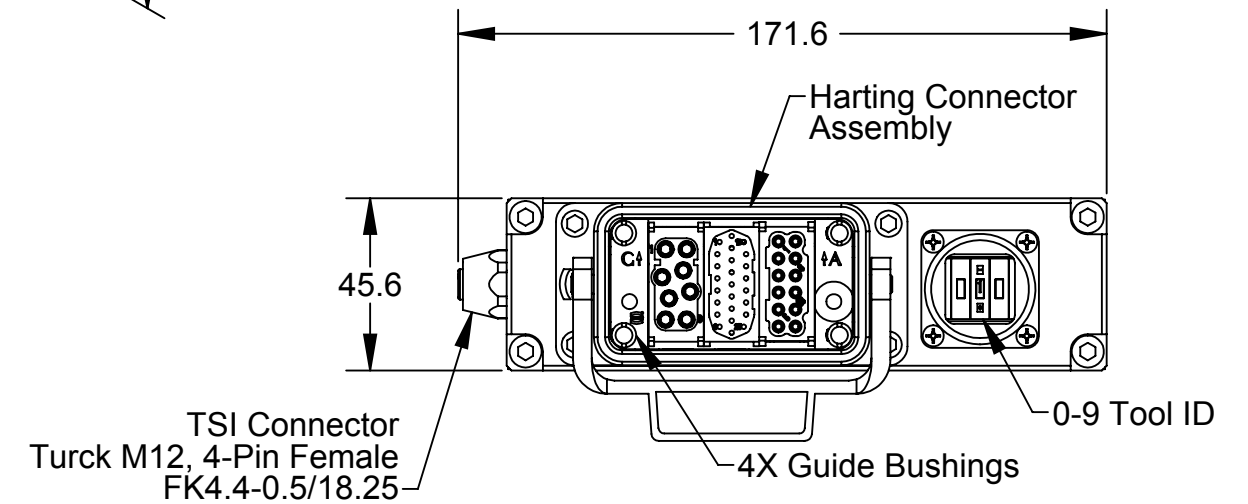
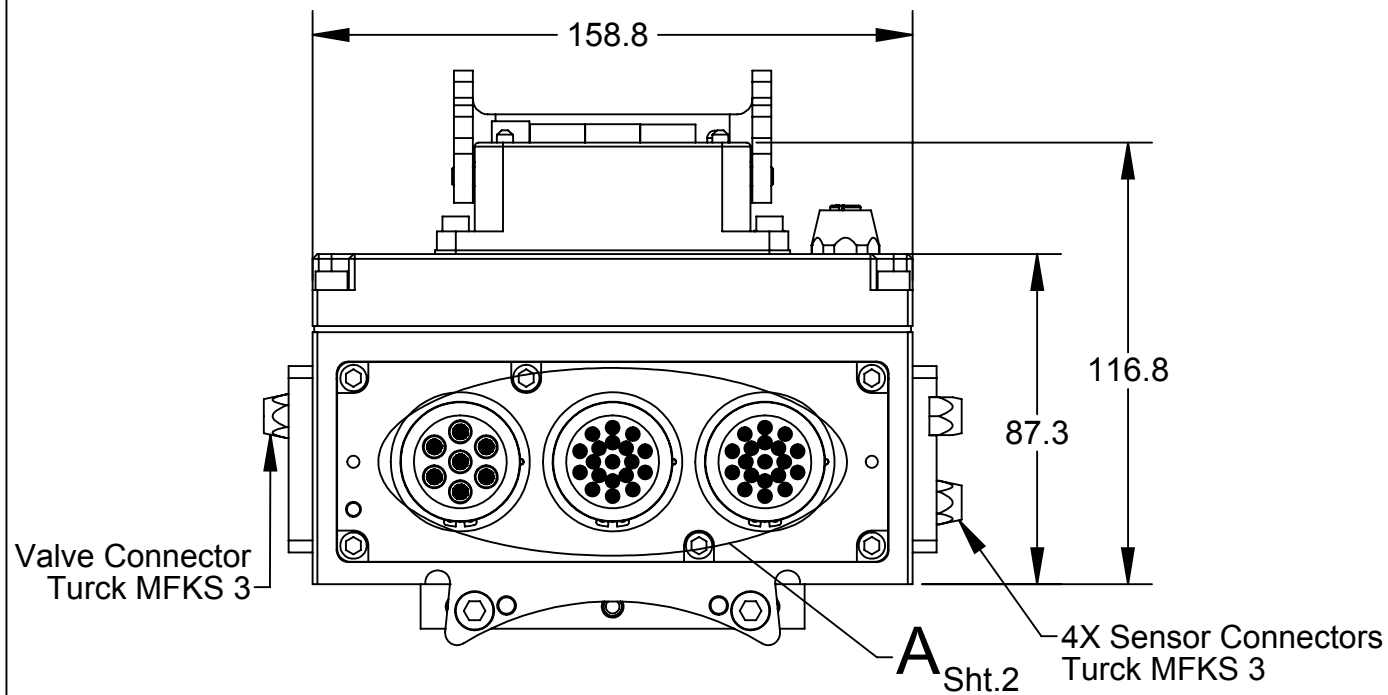
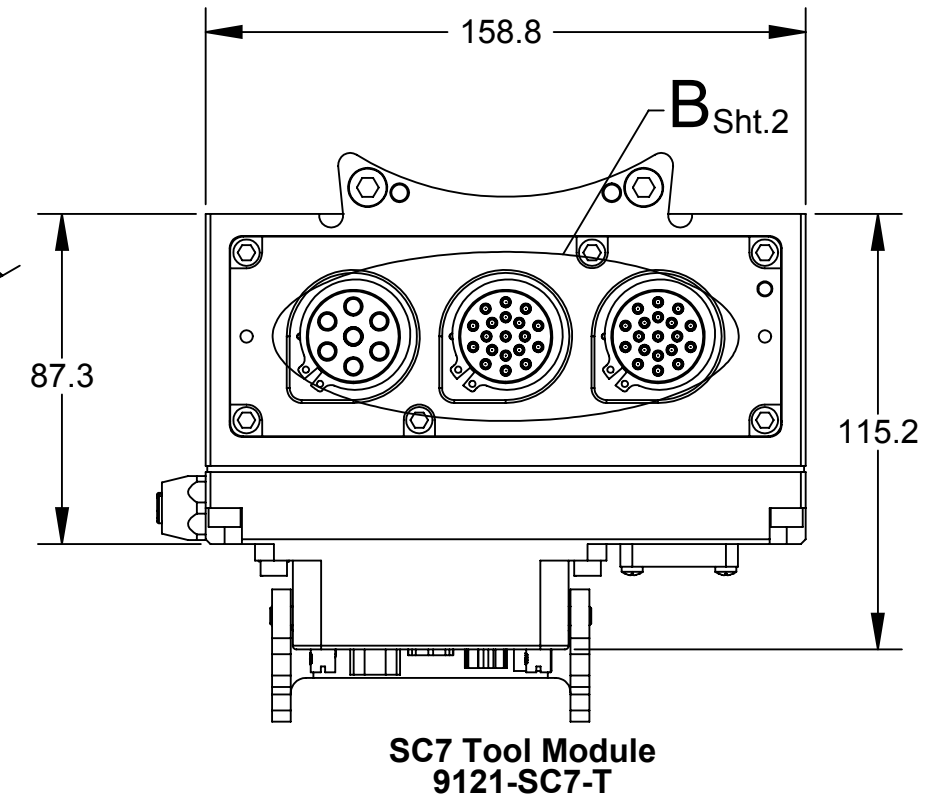
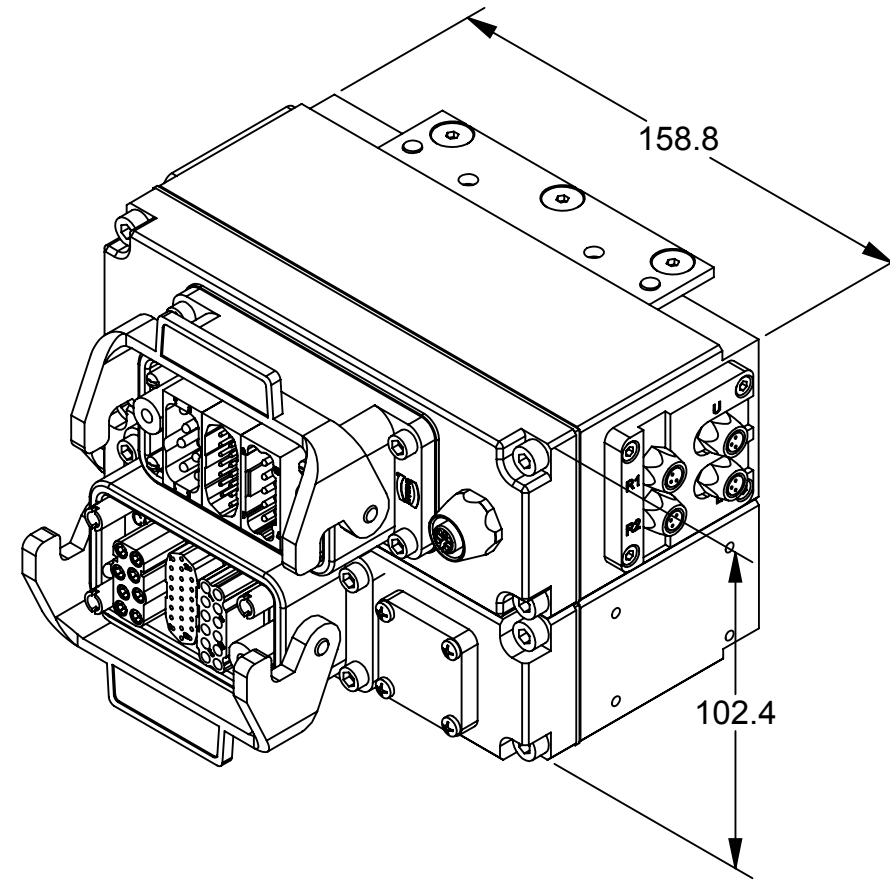
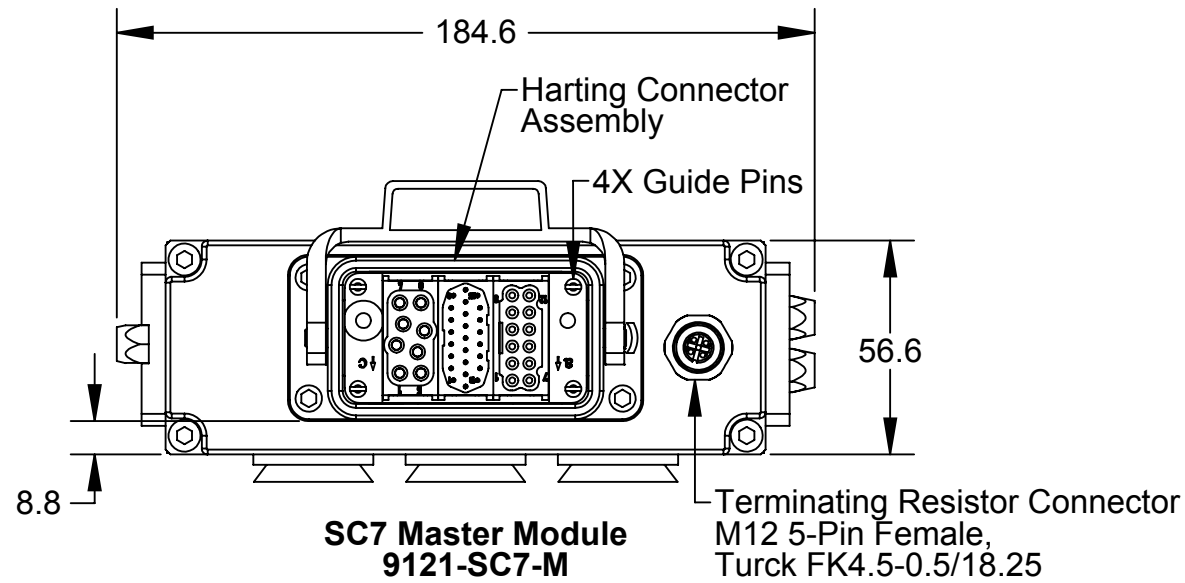


" DANGER!" - Electrical Shock Hazard

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
07	Eco 18687; Corrected dangling notes and updated title block.	MAL	2/26/2020



Notes:

1. Pin Block pin assignment information on Sheet 2.
2. Connector details and pin assignment information on Sheet 3.
3. Electrical schematic and functional notes on Sheet 4.

NOTES: UNLESS OTHERWISE SPECIFIED.

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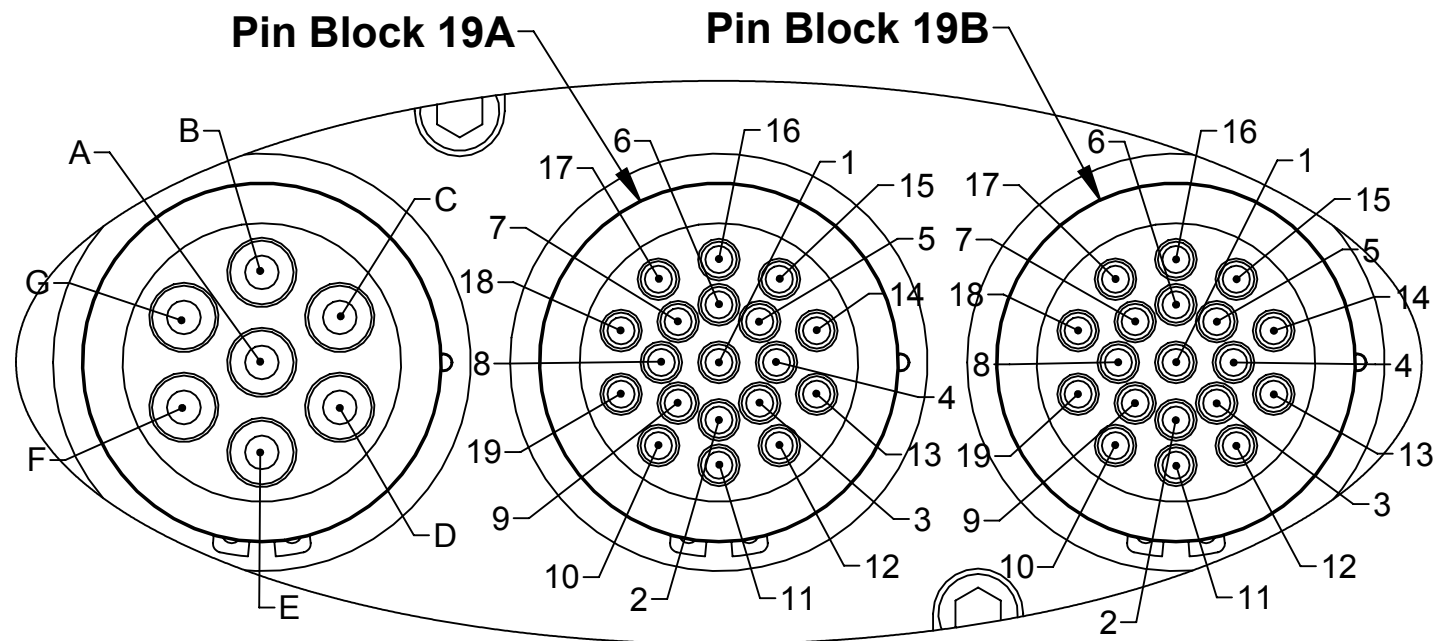
3rd ANGLE PROJECTION



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CHECKED BY: D. Mushow, 5/5/10		SC7 Customer Drawing	
PROJECT # 100428-2	SHEET 1 OF 4	SCALE 1:2	SIZE B
DRAWING NUMBER 9630-20-SC7		REVISION 07	

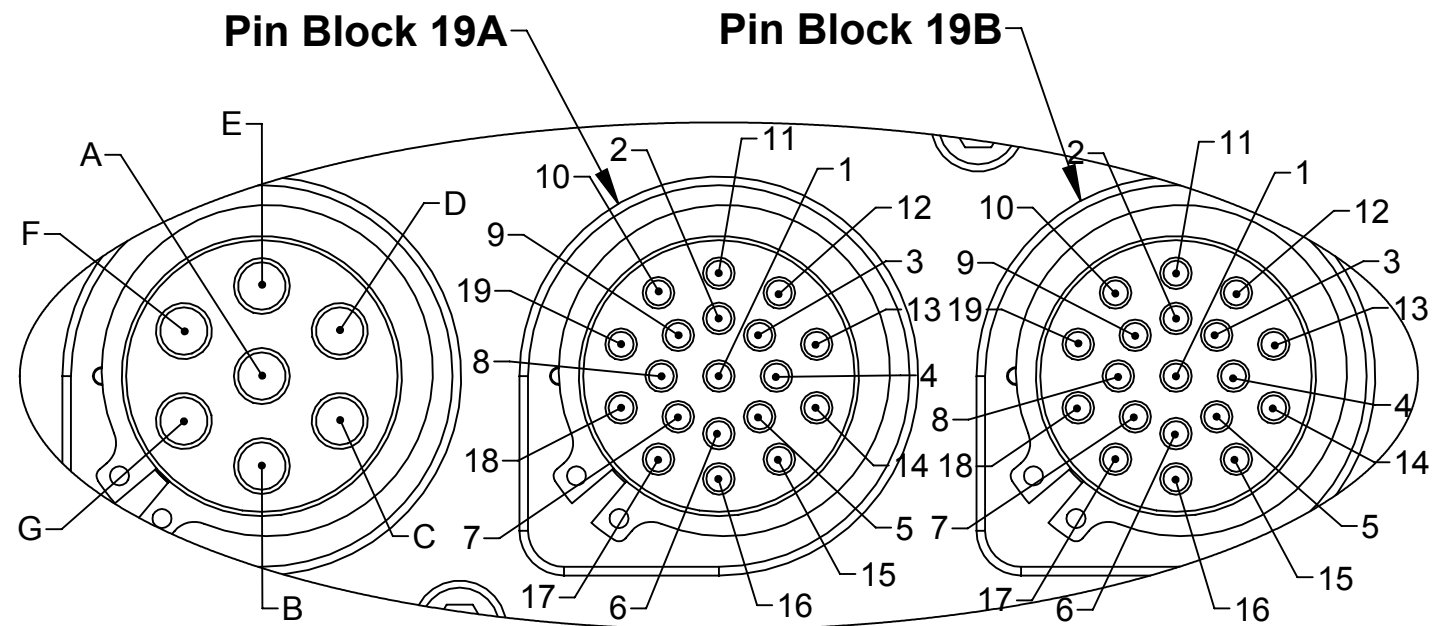


Master Side Pin Blocks
Scale 3:2

Table 1: 7-Pin Block	
A	PE
B	W/T
C	V/S
D	U/R
E	24V (Unswitched)
F	24V (Switched)
G	0V

Table 2: Pin Block 19A	
1	0V PTC and 0V Break Rel.
2	available
3	Tool ID1
4	Tool ID2
5	Tool ID4
6	Tool ID8
7	PTC
8	24V Break Rel.
9	Volt Reg.
10	Volt Reg.
11	X7/S1
12	0V X7/S3
13	Y7/S4
14	0V Y7/S4
15	0V ECX2/R2
16	EXC2/R1
17	KSR
18	KSR
19	N/C

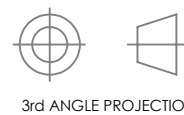
Table 3: Pin Block 19B	
1	available
2	available
3	available
4	available
5	available
6	available
7	CAN_H
8	CAN_L
9	RXD/TXD-P
10	RXD/TXD-N
11	available
12	available
13	TSI In
14	N/C
15	TSI Out
16	N/C
17	N/C
18	N/C
19	N/C



Tool Side Pin Blocks
Scale 3:2

NOTES: UNLESS OTHERWISE SPECIFIED.

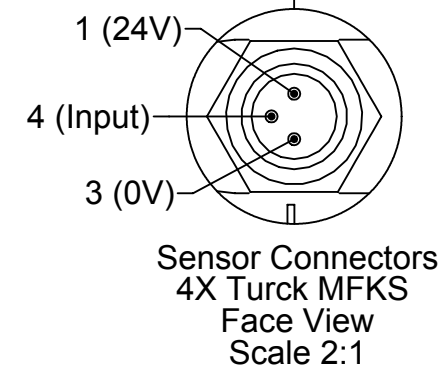
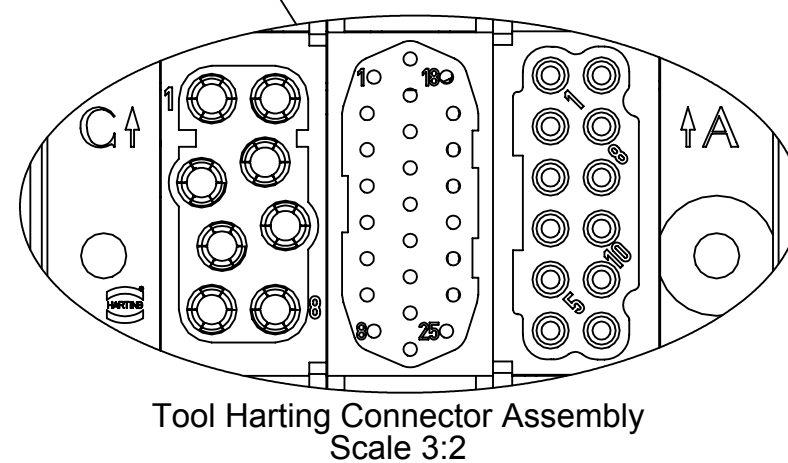
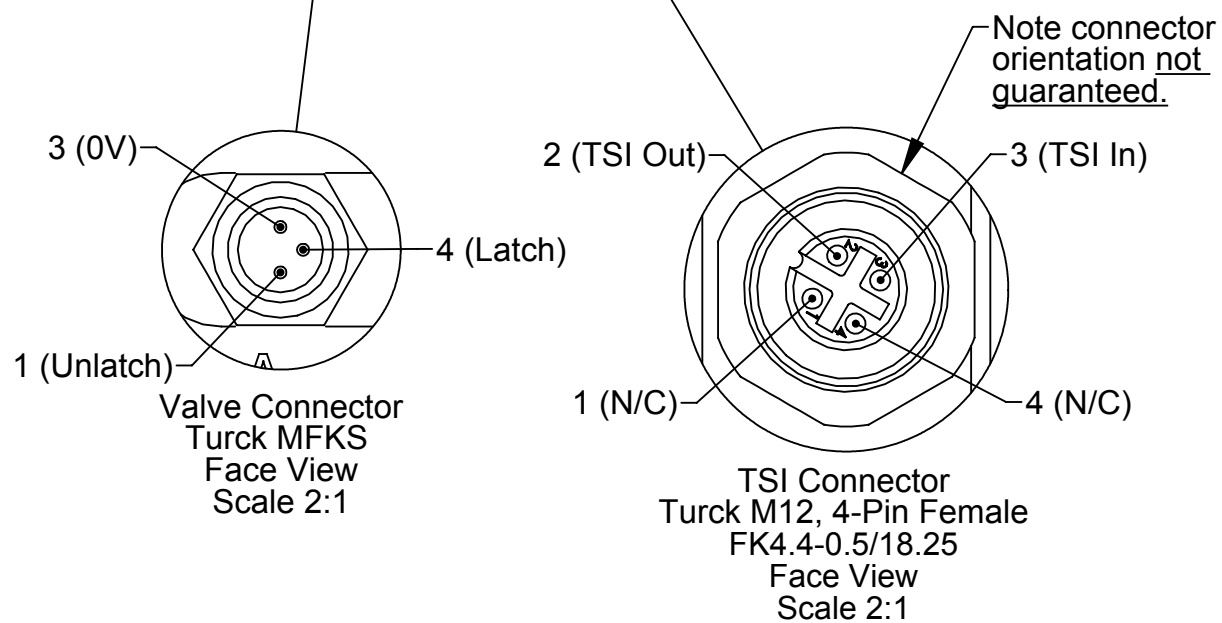
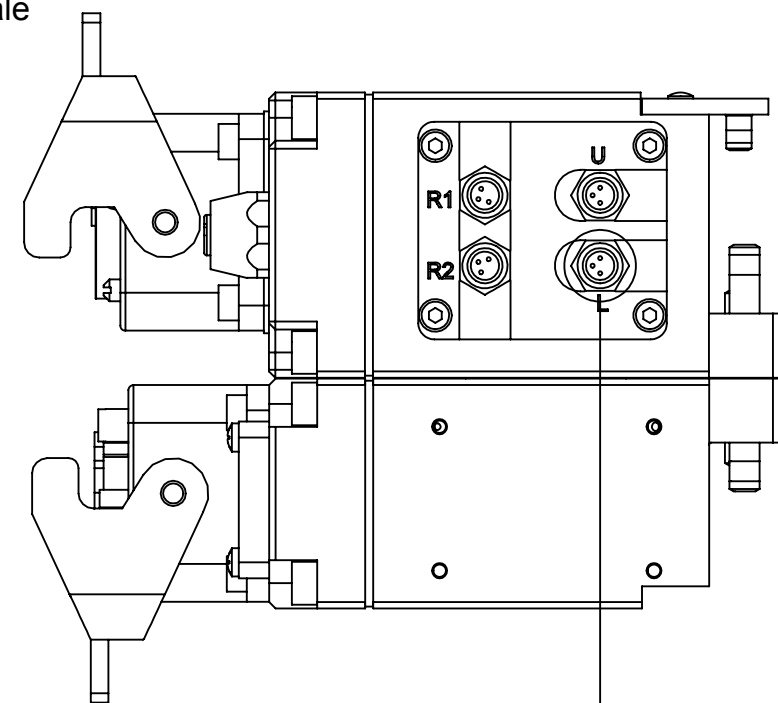
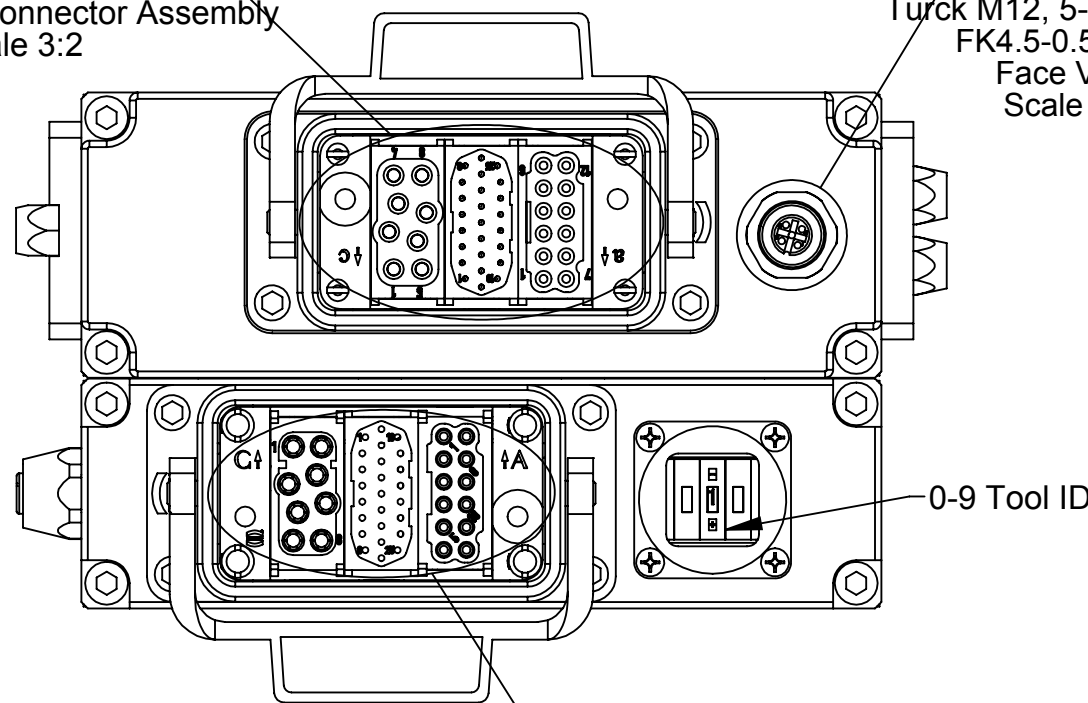
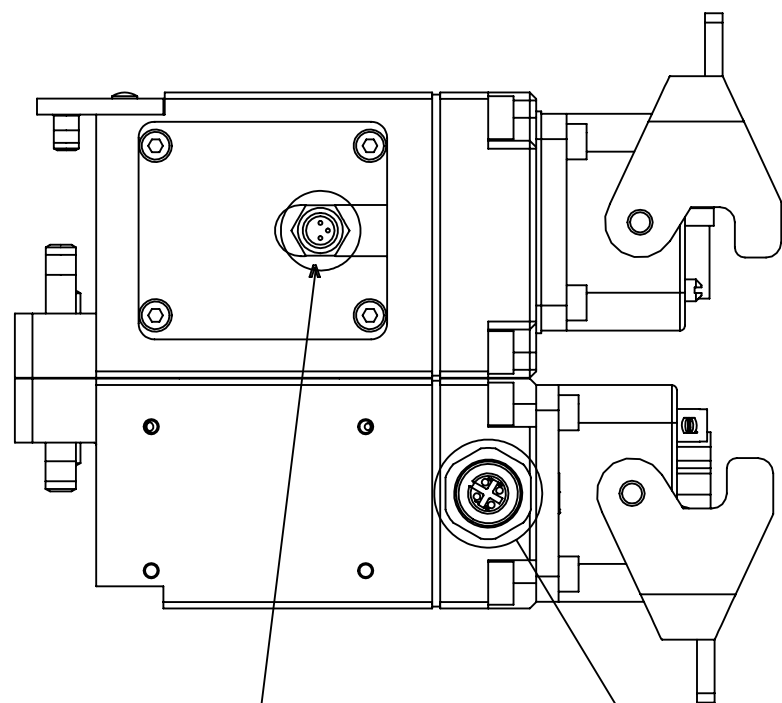
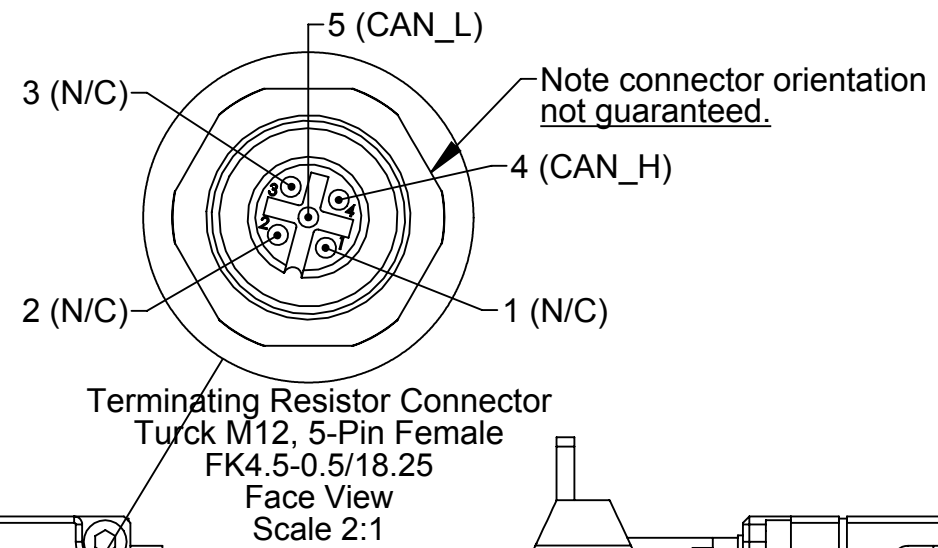
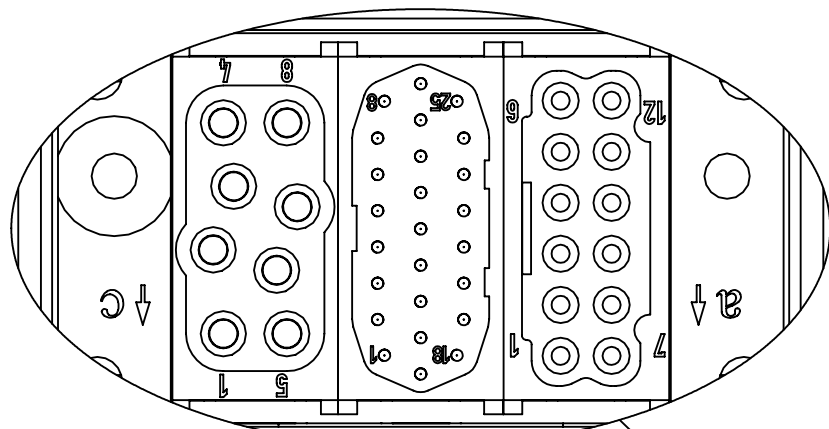
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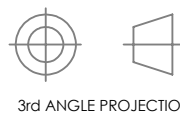
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SCALE	SIZE	DRAWING NUMBER	REVISION
1:2	B	9630-20-SC7	07
PROJECT # 100428-2		SHEET 2 OF 4	



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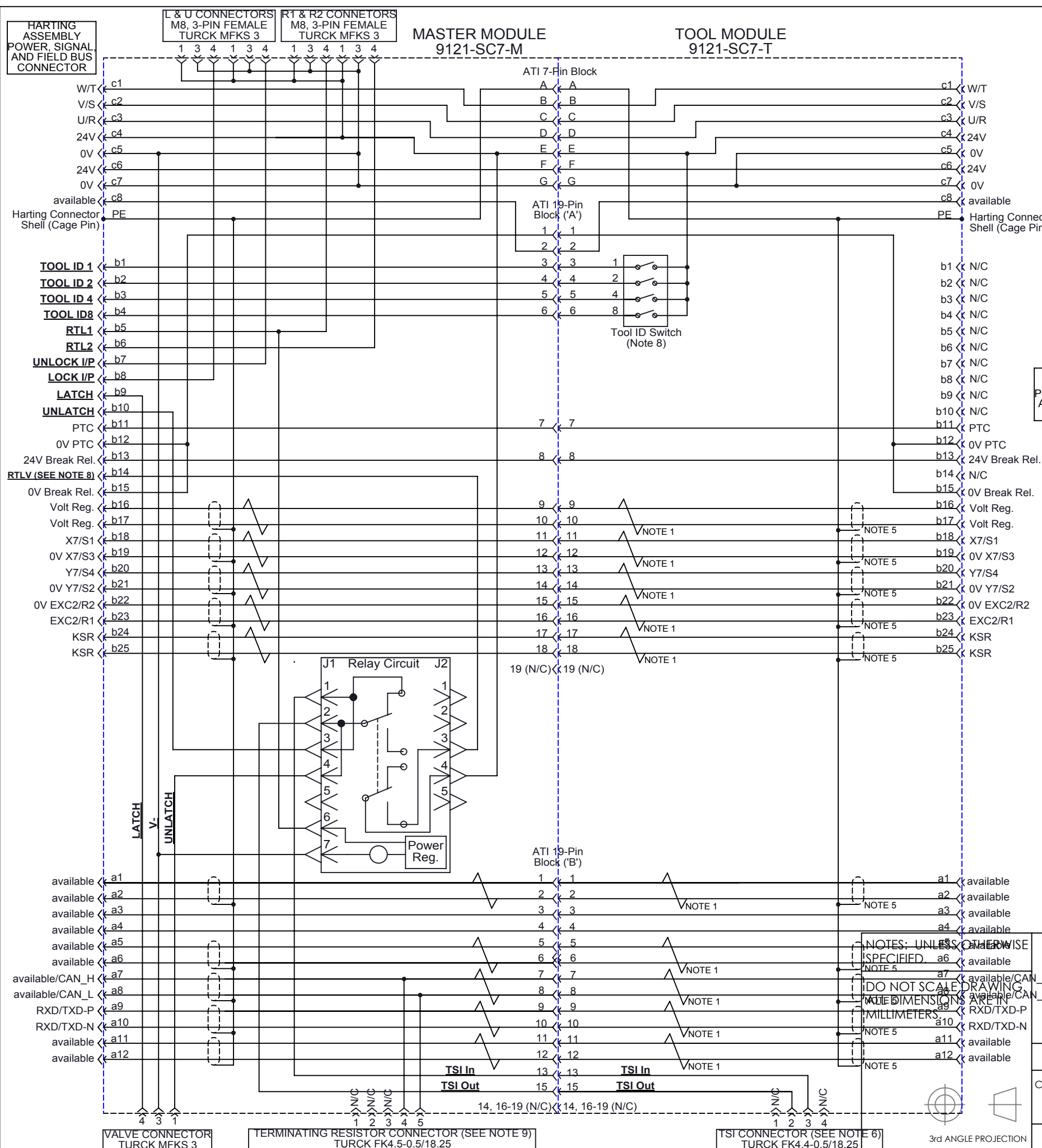
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CHECKED BY: D. Mushow, 5/5/10		SCALE 1:5	SIZE B
PROJECT # 100428-2	SHEET 3 OF 4	DRAWING NUMBER 9630-20-SC7	REVISION 07



Schematic Notes:

- The indicated wire pairs are twisted in the Master and Tool modules.
- ATI Tool Changer control and sensor signals are identified as bold and underlined.
- IMPORTANT:** 24V power is required for the Lock, Unlock, and Ready-to-Lock sensors and for Latching/Unlatching the Tool Changer. It is recommended that the 24V power be unswitched.
- Cables for Harting connectors are supplied by the customer.
- The indicated wire pairs are shielded in the Master and Tool. The shields are connected to PE via the Harting Connector Shell (Cage Pin).
- The Tool Stand Interlock (TSI) circuit is provided to ONLY allow tool release while in the stand or storage location as indicated by actuation of a customer-integrated switch. It is suggested that the customer integrate a single pole, single throw (Normally Open, spring return) limit switch to work with this feature. The limit switch should be mounted to the end effector in such a way that the switch is closed only when the tool is in the stand or storage location.
- The RTL1 sensor is very important to the operation of the TSI feature and should be monitored for failure. The RTL1V input is provided for fault monitoring of this circuit. Please consult the product manual for operation and fault monitoring recommendations.
- Refer to Table 4 for the Tool ID output (Note: Use pin c4 of the Harting Connector (Master Side) as common).
- If Device Net bus signals are utilized, a terminating resistor can be connected to the 5-Pin M12 Connector on the Master Module.

Table 4: Tool ID Output

Switch Position	Harting Connector (Master)			
	b4	b3	b2	b1
0	0	0	0	0
1	0	0	0	1
2	0	0	1	0
3	0	0	1	1
4	0	1	0	0
5	0	1	0	1
6	0	1	1	0
7	0	1	1	1
8	1	0	0	0
9	1	0	0	1

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PROJECT # 100428-2 SHEET 4 OF 4	<table border="1"> <tr> <th>SCALE</th> <th>SIZE</th> <th>DRAWING NUMBER</th> <th>REVISION</th> </tr> <tr> <td>1:10</td> <td>B</td> <td>9630-20-SC7</td> <td>07</td> </tr> </table>	SCALE	SIZE	DRAWING NUMBER	REVISION	1:10	B	9630-20-SC7	07
SCALE	SIZE	DRAWING NUMBER	REVISION						
1:10	B	9630-20-SC7	07						