Upgrade Information of MPE720 Version 7.36

1. Added and Improved Functions

1.1 Version 7.36 Upgrade Information

Items added and features improved from MPE720 version 7.35 to version 7.36 are as follows.

No.	Feature	Classification
1	The Window 10 was supported.	Functional enhancement
2	We improved the display of the servo parameters of Sigma-7.	Improvement
3	We improved the compilation processing of the Ladder Program.	Improvement
4	We changed the message about the transmission cycle that was displayed in the transmission parameters screen of the built-in SVC of the MP3000 series.	Improvement
5	We improved the processing of printing in the Print Builder function.	Improvement
6	We improved the fixed parameter name of the SVA-01 module.	Improvement
7	We improved the Print Builder functions in the Japanese OS.	Improvement
8	We improved the operation that closes the Motion program.	Improvement
9	We improved the display in the CP ladder.	Improvement
10	We improved the cross-reference search of the local variables.	Improvement

(*): When MPE720 Ver.7 before MPE720 Ver.7.11 is already installed in Windows Vista and Windows 7, it may not operate for the newest information of the servo model addition by the axial setup wizard function (the newest information added into the database) updated by after MPE720 Ver.7.13.

Please refer to the following page for operating procedures.

【About the restriction matter when using MPE720 Ver.7 in Windows Vista and Windows 7】

When MPE720 Ver.7 is used in Windows Vista and Windows 7, the following phenomena might be generated.

\<Phenomena\>

When MPE720 Ver.7 before MPE720 Ver.7.11 is already installed in Windows Vista and Windows 7, it may not operate for the newest information of the servo model addition by the axial setup wizard function (the newest information added into the database) updated by after MPE720 Ver.7.13.

\<Measures\>

Using a batch file, the following folder is deleted. (*1)

C:¥Users¥UserName(*2)¥AppData¥Local¥VirtualStore¥Program Files(*3)¥YASKAWA¥MPE720 Ver7

Procedure

1. The batch file enclosed by MPE720 Ver.7 installer is copied to a desktop.

   【Download Version】

   MPE720Ver7_xxx(*4)¥Tools¥CleanUp¥MPE720Ver7_x86.bat (32bitOS)

   MPE720Ver7_xxx(*4)¥Tools¥CleanUp¥MPE720Ver7_x64.bat (64bitOS)
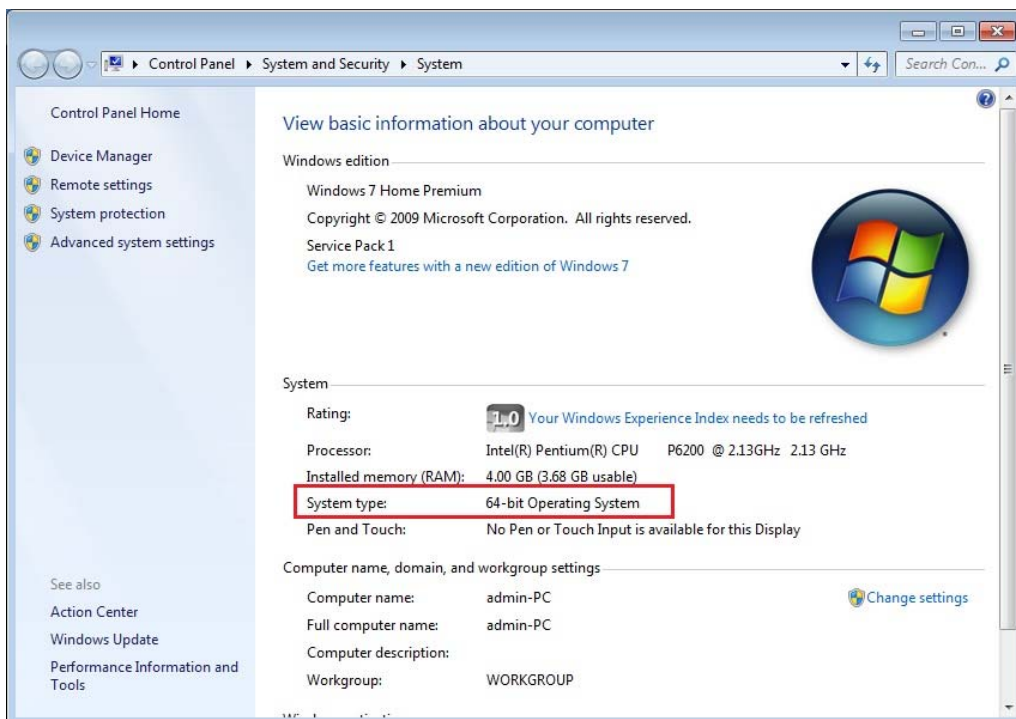
   【DVD Media Version】

   D(*5):¥Tools¥CleanUp¥MPE720Ver7_x86.bat (32bitOS)

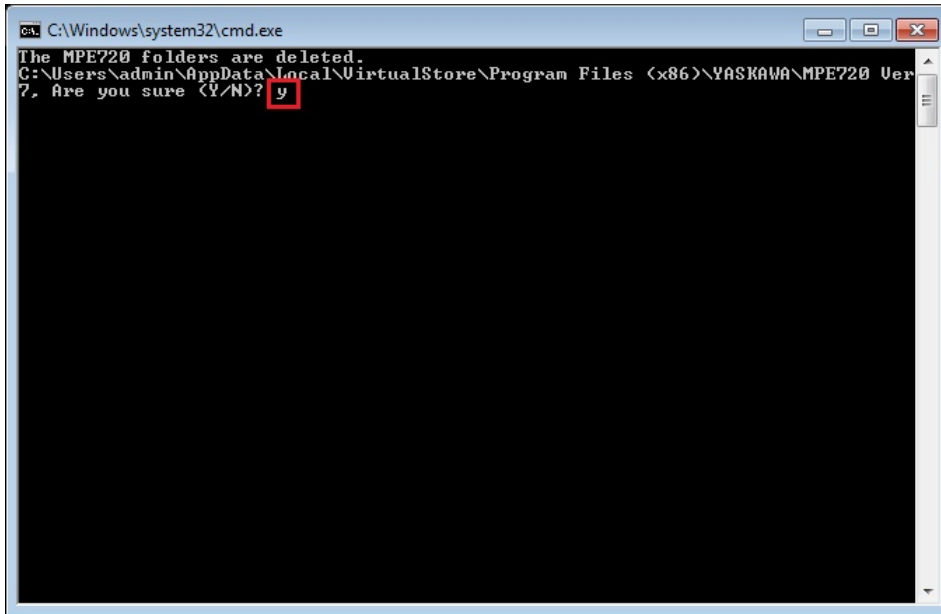   D(*5):¥Tools¥CleanUp¥MPE720Ver7_x64.bat (64bitOS)

2. The copied batch file is performed.
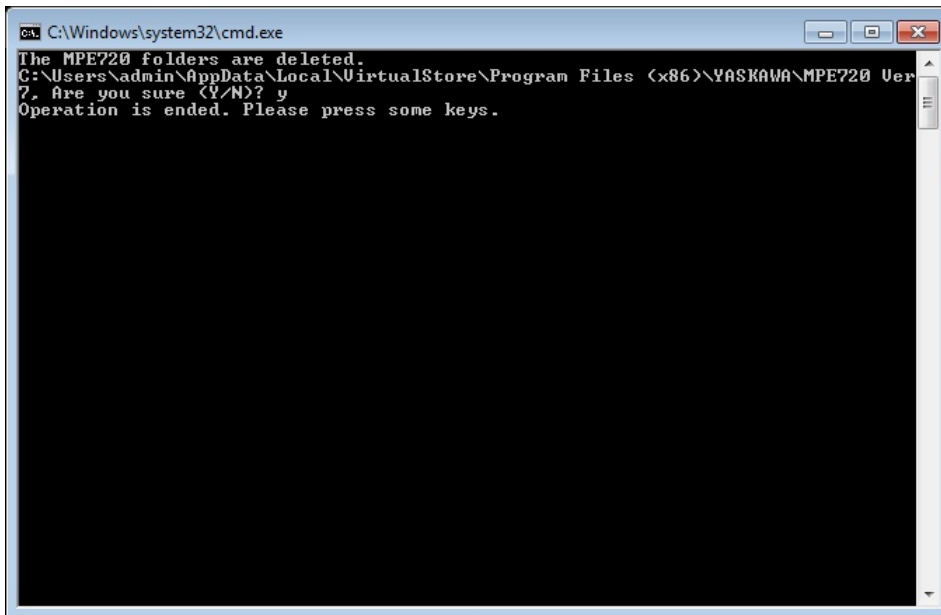
   MPE720Ver7_x86.bat (32bitOS)

   MPE720Ver7_x64.bat (64bitOS)

3. "y" is inputted on a command prompt and the Enter button is pushed.

4. The Enter button is pushed on a command prompt after deletion.

(*1): When multi-user is using one set of PC, please operate it by each user.

(*2): The user account name that logs in enters.

(*3): The path changes by OS.

     32bitOS: Program Files

     64bitOS: Program Files (x86)

(*4): The path changes by version.

(*5): The path changes by DVD drive.

(*6): When an installation path is changed at the time of MPE720 Ver.7 installation, please delete the "MPE720 Ver7" folder which a folder subordinate has below manually according to the installed path.

    C:¥Users¥UserName(*2)¥AppData¥Local¥VirtualStore

【About compile of the parallel circuit】

In the Ladder program of MPE720 Ver7 before MPE720 Ver7.23, when the parallel circuit is used, the following phenomena may occur.

<Phenomena>

When the circuit containing the following pattern was created, there was a phenomenon of operating without receiving the condition that the circuit below the OR circuit of 1st class must operate essentially in response to the conditional instruction before the OR circuit of 1st class.

<Measures>

When a phenomenon occurs, please carry out re-compile about the Ladder program in MPE720 Ver7 after MPE720 Ver7.24. Or please carry out again "Compile All Programs" of "Compile" menu.
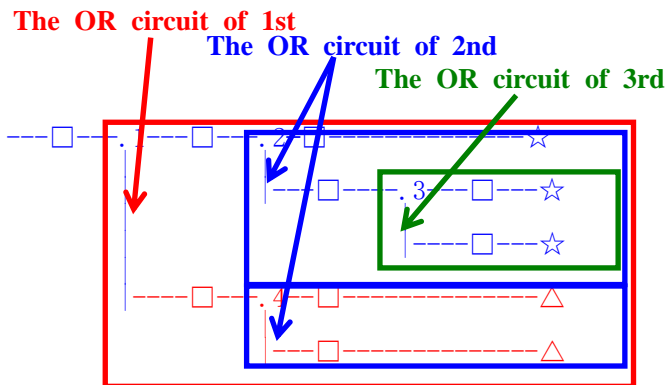
The OR circuit of 1st class：The OR circuit branched from the bus-bar of langue.
The OR circuit of 2nd class：The OR circuit branched out of the OR circuit of 1st class.
The OR circuit of 3rd class：The OR circuit branched out of the OR circuit of 2nd class.

□(Conditional instruction)：NO Contact, NC Contact, Coil, instruction(==, !=, >, <), power line (-------) etc.
☆(Output instruction)：Coil, Block instruction(Expression, STORE, COPYW) etc
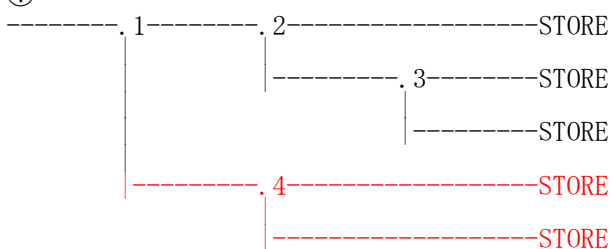　　　　　　　　※However, when all ☆ is coil commands, a phenomenon does not occur.
△(Output instruction)：Coil, Block instruction(Expression, STORE, COPYW)etc

＜Pattern＞

Symbol	Instruction
][	NO Contact
STORE	STORE instruction
( )	Coil

＜NG Pattern＞
①

This pattern is minimum circuit pattern.

This is NG.

②

```
 MB0        MB10
---][---. 1---][---. 2----------------STORE
                    MB20
                    |---][---. 3--------STORE
                              |
                              |----------STORE
         MB11
         |---][---. 4------------------STORE
                  |
                  |----------------------STORE
```
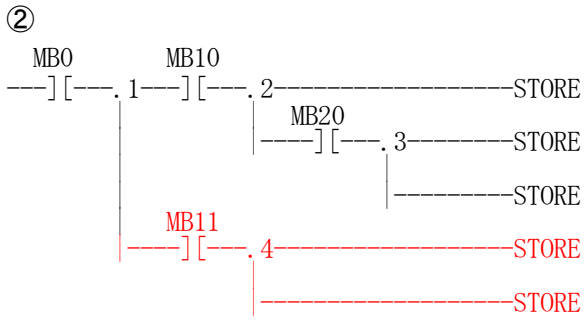
It is NG even if the minimum circuit pattern has conditional instructions (NO Contact etc.).

This is NG

③

```
 MB0        MB10
---][---. 1---][---. 2----------------STORE
                    MB20
                    |---][---. 3--------( )
                              |
                              |----------( )
         MB11
         |---][---. 4------------------STORE
                  |
                  |----------------------STORE
```
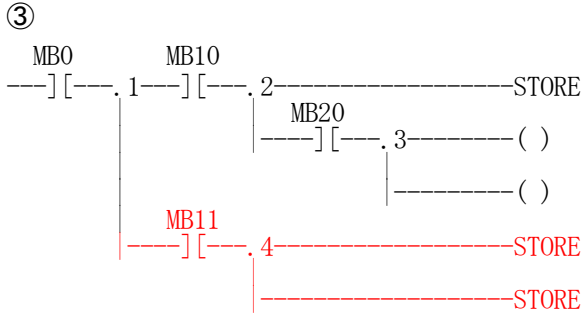
It is NG when there are at least one block commands (STORE command etc.) here.

This is NG

＜OK Pattern＞

①

```
----------. 1---------. 2----------------STORE
                      |--------------------STORE
                      |--------------------STORE
          |---------. 3----------------STORE
                    |--------------------STORE
```
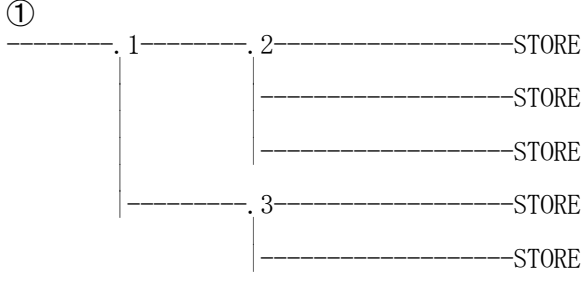
Since it is the OR circuit of 2nd, it is OK.

②

```
 MB0        MB10
---][---. 1---][---. 2------------------( )
                    MB20
                    |---][---. 3--------( )
                              |
                              |----------( )
         MB11
         |---][---. 4------------------( )
                  |
                  |----------------------( )
```

Since it is the coil altogether, it is OK.

③

```
 MB0        MB10
---][---. 1---][---. 2------------------( )
                    MB20
                    |---][---. 3--------( )
                              |
                              |----------( )
         MB11
         |---][---. 4------------------STORE
                  |
                  |----------------------STORE
```
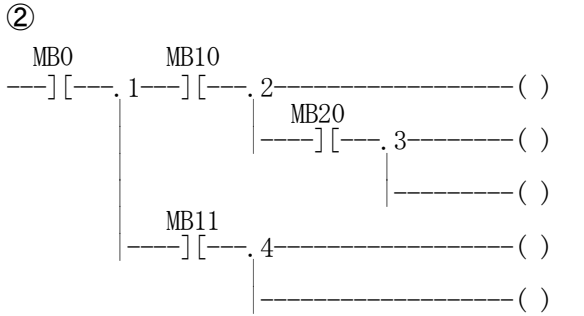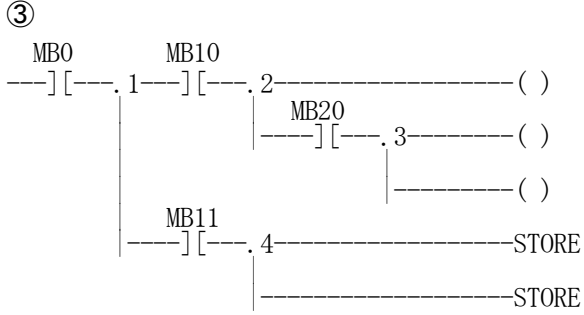
Since it is the coil altogether, it is OK.

1.2 Past Upgrade Information

No.	Upgrade Information	Remarks
1	MPE720 version 7.11 upgrade information	version 7.10→version 7.11
2	MPE720 version 7.13 upgrade information	version 7.11→version 7.13
3	MPE720 version 7.14 upgrade information	version 7.13→version 7.14
4	MPE720 version 7.20 upgrade information	version 7.14→version 7.20
5	MPE720 version 7.21 upgrade information	version 7.20→version 7.21
6	MPE720 version 7.23 upgrade information	version 7.21→version 7.23
7	MPE720 version 7.24 upgrade information	version 7.23→version 7.24
8	MPE720 version 7.26 upgrade information	version 7.24→version 7.26
9	MPE720 version 7.27 upgrade information	version 7.26→version 7.27
10	MPE720 version 7.28 upgrade information	version 7.27→version 7.28
11	MPE720 version 7.29 upgrade information	version 7.28→version 7.29
12	MPE720 version 7.30 upgrade information	version 7.29→version 7.30
13	MPE720 version 7.31 upgrade information	version 7.30→version 7.31
14	MPE720 version 7.33 upgrade information	version 7.31→version 7.33
15	MPE720 version 7.34 upgrade information	version 7.33→version 7.34
16	MPE720 version 7.35 upgrade information	version 7.34→version 7.35

2. Description
No. 1 The Window 10 was supported.

It was supported Windows 10 of Windows OS.

【Support Version】

Controller	Support Version
MP3000 Series	It is not dependent on the version.
MP2000 Series	It is not dependent on the version.

No. 2 We improved the display of the servo parameters of Sigma-7.

In the servo parameters of the Simga-7, there was a difference in the parameters that are displayed in the servo parameter screen of the MC-Configurator and the servo parameter screen of Engineering Builder. So, we improved so that the servo parameters of the MC-Configurator and the Engineering Builder are the same.

○Target models

MP2000 Series Controller

※MP3000 Series Controller is not able to start the servo parameters (Module Configuration) from the Engineering Builder.

○Target Servopacks

・MECHATROLINK-II Communications References Sigma-7S (SGD7S-****10*) SERVOPACK (Rotary type and Linear type)

・MECHATROLINK-III Communications References Sigma-7S (SGD7S-****20*) SERVOPACK (Rotary type and Linear type)

・MECHATROLINK-III Communications References Sigma-7W (SGD7W-****20*) SERVOPACK of 2-axis driving model (Rotary type and Linear type)

【Support Version】

Controller	Support Version
MP3000 Series	MP3000 series is not applicable.
MP2000 Series	It is not dependent on the version.

No. 3 We improved the compilation processing of the Ladder Program.

If the following target instruction and other instructions were configured the OR curicit in the state that a preposing instruction did not exist, warning check was not run at compile time. So, we had improved to run a warning check at compile time in the condition of the account of the left.

○Target instruction
　　1-ms ON-Delay Timer (TON(1ms))
　　1-ms OFF-Delay Timer (TOFF(1ms))
　　10-ms ON-Delay Timer (TON(10ms))
　　10-ms OFF-Delay Timer (TOFF(10ms))
　　1-s ON-Delay Timer (TON(1s))
　　1-s OFF-Delay Timer (TOFF(1s))
　　Rising-edge Pulses (ON-PLS)
　　Falling-edge Pulses (OFF-PLS)
　　Coil (COIL)
　　Reverse Coil (REV-COIL)
　　Rising-edge Detection Coil (ONP-COIL)
　　Falling-edge Detection Coil (OFFP-COIL)
　　Set Coil (S-COIL)
　　Reset Coil (R-COIL)
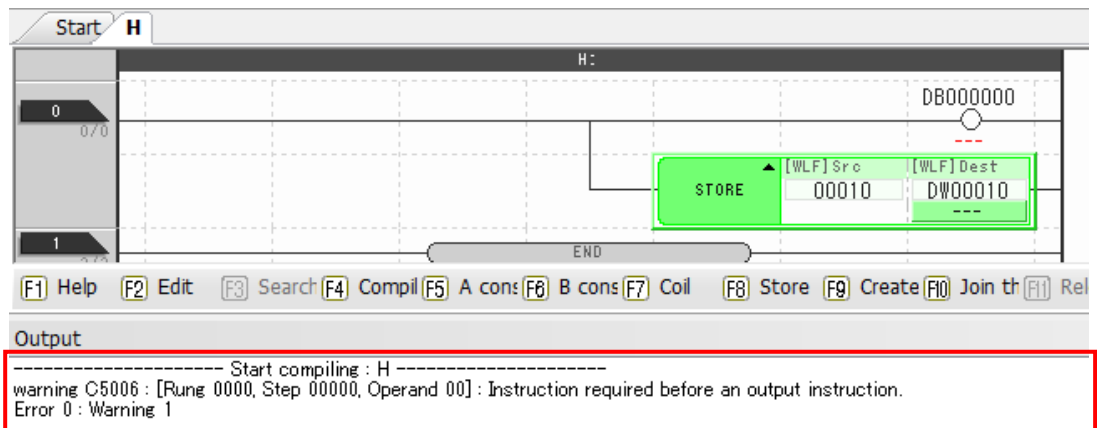
【Support Version】

Controller	Support Version
MP3000 Series	It is not dependent on the version.
MP2000 Series	It is not dependent on the version.

No. 4 We changed the message about the transmission cycle that was displayed in the transmission parameters screen of the built-in SVC of the MP3000 series.

We changed the message of the transmission cycle of the built-in SVC of the MP3000 series controller.
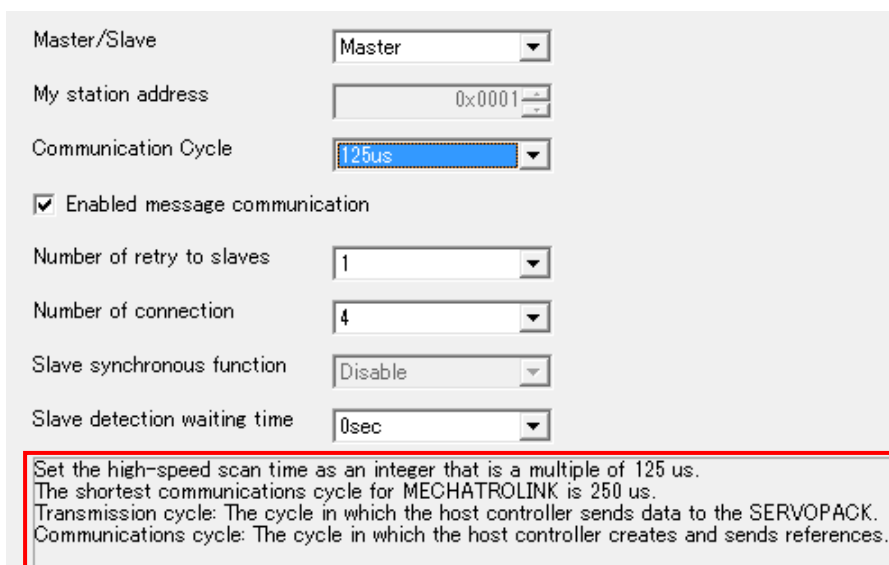
○125us EX Non-configurable models

CPU-201、CPU-201(SUB)

CPU-301(16axess)、CPU-301(32axess)

Transmission cycle：125us

Set the high-speed scan time as an integer that is a multiple of 125 us. The shortest communications cycle for MECHATROLINK is 250 us.

Transmission cycle: The cycle in which the host controller sends data to the SERVOPACK.

Communications cycle: The cycle in which the host controller creates and sends references.

○125us EX configurable models

CPU-202、CPU-202(SUB)

CPU-302(16axess)、CPU-302(32axess)

Transmission cycle：125us

Set the high-speed scan time as an integer that is a multiple of 125 us. The shortest communications cycle for MECHATROLINK is 250 us.

To make the communications cycle for MECHATROLINK 125us, set 125us EX as the communications cycle and the high-speed scan time must also be set to 125 us.

Transmission cycle: The cycle in which the host controller sends data to the SERVOPACK.

Communications cycle: The cycle in which the host controller creates and sends references.

Transmission cycle：125us EX

Set the high-speed scan time as an integer that is a multiple of 125 us. The shortest communications cycle for MECHATROLINK is 125 us. To enable this setting, the high-speed scan time must also be set to 125 us.

Transmission cycle: The cycle in which the host controller sends data to the SERVOPACK.

Communications cycle: The cycle in which the host controller creates and sends references.

【Support Version】

Controller	Support Version
MP3000 Series	It is not dependent on the version.
MP2000 Series	MP2000 series is not applicable.

No. 5 We improved the processing of printing in the Print Builder function.

In Print Builder function, there was a phenomenon that printed only "Cover" when it printed with checking in the "Cover" and "Module Configuration" of "Definition" tab. So, we improved so as to print the "Cover" and "Module Configuration".

【Support Version】

Controller	Support Version
MP3000 Series	It is not dependent on the version.
MP2000 Series	MP2000 series is not applicable.

No. 6 We improved the fixed parameter name of the SVA-01 module.

In the MC-Configurator, Sigma-7 did not display in the fixed parameter No.28: servo driver type selection of SVA-01 module. So, we changed to add the display of the Sigma-7 to fixed parameters No.28.

MC-Configurator
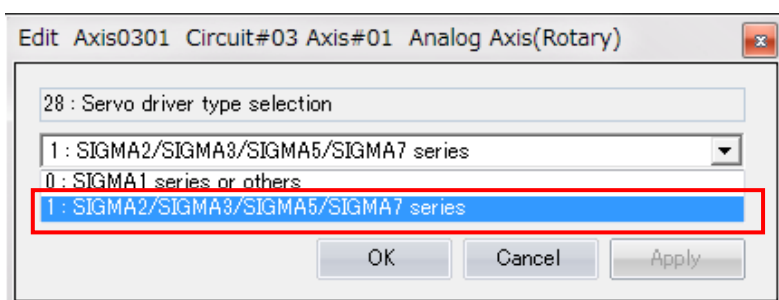
In the Engineering Builder, Sigma-5 and Sigma-7 did not display in the fixed parameter No.28: servo driver type selection of SVA-01 module. So, we changed to add the display of the Sigma-5 and Sigma-7 to fixed parameters No.28.

Enginnering Builder

【Support Version】

Controller	Support Version
MP3000 Series	It is not dependent on the version.
MP2000 Series	It is not dependent on the version.

No. 7 We improved the Print Builder functions in the Japanese OS.

In Print Builder function, there was a phenomenon in which some of the parameters were printed in Japanese when the language was set to English in the Japanese OS. So, we improved so that the parameters are printed correctly when language was set English.

```
PA-962421          P00074     SVC SERVOPACK Shaf

                Servo Type : Rotary Type

                Circuit No.   1          Axis No  :1

No.                    Parameter Name

0000 Basic Function Select Switch 0
0001 Application Function Select Switch 1
0002 Application Function Select Switch 2
0006 Application Function Select Switch 6
0007 Application Function Select Switch 7
0008 Application Function Select Switch 8
0009 Application Function Select Switch 9
000A Application Function Selections A
000B Application Function Select Switch B
000C Application Function Select Switch C
000D Application Function Select Switch D
000E Application Function Selections E
000F Application Function Selections F
0021 Reserved Constant
```

【Support Version】

Controller	Support Version
MP3000 Series	It is not dependent on the version.
MP2000 Series	It is not dependent on the version.

## No. 8 We improved the operation that closes the Motion program.

In a state where the two or more sub-program were opened, it took time when the sub-program was closed. So, we improved so as be able to close the sub-program immediately.

【Support Version】

Controller	Support Version
MP3000 Series	It is not dependent on the version.
MP2000 Series	It is not dependent on the version.

No. 9 We improved the display in the CP ladder.

If the DWG title of SEE instruction was selected, we improved so that the display of the DWG title did not disappear.
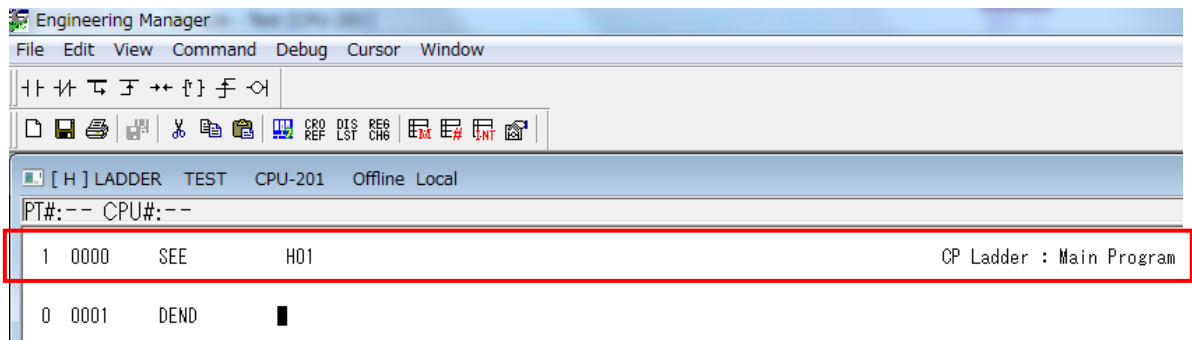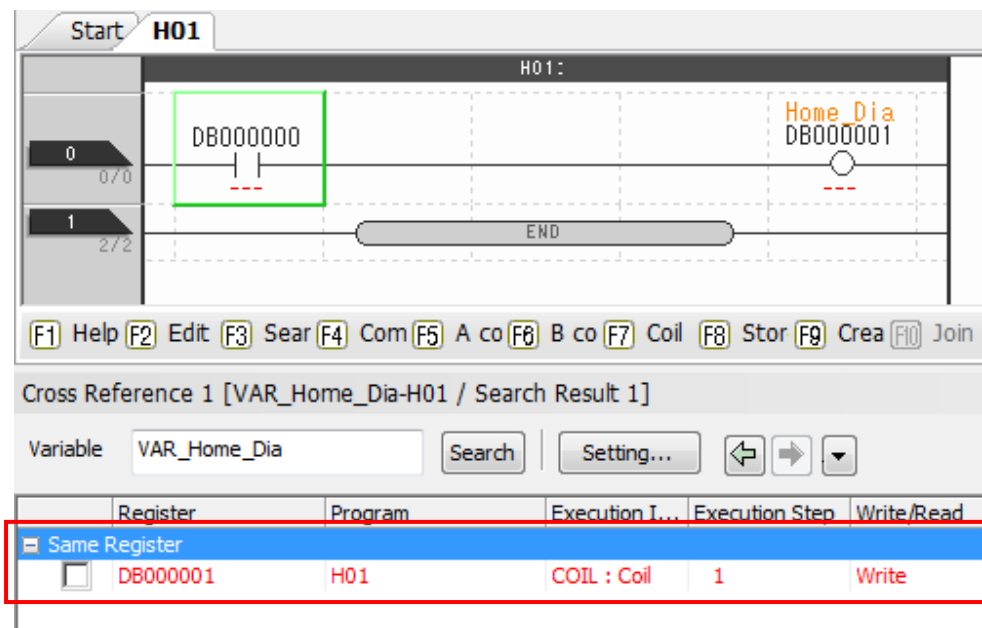

【Support Version】

Controller	Support Version
MP3000 Series	It is not dependent on the version.
MP2000 Series	It is not dependent on the version.

No. 10 We improved the cross-reference search of the local variables.

If "*:All Program" was selected in the Cross Reference Setting, the cross reference was searching the variable of local registers from all programs. So, we improved the process so as to run a search of the register for the local variables of the target program.

【Support Version】

Controller	Support Version
MP3000 Series	It is not dependent on the version.
MP2000 Series	It is not dependent on the version.