

Manuals.plus /

› AA Ignition /

› AA Ignition Replacement TPMS Sensor Instruction Manual - Model 550-0103AA

AA Ignition 550-0103AA

AA Ignition Replacement TPMS Sensor Instruction Manual

Model: 550-0103AA

1. INTRODUCTION

This manual provides essential information for the installation, operation, and maintenance of your AA Ignition Replacement Tire Pressure Monitoring System (TPMS) Sensor. This sensor is designed to wirelessly monitor the air pressure in your vehicle's tires, alerting you to low pressure conditions.

A low tire pressure warning on your dashboard indicates that a tire's pressure is below the recommended level or that a sensor may require replacement. The TPMS sensors are located inside your vehicle's tires.



Image 1.1: AA Ignition Replacement TPMS Sensor, including the sensor body, valve stem, nut, and washer.

2. PRODUCT FEATURES

- **Tire Pressure Monitoring:** Continuously monitors tire air pressure wirelessly.
- **Warning Light Elimination:** Designed to eliminate the low tire pressure warning light on the dashboard when properly installed and programmed.
- **Direct Replacement:** Functions as a direct replacement for the original factory part, ensuring compatibility and performance.
- **Part Number Compatibility:** Replaces OEM part numbers 550-0103, 42607-06011, and 42607-33021.
- **Redesigned Chip:** Features a redesigned chip for enhanced longevity.
- **Complete Kit:** Includes a new valve and washer for installation.



Image 2.1: Visual representation of key product features.

3. COMPATIBILITY

This AA Ignition TPMS sensor is compatible with a wide range of Toyota, Lexus, and Scion vehicles. Please verify your vehicle's specific year and model against the list below and cross-reference with the OEM part numbers.

3.1 Replaces Part Numbers

- 550-0103
- 42607-06011
- 42607-33021
- 5500103
- 4260706011
- 4260733021

REPLACES PART NUMBERS:

✓ 550-0103

✓ 42607-06011

✓ 42607-33021

✓ 5500103

✓ 4260706011

✓ 4260733021



AA Ignition is a registered trademark of GWA Auto Parts Inc. Other trademarks are registered trademarks of auto manufactures.

Image 3.1: List of OEM part numbers that this sensor replaces.

3.2 Compatible Vehicles (Partial List)

For a complete list, refer to the product listing or consult a professional.

- 2011-2016 Lexus CT200h
- 2006 GS300
- 2008-2011 GS460
- 2010-2015 GX460
- 2006-2016 Scion tC
- 2008-2015 Scion xB
- 2004-2016 Toyota 4Runner
- 2007-2013 Toyota Avalon
- 2007-2011 Toyota Camry
- 2007-2013 Toyota Corolla
- 2006-2013 Toyota RAV4
- 2005-2015 Toyota Tacoma
- 2005-2006 Toyota Tundra

FITS THE FOLLOWING VEHICLES

- 2011-2016 Lexus CT200h®
- 2007-2012 Lexus ES350®
- 2006 Lexus GS300®
- 2007-2011 Lexus GS350, GS450h®
- 2006-2007 Lexus GS430®
- 2008-2011 Lexus GS460®
- 2010-2015 Lexus GX460®
- 2004-2008 Lexus GX470®
- 2010-2012 Lexus HS250h®
- 2008-2013 Lexus IS F®
- 2006-2012 Lexus IS250®
- 2006-2013 Lexus IS350®
- 2007-2012 Lexus LS460®
- 2008-2012 Lexus LS600h®
- 2005-2007 Lexus LX470®
- 2008-2015 Lexus LX570®
- 2006 Lexus RX330®
- 2007-2015 Lexus RX350®
- 2007-2008 Lexus RX400h®
- 2010-2014 Lexus RX450h®
- 2007-2010 Lexus SC430®
- 2008-2010 Pontiac Vibe®
- 2012-2015 Scion iQ®
- 2006-2016 Scion tC®
- 2008-2015 Scion xB®
- 2008-2014 Scion xD®
- 2004-2016 Toyota 4Runner®
- 2007-2013 Toyota Avalon®, Corolla®
Highlander®, Matrix®
- 2007-2011 Toyota Camry, Yaris®
- 2008-2014 Toyota FJ Cruiser®
- 2005-2014 Toyota Land Cruiser®
- 2006-2015 Toyota Prius®
- 2015 Toyota Prius Plug-In®
- 2012-2016 Toyota Prius V®
- 2006-2013 Toyota RAV4®
- 2004-2007 Toyota Sequoia®
- 2006-2008 Toyota Solara®
- 2005-2015 Toyota Tacoma®
- 2005-2006 Toyota Tundra®
- 2009-2015 Toyota Venza®

Image 3.2: Partial list of compatible vehicle models.

4. INSTALLATION AND SETUP

Installation of TPMS sensors typically requires specialized tools and knowledge. It is highly recommended that installation and programming be performed by a qualified automotive technician or tire shop.

4.1 General Installation Steps (Professional Recommended)

1. **Tire Removal:** The tire must be safely removed from the wheel to access the old TPMS sensor.
2. **Old Sensor Removal:** The existing TPMS sensor is unmounted from the wheel.
3. **New Sensor Installation:** The AA Ignition TPMS sensor is mounted to the wheel using the provided new valve and washer. Ensure proper torque specifications are met.
4. **Tire Remounting and Inflation:** The tire is remounted onto the wheel and inflated to the manufacturer's recommended pressure.
5. **Sensor Registration/Programming:** The new TPMS sensor's ID must be registered with the vehicle's Engine Control Unit (ECU) using a compatible diagnostic tool (e.g., Toyota Techstream or an Autel TPMS programming tool). This step is crucial for the sensor to communicate with the vehicle and for the warning light to reset.

This sensor is a single pack; you will need one sensor for each tire requiring replacement. If the low tire pressure light on your vehicle blinks for a few seconds and then stops, it may indicate a need to replace your TPMS sensors.

REPLACEMENT TIRE PRESSURE SENSOR

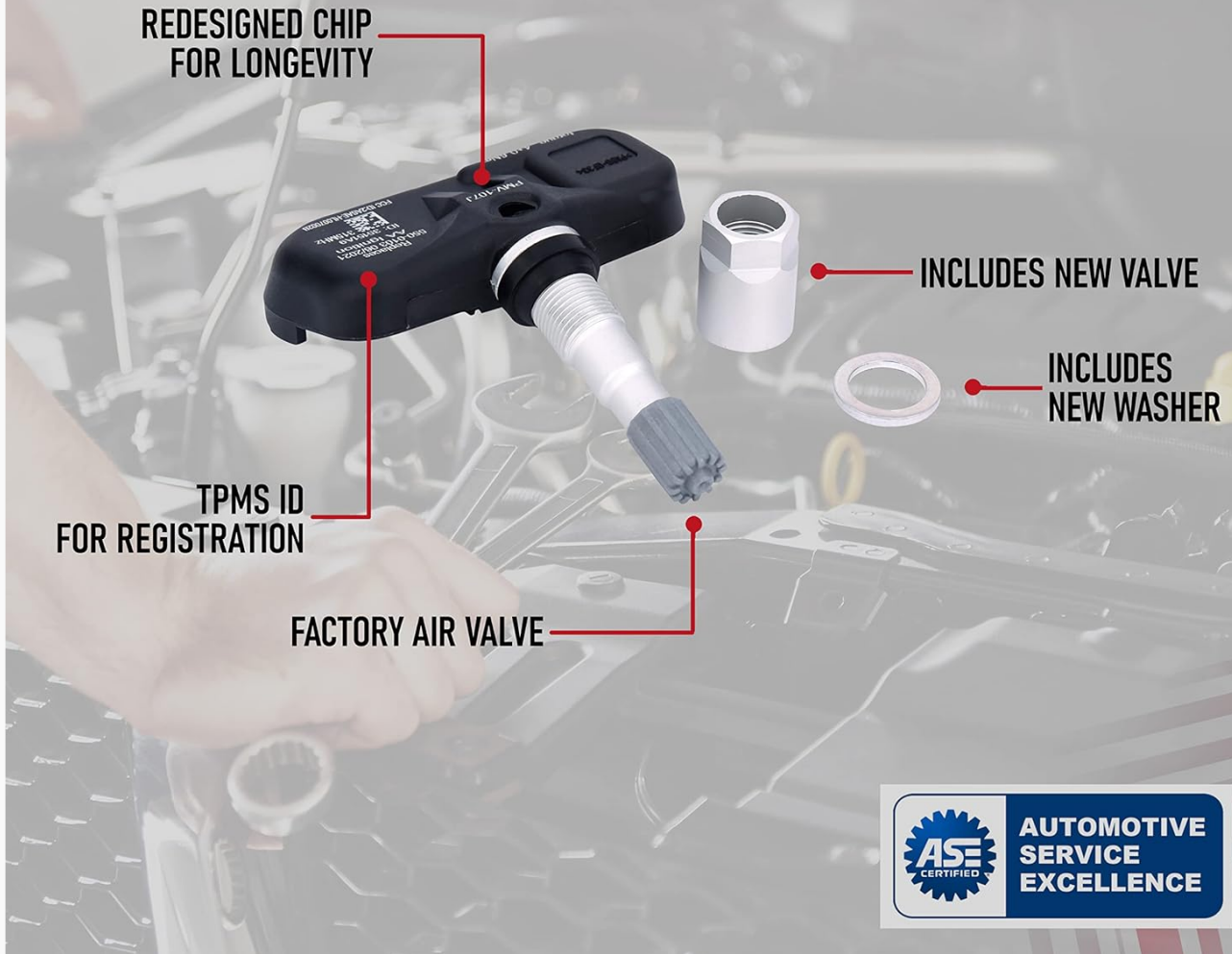


Image 4.1: Exploded view of the TPMS sensor components.

Image 4.2: Professional installation is recommended for optimal performance.

5. OPERATION

Once correctly installed and programmed, the AA Ignition TPMS sensor continuously monitors the air pressure within its respective tire. This data is wirelessly transmitted to your vehicle's TPMS receiver.

- **Normal Operation:** Under normal conditions, with tire pressures within the recommended range, the TPMS warning light on your dashboard will remain off.
- **Low Pressure Warning:** If a tire's pressure drops below a predetermined threshold, the TPMS sensor will trigger the warning light on your dashboard, alerting the driver to a low tire pressure condition.



Image 5.1: Typical TPMS warning light icon.



Image 5.2: Example of a low tire pressure warning display.

6. MAINTENANCE

TPMS sensors are sealed units with an internal battery. The battery life is finite and typically lasts several years, depending on usage and environmental factors. When the battery depletes, the sensor will cease to function, and the TPMS warning light may illuminate or blink.

- **Battery Life:** The lifespan of the sensor's internal battery can vary. Some users have reported sensor battery life of approximately 1.5 to 3 years.
- **Replacement:** When a sensor's battery dies or the sensor fails, the entire unit must be replaced. Individual battery replacement is not feasible.
- **Regular Tire Maintenance:** Ensure tires are regularly inspected for damage and maintained at the correct pressure, as this can impact sensor longevity and performance.



Image 6.1: Internal components of a TPMS sensor, including the battery.

7. TROUBLESHOOTING

If you experience issues with your TPMS system after installing an AA Ignition sensor, consider the following:

- **Blinking TPMS Light:** If the low tire pressure light on your vehicle blinks for a few seconds upon startup and then remains illuminated, it often indicates a system malfunction or a sensor that needs replacement or reprogramming.
- **No Reading/Incorrect Reading:** Ensure the sensor has been correctly registered with the vehicle's ECU. Incorrect programming is a common cause of sensors not reporting data.
- **Professional Diagnosis:** For persistent issues, consult a professional technician. They can use diagnostic tools to read fault codes and identify the exact cause of the TPMS malfunction.



Image 7.1: A flat tire, a common scenario that triggers the TPMS warning.

8. SPECIFICATIONS

Specification	Value
Brand	AA Ignition
Model Number	550-0103AA
Item Weight	0.06 Kilograms (2.08 ounces)
Style	Modern
Maximum Supply Voltage	5 Volts
Measurement Accuracy	±2%
Measuring Range	20 - 50 PSI
Mounting Type	Flange Mount
Output Type	Digital
Sensing Distance	10 Meters
Upper Temperature Rating	150 Degrees Fahrenheit
UPC	810072260451

9. WARRANTY AND SUPPORT

The AA Ignition Replacement TPMS Sensor comes with a lifetime warranty. This warranty covers defects in materials and workmanship under normal use.

- **Warranty Claim:** If the part fails, contact AA Ignition for a replacement. Refer to the official AA Ignition website for full details and terms of the lifetime warranty.
- **Technical Support:** For installation assistance, troubleshooting, or diagnostic help, contact AA Ignition customer support.

