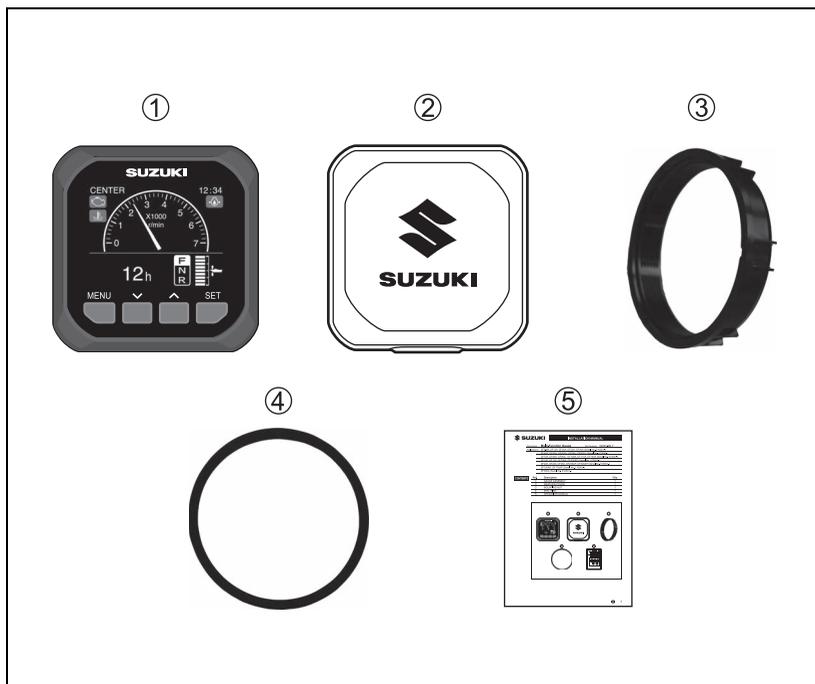


Description: **Multi-Function Gauge** Part Number: 34200-96L2*

- Applications: DF9.9B, DF15A, DF20A, DF25A, DF30A (Serial No. 510001-)
 DF40A, DF50A, DF50AV, DF60A, DF60AV (Serial No. 510001-)
 DF70A, DF80A, DF90A, DF100A, DF115A, DF140A (Serial No. 510001-)
 DF150, DF175, DF200A, DF200AP (Serial No. 510001-)
 DF200, DF225, DF250, DF250AP, DF300AP (Serial No. 510001-)
 DF150AP, DF175AP (Serial No. 710001-)
 DF350A (Serial No. 810001-)
 DF325A (Serial No. 810001-)
 DF100B (Serial No. 810001-)

CONTENTS

Ref.	Description	Q'ty
①	GAUGE ASSEMBLY	1
②	WEATHER COVER	1
③	MOUNTING NUT	1
④	SEAL RING	1
⑤	OPERATION MANUAL	1



INTRO- DUCTION

Thank you very much for purchasing a SUZUKI Genuine Multi-Function Gauge.

[Request to Customers]

Technical skills and experiences are required for installing this gauge.

Ask the dealer to install this gauge for safety reason.

This installation instruction manual describes the correct procedure for installation of the multi-function gauge. Before installation, read this manual carefully and fully understand the procedure.

- Store this operation manual in a place where it will not be lost or damaged.
- If you transfer this product, give this operation manual to the new owner.

IMPORTANT

▲ **WARNING** / ▲ **CAUTION** / **NOTICE** / **NOTE**

Please read this manual and follow its instructions carefully.

To emphasize special information, the symbol ▲ and the words **WARNING**, **CAUTION**, **NOTICE** and **NOTE** have special meanings.

These special meanings are applied except when laws or regulations require the signal words to be used with different meanings. Pay special attention to the messages highlighted by these signal words.

▲ **WARNING**

Indicates a potential hazard that could result in death or serious injury.

▲ **CAUTION**

Indicates a potential hazard that could result in minor or moderate injury.

NOTICE

Indicates a potential hazard that could result in damage to the motor or boat.

NOTE:

Indicates special information to make maintenance easier or instructions clearer.

- This manual shall not be reproduced, whether in part or in full, without permission.
- Please note that some part of the product may differ from the contents in the instructions due to specification changes etc.
- If you have any question, find a problem or have a missing part, contact your authorized SUZUKI Marine Dealer where you purchased this product.

In "Safety Precautions", important precautions are described to prevent danger to the operator of this gauge or other persons, or damage to the gauge or boat.

Precautions for Handling The Gauge Assembly

▲ WARNING

**Do not disassemble or modify the gauge, otherwise you may get an electric shock, or even the cause of a fire or injury.
Ask for repairs from the authorized SUZUKI Marine Dealer.**

▲ CAUTION

- Use navigation information, such as Distance and Fuel Consumption indicated on this gauge as a general reference only.
When exact navigation information is required, use nautical charts and dedicated navigation instruments.
- Do not operate this gauge while steering the boat or you might cause a maritime accident.
When using this gauge while the boat is stopped, check around the boat to be sure it is safe.
- Do not use the power source other than the specified one.
Doing so might cause heating, inflammation or failure.

NOTICE

- Before installation, take care not to splash water on the back side of the gauge.
After installation, it is still only water resistant and not completely waterproof if completely submerged in water.
Take care not to dip this gauge in water.
- Do not to apply excessive force to the display face for it may be damaged if it is exposed to such force.
- To clean the display face use a piece of soft cloth and lightly wiping the display face.

[Request to Dealers]

These settings must be performed by the dealer, which installed the product, before deliver to the customer.

[Before performing the settings]

- Refer to the connection examples of various systems and check the connection of the gauge.
- Make sure to check the battery, which to be connected, has enough voltage.
- When using Multi-Function Gauge more than one, as a general rule, the setting procedure should perform the following order.
- Use the minus terminal of the battery as the common use terminal for the engine battery or connect it to the GND cable.
- When two fuel senders are used, connect them one by one when setting the fuel senders.
- Connect the fuel sender to the gauge of single station at port side.
- When the number of engines is 2, 3 or 4, the fuel sender can be connected to 4.

(1)Activation of Multi-Function Gauge

- 1) Turn the key on to activate the Multi-Function Gauge.
- 2) In a short time after indicating the SUZUKI logo, the gauge display appears.
 - * If the display is not appeared, check the wiring and battery voltage.

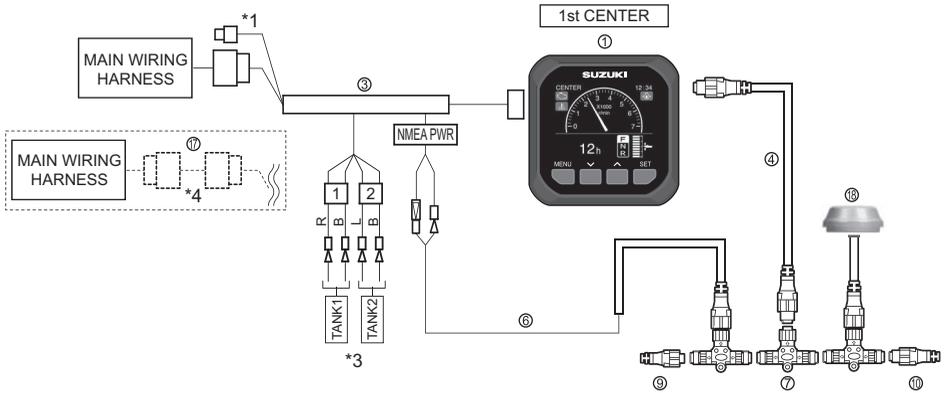
Contents

	Page
1. Connection Examples of Various Systems	6 - 16
1-1. Connection of Mechanical Remote Control System	6 - 8
(1) The single station of single engine	6
(2) The single station of single engine and dual gauge	7
(3) The single station of dual engine	8
1-2. Connection of SUZUKI Precision Control System	9 - 16
(1) The single station of single engine	9
(2) The dual station of single engine	10
(3) The single station of dual engine	11
(4) The dual station of dual engine	12
(5) The single station of triple engine	13
(6) The dual station of triple engine	14
(7) The single station of quad engine	15
(8) The dual station of quad engine	16
2. Gauge Installation	17
3. Wiring Arrangement	18
4. Function	19
5. Gauge Screen	20
6. Gauge Set up	21
6-1. Initial Setting	22 - 41
(1) Unit set up	24
(2) Time set up	25
(3) Position set up	26 - 32
① Gauge Position Setting	27
② Engine Position Setting	27 - 31
③ Engine Serial No.	32
(4) Sensor set up	33 - 34
(5) Fuel tank set up	35 - 41
① Tank Capacity	36 - 37
② Tank Calibration	38 - 40
③ Tank Reset	41
6-2. Illumination	42
6-3. Diagnosis	43 - 45
6-4. Display	46 - 47
6-5. Device List	48
7. Initialize	49
8. Alarm	50 - 52
9. Gauge Screen List	53
10. Specifications	54

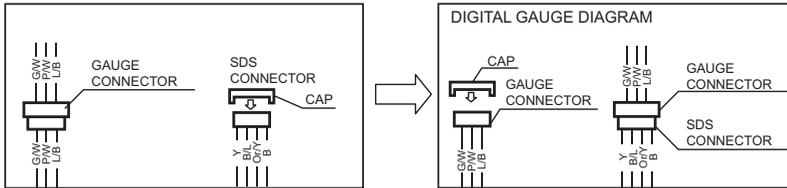
1. Connection Examples of Various Systems

1-1. Connection of Mechanical Remote Control System.

(1) The single station of single engine



*2 SDS CONNECTOR (DF40A-)



No.	Part Names	Part No.	Kit No.		Additional Quantity
			34000-96L4*	36001-88L0*	
①	GAUGE ASSY, MULTI	34200-96L2*	1	—	—
③	ADAPTER COMP, GAUGE	36661-96L3*	1	—	—
④	WIRE COMP, EXTENSION (0.6 m)	36662-88L1*	—	1	—
	WIRE COMP, EXTENSION (1.8 m)	36662-88L2*	—	—	
⑥	HARNESS ASSY, NETWORK POWER	36663-88L0*	—	1	—
⑦	CONNECTOR COMP, BRANCH	36664-88L0*	—	1	—
⑨	UNIT COMP, RESISTOR FEMALE	36665-88L0*	—	1	—
⑩	UNIT COMP, RESISTOR MALE	36665-88L1*	—	1	—
⑰	SET ENG TO INTERFACE WIRE	36660-89L**	—	—	—
⑱	SENSOR ASSY, PADDLE WHEEL	34190-88L0*	—	—	1
	MODULE ASSY, GPS RECEIVER	39950-88L0*	—	—	

*1. Connect only the system with the trim sender.

*2. It is required to change the SDS connector to one for engine.

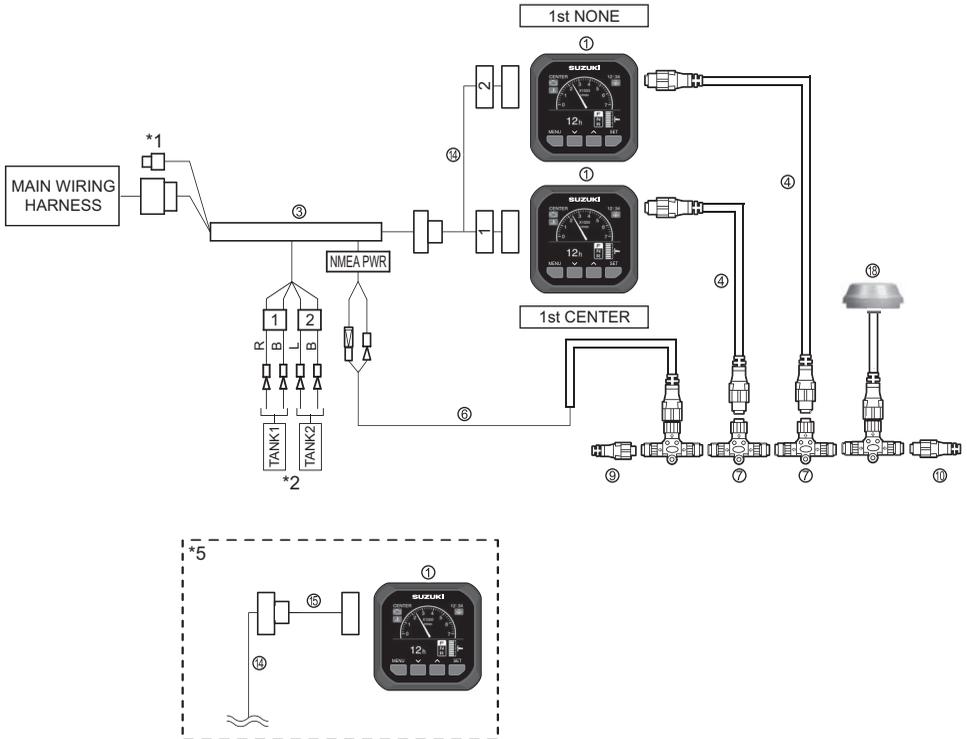
Remove the SDS connector cap to connect to the gauge connector, and connect the SDS connector to the female gauge connector.

*3. When use fuel sender more one, connect one by one and set up the fuel senders.

*4. DF9.9B-30A only.

Gauge set up →P21

(2) The single station of single engine and dual gauge



No.	Part Names	Part No.	Kit No.		Additional Quantity
			34000-96L4*	36001-88L0*	
①	GAUGE ASSY, MULTI	34200-96L2*	1	—	1
③	ADAPTER COMP, GAUGE	36661-96L3*	1	—	1
④	WIRE COMP, EXTENSION (0.6 m)	36662-88L1*	—	1	1
	WIRE COMP, EXTENSION (1.8 m)	36662-88L2*	—	—	
⑥	HARNESS ASSY, NETWORK POWER	36663-88L0*	—	1	—
⑦	CONNECTOR COMP, BRANCH	36664-88L0*	—	1	1
⑨	UNIT COMP, RESISTOR FEMALE	36665-88L0*	—	1	—
⑩	UNIT COMP, RESISTOR MALE	36665-88L1*	—	1	—
⑭	WIRE COMP, DUAL GAUGE ADAPTER	36667-96L1*	—	—	1
⑮	WIRE COMP, DUAL GAUGE EXT (0.6 m)	36667-96L2*	—	—	—
⑯	SENSOR ASSY, PADDLE WHEEL	34190-88L0*	—	—	1
	MODULE ASSY, GPS RECEIVER	39950-88L0*	—	—	

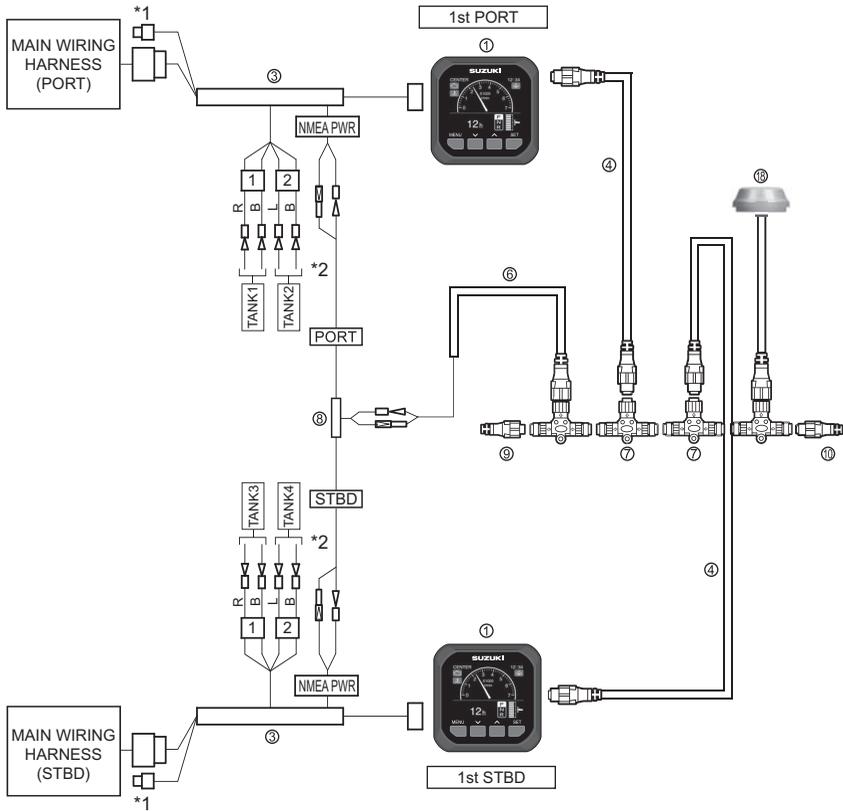
*1. Connect only the system with the trim sender.

*2. When use fuel sender more one, connect one by one and set up the fuel senders.

*5. ⑮ WIRE COMP, DUAL GAUGE EXT (0.6 m)

Gauge set up →P21

(3) The single station of dual engine



No.	Part Names	Part No.	Kit No.	Additional Quantity
			34000-96L5*	
①	GAUGE ASSY, MULTI	34200-96L2*	2	—
③	ADAPTER COMP, GAUGE	36661-96L3*	2	—
④	WIRE COMP, EXTENSION (0.6 m)	36662-88L1*	2	—
④	WIRE COMP, EXTENSION (1.8 m)	36662-88L2*	—	—
⑥	HARNESS ASSY, NETWORK POWER	36663-88L0*	1	—
⑦	CONNECTOR COMP, BRANCH	36664-88L0*	2	—
⑧	ADAPTER, GAUGE FOR MULTI	36665-87L1*	1	—
⑨	UNIT COMP, RESISTOR FEMALE	36665-88L0*	1	—
⑩	UNIT COMP, RESISTOR MALE	36665-88L1*	1	—
⑱	SENSOR ASSY, PADDLE WHEEL	34190-88L0*	—	1
	MODULE ASSY, GPS RECEIVER	39950-88L0*	—	

*1. Connect only the system with the trim sender.

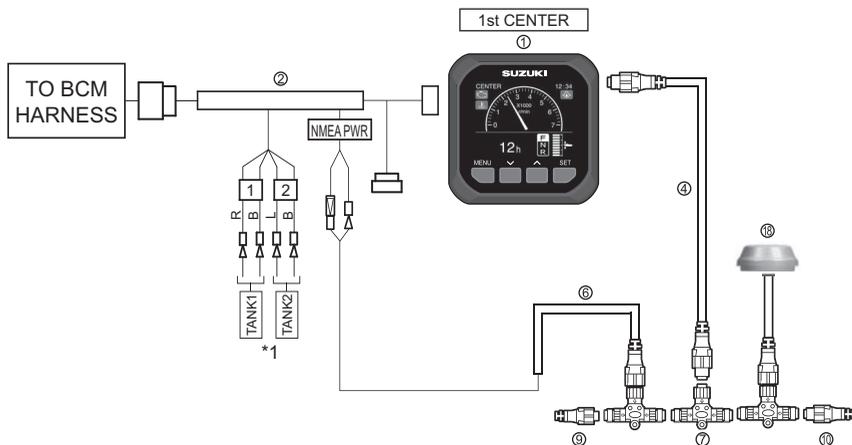
*2. When use fuel sender more one, connect one by one and set up the fuel senders.

Connect the fuel level sender to ③ of the PORT side.

Gauge set up →P21

1-2. Connection of SUZUKI Precision Control System.

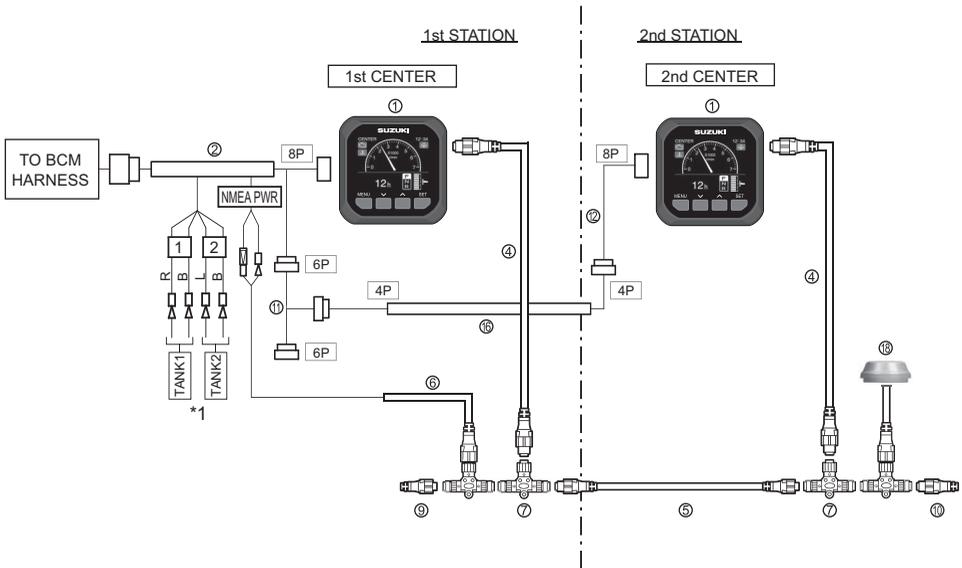
(1) The single station of single engine



No.	Part Names	Part No.	Kit No.		Additional Quantity
			34000-96L6*	36001-88L0*	
①	GAUGE ASSY, MULTI	34200-96L2*	1	-	-
②	ADAPTER COMP, GAUGE	36661-96L2*	1	-	-
④	WIRE COMP, EXTENSION (0.6 m)	36662-88L1*	-	1	-
	WIRE COMP, EXTENSION (1.8 m)	36662-88L2*	-	-	-
⑥	HARNESS ASSY, NETWORK POWER	36663-88L0*	-	1	-
⑦	CONNECTOR COMP, BRANCH	36664-88L0*	-	1	-
⑨	UNIT COMP, RESISTOR FEMALE	36665-88L0*	-	1	-
⑩	UNIT COMP, RESISTOR MALE	36665-88L1*	-	1	-
⑱	SENSOR ASSY, PADDLE WHEEL	34190-88L0*	-	-	1
	MODULE ASSY, GPS RECEIVER	39950-88L0*	-	-	

*1. When use fuel sender more one, connect one by one and set up the fuel senders.
Gauge set up →P21

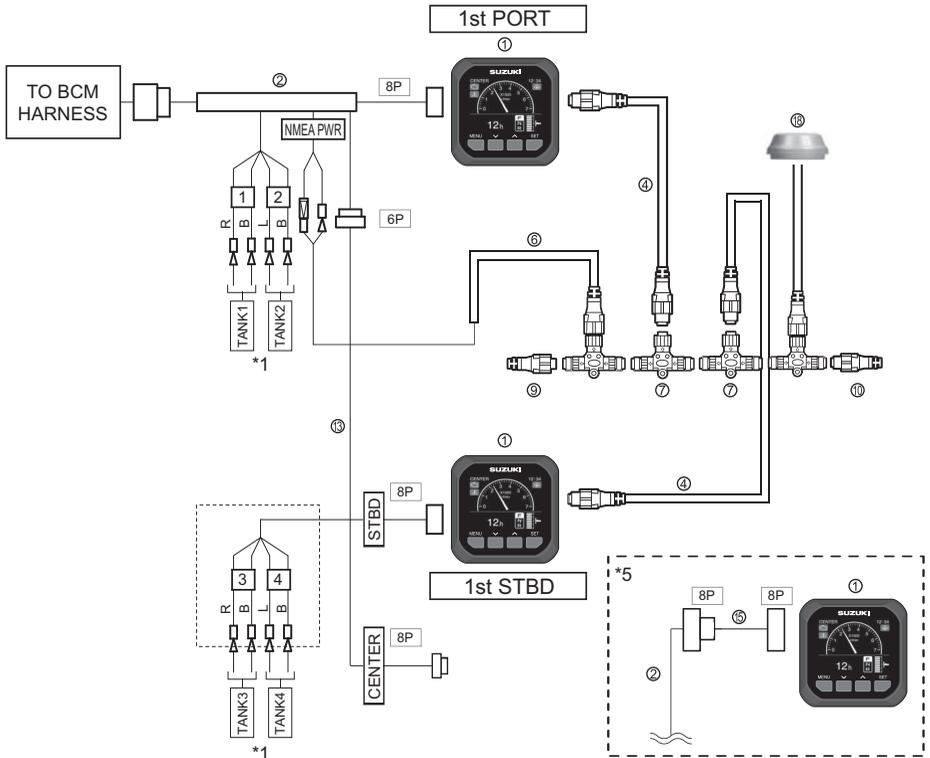
(2) The dual station of single engine



No.	Part Names	Part No.	Kit No.			Additional Quantity
			34000-96L6*	34002-96L1*	34001-88L0*	
①	GAUGE ASSY, MULTI	34200-96L2*	1	1	-	-
②	ADAPTER COMP, GAUGE	36661-96L2*	1	-	-	-
④	WIRE COMP, EXTENSION (0.6 m)	36662-88L1*	-	1	1	-
	WIRE COMP, EXTENSION (1.8 m)	36662-88L2*	-	-	-	
⑤	WIRE COMP, EXTENSION (4.6 m)	36662-88L3*	-	-	-	1
	WIRE COMP, EXTENSION (7.6 m)	36662-88L0*	-	-	-	
⑥	HARNESS ASSY, NETWORK POWER	36663-88L0*	-	-	1	-
⑦	CONNECTOR COMP, BRANCH	36664-88L0*	-	1	1	-
⑨	UNIT COMP, RESISTOR FEMALE	36665-88L0*	-	-	1	-
⑩	UNIT COMP, RESISTOR MALE	36665-88L1*	-	-	1	-
⑪	ADAPTER COMP, DUAL STATION	36665-96L0*	-	1	-	-
⑫	ADAPTER, GAUGE POWER	36666-96L0*	-	1	-	-
⑬	WIRE COMP, GAUGE EXT	36682-92E0*	-	1	-	-
⑱	SENSOR ASSY, PADDLE WHEEL	34190-88L0*	-	-	-	1
	MODULE ASSY, GPS RECEIVER	39950-88L0*	-	-	-	

*1. When use fuel sender more one, connect one by one and set up the fuel senders.
Gauge set up →P21

(3) The single station of dual engine



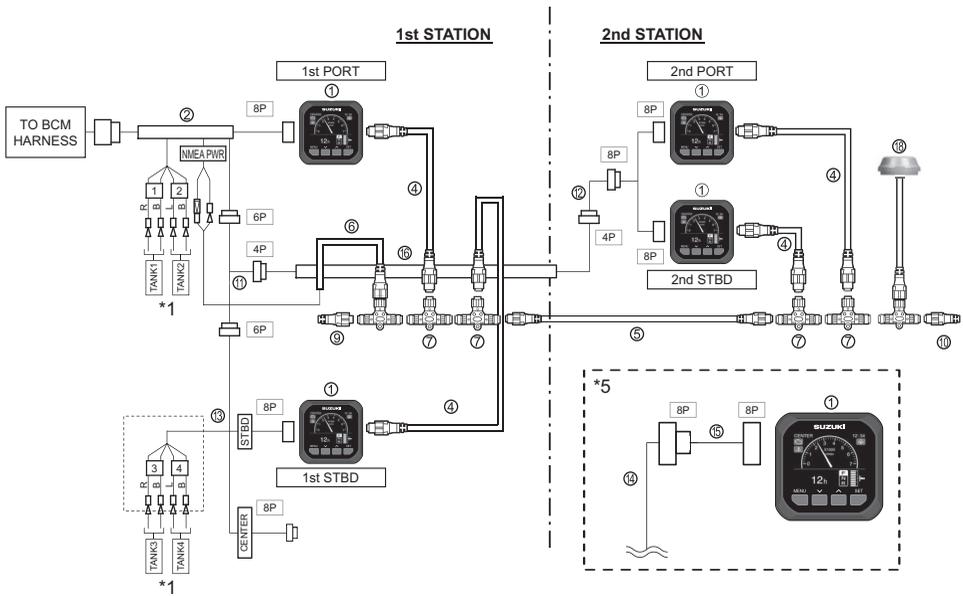
No.	Part Names	Part No.	Kit No.	Additional Quantity
			34000-96L7*	
①	GAUGE ASSY, MULTI	34200-96L2*	2	—
②	ADAPTER COMP, GAUGE	36661-96L2*	1	—
④	WIRE COMP, EXTENSION (0.6 m)	36662-88L1*	2	—
	WIRE COMP, EXTENSION (1.8 m)	36662-88L2*	—	
⑥	HARNESS ASSY, NETWORK POWER	36663-88L0*	1	—
⑦	CONNECTOR COMP, BRANCH	36664-88L0*	2	—
⑨	UNIT COMP, RESISTOR FEMALE	36665-88L0*	1	—
⑩	UNIT COMP, RESISTOR MALE	36665-88L1*	1	—
	WIRE COMP, GAUGE ADAPTER	36667-96L0*	1	—
⑬	WIRE COMP, GAUGE ADAPTER (TANK3, TANK4)	36667-96L3*	—	—
⑮	WIRE COMP, DUAL GAUGE EXT (0.6 m)	36667-96L2*	—	—
⑱	SENSOR ASSY, PADDLE WHEEL	34190-88L0*	—	1
	MODULE ASSY, GPS RECEIVER	39950-88L0*	—	

*1. When use fuel sender more one, connect one by one and set up the fuel senders.

*5. ⑮ WIRE COMP, DUAL GAUGE EXT (0.6 m)

Gauge set up →P21

(4) The dual station of dual engine



No.	Part Names	Part No.	Kit No.		Additional Quantity
			34000-96L7*	34002-96L1*	
①	GAUGE ASSY, MULTI	34200-96L2*	2	1	1
②	ADAPTER COMP, GAUGE	36661-96L2*	1	-	-
④	WIRE COMP, EXTENSION (0.6 m)	36662-88L1*	2	1	1
	WIRE COMP, EXTENSION (1.8 m)	36662-88L2*	-	-	
⑤	WIRE COMP, EXTENSION (4.6 m)	36662-88L3*	-	-	1
	WIRE COMP, EXTENSION (7.6 m)	36662-88L0*	-	-	
⑥	HARNESS ASSY, NETWORK POWER	36663-88L0*	1	-	1
⑦	CONNECTOR COMP, BRANCH	36664-88L0*	2	1	1
⑨	UNIT COMP, RESISTOR FEMALE	36665-88L0*	1	-	-
⑩	UNIT COMP, RESISTOR MALE	36665-88L1*	1	-	-
⑪	ADAPTER COMP, DUAL STATION	36665-96L0*	-	1	-
⑫	ADAPTER, GAUGE POWER	36666-96L0*	-	1	-
⑬	WIRE COMP, GAUGE ADAPTER	36667-96L0*	1	-	-
	WIRE COMP, GAUGE ADAPTER (TANK3, TANK4)	36667-96L3*	-	-	
⑭	WIRE COMP, DUAL GAUGE ADAPTER	36667-96L1*	-	-	1
⑮	WIRE COMP, DUAL GAUGE EXT (0.6 m)	36667-96L2*	-	-	-
⑯	WIRE COMP, GAUGE EXT	36682-92E0*	-	1	-
⑰	SENSOR ASSY, PADDLE WHEEL	34190-88L0*	-	-	1
⑱	MODULE ASSY, GPS RECEIVER	39950-88L0*	-	-	

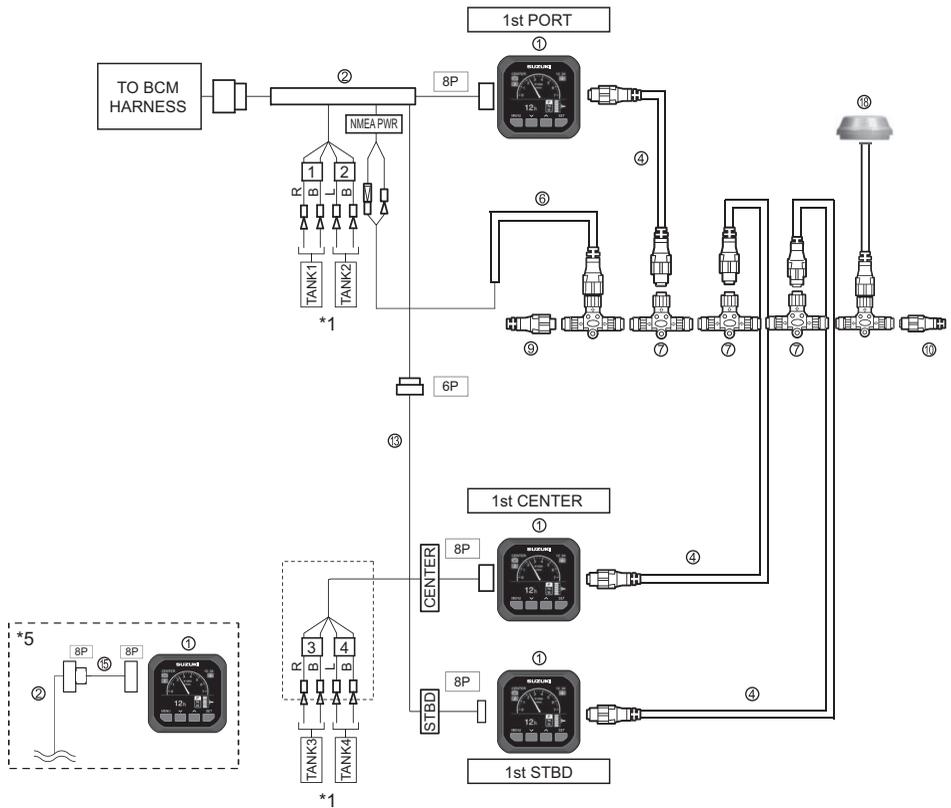
*1. When use fuel sender more one, connect one by one and set up the fuel senders.

*2. The number of quantity to purchase other than an adjunct of accessories.

*5. ⑮ WIRE COMP, DUAL GAUGE EXT (0.6 m)

Gauge set up →P21

(5) The single station of triple engine



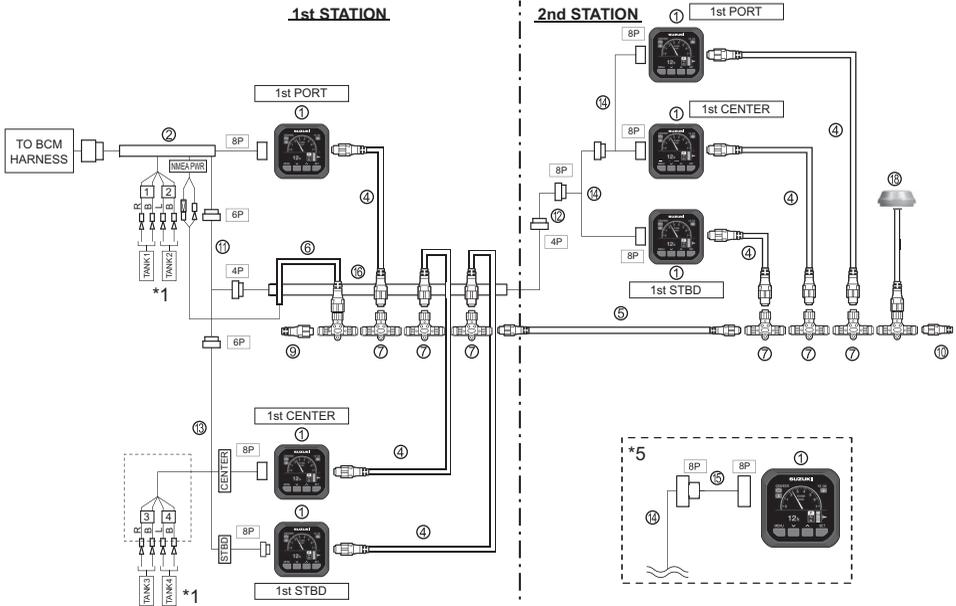
No.	Part Names	Part No.	Kit No.	Additional Quantity
			34000-96L7*	
①	GAUGE ASSY, MULTI	34200-96L2*	2	1
②	ADAPTER COMP, GAUGE	36661-96L2*	1	-
④	WIRE COMP, EXTENSION (0.6 m)	36662-88L1*	2	1
	WIRE COMP, EXTENSION (1.8 m)	36662-88L2*	-	
⑥	HARNESS ASSY, NETWORK POWER	36663-88L0*	1	-
⑦	CONNECTOR COMP, BRANCH	36664-88L0*	2	1
⑨	UNIT COMP, RESISTOR FEMALE	36665-88L0*	1	-
⑩	UNIT COMP, RESISTOR MALE	36665-88L1*	1	-
⑬	WIRE COMP, GAUGE ADAPTER	36667-96L0*	1	-
	WIRE COMP, GAUGE ADAPTER (TANK3, TANK4)	36667-96L3*	-	
⑮	WIRE COMP, DUAL GAUGE EXT (0.6 m)	36667-96L2*	-	-
⑱	SENSOR ASSY, PADDLE WHEEL	34190-88L0*	-	1
	MODULE ASSY, GPS RECEIVER	39950-88L0*	-	

*1. When use fuel sender more one, connect one by one and set up the fuel senders.

*5. ⑮ WIRE COMP, DUAL GAUGE EXT (0.6 m)

Gauge set up →P21

(6) The dual station of triple engine



No.	Part Names	Part No.	Kit No.		Additional Quantity
			34000-96L7*	34002-96L1*	
①	GAUGE ASSY, MULTI	34200-96L2*	2	1	3
②	ADAPTER COMP, GAUGE	36661-96L2*	1	-	-
④	WIRE COMP, EXTENSION (0.6 m)	36662-88L1*	2	1	3
	WIRE COMP, EXTENSION (1.8 m)	36662-88L2*	-	-	
⑤	WIRE COMP, EXTENSION (4.6 m)	36662-88L3*	-	-	1
	WIRE COMP, EXTENSION (7.6 m)	36662-88L0*	-	-	
⑥	HARNESS ASSY, NETWORK POWER	36663-88L0*	1	-	-
⑦	CONNECTOR COMP, BRANCH	36664-88L0*	2	1	3
⑨	UNIT COMP, RESISTOR FEMALE	36665-88L0*	1	-	-
⑩	UNIT COMP, RESISTOR MALE	36665-88L1*	1	-	-
⑪	ADAPTER COMP, DUAL STATION	36665-96L0*	-	1	-
⑫	ADAPTER, GAUGE POWER	36666-96L0*	-	1	-
⑬	WIRE COMP, GAUGE ADAPTER	36667-96L0*	1	-	-
	WIRE COMP, GAUGE ADAPTER (TANK3, TANK4)	36667-96L3*	-	-	
⑭	WIRE COMP, DUAL GAUGE ADAPTER	36667-96L1*	-	-	2
⑮	WIRE COMP, DUAL GAUGE EXT (0.6 m)	36667-96L2*	-	-	-
⑯	WIRE COMP, GAUGE EXT	36682-92E0*	-	1	-
⑰	SENSOR ASSY, PADDLE WHEEL	34190-88L0*	-	-	1
	MODULE ASSY, GPS RECEIVER	39950-88L0*	-	-	

*1. When use fuel sender more one, connect one by one and set up the fuel senders.

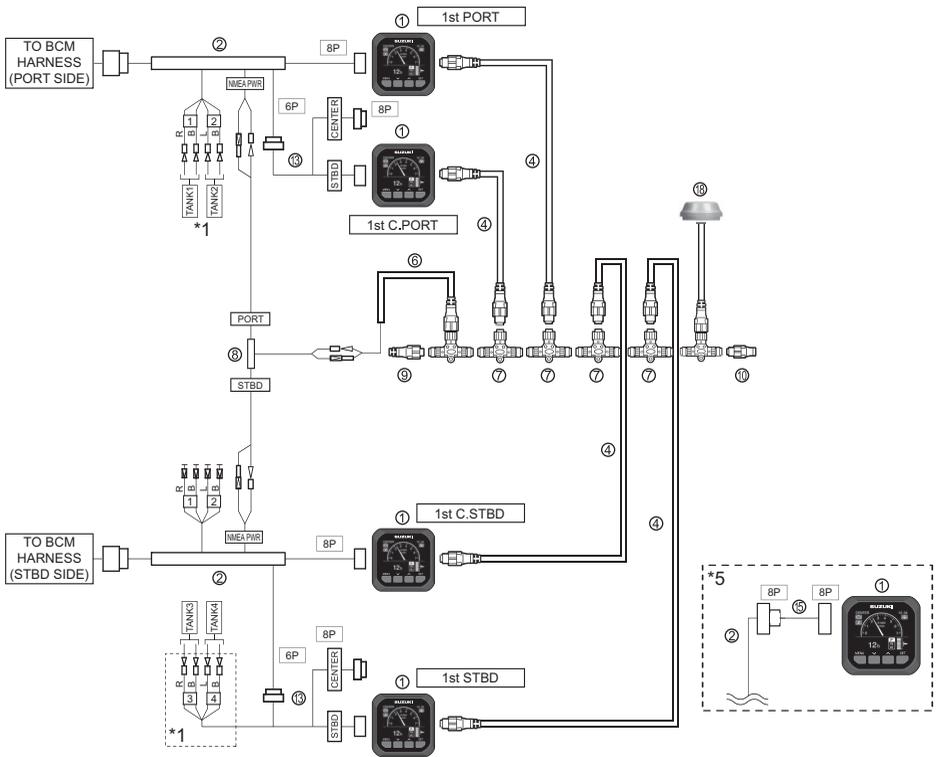
Connect the TANK1 and TANK2 fuel level sensor to ② of the PORT side.

Connect the TANK3 and TANK4 fuel level sensor to ⑭ of the STBD side.

*5. ⑮ WIRE COMP, DUAL GAUGE EXT (0.6 m)

Gauge set up →P21

(7) The single station of quad engine



No.	Part Names	Part No.	Kit No.	Additional Quantity
			34000-96L7*	
①	GAUGE ASSY, MULTI	34200-96L2*	2	2
②	ADAPTER COMP, GAUGE	36661-96L2*	1	1
④	WIRE COMP, EXTENSION (0.6 m)	36662-88L1*	2	2
	WIRE COMP, EXTENSION (1.8 m)	36662-88L2*	-	
⑥	HARNESS ASSY, NETWORK POWER	36663-88L0*	1	-
⑦	CONNECTOR COMP, BRANCH	36664-88L0*	2	2
⑧	ADAPTER, GAUGE FOR MULTI	36665-87L1*	-	1
⑨	UNIT COMP, RESISTOR FEMALE	36665-88L0*	1	-
⑩	UNIT COMP, RESISTOR MALE	36665-88L1*	1	-
⑬	WIRE COMP, GAUGE ADAPTER	36667-96L0*	1	1
	WIRE COMP, GAUGE ADAPTER (TANK3, TANK4)	36667-96L3*	-	
⑮	WIRE COMP, DUAL GAUGE EXT (0.6 m)	36667-96L2*	-	-
⑱	SENSOR ASSY, PADDLE WHEEL	34190-88L0*	-	1
	MODULE ASSY, GPS RECEIVER	39950-88L0*	-	

*1. When use fuel sender more one, connect one by one and set up the fuel senders.

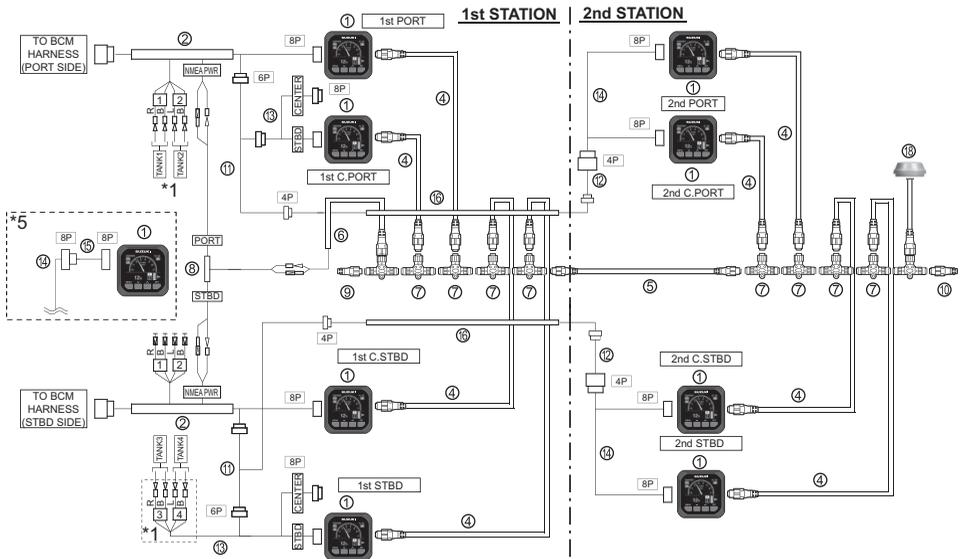
Connect the TANK1 and TANK2 fuel level sensor to ② of the PORT side.

Connect the TANK3 and TANK4 fuel level sensor to ⑭ of the STBD side.

*5. ⑮ WIRE COMP, DUAL GAUGE EXT (0.6 m)

Gauge set up →P21

(8) The dual station of quad engine



No.	Part Names	Part No.	Kit No.		Additional Quantity
			34000-96L7*	34002-96L1*	
①	GAUGE ASSY, MULTI	34200-96L2*	2	1	5
②	ADAPTER COMP, GAUGE	36661-96L2*	1	-	1
④	WIRE COMP, EXTENSION (0.6 m)	36662-88L1*	2	1	5
	WIRE COMP, EXTENSION (1.8 m)	36662-88L2*	-	-	
⑤	WIRE COMP, EXTENSION (4.6 m)	36662-88L3*	-	-	1
	WIRE COMP, EXTENSION (7.6 m)	36662-88L0*	-	-	
⑥	HARNESS ASSY, NETWORK POWER	36663-88L0*	1	-	-
⑦	CONNECTOR COMP, BRANCH	36664-88L0*	2	1	5
⑧	ADAPTER, GAUGE FOR MULTI	36665-87L1*	-	-	1
⑨	UNIT COMP, RESISTOR FEMALE	36665-88L0*	1	-	1
⑩	UNIT COMP, RESISTOR MALE	36665-88L1*	1	-	1
⑪	ADAPTER COMP, DUAL STATION	36665-96L0*	-	1	1
⑫	ADAPTER, GAUGE POWER	36666-96L0*	-	1	1
⑬	WIRE COMP, GAUGE ADAPTER	36667-96L0*	1	-	1
	WIRE COMP, GAUGE ADAPTER (TANK3, TANK4)	36667-96L3*	-	-	
⑭	WIRE COMP, DUAL GAUGE ADAPTER	36667-96L1*	-	-	2
⑮	WIRE COMP, DUAL GAUGE EXT (0.6 m)	36667-96L2*	-	-	-
⑯	WIRE COMP, GAUGE EXT	36682-92E0*	-	1	1
⑰	SENSOR ASSY, PADDLE WHEEL	34190-88L0*	-	-	1
	MODULE ASSY, GPS RECEIVER	39950-88L0*	-	-	

*1. When use fuel sender more one, connect one by one and set up the fuel senders.

Connect the TANK1 and TANK2 fuel level sensor to ② of the PORT side.

Connect the TANK3 and TANK4 fuel level sensor to ⑭ of the STBD side.

*5. ⑮ WIRE COMP, DUAL GAUGE EXT (0.6 m)

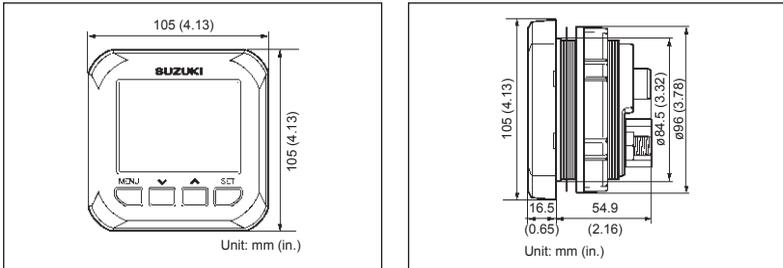
Gauge set up →P21

2. Gauge Installation

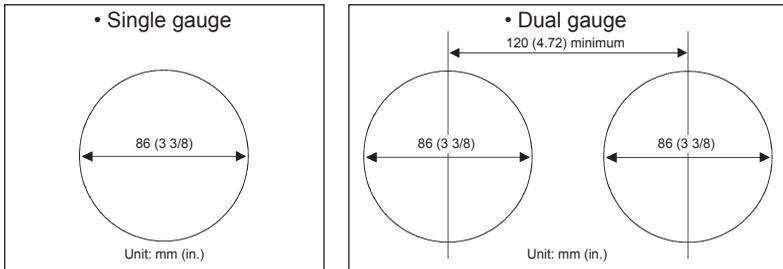
At first, choose a position where it is visible from the boat steering position and the wiring space on the back side of the gauge can be secured.

Then install the multi- function gauge using the following procedure.

- GAUGE DIMENSIONS



(1) Make a hole on the gauge install position of the boat precisely.

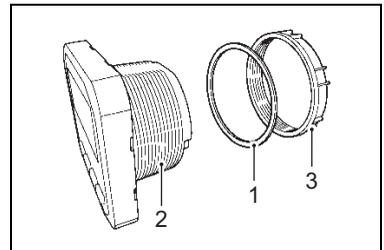


NOTICE

If the measurement does not fit to the size of the gauge, the gauge cannot be installed correctly.

Because of this, insufficient water resistance and drop out of the gauge may happen.

- (1) Install the gasket (1) to gauge.
- (2) Insert the gauge (2) into panel hole.
- (3) Thread the nut (3) onto threaded housing of gauge and tighten to back of panel.



NOTICE

If the water resistant process is not sufficient, water may get into the gauge and cause a trouble.

3. Wiring Arrangement

Refer to the connection examples and perform the required wiring for your system.

NOTICE

- Securely cover the unuse connection ports of various equipments with the cap of adjunct. If you do not cover the port with the cap, the pin of the port may get wet and cause a trouble.
- Fix the CAN coupler by turning the outer ring to the end. If it become loose, a connection error and a water exposure may cause a trouble.

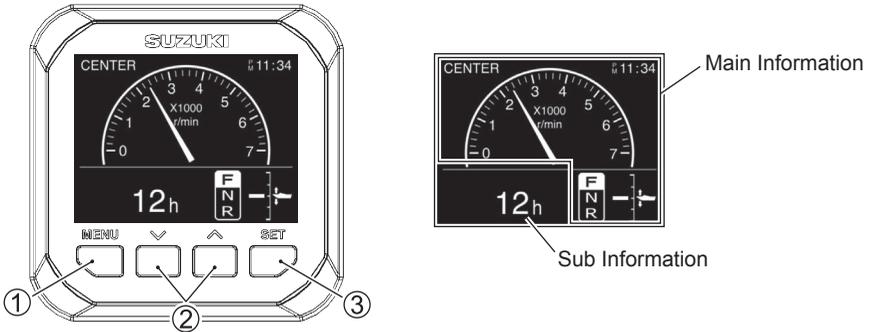


5P NMEA
2000 NET WORK

8P ENGINE

4. Function

Locations



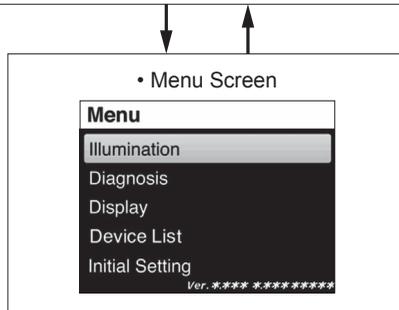
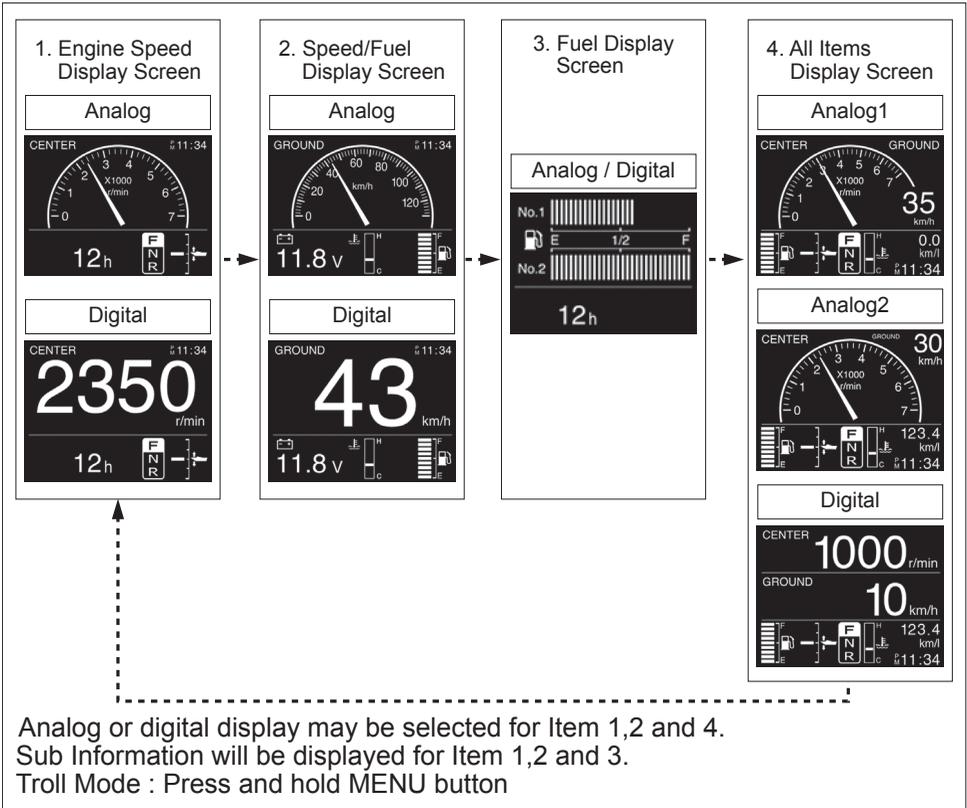
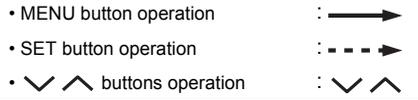
Function of Each Button

		• Gauge screen	• Menu screen
①	MENU button	Change to the menu screen	Change to the previous / Gauge screen
②		a) Change to Sub Information b) Press and hold either of the buttons (Reset the display value) c) *Press and hold both buttons (→ P44 Data Output)	Move the cursor
③	Set button	a) Change to Main Information b) Press and hold button (→ P42 Day or Night)	Proceed / Confirm

* All items Display Screen only.

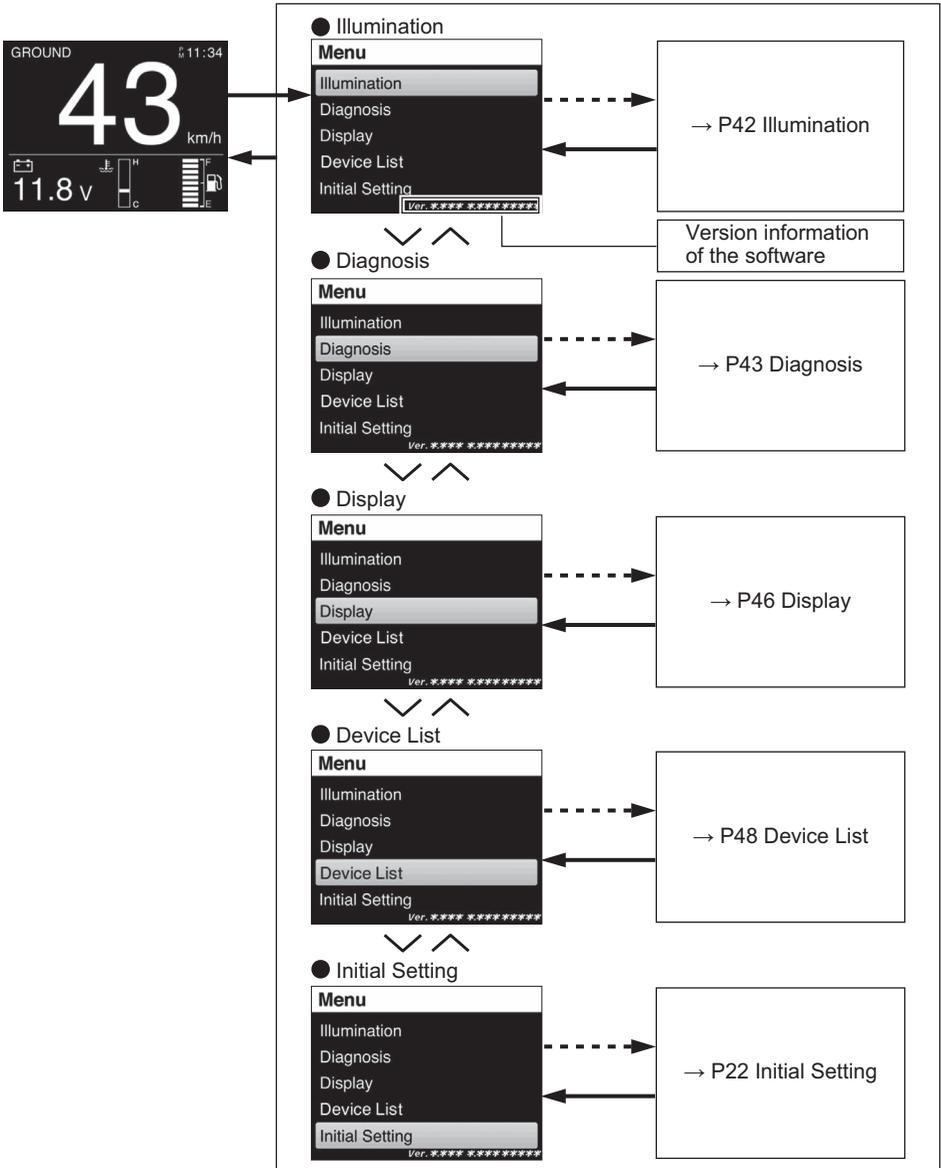
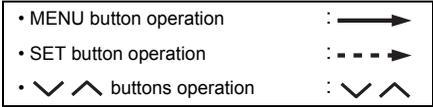
5. Gauge Screen

The following figures show the display screen and the operation flow.



6. Gauge Set up

- Menu Screen Operation
- By pressing the MENU button the display will change to the MENU screen.



6-1. Initial Setting

The settings related to the following items are configured in Initial Setting.

- Unit : Unit Setting
- Time : Time Setting
- Position : Gauge and Engine Position Settings
- Sensor Setting : Sensor Setting
- Tank : Tank Setting

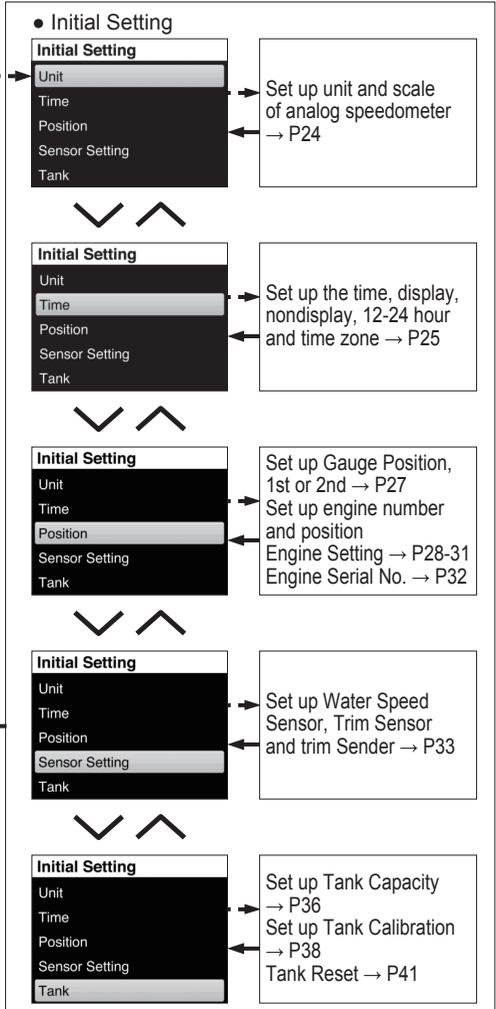
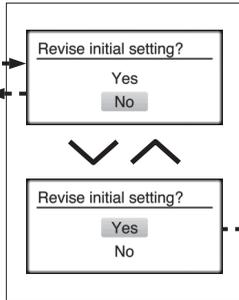
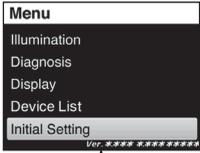
NOTICE

- **After installing the gauge(s) to the boat, set up the gauge(s) before use.
Without the set up procedure, the gauge(s) can not display the right indication.**
- **Position, Sensor Setting and Tank are used by the dealer during the initial setting.**
- **If the setting is changed, the current information may not be displayed any more.**

Some of the items in Initial Setting may be important during the initial setting. A confirmation screen to draw your attention will be displayed. After install the gauge, turn on the power and perform the following set up procedure for the gauge.

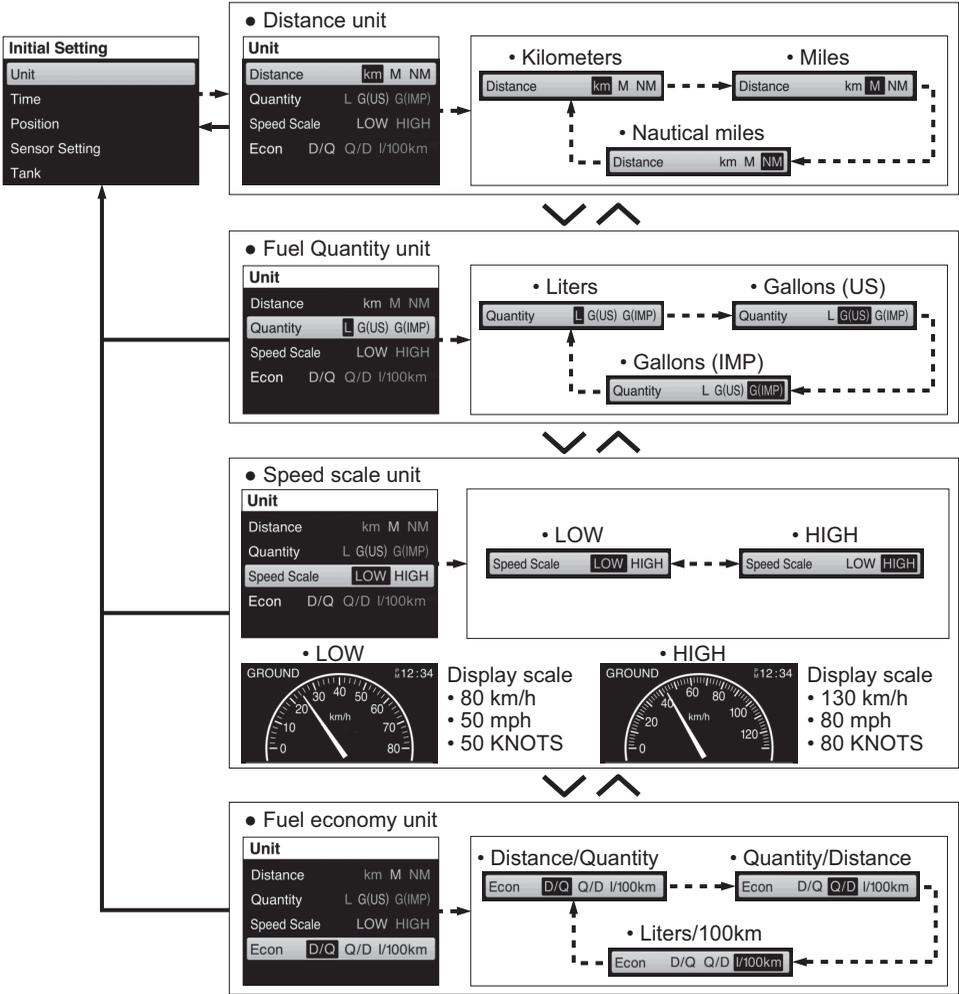
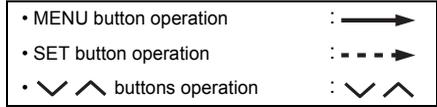
- MENU button operation : 
- SET button operation : 
-   buttons operation :  

• Menu screen



(1) Unit set up

- Setting for the following units.

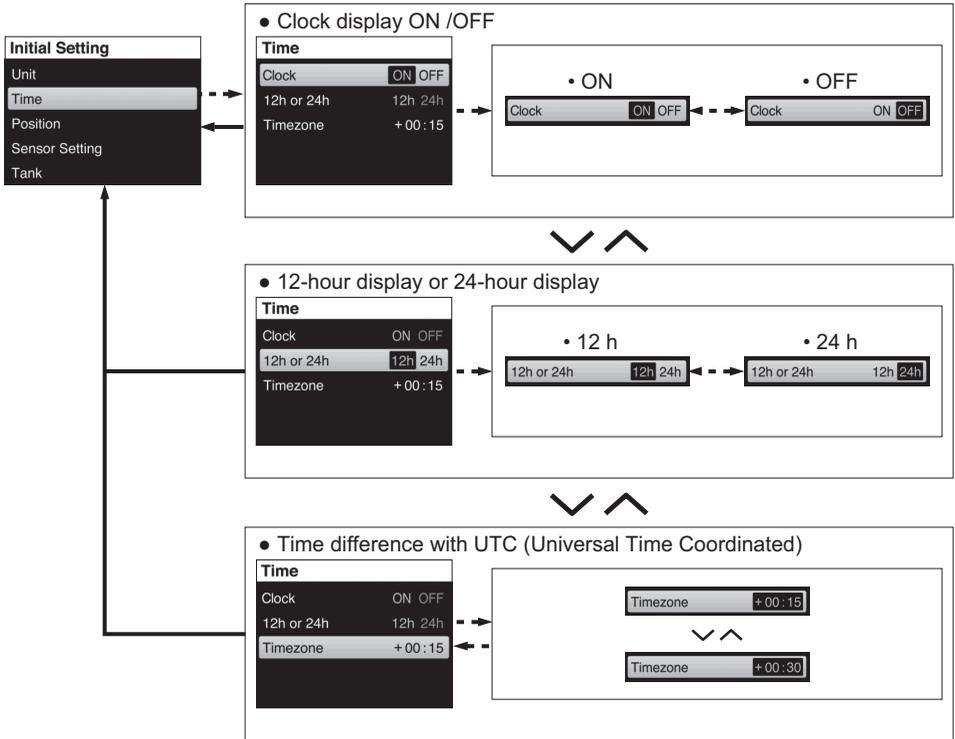
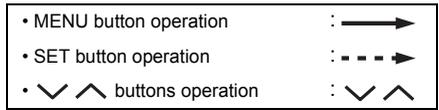


⚠ CAUTION

Select units of measurement which you will prefer and recognize.
Selecting units you do not recognize may cause judgment errors.

(2) Time set up

- Setting for the time indication.
The range can cover from -12:00 to +14:00.



If the gauge is not connected to a GPS module, "--:--" will be displayed.

Press the ∨ or ∨ button briefly to change the time by 15 minutes.

If you press and hold the ∨ or ∨ button, the time will be changed in 15 minute units continuously.

(3) Position set up

- Fuel Tank Number of each engine position.

Engine Number	Engine Position				NONE
	CENTER	—	—	—	
1 (Single)	CENTER	—	—	—	—
2 (Dual)	PORT	STBD	—	—	—
3 (Triple)	PORT	STBD	CENTER	—	—
4 (Quad)	PORT	STBD	C.PORT	C.STBD	—
*Fuel Tank Number	No 1, No 2	No 3, No 4	—	—	—

* 1st station only.

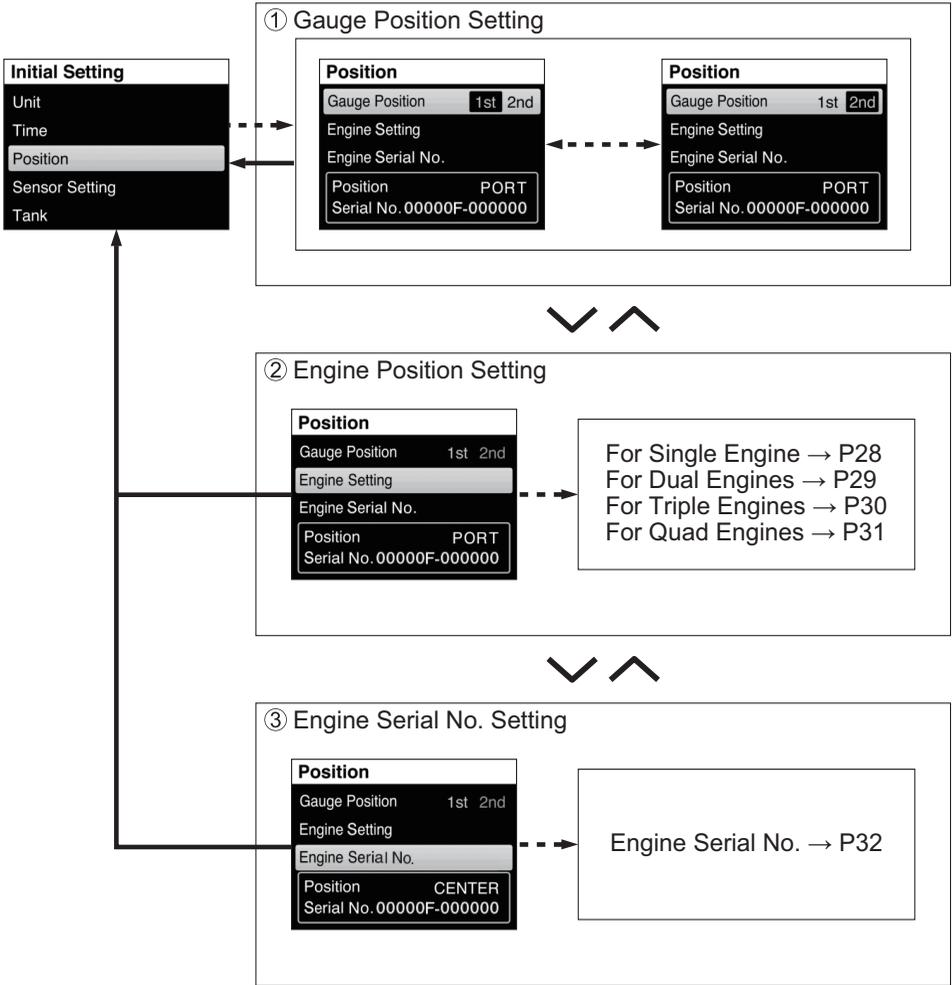
- If tank setting is performed with 1st station, tank information is shared with other gages.

- Main / Sub information of each engine position.

Main Information	Engine Position					
	PORT	STBD	CENTER	C.PORT	C.STBD	NONE
Engine Speed	○	○	○	○	○	—
Speed / Fuel	○	○	○	○	○	○
Fuel	○	○	○	○	○	○
All Items	○	○	○	○	○	—
Sub Information	Engine Position					
	PORT	STBD	CENTER	C.PORT	C.STBD	NONE
Total operating hours	○	○	○	○	○	—
Trip time	○	○	○	○	○	—
Trip distance	○	○	○	○	○	—
Battery voltage / Cooling water temperature	○	○	○	○	○	—
Instantaneous fuel flow	○	○	○	○	○	—
Total instantaneous fuel flow	○	○	○	○	○	○
Instantaneous fuel economy	○	○	○	○	○	○
Average fuel economy	○	○	○	○	○	○
Total fuel used	○	○	○	○	○	○
Latitude / Longitude	○	○	○	○	○	○

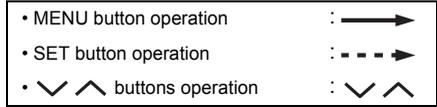
• Setting for the following Position.

- MENU button operation : 
- SET button operation : 
-   buttons operation :  

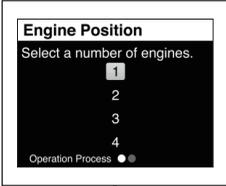


② Engine Position Setting

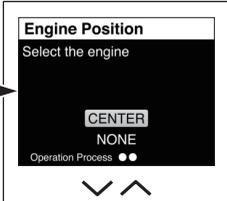
- For Single Engine



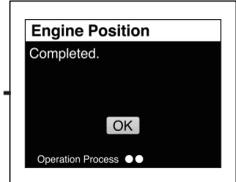
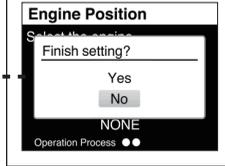
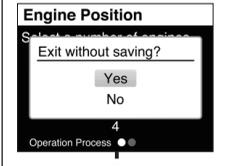
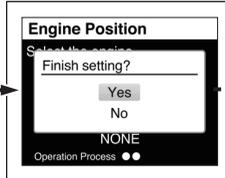
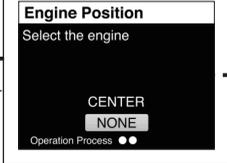
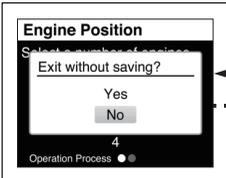
- Select the engine number by ∨ ∧ button and decide it by Set button.



- Select the engine position by ∨ ∧ button and decide it by Set button.
- Select "NONE" when set up speed and fuel display.



- Set up completion display will appear on screen to confirm. By ∨ ∧ button, select Yes to finish and select No to try again, then decide it by Set button.

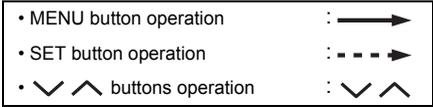


- Set up completion display will appear on screen. Return to the previous display by Set button.

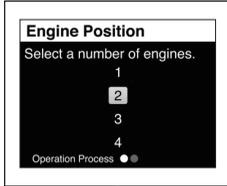
• WIRING DIAGRAM

Refer to Page 6-7 for Mechanical Remote Control System
 Refer to Page 9-10 for SUZUKI Precision Control System

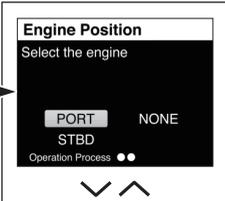
• For Dual Engine



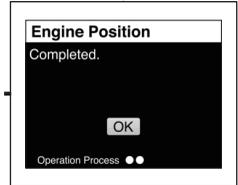
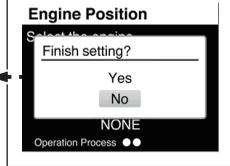
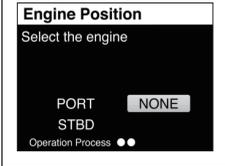
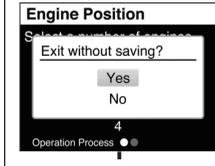
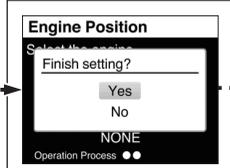
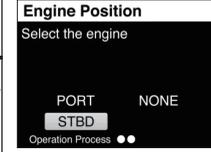
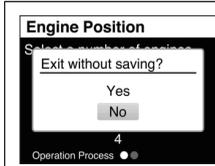
- Select the engine number by ∨ ∧ button and decide it by Set button.



- Select the engine position by ∨ ∧ button and decide it by Set button.
- Select "NONE" when set up speed and fuel display.



- Set up completion display will appear on screen to confirm. By ∨ ∧ button, select Yes to finish and select No to try again, then decide it by Set button.

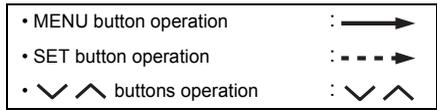


- Set up completion display will appear on screen. Return to the previous display by Set button.

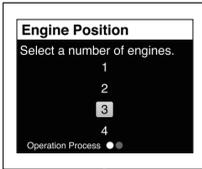
• WIRING DIAGRAM

Refer to Page 8 for Mechanical Remote Control System
 Refer to Page 11-12 for SUZUKI Precision Control System

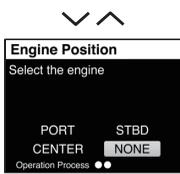
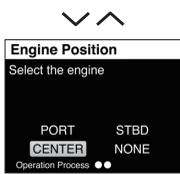
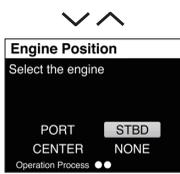
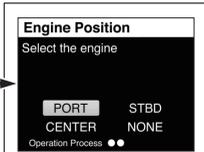
• For Triple Engine



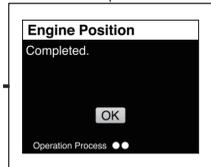
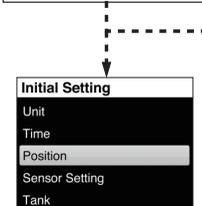
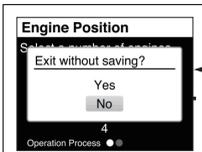
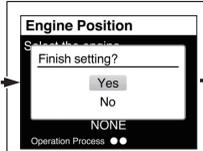
- Select the engine number by ∨ ∧ button and decide it by Set button.



- Select the engine position by ∨ ∧ button and decide it by Set button.
- Select "NONE" when set up speed and fuel display.



- Set up completion display will appear on screen to confirm. By ∨ ∧ button, select Yes to finish and select No to try again, then decide it by Set button.

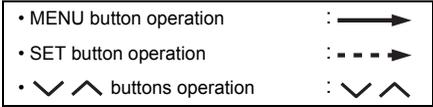


- Set up completion display will appear on screen. Return to the previous display by Set button.

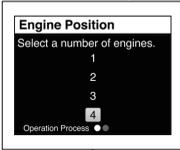
• WIRING DIAGRAM

Refer to Page 13-14 for SUZUKI Precision Control System

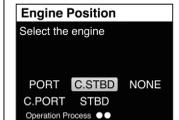
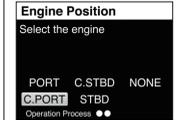
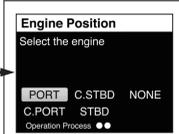
• For Quad Engine



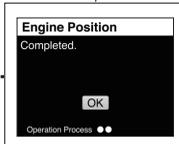
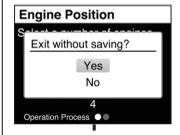
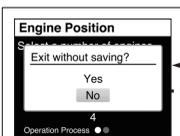
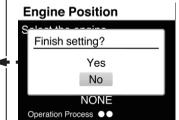
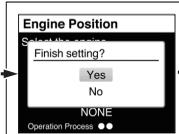
- Select the engine number by ∨ ∨ button and decide it by Set button.



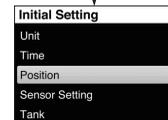
- Select the engine position by ∨ ∨ button and decide it by Set button.
- Select "NONE" when set up speed and fuel display.



- Set up completion display will appear on screen to confirm. By ∨ ∨ button, select Yes to finish and select No to try again, then decide it by Set button.



- Set up completion display will appear on screen. Return to the previous display by Set button.

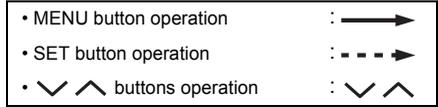


• WIRING DIAGRAM

Refer to Page 15-16 for SUZUKI Precision Control System

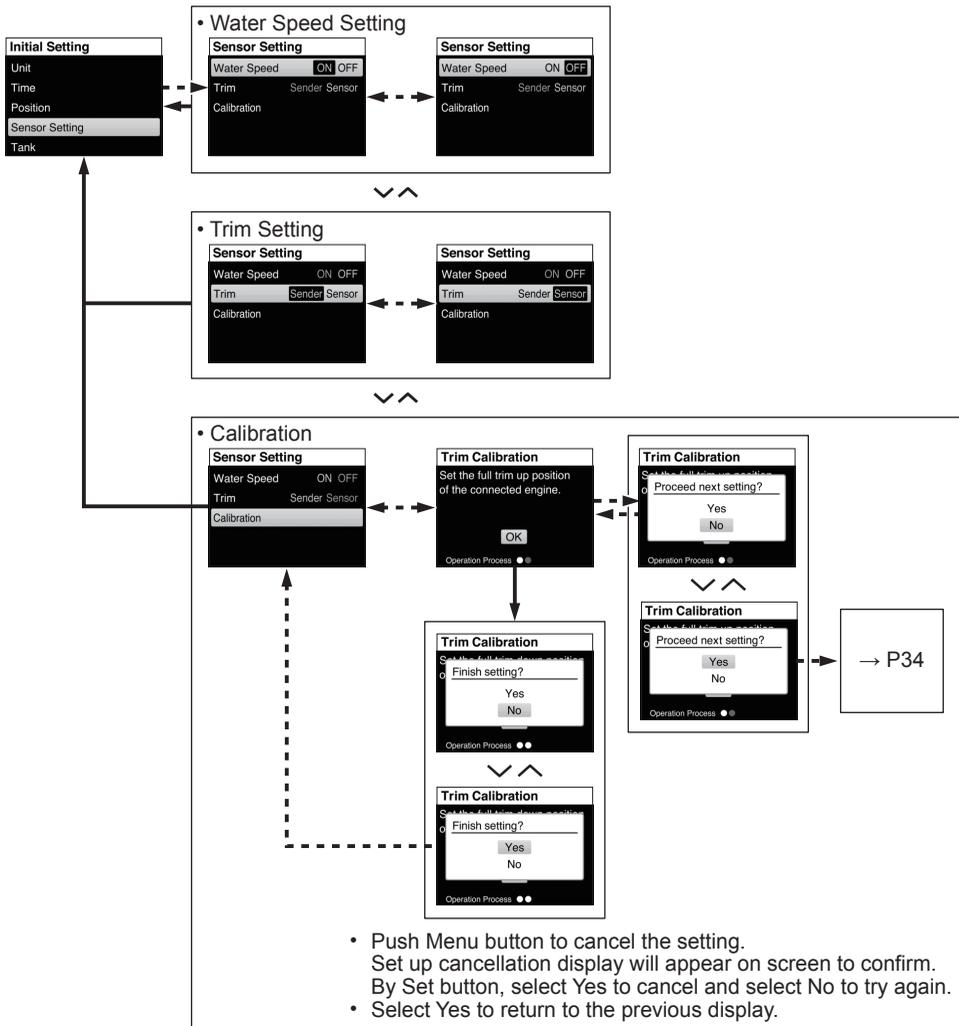
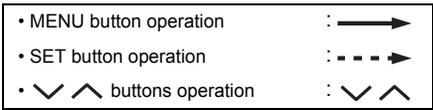
③ Engine Serial No.

- Setting for the following Engine Serial No.



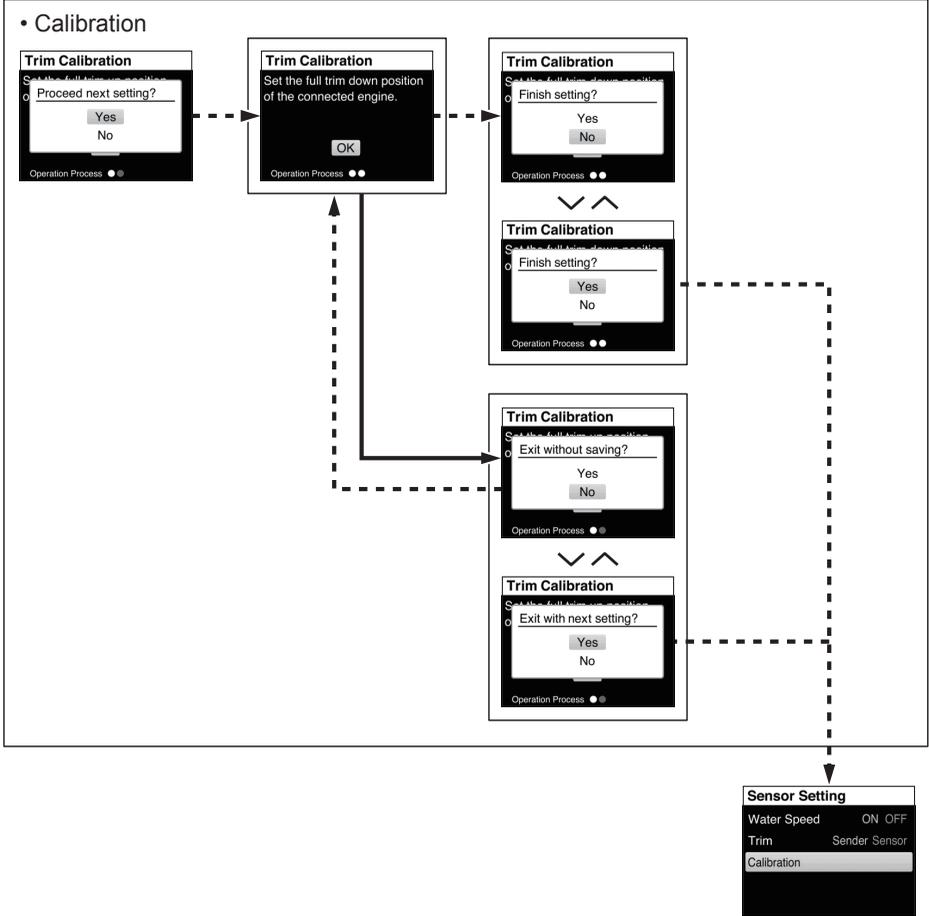
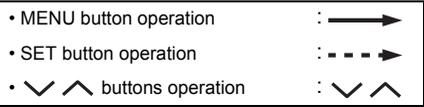
(4) Sensor set up

- Setting for the following Sensor setting.



NOTE:

- For trim sender model select and perform calibration.
- For trim sensor model select sensor only. (No calibration)



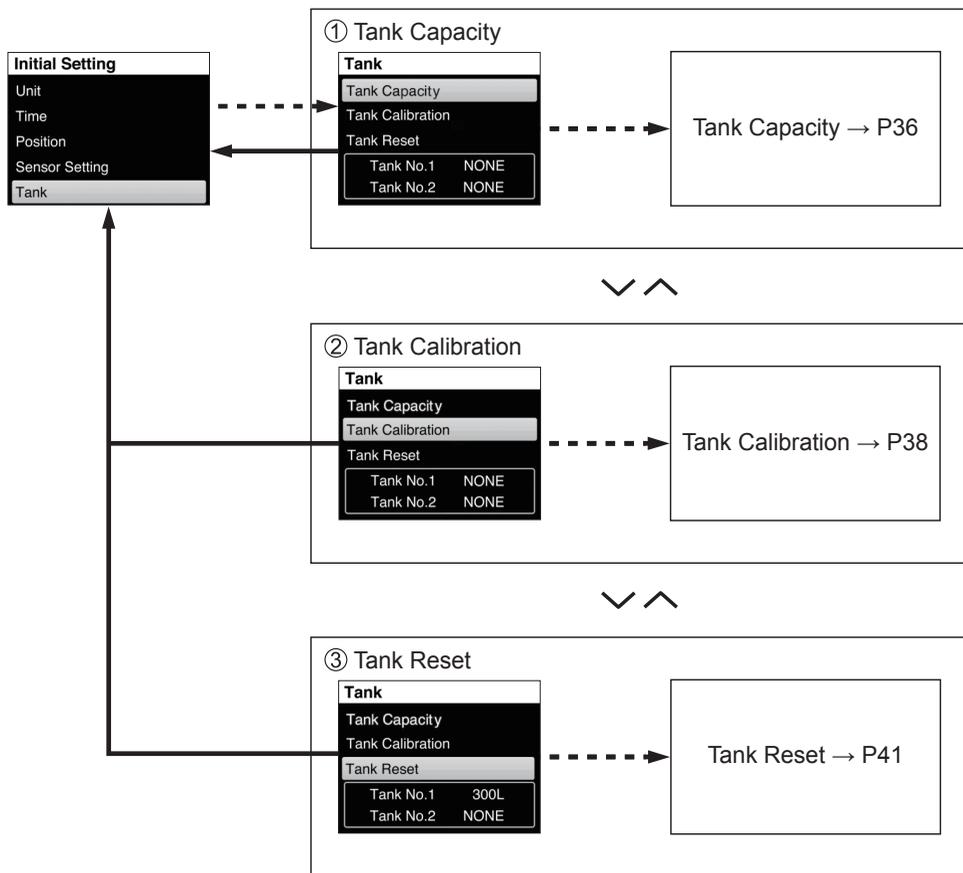
(5) Fuel tank set up

▲ WARNING

Before start fuel tank setting, make sure to check all of the fuel tanks on the boat are empty. If any gasoline is remained in any of the tanks, the setting will be performed incorrectly and the remaining fuel will be indicated incorrectly when navigating. In addition, it is necessary to measure the gasoline correctly by each quarter of each tank to perform the setting.

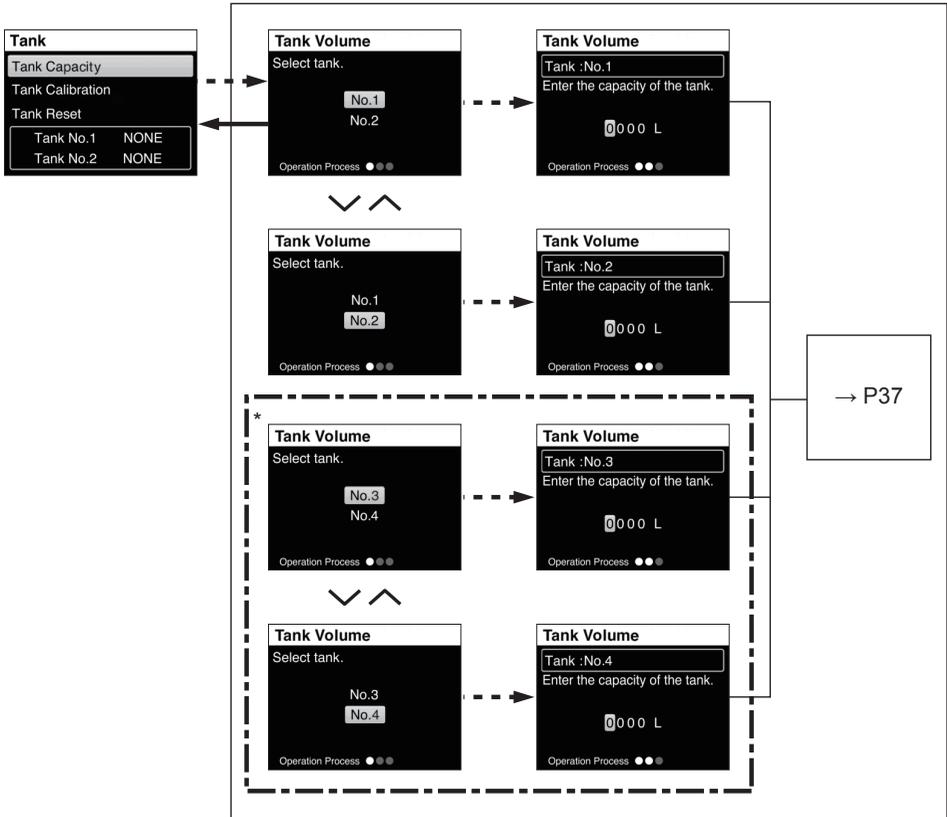
If not, the remaining gasoline will be indicated incorrectly and thus the boat might be unable to return to the port due to run out of gasoline.

When you retry the tank setting, always check all of the fuel tanks on the boat are completely empty at first and then try again the tank setting. If any gasoline is remained in any of the tanks, the setting will be performed incorrectly and the remaining fuel will be indicated incorrectly when navigating.



① Tank Capacity Setting for the following Tank Capacity.

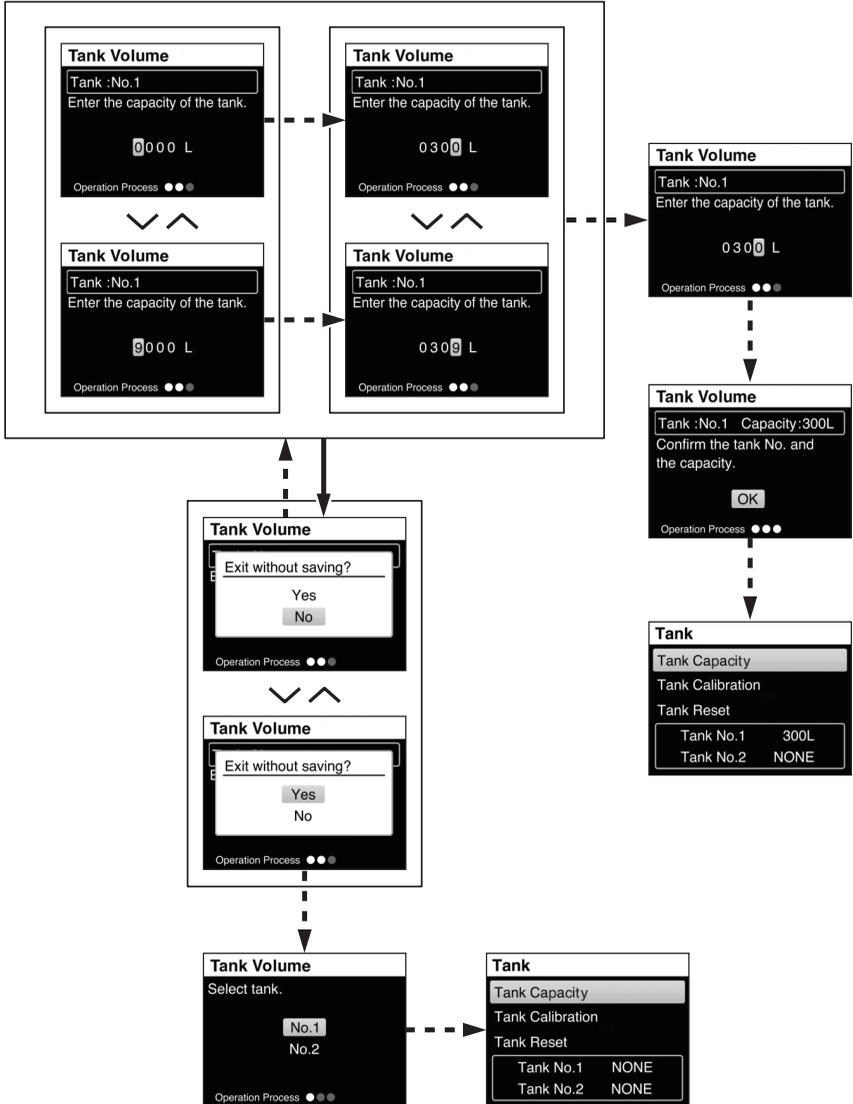
- MENU button operation : 
- SET button operation : 
-   buttons operation :  



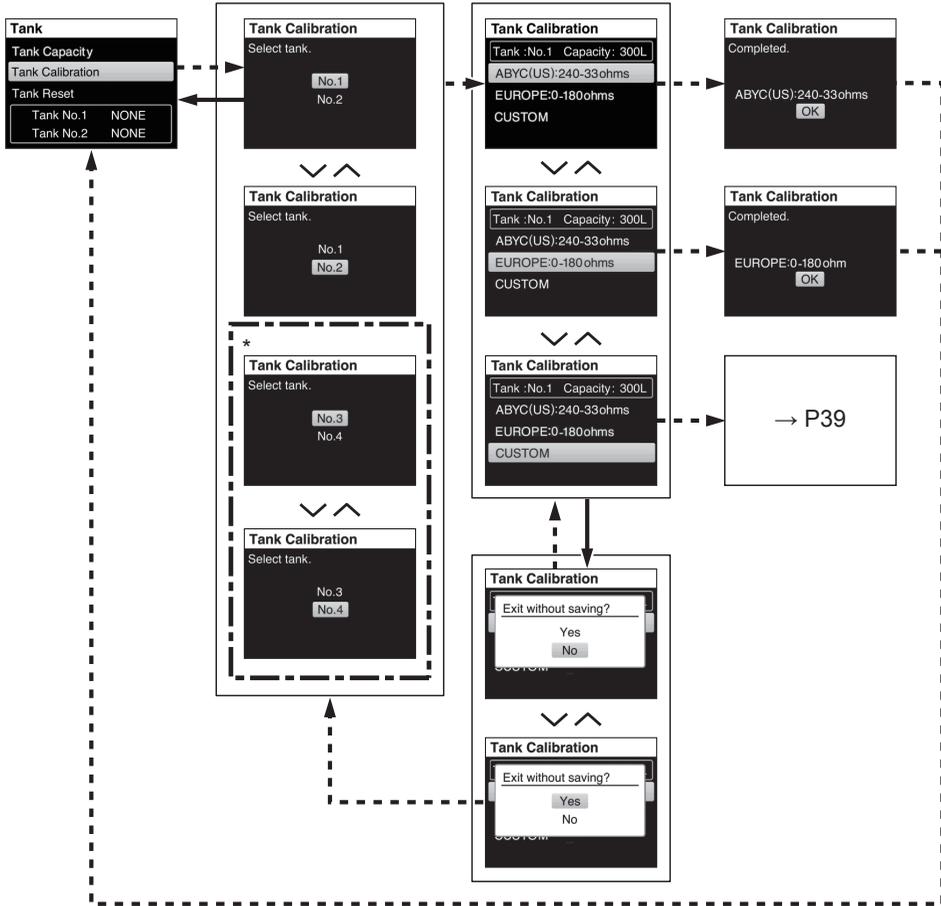
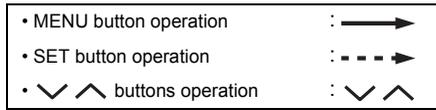
* Only if engine number is 2, 3, 4 and position is STBD, you can establish tank No.3 and No.4.

• Input the fuel tank capacity A case for 300 L tank.

- MENU button operation : 
- SET button operation : 
- \checkmark \wedge buttons operation : 



② Tank Calibration Set the Fuel level.

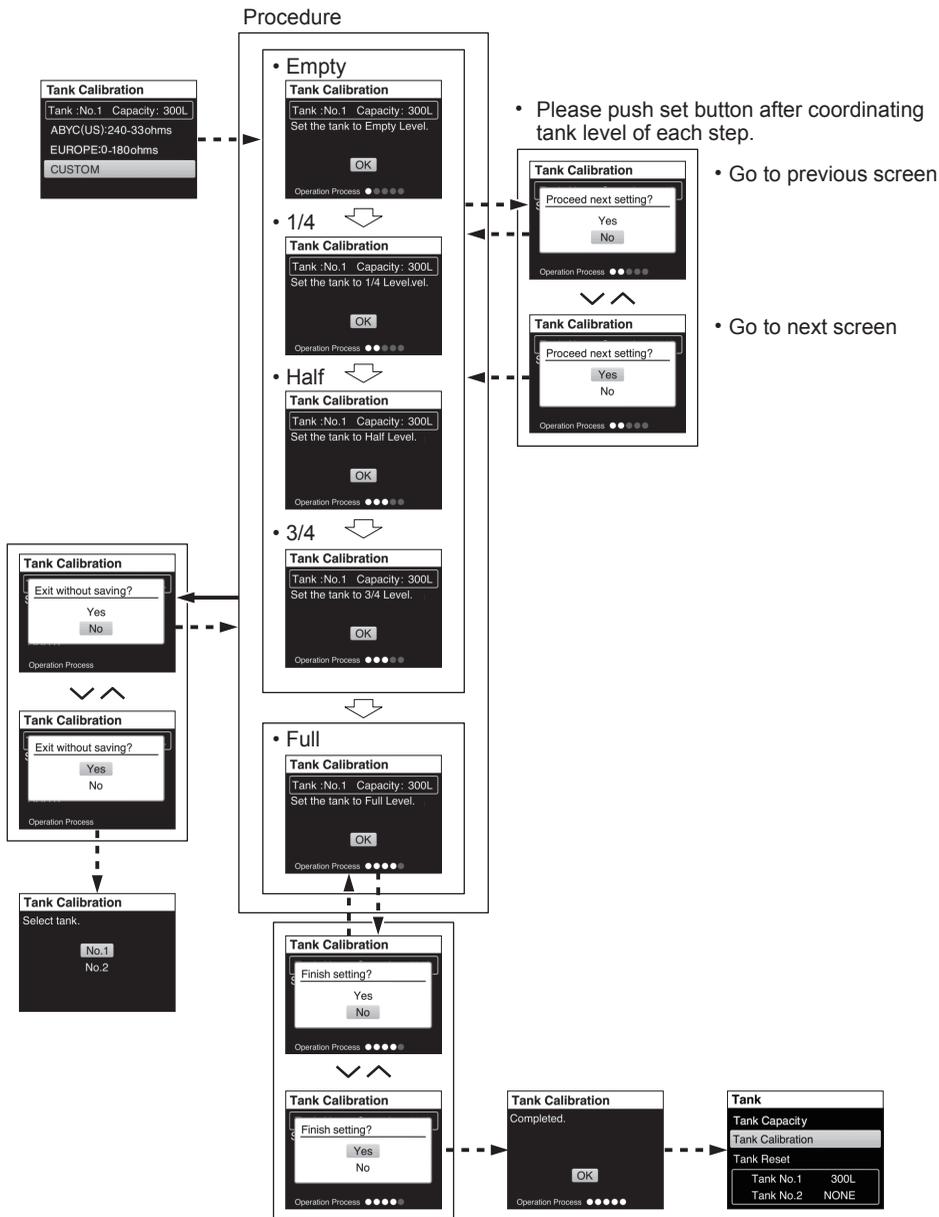
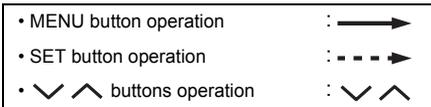


* Only if engine number is 2, 3, 4 and position is STBD, you can establish tank No.3 and No.4.

▲ WARNING

When you re-try the tank setting, always check all of the fuel tanks on the boat are completely empty at first and then try again the tank setting. If any gasoline is remained in any of the tanks, the setting will be performed incorrectly and the remaining fuel will be indicated incorrectly when navigating. In addition, it is necessary to measure the gasoline correctly by each quarter of each tank to perform the setting. If not, the remaining gasoline will be indicated incorrectly and thus the boat might be unable to return to the port due to run out of gasoline.

② Tank Calibration Set the Fuel level. (CUSTOM)



Fill out chart of fuel sender

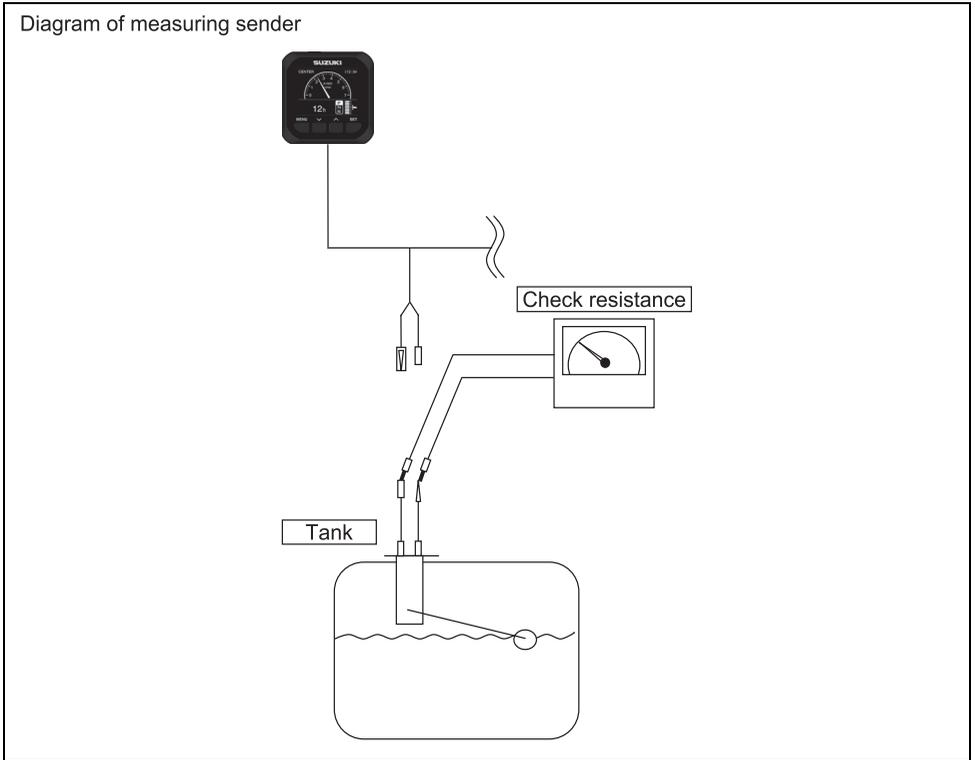
Capacity	Tank 1	Tank 2	Tank 3	Tank 4
Empty	Ω	Ω	Ω	Ω
1/4	Ω	Ω	Ω	Ω
Half	Ω	Ω	Ω	Ω
3/4	Ω	Ω	Ω	Ω
Full	Ω	Ω	Ω	Ω

NOTE:

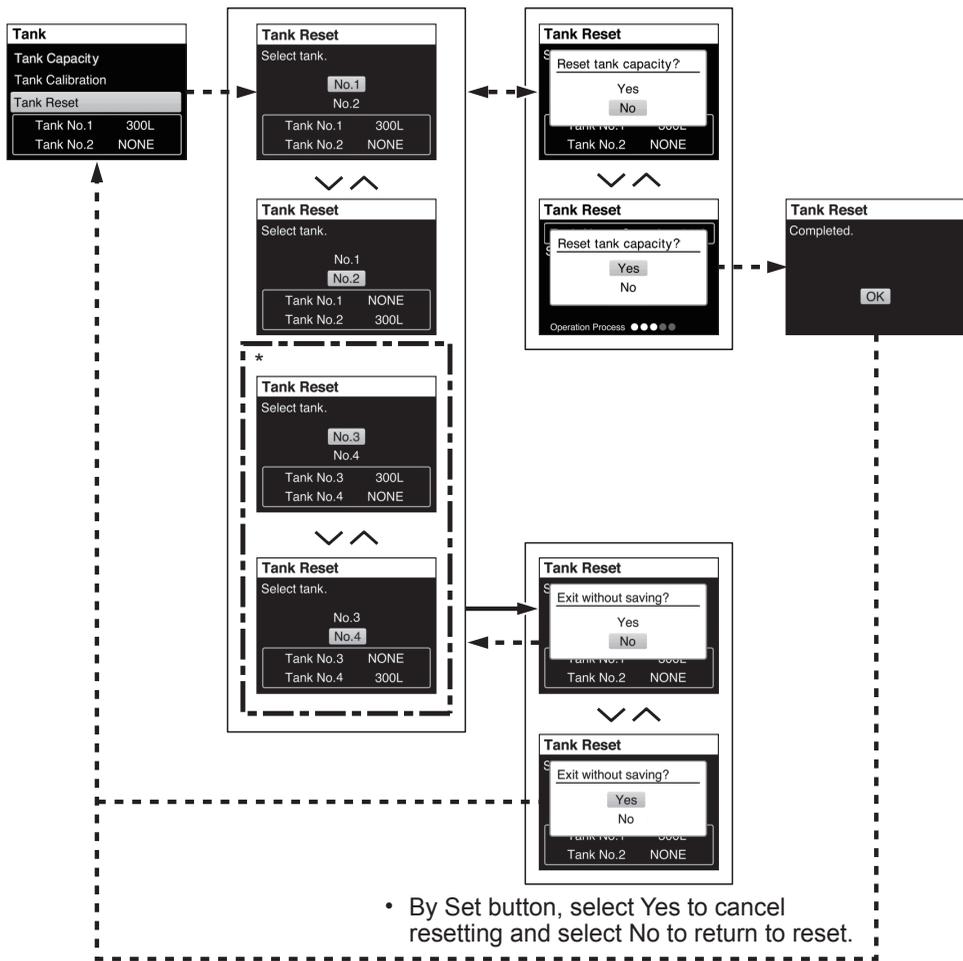
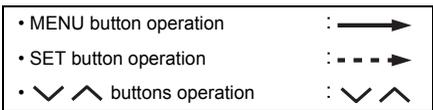
Recommend to measure the sender value when tank setting.

In case of trouble, you might be able to diagnosis the fault.

Diagram of measuring sender



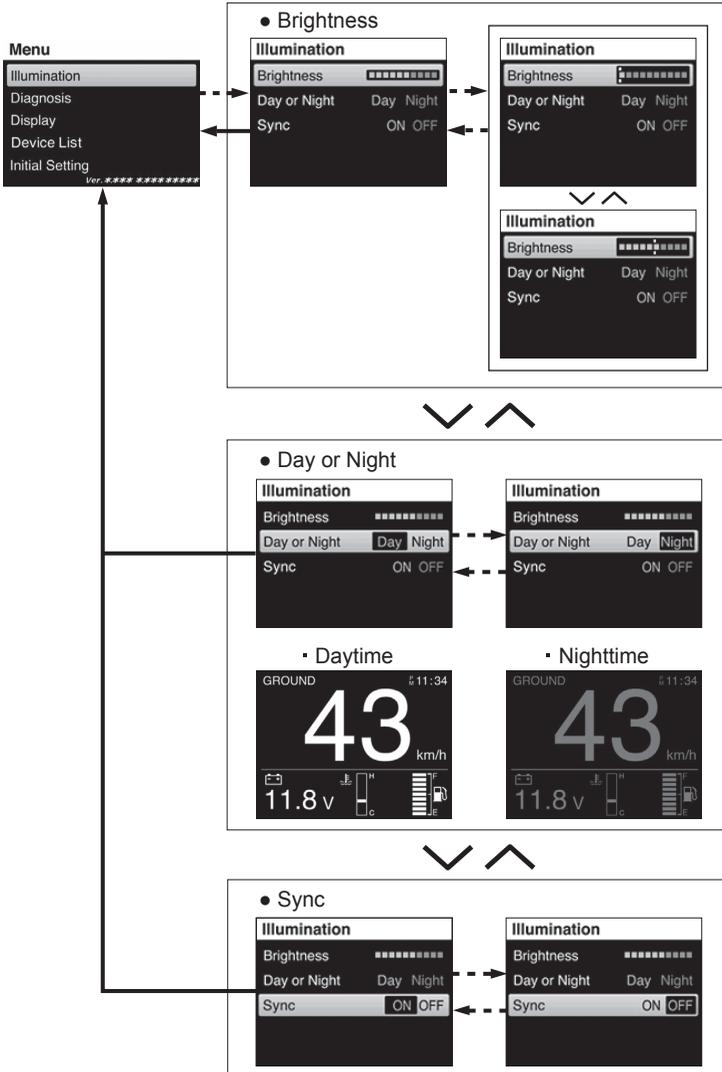
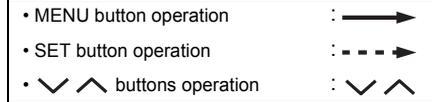
③ Tank Reset
Reset the tank setting.



* Only if engine number is 2, 3, 4 and position is STBD, you can establish tank No.3 and No.4.

6-2. Illumination

- Configures the illumination setting and day / night setting.



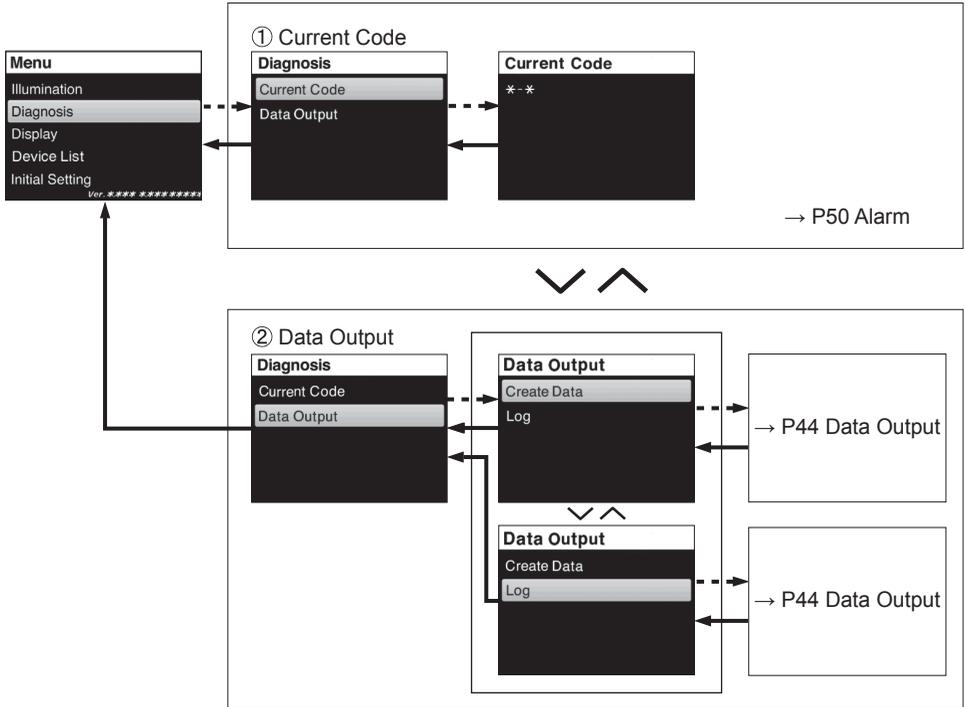
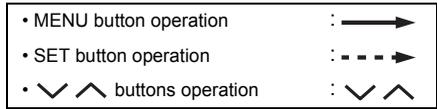
- The Brightness can be adjusted in 10 steps.

- You can select “Daytime display” or “Nighttime display” by press and hold the SET button, except for menu screen.

- You can synchronize the brightness setting and the Day or Night setting of gauges when the Sync is ON

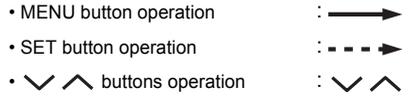
6-3. Diagnosis

- ① Current Code
Display the activated alarm.



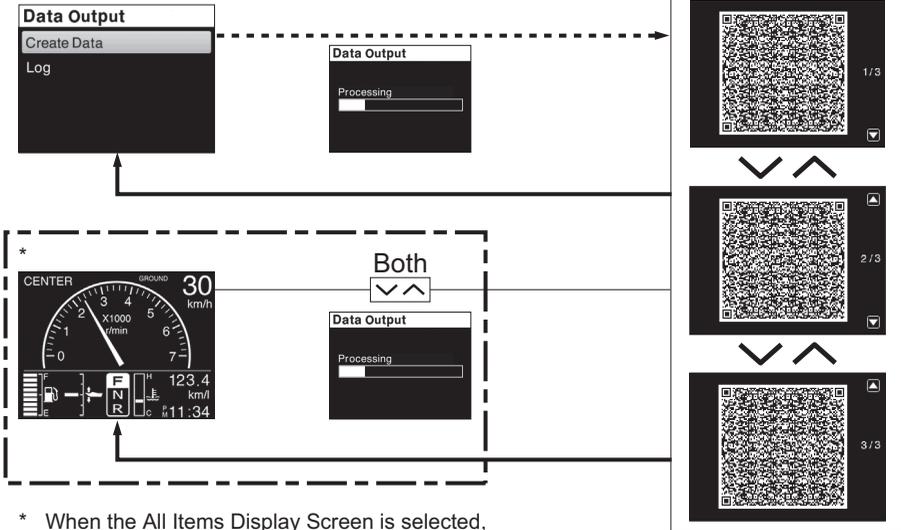
② Data Output

- Acquire the engine information, then record and readout the data with SUZUKI Diagnostic System Mobile.



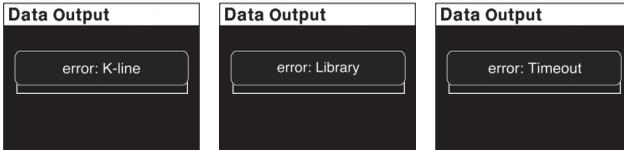
• Create Data

Acquire the engine information, then, convert to QR code and record the data.



* When the All Items Display Screen is selected, you can create the QR code by press and hold both ∨ ∨ buttons simultaneously.

Processing Error

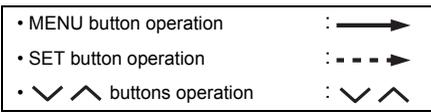


Caution message (→ P50 Alarm)

If your smart phone could not scan the QR code(s), please try the followings.

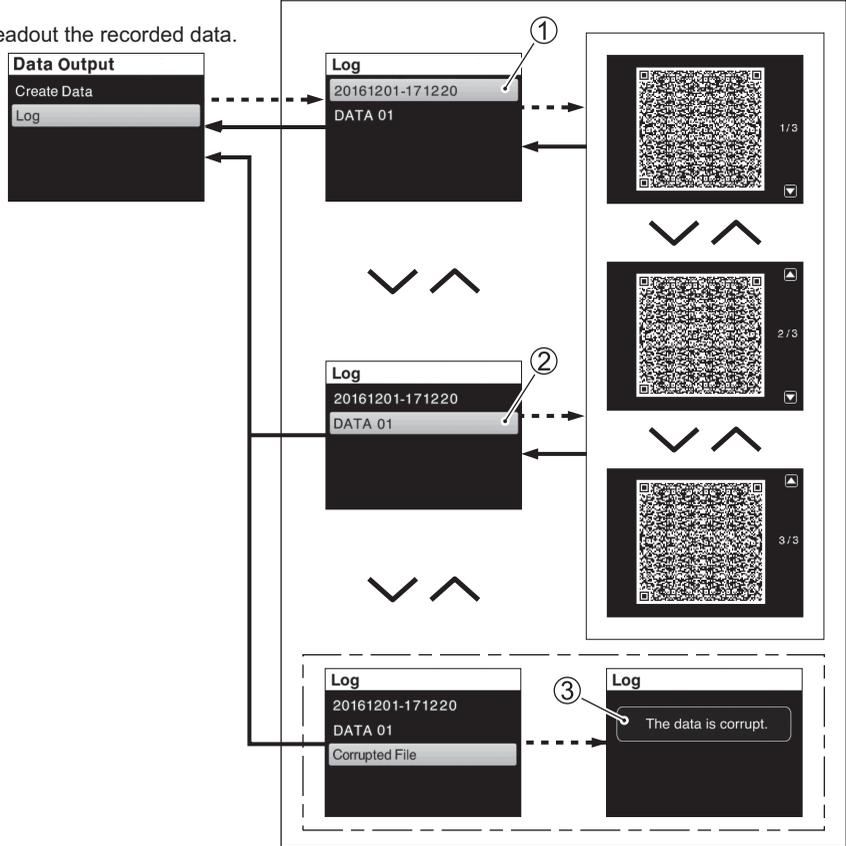
- Adjust the Brightness of the multi-function gauge.
- Shut off the direct sunlight from the multi-function gauge.

[QR code is registered trademark of DENSO WAVE INCORPORATED.]



• Log

Readout the recorded data.



- ① Display the time of the data acquired from the GPS module.
- ② Display "DATA **" when could not acquire the time of the data from the GPS module.
- ③ Caution message (→ P50 Alarm)

* Be able to store 15 set QR codes at maximum.
The oldest data shall be deleted automatically one by one.

6-4. Display

- Configures the settings of the Gauge screen.

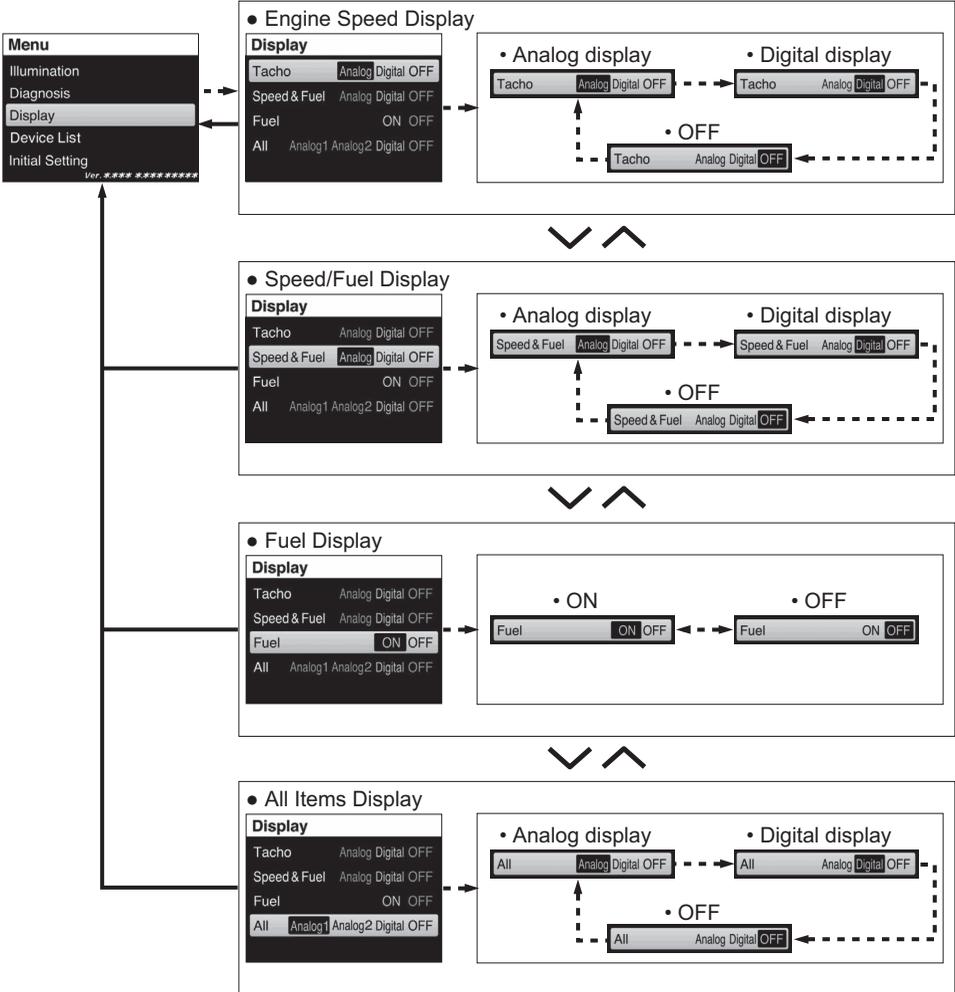
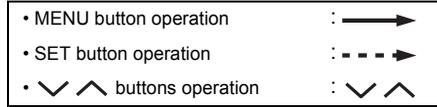
Selection Item

Analog : Analog display

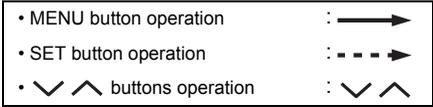
Digital : Digital display

OFF : Selected display is skipped.

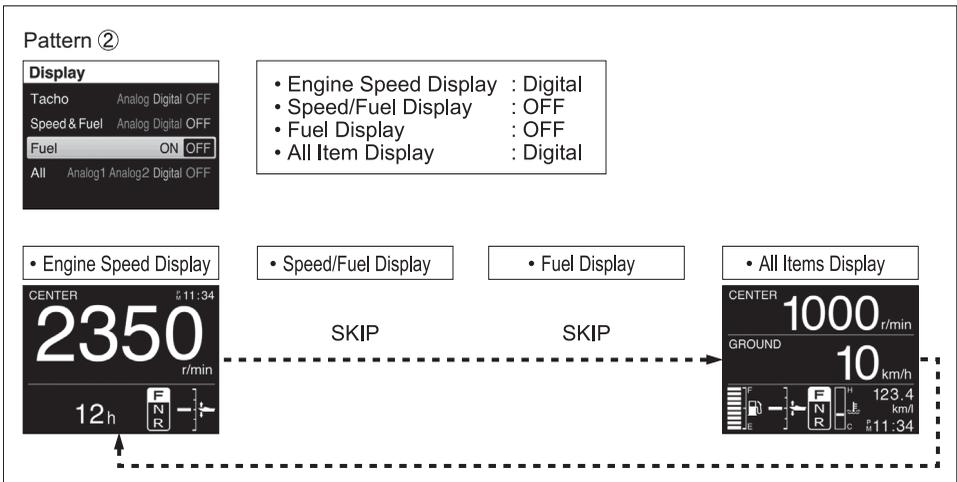
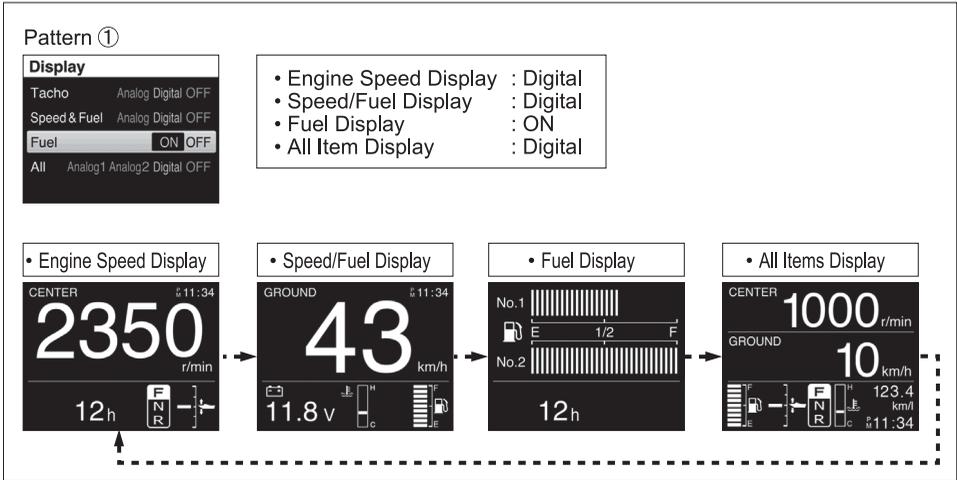
(Select at least one.)



• Display example of the gauge screen.



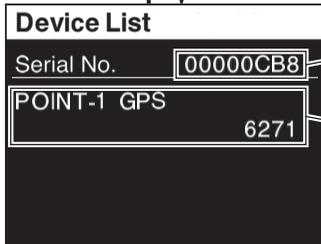
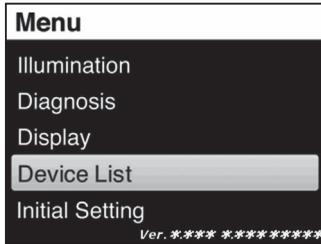
Example



6-5. Device List

- Display the information of the connected device.

• MENU button operation	: →
• SET button operation	: - - - →
• ∨ ∧ buttons operation	: ∨ ∧



Display the multi-function gauge serial number.

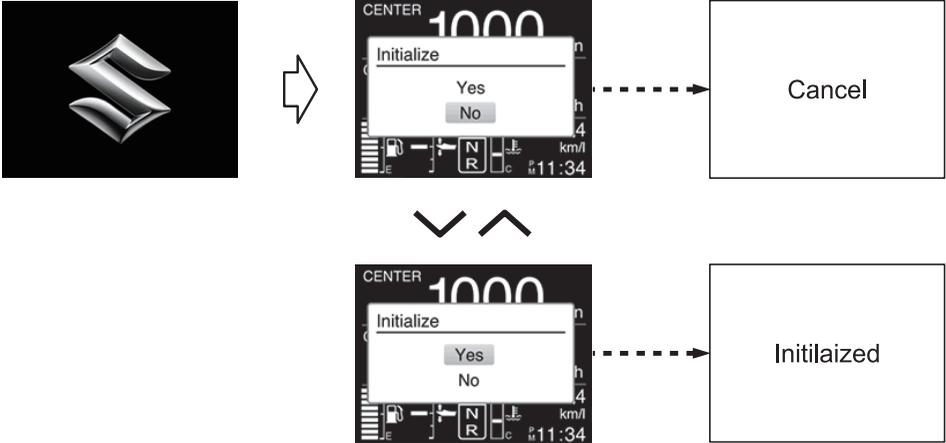
Display the name and the serial number of the connected device(s).

7. Initialize

• Configures the settings of the Initialized.

• MENU button operation	: —————>
• SET button operation	: - - - - ->
• ∨ ∨ buttons operation	: ∨ ∨

- (1) Turn the main switch off while pressing and holding the ∨ button.
- (2) Turn the main switch on while pressing and holding the ∨ button.
- (3) In a short time after indicating the SUZUKI logo, the initialize screen appears.



8. Alarm

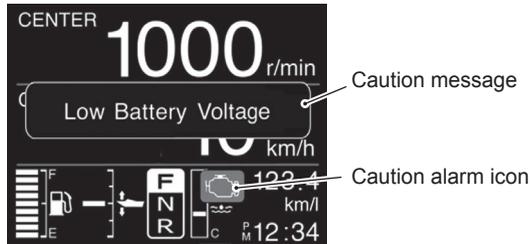
If an alarm occurs, the gauge screen will display the caution message and the caution alarm icon immediately.

The caution message clears when any of the buttons are pressed on the gauge.

However, the caution alarm icon is displayed until eliminating the cause.

The buzzer sound also stops when the cause is eliminated.

Example: Low battery voltage (All Items Display Screen)



• List of Caution message

Caution message	Caution alarm icon	Description
Low Battery Voltage *1		This system is activated when the battery voltage deficiency which could impair your motor's performance occurs. Adopt the appropriate measure according to the Owner's Manual.
Check Engine * - * *1 *2		If abnormal conditions exist in any sensor signal being input to the control unit, the self-diagnostic system warns of the abnormal condition. Adopt the appropriate measure according to the Owner's Manual.
Low Oil Pressure *1		This system operates when the engine lubricating oil pressure drops below the correct level. Adopt the appropriate measure according to the Owner's Manual.
Overheat *1		This system is activated when the cylinder wall temperature is too high due to insufficient water cooling. Adopt the appropriate measure according to the Owner's Manual.
Water in Fuel *1		This engine is equipped with an integral fuel filter / water separator and associated alert system. Adopt the appropriate measure on how to drain away the water according to the Owner's Manual.
Rev Limit *1	—	This system is activated when engine speed exceeds maximum recommended speed for more than 10 seconds. In addition, "Rev Limit" is displayed on screen. Adopt the appropriate measure according to the Owner's Manual.
Over Revolution *1	—	If you continue to run, engine speed will automatically be reduced to approximately 3000 r/min, simultaneously the buzzer sounds. Then the display will be changed into "Over Revolution". Adopt the appropriate measure according to the Owner's Manual.
Change Oil *1	—	This system informs the operator of the time for replacing engine oil on the basis of the maintenance schedule.
High Oil Temp *1		This system is activated when the engine oil temperature is too high due to insufficient oil cooling or deterioration in quality of engine oil. Adopt the appropriate measure according to the Owner's Manual.

Caution message	Caution alarm icon	Description
Keyless Unit Battery Low		This system is activated when the 12 volt battery voltage to the keyless control unit drops to a point which could impair the keyless control unit performance. Adopt the appropriate measure according to the Keyless Start System Operation Manual.
Remote Key Battery Low		The caution system is activated when key-fob battery voltage drops to a point which could impair key-fob performance. Adopt the appropriate measure according to the Keyless Start System Operation Manual.
Check Remote Key		The caution system is activated when key-fob identification error. Adopt the appropriate measure according to the Keyless Start System Operation Manual.
Check Shift Control *1		This system is activated in the event of an error of the control system of the electronic shift. Adopt the appropriate measure according to the Owner's Manual.
Check Throttle System *1		This system is activated in the event of an error of the control system of the electronic throttle. Adopt the appropriate measure according to the Owner's Manual.
Check Control Unit C. *1		This system is activated in the event of an error in the control system of the electronic throttle and shift systems. Adopt the appropriate measure according to the Owner's Manual.
Check 2nd Station *1		This system is activated in the event of an error in the control system of the 2nd station. Adopt the appropriate measure according to the Owner's Manual.
Check Gauge C. *1	—	This system activates when there is a communication error of the gauge. Adopt the appropriate measure according to the Owner's Manual.
error: Timeout	—	This Log data is corrupt and cannot be used.
The data is corrupt.	—	This system activates when there is a communication error of the gauge. Check the connection of the wiring.
error: K-line	—	An error occurred in process of creating the QR code. Re-create the QR code. Consult with your Suzuki Marine Dealer.
error: Library	—	An error occurred in process of creating the QR code. Re-create the QR code. Consult with your Suzuki Marine Dealer.

Caution message	Caution alarm icon	Description
Check Station Setting	—	Troll mode cannot operate from this gauge. Check the activated Station by pressing “SELECT” button on the control panel, and then re-operate to get into troll mode.
Check Troll Condition	—	Cannot switch to troll mode. Read “Troll Mode Operation” on page 15, and then re-operate to get into troll mode.
Check Troll System	—	The current ECM and BCM does not applicable to the troll mode system. Consult with your Suzuki Marine Dealer.

*1: This is also displayed in the gauge installed in the 2nd station.

*2: A number indicating the fault location is displayed in *_*.
(The number is displayed in the 1st station only.)

9. Gauge Screen List

Main Information		Engine speed display screen	Speed / Fuel display screen	Fuel display screen	All Items display screen
Engine speed		*○	—	—	*○
Clock *1		○	○	—	○
Trim position		*○	—	—	*○
Shift position		*○	—	—	*○
Engine position		*○	—	—	*○
Speed	Ground speed *1	—	○	—	○
	Water speed *2	—	○	—	○
Remaining fuel volume	Total	—	○	—	○
	Tank 1 / Tank 2	—	—	○	—
	Tank 3 / Tank 4 *5	—	—	○	—

Sub Information		Engine speed display screen	Speed / Fuel display screen	Fuel display screen	All Items display screen
Total operating hours		*○	*○	*○	—
Trip time		○	○	○	—
Trip distance *3		○	○	○	—
Battery voltage / Cooling water temperature		*○	*○	*○	*△
Fuel economy information	Instantaneous fuel flow	○	○	○	—
	Total instantaneous fuel flow	○	○	○	—
	Instantaneous fuel economy *3	○	○	○	○
	Average fuel economy *3	○	○	○	—
Total fuel used		○	○	○	—
Latitude / Longitude *1		○	○	○	—
Caution alarm icon / Caution message *4		*○	*○	*○	*○

*○ Displays information on the outboard motor connected.

*1: Requires input from GPS module.

*2: Requires input from water speed sensor module.

*3: Requires input from GPS module or water speed sensor module.

*4: Displays all items for the 1st station only.

*5: In case of more than dual engine application.

*△ Display cooling water temperature only.

10. Specifications

1	Display size	3.5 inch Color display
2	Resolution	320 x 240
3	Power voltage	DC8 - 16 V
4	Display screen	Horizontal
5	Dimensions without cover	105 (W) x 105 (H) x 16 (D) mm
6	Dimensions with cover	108 (W) x 110 (H) x 20 (D) mm
7	Weight	0.3 kg
8	Power consumption	2 W
9	Operating temperature range	-20 - 65 °C
10	Others	Built-in buzzer Includes protective cover NMEA 2000 output

• Suzuki Parameter Group Number (PGN)

Signal	NMEA2000 PGN / hex	Mode
RPM	127488/1F200	RX/TX
Trim Position	127488/1F200	RX/TX
Gear Position	127493/1F205	RX/TX
Water Speed	128259/1F503	RX
GPS Speed	129026/1F802	RX
Voltage	127489/1F201	RX/TX
Fuel flow	127489/1F201	RX/TX
Tank size	127505/1F211	RX/TX
Fuel level	127505/1F211	RX/TX
Engine hours	127489/1F201	RX/TX
Alarm data	127489/1F201	RX/TX
GPS Position	129029/1F805	RX
ISO Acknowledge	059392/E800	RX/TX
ISO Request	059904/EA00	RX
ISO Address claim	060928/EE00	RX/TX
Manufacturer ID	060928/EE00	RX/TX
Product info	126996/1F014	RX/TX

RX: Multi Function Gauge receives specified PGN

TX: Multi Function Gauge transmits specified PGN