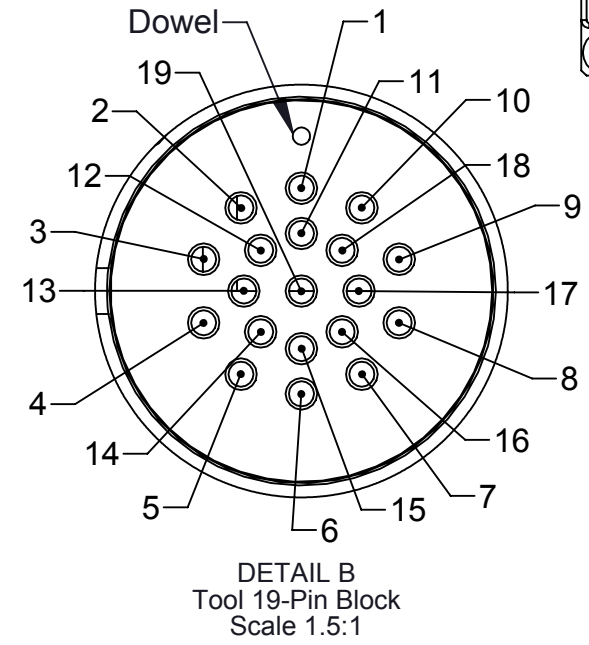
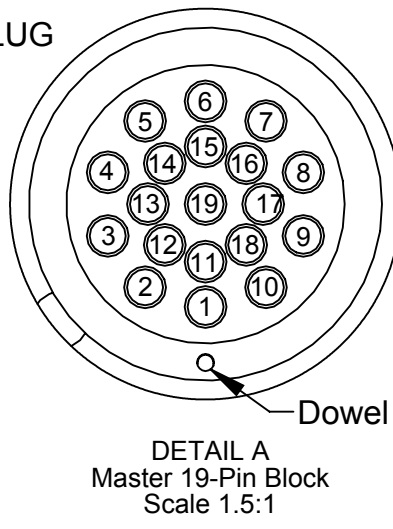
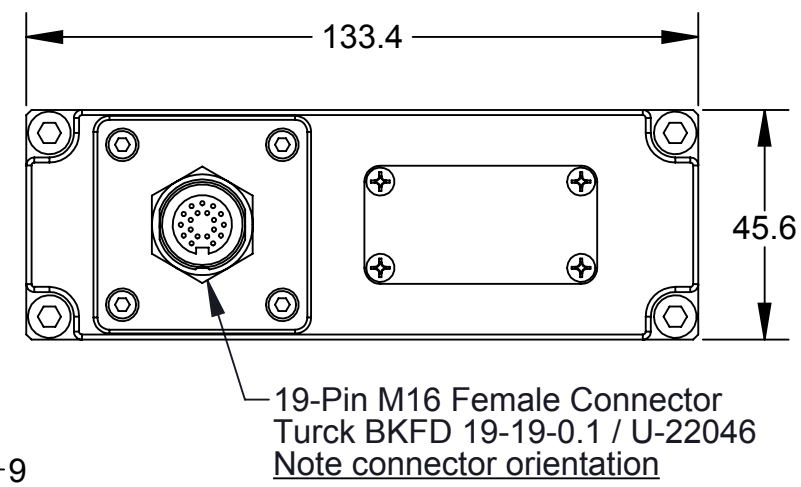
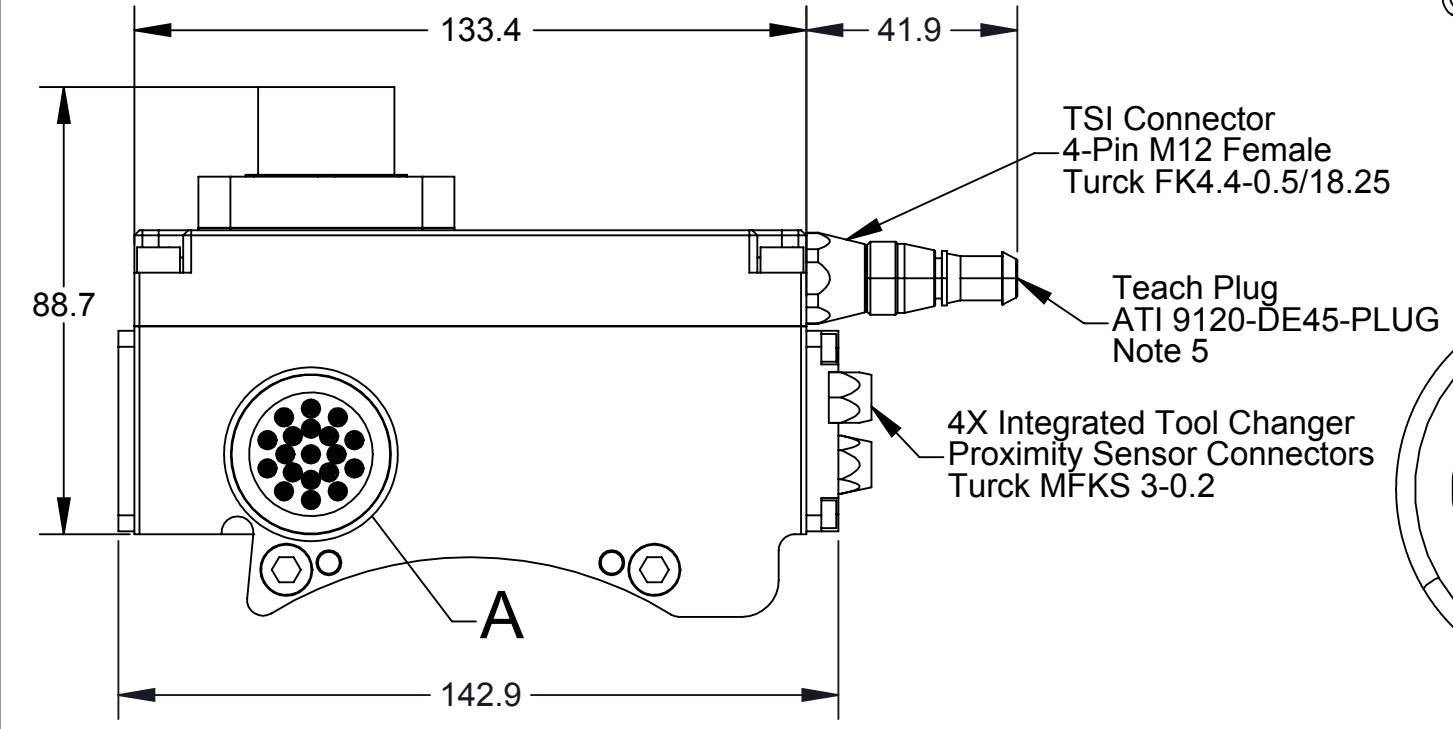
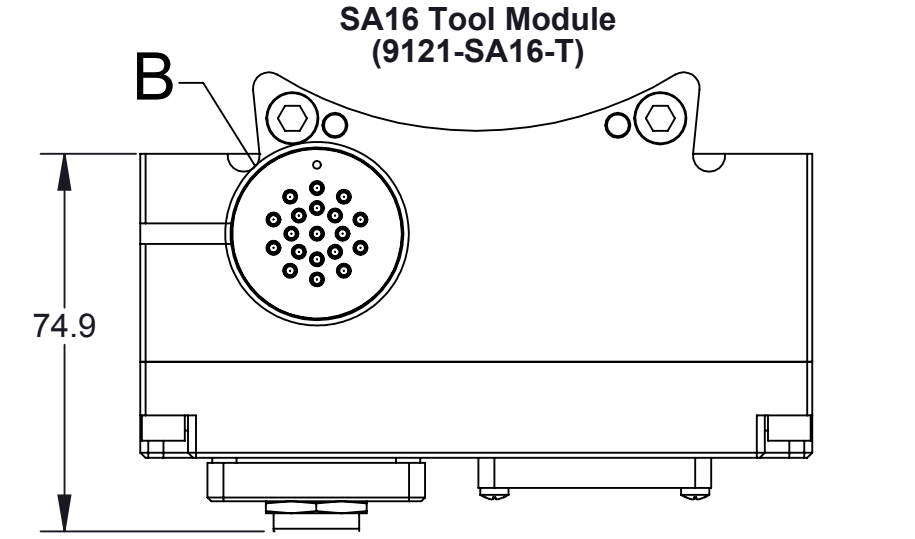
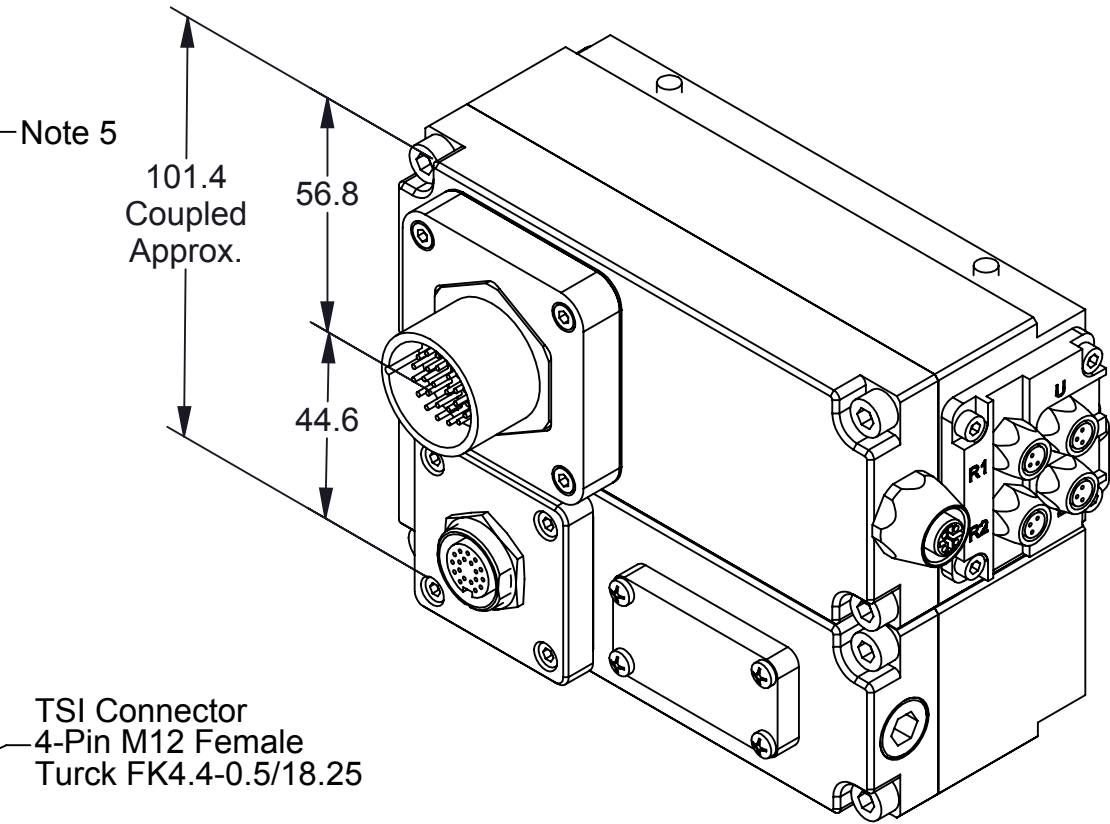
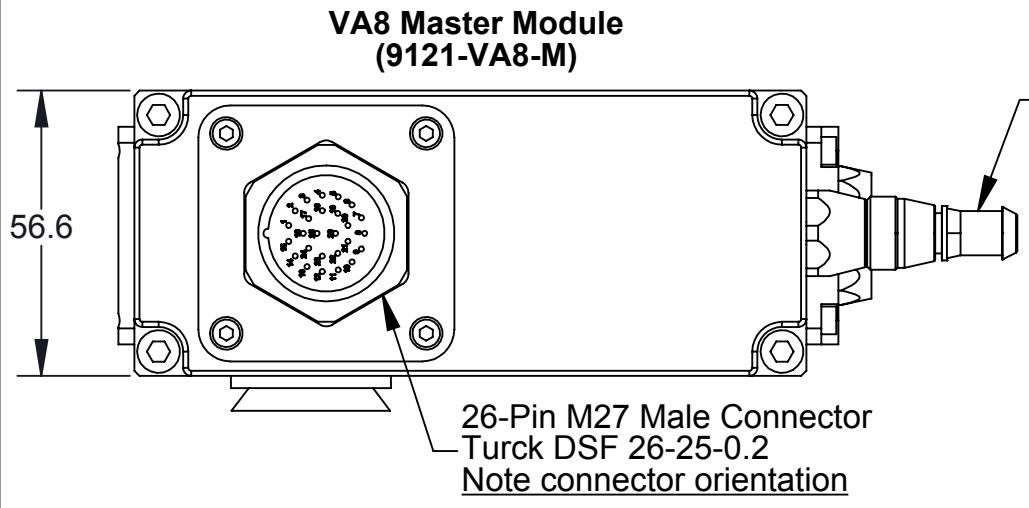


"DANGER!" - Electrical Shock Hazard

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
06	Eco 17949; Updated Turck P/N for 4X Integrated Tool Changer Proximity Sensors.	LJH	6/10/19



- Notes:
1. Connector details and pin assignment information on Sheet 2.
 2. Spare parts information on Sheet 3.
 3. Electrical schematic and functional notes on Sheet 4.
 4. The VA8 Master and SA16 Tool modules are potted with 3M DP270.
 5. Teach Plug is not connected to the Tool Stand Interlock (TSI) connector. Item is bagged separately.

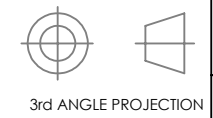
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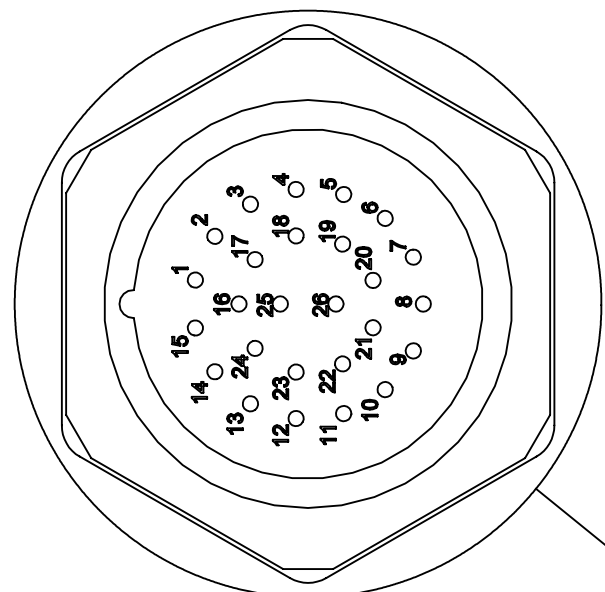


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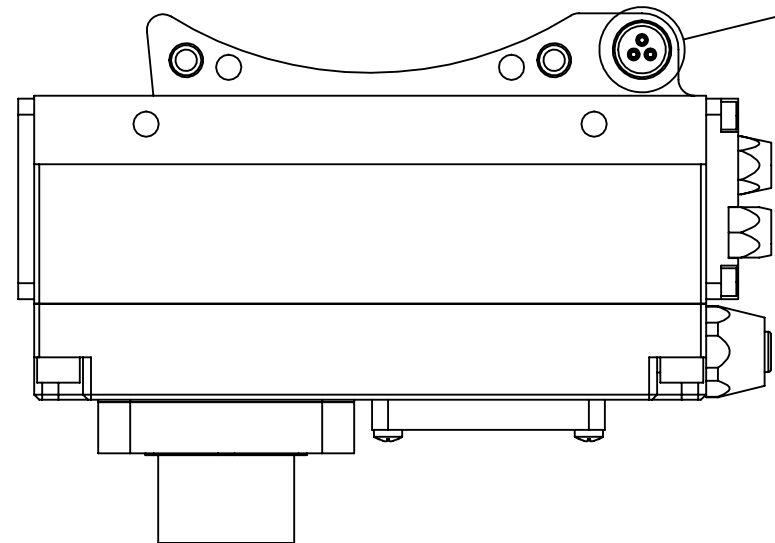
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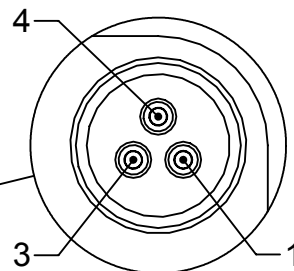
DRAWN BY: W. Berrocal, 10/22/13		TITLE	
CHECKED BY: A. Takla, 10/23/13 L. Jamshidi, 10/24/13		VA8 Master, SA16 Tool Customer Drawing	
PROJECT # 131011-1 SHEET 1 OF 4	SCALE 2:3	SIZE B	DRAWING NUMBER 9630-20-VA8M SA16T
			REVISION 06



DETAIL C
SCALE 2 : 1

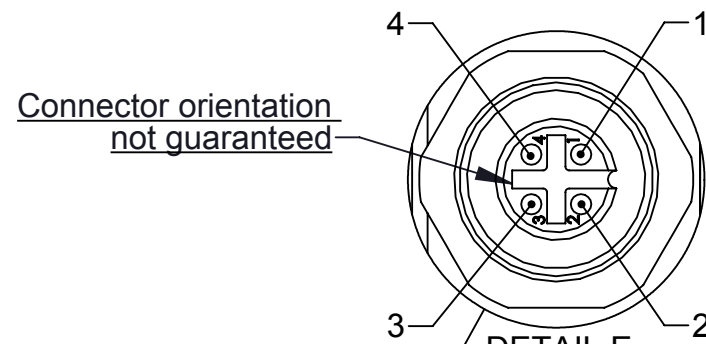


9121-VA8-M



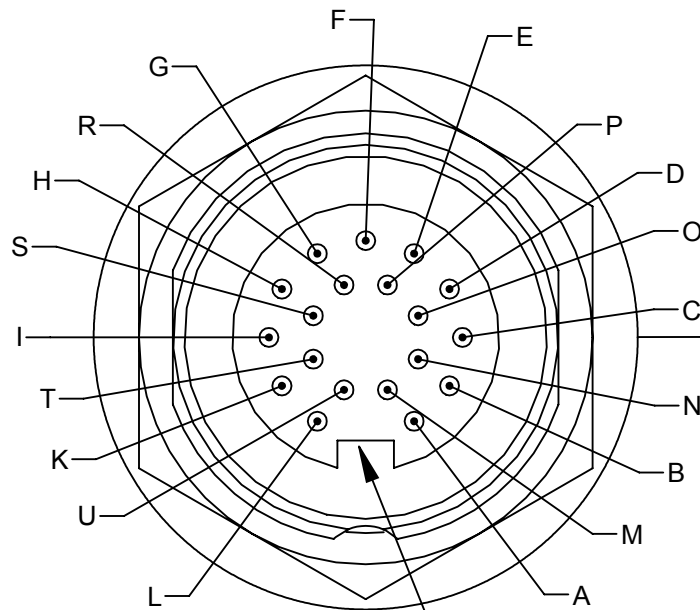
DETAIL G
SCALE 2 : 1

Table 1 Internal Valve Connection	
Pin 1	Unlatch
Pin 3	0V
Pin 4	Latch



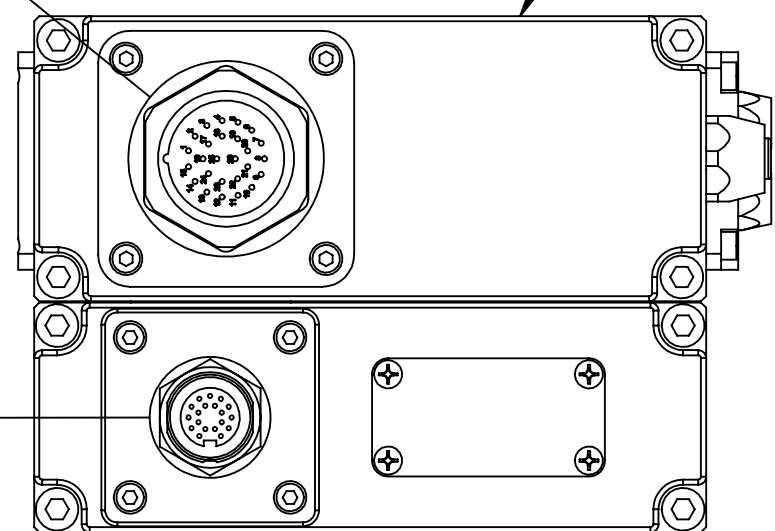
DETAIL E
SCALE 2 : 1

Table 2 TSI Connector	
Pin	Signal
1	TSI Out
2	N/C
3	N/C
4	TSI In

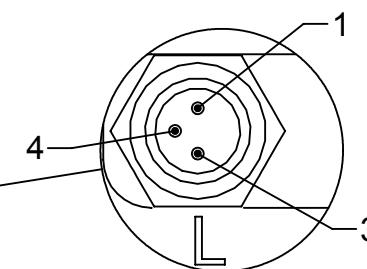
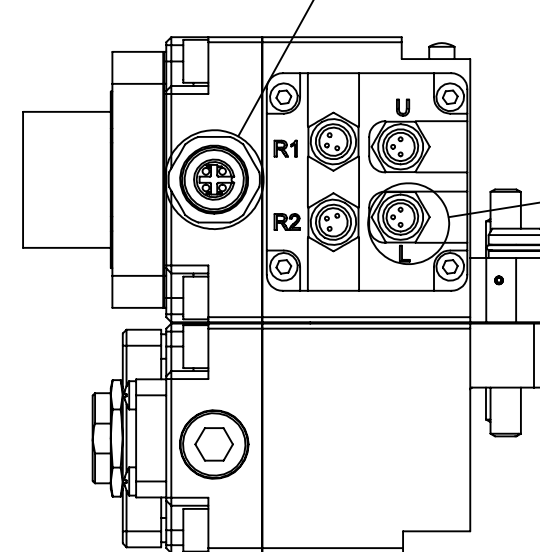


DETAIL D
SCALE 3 : 1

Note key orientation



9121-SA16-T



DETAIL F
SCALE 2 : 1

Table 3 Sensor Connector Wiring (Typical)	
Pin	Signal
1	V+
3	V-
4	Input

NOTES: UNLESS OTHERWISE SPECIFIED.

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3rd ANGLE PROJECTION

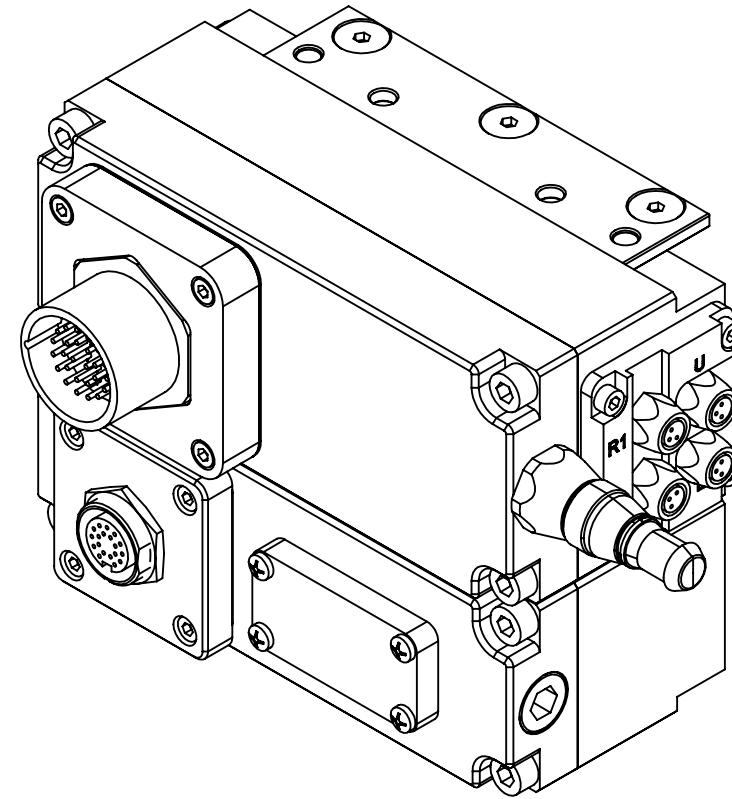
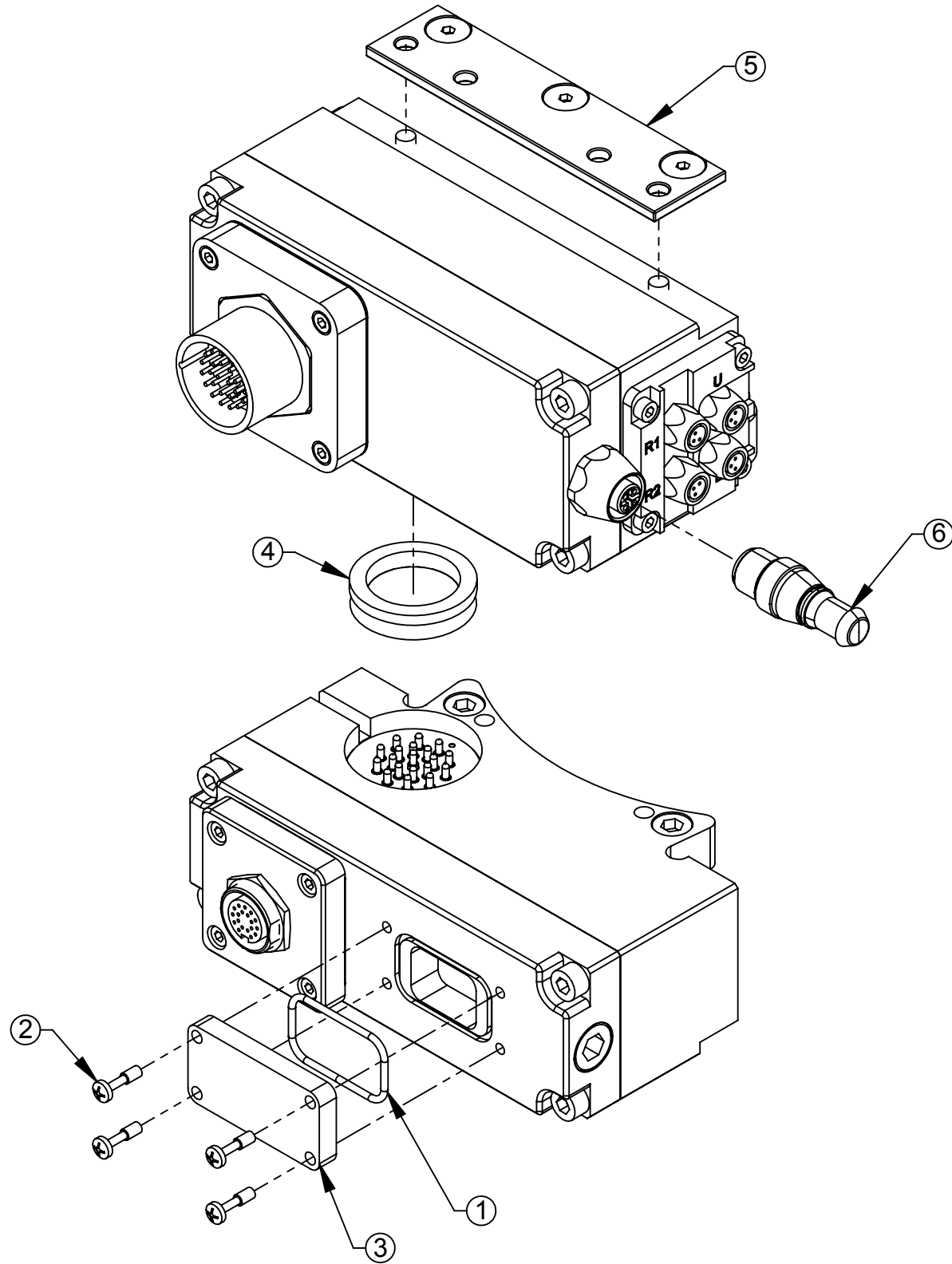


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CHECKED BY: A. Takla, 10/23/13 L. Jamshidi, 10/24/13		VA8 Master, SA16 Tool Customer Drawing			
PROJECT #	131011-1	SHEET	2	OF	4
SCALE	1:2	SIZE	B	DRAWING NUMBER	9630-20-VA8M SA16T
					06

VA8 Master, SA16 Tool Serviceable Parts



ITEM NO.	QTY.	PART NUMBER	DESCRIPTION
1	1	3410-0001092-01	O-ring AS568-023
2	4	3500-9957012-21	Captive Screw M3 x 12 Slotted Head SS
3	1	3700-20-2696	Tool ID WindowThick Window for DP/DE45 Master
4	1	4010-0000030-01	V-Ring Seal
5	1	9005-20-1198	Master Cleat Assembly
6	1	9120-DE45-PLUG	Yellow Teach Plug w/ Lanyard and Caution Tags

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3rd ANGLE PROJECTION



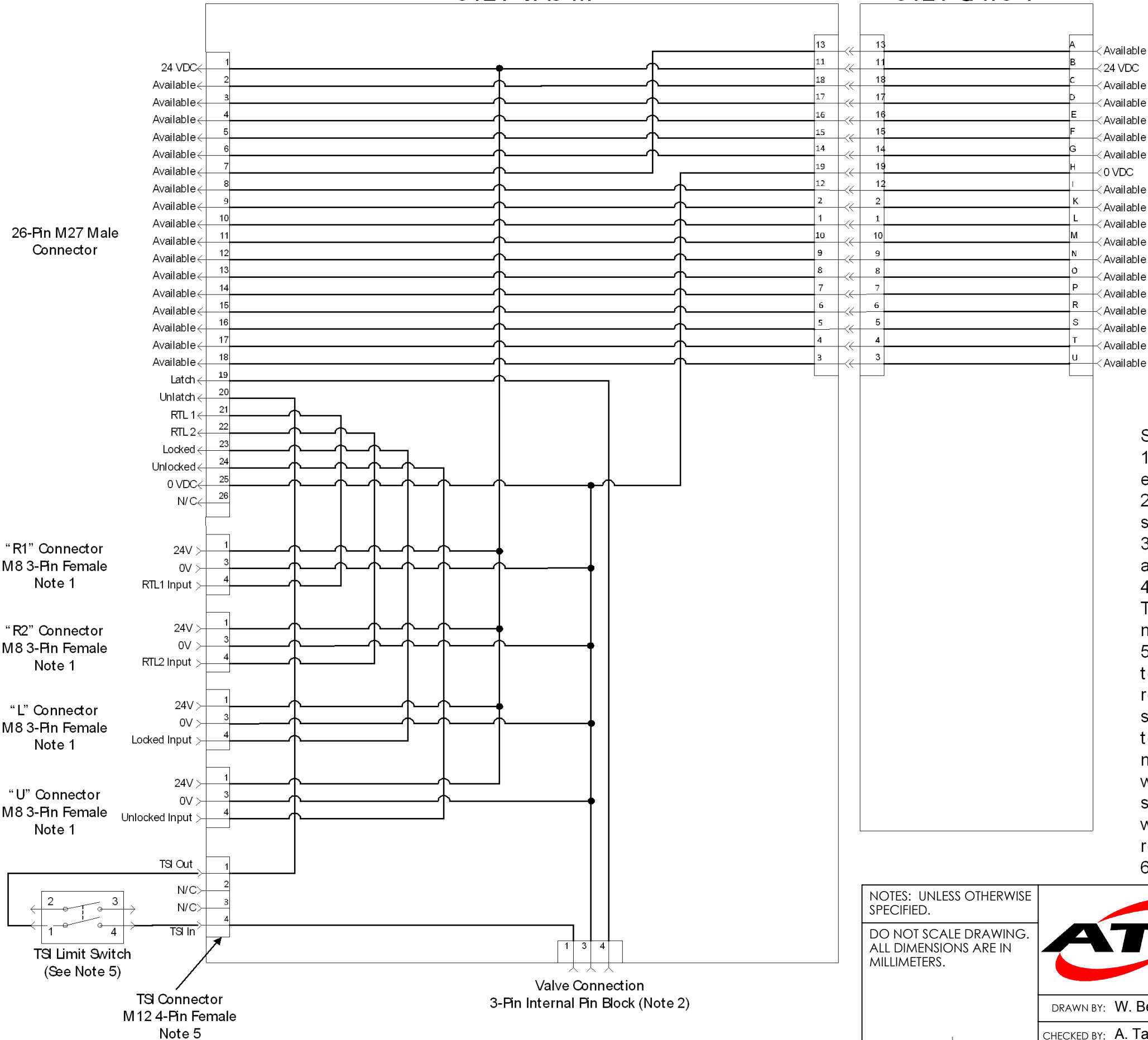
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PROJECT # 131011-1	SHEET 3 OF 4	SCALE 1:2	SIZE B
DRAWING NUMBER 9630-20-VA8M SA16T		REVISION 06	

9121-VA8-M

9121-SA16-T



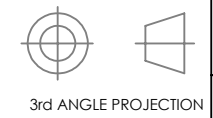
19-Pin M16 Female Connector

Schematic Notes:

1. The complete tool changer package comes equipped with external cables that are connected to the sensors.
2. An internal pin block is used to transmit the Latch/Unlatch signal to the valve adapter.
3. Cables to the 26-Pin M27 connector and 19-Pin M16 connector are supplied by the customer.
4. The voltage supplied to the valve must be between 19 and 29V. The voltage supplied to the Locked, Unlocked, and RTL sensors must be between 10 and 30V.
5. The VA8-M is supplied with a Teach Plug (P/N 9120-DE45-PLUG) to make the TSI circuit (Pin 1 to Pin 4 on TSI Connector). It is recommended that the customer integrate a mechanical limit switch to use with this circuit. The limit switch must be mounted to indicate that the robot and tool changer are in the stand, thus making the circuit and only allowing the tool changer to uncouple while in the stand. Contact ATI for further assistance. A limit switch is available from ATI (P/N 9005-20-1165) but is not included with the VA8 modules. Contact ATI for specific switch requirements.
6. Pin 19 on the pin block is first-to-mate, last-to-break.

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PROJECT # 131011-1	SHEET 4 OF 4	SCALE 1:1	SIZE B
		DRAWING NUMBER	REVISION
		9630-20-VA8M SA16T	06