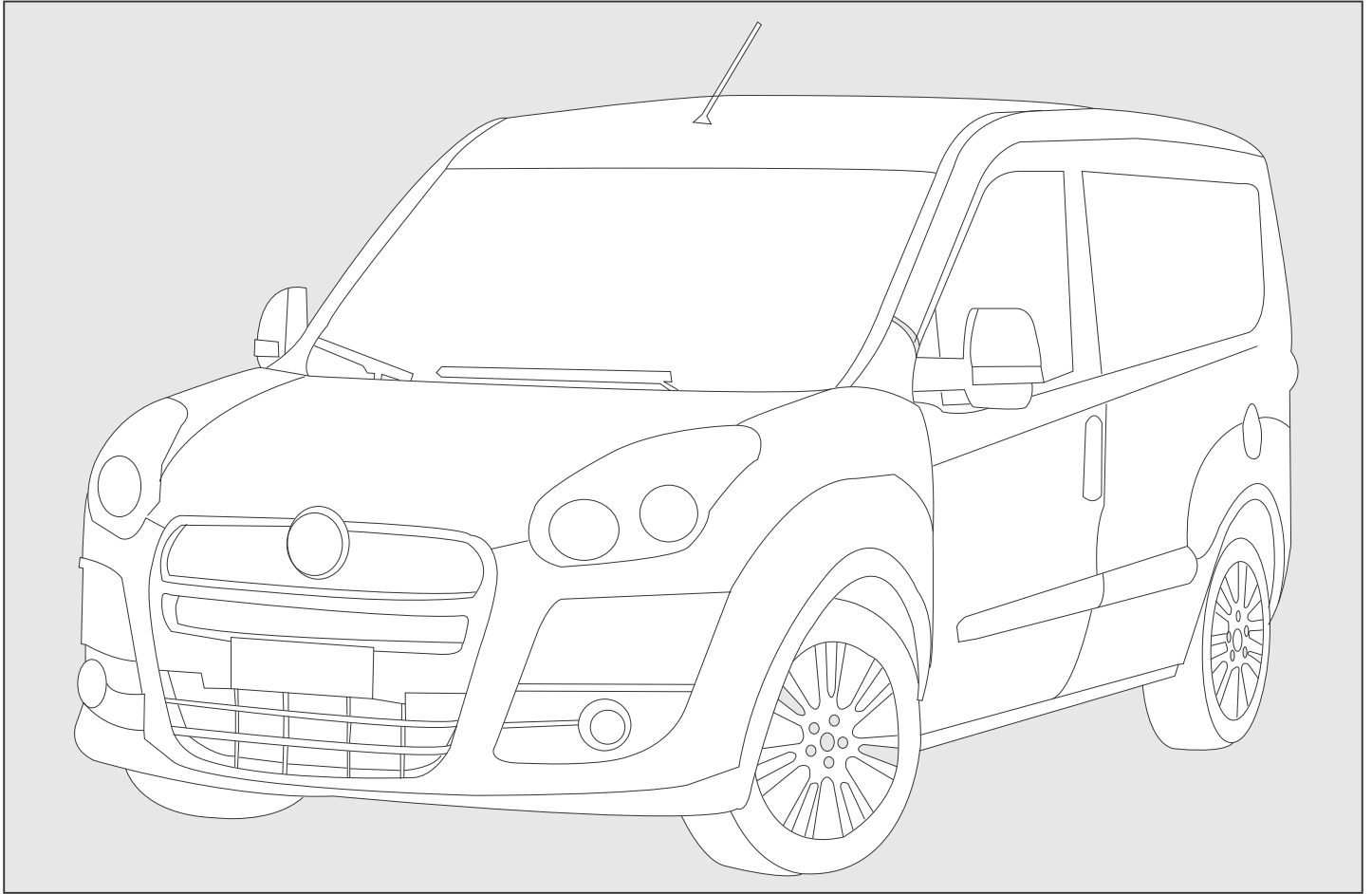


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VEHICLE DETAILS

Manufacturer	Fiat
Make	Doblo Cargo
Model	1.3 / Multijet 90 HP
Engine CC	1248
Engine Details	SDE 199 A3000 E4
Year	09 > 08.11
Chassis Nos.	N/A
LHD	YES
RHD	YES
PAS	YES
A/C	NO
Voltage	12v

KIT DETAILS

Kit Part No.	0500.4212
Description	Speed Reduction Kit
Compressor RPM	3925 @ Max Engine
	Power Output
Fitting Time	60 Minutes
Suction Fitting	45°
Discharge Fitting	45°
Belt Type	6PK 1744
Belt Part No.	0820.2621

RECOMMENDED COMPRESSORS

SELTEC	TM-13 HS	TM15-HS	TM16-HS
Comp No	0381.0492	-	-
Seltec No.	48844120	-	-
Mounting	Ear	-	-
Rotor	1A	-	-
Armature	SL	-	-
Diameter	126	-	-
Voltage	12	-	-
Orientation	V	-	-
Fitting	3/4 x 7/8	-	-
Manifold	Bolt	-	-

SANDEN	SD5H09	SD5H14	SD7H15
Comp No	-	-	-
Sanden No.	-	-	-
Mounting	-	-	-
Rotor	-	-	-
Armature	-	-	-
Diameter	-	-	-
Voltage	-	-	-
Orientation	-	-	-
Fitting	-	-	-

Notes

COMPRESSOR KIT CONFIGURATIONS

PART NUMBER	COMPRESSOR KIT PART NOS				DESCRIPTION	QTY.
	0500.4212	,	,	,		
0381.0492	●				TM13 Ear Mount 1A SL 126 12V V 3/4 x 7/8 Bolt	1

● = Additional parts to standard kits.

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:

- Inner and outer trim and body work
- Engine idle pace
- Check all the vehicle functions

Check list:

- Ensure that the right kit has been selected
- Before installing, check that all the correct pieces are present; also ensure that there are no missing or broken pieces
- When fitting, make sure the vehicle is properly protected against damage.

Installation apparatus

- Calibrated torque wrench
- Hand service tools
- Protective covers and shields

2 PRECAUTIONS

- Detach the battery negative lead.
- Torque all bolts where stated using a calibrated torque wrench.
- Take extreme care with moving parts.
- Remove the vehicles ignition key and keep it with you.
- 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.

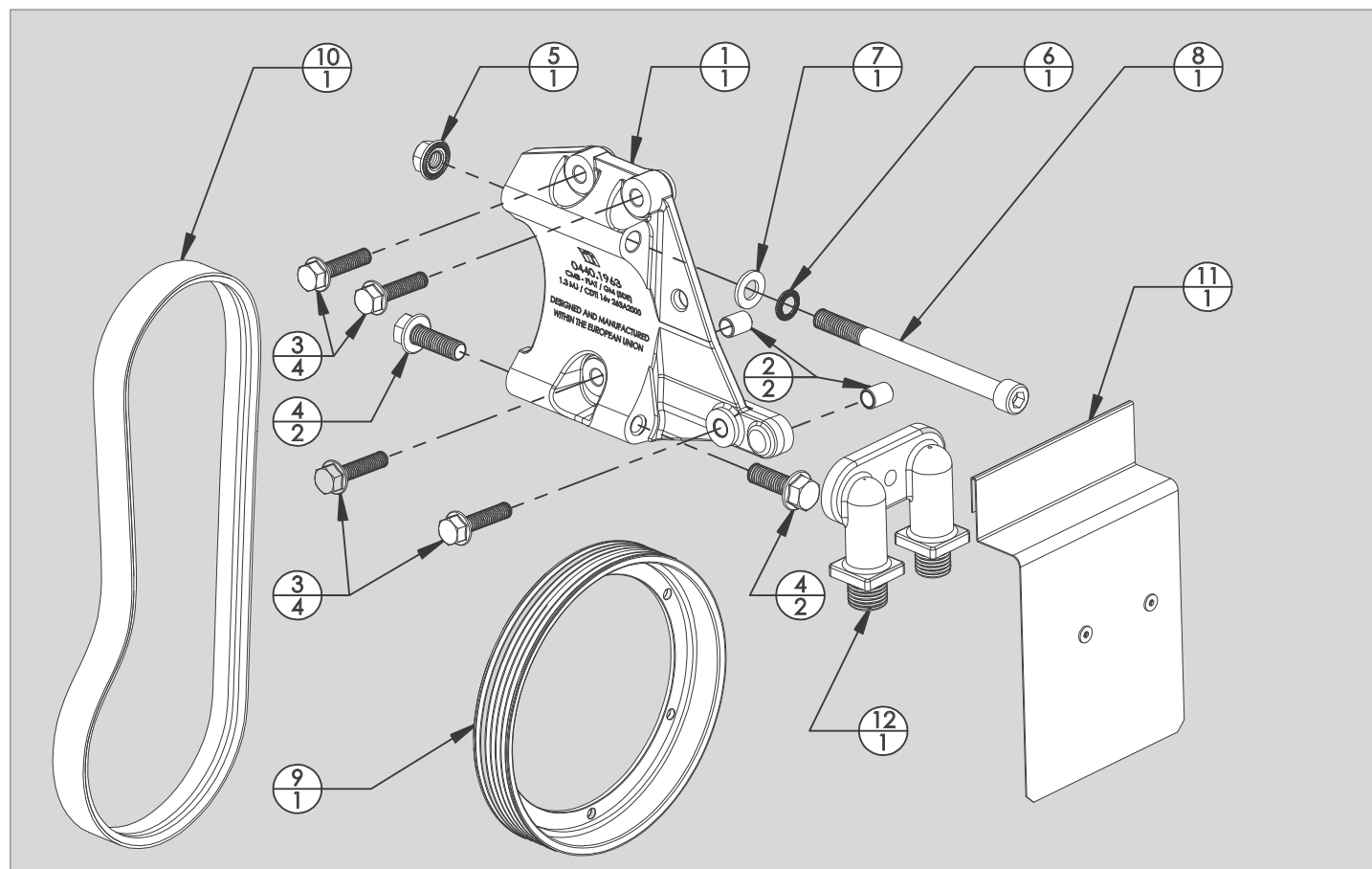
NB: This calls awareness to make the job easier or gives useful information.

STANDARD FASTENER TORQUE VALUES

- 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								
	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	0440.1963	Compressor Mount Bracket	1	-
2	2800.0311	Dowel Bush	2	-
3	2704.0481	Hex Flange Bolt Durlok - M8 x 35 : 1.25 - 12.9	4	-
4	2705.0491	Hex Flange Bolt Durlok - M10 x 30 : 1.50 - 12.9	2	-
5	2735.0071	Durlok Hexagon Flange Nut - M10 : 1.50	1	-
6	2809.0101	M10 Schnorr Safety washer type 'S'	1	-
7	2809.0011	Washer M10 Flat DIN 125 - A 10.5	1	-
8	2705.0301	Hex Socket Head Cap Screw M10 x 130 : 1.50 - 12.9	1	-
9	0411.0023	Clutch Rotor - PV6 160 Dia - Seltec	1	-
10	0820.2621	Belt - Poly Groove 6PK 1744	1	-
11	1431.0013	Head Shield	1	-
12	0425.0251	Manifold Inverted - 3 / 4 x 7 / 8 Insert O-Ring	1	-

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. Release the automatic tensioner.
2. Remove and discard drive belt.
3. Remove the unused wiring loom and support bracket. Secure bracket away from the holes used for the compressor mount bracket

INSTALLATION

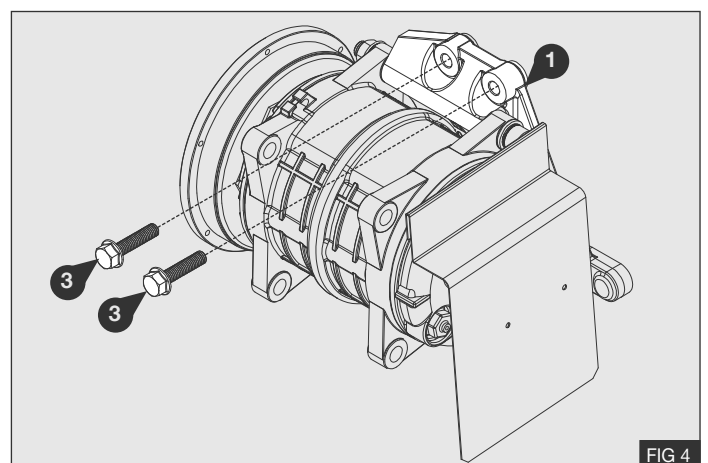
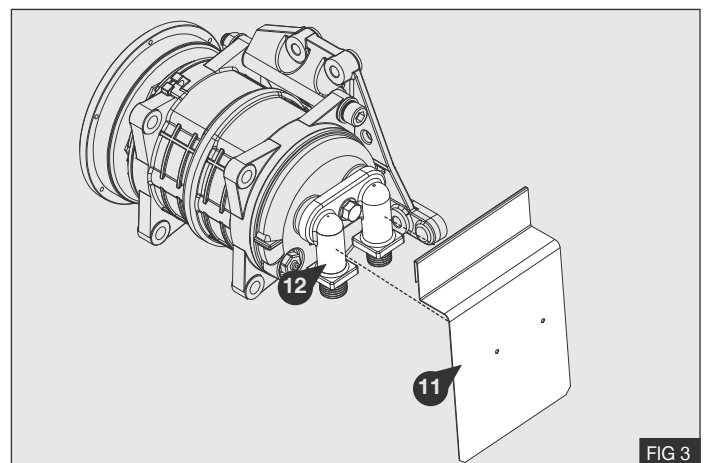
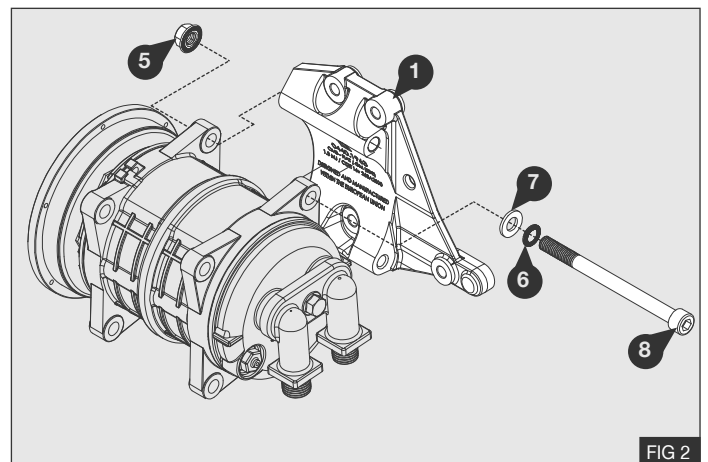
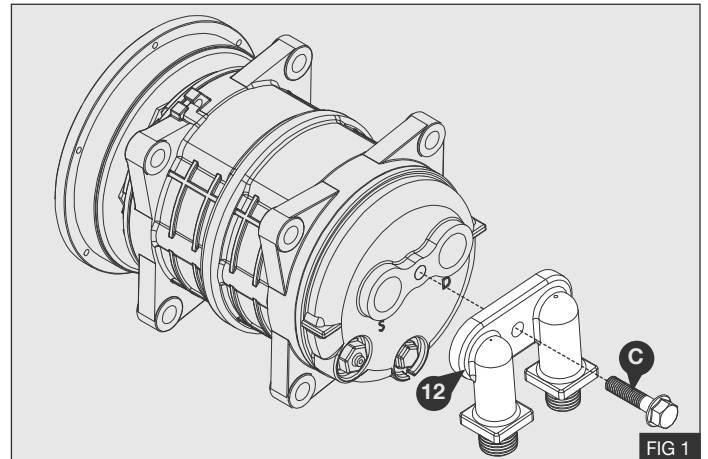
1. Install the supplied inverted manifold (12) to the compressor using the original bolt (C) - Fig 1
2. Torque bolt (C) to 45Nm / 33Lb.ft

3. Fit the compressor to the mount bracket (1) using M10 x 130 bolt (8), M10 washers (6) and (7) and M10 nut (5) - Fig 2.

Note: Do not torque or tighten bolt (8). Compressor must be allowed to rotate on the bolt axis.

4. Fit the supplied heat shield assembly (11) to the compressor by clipping it onto the inverted manifold (12) - Fig 3

5. Mount the mount bracket (1) to the engine block using two M8 x 35 setscrews (3) - Fig 4



6. Rotate the compressor so as to insert the remaining two M8 x 35 setscrews (3) into the bottom mounts- Fig 5

Note: Torque bolts in correct order, the bottom two first and then the top two.

7. Torque bolts (3) to 44Nm / 32Lb.ft - Fig 5
 8. Fix the bottom ears of the compressor to the bracket using two M10 x 30 setscrews (4) Torque both setscrews (4) and M10x130 bolt (8) - Fig 6
 9. Torque bolt (8) to 63Nm / 43Lb.ft.
 10. Torque setscrews (4) to 63Nm / 43Lb.ft - Fig 6

Caution: When the compressor is in position make sure that there is adequate clearance between the heat shield, exhaust and manifold. It is very important that none of these parts are touching.

11. Fit the supplied speed rotor (9) to the compressor clutch using 6x M5 cap head screws and M5 spring washers (K) - Fig 7
 12. Torque setscrews (K) to 9Nm / 6.65Lb.ft - Fig 7

Caution: When the speed rotor has been fitted check clearance between the rotor and the radiator hose(s). The hose clearance should be greater than 15mm at its closest point. If the clearance is less than 15mm adjust the position of the hose(s) onto the radiator to obtain at least 15mm.

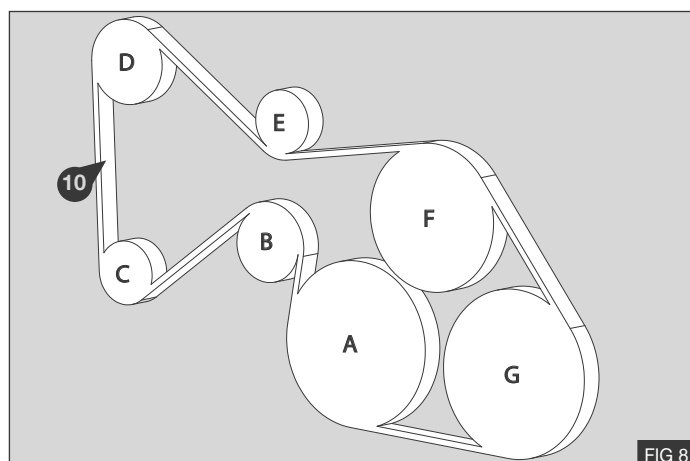
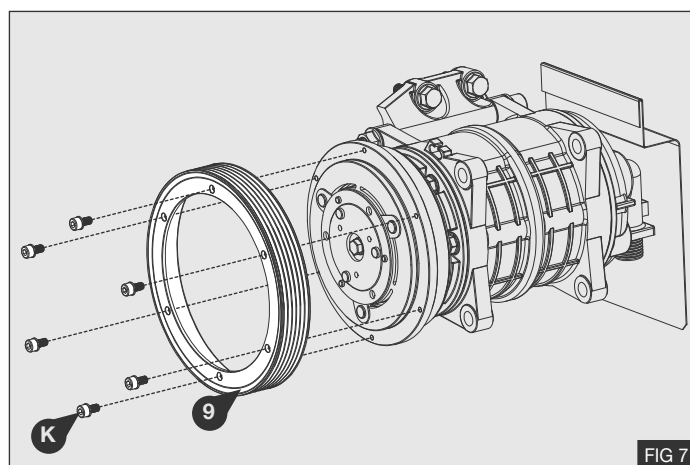
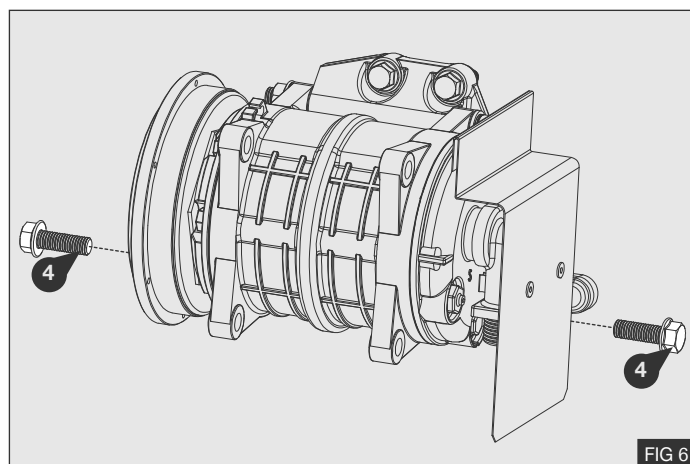
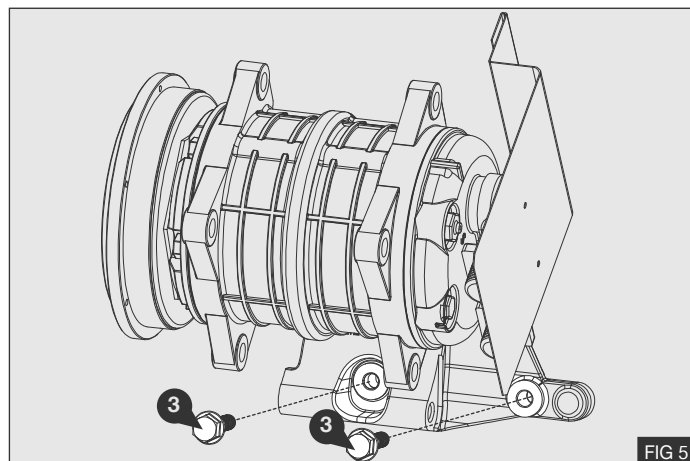
DRIVE BELT

1. Install the supplied drive belt (10) - Fig 8.

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

FINISH

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



Note