



Techni
ENGINEERING SOLUTIONS

IVECO DAILY 3.0L EURO 5 / EEV

35S 17, 35C 15/17, 40C 15/17

50C 15/17, 65C 15/17, 70C 15/17

CODE / CODICE: 0500.7122

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

VALEO : TM13 /15 / 16

QUE : QP13 /15 / 16

SANDEN : SD7H15

DELPHI SP15

FITTING INSTRUCTIONS

EINBAUANLEITUNGEN

INSTRUCTIONS POUR LE MONTAGE

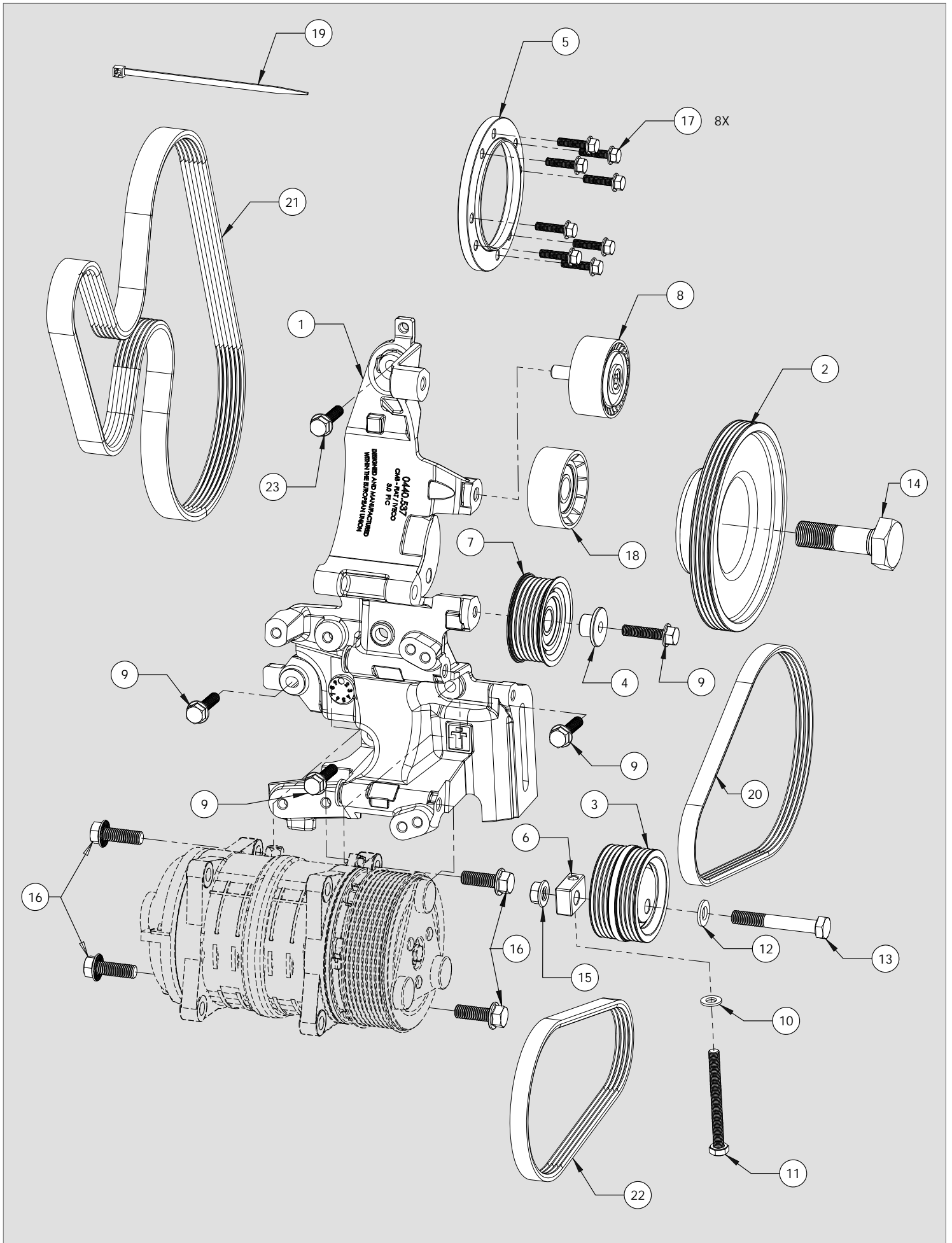
ISTRUZIONI DI MONTAGGIO

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	0441.5371	Compressor mount bracket - Iveco 3.0L F1C	1	-
2	1701.5261	Crank shaft drive pulley Ø160 - Iveco Daily 3.0L F1C	1	-
3	1700.5241	Twin 4PK pulley assembly Ø 71.5mm	1	-
4	2803.5611	Spacer ID 8.3 OD 16.8 L 14.5	1	-
5	2803.5731	Fan spacer Iveco 3.0l F1C	1	-
6	1703.5013	Adjuster block M8 (Typ2)	1	-
7	1700.0541	Idle pulley - 69 x 26.5 6PK	1	-
8	1700.5231	Idler 6PK Ø 60 inc M10 cap bolt	1	-
9	2704.0481	Hex flange bolt Durlok - M8 x 35 : 1.25 - 12.9	4	-
10	2808.0011	Washer M8 Flat DIN 125 - A 8.4	1	-
11	2719.0081	Hex Set Screw - M8 X 80 : 1.25 - 8.8	1	-
12	2809.0011	Washer M10 Flat DIN 125 - A 10.5	1	-
13	2705.5201	Hexagon Head Bolt - M10 x 70 ~ 1.5 : 10.9	1	-
14	2712.0002	Hexagonal Head Bolt - M20 x 66 :1.5 - 12.9	1	-
15	2735.0071	Durlok Hexagon Flange Nut - M10 : 1.50	1	-
16	2705.0491	Hex flange bolt Durlok - M10 x 30 : 1.50 - 12.9	4	-
17	2702.0111	Hex flange bolt Durlok - M6 x 25 : 1.00 - 12.9	8	-
18	1700.0341	Idle Pulley 60.2 X 25.5	1	-
19	2763.0051	Cable Tie 4.8 x 370 - Black	1	-
20	0820.6581	4PK 655	1	-
21	0820.5071	6PK 1320	1	-
22	0820.6561	4PK 560	1	-
23	2704.0091	Hex flange bolt Durlok - M8 x 30 : 1.25 - 12.9	1	-

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

SELTEC	TM-13 HS	TM15-HS	TM16-HS
Comp No	0381.0352	0381.5002	0381.0372
Valeo No.	488-44122	488-45122	488-46122
Mounting	Ear	Ear	Ear
Rotor	8PV	8PV	8PV
Armature	3E	3E	3E
Diameter	123	123	123
Voltage	12	12	12
Orientation	H	H	H
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	0391.0352	0391.5002	0391.0372
Que No.	QP15-1274	QP15-1548	QP16-1197
Mounting	Ear	Ear	Ear
Rotor	8PV	8PV	8PV
Armature	3E	3E	3E
Diameter	123	123	123
Voltage	12	12	12
Orientation	H	H	H
Fitting	3/4 x 7/8	3/4 x 7/8	3/4 x 7/8
Manifold	Bolt	Bolt	Bolt

DELPHI	SD5H09	SD5H14	SD7H15
Comp No.	-	-	0370.0080
Delphi No.	-	-	8256
Mounting	-	-	Ear
Rotor	-	-	8PV
Armature	-	-	SL
Diameter	-	-	123
Voltage	-	-	12
Orientation	-	-	H
Fitting	-	-	3/4 x 7/8

SANDEN	-	SP15	SP20
Comp No	-	0310.0011	-
Sanden No.	-	015201/1	-
Mounting	-	Ear	-
Rotor	-	8PV	-
Armature	-	SL	-
Diameter	-	122.4	-
Voltage	-	12	-
Orientation	-	H	-
Fitting	-	1-14 UNF-2A	-

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.

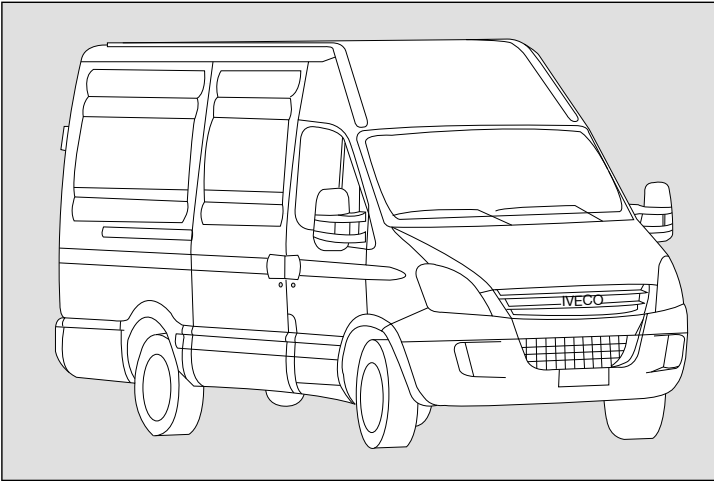
VALORI STANDARD DI SERRAGGIO PER DISPOSITIVI DI FISSAGGIO

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	Iveco
Model	Daily
Engine	35S 17, 35C 15/17, 40C 15/17, 50C 15/17, 65C 15/17, 70C 15/17
Engine Details	3.0L E5 / EEV (146/170PS) WG/VGT/Twin Turbo - Common Rail
Year	2012>
Chassis Nos.	N/A
LHD	YES
RHD	YES
PAS	YES
A/C	YES/NO
Voltage	12v

KIT DETAILS

Kit Part No.	0500.7122
Description	Standard Kit
Compressor	RPM 4700 @ Max Engine Power Output
Fitting Time	240 Minutes
Suction Fitting	90°
Discharge Fitting	90°
Main Drive Belt	6PK 1320
Belt Part No.	0820.5071
Compressor Belt	4PK 560
Belt Part No.	0820.6561
Crank Belt Belt	4PK 655
Belt Part No.	0820.6581
Note	Does not fit 205PS Engines

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 battery negative terminal.
2. Discharge air conditioning system.
3. Remove under panel (A) - Fig 1
4. Remove lower plastic guards (B) from the bumper sides - Fig 1
5. Drain coolant into a suitable container for re-use.
6. Remove front grille (C) and air filter box (D) - Fig 2
7. Remove screws (E) securing trim below headlights - Fig 3
8. Remove front bumper (F) - Fig 3
9. Remove headlights (G) - Fig 3
10. Disconnect bonnet release cable (H) - Fig 4

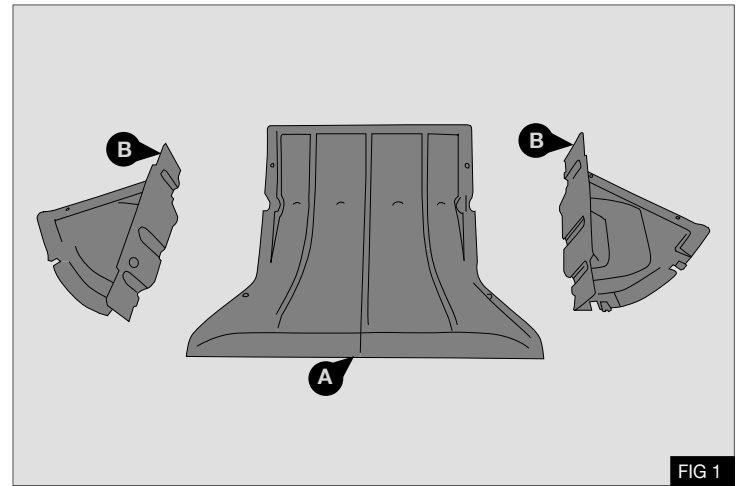


FIG 1

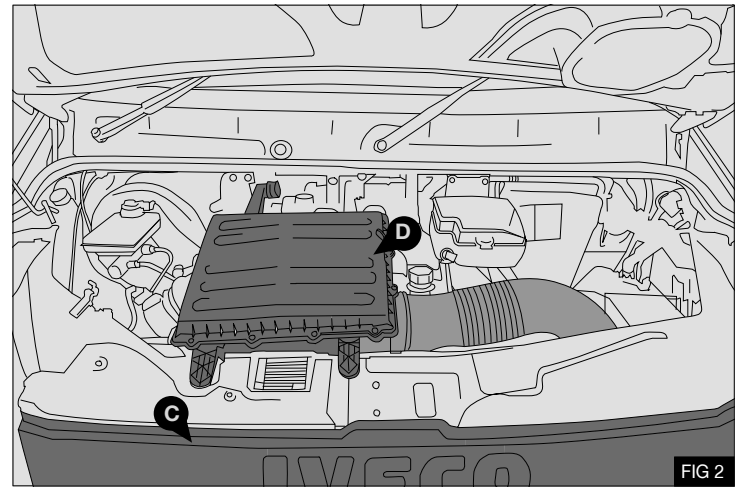


FIG 2

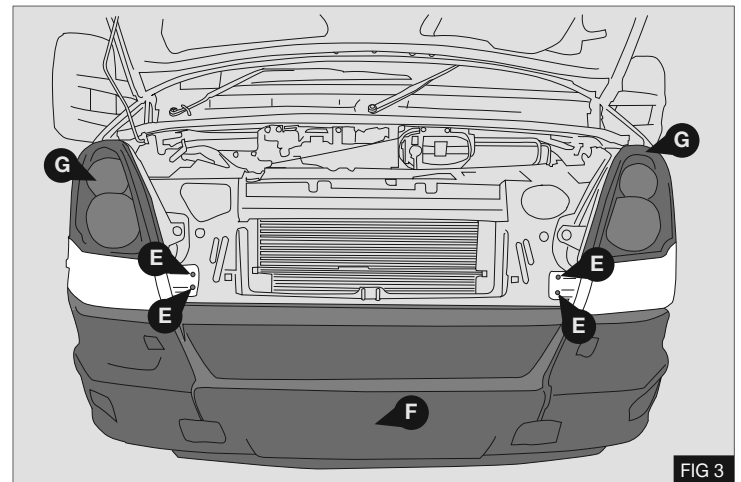
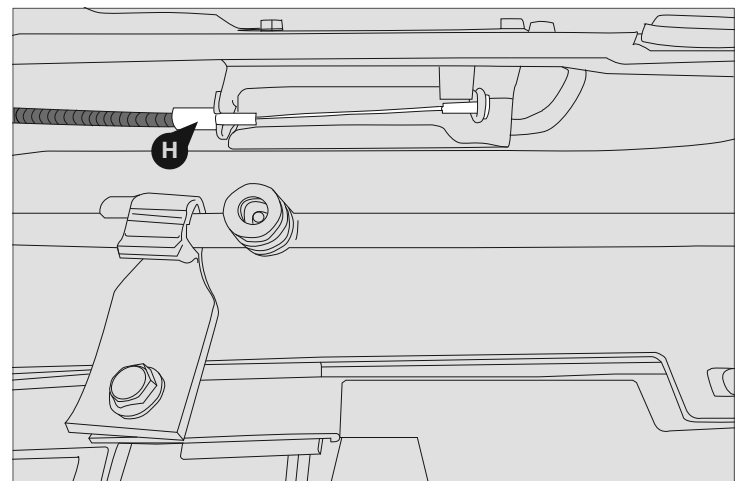
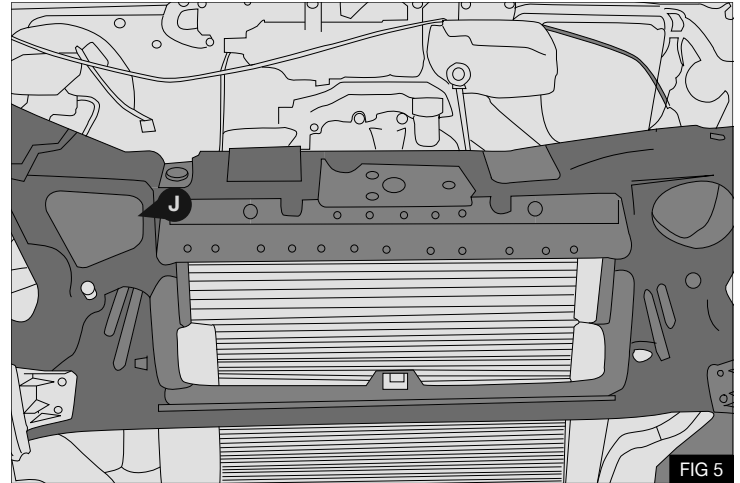


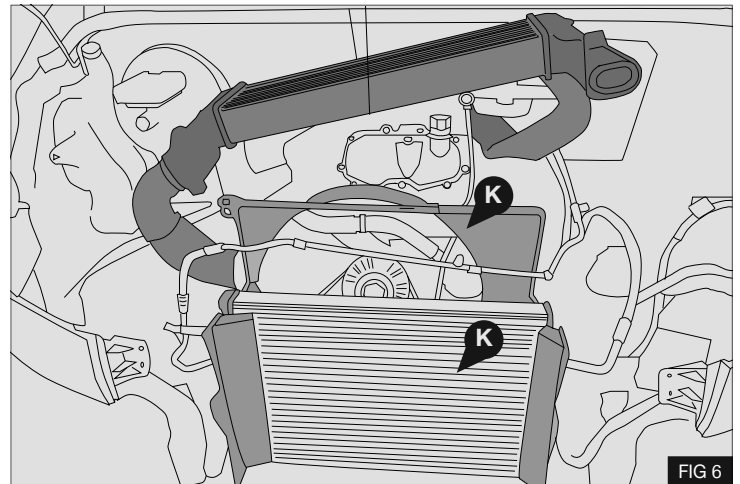
FIG 3



11. Remove the front panel **J** - Fig 5

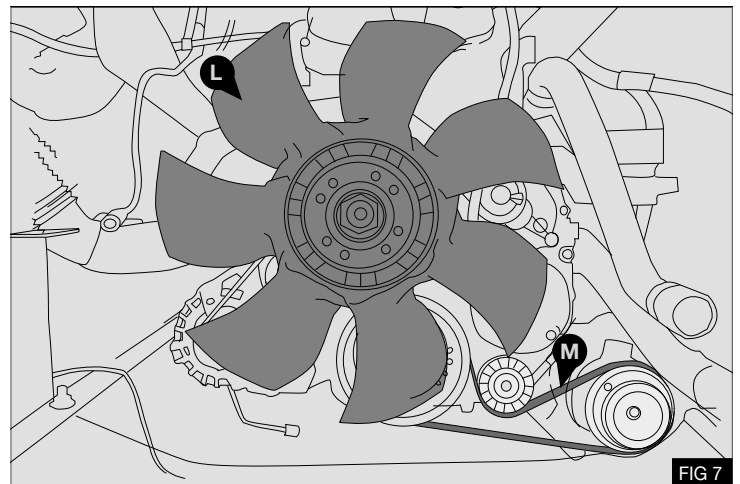


12. Carefully move turbo intercooler and restrain in the position shown - Fig 6
13. Disconnect and remove the remaining cooling pack components **K** - Fig 6

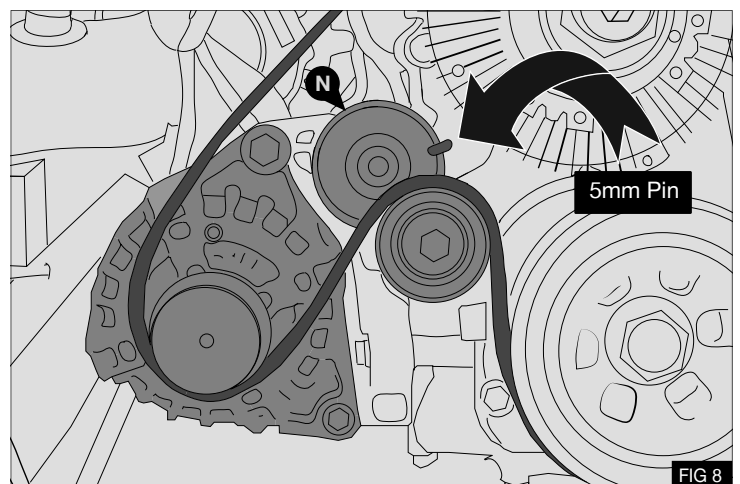


14. Remove and discard the M6 fasteners securing the cooling fan **L** to its hub - Fig 7
15. Carefully remove and retain the air conditioning compressor drive belt **M** - Fig 7

N.B it is necessary to lock the auto tensioner to facilitate re- installation



16. Release the tension on the original auto tensioner **N** and lock using a suitable 5mm diameter pin - Fig 8



17. Remove and discard the original drive belt (P) - Fig 9

18. Remove and retain the auto tensioner (N) and its fixing screw (Q) - Fig 9

19. Remove and retain the screws (U) securing the alternator (R) - Fig 9

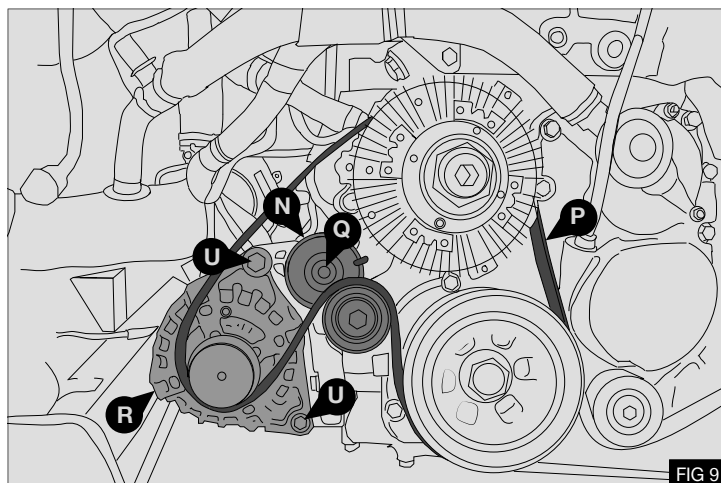


FIG 9

20. Disconnect the alternator (R) from its bracket and place to one side - Fig 10

21. Remove and discard the original alternator mounting bracket (S) and its fasteners - Fig 10

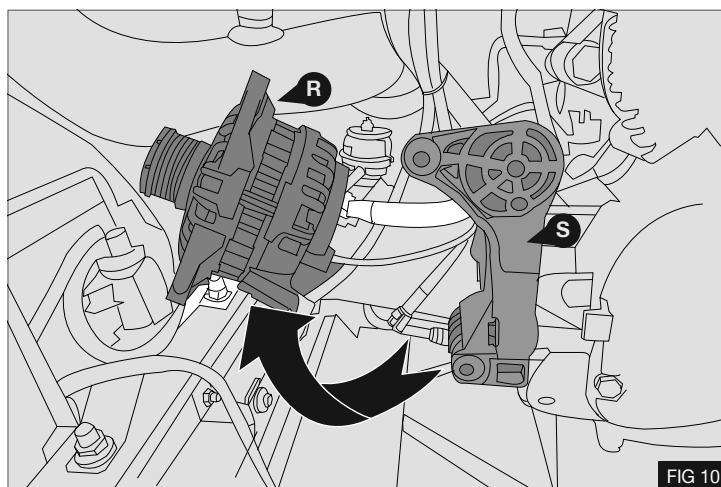


FIG 10

22. Remove the loom support (T) from the M8 upper mounting hole. - Fig 11

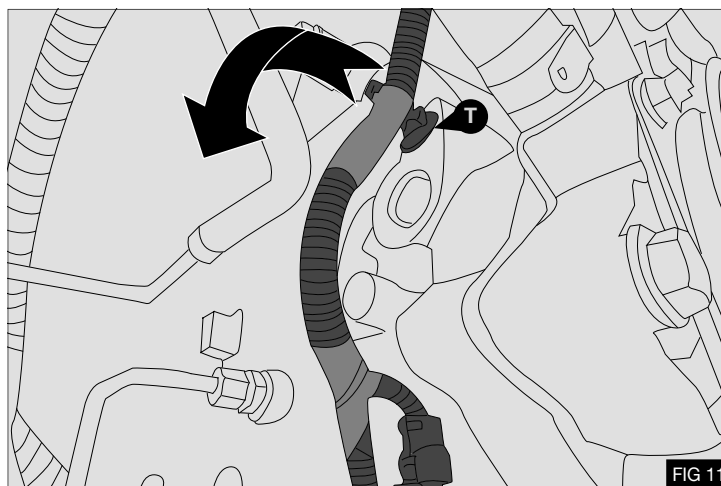


FIG 11

INSTALLATION

1. If the vacuum assist box is installed move pipe to position shown, this will improve clearance to the compressor pulley once installed - Fig 12

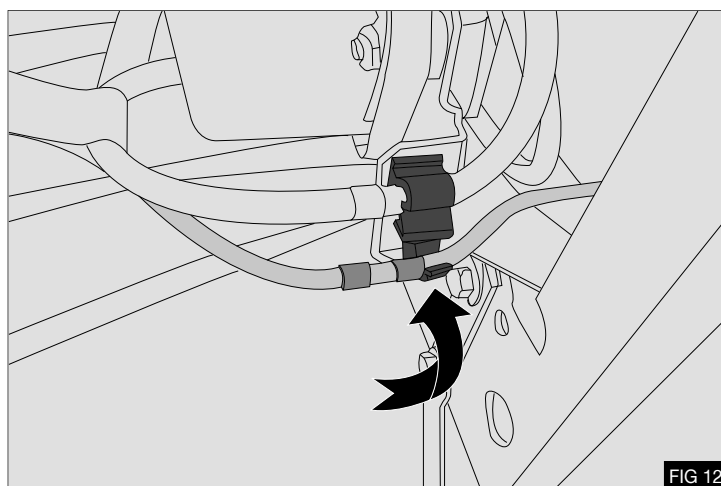
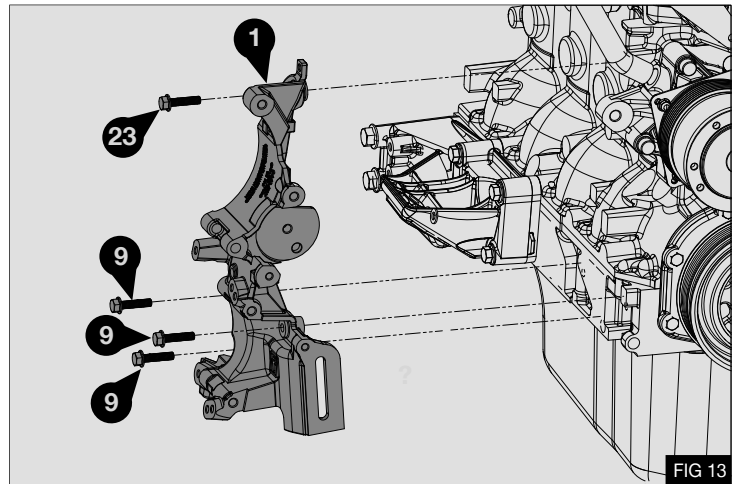
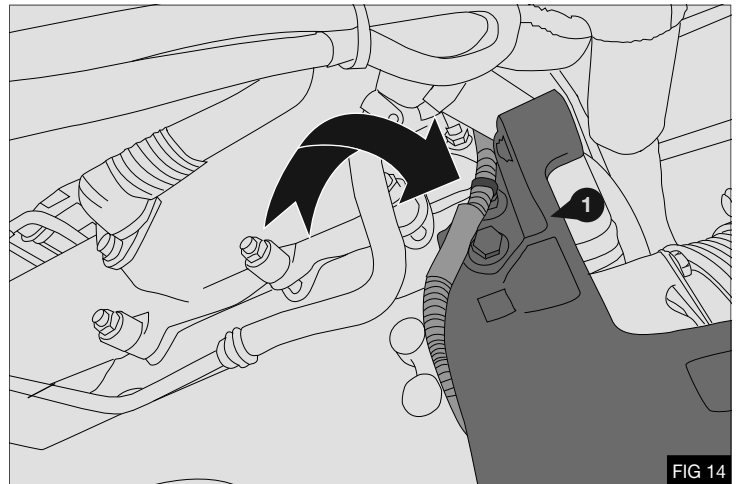


FIG 12

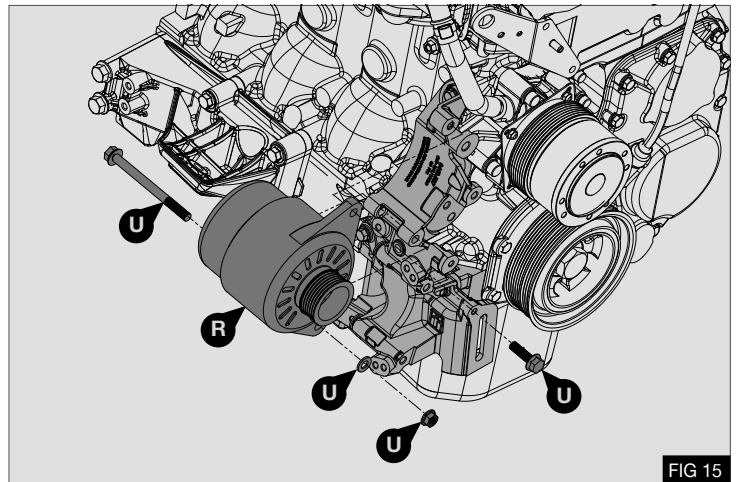
- Fit the mount bracket **1** to the points shown on the engine using 4 x M8x 35 bolts **9** and M8 x 30 bolt **23** - Fig 13
- Torque bolts **9** and **23** to 35Nm / 26 Lbft - Fig 13



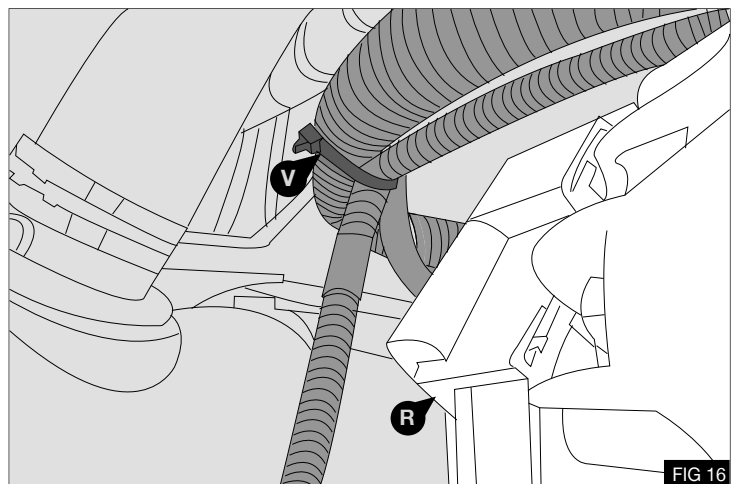
- Fit loom support into the hole provided in mount bracket - Fig 14



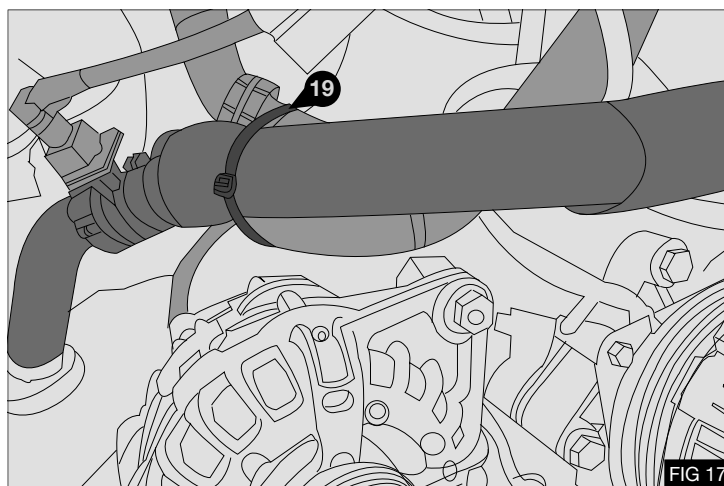
- Fit the alternator **R** using the original fasteners **U** - Fig 15
- Torque fasteners **U** to 45Nm / 33Lbft



- Remove the cable tie **V** securing the loom at the rear of the alternator - Fig 16



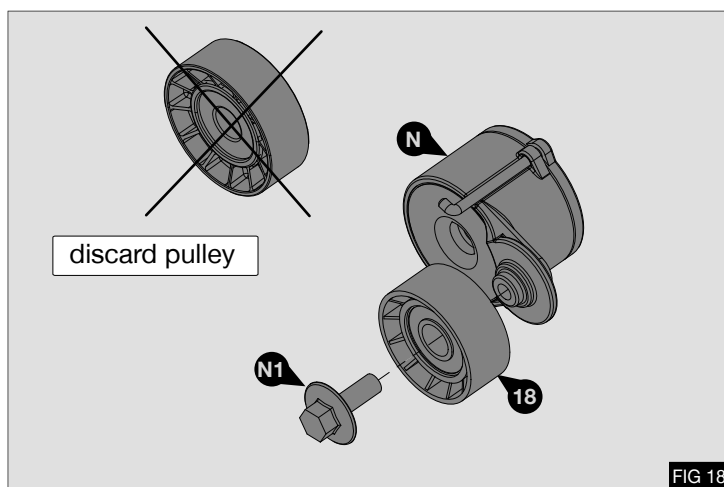
8. Secure loom using cable tie (19) at point shown - Fig 17



9. Remove and discard original pulley from tensioner (N), retain fastener (N1) - Fig 18

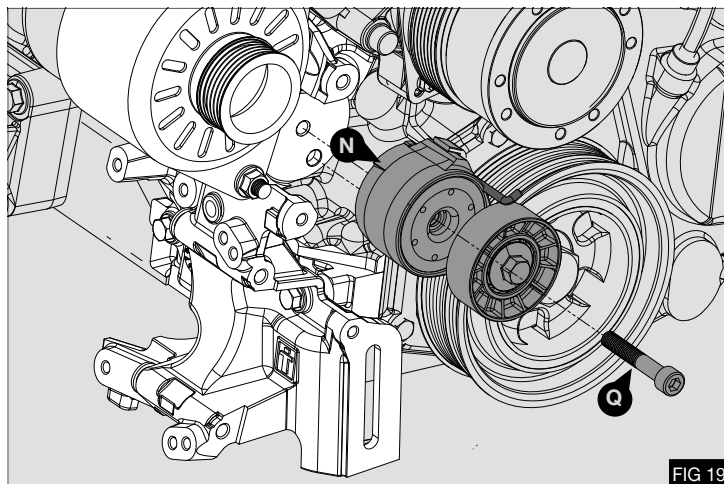
10. Fit supplied pulley (18) using original fastener (N1) - Fig 18

11. Torque bolt (N1) to 45Nm / 33Lbft



12. Fit auto tensioner assembly (N) to the bracket (1) using original fastener (Q) - Fig 19

13. Torque fastener (Q) to 45Nm / 33Lbft

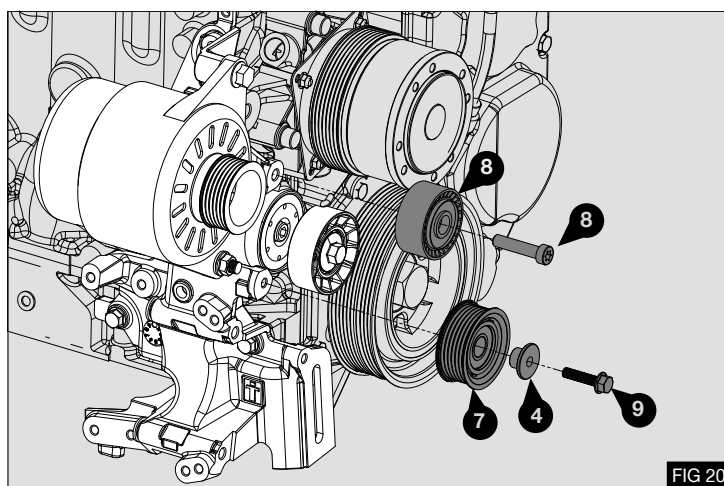


14. Fit reverse idle pulley assembly (8) - Fig 20

15. Torque bolt (8) to 45Nm / 33Lbft

16. Fit grooved idler pulley (7) using M8 x 35 bolt (9) with spacer (4) - Fig 20

17. Torque bolt (9) to 35Nm / 26lbft



18. Ensure battery negative terminal is disconnected
19. Remove 3x fasteners securing the engine starter motor (V).
- Fig 21

NB: It is not necessary to disconnect the wiring harness

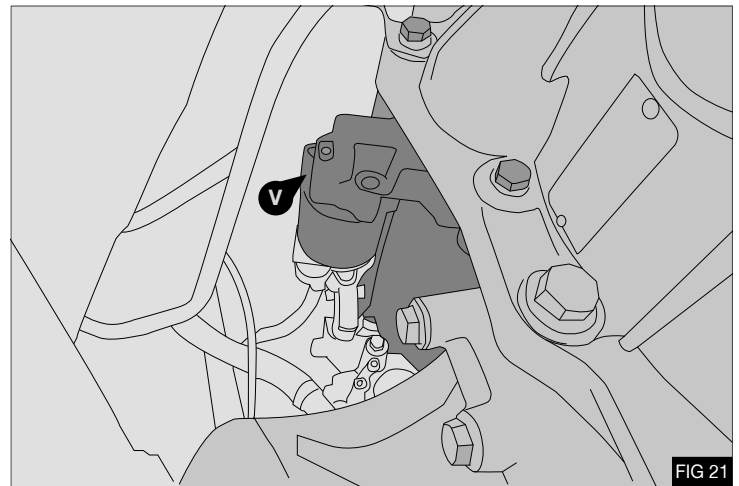


FIG 21

20. Using a suitable tool (large lever bar) against the flywheel gear, lock the engine and remove the bolt securing the crankshaft pulley – discard bolt. - Fig 22

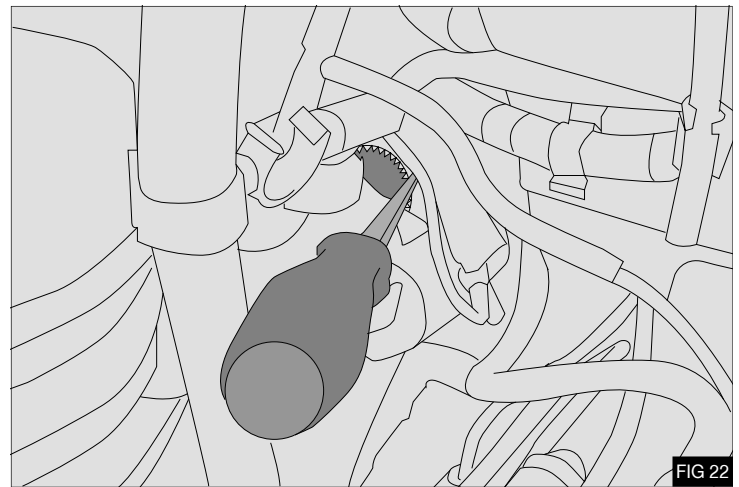


FIG 22

CRANK PULLEY INSTALLATION

1. Assemble the supplied M20 x 66 bolt (14) into the additional drive pulley (2) - Fig 23
2. Fit the pulley (2) with bolt (14); ensure correct seating -Fig 24
3. Using the method detailed earlier lock the engine and torque bolt (14) to 350Nm / 258Lbft
4. Once crank bolt (14) is correctly tightened, re- fit the starter motor (V) using the original fasteners into their original holes and torque to 25Nm 18Lbft

CAUTION: The pulley and bolt are prepared with a tight tolerance fit to provide alignment. Take care to locate the bolt (14) centrally within the additional drive pulley (2).

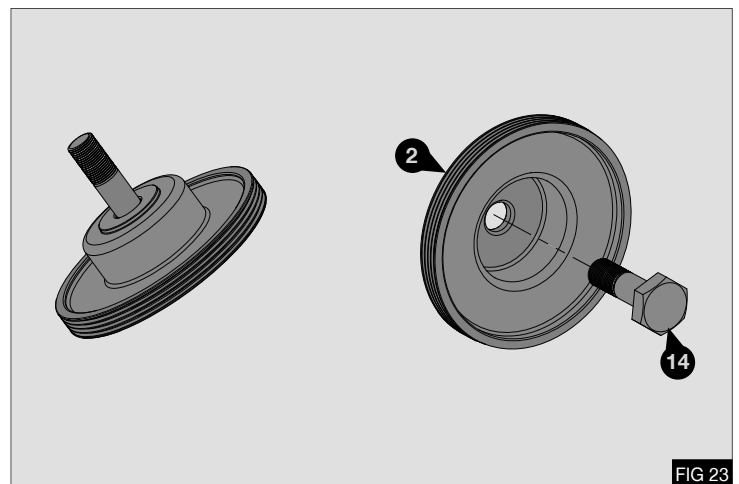


FIG 23

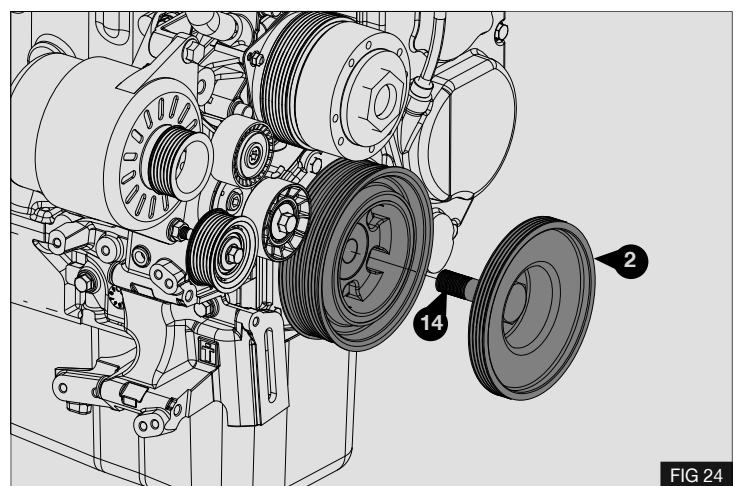
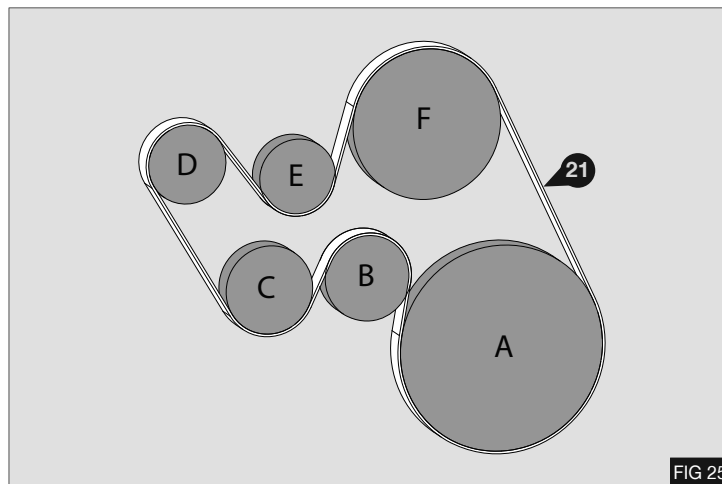


FIG 24

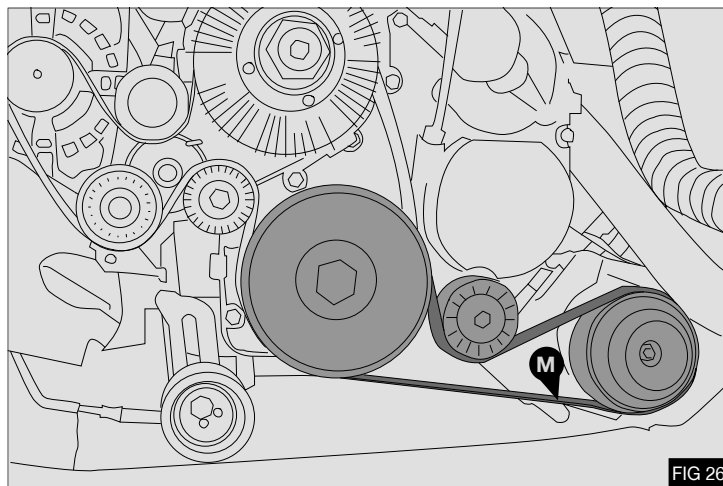
5. Fit the supplied drive belt (21), and remove locking pin from auto tensioner (N) - Fig 25

A - Crank pulley
 B - Auto tensioner
 C - Grooved idler pulley
 D - Alternator
 E - Reverse idler pulley
 F - Fan hub

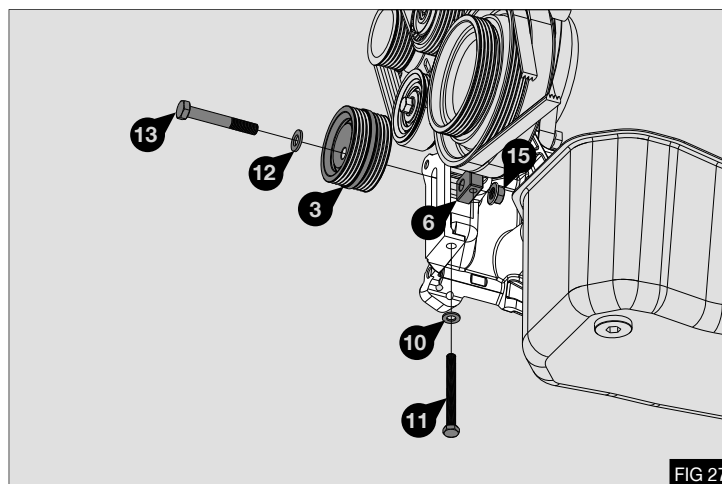


6. Fit original air conditioning compressor drive belt (M) - Fig 26

NB: It may ease the installation of the elastic belt if it is installed onto the crank pulley before the compressor.



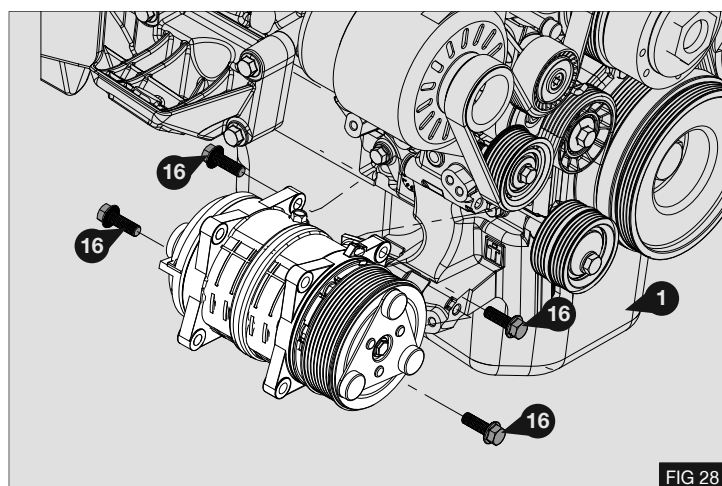
7. Assemble tensioner pulley (3) onto mounting bracket (1) using block (6), M8x 80 bolt (11) with M8 washer (10), M10 x 70 bolt (13), M10 flat washer (12) and M10 flange nut (15). Do not tighten at this stage - Fig 27



COMPRESSOR INSTALLATION

1. Fit the compressor (not supplied) to the bracket (1) using M10 x 30 bolts (16) - Fig 28
2. Torque bolts (16), to 58Nm / 43lbf

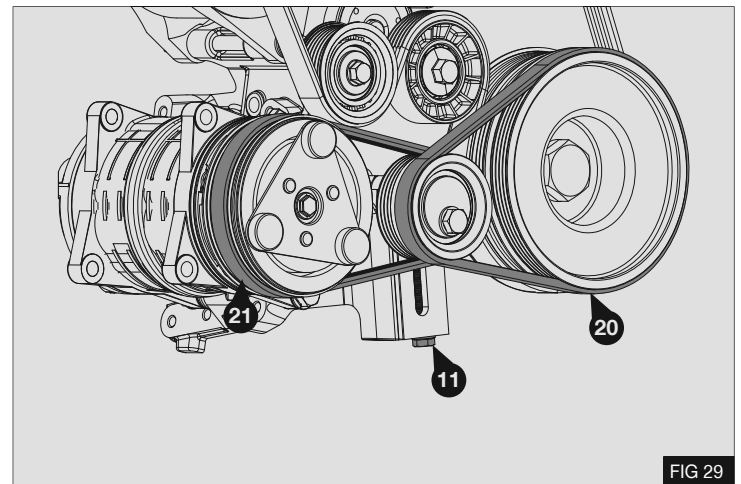
Note: Torque the bolts at the front of the compressor first.



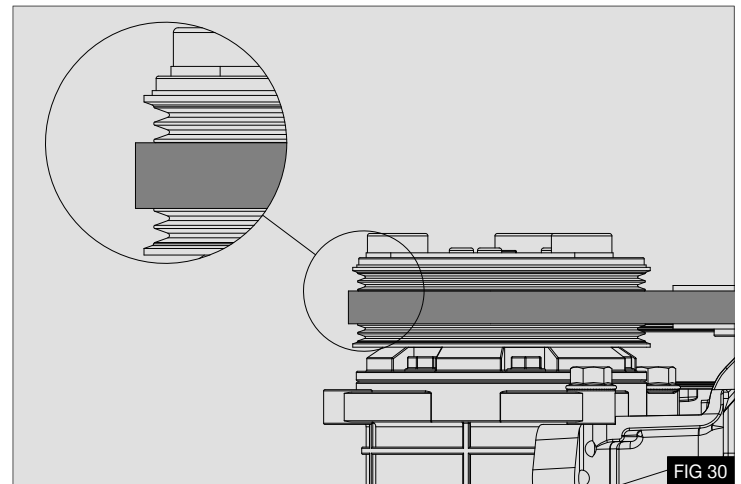
- Fit drive belts (21) between compressor and tensioner pulley (3) and (20) between the tensioner pulley and the crankshaft pulley – Fig 27 and Fig 29

BELT TENSION TABLE

Belt	Belt Age	Belt Tension Using Belt Tension Gauge
4PK	New Belt	48 - 56 kg
4PK	Used Belt	36 - 40 kg

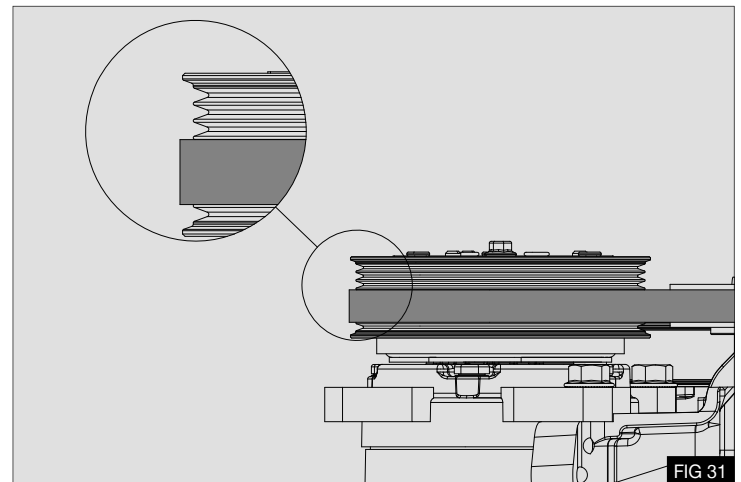


- TM / QUE / Sanden compressors – Belt is installed with 2 spare grooves at the front of the compressor pulley. – Fig 30



- Delphi SP15 Compressors – Belt is installed with 3 spare grooves at the front of the compressor pulley. – Fig 31

- Using draw bolt (11) apply tension to belts, once correct tensions have been achieved (see table) lock pulley by tightening M10 nut (15), Figs 27 & 29.
- Torque nut (15) to 50Nm 37Lbft

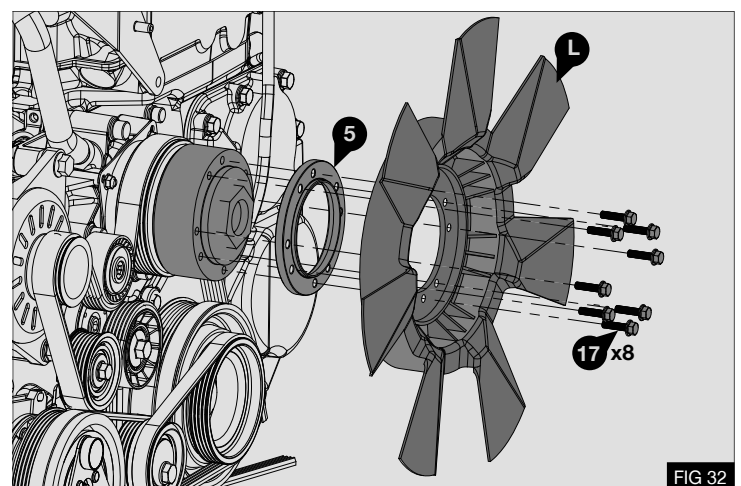


FAN HUB SPACER

- Install fan hub spacer (5) re-fit fan (L) secure using M6 x 25 bolts (17) - Fig 32
- Torque bolts (17) to 10Nm 7.5Lbft
- Re-fit all parts previously removed; Re-gas the air conditioning system.

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.
- Run engine with refrigerant compressor engaged for 10 minutes, Allow drive belts to cool and re-tension as necessary (See table).



(EN)

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