



AVAIL™

BALLISTIC DOOR PANELS

NIJ LEVEL IIIA



INSTALLATION GUIDE

As shown on

**NISSAN® PATROL
FOR FRONT DOORS**
(2010 - 2016 MODELS)



COMPATIBLE WITH:

- **Nissan Armada** (2016 Models)
- **Infiniti® QX56** (2010 - 2016 Models)
- **Infiniti QX80** (2014 - 2016 Models)



angelarmor.com

970 235 2961

sales@angelarmor.com

TABLE OF CONTENTS



INTRODUCTION	3
Product Description	3
Installation Overview	3
Warnings & Cautions	4
Legal Statements	4
TOOLS & PARTS LIST	5
Recommended Tools	5
Installation Kit Contents	6
INSTALLATION	7
Procedure	7
– Preparing for Installation	7
– Removing the Vehicle Interior Door Panel	7-8
– Removing the Outer Window Weatherstrip	9-10
– Inserting the Ballistic Door Panel	10-12
– Replacing the Outer Window Weatherstrip	12
– Replacing the Vehicle Interior Door Panel and Completing Installation	13
REMOVAL OR DECOMMISSION	14

© 2016 ANGEL ARMOR, LLC. ALL RIGHTS
RESERVED. PRINTED IN THE U.S.A.

NISSAN® IS A REGISTERED TRADEMARK OF
NISSAN MOTOR CO. LTD



INTRODUCTION

Congratulations on your purchase of the Angel Armor™ Avail™ Ballistic Door Panel (Level IIIA) for Nissan Patrol (2010 – 2016) for front doors. It's our honor to provide advanced protection to those who put their lives on the line in the name of law and order.

In just a matter of minutes, your vehicle will be upfitted with the finest ballistic technology available. With innovative ballistic materials, advanced designs and the fastest installation in the industry, Angel Armor Avail Ballistic Door Panels elevate protective technology to a higher level.



▲ Figure 1. Angel Armor Avail Ballistic Door Panel (Level IIIA) for Nissan Patrol front doors

Product Description

Angel Armor Avail Ballistic Door Panels (Level IIIA) are constructed of a proprietary technology that is not only remarkably strong, but also thin, lightweight and weatherproof. These properties, plus semi-rigid material characteristics, enable unprecedented ease of installation while providing protection independently tested in accordance with NIJ Standard 0108.01 protocol. Angel Armor Avail Ballistic Door Panels (Level IIIA) for Nissan Patrol exceed NIJ Standard 0108.01 protocol for multi-round protection and offer a five-year express limited warranty. Within this period, the panels may be removed and transferred to another vehicle of the same make and model without violating the warranty.

The Ballistic Door Panel installation shown in this Installation Guide was performed on the driver-side front door of a 2016 Infiniti QX80. The installation process is the same for Nissan Patrol, Nissan Armada and Infiniti QX56 models.

Installation Overview

Angel Armor Avail Ballistic Door Panels (Level IIIA) for the Nissan Patrol require no additional brackets or fasteners, and eliminate the need to remove the window glass. Minimal door disassembly is required to remove the outer window weatherstrip. Removal of the weatherstrip is necessary to install the Ballistic Door Panel in the vehicle door.

Installation into a Nissan Patrol take as little as 10 minutes for experienced installers. The average user installation takes only 10 to 25 minutes.



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 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 and foot protection.

⚠ Avoid excessive force when inserting the Ballistic Door Panel into the car door. Excessive force may damage the panel or internal door components.

⚠ When weatherstrip is disassembled, 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 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 Ballistic Door Panel 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. 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.

TOOLS & PARTS LIST

This section lists the tools recommended for installation and the parts included in the installation kit.

Recommended Tools

■ 10mm Socket



▲ Figure 2. 10mm socket

■ Pick Tools



▲ Figure 3. Pick tools

■ Plastic Door Pry Tools



▲ Figure 4. Plastic door pry tools

Installation Kit Contents

- Angel Armor Avail Ballistic Door Panel (Level IIIA) for Nissan Patrol (2010 and Newer Models) Front Doors



▲ Figure 5. Angel Armor Avail Ballistic Door Panel (Level IIIA) for Nissan Patrol front doors

- Angel Armor Brand Label



▲ Figure 6. Angel Armor brand label

- Isopropyl Alcohol Wipe



▲ Figure 7. Isopropyl alcohol wipe

INSTALLATION

This section provides instructions for installing Angel Armor Avail Ballistic Door Panel (Level IIIA) for Nissan Patrol (2010 – 2106) for front doors.

Preparing for Installation

- 1** Lower the window glass completely.
- 2** Turn off the vehicle ignition switch, and remove the key.
- 3** **⚠️ Disconnect the vehicle battery to avoid accidental airbag deployment.**

Removing the Vehicle Interior Door Panel

- 1** Remove the rubber door stop toward the back of the interior door panel.



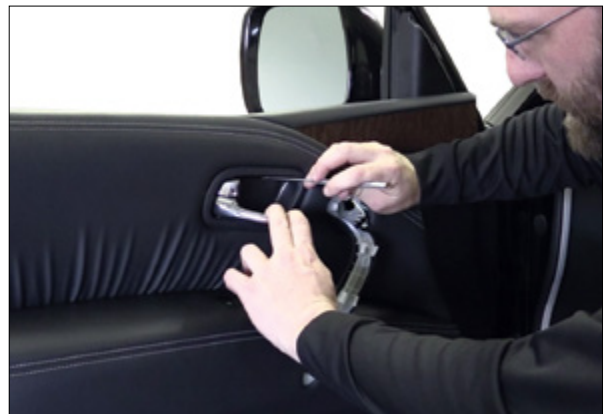
▲ Figure 8. Removing rubber door stop

- 2** Using the door pry tools, remove the door handle cover.



▲ Figure 9. Removing handle cover

- 3** Using the door pry tools, remove the trim cover from behind the door opening handle.



▲ Figure 10. Removing trim cover

Removing the Vehicle Interior Door Panel **CONTINUED**

- 4** Remove two 10mm bolts from the door handle and one 10mm bolt from the door opening handle.



▲ Figure 11. Removing 10mm bolts

- 5** Starting at the back corner, use the door pry tool to pry the interior vehicle door panel away from the door.

! NOTE: Once removed, it is okay to let the disengaged vehicle door panel temporarily hold its own weight.



▲ Figure 12. Prying door panel from door

- 6** Holding the side-view mirror in place, remove the three 10mm bolts from the side-view mirror bolt panel.



▲ Figure 13. Removing 10mm bolts from side-view mirror panel

- 7** Prop the side-view mirror up and out of the way of the weatherstrip.



▲ Figure 14. Propping side-view mirror away from weatherstrip

- 8** Partially reinstall the interior door panel so it is supported during the next steps.



▲ Figure 15. Partial reinstall of door panel

Removing the Outer Window Weatherstrip

- 1 Using the door pry tools, carefully pry up on the inner weatherstrip to create a small gap in between the weatherstrip and the window frame.



▲ Figure 16. Creating gap between weatherstrip and window frame

- 2 Insert the pick tool under the lifted weatherstrip. Slide the pick tool along the inside of the weatherstrip until you locate the small hole holding the first retaining clip, about 2 - 2 1/4" from the back of weatherstrip.



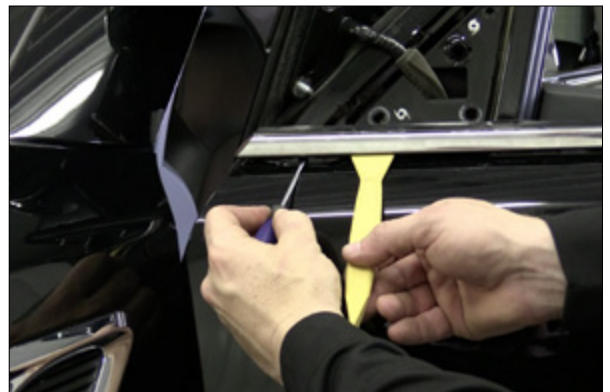
▲ Figure 17. Inserting pick tool under lifted weatherstrip

- 3 Using the pick tool, gently release the first weatherstrip retaining clip.



▲ Figure 18. Releasing first weatherstrip retaining clip

- 4 Slide the pick tool along the inside of the weatherstrip until you locate the small hole holding the second retaining clip, about 2 - 2 1/4" from the front of weatherstrip. Using the pick tool, gently release the second weatherstrip retaining clip.



▲ Figure 19. Releasing second weatherstrip retaining clip

Removing the Outer Window Weatherstrip **CONTINUED**

- 5** Carefully pull up on the front portion of the outer window weatherstrip. Gently rotate the weatherstrip out and pull up on the strip to remove it from the window frame.

! NOTE: BE CAREFUL, and DO NOT use excessive force when releasing the weatherstrip retaining clips. Excessive force will break the clips. The clips should release with ease if you follow these instructions.



▲ Figure 20. Removing weatherstrip from window frame

Inserting the Ballistic Door Panel

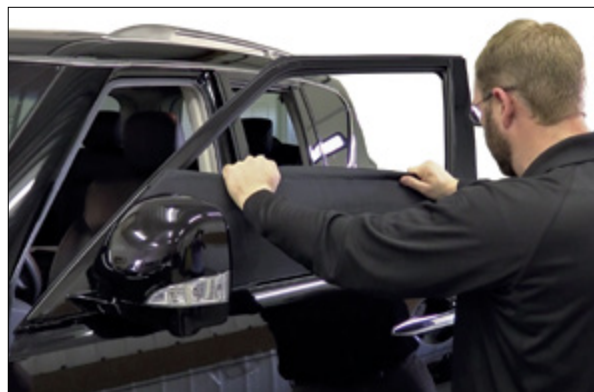
- 1** Hold the Ballistic Door Panel so that its anti-abrasion panel faces the interior of the vehicle.
- 2** Leading with the bottom edge of the Ballistic Door Panel, begin to insert the panel into the door adjacent to the outer surface of the window glass.

! NOTE: Hold the Ballistic Door Panel against the window glass as you insert to avoid obstructions inside the door. This can be achieved by lightly leaning back/pulling the panel out toward the exterior of the door.



▲ Figure 21. Inserting panel into door

- 3** Once the Ballistic Door Panel is half-way installed, grip the top of the panel and push it away from you. This ensures the bottom of the panel is against the outer door skin.



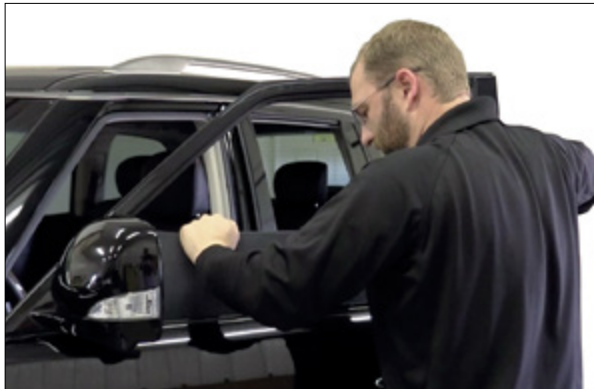
▲ Figure 22. Pulling panel toward you

Inserting the Ballistic Door Panel

CONTINUED

- 4 Using the Ballistic Door Panel, knock out the foam rubber spacers located inside of the door skin.

! NOTE: The spacers need to be knocked out so the Ballistic Door Panel can clear the entire length of the door. The foam spacers can stay inside of the door skin; they will not cause damage or create any noise.



▲ Figure 23. Knocking out foam rubber spacers

- 5 Slide the remainder of the Ballistic Door Panel down into the door, and push it down into its final location.
- 6 Once the panel is all the way down inside of the door, slide the Ballistic Door Panel forward. As you slide forward, press down on the back of the panel.



▲ Figure 24. Sliding panel forward while pushing down

- 7 Once the Ballistic Door Panel is all the way forward in the door, push down on the top of the panel with the plastic door pry tool. Repeat this step until the nylon fold at the top of the Ballistic Door Panel is in the correct location, approximately 0.44" from the edge of weatherstrip frame.



▲ Figure 25. Pushing down panel using plastic door pry tool



▲ Figure 26. Ensuring the panel is in correct location

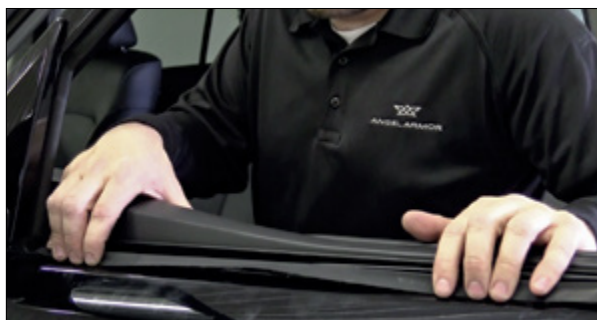
- 8 Reconnect the vehicle battery.

Inserting the Ballistic Door Panel

CONTINUED

- 9** Verify that the Ballistic Door Panel is properly positioned by confirming the following:

A. The nylon fold sits flush where the weatherstrip is installed.



▲ Figure 27. Nylon sitting flush where weatherstrip is installed

B. The Ballistic Door Panel is seated all the way forward.

C. The Ballistic Door Panel is seated behind the crash bar.

D. The window functions properly, rolling up and down with ease.

! NOTE: If excessive nylon is exposed above the door and the crease does not align with the top edge of the window frame, remove the panel and repeat steps 1 through 9 of this section. Avoid tearing the Ballistic Door Panel's weatherproof cover on the "teeth" inside of the door by pushing the panel toward the interior of the vehicle before lifting it out of the door.

Replacing the Outer Window Weatherstrip

- 1** Double-check that retaining clips on the weatherstrip are not bent too far back. If so, use the pick tool to bend them in so they will engage properly.
- 2** Starting at the back of the door, line the back of the weatherstrip up with its corresponding slot in the window frame.
- 3** Press the back edge of the outer window weatherstrip on the metal edge of the window frame, and begin to seat the weatherstrip along the window frame.



▲ Figure 28. Seating the weatherstrip

- 4** Verify that no nylon is exposed below or around the outer window weatherstrip.
- 5** Working from the back, press down to fully seat the entire length of the outer window weatherstrip onto the metal edge of the window frame.



▲ Figure 29. Pressing down to fully seat the weatherstrip

Replacing the Vehicle Interior Door Panel and Completing Installation

- 1** Replace the three 10mm side-view mirror bolts.
- 2** Align the interior door retainers on the door panel with the appropriate holes in the door.
- 3** Push firmly on each retainer area until the retainers re-engage.
- 4** Replace the two 10mm bolts from the door handle and one 10mm bolt from the door opening handle.
- 5** Replace the trim cover behind the door opening handle.
- 6** Replace the door handle cover.
- 7** Replace the rubber door stop toward the back of the door panel.

- 9** Attach the Angel Armor brand label to 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.





INSTALLATION COMPLETE:

Your vehicle is now equipped with advanced ballistic protection from Angel Armor.

REMOVAL OR DECOMMISSION

This section describes the process for removing the Ballistic Door Panel for decommission or transfer to another vehicle.

- 1** Lower the window glass completely.
- 2**  **Disconnect the vehicle battery to avoid accidental airbag deployment.**
- 3** Follow the procedure described in *Removing the Interior Vehicle Door Panel* on pages 7-8.
- 4** Follow the procedure described in *Removing the Outer Window Weatherstrip* on pages 9-10.
- 5** Align the ballistic panel with the vertical window frame, and grip the nylon fold at the top edge of the Ballistic Door Panel.
- 6** Slide the panel toward the back of the vehicle, and then pull the panel straight up to remove it from the door completely.

 **NOTE:** Avoid tearing the Ballistic Door Panel's weatherproof cover on the 'teeth' inside of the door by pushing the panel toward the back of the vehicle before lifting it out of the door.

- 7** Follow the procedure described in *Replacing the Outer Window Weatherstrip* on page 12.
- 8** Follow the procedure described in *Replacing the Interior Vehicle Door Panel* on page 13.
- 9** Reconnect the vehicle battery.
- 10** If removing the Ballistic Door Panel for transfer to another vehicle, inspect panel after removal. Contact Angel Armor with any concerns about wear or damage.