# **Dealer's Manual**

ROAD	GRAVEL	
E-BIKE		

# **ABS Service Software**

## **Non Series**

ABS Service Software SM-PCEBS BS-AU301 BS-AS300 BS-SS300 BS-AP301 BS-EW302 BS-EW305

Contents	
IMPORTANT NOTICE	3
Notice	5
Preparations	6
ABS Service Software	6
Connecting the PC and ABS	6
Logging in	7
Home screen	8
ABS Test & Configuration	11
Initial setting of the ABS	11
Preliminary check and validation of registered information (bike	
manufacturer)	12
Warranty check (dealer)	14
Testing and configuration	17
ABS Check-up	23
Maintenance for the ABS	23
Special Features	
Assist functions	31
SW Update - Cloud	32
ABS Calibration (dealer)	33
Factory Reset (bike manufacturer)	36
Troubleshooting	38
Error list	

# **IMPORTANT NOTICE**

- ABS maintenance requires certification by SHIMANO.
  - For details on how to obtain certification, contact SHIMANO.
  - Components and tools for repair (SM-PCEBS and ABS service software) are only sold to certified dealers.
  - The ID and password required to use the ABS service software are only provided to certified dealers by SHIMANO.
  - Configuration via the ABS service software is required to operate the ABS normally. Perform configuration
    according to the instructions in this manual after referring to "ABS Dealer's Manual " to perform
    installation.
- This manual is for the following target readers:
  - Bicycle manufacturers that produce bicycles where this product is installed
  - Dealers certified by SHIMANO
- In addition to the ABS user's manual, please read the user's manual and dealer's manual for the connected brake lever and brake caliper.
- Do not disassemble or modify the product other than as stated in the information contained in this manual and the dealer's manual for each component.
- Related manuals and technical documents are accessible online at https://si.shimano.com .
- For consumers who do not have easy access to the internet, please contact a SHIMANO distributor or any of the SHIMANO offices to obtain a hardcopy of the user's manual.
- Please observe the appropriate rules and regulations of the country, state or region in which you conduct your business as a dealer.

For safety, be sure to read this dealer's manual thoroughly before use, and follow it for correct use.

The following instructions must be observed at all times in order to prevent personal injury and physical damage to equipment and surroundings.

The instructions are classified according to the degree of danger or damage which may occur if the product is used incorrectly.

DANGER	Failure to follow the instructions will result in death or serious injury.
WARNING	Failure to follow the instructions could result in death or serious injury.
CAUTION	Failure to follow the instructions could cause personal injury or physical damage to equipment and surroundings.

# **Notice**

• Insert the connectors used for wiring the ABS in firmly until the green and red colored parts cannot be seen.



• The connector used for the ABS wiring must be connected with a certain orientation according to the pins and protrusion on the inner side. Connect the connector with the orientation of the pins and protrusion aligned as indicated in the schematic diagram below. Forcibly connecting the connector without aligning the orientation of the pins and protrusion may damage the pins and protrusion on the inner side of the connector.



- Make sure that the PC does not enter the standby mode while using the ABS service software.
- An assist bike that has had SHIMANO STEPS installed will automatically turn OFF if no operations have been performed for approximately 10 minutes with the power ON. Perform an operation such as the following every now and again while configuring the ABS to ensure that the power remains ON.
  - Switch the screen of the cycle computer
  - Turn the crank arm

The actual product may differ from the illustration because this manual is intended mainly to explain the procedures for using the product.

# **Preparations**

# **ABS Service Software**

The ABS service software is used to perform the initial setting and maintenance of an assist bike with ABS installed. The available functions depend on the login privileges. Make sure to read the entire manual before use.

# System requirements

- Internet connection
- Windows 10 or later
- USB ports (one for SM-PCEBS and one for the barcode reader)

# NOTICE

 Make sure that the internet is not disconnected while using the ABS service software due to proxy settings, firewall settings, or antivirus software, etc.

# Download

Access the URL sent by SHIMANO in advance and download the ABS service software.

# **Connecting the PC and ABS**

Refer to the figure when connecting.

## Preparations Logging in



\*1 A standard barcode reader that is connectable to a PC. A barcode reader makes the procedure more efficient but is not essential.

\*2 Connect the PC link cable using the connector that matches the ABS. The PC link cable also includes a connector with a different shape from that used with the ABS, but it is not indicated in the figure.

# **TECH TIPS**

• The LED of the SM-PCEBS lights blue when the PC and ABS are connected correctly.



- A SHIMANO STEPS error code may be displayed on the cycle computer when the PC link cable is connected to the BS-AU301. This does not affect the procedure. When the procedure is complete, refer to the user's manual for E-TUBE PROJECT Professional to clear the error log.
- After work using the ABS service software is complete, restart the power of the bicycle.

# Logging in

1. Turn the power of the bike ON and start the ABS service software.

#### 2. Enter the user name and password, then click [Login].

- The login information will be sent by SHIMANO in advance.
- The ABS service software displays information regarding the connected ABS and assist bike on the home screen.



# NOTICE

- An assist bike that has had SHIMANO STEPS installed will automatically turn OFF if no operations have been performed for approximately 10 minutes with the power ON. Perform an operation such as the following every now and again while configuring the ABS to ensure that the power remains ON.
  - Switch the screen of the cycle computer
  - Turn the crank arm
- If an error screen is displayed, follow the instructions on the screen. For error details, refer to " Error list ."

# **TECH TIPS**

- You can select [Save login information] to skip the procedure for entering the login information from the next time.
- If you happen to lose your login information, click [Password Recovery].

# Home screen

If the login is successful, the home screen is displayed. The home screen displays the [GO TO:] menu, which is selectable by the user that is logged in.

# Preparations

## Home screen



Item	Name	Explanation
(A)	Disconnect	Click to disconnect the ABS from the service software.
(B)	Connection status	Indicates the status of the connection with the ABS.
(C)	Logging out	Logs out and returns to the login screen.
(D)	[GO TO:] menu	Displays the menus that can be configured. * The displayed menus differ according to the user that is logged in.
(E)	Status	Displays the registration information for the connected ABS main unit and the bike. You can click [More info 1] to check detailed information such as the serial number.

# [GO TO:] menu

This menu enables you to access the various functions.

[ABS Test & Configuration]

Performs the initial setting when a new ABS is installed by the bicycle manufacturer or the ABS parts are replaced by the dealer.

[ABS Check-up]

Select this to perform periodic maintenance on a bike with ABS at a dealer.

[Special Features]

Provides several convenient functions to assist ABS installation and maintenance. The displayed information differs according to the user that is logged in.

# **TECH TIPS**

• The following icons are always available, except in situations where functions are being used or communication is being performed.

lcon	Function
Â	Click this icon on the left side of the screen to return to the home screen.
E	Click this icon on the right side of the screen to log out; the login screen will be displayed.

# **ABS Test & Configuration**

# **Initial setting of the ABS**

Perform initial setting of the ABS in the following cases:

- When installing the ABS
- When replacing ABS or front brake parts

Click [ABS Test & Configuration] on the home screen to access this function. The first operation differs according to the login privileges.

- Preliminary check: With the login privileges of a bicycle manufacturer, the software checks whether installation is complete and preparations for configuration are ready, and checks whether initial setting has been performed in the past.
- Warranty check: With the login privileges of a dealer, the ABS configuration parameters are retrieved by entering a warranty request ID.

## **ABS Test & Configuration**

Preliminary check and validation of registered information (bike manufacturer)

# NOTICE

- Complete the SHIMANO STEPS setting before performing initial setting of the ABS. For details, refer to the user's manual for E-TUBE PROJECT Professional .
- If an error screen is displayed during the procedure, follow the instructions on the screen. It may be impossible to continue the procedure, depending on the cause of the error. For error details, refer to " Error list."

# Preliminary check and validation of registered information (bike manufacturer)

### 1. Click [ABS Test & Configuration] on the home screen.

The preliminary check starts. When the preliminary check is complete, the bike model selection screen is displayed.



# **TECH TIPS**

- If a bicycle for which initial setting is complete is connected, you can select whether to perform configuration again.
- 2. Select the bike model from the pull-down menu, then click [Submit].

Bike models that can be selected by the user that is logged in are added to the pull-down menu from the cloud.



## ABS Test & Configuration Preliminary check and validation of registered information (bike manufacturer)

### 3. Enter the serial number of the bike frame using the keyboard, then click [Submit].

If a barcode of the serial number is affixed to the frame, you can read it with a barcode reader to enter the serial number.



4. Read the serial number of the wheel speed sensor with the barcode reader, then click [Submit].

The serial number of the wheel speed sensor is in the position indicated on the screen. The serial number can also be entered from the keyboard.

Â	Please enter speed sensor code	E
	8	
	Submit	
		Crepyright 2022   Biuthaka SpA

5. A compatibility check and firmware update check are automatically performed.

Refer to "Testing and configuration " to continue the procedure.



# NOTICE

• Make sure that the PC does not enter the sleep mode and the power of the bike does not turn OFF while the firmware is being updated.

# **TECH TIPS**

• If there is a firmware update, the firmware may be automatically updated or you may be able to select whether to update it. For details, refer to "SW Update - Cloud ."

# Warranty check (dealer)

1. Click [ABS Test & Configuration] on the home screen.



# ABS Test & Configuration Warranty check (dealer)

2. Enter the warranty request ID.

Please enter warranty request ID Please enter speed sensor last 3 digi	ists	
• The warranty request I below.	D can be retrieved from the	e web page displayed by clicking 🕕 indicated
Please enter warrar Please enter speed ser Submit	nty request ID •	

3. Enter the last three digits of the serial number on the wheel speed sensor, then click [Submit].



4. A firmware update check is automatically performed.

Refer to "Testing and configuration " to continue the procedure.



# NOTICE

• Make sure that the PC does not enter the sleep mode and the power of the bike does not turn OFF while the firmware is being updated.

# **TECH TIPS**

• If there is a firmware update, the firmware may be automatically updated or you may be able to select whether to update it. For details, refer to "SW Update - Cloud ."

# **Testing and configuration**

1. An internal check of the ABS main unit is automatically performed.

When the check is complete, the software automatically proceeds to the next test.



### 2. Depress the brake lever for the front side.

Depress the lever within the time limit displayed by the countdown on the screen. The software checks whether the ABS main unit operates normally when the brake lever is depressed. When the check is complete, the software switches to the next screen.



#### 3. Turn the front wheel.

Turn the front wheel at a speed of 5 km/h or faster within the time limit displayed by the countdown on the screen. Do not stop turning the front wheel until the progress bar is complete. The operation of the wheel speed sensor is being checked. When the check is complete, the software switches to the next screen.



# NOTICE

• Be careful not to get injured by the rotating wheel while working.

4. The ABS setting values provided for each bike model are downloaded from the cloud and saved to the ABS main unit.

When the setting values are saved, the software proceeds to ABS calibration.



#### 5. Hold the bike horizontally, then click [Start].

Use a level etc. to ensure that the bike is horizontal.



# **TECH TIPS**

• You can also start calibration by depressing the brake lever on the front side.

### 6. Continue holding the bike horizontally until the progress bar is complete.

When calibration is complete, the screen switches.



# NOTICE

- Take care for a bicycle with suspension, as the angle of the bicycle may differ when the tires are on the ground and when the bicycle is raised off the ground horizontally with a workbench, etc.
- An error will occur if the bicycle is tilted, and you will be requested to retry the process.
- 7. Hold the bike at an angle as indicated on the screen, then click [Start].



# **TECH TIPS**

- You can also start calibration by depressing the brake lever on the front side.
- 8. Continue holding the bike at the same angle until the progress bar is complete.

When calibration is complete, the screen switches.



9. Hold the bike at an angle as indicated on the screen, then click [Start].





- You can also start calibration by depressing the brake lever on the front side.
- 10. Continue holding the bike at the same angle until the progress bar is complete.

When calibration is complete, the screen switches.



**11.** The initial setting information is saved to the ABS main unit.

When the saving is complete, the results of the entire process are displayed.



## **Results screen**

If all the items have a check mark, the initial setting of the ABS has been completed without a problem.

An ABS ID is issued for the ABS main unit for which configuration is complete.

The ABS ID is an ID for identifying the ABS in the service software. It is saved to the main unit and displayed again from the next time that you connect.

# ABS Test & Configuration Testing and configuration



# **TECH TIPS**

- If the user that is logged in is a dealer, a summary of the problems solved by replacing the parts etc. is displayed on the results screen.
- Press [Ok] to return to the home screen. You can disconnect the bicycle on the home screen.

# **ABS Check-up**

# **Maintenance for the ABS**

The performance of the ABS is guaranteed by receiving maintenance from a certified dealer once a year. [ABS Check-up] is the function for performing that maintenance. It can be used when you are logged in with the access privileges for a dealer.

Read this chapter carefully to understand the procedure before starting work. With [ABS Check-up], you will be requested to perform various operations, such as performing operations within a specified time or rotating the wheel at a certain speed or higher. You can retry the process if an operation fails. However, if you retry the process too many times, the product will be deemed to have a problem with operation, even if it is in the normal state.

# NOTICE

- This function may not be available, depending on the combination of the login privileges and the bike model.
- An assist bike that has had SHIMANO STEPS installed will automatically turn OFF if no operations have been performed for approximately 10 minutes with the power ON. Perform an operation such as the following every now and again while configuring the ABS to ensure that the power remains ON.
  - Switch the screen of the cycle computer
  - Turn the crank arm
- If an error screen is displayed during the procedure, follow the instructions on the screen. It may be impossible to continue the procedure, depending on the cause of the error. For error details, refer to " Error list ."
- 1. Click [ABS Check-up] on the home screen.



#### 2. Perform a visual check of the brake.

Check the items displayed on the screen, determine whether they are OK, then click 
.

- If the confirmation results are OK, click on the left side. The icon changes to ⊘.
- If the confirmation results are not OK, click 
   on the right side. The icon changes to
   on





Click when the confirmation results are not OK

#### 3. After checking all the items, click [Submit].

- If all the items are determined to be OK, proceed to the next step.
- If an item is not OK, the screen changes to Check result confirmation screen .



- 4. The ABS operation history collected while riding is automatically uploaded to the cloud.
  - The ABS operation history is used by the SHIMANO support team to identify the cause of failure and provide technical support.
  - The upload process will take approximately one minute for annual maintenance. When the upload process is complete, proceed to the next step.



5. A firmware update check is automatically performed.



# NOTICE

• Make sure that the PC does not enter the sleep mode and the power of the bike does not turn OFF while the firmware is being updated.

# **TECH TIPS**

• If there is a firmware update, the firmware may be automatically updated or you may be able to select whether to update it. For details, refer to " SW Update - Cloud ."

### 6. An internal check of the ABS main unit is automatically performed.

When the check is complete, the software automatically proceeds to the next test.



### 7. Depress the brake lever for the front side.

Depress the lever within the time limit displayed by the countdown on the screen. The software checks for remaining air bubbles in the brake system and whether the pressure switch in the ABS main unit operates normally when the brake lever is depressed. When the check is complete, the software switches to the next screen.



### 8. Turn the front wheel.

Turn the front wheel at a speed of 5 km/h or faster within the time limit displayed by the countdown on the screen. Do not stop turning the front wheel until the progress bar is complete. The operation of the wheel speed sensor is being checked. When the check is complete, the software switches to the next screen.



# NOTICE

- Be careful not to get injured by the rotating wheel while working.
- An error will occur if the rotation speed of the front wheel is too slow, and you will be requested to retry the process.

### 9. Depress the brake lever for the front side again.

Depress the lever within the time limit displayed by the countdown on the screen. Do not release the lever until the progress bar is complete. When the check is complete, the software switches to the next screen.



# **TECH TIPS**

 In this section, a mechanical check is performed on the inside of the ABS. When you depress the brake lever, the lever click may feel stiffer than step 7, or feel weaker as if the oil had drained. These symptoms are caused by the ABS main unit temporarily fixing the hydraulic route, and are not a problem.

### 10. The control data in the ABS main unit is automatically verified.

When verification is complete, the software proceeds to ABS calibration.



## 11. Hold the bike horizontally, then click [Start].

Use a level etc. to ensure that the bike is horizontal.



- You can also start calibration by depressing the brake lever on the front side.
- 12. Continue holding the bike horizontally until the progress bar is complete.

When calibration is complete, Check result confirmation screen is displayed.



# NOTICE

- Take care for a bicycle with suspension, as the angle of the bicycle may differ when the tires are on the ground and when the bicycle is raised off the ground horizontally with a workbench, etc.
- An error will occur if the bicycle is tilted, and you will be requested to retry the process.

## Check result confirmation screen

The check result confirmation screen displays a summary of the results and a link to the following information for items that are determined to be not OK.

When a link to the manual containing the method for resolving a problem is displayed

## ABS Check-up Maintenance for the ABS



When a link to the web page enabling warranty requests for replacement parts is displayed



Displays the warranty request for replacement parts

# **TECH TIPS**

• The check result confirmation screen is also displayed even if there are no problems, and you can click [OK] to return to the home screen.

# **Special Features**

# **Assist functions**

Provides several convenient functions to assist ABS installation and maintenance. The displayed information differs according to the user that is logged in.

1. Click [Special Features] on the home screen.

The screen switches to the Special Features menu screen.



2. Select the item to use from the Special Features menu screen.

Special Features menu screen for bike manufacturer

Menu items	
	E
SW Update - Cloud Factory Reset	
Co back	
	Copyright 2022   Biultrake Sp.A.

Displays the home screen

#### Special Features menu screen for dealer

Menu items	
<b>^</b>	E
SW Update - Cloud ABS calibration	
Go back	
	Copyright 2002   Biultwike Sp.A
Displays the home scre	een

# NOTICE

.. ..

• If an error screen is displayed during the procedure, follow the instructions on the screen. It may be impossible to continue the procedure, depending on the cause of the error. For error details, refer to " Error list ."

# SW Update - Cloud

The function for only upgrading the firmware of the ABS main unit. You can check whether the latest ABS firmware has been applied to the bicycle before shipping. This function may not be displayed for some users that are logged in.

1. Click [SW Update - Cloud] on the Special Features menu screen.



2. A firmware update check is automatically performed.



3. When the following screen is displayed, click [Yes] to start updating the firmware.

Click [No] to cancel updating the firmware.



4. The following screen is displayed while updating the firmware.

Make sure that the PC does not enter the sleep mode and the power of the bike does not turn OFF.



# **ABS Calibration (dealer)**

This function is only enabled when the result of [ABS Check-up] determines that ABS calibration is required to solve the problem.

1. Click [ABS Calibration] on the Special Features menu screen.



2. Hold the bike horizontally, then click [Start].

Use a level etc. to ensure that the bike is horizontal.



# **TECH TIPS**

• You can also start calibration by depressing the brake lever on the front side.

3. Continue holding the bike horizontally until the progress bar is complete.

When calibration is complete, the screen switches.



# NOTICE

- Take care for a bicycle with suspension, as the angle of the bicycle may differ when the tires are on the ground and when the bicycle is raised off the ground horizontally with a workbench, etc.
- An error will occur if the bicycle is tilted, and you will be requested to retry the process.

4. Hold the bike at an angle as indicated on the screen, then click [Start].





- You can also start calibration by depressing the brake lever on the front side.
- Continue holding the bike at the same angle until the progress bar is complete.
   When calibration is complete, the screen switches.



6. Hold the bike at an angle as indicated on the screen, then click [Start].





• You can also start calibration by depressing the brake lever on the front side.

7. Continue holding the bike at the same angle until the progress bar is complete.

When calibration is complete, the screen switches.



# Factory Reset (bike manufacturer)

In cases such as where the initial setting of the ABS has been performed for the wrong bicycle type, you can reset all the ABS settings. By performing a reset, the ABS ID is disabled and state before performing [ABS Test & Configuration] is restored.



- By selecting this item, the settings start to reset immediately and the process cannot be canceled.
- 1. Click [Factory Reset] on the Special Features menu screen.

The screen switches and the settings start to reset.

<b>^</b>	E
SW Update - Cloud Factory Reset	
	Go back
	Copyright 2002   Biumain SpA

2. The following screen is displayed during the process.

When the reset is complete, the screen switches.



3. Click [Ok] to return to the Special Features menu screen.



# Troubleshooting

# **Error list**

To check the latest information, follow the link displayed on the error screen.

ERROR ID	Name	Explanation
SSW_ERR_001	MISSING INTERNET CONNECTION	There is no response from the cloud.

#### Countermeasure:

• Check the internet connection of the PC. Make sure that the internet is not disconnected while using the ABS service software due to proxy settings, firewall settings, or antivirus software, etc.

ERROR ID	Name	Explanation
SSW_ERR_002 ABS COMMUNICATION ERROR		There is no response from the ABS main unit.

#### Countermeasure:

- Turn the power of the bike ON.
- Check the cable connection between the ABS and PC.

ERROR ID	Name	Explanation
SSW_ERR_003	UNEXPECTED ABS STATUS	The ABS status cannot be recognized.

#### Countermeasure:

• Repeat the procedure from the start. Repeating the procedure from the start restores the default status.

ERROR ID	Name	Explanation
SSW_ERR_004	LOGIN ERROR	A login error has occurred.

## Countermeasure:

• This error is displayed when there is a problem with the entered information. Click [Try again], check [User name] and [Password], and try logging in again.

ERROR ID	Name	Explanation
SSW_ERR_005	USER NOT RECOGNIZED	The user does not have usage privileges for the ABS service software.

## Countermeasure:

• Contact support to check whether you have usage privileges for the ABS service software.

ERROR ID	Name	Explanation
SSW_ERR_006	ABS SERVICE DEVICE NOT FOUND	Connection failed because the ABS service device could not be detected.

#### Countermeasure:

• Check the connection between the SM-PCEBS and PC.

ERROR ID	Name	Explanation
SSW_ERR_007	ABS MAIN UNIT CONFIGURATION ERROR	Preparations for configuring the ABS main unit are not ready.

#### Countermeasure:

• A problem was found in the ABS main unit during the preliminary check. The ABS main unit needs to be replaced.

ERROR ID	Name	Explanation
SSW_ERR_008	ABS PARTS CHECK FAIL	An error was detected during the compatibility check.

#### Countermeasure:

- The following causes are possible:
  - Some parts that make up the ABS are incompatible with the bike model.
  - Some parts that make up the ABS are already associated with another bike. When replacing the parts that
    make up the ABS, make sure to use new parts, rather than using the parts which have already been used on
    another bike.
  - Some parts that make up the ABS do not exist in the database.
- Repeat the procedure from the start and confirm that the correct bike model is selected. If the situation does not improve, contact support.

ERROR ID	Name	Explanation
SSW_ERR_009	ABS SELF TEST FAIL	An error was detected during the compatibility check.

#### Countermeasure:

• There is a problem with the functions of the ABS main unit due to damage caused during transport, etc. The ABS main unit needs to be replaced.

ERROR ID	Name	Explanation
SSW_ERR_010	NO LEVER PRESSURE DETECTED	The pressure of the brake lever cannot be detected.

#### Countermeasure:

- The brake lever may not have been depressed within the time limit displayed by the countdown on the screen. Click [Try again] and try again.
- If the problem is not resolved with the procedure above, air needs to be bled from the brake system.

ERROR ID	Name	Explanation
SSW_ERR_011	PRESSURE SWITCH NOT DETECTED	The pressure switch was not detected.

#### Countermeasure:

• There is a problem with the ABS main unit. The ABS main unit needs to be replaced.

ERROR ID	Name	Explanation
SSW_ERR_012	NO WHEEL SPEED DETECTED	The wheel speed was not detected.

#### Countermeasure:

- Refer to the "ABS Dealer's Manual " to check that the wheel speed sensor is properly installed.
- When testing the wheel speed sensor, turn the wheel at a speed of 5 km/h or faster.

ERROR ID	Name	Explanation
SSW_ERR_013	NO SPEED SENSOR DETECTED	The wheel speed sensor was not detected.

#### Countermeasure:

• The wheel speed sensor is not connected to the ABS main unit correctly. Refer to the "ABS Dealer's Manual " to check the wiring of the wheel speed sensor.

ERROR ID	Name	Explanation
SSW_ERR_014	SPEED SENSOR CHECK FAILED	The wheel speed sensor check failed.

#### Countermeasure:

• A wheel speed detection or measurement error has occurred. Refer to the "ABS Dealer's Manual " to check that the wheel speed sensor is properly installed.

ERROR ID	Name	Explanation
SSW_ERR_017	SAVING PROCEDURE FAILED	The process for saving to the ABS main unit failed.

#### Countermeasure:

• Replace the ABS main unit.

ERROR ID	Name	Explanation
SSW_ERR_018	ABS CALIBRATION FAILED	The ABS calibration process failed.

#### Countermeasure:

• Click [Try again] and try ABS calibration again. Hold the bike steady in the specified position.

ERROR ID	Name	Explanation
SSW_ERR_019	ABS CALIBRATION CHECK FAILED	The ABS calibration check failed.

#### Countermeasure:

This error occurs in the procedure for lifting up and holding the front wheel. Click [Try again] and perform the
procedure for holding the bike horizontally once again. If the problem is not resolved, refer to the "ABS
Dealer's Manual " to confirm that the ABS main unit is connected to the frame securely.

ERROR ID	Name	Explanation
SSW_ERR_020	CHECK UP NOT STARTED	The [ABS Check-up] function cannot be started.

#### Countermeasure:

• [ABS Check-up] cannot be performed for the connected bike model, with the privileges of the user that is logged in.

ERROR ID	Name	Explanation
SSW_ERR_021	ABS TEST & CONFIGURATION NOT STARTED	The [ABS Test & Configuration] function cannot be started.

#### Countermeasure:

An incorrect warranty request ID was entered. Click [Learn more] to display a web page where you can
retrieve a warranty request ID or check the ABS ID associated with a warranty request ID that has already been
retrieved.

ERROR ID	Name	Explanation
SSW_ERR_022	CONNECTION ISSUE ON SERVICE DEVICE	The SM-PCEBS was found but the connection cannot be established. Another connection has already been established.

Countermeasure:

- Try the procedures below.
  - (1) Check whether an application other than the ABS service software is connected to the SM-PCEBS.
  - (2) Close the ABS service software.
  - (3) Remove the cables connected to the SM-PCEBS, then connect them again.
- If the situation does not improve after performing the above procedures several times, click [Learn more] and follow the instructions displayed.

ERROR ID	Name	Explanation
SSW_ERR_023	SERVICE DEVICE CAN'T BE USED	Cannot connect to the SM-PCEBS.

#### Countermeasure:

- Try the procedures below.
  - (1) Close the ABS service software.
  - (2) Remove the cables connected to the SM-PCEBS, then connect them again.
- If the situation does not improve after performing the above procedures several times, click [Learn more] and follow the instructions displayed.

ERROR ID	Name	Explanation
SSW_ERR_025	CONFIGURATION INCOMPLETE	ABS Test & Configuration was closed before it completed. The initial setting of the ABS was completed, but the required tests were not.

#### Countermeasure:

• Execute ABS Test & Configuration again. If the situation does not improve, click [Learn more] and follow the instructions displayed.

ERROR ID	Name	Explanation
SSW_ERR_026	API GENERIC ISSUE	An unexpected response was received from the cloud.

#### Countermeasure:

• Execute ABS Test & Configuration again. If the situation does not improve, click [Learn more] and follow the instructions displayed.

ERROR ID	Name	Explanation
SSW_ERR_027	WRONG BRAKE + ACTUATOR PN STORED	The combination of ABS main unit and connected brake components is not compatible with the selected bicycle model.

### Countermeasure:

• Check whether the correct bicycle model is selected, and execute ABS Test & Configuration again. If the situation does not improve, click [Learn more] and follow the instructions displayed.

ERROR ID	Name	Explanation
SSW_ERR_028	CLAIM TO BE OPENED	Make a query regarding the execution result of ABS Test & Configuration.

#### Countermeasure:

• Click the link to the query form, and enter information on the situation.

ERROR ID	Name	Explanation
SSW_ERR_029	CLAIM NOT CLOSED	Failed to send the query form because a problem occurred.

#### Countermeasure:

• Click [Learn more] and follow the instructions displayed.

ERROR ID	Name	Explanation
SSW_ERR_030	LOW SPEED DETECTED	During the wheel speed sensor check, the front wheel was not rotating at a speed of 5 km/h or higher.

### Countermeasure:

• Execute ABS Test & Configuration again. After starting the wheel speed sensor check, continue rotating the front wheel at a speed of 5 km/h or higher until the check is complete.

ERROR ID	Name	Explanation
SSW_ERR_031	SHIMANO DU NOT CONNECTED	The connection check of the drive unit failed.

### Countermeasure:

• Check whether the cable is connected correctly to the drive unit, and execute ABS Test & Configuration again. If the situation does not improve, click [Learn more] and follow the instructions displayed.

ERROR ID	Name	Explanation
SSW_ERR_032	ABS PARTS CHECK FAIL	The ABS main unit is not compatible with the selected bicycle model.

### Countermeasure:

• Check whether the correct bicycle model is selected, and execute ABS Test & Configuration again. If the

situation does not improve, click [Learn more] and follow the instructions displayed.

ERROR ID	Name	Explanation
SSW_ERR_033	ABS PARTS CHECK FAIL	The wheel speed sensor is not compatible with the selected bicycle model.

#### Countermeasure:

• Check whether the correct bicycle model is selected, and execute ABS Test & Configuration again. If the situation does not improve, click [Learn more] and follow the instructions displayed.

ERROR ID	Name	Explanation
SSW_ERR_034	ABS PARTS CHECK FAIL	The ABS main unit did not pass the required preliminary check.

#### Countermeasure:

• Click [Learn more] and follow the instructions displayed.

ERROR ID	Name	Explanation
SSW_ERR_035	ABS PARTS CHECK FAIL	The ABS main unit is already associated with another ABS kit.

### Countermeasure:

• Click [Learn more] and follow the instructions displayed.

ERROR ID	Name	Explanation
SSW_ERR_036	ABS PARTS CHECK FAIL	The bicycle is already associated with another ABS kit.

#### Countermeasure:

 Check whether the serial number of the bicycle frame is entered correctly, and execute ABS Test & Configuration again. If the situation does not improve, click [Learn more] and follow the instructions displayed.

ERROR ID	Name	Explanation
SSW_ERR_037	ABS PARTS CHECK FAIL	The wheel speed sensor did not pass the required preliminary check.

#### Countermeasure:

• Click [Learn more] and follow the instructions displayed.

ERROR ID	Name	Explanation
SSW_ERR_038	ABS PARTS CHECK FAIL	The wheel speed sensor is already associated with another ABS kit.

#### Countermeasure:

• Check whether the QR code of the wheel speed sensor was scanned correctly, and execute ABS Test & Configuration again. If the situation does not improve, click [Learn more] and follow the instructions displayed.

ERROR ID	Name	Explanation
SSW_ERR_039	ABS PARTS CHECK FAIL	The serial number entered for the wheel speed sensor is invalid.

#### Countermeasure:

• Check whether the serial number of the wheel speed sensor (B2Fxxxxxxx;yyyyyyyyyyy) has been entered correctly, and execute ABS Test & Configuration again.

ERROR ID	Name	Explanation
SSW_ERR_040	EMPTY BIKE MODELS MENU	The bicycle model is not associated with the OEM.

#### Countermeasure:

• Click [Learn more] and follow the instructions displayed.

ERROR ID	Name	Explanation
SSW_ERR_041	ABS PARTS CHECK FAIL	The process of saving ABS ID failed.

#### Countermeasure:

• Click [Learn more] and follow the instructions displayed.



SHIMANO NORTH AMERICA BICYCLE, INC. One Holland, Irvine, California 92618, U.S.A. Phone: +1-949-951-5003 SHIMANO EUROPE B.V. High Tech Campus 92, 5656 AG Eindhoven, The Netherlands Phone: +31-402-612222 SHIMANO INC. 3-77 Oimatu-cho, Sakai-ku, Sakai City, Osaka 590-8577, Japan

Please note: specifications are subject to change for improvement without notice. (English) @ Jul. 2023 by SHIMANO INC. ITP