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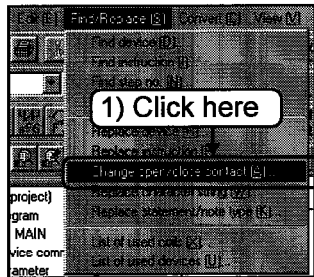
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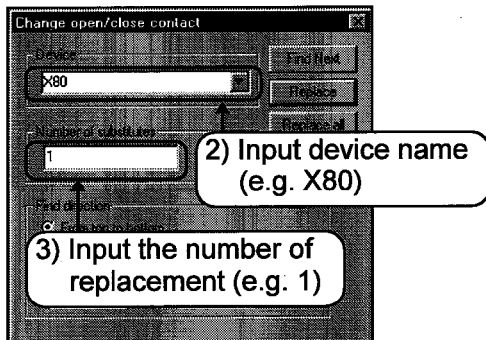
3 Offline operations

4.2 Replacing open contact with close contact and vice versa

This section explains replacing open contact in the circuit to close contact and vice versa.



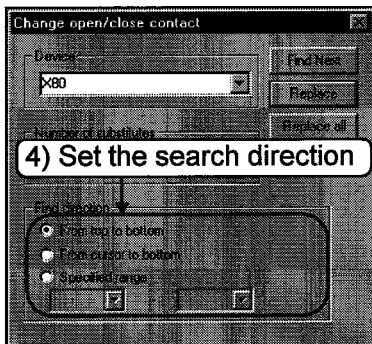
- 1) Click the [Find/Replace]-[Change open/close contact] menu.



- 2) Input the device name to be replaced (old device name).
- 3) Input the number of points to be replaced from the old device.

Hint!

Example of setting number of points for replacement
Device: X0, Number of points for replacement: 3
X0, X1 and X2 (three points) will be replaced for A to B contact.



- 4) Set the find direction.

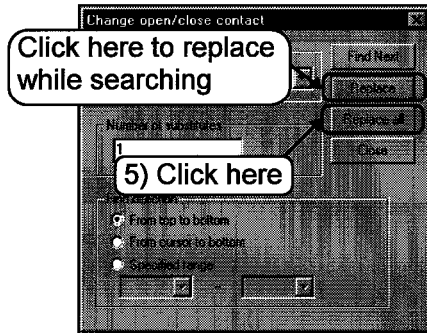
Hint!

Find direction

- [From top to bottom]
Searches from 0 step to END command.
- [From cursor to bottom]
Searches from the cursor position to END command.
- [Specified range]
Searches within the designated step range.

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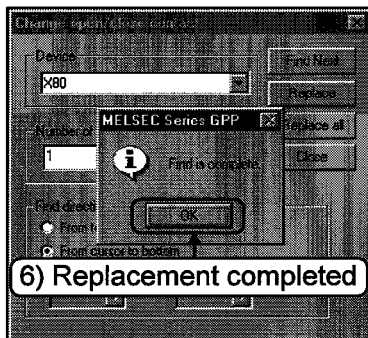
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- 5) Click the **Replace all** button.

By clicking the **Replace** button, AB contacts can be replaced while searching the device name.

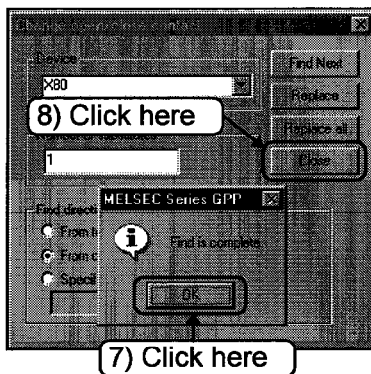
☞ Part 3, 4.1. ☞



- 6) Contacts of the designated device name are replaced.

If a device name of open contact (—|—) is designated, the contact is replaced with close (—|/—) contact.

If a device name of open branch (—|—) is designated, the contact is replaced with close (—|/—) branch contact.



- 7) After completing AB contact replacement, a dialog box is displayed to notice completion.

Click the **OK** button.

- 8) Click the **Close** button.

Now, operations for replacing A contact with B contact and vice versa are completed.

3 Offline operations

5 Explaining circuit components

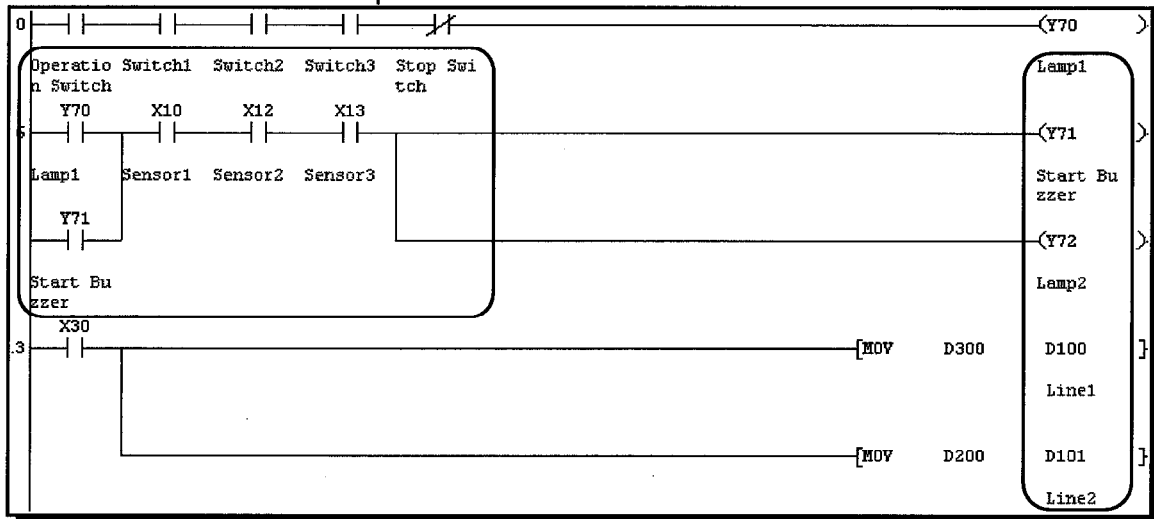
This chapter explains the following:

- Creating device comments to describe meaning and application of each device
- Creating statements to describe the operation of the circuit block
- Creating notes to describe the coil and the application instruction.

What is a device comment?

A device comment describes each device of the created circuit so that the application of each device can be viewed on the circuit creation screen.

A device comment can include up to 32 characters for a device.



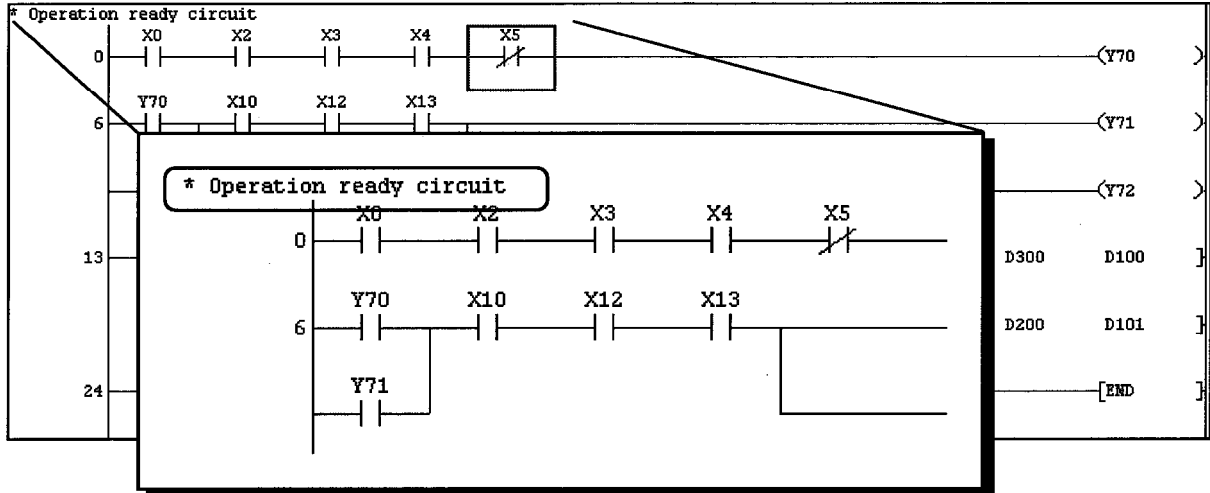
When creating a comment, tiling the circuit creation screen and the comment creation screen allows creating a device comment while referring to the device used in the created circuit.

☞ Part 2, 2.5. ☞

What is a statement?

A statement makes the circuit creation screen more comprehensible by explaining the circuit function of each circuit block.

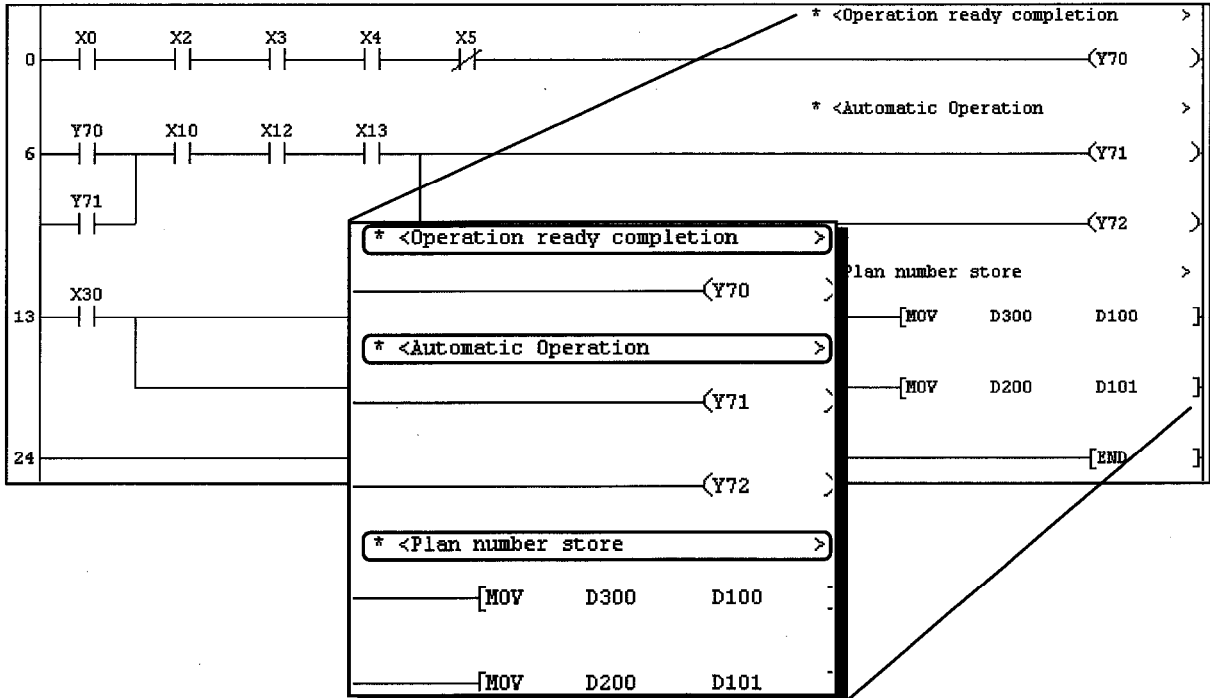
A statement can include up to 64 characters.



What is a note?

A note makes the circuit creation screen more comprehensible by explaining the application and other information of the coil and application instruction circuits.

A note can include up to 32 characters.



3

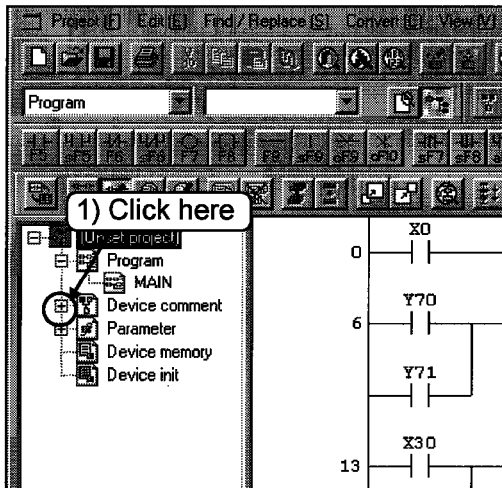
Offline operations

5.1 Creating device comments

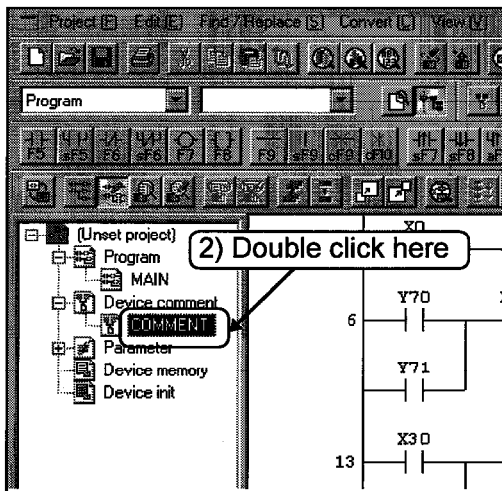
This section explains creating comments for designated devices.

There are two kinds of comments: the "common comment" (one comment per project) and the "program comment" (one comment per program).

Here, the common comment is described.



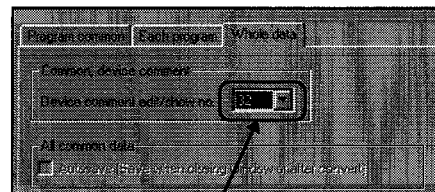
- 1) Click the + mark of [Device comment] in the project data list.



- 2) Double click [COMMENT] (common comment).

Point

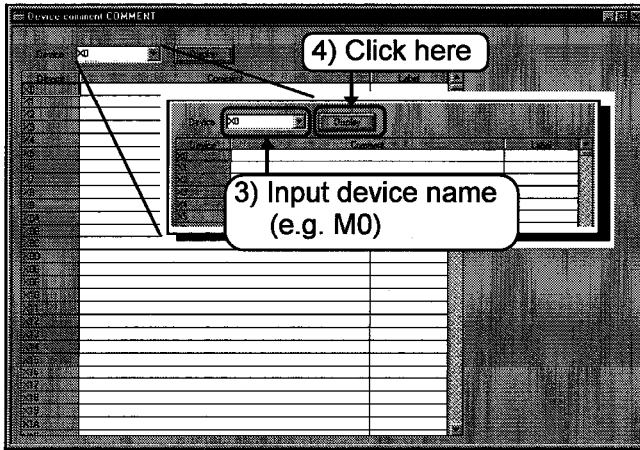
If the comment is to include 17 characters or more, click the [Tools] - [Options] set the number of characters for display to 32.



Set to 32

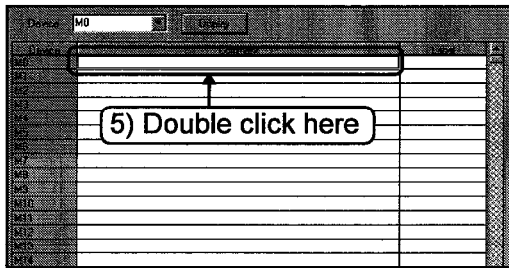
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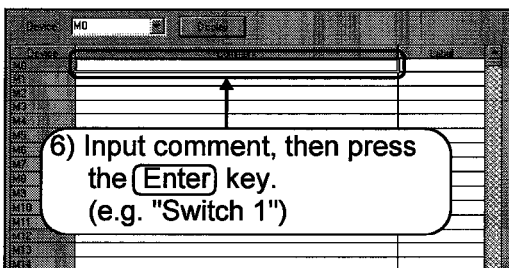


3) The comment creation screen is displayed.
Input the device name for which a comment is created.

4) Click the **Display** button.



5) The device name is displayed from M0.
Double click the comment column next to the device name to which a comment is input.








6) Input the comment to the designated device name, then press the **Enter** key.
A comment can include up to 32 characters.
To correct the input comment, press **BS** or **Del** key and re-input.

Part 3, 6.1.

To the following page



Hint!

The cursor () can be moved by pressing  ,  ,  , and  keys.

Point

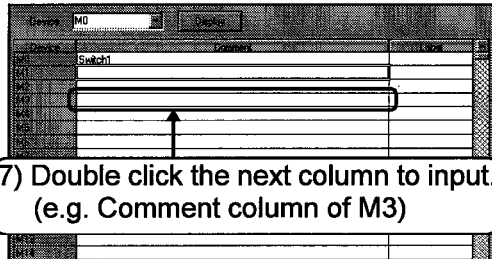
Comments can be created by Windows applications.

Part 5, Chapter 2.

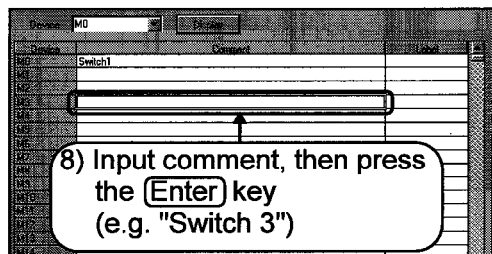
3

Offline operations

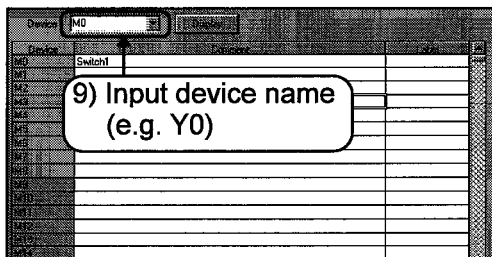
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7) Double click the next column to input.
(e.g. Comment column of M3)



8) Input comment, then press the **Enter** key
(e.g. "Switch 3")



9) Input device name
(e.g. Y0)



To the following page

7) Double click next comment column for input.

8) Input comment for the designated device name, then press the **Enter** key.

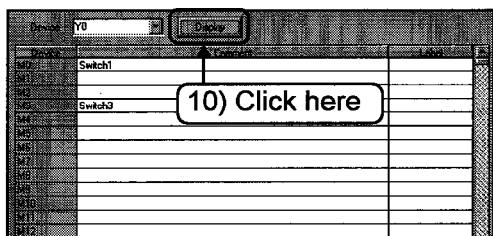
9) Create comment for other devices. Input the device name for comment creation.

Hint!

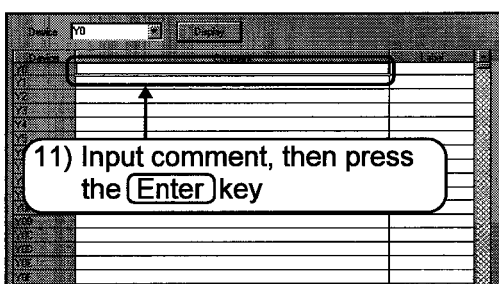
The device names for which comments have been created are registered to the list box [Device name]. It is possible to designate a device name for comment creation by clicking a registered device name.



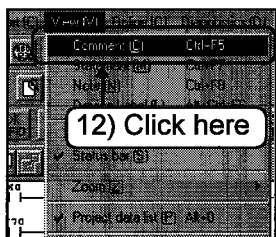
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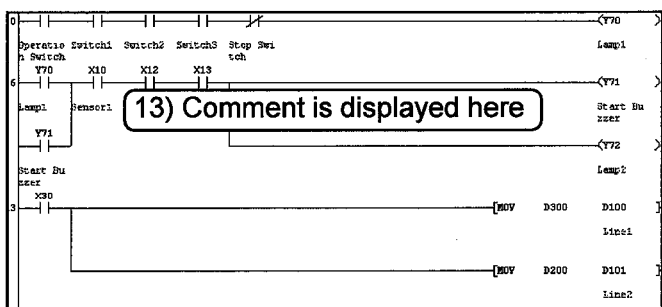
10) Click the **Display** button.



11) The device name is displayed from Y0.
Click the comment column and input comment.



12) Confirm the created comment on the circuit creation screen.
Click the [View]-[Comment] menu.



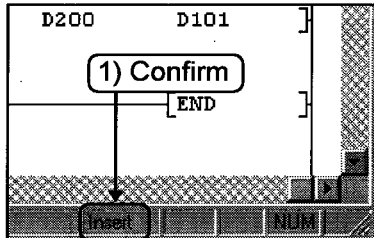
13) The comment created for the device is displayed.

3

Offline operations

5.2 Creating statements for each circuit block

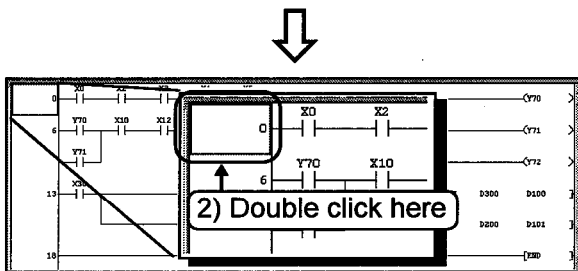
This section explains creating statements for the designated circuit block.
Be sure to switch to writing mode before creating statements.



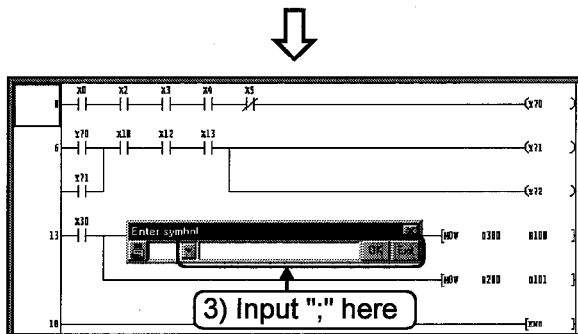
- 1) Confirm that "Insert" is displayed at the lower right of the screen

Point

If the area displays "Over write", press the **(Ins)** key and change the display to Insert.



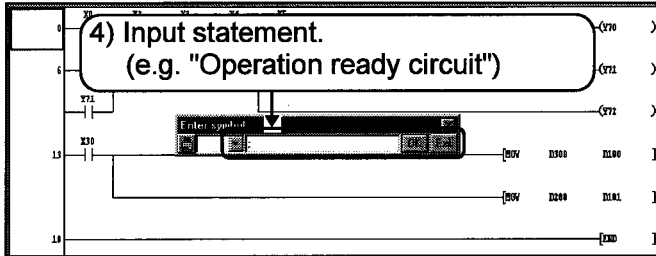
- 2) Double click the position of the number of step which becomes the line immediately under the statement.



- 3) The circuit input window is displayed. Input ",."

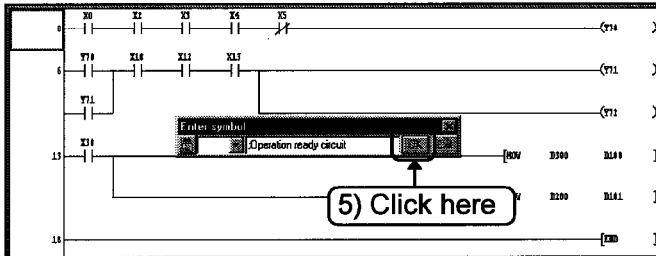
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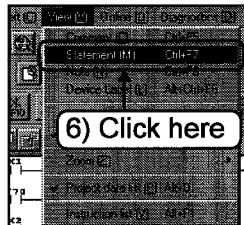


- 4) After inputting ";", input statement. A statement can include up to 64 characters.
To correct the input statement, press **[BS]** or **[Del]** key, and re-input.

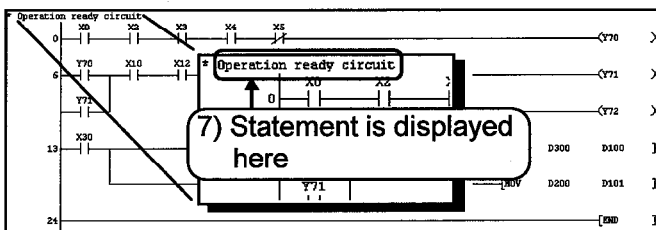
☞ Part 3, 6.5. ☜



- 5) Click the **[OK]** button.



- 6) Confirm the created statement on the circuit creation screen.
Click the **[View]-[Statement]** menu.



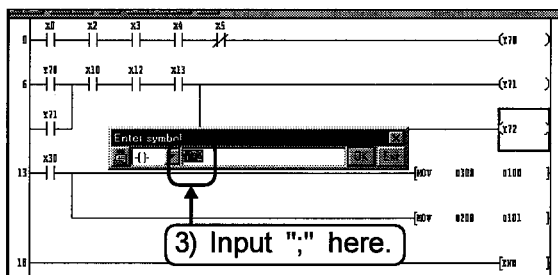
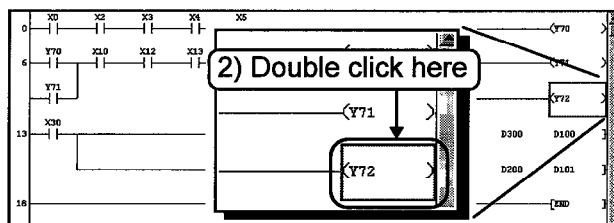
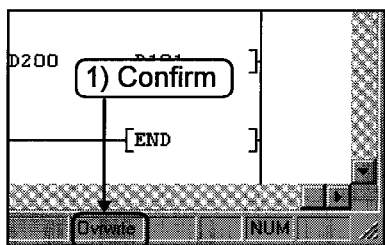
- 7) The created statement is displayed.

3

Offline operations

5.3 Creating a note for coil and application instruction

This section explains creating a note for the designated coil and application instruction. Be sure to switch to writing mode before creating a note.



To the following page //

- 1) Confirm that "Ovrwrte" is displayed at the lower right of the screen.

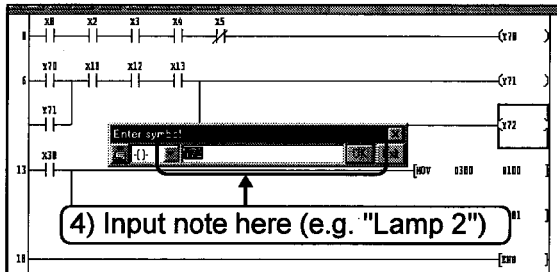
Point

If the area displays "Ovrwrte", press the **(Ins)** key and change the display to Insert.

- 2) Double click the position of the coil or the application instruction to put note.

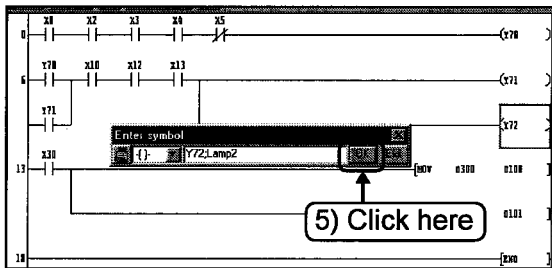
- 3) The circuit input window is displayed. Input ";" immediately after the coil or the application instruction.

From previous page

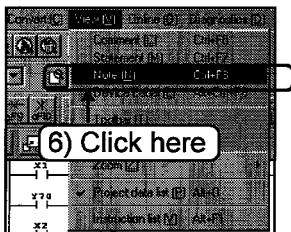


- 4) After inputting ";", input note.
A note can include up to 32 alphanumeric characters.
To correct the input note, press **[BS]** or **[Del]** key, and re-input.

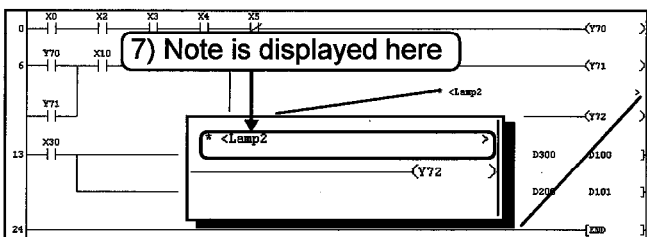
☞ Part 3, 6.5. ☞



- 5) Click the **[OK]** button.



- 6) Confirm the created note on the circuit creation screen.
Click the **[View]-[Note]** menu.



- 7) The note created for the coil or the application instruction is displayed.

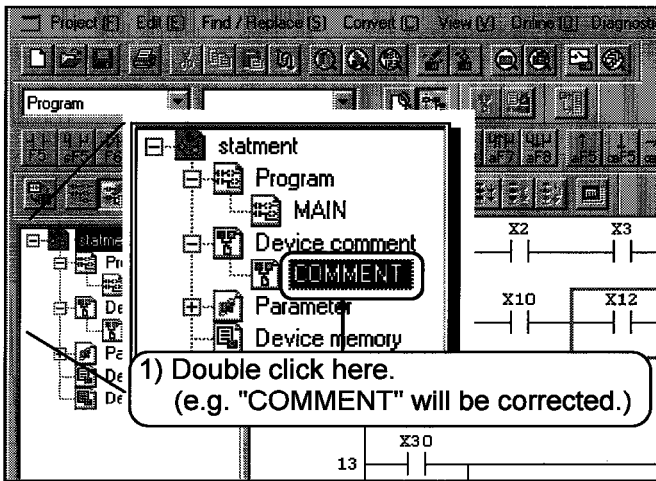
3 Offline operations

6 Editing comments

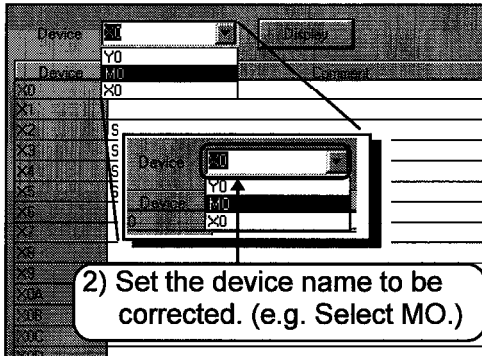
This chapter explains how to edit (correct, delete, copy) the device comment, the statement and the note for the device comment.

6.1 Correcting device comments

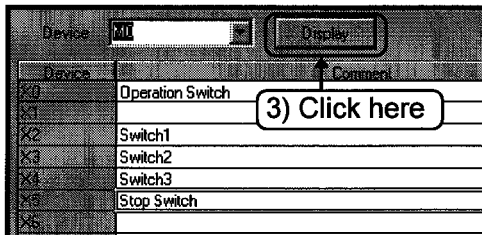
This section explains correcting comments for the designated device.



- 1) Double click the comment to be corrected in [Device comment] shown in the project data list.



- 2) The comment creation screen is displayed. Use the [Device] list box to set the device name to be corrected.

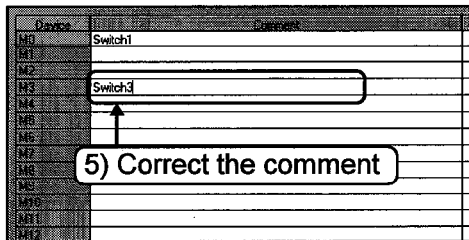
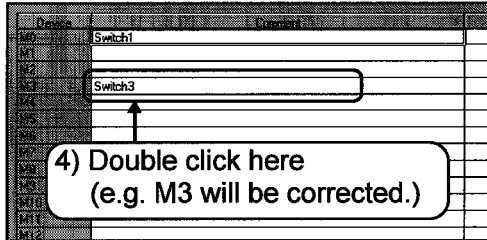


- 3) Click the [Display] button.



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4) Double click the comment column to be corrected.

5) A cursor (|) is displayed. Correct the comment.

Point

Use the following keys for correcting comment.

- Move cursor: and keys
- Delete characters at the left of the cursor: **[BS]** key
- Delete all: **[Del]** key

After correcting the comment, press the **[Enter]** key.

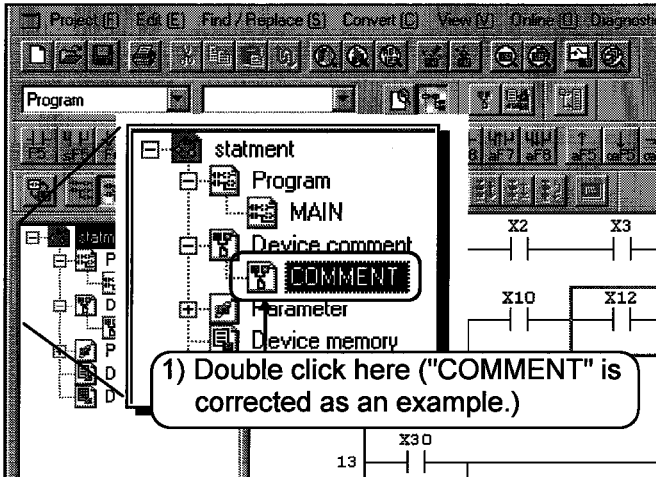
3

Offline operations

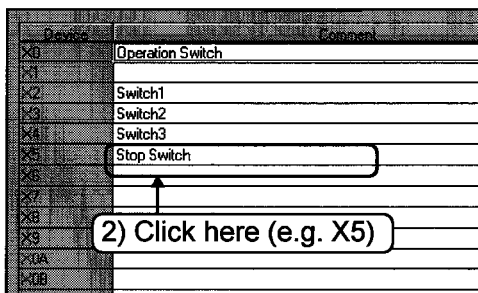
6.2 Deleting (cutting) device comments

This section explains deleting (cutting) the device comment for the designated device.

Deleting (cutting) each comment



- 1) Double click the comment to be deleted (cut) in the project data list.



- 2) The comment creation screen is displayed. Click the comment column to delete (cut), and move the cursor.




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Device	Comment
X0	Operation Switch
X1	
X2	Switch1
X3	Switch2
X4	Switch3
X5	Stop Switch
X6	
X7	
X8	
X9	
X0A	
X0B	
X0C	

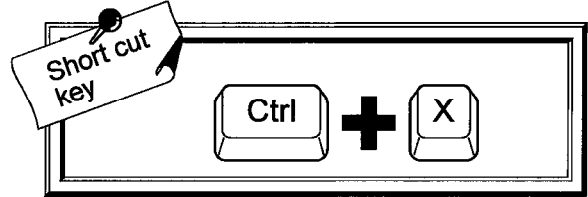
3) Press the **(Del)** key, or click 



Device	Comment
X0	Operation Switch
X1	
X2	Switch1
X3	Switch2
X4	Switch3
X5	
X6	
X7	
X8	
X9	
X0A	
X0B	
X0C	


4) The comment has been deleted (cut)



- 3) Press the **(Del)** key, or click  on the tool bar.



- 4) The comment has been deleted (cut).

Hint!

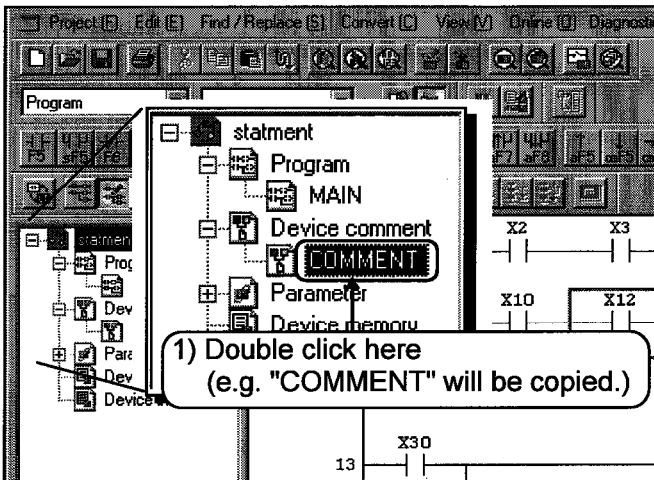
If the comment is cut by clicking , the cut comment can be pasted on other device comment columns by a paste operation.

 Part 3, 6.3. 

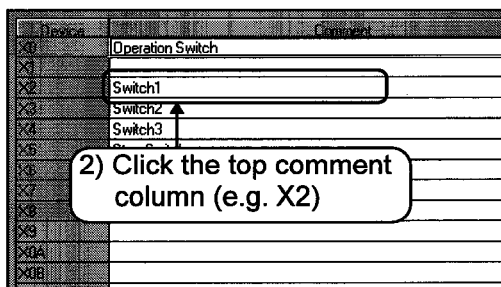
3

Offline operations

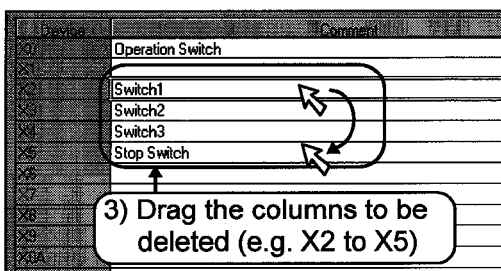
—Deleting (cutting) a series of comments in batch—




- 1) Double click comment to be corrected in [Device comment] shown in the project data list.



- 2) The comment creation screen is displayed. Click the top of the comment columns to be deleted (cut), and move the cursor.



- 3) Confirm that the cursor () is displayed, and drag the range to be deleted (cut).




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Device	Comment
X0	Operation Switch
X1	
X2	Switch1
X3	Switch2
X4	Switch3
X5	Stop Switch
X6	
X7	
X8	
X9	
X0A	
X0B	

4) Columns are highlighted

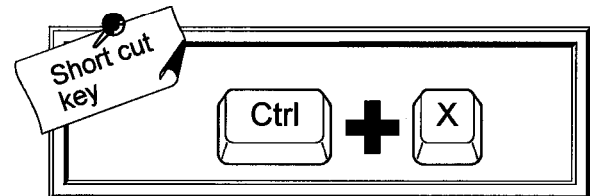
- 4) The comment columns in the dragged area are highlighted (except for the top column).
 To redo the range specification, click any comment column.
 To delete the columns, press the **Del** key.
 To cut the columns, click  on the tool bar.




Device	Comment
X0	Operation Switch
X1	
X2	
X3	
X4	
X5	
X6	
X7	
X8	
X9	
X0A	
X0B	



5) Comments have been deleted (cut)

- 5) Now the designated comments have been all deleted (cut).



 **Hint!**

If the comment is cut by clicking , the cut comment can be pasted on other device comment columns by a paste operation.

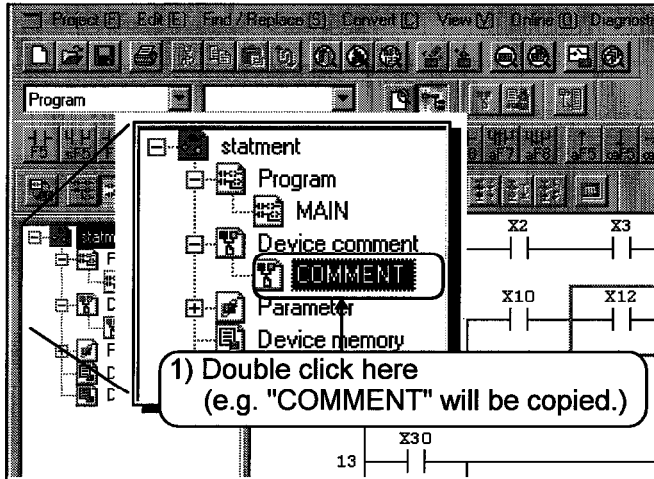
 Part 3, 6.3. 

3

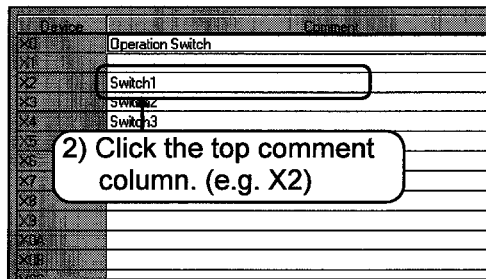
Offline operations

6.3 Copying device comments

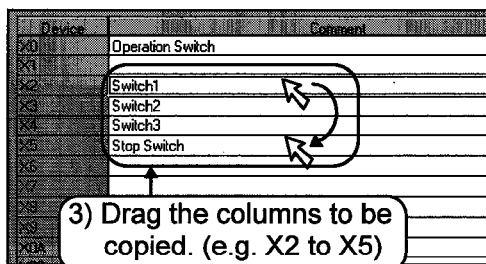
This section explains copying comments for the designated device.




- 1) Double click the comment to be copied in「COMMENT」shown in the project data list.



- 2) The comment creation screen is displayed.
Click the top of the comment columns to be copied, and move the cursor.

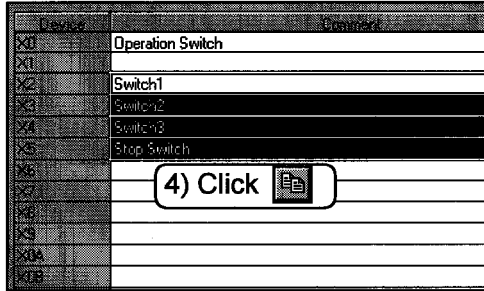



- 3) Confirm that the cursor () is displayed, and drag the range to be copied.

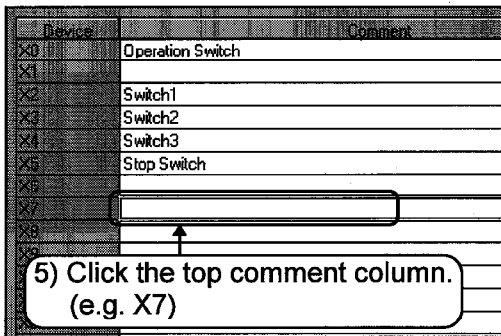
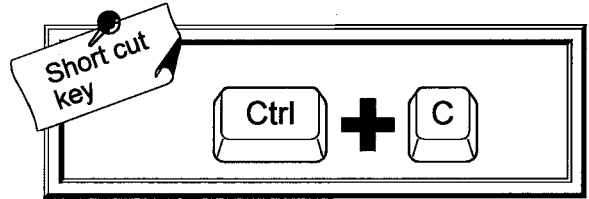


To the following page //

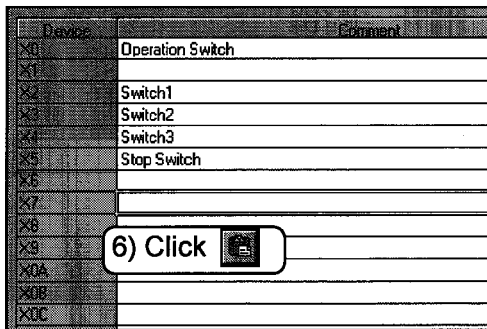
From previous page





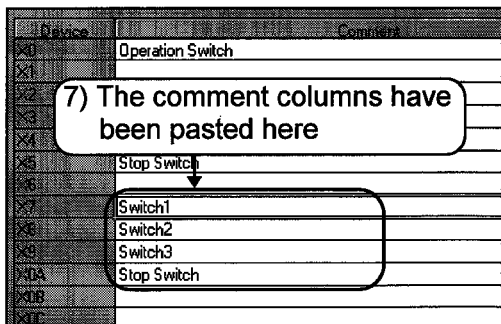
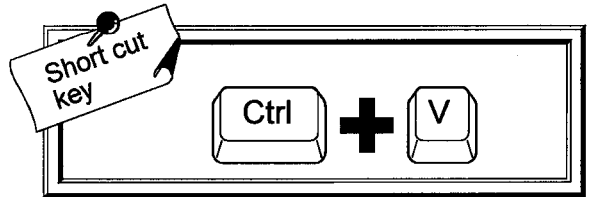
- 4) The comment columns in the dragged area are highlighted. To redo the range specification, click any comment column. Click  on the tool bar.



- 5) Click the top column for pasting comments, and move the cursor.



- 6) Confirm that the cursor () is displayed, and click  on the tool bar.

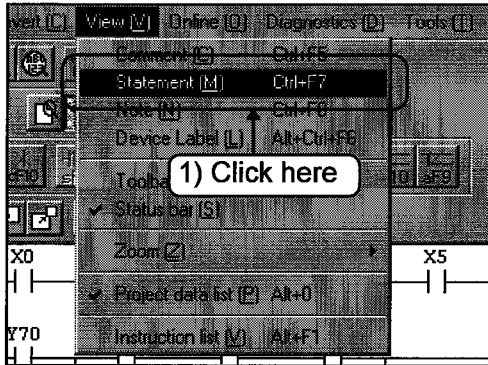


- 7) Now, the comments have been pasted to the area from the designated column.

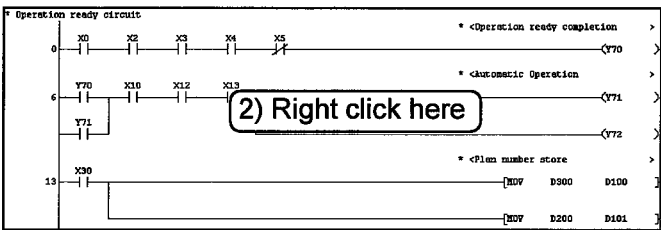
3 Offline operations

6.4 Searching statements and notes

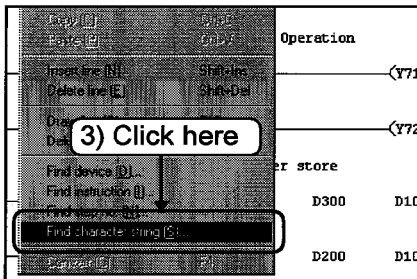
This section explains searching circuits with the designated statement and note. Display statements and notes on the circuit creation screen before searching for them.



- 1) Click the [View]-[Statement], [Note] menu. Statements and notes are displayed on the circuit creation screen.



- 2) Right click on the circuit creation screen, or click  on the tool bar.

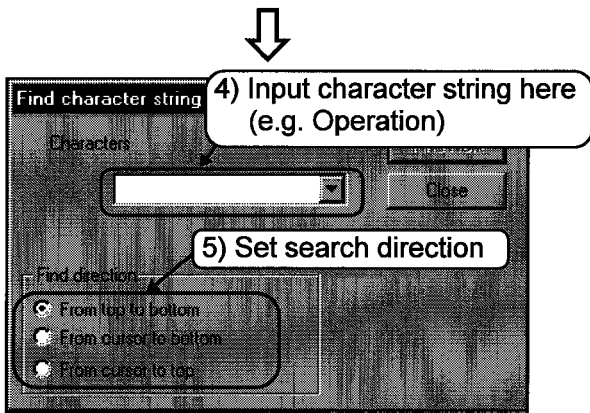


- 3) Click the [Find character string] menu. (Not required when operating from the tool bar.)



To the following page //

From previous page

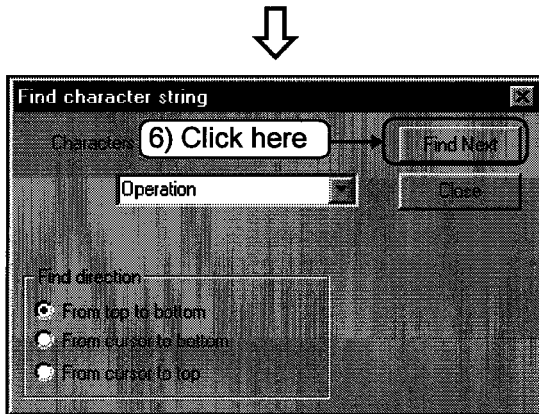


- 4) Input statement or note to search.
- 5) Set the find direction.

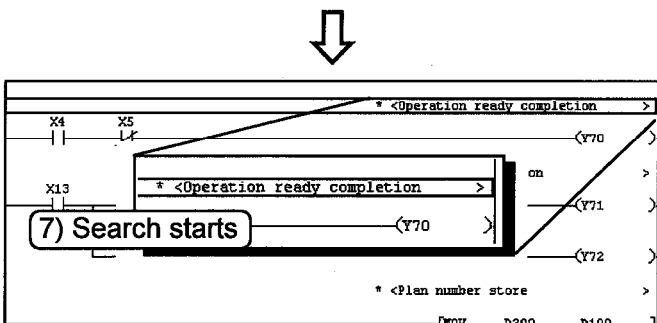
Hint!

Find direction

- [From top to bottom]
Searches from 0 step to the END command.
- [From cursor to bottom]
Searches from the cursor position to END command.
- [From cursor to top]
Searches from the cursor position to 0 step.



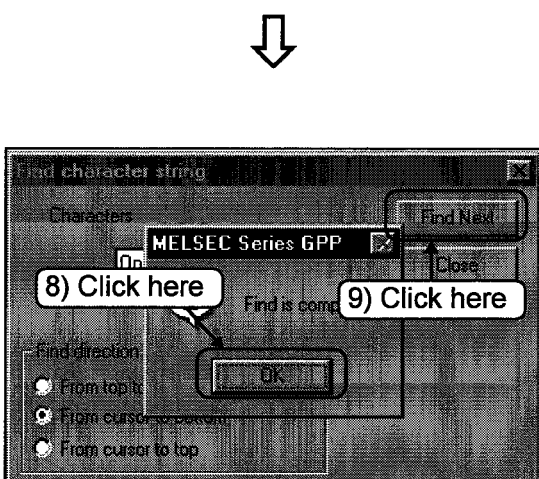
- 6) Click the **Find Next** button.



- 7) Searching starts.
The cursor moves to the circuit found first.

Hint!

Every time the **Find next** button is clicked, the cursor moves to circuits with the designated character string one after another.



- 8) If there is no circuit with the designated character string in the following steps, a dialog box to notice the end of search is displayed. Click the **OK** button.
- 9) Click the **Cancel** button.
Now, operation for searching character strings are completed.

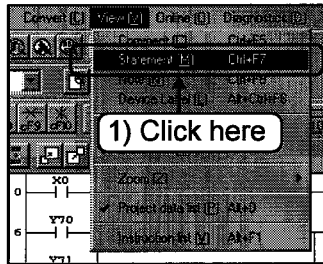
3

Offline operations

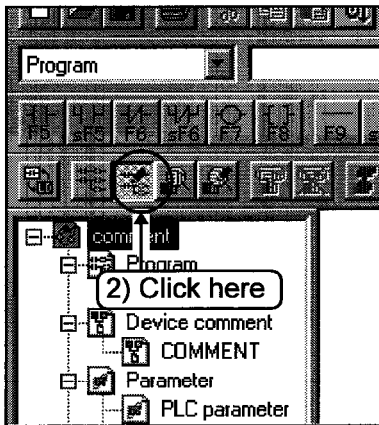
6.5 Correcting statements and notes


This section explains correcting statements and notes.

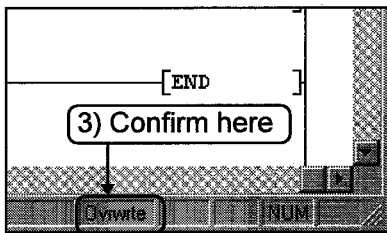
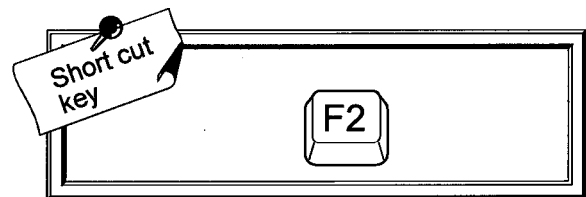
Display statements and notes on the circuit creation screen before correcting them so that the areas for correction can be easily checked.



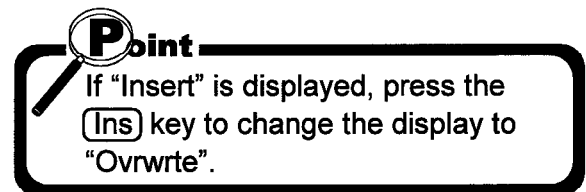
- 1) Click the [View]-[Statement], [Note] menu.
Statements and notes are displayed on the circuit creation screen.




- 2) Click  on the tool bar to switch to write mode.



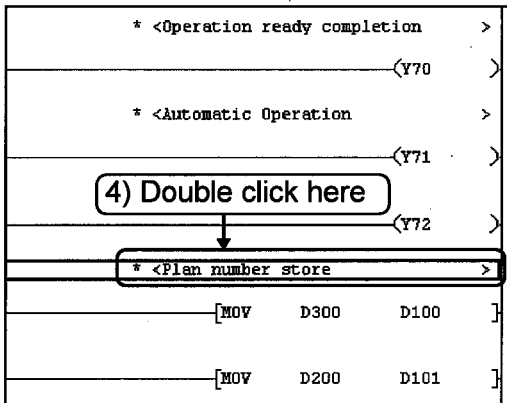
- 3) Confirm that "Ovrwrite" is displayed at the lower right of the screen



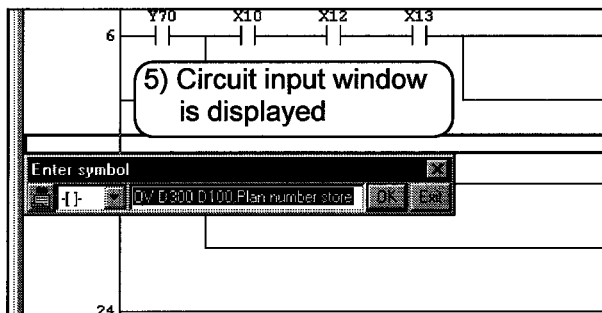
If "Insert" is displayed, press the  key to change the display to "Ovrwrite".

To the following page //

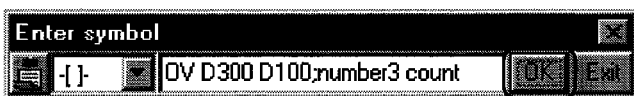
From previous page



4) Double click the statement or the note for correction.

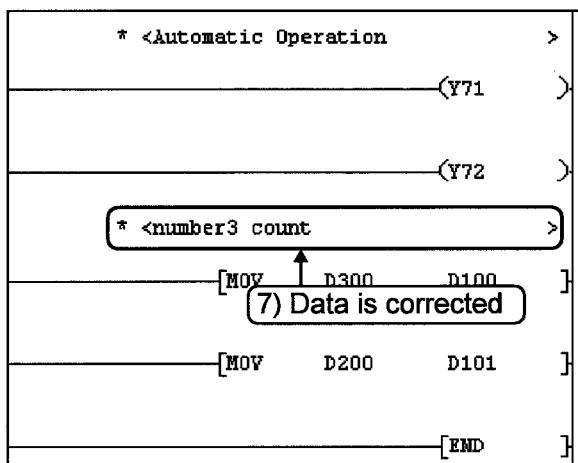


5) The circuit input window is displayed. Correct the statement or the note.



6) After completing correction, click the **OK** button.

6) Click here



7) The corrected statement or note is displayed.

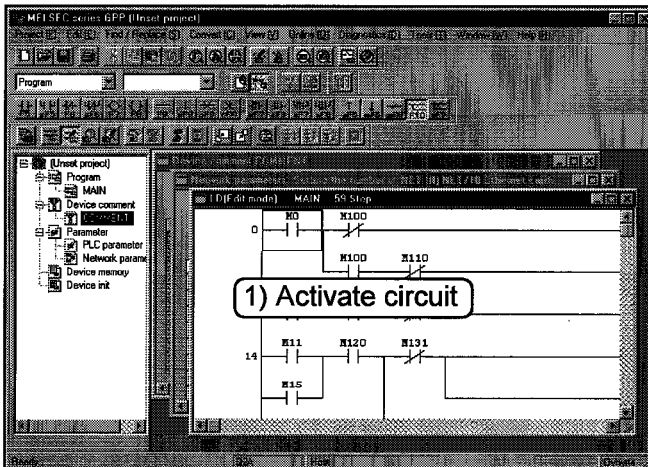
3 Offline operations

7 Printing

Before debugging a program and its contacts, coils and devices on the desk, print them out. This section explains various printing operations.

7.1 Printing a circuit

This section explains printing the circuit with its device comment, note and statement.



1) Activate the circuit to print.

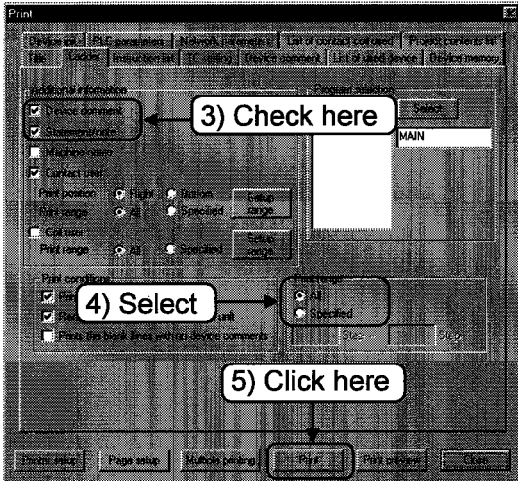


2) Click  on the tool bar.



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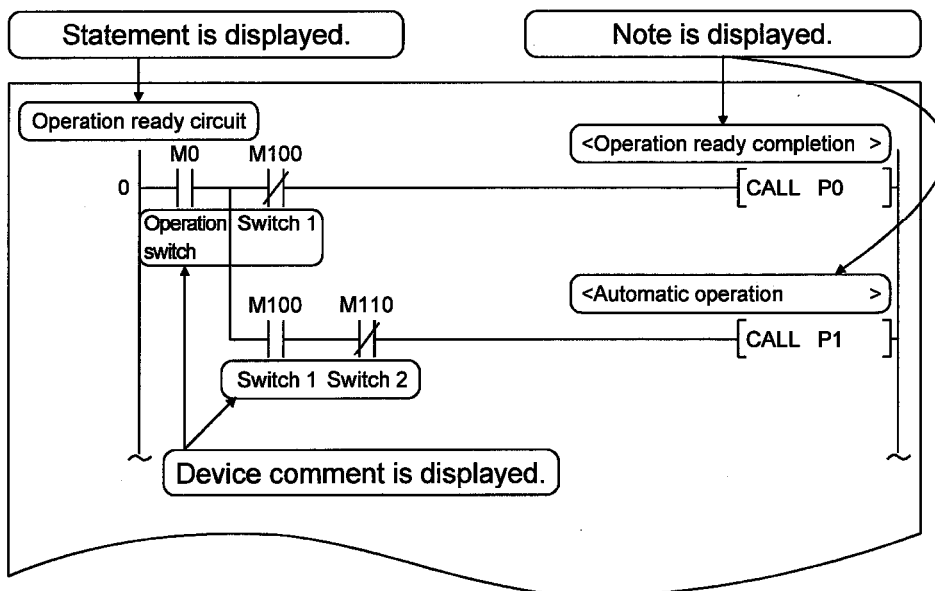


- 3) Put a check mark to the check box of the information added for printing. (e.g. Device comment, statement and note are added.)
- 4) Select the print range.
- 5) Click the **Print** button.
- 6) The set data is stored until the setting is changed.



Execute printing

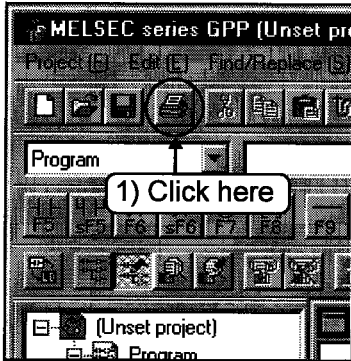
—The result of printing—



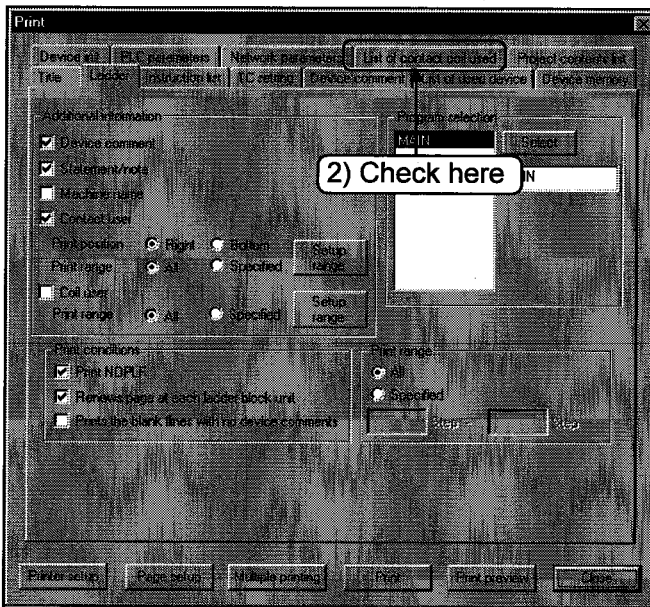
3 Offline operations

7.2 Printing contacts or coils in use

This section explains printing the circuit contacts and coils in use.



1) Click  on the tool bar.

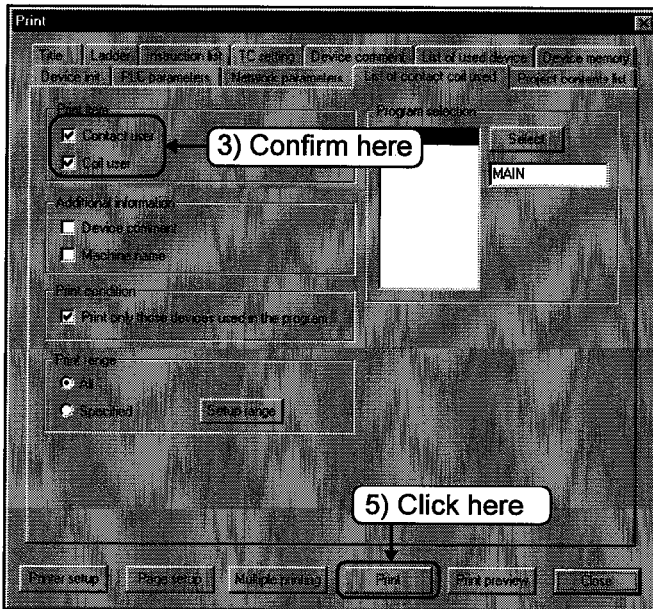


2) Click the “List of contact coil used” tab.



To the following page //

From previous page



- 3) Check that a check mark is put to the [Contact user] and [Coil user] check boxes.
(To print both contact and coil usage lists.)
- 4) Designate the print range.
- 5) Click the **Print** button.
- 6) The setting is stored until it is changed.

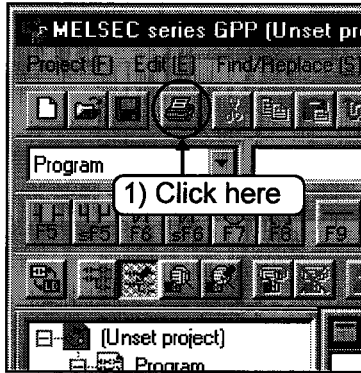


Execute printing

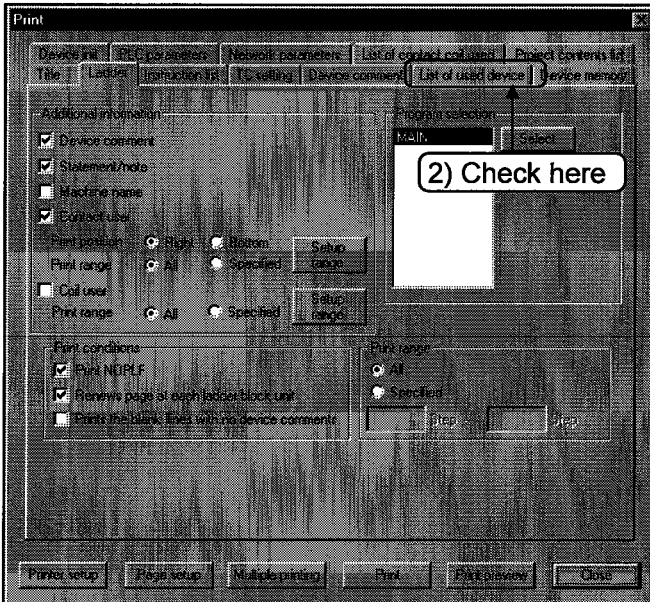
3 Offline operations

7.3 Printing the device in use

This section explains printing the circuit device.



1) Click  on the tool bar.

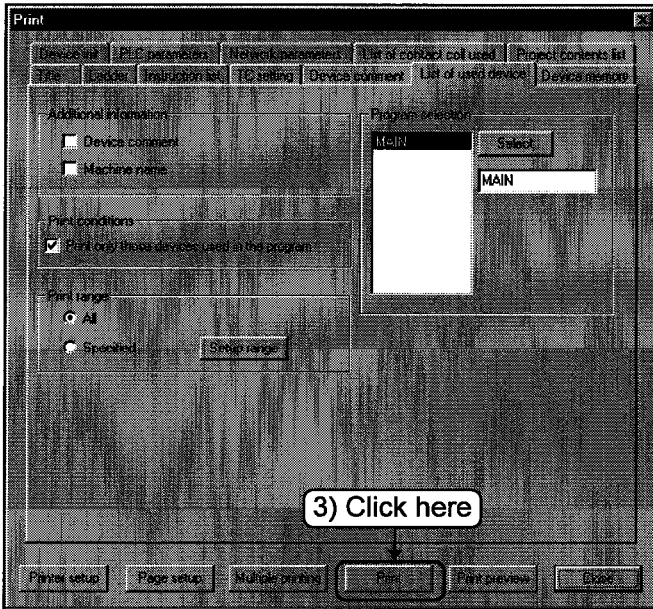


2) Click the "List of used device" tab.



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3) Click the **Print** button.



Hint!

- [Additional information]
Additional items to be printed other than contacts or coils are set here.
- [Print conditions]
Set for printing only the devices used in the program.
- [Print range]
Designates the program range for printing.
- [Program selection]
Program is selected for printing.



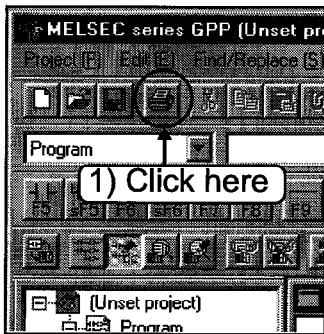
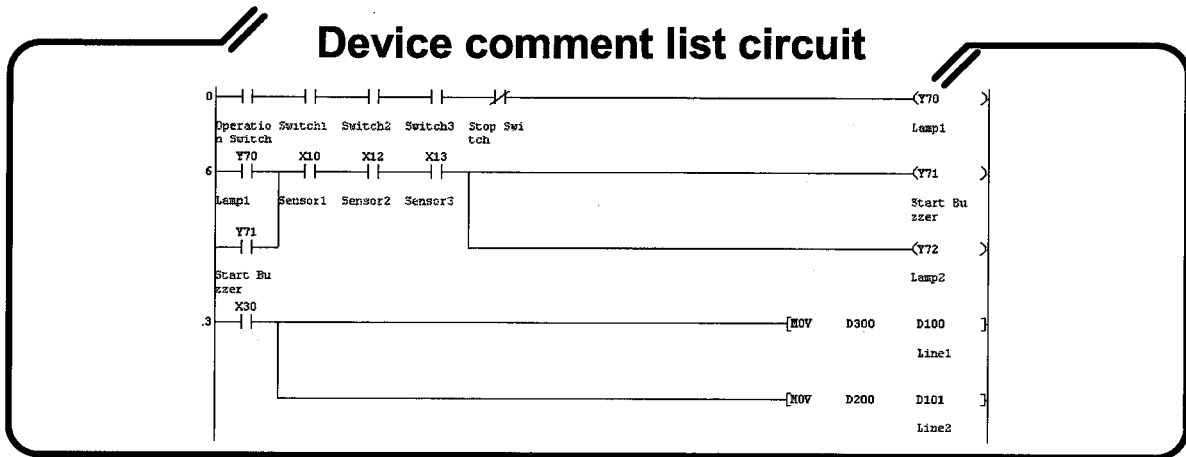
Execute printing

3 Offline operations

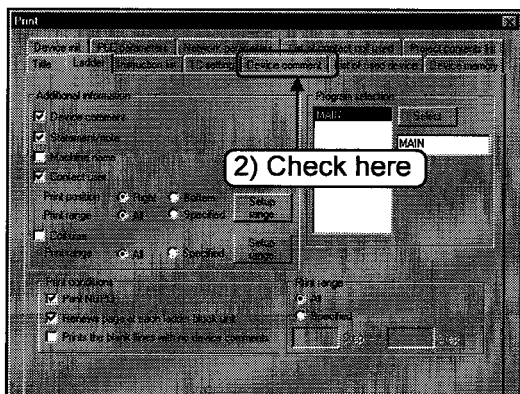
7.4 Printing a list of device comments in use

This section explains printing a list of device comments used in the following circuit.

This section explains printing a list of device comments used in the following circuit.



1) Click  on the tool bar.

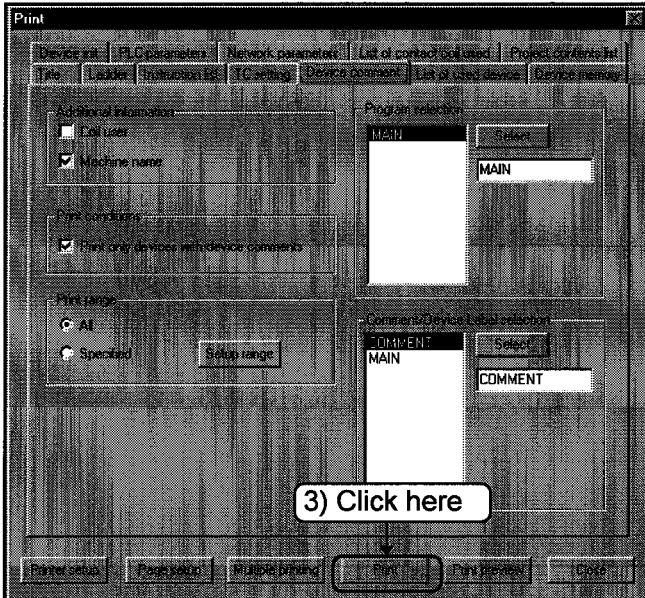


2) Click the [Device comment] tab.



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3) Click the **Print** button.

Hint!

- [Additional information]
Coil destination and device name are printed as required.
- [Print conditions]
Set this condition to print only the devices used in the program.
- [Print range]
Set the program range for printing.
- [Program selection]
Select program for printing.
After printing, click **Select**.
- [Comment/Device Label selection]
Select common comment or program comment for printing.
(Only if printing multiple files.)
After selecting, click **Select**.



Execute printing

Result of printing

Device comment list			
Device	Device comment	Dev Lbl	Coil user
X0	Operation switch		
X2	Switch 1		
X3	Switch 2		
X4	Switch 3		
X5	Stop switch		
X10	Sensor 1		
X12	Sensor 2		
X13	Sensor 3		

MEMO

A large, empty rectangular area with rounded corners, intended for writing a memo. The area is bounded by a thick black line and is completely blank.