Fiat Auto

B.U. After Sales
Assistenza Tecnica

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Registro delle Imprese - Uff. Torino n.70998 / 2000
REA Torino n.934697

Volvera, 5 june 2002

CF 213

To **FIAT AUTO IMPORTERS**

To **the After Sales Managers**

ORDER 4449
Model: Fiat STILO 1.8, 2.4 Selespeed, JTD
- engine cooling radiator fan ECU -

In some units among a batch of approximately 45,893 Fiat STILO vehicles, whose chassis numbers are prior to 118661 (see SIGI for list), the supplied engine cooling fan ECU may short-circuit due to non compliance of an internal component.

Delivery of vehicles from the yards and to end customers have been blocked.

It is consequently necessary to intervene according to the attached cycle mandatorily during pre-delivery inspections and by recalling customers by telephone for the vehicles which have been delivered to restore all vehicles (a draft letter is attached).

We herewith send the operating instructions for the work involved.

Best regards

M. Fantoni

encl.

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SUMMARY OF OPERATIONS

a) Vehicles involved

All vehicles listed on the enclosed sheet.

b) Vehicle identification

Vehicles assigned to you	Refer to enclosed list mentioned in point a).
Vehicles in transit	Before proceeding, apply for authorisation from Fiat Auto Direzione Qualità Ass. (Sales - Technical Service) (Mr. Sabatino - fax 0039 011 9860283).

c) Material required

ECU	part no. 51706419	Qty. 1 (1.8 16V – 1.9 JTD)
ECU	part no. 51706420	Qty. 1 (2.4 20V)
Shunt	part no. 71729096	Qty. 1

This material will be supplied by Ricambi (Spare Parts Division) upon reception of your specific order.

d) Remuneration

Expenses incurred by you relevant to:
- labour in accordance with the time schedule enclosed
- materials provided by Ricambi Volvera (refund calculated on the basis of refund conditions in force when the intervention is performed)
- intermediate costs (customs, etc.)
- miscellaneous costs (telephone, postage, etc.)

will be charged to us with the issuing of a Claim Report as per the instructions issued with our letters LP/du At 539 1/12/1994 and VQ/vz200258 July/01.

e) Final order deadline

The technical cut-off date for order 4449 will be 31 May 2003.

R.R. 4449

DRAFT LETTER (REGISTERED MAIL WITH RECEIPT OF RETURN)

RECALL CAMPAIGN 4449

Fiat Stilo - Engine cooling fan control unit

Dear Customer,

In some Fiat Stilo JTD 1800/2400 Selespeed vehicles, including the one you purchased, a component in the fitted engine cooling fan control unit may be faulty and cause a short-circuit.

This problem may effect your vehicle's safety. For this reason, we invite you to immediately take your vehicle for a check to the Dealer you purchased it from or, if more convenient, to any other Fiat Dealer and show them this letter

If you have already sold or lent your vehicle to other parties, please notify us of their name and address using the enclosed stamped, addressed postcard or give us any other information that may help us trace the present owner or user.

We are pleased to inform you that improvements recently introduced in production will be made to your vehicle. Your dealer will provide additional details.

The intervention to solve the problem will be carried out as rapidly as possible and entirely free of charge. Please telephone your dealer to fix an appointment at the most convenient time.

For additional information and assistance, please call our toll-free number 800.815.015.

We thank you in advance and look forward to hearing from you.

Yours faithfully,

Vehicle model Fiat Stilo Chassis ……..

FIAT AUTO S.P.A.
DIREZIONE QUALITA'- QUALITA' PRODOTTO

MODEL/VERSION:…… STILO 1.8 16V - 2.4 20V – 1.9 JTD

COMPONENT:…… Engine radiator fan ECU

FAULT:…….... Not compliant.

PROBLEM TO BE PREVENTED:
Anomalous radiator fan operation

TECHNICAL CAUSE:
Production problem experienced by the Supplier.

INTERVENTIONS IN PRODUCTION:
Ensured assembly of compliant parts.

INTERVENTION METHOD

PREVENTIVE INTERVENTION:
Check data on adhesive label applied to ECU body.

- **If the ECU is labelled by Magneti Marelli and the numeric code is followed by letter "S", run a diagnostic ECU test with EXAMINER, following the procedure described in the INTERVENTION section, to identifying the non compliant ECUs. Replace the ECU if it is not compliant.**
- **If the ECU does not carry the Magnetic Marelli trademark, the vehicle is OK.**
- **If the ECU carries the Magnetic Marelli trademark and that last letter of the code is not "S", the vehicle is OK.**
- **If there is a spot of green or yellow paint on the ECU cover, the vehicle is OK.**
- **If there is a yellow or silver flag on the ECU earth wire near the negative battery terminal fastening eyebolt, the vehicle is OK.**

CYCLE:

Perform the following operations in the engine compartment:

⇒ **Remove the battery compartment cover.**
⇒ **Locate ECU 1 on the radiator fan manifold.**
⇒ **Release the AIRBAG 2 wiring from the clip 3.**
⇒ **Loosen the screw 4 fastening the ECU 1.**
⇒ **Remove the ECU 1 from the housing on the manifold as far as the respective wiring will allow.**

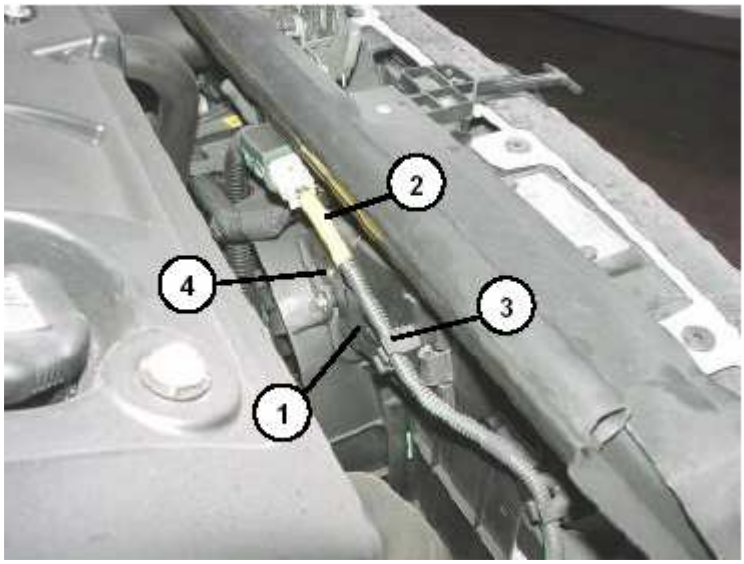
CHECK

Check the label:

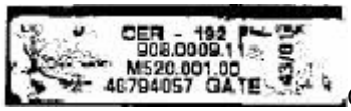
A. If the ECU is labelled by Magneti Marelli and the numeric code is followed by letter "S", run a diagnostic ECU test with EXAMINER following the procedure described in the TEST WITH EXAMINER section to identifying the non compliant ECUs. Replace the ECU if it is not compliant as described in the INTERVENTION section.
B. If the ECU does not carry the Magnetic Marelli trademark, the vehicle is OK.
C. If the ECU carries the Magnetic Marelli trademark and that last letter of the code is not "S", the vehicle is OK.
D. If there is a yellow or silver flag on the ECU earth wire near the negative battery terminal fastening eyebolt, the vehicle is OK.
E. If there is a spot of green or yellow paint on the ECU cover, the vehicle is OK.

If the vehicle is OK (steps B-C-D-E):

⇒ **Reposition the ECU 1 by reversing the removal sequence. Make sure that the wiring is correctly fastened in the respective clips.**
⇒ **Reposition the wiring 2 in the clip 3.**
⇒ **Rearrange the battery compartment cover.**

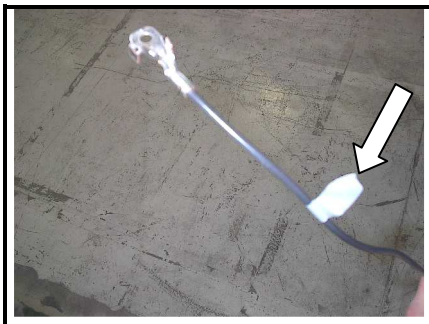


NOT COMPLIANT: WITH “S” (Ref. A)

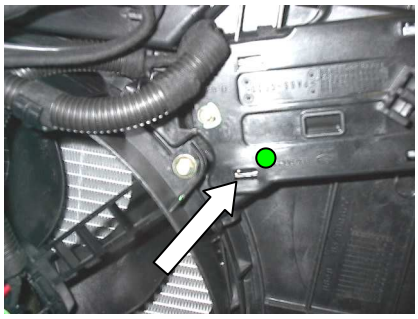


COMPLIANT (Ref. B)

COMPLIANT WITHOUT “S” (Ref. C)



COMPLIANT WITH FLAG (Ref. D)



COMPLIANT WITH GREEN OR YELLOW SPOT (Ref. E)
(the position is not binding)

TEST WITH EXAMINER (digital multimeter configuration)

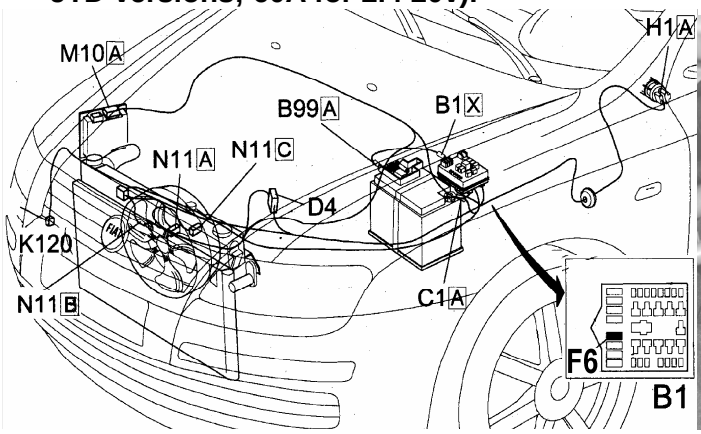
PRELIMINARY TESTS:

- ⇒ **Battery voltage must be ≥ 12.1 V (measured between the negative battery terminal and the positive wire fastening nut on the ECU B1).**
- ⇒ **The battery must have been connected for at least 2 hours.**
- ⇒ **At least 30 minutes must have elapsed since the engine was last stopped.**
- ⇒ **The vehicle doors must be closed during the test.**

NOTE: Reposition the battery protection cover if you need to wait for 2 hours before carrying out the test (e.g. because the battery has been disconnected or is flat).

MEASURING:

- ⇒ **Check that the ignition key is either at STOP or removed.**
- ⇒ **Remove the battery protection cover (if required).**
- ⇒ **Remove the radiator fan protection maxi-fuse (F6 in figure 1) (50A for 1.8 16v and 1.9 JTD versions; 60A for 2.4 20v).**



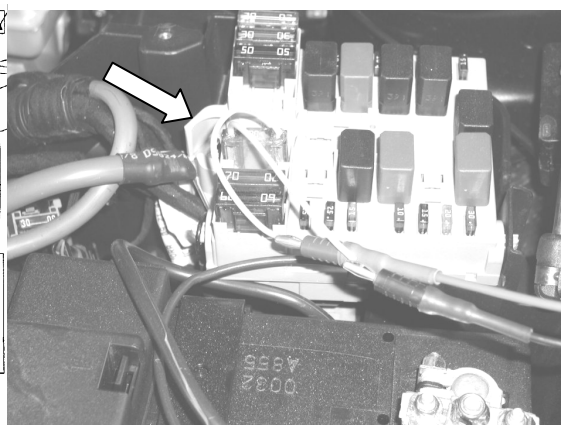


fig. 1 **fig. 2**

⇒ **Insert the device part no. 71729096 (50 kΩ shunt) in the previously removed MAXI-FUSE housing within 10 seconds (fig. 2 and 3).**

part no. 71729096

fig. 3

⇒ **Set up EXAMINER in digital multimeter configuration for reading continuous voltage and connect the probes in the device bushings.**
⇒ **Wait for 20 minutes for the voltage at device terminals to stabilise.**
⇒ **Check the voltage value on the EXAMINER display:**

If the voltage is lower than 0.045 V, the vehicle is OK.
Remove the shut and reposition the previously removed MAXI-FUSE.
Refit the ECU 1 by reversing the removal sequence
check correct position of wiring in the respective clips.
Reposition the wiring 2 in the clip 3.
Rearrange the battery compartment cover.

If voltage is higher than or equal to 0.045 V, replace the ECU as shown in INTERVENTION section (disconnect the negative battery terminal before replacing).

NOTE: If the measured value after 20 minutes is close to 0.000 V, open the driver's door for five seconds and close it: this operation should change the voltage value which should then return to the initial value.
If the operation does not make the reading change, check the configuration of EXAMINER and the conditions of the shunt. Replace the shunt if required.

INTERVENTION

⇒ **Disconnect the positive battery terminal and remove the battery.**
⇒ **Partially lift the relay unit to allow the following operations.**
⇒ **Disconnect the fan ECU corrugated wiring connections and remove the corrugated wiring from the battery compartment.**
⇒ **Disconnect the fan motor connector and fully remove the fan ECU.**
⇒ **Fit new fan ECU part no. 51706419 (1.8 16V – 1.9 JTD) or part no. 51706420 (2.4 20V) by reversing the removal sequence.**

⇒ **Make the electrical connections. Reposition the corrugated wiring correctly in the respective clips to avoid interference.**
⇒ **Remove the shut and reposition the previously removed maxi-fuse.**
⇒ **Fit the battery.**
⇒ **Connect the positive and negative battery terminals.**

⇒ **Fit the battery compartment cover.**

PERFORMED IDENTIFICATION:

A spot of white paint on the upper part of the ECU cover in a visible position.

SPARE PARTS IDENTIFICATION:

ECU	**part no. 51706419**	**Qty. 1 (1.8 16V – 1.9 JTD)**
ECU	**part no. 51706420**	**Qty. 1 (2.4 20V)**
Shunt	**part no. 71729096**	**Qty. 1**

TIME REQUIREMENTS

Intervention A = check	**Time requirement**	**0.20**
Intervention B = check + test with EXAMINER		**0.40**
Intervention B = check + test with EXAMINER + intervention		**0.90**