WE87 - Checking Relays And Replacing Them If Necessary (Workshop Campaign)

Revision: **April 10, 2015**
This revision amends WE87 as follows:
Under “Parts Info” the parts availability note was revised.

Model Year: **2015**

Model Line: **Macan**

Concerns: **Power supply relays**

Information: This is to inform you of a voluntary Workshop Campaign on the above-mentioned vehicles. **There is a possibility that relays from a batch whose switching contact was not manufactured according to specifications were installed on the affected vehicles.**

As a result, the switching contact in the relay can stick in normal position and the relevant electrical equipment will not therefore be supplied with current.
Depending on where the relay is used in the vehicle, this can cause various systems, e.g. rear window heating or the levelling system, to stop working.

Action Required: Check the batch number of the relays and replace relays if necessary.

Affected Vehicles: The VIN(s) can be checked by using PIWIS Vehicle Information link to verify if the campaign affects the vehicle. This campaign is scope specific to the VIN! Failure to verify in PIWIS may result in an improper repair. This campaign affects 847 vehicles in North America.

Parts Info: **NOTE: PARTS FOR THIS CAMPAIGN WILL BE AUTOMATICALLY ALLOCATED FOR UP TO 50% OF THE VEHICLES THAT ARE SERVICED AT YOUR DEALERSHIP. ONCE YOUR DEALERSHIP IS OUT OF STOCK AND REQUIRES ADDITIONAL PARTS, YOU SHOULD SUBMIT A PTEC / PAV.**

Part No.	Designation	Qty.
000.043.989.87	⇒ Relay, type number 645	up to 7 ea. *

* The number of relays required per vehicle depends on the result of the relay check carried out as part of this campaign and on the number of relays to be checked in the vehicle. This depends on the respective vehicle equipment.

Tools:
- Torque wrench, 2 – 10 Nm (1.5 – 7.5 ftlb.), e.g. **V.A.G 1783 - Torque wrench, 2-10 Nm (1.5-7.5 ftlb.)**
- **3438 - Hook**

- Assembly wedge

Work Procedure: See Attachment “A”.

Claim Submission: See Attachment “B”.

Attachment "A": **Work Procedure**

Checking batch number and installation position of the affected relays

Information: The relays with the **type number 645** from the batch number range specified below can be faulty and must be **replaced**:

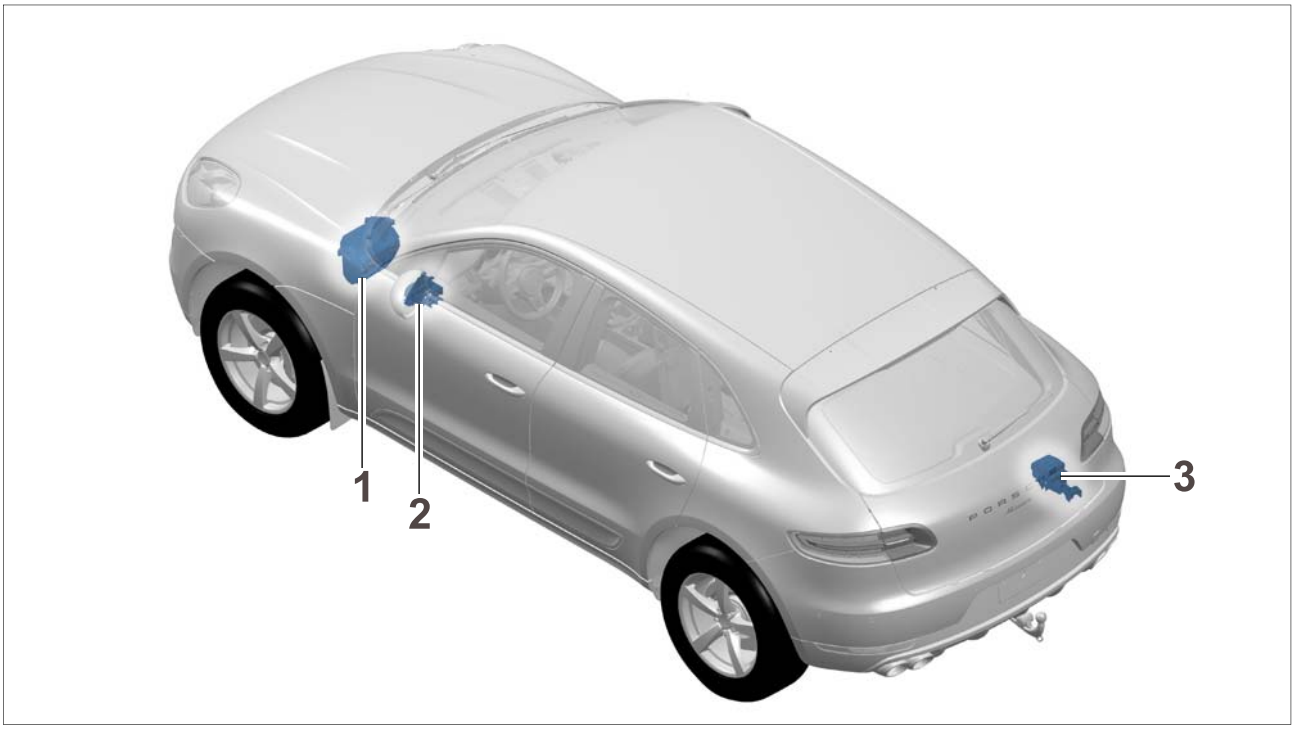
From batch **number:**	To batch **number:**
142361F	**143061F**

The type number and batch number can be read on the relay as follows: ⇒*Identification on relays*

1 – Relay type number **645**
2 – **Batch number** of the relay
3 – Batch number: **Year** of production
4 – Batch number: **Week** of production
5 – Batch number: **Weekday** of production
6 – Batch number: **Work shift** of production
7 – Batch number: **Production line** during manufacture

Identification on relays

Installation Position:



Overview of installation positions

The number of relays to be checked will vary depending on the various equipment variants of the affected vehicles and are installed at the following positions in the respective vehicle:

- Fuse box on cowl panel ⇒ *Overview of installation positions* **-1-**
- Fuse box on left of dashboard ⇒ *Overview of installation positions* **-2-**
- Fuse box in luggage compartment at the right ⇒ *Overview of installation positions* **-3-**

Information

The installation positions of the affected relays are known for each individual vehicle. Given the various steps required for checking the relays, the respective vehicle is assigned to one fixed scope, which determines the exact checks to be carried out on the relevant vehicle.
⇒ To find out which scope is assigned to the vehicle for checking the relays, see PIWIS Vehicle Information.

The table below shows the relays to be checked based on the assigned scope and their installation positions:

Scope:	Installation positions and number of relays to be checked:
• **Scope 1**	• Fuse box on cowl panel (1 ea.) ⇒ *Technical Information 'WE8700 Checking batch number of relay in fuse box on the cowl panel'*
• **Scope 2**	• Fuse box on cowl panel (1 ea.) • Fuse box in luggage compartment at the right (max. 4 ea.) ⇒ *Technical Information 'WE8700 Checking batch number of relay in fuse box on the cowl panel'* ⇒ *Technical Information 'WE8700 Checking batch number of relays in fuse box in the luggage compartment'*
• **Scope 3**	• Fuse box on cowl panel (1 ea.) • Fuse box on left of dashboard (max. 2 ea.) • Fuse box in luggage compartment at the right (max. 4 ea.) ⇒ *Technical Information 'WE8700 Checking batch number of relay in fuse box on the cowl panel'* ⇒ *Technical Information 'WE8700 Checking batch number of relays in fuse box on the dashboard'* ⇒ *Technical Information 'WE8700 Checking batch number of relays in fuse box in the luggage compartment'*
• **Scope 4**	• Fuse box on left of dashboard (max. 2 ea.) • Fuse box in luggage compartment at the right (max. 4 ea.) ⇒ *Technical Information 'WE8700 Checking batch number of relays in fuse box on the dashboard'* ⇒ *Technical Information 'WE8700 Checking batch number of relays in fuse box in the luggage compartment'*
• **Scope 5**	• Fuse box in luggage compartment at the right (max. 4 ea.) ⇒ *Technical Information 'WE8700 Checking batch number of relays in fuse box in the luggage compartment'*
• **Scope 6**	• Fuse box on cowl panel (1 ea.) • Fuse box on left of dashboard (max. 2 ea.) ⇒ *Technical Information 'WE8700 Checking batch number of relay in fuse box on the cowl panel'* ⇒ *Technical Information 'WE8700 Checking batch number of relays in fuse box on the dashboard'*

Checking batch number of relay in fuse box on the cowl panel

Procedure: 1 Disconnect ground line to the battery ⇒ *Workshop Manual '2X00IN Work instructions after disconnecting the battery'*.

2 Use **9873 - hood stay** to move front lid into service position ⇒ *Workshop Manual '552213 Securing lid (service position)'*.

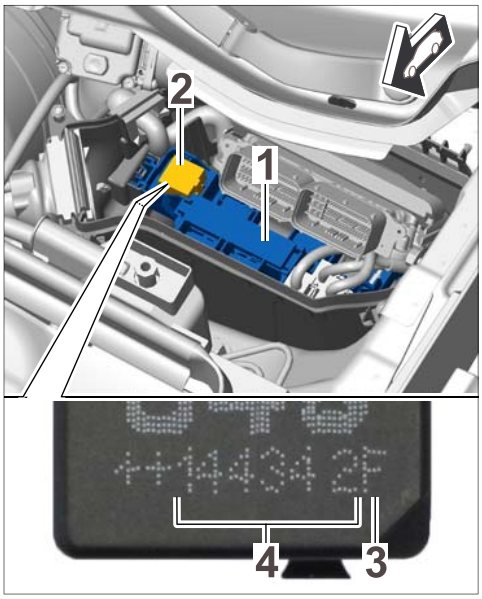
3 Remove plenum panel cover. For instructions, see ⇒ *Workshop Manual '508719 Removing and installing cowl panel cover'*.

4 Remove DME control unit ⇒ *Workshop Manual '247019 Removing and installing DME control unit'*.

5 Check the batch number of the **relay** with **type number 645** ⇒ *Checking relays in fuse box on the cowl panel* **-2-** in the fuse box in the engine compartment ⇒ *Checking relays in fuse box on the cowl panel* **-1-**.

5.1 Check production line of the relay as indicated by the letter in the batch number ⇒ *Checking relays in fuse box on the cowl panel* **-3-**.

- The letter in the batch number is **not "F"**: The relay is **not affected** ⇒ **Continue with Step 7**.
- The letter in the batch number is **"F"**: The relay was manufactured on the affected production line ⇒ **Continue checking the batch number. Continue with Step 5.2**.



Checking relays in fuse box on the cowl panel

5.2 Check the production period of the relay as indicated by the digits in the batch number ⇒ *Checking relays in fuse box on the cowl panel* **-4-**.

- The string of digits in the batch number is **less than 142361**: The relay is **not affected** ⇒ **Continue with Step 7**.
- The string of digits in the batch number is **greater than 143061**: The relay is **not affected** ⇒ **Continue with Step 7**.
- The string of digits in the batch number is within the range **from 142361 to 143061**: The **relay** may be **faulty** and must therefore be **replaced**. ⇒ **Continue with Step 6**.

For further information on the batch number and the meaning of the digits/letters, see "Information" section under ⇒ *Technical Information 'WE8700 Checking batch number and installation position of the affected relays'* in this document.

6 Replace the relay you determined to be faulty during the previous check.

6.1 Carefully pull the relay out of the plug-in socket and remove it.

6.2 Press new relay as far as it will go into the plug-in socket according to the installation position of the relay you just removed.

7 Install DME control unit ⇒*Workshop Manual '247019 Removing and installing DME control unit'*.

8 Install plenum panel cover. For instructions, see ⇒*Workshop Manual '508719 Removing and installing cowl panel cover'*.

9 Remove hood stay and close the front lid ⇒*Workshop Manual '552213 Securing lid (service position)'*.

10 Connect ground line to the battery ⇒*Workshop Manual '2X00IN Work instructions after disconnecting the battery'*.

11 If there are other affected relays in the fuse box on the dashboard and/or in the fuse box in the luggage compartment of the respective vehicle based on the assigned campaign scope, continue checking these relays.
For further information, see "Installation Position" under ⇒*Technical Information 'WE8700 Checking batch number and installation position of the affected relays'* in this document.

12 If no other relays in the vehicle are affected, enter the campaign in the Warranty and Maintenance booklet.
For invoicing, see section on ⇒*Technical Information 'WE8700 Invoicing'*.

Checking batch number of relays in fuse box on the dashboard

Procedure:

1 Remove dashboard trim panel at the left ⇒*Workshop Manual '701619 Removing and installing dashboard trim panel'*.

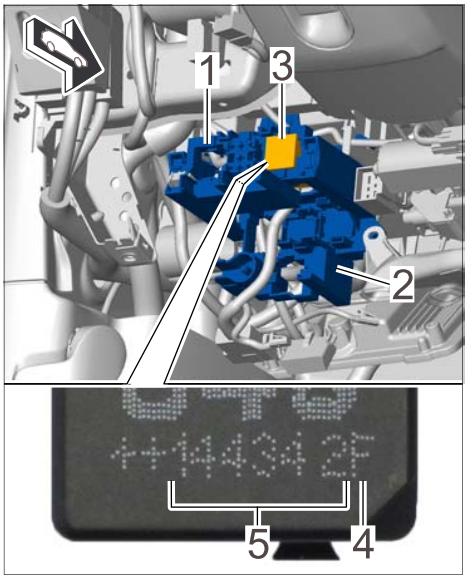
2 Remove dashboard moulding on driver's side at the right together with the air vent ⇒*Workshop Manual '70581902 Removing and installing dashboard moulding on driver's side at the right'*.

3 Remove trim panel under dashboard at the left ⇒*Workshop Manual '70191901 Removing and installing trim panel under dashboard at the left'*.

4 Check the batch number of the **relays** with **type number 645** ⇒ *Checking relays in fuse box on the dashboard* **-3-** in the **front** relay carrier ⇒ *Checking relays in fuse box on the dashboard* **-1-** and in the **rear** relay carrier ⇒ *Checking relays in fuse box on the dashboard* **-2-** of the fuse box on the dashboard.

4.1 Check production line of the relay as indicated by the letter in the batch number ⇒ *Checking relays in fuse box on the dashboard* **-4-**.

- The letter in the batch number is **not "F"**: The relay is **not affected** ⇒ **Continue with Step 6**.
- The letter in the batch number is **"F"**: The relay was manufactured on the affected production line ⇒ **Continue checking the batch number. Continue with Step 4.2**.



Checking relays in fuse box on the dashboard

4.2 Check the production period of the relay as indicated by the digits in the batch number ⇒ *Checking relays in fuse box on the dashboard* **-5-**.

- The string of digits in the batch number is **less than 142361**: The relay is **not affected** ⇒ **Continue with Step 6**.
- The string of digits in the batch number is **greater than 143061**: The relay is **not affected** ⇒ **Continue with Step 6**.
- The string of digits in the batch number is within the range **from 142361 to 143061**: The **relay** may be **faulty** and must therefore be **replaced**. ⇒ **Continue with Step 5**.

For further information on the batch number and the meaning of the digits/letters, see "Information" section under ⇒ *Technical Information 'WE8700 Checking batch number and installation position of the affected relays'* in this document.

5 Replace the relay you determined to be faulty during the previous check.

5.1 Carefully pull the relay out of the plug-in socket and remove it.

5.2 Press new relay as far as it will go into the plug-in socket according to the installation position of the relay you just removed.

6 Check any **other relays with type number 645** in the fuse box on the dashboard.
To do this, **repeat Steps 4.1 to 4.2** on the **other relays**.

7 Install trim panel under dashboard at the left ⇒ *Workshop Manual '70191901 Removing and installing trim panel under dashboard at the left'*.

8 Install dashboard moulding on driver's side at the right together with the air vent ⇒ *Workshop Manual '70581902 Removing and installing dashboard moulding on driver's side at the right'*.

9 Install dashboard trim panel at the left ⇒ *Workshop Manual '701619 Removing and installing dashboard trim panel'*.

10 If there are other affected relays in the fuse box in the luggage compartment of the respective vehicle based on the assigned campaign scope, continue checking these relays.
For further information, see "Installation Position" under ⇒ *Technical Information 'WE8700 Checking batch number and installation position of the affected relays'* in this document.

11 If no other relays in the vehicle are affected, enter the campaign in the Warranty and Maintenance booklet.
For invoicing, see section on ⇒ *Technical Information 'WE8700 Invoicing'*.

Checking batch number of relays in fuse box in the luggage compartment

Procedure:

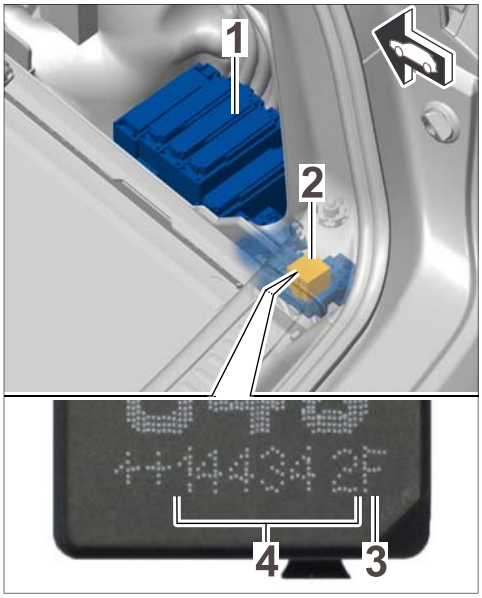
1 Open the rear lid.

2 Open and remove maintenance flap in the luggage compartment side trim panel at the right.

3 Check the batch number of the **relays** with **type number 645** ⇒ *Checking relays in fuse box in the luggage compartment* **-2-** in the fuse box in the luggage compartment ⇒ *Checking relays in fuse box in the luggage compartment* **-1-**.

3.1 Check production line of the relay as indicated by the letter in the batch number ⇒ *Checking relays in fuse box in the luggage compartment* **-3-**.

- The letter in the batch number is **not "F"**: The relay is **not affected** ⇒ **Continue with Step 5**.
- The letter in the batch number is **"F"**: The relay was manufactured on the affected production line ⇒ **Continue checking the batch number. Continue with Step 3.2**.



Checking relays in fuse box in the luggage compartment

3.2 Check the production period of the relay as indicated by the digits in the batch number ⇒ *Checking relays in fuse box in the luggage compartment* **-4-**.

- The string of digits in the batch number is **less than 142361**: The relay is **not affected** ⇒ **Continue with Step 5**.

- The string of digits in the batch number is **greater than 143061**: The relay is **not affected ⇒ Continue with Step 5**.

- The string of digits in the batch number is within the range **from 142361 to 143061**: The **relay** may be **faulty** and must therefore be **replaced**. ⇒ **Continue with Step 4**.

For further information on the batch number and the meaning of the digits/letters, see "Information" section under ⇒ *Technical Information 'WE8700 Checking batch number and installation position of the affected relays'* in this document.

4 Replace the relay you determined to be faulty during the previous check.

4.1 Carefully pull the relay out of the plug-in socket and remove it.

4.2 Press new relay as far as it will go into the plug-in socket according to the installation position of the relay you just removed.

5 Check any **other relays with type number 645** in the fuse box in the luggage compartment. To do this, **repeat Steps 3.1 to 3.2** on the **other relays**.

6 Position and close the maintenance flap in the luggage compartment side trim panel at the right.

7 Close the rear lid.

8 Enter the workshop campaign in the Warranty and Maintenance booklet.

Attachment "B": **Claim Submission** - Workshop Campaign WE87
Warranty claims should be submitted via WWS/PQIS.
Open campaigns may be checked by using either the PIWIS Vehicle Information system or through PQIS Job Creation.
Labor, parts, and sublet will be automatically inserted when Technician is selected in WWS/PQIS. If necessary, the required part numbers will need to be manually entered into warranty system by the dealer administrator.

Scope: **Scope 1 – Checking batch number of relay and replacing relay if necessary.**

- Relays in fuse box on the cowl panel

Working time:

Checking batch number of the relays and replacing relays if necessary	Labor time: **54 TU**
Includes: Disconnecting and connecting battery	
Moving front lid into service position	
Removing and installing plenum panel cover	
Removing and installing DME control unit	

Parts required:

000.043.989.87	Relay, type number 645	max. 1 ea. (depending on actual number required *)

* The number of relays required depends on the result of the relay check carried out as part of this campaign. Only the number of relays to be replaced as determined during the relay check must be invoiced.

⇒ **Damage code WE87 066 000 2**

Scope: **Scope 2 – Checking batch number of relays and replacing relays if necessary.**

- Relays in fuse box on the cowl panel
- Relays in fuse box in luggage compartment at the right

Working time:

Checking batch number of the relays and replacing relays if necessary — Labor time: **68 TU**

Includes:
- Disconnecting and connecting battery
- Moving front lid into service position
- Removing and installing plenum panel cover
- Removing and installing DME control unit
- Opening and closing maintenance flap in luggage compartment side trim panel at the right

Parts required:

000.043.989.87	Relay, type number 645	max. 5 ea. (depending on actual number required *)

* The number of relays required depends on the result of the relay check carried out as part of this campaign. Only the number of relays to be replaced as determined during the relay check must be invoiced.

⇒ **Damage code WE87 066 000 2**

Scope: **Scope 3 – Checking batch number of relays and replacing relays if necessary.**

- Relays in fuse box on the cowl panel
- Relays in fuse box on left of dashboard
- Relays in fuse box in luggage compartment at the right

Working time:

Checking batch number of the relays and replacing relays if necessary — Labor time: **139 TU**

Includes:
- Disconnecting and connecting battery
- Moving front lid into service position
- Removing and installing plenum panel cover
- Removing and installing DME control unit
- Removing and installing dashboard trim panel at the left
- Removing and installing dashboard moulding on driver's side at the right
- Removing and installing trim panel under dashboard at the left
- Opening and closing maintenance flap in luggage compartment side trim panel at the right

Parts required:

000.043.989.87	Relay, type number 645	max. 7 ea. (depending on actual number required *)

* The number of relays required depends on the result of the relay check carried out as part of this campaign. Only the number of relays to be replaced as determined during the relay check must be invoiced.

⇒ **Damage code WE87 066 000 2**

Scope: **Scope 4 – Checking batch number of relays and replacing relays if necessary.**

- Relays in fuse box on left of dashboard
- Relays in fuse box in luggage compartment at the right

Working time:

Checking batch number of the relays and replacing relays if necessary — Labor time: **96 TU**

Includes:
- Removing and installing dashboard trim panel at the left
- Removing and installing dashboard moulding on driver's side at the right
- Removing and installing trim panel under dashboard at the left
- Opening and closing maintenance flap in luggage compartment side trim panel at the right

Parts required:

000.043.989.87	Relay, type number 645	max. 6 ea. (depending on actual number required *)

* The number of relays required depends on the result of the relay check carried out as part of this campaign. Only the number of relays to be replaced as determined during the relay check must be invoiced.

⇒ **Damage code WE87 066 000 2**

Scope: **Scope 5 – Checking batch number of relays and replacing relays if necessary.**

- Relays in fuse box in luggage compartment at the right

Working time:

Checking batch number of the relays and replacing relays if necessary — Labor time: **20 TU**

Includes: Opening and closing maintenance flap in luggage compartment side trim panel at the right

Parts required:

000.043.989.87	Relay, type number 645	max. 4 ea. (depending on actual number required *)

* The number of relays required depends on the result of the relay check carried out as part of this campaign. Only the number of relays to be replaced as determined during the relay check must be invoiced.

⇒ **Damage code WE87 066 000 2**

Scope: **Scope 6 – Checking batch number of relays and replacing relays if necessary.**

- Relays in fuse box on the cowl panel
- Relays in fuse box on left of dashboard

Working time:

Checking batch number of the relays and replacing relays if necessary		Labor time: **125 TU**
Includes:	Disconnecting and connecting battery Moving front lid into service position Removing and installing plenum panel cover Removing and installing DME control unit Removing and installing dashboard trim panel at the left Removing and installing dashboard moulding on driver's side at the right Removing and installing trim panel under dashboard at the left	

Parts required:

000.043.989.87	Relay, type number 645	max. 3 ea. (depending on actual number required *)

* The number of relays required depends on the result of the relay check carried out as part of this campaign. Only the number of relays to be replaced as determined during the relay check must be invoiced.

⇒ **Damage code WE87 066 000 2**

References:
⇒ *Workshop Manual '2X00IN Work instructions after disconnecting the battery'*
⇒ *Workshop Manual '247019 Removing and installing DME control unit'*
⇒ *Workshop Manual '508719 Removing and installing cowl panel cover'*
⇒ *Workshop Manual '552213 Securing lid (service position)'*
⇒ *Workshop Manual '701619 Removing and installing dashboard trim panel'*
⇒ *Workshop Manual '70191901 Removing and installing trim panel under dashboard at the left'*

⇒ Workshop Manual '70581902 Removing and installing dashboard moulding on driver's side at the right'

Dealership	Service Manager	_____	Shop Foreman	_____	Service Technician	_____	_____	_____	_____
Distribution									
Routing	Asst. Manager	_____	Warranty Admin.	_____	Service Technician	_____	_____	_____	_____