CUMMINS

ENGINE Model: B3.9-C116
S/N 21411264

Build Date: 2000 year
Fuel Pump #
CPL : CPL2351

SPARE PARTS CATALOG

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

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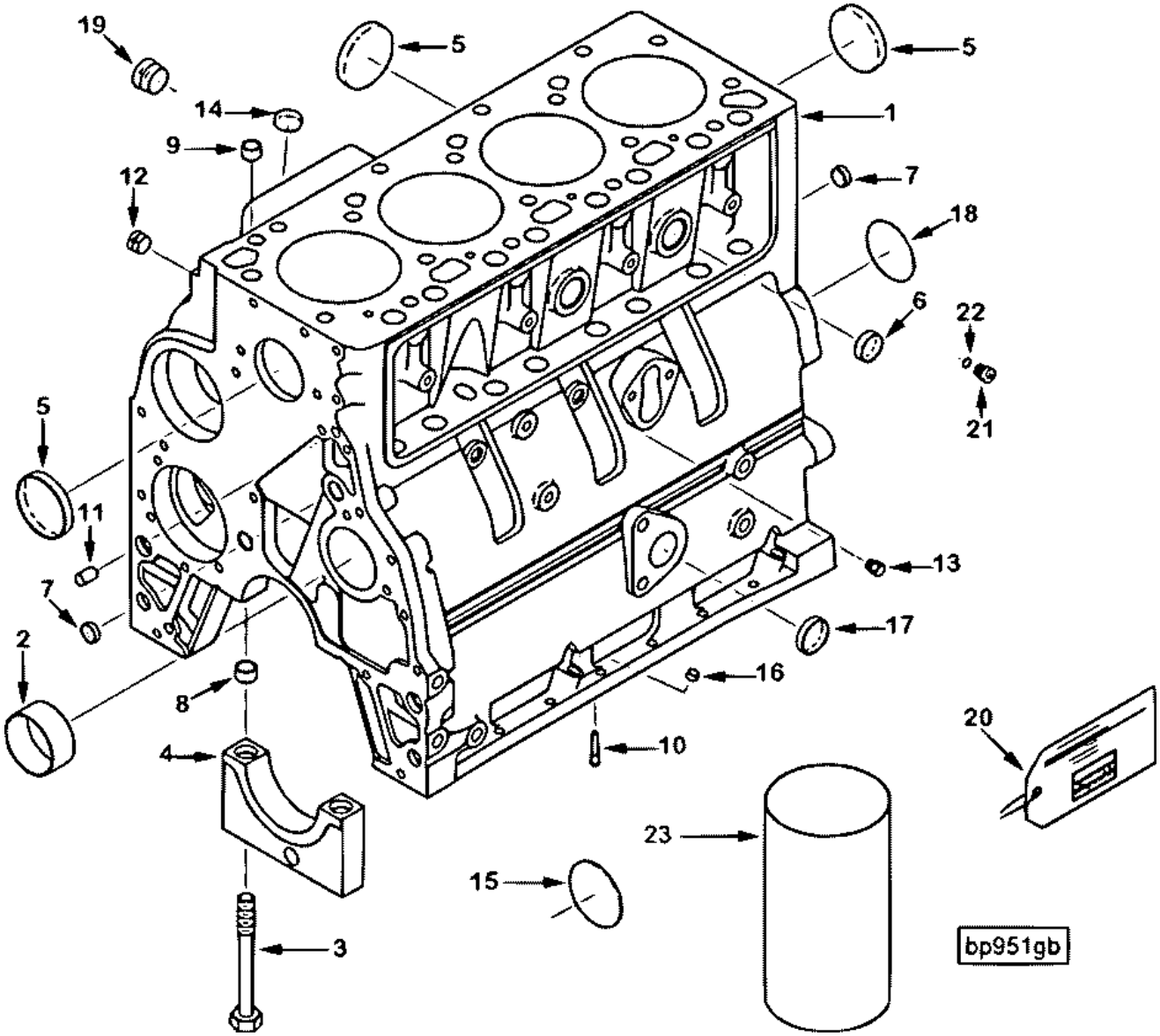
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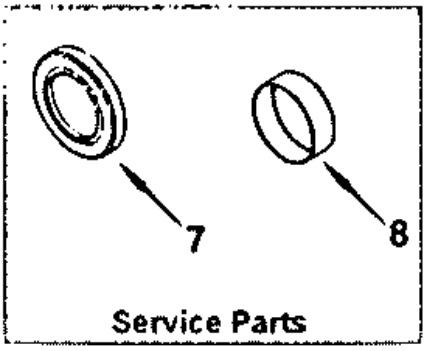
Engine Block

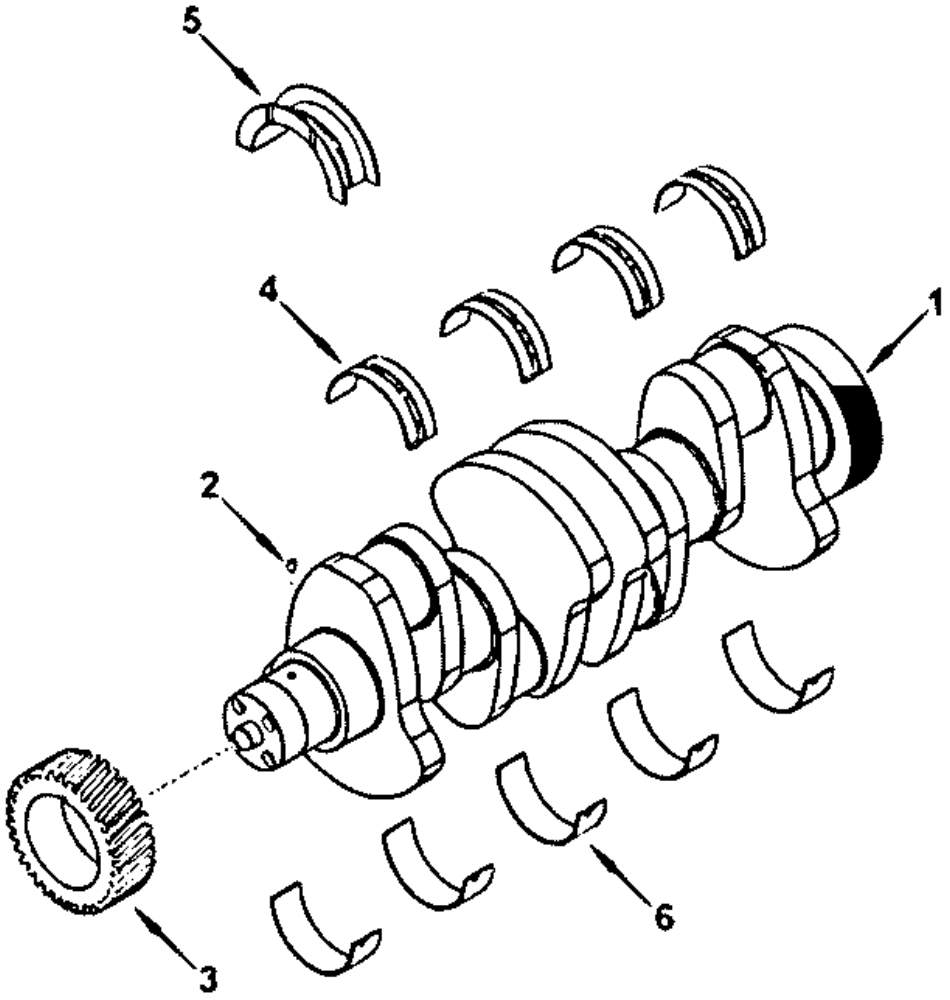
ref no	part number	part name	req	remarks
*	BP97114-04	Engine Block		Cylinder block Engine Family: "B" Series Cylinders: 4 Aspiration: Jacket Water Aftercooled High Speed Balancer: No Fuel Type: Diesel tapped fittings: Storm structural block: No Expansion plug 3007635 may be used in Brazil applications in place of 3914035. Contains encore-like block, use in place of BP9785. Cns may use 3900965 expansion plug in place of 3922072 expansion plug.
	3933223	Block, Cylinder		
1	3932012	Block, Cylinder	1	Serviced as 3933224
2	3940059	Bushing	1	
3	3927948	Screw, Hex Flange Head Cap	10	M12 X 1.50 X 119
4	3936791	Cap, Main Bearing	7	
5	3922072	Plug, Expansion	3	
6	3914035	Plug, Expansion	2	Replace With 3007635
7	3900956	Plug, Expansion	3	17.73 mm
8	3900068	Dowel, Ring	2	M18 X 10
	3933224	Kit, Cyl Block Hardware		For 1991 and Later 4B Engines
8	3900068	Dowel, Ring	2	M18 X 10
9	3902343	Dowel, Ring	2	
10	3937214	Nozzle, Piston Cooling	4	
11	3900257	Dowel, Pin	2	M10 X 16
12	3008468	Plug, Pipe	1	1/2 NPT
13	3906619	Plug, Pipe	2	1/8 NPT
14	3920706	Plug, Expansion	2	
15	3900687	Plug, Expansion	1	
16	3900955	Plug, Expansion	2	
17	3900958	Plug, Expansion	1	
18	3926047	Seal, O Ring	1	
19	3008469	Plug, Pipe	1	3/4 NPT
20	3933613	Tag, Instruction	1	
	3678923	Plug, Threaded	2	M10 X 1 X 13.5
21	3678924	Plug, Threaded	1	M10 X 1 X 13.5 Purchase
22	3678925	Seal, O Ring	1	M10
		$SERVICE PARTS		
23	3904166	Sleeve, Salvage	1	

Group 01.01	1	Option No
Picture bp951gb	**Engine Block**	bp97114-04



ref no	part number	part name	req	remarks
*	BP97114	Crankshaft and Bearings		Crankshaft and Bearings
	3908031	Crankshaft, Assembly	1	
1	3929036	Crankshaft, Engine	1	Serviced as 3908031
2	3904483	Dowel, Pin	1	
3	3929027	Gear, Crankshaft	1	
		$Main Bearing Sets		
	3802010	Set, Main Bearing	1	Standard
4	3929016	Bearing, Main	4	Standard
5	3927772	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	3927773	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	3927774	Bearing, Crankshaft Thrust	1	0.50 mm Oversize
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	3927775	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	3927776	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	3927770	Bearing, Crankshaft Thrust	1	0.50 mm Oversize
6	3929023	Bearing, Main	1	0.50 mm Oversize
	3802084	Bearing, Crankshaft Thrust	1	1.0mm Oversize Bore/1.0mm
5	3927771	Bearing, Crankshaft Thrust	1	1.00 mm Oversize
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


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Service Parts


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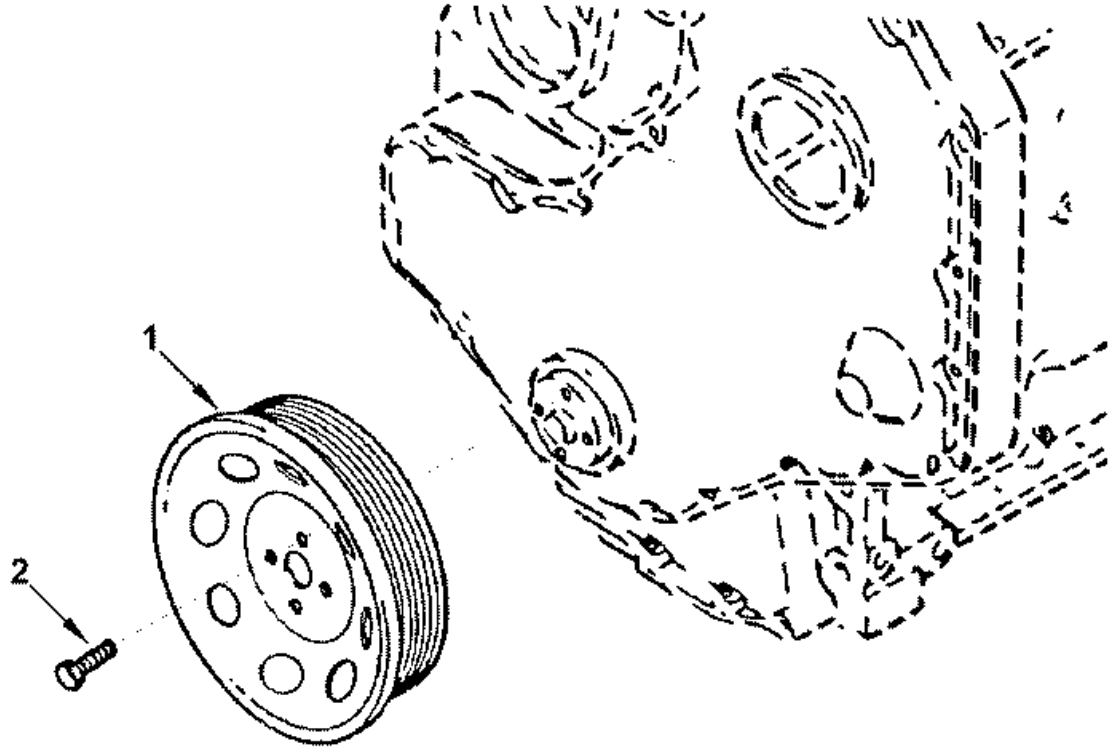
Group 01.02.3 | 3 | Option No

Picture af900gk

Front Drive Adapter

af9006

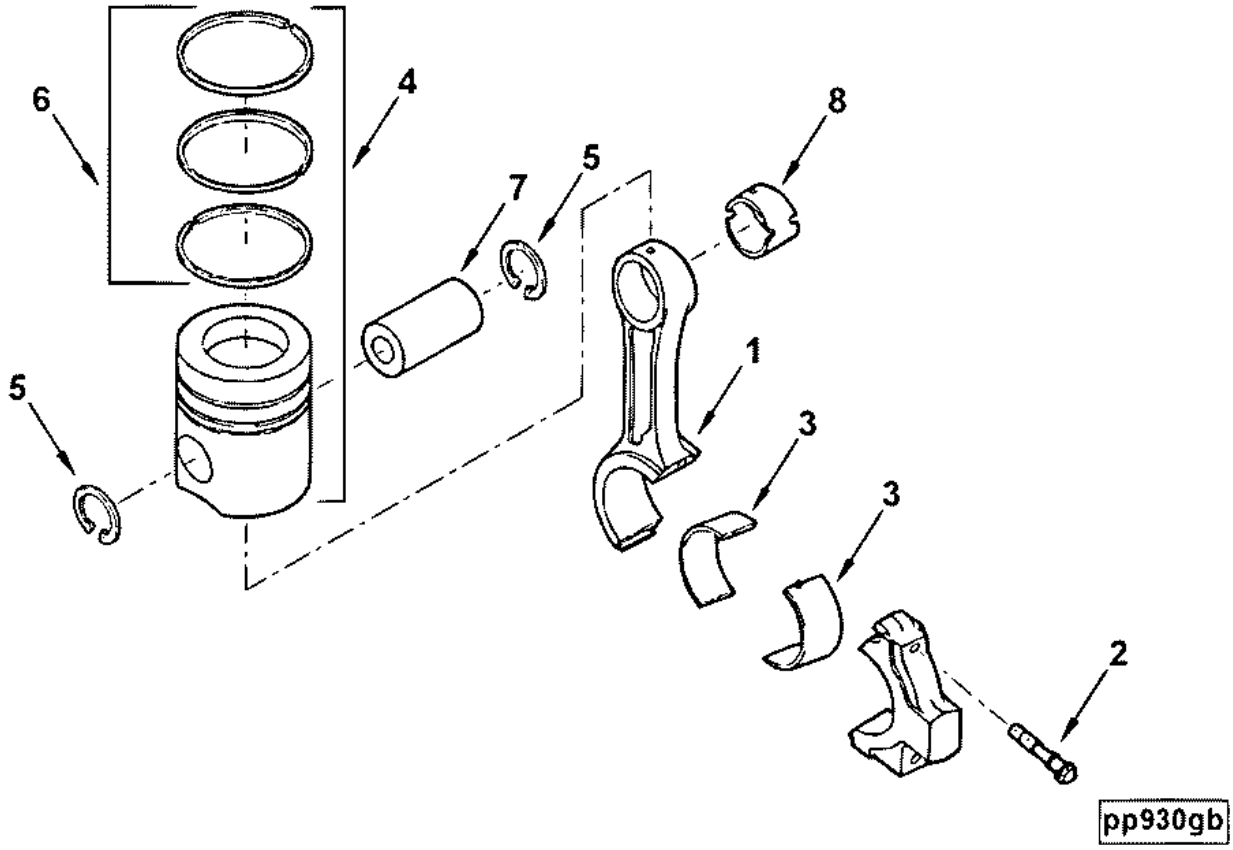
ref no	part number	part name	req	remarks
*	AF9006	Front Drive Adapter		Front Drive Adapter Engine Family: B Series Adaptable to a PTO: No Pulley Type: 8 Groove Torque Limit (LBS.FT.): 210 Location From FFOB (MM): 93.32 Pulley Effective Diameter (MM): 173.76 Attachment Provision: Mounted Restricted Cylinders: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



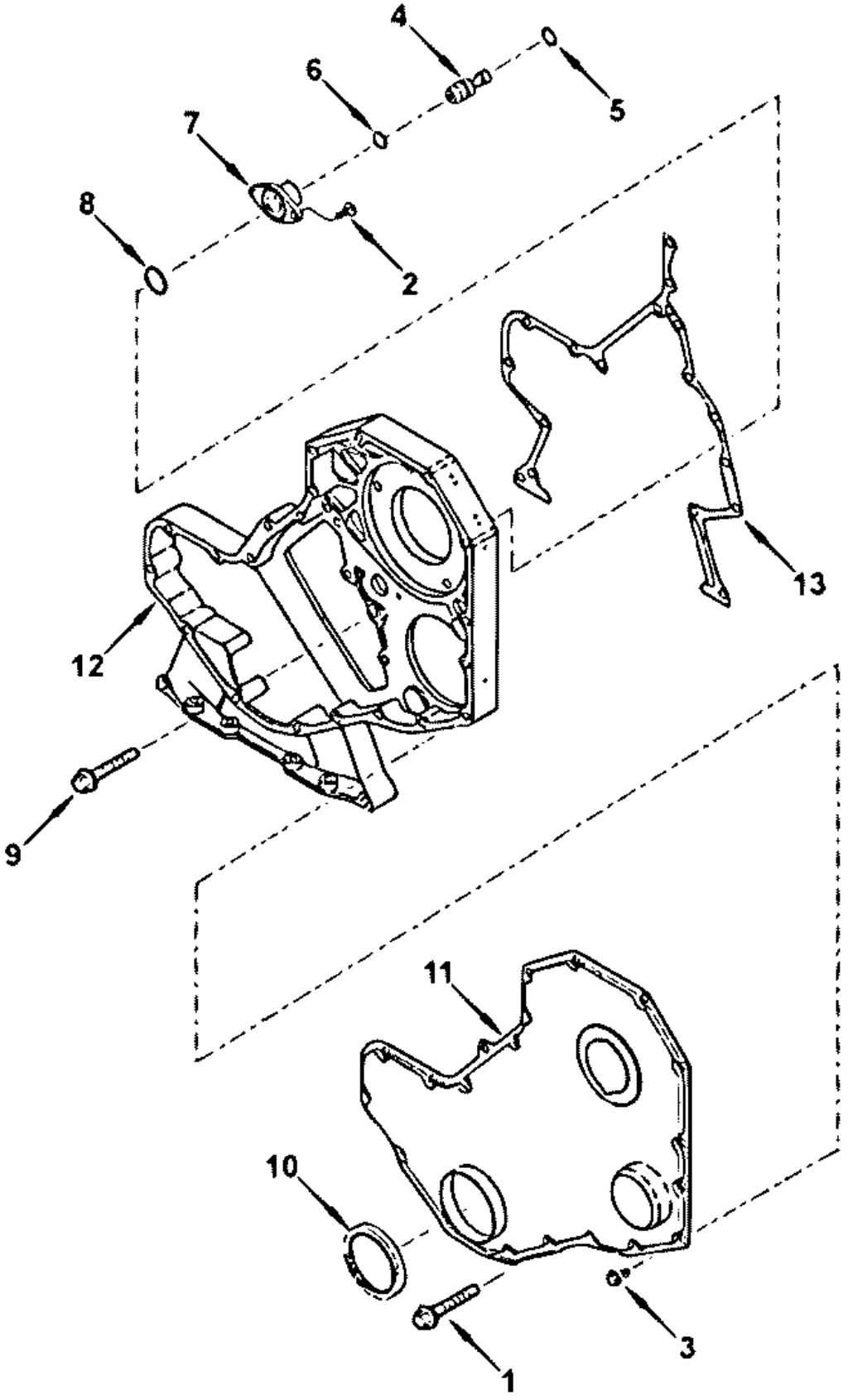
af900gk

Connecting Rod And Piston

ref no	part number	part name	req	remarks
*	PP2351-03	Connecting Rod And Piston		CPL2351
1	3942581	Rod, Engine Connecting	4	Recon Equivalent 3942581 RX
	3942580	Rod, Engine Connecting	1	
2	3900919	Screw, Connecting Rod Cap	2	MJ11 X 1.25 X 59
8	3941476	Bushing	1	
3	3901170	Bearing, Connecting Rod	2	
4	3802747	Kit, Engine Piston	4	Standard
	3928673	Piston, Engine	1	Serviced as 3802747
5	3920691	Ring, Retaining	2	
6	3802746	Set, Piston Ring	1	Standard
7	3934047	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	3802764	Kit, Engine Piston	4	0.50 mm Oversize
	3928674	Piston, Engine	1	Serviced as 3802764
5	3920691	Ring, Retaining	2	
6	3802422	Set, Piston Ring	1	0.50 mm Oversize
4	3802765	Kit, Engine Piston	4	1.00 mm Oversize
	3928675	Piston, Engine	1	Serviced as 3802765
5	3920691	Ring, Retaining	2	
6	3802423	Set, Piston Ring	1	1.00 mm Oversize



ref no	part number	part name	req	remarks
*	BP97034-04	Front Gear Cover		Front Gear Cover Family: B Series Belt Retainer Included: No Noise Dampening Panel Provision: No Access for Tach Drive: Yes Gear Housing Material: Cast Aluminum Fuel Pump Mounted Angle: 35 Degree ADDL. Clearance for ENG. Mount: No Compatible w/Oil Pan Corner Stiffener: Yes Engine Design Phase: Current Product Fuel Pump: Bosch A
1	3924962	Screw, Hex Flange Head Cap	11	
2	3907998	Screw, Round Head Cap	2	M5 X 0.80 X 17
3	3900633	Screw, Hex Flange Head Cap	11	M8 X 1.25 X 50
	3913995	Housing, Timing Pin	1	
4	3903924	Pin, Timing	1	
5	3904849	Ring, Retaining	1	
6	3913994	Seal, O Ring	1	
7	3919683	Housing, Timing Pin	1	
8	3915772	Seal, Rectangular Ring	1	
9	3926846	Screw, Hex Flange Head Cap	5	M8 X 1.25 X 20
	3935582	Cover, Gear	1	
10	3935959	Seal, Oil	1	Serviced as 3937111
11	3935581	Cover, Gear	1	
12	3936257	Housing, Gear	1	
13	3931351	Gasket, Gear Housing	1	
		$Service Parts		
	3937111	Front Seal Service Kit	A/R	
10	3935959	Seal, Oil	1	Serviced as 3937111
	3904351	Tool, Seal Installation	1	
	3904352	Tool, Seal Installation	1	


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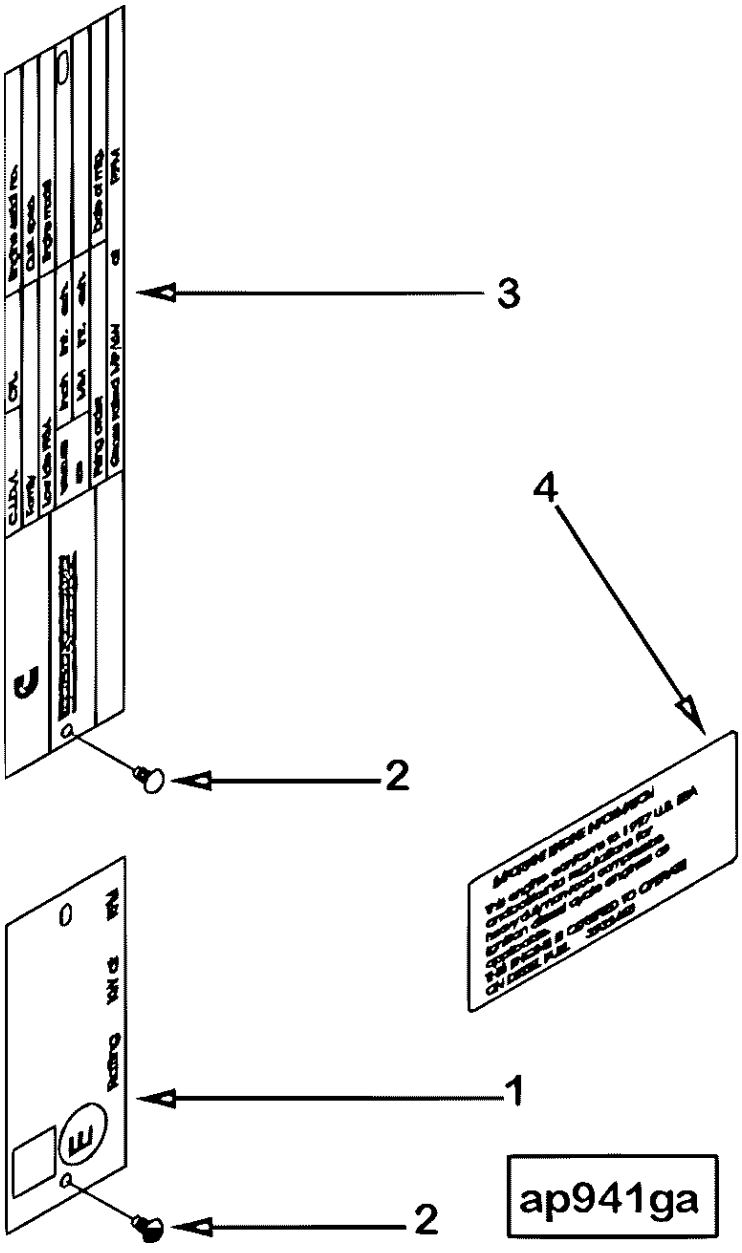
Group 01.06.1 | 6 | Option No

Picture ap941ga

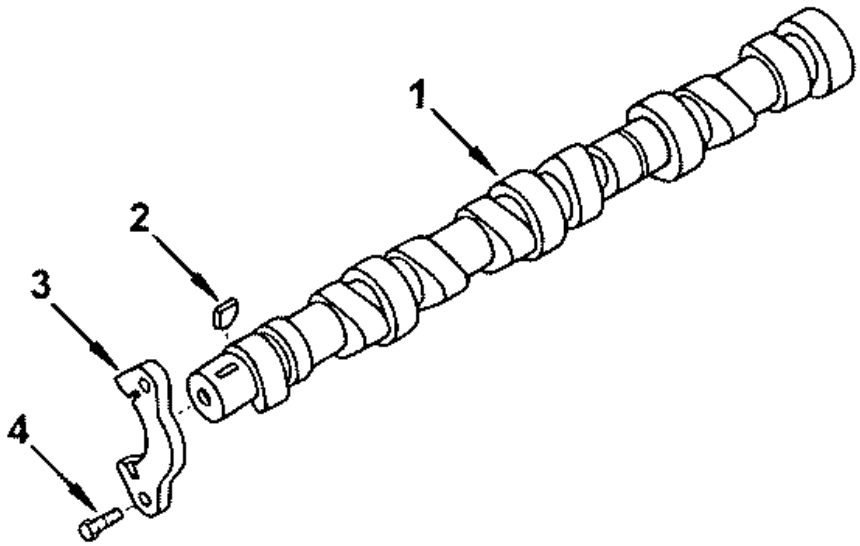
Dataplate

ap9141-03

ref no	part number	part name	req	remarks
*	AP9141-03	Dataplate		Agency Approval Certification Agency: CARB, EPA, EU Application: Nonroad Certification Year: 2000 Manufacturer of Record: Cummins Smoke Test: ECE R24.03 Language: English Fuel Type: Diesel Engine Family: B Series, C Series Varient Content: In place of 3284906 - Great Britain use 3284907 Japan use 3284908 Brazil use 3284995.
1	3161743	Dataplate	1	
2	3908612	Screw, Drive	4	
3	3284906	Dataplate	1	
4	3936912	Decal	1	



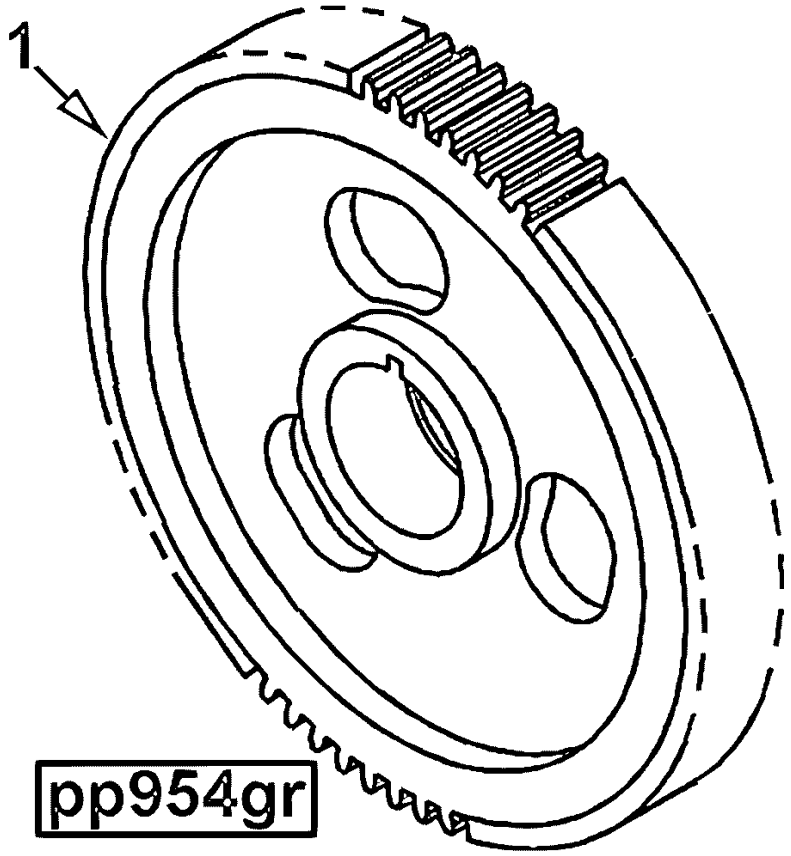
ref no	part number	part name	req	remarks
*	PP2351-01	Camshaft		CPL2351
1	3929885	Camshaft	1	
2	3902332	Key, Plain Woodruff	1	4.0 mm
3	3927155	Support, Camshaft Thrust	1	
4	3900227	Screw, Hexagon Head Cap	2	M8 X 1.25 X 22



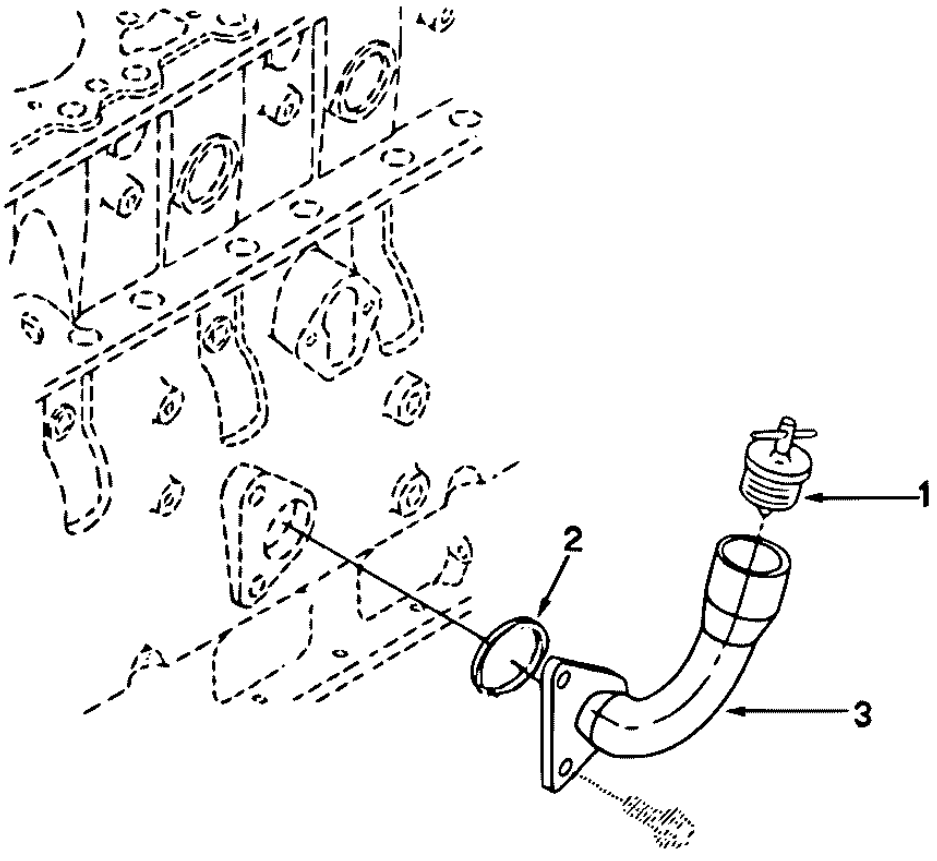
pp954gx

Camshaft Gear

ref no	part number	part name	req	remarks
*	PP97634	Camshaft Gear		Camshaft Gear Structure Language: 02 EBM Camshaft Gear Material: Steel Camshaft Gear Design: One-piece Engine Family: B Series Engine Cylinders: 4
1	3929028	Gear, Camshaft	1	



ref no	part number	part name	req	remarks
*	OB9129-02	Cylinder Block Cover		Cylinder Block Cover Engine Family: B Series Fill Tube Supplier: Cummins Oil Fill Location: Fuel Pump Side Fill Position From FFOB (mm): 259 Position Vert From Crank C/L (mm): 173 Position Horiz from Crank C/L (mm): 259 Position Horiz With Air CPR (mm): 293.5 Fill Cap Supplier: Cummins Requires Air Compressor Support: No Functional w/Dual Power Ratings: Yes Structure Code: 02 EBM Engine Cylinder Count: 6 4 Oil fill that clears F.M. lift pumps.
1	101322	Cap, Filler	1	
2	3284157	Tube, Oil Filler	1	
3	3906704	Seal, O Ring	1	
	3901249	Screw, Hex Flange Head Cap	2	M12 X 1.75 X 25



ob902gc

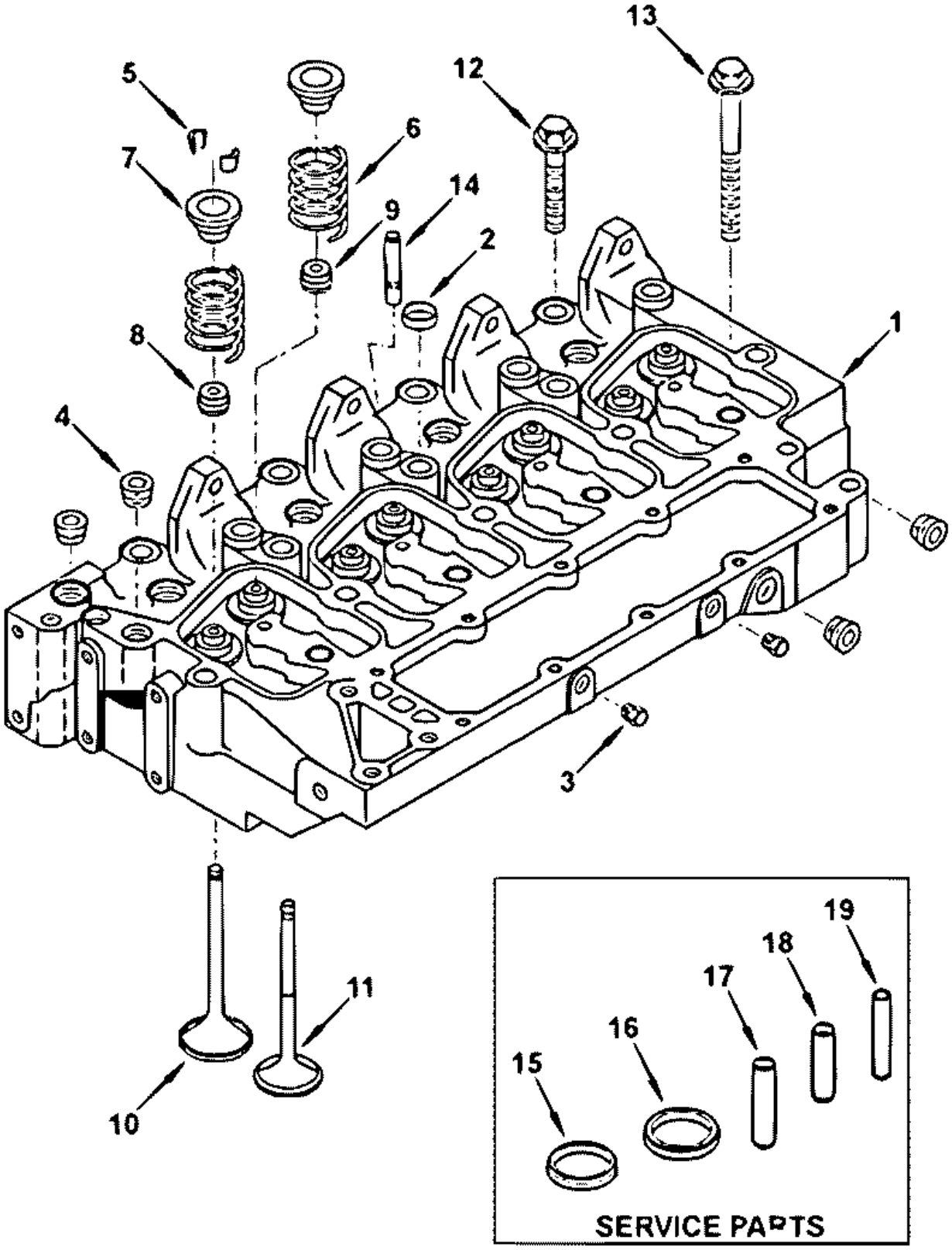
Group 02.01 | 10 | Option No

Picture kn951gn

Cylinder Head

pp97173-04

ref no	part number	part name	req	remarks
*	PP97173-04	Cylinder Head		Cylinder Head Engine Family: B Series Engine Design Phase: Current Product Cylinder: 4 Swirl: Low MFLD Pressure to Lift EXH Valve (PSI): 36 Notched Head: No Cylinder Head Material: Cast Iron Cylinder Head Valve Material: Standard Exhaust Manifold Type: Dry Aftercooler Water Supply Tap From FFOB (mm): 256.5 forward Valve Seat Inserts: No Valve Bridge Scalloping: No Compression Brake Mounting Hardware: No Aspiration: Jacket Water Aftercooled DEP may substitute valve spring retainer 3900299 for 3935038. Valve spring retainer 3900299 is NOT compatible with CDC Manufacturing.
	3930918	Head, Cylinder	1	
	3933422	Head, Cylinder	1	
1	3933421	Head, Cylinder	1	
2	3812092	Plug, Expansion	3	
3	3906619	Plug, Pipe	1	1/8 NPT
4	3008468	Plug, Pipe	5	1/2 NPT
	3802355	Valve, Intake	4	
^5	3900250	Collet, Valve	8	
^10	3920867	Valve, Intake	4	Serviced as 3802355
	3802356	Valve, Exhaust	4	
^5	3900250	Collet, Valve	8	
^11	3920868	Valve, Exhaust	4	Serviced as 3802356
6	3926700	Spring, Valve	8	
7	3935038	Retainer, Valve Spring	8	
8	3921640	Seal, Valve Stem	8	
12	3920779	Screw, Hex Flange Head Cap	4	M12 X 1.75 X 70
13	3920780	Screw, Hex Flange Head Cap	10	
14	3934712	Tube, Aftercooler	1	
		$Service Parts		
15	3925176	Insert, Valve		Exhaust
16	3925177	Insert, Valve		Intake
17	3904408	Guide, Valve Stem		Thick Wall 60.50mm Long intake
18	3904409	Guide, Valve Stem		Thick Wall 51.75mm Long exhaust
19	3906206	Guide, Valve Stem		Thin Wall Can be Used on intake and exhaust


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SERVICE PARTS

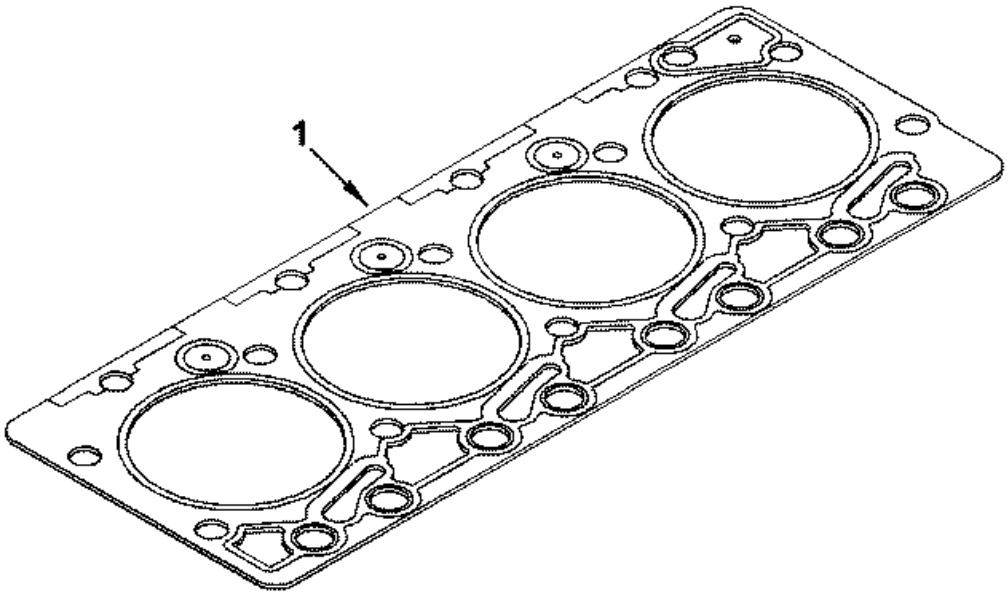
Group 02.01 | 11 | Option No

Picture pp951gf

Cylinder Head

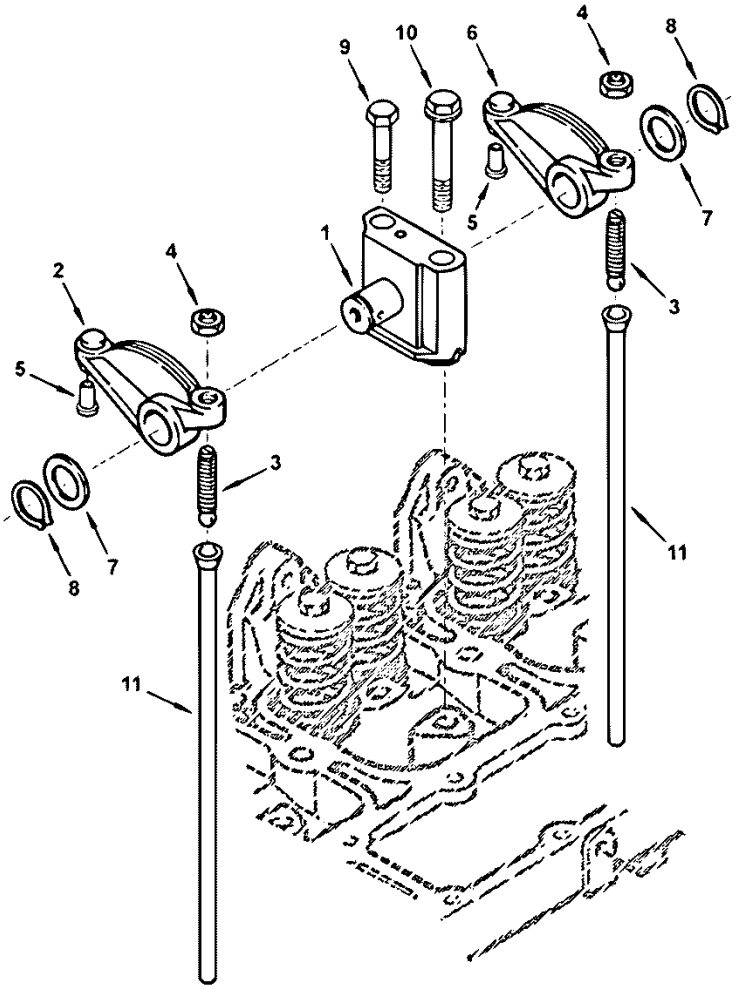
pp97300

ref no	part number	part name	req	remarks
*	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
*	BP9704-02	Rocker Levers		Rocker Lever Engine Family: B Series Cylinders: 4 P/N 3910815 can be used in place of 3939420.
	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	3284377	Rod, Push	8	



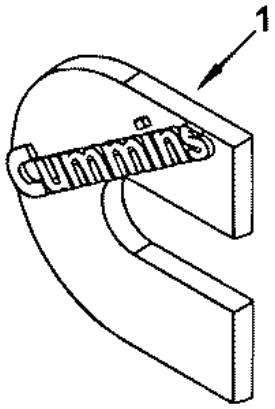
Group 03.01 | 13 | Option No

Picture ss940gn

Paint

ss9001

ref no	part number	part name	req	remarks
*	SS9001	Paint		Paint Paint Color: Cummins Biege Decal/Logo QTY-per ES18,214: 1-Cummins Hue: 1.1y Value: 5.57 Chroma: 2.4 Gloss Level @ 60 degrees: 55 +/-5 Structure Code: 02 EBM Engine Family: B Series, C Series. Contains Part Number 551284, Paint, Enamel
1	3991084	Nameplate	1	



ss940gn

Group 03.01 14 Option No

Picture null

Skid,4b Std

ss9241

ref no	part number	part name	req	remarks
*	SS9241	SKID,4B STD		SKID,4B STD 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

Group 03.01 15 Option No

Picture null

Engine,Dry

ss9702

ref no	part number	part name	req	remarks
*	SS9702	ENGINE,DRY		Oil fill tag Structure Language: 02 EBM tag identification: Without oil Engine Family: "B" Series, "C" Series Fuel Type: Compressed Natural Gas, Diesel cmep may substitute P/N 3924415 for P/N 3916103. All UK built engines must have P/N 3279059 warning label applied to instruction tag. BZL plant may substitute P/N 3916103 for P/N 3964750 instruction tag. Option Contains Instruction Tag, Part Number: 3967353
		NO CONTENT OPTION		

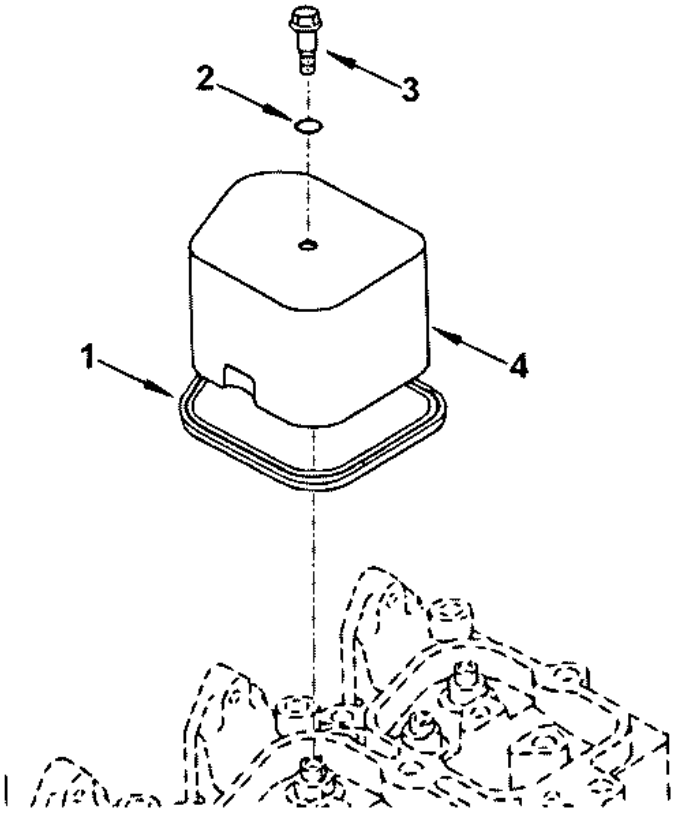
Group 03.01.1 | 16 | Option No

Picture vc900gf

Valve Cover

vc9008-04

ref no	part number	part name	req	remarks
*	VC9008-04	Valve Cover		Valve Cover Family: B Series Cylinders: 4 Oil Fill Cylinder: None Noise Supression Provision: No Studded Capscrew Location: None Brazil may use PN 3967202 instead of 3935449
1	3930906	Gasket, Valve Cover	4	
2	3935449	Isolator, Noise	4	
3	3907049	Screw, Hex Flange Head Cap	4	M8 X 1.25 X 21
4	3928404	Cover, Valve	4	



vc900gf

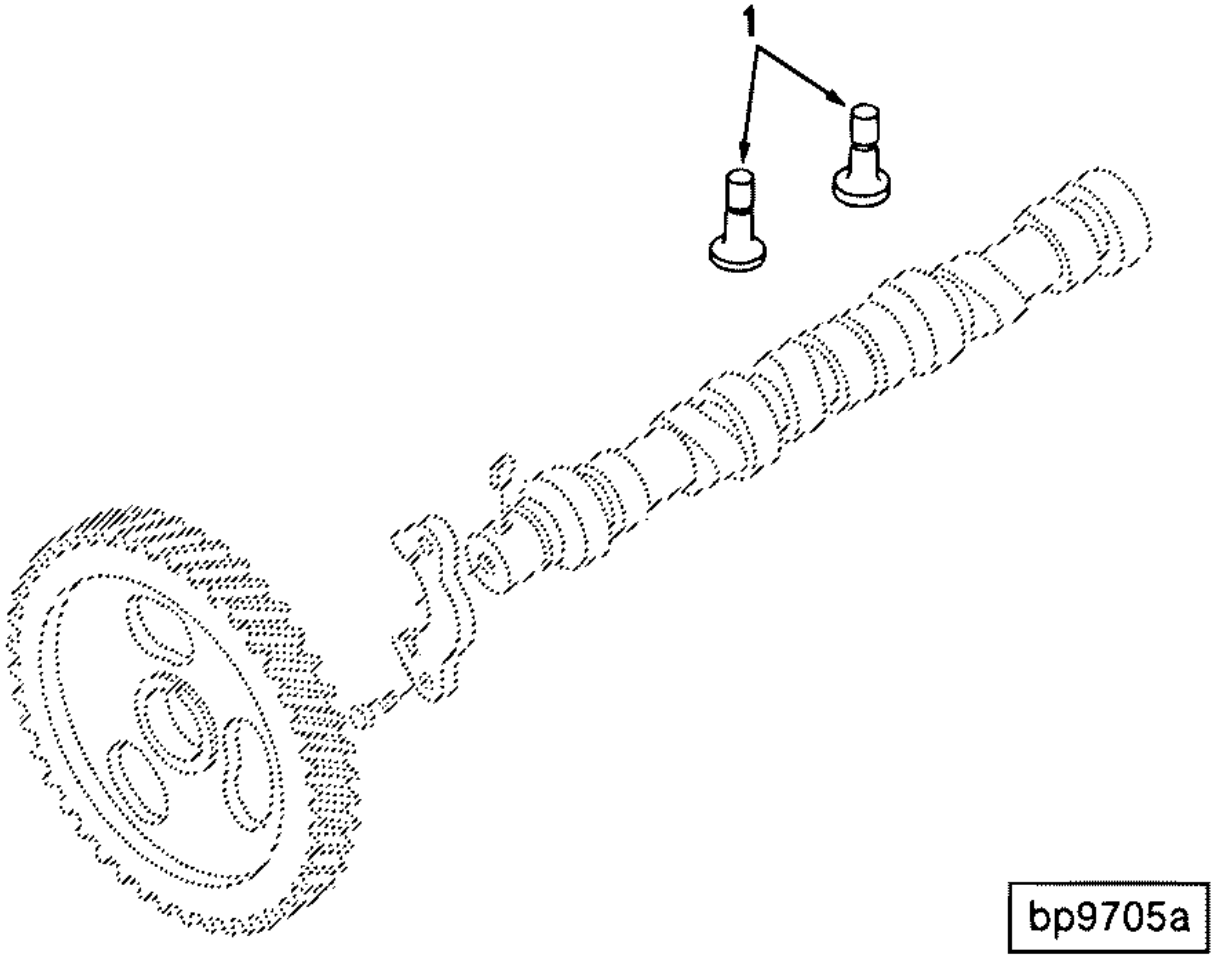
Group 04.01 | 17 | Option No

Picture bp9705a

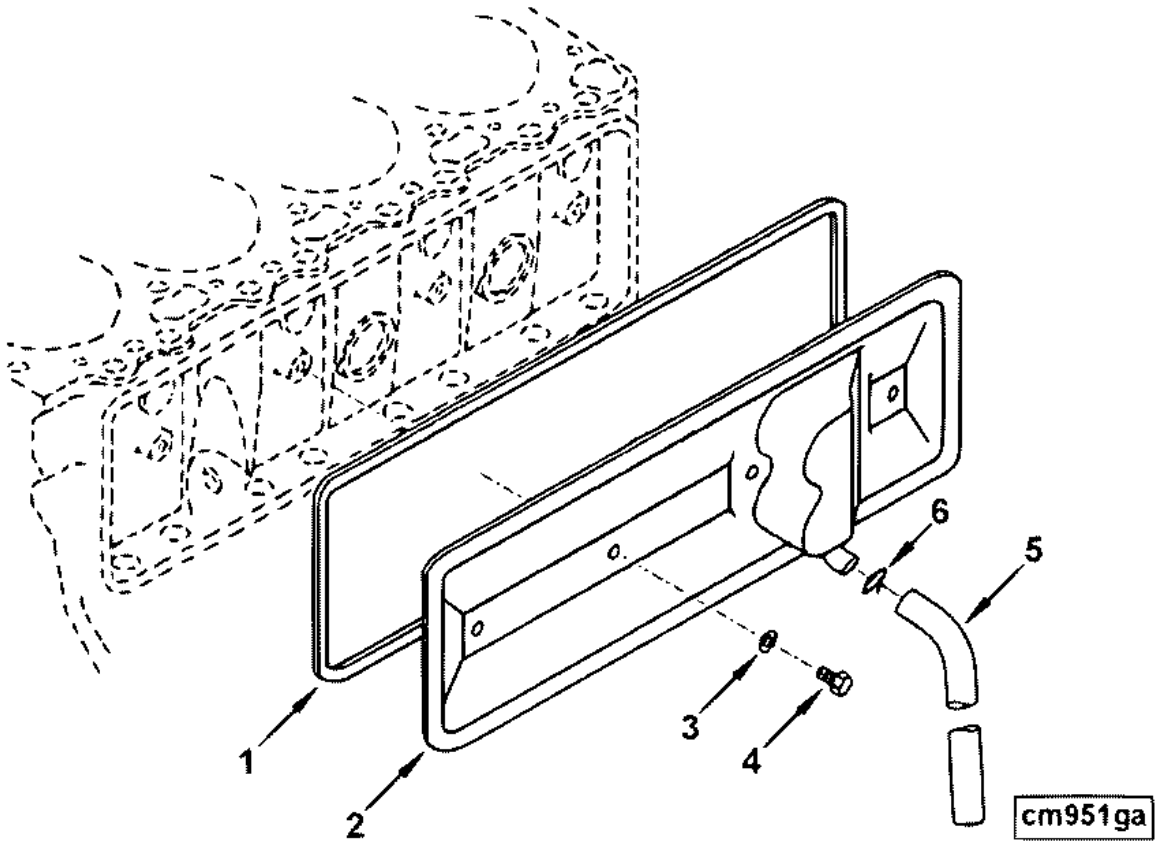
Valve Tappet

bp9705

ref no	part number	part name	req	remarks
*	BP9705	Valve Tappet		Camfollower Cover Engine Family: B Series Cylinders: 4
1	3931623	Tappet, Valve	8	

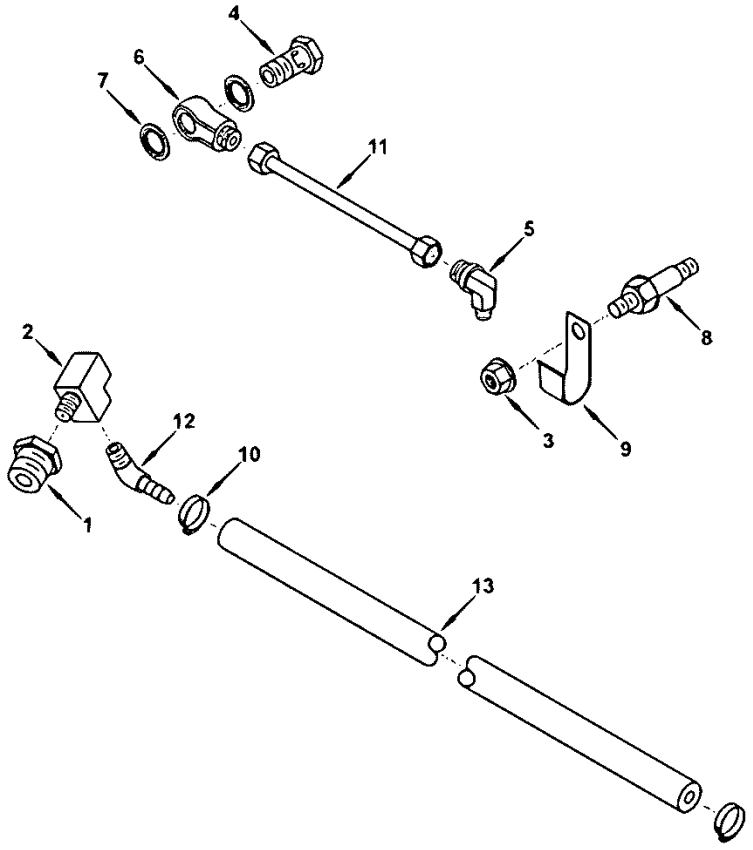


ref no	part number	part name	req	remarks
*	CM9001-10	Cam Follower Cover		Cam Follower Cover Engine Family: B Series Cylinders: 4 Hose Angle Off Breather (deg): 45 Hose Location on Baffle: Bottom Noise Panel Provision: None Double Baffle: No Baffle Location on Engine: #3 Cylinder Hose and Clamp Provided: Yes Drain Hose Length (mm): 360 Fuel Pump Type: Rotary Breather Provision: Yes Noise Isolator Provision: No
1	3283767	Gasket, Push Rod Cover	1	
2	3936188	Cover, Push Rod	1	
3	3928759	Seal, Grommet	2	
4	3900629	Screw, Hex Flange Head Cap	2	M8 X 1.25 X 16
5	3918612	Hose, Plain	1	
6	3904230	Clamp, Spring Hose	1	1"



Air Fuel Control Plumbing

ref no	part number	part name	req	remarks
*	FE9816-04	Air Fuel Control Plumbing		Air Fuel Control Plumbing Engine Family: B Series Aspiration: Jacket Water Aftercooled Fuel Pump Mfg/Model: Bosch A Boost Control: Yes Turbo Exhaust Location: HMFO Turbocharger Type: Wastegate Studded C/S in #4 valve cover.
1	S 931 C	Bushing, Reducing Pipe	1	1/2 NPTF(Ext) X 1/8 NPTF(Int)
2	3282406	Tee, Street Pipe	1	
3	3900589	Nut, Hexagon Flange	1	M8 X 1.25
4	3903035	Screw, Banjo Connector	1	
5	3910265	Elbow, Male Adapter	1	
6	3935171	Washer, Sealing	2	
7	3919644	Connector, Banjo	1	TCL use Only
8	3920344	Screw, Studded Flange Cap	1	M8 X 1.25 X 21
9	3920348	Clip	1	
10	3920719	Clamp, Hose	2	
11	3934602	Tube, Air Fuel Control	1	
12	3927317	Coupling, Elbow Hose	1	
13	3926113	Hose, Plain	1	



fe952gn

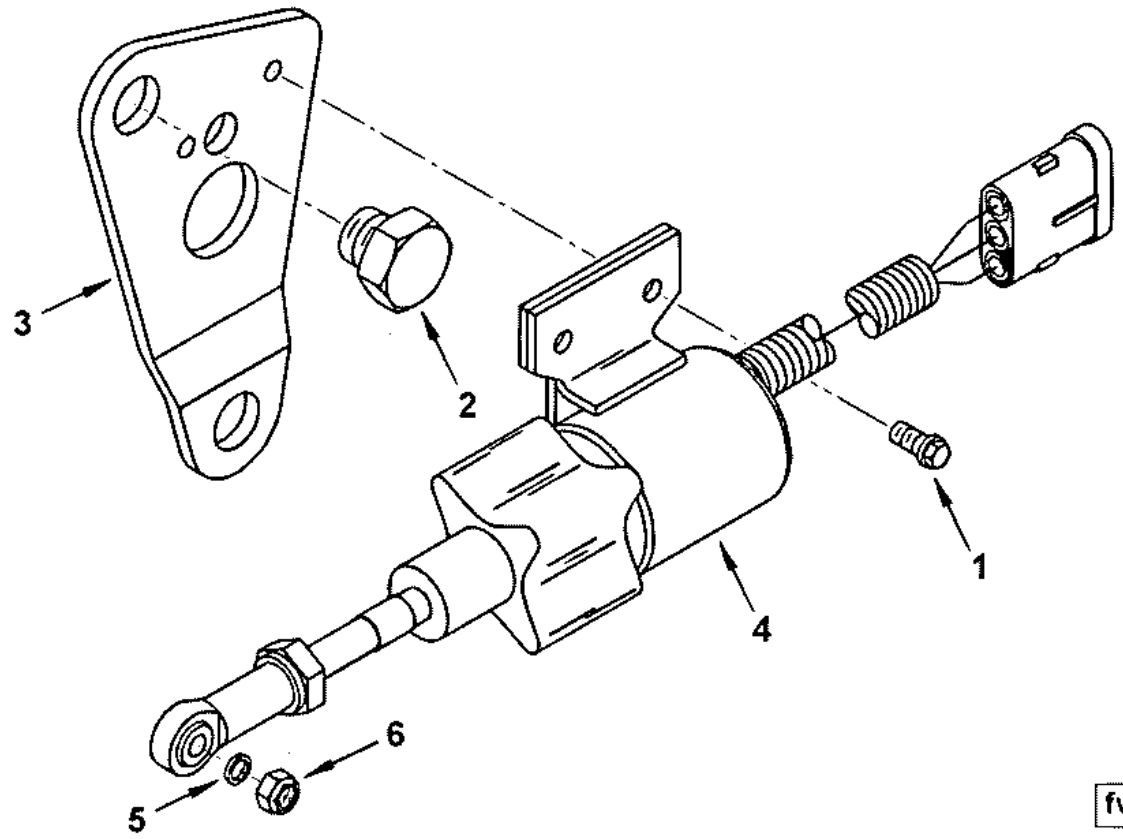
Group 05.06 | 20 | Option No

Picture fv952ga

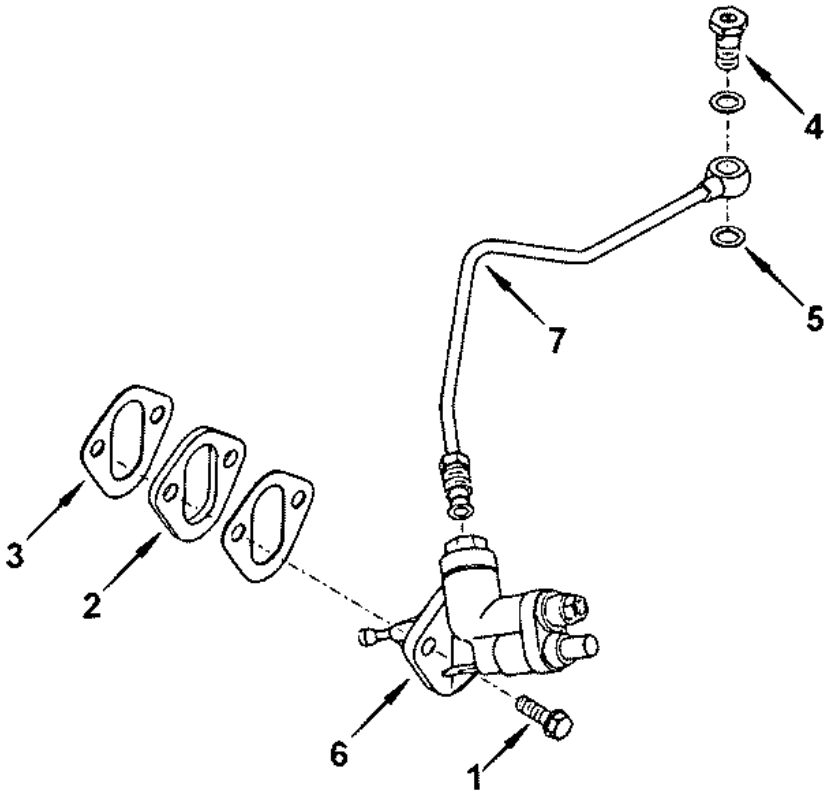
Fuel Shutoff Valve

fv9182-01

ref no	part number	part name	req	remarks
*	FV9182-01	Fuel Shutoff Valve		Fuel Shutoff Valve Valve Activation: Electrical Engine Design Phase: Current Product Voltage: 12 Valve Manufacturer: Syncro-Start Solenoid Location: Pump-Inboard Shutoff Valve Supplier: Cummins Solenoid Activation: Activate To Run Cylinders: 4 Compatible Shutoff Lever: P/N 3934019 Bolt-On Governor: No Fuel Pump Manufacturer/Model: Bosch "A" Pump Governor Type: RSV Engine Family: "B" Series
1	3900626	Screw, Hex Flange Head Cap	2	M6 X 1.00 X 12
2	3929456	Screw, Hexagon Head Cap	2	
3	3930590	Bracket, Solenoid	1	
4	3932529	Solenoid, Fuel Pump	1	
5	3934021	Nut, Lock	1	M6 X 1.00
6	3934022	Washer, Plain	1	



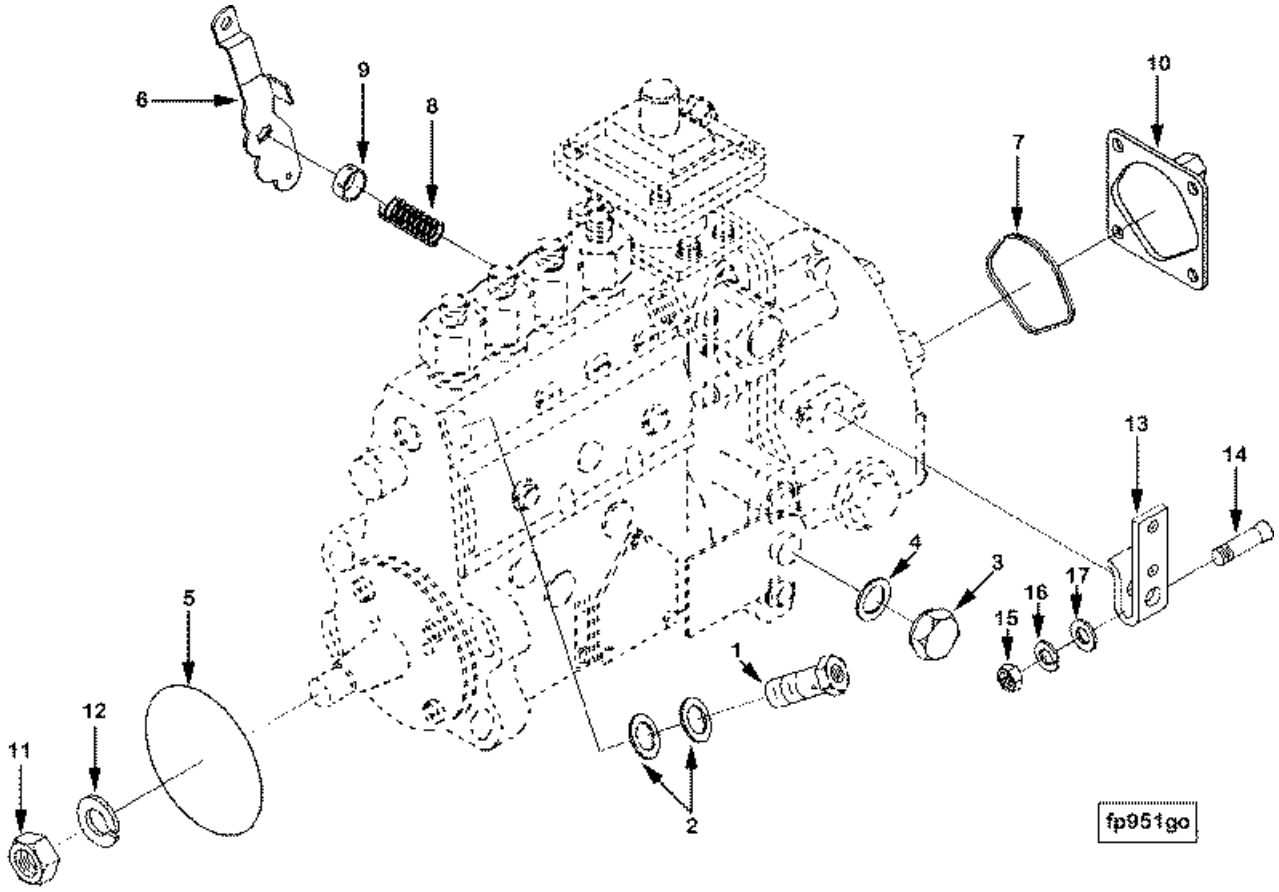
ref no	part number	part name	req	remarks
*	FS9170-04	Fuel System Accessories		Lift Pump Structure Code: 02 EBM Pump Style: Piston Pump Operation: Mechanical Pump Supplier: Cummins Pump Stand Measured Flow (LPH): 117.0 - 229.9 Pump Measured Flow (Pump RPM): 1250 Fuel Inlet Size: 1/4-18 NPTF Filter Location: On Engine Restricted Fuel Pump: Bosch A 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	3931059	Gasket, Cover Plate	2	
4	3916361	Screw, Banjo Connector	1	M12 X 1.50 X 24
5	3935171	Washer, Sealing	2	
6	3936318	Pump, Fuel Transfer	1	
7	3917280	Tube, Fuel Supply	1	



Base Fuel Pump

ref no	part number	part name	req	remarks
*	FP97757-01	Bosch "a" Pump With RSV		Fuel Pump
*	FP97757-01	Base Fuel Pump		Fuel Pump
1	3912886	Valve, Overflow	1	
2	3912887	Washer, Sealing	2	
3	3912888	Plug, Timing	1	
4	3912889	Washer, Sealing	1	
5	3910503	O Ring, Sealing	1	
6	3930657	Lever, Shutoff	1	
7	3919286	O Ring, Sealing	1	
8	3912890	Spring, Shutoff	1	
9	3912891	Housing, Return Spring	1	
10	3915169	Cover, Fuel Pump	1	
11	3912894	Nut, Gear Retaining	1	
12	3912895	Washer, Lock	1	
13	3913327	Lever, Control Assy	1	
14	3920929	Bolt, Throttle Shaft	1	
15	3920930	Nut, Hexagon	1	
16	3907478	Washer, Locking	1	
17	3920931	Washer, Flat	1	
				Advertised HP: 110 @ 2200 Torque Peak (lb-ft): 332 @ 1500 High Idle: 2457 Peak Power: 110 Governor Break RPM: 2275 Governor Regulation (%): 8 Compatible Fuel Rating - FR: 90024 CPL: 2351 Fuel Pump Type: Inline Pump Manufacturer/Model: Bosch A Fuel Pump Mounted Angle: 35 Deg Engine Family: B Series Engine Cylinders: 4 Engine Design Phase: Current Product Governor Type: RSV Boost Control Provided: Yes Pump Shut-Down Lever Design: P/N 3934019 Bolt-On Ele. Gov. Capable: No High Pressure Tube ID (mm): 1.8
1	3928603	Pump, Fuel Injection	1	Recon equivalent 3928603 RX

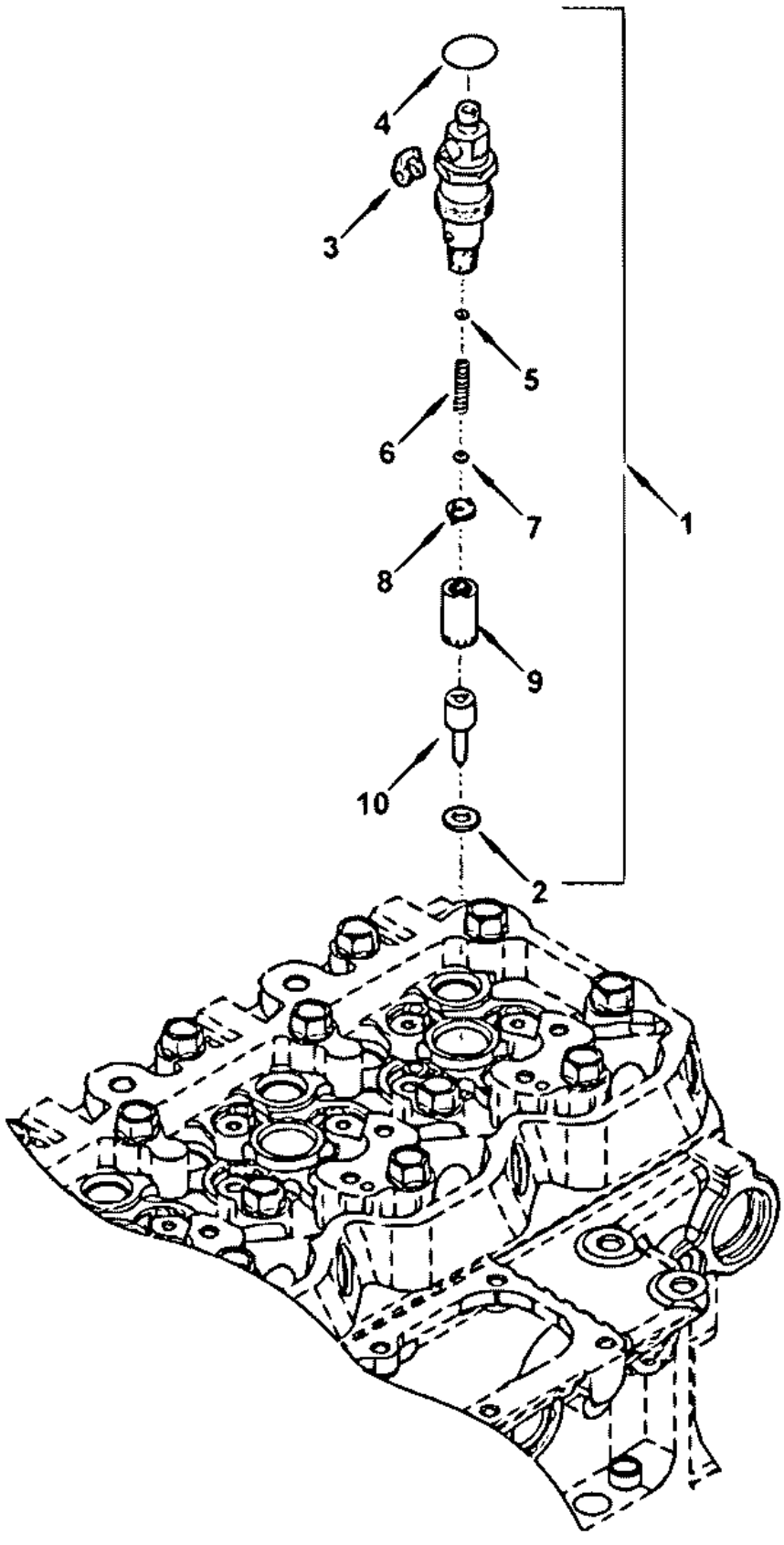
Group 05.21	22	Option No
Picture fp951go	**Base Fuel Pump**	fp97757-01



Fuel Injector

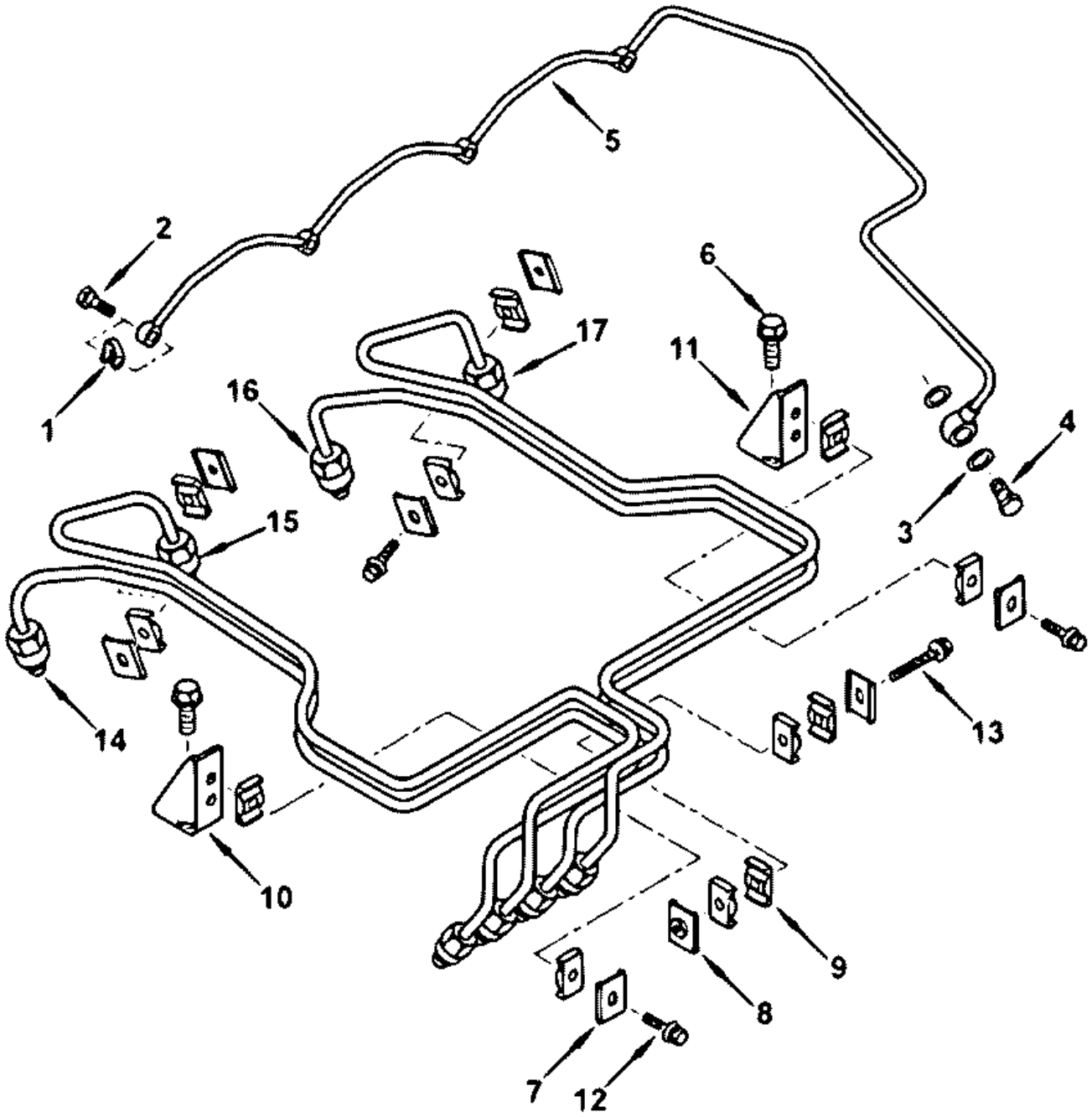
ref no	part number	part name	req	remarks
*	PP2351	Fuel Injector		CPL2351
1	3802677	Kit, Injector	4	Recon Equivalent 3802677 RX
	3929490	Injector	1	Serviced as 3802677
2	3906659	Seal, Injector	1	For 7mm Head
3	3903380	Seal, Banjo Connector	1	Replace With 4942278
4	3909356	Seal, Rectangular Ring	1	
5	3905156	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	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	3917945	Disc, Intermediate	4	
8	3917946	Spindle	4	
9	3905155	Retainer, Injector Nozzle	4	
10	3929492	Nozzle, Injector	4	

Fuel Injector



Fuel Plumbing

ref no	part number	part name	req	remarks
*	FT9969-02	Fuel Plumbing		Fuel Plumbing Engine Family: B Series Engine Cylinders: 4 High Pressure Tube ID: 1.8 Fuel Pump Governor: RSV Boost Control: With Connection Type: Beadless Adaptable To Air Heater: Yes Restricted Aspiration: Jacket Water Aftercooled Turbocharged Fuel Pump Manufacturer/Model: Bosch A Material: USIT
1	3903380	Seal, Banjo Connector	4	Replace With 4942278
2	3905307	Screw, Banjo Connector	4	M6 X 1.00 X 14.3
3	3918188	Washer, Sealing	2	8.0 mm
4	3924726	Valve, Check	1	M8 X 1.25 X 17.5
5	3933660	Manifold, Fuel	1	
6	3930837	Screw, Hex Flange Head Cap	4	M8 X 1.25 X 50
7	3904711	Brace, Tube	5	
8	3917717	Brace, Tube	3	
9	3917746	Isolator, Vibration	12	
10	3282942	Brace, Tube	1	
11	3919086	Brace, Tube	1	
12	3920854	Screw, Captive Washer Cap	4	M5 X 0.80 X 20
13	3920855	Screw, Captive Washer Cap	1	M5 X 0.80 X 35
14	3932147	Tube, Injector Fuel Supply	1	#1 Cylinder
15	3932148	Tube, Injector Fuel Supply	1	#2 Cylinder
16	3932149	Tube, Injector Fuel Supply	1	#3 Cylinder
17	3932150	Tube, Injector Fuel Supply	1	#4 Cylinder


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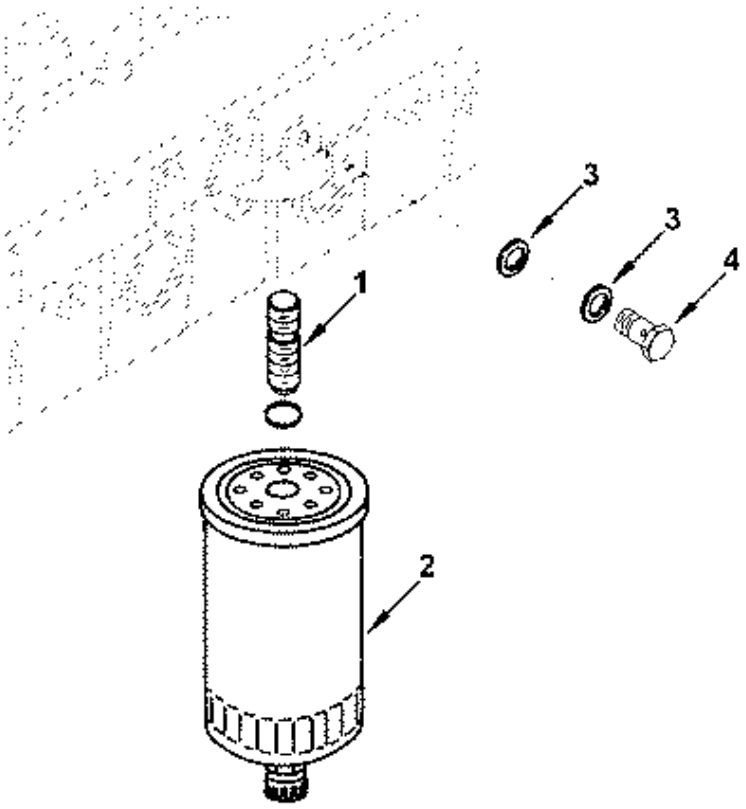
Group 06.04 | 25 | Option No

Picture ff954gn

Fuel Filter

ff9003-03

ref no	part number	part name	req	remarks
*	FF9003-03	Fuel Filter		Fuel Filter Element Type: Single Water Separator Provision: Yes Mtg. Angle from Crank C/L: TBD First Filter Horiz. from Crank C/L (mm): N/A First Filter Vert. from Crank C/L (mm): N/A First Filter Loc from FFOB (mm): N/A Element Style: Spin on Installation Responsibility: Cummins Filter Location: Fuel Pump Side Absolute Filtration (microns): 25 Compatible with Lift Pump: Yes Air Heater Connection Provided: No Filter Inlet Diameter: 1/4 Inch Engine Design Phase: Current Product Front Filter Fitting Orientation: 3:00 Return-to-Tank Valve Provision: No Supply Method: Mounted Engine Family: B Series Engine Cylinders: 4 6 DEP may use 3903035 screw,banjo connector to replace 3905860 screw,banjo connector.
1	3925954	Adapter, Filter Head	1	M16 X 1.50 (Both Ends) X 33.5
2	3931062	Filter, Fuel		
3	3935171	Washer, Sealing	2	
4	3905860	Screw, Banjo Connector	1	Order 3911446 and 3939570



ff954gn

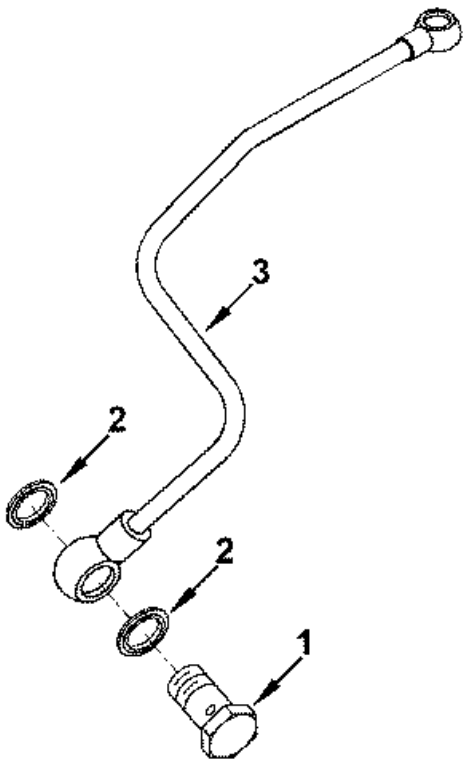
Group 06.04.1 | 26 | Option No

Picture ff950gn

Fuel Filter Plumbing

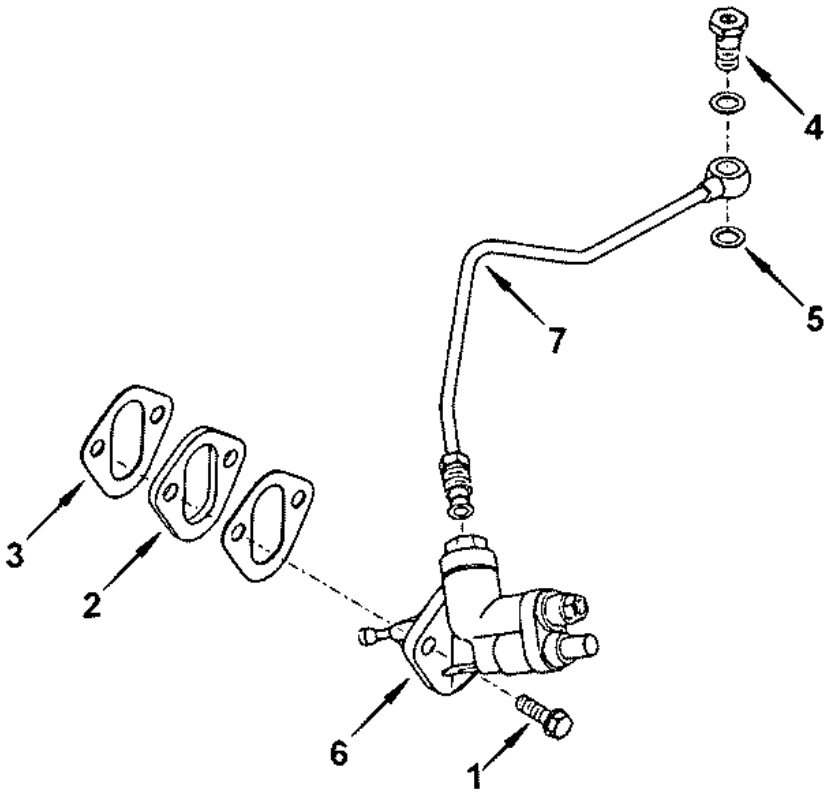
ff9797-04

ref no	part number	part name	req	remarks
*	FF9797-04	Fuel Filter Plumbing		Fuel Filter Plumbing Family: B Series Pump Mfg/Model: Bosch A Governor Type: RSV Heater/Spacer/Glow-Plug Provision: Heater/Spacer Tube Material: Steel Mounting Location: Fuel Pump Side Fuel Outlet Banjo Provided: Yes Cylinders: 4
1	3924725	Screw, Banjo Connector	1	M14 X 1.50 X 26
2	3935172	Washer, Sealing	2	
3	3936348	Tube, Fuel Supply	1	



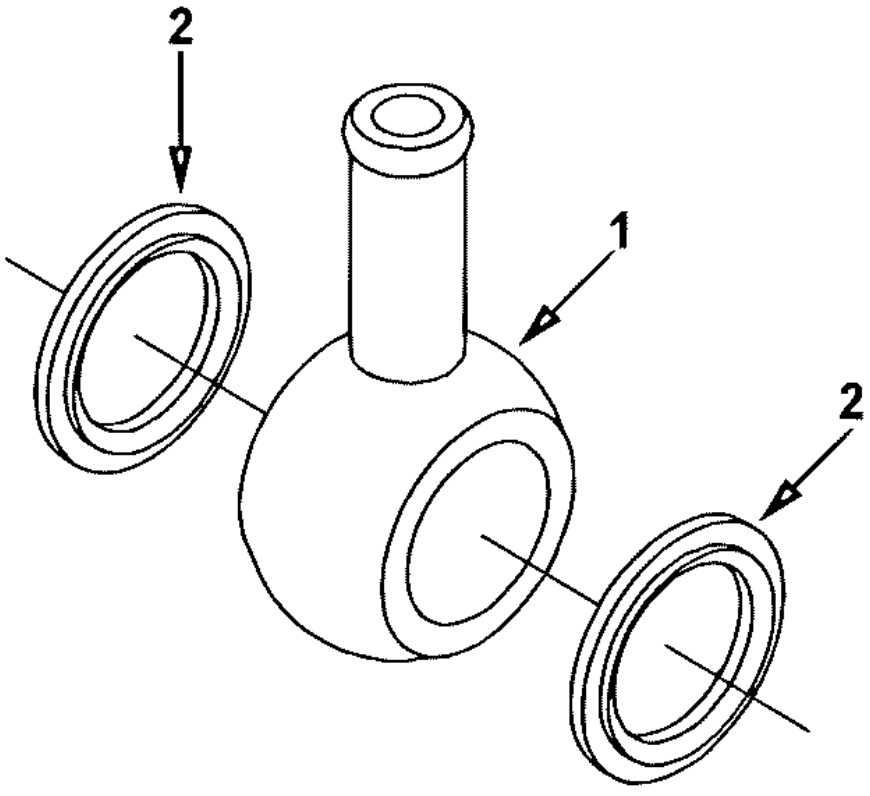
ff950gn

ref no	part number	part name	req	remarks
*	FS9170	PUMP,FUEL TRANSFER		Lift Pump Structure Code: 02 EBM Pump Style: Piston Pump Stand Measured Flow (LPH): 117.0 - 229.9 Pump Measured Flow (Pump RPM): 1250 Fuel Inlet Size: 1/4-18 NPTF Filter Location: #4 cylinder Pre-Filter Provided: No Restricted Fuel Pump Angle: 35 degree Engine Design Phase: Current Product Solenoid Bracket Provision: No Fuel Cooler Plumbing Provision: N/A Restricted Fuel Pump: Bosch A 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	3939258	Gasket, Cover Plate	2	
4	3916361	Screw, Banjo Connector	1	
5	3963983	Washer, Sealing	2	
6	4944712	Pump, Fuel Transfer	1	
7	3917280	Tube, Fuel Supply	1	



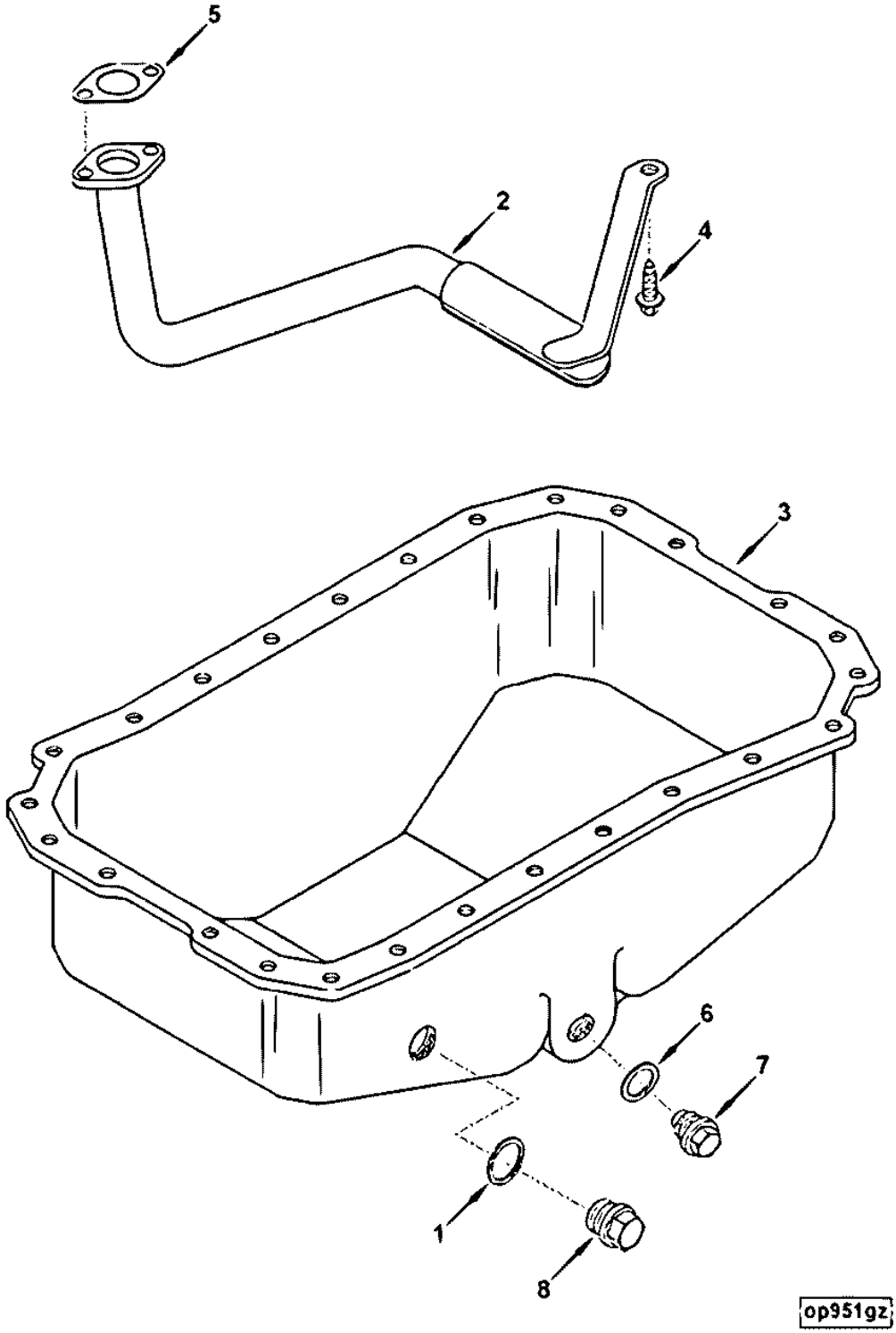
Fuel Drain Location

ref no	part number	part name	req	remarks
*	DL9028-02	Fuel Drain Location		Drain Location Drain Tube OD (mm): 7.90 Connection Type: Beadless Customer Connect Location: Fuel Pump - Outboard Engine Design Phase: Current Product Engine Family: B Series C Series Restricted Fuel Pump Mfg/Model: Bosch A Bosch MW Nippondenso EP9 Zexel Hybrid A Attaches to outboard side of pump. BZL may use 3355095 in place of 3911447.
1	3911447	Connector, Banjo	1	
2	3918192	Washer, Sealing	2	14MM



dl950gc

ref no	part number	part name	req	remarks
*	OP9017-04	Oil Pan		Oil Pan Family: B Series Cylinders: 4 Sump Style: Shallow Sump Location: Center Oil Pan Material: Stamped Steel Drain Location: Fuel Pump Side Pan High Capacity (Qt): 10 (9.461 1) Pan Low Capacity (Qt): 9 (8.515 1) Front Up Angularity (Deg): 45 Front Down Angularity (Deg): 45 Side To Side Angularity (Deg) : 45 Unique Characteristics: Can Not Use Immersion Heater With Balancer Structure Code: 02 EBM Oil Pan Type: Non-Isolated Internally Cast Suction Tube: No Required Oil Filter Medium: Cellulose Suction Tube Flange Thickness (MM): 5.16 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	3902425	Washer, Sealing	1	M22
2	3905223	Connection, Oil Suction	1	
3	3907570	Pan, Oil	1	
4	3900630	Screw, Hex Flange Head Cap	1	M8 X 1.25 X 20
5	3931349	Gasket, Flange	1	
6	3920773	Washer, Sealing	1	M18
7	3924147	Plug, Threaded	1	M18 X 1.50
8	3924148	Plug, Threaded	1	M22 X 1.50 X 14


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op951gz

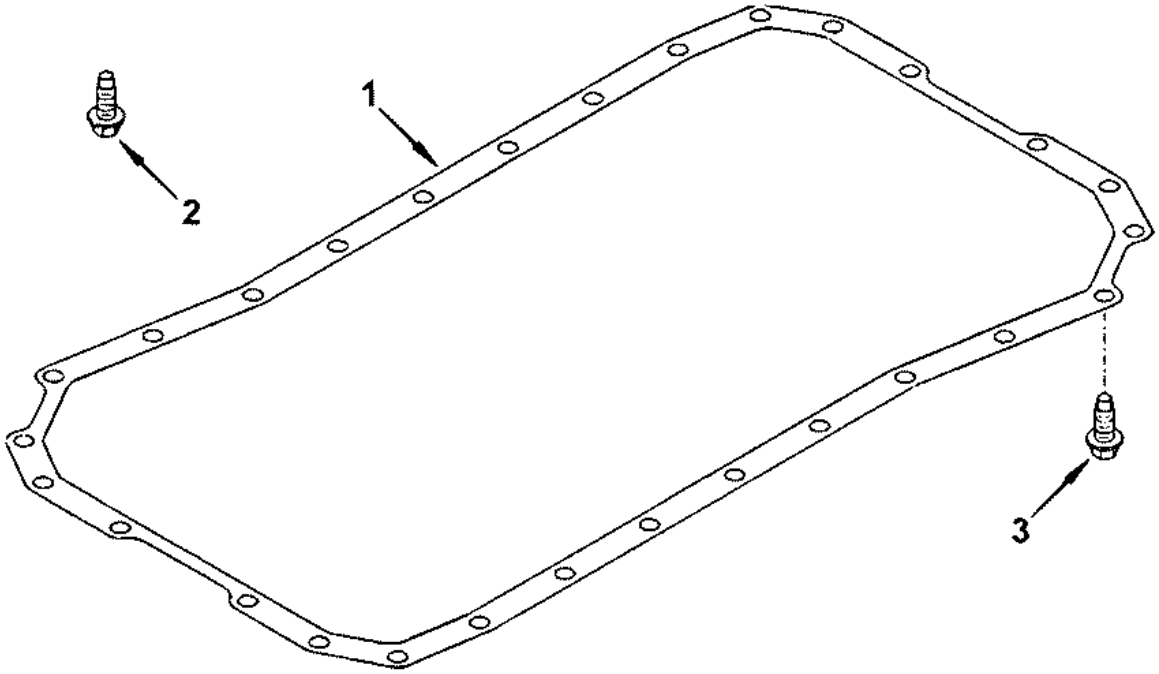
Group 07.01 | 30 | Option No

Picture op952ge

Mounting,Oil Pan

op9704-03

ref no	part number	part name	req	remarks
*	OP9704-03	Oil Pan Mounting		Oil Pan Mounting Engine Family: B Series Cylinders: 4 Bedplate Capability: Without Required Oil Pan Material: Stamped Steel Structure Code: 02 EBM Oil Pan Type: Non-Isolated For Internally Cast Oil Suction Tube: No
1	3931602	Gasket, Oil Pan	1	
2	3900630	Screw, Hex Flange Head Cap	2	M8 X 1.25 X 20
3	3920400	Screw, Hex Flange Head Cap	28	M8 X 1.25 X 21



op952ge

Group 07.02 | 31 | Option No

Picture lg962go

Gauge,Oil Level

lg9125

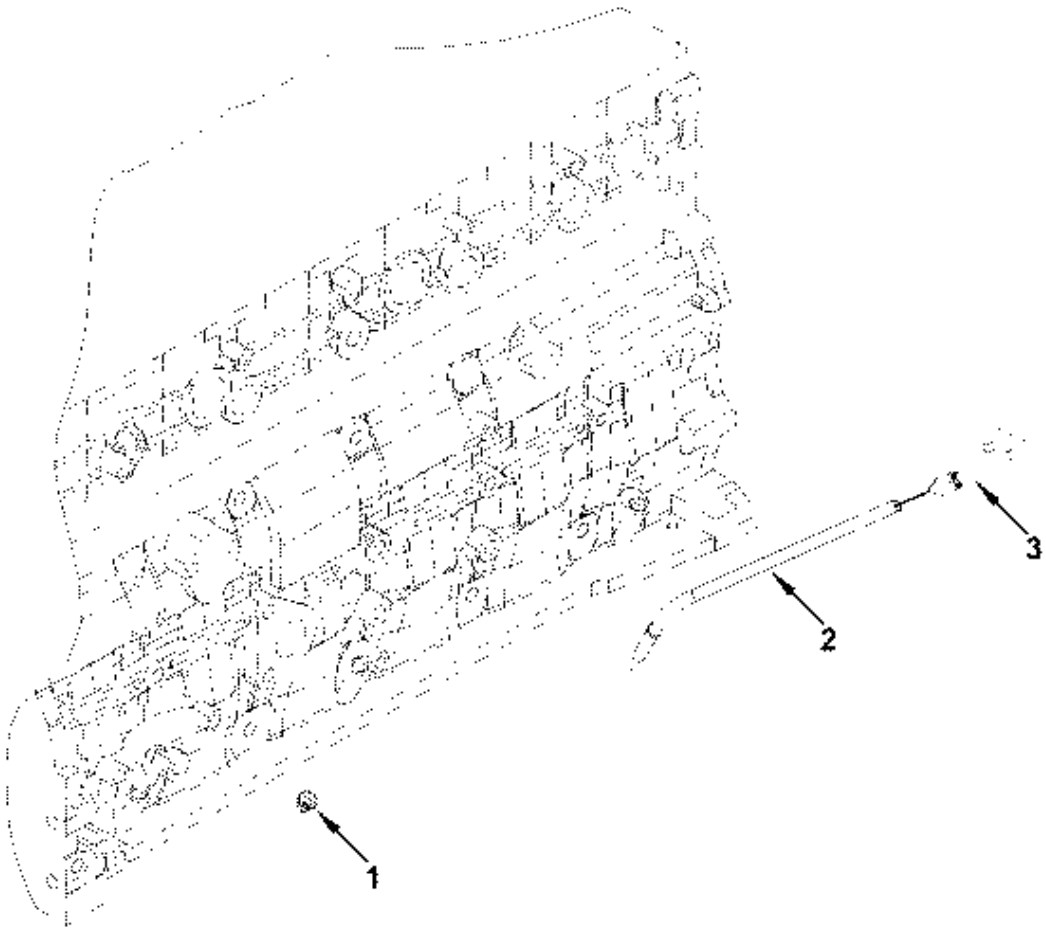
ref no	part number	part name	req	remarks
*	LG9125	Oil Level Gauge		Oil Level Gauge Family: "B" Series Cylinders: 4 Supplier: Cummins Oil Pan High Limit (qt): 10 Oil Pan Low Limit (qt): 9 Oil Pan Sump: Center Entry Location From FFOB (mm): 168.0 Power Angle (Deg): 0 Engine Tilt (Deg): 0 Pull Direction: 45 Deg Functions With Air Compressor: Yes Tube Termination Side: Fuel Pump Side Tube Effective Length (mm): 155 Handle-Horizontal From Crank CL: TBD Handle-Vertical From Crank CL: TBD Handle-Horizontal From FFOB: TBD Functions With Balancer: No Restricted Breather Type: Open Dipstick Tube to be Oriented so Top of Tube is 221 +/- 3MM From FFOB. CNS may use 3905368 Expansion Plug in Place of 3900955 Expansion Plug.
1	3900955	Plug, Expansion	1	
2	3905128	Tube, Oil Gauge	1	
3	3905420	Dipstick	1	

Group 07.02 | 31 | Option No

Picture lg962go

Gauge,Oil Level

lg9125



lg962go

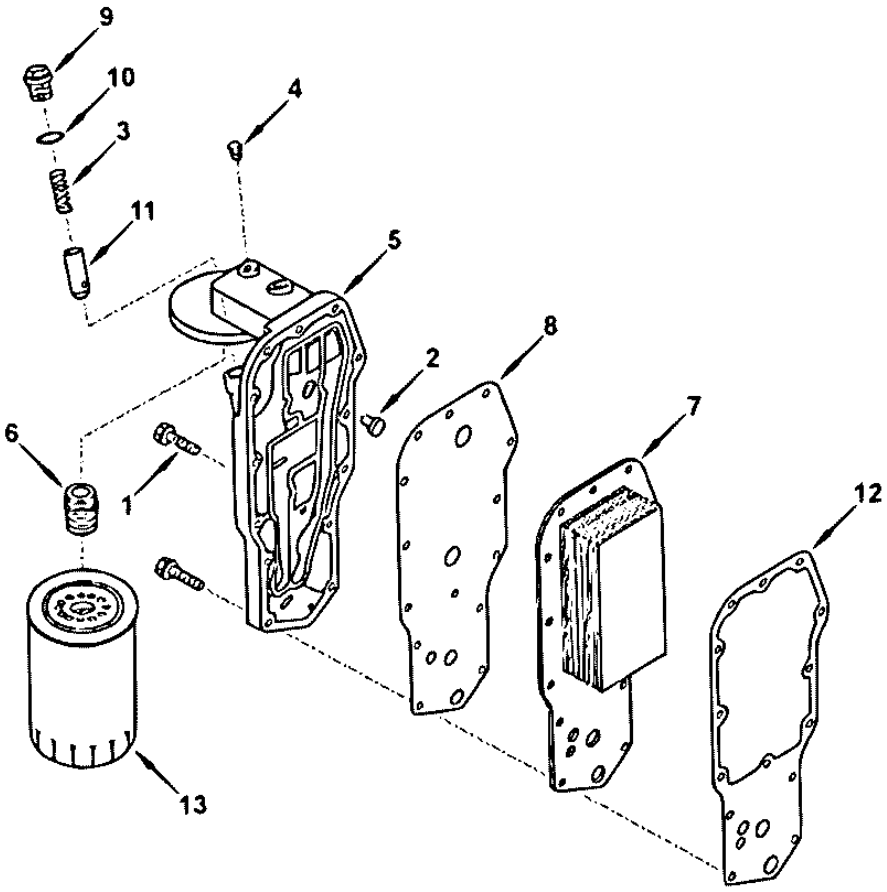
Group 07.05 | 32 | Option No

Picture lc900gk

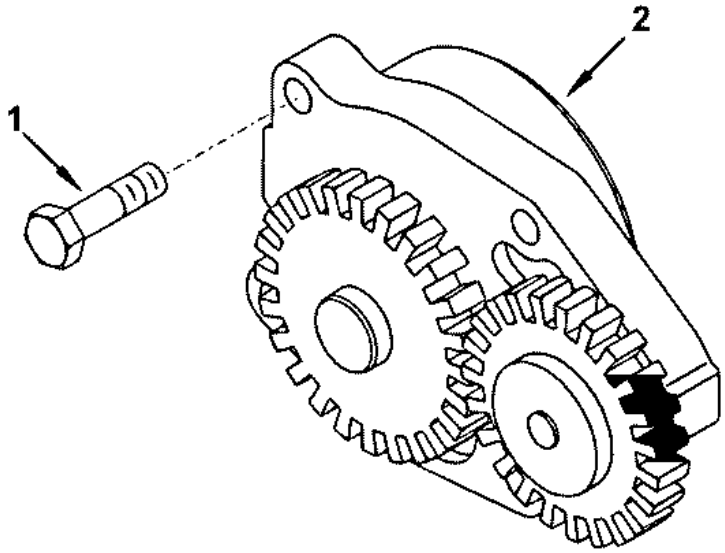
Lube Oil Cooler

lc9018-03

ref no	part number	part name	req	remarks
*	LC9018-03	Engine Oil Cooler		Lube Oil Cooler Cylinders: 4 Cooler Type: Plate Mounting Position/Location: Vertical Filter Material: Cellulose Engine Design Phase: Current Product Engine Family: B Series Restricted Aspiration: Turbocharged Jacket Water Aftercooled Charged Air Cooled Pressure Relief Set 65 PSI.
1	3900632	Screw, Hex Flange Head Cap	14	M8 X 1.25 X 35
2	3936365	Valve, Pressure Relief	1	
3	3918427	Spring, Compression	1	
4	3906619	Plug, Pipe	1	1/8 NPT
	3918954	Head, Lub Oil Filter	1	Serviced as 4024827
5	3924338	Head, Lub Oil Filter	1	
6	3909355	Adapter, Filter Head	1	
7	3921557	Core, Cooler	1	
8	3942915	Gasket, Filter Head	1	
9	3915787	Plug, Threaded	1	M22 X 1.50
10	3929457	Seal, O Ring	1	
11	3918428	Plunger, Prs Regulator	1	
12	3942914	Gasket, Oil Cooler Core	1	
13	3908616	Cartridge, Lub Oil Filter	1	Buy From Cummins Filtration

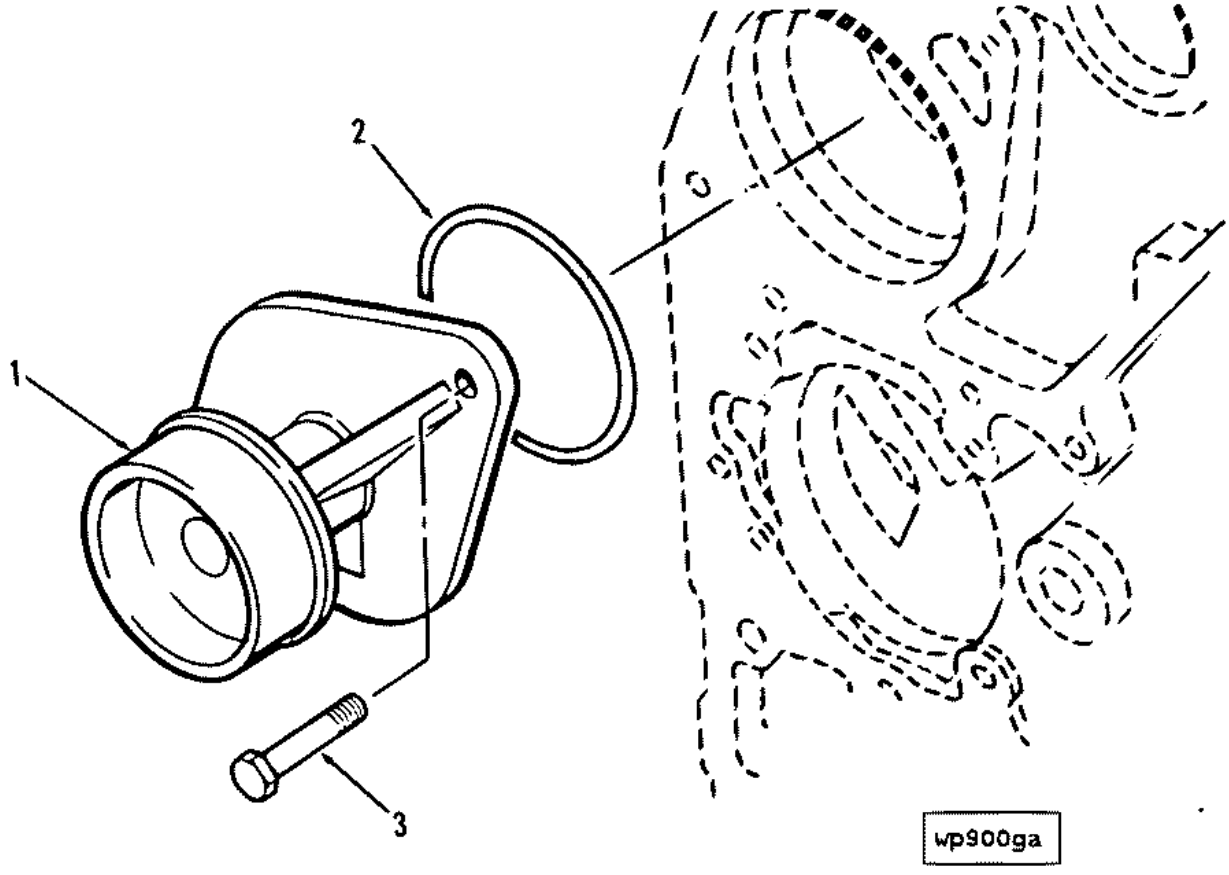


ref no	part number	part name	req	remarks
*	LP9711	Lube Oil Pump		Lubrication Oil Pump Structure Code: 02 EBM Engine Design Phase: Current Product Pump Drive: Non-Crank Concentric Body Material: Cast iron body Flow Rate@Pump Speed (GPM @ RPM): 14.6 @ 4200 Gear Type: Steel HCR Gear Piston Cooling Method: Saddle Jet Engine Families: B Series Cylinders - Engine Aspiration: 4 - Charge Air Cooled 4 - Jacket Water Aftercooled 4 - Sea Water Aftercooled 4 - Turbocharged.
1	3930336	Pump, Lubricating Oil	1	
2	3900677	Screw, Hexagon Head Cap	4	M8 X 1.25 X 30



lp950gb

ref no	part number	part name	req	remarks
*	WP9001-01	Water Pump		Water Pump Pulley Type: Standard Engine Family: B Series Pulley Diameter (mm): 88.00 Engine Design Phase: Current Product P/N 3903297, o-ring seal is interchangable with P/N 3906698. TCL may use part number 3900227 in place of 3941981.
	3802971	Kit, Water Pump	1	Recon Equivalent 3802971 RX
1	3283602	Pump, Water	1	Serviced as 3802971
2	3906698	Seal, Rectangular Ring	1	
3	3941981	Screw, Hex Flange Head Cap	2	



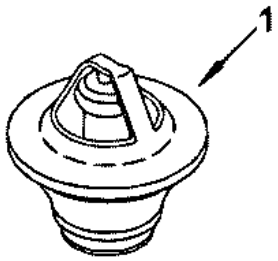
Group 08.07 35 Option No

Picture ec941ga

Thermostat

ec9001-03

ref no	part number	part name	req	remarks
*	EC9001-03	Thermostat		Thermostat Deg C Thermostat Opens: 83 C Number of Thermostats: 1 Thermostat Type: Jiggle-Pin Vented Non-Vented: Vented Requires By-Pass Housing: No Required Housing Bore Diameter (mm): 54.10
1	3283589	Thermostat	1	



ec941ga

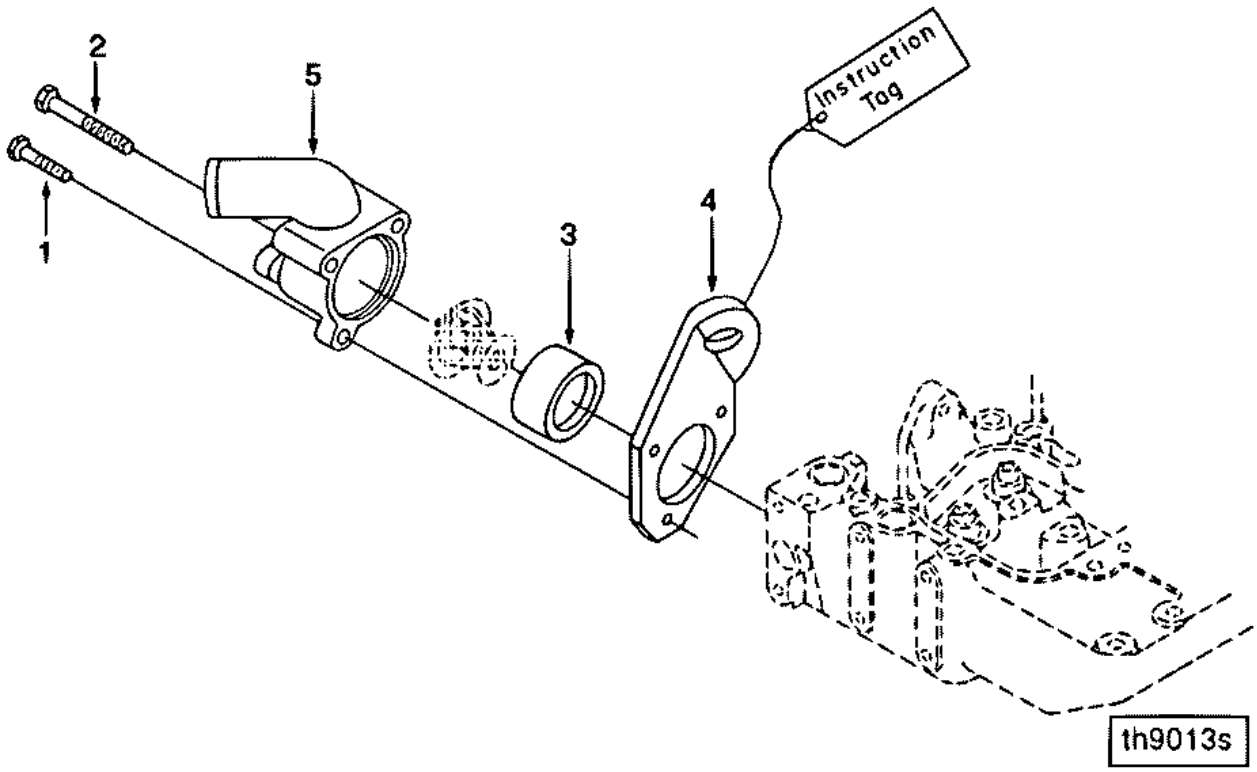
Group 08.07 | 36 | Option No

Picture th9013s

Thermostat Housing

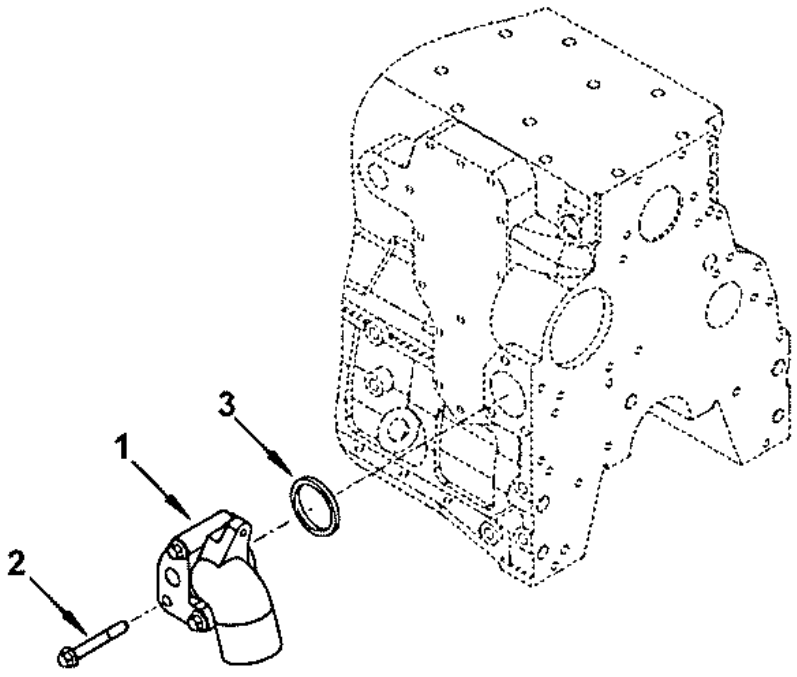
th9013

ref no	part number	part name	req	remarks
*	TH9013	Thermostat Housing		Thermostat Thermostat Bore: 54.10 Outlet Type/OD (mm): 45.0 Outlet Direction: Vertical Bracket Direction: Vertical/Rearward Fan Center Limitation: <203.0 Fan Size Limit: <20 inch Airation Method: Non-vented Tappings for Belt Tensioner: No Engine Design Phase: Current Product Engine Families: B Series Mounted 30 deg outboard angle from Crank C/L.
1	3900632	Screw, Hex Flange Head Cap	1	M8 X 1.25 X 35
2	3926972	Screw, Hex Flange Head Cap	2	M8 X 1.25 X 70
3	3923331	Gasket, Thm Housing Cov	1	
4	3903757	Bracket, Lifting	1	.250 inch thick
5	3914411	Housing, Thermostat	1	



Water Inlet Connection

ref no	part number	part name	req	remarks
*	WI9001-01	Water Inlet Connection		Water Inlet Connection Engine Family: B Series Inlet Connection OD (mm): 58.00 Connection Type: Beaded Connection Orientation: 30 Degree Down Contains MTG Pad for REF Compressor: No Tensioner MTG Provision: None Engine Design Phase: Current Product Alternator MTG Provision: None Attachment for Alternator Brace: Yes Compatible W/Front-Side Engine Mounts: Yes
1	3934877	Connection, Water Inlet	1	
2	3901757	Screw, Hex Flange Head Cap	3	M10 X 1.50 X 75
3	3906697	Seal, O Ring	1	



wi900ge

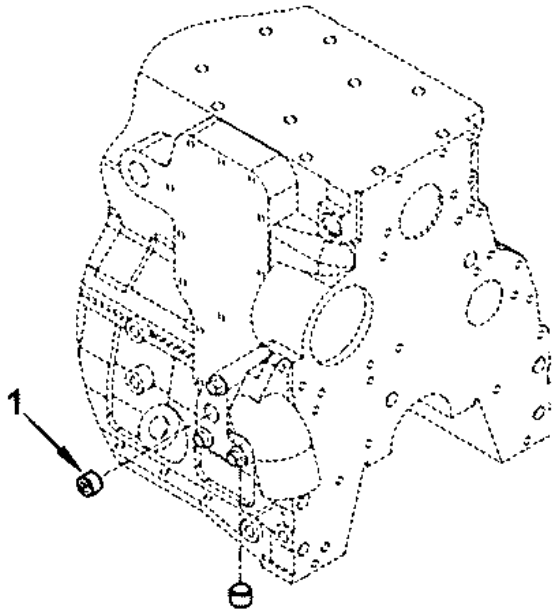
Group 08.07.1 | 38 | Option No

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

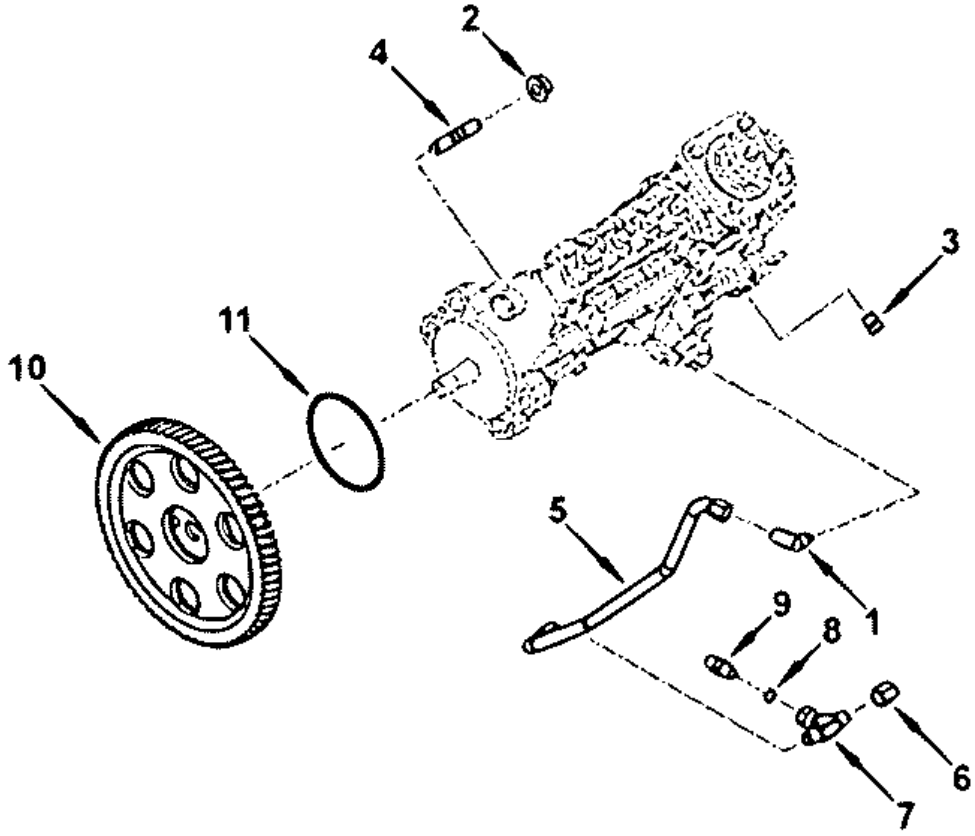
Group 09.01 | 39 | Option No

Picture fp953gc

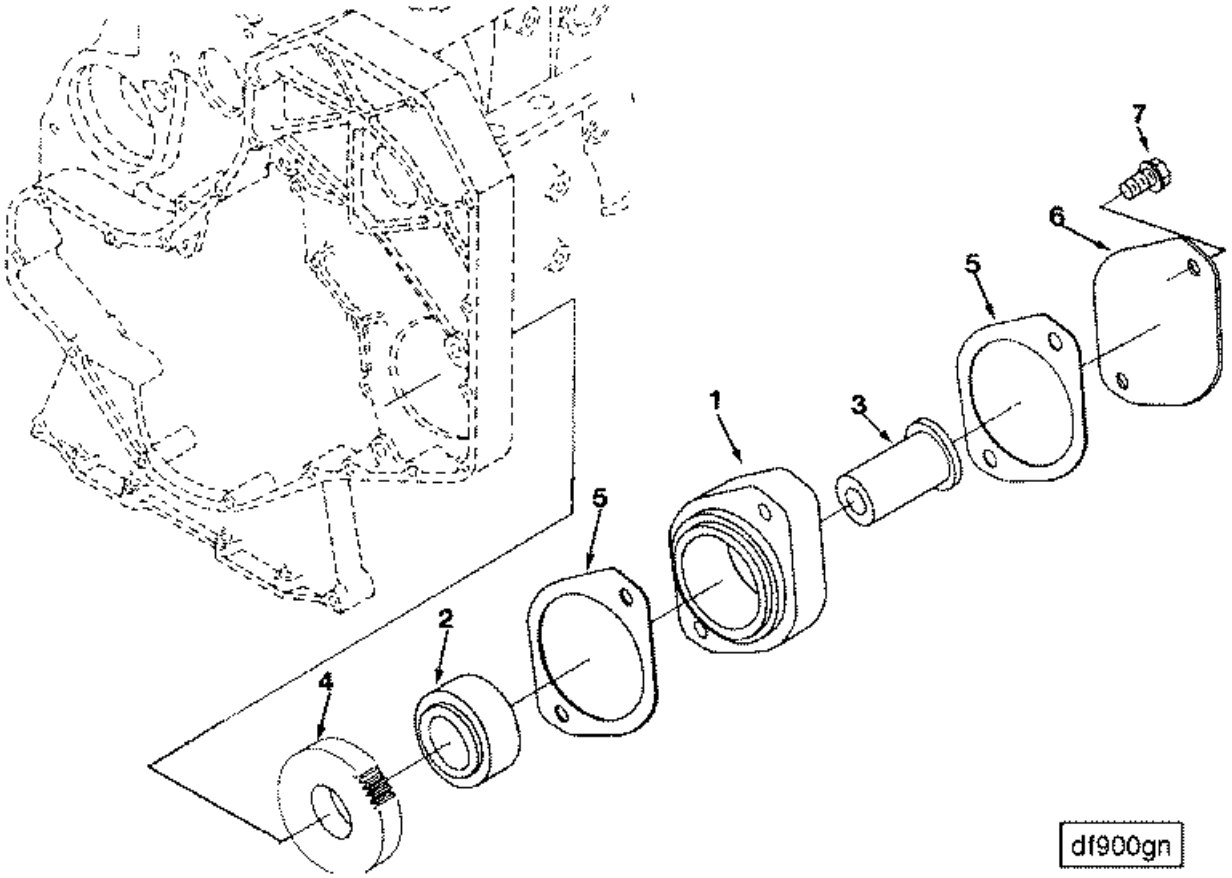
Fuel Pump Coupling

fp97917-06

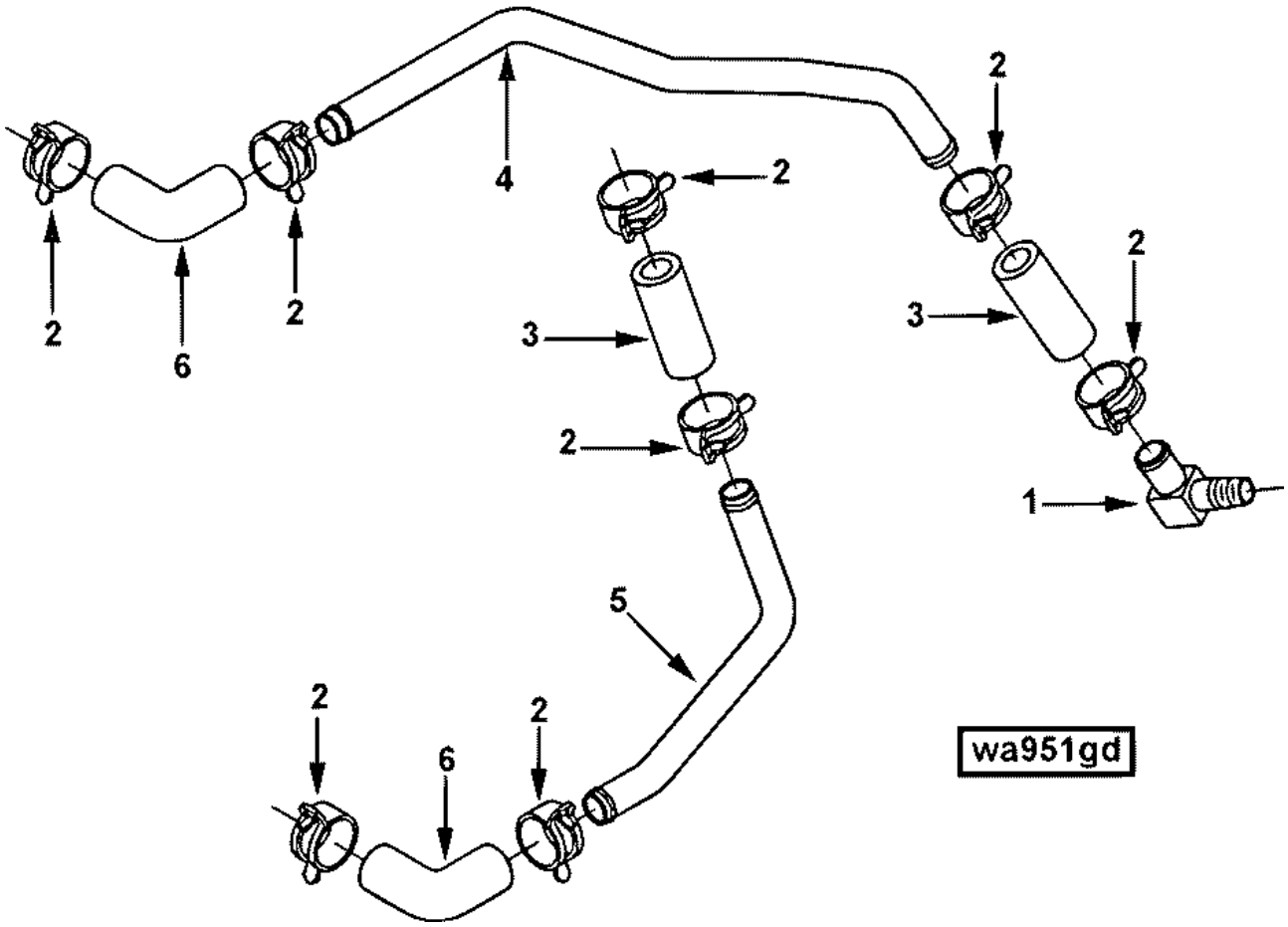
ref no	part number	part name	req	remarks
*	FP97917-06	Fuel Pump Coupling		Fuel Pump Coupling Engine Family: B Series Governor Type: RSV Air Compressor Support @ 185mm from FFOB: No Fuel Pump Supports Provided: No Boost Control Provision: Yes Engine Cylinders: 4 Engine Design Phase: Current Product Advertised Speed Restriction (<RPM): None Fuel Pump Mfg/Model: Bosch A Aspiration: Turbocharged Jacket Water Aftercooled NOx Level: 6.0 DEP may substitute 3282371 for 3907978.
1	68139	Elbow, Male Adapter	1	
2	3902662	Nut, Hexagon Flange	4	M10 X 1.50
3	3906619	Plug, Pipe	1	1/8 NPT
4	3907978	Stud	4	M10 x 1.50(Both Ends) x 50
5	3918536	Hose, Flexible	1	
6	3921556	Cap, Tube	1	7/16-20 Thd
7	3924346	Tee, Female Branch	1	
	3932321	Connector, Male	1	
8	3678925	Seal, O Ring	1	M10
9	3932320	Connector, Male	1	1/8 NPTF X M10 X 1.00
10	3934636	Gear, Fuel Pump	1	
11	3935032	Seal, Rectangular Ring	1	



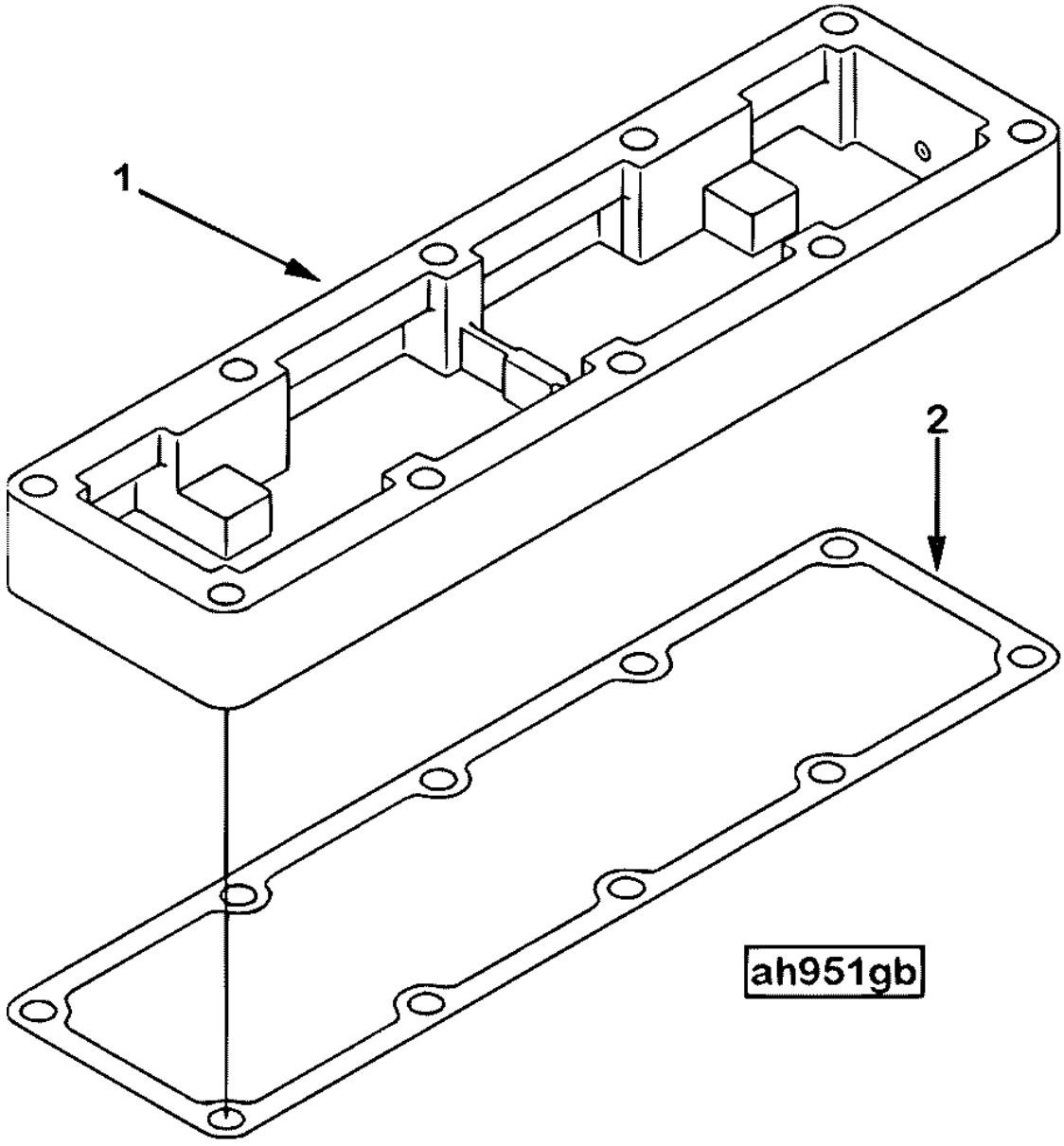
ref no	part number	part name	req	remarks
*	DF9005-03	Front Gear Train Accessory		Front Gear Train Accessory Drive Location: Gear Cover - Back Rear Flange SAE: 101-2 (SAE B) Accessory Drive Type: SAE 22-4 Rear Flange Mount Thread: Metric Maximum Torque: 105 lb.ft. Drive Offset: 0 deg Rear Flange Weight Limit: <21 lbs.- >31 lbs. Drive Rotation: Counter-Clock Mounting Fastener Type: Screws Application Restriction: N/A Engine Design Phase: Current Product Engine Families: B Series Effective Drive Ratio: .97:1 KCEC may use carburized gear P/N 3863321 in place of austempered gear, P/N 3928860. DEP may use 3929751 gasket between the Gear housing and accessory drive in place of 3008400 and 3 bond. Recommended to be used with customer supplied 'O' Ring.
	3924882	Drive, Hydraulic Pump	1	
1	3931088	Adapter, Hydraulic Pump	1	
2	3902601	Bearing, Roller	1	
3	3923242	Shaft, Accessory Drive	1	
4	3902595	Gear, Accessory Drive	1	
5	3929751	Gasket, Acc Drive Cover	1	
6	3914868	Plate, Cover	1	
7	3902115	Screw, Hex Flange Head Cap	2	M12 X 1.75 X 65
	3008400	Gasket, Hydraulic Pump	1	Service as 4089742
		$Service Parts		
	4089742	Kit, Vacuum Pump Repair	A/R	


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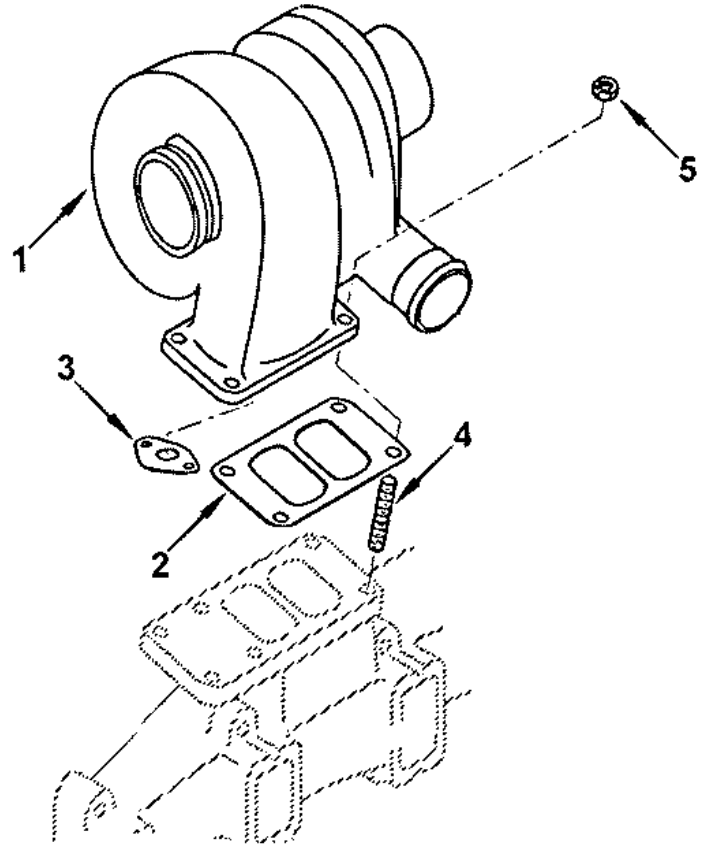
ref no	part number	part name	req	remarks
*	WA9739-01	Aftercooler Plumbing		Exhaust Manifold Type: Dry Restricted Alternator Moutning: N/A Exhaust Connection: N/A Works Only With Rear Expansion Tank: N/A DEP may use 3933519 hose, plain in place of 3918611.
1	3282444	Coupling, Elbow Hose	1	
2	3918163	Clamp, Hose	8	
3	3918611	Hose, Plain	2	
4	3284880	Tube, Aftercooler	1	
5	3933606	Tube, Aftercooler	1	
6	3934720	Hose, Elbow	2	



ref no	part number	part name	req	remarks
*	AH9062	Air Intake Heater		Grid Air Heater Engine Family: B Series Component Provided: Spacer Controls Provided: No Engine Design Phase: Current Product Engine Aspiration: Jacket Water Aftercooled Mounting location for WARNING label for Turbocharged and Charge Air Cooled engines, the warning label to be attached to the outboard side of the heater. For Jacket Water Aftercooled engines the warning label to be attached to the outboard side of the aftercooler.
1	3930133	Connection, Spacer	1	
2	3931605	Gasket, Int Manifold Cover	1	



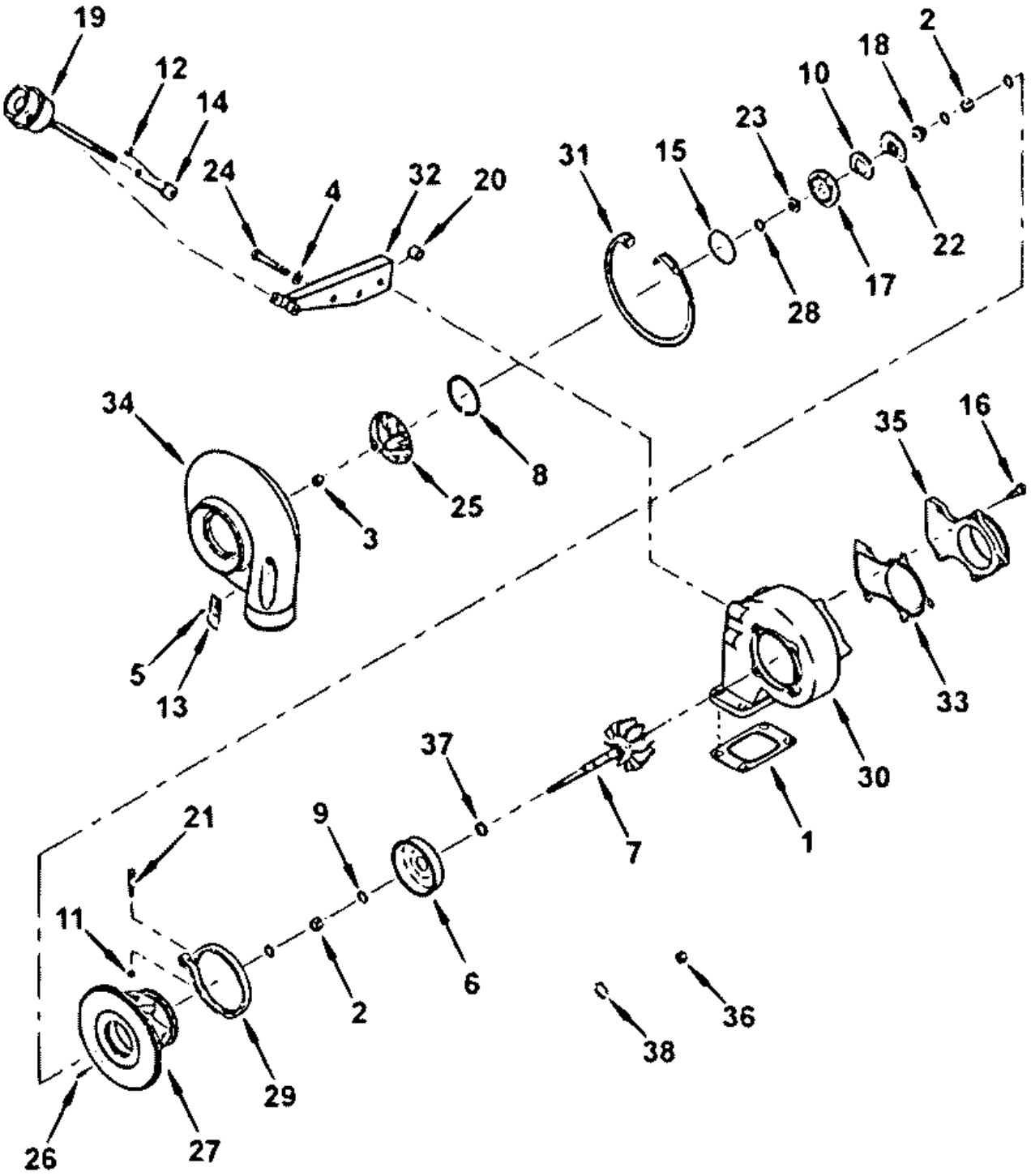
ref no	part number	part name	req	remarks
*	PP97307	Turbocharger		Turbocharger Turbocharger Location: HMFO Base ID17 Turbocharger: 3537751 Turbocharger Type: Wastegate Wastegate Pressure Setting (BAR): Turbo Model: HX30W Compressor Angle (shipping deg): 201 Turbine Angle (deg): 0 SPIG Orientation: 180 Deg. Engine Aspiration: Jacket Water Aftercooled Turbine Exhaust Outlet Type: Half Marmon Actuator Position: High Compressor Outlet Type: Hosebead
	3537753	Turbocharger	1	
	3802906	Turbocharger	1	
1	3537751	Turbocharger	1	Serviced as 3802906
2	3709861	Gasket, Turbocharger	1	Cummins Equiv. 3901356
3	3519807	Gasket, Turbocharger	1	Cummins Equiv. 3914388
4	3818823	Stud	4	M10 X 1.5-6G Both Ends
5	3818824	Nut, Hexagon Flange	4	M10 X 1.50



tb901gf

Turbocharger

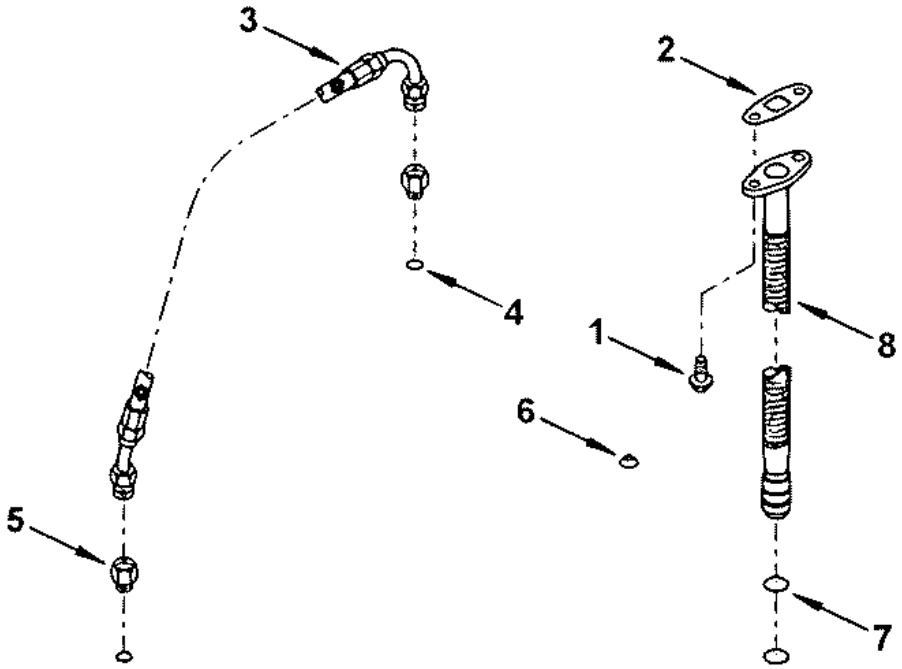
ref no	part number	part name	req	remarks
*	PP97307	Turbocharger		Turbocharger
	3802906	Turbocharger	1	
	3537751	Turbocharger	1	Serviced as 3802906
1	3535971	Washer, Plain	1	
2	3503100	Bearing, Turbocharger	2	
3	3503562	Nut, Lock	1	M7 X 1.00.
4	3504967	Washer, Plain	3	
5	3519163	Screw, Drive	2	
6	3519304	Shield, Turbocharger Heat	1	
7	3530522	Shaft & Wheel	1	
8	3527566	Ring, Retaining	1	
9	3762259	Ring, Retaining	4	
10	3528104	Baffle, Oil	1	
11	3531582	Nut, Regular Hexagon	1	
12	3528221	Ring, Retaining	1	
13	3527619	Dataplate	1	
14	3528177	End, Adjusting Link	1	
15	3528933	Seal, O Ring	1	
16	3530556	Screw, Hexagon Head Set	7	M8 X 1.25 X 20
17	3530923	Plate, Oil Seal	1	
18	3530924	Slinger, Oil	1	
19	3537561	Actuator, Turbocharger	1	
20	3532195	Spacer, Mounting	1	
21	3531598	Screw, Hexagon Head Set	1	
22	3531419	Bearing, Tur Thrust	1	
23	3534451	Collar, Thrust	1	
24	3532940	Screw, Hexagon Head Set	1	
25	3537538	Impeller, Tur Compressor	1	
	3536957	Housing, Tur Bearing	1	
^26	3522597	Pin, Roll	2	
^27	3536956	Housing, Tur Bearing	1	
28	3758848	Seal, Split Ring	1	
29	3531670	Clamp, V Band	1	
30	3535656	Housing, Turbine	1	
31	3535800	Ring, Retaining	1	
32	3535203	Bracket, Actuator	1	
33	3535001	Gasket, Adapter	1	
34	3536633	Housing, Compressor	1	
35	3527759	Connection, Adapter	1	
36	3528204	Nut, Regular Hexagon	2	1/4 - 28 UNF
37	3756754	Seal, Split Ring	1	


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ref no	part number	part name	req	remarks
*	TB9396-04	Turbocharger Location		Turbocharger Location Engine Family: B Series Cylinders: 4 Exhaust Outlet Location: HMFO Turbo Exh Loc from FFOB (mm): 111 Exh Vert from Crank C/L (mm): 550.3 Exh Horz. Crank C/L (mm): 194.1 Aspiration: Jacket Water Aftercooled Oil Supply Routing: Outboard Boost Line Pick-Up Size: 1/2 IN. NPTF Intake Cover Provided: Yes Turbocharger Type: Wastegate Engine Design Phase: Current Product Wastegate Bracket Orientation: 30 Degree Up Turbo SPIG Angle: 180 degree Additional Mounting Bosses: 0 Turbo Drain Location: Front Drain Bearing Housing Manufacturer: Holset CPR Angle: 201 Turbine Angle: 0 Turbo Drain Tube Type: Flexible Exhaust Support Flange: 2-M14 38.75mm Apart Boost Line Routing: External Alternator Support Provision: No Base Turbo ID17 Number: 3592015 3592121 DEP may substitute hose 3279245 in place of hose 3916166.
1	3008468	Plug, Pipe	1	1/2 NPT
2	3033033	Clamp, Hose	2	2 - 2 1/2 in
3	3278499	Washer, Plain	2	
4	3901448	Screw, Hex Flange Head Cap	8	M10 X 1.50 X 65
5	3901919	Manifold, Exhaust	1	
6	3901447	Screw, Hex Flange Head Cap	2	M8 X 1.25 X 75
7	3906619	Plug, Pipe	1	1/8 NPT
8	3909394	Draincock	1	1/8 NPTF
9	3910778	Decal	1	
10	3916166	Hose, Plain	1	
11	3927154	Gasket, Exhaust Manifold	4	
12	3929333	Aftercooler	1	
13	3930837	Screw, Hex Flange Head Cap	6	M8 X 1.25 X 50
14	3931264	Gasket, Connection	1	
15	3931605	Gasket, Int Manifold Cover	1	
16	3931998	Connection, Air Crossover	1	

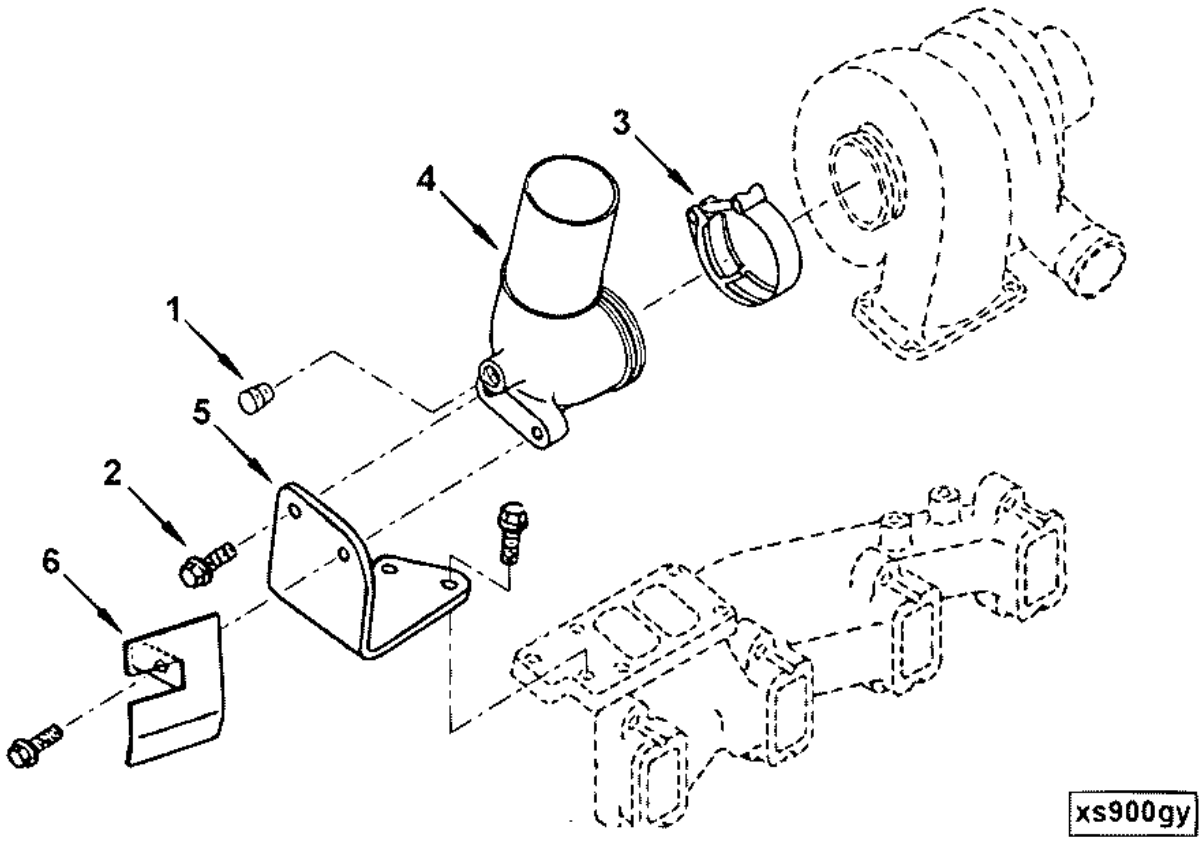
Turbocharger Plumbing

ref no	part number	part name	req	remarks
*	TP9701-05	Turbocharger Plumbing		Turbocharger Plumbing Structure Code: 02 EBM Engine Cylinders: 4 Engine Family: B Series Turbo Exhaust Location: HMFO Oil Filter Mounted Location: Vertical Manifold Type: Dry Turbo Supply Line Routing: Outboard Block Drain Location: Front drain Fuel Type: Diesel Bearing Housing Manfacturer: Holset Turbo Drain Line Type: Flexible
1	3900630	Screw, Hex Flange Head Cap	2	M8 X 1.25 X 20
2	3942725	Gasket, Oil Drain	1	
3	3913759	Hose, Flexible	1	
	3919687	Connector, Female	2	
4	3037236	Seal, O Ring	1	
5	3284244	Connector, Female	1	Replace With 3919687
6	3924389	Washer, Sealing	2	
	3934085	Connection, Tur Oil Drain	1	
7	3928624	Seal, O Ring	2	
8	3934092	Connection, Tur Oil Drain	1	

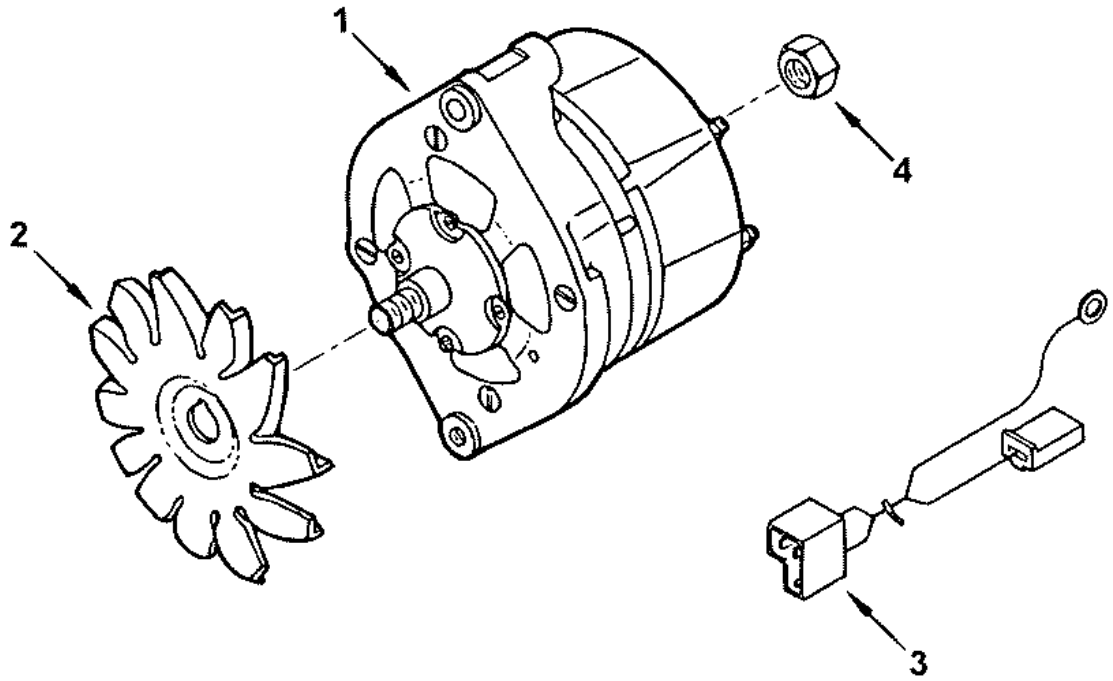


tp950gm

ref no	part number	part name	req	remarks
*	XS9168-02	Exhaust Connection		Exhaust Connection Engine Design Phase: Current Product Engine Family: B Series Support Flange Bolt Pattern: 2-M14 38.75mm apart Exhaust Manifold Type: Dry Connection Orientation: 90 deg vertical Mounting Flange to Turbo: 1/2 Marmon Turbocharger Type: Wastegate Restricted Cylinders: 4 Maximum Moment Load (in-lbs): 0 Turbo Connection: 78.86mm Restricted Turbocharger Location: HMFO Restricted Turbo Model: HX30
1	S 910 B	Plug, Pipe	1	1/4 NPT
2	3902460	Screw, Hex Flange Head Cap	4	M10 X 1.50 X 25
3	3903652	Clamp, V Band	1	
4	3910992	Pipe, Exhaust Outlet	1	
5	3931020	Brace, Exh Out Connection	1	
6	3934100	Shield, Heat	1	

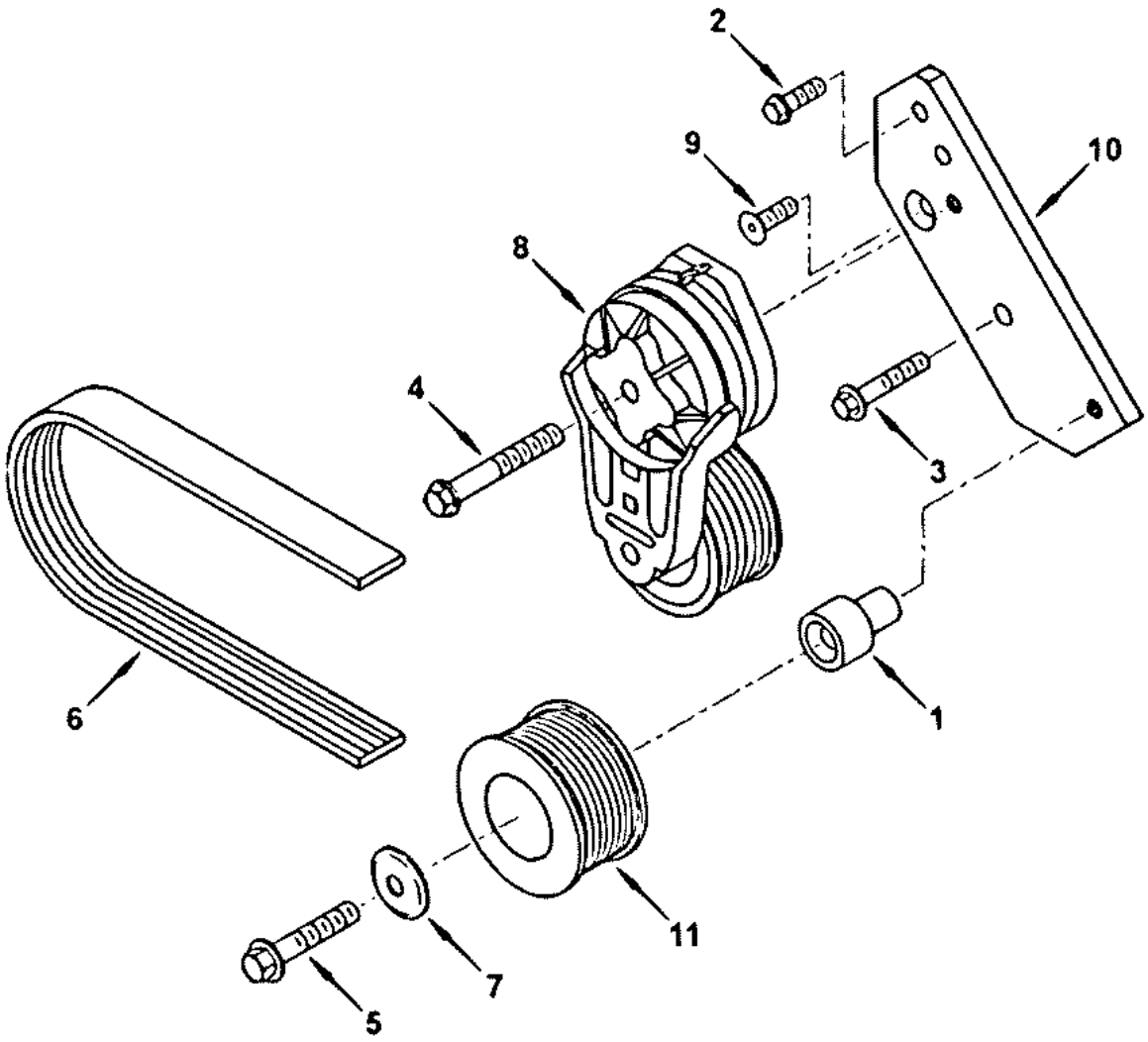


ref no	part number	part name	req	remarks
*	EE9023-03	Alternator		Alternator Alternator Manufacturer/Model: Bosch K-1 Voltage: 12 Amperage: 65 Functions W/Horizontal Oil Filter: Yes Alternator Body Length (mm): 128 Design Phase: Current Product Engine Family: B Series C Series
1	3920679	Alternator	1	
2	3904981	Fan, Alternator	1	
3	3920831	Harness, Wiring	1	
4	3935125	Nut, Hexagon Flange	1	



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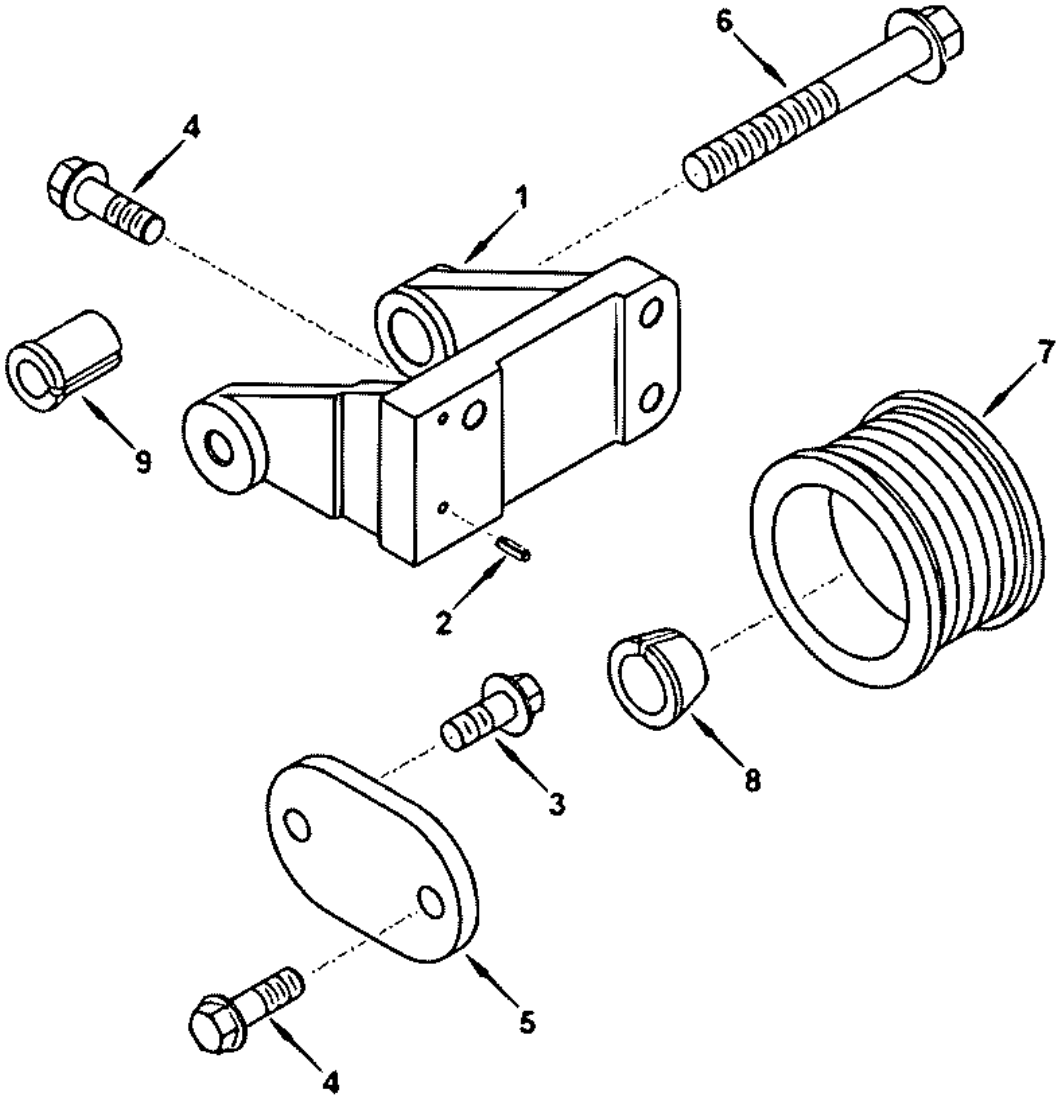
ref no	part number	part name	req	remarks
*	EH9993-07	Alternator Drive		Alternator Drive Tensioner Pulley Type: Standard Water Pump Pulley Diameter (MM): 88.00 Belt Supplier: Cummins Damper Pulley Effective Diameter (MM): 173.76 Engine Design Phase: Current Product Tall Tensioner Bracket: No Engine Family: B Series Alternator Manufacturer/Model : Bosch K-1 Delco Remy 15 SI Delco Remy CS 130 DEP may substitute 3282081 Hex Flange Head Capscrew in place of 3904446.
1	3935229	Shaft, Idler	1	
2	3900631	Screw, Hex Flange Head Cap	1	M8 X 1.25 X 25
3	3901445	Screw, Hex Flange Head Cap	1	M8 X 1.25 X 45
4	3904446	Screw, Hex Flange Head Cap	1	M10 X 1.50 X 70
5	3900635	Screw, Hex Flange Head Cap	1	M10 X 1.50 X 60
6	3911587	Belt, V Ribbed	1	
7	3935013	Shield, Dust	1	
8	3936201	Tensioner, Belt	1	
9	3925186	Screw, Flat Head Cap	1	M8 X 1.25 X 25
10	3926056	Bracket, Belt Tensioner	1	
11	3935015	Pulley, Idler	1	


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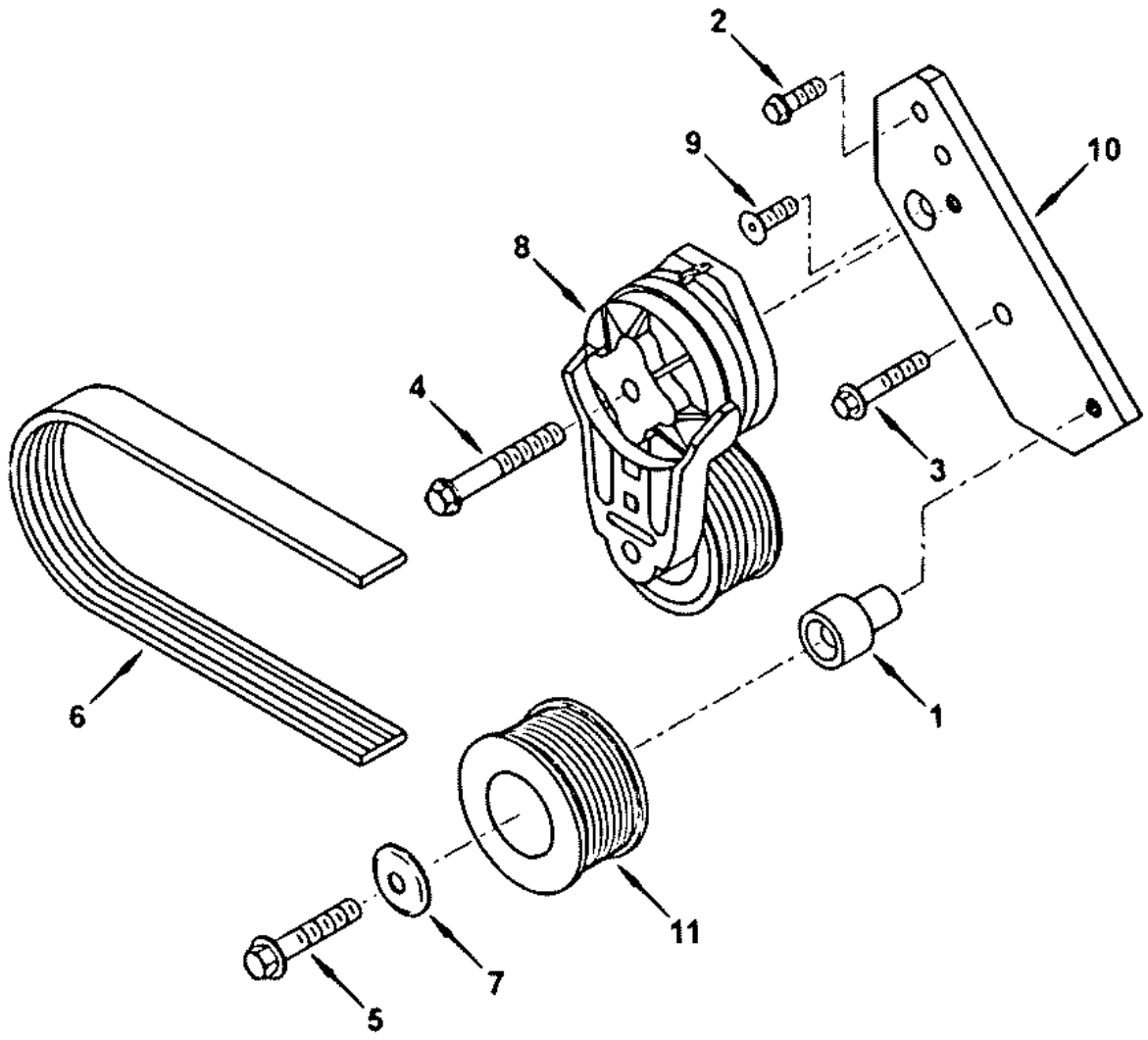
Alternator Location

ref no	part number	part name	req	remarks
*	EH9001-01	Alternator Location		Alternator Location Engine Design Phase: Current Product Pulley Retainer Provided: Yes Alternator Pulley Provided: Yes Belt Supplier: Cummins Belt Tensioner Supplier: Cummins Alternator Drive Speed: 2.9 Alternator Mount Type: 2 IN. spool Damper Pulley Effective Diameter (mm): 173.76 Alternator Driven by AUX Belt: No Required Tensioner Pulley Material: Steel Pad for Freon Compressor Provided: No Engine Family: B Series Alternator Manufacturer/Model: Bosch K-1, Lucas TVS/SA 23-12V, Lucas TVS/SA 23-24V Required Water Pump Pulley Type: Hardened, Standard Stud for Wiring Harness Attachment: No ALT Tail Support Required: No REF. Compressor MTG Hardware Included: No Tall Tensioner Bracket: No.
	3285113	Support, Alternator	1	
1	3285100	Support, Alternator	1	
2	3520815	Pin, Roll	2	
3	3900630	Screw, Hex Flange Head Cap	2	M8 X 1.25 X 20
4	3900631	Screw, Hex Flange Head Cap	3	M8 X 1.25 X 25
5	3903089	Brace, Alternator	1	
6	3908226	Screw, Hex Flange Head Cap	1	M10 X 1.50 X 95
7	3908560	Pulley, Alternator	1	60mm dia
8	3908563	Retainer, Pulley	1	
9	3910715	Spacer, Mounting	1	

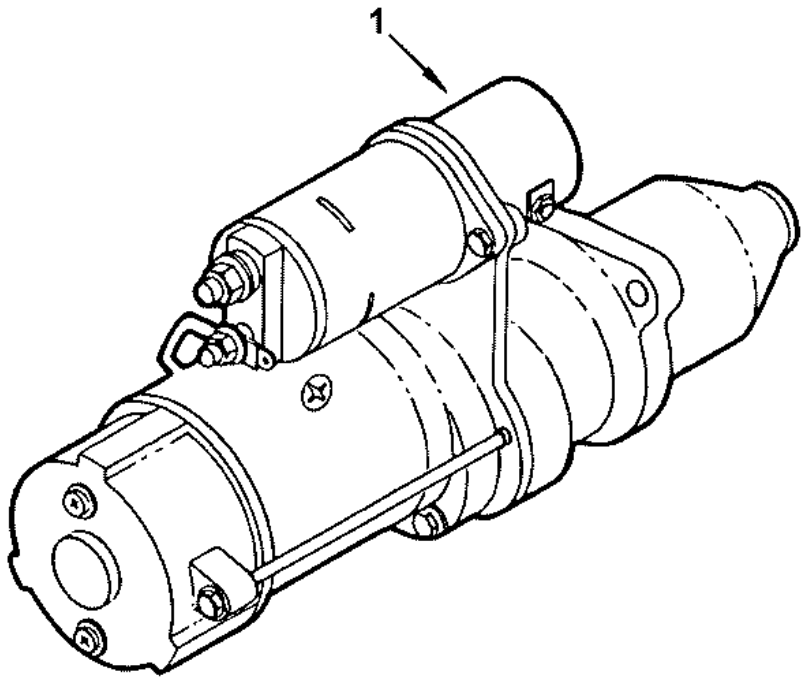
Group 13.02.3	50	Option No
Picture eh958gg	**Alternator Location**	eh9001-01



ref no	part number	part name	req	remarks
*	EH9993	DRIVE,ALTERNATOR		Alternator Drive 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 K-1, Delco Remy CS130, Delco Remy 15 SI DEP may substitute 3282081 hex flange head capscrew in place of 3904446. Brazil may use pn 3971876 instead of 3978019 Brazil may use pn 3967188 instead of 3937553 Brazil may use pn 3911587 instead of 3288689.
1	3935229	Shaft, Idler	1	
2	3900631	Screw, Hex Flange Head Cap	1	M8 X 1.25 X 25
3	3901445	Screw, Hex Flange Head Cap	1	M8 X 1.25 X 45
4	3282081	Screw, Hex Flange Head Cap	1	M10 X 1.50 X 75
5	3900635	Screw, Hex Flange Head Cap	1	M10 X 1.50 X 60
6	3288689	Belt, V Ribbed	1	
7	3935013	Shield, Dust	1	
8	3978022	Tensioner, Belt	1	
9	3925186	Screw, Flat Head Cap	1	M8 X 1.25 X 25
10	3926056	Bracket, Belt Tensioner	1	
11	3978019	Pulley, Idler	1	


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eh957gd

ref no	part number	part name	req	remarks
*	ST9039-01	Starting Motor		Starting Motor Mfg: Delco-Remy Volt: 12 Model/Type: 28MT 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 (mm): 13.00 Angle Limitation High (deg): 135 Angle Limitation Low (deg): 315 Supply Method: Mounted Exposed Starter Length (mm): 243.6 Starter Pinion Tooth Blank: 11 Starter Pinion Offset (mm): 0 Starter Solenoid Angle (deg): 315 Starter Body Diameter (mm): 89.92 Engine Family: B Series
1	3916854	Motor, Starting	1	Purchase 3964427 or 3964428



st910gc

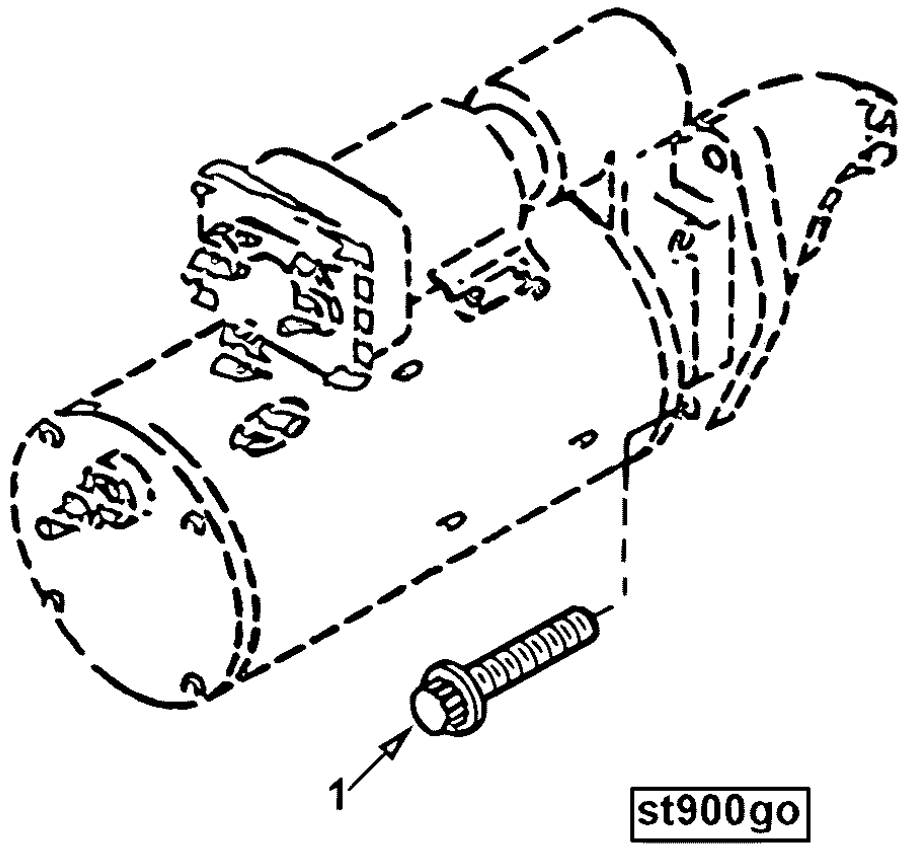
Group 13.05.1 53 Option No

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



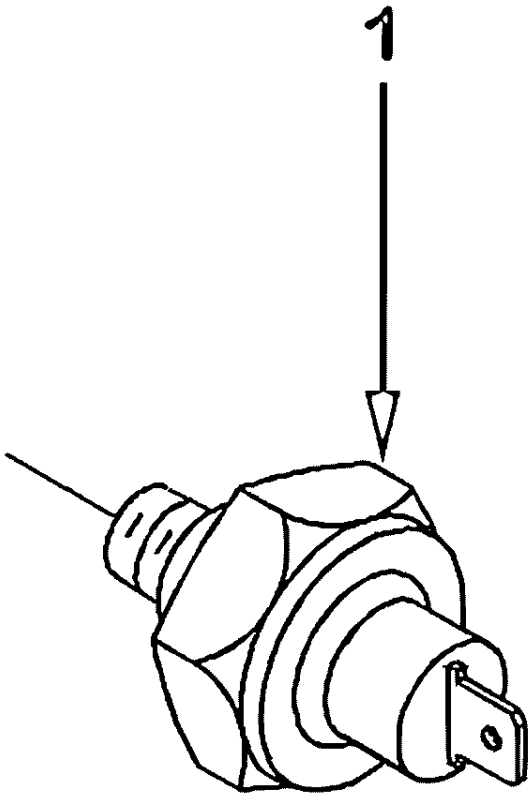
Group 15.01 | 54 | Option No

Picture sd950gk

Oil Pressure Sensor

eo9060

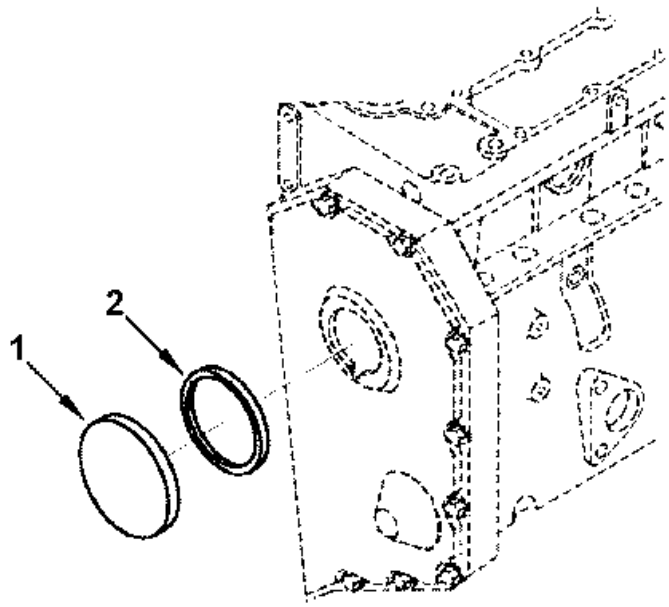
ref no	part number	part name	req	remarks
*	EO9060	Oil Pressure Sensor		Pressure Sensor Engine Family: B Series Sensor Voltage: 12 24 Sensor Activate PSI: 10 Sensor Deactivation PSI: 7 Sensor Thread: 1/8x27 NPTF Sensor Connection: 1/4in. male spade sensor to be mounted in the oil filter head.
1	3282126	Switch, Pressure	1	



sd950gk

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

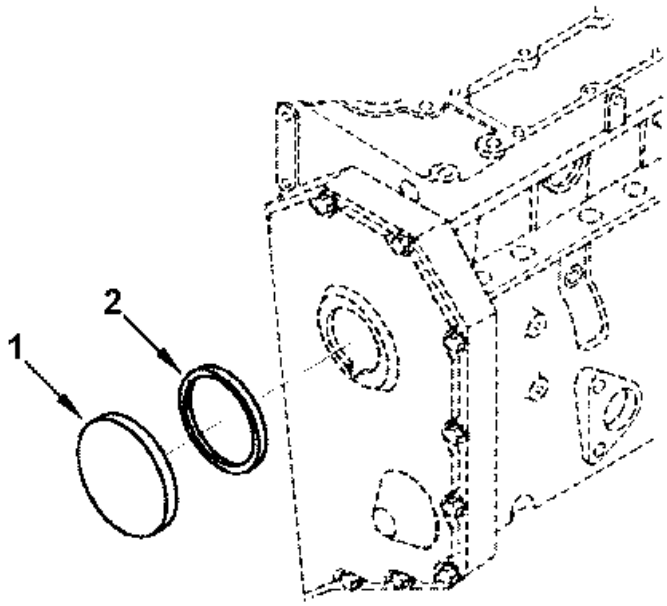
Group 15.06 56 Option No

Picture ei930gb

Mechanical Tachometer Drive

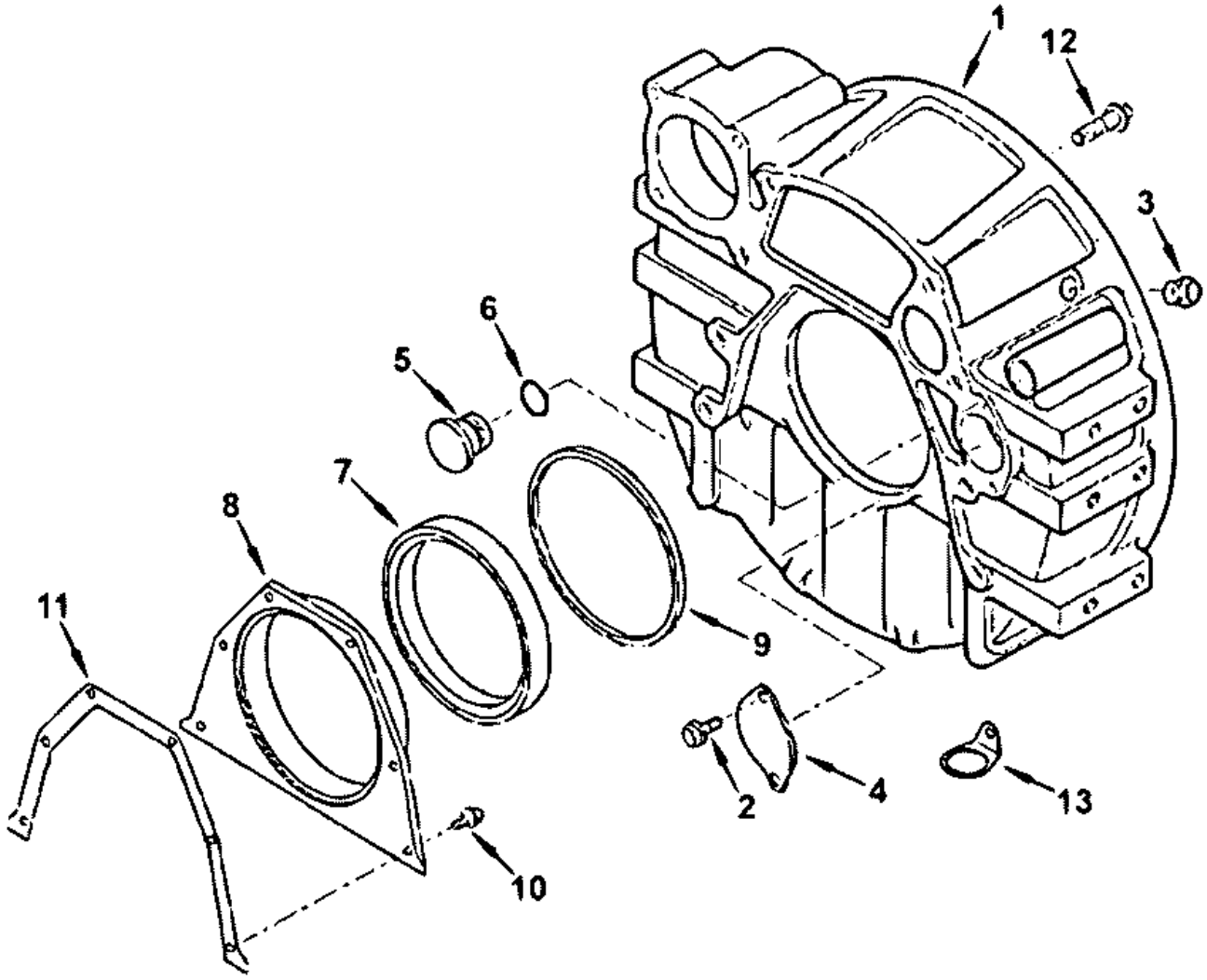
ei9701

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	



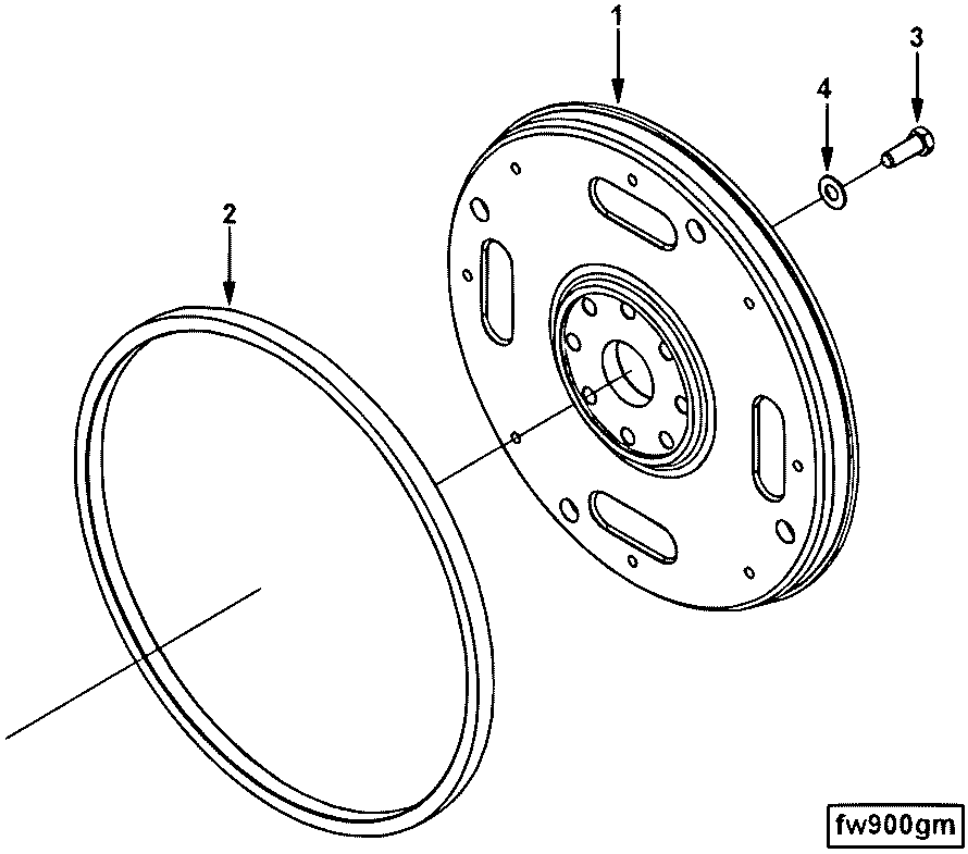
ei930gb

ref no	part number	part name	req	remarks
*	FH9002-03	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 St Quadrant: 1st 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	3937426	Housing, Flywheel	1	
2	3912072	Screw, Self Tapping Metal	2	M8 X 1.25 X 15
3	3904181	Plug, Threaded	1	3/4 - 16 UNF
4	3925234	Plate, Cover	1	
5	3910248	Plug, O Ring	1	
6	3910260	Seal, O Ring	1	
	3946090	Cover, Rear	1	
7	3933262	Seal, Oil	1	Serviced as 3934486
8	3936895	Cover, Rear	1	
9	3912473	Seal, Rectangular Ring	1	
10	3913638	Screw, Hex Flange Head Cap	6	M6 X 1.00 X 16
11	3928493	Gasket, Rear Cover	1	
12	3920447	Screw, Hex Flange Head Cap	8	M12 X 1.75 X 40
13	3928989	Clip	1	
		$Service Parts		
	3934486	Rr Crankseal Serv Kit	A/R	
7	3933262	Seal, Oil	1	Serviced as 3934486
	3904325	Tool, Seal Installation	1	
	3909409	Tool, Seal Installation	1	


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Flywheel

ref no	part number	part name	req	remarks
*	FW9017-02	Flywheel		Flywheel Type: Flywheel Housing SAE Size or Type: SAE 3 Intended Drive Hardware: 10" & 11 1/2" OC Clutch Material Specification: 40,001 Ring Gear Pitch: 10/12 Ring Gear Pitch Diameter: 403.86 mm (15.9") Ring Gear Tooth Count: 159 Crank Flange To Ring Gear Leading Edge (mm): 16.71 Maximum RPM: 2940 Pilot Bearing Bore Diameter (mm): 71.973 Clutch Mounting Bolt Circle (mm): 333.38 Clutch Mounting Hole Count: 16 Clutch Mounting Hole Nomenclature: 3/8-16 UNC-2B Moment of Inertia (KG/M2): 0.56 Required Starter Center Distance (mm): 216.40 Applicable Engine Family: "B" Series Multiple Clutch Face Bolt Circle
	3936821	Flywheel	1	
1	3936820	Flywheel	1	
2	3901774	Gear, Flywheel Ring	1	
3	3901395	Screw, Hexagon Head Cap	8	M12 X 1.25 X 32
4	3900269	Washer, Plain	8	M12


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fw900gm

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 60 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	

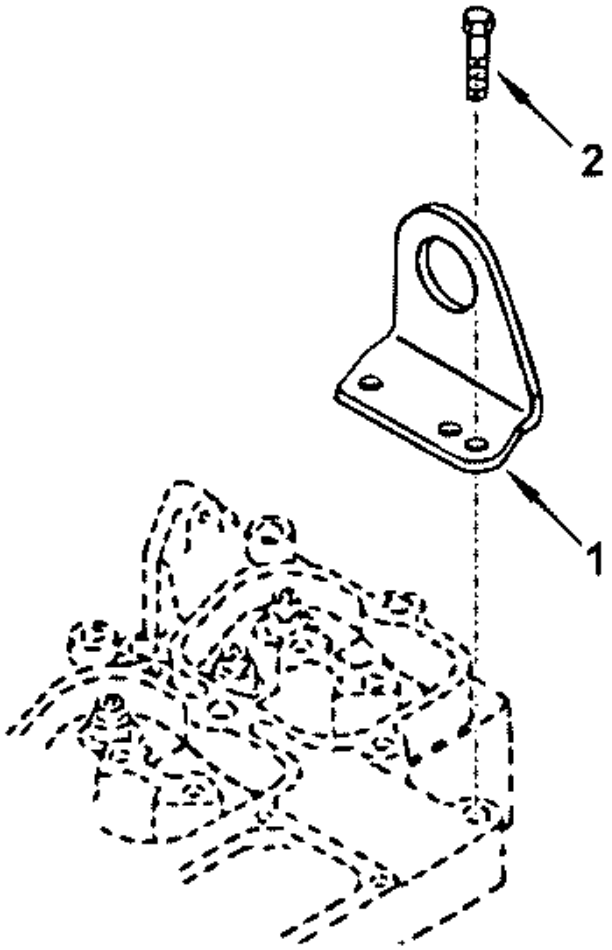
Group 17.06 61 Option No

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 62 Option No

Picture null

Rating,Fuel

fr90024

ref no	part number	part name	req	remarks
*	FR90024	RATING,FUEL		Fuel Rating Advertised HP: 110 @ 2200 RPM Secondary Adv HP: N/A @ N/A RPM Governor Regulation (%): 8 Torque Peak (lb ft): 332 @ 1500 Fuel Pump Manufacturer/Model: Bosch A Fuel Pump Mounted Angle: 35 degree Governor Type: RSV Boost Control Provided: Yes Fuel Pump Type: Inline High Pressure Fuel Line ID (mm): 1.8mm (0.07in) Low Idle Setting: 950 High Idle: 2457 Engine Application: Nonroad CPL: 2351 Certified By: EPA,CARB Engine Cylinders: 4 Engine Family: B Series Structure Code: 02 EBM Manufacturer of Record: Cummins, J I Case, Komatsu Fuel Type: Diesel Peak Power: 110 Governor Break RPM: 2275 Derate to No Air Curve Provision: 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 Duty Cycle Rating: Continuous Cert Level: Tier 1,Tier 1 Special Allowance: TPEM R24.03 Approved: Cummins, J I Case.