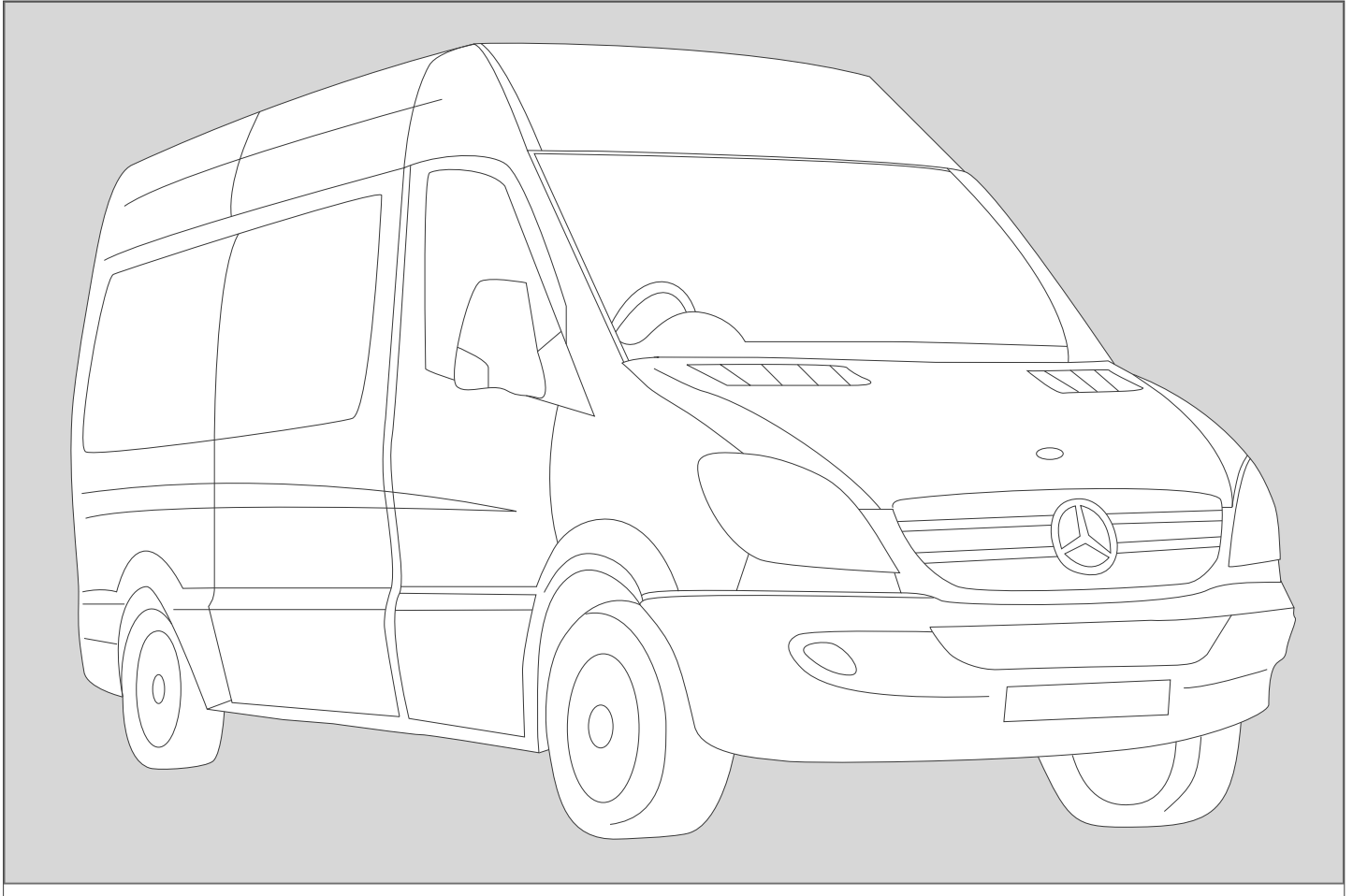


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### VEHICLE DETAILS

Manufacturer	Mercedes Benz
Make	Sprinter
Model	213 CDi / 313 CDi / 413 CDi / 513 CDi 216 CDi 316 CDi / 416 CDi / 516 CDi
Engine CC	2148
Engine Details	OM651 129/163 PS
Year	10.2009 >
Chassis Nos.	N/A
LHD	YES
RHD	YES
PAS	YES
A/C	YES
Voltage	12v

### KIT DETAILS

Kit Part No.	0500.6192
Description	Standard Kit
Compressor RPM	4695 @ Max Engine
	Power Output
Fitting Time	120 Minutes
Suction Fitting	90°
Discharge Fitting	90°
Belt Type	6PK 1250
Belt Part No.	0820.2241
Note	MB - Damper & Bolts are not included

## COMPATIBLE COMPRESSORS

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	0891.0202	0391.0002	0391.0312
Que No.	QP13.1302	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	SD7H15
Comp No	-	-	-
Sanden No	-	-	-
Mounting	-	-	-
Rotor	-	-	-
Armature	-	-	-
Diameter	-	-	-
Voltage	-	-	-
Orientation	-	-	-
Fitting	-	-	-

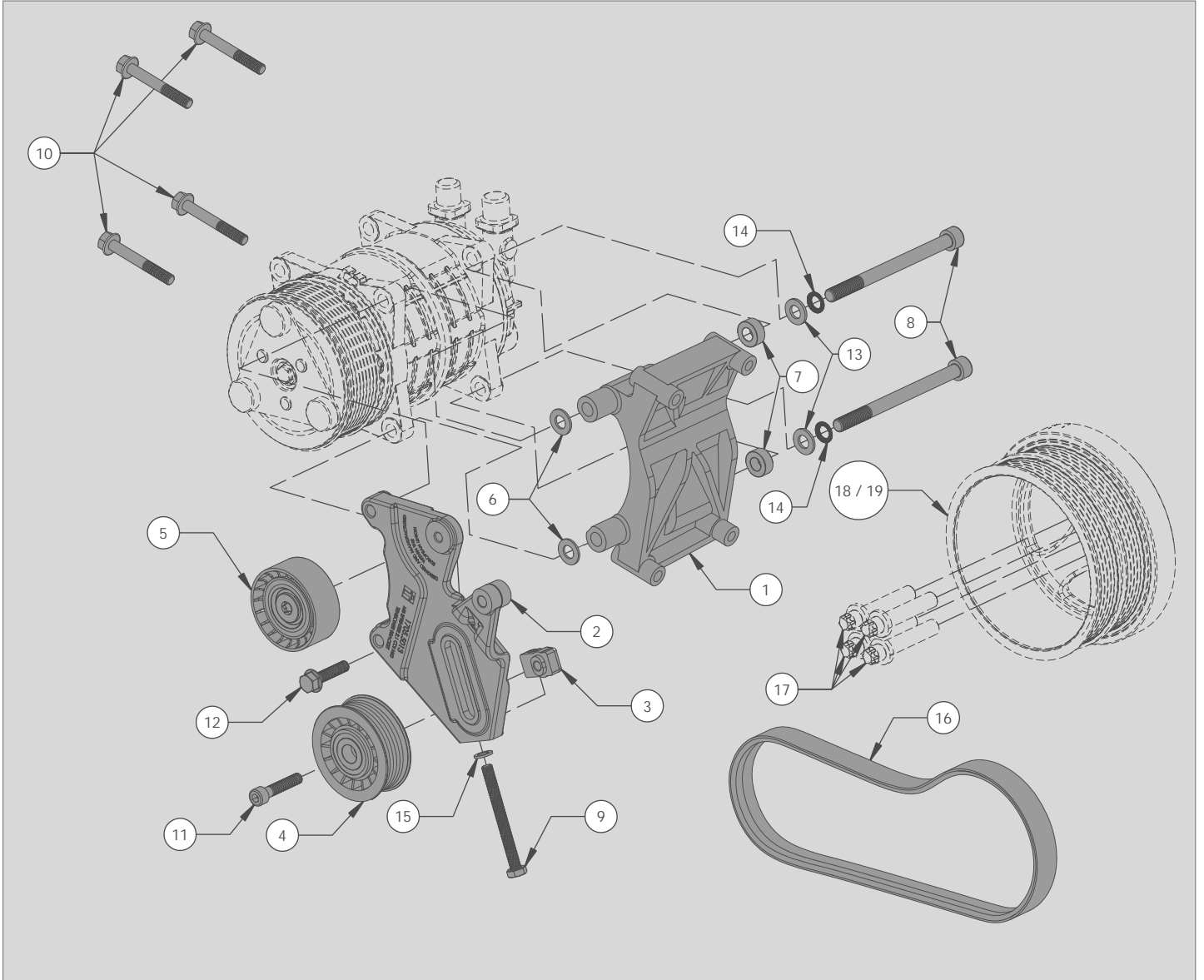
Notes

## COMPRESSOR KIT CONFIGURATIONS

PART NUMBER	COMPRESSOR KIT PART NOS						DESCRIPTION	QTY.
	0513.6082	0515.6082	0516.6082	0593.6082	0595.6082	0596.6082		
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
0391.0202				●			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.

### PARTS VIEW



ITEM	PART NO.	DESCRIPTION	QTY.	COMMENTS
1	0440.3161	Mount Bracket	1	-
2	1705.5013	Idle Pulley Bracket	1	-
3	1703.5003	Idle Pulley Adjuster	1	-
4	1700.5021	Idle Pulley 6PK x 75 Dia	1	-
5	1700.0641	Idle Pulley	1	Includeds Bolt
6	2803.9023	Shim 20.00 OD x 10.50 ID x 1.60	2	
7	2803.9013	Spacer - 20.00 OD x 10.40 ID x 8.40	2	-
8	2705.0301	Socket cap screw M10 x 130 : 1.50 -12.9	2	-
9	2719.0081	Hex Set Screw - M8 X 80 : 1.25 - 8.8	1	-
10	2704.1011	Hex flange bolt - M8 x 60 : 1.25 - 10.9	4	-
11	2704.0021	Hex socket head cap screw M8 x 40 : 1.25 - 12.9	1	-
12	2704.0481	Hex flange bolt Durlok - M8 x 35 : 1.25 - 12.9	1	-
13	2809.0011	Washer M10 Flat DIN 125 - A 10.5	2	-
14	2809.0101	M10 Schnorr safety washer type 'S'	2	-
15	2808.0031	Spring washer M8 x 1.6 - ID 8.3 OD 14.0	1	-
16	0820.2241	Belt - Poly Groove 6PK 1250	1	-
17	2706.0221	MB - Crankshaft pulley bolts - A0019901403	4	Not Included
18	1701.0961	MB - Crank Pulley 129PS - A6510300303	1	Not Included
19	1701.0981	MB - Crank Pulley 163PS - A6510300503	1	Not Included

## 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 manufacturer's 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:**

- Inner and outer trim and body work
- Engine idle pace
- Check all the vehicle functions

**Check list:**

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

### Installation apparatus

- Calibrated torque wrench
- Hand service tools
- Protective covers and shields

### 2 PRECAUTIONS

- Detach the battery negative lead.
- Torque all bolts where stated using a calibrated torque wrench.
- Take extreme care with moving parts.
- Remove the vehicles ignition key and keep it with you.
- Wear safeguards 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

- 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								
	Max Torque		Max Torque		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

## PRE-INSTALLATION

**NB** 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.

**NB:** Please refrain from using “Loctite” unless otherwise notified.

1. Using a suitable tool rotate the automatic belt tensioner pulley (A) clockwise and insert a suitable 4mm pin, an Allen key is ideal for this purpose (B) - Fig.1
2. Remove original manufacturers poly groove drive belt (C), noting the original routing.
3. Remove 4 x bolts (D) from crank pulley (E) and discard- Fig 1

**NB:** Crankshaft locking tool is required for this operation (Mercedes tool No 651 589 00 40 00) (F) - Fig 3

4. Remove and discard original crank pulley (E)
5. Using the supplied pulley (5) cut a thread into the hole on the engine casing - Fig 2

**NB:** The pulley bolt has a Trilobular thread and will cut the thread - Fig 2

6. Remove the supplied pulley (5)

## PULLEY & BRACKET INSTALLATION

1. Fit new crankshaft pulley (18) or (19) (Not Supplied and dependant on the engine power rating) with new bolts (17) (Not supplied) - Fig 3
2. Torque bolts (17) to 80 Nm / 59 lb ft + 90

**NB:** Crankshaft locking tool is required for this operation (Mercedes tool No 651 589 00 40 00) (F) - Fig 3

4. Fit the supplied compressor bracket (1) to the engine using 4 x M8 x 60 bolts (10) - Fig 4
5. Torque bolts (10) to 25 Nm / 18.5 lb ft - Fig 4

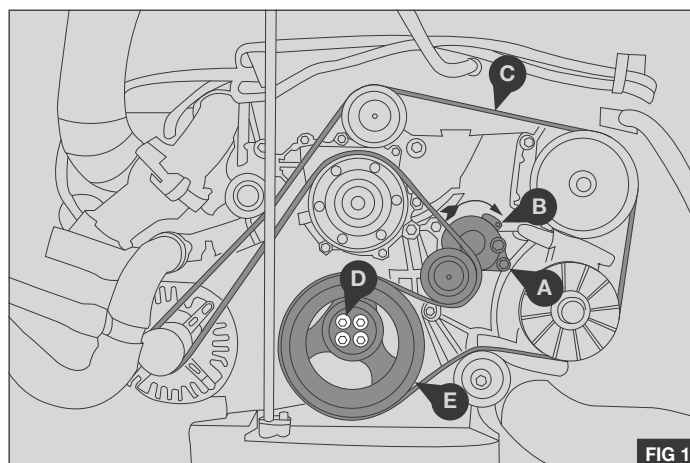


FIG 1

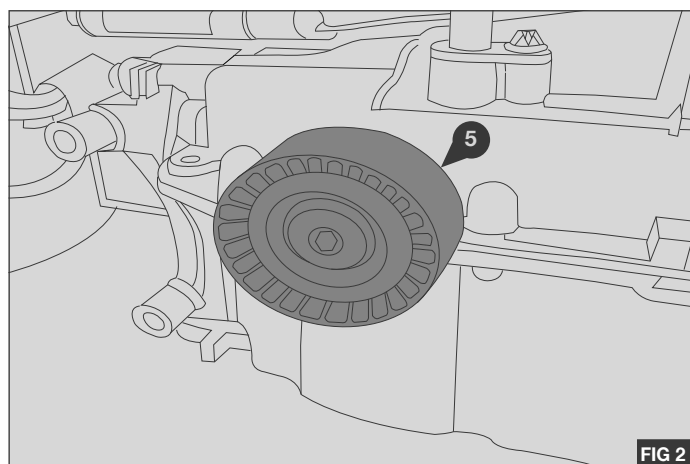


FIG 2

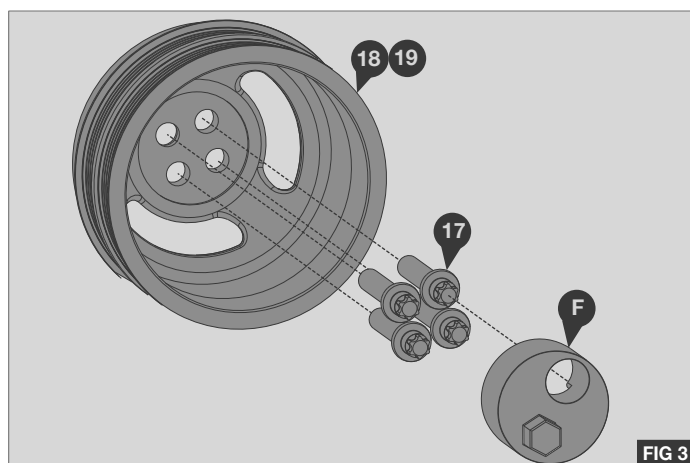


FIG 3

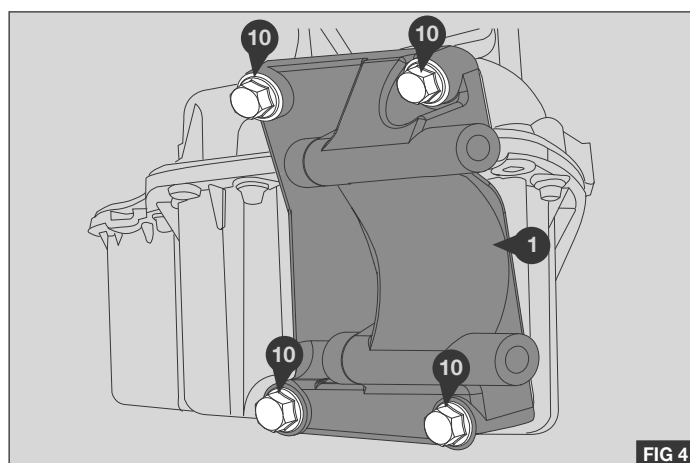
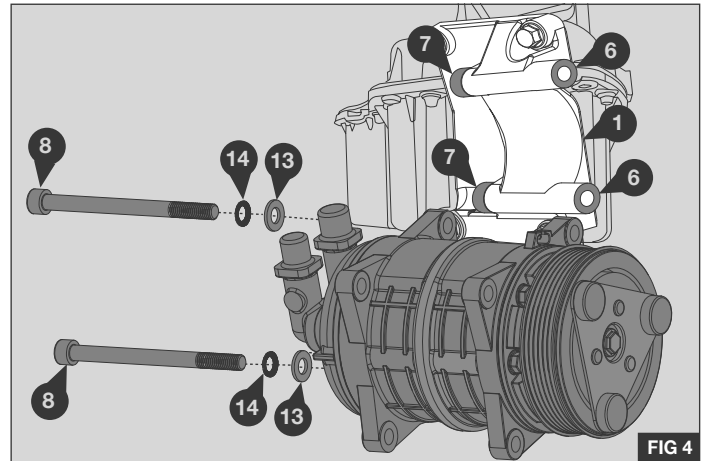


FIG 4

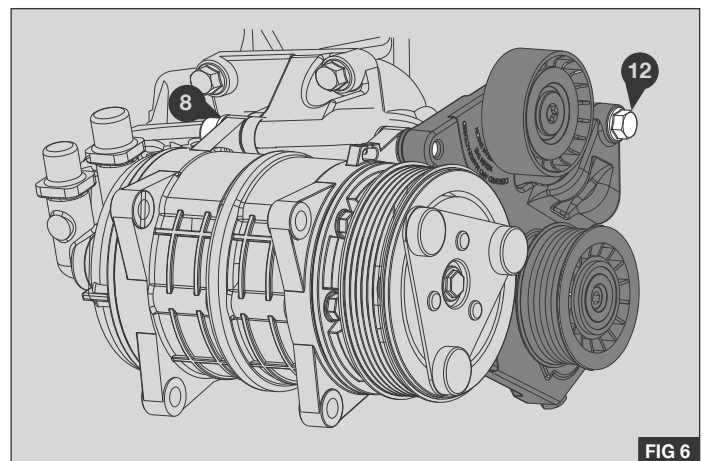
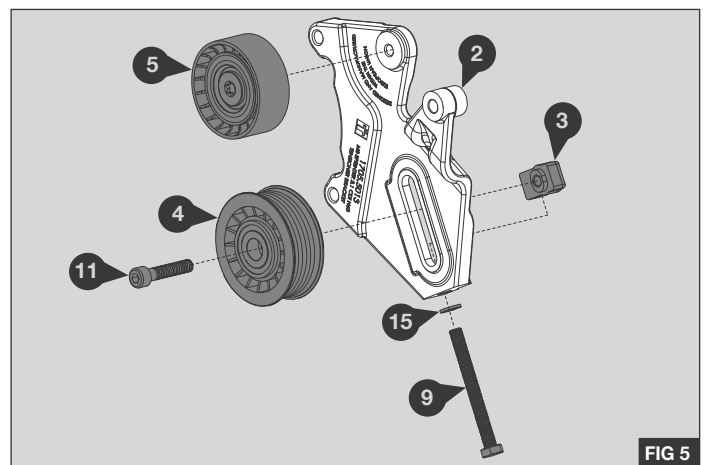
## COMPRESSOR INSTALLATION

1. Mount a compatible compressor specified on page 3 to the mount bracket (1), using 2 x 8.4 mm Spacers (7) between the rear ears of the compressor and the back mounting face of the mount bracket (1), 2 x 1.6 mm Spacers (6) between the front ears of the compressor and the front mounting face of the mounting bracket (1) 2 x M10 x 130 bolts (8), 2 x flat washers (13) and 2 x Schnorr safety washers (14) - Fig 4



## IDLE BRACKET INSTALLATION

1. Mount the idle pulley (5) previously removed onto the tensioner bracket (2) in the position shown - Fig 5
2. Torque bolt to 25Nm / 18lbft using a calibrated torque wrench.
3. Mount the supplied idle pulley (4) on to the tensioner bracket (2) using bolt (11), draw bolt mounting block (3), washer (15) and M8 x 80 bolt (9) in the position shown. Leaving the idle pulley tensioner assembly loose - Fig 5.
4. Mount the tensioner bracket assembly to the front compressor ears, using the 2 x M10 x130 bolts previously fitted (8) Fig 6.
5. Secure the tensioner bracket assembly to the mounting point for the original idle pulley, using bolt (12) M8 x 35 - Fig 6.
6. Torque bolts (8) to 50Nm / 37lbft using a calibrated torque wrench.
7. Torque bolt (12) to 25Nm / 18lbft using a calibrated torque wrench.





## DRIVE BELT INSTALLATION

1. Fit supplied poly groove drive belt (16) - Fig.7

**CP** Crankshaft Pulley

**TP** Tensioner Pulley

**IP** Idle Pulley

**RC** Refrigeration Compressor

**WARNING:** The compressor drive belt (16) must be fitted to the rear grooves of the clutch rotor as shown in Fig 7

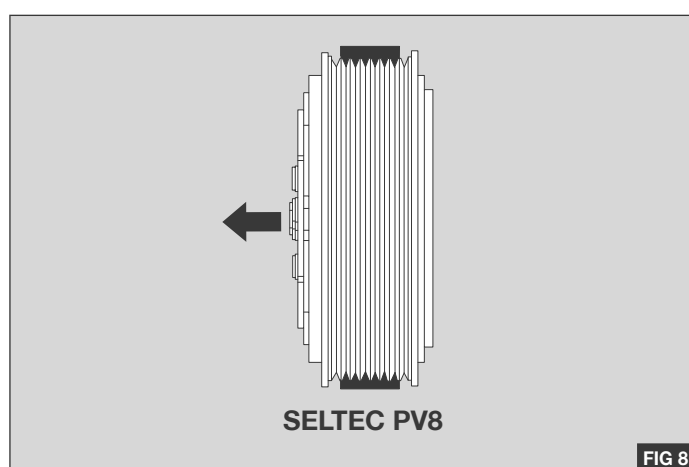
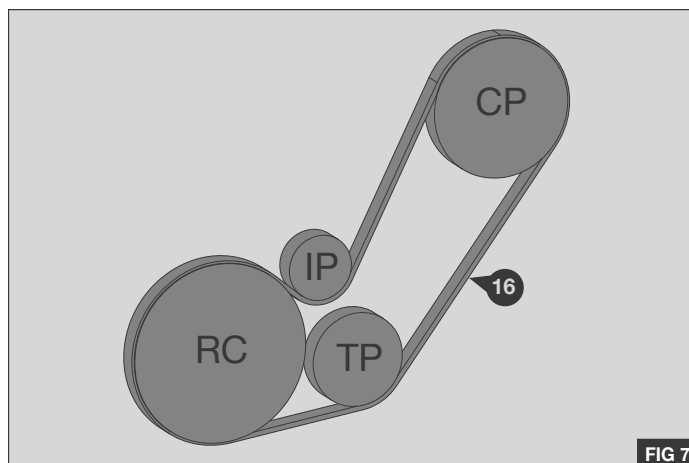
2. Tension the drive belt (16) using bolt (9)
3. When correct tension has been achieved, tighten bolt (11)
4. Torque bolt (11) to 25Nm / 18lbft using a calibrated torque wrench.

**Important:** Fit the drive belt one groove back from the front of the compressor clutch (Seltec PV8) - Fig 8

## POST INSTALLATION

1. 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 on to a suitable location.

**NB:** Check the belt tension when the belt is hot. It is important that the belt is allowed to cool before re-tensioning. Always re-tension new belts if the tension is less than the used belt amount.



**BELT TENSION TABLE**

Belt	Belt Age	Belt Tension Using a Belt Tension Gauge
6 PK	New Belt	72 - 84 kg
6 PK	Used Belt / Re-Tension	54 - 60 kg

**Note**

**Note**

**Note**