VENTUROUS
TRUCK TOPS

Modular Cap

Modular Truck Cap Installation Manual



Congratulations!
Thank you for purchasing your Venturous Truck Tops Modular Truck Cap.

The Modular Cap system is designed for easy installation, allowing you to assemble a full-featured truck cap using basic hand tools. Please read these instructions completely before beginning installation.

Parts Included in Boxes:

Box 1 Contains:

- Qty 5 - PolyFuse Black Panels
  - Qty 1 – Hinged roof panel
  - Qty 1 – Drivers side panel
  - Qty 1 – Passengers side panel
  - Qty 1 – Front panel
  - Qty 1 – Rear panel with door

Each side panel frame piece also comes w/ qty 5 1/4-20x1/2” pan head hex socket drive machine screws (black) and qty 5 1/4-20 serrated flange nuts (black)

Box 2 Contains:

- Qty 2 – Preassembled frame pieces with logos, seal tape, MOLLE panel brackets, including ball studs for props and top side roof support (MOLLE panels sold separately)
- Qty 1 – Rear cross member with brake light and roof support – marked with an R
- Qty 1 – Middle cross member with roof support – marked with an M
- Qty 1 – Front cross member with roof support – marked with an L
- Qty 4 – Linear roof supports
- Hardware Bag containing:
- Qty 26 – Black stainless steel serrated flange nuts
- Qty 6 – Washer plates
- Vehicle Specific Installation Kit – with clamps and wiring harness (Applicable to complete Modular Cap retail kits only)

Tools Required

Required Tools:
- 9/16” wrench
- 7/16” wrench

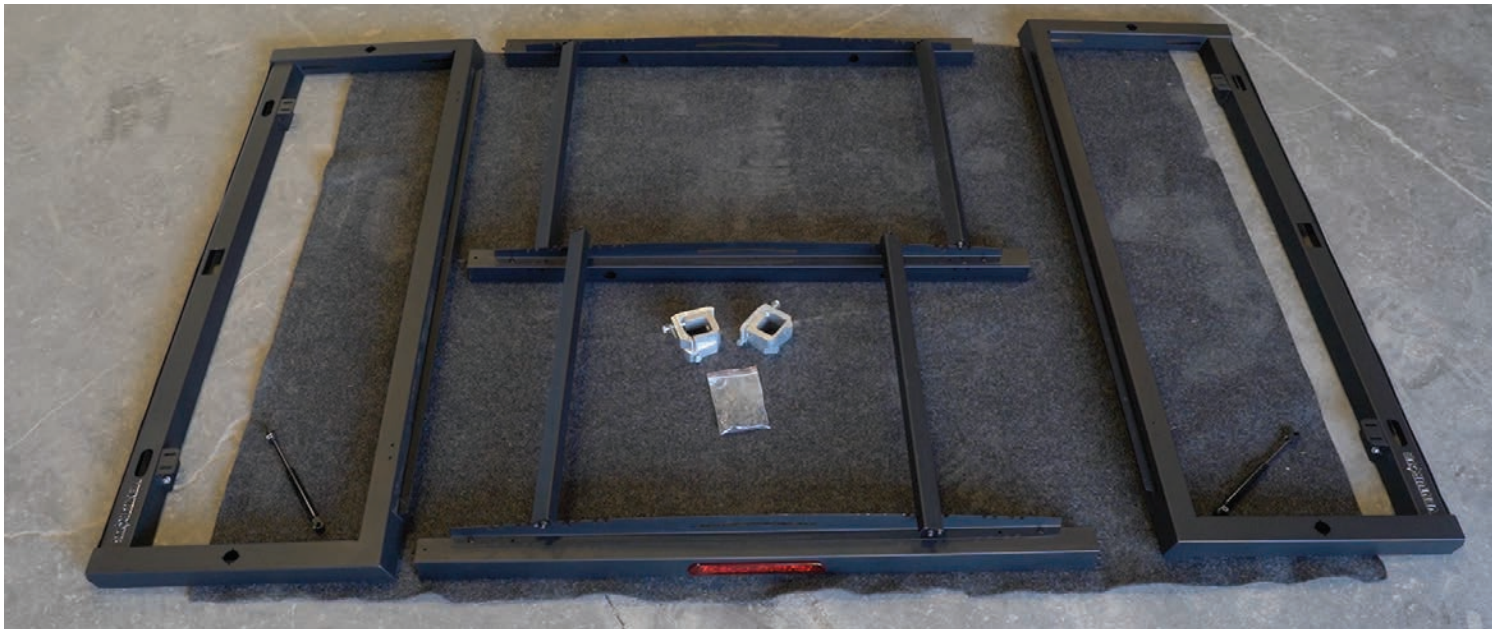
Recommended Tools:
- 9/16” socket
- Ratchet or socket wrench
- Socket adapter
- Impact wrench or cordless driver
- Stepladder (recommended for roof installation)

Before You Begin

1. Verify that all components and hardware are present.
2. Park the vehicle on a level surface and engage the parking brake.
3. Remove any cargo or accessories that may interfere with installation.
4. Read these instructions completely before beginning.

Safety Information

- Wear safety glasses during installation.
- Use caution when handling large panels to avoid injury or damage.
- Do not overtighten hardware.
- Verify all latches are fully engaged before operating the vehicle.
- Inspect the completed installation before driving.



Step 1 – Unpack and Organize Components

Carefully unpack the Modular Cap frame kit and verify that all components are present.

Lay all frame components inside the truck bed for easy access.

The frame kit consists of:
- Two (2) side frame assemblies
- Three (3) crossmembers
- Four (4) linear roof supports

Inspect all components for shipping damage before proceeding.



Step 2 – Position the Side Frame Assemblies

Position the left and right side frame assemblies against the inside walls of the truck bed.

The **Venturous** logo on each side frame must face out and toward the tailgate of the truck.

Use the front bulkhead of the truck bed as a guide and align the front edge of each side frame with the inside surface of the bulkhead.

Working from inside the truck bed, hold one side frame upright and secure it to the bed rail using two clamps positioned approximately 4 inches apart near the center of the bed rail. Clamps only included in complete Modular Cap retail kit purchases

Do not fully tighten the clamps. The frame should remain stable while still allowing enough movement to pivot and splay during assembly.

Repeat this procedure for the opposite side.





Step 3 – Install the Crossmembers

The three crossmembers are laser-marked:

- F – Front
- M – Middle
- R – Rear (with brake light assembly)

Important: The laser-marked letters must face the **driver side (DS)** of the vehicle.

Begin with the **middle (M)** crossmember.

Insert the studs into the corresponding holes near the top of each side frame.

Place a supplied washer plate over the protruding studs on the outside of the frame.

Install the supplied locking flange nuts and hand-tighten only.

Repeat this procedure for the **front (F)** and **rear (R)** crossmembers.

Once all three crossmembers have been installed, tighten all eighteen (18) locking flange nuts from outside the truck until the frame assembly is rigid.





Step 4 – Final Frame Positioning

There are 4 front to back roof supports that will install on the Modular Cap frame last.

There are 2 sets of grooves on each of the side-to-side roof supports.

These supports will lay in the grooves on the top of the side-to-side roof supports on top of the cross members.

These are angle bars that have a wide side with studs welded on and narrow side that will face down.

The down facing narrow side should always face the outside of the frame to block the view of the studs from the bottom.

There is a threaded nut on each of the long studs when you unpackage the supports.

Back off the nut until the studs can lay into the grooves.

The drivers side supports will lay in the outermost set of grooves.

The passenger side supports will lay in the innermost set of grooves.

Lay the supports in the appropriate set of grooves and tighten the nut on each end. The long stud carries the nut while the short stud is to keep the support from rotating. The short stud will not carry a nut.

These supports are 2 inches offset front to back of one another as well as spaced 2 inches different from side to side to accommodate a roof rack track that may be mounted to the roof panel to allow for the panel to still be folded up for storage and the tracks not interfere with one another.

Step 5 – Install the Wiring Harness

Before unpacking the panels, install the supplied wiring harness.

Follow the installation instructions included with the wiring harness kit for your specific vehicle.

Verify proper operation of all lighting functions before proceeding.

Step 6 – Unpack the Panels

Carefully unpack all cap panels.

Inspect each panel for shipping damage.

Place the panels on a clean, padded surface to prevent scratching during installation.



Step 7 – Install the Front Panel

Carefully lower the front panel between the truck cab and the front of the frame assembly.

Align both sides of the panel with the side frame assemblies.

Ensure the panel is fully seated against the frame.

Engage all latches until fully secured.

Verify each latch is completely engaged.



Step 8 – Install the Rear Panel

Position the rear panel against the rear of the frame.

Align both sides with the side frame assemblies.

Engage all panel latches.

Attach the stabilizer props by snapping each end onto the corresponding ball studs located on both the frame and the rear panel.

Verify both stabilizer props are fully seated.



Step 9 – Install the Side Panels

Install the left and right side panels individually.

Position each panel so the bottom edge rests on the truck bed.

The front and rear edges of each side panel should overlap the corresponding edges of the front and rear panels.

Align each panel evenly within the frame.

Engage all latches.

Repeat for the opposite side.

Inspect both side panels to ensure they are fully seated and evenly aligned.





Step 10 – Install the Roof Panel

Position the folded roof panel above the frame assembly.

A stepladder is recommended for this step.

Orient the roof panel with the latch side facing downward.

Carefully slide the folded roof panel onto the frame until it covers approximately one-half of the roof opening.

Once positioned, unfold the remaining half of the roof panel.

Square the roof panel with the frame and ensure it is evenly seated on all sides.

Engage all roof latches.

Verify every latch is fully engaged.

Final Inspection Checklist

Before driving, verify:

- ☐ All 18 crossmember nuts are tightened.
- ☐ Linear roof support fasteners are secure.
- ☐ All bed clamps are fully tightened.
- ☐ Frame is aligned with the front bulkhead.
- ☐ Wiring harness is installed and all lights function properly.
- ☐ Front panel is fully latched.
- ☐ Rear panel is fully latched.
- ☐ Stabilizer props are connected.
- ☐ Both side panels are fully latched.
- ☐ Roof panel is correctly aligned.
- ☐ All roof latches are securely engaged.

Your Modular Truck Cap is Ready for Use

Thank you for choosing the Venturous Truck Tops Modular Cap.

For maintenance information, replacement parts, and accessories, contact your authorized Venturous Truck Tops dealer or visit our website.

Venturous® Truck Tops | 800-983-2787 | DriveVenturous.com

Scan for the Venturous Truck Tops Modular Cap help page, or visit:
driveventurous.com/modular-help/