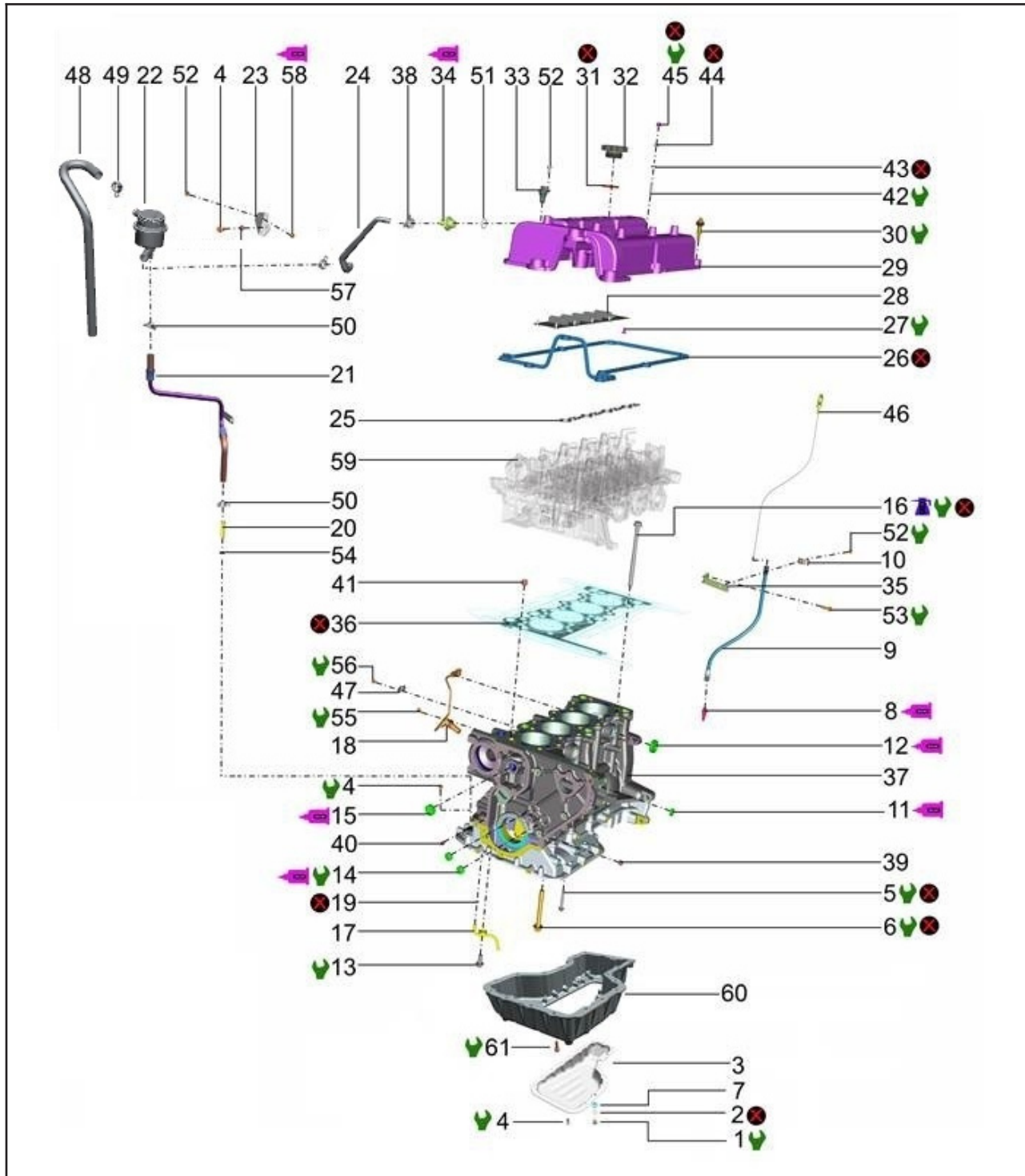




































ENGINE TIGHTENING TORQUE VALUES

A. CYLINDER BLOCK



ITEM NO.	DESCRIPTION	NO REUSE	SEALANT	LUBRICATION	TIGHTENING TORQUE (KGFM)
1	Assembly. Magnetic Drain Plug (M20x1.5)				 5±1
2	Sealing Washer (Oil Sump Drain Plug)				
3	Oil Sump				
4	Hex Flange Screw M8x16				 2.5
5	Hex Flange Bolt M8x60				 3
6	Hex Bolt (Main Bearing-Bed Plate) M14x1.5x10.9				 Refer Note 1
7	Oil Sump Boss				
8	Dipstick Tube Adapter				
9	Assembly Tube Dipstick (Nylon)				
10	Clamp				
11	Sealing Cap B22				
12	Sealing Cap B40				
13	Hex Flange Screw M12x30				 5
14	Plug MC 22x1-5				 3.5
15	Sealing Cap B30				
16	Bolt (Cylinder Head)				 Refer Note 2
17	Assembly, Oil Separator Pipe				
18	Crank Sensor With Updated Routine				
19	O Ring (Oil Separator Pipe)				
20	Assembly, Drain Seal (For Oil Separator)				
21	Tube Assembly with Clamp (OMS To Oil Sump)				
22	Oil Mist Separator				
23	Oil Mist Separator Mounting Bracket				

ITEM NO.	DESCRIPTION	NO REUSE	SEALANT	LUBRICATION	TIGHTENING TORQUE (KGFM)
24	Hose (Cylinder Head Cover To OMS)				
25	Gasket Injector Seal				
26	Seal -Camshaft Cover				
27	Hex Screw M6x12				 1
28	Assembly. Baffle Plate				
29	Cylinder Head Cover				
30	Assembly Screwing Element				 2.5
31	O-Ring (Oil Filler Cap)				
32	Oil Filler Cap				
33	Cam Shaft Position Sensor				
34	Adaptor (Cylinder Head Cover)				
35	Bus Dipstick Support Bracket				
36	Cylinder Head Gasket				
37	Assembly Cylinder Crankcase And Bedplate				
38	Spring Band Clamp 23dx12				
39	Hollow Dowel (For A/C Mtg. Bkt.)				
40	Hollow Dowel (For Front Cover)				
41	Hollow Dowel (For Cylinder Head				
42	Stud M6x25				 1.2
43	Rubber Washer (For Cylinder Head Cover)				
44	Washer (For Cylinder Head Cover)				
45	Hex Flange Nylon Nut M6				 1.2
46	Dipstick Inner-Dummy				
47	Clamp (Crank Sensor Cable)				
48	Breather Hose (OMS To Atmosphere)				

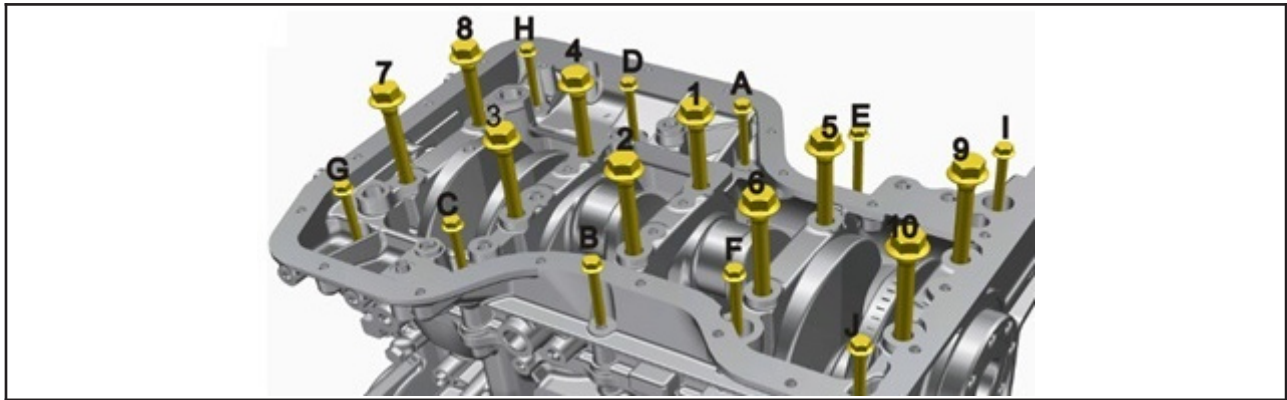
ITEM NO.	DESCRIPTION	NO REUSE	SEALANT	LUBRICATION	TIGHTENING TORQUE (KGFM)
49	Spring Band Clamp 25dx15				
50	Spring Band Clamp 17dx12				
51	Sealing Washer 22x27				
52	Hex Flange Screw M6x14				 1.2
53	Hex Flange Bolt M8x28				 2.5
54	O Ring (Assembly Drain Seal)				
55	Hex Flange Screw M6x16				 1
56	Hex Flange Screw M6x12				 1.2
57	Spring Washer B8				
58	Hex Flange Nut Am6				
59	Assembly. Cylinder Head With Valves				
60	Spacer Assembly				
61	Hex Flange Screw M8X25				 2.5

Sequence for main bearing bolt tightening:

1.

- a. Tighten main bearing bolts (1,2,3,4,5,6,7,8,9,10) with snug torque 5 kgfm
- b. Turn only the main bearing bolts to 45° using the Angle Indexing tool in the same sequence (Part Number : 2576 5890 0204) or Standard tool available in market.
- c. Turn further the main bearing bolts to 45° ° using the Angle Indexing tool in the same sequence (Part Number : 2576 5890 0204) or Standard tool available in market.
- d. Turn further the main bearing bolts to 20° ° using the Angle Indexing tool in the same sequence (Part Number : 2576 5890 0204) or Standard tool available in market.

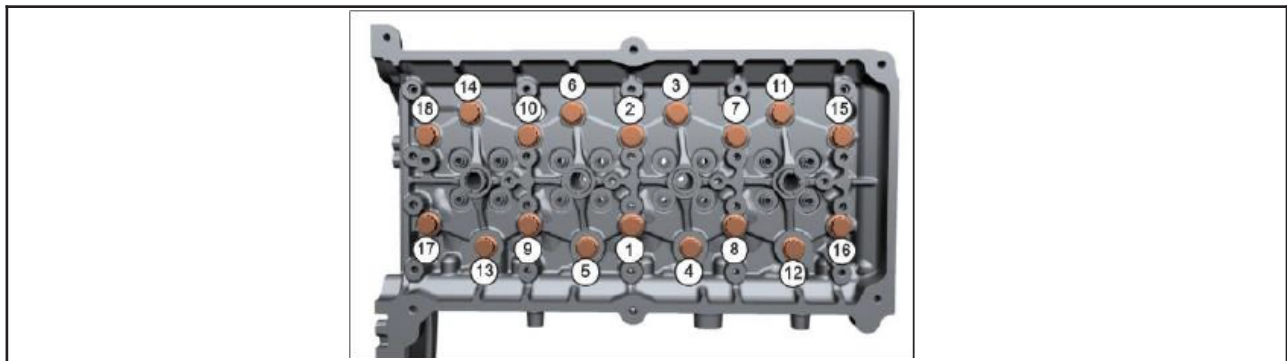
2. At the end all bedplate bolts (M8) marked as (A... J) Should be tighten to 3kgfm in sequence as shown in image.



3. Alternately, all bolts to be machine tightened simultaneously in each step.
4. Main bearing bolts to be smeared with moly paste (as per 313 TS: 25205) at the Time of machining and assembly.

Sequence for cylinder head bolt tightening

1.
 - a. Tighten Cylinder head bolt to 7.5 kgfm (Hold for 3 seconds) in sequence as marked.

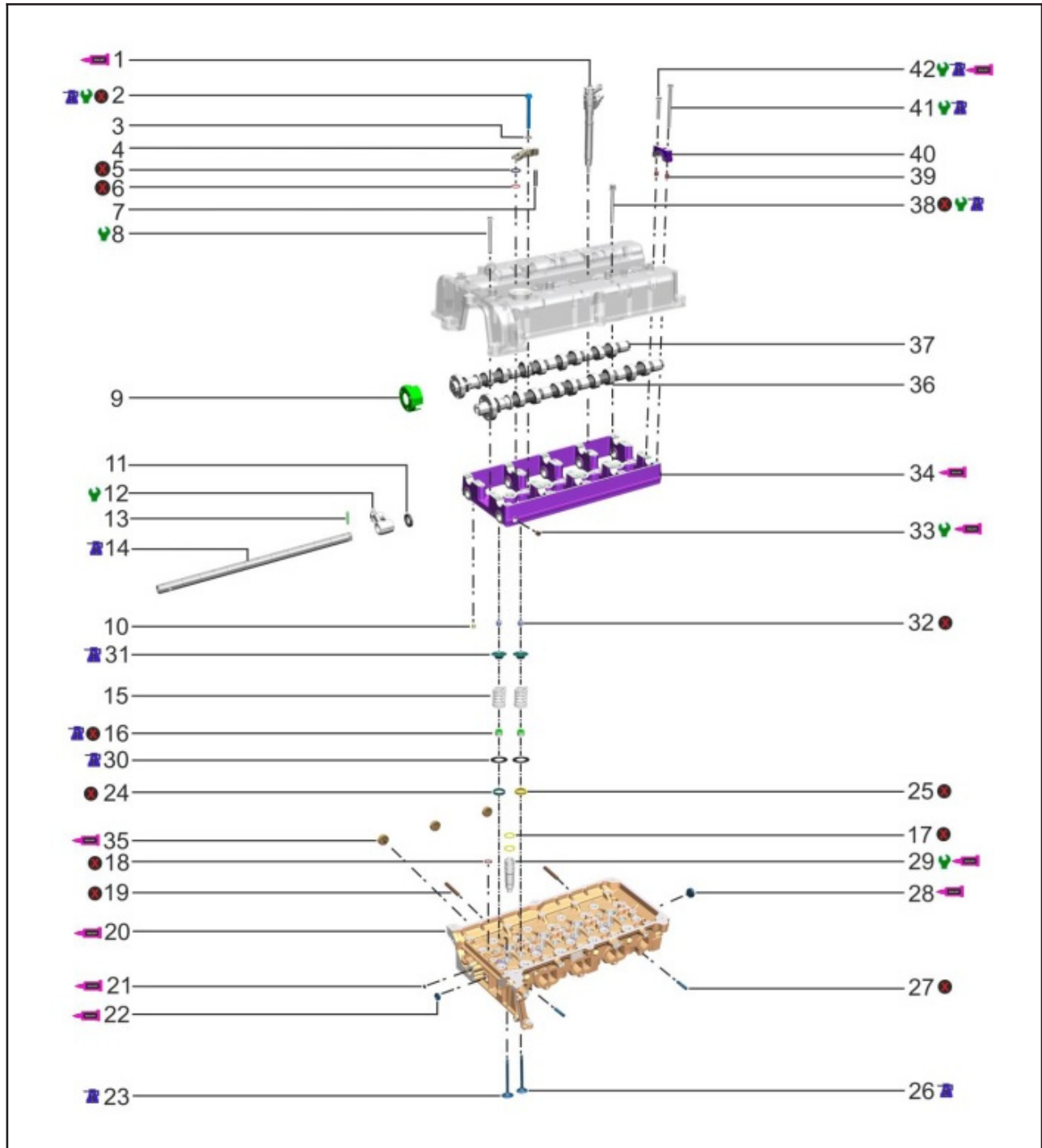





















- b. Turn the cylinder head bolt to 80° using the Angle Indexing tool in the same sequence as marked. Hold for 3 seconds. (Part Number: 2576 5890 0204) or Standard tool available in market.
- c. Turn the cylinder head bolt to 55° using the Angle Indexing tool in the same sequence as marked. Hold for 10 seconds. (Part Number: 2576 5890 0204) or Standard tool available in market.






















***i* NOTE**

○ Cylinder head bolts should be lubricated before assembly and Do not reuse cylinder head bolts & cylinder head gasket.

B. CYLINDER HEAD



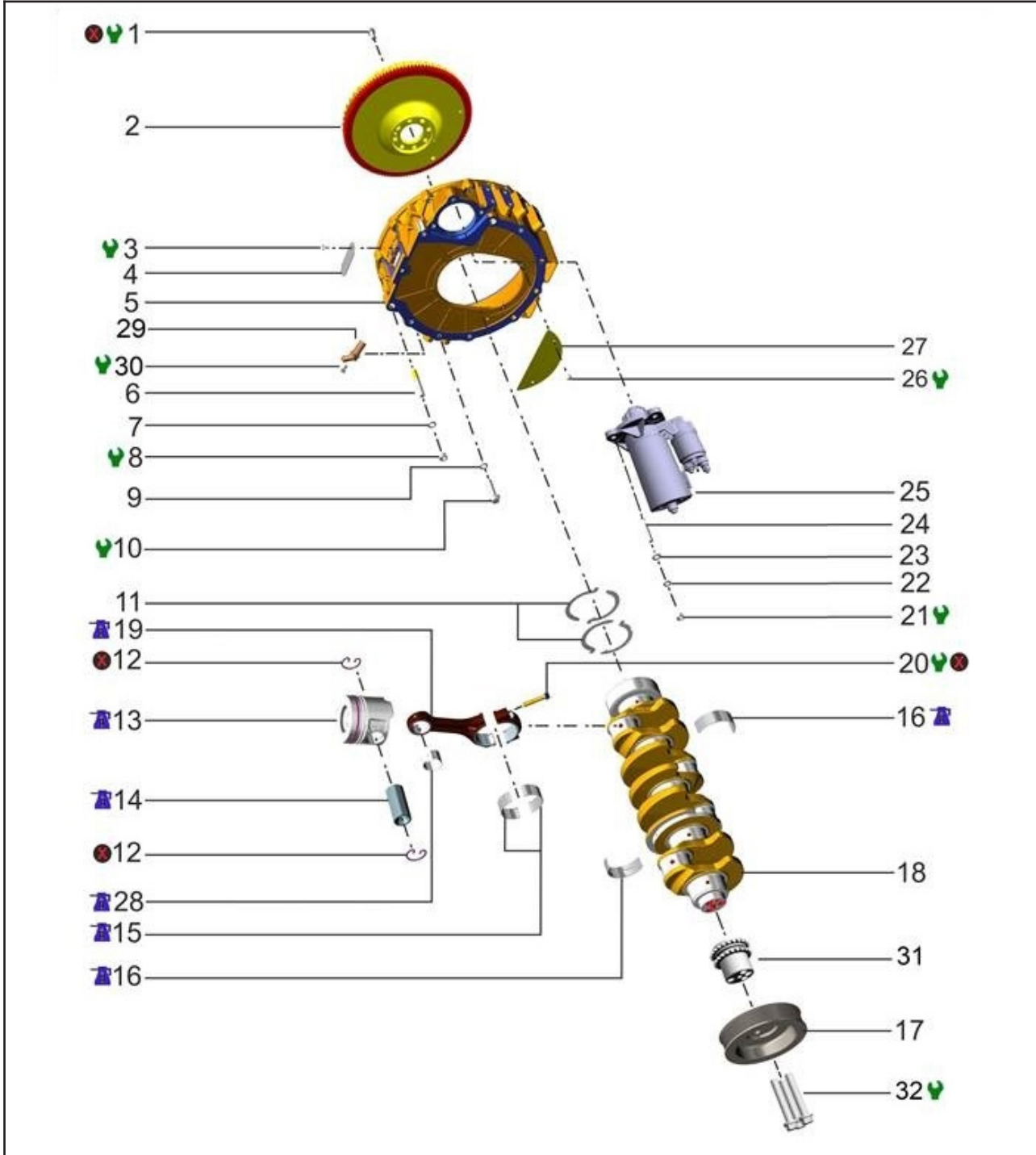
ITEM NO.	DESCRIPTION	NO REUSE	SEALANT	LUBRICATION	TIGHTENING TORQUE (KGFM)
1	Injector Assembly				
2	Hex Flange Bolt (Injector Claw)				 3.5+ 0.3
3	Spherical Washer				
4	Claw, Injector				
5	O Ring (For Camshaft Carrier)				
6	O Ring (For Injector Sleeve)				
7	Reaction Pin [Injector Clamp]				
8	Hex Flange Bolt M8x90				 2.5
9	Cam Sensor Wheel				
10	Hollow Dowel				
11	Rocker Washer Table DRG				
12	Rocker Arm-Offe DRG				 1.9- 2.3
13	Locking Pin (Rocker Shaft)				
14	Assembly Rocker Shaft With Core Plug				
15	Valve Spring				
16	Valve Guide Seal (CR Seal)				
17	O Ring Injector Sleeve				
18	O Ring (Cylinder Head To Cam Carrier)				
19	Stud For Exhaust Manifold				
20	Cylinder Head				
21	Sealing Cap B10				
22	Sealing Cap B20				
23	Inlet Valve				
24	Valve Seat Insert-Intake				
















ITEM NO.	DESCRIPTION	NO REUSE	SEALANT	LUBRICATION	TIGHTENING TORQUE (KGFM)
25	Valve Seat Insert-Exhaust				
26	Exhaust Valve				
27	Stud For Intake Manifold				
28	Sealing Cap B30				
29	Injector Sleeve				 6
30	Washer Valve Spring				
31	Retainer Valve Spring				
32	Valve Lock Half				
33	Plug MC 12x1.5				 2.2
34	Camshaft Carrier (GDC)				
35	Sealing Cap B20				
36	Trailing Cam Shaft				
37	Leading Camshaft				
38	Hex Flange Bolt M8x90				 2.5
39	Table DRG Hollow Dowel				
40	Cam Cap Mid & Rear				
41	Hex Flange Bolt M8x105				 1.5
42	Hex Flange Bolt M8x50				 1.5





i NOTE

- Apply lubricating grease urethyn E2 for injector during fitment.
- Always use new injector washer while fitment. Do not reuse injector washer.

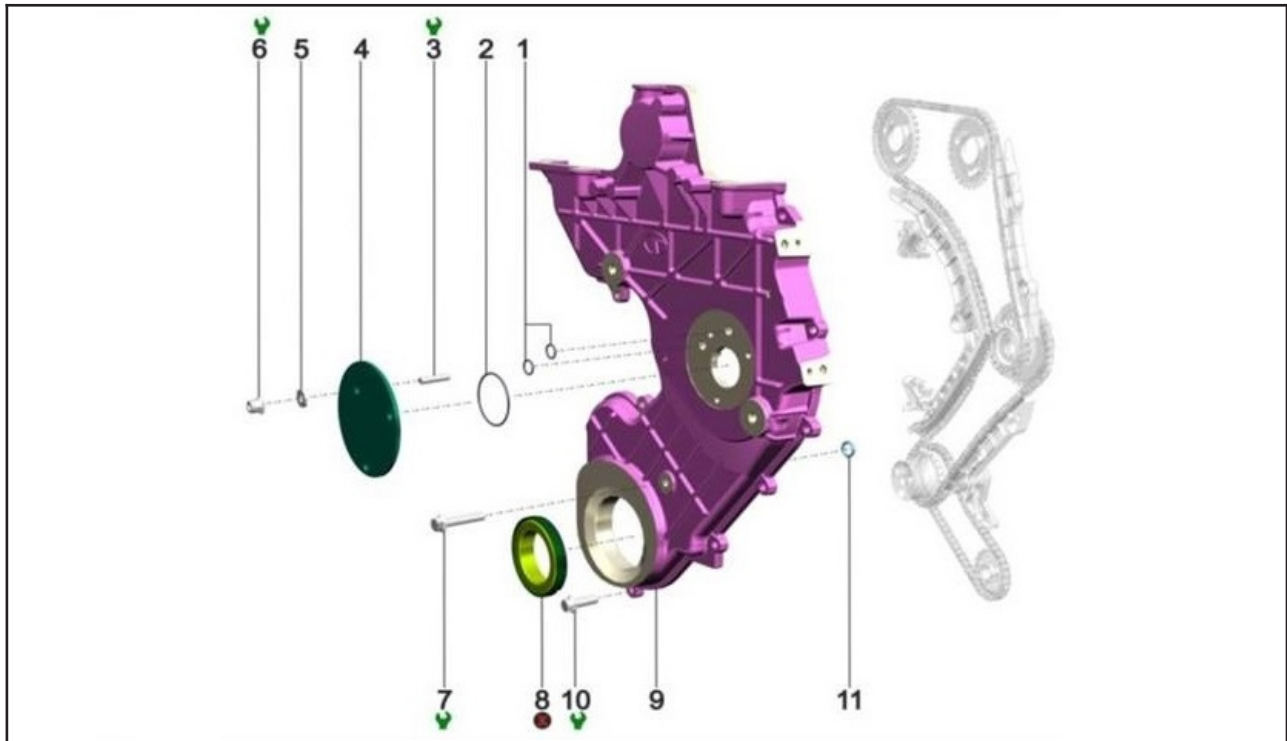
C. ENGINE MOVING PARTS



ITEM NO.	DESCRIPTION	NO REUSE	SEALANT	LUBRICATION	TIGHTENING TORQUE (KGFM)
1	Bolt, Flywheel MTG				 5+100° Angle
2	Assembly Flywheel With Ring Gear				
3	Hex Flange Screw M6X14				 1
4	Cover Plate (Inspection Window)				
5	Flywheel Housing				
6	Stud CM12X50				
7	Spring Washer B12				
8	Hex Nut M12				 8
9	Spring Washer B12				
10	Hex Flange Bolt M12X55				 8
11	Thrust Washer				
12	Flat Wire Circlip				
13	Piston				
14	Piston Pin				
15	Set Con Rod Bearing (Upper/ Lower) Cell				
16	Set Main Bearing Half (Upper/ Lower) Cell				
17	Pulley Assembly, Vibration Damper				
18	Crankshaft				
19	Connecting Rod Assembly				
20	Connecting Rod Bolt				 3.5+80° to 90° Angle
21	Hex Nut M10				 7
22	Spring Washer B10				
23	Bright Washer 10.5				

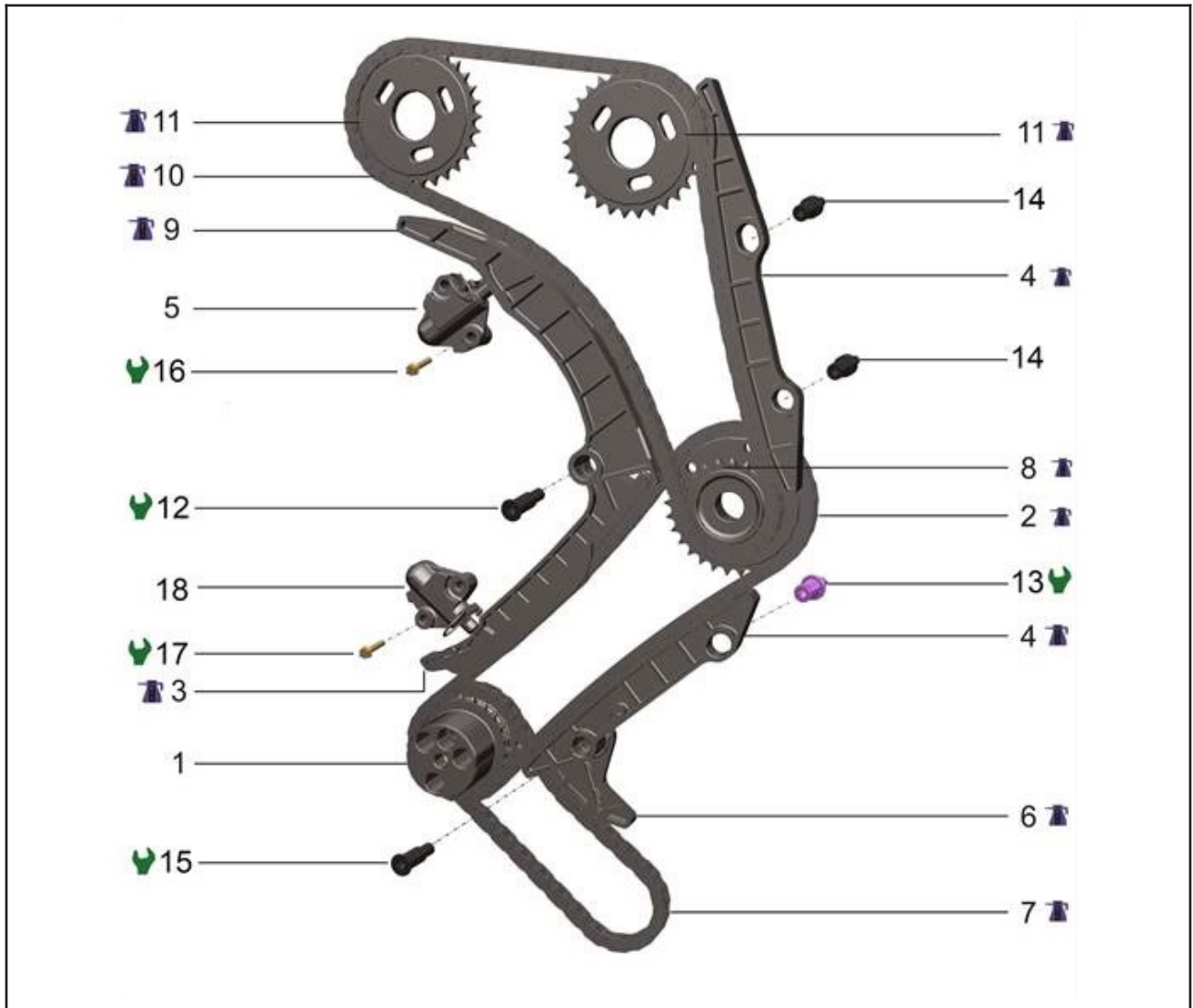
ITEM NO.	DESCRIPTION	NO REUSE	SEALANT	LUBRICATION	TIGHTENING TORQUE (KGFM)
24	Stud CM10X35				
25	Starter Motor 12V 2.2KW M/S, BOSCH Starter Motor 24V 2.7KW, M/S LucasTVS				
26	Hex Flange Screw M6X10				 1
27	Back Cover Plate				
28	Bush Small End				
29	Crank Sensor				
30	HEX FL Screw M6X14				 1.6
31	Oil pump sprocket				
32	Hex FL Bolt M14X1.5X80				 5+90° Angle
















D. ENGINE TIMING



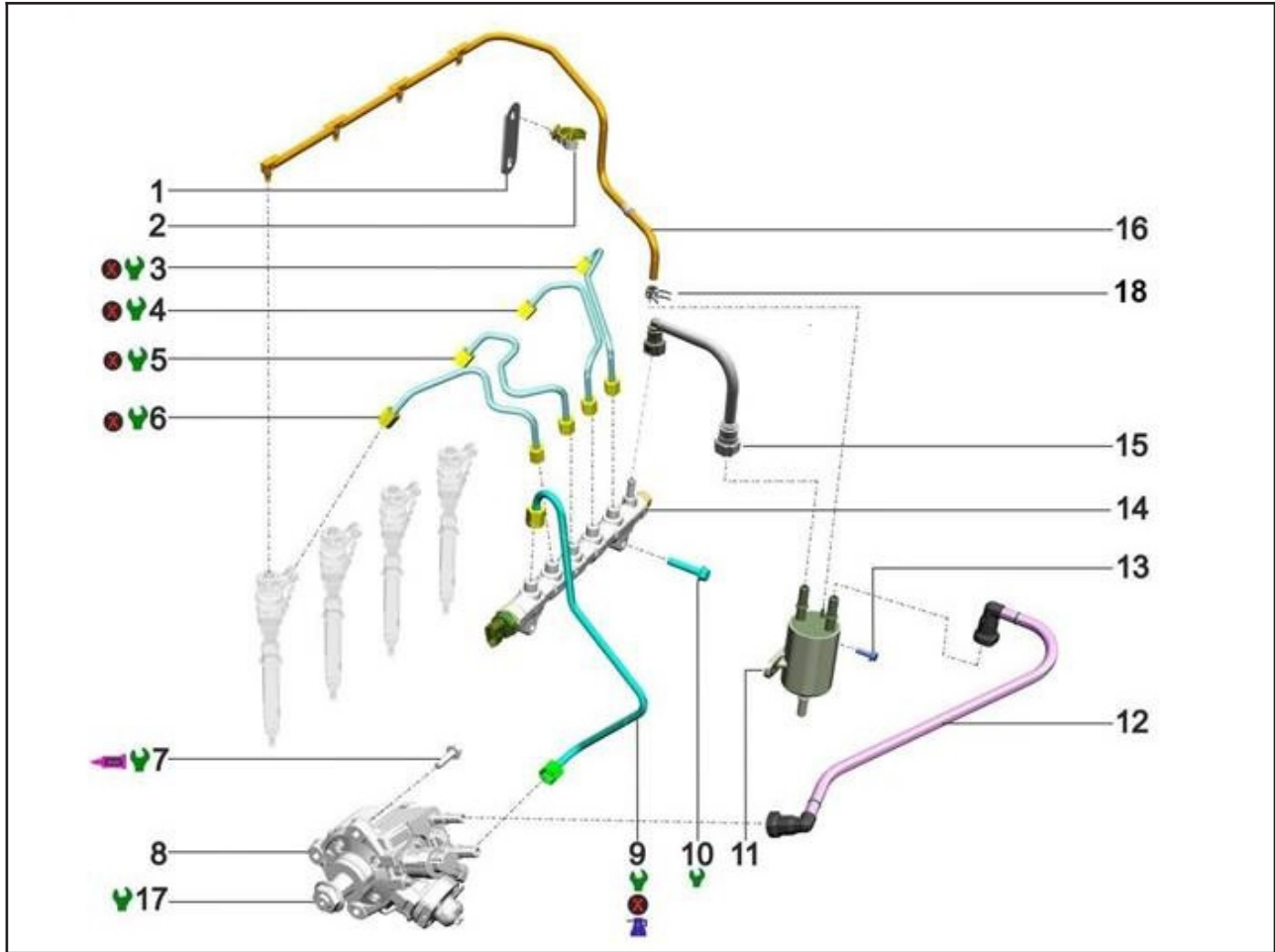
ITEM NO.	DESCRIPTION	NO REUSE	SEALANT	LUBRICATION	TIGHTENING TORQUE (KGFM)
1	O-Ring, Cover Plate (Cover Plate To Front Cover)				
2	O-Ring, Cover Plate (Cover Plate To Front Cover)				
3	Stud BM6x18				1.2
4	Cover Plate (Front Cover)				
5	Washer (Cylinder head cover)				
6	Hex FL Nyloc Nut M6				1.2
7	Hex Flange Bolt M8x45				2.5
8	Front Seal	✗			
9	Cover, Front				
10	Hex Flange Bolt M8x25				2.5
11	O Ring (Between Front Cover And Block)				

















E. TIMING KIT / CHAIN



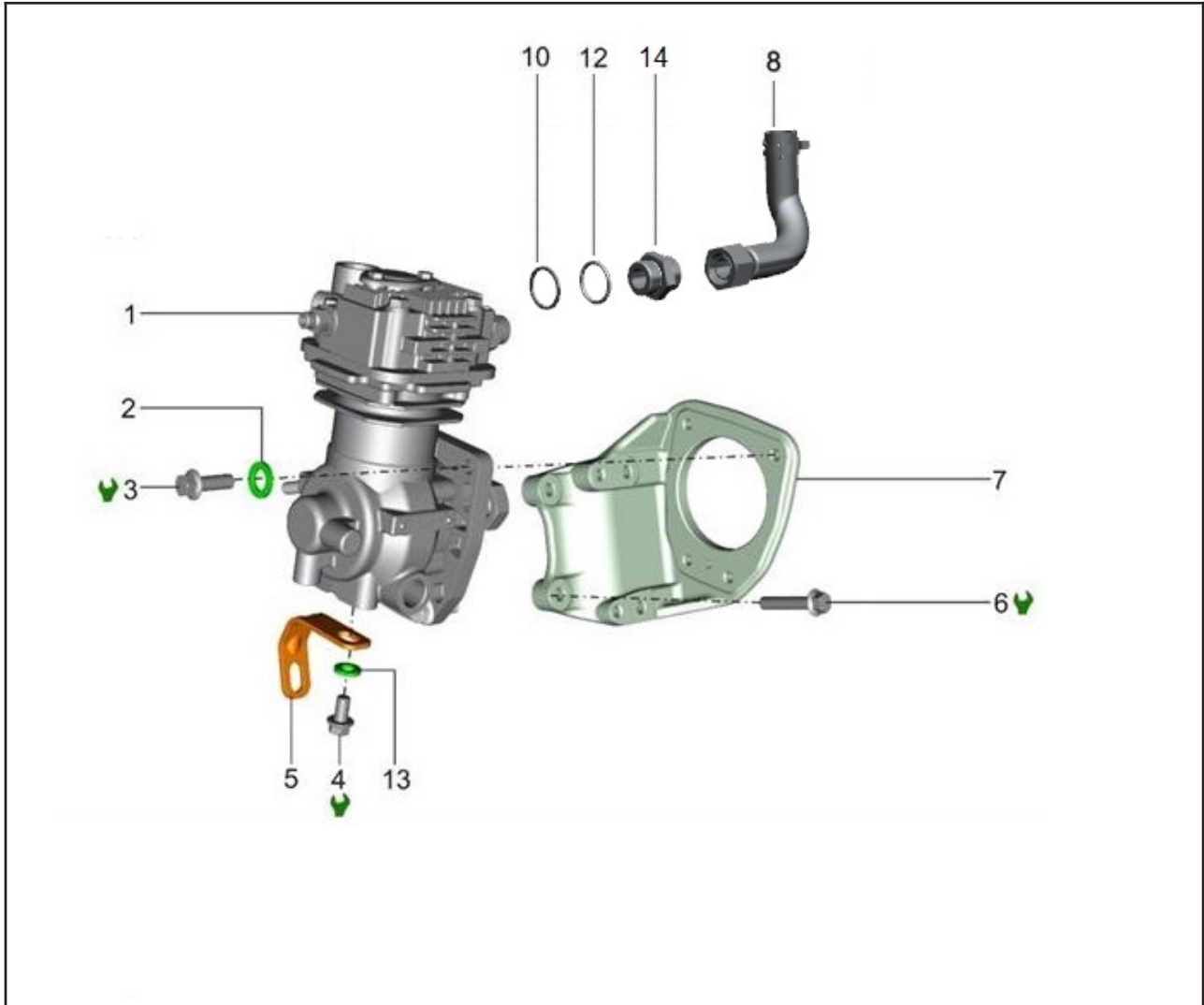
ITEM NO.	DESCRIPTION	NO REUSE	SEALANT	LUBRICATION	TIGHTENING TORQUE (KGFM)
1	Sprocket Crankshaft 22/25t				
2	Chain B123hnf X 86 Pitches (Crank To Hp Pump)				
3	Arm-Primary Assembly. Assembly Tensioner-Lower				
4	Chain Guide				
5	Tensioner - Hydraulic				
6	Assembly Mechanical Tensioner				
7	Chain B123 HNF X 58 Pitches (Crankshaft To Oil Pump)				
8	Sprocket Fip 21/33t				
9	Arm-Secondary Assembly. Assembly Tensioner-Upper				
10	Chain B123hnf X 102 Pitches (Hp Pump To Camshaft)				
11	Sprocket Camshaft 28T				
12	Bolt For Primary And Secondary Tensioner Arm				 2.0
13	Bolt For Primary Chain Guide				 2.0
14	Bolt For Secondary Chain Guide				 2.0
15	Bolt For Mechanical Tensioner & Primary Chain Guide				 2.0
16	Hex Flange Screw M6x30				 1.0
17	Hex Flange Screw M6x25				 1.0
18	Tensioner - Hydraulic				




F. DICOR SYSTEM



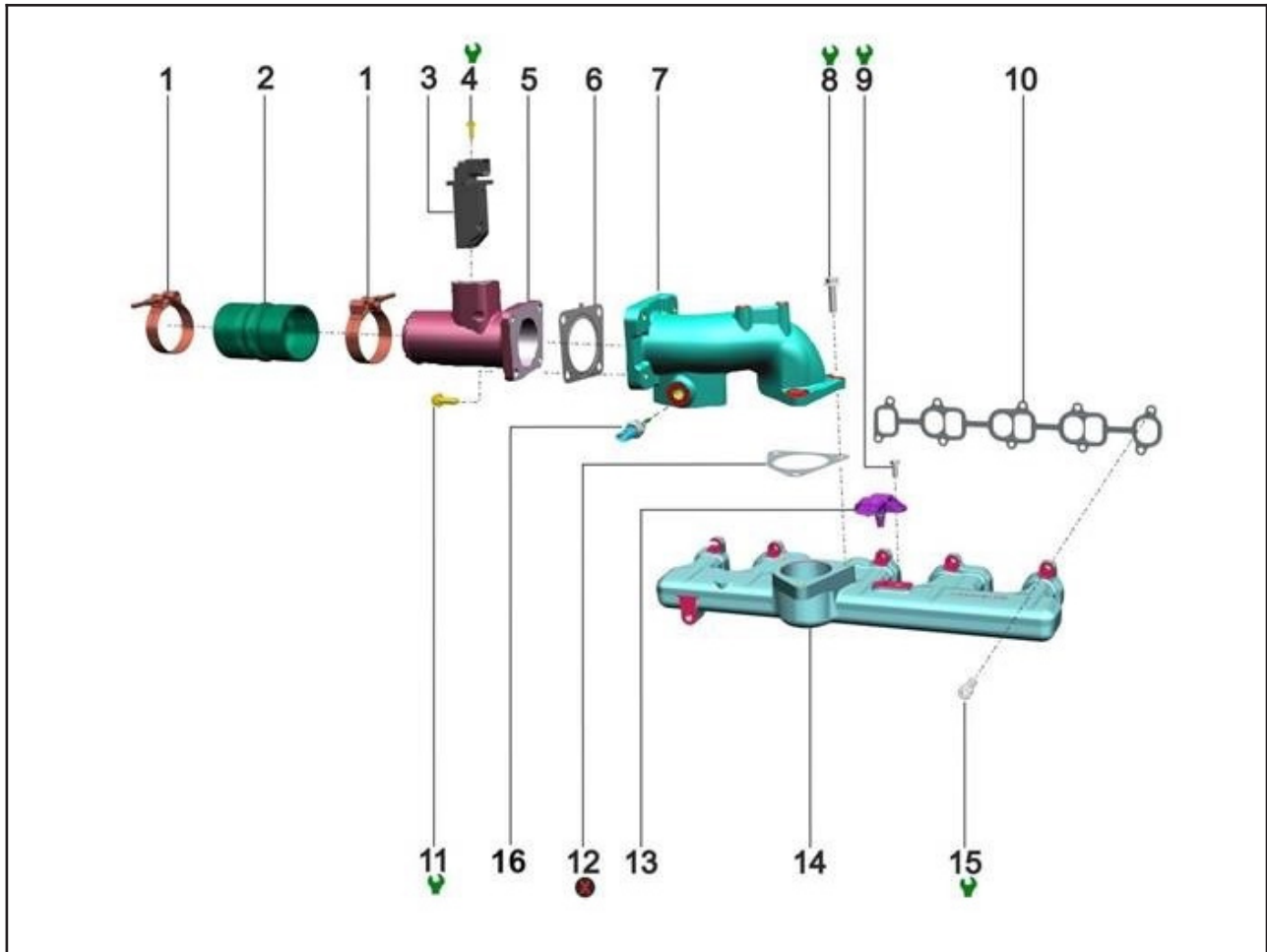
ITEM NO.	DESCRIPTION	NO REUSE	SEALANT	LUBRICATION	TIGHTENING TORQUE (KGFM)
1	Support Bracket				
2	Clamp				
3	HP Line Rail To INJ (Cylinder 04)				 3.0-3.6 (max)
4	HP Line Rail To INJ (Cylinder 03)				 3.0-3.6 (max)
5	HP Line Rail To INJ (Cylinder 02)				 3.0-3.6 (max)
6	HP Line Rail To INJ (Cylinder 01)				 3.0-3.6 (max)
7	Hex Flange Bolt M8X30				 3
8	HP Pump Assembly				
9	HP Pipe Assembly, Pump To Rail				 5.5
10	Hex Flange Bolt M8X40				 2.0±0.3
11	Assembly Fuel Accumulator				
12	Overflow Pipe Assembly, Fip To Accumulator				
13	Hex Flange Bolt M6X20				 1
14	Common Rail Assembly With Pressure Sensor				
15	Nylon Tube				
16	Leak Off Pipe Assembly, Injector				
17	HP Pump Nut M18X1.5				 8±0.5
18	Leak Off Line Clip				







G. AIR COMPRESSOR



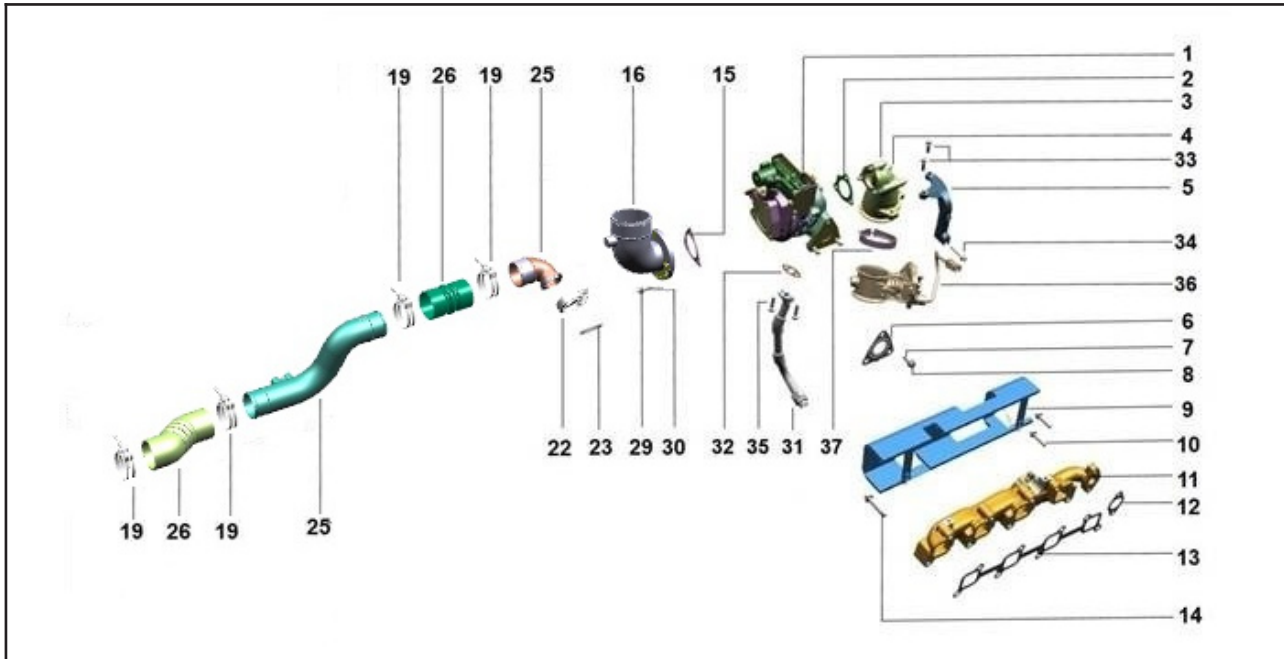
ITEM NO.	DESCRIPTION	NO REUSE	SEALANT	LUBRICATION	TIGHTENING TORQUE (KGFM)
1	Assembly. Belt Driven Compressor (160cc)				
2	Spring Washer B10				
3	Hex Bolt M10x30				 6.5 ± 0.5
4	Hex Screw M10x16				 2.3 ± 0.25
5	Air Compressor Support Bracket				
6	Hex Flange Bolt M10x50				 6.5 ± 0.5
7	Air Compressor Mounting Bracket				
8	Air Supply Pipe Assembly				
9	Elbow K-18-M26x1.5				
10	Sealing Washer 26x31				
11	Lock Nut M26x1.5				
12	O-Ring 26x3				
13	Hardened Washer				
14	Coupling Body				

H. AIR INTAKE SIDE













ITEM NO.	DESCRIPTION	NO REUSE	SEALANT	LUBRICATION	TIGHTENING TORQUE (KGFM)
1	Hose Clamp TB 58 SAE J1508				
2	Hump Hose (Pipe To Air Intake Elbow)				
3	PFM Sensor				
4	Hex Flange Screw M6X16				 1
5	Housing				
6	Gasket				
7	Air Intake Pipe, Intake Manifold				
8	Hex Flange Screw M8X30				 2.0±0.3
9	Hex Screw M6X16				 0.6
10	Gasket Intake Manifold				
11	Hex Flange Screw M8X25				 2.5±0.3
12	Gasket Intake Elbow				
13	Sensor, Air Temperature				
14	Intake Manifold				
15	Cap Screw M8X25				 2.0±0.3
16	Temperature Sensor (After EGR Cooler)				

I. EXHAUST SIDE

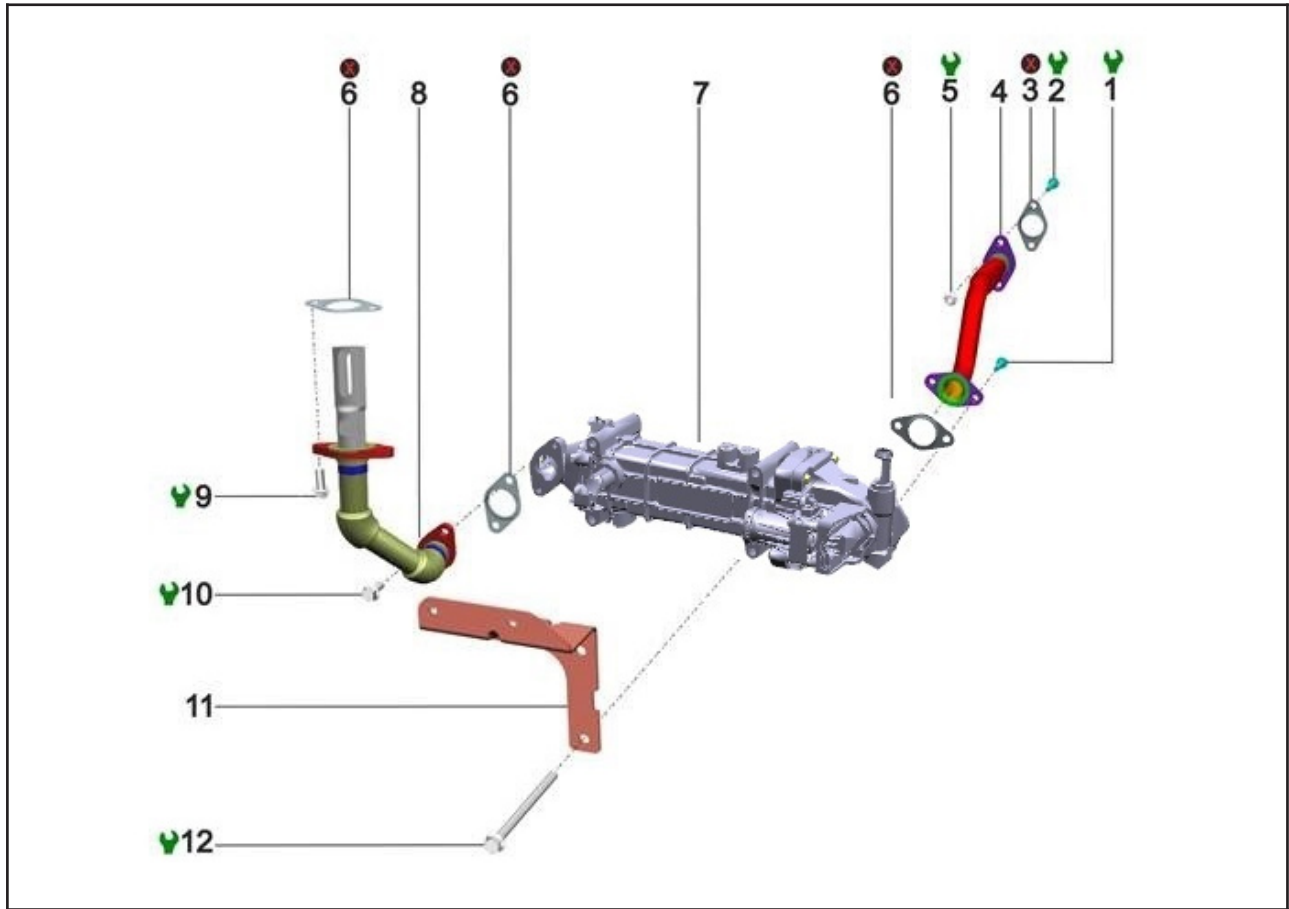










ITEM NO.	DESCRIPTION	NO REUSE	SEALANT	LUBRICATION	TIGHTENING TORQUE (KGFM)
1	Turbocharger				
2	Gasket (TC To Int. Elbow)	✘			
3	Exhaust Elbow				
4	Flanged Clinch Nut	✘			3.9
5	Exhaust Elbow Support Bracket				
6	Gasket (Exhaust Manifold To Tc)	✘			
7	Stud M10x30				7.7
8	Flanged Clinch Nut M10x1.5	✘			7.7
9	Heat Shield				
10	Hex Flange Bolt M8x40				3.5
11	Exhaust Manifold (For LCV)				
12	Gasket Exhaust Manifold to EGR Pipe				

ITEM NO.	DESCRIPTION	NO REUSE	SEALANT	LUBRICATION	TIGHTENING TORQUE (KGFM)
13	Gasket Exhaust Manifold				
14	Hex Flange Bolt M10x58				 3.5
15	Gasket (TC Air Intake)				
16	Air Intake Elbow Air Inlet Elbow (From Air Filter To TC) (LPO 10.2T Bus 24V)				
17	Bracket (OMS)				
18	TC Adapter				
19	Hose Clamp TB76 Hose Clamp TB 58 SAE J1508 (Ultra 1415 Truck (12V), LP712/912 Bus (12V), LPO 10.2T Bus (24V))				
20	Hose Assembly, Turbocharger to Intercooler Hump Hose (Pipe To Air Intake Elbow) (LPO 10.2T Bus 24V)				
21	Hose Clamp TB76 Hose Clamp TB 58 SAE J1508 (LPO 10.2T Bus 24V)				
22	VEE Band Clamp				
23	O Ring 48.7x3.55				
24	Clamp Support Bracket Assy., TCIC Pipe (Bangle Bracket) (LPO 10.2T Bus 24V)				
25	Pipe, TC to Intercooler				
26	Hump Hose (Pipe to Air Intake Elbow)				
27	Hose Clamp TB58				
28	TC-IC Pipe Support From Air Compressor Bracket				
29	Stud M8x25				 2
30	Hex Flange Nut M8				 2
31	Oil Return Pipe Assy., Turbocharger. At Crank case M22				 3.5
32	Gasket, Turbocharger Oil Return Line				

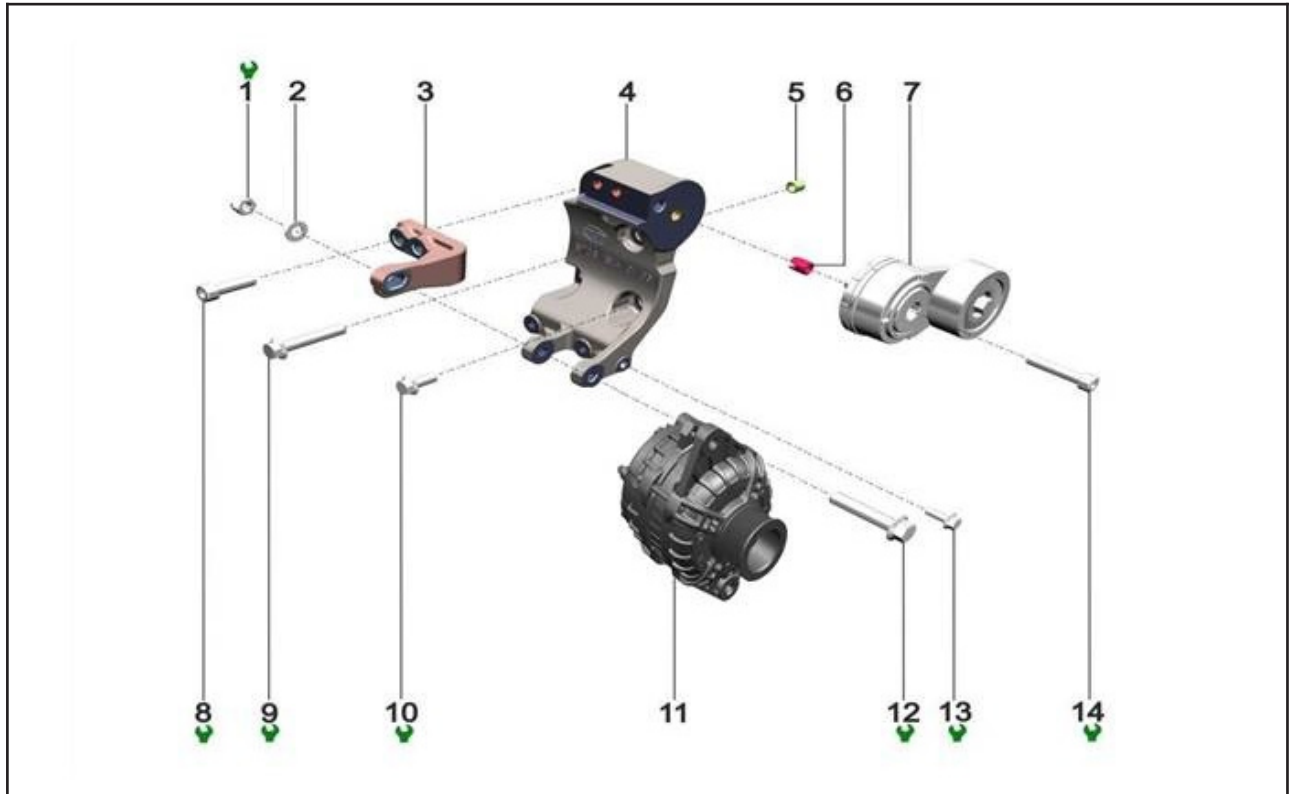
ITEM NO.	DESCRIPTION	NO REUSE	SEALANT	LUBRICATION	TIGHTENING TORQUE (KGFM)
33	HEX FL Screw M10X35				 4.6
34	HEX FL Bolt M10X58				 4.6
35	HEX FL Screw M6x22				 0.95
36	Exhaust Throttle Valve Assembly				
37	V-Band Clamp				








J. EGR SIDE



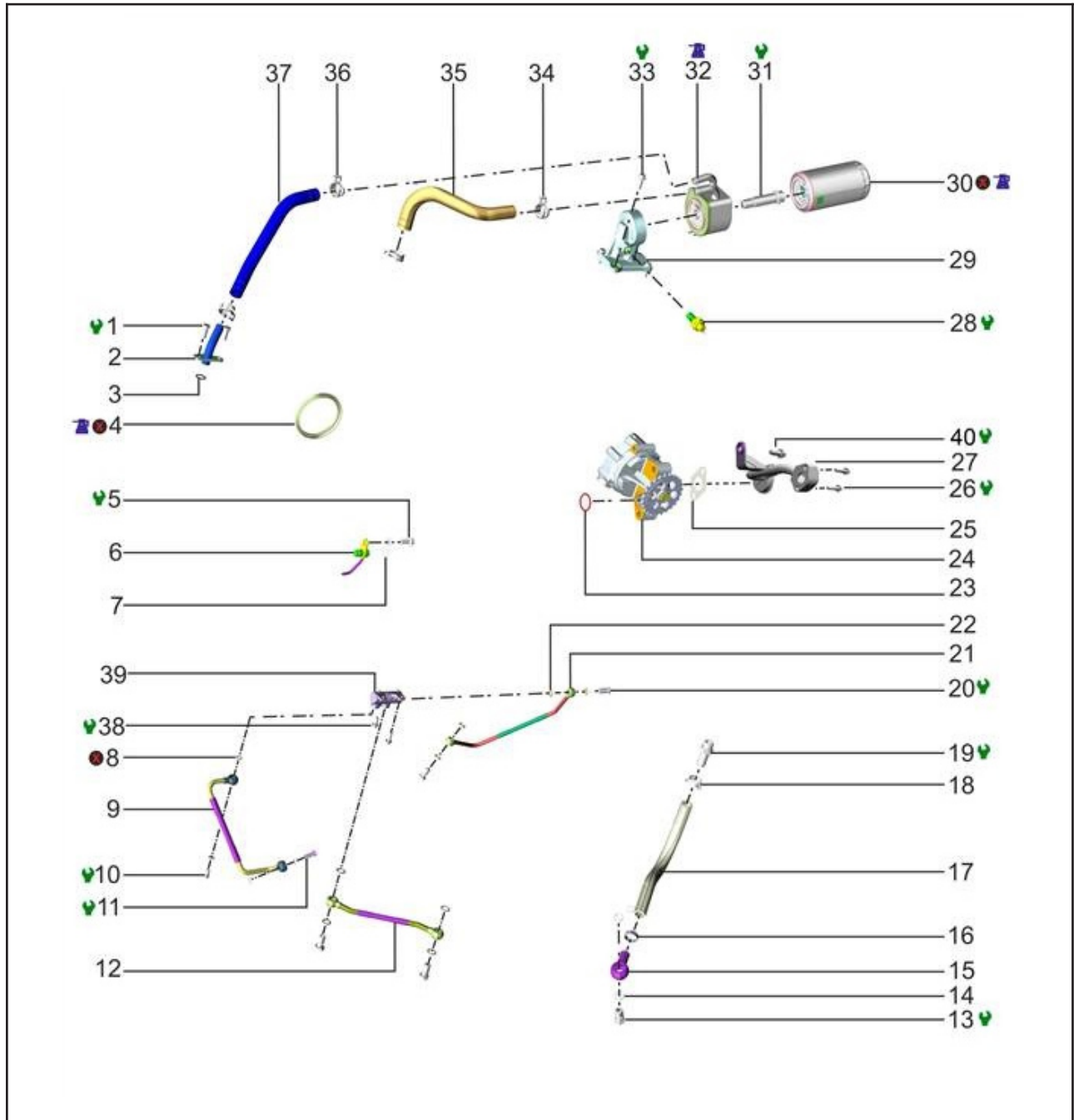
ITEM NO.	DESCRIPTION	NO REUSE	SEALANT	LUBRICATION	TIGHTENING TORQUE (KGFM)
1	Hex Flange Screw M8x22				 2.0±0.3
2	Hex Flange Bolt M8x40				 2.0±0.3
3	Gasket Exhaust Manifold To EGR Pipe				
4	Assembly EGR Tube				
5	Hex Flange Nut AM8				 3.9
6	Gasket EGR Pipe To EGR Valve				
7	EGR Cooler Assy. With Valve				
8	Assembly EGR Mixture				
9	Hex Flange Screw M8x22				 2.0±0.3
10	Hex Flange Screw M8x18				 2.0±0.3
11	Bracket Fuel Accumulator				
12	Hex Flange Bolt M8x115				 2.0±0.3











K. ALTERNATOR MOUNTING












ITEM NO.	DESCRIPTION	NO REUSE	SEALANT	LUBRICATION	TIGHTENING TORQUE (KGFM)
1	Nyloc Nut M10				 2
2	Bright Washer 10.5				
3	8PK 150A ALT Top BKT (Forged)				
4	Alternator Bracket Alternator Bracket 24V 150A (LP 712/912 Bus and LPO 10.2T Bus)				
5	Hollow Dowel				
6	Insert (Cylinder. Head Cover)				
7	Auto Tensioner For 8PK Belt				
8	Cap Screw M10x35				 5.8
9	Hex Flange Bolt M10x60				 6±0.5
10	Hex Flange Screw M10x25				 6±0.5
11	Alternator 12V 120A (Non AC Bus LP712/912, Truck Ultra 1415 and LPT 1412) Alternator 24V 150A (LP 712/912 Bus and LPO 10.2T Bus)				
12	Hex Flange Bolt M10x50				 2
13	Hex Flange Screw. M8x22				 2
14	Cap Screw M10x50				 4.5

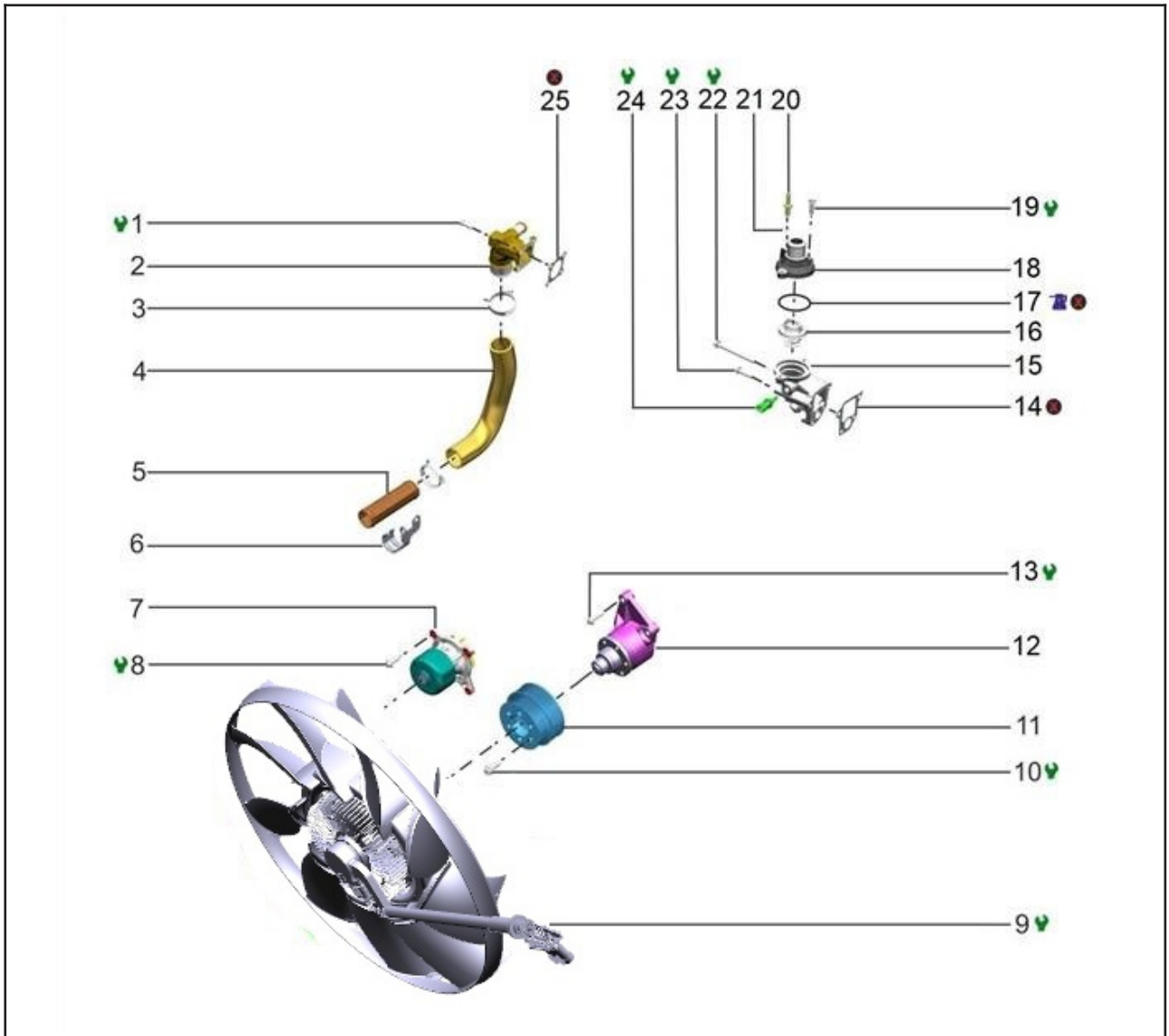
L. LUBRICATION SYSTEM
















ITEM NO.	DESCRIPTION	NO REUSE	SEALANT	LUBRICATION	TIGHTENING TORQUE (KGFM)
1	Hex Screw M8x20				 2.5±0.25
2	Assembly Inlet Pipe				
3	O Ring				
4	Crankshaft Seal Rear				
5	Hex Flange Screw M6x14				 1±0.15
6	Nozzle Assembly, Piston Cooling				
7	Gasket Piston Cooling Nozzle				
8	Sealing Washer 10x16				
9	Flexible Oil Supply Line Reservoir To Compressor				
10	Pipe Union Bolt 6 M10x1				 1.6±0.2
11	Pipe Union Bolt M10x1.5 (Air Compressor Oil Supply Line)				 1.6±0.2
12	Flexible Oil Supply Line Block To Reservoir				
13	Banjo Bolt M22x1.5				 5.2±0.25
14	Sealing Washer 22x27				
15	Banjo 22				
16	Clamp Air Comp Oil Return				
17	Oil Return Hose (Air Compressor To Bed Plate Socket)				
18	Spring Band Clamp 27DX12W				
19	Socket 20				 3.5
20	Pipe Union Bolt 8 M12x1.5				 3±0.2
21	Adapter Assembly Reservoir To TC				
22	Sealing Washer 12x18				
23	O Ring (Oil Pump-Bed Plate)				
24	Assembly Oil Pump				
25	Gasket, Oil Pump Strainer Boss (Strainer Boss-Oil Pump)				

ITEM NO.	DESCRIPTION	NO REUSE	SEALANT	LUBRICATION	TIGHTENING TORQUE (KGFM)
26	Hex Flange Bolt M8x35				 1.3
27	Oil Strainer Assembly (Oil Pump)				
28	Oil Pressure Switch				 3
29	Oil Filter Head				
30	Assembly Oil Filter				
31	Adaptor (For Oil Cooler & Oil Filter)				 3
32	Oil Cooler For Truck				
33	Hex Flange Screw M8X25				 3
34	Spring Band Clamp 25DX15W				
35	Hose (Oil Cooler To EGR Cooler)				
36	Spring Band Clamp 25DX15W				
37	Hose (Cylinder Block To Oil Cooler)				
38	Hex Flange Screw M8X25				 2.5±0.25
39	Oil Reservoir (Suitable For Air Compressor)				
40	Hex Flange Screw M12X28 (LPT 1412 and Ultra 1415)				 8

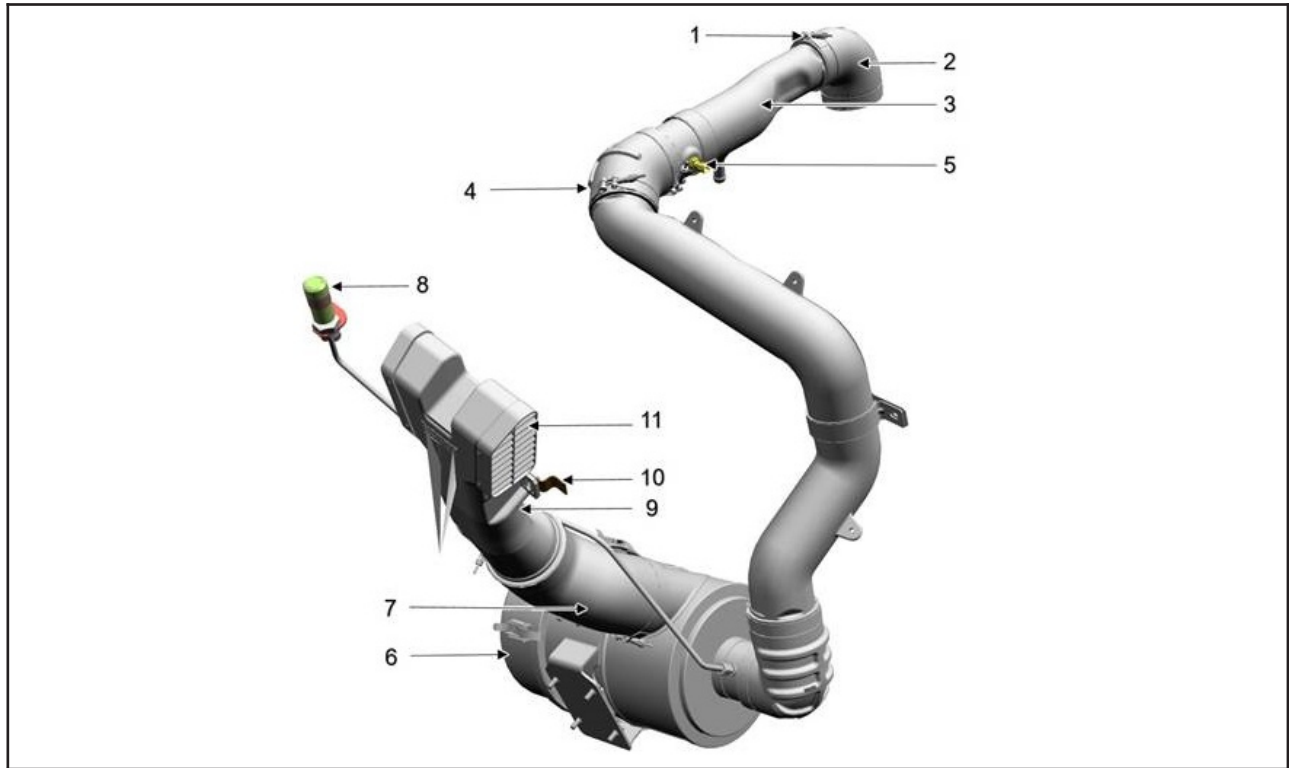
M. COOLING SYSTEM



ITEM NO.	DESCRIPTION	NO REUSE	SEALANT	LUBRICATION	TIGHTENING TORQUE (KGFM)
1	Hex Head - Collar Bolt				 2.5
2	Hose, Water Intake Elbow To Pipe				
3	Spring Band Clamp 55DX12W				
4	Rubber Bellow, Thermostat To Radiator				
5	Tube				
6	T-Connector Bracket In 8PK 150A 3I NGE				
7	Water Pump Assembly				
8	Hex Flange Screw M8x25				 2.5
9	Fan Assembly, E-Viscous Fan				 15-16
10	Hex Flange Screw M8x25				 2.2-2.4
11	Pulley, Bearing Housing (LP G2 Bus)				
12	Bearing Housing Assembly with Short Shaft (Non AC Bus LP 712/912, Truck LPT 1412), LP 712/912 Bus (24V) and LPO 10.2T Bus (24V) Bearing Housing Assembly with Long Shaft (Truck Ultra 1415)				
13	Hex Flange Bolt M8x45				 3.2
14	Gasket Thermostat Housing				
15	Thermostat Housing				
16	Thermostat Element				
17	O-Ring, Thermostat				
18	Thermostat Cover				
19	Hex Flange Bolt M8x25				 2.5
20	Adaptor (On Thermostat Housing)				
21	Sealing Washer 10x14				
22	Hex Flange Bolt M8x100				 2.5
23	Hex Flange Screw M8x35				 2.5

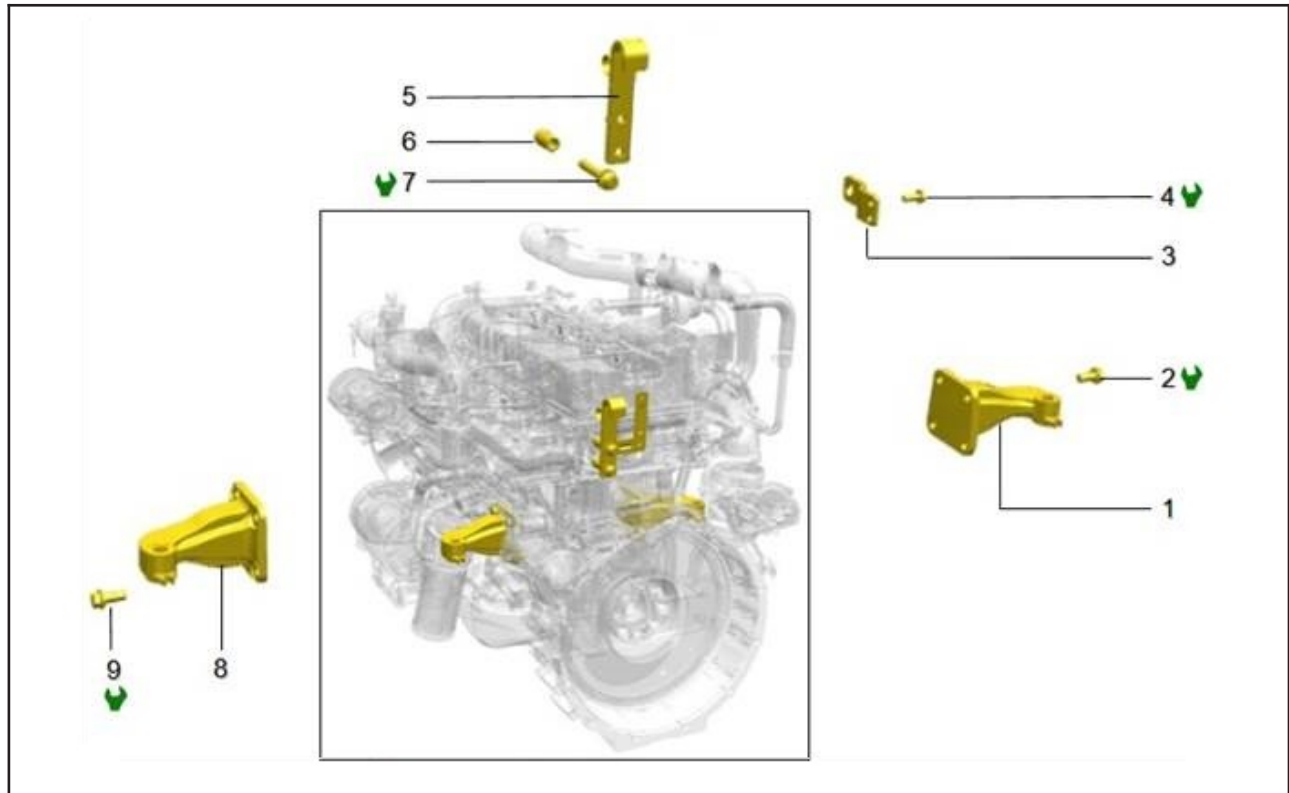
ITEM NO.	DESCRIPTION	NO REUSE	SEALANT	LUBRICATION	TIGHTENING TORQUE (KGFM)
24	Temperature Sensor				 1.5
25	Water Inlet Gasket				

N. AIR INTAKE SYSTEM



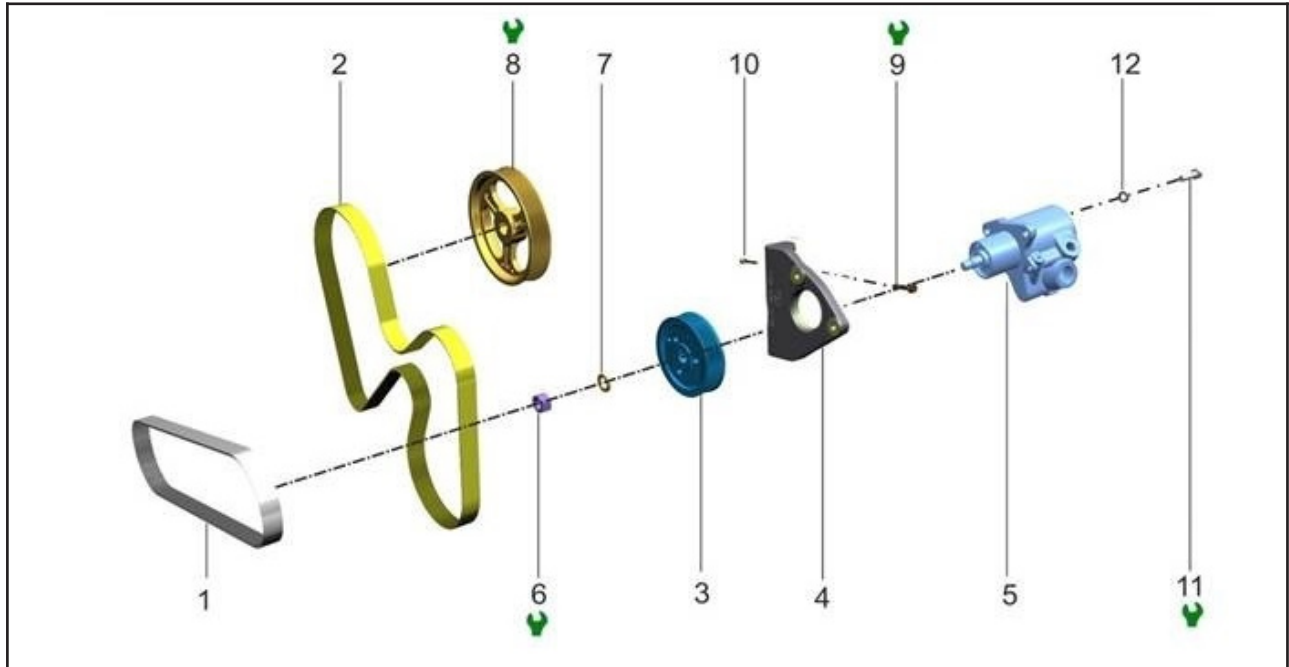
ITEM NO.	DESCRIPTION	NO REUSE	SEALANT	LUBRICATION	TIGHTENING TORQUE (KGFM)
1	Hose Clamp, T Bolt				
2	Hose Elbow				
3	Hose Assembly				
4	T Bolt Type Hose Clamp				
5	Air Temperature Sensor				
6	Assembly. Air Filter				
7	Hose				
8	Service Indicator				
9	Pipe & Bracket Assembly				
10	Assembly. Bracket				
11	Snorkel				

O. ENGINE MOUNTING SUPPORT



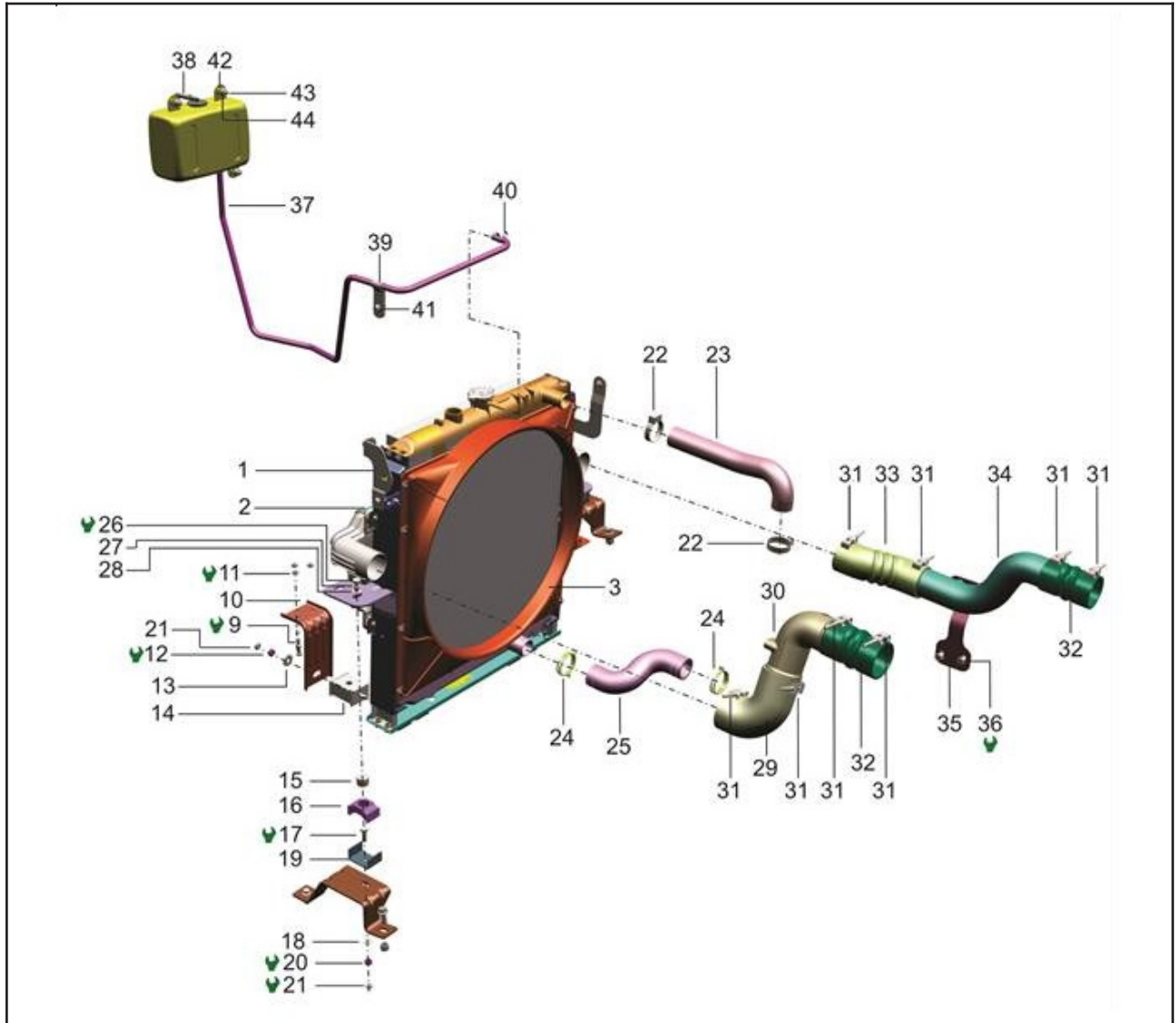
ITEM NO.	DESCRIPTION	NO REUSE	SEALANT	LUBRICATION	TIGHTENING TORQUE (KGFM)
1	Front Engine Support-Right (Painted)				
2	Hex Flange Screw M12x30				12
3	Lifting Hook (Rear)				
4	Hex Flange Screw M10X28				2.2+0.3
5	Lifting Hook (Front)				
6	Spacer				
7	Hex Flange Screw M10X60				2.2+0.3
8	Front Engine Support-Left (Painted)				
9	Hex Flange Screw M12x30				12








P. AUXILIARY BELTS





ITEM NO.	DESCRIPTION	NO REUSE	SEALANT	LUBRICATION	TIGHTENING TORQUE (KGFM)
1	6PK Stretch Fit Belt				
2	8PK Main Drive				
3	Pulley (For Separate Power Steering Pump Drive)				
4	Power Steering Pump Bracket				
5	Power Steering Pump Assembly				
6	Hex Nut				15
7	Spring Washer				
8	Pulley 8PK for Air Compressor (Dia.185)				20.4±1
9	Hex Flange Screw M6X30				2.5
10	Hollow Dowel				
11	Hex Screw M10X35				2.5
12	Spring Washer				

Q. RADIATOR AND FITMENTS



ITEM NO.	DESCRIPTION	NO REUSE	SEALANT	LUBRICATION	TIGHTENING TORQUE (KGFM)
1	Radiator Assembly				
2	Intercooler Assembly				
3	Fan Shroud				
4	Recover Bottle Assembly / Coolant tank				
5	Hex Bolt M6X1.0X18L				 4.5+0 -0.5
6	Flap				
7	Foam				
8	ECS- Bar Code Label				
9	Hex Flange Bolt M8x25 Ultra 1415 Truck (12V) Hex Flange Bolt M8x20 LPT 1412 Truck (12V) H/FL Screw M10X25 LP 712/912 Bus (24V)				 5
10	Bracket				
11	Hex FL Nut M8				 2.5
12	Hex Nut M10				 2.5
13	Washer A10.5				
14	Assembly Radiator Mounting Pad Top				
15	Boss				
16	Rubber Buffer				
17	Hex Screw M10x30				 5
18	Bright Washer 10.5				
19	Support Plate				
20	Hex Nut M10				 2.5
21	Hex Thin Nut M10				 2.5
22	Hose Clamp 50				
23	Hose (Thermostat To Radiator)				
24	Spring Band Clamp 55Dx12W				
25	Hose Assembly, Radiator To T-Connector				

ITEM NO.	DESCRIPTION	NO REUSE	SEALANT	LUBRICATION	TIGHTENING TORQUE (KGFM)
26	Hex Screw M10X30				 5
27	Spring Washer B10				
28	Bright Washer 10.5				
29	Hose (IC To Pipe)				
30	Pipe Assembly, IC to Intake Elbow				
31	Hose Clamp TB 58				
32	Hump Hose (Pipe To Air Intake Elbow)				
33	Hump Hose, IC To Air Intake Elbow				
34	Pipe, TC Adapter To Intercooler				
35	Bracket (For TC Adaptor To Intercooler Pipe)				
36	Hex Screw M10X25				 5
37	Hose (No Loss Tank To Filler Pipe)				
38	Tube (PVC L190, 2 THK, 12 O.D.)				
39	P Clamp -2 (No Loss Tank Piping)				
40	SPR. BD Clamp 15DX12W				
41	H/FL Screw M8X20				
42	Rubber Buffer (For Air Duct)				
43	H/FL Screw M8X25				
44	Hex FL Nut AM8				
45	Hose (Filler Neck To Radiator)				
46	Hose To Close Filler Neck Port				
47	Pressure Cap Assembly				