



Techni
ENGINEERING SOLUTIONS

MERCEDES NEW VITO 1.6
109 CDI (88 HP)/ 111 CDI (114 HP)

CODE / CODICE: 0500.7892

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

SELTEC: TM13 / 15

QUE: QP13 / 15

SANDEN: SD5H14 / SD7H15

FITTING INSTRUCTIONS

EINBAUANLEITUNGEN

INSTRUCTIONS POUR LE MONTAGE

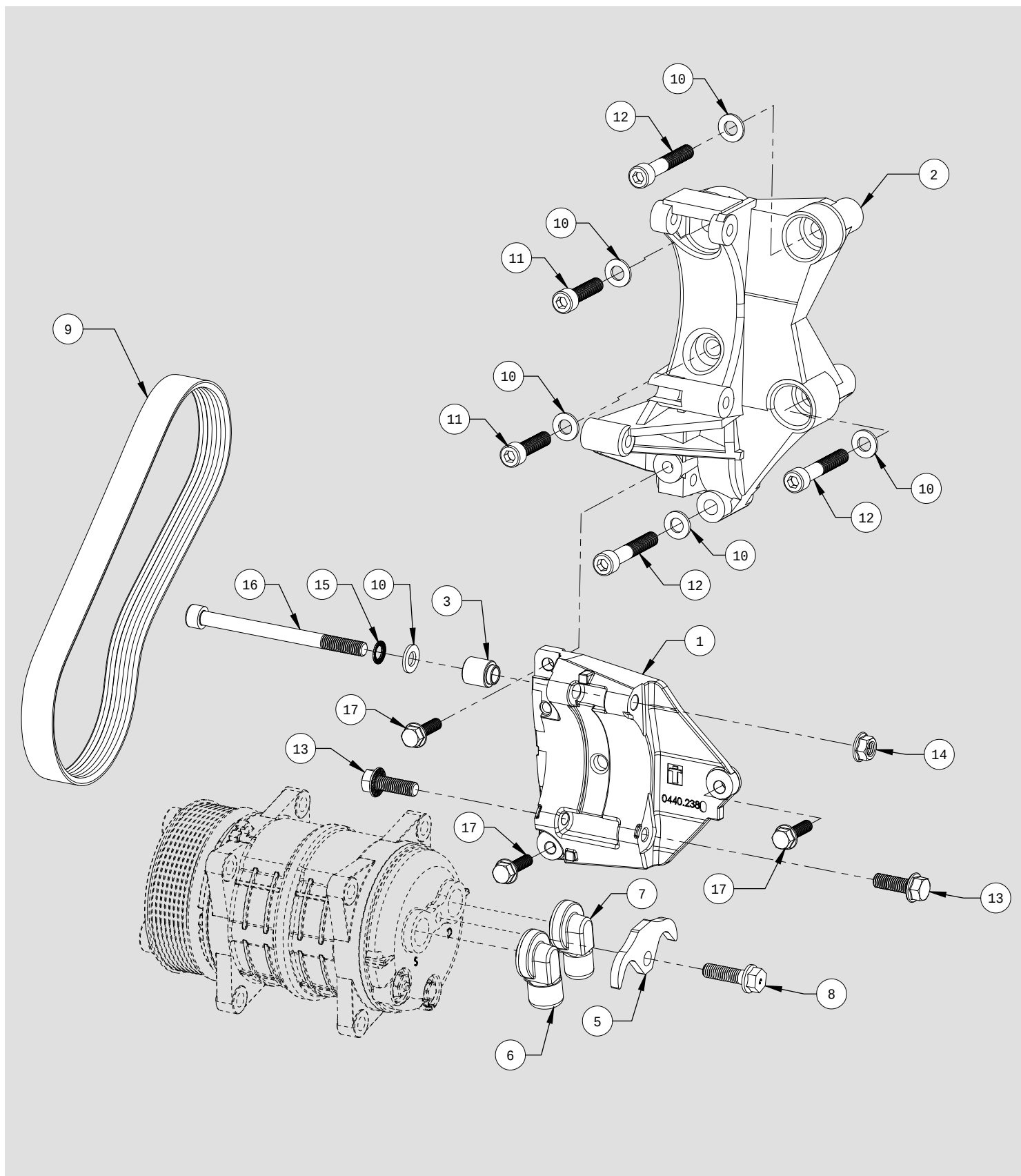
ISTRUZIONI DI MONTAGGIO

INSTRUCCIONES DE MONTAJE

Contents

ENGLISH	4
Parts View.....	4
Parts List	5
Compressor Configurations	6
Standard Fastener Torque Values	6
Kit Details	7
Vehicle Details	7
Forward	7
Pre Installation.....	8
Installation	10
Compressor Installation.....	12
Post Installation.....	13

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	0440.2385	Compressor Mount Bracket Vito 1.6	1	
2	0440.5541	OEM Alternator mount bracket (+AC)	1	
3	2803.6121	Compressor Spacer	1	
4	0425.0621	Manifold- Swivel Type D -3/4x7/8	1	
5	3020.6141	Manifold pipe clamp C	1	
6	0426.5032	Compressor Fitting - Suction 7/8 -14 Type B	1	
7	0426.5042	Compressor Fitting - Discharge 3/4 -16- Type B	1	
8	2705.5301	Hex Flange Bolt -M10 x 35 : 1.50 -8.8	1	
9	0820.7551	Belt - Poly Groove 7PK 1715	1	
10	2809.0011	Washer M10 Flat DIN 125 - A 10.5	6	
11	2705.5121	Socket cap screw M10 x 40 : 1.50 - 12.9	2	
12	2705.5051	Hex socket head cap screw M10 x 60 : 1.50 - 12.9	3	
13	2705.0491	Hex flange bolt Durlok - M10 x 30 : 1.50 - 12.9	2	
14	2735.0071	Durlok Hexagon Flange Nut - M10 : 1.50	1	
15	2809.0101	M10 Schnorr safety washer type 'S'	1	
16	2705.0301	Hex socket head cap screw M10 x 130 : 1.50 - 12.9	1	
17	2704.0091	Hex flange bolt Durlok - M8 x 30 : 1.25 - 12.9	3	

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

SELTEC	TM-13 HS	TM-15 HS	-
Comp No.	0381.0152	0381.0802	-
Seltec No.	10354320	10355320	-
Mounting	Ear	Ear	-
Rotor	8PV	8PV	-
GL	46.55mm	46.55mm	-
Armature	SL	SL	-
Diameter	123	123	-
Voltage	24	24	-
Orientation	V	V	-
Fitting	3/4 x 7/8	3/4 x 7/8	-
Manifold	Bolt	Bolt	-

QUE	QP-13 HS	QP-15 HS	-
Comp No.	0391.0152	0391.0802	-
Que No.	QP13-1235	QP15-1761	-
Mounting	Ear	Ear	-
Rotor	8PV	8PV	-
GL	46.55mm	46.55mm	-
Armature	SL	SL	-
Diameter	123	123	-
Voltage	12	12	-
Orientation	V	V	-
Fitting	3/4 x 7/8	3/4 x 7/8	-
Manifold	Bolt	Bolt	-

SANDEN	-	SD5H14	SD7H15
Comp No	-	0370.0051	0370.0061
Sanden No.	-	6629	8103
Mounting	-	Ear	Ear
Rotor	-	7PV	8PV
GL	-	46.55	46.55
Armature	-	SL	SL
Diameter	-	119	119
Voltage	-	12	12
Orientation	-	V	V
Fitting	-	3/4 x 7/8	3/4 x 7/8

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.

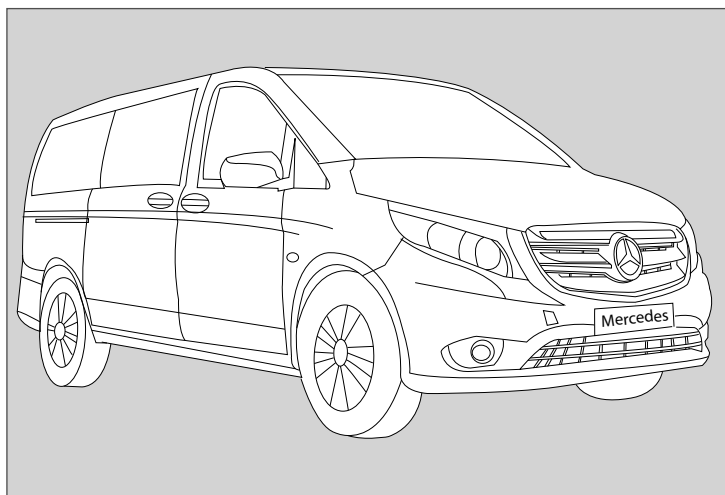
VALORI STANDARD DI SERRAGGIO PER DISPOSITIVI DI FISSAGGIO

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	Mercedes
Make	New Vito
Model Type	109 CDI (88 hp)/ 111 CDI (114 hp)
Engine	CDI eng OM 622 DE16LA - 65 / 84 kW
Engine Details	Euro 5b+ , Gr.III
Year	11.2014>
Chassis Type.	FWD
LHD	YES
RHD	YES
PAS	YES
A/C	No
Voltage	12v

KIT DETAILS

Kit Part Number	0500.7892
Description	Standard
Compressor RPM	4820 @ Max engine power output
Fitting Time	90 Minutes
Suction Fitting	90°
Discharge Fitting	90°
Belt Type	7PK 1715
Belt Part Number	0820.7551

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.

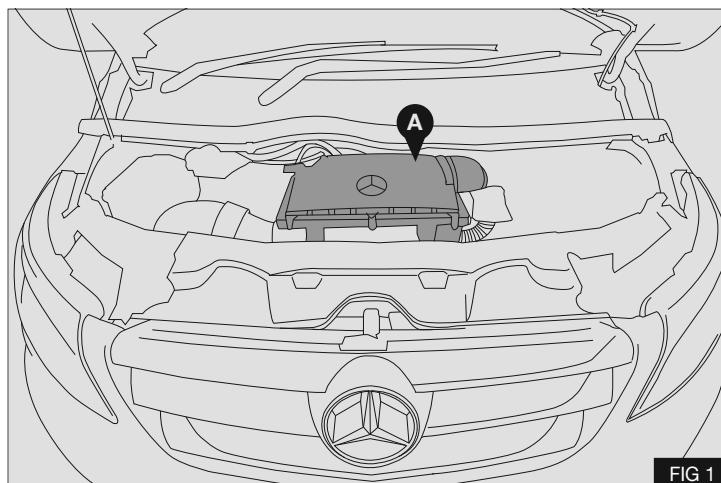
NB: This calls awareness to make the job easier or gives useful information.

PRE-INSTALLATION

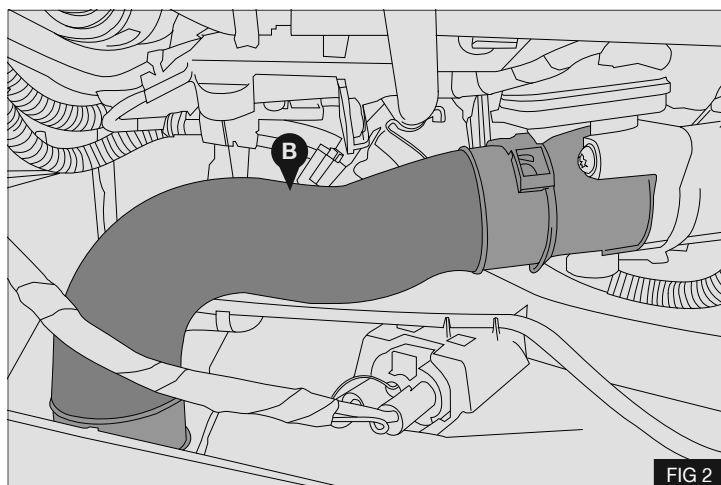
N.B Prior to commencing work, please examine the instructions with care. The alphabetical symbols on the diagram relate to written instructions, numerical symbols relate to the parts listing.

Removal of parts:

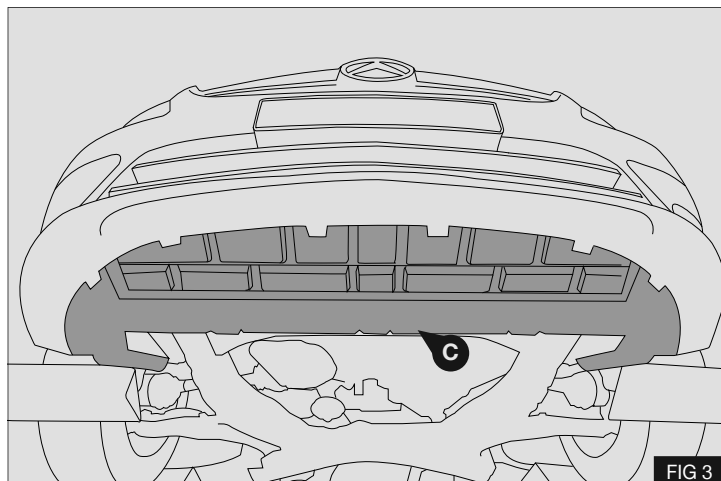
1. Disconnect the battery negative cable.
2. Remove air filter box- complete (A) - Fig 1



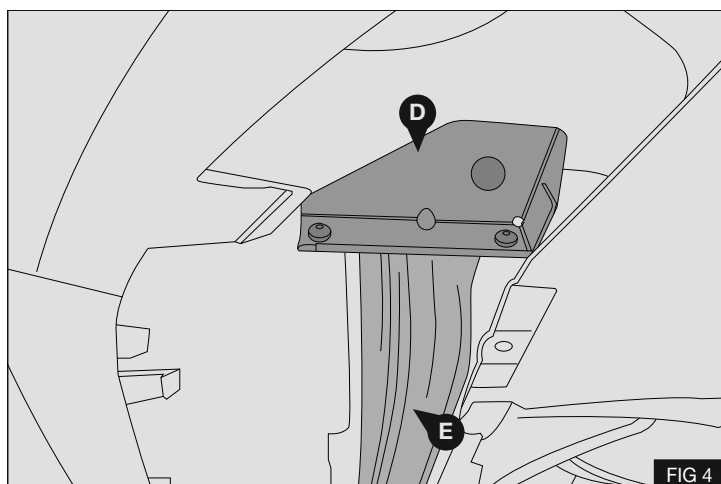
3. Remove intercooler hose (B) - Fig 2



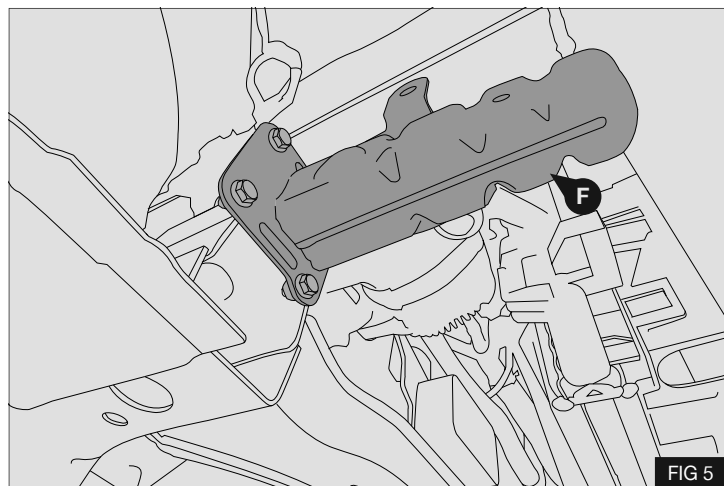
4. Remove lower panel (C) - Fig 3



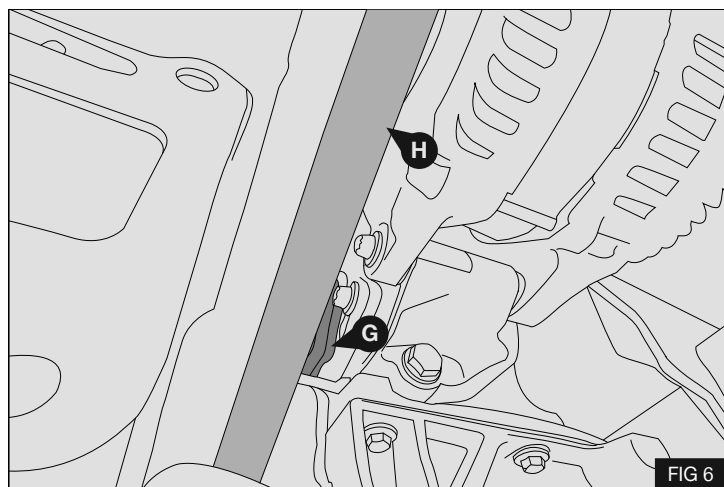
5. Remove washer bottle lower support (D) - Fig 4
6. Remove cross member (E) - Fig 4



7. Remove radiator lower mount (F) - Fig 5

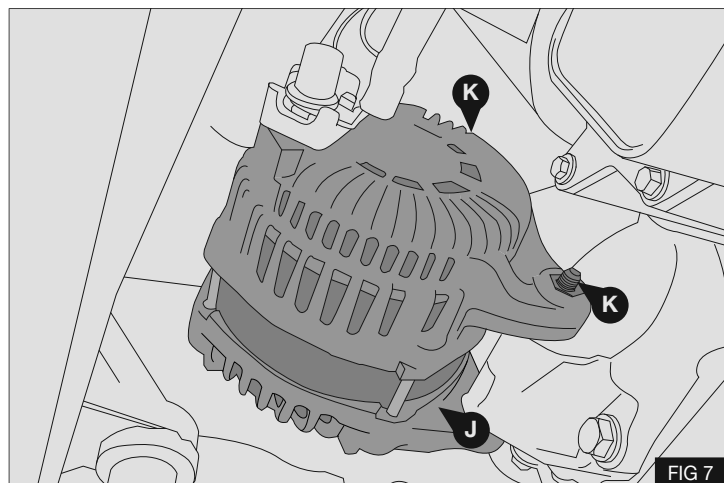


8. Release tension on automatic belt tensioner (G) and lock using a Ø4mm pin. - Fig 6
9. Remove and discard original drive belt (H) - Fig 6

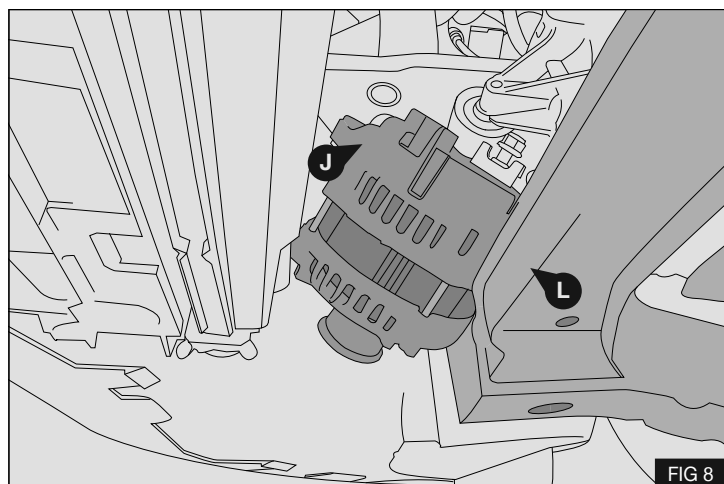


10. Disconnect wiring harness from the alternator (J) - Fig 7

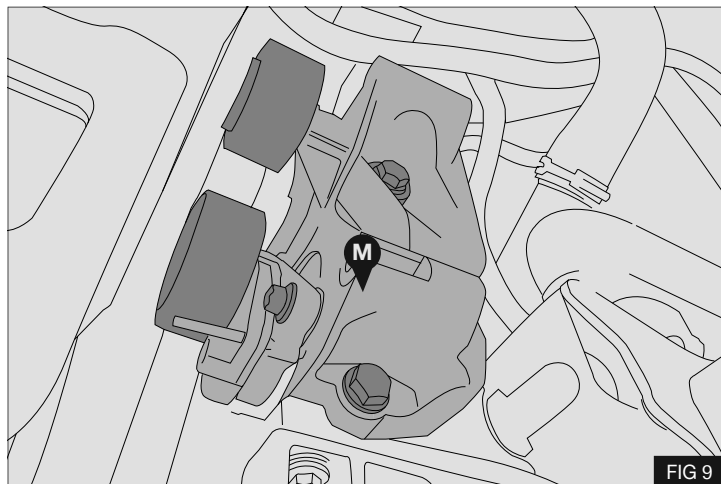
11. Remove bolts (K) securing the alternator (J) retain bolts (K), Remove alternator (J) - Fig 7



Caution: Carefully remove the alternator (J) between the radiator and the front sub-frame (L) - Fig 8

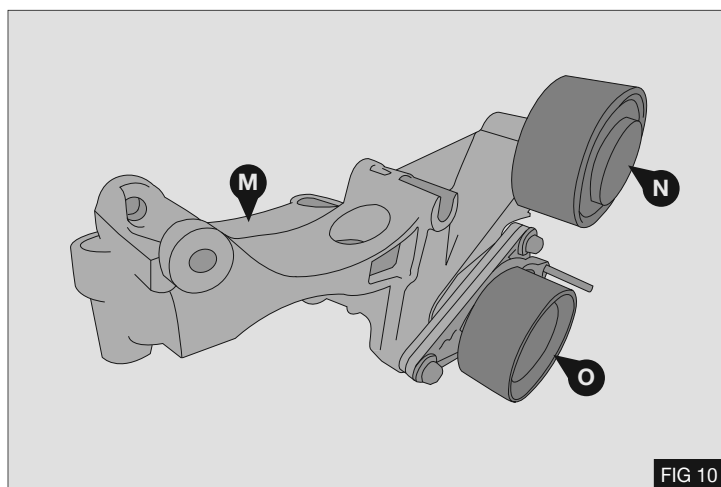


12. Remove the original alternator mounting bracket (M) complete with idle pulley and automatic tensioner. Discard fasteners.
- Fig 9



INSTALLATION

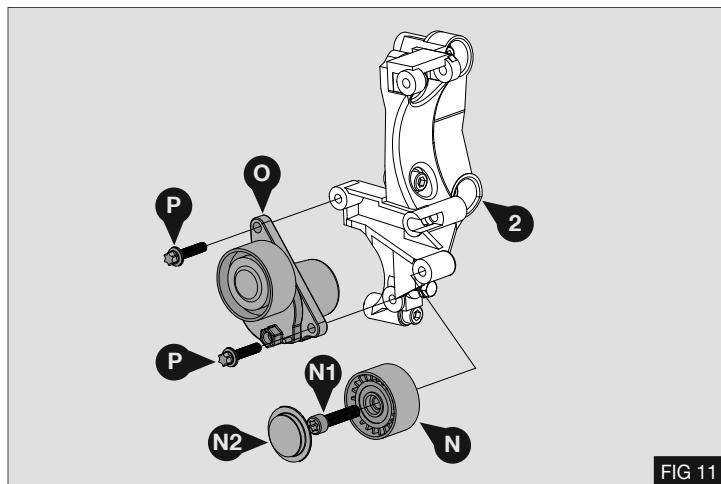
1. Remove the idler pulley (N) and tensioner (O) from the original alternator mount (M) (retain fasteners and pulley cap) - Fig 10



2. Assemble the tensioner (O) onto the supplied alternator mount bracket (2) using the original bolts (P), fit the idle pulley (N) to bracket (2) using the original bolt (N1) and dust cap (N2) - Fig 11

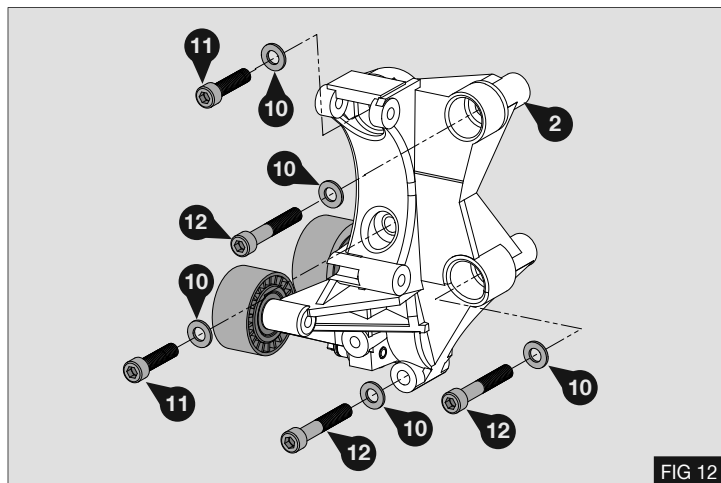
Torque bolts (P) to 23Nm / 17Lbft

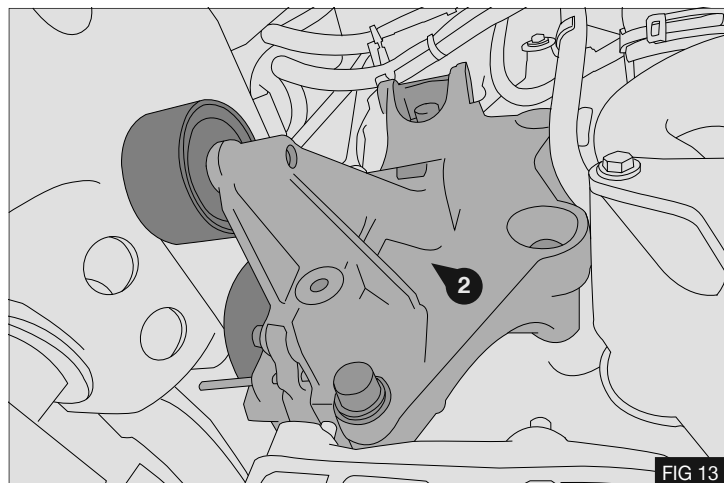
Torque bolt (N1) to 50Nm / 37Lbft



3. Install bracket assembly (2) to the engine and secure using 3x M10x60 cap head bolts (12) with washers (10) and 2x M10x40 cap head bolts (11) with washers (10) - Figs 12 & 13

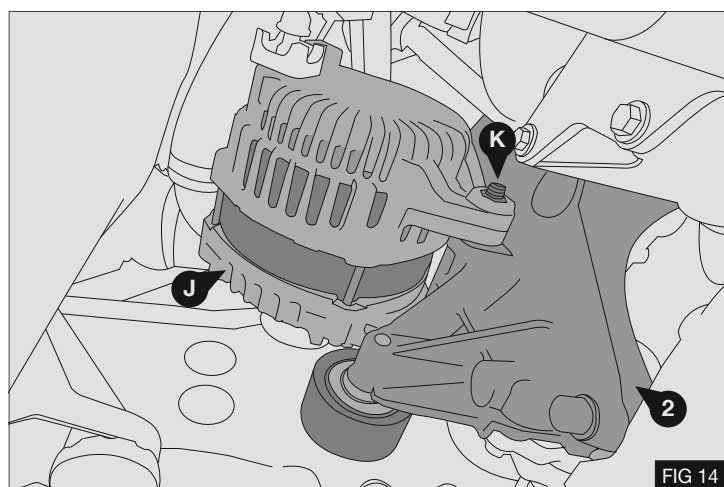
Torque bolts (11) and (12) to 63Nm / 46Lbft





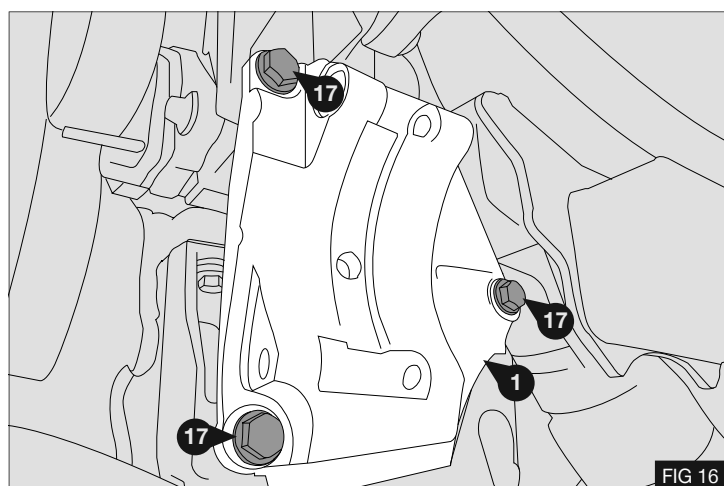
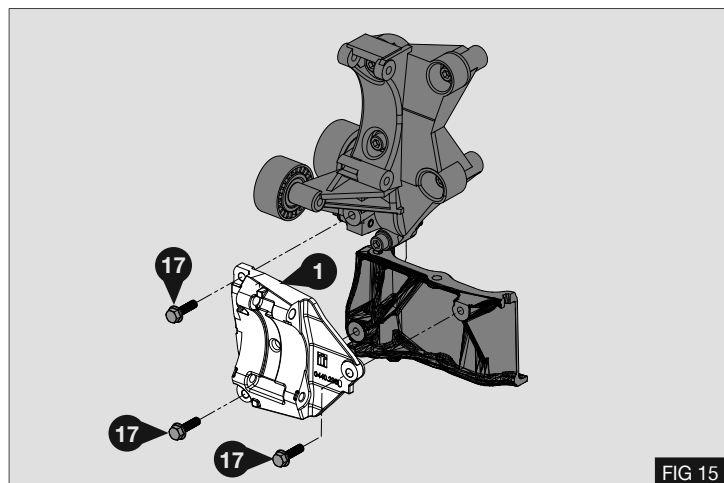
4. Fit the alternator (J) to the bracket (2) and secure using the original bolts (K) - Fig 14

Torque bolts (K) to 23Nm / 17Lbft



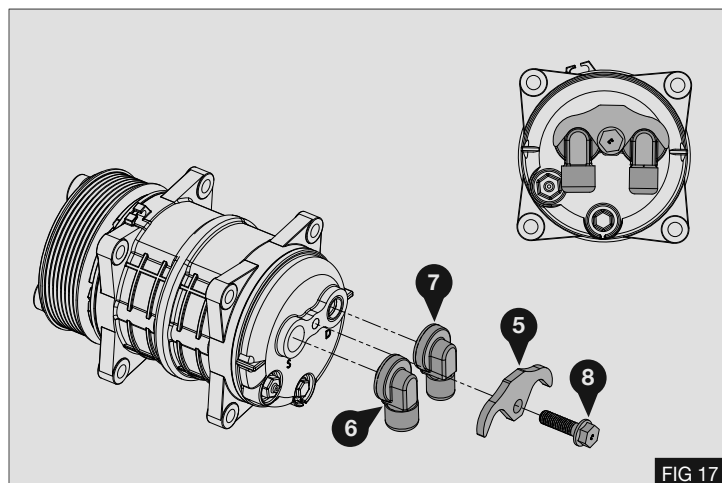
5. Fit the compressor mount bracket (1) using 3x M8x30 bolts (17) - Fig 15 & 16

Torque bolts (17) to 29Nm / 21.4Lbft

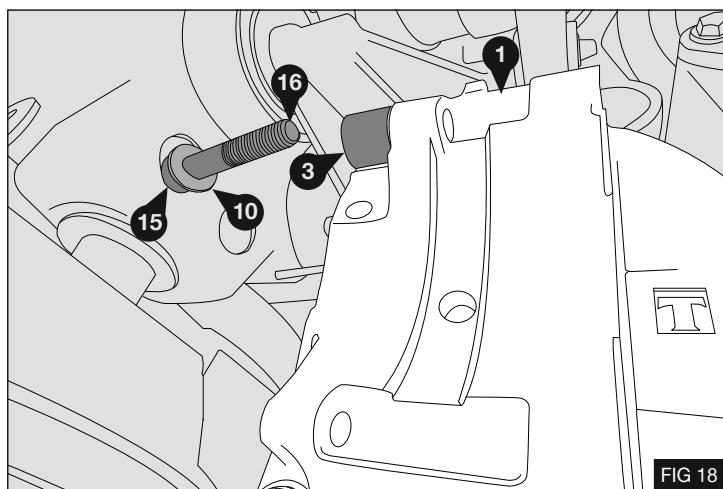


6. Fit the supplied compressor manifold fittings (6) and (7) to using clamp (5) and M10x35 Bolt (8) - Fig17

Torque bolt (8) to 45Nm / 33Lbft



7. Position M10x130 cap head bolt (16) with washers (15) and (10) into chassis as shown.
8. Install spacer (3) into mount bracket (1) - Fig 18



COMPRESSOR INSTALLATION

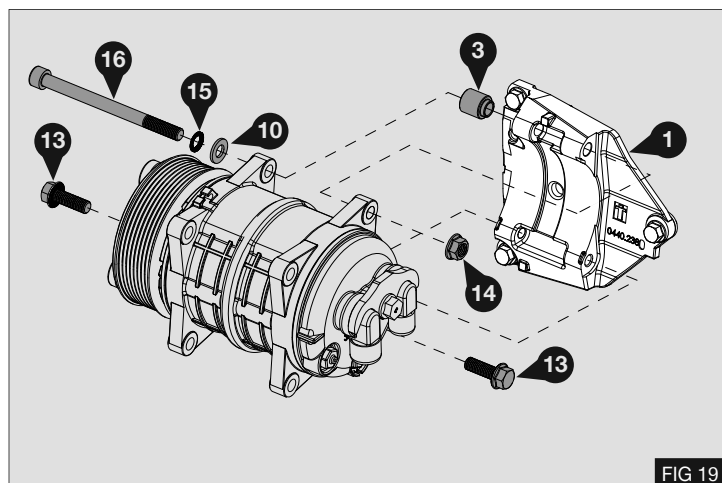
1. Install compressor to bracket (1) insert the bolt (16) with washers (15), (10) through the compressor and into the bracket, install M10 nut (14).

Note: Take care not to disturb the location of spacer (3)

2. Secure the compressor lower lugs to the bracket using 2x M10x30 bolts (13) - Fig 19

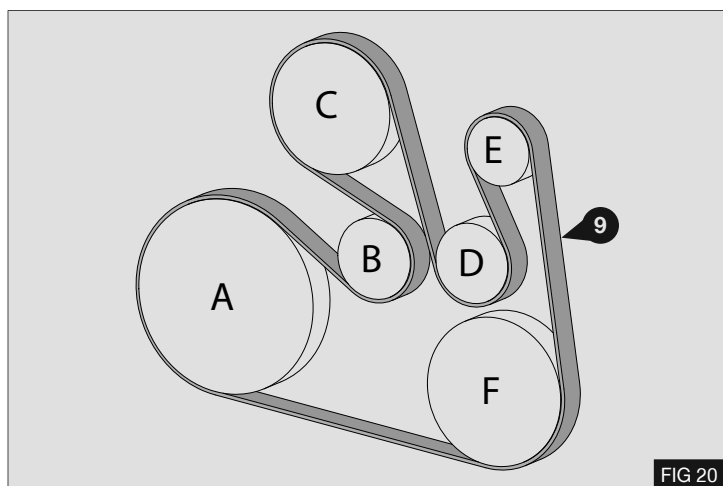
Torque bolts (13) to 58Nm / 43Lbft

Torque bolt (16) to 63Nm / 46Lbft



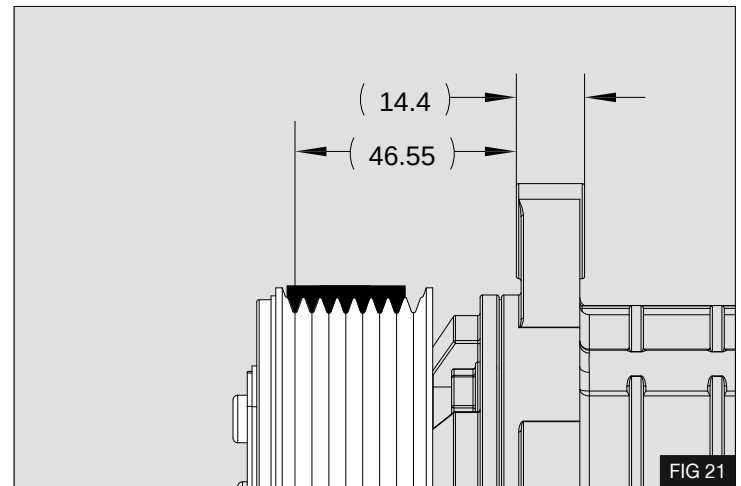
3. Install the supplied drive belt (9), Ensure correct location in compressor clutch and release automatic tensioner.
- Figs 20 & 21

- A. Crankshaft pulley
- B. Tensioner
- C. Water pump
- D. Idler
- E. Alternator
- F. Compressor



4. Que / Seltec / Sanden

Compressor belt is installed to the front grooves.

5. Install refrigerant hoses.**POST INSTALLATION****1. Re- fit all parts previously removed.:**

- Radiator lower mount (F)
- Cross member (E)
- Washer bottle lower support (D)
- Lower panel (C)
- Intercooler hose (B)
- Air filter box- complete (A)

2. 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.

(EN)

Techni focuses on constant upgrading of its products. The Manufacturer reserves the right to modify the models and components described in the present publication at any time for technical or commercial reasons and without prior notice. For further information, contact Techni technical services.

(DE)

Techni ist stets bestrebt die eigenen Produkte zu verbessern. Die Herstellerfirma behält sich das Recht vor, aus technischen oder Verkaufsgründen, zu jeder Zeit und ohne vorherige Ankündigung, Abänderungen an den Modellen und den in dieser Veröffentlichung beschriebenen Einbauteile vorzunehmen. Für weitere Informationen bitten wir Sie, sich an unseren Techni Kundendienst zu wenden.

(FR)

Techni vise à une amélioration constante des ces produits. La maison se réserve le droit d'apporter, à tout moment et sans préavis, des modifications aux modèles et aux composants décrits dans cette publication pour des raisons d'ordre technique ou commerciale. Pour d'ultérieures informations s'adresser au service d'assistance Techni.

(IT)

Techni mira ad un costante miglioramento dei propri prodotti. La Casa si riserva il diritto di apportare in qualunque momento e senza preavviso modifiche ai modelli e ai componenti descritti in questa pubblicazione per ragioni di natura tecnica o commerciale. Per ulteriori informazioni rivolgersi al servizio assistenza Techni.

(ES)

Techni aspira a un constante mejoramiento de su producción. La Fábrica se reserva el derecho de aportar en cualquier momento y sin preaviso modificaciones a los modelos y los componentes descritos en esta publicación por razones técnicas o comerciales. Para ulteriores informaciones dirigirse al servicio asistencia Techni.

VENDITA E SERVIZIO
VENTE ET SERVICE

SALES AND SERVICE
VERKAUF UND SERVICE



Techni
ENGINEERING SOLUTIONS

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