

Quickie S-525
Integrated C.G.Tilt

User

Instruction

Manual

Supplement

SUPPLIER:
THIS MANUAL MUST BE GIVEN TO THE
RIDER OF THIS WHEELCHAIR.

RIDER:
BEFORE USING THIS WHEELCHAIR
READ THIS ENTIRE MANUAL AND SAVE
FOR FUTURE REFERENCE.



I. INTRODUCTION NOTE

QUICKIE S-525 INTEGRATED C.G. TILT USER INSTRUCTION MANUAL SUPPLEMENT

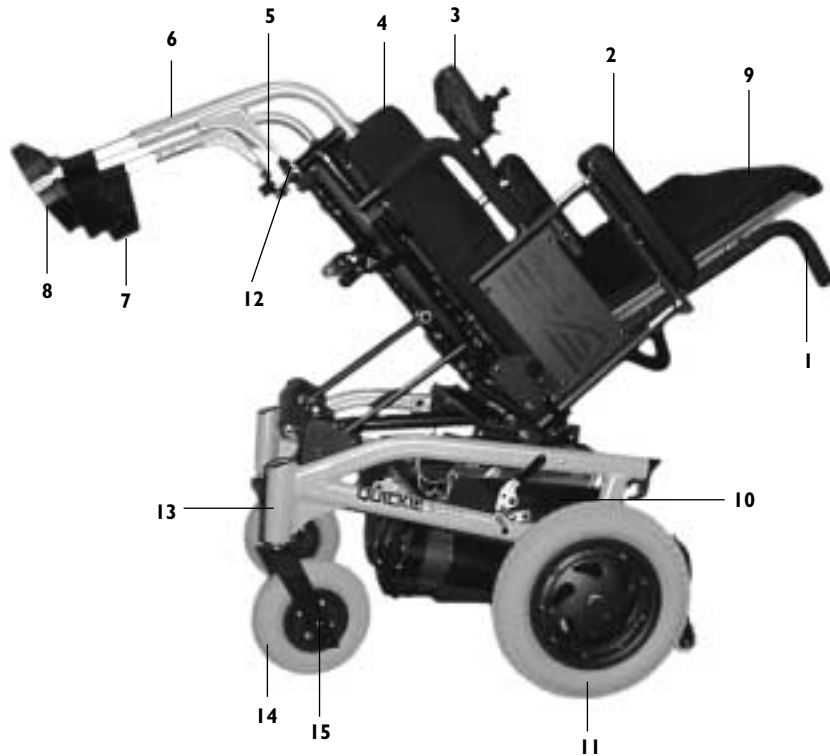
NOTE: This supplement contains information on the operation and adjustments for the Integrated C.G.Tilt System of a Quickie S-525 wheelchair ONLY. Please refer to the Quickie S-525 User Instruction Manual for additional notices, EMI information, warnings, tips for attendants, set-up, adjustment and use information, operating guide, battery and maintenance information, wiring diagrams, and warranty information regarding the Quickie S-525.

SUNRISE MEDICAL

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II. TABLE OF CONTENTS

I. INTRODUCTION NOTE.....	2
II. TABLE OF CONTENTS.....	3
III. YOUR CHAIR AND ITS PARTS.....	4
IV. WARNINGS.....	6
A. Solid Seat Back	
B. Driving	
C. Tilting	
V. SET UP, ADJUSTMENT & USE.....	7
A. Battery Removal.....	7
B. Solid Seat Back & Lateral Thoracic Supports	7
C. Headrest	8
D. Foam Back	9
E. Seat Tilt Adjustments.....	9
F. TM40 Single or Dual Switch Actuator Controller	10
G. Check Out.....	11
VI. OPERATING GUIDE.....	12
A. Toggle Switch Activation	
B. Single Switch Activation	
C. Integral Joystick Activation	
D. Remote Joystick Activation	
VII. MAINTENANCE & TROUBLESHOOTING TIPS.....	13
A. Maintenance	
B. Troubleshooting Tips	
VIII. WIRING DIAGRAMS	14
IX. SUNRISE LIMITED WARRANTY.....	15



QUICKIE S-525 INTEGRATED C.G.TILT

- | | |
|---|---|
| 1. Push Handle | 10. Battery Box |
| 2. Dual Post, Height-Adjustable Armrest | 11. 12" Drive Wheels |
| 3. Remote Joystick (optional) | 12. Swing-Away Quick Release Footrest Lever |
| 4. Jay Cushion (optional) | 13. Caster Housing |
| 5. Swing-Away Footrest Latch Plate | 14. 8" Solid Casters |
| 6. Swing-Away Footrest Hanger | 15. Caster Fork |
| 7. Heel Loop | 16. Tilt Toggle Switch (not shown) |
| 8. Composite Footplate | 17. Headrest (not shown) |
| 9. Solid Seat Back | |

QUICKIE S-525 INTEGRATED C.G.TILT

Weight

145 lb. With swing-away footrests and armrests, without batteries

Drive Wheels

12" Mag

Tire types:

Standard - pneumatic

Option - airless insert, solid

Joystick

Standard - integral (right-hand or left-hand mount)

Optional - remote (right-hand or left-hand mount)

Option - swing-away retractable joystick (remote only)

Batteries

(2 batteries required to operate chair)

Option - 22 NF deep cycle gel,

Option - U1 deep cycle gel

Battery Charger

Standard - off board (Lester)

Colors

Refer to current order form

Chair Parts

Standard - black

Seat Frame Dimensions

Seat Frame width: standard - 14"-20"

Seat depth: 14"-18" adjustable

Solid seat back

Aluminum seat pan

Optional cushions: Jay Cushions

CG Tilt

3° - 50°

6° - 50°

Backrest

Standard - Non-folding: 15" - 20"

Option - Folding: 15" - 20"

Straight Backpost - standard

Footrest

Standard - Swing-away with composite footplates and heel loops.

Option - elevating legrests, multipositional and angle-adjustable footplate

Casters

Standard - 8" solid

Option - 8" airless insert, 8" pneumatic

Armrests

Standard - dual post flip back

Option - height-adjustable dual post or single post with desk or full length waterfall pads

Wheel Locks

Option - Push-to-lock

Option - 6" extension handles

Drives

Right-angle Helix Drive System

Swing-Away Lateral Thoracic Supports

Option - Curved

Option - Straight

Headrest

Standard - 9" x 5" headrest pad

All features may not be available with some chair setups or in conjunction with another chair feature. Please consult your supplier for more information. Your authorized supplier can also provide you with more information on accessories.

IV. ⚠️ WARNINGS

A. SOLID SEAT BACK

⚠️ WARNING

Do not use the Solid Seat back to push or lift the wheelchair. Improper use may cause the back to unexpectedly detach from the wheelchair.

B. DRIVING

⚠️ WARNING

Always drive your chair when seated at the minimum tilt angle. Driving your chair when seated at an angle greater than the minimum can cause damage to the tilt actuator.

C. TILTING

⚠️ WARNING

To prevent damage and personal injury, avoid tilting near objects such as walls, tables or chairs.

To avoid injury, ensure other people, especially children, are clear of the system.

D. CHANGES & ADJUSTMENTS

⚠️ WARNING

Never use non-Quickie parts or make changes to your chair unless authorized by Sunrise. (Doing so will void the warranty and may create a safety hazard.)

1. If you modify or adjust this chair it may increase the risk of fall or tip-over.
2. Modifications unauthorized by Sunrise constitutes remanufacturing of the wheelchair. This voids the warranty. The rider then assumes all future liability for the wheelchair.

V. SET-UP, ADJUSTMENT & USE

TOOLS YOU WILL NEED

I. Basic Tool Kit:

To set-up, adjust and maintain your chair you will need the following tools:

- 5/32" Allen wrench
- 3/16" Allen wrench
- 5/16" Allen wrench
- 9/16" box and open-end wrench
- Phillips screwdriver #1

NOTE: Setting the wheelchair on a flat surface, such as a table or a workbench, helps make these procedures easier.

A. BATTERY REMOVAL

To remove the batteries for transporting or servicing:

I. Remove Battery Box

- a) Turn both swedge latches up (fig1&2,A) located on the rear of the battery box.
- b) Slide the box lid rearward until it is removed.
- c) Disconnect Power harness (fig 3, C), by pulling plug rearward.
- d) Grab handle (fig1, B) and pull entire battery box away from chair.
- e) Disconnect each battery and remove from batterybox as needed.

2. Battery Installation

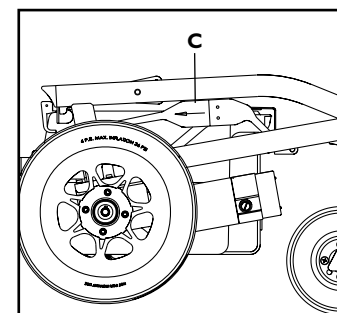
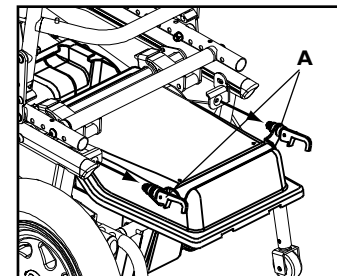
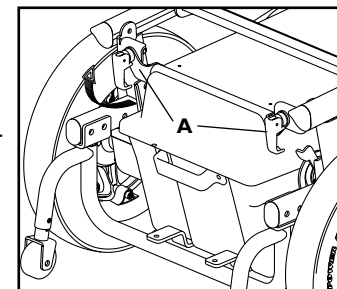
See section XI. Batteries, D for instructions and wiring diagram.

⚠️ WARNING

Batteries may weigh up to 40 lbs. Care must be taken to avoid injury when lifting.

B. SOLID SEAT BACK & LATERAL THORACIC SUPPORTS

1. To adjust the height of the lateral support mount, loosen the adjustment screw until the receiver slides freely on the back posts. Tighten the adjustment screw when the proper height is determined.
2. Assess and fit the lateral thoracic supports. Assess client for proper positioning of the lateral thoracic supports. Each support is independent and may be adjusted for your client's clinical need.



⚠ WARNING

A minimum of 1" (2.5 cm) of clearance should exist between the top of the lateral support and the user's arm pit.

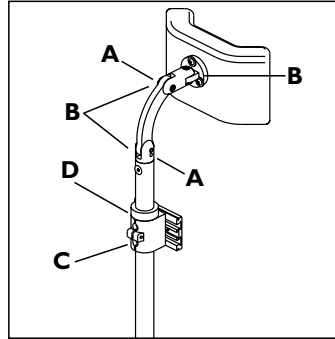
- a) To adjust the height, angle, or width of the lateral thoracic support pads, loosen the top bolts and slide to correct width. Tighten bolt to bolt plate. If more adjustment is necessary, loosen the internally mounted bolts, and slide in the track to the desired height and width. The angle is obtained by tilting the bracket as needed. Tighten the bolts.
- b) To adjust the depth of the lateral thoracic pads, turn the middle bracket so that the slots are on side. Adjust to desired depth. Re-tighten the bolts.

C. HEADREST

1. Mounting a headrest.

The Solid Seat Back has a headrest plate mounted to it. Care should be taken to use the proper screw length when mounting.

- 2. To position the headrest use the double clamp and the collar clamp (B,C,D) to obtain the proper height and distance. For clamp B use a 3/32 Allen set screw (A) and a 3/16 Allen cap screw. Clamp B positions the headrest forward and aft. However, due to the vertical movement of this adjustment, collar clamp D will have to be moved in conjunction.
- 3. Retighten both the 3/16 Allen and the set screws (A) with a 3/32 Allen wrench.



D. FOAM BACK

1. Secure the foam and cover to the shell.

To secure the back foam and cover on the Solid Seat Back, slide the top edge of the cover over the top lip of the shell. Press the back in place against the shell.

E. SEAT TILT ADJUSTMENTS

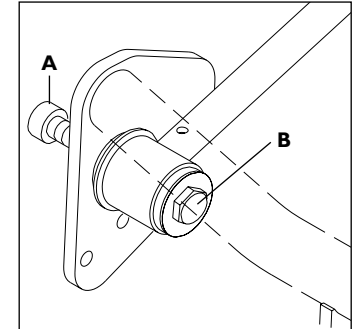
The minimum and maximum seat tilt angles can be adjusted.

1. Lower Stop Limit Adjustment

- a) Seat must be in full upright (untilted) position.
- b) Use the 5/16" Allen wrench to loosen the socket head cap screws on both sides of the chair. (A)
- c) Use the 9/16" open-end wrench to rotate the lower arm pivot (B) until the front of the seat is as high as possible.

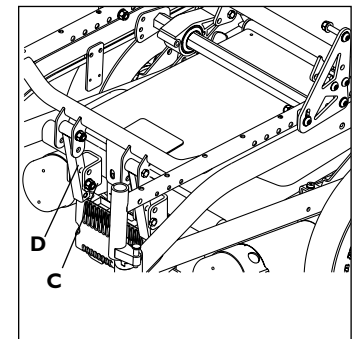
Note: Will tilt back only a small distance.

- d) Use the 5/16" Allen wrench to tighten the socket head cap screws (A) and secure the lower arm pivot.
- e) Use the 3/16" Allen wrench and 1/2" open-end wrench to remove bolts (C) holding the lower stop blocks.
- f) Reposition lower stop block to the desired holes. (D)

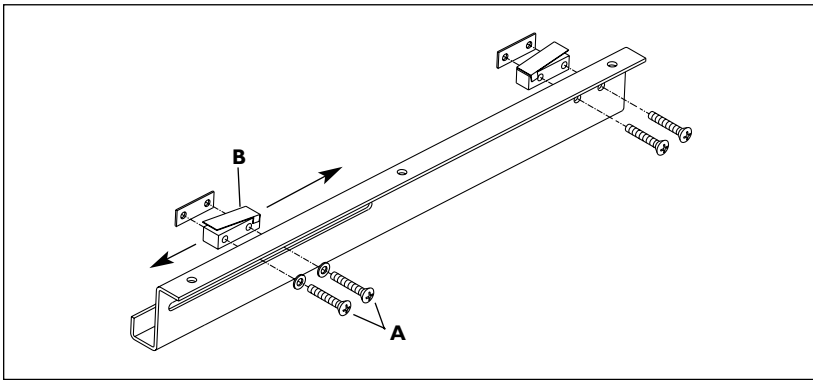


Note: Lower stop limit tilt angle:
upper position = 6 degrees; lower position = 3 degrees.

- g) Use the 5/16" Allen wrench to loosen the socket head cap screws (A) on both sides of the chair.
 - h) Use the 1/2" open-end wrench to rotate the lower arm pivot until the upper stop blocks just come to rest on the lower stop blocks.
 - i) Use the 5/16" Allen wrench to tighten the socket head cap screws (A) on both sides of the chair.
 - j) Verify that the desired lower stop limit has been achieved.
2. Maximum Tilt Angle Limit Adjustment
- a) Use the #1 Phillips screwdriver to loosen the two screws (A) holding the front limit switch.
 - b) Slide the front limit switch (B) completely forward.



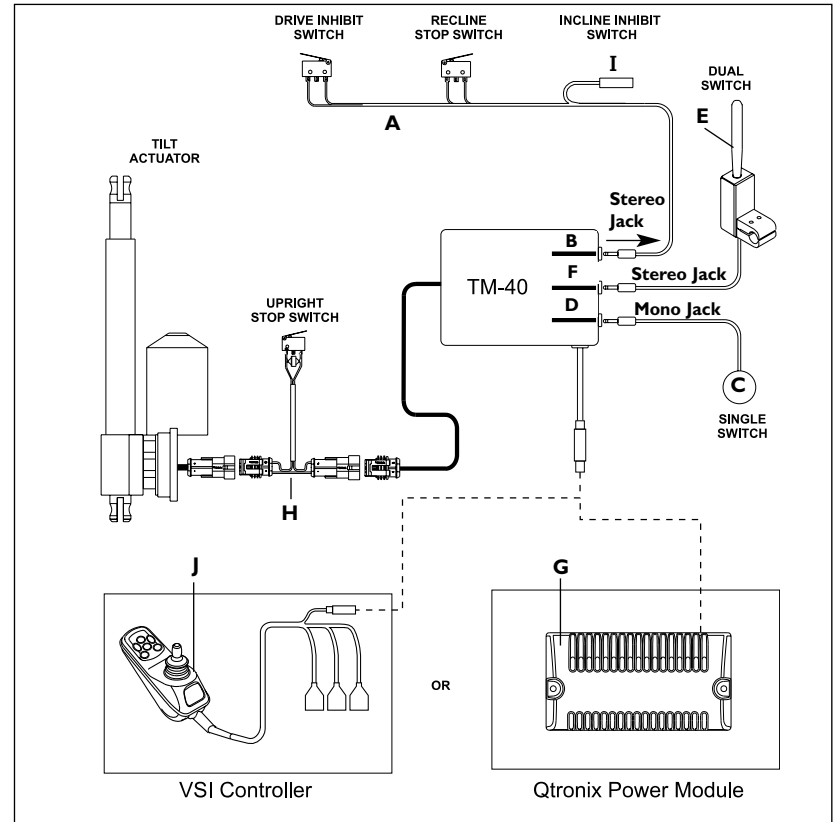
- c) Tilt the seat to the desired limit.
- d) Slide the switch (B) back toward the rear until it comes into contact with the tilt carriage.
Note: Sliding the switch (B) toward the back of the chair decreases the tilt limit angle. Sliding the switch (B) toward the front of the chair increases the tilt limit angle.
Note: A soft, audible click can be heard as the switch arm (B) comes in contact with the carriage.
- e) Use the #1 Phillips screwdriver to tighten the switch to the point where the switch closes.
Note: Listen for the soft, audible click.
- f) Verify that the desired tilt angle has been achieved.
Note: Maximum tilt angle is adjustable to 50°.



F. TM40 SINGLE OR DUAL SWITCH ACTUATOR CONTROLLER

The TM40 actuator controller can be used to activate the tilt mechanism with either single or dual switch controls.

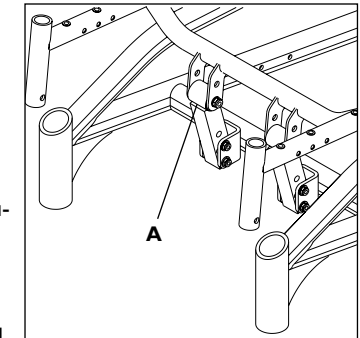
1. Plug limit switch harness assembly (A) into TM40 limit switch jack (B).
2. Plug single switch (C) into TM40 single switch jack (D) OR plug dual switch (E) into TM40 dual switch jack (F).
3. Plug TM40 into the QTRONIX Power Module (G) or the Pilot Controller Communications Connector (J).
4. Use mating plugs (H) to connect the TM40 to the tilt actuator.



G. CHECK-OUT

Once the tilt assembly is adjusted, it should actuate smoothly and easily. All accessories should also perform smoothly.

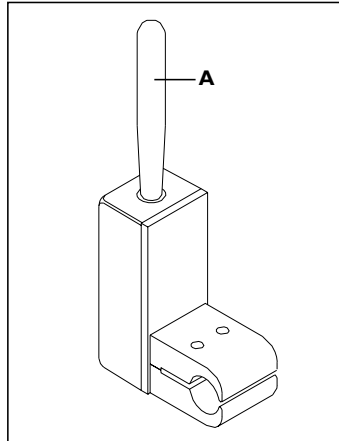
1. Verify seat can achieve full tilt and will return to neutral.
2. Verify upper and lower stop blocks meet (A).
3. Verify the motor cuts out once the neutral position is reached.
4. Verify no debris is interfering with the glide bearings.
5. Verify all hardware is securely tightened.
6. Verify that the tilt lock-out sensor (I) is positioned in its mount with its wires leading out toward the front of the chair.



TO OPERATE THE C.G. TILT

A. TOGGLE SWITCH ACTIVATION

1. To operate, push the toggle switch (A) forward (to tilt back) or pull toggle backward (to return to neutral) until tilted into the desired position.
2. The toggle switch will return to neutral when released and the seating system will stop moving.



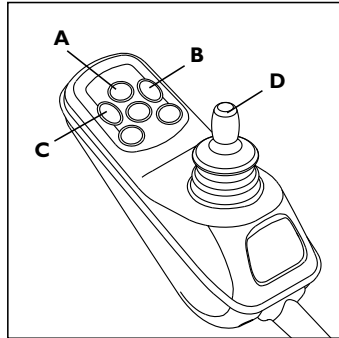
B. SINGLE SWITCH ACTIVATION

1. Depress and hold single switch to tilt back into the desired position.
2. Depress and hold single switch to return to neutral until tilted into the desired position.

C. INTEGRAL JOYSTICK ACTIVATION (OPTIONAL)

From the "off" position:

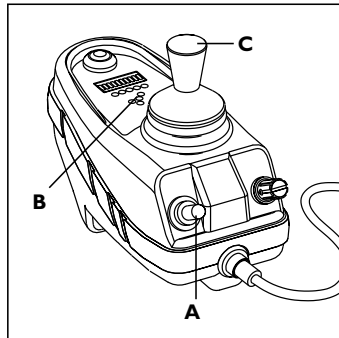
1. Push the on/off button (A) once to turn the chair on.
2. Push either tilt button (B or C) to activate tilt mode.
3. Push forward on joystick (D) to tilt back.
4. Pull backward on joystick (D) to tilt forward.
5. Push either tilt button (B or C) to deactivate and resume drive mode.



D. REMOTE JOYSTICK ACTIVATION (OPTIONAL)

From the "off" position

1. Push the on/off mode select toggle switch (A) down once to turn the chair "on".
2. Push the on/off mode select toggle switch (A) up twice to move index to tilt mode (noted by two (2) actuator lights (B)).
3. Push the joystick (C) forward to tilt backward or backward to tilt forward.
4. Push the on/off mode select toggle switch (A) up once to return to drive mode.



A. MAINTENANCE

You should check the items on this chart at the indicated intervals. If any of the items are loose, worn, bent or distorted, immediately have them checked and/or repaired by your authorized Sunrise supplier. Frequent maintenance and servicing will improve performance and extend wheelchair life.

NOTE: Check weekly, and use a clean, dry cloth or compressed air as needed to keep glide bearings free of debris.

CHECK...	Daily	Weekly	Monthly	Quarterly	Annually
Charge Batteries	✓				
Glide bearings free of debris			✓		
Check tires for proper inflation level			✓		
Check batteries for proper electrolyte level (wet cell only)			✓		
Check plugs and connectors for proper connections				✓	
Check all moving parts for wear					✓
Inspect all nuts, bolts and fasteners for looseness or wear					✓
Inspect upholstery for wear					✓
Remove and inspect motor brushes					✓
Servicing by authorized Supplier					✓

B. TROUBLESHOOTING TIPS

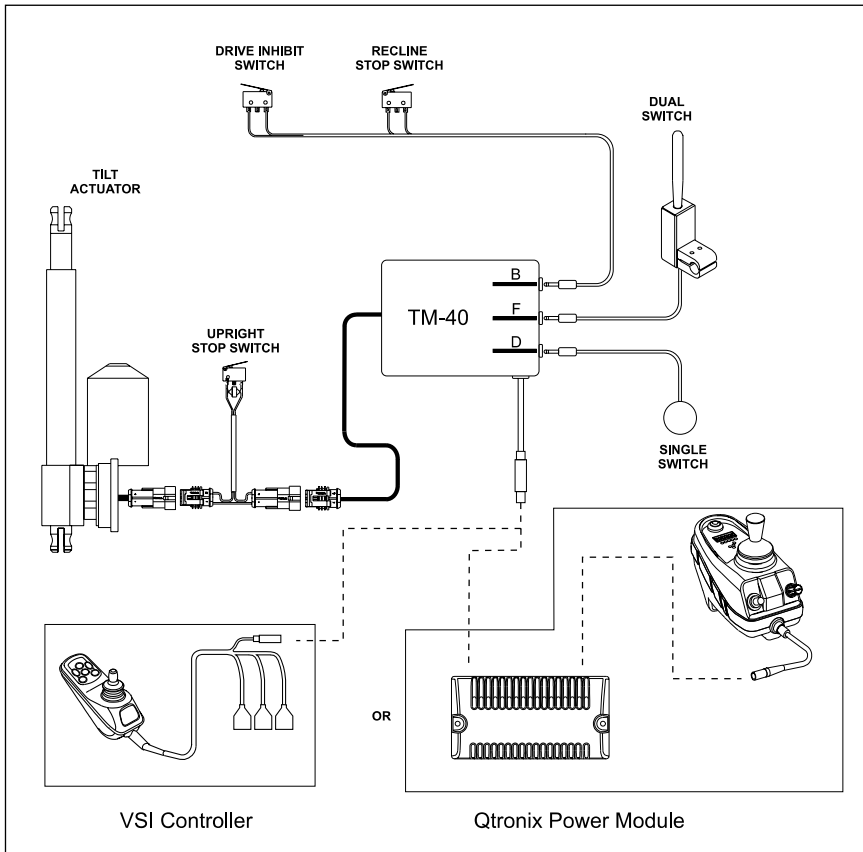
If you should notice your C.G. Tilt system binding up, not running in a smooth fashion, or emitting an unusual noise during use, a foreign matter may have come into contact with the glide bearings. If this occurs, use a clean, dry cloth or compressed air to clear or, if needed, please see your authorized Sunrise supplier.

If your tilt system will not function, check to ensure the tilt lock out sensor is seated properly in its mount. The wires should lead out of the sensor toward the front of the chair.

VIII. WIRING DIAGRAMS

TM40 ACTUATOR CONTROLLER

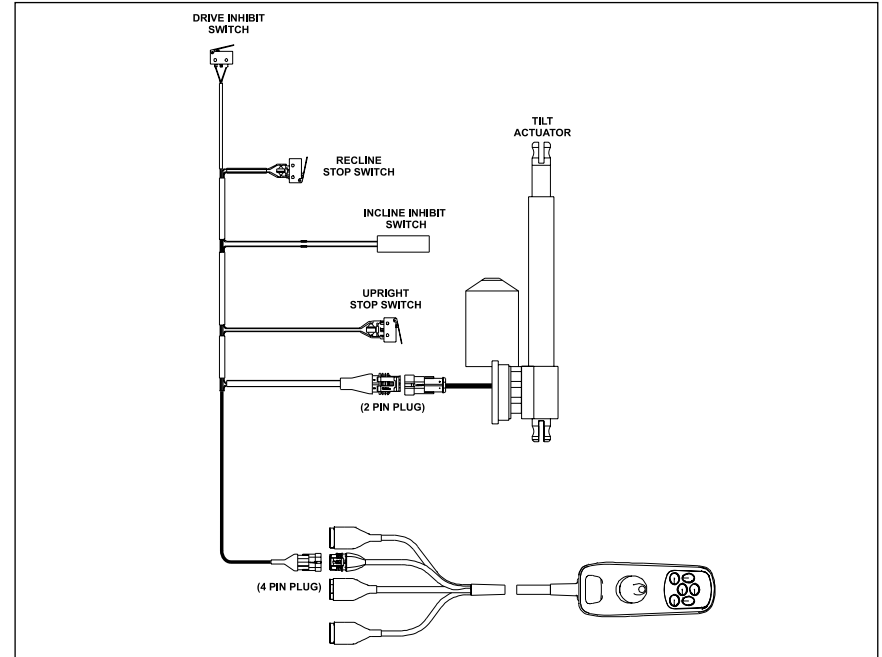
(Independent switch control, Integral Joystick, and Remote Joystick)



VIII. WIRING DIAGRAMS

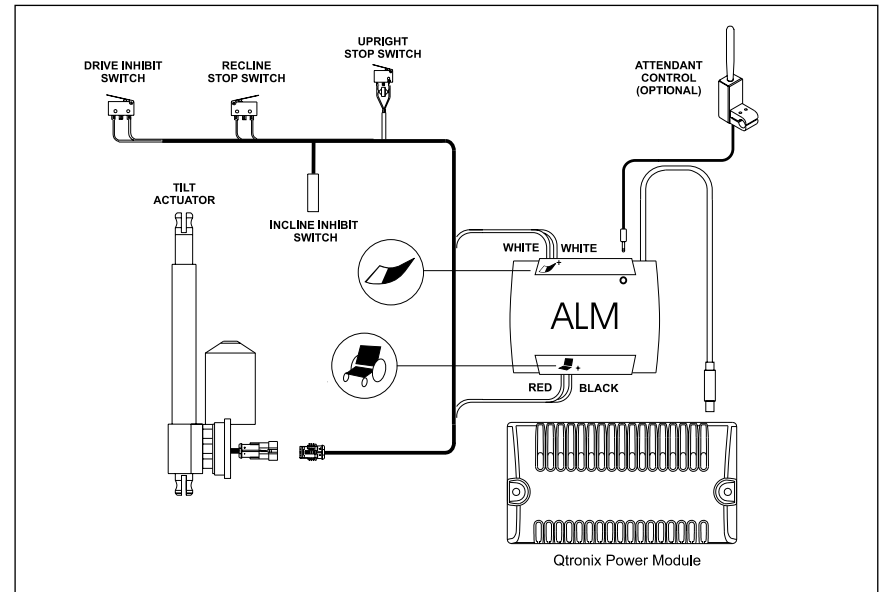
ALM ACTUATOR CONTROLLER

(Through drive control- Integral Joystick)



ALM ACTUATOR CONTROLLER

(Through drive control- Remote Joystick)



IX . SUNRISE LIMITED WARRANTY

FOR THREE (3) YEARS:

We warrant the C.G. power tilt seating system seat frame, sub-base frame, actuator and structural components of this wheelchair against defects in materials and workmanship for three (3) years from the date of first consumer purchase.

FOR TWO (2) YEARS:

We warrant the ALM (Actuator Lights Module) actuator controller for two (2) years from the date of first consumer purchase.

FOR ONE (1) YEAR:

We warrant other electronic components such as the single switch actuator controller for one (1) year from the date of the first consumer purchase.

Additional Warranty:

We warrant all other original components (such as upholstery, plastic, rubber parts and painted surfaces) for three (3) months from the date of first consumer purchase.



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Manufactured under one or more of the following patents:
U.S. and European patents pending.

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