

MINISTERE DES TRANSPORTS

REFERENCE : No E13*67R00*67R01*0083*00

ANNEXES : Documentation technique

Luxembourg, le 09 décembre 2000

19-21, Boulevard Royal

L-2910 LUXEMBOURG

Tél. 478-1 - Télécopieur 241 817 - Télex 1465 CIVAIR LU



COMMUNICATION CONCERNANT - L'HOMOLOGATION
COMMUNICATION CONCERNING APPROVAL GRANTED

~~- LE REFUS D'HOMOLOGATION~~

~~APPROVAL REFUSED~~

~~- L'EXTENSION D'HOMOLOGATION~~

~~APPROVAL EXTENDED~~

~~- LE RETRAIT D'HOMOLOGATION~~

~~APPROVAL WITHDRAWN~~

~~- L'ARRÊT DÉFINITIF DE LA PRODUCTION~~

~~PRODUCTION DEFINITELY DISCONTINUED~~

D'UN TYPE D'EQUIPEMENT GPL EN APPLICATION DU RÈGLEMENT N°67

OF A TYPE OF LPG EQUIPMENT PURSUANT TO REGULATION No 67



Numéro d'homologation :

Approval number :

E13*67R00*67R01*0083*00

Marque d'homologation :

Approval mark :



67R - 01 0083

1.

Equipement GPL:

LPG equipment considered :

not applicable

Réservoir:

Container :

not applicable

Accessoires fixés au réservoir ⁽²⁾

Accessories fitted to the container ⁽²⁾

- limiteur de remplissage à 80 %

80 per cent stop valve:

not applicable

- jauge

lever indicator

not applicable

- soupape de surpression

pressure relief valve (discharge valve)

not applicable

**- vanne d'isolement télécommandée
avec limiteur de débit**

remotely controlled service valve
with excess flow valve

not applicable

- avec/sans pompe à GPL ⁽²⁾

with/without LPG fuel pump ⁽²⁾

not applicable



bloc multivannes, y compris les accessoires suivants:

multivalve, including the following accessories:

- capot étanche:

gas-tight housing: not applicable

- traversée d'alimentation (pompe/actionneurs) ⁽²⁾:

power supply bushing (pump/actuators) ⁽²⁾: not applicable

Pompe à GPL ⁽²⁾:

LPG fuel pump ⁽²⁾: not applicable

Vaporisateur/détendeur ⁽²⁾:

Vaporizer/pressure regulator ⁽²⁾: not applicable

Vanne d'arrêt ⁽²⁾:

Shut-off valve ⁽²⁾: not applicable

Soupape antiretour ⁽²⁾:

Non-return valve ⁽²⁾: not applicable

Soupape de surpression sur la tuyauterie de gaz ⁽²⁾:

Gas-tube pressure relief valve ⁽²⁾: not applicable

Raccord d'alimentation de secours ⁽²⁾:

Service coupling ⁽²⁾: not applicable

Flexible ⁽²⁾:

Flexible hose ⁽²⁾: not applicable

Embout de remplissage à distance ⁽²⁾:

Remote filling unit ⁽²⁾: not applicable

Dispositif d'injection de gaz ou injecteur ⁽²⁾:

Gas injection device or injector ⁽²⁾: not applicable

Rampe d'alimentation ⁽²⁾:

Fuel rail ⁽²⁾: not applicable

Doseur de gaz ⁽²⁾:

Gas dosage unit ⁽²⁾: not applicable

Mélangeur de gaz ⁽²⁾:

Gas mixing piece ⁽²⁾: not applicable

Module de commande électronique ⁽²⁾:

Electronic control unit ⁽²⁾: type: M198
versions: M198-I, M198-c

Capteur de pression/température ⁽²⁾:

Pressure/temperature sensor ⁽²⁾: not applicable

Filtre à GPL ⁽²⁾:

LPG filter unit ⁽²⁾: not applicable

2. Marque de fabrique ou de commerce:

Trade name or mark : Lovato

Type:

Type: M198

3. Nom et adresse du fabricant:

Manufacturer's name and address: Officine Lovato S.p.A.
Strada Casale, 175
I-36100 Vicenza



4. **Le cas échéant, nom et adresse du mandataire du fabricant:**
If applicable, name and address of the manufacturer's representative: not applicable
5. **Equipement présenté à l'homologation le:**
Submitted for approval on: 18.10.2000
6. **Service technique chargé des essais d'homologation:**
Technical service responsible for conducting approval tests: Luxcontrol S.A.
B.P. 349
L-4004 Esch-sur Alzette
7. **Date du procès-verbal délivré par ce service:**
Date of report issued by that service: 24.11.2000
8. **Numéro du procès-verbal:**
Number of test report issued by that service: LCA 54 309 007 0
9. **Homologation:**
Approval: granted
10. **Raisons de l'extension (éventuellement):**
Reason(s) for extension (if applicable): not applicable
11. **Lieu:**
Place: Luxembourg
12. **Date:**
Date: 09 décembre 2000
13. **Signature:**
Signature:



Pour le Ministre des Transports


Paul SCHMIT
Commissaire du Gouvernement



14. **Des copies des documents soumis dans le dossier d'homologation ou d'extension de l'homologation peuvent être obtenues sur demande.**
The documents filed with the application or extension of approval can be obtained upon request.
see "INDEX TO TYPE-APPROVAL REPORT"

⁽²⁾ **Biffer les mentions inutiles**
Strike out what does not apply.

MINISTERE DES TRANSPORTS

REFERENCE : N° E13*67R00*67R01*0083*00

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Luxembourg, le 09 décembre 2000

19-21, Boulevard Royal

L-2910 Luxembourg

Tél. 478-1 - Télécopieur 241817 - Télex 1465 CIVAIR LU

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Numéro d'homologation:

Approval number:

E13*67R00*67R01*0083*00

1.

Procès-verbal d'essais:

Test report:

- Technical report:
- Index:

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2.

Dossier du constructeur:

Report of manufacturer:

- Information document:
- Drawings of the device:

Page 001
Page 002, 003, 004, 005, 006, 007, 008

3.

Autres documents annexés:

Other documents annexed:

not applicable

Date de délivrance de l'homologation initiale:

Date of issue of initial type-approval:

09.12.2000

Date de la dernière délivrance de pages révisées:

Date of last issue of revised pages:

not applicable

Date de la dernière délivrance d'une homologation révisée:

Date of last extension:

not applicable





Luxcontrol^{SA}
HOMOLOGATION AUTOMOBILE

TECHNICAL REPORT

No.: LCA 54 309 007 0

Inspection concerning the

Specific equipment of motor vehicles using liquefied petroleum gases in their propulsion system

performed according to

ECE – Regulation No. 67

Type: **M198**
Manufacturer: **Officine Lovato S.p.A.**
Strada Casale, 175
I-36100 Vicenza

Extension -- to ECE Type Approval no.: not applicable

Index:

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4. Statement of compliance	Page 6
5. Annex (beginning with an index)	

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E13*67R00*67R01*0083*00

Société Nationale de Contrôle Technique-Homologations

Luxcontrol SA

1, Av. des Terres Rouges, L-4004 Esch-sur-Alzette
BP 349
LUXEMBOURG
Assurance Qualité EN ISO 9001:2015
N° 5-0022 (E) (K) (R) (S) (T) (U) (V) (W) (X) (Y) (Z) (AA) (AB) (AC) (AD) (AE) (AF) (AG) (AH) (AI) (AJ) (AK) (AL) (AM) (AN) (AO) (AP) (AQ) (AR) (AS) (AT) (AU) (AV) (AW) (AX) (AY) (AZ) (BA) (BB) (BC) (BD) (BE) (BF) (BG) (BH) (BI) (BJ) (BK) (BL) (BM) (BN) (BO) (BP) (BQ) (BR) (BS) (BT) (BU) (BV) (BW) (BX) (BY) (BZ) (CA) (CB) (CC) (CD) (CE) (CF) (CG) (CH) (CI) (CJ) (CK) (CL) (CM) (CN) (CO) (CP) (CQ) (CR) (CS) (CT) (CU) (CV) (CW) (CX) (CY) (CZ) (DA) (DB) (DC) (DD) (DE) (DF) (DG) (DH) (DI) (DJ) (DK) (DL) (DM) (DN) (DO) (DP) (DQ) (DR) (DS) (DT) (DU) (DV) (DW) (DX) (DY) (DZ) (EA) (EB) (EC) (ED) (EE) (EF) (EG) (EH) (EI) (EJ) (EK) (EL) (EM) (EN) (EO) (EP) (EQ) (ER) (ES) (ET) (EU) (EV) (EW) (EX) (EY) (EZ) (FA) (FB) (FC) (FD) (FE) (FF) (FG) (FH) (FI) (FJ) (FK) (FL) (FM) (FN) (FO) (FP) (FQ) (FR) (FS) (FT) (FU) (FV) (FW) (FX) (FY) (FZ) (GA) (GB) (GC) (GD) (GE) (GF) (GG) (GH) (GI) (GJ) (GK) (GL) (GM) (GN) (GO) (GP) (GQ) (GR) (GS) (GT) (GU) (GV) (GW) (GX) (GY) (GZ) (HA) (HB) (HC) (HD) (HE) (HF) (HG) (HH) (HI) (HJ) (HK) (HL) (HM) (HN) (HO) (HP) (HQ) (HR) (HS) (HT) (HU) (HV) (HW) (HX) (HY) (HZ) (IA) (IB) (IC) (ID) (IE) (IF) (IG) (IH) (II) (IJ) (IK) (IL) (IM) (IN) (IO) (IP) (IQ) (IR) (IS) (IT) (IU) (IV) (IW) (IX) (IY) (IZ) (JA) (JB) (JC) (JD) (JE) (JF) (JG) (JH) (JI) (JJ) (JK) (JL) (JM) (JN) (JO) (JP) (JQ) (JR) (JS) (JT) (JU) (JV) (JW) (JX) (JY) (JZ) (KA) (KB) (KC) (KD) (KE) (KF) (KG) (KH) (KI) (KJ) (KK) (KL) (KM) (KN) (KO) (KP) (KQ) (KR) (KS) (KT) (KU) (KV) (KW) (KX) (KY) (KZ) (LA) (LB) (LC) (LD) (LE) (LF) (LG) (LH) (LI) (LJ) (LK) (LL) (LM) (LN) (LO) (LP) (LQ) (LR) (LS) (LT) (LU) (LV) (LW) (LX) (LY) (LZ) (MA) (MB) (MC) (MD) (ME) (MF) (MG) (MH) (MI) (MJ) (MK) (ML) (MM) (MN) (MO) (MP) (MQ) (MR) (MS) (MT) (MU) (MV) (MW) (MX) (MY) (MZ) (NA) (NB) (NC) (ND) (NE) (NF) (NG) (NH) (NI) (NJ) (NK) (NL) (NM) (NN) (NO) (NP) (NQ) (NR) (NS) (NT) (NU) (NV) (NW) (NX) (NY) (NZ) (OA) (OB) (OC) (OD) (OE) (OF) (OG) (OH) (OI) (OJ) (OK) (OL) (OM) (ON) (OO) (OP) (OQ) (OR) (OS) (OT) (OU) (OV) (OW) (OX) (OY) (OZ) (PA) (PB) (PC) (PD) (PE) (PF) (PG) (PH) (PI) (PJ) (PK) (PL) (PM) (PN) (PO) (PP) (PQ) (PR) (PS) (PT) (PU) (PV) (PW) (PX) (PY) (PZ) (QA) (QB) (QC) (QD) (QE) (QF) (QG) (QH) (QI) (QJ) (QK) (QL) (QM) (QN) (QO) (QP) (QQ) (QR) (QS) (QT) (QU) (QV) (QW) (QX) (QY) (QZ) (RA) (RB) (RC) (RD) (RE) (RF) (RG) (RH) (RI) (RJ) (RK) (RL) (RM) (RN) (RO) (RP) (RQ) (RR) (RS) (RT) (RU) (RV) (RW) (RX) (RY) (RZ) (SA) (SB) (SC) (SD) (SE) (SF) (SG) (SH) (SI) (SJ) (SK) (SL) (SM) (SN) (SO) (SP) (SQ) (SR) (SS) (ST) (SU) (SV) (SW) (SX) (SY) (SZ) (TA) (TB) (TC) (TD) (TE) (TF) (TG) (TH) (TI) (TJ) (TK) (TL) (TM) (TN) (TO) (TP) (TQ) (TR) (TS) (TT) (TU) (TV) (TW) (TX) (TY) (TZ) (UA) (UB) (UC) (UD) (UE) (UF) (UG) (UH) (UI) (UJ) (UK) (UL) (UM) (UN) (UO) (UP) (UQ) (UR) (US) (UT) (UU) (UV) (UW) (UX) (UY) (UZ) (VA) (VB) (VC) (VD) (VE) (VF) (VG) (VH) (VI) (VJ) (VK) (VL) (VM) (VN) (VO) (VP) (VQ) (VR) (VS) (VT) (VU) (VV) (VW) (VX) (VY) (VZ) (WA) (WB) (WC) (WD) (WE) (WF) (WG) (WH) (WI) (WJ) (WK) (WL) (WM) (WN) (WO) (WP) (WQ) (WR) (WS) (WT) (WU) (WV) (WW) (WX) (WY) (WZ) (XA) (XB) (XC) (XD) (XE) (XF) (XG) (XH) (XI) (XJ) (XK) (XL) (XM) (XN) (XO) (XP) (XQ) (XR) (XS) (XT) (XU) (XV) (XW) (XX) (XY) (XZ) (YA) (YB) (YC) (YD) (YE) (YF) (YG) (YH) (YI) (YJ) (YK) (YL) (YM) (YN) (YO) (YP) (YQ) (YR) (YS) (YT) (YU) (YV) (YW) (YX) (YY) (YZ) (ZA) (ZB) (ZC) (ZD) (ZE) (ZF) (ZG) (ZH) (ZI) (ZJ) (ZK) (ZL) (ZM) (ZN) (ZO) (ZP) (ZQ) (ZR) (ZS) (ZT) (ZU) (ZV) (ZW) (ZX) (ZY) (ZZ)

CCP: 58 197-94
BGL: 30-161 207-27
TVA: LU 113 536 61
RC Lux.: n° B15664



1. **General**

1.1. **Test Provisions**

The inspection was carried out according to the requirements of ECE-Regulation No. 67 including Corrigendum 1 of the 01 series of amendments, which entered into force on November 13, 1999.

1.2. **Information concerning the vehicle type and the requested approval**

The statements below apply to the previous ECE type-approval as referred to on page 1.

1.2.1. **[] Numbering according to the communication concerning the approval of ECE-R67**

[1.] LPG equipment considered:

Control unit

- **Type:** M198
- **Versions:** M198-I, M198-c

[2.] Trade name or mark:

Lovato

[3.] Manufacturer's name and address:

**Officine Lovato S.p.A.
Strada Casale, 175
I-36100 Vicenza**

[4.] If applicable, name and address of manufacturer's representative:

Not applicable

[5.] Submitted for approval on: **18.10.2000**

[10.] Reason(s) of extension:

Not applicable

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E13*67R00*67R01*0083*00

Société Nationale de Contrôle Technique-Homologations
L-5201 SANDWEILER (Luxembourg)
Assurance Qualité certifiée COFRAC EN 45011
Accréditation N° 5-0022 (Portée communiquée sur demande)



2. Inspections and their results

2.1. Version of the tested equipment

The following variants have been used for testing (if not stated in part 1.2.1. of this report):

Not applicable

2.2. Inspection items

	Location of test:	Date of receipt of test item:	Date of test:
Main Report	Bollate (Italy)	18.10.2000	18.10.2000

2.2.1. General

No parts of the control unit are in contact with LPG.

Every material of the equipment in contact with LPG is compatible with it.

The control unit complies with relevant electromagnetic compatibility requirements of the amendment 95/54/EC of the Directive 72/245/EEC with is considered as equivalent to Regulation R10.02.

2.2.2. Inspections: (control unit; Annex 14)

Tests	Test results	Line item
Switching off delay	requirements fulfilled	Annex 14, par. 2
Electromagnetic compatibility	type approval: e13*72/245*95/54*0683*00	Annex 14, par. 3
Electrical failure	requirements fulfilled	Annex 14, par. 4
Output of electronic control unit	requirements fulfilled	Annex 14, par. 5

2.3. Remarks

Inspection results are only applicable to items, which have been tested.

2.4. Test facilities

All measuring and test equipment used to carry out the inspections are in accordance with the ECE-Regulation stated in 1.1. of this report and with EN 45001.

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3. Evaluation of test results

3.1. Variants and equipment covered

The tests carried out cover the following variations as far as these are relevant for the gas unit:

- device versions as stated in the information document

3.2. Remarks

3.2.1. Main report:

Not applicable

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E13*67R00*67R01*0083*00

Société Nationale de Contrôle Technique-Homologations

L-5201 SANDWEILER (Luxembourg)

Assurance Qualité certifiée COFRAC EN 45011

Accréditation N° 5-0022 (Portée communiquée sur demande)



4. Statement of compliance

The inspections items and measurements carried out have shown the compliance of the vehicle type described in this report and the attached Annex with the requirements of ECE-Regulation No. 67 including Corrigendum 1 of the 01 series of amendments, which entered into force on November 13, 1999.

Esch/Alzette, November 24th, 2000

Luxcontrol s.a.
Service Homologation-automobile

Paul Wax
Ingénieur-Inspecteur

Patrizio Vinciarelli
Ingénieur-Inspecteur

Annex

E13*67R00*67R01*0083*00

Société Nationale de Contrôle Technique-Homologations

L-5201 SANDWEILER (Luxembourg)

Assurance Qualité certifiée COFRAC EN 45011

Accréditation N° 5-0022 (Portée communiquée sur demande)



Index to the information package, including a summary in chronological order, concerning extensions and/or amendments

EEC type-approval No.: not applicable

Main Report

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Composition of the Annex:

A: Index Page 1
B: Information folder Pages 1 to 8

Index to the information folder:

- manufacturer's information document (pages 1 to 8)
