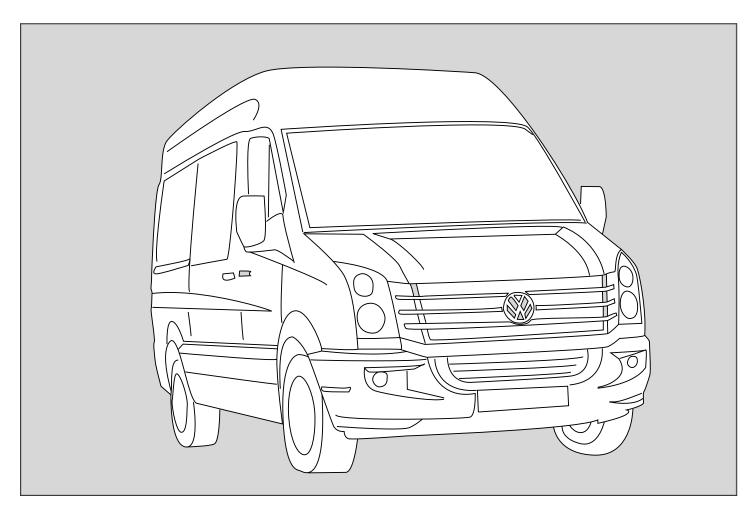
## 0500.6222\_EN

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## **VEHICLE DETAILS**

Volkswagen
Crafter
CR30 / CR35 / CR39 / CR50
9PS / 114PS / 136PS / 163PS
1968 CC
CKTB/CKTC/CKUC/CKUB
E5 / E6 / EEV
10.2010>
N/A
YES
YES
YES
NO
12v

## **ADAPTER KIT DETAILS**

0500.6222
Speed Kit
3200 @ Max Engine
Power Output
40 Minutes
45°
45°
4PK 711 / 6PK 1693
0820.523 / 0820.6441
BlueMotion / Stop/start

## **COMPATIBLE COMPRESSORS**

SELTEC	TM-13 HS	TM15-HS	TM16-HS
Comp No	-	0381.5082	-
Seltec No.	-	-	-
Mounting	-	Direct	-
Rotor	-	1A	-
Armature	-	SL	-
Diameter	-	126	-
Voltage	-	12	-
Orientation	-	V	-
Fitting	-	3/4 x 7/8	-
Manifold	-	Bolt	-

QUE	QP13-HD	QP15-HD	QP16-HD
Comp No	-	0391.5082	-
Que No.	-	-	-
Mounting	-	Direct	-
Rotor	-	1A	-
Armature	-	SL	-
Diameter	-	126	-
Voltage	-	12	-
Orientation	-	V	-
Fitting	-	3/4 x 7/8	-
Manifold	-	Bolt	-

SANDEN	SD5H09	SD5H14	SD7H15
Comp No	-	-	-
Sanden No	-	-	-
Mounting	-	-	-
Rotor	-	-	-
Armature	-	-	-
Diameter	-	-	-
Voltage	-	-	-
Orientation	-	-	-
Fitting	-	-	-

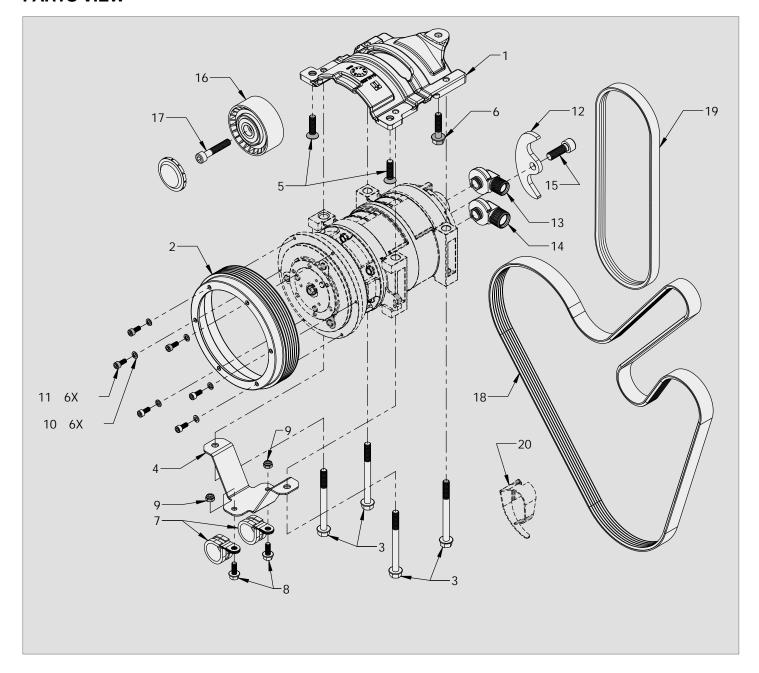
Notes			

COMPRESSOR KIT CONFIGURATIONS								
	CC	COMPRESSOR KIT PART NOS						
PART NUMBER	0515.6222	0595.6222	1	1	1	-	DESCRIPTION	
0381.5082	-						TM15 Direct Mount 1A SL 126 12V V 3/4 x 7/8 Bolt	1
0391.5082		•					QP15 Direct Mount 1A SL 126 12V V 3/4 x 7/8 Bolt	1

<sup>=</sup> Additional parts to standard kits.



## **PARTS VIEW**



## **PARTS LIST**

ITEM	PART NO.	DESCRIPTION	QTY.	COMMENTS
1	0440.5032	VW 2.0 E5 No A/C - TM15 Direct	1	
2	0411.5053	PV6 160 Dia GL 31.55 - Seltec/QUE	1	
3	2704.5381	Hexagon flange bolt - M8 x 90 : 1.25 - 8.8	4	
4	3020.6031	Hose Support Bracket	1	
5	2704.5351	Flat Countersunk Head Cap Screw M8 x 30 : 1.25	2	
6	2704.1021	Hexagon flange bolt - M8 x 35 : 1.25 - 10.9	1	
7	2771.1011	P-Clip 28mm	2	
8	2702.0521	Hexagon flange bolt M6 X 16: 1.00 - 6921	2	
9	2732.0031	Hexagonal Nylon Insert Nut M6 - DIN 985	2	
10	2805.0031	Spring washer M5 x 1 ID 5.1 OD 9.2	6	
11	2716.0031	Hexagon socket head cap screw M5 x 10 - 0.80	6	
12	3020.5003	Compressor Fitting Clamp	1	
13	0426.5041	Compressor Discharge Fitting (Low Profile) 3/4-16	1	
14	0426.5031	Compressor Suction Fitting (Low Profile) 7/8 -14	1	
15	2705.5071	Hexagon socket head cap screw M10 x 30 :1.50 -12.9	1	
16	1700.5131	Idle Pulley - VW 6PK x 70	1	
17	2704.5341	Hexagon socket head cap screw M8 x 45 : 1.25 - 12.9	1	
18	0820.6441	Belt - Poly Groove 6PK 1693	1	
19	0820.5231	Belt - Poly Groove 4PK 711 Elast	1	
20	2510.5021	Stretch Belt Installation Tool	1	Not Included



#### **FOREWORD**

1. 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:

- 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.
- 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 individualsWarning: 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		8	.8	10	0.9	12	2.9
	Max T	orque						
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**

**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:

- Remove and discard the original stretch belt
   Fig. 1
- Using a suitable 16mm hex tool rotate the automatic tensioner pulley © in a clockwise direction and insert a 4mm pin in the tensioning element 

  D Fig. 2
- 2. Remove and discard the drive belt (B) Fig. 1

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

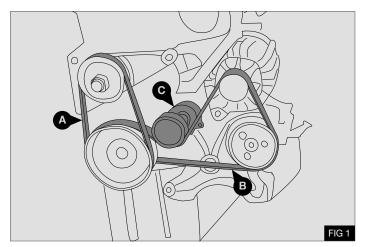
#### **COMPRESSOR BRACKET INSTALLATION**

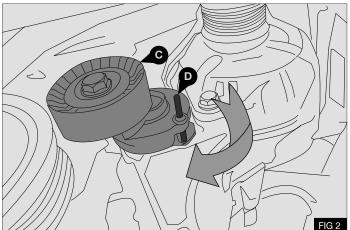
- 1. Loosely install the compressor mount bracket

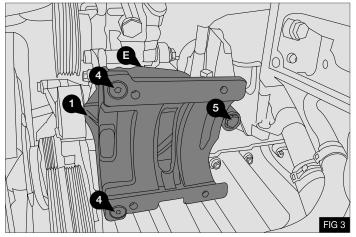
  ① onto the original mounting bracket ⑤, using
  the two supplied M8 x 30 countersunk screws
  ⑤ and one M8 x 35 Bolt ⑥ Fig.3
- 2. Torque the two mounting screws ⑤ to 20Nm / 15lb.ft and bolt ⑥ to 29Nm / 21lb.ft using a calibrated torque wrench Fig. 3

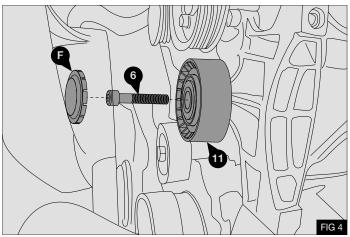
#### **IDLE PULLEY INSTALLATION**

- **1.** Fit the supplied Idle pulley 16 to the original auxiliary mounting bracket using the supplied M8 x 45 bolt 17 Fig. 4
- **2.** Torque bolt 17 29Nm / 21lb.ft. using a calibrated torque wrench.
- **3.** Fit the supplied idle pulley bearing cover (F)









#### **COMPRESSOR ASSEMBLY**

- Fit the supplied compressor rotor 2 to the compressor. Fixing it with the supplied bolts 10
   M5 x 10 and washers 11 Fig. 5
- **2.** Torque the six bolts 10 to 3Nm / 2lb.ft. using a calibrated torque wrench.
- 3. Fit the supplied compressor fittings 13 & 14and clamp in place with clamp 12 and bolt15 Fig. 5

**NB:** Align supplied suction and discharge fittings as shown in Fig. 5

#### **COMPRESSOR INSTALLATION**

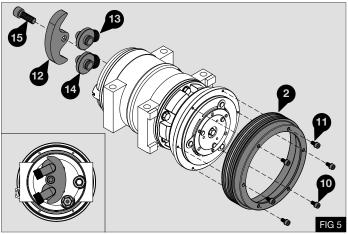
- Fit the compressor to the compressor mount bracket 1. Fixing it with the supplied bolts
   M8 x 90 and bottom hose support bracket
   4 at the front Fig. 6
- **2.** Torque the four bolts 3 to 15Nm / 11lb.ft. using a calibrated torque wrench.
- **3.** Fit the supplied P-Clips 7 to the smaller bottom hose, either side of the original hose support ①

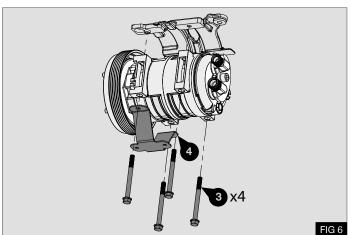
Mount to the hose support bracket 4 using bolts 8 M6 x 16 and M6 Nuts 9 - Fig. 7

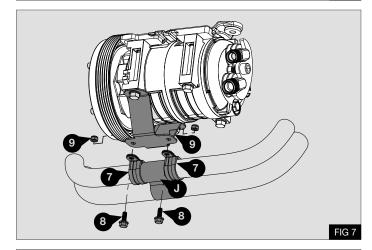
**WARNING:** Check for adequate clearance between bottom hose and the compressor clutch assembly

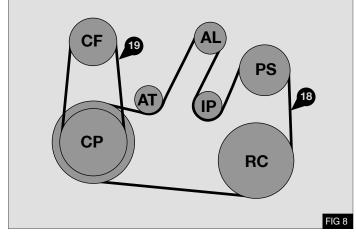
#### **DRIVE BELT**

- 1. Fit the supplied replacement poly groove engine drive belt 18 to the engine in the configuration shown Fig. 8
  - **CP** Crankshaft Pulley
  - **AT** Automatic Tensioner
  - **AL** Alternator
  - **RC** Refrigeration Compressor
  - **PS** Power Steering
  - IP Idle Pulley
  - CF Cooling Fan
- 2. Remove the previously installed 4mm pin from the automatic tensioner to tension the beltFig. 2





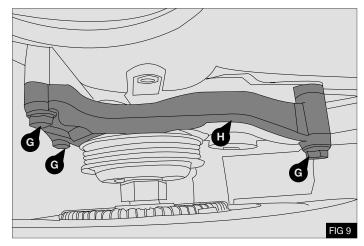


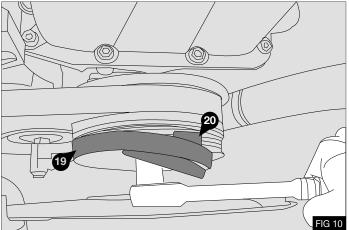


#### STRETCH BELT

- **1.** Remove the three original bolts **G** securing the viscous fan bracket **H** to the engine Fig. 9
- 2. Carefully feed one side the supplied drive belt

  19 between the rear of the viscous fan bracket
  and the engine, loop the belt around the bracket
  and onto the viscous fan pulley.
- **3.** Re-fit the viscous fan bracket to the engine using the original three bolts G.
- **4.** Torque bolts G to 50Nm / 37lb.ft + 90 degrees
- **5.** Lay drive belt 19 on the viscous fan pulley. Mount the poly-V belt fitting tool 20 (not supplied) on the crank pulley and place the belt 19 over the top of it Fig.10
- 6. Turn the engine 180 degrees in a clockwise direction using a 19mm double hex tool on the main crankshaft bolt whilst guiding the belt onto the crankshaft pulley. Check for correct belt location in both of the pulleys and remove the poly-V belt fitting tool 20 (not supplied).





#### **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.

Notes	

Notes	