

Manuals.plus /

› Autoelements /

› Autoelements Engine Splash Shield Under Cover Front for 2009-2013 Toyota Corolla (Model TO1228148) - Installation and Maintenance Manual

Autoelements TO1228148

Autoelements Engine Splash Shield Under Cover Front for 2009-2013 Toyota Corolla

Model: TO1228148 | OEM Part Number: 5145102040

1. PRODUCT OVERVIEW

This document provides comprehensive instructions for the installation, maintenance, and troubleshooting of the Autoelements Front Engine Splash Shield Under Cover. This component is designed to protect the engine bay from road debris, water, and other elements, ensuring the longevity and proper functioning of critical engine components. It is a direct replacement part manufactured to meet original equipment specifications.



Figure 1.1: Front view of the Autoelements Engine Splash Shield Under Cover.

2. COMPATIBILITY

This Autoelements Engine Splash Shield Under Cover (Part Number TO1228148, OEM Number 5145102040) is specifically designed for the following Toyota Corolla models:

- **2009 Toyota Corolla:** Base 4 Cyl 1.8L, LE 4 Cyl 1.8L, S 4 Cyl 1.8L, CE 4 Cyl 1.8L, XLE 4 Cyl 1.8L, XRS 4 Cyl 2.4L
- **2010 Toyota Corolla:** Base 4 Cyl 1.8L, LE 4 Cyl 1.8L, S 4 Cyl 1.8L, CE 4 Cyl 1.8L, XLE 4 Cyl 1.8L, XRS 4 Cyl 2.4L
- **2011 Toyota Corolla:** Base 4 Cyl 1.8L, LE 4 Cyl 1.8L, S 4 Cyl 1.8L, CE 4 Cyl 1.8L, XRS 4 Cyl 2.4L
- **2012 Toyota Corolla:** LE 4 Cyl 1.8L, S 4 Cyl 1.8L, CE 4 Cyl 1.8L, L 4 Cyl 1.8L, XRS 4 Cyl 2.4L
- **2013 Toyota Corolla:** LE 4 Cyl 1.8L, S 4 Cyl 1.8L, CE 4 Cyl 1.8L, L 4 Cyl 1.8L

Before installation, verify that this part is compatible with your specific vehicle year, make, and model to ensure proper fitment.

3. INSTALLATION INSTRUCTIONS (SETUP)

Safety First: Always ensure the vehicle is securely supported on jack stands or a lift before working underneath. Wear appropriate personal protective equipment, including safety glasses and gloves. If you are unsure about any step, consult a qualified mechanic.

Required Tools:

- Socket wrench set
- Screwdriver set (Phillips and flathead)
- Pry tool (for plastic clips, if applicable)
- Jack and jack stands or vehicle lift

Step-by-Step Installation:

1. **Prepare the Vehicle:** Park the vehicle on a level surface. Engage the parking brake. If using a jack, lift the front of the vehicle and secure it with jack stands.
2. **Remove Existing Splash Shield (if applicable):** Locate and remove all fasteners (bolts, screws, plastic clips) securing the old splash shield. Carefully lower and remove the old shield. Note the position and type of each fastener for reinstallation.
3. **Inspect Mounting Points:** Clean any debris from the mounting points on the vehicle's chassis. Ensure there are no obstructions or damage that would prevent proper installation of the new shield.
4. **Position the New Splash Shield:** Carefully align the new Autoelements splash shield with the mounting points on the vehicle. Ensure all holes on the shield match the corresponding holes on the vehicle.
5. **Secure the Splash Shield:** Begin by loosely attaching a few fasteners to hold the shield in place. Once aligned, install all remaining fasteners. Tighten all bolts and screws securely, but do not overtighten, especially plastic fasteners, to avoid stripping or cracking.
6. **Final Check:** Double-check all fasteners to ensure they are tight. Gently tug on the splash shield to confirm it is securely mounted and does not have excessive play.
7. **Lower Vehicle:** Carefully lower the vehicle from the jack stands or lift.



Figure 3.1: Underside view of the splash shield, highlighting key mounting points.



Figure 3.2: Side profile of the splash shield, illustrating its contoured design for vehicle fitment.

4. FUNCTION AND BENEFITS (OPERATING)

The Autoelements Engine Splash Shield serves several critical functions for your vehicle:

- **Debris Protection:** Shields the engine, transmission, and other vital undercarriage components from road debris, rocks, dirt, and mud.
- **Water and Moisture Barrier:** Helps prevent water and moisture from splashing directly onto sensitive electrical components and belts, reducing the risk of corrosion and malfunction.
- **Aerodynamics:** Contributes to the vehicle's aerodynamic efficiency by smoothing airflow under the car, which can subtly improve fuel economy.
- **Noise Reduction:** Can help dampen road noise and vibrations from entering the cabin.

Proper installation ensures these benefits are fully realized, contributing to the overall protection and performance of your Toyota Corolla.

5. MAINTENANCE

Regular inspection and maintenance of your engine splash shield are recommended to ensure its continued effectiveness:

- **Periodic Inspection:** During routine oil changes or vehicle inspections, visually check the splash shield for any signs of damage, cracks, or loose fasteners.
- **Cleaning:** If the shield accumulates excessive dirt or mud, it can be cleaned with water and a mild detergent. Ensure all debris is removed, especially from drainage holes.

- **Fastener Check:** Periodically check that all bolts, screws, and clips securing the splash shield are tight and in good condition. Replace any missing or damaged fasteners promptly.
- **Damage Assessment:** If the splash shield sustains significant damage (e.g., from hitting road debris), it should be replaced to maintain proper protection for the engine bay.

6. TROUBLESHOOTING

If you encounter issues with your Autoelements Engine Splash Shield, consider the following troubleshooting steps:

- **Improper Fitment:** If the shield does not align correctly with mounting holes, double-check the vehicle's year, make, and model against the compatibility list. Ensure the shield is oriented correctly. Slight adjustments may be needed during installation.
- **Loose or Rattling Noise:** This typically indicates loose fasteners. Re-inspect all bolts, screws, and clips and tighten them securely. Check for any missing fasteners and replace them.
- **Damage or Cracks:** If the shield is cracked or broken, its protective capabilities are compromised. It is recommended to replace the shield to ensure optimal protection for your engine bay.
- **Difficulty Installing:** Ensure all old fasteners and debris are completely removed from the mounting area. Sometimes, minor bending or manipulation of the shield is required to align all holes before tightening. Do not force the shield into place.

If problems persist after following these steps, it is advisable to consult a professional mechanic.

7. SPECIFICATIONS

Specification	Detail
Brand	Autoelements
Manufacturer Part Number	TO1228148
OEM Part Number	5145102040
ABPA Partslink Number	TO1228148
Placement on Vehicle	Front
Fitment Type	Direct Replacement
Condition	New / Aftermarket
Product Dimensions	85 x 25 x 20 inches (Approximate)

8. WARRANTY AND SUPPORT

This Autoelements Engine Splash Shield Under Cover comes with a **1-year warranty** from the date of purchase. This warranty covers manufacturing defects and material flaws under normal use conditions.

For warranty claims, technical support, or any questions regarding the product, please contact your retailer or the Autoelements customer service department through the contact information provided at the point of purchase. Please have your purchase receipt and product model number (TO1228148) available when contacting support.