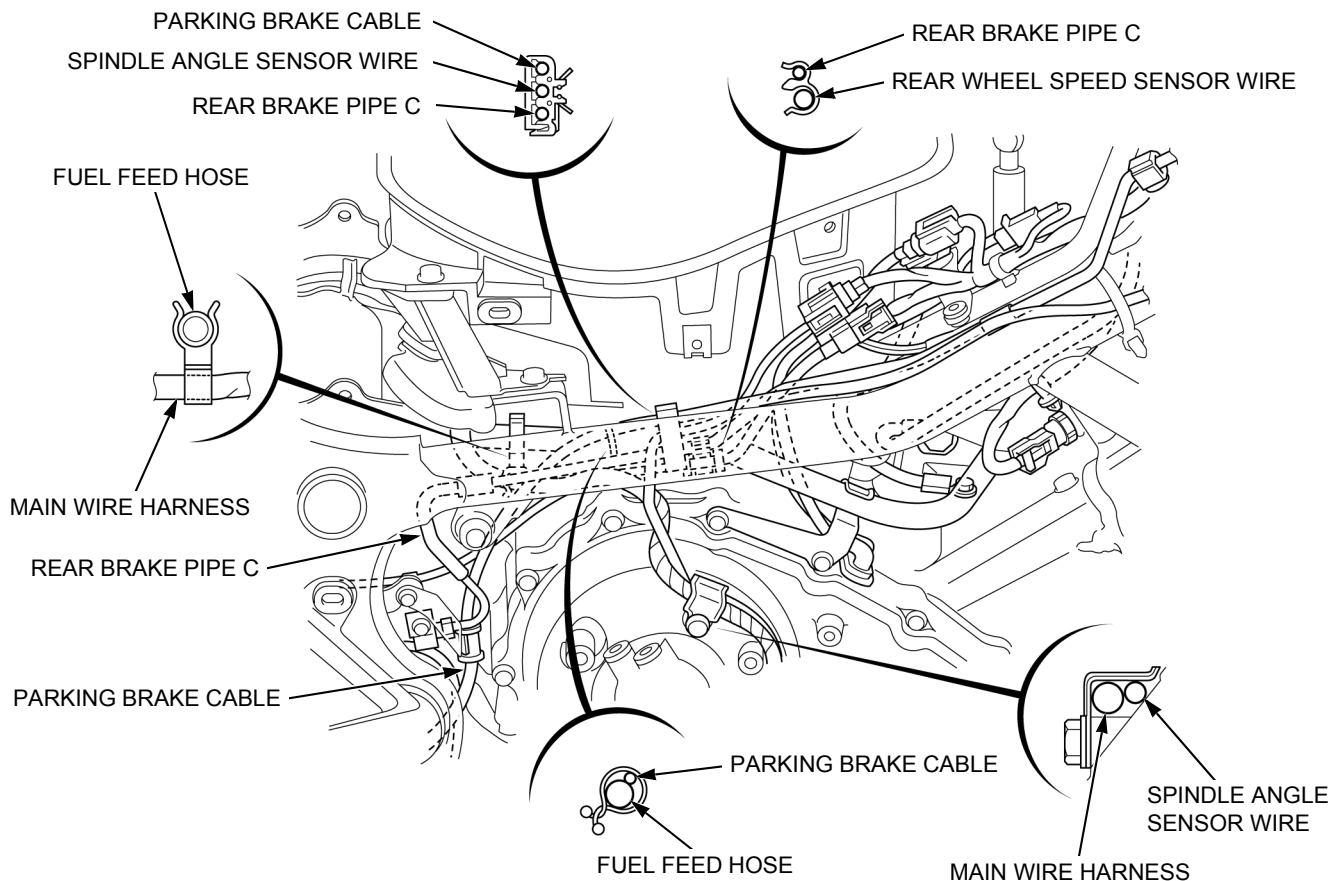


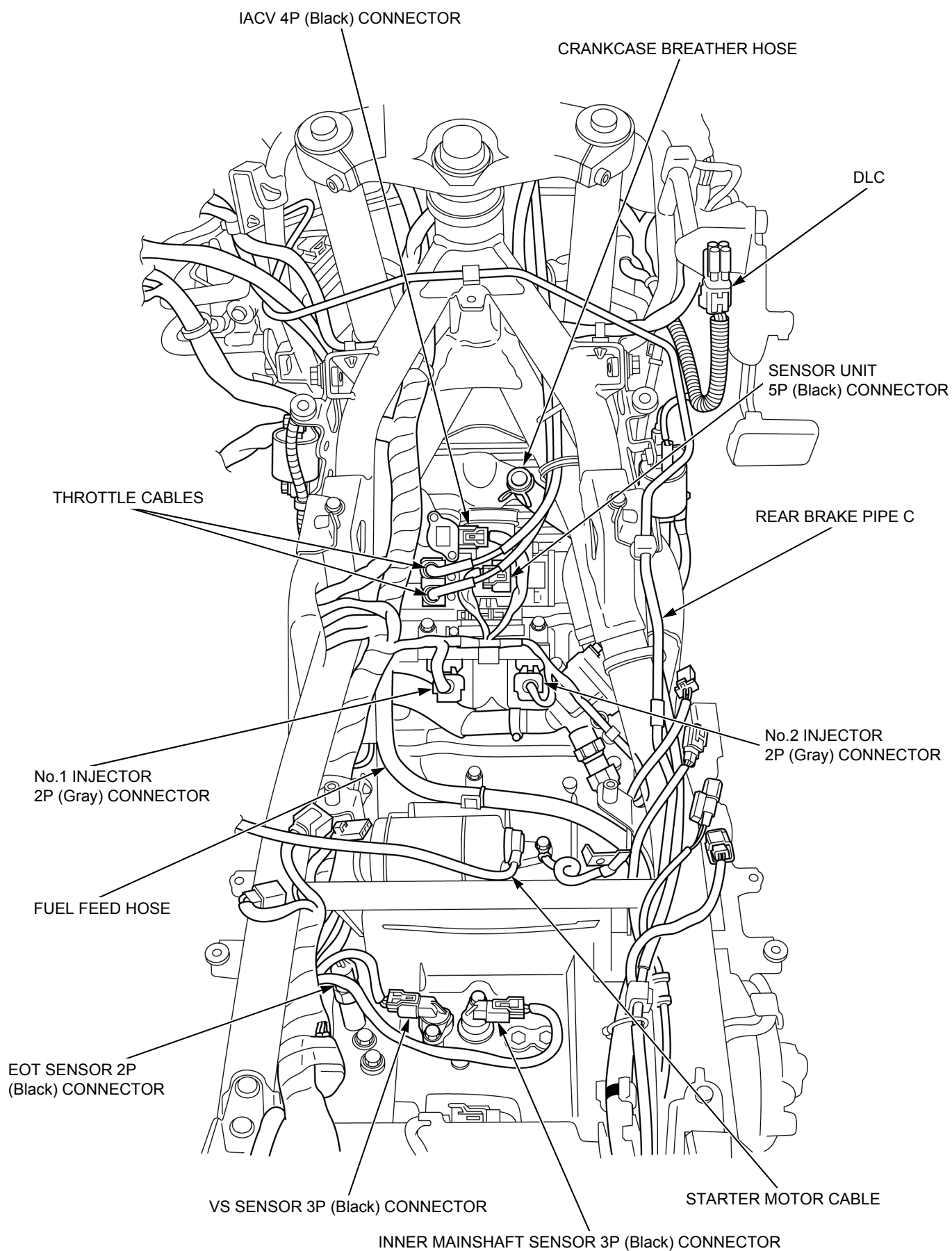


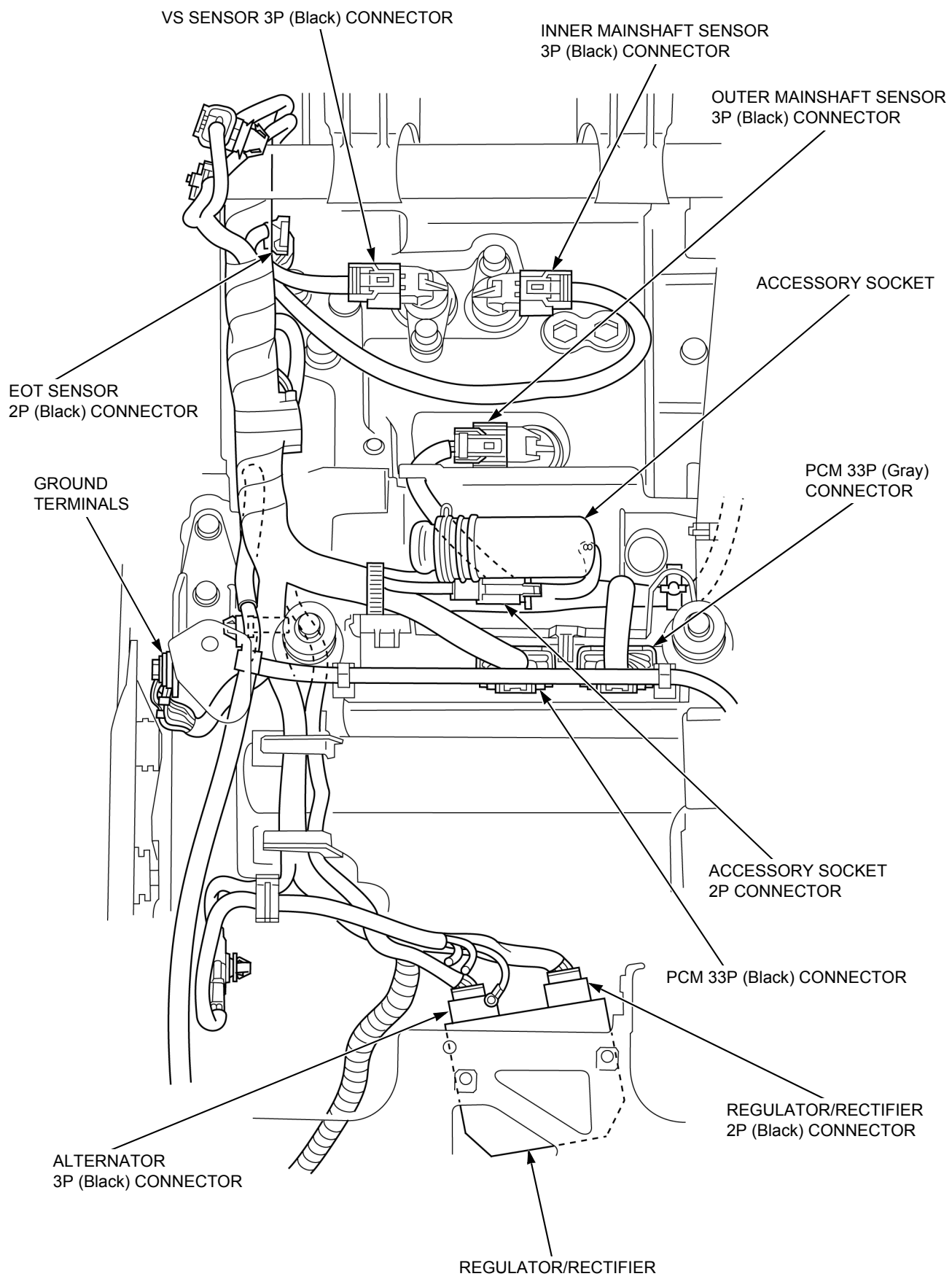


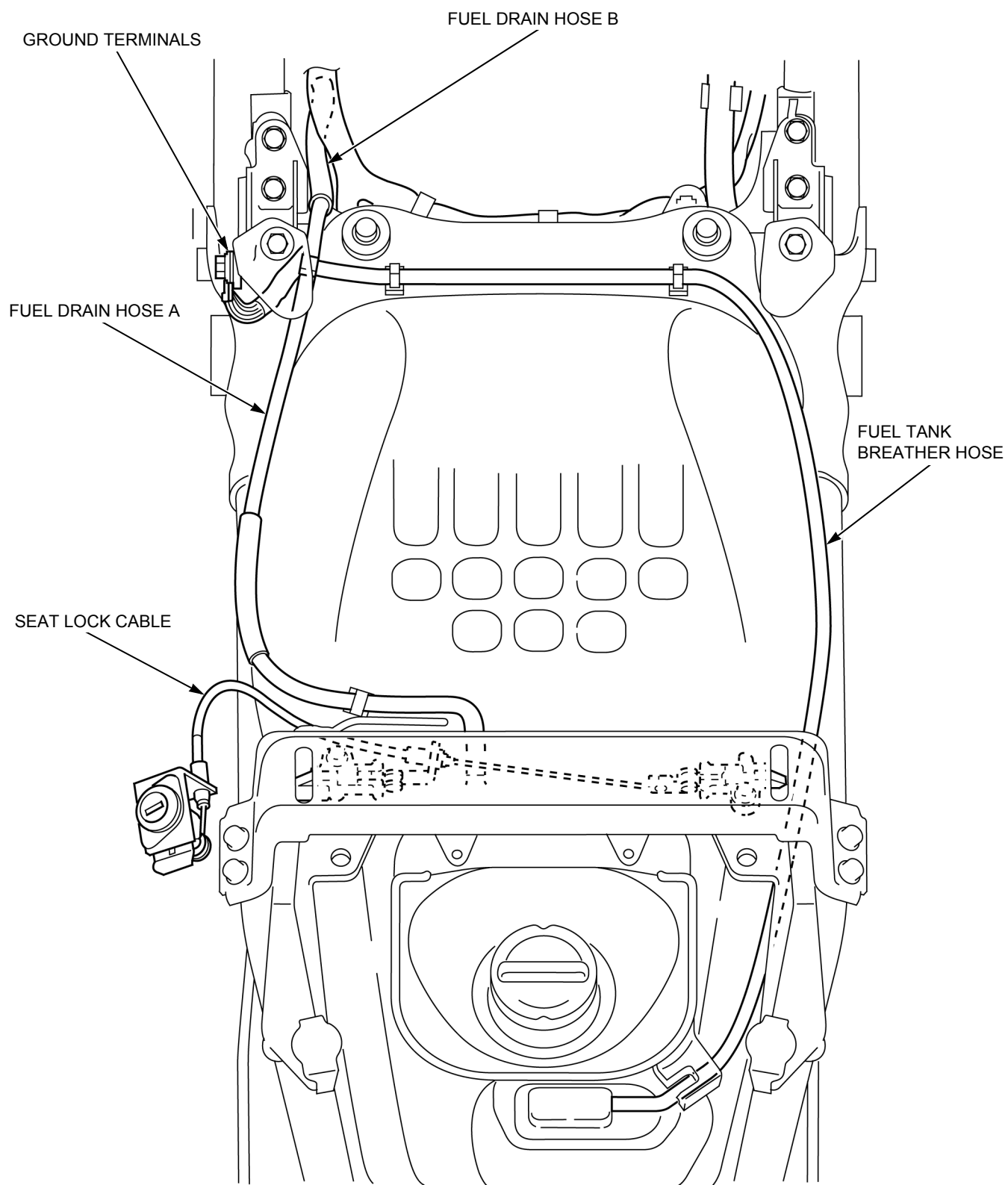




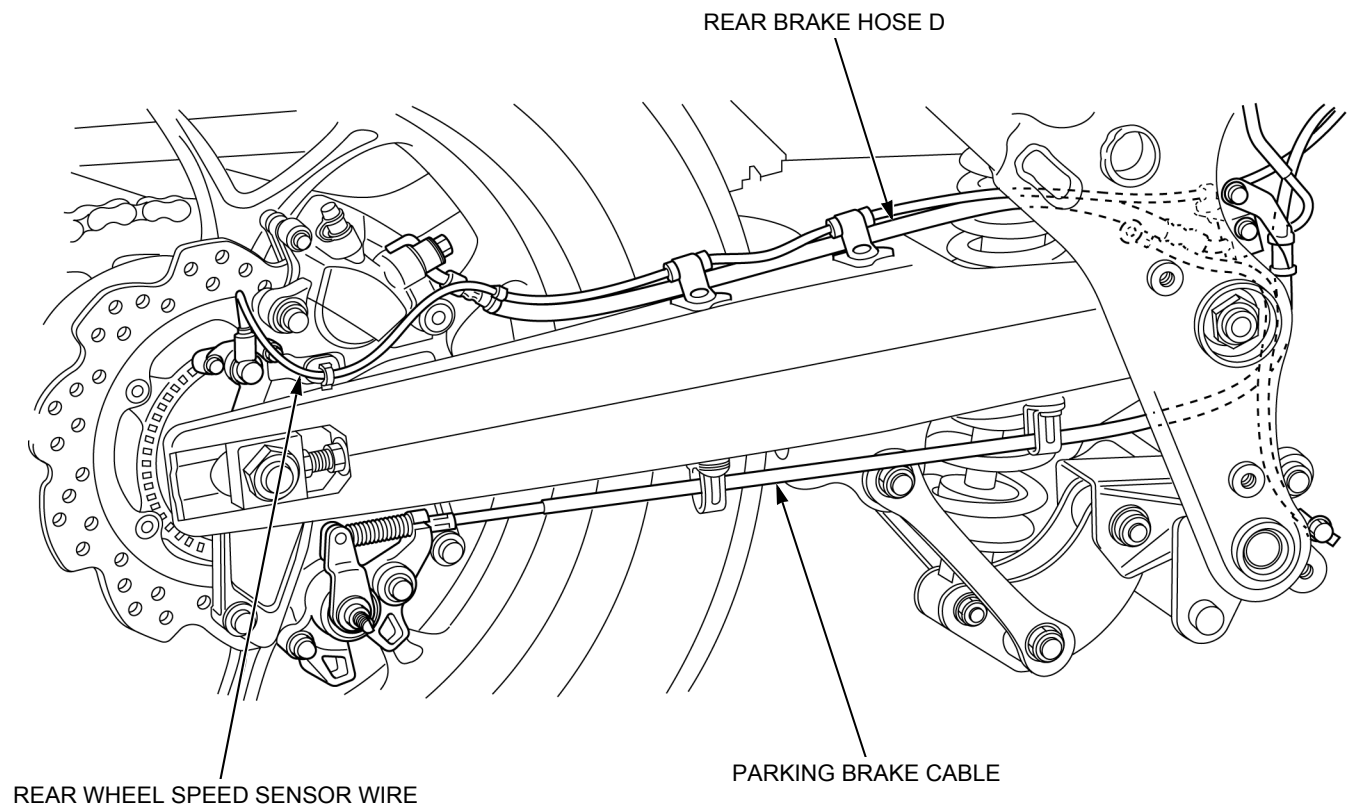












## TECHNICAL FEATURES

### PCM-to-COMBINATION METER TWO-WAY SERIAL COMMUNICATION

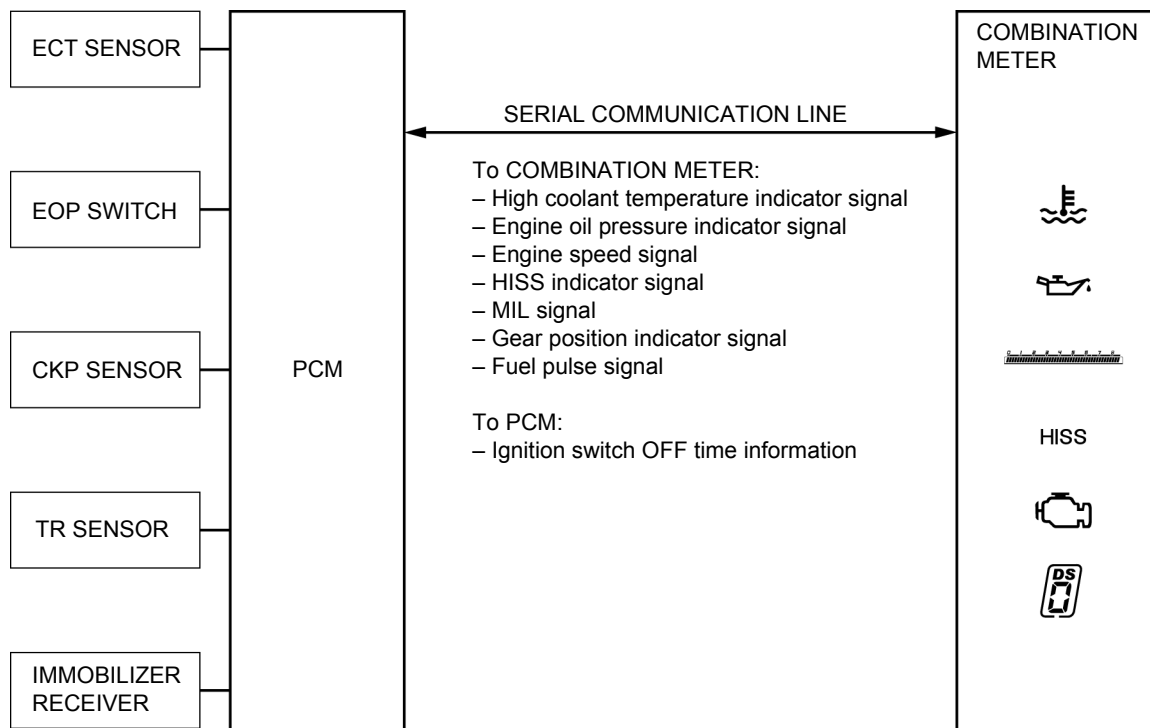
This motorcycle is equipped with the PCM-to-combination meter two-way serial communication system.

The PCM sends the following information to combination meter:

- High coolant temperature indicator signal
- Engine oil pressure indicator signal
- Engine speed signal
- MIL signal
- HISS indicator signal
- Gear position indicator signal
- Fuel pulse signal (for fuel mileage signal)

Combination meter sends the ignition switch OFF time information (elapsed time after the ignition switch is turned OFF) to the PCM. The PCM uses this information for the EOP switch line open circuit detection with the VS sensor signal.

These signals are communicated between the combination meter and PCM via one wire. This wire is called the serial communication (TXD/RXD) line.



#### WHEN THE SERIAL COMMUNICATION IS ABNORMAL

If there is any problem in the serial communication line, the combination meter shows following:

- MIL [1] and engine oil pressure indicator [2] stay on.
- Shift indicator "-" [3] is blinking.
- Tachometer, high coolant temperature indicator and HISS indicator do not come on.
- Fuel mileage meter indicates "-"

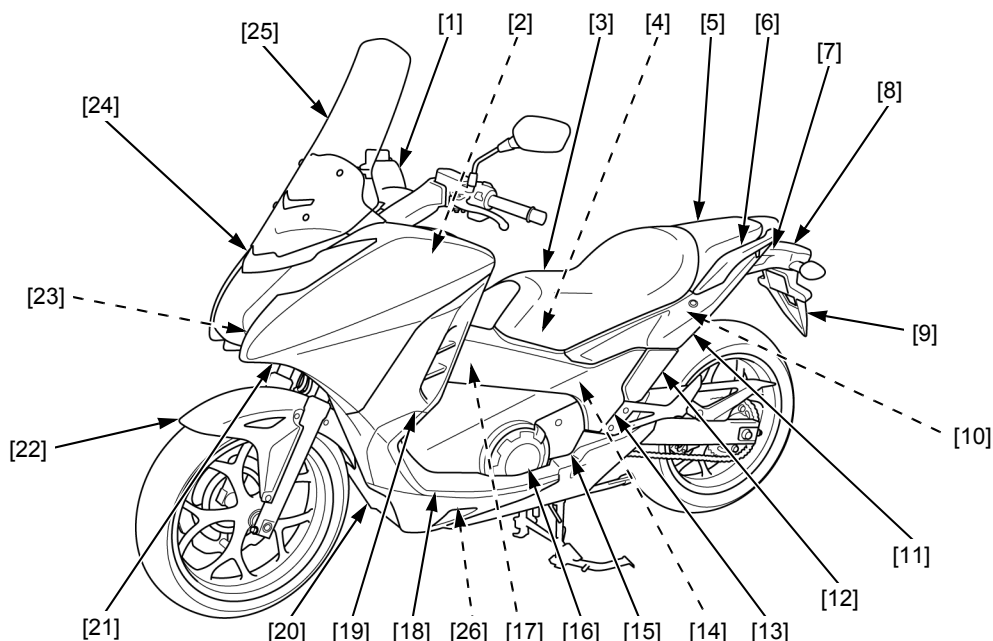
Serial communication line troubleshooting (page 21-8).

If there is any problem in the serial communication, the PCM stores the DTC 86-1. Read the DTC (page 4-9).

DTC troubleshooting (page 4-29)

MIL troubleshooting (page 4-46)

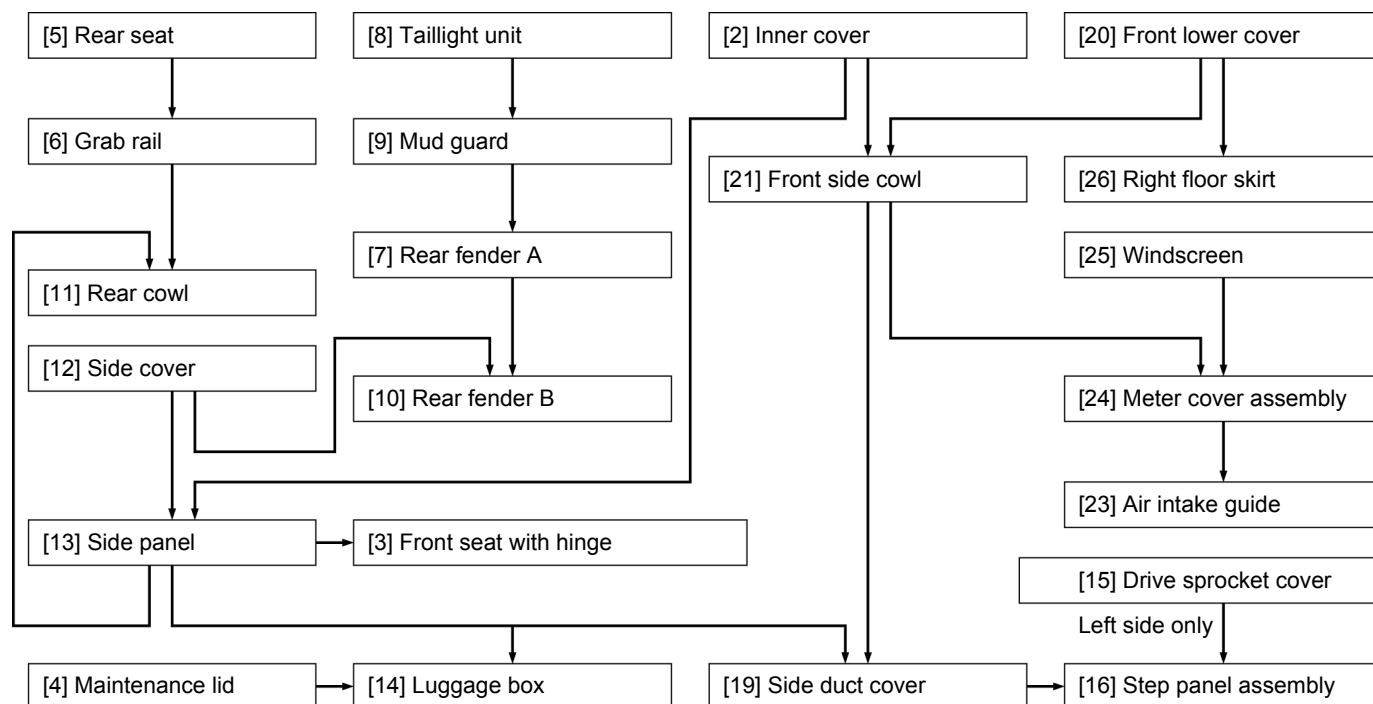
## BODY PANEL LOCATIONS



[1] Handlebar cover	page 2-4	[10] Rear fender B	page 2-17	[19] Side duct cover	page 25-31
[2] Inner cover	page 2-4	[11] Rear cowl	page 25-29	[20] Front lower cover	page 2-5
[3] Front seat	page 2-10	[12] Side cover	page 25-30	[21] Front side cowl	page 25-28
[4] Maintenance lid	page 2-11	[13] Side panel	page 25-30	[22] Front fender	page 2-20
[5] Rear seat	page 2-8	[14] Luggage box	page 25-31	[23] Air intake cover	page 2-8
[6] Grab rail	page 2-8	[15] Drive sprocket cover	page 2-12	[24] Meter cover assembly	page 25-28
[7] Rear fender A	page 2-17	[16] Step panel assembly	page 2-14	[25] Windscreen	page 2-6
[8] Taillight unit	page 2-15	[17] Battery box cover	page 2-19	[26] Right floor skirt	page 2-18
[9] Mud guard	page 2-17	[18] Floor mat	page 2-13		

## BODY PANEL REMOVAL CHART

This chart shows removal order of frame covers by means of arrow.



## FRONT SIDE COWL

### REMOVAL/INSTALLATION

Remove the following:

- Inner cover (page 2-4)
- Front lower cover (page 2-5)

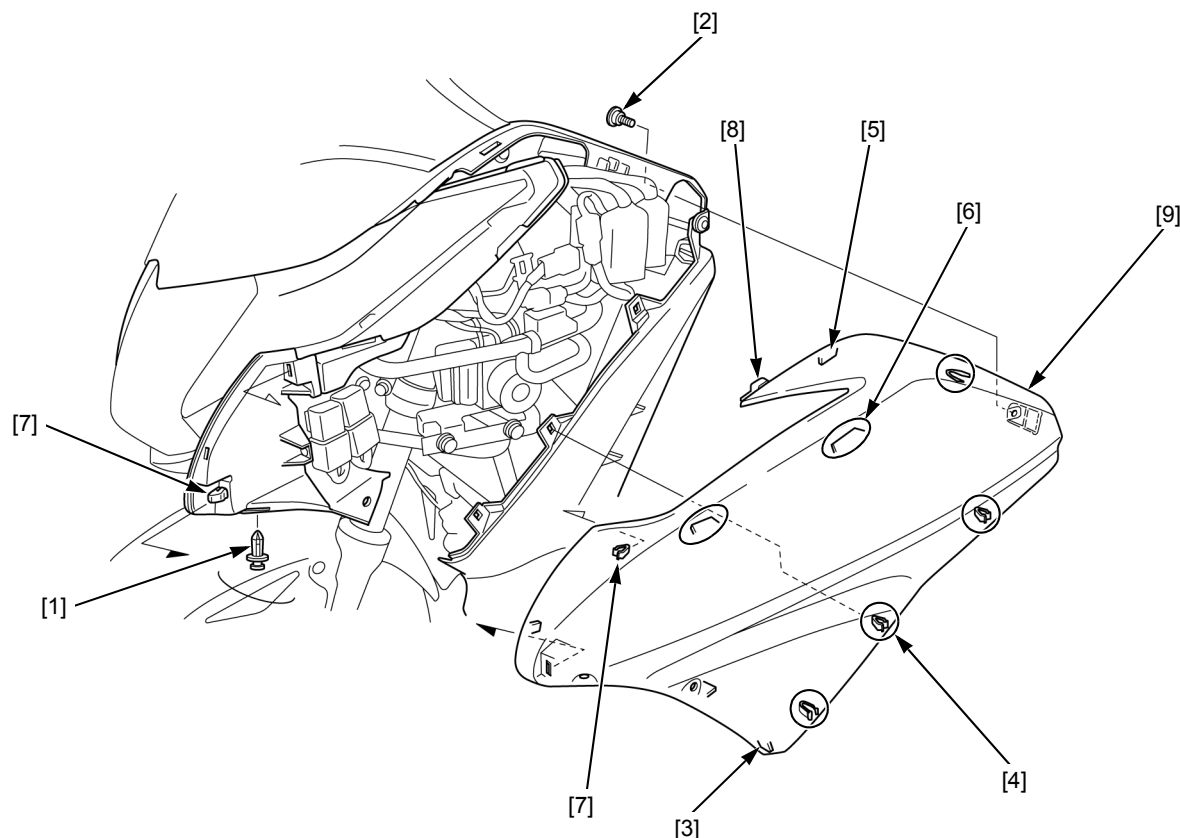
Remove the trim clip [1] and setting bolt [2].

Release tab [3] from the side duct cover, then release the four snap fit clips [4] in order from the lower side.

Release the tab [5] from the front garnish and the two hooks [6] from the front turn signal light.

Release the two snap fit clips [7] and tab [8] by sliding the front side cowl [9] forward, and remove it.

Installation is in the reverse order of removal.



## METER COVER ASSEMBLY

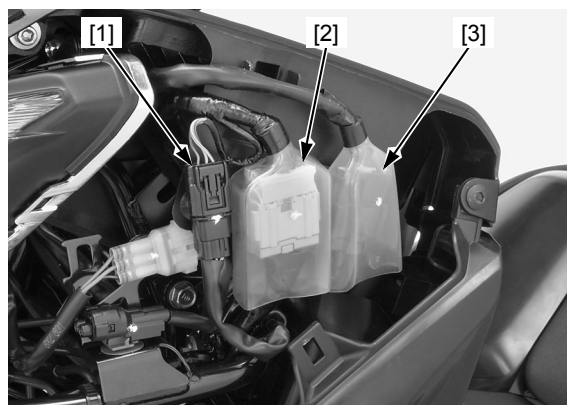
### REMOVAL/INSTALLATION

NOTE:

Refer to meter cover assembly removal/installation (page 2-6).

Remove the following connector clips from the meter cover assembly.

- Left handlebar switch 3P (Black) connector [1]
- Left handlebar switch 12P (Gray) connector [2]
- Ignition switch 2P (Brown) connector [3]



## REAR COWL

### REMOVAL/INSTALLATION

Remove the following:

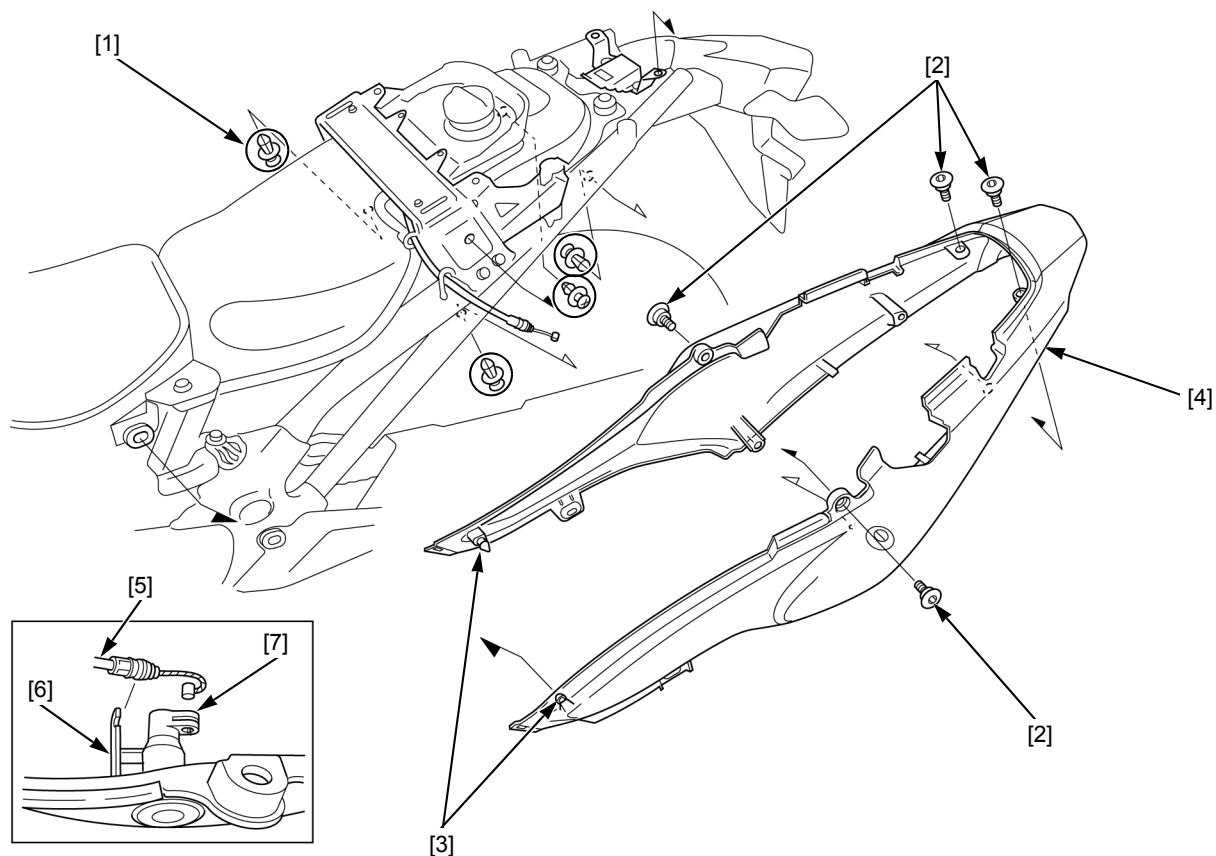
- Grab rails (page 2-8)
- Both side panels (page 25-30)
- Four trim clips [1] and four setting bolts [2]

Releasing the bosses [3] from the grommets and tabs from rear fender B.

Remove the seat cowl [4] by removing the seat lock cable [5] from the stay [6] and disconnect it from the seat lock cylinder [7].

*Be careful not to dislodge the grommets.*

Installation is in the reverse order of removal.



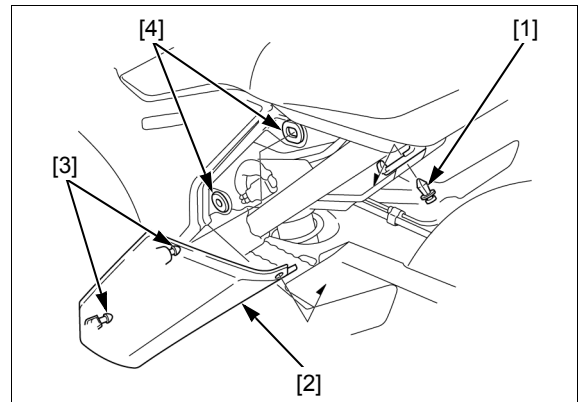
## SIDE COVER

### REMOVAL/INSTALLATION

Remove the trim clip [1] and the side cover [2] by releasing the bosses [3] from the grommets [4].

*Be careful not to dislodge the grommets.*

Installation is in the reverse order of removal.



## SIDE PANEL

### REMOVAL/INSTALLATION

Remove the following:

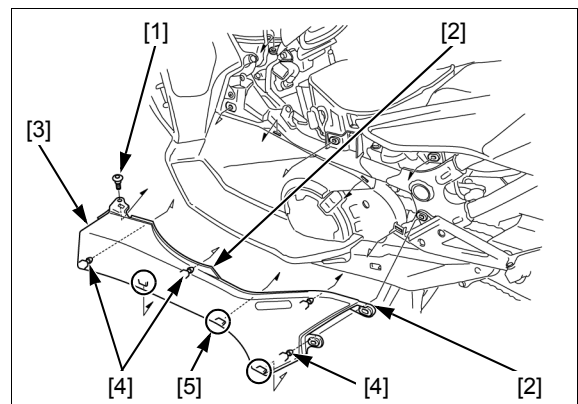
- Inner cover (page 2-4)
- Both side covers (page 25-30)
- Setting bolt [1]

Release the tabs [2] from the rear cowl.

Remove the side panel [3] by releasing the bosses [4] from the grommets and the tabs [5] from the step panel.

*Be careful not to dislodge the grommets.*

Installation is in the reverse order of removal.



## LUGGAGE BOX

### REMOVAL/INSTALLATION

Remove both side panels (page 25-30).

Disconnect the sidestand switch 3P (Green) connector [1].

Remove the TR sensor 3P (Black) connector [2], rear wheel speed sensor 2P (Gray) connector [3] and shift spindle angle sensor 3P (Gray) connector [4] from the connector clips.

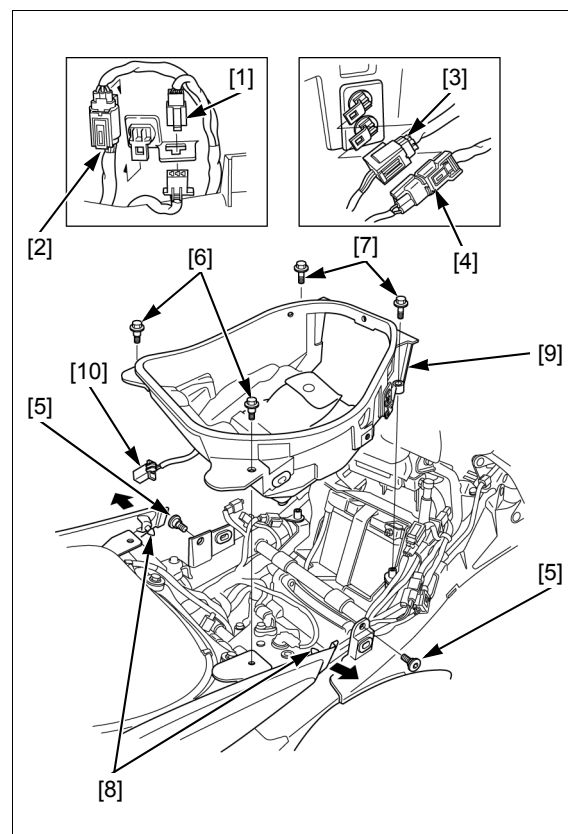
Remove the setting bolts [5], flange setting bolts [6] and flange bolts [7].

Release the bosses [8] from the grommets and raise the luggage box [9] while spreading the rear cowl ends.

Disconnect the accessory socket 2P connector [10] and remove the luggage box.

*Be careful not to dislodge the grommets.*

Installation is in the reverse order of removal.



## SIDE DUCT COVER

### REMOVAL/INSTALLATION

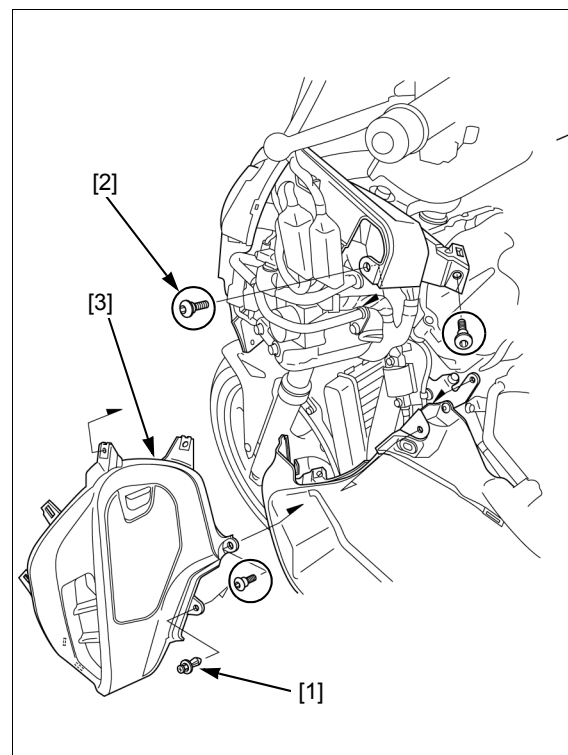
#### LEFT SIDE

Remove the following:

- Left side panel (page 25-30)
- Left front side cowl (page 25-28)
- Trim clip [1]
- Three setting bolts [2]

Release the tabs from the step panel and remove the left side duct cover [3]

Installation is in the reverse order of removal.



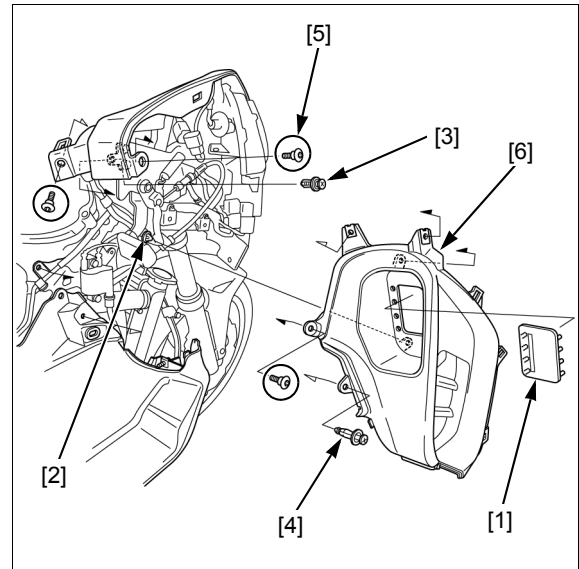
### RIGHT SIDE

Remove the following:

- Right side panel (page 25-30)
- Right front side cowl (page 25-28)
- Parking brake cover rubber [1]
- Wire harness clip [2]
- Trim clip (screw type) [3]
- Trim clip [4]
- Three setting bolts [5]

Release the tabs from the step panel and remove the right side duct cover [6] while clearing the parking brake lever.

Installation is in the reverse order of removal.





# MAINTENANCE SCHEDULE

## Except TH type

Perform the Pre-ride inspection in the Owner's Manual at each scheduled maintenance period.

I: Inspect and Clean, Adjust, Lubricate or Replace if necessary. C: Clean. R: Replace. A: Adjust. L: Lubricate.

The following items require some mechanical knowledge. Certain items (particularly those marked \* and \*\*) may require more technical information and tools. Consult a dealer.

ITEMS	FREQUENCY	NOTE	ODOMETER READING (NOTE 1)						ANNUAL CHECK	REGULAR REPLACE	REFER TO PAGE
			x 1,000 km	1	12	24	36	48			
			x 1,000 mi	0.6	8	16	24	32			
* FUEL LINE					I	I	I	I	I		3-4
* THROTTLE OPERATION					I	I	I	I	I		3-4
* AIR CLEANER		NOTE 2				R		R			3-5
CRANKCASE BREATHER		NOTE 3			C	C	C	C	C		3-5
* SPARK PLUG						I		R			3-6
* VALVE CLEARANCE						I		I			3-7
ENGINE OIL				R	R	R	R	R	R		3-10
ENGINE OIL FILTER				R	R	R	R	R	R		3-11
CLUTCH OIL FILTER				R		R		R			3-12
* ENGINE IDLE SPEED				I	I	I	I	I	I		3-13
RADIATOR COOLANT		NOTE 4			I	I	I	I	I	3 YEARS	3-13
* COOLING SYSTEM					I	I	I	I	I		3-14
DRIVE CHAIN				EVERY 1,000 km (600 mi) I, L							25-35
DRIVE CHAIN SLIDER					I	I	I	I			3-17
BRAKE FLUID		NOTE 4			I	I	I	I	I	2 YEARS	3-18
BRAKE PADS WEAR					I	I	I	I	I		3-19
BRAKE SYSTEM				I	I	I	I	I	I		3-19
* BRAKE LOCK OPERATION					I	I	I	I			3-20
HEADLIGHT AIM					I	I	I	I	I		3-20
SIDESTAND					I	I	I	I	I		3-21
* SUSPENSION					I	I	I	I	I		3-22
* NUTS, BOLTS, FASTENERS				I	I	I	I	I	I		3-22
** WHEELS/TIRES					I	I	I	I	I		3-23
** STEERING HEAD BEARINGS				I	I	I	I	I	I		3-23

\* Should be serviced by a dealer, unless the owner has proper tools and service data and is mechanically qualified.

\*\* In the interest of safety, we recommend these items be serviced only by a dealer.

Honda recommends that a dealer should road test your motorcycle after each periodic maintenance is carried out.

### NOTES:

- At higher odometer readings, repeat at the frequency interval established here.
- Service more frequently when riding in unusually wet or dusty areas.
- Service more frequently when riding in rain or at full throttle.
- Replacement requires mechanical skill.

## NC750D-E ADDENDUM

### TH type

Perform the Pre-ride inspection in the Owner's Manual at each scheduled maintenance period.

I: Inspect and Clean, Adjust, Lubricate or Replace if necessary. C: Clean. R: Replace. A: Adjust. L: Lubricate.

The following items require some mechanical knowledge. Certain items (particularly those marked \* and \*\*) may require more technical information and tools. Consult a dealer.

ITEMS	FREQUENCY	NOTE	ODOMETER READING (NOTE 1)								REFER TO PAGE
			x 1,000 km	1	6	12	18	24	30	36	
			x 1,000 mi	0.6	4	8	12	16	20	24	
* FUEL LINE						I		I		I	3-4
* THROTTLE OPERATION						I		I		I	3-4
* AIR CLEANER		NOTE 2					R			R	3-5
CRANKCASE BREATHER		NOTE 3			C	C	C	C	C	C	3-5
* SPARK PLUG			EVERY 24,000 km (16,000 mi): I EVERY 48,000 km (32,000 mi): R								3-6
* VALVE CLEARANCE								I			3-7
ENGINE OIL				R		R		R		R	3-10
ENGINE OIL FILTER				R		R		R		R	3-11
CLUTCH OIL FILTER				R				R			3-12
* ENGINE IDLE SPEED				I		I		I		I	3-13
RADIATOR COOLANT		NOTE 4				I		I		I	3-13
* COOLING SYSTEM						I		I		I	3-14
* EVAPORATIVE EMISSION CONTROL SYSTEM							I			I	24-25
DRIVE CHAIN			EVERY 1,000 km (600 mi): I, L								25-35
DRIVE CHAIN SLIDER						I		I		I	3-17
BRAKE FLUID		NOTE 4			I	I	I	I	I	I	3-18
BRAKE PADS WEAR					I	I	I	I	I	I	3-19
BRAKE SYSTEM				I		I		I		I	3-19
* BRAKE LOCK OPERATION					I	I	I	I	I	I	3-20
HEADLIGHT AIM						I		I		I	3-20
SIDESTAND						I		I		I	3-21
* SUSPENSION						I		I		I	3-22
* NUTS, BOLTS, FASTENERS				I		I		I		I	3-22
** WHEELS/TIRES						I		I		I	3-23
** STEERING HEAD BEARINGS				I		I		I		I	3-23

\* Should be serviced by a dealer, unless the owner has proper tools and service data and is mechanically qualified.

\*\* In the interest of safety, we recommend these items be serviced only by a dealer.

Honda recommends that a dealer should road test your motorcycle after each periodic maintenance is carried out.

#### NOTES:

1. At higher odometer readings, repeat at the frequency interval established here.
2. Service more frequently when riding in unusually wet or dusty areas.
3. Service more frequently when riding in rain or at full throttle.
4. Replacement requires mechanical skill.

## DRIVE CHAIN

### NOTE:

Refer to drive chain for maintenance procedures not included in this section (page 3-14).

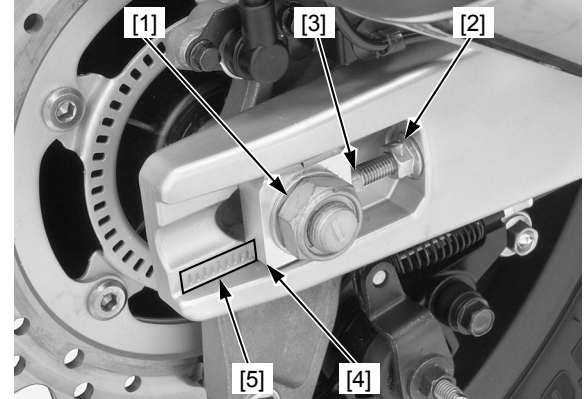
### ADJUSTMENT

Loosen the rear axle nut [1].  
Loosen the lock nuts [2] and turn the adjusting bolts [3] until the correct drive chain slack is obtained.  
Make sure both axle collar rear ends [4] are aligned with same index lines [5] on the swingarm.  
Tighten the axle nut to the specified torque.

**TORQUE: 98 N·m (10.0 kgf·m, 72 lbf·ft)**

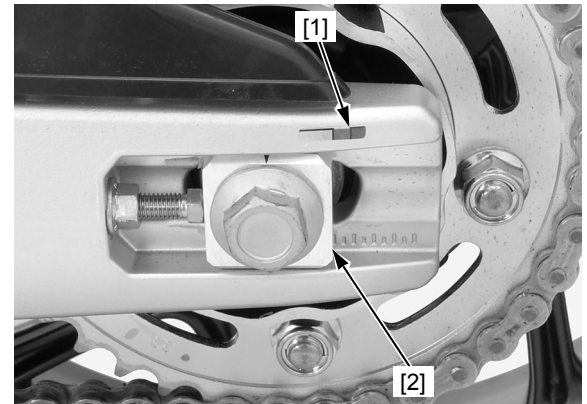
Hold the adjusting bolts and tighten the lock nuts.

Recheck the drive chain slack and free wheel rotation.



Check the drive chain wear indicator label [1] attached on the left swingarm.

If the axle collar rear end [2] reaches red zone of the indicator label, replace the drive chain with a new one (page 25-35).



### REPLACEMENT

#### NOTE:

Refer to drive chain replacement (page 3-16).

Make sure that the pins are staked properly by measuring the diameter of the staked area using a slide caliper [1].

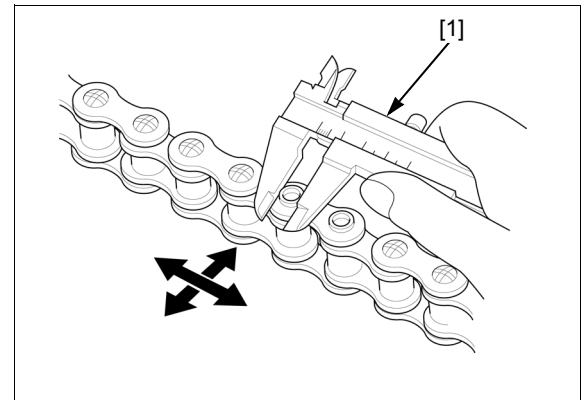
#### DIAMETER OF THE STAKED AREA:

**DID: 5.40 – 5.60 mm (0.213 – 0.220 in)**

**RK: 5.30 – 5.70 mm (0.209 – 0.224 in)**

After staking, check the staked area of the master link for cracks.

If there is any cracking, replace the master link, O-rings and plate.



## TRANSMISSION

### TRANSMISSION ASSEMBLY

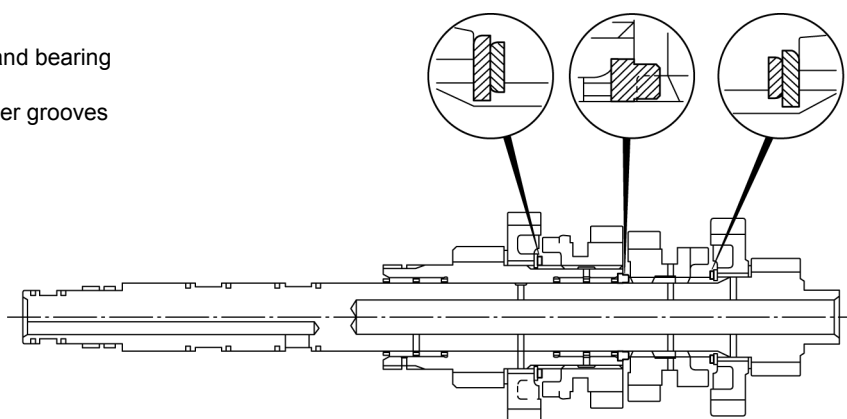
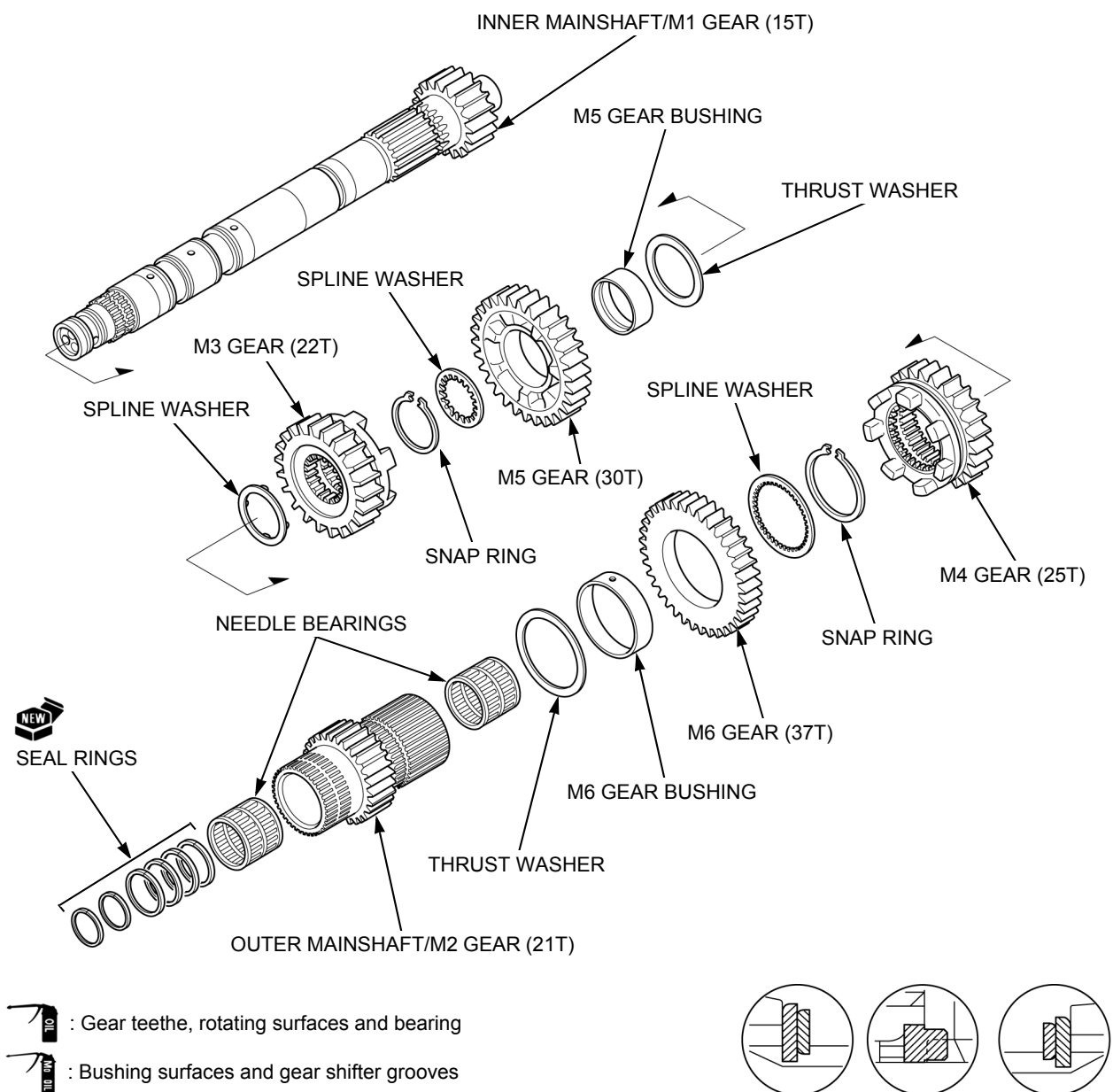
Clean all parts in solvent, and dry them thoroughly.

Apply engine oil to the gear teeth, rotating surface and bearing.

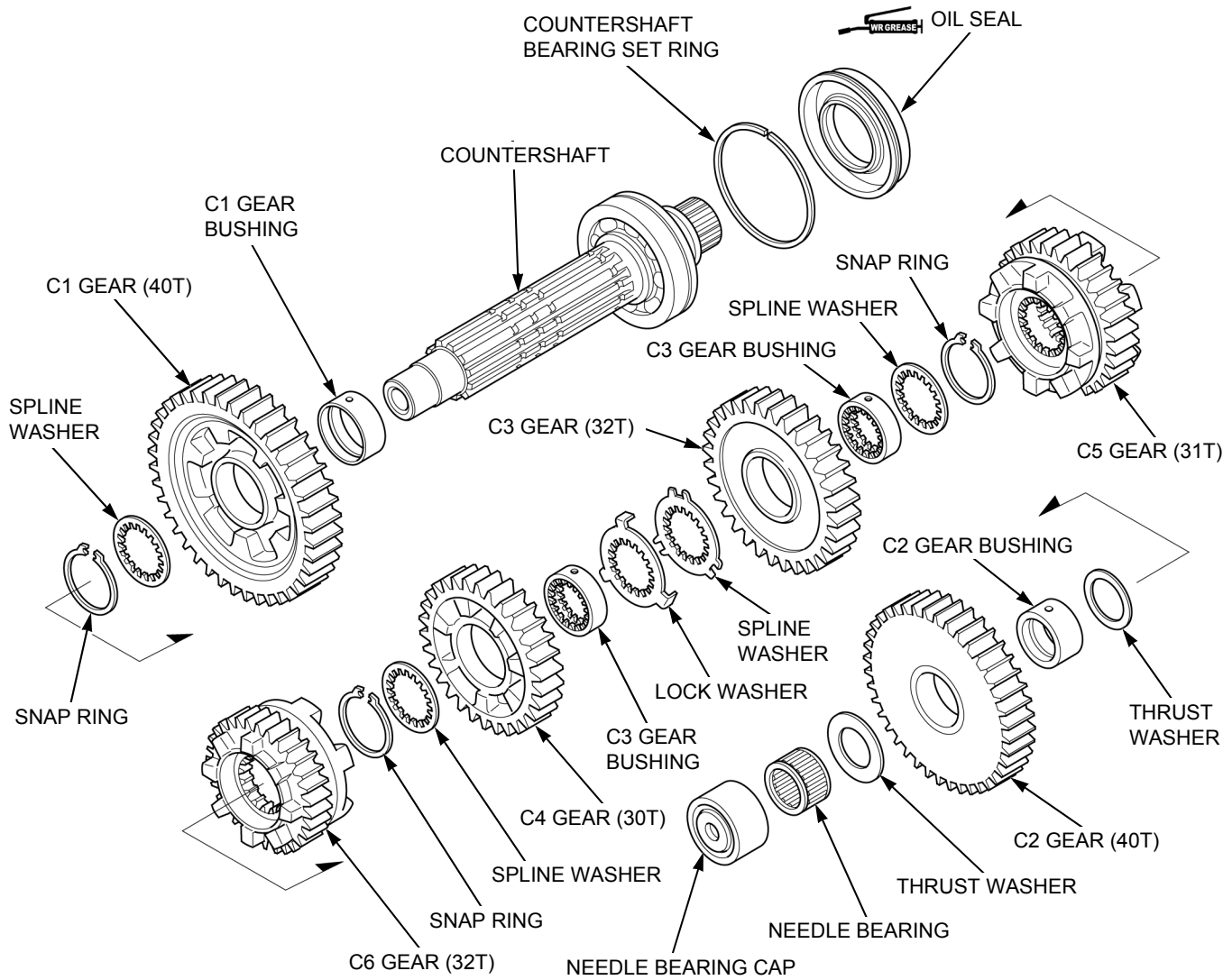
Apply molybdenum oil solution to the spline bushing outer surfaces, bushing inner and outer surfaces, and gear shifter grooves.



Assemble the mainshaft and countershaft.

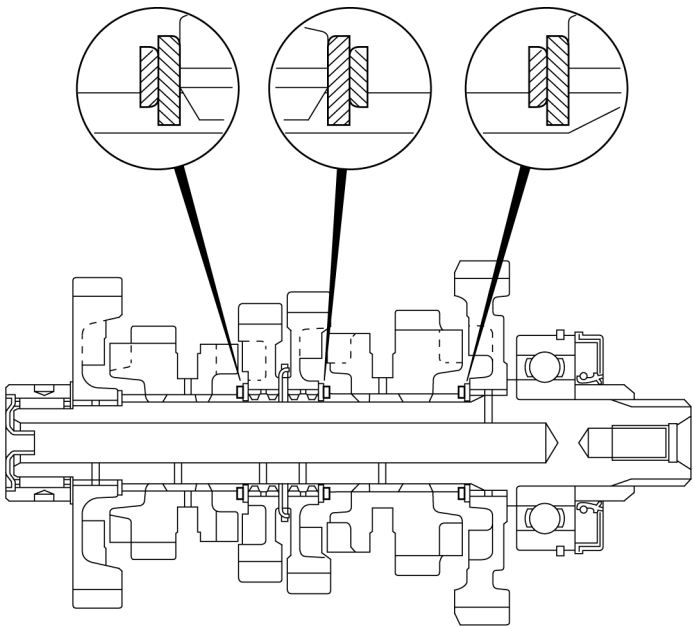
## MAINSHAFT



COUNTERSHAFT



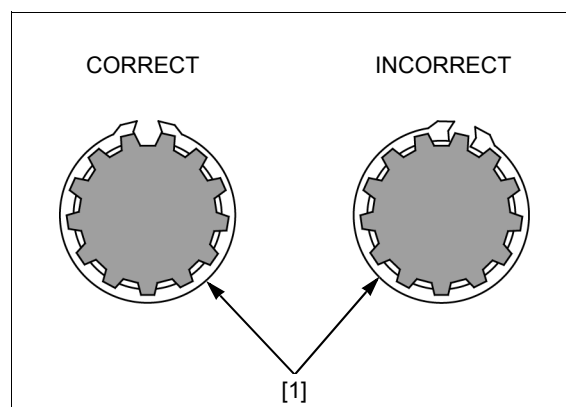
 : Gear teethe, rotating surfaces and bearing  
 : Bushing surfaces and gear shifter grooves



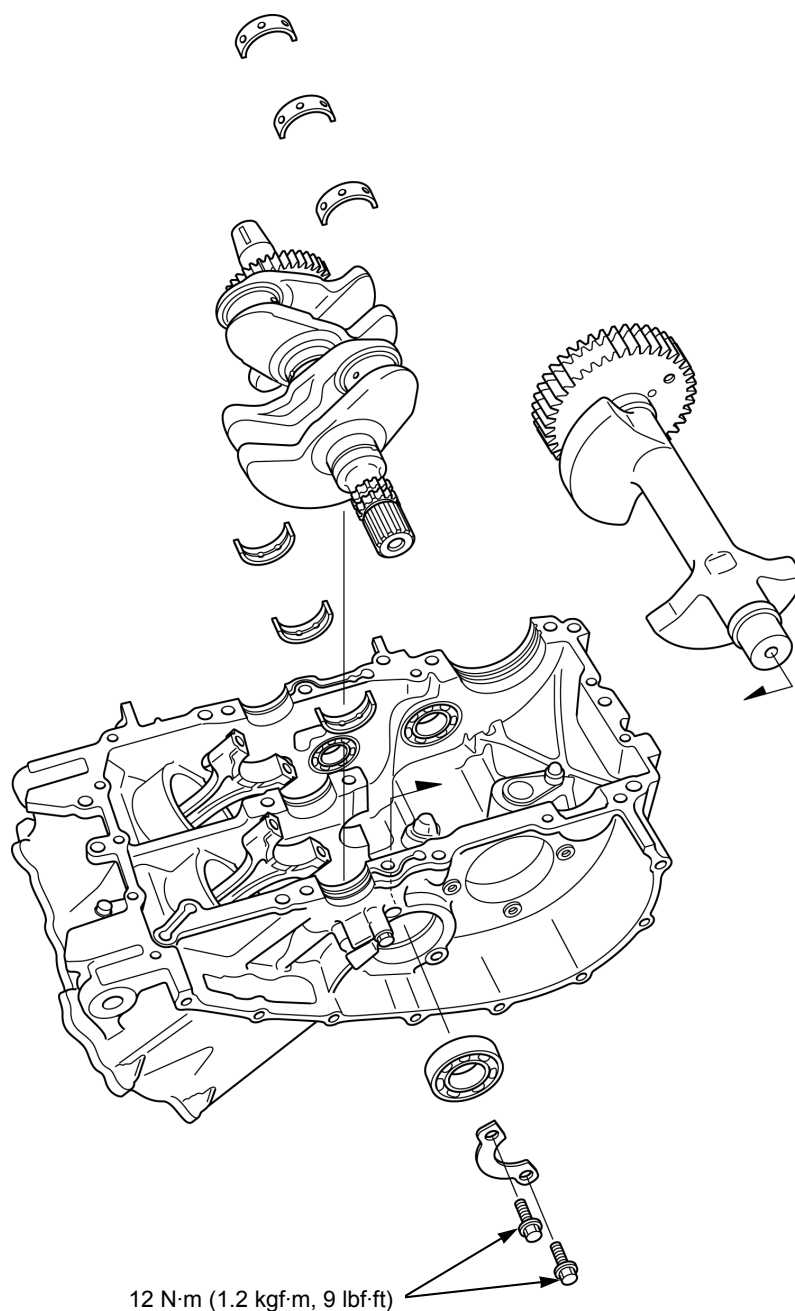
Assemble the transmission gears and shafts.

**NOTE:**

- Coat each gear with clean engine oil and check for smooth movement.
- Align the lock washer tabs with the spline washer grooves.
- Always install the thrust washers and snap rings with the chamfered (rolled) edge facing away from the thrust load.
- Install the snap rings [1] so that the end gap aligns with the groove of the splines.
- Make sure that the snap rings are fully seated in the shaft groove after installing them.



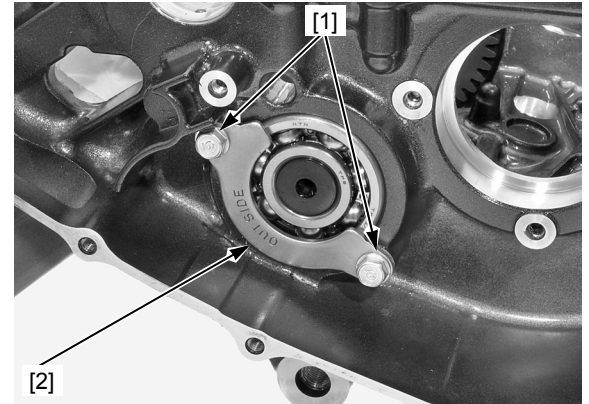
## BALANCER



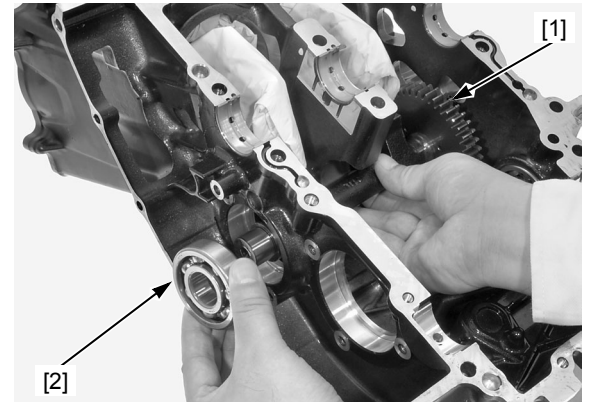
## REAR BALANCER REMOVAL

Remove the crankshaft (page 14-5).

Remove the rear balancer shaft bearing set plate bolts [1] and set plate [2].



Remove the rear balancer shaft [1] and right balancer shaft bearing [2].



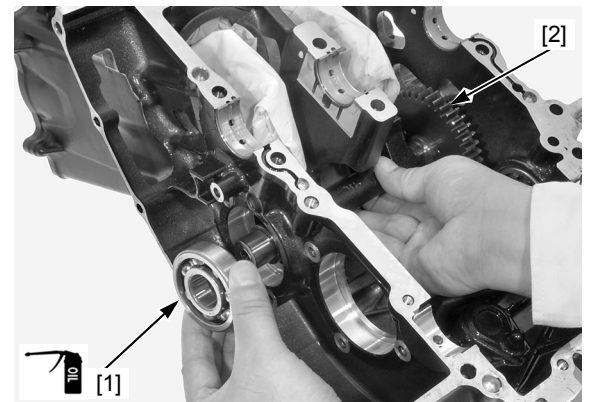
## REAR BALANCER INSTALLATION

Apply engine oil to the right balancer shaft bearing [1].

Install the rear balancer shaft [2] and right balancer shaft bearing into the upper crankcase.

### NOTE:

Install the bearing into the crankcase with the marked side facing out.



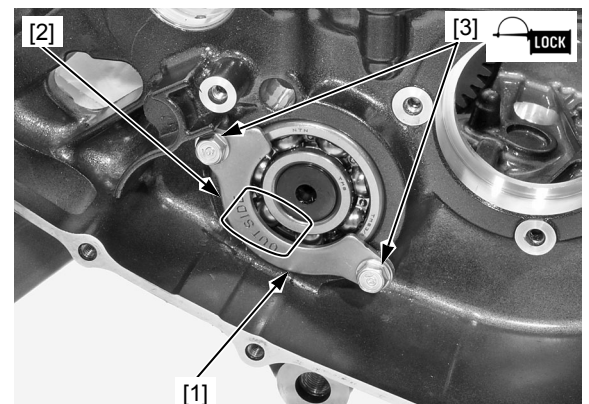
Apply locking agent to the rear balancer shaft bearing set plate bolt threads (page 25-13).

Install the rear balancer shaft bearing set plate [1] with its "OUT SIDE" mark [2] facing out.

Install and tighten the rear balancer shaft bearing set plate bolts [3] to the specified torque.

**TORQUE: 12 N·m (1.2 kgf·m, 9 lbf·ft)**

Install the crankshaft (page 14-6).



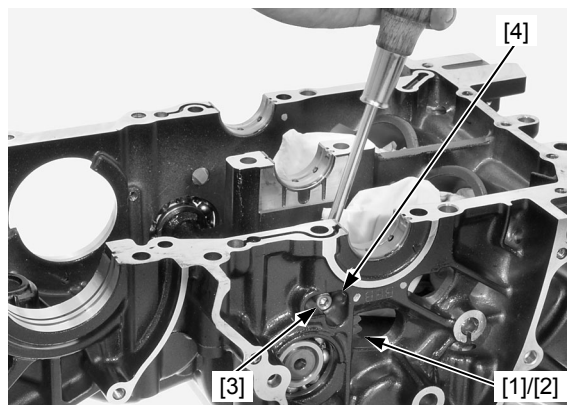
## CRANKSHAFT

### INSTALLATION

**NOTE:**

Refer to crankshaft installation (page 14-6).

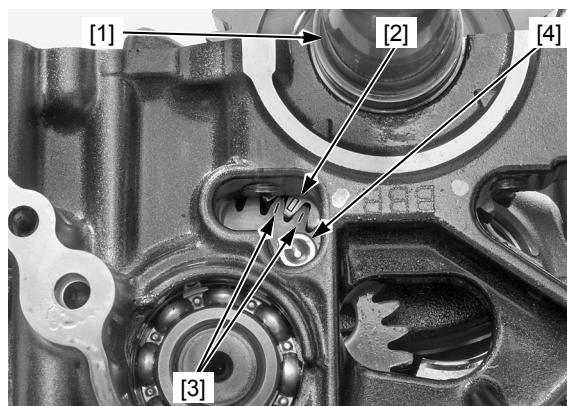
Align the rear balancer driven gear [1] and sub-gear [2] teeth and install a 6 x 12 mm socket bolt [3] into the driven gear and sub-gear holes through the upper crankcase inspection hole [4].



Install the crankshaft [1] onto the upper crankcase so that the index line [2] on the balancer drive gear is positioned between the index lines [3] on the balancer driven gear as shown.

Remove the 6 x 12 mm socket bolt [4].

Set the connecting rods onto the crankpins.



## REAR WHEEL

### REMOVAL

**NOTE:**

Refer to rear wheel removal (page 17-5).

Loosen the lock nuts [1], drive chain adjusting bolts [2] and axle nut [3].

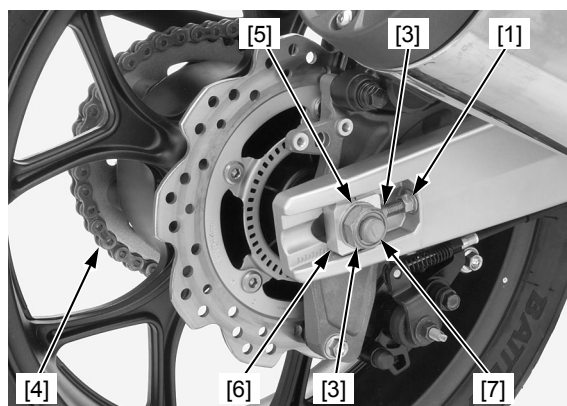
Push the rear wheel forward.

Derail the drive chain [4] from the driven sprocket.

Remove the axle nut, washer [5] and axle collar [6].

Remove the axle [7], axle collar and rear wheel.

*Do not operate the brake lever after removing the rear wheel.*





## INSTALLATION

### NOTE:

Refer to rear wheel installation (page 17-10).

*Be careful not to damage the brake pads.*

Install the rear wheel in the swingarm aligning the brake disc between the brake pads.

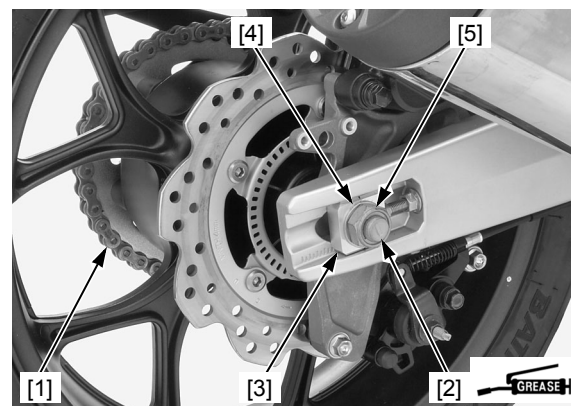
Install the drive chain [1] over the driven sprocket.

Apply a thin coat of grease to the rear axle outer surface.

Install the rear axle [2] from the left side through the left axle collar, swingarm, rear wheel and side collars.

Install the axle collar [3], washer [4] and rear axle nut [5].

Adjust the drive chain slack (page 25-35).



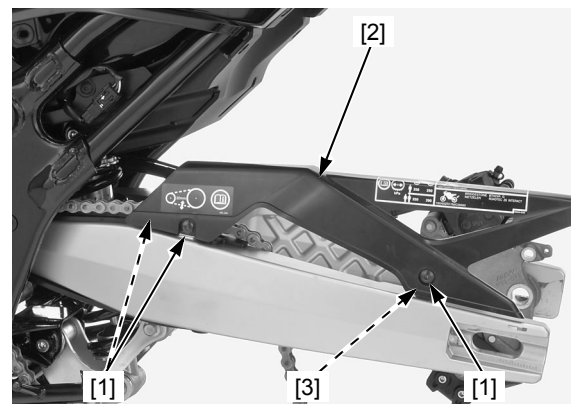
## SWINGARM

### REMOVAL

### NOTE:

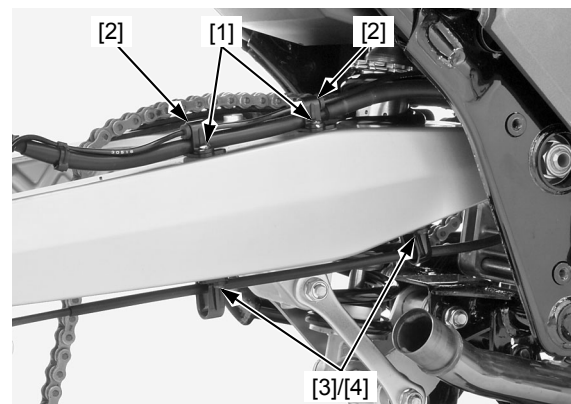
Refer to swingarm removal (page 17-15).

Remove the three socket bolts [1], the drive chain case [2] and chain case stay [3].



Remove the screws [1] and brake hose guides [2].

Remove the screws [3] and parking brake cable guides [4].



## DISASSEMBLY/INSPECTION

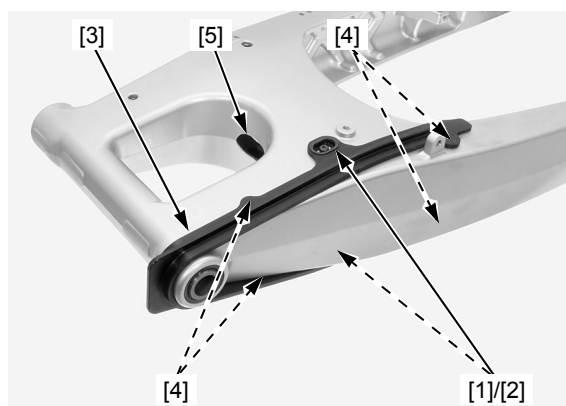
### NOTE:

Refer to swingarm disassembly/inspection (page 17-20).

Remove the drive chain slider mounting screws [1] and washers [2].

Remove the drive chain slider [3] by releasing the slider bosses [4] from the swingarm holes.

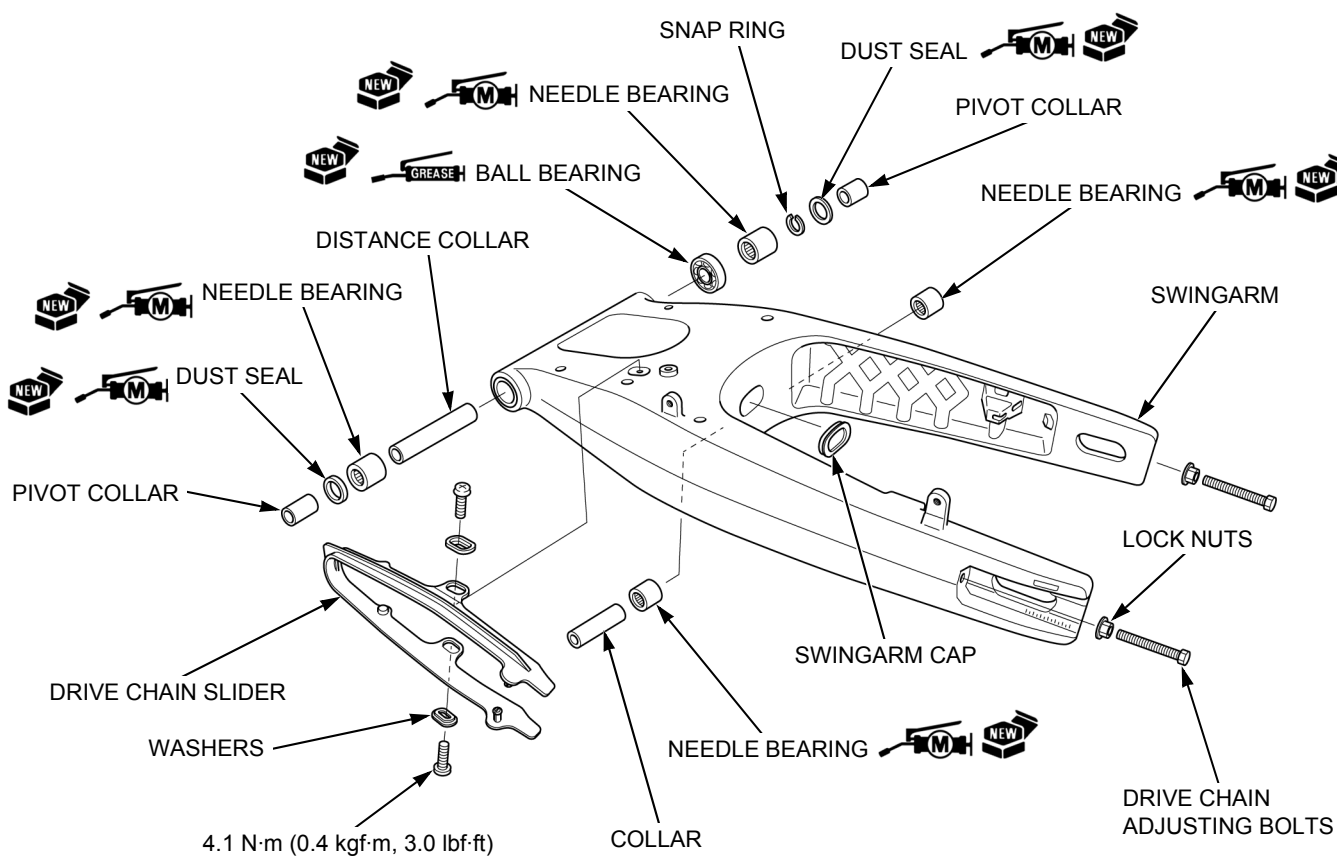
Remove the swingarm cap [5].



## ASSEMBLY

### NOTE:

Refer to swingarm assembly (page 17-20).



Install the swingarm cap [1].

Install the drive chain slider [2].

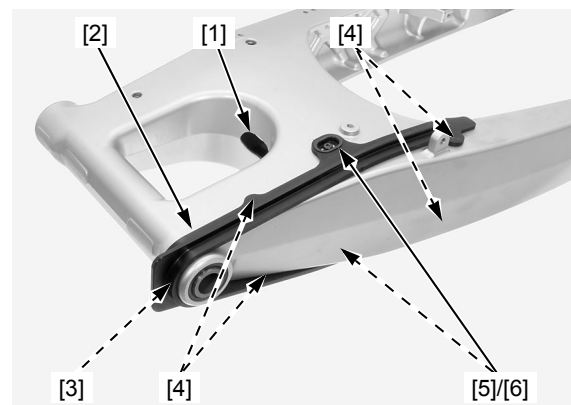
**NOTE:**

- Align the drive chain slider rib [3] with the swingarm groove.
- Align the drive chain slider bosses [4] with the swingarm holes.

Install the washers [5] and drive chain slider mounting screws [6].

Tighten the screws to the specified torque.

**TORQUE: 4.1 N·m (0.4 kgf·m, 3.0 lbf·ft)**



## INSTALLATION

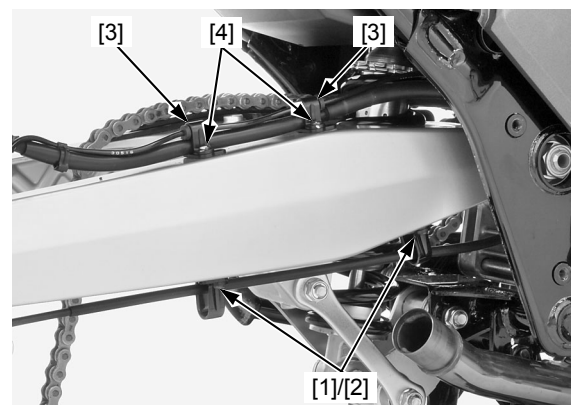
**NOTE:**

Refer to swingarm installation (page 17-21).

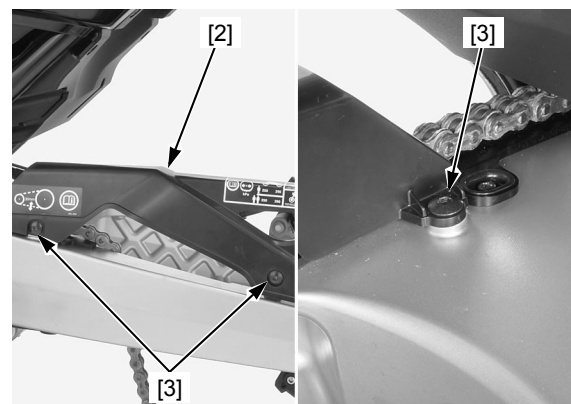
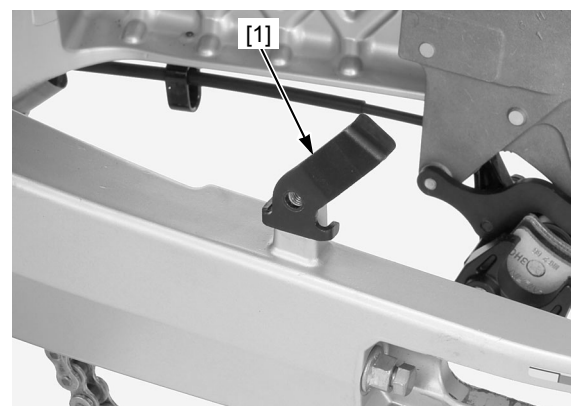
Install the parking brake cable guides [1] and screws [2], and tighten the screws to the specified torque.

**TORQUE: 1.3 N·m (0.1 kgf·m, 0.7 lbf·ft)**

Install the brake hose guides [3] and screws [4], and tighten the screws securely.



Place the chain case stay [1] as shown, install the drive chain case [2] with three socket bolts [3] and tighten the bolts securely.



## BRAKE FLUID REPLACEMENT/AIR BLEEDING

### NOTE:

- Do not allow foreign material to enter the system when filling the reservoir.
- When using a commercially available brake bleeder, follow the manufacturer's operating instructions.

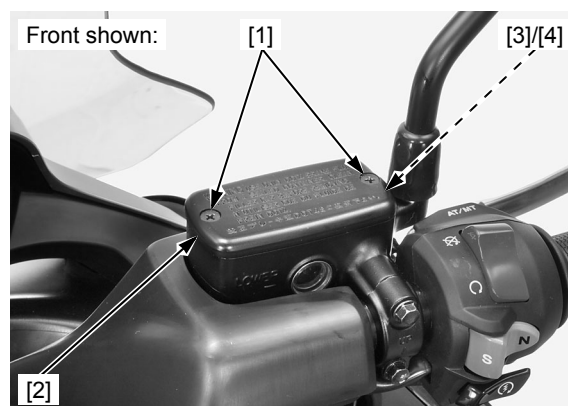
### BRAKE FLUID DRAINING

Place the motorcycle on its centerstand.

Front brake: Turn the handlebar to the left until the front brake reservoir is parallel to the ground.

Rear brake: Turn the handlebar to the right until the rear brake reservoir is parallel to the ground.

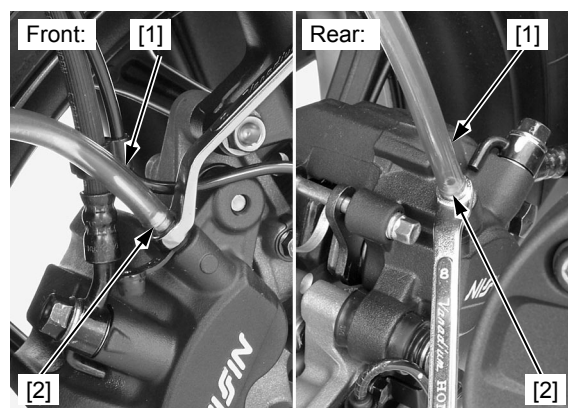
Remove the reservoir cover screws [1], reservoir cover [2], set plate [3] and diaphragm [4].



Connect a bleed hose [1] to the brake caliper bleed valve [2].

Loosen the bleed valve and pump the brake lever until no more fluid flows out of the bleed valve.

Tighten the bleed valve.



## BRAKE FLUID FILLING/AIR BLEEDING

### NOTE:

- If an automatic refill system is not used, add brake fluid when the fluid level in the reservoir is low.
- Check the fluid level often while bleeding the brakes to prevent air from being pumped into the system.
- When using a brake bleeding tool, follow the manufacturer's operating instructions.
- If air is entering the bleeder from around the bleed valve threads, seal the threads with teflon tape.

Fill the brake reservoir with DOT 4 brake fluid from a sealed container.

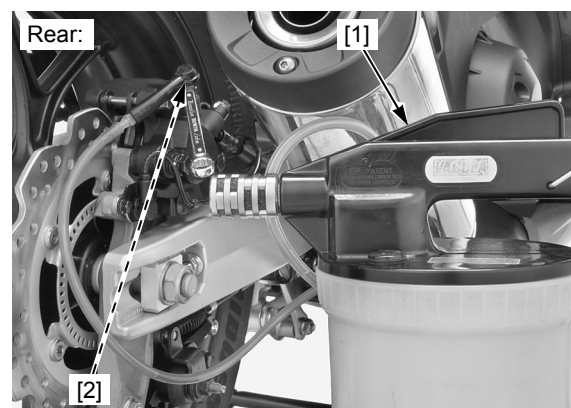
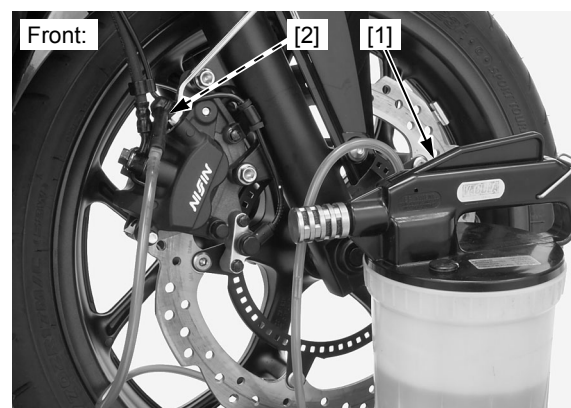
Connect a commercially available brake bleeder [1] to the brake caliper bleed valve [2].

Operate the brake bleeder and loosen the bleed valve.

Close the bleed valve and operate the brake lever. If it is still spongy, bleed the system again.

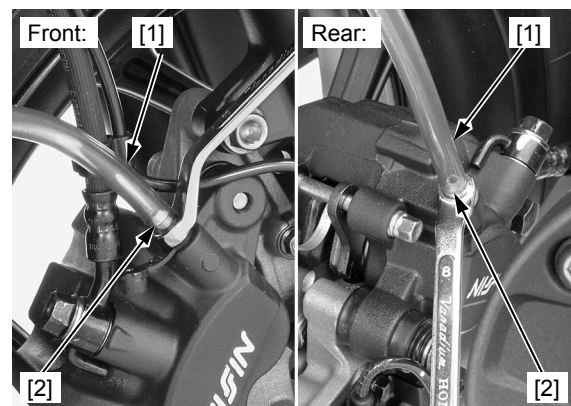
After bleeding the air completely, tighten the brake caliper bleed valve to the specified torque.

**TORQUE: 5.4 N·m (0.6 kgf·m, 4.0 lbf·ft)**



If a brake bleeder is not available, use the following procedure:

Connect a bleed hose [1] to the front brake caliper bleed valve [2].



Pressurize the system with the brake lever until lever resistance is felt.

1. Squeeze the brake lever, open the bleed valve 1/4 turn and then close the valve.
2. Release the brake lever slowly and wait several seconds after it reaches the end its travel.

### NOTE:

- Do not release the lever until the bleed valve has been closed.
3. Repeat steps 1 and 2 until air bubbles do not appear in the bleed hose.



## NC750D-E ADDENDUM

Fill the brake reservoir to the casting ledge [1] with DOT 4 brake fluid from a sealed container.

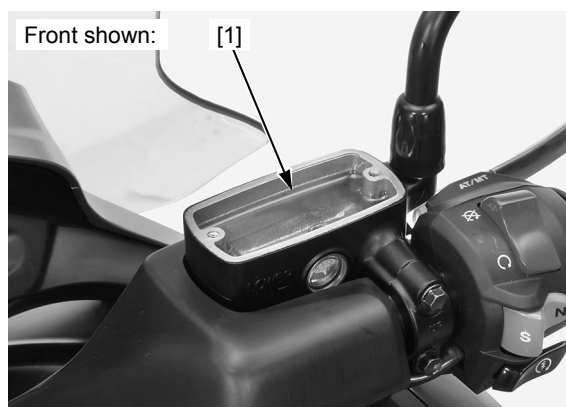
Install the diaphragm and set plate.

Install the reservoir cover and tighten the screws to the specified torque.

**TORQUE: 1.5 N·m (0.2 kgf·m, 1.1 lbf·ft)**

Tighten the brake caliper bleed valve to the specified torque.

**TORQUE: 5.4 N·m (0.6 kgf·m, 4.0 lbf·ft)**



## FRONT BRAKE CALIPER

### REMOVAL/INSTALLATION

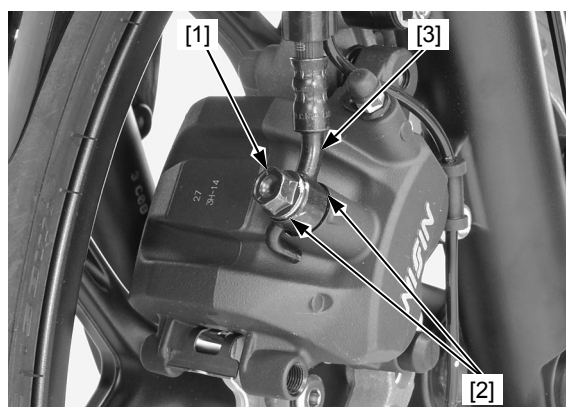
NOTE:

Refer to front brake caliper removal/installation (page 18-18).

Remove the brake hose oil bolt [1], sealing washers [2] and brake hose joint [3].

NOTE:

When removing the oil bolt, cover the end of brake hose to prevent contamination.



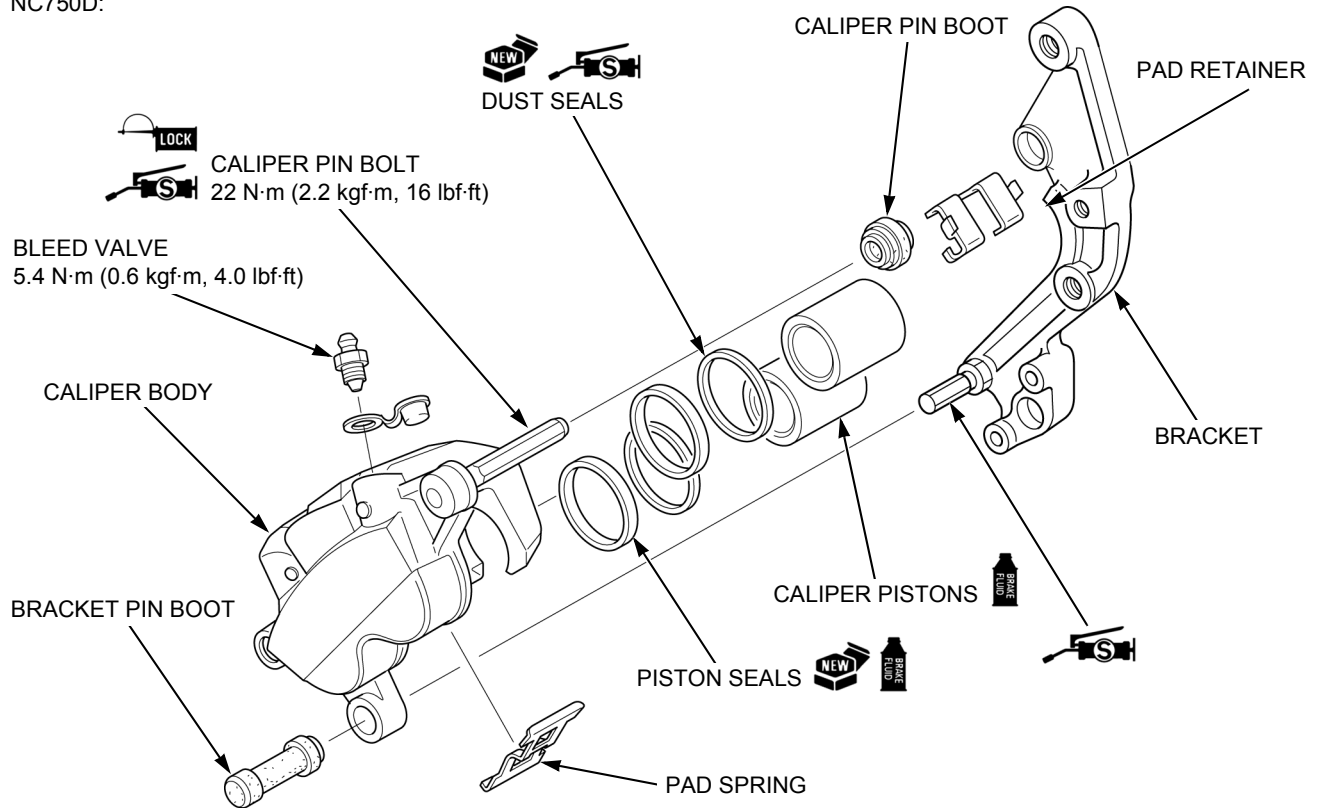
## DISASSEMBLY/ASSEMBLY

Disassemble the front brake caliper as shown in the figure.

### NOTE:

- Be careful not to damage the piston sliding surface.
- If the caliper pin boot and bracket pin boot are hard or deteriorated, replace them with new ones.

NC750D:



Place a shop towel over the pistons.

*Do not use high pressure air or bring the nozzle too close to the inlet.*

Position the caliper body with the pistons facing down and apply small squirts of air pressure to the fluid inlet to remove the pistons.

Clean the seal grooves with clean brake fluid.

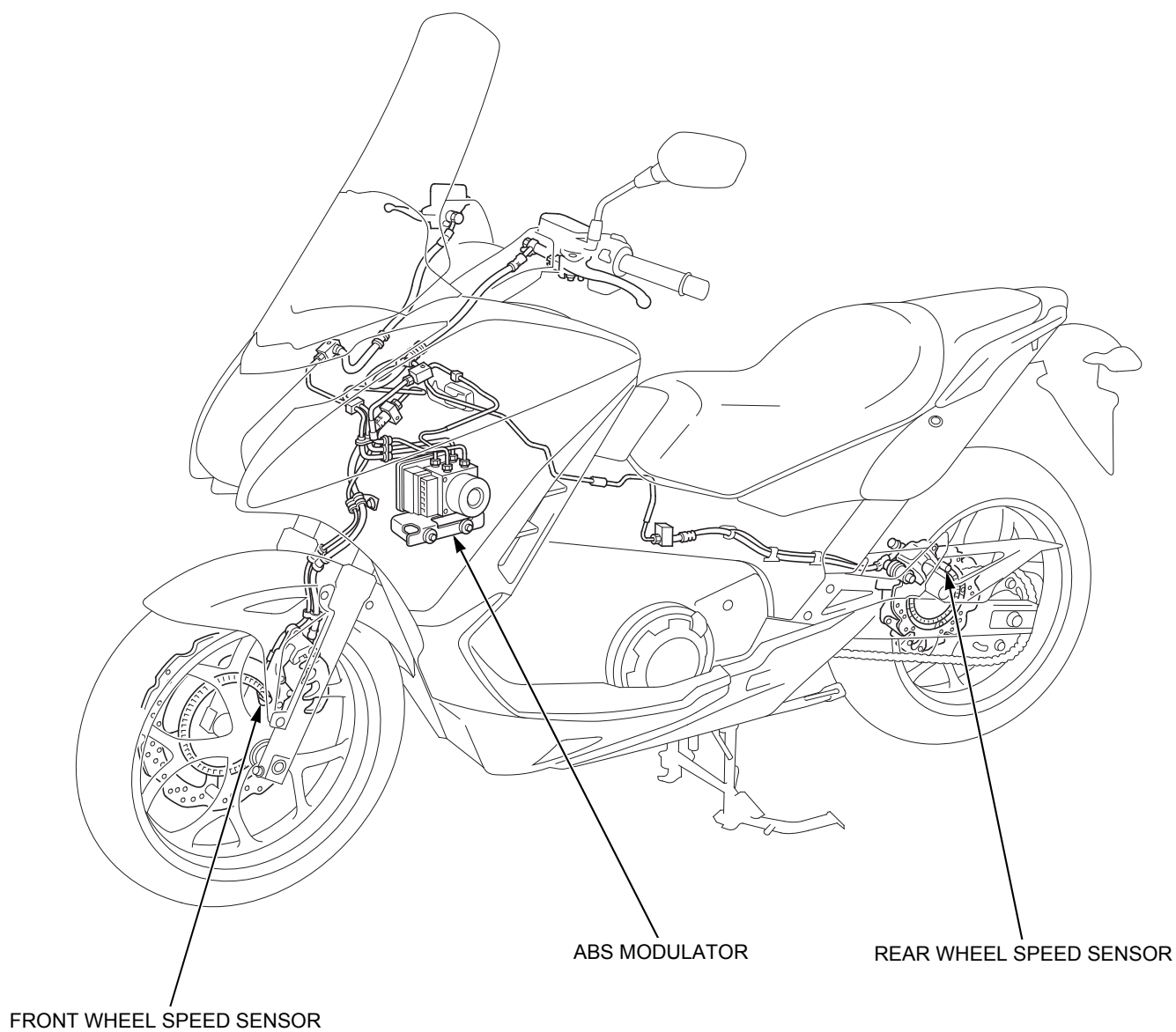
Assembly is in the reverse order of disassembly.

### NOTE:

- Apply locking agent to the caliper pin threads.
- Replace the piston seals and dust seals with new ones.
- Apply brake fluid to the caliper pistons and new piston seals.
- Apply silicone grease to new dust seals.
- Install the pistons with the opening toward the pads.
- Apply Honda Bond A, Cemedine #540 or equivalent to the brake pad retainer mating surface.
- Apply 0.4 g (0.01 oz) of silicone grease to the caliper pin and bracket pin sliding surfaces.



## ABS SYSTEM LOCATION







## ABS TROUBLESHOOTING INFORMATION

### PROBLEM CODE READOUT/ERASING

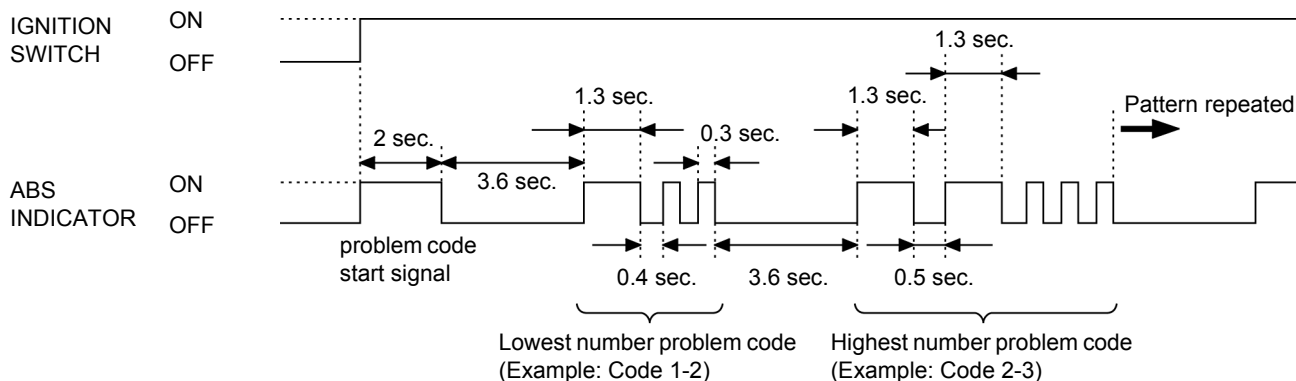
#### NOTE:

Refer to ABS problem code readout/erasing (page 19-8).

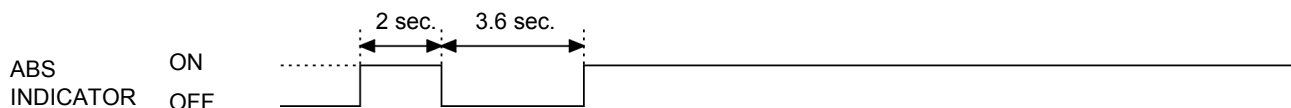
### PROBLEM CODE INDICATION PATTERN

#### NOTE:

- The ABS indicator indicates the problem code by blinking a specified number of times. The indicator has two types of blinking, a long blink and short blink. The long blink lasts for 1.3 seconds and the short blink lasts for 0.3 seconds. The long blink(s) indicate the main code and the short blink(s) indicate the sub-code. For example, when one long blink is followed by two short blinks, the problem code is 1-2 (one long blink = main code: 1, and two short blinks = sub-code: 2).
- When the ABS control unit stores some problem codes, the ABS indicator shows the problem codes in the order from the lowest number to highest number. For example, when the ABS indicator indicates code 1-2, then indicates code 2-3, two failures have occurred.



When the problem code is not stored:



## CIRCUIT INSPECTION

### INSPECTION AT ABS MODULATOR CONNECTOR

Remove the left front side cowl (page 25-28).

Turn the ignition switch OFF.

Disconnecting procedure:

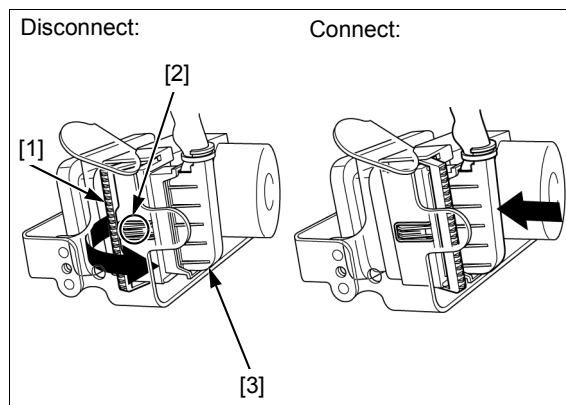
Turn the lock lever [1] to this side while pressing the lock tab [2] to release it.

Be sure the lock lever is turned all the way and disconnect the ABS modulator 18P (Black) connector [3].

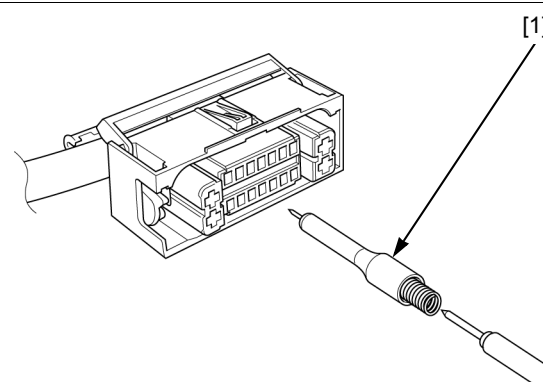
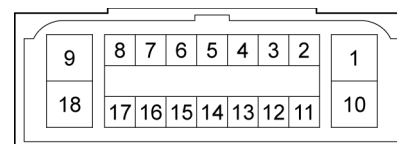
Connecting procedure:

Be sure to seat the lock lever against the wire side of the connector fully. Connect the ABS modulator 18P (Black) connector by pressing it straight at the area as shown (arrow) until the lock tab clicks.

Make sure the connector is locked securely.



- Always clean around and keep any foreign material away from the connector before disconnecting it.
- A faulty ABS is often related to poorly connected or corroded connections. Check those connections before proceeding.
- In testing at ABS modulator 18P (Black) connector terminals (wire harness side; except No. 1, No. 9, No. 10 and No. 18 terminals), always use the test probe [1]. Insert the test probe into the connector terminal, then connect the digital multimeter probe to the test probe.

**TOOL:****Test probe [1]****07ZAJ-RDJA110****TERMINAL LAYOUT:**

(Terminal side of the wire harness)

## ABS INDICATOR PROBLEM CODE INDEX

## NOTE:

- The ABS indicator might blink in the following cases. Correct the faulty part.
  - Incorrect tire pressure.
  - Tires not recommended for the motorcycle were installed (incorrect tire size).
  - Deformation of the wheel or tire.
- The ABS indicator might blink while riding under the following conditions. This is temporary failure. Be sure to erase the problem code (page 19-9). Then, test-ride the motorcycle above 10 km/h (6 mph) and check the problem code (page 19-8). Ask the rider for the riding conditions in detail when the motorcycle is brought in for inspection.
  - The motorcycle has continuously run bumpy roads.
  - The front wheel leaves the ground for a long time when riding (wheelie).
  - Only either the front or rear wheel rotates.
  - The ABS operates continuously.
  - The ABS control unit has been disrupted by an extremely powerful radio wave (electromagnetic interference).

Problem code	Function failure	Detection		Symptom/Fail-safe function	Refer to
		A	B		
–	ABS indicator malfunction <ul style="list-style-type: none"> <li>• ABS modulator voltage input line</li> <li>• Indicator related wires</li> <li>• Combination meter</li> <li>• ABS modulator</li> <li>• ABS fuse 7.5 A (ABS MAIN)</li> </ul>			• ABS indicator never comes ON at all	25-53
				• ABS indicator stays ON at all	25-53
1-1	Front wheel speed sensor circuit malfunction <ul style="list-style-type: none"> <li>• Wheel speed sensor or related wires</li> </ul>	○	○	• Stops ABS operation	25-56
1-2	Front wheel speed sensor malfunction <ul style="list-style-type: none"> <li>• Wheel speed sensor, pulser ring or related wires</li> <li>• Electromagnetic interference</li> </ul>		○	• Stops ABS operation	
1-3	Rear wheel speed sensor circuit malfunction <ul style="list-style-type: none"> <li>• Wheel speed sensor or related wires</li> </ul>	○	○	• Stops ABS operation	25-58
1-4	Rear wheel speed sensor malfunction <ul style="list-style-type: none"> <li>• Wheel speed sensor, pulser ring or related wires</li> <li>• Electromagnetic interference</li> </ul>		○	• Stops ABS operation	
2-1	Wheel slipping <ul style="list-style-type: none"> <li>• Pulser ring or related wires</li> </ul>		○	• Stops ABS operation	25-56 25-58
3-1	Solenoid valve malfunction (ABS modulator)	○	○	• Stops ABS operation	25-59
3-2					
3-7					
3-8					
4-2	Front wheel lock (Wheelie) <ul style="list-style-type: none"> <li>• Riding condition</li> </ul>		○	• Stops ABS operation	25-56
5-1	Motor lock <ul style="list-style-type: none"> <li>• Pump motor (ABS modulator) or related wires</li> <li>• ABS fuse 30 A (ABS M.)</li> </ul>	○	○	• Stops ABS operation	25-60
5-2	Motor relay stuck off <ul style="list-style-type: none"> <li>• Pump motor (ABS modulator) or related wires</li> <li>• ABS fuse 30 A (ABS M.)</li> </ul>	○	○	• Stops ABS operation	
5-3	Motor relay stuck on <ul style="list-style-type: none"> <li>• Pump motor (ABS modulator) or related wires</li> <li>• ABS fuse 30 A (ABS M.)</li> </ul>	○	○	• Stops ABS operation	
5-4	Valve relay malfunction <ul style="list-style-type: none"> <li>• Valve relay (ABS modulator) or related wires</li> <li>• ABS fuse 30 A (ABS SOL.)</li> </ul>	○	○	• Stops ABS operation	25-61
6-1	Power circuit/Under voltage <ul style="list-style-type: none"> <li>• Input voltage (too low)</li> <li>• ABS fuse 7.5 A (ABS MAIN)</li> </ul>	○	○	• Stops ABS operation	25-62
6-2	Power circuit/Over voltage <ul style="list-style-type: none"> <li>• Input voltage (too high)</li> </ul>	○	○	• Stops ABS operation	
8-1	ABS control unit <ul style="list-style-type: none"> <li>• ABS control unit malfunction (ABS modulator)</li> </ul>	○	○	• Stops ABS operation	25-62

(A) Pre-start self-diagnosis (page 19-7)

(B) Ordinary self-diagnosis: diagnoses while the motorcycle is running (after pre-start self-diagnosis)

# ABS INDICATOR CIRCUIT TROUBLESHOOTING

## ABS INDICATOR DOES NOT COME ON (when the ignition switch turned ON)

NOTE:

- Check the combination meter initial operation before proceeding (page 21-6).

### 1. Indicator Operation Inspection

Turn the ignition switch OFF.  
Disconnect the ABS modulator 18P (Black) connector (page 25-50).  
Turn the ignition switch ON.  
Check the ABS indicator.

**Does the ABS indicator come on?**

**YES** – Faulty ABS modulator

**NO** – GO TO STEP 2.

### 2. Indicator Signal Line Short Circuit Inspection

Turn the ignition switch OFF.  
Check for continuity between the wire harness side 18P (Black) connector [1] terminal and ground.

**TOOL:**

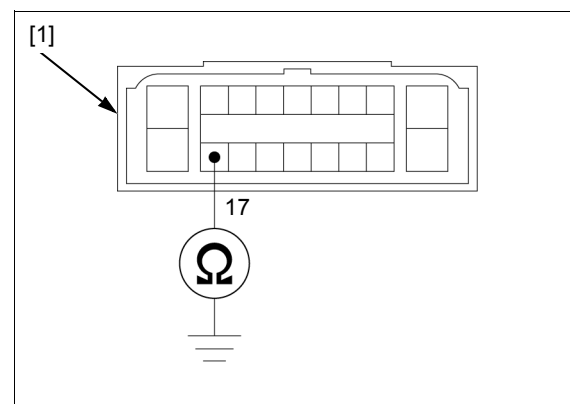
**Test probe** 07ZAJ-RDJA110

**CONNECTION: 17 – Ground**

**Is there continuity?**

**YES** – Short circuit in the Orange/black wire

**NO** – Faulty combination meter



## ABS INDICATOR STAYS ON (Indicator does not go off when the motorcycle is running, but problem code is not stored)

### 1. Service Check Line Short Circuit Inspection

Turn the ignition switch OFF.  
Disconnect the ABS modulator 18P (Black) connector (page 25-50).  
Check for continuity between the wire harness side 18P (Black) connector [1] terminal and ground.

**TOOL:**

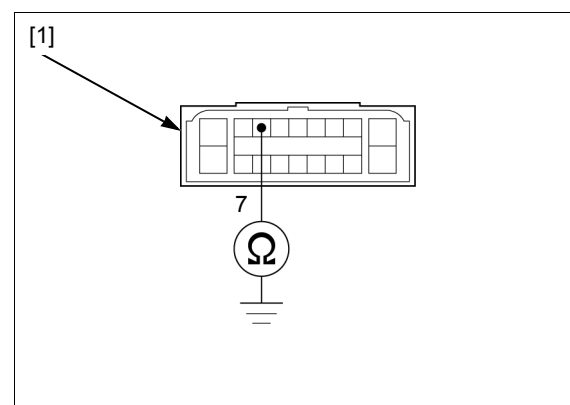
**Test probe** 07ZAJ-RDJA110

**CONNECTION: 7 – Ground**

**Is there continuity?**

**YES** – Short circuit in the Brown wire

**NO** – GO TO STEP 2.



## 2. Indicator Signal Line Open Circuit Inspection

Short the wire harness side 18P (Black) connector [1] terminal to the ground with a jumper wire [2].

**TOOL:**

**Test probe** 07ZAJ-RDJA110

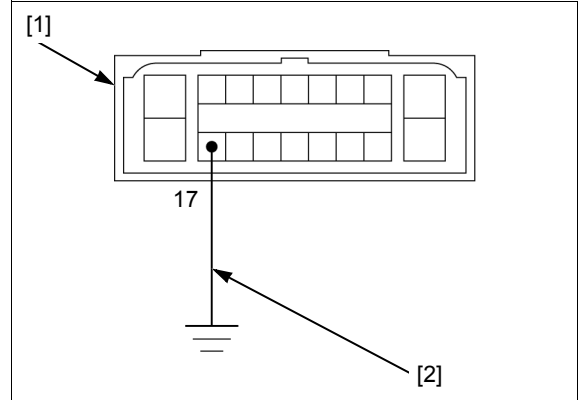
**CONNECTION: 17 – Ground**

Turn the ignition switch ON.  
Check the ABS indicator.

**Does it go off?**

**YES** – GO TO STEP 3.

**NO** – • Open circuit in the Orange/black wire  
• Faulty combination meter (if the Orange/black wire is OK)



## 3. Modulator Ground Line Open Circuit Inspection

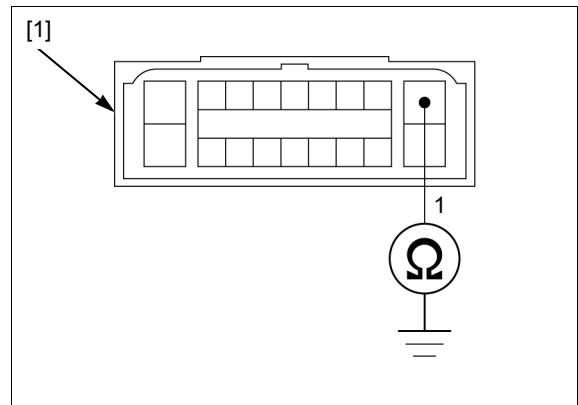
Turn the ignition switch OFF.  
Check for continuity between the wire harness side 18P (Black) connector [1] terminal and ground.

**CONNECTION: 1 – Ground**

**Is there continuity?**

**YES** – GO TO STEP 4.

**NO** – Open circuit in the Green/yellow wire



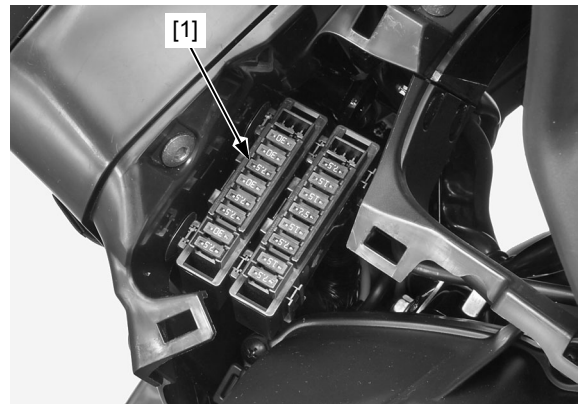
## 4. Fuse Inspection

Remove the fuse box cover and check the ABS MAIN fuse (7.5 A) [1] in the fuse box.

**Is the fuse blown?**

**YES** – GO TO STEP 5.

**NO** – GO TO STEP 6.



## 5. Power Input Line Short Circuit Inspection

With the ABS MAIN fuse (7.5 A) removed, check for continuity between the wire harness side 18P (Black) connector [1] and ground.

**TOOL:**

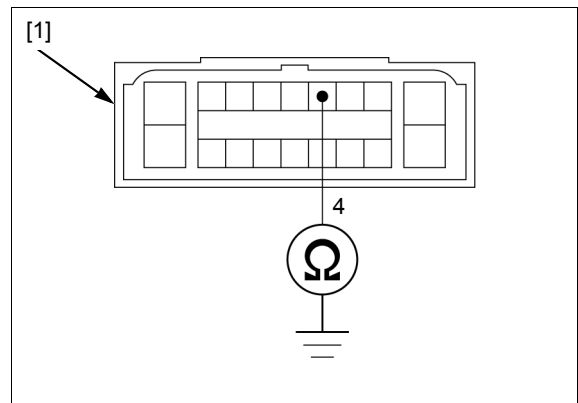
**Test probe** 07ZAJ-RDJA110

**CONNECTION: 4 – Ground**

**Is there continuity?**

**YES** – Short circuit in the Red/black wire

**NO** – Intermittent failure. Replace the ABS MAIN fuse (7.5 A) with a new one, and recheck.



**6. Power Input Line Open Circuit Inspection**

Install the ABS MAIN fuse (7.5 A).

Turn the ignition switch ON.

Measure the voltage between the wire harness side 18P (Black) connector [1] terminal and ground.

**TOOL:**

Test probe

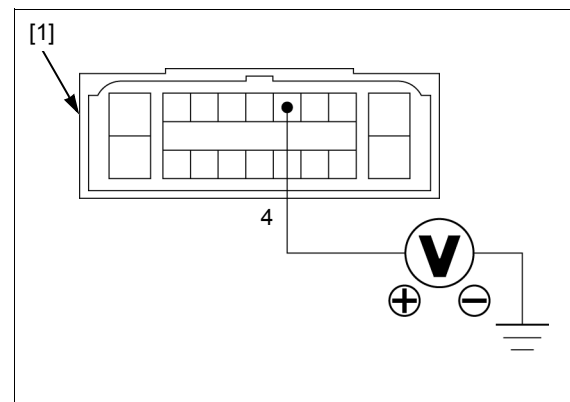
07ZAJ-RDJA110

**CONNECTION:** 4 (+) – Ground (–)

*Is there battery voltage?*

**YES** – Faulty ABS modulator

**NO** – Open circuit in the Red/black wire



## ABS TROUBLESHOOTING

**NOTE:**

- Perform inspection with the ignition switch OFF, unless otherwise specified.
- All connector diagrams in the troubleshooting are viewed from the terminal side.
- Use a fully charged battery. Do not diagnose with a charger connected to the battery.
- When the ABS modulator assembly is detected to be faulty, recheck the wire harness and connector connections closely before replacing it.
- After diagnostic troubleshooting, erase the problem code (page 19-9) and test-ride the motorcycle to check that the ABS indicator operates normally during pre-start self-diagnosis (page 19-7).

### **PROBLEM CODE 1-1, 1-2, 2-1 or 4-2 (Front Wheel Speed Sensor Circuit/ Front Wheel Speed Sensor/Front Pulser Ring/Front Wheel Lock)**

**NOTE:**

- The ABS indicator might blink under unusual riding conditions (page 25-52). This is temporary failure. Erase the problem code (page 19-9) and test-ride the motorcycle above 10 km/h (6 mph) to check that the ABS indicator goes off and does not blink.

#### **1. Speed Sensor Air Gap Inspection**

Measure the air gap between the front wheel speed sensor and pulser ring (page 19-23).

***Is the air gap correct?***

**YES** – GO TO STEP 2.

**NO** – Check each part for deformation and looseness and correct accordingly. Recheck the air gap.

#### **2. Speed Sensor Condition Inspection**

Inspect the area around the front wheel speed sensor:

Check that there is iron or other magnetic deposits between the pulser ring [1] and wheel speed sensor [2], and the pulser ring slots for obstructions.

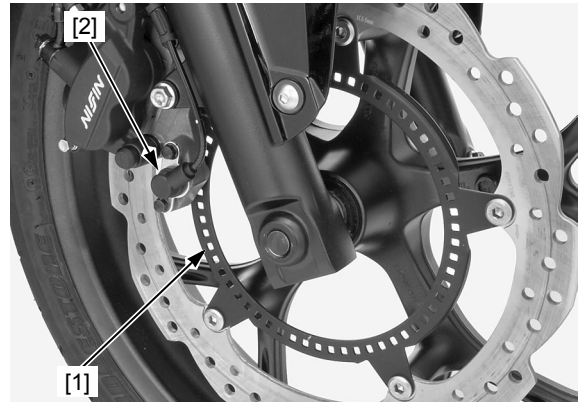
Check the installation condition of the pulser ring or wheel speed sensor for looseness.

Check the pulser ring and sensor tip for deformation or damage.

***Are the sensor and pulser ring in good condition?***

**YES** – GO TO STEP 3.

**NO** – Remove any deposits. Install properly or replace faulty part.





### 3. Front Wheel Speed Sensor Line Short Circuit Inspection (at sensor side)

Turn the ignition switch OFF.

Disconnect the front wheel speed sensor 2P (Blue) connector.

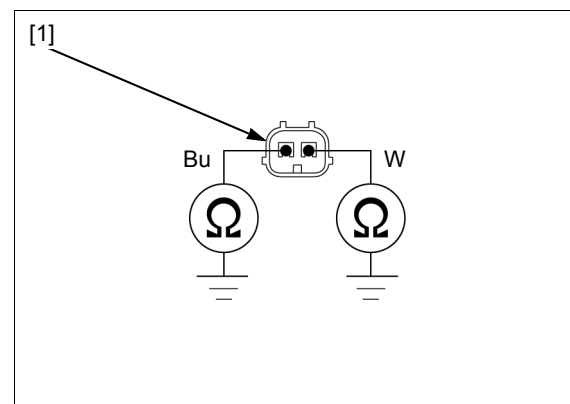
Check for continuity between each terminal of the sensor side 2P (Blue) connector [1] and ground.

**CONNECTION: White – Ground**  
**Blue – Ground**

*Is there continuity?*

**YES** – Faulty front wheel speed sensor

**NO** – GO TO STEP 4.



### 4. Front Wheel Speed Sensor Line Short Circuit Inspection

Disconnect the ABS modulator 18P (Black) connector (page 25-50).

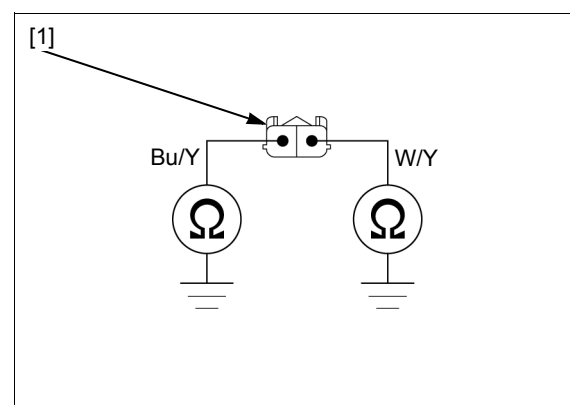
Check for continuity between each terminal of the wire harness side 2P (Blue) connector [1] and ground.

**CONNECTION: Blue/yellow – Ground**  
**White/yellow – Ground**

*Is there continuity?*

**YES** – • Short circuit in the Blue/yellow wire  
• Short circuit in the White/yellow wire

**NO** – GO TO STEP 5.



### 5. Speed Sensor Line Open Circuit Inspection

Short the wire harness side 18P (Black) connector [1] terminals with a jumper wire [2].

**CONNECTION: 3 – 12**

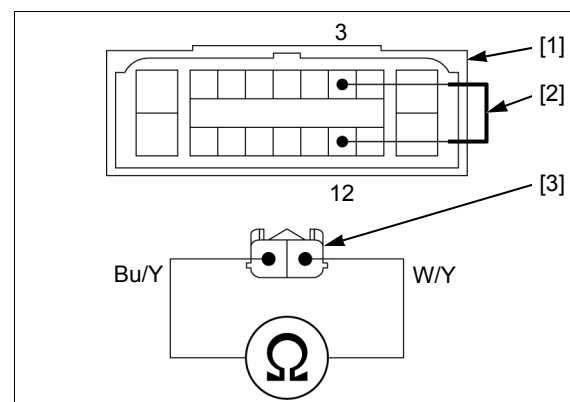
Check for continuity between the wire harness side 2P (Blue) connector [3] terminals.

**CONNECTION: Blue/yellow – White/yellow**

*Is there continuity?*

**YES** – GO TO STEP 6.

**NO** – Open circuit in the Blue/yellow or White/yellow wire



### 6. Failure Reproduction with a New Speed Sensor

Replace the front wheel speed sensor with a new one (page 19-23).

Connect the 18P (Black) and 2P (Blue) connectors.

Erase the problem code (page 19-9).

Test-ride the motorcycle above 10 km/h (6 mph).

Retrieve the problem code (page 19-8) and check the ABS indicator.

**Dose the ABS indicator indicate code "1-1, 1-2, 2-1 or 4-2"?**

**YES** – Faulty ABS modulator

**NO** – Faulty original wheel speed sensor

## PROBLEM CODE 1-3, 1-4 or 2-1 (Rear Wheel Speed Sensor Circuit/Rear Wheel Speed Sensor/Rear Pulser Ring)

### NOTE:

- The ABS indicator might blink under unusual riding conditions (page 25-52). This is temporary failure. Erase the problem code (page 19-9) and test-ride the motorcycle above 10 km/h (6 mph) to check that the ABS indicator goes off and does not come on.

### 1. Speed Sensor Air Gap Inspection

Measure the air gap between the rear wheel speed sensor and pulser ring (page 19-23).

**Is the air gap correct?**

**YES** – GO TO STEP 2.

**NO** – Check each part for deformation and looseness and correct accordingly. Recheck the air gap.

### 2. Speed Sensor Condition Inspection

Inspect the area around the rear wheel speed sensor:

Check that there is iron or other magnetic deposits between the pulser ring [1] and wheel speed sensor [2], and the pulser ring slots for obstructions.

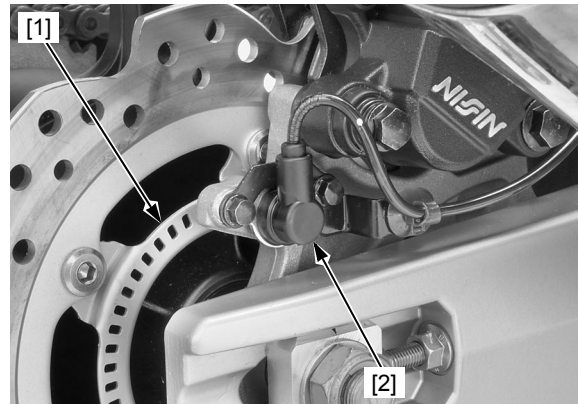
Check the installation condition of the pulser ring or wheel speed sensor for looseness.

Check the pulser ring and sensor tip for deformation or damage.

**Are the sensor and pulser ring in good condition?**

**YES** – GO TO STEP 3.

**NO** – Remove any deposits. Install properly or replace faulty part.



### 3. Rear Wheel Speed Sensor Short Circuit Inspection

Turn the ignition switch OFF.

Disconnect the rear wheel speed sensor 2P (Gray) connector.

Check for continuity between each terminal of the sensor side 2P (Gray) connector [1] and ground.

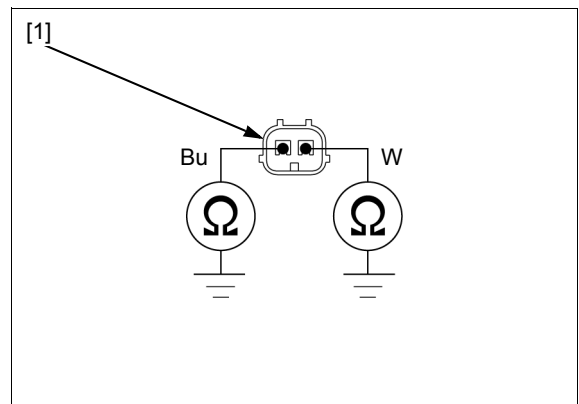
**CONNECTION: Blue – Ground**

**White – Ground**

**Is there continuity?**

**YES** – Faulty rear wheel speed sensor

**NO** – GO TO STEP 4.



#### 4. Rear Wheel Speed Sensor Line Short Circuit Inspection

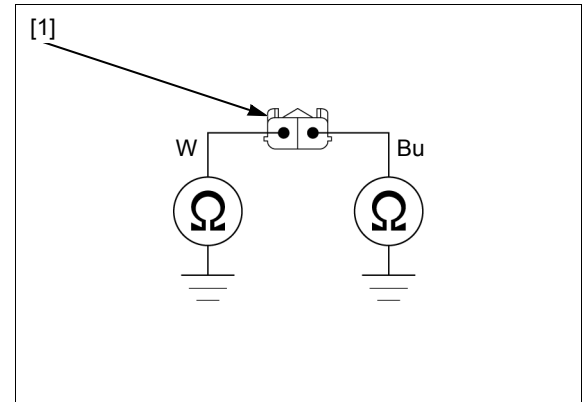
Disconnect the ABS modulator 18P (Black) connector (page 25-50).  
Check for continuity between each terminal of the wire harness side 2P (Gray) connector [1] and ground.

**CONNECTION: White – Ground**  
**Blue – Ground**

*Is there continuity?*

**YES** – • Short circuit in the White wire  
• Short circuit in the Blue wire

**NO** – GO TO STEP 5.



#### 5. Speed Sensor Line Open Circuit Inspection

Short the wire harness side 18P (Black) connector [1] terminals with a jumper wire [2].

**CONNECTION: 13 – 14**

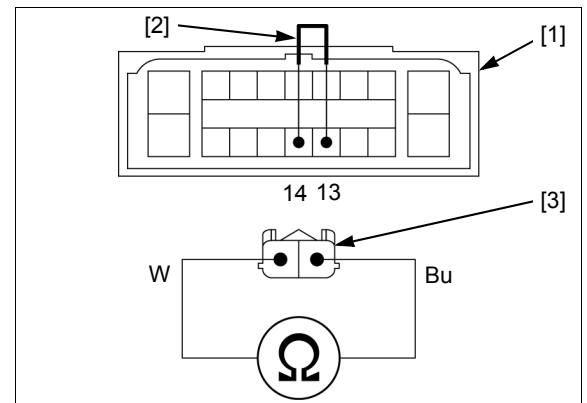
Check for continuity between the wire harness side 2P (Gray) connector [3] terminals.

**CONNECTION: White – Blue**

*Is there continuity?*

**YES** – GO TO STEP 6.

**NO** – Open circuit in the White or Blue wire



#### 6. Failure Reproduction with a New Speed Sensor

Replace the rear wheel speed sensor with a new one (page 19-24).  
Connect the 18P (Black) and 2P (Gray) connectors.  
Erase the problem code (page 19-9).  
Test-ride the motorcycle above 10 km/h (6 mph).  
Retrieve the problem code (page 19-8) and check the ABS indicator.

**Dose the ABS indicator indicate code "1-3, 1-4 or 2-1"?**

**YES** – Faulty ABS modulator

**NO** – Faulty original wheel speed sensor

### PROBLEM CODE 3-1, 3-2, 3-7 or 3-8 (Solenoid Valve)

#### 1. Failure Reproduction

Erase the problem code (page 19-9).  
Test-ride the motorcycle above 10 km/h (6 mph).  
Retrieve the problem code (page 19-8) and check the ABS indicator.

**Dose the ABS indicator indicate code "3-1, 3-2, 3-7 or 3-8"?**

**YES** – Faulty ABS modulator

**NO** – Solenoid valve is normal (intermittent failure).

## PROBLEM CODE 5-1, 5-2 or 5-3 (Motor Lock)

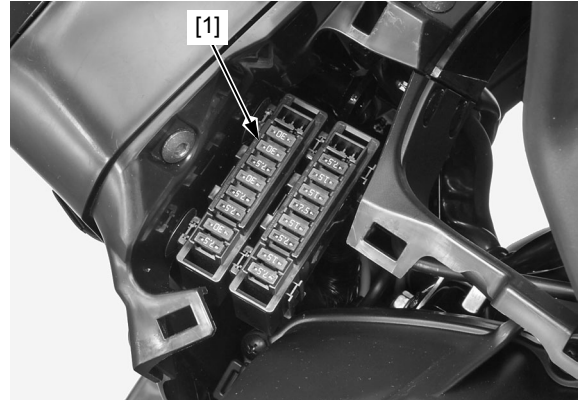
### 1. Fuse Inspection

Remove the inner cover (page 2-4).  
Remove the fuse box cover and check the ABS MOD fuse (30 A) [1] in the fuse box.

**Is the fuse blown?**

**YES** – GO TO STEP 2.

**NO** – GO TO STEP 3.



### 2. Motor Power Input Line Short Circuit Inspection

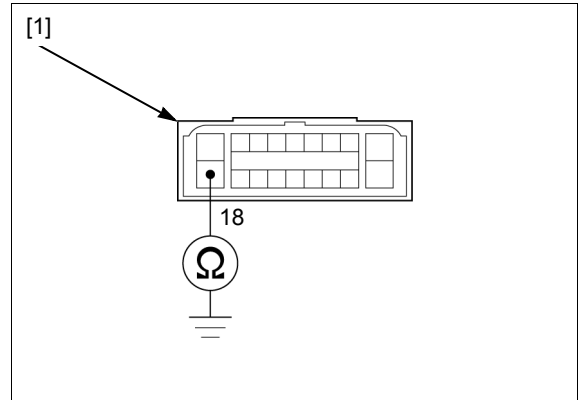
Turn the ignition switch OFF.  
Disconnect the ABS modulator 18P (Black) connector (page 25-50).  
With the ABS MOD fuse (30 A) removed, check for continuity between the wire harness side 18P (Black) connector [1] terminal and ground.

**CONNECTION: 18 – Ground**

**Is there continuity?**

**YES** – Short circuit in the Violet/white wire between the fuse box and ABS modulator 18P (Black) connector

**NO** – Intermittent failure. Replace the ABS MOD fuse (30 A) with a new one, and recheck.



### 3. Motor Power Input Line Open Circuit Inspection

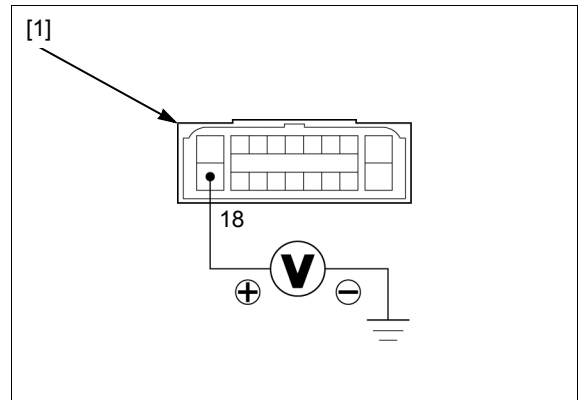
Install the ABS MOD fuse (30 A).  
Turn the ignition switch OFF.  
Disconnect the ABS modulator 18P (Black) connector (page 25-50).  
Measure the voltage between the wire harness side 18P (Black) connector [1] terminal and ground.

**CONNECTION: 18 (+) – Ground (–)**

**Is there battery voltage?**

**YES** – GO TO STEP 4.

**NO** – Open circuit in the Black or Violet/white wire between the battery and 18P (Black) connector



### 4. Failure Reproduction

Connect the 18P (Black) connector.  
Erase the problem code (page 19-9).  
Test-ride the motorcycle above 10 km/h (6 mph).  
Retrieve the problem code (page 19-8) and check the ABS indicator.

**Dose the ABS indicator indicate code "5-1, 5-2 or 5-3"?**

**YES** – Faulty ABS modulator

**NO** – Pump motor is normal (intermittent failure).

## PROBLEM CODE 5-4 (Valve Relay)

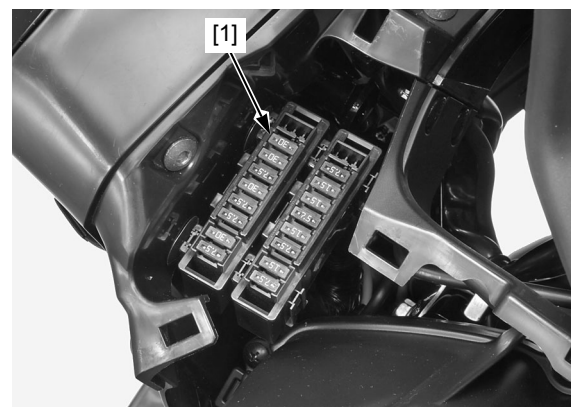
### 1. Fuse Inspection

Remove the inner cover (page 2-4).  
Remove the fuse box cover and check the ABS SOL fuse (30 A) [1] in the fuse box.

**Is the fuse blown?**

**YES** – GO TO STEP 2.

**NO** – GO TO STEP 3.



### 2. Relay Power Input Line Short Circuit Inspection

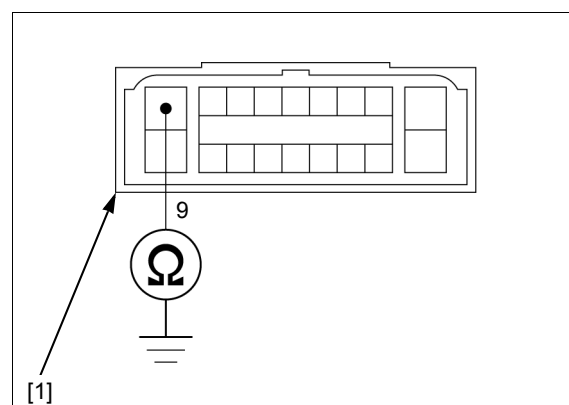
Turn the ignition switch OFF.  
Disconnect the ABS modulator 18P (Black) connector (page 25-50).  
With the ABS SOL fuse (30 A) removed, check for continuity between the wire harness side 18P (Black) connector [1] terminal and ground.

**Connection: 9 – Ground**

**Is there continuity?**

**YES** – Short circuit in the Black/white wire

**NO** – Intermittent failure. Replace the ABS SOL fuse (30 A) with a new one, and recheck.



### 3. Relay Power Input Line Open Circuit Inspection

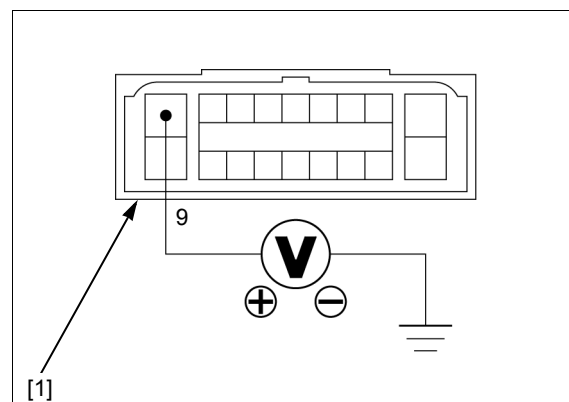
Install the ABS SOL fuse (30 A).  
Turn the ignition switch OFF.  
Disconnect the ABS modulator 18P (Black) connector (page 25-50).  
Measure the voltage between the wire harness side 18P (Black) connector [1] terminal and ground.

**Connection: 9 (+) – Ground (-)**

**Is there battery voltage?**

**YES** – GO TO STEP 4.

**NO** – Open circuit in the Black/white or Black wire between the battery and 18P (Black) connector



### 4. Failure Reproduction

Connect the 18P (Black) connector.  
Erase the problem code (page 19-9).  
Test-ride the motorcycle above 10 km/h (6 mph).  
Retrieve the problem code (page 19-8) and check the ABS indicator.

**Does the ABS indicator indicate code "5-4"?**

**YES** – Faulty ABS modulator

**NO** – Valve relay is normal (intermittent failure)

## PROBLEM CODE 6-1 or 6-2 (Power Circuit)

### 1. Input Voltage Inspection

Turn the ignition switch OFF.  
 Disconnect the ABS modulator 18P (Black) connector (page 25-50).  
 Turn the ignition switch ON.  
 Measure the voltage between the wire harness side 18P (Black) connector [1] terminal and ground.

**TOOL:**

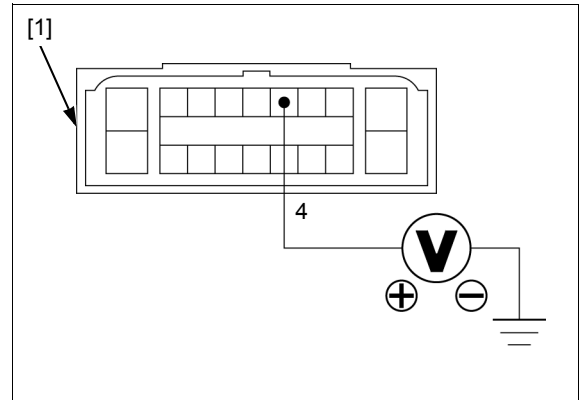
**Test probe** 07ZAJ-RDJA110

**CONNECTION:** 4 (+) – Ground (–)

**Is the voltage above 9.6 V?**

**YES** – GO TO STEP 2.

**NO** – Check the battery voltage (page 20-6).



### 2. Charging Voltage Inspection

Turn the ignition switch OFF.  
 Connect the ABS modulator 18P (Black) connector.  
 Measure the charging voltage (page 20-7).

**Is the voltage above 16.5 V?**

**YES** – Check the regulator/rectifier (page 20-8).

**NO** – GO TO STEP 3.

### 3. Failure Reproduction

Turn the ignition switch OFF.  
 Erase the problem code (page 19-9).  
 Test-ride the motorcycle above 10 km/h (6 mph).  
 Retrieve the problem code (page 19-8) and check the ABS indicator.

**Dose the ABS indicator indicate code "6-1 or 6-2"?**

**YES** – Faulty ABS modulator

**NO** – Power circuit is normal (intermittent failure)

## PROBLEM CODE 8-1 (ABS Control Unit)

### 1. Failure Reproduction

Erase the problem code (page 19-9).  
 Test-ride the motorcycle above 10 km/h (6 mph).  
 Retrieve the problem code (page 19-8) and check the ABS indicator.

**Dose the ABS indicator indicate code "8-1"?**

**YES** – Faulty ABS modulator

**NO** – ABS control unit is normal (intermittent failure)

## ABS MODULATOR

### REMOVAL/INSTALLATION

Drain the brake fluid from the hydraulic system (page 25-44).

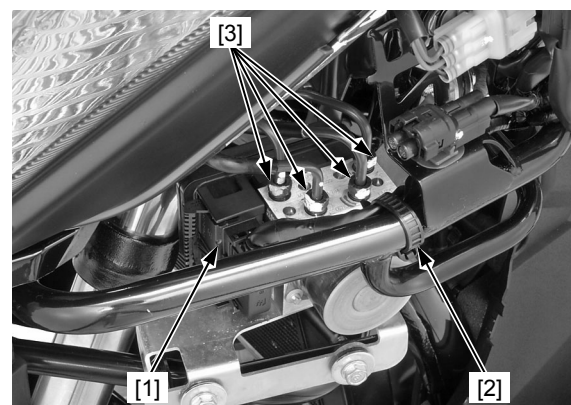
Remove the left side duct cover (page 25-31).

Disconnect the ABS modulator 18P (Black) connector [1] (page 25-50).

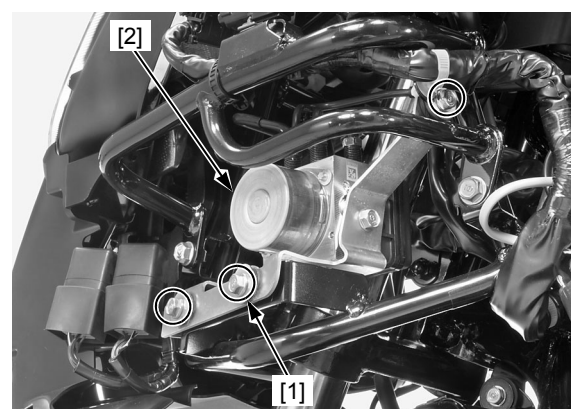
Remove the main wire harness clamp [2].

*Be careful not to bend or damage the brake pipes.*

Loosen the brake pipe joint nuts [3] and disconnect the brake pipes from the ABS modulator assembly.



Remove the three bolts [1] and ABS modulator assembly [2].



Remove the two bolts [1] and ABS modulator [2] from the bracket [3].

Installation is in the reverse order of removal.

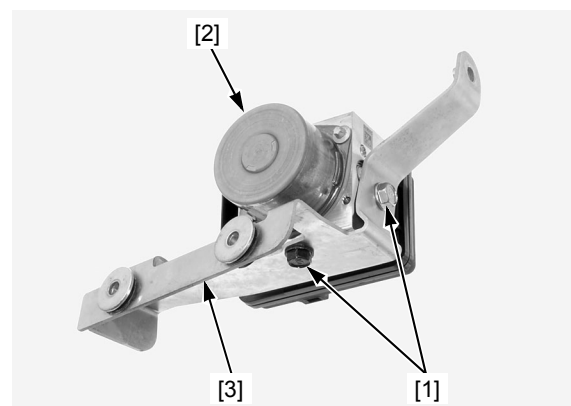
#### NOTE:

Apply brake fluid to the joint nut threads.

#### TORQUE:

**Brake pipe joint nut: 14 N·m (1.4 kgf·m, 10 lbf·ft)**

After installation, fill and bleed the hydraulic system (page 25-45).



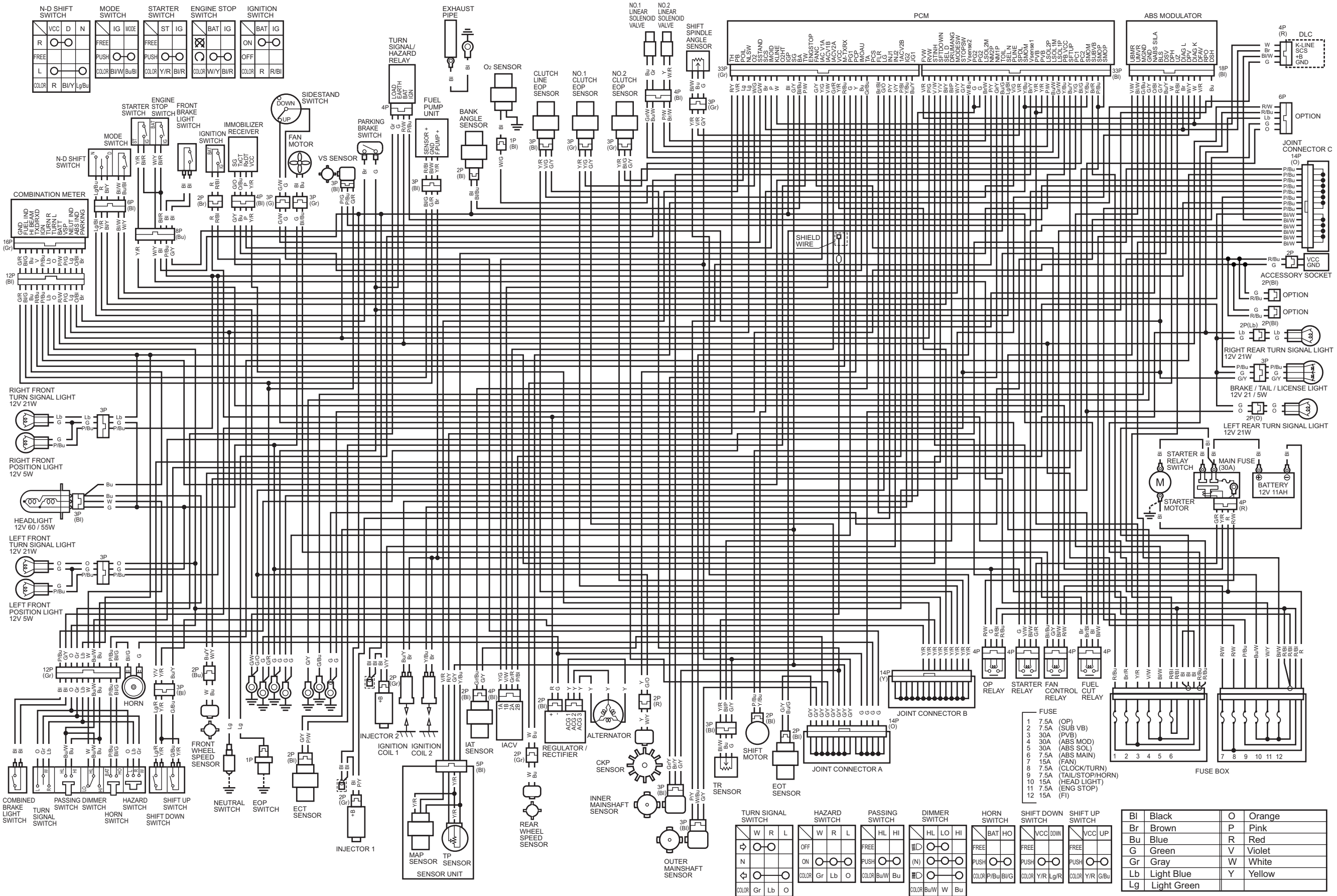
---

## MEMO

---



NC750D (Except TH type)



WIRING DIAGRAM

NC750D (TH type)

