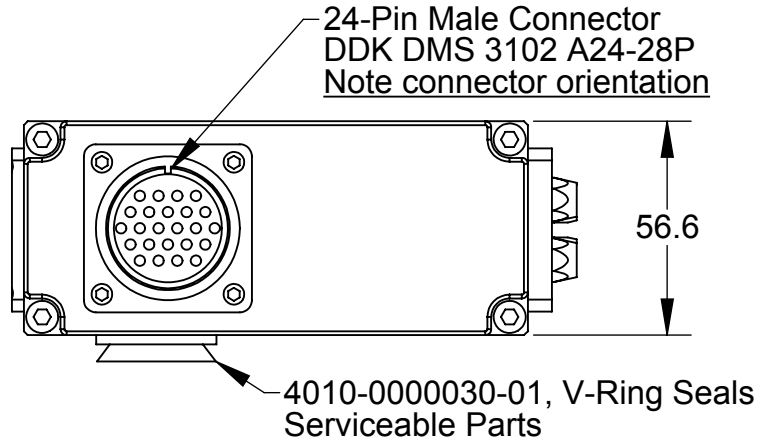


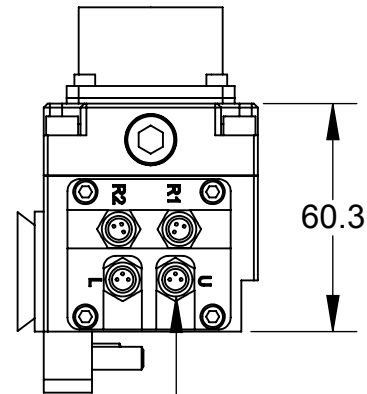
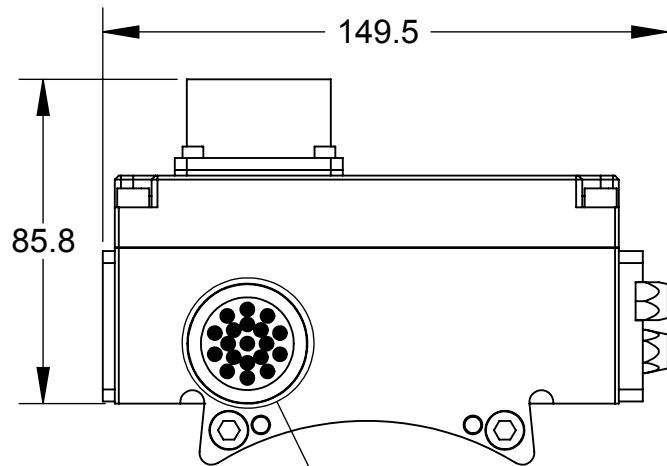
"DANGER!" - Electrical Shock Hazard

This module has a Voltage of 50V or greater, NO contact should be attempted before removing power. This especially includes separation or insertion of the mating connectors or any contact with the tool changer or its components.

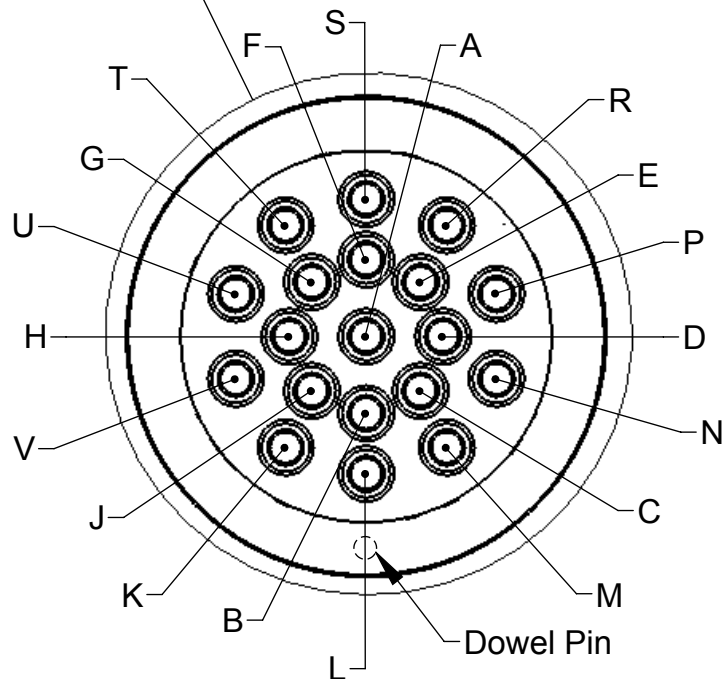
Rev.	Description	Initiator	Date
01	Initial design.	WB	3/19/2010
02	Per customer request, changed the orientation of the 24-Pin connector on the Master and Tool.	WB	4/29/2010
03	Corrected schematic of NPN sensors on Sheet 3. Changed Note 2 on Sheet 3 to emphasize that SA10 Module can only work with NPN sensors.	WB	6/14/2010
04	Eco 13646: Removed Cleat Assemblies from the Model and Drawing. Added Electrical Shock Hazard Note.	CF	4/12/2016



9121-SA10-M



RTL, Lock, and Unlock
Sensor Connectors
4X Turck MFKS 3

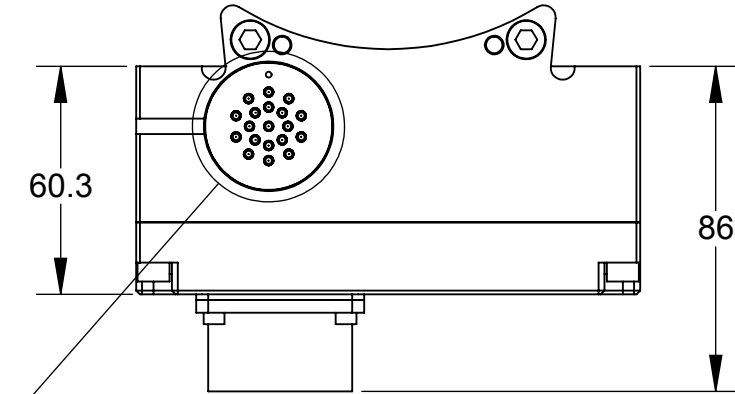
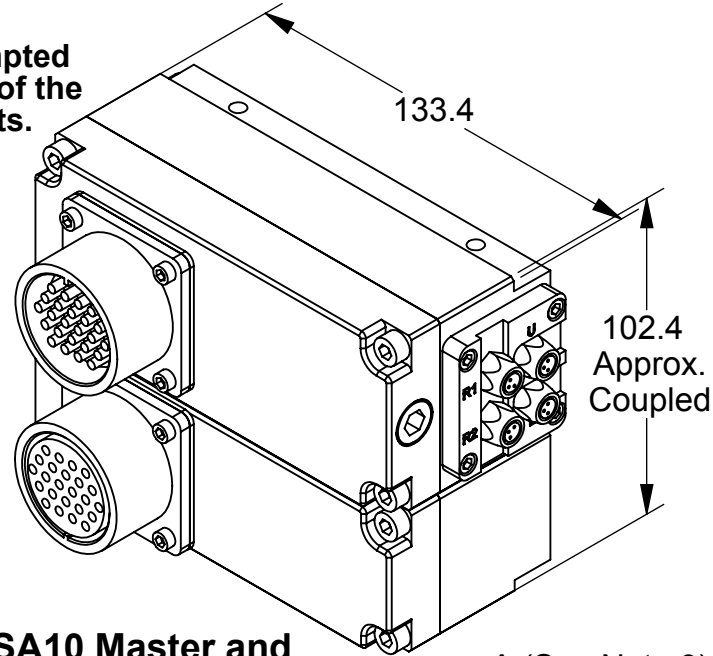


Master Side Pin Block (See Table 1)

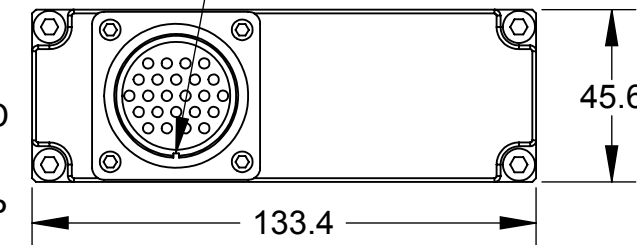
DETAIL A
SCALE 2 : 1

**SA10 Master and
Tool Coupled**

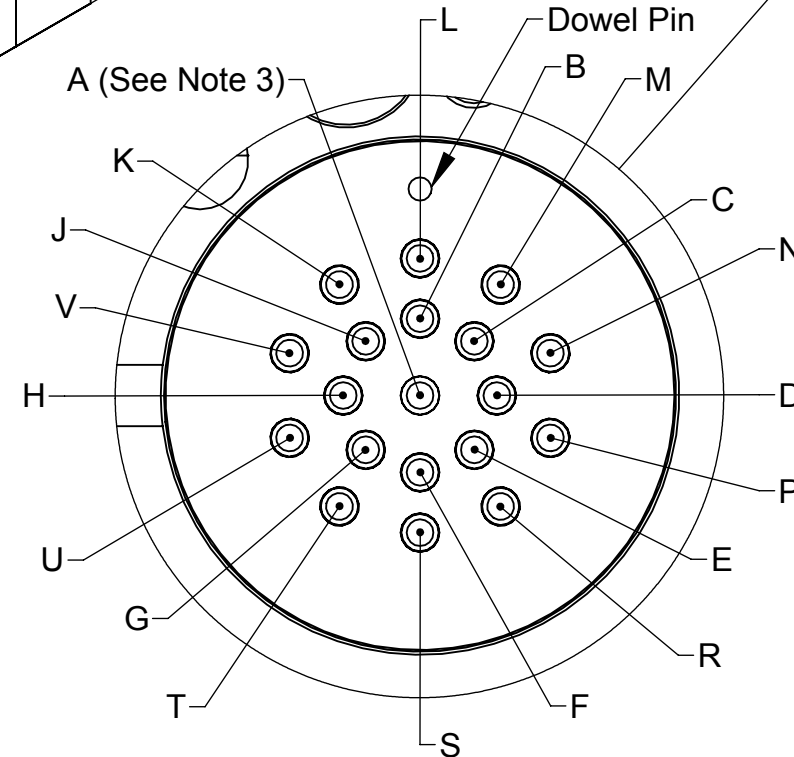
Table 1	
19-Pin Pin Block	
A	0V
B	Spare 1
C	Spare 2
D	Spare 3
E	Spare 4
F	Spare 5
G	Spare 6
H	Spare 7
J	Spare 8
K	Spare 9
L	Spare 10
M	Spare 11
N	Spare 12
P	Spare 13
R	Spare 14
S	Spare 15
T	Spare 16
U	Spare 17
V	Spare 18



24-Pin Female Connector
DDK DMS 3102 A24-28S
Note connector orientation



9121-SA10-T



Tool Side Pin Block (See Table 1)

DETAIL B
SCALE 2 : 1

Notes:

- Connector details and pin assignment information on Sheet 2.
- Electrical schematic and functional notes on Sheet 3.
- Pin A is first-mate last-break.

NOTES: UNLESS OTHERWISE SPECIFIED.

DO NOT SCALE DRAWING.
ALL DIMENSIONS ARE IN MILLIMETERS.



3rd ANGLE PROJECTION

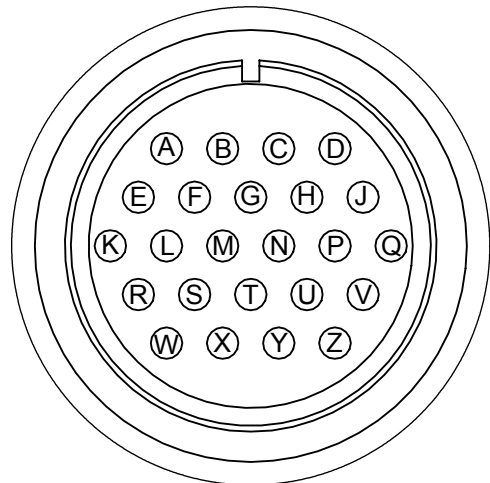


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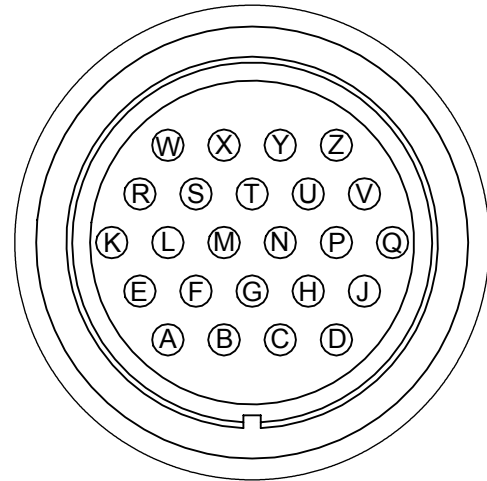
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CHECKED BY: D. Mushow, 3/19/10		SA10 Module Customer Drawing	
PROJECT # 100315-2	SHEET 1 OF 3	SCALE 2:3	SIZE B
DRAWING NUMBER 9630-20-SA10		REVISION 04	

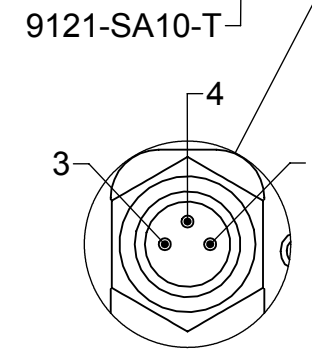
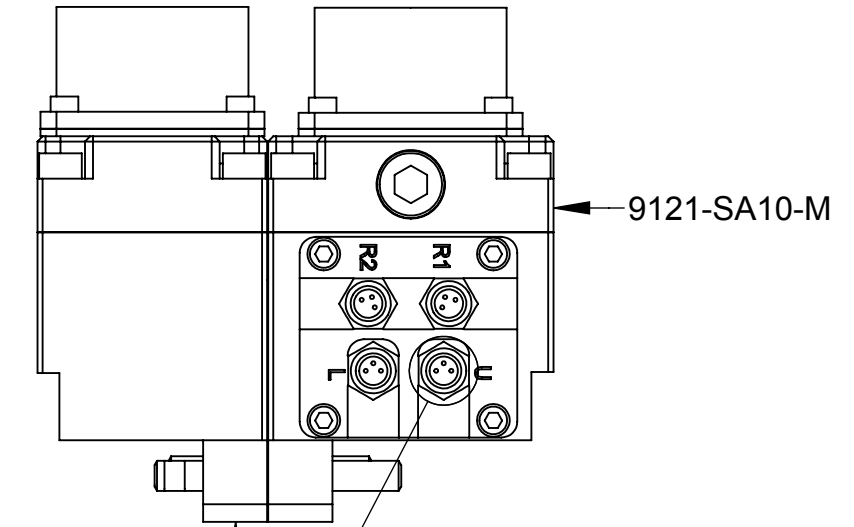
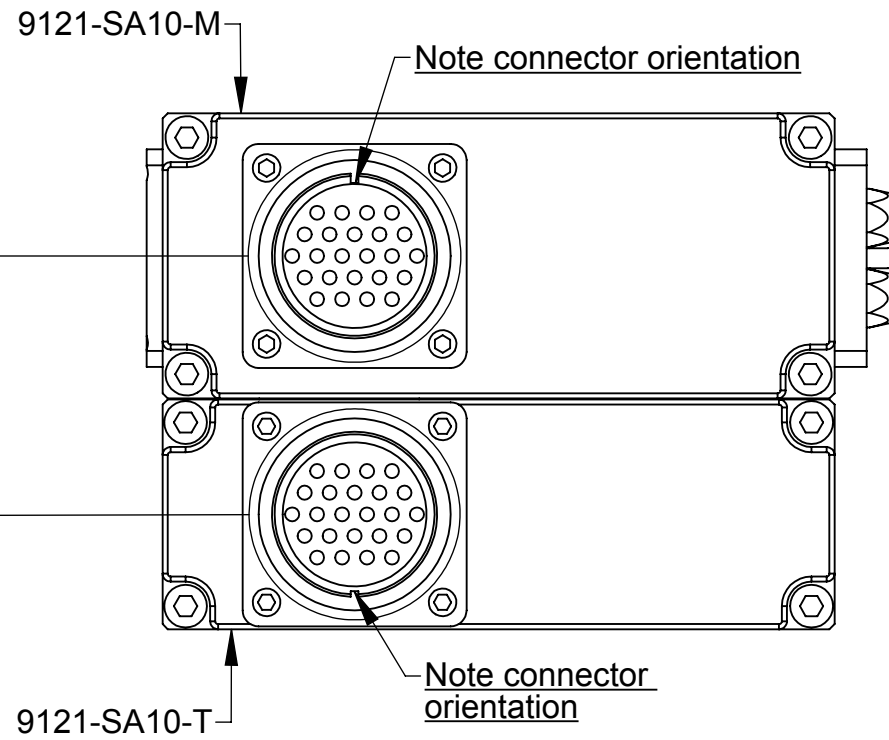
Rev.	Description	Initiator	Date
-	See Sheet1	-	-



24-Pin Male Connector
DDK DMS 3102 A24-28P
Face View
Scale 3:2



24-Pin Female Connector
DDK DMS 3102 A24-28S
Face View
Scale 3:2



Sensor Connectors
4X Turck MFKS
Face View
Scale 2:1

Table 3	
Sensor Connectors	
1	V+
3	V-
4	Output

Table 2		
Pin	24-Pin Male Connector Master Side	24-Pin Female Connector Tool Side
A	0V	0V
B	Spare 1	Spare 1
C	Spare 2	Spare 2
D	Spare 3	Spare 3
E	Spare 4	Spare 4
F	Spare 5	Spare 5
G	Spare 6	Spare 6
H	Spare 7	Spare 7
J	Spare 8	Spare 8
K	Spare 9	Spare 9
L	Spare 10	Spare 10
M	Spare 11	Spare 11
N	Spare 12	Spare 12
P	Spare 13	Spare 13
Q	Spare 14	Spare 14
R	Spare 15	Spare 15
S	Spare 16	Spare 16
T	Spare 17	Spare 17
U	Spare 18	Spare 18
V	N/C	N/C
W	Locked I/P	N/C
X	Unlocked I/P	N/C
Y	RTL I/P	N/C
Z	24V	N/C

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3rd ANGLE PROJECTION



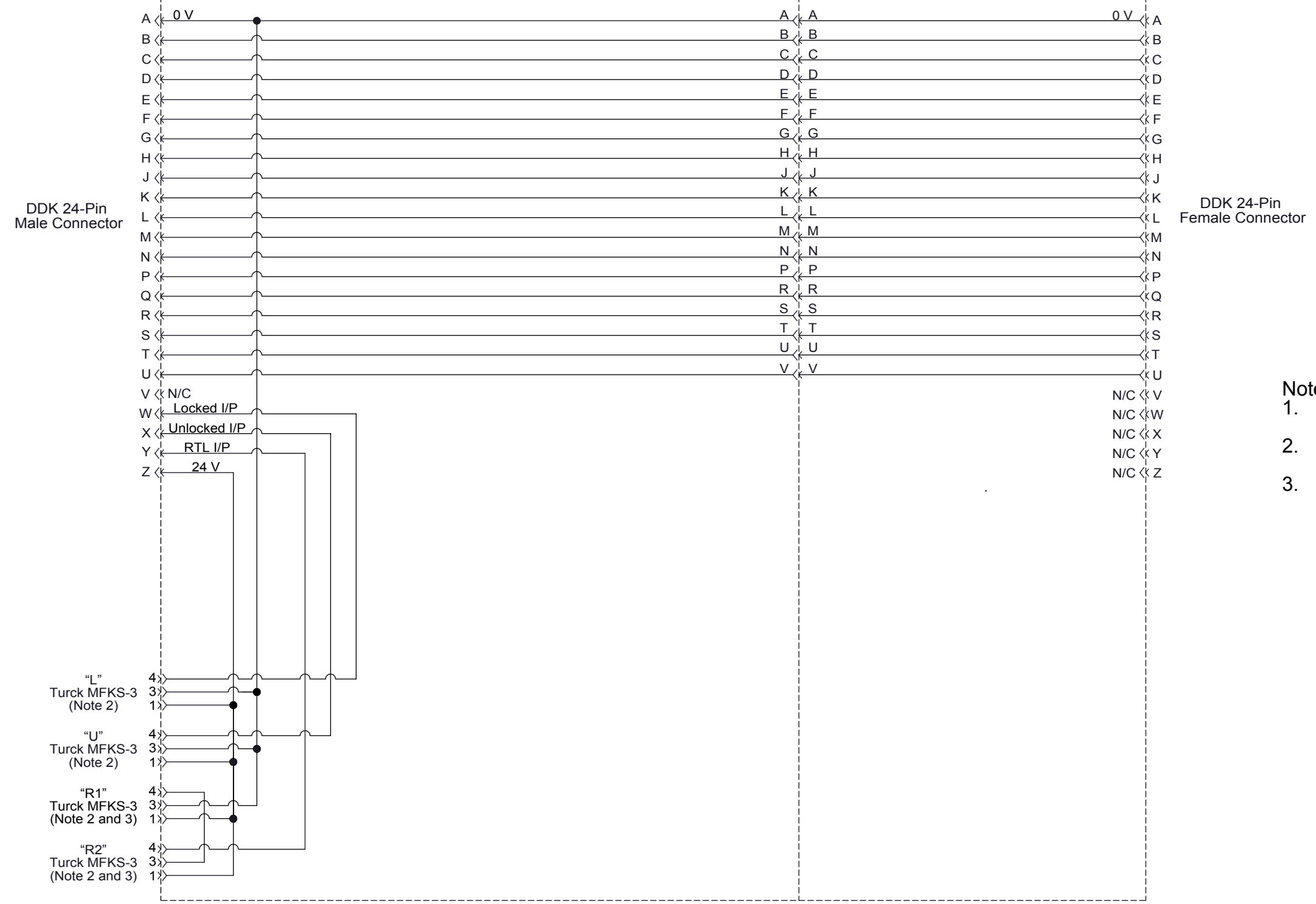
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PROJECT # 100315-2	SHEET 2 OF 3	SCALE 2:3	SIZE B
DRAWING NUMBER 9630-20-SA10		REVISION 04	

Rev.	Description	Initiator	Date
-	See Sheet1	-	-

Control/Signal Module, Master (9121-SA10-M) Control/Signal Module, Tool (9121-SA10-T)

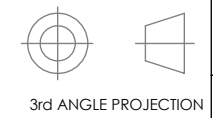


- Notes:
1. The complete tool changer package comes equipped with external cables that are connected to the sensors.
 2. Note that the the SA10 module is designed to work with only NPN sensors.
 3. The two RTL sensors are wired in series.

Relay Circuit Shown w/
RTL Sensor I/P Low and
Relay Coil Not Energized

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PROJECT # 100315-2	SHEET 3 OF 3	SCALE 1:1	SIZE B
DRAWING NUMBER 9630-20-SA10		REVISION 04	