# Action Trackchair® Owner's Manual

## Including Models ST, NT, PT, TR, & PR



*Revised ~ Nov. 3, 2016*

**Helping the Disabled to be Enabled®**

# Action Manufacturing

# 1105 Lake Road, PO Box 620

# Marshall, MN 56258

# 507-532-5940

www.actiontrackchair.com

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- Triplicate Registration Form.....

# Introduction

Welcome to Action Trackchair. We at Action Trackchair want to make your experience the best it can be. Enclosed in this owner's manual you'll find information to use and maintain your Action Trackchair. With any questions please contact us at:

Action Manufacturing
1105 Lake Road
PO Box 620
Marshall, MN 56258
507-532-5940
tim@actiontrackchair.com
kevin@actiontrackchair.com

## Safety Guidelines

- Only one person should be on the Trackchair at any time.
- Seat belt is recommended.
- **Do not** navigate Trackchair/Trackstander on more than a 20 degree slope
- Trackchair will climb inclines enough to tip over in any direction.
- When climbing over small logs or curbs approach incline at an angle, **not** directly at 90°
- Make sure controls are in the off position before sitting in Trackchair and before getting out of seat.
- Always have a backup plan, "What if…?"
- **Do not** ride the Trackchair during loading or unloading from vehicle or carrier.
- **Do not** attempt to climb stairways.
- Action Manufacturing Inc. does not recommend driving the Trackstander in the upright position other than flat and stable terrain
- Failure to know the limits can cause personal injury or equipment damage

# Operating Your Action Trackchair

- When you are ready to drive the Trackchair, make sure controls are in the off position before sitting in Trackchair.
- When operating your Trackchair, make sure you are securely fastened in with either the lap belt or 4 point harness.
- Your Trackchair can be programmed by your distributor/dealer to have the option of locking the joystick or not, ask them about the availability for this option
- If your Trackchair has a locking control, **it can be unlocked in this way**. Turn control on, hold joystick forward until you hear a beep or three seconds, then joystick back until you hear a beep or three seconds. It is now unlocked and ready for operation.
- When **locking the control**, (if this option is selected by the distributor/dealer/customer) it is done in this way. After the control has been turned off, hold the on/off button until the control has cycled both on and then off. Control is now set in the locked mode.
- The Action Trackchair control has five speeds, one-five and can be changed with the up and down arrows.
- Battery indicator is on the main screen on controls. Battery charge will last up to six hours, depending on battery condition and type of use the Trackchair is subject to. Action Trackchair has a built-in battery charger that plugs into 110 volt outlet.
- Optional lighting is available and is controlled on the joystick control panel.
- If your Trackchair has no separate Tilt–On-The-Fly rocker switch, tilting of the chair is possible by pushing the “M” button on controls, and then moving joy stick forward or backward to tilt chair. Cancel by pushing “M” again or moving joystick to the left.
- If for some reason it is necessary to pull the Trackchair. Disengage the brakes on the motors with the levers on back of motors. Push levers to the outsides on both motors. Do not pull Trackchair more than 5 MPH
- Action Trackchair does not recommend operating your Trackchair in the salt water, although our Trackchairs are powder coated to the highest quality with very durable powder coat, salt water is very corrosive and causes problems with powder coat and metal. If your Trackchair has been exposed to salt water, rinse the Trackchair completely with fresh water and dry off.

## Comfort Adjustments

There are few adjustments that are necessary. The foot rest can be moved up or down to fit the rider's needs. The chair itself can be leveled to the desired comfort of the rider. The armrest can flip down or back for easier transferring into the chair. Electronic controls can be adjusted at a servicing distributor/dealer as far as speed, acceleration, deceleration, braking, etc.

# Batteries and Charging

- Battery charge will last up to six hours, depending on battery condition, temperatures and type of use the Trackchair is subject to (terrain and weight of rider). The Trackchair has a built-in battery charger that plugs into 110 volts.

## Operation after Applying AC Power to a ProSport Charger Connected to Discharged Batteries

During the startup test the battery type LED will be illuminated and the red charge mode LED will flash indicating that the unit is in a self-test mode. When complete and if there are no faults, the charger's system check OK indicator will illuminate green and the ProSport's solid red charging LED will be ON indicating the charge process is initiated. Note: If there is a fault the appropriate bank LED will illuminate and the charge process may not start, depending on the location of the fault. See page 25 for further troubleshooting details.

**If there are no Battery Faults, the Green System Check OK LED will illuminate and the following sequences will proceed:**

The red battery type LED (factory set for standard Flooded (lead-acid)/AGM batteries) will illuminate.

The red charge mode LED will illuminate indicating the charger has started its multi-stage charging process.

When the charge process is approximately 80% complete the red charge mode indicator will turn off and the amber conditioning LED will turn on indicating the conditioning mode.

When the multi-stage charge process is completed you will observe the following: Battery type red LED goes OFF.

The red charging LED and the amber conditioning LED will be off and the green ready/maintain LED will illuminate indicating your batteries are fully charged.

The only LEDs on after the multi-stage charge process is completed are the green system OK LED, blue AC power LED and the green ready/maintain LED.

## Multi-Stage Charging Overview

**Stage 1 - System Check OK and Battery Analyzing:** During this stage the ProSport red “Charge” LED will flash indicating ProSport is analyzing all battery connections in addition to checking each battery is capable of being charged. Upon completion the “System Check OK” indicator will illuminate green followed by Stage 2 Charging.

**Stage 2 - Charging:** During this mode the “Charging” indicator will be red. The ProSport Series will use all of its available charging amps (as controlled by temperature) until the battery voltage is raised to 14.6VDC (Flooded lead-acid factory setting).

**Stage 3 - Conditioning:** During this mode the “Conditioning” status indicator will be amber. Batteries will hold at 14.6 VDC (factory set for Flooded lead-acid batteries) to complete charging while conditioning each battery connected. Upon completion the ProSport will go into its Energy Saver Mode.

**Stage 4 - Auto Maintain (Energy Saver Mode):** During this mode the blue “Power” and green “Auto Maintain” LED's will be on indicating Stage 2 charging and Stage 3 conditioning are completed. At this time ProSport will initiate its Auto Maintain (Energy Saver Mode) which will monitor and Auto Maintain batteries only when needed to maintain a full state of charge.

**Stage 5 - Storage Recondition Mode:** During this mode the ProSport “Storage Recondition Mode” green indicator will illuminate with a slow fade in and out pulse. This indicates that while your batteries/boat are in storage the ProSport will automatically recondition all batteries for up to 3 hours once a month extending battery life and maximizing on the water battery power performance.

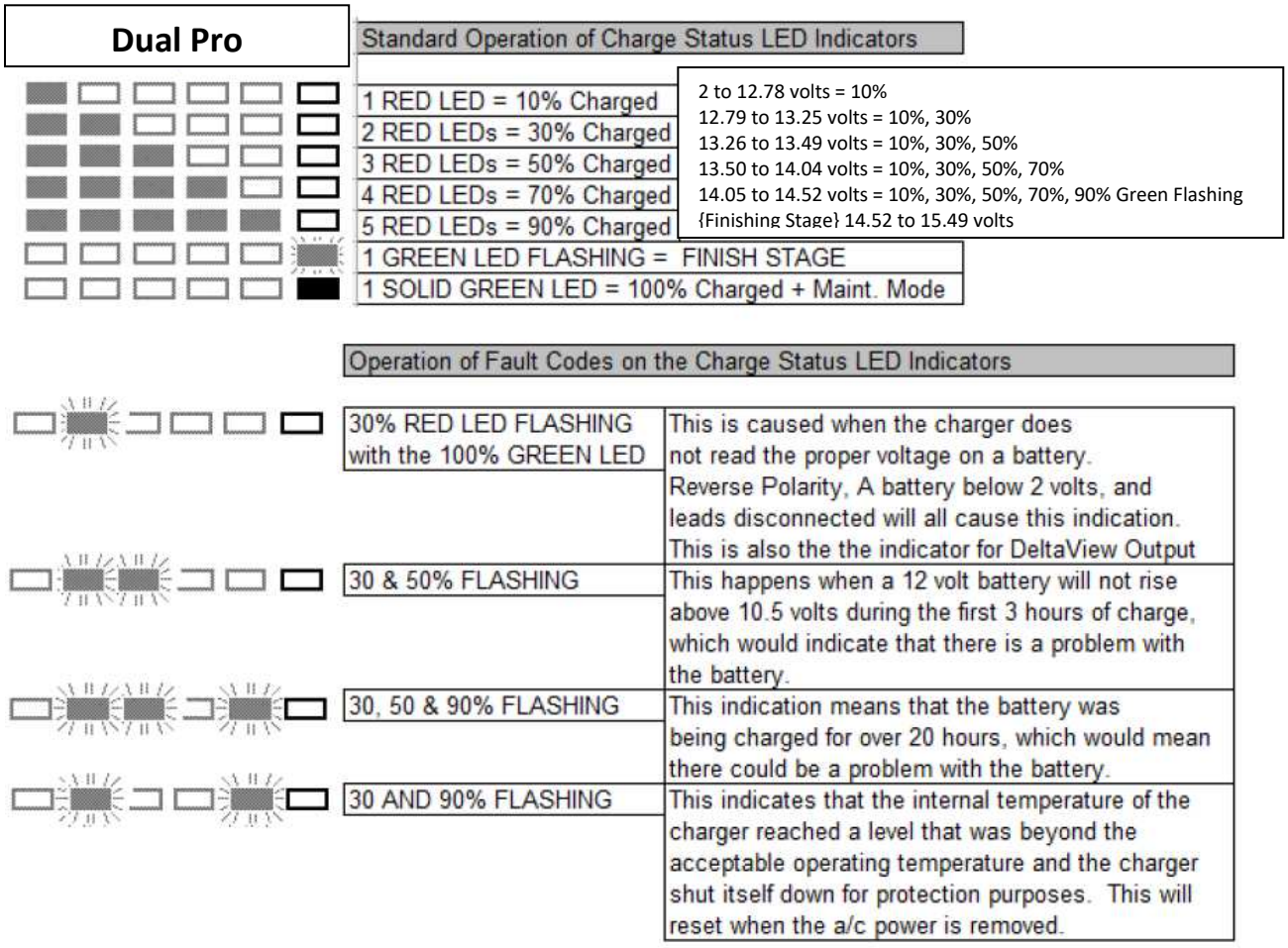
## Batteries and Charging (Continued)

- To get maximum daily use, the battery must be fully charged. This is accomplished by having the Trackchair plugged in until the "READY LIGHT" comes on.

### INDEPENDENT CHARGING BANK INDICATIONS

When your battery charging system is activated, each bank provides charging information utilizing five red Light Emitting Diode (LED) indicators and one green Light Emitting Diode (LED) indicator.

The five red LEDs enable you to track the progress of the charge cycle on each battery as the voltage rises. (see the following chart)

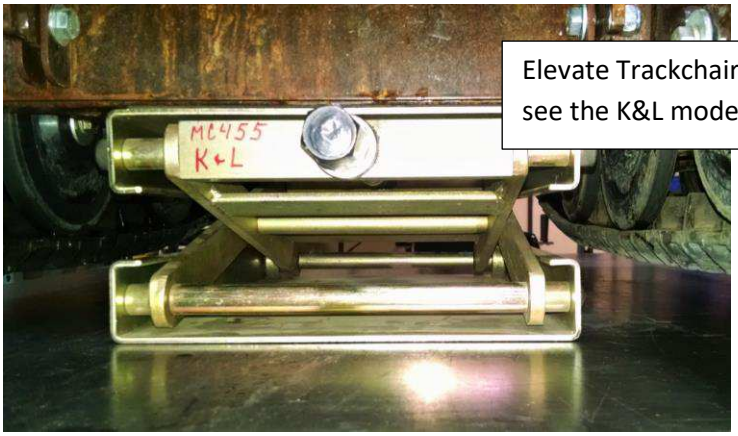



The charger can be left on for an extended period of time without harming the battery.

***Your system provides an equalization stage every 30 days while plugged in. If the charger is normally disconnected from A/C after completing charge, equalization can be accomplished by plugging back into A/C whenever this stage is desired. Battery manufacturers recommend that equalization is done once a month in order to further reduce sulfation on the lead plates of a battery, which helps promote longer battery life. Note: During this process the LEDs will go through their normal routine (Red counting up for % of charge) and the Green Led will blink until the unit returns to the maintenance mode and a steady Green LED. (Not applicable to a Gel Profile)***

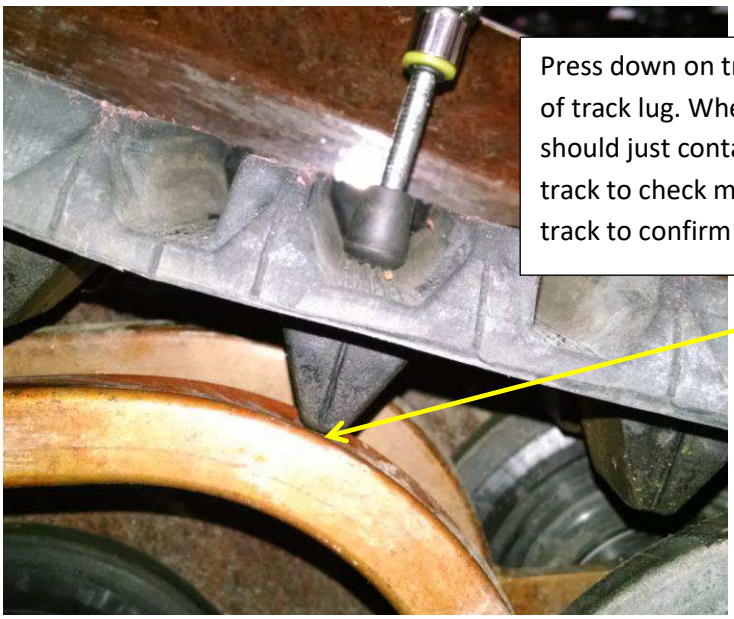
**Track Adjustment procedure for NT model Trackchairs**

Track can be adjusted by loosening both bolts on the front idler wheels, inside and outside. Track tensioners can be tightened with a 9/16 wrench by holding the lock nut and turning track tensioner bolts clockwise an even amount. Adjustment is only needed if the track tension does not meet the below spec. IT IS NOT NECESSARY TO OVER TIGHTEN THE TRACKS. Re-tighten front idler wheels, inside and outside to 130 in./lbs.




Elevate Trackchair with suitable lift or blocks, here you see the K&L model MC455 fat jack. (Purchase on-line)

Locate track lug over frame as shown



Press down on track with 10 to 15 lbs. of force and observe location of track lug. When properly tensioned the lug at the blue arrow should just contact the frame with 10 to 15 lbs. of force. Rotate track to check measurement at 3 different locations around the track to confirm measurement

Use suitable spring tension gauge purchased from your distributor/dealer #80500

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## Repairs and Maintenance

- All bearings are sealed and need no additional greasing.
- Track can be adjusted by loosening both bolts on the front idler wheels, inside and outside. Track tensioners can be tightened with a 9/16 wrench by holding the lock nut and turning track tensioner bolts clockwise an even amount. Adjustment is only needed if the track tension does not meet the below spec. IT IS NOT NECESSARY TO OVER TIGHTEN THE TRACKS. Re-tighten front idler wheels, inside and outside to 130 in./lbs.

Rotate the track so an internal lug is directly above the “A” frame cross support as shown

Press down on track with 20 to 25 lbs. of force and observe location of track lug. When properly tensioned the lug should just contact “A" frame at bottom right of picture with 20 to 25 Lbs. of force. Note arrow

Use suitable spring tension gauge purchased from your distributor/dealer #80500

## Cleaning your Trackchair/Trackstander

- The Action Trackchair/Trackstander can be washed with a garden hose, do not use high pressure wash to clean the chair. Always cover the joystick with a plastic bag to protect it from getting moisture inside. **THE JOYSTICK IS NOT WATERPROOF** and should be covered when washing, or stored outside or when transporting behind the vehicle open.
- Do not spray water directly onto the motor controller under the seat.

# Warranties

- **1 YEAR**: The following components are covered against manufacture defects in materials and workmanship for the period of one year.
  - Batteries
  - Control box and joy stick
  - Motors
  - All sprockets and idler wheels
  - Seats
  - Tilt Actuator
  - All other parts 1 year
    **Parts and Labor.**

- **2 YEARS:** The following components are covered against manufacture defects in materials and workmanship for the period of two years.
  - ProSport battery charger (Trackchair)
    **1st Year- Parts and Labor 2nd Year- Parts Only.**

- **3 YEARS:** The following components are covered against manufacture defects in materials and workmanship for the period of three years.
  - Dual Pro battery charger (Trackstander)
    **1st Year- Parts and Labor 2nd and 3rd Years- Parts Only**.
  - Tracks
    **1st Year- Parts and Labor 2nd and 3rd Years- Parts Only.**
  - Frame welding (Trackchair/Trackstander)

* Warranty period starts @ delivery date to customer.

# Specifications

| | ST Models<br>ST16, ST18, ST20, ST22, ST24 | TR Models Trackstander<br>TR1816, TR1820, TR2016, TR2020 |
|---|---|---|
| Height | 42” | 43” lowered 64” raised |
| Width | 37”, 37”, 39”, 41”, or 43” | 37” or 39” |
| Length | 52 ½ “ w/ rear idlers | 59” w/ rear idlers to front wheel kit |
| Weight | 350 pounds estimate | 470 pounds estimate |
| Seat height | 23” | 25” |
| Seat Depth | 16 ½” | 16” or 20” |
| Tilt angle for chair | 20° each way | 5° forward/ 20° back |
| Track Size | 6 ½” X 90” | 6 ½” X 90” |
| Batteries | Two 12 volt Wheelchair Batteries | Two 12 volt Wheelchair Batteries |
| Controls | Action Trackchair controls | Action Trackchair controls |
| Motors | 24 volt DC 24:1 ratio high torque | 24 volt DC 24:1 ratio high torque |
| Speed | 3-4 MPH | 3-4 MPH |
| Turning Radius | ZERO | ZERO |
| Width between armrest | 16”, 18”, 20”, 22” or 24” | 18” or 20” |
| Ground Clearance | 3 ½” | 3 ½” |
| Battery Charger | 12 amp Std. 20 amp Optional | 20 amp Std. |
| Range | Variable up to 6 Miles | Variable up to 6 Miles |
| Foot rest | Adjustable Std. or Flip up | Adjustable Std. |
| Accessory holders | Two on each side and two on back of chair | Two on each side and two on back of chair |
| Lap belt | Std | Four point harness Std. |
| Knee support | N/A | Std. |

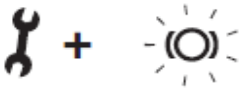
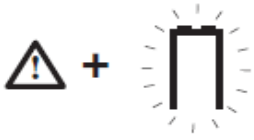
# Specifications

| PT Model PT14 | | PR1416 |
|---|---|---|
| Between arm rest | 14” | 14” |
| Total Width | 32” | 32” |
| Height | 42.5” | 41” lowered- 56.5” raised |
| Track | Type II is Std. | Type II is Std. |
| Length | 47.5” w/ rear idlers | 39’—47.5 “ w/ rear idlers |
| Weight | 375 pounds est. | 375 pounds est. |
| Seat height | 21.5” | 21.5” |
| Seat Depth | Adjustable 9”-15” | 15” |
| Track Size | 6 ½” X 90” | 6 ½” X 90” |
| Batteries | Two 12 volt AGM Wheelchair Bat. | Two 12 volt AGM Wheelchair Bat. |
| Controls | Action Trackchair controls | Action Trackchair controls |
| Motors | 24 volt DC 24:1 ratio high torque | 24 volt DC 24:1 ratio high torque |
| Speed | 3-4 MPH | 3-4 MPH |
| Turning Radius | ZERO | ZERO |
| Ground Clearance | 3 ½” | 3 ½” |
| Battery Charger | 12 amp | 12 amp |
| Range | Variable up to 6 Miles | Variable up to 6 Miles |
| Foot rest | Adjustable Std. | Adjustable Std. |
| Lap belt | 4 point belt | 3 point belt |
| Knee Support | N/A | Adjustable |
| Flip up Arm rest | N/A | Std. |

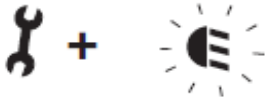
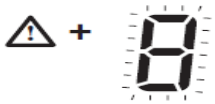
**NT Models**

**NT14, NT16, NT18, NT20, NT22**

| | | | |
|---|---|---|---|
| Between are rest | 14”, 16”, 18”, 20”, 22” | Motors | 24 volt DC 24:1 ratio high torque |
| Width | 29.5” | Speed | 3-4 MPH |
| Height | 47” | Turning Radius | ZERO |
| Length | 47.5” with rear idlers | Ground Clearance | 3.5” |
| Weight | 380 pounds est. | Battery Charge | 12 amp standard |
| Seat height | 25” | Range | Variable up to 10 Miles |
| Track size | 6 ½” X 90” | Foot Rest | Flip up footrest standard |
| Batteries | Two 12 volt AGM Wheelchair Bat. | Flip up Arm rest | Std. |
| Controls | Action Trackchair controls | Accessory holders | two each side |
| | | Lap belt | Std. |

| HANDCONTROL LCD DISPLAY | FAULT/WARNING | REMEDY |
|---|---|---|
|  | Power Section Fault, or Current Sensor Fault, or EEPROM Fault, or Main Relay Fault, or Precharge Fault, or HW Failsafe Fault. | 1. Cycle power<br>2. Replace powerbase. |
|  | Handcontrol Fault, or Joystick Fault:<br>Joystick out of center,<br>Joystick stuck OOC,<br>Joystick Out-of-Range | 1. Return joystick to neutral and cycle power<br>2. Recalibrate joystick.<br>3. Check joystick cable and cable connections.<br>4. Repalce joystick.<br>5. Replace hand control. |
|  | Communications Fault | 1. Check cable and cable connections.<br>2. Replace cable. |
|  | Brake Fault. | 1. Check wiring.<br>2. Replace motor.<br>3. Replace powerbase. |
|  | Seatback Actuator Driver Fault | 1. Select drive or a different actuator; fault may clear.<br>2. Check wiring.<br>3. Check that the seatback is not jammed.<br>4. Check actuator; replace if faulty.<br>5. Replace powerbase. |
|  | Seat Actuator Driver Fault. | 1. Select drive or a different actuator; fault may clear.<br>2. Check wiring.<br>3.Check that the seat is not jammed.<br>4. Check actuator; replace if faulty.<br>5. Replace powerbase. |
|  | Leg Actuator Driver Fault | 1. Select drive or a different actuator; fault may clear<br>2. Check wiring.<br>3. Check that the leg rest is not jammed<br>4. Check actuator; replace if faulty.<br>5. Replace powerbase. |
|  | Under voltage warning | 1. Recharge battery.<br>2. Replace old battery.<br>3. If this is happening frequently, replace charger.<br>4. Check charger port on hand control; replace if damaged. |
|  | Overvoltage Warning. | 1. Wait for voltage to come down<br>2. Replace old battery.<br>3. Check charger; replace if faulty |

*Revised ~ Oct. 19, 2016*

| | | |
|---|---|---|
|  | Controller Over/Under temperature warning. | 1. If too hot, wait for controller to cool.<br>2. If too cold, drive chair in limited current mode until controller warms up. |
|  | Drive Thermal Warning | 1. Wait for motor to cool. |
|  | Open Motor Fault | 1. Check wiring.<br>2. Replace motor.<br>3. Replace powerbase. |
|  | Left Indicator Fault | 1. Press Left Indicator button.<br>2. Replace Bulb.<br>3. If fault continues, check wiring. |
|  | Right Indicator Fault. | 1. Press Right Indicator button<br>2. Replace bulb.<br>3. If fault continues, check wiring. |
|  | Hazard Lights Fault. | 1. Press Right or Left Indicator button.<br>2. Replace bulb.<br>3. If fault continues, check wiring. |
|  | Running Lights Fault | 1. Press Running Lights button.<br>2. Replace bulb.<br>3. If fault continues, check wiring. |
|  <br>The numerical icon showing the present Speed Mode flashes. | Speed Limit Warning. | 1. Return seat to normal or upright position.<br>2. If fault continues, check all limit switches and wiring. |
|  | Low battery | 1. Recharge battery. |
|  | Locked Mode. * | 1. Unlock the system. |
|  | Chair under attendant control. * | 1. Turn off attendant control (1742) |
|  <br>*The bars on the battery icon light up in a chase sequence.* | Battery charging; Inhibit. * | 1. Unplug charger when charging is complete. |

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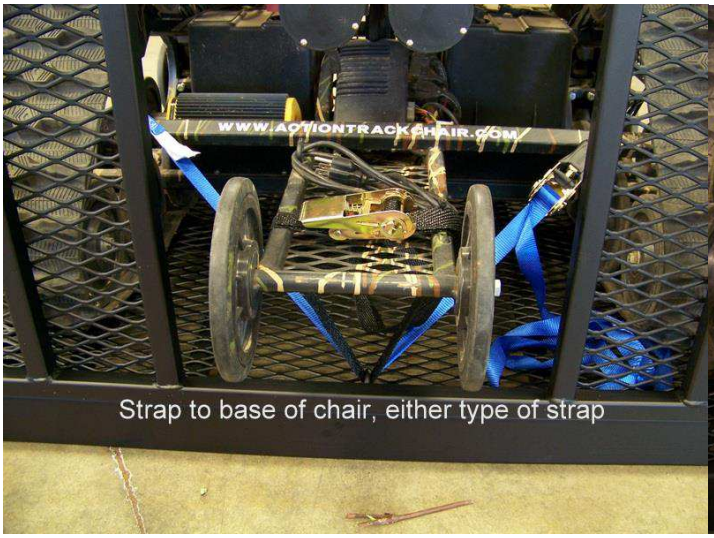
* These icons indicate a problem only if they appear when they shouldn't.

## Strapping Methods

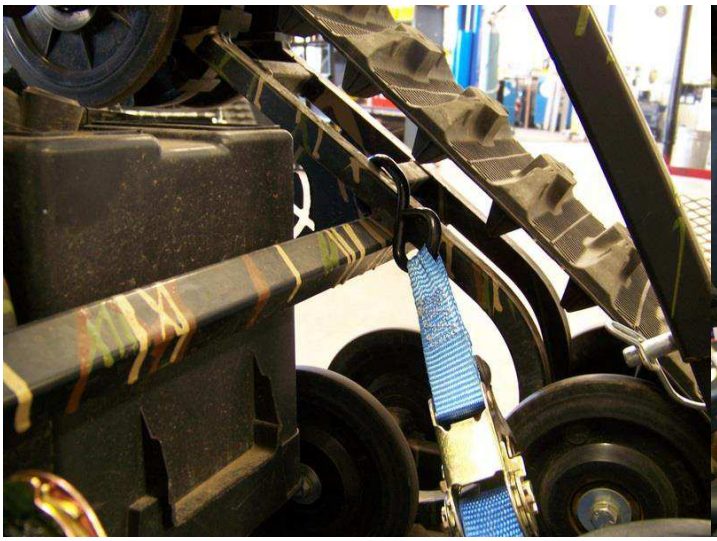


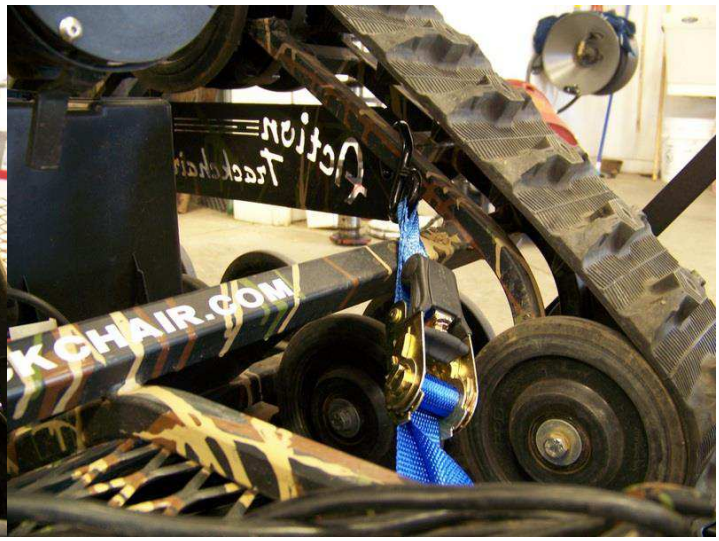


# Proper strapping options for Trackchair to carrier

*****Class III receiver hitch required for carrier, Check auto manufacturers recommendation for hitch capacity*****

**Class III**—2"-- Up to 6,000 pounds towing capacity, up to 600 pounds tongue weight





*Revised ~ Oct. 19, 2016*

# Rocker switch override instructions

Actuator not moving up or down?

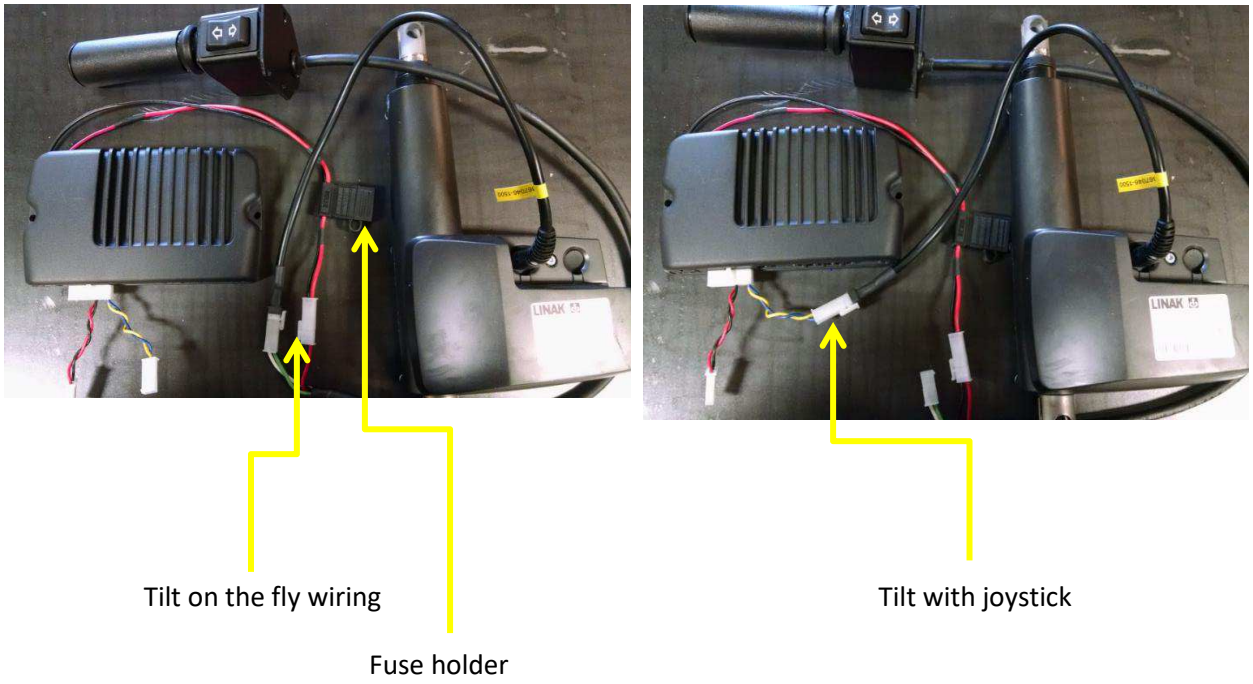
First check the fuse in the black fuse holder located at the black & red, 16 gauge wire harness which comes off the battery, fuse type is an ATC 20 amp.

If you suspect the actuator has failed and you have a “Tilt on the Fly” rocker switch, (not tilt through the joystick) you can simply bypass the rocker switch as follows:

Locate wire coming out of the side of the actuator, unplug from the current plug it is attached to. Plug lead from actuator into blue/yellow lead from the 14 pin connector which is located under the seat.

Now turn joystick on and press the “M” button, move the joystick forward or reverse and the actuator should move up or down.

If you find that the actuator does work, then the problem would be in the “Tilt on the Fly” rocker switch or wiring to it.




*Revised ~ Oct. 19, 2016*

## Law, Regulation and Policy for Wheelchair/Mobility Device Use

in "**Federally Designated Wilderness** (ADA Title V Section 508c, as amended in 2008)
(1) IN GENERAL – Congress reaffirms that nothing in the Wilderness Act prohibits wheelchair use in a wilderness area by an individual whose disability requires its use. The Wilderness Act requires no agency to provide any form of special treatment or accommodation or to construct any facilities or modify any conditions of lands within a wilderness area to facilitate such use.

(2) Definition – for the purposes of paragraph (1), the term wheelchair means a device designed solely for use by a mobility impaired person for locomotion, that is suitable for use in an indoor pedestrian area." (per American with Disabilities Act, Title V Section 508 (c)

**Application:** "Designed solely for use by a mobility-impaired person" means that the original design and manufacture of the device was only for the purpose of mobility by a person who has a limitation on their ability to walk. "Suitable for indoor pedestrian use" means the device would be allowed to be used inside a mall, etc.

A wheelchair or mobility device, even one that is a battery powered, that meets both parts of this definition is allowed anywhere foot travel is allowed including in federally designated wilderness areas.

*The following CFR and FSM apply in **ALL** areas of the National Forest System*

**36 Code of Federal Regulation (CFR) 212.1**

"Motor Vehicle. Any vehicle which is self-propelled, other than:

(1) a vehicle operated on rails; and

(2) any wheelchair or mobility device, including one that is battery-powered, that is designed solely for use by a mobility-impaired person for locomotion, and that is suitable for use in an indoor pedestrian area."

**Forest Service Manual 2353.05**"Wheelchair or Mobility Device. A device, including one that is battery-powered, that is designed solely for use by a mobility-impaired person for locomotion, and that is suitable for use in an indoor pedestrian area. A person whose disability requires use of a wheelchair or mobility device may use a wheelchair or mobility device that meets this definition anywhere foot travel is allowed."

**Application:** "Designed solely for use by a mobility-impaired person" means that the original design and manufacture of the device was only for the purpose of mobility by a person who has a limitation on their ability to walk. "Suitable for indoor pedestrian use" means the device would be allowed to be used inside a mall, etc. A wheelchair or mobility device, even one that is a battery powered, that meets both parts of this definition is allowed anywhere foot travel is allowed