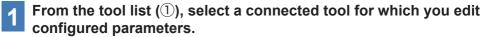
2.2.8 CONFIGURING PARAMETERS OF THE TOOL

Various parameters of the tool can be set from the Tool Manager software.

(2) Select a Parameter File to Edit

The parameter file can be selected in one of the following four ways.

Selecting the parameter file registered in the tool



2 Select Parameter on the display change tab (2), and click [Read From Connected Tool] (3).



Selecting the parameter file saved in the Tool Manager software

(Refer to (8) in this section for how to save the parameter file.)

Select Parameter on the display change tab (①), and click a desired parameter file (②).

ToolManager_EYFSW102 (Ver.XXX) File Option Help		- o ×
Open Tool EYFMH1V MH1WC221 1019 EYFMH1WC MH1WC22110019 History Pa	Dunitar	0
TEYFMH2WC disconnected	EYFMH1-20230210	
EVFMH2WC disconnentee	Write to Tool Save Parameter Copy Parameter Co Model Number EV17H11WC v	mment Export ···

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2.2.8 CONFIGURING PARAMETERS OF THE TOOL

Selecting the parameter file saved in CSV file format (Refer to (8) in this section for how to export the parameter file to CSV.)



Select Parameter on the display change tab (①), and click [Import Parameter File] (②).

When Open File Dialog is displayed, select the CSV file that has a parameter file to edit.

2

The selected parameter file is newly added to the parameter list (3), so click that parameter file.

Option Help			File Option Help	
Open Tool	EYFMH11 C 1		Open Tool	EYFMH1WC MH1WC22110019
EYFMH1WC MH1WC22110019	History Parameter		EYFMH1WC MH1WC22110019	History Parameter
EYFMH2WC MH2WC22120005 disconne	2 Import Parameter File	EYFMH1-20230210	T EYFMH2WC MH2WC22120005 disconnected	Import Parameter File
EYFMH2WC			* EYFMH2WC	Create New
MH2WC22120023 disconnect	ed Read From Connected Tool		MH2WC22120023 disconnected	Read From Connected Tool
	EYFMH1-20230210			EYFMH1-20230210
		Model Number EYFMH1W	(3	EYFMH1WC20230130 Model Number EYF
		Mode Setting ⑦ 〇 Wirel		Mode Setting (?) ()

Newly creating a parameter file and selecting the file

When you select [Create New] in the upper part of the parameter list (①), the [Copy Parameter] window opens, where you can enter a parameter registration name and a supplementary comment.

They will be registered by clicking [Add] (2).

(The registration name and the supplementary comment each can be up to 25 one-byte characters or 15 two-byte characters long.)

(The registration name may not include the letters $\, /, :, *, ?, ", <, and >$. Moreover, the registration name may not begin with a space.)

History Parameter							
	EYFMH1-20230210	History	Parameter				
() Create New		Import Paran	neter File	EYFMH1W			
	Write to Tool Save Parameter	Create New					
EY7MH1-20230210	Model Number EYFMH1WC v	Read From C	onnected Tool			Write to	Tool
	Copy Parameter	EYFMH1-2023	0210				
	Add parameters to Parameter List	EYFMH1W		Model Number	EYFMH1WC	~	
	-			Mode Setting	② O Wireless	Communication Mode	Star
	Parameter Name						
	EAMHIM			Torque	Shut-off Torque	0.0 Nm	
	Comment				Upper Limit	0.0 Nm	⊠ Li
					Tolerance	NaN %	Toler
					Offset ?	Adjust Torque Offset	
	Andle After Snug				Offset_Slope	0.00	Offs

Note

- Model number of the parameter is automatically set to the number of the selected tool on tool list.
- Each parameters are in the default values of the selected tool model when the new parameter file is created.

2.2.8 CONFIGURING PARAMETERS OF THE TOOL

(3) Configure Basic Parameters

When you select a parameter file, the configured parameter input screen will be displayed.

ToolManager_EYFSW102 (Ver:XXX) File Option Help			0
Open Tool	EYFMH1WC MH1WC22110019		{
EYFMH1WC MH1WC22110019	History Parameter		25
* EYFMH2WC	Import Parameter File	Read From Connected Tool (Editing)	
	Create New		
EYFMH2WC MH2WC22120023 disconnected	Read From Connected Tool	Write to Tool Save Parameter Copy Parameter Comment Export	
	EYFMH1-20230210		
	EYFMH1WC20230130	Model Number EYFMH1WC V	
		Mode Setting (?) O Wireless Communication Mode Stand Alone Mode	
		Torque Shut-off Torque 30.0 Nm	
		Upper Limit 50.0 Nm Lower Limit 10.0 Nm	
		Tolerance 150.1 % Tolerance -50.0 %	
		Offset ② Adjust Torque Offset Default	
		Offset_Slope ⑦ 25.00 Offset_Intercept ⑦ 5.00	
		Angle Angle Before Snug	
		Upper Limit 99999 degree 🗹 Lower Limit 0 degree	
		Angle After Snug	
		🗹 Upper Limit 99999 degree 🗹 Lower Limit 0 degree	
		Angle Error Shut-Off 🕜	
		Snug Point	
		O Course Terrorise O Course Terrorise O Course Terrorise O Course Terrorise	

Configure each parameter by entering a numerical value, selecting an option, or selecting ON/OFF. (For information of each parameter item, Refer to 2.2.9.)

Entering a numerical value	Torque	Shut-off Torque 60.0 Nm	
Selecting an option	Mode Setting	O Wireless Communication Mode	Stand Alone Mode
Selecting ON/OFF		Angle Error Shut-Off	

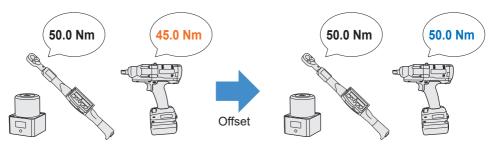
For the item with a hover icon ((?)), you can read the explanation for that item by putting a cursor on the hover icon.

0		
Cross Thread Reduction	Tool is disabled for the selected per when this function is ON.	eriod of time between rundowns
Retightening Prevention	0.0 s	
Rundown Error Detection	(?) 0.0 s	

2.2.8 CONFIGURING PARAMETERS OF THE TOOL

(4) Set Offsets

The torque value shown by the tool and the actual torque on the fastener may differ depending on the damping caused by the socket and/or the joint condition. In that case, the torque value shown by the tool can be adjusted by Offset setting.



- For the first application, select [Adjust Torque Offset] (①) in Offset on the configured parameter input screen to calculate offset values automatically.
- If the offset values that were previously set for the tool used for work already exist, you can set the same torque performance to the tool by entering those values in [Offset_Slope] and [Offset_Intercept] (②) on the configured parameter input screen.
 (For details of [Offset Slope] and [Offset Intercept], Refer to 2.2.9].)
- \bullet When selecting [Default] (③), you can return the offset values to the model's default values.

Torque	Shut-off Torque	20.0 Nm		
	🗹 Upper Limit	50.0 Nm	🗹 Lower Limit	10.0 Nm
	Tolerance	150.0 %	Tolerance	-50.0 %
	Offset	Adjust Torque Offset	Default	3
	2 Offset_Slope (25.05	Offset_Intercept	⑦ 5.00

Note

• To set offsets, you need to empty the history log data in the tool's internal storage. Following the dialog displayed after [Adjust Torque Offset] is selected, save and delete the history log data.

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(The history log data is saved in the history list.)

2.2.8 CONFIGURING PARAMETERS OF THE TOOL

When you select [Adjust Torque Offset] and then, from the dialog displayed after that, save and delete the history log data inside the tool, the offset setting window will open. Perform the following procedure to set offsets.



Select a [Socket Extension Length] (1) to use from the pull-down menu.

(If the length that matches the socket to use is not found, select the nearest length.)



Enter a numerical value that represents [Shut-off Torque] (2).



Select [Continue Offset] (3) to register the settings to the tool.

Û					_			
	Tool Torque Result	[Nm]	Audit Torque Value	[Nm] %	0	Offset_Slope	Uffset_	Intercept
_								
_								
So	cket Extension Length	40mm	1.5inch v	(2	Shut-off Torque		20.0 Nn
то	ol Torque Result	Acquire				Audit Torque Valu	e	Nn
	Check	Offset_	Slope 25.00	Offset_Inter	cept [5.00		
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1							

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2.2.8 CONFIGURING PARAMETERS OF THE TOOL

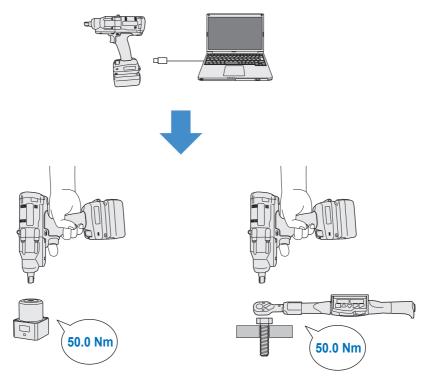
4

Remove the tool from the USB cable once, and do a tightening work on the torque tester or the actual bolt.



Check the torque result shown by the torque tester or the torque wrench which retightened the actual bolt (Audit Torque Value).

Remove the USB cable.



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2.2.8 CONFIGURING PARAMETERS OF THE TOOL

- 6
- Reconnect the USB cable to connect the tool to the Tool Manager software.
- 7
- Select [Acquire] (④) to import the torque value measured by the tool.

The imported value is shown in the [Tool Torque Result] column (5) in the upper display window.

8 Enter the [Audit Torque Value] (⁶) checked with the torque tester or the torque wrench.



Select [Check] (⑦) to calculate new offset values. (At this point, the newly calculated offset values have not been registered in the tool yet.)

- Check by % (⁽⁹⁾) the difference between the [Tool Torque Result]
 (⁽⁵⁾) measured by the tool and the [Audit Torque Value] (⁽⁸⁾) in the upper display window.
- If the above difference is small enough, select [Update & Exit] (⁽¹⁾) to end the offset setting.

If the above difference is still large, select [Continue Offset] (11) to set the new offset values to the tool and repeat steps 4 to 11 until the difference becomes small enough. (When % goes into the range of 95.0% to 105.0%, values of %, offset (slope), and offset (intercept) will turn green. Use them for reference.)

Tool Toraue Result [Nm]	Audit Torque Value [Nm	1 %	Offset_Slope	Offset_Intercept
5 54.32	8 52.00	95.7	61.77	20.54
51.99	45.00	86.6	71.37	20.54
51.65	55.00	106.5	55.00	25.00
cket Extension Length 40m		6	Shut-off Torque Audit Torque Valu	50.0 Nn
Check Offs	t_Slope 59.13 Of	fset_Intercept [20.54	

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Continued to the next page

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2.2.8 CONFIGURING PARAMETERS OF THE TOOL

Note

 After exiting the offset setting window, you can save the updated parameters to parameter list.

If you are editing a parameter file read from a connected tool, the parameter file is newly added on parameter list.

If you are editing a parameter file originally on parameter list, the parameter file is overwritten.

• The history log acquired in offset setting is saved to the [Offset] folder on history list.

disconnected	History	Parameter			
disconnected	Import History File		î of	fset	
	Offset				
disconnected	Feb./11/202	23 12:05:34	Í		
	Feb./10/202	23 19:07:12		Count	Date
	Feb./10/202	23 19:03:39		Count	Date
] 3	February/05/202

By checking [Minimum Output Mode] on the offset setting window, the tool can be operated in [Minimum Output Mode].

(When you uncheck [Minimum Output Mode], the tool will return to [Offset Mode].)



Minimum Output Mode

[Functional overview]

When the target torque is close to the lower limit of the torque control functioning range of the tool, you can check whether torque control is available. The tool in this mode is shut off at the minimum number of pulses (the minimum output). In this case, no history log is recorded.

After the work in this mode, use a torque tester or a torque wrench to check whether the torque output by the tool is not more than the target torque.

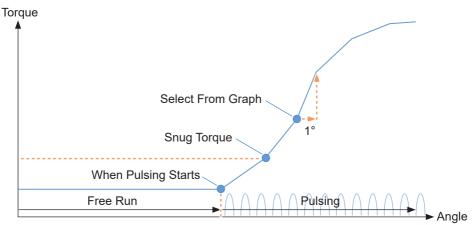
If any over-torque occurs in this mode, the tool might not be available to such work.

2.2.8 CONFIGURING PARAMETERS OF THE TOOL

(5) Set a Snug Point

The snug point is used as a reference point to divide angle measurements into the angle before snug and the angle after snug.

The snug point can be set from three methods: [When Pulsing Starts], [Snug Torque], and [Select From Graph].



When Pulsing Starts

The point in time when the tool started pulsing is regarded as a snug point. It is set just by selecting the item.

Snug Torque

- The point in time when tightening reached the set torque is regarded as a snug point.
- After selecting the item of [Snug Torque], enter the value of [Detection Threshold].

Snug Torque

Detection Threshold 0.0

0.0 Nm

Continued to the next page

Select From Graph

- Select a desired snug point from the torque waveform data.
- A rise in torque to a 1° increase in tightening angle at the selected point (a slope in graph) is the threshold for determining the snug.

Note

- If there is a steeper slope in graph before the selected point, that point will be judged to be the snug point.
- Select the item of [Select From Graph], and click [Select Snug Point]. The graph window opens.

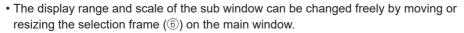
Select From Graph

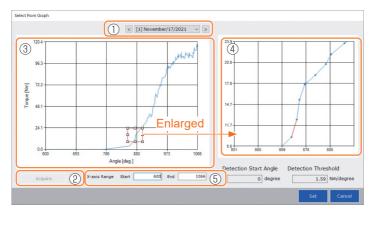
Select Snug Point

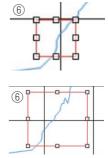
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2.2.8 CONFIGURING PARAMETERS OF THE TOOL

- The graph window shows a graph of the most recent history log. The graph used for the setting can be changed from the pull-down above (①).
- By selecting [Acquire] (2), you can also import a new graph used for the setting.
- The setting window has a main window (③) that displays the entire graph and a sub window (④) that enlarges and displays any part of the graph.
- The display range of the main window can be changed by entering the display start and end angles in the [X-axis Range] (⑤) under the graph.



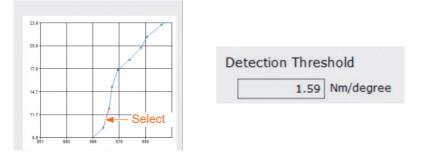




The selection frame can be moved or resized by a drag-and-drop operation.

Continued to the next page

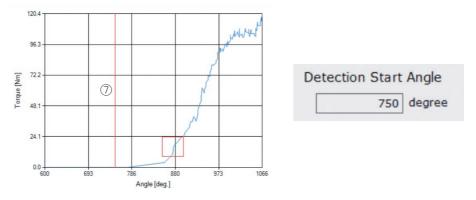
• The snug point is set by selecting a line between any dots on the graph from the sub window. At the line between the selected dots, the amount of increase in torque with respect to the tightening angle advancing by 1° is the threshold for determining the snug point (Detection Threshold).



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2.2.8 CONFIGURING PARAMETERS OF THE TOOL

- By setting the [Detection Start Angle], you can postpone the start of the snug point detection until the set angle is reached. This feature is effective for work where a load is generated on the way before snug.
- The [Detection Start Angle] is set by moving the selection bar (\bar{O}) on the main window to the left or right.

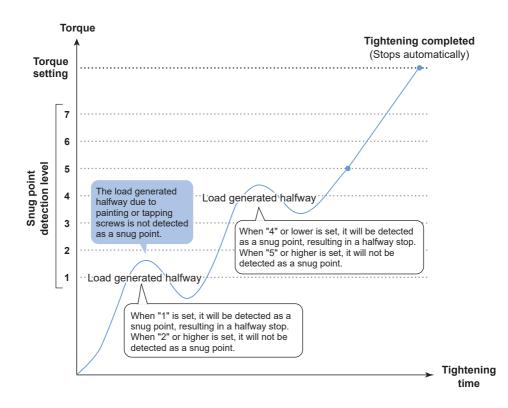


• When you have finished setting the snug point detection threshold and the snug point detection start angle, select [Set] to exit the graph window.

2.2.8 CONFIGURING PARAMETERS OF THE TOOL

(6) Set a Snug Point Detection Level

The snug point detection level setting is used in the following cases.



Can be set in 7 levels	7 $\stackrel{:}{\scriptstyle\sim}$ Set for the work with a high load generated halfway \sim
	 1 Set for the work with a low load generated halfway 0 Snug point detection level function OFF

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2.2.8 CONFIGURING PARAMETERS OF THE TOOL

- You can set a snug point detection level from the setting parameter input screen.
- Enter a desired value in the "Snug Point Detection Level" input field.

ToolManager_EYFSW102 (Ver.1.03.00)			- 🗆 X
File Option Help Open Tool	EYFMH1WC		
EYFMH1WC MH1WC20200123	MH1WC20200123 History Parameter		0
C EVENING deconnected	Inport Parameter File Create New Filed From Connected Tool Inf ExprimeTool Expression Ex	Wet to Tool Save Parameter Copy Parameter Model Number EFFH411WC ✓ Model Setting O Wireless Communication Model Ø Torque Shut-off Torque 122.4 km Upper Limit 222.2 km Upper Limit 222.2 km Upper Limit 222.2 km	ter Communit Export
		Angle Angle Before Srug Diffset (*) Angle Angle Before Srug Depor Limit 67800 degree Angle After Srug Depor Limit 6780 degree Angle Error Stut-Off (*)	Defaut
		Snug Point	d 0.00 Nm/degree
		Snug Point Detection Level	· · · ·

CAUTION

- Set a snug point detection level from "1". Setting a snug point detection level from "2–7" may result in cracking or deformation of the target material because of high tightening torque.
- If the tool stops before the snug point at a snug point detection level of "1", set the snug point detection level to "2–7".

2.2.8 CONFIGURING PARAMETERS OF THE TOOL

(7) Register the Set Parameter File to the Tool

• When you select [Write to Tool], the set parameter file will be registered to the tool.

Note

- [Write to Tool] is inactivated and can't be selected when the model number on the parameter file doesn't mach with the tool model number.
- Before the registration, a dialog lets you check changes from the settings currently registered in the tool.
- At work in [Stand Alone Mode], the tool runs according to the parameters registered in its inside.

Import Parameter File	^	Read From Connected Tool			
Create New)	
Read From Connected Tool			Write to Tool	Save Parameter	Copy Parameter
newParameter)	

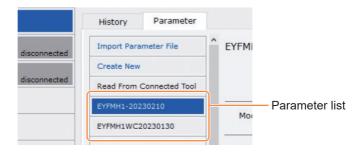
		Change	3
	Current Parameter	New Parameter	
Mode Setting	Stand Alone Mode	Stand Alone Mode	
Shut-off Torque [Nm]	60.0	20.0	
Upper Limit [Nm]	Disable	Disable	1
Lower Limit [Nm]	Disable	Disable	
Offset_Slope	40.00	40.00	
Offset_Intercept	0.00	0.00	
Angle Error Shut-Off	Enable	Enable	1
Upper Limit (Angle Before Snug) [degree]	Disable	Disable	
Lower Limit (Angle Before Snug) [degree]	Disable	Disable	
Upper Limit (Angle After Snug) [degree]	Disable	Disable	

• The parameter file registered in the tool can be transmitted and registered to the controller by wireless. (For how to register it to the controller, read the Operating Instructions of the controller.)

2.2.8 CONFIGURING PARAMETERS OF THE TOOL

(8) Manage the Set Parameter File

The set parameter file can be registered to the parameter list. Moreover, you can manage it variously on the Tool Manager software.



Overwriting the parameter file

When you select [Save Parameter] ((2)) while editing the parameter file on the parameter list ((1)), edits will be overwritten.

Additionally saving the parameter file

When you select [Copy Parameter] ((3)), the set parameter file will be additionally saved to the parameter list ((1)).

You can set a file name and a supplementary comment when additionally saving the parameter file.

(The file name and the supplementary comment each can be up to 25 one-byte characters or 15 two-byte characters long.)

(The file name may not include the letters $\, /, :, *, ?, ", <$, and >. Moreover, the file name may not begin with a space.)

History Parameter	
Import Parameter File	• EYFMH1W20230211 (Editing)
Create New	
Read From Connected Tool	Write to Tool Save Parameter Copy Parameter Comment
EYFMH1-20230210	Model Number EYFMH1WC
EYFMH1W20230211	
EYFMH1WC20230130	Mode Setting 🕐 🔿 Wireless Communication Mode 💿 Stand Alone Mode

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2.2.8 CONFIGURING PARAMETERS OF THE TOOL

Adding a comment to the parameter file

When you select [Comment] ((4), a supplementary comment can be set to the specified parameter file.

(The supplementary comment can be up to 25 one-byte characters or 15 two-byte characters long.)

Exporting the parameter file

When selecting [Export] (5), you can export the set parameter file in CSV file format.

History	Parameter		
Import Para Create New		EYFMH1WC20230205	5
Read From (Connected Tool	Write to Tool Save Parameter Copy Parameter Comment	Export
EYFMH1-202	30210	Model Number EYFMH1WC	
EYFMH1W20	230211		
EYFMH1WC2	0230130	Mode Setting 🕐 🔿 Wireless Communication Mode 💿 Stand Alone Mode	
EYFMH1WC2	0230205	· · · · · · · · · · · · · · · · · · ·	

You can register the output parameter file into the controller.

(For details on how to register it to the controller, read the Operating Instructions of the controller.)

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2.2.8 CONFIGURING PARAMETERS OF THE TOOL

Renaming the parameter file



Select a parameter file to rename from the parameter list.



When selecting [Change Name], you can edit the name of the parameter file.

(The file name and the supplementary comment each can be up to 25 one-byte characters or 15 two-byte characters long.)

(The file name may not include the letters $\, /, :, *, ?, ", <, and >$. Moreover, the file name may not begin with a space.)

ile Option Help			File	e Option Help				
Open Tool	EYFMH1WC MH1WC22110019			Open Tool		EYFMH1W MH1WC22110		
EYFMH1WC MH1WC22110019	History Parameter			EYFMH1WC MH1WC22110019		History	Parameter	
T EYFMH2WC MH2WC22120023 disconnected	Import Parameter File	^ EYFMH1WC20230		EYFMH2WC MH2WC22120023	disconnected	Import Para	meter File	EYFMH1WC202
* EYFMH2WC	Create New			Y EYFMH2WC		Create New		
MH2WC22120005 disconnected	WC22120005 disconnected Read From Connected Tool			MH2WC22120005	005 disconnected	Read From Connected Tool		
	EYFMH1-20230210	Model Number				EYFMH1-202	30210	Model Number
	EYFMH1W20230211	Model Number				EYEMH1W20	230211	Model Number
	EYFMH1WC20230130	Change Name				EYFMH1WC	New name	Mode Setting
	EYFMH1WC20230205	Delete				EILBURT	0230205	

Deleting the parameter file

- **1** Select a parameter file to delete from the parameter list (①). Or select [...] (②) on the configured parameter input screen.
- **2** When you select [Delete], the dialog will ask whether to make a deletion.

When you select [OK], the saved parameter file will be deleted. (When the parameter file of the tool being connected is selected, not [Delete] but [Factory Default] is displayed on [...].)

File	Option Help				
	Open Tool	EYFMH1WC MH1WC22110019			Ę
3	EYFMH1WC MH1WC22110019	History Parameter			۲. ۲
3	EYFMH2WC MH2WC22120023 disconnected	Import Parameter File	CEVFMH1WC20230		
3	EYFMH2WC	Create New			
1	MH2WC22120005 disconnected	Read From Connected Tool		Tool Save Parameter Copy Parameter	Comment 2 Export Delete
		EYFMH1-20230210			_
	_		Model Number		
	6	EYFMH1WC20230130	Change Name		-
		EYFMH1WC20230205	Delete	Stand Alone Mode	

2.2.9 PARAMETER LIST

Mode Setting					
[Functional overview] Select an operation mode of the tool.					
[Default value] Factory Default Mode (Fd)					
[Setting value] Stand Alone Mode (A): Wireless Communication Mode (C):	The history log data is recorded in the internal storage. The tool does not communicate with the controller.				
	send history logs and receive parameters.				
Shut-Off Torque					
running automatically.	he set value of shut-off torque, the tool will stop pper Limit \ge Shut-Off Torque \ge Torque Lower Limit.				
[Default value] EYFMH1: 20.0 Nm/177.0 In.lbs/14.7 F EYFMH2: 50.0 Nm/442.5 In.lbs/36.9 F					
	n.lbs to 619.5 In.lbs/7.4 Ft.lbs to 51.6 Ft.lbs 5 In.lbs to 1238.9 In.lbs/22.1 Ft.lbs to 103.2 Ft.lbs				
• The range where this tool usage is recommended is as follows: EYFMH1: 20.0 Nm to 60.0 Nm/177.0 In.lbs to 531.0 In.lbs/14.7 Ft.lbs to 44.2 Ft.lbs EYFMH2: 50.0 Nm to 120.0 Nm/442.5 In.lbs to 1061.9 In.lbs/36.9 Ft.lbs to 88.5 Ft.lbs (Recommended range for large component assembly: 50.0 Nm to 80.0 Nm/442.5 In.lbs to 708.0 In.lbs/36.9 Ft.lbs to 59.0 Ft.lbs)					
Torque Upper Limit	, , ,				
[Functional overview] Set the upper limit of torque for judging work OK or NOK. Ensure that it is in the range, Torque Upper Limit \geq Shut-Off Torque \geq Torque Lower Limit.					
[Default value] *999.9 Nm/*8848.7 In.lbs/*737.4 Ft.lbs	s				
	In.lbs to *8848.7 In.lbs/7.4 Ft.lbs to *737.4 Ft.lbs 5 In.lbs to *8848.7 In.lbs/22.1 Ft.lbs to *737.4 Ft.lbs				

2.2.9 PARAMETER LIST

Torque Lower Limit

[Functional overview]

Set the lower limit of torque for judging work OK or NOK. Ensure that it is in the range, Torque Upper Limit \geq Shut-Off Torque \geq Torque Lower Limit.

[Default value] *0 Nm/*0 In.lbs/*0 Ft.lbs

[Setting value] EYFMH1: *0 Nm to 70.0 Nm/*0 In.lbs to 619.5 In.lbs/*0 Ft.lbs to 51.6 Ft.lbs EYFMH2: *0 Nm to 140.0 Nm/*0 In.lbs to 1238.9 In.lbs/*0 Ft.lbs to 103.2 Ft.lbs

Offset_Slope

[Functional overview]

This is a coefficient that adjusts the slope of the output torque curve of the tool to the torque curve on the simulated actual workpiece.

For setting, you are recommended to use the automatic offset calculation function. (How to set, Refer to 2.2.8).

[Default value] EYFMH1: 25.00 EYFMH2: 55.00

[Setting value] 0.10 to 500.00

Offset_Intercept

[Functional overview]

This is a coefficient that adjusts the intercept of the output torque curve of the tool to the torque curve on the simulated actual workpiece.

For setting, you are recommended to use the automatic offset calculation function. (How to set, Refer to 2.2.8).

Note

• The value of offset (intercept) is the lower limit that the torque sensor can measure with accuracy. Ensure that the set value of "Shut-Off Torque" and/or "Torque Lower Limit" is not less than the value of offset (intercept).

[Default value] EYFMH1: 5.00 EYFMH2: 25.00

[Setting value] -1000.00 to 1000.00

2.2.9 PARAMETER LIST

Angle Before Snug Upper Limit

[Functional overview]

Set the upper limit of accumulated angle, from trigger-on to snug point, for judging work OK or NOK.

The snug point detection method can be selected from snug point setting.

[Default value] *99999°

[Setting value] 0° to *99999°

Angle Before Snug Lower Limit

[Functional overview]

Set the lower limit of accumulated angle, from trigger-on to snug point, for judging work OK or NOK.

The snug point detection method can be selected from snug point setting.

[Default value] *0°

[Setting value] *0° to 99999°

Angle After Snug Upper Limit

[Functional overview]

Set the upper limit of accumulated angle, from snug point to running stop, for judging work OK or NOK.

The snug point detection method can be selected from snug point setting.

[Default value] *9999°

[Setting value] 0° to *9999°

Angle After Snug Lower Limit

[Functional overview]

Set the lower limit of accumulated angle, from snug point to running stop, for judging work OK or NOK.

The snug point detection method can be selected from snug point setting.

[Default value] *0°

[Setting value] *0° to 9999°

2.2.9 PARAMETER LIST

Angle Error Shut-Off

[Functional overview]

With this function ON, if the set upper-limit angle is exceeded during tightening work, the tool will stop operating automatically.

To use this function, you need to set the upper-limit angle.

[Default value]

OFF

[Setting value] ON, OFF

No Load Speed

[Functional overview]

Set the anvil rotation speed from trigger-on to tool pulsing start in 100 rpm steps.

[Default value]

2300 rpm

[Setting value] 1500 rpm to 2300 rpm

Variable Speed Control

[Functional overview]

When this function is ON, the no-load speed changes according to the trigger pull-in depth.

If this function is OFF, the no-load speed will be fixed at the set rpm.

[Default value]

OFF

[Setting value] ON, OFF

Storage Option When Limit Reached

[Functional overview]

This option allows you to select whether to automatically update history logs or prohibit tool operation when the history log storage space in the tool has reached the limit.

[Default value]

Auto Delete

[Setting value]

Auto Delete, Fastening Prohibited

2.2.9 PARAMETER LIST

Snug Point	
[Functional overview] Select a detection method for t	the snug point. The snug point is used as a reference to the one before snug and the one after snug. The point in time when the tool started pulsing is regarded as a snug point. The point in time when tightening reached the set torque is regarded as a snug point. Select a desired snug point from the torque waveform
[Default value] When Pulsing Starts	data.
[Setting value] When Pulsing Starts, Snug Tor	que, Select From Graph
Detection Threshold (Snug T	orque)
snug point. This parameter is enabled only Note	tening torque reached this threshold is judged to be the when the snug point setting is "Snug Torque." forque" may be less accurate if the absolute value of "Offset_
[Default value] 0.0 Nm	
[Setting value] 0.0 Nm to 999.9 Nm / 0.0 In.lbs	to 8848.7 In.lbs / 0.0 Ft.lbs to 737.4 Ft.lbs
Detection Threshold (Select	From Graph)
less than this threshold is judge The value is automatically set to This parameter is enabled only Note	tening torque for a tightening angle of 1° reached not ed to be the snug point. by selecting one section on the graph. when the snug point setting is "Select From Graph." nug point detection might not be made depending on work.
[Default value] 0.0 Nm/1°	
[Setting value] 0.0 Nm/1° to 999.9 Nm/1° / 0.0	n.lbs/1° to 8848.7 In.lbs/1° / 0.0 Ft.lbs/1° to 737.4 Ft.lbs/1°

Entering the value with (*) will disable the function.

2.2.9 PARAMETER LIST

Detection Start Angle (Select From Graph)

[Functional overview]

Unless the accumulated tightening angle reaches this value, snug point detection does not start.

This parameter is enabled only when the snug point setting is "Select From Graph."

[Default value]

[Setting value] 0° to 99999°

Snug Point Detection Level

[Functional overview]

This setting changes the load level for bolt snug point detection.

Increasing the snug point detection level can prevent the tool from stopping before a bolt reaches the snug point because of a high load during tightening.

(Depending on the work, even if the snug point detection level is increased, the tool might stop before the snug point.)

[Default value]

*0

[Setting value] *0 to 7

Disable Reverse

[Functional overview] When this function is ON, the tool will not operate reversely even if the trigger is on.

[Default value] OFF

[Setting value] ON, OFF

2.2.9 PARAMETER LIST

Rundown Error Detection

[Functional overview]

If the tool shuts off before the set time has passed since work started, this will be judged NOK.

[Default value] *0.0 s

[Setting value] *0.0 s to 3.0 s

Retightening Prevention

[Functional overview] Unless the selected time has passed since work was complete, the tool will not operate even if the trigger is on.

[Default value] *0.0 s

[Setting value] *0.0 s to 3.0 s

Cross Thread Reduction

[Functional overview] This is a tool operation option	n for reducing cross threading.
OFF:	Cross threading reduction function disabled.
Soft Start Up Shift Timing:	The no-load speed is fixed at *the tool lowest rpm before the set time has passed since work started. *the tool lowest rpm: about 350 rpm
360 degree Reverse:	In order to follow a thread, the tool operates 360 degrees reversely before operating forward.

OFF (Soft Start Up Shift Timing *0.0 s)

[Setting value] OFF, Soft Start Up Shift Timing (*0.0 to 1.0 s), 360 degree Reverse

2.2.9 PARAMETER LIST

Ignore Rundown Result Before Snug

[Functional overview]

When this function is ON, if work is interrupted by trigger-off before the snug point, the history log for that will not be recorded.

From the "Snug Point" parameter, set the method for determining the snug point.

[Default value] OFF

[Setting value] ON, OFF

Snug Torque Detection Delay

[Functional overview]

The tool will not shut off even if a load is generated on the way that exceeds the set shut-off torque before the set time has passed since work started.

[Default value] *0.0 s

[Setting value] *0.0 s to 3.0 s

Buzzer

[Functional overview]

This is a condition option for sounding a buzzer when work is complete.

OFF: A buzzer is not set off after work is complete.

Buzzer OK:	After work is complete, a buzzer is set off when the result is OK.
Buzzer NOK:	After work is complete, a buzzer is set off when the result is NOK.

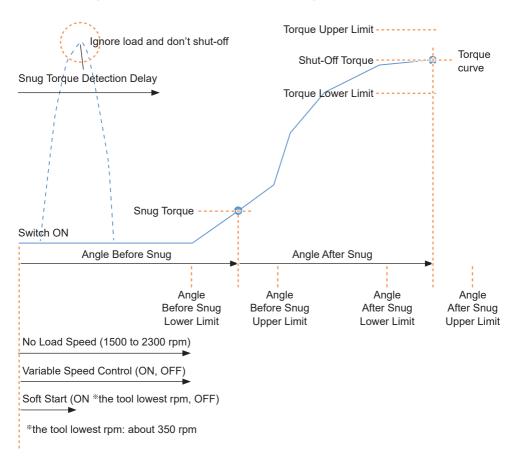
[Default value]

OFF

[Setting value] OFF. Buzzer OK. Buzzer NOK

2.2.9 PARAMETER LIST

Schematic diagram of parameters related to torque, angle, and speed.



2.2.10 SETTING OPTIONS FOR THE TOOL

You can set the following tool options from the Tool Manager software.

- Tool Information (Serial)
- Maintenance Interval Alarm (Pulse Time)
- Clock

1

Open the tool info window.

Select the tool (1) being connected on the tool list or the device setting icon (2), and click [Tool Info].





Continued to the next page



Set the Tool Information.

You can set the Tool Information (serial number) from the tool info window.

- 1. Enter an eight-digit serial number in the serial number input field (①). (The serial number is printed on the tool's color plate.)
- 2. When you select [Set Serial Number] (②), the newly set tool information will be registered to the tool.



Note

• By checking [Change] in the item of [Model], you will be ready to change the tool model number information registered in the tool being connected.

This function is used only when a wrong model number is registered to the tool because of the replacement of circuit components or other reasons.

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CAUTION

• The tool may not deliver its true performance, if you register any model number different from that on the rating label of the tool.



EN

2.2.10 SETTING OPTIONS FOR THE TOOL

3

Set the Maintenance Interval Alarm (Pulse Time).

The Maintenance Interval Alarm (Pulse Time) can be set from the tool info window.

Maintenance Interval Alarm (Pulse Time)

[Functional overview]

This is an alarm that counts the pulsing time that has been accumulated since the tool started to be used, and reminds you of maintenance timing.

When you have 1 hour or less to go before the set time, the control panel display will give you a warning.

If the set time is reached, the control panel display will remind you of that, and the tool's motor will be locked (stopped).

Initializing the tool will reset the accumulated pulsing time, and also unlock the tool's motor.

CAUTION

• When the tool is initialized, the other parameters will also return to the factory defaults.

If you initialize the tool, be sure to reconfigure parameters before using it again.

Warning display (changing every 0.5 seconds):

```
Setting value (1 to 99) \rightarrow -1 \rightarrow Operation mode (A or C)
```

Stop display (changing every 0.5 seconds):

Setting value (1 to 99) \rightarrow 0

[Default value] *0 hours

[Setting value] *0 hours to 99 hours

Entering the value with (*) will disable the function.

- 1. Enter time it takes to sound an alarm, in the input field (①) of [Maintenance Interval Alarm (Pulse Time)].
- 2. When you select [Set Interval Alarm] (2), the alarm will be set to the tool.

Maintenand	e Interv	al Alarm (Pi	ulse Time)	2	Set Interval Alarm
?		2 h			

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2.2.10 SETTING OPTIONS FOR THE TOOL

4

Set the Clock.

- The tool's internal clock can be set from the tool info window.
- When you click [Adjust to PC Clock] (①), the tool's internal clock will be synchronized to your PC's clock.

Clock	0	Adjust to PC Clock
Tool	February/11/2023 20:17:02	
PC	February/11/2023 20:17:03	

2.2.11 INITIALIZING CONFIGURATION OF THE TOOL

You can initialize the tool from the Tool Manager software.

For the initialized tool, all the configured parameters return to factory default settings. Moreover, the count of accumulated pulsing time of the Maintenance Interval Alarm (Pulse Time) is reset to 0.

From the tool list (①), select a tool to initialize.

The tool to be initialized needs to be being connected with the Tool Manager software.



Select [Read From Connected Tool] (2) from the parameter list.

3 Select [...] (③) from the configured parameter input screen, and click [Factory Default].

When a parameter file other than that of the tool being connected is selected, not [Factory Default] but [Delete] is displayed.

ToolManager_EYFSW102 (Ver.XXX)			- a ×
File Option Help			
Open Tool	EYFMH1WC MH1WC22110019		Ô
T T EYFMH1WC MH1WC22110019	History Parameter		ري ن
MH2WC22120023 disconnected	Import Parameter File	Read From Connected Tool	
EVFMH2WC MH2WC22120005 discon	Read From Connected Tool	Write to Tool Save Parameter Copy Parameter Comment	Factory Default
	EYFMH1W20230211	Model Number EYFMH1WC	3 î
	EYFMH1WC20230130	Mode Setting ② O Wireless Communication Mode Stand Alone Mode	
	EYFMH1WC20230205		
		Torque Shut-off Torque 20.0 Nm	
		Upper Limit 40.0 Nm Lower Limit 10.0 Nm	
		Tolerance 99.9 % Tolerance -50.0 %	
		Offset (2) Adjust Torque Offset Default	
		Offset (7) Adjust Torque Offset Default	
		Offset_Slope (?) 12.29 Offset_Intercept (?) 4.37	
		Annia Annie Refine Snun	



When the dialog is displayed asking whether to initialize the tool, select [OK], and it will be initialized.

2.2.12 DISPLAYING AND SAVING THE HISTORY LOG

You can save the history logs recorded in the tool to the Tool Manager software, and browse them later.

Save the History Logs Recorded in the Tool to the Tool Manager software

It is possible to read a history log from the tool connected with the Tool Manager software via USB communication, and save it to the history list.



From the tool list (1), select a tool being connected.



Select a history log on the display change tab (2), and click [Read From Connected Tool] (3).





It will be read when you select [Acquire] from the dialog to be displayed. The read history log is saved automatically to the Tool Manager software.

- 4 From the dialog displayed after reading is complete, you can choose whether to delete the read history log from the tool's internal memory or keep having it.
- **5** The read history log is added to the history list (④). Note
 - You can set a parameter to select whether to overwrite old history logs or prohibit fastening when the capacity of history logs saved in the tool has reached the upper limit of the tool's storage. Read out the data periodically.

all								Com	ment	Export
Feb./11/2023 21:48:34	Count	Date	Time	Work Result	NOK Message	Torque Result [Nm]	Shut-off Torque [Nm]	Upper Torque Limit [Nm]	Lower Torque Limit (Nm)	Angle (Before S [deg.]
PED/10/2023 19103139	14	February/11/2023	21:43:51	OK		26.6	20.0	40.0	10.0	235
Feb./10/2023 16:59:13	13	February/11/2023	21:43:50	OK		20.1	20.0	40.0	10.0	64
Jan./30/2023 15:33:37	12	February/11/2023	21:43:49	NOK	Error	12.9	20.0	40.0	10.0	749
	11	February/11/2023	21:43:46	OK		23.2	20.0	40.0	10.0	1765
	10	February/11/2023	21:43:44	OK		22.1	20.0	40.0	10.0	1847
	9	February/11/2023	21:43:41	OK		22.8	20.0	40.0	10.0	2238
	8	February/11/2023	21:43:39	NOK	Error	0.0	20.0	40.0	10.0	280
	7	February/11/2023	21:43:35	OK		21.2	20.0	40.0	10.0	2057
	6	February/11/2023	20:57:43	OK		21.2	20.0	40.0	10.0	1628
	5	February/11/2023	20:57:40	OK		21.8	20.0	40.0	10.0	1768