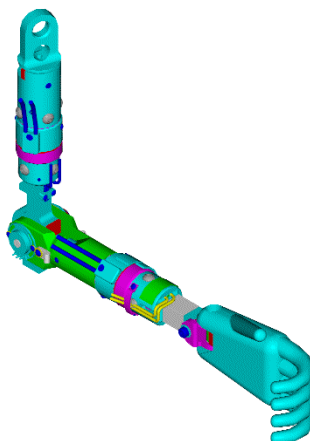


# ROBERT A. DENTON, INC.

2967 Waterview Dr., Rochester Hills, MI 48309

Tel (248) 852-5100 • Fax (248) 852-6060 • email: info@radenton.com • www.radenton.com



## MODEL 4380 Enhanced Airbag Interaction Arm for Hybrid III 5<sup>th</sup> Percentile and SID-IIs ATD's

### Applications:

The Model 4380 Enhanced Airbag Interaction Arm load cell assembly is designed for use on the Hybrid III 5<sup>th</sup> Percentile and the SID-IIs ATD's to measure arm interaction during airbag testing. The Enhanced Airbag Arm provides the capability to measure up to six accelerations, six forces, ten moments and two rotations for a total of twenty-four channels. Each of the four load cells and two potentiometers are wired per the SAE J211 Right Hand Rule sign convention. Accelerometers are not included with the Arm assembly.

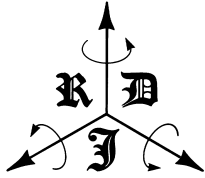
Model 4380 includes all necessary flesh and attaching components for the Arm assembly to be used on both the Hybrid III 5<sup>th</sup> Percentile and the SID-IIs ATD's on either the right or left side.

### Standard Ordering Configuration: 4380J

For optional configurations, see load cell ordering guide or consult factory.

### Instrumentation:

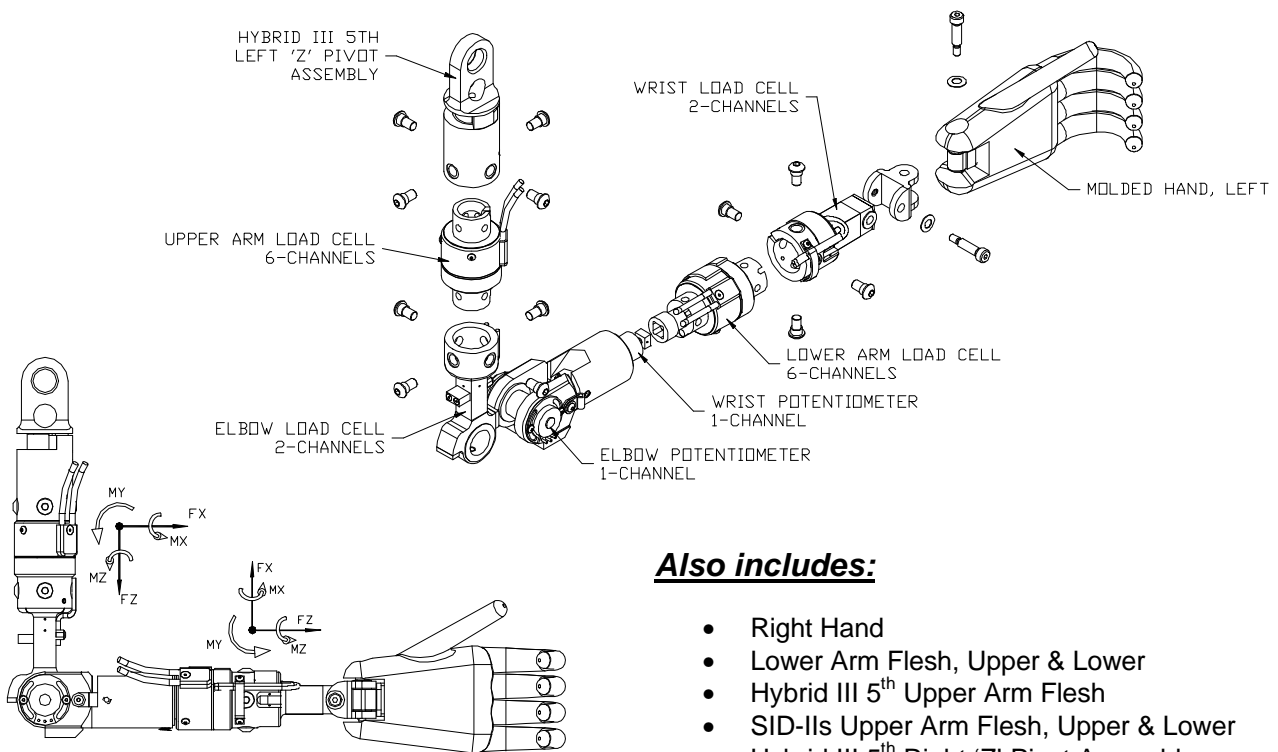
Instrument Position	Number of Channels	Measurements	Model Number
Wrist Load Cell	2	Mx, My	4455
Lower Arm Load Cell	6	Fx, Fy, Fz Mx, My, Mz	4461
Elbow Load Cell	2	Mx, My	3781
Upper Arm Load Cell	6	Fx, Fy, Fz Mx, My, Mz	3780
Uniaxial Accelerometers	6	(2) 'X', (2) 'Y', (2) 'Z'	na
Wrist 'Z' Pot.	1	'Y' rotation	4453
Elbow Rotation Pot.	1	'Z' rotation	4005



## Model 4380 Enhanced Airbag Interaction Arm

### NOTES

1. The Upper Arm and Lower Arm load cells are both calibrated on fixture number 3697. The Elbow load cell is calibrated on fixture number 3698 and the Wrist load cell is calibrated on fixture number 4464.
2. These load cells are wired for SAE J211 Right Hand Rule sign convention indicated by the suffix "J" on the model tag on the load cell.
3. If the model tag on the load cell includes a "G" suffix, the shield of the cable is grounded to the body of the part.
4. If the model tag on the load cell includes an "I" suffix, there is an ID module in the body of the load cell. The number following the "I" indicates the type of ID module.
5. The standard cable length for this load cell is 9.1 meters (30'). If the cable is cut shorter, the calibration will change. Upon request, the load cell can be made and calibrated with a custom cable length.



### Also includes:

- Right Hand
- Lower Arm Flesh, Upper & Lower
- Hybrid III 5<sup>th</sup> Upper Arm Flesh
- SID-IIs Upper Arm Flesh, Upper & Lower
- Hybrid III 5<sup>th</sup> Right 'Z' Pivot Assembly
- SID-IIs Left & Right 'Z' Pivot Assemblies

### *Creating the Standard in Safety Measurement Since 1974*

Robert A. Denton, Inc. maintains a high level of control over the manufacture of its products to ensure quality, accuracy and reliability. Continued improvement necessitates that we reserve the right to modify these specifications without notice.

Robert A. Denton, Inc., 2967 Waterview Drive, Rochester Hills, Michigan 48309  
Tel: (248) 852-5100 • Fax: (248) 852-6060 • email: info@radenton.com  
Copyright © R. A. Denton, Inc. 1997