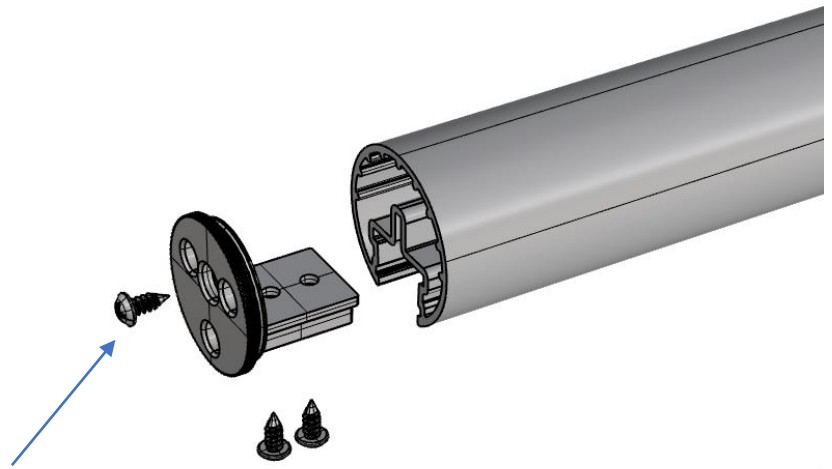


Sprocketlock™ Connectors

Channelgrip Connector installation

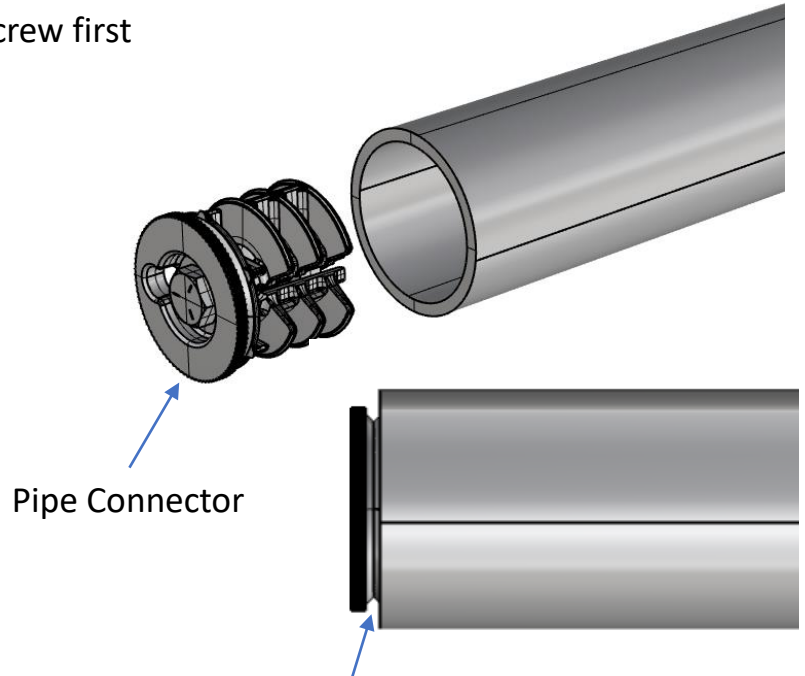
- Insert Channelgrip connector into handrail tubing.
- Install single longitudinal setscrew first and tighten securely.
- Install two side-by-side setscrews and tighten securely.



Install this screw first

Pipe Connector installation

- Insert Pipe Connector into Schedule 40 pipe and tap in place until V-groove is just protruding.
- A T-bracket may be used as an insertion tool and guide.
- Tighten bolt on Pipe Connector with a socket wrench as firmly as you can.



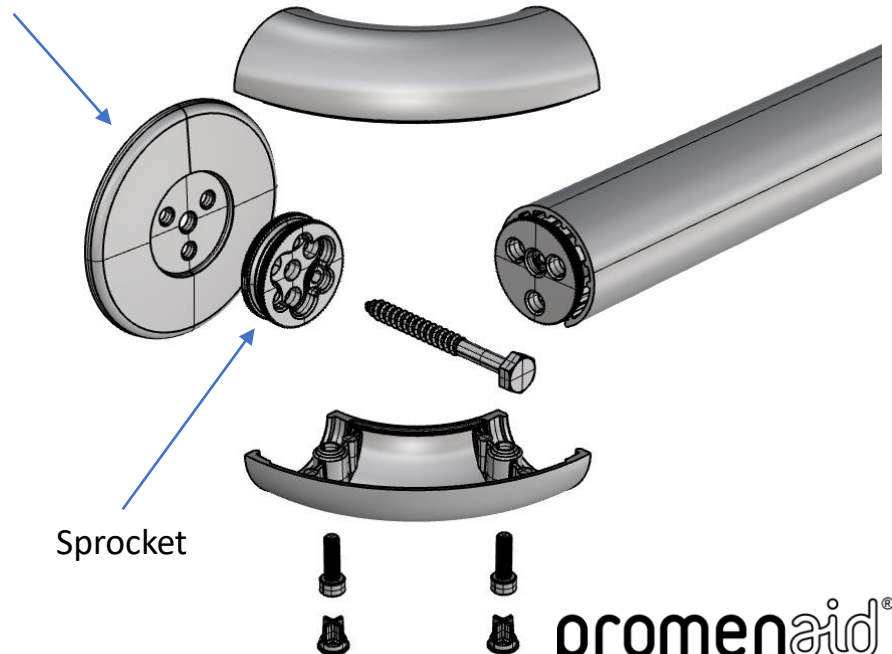
Pipe Connector

V-groove

Optional Rosette

Wall Connection installation

- Install all components temporarily to determine Sprocket location.
- Attach Sprocket to wall with 1/4" bolt or equivalent.
- Optional – Install Rosette between Sprocket and wall.
- Clamp two halves of 90-degree bend together with socket screws. The screws should thread easily.
- When ALL components are in place and all screws are tightened, install hole plugs.



Sprocket

Sprocketlock™ Bends

Single Bend installation

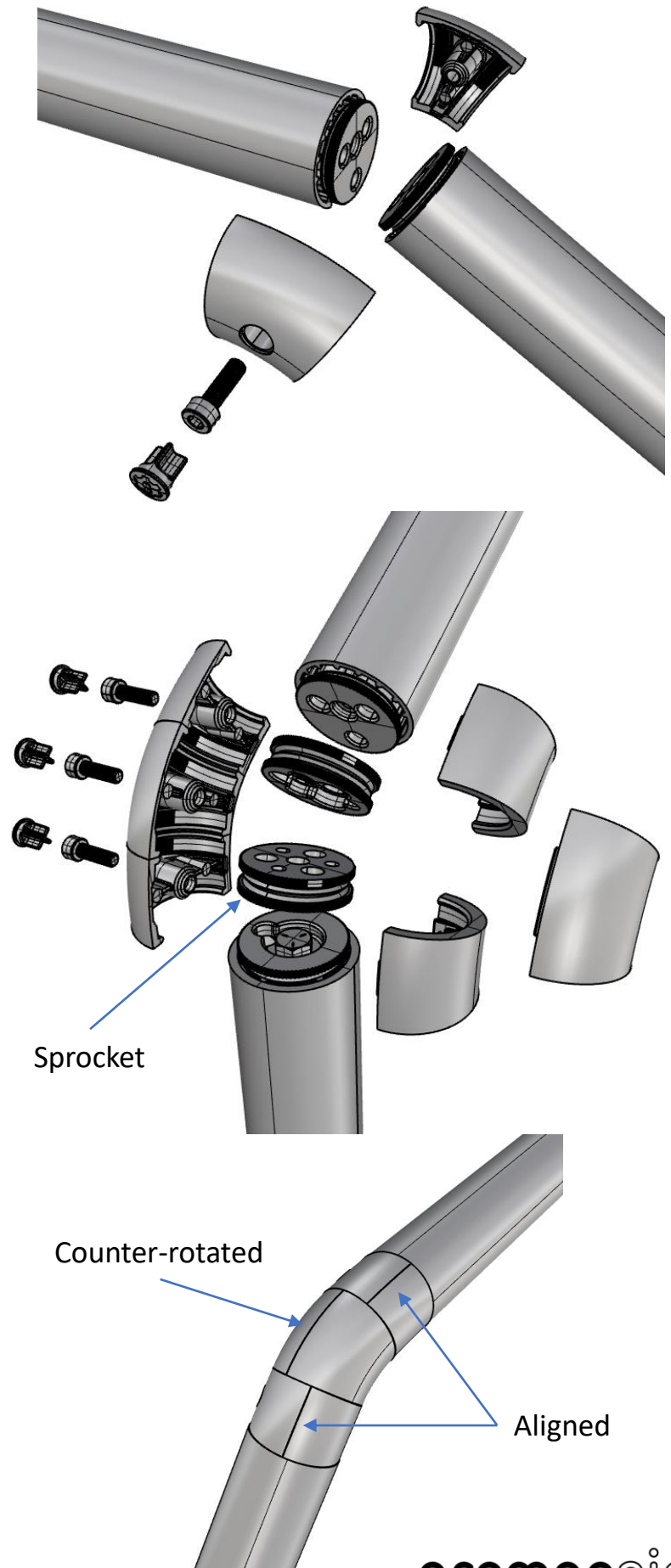
- First install Channelgrip Connectors or Pipe Connectors in tubing.
- Clamp two halves of bend together with socket screws. The screws should thread easily.
- When ALL components are in place and all screws are tightened, install hole plugs.

Multiple Bend installation

- Combine bends to produce desired angle.
- Join bends together with Sprockets, making sure that Sprocket V-grooves align equally with both bends.
- Clamp halves of bends together with socket screws.
- When ALL components are in place and all screws are tightened, install hole plugs.

Adjustable Bend installation

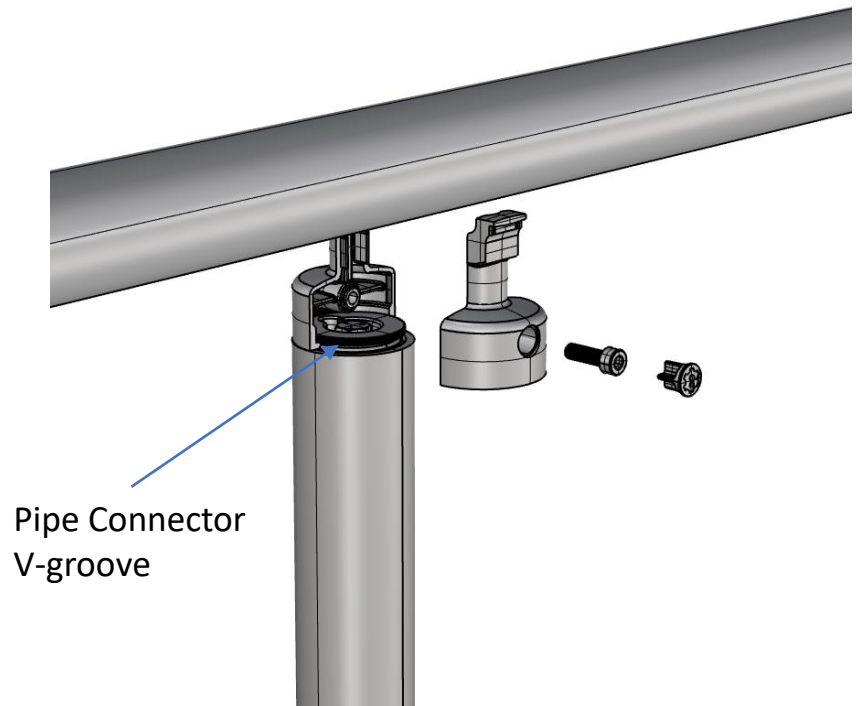
- If you cannot achieve the desired angle with a simple combination of bends, use three bends together to create an adjustable joint.
- **IMPORTANT** – the two outer bends must be identical.
- Assemble the three bends but do not fully tighten the socket screws.
- Keeping the two outer bends aligned and immobile, rotate the middle bend to add or subtract its angle from the sum of the angles of the outer bends.
- When the desired angle is achieved, rotate the entire assembly in the opposite direction until it aligns with the railing tubes.
- Tighten the socket screws completely, ensuring that the two outer bends are still aligned with each other.



Sprocketlock™ Posts

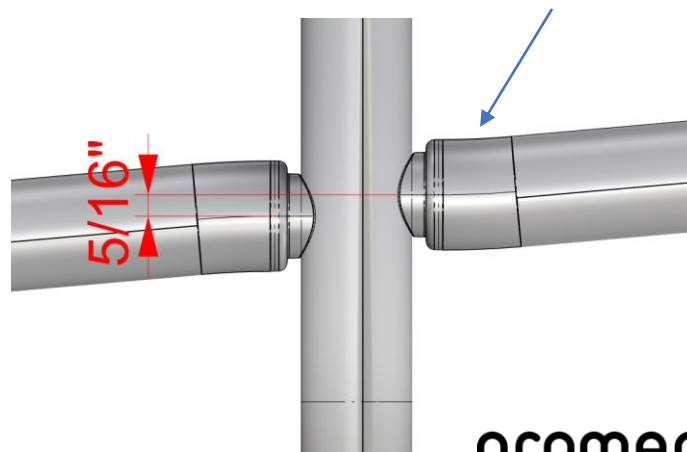
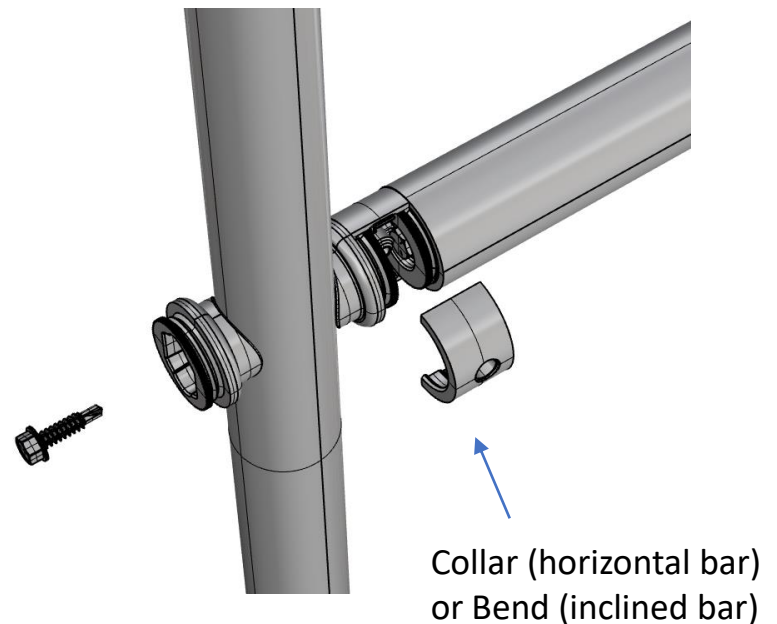
Post and T-bracket installation

- Top of post tube should be 33" above ground level.
- Insert Pipe Connector and tap in place until V-groove is just protruding. The T-bracket may be used as an insertion tool and guide.
- Tighten bolt on Pipe Connector with a socket wrench as firmly as you can.
- Position one half of T-bracket on Pipe Connector and inside handrail channel.
- Pivot second half of T-bracket into place in channel and on connector.
- Squeeze halves of T-bracket together and install socket screw. The screw should thread easily.
- When job is complete and all screws are fully tightened, insert plastic plugs.



Cross-bar installation

- Attach T-connectors to pipe at desired height* using 1/4" self-drilling screws.
- To attach T-connector to cross-bar, use Collar (horizontal bar), 5-degree Bend (inclined bar on ramp), or 32-degree Bend (standard stairs).
- Install Collars or Bends temporarily to measure and cut cross-bars.
- Insert Pipe Connector in cross-bar and tap in place until V-groove is just protruding. The T-bracket may be used as an insertion tool and guide.
- Tighten bolt on Pipe Connector with a socket wrench as firmly as you can.
- Install Collars or Bends permanently with socket screws.
- When job is complete and all screws are fully tightened, insert plastic plugs.



*Important

- For angled cross-bars on ramps or stairs, offset heights of opposing T-connectors.
- Ramps – offset lower T-connector 5/16" below upper T-connector.
- 32-degree stairs – offset heights 2-7/16".