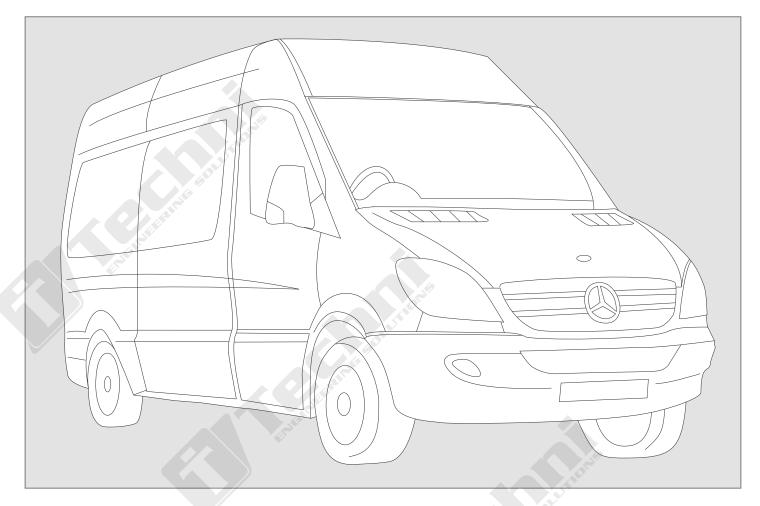
Einbauanleitung | Manuel d'instruction de montage | Manuale di istruzioni per l'installazione Manual de instrucciones de installacion montaje

# Fitting Instruction Manual

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# **VEHICLE INFORMATION**

Manufacturer	Mercedes Benz
Make	Sprinter
Model	209, 211, 213, 215, 309
	311, 313, 315, 411, 415
	509, 511, 515 CDi
Engine CC	2148cc 4cyl
Engine Details	OM646 DELA 65KW/88PS
	OM646 DELA80KW/109PS
	OM646 DELA 95KW/129PP
	OM646 110KW/150PS
Year	05.06>10.09
Chassis Nos.	N/A
LHD	YES
RHD	YES
PAS	YES
A/C	NO
Voltage	12v

# ADAPTER KIT DETAILS

Adapter Kit Part No.	0500.3312
Description	Standard Kit
Compressor RPM	4449 @ Max Engine
×	Power Output
Fitting Time	35 Minutes
Suction Fitting	90°
Discharge Fitting	90°
Belt Type	6PK 2300
Belt Part No.	0820.1301

SELTEC	TM-13 HS	TM15-HS	TM16-HS	
Comp No	0381.0202	0381.0002	0381.0312	
Seltec No.	488-45120	488-45120	488-46134	
Mounting	Ear	Ear	Ear	
Rotor	8PV	8PV	8PV	
Armature	3E	3E	3E	
Diameter	123	123	123	
Voltage	12	12	12	
Orientation	V	V	V	
Fitting	3/4 x 7/8	3/4 x 7/8	3/4 x 7/8	
Manifold	Bolt	Bolt Bolt		

QUE	QP13-HD	QP15-HD	QP16-HD	
Comp No	0391.0202	0391.0002	0391.0312	
Que No.	QP15-1302	QP15-1171	QP16-1581	
Mounting	Ear	Ear	Ear	
Rotor	8PV	8PV	8PV	
Armature	3E	3E	3E	
Diameter	123	123	123	
Voltage	12	12	12	
Orientation	V	V	V	
Fitting	3/4 x 7/8	3/4 x 7/8	3/4 x 7/8	
Manifold	Bolt	Bolt	Bolt	

SANDEN	SD5H09	SD5H14	SD5H15
Comp No	-	0300.0461	0300.2001
Sanden No	-	6629	8026
Mounting	-	Ear	Ear
Rotor	-	7PV	6PV
Armature	-	SL	SL
Diameter	-	124	125
Voltage	-	12	12
Orientation	-	V	V
Fitting	_	3/4 x 7/8	3/4 x 7/8



COMPRESSOR KIT CONFIGURATIONS									
	со	MPRE	PRESSOR KIT PART NOS						
PART NUMBER	0513.3312	0515.3312	0516.3312	0593.3312	0595.3312	0596.3312	DESCRIPTION		
0381.0202							TM13 Ear Mount 8PV 3E 123 12V V 3/4 x 7/8 Bolt	1	
0381.0002							TM15 Ear Mount 8PV 3E 123 12V V 3/4 x 7/8 Bolt	1	
0381.0312							TM16 Ear Mount 8PV 3E 123 12V V 3/4 x 7/8 Bolt	1	
0391.0152				•			QP13 Ear Mount 8PV 3E 123 12V V 3/4 x 7/8 Bolt	1	
0391.0002					•		QP15 Ear Mount 8PV 3E 123 12V V 3/4 x 7/8 Bolt	1	
0391.0312						•	QP16 Ear Mount 8PV 3E 123 12V V 3/4 x 7/8 Bolt	1	

Additional parts to standard kits.

#### FOREWORD

 The purpose of this manual is to facilitate the installation of a direct drive compressor. The information given is merely instructive, should any complications arise contact the Technical department. The manufacturers warranty does not cover any problems caused by defective installation or alterations made unless authorised. The manufacturer shall not be responsible for any injury, damage or loss caused directly or indirectly as a result of using this manual or the information contained within it.

#### **1 SAFETY MEASURES:**

Before fitting the Compressor adapter drive kit, ensure the following for damage:

- a Inner and outer trim and body work
- **b** Engine idle pace
- c Check all the vehicle functions

#### Check list:

- a Ensure that the right kit has been selected
- **b** Before installing, check that all the correct pieces are present; also ensure that there are no missing or broken pieces
- c When fitting, make sure the vehicle is properly protected against damage.

#### Installation apparatus

- a Calibrated torque wrench
- b Hand service tools
- c Protective covers and shields

#### 2 PRECAUTIONS

- **a** Detach the battery negative lead.
- **b** Torque all bolts where stated using a calibrated torque wrench.
- **c** Take extreme care with moving parts.
- **d** Remove the vehicles ignition key and keep it with you.
- e Wear eye safeguards and to make sure that liquid refrigerant never touches your skin

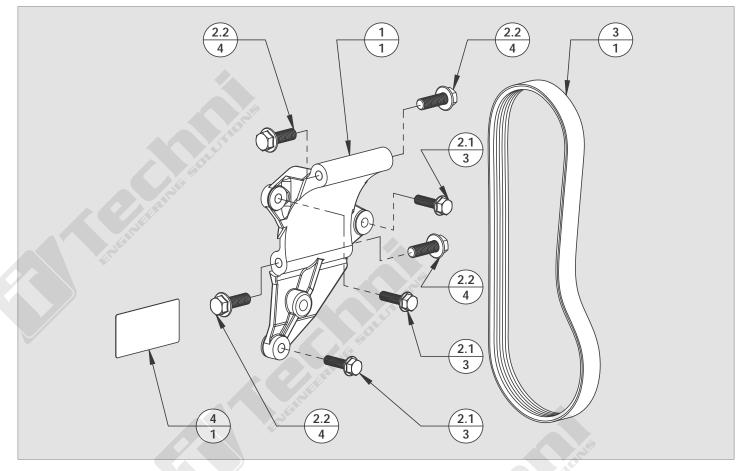
Caution: Measures must be followed accurately to steer clear of the possibility of damage to individuals Warning: This calls awareness to actions which must be pursued to avoid damage to the components. NB: This calls awareness to make the job easier or gives useful information.

## STANDARD FASTENER TORQUE VALUES

1. In the absence of specific torque values detailed in this fitting instruction manual, the following chart can be used as a guide to the maximum safe torque for specific size and grade of fastener.

STRENGTH	4.8		NGTH 4.8 8.8		10.9		12.9	
	Max T	orque	Max T	orque	Max Torque		Max Torque	
Dia / Pitch	lb.ft	Nm	lb.ft	Nm	lb.ft	Nm	lb.ft	Nm
M5 x 0.80	2	3	4.5	6	6.5	9	7.5	10
M6 x 1.00	4	5.5	7.5	10	11	15	13	18
M8 x 1.25	10	13	18	25	26	35	33	45
M10 x 1.25	20	27	39	53	57	78	66	90
M10 x 1.50	18	25	37	50	55	73	63	86
M12 x 1.75	33	45	63	85	97	130	111	150
M14 x 2.00	55	75	103	140	151	205	177	240
M16 x 2.00	85	115	159	215	232	315	273	370

# PARTS VIEW



ITEM	PART NO.	DESCRIPTION	QTY.	COMMENTS
1	0440.2203	Compressor Mount Bracket	1	-
2	0290.3322	Fastener Pack	1	Not shown
2.1	2704.0091	Hexagon flange bolt Durlok - M8 x 30 : 1.25 - 12.9	3	-
2.2	2705.0491	Hexagon flange bolt Durlok - M10 x 30 : 1.50 - 12.9	4	-
3	0820.1301	Belt - Poly Groove 6PK 2300	1	-
4	2902.3312	Belt Warning Label - 0500.3312	1	
5	2901.3312	Installation instructions - 0500.3312	1	Not shown

## PRE INSTALLATION

**N.B** Prior to commencing work, please examine the instructions with care. The alphabetical symbols on the diagram relate to written instructions, numerical symbols relate to the parts listing.

#### Dismantle the following:

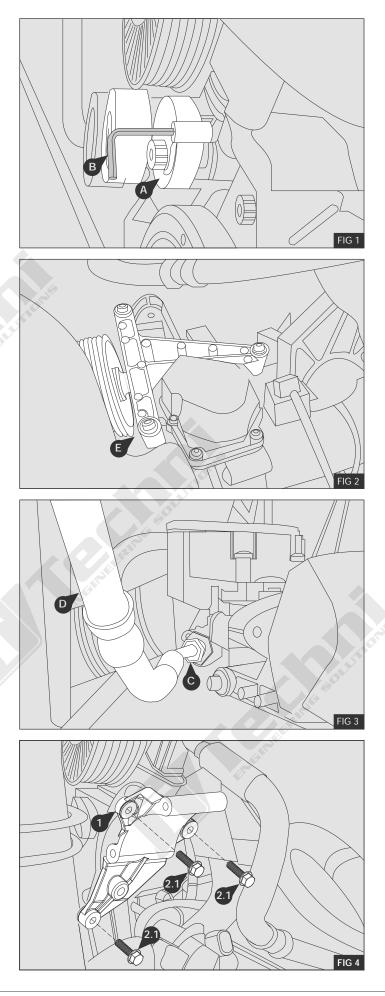
- Using a suitable tool rotate the automatic belt tensioner pulley (A) anti-clockwise and insert a suitable 4mm pin, an Allen key is ideal for this purpose (B) - Fig.1
- 2. Remove and discard the original manufacturers poly groove drive belt, noting the original routing, if different from the diagram shown in Fig.6 report your findings to your Kit/System supplier before proceeding.
- Remove and discard the original vehicle manufacturers mounting bracket assembly that supports the idle pulley when the vehicle is not fitted with air conditioning. If you are using this kit to adapt the original manufacturers compressor, remove the original compressor and any bracket before proceeding (E) Fig.2
- 4. Release the power steering pipe nut C and turn the pipe D to the position show to allow clearance for the compressor. It may be necessary to realign the pipe assembly once the selected compresor is in place - Fig.3
- Fully tighten the power steering pipe nut previously released C be careful not to overtighten the nut.

## COMPRESSOR BRACKET INSTALLATION

**NB:** Please refrain from using "Loctite" unless otherwise notified

- Install the supplied compressor mount bracket

   into the position previously taken by the original mounting bracket using bolts 2.1 M8 x 30 - Fig.4
- **2.** Torque bolts (2.1) to 35Nm / 26lb.ft. using a calibrated torque wrench.



# COMPRESSOR INSTALLATION

- Fit the compressor to the compressor mount bracket ① Fixing it with the supplied bolts ②.2 M10 x 30, ensure that there is adequate clearance between the compressor and the power steering hose assemble previously turned to position - Fig.5
- 2. Torque the four bolts (2.2) to 73Nm / 55lb.ft. using a calibrated torque wrench.

# DRIVE BELT

- Fit the supplied replacement poly groove engine drive belt (3) to the engine in the same configuration in accordance with the original manufacturers design - Fig.6
  - CP Crankshaft Pulley
  - AT Automatic Tensioner
  - WP Water Pump
  - AL Alternator
  - IP Idle Pulley
  - **PS** Power Steering
  - RC Refrigeration Compressor

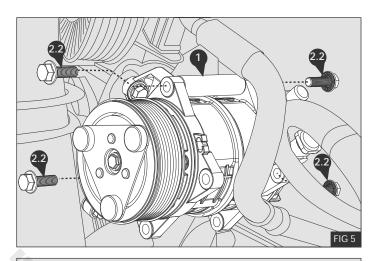
**NB:** Where applicable and dependent on the compressor model, align the supplied drive belt by installing in the correct clutch groove - Fig.7 Seltec PV8 has the same gauge line (46.55) as the Sanden PV6 & PV7, belt is fitted to front groove.

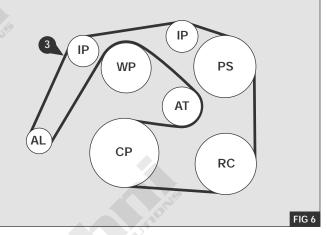
Sanden PV8 has a unique gauge line (50.11) in most cases, belt is fitted to second groove. If in any doubt, please check with your compressor supplier

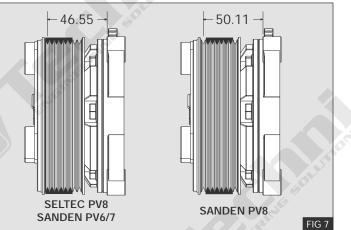
2. Release the automatic belt tensioner (A) and remove the securing pin if fitted previously.

#### POST INSTALLATION

 Before starting the engine check all the installed parts and ensure that the belt is installed correctly. Run the unit for at least ten minutes, then check the whole mounting assembly and previously removed parts. Attach the supplied warning label ④ on to a suitable location.







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