



**Techni**  
ENGINEERING SOLUTIONS

**ISUZU FORWARD / NPR N75.190**  
**5.2 LITRE, 4HK1TC 140KW (190PS)**

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**CODE / CODICE: 0500.7792**

**COMPRESSOR / COMPRESSEUR / KOMPRES-  
SOR / COMPRESSORE / COMPRESOR :  
SELTEC TM13 / 15 / 16  
QUE QP13 / 15 / 16**

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**FITTING INSTRUCTIONS  
EINBAUANLEITUNGEN  
INSTRUCTIONS POUR LE MONTAGE  
ISTRUZIONI DI MONTAGGIO  
INSTRUCCIONES DE MONTAJE**

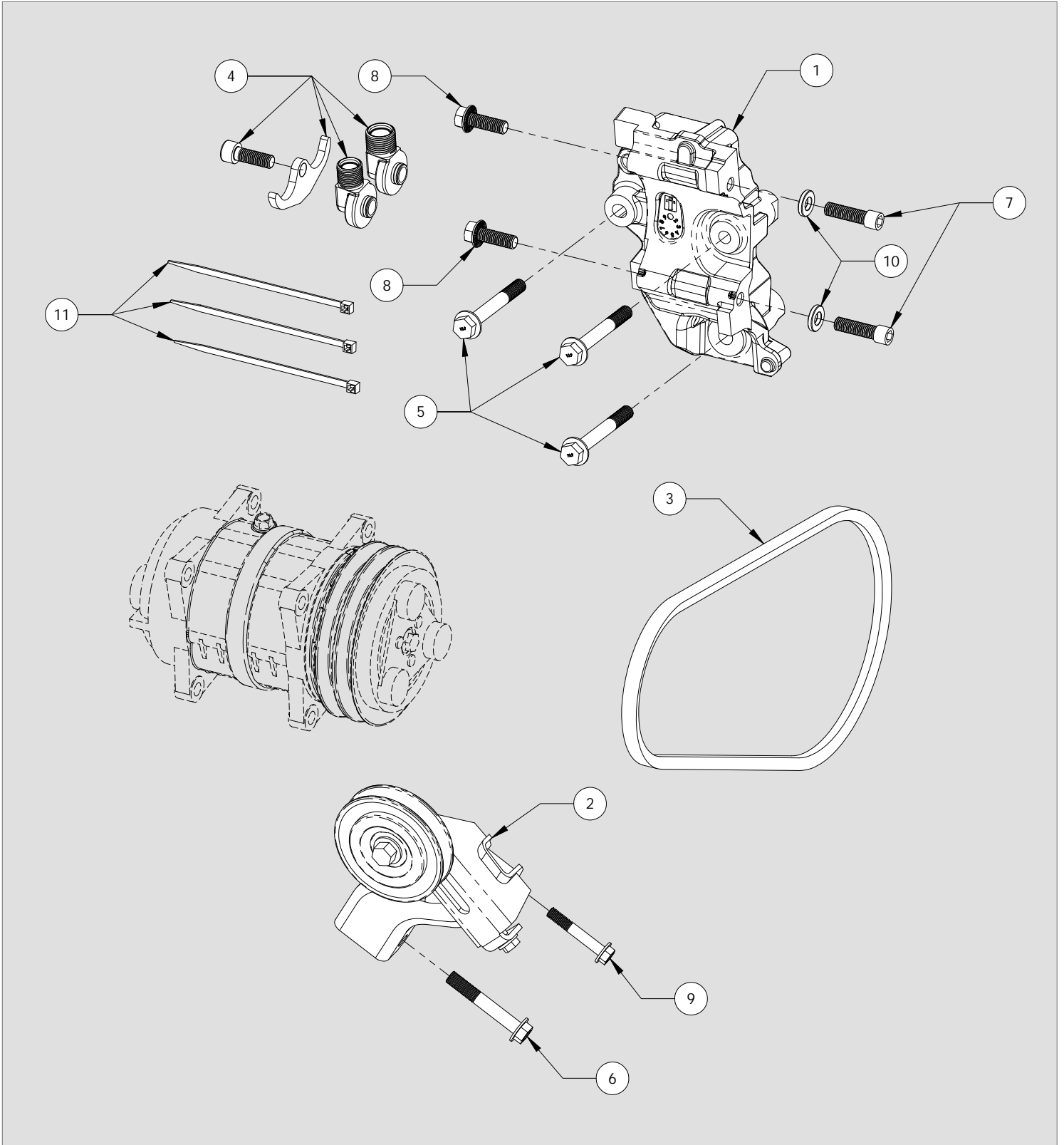
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PARTS VIEW / VUE ÉCLATÉE / TEILEANSICHT / VISTA PARTA / IMÁGENES DE LAS PIEZAS



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

ITEM	CODE / CODICE / KODE / CODIGO	DESCRIPTION / DESCRIZIONE / BESCHREIBUNG / DESCRIPCION	QTY.	COMMENTS
1	0440.5451	Compressor Mount Bracket	1	
2	1705.5111	Belt Tensioner Assembly - Isuzu 4HK1	1	
3	0800.5201	Drive Belt - A Section 13A 1650C	1	
4	0425.0601	Manifold Que / Seltec - Swivel Type B - 3/4-7/8	1	
5	2705.5371	Hex flange bolt - M10 x 80 : 1.50 - 10.9 DIN6912	3	
6	2705.5321	Hex flange bolt - M10 x 65 : 1.5 - Gr8	1	
7	2720.0291	Hex socket head cap screw M10 x 35 : 1.5 - 10.9 - 13mm Head	2	
8	2705.0491	Hex flange bolt Durlok - M10 x 30 : 1.50 - 12.9	2	
9	2704.5711	Hex flange bolt - M8 x 50 : 1.25 - Gr8	1	
10	2809.0121	Hardened Washer - OD20 x ID10 x L3.5	2	
11	2763.0051	Cable Tie 4.8 x 370 - Black	3	

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

SELTEC	TM-13 HS	TM-15 HS	TM-16 HS
Comp No	0381.0722	0381.0122	0381.0222
Valeo No.	435-54071	435-55015	435-56015
Mounting	Ear	Ear	Ear
Rotor	2A	2A	2A
GL	39.6mm	39.6mm	39.6mm
Armature	3E	3E	3E
Diameter	135	135	135
Voltage	24	24	24
Orientation	V	V	V
Fitting	3/4 x 7/8	3/4 x 7/8	3/4 x 7/8
Manifold	Bolt	Bolt	Bolt

QUE	QP-13 HD	QP-15 HD	QP-16 HD
Comp No	0391.0722	0391.0122	0391.0222
Que No.	QP13-1234	QP15-1153	QP16-1181
Mounting	Ear	Ear	Ear
Rotor	2A	2A	2A
GL	39.6mm	39.6mm	39.6mm
Armature	3E	3E	3E
Diameter	135	135	135
Voltage	24	24	24
Orientation	V	V	V
Fitting	3/4 x 7/8	3/4 x 7/8	3/4 x 7/8
Manifold	Bolt	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.

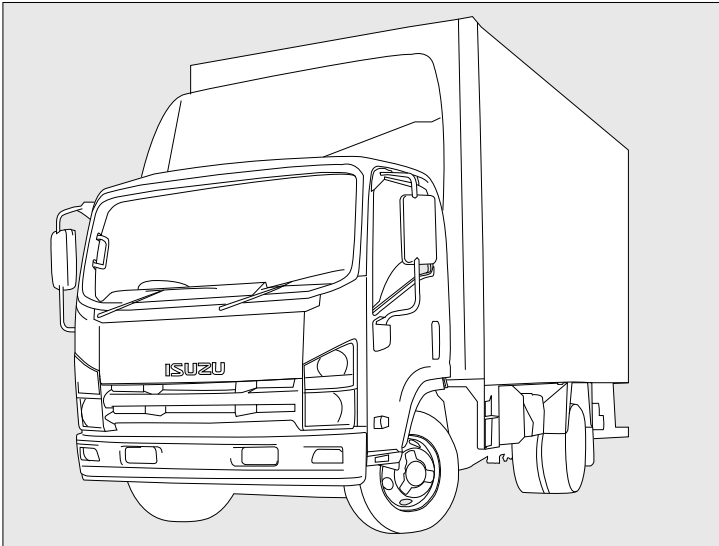
**VALORI STANDARD DI SERRAGGIO PER DISPOSITIVI DI FISSAGGIO**

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	Isuzu
Model	Forward / NPR N75.190
Engine CC	5.2 Litre
Engine Details	4HK1TC 140kW (190PS)
Year	2014>
Chassis Nos.	N/A
LHD	YES
RHD	YES
PAS	YES
A/C	NO
Voltage	24v

## KIT DETAILS

Kit Part Number	0500.7792
Description	Standard Kit
Compressor RPM	3408 @ Max engine power output
Fitting Time	45 Minutes
Suction Fitting	90°
Discharge Fitting	90°
Belt Type	13A 1650
Belt Part Number	0800.5201
Note:	Compatible with both manual and Easyshift gearbox options

## 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

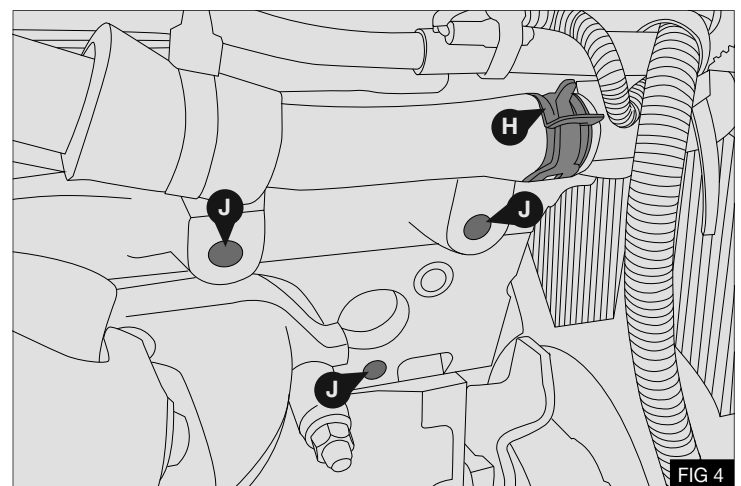
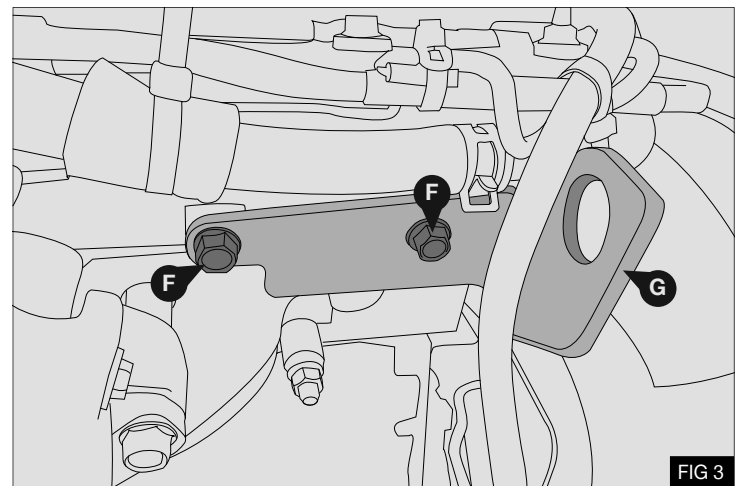
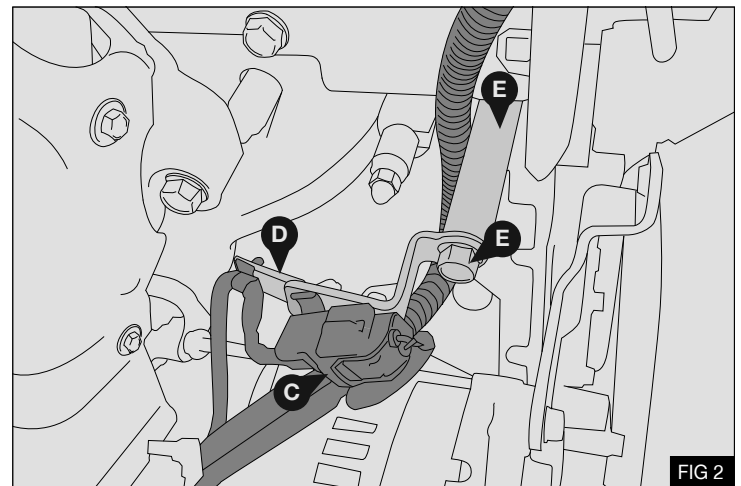
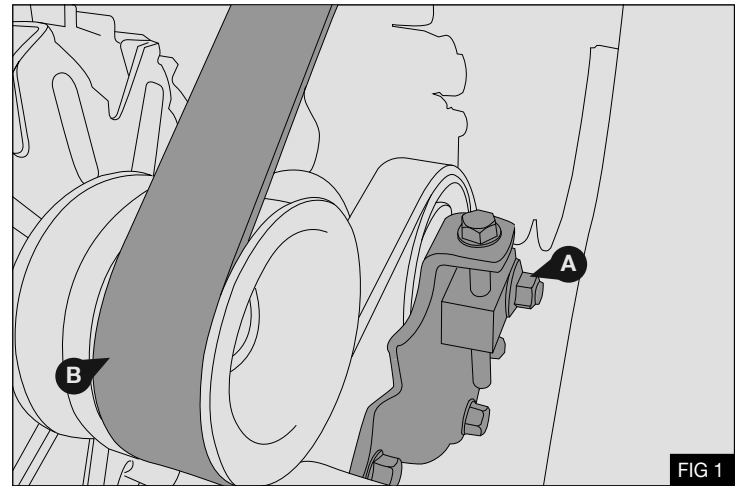
**Warning:** This calls awareness to actions which must be pursued to avoid damage to the components.

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

**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.

### PRE-INSTALLATION

1. Mark the position of the original adjuster block / assembly (A). Release the tension from the original drive belt (B) and then leave the belt loose on the engine - Fig 1
2. Detach the clips securing the loom assembly (C) to the support plate (D) - Fig 2
3. Remove and discard the bolt (E) support plate (D) and spacer (E) - Fig 2
4. Remove and discard the bolts (F) and the engine lifting eye (G) - Fig 3
5. Rotate the water hose pipe clamp (H) to the position shown opposite - Fig 4
6. Using bolt holes (J) and bolts (5) offer the mount bracket (1) up to the engine and check clearance to water hose pipe clamp (H) - Fig 4





## MOUNT BRACKET INSTALLATION

1. Install the mount bracket (1) to the engine using the supplied M10x80 bolts (5) - Fig 5
2. Torque the 3x M10x80 bolts (5) to 48Nm / 35.4lb-ft using a calibrated torque wrench - Fig 5

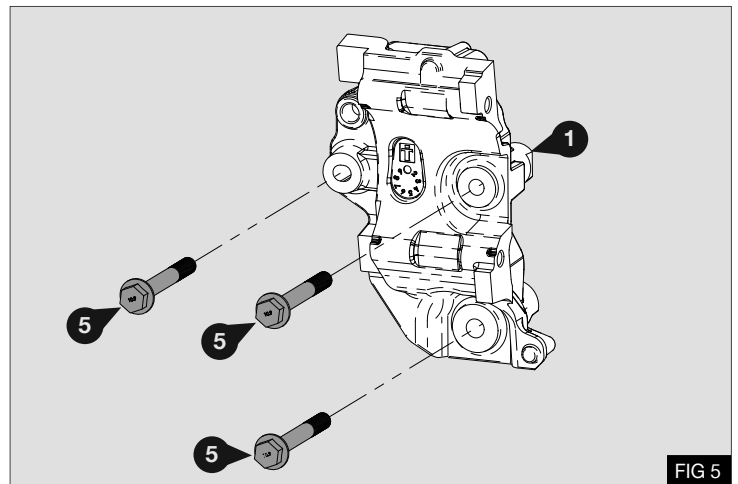


FIG 5

3. Secure the loom assembly (C) to the mount bosses on the bracket (1) using the supplied cable ties (11) - Fig 6

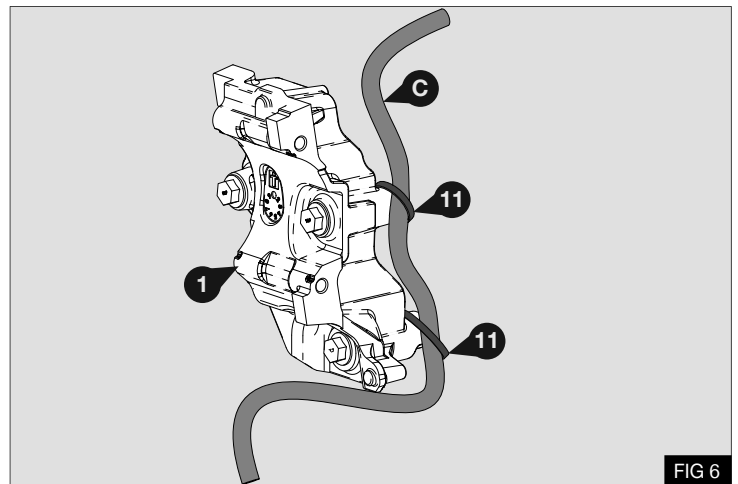


FIG 6

## COMPRESSOR INSTALLATION

1. Install the supplied compressor manifold (4) to the compressor using the M10 bolt included in the manifold kit - Fig 7

**Note:** The manifold assembly allows adjustable positioning of the suction and discharge ports. Once the positions have been set torque the manifold securing bolt to 20 - 24Nm / 14.8 - 17.7lb-ft

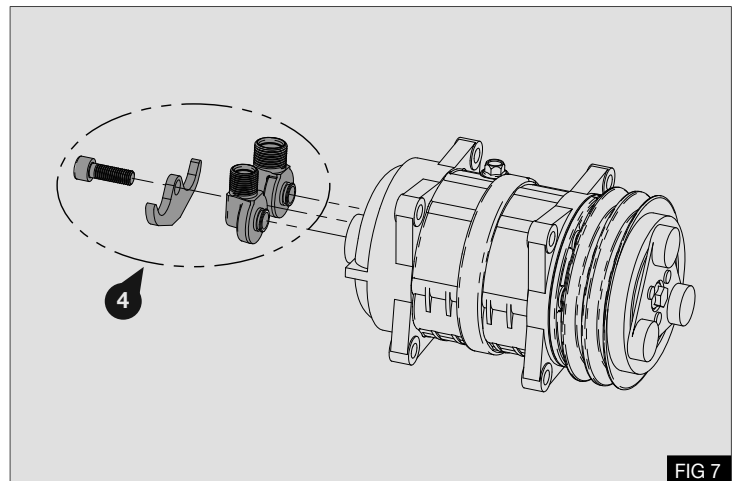


FIG 7

2. Install the compressor to the mount bracket (1) as shown opposite using bolts (7) with washers (10) at the front of the compressor. Secure the rear of the compressor using bolts (8) - Fig 8

Torque bolts (7) to 48Nm / 35.4lb ft.

Torque bolts (8) to 58Nm / 42.8lb ft.

**Note:** Depending on the make and model of compressor installed, it may be necessary to shape the heatshield to clear the manifold clamp.

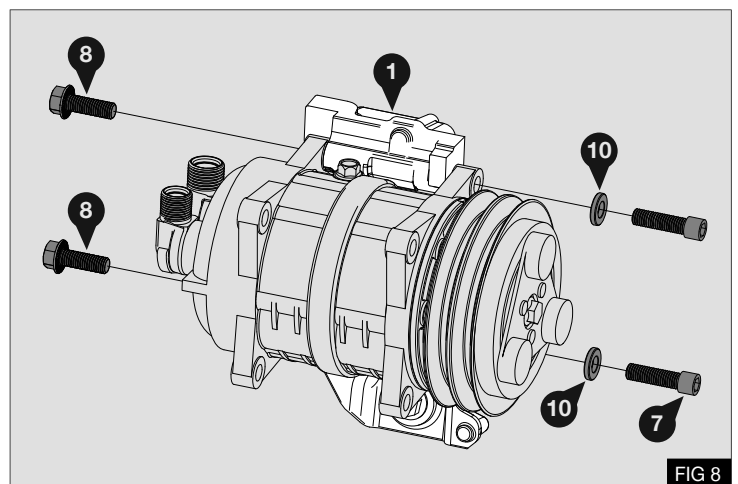


FIG 8

**BELT TENSIONER INSTALLATION**

1. Remove and discard the M8 bolt (J) from the thermostat housing - Fig 9

**Note:** The lower position (K) also used for mounting the belt tensioner assembly (2) - Fig 8

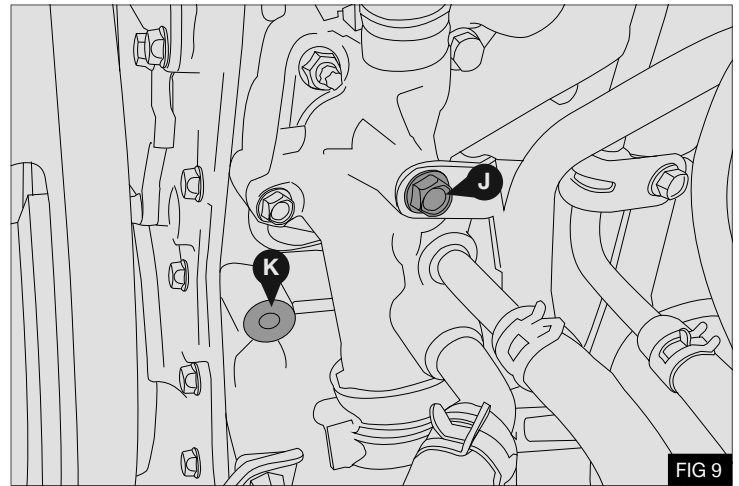


FIG 9

2. Install the belt tensioner assembly (2) using M10x65 bolt (6) and M8x50 bolt (9) - Fig 10

Torque bolt (6) to 38Nm / 28lb ft.

Torque bolt (9) to 20Nm / 14.8lb ft.

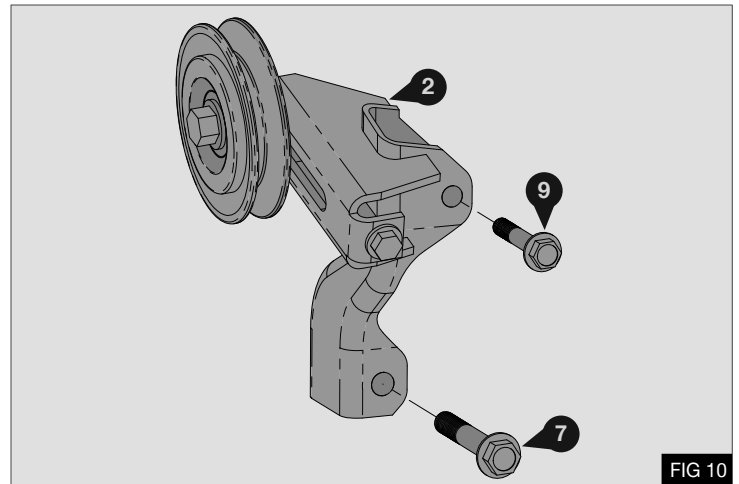


FIG 10

**DRIVE BELT INSTALLATION**

1. Feed the supplied drive belt (3) over the viscous fan and the original drive belt - Fig 11

A – Crankshaft Pulley (rear groove)

B – Alternator (rear groove)

C – Compressor (rear groove)

D – Tensioner

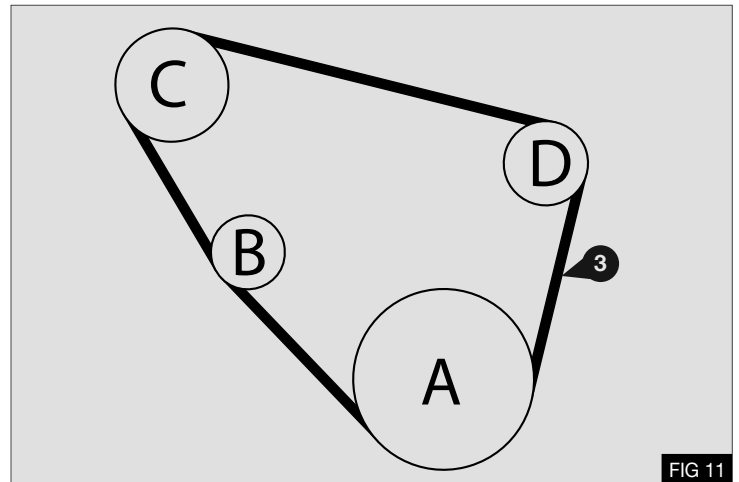


FIG 11

2. Install the drive belt (3) onto the rear groove of the crank, alternator and compressor pulley - Fig 12

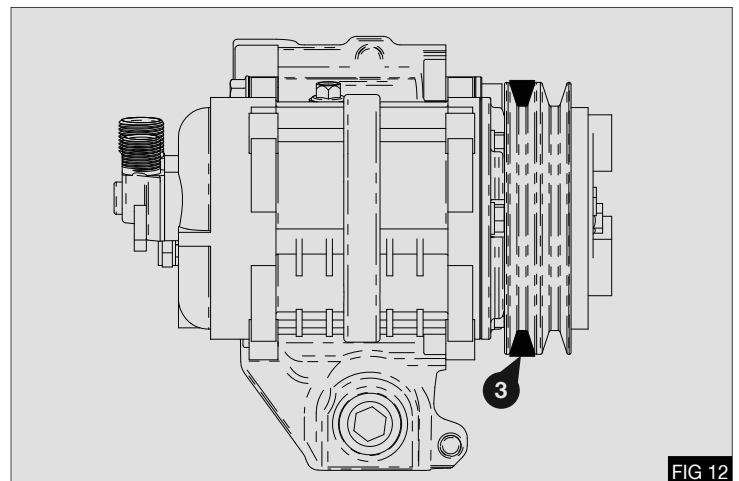
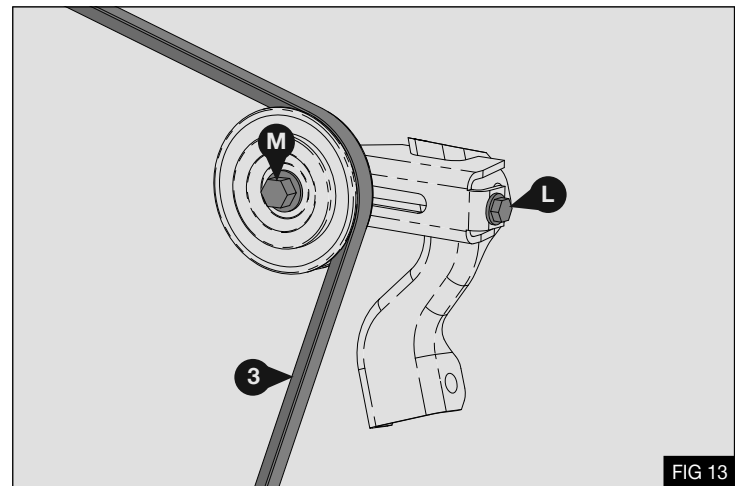


FIG 12

3. Tension the drive belt (3) using the adjuster bolt (L). When the correct tension (new belt level) has been achieved (see table below) tighten the pulley lock bolt (M) to 27Nm / 20lb ft. - Fig 13

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

**Note:** A new drive belt must be tensioned to the “new belt” level in order to mesh correctly into the pulley groove. The belt tension will then fall after a short running in period. After this running in period check the belt tension falls within the used belt / re-tension scale, and adjust if required.



4. Re-fit the original drive belt and re-tension to the position marked before the belt was removed - Fig 1
5. Run the engine with compressor engaged for five minutes. Check all components.

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