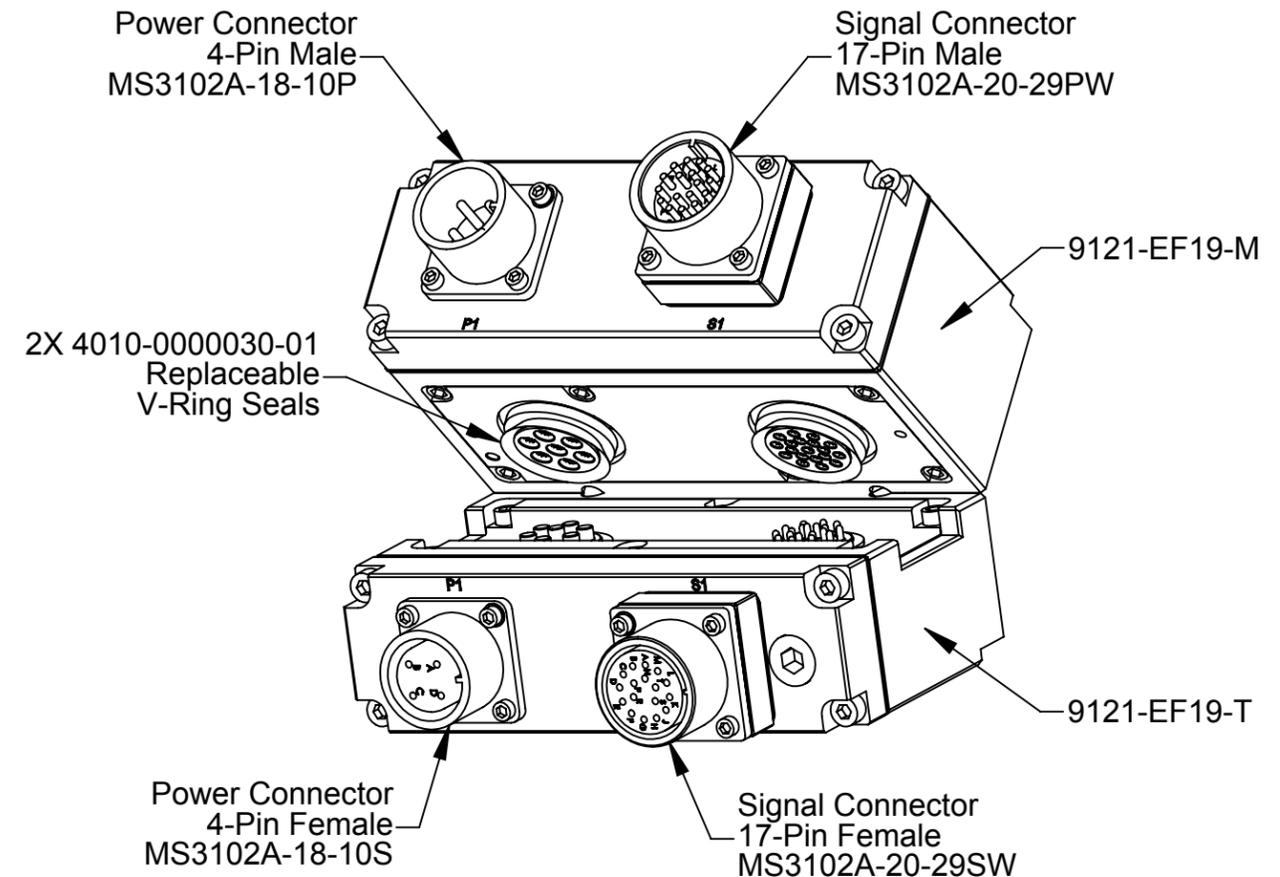
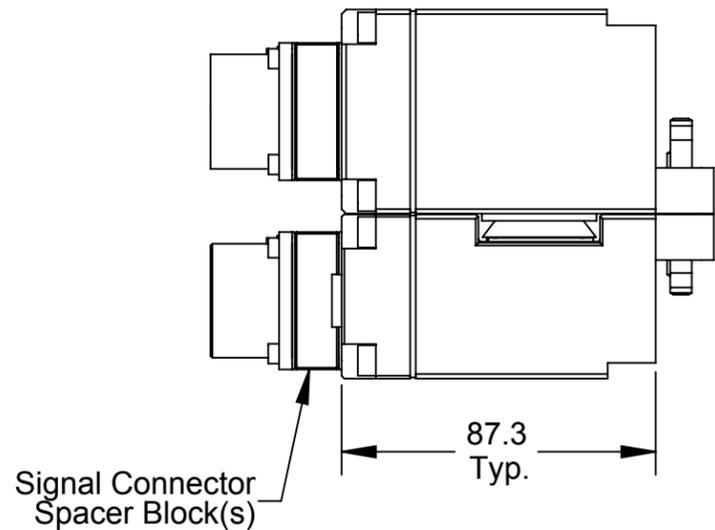
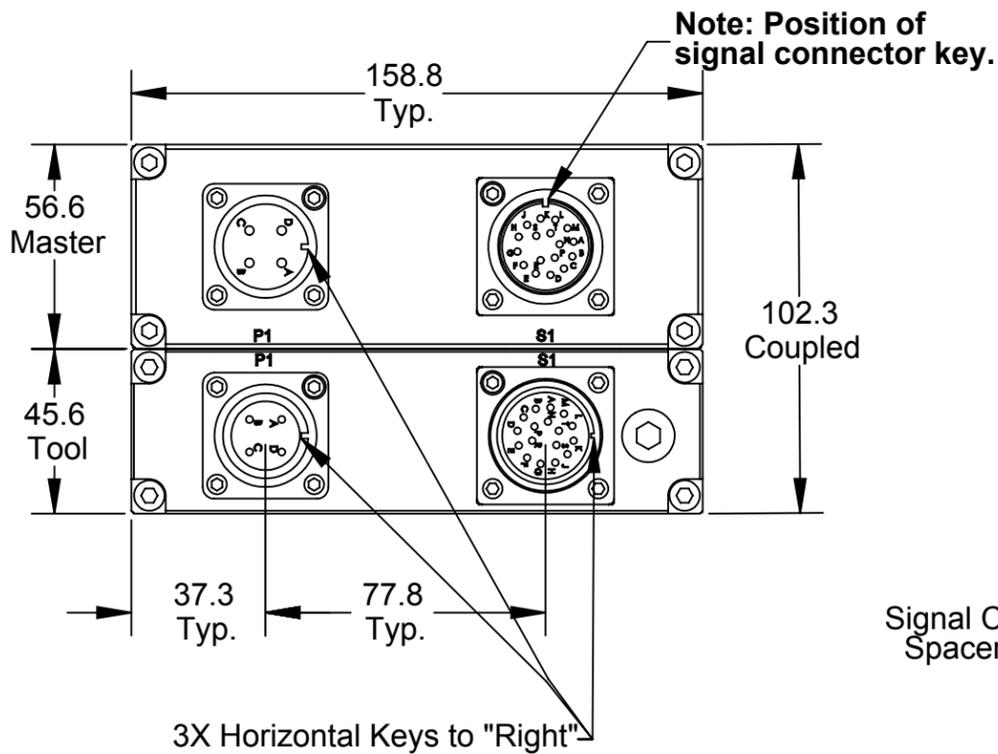
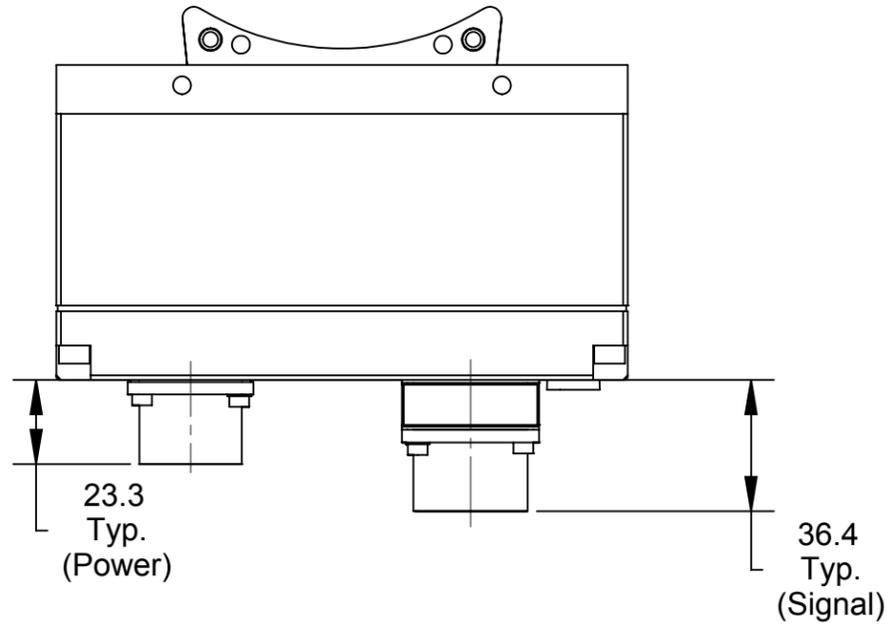




**"DANGER!" - Electrical Shock Hazard**

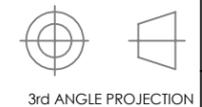
This module has a Voltage of 50V or greater, NO contact should be attempted before removing power. This especially includes separation or insertion of the mating connectors or any contact with the tool changer or its components.

Rev.	Description	Initiator	Date
08	Eco 12909; Added Pin Block Pin Positions to Electrical Schematic. Added Sheets 2, 3, & 4. Added Electrical Hazard Note. Updated drawing to Current Standards.	CF	10/2/2015



Operation:  
1. Do not couple or uncouple the servo modules unless electrical power has been disconnected and discharged both upstream and downstream from the modules.

NOTES: UNLESS OTHERWISE SPECIFIED.  
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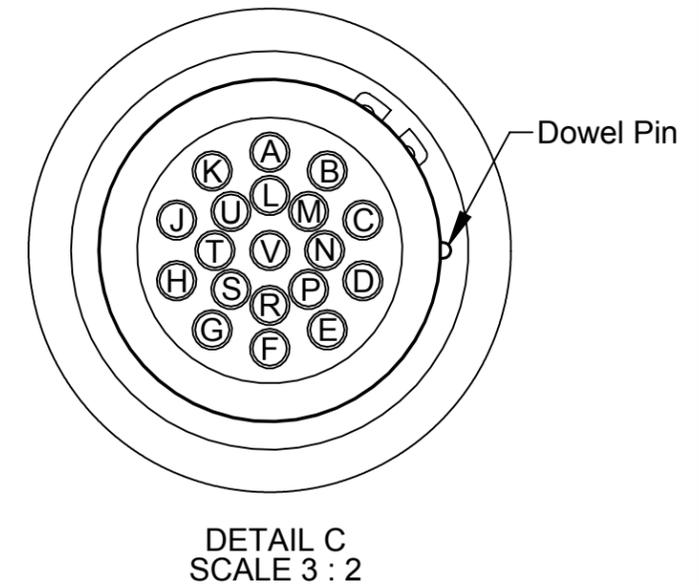
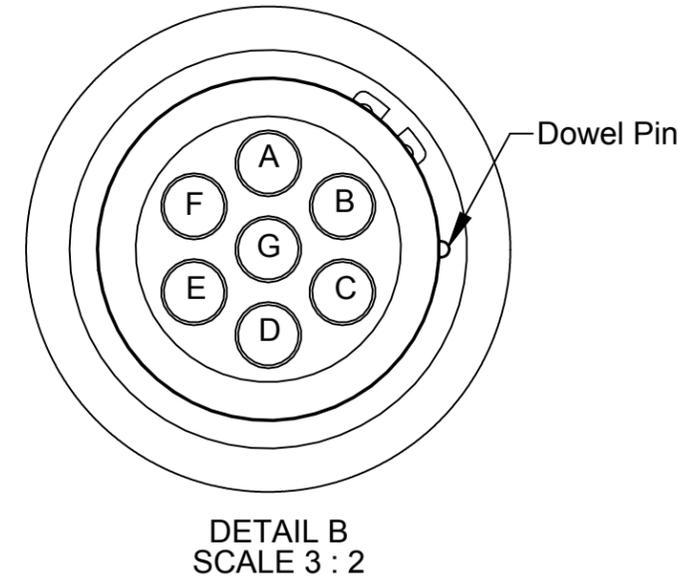
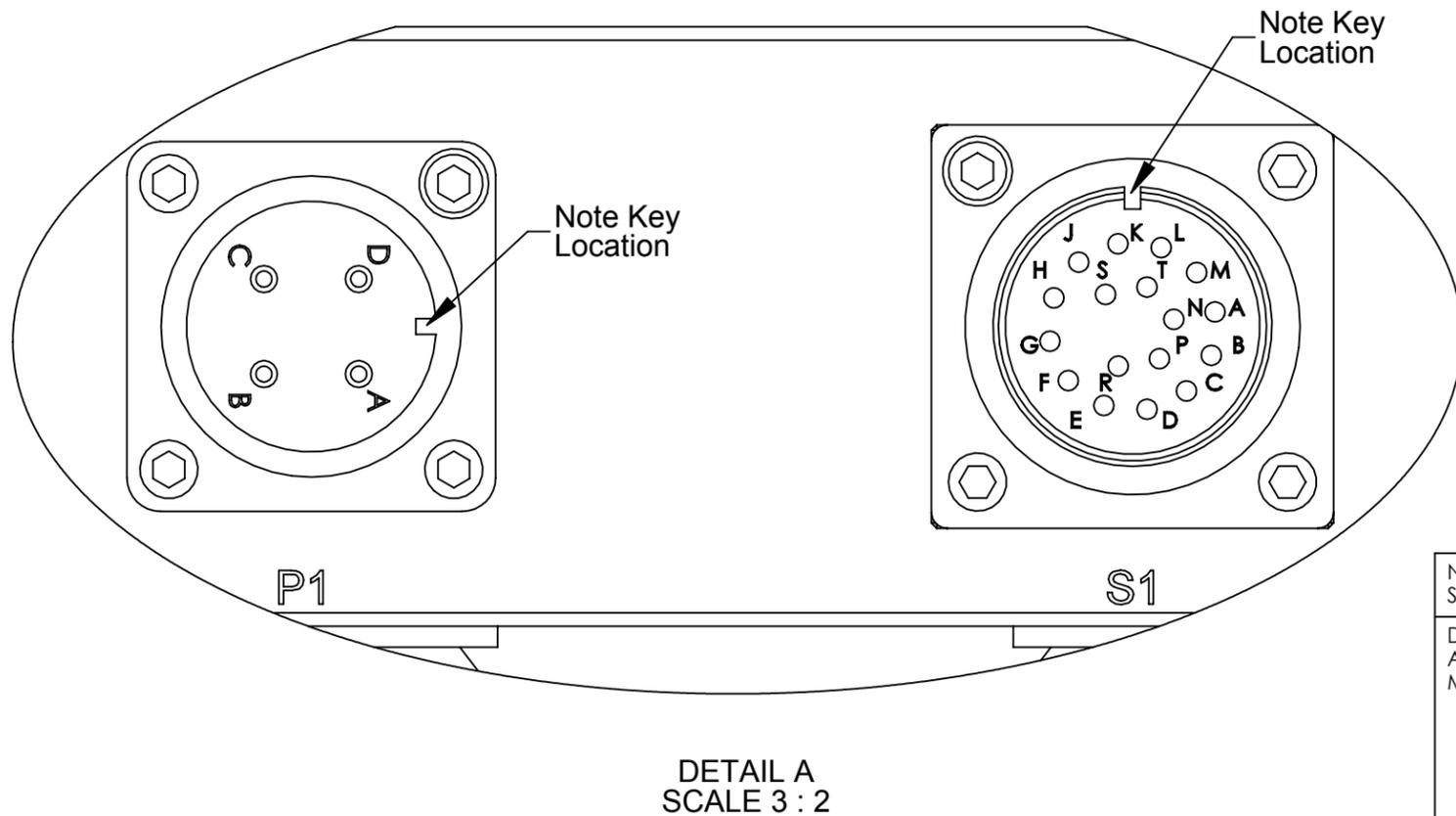
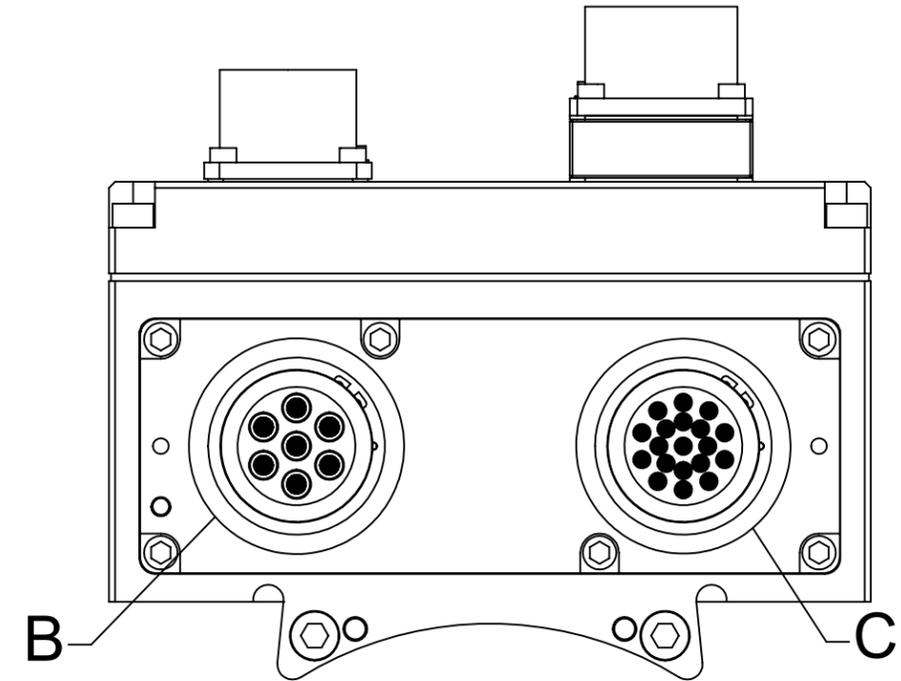
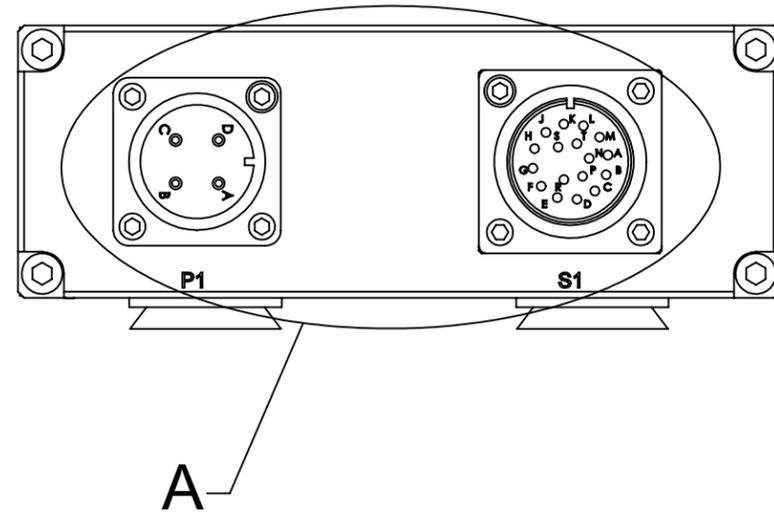
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CHECKED BY: P Luczka, 06/03/11 W Berrocal, 06/03/11		EF19 Servo Assembly & Wiring	
PROJECT # 110603-1	SHEET 1 OF 4	SCALE 1:2	SIZE B
		DRAWING NUMBER 9630-20-EF19	REVISION 08

# EF19 MASTER MODULE

Rev.	Description	Initiator	Date
-	See Sheet1	-	-



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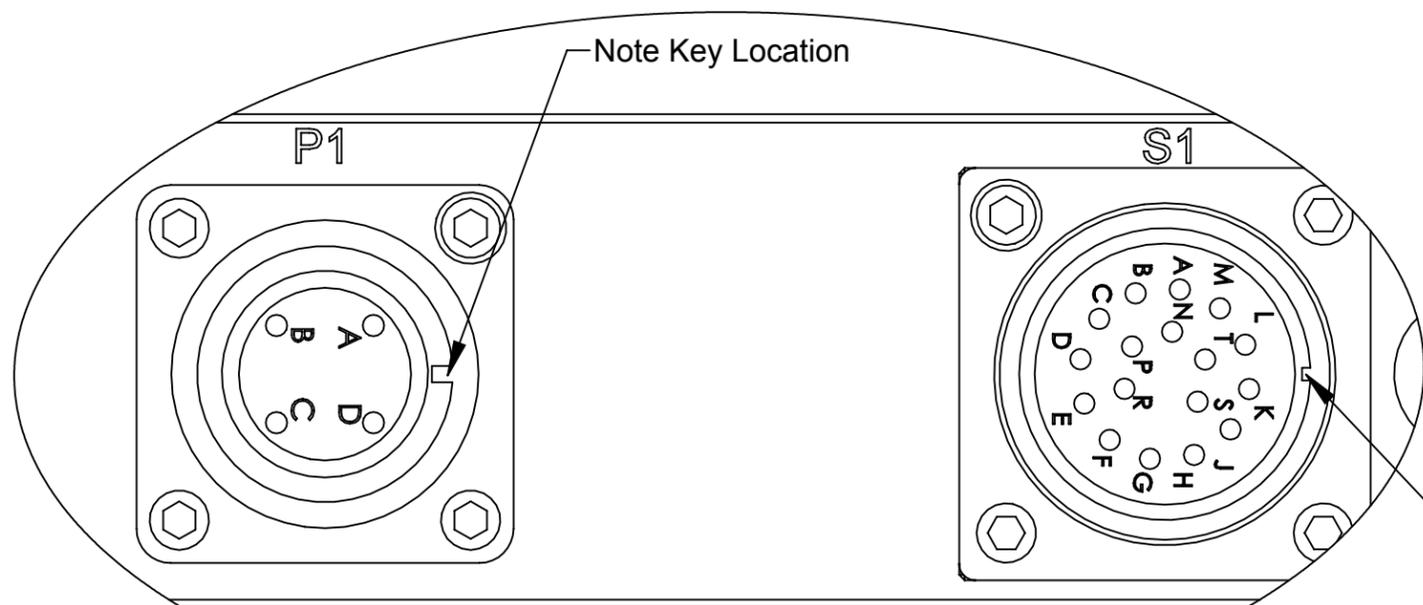
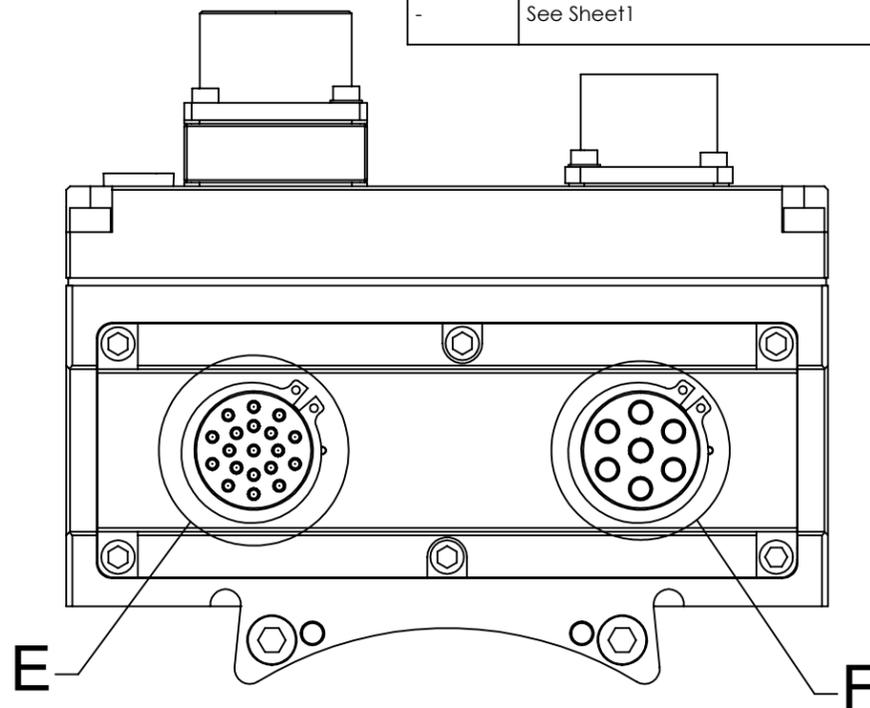
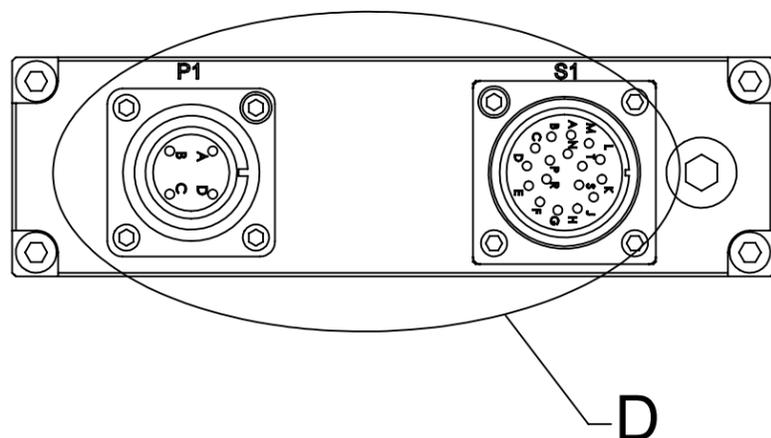
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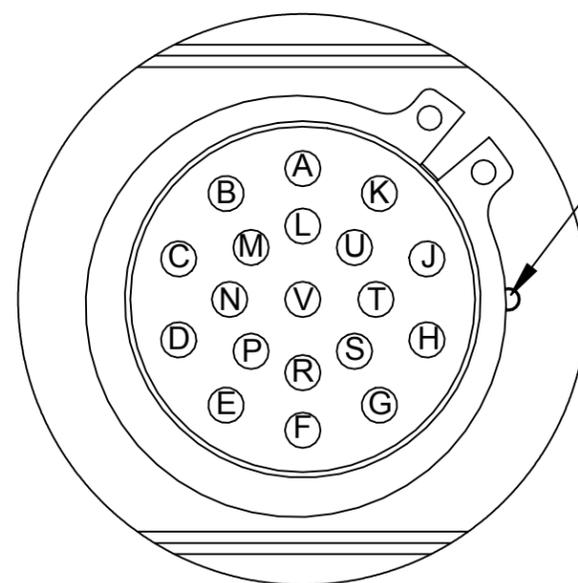
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CHECKED BY: P Luczka, 06/03/11 W Berrocal, 06/03/11		EF19 Servo Assembly & Wiring	
PROJECT # 110603-1	SHEET 2 OF 4	SCALE 2:3	SIZE B
		DRAWING NUMBER 9630-20-EF19	REVISION 08

# EF19 TOOL MODULE

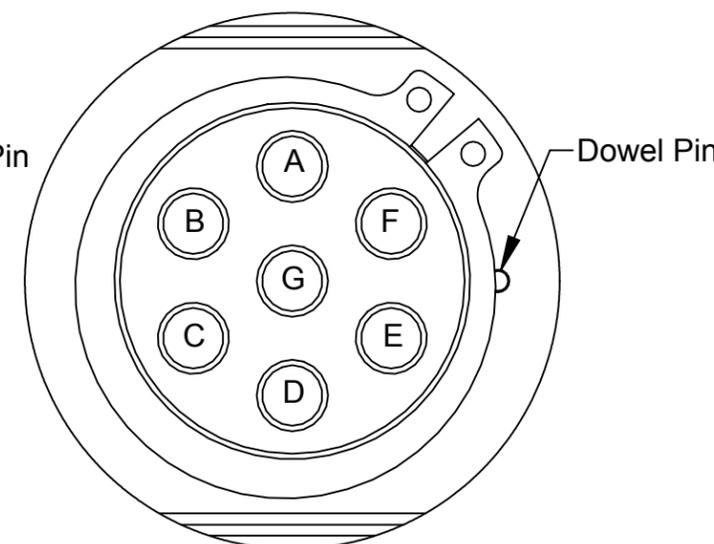
Rev.	Description	Initiator	Date
-	See Sheet1	-	-



DETAIL D  
SCALE 3 : 2



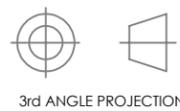
DETAIL E  
SCALE 2 : 1



DETAIL F  
SCALE 2 : 1

NOTES: UNLESS OTHERWISE SPECIFIED.

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3rd ANGLE PROJECTION



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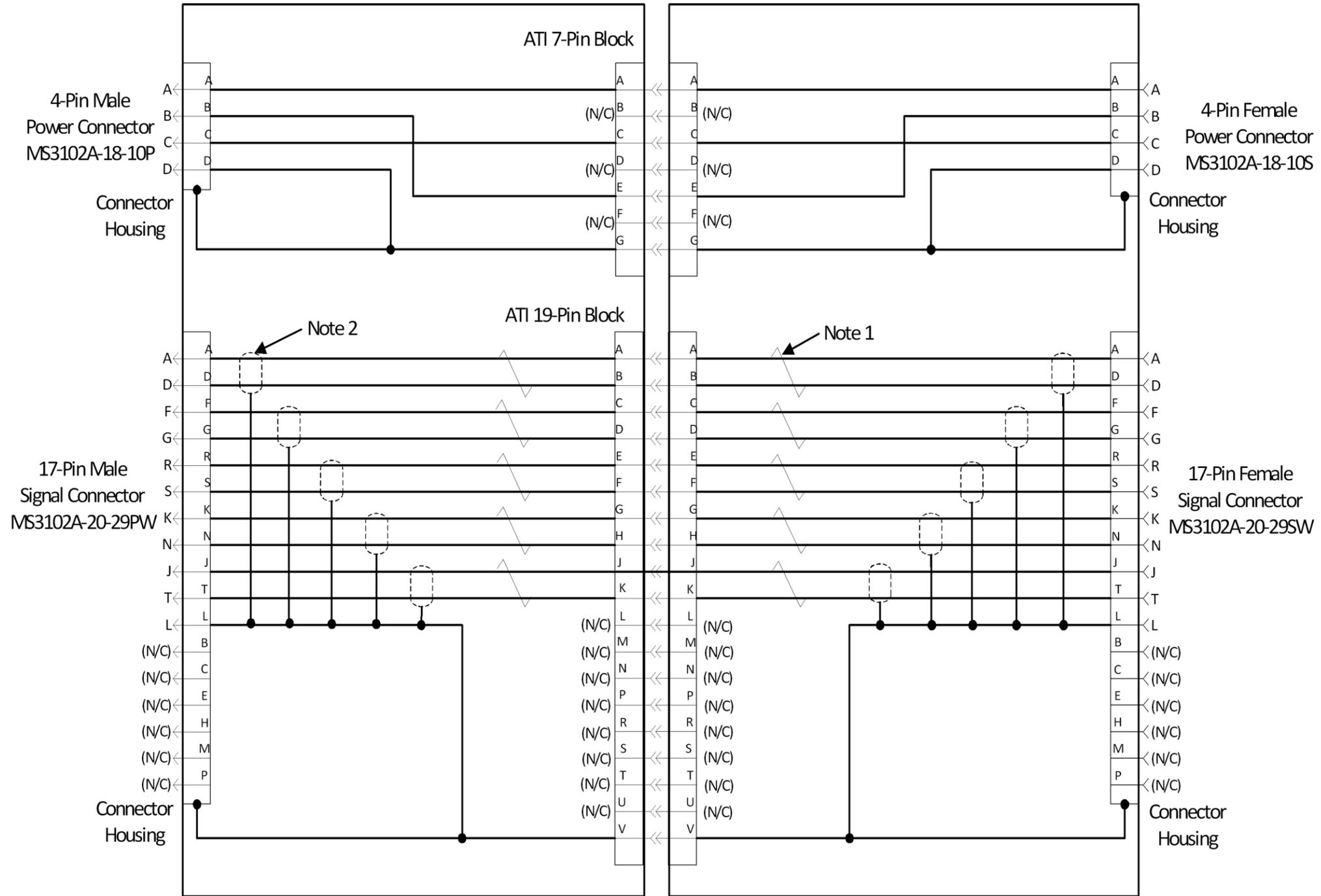
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PROJECT # 110603-1	SHEET 3 OF 4	SCALE 2:3	SIZE B
DRAWING NUMBER 9630-20-EF19		REVISION 08	

Rev.	Description	Initiator	Date
-	See Sheet1	-	-

### 9121-EF19-M

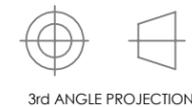
### 9121-EF19-T



- Notes:**
1. Indicated signal pairs are twisted and shielded.
  2. The signal pair shields are connected to the 17-Pin Connector Shell.
  3. Pin G of the 7-Pin Block is first-to-mate, last-to-break.
  4. Pin V of the 19-Pin Block is first-to-mate, last-to-break.

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PROJECT # 110603-1	SHEET 4 OF 4	SCALE 1:2	SIZE B
DRAWING NUMBER 9630-20-EF19		REVISION 08	