

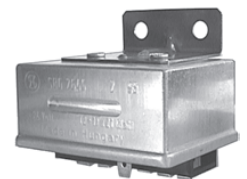
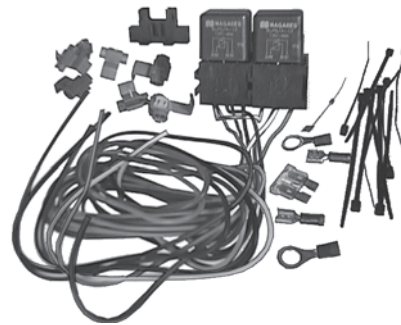
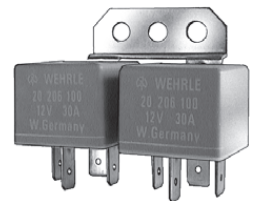
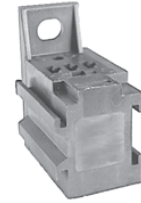


RELAYS

RELAIS

RELAIS

RELÈ



PART 1 1
3rd Edition



ISO/TS 16949:2002 certified supplier

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ABBREVIATIONS:

A=Assortment, **AC**=Air Condition, **Alu**=Aluminium, **Amp.**=Ampere, **AT**=Automatic Transmission, **Cat.**=Catalyzer, **Ch.**=Chassis, **Cyl.**=Cylinder, **CW**=Clockwise rotation, **Eur.**=European application, **FWD.**=Front Wheel Drive, **H**=Hight, **HD**=Heavy Duty construction, **HP**=Horse Power, **I.D.**=Inner Diameter, **kW.**=Kilowatt, **L**=Length, **LHD**=Left Hand Drive, **LL.**=Lead Length, **M**=Minimum supply, **MT**=Manual Transmission, **Mtr.**=Metre, **O.D.**=Outer Diameter, **O.E.**=Original Equipment, **PS**=Power Steering, **RHD**=Right Hand Drive, **Th.**=Thickness, **V.**=Volt, **W/=With**, **W/o=Without**, **W.**=Width, **4WD.**=Four Wheel Drive, New Number.

Bo=Bosch, **Ch**=Chrysler, **Du**=Ducellier, **DR**=Delco Remy, **Fe**=Femsa, **Fo**=Ford, **Hi**=Hitachi, **Lu**=Lucas, **Ma**=Mazda, **Mi**=Mitsubishi, **MM**=Magneti Marelli, **Mo**=Motorola, **Mt**=Magnetron, **ND**=Nippondenso, **Pa**=Pal Magnetron, **SE**=SEV, **Si**=Siemens, **Ta**=Talbot, **Te**=Telefunken


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ABKÜRZUNGEN:

A=Sortimente, **AC**=Air Condition, **Alu**=Aluminium, **Amp.**=Ampere, **AT**=Automatik Getriebe, **Cat.**=Katalysator, **Ch.**=Fahrgestell, **Cyl.**=Zylinder,
CW=Uhrzeigersinn, **Eng.**=Motor, **Eur.**=Europäische Montierung, **FWD.**=Frontantrieb, **H**=Höhe, **HD**=Hochbelastbar / Schüttelfest,
HP=Pferdestärke, **I.D.**=Innendurchmesser, **kW.**=Kilowatt, **L**=Länge, **LHD**=Linksgesteuert, **LL.**=Kabellänge, **M**=Mindestbestellmenge,
MT=Manual Getriebe, **Mtr.**=Meter, **O.D.**=Aussendurchmesser, **O.E.**=Originalteil, **PS**=Servolenkung, **RHD**=Rechtsgesteuert, **Th.**=Dicke,
V.=Volt, **W/**=mit, **W/o**=ohne, **W.**=Breite, **4WD.**=Allradantrieb,  Neue Nummer.

Bo=Bosch, **Ch**=Chrysler, **Du**=Ducellier, **DR**=Delco Remy, **Fe**=Femsa, **Fo**=Ford, **Hi**=Hitachi, **Lu**=Lucas, **Ma**=Mazda,
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Si=Siemens, **Ta**=Talbot, **Te**=Telefunken

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ABREVIATIONS:

A=Assortiment, **AC**=Climatisation, **Alu**=Aluminium, **Amp.**=Ampère, **AT**=Transmission automatique, **Cat.**=Catalyseur, **Ch.**=Numéro de Série, **Cyl.**=Cylindre, **CW**=Rotation dans le sens des aiguilles d'une montre, **Eur.**=Application européenne, **FWD.**=Traction Avant, **H**=Hauteur, **HD**=Construction de grande puissance, **HP**=Chevaux, **I.D.**=Diamètre Intérieur, **kW.**=Kilowatt, **L**=Longueur, **LHD**=Conduite à gauche, **LL**=Longueur du câble, **M**=Livraison minimum, **MT**=Transmission Manuelle, **Mtr.**=Mètre, **O.D.**=Diamètre Extérieur, **O.E.**=Référence d'orgine, **PS**=Direction Assistée, **RHD**=Conduite à droite, **Th.**=Epaisseur, **V.**=Volt, **W/**=avec, **W/o**=sans, **W.**=Largeur, **4WD.**=Quatre roues motrices, Nouvelle référence.

Bo=Bosch, **Ch**=Chrysler, **Du**=Ducellier, **DR**=Delco Remy, **Fe**=Femsa, **Fo**=Ford, **Hi**=Hitachi, **Lu**=Lucas, **Ma**=Mazda, **Mi**=Mitsubishi, **MM**=Magneti Marelli, **Mo**=Motorola, **Mt**=Magnetron, **ND**=Nippondenso, **Pa**=Pal Magnetron, **SE**=SEV, **Si**=Siemens, **Ta**=Talbot, **Te**=Telefunken

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ABBREVIAZIONI:

A=Assortimenti, **AC**=Aira Condizionata, **Alu.**=Alluminio, **Amp.**=Ampere, **AT**=Trasmissione Automatica, **Cat.**=Catalizzato, **Ch.**=Chassis, **Cyl.**=Cilindro, **CW**=Rotazione Oraria, **Eng.**=Motore, **Eur.**=Applicazioni Europee, **FWD**=Trazione Anteriore, **HD**=Versione Potenziata, **HP**=Cavalli Vapore, **I.D.**=Diametro Interno, **kW.**=Kilowatt, **L**=Lunghezza, **LL**=Lunghezza Principale, **LHD**=Montato a Sinistra, **M**=Minimo Fornibile, **MT**=Trasmissione Manuale, **Mtr.**=Metro, **O.D.**=Diametro Esterno, **O.E.**=Equipaggiamento Originale, **PS**=Controllo di potenza, **RHD**=Montato a destra, **Th.**=Spessore, **V.**=Volt, **W/=Con**, **W/o**=Senza, **W.**=Larghezza, **4WD**=Trazione integrale,  Nuovo Numero.

Bo=Bosch, **Ch**=Chrysler, **Du**=Ducellier, **DR**=Delco Remy, **Fe**=Femsa, **Fo**=Ford, **Hi**=Hitachi, **Lu**=Lucas, **Ma**=Mazda, **Mi**=Mitsubishi, **MM**=Magnetit Marelli, **Mo**=Motorola, **Mt**=Magneton, **ND**=Nippondenso, **Pa**=Pal Magneton, **SE**=SEV, **Si**=Siemens, **Ta**=Talbot, **Te**=Telefunken

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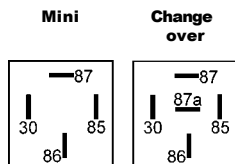
GB Terminal Designations for Relays

- 1 Ignition coil - Low voltage side.
- 15 Ignition controlled feed (Ignition / key switch)
- 30 Input from positive battery terminal.
- 31 Return to battery - ve (ground).
- 31b Return time to neg. battery terminal or ground.
- 50 Starter control (direct).
- 53c Electric windshield washer pump.
- 53e Wiper (brake winding).

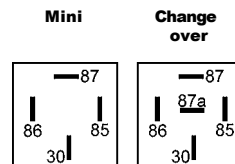
- 85 End of winding to negative.
- 85b End of second winding.
- 86 Start of winding.
- 87 Switching relay Output (N/O contacts).
-Input (C/O contacts).
- 87a First output (break side).
- 87b Second output.
- L Control lamp.
- TD 12 V. square wave input from ECU.

GB DIN 72651 DIN 72552

- W2 1 86 Start of winding.
- W1 2 85 End of winding to negative.
- C2 3 30 Input from positive battery terminal.
- C3 4 87a 1st output (break contact side).
- C1 5 87 Switching relay - Output (N/O contacts) - Input (C/O contacts).



A
Servicing BMW, Ford, Jaguar, Opel, Volvo.



B
Servicing Audi, British Leyland, Citroën, DB-LKW, KHD, MAN, Massey Ferguson, Peugeot, Saab, Talbot, Volvo, VW.

Anschluss-Bezeichnungen für Relais
D

1 Zündspule - Niederspannungsseite.

15 Geschaltetes Plus hinter Batterie (Ausgang Zündschalter).

30 Eingang von B+ (direkt).

31 Rückleitung ab B- od. Masse (direkt).

31b Rückleitung an B- od. Masse über Schalter od. Relais.

50 Startersteuerung (direkt).

53c Elektrische Scheibenwaschpumpe.

53e Wischer (Bremswicklung).

85 Wicklungsende - Minusseite.

85b Ende der zweiten Wicklung.

86 Wicklungsanfang.

87 Relaiskontakt bei Öffner u. Wechsler (Eingang).

87a Erster Ausgang (Öffnerseite).

87b Zweiter Ausgang.

L Kontroll-Lampe.

TD 12 V. - Rechtecksignaleingang von ECU. (Steuergerät).

GB DIN 72651 DIN 72552

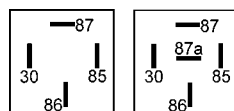
W2 1 86 Wicklungsanfang.

W1 2 85 Wicklungsende - Minusseite.

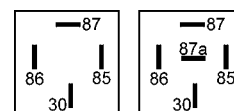
C2 3 30 Eingang von B+ (direkt).

C3 4 87a Erster Ausgang (Öffnerseite).

C1 5 87 Relaiskontakt bei Öffner u. Wechsler (Eingang).

Klein Wechsler


A
Für BMW, Ford, Jaguar, Opel, Volvo.

Klein Wechsler


B
Für Audi, British Leyland, Citroën, DB-LKW, KHD, MAN, Massey Ferguson, Peugeot, Saab, Talbot, Volvo, VW.

F Description des Broches pour Relais

1 Sortie rupteur.

15 + Contact.

30 + permanent.

31 Masse.

31b Retour de masse.

50 Démarrage.

53c Commande pompe électrique de Lave-Glaces.

53e Moteur Essuie-Glaces.

85 1ère sortie d'enroulement de relais.

85b Fin de sortie d'enroulement de relais.

86 2ème sortie d'enroulement de relais.

87 Contact Sortie - (Contact fermé) -
Sortie (Contact ouvert).

87a 1ère sortie.

87b 2ème sortie.

L Lampe Témoin.

TD Sortie séquentielle en 12 V. pour les calculateurs.

GB DIN 72651 DIN 72552

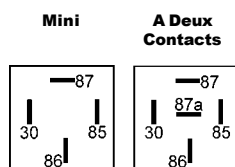
W2 1 86 2ème sortie d'enroulement de relais.

W1 2 85 1ère sortie d'enroulement de relais.

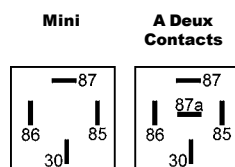
C2 3 30 + permanent.

C3 4 87a 1ère sortie.

C1 5 87 Contact Sortie - (Contact fermé) - Sortie (Contact ouvert).



A
Affectation BMW, Ford, Jaguar, Opel, Volvo.

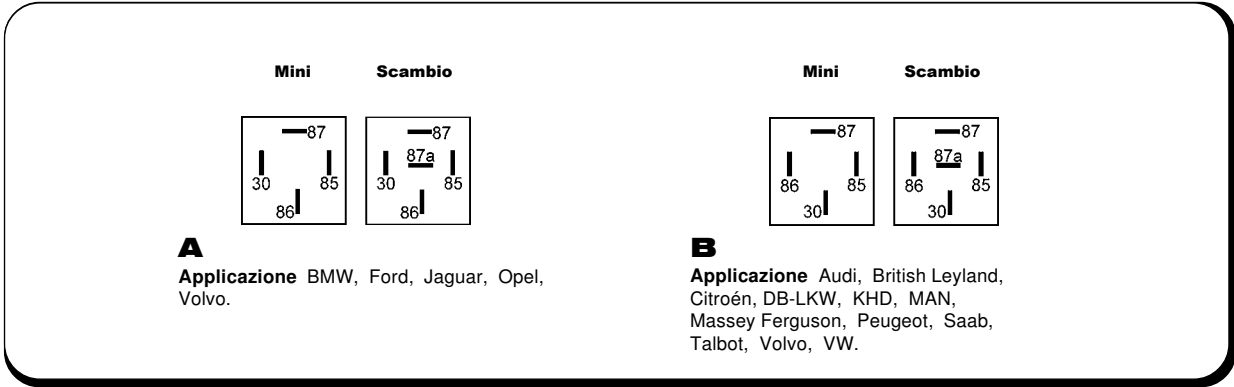


B
Affectation Audi, British Leyland, Citroën,
DB-LKW, KHD, MAN, Massey Ferguson,
Peugeot, Saab, Talbot, Volvo, VW.

Descrizione Terminali per Relè I

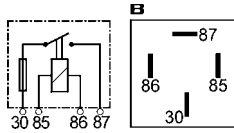
- | | |
|---|---|
| <p>1 Bobina accensione - Lato bassa tensione.</p> <p>15 Accensione / Sottochiave.</p> <p>30 Ingresso dal positivo.</p> <p>31 Uscita negativo o massa.</p> <p>31b Terminale uscita temporizzata.</p> <p>50 Starter.</p> <p>53c Pompa lavavetri.</p> <p>53e Tergicristallo (avvolgimento di stop).</p> <p>85 Fine avvolgimento al negativo.</p> | <p>85b Fine secondo avvolgimento.</p> <p>86 Inizio avvolgimento.</p> <p>87 Contatto relè (uscita Normalmente Aperto) (Ingresso Normalmente Chiuso).</p> <p>87a Prima uscita.</p> <p>87b Seconda uscita.</p> <p>L Lampada di controllo.</p> <p>TD 12 V. - Ingresso onda quadra da ECU.</p> |
|---|---|

- | | | |
|------------|-------------------------|--|
| GB | <u>DIN 72651</u> | <u>DIN 72552</u> |
| W2 1 | 86 | Inizio avvolgimento. |
| W1 2 | 85 | Fine avvolgimento. |
| C2 3 | 30 | Ingresso dal positivo. |
| C3 4 | 87a | Prima uscita. |
| C1 5 | 87 | Contatto relè (uscita Normalmente Aperto) (Ingresso Normalmente Chiuso). |

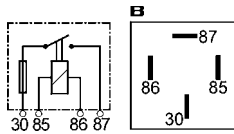


Terminal Designations
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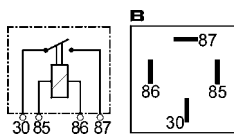
Mini Relays



160155 A
12 V. 15 Amp. 4 terminals.
W/ insertable ATO-blade fuse.

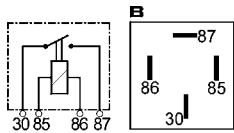


160473 A
24 V. 15 Amp. 4 terminals.
W/ insertable ATO-blade fuse.



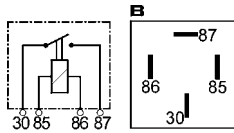
160652
6 V. 20 Amp. 4 terminals.

WEHRLE



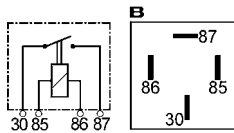
160080 A
12 V. 30 Amp. 4 terminals.

WEHRLE



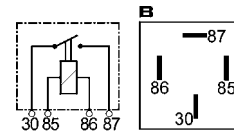
160082 A
24 V. 20 Amp. 4 terminals.

WEHRLE



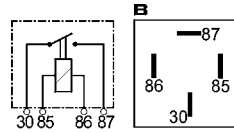
160307 A Std pkg 10
As Cargo 160082, but w/o bracket.
24 V. 20 Amp. 4 terminals.

NAGARES



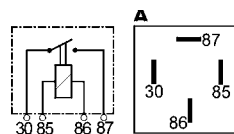
160311 A
12 V. 40 Amp. 4 terminals.

NAGARES



160282 A
As Cargo 160311, but w/o bracket.
12 V. 40 Amp. 4 terminals.

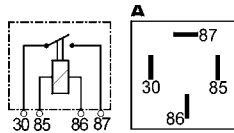
WEHRLE



160083 A
12 V. 30 Amp. 4 terminals.

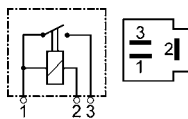
Mini Relays

WEHRLE



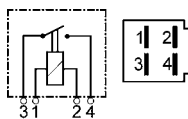
160215 A
24 V. 20 Amp. 4 terminals.

XILES



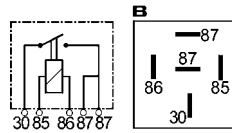
160479 A
12 V. 25 Amp. 3 terminals.

XILES



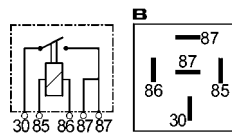
160480 A
12 V. 25 Amp. 4 terminals.

WEHRLE



160265 A
12 V. 30 Amp. 5 terminals.

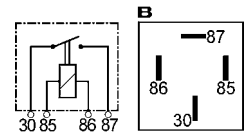
WEHRLE



160266 A
24 V. 20 Amp. 5 terminals

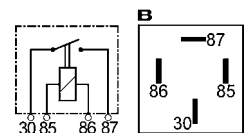
High Performance

WEHRLE



160239 A
12 V. 70 Amp. 4 terminals.
W/ two 6.3 mm. and two 9.5 mm.
terminals (terminals 30 and 87).

WEHRLE



160240 A
24 V. 30 Amp. 4 terminals.
W/ two 6.3 mm. and two 9.5 mm.
terminals (terminals 30 and 87).

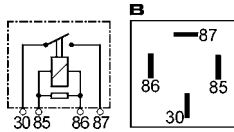
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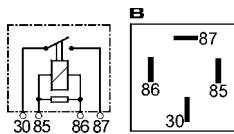
Mini Relays

High Performance

WEHRLE

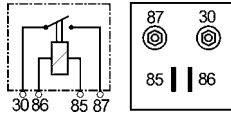


160468 A
12 V. 70 Amp. 4 terminals.
W/ two 6.3 mm. and two 9.5 mm. terminals (terminals 30 and 87).
W/o bracket, w/ resistor.



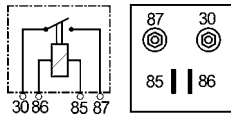
160272 A
24 V. 70 Amp. 4 terminals.
W/ two 6.3 mm. and two 9.5 mm. terminals (terminals 30 and 87).
W/o bracket, w/ resistor.

NAGARES



160477
12 V. 100 Amp. continued.
180 Amp. for 15 sec. 4 terminals.
(2 screws, 2 flat plugs).

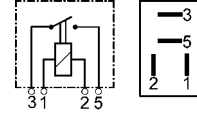
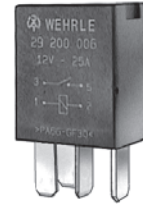
NAGARES



160478
24 V. 60 Amp. continued.
80 Amp. for 15 sec. 4 terminals.
(2 screw, 2 flat plug).

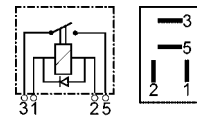
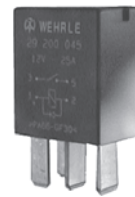
Micro Relays

WEHRLE



160363 A
12 V. 25 Amp. 4 terminals.
W/o bracket.

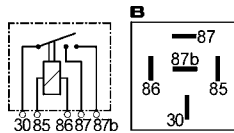
WEHRLE



160364 A
12 V. 25 Amp. 4 terminals.
W/ diode.
W/o bracket.

Double Contact Relays

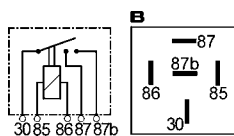
NAGARES



160168 A

12 V. 2 x 15 Amp. 5 terminals.

NAGARES

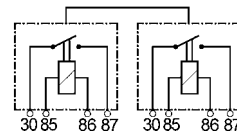
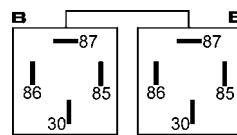
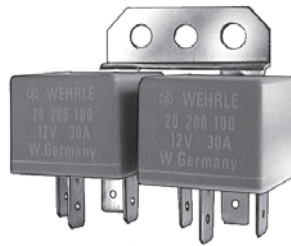


160169 A

24 V. 2 x 10 Amp. 5 terminals.

Twin Relays

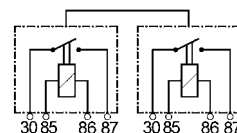
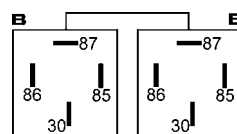
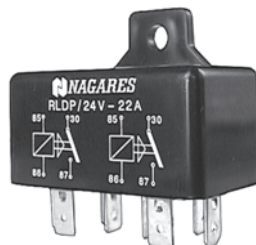
WEHRLE



160267

12 V. 2 x 30 Amp. 2 x 4 terminals.

NAGARES

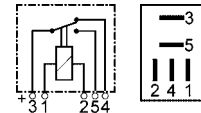
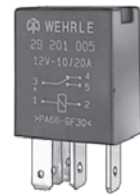


160268 A

24 V. 2 x 20 Amp. 2 x 4 terminals.

Change Over Relays

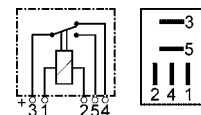
WEHRLE



160365 A

12 V. 10/20 Amp. 5 terminals. W/o bracket.

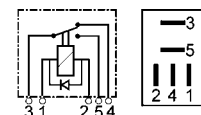
WEHRLE



160368 A

24 V. 4/10 Amp. 5 terminals. W/o bracket.

WEHRLE



160366 A

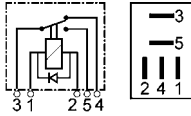
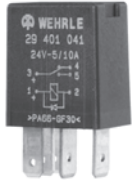
12 V. 15/25 Amp. 5 terminals. W/ diode. W/o bracket.

Cross Reference List page 71

Terminal Designations
page 6 - 9

Change Over Relays

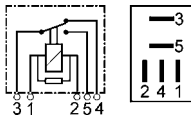
WEHRLE



160521

24 V. 5/10 Amp. 5 terminals.
W/ diode.
W/o bracket.

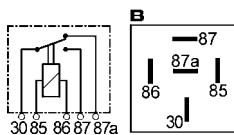
WEHRLE



160367 A

12 V. 15/25 Amp. 5 terminals.
W/ resistor.
W/o bracket.

WEHRLE

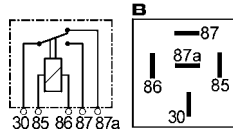


160081 A

12 V. 20/30 Amp. 5 terminals.



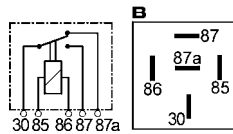
WEHRLE



160216 A

24 V. 10/20 Amp. 5 terminals.

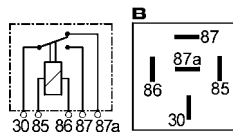
NAGARES



160308 A

12 V. 15/40 Amp. 5 terminals.
W/o bracket.

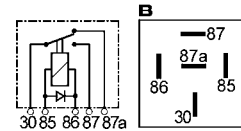
NAGARES



160337 A

24 V. 10/22 Amp. 5 terminals.
W/o bracket.

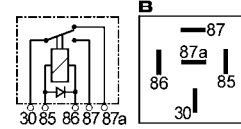
WEHRLE



160270 A

12 V. 20/30 Amp. 5 terminals.
W/ diode.

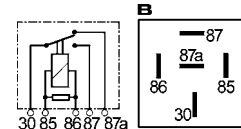
WEHRLE



160271 A

24 V. 10/20 Amp. 5 terminals.
W/ diode.

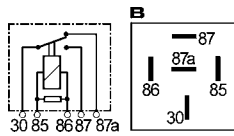
WEHRLE



160403 A

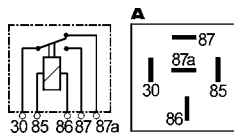
12 V. 20/30 Amp. 5 terminals.
W/ resistor.

Change Over Relays



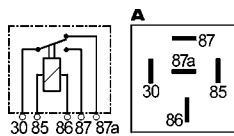
160394

Replacing 89 9932, 89 9957.
Servicing Mercedes, Iveco.
 24 V. 40/60 Amp. 5 terminals.
 W/o bracket w/ resistor.



160316 A

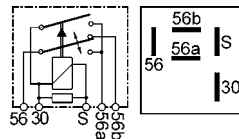
12 V. 15/40 Amp. 5 terminals.



160317 A

24 V. 10/22 Amp. 5 terminals.

Dip Relay



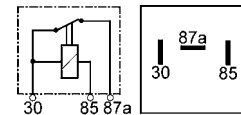
160654

Replacing Stribel 899202.
Servicing Audi, VW
 For headlamp dip or flasher unit (Flip Flop).
 12 V. 2x150 Watt. 5 terminals.



Switch-off Relays

WEHRLE

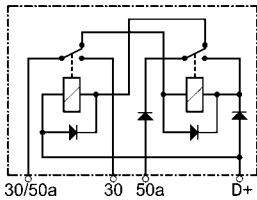
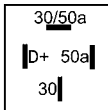


160404

12 V. max. 2x21 Watt. 3 terminals.
 To switch off automatically one or two rear fog light lamps, if trailer or caravan is being connected to the towing vehicle.

Start Repeat Locking Relays

WEHRLE

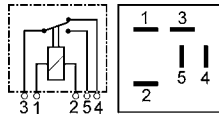


160472

24 V. 4 terminals.

Charge Relays

JIDECO



160407

Replacing Isuzu 8-94235-627-0.
12 V. 20 Amp. 5 terminals.

Relay Multi Plugs



190766 Std pkg 10

Socket. 9 terminals max.
Sockets can be built together.
5 x 6.3 mm flat plug terminals.
4 x 2.8 mm flat plug terminals.

192158

Kit set.
Contents:

- 1 pcs. Cargo 190766 and terminals:
- 5 pcs. Cargo 190252,
- 4 pcs. Cargo 191083.



190767 Std pkg 10

Socket. 5 terminals max.
5 x 6.3 mm flat plug terminals.

192159

Kit set.
Contents:

- 1 pcs. Cargo 190767 and terminals:
- 5 pcs. Cargo 190252.

Relay Multi Plugs


191752 A Std pkg 10
 Socket for micro-relay.
 5 terminals max.
 Sockets can be built together.
 2 x 6.3 mm flat plug terminals.
 3 x 4.7 mm flat plug terminals.

192161

Kit set.
 Contents:
 1 pcs. Cargo 191752
 and terminals:
 2 pcs. Cargo 190252,
 3 pcs. Cargo 191089.



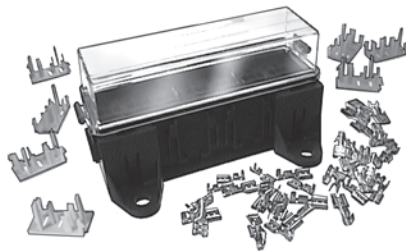
191026 Std pkg 10
 Socket. 9 terminals max.
 Sockets can be built together.
 2 x 9.5 mm flat plug terminals.
 3 x 6.3 mm flat plug terminals.
 4 x 2.8 mm flat plug terminals.

192160

Kit set.
 Contents:
 1 pcs. Cargo 191026
 and terminals:
 2 pcs Cargo 191025,
 3 pcs. Cargo190252,
 4 pcs. Cargo 191083.

Relay Boxes


191410
 4-way for standard relays.
 Kit set w/ transparent lid, terminals and terminallock.
 Can be assembled in rows.
 (Terminals Cargo 190252 or 191029).



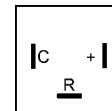
191818
 7-ways for micro-relays.
 Kit set w/ transparent lid, terminals and terminallock.
 Can be assembled in rows.
 (Terminals Cargo 190252 or 191029 and 191089).

Flasher Units

Terminal Designations

	D	F	J	US	GB
	+49	+	B	X / B	
	49a	C	L	L	
	C	R		P	
	31	-	E	Ground	
	C2	R2		C2	

NAGARES S.A.



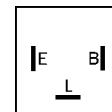
160312 A

12 V. 2/4 x 21 Watt 3 terminals.
Interchangeable with any 4 terminal device (+,+,C,R).
For SAE standard vehicles. (France, Italy, USA, Spain).

160313

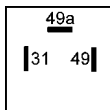
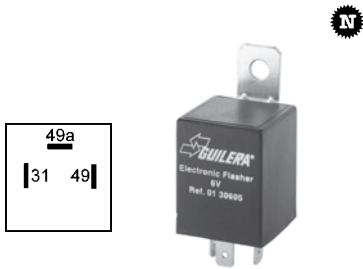
As Cargo 160312, but 24 V. 2/4 x 21 Watt 3 terminals.

NAGARES S.A.



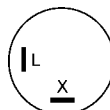
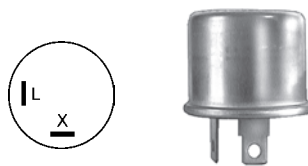
160315 A

12 V. 2/4 x 21 Watt 3 terminals.
Servicing Japanese vehicles.



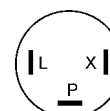
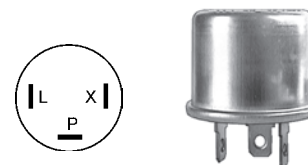
160651

6 V. 42 Watt 3 terminals.



160115 A

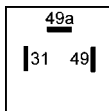
12 V. 138 Watt 2 terminals.



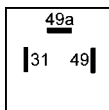
160116 A

12 V. 138 Watt 3 terminals.

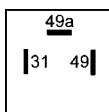
Flasher Units

WEHRLE

160242 A

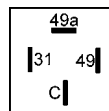
12 V. 2/4 x 21 Watt 3 terminals.
Servicing Alfa Romeo, Audi, BMW, Ford, Opel, Saab, Volvo, VW.

WEHRLE

160474 A

12 V. 2/4 x 21 Watt. 3 terminals.
 Height: 30 mm.
Servicing VW 76-

WEHRLE

160261

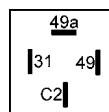
24 V. 2/4 x 21 Watt 3 terminals.

WEHRLE

160243 A

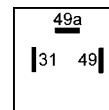
12 V. 2/4 x 21 Watt 4 terminals.
Servicing Alfa Romeo, Citroen, Fiat, Ford, Lada, Lancia, Peugeot, Renault, Saab, Vauxhall, Volvo.

160296

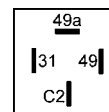
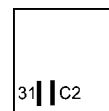
24 V. 2/4 x 21 Watt 4 terminals.

NGK GCS

160244 A

12 V. 2+1/6 x 21 Watt 4 terminals.
 For vehicles towing trailers or caravans.
Servicing Audi, BMW, Fiat, Ford, Jap. vehicles, Opel, Saab, Vauxhall, Volvo.

WEHRLE

160475 A

12 V. 2+1/6 x 21 Watt.
 3 terminals + 2 in top.
 For vehicles towing trailers or caravans.


160402 A

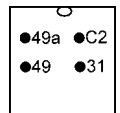
12 V. 2+1 / 6 x 21 Watt
 4 terminals + 2 in top.
 Height: 30 mm.
 For vehicles towing trailers or caravans.
Servicing VW.

Cross Reference List page 71

Terminal Designations
page 18

Flasher Units

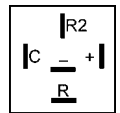
WEHRLE



160305 A

12 V. 2+1/6 x 21 Watt 4 bullet terminals.
For vehicles towing trailers or caravans.
Servicing Mercedes.

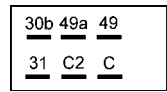
MAGARES



160314 A

12 V. 2+1/6 x 21 Watt 5 terminals.
For vehicles towing trailers or caravans.
For SAE standard vehicles.
(France, Italy, USA, Spain).

WEHRLE



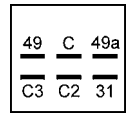
160199

24 V. 3+1/8 x 21 Watt 6 terminals.
Servicing Mercedes etc.

160262

24 V. 2+1/6 x 21 Watt 6 terminals.
Servicing MAN, Mercedes, Renault, Volvo.

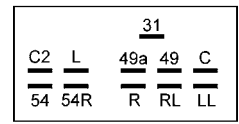
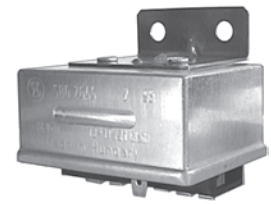
WEHRLE



160263 A

12 V. 2+1+1/8 x 21 Watt 6 terminals.
Servicing John Deere, Fendt, IH Case etc.

STRIBEL



W/ electronic protection against short circuits.

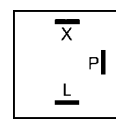
160281

24 V. 2+1/6 x 21 Watt 11 terminals.
Servicing Magirus, Mercedes a.o.
Replacing 0248 1968 EZ, 001 544 8332).

160286

24 V. 3+1/8 x 21 Watt 11 terminals.
Standard execution.
Servicing Mercedes etc.

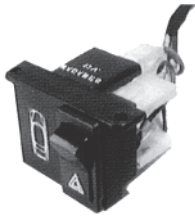
MAGARES



160341 A

12 V. 180 Watt 3 terminals.
16 Amp.

Hazard Warning Light Systems



160578

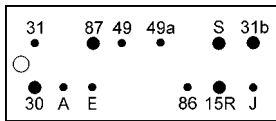
12 V.

Complete set containing switch, relay and mounting bracket.

Timing Devices

- Rear window heating
- Wiper-washer system

WEHRLE



160287

Servicing Mercedes.

Replacing 60 215 005,
Mercedes 201 821 0047.

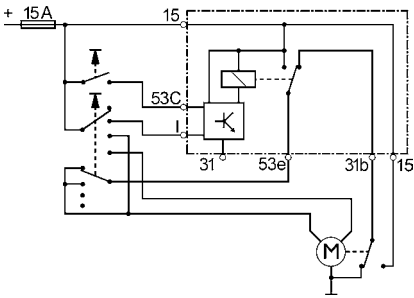
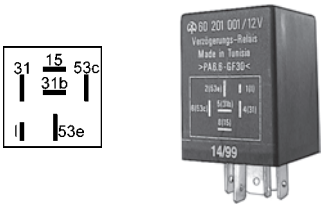
12 V.

Flasher unit 2/4 x 21 Watt.

Cross Reference List page 71

Time Delay Relays

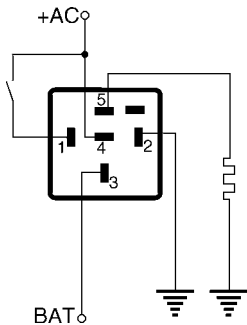
WEHRLE



160297

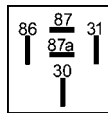
Replacing 60 201 001, Opel 1238 550, GM 90 069 864, Siemens 5WK 1636, -1640.
12 V. 6 terminals.
For windshield wiper and washer.
Also for universal use.
Delay on: 3.5 sec.

HAGARES



160570

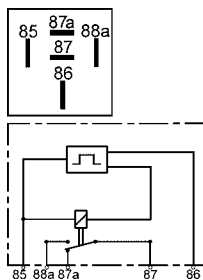
Servicing Citroën, Peugeot, Valeo.
12 V. 5 Terminals.
For rear window heater.
Also for universal use.
Delay on: 10 min.



160467

Replacing Mercedes 000 821 3347, Stribel 89 8270.
24 V. 5 terminals.
For AC-Compressor, bus doors and time delayed motors.
Delay on: 2.5 sec.

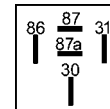
WEHRLE



160501

24 V. 5 terminals.
For AC-Compressor, bus doors and time delayed motors.
Delay on: 3 sec.

WEHRLE



160466

Replacing Mercedes 001 545 5605, Stribel 89 8211, Wehrle 51 401 004.
24 V. 5 terminals.
For AC-Compressor, bus doors and time delayed motors.
Delay on: 4 sec.

Light Delay Units

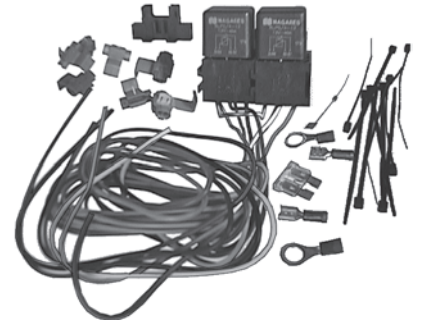
160471

Holds the interior light on for 15 sec. 12V.

Voltage Reducer

160627

Set w/ 2 resistors.
Reduces the voltage with 0.75 V.
Secures the lifetime of the headlight bulbs in cars with high voltage.

Automatic Daytime Running Lights


Complete w/ relays, wires and connecting material. Fitting instruction included.

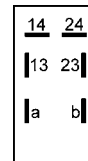
Servicing Most Eur. and Jap. vehicles.

160274

12 V.

160275

As Cargo 160274, but 24 V.


160278

Special relay for automatic daytime running light (Cargo 160274).

To be used on vehicles w/ alternator w/o diodetrio.

12 V. 6 terminals.

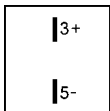
Acoustic Warning

Universal reminder for turning on light



160276

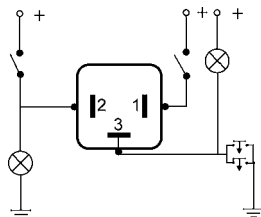
12 V. 2 terminals.
86dB.



160347

Electronic.
72 dB.
12 V. 2 terminals.

Universal reminder for turning on and off light

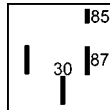


160509

Electronic.
72 dB.
12 V. 3 terminals.

Cross Reference List page 71

Radiator Fan Relays

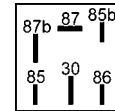


160637

Replacing 357906381A, 1J0906381A.
Servicing VW, VR6 models, 1.9 TDI.
12 V. 4 terminals.

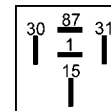
Cross Reference List page 71

Fuel Pump Relays



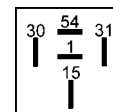
160295

Replacing 1238 966, GM 90 378 651.
Servicing Opel, Vauxhall.
12 V. 6 terminals.



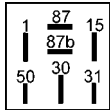
160348

Replacing 82GG-9P7044AA, 6107 322.
Servicing Ford.
12 V. 5 terminals.

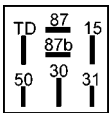


160350

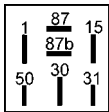
Replacing 85AG-9P704AA, 6161 570.
Servicing Ford.
12 V. 5 terminals.

*Terminal Designations
page 6 - 9*
Fuel Pump Relays

160352

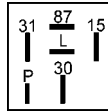
Replacing 12 38 566, GM 90 124 673.
Servicing Fiat, Ford, Opel, Renault, Vauxhall, Volvo, VW.
12 V. 7 terminals.


160353

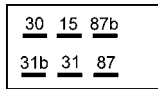
Replacing 0280 230 009.
Servicing Citroen, Fiat, Peugeot, Seat.
12 V. 7 terminals.


160354

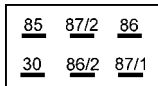
Replacing 0280 230 006.
Servicing Citroen, Fiat, Peugeot, Renault.
12 V. 7 terminals.


160362

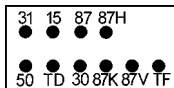
Replacing 321 906 363.
Servicing VW.
12 V. 6 terminals.


160400

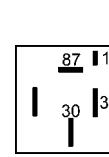
Replacing 3523639.
Servicing Volvo. (Engine B 230E).
12 V. 30 Amp. 6 terminals.


160401

Replacing 3523608.
Servicing Volvo. (Engine B 230F).
12 V. 15 Amp. 6 terminals.


160470

12 V. 10 terminals.
W/ coldstartvalve.
RPM-limited 6200 RPM/min.


160372

Replacing 321 906 059H, 443 907 385C, G, H.
Servicing Audi 80 1.8, 85-91.
12 V. 5 terminals.

160373

Replacing 443 907 385E, F, J, K.
Servicing Audi, VW, 5 cyl. W/ RPM Limited 6600 RPM.
12 V. 5 terminals.

160374

Replacing 321 906 059D, E, F, 443 906 059A, 443 907 385.
Servicing VW Golf, Jetta, Passat -84. W/ RPM Limited 6600 RPM.
12 V. 5 terminals.

160375

Replacing 321 906 059G, 443 907 385B.
Servicing Audi, VW, 4 cyl. W/ RPM Limited 6600 RPM.
12 V. 5 terminals.

Applications List page 49
Cross Reference List page 71

GB

Glow Plug Controller Descriptions

CARGO	Pre-heating time in sec. at +20° C	Postheating		Temperature measurement		Characteristic
		W/	W/o	Int.	Ext.	
160416	< 8		✓	✓		
160417	< 13		✓	✓		
160418	< 8	✓		✓		
160419	< 6	✓		✓		
160420	< 8	✓			✓	
160421	< 4	✓			✓	
160422	< 18		✓		✓	
160423	< 14		✓	✓		
160424	< 8		✓	✓		
160425	< 9		✓	✓		
160426	< 7	✓		✓		
160427	< 14	✓		✓		
160428	< 8	✓		✓		W/ postheating cut-out
160429	< 13		✓	✓		
160430	< 5	✓		✓		
160431	< 10		✓	✓		Coding at plug
160432	< 7	✓		✓		W/ postheating cut-out, impulse postheating time
160433	< 9	✓			✓	
160434	< 8	✓			✓	
160435	< 12	✓		✓		
160436	< 8	✓			✓	W/ postheating cut-out
160438	< 10	✓				Impulse postheating time
160439	< 5	✓		✓	✓	
160440	< 9	✓		✓	✓	Impulse postheating time
160441	< 9		✓	✓		W/ defect warning

CARGO	Pre-heating time in sec. at +20° C	Postheating		Temperature measurement		Characteristic
		W/	W/o	Int.	Ext.	
160442	< 9		✓	✓		W/ defect warning
160443	< 9		✓	✓		W/ defect warning
160444	< 9		✓	✓		W/ defect warning
160445	< 9	✓			✓	W/ defect warning
160446	< 9	✓			✓	W/ defect warning
160447	< 9	✓			✓	W/ defect warning
160448	< 9	✓			✓	W/ defect warning
160449	< 7	✓		✓		
160450	< 9		✓	✓		W/ defect warning
160451	< 7	✓			✓	Impulse postheating time
160452						Technical specification on request
160453						Switching relay - control by ECU
160454						
160455						
160456						
160457						
160458	< 12	✓			✓	
160459						Switching relay - control by ECU
160460						Switching relay - control by ECU
160461						Switching relay - control by ECU
160463	< 9	✓			✓	W/ defect warning
160464	< 5		✓		✓	
160469	<5	✓		✓		
160705	<9	✓			✓	
160706	<9	✓			✓	
160707	<9	✓			✓	

Terminal Designations

15 **Ignition controlled feed** (ignition / key switch)
 30 **Feed from positive battery terminal, direct**
 31 **Earth or battery negative**
 50 **Starter feed** (direct)
Switching relays
 85 Finish of winding (earth)
 86 Start of winding
 87 Output
 87b Second output
 A **Finish of winding** (earth)
 ALFB **Output glow plug**
 B1 **Start of winding**
 B2 **Start of winding**
Generator and generator regulator
 B+ Battery positive, generator output
 CTN **Temperature signal**

EVKSB **Electrical coldstart valve**
 G **Output glow plug**
 L **Controllamp**
 LA **Controllamp**
 n.c. **No connection**
 PC **Throttle position signal**
 S **Throttle position signal**
 S1 **Output glow plug**
 S2 **Output glow plug**
 SB **Ground**
 T **Temperature signal**
 TEC **Thermo switch**
 T/NTC **Temperature signal**

Glühzeitrelais Beschreibung

D

CARGO	Vor-glühzeit in sec. bei +20° C	Nachglühzeit		Temperatur messung		Besonderheit	CARGO	Vor-glühzeit in sec. bei +20° C	Nachglühzeit		Temperatur messung		Besonderheit
		Mit	Ohne	Int.	Ext.				Mit	Ohne	Int.	Ext.	
160416	< 8		✓	✓			160442	< 9		✓	✓		Mit Fehlererkennung
160417	< 13		✓	✓			160443	< 9		✓	✓		Mit Fehlererkennung
160418	< 8	✓		✓			160444	< 9		✓	✓		Mit Fehlererkennung
160419	< 6	✓		✓			160445	< 9	✓			✓	Mit Fehlererkennung
160420	< 8	✓			✓		160446	< 9	✓			✓	Mit Fehlererkennung
160421	< 4	✓			✓		160447	< 9	✓			✓	Mit Fehlererkennung
160422	< 18		✓		✓		160448	< 9	✓			✓	Mit Fehlererkennung
160423	< 14		✓	✓			160449	< 7	✓		✓		
160424	< 8		✓	✓			160450	< 9		✓	✓		Mit Fehlererkennung
160425	< 9		✓	✓			160451	< 7	✓			✓	Getaktete Nachglühzeit
160426	< 7	✓		✓			160452						<i>Tech. Spezifikationen auf Anfrage</i>
160427	< 14	✓		✓			160453						Kontrolle über elek. Steuergerät
160428	< 8	✓		✓		Mit Nachglühunterbrechung	160454						
160429	< 13		✓	✓			160455						
160430	< 5	✓		✓			160456						
160431	< 10		✓	✓		Codierung an Stecker	160457						
160432	< 7	✓		✓		Mit Nachglühunterbrechung, getaktete Nachglühzeit	160458	< 12	✓			✓	
160433	< 9	✓			✓		160459						Kontrolle über elek. Steuergerät
160434	< 8	✓			✓		160460						Kontrolle über elek. Steuergerät
160435	< 12	✓		✓			160461						Kontrolle über elek. Steuergerät
160436	< 8	✓			✓	Mit Nachglühunterbrechung	160463	< 9	✓			✓	Mit Fehlererkennung
160438	< 10	✓				Getaktete Nachglühzeit	160464	< 5		✓		✓	
160439	< 5	✓		✓	✓		160469	<5	✓		✓		
160440	< 9	✓		✓	✓	Getaktete Nachglühzeit	160705	<9	✓			✓	
160441	< 9		✓	✓		Mit Fehlererkennung	160706	<9	✓			✓	
							160707	<9	✓			✓	

Anschluss Beschreibung

15 Plusanschluss hinter Zündschloss

30 Dauerplusleitung, Batterie + (direkt)

31 Masse oder B -

50 Starteransteuerung (direkt)

Schaltrelais

85 Wicklungsende (Masse)

86 Wicklungseingang

87 Ausgang

87b 2. Ausgang

A Wicklungsende (Masse)

ALFB Ausgangsleitung Glühkerze

B1 Wicklungsanfang

B2 Wicklungsanfang

LIMA und LIMA-Regler

B+ Batterie +, LIMA

CTN Temperatursignal

EVKSB Elektr. Kaltstartventil

G Ausgangsleitung Glühkerze

L Kontroll-Lampe

LA Kontroll-Lampe

n.c. Nicht belegt

PC Drosselklappen-Positions-Signal

S Drosselklappen-Positions-Signal

S1 Ausgangsleitung Glühkerze

S2 Ausgangsleitung Glühkerze

SB Masse

T Temperatursignal

TEC Temperaturschalter

T/NTC Temperatursignal

F Description des Temporisateurs de Préchauffage

CARGO	Temps de Préchauffage en sec. à +20° C	Préchauffage		Mesure de température		Caractéristique
		Avec	Sans	Int.	Ext.	
160416	< 8		✓	✓		
160417	< 13		✓	✓		
160418	< 8	✓		✓		
160419	< 6	✓		✓		
160420	< 8	✓			✓	
160421	< 4	✓			✓	
160422	< 18		✓		✓	
160423	< 14		✓	✓		
160424	< 8		✓	✓		
160425	< 9		✓	✓		
160426	< 7	✓		✓		
160427	< 14	✓		✓		
160428	< 8	✓		✓		A/ arrêt automatique de postchauffage
160429	< 13		✓	✓		
160430	< 5	✓		✓		
160431	< 10		✓	✓		Broche à détrompeur
160432	< 7	✓		✓		Delai d'impuls. de post-chauffage
160433	< 9	✓			✓	
160434	< 8	✓			✓	
160435	< 12	✓		✓		
160436	< 8	✓			✓	A/ arrêt automatique de postchauffage
160438	< 10	✓				Delai d'impuls. de post-chauffage
160439	< 5	✓		✓	✓	
160440	< 9	✓		✓	✓	Delai d'impuls. de post-chauffage
160441	< 9		✓	✓		A/ détection de défaut
160442	< 9		✓	✓		A/ détection de défaut

CARGO	Temps de Préchauffage en sec. à +20° C	Préchauffage		Mesure de température		Caractéristique
		Avec	Sans	Int.	Ext.	
160443	< 9		✓	✓		A/ détection de défaut
160444	< 9		✓	✓		A/ détection de défaut
160445	< 9	✓			✓	A/ détection de défaut
160446	< 9	✓			✓	A/ détection de défaut
160447	< 9	✓			✓	A/ détection de défaut
160448	< 9	✓			✓	A/ détection de défaut
160449	< 7	✓		✓		
160450	< 9		✓	✓		A/ détection de défaut
160451	< 7	✓			✓	Delai d'impuls. de post-chauffage
160452						Spécifications techniques sur demande
160453						Contrôle par calculateur
160454						
160455						
160456						
160457						
160458	< 12	✓			✓	
160459						Contrôle par calculateur
160460						Contrôle par calculateur
160461						Contrôle par calculateur
160463	< 9	✓			✓	A/ détection de défaut
160464	< 5		✓		✓	
160469	<5	✓		✓		
160705	<9	✓			✓	
160706	<9	✓			✓	
160707	<9	✓			✓	

Description des Bornes

- 15 + Contact
- 30 + Permanent
- 31 Masse
- 50 Démarrage
- Contacts**
- 85 1ère d'enroulement de relais (Masse)
- 86 2ème d'enroulement de relais
- 87 Sortie
- 87b 2ème sortie
- A 1ère d'enroulement de relais (Masse)
- ALFB Sortie bougie de préchauffage
- B1 Début d'enroulement
- B2 Début d'enroulement
- Alternateur et regulateur**
- B+ + Permanent
- CTN Signal de Température d'Eau

- EVKSB Contact. de position d'accélérateur sur pompe d'injection
- G Borne Bougie de Préchauffage
- L Borne Lampe Témoin
- LA Borne Lampe Témoin
- n.c. Pas de connexion
- PC Signal la position de l'axe d'accélérateur
- S Signal la position de l'axe d'accélérateur
- S1 Borne Bougie de Préchauffage
- S2 Borne Bougie de Préchauffage
- SB Masse
- T Borne Capteur Température d'Eau
- TEC Contacteur de Thermo-ventilateur
- T/NTC Borne Capteur Température d'Eau

Descrizione Relè Controllo Candele
I

CARGO	Preriscaldamento in sec. +20° C	Postriscaldamento		Misurazione temperatura		Particolarità	CARGO	Preriscaldamento in sec. +20° C	Postriscaldamento		Misurazione temperatura		Particolarità
		Con	Senza	Int.	Est.				Con	Senza	Int.	Est.	
160416	< 8		✓	✓			160441	< 9		✓	✓		Con segnale errore
160417	< 13		✓	✓			160442	< 9		✓	✓		Con segnale errore
160418	< 8	✓		✓			160443	< 9		✓	✓		Con segnale errore
160419	< 6	✓		✓			160444	< 9		✓	✓		Con segnale errore
160420	< 8	✓			✓		160445	< 9	✓			✓	Con segnale errore
160421	< 4	✓			✓		160446	< 9	✓			✓	Con segnale errore
160422	< 18		✓		✓		160447	< 9	✓			✓	Con segnale errore
160423	< 14		✓	✓			160448	< 9	✓			✓	Con segnale errore
160424	< 8		✓	✓			160449	< 7	✓		✓		
160425	< 9		✓	✓			160450	< 9		✓	✓		Con segnale errore
160426	< 7	✓		✓			160451	< 7	✓			✓	Tempo di postriscaldamento tattico
160427	< 14	✓		✓			160452						Specifiche tecniche su richiesta
160428	< 8	✓		✓		Con interruzione postriscaldamento	160453						Controllo elettronico (ECU)
160429	< 13		✓	✓			160454						
160430	< 5	✓		✓			160455						
160431	< 10		✓	✓		Codifica alla spina	160456						
160432	< 7	✓		✓		Con interruzione postriscaldamento, tempo di postriscaldamento tattico	160457						
160433	< 9	✓			✓		160458	< 12	✓			✓	
160434	< 8	✓			✓		160459						Controllo elettronico (ECU)
160435	< 12	✓		✓			160460						Controllo elettronico (ECU)
160436	< 8	✓			✓	Con interruzione postriscaldamento	160461						Controllo elettronico (ECU)
160438	< 10	✓				Tempo di postriscaldamento tattico	160463	< 9	✓			✓	Con segnale errore
160439	< 5	✓		✓	✓		160464	< 5		✓		✓	
160440	< 9	✓		✓	✓	Tempo di postriscaldamento tattico	160469	<5	✓		✓		
							160705	<9	✓			✓	
							160706	<9	✓			✓	
							160707	<9	✓			✓	

Descrizione Terminali

15 Accensione / Sottochiave
 30 Ingresso dal positivo
 31 Uscita negativo o massa
 50 Starter

Relè interruttori

85 Fine avvolgimento (Massa)
 86 Inizio avvolgimento
 87 Uscita **contatto normalmente aperto**
 87b 2a Uscita.

A Fine avvolgimento (Massa)
 ALFB Uscita candele
 B1 Inizio avvolgimento
 B2 Inizio avvolgimento

Generatore e regolatore generatore

B+ Batteria +, generatore
 CTN Segnale temperatura

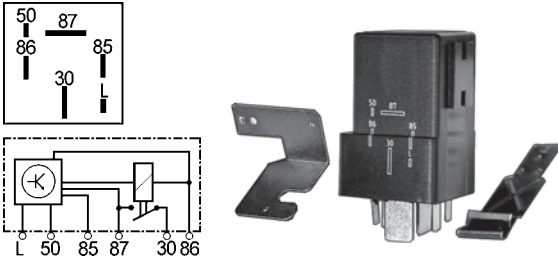
EVKSB Valvola elettrica partenza a freddo
 G Uscita candele
 L Lampada di controllo
 LA Lampada di controllo
 n.c. Non connesso

PC Segnale posizione farfalla
 S Segnale posizione farfalla
 S1 Uscita candele
 S2 Uscita candele
 SB Massa

T Segnale temperatura
 TEC Interruttore temperatura
 T/NTC Segnale temperatura

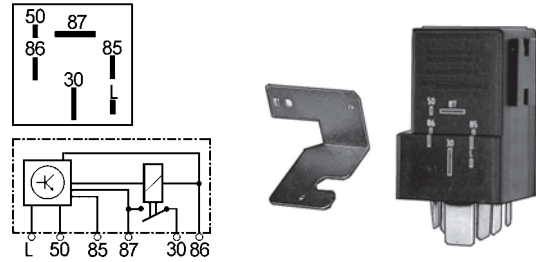
Glow Plug Controller- and Terminal Designations page 26 - 29

Glow Plug Controllers



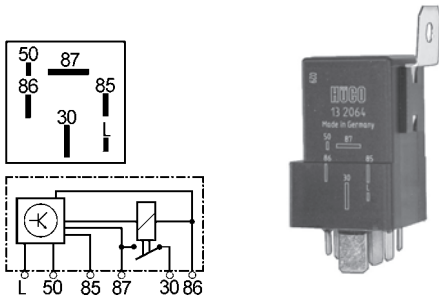
160416

Replacing 1238565.
Servicing Ford, Opel, Vauxhall.
 12 V.
 6 terminals.



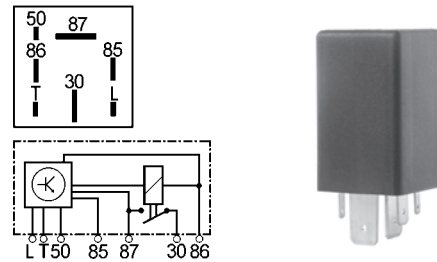
160419

Replacing 0281 003 098, HDC 111.
Servicing Ford, Opel, Vauxhall.
 12 V.
 Post heating type.
 6 terminals.



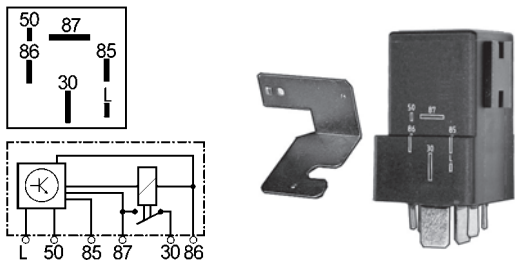
160417

Replacing 5000 409614.
Servicing Renault.
 12 V.
 6 terminals.



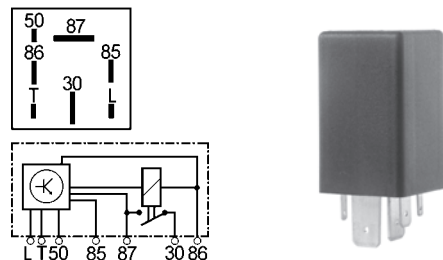
160420

Replacing 0250 201 933, 0333 402 512, 171911261A.
Servicing Audi, Seat, VW.
 12 V.
 Post heating type.
 7 terminals.



160418

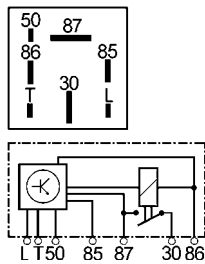
Replacing 6132248.
Servicing Ford.
 12 V.
 Post heating type.
 6 terminals.



160421

Replacing 0281 003 099, 191911261A.
Servicing Audi, VW.
 12 V.
 Post heating type.
 7 terminals.

Glow Plug Controllers



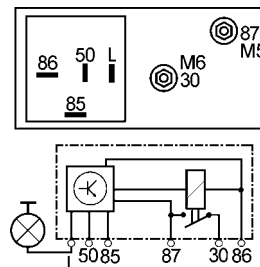
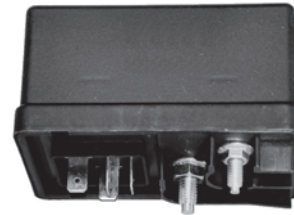
160422

Replacing 321 191 261C.

Servicing VW.

12 V.

7 terminals.



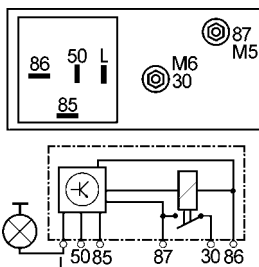
160424

Replacing 0250 201 952, 0333 402 509, 598111.

Servicing Citroen, Fiat, Iveco, Nissan, Peugeot, Renault, Rover.

12 V.

6 terminals.



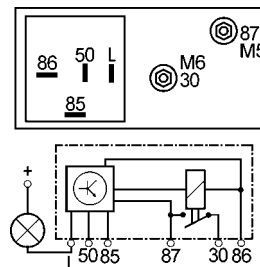
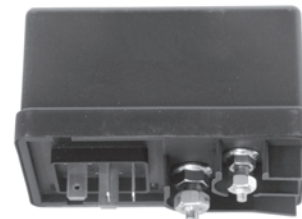
160423

Replacing 0333 402 501, 5981.10.

Servicing Alfa Romeo, Citroen, Fiat, Peugeot.

12 V.

6 terminals.



160425

Replacing 0333 402 513, 0333 402 524, 7700 757 776.

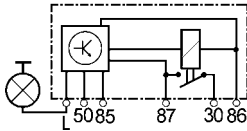
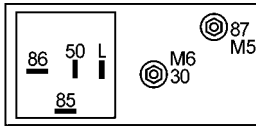
Servicing Alfa Romeo, Renault.

12 V.

6 terminals.

Glow Plug Controller- and Terminal Designations page 26 - 29

Glow Plug Controllers



160426

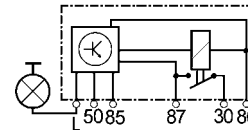
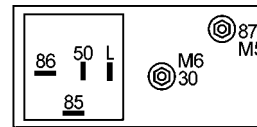
Replacing 46428175, 59737540, 75896560, 76647630.

Servicing Fiat.

12 V.

Post heating type.

6 terminals.



160428

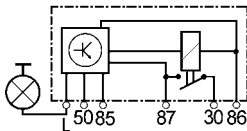
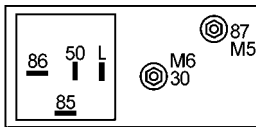
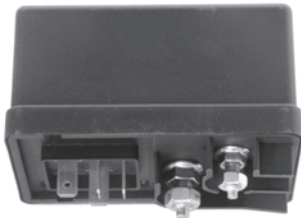
Replacing 0333 402 520, 162064501000, 4686062.

Servicing Alfa Romeo, Chrysler.

12 V.

Post heating type.

6 terminals.



160427

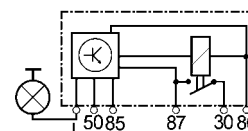
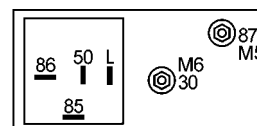
Replacing 5946920, 061830058020.

Servicing Fiat, Seat.

12 V.

Post heating type.

6 terminals.



160429

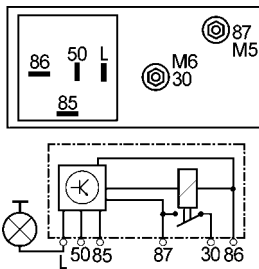
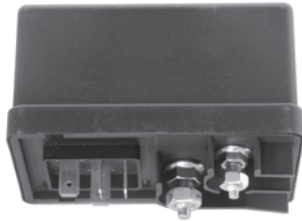
Replacing 7700 733 390.

Servicing Renault.

12 V.

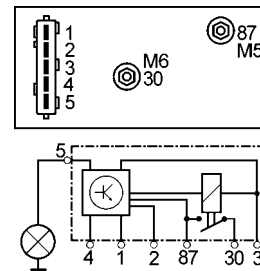
6 terminals.

Glow Plug Controllers



160430

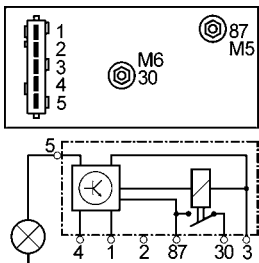
Replacing 0333 402 525.
Servicing Leyland, Rover
12 V.
Post heating type.
6 terminals.



1=85/31 2=S 3=86/15 4=50 5=Controllamp

160432

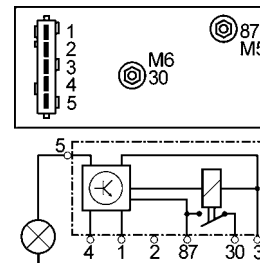
Replacing 0281 003 005, 598119, 961416778.
Servicing Fiat, Peugeot.
12 V.
Post heating type.
7 terminals.



1=85/31 2=n.c. 3=86/15 4=50 5=Controllamp

160431

Replacing 598116, 9611751080, 245609.
Servicing Citroen, Renault.
12 V.
7 terminals.



1=85/31 2=T/NTC 3=86/15 4=50 5=Controllamp

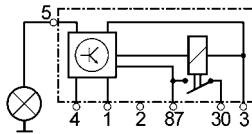
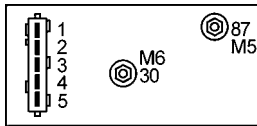
160433

Replacing 46414088, 7735921.
Servicing Citroen, Fiat.
12 V.
Post heating type.
7 terminals.

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Glow Plug Controller- and Terminal Designations page 26 - 29

Glow Plug Controllers



1=85/31 2=T/NTC 3=86/15 4=50 5=Controllamp

160434

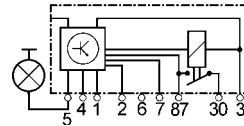
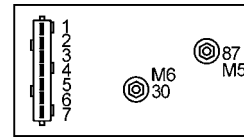
Replacing 0281 003 006, 0281 003 012, 598124.

Servicing Citroen, Fiat, Peugeot.

12 V.

Post heating type.

7 terminals.



1=85/31 2=T/NTC 3=86/15 4=50 5=Controllamp 6=n.c. 7=S

160436

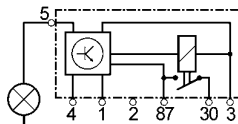
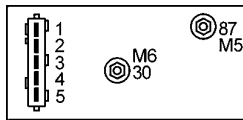
Replacing 0281 003 009, 5981121.

Servicing Citroen, Rover.

12 V.

Post heating type.

9 terminals.



1=85/31 2=n.c. 3=86/15 4=50 5=Controllamp

160435

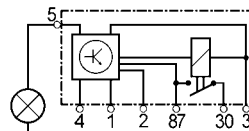
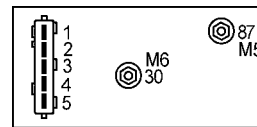
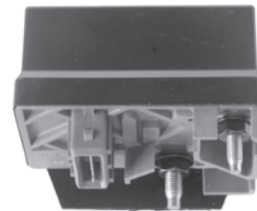
Replacing 43423043, 46423043.

Servicing Citroen, Fiat, Lancia.

12 V.

Post heating type.

7 terminals.



1=85/31 2=T/NTC 3=86/15 4=50 5=Controllamp

160453

Replacing 5981.31.

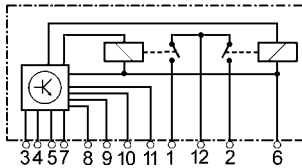
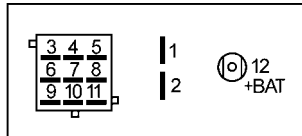
Servicing Citroen, Peugeot.

12 V.

Post heating type.

7 terminals.

Glow Plug Controllers



1=87(plug 1+2) 2=87b(plug 3+4) 3=n.c. 4=PC 5=TEC
6=86/15 7=50 8=Controllamp 9=EVKSB 10=85/31 11=Clim 12=30

160438

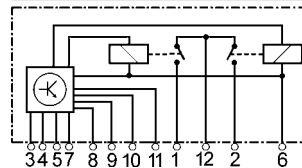
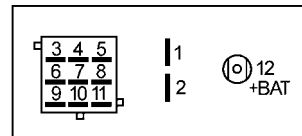
Replacing HDC 124, 7700790579, 7700851443.

Servicing Renault.

12 V.

Post heating type.

12 terminals.



1=87(plug 1+2) 2=87b(plug 3+4) 3=S2 4=PC 5=CTN
6=86/15 7=50 8=Controllamp 9=S1 10=85/31 11=Clim 12=30

160440

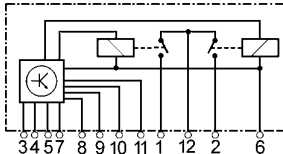
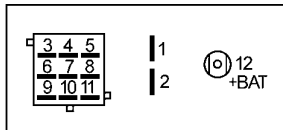
Replacing 7700869 319.

Servicing Renault.

12 V.

Post heating type.

12 terminals.



1=87(plug 1+2) 2=87b(plug 3+4) 3=ALFB 4=PC 5=T/NTC
6=86/15 7=50 8=Controllamp 9=EVKSB 10=85/31 11=Clim 12=30

160439

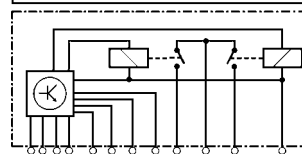
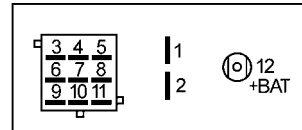
Replacing 7700 863 626, 7700 102 036.

Servicing Renault.

12 V.

Post heating type.

12 terminals.



1=87(plug 1+2) 2=87b(plug 3+4) 3=ALFB 4=PC 5=T/NTC 6=86/15
7=50 8=Controllamp 9=EVKSB 10=85/31 11=Clim 12=30/+BAT.

160452

Replacing 7700 870 715, 7700870 715/A, 7700 870 715/B.

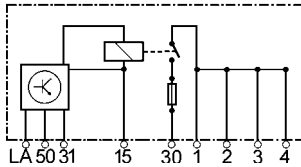
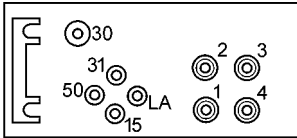
Servicing Renault.

12 V.

12 terminals.

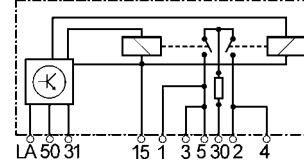
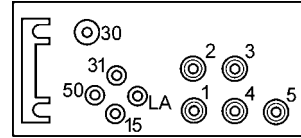
Glow Plug Controller- and Terminal Designations page 26 - 59

Glow Plug Controllers



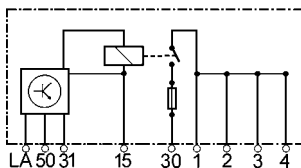
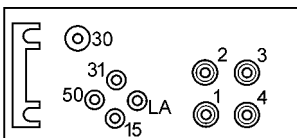
160441

Replacing 0333 402 505, 0333 402 506, 002 545 0532.
Servicing Mercedes.
 12 V.
 9 terminals.



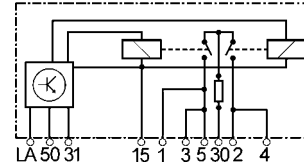
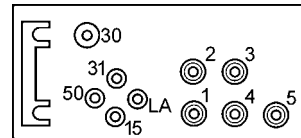
160443

Replacing 0333 402 507, 0333 402 508, 001 545 9832.
Servicing Mercedes.
 12 V.
 10 terminals.



160442

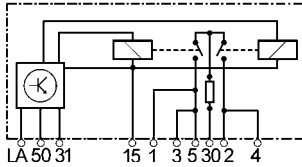
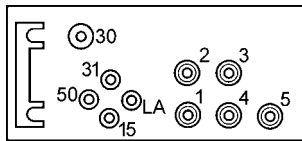
As Cargo 160441, but w/ fixing on opposite side.



160450

As Cargo 160443, but w/ fixing on opposite side.

Glow Plug Controllers


160449

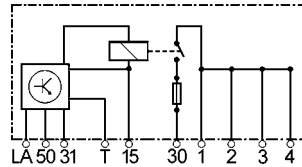
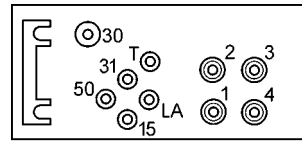
Replacing 0281 003 096, 025 545 5432.

Servicing Mercedes.

12 V. Post heating type.

Exchange Cargo 160441 and 160443 in connection with change to post heating glow plug.

10 terminals.


160445

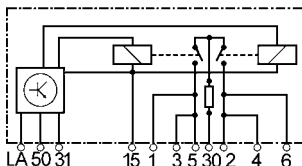
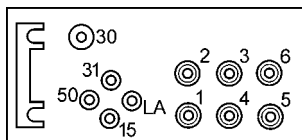
Replacing 007 545 9832.

Servicing Mercedes.

12 V.

Post heating type.

10 terminals.

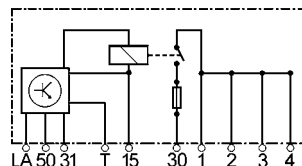
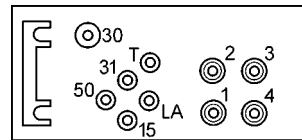

160444

Replacing 005 452 4532, 003 545 2532.

Servicing Mercedes.

12 V.

11 terminals.


160446

Replacing 008 545 0032.

Servicing Mercedes.

12 V.

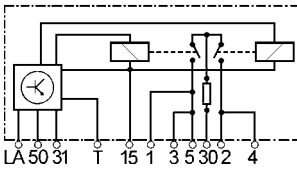
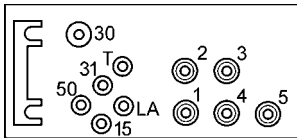
Post heating type.

10 terminals.

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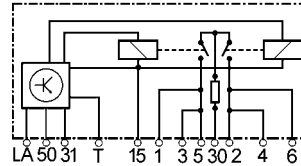
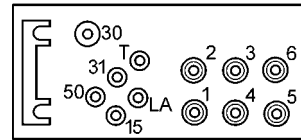
Glow Plug Controller- and Terminal Designations page 26 - 29

Glow Plug Controllers



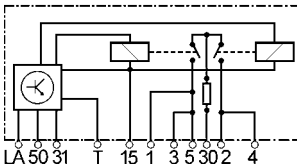
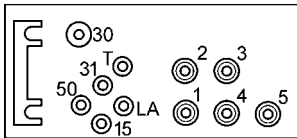
160447

Replacing 007 545 9932.
 Servicing Mercedes.
 12 V.
 11 terminals.



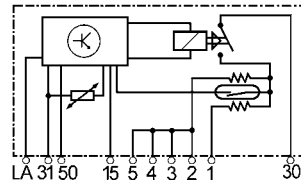
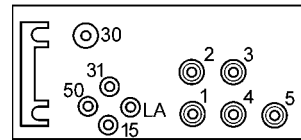
160448

Replacing 007 545 1632.
 Servicing Mercedes.
 12 V.
 Post heating type.
 12 terminals.



160463

As Cargo 160447, but w/ fixing on the opposite side.
 12 V.

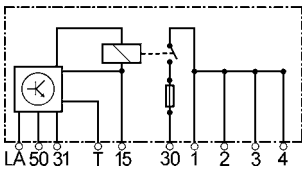
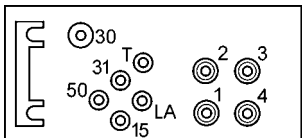


160455

Replacing 003 545 1032.
 Servicing Mercedes.
 12 V.
 10 terminals.

Glow Plug Controllers

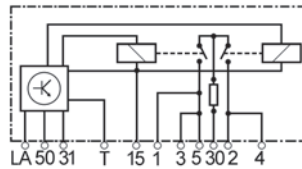
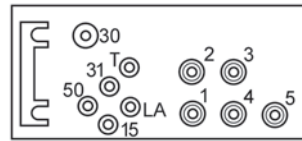
N



160705

Replacing 012 545 8832
Servicing Mercedes
12 V.
10 terminals

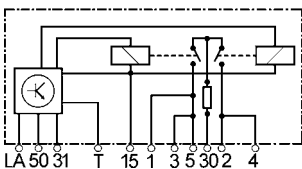
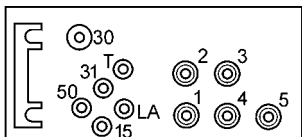
N



160707

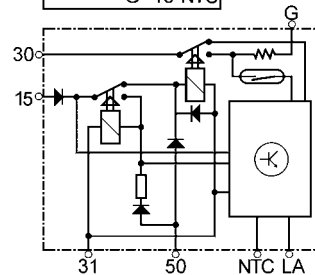
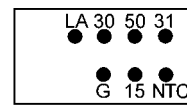
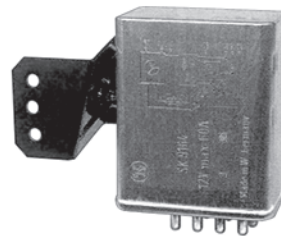
Replacing 018 545 7232
Servicing Mercedes
12 V.
11 terminals

N



160706

Replacing 012 545 8932
Servicing Mercedes
12 V.
11 terminals



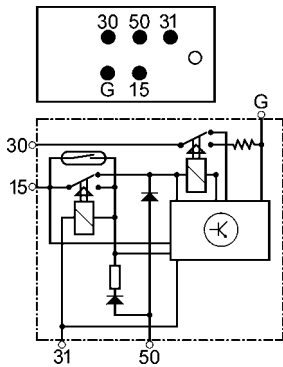
160454

Replacing 001 545 2232.
Servicing Mercedes.
12 V.
7 terminals.

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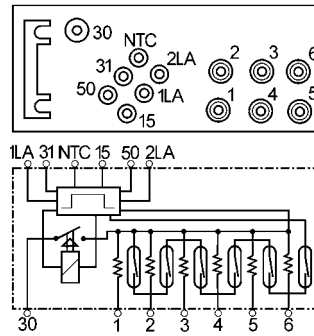
Glow Plug Controller- and Terminal Designations page 26 - 29

Glow Plug Controllers



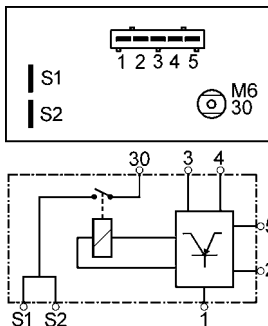
160456

Replacing 001 545 1832.
Servicing Mercedes.
 12 V.
 5 terminals.



160457

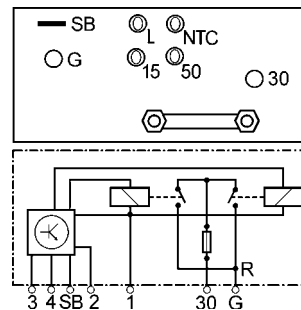
Replacing 1 285 085.
Servicing BMW.
 12 V.
 13 terminals.



1=85/31 2=T/NTC 3=86/15 4=50 5=Controllamp
 M6=30 S1=87 S2=87a

160451

Replacing 7700 866 727.
Servicing Renault.
 12 V.
 Post heating type.
 8 terminals.

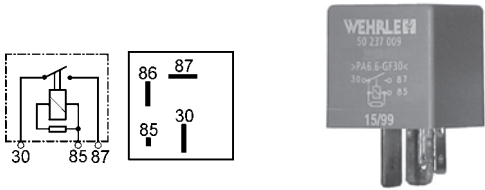


1=L 2=NTC 3=50 4=15 SB=31 G=87

160458

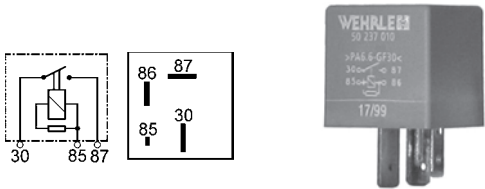
Replacing 1363438, 9162987.
Servicing Volvo.
 12 V.
 7 terminals.
 Post heating type.

Glow Plug Controllers



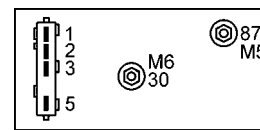
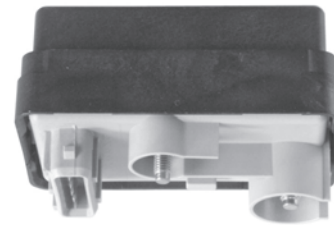
160459

Replacing 357 911 253A.
Servicing VW.
12 V. 4 terminals.
UWD type.



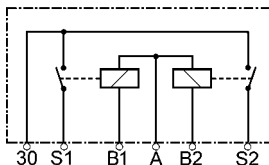
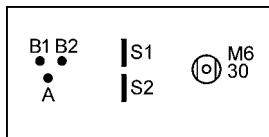
160460

Replacing 357 911 253.
Servicing VW.
12 V. 4 terminals
For engines w/ electronic diesel control (EDC).



160464

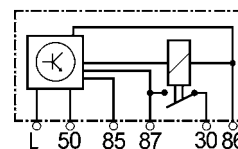
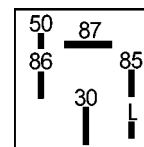
Replacing 46438456.
Servicing Alfa Romeo, Citroen, Fiat, Lancia, Peugeot, Renault.
For engines w/ electronic diesel control (EDC).
12 V.
6 terminals.



A=85/31 B1=86 B2=86a S1=87 S2=87a M6=30/+Bat.

160461

Replacing 7700 107 794, 7700 867 558C, 30872555.
Servicing Renault, Volvo.
12 V.
6 terminals.



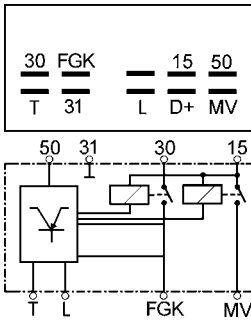
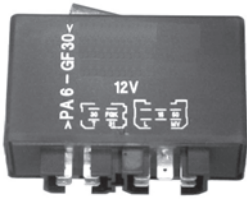
160469

Replacing 93BB 6M092AA, BA.
Servicing Ford
12 V.
6 terminals.

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Glow Plug Controller and Terminal Designations page 26 - 29*

Glow Plug Controllers



160462

Replacing 98 411 034, 99 484 736.

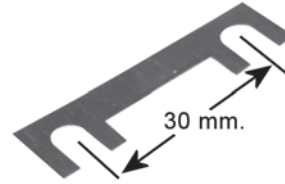
Servicing Iveco.

12 V.

9 terminals.

For flame start system.

Fuses



Strip type.

Small size.

DIN 72581.

Std pkg 10

	Amp.
191184 A	30
191185 A	40
191186 A	50
191187 A	60
191188 A	80
191189 A	100
192338	150

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ASSORTMENTS

SORTIMENTE

ASSORTIMENTS

ASSORTIMENTI

PART 1 1

3rd Edition



ISO/TS 16949:2002 certified supplier

GB

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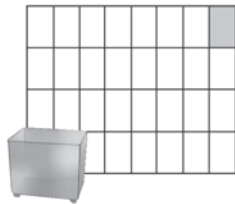
	Pag.		Pag.	
811005	Relè Frece 12 V.	47	Assortimenti Indice	48
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Assortment Box and Inserts

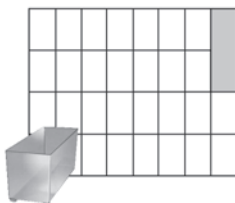


200663 Std pkg 6
 Profi Service Case, empty.
 Can be divided using inserts.
 Dim.: 340 x 265 x 57 mm.
 Polypropylene (Unbreakable).

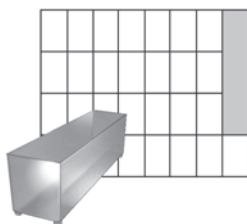
**INSERTS FOR
 ASSORTMENT BOXES
 Polypropylene
 (Unbreakable)**



200664 Std pkg 96
 Dim.: 55 x 40 x 45 mm.



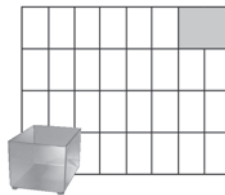
200665 Std pkg 48
 Dim.: 110 x 40 x 45 mm.



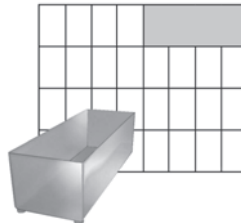
200666 Std pkg 30
 Dim.: 165 x 40 x 45 mm.



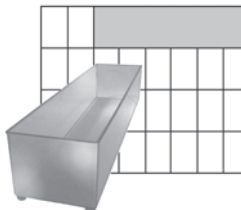
200667 Std pkg 24
 Dim.: 220 x 40 x 45 mm.



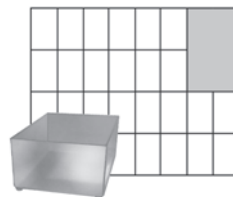
200668 Std pkg 48
 Dim.: 55 x 80 x 45 mm.



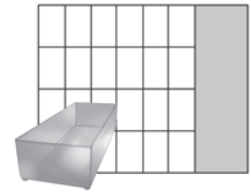
200669 Std pkg 24
 Dim.: 55 x 160 x 45 mm.



200670 Std pkg 15
 Dim.: 55 x 240 x 45 mm.



200671 Std pkg 24
 Dim.: 110 x 80 x 45 mm.



200672 Std pkg 12
 Dim.: 220 x 80 x 45 mm.



200673 Std pkg 12
 Dim.: 110 x 160 x 45 mm.



200676
 Display for 4 Profi Service Cases.
 Dim.: 330 x 360 x 200 mm.

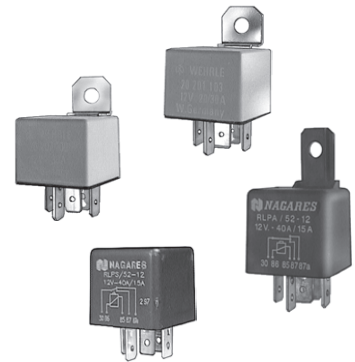


200693
 Display for 4 Profi service cases.
 Dim.: 313 x 373 x 265 mm.
 Can be assembled horizontally or vertically.

Mini Relays 12 V.

811001

		Qty.
160080	30 Amp. 4 terminals	6
160081	20/30 Amp. 4 terminals	6
160083	30 Amp. 4 terminals	2
160155	15 Amp. 4 terminals	2
160168	2 x 15 Amp. 5 terminals	2
160239	70 Amp. 4 terminals	2
160265	30 Amp. 5 terminals	2
160270	20/30 Amp. 5 terminals	2
160282	40 Amp. 4 terminals	6
160308	20/30 Amp. 5 terminals	6
160403	15/40 Amp. 5 terminals	2
160468	70 Amp. 4 terminals	2

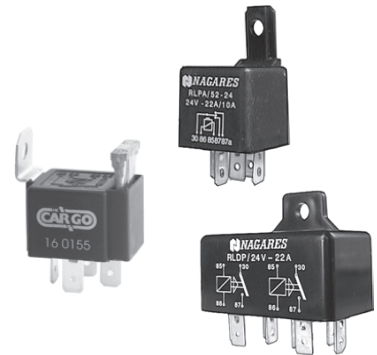


Mini Relays 12 - 24 V.

811002

		Qty.
160080	12 V. 30 Amp. 4 terminals	1
160081	12 V. 20/30 Amp. 5 terminals ..	1
160082	24 V. 20 Amp. 4 terminals	1
160083	12 V. 30 Amp. 4 terminals	1
160155	12 V. 15 Amp. w/ fuse 4 term. ...	1
160168	12 V. 2 x 15 Amp. 5 terminals ..	1
160169	24 V. 2 x 10 Amp. 5 terminals ..	1
160215	24 V. 20 Amp. 4 terminals	1
160216	24 V. 10/20 Amp. 5 terminals ..	1
160239	12 V. 70 Amp. 4 terminals	1
160240	24 V. 40 Amp. 4 terminals	1
160265	12 V. 30 Amp. 5 terminals	1
160266	24 V. 20 Amp. 5 terminals	1
160270	12 V. 20/30 Amp. 5 terminals ..	1

		Qty.
160271	24 V. 10/20 Amp. 5 terminals	1
160272	24 V. 70 Amp. 4 terminals	1
160282	12 V. 40 Amp. 4 terminals	1
160307	24 V. 20 Amp. 4 terminals	1
160311	12 V. 40 Amp. 4 terminals	1
160316	12 V. 15/40 Amp. 5 terminals	1
160317	24 V. 10/22 Amp. 5 terminals	1
160473	24 V. 15 Amp. 4 terminals	1
160479	12 V. 25 Amp. 3 terminals	1
160480	12 V. 25 Amp. 4 terminals	1



Mini Relays 24 V.

811003

		Qty.
160082	20 Amp. 4 terminals	4
160215	20 Amp. 4 terminals	4
160307	20 Amp. 4 terminals	4
160266	20 Amp. 5 terminals	2
160240	40 Amp. 4 terminals	2
160272	70 Amp. 4 terminals	2
160169	2x10 Amp. 5 terminals	2
160268	2x20 Amp. 2x4 terminals	2
160216	10/20 Amp. 4 terminals	4
160271	10/20 Amp. 5 terminals	2
160317	10/20 Amp. 5 terminals	2
160337	10/22 Amp. 5 terminals	2

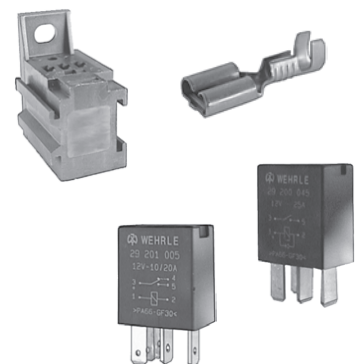


Micro Relays



811004

		Qty.
160363	25 Amp. 4 terminals	2
160364	Normally open w/ diode	2
160365	Change over 12 V. 10/20 Amp. ...	2
160366	Change over w/ diode	2
160367	Change over w/ resistor	2
160368	Change over 24 V. 4/10 Amp. ...	1
160521	5/10 Amp. 5 terminals	2
191089	Terminal 4.7 mm. 0.5-1.0 mm ² ..	100
190868	Terminal 6.3 mm. 0.5-1.0 mm ² ..	100
190252	Terminal 6.3 mm. 1.0-2.5 mm ² ..	100
191752	Relay multi plug	10

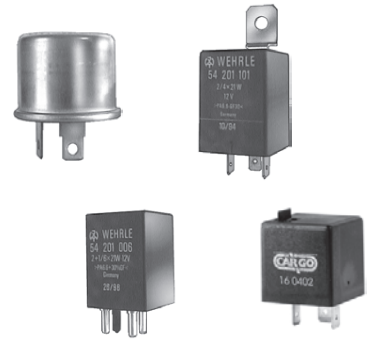


Flasher Units 12 V.

811005

		Qty.
160115	138 Watt. 2 terminals	1
160116	138 Watt. 3 terminals	1
160242	2/4 x 21 Watt. 3 terminals	1
160243	2/4 x 21 Watt. 4 terminals	1
160244	2 + 1/6 x 21 Watt. 4 terminals .	1
160263	2 + 1 + 1/8 x 21 Watt. 6 term.	1
160305	2 + 1/6 x 21 Watt. 4 bull. term. ...	1
160312	2/4 x 21 Watt. 3 terminals	1
160314	2 + 1/6 x 21 Watt. 5 terminals .	1
160315	2/4 x 21 Watt. 3 terminals	1
160341	180 Watt. 3 terminals	1
160402	2 + 1/6 x 21 Watt. 4+2 term.	1
160474	2/4 x 21 Watt. 3 terminals	1

160475	2+1/6 x 21 Watt. 3 terminals + 2 in top	1
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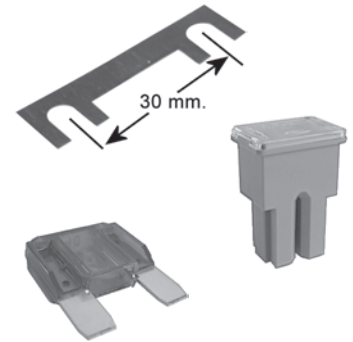


Special Fuses

804032

	Type	Amp.	Qty.
191152	Pink	30	5
191153	Green	40	5
191154	Yellow	60	5
191155	Pink	30	5
191156	Yellow	60	5
191157	Black	80	5
191184	Strip	30	10
191185	Strip	40	10
191186	Strip	50	10
191187	Strip	60	10
191188	Strip	80	10
191189	Strip	100	10
191249	Yellow	20	5
191250	Green	30	5

	Type	Amp.	Qty.
191251	Orange	40	5
191252	Red	50	5
191253	Blue	60	5
191254	Beige	70	5
191255	Natural	80	5
191256	Violet	100	5



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160081	811001	46
<i>and</i>	811002	46
160082	811002	46
<i>and</i>	811003	46
160083	811001	46
<i>and</i>	811002	46
160115	811005	47
160116	811005	47
160155	811001	46
<i>and</i>	811002	46
160168	811001	46
<i>and</i>	811002	46
160169	811002	46
<i>and</i>	811003	46
160215	811002	46
<i>and</i>	811003	46
160216	811002	46
<i>and</i>	811003	46
160239	811001	46
<i>and</i>	811002	46
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<i>and</i>	811003	46
160242	811005	47
160243	811005	47
160244	811005	47
160263	811005	47
160265	811001	46
<i>and</i>	811002	46
160266	811002	46
<i>and</i>	811003	46
160268	811003	46
160270	811001	46
<i>and</i>	811002	46
160271	811002	46
<i>and</i>	811003	46
160272	811002	46
<i>and</i>	811003	46
160282	811001	46
<i>and</i>	811002	46
160305	811005	47
160307	811002	46
<i>and</i>	811003	46
160308	811001	46
160311	811002	46
160312	811005	47
160314	811005	47
160315	811005	47
160316	811002	46
160317	811002	46
<i>and</i>	811003	46
160337	811003	46
160341	811005	47
160363	811004	46
160364	811004	46
160365	811004	46
160366	811004	46
160367	811004	46
160368	811004	46
160402	811005	47
160403	811001	46
160468	811001	46
160473	811002	46
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191184	804032	47
191185	804032	47
191186	804032	47
191187	804032	47
191188	804032	47
191189	804032	47
191249	804032	47
191250	804032	47
191251	804032	47
191252	804032	47
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ANWENDUNGS- LISTEN

LISTE D'APPLICATION

LISTA APPLICAZIONI

PART 1 1

3rd Edition



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Fuel Pump Relays

Model	Eng.	Type	Date	Cargo
ALFA ROMEO				
Alfa 75 1.8 Turbo	AR06134	162.B1C,D,G	02.86 - 01.90	160353
Alfa 75 1.8 i.e. Turbo	AR06158	162.B1E	02.86 - 01.90	160353
Alfa 164 2.0 Turbo	AR06476	164	01.88 - 09.92	160354
AUDI				
Coupe 1.8 Coupe	DZ		08.89 - 07.91	160372
Coupe 1.8 GT	DS, JV, JN		01.85 - 08.88	160372
Coupe 1.8 GT	SF		04.86 - 08.88	160372
Coupe 1.8 GT	PV		08.86 - 10.87	160372
Coupe 1.8 GT	DZ		08.86 - 08.88	160372
Coupe 2.0	JS, HP		09.83 - 07.86	160373
Coupe 2.0	SK		03.86 - 04.88	160373
Coupe 2.0	ABK, ADD, 3A		05.89 - 12.96	160372
Coupe 2.2 Quattro	KV		12.84 - 12.87	160374
Coupe 2.2 Quattro	KV		11.88 - 07.91	160373
Coupe 2.0 20V Quattro	NM		08.89 - 07.91	160373
80 1.8	SD		09.86 - 07.88	160372
80 1.8	RU		05.86 - 07.90	160372
80 1.8 Quattro	SD		09.86 - 08.90	160372
80 1.8 E	DZ		06.86 - 08.91	160372
80 1.8 E Quattro	DZ		05.86 - 07.91	160372
80 1.8 S	SF		09.86 - 12.90	160372
80 1.8 S	JN, NE, PM		09.86 - 10.91	160372
80 1.8 S Quattro	SF		09.86 - 07.90	160372
80 1.8 S Quattro	JN, NE, PM		09.86 - 09.91	160372
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80 1.8 GTE	PV		08.85 - 08.86	160375
80 1.8 GTE Quattro	PV		08.85 - 08.86	160372
80 2.0, Quattro	AAD, 3A		10.90 - 08.91	160374
80 2.0 E, Quattro	3A		08.88 - 10.90	160374
90 2.0	PS		07.88 - 09.91	160374
90 2.0	JS		10.84 - 03.87	160374
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100 1.8, Avant	SH		09.86 - 07.88	160373
100 1.8, Avant	DS, JW, NP		09.86 - 07.89	160373
100 1.8 Quattro	JW, NP, SH		09.86 - 07.87	160373
100 1.8 Quattro	JW, NP, SH		08.87 - 12.87	160372
100 1.8 Quattro Avant	JW		04.85 - 08.86	160372
100 1.8 Quattro Avant	NP, PH, 4B		08.85 - 07.88	160372
100 1.8 Quattro Avant	JW		09.86 - 07.89	160373
100 1.8 Quattro Avant	JW, NP, SH		01.88 - 07.88	160372
100 2.0	KP		08.84 - 12.87	160373
100 2.0	SL		08.86 - 11.87	160373
100 2.0	RT		01.88 - 11.90	160374
100 2.0 E Avant	KP		01.85 - 12.87	160373
100 2.0 E Avant	RT		01.88 - 11.90	160374
100 2.1, Avant	KF, WC		08.82 - 07.84	160373
100 2.2, Avant, Quattro, Quattro Avant	KU		06.89 - 11.90	160374
200 2.2 5 E	WC		10.79 - 09.82	160373
200 2.2 5 E	WC		10.79 - 09.82	160374
200 2.2 Turbo	WJ		10.79 - 08.82	160373
BMW				
320 2.0 i	M20B20	E30	09.82 - 12.85	160352
320 2.0 i L-Jetronic, Motronic	M20B20	E30	12.85 - 06.91	160352
320 2.0 i Touring	M20B20	E30	01.88 - 12.91	160352
320 2.0 i Cabriolet	M20B20	E30	04.86 - 10.93	160352
525 2.5 i	M30B25	E28	06.81 - 12.87	160352
528 2.8 i	M30B28	E28	06.81 - 12.87	160352

Fuel Pump Relays

Model	Eng.	Type	Date	Cargo
CITROEN				
BX 16 1.6	180Z		03.86 - 10.89	160354
BX 19 1.9 Break	DFZ (XU9J1)		07.86 - 12.94	160354
CX 25 2.5 GTi w/ Cat.	M25-668		05.86 - 12.92	160353
CX 25 2.5 GTi Turbo	M25-662		08.85 - 12.92	160353
CX 25 2.5 GTi Turbo w/ Cat.	M25-667		09.86 - 12.92	160353
CX 25 2.5 TRi	M25-659		05.85 - 12.92	160353
CX 25 2.5 TRI Break	M25-659		08.85 - 12.92	160353
CX 25 2.5 Break w/ Cat.	M25-668		05.86 - 12.92	160353
Visa 1.6 GTi	180A (XU5J)		01.85 - 06.86	160354
Visa 1.6 GTi	B6D		06.85 - 03.91	160354
XM 2.0 Break	XU102C, RDZ (XU10MZ)		11.91 - 04.94	160354
XM 2.0 Turbo	RGX (XU10J2TE)		05.94 -	160354
XM 2.0 Turbo Break	RGX (XU10J2TE), RGY (XU10J2TE/Z)		05.94 -	160354
XM 2.0 Turbo Break	RGY (XU10J2TE/Z)		09.92 - 04.94	160354
XM 2.0 i	RFZ (XU10J2)		11.91 - 04.94	160354
XM 2.0 i Turbo	RGY (XU10J2TE/Z)		09.92 - 06.94	160354
FERRARI				
Mondial 3.4 T, Cabriolet	F119D		03.89 - 12.93	160353
FIAT				
Croma 2.0 16V Automatic	154E1.000		08.92 - 08.96	160353
Croma 2.0 i.e. Turbo	834C.146		11.86 - 11.88	160354
Croma 2000 CHT	154A1.000	154AC	12.85 - 02.89	160353
Croma 2000 i.e.	834B.048		03.86 - 09.90	160353
Croma 2000 i.e.	834B.000		03.87 - 09.92	160353
Croma 2000 i.e., Turbo	834B.146, 154C3.046		10.87 - 08.96	160353
Croma 2000 i.e. Turbo	154A2.000		12.85 - 06.90	160353
Uno 1.3 i.e. Turbo	146A2.000		04.85 - 08.89	160354
Uno 1.3 i.e. Turbo	146A2.246	146	09.89 - 03.91	160353
Uno 1.3 i.e. Turbo (73kw)	146A2.146		10.87 - 09.89	160353
Uno 1.3 i.e. Turbo (74kw)	146A2.246	146	04.89 - 03.91	160353
Uno 1.4 i.e. Turbo	146A8.046		10.90 - 09.93	160353
FORD				
Escort 1.6, Stationcar	LUJ, LUK		07.90 - 08.92	160350
Escort 1.6, Cabriolet, Stationcar	LJF	ALL, AVL, GAL	07.90 - 12.92	160350
Escort 1.6 Turbo RS	LNB	AF, AWF, ABFT	01.86 - 07.90	160350
Escort 1.6 16V, 4x4, Stationcar	L1E	GAL, AAL, ABL, ANL	01.95 -	160350
Escort 1.6 16V XR3i Cabriolet	L1E		02.95 -	160350
Escort 1.6 16V XR3i Cabriolet	L1H	ALL	02.95 -	160350
Escort 1.6 16V XR3i Cabriolet	L1E	ALL	12.92 - 01.95	160350
Escort 1.6 XR3i	LRB, LR2		01.86 - 08.89	160350
Escort 1.6 XR3i Cabriolet	LRB, LR2	ALF	01.86 - 07.90	160350
Escort 1.6 i	L1E, L1K	GAL	08.93 - 01.95	160350
Escort 1.6 i	L1E, L1K	GAL, AFL	01.95 -	160350
Escort 1.6 i Cabriolet, Stationcar	L4B	ALF, AWF, AVF	01.86 - 07.90	160350
Escort 1.6 i 16V	L1E	GAL	09.92 - 01.95	160350
Escort 1.6 i 16V	L1H		01.94 - 01.95	160350
Escort 1.6 i 16V Stationcar	L1E	GAL	09.92 - 01.95	160350
Escort 1.6 i 16V Cabriolet, Stationcar	L1H	ALL	01.94 - 01.95	160350
Escort 1.8 16V	RKC	GAL, AAL, ABL, AFL	01.95 -	160350
Escort 1.8 16V Stationcar	RDA	GAL, AVL	02.92 - 12.92	160350
Escort 1.8 16V Stationcar	RKC	GAL, ANL	01.95 -	160350
Escort 1.8 16V XR3i, Cabriolet	RDA, RQB	GAL	02.92 - 12.92	160350
Escort 1.8 16V XR3i 4X4	RDA, RQB		08.93 - 01.95	160350
Escort 1.8 16V XR3i Cabriolet	RKC	ALL	10.95 -	160350
Escort 1.8 i 16V	RDA	GAL	09.92 - 01.95	160350
Escort 1.8 i 16V Stationcar	RDA, RQB	GAL	01.93 - 01.95	160350
Orion 1.6 i	L4B		03.86 - 07.90	160350
Orion 1.6 i	LRB		03.86 - 07.90	160350
Orion 1.6 i	LJF	GAL	07.90 - 09.92	160350
Orion 1.6 i 16V	L1E, L1K	GAL	07.92 - 12.93	160350
Orion 1.8 i 16V	RQB		01.92 - 12.93	160350
Orion 1.8 i 16V	RDA	GAL	02.92 - 12.93	160350

Fuel Pump Relays

Model	Eng.	Type	Date	Cargo
Scorpio 1.8	REC		04.85 - 02.92	160348
Scorpio 2.0	NEL, N8D		04.85 - 08.89	160348
Scorpio 2.0	N9D		05.89 - 09.94	160348
Scorpio 2.0 i	NRA, NRI		04.85 - 02.92	160348
Scorpio 2.0 i	NRC		10.85 - 12.90	160348
Scorpio 2.0 i, Stationcar	N9D, N9F	GGE	05.89 - 09.94	160348
Scorpio 2.0 i	NRA, NRI, N9F		02.92 - 09.94	160348
Scorpio 2.4 i	ARC		09.86 - 09.88	160348
Scorpio 2.4 i	ARD		10.88 - 02.92	160348
Scorpio 2.4 i	ARDV6EFIHC		10.88 - 02.92	160348
Scorpio 2.4 i Stationcar	ARD	GGE	09.91 - 09.94	160348
Scorpio 2.8 i, 4x4	PRE		10.85 - 11.86	160348
Scorpio 2.9 24V Stationcar	BOA		08.93 - 09.94	160348
Scorpio 2.9 i	BRC, BRD, BRE, BRF		09.86 - 09.94	160348
Scorpio 2.9 i	BRD, BRE, BRF		09.86 - 12.94	160348
Scorpio 2.9 i	BRE		10.87 - 02.92	160348
Scorpio 2.9 i Stationcar	BRD, BRE, BRF	GGE	09.91 - 09.94	160348
Scorpio 2.9 i 4x4	BRD, BRE, BRF		05.88 - 02.93	160348
Scorpio 2.9 i 4x4, Stationcar	BRD, BRE, BRF	GGE	05.88 - 02.93	160348
Scorpio 2.9 i 24V	BOA		04.91 - 09.94	160348
Sierra 1.6 i Hatchback, Stationcar	L6B	BNG, GBC, GBG	10.89 - 02.93	160350
Sierra 2.0 4x4	N9C	GBG, BG4	01.90 - 02.93	160348
Sierra 2.0 4x4 Stationcar	N9C	BNG	02.90 - 02.93	160348
Sierra 2.0 16V Cosworth 4x4 Hatchback	N5C, N5D	GBC, GBG	01.90 - 02.93	160348
Sierra 2.0 i	NEJ, NE5, N4A, N4B, N4I	GBG, GB4	01.87 - 01.89	160350
Sierra 2.0 i	N4A, N4B, N4I		02.89 - 02.93	160348
Sierra 2.0 i	NEJ, NE5	GBG, GB4	02.89 - 12.89	160348
Sierra 2.0 i	N9C		01.90 - 02.93	160348
Sierra 2.0 i w/o A/C	N9C		01.90 - 02.93	160350
Sierra 2.0 i Stationcar	NEJ, NE5, N4A, N4B, N4I	BNG	01.87 - 01.89	160350
Sierra 2.0 i Stationcar	NEJ, NE5, N4A, N4B, N4I	BNG	02.89 - 02.93	160348
Sierra 2.0 i Stationcar	N9C	BNG	05.89 - 02.93	160348
Sierra 2.0 i Hatchback	NRB, NR2	GBC	03.85 - 12.86	160350
Sierra 2.0 i Hatchback	NEJ, NE5, N4A, N4B, N4I	GBC, GBG	01.87 - 01.89	160350
Sierra 2.0 i Hatchback	NEJ, NE5, N4A, N4B, N4I	GBC, GBG	02.89 - 02.93	160348
Sierra 2.0 i Hatchback	N9B, N9C	GBC, GBG	06.89 - 02.93	160348
Sierra 2.8 XR4i Stationcar	PR5, PR6	BNC	08.82 - 12.86	160348
Sierra 2.8 i XR 4x4 Hatchback	PRG	GBC, GBG	01.87 - 08.88	160348
Sierra 2.9 Stationcar	B4B, B4C	BNG	08.88 - 02.93	160348
Sierra 2.9 4x4	B4B, B4C	GBG, BG4	08.88 - 02.93	160350
Sierra 2.9 4x4 Stationcar	B4B, B4C		08.88 - 02.93	160348
Sierra 2.9 i	B4B, B4C		08.88 - 02.93	160348
Sierra 2.9 i Hatchback	B4B, B4C		08.88 - 02.93	160348
Sierra 2.9 i XR 4x4 Hatchback	B4A, B4B, B4C		08.88 - 02.93	160348
LANCIA				
Thema 2.0 16V	834F1.000		08.92 - 12.93	160353
Thema 2.0 16V Stationcar	834F1.000		05.92 - 07.94	160353
Thema 2.0 Turbo 16V	834C.1000	834	12.88 - 06.90	160353
Thema 2.0 Turbo 16V	834F2.000	834	10.92 - 07.94	160353
Thema 2.0 Turbo 16V Stationcar	834C.146, 834C1.246		01.89 - 03.92	160353
Thema 2.0 Turbo 16V Stationcar	834F2.000	834	11.92 - 07.94	160353
Thema 2.0 i.e.	834B.146		09.87 - 05.92	160353
Thema 2.0 i.e.	834B.000		11.84 -	160354
Thema 2.0 i.e. 16V	834B2.246		02.89 - 05.92	160353
Thema 2.0 i.e. Turbo	834C.146		07.86 - 05.90	160353
Thema 2.0 i.e. Turbo Stationcar	834B2.246		02.89 - 05.92	160353
Thema 2.0 i.e. Turbo 16V	834C1.246		04.89 - 05.92	160353
Thema 2.0 i.e. Turbo 16V Stationcar	834C1.000	834AC	12.88 - 06.90	160353
Thema 2.9 8.32	F105L.046	834	10.87 - 05.92	160353
MERCEDES BENZ				
190 E 2.3	M102.985	201	09.86 - 08.93	160470
190 E 2.3 -16	M102.983	201	04.84 - 08.88	160470
190 E 2.6	M103.942	201	09.86 - 08.93	160470

Fuel Pump Relays

Model	Eng.	Type	Date	Cargo
OPEL				
Ascona C 1.8 E w/ Cat.	C18NE		01.85 - 08.86	160352
Ascona C 2.0 i	20NE		09.86 - 08.88	160295
Astra F 1.8 i	C18NZ		03.92 - 09.98	160295
Astra F 1.8 i Caravan, Hatchback	C18NZ		09.91 - 01.98	160295
Astra F 1.8 i 16V, Caravan	C18XE		06.93 - 10.94	160295
Astra F 1.8 i 16V, Caravan	C18XEL, X18XE		11.94 -	160295
Astra F 1.8 i 16V Cabriolet	C18XE, C18XEL, X18XE	53B	11.94 - 03.01	160295
Astra F 1.8 i 16V Hatchback	C18XE		06.93 -	160295
Astra F 1.8 i 16V Hatchback	C18XEL, X18XE		09.94 -	160295
Astra F 2.0 i	C20NE		03.92 - 09.98	160295
Astra F 2.0 i Cabriolet	C20NE		03.93 - 10.94	160295
Astra F 2.0 i Caravan	C20NE		00.91 - 07.94	160295
Astra F 2.0 i Hatchback	C20NE		09.91 - 01.98	160295
Astra F 2.0 i 16V, Caravan, Hatchback	X20XEV		02.95 - 09.98	160295
Astra F 2.0 i 16V Caravan	C20XE		03.93 - 01.98	160295
Astra F 2.0 GSi 16V Hatchback	C20XE		09.91 - 01.98	160295
Calibra A 2.0 i, 4x4	C20NE		06.90 - 07.97	160295
Calibra A 2.0 i 16V	C20XE		06.90 - 02.94	160295
Calibra A 2.0 i 16V	X20XEV		02.94 - 07.97	160295
Calibra A 2.0 i 16V (ECOTEC-4)	X20XEV		02.94 - 07.97	160295
Calibra A 2.0 i 16V 4x4	X20XEV		02.94 - 07.97	160295
Calibra A 2.0 i Turbo 4x4	C20LET		03.92 - 07.97	160295
Corsa A 1.6 GSi Hatchback	E16SE		05.88 - 03.92	160295
Corsa A 1.6 GSi Hatchback	C16SEI		09.89 - 03.93	160295
Corsa A 1.6 GSi Hatchback	C16SE		02.92 - 03.93	160295
Frontera A 2.0 i Sport	C20NE, X20SE		03.92 - 10.98	160295
Frontera A 2.4 i Long	C24NE		03.92 - 10.98	160295
Kadett E 1.4 i	C14NZ	43B	01.90 - 08.91	160352
Kadett E 1.6 i, Caravan, Hatchback	C16LZ, C16NZ, E16NZ		09.86 - 08.91	160295
Kadett E 1.6 i Cabriolet	16SV		07.89 - 02.93	160295
Kadett E 1.6 i Cabriolet	E16NZ	43B	10.86 - 02.93	160295
Kadett E 1.6 i Cabriolet	C16LZ, C16NZ		10.87 - 02.93	160295
Kadett E 1.6 i Combo	C16NZ		08.91 - 07.94	160295
Kadett E 1.8 E Caravan	C18NE		10.85 - 08.86	160352
Kadett E 1.8 i	18E		02.83 - 08.86	160352
Kadett E 1.8 i Caravan	C18NT, C18NZ		06.85 - 08.86	160352
Kadett E 1.8 i Caravan	C18NT, C18NZ		09.86 - 08.91	160295
Kadett E 1.8 i	C18NT, C18NZ		09.90 - 08.91	160295
Kadett E 1.8 i	C18NE		10.85 - 08.86	160352
Kadett E 1.8 i Hatchback	C18NT, C18NZ		06.85 - 08.86	160352
Kadett E 1.8 i Hatchback	C18NT, C18NZ		09.86 - 08.91	160295
Kadett E 2.0 Hatchback	20NE, 20SEH		09.86 - 08.91	160295
Kadett E 2.0 i, Cabriolet, Caravan	20NE, C20NE		09.86 - 08.91	160295
Kadett E 2.0 GSi Hatchback	C20NE		09.86 - 08.91	160295
Kadett E 2.0 GSi 16V Hatchback	20XEJ, C20XE		03.88 - 08.91	160295
Omega A 1.8, Caravan	E18NVR		09.87 - 03.94	160295
Omega A 1.8 S, Caravan	18SV		09.86 - 03.94	160295
Omega A 1.8 i, Caravan	18SEH		09.86 - 03.94	160295
Omega A 2.0 i, Caravan	20SE, C20NE		09.86 - 03.94	160295
Omega A 2.0 i, Caravan	C20NEF, C20NEJ		09.90 - 03.94	160295
Omega A 2.4 i, Caravan	C24NE		09.88 - 03.94	160295
Omega A 2.6 i, Caravan	C26NE		09.90 - 03.94	160295
Omega A 3.0 i	30NE		03.87 - 09.90	160295
Omega A 3.0 i	C30NE		03.88 - 03.94	160295
Omega A 3.0 i Caravan	C30LE, C30NE		03.87 - 03.94	160295
Omega A 3.0 i (3000 Lotus)	30NE		03.87 -	160352
Omega A 3.0 i 24V, Caravan	C30SE, C30SEJ		09.89 - 03.94	160295
Omega A 3.0 i 24V Evolution 500	C30XEI		03.91 - 07.92	160295
Omega A 3.6 i 24V Lotus	C36GET		08.90 - 09.92	160295
Rekord E 1.8 E, Caravan	C18NV		05.85 - 08.86	160352
Rekord E 1.8 E (Facelift)	C18NV		- 08.86	160352
Rekord E 2.2, Caravan	22E		11.84 - 08.86	160352

Fuel Pump Relays

Model	Eng.	Type	Date	Cargo
Senator B 2.5 i	25NE		09.83 -	160352
Senator B 2.6 i	C26NE		09.90 - 09.90	160295
Senator B 3.0 i	30NE		01.83 -	160352
Senator B 3.0 i 24V	C30SE		09.89 - 09.93	160295
Vectra A 2.0 GTi Hatchback	20SEH		09.88 - 11.95	160295
Vectra A 2.0 16V 4x4	C20XE		02.90 - 11.95	160295
Vectra A 2.0 i	20SEH		09.88 - 09.92	160295
Vectra A 2.0 i, Hatchback	20NE		09.88 - 10.90	160295
Vectra A 2.0 i, Hatchback	C20NE		09.88 - 11.95	160295
Vectra A 2.0 i 4x4	20NE		01.89 - 10.90	160295
Vectra A 2.0 i 4x4	20SEH		01.89 - 09.92	160295
Vectra A 2.0 i 4x4	C20NE		01.89 - 11.95	160295
Vectra A 2.0 i 16V, 4x4	20XEJ		01.89 - 06.94	160295
Vectra A 2.0 i 16V, 4x4	X20XEJ		06.94 - 11.95	160295
Vectra A 2.0 i 16V Hatchback	20XEJ		02.89 - 10.90	160295
Vectra A 2.0 i 16V Hatchback	C20XE		02.90 - 11.95	160295
Vectra A 2.0 i 16V Hatchback	X20XEJ		06.94 - 11.95	160295
Vectra A 2.0 i Turbo 4x4	C20LET		06.94 - 11.95	160295
Vectra B 2.0 i, Caravan, Hatchback			00.90 -	160295
PEUGEOT				
205 1.6 GTi	180A (XU5J), 180Z (XU5J), XU5JA		10.87 - 12.89	160354
205 1.6 GTi Cabriolet	180A (XU5J), 180Z (XU5J)	741B, 20D	04.86 - 10.90	160353
205 1.9 GTi Cabriolet	DFZ (XU9J1)	741B, 20D	10.87 - 12.94	160353
205 1.9 GTi	D6B (XU9JA), DFZ (XU9J1), DKZ (XU9JAZ)		10.87 - 10.94	160353
305 1.9 w/ Cat.	DFZ (XU9J1)		10.82 - 07.90	160354
305 1.9	DFZ (XU9J1)		11.86 - 12.88	160354
309 1.6	180Z (XU5J), B6B (XU5J)		11.85 - 09.88	160354
309 1.6	B6B (XU5J)		11.85 - 09.90	160354
309 1.9	D6B (XU9JA)		03.86 - 12.93	160354
309 1.9	DFZ (XU9J1)		08.89 - 12.93	160354
309 1.9 w/ Cat.	DFZ (XU9J1)		03.86 - 12.93	160354
505 2.2	851X (ZDJL)		03.86 - 12.93	160354
505 2.2 w/ Cat.	851X (ZDJL)		03.86 - 12.93	160354
505 2.2 GTi	851B (ZDJL)		08.83 - 12.93	160353
RENAULT				
Fuego 2.2 i w/ Cat.	J7T718		10.83 - 10.85	160354
R18 2.2 i w/ Cat.	J7T718		10.83 - 02.86	160354
SEAT				
Ibiza 1.2 i	021C.1000		12.89 - 05.93	160353
Ibiza 1.5 i	021B.2000, 021C.2000, 021D.2000		10.86 - 05.93	160353
Malaga 1.2 i	021C.1000		12.89 - 12.93	160353
Malaga 1.5 i	021A.2000, 021C.2000, 021D.2000		10.86 - 12.93	160353
Malaga 1.5 i	021B.2000		01.87 - 12.93	160353
Malaga 1.5 i w/ Cat.	021B.2000		01.87 - 12.93	160353
VAUXHALL				
Astra E 1.8 GT/E Hatchback	18E, 18SE		09.84 - 08.86	160352
Astra E 1.8 GT/E Hatchback	18E, 18SE		09.86 - 08.91	160295
Astra E 2.0 GT/E Hatchback	20SEH		09.86 - 08.91	160295
Astra E 2.0 16V GTE Hatchback	20XE		05.88 - 08.91	160295
Astra F 2.0 i	C20NE		03.92 - 09.98	160295
Astra F 2.0 i Cabriolet	C20NE		03.93 - 10.94	160295
Astra F 2.0 i Hatchback, Stationcar	C20NE		09.91 - 02.98	160295
Astra F 2.0 i 16V	X20XEJ		02.95 - 09.98	160295
Astra F 2.0 i 16V Hatchback	C20XE		09.91 - 02.98	160295
Belmont 1.8	18SE		01.86 - 12.90	160295
Belmont 1.8 i	18E		09.85 - 08.91	160295
Belmont 1.8 i	18SE		09.85 - 08.91	160295

Fuel Pump Relays

Model	Eng.	Type	Date	Cargo
VAUXHALL <i>continued</i>				
Calibra A 2.0 i, 4x4	C20NE		06.90 - 07.97	160295
Calibra A 2.0 i 16V, 4x4	C20XE		06.90 - 02.94	160295
Calibra A 2.0 i 16V	X20XEV		06.90 - 07.97	160295
Calibra A 2.0 i 16V 4x4	X20XEV		02.94 - 07.97	160295
Calibra A 2.0 i Turbo 4x4	C20LET		03.92 - 07.97	160295
Carlton 1.8 i, Stationcar	18SEH		09.86 - 03.94	160295
Carlton 2.0 i, Stationcar	20SE		09.86 - 03.94	160295
Carlton 2.0 i Stationcar	C20NEJ		09.90 - 03.94	160295
Carlton 2.4 i, Stationcar	C24NE		09.88 - 03.94	160295
Carlton 2.6 i, Stationcar	C26NE		09.90 - 03.94	160295
Carlton 3.0	30NE		03.87 - 09.90	160352
Carlton 3.0	C30NE		03.88 - 03.94	160352
Carlton 3.0 Stationcar	C30NE		03.87 - 03.94	160352
Cavalier 2.0 i	20NE		09.88 - 10.90	160295
Cavalier 2.0 i, Hatchback	20SEH		09.88 - 09.92	160295
Cavalier 2.0 i Hatchback	20NE		09.88 - 10.92	160295
Cavalier 2.0 i 4x4	20SEH		09.88 - 09.92	160295
Cavalier 2.0 i 16V	X20XEV		09.93 - 11.95	160295
Cavalier 2.0 i 16V, 4x4, Hatchback	C20XE		09.88 - 11.95	160295
Frontera A 2.0 i 4WD Sport	C20NE, X20SE		03.92 - 10.98	160295
Frontera A 2.4 i 4WD Long	C24NE		03.92 - 10.98	160295
Nova A 1.6 GSi Hatchback	E16SE		05.88 - 03.92	160295
Nova A 1.6 GSi Hatchback	C16SEI		09.89 - 03.93	160295
Nova A 1.6 GSi Hatchback	C16SE		02.92 - 03.93	160295
Senator B 2.5 i	25E		09.87 - 10.90	160352
Senator B 2.6 i	C26NE		09.90 - 09.93	160352
Senator B 3.0	C30LE		09.87 - 09.93	160352
Senator B 3.0	30NE		01.88 - 09.90	160352
Senator B 3.0 24V	C30SE		09.89 - 09.93	160295
Senator B 3.0 i	C30NE		01.88 - 09.93	160352
VOLVO				
740 2.0 Stationcar	B200F	745	08.89 - 07.90	160401
740 2.0 Stationcar	B200F	745	08.89 - 07.91	160401
740 2.3	B230E	744	08.84 - 07.88	160400
740 2.3	B230F	744	08.87 - 07.92	160401
740 2.3	B230FB	744	08.88 - 07.90	160401
740 2.3 Stationcar	B230K	745	09.85 - 12.87	160400
740 2.3 Stationcar	B230F	745	08.87 - 07.92	160401
740 2.3 Stationcar	B230E	745	01.88 - 07.90	160400
740 2.3 Stationcar	B230K	745	01.88 - 07.90	160401
740 2.3 Stationcar	B230FB	745	08.89 - 07.90	160401
740 2.3 Turbo	B230FT	744	08.86 - 07.89	160401
740 2.3 Turbo	B230FT	744	08.89 - 07.90	160401
740 2.3 Turbo Stationcar	B230ET	745	08.85 - 07.88	160401
740 2.3 Turbo Stationcar	B230FT	745	08.86 - 07.89	160401
740 2.3 Turbo 2 Stationcar	B230FT	745	08.89 - 07.90	160401
760 2.3 Turbo	B230ET	704,764	08.84 - 10.88	160401
940 2.0	B200F	944	01.92 - 07.94	160401
940 2.0 Stationcar	B200F	945	01.92 - 07.94	160401
940 2.3, Stationcar	B230FB	945	01.91 - 12.93	160401
940 2.3, Stationcar	B230FD	945	08.92 - 12.93	160401
940 2.3 Turbo, Stationcar	B230FT	945	01.94 - 07.94	160401
940 2.3 Turbo, Stationcar	B230FK	945	01.95 -	160401
VW				
Caddy I 1.8	JH		08.85 - 07.92	160375
Corrado 1.8 G60	PG		10.88 - 09.93	160362
Golf I 1.8 Cabriolet Automatic Transmission	2H		08.89 - 03.93	160375
Golf I 1.8 Cabriolet Automatic Transmission	JH		08.83 - 04.93	160375
Golf II 1.8	GX		08.85 - 10.87	160362
Golf II 1.8	RH		08.86 - 01.90	160375
Golf II 1.8	GX		08.87 - 10.91	160375
Golf II 1.8 GTi	DX, EV, PB		08.83 - 10.91	160375
Golf II 1.8 GTi	PF		01.87 - 10.91	160375

Fuel Pump Relays

Model	Eng.	Type	Date	Cargo
Golf II 1.8 Syncro	GX		02.86 - 10.87	160362
Golf II 1.8 Syncro	GU, GX		02.86 - 07.88	160373
Golf II 1.8 Syncro	RP		08.87 - 10.91	160373
Golf II 1.8 Syncro	1P		08.88 - 07.91	160373
Golf II 1.8 G60 GTi	PG		04.90 - 07.91	160362
Golf II 1.8 G60 GTi Syncro	1H, PG		08.88 - 07.91	160362
Jetta I 1.8	DX		08.82 - 07.83	160374
Jetta II 1.8	EV, GZ, PB		01.84 - 10.91	160373
Jetta II 1.8	GU, GX, HV		08.84 - 10.91	160362
Jetta II 1.8	RD		08.85 - 10.87	160373
Jetta II 1.8	RH		08.86 - 01.90	160373
Jetta II 1.8	PF		01.87 - 10.91	160373
Jetta II 1.8	GX, RP		08.87 - 10.91	160373
Jetta II 1.8 Syncro	RP		08.87 - 12.88	160373
Jetta II 1.8 Syncro	1P		08.88 - 07.91	160373
Passat 1.8	JN		08.85 - 10.87	160362
Passat 1.8	ABS, ADZ, RP		02.88 - 08.96	160362
Passat 1.8	PF		04.88 - 07.93	160362
Passat 1.8, Variant	PB	3A5, 35	04.88 - 07.92	160362
Passat 1.8 Variant	ABS, ADZ, RP	3A5, 35	02.88 - 07.90	160362
Passat 1.8 G60 Syncro	PG		08.88 - 08.96	160362
Passat 1.8 G60 Syncro Variant	PG		08.88 - 05.97	160362
Passat 2.0	2E, ADY, AGG		02.90 - 08.96	160362
Passat 2.0 Syncro	ADY, AGG		10.90 - 08.96	160352
Passat 2.0 Syncro	2E	3A2, 35I	10.90 - 08.96	160352
Passat 2.0 Variant	2E, ADY, AGG	3A5, 35	02.90 - 05.97	160362
Passat 2.0 Syncro Variant	2E, ADY, AGG	3A5, 35I	10.90 - 05.97	160352

Also see Cross Reference List page 71

Glow Plug Controllers

Model	Eng.	Type	Date	Cargo
ALFA ROMEO				
Alfa 75 2.0 TD	VM80A	162.BD,BG	05.85 - 09.92	160428
Alfa 75 2.4 TD	VM81A	162	10.84 - 02.92	160428
Alfa 164 2.5 TD	VM84A	164.A1A	06.87 - 09.92	160428
Alfa 164 2.5 TD	VM08B, VM32B	164.K2A,B	09.92 - 09.98	160428
AUDI				
A3 1.9 TDi	AGR, ALH		09.96 - 07.01 For engines w/ electronic diesel control (EDC)	160460
A6 3.2 FSi Quattro Avant	AUK	4F5	03.05 -	160453
80 1.6 TD	RA, SB		09.86 - 08.91	160420
80 1.6 Diesel	JK		09.86 - 08.91	160420
80 1.9 Diesel	1Y		08.89 - 08.91	160420
100 2.0 TD	NC		03.88 - 11.90	160420
100 2.0 TD Avant	NC		03.88 - 11.90	160420
100 2.4 Diesel, Avant	3D	44	08.89 - 07.91	160420
100 2.4 Diesel, Avant	AAS		12.90 - 06.94	160420
100 2.5 TDi, Avant	1T		01.90 - 11.90	160420
100 2.5 TDi, Avant	AAT, ABP		12.90 - 06.94	160420
CHRYSLER				
Voyager 2.5 TD	425CLIRS/X		10.95 - 12.00	160428
Voyager 2.5 TD SE	09B, M00	ES	04.92 - 09.95	160428
CITROEN				
AX 14 1.4 Diesel	K9A (TUD3)		09.88 - 06.92	160424 W/o Post Heating
AX 14 1.4 Diesel	K9Y (TUD3Y)		08.91 - 12.97	160424 W/o Post Heating
AX 15 1.5 Diesel	VJY (TUD5)		08.94 - 12.97	160436
Berlingo 1.8 Diesel	A9A (XUD7)		07.96 -	160434
Berlingo 1.9 Diesel	D9B (XUD9A/L)		07.96 -	160434
Berlingo 1.9 Diesel	D9B (XUD9A/L), DJY (XUD9A)		07.96 - 08.98	160436
Berlingo 1.9 Diesel	WJY (DW8B), WJZ (DW8)		07.98 -	160453
Berlingo 1.9 Diesel 4WD	WJZ (DW8)	MF	07.98 - 11.02	160436
Berlingo 2.0 HDi	RHY	MBRHY, MCRHY	12.99 -	160453
Berlingo 90 2.0 HDi	RHY (DW10TD)	MF	12.99 -	160453
BX 17 1.7 TD Break	A8A (XUD7TE), AJZ (XUD7TE)		03.88 - 12.94	160424 W/o Post Heating
BX 17 1.8 Diesel	161 (XUD7)		10.85 - 01.93	160424 W/o Post Heating
BX 17 1.8 Diesel Break	161A (XUD7)	XB.	10.85 - 09.93	160432
BX 19 1.9 Diesel	D9B (XUD9A/U)		03.87 - 02.93	160432
BX 19 1.9 Diesel	D9B (XUD9A/U)		03.87 - 02.93	160424 W/o Post Heating
BX 19 1.9 Diesel Break	162 (XUD9), D9A (XUD9)		09.83 - 12.87	160424 W/o Post Heating
BX 19 1.9 Diesel Break	D9B (XUD9A/U)		03.87 - 12.94	160424 W/o Post Heating
BX 19 1.9 Turbo TRD	A8A (XUD7TE), AJZ (XUD7TE)		03.88 - 02.93	160424 W/o Post Heating
C5 2.0 HDi	4HX (DW12TED4), RHZ (DW10ATED)		03.01 -	160453
C5 2.0 HDi Break	4HX (DW12TED4), RHS (DW10ATED4)		06.01 -	160453
C15 1.8 Diesel	161A (XUD7)		07.86 - 12.00	160424 W/o Post Heating
C25 1.9 Diesel	D9B (XUD9A/U)		07.87 - 01.94	160424 W/o Post Heating
C25 2.5 Diesel 4x4	CRD93L		01.87 - 01.94	160423 W/o Post Heating
C25 2.5 Diesel 4x4	CRD93L		01.87 - 02.94	160424 W/o Post Heating
C25 2.5 TD	CRD93LS		04.87 - 01.94	160423 W/o Post Heating
C25 2.5 TD	CRD93LS		08.87 - 02.94	160424 W/o Post Heating

Glow Plug Controllers

Model	Eng.	Type	Date	Cargo
C25 2.5 TD 4x4	CRD93LS		04.87 - 01.94	160423 W/o Post Heating
C25 2.5 TD 4x4	CRD93LS		08.87 - 02.94	160424 W/o Post Heating
CX 25 2.5 Diesel	M25-660		04.87 - 12.92	160423 W/o Post Heating
CX 25 2.5 Diesel, Break	M25-660		05.86 - 12.92	160424 W/o Post Heating
CX 25 2.5 TD	M25-669		01.87 - 12.92	160424 W/o Post Heating
CX 25 2.5 TD, Break	M25-669		04.87 - 12.92	160423 W/o Post Heating
Evasion 1.9 TD	D8B (XUD9TF), DHX (XUD9TF/BTF)		11.94 - 07.02	160453
Evasion 1.9 TD	D8B (XUD9TF), DHX (XUD9TF/BTF)		11.94 - 07.02	160432 Equipment var.: DSX
Evasion 1.9 TD	D8B (XUD9TF), DHX (XUD9TF/BTF)		11.94 - 07.02	160433 Equipment var.: DV SX
Evasion 2.0 TD	XUD9TE		05.97 - 07.02	160432
Evasion 2.0 HDi	RHZ (DW10ATED)	U6U	08.99 - 07.02	160453
Evasion 2.1 TD	P8C (XUD11BTE)		05.96 - 07.02	160432
Jumper 1.9 TD	D8C (XUD9UTF)		02.94 - 02.02	160432
Jumper 1.9 TD	D8C (XUD9UTF), DHX (XUD9TF/BTF)	230L, 230	03.94 - 02.02	160432
Jumper 1.9 TD, 4x4	D8C (XUD9UTF)	230P	08.94 - 02.02	160432
Jumper 2.4 Diesel	T9A (DJ5)	230L	03.94 - 04.02	160436
Jumper 2.4 TD	T8A (DJ5T)	230L	03.94 - 04.02	160436
Jumper 2.5 Diesel	T9A (DJ5)	230	03.94 - 04.02	160436
Jumper 2.5 Diesel 4x4	T9A (DJ5)	230P	08.96 - 04.02	160436
Jumper 2.5 TD	T8A (DJ5T)	230	03.94 - 04.02	160436
Jumper 2.5 TD 4x4	T8A (DJ5T)	230P	08.96 - 04.02	160436
Jumper 2.5 TDi	THX (DJ5TED)		12.96 - 11.00	160436
Jumpy 1.9 Diesel	D9B (XUD9A/U)		10.95 - 04.98	160434
Jumpy 1.9 TD	D8B (XUD9TF)		04.96 -	160453
Jumpy 1.9 TD	DHX (XUD9TF/BTF), DHX (XUD9TF/BTF)		10.95 -	160453
Jumpy 2.0 HDi	RHZ (DW10ATED)	U6U	03.00 - 07.00	160453
Saxo 1.5 Diesel	VJY (TUD5), VJZ (TUD5)		09.96 -	160436
Saxo 1.5 Diesel	VJY (TUD5)		09.00 -	160453
Visa 1.7 Diesel	161A (XUD7)		04.84 - 03.91	160424 W/o Post Heating
Xantia 1.9 Diesel	DJZ (XUD9Y)		06.94 - 01.98	160435
Xantia 1.9 Diesel	D9B (XUD9A/L)		06.94 - 01.98	160435 Equipment var.: Exclusive, Prestige
Xantia 1.9 Diesel	D9B (XUD9A/L)		06.94 - 01.98	160436 W/ post heating "cut-out"
Xantia 1.9 Diesel	DHW (XUD9SD)		02.96 - 01.98	160435
Xantia 1.9 Diesel	DHW (XUD9SD)	X2	01.98 - 12.01	160432
Xantia 1.9 Diesel Break	DHW (XUD9SD)		04.97 - 12.01	160432
Xantia 1.9 TD	DHY (XUD9TE/Y), DHX (XUD9TF/BTF)		10.94 - 08.98	160436
Xantia 1.9 TD	DHY (XUD9TE/Y), DHX (XUD9TF/BTF)	X2	01.98 -	160453
Xantia 1.9 TD Break	DHY (XUD9TE/Y), DHX (XUD9TF/BTF)	X1	06.95 - 01.98	160436
Xantia 1.9 TD Break	DHY (XUD9TE/Y), DHX (XUD9TF/BTF)	X1	06.95 - 01.98	160453
Xantia 1.9 TD Break	D8B (XUD9TF)	X1	09.95 - 12.96	160435
Xantia 1.9 TD Break	D8B (XUD9TF), DHX (XUD9TF/BTF)		01.98 -	160453
Xantia 2.0 HDi, Break	RHZ (DW10ATED)	X2	02.99 -	160453
Xantia 2.1 TD 12V	P8C (XUD11BTE)		06.95 - 01.98	160432
Xantia 2.1 TD 12V	P8C (XUD11BTE)	X2	01.98 - 02.99	160432
Xantia 2.1 TD 12V Break	P8C (XUD11BTE)		01.98 - 02.99	160432
XM 2.1 Diesel, Break	P9A (XUD11A)	Y3	05.89 - 06.94	160432
XM 2.1 TD 12V, Break	P8A (XUD11ATE), PHZ (XUD11ATE), PJZ (XUD11ATE)		05.89 - 06.94	160432

Glow Plug Controllers

Model	Eng.	Type	Date	Cargo
CITROEN continued				
Xsara 1.5 Diesel	VJZ (TUD5)		04.97 - 09.00	160436
Xsara 1.8 Diesel, Break	161A (XUD7), A9A (XUD7)		04.97 - 09.00	160436
Xsara 1.8 TD		N1	10.97 - 09.00	160436
Xsara 1.9 Diesel, Break	DJY (XUD9A)		04.97 - 09.00	160436
Xsara 1.9 Diesel, Break	DHV (XUD9BSD)	N1	01.98 - 09.00	160453
Xsara 1.9 TD, Break	DHY (XUD9TE/Y)		04.97 - 09.00	160436
Xsara 1.9 TD Coupe	DHY (XUD9TE/Y)	N0	02.98 - 08.00	160432
Xsara 2.0 HDi, Break, Coupe	RHY (DW10TD)	N1	02.99 -	160453
Xsara 2.0 HDi, Break, Coupe	RHZ (DW10ATED)	N1	05.01 -	160453
Xsara Picasso 2.0 HDi MPV	RHY (DW10TD)		06.00 -	160453
ZX 1.8 Diesel	161A (XUD7)	N2	06.93 - 05.95	160424
ZX 1.8 Diesel, Break	161A (XUD7)	N2	06.95 - 06.97	160435
ZX 1.9 Diesel	DJZ (XUD9Y)		03.91 - 04.94	160424
			W/o Post Heating	
ZX 1.9 Diesel	DJZ (XUD9Y)		07.92 - 06.97	160435
ZX 1.9 Diesel	D9B (XUD9A/U)		06.94 - 05.95	160424
			W/o Post Heating	
ZX 1.9 Diesel	D9B (XUD9A/U)		06.95 - 06.97	160434
ZX 1.9 Diesel Break	D9B (XUD9A/U)		06.94 - 05.95	160424
			W/o Post Heating	
ZX 1.9 Diesel Break	D9B (XUD9A/U)		06.94 - 10.97	160434
ZX 1.9 Diesel Break	DJZ (XUD9Y)		10.93 - 10.97	160435
ZX 1.9 TD, Break	DHY (XUD9TE/Y)		07.92 - 06.97	160432
DODGE				
Caravan 2.5 TD			01.95 - 03.01	160428
FIAT				
Brava 1.9 TD	182A7.000, 182A8.000	182	03.96 - 10.01	160464
Ducato 1.9 TD	DHX (XUD9TF/L)	230	04.98 - 10.01	160432
Ducato 2.4 TD	8144.21		01.86 - 08.90	160424
			W/o Post Heating	
Ducato 2.5 Diesel	8144.67, CRD93L	280	01.82 - 08.90	160424
			W/o Post Heating	
Ducato 2.5 Diesel	8144.67	290	07.90 - 03.94	160424
			W/o Post Heating	
Ducato 2.5 Diesel	8140.67	230	03.94 - 04.02	160424
			W/o Post Heating	
Ducato 2.5 Diesel 4x4	8144.67	280	03.89 - 08.90	160424
			W/o Post Heating	
Ducato 2.5 Diesel 4x4	8144.67	290	07.90 - 02.94	160432
Ducato 2.5 Diesel 4x4	8144.67	290	07.90 - 03.94	160424
			W/o Post Heating	
Ducato 2.5 Diesel Panorama, 4x4	8144.67, CRD93L		01.86 - 08.90	160424
			W/o Post Heating	
Ducato 2.5 Diesel Panorama, 4x4	8144.67	290	07.90 - 03.94	160424
			W/o Post Heating	
Ducato 2.5 TD, 4x4	8140.27	290	07.90 - 03.94	160424
			W/o Post Heating	
Ducato 2.5 TD Panorama	8144.21	280	01.87 - 08.90	160424
			W/o Post Heating	
Ducato 2.5 TD Panorama	8140.27	290	08.90 - 03.94	160424
			W/o Post Heating	
Ducato 2.5 TD Panorama 4x4	8144.21	280	01.86 - 08.90	160424
			W/o Post Heating	
Ducato 2.5 TD Panorama 4x4	8140.27	290	01.91 - 03.94	160424
			W/o Post Heating	
Fiorino 1.7 Diesel	149B3.000		12.87 - 12.90	160426
Fiorino 1.7 Diesel	149B2.000		01.88 - 12.91	160432
Fiorino 1.7 Diesel Pick Up	146B2.000	146	10.93 - 12.97	160426
Fiorino 1.7 TD 65	146D7.000		01.97 -	160464
Marea 1.9 TD, Weekend	182A8.000	185..	09.96 -	160464
Marea 1.9 TD Weekend	182A7.000	185..	09.96 - 02.99	160464

Glow Plug Controllers

Model	Eng.	Type	Date	Cargo
Palio 1.7 TD weekend	176A3.000		04.96 - 03.01	160464
Palio 1.9 Diesel weekend	223A6.000	178DYD1A07	03.01 -	160464
Panda 1300 Diesel	156A5.000	141A	04.86 - 12.92	160426
Punto 1.7 Diesel	176B3.000	176L	04.96 - 02.00	160433
Punto 1.7 TD	176A3.000, 176A5.000	176	01.94 - 09.99	160464
Punto 60 1.7 TD	176B7.000	176	09.96 - 09.99	160464
Scudo 1.9 Diesel	D9B	220	02.96 - 04.98	160434
Scudo 1.9 Diesel Combinato	WJZ (DW8)	220P	04.98 -	160434
Scudo 1.9 TD	D8B	220, 220L	02.96 -	160453
Scudo 1.9 TD, ECO	DHX (XUD9TF/L)		02.96 -	160453
Scudo 2.0 JTD	RHX	220L	12.99 -	160453
Scudo 2.0 JTD Combinato	RHZ	220P	12.99 -	160453
Strada 1.7 TD	176A3.000		06.99 -	160464
Talento 1.9 Diesel	149B1.000	290UAK, 290UK, 290UEHK, 290UTK	03.88 - 12.94	160432
Tempra 1.9 TD	160A6.000, 160D1.000	159AU,CU	05.90 - 08.96	160424
Tempra 1.9 TD	160B6.046	159AQ	07.92 - 03.93	160432
Tempra 1.9 TD Stationcar	160A6.000, 160D1.000	159AI,BI,A1,AU,CU	07.91 - 02.95	160426
Tipo 1.7 Diesel	149B4.000	160AG	01.88 - 10.94	160435
Tipo 1.9 TD	160A6.000, 160A6.046 160D1.000	160AR,AQ,EI,EL,GL	09.90 - 03.93	160432
Ulysse 1.9 TD	DHX (XUD9TF/L)	220	02.95 - 08.02	160453
Ulysse 1.9 TD	DHX (XUD9TF/L)	220	10.96 - 12.99	160432
Ulysse 2.0 JTD	RHZ	220	10.99 - 08.02	160453
Ulysse 2.1 TD	P8C	220	05.96 - 10.99	160432
Uno 1.3 Diesel Super	127A5.000, 146B1.000		06.83 - 03.92	160432
Uno 1.7 Diesel	146B2.000		09.89 - 12.93	160432
Uno 1.9 Diesel	149B5.046	146A	09.89 - 03.94	160432
FORD				
Escort 1.8 Diesel	RTA, RTB		07.88 - 07.90	160419
Escort 1.8 Diesel	RTE, RTF, RTH	GAL	07.90 - 12.92	160419
Escort 1.8 Diesel	RTE, RTF, RTH		08.93 - 12.96	160469
Escort 1.8 Diesel Express	RTH		07.90 - 12.94	160419
Escort 1.8 Diesel Express	RTH		08.93 - 12.94	160469
Escort 1.8 Diesel Express	RTF, RTH		01.95 -	160469
Escort 1.8 Diesel Stationcar	RTA, RTB	AWF,AVF	01.89 - 07.90	160419
Escort 1.8 Diesel Stationcar	RTE, RTF, RTH	GAL,AVL	07.90 - 12.92	160419
Escort 1.8 Diesel Stationcar	RFD, RFK, RTH	GAL	08.93 - 01.95	160469
Escort 1.8 Diesel Stationcar		GAL,ANL	01.95 - 02.99	160469
Escort 1.8 TD	RFD, RFK, RFS	GAL,AFL	08.93 - 10.98	160469
Escort 1.8 TD	RFD, RFK	GAL,AAL,ABL	01.95 - 09.01	160469
Escort 1.8 TD	RVA	GAL,AAL,ABL	12.95 - 10.98	160419
Escort 1.8 TD	RVA	GAL,AFL	12.95 - 02.99	160419
Escort 1.8 TD Cabriolet	RFD, RFK	ALL	09.95 - 08.98	160469
Escort 1.8 TD Cabriolet	RVA	ALL	10.96 - 08.99	160419
Escort 1.8 TD Stationcar	RFD, RFK	GAL,ANL	01.95 - 09.01	160469
Escort 1.8 TD Stationcar	RVA	GAL,ANL	12.95 - 02.99	160419
Fiesta 1.8 Diesel	RTC, RTD, RTG		08.93 - 12.95	160469
Fiesta 1.8 Diesel	RTJ, RTK		08.95 - 04.00	160418
Fiesta 1.8 Diesel courier	RTC, RTD, RTG	F5L	08.93 - 02.96	160469
Mondeo 1.8 TD, Stationcar	RFM, RFN	GBP	06.93 - 08.96	160469
Orion 1.8 Diesel	RTA, RTB		01.89 - 07.90	160419
Orion 1.8 Diesel	RTE, RTF, RTH	GAL	08.93 - 12.93	160469
Orion 1.8 TD	RFD, RFK	GAL	08.93 - 12.93	160469
Scorpio 2.5 Diesel	STR		12.85 - 02.92	160416
Scorpio 2.5 Diesel	STR		12.85 - 02.92	160419
Scorpio 2.5 Diesel Stationcar	SCB, SFA, SFB		09.91 - 09.94	160416

ECU - Control

W/o Post Heating
W/ post heating
W/o Post Heating

Glow Plug Controllers

Model	Eng.	Type	Date	Cargo
FORD continued				
Scorpio 2.5 TD	SFA, SFB		06.88 - 07.93	160419 W/ post heating
Sierra 1.8 TD, Hatchback, Stationcar	RFA, RFB, RFL		04.89 - 02.93	160419
Sierra 2.3 Diesel Stationcar	YTR	BNG	01.87 - 02.93	160416 W/o Post Heating
Sierra 2.3 Diesel Stationcar	YTR	BNG	01.87 - 02.93	160419 W/ post heating
LANCIA				
Delta 1.9 TD	160D1.000, 835A4.000	836	07.95 - 08.99	160435
Dedra 1.9 TDS Stationcar	160D1.000, 835A4.000	835	07.95 - 07.99	160435
Zeta 2.0 JTD	RHW, RHZ		09.99 - 09.02	160453
MERCEDES BENZ				
190 2.0 Diesel	OM601.911	201	08.83 - 01.89	160446 W/ Post Heating - 5 Cyl.
190 2.0 Diesel	OM601.911	201	08.83 - 08.89	160449 If car is changed to post heat system, use 160441 = 4 cyl. or 160443 = 5 cyl.
190 2.0 Diesel	OM601.911	201	02.89 - 08.89	160442 If car is changed to post heat system, use 160441 = 4 cyl. or 160443 = 5 cyl.
190 2.0 Diesel	OM601.911	201	08.89 - 08.93	160446 If car is changed to post heat system, use 160441 = 4 cyl. or 160443 = 5 cyl.
190 E 2.0	M102.962	201	01.85 - 12.86	160449 If car is changed to post heat system, use 160441 = 4 cyl. or 160443 = 5 cyl.
190 E 2.0	M102.961	201	02.85 - 12.86	160449 If car is changed to post heat system, use 160441 = 4 cyl. or 160443 = 5 cyl.
190 2.5 Diesel	OM602.911	201	04.85 - 01.89	160443 W/o Post Heating - 4 Cyl. As 160450, but w/fixing on opposite side
190 2.5 Diesel	OM602.911	201	04.85 - 01.89	160450 W/o Post Heating - 4 Cyl. As 160443, but w/fixing on opposite side
190 2.5 Diesel	OM602.911	201	02.89 - 08.93	160447 W/o Post heating - 5 Cyl. As 160463, but w/fixing on opposite side
190 2.5 Diesel	OM602.911	201	08.89 - 08.93	160447 W/o Post heating - 5 cyl. As 160463 but w/fixing on opposite side
190 2.5 TD	OM602.961	201	09.88 - 08.93	160463
200 2.0 Diesel	OM601.912	124	08.89 - 06.93	160441 W/o post heating
200 2.0 Diesel	OM601.912	124	08.89 - 06.93	160445 W/ Post Heating - 5 cyl
200 2.0 Diesel	OM601.912	124	08.89 - 06.93	160449 If car is changed to post heat system, use 160441 = 4 cyl. or 160443 = 5 cyl.
200 D 2.0 Diesel	OM615.940	123	07.76 - 02.79	160442 As Cargo 160441, but w/ fixing on opposite side
200 D 2.0 Diesel	OM615.940	123	03.79 - 11.85	160442 As Cargo 160441, but w/ fixing on opposite side
200 D 2.0 Diesel	OM601.912	124	12.84 - 08.89	160441
200 D 2.0 Diesel	OM601.912	124	12.84 - 01.89	160442 As Cargo 160441, but w/ fixing on opposite side
200 D 2.0 Diesel	OM601.912	124	12.84 - 08.89	160449
200 D 2.0 Diesel	OM601.912	124	02.89 - 08.89	160445 W/ Post Heating - 5 cyl
200 TD 2.0 TD Stationcar	OM601.912	124	09.85 - 08.91	160441 W/o Post Heating
200 TD 2.0 TD Stationcar	OM601.912	124	09.85 - 01.89	160442 As Cargo 160441, but W/ fixing on opposite side
200 TD 2.0 TD Stationcar	OM601.912	124	09.85 - 08.91	160449 If car is changed to post heat system, use 160441 = 4 cyl. or 160443 = 5 cyl.
200 TD 2.0 TD Stationcar	OM601.912	124	09.88 - 08.91	160441 W/o Post Heating
200 TD 2.0 TD Stationcar	OM601.912	124	09.88 - 01.89	160442 As Cargo 160441, but W/ fixing on opposite side
200 TD 2.0 TD Stationcar	OM601.912	124	09.88 - 02.89	160445 W/ Post Heating - 5 cyl
200 TD 2.0 TD Stationcar	OM601.912	124	09.88 - 08.91	160449 If car is changed to post heat system, use 160441 = 4 cyl. or 160443 = 5 cyl.

Glow Plug Controllers

Model	Eng.	Type	Date	Cargo
200 TD 2.0 TD Stationcar	OM601.912	124	02.89 - 08.91	160445 W/o Post Heating - 5 cyl
207 2.4 Diesel	OM616.939	601	09.82 - 01.89	160441 W/o post heating
207 2.4 Diesel	OM616.939	601	09.82 - 01.89	160449
207 2.4 Diesel		601	09.82 - 01.89	160449 W/ post heating
207 D 2.4 Diesel	OM616.937	601	07.82 - 01.89	160441
207 D 2.4 Diesel	OM616.937	601	07.82 - 01.89	160449
207 D 2.4 Diesel	OM616.937	601	09.82 - 01.89	160441
				W/o Post Heating
208 2.3 Diesel	OM601.940	601	10.88 - 02.96	160441
208 2.3 Diesel	OM601.940	601	10.88 - 06.95	160449
208 D 2.3 Diesel	OM601.940	601	10.88 - 06.96	160441
208 D 2.3 Diesel	OM601.940	601	10.88 - 06.95	160449
				W/o Post Heating - 4 Cyl.
				If car is changed to post heat system, use 160441 = 4 cyl. or 160443 = 5 cyl.
209 D 3.0 Diesel	OM617.913	601	12.82 - 12.89	160443
209 D 3.0 Diesel	OM617.913	601	12.82 - 01.89	160449
209 D 3.0 Diesel	OM617.913	601	01.89 - 01.90	160447
				W/o Post heating - 5 cyl.
210 D 2.9 Diesel	OM602.940	601	11.88 - 06.95	160449
250 D 2.5 Diesel	OM602.912	124	01.89 - 06.93	160447
250 D 2.5 Diesel	OM602.912	124	04.85 - 06.93	160449
250 GD 2.5 Diesel	OM602.930	460	12.88 - 08.92	160449
250 TD 2.5 TD Stationcar	OM602.912	124	09.85 - 06.93	160449
				W/o Post heating - 5 cyl. As 160463 but w/fixing on opposite side
290 GD 2.9 Diesel	OM602.942	463	04.92 -	160442
300 3.0 Diesel 4 Matic	OM603.913	124	09.86 - 08.90	160444
300 3.0 Diesel 4 Matic	OM603.913	124	09.90 - 08.92	160445
300 3.0 Diesel 4 Matic	OM603.913	124	09.90 - 08.92	160448
300 3.0 TD 4 Matic	OM603.960	124	02.89 - 06.93	160442
300 D 3.0 Diesel	OM603.912	124	12.84 - 01.89	160444
300 D 3.0 Diesel	OM603.912	124	08.89 - 06.93	160448
300 D 3.0 Diesel 4 Matic	OM603.913	124	08.89 - 08.90	160444
300 D 3.0 Diesel 4 Matic	OM603.913	124	08.89 - 06.93	160448
300 TD 3.0 Diesel Stationcar	OM603.912	124	09.86 - 01.89	160444
300 TD 3.0 Diesel Stationcar	OM603.912	124	02.89 - 06.93	160442
300 TD 3.0 Diesel Stationcar	OM603.960	124	02.89 - 06.93	160442
300 TD 3.0 Diesel Stationcar	OM603.912	124	02.89 - 06.93	160448
300 GD 3.0 Diesel	OM603.912	460	03.79 - 01.89	160444
				W/ Post Heating. - 6 Cyl
				W/o Post Heating. - 6 Cyl.

Glow Plug Controllers

Model	Eng.	Type	Date	Cargo
MERCEDES BENZ <i>continued</i>				
300 GD 3.0 Diesel	OM617.931	460.3	12.79 - 12.91	160449
				If car is changed to post heat system, use 160441 = 4 cyl. or 160443 = 5 cyl.
300 GD 3.0 Diesel	OM603.931	463	09.89 -	160448
				W/ Post Heating. - 6 Cyl
300 GD 3.0 Diesel Cabriolet	OM603.931	463	12.90 - 09.97	160448
				W/ Post Heating. - 6 Cyl
307 D 2.4 Diesel	OM616.939, OM616.937	602	06.82 - 01.89	160441
				W/o Post Heating
307 D 2.4 Diesel	OM616.939	602	06.82 - 01.89	160449
				If car is changed to post heat system, use 160441 = 4 cyl. or 160443 = 5 cyl.
307 D 2.4 Diesel	OM616.937, OM616.939	602	09.82 - 01.89	160449
				If car is changed to post heat system, use 160441 = 4 cyl. or 160443 = 5 cyl.
307 D 2.4 Diesel	OM616.937	602	10.82 - 01.89	160441
				W/o Post Heating
307 D 2.4 Diesel	OM616.937	602	10.82 - 01.89	160449
				If car is changed to post heat system, use 160441 = 4 cyl. or 160443 = 5 cyl.
308 D 2.3 Diesel	OM601.940	601, 602	10.88 - 02.96	160449
309 D 3.0 Diesel	OM617.913	602	10.82 - 01.89	160443
				W/o Post Heating - 4 Cyl.
309 D 3.0 Diesel	OM617.913	602	10.82 - 01.89	160449
				If car is changed to post heat system, use 160441 = 4 cyl. or 160443 = 5 cyl.
309 D 3.0 Diesel	OM617.913	602	10.82 - 01.90	160447
				W/o Post heating - 5 cyl. As 160463 but w/fixing on opposite side
310 2.9 Diesel	OM602.940	602	06.89 - 06.95	160449
310 D 2.9 Diesel	OM602.940	601, 602	06.89 - 06.95	160449
407 D 2.4	OM616.913, OM616.939	T1/TN	00.81 - 00.89	160441
				W/o Post Heating - 4 Cyl.
408 D 2.3	OM601.940	T1/TN	10.87 - 12.92	160449
				If car is changed to post heat system, use 160441 = 4 cyl. or 160443 = 5 cyl.
410 D 2.9	OM602.940	T1/TN	01.89 - 01.90	160447
				W/o Post heating - 5 cyl.
507 D 2.4	OM616.914	T2/LN1	04.86 - 04.89	160441
				W/o Post Heating - 4 Cyl.
507 D 2.4	OM616.914	T2/LN1	04.86 - 04.89	160449
				If car is changed to post heat system, use 160441 = 4 cyl. or 160443 = 5 cyl.
507 DK 2.4	OM616.914	T2/LN1	04.86 - 04.89	160441
				W/o Post Heating
507 DK 2.4	OM616.914	T2/LN1	04.86 - 04.89	160449
				If car is changed to post heat system, use 160441 = 4 cyl. or 160443 = 5 cyl.
508 D 2.3	OM601.941	T2/LN1	03.89 - 12.94	160449
C 200 C 2.0 CDi	OM611.960	202	03.98 - 05.00	160705
C 200 C 2.1 CDi	OM611.962	203	09.00 -	160705
C 200 C 2.2 CDi Stationcar	OM611.960	202	03.98 - 03.01	160705
C 200 D 2.0 Diesel	OM601.913	202	03.93 - 05.00	160705
C 200 D C 2.0 Diesel	OM604.915	202	10.96 - 05.00	160705
C 200 T C 2.0 Diesel Stationcar	OM604.915	202	10.96 - 03.01	160705
C 220 C 2.1 CDi Coupe	OM611.962	203	03.01 -	160705
C 220 C 2.1 CDi	OM611.962	203	05.00 -	160705
C 220 C 2.2 Diesel	OM604.910	202	07.96 - 05.00	160705
C 220 C 2.2 CDi	OM611.960	202	09.97 - 05.00	160705
C 220 D 2.2 Diesel	OM604.910	202	08.93 - 05.00	160705
C 220 T C 2.2 Diesel Stationcar	OM604.910	202	06.96 - 03.01	160705
C 220 T C 2.2 CDi Stationcar	OM611.960	202	09.97 - 03.01	160705
C 250 D 2.5 Diesel	OM605.910	202	05.93 - 05.00	160707
C 250 T C 2.5 TD Stationcar	OM605.960	202	06.96 - 03.01	160707
C 250 TD C 2.5 TD	OM605.960	202	10.95 - 05.00	160707
C 270 CDI 2.7 CDi Stationcar	OM612.962	T203	03.01 -	160706
C 30 AMG C 3.0 DCi, Coupe	OM612.990	W203	01.03 -	160706
MB 100 D 2.4 Diesel	OM616.963	631	02.88 - 08.89	160442
				As Cargo 160441, but w/ fixing on opposite side

Glow Plug Controllers

Model	Eng.	Type	Date	Cargo
Sprinter 208 2.3 Diesel	OM601.943	901,902	01.95 - 04.00	160442
As Cargo 160441, but w/ fixing on opposite side				
Sprinter 210 2.9 Diesel	OM602.980	901,902	01.97 - 04.00	160449
Sprinter 308 2.3 Diesel	OM601.943	903	02.95 - 04.00	160449
Sprinter 310 2.9 Diesel	OM602.980	903	02.95 - 04.00	160449
Sprinter 310 2.9 Diesel 4x4	OM602.980	903	05.97 - 08.02	160449
V 230 v 2.3 TD	OM601.970		09.96 -	160449
Vito 108 2.3 Diesel	OM601.942	638	02.96 -	160449
Vito 110 2.3 Diesel	OM601.970	638	02.96 -	160449
Vito 110 2.3 TD	OM601.970	638	03.97 -	160449
OPEL				
Astra F 1.7 Diesel	17DR		07.92 - 01.99	160419
Astra F 1.7 Diesel, Caravan, Hatchback	17DR		12.91 -	160419
				W/ Post Heating
Astra F 1.7 Diesel, Caravan, Hatchback	17D		12.91 - 09.92	160419
				W/ Post Heating
Astra F 1.7 Diesel, Caravan, Hatchback	17D		03.92 - 09.92	160416
				W/o post heating
Astra F 1.7 Diesel, Caravan, Hatchback	17DR		07.92 - 09.98	160416
				W/o post heating
Frontera A 2.3 TD Long	23DTR		03.92 - 10.98	160419
Kadett Combo E 1.7 Diesel	17D		01.89 - 07.94	160416
Kadett E 1.7 Diesel, Caravan, Hatchback	17D		02.89 - 08.91	160419
				W/ Post Heating
Kadett E 1.7 Diesel, Caravan, Hatchback	17D		08.88 - 09.92	160416
				W/o post heating
Omega A 2.3 Diesel, Caravan	23YD		10.86 - 03.94	160416
				W/o post heating
Omega A 2.3 TD, Caravan	23DTR		08.88 - 03.94	160416
				W/o post heating
Vectra A 1.7 Diesel, Hatchback	17D		10.88 - 09.92	160416
				W/o post heating
PEUGEOT				
Boxer 1.9 Diesel	D8C (XUD9AU)		03.94 - 06.95	160424
				W/o post heating
Boxer 1.9 Diesel	D8C (XUD9AU)		07.95 - 04.02	160434
Boxer 1.9 TD	D8C (XUD9UTF)		03.94 - 02.02	160432
Boxer 1.9 TD	D8C (XUD9UTF)	230P	03.94 - 02.02	160432
Boxer 1.9 TD	DHY (XUD9TE)	230P	08.94 - 02.02	160432
Boxer 1.9 TD	D8C (XUD9UTF)		07.96 - 02.02	160432
Boxer 1.9 TD	DHY (XUD9TE)		12.98 - 02.02	160432
Boxer 1.9 TD		230L	07.99 - 02.02	160432
Boxer 1.9 TD 4x4	D8C (XUD9UTF)		07.96 - 02.02	160432
Boxer 2.5 Diesel	T9A (DJ5)		03.94 - 04.02	160436
Boxer 2.5 Diesel 4x4	T9A (DJ5)		07.96 - 04.02	160436
Boxer 2.5 TD	T8A (DJ5T)	230P	03.94 - 04.02	160436
Boxer 2.5 TD 4x4	T8A (DJ5T)		07.96 - 04.02	160436
Expert 1.9 TD	D8B (XUD9TE)		02.96 -	160432
Expert 1.9 TD	DHX (XUD9TE)		06.98 -	160432
J5 1.9 Diesel	D9B (XUD9A)		10.90 - 01.94	160424
				W/o post heating
J5 2.5 Diesel	CRD93		10.90 - 06.91	160423
				W/o post heating
J5 2.5 Diesel	CRD93		07.91 -	160424
				W/o post heating
J5 2.5 Diesel 4x4	CDR93		10.90 - 06.91	160423
				W/o post heating
J5 2.5 Diesel 4x4	CDR93		07.91 -	160424
				W/o post heating
J5 2.5 TD	CRD93LS		06.91 -	160423
				W/o post heating

Glow Plug Controllers

Model	Eng.	Type	Date	Cargo
PEUGEOT <i>continued</i>				
J5 2.5 TD	CRD93LS		07.91 -	160424 W/o post heating
J5 2.5 TD	CRD93LS		10.90 - 06.91	160423
J5 2.5 TD 4x4	CRD93LS		10.90 - 06.91	160423 W/o post heating
J5 2.5 TD 4x4	CRD93LS		07.91 -	160424 W/o post heating
J5 2.5 TD 4x4	CRD93LS		10.90 - 06.91	160423 W/o post heating
J5 2.5 TD 4x4	CRD93LS		07.91 -	160424 W/o post heating
Partner 1.8 Diesel	A9A (XUD7)		07.96 -	160434
Partner 1.9 Diesel	DJY (XUD9A)		06.96 -	160434
Partner 1.9 Diesel	DJY (XUD9A)		06.96 - 08.98	160436
106 1.4 Diesel	K9Y (TUD3Y)	1A, 1C	09.92 - 04.96	160431
106 1.5 Diesel	VJY (TUD5)	1A, 1C	06.94 -	160436
106 1.5 Diesel Hatchback	TUD5	1A, 1C	06.94 - 04.96	160436
205 1.9 Diesel	DJZ (XUD9Y)		10.87 - 08.98	160424 W/o post heating
205 1.9 Diesel	DJZ (XUD9Y)		10.87 - 09.98	160432
206 1.9 Diesel	WJZ (DW8)	2A/C	09.98 - 11.01	160453
206 2.0 HDi	RHY (DW10TD)	2A/C	12.99 -	160453
305 1.9 Diesel	162 (XUD9)		10.82 - 07.90	160423
305 1.9 Diesel	162 (XUD9)		10.82 - 07.90	160424
305 1.9 Diesel	162 (XUD9)		10.82 - 07.90	160432
306 1.8 Diesel Hatchback	A9A (XUD7)	7A, 7C, N3, N5	05.93 -	160434
306 1.9 Diesel	DHV (XUD9BSD)	7B, N3, N5	06.98 - 10.03	160432
306 1.9 Diesel, Break	WJY (DW8B), WJZ (DW8)	7B, N3, N5	09.98 -	160453
306 1.9 Diesel Break	DJY (XUD9A)	7E, N3, N5	03.97 - 08.98	160436
306 1.9 Diesel Break	DHV (XUD9BSD)	7E, N3, N5	06.98 - 03.02	160432
306 1.9 Diesel Hatchback	DJZ (XUD9Y)	7A, 7C, N3, N5	05.93 - 08.98	160436
306 1.9 Diesel Hatchback	DJY (XUD9A)	7A, 7C, N3, N5	06.94 - 08.98	160436
306 1.9 Diesel Hatchback	DHV (XUD9BSD)	7A, 7C, N3, N5	06.98 - 10.03	160432
306 1.9 TD Break	DHY (XUD9TE)	7E, N3, N5	05.97 - 03.02	160432
306 1.9 TD Hatchback	DHY (XUD9TE)	7A, 7C, N3, N5	05.93 - 04.97	160432
306 1.9 SLD	DJY (XUD9A), DJZ (XUD9Y)	7B, N3, N5	06.94 - 08.98	160436
306 1.9 SLD	DJY (XUD9A)	7B, N3, N5	07.95 -	160434
306 1.9 SRDT	DHY (XUD9TE)	7B, N3, N5	06.94 - 04.97	160432
306 2.0 HDi, Break, Hatchback	RHY (DW10TD)	7A, 7B, 7C, 7E, N3, N5	06.99 -	160453
309 1.8 Diesel	161A (XUD7)		07.89 - 12.93	160424 W/o post heating
309 1.9 Diesel	162 (XUD9), D9A (XUD9), DJZ (XUD9Y)		07.89 - 12.93	160424 W/o post heating
405 1.8 TD, Break	A8A (XUD7TE), AJZ (XUD7TEY)		03.88 - 12.92	160424 W/o post heating
405 1.9 Diesel	DJY (XUD9A)		06.94 - 10.95	160424 W/o post heating
405 1.9 Diesel	DJZ (XUD9Y)		07.94 - 10.95	160436
405 1.9 Diesel, Break	D9B (XUD9A)		03.88 - 01.92	160424
405 1.9 Diesel, Break	DJZ (XUD9Y)		07.88 - 09.92	160432
405 1.9 Diesel, Break	DJY (XUD9A)		06.92 - 04.97	160434 W/ post heating
405 1.9 Diesel Break	DJY (XUD9A)		06.94 - 10.96	160436
405 1.9 Diesel Break	DJZ (XUD9Y)		07.94 - 10.96	160436
405 1.9 Diesel Break	DJY (XUD9A)		07.98 -	160434
405 1.9 TD	DHY (XUD9TE)		08.92 - 10.95	160432
405 1.9 TD Break	DHY (XUD9TE)		08.92 - 10.96	160432
406 1.9 Diesel Break	DHW (XUD9SD)	8E/F	10.96 -	160453
406 1.9 TD, Break	DHY (XUD9TE), DHX (XUD9TE)	8B, 8E/F	01.96 - 03.99	160453
406 2.0 HDi, Break	RHZ (DW10ATED)	8B, 8E/F	02.99 - 03.99	160453
406 2.0 HDi, Break	RHY (DW10TD)	8B, 8E/F	02.99 - 05.04	160453
406 2.0 HDi 110 FAP Break	RHS (DW10ATED4)	8E/F	08.01 -	160453
406 2.1 TD 12V, Break	P8C (XUD11BTE)	8B, 8E/F	01.96 - 03.99	160432

Glow Plug Controllers

Model	Eng.	Type	Date	Cargo
505 2.5	152B (XD3TE)		10.86 - 12.93	160432
505 2.5 Diesel	155 (XD3)		06.81 - 12.93	160424
				W/o post heating
505 2.5 Diesel	155 (XD3)		10.81 - 11.90	160424
				W/o post heating
505 2.5 Diesel Break	155 (XD3)		08.83 - 01.92	160424
				W/o post heating
505 2.5 TD	152A (XD3T)		10.83 - 01.92	160424
505 2.5 TD Break	152B (XD3TE)		10.86 - 12.93	160432
				W/o post heating
605 2.1 Diesel	P9A (XUD11A)		06.89 - 07.95	160424
				W/o post heating
605 2.1 TD	PHZ (XUD11ATE)		06.89 - 09.99	160424
				W/o post heating
605 2.1 TD 12V	P8C (XUD11BTE)		08.94 - 08.98	160424
				W/o post heating
806 1.9 TD	DHY (XUD9TE)		05.97 - 08.02	160432
806 2.1 TD	P8C (XUD11BTE)		06.96 - 08.99	160432
RENAULT				
Clio 1.9 Diesel	F8Q630	SB0E	09.94 -	160451
Clio 1.9 Diesel	F8Q730	B,C,S576,57S	09.94 - 09.98	160451
Clio 1.9 Diesel	F9Q734	B,C 57	01.97 - 09.98	160451
Clio 1.9 Diesel	F8Q630	B/CB0E	09.98 -	160451
Espace 2.1 TD	J8S774	J,S115	10.84 - 12.90	160425
Espace 2.1 TD	J8S240	J,S115	10.84 - 12.90	160425
				W/o post heating
Espace 2.1 TD	J8S610, J8S772, J8S776, J8S778	J634,J,S635	04.91 - 07.93	160425
				W/o post heating
Laguna 2.2 Diesel	G8T706, G8T752, G8T790, G8T794	B56F	09.94 - 03.01	160439
Laguna 2.2 Diesel Grandtour	G8T706, G8T752, G8T790, G8T794	K56	09.95 - 03.01	160439
Master 28-35 I 2.1 Diesel	J8S330	T.	01.86 - 07.98	160425
				W/o post heating
Master 28-35 I 2.4 Diesel	S8U731, Sofim-8140.61.2300	T.	08.80 - 08.89	160425
Master 28-35 I 2.5 Diesel	S8U731, Sofim-8140.61.2300	P.	09.80 - 07.98	160425
				W/o post heating
Master 28-35 I 2.5 Diesel	S8U742, Sofim-8140.67.2510	T.	08.89 - 07.98	160425
				W/o post heating
Master 28-35 I 2.5 Diesel	S8U742, Sofim-8140.67.2510	T.	08.89 - 07.98	160432
Megane 1.9 Diesel Classic	F8Q620, F8Q624	LA0A,LA0U	09.96 -	160452
Megane 1.9 Diesel Eco	F8Q620, F8Q624	B/SA0U,BA0A	01.96 -	160452
Megane 1.9 Diesel Scenic	F8Q788		03.97 - 09.99	160452
R19 1.9 Diesel	F8Q706, F8Q742	B,C5353J,534	03.91 - 04.92	160438
R19 1.9 Diesel	F8Q742	B/C53	04.92 - 12.95	160438
R19 1.9 Diesel Chamade	F8Q706, F8Q742	534	03.91 - 04.92	160438
R19 1.9 Diesel Chamade	F8Q742	L53	04.92 - 12.95	160438
R19 1.9 TD Chamade		L53K	09.90 - 04.92	160440
R21 2.1 Diesel	J8S704	L480,486	03.86 - 12.89	160425
				W/o post heating
R21 2.1 Diesel	J8S600, J8S740	L48V,B480,B48V	05.89 - 06.94	160425
				W/o post heating
R21 2.1 Diesel Nevada	J8S704	K,S486	10.86 - 09.90	160425
				W/o post heating
R21 2.1 Diesel Nevada	J8S600, J8S740	K,S48V,480	08.89 - 12.92	160425
				W/o post heating
R21 2.1 Diesel 4x4 Nevada	J8S704	K486	10.88 - 05.92	160425
				W/o post heating
R21 2.1 TD, Nevada	J8S714, J8S786, J8S788		03.86 - 06.94	160425
				W/o post heating
R25 2.1 Diesel	J8S736	B296	06.89 - 12.92	160424
				W/o post heating

Glow Plug Controllers

Model	Eng.	Type	Date	Cargo
RENAULT <i>continued</i>				
R25 2.1 TD	J8S708, J8S738	B29W,B290	04.84 - 12.92	160424
Rapid 1.9 Diesel	F8Q640, F8Q682	F40R	09.94 - 03.98	160451
Trafic 1.9 Diesel	F8Q606	TXW	00.81 -	160425
Trafic 2.1 Diesel	852720	PXX	05.89 - 06.94	160425
Trafic 2.1 Diesel	J8S620, J8S758	PXX	06.94 - 10.97	160425
Trafic 2.5 Diesel	S8U750, S8U752, S8U758		05.89 - 03.01	160425
Trafic 2.5 Diesel	Sofim-8140.67.2500, Sofim-8140.67.2550, Sofim-8140.67.2580		05.89 - 03.01	160425
Trafic 2.5 Diesel	S8U752, S8U758		05.89 - 03.01	160425
				W/o post heating
				W/o post heating
				W/o post heating
				W/o post heating
				W/o post heating
				W/o post heating
				W/o post heating
ROVER				
Montego 2.0 TD, Estate	BB		10.88 - 12.93	160430
218 1.8 Diesel	XUD7TE		10.92 - 10.95	160432
418 1.8 Diesel	XUD7TE		09.91 - 04.95	160432
418 1.8 Diesel Tourer	XUD7TE		09.93 - 02.96	160432
SEAT				
Alhambra 1.9 TDi	1Z		04.96 -	160460
			For engines w/ electronic diesel control (EDC)	
Arosa 1.7 SDi	AKU		08.97 -	160460
			For engines w/ electronic diesel control (EDC)	
Cordoba 1.9 Diesel	1Y		02.93 - 08.96	160459
Cordoba 1.9 Diesel	1Y		09.93 - 08.96	160421
				VWD type
				W/o post heating
Ibiza 1.9 Diesel	1Y		04.93 - 07.93	160421
Ibiza 1.9 Diesel	1Y		04.93 - 08.96	160459
				Chas. -6K..ZR025747
				VWD type
Malaga 1.7 Diesel	022A.5000		05.85 - 12.93	160424
Malaga 1.7 Diesel	022A.5000		05.85 - 12.93	160427
				W/o post heating
				W/ post heating
Toledo 1.9 Diesel	1Y	1I	05.91 - 10.98	160421
Toledo 1.9 Diesel	1Y	1I	05.91 - 03.99	160459
Toledo 1.9 TDi	AGR, ALH	1M..	04.99 -	160460
			For engines w/ electronic diesel control (EDC)	
SKODA				
Octavia 1.9 TDi, Stationcar	AGR, ALH	1U2	09.96 -	160460
			For engines w/ electronic diesel control (EDC)	
SSANGYONG				
Musso 2.3 Diesel 4WD	MB-OM661, MB-OM601.940	FJ	10.95 -	160449
VAUXHALL				
Astra 1.7 Diesel	17D		03.92 - 09.92	160416
				W/o post heating
Astra 1.7 Diesel	17DR		07.92 - 09.98	160419
Astra 1.7 Diesel Hatchback	17DR		01.89 - 08.91	160416
Astra 1.7 Diesel Hatchback	17D		01.90 - 12.90	160416
				W/o post heating
Astra 1.7 Diesel Hatchback, Stationcar	17DR		03.91 - 12.94	160419
Astra 1.7 Diesel Hatchback, Stationcar	17D		12.91 - 01.94	160416
				W/o post heating

Glow Plug Controllers

Model	Eng.	Type	Date	Cargo
Astra 1.7 Diesel Stationcar	17D		02.89 - 08.91	160416
Astra 1.7 Diesel Stationcar	17D		12.91 - 01.94	160419
				W/ post heating
Belmont 1.6 Diesel	16DA		09.85 - 01.89	160416
Belmont 1.7 Diesel	17D		01.89 - 12.91	160416
Carlton 2.3 Diesel, Stationcar	23YD		09.86 - 01.94	160416
Carlton 2.3 Diesel, Stationcar	23YD		09.86 - 03.94	160419
				W/o post heating
Carlton 2.3 TD Intercooler, Stationcar	23DTR		03.92 - 01.94	160416
				W/o post heating
Cavalier 1.7 Diesel, Hatchback	17D		09.88 - 01.92	160416
Cavalier 1.7 Diesel, Hatchback	17D		09.88 - 01.92	160419
				W/o post heating
				W/ post heating
Frontera 2.3 TD 4WD Long	23DTR		03.92 - 01.95	160416
Frontera 2.3 TD 4WD Long	23DTR		03.92 - 10.98	160419
				W/o post heating
				W/ post heating
VOLVO				
V40 1.9 TD Stationcar	D4192T		07.95 - 08.99	160461
240 2.4 Diesel	D24		08.87 - 08.93	160458
240 2.4 Diesel Stationcar	D24	P245	01.85 - 08.93	160458
740 2.4 TD	D24T	744	01.85 - 07.92	160458
740 2.4 TD Stationcar	D24T	745	09.85 - 07.92	160458
740 2.4 TD Intercooler Stationcar	D24TIC	745	08.86 - 07.88	160458
760 2.4 TD	D24T	704,764	01.85 - 07.92	160458
760 2.4 TD Intercooler, Stationcar	D24TIC	704,764	08.87 - 07.92	160458
940 2.4 Diesel	D24	944	08.90 - 07.92	160458
940 2.4 TD	D24T	944	08.90 - 08.93	160458
940 2.4 TD Intercooler	D24TIC	944, 945	08.90 - 12.98	160458
940 2.4 TD Stationcar	D24T	945	08.90 - 07.94	160458
960 2.4 TD Intercooler, Stationcar	D24TIC	944,964,965	09.91 - 07.94	160458
VW				
Beetle 1.9 TDi	ALH		01.98 - 02.01	160460
				For engines w/ electronic diesel control (EDC)
Bora 1.9 TDi	AGR, ALH		10.98 - 06.01	160460
				For engines w/ electronic diesel control (EDC)
Caddy I 1.6 Diesel	JK		08.82 - 07.90	160421
Caddy I 1.6 Diesel	ME		08.87 - 07.92	160420
Golf I 1.6 Diesel	CR, JK		08.80 - 07.83	160422
Golf II 1.6 Diesel	ME		08.83 - 10.91	160420
Golf II 1.6 TD	1V, MF		08.89 - 10.91	160420
Golf II 1.6 TD	RA		04.89 - 10.91	160421
				W/ post heating (3 min.)
Golf III 1.9 Diesel, Variant	1Y	1H..	11.91 - 08.97	160421
				W/ post heating (3 min.)
Golf III 1.9 Diesel	1Y	1H..	11.91 - 08.97	160459
				VWD type
Golf III 1.9 Diesel	1Y	1H..	11.91 - 08.97	160460
				For engines w/ electronic diesel control (EDC)
Golf III 1.9 TD GTD	AAZ	1H..	11.91 - 08.97	160459
				VWD type
Golf III 1.9 TD GTD	AAZ	1H..	11.91 - 08.97	160460
				For engines w/ electronic diesel control (EDC)
Golf III 1.9 TDi	1Z, AHU	1H..	09.93 - 08.97	160421
				W/ post heating (3 min.)
Golf III 1.9 TDi	AFN		04.96 - 08.97	160421
Golf IV 1.9 TDi	AGR, ALH	1J..	08.97 - 06.01	160460
				For engines w/ electronic diesel control (EDC)

Glow Plug Controllers

Model	Eng.	Type	Date	Cargo
VW continued				
Jetta I 1.6 Diesel	CR, JK		08.80 - 12.83	160422
Jetta II 1.6 TD	JR		01.84 - 10.91	160421
			W/ post heating (3 min.)	
Jetta II 1.6 TD	RA, SB		04.89 - 10.91	160421
			W/ post heating (3 min.)	
Jetta II 1.6 TD	1V		01.90 - 10.91	160420
Jetta II 1.6 Diesel	ME		01.84 - 10.91	160420
LT 28-35 2.4 Diesel	CP, DW		12.82 - 07.92	160420
LT 28-35 2.4 TD	DV		02.86 - 08.92	160420
LT 28-35 I 2.4 Diesel	CP, DW		12.82 - 07.92	160420
LT 28-35 I 2.4 TD	DV		12.82 - 07.89	160421
			W/ post heating (3 min.)	
LT 28-35 I 2.4 TD	DV		12.82 - 08.92	160420
LT 40-55 I 2.4 Diesel	CP, DW		01.79 - 12.91	160420
LT 40-55 I 2.4 TD	DV		12.82 - 08.92	160420
Lupo 1.7 SDi	AKU		09.98 -	160460
			For engines w/ electronic diesel control (EDC)	
Passat 1.6	RA		05.86 - 03.88	160420
Passat 1.6 Diesel	CR, JK		08.80 - 03.88	160421
Passat 1.6 Diesel Variant	CR, JK		08.80 - 03.88	160420
Passat 1.6 TD, Variant	CY		04.82 - 03.88	160420
Passat 1.6 TD	CY		01.85 - 03.88	160420
Passat 1.6 TD	RA, SB		08.88 - 09.93	160420
Passat 1.6 TD Variant	SB	3A5, 35	08.88 - 09.93	160420
Passat 1.9 Diesel, Variant	1Y		05.89 - 10.93	160420
Passat 1.9 TD	AAZ		03.91 - 08.96	160459
			VWD type	
Passat 1.9 TD, Variant	AAZ		03.91 - 08.97	160421
			W/ post heating (3 min.)	
Passat 1.9 TDi	1Z		10.93 - 08.96	160460
			For engines w/ electronic diesel control (EDC)	
Passat 1.9 TDi	AHU		10.93 - 08.96	160460
			For engines w/ electronic diesel control (EDC)	
Polo 1.3 Diesel, Coupe, Classic	MN		08.86 - 07.90	160420
Polo 1.9 Diesel	AEF, AGD		10.94 - 10.99	160459
			VWD type	
Polo 1.9 Diesel	AEF, AGD		10.94 - 10.99	160460
			For engines w/ electronic diesel control (EDC)	
Sharan 1.9 TDi	1Z		09.95 -	160460
			For engines w/ electronic diesel control (EDC)	
Transporter III 1.6 Diesel	CS		01.81 - 07.87	160420
Transporter III 1.6 TD	JX		08.84 - 07.92	160420
Transporter III 1.6 TD Syncro	JX		03.86 - 07.92	160420
Transporter III 1.7 Diesel	KY		10.86 - 07.92	160420
Transporter III 1.7 Diesel	KY		07.89 - 07.92	160420
Transporter IV 1.9 Diesel	1X		07.90 -	160459
			VWD type	
Transporter IV 1.9 Diesel	1X		09.90 - 03.92	160420
			Chas. 70..N..100000	
Transporter IV 2.4 Diesel	AAB		09.90 - 03.92	160420
			Chas. 70..N..100000	
Transporter IV 2.4 Diesel Syncro	AAB		11.92 - 09.98	160421
Transporter IV 2.5 TDi	ACV		09.95 -	160460
			For engines w/ electronic diesel control (EDC)	
Transporter IV 2.5 TDi Syncro	ACV		01.96 -	160460
			For engines w/ electronic diesel control (EDC)	
Transporter V 2.4 Diesel	AJA		08.97 - 06.03	160421
Vento I 1.9 Diesel	1Y	1H.	11.91 - 09.98	160460
			For engines w/ electronic diesel control (EDC)	
Vento I 1.9 TD	AAZ	1H.	11.91 - 09.98	160459
			VWD type	

Also see Cross Reference List page 71



**CROSS
REFERENCE
LIST**

**VERGLEICHS-
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**LISTE DE
CORRESPONDANCES**

**LISTA DEI
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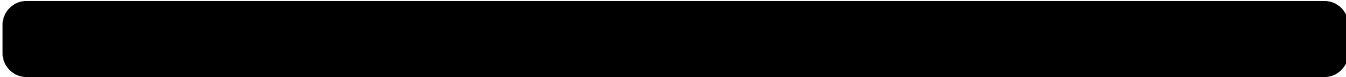
PART 1 1

3rd Edition



ISO/TS 16949:2002 certified supplier

CROSS REFERENCE LIST



	Cargo		Cargo		Cargo		Cargo
NIPPONDENSO							
056700-4800	160479	95534787	160423	899019	160416	VALEO	
056700-4810	160480	9601329480	160354	899020	160416	03283	160337
NISSAN							
01501081-0	160282	96053749	160431	899028	160469	03523	160337
01505634-0	160311	96117510	160431	899030	160419	03601	160282
01505997-0	160282	96141677	160432	899045	160419	03608	160311
01506377-0	160311	96165823	160436	899046	160419	102180	160423
01506437-0	160282	9616582380	160436	899047	160469	245600	160423
01506584-0	160308	96165824	160434	899102	160416	245603	160424
25230-89978	160480	9616582480	160434	899107	160420	245604	160425
26350-G9801	160276	9619879180	160570	899108	160444	245606	160429
OPEL							
09287211	160311	96252036	160432	899117	160458	245607	160438
1238532	160416	9639912580	160453	899121	160416	245609	160431
1238537	160416	9999163554	160354	899123	160444	245612	160431
1238539	160295	RENAULT					
1238540	160295	5000409614	160417	899125	160416	245615	160420
1238542	160352	7700102036	160439	899132	160418	245618	160432
1238549	160295	7700107794	160461	899136	160421	643817	160453
1238550	160297	7700590793	160316	899138	160419	73100122	160423
1238563	160352	7700702747	160425	899139	160421	73101002	160423
1238565	160416	7700708960	160352	899149	160448	73103402	160424
1238566	160352	7700715675	160352	899151	160445	73104822	160425
1238621	160311	7700721268	160354	899152	160447	73104902	160431
1238966	160295	7700733390	160429	899153	160446	73105002	160424
90040992	160416	7700751089	160425	899163	160456	73506302	160431
90228928	160416	7700757776	160425	899164	160454	73506802	160453
90240651	160416	7700790579	160438	899169	160422	73507202	160432
90464952	160416	7700851443	160438	899176	160417	VAUXHALL	
PARIS RHONE / VALEO							
102180M	160423	7700856789	160438	899179	160441	091097769	160416
102696	160424	7700863454	160438	899180	160443	091108750	160416
105857	160423	7700863626	160439	899189	160416	VW	
PEUGEOT							
145205	160354	7700866727	160451	899191	160457	171911261A	160420
598110	160423	7700867374	160438	899195	160442	171911261B	160420
598111	160424	7700867558C	160461	899199	160455	171911261D	160421
598113	160423	7700869319	160440	899626	160337	171911261E	160421
598115	160424	7700870715	160452	899627	160308	191906363	160362
598116	160431	7700870715A	160452	899628	160308	191911261A	160421
598119	160432	7700870715B	160452	899744	160308	191911261B	160420
598120	160431	7701348734	160438	899747	160337	191911261C	160421
598121	160436	9611751080	160431	899784	160337	1J0906381A	160637
598124	160434	ROVER GROUP					
598126	160436	HCJ100110	160436	899798	160337	3059060591	160352
598127	160436	NCJ100110	160436	899839	160337	321191261C	160422
598131	160453	PRC5020	160424	899932	160394	321906059D	160374
655117	160308	SEAT					
655504	160308	0581CR01	160424	899957	160394	321906059E	160374
655533	160282	0581CR1	160424	SUZUKI			
655522	160353	058CR01	160424	163547	160311	321906059F	160374
655547	160354	SIEM					
7920076593	160423	05879900	160423	38610-85C00	160315	321906059G	160375
91000409	160354	06421900	160424	SWF			
9100040980	160354	08110900	160425	611012	160316	321906059H	160372
91515869	160424	SIEMENS					
9151586980	160424	5WK1636	160297	611013	160317	321906059I	160362
91541882	160354	5WK1640	160297	611100	160242	321911261C	160422
9250883280	160423	5WK2205	160374	611101	160244	357906363	160362
9250888280	160423	STRIBEL					
92515667	160424	896399	160401	611102	160243	357906381A	160637
9251586780	160424	898151	160401	611107	160305	357911253	160460
92515869	160424	898160	160400	611108	160305	357911253A	160459
9251586980	160424	898174	160470	611109	160305	443906059	160374
9549299580	160423	898211	160466	611110	160315	443906059A	160374
95496621	160353	898244	160353	611111	160315	443907385	160374
TALBOT							
TOYOTA							
VALEO							
VW							
VAUXHALL							
SWF							
SUZUKI							
TALBOT							
TOYOTA							
VALEO							
VW							
VAUXHALL							

CROSS REFERENCE LIST



	Cargo		Cargo	Cargo	Cargo
VOLVO		50237009	160459		
1326730	160352	50237010	160460		
1347603	160401	51204003	160348		
1348600	160400	51216001	160416		
1363438	160458	51216002	160416		
2223608	160401	51216003	160416		
2223639	160400	51216901	160421		
285227	160352	51223908	160352		
30872555	160461	51223909	160352		
30873658	160461	51233001	160421		
3285227	160352	51233006	160421		
3523608	160401	51233011	160422		
3523639	160400	51299002	160424		
35601160	160416	51299003	160431		
3650116	160416	51299004	160432		
9162987	160458	51299006	160431		
		51299007	160453		
WEHRLE		51401004	160466		
10485007	190767	54201006	160305		
10485008	190766	54201030	160305		
10700005	191026	54201101	160242		
13132030	160441	54201102	160243		
13132031	160442	54201103	160244		
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