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MODEL 4507 INSTRUMENTED LOWER LEG ASSEMBLY

Used in the HIII 50M

Applications:

The Model 4507 Instrumented Lower Leg Load Cell Assembly consists of two load cells (the Model 3115 4-Channel Upper Tibia and the Model 3287 4-Channel Lower Tibia) and the Model 2110 Structural Replacement Knee Clevis. The Model 4507 Lower Leg Assembly is used on the Hybrid III 50th Percentile Crash Dummy. The instrumented lower leg measures the forces and moments acting upon the lower section of the leg.

Standard Ordering Configuration: 4507

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

Specifications: (for more complete channel information see the Specification sheet for each Load Cell)

Channel	Capacity		Bridge Resistance (nom)	Output Sensitivity (nom)
	Metric	English		
Upper Tibia:				
Fx	11.1 kN	2500 lbf	350 ohms	2.0 mV/V
Fz	11.1 kN	2500 lbf	700 ohms	1.0 mV/V
Mx	395 Nm	3500 in-lbf	350 ohms	3.0 mV/V
My	395 Nm	3500 in-lbf	350 ohms	3.0 mV/V
Lower Tibia:				
Fx	11.1 kN	2500 lbf	350 ohms	2.0 mV/V
Fz	11.1 kN	2500 lbf	700 ohms	1.0 mV/V
Mx	395 Nm	3500 in-lbf	350 ohms	3.0 mV/V
My	395 Nm	3500 in-lbf	350 ohms	3.0 mV/V

Non-linearity ..... less than 1% of full scale
Hysteresis .....less than 1% of full scale
Crosstalk .....less than 5% of full scale
Excitation ..... 10 VDC nom. 15 VDC max.

Wiring

Upper & Lower Tibias:

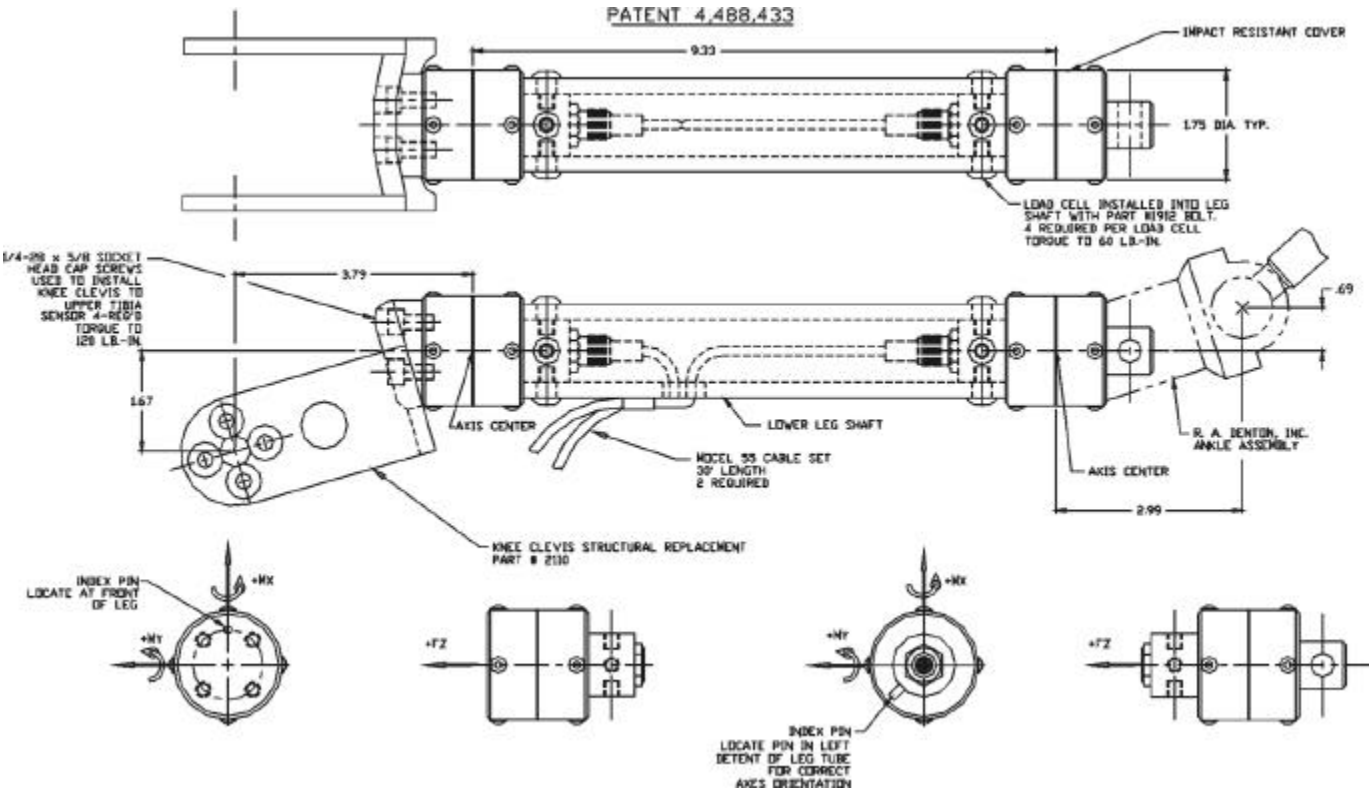
Fx Channel		Fz Channel		Mx Channel		My Channel	
Brown	+Exc.	Green	+Exc.	Green Stripe	+Exc.	Red Stripe	+Exc.
Red	+Sig.	Blue	+Sig.	Blue Stripe	+Sig.	Black	+Sig.
Orange	-Exc.	Violet	-Exc.	Orange Stripe	-Exc.	White	-Exc.
Yellow	-Sig.	Gray	-Sig.	Yellow Stripe	-Sig.	Black Stripe	-Sig.

Issue Date: 3-Dec-04

MODEL 4507 LOWER LEG LOAD CELL ASSEMBLY

NOTES

1. Use the Denton Model 3337 calibration fixture and reference calibration fixture drawing 3287-C for the Model 3287 load cell. Use the Denton Model 2171 calibration fixture and reference calibration fixture drawing 3115-C for the Model 3115 load cell.
2. If the model tag on the load cell includes a “J” suffix, the load cell is wired for SAE J211 Right Hand Rule sign convention.
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.



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