



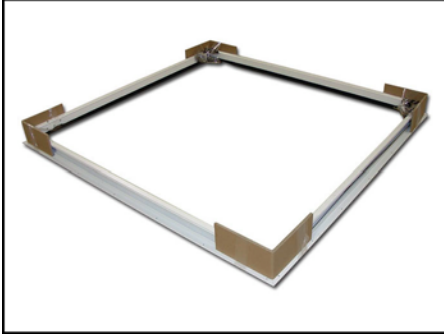
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# I. GETTING STARTED

## 1.01 RECEIVING THE ACCU-SLIDE

You will receive your Accu-Slide unit in one of the two ways shown below:



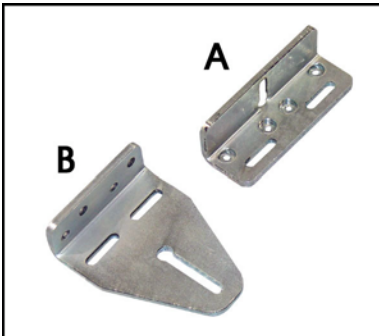
*Fully assembled picture frame...  
Ready to install.*



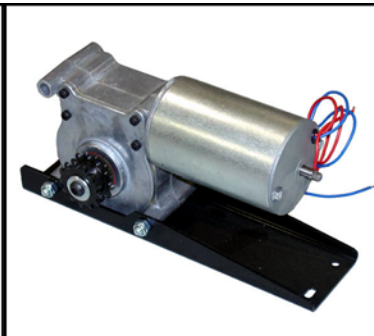
*Unassembled frame... Ready for assembly.*

## 1.02 INCLUDED PARTS

All units include the following parts:



*A - (4) Outside Standoffs  
B - (4) Inside Standoffs  
(Styles may Vary)*



*(1) Motor & Mount*



*(1) Override Flex Shaft*



*Aluminum Screw Cover  
(if purchased with unit)*



*(8) Anti-Vibration Grommets*

## 1.03 TOOLS YOU WILL NEED



**Screw Gun**



**3/8" & 7/16"  
Combination Wrenches**



**Ratchet with  
3/8" & 7/16" Deep Well Sockets**

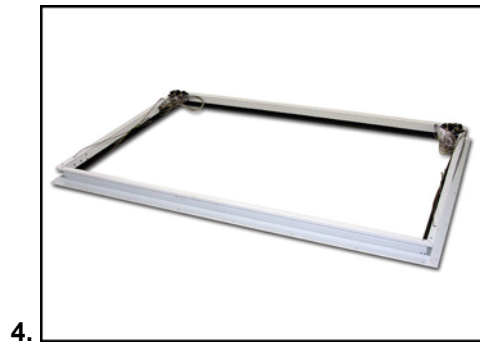
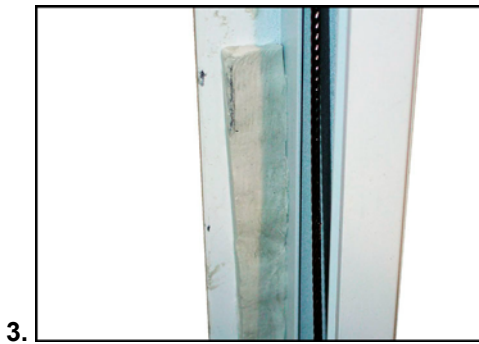
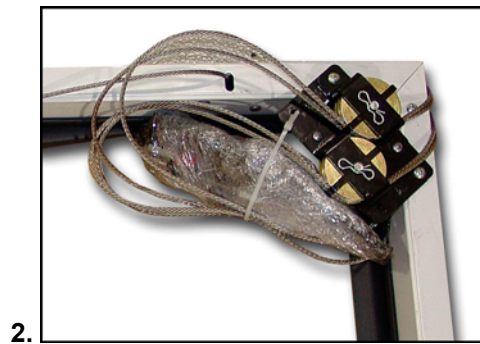
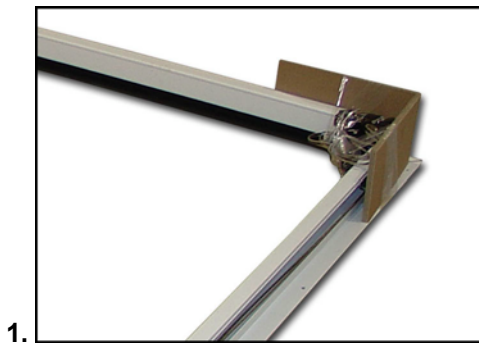


**Needle-Nose Vice Grips**

## II. FULLY ASSEMBLED PICTURE FRAME INSTALLATION

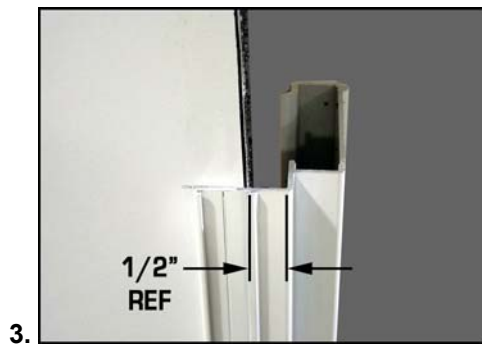
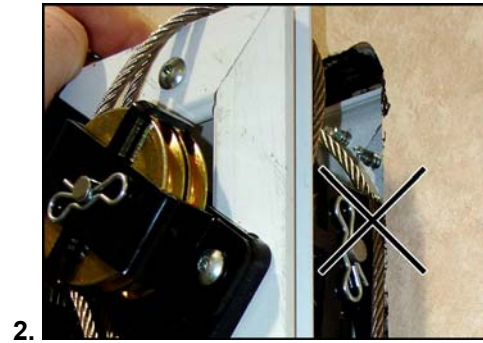
### 2.01 PREPARING FOR INSTALLATION

1. Remove cardboard corners (only) from frame.
2. Leave chain and connectors contained in plastic.  
**DO NOT remove the cables at this time.**
3. Prepare the back flange of the frame with weatherproofing material of your choice.
4. The frame is now ready to install.



## 2.02 PLACING FRAME INTO ROUGH OPENING

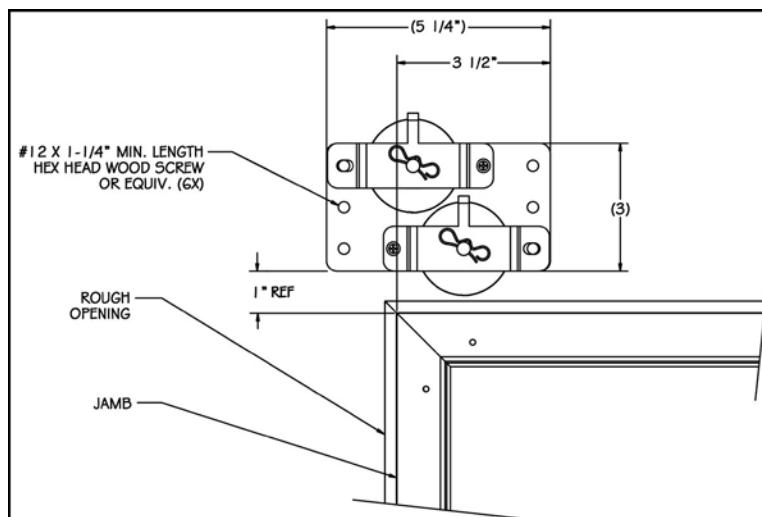
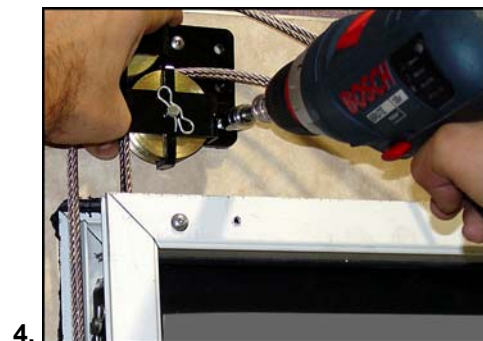
1. Place picture frame into rough opening from outside of vehicle, setting the bottom in first. Center in rough opening.
2. **DO NOT ALLOW CABLES TO BE PINCHED BETWEEN FRAME AND ROUGH OPENING!**
3. Position frame centered in rough opening. This will make each jamb spaced approximately  $\frac{1}{2}$ " from rough opening as pictured below. Check the squareness of the frame.
4. After placing and centering the frame, it will need to be squared in the opening. Once frame is in place, screw frame to exterior wall with #10 pan head screws in all holes.



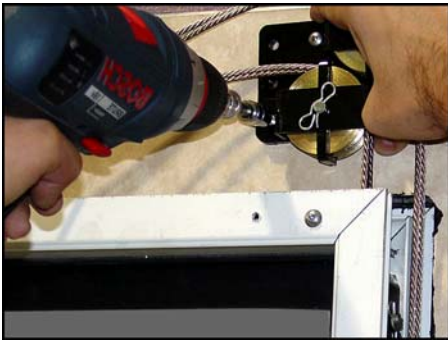
## 2.03 PLACING ACCU-SLIDE MECHANICS

### • IF YOU HAVE TOP-MOUNTED MECHANICS...

1. Inside of room should now look like Figure 1.
2. Cut the tie straps that are holding the chain and connectors to the corner of the frame.
3. Remove (2) screws holding corner pulley brackets to corner of frame.  
**DISCARD THESE SCREWS. DO NOT PUT THEM BACK INTO THE FRAME!**
4. Rotate corner pulley brackets to horizontal position. Locate to the dimensions on the drawing below, and attach to the wall using #12 hex head screws in all holes.



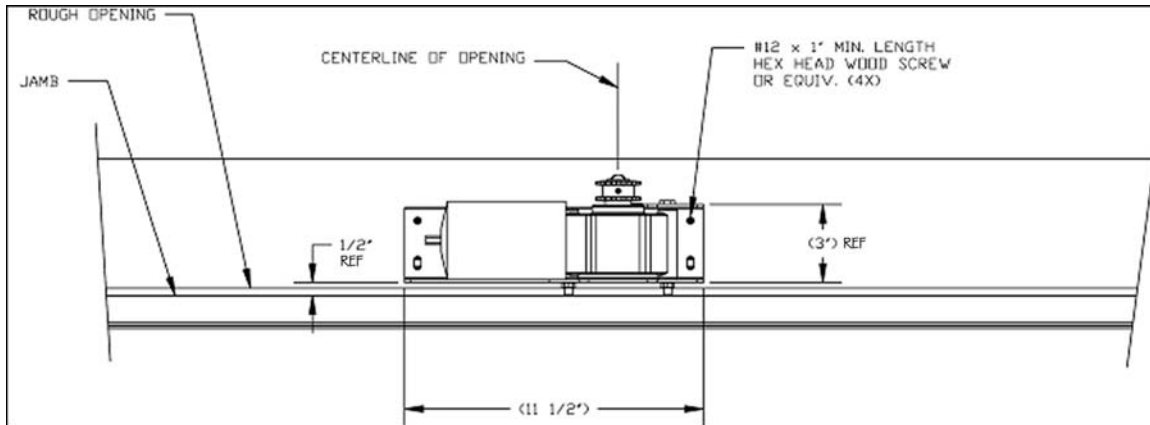
5. Repeat steps above for other corner pulley assembly.
6. Locate motor to the dimensions on drawing below. Mount to wall using #12 hex head screws in all holes. Connect the motor to power at this time.



5.



6.



7. Locate jamb clamp and place hinge of clamp into groove of jamb as shown.
8. Jamb clamp should then rotate flat against the wall.



7.



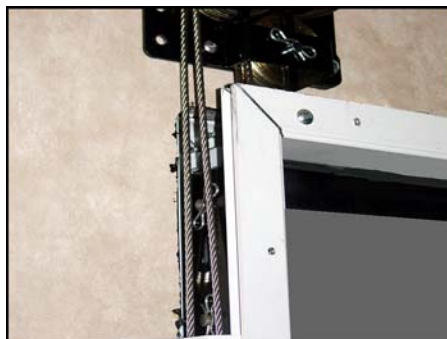
8.



9. Locate clamp vertically between cable exit holes or to your designed location. Fasten clamp to wall with #10 pan head screws, in all holes.
10. **DO NOT PINCH CABLES BETWEEN CLAMP AND WALL!**
11. Attach sill clamp to sill using same procedure as the jamb clamps. Place sill clamp in center of sill.

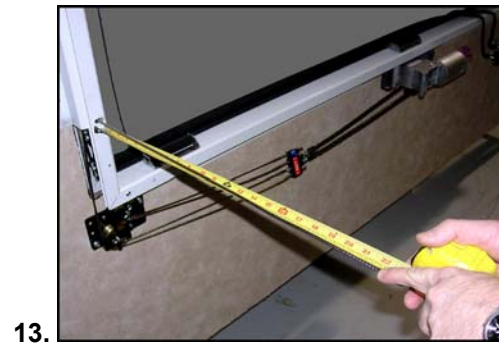
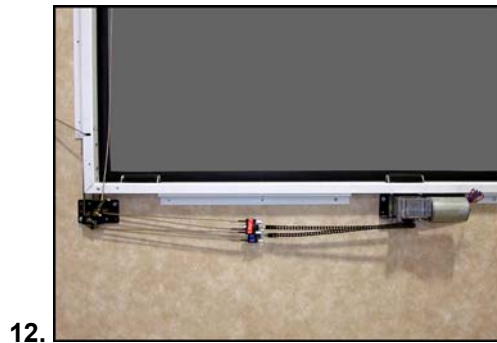


**NOTE:** One side of the slide out will have a crossed cable (below left), and the other side will NOT have a crossed cable (below right). This is normal for the slide to work. Be sure to check that **ONLY ONE SIDE** is crossed.



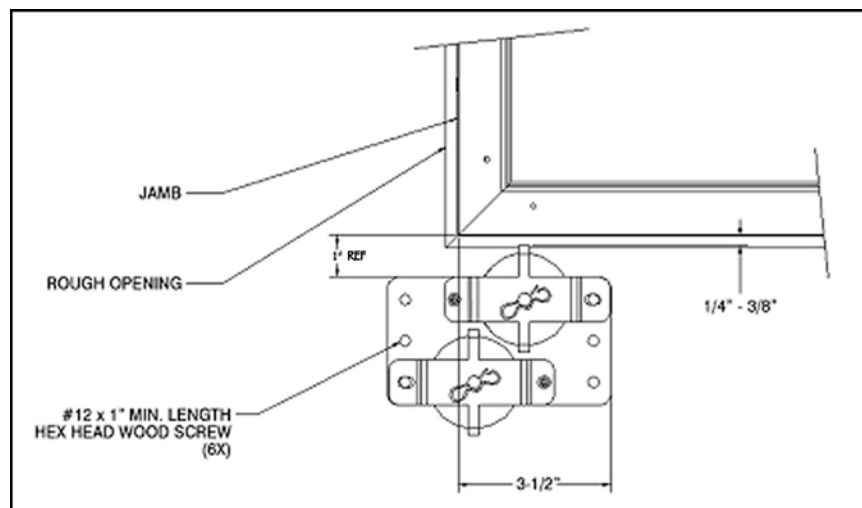


12. Once chains are on the sprocket, make sure the chain/cable connectors are half way between motor and corner pulley assemblies when cables are pulled tight. This applies to both sides of motor.
13. Pull the bottom inside cable tight and measure the distance from the edge of frame to the end of the cable. Record the measurement. Pull the outside opposing cable tight and measure the distance from the exit hole to the end of the cable. This measurement should be within 1/2" of the first cable. If this test fails, the chain will need to be moved on the sprocket to make the cables the same length. Repeat this test for the cables on the other side of the motor.

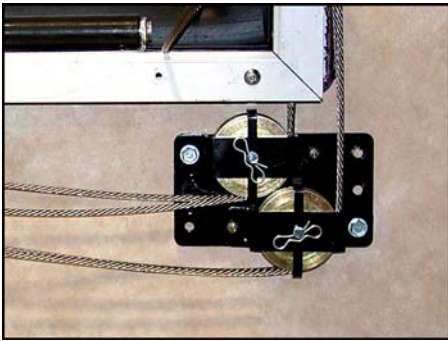


• IF YOU HAVE BOTTOM-MOUNTED MECHANICS...

1. Inside of room should now look like Figure 1.
2. Cut the tie straps that are holding the chain and connectors to the corner of the frame.
3. Remove (2) screws holding corner pulley brackets to corner of frame.  
**DISCARD THESE SCREWS. DO NOT PUT THEM BACK INTO THE FRAME!**
4. Rotate corner pulley brackets to horizontal position. Locate to the dimensions on the drawing below, and attach to the wall using #12 hex head screws in all holes.



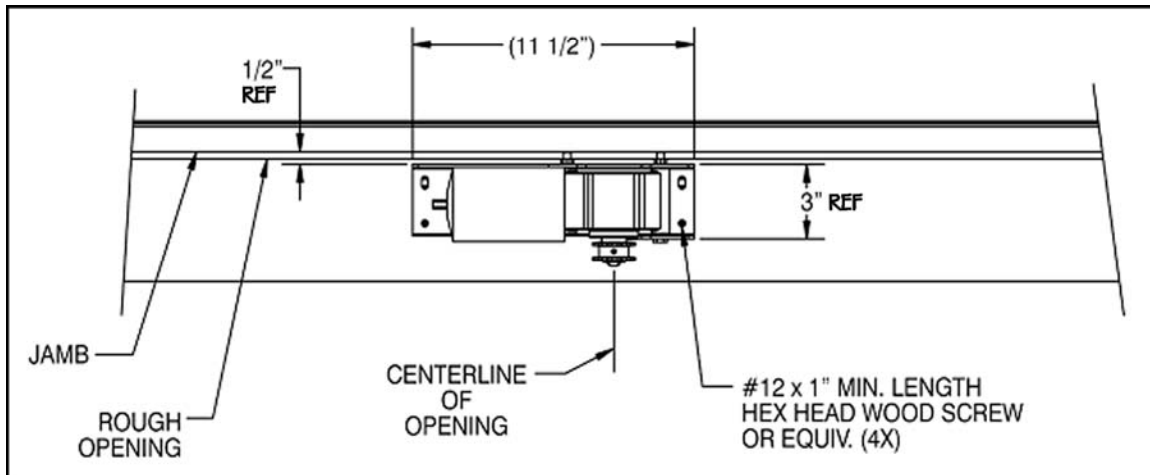
5. Repeat steps above for other corner pulley assembly.
6. Locate motor to the dimensions on drawing below. Mount to wall using #12 hex head screws in all holes. Connect the motor to power at this time.



5.



6.



7. Locate jamb clamp and place hinge of clamp into groove of jamb as shown.
8. Jamb clamp should then rotate flat against the wall.

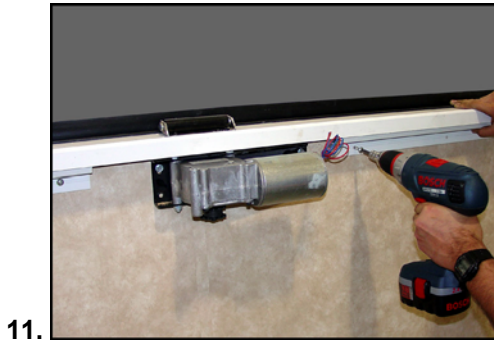


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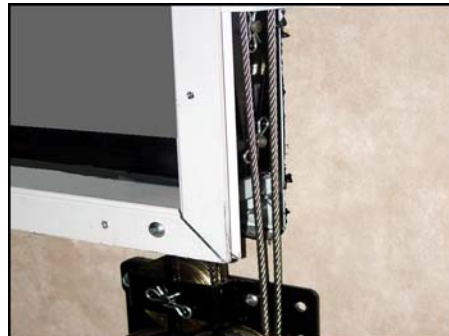
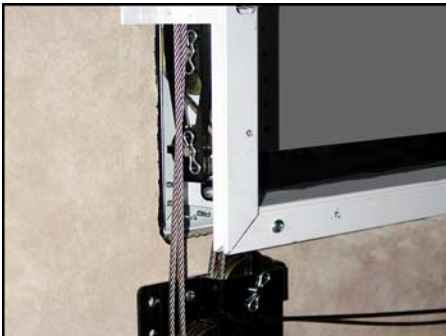


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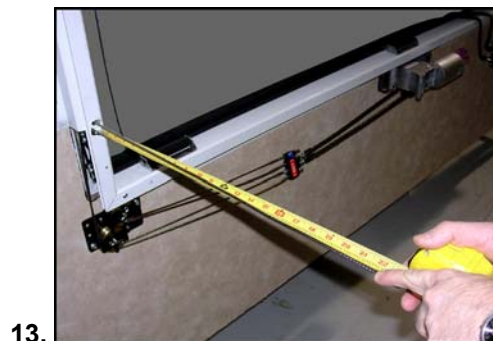
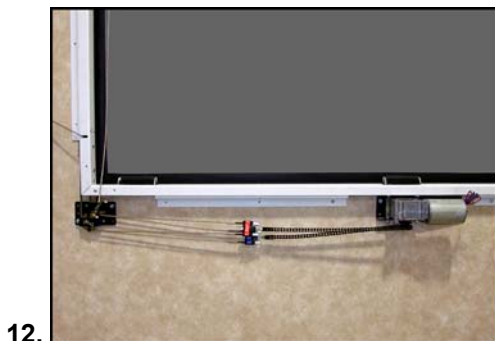
9. Locate clamp vertically between cable exit holes or to your designed location. Fasten clamp to wall with #10 pan head screws, in all holes.
10. **DO NOT PINCH CABLES BETWEEN CLAMP AND WALL!**
11. Attach (2) pieces of sill clamp per the instructions above for jamb clamp. Locate each clamp half way between motor and corner pulley assembly.



**NOTE:** One side of the slide out will have a crossed cable (below left), and the other side will NOT have a crossed cable (below right). This is normal for the slide to work. Be sure to check that **ONLY ONE SIDE** is crossed.



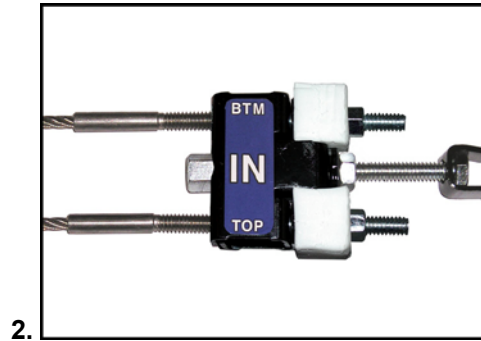
12. Once chains are on the sprocket, make sure the chain/cable connectors are halfway between motor and corner pulley assemblies when cables are pulled tight. This applies to both sides of motor.
13. Pull the bottom inside cable tight and measure the distance from the edge of frame to the end of the cable. Record the measurement. Pull the outside opposing cable tight and measure the distance from the exit hole to the end of the cable. This measurement should be within 1/2" of the first cable. If this test fails, the chain will need to be moved on the sprocket to make the cables the same length. Repeat this test for the cables on the other side of the motor.



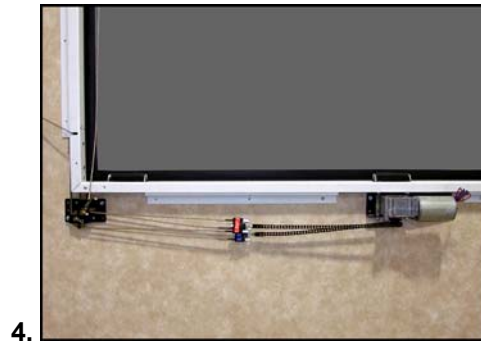


• **THE FOLLOWING IS FOR BOTH TOP AND BOTTOM MECHANICS...**  
**(Bottom Mechanics Shown)**

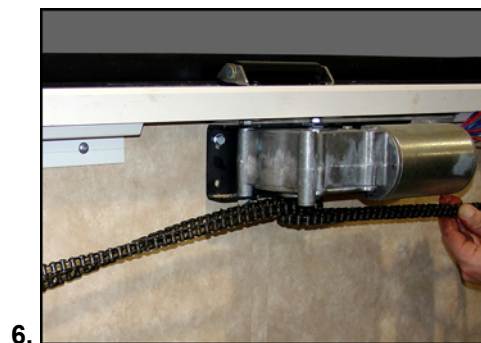
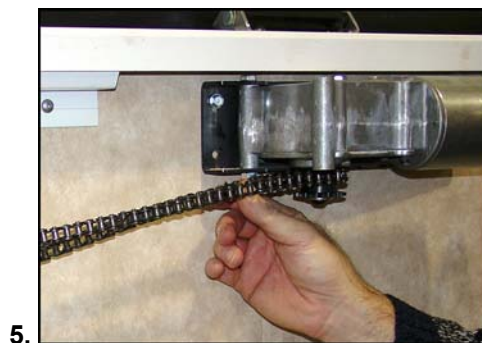
1. Remove all plastic, cut any wire ties and any tape to free chain and cable connectors.
2. Adjust each cable nut the same distance from the end of the cable. Adjust chain connector so that about 1-1/4" of the stud is showing. Do this to all chain/cable connectors.



3. Lay out each chain/cable assembly to remove any crossed cables or twisted chain.
4. Locate each chain/cable connector half way between motor and corner pulley assembly as shown.



5. Place (1) chain onto sprocket, using the set of teeth closest to the motor body to allow the other chain to be placed later.
6. Place second chain onto sprocket.

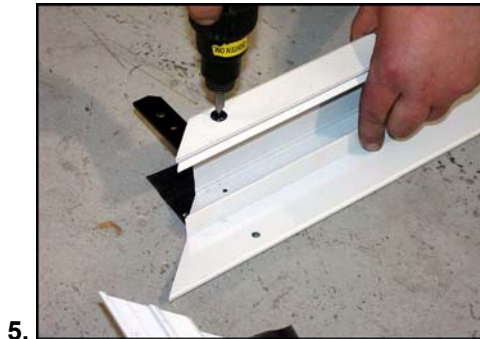




## III. UNASSEMBLED “KNOCK DOWN” UNIT INSTALLATION

### 3.01 PREPARING FOR INSTALLATION

1. Remove cardboard ends and plastic wrap.
2. Lay out jambs as shown. The side with the wipe attached should be up.
3. Roll the header over (wipe side down) and install a corner lock in the grooved area as shown above. The lock will be installed opposite side of wipe.
4. Position of corner lock after installation. Lock must be positioned in the grooved area.
5. After lock is located, place a Tek Screw (included) in the pre-drilled hole. Repeat, attaching the corner lock to other end of header.



6. Once locks are installed, roll the header back over (wipe side up), slide corner lock into the top of each jamb, making sure header wipe overlaps jamb wipe.  
**DO NOT SCREW CORNER LOCKS INTO JAMBS!**
7. After corner locks are placed into the jambs, place another corner lock on top of wipe.



6.



7.

8. Attach the corner lock with (4) Tek Screws (included). Holes for these screws have been pre-drilled.
9. If you have a (4) sided "picture frame", be sure all (4) corners are assembled per the instructions above.



8.



9.

10. If you have a (3) sided frame with a flat sill, be sure (2) corners are assembled per the instructions above.
11. Prepare the back flange of the frame with weatherproofing of your choice.



10.

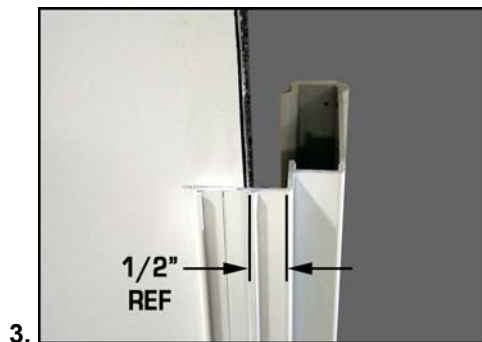
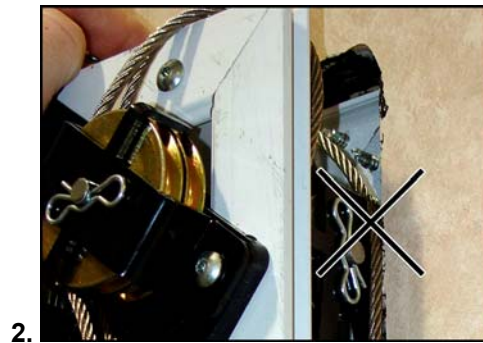


11.

### 3.02 PLACING FRAME INTO ROUGH OPENING

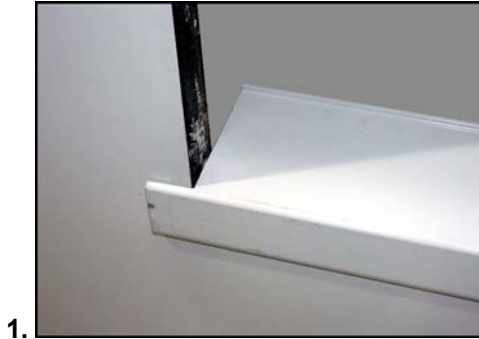
• IF YOU HAVE A (4) SIDED "PICTURE FRAME"...

1. Place picture frame into rough opening from outside of vehicle, setting the bottom in first. Center in rough opening.
2. **DO NOT ALLOW CABLES TO BE PINCHED BETWEEN FRAME AND ROUGH OPENING!**
3. Position frame centered in rough opening. This will make each jamb spaced approximately  $\frac{1}{2}$ " from rough opening as pictured below. Check the squareness of the frame.
4. After placing and centering the frame, it will need to be squared in the opening. Once frame is in place, screw frame to exterior wall with #10 pan head screws in all holes.

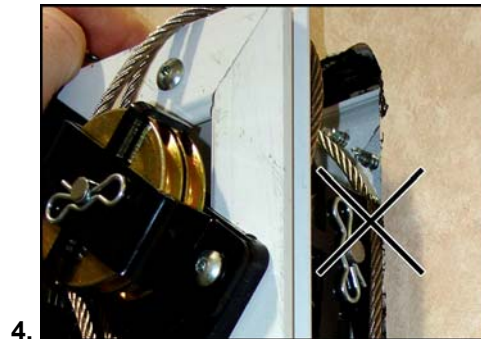


• IF YOU HAVE A (3) SIDED FRAME WITH A FLAT SILL...

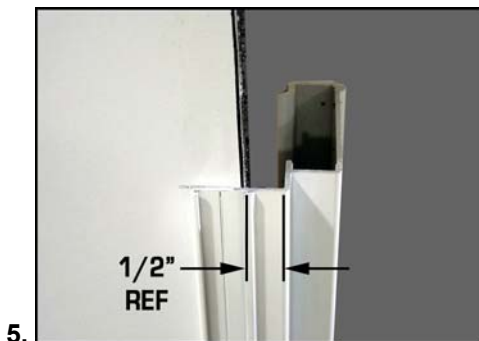
1. Place the flat sill centered into the rough opening as shown.
2. Locate the rollers along the sill, fasten the rollers using #10 screws long enough to penetrate through the sill and into the structure of the rough opening.



3. Place picture frame into rough opening from outside of vehicle, setting the bottom in first. Align the outside edge of jamb with outside edge of sill for a clean look.
4. **DO NOT ALLOW CABLES TO BE PINCHED BETWEEN FRAME AND ROUGH OPENING!**



5. Position frame centered in rough opening. This will make each jamb spaced approximately 1/2" from rough opening as pictured above.
6. After placing and centering frame, it will need to be squared in the opening. Once frame is in place, screw frame to exterior wall with #10 pan head screws in all holes.

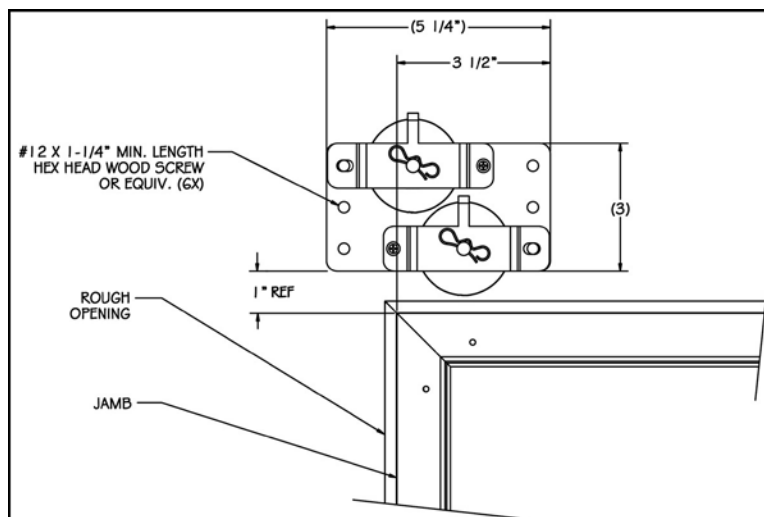
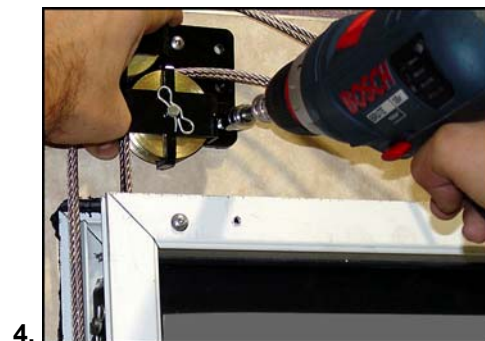




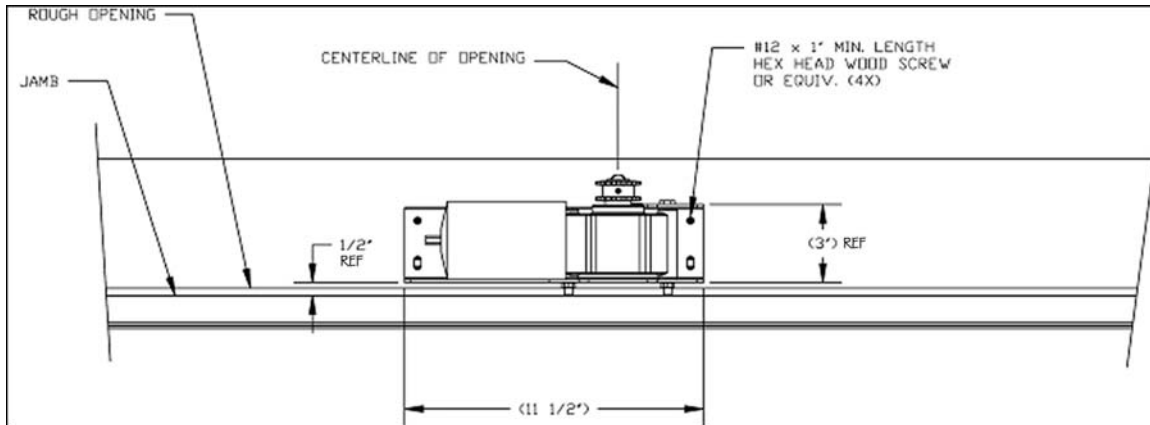
### 3.03 PLACING ACCU-SLIDE MECHANICS

#### • IF YOU HAVE TOP-MOUNTED MECHANICS...

1. Inside of room should now look like Figure 1.
2. Cut the tie straps that are holding the chain and connectors to the corner of the frame.
3. Remove (2) screws holding corner pulley brackets to corner of frame.  
**DISCARD THESE SCREWS. DO NOT PUT THEM BACK INTO THE FRAME!**
4. Rotate corner pulley brackets to horizontal position. Locate to the dimensions on the drawing below, and attach to the wall using #12 hex head screws in all holes.



5. Repeat steps above for other corner pulley assembly.
6. Locate motor to the dimensions on drawing below. Mount to wall using #12 hex head screws in all holes. Connect the motor to power at this time.



7. Locate jamb clamp and place hinge of clamp into groove of jamb as shown.
8. Jamb clamp should then rotate flat against the wall.

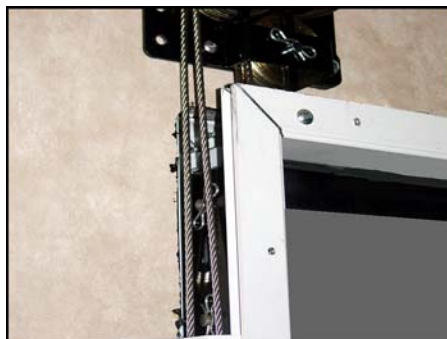




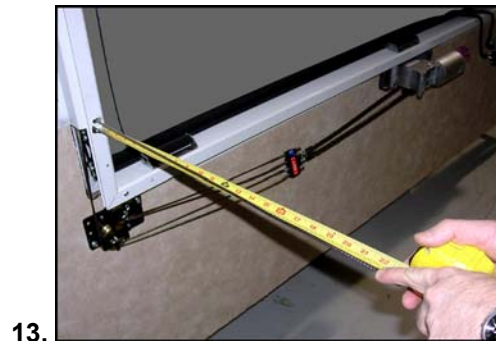
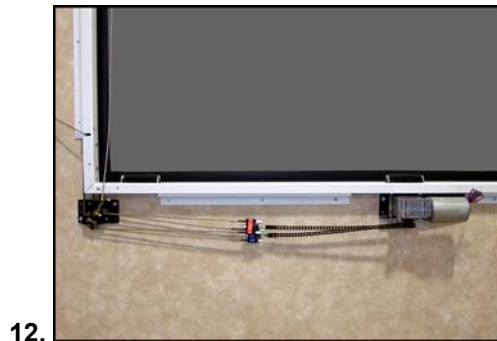
9. Locate clamp vertically between cable exit holes or to your designed location. Fasten clamp to wall with #10 pan head screws, in all holes.
10. **DO NOT PINCH CABLES BETWEEN CLAMP AND WALL!**
11. Attach sill clamp to sill using same procedure as the jamb clamps. Place sill clamp in center of sill.



**NOTE:** One side of the slide out will have a crossed cable (below left), and the other side will NOT have a crossed cable (below right). This is normal for the slide to work. Be sure to check that **ONLY ONE SIDE** is crossed.

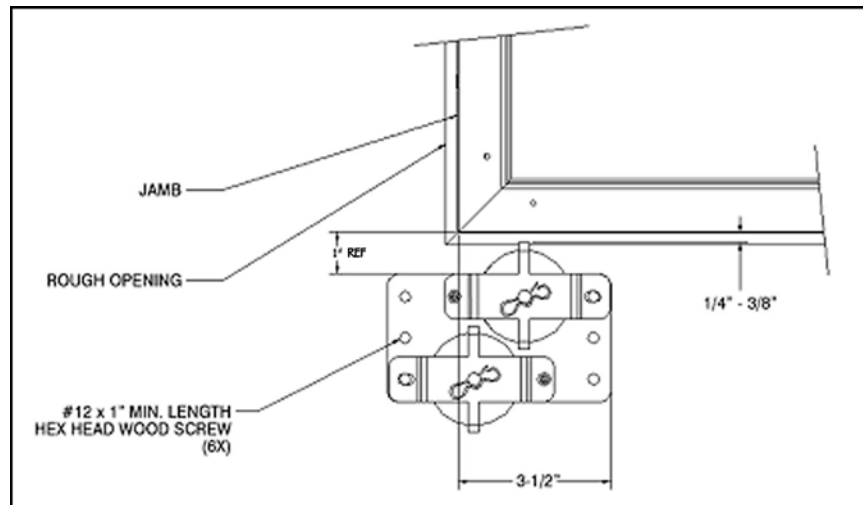


12. Once chains are on the sprocket, make sure the chain/cable connectors are half way between motor and corner pulley assemblies when cables are pulled tight. This applies to both sides of motor.
13. Pull the bottom inside cable tight and measure the distance from the edge of frame to the end of the cable. Record the measurement. Pull the outside opposing cable tight and measure the distance from the exit hole to the end of the cable. This measurement should be within 1/2" of the first cable. If this test fails, the chain will need to be moved on the sprocket to make the cables the same length. Repeat this test for the cables on the other side of the motor.

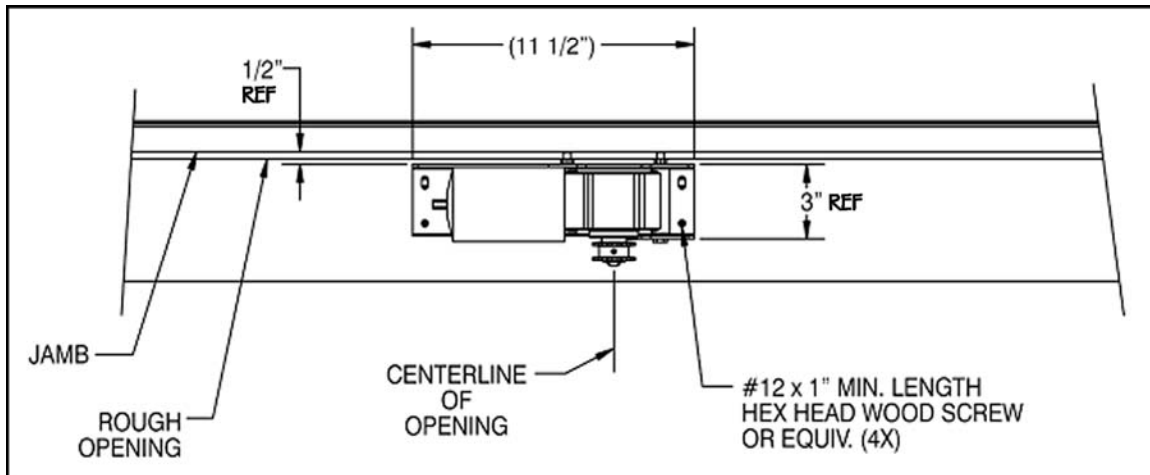
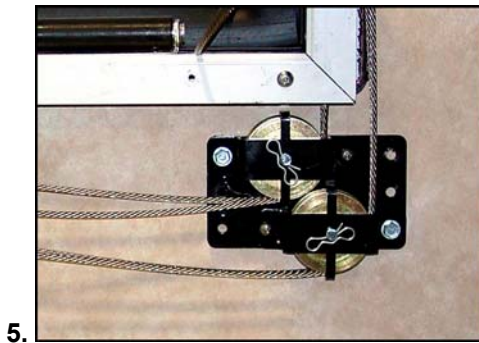


• IF YOU HAVE BOTTOM-MOUNTED MECHANICS...

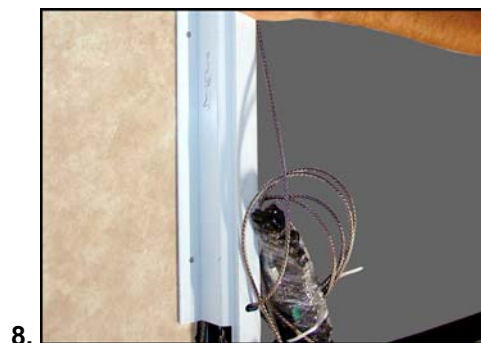
1. Inside of room should now look like Figure 1.
2. Cut the tie straps that are holding the chain and connectors to the corner of the frame.
3. Remove (2) screws holding corner pulley brackets to corner of frame.  
**DISCARD THESE SCREWS. DO NOT PUT THEM BACK INTO THE FRAME!**
4. Rotate corner pulley brackets to horizontal position. Locate to the dimensions on the drawing below, and attach to the wall using #12 hex head screws in all holes.



5. Repeat steps above for other corner pulley assembly.
6. Locate motor to the dimensions on drawing below. Mount to wall using #12 hex head screws in all holes. Connect the motor to power at this time.



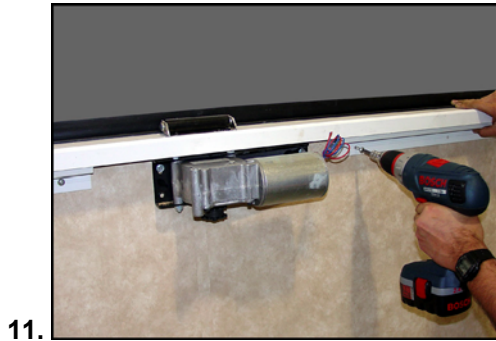
7. Locate jamb clamp and place hinge of clamp into groove of jamb as shown.
8. Jamb clamp should then rotate flat against the wall.



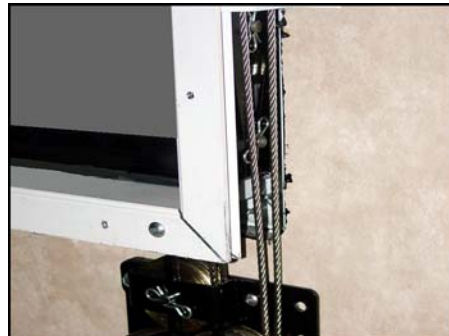
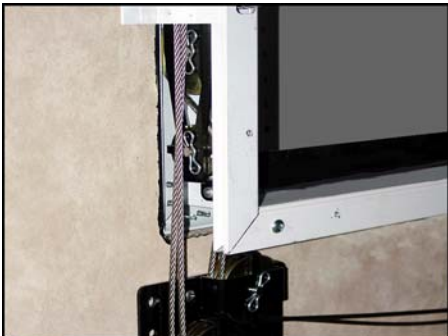
9. Locate clamp vertically between cable exit holes or to your designed location. Fasten clamp to wall with #10 pan head screws, in all holes.

10. **DO NOT PINCH CABLES BETWEEN CLAMP AND WALL!**

11. Attach (2) pieces of sill clamp per the instructions above for jamb clamp. Locate each clamp half way between motor and corner pulley assembly.

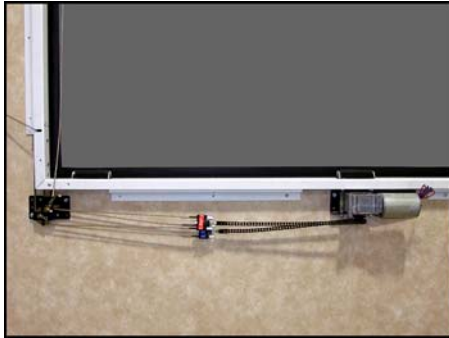


**NOTE:** One side of the slide out will have a crossed cable (below left), and the other side will NOT have a crossed cable (below right). This is normal for the slide to work. Be sure to check that **ONLY ONE SIDE** is crossed.

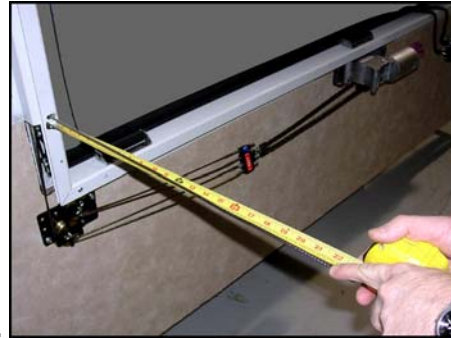




12. Once chains are on the sprocket, make sure the chain/cable connectors are halfway between motor and corner pulley assemblies when cables are pulled tight. This applies to both sides of motor.
13. Pull the bottom inside cable tight and measure the distance from the edge of frame to the end of the cable. Record the measurement. Pull the outside opposing cable tight and measure the distance from the exit hole to the end of the cable. This measurement should be within 1/2" of the first cable. If this test fails, the chain will need to be moved on the sprocket to make the cables the same length. Repeat this test for the cables on the other side of the motor.



12.



13.

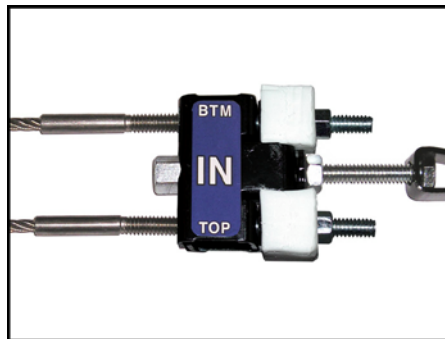


• THE FOLLOWING IS FOR BOTH TOP AND BOTTOM MECHANICS...  
(Bottom Mechanics Shown)

1. Remove all plastic, cut any wire ties and any tape to free chain and cable connectors.
2. Adjust each cable nut the same distance from the end of the cable. Adjust chain connector so that about 1-1/4" of the stud is showing. Do this to all chain/cable connectors.

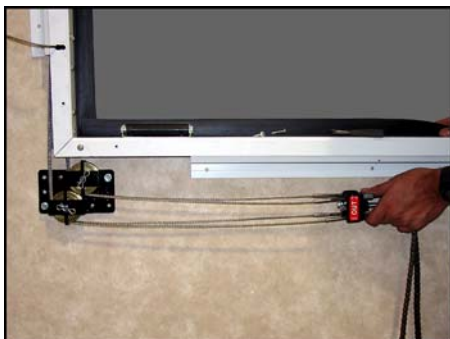


1.

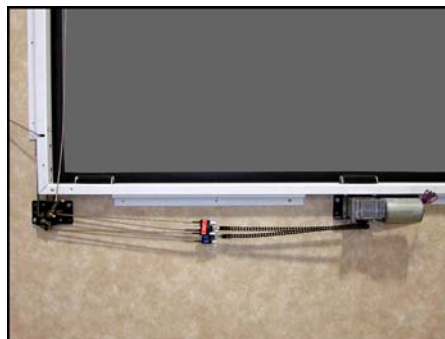


2.

3. Lay out each chain/cable assembly to remove any crossed cables or twisted chain.
4. Locate each chain/cable connector half way between motor and corner pulley assembly as shown.



3.



4.

5. Place (1) chain onto sprocket, using the set of teeth closest to the motor body to allow the other chain to be placed later.
6. Place second chain onto sprocket.



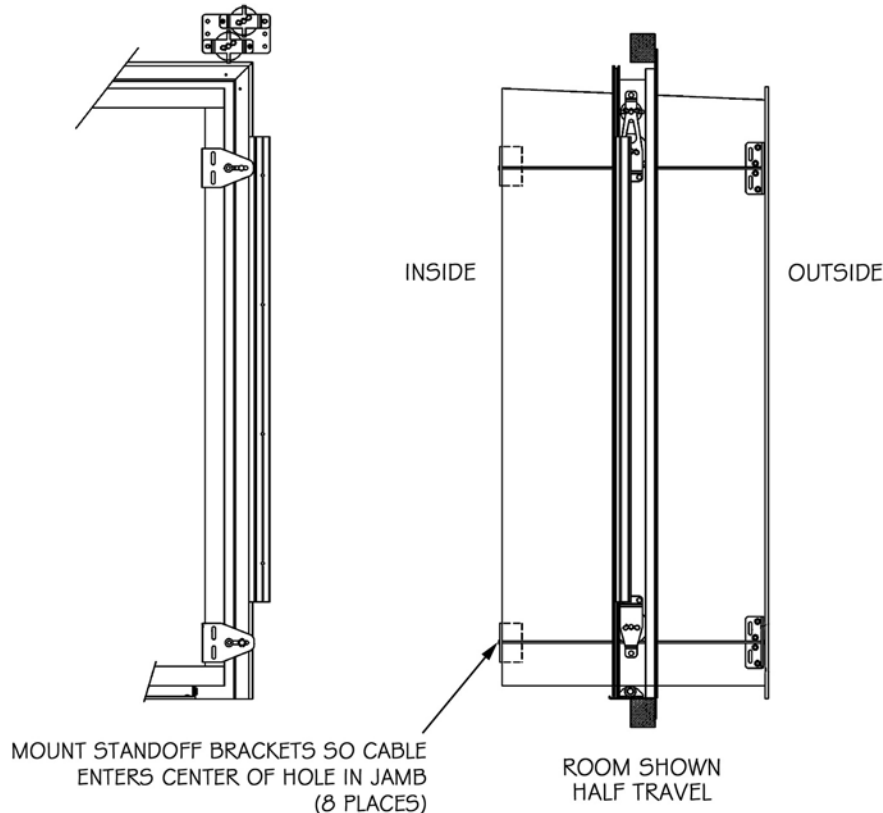
5.



6.

## IV. ROOM PREPARATION

### 4.01 MOUNTING THE STANDOFF BRACKETS

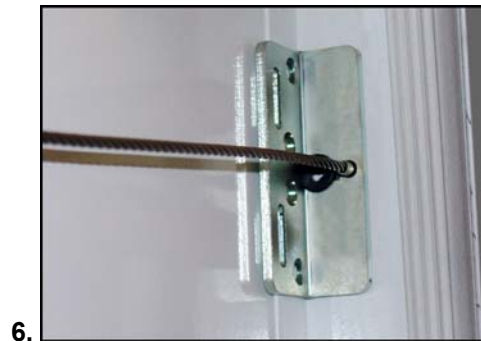


The key to mounting standoffs is to make sure the cable will attach to the standoff in a straight line from the center of each exit hole in the jambs. (see above)

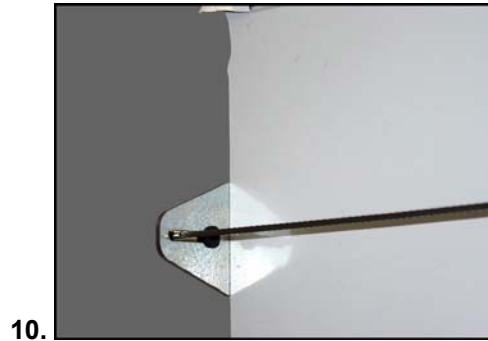
**There are (2) ways to accomplish this:**

1. Set the room first, move the room to half travel and support the room from the outside of vehicle so it is level. Pull a cable tight towards the mounting area of the standoff, making sure the cable is level mark the location the ball end of cable will set, do this for all cables.
2. Before setting the room, take a measurement from the top of the rollers to the center of the bottom exit holes in the jamb. Transfer this same measurement from bottom of room to area where bottom standoff bracket will be located (inside and outside). Do this to both sides of the room. Take a measurement from center of bottom exit hole to center of top exit hole and transfer this measurement from location of bottom standoff brackets to the top standoff brackets on the room. Once these locations are marked set the room into the rough opening. **WHEN PLACING ROOM IN ROUGH OPENING, BE VERY CAREFUL NOT TO TEAR THE RUBBER WIPE THAT SURROUNDS THE FRAME!!!!**

3. Locate bottom outside standoff bracket to the mark you made in the last step (hole for cable should be in line with mark on room). Once located, attach with a #10 screw in the center of each vertical slot in the bracket. ATTACH ONLY (2) SCREWS AT THIS TIME. Bracket should also be mounted approximately 3/16" away from fascia to allow cable to attach to bracket.
4. Locate and attach top standoff bracket the same way the bottom standoff was attached. *Repeat steps 3 & 4 on other side of the room.*
5. Slide room in rough opening to about half the length of travel. Attach all outside cables to outside standoff brackets by sliding cable thru the keyhole portion of the standoff.
6. Once cable is in place, attach rubber grommet (included) into same keyhole to keep cable from backing out of standoff bracket.



7. Mount the inside standoffs using the same procedure as the outside standoffs..
8. Mount the inside standoffs with (2) screws only in the center of the vertical slots. (the actual shape of your standoff bracket may be different).
9. Place ball end of cable through keyhole in standoff as you did with the outside cables.
10. Once cable is attached, place rubber grommet in keyhole to keep cable from backing out.



**NOTE:** You may need to push the room outward to attach inside cables.

## V. SLIDE ADJUSTMENT

### 5.01 ADJUSTING THE STANDOFF BRACKETS

#### Adjusting the Inside Standoff Brackets:

Carefully actuate room to move outward, stop motion when inside stand-offs are 1" – 2" from making contact with inside of frame. Check that the ball end of the cable is aligned with the exit hole in frame (see Figure 1 below).

If the cable is out of alignment, loosen the 2 screws in the slotted holes and adjust the standoff accordingly. Tighten screws. Perform this step to each inside standoff.

When all cables are aligned, proceed to slide the room completely outward.

Once room is out check that all inside standoffs are making contact with frame.

If all standoffs are making contact with frame, tighten all cable adjustments nuts (3/8") enough to remove any slack from the cables. **DO NOT OVERTIGHTEN!**

Tighten chain adjustment nuts (7/16") equally to remove any slack in chain.

**DO NOT OVERTIGHTEN!**

#### Adjusting the Outside Standoff Brackets:

Once slack has been removed, actuate room to move inward, stop motion when outside standoffs are 1" – 2" from making contact with outside of frame. Check that ball end of cable is aligned with exit hole in frame (see Figure 2 below).

If the cable is out of alignment, loosen the 2 screws in the slotted holes and adjust the standoff accordingly. Tighten screws. Perform this step to each outside standoff.

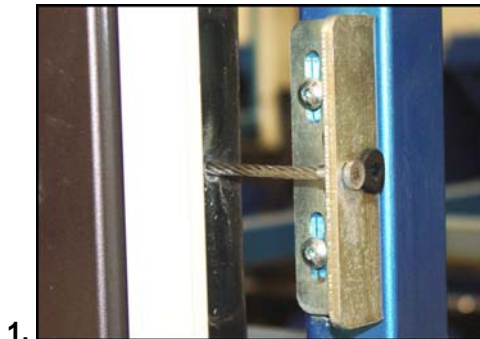
When all cables are aligned, proceed to slide room completely inward.

Once room is in, check that all outside standoffs are making contact with frame.

If all standoffs are making contact with frame, tighten all cable adjustments nuts (3/8") enough to remove any slack from the cables. **DO NOT OVERTIGHTEN!**

Tighten chain adjustment nuts (7/16") equally to remove any slack in chain.

**DO NOT OVERTIGHTEN!**



1.



2.

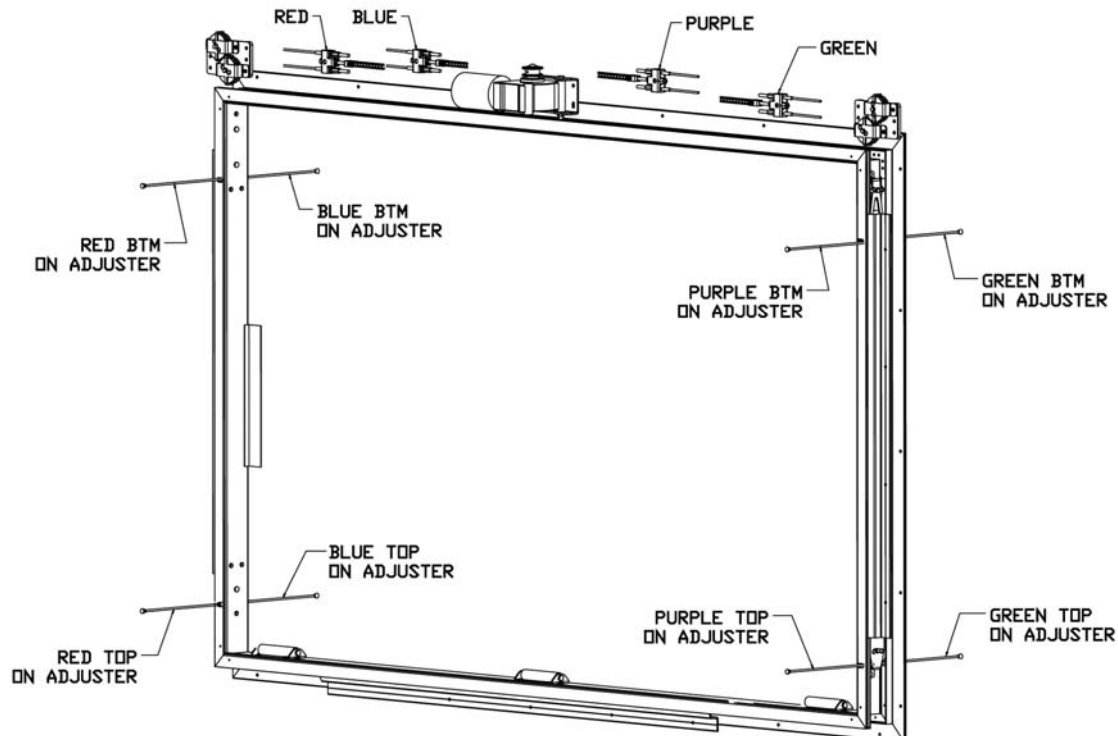
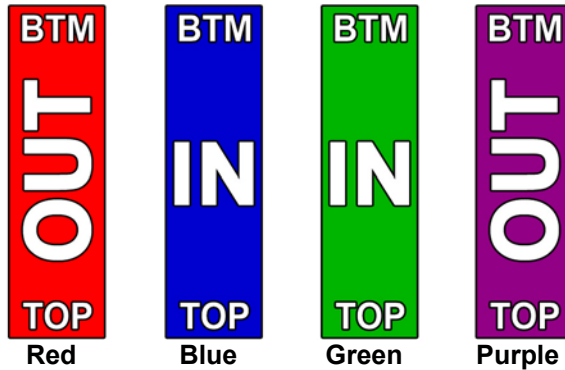
**MAKE SURE ALL CABLES ENTER THE FRAME WITHOUT ANY INTERFERENCE DURING OPERATION AND WHEN FULLY SEATED (KINKING, SCRAPING, PINCHING ETC...) FAILURE TO DO SO WILL RESULT IN A MALFUNCTION OF THE SYSTEM!!!**

## 5.02 FINAL ADJUSTMENT

Shipped with your system is a sticker that should be placed near the slide for instructions on adjusting this system. You will notice each cable-chain connector has a colored tag on it corresponding to the colors of the sticker above. The example diagram below is showing the association between cable adjusters and cables.

CABLE ADJUSTMENT INSTRUCTIONS (Colors indicate adjuster brackets)		854202	
<b>IMPORTANT: THIS SYSTEM IS A GIVE AND TAKE SYSTEM. BEFORE TIGHTENING FOR FIT, MAKE SURE YOU HAVE ENOUGH SLACK IN THE OPPOSING CABLES FOR THE REQUIRED ADJUSTMENT.</b>			
<b>LEFT FRONT</b> controls tension for the left side seal when room is out. Top cable screw adjusts the room bottom. <i>[Opposing cable: Left rear top]</i> Bottom cable screw adjusts the room top. <i>[Opposing cable: Left rear bottom]</i>	<b>RED</b>	<b>RIGHT FRONT</b> controls tension for the right side seal when it is in. Top cable screw adjusts the room bottom. <i>[Opposing cable: Right rear top]</i> Bottom cable screw adjusts the room top. <i>[Opposing cable: Right rear bottom]</i>	<b>GREEN</b>
<b>LEFT REAR</b> controls tension for the left side seal when room is in. Top cable screw adjusts the room bottom. <i>[Opposing cable: Left front top]</i> Bottom cable screw adjusts the room top. <i>[Opposing cable: Left front bottom]</i>	<b>BLUE</b>	<b>RIGHT REAR</b> controls tension for the right side seal when it is out. Top cable screw adjusts the room bottom. <i>[Opposing cable: Right front top]</i> Bottom cable screw adjusts the room top. <i>[Opposing cable: Right front bottom]</i>	<b>PURPLE</b>

**BAL POWER JAMB** BAL is a registered trademark of Norco Industries, Inc. U.S. Patent#: 6254171 Other U.S. and Foreign Patents Pending.





**Before going over final adjustments, there are a few things to note about this system...**

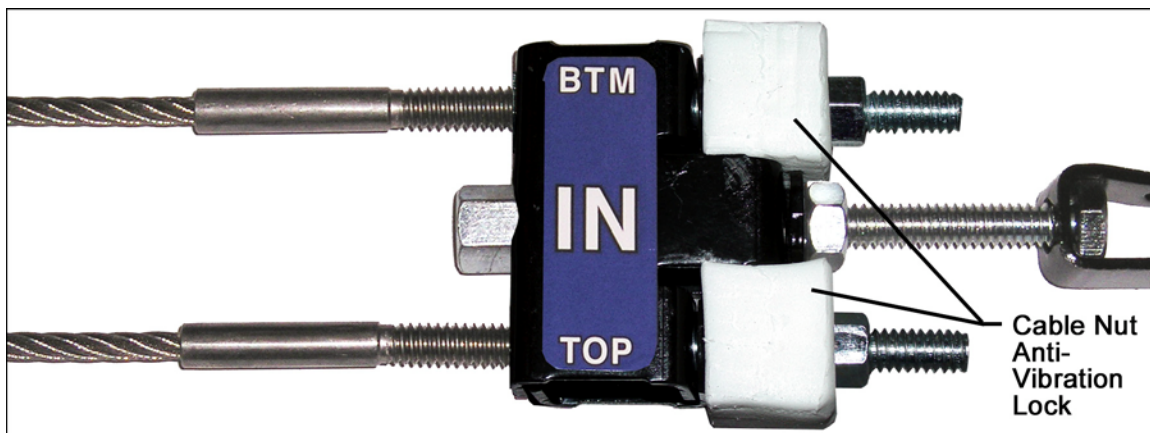
The Accu-Slide is a give and take system between the cables, if the inside and outside opposing cables are too tight you will cause the motor to be over worked leading to trouble later on.

When the room is seated full out, the OUTSIDE cables should be slack enough to move the cable approximately ½" up or down (1" total movement) by hand. The holding power is actually on the INSIDE cables pulling the standoff brackets tight against the frame.

When the room is seated full in, the INSIDE cables should be slack enough to move the cable approximately ½" up or down (1" total movement) by hand. The holding power is now on the OUTSIDE cables pulling the standoff brackets tight against the frame.

The chains work the same way as the cables, when the room is full in or out, half of the chain on each side of the motor will be slightly slack and half of each chain will be tight.

**AFTER ALL FINAL ADJUSTMENTS, TIGHTEN 1/4-20 JAM NUT AGAINST CABLE/CHAIN ADJUSTER BRACKET ON ALL CHAIN CONNECTIONS. TIGHTEN THE JAM NUTS ON THE CABLES BY USING A WRENCH ON BOTH THE JAM NUT AND THE COUPLING NUT - FAILURE TO DO SO WILL RESULT IN A MALFUNCTION OF THE SYSTEM!!!**



*Cable / Chain connector after final adjustment.  
1/4 - 20 Jam Nut tight against connector nut keepers are properly located.*

**WHAT YOU SHOULD SEE ON A PROPERLY ADJUSTED ROOM:**

1. When room is out, all inside standoff brackets and inside seal will be tight against the frame. Outside cables will be slack enough to move (1" total) by hand. One half of each chain will be tight, one half of each chain will be slightly slack.
2. When room is in, all outside standoff brackets and seal will be tight against the frame. Inside cables will be slack enough to move (1" total) by hand. One half of each chain will be tight, one half of each chain will be slightly slack.
3. Room will run smooth, quiet and track straight during movement.

***If any of the above are NOT true, adjustment will be required.***

**EXAMPLE OF A ROOM THAT NEEDS TO BE ADJUSTED:****Problem:**

Right side, bottom outside standoff bracket is not tight against frame. Seal has a gap.  
(Slide mechanics are on top for this example)

**Solution:**

1. Make sure room is fully in.
2. Read instructions to find the appropriate cable to adjust. Make sure you have enough slack in the opposing bottom inside cable (*per instructions*) to give to the outside cable.
3. Tighten *Green Top* cable adjuster nut (*per instructions*) until standoff bracket is tight against frame and/or seal is tight.
4. Make sure nut keeper on adjuster bracket is oriented properly, and chain connector jam nut is tight.
5. Test room in and out for sealing.
6. Repeat above steps again if necessary for any other standoff brackets.

**Once the Accu-Slide is properly adjusted and running smoothly, you may enclose the mechanics as you desire, with these points in mind:**

1. Do NOT allow enclosure to make contact with any moving parts of the Accu-slide.
2. Do NOT allow debris (*screws, nuts, wood, plastic, etc...*) to fall into frame enclosure or pulley brackets.
3. You must allow entrance to the mechanics of the Accu-Slide for any adjustments that may be required later on.

**CHECK ONCE MORE...**

- ✓ NO KINKED OR PINCHED CABLES
- ✓ ALL CABLES ALIGN WITH EXIT HOLES IN FRAME
- ✓ PROPERLY ADJUSTED CABLES AND CHAINS
- ✓ ALL CABLE NUT KEEPERS ORIENTED PROPERLY
- ✓ ALL CHAIN CONNECTOR JAM NUTS ARE TIGHT

**NORCO INDUSTRIES WILL NOT BE RESPONSIBLE FOR IMPROPERLY INSTALLED SYSTEMS!**

## VI. TROUBLESHOOTING

### 6.01 COMMON PROBLEMS / SOLUTIONS

**PROBLEM: Motor does not run or make any noise.**

**Cause 1:** *Dead battery*

**Solution:** Charge or replace battery.

**Cause 2:** *Open circuit or faulty switch*

**Solution:** Check switch, fuse & circuit breaker.

**Cause 3:** *Bad Motor or Controller*

**Solution:** Replace the Motor or Controller.

**PROBLEM: Motor runs, but slide room does not move.**

**Cause 1:** *Cable(s) have become detached*

**Solution:** Check tension of all cables. Open access panel and re-adjust. Place grommet or screw in standoff bracket to secure the cable (*refer to section 2.02*).

**Cause 2:** *Chain is caught on a bracket*

**Solution:** Open access panel to identify the problem. Adjust cable tension. Tighten all 4 jamb nuts. Place nut anti-vibration keeper on cable nuts (8).

**Cause 3:** *Chain is off the sprocket*

**Solution:** Open access panel to identify the problem. Put chain back on sprocket. Re-adjust cable tension, tighten all jamb nuts (4). Place nut anti-vibration keeper on cable nuts (8).

**Cause 4:** *Shaft key is broken*

**Solution:** Inspect damage and replace all damaged parts.

**PROBLEM: Loose Cable – Sagging 1 or more inches, or hanging.**

**Cause 1:** *Adjustment nut is too loose or off cable*

**Solution:** Open access panel, install all nuts with anti-vibration keeper or Locktite, and adjust.

**Cause 2:** *Cable is loose from connector bracket*

**Solution:** Open access panel, loosen nut on loose cable and attach to bracket, then adjust. (*refer to section 2.02*)

**Cause 3:** *Drive chain has too much slack*

**Solution:** Open access panel & tighten adjustment nuts. (*refer to section 2.02*)

**Cause 4:** *Room stand-off bracket is loose or off*

**Solution:** Inspect all inside and outside brackets for secure attachment, and repair as required.

**PROBLEM: Squeaks while operating.**

**Cause 1:** *Cables are too tight*

**Solution:** Open access panel, and adjust tension.

**Cause 2:** *Brackets are not properly aligned*

**Solution:** Align brackets properly and re-adjust.

**Cause 3:** *Friction between pulleys or brackets*

**Solution:** Lubricate corner pulleys & adjust bracket if pulley is interfering.

**PROBLEM: Room wipe is torn or missing.**

**Cause 1:** *Room or framework is out of square*

**Solution:** Correct the problem and replace wipe. (refer to section 3.02)

**Cause 2:** *Wipe is torn or weathered*

**Solution:** Replace wipe. (refer to section 3.02)

**PROBLEM: Room doesn't close completely.**

**Cause 1:** *Improper adjustment*

**Solution:** Open access panel, and adjust tension. Refer to adjustment instructions.

**Cause 2:** *Room is hitting an obstruction*

**Solution:** Check for obstructions and correct.

**Cause 3:** *Improper stand-off bracket alignment (cable is kinked)*

**Solution:** Loosen cable nut to allow slack. Remove screws from stand-off and align cable with slot. Re-attach standoff. Adjust cable tension.

**PROBLEM: Loud grinding noise when room operates.**

**Cause 1:** *Screw or foreign object lodged in jamb pulleys*

**Solution:** Remove jamb clamp and inspect area causing the noise. Remove any loose objects. Inspect pulleys for damage. Replace the cable(s) if any have become frayed due to the problem.

**Cause 2:** *Cable has jumped to wrong pulley*

**Solution:** This can only happen in rare circumstances, if it has happened you will need to determine which set of cables it is (of the two, it will be the cable on top).

1. Loosen the appropriate cable adjusting nut to allow slack in the cable.
2. Using a flat tip screw driver or a small narrow tool (it may take 2) move the cable back to the proper pulley. You may need to pry the extrusion out a little to make enough room for the cable to pass the pulley. It is helpful if a second person can push the cable from the opposite side to force the cable away from the pulley.
3. After the cables are on the proper pulleys, re-adjust the cable tension as described.

**PROBLEM: Cable is bent and/or frayed at standoff bracket.**

**Cause:** *Standoff bracket was not properly aligned during installation process*

**Solution:**

1. Remove the tension from the cable via the cable adjustment nut.
2. Remove the screws from the standoff bracket and adjust to the appropriate location.
3. Re-attach standoff bracket and adjust cable tension.

Replace the cable if it has become frayed. (Refer to section 3.01)



## VII. LIMITED WARRANTY

**Norco Industries two year limited warranty** of the ACCU-SLIDE Expandable Room System commences upon delivery of unit to end user. The limited warranty includes all components, metal brackets, pulleys, cables and end connectors, aluminum extrusions, gear motor, and chain from manufacturing defects and workmanship.

**The system is not warranted against** water passage, customer abuse or improper installation. It is the responsibility of the final stage manufacturer to ensure the ACCU-SLIDE system is properly installed, adjusted, and sealed to prevent water passage in both the opened and closed positions of the room.

