



Parts Catalog
aPLI 233-5000



aPLI

ADVANCED PEDESTRIAN LEGFORM IMPACTOR



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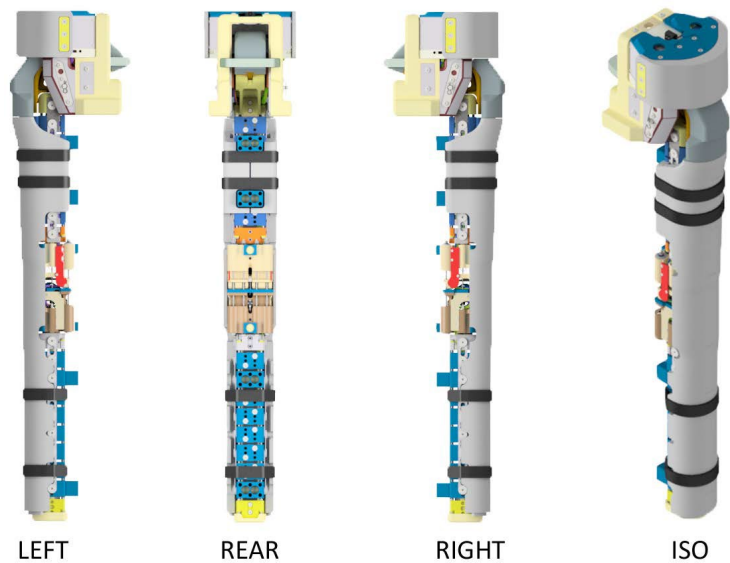
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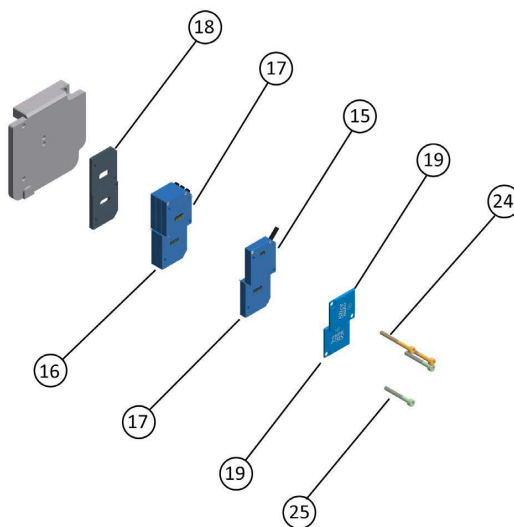
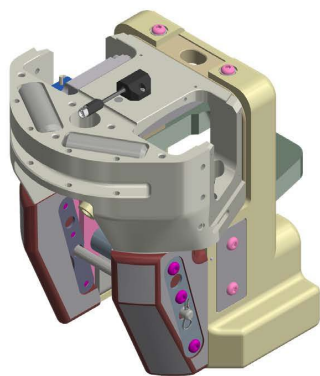
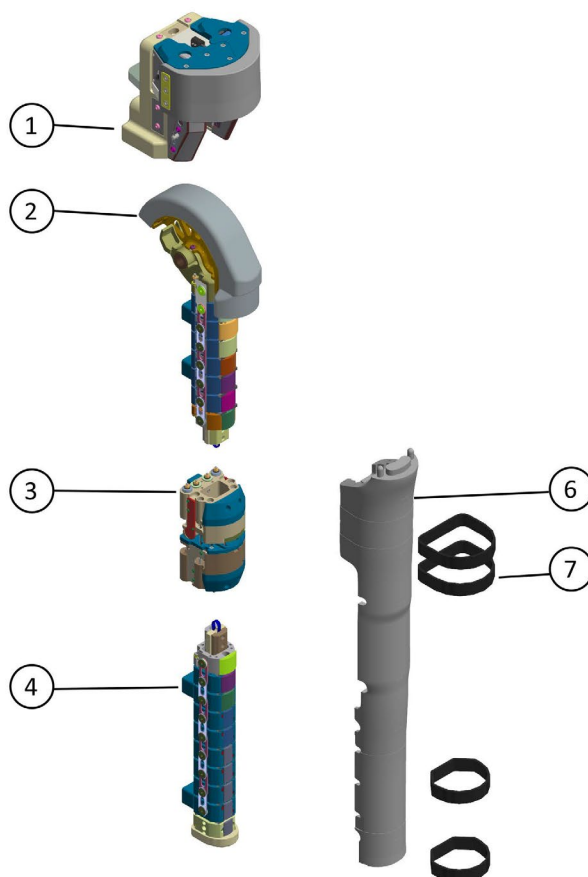
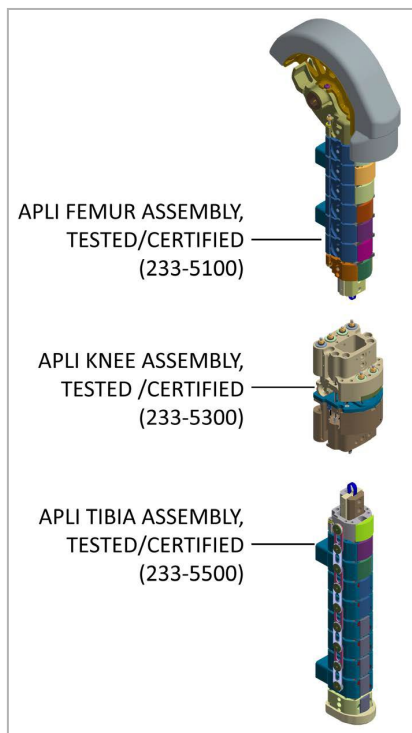
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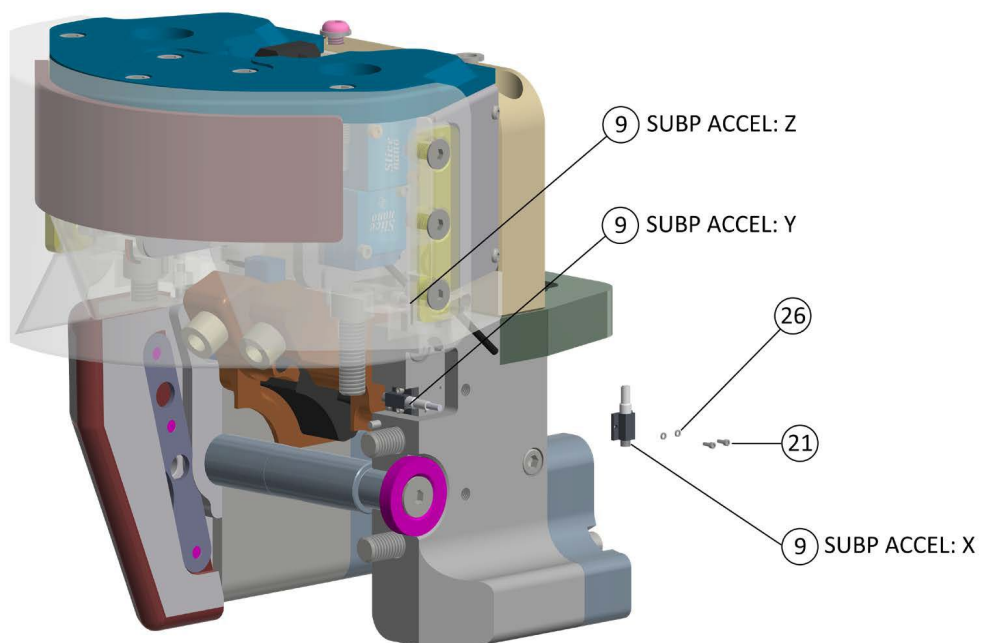
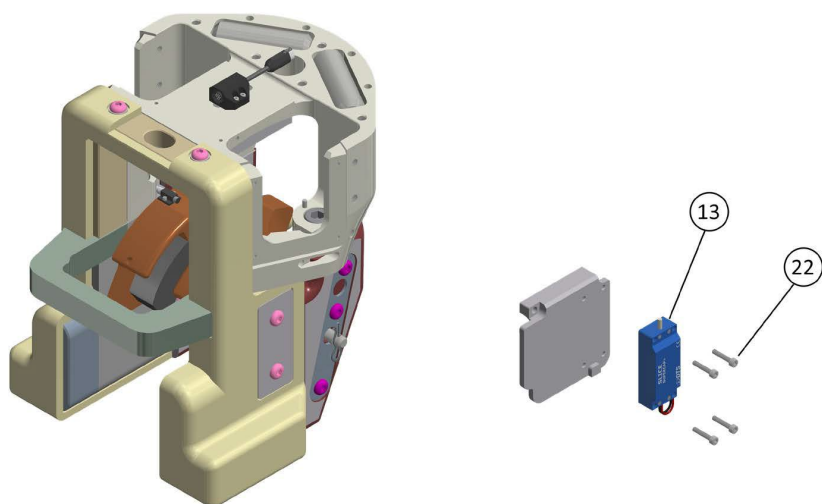
The advanced Pedestrian Legform Impactor (aPLI) is the latest pedestrian crash testing tool representing a 50th percentile male leg which simulates the flexible nature of the human leg bones and is used for the assessment of knee, upper and lower leg injuries. The aPLI improves on the Flex-PLI’s groundbreaking technology by adding a Simplified Upper Body Part (SUBP) which adds ballast to the leg to simulate the human upper-body mass for enhanced kinematics. The SUBP also allows for femur injury to be assessed and provides for the placement of a Data Acquisition System (DAS). To make the aPLI’s biofidelity and sensitivity more human-like, the leading experts in the field led by JSAE and the ISO/TC22/SC36/WG5 & WG6 working group also redesigned the knee, rerouted ligament cables, and incorporated a polyurethane flesh to further help with mass distribution and biofidelic response.



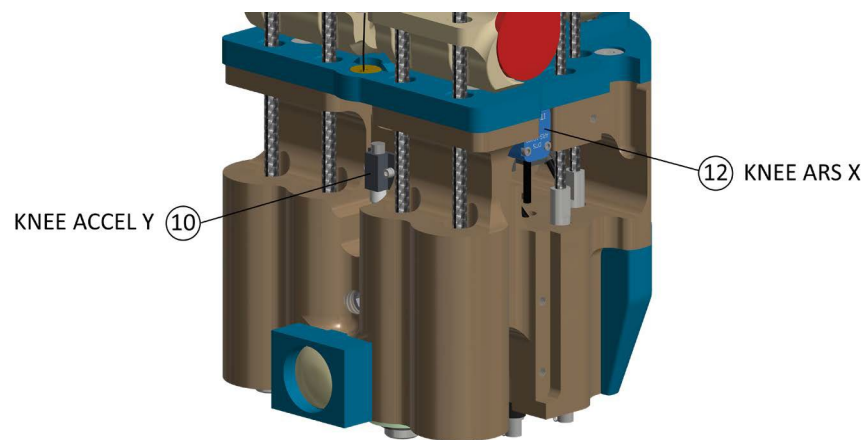
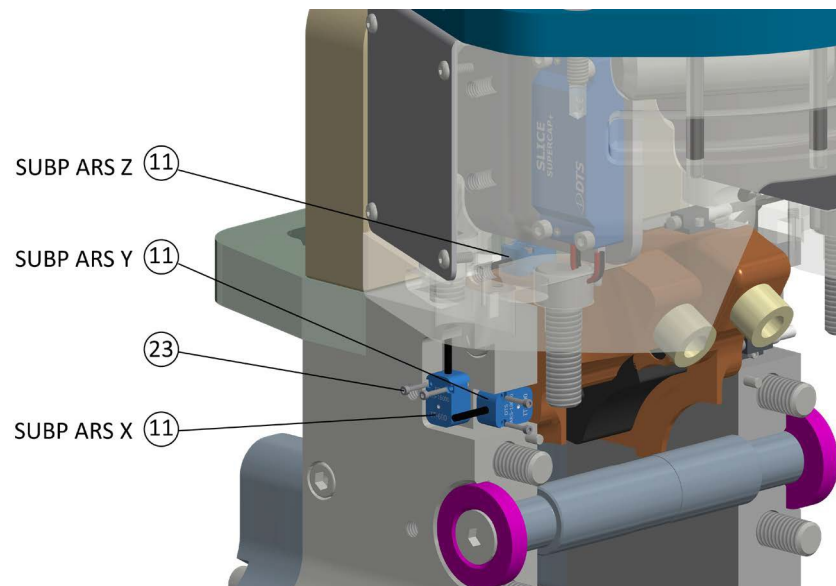
Top Assembly



Top Assembly



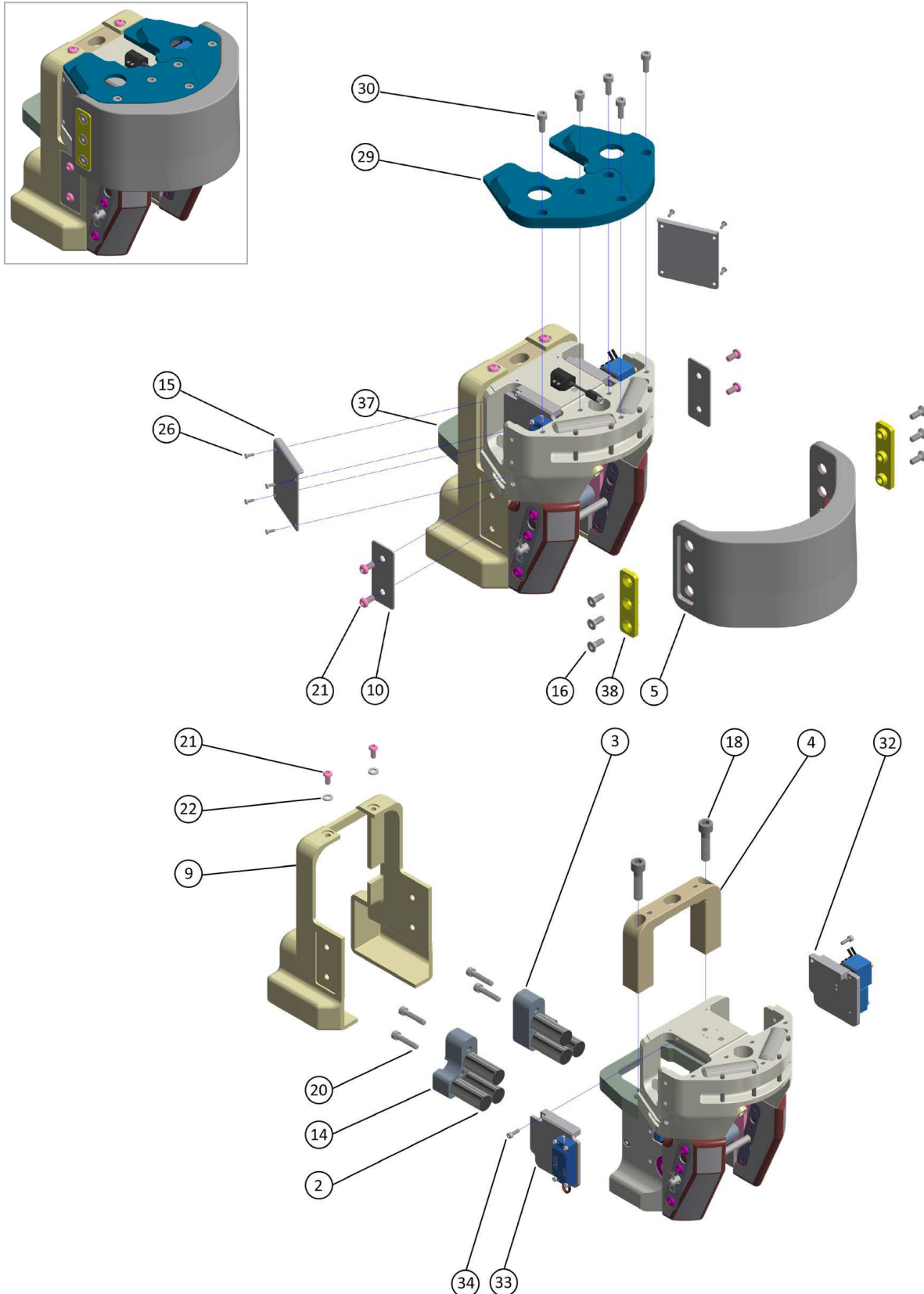
Top Assembly



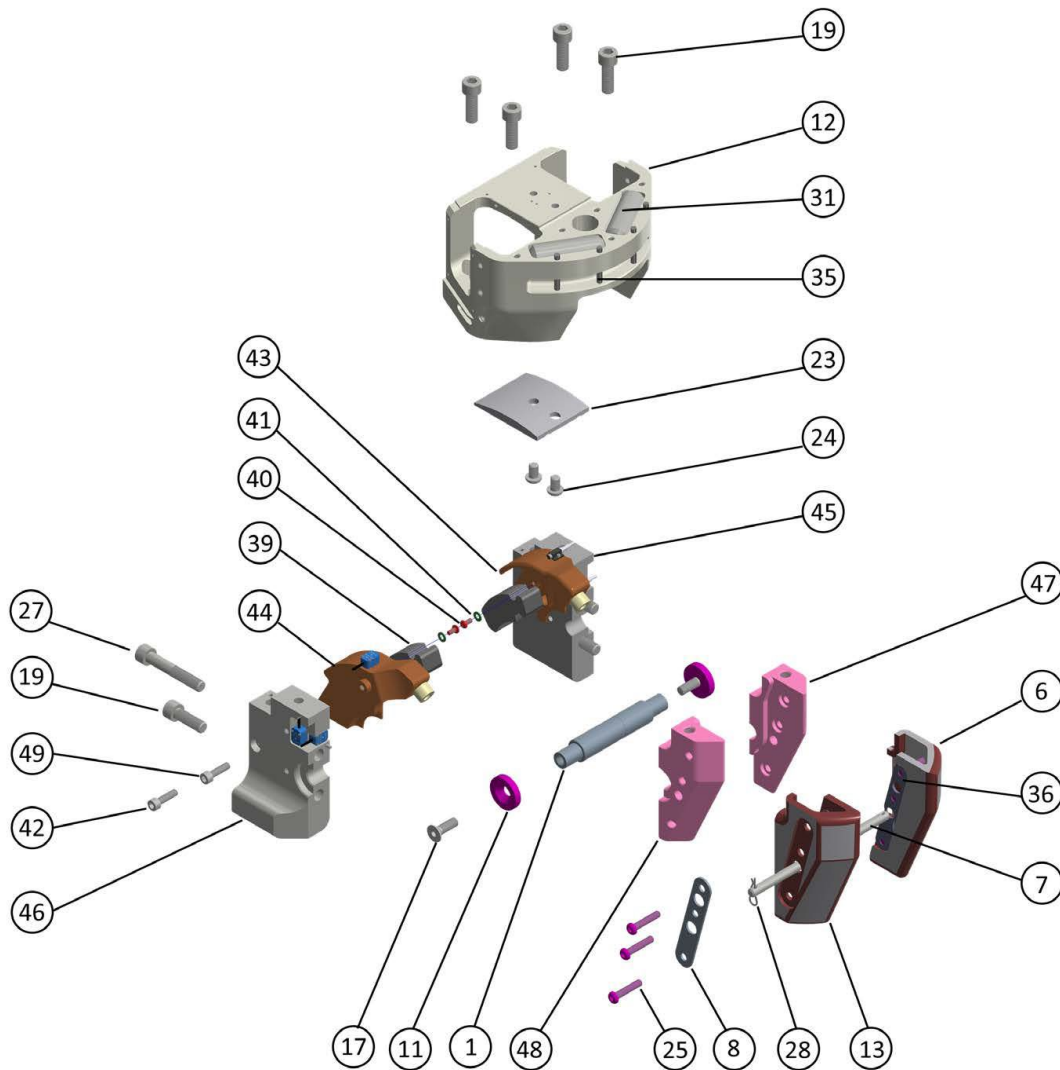
Item	Qty	Part Number	Description
1	1	233-5150	aPLI SUBP ASSEMBLY
2	1	233-5100	aPLI FEMUR ASSEMBLY, TESTED/CERTIFIED
3	1	233-5300	aPLI KNEE ASSEMBLY, TESTED/CERTIFIED
4	1	233-5500	aPLI TIBIA ASSEMBLY, TESTED/CERTIFIED
5	1	233-5250	FLESH COVER ASSEMBLY (NOT SHOWN)
6	1	233-5260	WEIGHTED FLESH ASSEMBLY
7	4	6005983	CABLE TIE HOOK & LOOP 1" X 24" BLACK
8	1	233-TOOL-KIT	TOOL KIT (NOT SHOWN)
9	3	61-123-05-200-5V	7264C-2000TZ ACCEL, 200mm, SLICE, SUBP
10	1	61-123-05-1000-5V	ACCEL, 7264C-2000TZ, 1000mm CBL, SLICE, KNEE Y

Top Assembly

Item	Qty	Part Number	Description
11	3	61-703-05-09-D0	ARS PRO 18K, 200mm CBL, SLICE, SUBP
12	1	61-703-05-08-D0	ARS PRO 18K, 1120mm CBL, SLICE, KNEE X
13	1	TE-6002144	SLICE SUPERCAP+ (200mm UP; 80mm PIGTAIL)
14	1	TE-6002190	EXIT CABLE, 8cm
15	1	TE-6000201-XX	SLICE NANO BASE 10cm, 10cm
16	1	TE-6002010-45-XX	SLICE NANO BRIDGE, 45mm
17	1	TE-6002010-155-XX	SLICE NANO BRIDGE, 155mm
18	3	TE-6002011-70-XX	SLICE NANO BRIDGE, 70mm
19	1	TE-6002105	SLICE NANO BRIDGE, 155mm CABLES
20	1	TE-6002012	SLICE NANO STACK EXTENDER
21	2	TE-6002115	SLICE NANO COVER
22	3	5000456	M2.5 X 0.45 X 10 LG.SHCS
23	8	5000375	M1.4 X 0.3 X 4 LG.SHCS
24	4	5000437	M3 X 0.5 X 16 LG.SHCS
25	8	5000727	M1.4 X 0.3 X 8 LG.SHCS
26	2	5000986	M3 X 0.5 X 30 LG.SHCS
27	2	5001057	M3 X 0.5 X 25 LG.SHCS
28	8	9000552	#0 FLAT WASHER
29	10	6006010	FIR-TREE CLIP 6.5 HOLE X 2-6 THK BLACK (NOT SHOWN)

SUBP Assembly

SUBP Assembly

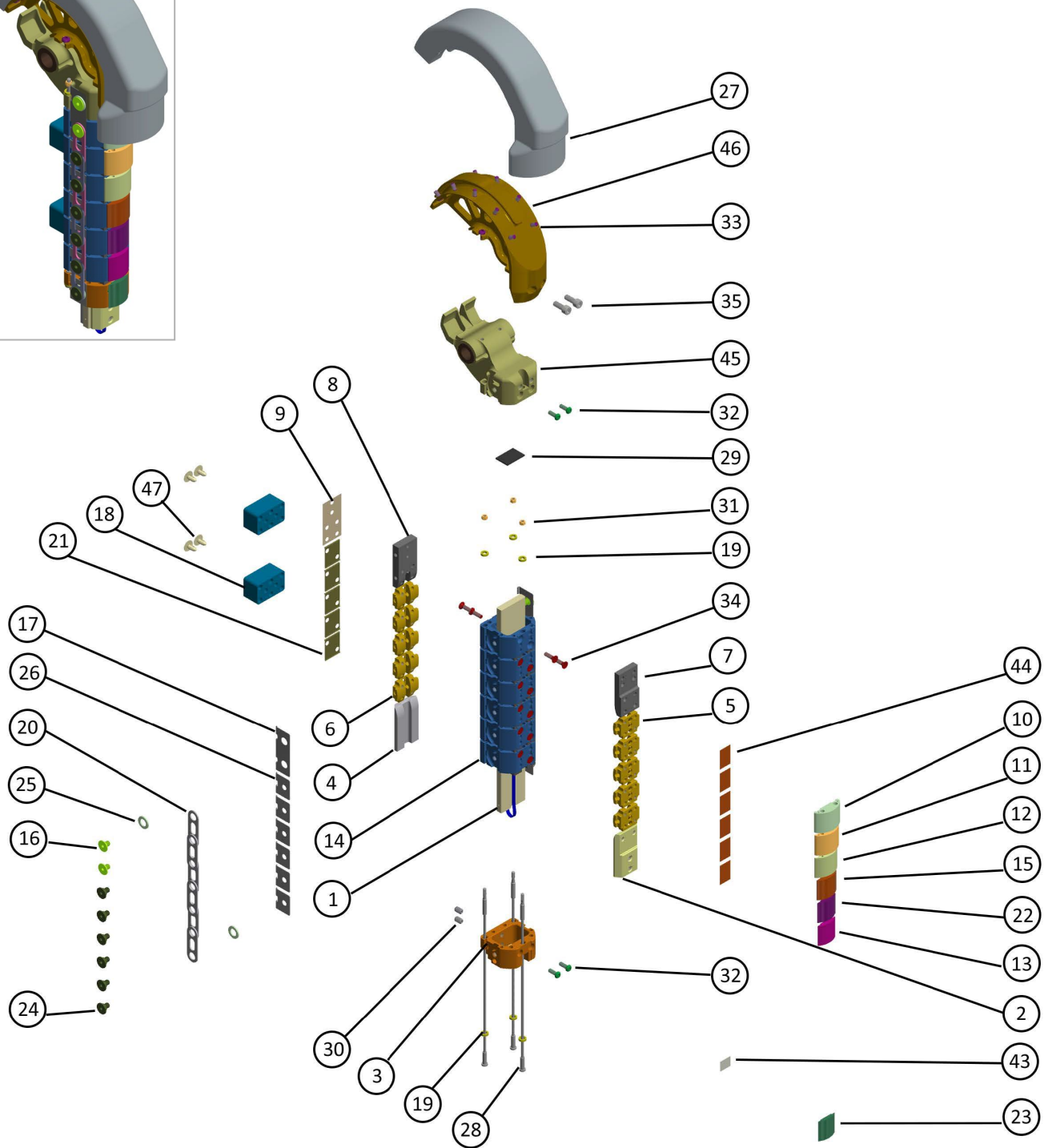
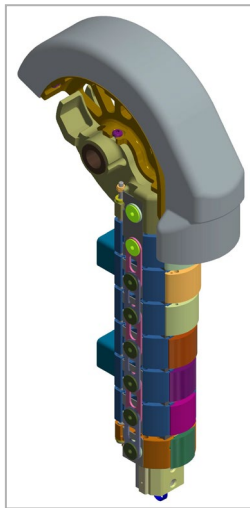


Item	Qty	Part Number	Description
1	1	233-5154	X-AXIS SHAFT
2	6	233-5155	TUNGSTEN INSERT
3	1	233-5156	REAR BALLAST CLAMP LEFT
4	1	233-5159	CLAMP SUPPORT
5	1	233-5210	TOP FLESH ASSEMBLY, TESTED & CERTIFIED
6	1	233-5220	LOWER BUFFER, LEFT
7	1	233-5161	TRAVEL PIN
8	2	233-5179	SHEET METAL CLAMP
9	1	233-5204	REAR IMPACT PROTECTION
10	2	233-5162	SIDE CLAMP PLATE
11	2	233-5164	PIVOT CLAMP WASHER
12	1	233-5166	SUBP TOP HOUSING
13	1	233-5230	LOWER BUFFER, RIGHT

SUBP Assembly

Item	Qty	Part Number	Description
14	1	233-5170	REAR BALLAST CLAMP RIGHT
15	2	233-5172	DAS COVER
16	6	5000090	M6 X 1 X 16 LG.FHCS
17	2	5000117	M8 X 1.25 X 25 LG.FHCS
18	2	5000930	M10 X 1.5 X 40 LG.SHCS
19	6	5000444	M10 X 1.5 X 30 LG.SHCS
20	4	5000008	M6 X 1 X 30 LG.SHCS
21	6	5000356	M6 X 1 X 12 LG.BHCS
22	2	5001580	M6 FLAT WASHER PLAIN SS
23	1	233-5171	LAUNCHER SUPPORT BRACKET
24	2	5000614	M8 X 1.25 X 12 LG.BHCS
25	6	5001754	M6 X 1 X 30 LG.BHCS
26	8	5001020	M3 X 0.5 X 6 LG.BHCS
27	2	5001753	M10 X 1.5 X 60 LG.SHCS
28	2	9004065	PIN HAIRPIN COTTER 5/16 ZINC
29	1	233-5151	COVER TOP PLATE SUBP
30	5	5000081	M6 X 1 X 16 LG.SHCS
31	2	233-5167	BALLAST DTS
32	1	233-5152	DTS MOUNTING BRACKET, LEFT
33	1	233-5153	DTS MOUNTING BRACKET, RIGHT
34	2	5000152	M4 X 0.7 X 12 LG.SHCS
35	4	5001773	M5 X 40 LG.DOWEL PIN SS
36	2	233-5194	CLAMP PLATE
37	1	233-5185	REAR BRACE
38	2	233-5186	SUBP FLESH CLAMP PLATE
39	2	233-5187	SUBP BUMPER
40	2	5000103	M4 X 0.7 X 8 LG.BHCS
41	2	5000155	M4 FLAT WASHER PLAIN ZINC
42	2	5000282	M6 X 1 X 22 LG.SHCS
43	1	233-5198	LEFT BUMPER COVER ASSEMBLY
44	1	233-5199	RIGHT BUMPER COVER ASSEMBLY
45	1	233-5183	REAR CLAMP, LEFT
46	1	233-5184	REAR CLAMP, RIGHT
47	1	233-5180	LOWER CLAMP LEFT
48	1	233-5181	LOWER CLAMP RIGHT
49	2	5000285	M6 X 1 X 18 LG.SHCS

Femur Assembly



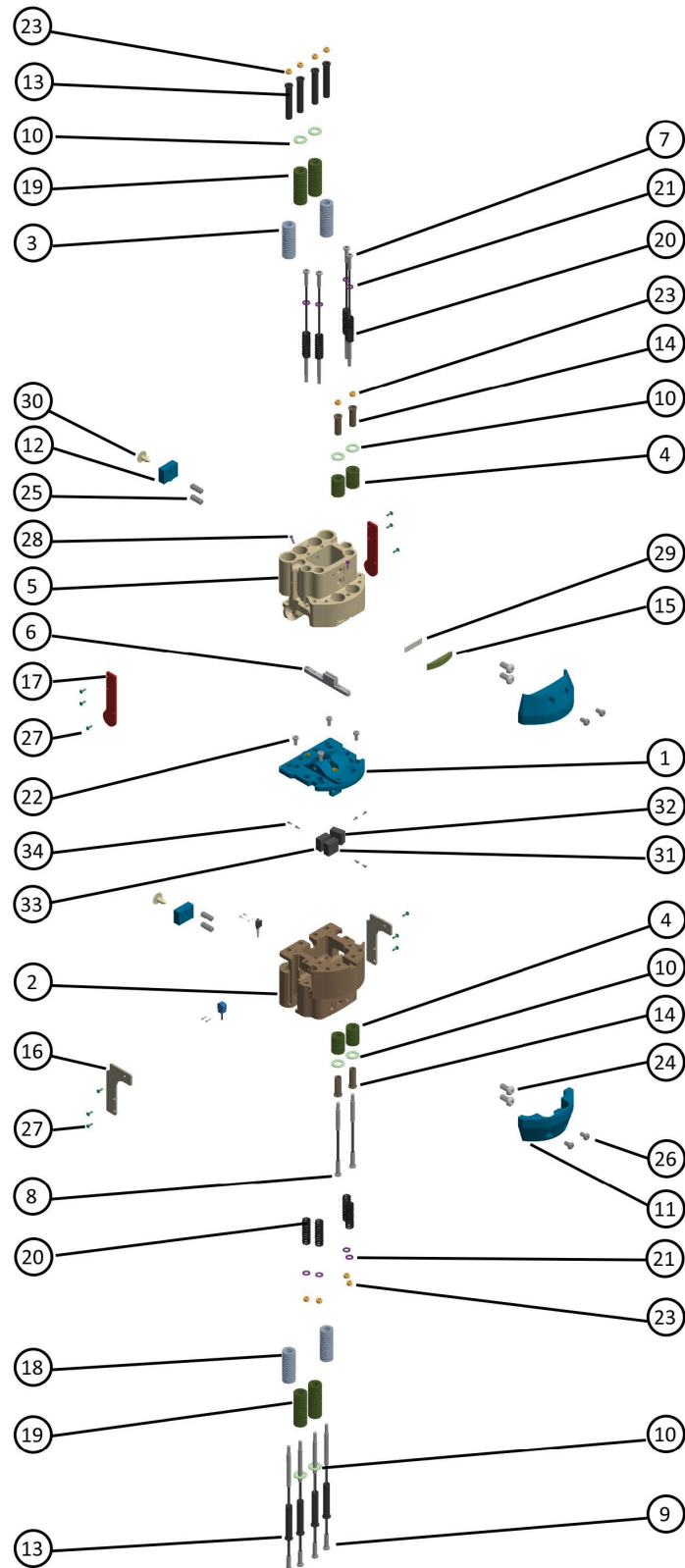
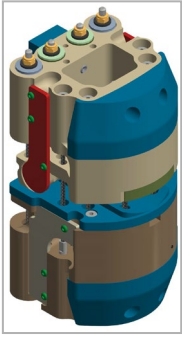
Femur Assembly

Item	Qty	Part Number	Description
1	1	233-5165	PCB FEMUR BONE ASSEMBLY, 3 CH
2	1	233-5102	BONE CLAMP THICK, KNEE (FEMUR)
3	1	233-5137	FEMUR SEGMENT LOWER (PT-2)
4	1	233-5508	BONE CLAMP THIN, KNEE (FEMUR)
5	5	233-5125	SPACER, BONE CONTACT, THICK (FEMUR)
6	5	233-5127	SPACER, BONE CONTACT, THIN (FEMUR)
7	1	233-5128	BONE CLAMP THICK, FEMUR TOP
8	1	233-5129	BONE CLAMP THIN, FEMUR TOP
9	1	233-5504	SHIM, BONE CLAMP (T0.4) (OPTIONAL)
10	1	233-5118	IMPACT FACE FEMUR 2
11	1	233-5117	IMPACT FACE FEMUR 3
12	1	233-5116	IMPACT FACE FEMUR 4
13	1	233-5115	IMPACT FACE FEMUR 7
14	6	233-5134	SEGMENT ASSEMBLY FEMUR
15	1	233-5119	IMPACT FACE FEMUR 5
16	4	233-5105	STEPPED BOLT, SHORT
17	2	233-5121	CABLE COVER, FEMUR
18	2	233-5124	LEGFORM PUSH PAD
19	6	233-5521	WASHER, CABLE (OPTIONAL)
20	12	233-5515	LINK
21	5	233-5509	SHIM, TIBIA (T0.4) (OPTIONAL)
22	1	233-5518	IMPACT FACE FEMUR 6
23	1	233-5517	IMPACT FACE TIBIA 3
24	12	233-5106	STEPPED BOLT
25	4	233-5104	WASHER
26	12	233-5528	CABLE COVER
27	1	233-5203	FEMUR HOOK
28	3	133-5110	CABLE ASSEMBLY, FEMUR
29	1	133-5510	RUBBER BUFFER, FEMUR/TIBIA END
30	2	5000796	M8 X 1.25 X 12 LG.SSSCP
31	3	5000522	M5 X 0.8 HEX LOCK NUT ZINC
32	6	5000072	M6 X 1 X 16 LG.BHCS
33	12	5000356	M6 X 1 X 12 LG.BHCS
34	24	5001089	M6 X 1 X 20 LG.FHCS
35	2	5000075	M8 X 1.25 X 20 LG.SHCS
36	2	133-5002	SHIM, BONE CLAMP (T0-05) (OPTIONAL) (NOT SHOWN)
37	2	133-5003	SHIM, BONE CLAMP (T0-5) (OPTIONAL) (NOT SHOWN)
38	2	133-5004	SHIM, BONE CLAMP (T0-6) (OPTIONAL) (NOT SHOWN)
39	15	133-5012	SHIM, .05 (OPTIONAL) (NOT SHOWN)
40	5	133-5029	SHIM, .1 THICK (OPTIONAL) (NOT SHOWN)
41	5	133-5030	SHIM, .2 THICK (OPTIONAL) (NOT SHOWN)
42	5	133-5031	SHIM, .40 (OPTIONAL) (NOT SHOWN)

Femur Assembly

Item	Qty	Part Number	Description
43	1	233-5026	TAPE, FEMUR KNEE SEGMENT
44	6	233-5025	TAPE SEGMENT
45	1	233-5192	FEMUR TOP MOUNTING BRACKET
46	1	233-5191	CURVED IMPACT FACE
47	4	6006010	FIR-TREE CLIP 6.5 HOLE X 2-6 THK BLACK

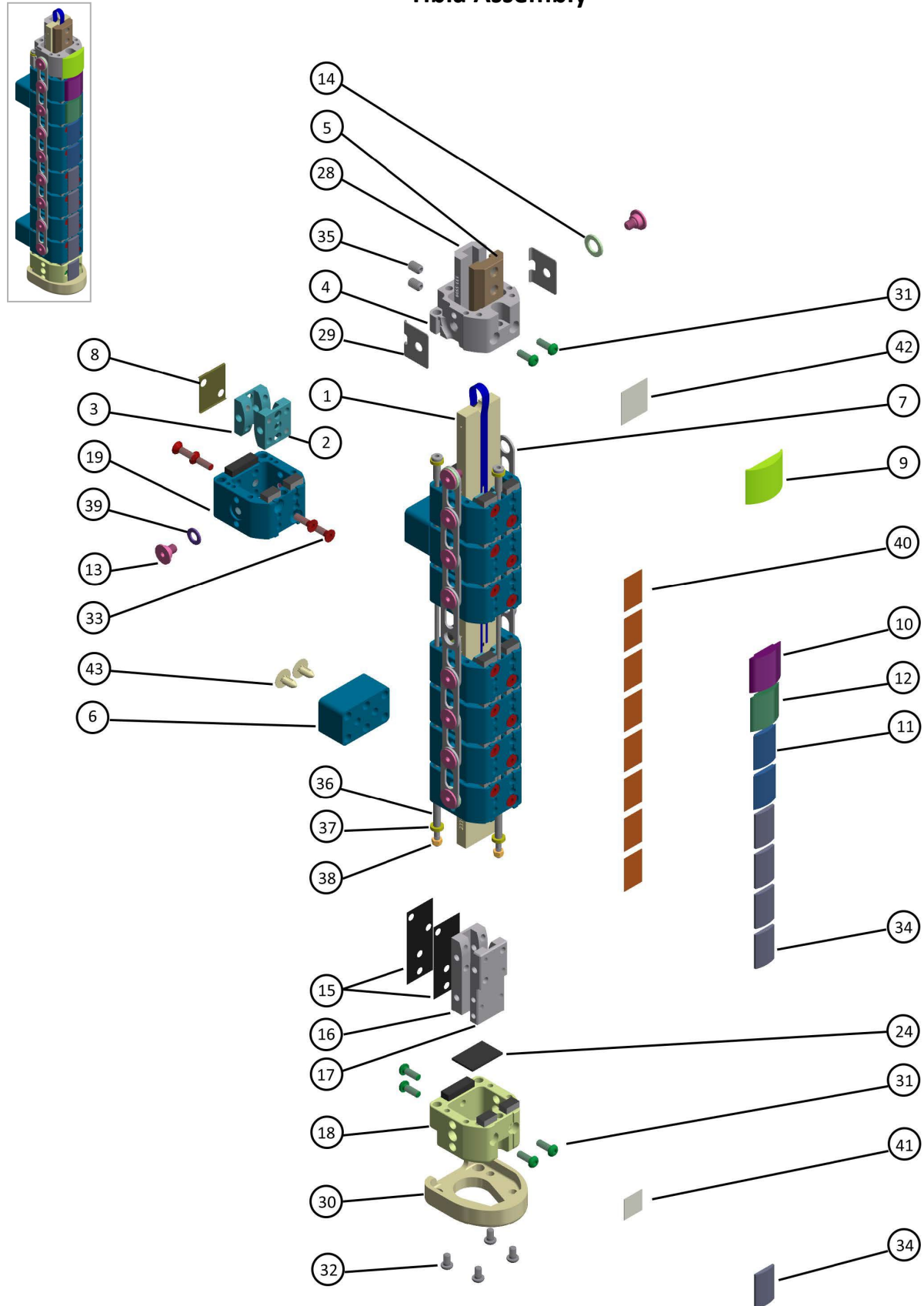
Knee Assembly



Knee Assembly

Item	Qty	Part Number	Description
1	1	233-5313	MENISCUS ASSEMBLY
2	1	233-5330	KNEE BLOCK LOWER
3	2	233-5326	OUTSIDE MCL FEMUR STACK THICK (39 WASHERS FOR EACH 233-5326 ASSEMBLY)
4	4	233-5329	LCL FEMUR AND TIBIA STACK THIN (20 WASHERS FOR EACH 233-5329 ASSEMBLY)
5	1	233-5320	KNEE BLOCK UPPER
6	1	233-5302	KNEE STRING ATTACHMENT
7	4	233-5360	CABLE ASSEMBLY, KNEE AP
8	2	233-5370	CABLE ASSEMBLY, LCL
9	4	233-5350	CABLE ASSEMBLY, MCL
10	8	233-5319	BELLEVILLE TOP WASHER
11	2	233-5304	KNEE COVER
12	2	233-5305	KNEE PUSH PAD
13	8	233-5310	GUIDE TUBE, MCL
14	4	233-5311	GUIDE TUBE, LCL
15	1	233-5306	ROUNDING
16	2	233-5314	CABLE CLAMP LOWER
17	2	233-5315	CABLE CLAMP UPPER
18	2	233-5327	OUTSIDE MCL TIBIA STACK THICK (37 WASHERS FOR EACH 233-5327 ASSEMBLY)
19	4	233-5328	INSIDE MCL FEMUR & TIBIA STACK THIN (42 WASHERS FOR EACH 233-5328 ASSY)
20	8	9003159	SPRING, 12 X 40
21	8	133-5311	CABLE WASHER
22	4	5000774	M5 X 0.8 X 10 LG.LHCS
23	10	5000522	M5 X 0.8 HEX LOCK NUT ZINC
24	4	5001479	M8 X 1.25 X 16 LG.BHCS
25	4	5000006	M8 X 1.25 X 20 LG.SSSCP
26	4	5000891	M6 X 1 X 10 LG.BHCS
27	12	5000410	M3 X 0.5 X 8 LG.BHCS
28	2	5001074	M3 X 0.5 X 10 LG.BHCS
29	1	233-5334	TAPE SEGMENT KNEE
30	2	6006010	FIR-TREE CLIP 6.5 HOLE X 2-6 THK BLACK
31	1	61-503A-05-1150-00-5V	CBL ASSEMBLY STRING POT R, 1150mm CBL, SLICE, ACL
32	1	61-507A-05-950-00-5V	CBL ASSEMBLY STRING POT L, 950mm CBL, SLICE, MCL
33	1	61-507B-05-1150-00-5V	CBL ASSEMBLY STRING POT L, 1150mm CBL, SLICE, PCL
34	6	9003560	#2-56 X 3/16 LG.SHCS

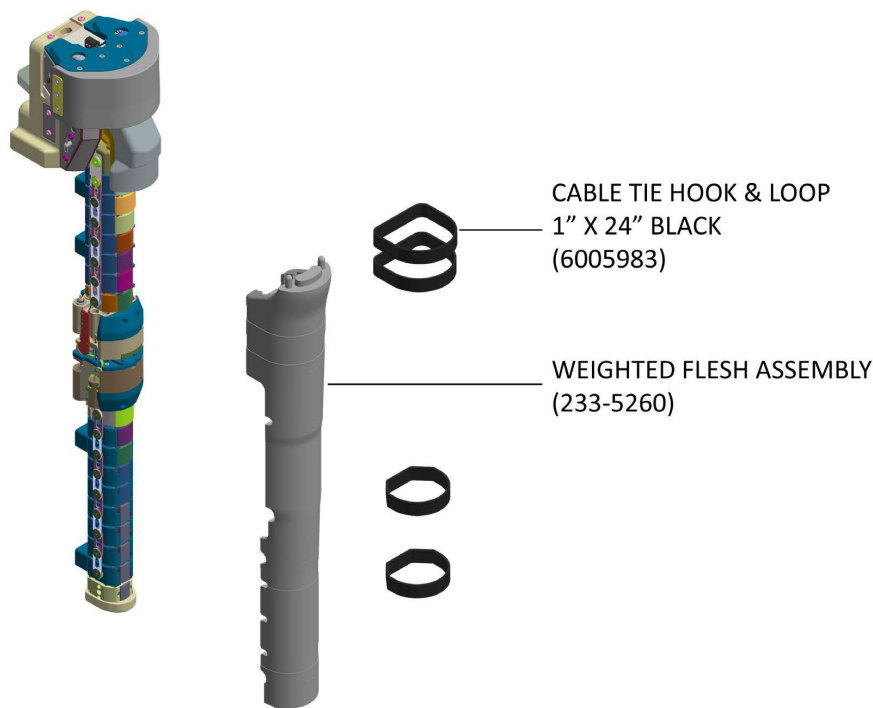
Tibia Assembly



Tibia Assembly

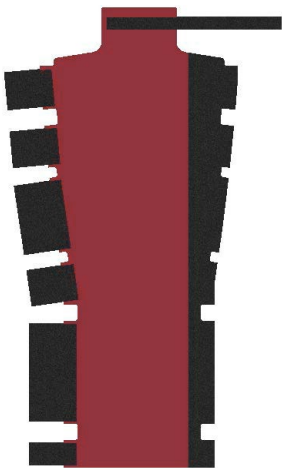
Item	Qty	Part Number	Description
1	1	233-5565	PCB BONE ASSEMBLY, 4 CH TIBIA, TESTED/CERTIFIED
2	7	233-5505	SPACER BONE CONTACT, THICK (TIBIA)
3	7	233-5507	SPACER BONE CONTACT, THIN (TIBIA)
4	1	233-5537	TIBIA SEGMENT, KNEE
5	1	233-5506	BONE CLAMP THICK, KNEE (TIBIA)
6	2	233-5124	LEGFORM PUSH PAD
7	16	233-5515	LINK
8	7	233-5509	SHIM, TIBIA (T0.4)
9	1	233-5519	IMPACT SEGMENT TIBIA 1
10	1	233-5518	IMPACT FACE FEMUR 6
11	2	233-5526	IMPACT SEGMENT TIBIA 4&5
12	1	233-5517	IMPACT FACE TIBIA 3
13	18	233-5106	STEPPED BOLT
14	4	233-5104	WASHER
15	2	233-5031	SHIM, BONE CLAMP (T0.4)
16	1	233-5503	BONE CLAMP THIN (TIBIA) BOTTOM
17	1	233-5502	BONE CLAMP THICK (TIBIA)
18	1	233-5531	SEGMENT BOTTOM ASSEMBLY (TIBIA)
19	8	233-5534	INNER SEGMENT ASSEMBLY (TIBIA)
20	7	133-5012	SHIM, .05 (OPTIONAL – NOT SHOWN)
21	7	133-5029	SHIM, .1 THICK (OPTIONAL – NOT SHOWN)
22	7	133-5030	SHIM, .2 THICK (OPTIONAL – NOT SHOWN)
23	7	133-5031	SHIM, .40 (OPTIONAL – NOT SHOWN)
24	1	133-5510	RUBBER BUFFER, FEMUR/TIBIA END
25	1	133-5002	SHIM, BONE CLAMP (T0-05) (OPTIONAL – NOT SHOWN)
26	1	133-5003	SHIM, BONE CLAMP (T0-5) (OPTIONAL – NOT SHOWN)
27	1	133-5004	SHIM, BONE CLAMP (T0-6) (OPTIONAL – NOT SHOWN)
28	1	133-5508	BONE CLAMP THIN, KNEE
29	2	233-5528	CABLE COVER
30	1	233-5205	FOOT
31	6	5000072	M6 X 1 X 16 LG.BHCS
32	4	5000891	M6 X 1 X 10 LG.BHCS
33	32	5001089	M6 X 1 X 20 LG.FHCS
34	5	233-5527	IMPACT FACE TIBIA 6 TO 10
35	2	5000796	M8 X 1.25 X 12 LG.SSSCP
36	3	133-5530	CABLE ASSEMBLY, TIBIA
37	6	233-5521	WASHER, CABLE
38	3	5000522	M5 X 0.8 HEX LOCK NUT ZINC
39	16	233-5523	TIBIA, WASHER
40	8	233-5025	TAPE SEGMENT
41	1	233-5028	TAPE 3, IMPACT SEGMENT
42	1	233-5027	TAPE, TIBIA KNEE SEGMENT
43	4	6006010	FIR-TREE CLIP 6.5 HOLE X 2-6 THK BLACK

Weighted Flesh Assembly



Item	Qty	Part Number	Description
1	1	233-5260	WEIGHTED FLESH ASSEMBLY
2	1	233-5250	FLESH COVER ASSEMBLY
3	4	6005983	CABLE TIE HOOK & LOOP 1" X 24" BLACK

Flesh Cover Assembly



Item	Qty	Part Number	Description
1	1	233-5250	Flesh Cover Assembly

Tool Kit

233-TOOL-KIT

Item	Qty	Part Number	Description
1	1	5000819	WRENCH, OPEN END 4mm 30° ANGLE MINI
2	1	6004602	WRENCH, OPEN END 5.5mm 30° ANGLE MINI
3	1	133-5112	WIRE SETTING TOOL
4	20	5000522	HEX NUT, M5 X 0.8 NYLOCK
5	1	6002558-13	TAPE, DOUBLE-SIDED, 50mm WIDE ROLL, 25m
6	1	6002739	FLASH DRIVE, 2GB USB, SWIVEL, HUMANETICS
7	1	233-5103	HANGER ASSEMBLY, DYNAMIC, CERTIFIED
8	40	6006010	FIR-TREE CLIP 6.5 HOLE X 2-6 THK BLACK