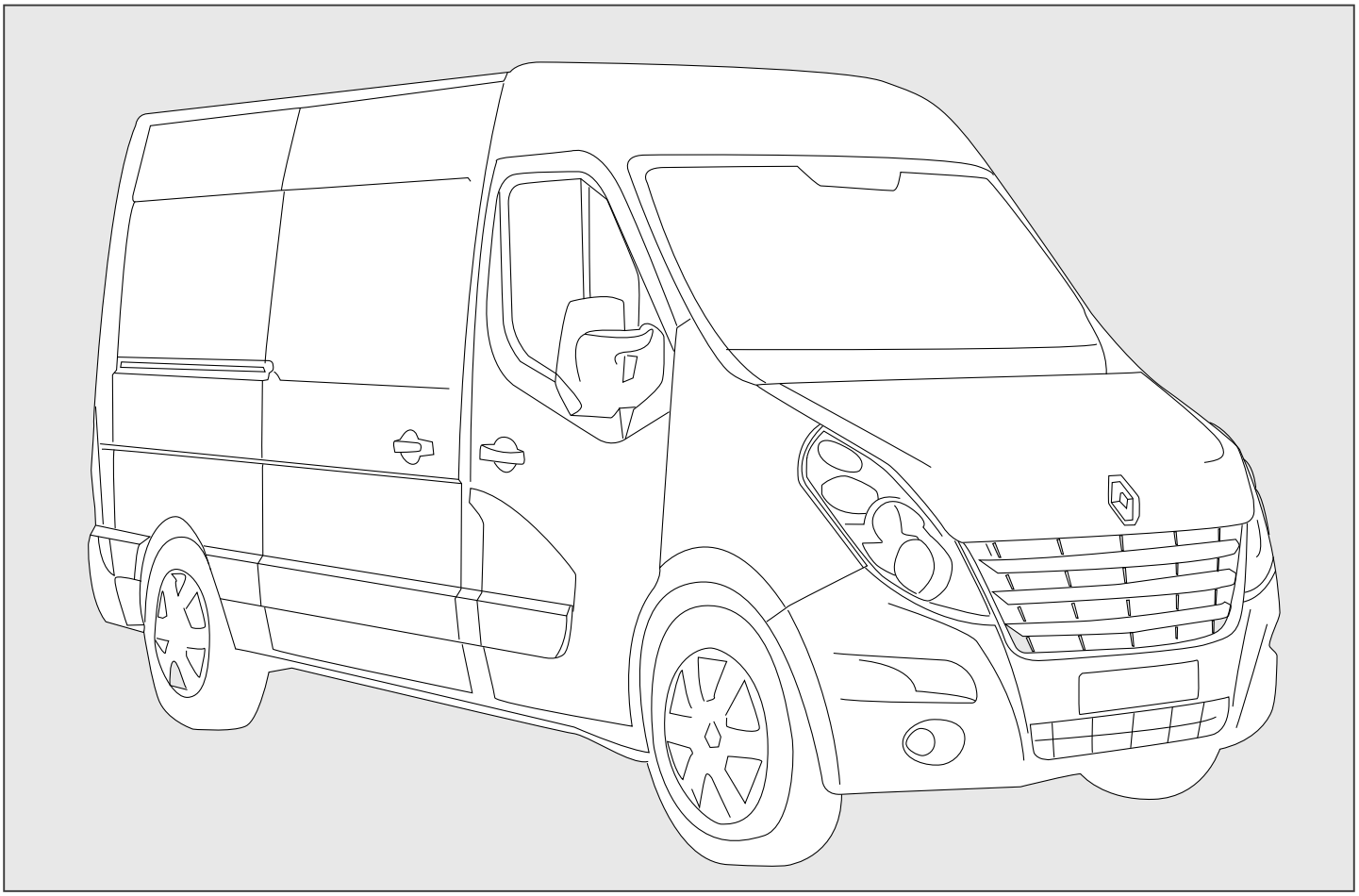
0500.6212

Contents



VEHICLE DETAILS

Manufacturer	Vauxhall / Opel, Renault , Nissan
Make	Movano, Master, NV400
Model	RWD 2.3L CDTi / dCi
Engine CC	2298cc
Engine Details	Euro 5 125/150
Year	2010>
Chassis Nos.	N/A
LHD	YES
RHD	YES
PAS	YES
A/C	YES
Voltage	12v

KIT DETAILS

Kit Part No.	0500.6212
Description	Standard Kit
Compressor RPM	3544 @ Max Engine Power Output
Fitting Time	60 Minutes
Suction Fitting	45°
Discharge Fitting	45°
Belt Type	6PK1005
Belt Part No.	0820.2681
Note :	Compatible with & without PTO Not compatible with Tecshift / Quickshift / Automatic / Robotised Gearbox or Stop/Start options

RECOMMENDED COMPRESSORS

SELTEC	TM-13 HS	TM15-HS	TM16-HS
Comp No	0381.0792	0381.0102	0381.0332
Seltec No.	-	-	43556063
Mounting	Ear	Ear	Ear
Rotor	1A	1A	1A
Armature	SL	SL	SL
Diameter	126	126	126
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	0391.0792	0391.0102	0391.0332
QUE No.	-	-	-
Mounting	Ear	Ear	Ear
Rotor	1A	1A	1A
Armature	SL	SL	SL
Diameter	126	126	126
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

Notes

Notes

COMPRESSOR KIT CONFIGURATIONS

PART NUMBER	COMPRESSOR KIT PART NOS						DESCRIPTION	QTY.
	0513.6212	0515.6212	0515.6212	0593.6212	0595.6212	0596.6212		
0381.0792	⬬						TM13 Ear Mount 1A SL 126 12V H 3/4 x 7/8 Bolt	1
0381.0102		⬬					TM15 Ear Mount 1A SL 126 12V H 3/4 x 7/8 Bolt	1
0381.0332			⬬				TM16 Ear Mount 1A SL 126 12V H 3/4 x 7/8 Bolt	1
0391.0792				⬬			QP13 Ear Mount 1A SL 126 12V H 3/4 x 7/8 Bolt	1
0391.0102					⬬		QP15 Ear Mount 1A SL 126 12V H 3/4 x 7/8 Bolt	1
0391.0332						⬬	QP16 Ear Mount 1A SL 126 12V H 3/4 x 7/8 Bolt	1

⬬ = Additional parts to standard kits.

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.

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 vehicles ignition key and keep it with you.
- **e** Wear safeguards to make sure that liquid refrigerant never touches your skin

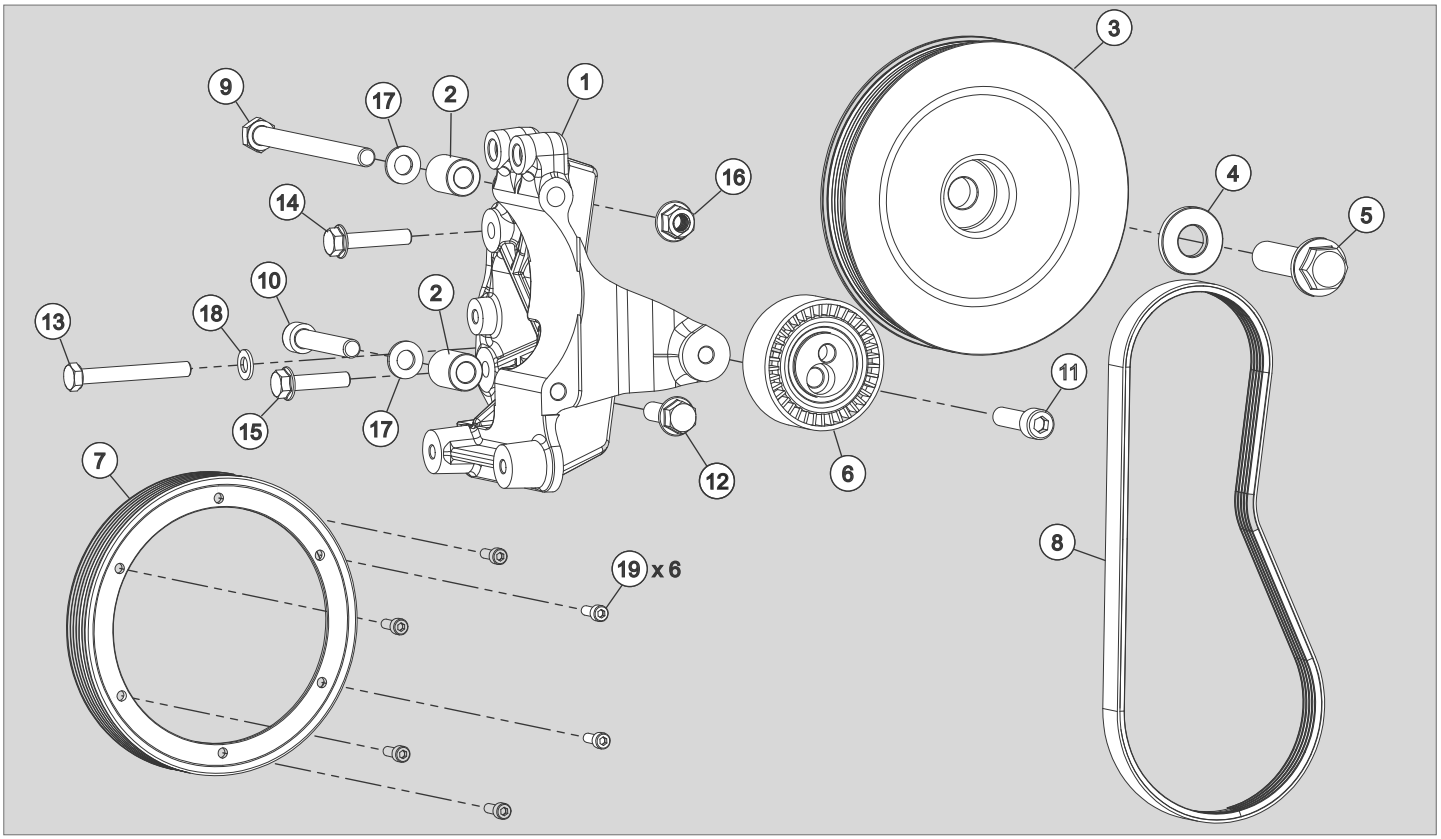
Caution: Measures must be followed accurately to steer clear of the possibility of damage to individuals
Warning: This calls awareness to actions which must be pursued to avoid damage to the components.
NB: This calls awareness to make the job easier or gives useful information.

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	 4.8		 8.8		 10.9		 12.9	
	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

PARTS VIEW



ITEM	PART NO.	DESCRIPTION	QTY.	COMMENTS
1	0440.3241	Compressor Mount Bracket	1	-
2	2803.5251	Spacer	2	-
3	1701.1041	Crank Pulley	1	-
4	2803.5263	Crank Pulley Spacer	1	-
5	2711.0001	Crank Pulley Bolt	1	-
6	1700.0401	Eccentric Idler Pulley	1	-
7	0411.0213	Speed Rotor 156mm PV6	1	-
8	0820.2681	Belt 6PK 1005	1	-
9	2705.0531	Bolt M10 x 130 : 1.5 10.9 Hex	1	-
10	2705.0601	Bolt - M10 x 60 Socket Head : 1.5 12.9	1	-
11	2705.0681	Bolt M10 x 40 Cap head 1.5 12.9	1	-
12	2720.0401	Set Screw M10 x 30 Hex Flange 1.50 12.9	1	-
13	2704.0391	Bolt M8 x 65 Hex 1.25 12.9	1	-
14	2719.0161	Set Screw M8 x 40 Hex Flange 1.25 12.9	1	-
15	2704.0481	Set Screw M8 x 35 Hex Flange 1.25 12.9	1	-
16	2735.0071	Nut M10 : 1.5 8.8 Flanged Serrated	1	-
17	2809.0011	Washer M10 Flat Steel 16mm OD	2	-
18	2808.0011	Washer M8 Flat Steel 16mm OD	1	-
19	2716.0051	Set Screw M5 x 15 Hex Soc 0.80	6	-

PRE-INSTALLATION

Caution: Do not use “Loctite” on any bolt unless stated - This will void the Compressor Mount Bracket Warranty

Remove the following parts:

1. Disconnect battery.
2. Remove under panel cover.
3. Mark the direction of rotation of the drive belt Ⓐ.
4. Lock tensioner Ⓑ using a suitable 3mm pin.
5. Remove and retain drive belt Ⓐ.
6. Unscrew the viscous fan Ⓒ from the drive pulley Ⓓ.
7.

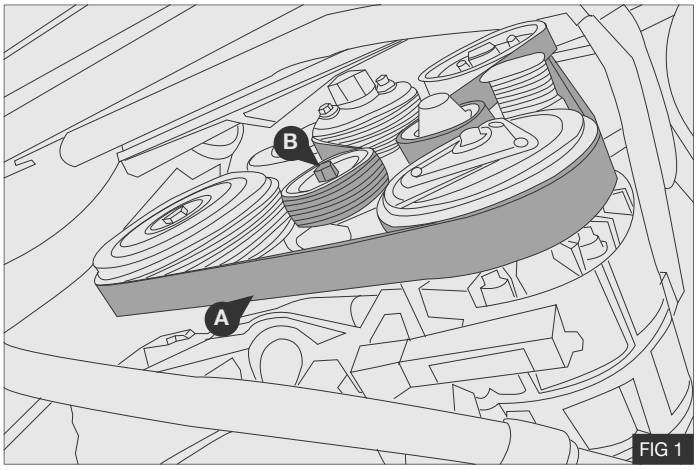


FIG 1

Note: The viscous fan has a left hand thread.

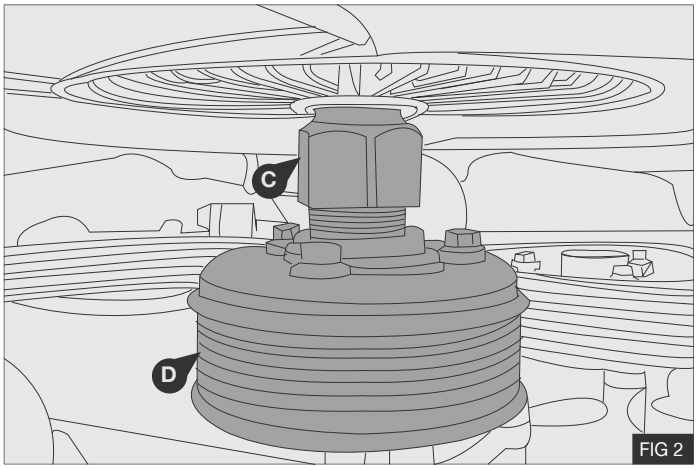


FIG 2

8. Remove 1 x bolt Ⓔ securing flywheel protection plate Ⓕ.
9. Retain bolt Ⓔ and protection plate Ⓕ.

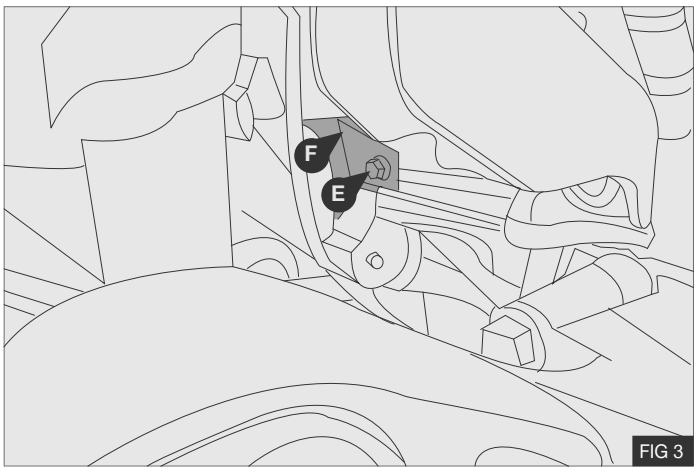


FIG 3

INSTALLATION

1. Lock the flywheel using a suitable tool.

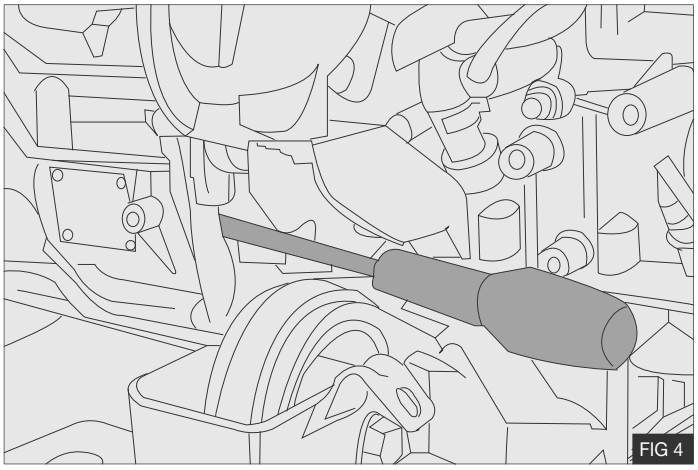


FIG 4

2. Remove and retain the crankshaft pulley (G), discard crank pulley bolt Ⓗ and spacer Ⓘ.

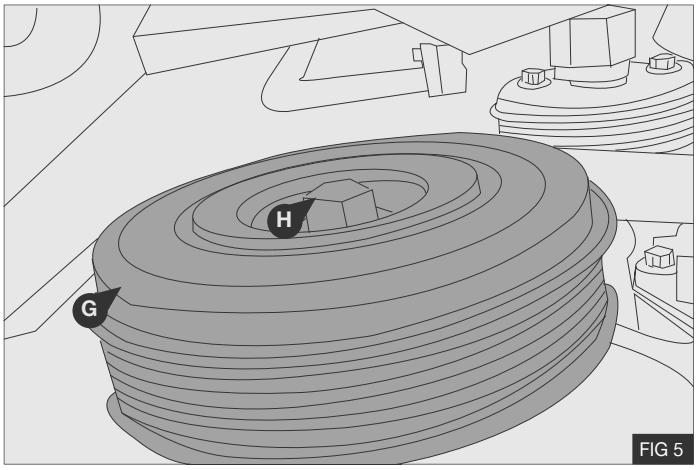


FIG 5

3. Install the supplied pulley ③ using spacer ④ and supplied bolt ⑤.

4. Lock the fly wheel and torque bolt ⑤ to 50 Nm / 36.8 Lb ft. then an additional 120°.

5. Re-fit flywheel protection plate Ⓕ and bolt Ⓔ.

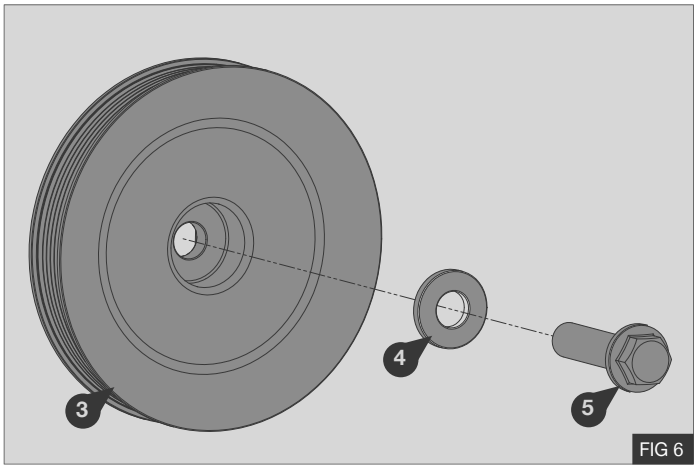


FIG 6

6. Remove and retain bolt Ⓙ and earth strap Ⓚ.

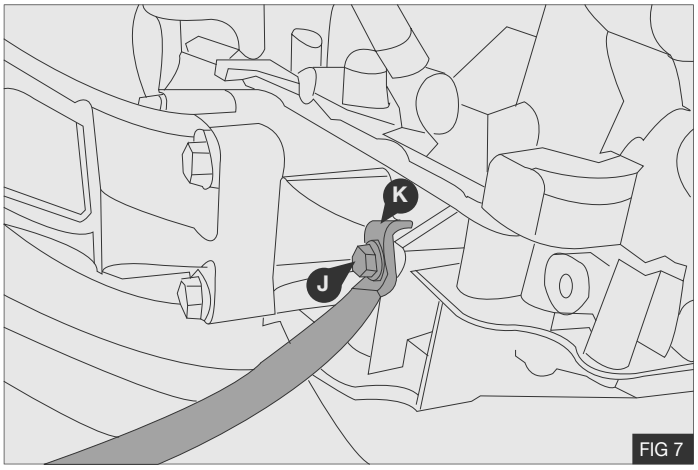


FIG 7

7. Secure mount bracket ① to engine block using 1x M8x40 bolt (14), 1x M8x35 bolt (15) and 1xM8x65 bolt (13) with flat washer (18).

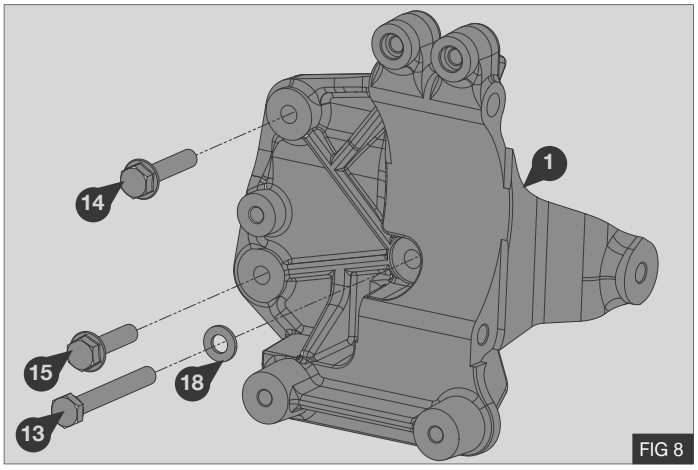


FIG 8

1. Refit earth strap Ⓚ in new position using original bolt Ⓙ.
2. Torque all M8 bolts (13), (14), and (15) to
3. 29Nm / 21.4lb ft.
4. Torque bolt Ⓙ to 24Nm / 18lb ft.

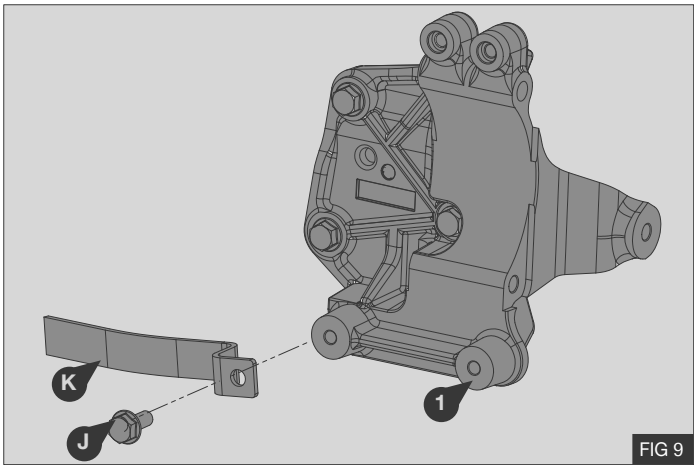


FIG 9

5. Secure the compressor to mount bracket ① using 2x spacers ② at rear of compressor, 1x M10x30 bolt (12), 1x M10x60 bolt (10), with flat washer (17) and 1xM10x130 bolt (9) with flat washer (17) and nut (16)
6. Torque all M10 bolts (10) and (12) to 58Nm / 42.8lb ft.
7. Torque bolt ⑨ to 48Nm / 35lb ft..

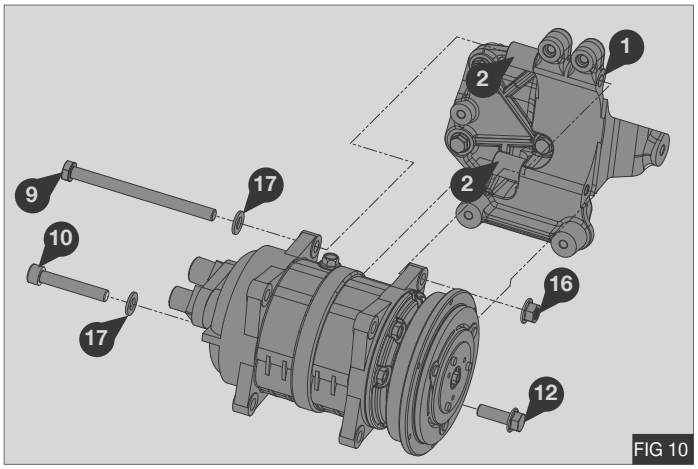


FIG 10

8. Secure the speed rotor ⑦ to the compressor using 6xM5 bolts (19).
9. Torque M5 bolts (19) to 7Nm / 5.2 lb ft.

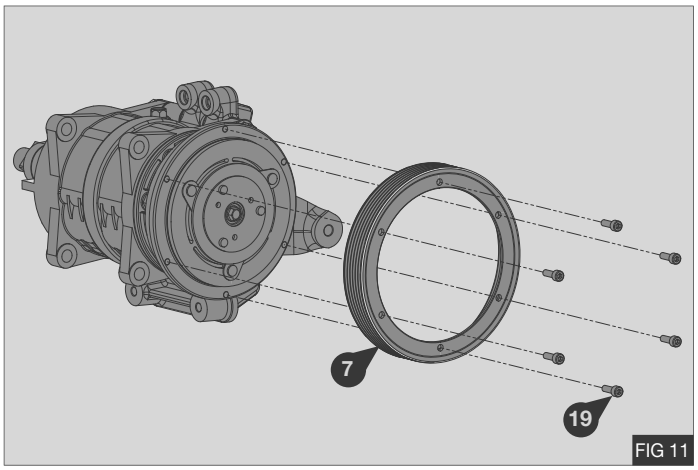


FIG 11

10. Re-fit original drive belt Ⓐ in same direction as when removed.
11. Remove locking pin from tensioner.

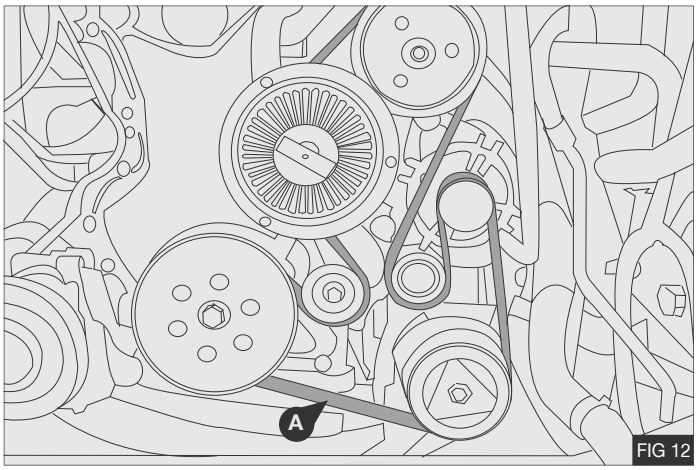


FIG 12

DRIVE BELT

1. Hook supplied drive belt ⑧ around drive pulley and compressor.

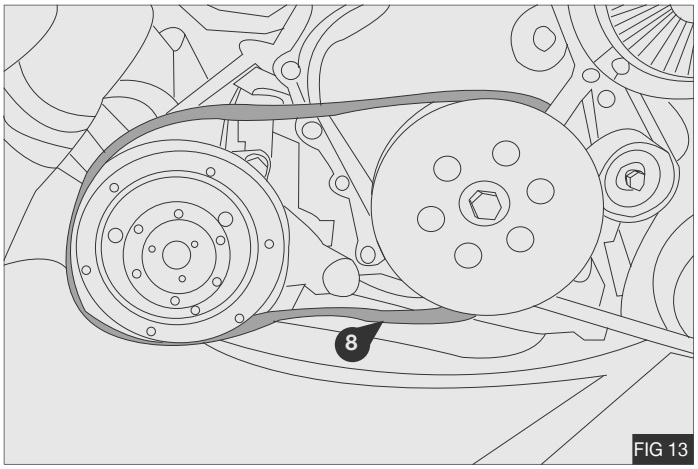


FIG 13

2. Loosely secure eccentric idler ⑥ to mount bracket ① using 1x M10x40 bolt (11). Belt ⑧ is fitted above Eccentric idler as shown opposite.
3. Do not tighten M10 bolt (11) at this stage.

Caution: Eccentric idler ⑥ must be turned anti-clockwise looking from the front of vehicle to tension the drive belt.

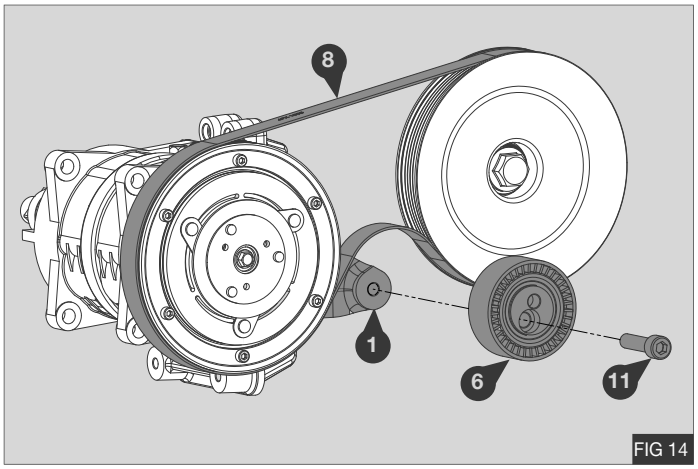


FIG 14

4. Using a 8mm Hex socket and ¼ inch drive ratchet turn Eccentric idler ⑥ anti-clockwise to tension drive belt ⑧.

BELT TENSION TABLE		
Belt	Belt Age	Belt Tension Using the Belt Tension Gauge
6 PK	New Belt	72 - 84 kg
6 PK	Used Belt / Re-Tension	54 - 60kg

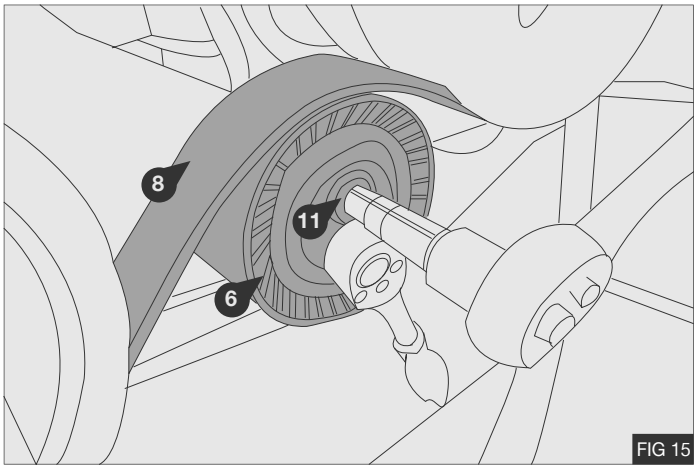


FIG 15

5. When specific tension has been achieved torque M10x40 bolt (11) to 58Nm / 42.8 lb ft.

Note: Check the belt tension when the belt is hot. IT IS IMPORTANT THAT THE BELT IS ALLOWED TO COOL BEFORE RE-TENSIONING. Always re-tension NEW belts if the tension is less than the USED BELT AMOUNT.

6. Refit all previously removed parts
7. Run the engine with the compressor clutch engaged for five minutes, check all components and fit belt label stickers.

Notes

Notes

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