





# AMYLIOR

Technical product presentation

*Rick Alves & g-7*



Amysystems is an Amylior inc. brand



## COMPANY HISTORY



- Amylior is an industry leader in development, manufacturing and distribution of mobility equipment since 1997.
- Our entire team of more than 100 employees is the main reason for our success.
- Amylior distributes its products in Canada, USA and Australia as well as in some European countries.



2000 sq. ft.



1997



4000 sq. ft.



2001



32000 sq. ft.



2006



68000 sq. ft.



2017



## COMPANY HIGHLIGHTS



### START-UP

In May 1997, Amylior launches its business manufacturing aftermarket power seating systems as well as custom options for wheelchairs.

1997

### LAUNCH USA

Amylior gets its first 510K to start promoting our tilt system in the USA.

1999

### LAUNCH AmySEAT

Amylior launches its first full seat assembly with all the power seating systems to adapt on all bases.

2001

### ALLTRACK SERIES LAUNCH IN CANADA

Amylior develops its own power base platform with Mid and Rear Hybrid options through a wheelchair distributor

2008

### ALLTRACK SERIES LAUNCH IN USA

Amylior launches its own power base platform with Mid and Rear Hybrid options in the USA through its established representation network

2009





# COMPANY HIGHLIGHTS

## ALLTRACK SERIES GEN. 2

Amylior introduces its 2<sup>nd</sup> generation of the Alltrack series.

2015

## AMYLOR'S NEW FACILITY

Amylior builds new state-of-the-art facility to continue to answer to high demand.

2017

## ACQUISITION OF CONTINENT GLOBE

Amylior acquires Continent Globe to diversify its product offer.

2017

## PERFORMA SEATING LAUNCH

Amylior launches its new PERFORMA seating cushion line.

2020

## FUTURE LAUNCH

What does the future holds for us?

202...



# ALLTRACK SERIES

# AMYLIOR



ALLTRACK M<sup>3</sup>  
SERIES

## SERIES ALLTRACK R<sup>3</sup> HYBRID



ALLTRACK HD<sup>3</sup>  
SERIES



ALLTRACK P<sup>3</sup>  
SERIES



## UNIQUE FEATURES

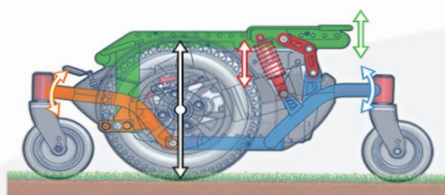


- OUR PATENTED DUAL-ACTION SUSPENSION OFFERS A FULLY INDEPENDENT 6-WHEEL INTERACTIVE SUSPENSION WITH VERTICAL SHOCK ABSORPTION
- THE ALLTRACK'S RUGGED DESIGN IS MADE TO OULAST ALL OF OUR COMPETITION
- ALL OF OUR MID AND REAR PLATFORM IS BUILT TO HAVE THE MOST COMMON PARTS POSSIBLE TO REDUCE PARTS INVENTORY
- EASY ACCESS TO BATTERIES
- OUR BARRIATRIC ALLTRACK OFFERS A WEIGHT CAPACITY OF 550 LBS. OFFERING THE SAME POWER SEATING OPTIONS AS OUR STANDARD AND HD MODELS. THE ONLY CHOICE IN ITS CLASS.
- WITH THE ALLTRACK'S HIGH LEVEL OF CONFIGURABILITY, IT IS ALWAYS POSSIBLE TO OPTIMIZE THE ALLTRACK DUE TO CONDITION CHANGES OF THE USERS IN AN AFTERMARKET SITUATION

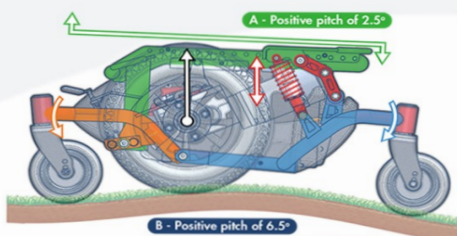


## THE BEST AND MOST UNIQUE SUSPENSION SYSTEM

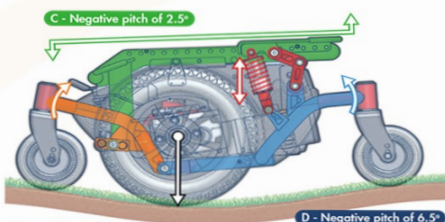
# AMYLIOR



Normal view on a flat surface



For a positive incline of 6.5° (B), the seat plate is only affected by 2.5° (A). The articulation of the 6 wheels minimizes the effect on the seat and user.



For a negative slope of -6.5° (D), the seat plate is only affected by -2.5° (C). The articulation of the 6 wheels minimizes the effect on the seat and user.

### GC3

- Gravity Compensation
- Gravity Control
- Ground Compensation

### Dual Stage Terrain Dampening Suspension

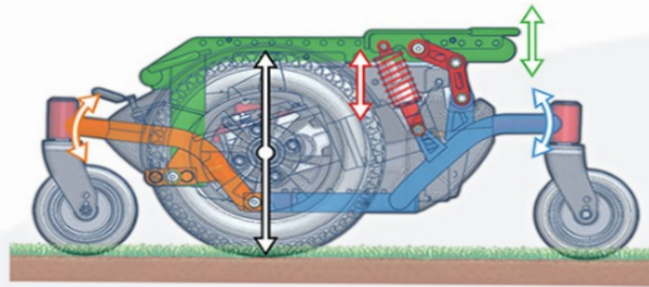
#### Stage 1 - Base (6-wheel independent suspension)

- 6-wheel independent suspension
- Multiple Pivot Points
- Stable Geometric Design without a mechanical anti pitch system
- Independent wheel movement
- Free vertical movement of drive wheel
- Exceptional Traction

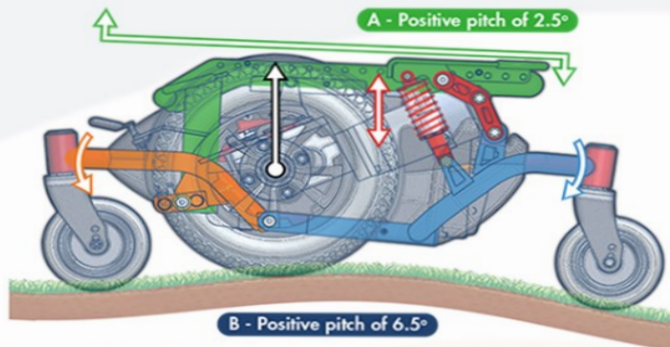
#### Stage 2 - Seat (Seat Suspension)

- 2.6 to 1 Pitch Dampening ratio  
(for every  $\pm 2.6^\circ$  of terrain angle, the seat angle only moves by  $\pm 1^\circ$ )
- Unique Direct vertical seat suspension
- Stability and comfort reduces rider fatigue  
(Stable and Smooth ride may require less postural correction)
- Controlled weight distribution

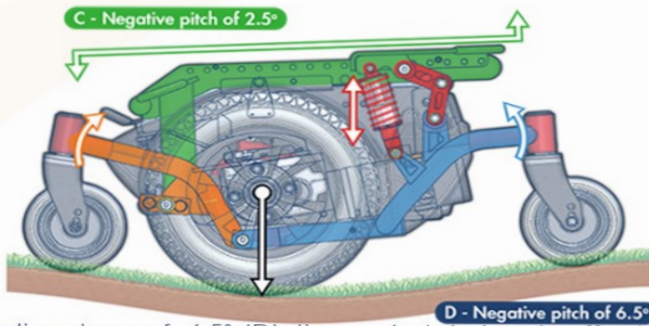




Normal view on a flat surface



For a positive incline of  $6.5^\circ$  (B), the seat plate is only affected by  $2.5^\circ$  (A). The articulation of the 6 wheels minimizes the effect on the seat and user.



For a negative slope of  $-6.5^\circ$  (D), the seat plate is only affected by  $-2.5^\circ$  (C). The articulation of the 6 wheels minimizes the effect on the seat and user.



## WARRANTY ALLTRACK



### WARRANTY

- Five (5) years: main frame, seat frame, seat frame mounting brackets and power module mounting brackets. *(See note #1)*
- Two (2) years: charger, joystick, specialty controls, electrical harnesses, breaker assembly, activation switches, motor/gearbox assembly, power seat modules, accessories, front riggings, armrests, caster forks, power modules, actuators and batteries. *(See note #1)*
- Six (6) months: bearings and bushings. *(See note #1)*
- Ninety (90) days: upholstery and seating, pads (all types), plastic or rubber parts and painted surfaces due to poor adhesion. *(See notes #1 & #2)*

**See full warranty at below link:**

**CANADIAN LIMITED WARRANTY**



## TECHNICAL TRAINING



### MORNING:

- FREEWHEEL AND BRAKE RELEASE
- MOTORS AND GEARBOXES
- ACCESS TO MODULE, ELECTRONICS AND BATTERIES
- SHROUD AND COVER REMOVAL
- SUSPENSION, PIVOT POINTS AND COG
- TIRE AND WHEEL CHANGES
- CASTER FORKS
- SEAT ADJUSTMENTS
- ACTUATOR AND MODULE SERVICING
- LEG REST ADJUSTMENTS
- HEAD REST ADJUSTMENT

### AFTERNOON

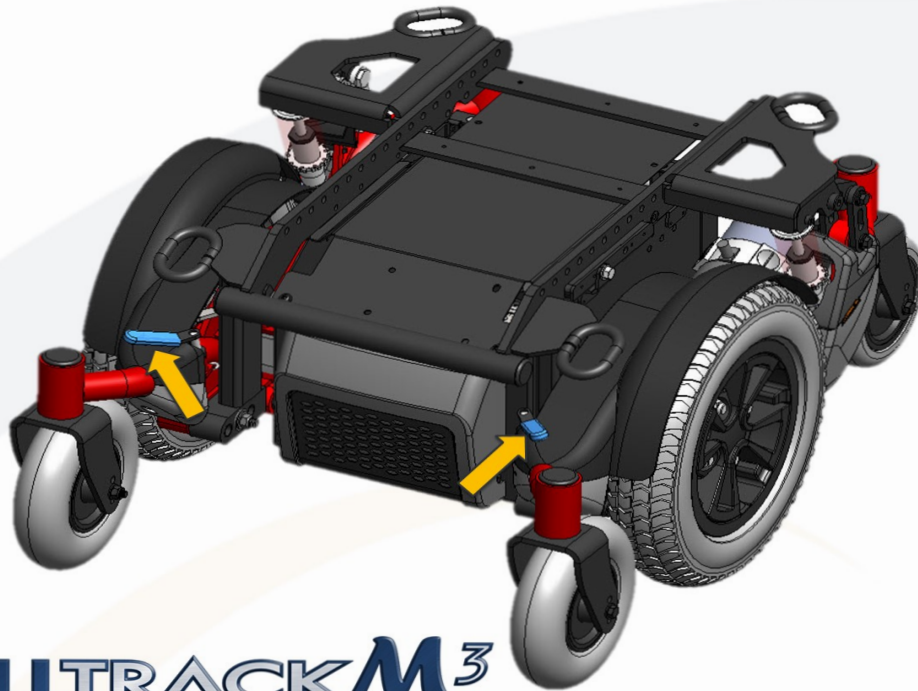
- SEATING ELECTRONICS ACCESS
- PROGRAMMING
- TIPS, TROUBLESHOOTING



## FREEWHEEL BRAKE RELEASE



SERIES  
**ALLTRACK R<sup>3</sup>**  
HYBRID

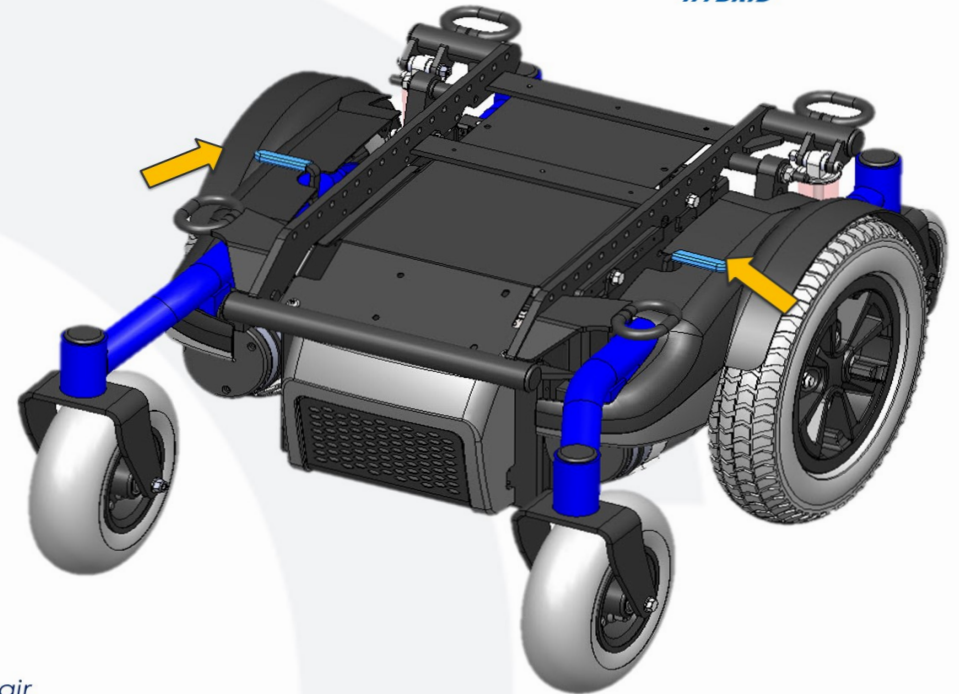


**ALLTRACK M<sup>3</sup>**  
SERIES

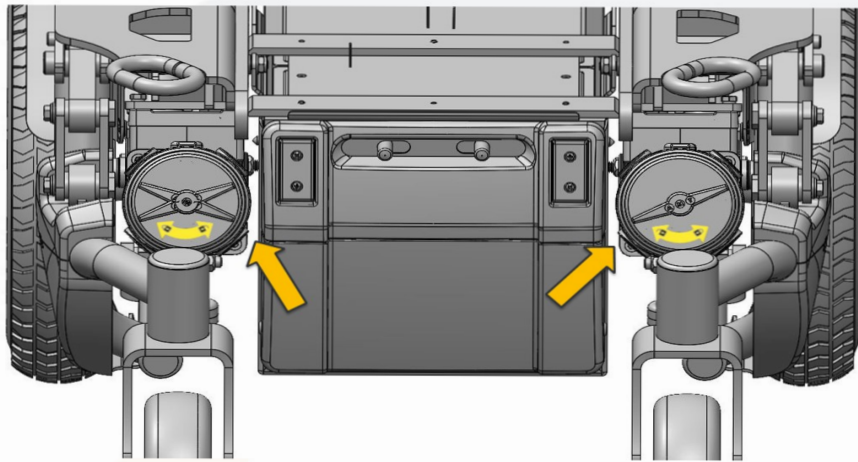


PIVOT LEVER ¼ TURN TO ACTIVATE FREEWHEEL MODE

**NOTE** - If the lever is difficult to disengage, rock the wheelchair slightly from front to rear and/or push against the chair while moving the lever.



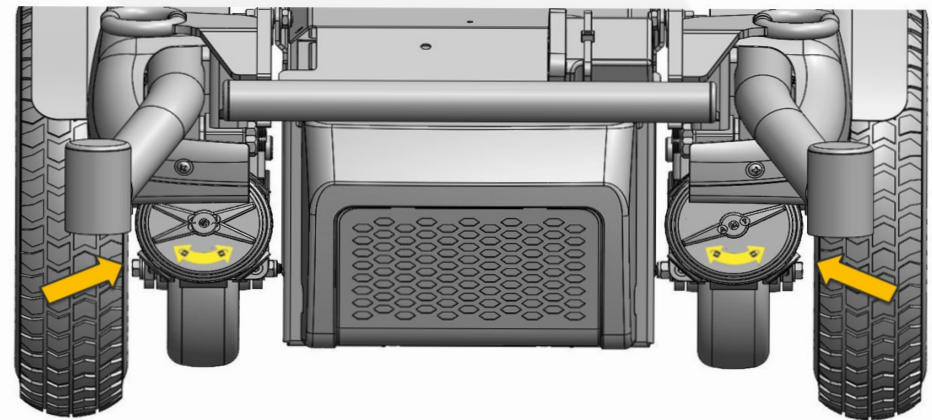
## Brake release motors



**ALLTRACK***M*<sup>3</sup>  
SERIES



*SERIES*  
**ALLTRACK***R*<sup>3</sup>  
*HYBRID*



## GERMAN AMT SCHMIDT 4 POLE MOTOR

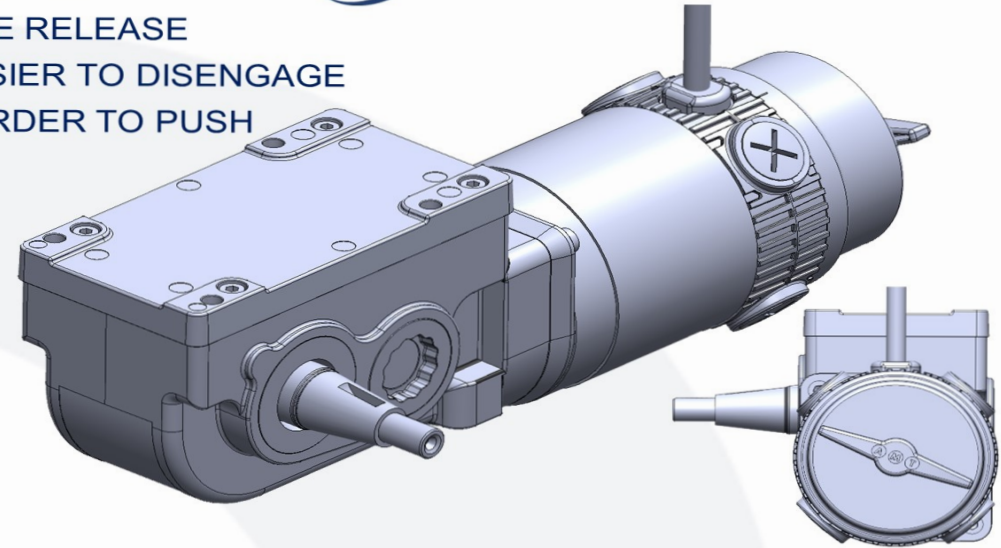
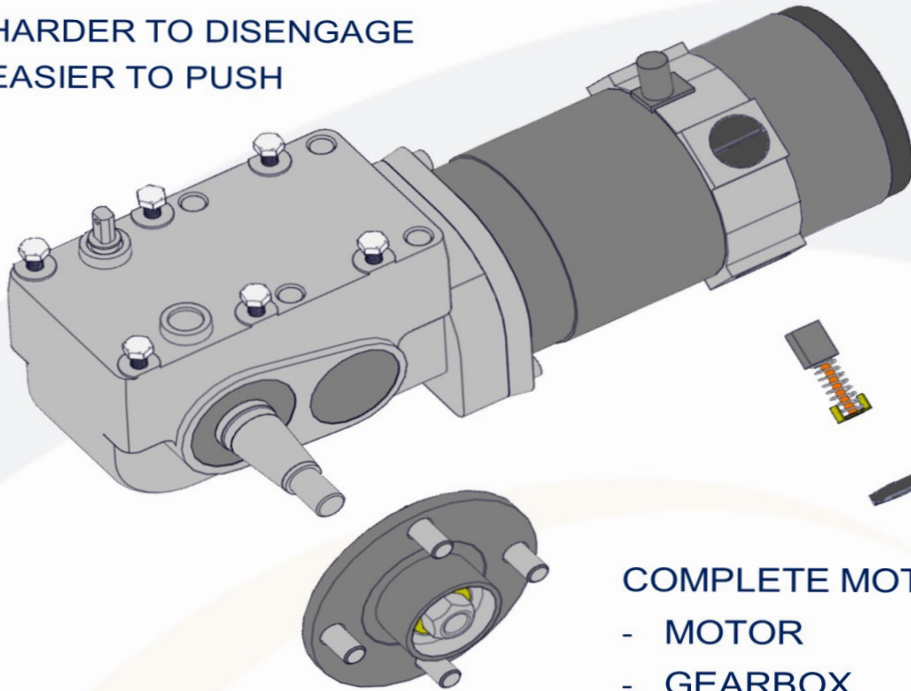


### COG RELEASE

- HARDER TO DISENGAGE
- EASIER TO PUSH

### BRAKE RELEASE

- EASIER TO DISENGAGE
- HARDER TO PUSH



### COMPLETE MOTOR SERVICE PART INCLUDES:

- MOTOR
- GEARBOX
- BRUSHES
- WHEEL HUB

### SEPARATE SERVICE KITS:

- WHEEL HUB
- MOTOR BRUSHES

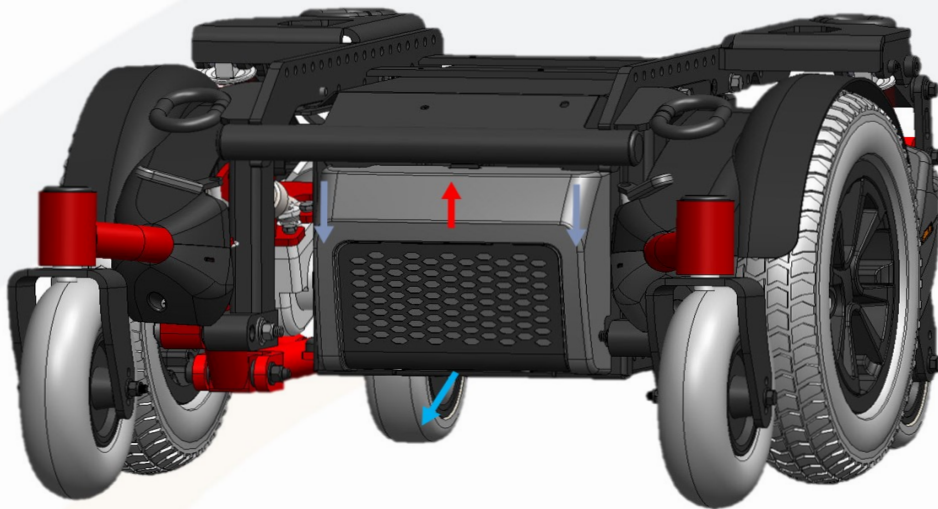


## MODULE AND BATTERY ACCESS



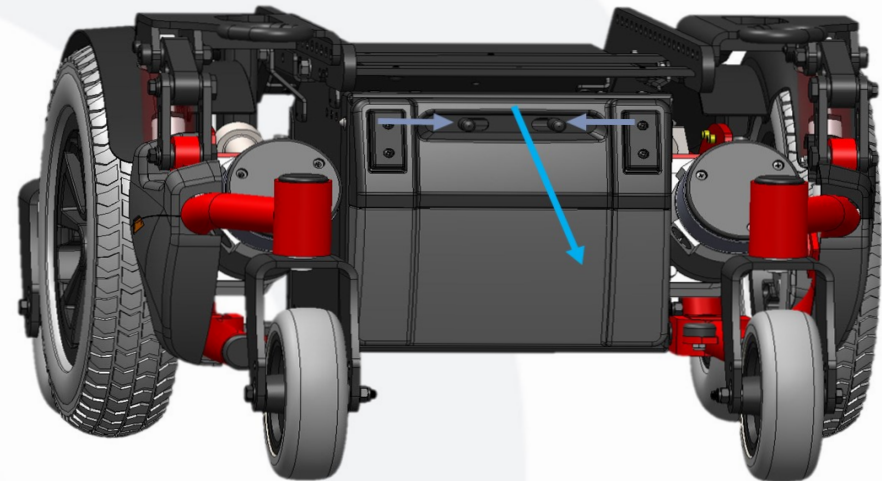
### FRONT ACCESS TO POWER MODULE

- 1- PRESS DOWN ON BOTH TOP CORNERS
- 2- PULL OUT BOTTOM PORTION
- 3- UNHOOK TOP PORTION



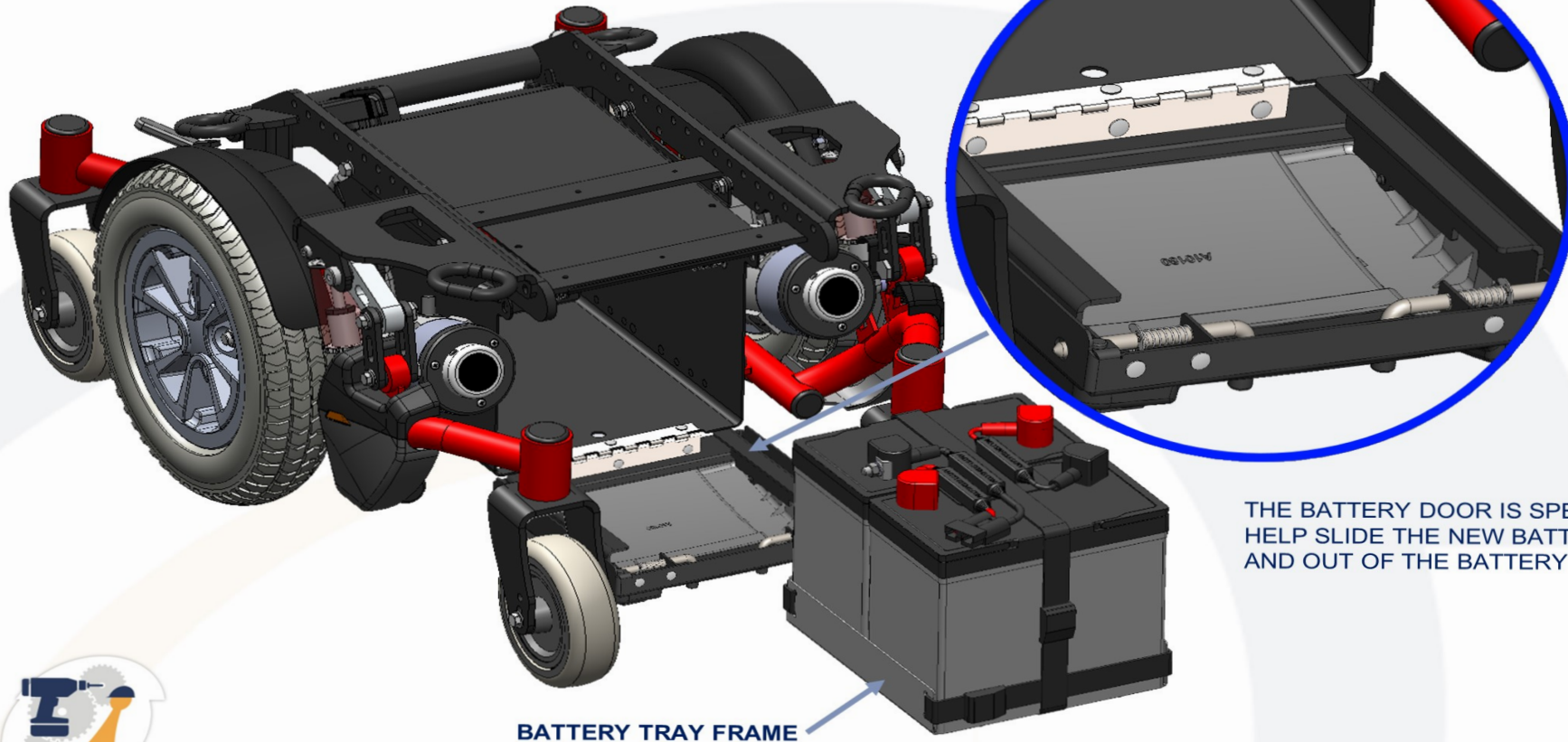
### REAR ACCESS TO BATTERY TRAY

- 1- PINCH RELEASE LATCHES INWARDS
- 2- PIVOT DOOR DOWNWARDS, IT WILL ACT AS A BRIDGE FOR THE BATTERIES
- 3- PULL OUT BATTERIES



## BATTERY TRAY

# RAMYLIOR



# BATTERY CABLES AND INSTALLATION



AVAILABLE IN :

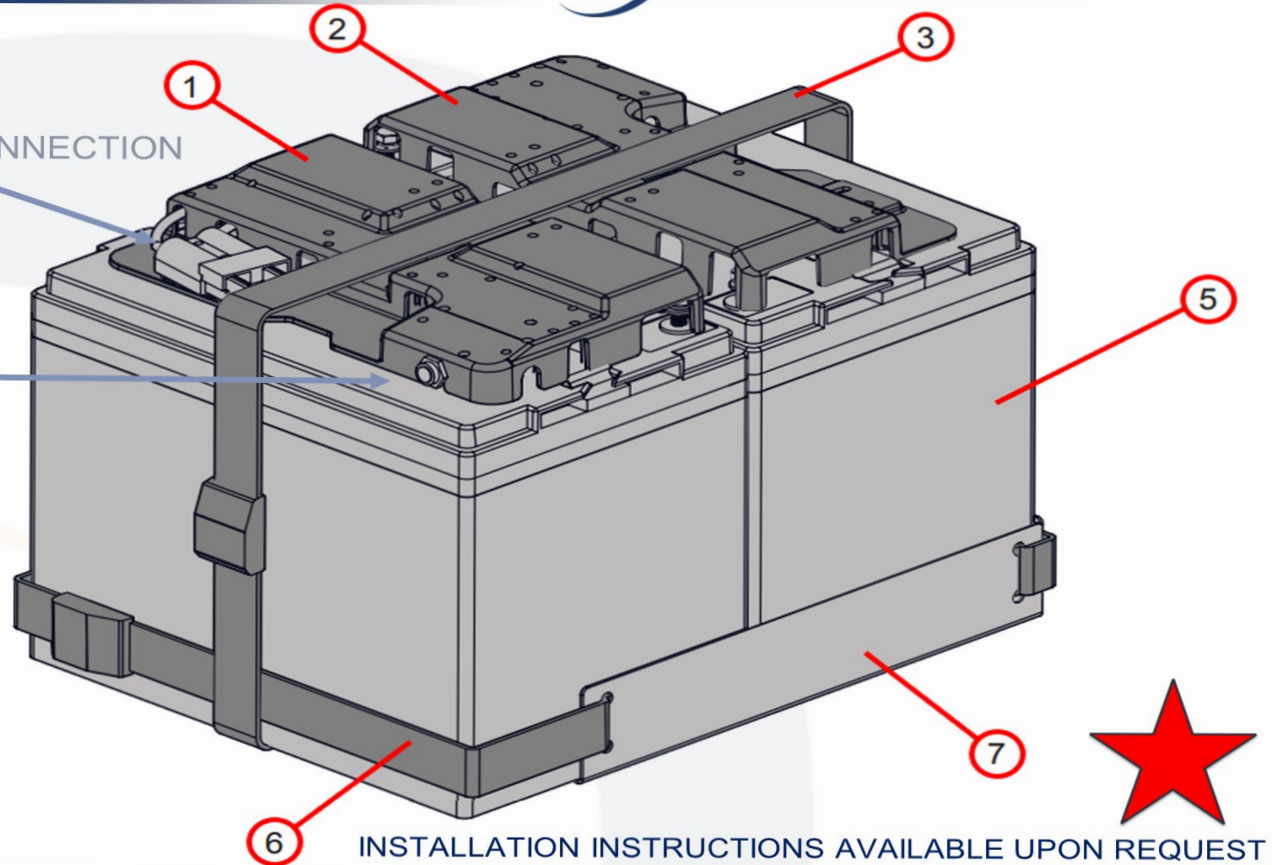
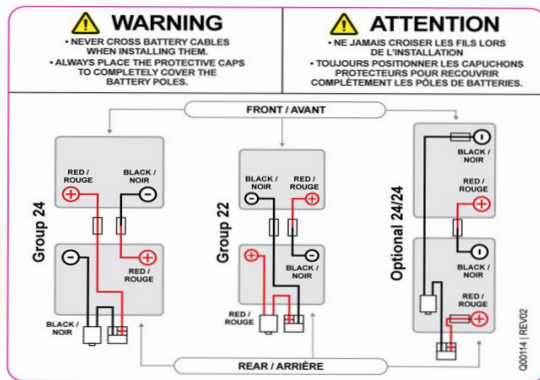
- GROUP 22 55AMP GEL
- GROUP 24 75AMP GEL

NEW LITHIUM 24V CELL:

- COMPATIBLE WITH GP22 AND GP24 FRAMES

CIRCUIT BREAKER

MAIN CONNECTION





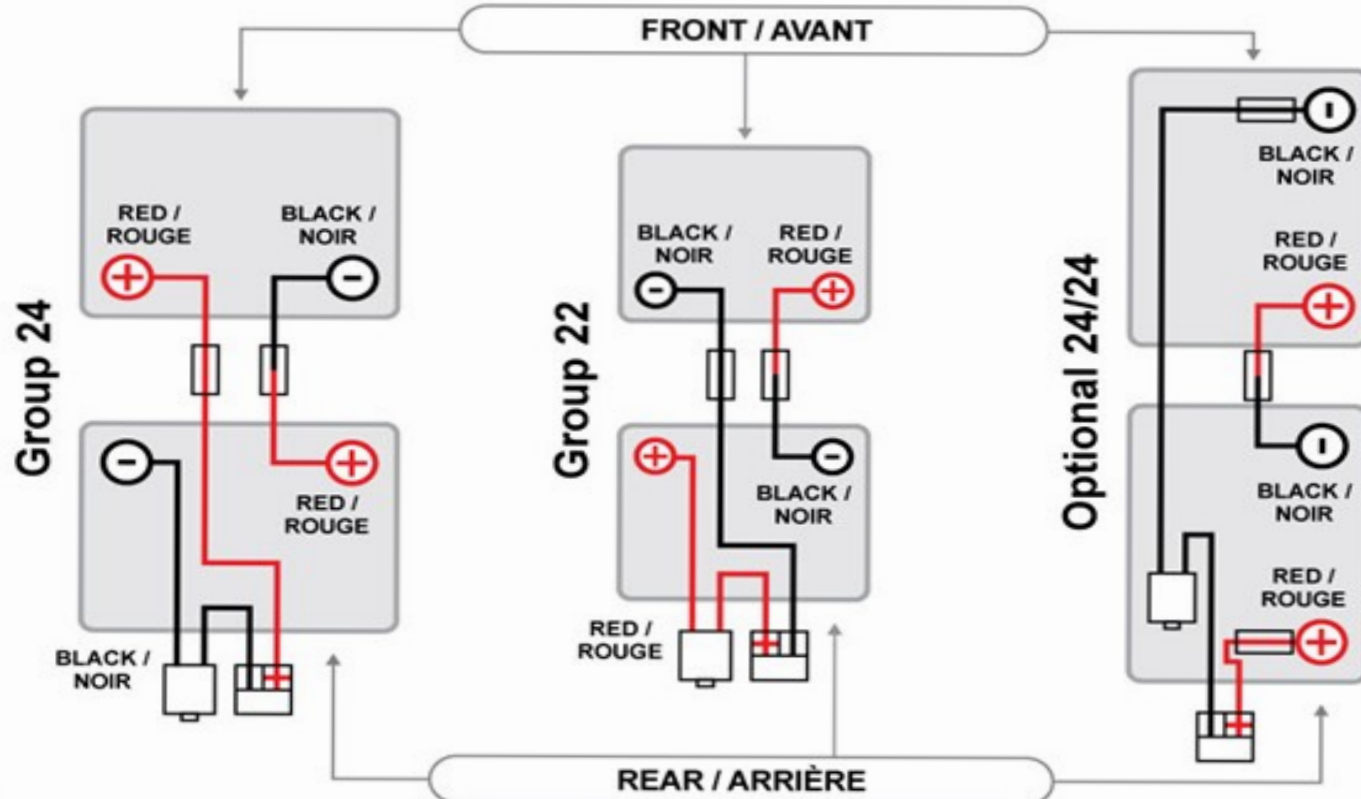
## WARNING

- NEVER CROSS BATTERY CABLES WHEN INSTALLING THEM.
- ALWAYS PLACE THE PROTECTIVE CAPS TO COMPLETELY COVER THE BATTERY POLES.



## ATTENTION

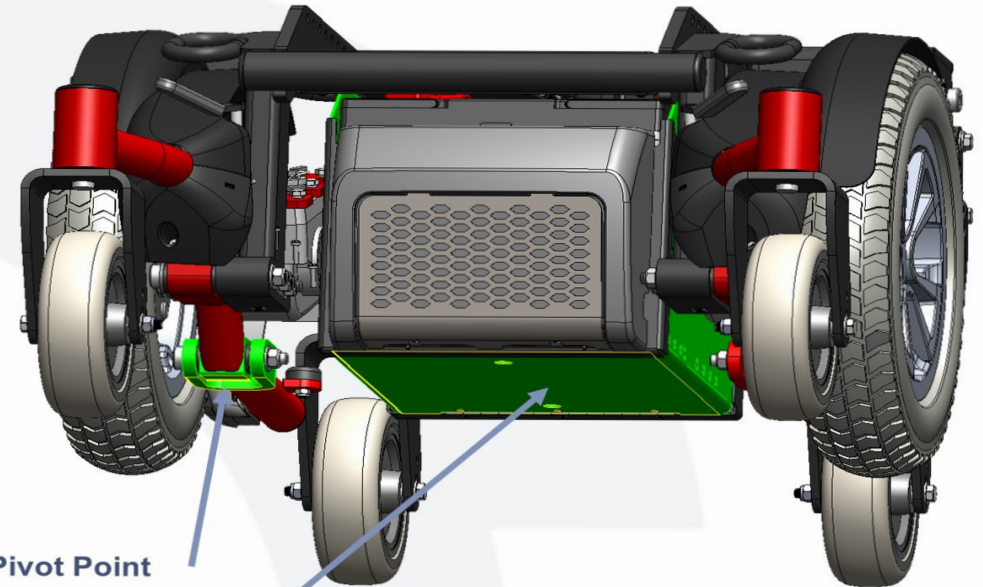
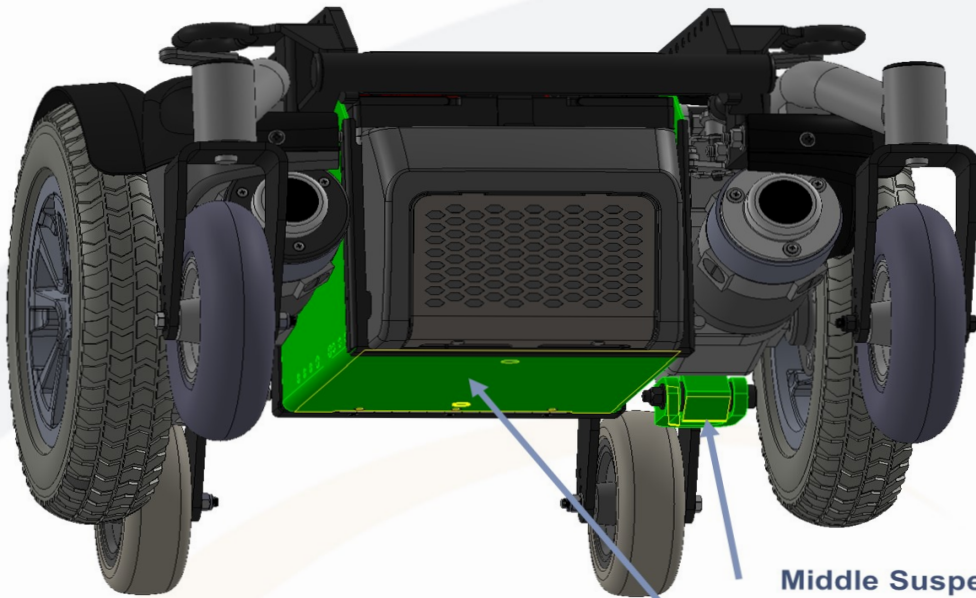
- NE JAMAIS CROISER LES FILS LORS DE L'INSTALLATION
- TOUJOURS POSITIONNER LES CAPUCHONS PROTECTEURS POUR RECOUVRIR COMPLÈTEMENT LES PÔLES DE BATTERIES.



Q00114 | REV02

## STABILIZING THE CHAIR FOR SERVICE

There is 2 place to prop up the chair from without risking damage.



### Middle Suspension Pivot Point

Use this position when changing drive wheels

### Bottom of Battery Compartment

Use this position when changing pivot points, motors or suspension

SERIES  
**ALLTRACK R<sup>3</sup>**  
HYBRID



# ALLTRACK SERIES

**NEW COLOR SCHEME**

**AVAILABLE  
NOW**



CLICK HERE TO VISIT  
OUR NEW GALLERY



# NEW EXITING COLORS



COBALT BLUE



CANDY RED



# NEW EXITING COLORS



HABANERO METALLIC



CABERNET



# NEW EXITING COLORS



SUBLIME



ONYX BLACK MATTE



# NEW EXITING COLORS



INDIGO BLUE



BUBBLE GUM METALLIC



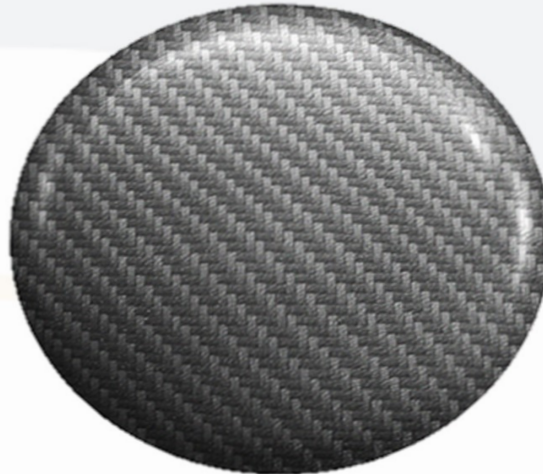
## HYDROGRAPHICS



DESERT CAMO



CARBON FIBRE



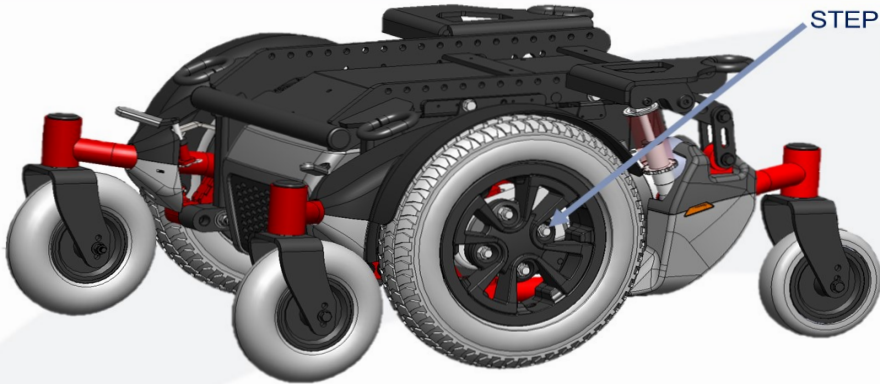
WOODLAND CAMO



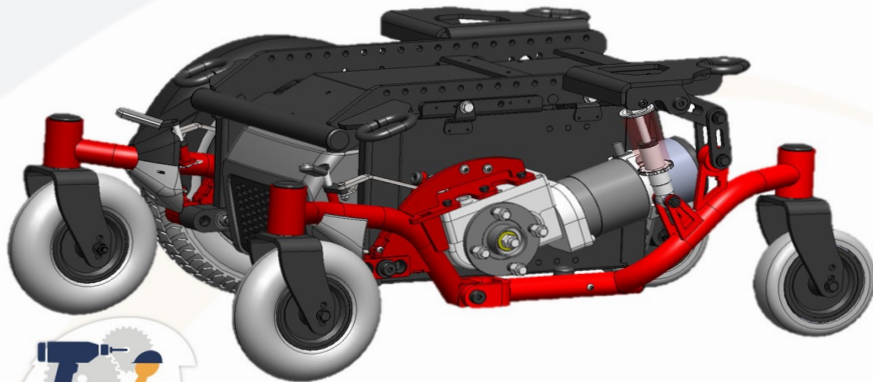
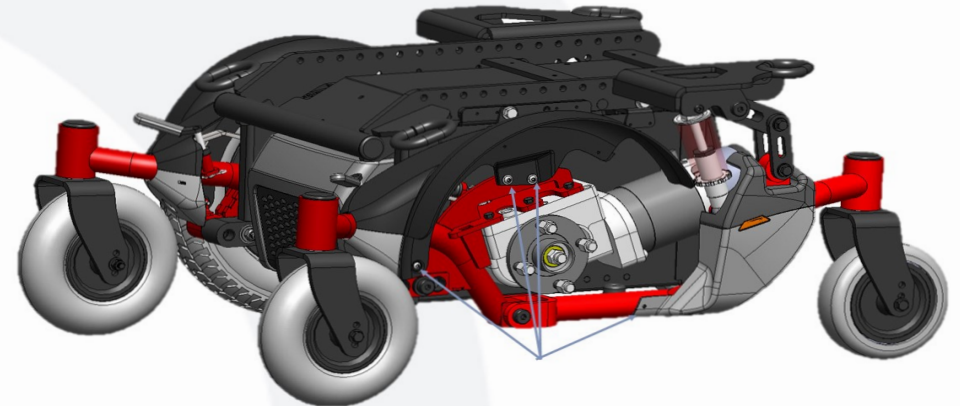
## SHROUD COVER – ATM, ATPM or ATHD



STEP 1: REMOVE DRIVE WHEEL, 4 X 5/8 WHEEL NUTS  
RESTING LOWER SUSPENSION ARM ON WOOD BLOCK IS PERFECT  
HEIGHT SO DRIVE WHEEL CAN BE REMOVED WITHOUT TOUCHING  
FLOOR



STEP 2: REMOVE COVERS  
1 SCREW AT LOWER FRONT OF FENDER, 2 SCREWS AT MIDDLE OF  
THE FENDER FOR FRONT COVER  
1 SCREW AT BOTTOM OF REAR COVER, CLIPPED ON TO FRAME

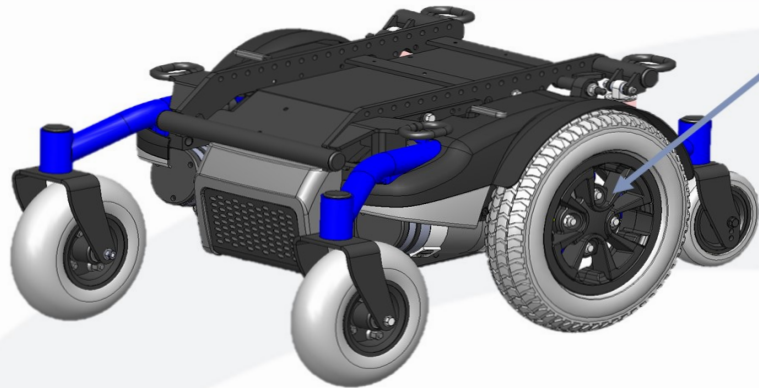


ACCESS TO REPLACING MOTORS  
ACCESS TO REAR SHOCK (ONLY REAR COVER SHOULD BE REMOVED)  
ACCESS TO PIVOT POINT MAINTENANCE

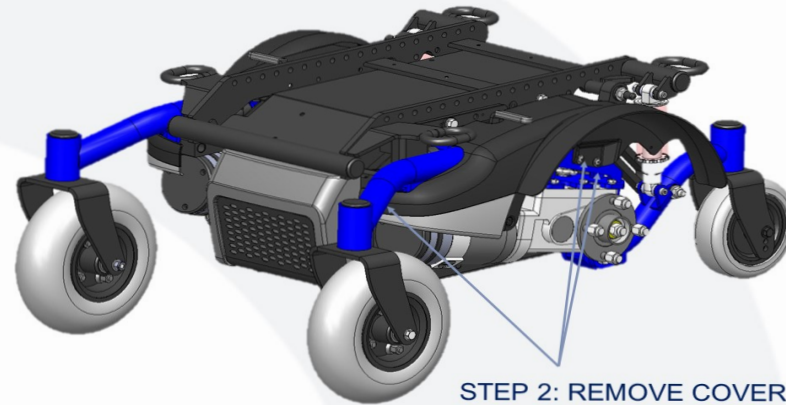
INSTALLATION INSTRUCTIONS AVAILABLE  
UPON REQUEST



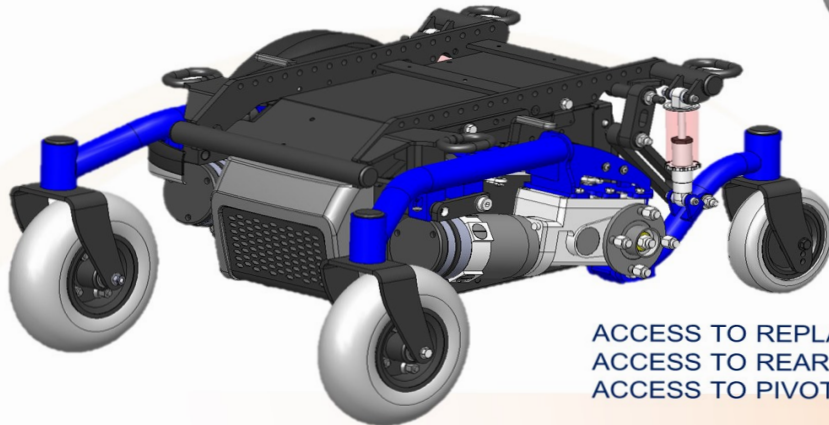
## SHROUD COVER – ATR OR ATPR



STEP 1: REMOVE DRIVE WHEEL, 4 X 5/8 WHEEL NUTS  
RESTING LOWER SUSPENSION ARM ON WOOD BLOCK IS PERFECT  
HEIGHT SO DRIVE WHEEL CAN BE REMOVED WITHOUT TOUCHING  
FLOOR



STEP 2: REMOVE COVERS  
1 SCREW AT FRONT OF COVER  
2 SCREWS AT MIDDLE OF THE FENDER



ACCESS TO REPLACING MOTORS  
ACCESS TO REAR SHOCK  
ACCESS TO PIVOT POINT MAINTENANCE

INSTALLATION INSTRUCTIONS AVAILABLE  
UPON REQUEST

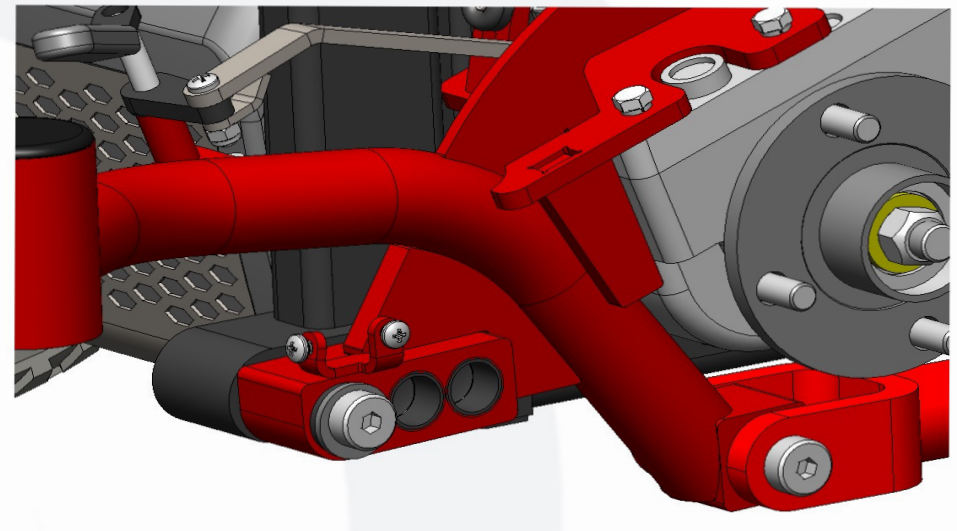
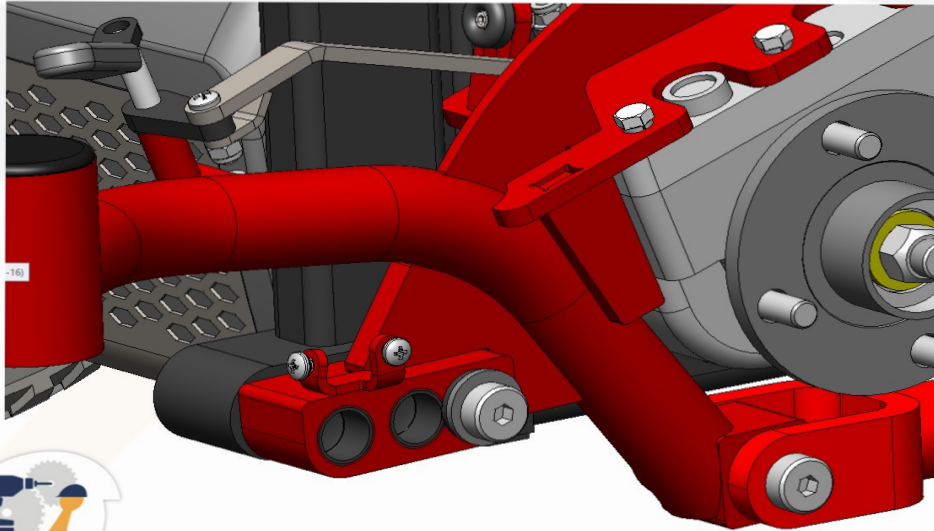


## PIVOT POINT CHANGE



To help with stability issues with front heavy users, we can move the pivot point to a forward position to help distribute the weight more evenly between the front caster and drive wheel.

- Once the shrouds and drive wheel are removed, remove the front shoulder bolt from the rear position.
- You can remove the rubber plugs, keep them handy, as we will reinstall them in the unused holes.
- CAREFULLY** remove the 2 bushings from the suspension arm and insert them with care into the front position.
- Reinstall the bolt in the front position. Reinstall the shrouds and drive wheels.



**Important: Use the Bottom of Battery Compartement to change pivot points** 25

## PIVOT POINT & SUSPENSION MAINTENANCE



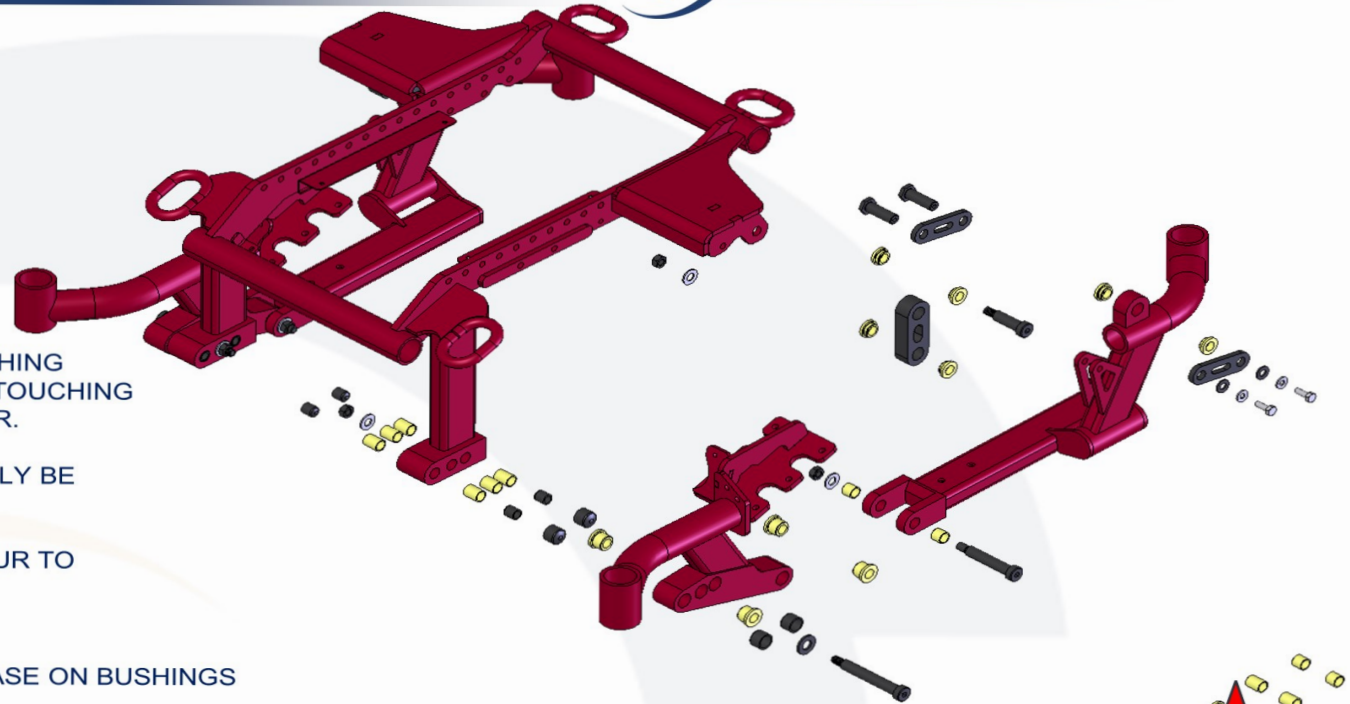
- KIT FOR MID WHEEL: S-0017
- KIT FOR REAR WHEEL: S-0018
- RETROFITABLE UP TO 2012 CHAIRS
- GEN1 AND GEN2 COMPATIBLE

NO 2 METAL PARTS ARE TOUCHING, PLASTIC IGUS BUSHING FOR EVERY PIVOT POINT. SHOULDER BOLTS ARE NOT TOUCHING FRAME DIRECTLY AND ARE PROTECTED AGAINST WEAR.

BUSHING WEARS DOWN OVER TIME AND USE CAN EASILY BE REPLACED DURING SCHEDULED MAINTENANCE.

EXPECT BETWEEN 45 MINUTES AND 2 HOURS OF LABOUR TO REPLACE ALL PIVOT BUSHINGS.

NEVER USE ANY KIND OF LUBRICANT OR GREASE ON BUSHINGS



	COG RELEASE MOTOR		BRAKE RELEASE MOTOR
	KIT GEN1	KIT GEN2	KIT GEN2
ALLTRACK M3, M3HD AND PM3	S-0017	S-0033	S-0076
ALLTRACK R3, R3HD AND PR3	S-0018	S-0034	S-0077
ALLTRACK HD AND HD3	S-0017	S-0033	N/A



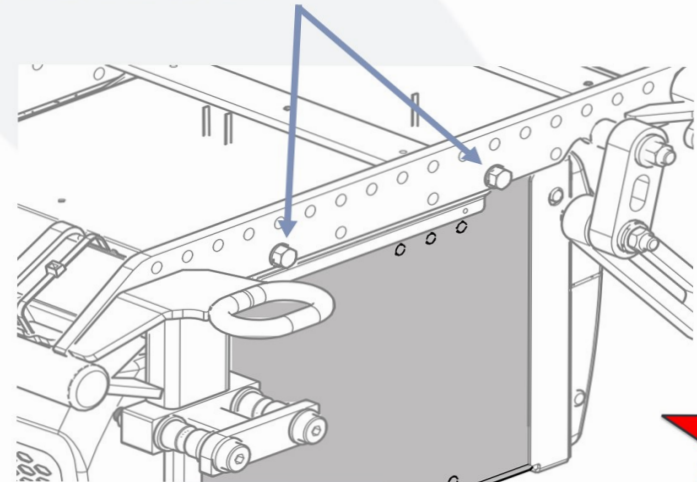
## CG ADJUSTMENTS



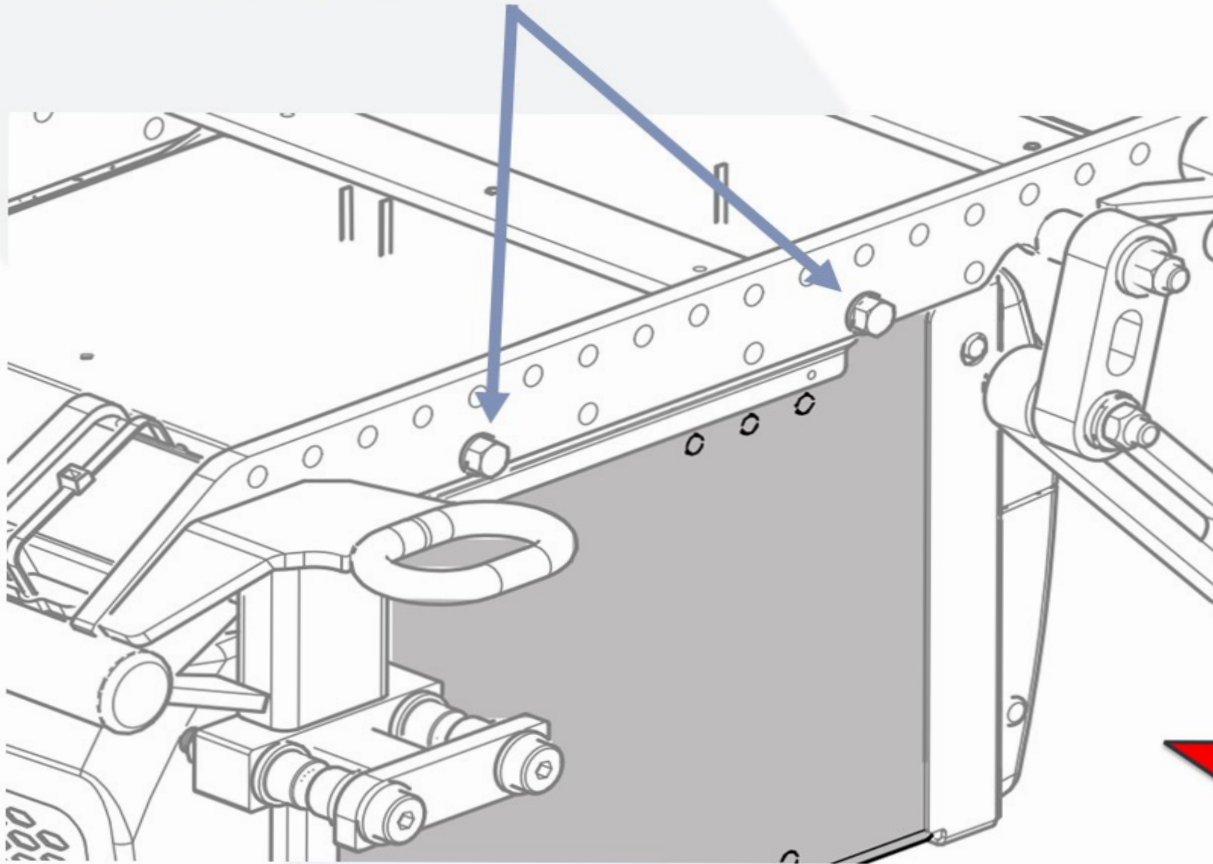
MODULE CAN BE MOVED FORWARD AND BACK



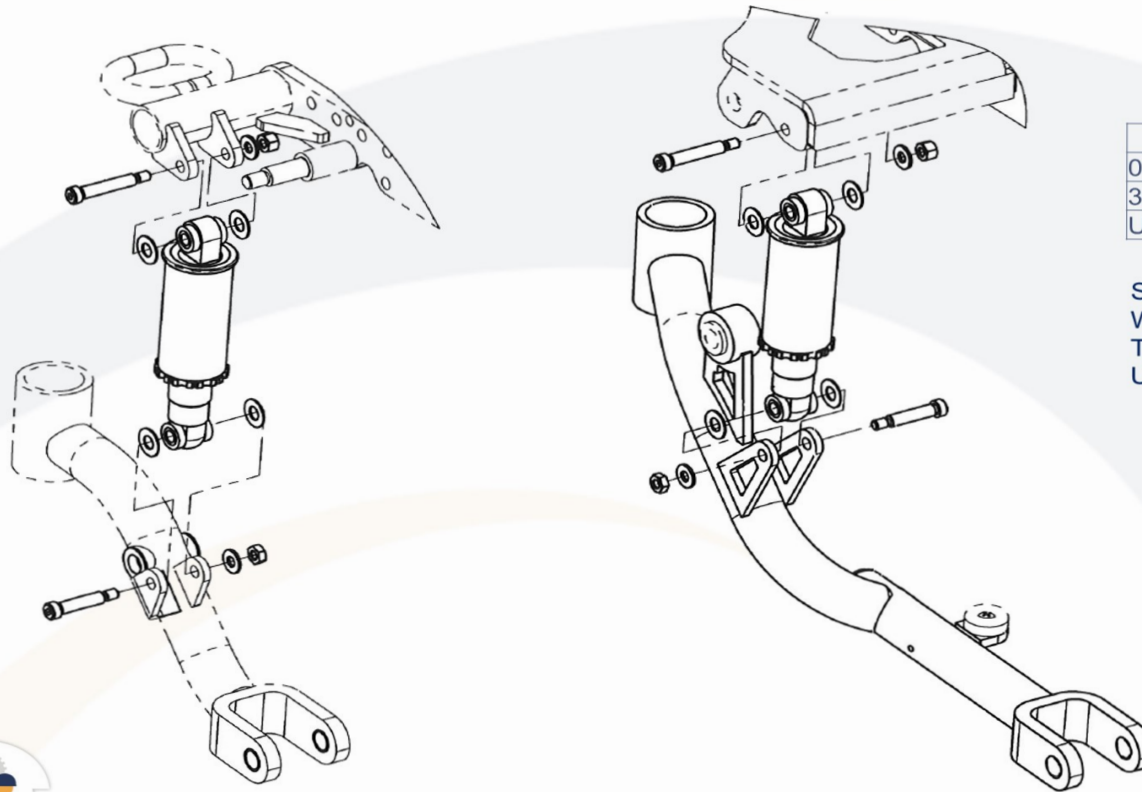
BATTERY COMPARTMENT CAN BE MOVED FORWARD AND BACK



BATTERY COMPARTMENT CAN BE MOVED FORWARD AND BACK



## SHOCKS - SUSPENSION



	SHOCK	KIT
0-300LBS	J00036	C-10317
300-450LBS	J00014	C-10316
UP TO 550LBS	J00035	C-10318

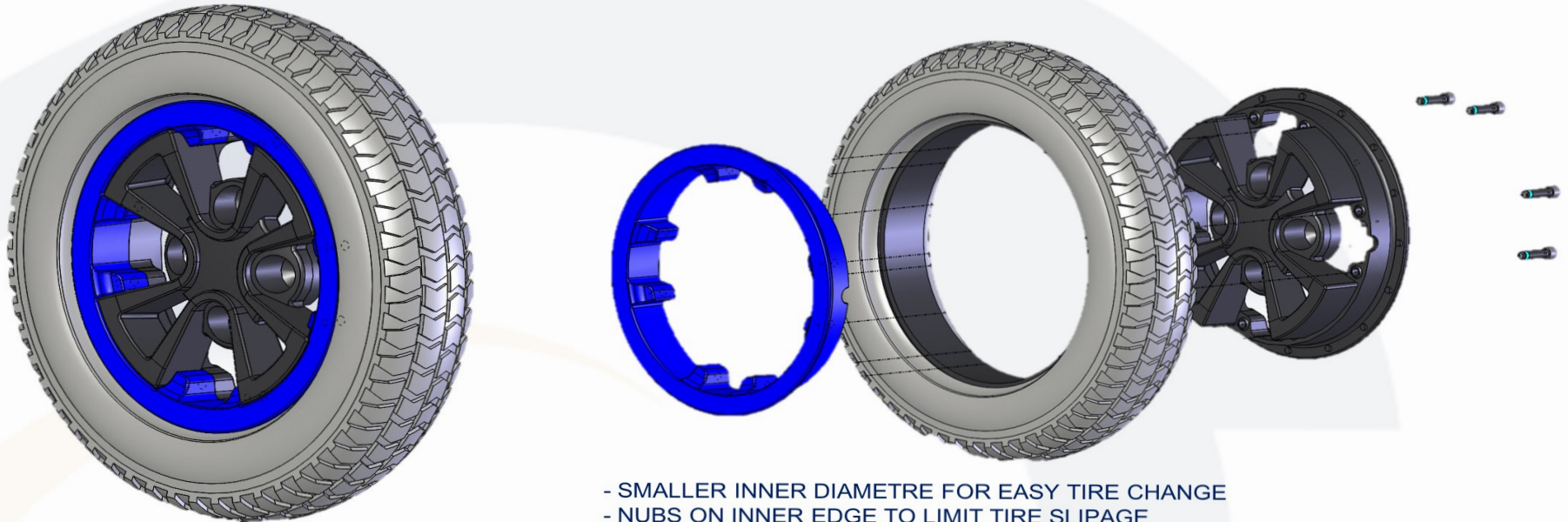
SHOCK KITS ARE COMPATIBLE NO MATTER  
WHAT BASE MODEL  
THEY CAN BE CHANGED TO ACCOMMODATE  
USER WEIGHT OR COMFORT LEVEL



RIGHT SIDE INSTALLATION  
REAR WHEEL BASE

RIGHT SIDE INSTALLATION  
MIDWHEEL BASE

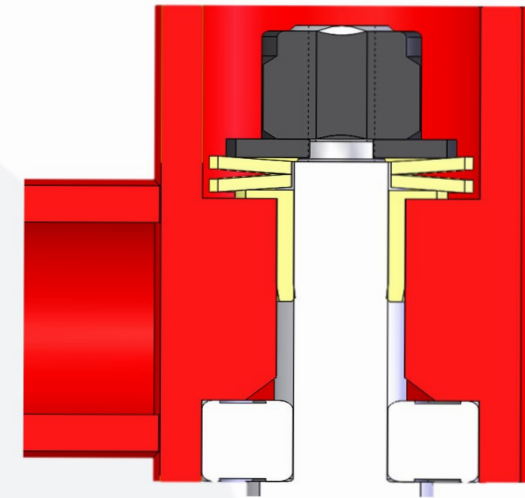
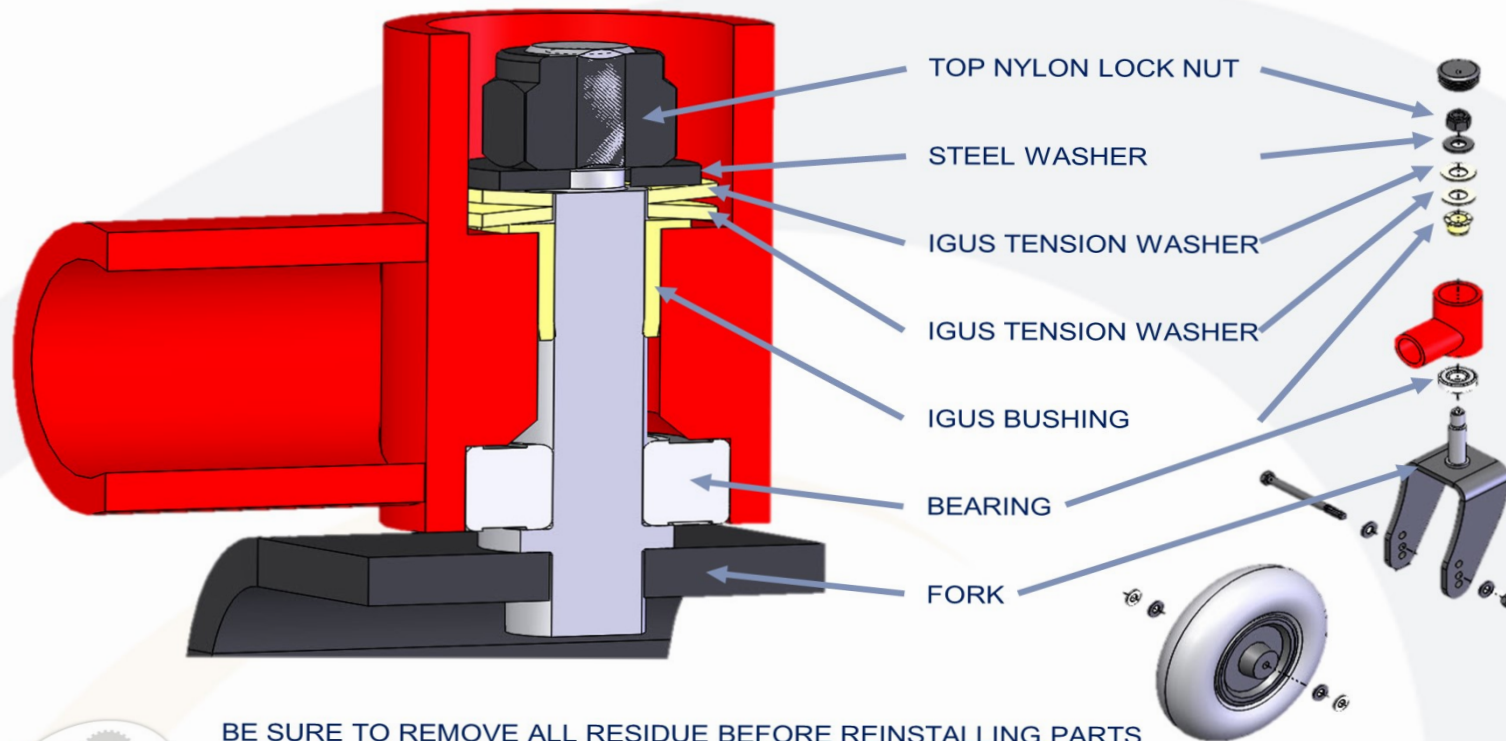
## DRIVE WHEEL REPLACEMENT



- SMALLER INNER DIAMETRE FOR EASY TIRE CHANGE
- NUBS ON INNER EDGE TO LIMIT TIRE SLIPAGE
- OUTER RING CAN BE COLOR MATCHED TO THE CHAIR
- 1 RIM 4 CONFIGURATIONS: 14", 12.5", FLAT FREE AND PNEUMATIC



# CASTER FORK MAINTENANCE

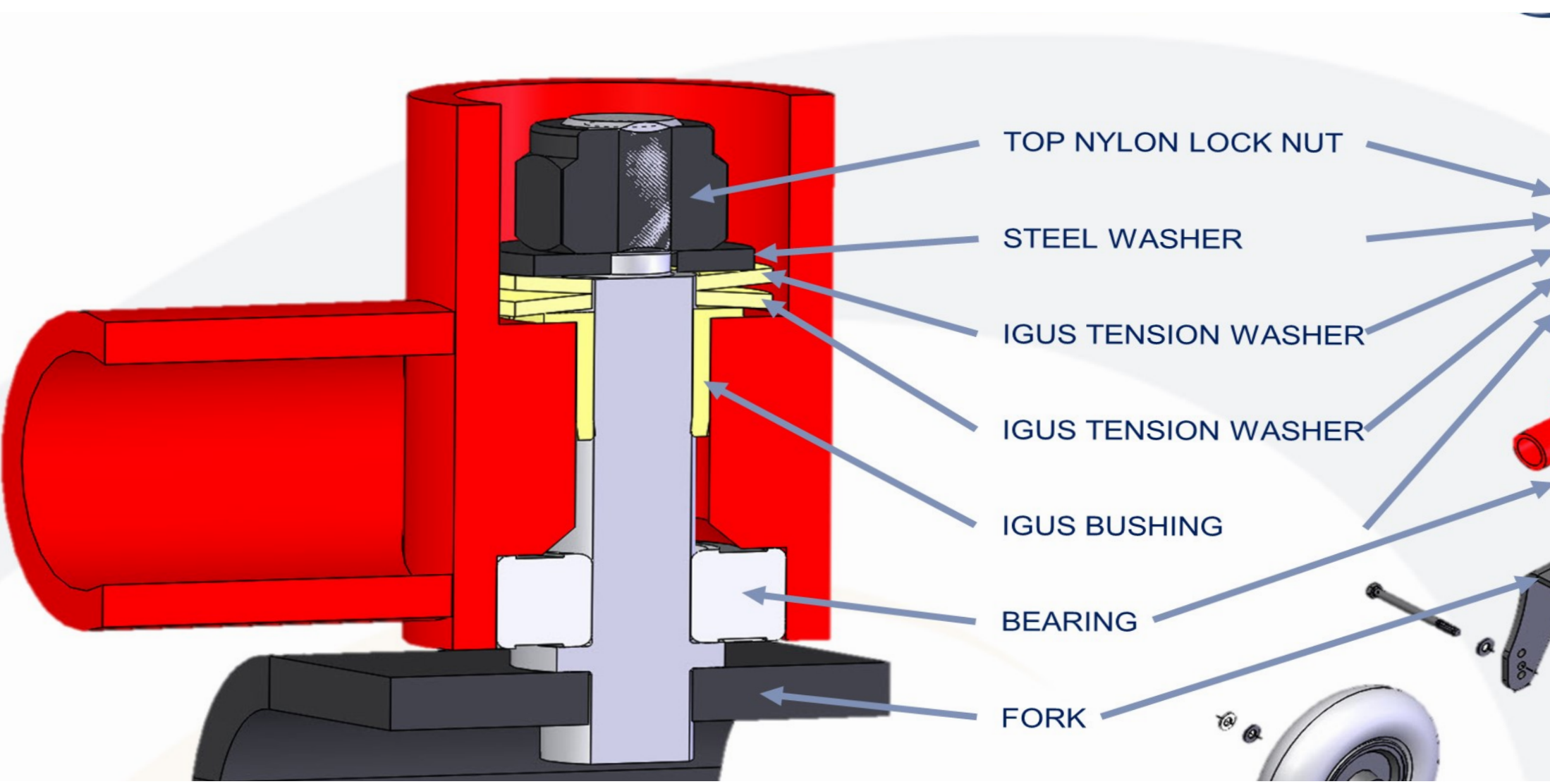


TAKE CLOSE CARE TO INSTALL THE 2 IGUS TENSION WASHERS BACK TO BACK AS PICTURED. ONLY IN THIS CONFIGURATION WILL THEY HAVE THE RIGHT PRESSURE ON THE FORK STEM.

BE SURE TO REMOVE ALL RESIDUE BEFORE REINSTALLING PARTS  
STRONGLY SUGGESTED TO REPLACE ALL PARTS AT THE SAME TIME  
NEVER USE ANY KIND OF LUBRICANT OR GREASE IN FORK HOUSING

INSTALLATION INSTRUCTIONS AVAILABLE  
UPON REQUEST

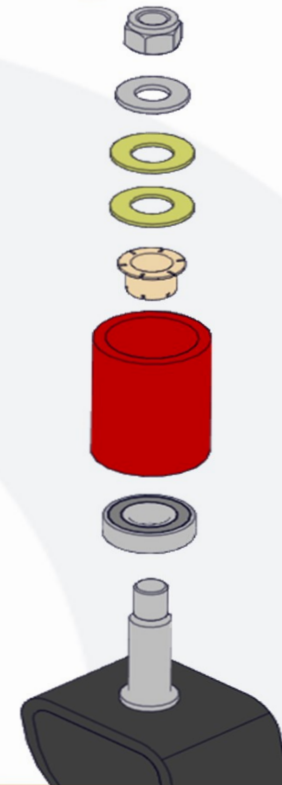
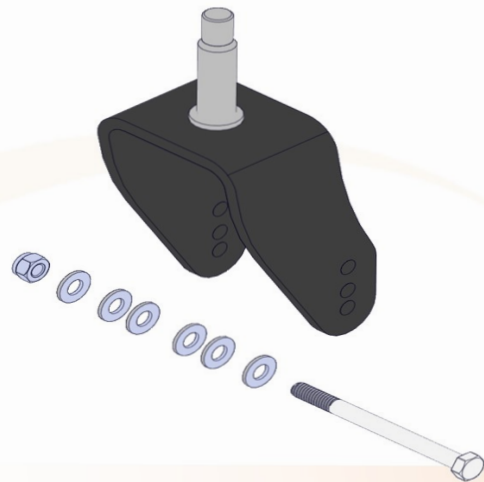




## CASTER FORKS COMPATIBILITY

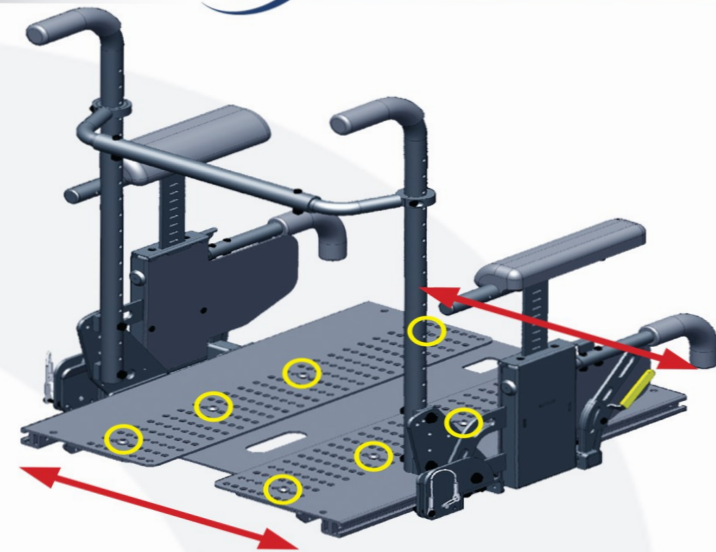
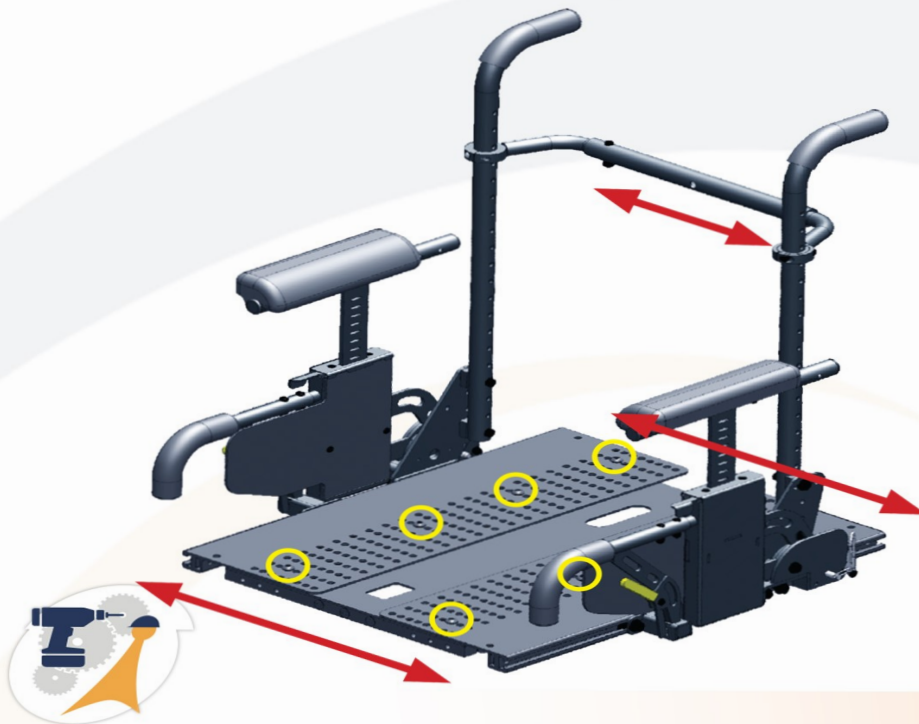


		FORK	AXLE KIT	BUSHING KIT
MID	REAR FORK 6" CASTER	A10193	S-0064	S-0035
	FRONT FORK 6" CASTER	A10193	S-0064	S-0035
	FRONT FORK 8" CASTER	A10193	S-0064	S-0035
REAR	REAR FORK 6" CASTER	A10193	S-0064	S-0035
	FRONT FORK 8" CASTER	A10244	S-0064	S-0035
	FRONT FORK 9" CASTER	A10245	S-0065	S-0035



## SEAT WIDTH ADJUSTEMENT

EVERY HOLE IS EQUIVALENT TO 1" TOTAL WIDTH  
ADJUST ONE SIDE AT THE TIME, IT IS EASIER

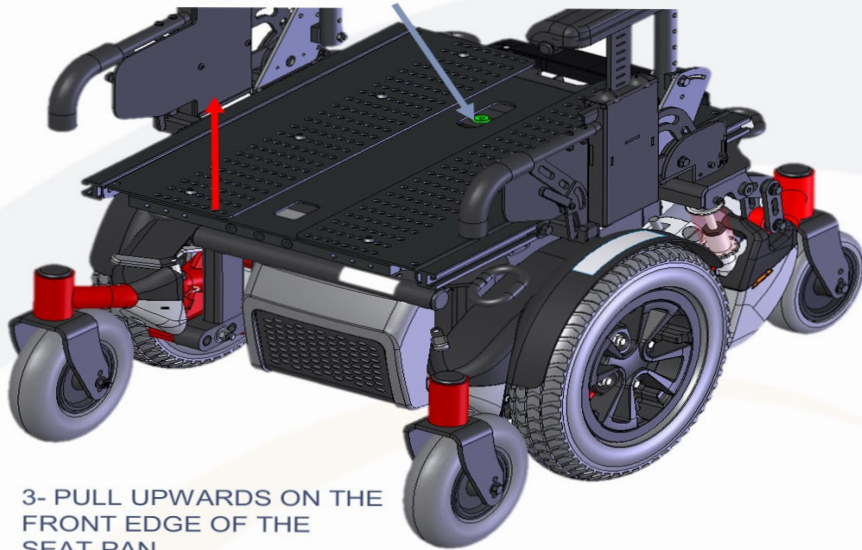


	MIN WIDTH	MAX WIDTH	MAX DEPTH
PEDIATRIC	11	16	16
ADULT, SHORT	15	20	19
ADULT, LONG	15	20	22
LARGE ADULT, LONG	19	24	22
BARIATRIC, LONG	24	28	24

## TILT ACTUATOR REPLACEMENT



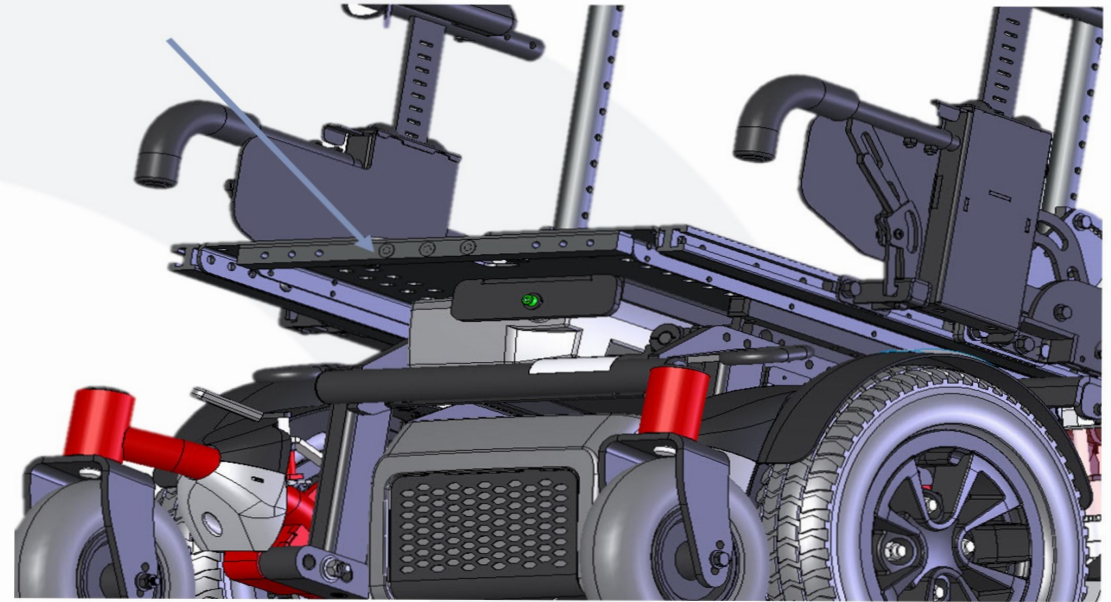
- 1- REMOVE SEAT CUSHION
- 2- USING A 6mm ALLEN KEY, REMOVE REAR ACTUATOR BOLT



- 3- PULL UPWARDS ON THE FRONT EDGE OF THE SEAT PAN



- 4- USING A 5mm ALLEN KEY, REMOVE FRONT ACTUATOR BOLT



- 5- TAKE NOTE OF THE WIRE ROUTING
- 6- ACTUATOR WILL FALL OUT FROM THE FRONT
- 7- REINSTALL IN REVERSE ORDER

## POWER ELEVATING LEG RESTS



### REMOVAL OF FRONT RIGGINGS

1- REMOVE ACTUATOR  
(ONLY WHEN USING POWER ELRS)

2- REMOVE 2 FRONT SCREWS FOR RECEIVER

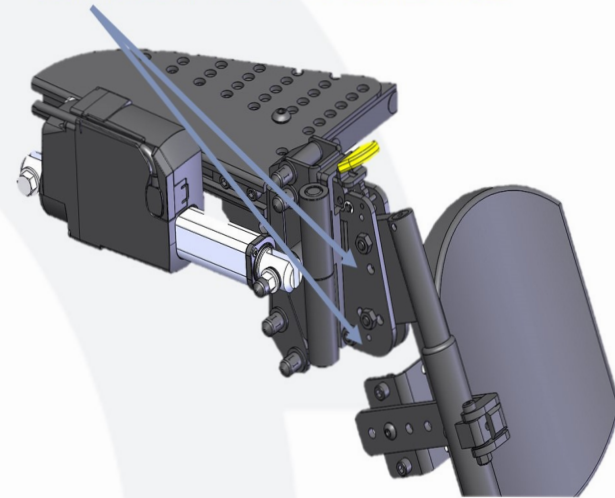
3- RECEIVER WILL SLIDE FORWARD



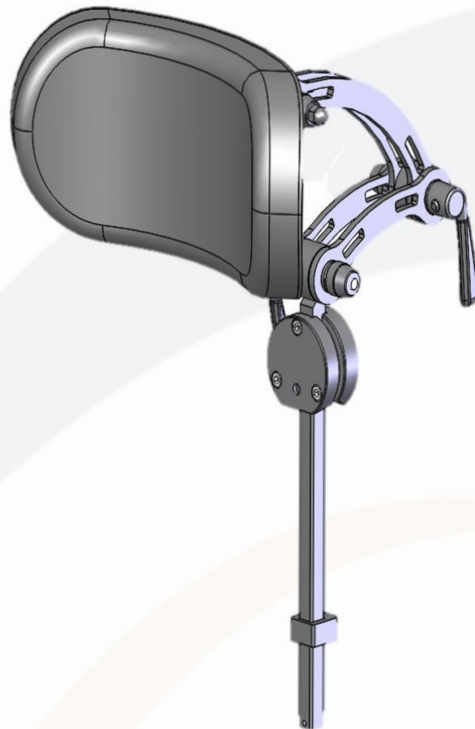
### LEG REST ANGLE ADJUSTEMENT

EVERY HANGER IS ANGLE ADJUSTABLE (60-70-80-90)

ALIGN HOLES AT THE TOP TO DESIRED ANGLE



## MULTI AXIS HEAD REST



QUICK LATCH FOR EASY ADJUSTMENT  
KIT IS SUPPLIED WITH BOLTS TO REPLACE QUICK  
LATCH SYSTEM

NEW PIVOT BALL AT THE BOTTOM TO  
PERMIT UP TO 3" OF LATERAL MOVEMENT

KIT INCLUDES A SECONDARY VERTICAL  
BAR TO ADD 5" OF LATERAL MOVEMENT  
(UP TO 8" TOTAL)

HEIGHT ADJUSTMENT  
LATERAL ADJUSTMENT  
DEPTH ADJUSTMENT

NOTE - When pushing the Quick Latch back in, it should be hard and stiff to close down. It should leave a pressure mark in your palm. If it still moves after that, repeat by tightening the nut, not the latch. The first time it is tightened, usually the star washer on the inside will "break" the paint. The second time, it will be firmly set into the metal and hold well.

If this is still an issue, every headrest is supplied with replacement nuts and bolts, so it can be locked in place.



## WEBSITE



WEBSITE WILL FEATURE THE FOLLOWING:

- FULL PARTS MANUAL
- INSTRUCTION GUIDES
- INFORMATION BULLETINS
- SOFTWARE DOWNLOADS
- ORDER FORMS
- OWNERS MANUAL
- PRODUCT INFORMATION
- AND MUCH MORE



## QUESTIONS



## HANDS ON



- REMOVING REAR TILT ACTUATOR BOLT AND LIFTING SEAT
- \*\* NOTICE THE ROUTING OF THE ACTUATOR CABLE
  
- REMOVING DRIVE TIRE AND FENDER
- \*\* NOTICE THE LOCATION OF THE BOLTS TO MOVE THE BATTERY TRAY AND THE FRONT PIVOT POINT ADJUSTEMENT
  
- REMOVING DRIVE MOTOR
- \*\* NOTICE THE ACCESS FOR THE BOLTS FROM THE TOP OF THE MOTOR AND LOCATION FOR THE FREE WHEEL LEVER FOR THE COG RELEASE MOTOR
  
- REMOVING BATERIES
- \*\* THE PLASTIC COVERS ARE UNIVERSAL FOR ALL BATTERY TYPES.



# LUNCH



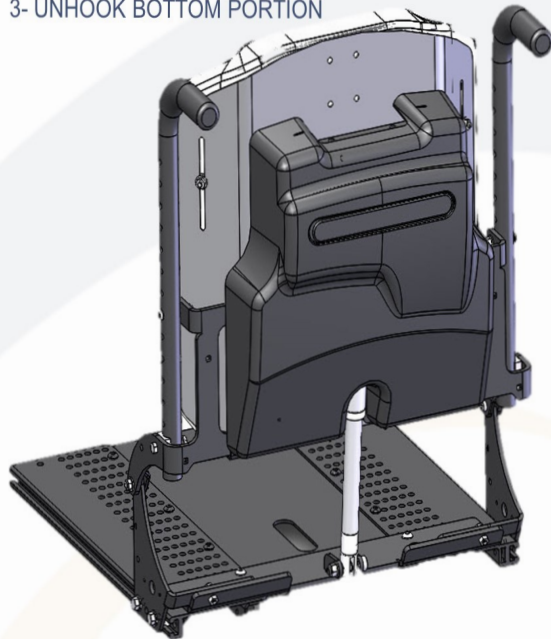


## SEATING ELECTRONIC ACCESS



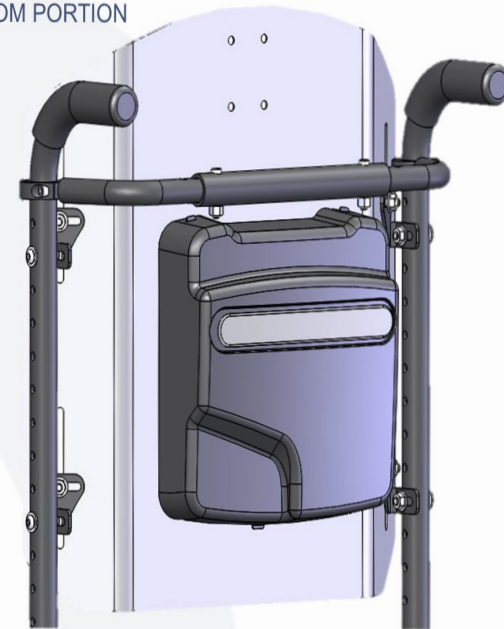
### POWER RECLINE SHROUD REMOVAL

- 1- LIFT TOP CORNERS
- 2- PULL OUT FROM CLIPS
- 3- UNHOOK BOTTOM PORTION



### FIXED BACK SHROUD REMOVAL

- 1- LIFT TOP CORNERS
- 2- PULL OUT FROM CLIPS
- 3- UNHOOK BOTTOM PORTION



### POWER RECLINE SHROUD INSTALLATION

- 1- CLIP TOP CORNERS
- 2- PUSH IN BOTTOM PORTION



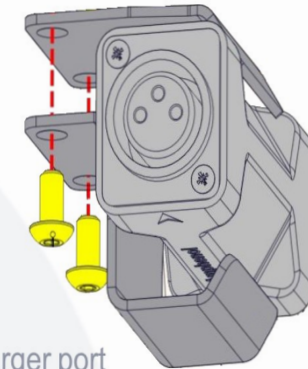
### FIXED BACK SHROUD INSTALLATION

- 1- CLIP TOP CORNERS
- 2- PUSH IN BOTTOM PORTION

## OMNI 2



- R-net speciality control Interface
- Two-section design, featuring slimline display
- Large, high resolution, 3.5" VGA screen
- Integrated Bluetooth® wireless technology
- Infra-Red (IR) control
- Built-in light sensor
- USB charging socket
- High-volume horn
- Dual-channel inputs, analogue and digital
- Sip-and-Puff transducer
- On-board configuration programming
- Electronics sealed to IPx4
- Backwards compatible - 'Connect & Go'

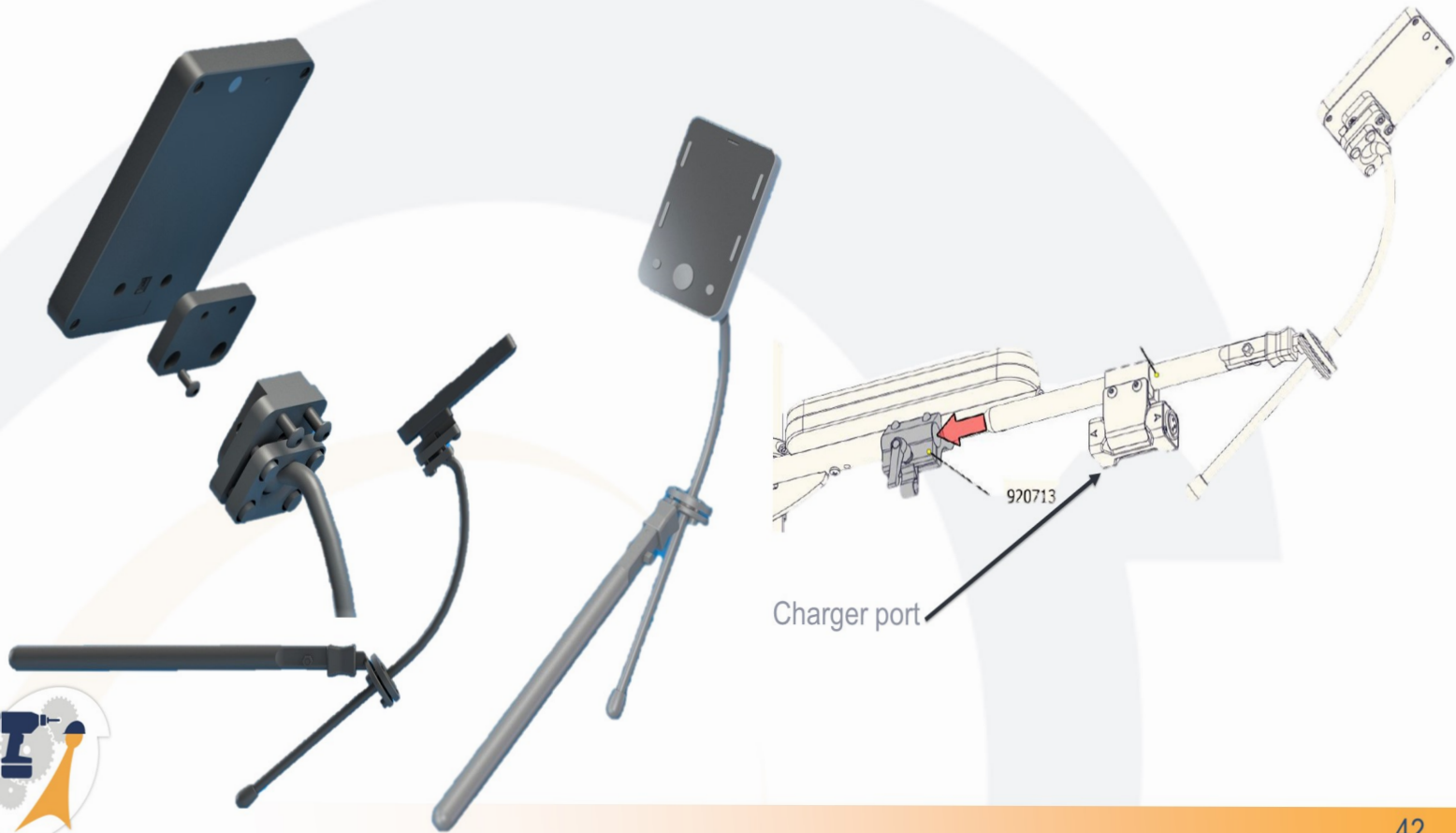


Remote charger port located on arm rest, on the same side as OMNI2 screen.

Can be switched place, as custom.



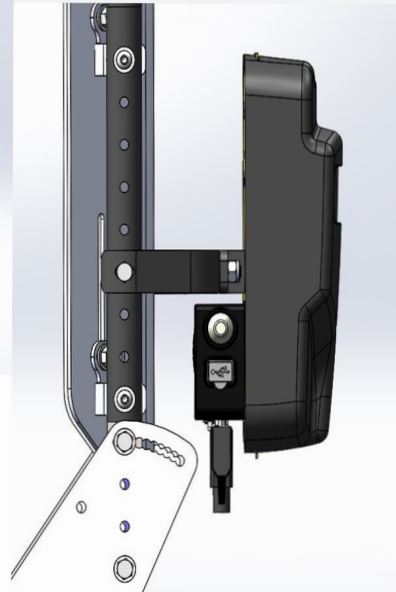
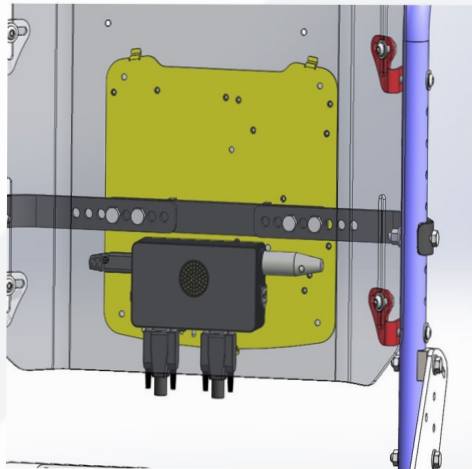
## Installation of DISPLAY Module



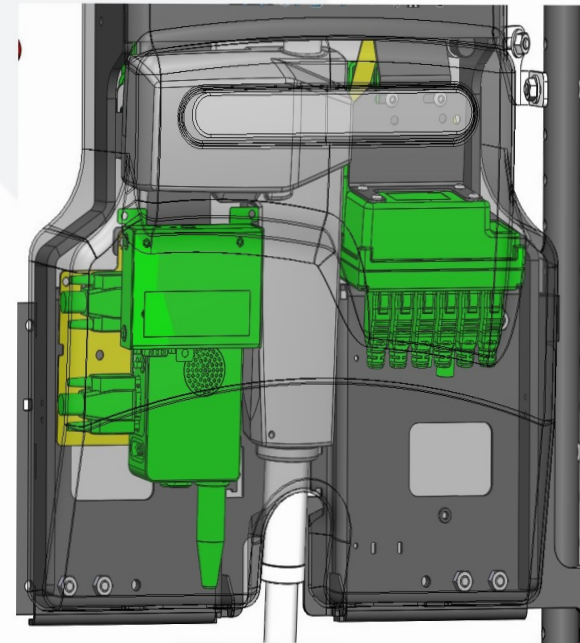
## Installation of INPUT Module



For installation on fixed back:  
always select code ending with -F-E



For installation on reclining back:  
No change in selection of code



## EBX with iQ actuators



Amylior proudly introduces its new electronics architecture: the e-bx seating controller with iQ Actuators.

Thanks to our proprietary handshake protocol, the system is the first truly plug-n-play platform. A very effective combination to help control proper positions and natural movements of the human body.

Using a real-time 2-way communication, the iQ Actuators and e-bx are in constant interaction, exchanging important information such as position, running time, speeds, errors and more.

The e-bx new memory seating feature allows the user to store and easily recall positions for driving, eating and resting. This innovative system also integrates different error detection software and superior troubleshooting functionality to help with fast and efficient problem-solving.



## E-bx with iQ actuators



### End user Features:

- Precise control of actuators
- Control through RNET joystick and input device
- Control through external switches, either keypad, toggle or independent single switches
- Actuator knows its position in all time, even while power failure
- Proportional control of actuator speed

### Tech Features:

- 2 different troubleshooting modes
- Real plug-n-play system
- No dedicated channel on the controller
- Internal feedback loop to synchronize actuators
- Full configuration of inhibits and actuator limits through R-Net Software
- Full configuration of actuator speeds, accelerations and synchronizations through R-Net Software



## iQ Actuators



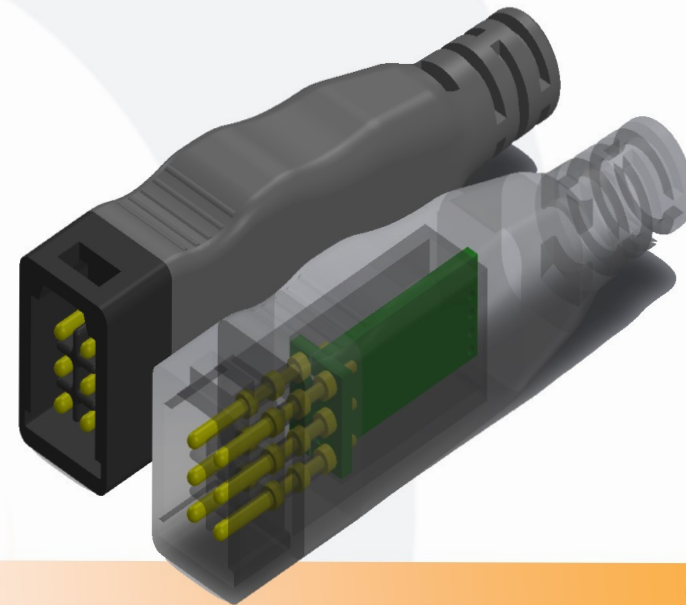
Actuator with built in MCU that relates information such as:

- Model and address of actuator
- Serial number of unit
- Stroke length and limits
- Feedback loop
- Voltage type



This internal processor allows automatic recognition of what is connected to the e-bx module.

No complex configuration of the chair is necessary.





## POWER SEATING OPTIONS THROUGH LED JOYSTICK OPERATION



Start by powering the chair on:  
Press the ON/OFF button



Press the MODE  
button once to get  
into SEATING mode



Deflect joystick  
left or right to  
scroll through  
power options.

Deflect joystick  
back to activate  
power option.

Deflect joystick  
forward to come  
back to neutral  
position.

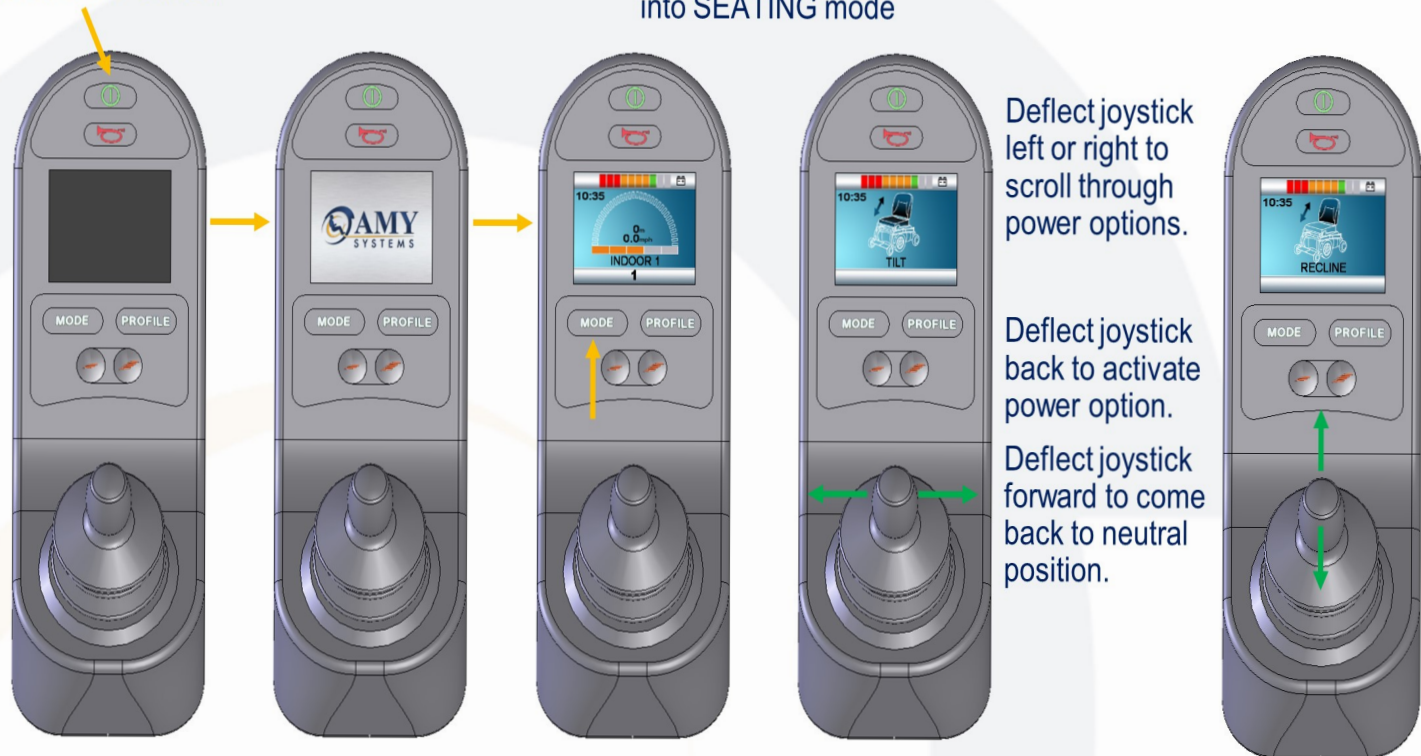


## POWER SEATING OPTIONS THROUGH COLOR JOYSTICK OPERATION



Start by powering the chair on:  
Press the ON/OFF button

Press the MODE  
button once to get  
into SEATING mode



## POWER SEATING OPTIONS THROUGH ADVANCED JOYSTICK OPERATION



Start by powering the chair on:  
Push the ON/OFF paddle forward

Press the MODE  
button once to get into  
SEATING mode



Deflect joystick  
left or right to  
scroll through  
power options.

Deflect joystick  
back to activate  
power option.

Deflect joystick  
forward to come  
back to neutral  
position.



## POWER SEATING OPTIONS EXTERNAL ACTIVATION (ANY TYPE OF JOYSTICK)



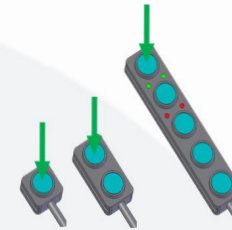
Start by powering the chair on:

Press the ON/OFF button

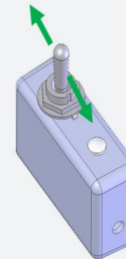


While joystick is on, and in any mode, you can activate power functions with the external control.

Depending on the total amount of power options, it could be any type of single switch, dual switch or multiple switch, either push button or toggle switch.

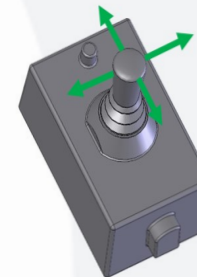


Depress the button that corresponds to the power option you require. Release when at desired position. Depress to go back to neutral position.



Deflect toggle switch back to activate power option.

Deflect toggle switch forward to come back to neutral position.



Deflect toggle switch either forward, back, left or right to activate desired power option.

Release when at desired position.

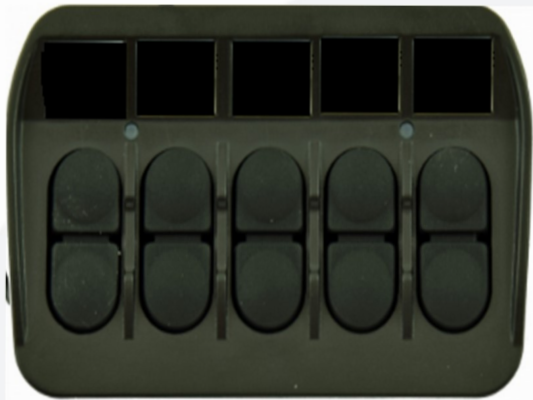
Deflect toggle switch in same direction to return to neutral position.



## Keypads and switches



Push button Keypad  
SWKEYPAD-P-EBX



Toggle Keypad  
SWKEYPAD-T-EBX



The ebx is compatible with legacy buttons with simple programming.

The ebx is NOT compatible with SWKEYPAD-T(P)-JSM2



Each buttons can be programmed:

- Direct Function
- Auto-Toggle
- Memory

Keypad has 10 positions

Legacy has 5 positions

## Information in Actuator MCU



Parameter	Level	Min	Max	Default Option	Description
<b>Id</b>	OEM	0	65536	0	Unique identification of the Actuator Assembly (not used by the Ebox)
<b>Type</b>	OEM	0	255	0	Type of the Actuator
<b>SlavetoType</b>	OEM	0	255	0	Used in case of Master/Slave actuators
<b>Revision</b>	OEM	0	255	0	Identifies the revision of the Actuator Assembly (not used by the Ebox)
<b>Current Up</b>	OEM	1	150	50	Current limit in the Up direction (unit 0.1Amp)
<b>Current Down</b>	OEM	1	150	50	Current limit in the Down direction (unit 0.1Amp)
<b>Run Time</b>	OEM	1	32000	3000	Total time it takes for the actuator to go from Home to End (at 100% speed, unit is 0.01s)
<b>KP Factor</b>	OEM	25	250	100	Amplification factor used in case of Master/Slave actuators
<b>Product Code</b>	OEM	0 to 16 char.		"Empty"	Free string (not used by the Ebox)

Type	Name
10	Legs
11	Left Leg
12	Right Leg
13	Power Flip-Up
14	Elevating Platform
20	Backrest / Recline
30	Tilt
40	Lift / Elevate
50	Standing
51	Standing Left
52	Standing Right
60	Latitude Horizontal
61	Latitude Vertical
70	Anterior Tilt
80	Left Lateral
81	Right Lateral
90	Spare 1
91	Spare 2
92	Spare 3
93	Spare 4
100	Actuator 1 (No feedback)
101	Actuator 2 (No feedback)
102	Actuator 3 (No feedback)
103	Actuator 4 (No feedback)
104	Actuator 5 (No feedback)
105	Actuator 6 (No feedback)



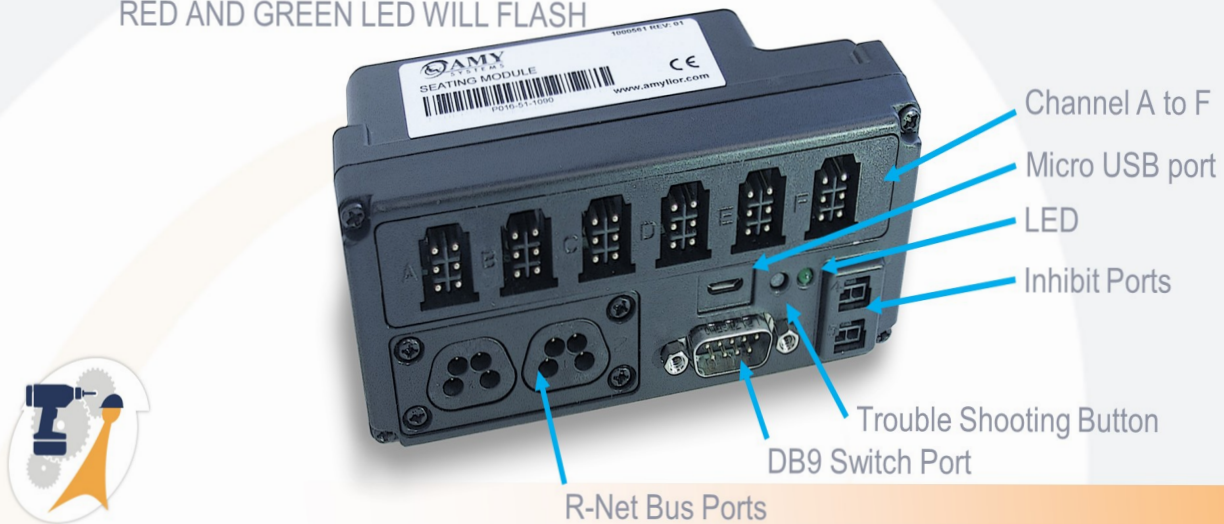
## Trouble Shooting Modes



Press and hold button on e-bx while turning the chair on.  
After 2 seconds, LED will flash. Release after flash to enter given mode.

First flash: mode 1: disables inhibits, and end stop limits of actuators.  
RED LED WILL FLASH

Second flash: mode 2: direct drive of actuator on channel A to E with button 1 to 5 of keypad.  
RED AND GREEN LED WILL FLASH



## Flash and R-Net Codes



The e-bx uses the same codes as the ISM to report problems. They will show up on the screen as they would normally do.

Most frequent codes and how to fix:

9661 (to 9666)

The Actuator 1 (to 6) specified in the Axis is faulty.

This fault will occur when the specified Actuator is not present, or it return an error.

Re-home actuator, if fault still present, replace actuator.

We have a complete list of error codes and potential fixes available.



## Bluetooth Pairing



To go into the settings menu, press and hold the top left soft key .



Navigate to the Bluetooth menu and turn on the wanted mode.

Turn the joystick off and on to reset the system.



The Bluetooth Module must be put into Discovery Mode. Use the following procedure:

Operate your Input Device in the forward direction and hold until it beeps. This will take approximately 10 seconds, then release.

Operate your Input Device in the reverse direction and hold until it beeps. This will take approximately 10 seconds, then release. (A short beep may be heard as the directions are changed).

The Bluetooth Module is now in Discovery Mode and ready to be paired with a Bluetooth device.



From your device, go to the Bluetooth settings and follow the pairing protocol from that device.



## Memory Seat



How to adjust memory seat using the speed buttons of the joystick:

Set the seating to the desired position and then stop all movements of the seating.

Go in the joystick seating mode to the Axis where you want to store the position.

Select the speed down button for 3 seconds, you will hear a short beep. (GREEN)

Release the speed down button.

Within 3 seconds move to step 4 or 5.

To store the position under the forward direction, select the speed up button for 3 seconds, you will hear a short beep. Release the speed up button. (ORANGE)

To store the position under the backward direction, select the speed down button for 3 seconds, you will hear a short beep. Release the speed down button. (GREEN)

If it was not possible to store the position three short beeps will be generated.



## Memory Seat



How to adjust memory positions using the keypad

Set the seating to the desired position and then stop all movements of the seating. If the seating is moving it is not possible to store the position.

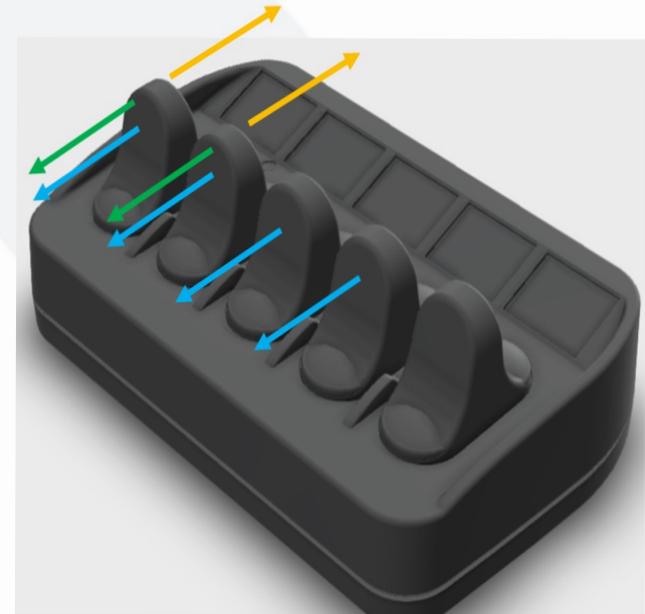
Keep the 2 most left top buttons of the keypad closed, after 3 seconds the green LED will start flashing slowly. Then release both buttons. (ORANGE)

Keep the 2 most left bottom buttons of the keypad closed, after 3 seconds the green LED will flashing fast. Then release both buttons. (GREEN)

Then press the button on the keypad for 3 seconds where to store the position. If the position is stored successfully. The green LED will be continuously on. (BLUE)

If it was not possible to store the position the red LED will flash for 3 seconds.

Remark: If the Axis Function of the Axis connected to the key is not the memory function storage of the position will fail.



# OBP PROGRAMMING ACCESS



## COLOR JOYSTICK AND OMNI



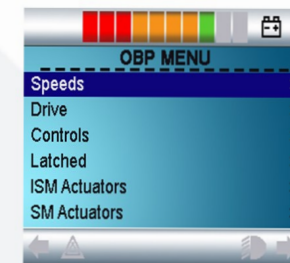
TURN ON CHAIR



PRESS MODE UNTIL YOU ACCESS OBP MODE



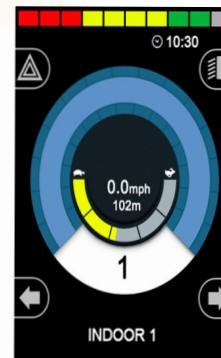
NAVIGATE MENU WITH JOYSTICK OR ARROWS ON OMNI



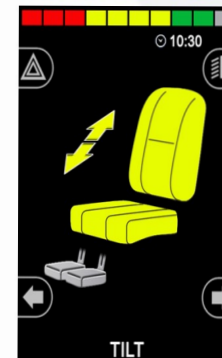
## ADVANCED JOYSTICK



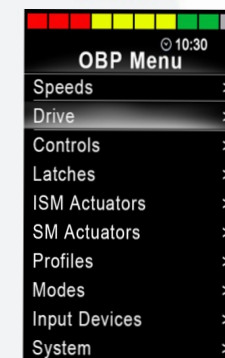
TURN ON CHAIR



PRESS MODE UNTIL YOU ACCESS OBP MODE



NAVIGATE MENU WITH JOYSTICK



# PC PROGRAMMER



Drop Down Menus    Toolbars

Sample Settings.R-net - PGDT R-net programmer

File Edit Controller Tools View Help

Parameter	Profile 1	Profile 2	Profile 3	Profile 4	Profile 5	Profile 6	Profile 7	Profile 8
Profile Management								
Mode 1    Mode 2    Mode 3    Mode 4    Mode 5    Mode 6    Mode 7    Mode 8								
Mode Name	Drive	Seating	Bluetooth	Environmental	Mode 5	Mode 6	Mode 7	Programming
Input	Drive	Seating	Raw	Raw	Raw	Raw	Raw	Programming
Output	Drive	Seating	Mouse	Environmental	Output 5	Output 6	Output 7	Programming
Speeds								
Profile 1	Profile 2	Profile 3	Profile 4	Profile 5	Profile 6	Profile 7	Profile 8	
Maximum Forward Speed	30 %	40 %	60 %	80 %	100 %	100 %	100 %	40 %
Minimum Forward Speed	10 %	15 %	20 %	25 %	30 %	30 %	30 %	15 %
Maximum Reverse Speed	30 %	35 %	40 %	45 %	50 %	50 %	50 %	35 %
Minimum Reverse Speed	10 %	15 %	20 %	25 %	30 %	30 %	30 %	15 %
Maximum Turning Speed	20 %	25 %	30 %	35 %	40 %	40 %	40 %	25 %
Minimum Turning Speed	10 %	10 %	15 %	20 %	20 %	20 %	20 %	10 %
Maximum Forward Acceleration	30	35	40	45	50	50	50	35
Minimum Forward Acceleration	15	20	20	20	25	25	25	20
Maximum Forward Deceleration	40	45	50	55	60	60	60	45
Minimum Forward Deceleration	20	25	25	25	30	30	30	25
Maximum Reverse Acceleration	30	35	40	45	50	50	50	35
Minimum Reverse Acceleration	15	20	20	20	25	25	25	20
Maximum Reverse Deceleration	30	30	40	45	45	45	45	30
Minimum Reverse Deceleration	15	20	20	20	25	25	25	20
Maximum Turn Acceleration	30	35	40	45	50	50	50	35
Minimum Turn Acceleration	15	20	20	20	25	25	25	20
Maximum Turn Deceleration	40	45	50	55	60	60	60	45
Minimum Turn Deceleration	20	20	25	30	30	30	30	20
Power	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %
Torque	80 %	80 %	80 %	80 %	80 %	80 %	80 %	80 %
Tremor Damping	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %
Fast Brake Rate	80	80	80	80	80	80	80	80
Controls								
Global	Profile 1	Profile 2	Profile 3	Profile 4	Profile 5	Profile 7	Attendant	
Joystick								

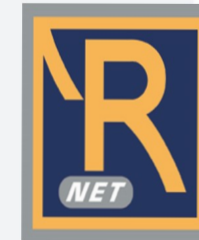
Parameter Name    Programming Area    Cells    Status Bar

Program1 - PGDT Rnet Programmer

File Edit Controller Tools View Help

- Read from Controller
- Write to Controller
- Reset to Presets
- Create Presets
- Set Controller Personality
- Unlock

Maximum Reverse Speed	30 %	35 %
Minimum Reverse Speed	10 %	15 %
Maximum Turning Speed	20 %	25 %
Minimum Turning Speed	10 %	10 %
Maximum Forward Acceleration	30	35
Minimum Forward Acceleration	15	20
Maximum Forward Deceleration	40	45
Minimum Forward Deceleration	20	25



**Drop Down Menus**   **Toolbars**

Parameter

Parameter	Profile 1	Profile 2	Profile 3	Profile 4	Profile 5	Profile 6	Profile 7	Profile 8
Mode Name	Mode 1	Mode 2	Mode 3	Mode 4	Mode 5	Mode 6	Mode 7	Mode 8
Drive	Seating	Bluetooth	Environmental	Mode 5	Mode 6	Mode 7	Programming	
Input	Seating	Raw	Raw	Raw	Raw	Raw	Programming	
Output	Drive	Seating	Mouse	Environmental	Output 5	Output 6	Output 7	Programming
Speeds	Profile 1	Profile 2	Profile 3	Profile 4	Profile 5	Profile 6	Profile 7	Attendant
Maximum Forward Speed	30 %	40 %	60 %	80 %	100 %	100 %	100 %	40 %
Minimum Forward Speed	10 %	15 %	20 %	25 %	30 %	30 %	30 %	15 %
Maximum Reverse Speed	30 %	35 %	40 %	45 %	50 %	50 %	50 %	35 %
Minimum Reverse Speed	10 %	15 %	20 %	25 %	30 %	30 %	30 %	15 %
Maximum Turning Speed	20 %	25 %	30 %	35 %	40 %	40 %	40 %	25 %
Minimum Turning Speed	10 %	10 %	15 %	20 %	20 %	20 %	20 %	10 %
Maximum Forward Acceleration	30	35	40	45	50	50	50	35
Minimum Forward Acceleration	15	20	20	20	25	25	25	20
Maximum Forward Deceleration	40	45	50	55	60	60	60	45
Minimum Forward Deceleration	20	25	25	25	30	30	30	25
Maximum Reverse Acceleration	30	35	40	45	50	50	50	35
Minimum Reverse Acceleration	15	20	20	20	25	25	25	20
Maximum Reverse Deceleration	30	30	40	45	45	45	45	30
Minimum Reverse Deceleration	15	20	20	20	25	25	25	20
Maximum Turn Acceleration	30	35	40	45	50	50	50	35
Minimum Turn Acceleration	15	20	20	20	25	25	25	20
Maximum Turn Deceleration	40	45	50	55	60	60	60	45
Minimum Turn Deceleration	20	20	25	30	30	30	30	20
Power	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %
Torque	80 %	80 %	80 %	80 %	80 %	80 %	80 %	80 %
Tremor Damping	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %
Fast Brake Rate	80	80	80	80	80	80	80	80
Controls								
Global								
Joystick								

For Help, press F1   NUM   App: OEM   File: OEM   R-net Not Connec

**Parameter Name**   **Programming Area**   **Cells**   **Status Bar**

Program1 - PGDT Rnet Programmer

File Edit Controller Tools View Help

- Read from Controller
- Write to Controller
- Reset to Presets
- Create Presets
- Set Controller Personality
- Unlock

Maximum reverse speed 30 %

Minimum Reverse Speed 10 %

Maximum Turning Speed 20 %

Minimum Turning Speed 10 %

Maximum Forward Acceleration 30

Minimum Forward Acceleration 15

Maximum Forward Deceleration 40

Minimum Forward Deceleration 20

## PARAMETERS



TORQUE: THE AMOUNT OF FORCE REQUIRED TO GET THE MOTOR TURNING FROM A STANDSTILL  
POWER: THE AMOUNT OF FORCE REQUIRED TO KEEP THE MOTOR TURNING OVER A LONG PERIOD.

TREMOR DAMPENING: THIS PARAMETER WILL HELP FOR PEOPLE WITH HEAVY HAND TREMORS. THE HIGHER THE VALUE, THE LONGER YOU NEED TO HOLD THE JOYSTICK IN A GIVEN DIRECTION TO MOVE. IT WILL ALSO TAKE A MEDIAN VALUE BETWEEN THE TREMORS

DEADBAND: NEUTRAL ZONE IN THE CENTER OF JOYSTICK. GOOD WHEN USERS TEND TO REST THEIR HANDS ON THE JOYSTICK AT STARTUP. OR WITH HEAVIER JOYSTICK HANDLES, THIS MAKES THE JOYSTICK LESS SENSITIVE IN THE NEUTRAL POSITION.

LATCHED DRIVE OR ACTUATORE: THIS PERMITS THE CHAIR TO DO AN ACTION FOR A SET PETIOD OF TIME WHEN THE USER GIVE SINGLE INPUT. EX: PUSH THE JOYSTICK FORWARD FOR 1 SECOND, BUT CHAIR WILL DRIVE STRAIGHT FOR 10 SECONDS.



## QUESTIONS



## HANDS ON PROGRAMMING



- FIND ERROR CODES IN DOAGSNOSTICS SECTION
- \*\* SEE MORE DETAILS WHEN USING THE SOFTWARE AND IN MANUAL
- ADJUSTING SPEED ACCELERATIONS
- \*\* TEST DRIVE, PUT CRAZY NUMBERS AND FEEL THE DRIVING DIFFERENCE
- ADJUST TREMOR DAMPENING AND DEADBAND
- \*\* TEST TO FEEL THE DIFFERENCE
- TURN OFF PROFILES AND MODES
- \*\*NEVER TURN OFF MODE 8





# TEST



**TEST**





**AMYLIOR**

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