



Company Address:
1338 Hundred Oaks Drive, Suite DD
Charlotte, NC 28217

Toll Free: (888) 652-8395
Phone: (980) 888-8335
Fax: (980) 888-8336

america@hcforklift.com
www.hcforkliftamerica.com



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XC Series Electric Lithium-ion Cushion Tire Forklift

with capacity of 8,000 to 12,000lbs



Making Material Handling Easier
SINCE 1956



APPEARANCE

The XC Series Electric Lithium-ion Cushion Tire Forklift is designed to work in North American warehouses and manufacturing facilities. Thanks to its vented counterweight and good ground clearance, Hangcha's lithium-ion powered cushion forklift can successfully take on harsh indoor operational environments while still maintaining a lifting capacity of up to 12,000lbs. The exterior of this electric forklift is also powder coated in a durable, easy to see, green finish that designates it as lithium-ion powered.



COMFORTABLE OPERATION

In developing the XC Series Electric Lithium-ion Cushion Tire Forklift, ergonomic design, comfort, and ease of operation were carefully considered. This is because comfortable operating environments contribute to increased productivity among operators.

Ergonomic Design

- / Designed as a dedicated lithium-ion powered forklift, allows for a larger operator compartment that is more ergonomic and comfortable. It also gives operators a wide view of their surroundings.
- / The large LCD colored display allows operators to clearly see the status of the forklift. They can also easily change the forklift's settings thanks to the intuitive controls of the display.
- / The adjustable steering wheel and seat position allow for operators to find their ideal operating position.
- / The large brake pedal and regenerative braking function effectively reduce operator fatigue to allow them to work longer.
- / The forklift's full suspension seat and high-positioned, shock-absorbing steer axle provide the operator with a more comfortable ride quality when operating the forklift.



The ergonomically designed operator compartment allows the operator to have a wide field of vision.



High Positioned, Shock Absorbing Steer Axle

SAFE

Hangcha designed the XC Series Electric Lithium-ion Cushion Tire Forklift to be safe. By using a dedicated chassis design, low profile counterweight, OPS System, and the automatic deceleration while turning feature, Hangcha is able to keep operators safe while operating the lithium-ion cushion forklift

- / The XC Series Electric Lithium-ion Cushion Tire Forklift features a dedicated lithium-ion design. This means that the lithium-ion battery pack is placed lower in the chassis. By doing this, Hangcha is able to increase the longitudinal and lateral stability of the forklift and give it a lower center of gravity. This provides the operator with a stable and safe forklift.
- / The XC Series Electric Lithium-ion Cushion Tire Forklift is designed with a low counterweight to improve operator visibility.
- / This forklift features an Operator Presence Sensing (OPS) System to ensure that the forklift is safe and unintentional movements of the forklift won't occur.
- / The controller senses when the forklift is being turned and reduces its speed automatically. This ensures the safety of both the operator and the forklift.



The forklift features a great ground clearance to ensure it works in more application scenarios.



ENERGY SAVING & EFFICIENT

Designed around an 80V system, the XC Series Electric Lithium-ion Cushion Tire Forklift provides users with an energy saving and efficient alternative to similarly spec'd I.C powered forklifts.

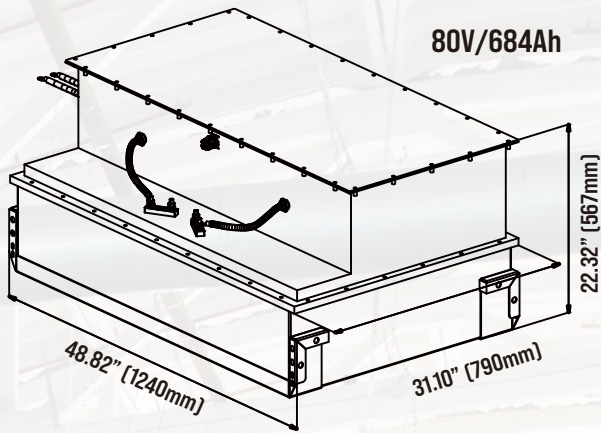
- / The XC Series Electric Lithium-ion Cushion Tire Forklift features an efficient high-torque electric motor to significantly improve the forklift's travel speed, gradeability, and lifting speed.
- / The 80V system manages energy more efficiently. Combined with the optional larger batteries and dual charging ports, operators can use the forklift for extended periods of time. This includes 24 hour shifts when opportunity charging.
- / The forklift features an internal gear pump with two-stage pressure design and a slope-shaped operation curve. Combined with the forklift's load sensing multiway valve, the XC Series Electric Lithium-ion Cushion Tire Forklift is able to consume less energy. In addition, these features allow operators to accurately manipulate materials.



LITHIUM-ION POWER

Lithium Iron Phosphate Battery Packs

- / Integrated Battery Management System (BMS) continually monitors energy management and ensures reliable operation.
- / HANGCHA provides these Lithium Iron Phosphate (LiFePO₄) battery packs with up to a 7 year or 15,000 hour warranty.
- / See warranty certificate for specific warranty information on the Lithium Iron Phosphate battery packs.



X Series Electric Lithium-ion Cushion Tire Forklift Lithium-ion Battery Capacity		
Load Capacity (lb)	Standard Battery Capacity (V/Ah) (kW-h)	Optional Battery Capacity (V/Ah) (kW-h)
8,000-10,000lbs	80V/604Ah 48.32kW-h	N/A
12,000lbs	80V/684Ah 54.72kW-h	80V/906Ah 72.48kW-h

X Series Electric Lithium-ion Cushion Tire Forklift Lithium-ion Battery Running Times		
Load Capacity (lb)	Standard Battery Running Time (hour)	Optional Battery Running Time (hour)
8,000-10,000lbs	8 hours	N/A
12,000lbs	8 hours	11 hours

*Run time will be dependent on customer application and use.

Easy Access Dual Charging Ports

The newly designed forklift features easy access, dual charging ports on the right side of the forklift to provide operators with a convenient way to charge the forklift.



Maintenance-Free Battery Pack

The forklift features a Lithium Iron Phosphate (LiFePO₄) battery pack doesn't require any regular maintenance performed on the battery pack.



<2 Hour Charging Time

The XC Series Electric Lithium-ion Cushion Forklift is able to charge in less than 2 hours taking advantage of the forklift's dual charging features.



RELIABLE & EASY TO MAINTAIN

Hangcha designed the XC Series Electric Lithium-ion Cushion Forklift to be reliable and easy to maintain. By using key components, specific designs, and testing, Hangcha is able to build a reliable forklift that operators can count on.

- / The forklift's open counterweight and additional cooling fans ensure that the system runs reliably through harsh indoor operational environments.
- / Switches, connectors, instruments, and other key parts are sourced from industry known suppliers to ensure reliability, performance, and ease of service.
- / The XC Series Electric Lithium-ion Cushion Forklift features removable left and right side panels, rear baseplate, and a wide opened hood to facilitate easy access to main components.
- / The battery compartment features rollers to laterally remove the battery pack.
- / The drive unit is removable to lower the overall maintenance cost of the forklift.



The forklift features industry known components to ensure the forklift's reliability.

STANDARD CONFIGURATION

- | | | | |
|---|---|--|--|
| <ul style="list-style-type: none">/ Powerful AC Traction Motor/ Powerful AC Pump Motor/ INMOTION Controller/ Lithium-ion Battery Pack/ Smooth Cushion Tires/ Low Noise Gear Pump/ Multi-Function Instrument Cluster/ Integral Rubber Pedal Pad/ LED Combination Headlights & Taillights | <ul style="list-style-type: none">/ Stamped Hood with Gas Shocks/ Stamped Iron Side Plates/ Stamped Stainless Steel Boarding Step/ Mechanical Parking Handbrake/ Automatic Deceleration while Turning Function/ Operator Presence Sensing System (OPS) | <ul style="list-style-type: none">/ Soft Landing System/ SPE Power Selection/ DC-DC Converter/ Tilt Cylinder Piston Sleeve/ Electronic Cooling Fan/ Dual Hydraulic Multiway Valves/ Emergency Cut-Off Switch/ Reverse Alarm/ Tow Pin | <ul style="list-style-type: none">/ Load-Sensing Multiway Valve/ Limited Free-Lift 2 Stage Mast/ Locking Tilting Hydraulic Valve/ Hydraulic Oil Tank with an Oil Suction & Recycling Filter/ Small Diameter Steering Wheel/ Adjustable Steering Wheel/ Panoramic Rear View Mirror/ Cup Holder |
|---|---|--|--|

OPTIONS

- | | | | |
|---|---|--|--|
| <ul style="list-style-type: none">/ Larger Capacity Lithium-ion Battery Packs/ Pin Code or Card Access/ Permanent Magnet Traction Motor/ Permanent Magnet Pump Motor/ Non-Marking Solid Cushion Tire/ Left & Right Rearview Mirrors/ Reverse Camera System/ Front/Rear Blue Lights | <ul style="list-style-type: none">/ Rear Working Lights/ Three-Sided, One-Line Projection Light/ Freezer Package/ Rear Reverse Grip with Horn Button/ Lockable Hood/ Integrated Fingertip Control System | <ul style="list-style-type: none">/ Triple Hydraulic Multiway Valves/ Quadruple Hydraulic Multiway Valves/ Quintuple Hydraulic Multiway Valves/ Grammer Full Suspension Seat/ Large Forced Cooling Fan/ Auxiliary Hydraulic Valve Group/ Fire Extinguisher | <ul style="list-style-type: none">/ Full-Free Lift 3 Stage Mast/ Lift Buffering System/ Widened/Heightened Load Backrest/ Widened Fork Carriage/ Integral Side Shifter/ Various Fork Lengths/ Various Optional Attachments/ Charger |
|---|---|--|--|

8,000lb Mast Specification

Type	Model	Lifting Height	Overall Height		Free Lifting Height		Tilt Range		Capacity	
			Lowered	Extended		With Backrest	Without Backrest	Forward	Backward	Load Capacity at 24in (600mm)
				With Backrest	Without Backrest					8000lb(3.5t)
Limited Free Lift 2 Stage Mast	XC35M250	98.4(2500)	78.7(2000)	146.7(3725)	131.7(3345)	4.3(110)	4.3(110)	5	6	8000(3500)
	XC35M280	110.2(2800)	84.6(2150)	158.5(4025)	143.5(3645)	4.3(110)	4.3(110)	5	6	8000(3500)
	XC35M300	118.1(3000)	88.6(2250)	166.3(4225)	151.4(3845)	4.3(110)	4.3(110)	5	6	8000(3500)
	XC35M330	129.9(3300)	97.6(2480)	178.1(4525)	163.2(4145)	4.3(110)	4.3(110)	5	6	8000(3500)
	XC35M340	133.9(3400)	99.6(2530)	182.1(4625)	167.1(4245)	4.3(110)	4.3(110)	5	6	8000(3500)
	XC35M350	137.8(3500)	101.6(2580)	186(4725)	171.1(4345)	4.3(110)	4.3(110)	5	6	8000(3500)
	XC35M370	145.7(3700)	105.5(2680)	193.9(4925)	178.9(4545)	4.3(110)	4.3(110)	5	6	8000(3500)
	XC35M400	157.5(4000)	111.4(2830)	205.7(5225)	190.7(4845)	4.3(110)	4.3(110)	5	6	8000(3500)
Full Free Lift 3 Stage Mast	XC35N400	157.5(4000)	82.1(2085)	205.7(5225)	192.1(4880)	33.9(860)	47.4(1205)	5	6	8000(3500)
	XC35N430	169.3(4300)	86(2185)	217.5(5525)	203.9(5180)	37.8(960)	51.4(1305)	5	6	8000(3500)
	XC35N450	177.2(4500)	88.6(2250)	225.4(5725)	211.8(5380)	40.4(1025)	53.9(1370)	5	6	8000(3500)
	XC35N470	185(4700)	91.1(2315)	233.3(5925)	219.7(5580)	42.9(1090)	56.5(1435)	5	6	8000(3500)
	XC35N480	189(4800)	93.1(2365)	237.2(6025)	223.6(5680)	44.9(1140)	58.5(1485)	5	6	8000(3500)
	XC35N500	196.9(5000)	97.6(2480)	245.1(6225)	231.5(5880)	49.4(1255)	63(1600)	5	6	8000(3500)
	XC35N530	208.7(5300)	101.6(2580)	256.9(6525)	243.3(6180)	53.3(1355)	66.9(1700)	5	6	8000(3500)
	XC35N550	216.5(5500)	105.5(2680)	264.8(6725)	251.2(6380)	57.3(1455)	70.9(1800)	5	6	7480(3400)
	XC35N600	236.2(6000)	115.6(2935)	284.4(7225)	273(6935)	67.3(1710)	80.9(2055)	5	6	6930(3150)

With sideshifter, subtract 550lb(250kg). With integral sideshifter, subtract 330lb(150kg).

10,000lb Mast Specification

Type	Model	Lifting Height	Overall Height		Free Lifting Height		Tilt Range		Capacity	
			Lowered	Extended		With Backrest	Without Backrest	Forward	Backward	Load Capacity at 24in (600mm)
				With Backrest	Without Backrest					10000lb(4.5t)
Limited Free Lift 2 Stage Mast	XC45M250	98.4(2500)	78.7(2000)	146.7(3725)	131.7(3345)	4.3(110)	4.3(110)	5	6	10000(4500)
	XC45M280	110.2(2800)	84.6(2150)	158.5(4025)	143.5(3645)	4.3(110)	4.3(110)	5	6	10000(4500)
	XC45M300	118.1(3000)	88.6(2250)	166.3(4225)	151.4(3845)	4.3(110)	4.3(110)	5	6	10000(4500)
	XC45M330	129.9(3300)	97.6(2480)	178.1(4525)	163.2(4145)	4.3(110)	4.3(110)	5	6	10000(4500)
	XC45M340	133.9(3400)	99.6(2530)	182.1(4625)	167.1(4245)	4.3(110)	4.3(110)	5	6	10000(4500)
	XC45M350	137.8(3500)	101.6(2580)	186(4725)	171.1(4345)	4.3(110)	4.3(110)	5	6	10000(4500)
	XC45M370	145.7(3700)	105.5(2680)	193.9(4925)	178.9(4545)	4.3(110)	4.3(110)	5	6	10000(4500)
	XC45M400	157.5(4000)	111.4(2830)	205.7(5225)	190.7(4845)	4.3(110)	4.3(110)	5	6	10000(4500)
Full Free Lift 3 Stage Mast	XC45N400	157.5(4000)	82.1(2085)	205.7(5225)	192.1(4880)	33.9(860)	47.4(1205)	5	6	10000(4500)
	XC45N430	169.3(4300)	86(2185)	217.5(5525)	203.9(5180)	37.8(960)	51.4(1305)	5	6	10000(4500)
	XC45N450	177.2(4500)	88.6(2250)	225.4(5725)	211.8(5380)	40.4(1025)	53.9(1370)	5	6	10000(4500)
	XC45N470	185(4700)	91.1(2315)	233.3(5925)	219.7(5580)	42.9(1090)	56.5(1435)	5	6	10000(4500)
	XC45N480	189(4800)	93.1(2365)	237.2(6025)	223.6(5680)	44.9(1140)	58.5(1485)	5	6	10000(4500)
	XC45N500	196.9(5000)	97.6(2480)	245.1(6225)	231.5(5880)	49.4(1255)	63(1600)	5	6	9800(4450)
	XC45N530	208.7(5300)	101.6(2580)	256.9(6525)	243.3(6180)	53.3(1355)	66.9(1700)	5	6	9600(4350)
	XC45N550	216.5(5500)	105.5(2680)	264.8(6725)	251.2(6380)	57.3(1455)	70.9(1800)	5	6	9480(4300)
	XC45N600	236.2(6000)	115.6(2935)	284.4(7225)	273(6935)	67.3(1710)	80.9(2055)	5	6	9020(4100)

With sideshifter, subtract 770lb(350kg). With integral sideshifter, subtract 440lb(200kg).

12,000lb Mast Specification

Type	Model	Lifting Height	Overall Height		Free Lifting Height		Tilt Range		Capacity	
			Lowered	Extended		With Backrest	Without Backrest	Forward	Backward	Load Capacity at 24in (600mm)
				With Backrest	Without Backrest					12000lb(5.5t)
Limited Free Lift 2 Stage Mast	XC55M250	98.4(2500)	78.7(2000)	146.9(3730)	132.3(3360)	4.7(120)	4.7(120)	5	6	12000(5500)
	XC55M280	110.2(2800)	84.6(2150)	158.7(4030)	144.1(3660)	4.7(120)	4.7(120)	5	6	12000(5500)
	XC55M300	118.1(3000)	88.6(2250)	166.5(4230)	152(3860)	4.7(120)	4.7(120)	5	6	12000(5500)
	XC55M330	129.9(3300)	97.6(2480)	178.3(4530)	163.8(4160)	4.7(120)	4.7(120)	5	6	12000(5500)
	XC55M340	133.9(3400)	99.6(2530)	182.3(4630)	167.7(4260)	4.7(120)	4.7(120)	5	6	12000(5500)
	XC55M350	137.8(3500)	101.6(2580)	186.2(4730)	171.7(4360)	4.7(120)	4.7(120)	5	6	12000(5500)
	XC55M370	145.7(3700)	105.5(2680)	194.1(4930)	179.5(4560)	4.7(120)	4.7(120)	5	6	12000(5500)
	XC55M400	157.5(4000)	111.4(2830)	205.9(5230)	191.3(4860)	4.7(120)	4.7(120)	5	6	12000(5500)
Full Free Lift 3 Stage Mast	XC55N400	157.5(4000)	82.1(2085)	205.9(5230)	192.1(4880)	33.9(860)	47.4(1205)	5	6	12000(5500)
	XC55N430	169.3(4300)	86(2185)	217.7(5530)	203.9(5180)	37.8(960)	51.4(1305)	5	6	12000(5500)
	XC55N450	177.2(4500)	88.6(2250)	225.6(5730)	211.8(5380)	40.4(1025)	53.9(1370)	5	6	12000(5500)
	XC55N470	185(4700)	91.1(2315)	233.5(5930)	219.7(5580)	42.9(1090)	56.5(1435)	5	6	12000(5500)
	XC55N480	189(4800)	93.1(2365)	237.4(6030)	223.6(5680)	44.9(1140)	58.5(1485)	5	6	12000(5500)
	XC55N500	196.9(5000)	97.6(2480)	245.3(6230)	231.5(5880)	49.4(1255)	63(1600)	5	6	11880(5400)
	XC55N530	208.7(5300)	101.6(2580)	257.1(6530)	243.3(6180)	53.3(1355)	66.9(1700)	5	6	11550(5250)
	XC55N550	216.5(5500)	105.5(2680)	265(6730)	251.2(6380)	57.3(1455)	70.9(1800)	5	6	11220(5100)
	XC55N600	236.2(6000)	115.6(2935)	284.6(7230)	273(6935)	67.3(1710)	80.9(2055)	5	6	10600(4820)

With sideshifter, subtract990lb(450kg). With integral sideshifter, subtract 550lb(250kg).



XC Series Electric Lithium-ion Cushion Tire Forklift

Distinguishing Marks	1.1	Manufacturer			HANGCHA GROUP CO.,LTD.		
		HCFA Model Number			FB35CLi	FB45CLi	FB55CLi
	1.2	Manufacturer's Type Designation			CPD35-XD2-CSI	CPD45-XD2-CSI	CPD55-XD2-CSI
	1.3	Power Type: Electric, Gas, Diesel, LPG			Electric	Electric	Electric
	1.4	Operation Type			Rider Seated	Rider Seated	Rider Seated
	1.5	Load Capacity/Rated Load	Q	lb(kg)	8000(3500)	10000(4500)	12000(5500)
	1.6	Load Center	c	in(mm)	24(600)	24(600)	24(600)
	1.7	Load Distance, centre of drive axle to fork	x	in(mm)	18.5(470)	18.5(470)	18.8(478)
Weight	1.8	Wheelbase	y	in(mm)	62.4(1585)	62.4(1585)	69.7(1770)
	2.1	Service Weight		lb(kg)	13200 (6000)	15356 (6980)	17710 (8050)
	2.2	Axle Load, with load, front		lb(kg)	18183 (8265)	21872 (9942)	24893 (11315)
	2.3	Axle Load, with load, rear		lb(kg)	2717 (1235)	3384 (1538)	4917 (2235)
	2.4	Axle Load, without load, front		lb(kg)	5284 (2402)	5289 (2404)	6193 (2815)
Tires	2.5	Axle load, without load, rear		lb(kg)	7916 (3598)	10067 (4576)	11517 (5235)
	3.1	Tire type			Cushion	Cushion	Cushion
	3.2	Tire Size, front			22x9-16	22x12-16	22x12-16
	3.3	Tire Size, rear			18x6-12.125	18x8-12.125	18x8-12.125
	3.4	Number of Wheels, front / rear(x=driven)			2x/2	2x/2	2x/2
	3.5	Track width, front	b10	in(mm)	38.2(971)	41.1(1045)	41.1(1045)
Dimensions	3.6	Track Width, rear	b11	in(mm)	40.2(1022)	44.3(1125)	44.3(1125)
	4.1	Tilt of Mast/Fork Carriage Forward/Backward	α/β	(°)	5/6	5/6	5/6
	4.2	Height, mast lowered	h1	in(mm)	88.6(2250)	88.6(2250)	88.6(2250)
	4.3	Height, mast extended	h4	in(mm)	166.3(4225)	166.3(4225)	166.3(4225)
	4.4	Free Lift	h2	in(mm)	4.3(110)	4.3(110)	4.3(110)
	4.5	Lift	h3	in(mm)	118.1(3000)	118.1(3000)	118.1(3000)
	4.6	Height of Overhead Guard	h6	in(mm)	88.5(2248)	88.5(2248)	88.5(2248)
	4.7	Overall Length	l1	in(mm)	140.5(3570)	144.7(3675)	158.2(4018)
	4.8	Length to Fork Face	l2	in(mm)	98.5(2500)	102.6(2605)	110.2(2798)
	4.9	Overall Width	b1	in(mm)	47.2(1200)	53.1(1350)	53.1(1350)
	4.10	Fork Dimensions	s×e×l	in(mm)	2×4.8×42(50×122×1070)	2×6×42(50×150×1070)	2.4×6×48(60×150×1220)
	4.11	Fork Carriage DIN 15 173, class/type A,B			IIIA	IIIA	IVA
	4.12	Fork Carriage Width	b3	in(mm)	45.8(1164)	51.7(1314)	51.7(1314)
Performance Data	4.13	Ground clearance, with load, below mast	m1	in(mm)	3.1(80)	3.1(80)	3.1(80)
	4.14	Ground Clearance, center of wheelbase	m2	in(mm)	5.5(140)	5.5(140)	5.5(140)
	4.15	Aisle Width for Pallets 40" x 48" Crossways	Ast	in(mm)	142.4(3618)	145.3(3690)	153.5(3898)
	4.16	Aisle Width for Pallets 32" x 48" Crossways	Ast	in(mm)	150.3(3818)	153.1(3890)	161.3(4098)
	4.17	Turning Radius, outside	Wa	in(mm)	84.3(2140)	87.4(2220)	95.3(2420)
	5.1	Travel Speed, with/without load		mph(km/h)	11.2 (18)/11.5 (18.5)	11.2 (18)/11.5 (18.5)	10.9 (17.5)/11.2 (18)
	5.2	Lift Speed, with/without load		fpm(mm/s)	72.8(370)/118.1(600)	57.1(290)/88.6(450)	57.1(290)/88.6(450)
	5.3	Lowering Speed, with/without load		fpm(mm/s)	98.4(500)/98.4(500)	98.4(500)/98.4(500)	98.4(500)/98.4(500)
Electric Motor	5.4	Max. Drawbar Pull, with/without load		lbf(N)	4720(21000)/-	4720(21000)/-	4720(21000)/-
	5.5	Max. Gradeability, with/without load		%	23/-	19/-	16/-
	5.6	Service Brake, operation / control			Foot / Hydraulic	Foot / Hydraulic	Foot / Hydraulic
	5.7	Parking Brake, operation / control			Hand / Mechanical	Hand / Mechanical	Hand / Mechanical
	5.8	Steering, type			Hydraulic	Hydraulic	Hydraulic
	6.1	Drive Motor, 60 minute rating		HP (kW)	30.8(23)	30.8(23)	30.8(23)
	6.2	Pump Motor, 15 minute rating		HP (kW)	37.5(28)	37.5(28)	37.5(28)
	6.3	Battery Voltage		volts	80	80	80
Additional Data	6.4	Battery Capacity, minimum		Ah/6 hr.rate	-	-	684
	6.5	Battery Capacity, maximum		Ah/6 hr.rate	604	604	906
	6.6	Battery Weight, minimum		lb(kg)	904(410)	904(410)	948(430)
	6.7	Battery Weight, maximum		lb(kg)	931 (423)	931 (423)	1386 (630)
	7.1	Drive Motor Control			MOSFET AC	MOSFET AC	MOSFET AC
	7.2	Controller Manufacturer			INMOTION	INMOTION	INMOTION
	7.3	Working Pressure for Attachments		psi(bar)	2683(185)	2683(185)	2683(185)
	7.4	Hydraulic Tank - capacity (drain/refill)		gal(liter)	10.6(40)	13.7(52)	13.7(52)

