



Tire Sealant and Compressor Kit (TSCK)

1 Introduction

Note: Nothing in this standard supercedes applicable laws and regulations.

Note: In the event of conflict between the English and domestic language, the English language shall take precedence.

1.1 Scope. This standard defines basic requirements and tests for the Tire Sealant and Compressor Kit (TSCK) system. Additional project specific requirements are defined in the relevant project documentation (Component Technical Specification (CTS) and Subsystem Technical Specification (SSTS)).

Scope of this standard is the introduction of a unique process for testing of TSCK (mobile, integrated), to guarantee the function and the quality for the customer. The approach is a subjective evaluation, to gather a collection of possible use cases of the TSCK (including additional functionalities) and the customer needs. Customer specific use cases are simulated.

The data of the components (in general compressor, hose, sealant, sealant bottle and installation body) are summarized in this General Specification. This data is the base for future system development to improve the integration of the components into the vehicle and within the manufacturing process.

1.2 Mission/Theme. The TSCK may be used to temporarily seal and inflate a small puncture in the tread area of the tire. The TSCK is not designed to repair blowouts or sidewall damage. A TSCK is not a permanent repair solution. After temporarily sealing and inflating a tire with the TSCK, the vehicle must be taken to an authorized GM dealer to have the tire inspected and repaired.

1.3 Classification. Four (4) types of TSCK exist:

1.3.1 Type 1, Mobile System.

Type 1A is a mobile two piece system with automatic sealant insertion.

Type 1B is a mobile one piece system with automatic sealant insertion.

1.3.2 Type 1, Integrated System.

Type 2A is two piece system integrated into the vehicle with automatic sealant insertion and a compressor that is hardwired to the vehicle.

Type 2B (Special solution – for running projects only) is a two piece system integrated into the vehicle with automatic sealant insertion and a compressor that requires a power cord to be plugged into the Auxiliary Power Outlet (APO).

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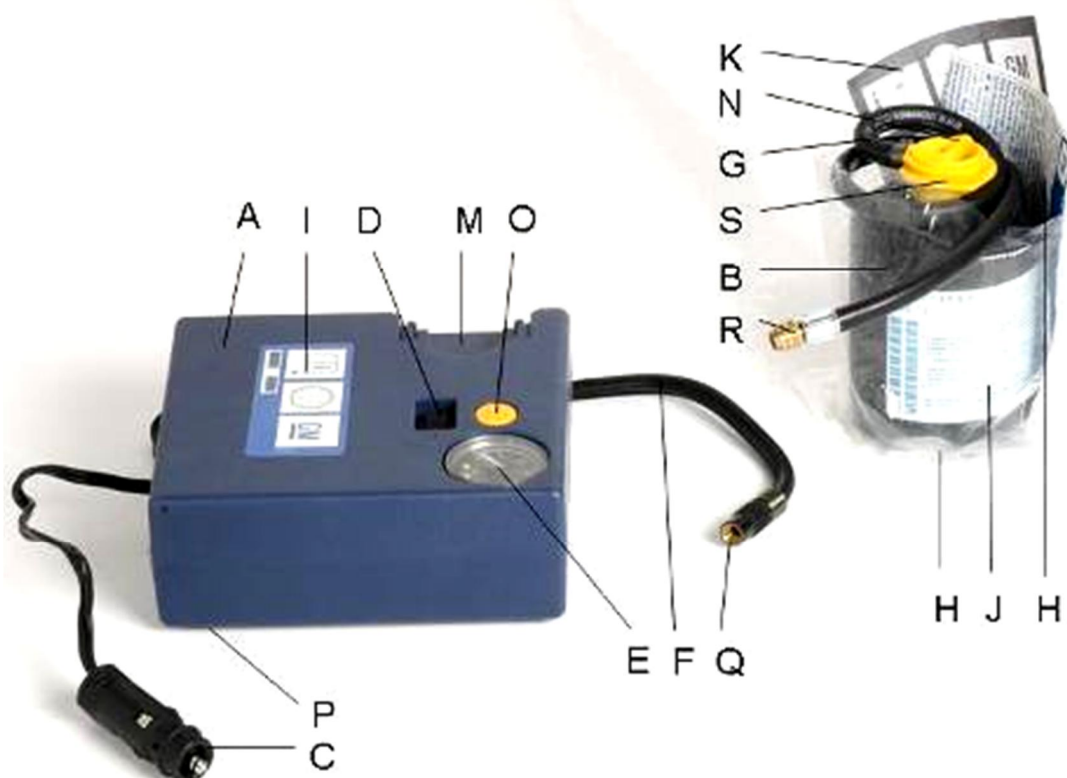
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Figure 1: Components of Assembly Type 1A - Mobile Two Piece System with Automatic Sealant Insertion



Schematic of Figure 1 should be used as a reference to point out key components and not as a design direction.

Note: Customer is required to connect Q to N and R to tire valve stem or TPM.

- A Air Compressor
- B Tire Sealant Canister in to packaging bag
- C Air Compressor Accessory Plug
- D On/Off Switch
- E Air Pressure Gauge
- F Air Compressor Inflation Hose
- G Sealant Filling Hose
- H Removable and Adhesive Speed Restriction Label (GM Approved)
- I Label with GM logo, info logo and TSCK Label (GM Approved)
- J Warning/Usage Instruction Label (GM Approved)
- K Sealant Warning Label on Canister (GM Approved)
- L Usage and Instruction Label (GM Approved)
- M Additional Warning Label (GM Approved)
- N Compressor Mounting Slot for Sealant Canister
- O Sealant Filling Hose Connector to Air Compressor Inflation Hose Connector
- P Pressure release switch
- Q Adapters for supplementary functions
- R Connection of Air Compressor Inflation Hose to Tire Sealant Canister
- S Connection of Sealant Filling Hose to tire valve stem or TPM sensor valve
- T Mounting flange of Sealant Canister

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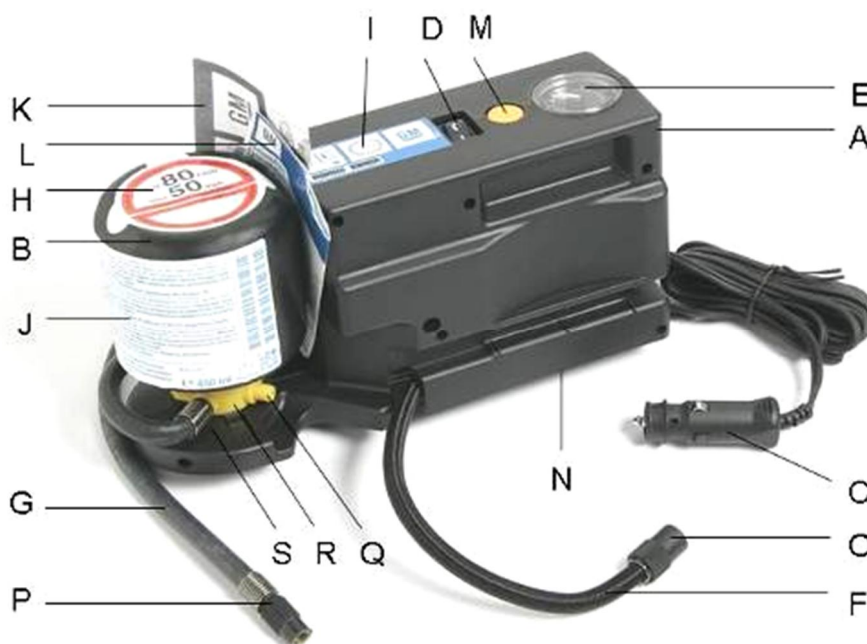
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Figure 2: Components of Assembly Type 1B - Mobile One Piece System with Automatic Sealant Insertion



Schematic of Figure 2 should be used as a reference to point out key components and not as a design direction.

Note: Customer is required to connect O to Q and P to tire valve stem or TPM.

- A Air Compressor
- B Tire Sealant Canister
- C Air Compressor Accessory Plug with cable
- D On/Off Switch
- E Air Pressure Gauge
- F Air Compressor Inflation Hose
- G Sealant Filling Hose
- H Removable and Adhesive Speed Restriction Label (GM Approved)
- I Label with GM logo, info logo and TSCK Label (GM Approved)
- J Warning/Usage Instruction Label (GM Approved)
- K Warning/Usage Instruction Label (GM Approved)
- L Sealant Warning Label on Canister (GM Approved)
- M Usage and Instruction Label (GM Approved)
- N Additional Warning Label (GM Approved)
- O Pressure release button
- P Adapters for supplementary functions (not shown in Figure 2)
- Q Connection of Air Compressor Inflation Hose to Tire Sealant Canister
- R Connection of Sealing Filling Hose to tire valve stem or TPM sensor valve
- S Sealant Filling Hose Connector to Air Compressor Inflation Hose Connector
- T Mounting flange of Sealant Canister
- U Compressor Mounting Slot for Sealant Canister

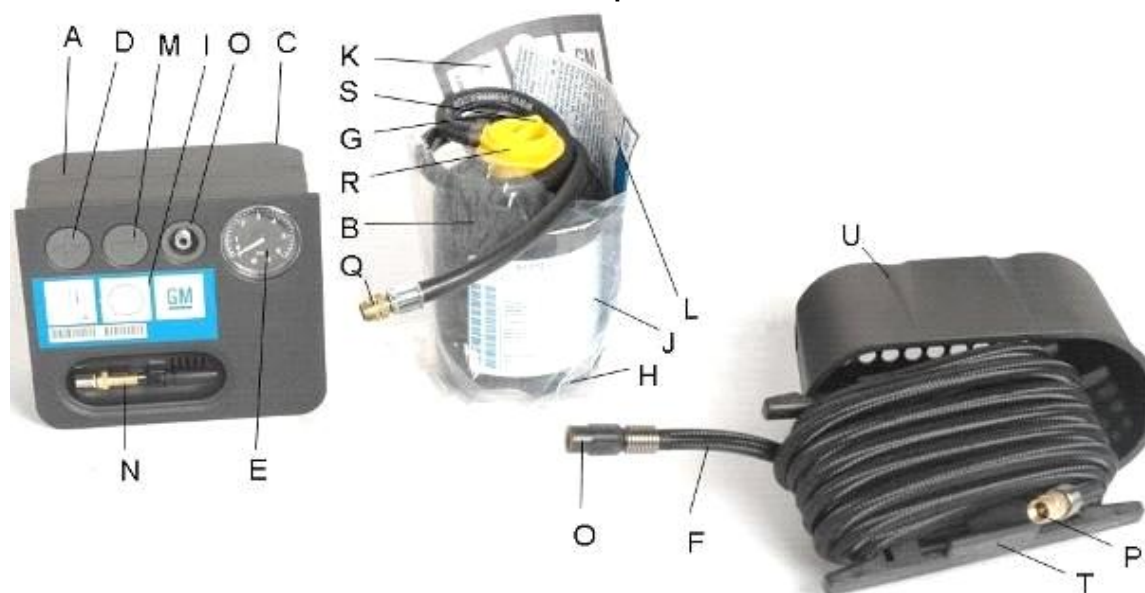
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Figure 3: Components of Assembly Type 2A - Stationary Two Piece System Integrated into the Vehicle with Automatic Sealant Insertion and a Compressor that is Hardwired to the Vehicle



Schematic of Figure 3 should be used as a reference to point out key components and not as a design direction.

Note: Customer is required to connect O to O, P to S and Q to tire valve stem or TPM.

- A Air Compressor
- B Tire Sealant Canister in to packaging bag
- C Direct electrical connection on the back
- D On/Off Switch
- E Air Pressure Gauge
- F Air Compressor Inflation Hose
- G Sealant Filling Hose
- H Removable and Adhesive Speed Restriction Label (GM Approved)
- I Label with GM logo, info logo and TSCK Label (GM Approved)
- J Sealant Warning Label on Canister (GM Approved)
- K Usage Instruction label (GM Approved)
- L Additional Warning Label (GM Approved)
- M Pressure release button
- N Adapters for supplementary functions
- O Connection of Air Compressor Inflation Hose to Compressor
- P Connection of Air Compressor Inflation Hose to Tire Sealant Canister
- Q Connection of Sealing Filling Hose to tire valve stem or TPM sensor valve
- R Mounting flange of Sealant Canister
- S Connection of Sealant Filling Hose to Air Compressor Inflation Hose Connector
- T Hose role and Condition foot with Mounting Slot for Sealant Canister
- U Hose role Container

1.3.2 Types of Labels for Usage at GME and/or GMNA.

- Removable and Adhesive Speed Restriction Label
- Label with GM logo, info logo and TSCK Label

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- Warning/usage Instruction label
- Sealant Warning Label on Canister
- Usage Instruction label
- Additional Warning Label

Figure 5: Removable and Adhesive Speed Restriction Label (GM Approved)
(Reference only – Actual label must be approved by GM Engineering)

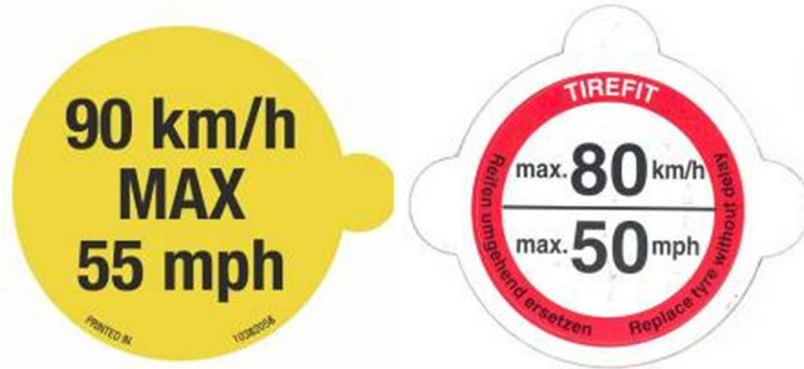


Figure 6: Label with GM Logo, Info Logo and TSCK Label (GM Approved)
(Reference only – Actual label must be approved by GM Engineering)

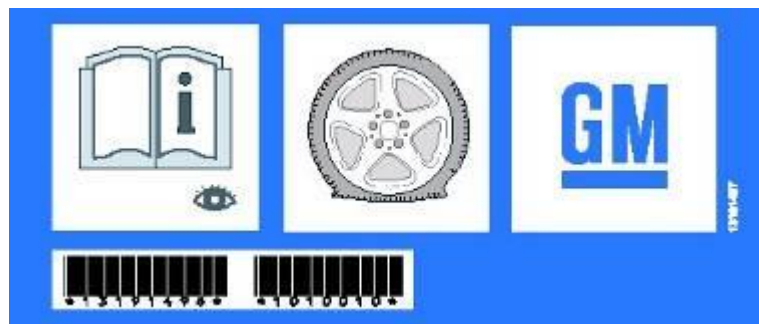
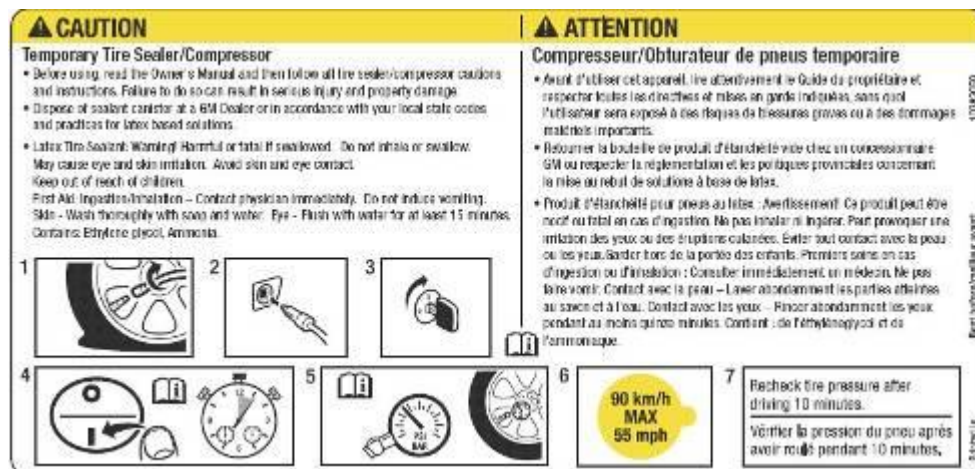


Figure 7: Warning/Usage Instruction Label (GM Approved) – GMNA Requirement Only
(Reference only – Actual label must be approved by GM Engineering)



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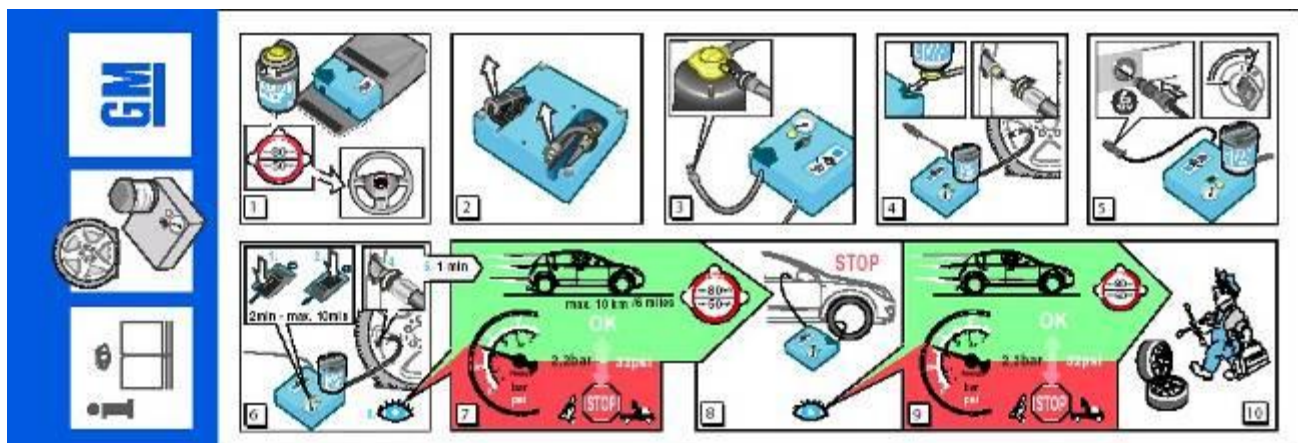
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Figure 8: Sealant Warning Label on Canister (GM Approved) – GME Requirement Only
(Reference only – Actual label must be approved by GM Engineering)



Figure 9: Usage Instruction Label (GM Approved)
(Reference only – Actual label must be approved by GM Engineering)



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 Reifendichtmittel Tyre sealant Mastic d'étanchéité pour pneus	
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