RUTHZIL TRATOR COMERCIAL DE PEÇAS LTDA 11 97083-6812 ROLANDO

CUMMINS

ENGINE Model: B3.9-C116
S/N 21251613

Build Date: 1997 year
Fuel Pump #
CPL : CPL594

SPARE PARTS CATALOG

Cummins Inc.
Box 3005
Colombus, Indiana, U.S.A., 47202

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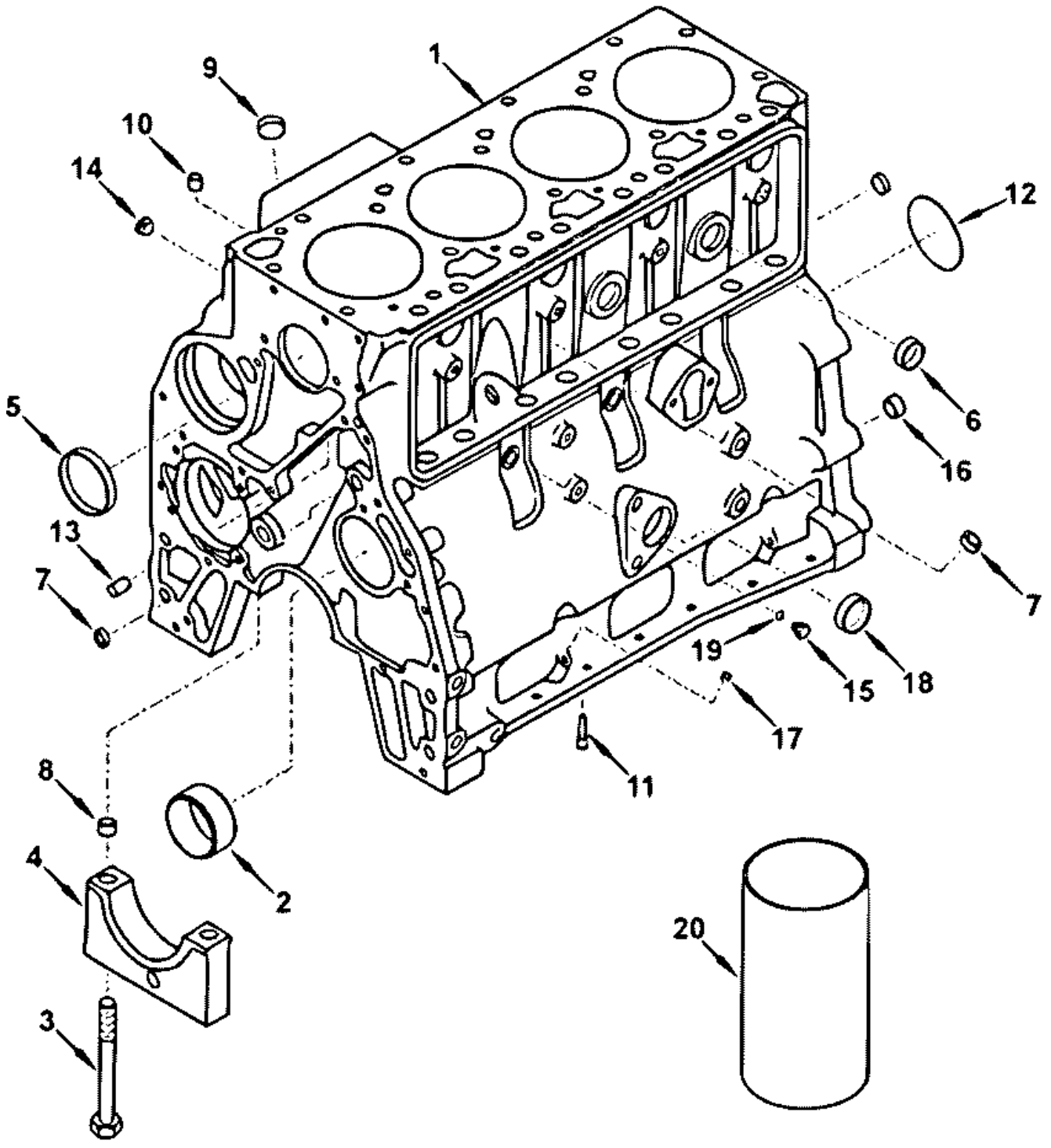
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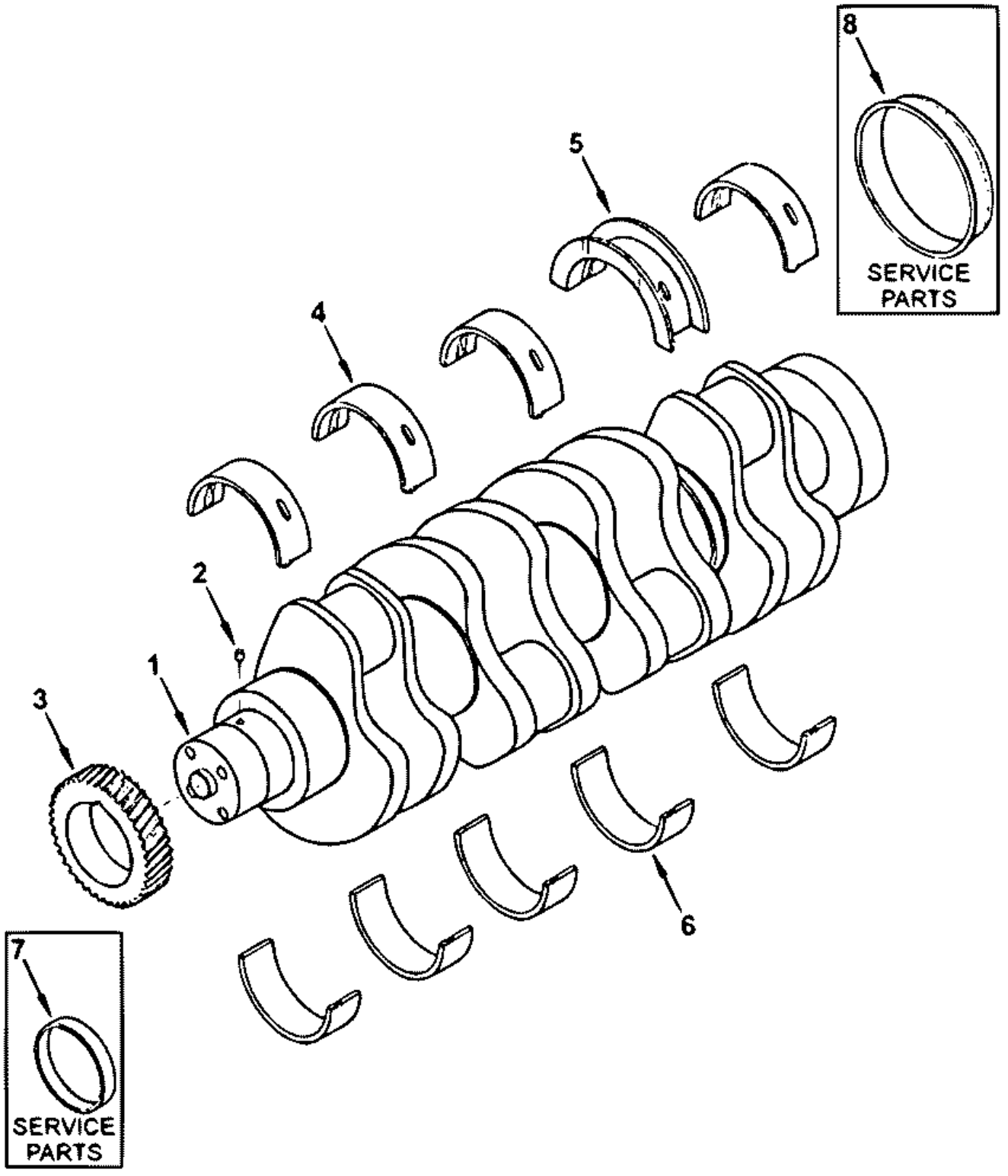
Cylinder Block

ref no	part number	part name	req	remarks
*	BP9785	Cylinder Block		Cylinder Block Engine: B Series Cylinders: 4 Aspiration: Jacket Water Aftercooled High Speed Balancer: No Expansion plug 3007635 may be used in Brazil applications in place of 3914035. Cylinder Block 3903796 may be substitured for cylinder block 3916254.
	3802269	Block, Cylinder	1	
	3928794	Block, Cylinder	1	
1	3928787	Block, Cylinder	1	Serviced as 3280122
2	3901306	Bushing	1	
3	3904217	Screw, Hexagon Head Cap	10	M14 X 2.00 X 119
4	3900967	Cap, Main Bearing	5	
5	3812090	Plug, Expansion	4	
6	3914035	Plug, Expansion	2	
7	3900956	Plug, Expansion	3	
8	3900068	Dowel, Ring	10	
9	3920706	Plug, Expansion	1	
	3802642	Kit, Cyl Block Hardware	1	
9	3920706	Plug, Expansion	1	
10	3902343	Dowel, Ring	2	
11	3930139	Nozzle, Piston Cooling	4	
12	3900687	Plug, Expansion	1	
13	3900257	Dowel, Pin	2	
14	3008468	Plug, Pipe	1	1/2 NPT
15	3906619	Plug, Pipe	2	1/8 NPT
16	3900068	Dowel, Ring	2	
17	3900955	Plug, Expansion	1	
18	3900958	Plug, Expansion	1	
19	3926047	Seal, O Ring	1	
		$SERVICE PARTS		
2	3904369	Bushing	A/R	
2	3903242	Bushing	A/R	
4	3900967	Cap, Main Bearing	5	
20	3904166	Sleeve, Salvage	A/R	

Cylinder Block



ref no	part number	part name	req	remarks
*	BP9785	Crankshaft and Bearings		Crankshaft and Bearings
	3908031	Crankshaft, Assembly	1	
1	3929036	Crankshaft, Engine	1	Serviced as 3908031
2	3904483	Dowel, Pin	1	M6 x 8.0
3	3929027	Gear, Crankshaft	1	
		$Main Bearing Sets		
	3802010	Set, Main Bearing	1	Standard
4	3929016	Bearing, Main	4	Standard
5	3926723	Bearing, Crankshaft Thrust	1	Standard
6	3929021	Bearing, Main	5	Standard
	3802011	Set, Main Bearing	1	0.25 mm Oversize
4	3929017	Bearing, Main	4	0.25 mm Oversize
5	3283065	Bearing, Crankshaft Thrust	1	0.25 mm Oversize
6	3929022	Bearing, Main	5	0.25 mm Oversize
	3802012	Set, Main Bearing	1	0.50 mm Oversize
4	3929018	Bearing, Main	4	0.50 mm Oversize
5	3283066	Bearing, Crankshaft Thrust	1	
6	3929023	Bearing, Main	5	0.50 mm Oversize
	3802013	Set, Main Bearing	1	0.75 mm Oversize
4	3929019	Bearing, Main	4	0.75 mm Oversize
5	3283067	Bearing, Crankshaft Thrust	1	0.75 mm Oversize
6	3929024	Bearing, Main	5	0.75 mm Oversize
	3802014	Set, Main Bearing	1	1.00 mm Oversize
4	3929020	Bearing, Main	4	1.00 mm Oversize
5	3283068	Bearing, Crankshaft Thrust	1	1.00 mm Oversize
6	3929025	Bearing, Main	5	1.00 mm Oversize
	3802082	Bearing, Crankshaft Thrust	1	.5mm Oversize Bore/.5mm
5	3283063	Bearing, Crankshaft Thrust	1	Serviced as 3800330
6	3929023	Bearing, Main	1	0.50 mm Oversize
	3802084	Bearing, Crankshaft Thrust	1	1.0mm Oversize Bore/1.0mm
5	3283064	Bearing, Crankshaft Thrust	1	Serviced as 3800331
6	3929025	Bearing, Main	1	1.00 mm Oversize
		$Service Parts		
7	3906080	Sleeve, Wear	A/R	Front
8	3906081	Sleeve, Wear	A/R	Rear


8
SERVICE PARTS
5
4
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SERVICE PARTS
bp9782b

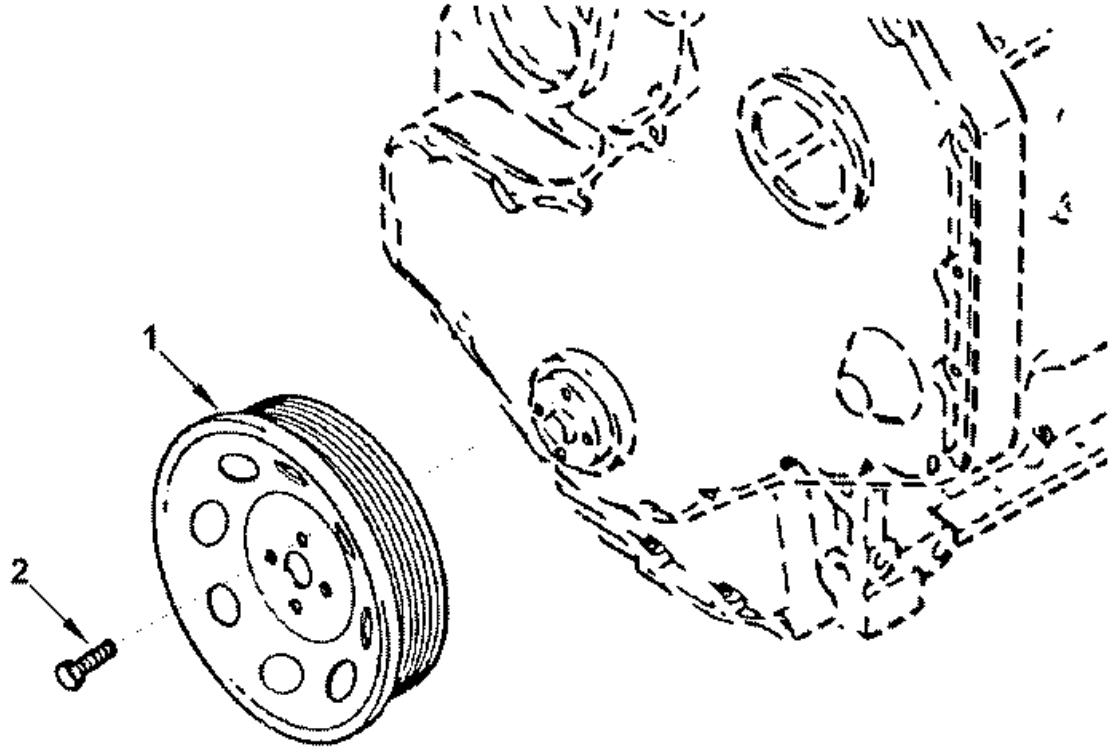
Group 01.02.3 | 3 | Option No

Picture af900gk

Front Drive Adapter

af9006

ref no	part number	part name	req	remarks
*	AF9006	Front Drive Adapter		Front Drive Adapter Engine Family: B Series Adaptable to a PTO: No Pulley Type: 8 Groove Torque Limit (LBS.FT.): 210 Location From FFOB (MM): 93.32 Pulley Effective Diameter (MM): 173.76 Attachment Provision: Mounted Restricted Cylinders: 4 6
1	3914494	Pulley, Crankshaft	1	
2	3903857	Screw, Hex Flange Head Cap	4	M12 X 1.25 X 36



af900gk

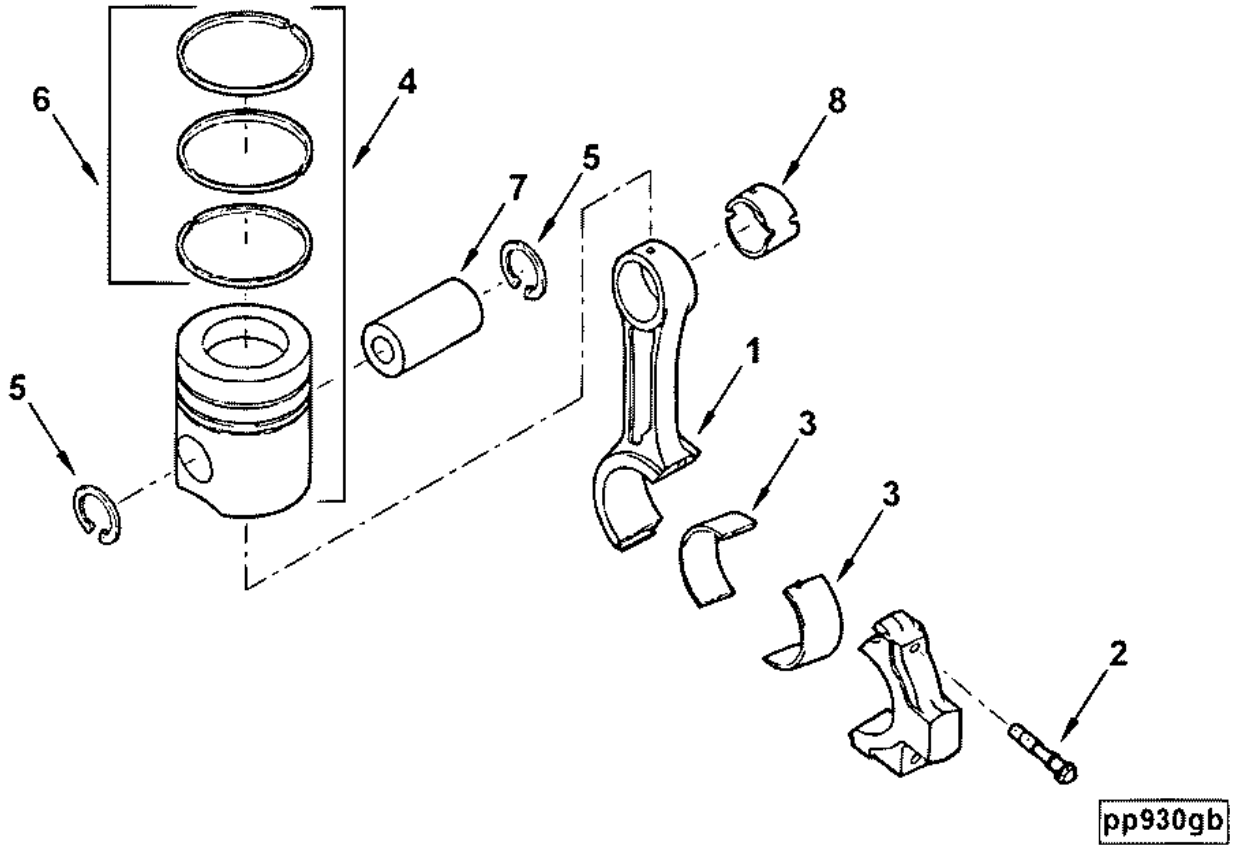
Group 01.04 4 Option No

Picture pp930gb

Connecting Rod And Piston

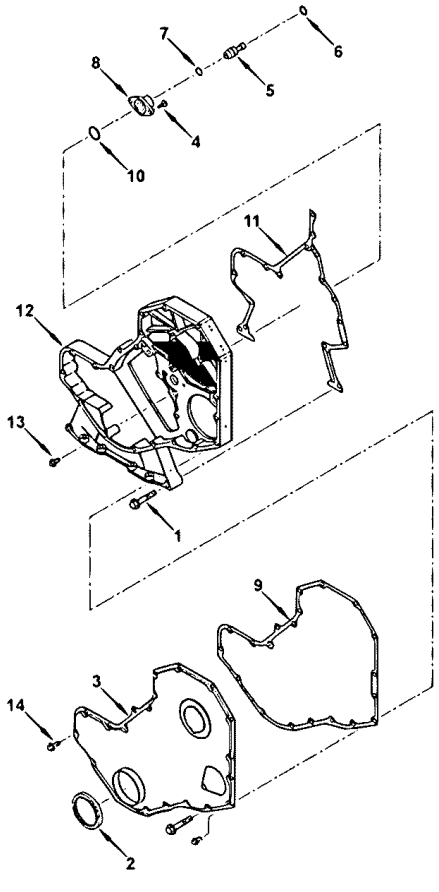
pp594-01

ref no	part number	part name	req	remarks
*	PP594-01	Connecting Rod And Piston		CPL594
1	3925232	Rod, Engine Connecting	4	Recon Equivalent 3925232 RX
	3901567	Rod, Engine Connecting	1	
2	3900919	Screw, Connecting Rod Cap	2	MJ11 X 1.25 X 59
8	3901085	Bushing	1	
3	3901170	Bearing, Connecting Rod	8	
4	3802100	Kit, Engine Piston	4	Standard
	3907156	Piston, Engine	1	Serviced as 3802100
5	3901706	Ring, Retaining	2	
6	3802230	Set, Piston Ring	1	Standard
7	3901793	Pin, Piston	4	
3	3901171	Bearing, Connecting Rod	A/R	0.25 mm Oversize
3	3901172	Bearing, Connecting Rod	A/R	0.50 mm Oversize
3	3901173	Bearing, Connecting Rod	A/R	0.75 mm Oversize
3	3901174	Bearing, Connecting Rod	A/R	1.00 mm Oversize
4	3802102	Kit, Engine Piston	4	0.50 mm Oversize
	3907157	Piston, Engine	1	Serviced as 3802102
5	3901706	Ring, Retaining	2	
6	3802232	Set, Piston Ring	1	0.50 mm Oversize
4	3802104	Kit, Engine Piston	4	1.00 mm Oversize
	3907158	Piston, Engine	1	Serviced as 3802104
5	3901706	Ring, Retaining	2	
6	3802234	Set, Piston Ring	1	1.00 mm Oversize

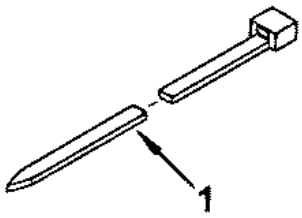


Front Gear Cover

ref no	part number	part name	req	remarks
*	BP9884-02	Front Gear Cover		Front Gear Cover Engine Family: B Series Belt Retainer Provided: No Noise Dampening Panel Provided: No Access For Tach Drive: Yes Gear Housing Material: Cast Aluminum Structure Code: 02 EBM Restricted Fuel Pump: Bosch VE Bosch VP-14 CAV DPA CAV DPS Stanadyne DB3 Stanadyne DB4 DEP may use 3920518 in place of 3920758.
1	3900633	Screw, Hex Flange Head Cap	11	M8 X 1.25 X 50
2	3904353	Front Seal Service Kit	1	Includes Installation Tools
3	3903794	Cover, Gear	1	
4	3907998	Screw, Round Head Cap	2	M5 X 0.80 X 17
5	3903924	Pin, Timing	1	
6	3904849	Ring, Retaining	1	
7	3913994	Seal, O Ring	1	
8	3919683	Housing, Timing Pin	1	
9	3914385	Gasket, Gear Cover	1	
10	3915772	Seal, Rectangular Ring	1	
11	3931351	Gasket, Gear Housing	1	
12	3920758	Housing, Gear	1	Serviced as 3802350
13	3924962	Screw, Hex Flange Head Cap	11	M8 X 1.25 X 16
14	3926846	Screw, Hex Flange Head Cap	5	M8 X 1.25 X 20



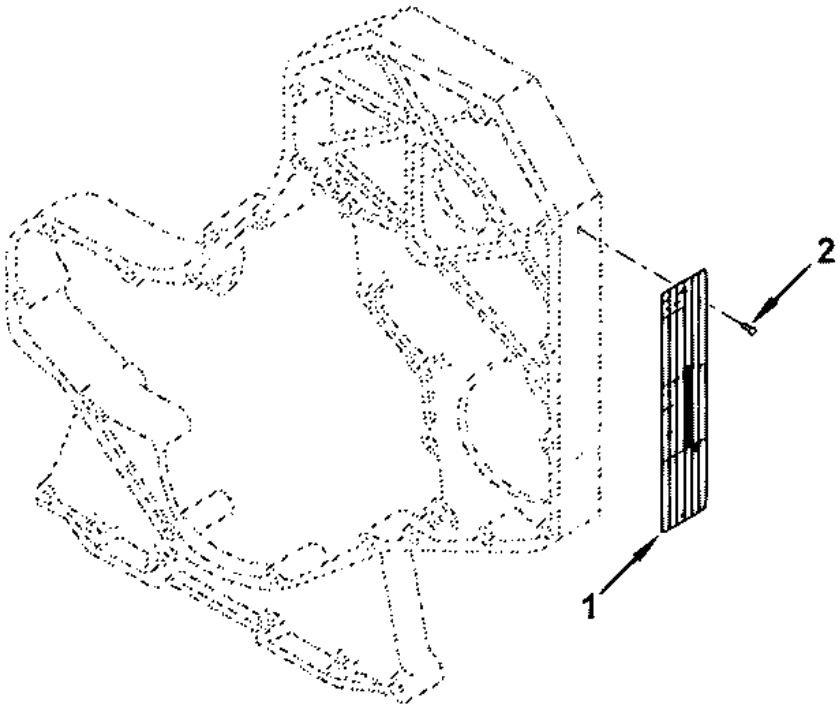
ref no	part number	part name	req	remarks
*	AP8099	DECLARATION OF INCORPORAT		When this option is specified e.C. Machinery directive applies. Declaration of incorporation in accordance with e.C. Machinery directive 89/392/EEC as ammended by e.C. directive 91/368/EEC. This engine meets the requirements of the directives for machines which are to be incorporated into a final product. Note: This Machinery Directive Covers all generating plant and stationary power units shipped into greater Europe.
1	201351	Clamp, Wire Tie	1	



ap951gj

Dataplate

ref no	part number	part name	req	remarks
*	AP9001-01	Dataplate		Dataplate Certification Status: Non-Certified Engine Manufactured For: Cummins Engine Family: B Series C Series Dataplate to be located on outboard edge of gear housing, fuel pump side, orientated 90 degrees counter clockwise from horizontal with the top edge approximately 312.5mm from the centerline of the crankshaft. UK plants will show P/N 3278437 as content instead of P/N 3906610. Variant Structure Required For CABO Add: 201351 Tie; 3666880 O & M Manual & 3666891 Decal To Existing Structure.
1	3906610	Dataplate	1	
2	3908612	Screw, Drive	2	



ap900gk

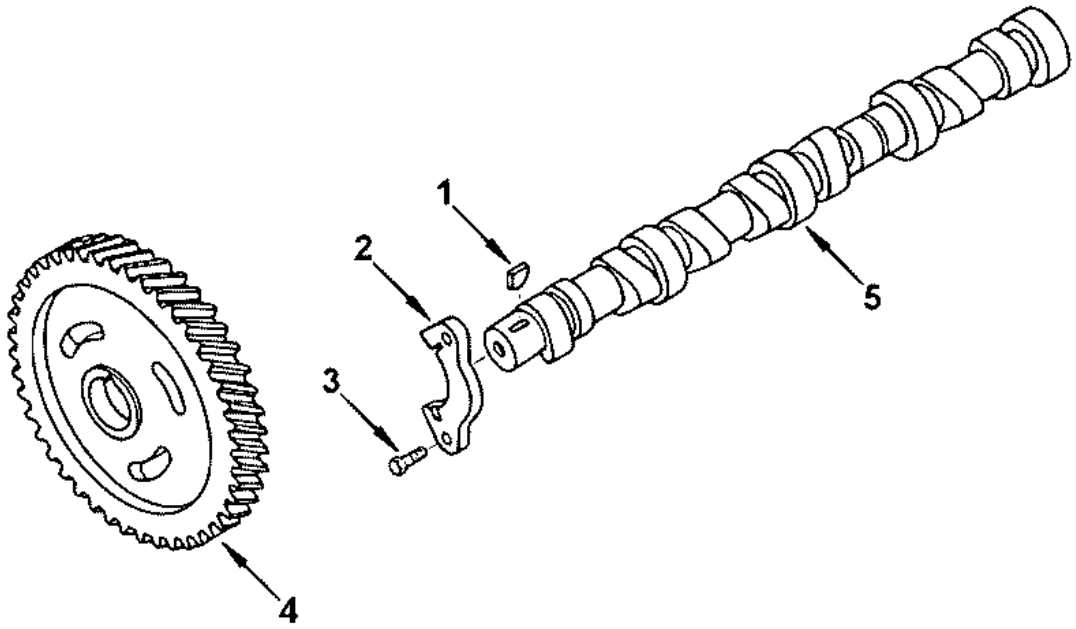
Group 01.07 | 8 | Option No

Picture pp9592b

Camshaft

pp594-01

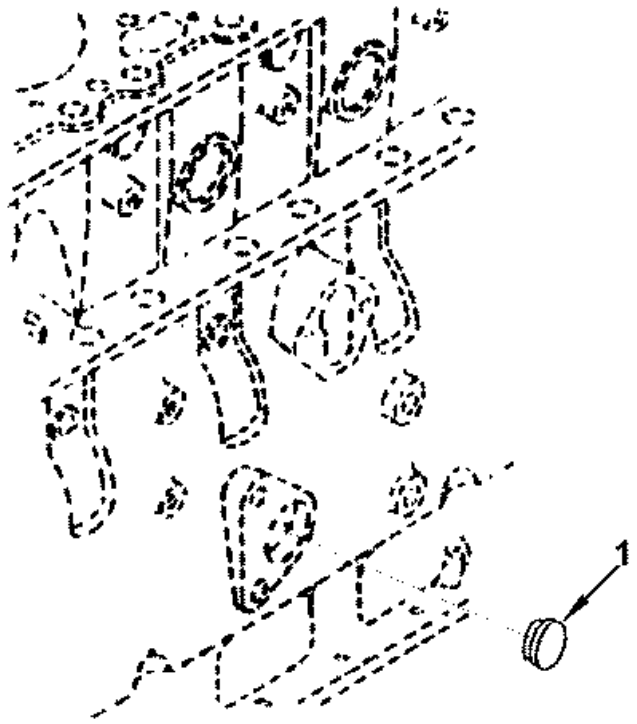
ref no	part number	part name	req	remarks
*	PP594-01	Camshaft		
1	3902332	Key, Plain Woodruff	1	
2	3927155	Support, Camshaft Thrust	1	
3	3900227	Screw, Hexagon Head Cap	2	M8 X 1.25 X 22
4	3929030	Gear, Camshaft	1	
5	3929039	Camshaft	1	



pp9592b

Cylinder Block Cover

ref no	part number	part name	req	remarks
*	OB9000	Cylinder Block Cover		Plug for use when no side oil is specified.
1	3905369	Plug, Expansion	1	



ob900gk

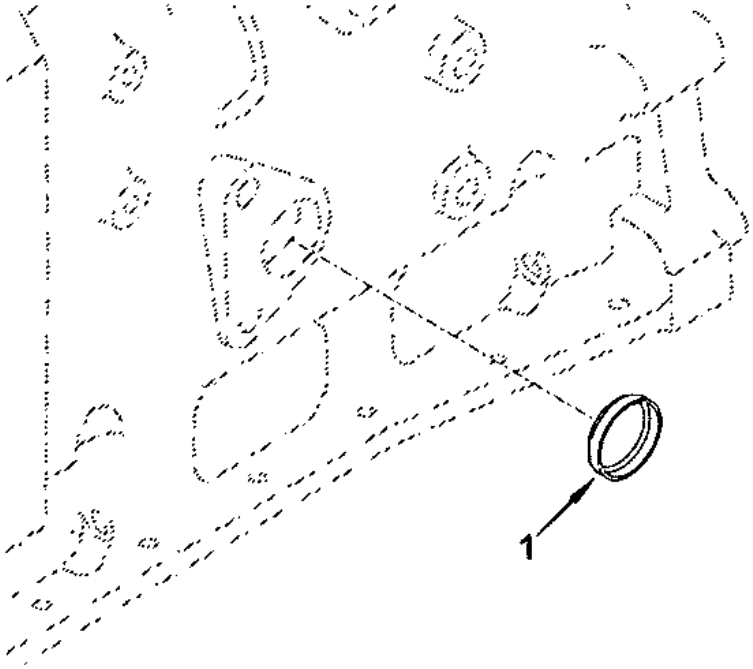
Group 01.08 | 10 | Option No

Picture ob900gc

Cylinder Block Cover

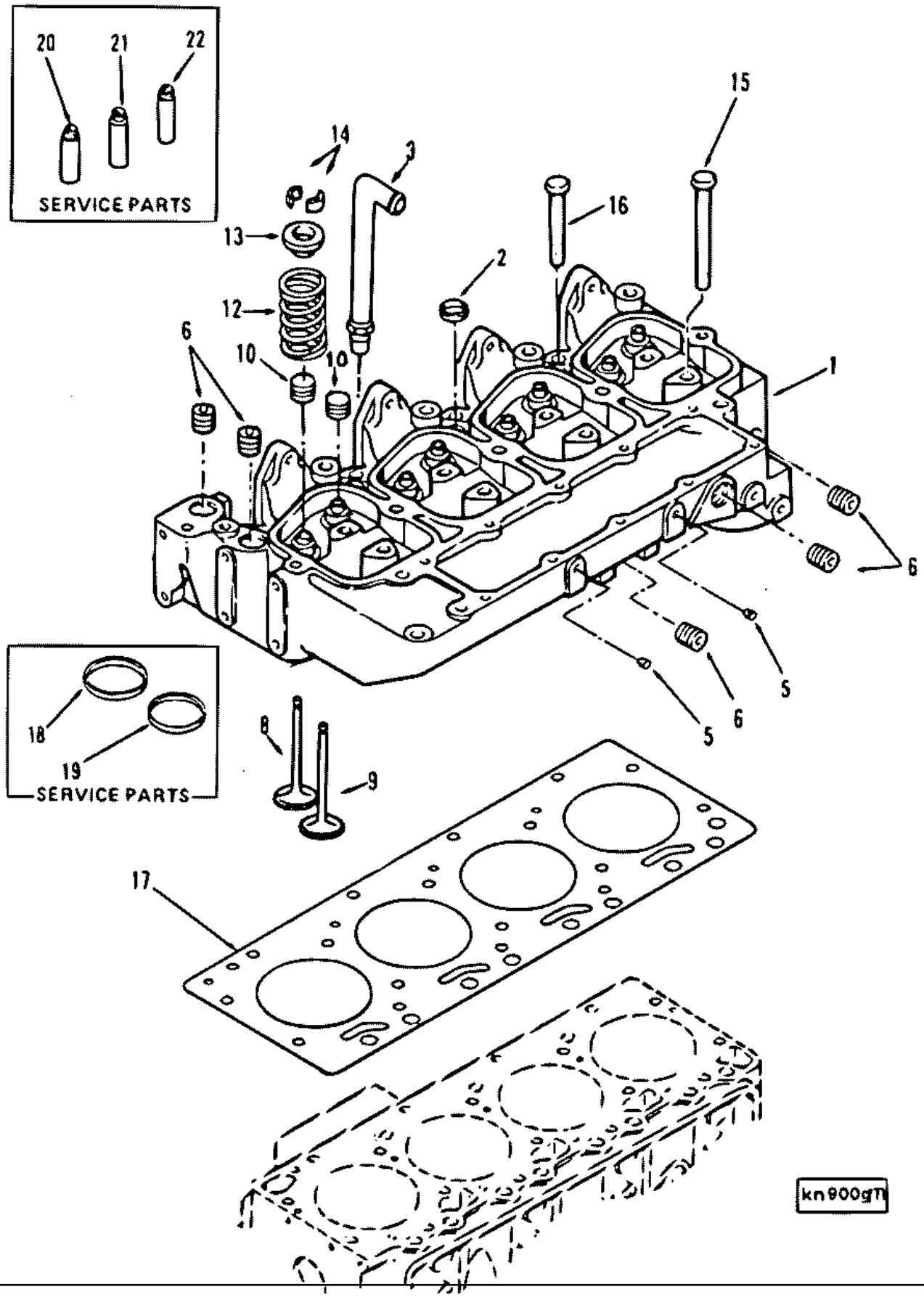
ob9704

ref no	part number	part name	req	remarks
*	OB9704	Cylinder Block Cover		Cylinder Block Cover Adapter Oil Fill Location: Not Fuel Pump Side Air Compressor Support Provided: No CPR Rear Support Location: None Fasteners Provided: Yes CPR Oil Drain Provision: No Brazil may assemble P/N3007636 in place of P/N3900958.
1	3900958	Plug, Expansion	1	



ob900gc

ref no	part number	part name	req	remarks
*	PP594-02	Cylinder Head		CPL594 Cylinder Head has been omitted and added as a dependent option PP 9977.



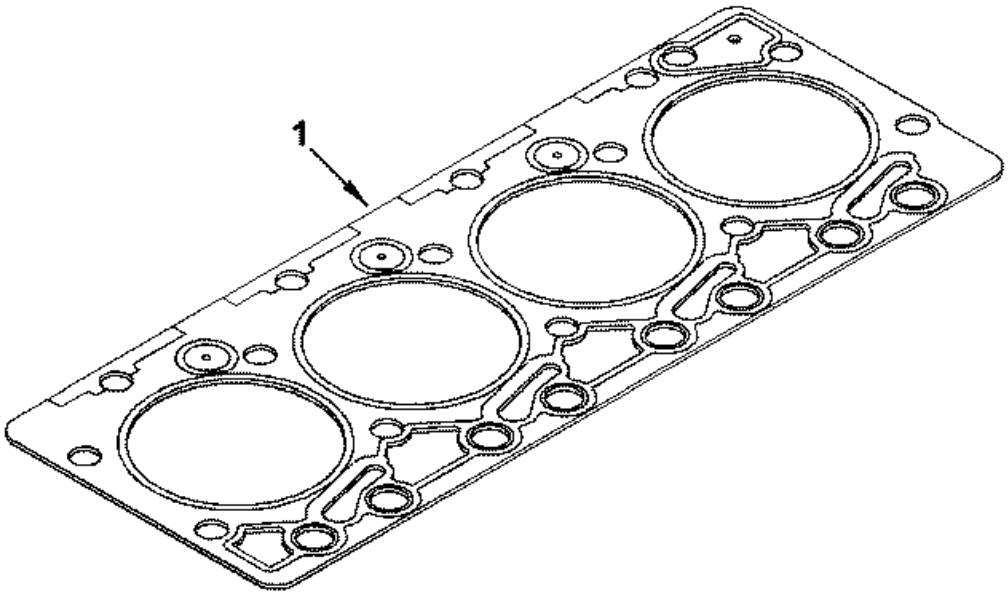
Group 02.01 | 12 | Option No

Picture pp951gf

Cylinder Head

pp97300

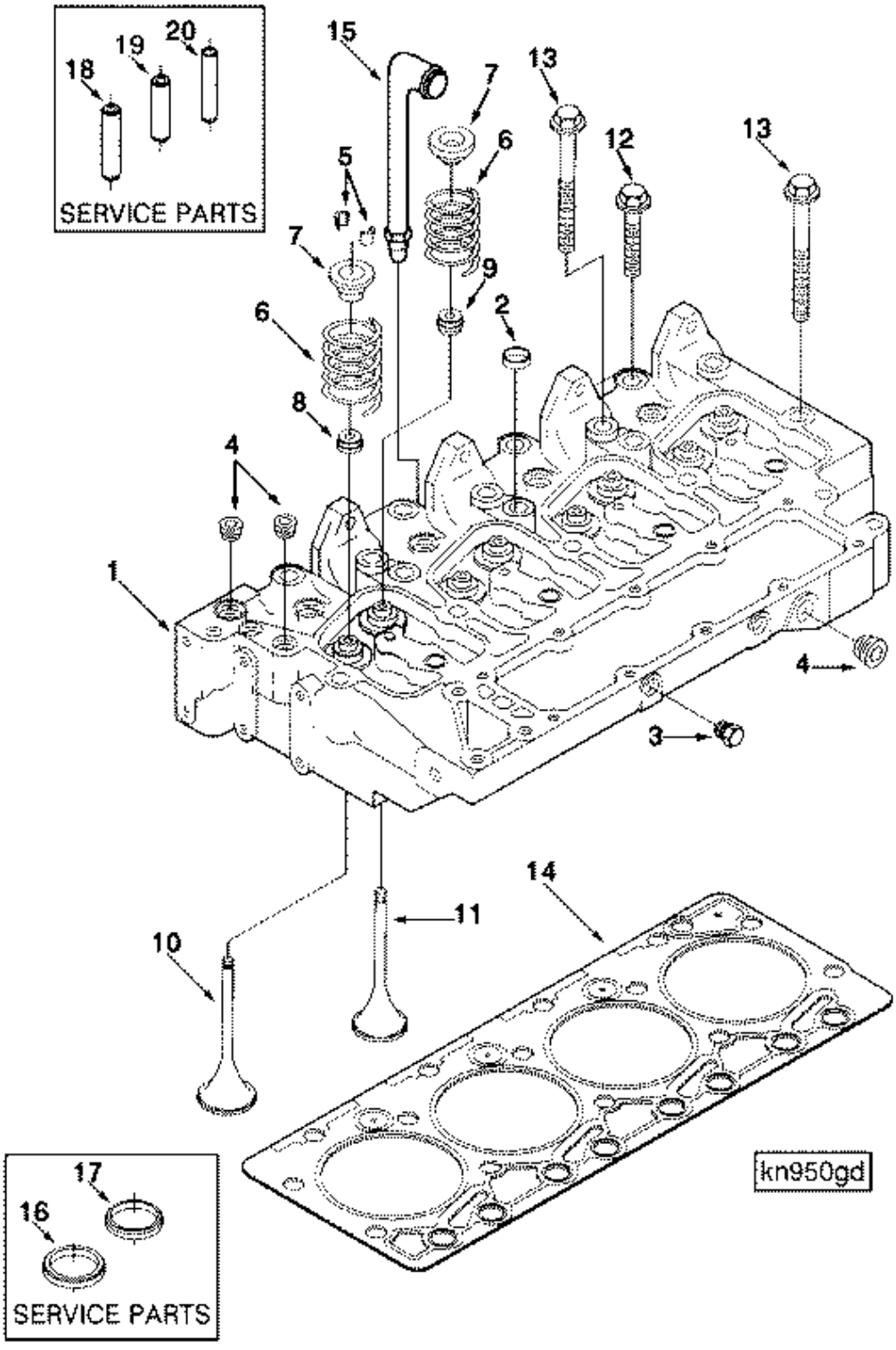
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*	PP97300	Cylinder Head		Cylinder Head Mounting Structure Code: 02 EBM Engine Family: B Series Engine Cylinders: 4 Gasket Material: Standard
1	3283569	Gasket, Cylinder Head	1	



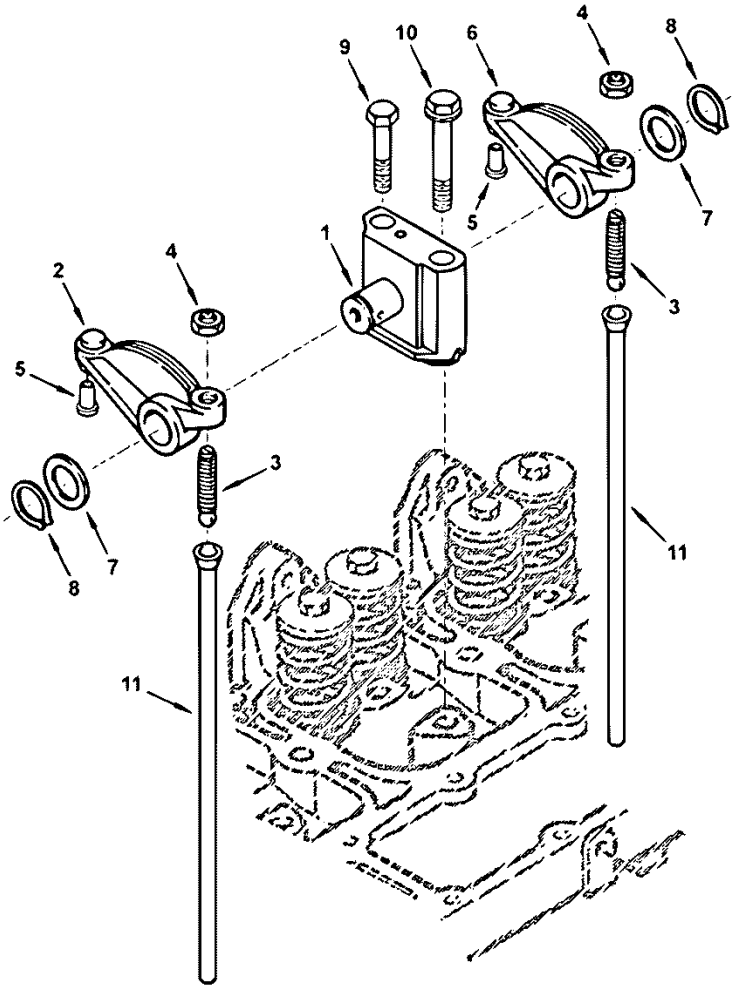
pp951gf

ref no	part number	part name	req	remarks
*	PP9977	Cylinder Head		CPL9977 Cylinder Head Engine Family: B Series Cylinder: 4 Swirl: High Exh Spring PSI: 36 Cylinder Head Material: Cast Iron Cylinder Head Valve Material: Standard Exhaust Manifold Type: Dry Aftercooler Water Supply Tap From FFOB (MM): 136.5 Aspiration: Jacket Water Aftercooled
	3800338	Head, Cylinder	1	
1	3933417	Head, Cylinder	1	
2	3812092	Plug, Expansion	2	
3	3906619	Plug, Pipe	2	1/8 NPT
4	3008468	Plug, Pipe	5	1/2 NPT
	3802005	Kit, Intake Valve	4	
^10	3920867	Valve, Intake	4	Serviced as 3802355
^5	3900250	Collet, Valve	8	
	3802006	Kit, Exhaust Valve	4	
^11	3920868	Valve, Exhaust	4	Serviced as 3802356
^5	3900250	Collet, Valve	8	
6	3900276	Spring, Valve	8	
7	3900299	Retainer, Valve Spring	8	
8	3901097	Seal, Valve Stem	4	
9	3921640	Seal, Valve Stem	4	
12	3920779	Screw, Hex Flange Head Cap	4	M12 X 1.75 X 70
13	3920780	Screw, Hex Flange Head Cap	10	M12 X 1.75 X 120
14	3921393	Gasket, Cylinder Head	1	Standard
15	3905639	Tube, Aftercooler	1	
14	3921395	Gasket, Cylinder Head	A/R	.25mm Oversize
14	3921397	Gasket, Cylinder Head	A/R	.50mm Oversize
		$SERVICE PARTS		
16	3904105	Insert, Valve		Exhaust
17	3906854	Insert, Valve		Intake
18	3904408	Guide, Valve Stem		Thick Wall 60.50mm Long intake
19	3904409	Guide, Valve Stem		Thick Wall 51.75mm Long exhaust
20	3906206	Guide, Valve Stem		Thin Wall Can be Used on

Cylinder Head



ref no	part number	part name	req	remarks
*	BP9704-01	Rocker Levers		Rocker Lever Engine Family: B Series Cylinders: 4 P/N 3900706 can be used in place of 3934086.
	3922488	Support, Rocker Lever	4	
1	3911423	Support, Rocker Lever	1	
	3922487	Shaft, Rocker Lever	1	
2	3910811	Lever, Rocker	4	Intake
	3910809	Lever, Rocker	1	
3	3900706	Screw, Slotted Set	1	3/8 - 24 x 1 1/2 inch
4	3927692	Nut, Heavy Hexagon	1	3/8 - 24 UNF - 2B
5	3900705	Insert, Rocker Lever	1	Purchase Higher Level
6	3910810	Lever, Rocker	4	Exhaust
	3910808	Lever, Rocker	1	
3	3900706	Screw, Slotted Set	1	3/8 - 24 x 1 1/2 inch
4	3927692	Nut, Heavy Hexagon	1	3/8 - 24 UNF - 2B
5	3900705	Insert, Rocker Lever	1	Purchase Higher Level
7	3900245	Washer, Plain	8	M19
8	3900242	Ring, Retaining	8	
9	3901221	Screw, Hexagon Head Cap	4	M8 X 1.25 X 75
10	3920781	Screw, Hex Flange Head Cap	4	
11	3923262	Rod, Push	8	



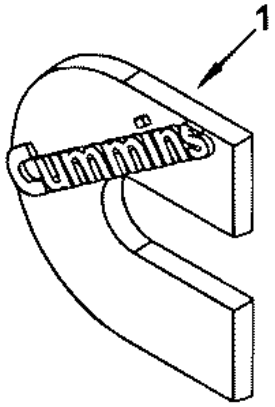
Group 03.01 | 15 | Option No

Picture ss940gn

Paint

ss9031

ref no	part number	part name	req	remarks
*	SS9031	Paint		Paint Paint Color: Black - High gloss Decal/Logo QTY-per ES18,214: 1-Cummins Turbo/Exh Manifold Masked: No Hue: To Be Determined Value: To Be Determined Chroma: To Be Determined Gloss Level @ 60 degrees: To Be Determined Structure Code: 02 EBM Engine Family: B Series C Series. Contains Part Number 3278452, Paint, Enamel
1	3991084	Nameplate	1	

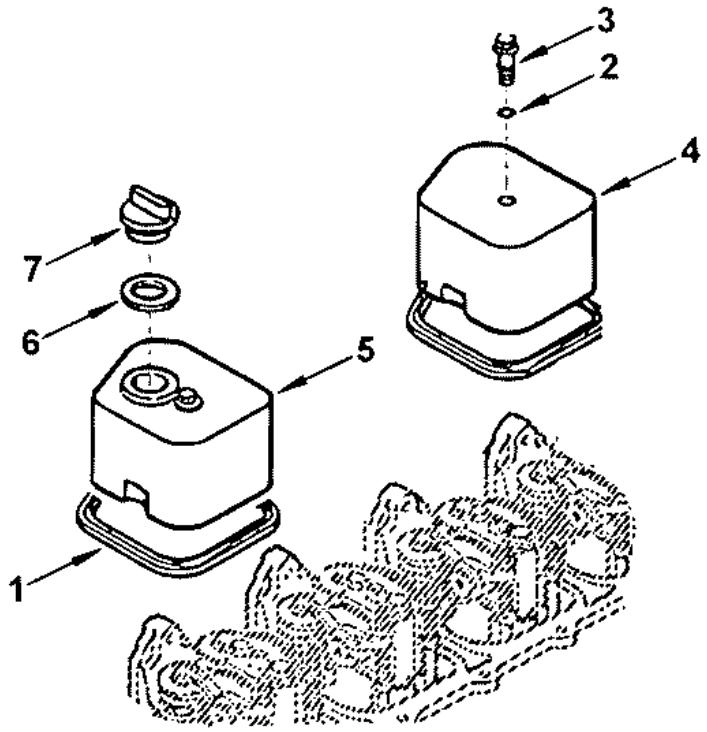


ss940gn

Skid,4b Lowline-Crate

ref no	part number	part name	req	remarks
*	SS9240	SKID,4B LOWLINE-CRATE		
				Includes Two Shipping Brackets Part Number: 3279357
		NO CONTENT		Includes Two Shipping Brackets Part Number: 3281022
				Includes Two Hex Flange Head Cap Screws Part Number: 3901249

ref no	part number	part name	req	remarks
*	VC9001	Valve Cover		Valve Cover
*	VC9001	Valve Cover		Valve Cover Engine Cylinders: 4 Family: B Series Oil Fill Location: 1 Cylinders: 4 Studded C/S Valve Cover Oil Fill Cylinder: Cylinder Number: No 1 P/N 3901837 Seal, O'Ring may Noise Supression Provision: be substituted for P/N No 3910824. Studded Capscrew Location:
1	3930906	Gasket, Valve Cover	1	
2	3910824	Seal, O Ring	4	None Plain washer S-602 may be used.
3	3907049	Screw, Hex Flange Head Cap	4	M8 X 1.25 X 21
1	3930906	Gasket, Valve Cover	4	
4	3902604	Cover, Valve	3	
2	3910824	Seal, O Ring	4	
5	3902605	Cover, Valve	1	
3	3907049	Screw, Hex Flange Head Cap	4	M8 X 1.25 X 21
6	3902363	Seal, Rectangular Ring	1	3.0 thick
4	3902604	Cover, Valve	3	
7	3901895	Cap, Filler	1	
5	3902605	Cover, Valve	1	
6	3902363	Seal, Rectangular Ring	1	
7	3901895	Cap, Filler	1	



vc900gh

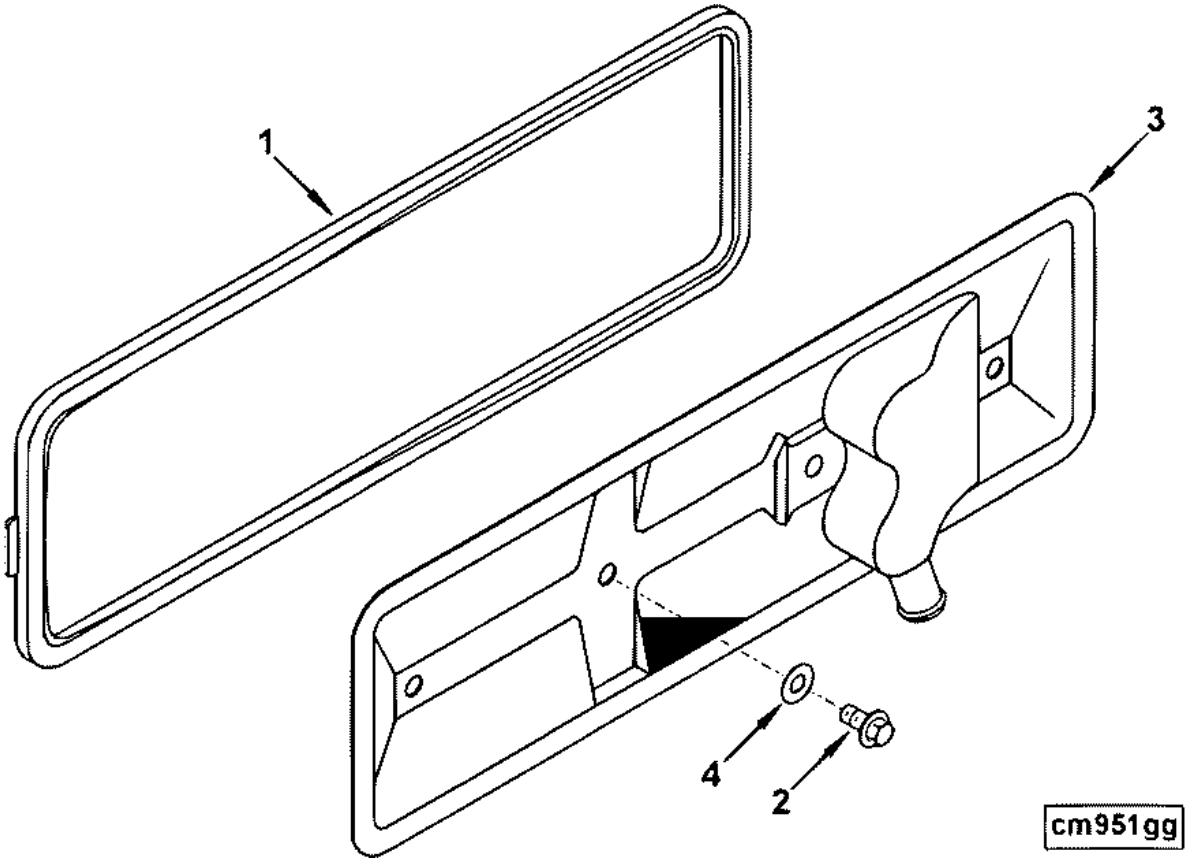
Group 04.03 | 18 | Option No

Picture cm951gg

Cover,Cam Follower

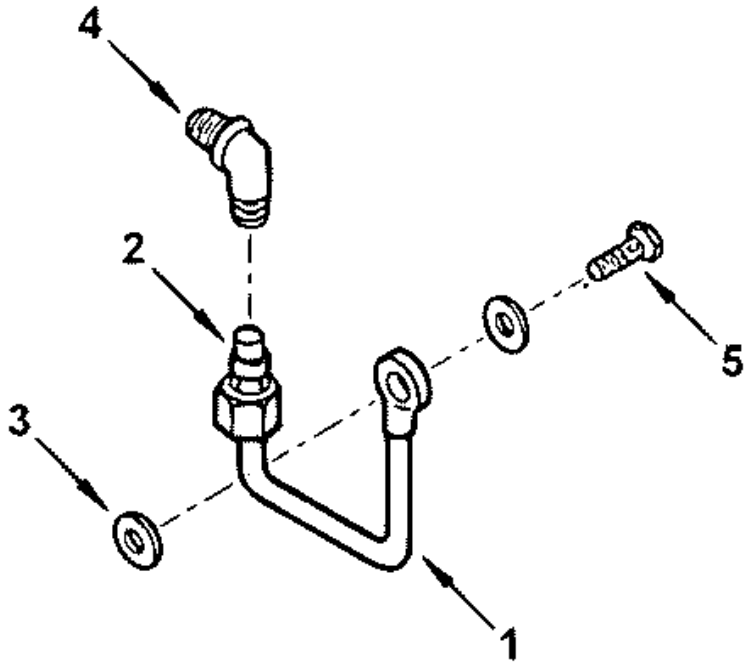
cm9024-01

ref no	part number	part name	req	remarks
*	CM9024-01	Cam Follower Cover		Cam Follower Cover Structure Code: 02 EBM Engine Family: B Series Cylinders: 4 Hose Angle Off Breather (Deg) : 45 Hose Location On Baffel: Bottom Noise Panel Provision: No Double Baffel: Yes Baffel Location On Engine: #3 Cylinder Hose And Clamp Provided: No Fuel Pump Type: Rotary Breather baffel fabricated part of cover. Remaining mounting parts to be found in Fuel Tubing (FT) option.
1	3283767	Gasket, Push Rod Cover	1	
2	3900629	Screw, Hex Flange Head Cap	2	M8 X 1.25 X 16
3	3925680	Cover, Push Rod	1	
4	3928759	Seal, Grommet	2	



Air Fuel Control Plumbing

ref no	part number	part name	req	remarks
*	FE9701	Air Fuel Control Plumbing		Air Fuel Control Plumbing Engine Family: B Series Aspiration: Charge Air Cooled Jacket Water Aftercooled Turbocharged Fuel Pump Mfg/Model: Bosch VE Bosch VP-14 Structure Code: 02 EBM Boost Control: Yes Turbocharger Type: Non-Wastegate DEP and BZL may use air fuel control tube 3282437 in place of 3910004.
1	3910004	Tube, Air Fuel Control	1	
2	3905391	Seal, Grommet	1	
3	3918188	Washer, Sealing	2	8.0 mm
4	3910265	Elbow, Male Adapter	1	
5	3924724	Screw, Banjo Connector	1	M8 X 1.00 X 17



fe940gb

Group 05.06 20 Option No

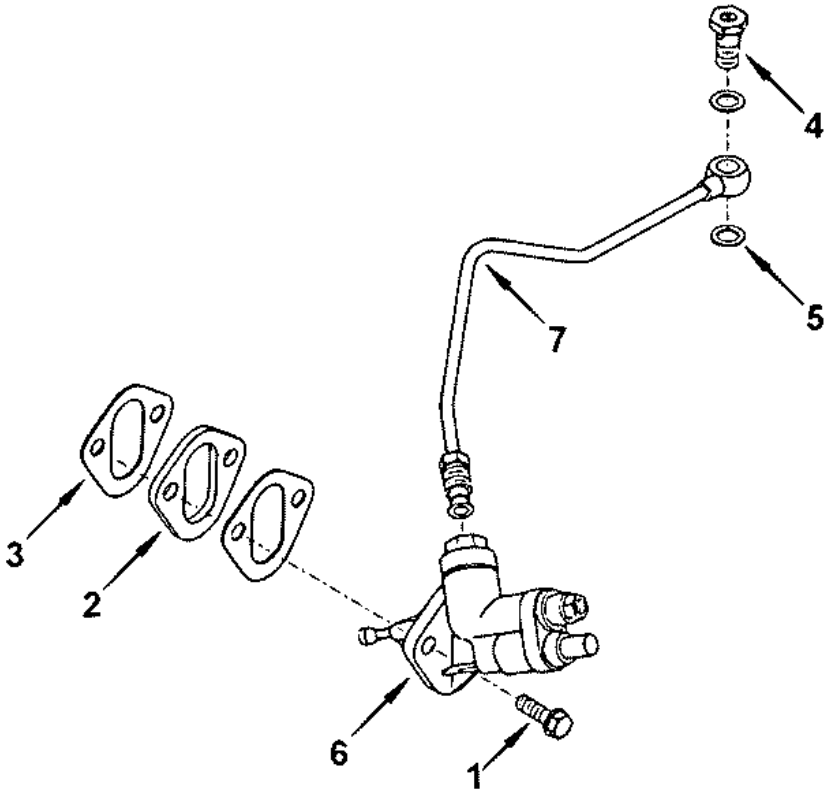
Picture null

Bosch Fuel Shutoff Valve

fv9002

ref no	part number	part name	req	remarks
*	FV9002	Fuel Shutoff Valve		Fuel Shutoff Valve 24 Volt Narmally Closed, ATR, Electrical Soleniod.
		NO CONTENT OPTION		No Content Option Used as a Pointer to Select the Correct Fuel Pump.

ref no	part number	part name	req	remarks
*	FS9189	Fuel System Accessories		Lift Pump Structure Code: 02 EBM Pump Style: Piston Pump Operation: Mechanical Pump Supplier: Cummins Pump Manufacturer: To Be Determined Pump Measured Flow (Liters/Min): 49- 68 Pump Measured Flow RPM: 1250 Fuel Inlet Size: 1/4-18 NPTF Filter Location: On Engine Restricted Fuel Pump: Bosch VE Bosch VP14 CAV DPA CAV dps Cylinders: 4 Engine Family: B Series.
1	3900631	Screw, Hex Flange Head Cap	2	M8 X 1.25 X 25
2	3914284	Spacer, Mounting	1	
3	3931348	Gasket, Cover Plate	2	
4	3903035	Screw, Banjo Connector	1	
5	3918191	Washer, Sealing	2	Purchase 3935171
6	3918076	Pump, Fuel Transfer	1	
7	3917280	Tube, Fuel Supply	1	



fs950gi

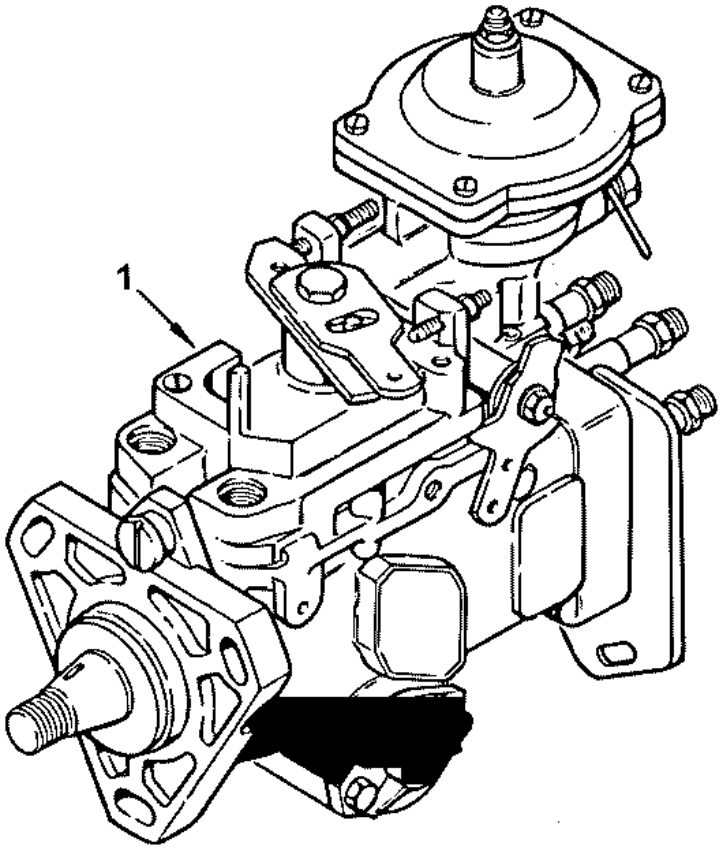
Group 05.21 | 22 | Option No

Picture fp900gc

Bosch Injection Pump

fp97126

ref no	part number	part name	req	remarks
*	FP97126	Bosch Injection Pump		CPL#0594. "VE" type (Non Certified) fuel pump for 107 BHP turbocharged and aftercooled "B" series 4 cyl. engine at 2100 RPM with peak torque of 295 lbs. ft. at 1700 RPM. Has 24 volt atr fuel solenoid and 2.0mm tubing. With FR9024 and FE9701.
1	3917517	Pump, Fuel Injection	1	Recon equivalent 3917517 RX

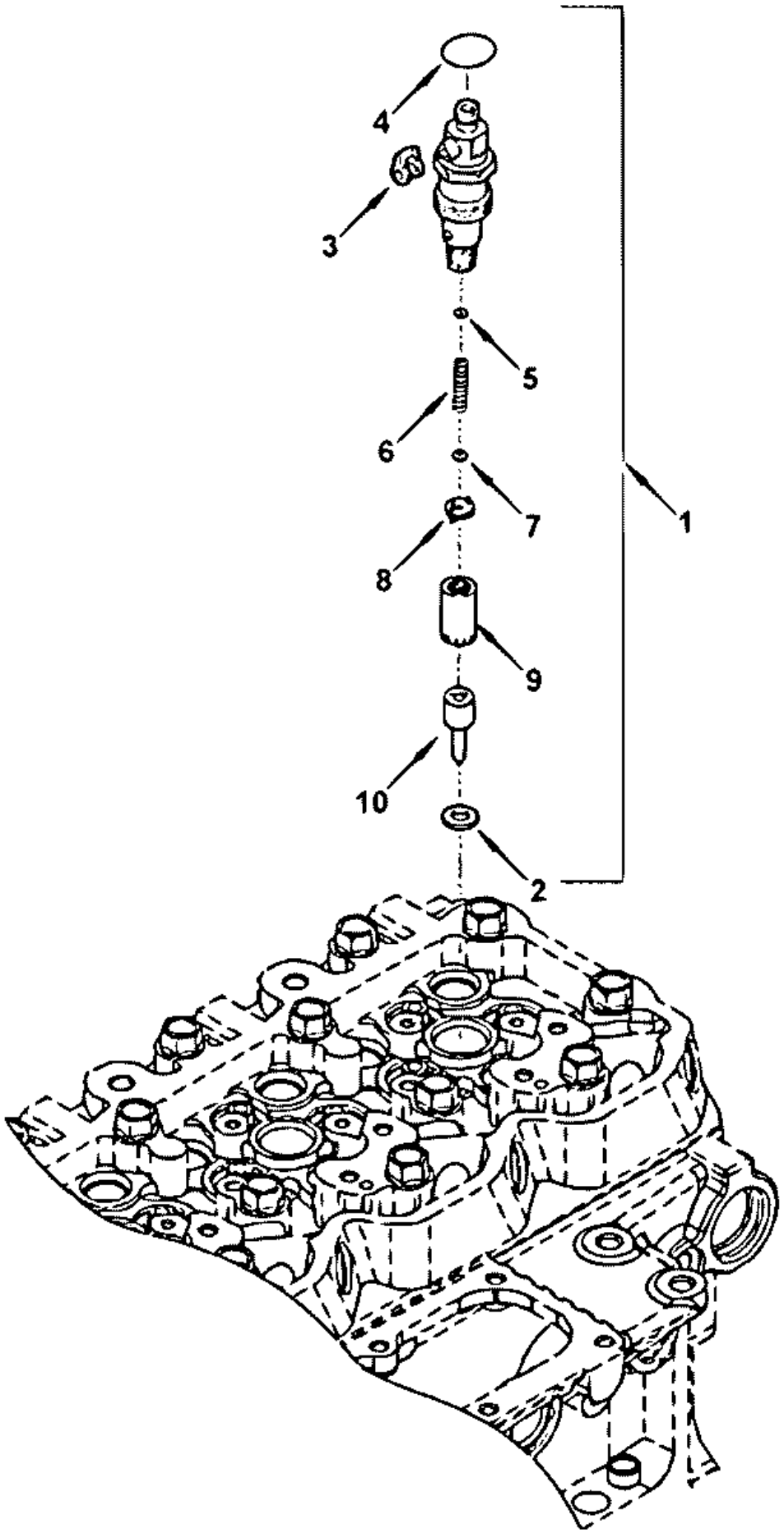


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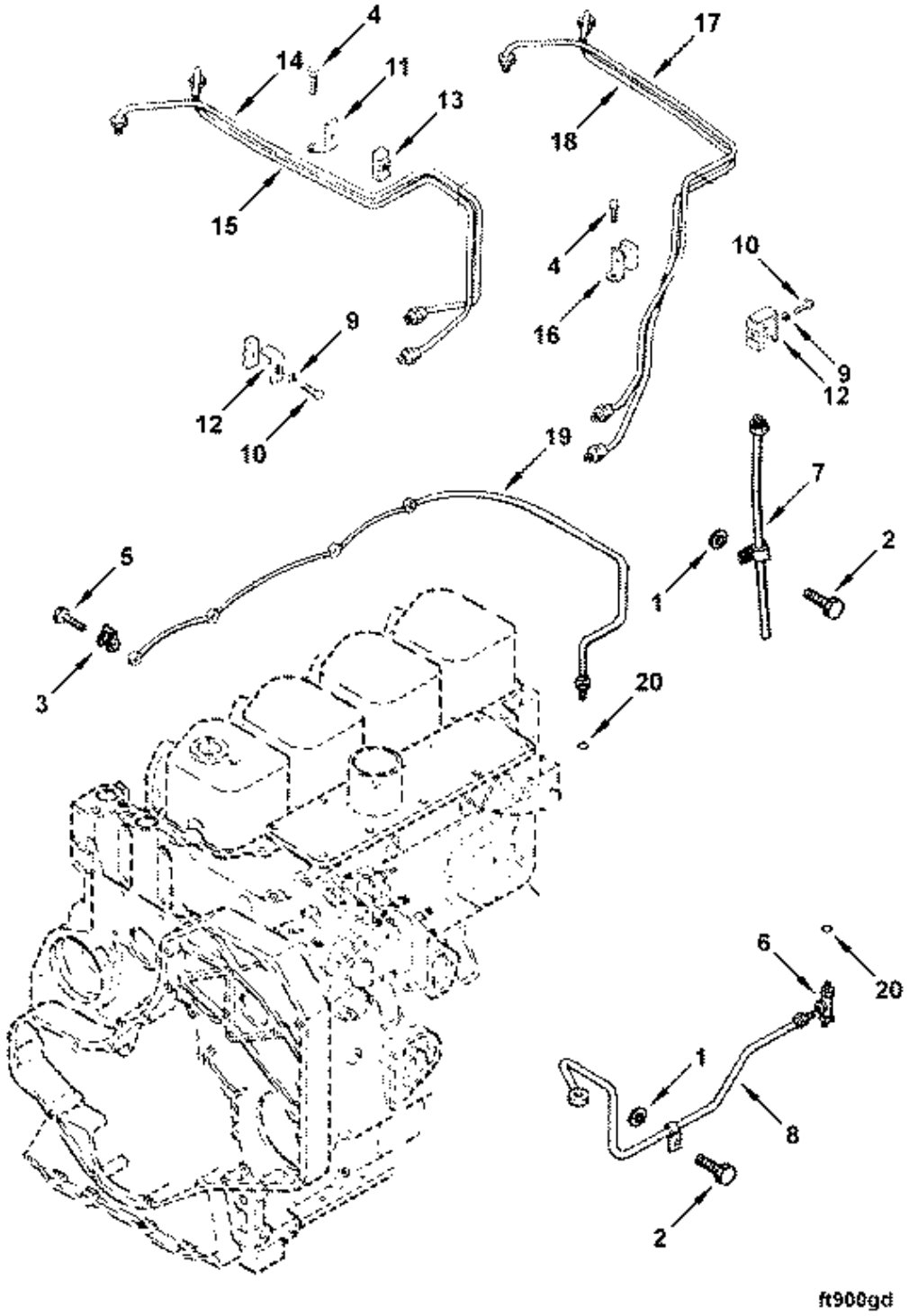
Fuel Injector

ref no	part number	part name	req	remarks
*	PP594-01	Fuel Injector		CPL594
1	3802327	Injector, Bosch		Recon Equivalent 3802327 RX
	3919343	Injector	1	
2	3906659	Seal, Injector	1	For 7mm Head
3	3903380	Seal, Banjo Connector	1	Replace With 4942278
4	3909356	Seal, Rectangular Ring	1	
5	3905156	Shim	A/R	1.00 mm Thick
5	3905157	Shim	A/R	1.04 mm Thick
5	3905158	Shim	A/R	1.08 mm Thick
5	3905159	Shim	A/R	1.10 mm Thick
5	3905160	Shim	A/R	1.14 mm Thick
5	3905161	Shim	A/R	1.18 mm Thick
5	3905162	Shim	A/R	1.20 mm Thick
5	3905163	Shim	A/R	1.24 mm Thick
5	3905164	Shim	A/R	1.28 mm Thick
5	3905165	Shim	A/R	1.30 mm Thick
5	3905166	Shim	A/R	1.34 mm Thick
5	3905167	Shim	A/R	1.38 mm Thick
5	3905168	Shim	A/R	1.40 mm Thick
5	3905169	Shim	A/R	1.44 mm Thick
5	3905170	Shim	A/R	1.48 mm Thick
5	3905171	Shim	A/R	1.50 mm Thick
5	3905172	Shim	A/R	1.54 mm Thick
5	3905173	Shim	A/R	1.58 mm Thick
5	3905174	Shim	A/R	1.60 mm thick
5	3905175	Shim	A/R	1.64 mm Thick
5	3905176	Shim	A/R	1.68 mm Thick
5	3905177	Shim	A/R	1.70 mm Thick
5	3905178	Shim	A/R	1.74 mm Thick
5	3905179	Shim	A/R	1.76 mm Thick
5	3905180	Shim	A/R	1.78 mm Thick
5	3905181	Shim	A/R	1.80 mm Thick
5	3905182	Shim	A/R	1.84 mm Thick
5	3905183	Shim	A/R	1.88 mm Thick
5	3905184	Shim	A/R	1.90 mm Thick
5	3905185	Shim	A/R	1.94 mm Thick
5	3905186	Shim	A/R	1.98 mm Thick
6	3905152	Spring, Compression	4	
7	3905153	Spindle, Injector	4	
8	3905154	Disc, Intermediate	4	
9	3905155	Retainer, Injector Nozzle	4	
10	3919303	Nozzle	4	

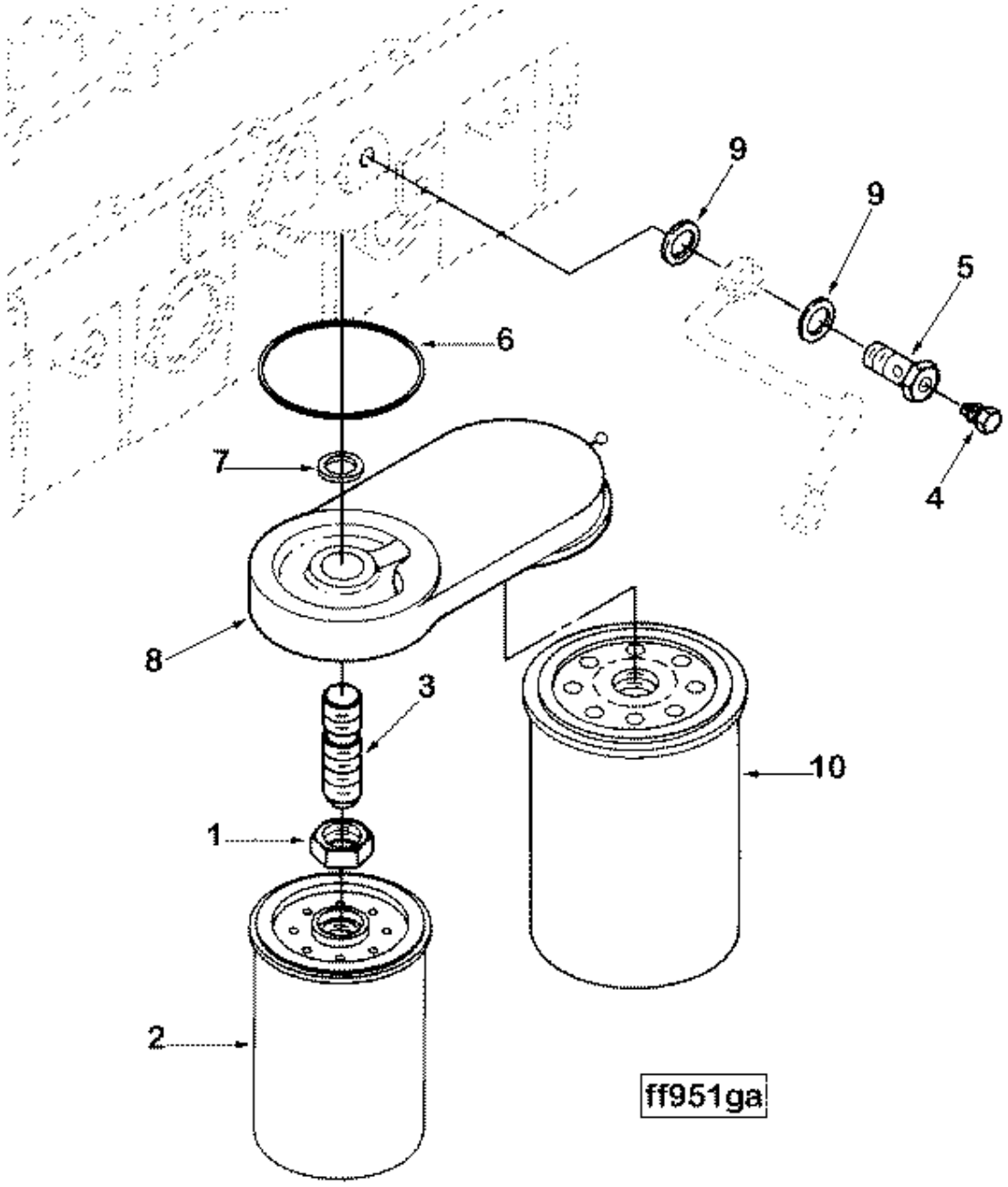
Fuel Injector



ref no	part number	part name	req	remarks
*	FT9818-03	Fuel Plumbing		Fuel Plumbing Engine Family: B Series Engine Cylinders: 4 High Pressure Tube ID.: 2.0 Boost Control: With Connection Type: Dual Bead Restricted Aspiration: jacket Water Aftercooled Turbocharged Fuel Pump Manufacturer/Model: Bosch VE Bosch VP-14 Contains Dual Bead Fuel Drain Tube for 1/4 in. I.D. hose connection.
1	3928759	Seal, Grommet	4	
2	3900629	Screw, Hex Flange Head Cap	2	M8 X 1.25 X 16
3	3903380	Seal, Banjo Connector	4	Replace With 4942278
4	3918109	Screw, Hex Flange Head Cap	2	M8 X 1.25 X 25
5	3905307	Screw, Banjo Connector	4	M6 X 1.00 X 14.3
6	3905388	Tee, Male Union	1	
7	3912137	Tube, Fuel Drain	1	
20	3905391	Seal, Grommet	1	
8	3905701	Tube, Fuel Drain	1	
20	3905391	Seal, Grommet	1	
9	3917712	Screw, Hexagon Head Cap	2	M5 X 0.80 X 22
10	3903723	Washer, Plain	2	
11	3919294	Brace, Tube	1	
12	3904711	Brace, Tube	2	
13	3917746	Isolator, Vibration	4	
14	3904204	Tube, Injector Fuel Supply	1	#1 Cylinder
15	3904205	Tube, Injector Fuel Supply	1	#2 Cylinder
16	3919292	Brace, Tube	1	
17	3904206	Tube, Injector Fuel Supply	1	#3 Cylinder
18	3904207	Tube, Injector Fuel Supply	1	#4 Cylinder
19	3909695	Manifold, Fuel	1	
20	3905391	Seal, Grommet	1	

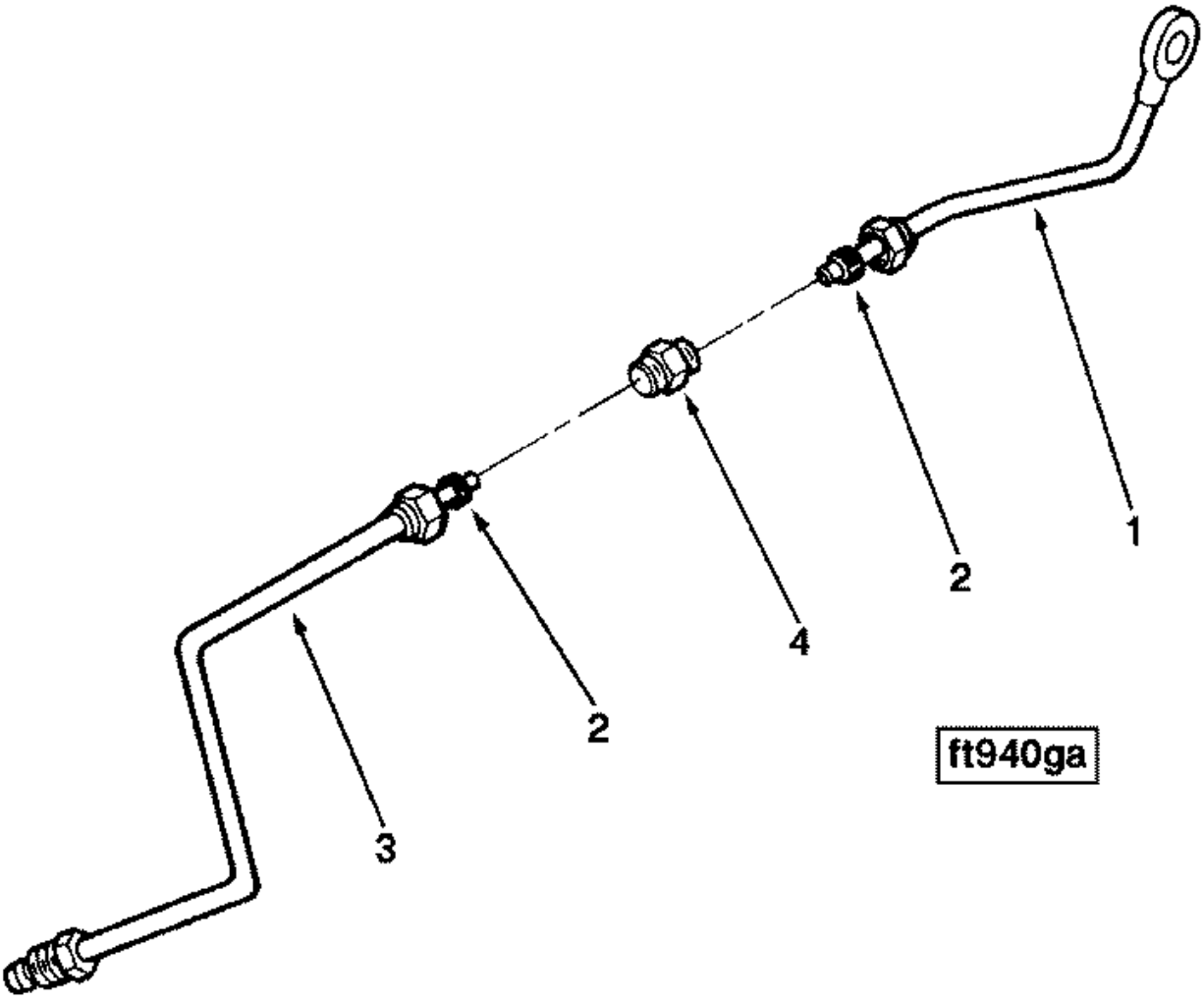

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ft900gd

ref no	part number	part name	req	remarks
*	FF9007-02	Fuel Filter		Fuel Filter Element Type: Dual Water Separator Provision: Yes Mounting Angularity: 40 Degrees Rearward Element Style: Spin on Installation Responsibility: Cummins Filter Location: #4 Cylinder Absolute Filtration (Microns): 25 Compatible with Lift Pump: Yes Air Heater Connection Provided: No Filter Inlet Diameter: 1/4 In. Engine Family: B Series Engine Cylinders: 4 6 P/N 3903546 Seal O'Ring is interchangeable with P/N 3906694. P/N 3903846 Seal O'Ring is interchangeable with P/N 3906695. P/N 3904362 Fuel Filter Head is interchangeable with P/N 3915240.
1	3903293	Nut, Regular Hexagon Jam	1	M16 X 1.50
2	3931063	Filter, Fuel	1	Buy From Cummins Filtration
3	3925955	Adapter, Filter Head	1	M16 X 1.50 (Both Ends)
	3905860	Screw, Banjo Connector	1	Order 3911446 and 3939570
4	3905403	Screw, Captive Washer Cap	1	M6 x 1.00 x 10
5	3911446	Screw, Banjo Connector	1	M12 X 1.50 X 24
6	3906694	Seal, Rectangular Ring	1	
7	3906695	Seal, Rectangular Ring	1	
	3897331	Head, Fuel Filter	1	
8	3897327	Head, Fuel Filter	1	
9	3918191	Washer, Sealing	2	Purchase 3935171
10	3930942	Filter, Fuel	1	Fleetguard P/N FS1280

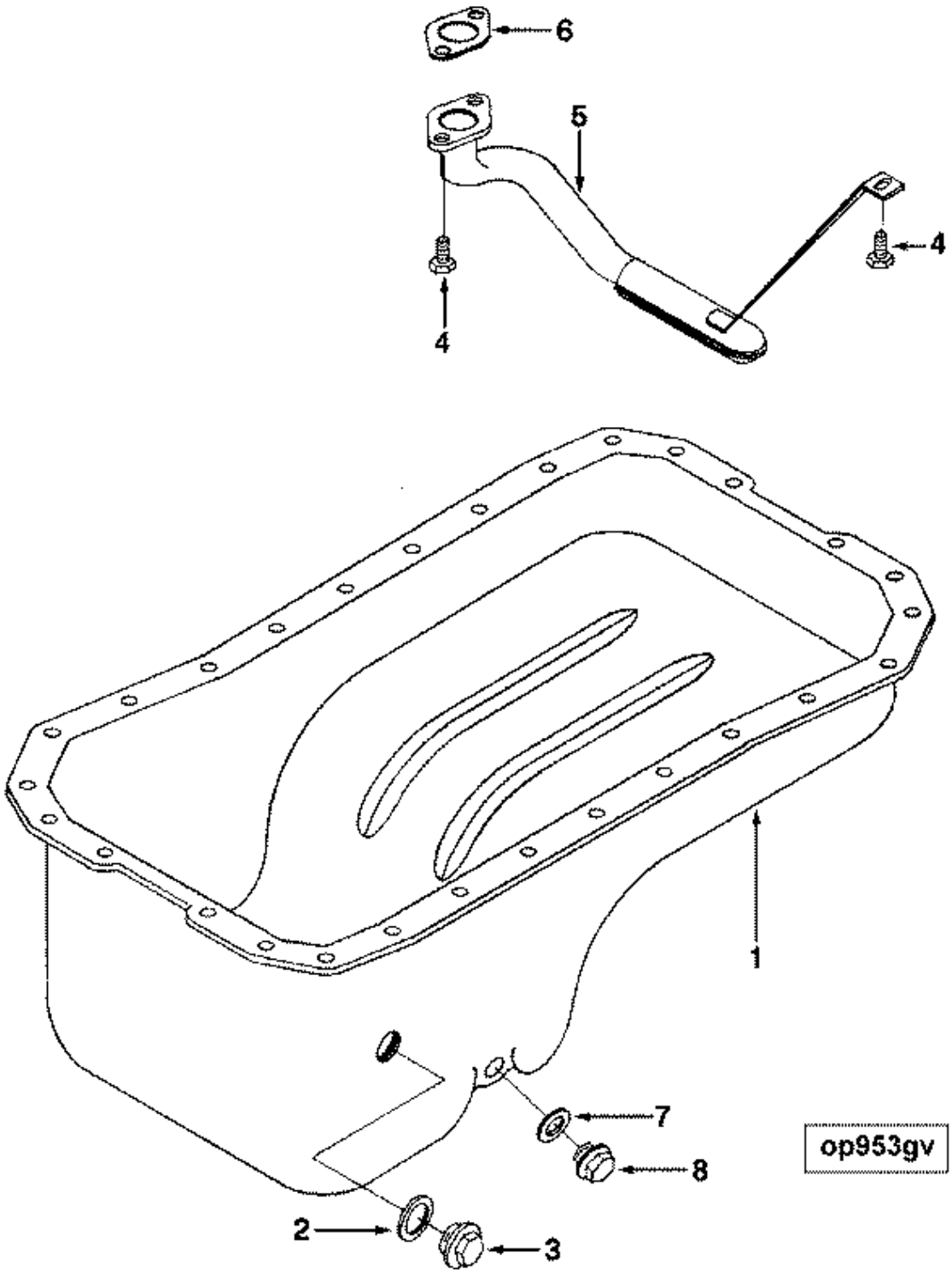

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Fuel Filter Plumbing

ref no	part number	part name	req	remarks
*	FF9737-01	Fuel Filter Plumbing		Fuel Filter Plumbing Engine Family: B Series Pump Mfg/Model: Bosch VE Bosch VP14 Engine RPM Limitation: <=2500 Heater/Spacer/Glow-plug Provision: Heater/Spacer Tube Material: Steel Boost Control Provision: Without Mounting Location: #4 Cylinder Engine Design Phase: Current Product Cylinders: 4 6
1	3908988	Tube, Fuel Supply	1	
2	3905351	Seal, Grommet	1	
3	3918641	Tube, Fuel Supply	1	
2	3905351	Seal, Grommet	1	
4	3908985	Union, Male	1	9/16-24 x 9/16-24



ref no	part number	part name	req	remarks
*	OP9003-06	Oil Pan		Oil Pan Family: B Series Cylinders: 4 Sump Style: Standard Sump Location: Front Oil Pan Material: Stamped Steel Drain Location: Fuel Pump Side Pan High Capacity (qt): 10 Pan Low Capacity (qt): 8 Front Up Angularity (deg): 45 Front Down Angularity (deg): 45 Side To Side Angularity (deg): 45 Heater Boss Size & Location: 22mm Fuel Pump DEP may substitute 3281626 capscrew in place of 3920400. DEP may use 3282266 plug in place of 3924148 plug.
1	3901049	Pan, Oil	1	
2	3902425	Washer, Sealing	1	M22
3	3924148	Plug, Threaded	1	M22 X 1.50 X 14
4	3907860	Screw, Hex Flange Head Cap	3	M8 X 1.25 X 25
5	3920795	Connection, Oil Suction	1	
6	3931349	Gasket, Flange	1	
7	3920773	Washer, Sealing	1	M18
8	3924147	Plug, Threaded	1	M18 X 1.50


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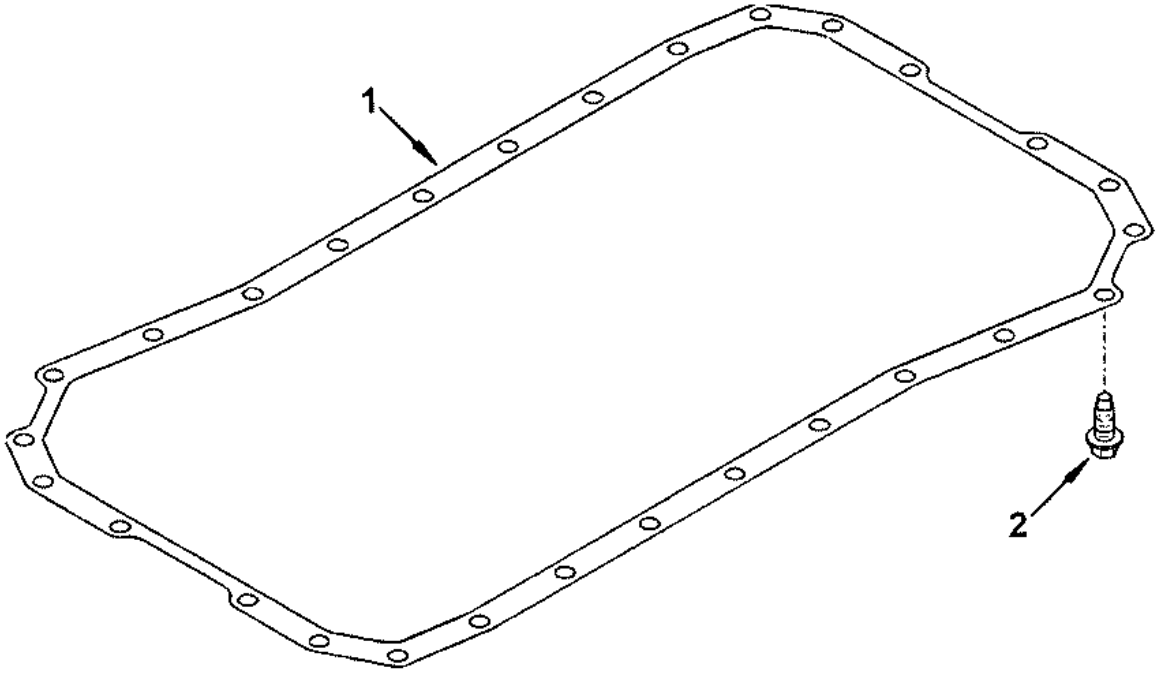
Group 07.01 | 28 | Option No

Picture op950gn

Mounting,Oil Pan

op9704

ref no	part number	part name	req	remarks
*	OP9704	Oil Pan		Oil Pan Mounting Engine Family: B Series Cylinders: 4 Bedplate Capability: Without Required Oil Pan Material: Stamped Steel Structure Code: 02 EBM
1	3931602	Gasket, Oil Pan	1	
2	3920400	Screw, Hex Flange Head Cap	28	M8 X 1.25 X 21



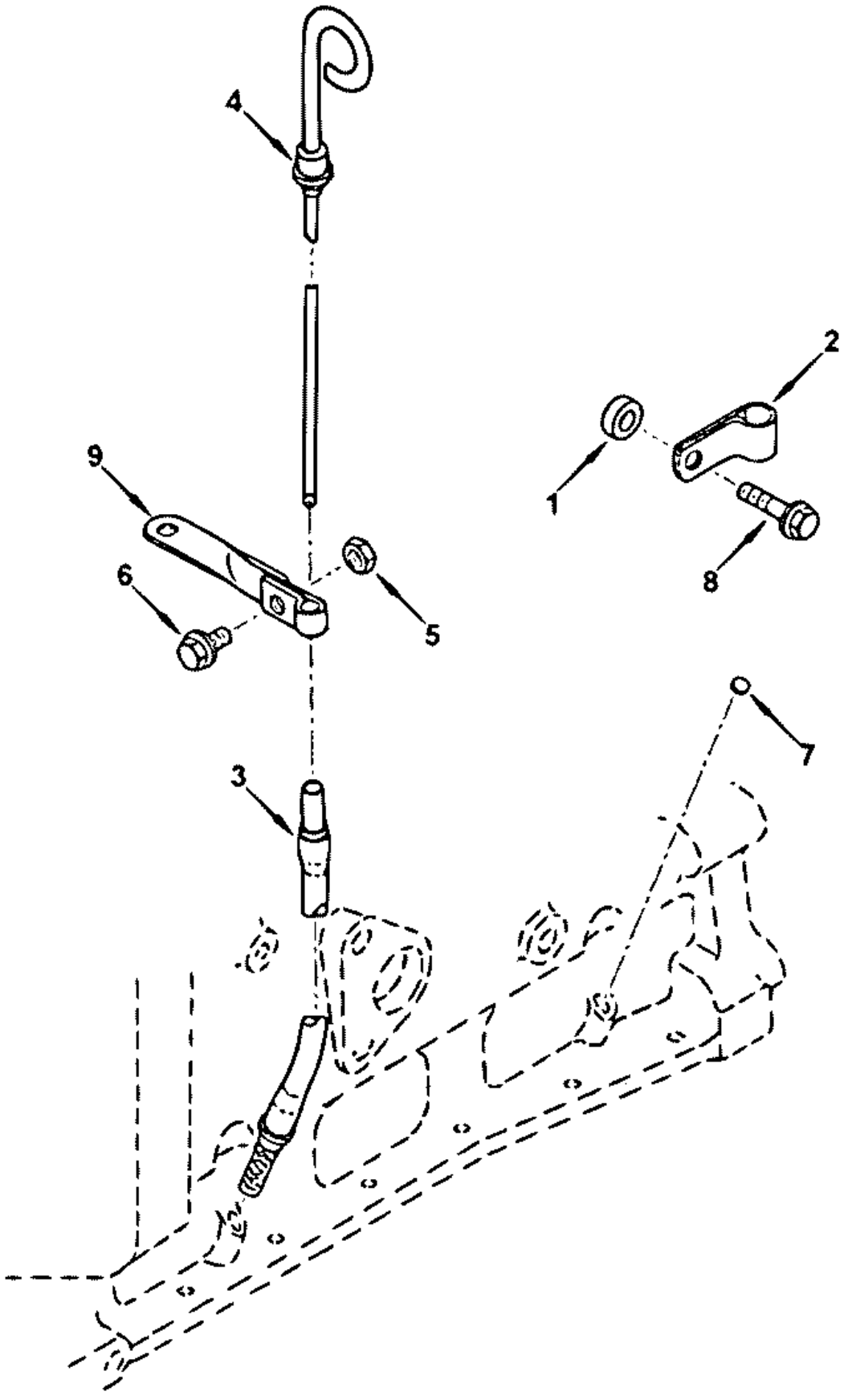
op950gn

Gauge,Oil Level

ref no	part number	part name	req	remarks
*	LG9239	Oil Level Gauge		Lube Oil Gauge Family: B Series Cylinders: 4 Supplier: Cummins Oil Pan High Limit (qt): 10 Oil Pan Low Limit (qt): 8 Oil Pan Sump: Front Entry Location from FFOB (mm): 168.0 Power Angle (deg): 0 Engine Tilt (deg): 0 Pull Direction: Vertical Functions with Air Compressor: No Tube Termination Side: Fuel Pump Side Tube Effective Length (mm): 562 Handle - Horizontal from Crank C/L: 0 Handle - Vertical from Crank C/L: 0 Handle - Horizontal from FFOB: 0 Functions with Balancer: No Restricted Breather Type: Open CNS may use 3905368 expansion plug in place of 3900955 expansion plug.
1	68368 B	Spacer, Mounting	1	
2	554013	Clamp, Tube	1	
3	3279264	Tube, Oil Gauge	1	
4	3281712	Dipstick	1	
5	3900240	Nut, Regular Hexagon	1	M8 X 1.25
6	3900629	Screw, Hex Flange Head Cap	1	M8 X 1.25 X 16
7	3900955	Plug, Expansion	1	
8	3902114	Screw, Hex Flange Head Cap	1	M8 X 1.25 X 30
9	3905804	Brace, Tube	1	

Gauge,Oil Level

lg9239



lg950gg

Group 07.03 30 Option No

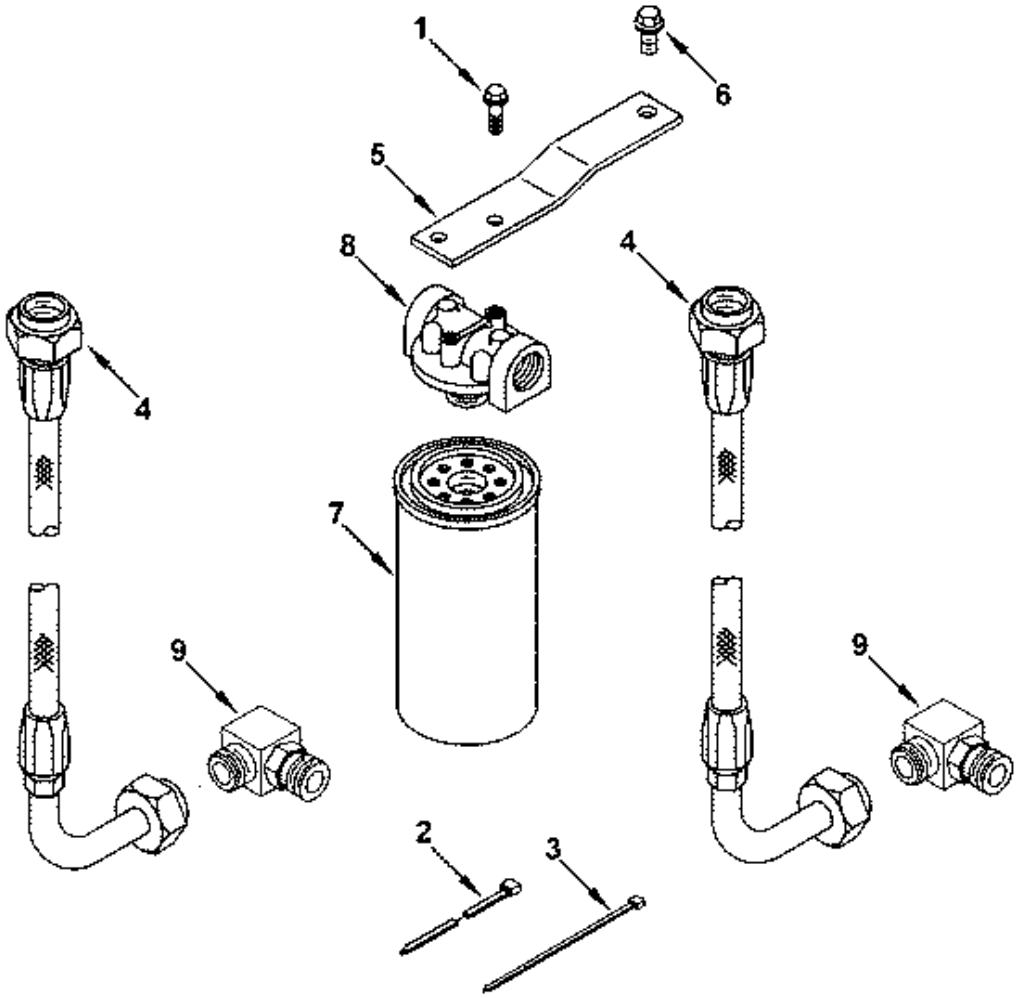
Picture lf952gn

Filter,Full Flow Oil

lf9039-03

ref no	part number	part name	req	remarks
*	LF9039-03	Full Flow Oil Filter		Filter, full flow oil Engine Cylinders: 4 Oil Filter Position: Down Engine Aspiration: N/T/A Only With Exhaust manifold with boss at top rear Remote Mounted: Yes Filter Plumbing Included: Yes Filter Element Type: Cartridge Filter Element Thread: 3/4-16 Un-2 B Filter Element Length (mm): 137.62mm Short Connecting Hose Length (mm): 740 Short Connecting Hose Ends: Straight/straight Long Connecting Hose Length (mm): 740 Long Connecting Hose Ends: Straight/90 Degrees Mounting Bracket Included: No Includes Oil Filter Slave: Yes Requires Chief Engineers Approval: Yes Same As LF9022 Except: Filter Is Plumbed to cooler and fixed to top rear exhaust manifold boss with a throwaway bracket for hot test and shipping. Filter head has M8 mounting holes. Hoses are now of equal length.
1	3900631	Screw, Hex Flange Head Cap	2	M8 X 1.25 X 25
2	201351	Clamp, Wire Tie	2	
3	3018920	Clamp, Wire Tie	1	
4	3281847	Hose, Flexible	2	
5	3282724	Bracket, Shipping	1	
6	3903990	Screw, Hex Flange Head Cap	1	M10 X 1.50 X 20
7	3908615	Cartridge, Lub Oil Filter	1	
8	3282285	Head, Lub Oil Filter	1	
9	3924568	Elbow, Male Union	2	

Group 07.03	30	Option No
Picture lf952gn	**Filter,Full Flow Oil**	lf9039-03



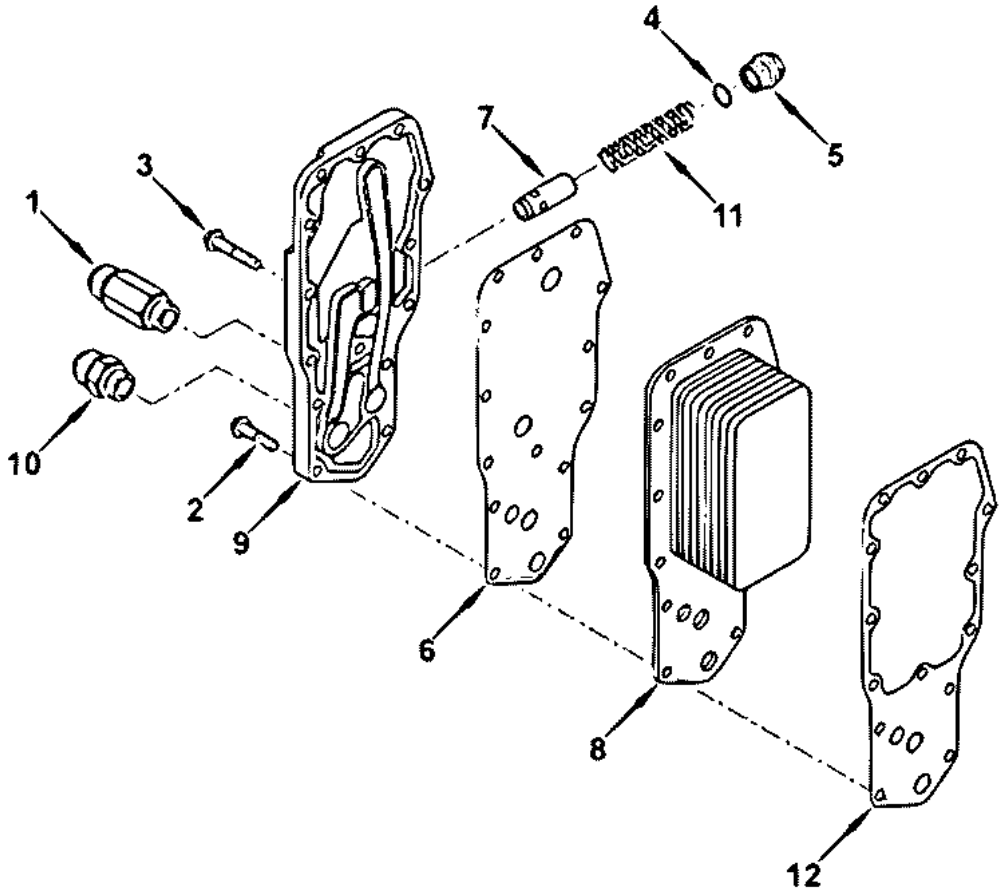
Group 07.05 | 31 | Option No

Picture lc950gb

Cooler,Engine Oil

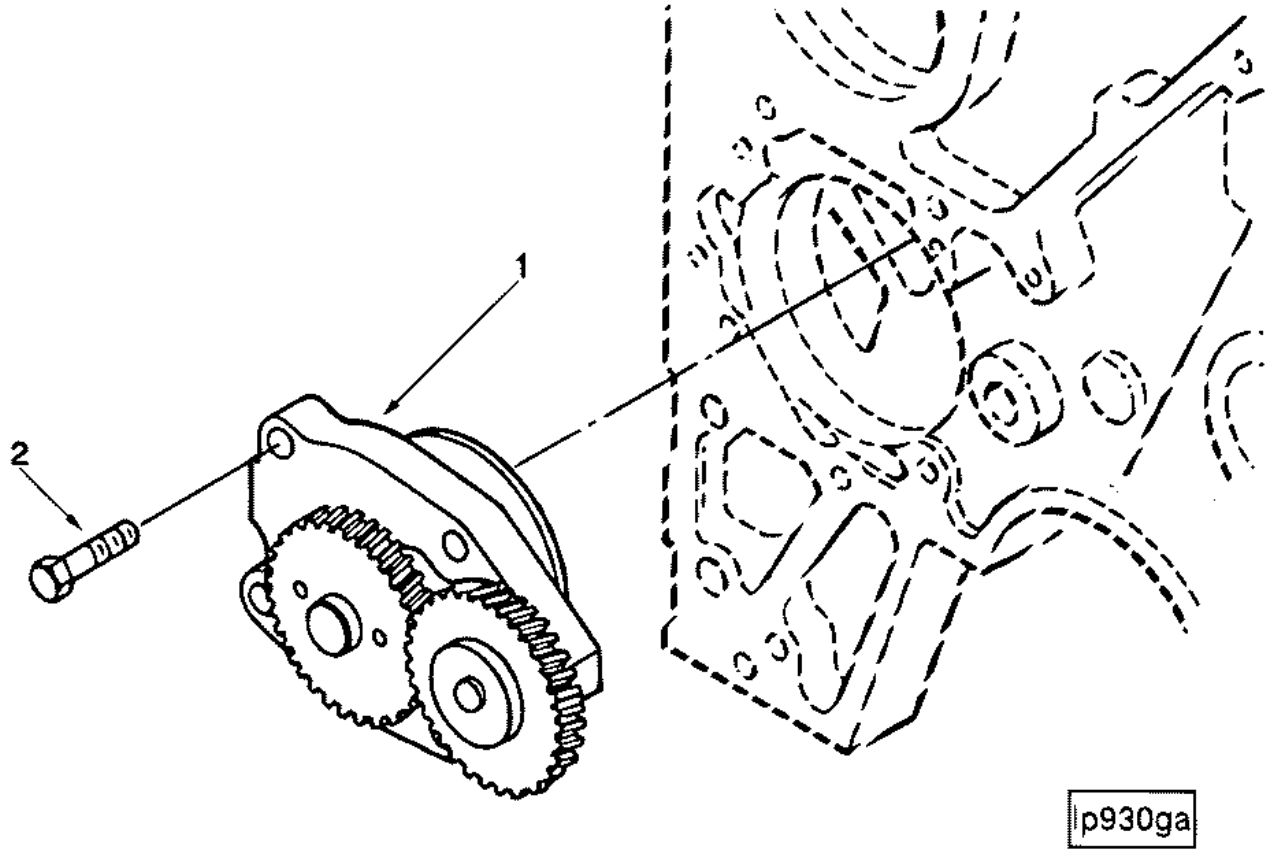
lc9056

ref no	part number	part name	req	remarks
*	LC9056	Engine Oil Cooler		Lube Oil Cooler Structure Code: 02 EBM Cylinders: 4 Cooler Type: Plate Mounting Position/Location: Remote Chief Engineer Approval Required: Yes Filter Material: Cellulose Unique Characteristics: Straight Connections Engine Families: B Series Restricted Aspiration: Jacket Water Aftercooled Turbocharged Pressure Relief Set 65 PSI. For Use Only With LF9039.
1	3282612	Connector, Male	1	
2	3900632	Screw, Hex Flange Head Cap	13	M8 X 1.25 X 35
3	3901445	Screw, Hex Flange Head Cap	1	M8 X 1.25 X 45
4	3909397	Seal, O Ring	1	
5	3915787	Plug, Threaded	1	M22 X 1.50
6	3929792	Gasket, Filter Head	1	
7	3918428	Plunger, Prs Regulator	1	
8	3921557	Core, Cooler	1	
9	3923332	Cover, Lub Oil Cooler	1	
10	3923333	Connector, Male	1	7/8-14 X 1 1/16-12
11	3918427	Spring, Compression	1	
12	3942914	Gasket, Oil Cooler Core	1	



Lube Oil Pump

ref no	part number	part name	req	remarks
*	LP9005	Lube Oil Pump		Lubricating Oil Pump Pump Flow Rate (GPM @ RPM): 14.6 @ 2400 Engine Family: B Series Engine Cylinders: 3 4
1	3930336	Pump, Lubricating Oil	1	
2	3900677	Screw, Hexagon Head Cap	4	M8 X 1.25 X 30



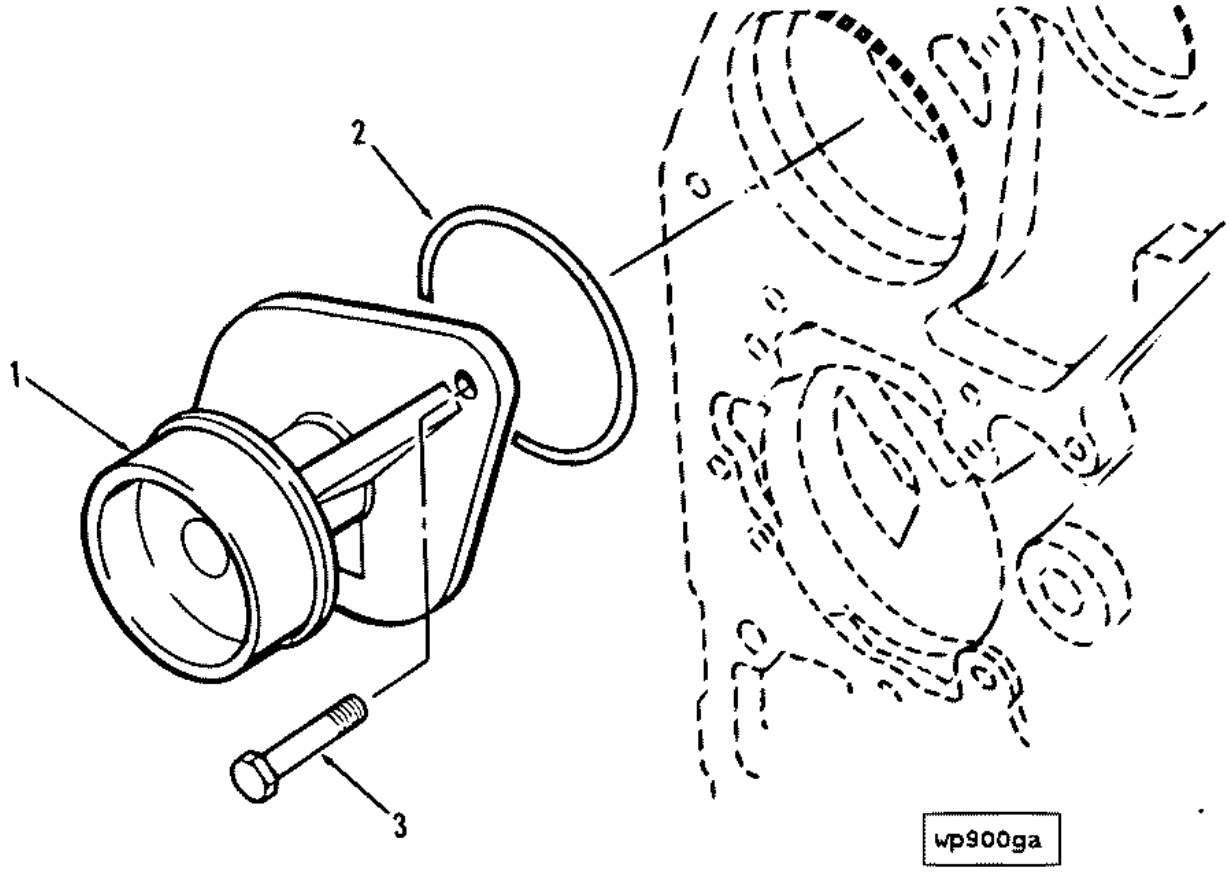
Group 08.01 | 33 | Option No

Picture wp900ga

Water Pump

wp9001

ref no	part number	part name	req	remarks
*	WP9001	Water Pump		Water Pump Pulley Type: Standard Engine Family: B Series Pulley Diameter (MM): 88.00 P/N 3903297, O-Ring Seal is interchangeable with P/N 3906698
	3286278	Kit, Water Pump	A/R	Recon Equivalent 3286278 RX
1	3928396	Pump, Water	1	Serviced as 3286278
2	3906698	Seal, Rectangular Ring	1	
3	3900227	Screw, Hexagon Head Cap	2	M8 X 1.25 X 22



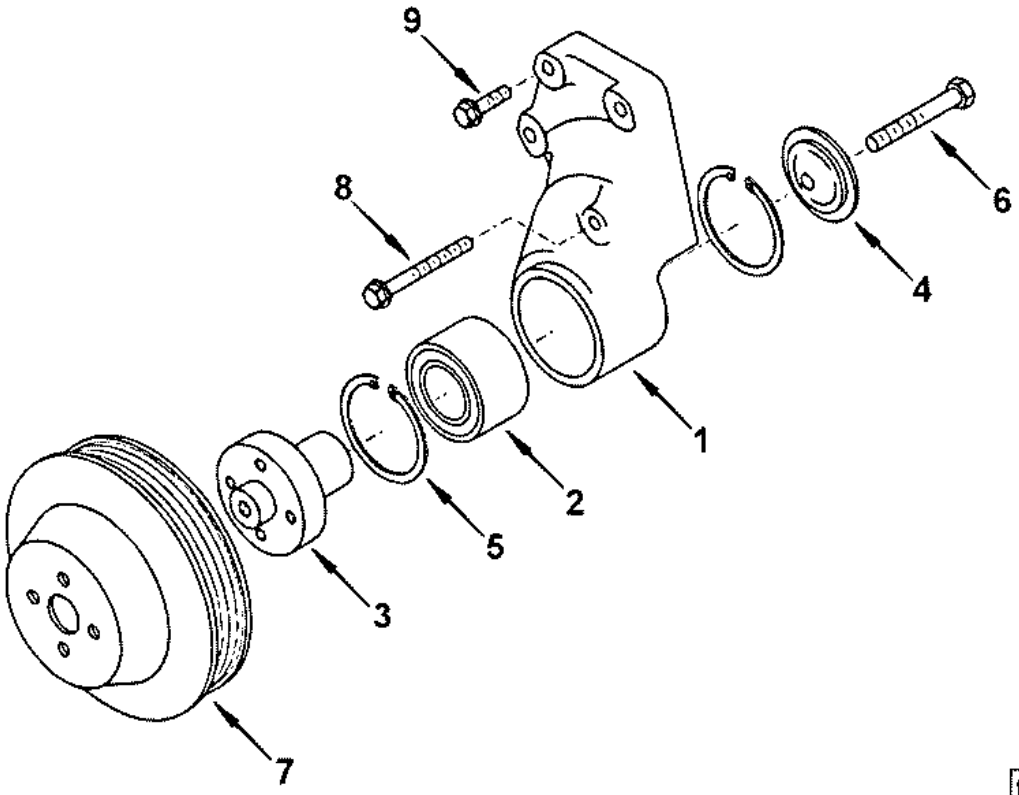
Group 08.03 | 34 | Option No

Picture fa900gw

Drive,Fan

fa9062

ref no	part number	part name	req	remarks
*	FA9062	Fan Drive		Fan Drive Component Supplier: Cummins Fan Drive Ratio: 1.10:1 Mounting Bolt Circle (MM): 50 Engine Fan Center (MM): 203.2 (8 IN) Horizontal Offset: 49.0 Unique Characteristics: Increased Fan Weight Capability Engine Family: B Series
	3911202	Support, Fan	1	
1	3281875	Support, Fan	1	
2	3910739	Bearing, Ball	1	
3	3910622	Hub, Fan	1	
4	3923904	Retainer, Fan Hub	1	
5	3035960	Ring, Retaining	2	
6	3907769	Screw, Hexagon Head Cap	1	M10 X 1.75 X 70
7	3914463	Pulley, Fan	1	
8	3901447	Screw, Hex Flange Head Cap	1	M8 X 1.25 X 75
9	3902114	Screw, Hex Flange Head Cap	3	M8 X 1.25 X 30



fa900gw

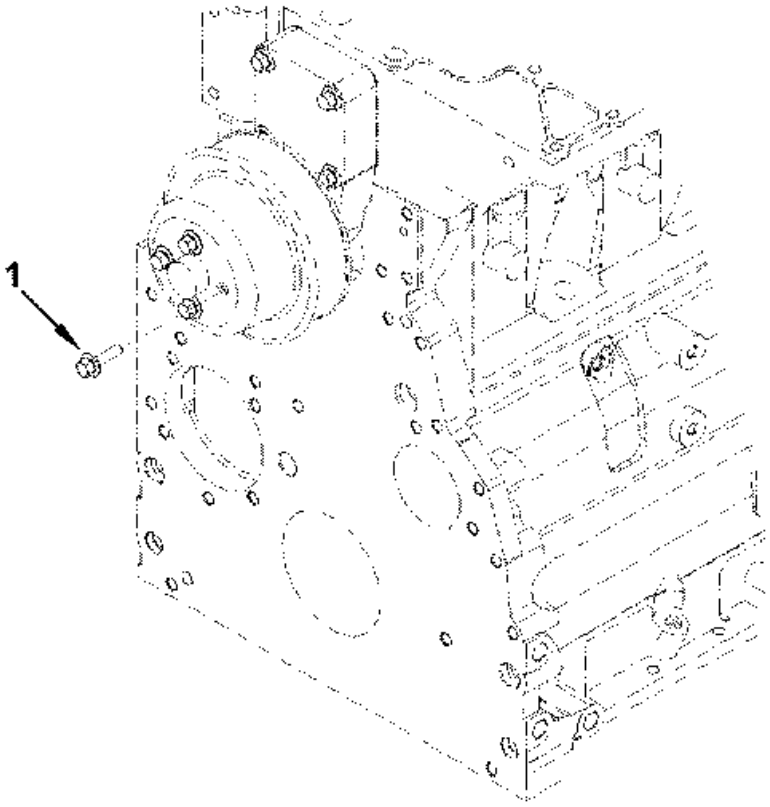
Group 08.03 | 35 | Option No

Picture fa900gz

Fan Drive

fa9702

ref no	part number	part name	req	remarks
*	FA9702	Fan Drive		Fan Drive Mounting Required Bolt Circle (MM): 50 Installation Responsibility: Customer Fastener Length (MM): 20 Spacer Type: Clamping Plate Engine Family: B Series
1	3900630	Screw, Hex Flange Head Cap	4	M8 X 1.25 X 20



fa900gz

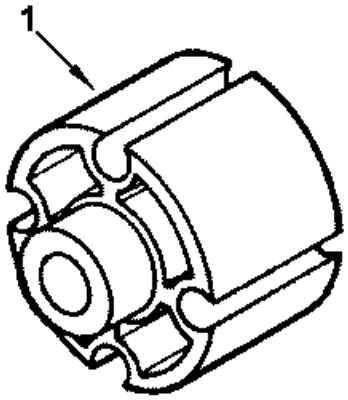
Group 08.05 | 36 | Option No

Picture sp910ga

Fan Pilot Spacer

sp9004

ref no	part number	part name	req	remarks
*	SP9004	Fan Pilot Spacer		Fan Pilot Spacer Spacer Thickness (MM): 44.5 (1.75 IN) Spacer Type: Spacer Fan Pilot Diameter (MM): 50.8 Engine Family: B Series C Series Mounting Bolt Circle (MM): 88.9
1	3903818	Spacer, Fan	1	



sp910ga

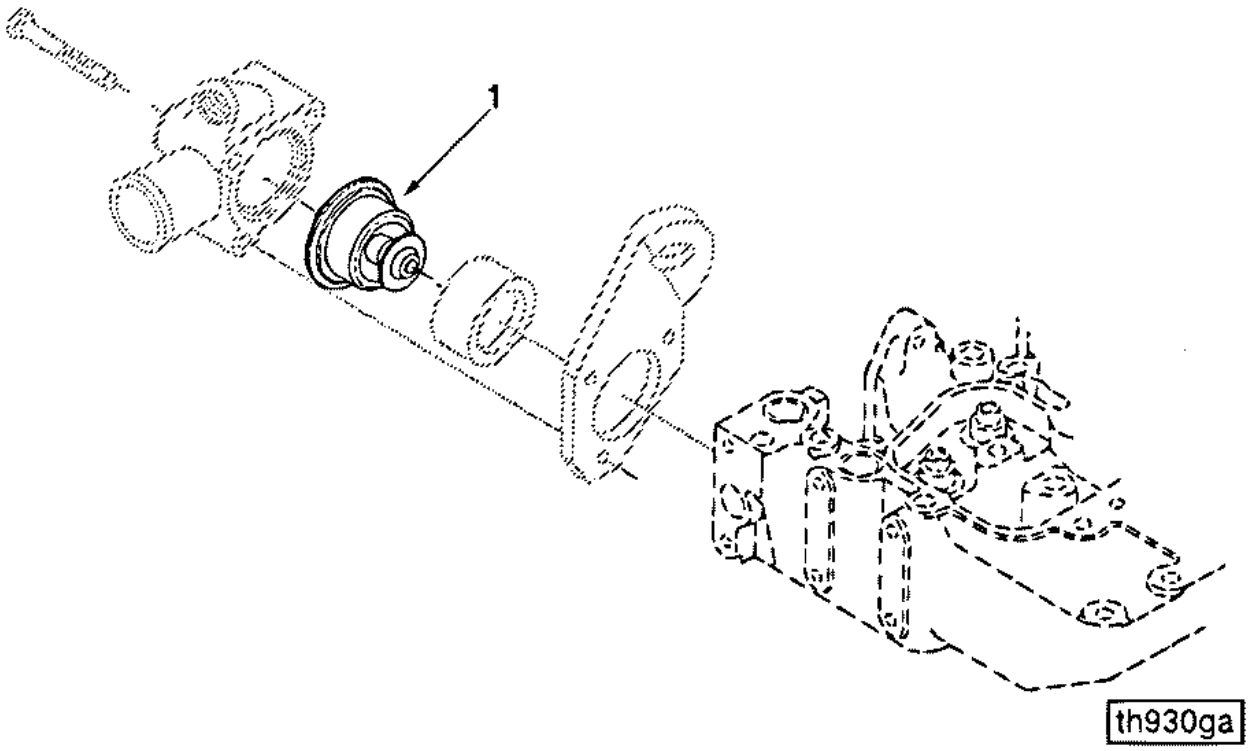
Group 08.07 37 Option No

Picture th930ga

Thermostat

ec9001-02

ref no	part number	part name	req	remarks
*	EC9001-02	Thermostat		Thermostat Thermostat Opening Temp: 83 Deg C Number of Thermostats: 1 Vented Thermostat: Yes Vented Type: Jiggle Pin
	3802273	Kit, Thermostat	1	
1	3917324	Thermostat	1	
	3923331	Gasket, Thm Housing Cover	1	



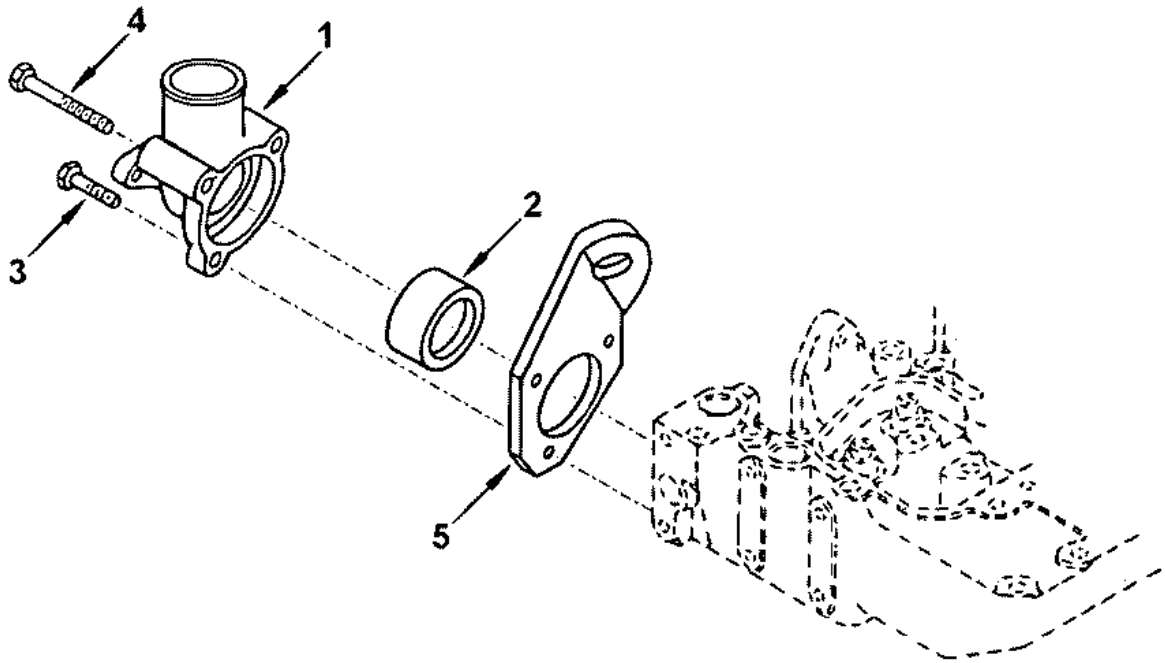
Group 08.07 | 38 | Option No

Picture th900gb

Thermostat Housing

th9001-02

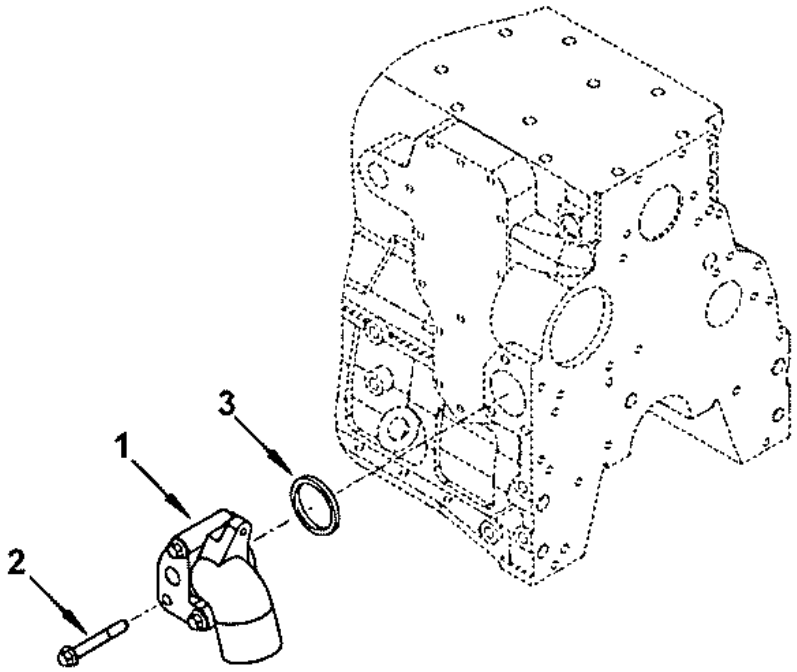
ref no	part number	part name	req	remarks
*	TH9001-02	Thermostat Housing		Thermostat Housing Thermostat Bore: 54.25 Outlet Type/OD (mm): 45.0 Outlet Direction: Vertical Bracket Direction: Vertical/Forward Airation Method: Non-Vented Tappings for Belt Tensioner: No Engine Families: B Series
1	3914409	Housing, Thermostat	1	
2	3923331	Gasket, Thm Housing Cov	1	
3	3900632	Screw, Hex Flange Head Cap	1	M8 X 1.25 X 35
4	3926972	Screw, Hex Flange Head Cap	2	M8 X 1.25 X 70
5	3903757	Bracket, Lifting	1	.250 inch thick



th900gb

Water Inlet Connection

ref no	part number	part name	req	remarks
*	WI9002	Water Inlet Connection		Water Inlet Connection Structure Code: 02 EBM Engine Family: B Series Inlet Connection OD (MM): 58.00 Connection Type: Beaded Connection Orientation: 73 Degree Down Contains Mtg Pad For Freon Compressor: No Attachment For Low Profile Tensioner: No
1	3903103	Connection, Water Inlet	1	
2	3901757	Screw, Hex Flange Head Cap	3	M10 X 1.50 X 75
3	3906697	Seal, Rectangular Ring		



wi900ge

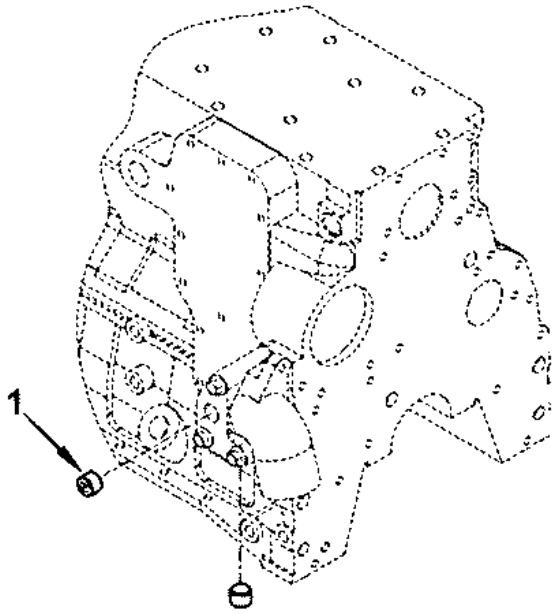
Group 08.07.1 | 40 | Option No

Picture wi900gg

Water Inlet Connection

wi9701

ref no	part number	part name	req	remarks
*	WI9701	Water Inlet Connection		Plugs for use in water inlet connection to be used without water cooled exhaust manifold
1	3008468	Plug, Pipe	2	1/2 NPT



wi900gg

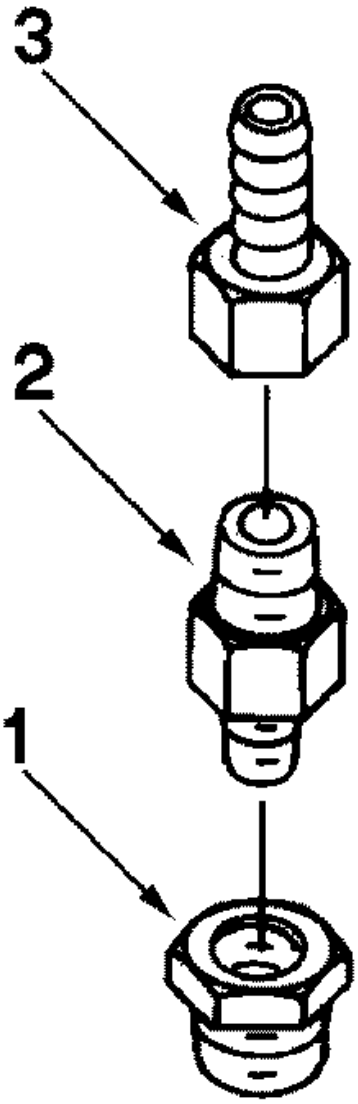
Group 08.13.1 | 41 | Option No

Picture wh950gb

Engine Vent Plumbing

wh9051

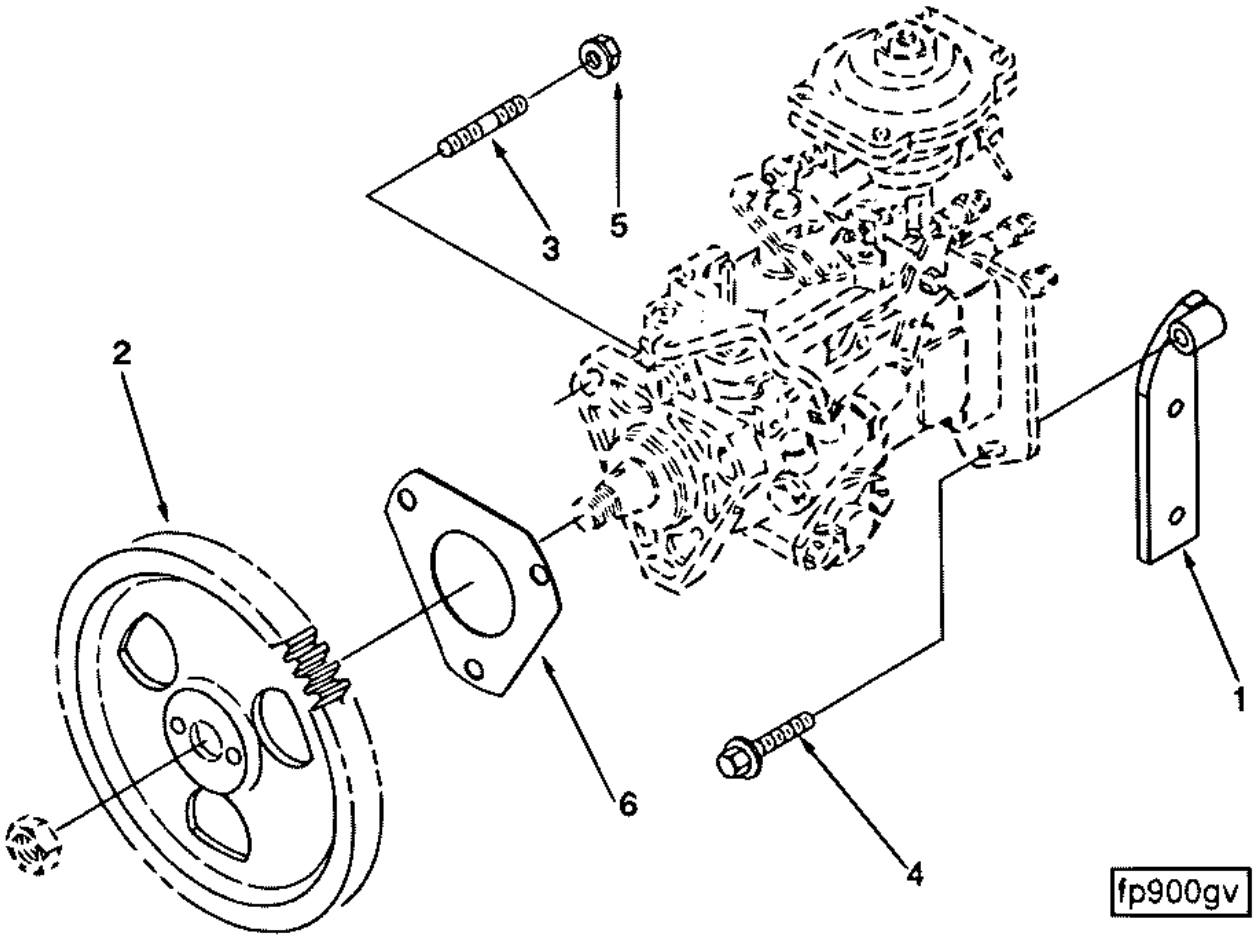
ref no	part number	part name	req	remarks
*	WH9051	Engine Vent Plumbing		Plumbing, Heater Option Type: Engine Vent Water Supply Tap Location: Cylinder Head Top Front - Inboard Size: 3/8-18 NPTF Straight For Samsung: Push-On Fitting With Check Valve For 9.5 MM (3/8") I.D. Hose. Located top of cylinder head inboard near to number one rocker cover in 1/2" NPTF hole. DEP may use 3283438 coupling, plain hose instead of 3911925 .
1	S 967	Bushing, Reducing Pipe	1	1/2 NPTF
2	3911915	Valve, Check	1	1/4 NPTF x 3/8 NPTF
3	3911925	Coupling, Plain Hose	1	



wh950gb

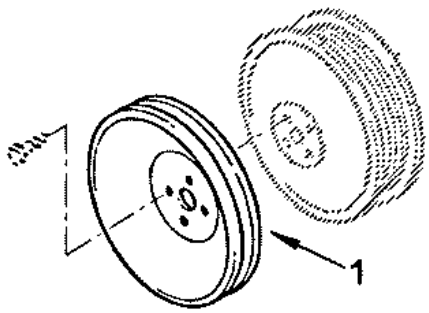
Fuel Pump Coupling

ref no	part number	part name	req	remarks
*	FP9702-02	Fuel Pump Coupling		Fuel Pump Coupling Engine Family: B Series Provision For Air Compressor: No Fuel Pump Supports Provided: Yes Structure Code: 02 EBM Fuel Pump Mfg/Model: Bosch VE Bosch VP-14 Aspiration: Charge Air Cooled Jacket Water Aftercooled Naturally Aspirated Turbocharged Fuel Pump Gear 3920594 may be substituted for 3920593. DEP may substitute 3282370 in place of 3902501.
1	3905313	Brace, Fuel Pump	1	
2	3931383	Gear, Fuel Pump	1	
3	3902501	Stud	3	M8 x 1.25 (Both Ends) x 47.98
4	3900630	Screw, Hex Flange Head Cap	3	M8 X 1.25 X 20
5	3900589	Nut, Hexagon Flange	3	M8 X 1.25
6	3931607	Gasket, Fuel Pump	1	



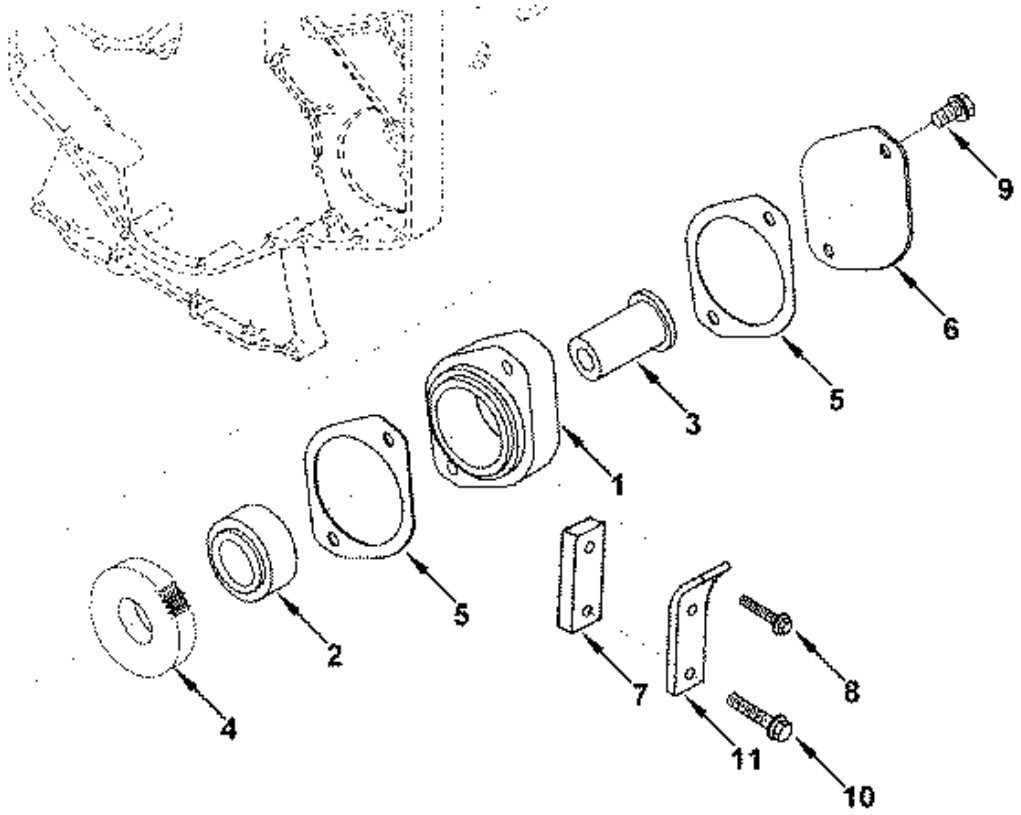
Accessory Drive Pulley

ref no	part number	part name	req	remarks
*	AD9003	Accessory Drive Pulley		Accessory Drive Pulley Groove Count: 1 Pulley Diameter (mm): 179.55 Effective Diameter (mm): 175.37 Pitch Diameter (mm): 172.82 Pulley Construction/Type: 1 piece 1/2 IN. V Pulley Rotation: Clockwise Pulley Ratio to Engine Speed: 1.00:1 Required Fan Hub Material: Cast Iron Bolt Circle (mm): 50 60 Engine Family: B Series C Series
1	3919624	Pulley, Accessory Drive	1	



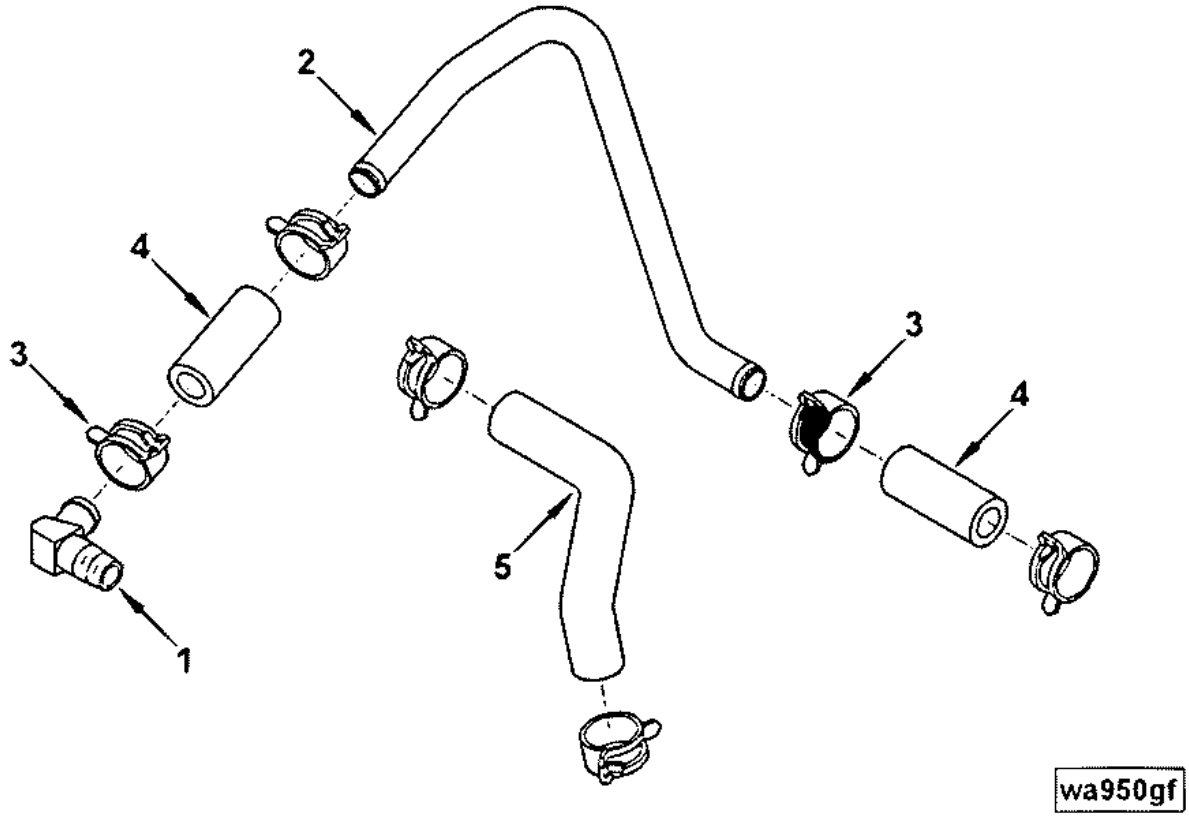
fa901gi

ref no	part number	part name	req	remarks
*	DF9014	Front Gear Train Accessory		Front Gear Train Accessory Drive Location: Gear Cover-Back Rear Flange SAE: 101-2 (SAE B) Accessory Drive Type: SAE 22-4 Rear Flange Mount Thread: Metric Maximum Torque: 105 Lb. Ft. Drive Offset: 0 Deg Drive Rotation: Counter-Clock Engine Families: B Series Effective Drive Ratio: .97:1
	3910653	Drive, Hydraulic Pump Assy	1	
1	3916280	Adapter, Hydraulic Pump	1	
2	3902601	Bearing, Roller	1	
3	3912204	Shaft, Accessory Drive	1	
4	3902595	Gear, Accessory Drive	1	
5	3008400	Gasket, Hydraulic Pump	2	Service as 4089742
6	3914868	Plate, Cover	1	
7	3905944	Spacer, Mounting	1	
8	3901249	Screw, Hex Flange Head Cap	2	M12 X 1.75 X 25
9	3902115	Screw, Hex Flange Head Cap	2	M12 X 1.75 X 65
10	3902116	Screw, Hex Flange Head Cap	2	M12 X 1.75 X 50
11	3905945	Brace, Hydraulic Pump	1	
		$Service Parts		
	4089742	Kit, Vacuum Pump Repair	A/R	



Aftercooler Plumbing

ref no	part number	part name	req	remarks
*	WA9702-02	Aftercooler Plumbing		Aftercooler Plumbing Exhaust Manifold Type: Dry DEP may use 3282417, 3282444 and 3918611 in place of 3914855, 3907167 and 3918607. Coupling elbow hose to be set at 45 degree +/- 1 degree upward and rearward. Restricted Fuel Pump: Rotary
1	3282444	Coupling, Elbow Hose	1	
2	3914855	Tube, Aftercooler	1	
3	3918163	Clamp, Hose	6	
4	3918611	Hose, Plain	2	
5	3918608	Hose, Elbow	1	



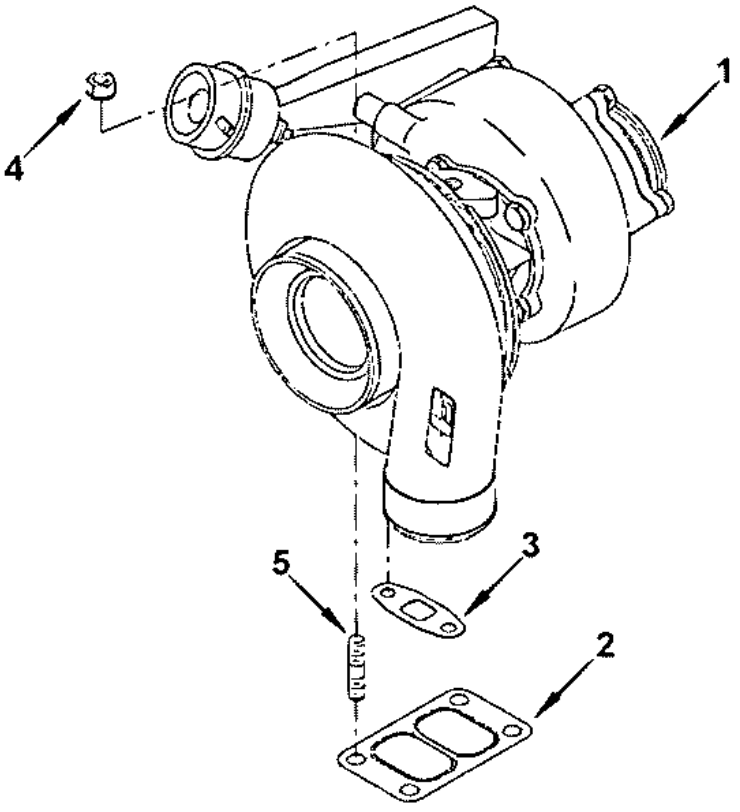
Group 10.05 | 46 | Option No

Picture pp956gs

Turbocharger

pp9726

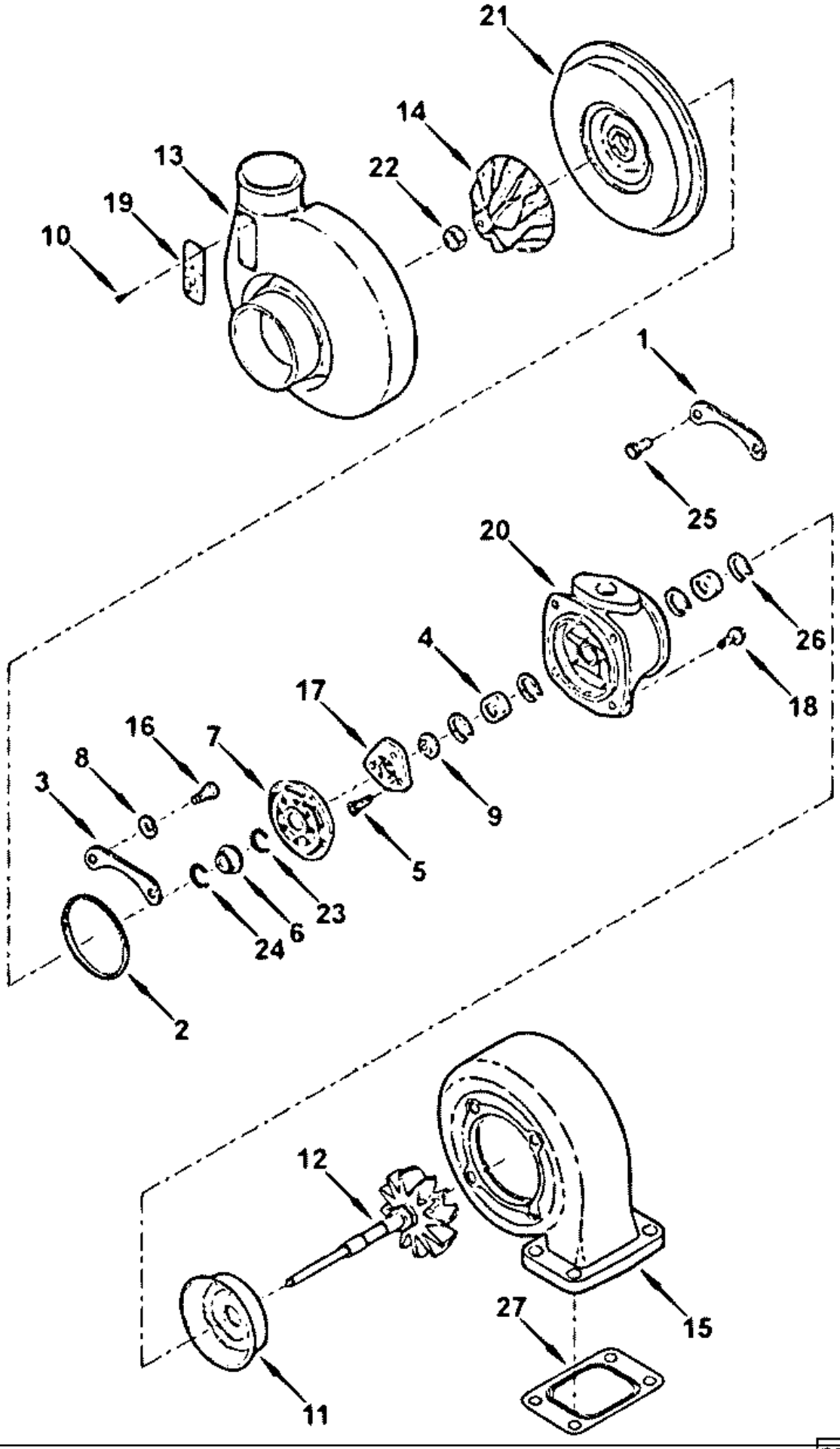
ref no	part number	part name	req	remarks
*	PP9726	Turbocharger		Turbocharger
				Engine Family: B Series
				Turbocharger Location: HMRO
				Base ID 17 Turbo: 3535381
				Turbo Type: Non-Wastegate
				Structure Code: 02 EBM
				Engine Cylinders: 4
	3802290	Turbocharger	1	Recon Equivalent 3802290 RX
1	3522900	Turbocharger	1	Serviced as 3802290
2	3709861	Gasket, Turbocharger	1	Cummins Equiv. 3901356
3	3914388	Gasket, Oil Drain	1	Holset P/N 3519807
4	3818824	Nut, Hexagon Flange	4	M10 X 1.50
5	3818823	Stud	4	M10 X 1.5-6G Both Ends



pp956gs

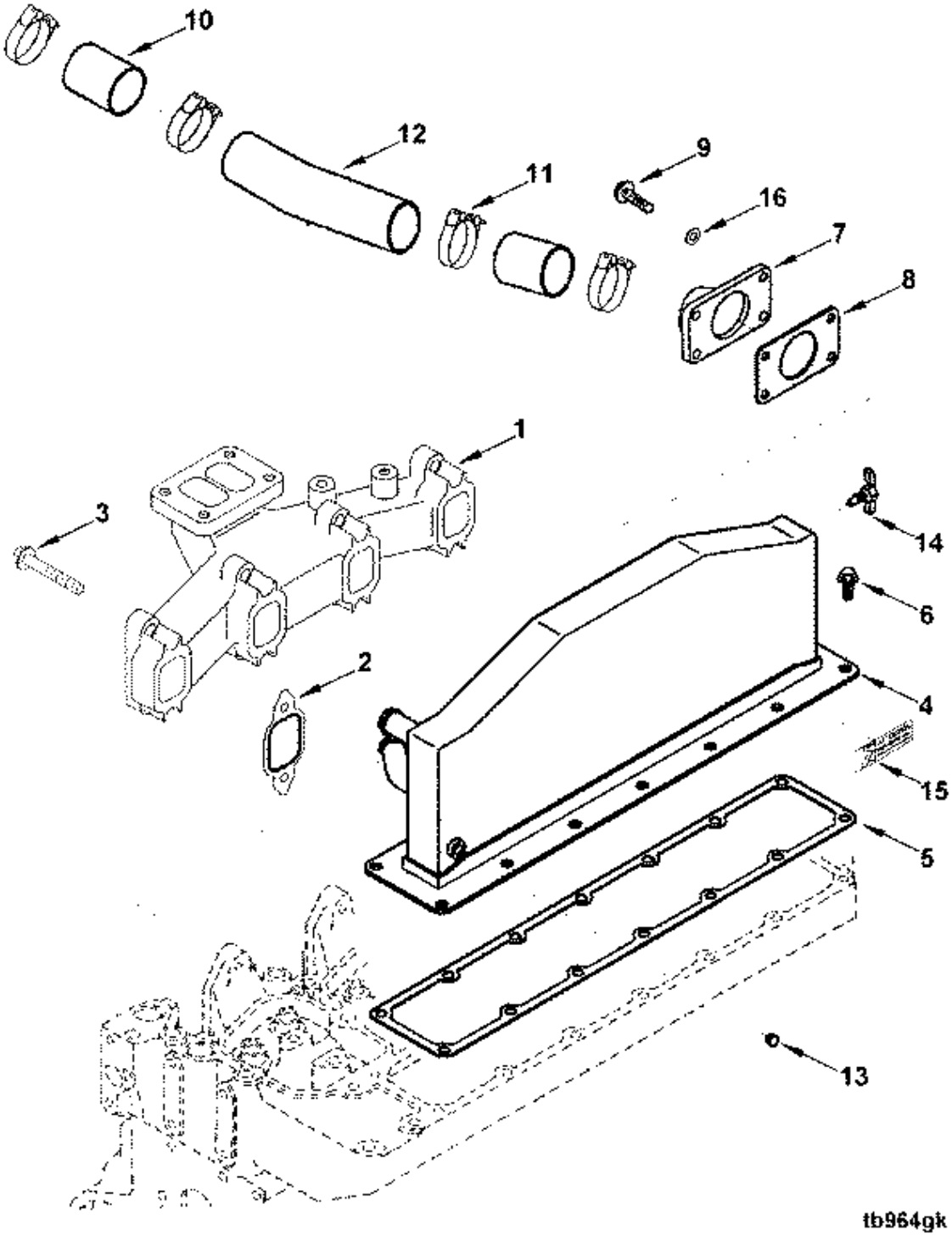
Turbocharger

ref no	part number	part name	req	remarks
*	PP9726	Turbocharger		Turbocharger
	3802290	Turbocharger	1	Recon Equivalent 3802290 RX
	3522900	Turbocharger	1	Serviced as 3802290
1	3501188	Plate, Clamping	2	
2	3502449	Seal, Rectangular Ring	1	
3	3502734	Plate, Clamping	3	
4	3503100	Bearing, Turbocharger	2	
5	3503347	Screw, Flat Head Cap	3	
6	3503662	Slinger, Oil	1	
7	3503668	Baffle, Oil	1	
8	3518004	Washer, Lock	6	M6.
9	3518980	Collar, Thrust	1	
10	3519163	Screw, Drive	2	
11	3519302	Shield, Turbocharger Heat	1	
12	3519336	Shaft & Wheel	1	
13	3521848	Housing, Compressor	1	
14	3521863	Impeller, Tur Compressor	1	
15	3521927	Housing, Turbine	1	
16	3524262	Screw, Hexagon Head Set	6	M6 X 1.00 X 12.
17	3525739	Bearing, Tur Thrust	1	
18	3527184	Screw, Hex Flange Head Cap	4	
19	3527619	Dataplate	1	
20	3528206	Housing, Tur Bearing	1	
21	3534947	Diffuser, Turbocharger	1	
22	3596402	Nut, Lock	1	
23	3756754	Seal, Split Ring	1	
24	3758848	Seal, Split Ring	1	
25	3759917	Screw, Hexagon Head Set	4	M8 X 1.25 X 12
26	3762259	Ring, Retaining	4	


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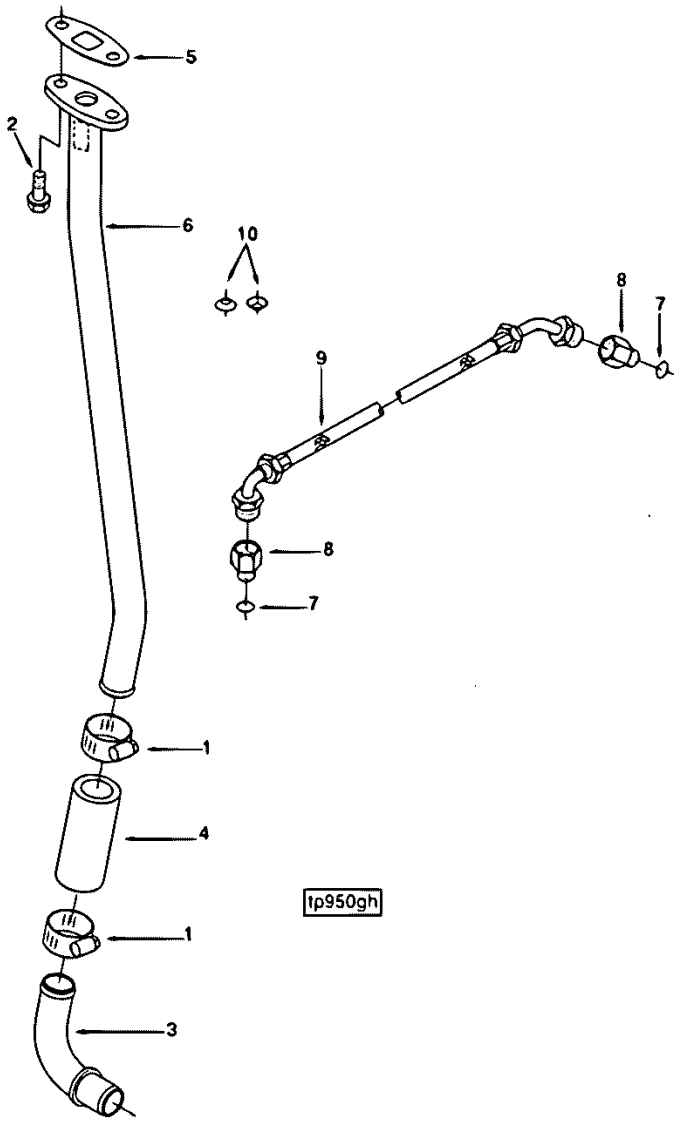
Turbocharger Location

ref no	part number	part name	req	remarks
*	TB9178-02	Turbocharger Location		Turbocharger Location Engine Family: B Series Cylinders: 4 Exhaust Outlet Location: HMRO Turbo Exh Loc from FFOB (mm): 362.7 Exh Vert from Crank C/L (mm): 521.5 Exh Horz. Crank C/L (mm): 154 Aspiration: Jacket Water Aftercooled Crossover Routing: Top Standard Oil Supply Routing: Outboard Exh. Manifold Type: Dry Intake Cover Provided: Yes Turbine Outlet Flange Type: Half Marmon Turbocharger Type: Non-Wastegate Structure Code: 02 EBM Cylinder Head Type: Standard Base Turbo ID17 Number: 3535381 3528755 Hybrid aftercooler The 3916438 hose may be used to replace the 3916166 hose. Hybrid core aftercooler 3910281 may be substituted for stainless steel core aftercooler 3919805.
1	3901635	Manifold, Exhaust	1	
2	3905443	Gasket, Exhaust Manifold	4	Purchase 3927154
3	3901448	Screw, Hex Flange Head Cap	8	M10 X 1.50 X 65
4	3919805	Aftercooler	1	
5	3931605	Gasket, Int Manifold Cover	1	
6	3918108	Screw, Hex Flange Head Cap	10	M8 X 1.25 X 16
7	3914486	Connection, Air Crossover	1	
8	3914856	Gasket, Connection	1	
9	3918109	Screw, Hex Flange Head Cap	4	M8 X 1.25 X 25
10	3916438	Hose, Plain	2	
11	3033033	Clamp, Hose	4	2 - 2 1/2 in
12	3908776	Tube, Air	1	
13	3906619	Plug, Pipe	1	1/8 NPT
14	3909394	Draincock	1	1/8 NPTF
15	3910778	Decal	1	
16	3918189	Washer, Sealing	4	


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Turbocharger Plumbing

ref no	part number	part name	req	remarks
*	TP9730-02	Turbocharger Plumbing		Turbocharger Plumbing Structure Code: 02 EBM Engine Cylinders: 4 Engine Family: B Series Turbo Exhaust Location: HMRO Oil Filter Mounted Location: Remote Manifold Type: Dry Turbo Drain Line Routing: Outboard Block Drain Location: Front Drain
1	3819725	Clamp, Hose	2	9/16 - 1 3/8"
2	3900630	Screw, Hex Flange Head Cap	2	M8 X 1.25 X 20
3	3903744	Tube, Tur Oil Drain	1	
4	3903745	Hose, Plain	1	
5	3931350	Gasket, Oil Drain	1	
6	3903741	Connection, Tur Oil Drain	1	
	3919687	Connector, Female	2	
7	3037236	Seal, O Ring	1	
8	3920801	Connector, Female	1	
9	3916289	Hose, Flexible	1	
10	3924389	Washer, Sealing	2	7.2 mm



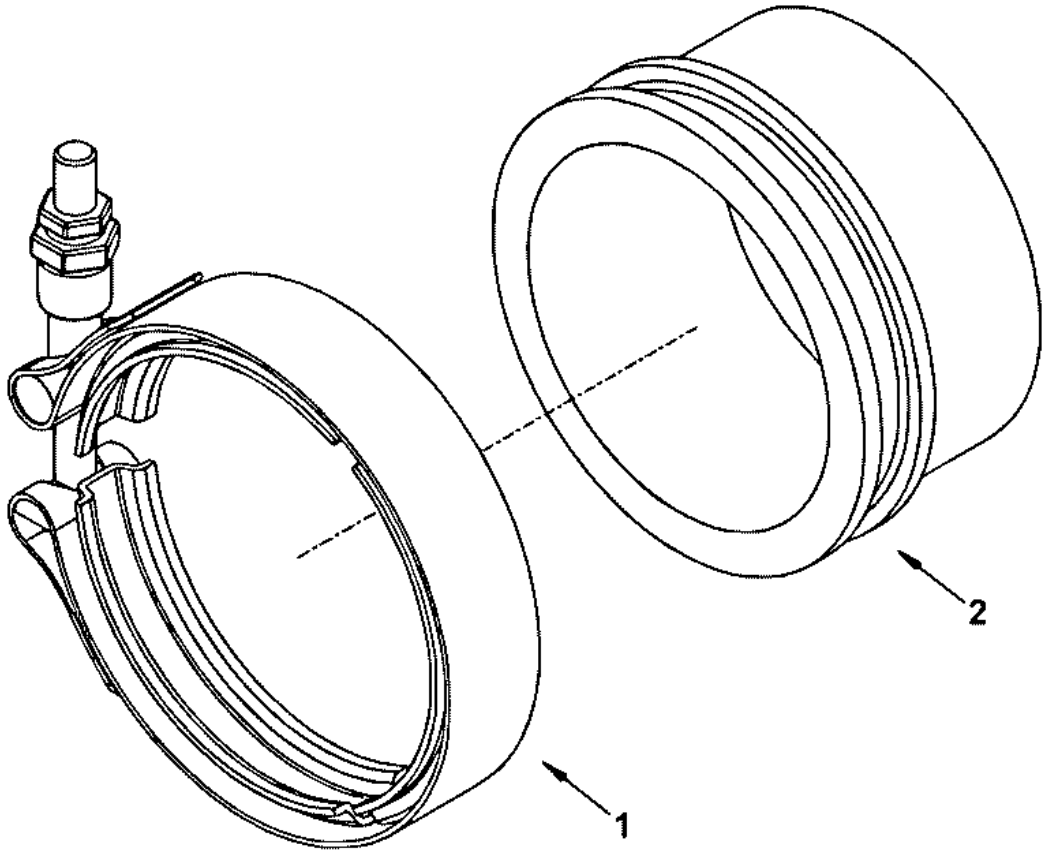
Group 11.01.1 | 50 | Option No

Picture xs900zf

Exhaust Connection

xs9075

ref no	part number	part name	req	remarks
*	XS9075	Exhaust Connection		Exhaust Connection Engine Family: B Series Exhaust Manifold Type: Dry Exhaust Pipe Diameter (in.): 2.82 Connection Orientation: Straight Restricted Cylinders: 4,6 Restricted Aspiration: Turbocharged Charge Air Cooled
1	3903652	Clamp, V Band	1	
2	3903552	Tube, Exhaust Outlet	1	



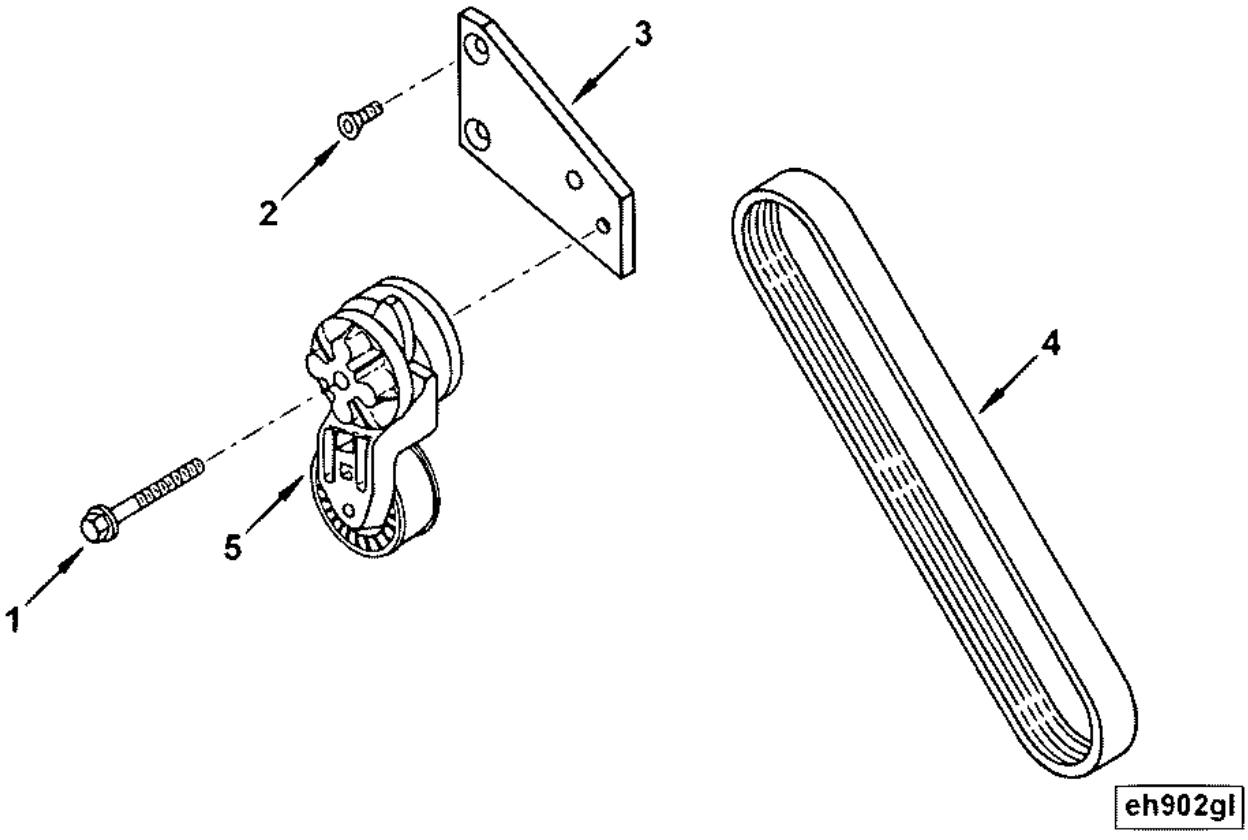
Group 13.02.2 | 51 | Option No

Picture eh902gl

Alternator Drive

eh97030

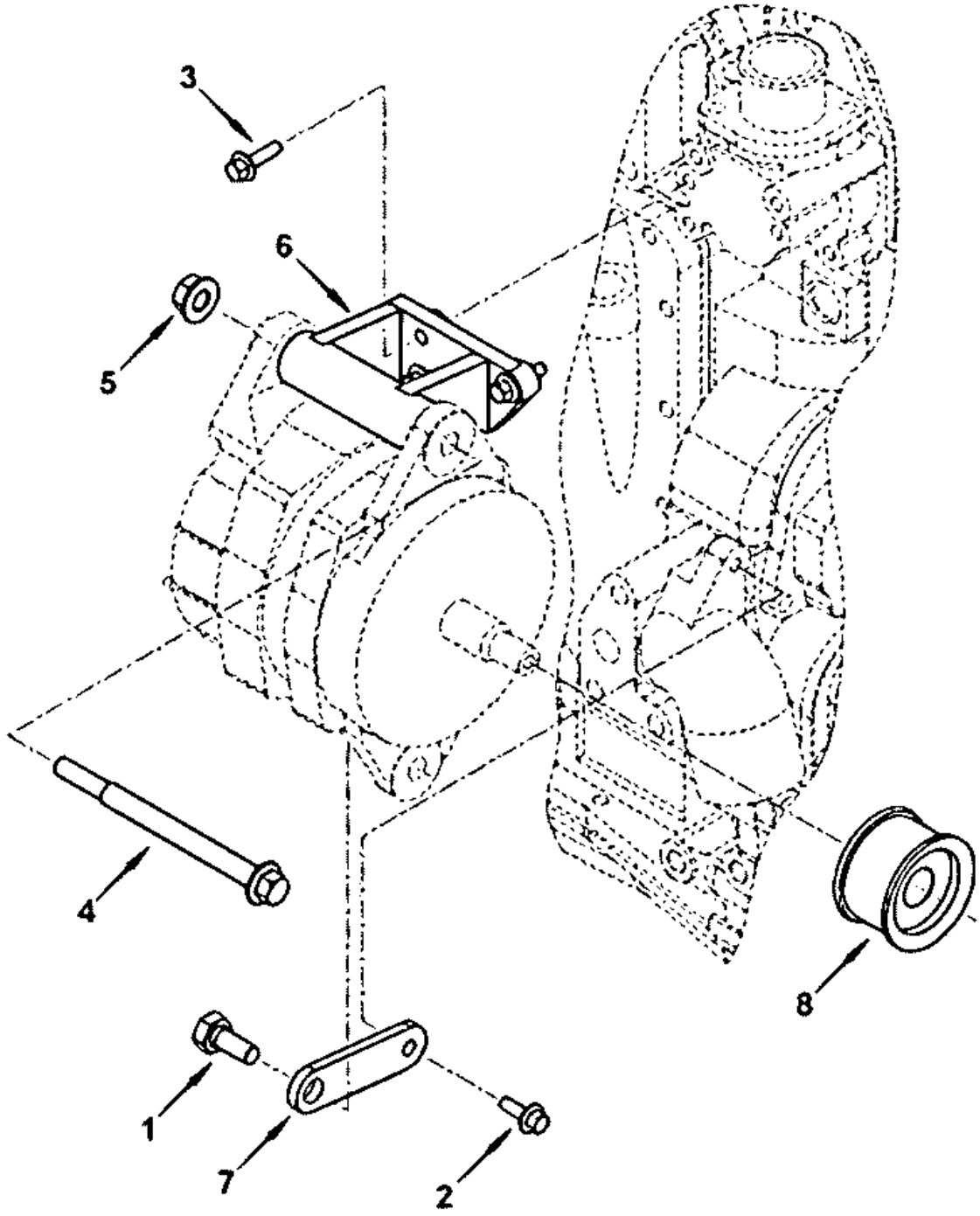
ref no	part number	part name	req	remarks
*	EH97030	Alternator Drive		Alternator Drive Fan Drive Ratio: 1.10:1 Fan Center (MM): 203.2 Tensioner Pulley Type: Standard Pulley Diameter (MM): 88.00 Belt Supplier: Cummins Damper Pulley Effective Diameter (MM): 173.76 Structure Code: 02 EBM Engine Family: B Series Alternator Manufacturer/Model : Bosch N-1 Up To 14V/110A Bosch N-1 Up To 28V/80A Delco Remy 20 SI Up To 12V/60A Delco Remy 20 SI Up To 24V/60A Delco Remy 21 SI 12V/130A Delco Remy 21 SI Up To 12V/100A Fan Drive Ratio: 1.10 To 1 Delco Remy 21 SI Up To 24V/70A
1	3282081	Screw, Hex Flange Head Cap	1	M10 X 1.50 X 75
2	3900631	Screw, Hex Flange Head Cap	2	M8 X 1.25 X 25
3	3924180	Bracket, Belt Tensioner	1	
4	3921753	Belt, V Ribbed	1	
5	3922900	Tensioner, Belt	1	Purchase 3934818



Alternator Location

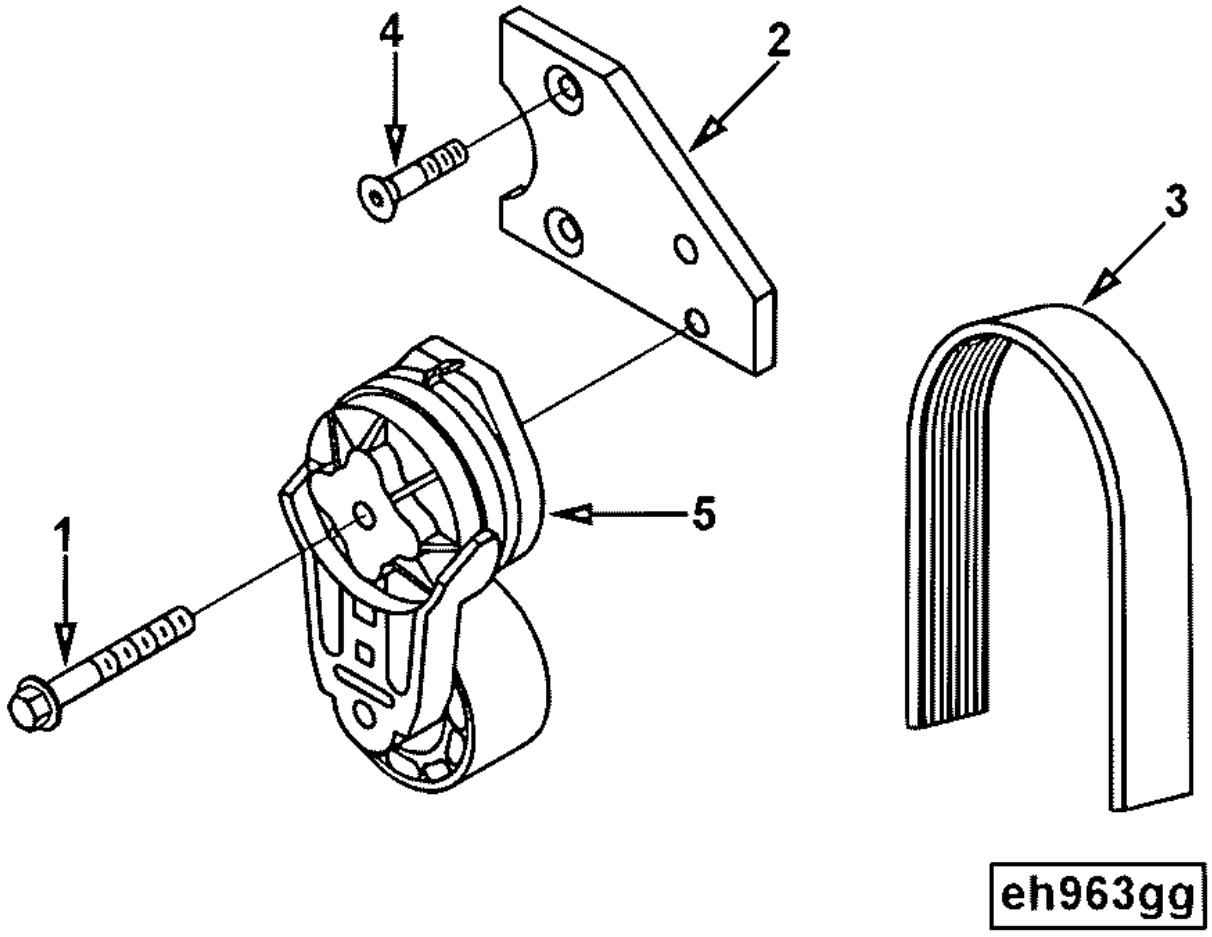
ref no	part number	part name	req	remarks
*	EH9029-01	Alternator Location		Alternator Location Pulley Retainer Provided: Yes Alternator Pulley Provided: Yes Drive Hardware Supplier: Cummins Alternator Drive Speed: 2.9 Alternator Mount Type: 4" Hinge Structure Code: 02 EBM Damper Pulley Effective Diameter (MM): 173.76 Engine Family: B Series Alternator Manufacturer/Model : Bosch N-1 Up To 14V/110A Bosch N-1 Up To 28V/80A Delco Remy 20 SI Up To 12V/60A Delco Remy 20 SI Up To 24V/60A Delco Remy 21 SI Up To 12V/100A Delco Remy 21 SI Up To 12V/160A Delco Remy 21 SI Up To 24V/70A Required Water Pump Pulley Type: Hardened Standard DEP may substitute 3920560 for 3918275.
1	3052061	Screw, Hexagon Head Cap	1	1/2 - 13 X 1 in
2	3900630	Screw, Hex Flange Head Cap	1	M8 X 1.25 X 20
3	3900631	Screw, Hex Flange Head Cap	3	M8 X 1.25 X 25
4	3903105	Screw, Hex Flange Head Cap	1	M12 X 1.75 X 150
5	3903210	Nut, Hexagon Flange	1	M12 X 1.75
6	3910923	Support, Alternator	1	
7	3910924	Brace, Alternator	1	
8	3918275	Pulley, Alternator	1	

Group 13.02.3	52	Option No
Picture eh951gf	**Alternator Location**	eh9029-01



Alternator Drive

ref no	part number	part name	req	remarks
*	EH97030	Alternator Drive		Alternator Drive Fan Drive Ratio: 1.10:1 Fan Center (mm): 203.2 Tensioner Mounting Holes: Single Set Tensioner Pulley Type: Standard Water Pump Pulley Diameter (mm): 88.00 Belt Supplier: Cummins Required Belt Length (mm): N/A Belt Tensioner Supplier: Cummins Damper Pulley Effective Diameter (mm): 173.76 Structure Code: 02 EBM Engine Design Phase: Current Product Tall Tensioner Bracket: No Engine Family: B Series Alternator Manufacturer/Model: Bosch N-1 up to 14V/110A, Bosch N-1 up to 28V/80A, Delco Remy 20 SI up to 12V/60A, Delco Remy 20 SI up to 24V/60A, Delco Remy 22 SI12V/100A, Delco Remy 22 SI12V/130A, Delco Remy 22 SI24V/70A Contains alignment features for vertical thermostat housings in TH9001, TH9037, and TH9048. But can be used with but not align to other thermostat housings. Brazil may use PN3921753 instead of 3288746 Brazil may use PN3967188 instead of 3937553.
1	3282081	Screw, Hex Flange Head Cap	1	M10 X 1.50 X 75
2	3286908	Bracket, Belt Tensioner	1	
3	3925186	Screw, Flat Head Cap	2	M8 X 1.25 X 25
4	3288746	Belt, V Ribbed	1	
5	3978022	Tensioner, Belt	1	


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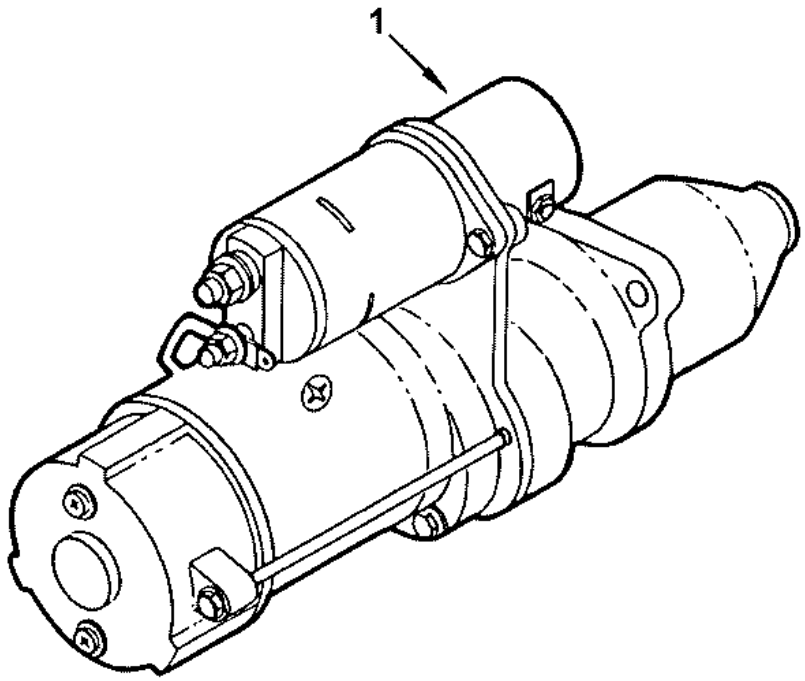
Group 13.05 | 54 | Option No

Picture st910gc

Starting Motor

st9042

ref no	part number	part name	req	remarks
*	ST9042	Starting Motor		Starting Motor Mfg: Delco-Remy Volt: 24 Model/Type: 28 MT Type 171 Dia Pitch: 10/12 Mt SAE: SAE #1 - 3 Bolt 90 Degree Wet/Dry: Dry Starter Style: Barrel Pilot Bore Diameter (MM): 88.90 W/Heat Shield: No Mtg Flg Thickness: 11.56 Angle Limitation High: 135 Angle Limitation Low: 315 Supply Method: Mounted Structure Code: 02 EBM Engine Family: B Series
1	3926932	Motor, Starting	1	
	3281694	Tag, Instruction	1	



st910gc

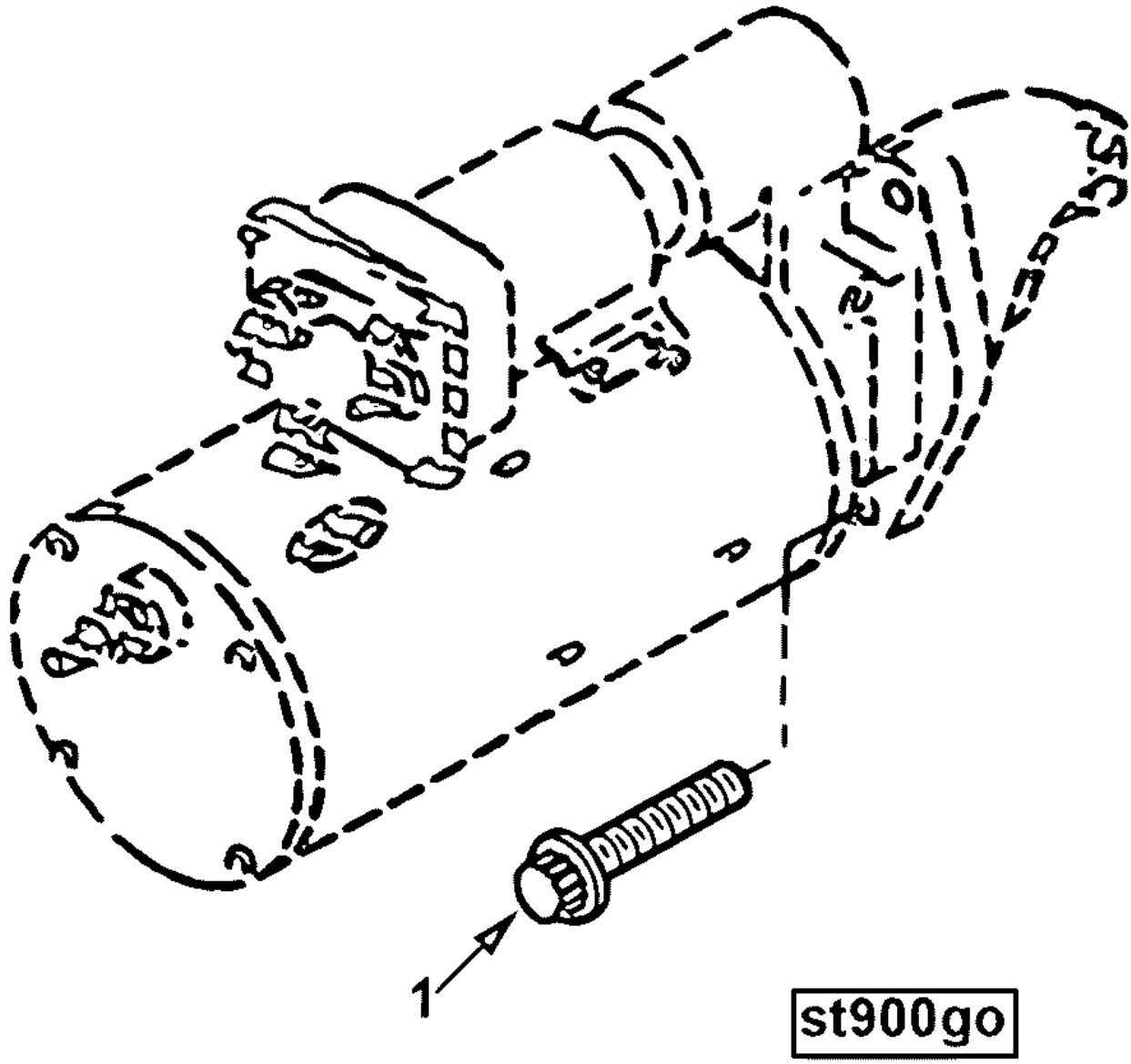
Group 13.05.1 | 55 | Option No

Picture st900go

Starting Motor Mounting

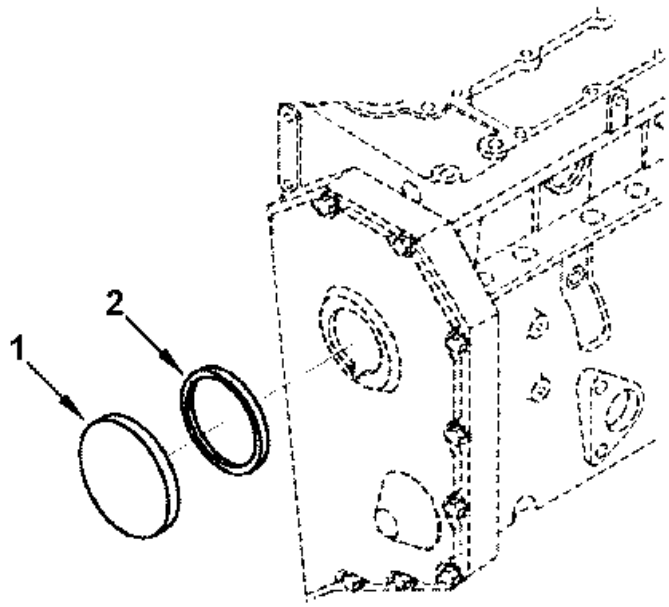
sm9702

ref no	part number	part name	req	remarks
*	SM9702	Starting Motor Mounting		Starter Mounting Clutch Type: Dry Mounting Capscrew Size or Nut Size: M10 Required Pilot Bore (MM): 88.9 Spacer Thickness (MM): 0.0 Engine Family: B Series C Series Starter Mount SAE: Chrysler Unique - 3 Bolt SAE #1-3 Bolt 90 Degree SAE #3-3 Bolt 120 Degree
1	3903834	Screw, Twelve Point Cap	3	M10 X 1.50 X 35



Mechanical Tachometer Drive

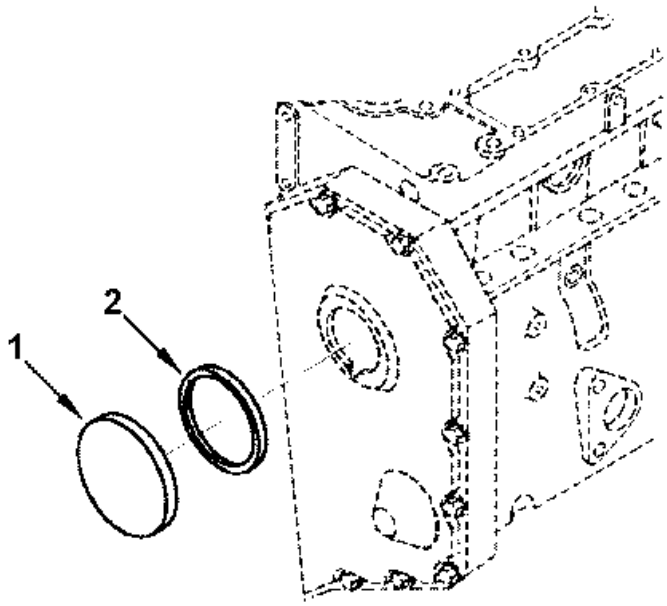
ref no	part number	part name	req	remarks
*	EI9000	Mechanical Tachometer Driv		No content options. To provide accessory hole cover when no mechanical tach drive or front oil fill is specified.
1	3903463	Cover, Access Hole	1	
2	3903475	Seal, Rectangular Ring	1	



ei930gb

Mechanical Tachometer Drive

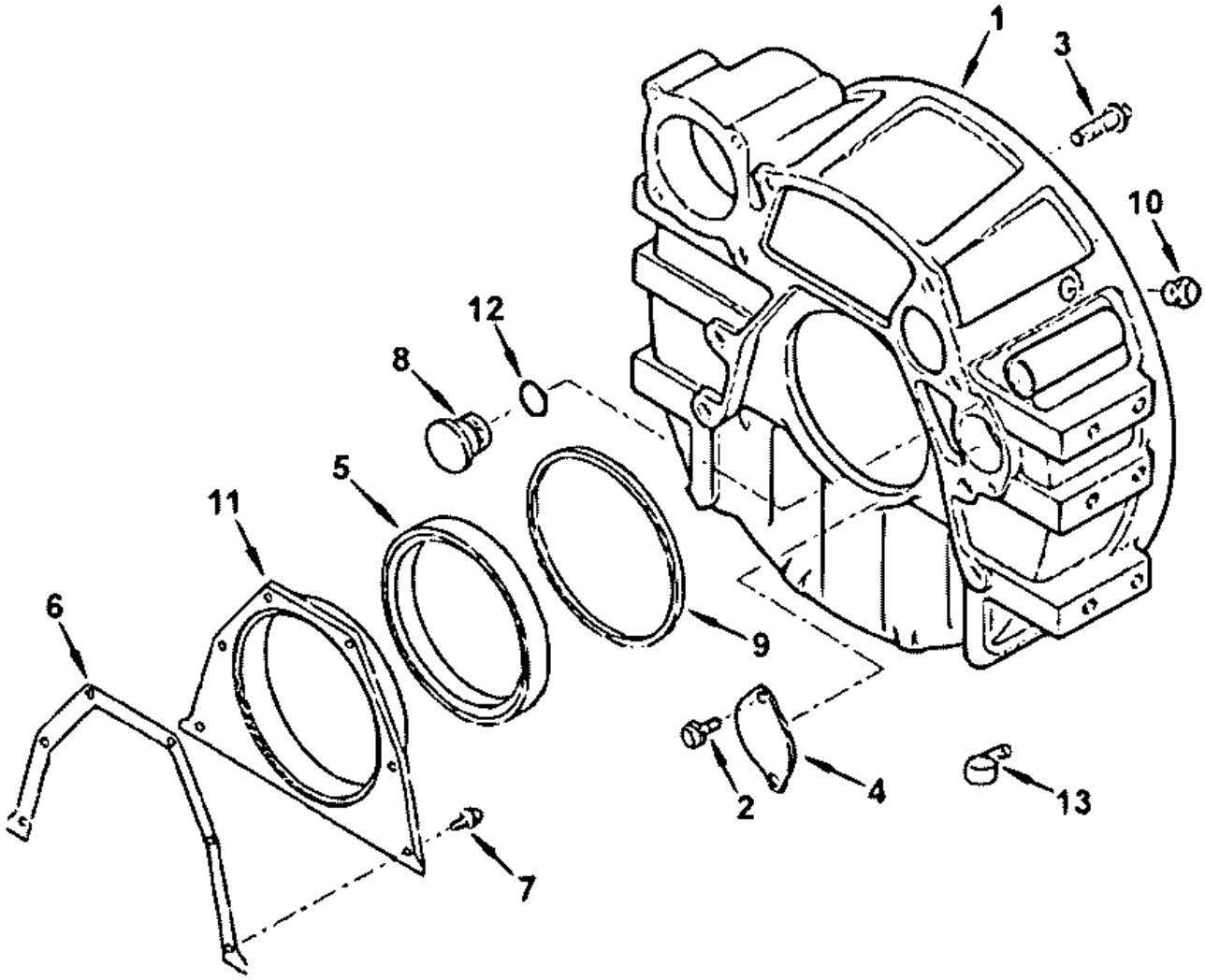
ref no	part number	part name	req	remarks
*	EI9701	Mechanical Tachometer Driv		Mechanical Tach Drive Cover Mechanical Tach Drive Provision: No Structure Code: 02 EBM Oil Fill Location: Fuel Pump Side Exhaust Side Valve Cover None Engine Family: C Series B Series
1	3903463	Cover, Access Hole	1	
2	3903475	Seal, Rectangular Ring	1	



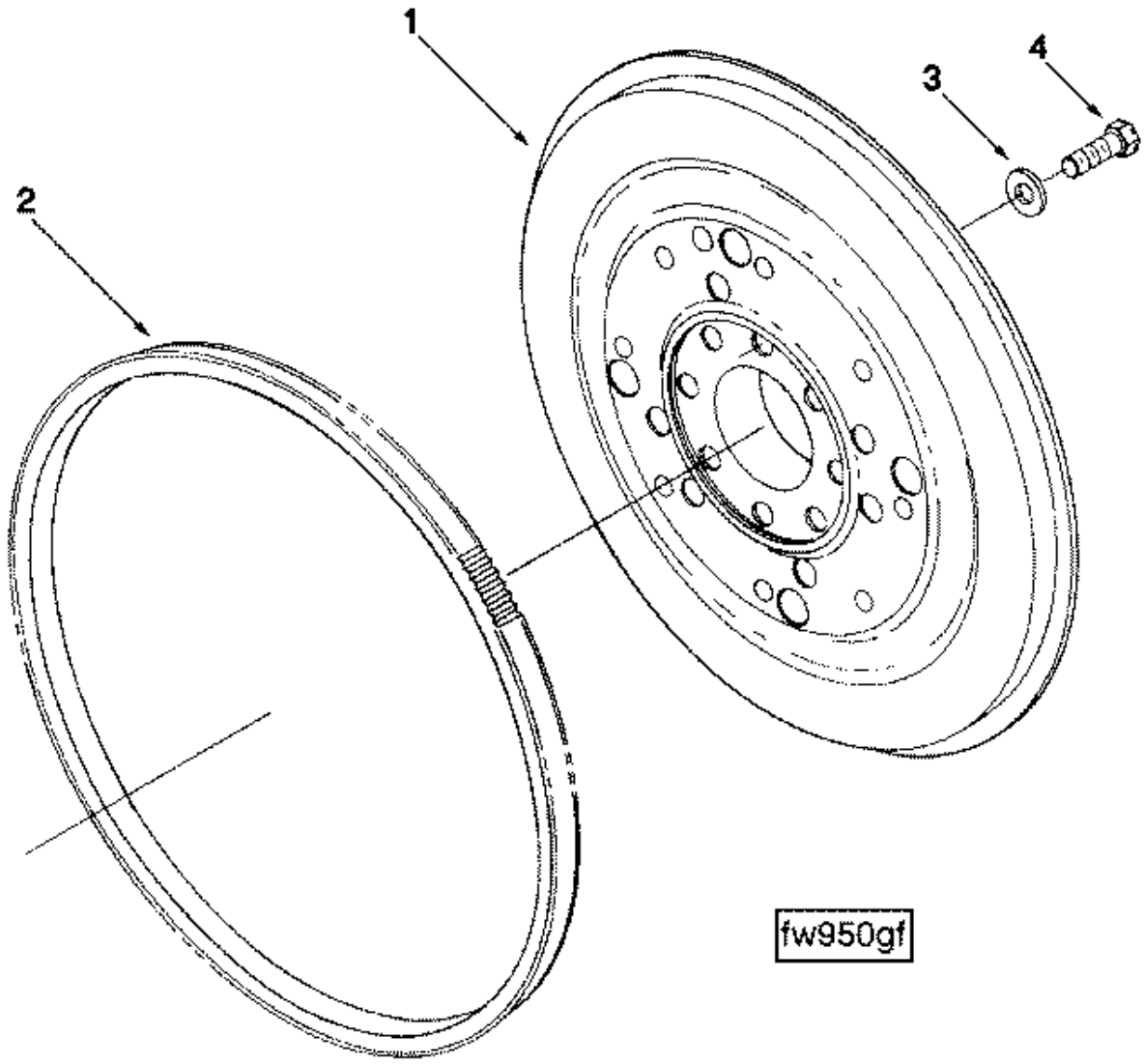
ei930gb

Flywheel Housing

ref no	part number	part name	req	remarks
*	FH9002-01	Flywheel Housing		Flywheel Housing Wet/Dry Clutch: Dry Housing Material: Aluminum SAE Size or Type: SAE 3 Starter Mount SAE: SAE #1 - 3 Bolt 90 Degree Starter Pad Offset From RFOB (MM): 0.00 Starter Mounting Hole Diameter (MM): 88.9 Mount Type: Pad Engine Mounting Hole Dimension: M12 x 1.75-6H # Mount Holes: 12 Engine Mount Top Hole +/- CR C/L (MM): 82.5 Tach Sensor Location: 4th Tach Size: 3/4 - 16 UNF Tach Count: 1 Trans MT Holes Count/Thread: 12 - M10 x 1.5 x 25 Starter Bore Angle (Deg): 47 Starter Center Distance: 216.407 Engine Family: B Series Not to be used with low mount rear out turbo locations.
1	3931627	Housing, Flywheel	1	
2	3912072	Screw, Self Tapping Metal	2	M8 X 1.25 X 15
3	3920447	Screw, Hex Flange Head Cap	8	M12 X 1.75 X 40
4	3925234	Plate, Cover	1	
	3909410	Rear Crank Seal Serv. Kit	1	Includes Installation Tools Tools
5	3925529	Seal, Oil	1	Serviced as 3909410
6	3928493	Gasket, Rear Cover	1	
7	3913638	Screw, Hex Flange Head Cap	6	M6 X 1.00 X 16
8	3910248	Plug, O Ring	1	
9	3912473	Seal, O Ring	1	
10	3904181	Plug, Threaded	1	3/4 - 16 UNF
11	3921043	Cover, Rear	1	
12	3910260	Seal, O Ring	1	
13	3928989	Clip	1	


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ref no	part number	part name	req	remarks
*	FW9221	Flywheel		Flywheel Type: Flywheel Housing SAE Size Or Type: SAE 3 Intended Drive Hardware: Heat Resistant Lovejoy-Centaflex Material Specification: 40,001 Ring Gear Pitch: 10/12 Ring Gear Pitch Diameter: 403.86mm (15.9in) Ring Gear Tooth Count: 159 Crank Flange To Ring Gear Leading Edge (mm): 17.01 Maximum RPM: 3100 Pilot Bearing Bore Dia. (mm): 71.973mm Clutch Mounting Bolt Circle (mm): 210.00 Clutch Mounting Hole Count: 3 Clutch Mounting Hole Nomenclature: M16x2.00 6H Moment of Inertia (Kg/m2): 0.4 Structure Code: 02 EBM Required Starter Center Distance (mm): 216.40 Applicable Engine Families: B Series
	3283105	Flywheel	1	
1	3282051	Flywheel	1	
2	3901774	Gear, Flywheel Ring	1	
3	3900269	Washer, Plain	8	M12
4	3901395	Screw, Hexagon Head Cap	8	M12 X 1.25 X 32


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fw950gf

Group 17.02 60 Option No

Picture null

Set,Upper Engine Gasket

3802242-01

ref no	part number	part name	req	remarks
		$SERVICE GASKET SET		
		$UPPER ENGINE SET		
		$.50MM OVER THICKNESS		
	3802242-01	Set, Upper Eng Gasket	1	
	3283338	Gasket, Cylinder Head	1	
	3900808	Seal, Injector	4	
	3901356	Gasket, Turbocharger	1	Holset P/N: 3709861
	3902425	Washer, Sealing	1	M22
	3903380	Seal, Banjo Connector	4	Replace With 4942278
	3906694	Seal, Rectangular Ring	1	
	3906773	Washer, Sealing	1	
	3910824	Seal, O Ring	4	
	3912220	Gasket, Exh Out Connection	1	
	3918188	Washer, Sealing	2	8.0 mm
	3919358	Sleeve, Injector	4	
	3921640	Seal, Valve Stem	8	
	3923261	Seal, Injector	4	
	3923331	Gasket, Thm Housing Cover	1	
	3927154	Gasket, Exhaust Manifold	4	
	3930906	Gasket, Valve Cover	4	
	3935449	Isolator, Noise	4	
	3936876	Seal, Rectangular Ring	1	
	3937142	Seal, Injector	4	
	3937706	Gasket, Oil Drain	1	Replace With 5264569
	3938153	Gasket, Int Manifold Cover	1	

Group 17.02 61 Option No

Picture null

Set,Upper Engine Gasket

3802362-01

ref no	part number	part name	req	remarks
		$SERVICE GASKET SET		
		$UPPER ENGINE SET		
		$.15MM OVER THICKNESS		
	3802362-01	Set, Upper Eng Gasket	1	
	3283336	Gasket, Cylinder Head	1	0.25mm Oversize
	3900808	Seal, Injector	4	
	3901356	Gasket, Turbocharger	1	Holset P/N: 3709861
	3902425	Washer, Sealing	1	M22
	3903380	Seal, Banjo Connector	4	Replace With 4942278
	3906694	Seal, Rectangular Ring	1	
	3906773	Washer, Sealing	1	
	3910824	Seal, O Ring	4	
	3912220	Gasket, Exh Out Connection	1	
	3918188	Washer, Sealing	2	8.0 mm
	3919358	Sleeve, Injector	4	
	3921640	Seal, Valve Stem	8	
	3923261	Seal, Injector	4	
	3923331	Gasket, Thm Housing Cover	1	
	3927154	Gasket, Exhaust Manifold	4	
	3930906	Gasket, Valve Cover	4	
	3935449	Isolator, Noise	4	
	3936876	Seal, Rectangular Ring	1	
	3937142	Seal, Injector	4	
	3937706	Gasket, Oil Drain	1	Replace With 5264569
	3938153	Gasket, Int Manifold Cover	1	

Set,Lower Engine Gasket

ref no	part number	part name	req	remarks
		$SERVICE GASKET SET		
		$LOWER ENGINE SET		
	3802375-01	Set, Lower Eng Gasket	1	
	154916	Gasket, Hydraulic Pump	1	
	3283767	Gasket, Push Rod Cover	1	
	3804899	Kit, Front Seal Service	1	Contains Debris Shield
	3901020	Nozzle, Piston Cooling	4	
	3902425	Washer, Sealing	2	M22
	3903475	Seal, Rectangular Ring	1	
	3905595	Gasket, Timing Pin Housing	1	
	3906696	Seal, Rectangular Ring	1	
	3906697	Seal, Rectangular Ring	1	
	3906698	Seal, Rectangular Ring	1	
	3908096	Gasket, Cover Plate	1	
	3912473	Seal, Rectangular Ring	1	
	3913994	Seal, O Ring	1	
	3915772	Seal, Rectangular Ring	1	
	3915800	Seal, Rectangular Ring	1	
	3916042	Gasket, Hydraulic Pump	1	
	3920773	Washer, Sealing	1	M18
	3928759	Seal, Grommet	6	
	3929751	Gasket, Acc Drive Cover	1	
	3929792	Gasket, Filter Head	1	
	3933261	Shield, Dust	1	
	3939355	Gasket,Fuel Pump	1	
	3934486	Rr Crankseal Serv Kit	1	
	3937214	Nozzle, Piston Cooling	4	
	3938156	Gasket, Gear Housing	1	
	3938157	Gasket, Flange	1	
	3938159	Gasket, Rear Cover	1	
	3938162	Gasket, Oil Pan	1	
	3939258	Gasket, Cover Plate	1	
	3942914	Gasket, Oil Cooler Core	1	
	3942915	Gasket, Filter Head	1	

Group 17.02 63 Option No

Picture null

Set,Upper Engine Gasket

3804896-01

ref no	part number	part name	req	remarks
		$UPPER ENGINE GASKET SET		
		$STANDARD THICKNESS		
	3804896-01	Set, Upper Eng Gasket	1	
	3283333	Gasket, Cylinder Head	1	
	3900808	Seal, Injector	4	
	3901356	Gasket, Turbocharger	1	Holset P/N: 3709861
	3902425	Washer, Sealing	1	M22
	3903380	Seal, Banjo Connector	4	Replace With 4942278
	3906694	Seal, Rectangular Ring	1	
	3906773	Washer, Sealing	1	
	3910824	Seal, O Ring	4	
	3912220	Gasket, Exh Out Connection	1	
	3918188	Washer, Sealing	2	8.0 mm
	3919358	Sleeve, Injector	4	
	3921640	Seal, Valve Stem	8	
	3923261	Seal, Injector	4	
	3923331	Gasket, Thm Housing Cover	1	
	3927154	Gasket, Exhaust Manifold	4	
	3930906	Gasket, Valve Cover	4	
	3935449	Isolator, Noise	4	
	3936876	Seal, Rectangular Ring	1	
	3937142	Seal, Injector	4	
	3937706	Gasket, Oil Drain	1	Replace With 5264569
	3938153	Gasket, Int Manifold Cover	1	

Picture null

Set,Main Bearing (Std)

4955855

ref no	part number	part name	req	remarks
*		Main Bearing Set		Main Bearing Set
	4955855	Set, Main Bearing	1	Standard
	3978818	Bearing, Main	4	Upper: Standard
	3978820	Bearing, Main	5	Lower: Standard
	4938948	Bearing, Thrust	1	

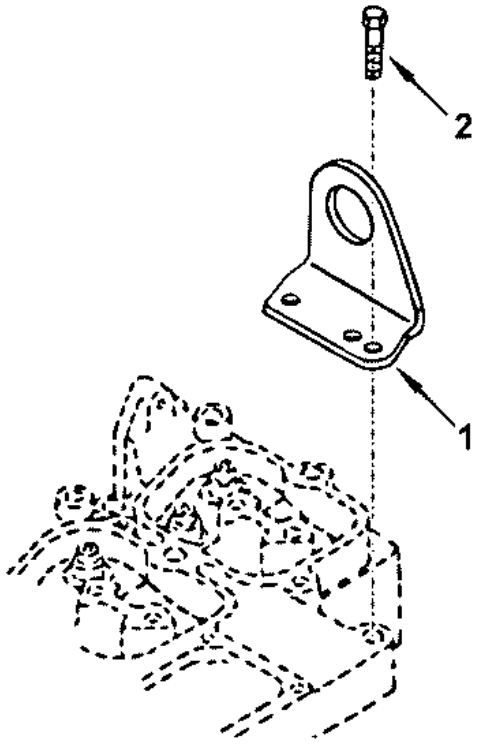
Group 17.06 | 65 | Option No

Picture la900gc

Lifting Bracket

la9007

ref no	part number	part name	req	remarks
*	LA9007	Lifting Bracket		Lifting Bracket Structure Code: 02 EBM Engine Family: B Series Capscrew Length: 30MM Allows For Intake Trunking: No Max Lifting Load (Lbs.): 2000 Bracket Pre-Painted: No Bracket(s) Provided: Front And Rear Neuss will use 25mm mounting capscrews.
1	3908118	Bracket, Lifting	1	
2	3910495	Screw, Hex Flange Head Cap	2	M12 X 1.75 X 30



la900gc

Group 99.01 66 Option No

Picture null

Rating,Fuel

fr9024

ref no	part number	part name	req	remarks
*	FR9024	RATING,FUEL		Fuel Rating Advertised HP: 107 @ 2100 RPM Secondary Adv HP: N/A @ N/A RPM Torque Peak (lb-ft): 295 @ 1700 Pump Manufacturer/Model: Bosch VE Boost Control Provided: Yes Fuel Pump Type: Rotary High Pressure Fuel Line ID (mm): 2.0mm (0.08in) Engine Application: Nonroad CPL: 0594 Certification Agency: None Engine Cylinders: 4 Timing Gear Code: F Engine Family: B Series Structure Code: 02 EBM Manufacturer of Record: Cummins Dual Power Rating: No FP Gear Timing (deg crank): 0 deg retarded Engine Design Phase: Current Product Engine Aspiration: Jacket Water Aftercooled High Altitude (>10K feet) Rating: No Managed Torque: No Speed Sensor Location: N/A Fuel Pump Mounted Angle: 35 degree.