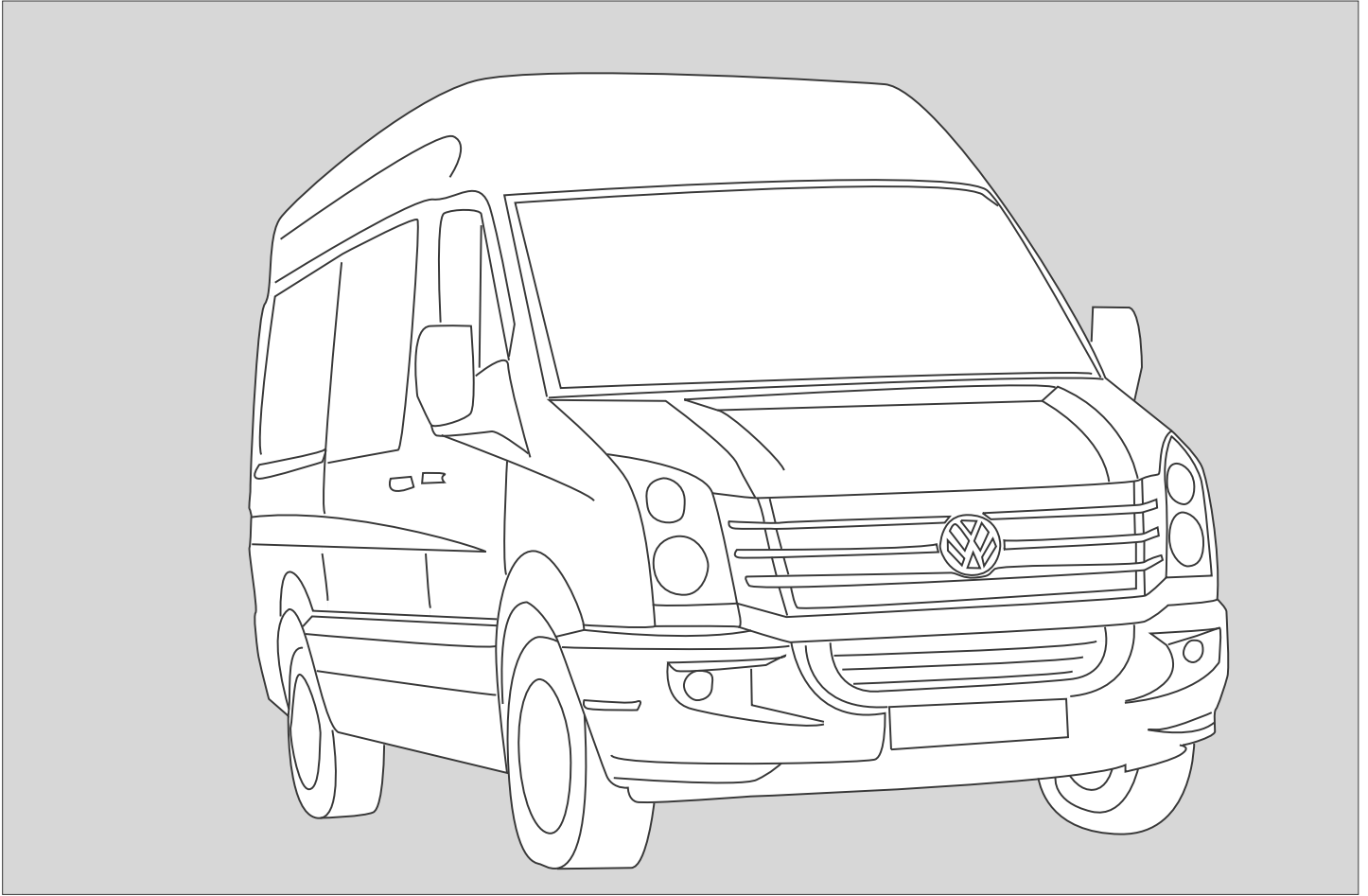


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### VEHICLE DETAILS

|                |                                       |
|----------------|---------------------------------------|
| Manufacturer   | Volkswagen                            |
| Make           | Crafter                               |
| Model          | CR30 / CR35 / CR39 / CR50             |
| Engine         | 109PS / 136PS / 163PS ~ 2.0L (1968CC) |
| Engine Details | CKTB/CKTC/CKUC/CKUB~E5 / EEV          |
| Year           | 10.2010>                              |
| Chassis Nos.   | N/A                                   |
| LHD            | YES                                   |
| RHD            | YES                                   |
| PAS            | YES                                   |
| A/C            | NO                                    |
| Voltage        | 12v                                   |

### ADAPTER KIT DETAILS

|                   |                         |
|-------------------|-------------------------|
| Kit Part No.      | 0500.6282               |
| Description       | Standard Kit            |
| Compressor RPM    | 4175 @ Max Engine       |
|                   | Power Output            |
| Fitting Time      | 40 Minutes              |
| Suction Fitting   | 45°                     |
| Discharge Fitting | 45°                     |
| Belt Type         | 6PK 1650                |
| Belt Part No.     | 0820.0231               |
| Compatible with:  | BlueMotion / Stop/start |

## COMPATIBLE COMPRESSORS

| SELTEC      | TM-13 HS | TM15-HS | TM16-HS   |
|-------------|----------|---------|-----------|
| Comp No     | -        | -       | 0381.2012 |
| Seltec No.  | -        | -       | -         |
| Mounting    | -        | -       | Direct    |
| Rotor       | -        | -       | 8PV       |
| Armature    | -        | -       | 3E        |
| Diameter    | -        | -       | 123       |
| Voltage     | -        | -       | 12        |
| Orientation | -        | -       | V         |
| Fitting     | -        | -       | 3/4 x 7/8 |
| Manifold    | -        | -       | Bolt      |

| QUE         | QP13-HD | QP15-HD | QP16-HD   |
|-------------|---------|---------|-----------|
| Comp No     | -       | -       | 0391.2012 |
| Que No.     | -       | -       | QP16-1641 |
| Mounting    | -       | -       | Direct    |
| Rotor       | -       | -       | 8PV       |
| Armature    | -       | -       | 3E        |
| Diameter    | -       | -       | 123       |
| 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     | -      | -      | -      |

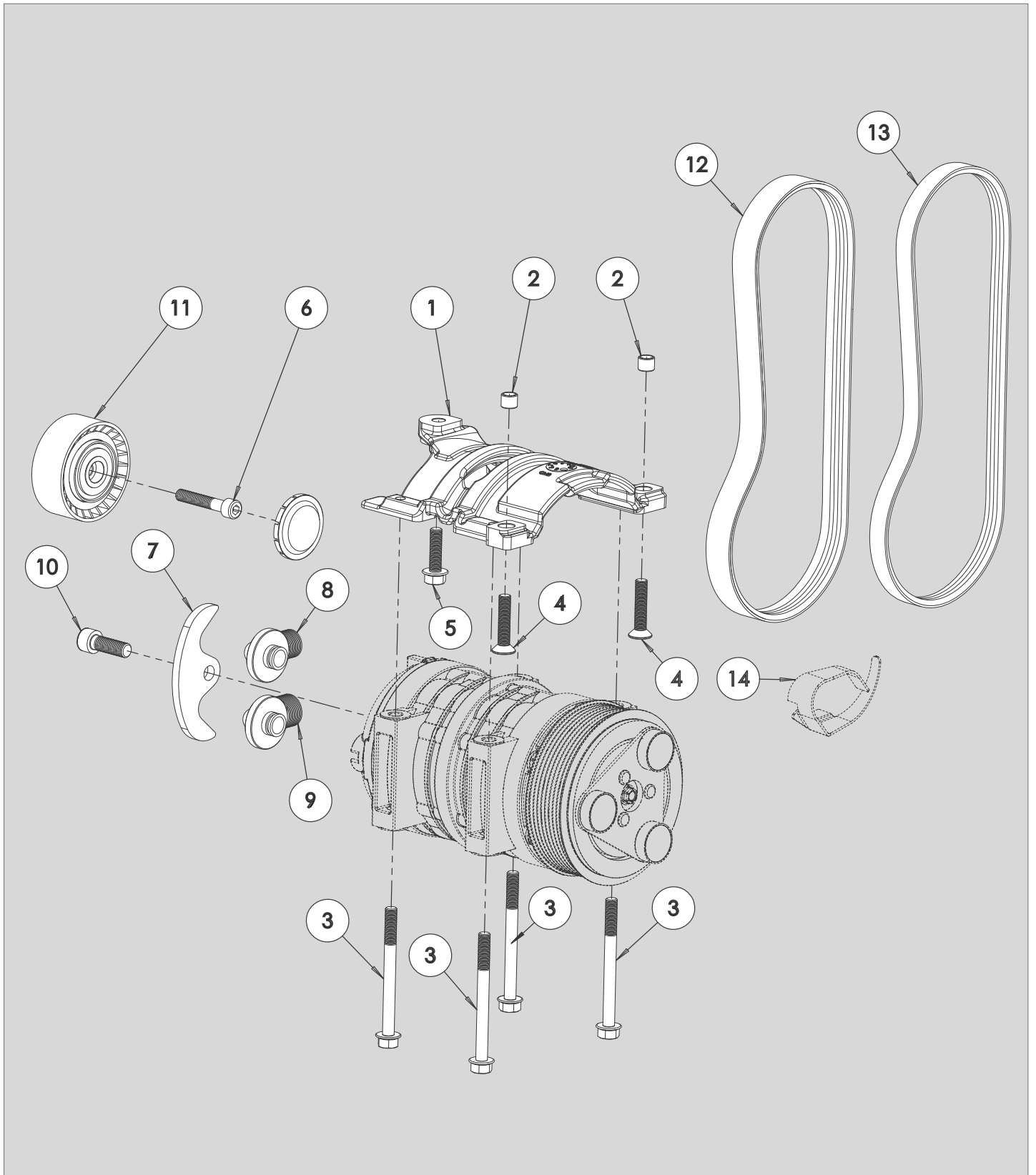
| Notes |
|-------|
|       |

## COMPRESSOR KIT CONFIGURATIONS

| PART NUMBER | COMPRESSOR KIT PART NOS |           |  |  |  |  | DESCRIPTION                                    | QTY. |
|-------------|-------------------------|-----------|--|--|--|--|--|------|
|             | 0516.6282               | 0596.6282 |  |  |  |  |  |      |
| 0381.2012   | ●                       |           |  |  |  |  | TM16 Ear Mount 8PV 3E 123 12V V 3/4 x 7/8 Bolt | 1    |
| 0391.2012   |                         | ●         |  |  |  |  | QP16 Ear Mount 8PV 3E 123 12V V 3/4 x 7/8 Bolt | 1    |

● = Additional parts to standard kits.

PARTS VIEW



## PARTS LIST

| ITEM | PART NO.  | DESCRIPTION                                     | QTY. | COMMENTS     |
|------|-----------|---|------|--------------|
| 1    | 0440.5034 | CMB - VW Crafter 2.0 E5 No A/C - TM16 Direct    | 1    | -            |
| 2    | 2800.5571 | Dowel Bush                                      | 2    | -            |
| 3    | 2704.5381 | Hex flange bolt - M8 x 90 : 1.25 - 8.8          | 4    | -            |
| 4    | 2704.5431 | Flat Countersunk Head Cap Screw M8 x 40 : 1.25  | 2    | -            |
| 5    | 2704.0091 | Hex flange bolt Durlok - M8 x 30 : 1.25 - 12.9  | 1    | -            |
| 6    | 2704.5341 | Hex socket head cap screw M8 x 45 : 1.25 - 12.9 | 1    | -            |
| 7    | 3020.5003 | Manifold clamp                                  | 1    | -            |
| 8    | 1515.5003 | Fitting - Discharge                             | 1    | -            |
| 9    | 1520.5003 | Fitting - Suction                               | 1    | -            |
| 10   | 2705.5051 | Socket cap screw M10 x 30 : 1.50 - 12.9         | 1    | -            |
| 11   | 1700.5131 | Idle Pulley VW 6PK x 70                         | 1    | -            |
| 12   | 0820.0231 | Belt - Poly Groove 6PK 1650                     | 1    | -            |
| 13   | 0820.5231 | Belt - Poly Groove 4PK 711 Elast                | 1    | -            |
| 14   | 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.

|   |   |
|---|---|
| <p><b>1 SAFETY MEASURES:</b></p> <p><b>Before fitting the Compressor adapter drive kit, ensure the following for damage:</b></p> <ul style="list-style-type: none"> <li>a Inner and outer trim and body work</li> <li>b Engine idle pace</li> <li>c Check all the vehicle functions</li> </ul> <p><b>Check list:</b></p> <ul style="list-style-type: none"> <li>a Ensure that the right kit has been selected</li> <li>b Before installing, check that all the correct pieces are present; also ensure that there are no missing or broken pieces</li> <li>c When fitting, make sure the vehicle is properly protected against damage.</li> </ul> | <p><b>Installation apparatus</b></p> <ul style="list-style-type: none"> <li>a Calibrated torque wrench</li> <li>b Hand service tools</li> <li>c Protective covers and shields</li> </ul> <p><b>2 PRECAUTIONS</b></p> <ul style="list-style-type: none"> <li>a Detach the battery negative lead.</li> <li>b Torque all bolts where stated using a calibrated torque wrench.</li> <li>c Take extreme care with moving parts.</li> <li>d Remove the vehicles ignition key and keep it with you.</li> <li>e Wear safeguards to make sure that liquid refrigerant never touches your skin</li> </ul> |
|---|---|

**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.

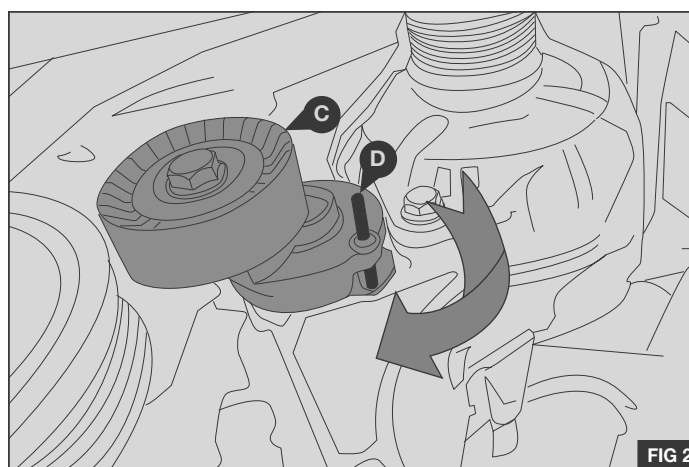
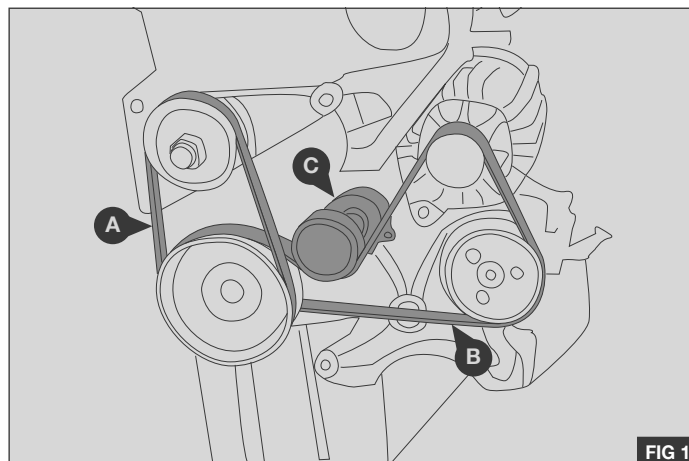
| STRENGTH    |  |     |  |     |  |     |  |     |
|-------------|---|-----|---|-----|---|-----|---|-----|
|             | Max Torque  |     | Max Torque  |     | Max Torque  |     | Max Torque  |     |
| Dia / Pitch | lb.ft   | Nm  | lb.ft   | Nm  | lb.ft   | Nm  | lb.ft   | Nm  |
| M5 x 0.80   | 2   | 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

**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:

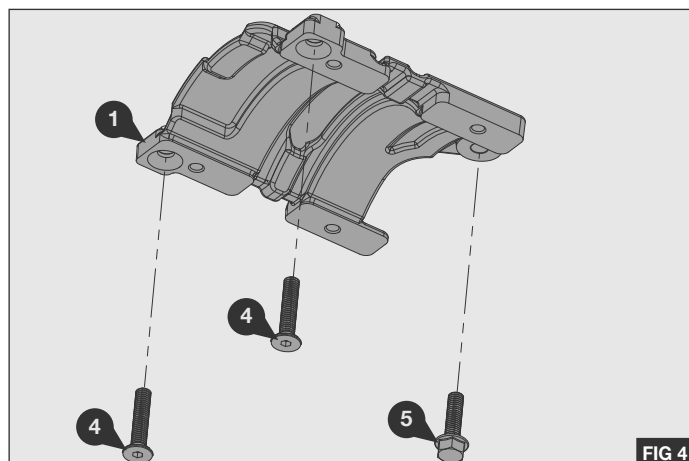
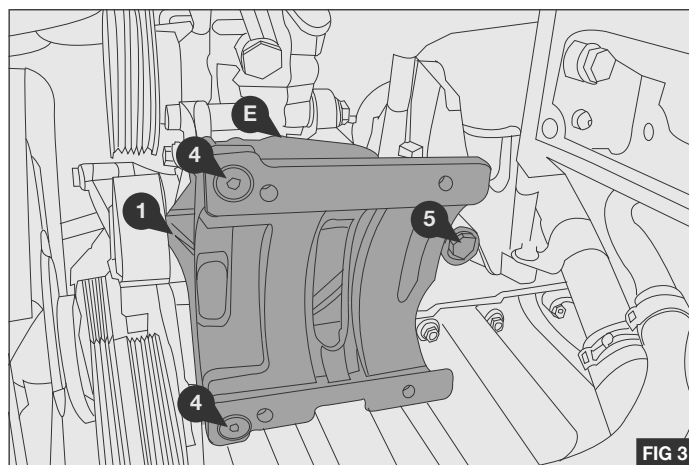
1. Remove and discard the original stretch belt (A) from the fan - Fig 1
2. Using a suitable 16mm hex tool rotate the automatic tensioner pulley (C) in a clockwise direction and insert a 4mm pin in the tensioning element (D) - Fig.2
3. Remove and discard the drive belt (B) - Fig 1



**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 (E), using the supplied M8 x 40 countersunk cap screws (4) at the front and a M8 x 30 bolt (5) at the rear - Fig.3
2. Torque the front mounting bolts (4) to 20Nm / 15lb.ft using a calibrated torque wrench - Fig.4
3. Torque the rear mounting bolt (5) to 29Nm / 21lb.ft using a calibrated torque wrench - Fig.4



### IDLE PULLEY INSTALLATION

1. Fit the supplied Idle pulley (11) to the original auxiliary mounting bracket using the supplied M8 x 45 bolt (6) - Fig.5
2. Torque bolt (6) 29Nm / 21lb.ft. using a calibrated torque wrench.
3. Fit the supplied idle pulley bearing cover (F)

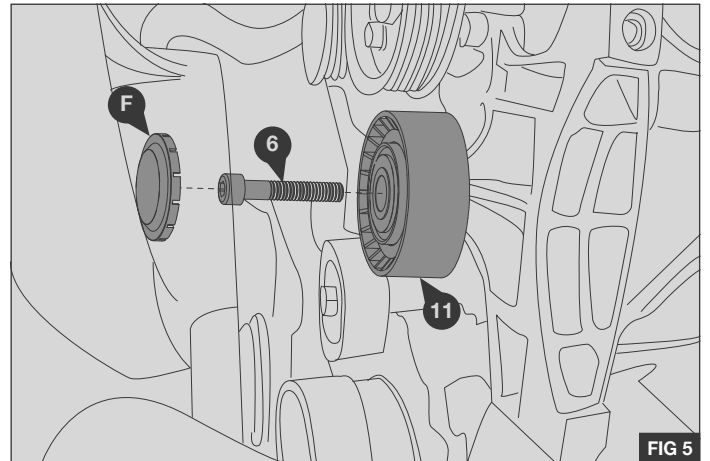


FIG 5

### COMPRESSOR ASSEMBLY

1. Fit the supplied compressor fittings (8) and (9) as shown opposite, secure using clamp (7) and M10 x 30 bolt (10) - Fig.6
2. Orientate the fittings as shown in the inset view.
3. Torque bolt (10) to 45Nm / 33lb.ft using a calibrated torque wrench - Fig.6

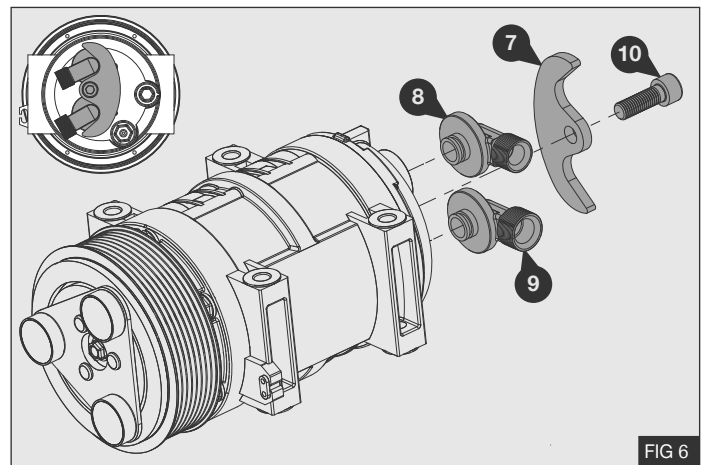


FIG 6

**NB:** Align supplied suction and discharge fittings as shown in - Fig.6

### COMPRESSOR INSTALLATION

1. Install the compressor to the mount bracket (1) using the supplied M8 x 90 bolts (3) - Fig.7
2. Torque the four bolts (3) to 17Nm / 13lb.ft. using a calibrated torque wrench.

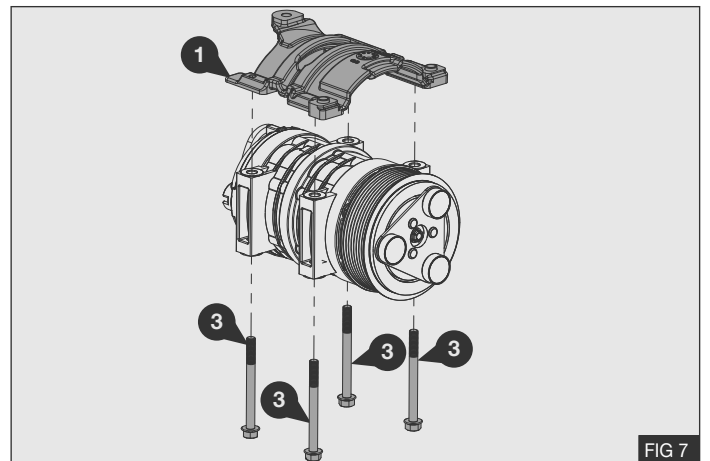


FIG 7

### DRIVE BELT

1. Fit the supplied replacement poly groove engine drive belt (12) 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 belt - Fig 2.

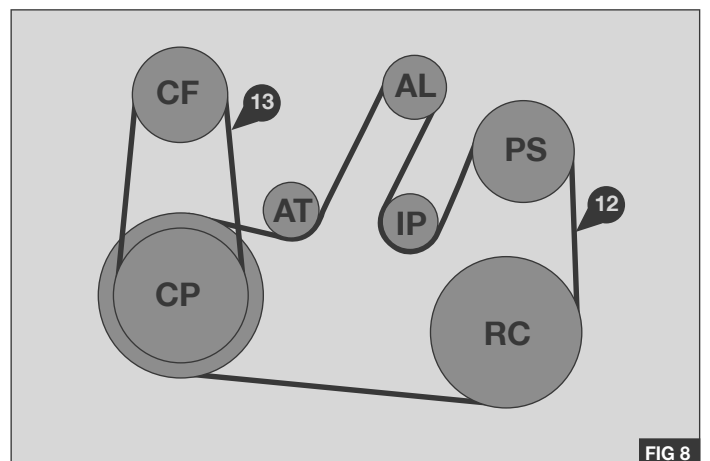
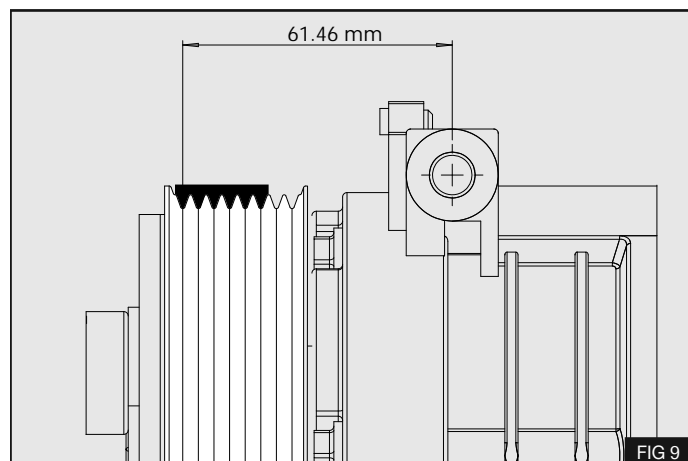


FIG 8

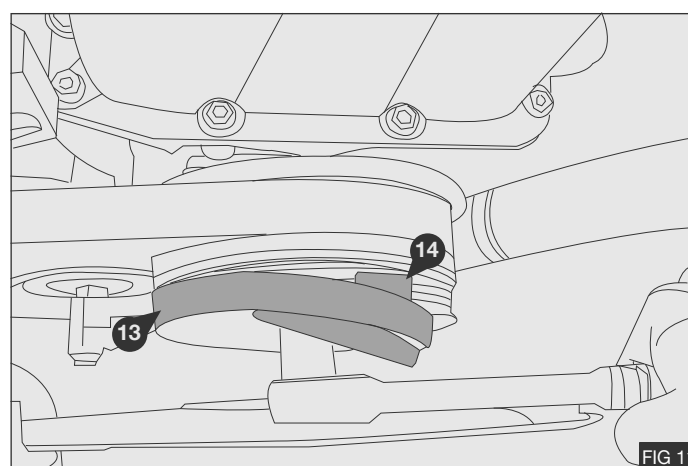
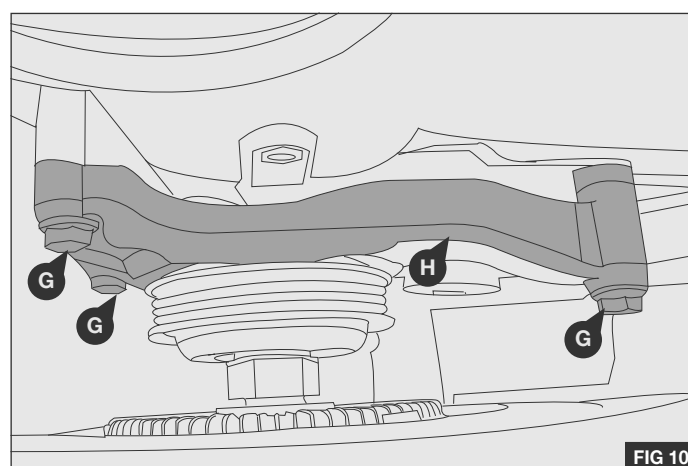


- Place the belt in the correct groove on the compressor- Fig 9



## DRIVE BELT

- Remove the three original bolts (G) securing the viscous fan bracket (H) to the engine - Fig.9
- Carefully feed one side the supplied drive belt (13) between the rear of the viscous fan bracket and the engine, loop the belt around the bracket and onto the viscous fan pulley.
- Re-fit the viscous fan bracket to the engine using the original three bolts (G).
- Torque bolts (G) to 50Nm / 37lb.ft + 90 degrees
- Lay drive belt (13) on the viscous fan pulley. Mount the poly-V belt fitting tool (14) (not supplied) on the crank pulley and place the belt (13) over the top of it – Fig.10
- 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 (14) (not supplied).



## 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 on to a suitable location.

**Notes**

**Notes**

**Notes**