



AVAIL[®]

BALLISTIC DOOR PANELS

LEVEL III + M855/M193/MSR



INSTALLATION GUIDE

for front driver and
passenger-side doors

As shown on
DODGE[®] DURANGO
(2011 & Newer Models)

DODGE



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INTRODUCTION

Congratulations on your purchase of the Angel Armor® Avail Ballistic Door Panel (Level III+) for Dodge Durango (2011 – Newer Models)! It's our honor to provide advanced protection to those who put their lives on the line in the name of law and order.

Your vehicle will soon be upfitted with the finest ballistic technology available. With optimized coverage area, a seamless design and powerful protection from NIJ Level III rifle threats, Avail elevates vehicle protection to a higher level.

Product Description



▲ Figure 1. Angel Armor Avail Ballistic Door Panel (Level III+) for Dodge Durango 2011 - Newer Models)

The Avail Level III+ armor panel is made of a premium steel plate packed with superior protective capabilities. This high-strength solution features discreet, seamless coverage in a single-piece design and a weatherproof coating to help resist environmental wear and corrosion. The alloy steel crash bar brackets

and door mounting bracket secure the armor in place to help prevent rattling and shifting within the door and a nylon check strap is included to preserve door functionality and hinder over-extension.

When fully installed, the complete Avail Level III+ ballistic armor package gives officers the ability to use their door as a tactical shield against rifle-round threats without compromising the integrity/functionality of the vehicle door.

Avail exceeds NIJ Level III Standard 0108.01 protocol for multi-round protection and offers a five-year express limited warranty.

Installation Overview

The ballistic door panel installation shown in this guide was performed on the front passenger-side door of the Dodge Durango (2011 - Newer Models). The installation process is the same for front driver-side doors of the Dodge Durango (2011 - Newer Models).

Avail Level III+ armor features a simple installation starting with applying the door hinge check strap. Door disassembly is required to install the crash bar brackets and door mounting bracket. Once this is completed, the armor is secured in place and the vehicle door panel is reassembled. Installation takes approximately 2 - 3 hours per vehicle door.



Watch an installation in action at angelarmor.com.



Warnings and Cautions

Please adhere to the following guidelines to prevent personal injury, equipment damage and unnecessary difficulty during installation.



DISCONNECT THE VEHICLE BATTERY AFTER THE WINDOW IS ADJUSTED FOR REMOVAL/ INSTALLATION TO AVOID ACCIDENTAL AIRBAG DEPLOYMENT. ACCIDENTAL DEPLOYMENT OF THE AIRBAG MAY CAUSE SERIOUS PERSONAL INJURY.

-  Read this guide in its entirety before beginning installation.
-  Wear appropriate protective gear, including eye, hand and foot protection.
-  Use extreme caution when transporting the ballistic door panel. The armor panel is very heavy and impact may result in serious injury.
-  To avoid muscle strain or back injury, use lifting aids and proper lifting techniques when transporting the ballistic door panel.
-  Avoid excessive force when inserting the armor into the car door. Excessive force may damage the weatherstripping or scratch finished surfaces.
-  Avoid puncturing speakers with screws, push-snaps, fasteners or other sharp pieces during door disassembly, panel insertion and door re-assembly.



Do not drop screws or other assembly components inside the door, as they may be difficult to retrieve. If possible, use magnetic tools during installation.



Use only plastic trim removal/prying tools on finished surfaces to help prevent scratching.



Discard and replace any door components that are inadvertently damaged during the installation process. Proper installation according to the instructions in this guide should not cause damage to any vehicle or window armor parts or components.



Use caution when removing parts that may have sharp edges, such as the outer window weatherstrip.

Legal Statements

See Warranty and Terms and Conditions for important legal information on angelarmor.com. These instructions are provided for your convenience only, and Angel Armor expressly disclaims any liability for any damage to personal property or personal injury that occurs as a result of either installation or removal of panels.



PARTS & TOOLS LIST

This section lists the parts included in the installation kit and the tools recommended for installation. Installation kit contents are for one door panel.

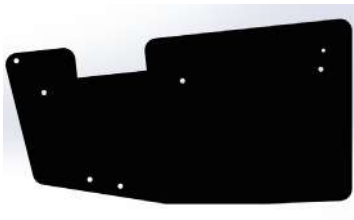
Installation Kit Contents

- One Upper Avail Ballistic Door Panel (Level III+) for Dodge Durango (2011 - Newer Models)



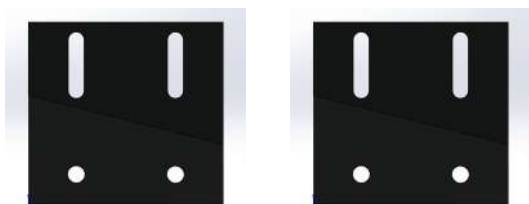
▲ Figure 2. Avail Ballistic Door Upper Panel for Dodge Durango

- One Lower Avail Ballistic Door Panel (Level III+)



▲ Figure 3. Avail Ballistic Door Lower Panel for Dodge Durango (driver side part shown)

- Two Avail Top Bracket



▲ Figure 4. Render of Two Top Bracket

- One Avail Crash Bar Bracket (part 1)



▲ Figure 5. Render of Crash Bar Bracket (part 1)

- One Avail Crash Bar Bracket (part 2)



▲ Figure 6. Render of Crash Bar Bracket (part 2)

- One Avail Bottom Bracket



▲ Figure 7. Render of Bottom Bracket

- One Avail Rear Middle Bracket



▲ Figure 8. Render of Rear Middle Bracket

- Four Avail Pill Box Washers



▲ Figure 9. Render of Pill Box Washers

- One Avail Check Strap



▲ Figure 10. Render of Checkstrap

- Two Avail Nylon Installation Strap



▲ Figure 11. Two Nylon Installation Straps

- Eighteen 25mm M8 Bolts and Washers



▲ Figure 12. 25mm M8 Bolts and Washers

- Two 20mm M6 Bolts



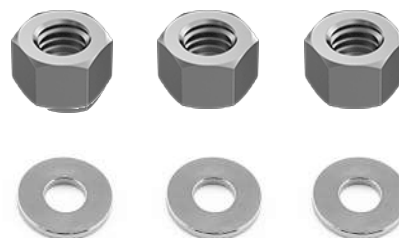
▲ Figure 13. 20mm M6 Bolts

- One 40mm M6 Bolt



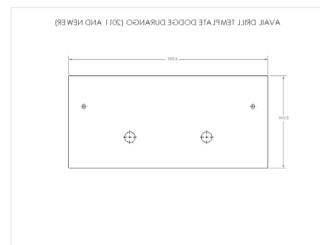
▲ Figure 14. 40mm M6 Bolt

- Three M6 Nuts and Washers



▲ Figure 15. M6 Nuts and Washers

- Drill Template Appendix A



▲ Figure 16. Drill Template Appendix A (appended to the end of this guide)

- One Isopropyl Alcohol Wipe



▲ Figure 17. Isopropyl Alcohol Wipe

- One Brand Label



▲ Figure 18. Angel Armor Brand Label



Personal Protective Equipment

- Protective Gloves
- Protective Eye wear
- Steel-Toe Boots

Required Tools

- Torx T-20 Screwdriver
- Torx T-27 Screwdriver
- 13mm Box End Wrench
- Needle Nose Pliers
- 10mm Socket
- 10mm Box End Wrench
- 7mm Socket
- 9mm (or 11/32") Drill Bit
- Drill
- Trim Removal Tool
- Electrical Tape
- Isopropyl Alcohol Wipe
- Marker

Recommended Tools

- De-burring Tool
- Touch-up Paint
- Magnetic Retrieval Tool
- Headlamp or Flashlight



INSTALLATION

This section provides instructions for installing Angel Armor Avail Ballistic Door Panels (Level III+) into the Dodge Durango (2011 - Newer Models.)

Overview

Installation of the Angel Armor Avail Ballistic Door Panel (Level III+) into a Dodge Durango is simple. Door disassembly is required to install the check strap, crash bar brackets, and armor mounting brackets. Once this is completed, the armor is secured in place and the vehicle door panel is quickly reassembled. See page 9 for detailed instructions.

General Installation Procedure

- 1** Install the Check Strap.
- 2** Remove weather strip, vehicle door panel, window and window regulator.
- 3** Install the Upper Mounting Bracket.
- 4** Install Crash Bar Bracket and Lower Bracket.
- 5** Insert the Avail ballistic panel.
- 6** Secure the Avail ballistic panel by installing Door Upper and Lower Mounting Brackets
- 7** Re-assemble the door.

Important Notes

- The directions, photographs and illustrations in this guide depict an installation performed on the driver side. The same installation procedure applies to the passenger door.
- Note the location of screws, fasteners, wires and door components before disassembling to aid proper re-assembly after panel installation.
- Place all removed hardware and components in a safe place or magnetic tray during installation.
- The Avail Level III+ armor panel is made of a premium steel plate. This protective material is heavy and extra caution should be taken when transporting, handling and installing the armor.
- Firm pressure may be needed to clear minor obstructions during insertion of the ballistic panels but never use excessive force. Excessive force may damage internal door components.

- ⚠ Use extreme caution when transporting the ballistic door panel. The armor panel is very heavy and impact may result in serious injury.**
- ⚠ To avoid muscle strain or back injury, use lifting aids and proper lifting techniques when transporting the ballistic door panel.**
- ⚠ Wear appropriate protective gear, including eye, hand and foot protection. Protective gloves are highly recommended when handling the steel armor.**



PROCEDURE

Complete the following steps to properly install Angel Armor Avail Ballistic Door Panels (Level III+) for Dodge Durango (2011 - Newer Models).

Preparing for Ballistic Door Panel Installation

- 1 Open the front driver-side door and lower the window glass completely.
- 2 Turn off the vehicle ignition switch, and remove the key.

Installing the Check Strap

- 1 While supporting the weight of the vehicle door, use a 13mm socket wrench to remove bottom bolts on door and body side of the upper door hinge. (An automotive door lift stand is recommended for door support during removal and installation.)
- 2 Pre-bend the check strap, mount the check strap on the bottom bolts of the upper hinge before replacing the bolts. Tighten to OEM specifications.



▲ Figure 19. Mounted check strap (photo taken from bottom view to better show strap placement)

- 3 After the check strap is installed, push the strap in while slowly closing the door. This inward motion creates a memory for the strap, allowing the door to close in the same manner.

Removing the Window Weather Strip

- 1 Using Torx T-20 screwdriver, remove the outer window weatherstrip screw at the rear end of the window frame.
- 2 Pull up the back end of the outer window weatherstrip to remove it completely
- 3 Locate the indent on the front bottom edge on the door handle trim panel. Insert a flat head screwdriver and pry to remove. Pull straight out, and the handle panel should pivot off from the rear edge.

Removing Vehicle Door Panel

- 1 Using a trim removal tool, remove the trim cover behind the door handle.
- 2 Remove the 10mm bolt from behind the handle.



▲ Figure 20. Removing 10mm bolt



Removing Vehicle Door Panel CONTINUED

- 3** Using a trim removal tool, lift the trim cover in the armrest.
- 4** Remove the 7mm screw in the armrest.



▲ Figure 21. Removing 7mm screw

- 5** Slowly pull the trim panel away from the door, using a trim tool to pop out the door clips.
- 6** Disconnect cables and wiring behind the door trim.
- 7** Once the trim panel is removed, use a Torx T-20 screwdriver to remove the speaker.



▲ Figure 22. Removing speaker using a torx T-20 screwdriver

Removing Vehicle Window

- 1** Reconnect the window controls on the door trim and turn the key to accessory mode.
- 2** Align the window regulator so it can be manipulated through the speaker hole.
- 3** Pull up on the window while applying pressure to the window regulator until it releases upwards.
- 4** Repeat this process with the front regulator looking through the viewing hatch.
- 5** Remove the window from the door by rotating it vertically and pulling upwards.
- 6** Remove key and unhook window controls.

Removing The Window Regulator

- 1** Using a 10mm Socket, remove the bolts around the regulator panel.



▲ Figure 23. Removing bolts around regulator panel. (yellow circle indicates sockets, red circle indicates torx)

- 2** Using a Torx T-27 screwdriver, turn the 3 panel clips counterclockwise to release the regulator panel.



Removing The Window Regulator CONTINUED

- 3** Using a Torx T-27 screwdriver, remove the screws from the striker housing at the rear of the door.



▲ Figure 24. Removing screws from striker housing at the rear of the door

- 4** Using a 7mm Socket, remove the screws from the wire harness mount at the front of the door.



▲ Figure 25. Removing screws from the wire harness mount

- 5** Remove the regulator panel by twisting the bottom towards your body slightly. Use caution during this as the striker housing is connected to the regulator panel by a plastic arm.

Preparing Door For Installation

- 1** Place the drill guide on the door seal rivets (Drill Guide in Appendix A). Drill out with 9mm (or 11/32") drill bit.



▲ Figure 24. Using drill guide to drill out with 9mm bit

- 2** Remove the 3 electrical clips from the lower crash bar inside the door.



▲ Figure 25. Removing electrical clips from the lower crash bar



Installing Vehicle Armor

- 1 Using a 25mm M8 bolt, connect both portions of the Crash Bar Bracket (Part 1 and Part 2).



▲ Figure 26. Connected Crash Bar Bracket

- 2 Install the brackets into the crash bar using two of the 20mm M6 bolts through the Crash Bar Bracket Part 2 and align it with the holes that the electrical clips were in.

NOTE: The hole in the front of the Crash Bar Bracket Part 1 will remain empty for this step.

- 3 Loosely install the bottom bracket, through the drilled holes, with the long side resting on the bottom door skin.
- 4 Insert the lower armor into the door and rest at the bottom of the cavity.
- 5 Place the nylon install straps onto the door.

- 6 Place two of the Pill Box Washers onto the back of the upper door armor using electrical tape, aligning them with the holes in the upper portion of the armor.



▲ Figure 27. Placing Pill Box Washers on back of the door using electrical tape

- 7 Drop the upper armor into the door cavity using the nylon install strap.
- 8 Once the Upper Armor is lowered about halfway into the door, install the Rear Middle Bracket attaching it to the Upper Armor while making sure it stays perpendicular to the bottom edge of the armor.



▲ Figure 28. Lowering Upper Armor halfway into the door



Installing Vehicle Armor CONTINUED



▲ Figure 29. Rear Middle Bracket installed

- 9** Loosely secure the Lower Armor to the Crash Bar Bracket and the Bottom Bracket.
- 10** Align the Upper Armor, Lower Armor, and the Crash Bar Bracket so that the 40mm M6 can be fastened through all 3 brackets and the crash bar itself.



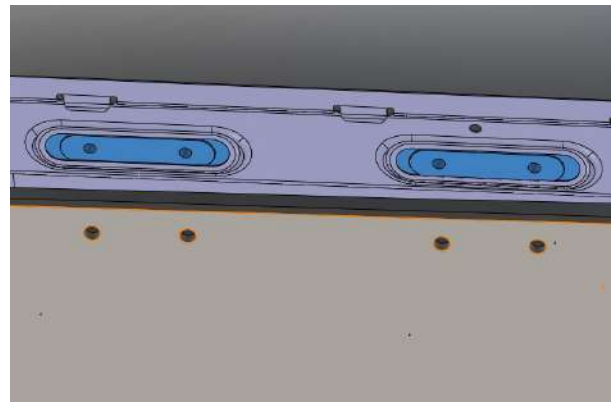
▲ Figure 30. Aligning Upper Armor, Lower Armor, and Crash Bar Bracket

- 11** Secure the Rear Middle Bracket to the Lower Armor.
- 12** Remove the nylon straps.
- 13** Using one bolt, loosely attach one Pill Box Washer to the back of a Top Bracket.



▲ Figure 31. Attaching one Pill Box Washer to the back of a Top Bracket

- 14** Slide the Pill Box Bracket into the pill shaped hole in the door skin.



▲ Figure 32. Correct alignment of the Pill Box Bracket and pill shaped holes. (top brackets hidden to show alignment)

- 15** Install the rest of the bolts into the Top Bracket (2 through the armor and one into the pill hole).



Installing Vehicle Armor CONTINUED

- 16** Repeat this process with the other Top Bracket and final Pill Box Washer.
- 17** Secure all brackets and bolts starting from the top and working down to the bottom.

NOTE: Torque Specs

M8 — 19ft - lbs / M6 — 9ft - lbs

- 18** Confirm Armor Position by Checking The Following.
 - The armor sits flush to the crash bar and upper crash bar.
 - The bottom mounting bracket sits flush with the armor panel and mounts tightly to the inner side of the door frame.
 - The door handle wiring harness connector sits freely and is not pinched by the upper edge of the armor panel.
 - Firmly grip the armor panel and attempt to shake – there should be no movement of the armor panel.
 - Check that all bolts are torqued appropriately.
 - 18 ft lbs for M8 hardware
 - 9 ft lbs for M6 hardware

Re-assembling The Door

- 1** Reinstall the regulator panel, window, and trim in reverse order.



Completing Installation

- 1** Verify that all trim and window components are properly re-installed and that the window, door locks and mirrors function as intended.
- 2** Once armored, the vehicle door may require additional adjustment at the hinges for proper closing and matching of body lines. Conduct final door adjustment by completing the following steps:
 - A** Gently close door to check alignment.
 - B** Loosen the door side hinge nuts.
 - C** With the help of an assistant or door lift, apply gentle upward pressure on bottom of door and move in/out at top and bottom of door as required.
 - D** Re-torque bolts, gently close the door and inspect closure/alignment.
 - E** Repeat as necessary.
- 3** Attach the Angel Armor brand label toward the top of the interior door panel by completing the following procedure:
 - A** Clean the attachment area on the door with the supplied isopropyl alcohol wipe.
 - B** Allow the door surface to dry completely.
 - C** Remove the backing from the brand label.
 - D** Apply the brand label to the door, pressing for at least 30 seconds to ensure proper adhesion.



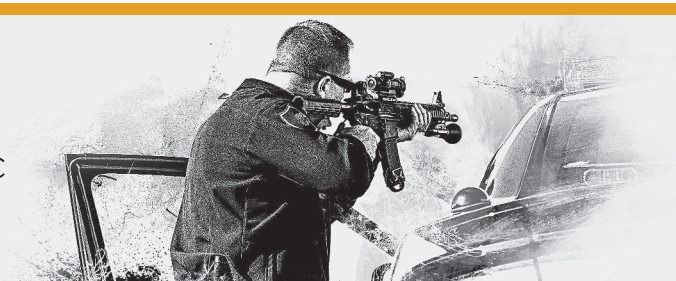
▲ Figure 33. Applying the brand label to the door

REMOVAL OR DECOMMISSION

If removing the armor for decommission or transfer to another vehicle, contact Angel Armor for support.

INSTALLATION COMPLETE:

Your vehicle is now equipped with Avail Level III+ — advanced ballistic protection from Angel Armor.



APPENDIX A: DRILL TEMPLATE

Front Door Lower Mounting Bracket Drill Template

AVAIL DRILL TEMPLATE DODGE DURANGO (2011 AND NEWER)

