

FC7 - <offline>

"String Parsing" Parse Incoming Strings
Name: STRNG_P **Family:** CP_BSP
Author: CJG **Version:** 1.0
Block version: 2
Time stamp Code: 3/1/2006 9:17:48 AMAM
Interface: 2/24/2006 2:49:20 PMPM
Lengths (block/logic/data): 04042 03690 00030

Name	Data Typ	Address	Comment
IN		0.0	
OUT		0.0	
IN_OUT		0.0	
TEMP		0.0	
Length	Int	0.0	
MovErr	Int	2.0	
Count	Int	4.0	
Over	Int	6.0	
RETURN		0.0	
RET_VAL	Bool	0.0	Done Parsi

Block: FC7 Parse Incoming String into Variables

Network: 1 Go to the Command to be Parsed

Go to the Command to be Parsed

```

SET
A   "GID_Done"
JC  GID

SET
A   "GLE_Done"
JC  GLE

SET
A   "GSV_Done"
JC  GSV

JU  END

```

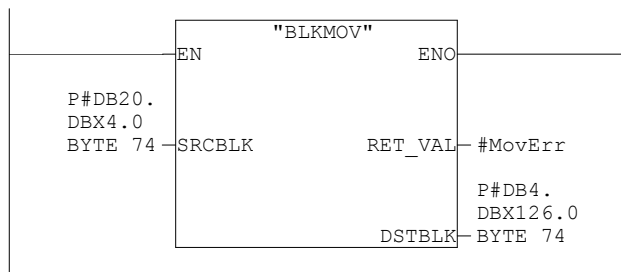
Network: 2 Start Parsing the GID Command

Start Parsing the GID Command

GID: SET

Network: 3 Bring in the Received GID String

Bring in the Received GID String, starting at 4 to ignore the command and first comma



Network: 4 Set the Original length for Strings.Working to 74.

Set the Original length for Strings.Working to 74.

```

SET
OPN  "Strings"
L    74          // Start String.Working Length at 74
T    DB4.DBB 125

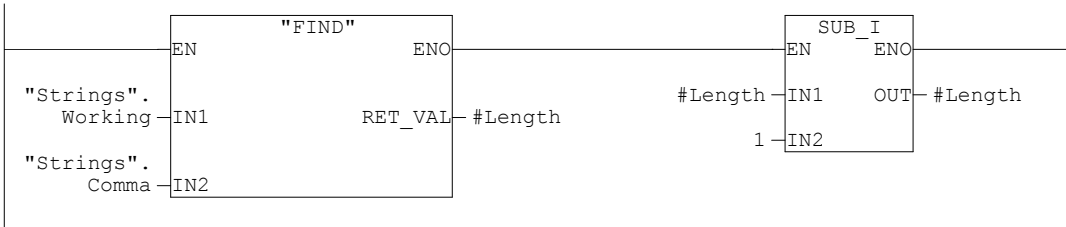
L    DB4.DBD 124

L    0          // Start at 0
T    #Length
T    #Over

```

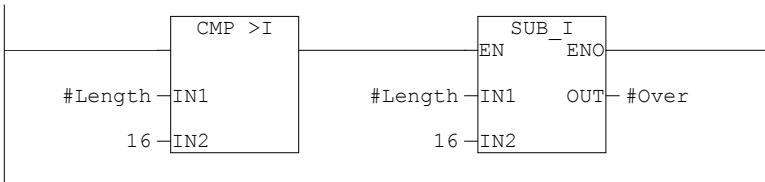
Network: 5 Find First Comma for UNIT_ID

Find Comma in Received String and Subtract 1 from length to account for comma.



Network: 6 Set Max String Length to 8 for Displaying on HMI

Set Max String Length to 8 for Displaying on HMI



Network: 7 Set Max and Actual lengths for UNIT_ID

Set Max and Actual lengths for UNIT_ID

```

SET
OPN  "Strings"
L    16          // Max Length for UNIT_ID
T    DB4.DBB  0

L    #Over
L    0
>I
JC   OVR7

L    #Length    // Length of UNIT_ID
T    DB4.DBB  1 // Put in UNIT String
T    #Over      // For Copy Length to String
JU   DON7

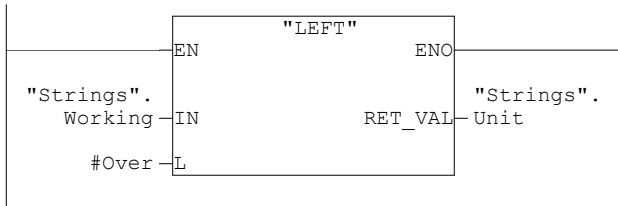
OVR7: L    16          // Length of 16
T    DB4.DBB  1 // Put in UNIT String
T    #Over      // For Copy Length to String
JU   DON7

DON7: L    DB4.DBD  0
NOP   0

```

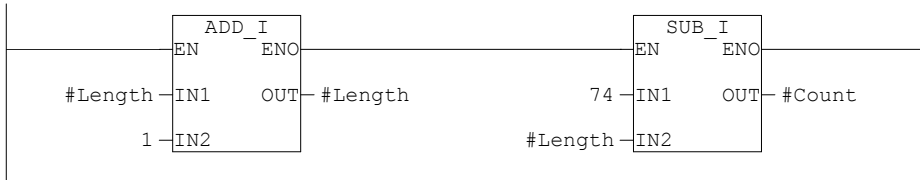
Network: 8 Move out UNIT_ID

Copy out the UNIT_ID



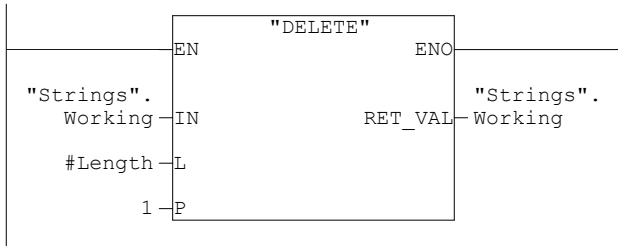
Network: 9 Adjust Length for UNIT_ID

Add 1 to Length to Delete Comma, and subtract length from original



Network: 10 Delete the UNIT_ID Length from Strings.Working

Delete the UNIT_ID Length from Strings.Working left side, starting at 1st character.



Network: 11 Set the Actual New length for Strings.Working

Set the New Actual Length of Strings.Working and Reset Length to 0.

```

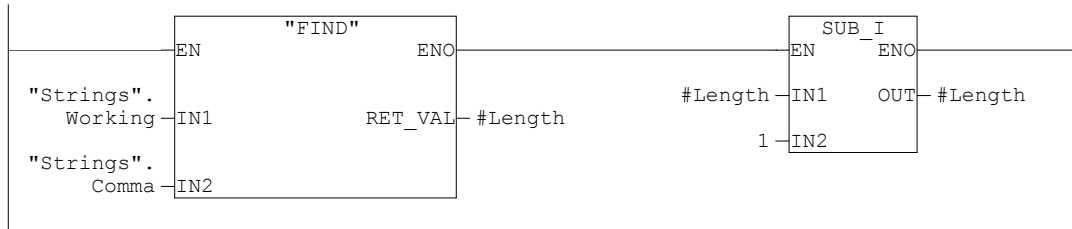
SET
OPN  "Strings"
L    #Count      // Current length of
T    DB4.DBB 125 // String.Working

L    DB4.DBD 124

L    0           // Reset to 0
T    #Length
T    #Over
  
```

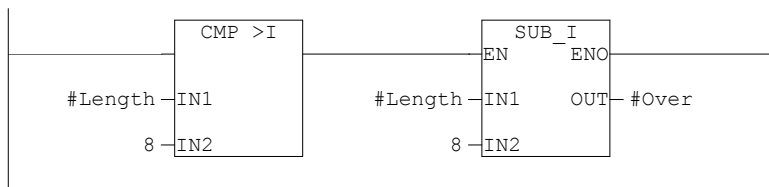
Network: 12 Find Second Comma for FIRM_REV

Find Comma in Received String and Subtract 1 from length to account for comma



Network: 13 Set Max String Length to 8 for Displaying on HMI

Set Max String Length to 8 for Displaying on HMI



Network: 14 Set Max and Actual lengths for FIRM_REV

Set Max and Actual lengths for FIRM_REV

```

SET
OPN "Strings"
L 10 // Max Length for FIRM_REV
T DB4.DBB 18

L #Over
L 0
>I
JC OVR8

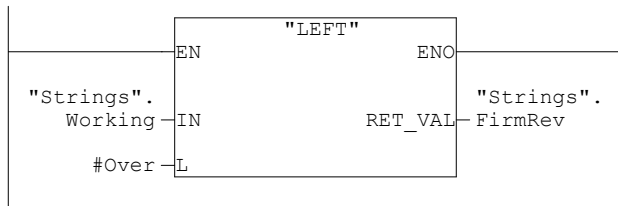
L #Length // Length of FIRM_REV
T DB4.DBB 19 // Put in FIRMREV String
T #Over // For Copy Length to String
JU DON8

OVR8: L 8 // Length of 8
T DB4.DBB 19 // Put in FIRMREV String
T #Over // For Copy Length to String
JU DON8

DON8: L DB4.DBD 18
NOP 0
  
```

Network: 15 Move out FIRM_REV

Copy out the FIRM_REV



Network: 16 Completed Parsing the GID Command

Completed Parsing the GID Command

END
 (JMP)

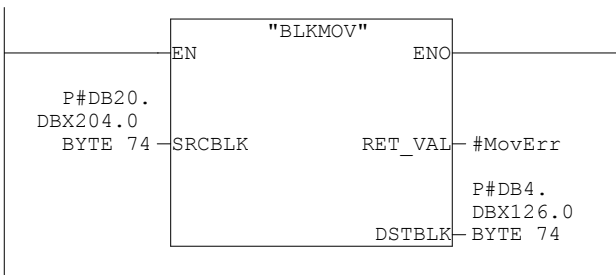
Network: 17 Start Parsing the GLE Command

Start Parsing the GLE Command

GLE: SET

Network: 18 Bring in the Received GLE String

Bring in the Received GLE String, starting at 204 to ignore the command and first comma



Network: 19 Set the Original length for Strings.Working to 74.

Set the Original length for Strings.Working to 74.

```

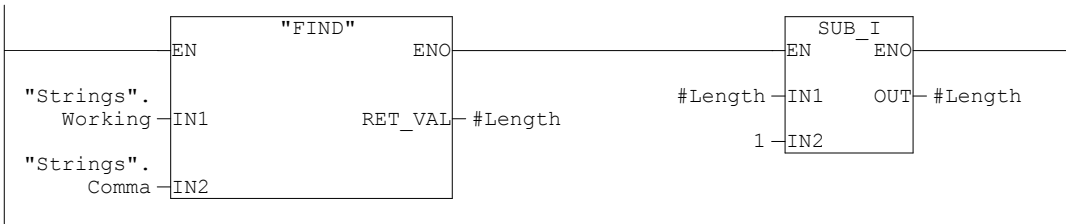
SET
OPN "Strings"
L 74 // Start String.Working Length at 74
T DB4.DBB 125

L DB4.DBD 124

L 0 // Start at 0
T #Length
T #Over
  
```

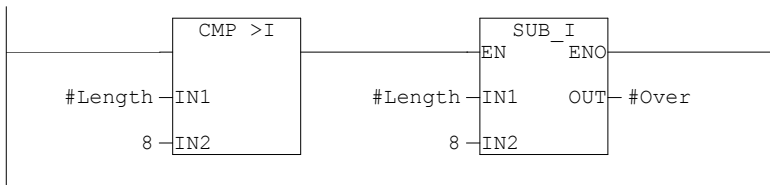
Network: 20 Find First Comma for CNTL_ERR

Find Comma in Received String and Subtract 1 from length to account for comma.



Network: 21 Set Max String Length to 8 for Displaying on HMI

Set Max String Length to 8 for Displaying on HMI



Network: 22 Set Max and Actual lengths for CNTL_ERR

Set Max and Actual lengths for CNTL_ERR

```

SET
OPN  "Strings"
L    20          // Max Length for CNTL_ERR
T    DB4.DBB    30

L    #Over
L    0
>I
JC   OVR9

L    #Length     // Length of CNTL_ERR
T    DB4.DBB    31 // Put in ERR String
T    #Over       // For Copy Length to String
JU   DON9

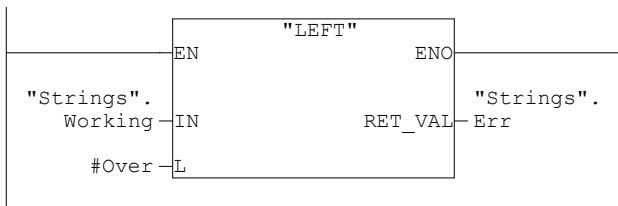
OVR9: L    8          // Length of 8
      T    DB4.DBB    31 // Put in ERR String
      T    #Over       // For Copy Length to String
      JU   DON9

DON9: L    DB4.DBD    30
      NOP    0

```

Network: 23 Move out CNTL_ERR

Copy out the CNTL_ERR



Network: 24 Completed Parsing the GLE Command

Completed Parsing the GLE Command



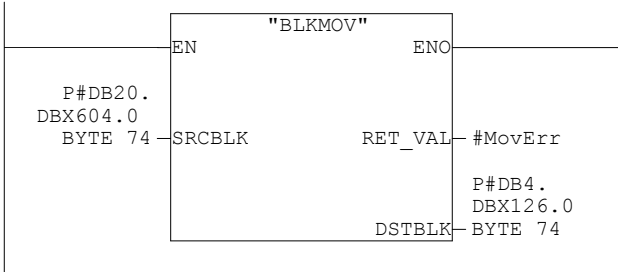
Network: 25 Start Parsing the GSV Command

Start Parsing the GSV Command

GSV: SET

Network: 26 Bring in the Received GSV String

Bring in the Received GSV String, starting at 604 to ignore the command and first comma



Network: 27 Set the Original length for Strings.Working to 74.

Set the Original length for Strings.Working to 74.

```

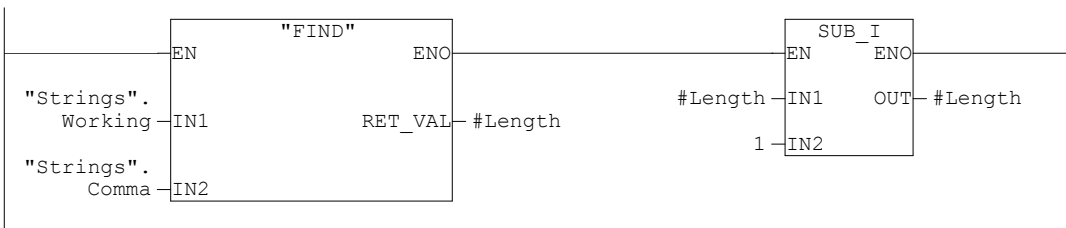
SET
OPN "Strings"
L 74 // Start String.Working Length at 74
T DB4.DBB 125

L DB4.DBD 124

L 0 // Start at 0
T #Length
T #Over
  
```

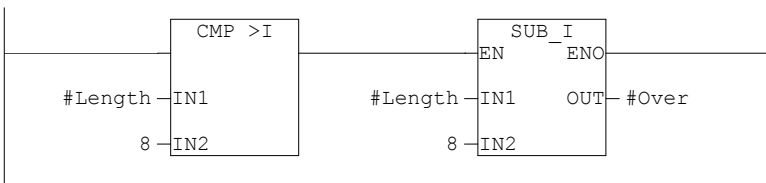
Network: 28 Find First Comma for SPEED

Find Comma in Received String and Subtract 1 from length to account for comma.



Network: 29 Set Max String Length to 8 for Displaying on HMI

Set Max String Length to 8 for Displaying on HMI



Network: 30 Set Max and Actual lengths for SPEED

Set Max and Actual lengths for SPEED

```

SET
OPN "Strings"
L 10 // Max Length for SPEED
T DB4.DBB 52

L #Over
L 0
>I
JC OVR1

L #Length // Length of SPEED
T DB4.DBB 53 // Put in SPD String
T #Over // For Copy Length to String
JU DON1

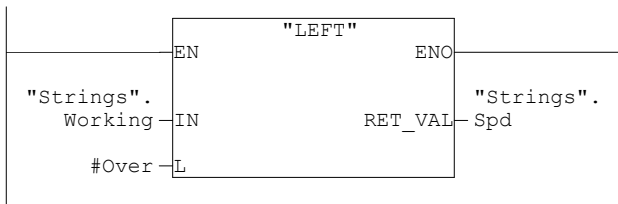
OVR1: L 8 // Length of 8
T DB4.DBB 53 // Put in SPD String
T #Over // For Copy Length to String
JU DON1

DON1: L DB4.DBD 52
NOP 0

```

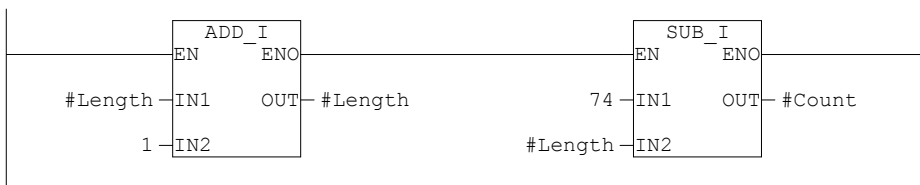
Network: 31 Move out SPEED

Copy out the SPEED



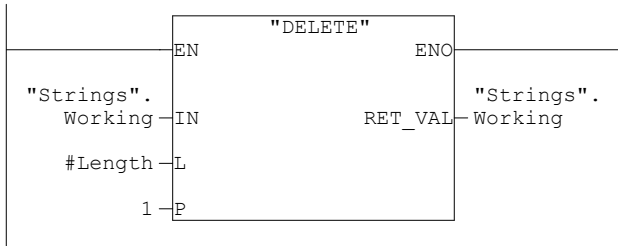
Network: 32 Adjust Length for SPEED

Add 1 to Length to Delete Comma, and subtract length from original



Network: 33 Delete the SPEED Length from Strings.Working

Delete the SPEED Length from Strings.Working left side, starting at 1st character.



Network: 34 Set the Actual New length for Strings.Working

Set the New Actual Length of Strings.Working and Reset Length to 0.

```

SET
OPN  "Strings"
L    #Count      // Current length of
T    DB4.DBB 125 // String.Working

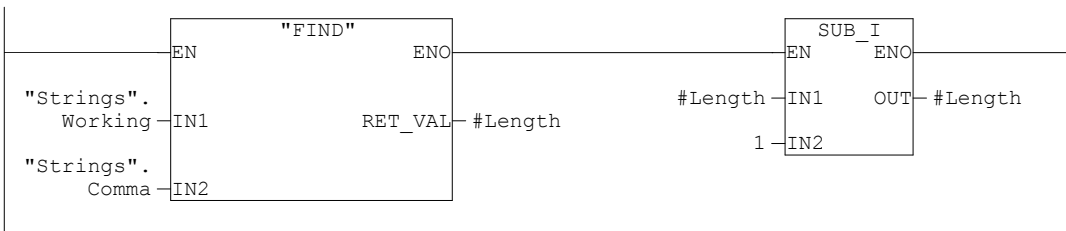
L    DB4.DBD 124

L    0           // Reset to 0
T    #Length
T    #Over

```

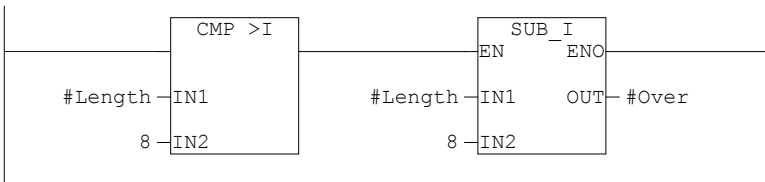
Network: 35 Find Second Comma for TORQUE

Find Comma in Received String and Subtract 1 from length to account for comma



Network: 36 Set Max String Length to 8 for Displaying on HMI

Set Max String Length to 8 for Displaying on HMI



Network: 37 Set Max and Actual lengths for TORQUE

Set Max and Actual lengths for TORQUE

```

SET
OPN  "Strings"
L    10          // Max Length for TORQUE
T    DB4.DBB 64

L    #Over
L    0
>I
JC   OVR2

L    #Length     // Length of TORQUE
T    DB4.DBB 65 // Put in TRQ String
T    #Over       // For Copy Length to String
JU   DON2

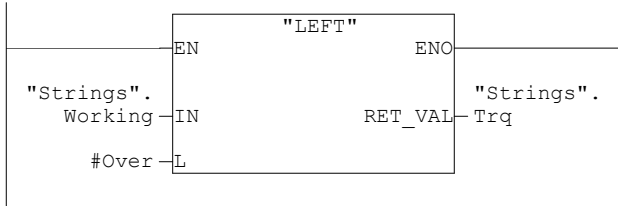
OVR2: L    8      // Length of 8
      T    DB4.DBB 65 // Put in TRQ String
      T    #Over   // For Copy Length to String
      JU   DON2

DON2: L    DB4.DBD 64
      NOP  0

```

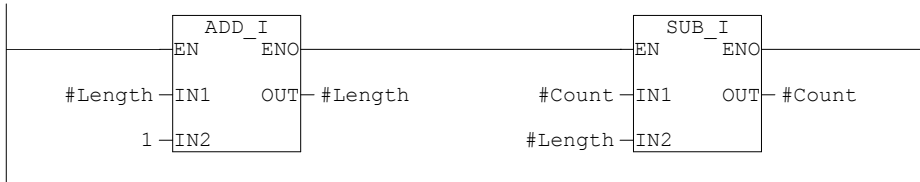
Network: 38 Move out TORQUE

Copy out the TORQUE



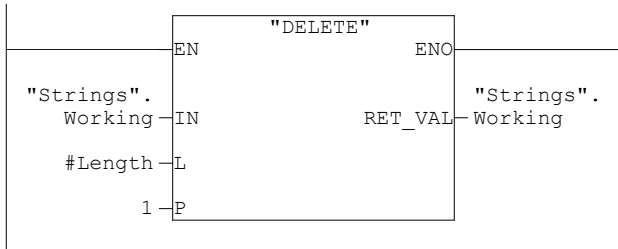
Network: 39 Adjust Length for TORQUE

Add 2 to Length to Delete Comma, and subtract length from original



Network: 40 Delete the TORQUE Length from Strings.Working

Delete the TORQUE Length from Strings.Working left side, starting at 1st character.



Network: 41 Set the Actual New length for Strings.Working

Set the New Actual Length of Strings.Working and Reset Length to 0.

```

SET
OPN  "Strings"
L    #Count      // Current length of
T    DB4.DBB 125 // String.Working

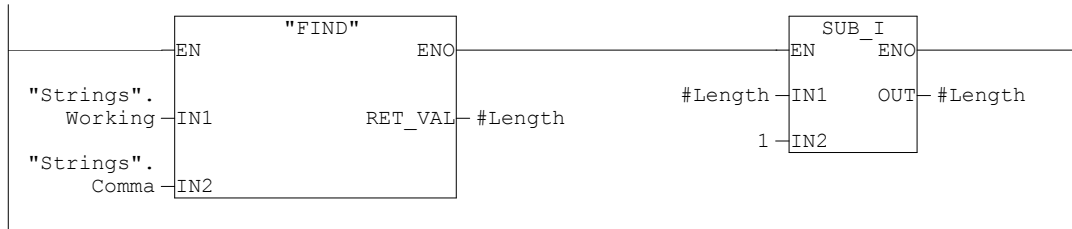
L    DB4.DBD 124

L    0           // Reset Length to 0
T    #Length
T    #Over

```

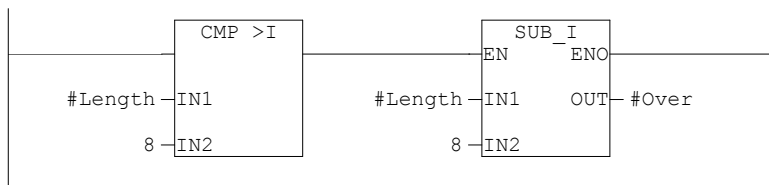
Network: 42 Find Third Comma for MOTOR ERROR

Find Comma in Received String and Subtract 1 from length to account for comma



Network: 43 Set Max String Length to 8 for Displaying on HMI

Set Max String Length to 8 for Displaying on HMI



Network: 44 Set Max and Actual lengths for MOTOR ERROR

Set Max and Actual lengths for MOTOR ERROR

```

SET
OPN "Strings"
L 10 // Max Length for MOTOR ERROR
T DB4.DBB 76

L #Over
L 0
>I
JC OVR3

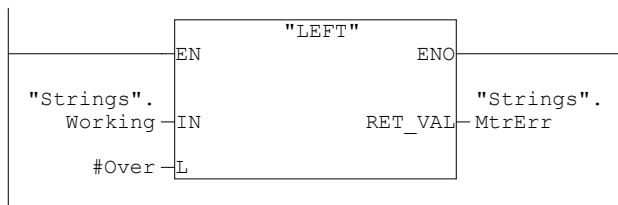
L #Length // Length of MOTOR ERROR
T DB4.DBB 77 // Put in MTRERR String
T #Over // For Copy Length to String
JU DON3

OVR3: L 8 // Length of 8
T DB4.DBB 77 // Put in MTRERR String
T #Over // For Copy Length to String
JU DON3

DON3: L DB4.DBD 76
NOP 0
  
```

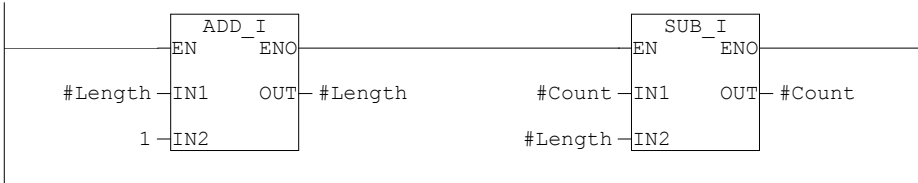
Network: 45 Move out MOTOR ERROR

Copy out the MOTOR ERROR



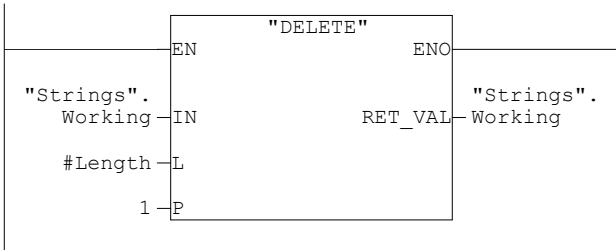
Network: 46 Adjust Length for MOTOR ERROR

Add 1 to Length to Delete Comma, and subtract length from original



Network: 47 Delete the MOTOR ERROR Length from Strings.Working

Delete the MOTOR ERROR Length from Strings.Working left side, starting at 1st character.



Network: 48 Set the Actual New length for Strings.Working

Set the New Actual Length of Strings.Working and Reset Length to 0.

```

SET
OPN  "Strings"
L    #Count      // Current length of
T    DB4.DBB 125 // String.Working

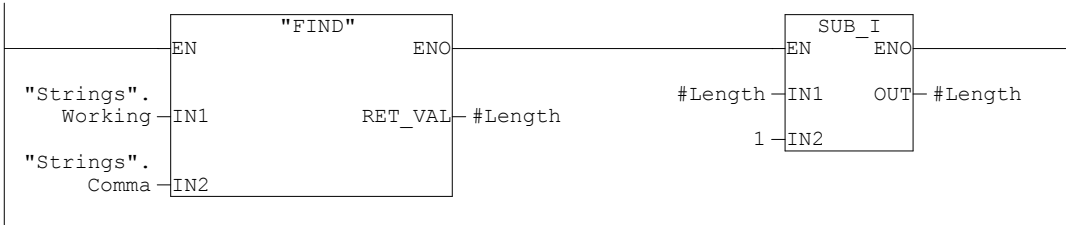
L    DB4.DBD 124

L    0           // Reset Length to 0
T    #Length
T    #Over

```

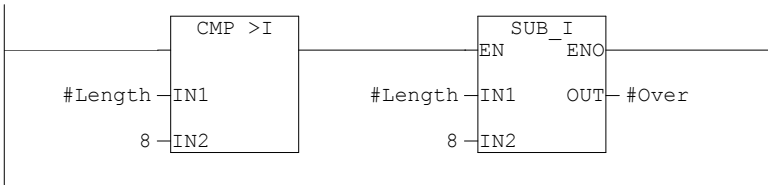
Network: 49 Find Fifth Comma for SHEAR RATE

Find Comma in Received String and Subtract 1 from length to account for comma



Network: 50 Set Max String Length to 8 for Displaying on HMI

Set Max String Length to 8 for Displaying on HMI



Network: 51 Set Max and Actual lengths for SHEAR RATE

Set Max and Actual lengths for SHEAR RATE

```

SET
OPN  "Strings"
L    10          // Max Length for SHEAR RATE
T    DB4.DBB    88

L    #Over
L    0
>I
JC   OVR4

L    #Length     // Length of SHEAR RATE
T    DB4.DBB    89 // Put in SRATE String
T    #Over       // For Copy Length to String
JU   DON4

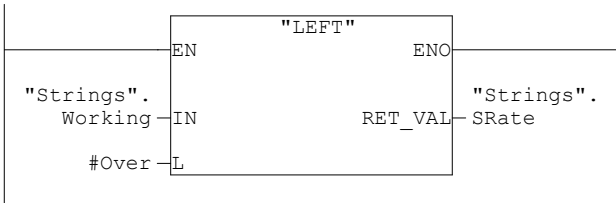
OVR4: L    8          // Length of 8
      T    DB4.DBB    89 // Put in SRATE String
      T    #Over       // For Copy Length to String
      JU   DON4

DON4: L    DB4.DBD    88
      NOP    0

```

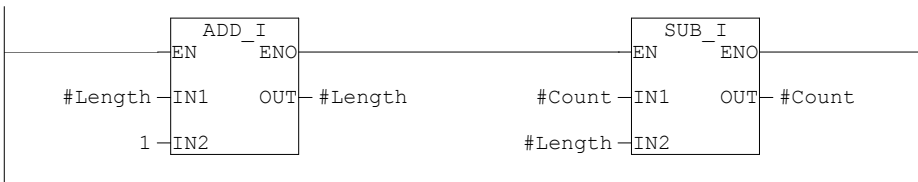
Network: 52 Move out SHEAR RATE

Copy out the SHEAR RATE



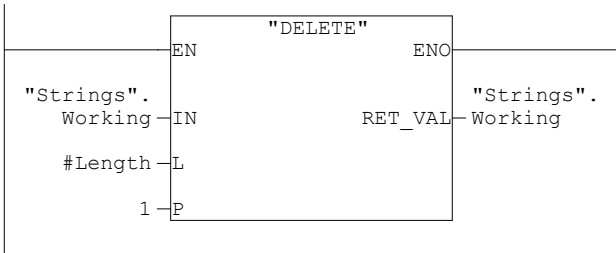
Network: 53 Adjust Length for SHEAR RATE

Add 2 to Length to Delete Comma, and subtract length from original



Network: 54 Delete the SHEAR RATE Length from Strings.Working

Delete the SHEAR RATE Length from Strings.Working left side, starting at 1st character.



Network: 55 Set the Actual New length for Strings.Working

Set the New Actual Length of Strings.Working and Reset Length to 0.

```

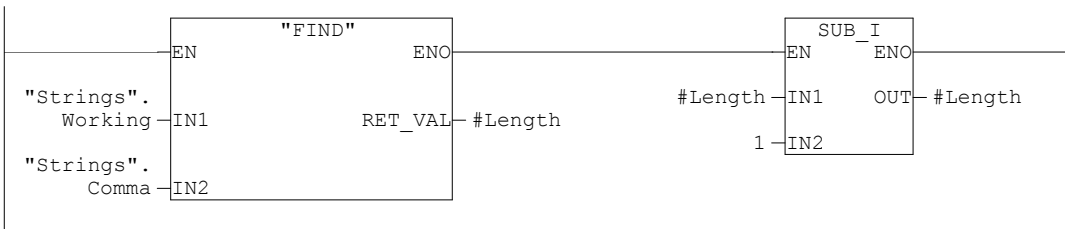
SET
OPN "Strings"
L #Count // Current length of
T DB4.DBB 125 // String.Working

L DB4.DBD 124

L 0 // Reset Length to 0
T #Length
T #Over
  
```

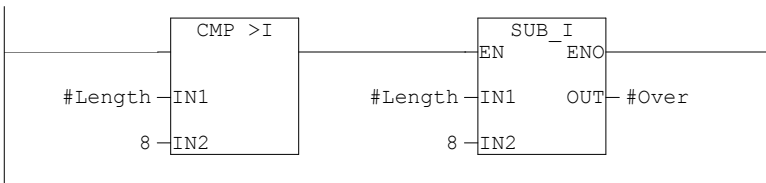
Network: 56 Find Sixth Comma for SHEAR STRESS

Find Comma in Received String and Subtract 1 from length to account for comma



Network: 57 Set Max String Length to 8 for Displaying on HMI

Set Max String Length to 8 for Displaying on HMI



Network: 58 Set Max and Actual lengths for SHEAR STRESS

Set Max and Actual lengths for SHEAR STRESS

```

SET
OPN "Strings"
L 10 // Max Length for SHEAR STRESS
T DB4.DBB 100

L #Over
  
```

```

L      0
>I
JC     OVR5

L      #Length      // Length of SHEAR STRESS
T      DB4.DBB 101  // Put in SSTRS String
T      #Over        // For Copy Length to String
JU     DON5

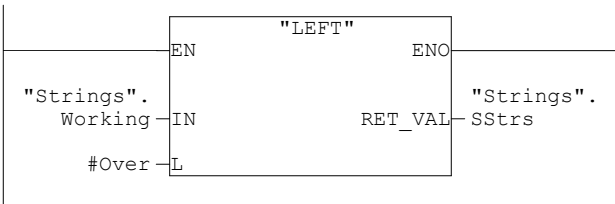
OVR5: L      8      // Length of 8
T      DB4.DBB 101  // Put in SSTRS String
T      #Over        // For Copy Length to String
JU     DON5

DON5: L      DB4.DBD 100
NOP    0

```

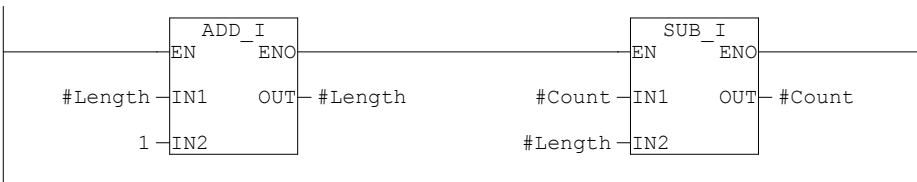
Network: 59 Move out SHEAR STRESS

Copy out the SHEAR STRESS



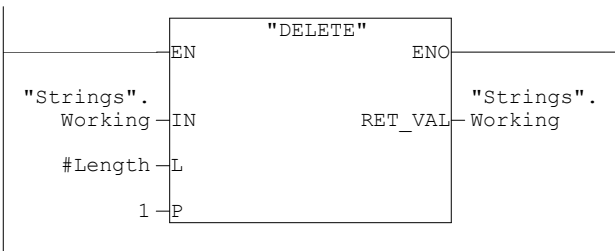
Network: 60 Adjust Length for SHEAR STRESS

Add 2 to Length to Delete Comma, and subtract length from original



Network: 61 Delete the SHEAR STRESS Length from Strings.Working

Delete the SHEAR STRESS Length from Strings.Working left side, starting at 1st character.



Network: 62 Set the Actual New length for Strings.Working

Set the New Actual Length of Strings.Working and Reset Length to 0.

```

SET
OPN   "Strings"
L     #Count      // Current length of
T     DB4.DBB 125 // String.Working

L     DB4.DBD 124

```

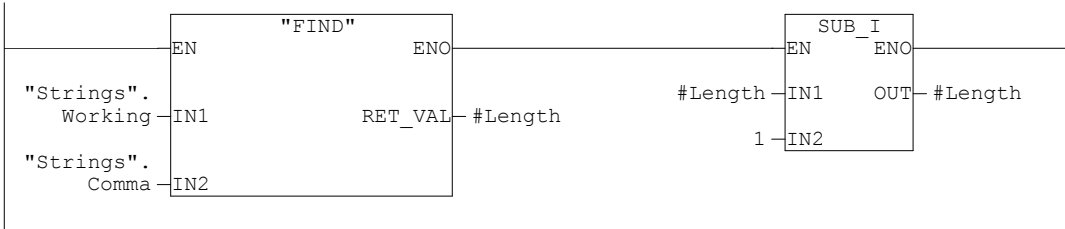
```

L 0 // Reset Length to 0
T #Length
T #Over

```

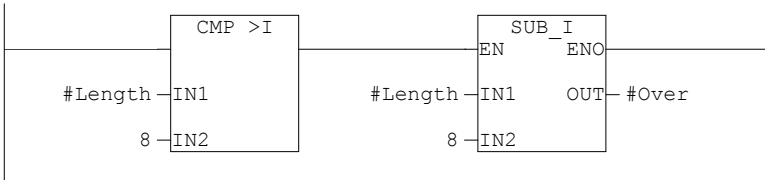
Network: 63 Find Seventh Comma for VISCOSITY

Find Comma in Received String and Subtract 1 from length to account for comma



Network: 64 Set Max String Length to 8 for Displaying on HMI

Set Max String Length to 8 for Displaying on HMI



Network: 65 Set Max and Actual lengths for VISCOSITY

Set Max and Actual lengths for VISCOSITY

```

SET
OPN "Strings"
L 10 // Max Length for VISCOSITY
T DB4.DBB 112

L #Over
L 0
>I
JC OVR6

L #Length // Length of VISCOSITY
T DB4.DBB 113 // Put in VISC String
T #Over // For Copy Length to String
JU DON6

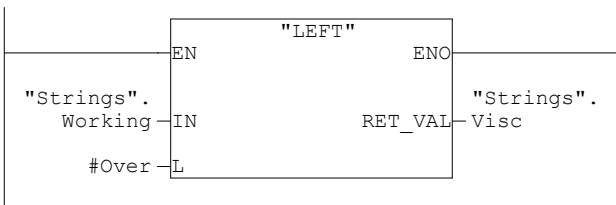
OVR6: L 8 // Length of 8
T DB4.DBB 113 // Put in VISC String
T #Over // For Copy Length to String
JU DON6

DON6: L DB4.DBD 112
NOP 0

```

Network: 66 Move out VISCOSITY

Copy out the VISCOSITY



Network: 67 Completed Parsing the GSV Command
--

Completed Parsing the GSV Command

END

——< JMP >——|

Network: 68 Set the Return Value to show String Parsing was Completed.

Set the Return Value to show String Parsing was Completed.
--

```
END: S      #RET_VAL  
     BE
```