Battery Motor Installation Instructions

Scan for electronic version

Contents

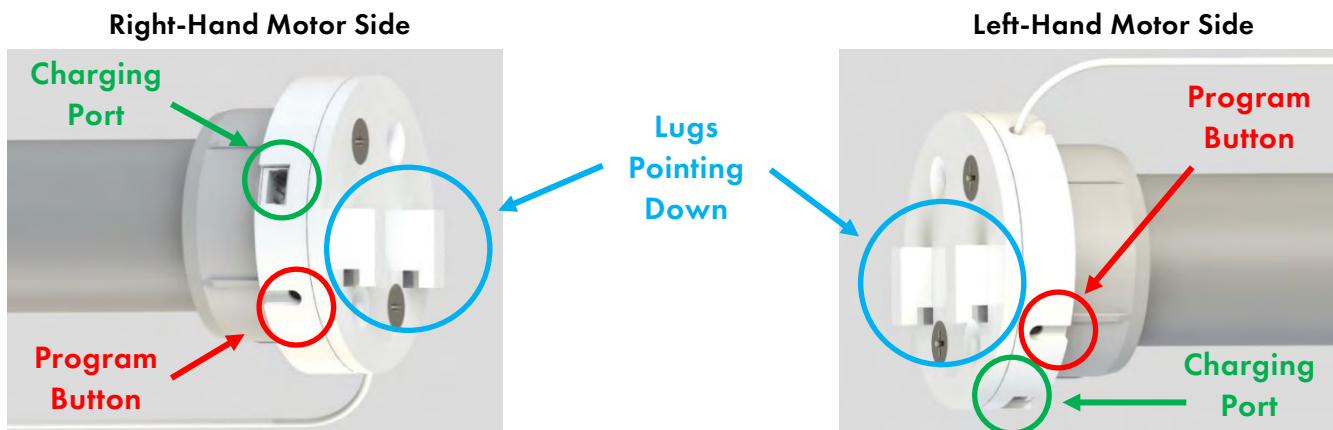# Battery Motor
Installation Instructions

1.0 Overview

The following installation instructions are for Insolroll's embedded rechargeable lithium-ion battery powered motorized shades. The hardware options available for these motors are: Exposed, Cassette, Facia, and Dual Shade. Motorized shades come fully assembled and ready for installation. Mounting screws are not provided. The type and size of screw required are project specific and will vary depending upon the mounting surface.

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1.1 Tools

Screw/drill gun with Phillips head bit extender; Hex head driver; Standard and Phillips head screwdriver; level; tape measure; 1/8″ and 3/16″ drill bit.

1.2 Rechargeable Embedded Li-ion Motors ONLY

1.21 Motor Adapter Orientation for Exposed and Fascia Systems

Right-Hand Motor Side　　　　　　　　　　　　　　**Left-Hand Motor Side**

Charging Port — Lugs Pointing Down — Program Button

Program Button — Charging Port

1.22 Important Information about Motor Battery Charging Cables

The motor battery is fully charged prior to shipment and the motor is programmed to Deactivate RTS prior to shipment. Refer to the Battery Motor Programming Instructions for more details.

All orders must include at least one charger. All fascia and cassette shades will include an 8″ extension cable for easy charging. This extension cable can be ordered for other exposed and dual shade applications for an additional cost. The metal contacts of the connector must face toward the motor bracket side during insertion into the charge port.

Li-ion Charger
76″ long cable

Must be included with every Li-ion battery motor order

Plugs directly into the common electrical outlet
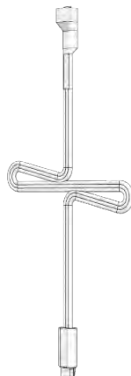
Extension Cable
8″ long cable is included with all Fascia and Cassette shades

94.5″ long cable is also available

Both can be ordered for any other system at an additional cost

Cable Orientation
Cable can only be inserted in one orientation (metal contacts must face toward the motor bracket side)

![Insolroll Window Shading Systems logo]

Battery Motor
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1.3 External Battery Motors ONLY

1.31 Motor Adapter Orientation for Exposed and Fascia Systems

Right-Hand Motor Side

Lugs Pointing Down

Program Button

Charging Cable

Left-Hand Motor Side

Charging Cable

Program Button

1.32 Important Information about Motor Battery Wands

Each battery pack is fully charged prior to shipment and the motor is programmed to Deactivate RTS prior to shipment. Refer to the Battery Motor Programming Instructions for more details.

All orders must include at least one charger. All fascia and cassette shades will include an 8″ extension cable for easy charging. This extension cable can be ordered for other exposed and dual shade applications for an additional cost. The metal contacts of the connector must face toward the motor bracket side during insertion into the charge port.
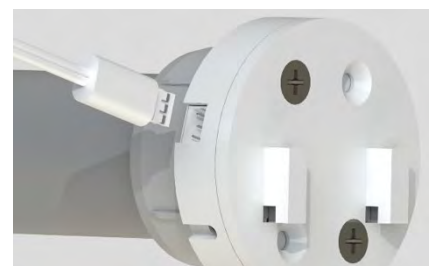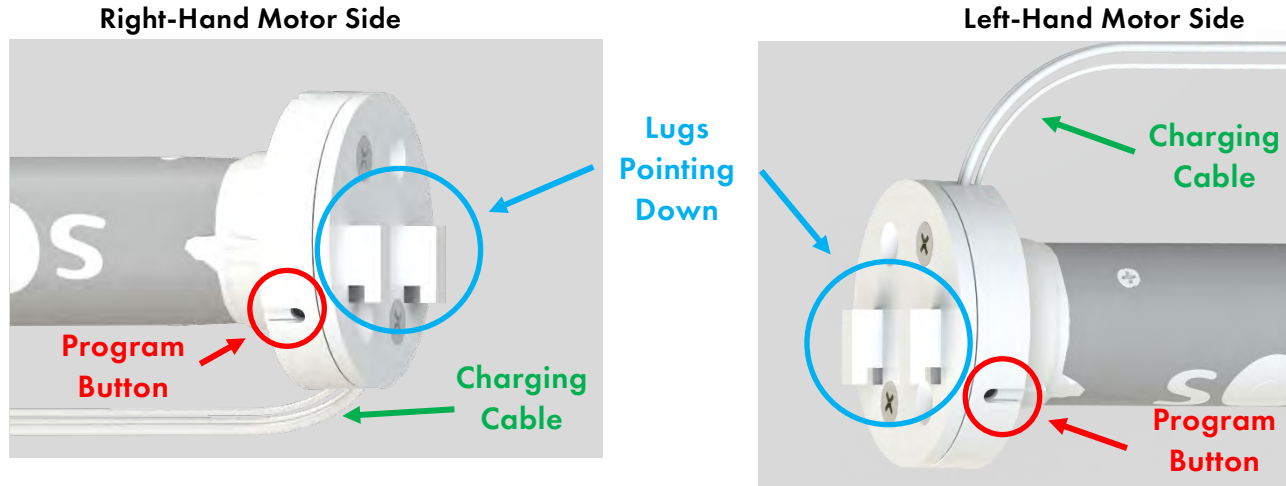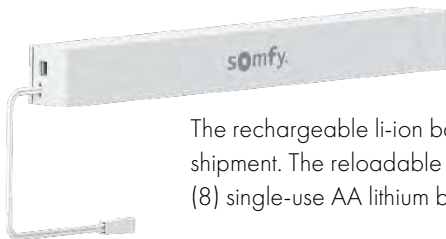
Battery Packs

We offer rechargeable li-ion battery packs (shown-left) and reloadable battery wands.

The rechargeable li-ion battery wands are fully charged prior to shipment. The reloadable battery wands are shipped with eight (8) single-use AA lithium batteries.

Cable Orientation

The battery pack cable can only be inserted in one orientation (match the geometry of the connectors when connecting the battery pack cable to the motor cable).
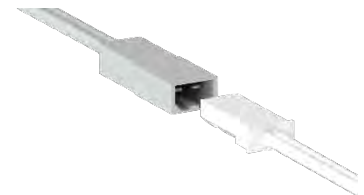
Li-ion Charger

76″ long cable

Must be included with every external battery motor order.

Plugs directly into the common electrical outlet.
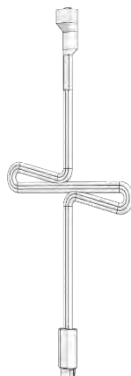
Extension Cable

The extension cable is not included in any external battery motor order but they are available to be ordered at an additional cost.

Available in an 8″ long cable and a 94.5″ long cable.

Cable Orientation

Charging cable can only be inserted into the battery pack in one orientation (metal contacts must face toward the logo on the pack).

Insolroll
WINDOW SHADING SYSTEMS

2.0 Exposed Systems

Motor / Idler
Brackets
(x2)

Plastic End
Covers
(x2)

Battery
Motor

Spring Loaded
Idler

Fabric Panel
&
Roller Tube

2.1 Exposed Bracket Options
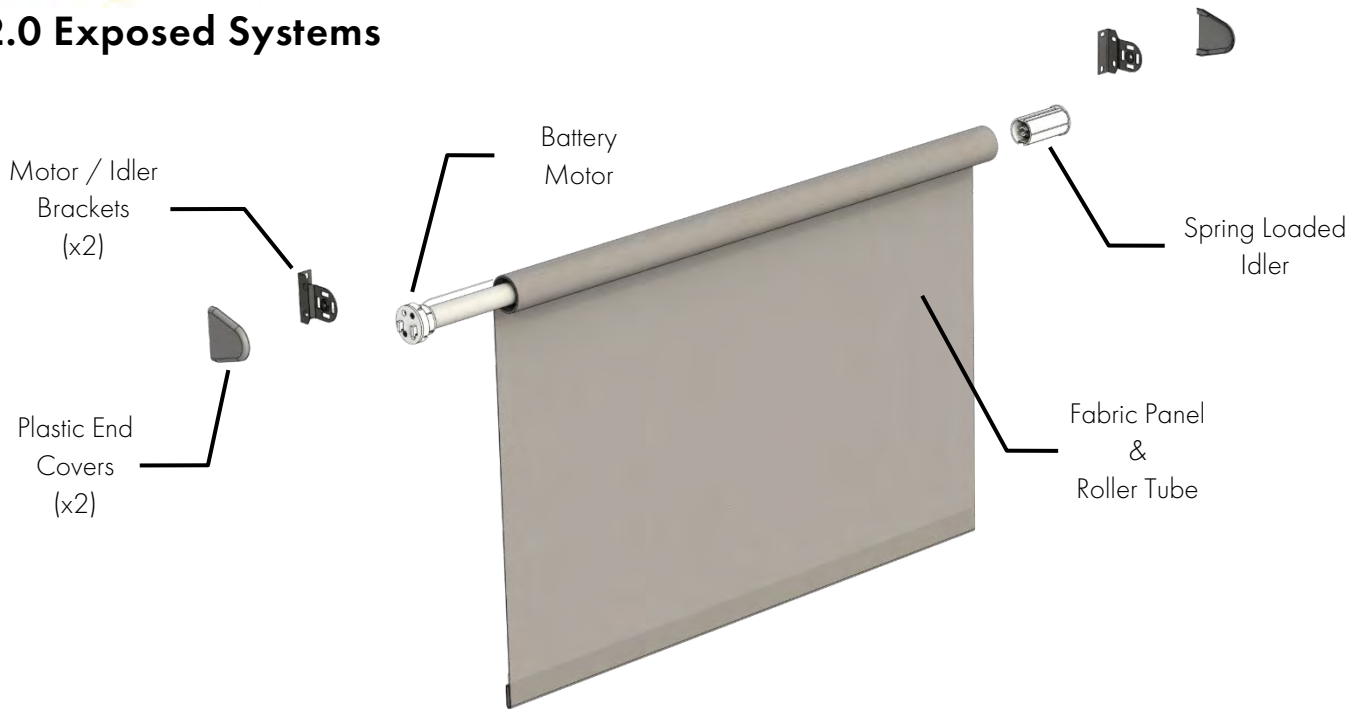
Exposed bracket system is offered in two sizes, a standard size for shorter shades and an extended size for taller shades. Motor and Idler brackets are identical. These brackets can be used for both ceiling and wall mount applications.

Optional plastic end caps are available, but keep in mind the plastic end caps add a total of 3/16″ to the bracket-to-bracket distance.

Standard Exposed Bracket

2 3/8″

2 3/16″

23/32″
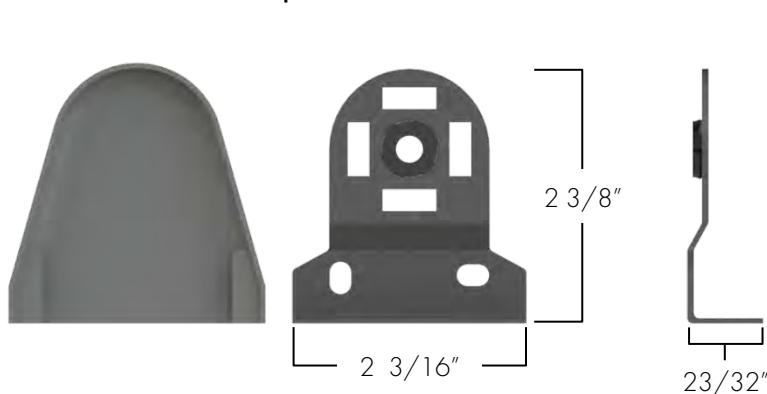
Extended Exposed Bracket

2 7/8″

2 3/16″
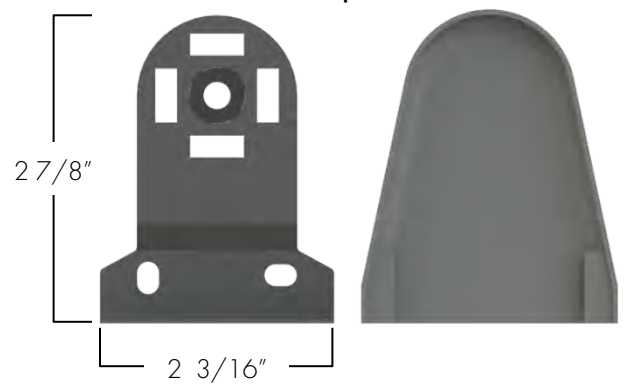
2.2 Bracket Location and Mounting

Mark the location of the brackets noting that the bracket-to-bracket width equals shade order width. For proper shade operation, brackets must be mounted perfectly level. Verify using a level.

2.3 Shade Installation

1. Install the shade by carefully inserting the idler pin into the bracket bushing and compress the idler so the motor head mounting plate bypasses the bracket.
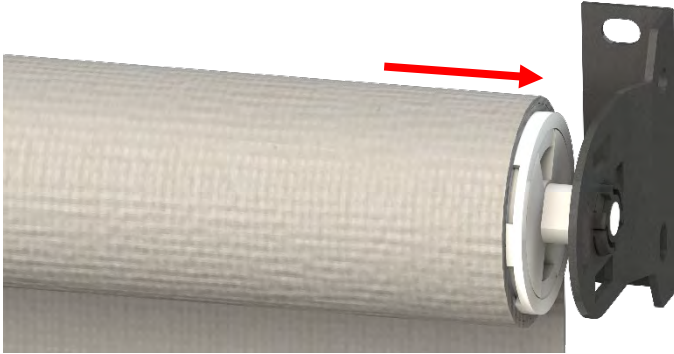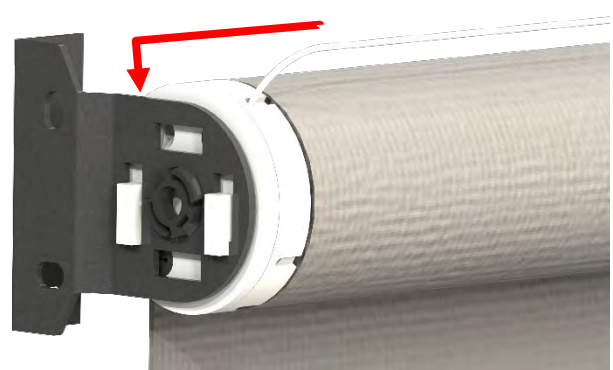

2. Align the motor head adapter lugs to fit into the rectangular slots in the bracket. Push down on the motor head adapter to ensure the lugs are fully seated in the slots.
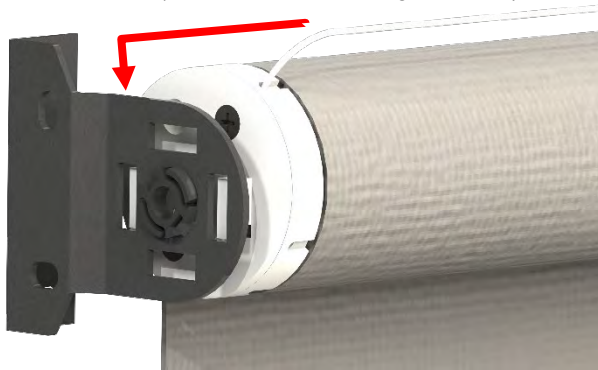
3. Install the bracket covers by simply sliding the cover over the bracket.
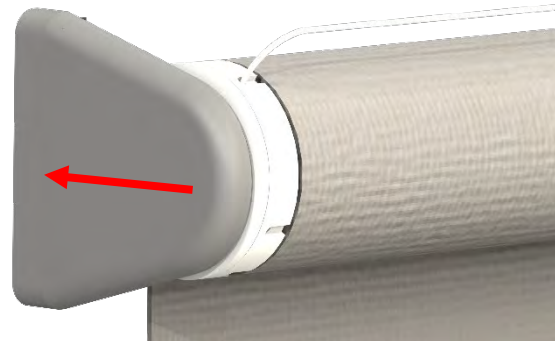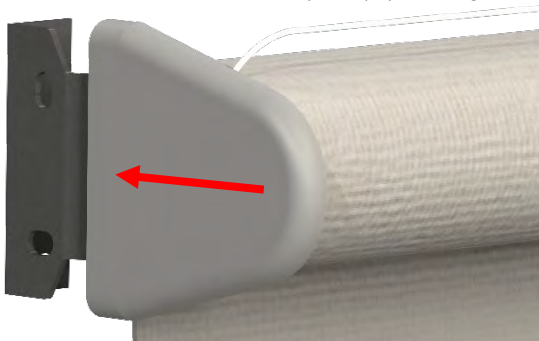
2.4 Shade Removal

To remove the shade, reverse the above installation instructions. Begin by, lifting up the motor head so the adapter lugs are not fully seated. Move the shade toward the idler to compress the idler enough so that the motor head adapter lugs can swing by the motor bracket. Remove the idler pin from the idler bracket.

Shade Operation

For information on programming and operating your shade, please refer to the Battery Motor Programming Instructions.

Battery Motor
Installation Instructions

3.0 Cassette Systems (Three and Four Inch)

Mounting Brackets

Assembled Cassette

Cassette Housing,
Plastic End Caps,
Li-ion Embedded Motor,
Fabric Panel
&
Roller Tube

Antenna

Prior to shipment, the antenna is inserted in a ridge inside of the cassette to keep it hidden.

3.1 Cassette Mounting Brackets

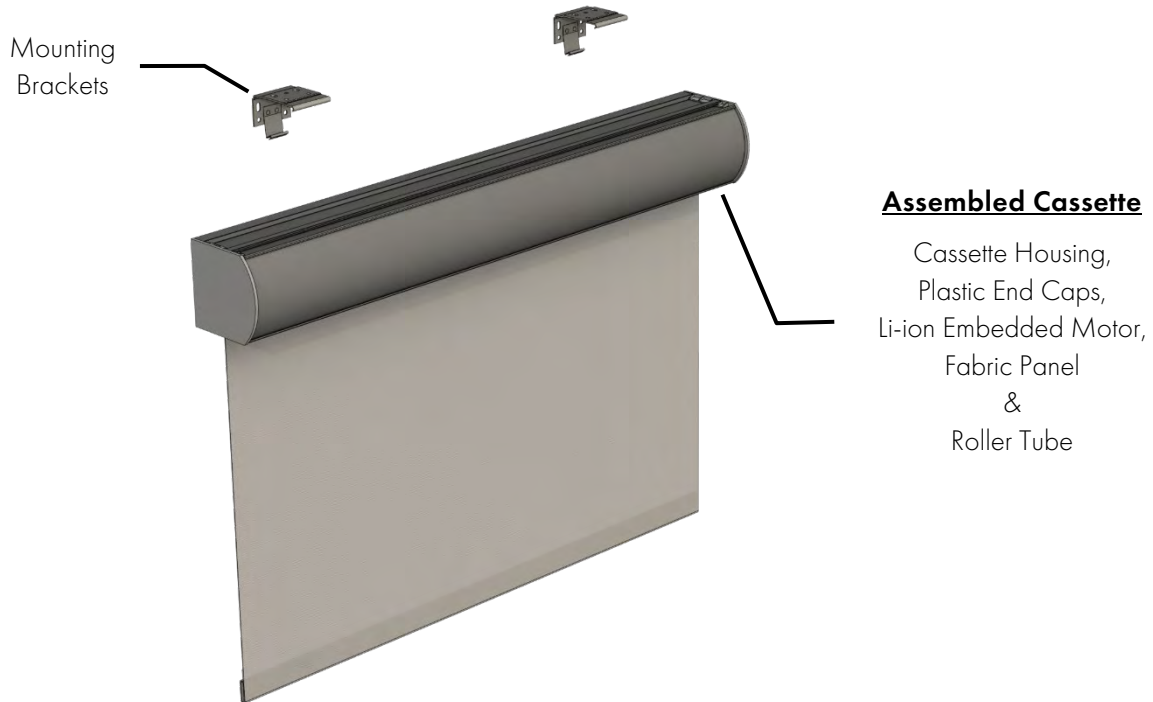Cassette systems are shipped fully assembled. These systems utilize mounting brackets that can be mounted for wall or ceiling mount. Mount two outer brackets approximately 2" in from the end. On wider units install center bracket(s) supplied. We recommend a pan head fastener; other fasteners may prohibit the cassette from seating properly.

Ceiling Mount

Wall Mount
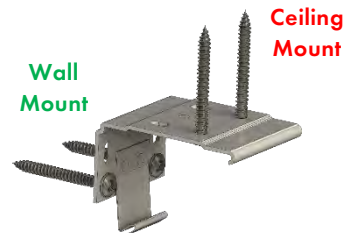
3.2 Shade Installation

Hook top of extrusion into front of mounting brackets as shown. Rotate the back bottom corner of cassette up and snap into bracket.

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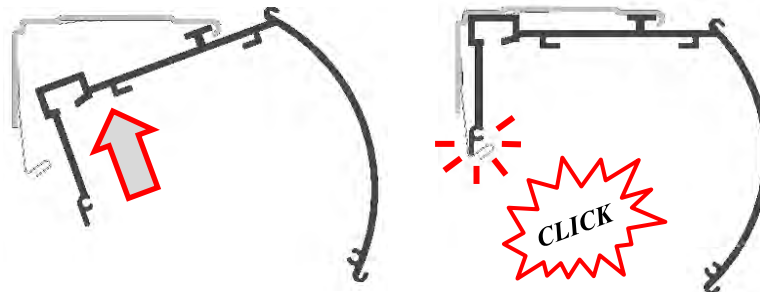
3.3 Cassette Removal

To remove cassette, insert flat head screwdriver into mounting bracket slot, then back to release cassette.

Shade Operation

Refer to the Battery Motor Programming Instructions for shade operation.

4.0 Fascia (3" and 4")

Fascia
Housing

Motor
Bracket

Idler
Bracket

Spring Loaded
Idler

Plastic End
Caps (x2)

Fabric Panel
&
Roller Tube
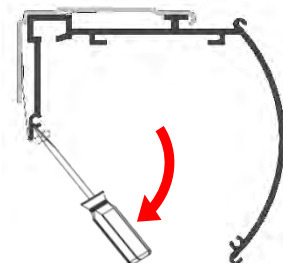
Battery
Motor
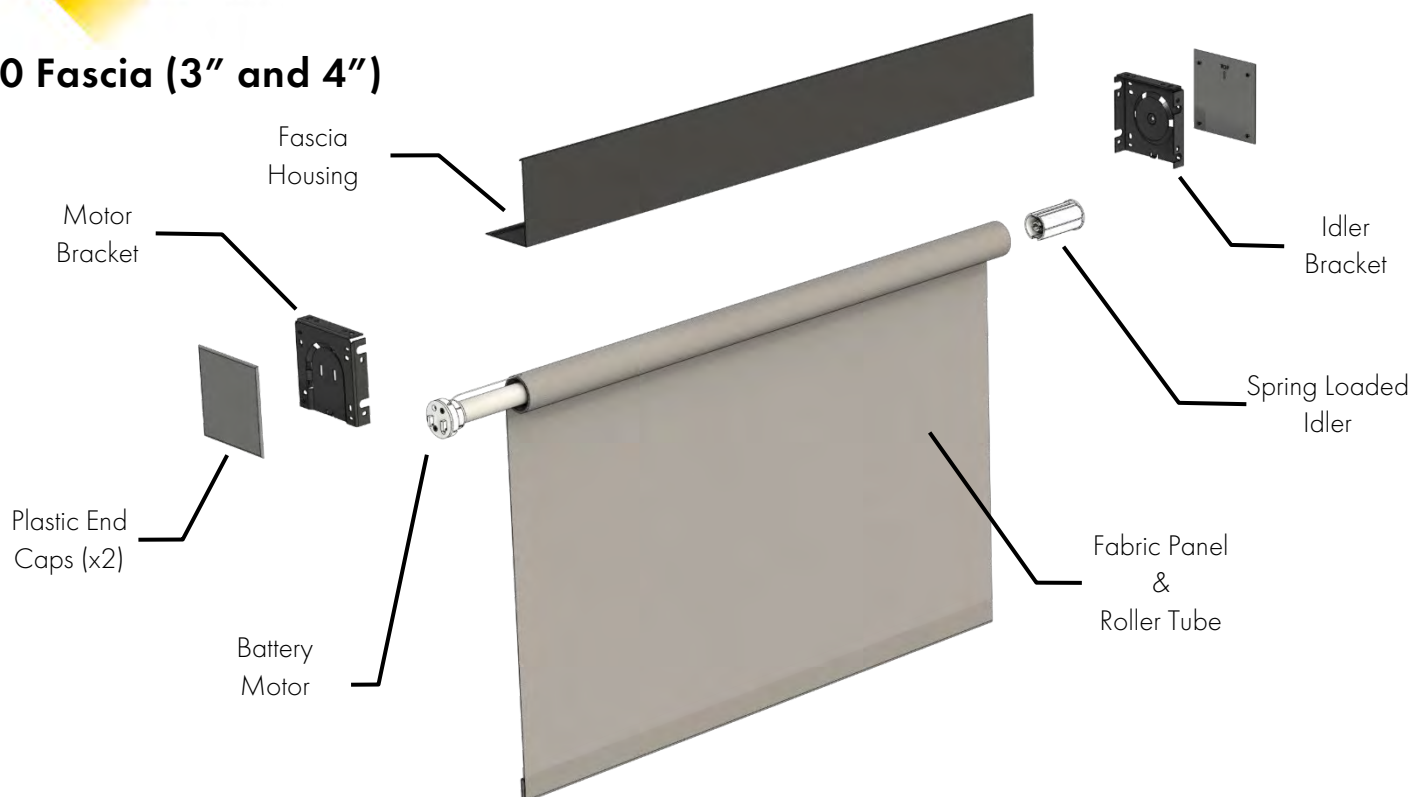
4.1 Fascia Bracket Options

Motor bracket and Idler bracket are different, so it does matter which side each one is mounted on. These brackets can be used for both ceiling and wall mount applications.

Optional plastic end caps are available, but keep in mind the plastic end caps add a total of 1/4" to the bracket-to-bracket distance.

3" Fascia
(for shorter shades)

3"

3/4"

3"

End Cap	Idler Bracket	Motor Bracket

4" Fascia
(for taller shades)

4"

4"

4"

3/4"
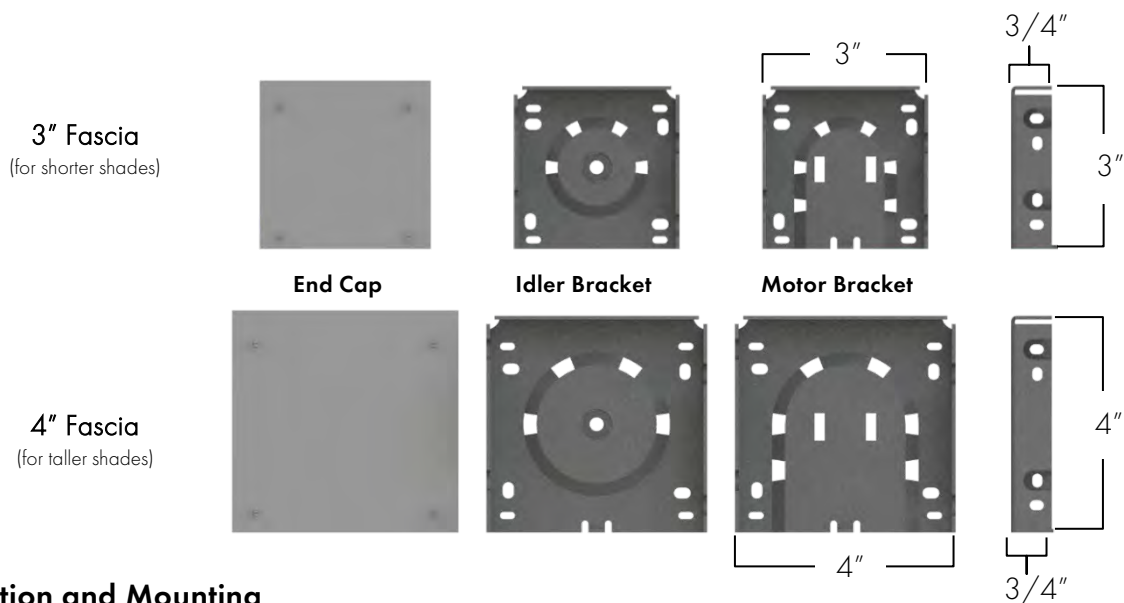
Bracket Location and Mounting

Determine the operator side of the shade. Mark the location of the brackets noting that the bracket-to-bracket width equals shade width. For proper shade operation, brackets must be mounted perfectly level.

4.2 Shade Installation – 3" Fascia

1. Due to the length of the motor bracket tang, install the shade motor side first by aligning the adapter lugs to fit into the rectangular slots in the bracket.

Long Tang Prevents Traditional Install

2. Then compress the idler pin by hand and carefully insert the idler pin into the plastic bushing. *Be very careful: The plastic bushing can be damaged, so be careful when decompressing the idler. The idler spring can exert enough force to break the plastic bushing in the idler bracket.*
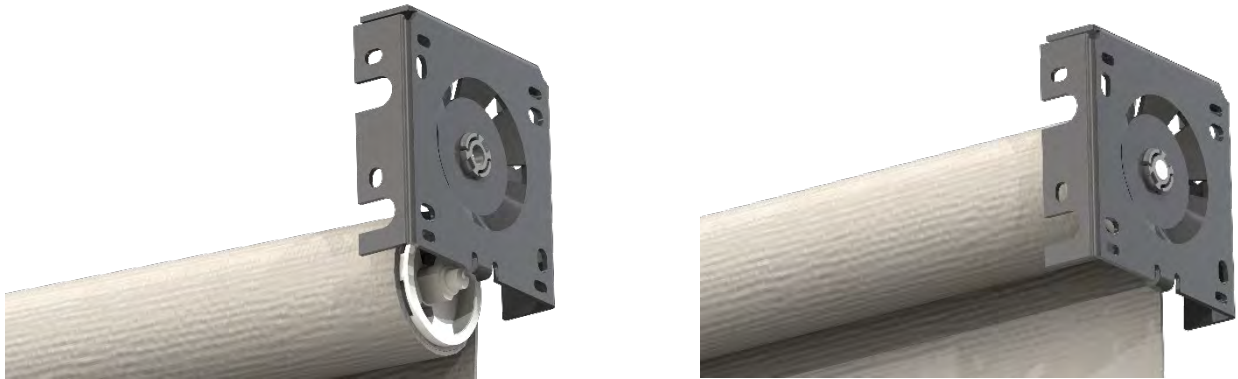
4.3 Shade Removal – 3" Fascia
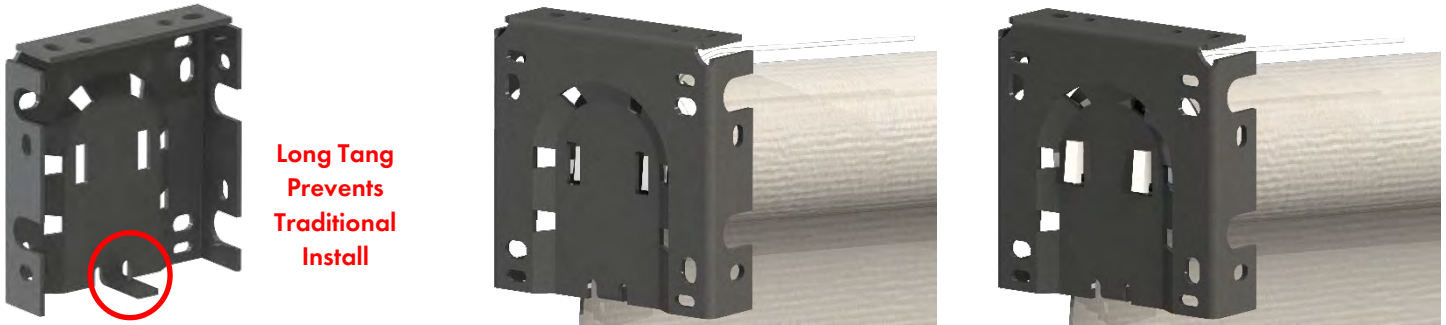
1. The idler pin is stepped so there is a small flat area that will accept a flat head screwdriver. Carefully wedge the screwdriver between the idler and the bracket.
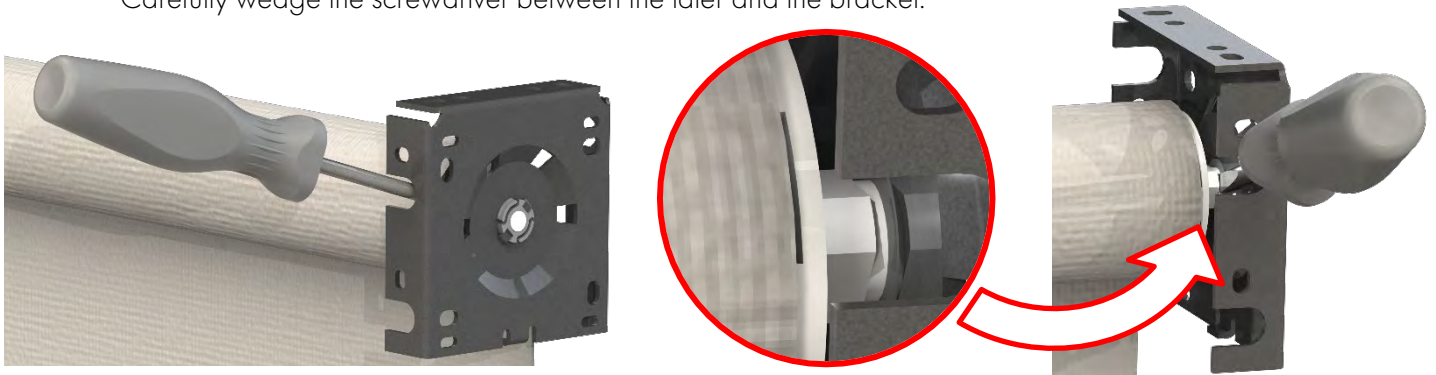
2. Maintain pressure against the idler pin while moving the shade down and away from the plastic bushing. *Be very careful: The idler spring can exert enough force to break the plastic bushing in the idler bracket.*

3. Lift the motor side of the shade so the motor head adapter lugs are out of the bracket and remove the shade.

4.4 Shade Installation – 4" Fascia

1.   4" fascia allows enough room for a traditional install. Carefully insert the idler pin into the bracket bushing.

2.   Compress the idler so the motor head mounting plate bypasses the bracket. Align the motor head adapter lugs to fit into the rectangular slots in the bracket. Ensure motor is fully seated in the slots.
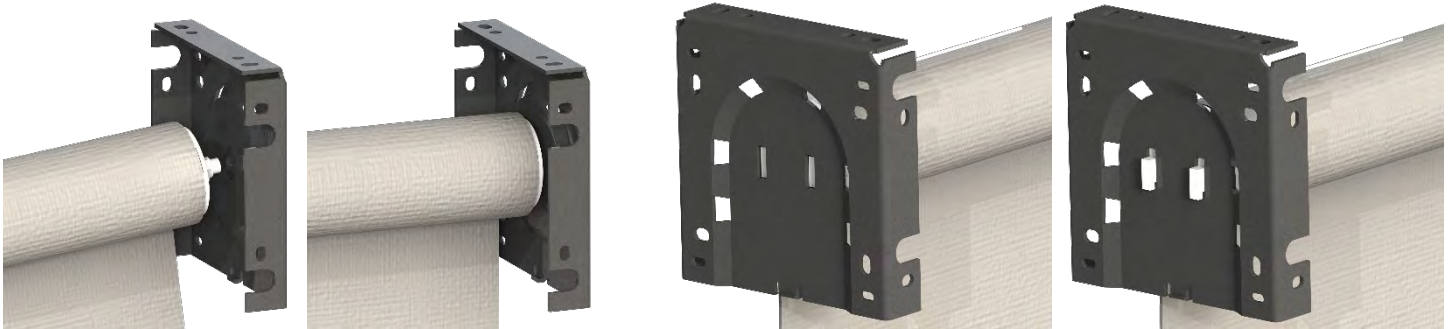

4.5 Shade Removal – 4" Fascia

Remove the shade from the motor bracket by lifting up the motor head so the adapter lugs are not fully seated. Move the shade toward the idler to compress the idler enough so that the motor head adapter lugs can swing by the motor bracket. Remove the idler pin from the idler bracket.

Antenna

Ensure the antenna does not contact the shade fabric. The antenna can be tucked next to the motor bracket and behind the fascia without impacting radio transmission.

Shade Operation

Refer to the Battery Motor Programming Instructions for shade operation.

4.6 Fascia Installation

1.   Ensure both the 8" extension cable and antenna are out of the way and won't interfere or be damaged when the shade is operating.

2.   Insert fascia into the top lip of both brackets. Push fascia toward the back of the lower part of the bracket. The fascia snaps onto the tang of both brackets. If the fascia is not secure, check the tang to ensure it is not bent. If necessary, carefully bend the tang down so the fascia engages with the tang.

3.   For outside mount, secure the end caps.

CLICK
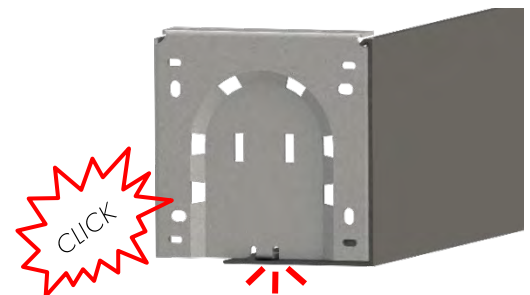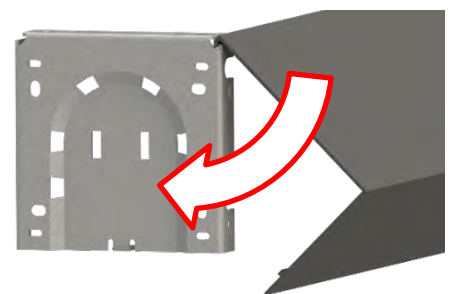
4.7 Fascia Removal

Remove the fascia by pulling down on the bottom flap of the fascia near the brackets to ease the fascia over the edge of each bracket. Carefully remove the fascia and place on a scratch resistant surface.

5.0 Top/Back Cover

5.1 Top Back Cover with Fascia (Regular Roll) Installation

Top/Back Cover

Fascia Housing

Motor Bracket

Idler Bracket

Spring Loaded Idler

Plastic End Caps (x2)

Fabric Panel & Roller Tube

Battery Motor
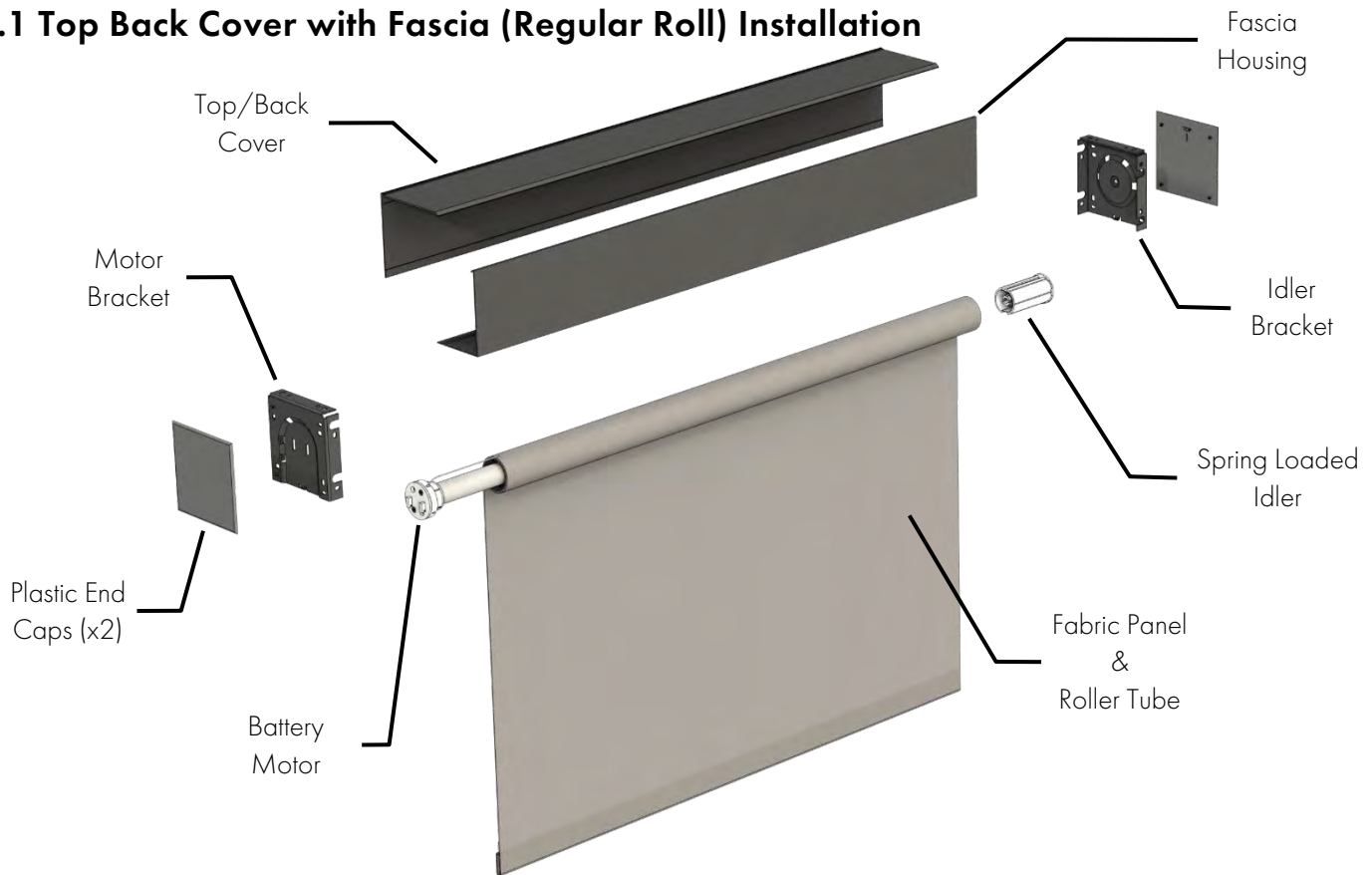
1. Slide the top/back cover into both brackets so the cover sits underneath the top bracket flange. Using the bracket as a template, mark and drill the holes using a 3/16" drill bit into the top/back cover. _NOTE: Inside mount uses the holes on the top of the bracket. Outside mount uses the holes on the back of the bracket._

Ceiling Mount

Wall Mount
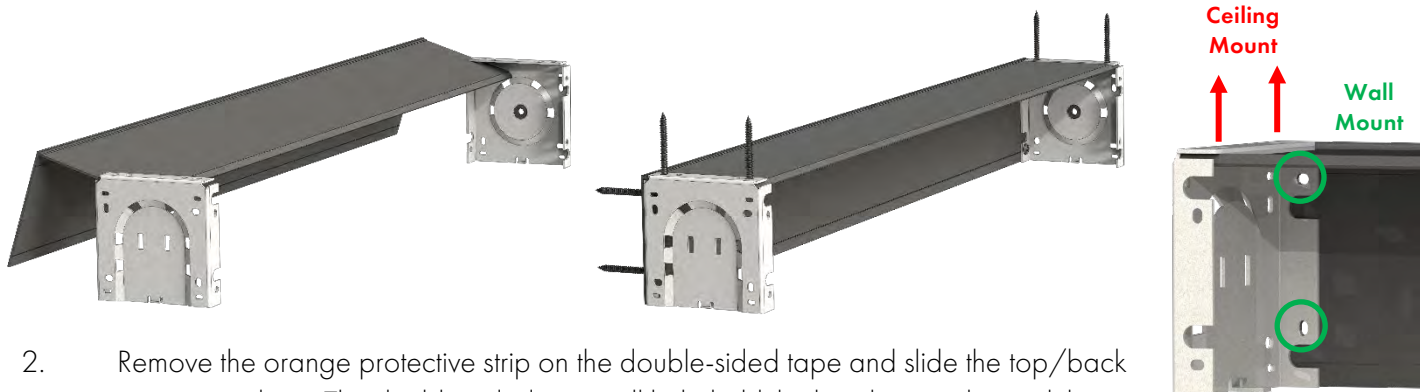
2. Remove the orange protective strip on the double-sided tape and slide the top/back cover into place. The double-sided tape will help hold the brackets in place while you mount the top/back cover and brackets. The top/back cover will be mounted with the brackets at the same mounting points.

3. Refer to Section 4.4 Shade Installation – 4" Fascia for information on shade installation.

4. Refer to Section 4.6 Fascia Installation for information on how to install the Fascia Housing.

5.2 Top/Back Cover without Fascia (Reverse Roll) Installation

Top/Back
Cover Housing

Top/Back
Cover Screws
(x2)

Motor
Bracket

Idler
Bracket

Plastic End
Caps (x2)

Spring Loaded
Idler

Battery
Motor

Fabric Panel
&
Roller Tube
(can be reverse or regular roll)
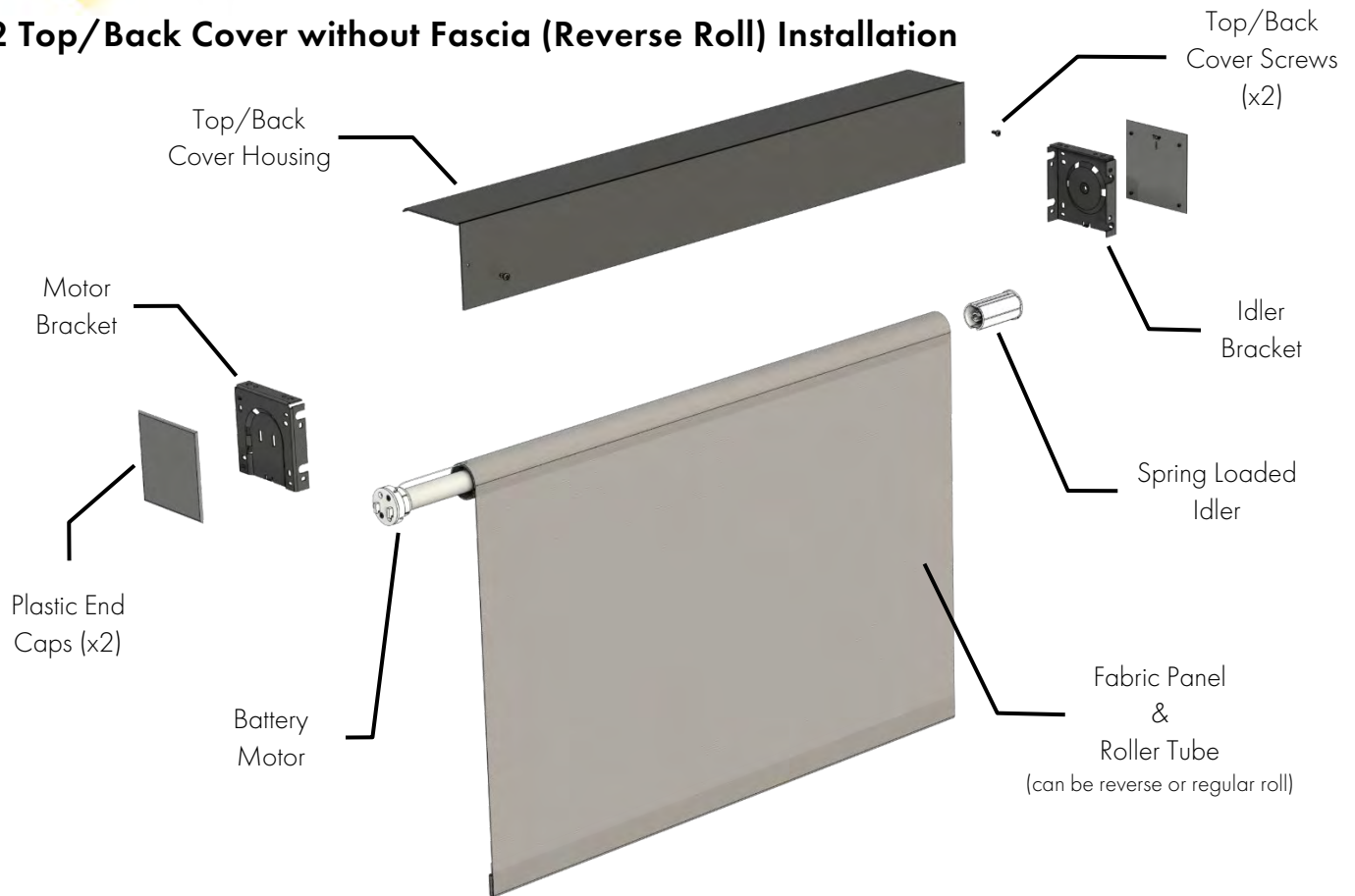
1. Refer to Sections *4.1 Fascia Bracket Options & 4.4 Shade Installation – 4″ Fascia* for information on mounting the brackets and installing the shade. Note: the shade can be installed as either reverse or regular roll.

2. Fascia will not be used in this application, instead the top/back cover will be used as the front exposed housing. Remove the double-sided tape protective covering and slide the top/back cover into the brackets as shown. The tape will temporarily hold the front cover in place for the next step.

3. This application requires a screw through the front of the top/back cover to keep it secured. Pre-drill a 1/8″ hole through the front of the cover into flange on the brackets. Attach with provided #8 x 3/8″ pan head screw.

6.0 Dual Shade Bracket

Battery
Motors (x2)

Motor/Idler
Bracket
(x2)

Spring Loaded
Idlers (x2)

Back Shade
Fabric Panel
&
Roller Tube
(usually blackout fabric)

Front Shade
Fabric Panel
&
Roller Tube
(usually translucent fabric)
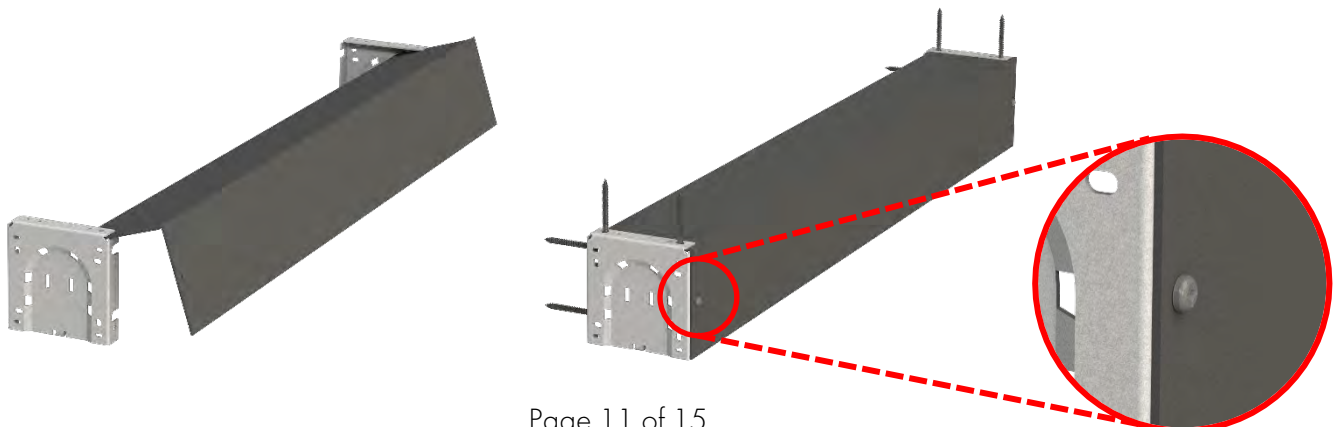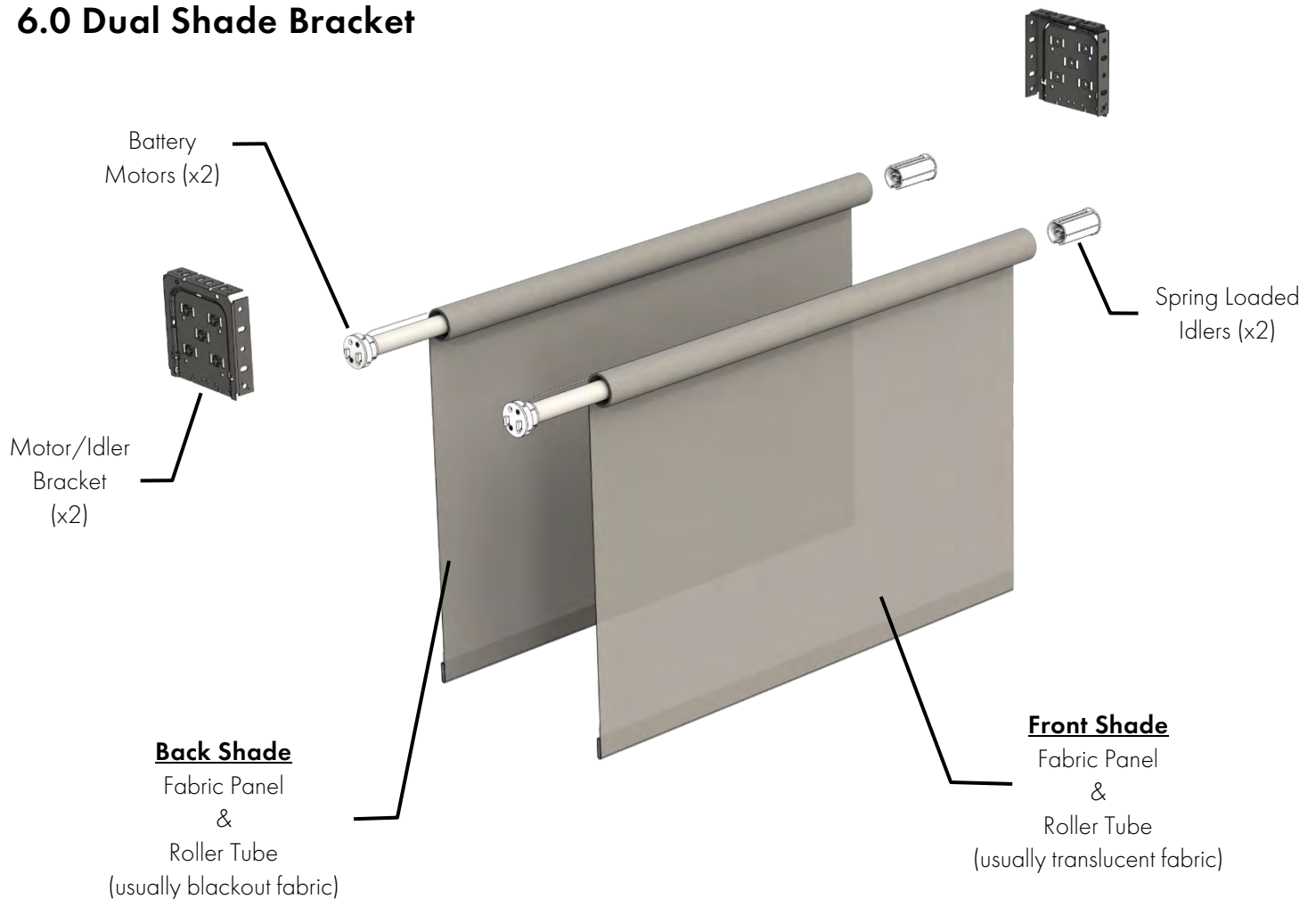
6.1 Dual Shade Mounting Bracket Options

Dual shades are offered as an exposed system (for existing pocket applications), with 6" Valance, 5 1/2" Pocket and Flap and Hanger

If you are using any of the housing options refer to Section 7.0 Optional Hardware for instructions on how to properly install the housing for your application.

Bracket Location and Mounting

Mark the location of the brackets noting that the bracket-to-bracket width equals shade width. For proper shade operation, brackets must be mounted perfectly level.

6.2 Shade Installation

1. Install the back shade (usually a blackout or darker fabric) by carefully inserting the idler pin into the top-back bracket bushing.

2. Compress the idler so the motor head mounting plate bypasses the bracket. Align the motor head adapter lugs to fit into the rectangular slots in the bracket. Push down on the motor head adapter to ensure the lugs are fully seated in the slots.

Back Shade First (usually blackout)

Ensure Lugs Are Fully Seated
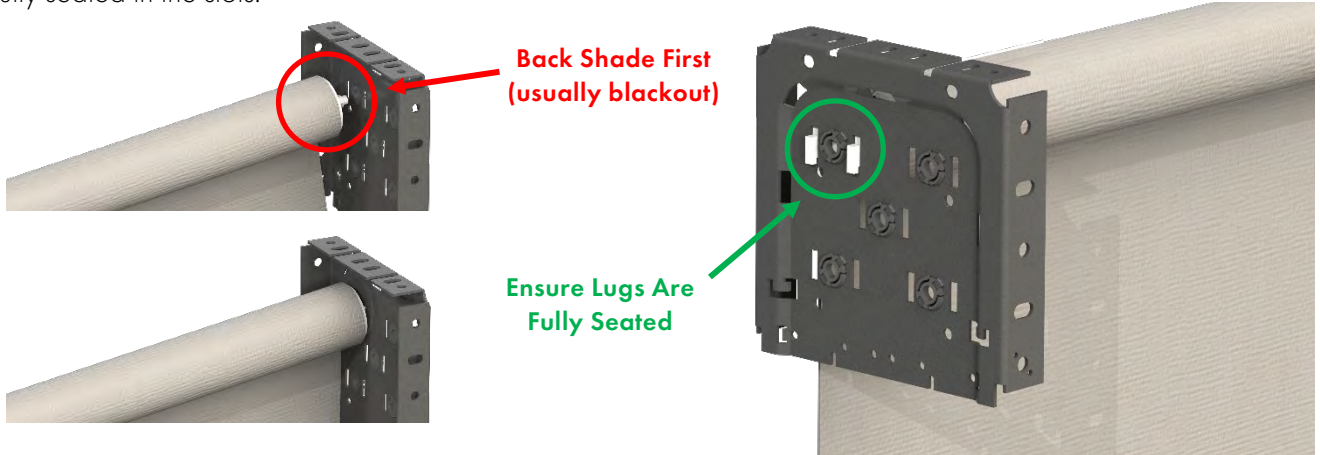
3. Install the front shade (usually a translucent or lighter fabric) by carefully inserting the idler pin into the bottom-front bracket bushing.

4. Compress the idler so the motor head mounting plate bypasses the bracket. Align the motor head adapter lugs to fit into the rectangular slots in the bracket. Push down on the motor head adapter to ensure the lugs are fully seated in the slots.

Front Shade Second (usually translucent)

Ensure Lugs Are Fully Seated
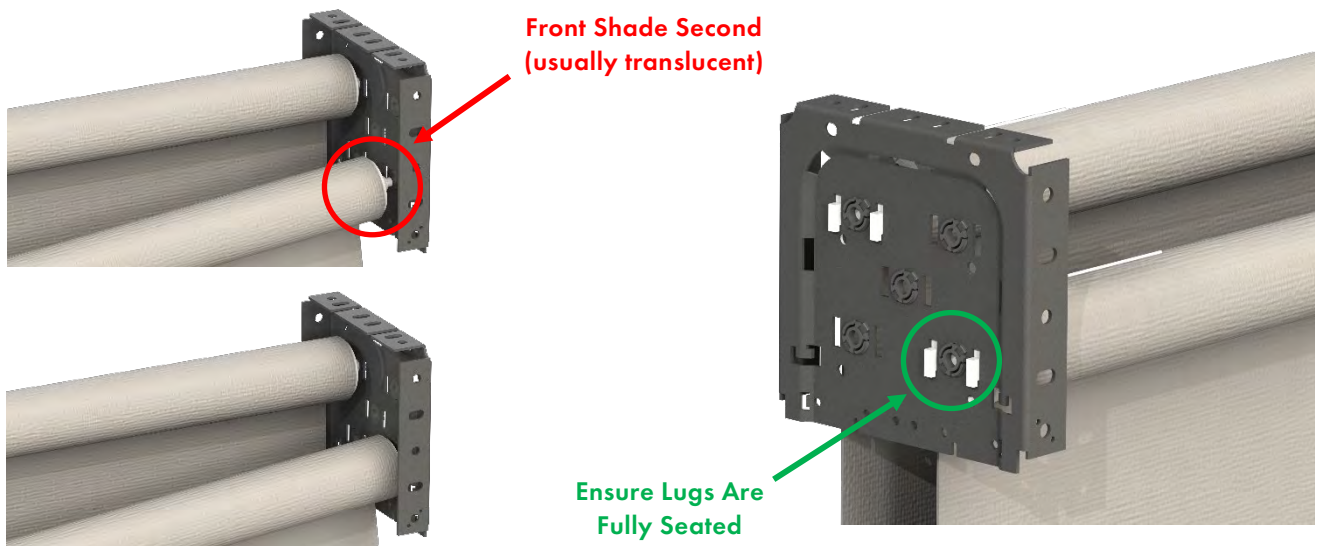
6.3 Shade Removal

Remove the shade from the motor bracket by lifting the motor head so the adapter lugs are not fully seated. Move the shade toward the idler to compress the idler enough so that the motor head adapter lugs can swing by the motor bracket. Remove the idler pin from the idler bracket.
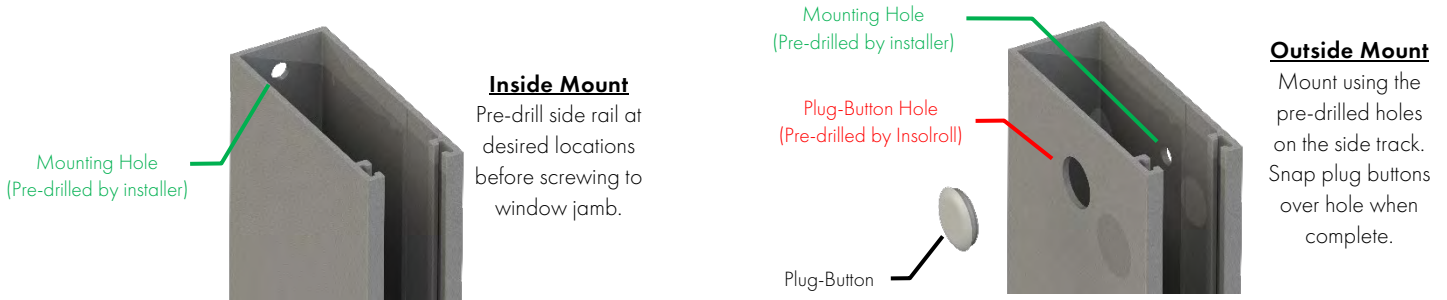
7.0 Optional Hardware

7.1 Sidetrack

1. Sidetrack system should be installed after the shade has been installed. Mount the sidetracks first. Determine the placement and verify the length of the sidetracks. The sidetracks should sit flush with the outside of the bracket (or end cap if applicable). Pre-drill the sidetrack based on your application.

Mounting Hole
(Pre-drilled by installer)

Inside Mount
Pre-drill side rail at desired locations before screwing to window jamb.

Mounting Hole
(Pre-drilled by installer)

Plug-Button Hole
(Pre-drilled by Insolroll)

Plug-Button

Outside Mount
Mount using the pre-drilled holes on the side track. Snap plug buttons over hole when complete.

2. Mount the sidetracks and use a level to verify they are mounted vertical.

3. Once the sidetracks are mounted, the bottom sill can be mounted. Use the sidetracks as guides to line up the bottom seal. The bottom sill should sit flush with both sidetracks. Mount the bottom seal using the same steps as the sidetracks.

7.2 6" Valance

A. Inside Mount:

1. No end plates or valance mounting brackets are included for this application. Valance is mounted independently from the shade. You will receive exposed brackets for single shade applications or dual shade brackets for dual shade applications.
    (For dual shade: A notch will be cut in the shade bracket to ensure the valance sits up against the bracket.)

2. "Dry-fit" the valance at the desired location to ensure shade clearance and proper fit for your application. Valance should sit flush with front of opening.

3. Pre-drill mounting holes in the top return of the valance (holes should be drilled in the groove of the return).

4. Place valance into opening. Secure the valance by screwing through the top of the valance into the surface.

Dual shade bracket will be notched
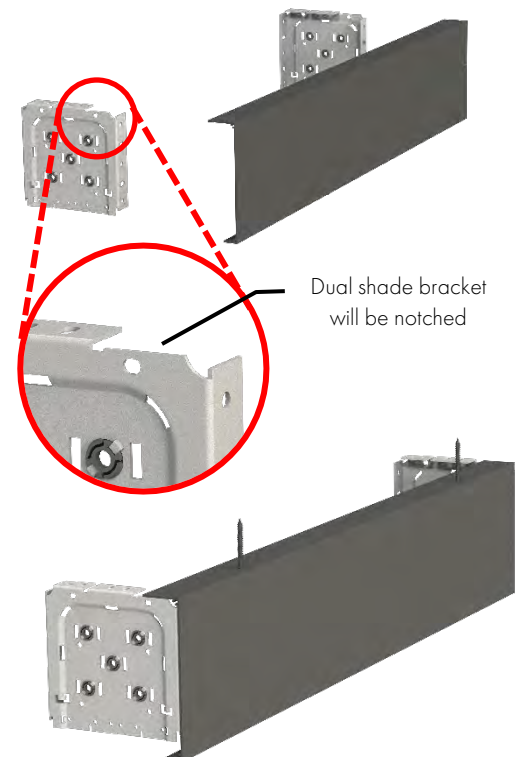
B. Outside Mount:

1. End plates are included for this application. Valance is mounted independently from the shade. You will receive exposed brackets for single shade applications or dual shade brackets for dual shade applications.

2. Secure the end plates to the valance with supplied mounting screws. "Dry-fit" the valance at the desired location to ensure shade clearance and proper fit.

3. Determine the location of the L-brackets. Recommended spacing between L-brackets is a maximum 36". Mount L-brackets.
   (Note if dual shade: the top of the L-bracket must be mounted flush with the top of the shade brackets.)

5. Dry fit valance on L-brackets to determine the pre-drill hole location. Loosen L-bracket adjustable screws as required for ease of installation. Pre-drill 3/16" holes in the top return of the valance (holes should be drilled in the groove of the return).

6. Using the supplied fasteners, secure the valance to the L-brackets. Position the valance so the end plates are flush with the mounting surface and firmly tighten the L-bracket adjustable screws.
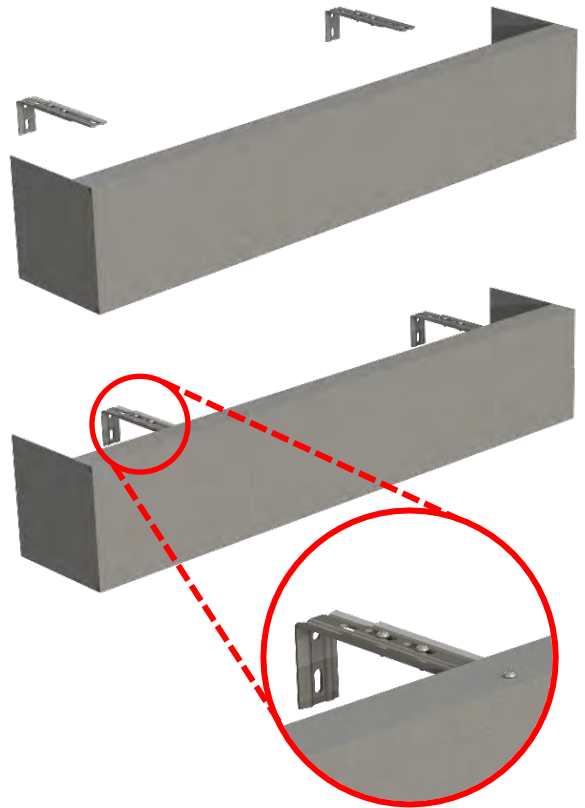
8.0 Fabric Telescope Adjustment

Fabric telescoping is excessive horizontal movement of fabric while shade rolls up on the tube. Shades are tested and fabric telescoping is adjusted prior to shipment, but additional adjustments may be required depending on each specific application.

If fabric adjustments are required, roll the shade all the way down so the tube is exposed (this will require adjustment of the lower limit using the Battery Motor Programming Instructions).

Place a piece of duct tape, 2"-4" in length, near the edge of the tube on the side opposite of the direction the fabric is moving.

Run the shade up and down a few times. If the shade still telescopes, repeat the process. The correct amount of tape can only be determined by trial and error. Re-set the lower limit after completing shade adjustments.