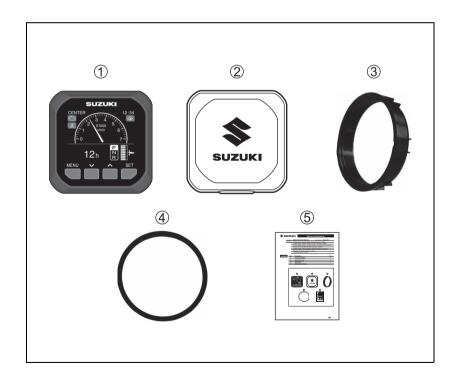


# INSTALLATION MANUAL

Description:	Multi-Function Gauge	Part Number: 34200-96L1*
Applications:	DF9.9B, DF15A, DF20A, DF25A, D	F30A (Serial No. 510001-)
	DF40A, DF50A, DF50AV, DF60A,	DF60AV (Serial No. 510001-)
	DF70A, DF80A, DF90A, DF100A,	DF115A, DF140A (Serial No. 510001-)
	DF150, DF175, DF200A, DF200AF	? (Serial No. 510001-)
	DF200, DF225, DF250, DF250AP,	DF300AP (Serial No. 510001-)
	DF150AP, DF175AP (Serial No. 71	0001-)
	DF350A (Serial No. 810001-)	



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.

# MPORTANT

Please read this manual and follow its instructions carefully.

To emphasize special information, the symbol **A** 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.

#### A WARNING

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

### 

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

### A 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.

### 

- 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.

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# 1. Multi-Function Gauge · Kit LINEUP

• For single Station (Mechanical Control System)

Contents	Part No.	No.	Single	Dual
Contents	Part No.		Kit No. 34000-96L4*	Kit No. 34000-96L5*
GAUGE ASSY, MULTI	34200-96L1*	1	1	2
WIRE COMP, GAUGE POWER (6.0 m)	36663-98J1*	2	1	1
ADAPTER, GAUGE FOR MULT	36665-87L0*	3	-	1
WIRE COMP, EXTENSION (0.6 m)	36662-88L1*	(5)	-	2
HARNESS ASSY, NETWORK POWER	36663-88L0*	6	-	1
CONNECTOR COMP, BRANCH	36664-88L0*	$\bigcirc$	-	2
UNIT COMP, RESISTOR FEMALE	36665-88L0*	8	-	1
UNIT COMP, RESISTOR MALE	36665-88L1*	9	-	1
ADAPTER COMP, GAUGE	36661-96L1*	(18)	1	2
MANUAL	34212-96L1*	-	1	1

For single Station (DBW Control System)

Contonto	Dort No.	No.	Single	Dual
Contents	Contents Part No.		Kit No. 34000-96L6*	Kit No. 34000-96L7*
GAUGE ASSY, MULTI	34200-96L1*	1	1	2
WIRE COMP, GAUGE POWER (6.0 m)	36663-98J1*	2	1	1
WIRE COMP, EXTENSION (0.6 m)	36662-88L1*	(5)	-	2
HARNESS ASSY, NETWORK POWER	36663-88L0*	6	-	1
CONNECTOR COMP, BRANCH	36664-88L0*	$\bigcirc$	-	2
UNIT COMP, RESISTOR FEMALE	36665-88L0*	8	-	1
UNIT COMP, RESISTOR MALE	36665-88L1*	9	-	1
ADAPTER COMP, GAUGE	36661-96L0*	12	1	1
WIRE COMP, GAUGE ADAPTER	36667-96L0*	(13)	_	1
MANUAL	34212-96L1*	-	1	1

For dual Station

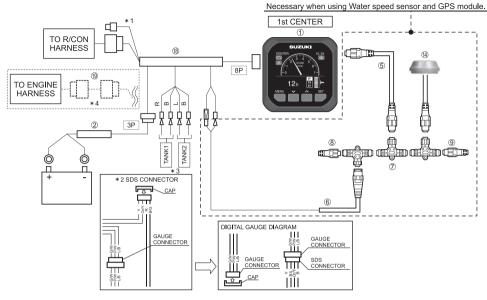
Contents	Part No.	No.	Kit No. 34002-96L1*
GAUGE ASSY, MULTI	34200-96L1*	1	1
WIRE COMP, EXTENSION	36682-92E0*	4	1
WIRE COMP, EXTENSION (0.6 m)	36662-88L1*	(5)	1
CONNECTOR COMP, BRANCH	36664-88L0*	$(\tilde{U})$	1
ADAPTER, GAUGE POWER	36666-96L0*	1	1
ADAPTER COMP, DUAL STATION	36665-96L0*	(16)	1
MANUAL	34212-96L1*	-	1

Cable

Contents	Part No.	No.	Kit No. 36001-88L0*	Kit No. 36660-89L**
WIRE COMP, EXTENSION (0.6 m)	36662-88L1*	(5)	1	-
HARNESS ASSY, NETWORK POWER	36663-88L0*	6	1	-
CONNECTOR COMP, BRANCH	36664-88L0*	$\bigcirc$	1	-
UNIT COMP, RESISTOR FEMALE	36665-88L0*	8	1	-
UNIT COMP, RESISTOR MALE	36665-88L1*	9	1	-
WIRE COMP, GAUGE ADAPTER (TANK3, TANK4)	36667-96L3*	(13)	-	-
WIRE COMP, DUAL GAUGE EXT (0.6 m)	36667-96L2*	1	-	-
WIRE COMP, ENG TO INTERFACE	36668-89L0*	(19)	-	1
CLAMP, WIRE	29404-93J0*	-	-	1
CLAMP, WIRE	09407-1440*	-	_	4

### 2. Connection Examples of Various Systems

- 2-1. Connection of Mechanical Remote Control System.
  - (1) The single station of single engine



No.	Part Names	Kit No. 34000-96L4*	Kit No. 36001-88L0*	Requaired Quantity	
1	GAUGE ASSY, MULTI	1	-	1	
2	WIRE COMP, GAUGE POWER (2.5 m)	-	-	1	
Z	WIRE COMP, GAUGE POWER (6.0 m)	1	-	I	
(5)	WIRE COMP, EXTENSION (0.6 m)	-	1	1	1
3	WIRE COMP, EXTENSION (1.8 m)	-	-	I	
6	HARNESS ASSY, NETWORK POWER	-	1	1	
$\bigcirc$	CONNECTOR COMP, BRANCH	-	1	1	*5
8	UNIT COMP, RESISTOR FEMALE	-	1	1	
9	UNIT COMP, RESISTOR MALE	-	1	1	
(14)	SENSOR ASSY, PADDLE WHEEL	-	-	1	
(14)	MODULE ASSY, GPS RECEIVER	-	-	I	
(18)	ADAPTER COMP, GAUGE	1	-	1	]
(19)	WIRE COMP, ENG TO INTERFACE	-	-	1	]

\*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.

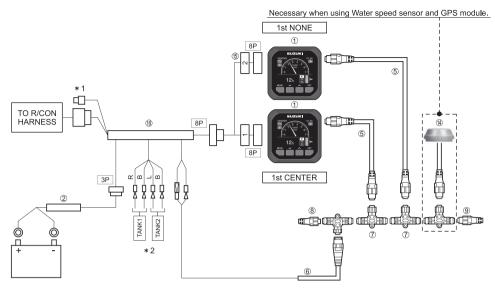
\*3. When use fuel sender more one, connect one by one and set up the fuel senders.

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

\*5. The number of quantity to purchase other than an adjunct of accessories.

Gauge set up →P21

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



No.	Part Names	Kit No. 34000-96L4*	Kit No. 36001-88L0*	Required Quantity	
1	GAUGE ASSY, MULTI	1	-	2	
(2)	WIRE COMP, GAUGE POWER (2.5 m)	-	-	1	
Z	WIRE COMP, GAUGE POWER (6.0 m)	1	-	I	
(5)	WIRE COMP, EXTENSION (0.6 m)	-	1	2	
9	WIRE COMP, EXTENSION (1.8 m)	-	-	2	
6	HARNESS ASSY, NETWORK POWER	-	1	1	
$\bigcirc$	CONNECTOR COMP, BRANCH	-	1	2	*
8	UNIT COMP, RESISTOR FEMALE	-	1	1	
9	UNIT COMP, RESISTOR MALE	-	1	1	
(14)	SENSOR ASSY, PADDLE WHEEL	-	-	1	
(4)	MODULE ASSY, GPS RECEIVER	-	-	I	
(15)	WIRE COMP, DUAL GAUGE ADAPTER	-	-	1	
1	WIRE COMP, DUAL GAUGE EXT (0.6 m)	-	-	-	
(18)	ADAPTER COMP, GAUGE	1	-	1	

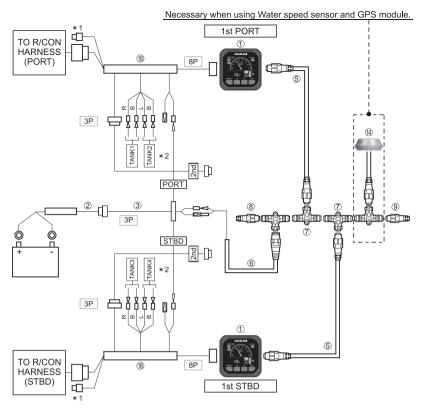
\*1. Connect only the system with the trim sender.

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

\*3. The number of quantity to purchase other than an adjunct of accessories.

Gauge set up  $\rightarrow$  P21

(3) The single station of dual engine



No.	Part Names	Kit No. 34000-96L5*	Required Quantity	
1	GAUGE ASSY, MULTI	2	2	1
(2)	WIRE COMP, GAUGE POWER (2.5 m)	-	1	1
2	WIRE COMP, GAUGE POWER (6.0 m)	1		
3	ADAPTER, GAUGE FOR MULT	1	1	
(5)	WIRE COMP, EXTENSION (0.6 m)	2	2	1
9	WIRE COMP, EXTENSION (1.8 m)	-	2	
6	HARNESS ASSY, NETWORK POWER	1	1	
$\overline{\mathcal{O}}$	CONNECTOR COMP, BRANCH	2	2	*3
(8)	UNIT COMP, RESISTOR FEMALE	1	1	1
9	UNIT COMP, RESISTOR MALE	1	1	
(14)	SENSOR ASSY, PADDLE WHEEL	-	1	1
(4)	MODULE ASSY, GPS RECEIVER	-		
(18)	ADAPTER COMP, GAUGE	2	2	1

\*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 (8) of the PORT side.

\*3. The number of quantity to purchase other than an adjunct of accessories.

#### 2-2. Connection of SUZUKI Precision Control System.

(1) The single station of single engine

**1st CENTER** 1 SUZUK (12) (FC)m 8P (14) TO BCM HARNESS (5) Ľ m Å , 🛛 🕁 Ŕ 3P F ₽ Ż 2 (8) TANK2 ANK1 nÆm archar nn  $\overline{(7)}$ ň ň \* 1 4 6

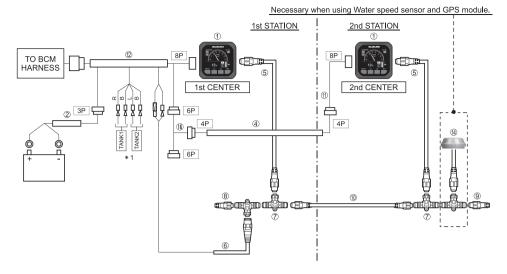
Kit No. Kit No. Required No. Part Names 34000-96L6\* 36001-88L0\* Quantity GAUGE ASSY, MULTI 1 1 1 \_ WIRE COMP, GAUGE POWER (2.5 m) \_ \_ 2 1 WIRE COMP, GAUGE POWER (6.0 m) 1 \_ WIRE COMP, EXTENSION (0.6 m) \_ 1 (5) 1 WIRE COMP, EXTENSION (1.8 m) \_ \_ 6 HARNESS ASSY, NETWORK POWER 1 1 \_ CONNECTOR COMP. BRANCH 1 \*2  $\overline{7}$ \_ 1 UNIT COMP, RESISTOR FEMALE 1 1 (8) \_ (9) UNIT COMP, RESISTOR MALE 1 1 \_ 12 ADAPTER COMP, GAUGE 1 1 \_ SENSOR ASSY, PADDLE WHEEL \_ \_ (14) 1 MODULE ASSY, GPS RECEIVER

\*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.

Gauge set up  $\rightarrow$  P21

Necessary when using Water speed sensor and GPS module.

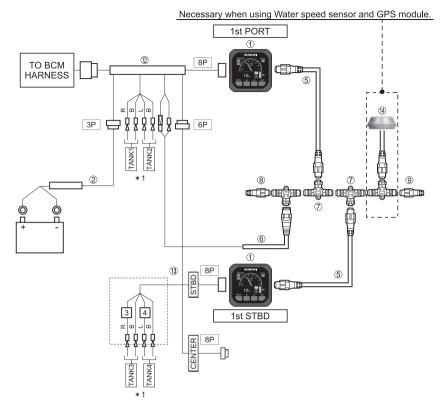


No.	Part Names	Kit No. 34000-96L6*	Kit No. 34002-96L1*	Kit No. 36001-88L0*	Required Quantity	]
1	GAUGE ASSY, MULTI	1	1	-	2	
(2)	WIRE COMP, GAUGE POWER (2.5 m)	-	-	-	1	
Z	WIRE COMP, GAUGE POWER (6.0 m)	1	-	-	I	
4	WIRE COMP, GAUGE EXT	-	1	-	1	
(5)	WIRE COMP, EXTENSION (0.6 m)	-	1	1	2	
9	WIRE COMP, EXTENSION (1.8 m)	-	-	-	2	
6	HARNESS ASSY, NETWORK POWER	-	-	1	1	
$\overline{O}$	CONNECTOR COMP, BRANCH	-	1	1	2	*2
8	UNIT COMP, RESISTOR FEMALE	-	_	1	1	
9	UNIT COMP, RESISTOR MALE	-	-	1	1	
(10)	WIRE COMP, EXTENSION (4.6 m)	-	-	-	4	
	WIRE COMP, EXTENSION (7.6 m)	-	-	-	I	
1	ADAPTER, GAUGE POWER	-	1	-	1	
(12)	ADAPTER COMP, GAUGE	1	-	-	1	
(14)	SENSOR ASSY, PADDLE WHEEL	-	-	-	1	1
(4)	MODULE ASSY, GPS RECEIVER	-	-	-	I	
(16)	ADAPTER COMP, DUAL STATION	-	1	-	1	

\*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.

Gauge set up  $\rightarrow$  P21

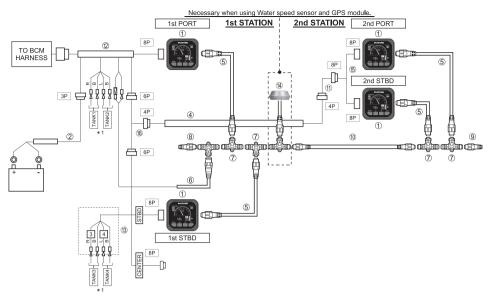


No.	Part Names	Kit No. 34000-96L7*	Required Quantity	
1	GAUGE ASSY, MULTI	2	2	
(2)	WIRE COMP, GAUGE POWER (2.5 m)	-	1	
Z	WIRE COMP, GAUGE POWER (6.0 m)	1		
(5)	WIRE COMP, EXTENSION (0.6 m)	2	2	
9	WIRE COMP, EXTENSION (1.8 m)	-	2	
6	HARNESS ASSY, NETWORK POWER	1	1	
$\bigcirc$	CONNECTOR COMP, BRANCH	2	2	*2
(8)	UNIT COMP, RESISTOR FEMALE	1	1	
9	UNIT COMP, RESISTOR MALE	1	1	
(12)	ADAPTER COMP, GAUGE	1	1	
(13)	WIRE COMP, GAUGE ADAPTER	1	4	
0	WIRE COMP, GAUGE ADAPTER (TANK3, TANK4)	-		
(14)	SENSOR ASSY, PADDLE WHEEL	-	4	
(4)	MODULE ASSY, GPS RECEIVER	-		
1	WIRE COMP, DUAL GAUGE EXT (0.6 m)	-	-	

\*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. Gauge set up  $\rightarrow$  P21

#### (4) The dual station of dual engine

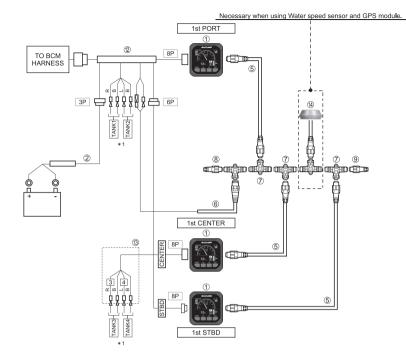


No.	Part Names	Kit No. 34000-96L7*	Kit No. 34002-96L1*	Required Quantity	
1	GAUGE ASSY, MULTI	2	1	4	
(2)	WIRE COMP, GAUGE POWER (2.5 m)	-	-	4	
2	WIRE COMP, GAUGE POWER (6.0 m)	1	-	I	
4	WIRE COMP, GAUGE EXT	-	1	1	
(5)	WIRE COMP, EXTENSION (0.6 m)	2	1	4	
9	WIRE COMP, EXTENSION (1.8 m)	-	-	4	
6	HARNESS ASSY, NETWORK POWER	1	-	1	
$\bigcirc$	CONNECTOR COMP, BRANCH	2	1	4	*2
8	UNIT COMP, RESISTOR FEMALE	1	-	1	
9	UNIT COMP, RESISTOR MALE	1	-	1	
(10)	WIRE COMP, EXTENSION (4.6m)	-	-	1	
	WIRE COMP, EXTENSION (7.6m)	-	-	I	
1	ADAPTER, GAUGE POWER	-	1	1	
(12)	ADAPTER COMP, GAUGE	1	-	1	
(13)	WIRE COMP, GAUGE ADAPTER	1	-	4	
(13)	WIRE COMP, GAUGE ADAPTER (TANK3, TANK4)	-	-	I	
(14)	SENSOR ASSY, PADDLE WHEEL	-	-	4	
(4)	MODULE ASSY, GPS RECEIVER	-	-	I	
(15)	WIRE COMP, DUAL GAUGE ADAPTER	-	-	1	1
(16)	ADAPTER COMP, DUAL STATION	-	1		1
17	WIRE COMP, DUAL GAUGE EXT (0.6 m)	_	-	1	

\*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.

Gauge set up  $\rightarrow$  P21

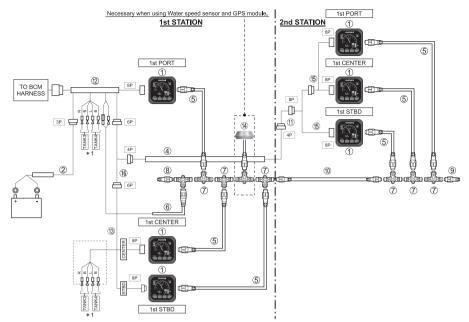


No.	Part Names	Kit No. 34000-96L7*	Required Quantity	
1	GAUGE ASSY, MULTI	2	3	
(2)	WIRE COMP, GAUGE POWER (2.5 m)	-	1	
2	WIRE COMP, GAUGE POWER (6.0 m)	1		
(5)	WIRE COMP, EXTENSION (0.6 m)	2	- 3	
9	WIRE COMP, EXTENSION (1.8 m)	-	3	
6	HARNESS ASSY, NETWORK POWER	1	1	
$\bigcirc$	CONNECTOR COMP, BRANCH	2	3	*2
(8)	UNIT COMP, RESISTOR FEMALE	1	1	
9	UNIT COMP, RESISTOR MALE	1	1	
(12)	ADAPTER COMP, GAUGE	1	1	
(13)	WIRE COMP, GAUGE ADAPTER	1	1	
(13)	WIRE COMP, GAUGE ADAPTER (TANK3, TANK4)	-		
(14)	SENSOR ASSY, PADDLE WHEEL	-	1	
4	MODULE ASSY, GPS RECEIVER	-	7 '	
17	WIRE COMP, DUAL GAUGE EXT (0.6 m)	-	-	

\*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. Gauge set up  $\rightarrow$  P21

#### (6) The dual station of triple engine



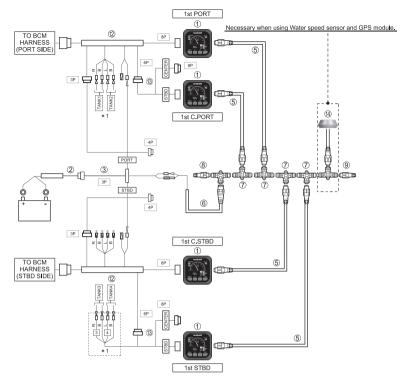
No.	Part Names	Kit No. 34000-96L7*	Kit No. 34002-96L1*	Kit No. 36001-88L0*	Required Quantity	
1	GAUGE ASSY, MULTI	2	1	-	6	
(2)	WIRE COMP, GAUGE POWER (2.5 m)		_	_	4	
2	WIRE COMP, GAUGE POWER (6.0 m)	1	-	-	I	
4	WIRE COMP, GAUGE EXT	_	1	_	1	
(5)	WIRE COMP, EXTENSION (0.6 m)	2	1	1	6	
9	WIRE COMP, EXTENSION (1.8 m)	-	-	-	6	
6	HARNESS ASSY, NETWORK POWER	1	-	1	1	
$\overline{O}$	CONNECTOR COMP, BRANCH	2	1	1	6	*2
8	UNIT COMP, RESISTOR FEMALE	1	-	1	1	
9	UNIT COMP, RESISTOR MALE	1	-	1	1	
(10)	WIRE COMP, EXTENSION (4.6m)	-	-	-	4	
	WIRE COMP, EXTENSION (7.6m)	-	-	-	I	
1	ADAPTER, GAUGE POWER	-	1	-	1	
12	ADAPTER COMP, GAUGE	1	-	-	1	
	WIRE COMP, GAUGE ADAPTER	1	-	-		
13	WIRE COMP, GAUGE ADAPTER (TANK3,TANK4)	-	-	-	1	
(14)	SENSOR ASSY, PADDLE WHEEL	-	-	-	4	
(4)	MODULE ASSY, GPS RECEIVER	-	-	-	I	
(15)	WIRE COMP, DUAL GAUGE ADAPTER	-	-	-	2	
16	ADAPTER COMP, DUAL STATION	-	1	-	1	
17	WIRE COMP, DUAL GAUGE EXT (0.6 m)	-	-	-	-	

\*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.

Gauge set up  ${\rightarrow}\mathsf{P21}$ 

#### (7) The single station of quad engine



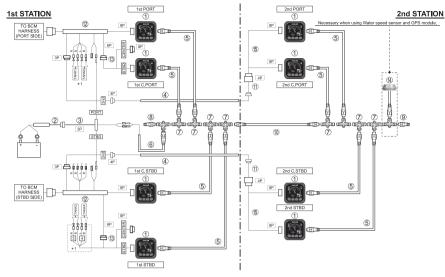
No.	Part Names	Kit No. 34000-96L7*	Kit No. 34002-96L1*	Required Quantity	]
1	GAUGE ASSY, MULTI	2	1	4	
2	WIRE COMP, GAUGE POWER (2.5 m)	-	-	1	
Z	WIRE COMP, GAUGE POWER (6.0 m)	1	-	I	
3	ADAPTER, GAUGE FOR MULT	-	-	1	
(5)	WIRE COMP, EXTENSION (0.6 m)	2	1	4	
3	<sup>5)</sup> WIRE COMP, EXTENSION (1.8 m)		-	4	
6	HARNESS ASSY, NETWORK POWER	1	-	1	
$\bigcirc$	CONNECTOR COMP, BRANCH	2	1	4	*2
(8)	UNIT COMP, RESISTOR FEMALE	1	1	1	
9	UNIT COMP, RESISTOR MALE	1	1	1	
(12)	ADAPTER COMP, GAUGE	1	-	2	
(13)	WIRE COMP, GAUGE ADAPTER	1	-	2	
0	WIRE COMP, GAUGE ADAPTER (TANK3, TANK4)	-	-	2	
(14)	SENSOR ASSY, PADDLE WHEEL	-	-	1	
4	MODULE ASSY, GPS RECEIVER		-	1	
1	WIRE COMP, DUAL GAUGE EXT (0.6 m)	_	-	-	

\*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 @ of the PORT side. Connect the TANK3 and TANK4 fuel level sensor to @ of the STBD side.

\*2. The number of quantity to purchase other than an adjunct of accessories. Gauge set up  $\rightarrow$  P21

15

#### (8) The dual station of quad engine



No.	Part Names	Kit No. 34000-96L7*	Kit No. 34002-96L1*	Kit No. 36001-88L0*	Required Quantity	]
1	GAUGE ASSY, MULTI	2	1	-	8	
(2)	WIRE COMP, GAUGE POWER (2.5 m)	-	-	-	1	
Ø	WIRE COMP, GAUGE POWER (6.0 m)	1	-	-	I	
3	ADAPTER, GAUGE FOR MULT	-	-	-	1	
4	WIRE COMP, GAUGE EXT	-	1	-	2	
(5)	WIRE COMP, EXTENSION (0.6 m)	2	1	1	8	
3	WIRE COMP, EXTENSION (1.8 m)	-	-	-	0	
6	HARNESS ASSY, NETWORK POWER	1	-	1	1	
$\bigcirc$	CONNECTOR COMP, BRANCH	2	1	1	8	*2
8	UNIT COMP, RESISTOR FEMALE	1	-	1	1	
9	UNIT COMP, RESISTOR MALE	1	-	1	1	
(10)	WIRE COMP, EXTENSION (4.6 m)	-	-	-	1	
	WIRE COMP, EXTENSION (7.6 m)	-	-	-	1	
1	ADAPTER, GAUGE POWER	-	1	-	2	
(12)	ADAPTER COMP, GAUGE	1	-	-	2	
	WIRE COMP, GAUGE ADAPTER	1	-	-		
(13)	WIRE COMP, GAUGE ADAPTER (TANK3,TAMK4)	-	-	-	2	
(14)	SENSOR ASSY, PADDLE WHEEL	-	-	-	1	
(4)	MODULE ASSY, GPS RECEIVER	-	-	-	I	
(15)	WIRE COMP, DUAL GAUGE ADAPTER	-	-	-	2	
1	WIRE COMP, DUAL GAUGE EXT (0.6 m)	-	-	-	-	

\*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 @ of the PORT side. Connect the TANK3 and TANK4 fuel level sensor to ® of the STBD side.

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

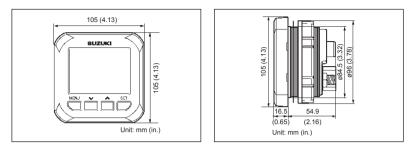
Gauge set up →P21

## 3. Gauge Installation

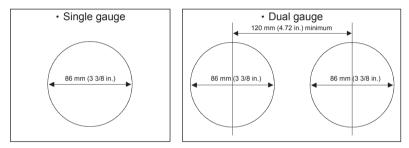
At first, choose a position where it is visible from the boat steering position and the wiring space on the back side of the gauge can be secured.

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.

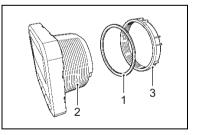


NOTICE

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.

## 4. Wiring Arrangement

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

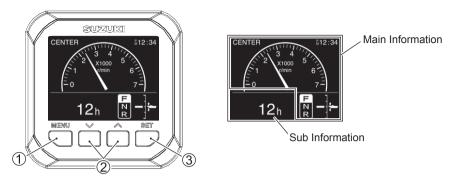
#### NOTICE

- 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.



# 5. Function

Locations



### Function of Each Button

		Gauge screen	Menu screen
		CENTER CENTER	Menu Illumination Diagnosis Display Device List Initial Setting
1	MENU button	Change to the menu screen	Change to the previous / Gauge screen
2	buttons	<ul> <li>a) Change to Sub Information</li> <li>b) Press and hold either of the buttons (Reset the display value)</li> <li>c) *Press and hold both buttons (→ P44 Data Output)</li> </ul>	Move the cursor
3	Set button	<ul> <li>a) Change to Main Information</li> <li>b) Press and hold button</li> <li>( → P42 Day or Night)</li> </ul>	Proceed / Confirm

\*All items Display Screen only.

## 6. Gauge Screen

- The following figures show the display screen and the operation flow.
- MENU button operation
- · SET button operation

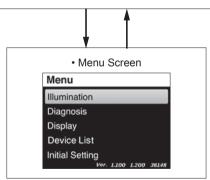
0

0.0

K100

· V A buttons operation ·~~ 3. Fuel Display Screen 1. Engine Speed 2. Speed/Fuel 4. All Items Display Screen Display Screen **Display Screen** Analog Analog Analog CENTER 12-24 GROUND 12-3 ROUNE Analog / Digital Ē, No.1 0 FŊ 1/2 Ē 12h 12h No.2 Digital 12h Digital Digital CENTER 12:34 12:34 CENTER GROUNI ٩ 12h 12h

Analog or digital display may be selected for Item 1,2 and 4. Sub Information will be displayed for Item 1,2 and 3.



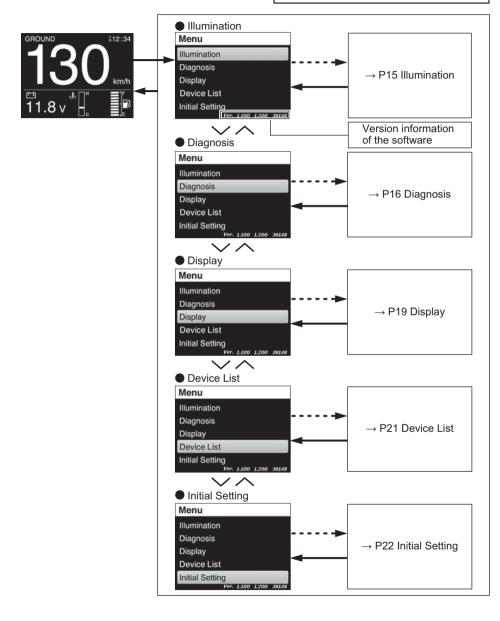
### 7. Gauge Set up

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

•	MENU button operation
•	SET button operation

· v v buttons operation

• :~~~



## 7-1. Initial Setting

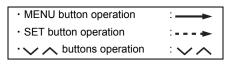
The settings related to the following items are configured in Initial Setting.

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

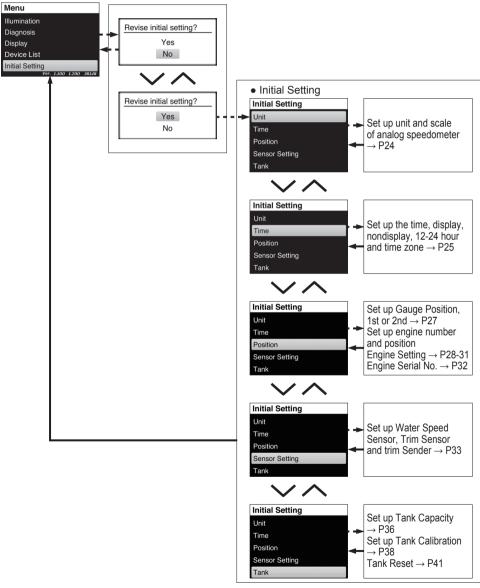
#### NOTICE

- 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.

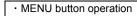
Some of the items in Initial Setting may be important during the initial setting. A confirmation screen to draw your attention will be displayed. After install the gauge, turn on the power and perform the following set up procedure for the gauge.





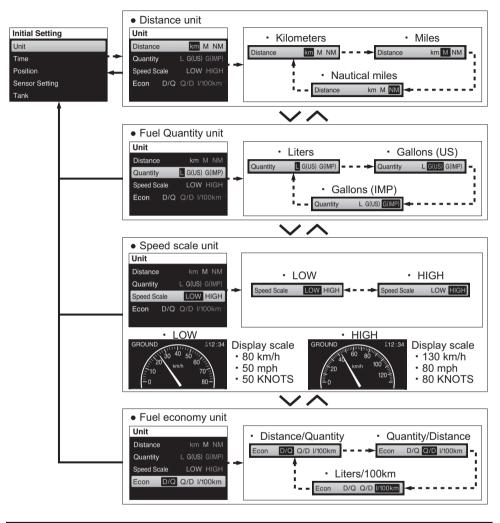


• Setting for the following units.



SET button operation

 $\cdot$  buttons operation :  $\checkmark$ 



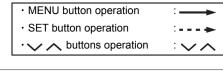
### **A** CAUTION

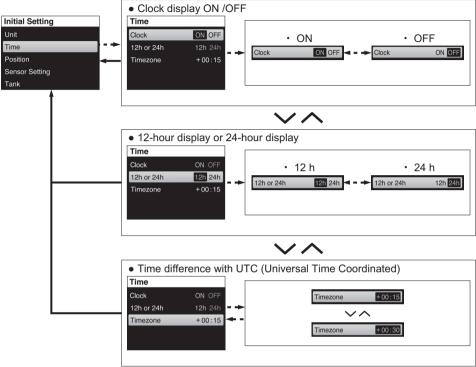
Select units of measurement which you will prefer and recognize. Selecting units you do not recognize may cause judgment errors.

#### (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  $\checkmark$  or  $\land$  button briefly to change the time by 15 minutes.

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

(3) Position set up

• Fuel Tank Number of each engine position.

Engine Number		NONE			
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	_	_	

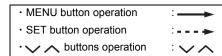
\*1st station only.

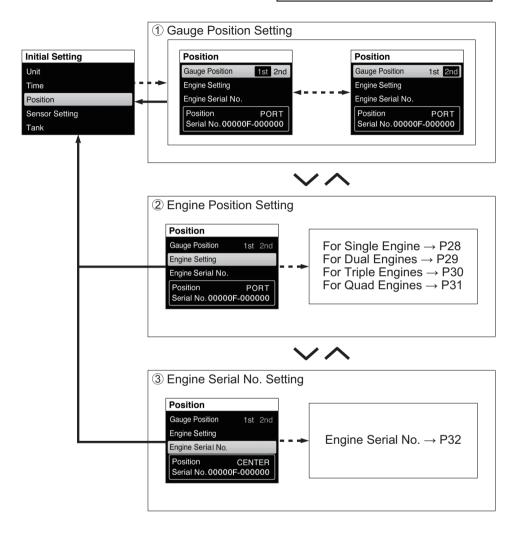
• If tank setting is performed with 1st station, tank information is shared with other gages.

• Main / Sub information of each engine position.

Main Information	Engine Position							
	PORT	STBD	CENTER	C.PORT	C.STBD	NONE		
Engine Speed	0	0	0	0	0	_		
Speed / Fuel	0	0	0	0	0	0		
Fuel	0	0	0	0	0	0		
All Items	0	0	0	0	0	—		
Sub Information			Engine	Position				
Sub information	PORT	STBD	CENTER	C.PORT	C.STBD	NONE		
Total operating hours	0	0	0	0	0	—		
Trip time	0	0	0	0	0	_		
Trip distance	0	0	0	0	0	—		
Battery voltage / Cooling water tem- perature	0	0	0	0	0	—		
Instantaneous fuel flow	0	0	0	0	0	—		
Total instantaneous fuel flow	0	0	0	0	0	0		
Instantaneous fuel economy	0	0	0	0	0	0		
Average fuel econo- my	0	0	0	0	0	0		
Total fuel used	0	0	0	0	0	0		
Latitude / Longitude	0	0	0	0	0	0		

• Setting for the following Position.



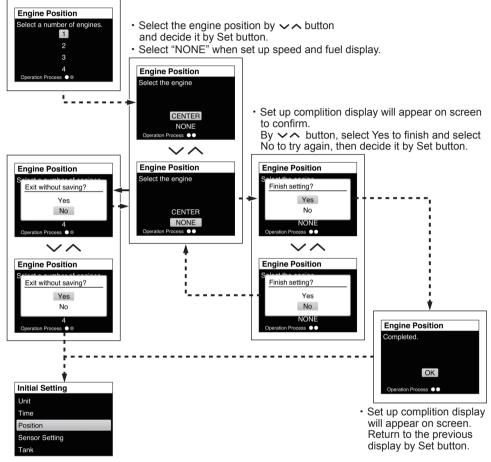


- 2 Engine Position Setting
  - For Single Engine

- MENU button operation
  - SET button operation
  - · V A buttons operation

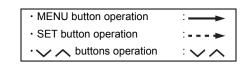


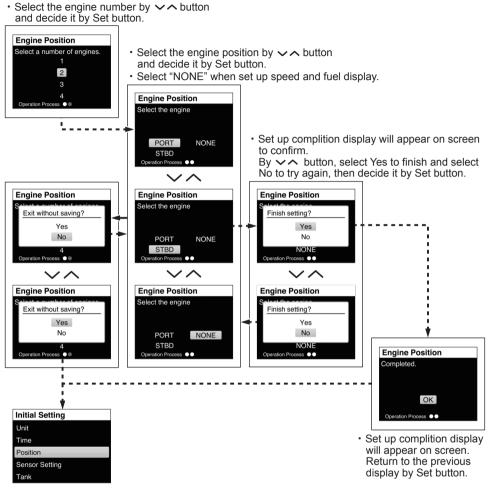
• Select the engine number by VA button and decide it by Set button.



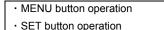
• WIRING DIAGRAM

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



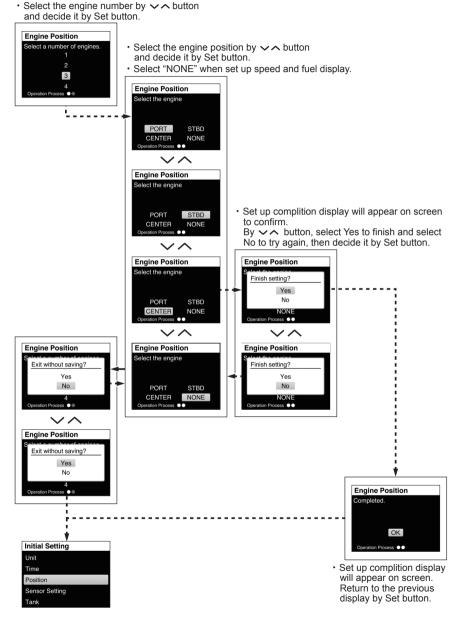


• WIRING DIAGRAM Refer to Page 8 for Mechanical Remote Control System Refer to Page 11-12 for SUZUKI Precision Control System

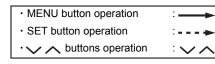


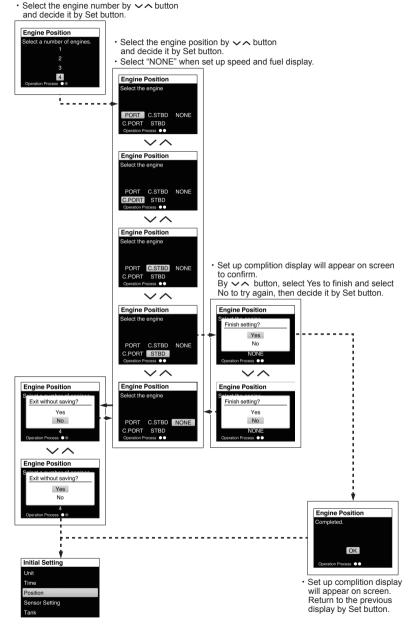
· V A buttons operation





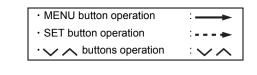
• WIRING DIAGRAM Refer to Page 13-14 for SUZUKI Precision Control System

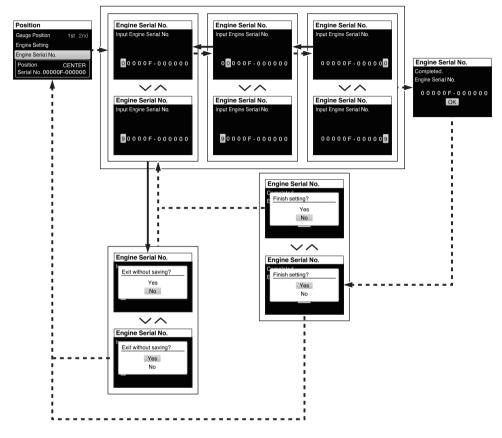




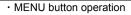
• WIRING DIAGRAM Refer to Page 15-16 for SUZUKI Precision Control System

- 3 Engine Serial No.
  - Setting for the following Engine Serial No.

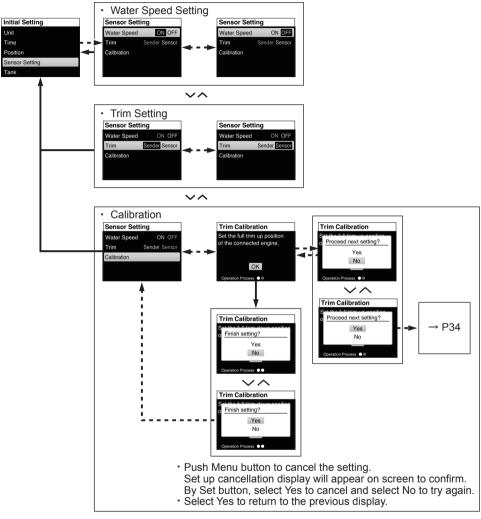




- (4) Sensor set up
  - Setting for the following Sensor setting.

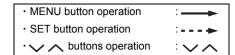


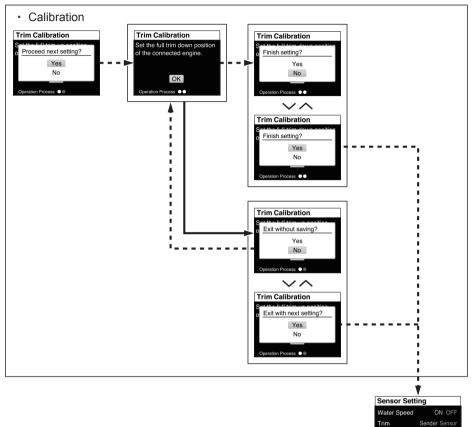
SET button operation
buttons operation



NOTE:

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





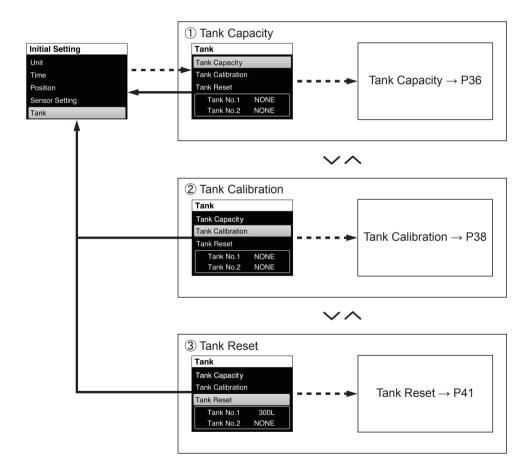


#### WARNING

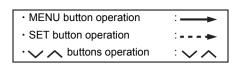
Before start fuel tank setting, make sure to check all of the fuel tanks on the boat are empty. If any gasoline is remained in any of the tanks, the setting will be performed incorrectly and the remaining fuel will be indicated incorrectly when navigating. In addition, it is necessary to measure the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

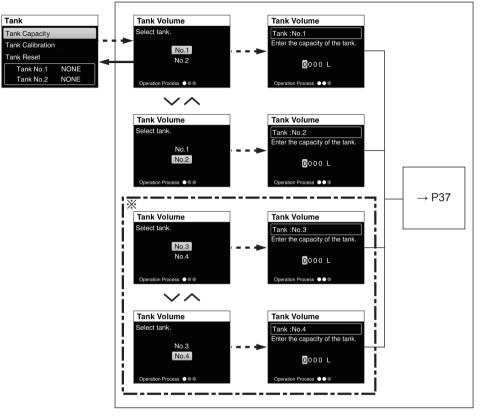
If not, the remaining gasoline will be indicated incorrectly and thus the boat might be unable to return to the port due to run out of gasoline.

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.



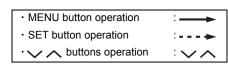
① Tank Capacity Setting for the following Tank Capacity.

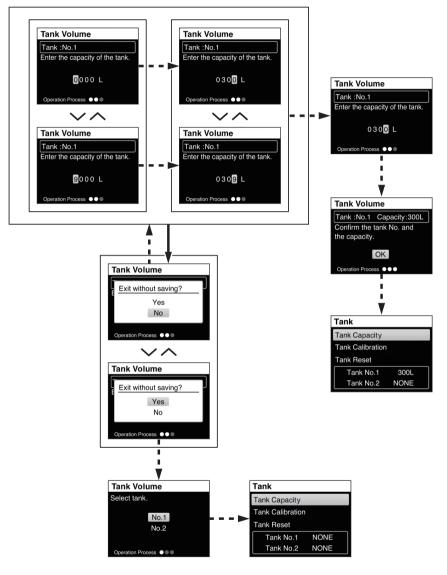




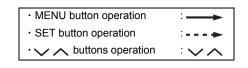
\*Only if engine number is 2, 3, 4 and position is STBD, you can establish tank No.3 and No.4.

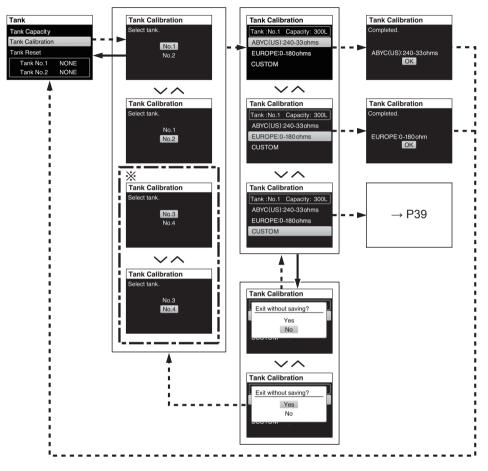
• Input the fuel tank capacity A case for 300L tank.





2 Tank Calibration Set the Fuel level.

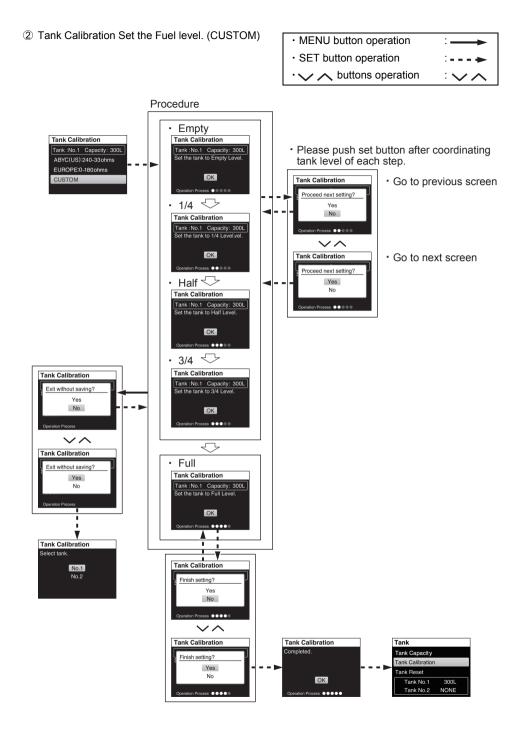




\*Only if engine number is 2, 3, 4 and position is STBD, you can establish tank No.3 and No.4.

#### A 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.

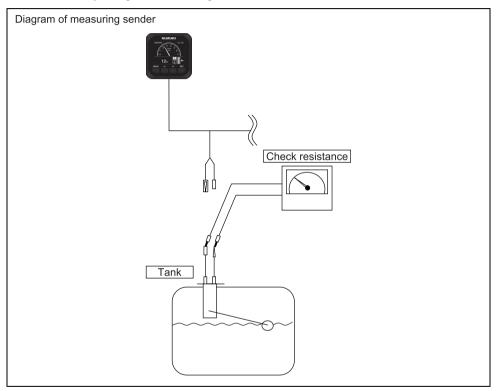


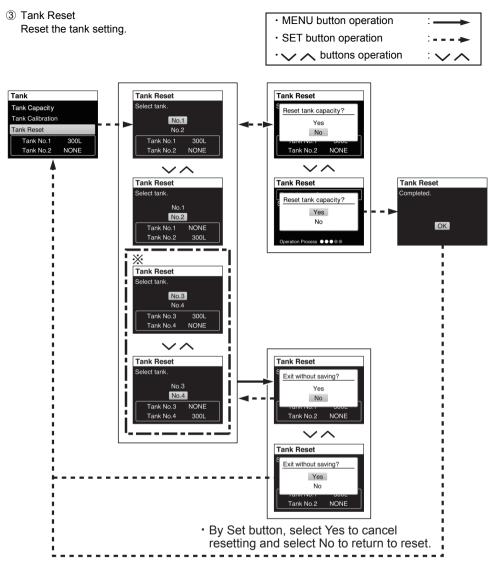
#### Fill out chart of fuel sender

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.





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

### 7-2. Illumination

Menu

Display

- · Configures the illumination setting and day / night setting.
- · V A buttons operation : 11 The Brightness can Brightness be adjusted in Illumination Illumination 10 steps. Brightness Illumination -----Brightness ..... Diagnosis Day or Night Day Night Day or Night Day Night Sync ON OFF ON OFF Sync Device List Initial Setting  $\overline{\vee \wedge}$ Illumination Brightness ..... Day or Night Day Night Sync ON OFF You can select Day or Night "Daytime display" or Illumination Illumination "Nighttime display" by Brightness ..... ..... Brightness press and hold the Day or Night Day or Night Day Night Day Night SET button, except ON OFF Sync ON OFF Sync for menu screen. Daytime Nighttime \$12:34 km/r R 8 • You can synchronize Sync the brightness setting Illumination Illumination and the Day or Night ..... Brightness -----Brightness setting of gauges when the Sync is ON Day or Night Day or Night Day Night Sync ON OFF Sync ON OFF

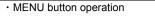
MENU button operation

· SET button operation

### 7-3. Diagnosis

#### 1 Current Code

Display the activated alarm.



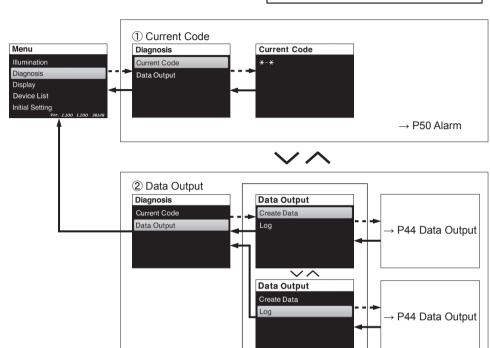
: —

:---

·~~

SET button operation

 $\cdot$   $\checkmark$   $\checkmark$  buttons operation



#### 2 Data Output

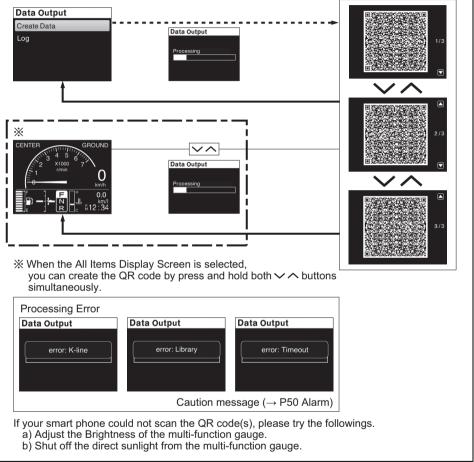
• Acquire the engine information, then record and readout the data with SUZUKI Diagnostic System Mobile.

- MENU button operation
- SET button operation
  buttons operation

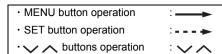
:~~

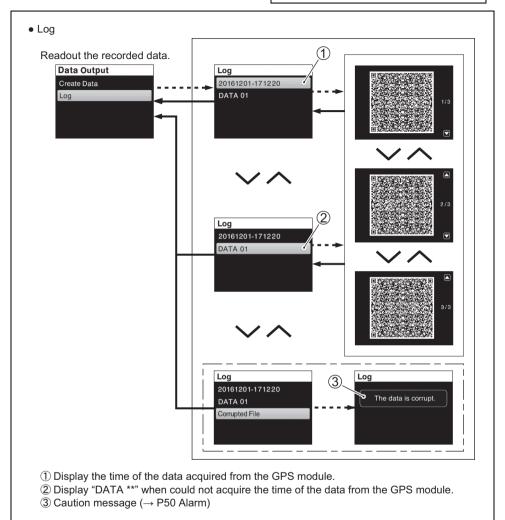
Create Data

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



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





\*Be able to store 15 set QR codes at maximum.

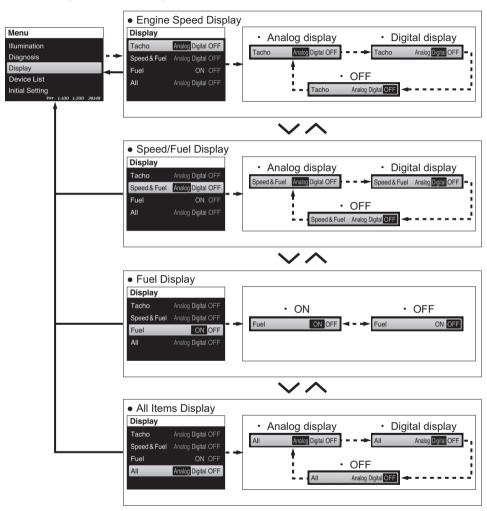
The oldest data shall be deleted automatically one by one.

# 7-4. Display

• Configures the settings of the Gauge screen.

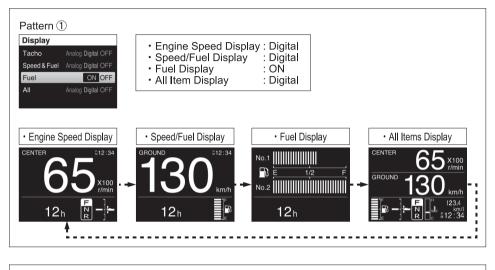
Selection Item

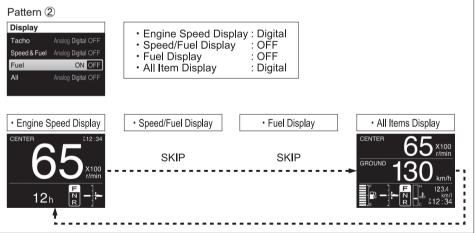
- Analog : Analog display
- Digital : Digital display
- OFF : Selected display is skipped. (Select at least one.)
- MENU button operation : ---SET button operation : ---buttons operation : ----



- Display example of the gauge screen.
- MENU button operation
- SET button operation
  buttons operation







### 7-5. Device List

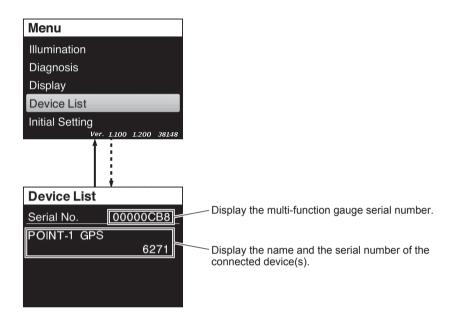
• Display the information of the connected device.

<ul> <li>MENU</li> </ul>	button	operation
--------------------------	--------	-----------

SET button operation

: —

 $\cdot \checkmark \land$  buttons operation :  $\checkmark \land$ 



### 8. Initialize

- Configures the settings of the Initialized.
- MENU button operation

SET button operation

:~~

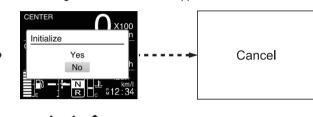
 $\cdot$   $\checkmark$  buttons operation

(1) Turn the main switch off while pressing and holding the  $\bigwedge$  button.

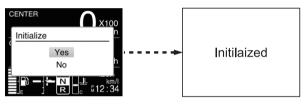
(2) Turn the main switch on while pressing and holding the  $\checkmark$  button.

(3) In a short time after indicating the SUZUKI logo, the initialize screen appears.









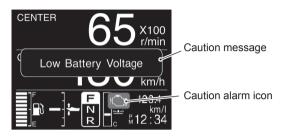
## 9. Alarm

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	ŗ	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	ſ	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	•	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	{ <mark>}</mark>	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	ţ.	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.

Caution message	Caution alarm icon	Description
High Oil Temp	{ <del>}</del> }	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.
Keyless Unit Battery Low	Ę	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	ſ	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	Ĵ	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	ſ	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.	۲Ţ	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.

\*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.)

### 10. Gauge Screen List

		Engine speed display screen	Speed / Fuel display screen	Fuel display screen	All Items display screen	
Engine speed			* O	—	_	* O
Clock	Clock *1		0	0		0
Trim position		* O	—	_	* O	
Shift position		* O	—	_	* O	
Engine positio	Engine position		*0	—	_	* O
Speed	Ground speed Water speed	*1 *2		0	_	0
Remaining	Total			0		0
fuel volume	Tank 1 / Tank 2 Tank 3 / Tank 4	*5			0	_

			Speed / Fuel display screen	Fuel display screen	All Items display screen	
Total operating	g hours		* 0	* 0	* 0	—
Trip time			0	0	0	—
Trip distance		*3	0	0	0	
Battery voltage / Cooling water tem- perature			* ()	* O	* ()	* 🛆
	Instantaneous fuel flow		0	0	0	_
Fuel econo-	Total instantaneous fuel flow		0	0	0	_
my information	Instantaneous fuel economy	*3	0	0	0	0
	Average fuel econo- my	*3	0	0	0	
Total fuel used		0	0	0		
Latitude / Longitude *1		0	0	0		
Caution alarm icon / Caution message *4		* O	* O	*0	* O	

\* O 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.

 $* \triangle$  Display cooling water temperature only.

# 11. 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		
		Built-in buzzer		
10	Others	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