



Techni
ENGINEERING SOLUTIONS

**FIAT / VAUXHALL,
NEW DOBLO CARGO / COMBO
1.6 MULTIJET 16V E5 / 1.6 CDTI E5**

CODE / CODICE: 0500.6502

**COMPRESSOR / COMPRESSEUR / KOMPRESSOR
/ COMPRESSORE / COMPRESOR :**

SELTEC TM13 / 15

QUE QP13 / 15

FITTING INSTRUCTIONS

EINBAUANLEITUNGEN

INSTRUCTIONS POUR LE MONTAGE

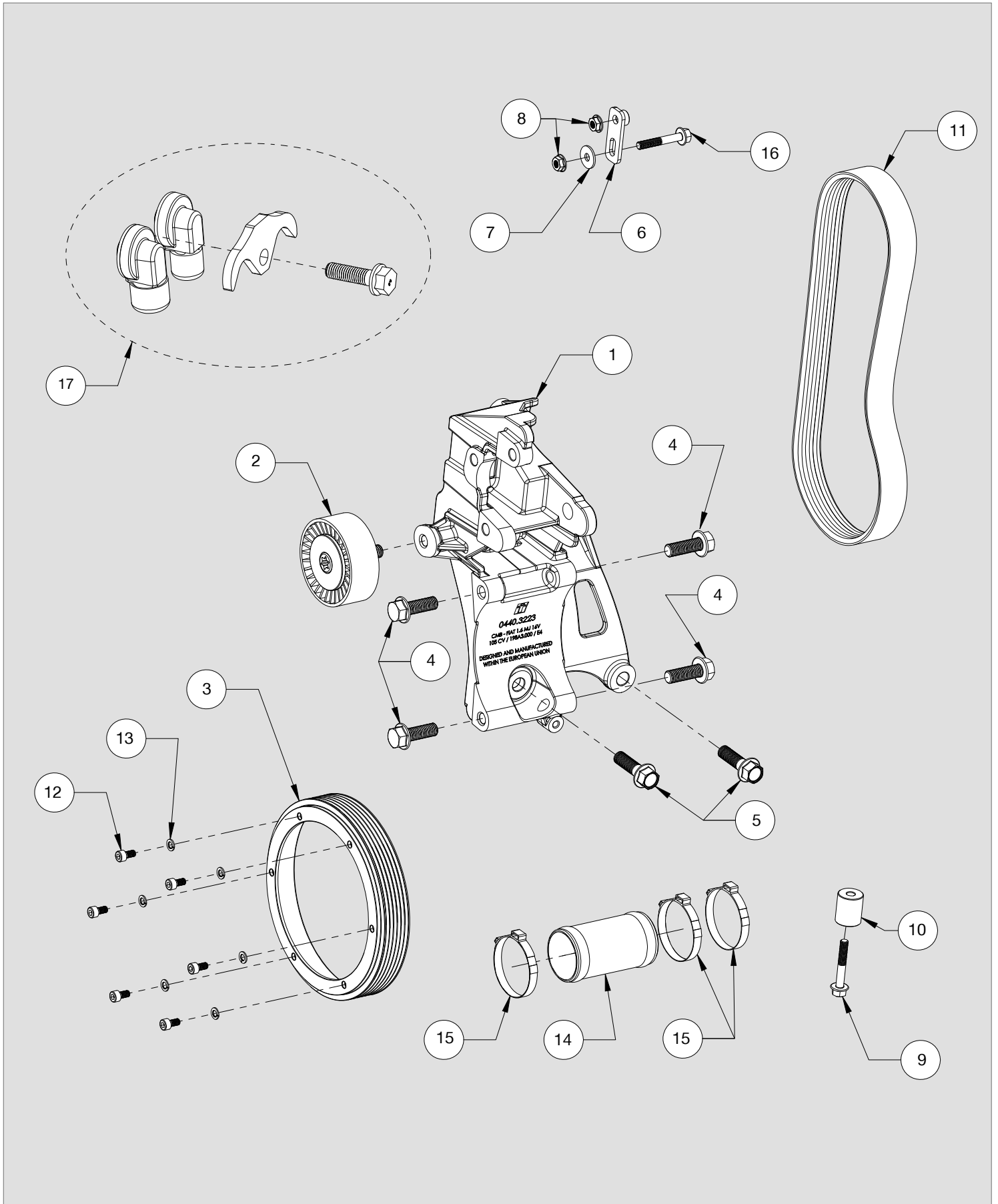
ISTRUZIONI DI MONTAGGIO

INSTRUCCIONES DE MONTAJE

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PARTS VIEW / VUE ÉCLATÉE / TEILEANSICHT / VISTA PARTA / IMÁGENES DE LAS PIEZAS



PARTS LIST / NOMENCLATURE / TEILELISTE / ELENCO DELLE PARTI / LISTA DE PIEZAS

| ITEM | CODE / CODICE / KODE / CODIGO | DESCRIPTION / DESCRIZIONE / BESCHREIBUNG / DESCRIPCION | QTY. | COMMENTS |
|------|-------------------------------|--------------------------------------------------------|------|----------|
| 1 | 0440.3223 | Compressor Mount Bracket | 1 | - |
| 2 | 1700.5001 | Back Idle pulley 70 x 26 | 1 | - |
| 3 | 0411.0333 | Clutch Rotor - PV6 160 Dia | 1 | - |
| 4 | 2705.0491 | Hex flange bolt durlok - M10 x 30 : 1.50 | 4 | - |
| 5 | 2705.5001 | Hex flange bolt - M10 x 35 : 1.25 | 2 | - |
| 6 | 3020.9143 | Air pipe support bracket | 1 | - |
| 7 | 2806.0501 | M6 penny washer | 1 | - |
| 8 | 2732.0041 | Hexagon flange nut durlok - M6 :1.00 | 2 | - |
| 9 | 2702.0501 | Hex flange bolt M6 x 40 :1.00 | 1 | - |
| 10 | 2803.2803 | Turbo pipe spacer | 1 | - |
| 11 | 0820.5051 | Belt - Poly Groove 6PK 1855 | 1 | - |
| 12 | 2716.0051 | Hex socket head cap screw - M5 x 10 - 0.80 | 6 | Ref only |
| 13 | 2805.0031 | Spring washer M5 x 1 - ID 5.1 x 5.1 OD 9.2 | 6 | Ref only |
| 14 | 1494.0003 | Turbo Pipe connector | 1 | - |
| 15 | 1537.1001 | Turbo pipe clip | 3 | - |
| 16 | 2702.0511 | Hex Flange Bolt M6 x 30 : 100 | 1 | - |
| 17 | 0425.0621 | Manifold - Que/Seltec - swivel type D- 3/4x7/8 | 1 | - |

**COMPATIBLE COMPRESSORS / COMPRESSEURS RECOMMANDÉS / EMPFOHLENE KOMPRESSOREN
RACCOMANDATO COMPRESSORI / RECOMENDADAS COMPRESORES**

| SELTEC | TM-13 HS | TM15-HS | - |
|-------------|-----------|-----------|---|
| Comp No | 0381.0492 | 0381.0092 | - |
| Valeo No. | - | 10055063 | - |
| Mounting | Ear | Ear | - |
| Rotor | 1A | 1A | - |
| GL | - | - | - |
| Armature | SL | SL | - |
| Diameter | 126 | 126 | - |
| Voltage | 12 | 12 | - |
| Orientation | V | V | - |
| Fitting | 3/4 x 7/8 | 3/4 x 7/8 | - |
| Manifold | Bolt | Bolt | - |

| QUE | QP13-HD | QP15-HD | - |
|-------------|-----------|-----------|---|
| Comp No | 0391.0492 | 0391.0092 | - |
| Que No. | QP13-1825 | QP15-1166 | - |
| Mounting | Ear | Ear | - |
| Rotor | 1A | 1A | - |
| GL | - | - | - |
| Armature | SL | SL | - |
| Diameter | 126 | 126 | - |
| Voltage | 12 | 12 | - |
| Orientation | V | V | - |
| Fitting | 3/4 x 7/8 | 3/4 x 7/8 | - |
| Manifold | Bolt | Bolt | - |

| SANDEN | - | - | - |
|-------------|---|---|---|
| Comp No | - | - | - |
| Sanden No. | - | - | - |
| Mounting | - | - | - |
| Rotor | - | - | - |
| GL | - | - | - |
| Armature | - | - | - |
| Diameter | - | - | - |
| Voltage | - | - | - |
| Orientation | - | - | - |
| Fitting | - | - | - |

| NOTES |
|-------|
| |

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.

COUPLES DE SERRAGE DES FIXATIONS STANDARDS

Si des chiffres de serrage au couple particuliers ne sont pas indiqués dans cette notice de montage, se référer au tableau suivant qui servira de guide pour le couple de sécurité maximum correspondant à une taille et un grade spécifiques de fixation.

ANZIEHMOMENTE FÜR STANDARDBEFESTIGUNGSMITTEL





Falls in dieser Einbauanleitung keine speziellen Anziehmomente angegeben sind, kann die folgende Tabelle als Richtlinie für das maximale sichere Anziehmoment für eine spezifische Größe oder Qualität von Befestigungsmitteln dienen.

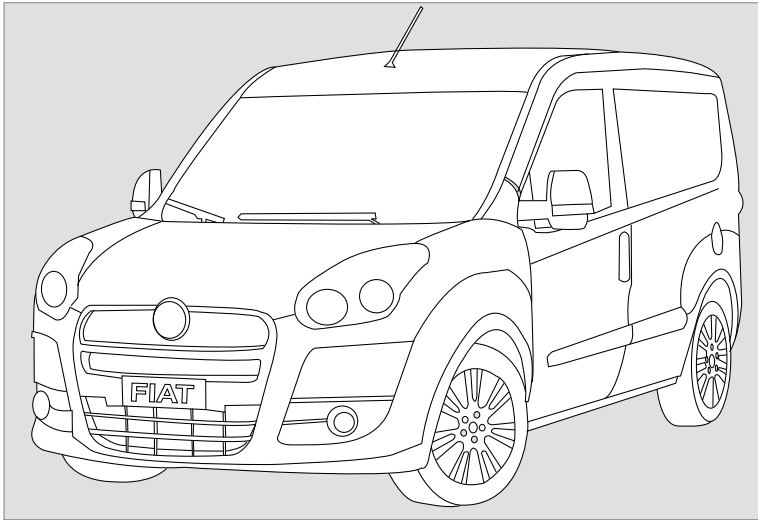
VALORI STANDARD DI SERRAGGIO PER DISPOSITIVI DI FISSAGGIO

In assenza di valori specifici di coppia nel presente manuale di istruzioni, si può utilizzare la seguente tabella come guida per conoscere la coppia massima sicura in base a dimensioni e grado del dispositivo di fissaggio.

VALORES ESTÁNDAR DE LOS PARES DE APRIETE Y FIJACIÓN

En ausencia de valores para los pares de apriete específicos detallados en este manual de instrucciones de montaje, se puede utilizar la siguiente tabla como guía para consultar el máximo par de torsión seguro para un tamaño concreto y su grado de fijación.

| 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 |



VEHICLE DETAILS

| | |
|----------------|-----------------------------------|
| Manufacturer | Fiat / Vauxhall |
| Make | New Doblo Cargo / Combo |
| Model | 1.6 Multijet 16V E5 / 1.6 CDTi E5 |
| Engine CC | 1598cc |
| Engine Details | 198A3000 - 105 BHP |
| Year | 08.2011>2015 |
| Chassis Nos. | N/A |
| LHD | YES |
| RHD | YES |
| PAS | YES |
| A/C | NO |
| Voltage | 12v |

KIT DETAILS

| | |
|-------------------|------------------------------|
| Kit Part No. | 0500.6502 |
| Description | Standard Kit |
| Compressor RPM | 4125 Max engine power output |
| Fitting Time | 60 Minutes |
| Suction Fitting | 90° |
| Discharge Fitting | 90° |
| Belt Type | 6PK 1855 |
| Belt Part No. | 0820.5051 |

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:

- 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 vehicle's ignition key and keep it with you.
- e Wear safeguards and 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.

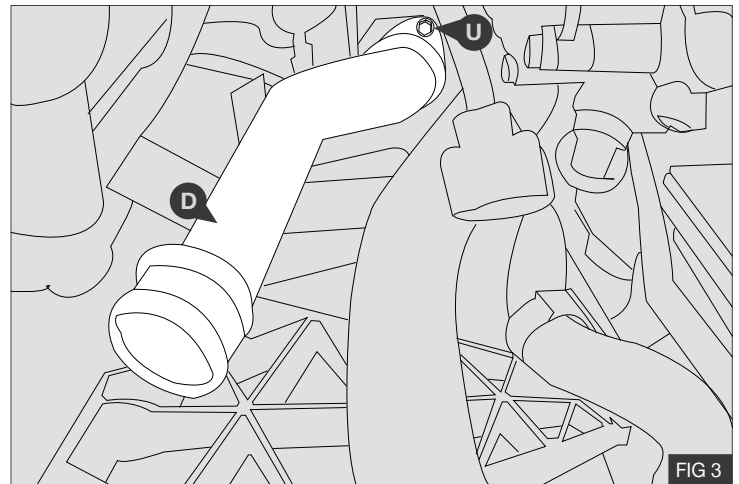
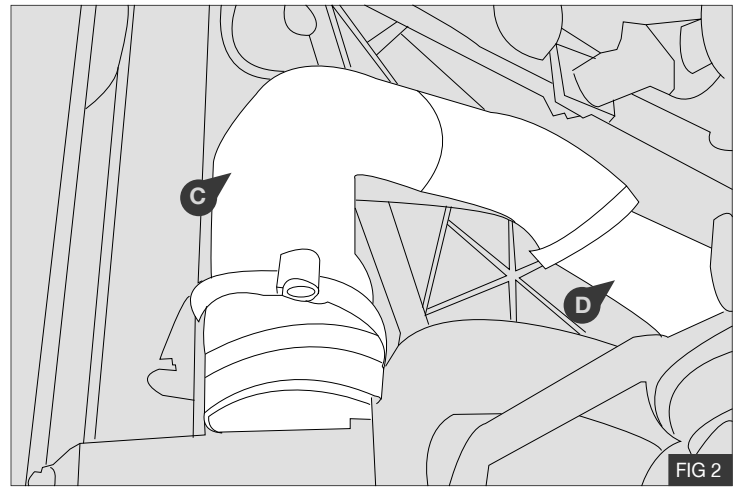
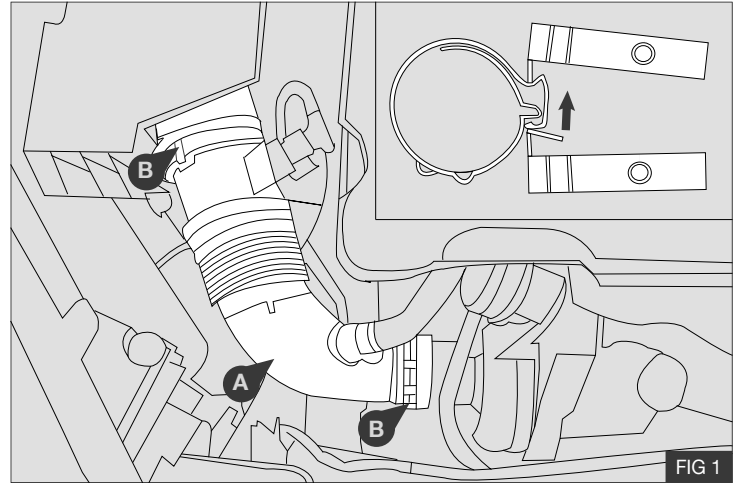
NB: This calls awareness to make the job easier or gives useful information.

PRE-INSTALLATION

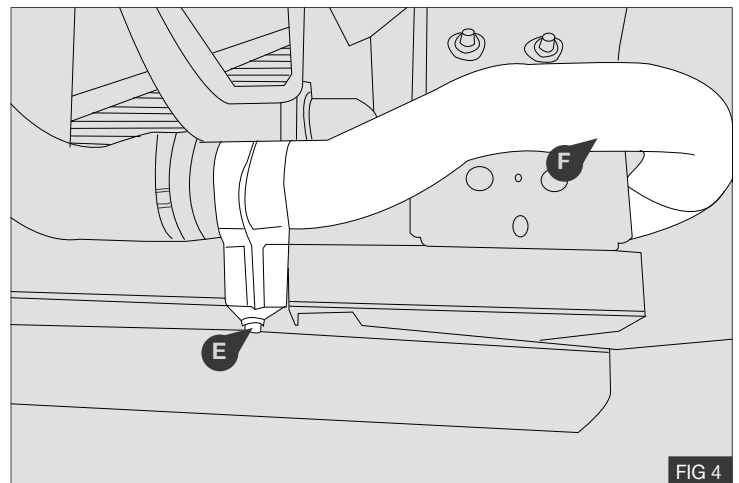
N.B Prior to commencing work, please examine the instructions with care. The alphabetical symbols on the diagram relate to written instructions, numerical symbols relate to the parts listing.

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

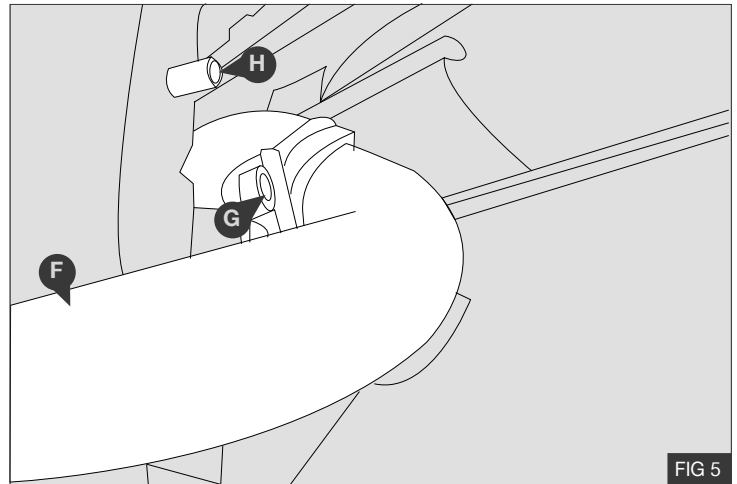
1. Remove the under panel
2. Remove the turbo hose (A) and pipe clips (B) using correct removal pliers Clic-R® - Fig 1
3. Remove the rubber air hose (C) and the top metal pipe (D) and 2 x M8 bolts (U) - Fig 2 and Fig 3



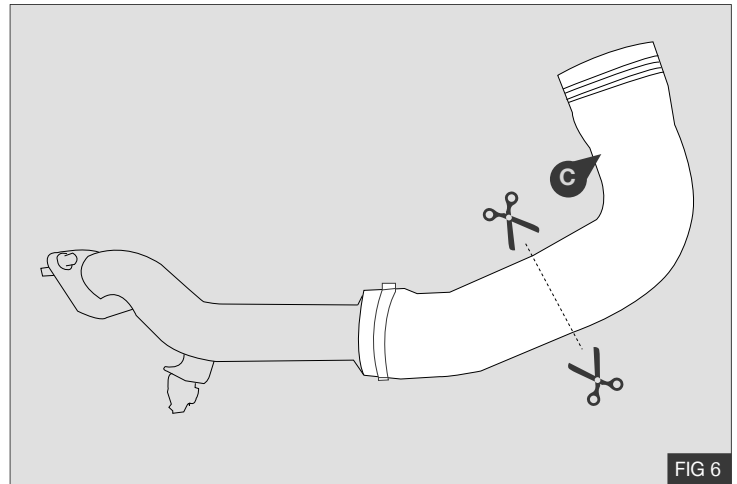
4. Remove OE bolt (E) that secures the metal air pipe (F) to the chassis - Fig 4



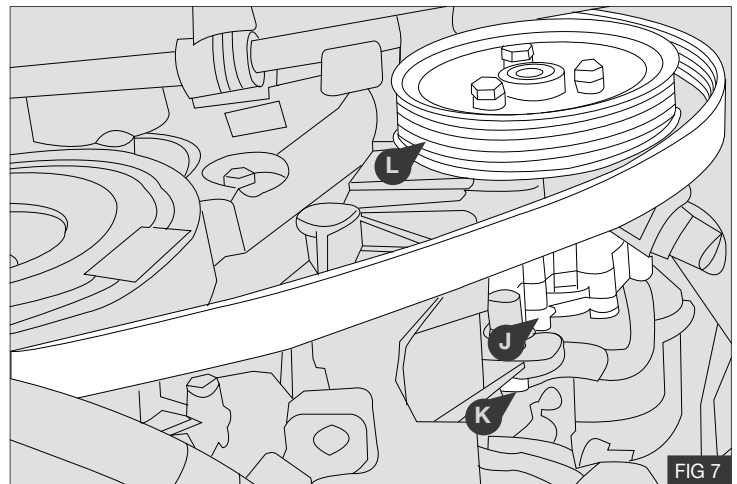
5. Remove the support bracket ③ for the pipe ⑤ off the chassis stud ④ - Fig 5



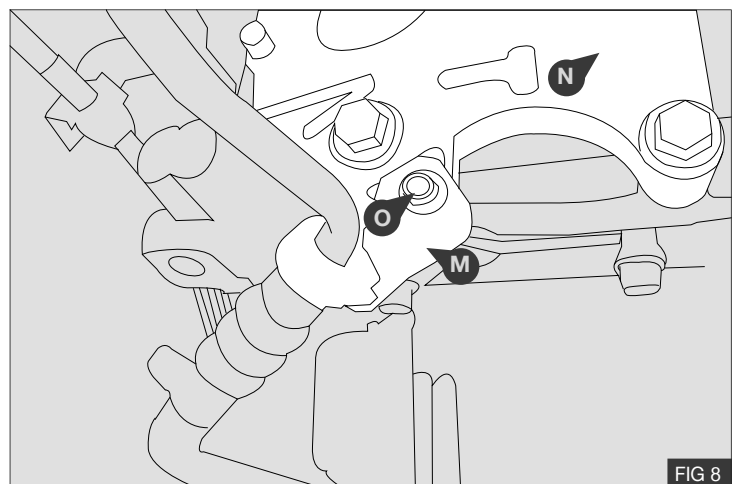
6. Cut the rubber hose ① on the line indicated in the image - Fig 6



7. Remove the OE belt and the PAS pump ②. Retain the OE M8 socket head bolts ⑥ and washers for use later. Remove the PAS rotor ④ from the PAS pump ②. Retain the OE bolts for use later - Fig 7



8. Remove the PAS pipe support bracket ⑦ from the OE mount bracket ⑧ and retain the M6 bolt and washer ⑨ for use later - Fig 8



9. Remove the OE mount bracket (N) and retain 3 of the 5 OE M10 x 45 bolts (P) for use later - Fig 9
10. Remove the sliding bush (Q) from the OE mount bracket (N) for use later - Fig 9

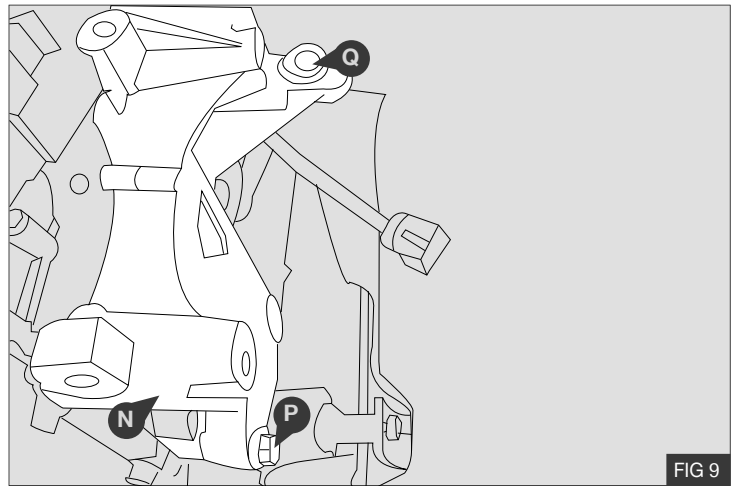


FIG 9

MOUNT BRACKET INSTALLATION

1. Mount the idler (2) onto the mount bracket Torque M10 x 30 bolt - 58 Nm / 42.7 lb.ft
2. Install the sliding bush (Q) into the mount bracket (1) - Fig 10

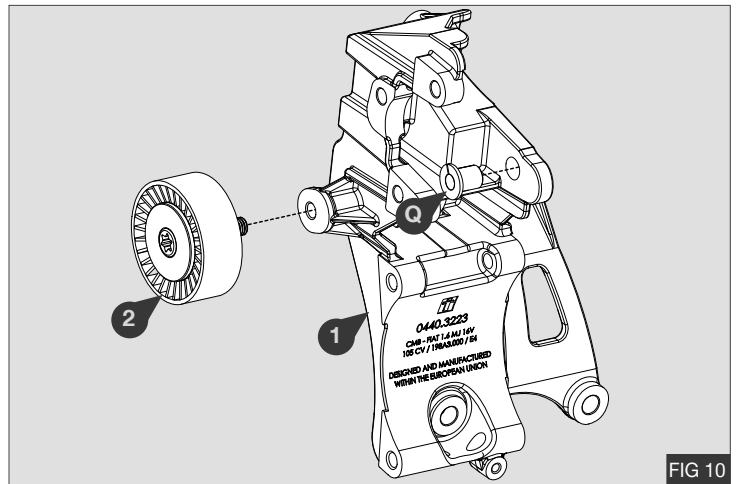


FIG 10

3. Install the mount bracket (1) to the engine block using three OE M10 bolts (P), and two M10 x 35 flange bolts (5) and (5a) - Fig 11

Torque bolts OE M10 x45 bolts (P) 58 Nm / 42.7 lb.ft and M10 x 35 bolt (5) and (5a) 58 Nm / 42.7 lb.ft - Fig 11

4. Now loosen the M10 x 35 flange bolt (5a) and temporarily remove to allow access - Fig 11

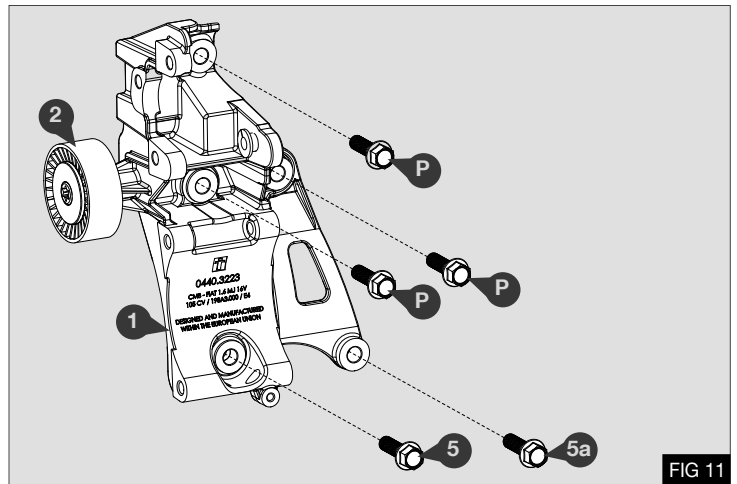


FIG 11

COMPRESSOR INSTALLATION

1. Mount the compressor to the bracket (1) using four M10 x 30 set screws (4) - Fig 12

Note: It is advisable to do the back top set screw from the top side of the engine.

2. Replace the M10 x 35 flange bolt and washer (5a) back into the mount hole that it was removed from.

Torque the bolts M10 x 30 set screw (4) 58 Nm / 42.7 lb.ft and M10 x 35 bolt (5a) 58 Nm / 42.7 lb.ft - Fig 12

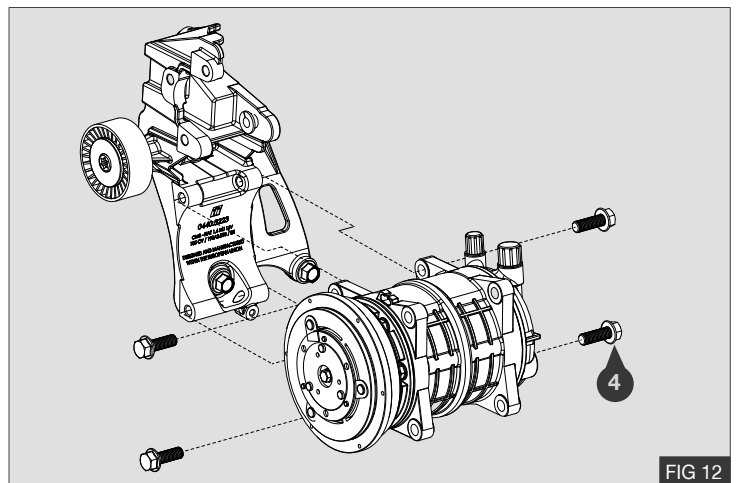


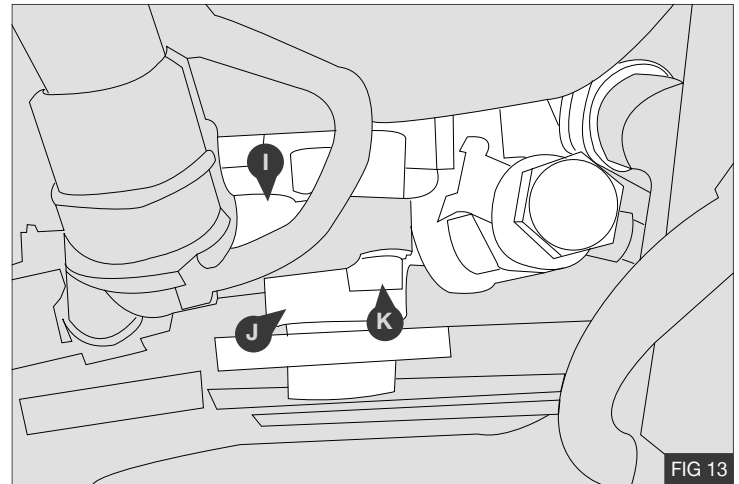
FIG 12

PAS INSTALLATION

1. Secure the PAS pump **J**, minus the rotor, to the mount bracket **I** using the OE M8 socket head bolts **K** and washers - Fig 13

Note: It is easier to put the PAS pump **J** into position from the top side of the engine.

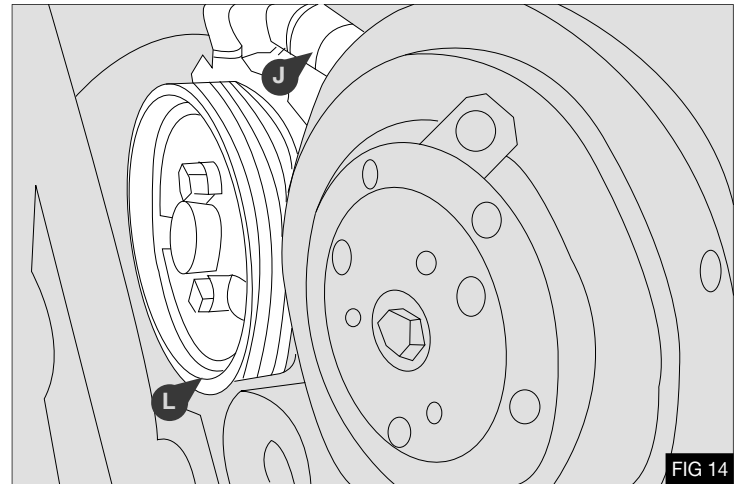
Torque OE M8 socket head bolts **K** to 29 Nm / 21.4 lb.ft - Fig 13



2. Re-install the PAS pump rotor **L** to the PAS pump **J** using the OE bolts - Fig 14

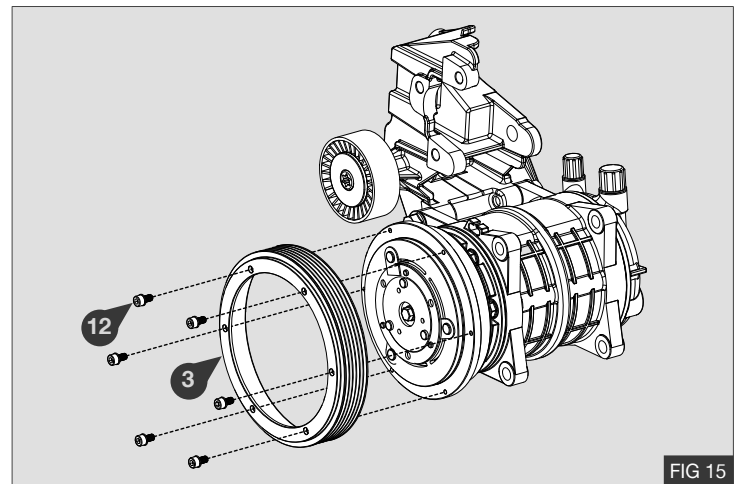
Torque the OE bolts to 29 Nm / 21.4 lb.ft - Fig 14

Warning : Check PAS pump rotor **L** is fitted correctly, it is possible to fit the wrong way round



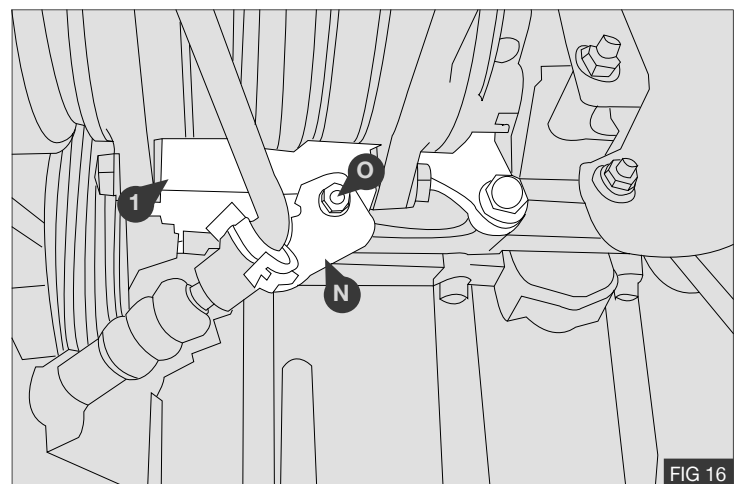
CLUTCH ROTOR INSTALLATION

1. Install the compressor rotor **3** to the compressor using six M5 socket head set screws **12** and spring washers **13** - Fig 15
2. Torque M5 socket head set screws **12** to 7.1 Nm / 5.24 lb.ft - Fig 15

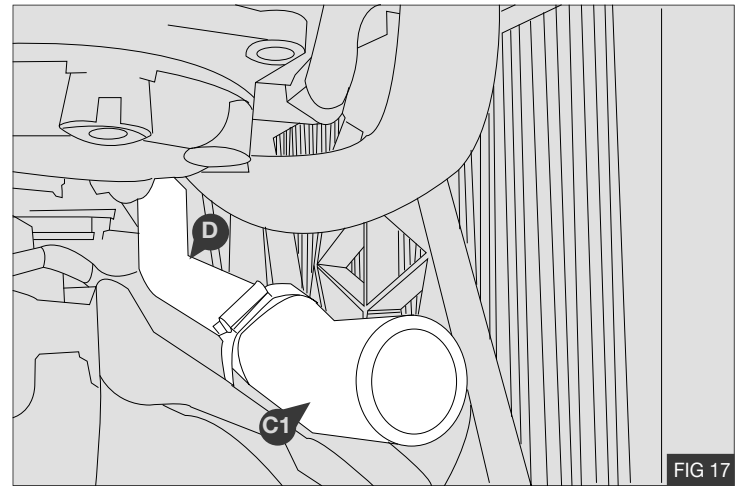


3. Secure the PAS pipe support bracket **N** to the main mount bracket **I** using the OE M6 bolt and washer **O** - Fig 16

Torque OE M6 bolt **O** to 12 Nm / 8.85 lb.ft - Fig 16

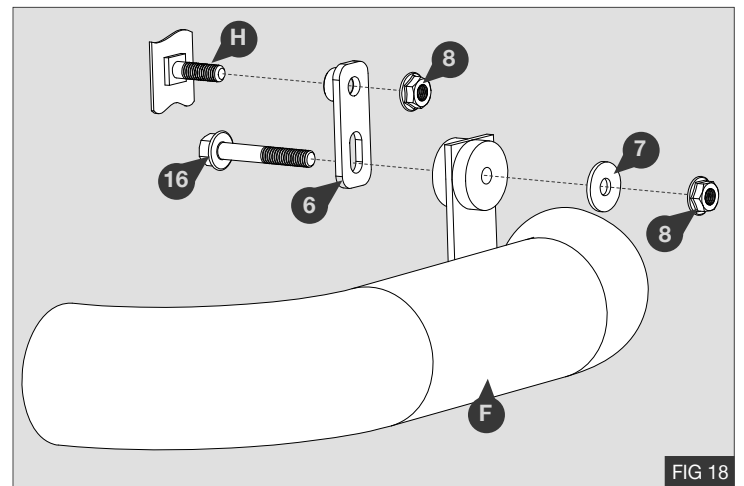


4. Re-fit hose assembly (D) - Fig 17



5. Secure the lower metal air pipe (F) to the air pipe support bracket (6) using one M6 x 30 bolt (16) going through the air pipe (F) support bracket and being secured in place with one M6 nut (8) onto one M6 flat washer 25mm (7) - Fig 18

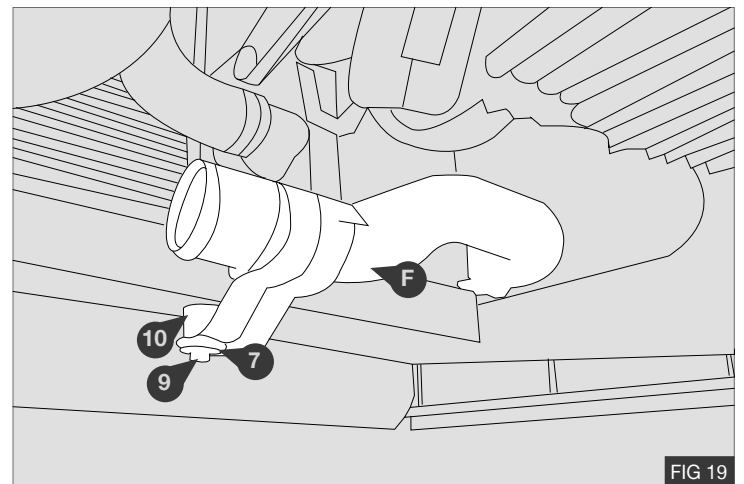
6. Secure the air pipe support bracket (6) to the chassis stud (H) using an M6 nut (8) - Fig 18.



Note: Do not torque nuts at this time.

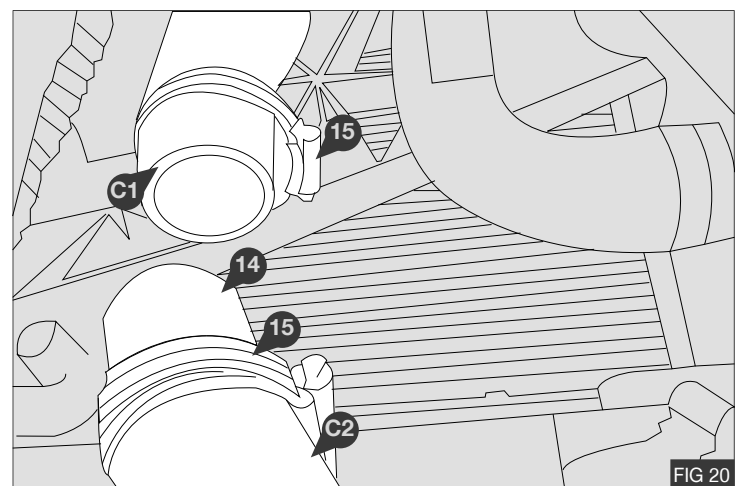
7. Secure the lower metal air pipe (F) to the chassis using one M6 x 40 bolt (9) going through the air pipe spacer (10) - Fig 19

Torque the M6 x 40 bolt (9) and M6 x 30 bolts (16) to 12 Nm / 8.85 lb.ft.

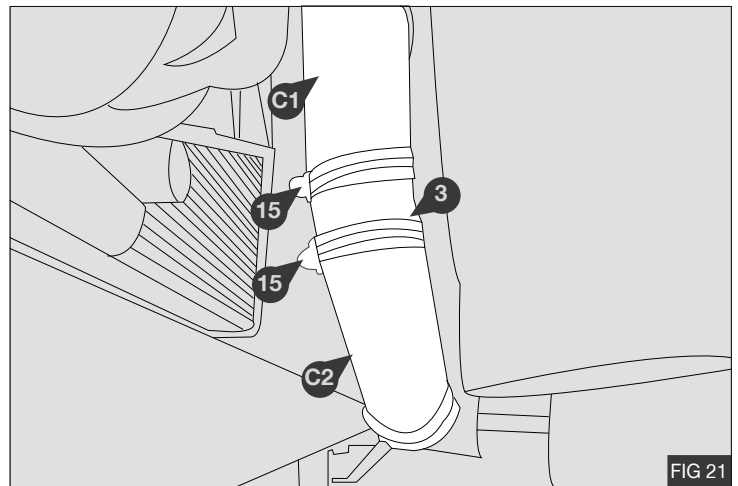


8. Secure the Air hose connector (14) to the bottom half of the cut rubber air hose (C2) using one 40-60mm pipe clip (15) - Fig 20

9. Place one 40-60mm pipe clip (15) to top half of the hose assembly (C1) - Fig 20

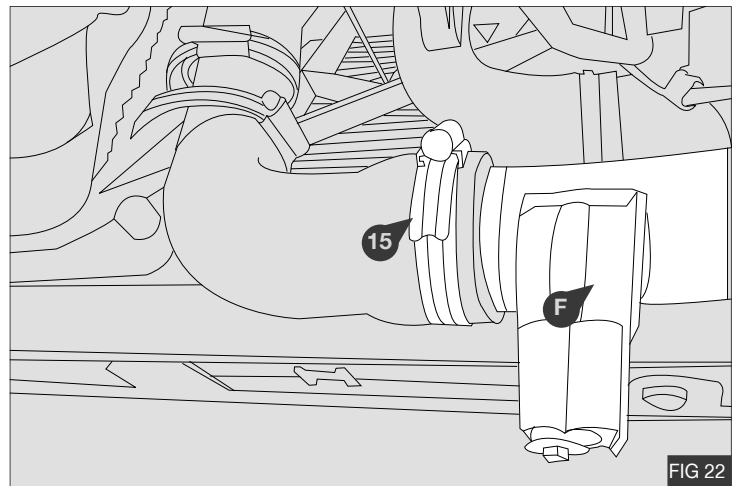


10. Fit the bottom half of the cut hose (C2) to the top half of the cut hose (C1) leaving a gap between (C1) & (C2) to allow for the whole hose assembly to be extended - Fig 21
11. Secure both halves together with the top 40-60mm pipe clip (15) - Fig 21

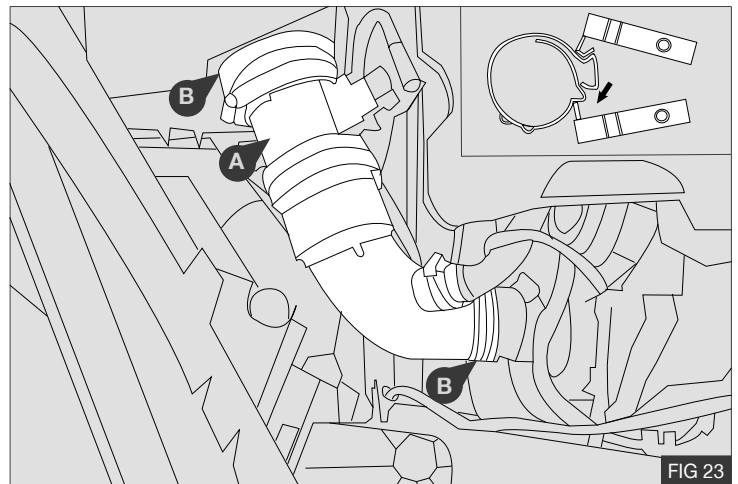


12. Secure the newly assembled air hose to the lower metal air pipe (F) using one 40-60mm pipe clip (15) - Fig 22

Note: Pipe clip (15) torque cap is designed to break off at the correct torque to allow for the expansion and contraction of the spring.



13. Re-fit the turbo hose (A) using the original clic - R® pipe clips (B) - Fig 23



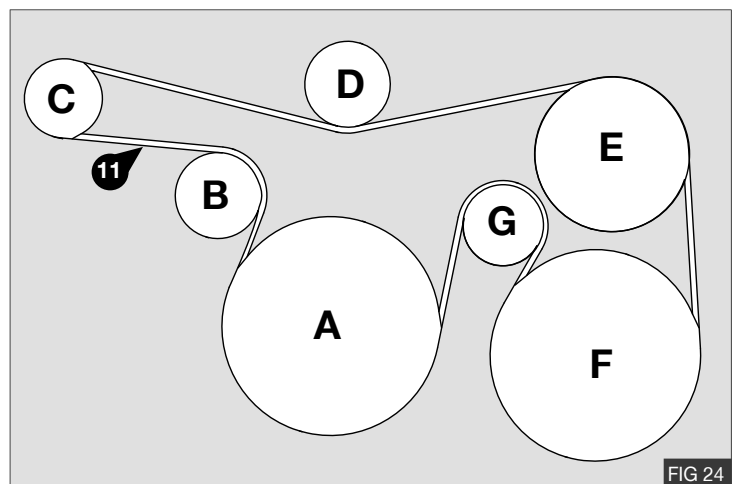
DRIVE BELT

Fit the belt provided (11) as shown in the diagram - Fig 24

- A. Crank Pulley
- B. Automatic Tensioner
- C. Alternator
- D. Idle Pulley
- E. PAS Pump
- F. Compressor
- G. Idle Pulley

FINISH

1. Run the engine with the compressor clutch engaged for five minutes, check all components and fit belt label.



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Sundorne Trade Park, Henley Way,
Shrewsbury, United Kingdom, SY1 4NS
Telephone (+44) (0) 1743 443176
Fax (+44) (0) 1743 443113
Email: sales@techni.co.uk