RUTHZIL TRATOR COMERCIAL DE PEÇAS LTDA 11 97083-6812 ROLANDO

Customized Parts Catalog for Engine Model

QSB6.7 CM850

CONSTRUCTION

Prepared Specifically for:

Engine Serial Number: **73099790**

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

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Bulletin No.73099790 Printed in U.S.A.

Cummins Inc.

New Parts Warranty
Midrange

COVERAGE

PRODUCTS WARRANTED

This warranty applies to New Parts marketed by Cummins for its A, B, and C Series engines. It applies anywhere in the world where service is available through a Cummins distributor or A, B, and C Series dealer.*

COVERAGE

This warranty covers any failures of parts on or after December 1, 1986, which result, under normal use and service, from defects in workmanship or material (Warrantable Failures). The coverage extends six months from the date of first installation.

This warranty continues to all subsequent Owners until the end of the period of coverage.

CUMMINS RESPONSIBILITIES

Cummins will pay for all parts and labor needed to repair the damage to the engine resulting from the Warrantable Failure. All labor costs will be paid in accordance with Cummins published Standard Repair Time guidelines.

Cummins will pay for the lubricating oil, antifreeze, filter elements, and other maintenance items that are not reusable due to the Warrantable Failure.

Cummins will pay reasonable labor costs for engine removal and reinstallation when necessary to make the warranty repair.

OWNER RESPONSIBILITIES

At the time when the parts are installed, Owner is responsible for the preparation of a written record containing the following: (1) the date of installation of the parts; (2) the engine serial number; (3) the engine miles, hours or kilometers of operation; (4) the parts installed, and (5) the location of the parts in the engine. The purpose of this record is to protect Owner's interests and support any claim for a Warrantable Failure.

Owner is responsible for the operation and maintenance of the engine as specified in Cummins Operation and Maintenance Manuals.

Before expiration of the warranty, Owner must give notice to a Cummins distributor or A, B, and C Series dealer* of a failure considered to be warrantable and deliver the engine to such facility for repair.

Owner is responsible for the cost of lubricating oil, antifreeze, filter elements and other maintenance items replaced during warranty repairs except where such items are not reusable due to a Warrantable Failure.

Owner is responsible for communication expenses, meals, lodging and similar costs incurred by Owner as a result of a Warrantable Failure. Owner is responsible for non-engine repairs and for "downtime" expenses, cargo damage and all business costs and losses resulting from a Warrantable Failure. **CUMMINS IS NOT RESPONSIBLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.**

(In the United States, some states do not allow the exclusion or limitation of incidental or consequential damages relating to Consumer Products, so the above limitation or exclusion may not apply to you.)

LIMITATIONS

Cummins is not responsible for failures resulting from Owner or Operator abuse or neglect, such as: operation without adequate coolant or lubricants; overfueling; overspeeding; lack of maintenance of lubricating, cooling or air intake systems; improper storage, starting, warm-up, run-in or shutdown practices. Cummins is also not responsible for failures caused by incorrect fuel, or by water, dirt or other contaminants in the fuel.

Except for fuel pumps, Cummins does not warrant parts supplied by Cummins which bear the name of another company. These parts are warranted by their manufacturers and not by Cummins. This category of parts includes, but is not limited to: hydraulic pumps, alternators, starters, fans, air conditioning compressors, clutches, filters, transmissions, torque converters, marine gears, air cleaners and non-Cummins air compressors, engine compression brakes, and steering pumps.

Parts used in warranty repairs may be new Cummins, Cummins approved rebuilt parts, or repaired parts. Cummins is not responsible for failures resulting from the use of parts not approved by Cummins.

Before a claim for excessive oil consumption will be considered, Owner must submit adequate documentation to show that consumption exceeds Cummins published standards.

This warranty does not apply to parts furnished by Cummins at no charge to the Owner.

THIS WARRANTY IS THE SOLE WARRANTY MADE BY CUMMINS IN REGARD TO THESE PARTS. CUMMINS MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, OR OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

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Customer Service Information

This Customized Parts Catalog contains parts information for the following Cummins Engine:

Engine Data

Model Number	QSB6.7 CM850
Serial Number	73099790
Shop Order Number	SO24151
Build Plant	CONSOLIDATED DIESEL CO.
Build Date	01JUN10
Fuel Pump Part Number	5256608
Fuel Pump Calibration	GY38
Engine Configuration Number	D313013CC08
CPL Number	CPL8610

Certain basic engine components have been matched to give optimum performance to your engine. The part numbers listed in this catalog for these components are for a standard engine configuration. When ordering any of the Control Parts List (CPL) components listed below, please order by part description and engine serial number. Reference to the CPL number stamped on the engine data (name) plate will also help identify the proper service parts for your engine.

This catalog was compiled using the most current information as of 16-FEB-11.

USER INFORMATION

. Parts numbers appearing in ( ) are for identification purposes only and should not be used when ordering service replacement parts.

. The reference numbers appearing on the art pages is for publication use only.

. Assembly content is shown by part number indentation.

. Options are engineered production part groupings, specifically used for compiling engine orders.

. Option numbers are for reference only and are not sold for service.

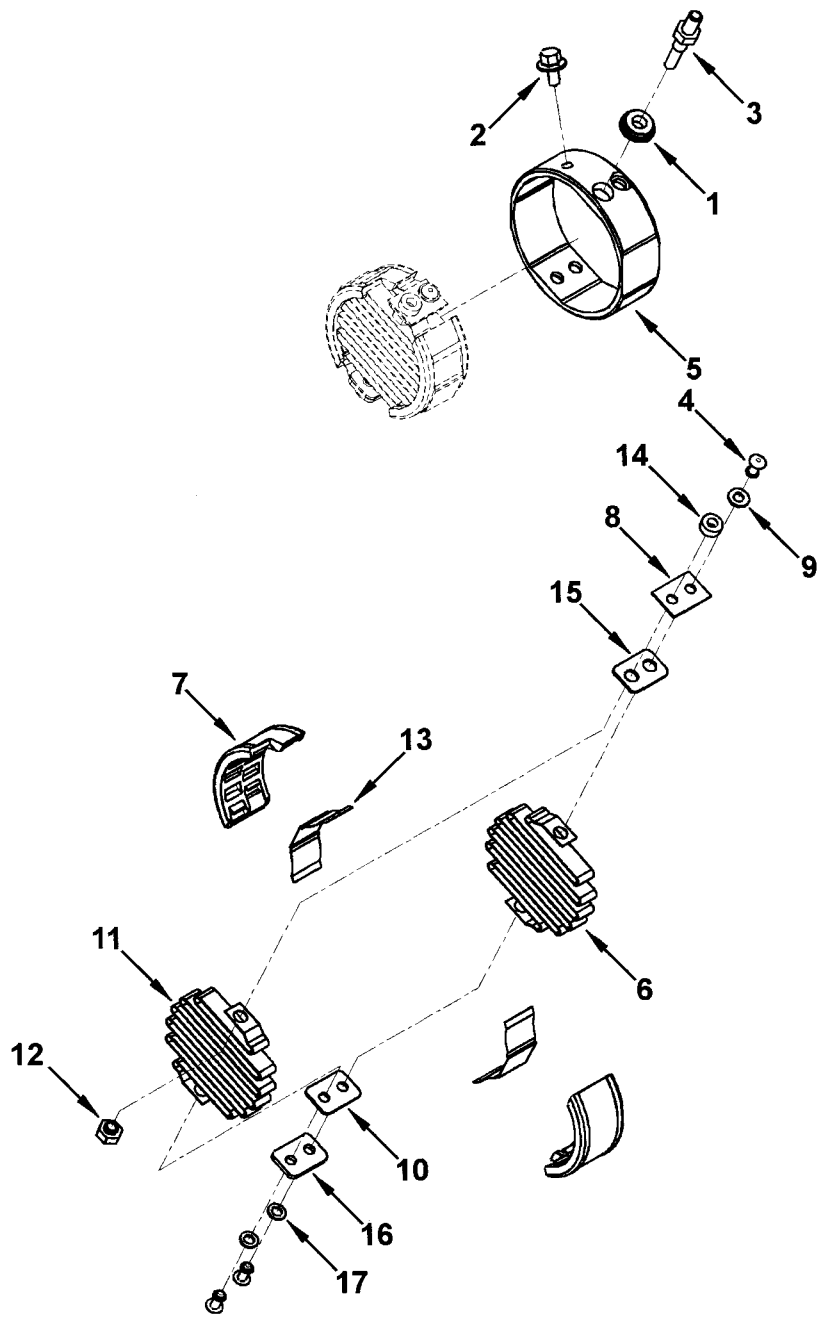
. Use assembly and not option content to determine service parts replacement.

. Always specify engine model and serial number when ordering parts from this catalog.

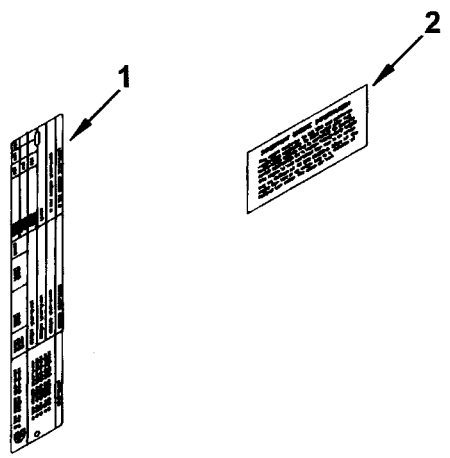
. Continual product improvement causes the obsoletion and replacement of part numbers. Service Parts you receive may not be the part number as those listed in this parts catalog.

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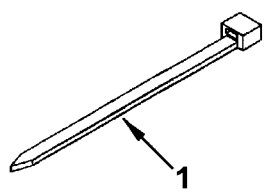

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Ref No.	Part Number	Part Name	Req	Remarks
		AIR HEATER STARTING AID		
		OPTION AH9161		Air Heater Starting Aid
				air heater type: Electric grid Voltage: 12volt Amperage: 125 A ground type: Earth return - internal Control Provided: No Engine Family: "B" Series earth return only decal: Place the warning label on the round surface of air transfer pipe. The label should be placed after painting DEP will omit 4938740 tag instruction from u.k option to comply with European legislation.
1	4896355	Retainer, Cover	1	
2	3900625	Screw, Hex Flange Head Cap	1	M6 X 1.00 X 10
3	4940117	Screw, Hex Flange Head Cap	1	
	4941310	Aid, Starting	1	
4	(4934489)	Rivet	3	
5	4938354	Housing, Starting Aid	1	
6	4938355	Element, Heating	1	
7	4938357	Retainer, Element	2	
8	4938367	Washer, Plain	1	
9	4938360	Washer, Insulating	1	
10	4938368	Washer, Insulating	1	
11	4938356	Element, Heating	1	
12	4941307	Adapter, Elc Connector	1	
13	4938358	Spring, Leaf	2	
14	4938359	Washer, Insulating	1	
15	4938369	Retainer, Cap Screw	1	
16	4938362	Washer, Plain	3	
17	4938370	Washer, Plain	2	



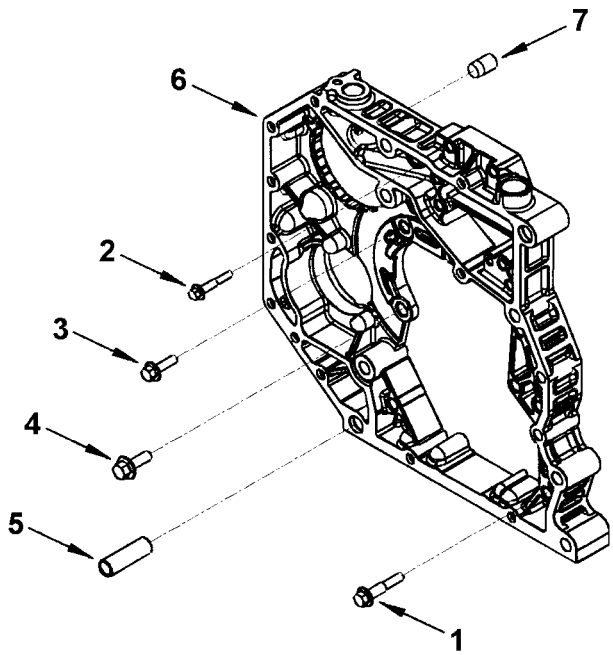
ap950go

Ref No.	Part Number	Part Name	Req	Remarks
		AGENCY APPROVAL		
		OPTION AP9900		Agency Approval Certified By: Mep, EPA, CARB, Eu Application: Nonroad cert level: Stg II, tier 3, tier 3, stg iiia special variant dataplate content: In place of 4989273 DEP May Use: 4996959 kcec may use: 5253040 and 5258623 variant chinese nameplate content: In place of 5260014 DEP May Use: 5262967 kcec may use: 5260840 For engines with fuel pump to be mounted/ attached on the rear gear housing, dataplate and nameplate to be mounted and centered on valve cover in the sunken flat section.
1	5260014	Nameplate	1	
2	4989273	Dataplate	1	



ap951gj

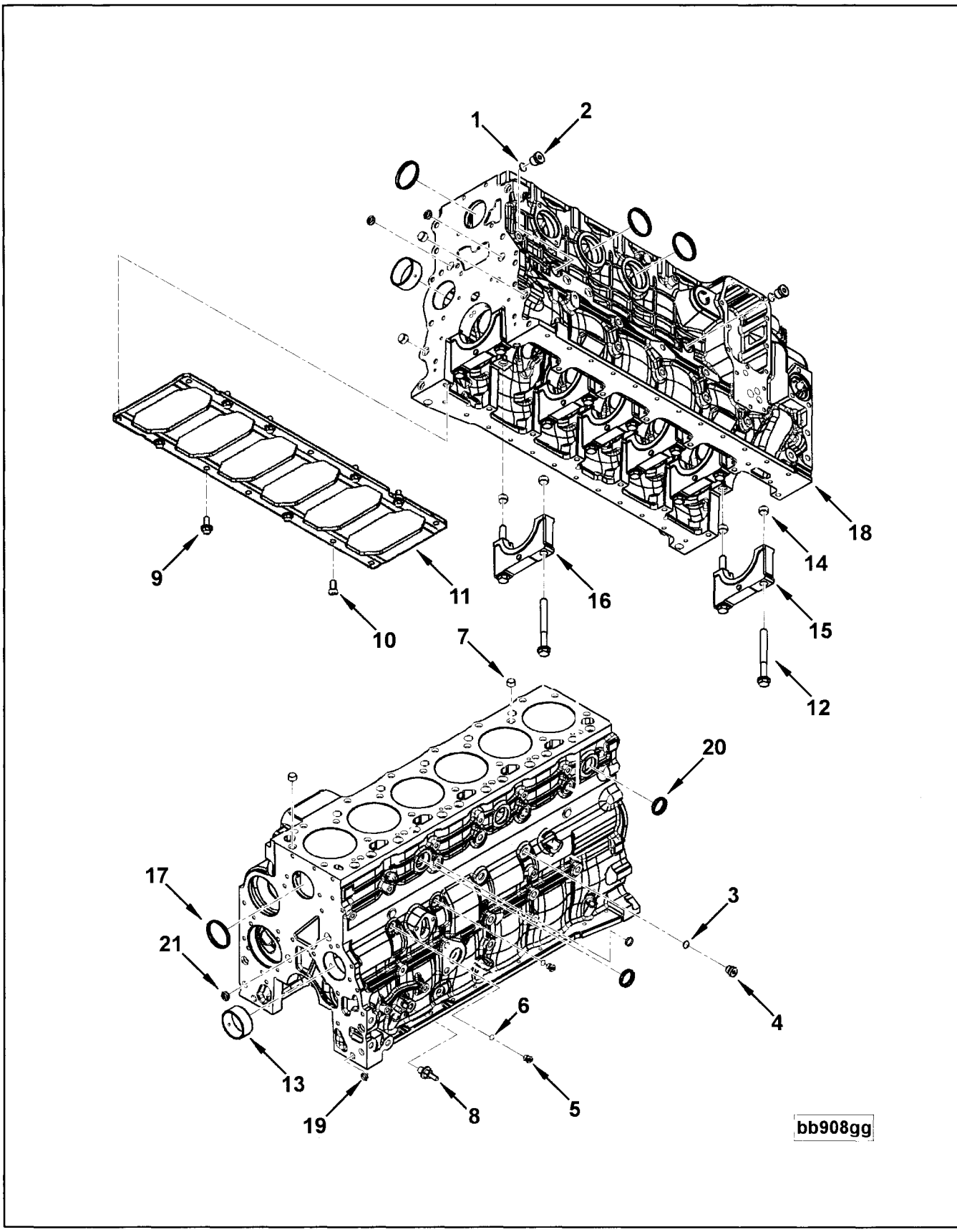
Ref No.	Part Number	Part Name	Req	Remarks
		INCORPORATION DOCUMENTATIO		
		OPTION AP9980		Incorporation Documentation
				Certification Agency: European Commission directive: 2006/42/EC Additional Information: A letter of conformity is supplied with the engine stating this product meets the declaration of incorporation in accordance with e.C. Machinery directive 2006/42/EC. This engine meets the requirements of the directives for machines which are to be incorporated into a final product.
1	201351	Clamp, Wire Tie	1	



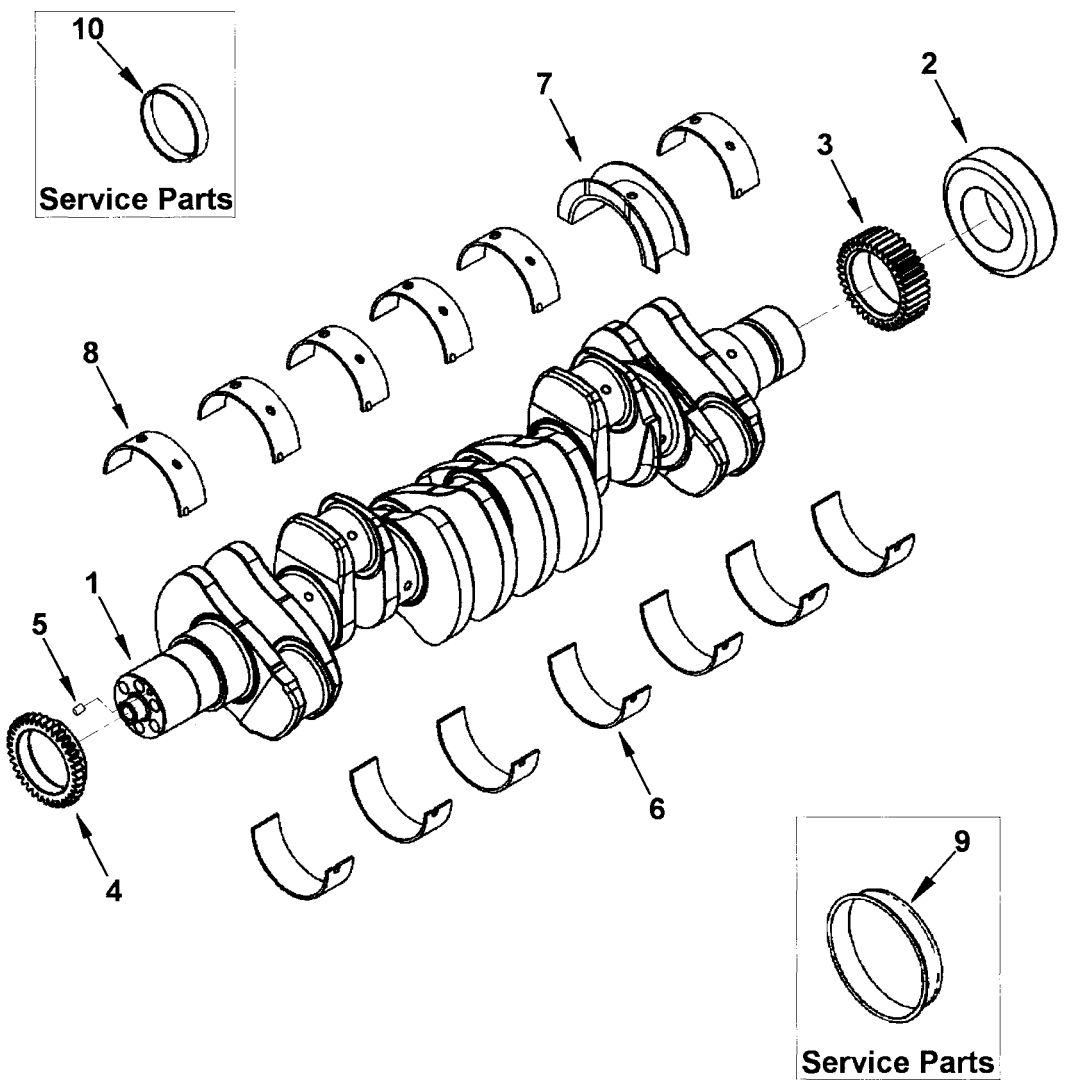
bb903gl

Ref No.	Part Number	Part Name	Req	Remarks
		REAR GEAR HOUSING		
		OPTION BB9131		Rear Gear Housing
1	3918153	Screw, Hex Flange Head Cap	3	M10 X 1.50 X 50
2	3901445	Screw, Hex Flange Head Cap	4	M8 X 1.25 X 45
3	3903112	Screw, Hex Flange Head Cap	2	M10 X 1.50 X 30
4	3910495	Screw, Hex Flange Head Cap	1	M12 X 1.75 X 30
	4936423	Housing, Gear	1	
5	3954616	Dowel, Ring	2	
6	(4936420)	Housing, Gear	1	
7	(4929128)	Insert, Threaded	2	

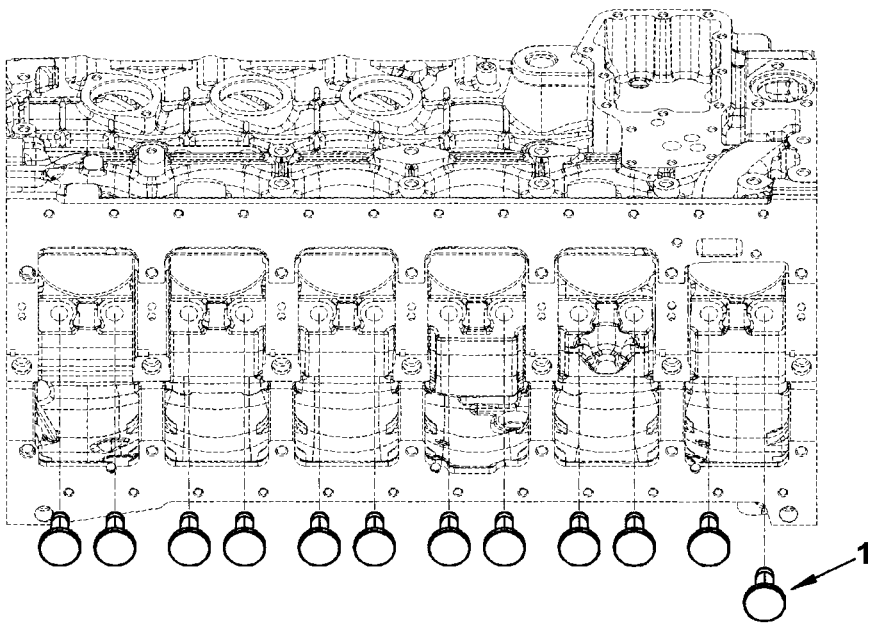
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Ref No.	Part Number	Part Name	Req	Remarks
		CYLINDER BLOCK		
		OPTION BB9206		Cylinder Block
				Cylinders: 6 High Speed Balancer: No water pump location: Low Crank Gear Material: Steel Fuel Type: Diesel premium block: No tapped fittings: Storm structural block: No thrust face: 180 degrees main bearing type: Standard valves per cylinder: 4 rear gear train provision: Yes front gear train provision: No Front PTO Provision: Yes tappet diameter: 30mm block oil pan flange bolt pattern spacing: 60mm block oil pan flange bolt pattern width: 299mm block oil pan flange bolt pattern quantity: 24 components included in oil pan flange bolt pattern block: Yes rear gear housing: Yes oil pump: No front gear cover: Yes cast rear drive provision: No Additional Rear Structural Member: No
	3678873	Plug, Threaded	2	
1	3678786	Seal, O Ring	1	
2	(3678791)	Plug, Threaded	1	
	3678921	Plug, Threaded	1	M14 X 1.50
3	3678912	Seal, O Ring	1	
4	(3678922)	Plug, Threaded	1	M14 X 1.50
	3678923	Plug, Threaded	1	M10 X 1 X 13.5
5	(3678924)	Plug, Threaded	1	M10 X 1 X 13.5
6	3678925	Seal, O Ring	1	M10 X 1.00
7	3902343	Dowel, Ring	2	
8	3936352	Screw, Hex Flange Head Cap	2	
9	3902460	Screw, Hex Flange Head Cap	10	M10 X 1.50 X 25
10	3949830	Screw, Round Head Cap	1	
11	3965764	Stiffener, Cylinder Block	1	
	(4991099)	Block, Cylinder	1	Serviced as 4955412
12	3927948	Screw, Hex Flange Head Cap	14	
13	4983253	Bushing	2	
	3974157	Cap, Main Bearing	6	
14	3900068	Dowel, Ring	2	
15	(3974156)	Cap, Main Bearing	1	
	3974159	Cap, Main Bearing	1	
14	3900068	Dowel, Ring	2	
16	(3974158)	Cap, Main Bearing	1	
17	4938189	Plug, Expansion	4	
18	(4990447)	Block, Cylinder	1	
19	3900956	Plug, Expansion	2	
20	3905401	Plug, Expansion	3	
21	3914035	Plug, Expansion	3	

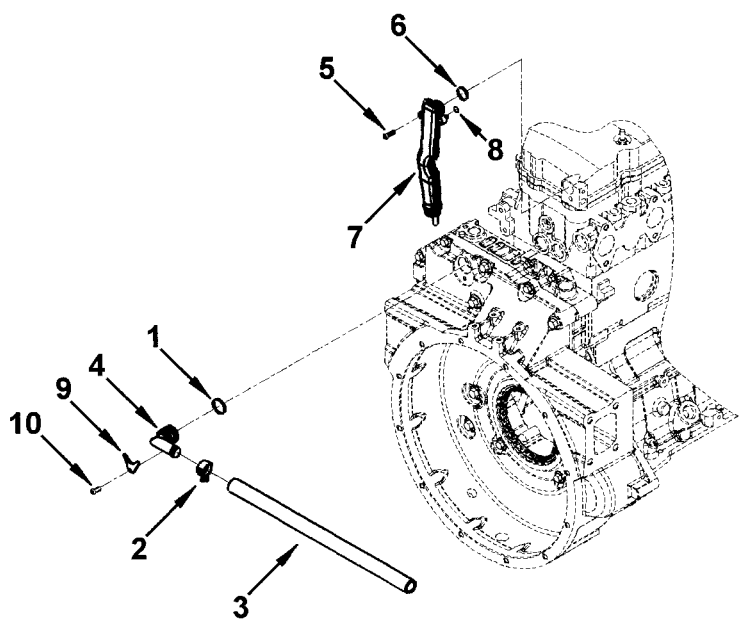

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Service Parts
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Service Parts
bb904ge

Ref No.	Part Number	Part Name	Req	Remarks
		CRANKSHAFT AND BEARINGS		
		OPTION BB9206		Crankshaft and Bearings
	4934861	Crankshaft, Engine	1	
	4934862	Crankshaft, Engine	1	
1	(3968164)	Crankshaft, Engine	1	
2	(2831066)	Collar, Shaft	1	
3	4934418	Gear, Crankshaft	1	
4	(4934419)	Gear, Crankshaft	1	
5	3955030	Dowel, Pin	1	
	3357480	PDC Kit	A/R	Standard
6	3929021	Bearing, Main	7	Standard
7	3927772	Bearing, Crankshaft Thrust	1	Standard
8	3929016	Bearing, Main	6	Standard
	3802071	Set, Main Brg(.010)	A/R	0.25 mm Oversize
6	3929022	Bearing, Main	7	0.25 mm Oversize
7	3283065	Bearing, Crankshaft Thrust	1	0.25 mm Oversize
8	3929017	Bearing, Main	6	0.25 mm Oversize
	3802072	Set, Main Brg(.020)	A/R	0.50 mm Oversize
6	3929023	Bearing, Main	7	0.50 mm Oversize
7	3283066	Bearing, Crankshaft Thrust	1	
8	3929018	Bearing, Main	6	0.50 mm Oversize
	3802073	Set, Main Brg(.030)	A/R	0.75 mm Oversize
6	3929024	Bearing, Main	7	0.75 mm Oversize
7	3283067	Bearing, Crankshaft Thrust	1	0.75 mm Oversize
8	3929019	Bearing, Main	6	0.75 mm Oversize
	3802074	Set, Main Brg(.040)	A/R	1.00 mm Oversize
6	3929024	Bearing, Main	7	0.75 mm Oversize
7	3283068	Bearing, Crankshaft Thrust	1	1.00 mm Oversize
8	3929019	Bearing, Main	6	0.75 mm Oversize
	3802702	Bearing, Crankshaft Thrust	A/R	0.50 mm Oversize
6	3929023	Bearing, Main	1	0.50 mm Oversize
7	3283066	Bearing, Crankshaft Thrust	1	
	3802704	Bearing, Crankshaft Thrust	A/R	1.00 mm Oversize
6	3929025	Bearing, Main	1	1.00 mm Oversize
7	3283068	Bearing, Crankshaft Thrust	1	1.00 mm Oversize
		SERVICE PARTS		
9	3926126	Rear Seal, Wear Sleeve Kit		Rear
10	3802820	Front Seal, Wearsleeve Kit		Front



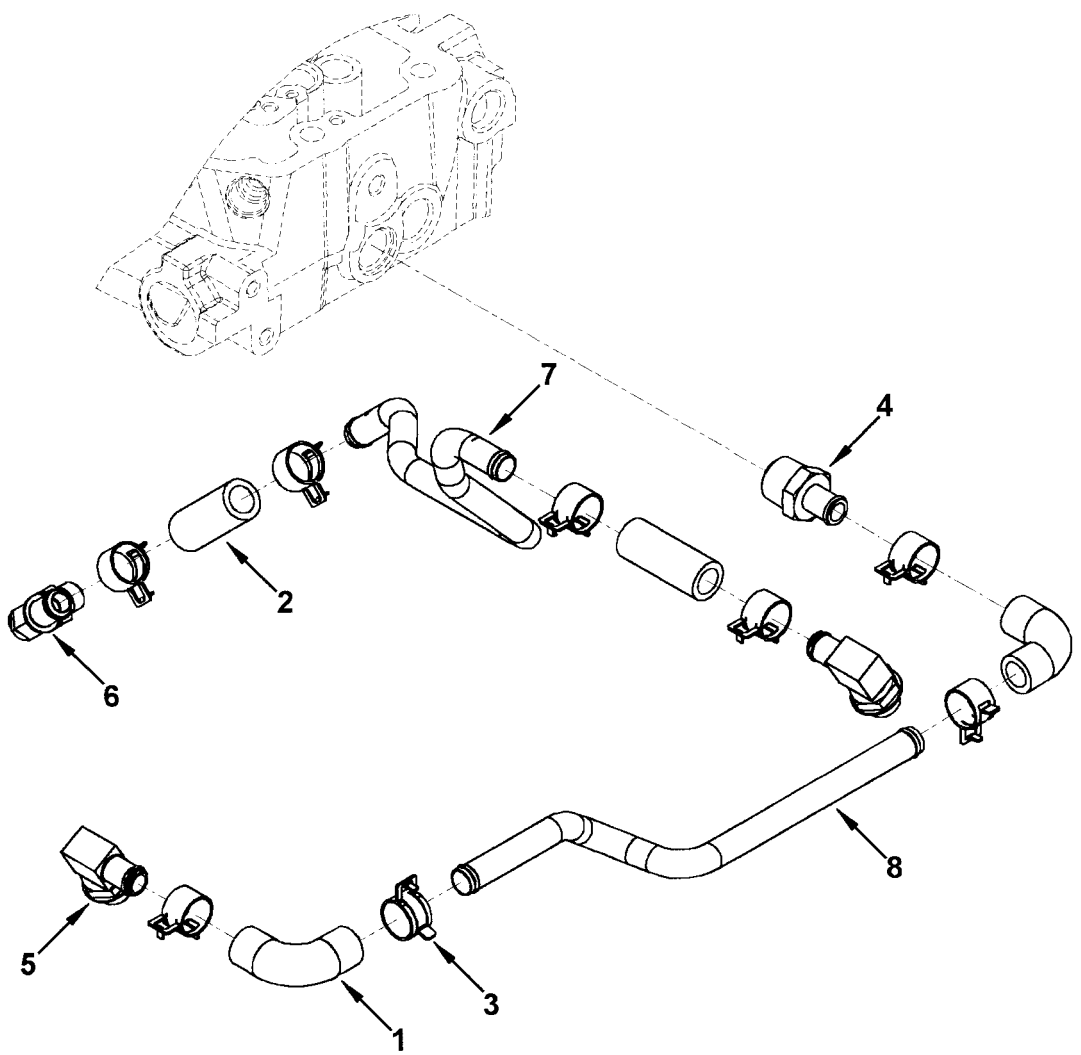
Ref No.	Part Number	Part Name	Req	Remarks
		VALVE TAPPETS		
		OPTION BB9206		Valve Tappets
1	3947759	Tappet, Valve	12	

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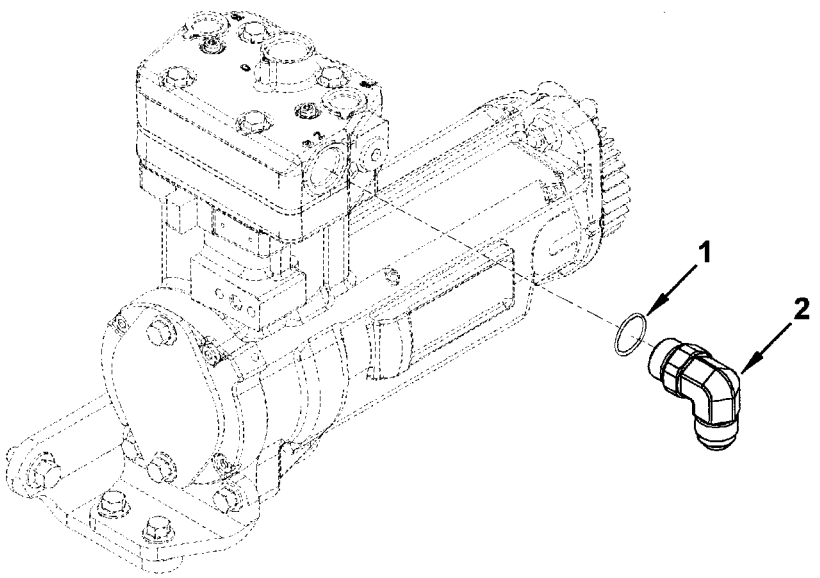


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Ref No.	Part Number	Part Name	Req	Remarks
		CRANKCASE BREATHER		
		OPTION BR9191		Crankcase Breather Structure Code: Mr03 EBM System Type: Non ccv Location: Flywheel Housing Vent Size: 19.05 Outlet can be Rotated to Suit OEM Around Horizontal Axis Factory set at 8 o' Clock to Following: Vent Location From Centerline Of Crank (mm): 256 Vent Location From C/L of Engine (mm): 180.7 Hose Length Below Pan Rail: N/A Engine Angularity Limit: 32 Deg.
1	145530	Seal, O Ring	1	
2	3917995	Clamp, Spring Hose	1	
3	3918614	Hose, Plain	1	
4	3966164	Breather, Crankcase	1	
5	3977572	Screw, Round Head Cap	2	
	3971371	Tube, Breather	1	
6	145528	Seal, O Ring	2	
7	(3968786)	Tube, Breather	1	
8	3970042	Seal, O Ring	1	
9	4899498	Plate, Clamping	1	
10	4937420	Screw, Round Head Cap	1	


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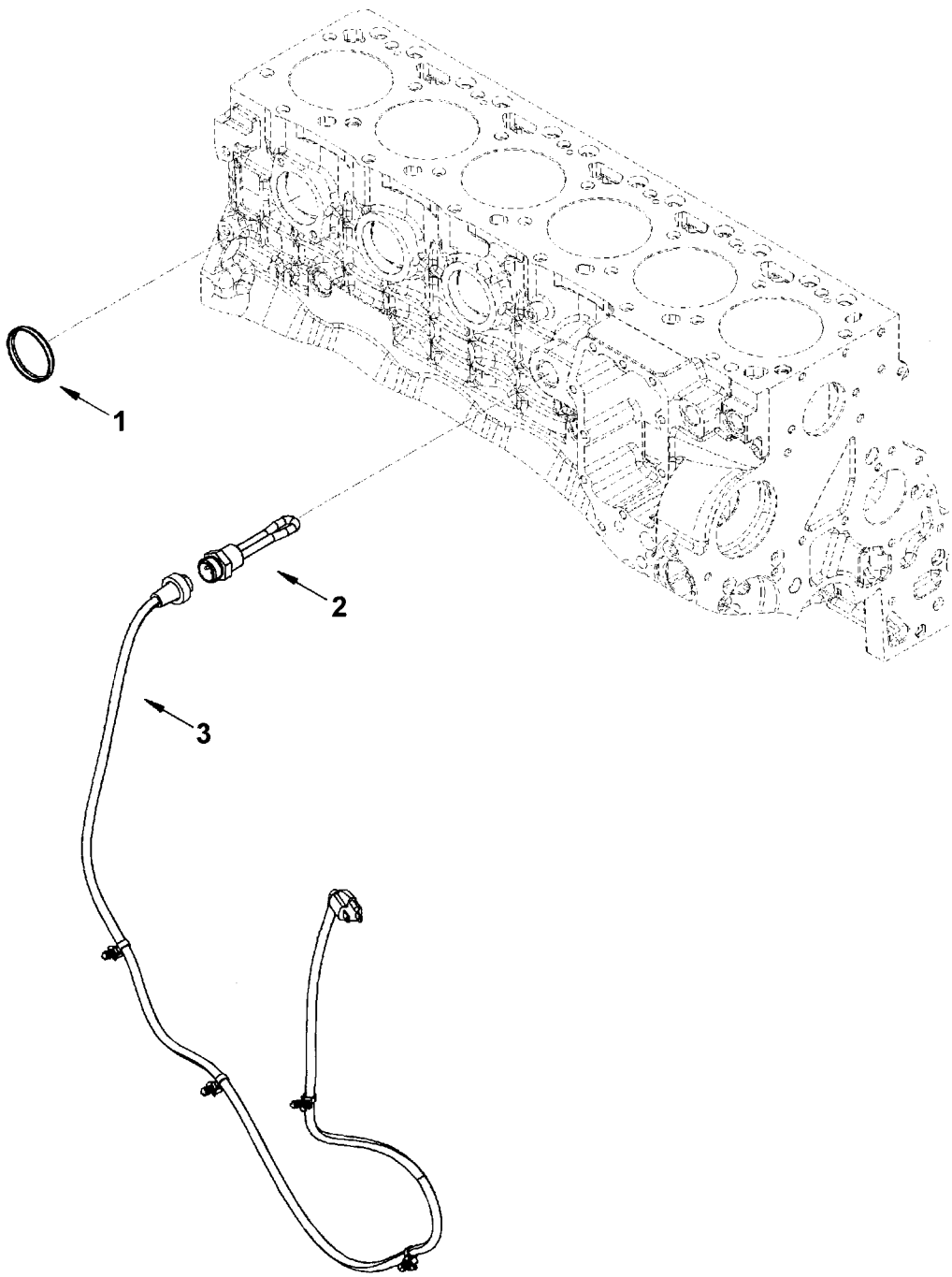
Ref No.	Part Number	Part Name	Req	Remarks
		COMPRESSOR COOLANT PLUMBIN		
		OPTION CC9232		Compressor Coolant Plumbing
				Engine Family: "B" Series Coolant Pick-Up Location: Cylinder Block Side (remove expansion plugs) coolant return: Head rear water plumbing type: Rigid CPR Water Inlet Location: Top CPR Water Outlet Location: Top CPR Air Outlet Location: Side compressor manufacturing/model: Wabco 250cc Accessory Drive Location: Vertical from crank CL: 202.83mm horizontal from engine CL: 190.63mm air compressor position: High
1	4930889	Hose, Elbow	3	
2	3931522	Hose, Plain	2	
3	4930304	Clamp, Hose	8	23 mm Clamp
4	3954646	Coupling, Plain Hose	1	
5	3979410	Coupling, Elbow Hose	2	
6	3954655	Coupling, Elbow Hose	1	
7	3955465	Tube, Cpr Water Inlet	1	
8	3955466	Tube, Cpr Water Outlet	1	



cd900za

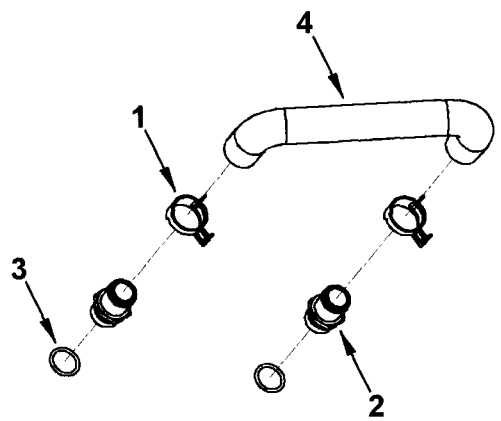
Ref No.	Part Number	Part Name	Req	Remarks
		AIR COMPRESSOR DIS PLUMBIN		
		OPTION CD9003		CPR Air Discharge
				Plumbing Discharge Connection Type: 90 Degree Elbow
				Discharge Connection Customer Interface: 1 1/16-12
				Discharge Connection CPR Interface: M27 X 2
	3958561	Elbow, Male Adapter	1	
1	3678606	Seal, O Ring	1	M27 X 2.00
2	(3958562)	Elbow, Male Adapter	1	

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Group No. 10.02 **AID,COO HEATER STARTING** Option No. CH9081

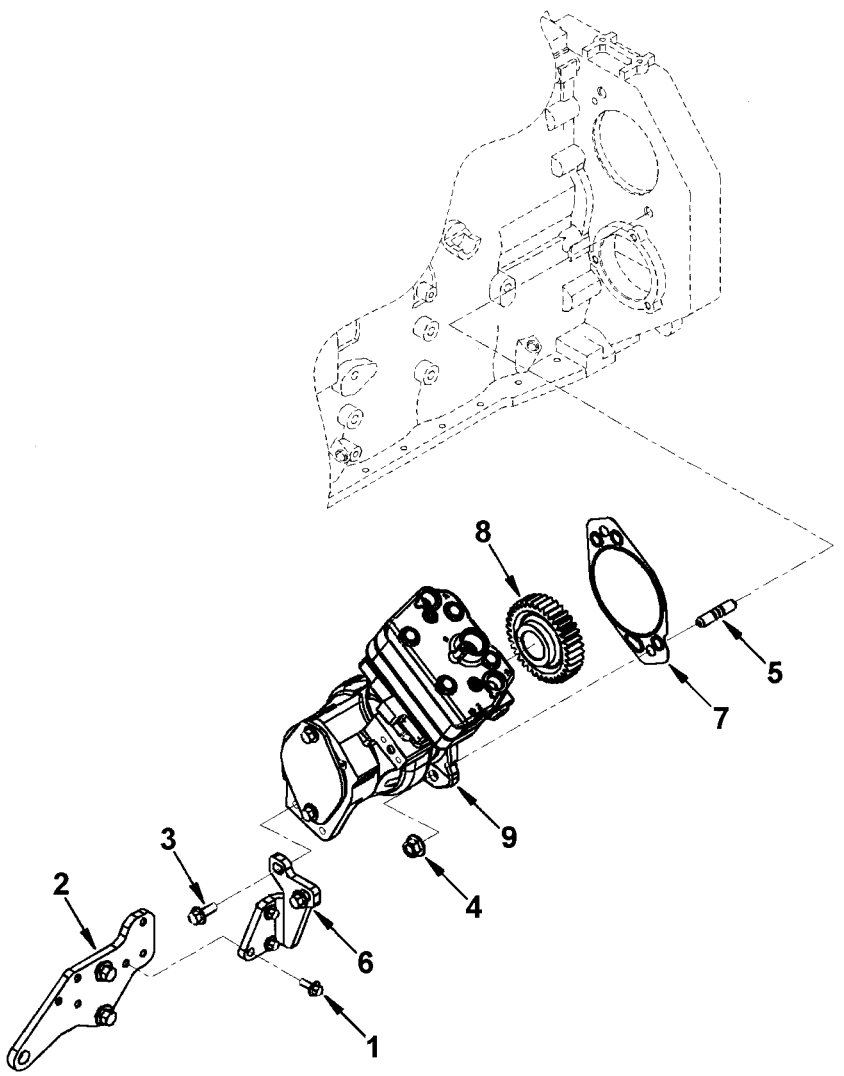
Ref No.	Part Number	Part Name	Req	Remarks
		AID,COO HEATER STARTING		
		OPTION CH9081		Mr - coo heater starting aid Voltage: 120 watt: 750 cord length: 72in. type: Water only male plug type: US plug type: 2 bolt operation type: Manual location from front face of block(mm): 254 supply method: Mounted cord provision: Yes Engine Family: "B" Series engine design phase: Echo.
1	4938189	Plug, Expansion	1	
2	3923050	Cable, Engine Heater	1	
3	4948145	Heater, Engine	1	



ci953gs

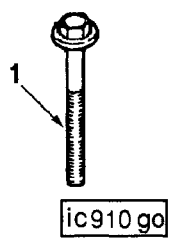
Ref No.	Part Number	Part Name	Req	Remarks
		CPR AIR INLET PLUMBING		
		OPTION CI9190		CPR Air Inlet Plumbing arrangement engine family : Tier 3 b air plumbing supplier: Cummins Air Supply Location: Plumbing Off Of Intake manifold air plumbing type: Molded hose CPR Air Inlet Location: Top Of CPR Head CPR Air Outlet Location: Side Of CPR Head compressor manufacturing/model: Wabco 250cc Accessory Drive Location: High vertical from crank centerline: 202.83mm horizontal from engine centerline: 190.63mm air compressor position: High.
1	3925089	Clamp, Spring Hose	2	
	3977696	Union, Male	2	
2	(3977695)	Union, Male	1	
3	3678606	Seal, O Ring	1	M27 X 2.00
4	4937961	Hose, Molded	1	

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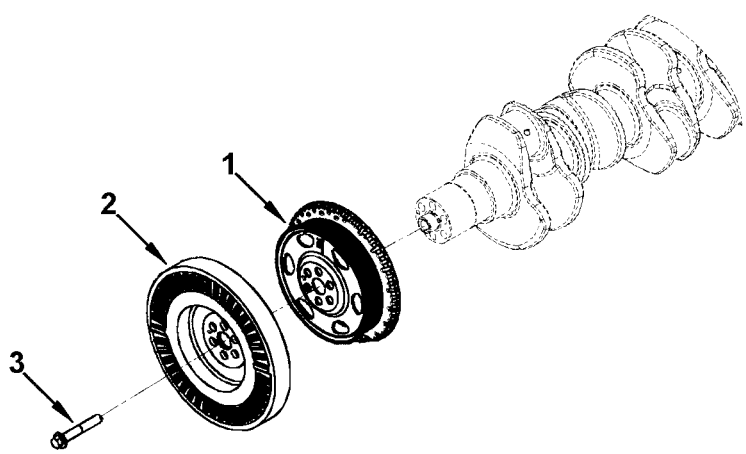
cp963gc

Ref No.	Part Number	Part Name	Req	Remarks
		AIR COMPRESSOR		
		OPTION CP9548		Air Compressor
				CPR Manufacturer/model: Wabco 250cc Cylinders: 1 Method Of Cooling: Water CFM: 15.2 CPR Rear Drive: Gear CPR Front Flange: SAE "B" (5.750in) CPR Rear Flange: 82-B (SAE A) CPR Rear Mount Thread: Metric air compressor location: High fuel pump location: Low Water Inlet: Top Water Outlet: Top Air Outlet: Side Air Outlet Port Size: M27-2 Air Inlet: Top CPR SAE/din Standard Rear Drive: SAE 19-4 CPR Max Thru Torque: 105 FT LB Max CPR Speed (RPM): 3000 CPR Max Inlet Temp (deg F): 250 CPR Turbocharged: Yes CPR Supplier: Cummins Rear Support Mounting Location: 588.74mm from front face of block compressor length (mm): 162.5 Design Phase: Echo oil return provision: Rear gear housing. Drive centerline from crank centerline (mm): 278.35 Engine Family: "B" Series.
1	3900630	Screw, Hex Flange Head Cap	3	M8 X 1.25 X 20
2	3959312	Brace, Air Compressor	1	
3	3902460	Screw, Hex Flange Head Cap	2	M10 X 1.50 X 25
4	3903210	Nut, Hexagon Flange	2	M12 X 1.75
5	3905371	Stud	2	
6	3955094	Brace, Air Compressor	1	
7	4896897	Gasket, Acc Drive Cover	1	
	4946291	Compressor, Air	1	Recon equivalent 4946291 RX
8	3954290	Gear, Accessory Drive	1	
9	(4946485)	Compressor, Air	1	
		COMPRESSOR SERVICE KITS		
	4089222	Kit, Rear Seal & Adpt.	1	Services 4933559
	4089240	Kit, Gskt & Seals 1 Cyl	1	Gasket & Seal Set Kit 75mm Single Major
	4089675	Plug, Solid	1	Services 4933559
	4089684	Adapter, Spline	1	Spline Adapter, 11th LH/HM
	4089686	Kit, Compressor Repair	1	Head Repair Kit, Single 75mm US Ports



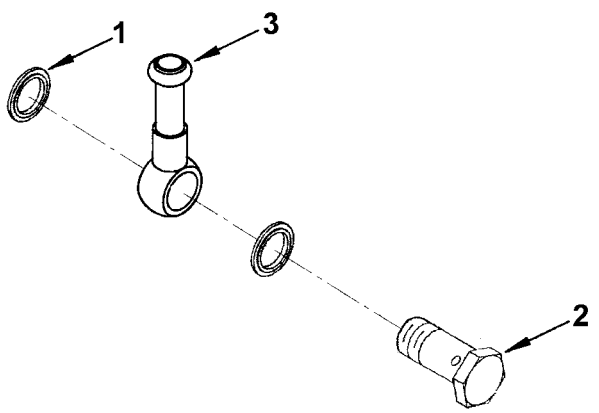
Ref No.	Part Number	Part Name	Req	Remarks
		AIR COMPRESSOR MOUNTING		
		OPTION CP9568		Air Compressor Mounting
1	3901249	Screw, Hex Flange Head Cap	1	CPR Manufacturer/model: Wabco 250cc mounting for compressor bracket when fuel filter is located on-engine. M12 X 1.75 X 25

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da954ga

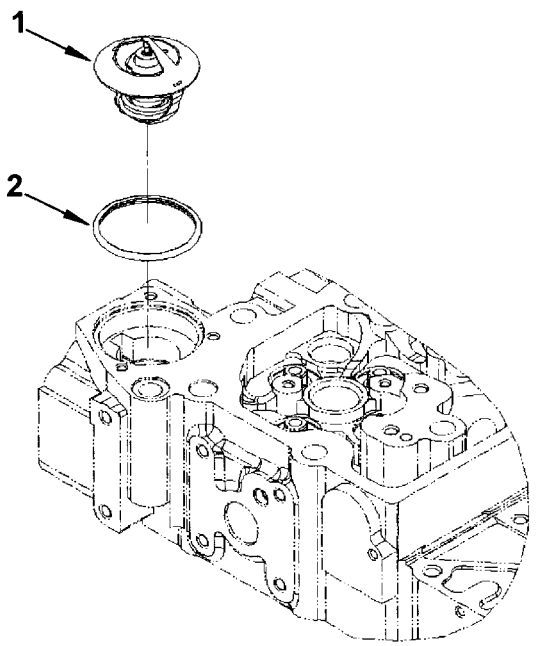
Ref No.	Part Number	Part Name	Req	Remarks
		VIBRATION DAMPER		
		OPTION DA9342		Vibration Damper Structure Code: 03 EBM Crank Pulley Type: Cast 8 Groove Crank Pulley Groove Profile: Poly Vee 8rib K Crank Pulley Diameter (mm): 174.75 over balls: 2.5 engine speed sensing: Yes Engine Position Sensing: Yes FFOB (mm) to CL of First Crank Pulley Groove: 51.78 Crank Bolt Circle (mm): 50 Natural Frequency (@ 40 degrees C): N/A Damper Type: Viscous damper diameter (mm): 250 Damper RPM Limitation: 300 PS@2500 PTO Provision: No customer mounting thread: N/A customer mounting bolt circle (mm): N/A customer mounting face from FFOB (mm): N/A Auxilary drive pulley type: None auxilary drive pulley diameter (mm): N/A over balls (mm): N/A FFOB (mm) to CL of First auxilary pulley groove: N/A Additional Info: Dcec may use vibration damper 4981136 in place of 4991131.
1	5255204	Pulley, Crankshaft	1	
2	4991131	Damper, Vibration	1	
3	3968075	Screw, Captive Washer Cap	6	



dl951gy

Ref No.	Part Number	Part Name	Req	Remarks
		LOCATION,DRAIN		
		OPTION DL9224		Mr - drain location cust interface: 10mm push on hose - single bead location from fob and centerline of crank(mm): X = 335.0 y = 373.0 z = -565.0 engine design phase: Echo Engine Cylinders: 6 Engine Family: "B" Series Unique Characteristics: 10mm push-on banjo fitting supplied in kit 8mm quick- disconnect fitting per SAE j2044 supplied with engine.
1	3963990	Washer, Sealing	2	
2	3957770	Screw, Banjo Connector	1	
3	4929149	Connector, Banjo	1	

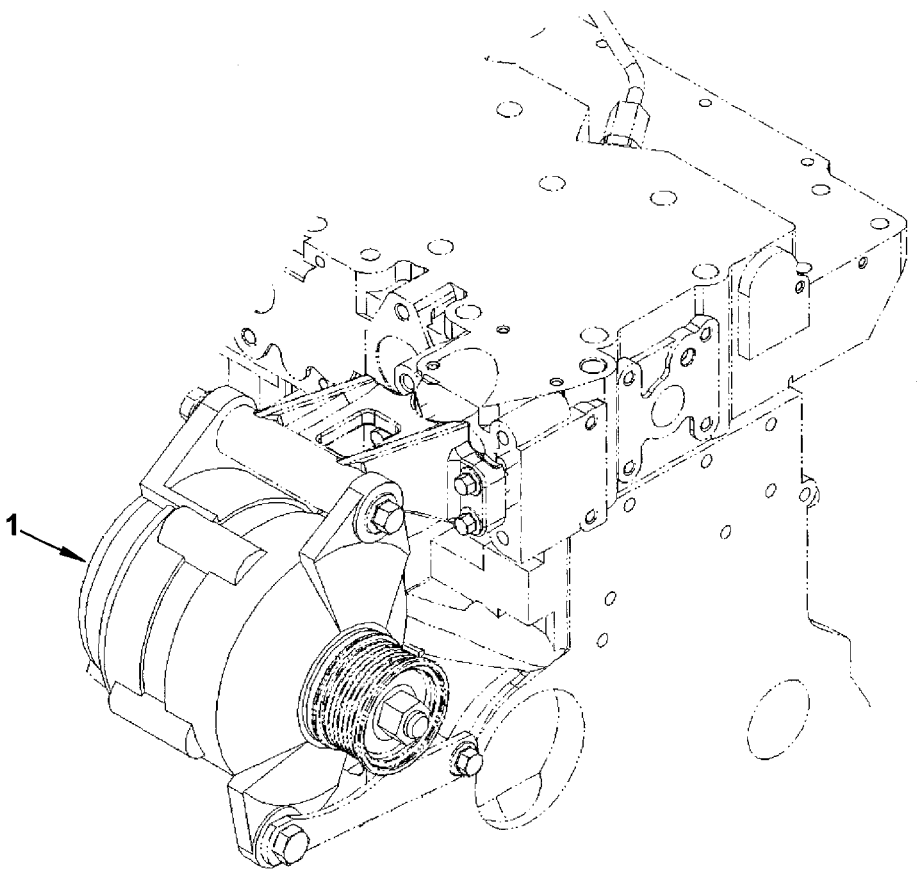
Ref No.	Part Number	Part Name	Req	Remarks
		SOFTWARE,CUS INTERFACE **OPTION DO91173**		Customer software interface Engine Control System: E2 I Transmission: Generic Commun Support: J1939 cust/OEM name: Terex cust/OEM model: RT600 cust/OEM app: Rough terrain Crane Remote Throttle: No High Idle: 2710 RPM Low Idle: 950 RPM ISC enable: Yes ISC Validation: No switch speed input: No Torque Curve Selection: No Governor Type: ASG governor droop: 7% idle validation: No Multiple Unit Synchronization: N/A Output Driver Setup: Yes Calibration Voltage: 12 Throttle Type: Williams Pedal Or Equivalent comment: PWM7125 powermatch: No guid: N/A governor break: 2530 RPM engine brake provision: Yes electronic fan clutch: Yes Oil Pressure Sensor Type: Switch Engine Family: Qsb6(t3) applicable FR option: FR91597.



ec900zf

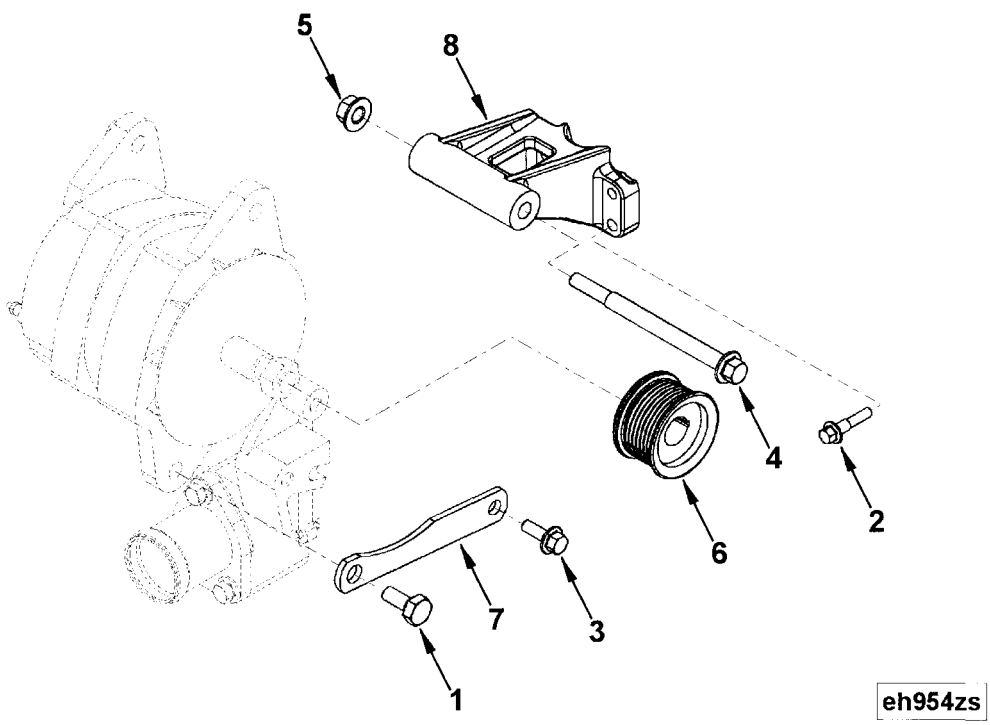
Ref No.	Part Number	Part Name	Req	Remarks
		THERMOSTAT		
		OPTION EC9045		Thermostat Thermostat Opening Temperature: 83 C Number of Thermostats: 1 Thermostat Type: Non-Balanced or Poppet Vented Non-Vented: Vented With Jiggle-Pin By-Pass Type: Mechanical Plug Engine Family: "B" Series Required Housing Bore Diameter: 60.96 mm (2.4 in) Low Gain Thermostat: Yes Maximum Temperature Capability: 118.3 C (245 F) One Notch High Metal Weir D-Ring Seal. Material: Nitrile
	3974823	Thermostat	1	
1	3973834	Thermostat	1	
2	3954829	Seal, Thermostat	1	

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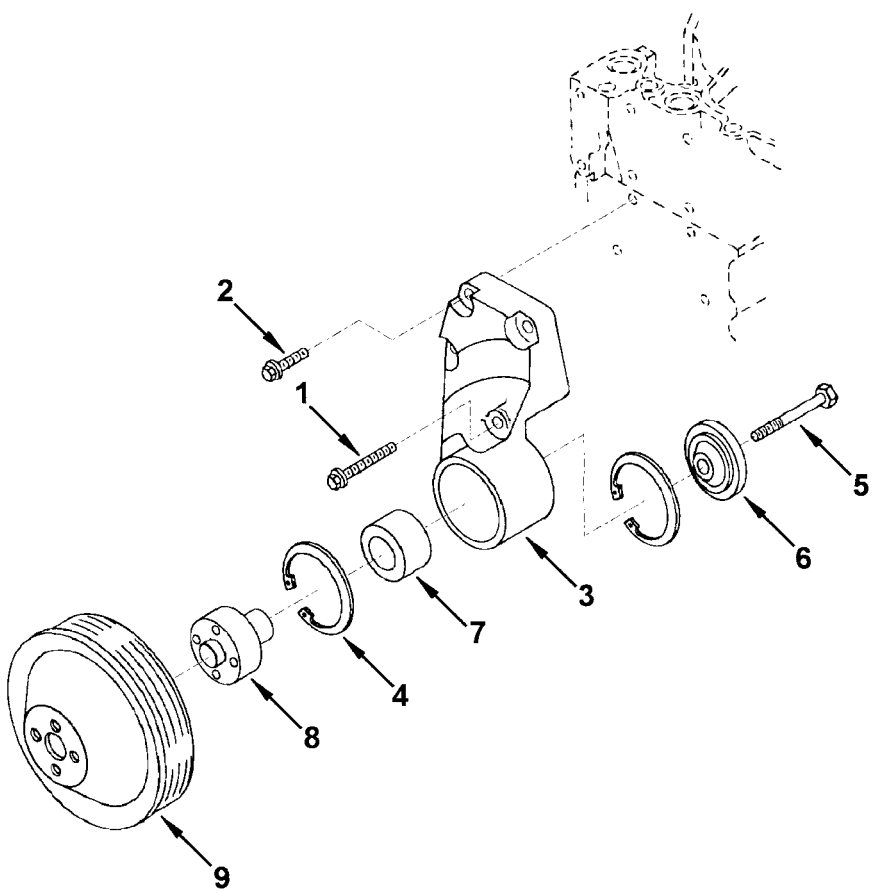


ee900ze

Ref No.	Part Number	Part Name	Req	Remarks
		ALTERNATOR		
		OPTION EE9245		Alternator
				manufacturer/model: Delco 24si Voltage: 12 Amperage: 130 mounting type: Lugs, 101.1mm apart mounting to suit: 98.5mm spool alternator length (mm): 179.67 Cummins branded: Yes
1	5260126	Alternator	1	

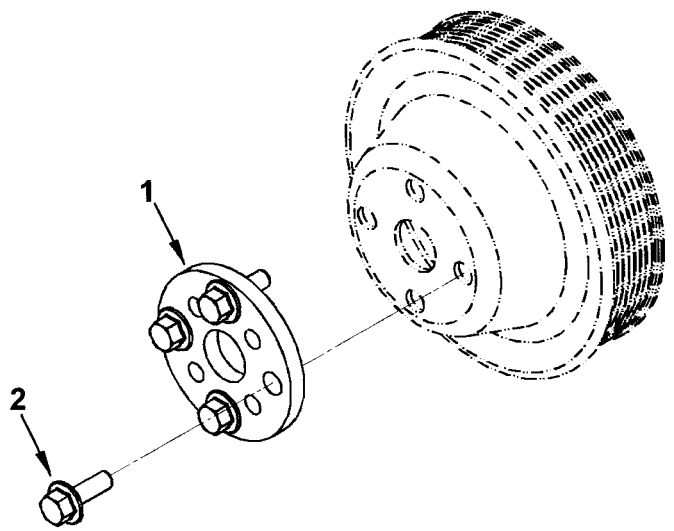

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eh954zs

Ref No.	Part Number	Part Name	Req	Remarks
		ALTERNATOR MOUNTING		
		OPTION EH9469		Alternator Mounting Engine Family: "B" Series alternator mount location: Cylinder head alternator center: Pulley location horizontal from engine centerline (mm): -287.99 Pulley location vertical from crank centerline (mm): 339.15 Pulley Retainer Provided: No alternator pulley provided: Yes alternator pulley diameter over 2.5mm gage balls (mm): 61.13 mounting for alternator type: 4in. spool Alternator Driven By Auxilary Belt: No alternator tail support required: No Maximum Amperage At 14volt: 160 Maximum Amperage At 28volt: 80 Damper Pulley Effective Diameter (mm): 173.76 Unique Characteristics: Alternator mounting screws provided tensioner locating pin position 1: X = -227.0, y = 195.0 accommodates alternator model: Delco 22si 24si.
1	3052061	Screw, Hexagon Head Cap	1	1/2 - 13 X 1 in
2	3900632	Screw, Hex Flange Head Cap	4	M8 X 1.25 X 35
3	3902460	Screw, Hex Flange Head Cap	1	M10 X 1.50 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	3925852	Pulley, Alternator	1	
7	3942821	Brace, Alternator	1	
8	4931017	Support, Alternator	1	



fa901gw

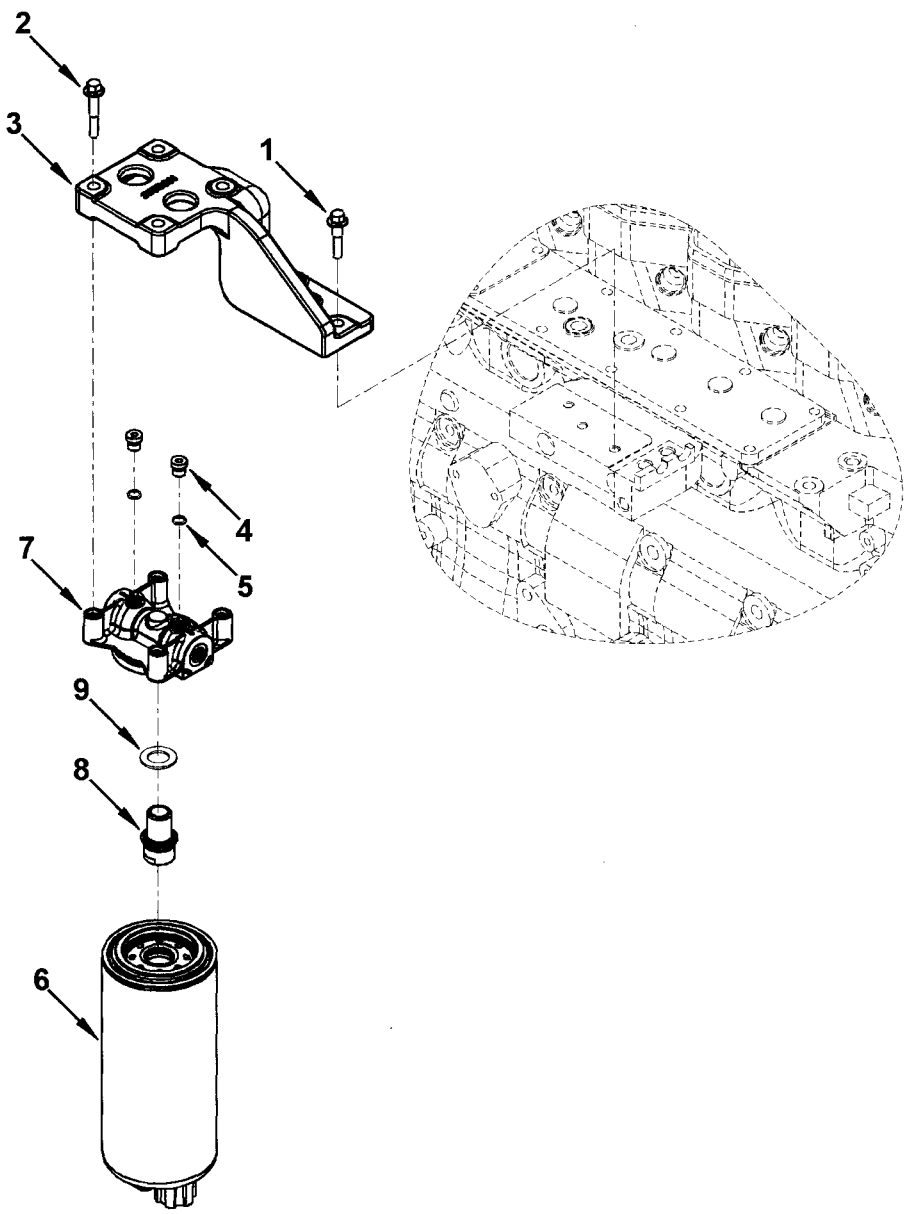
Ref No.	Part Number	Part Name	Req	Remarks
		FAN DRIVE		
		OPTION FA9336		Fan Drive
				Fan Drive Ratio: 1.1:1 Fan Drive CL to CCL (mm): 203.2 Fan Drive CL to Engine CL (mm): 49 Fan Pilot Diameter (mm): 25.4 Fan Mounting Bolt Circle (mm): 60 Fan Pulley Thickness (mm): 5 Fan Pulley Diameter Over 2.5mm Gage Balls (mm): 159.13 Crank Pulley Effective Diameter (mm): 173.76
1	3975555	Screw, Hex Flange Head Cap	1	
2	2830411	Screw, Hex Flange Head Cap	3	
	3285949	Support, Fan	1	
3	(3285946)	Support, Fan	1	
4	3035960	Ring, Retaining	2	
5	3907769	Screw, Hexagon Head Cap	1	M10 X 1.75 X 70
6	3923044	Retainer, Fan Hub	1	
7	3910739	Bearing, Ball	1	
8	3911924	Hub, Fan	1	
9	3914462	Pulley, Fan	1	



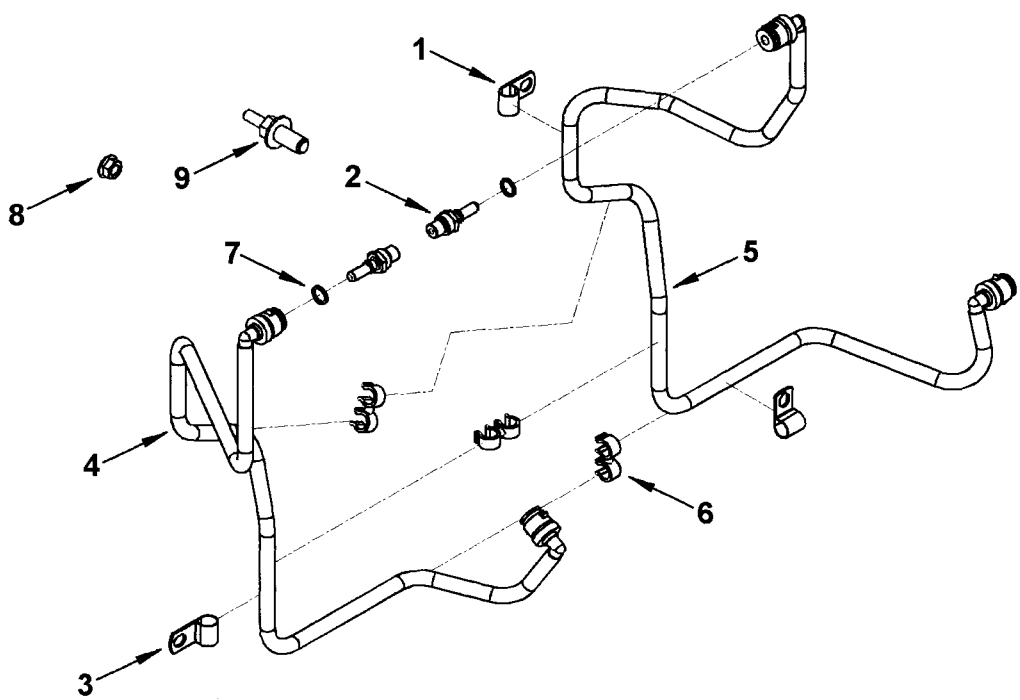
fa901zi

Ref No.	Part Number	Part Name	Req	Remarks
		FAN DRIVE MOUNTING		
		OPTION FA9734		Fan Drive Mounting
				Thread Size: M10 X 1.5 Capscrew Length: 25 mm Clamping Plate Thickness: 8.4 mm Clamping Plate Bolt Circle: 4 X 60 mm
1	3915490	Plate, Clamping	1	
2	3902460	Screw, Hex Flange Head Cap	4	M10 X 1.50 X 25

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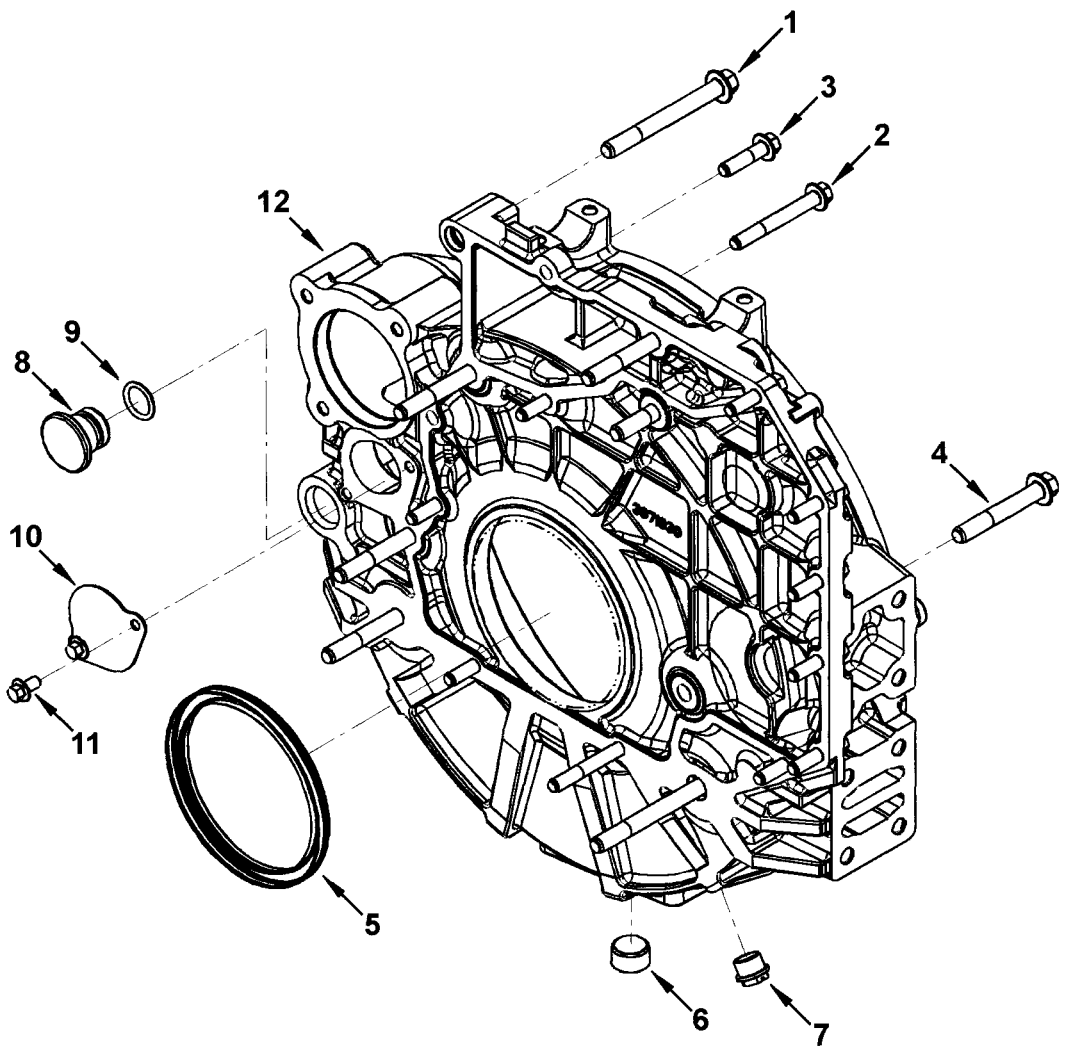

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ff967gm

Ref No.	Part Number	Part Name	Req	Remarks
		FUEL FILTER LOCATION		
		OPTION FF9541		Fuel Filter Location
				Element Type: Single element style: Spin-on drain provision: No fuel heater provided: No fuel heater voltage: No water separator provision: No Location: Engine Mounted CCL to top of Canister (mm): 417 engine CL to Canister CL (mm): 316 FFOB to Canister CL (mm): -324 filter length (mm): 191 filter diameter (mm): 93.5 fuel filter fuel inlet location: CCL to inlet CL (mm): 439 engine CL to inlet CL (mm): 316 FFOB to inlet CL (mm): -277 fuel filter fuel outlet location: CCL to outlet CL (mm): 439 engine CL to outlet CL (mm): 316 FFOB to outlet CL (mm): -371 absolute filtration (microns): 3 Engine Family: "B" Series.
1	3900632	Screw, Hex Flange Head Cap	3	M8 X 1.25 X 35
2	3901445	Screw, Hex Flange Head Cap	4	M8 X 1.25 X 45
3	4992695	Support, Filter	1	
	5264205	Filter, Fuel	1	
	3678923	Plug, Threaded	2	M10 X 1 X 13.5
4	(3678924)	Plug, Threaded	1	M10 X 1 X 13.5
5	3678925	Seal, O Ring	1	M10 X 1.00
6	4989106	Filter, Fuel	1	Buy From Cummins Filtration
7	4990848	Head, Fuel Filter	1	Buy From Cummins Filtration
8	5264206	Adapter, Filter Head	1	
9	4937285	Gasket, Filter	1	Buy From Cummins Filtration

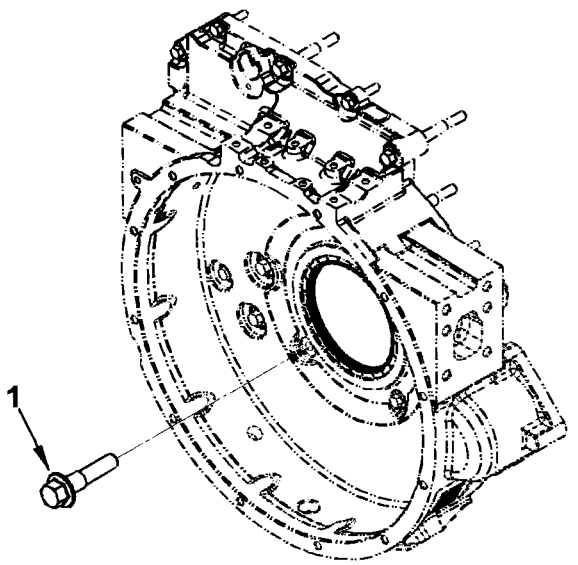


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Ref No.	Part Number	Part Name	Req	Remarks
		FUEL FILTER PLUMBING		
		OPTION FF9573		Fuel Filter Plumbing
1	3609967	Clip	2	
2	3964337	Connector, Qck Disconnect	2	
3	68152	Clip	1	# 4
	4941584	Tube, Fuel Supply	1	
4	4941582	Tube, Fuel Supply	1	
5	4941583	Tube, Fuel Supply	1	
6	3954778	Clamp, Tube	4	
6	3954778	Clamp, Tube	1	
7	4891385	Washer, Sealing	2	
8	3900589	Nut, Hexagon Flange	3	M8 X 1.25
9	3944061	Screw, Hex Flange Head Cap	2	


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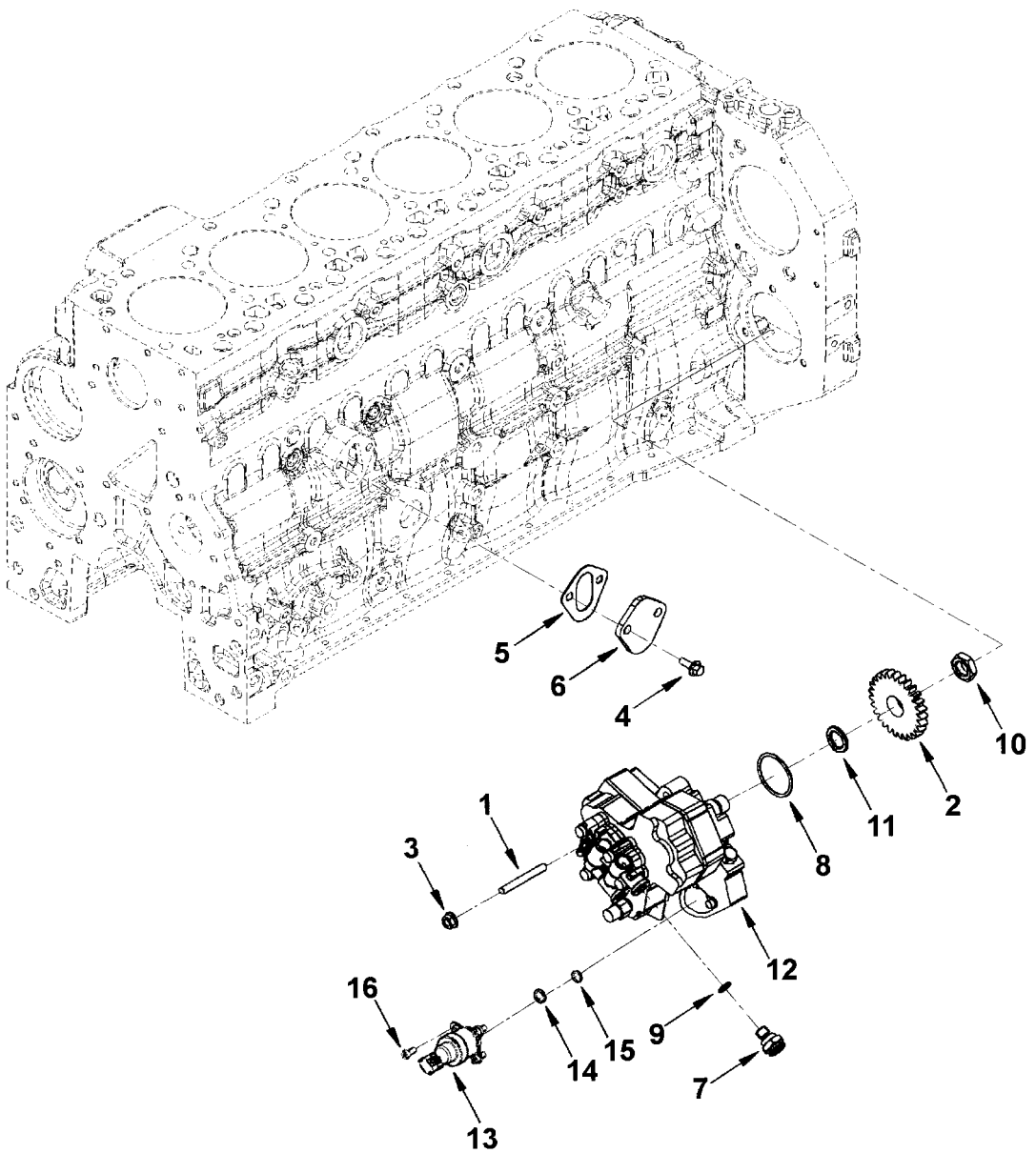
Ref No.	Part Number	Part Name	Req	Remarks
		FLYWHEEL HOUSING		
		OPTION FH9481		Flywheel Housing Clutch Type: Dry Starter Bore Position: 55 FH to block pattern: 8 xm12 x1.75 + 2 xm10 x1.5 SAE size: 3 starter pilot bore diameter: 88.9 Starter bore location horiz from CCL: - 177.26 vert from CCL: 124.12 Starter mounting hole pattern angle: 0 Starter mounting hole thread size: M10 Starter mounting face offset from RFOB: 41.2 starter motor center distance(mm): 216.4 Tachometer sensor hole location: 3rd quadrant Tachometer sensor hole count: 1 Tachometer sensor hole thread size: 3/4-16 UNF Material: Aluminum Engine Mount Type: Pad mounting pad hole description: 8 xm12 x 1.75 per side mounting pad top hole location from CCL (mm): 84.68 mounting pad angle from vertical (deg): 0 Transmission mounting hole count: 12 Transmission mounting hole thread size: M10X1.5-6 h Engine Family: "B" Series distance across mounting surface(mm): 490 Suitable for +/- 6 g vertical, +/- 4 g axial, and +/- 2 g laterial load with 409 kg transmission.
1	3089188	Screw, Hex Flange Head Cap	2	
2	3900679	Screw, Hex Flange Head Cap	2	M10 X 1.50 X 80
3	3903464	Screw, Hex Flange Head Cap	9	M10 X 1.50 X 40
4	3914177	Screw, Hex Flange Head Cap	6	M12 X 1.75 X 80
5	4988952	Seal, Oil	1	
	(3973088)	Housing, Flywheel	1	
6	3008469	Plug, Pipe	1	3/4 NPT
7	3904181	Plug, Threaded	1	3/4 - 16 UNF
8	3910248	Plug, O Ring	1	
9	3910260	Seal, O Ring	1	
10	3925234	Plate, Cover	1	
11	3925883	Screw, Hex Flange Head Cap	2	M8 X 1.25 X 16
12	3971631	Housing, Flywheel	1	



fh960gb

Ref No.	Part Number	Part Name	Req	Remarks
		FLYWHEEL HOUSING MOUNTING		
		OPTION FH9629		Flywheel Housing Mounting
1	3903464	Screw, Hex Flange Head Cap	1	1 x M10 x 1.5 40 long capscrew For use without engine balancer. M10 X 1.50 X 40

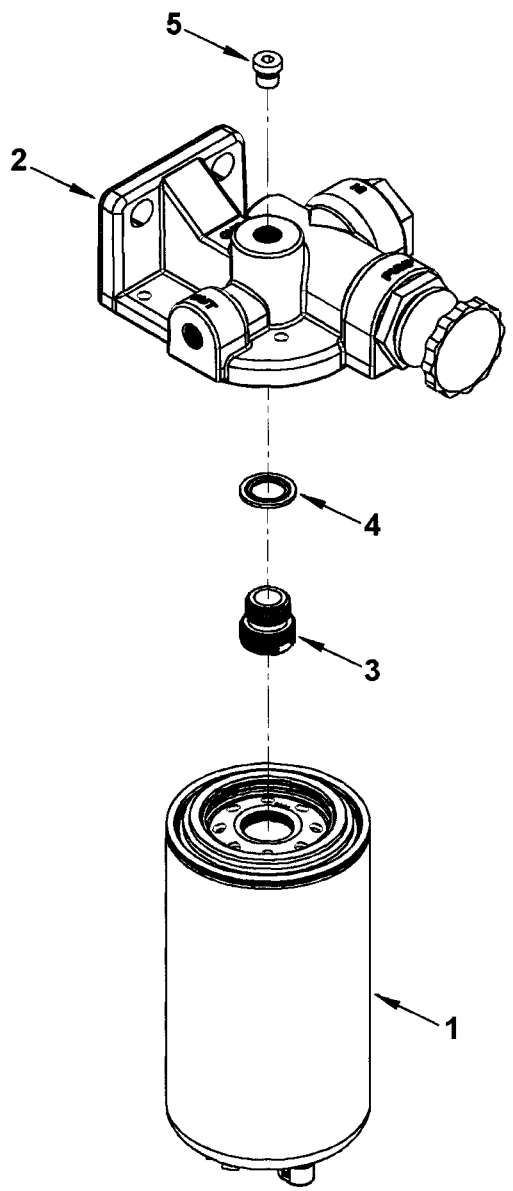
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fp965gz

Ref No.	Part Number	Part Name	Req	Remarks
		FUEL PUMP		
		OPTION FP90312		Fuel Pump
				Structure Code: Mr 03 BM fuel pump manufacturer/model: Bosch common rail pressure capability: 1600 BAR SAE flange type: SAE j626 aug 93 non-standard type 2 pilot shaft diameter (mm): 80 fuel pump inlet: M12 x 1.5 fuel pump drain: SAE j2044 Location: Low engine design phase: Tier 3 DEP may substitute gear 4893389 for 3955153.
1	3949419	Stud	3	
2	3955153	Gear, Fuel Pump	1	
3	3900589	Nut, Hexagon Flange	3	M8 X 1.25
4	3900630	Screw, Hex Flange Head Cap	2	M8 X 1.25 X 20
5	3939258	Gasket, Cover Plate	1	
6	3948083	Plate, Cover	1	
	4988593	Pump, Fuel	1	Recon Equivalent 4988593 NX
7	3974765	Connector, Qck Disconnect	4	
8	2830977	Seal, O Ring	1	
9	4891385	Washer, Sealing	4	
10	4890634	Nut, Regular Hexagon	1	
11	4890635	Washer, Spring	1	
12	(4988594)	Pump, Fuel	1	
13	5257595	Actuator, Etr Fuel Control	1	
14	3947269	Seal, O Ring	1	
15	3947270	Seal, O Ring	1	
16	4932790	Screw, Socket Head Cap	3	

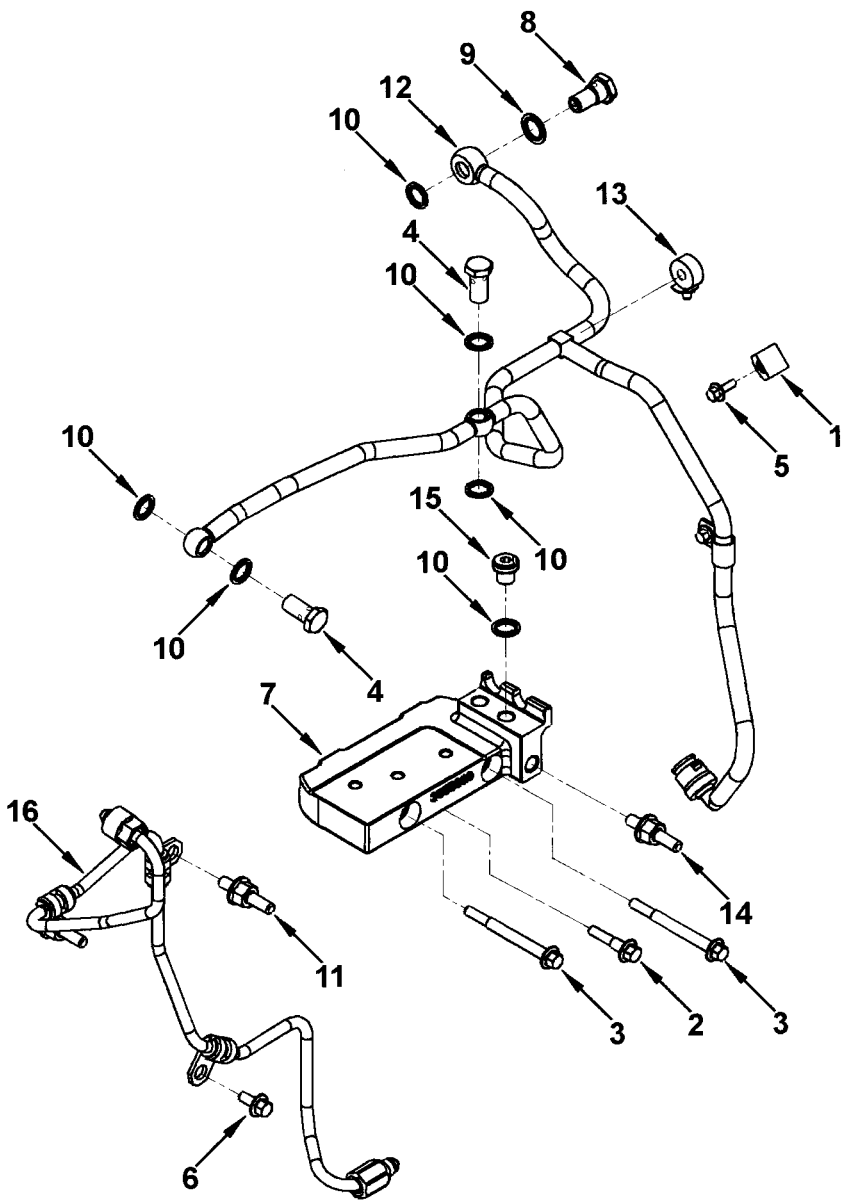
Ref No.	Part Number	Part Name	Req	Remarks
		RATING,FUEL		
		OPTION FR91597		Mr - fuel rating rated power: 215 BHP at 2500 RPM Peak torque: 655 lbs. FT at 1500 RPM Governed Power: 215 BHP At 2500 RPM CPL: 8610 Certified By: EPA,CARB,Eu cal. Restr: No Power Rating: No Engine Control System: E2 I Application: Non Road cert level: Tier 3,tier 3,stiiia Engine Family: "B" Series Cylinders: 6 engine design phase: Tier3 b Engine Aspiration: Charged Air Cooled fuel pump manufacturer/model: Bosch CP3.3 ECM version: CM850 manufacturer of record: Cummins ambient air pressure sensor: Yes Fuel Type: Diesel FP gear timing (deg crank:) N/A Speed Sensor Location: Crank cylinder head valve seat inserts: Yes Turbocharger ID17 P/N: 3770571, 4039043, 4039630, 4039631, 4043956.

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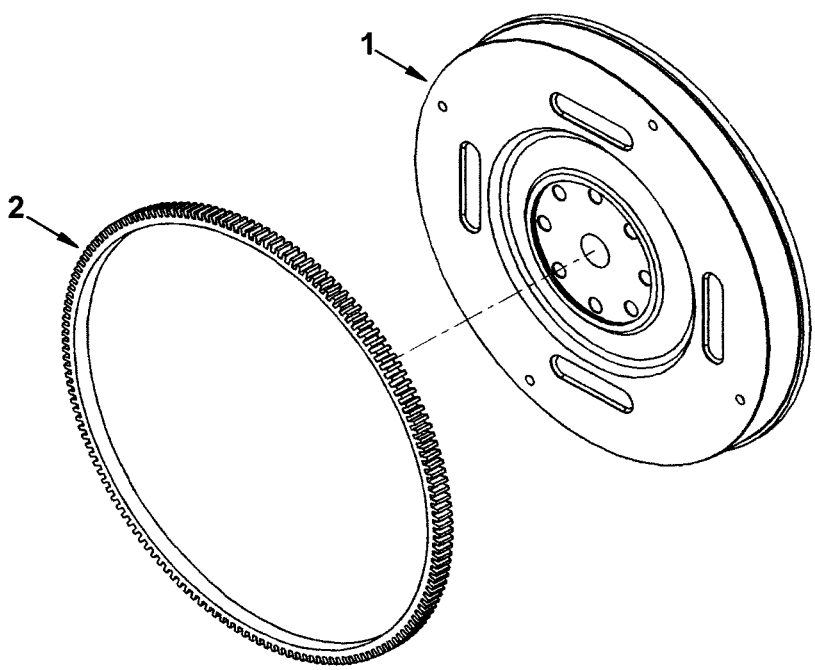


fs962gs

Ref No.	Part Number	Part Name	Req	Remarks
		FUEL SYSTEM ACCESSORIES		
		OPTION FS9996		Fuel System Accessories
				Element type; single element style: Spin-on priming provision: Yes drain provision: Yes fuel heater voltage: None water Separator provision: Yes water in fuel sensor (wif): Yes water in fuel Sensor (wif)harness provided: No water in fuel sensor Harness Length(FT): N/A Location: Off Engine Hose Length: None absolute filtration (microns): 25 fuel pump inlet from pre- filter: SAE j2044
	3975126	Filter, Fuel	1	Individual Comp. Available
1	3973233	Filter, Fuel	1	Fleetguard P/N FS19732
2	3975404	Head, Fuel Filter	1	
3	3975405	Adapter, Filter Head	1	Fleetguard 394283401
4	4946959	Gasket, Filter	1	Fleetguard #033384900
5	3977852	Plug, Threaded	1	

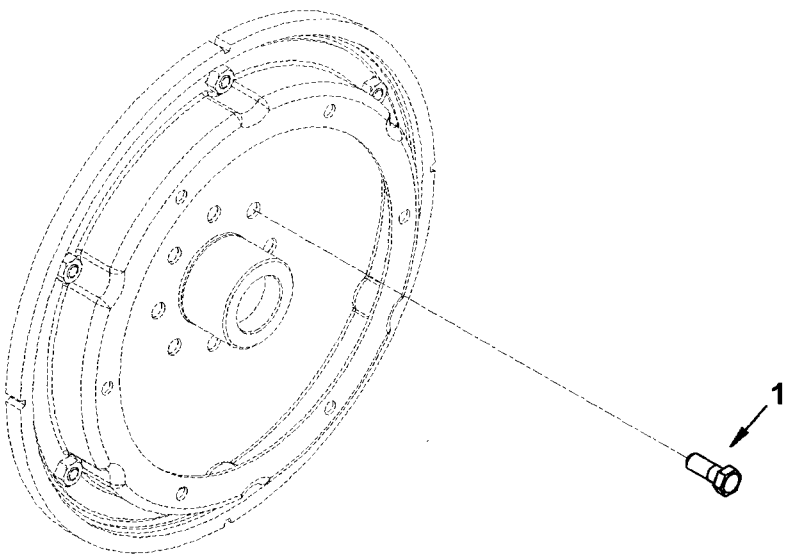

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Ref No.	Part Number	Part Name	Req	Remarks
		FUEL PLUMBING		
		OPTION FT9113		Fuel Plumbing Structure Code: Mr 03 EBM Engine Cylinders: 6 fitting type: N/A 4 fitting supplier: Customer orientation: N/A OEM Attachment: M12 X 1.5-6 H Female OEM Drain Fitting Location: CL of engine (mm): 307.0 CL of crank (mm): 373.0 FFOB (mm): -532.0 Cylinder head Fuel Drain Loc.: CL of engine (mm): 16.0 CL of crank (mm): 391.5 FFOB (mm): -756.5 Common rail fuel Drain Loc.: CL of engine (mm): 216.0 CL of crank (mm): 412.0 FFOB (mm): -289.5 Fuel pump Drain Loc.: CL of engine (mm): 291.5 CL of crank (mm): 55.0 FFOB (mm): -695.0 ECM fuel Manifold Drain Port: CL of engine (mm): N/A CL of crank (mm): N/A FFOB (mm): N/A Unique Characteristics: For Use With Low mount pump.
1	68152	Clip	2	# 4
2	3900632	Screw, Hex Flange Head Cap	2	M8 X 1.25 X 35
3	3902112	Screw, Hex Flange Head Cap	1	M8 X 1.25 X 80
4	3903035	Screw, Banjo Connector	2	M12 X 1.50 X 24
5	3913638	Screw, Hex Flange Head Cap	2	M6 X 1.00 X 16
6	3925883	Screw, Hex Flange Head Cap	1	M8 X 1.25 X 16
7	3955080	Connection, Fuel Block	1	
8	3957290	Valve, Check	1	
9	3963988	Washer, Sealing	1	
10	3963990	Washer, Sealing	7	
11	4929065	Screw, Studded Flange Cap	2	
12	4994932	Tube, Fuel Drain	1	
13	4899743	Clip	1	
14	3955171	Coupling, Plain Hose	1	
15	4929619	Plug, Threaded	1	
16	4940552	Tube, Fuel Supply	1	



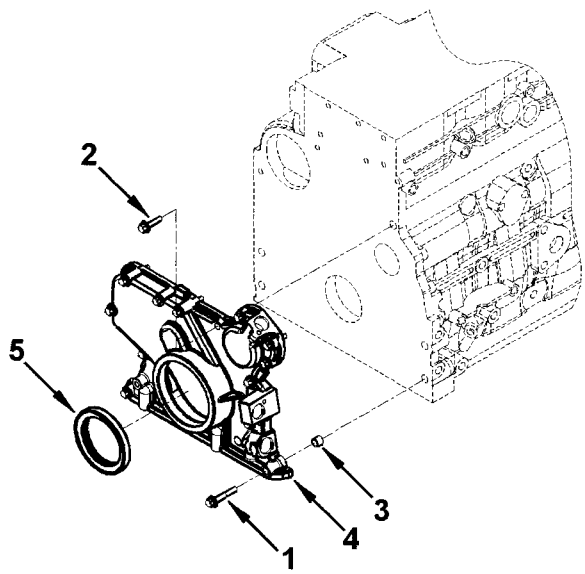
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Ref No.	Part Number	Part Name	Req	Remarks
		FLYWHEEL		
		OPTION FW9885		Flywheel
				ring gear diametrical pitch: 8/10 ring gear tooth count: 127 ring gear outside diameter(mm): 407.85 supplier: Cummins type: Flywheel max full load rated speed(not to exceed): 2980 flywheel inertia: 0.35 flywheel mounting flange to ring gear leading edge (mm): 16.13 mounting web thickness (mm): 16 Pilot Bearing Bore Diameter (mm): 51.968 clutch/t. C.Mounting bolt circle count: Single clutch/t. C.Mounting hole count: 8 clutch/t. C.Bolt circle diameter (mm): 342.9 clutch/t. C.Mounting hole spacing: Equal clutch/t. C.Mounting hole size: 10.5mm thru 2 nd clutch/t. C.Mounting hole count: N/A 2 nd clutch/t. C.Bolt circle diameter (mm): N/A 2 nd clutch/t. C.Mounting hole spacing: N/A 2 nd clutch/t. C.Mounting hole size: N/A Cummins material standard: 40001 Intended Drive Hardware: Clark 18000, 24000,hr 28000,32000,c270,c320.
	3973519	Flywheel	1	
1	(3973518)	Flywheel	1	
2	3905427	Gear, Flywheel Ring	1	



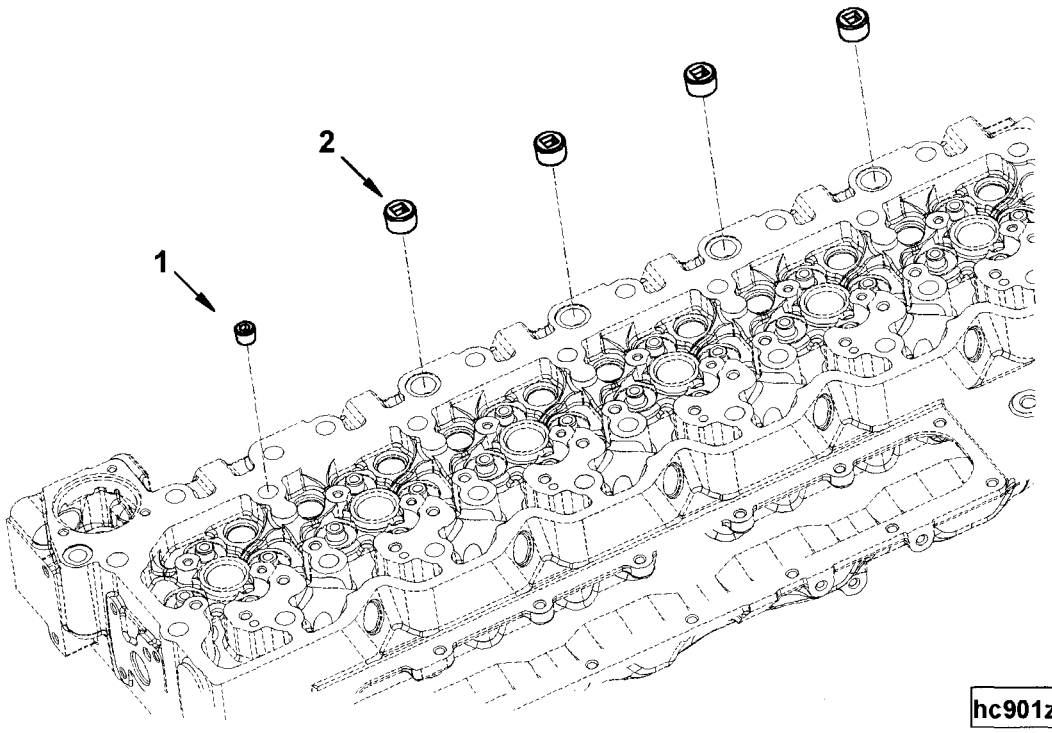
fw951zu

Ref No.	Part Number	Part Name	Req	Remarks
		FLYWHEEL MOUNTING		
		OPTION FW9934		Flywheel Mounting
				Bolt Length (mm): 31 Flywheel Web Thickness (mm): 16 To Suit REPTO: No
1	4894641	Screw, Captive Washer Cap	8	



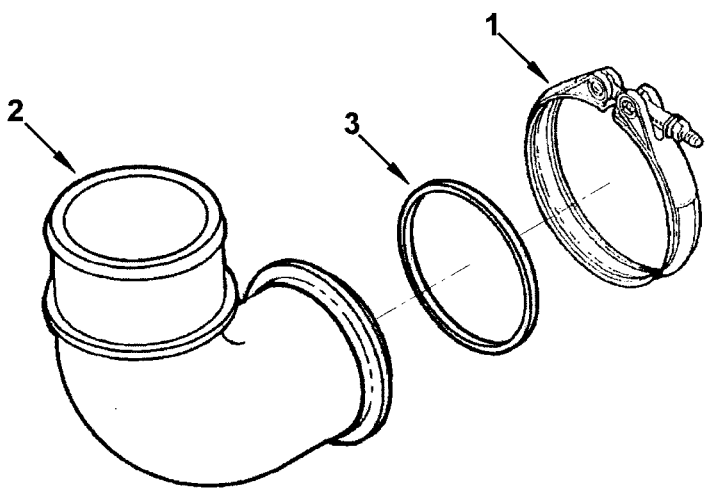
gg940gy

Ref No.	Part Number	Part Name	Req	Remarks
		FRONT GEAR COVER		
		OPTION GG9836		Front Gear Cover Structure Code: 03 EBM Engine Family: "B" Series Cylinders: 4/6 Design Phase: N/A Belt Retainer Provision: No Noise Panel Provision: No Material: Cast Aluminium Oil Pan/Front Gear Cover Mtg Holes: 2 Oil Pressure Switch Provision: Yes Oil Fill Provision: No
1	3901445	Screw, Hex Flange Head Cap	7	M8 X 1.25 X 45
2	3902114	Screw, Hex Flange Head Cap	6	M8 X 1.25 X 30
3	3949326	Dowel, Ring	2	
4	5258751	Cover, Front	1	
5	4890832	Seal, Oil	1	



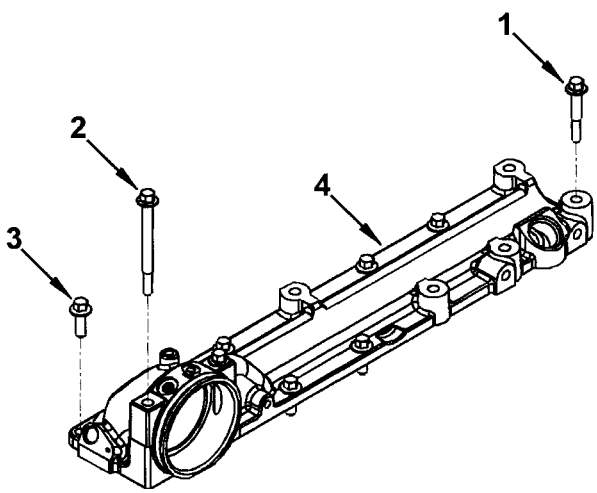
Ref No.	Part Number	Part Name	Req	Remarks
		CABIN HEATER PLUMBING		
		OPTION HC9026		Cabin Heater Plumbing
				For use with customer supplied cab heater.
1	4931643	Plug, Pipe	4	1/2 NPT
2	4933532	Plug, Pipe	1	3/4 NPT

Ref No.	Part Number	Part Name	Req	Remarks
		MOUNTING,AUXILIARY PUMP		
		OPTION HD9347		Mr - auxiliary pump mounting pump drive type: Gear compressor rear drive: N/A Engine Family: "B" Series No content option for no air compressor and no hydraulic drive engines.



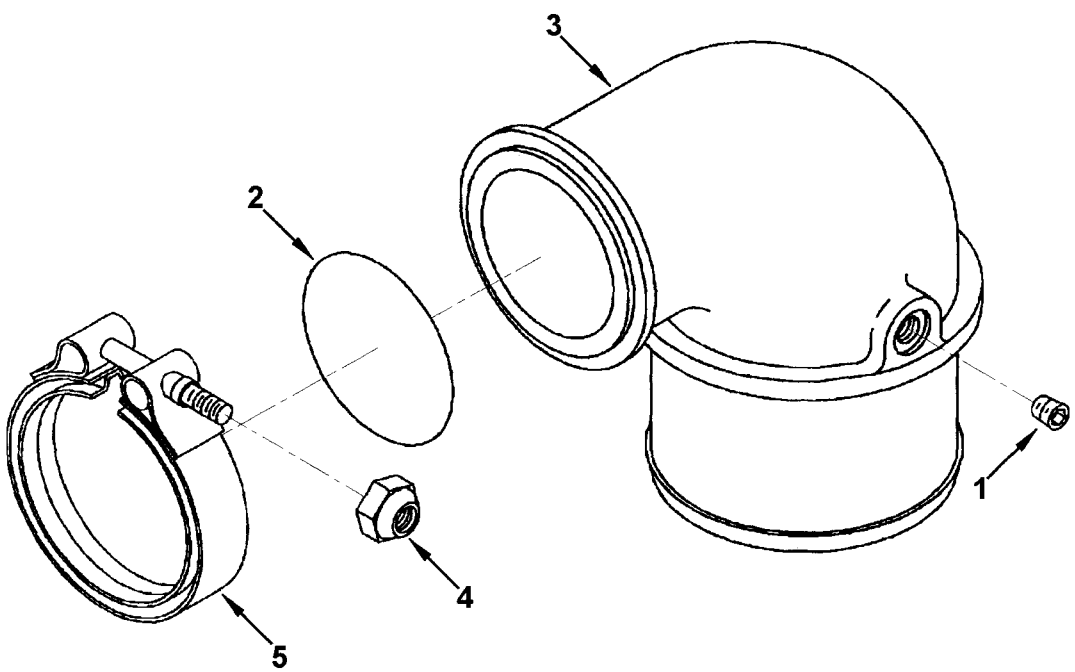
ic910gp

Ref No.	Part Number	Part Name	Req	Remarks
		AIR INTAKE CONNECTION		
		OPTION IC9480		Air Intake Connection Design Phase: Current Product Engine Family: "B" Series Engine Cylinders: 4 And 6 Engine Aspiration: Turbocharged Connection supplier: Connection Style: Elbow Connection orientation: Customer defined customer interface location from engine centerline(mm): 279.75 from crank centerline (mm): Customer defined from front face of block (mm): Customer defined Connection Outside Diameter (mm): 75.
1	4938989	Clamp, V Band	1	
2	4933777	Pipe, Air Transfer	1	
3	3867646	Seal, O Ring	1	

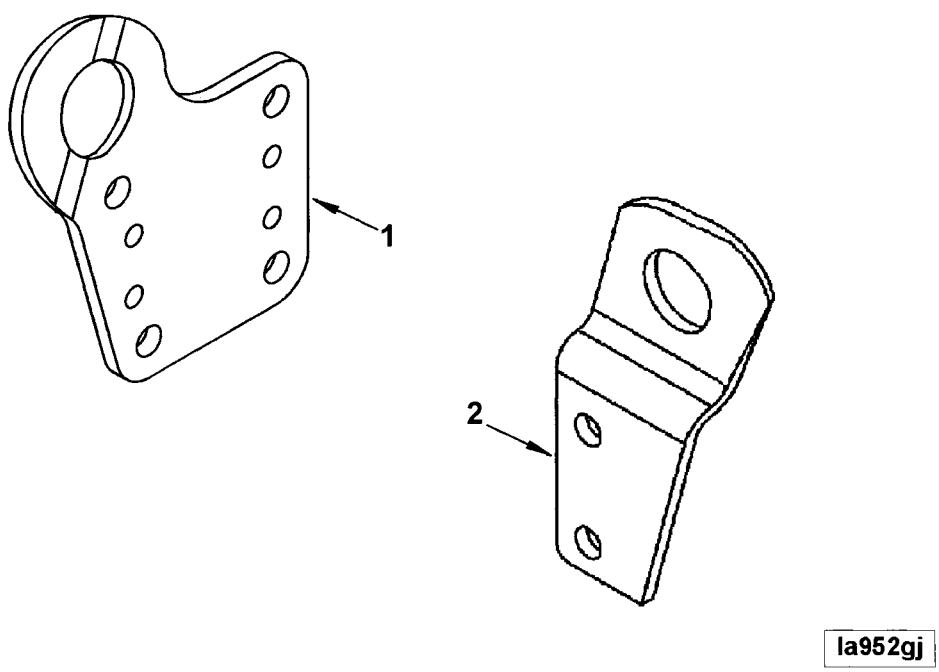


im901gz

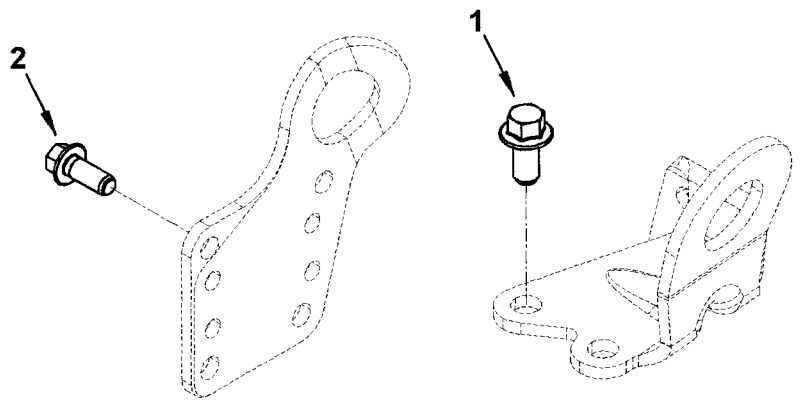
Ref No.	Part Number	Part Name	Req	Remarks
		AIR INTAKE MANIFOLD		
		OPTION IM9113		Air Intake Manifold Design Phase: Current Product Engine Family: "B" Series Engine Cylinders: 6 Intake connection mounting provision: Yes Intake Connection Type/interface: Half Marmon flange Marmon flange diameter (mm): 88 Intake Connection Mounting Interface: From engine CL (mm): 221.75 from CCL (mm): 427.728 From FFOB (mm): -132 Air heater provision: Yes Integral Air Heater Voltage: 12/24 V fipg (fixed in place gasket) used in this opt air compressor air supply provision: Yes
1	3900633	Screw, Hex Flange Head Cap	1	M8 X 1.25 X 50
2	3919995	Screw, Hex Flange Head Cap	2	M8 X 1.25 X 90
3	3918109	Screw, Hex Flange Head Cap	7	M8 X 1.25 X 25
4	4981333	Manifold, Air Intake	1	


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Ref No.	Part Number	Part Name	Req	Remarks
		AIR TRANSFER CONNECTION		
		OPTION IT9039		Air Transfer Connection
				Connection Supplier: Cummins Connection Type: 90 Degree Elbow orientation: Rotatable engine interface flange type: Half Marmon engine interface flange diameter(mm): 73.85 (3″) engine interface flange thickness (mm): 3.5 OEM Interface Connection. Diameter (mm): 76.7 OEM Interface Connection. Clamping Surface(mm): 33.5 Turbocharger interface to CL OEM interface (mm): 95.2 OEM Interface To CL Turbocharger Interface(mm): 100 customer tapping: 1/8-27 NPTF s-2 supply method: Kit
1	3008465	Plug, Pipe	1	1/8 NPT
2	3883284	Seal, O Ring	1	
3	3918685	Pipe, Air Transfer	1	
4	3923041	Nut, Lock	1	
5	3069053	Clamp, V Band	1	


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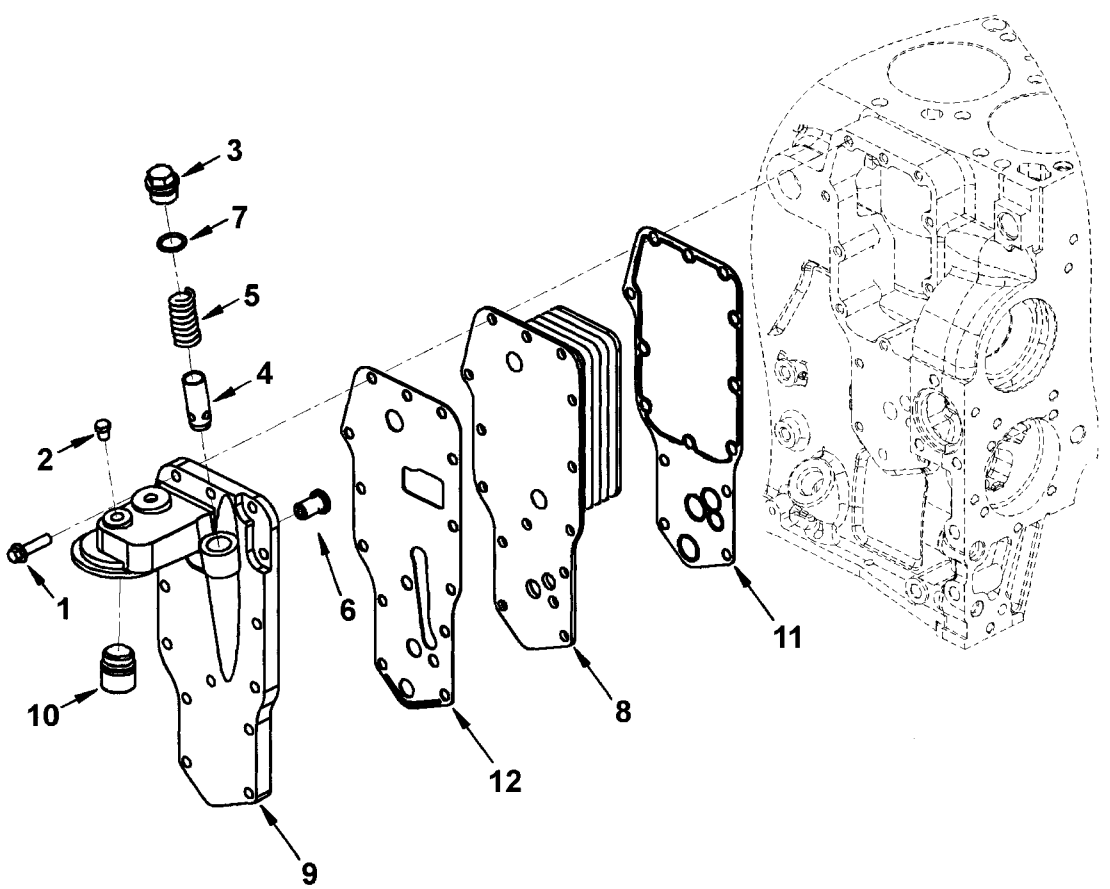
Ref No.	Part Number	Part Name	Req	Remarks
		LIFTING ARRANGEMENT		
		OPTION LA9145		Lifting Arrangement
				Engine Family: "B" Series max lifting load(lbs): 3145 bracket(s) provided: Front and rear accommodates pad mount alternator bracket: Y accommodates spool, hinge and customer supplied mount alternator bracket: Y this bracket is designed for engine mounting on tier3 6B engines. Maximum allowable load for a single bracket is 2450 lbs. front bracket eyelet coordinates as viewed from the front, using front face of block and centerline of crank: X = -144.35; y = 455.73; z = 78.00 rear bracket eyelet coordinates as viewed from the front, using front face of block and centerline of crank: X = -123.75; y = 444.45; z = 785.58.
1	4894100	Bracket, Lifting	1	
2	4933232	Bracket, Lifting	1	



la951gz

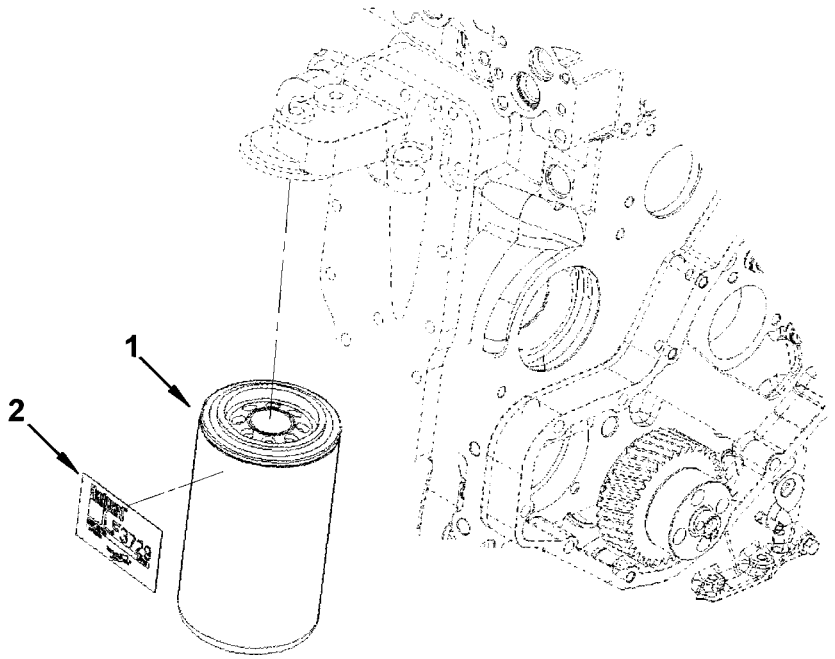
Ref No.	Part Number	Part Name	Req	Remarks
		LIFTING BRACKET MOUNTING		
		OPTION LA9147		Lifting Bracket Mounting
				Engine Family: "B" Series rear bracket capscrew diameter: M12 rear bracket capscrew length: 25 rear bracket capscrew quantity: 2 front bracket capscrew diameter: M10 front bracket capscrew length: 25 accommodates spool, hinge and customer supplied mount alternator bracket.
1	3903990	Screw, Hex Flange Head Cap	2	M10 X 1.50 X 20
2	3902460	Screw, Hex Flange Head Cap	4	M10 X 1.50 X 25

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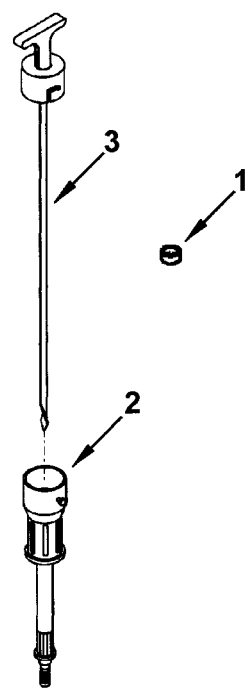
lc900zb

Ref No.	Part Number	Part Name	Req	Remarks
		ENGINE OIL COOLER		
		OPTION LC9244		Engine Oil Cooler Advertised HP Restriction: Less Than or Equal to 300 Filter Head Loc: High CL of Engine to CL of Filter Head (mm): -227.8 FFOB to CL of Filter Head (mm): -185 Filter Thread Size Provided: 1-16 UN - 2A Oil Pressure Tap Size: 1/8- 27 NPTF Lube Flow Cooling Capacity (GPM): 20.5 Block Mtg Interface: 15-M8 X 1.25 Threaded Hole BZL may use 3008465 Instead of 3906619 and 3947206 (2X) and 3901445 (13X) Instead of 3901445 (15X).
1	3901445	Screw, Hex Flange Head Cap	15	M8 X 1.25 X 45
2	3906619	Plug, Pipe	2	1/8 NPT
3	3946947	Plug, Threaded	1	
4	3947287	Plunger, Prs Regulator	1	
5	3925009	Spring, Compression	1	
6	3936365	Valve, Pressure Relief	1	
7	3929457	Seal, O Ring	1	
8	3975818	Cooler, Oil	1	
	3955034	Head, Lub Oil Filter	1	
9	(3965153)	Head, Lub Oil Filter	1	
10	(3942367)	Adapter, Filter Head	1	
11	2830559	Gasket, Oil Cooler Core	1	Serviced as 3977913
12	3974127	Gasket, Filter Head	1	Serviced as 3977913



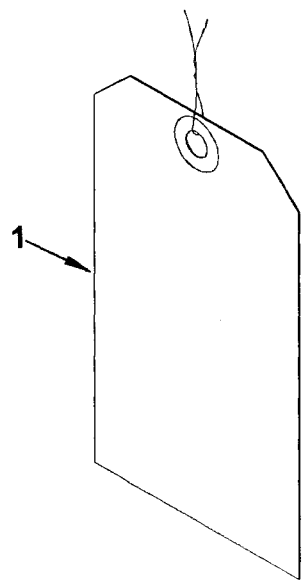
Ref No.	Part Number	Part Name	Req	Remarks
		FULL FLOW OIL FILTER		
		OPTION LF9136		Full Flow Oil Filter
1	3937736	Cartridge, Lub Oil Filter	1	Purchase From Fleetguard
2	(5259795)	Decal	1	

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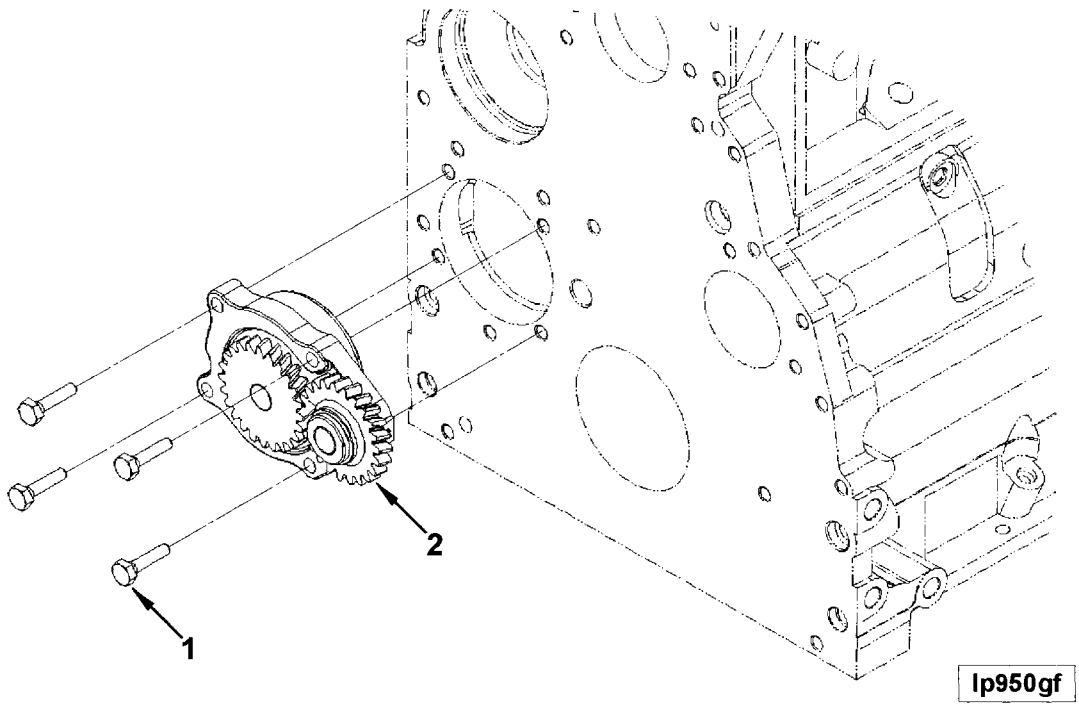
lg955gp

Ref No.	Part Number	Part Name	Req	Remarks
		OIL LEVEL GAUGE		
		OPTION LG90117		Oil Level Gauge Engine Family: B Engine Cylinders: 6 Oil Pan Sump Type: Standard Front/ Rear Dipstick Supplier: Cummins Dipstick Tube Supplier: Cummins Dipstick Location: Fuel Pump Side tube entry location from FFOB (mm): 352 Dipstick Style: Locking, Free Hanging Dipstick Pull Location: Fuel Pump Side from engine CL: N/A from CCL: N/A from FFOB CL: N/A Dipstick Brace Attachment Location: N/A from engine CL: N/A from CCL: N/A from FFOB CL: N/A Oil Level High / Low (qt): 18.5 / 15.85 Dipstick Calibration: Bfob - full / low (mm): 50.5/63.6 Power Angle (deg): 0 Tilt Angle (deg): 0 effective tube length (mm): 800 tube bend angle (deg): N/A handle color: Yellow wire tie to engine for shipment.
1	3900955	Plug, Expansion	4	
	(3976997)	Dipstick	1	
2	3974254	Tube, Oil Gauge	1	
3	3976998	Dipstick	1	

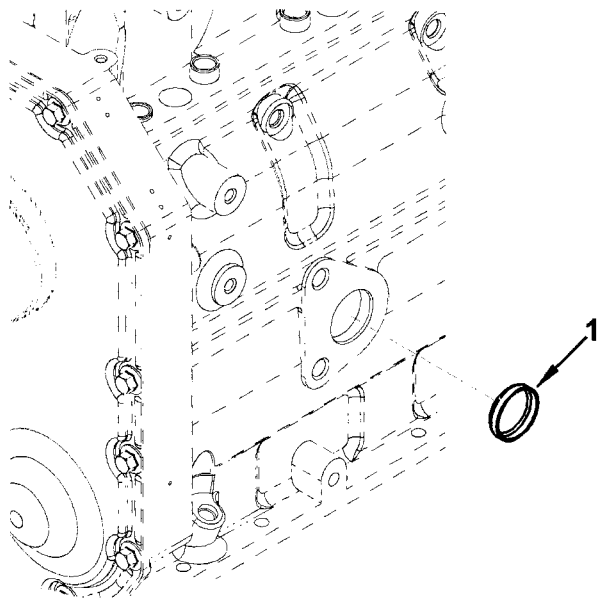


lo951ga

Ref No.	Part Number	Part Name	Req	Remarks
		LUBE OIL **OPTION LO9701**		
1	(3916103)	Tag, Instruction	1	Tag Identification: No Oil Tag Location: Front Lifting Bracket BZL Plant May Substitute P/N 3916103 for P/N 3352918 Instruction Tag



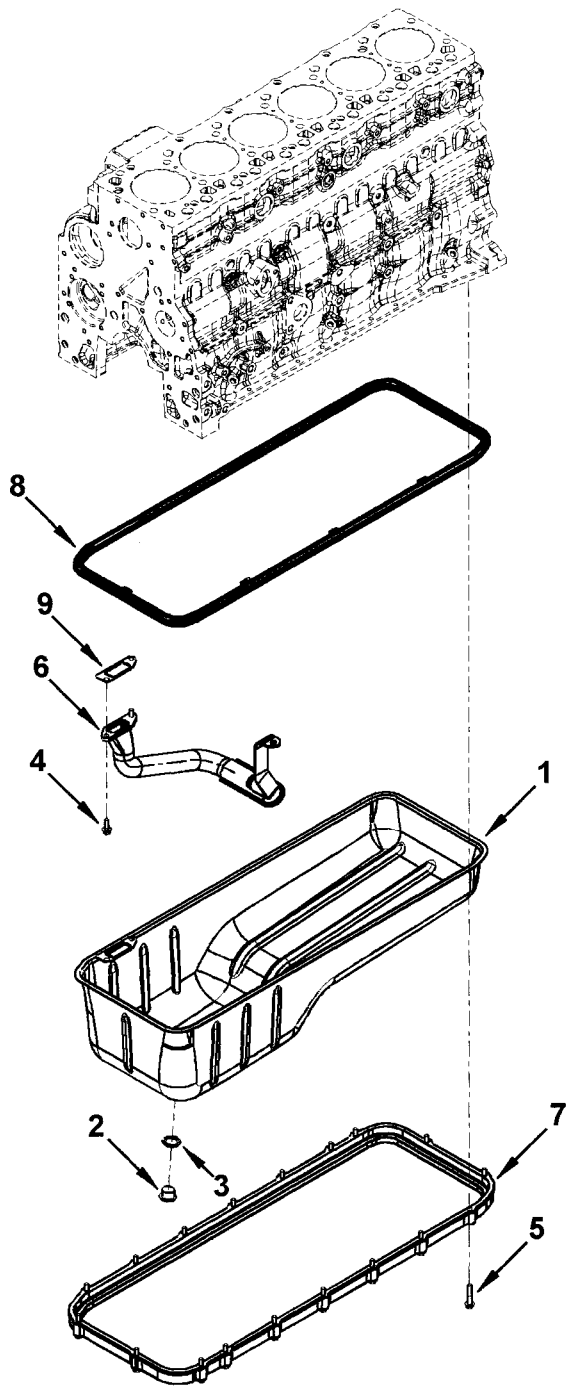
Ref No.	Part Number	Part Name	Req	Remarks
		LUBRICATING OIL PUMP		
		OPTION LP9065		Lubricating Oil Pump pump drive: Non crank concentric max HP: 305 body material: Cast iron flow rate at pump speed (GPM at RPM): 3.2 at 750 gear type: Steel HCR gear piston cooling method: Saddle or j-jet Engine Cylinders: 6 Engine Aspiration: Charge Air Cooled block oil pump cavity (mm): 21.2 CDC may use lub oil pump 3971544 in place of lub oil pump 4939588
1	3900677	Screw, Hexagon Head Cap	4	M8 X 1.25 X 30
2	4939588	Pump, Lubricating Oil	1	



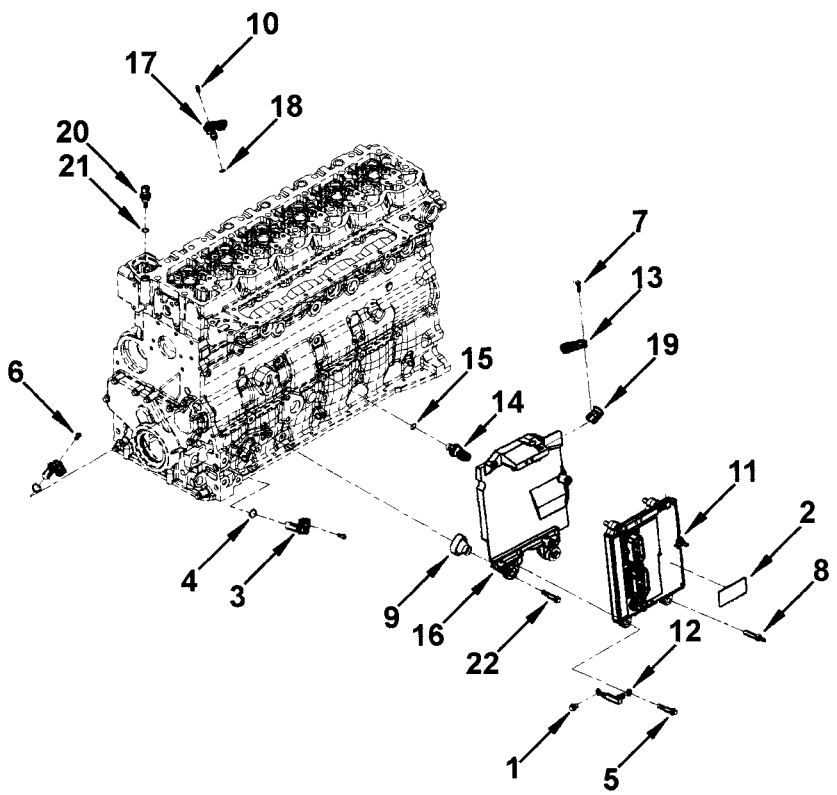
ob901zb

Ref No.	Part Number	Part Name	Req	Remarks
		OIL FILLER ARRANGEMENT		
		OPTION OB9169		Oil Filler Arrangement Engine Family: "B" Series fill tube supplier: No fill provided in block. Functional w/dual power ratings: Yes Restricted Breather Type: None Fuel Type: Diesel drain provision for 50 DN alternator: No Engine Aspiration: Charge Air Cooled engine cylinder count: 6 Fill Location: Valve Cover.
1	3900958	Plug, Expansion	1	

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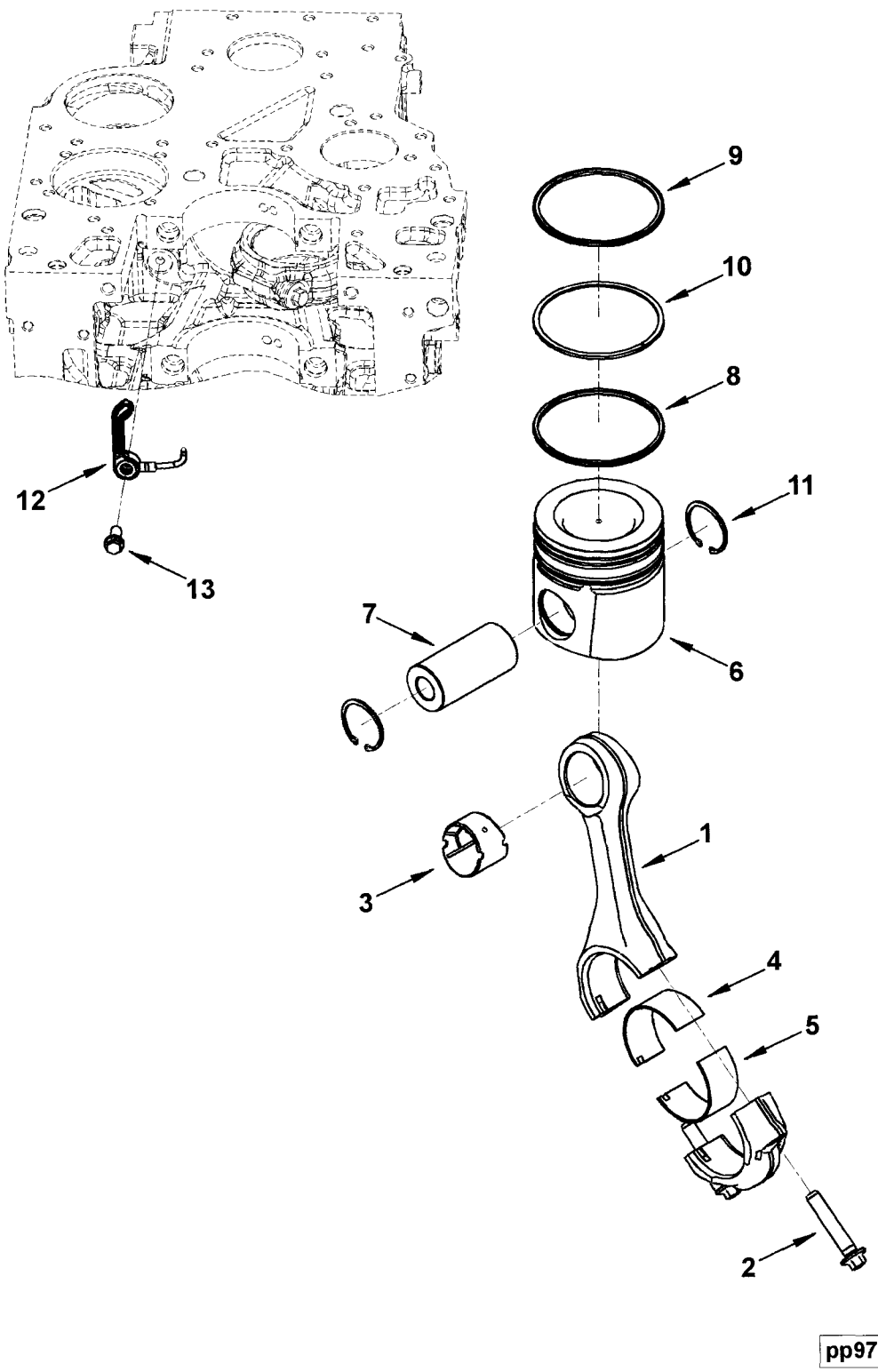

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Ref No.	Part Number	Part Name	Req	Remarks
		OIL PAN		
		OPTION OP9456		Oil Pan Design Phase: EBM 03 Engine Family: "B" Series Engine Cylinders: 6 sump location: Front oil pan material: Stamped steel pan capacity value high(qt): 18.5 (17.5 l) low (qt) 15.85 (15 l) oil pan angularity value up: 50 down: 50 side to side: 43 drain size: M22 Drain Location: Bottom heater provision: Yes heater boss size: M22X1.5 heater boss location: Fuel pump side Oil Level Sensor Provision: None Oil Level Sensor Tapping Size: None Oil Level Sensor Location: N/A block flange (width/length hole to hole): 299 x 775.4 Unique Characteristics: Isolated Oil Pan sump style: Standard oil pan type: Isolated suspended internally cast suction tube: No required oil filter medium: Stratapore suction tube flange thickness (mm): 15.0 doweled for flywheel housing: No corner pan stiffener provided: No.
	4898036	Pan, Oil	1	
1	(4898037)	Pan, Oil	1	
2	3282266	Plug, Threaded	2	
3	3287561	Washer, Sealing	2	
4	3025806	Screw, Socket Head Cap	2	M8 X 1.25 X 30
5	3901445	Screw, Hex Flange Head Cap	18	M8 X 1.25 X 45
6	3977790	Tube, Lub Oil Suction	1	
7	4938655	Adapter, Oil Pan	1	
8	4934344	Gasket, Oil Pan	1	
9	4898301	Gasket, Oil Suc Connection	1	

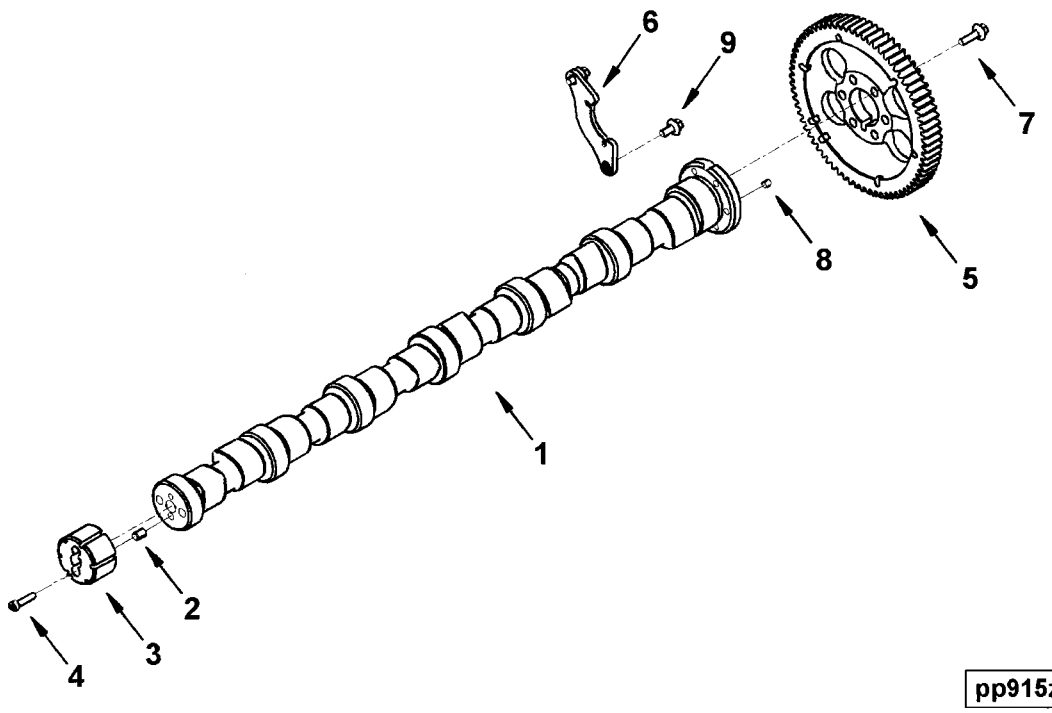


ph903zg

Ref No.	Part Number	Part Name	Req	Remarks
		ENGINE CONTROL MODULE		
		OPTION PH9114		Engine Control Module ECM Version: CM850 PV ECM Location: On-Engine Manufacturer of Record: Cummins Boot Software Type: BL 4504 Ambient Air Pressure Sensor: Yes Intake Manifold Pressure Sensor: Absolute Oil Pressure Sensor: Switch Speed Sensor Location: Damper Pulley Engine Design Phase: ISBE EURO4 Beta Build Engine Family: B Series ECM Hardware Level: PV Turbo Type: Wgt/Vgt Coolant Temp Sensor: Standard Tolerance Intake Connection Type: Rount Rotatable Unique Characteristics: Oil Pressure SW. In Frt. Gear CVR. KOM may use 4936491 SHCS in Place of the 3957849 SHCS. KOM may use 3609867 in Place of 3958748. DCEC may use Dataplate 5267513 in Place of 3958748.
1	3093956	Screw, Hex Flange Head Cap	1	M8 X 1.25 X 12
2	3609867	Dataplate	1	
3	2872277	Sensor, Position	2	Cam or Crank
4	4928599	Seal, O Ring	1	
5	3901445	Screw, Hex Flange Head Cap	6	M8 X 1.25 X 45
6	3906391	Screw, Socket Head Cap	2	M6 X 1.00 X 16
7	3920854	Screw, Captive Washer Cap	1	M5 X 0.80 X 20
8	3947206	Screw, Studded Flange Cap	2	
9	4899791	Isolator, Vibration	3	
10	3957849	Screw, Socket Head Cap	1	
11	4921776	Module, Electronic Control	1	Recon Equiv. 4921776 NX/RX
12	3977357	Wire, Ground	1	
13	4076493	Sensor, Pressure	1	Ambient Air
14	4076930	Switch, Pressure	1	Oil
15	4921574	Seal, O Ring	1	
16	4993966	Bracket, Etr Cnt Module	1	
17	4921322	Sensor, Prs Temperature	1	Intake Manifold
18	4903482	Seal, O Ring	1	
19	4932211	Clip	1	
20	4954905	Sensor, Temperature	1	Coolant or Oil or Fuel
21	4010519	Seal, O Ring	1	
22	3928873	Screw, Hex Flange Head Cap	3	

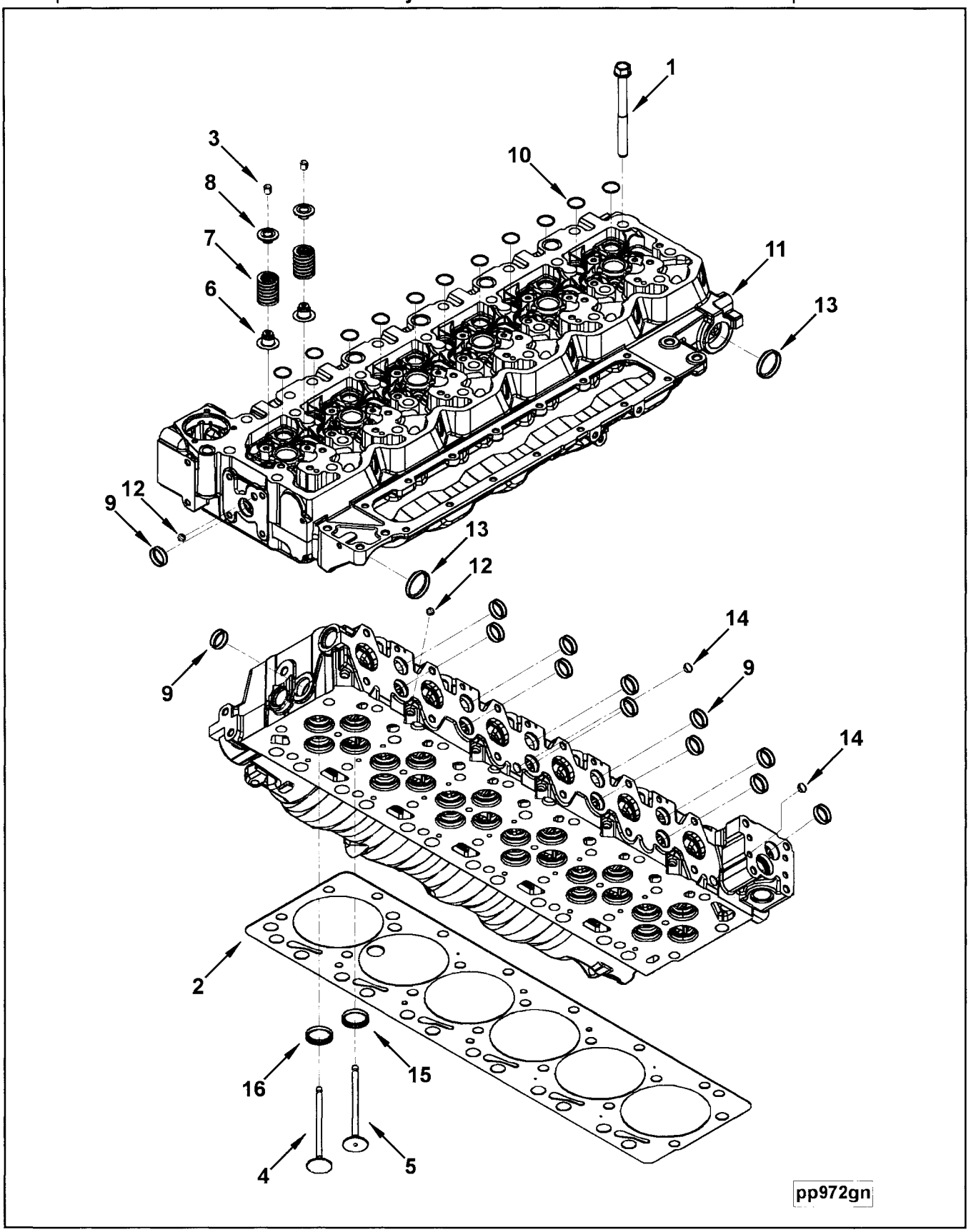

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Ref No.	Part Number	Part Name	Req	Remarks
		CONNECTING ROD AND PISTON		
		OPTION PP8610		Connecting Rod and Piston
	(3971212)	Rod, Engine Connecting	6	Recon Equivalent 3971212 RX
1	(3971211)	Rod, Engine Connecting	1	
2	4891179	Screw, Connecting Rod Cap	2	
3	4891178	Bushing	1	
4	3969562	Bearing, Connecting Rod	6	Standard
5	4893693	Bearing, Connecting Rod	6	Standard
	4955160	Kit, Engine Piston	6	
6	(4934860)	Piston, Engine	1	Serviced as 4955160
7	4931041	Pin, Piston	1	
	4955251	Set, Piston Ring	1	
8	(3976339)	Ring, Compression Piston	1	
9	(4932587)	Ring, Compression Piston	1	
10	4932801	Ring, Oil Piston	1	
11	3920691	Ring, Retaining	12	
12	3968877	Nozzle, Piston Cooling	6	
13	3964817	Screw, Banjo Connector	6	
	4955481	Kit, Engine Piston .50 mm	A/R	0.50 mm Oversize
6	(4934816)	Piston, Engine	1	Serviced as 4955481
	4955480	Set, Piston Ring .50 mm	1	0.50 mm Oversize
4	3901171	Bearing, Connecting Rod	A/R	0.25 mm Oversize
4	3901172	Bearing, Connecting Rod	A/R	0.50 mm Oversize
4	3901173	Bearing, Connecting Rod	A/R	0.75 mm Oversize
4	3901174	Bearing, Connecting Rod	A/R	1.00 mm Oversize
5	4892795	Bearing, Connecting Rod	A/R	0.25 mm Oversize
5	4892796	Bearing, Connecting Rod	A/R	0.50 mm Oversize
5	4892797	Bearing, Connecting Rod	A/R	0.75 mm Oversize
5	4892798	Bearing, Connecting Rod	A/R	1.00 mm Oversize

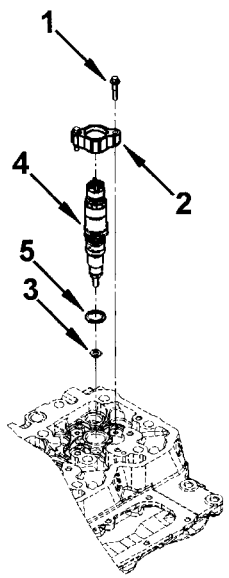


Ref No.	Part Number	Part Name	Req	Remarks
		CAMSHAFT		
		OPTION PP8610		Camshaft
	3954100	Camshaft	1	
1	(3954099)	Camshaft	1	Customer to Purchase 3979506
2	3954111	Dowel, Ring	1	
3	3955069	Ring, Speed Indicator	1	
4	4895877	Screw, Socket Head Cap	2	
5	4896380	Gear, Camshaft	1	
6	4897457	Support, Camshaft Thrust	1	
7	3093730	Screw, Hex Flange Head Cap	6	M8 X 1.25 X 25
8	3904483	Dowel, Pin	1	
9	3925883	Screw, Hex Flange Head Cap	2	M8 X 1.25 X 16

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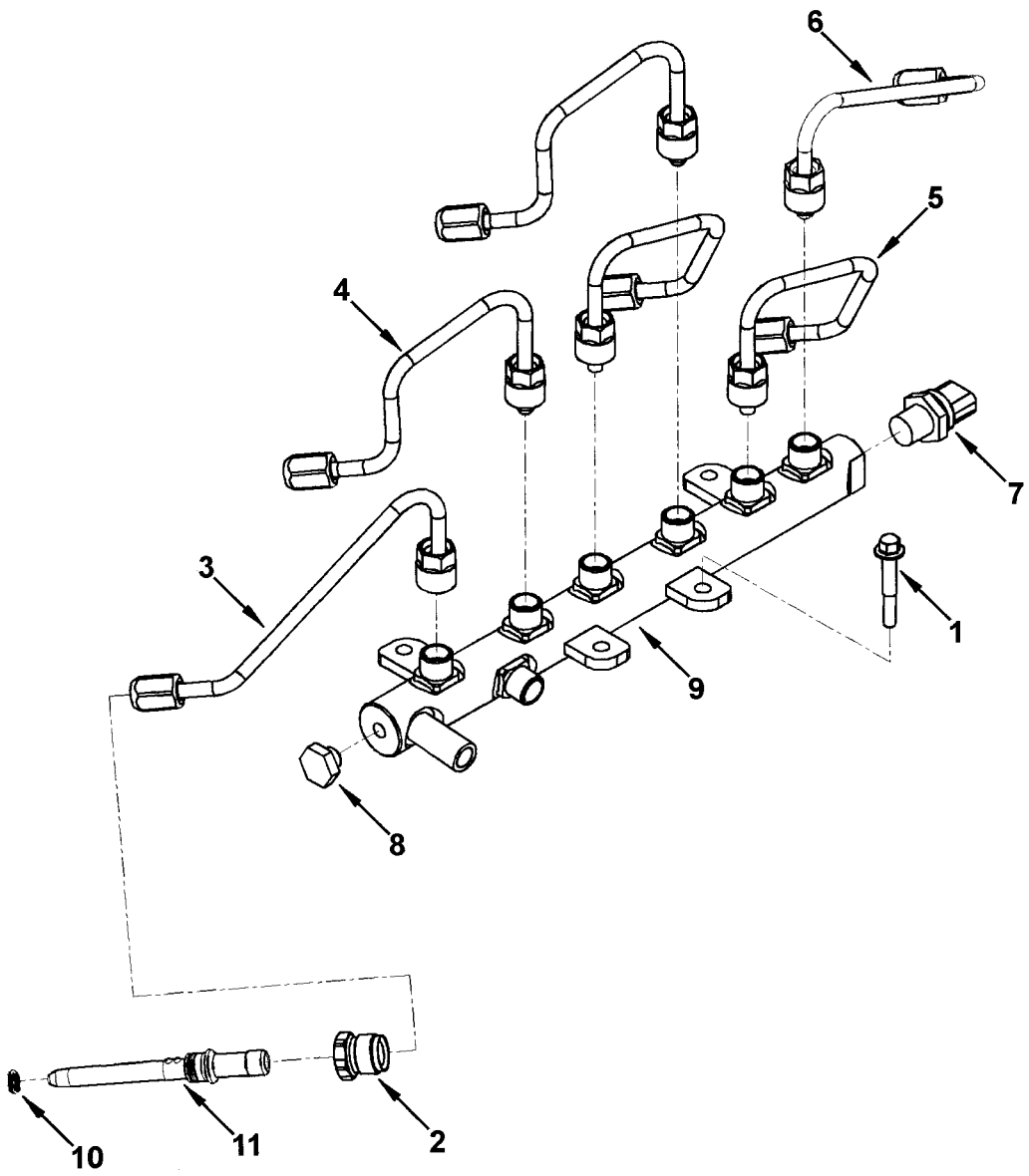
Ref No.	Part Number	Part Name	Req	Remarks
		CYLINDER HEAD		
		OPTION PP8610		Cylinder Head
1	3927063	Screw, Hex Flange Head Cap	26	
2	4932210	Gasket, Cylinder Head	1	
	4936081	Head, Cylinder	1	Recon Equivalent 4936081 NX
	3802967	Kit, Exhaust Valve	12	
3	3940123	Collet, Valve	2	
4	(3940734)	Valve, Exhaust	1	Serviced as 3802967
	3802924	Kit, Intake Valve	12	
3	3940123	Collet, Valve	2	
5	(3940735)	Valve, Intake	1	Serviced as 3802924
6	3955393	Seal, Valve Stem	2	
7	3943161	Spring, Valve	24	
8	3943198	Retainer, Valve Spring	24	
	3977226	Head, Cylinder	1	
9	3914035	Plug, Expansion	13	
10	3920706	Plug, Expansion	11	
11	(3977222)	Head, Cylinder	1	
12	3007632	Plug, Expansion	7	
13	3945094	Plug, Expansion	2	
14	3945095	Plug, Expansion	2	
15	3943449	Insert, Valve	12	Standard
16	3943450	Insert, Valve	12	Standard
		SERVICE PARTS		
15	3939719	Insert, Valve	A/R	0.127 mm Oversize
15	3939720	Insert, Valve	A/R	0.254 mm Oversize
15	3939721	Insert, Valve	A/R	0.508 mm Oversize
16	3939723	Insert, Valve	A/R	0.127 mm Oversize
16	3939724	Insert, Valve	A/R	0.254 mm Oversize
16	3939725	Insert, Valve	A/R	0.508 mm Oversize



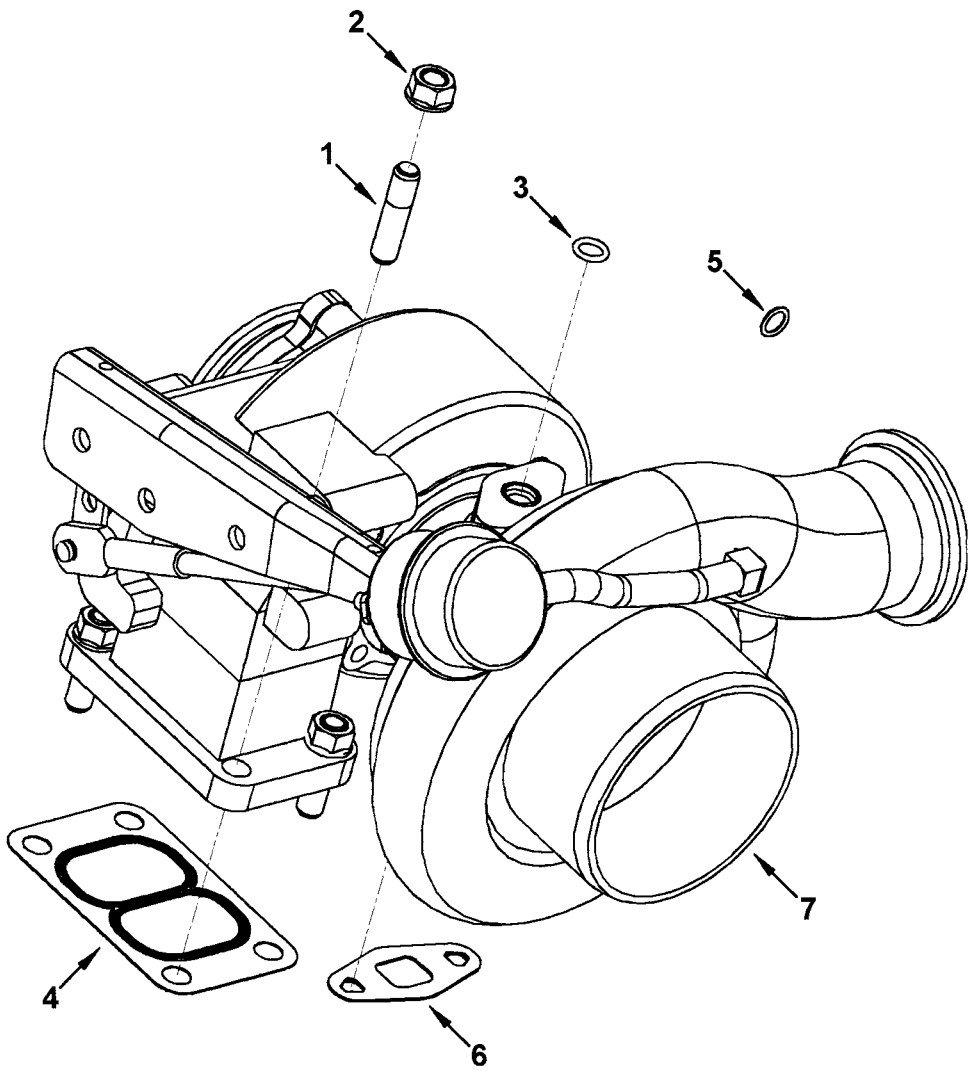
pp968gk

Ref No.	Part Number	Part Name	Req	Remarks
		INJECTOR		
		OPTION PP8610		Injector
1	3900628	Screw, Hex Flange Head Cap	12	M6 X 1.00 X 30
2	3976370	Clamp, Injector	6	
4	3976372	Injector	6	Recon Equivalent 3976372 NX
3	3976371	Seal, Injector	1	
5	3977393	Seal, O Ring	1	

NOTES

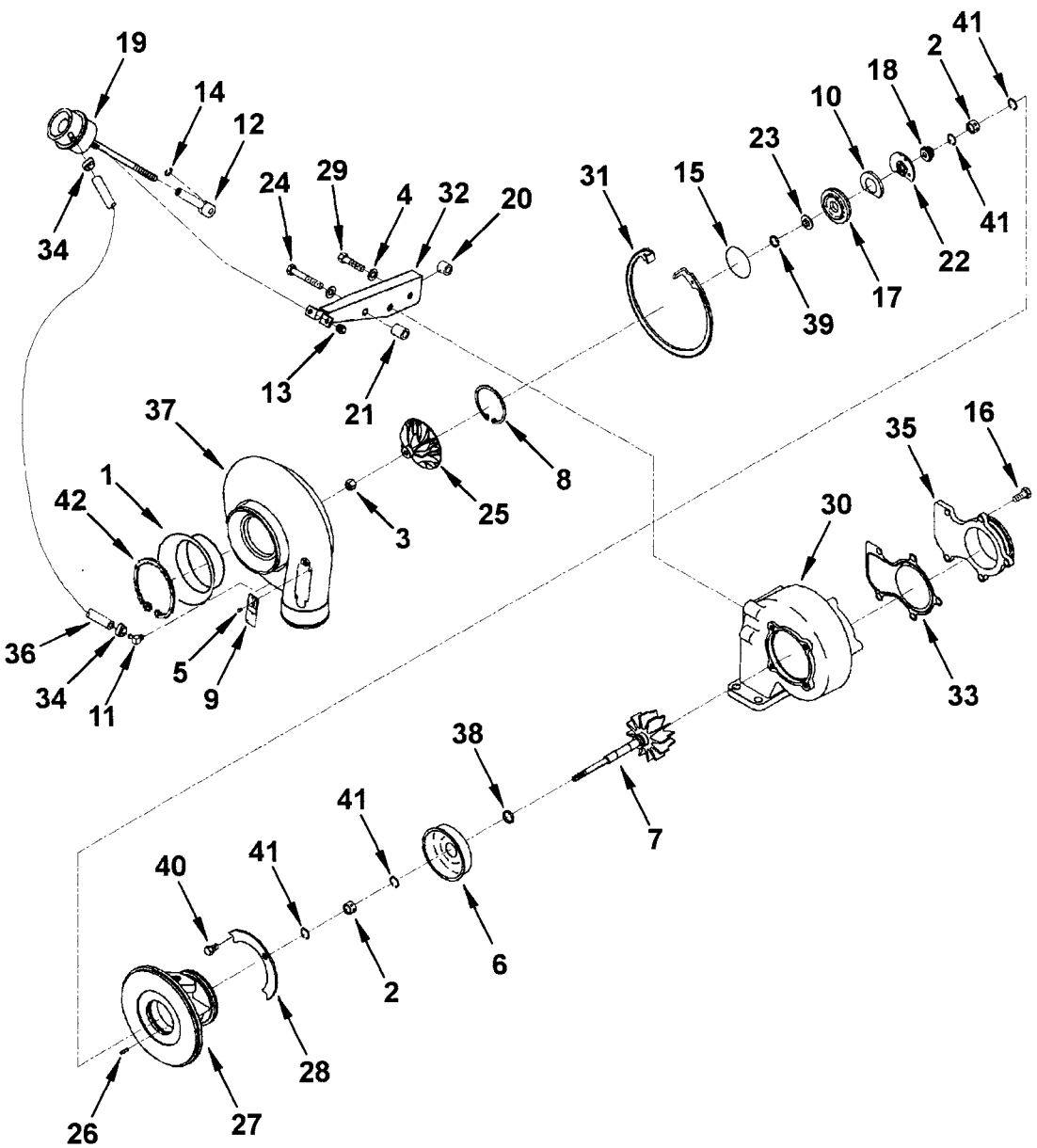

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Ref No.	Part Number	Part Name	Req	Remarks
		INJECTOR PLUMBING		
		OPTION PP8610		Injector Plumbing
1	3930837	Screw, Hex Flange Head Cap	4	
2	5264181	Retainer, Inj Ful Sup Cnr	6	
3	3978031	Tube, Injector Fuel Supply	1	#1 Cylinder
4	3978032	Tube, Injector Fuel Supply	2	#2 and #3 Cylinder
5	3978034	Tube, Injector Fuel Supply	2	#4 and #5 Cylinder
6	3978036	Tube, Injector Fuel Supply	1	#6 Cylinder
	3977530	Manifold, Fuel	1	
7	5260246	Sensor, Pressure	1	Fuel
8	3974093	Valve, Pressure Relief	1	
9	(3978448)	Manifold, Fuel	1	
	3975703	Connector, Inj Fuel Supply	6	
10	3972753	Seal, O Ring	1	
11	(3975702)	Connector, Inj Fuel Supply	1	

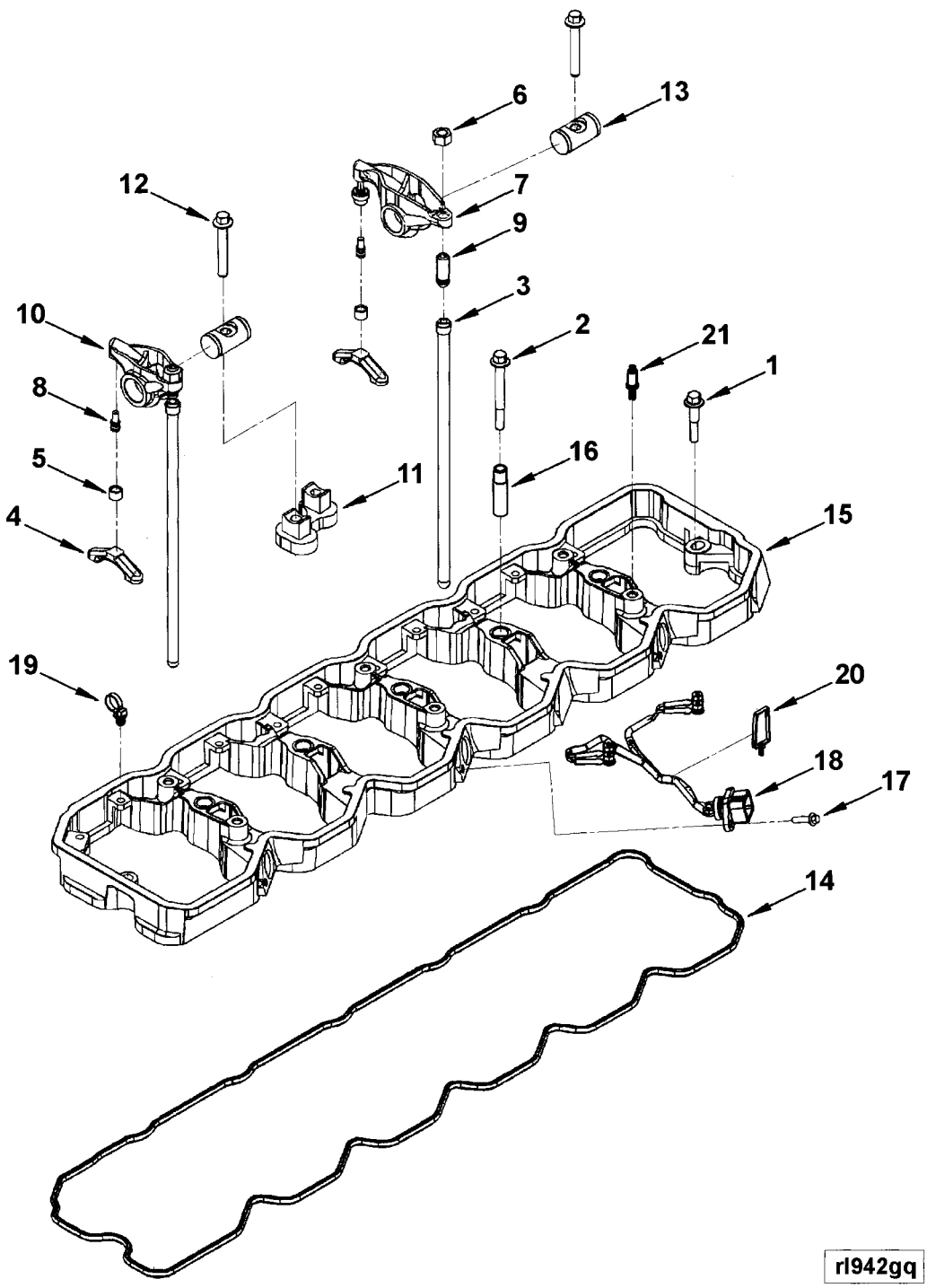


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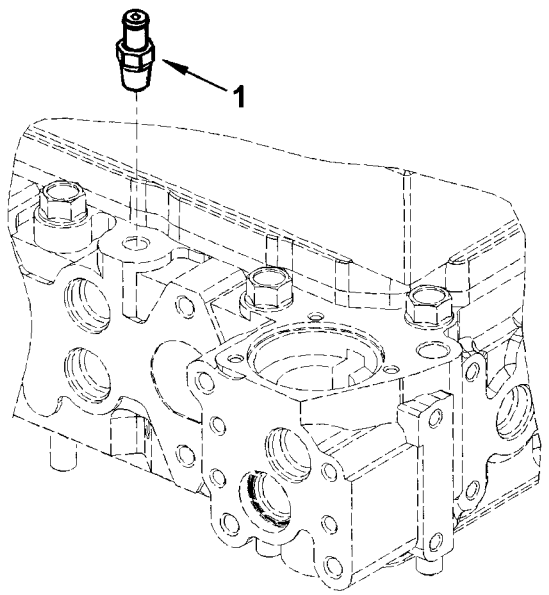
Ref No.	Part Number	Part Name	Req	Remarks
		TURBOCHARGER		
		OPTION PP99127		Turbocharger
				Engine Cylinders: 6 Engine Family: "B" Series engine design phase: Tier 3 Exhaust Outlet Location: HMRO x = -177 y = 528 z = -504 base ID17 turbocharger: 4039630 Turbocharger Type: Wastegate wastegate pressure setting (BAR): 1.93 Turbocharger model: HX35 w fixed compressor outlet orientation(deg): 5 compressor angle (shipping (deg): 335 turbine angle (deg): 20 Engine Aspiration: Charge Air Cooled heat shield provision: No
1	3818823	Stud	4	M10 X 1.5-6G Both Ends
2	3818824	Nut, Hexagon Flange	4	M10 X 1.50
	4955479	Kit, Turbocharger	1	
3	3678603	Seal, O Ring	1	
4	3949530	Gasket, Turbocharger	1	
5	3922794	Seal, O Ring	1	
6	4891288	Gasket, Oil Drain	1	
7	(4039630)	Turbocharger	1	Serviced as 4955479


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pp975gc

Ref No.	Part Number	Part Name	Req	Remarks
		TURBOCHARGER		
		OPTION PP99127		Turbocharger
	4955479	Kit, Turbocharger	1	
	(4039630)	Turbocharger	1	Serviced as 4955479
1	(3532427)	Baffle, Turbocharger Noise	1	
2	3503100	Bearing, Turbocharger	2	
3	3596402	Nut, Lock	1	
4	3504967	Washer, Plain	3	
5	3519163	Screw, Drive	2	
6	3519302	Shield, Turbocharger Heat	1	
7	3519336	Shaft & Wheel	1	
8	3527566	Ring, Retaining	1	
9	(3527619)	Dataplate	1	
10	3528104	Baffle, Oil	1	
11	3528121	Coupling, Elbow Hose	1	
12	(3528177)	End, Adjusting Link	1	
13	3592050	Nut, Hexagon Flange	2	
14	3528221	Ring, Retaining	1	
15	3528933	Seal, O Ring	1	
16	3530556	Screw, Hexagon Head Set	5	M8 X 1.25 X 20
17	3530923	Plate, Oil Seal	1	
18	3530924	Slinger, Oil	1	
19	(3598272)	Actuator, Turbocharger	1	
20	3532195	Spacer, Mounting	3	
21	3532196	Spacer, Mounting	1	
22	3595651	Bearing, Tur Thrust	1	
23	3532217	Collar, Thrust	1	
24	3539209	Screw, Hexagon Head Set	1	
25	(4035699)	Impeller, Tur Compressor	1	
26	3522597	Pin, Roll	1	
27	(4035900)	Housing, Tur Bearing	1	
28	3534309	Plate, Clamping	2	
29	3534291	Screw, Hexagon Head Set	2	
30	3529882	Housing, Turbine	1	
31	3533163	Ring, Retaining	1	
32	(4041846)	Bracket, Actuator	1	
33	3535001	Gasket, Adapter	1	
34	3535215	Clamp, Hose	2	
35	3527759	Connection, Adapter	1	
36	(4048711)	Hose, Plain	1	
37	(4036745)	Housing, Compressor	1	
38	3756754	Seal, Split Ring	1	
39	3758848	Seal, Split Ring	1	
40	3759917	Screw, Hexagon Head Set	4	M8 X 1.25 X 12
41	3762259	Ring, Retaining	4	
42	3531238	Ring, Retaining	1	


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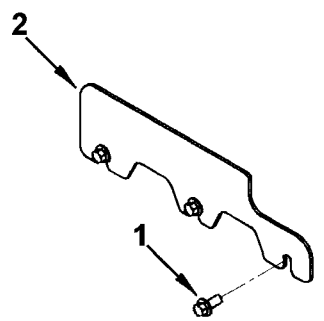
Ref No.	Part Number	Part Name	Req	Remarks
		ROCKER LEVER		
		OPTION RL9765		Rocker Lever
				Structure Code: 03 EBM engine design: Tier3 Engine Family: "B" Series Cylinders: 6 compression brake compatible: No pressure diameter cast rocker housing with Additional mounting holes.
1	3900633	Screw, Hex Flange Head Cap	2	M8 X 1.25 X 50
2	3903096	Screw, Hex Flange Head Cap	5	M8 X 1.25 X 70
3	3941253	Rod, Push	12	
4	3943626	Crosshead, Valve	12	
	4995602	Assembly, Rocker Lever	6	
	4995603	Lever, Rocker	1	
5	(4994198)	Socket, Rocker Lever	1	
	(4995605)	Lever, Rocker	1	
6	3927692	Nut, Heavy Hexagon	1	
7	3941928	Lever, Rocker	1	Exhaust
8	(4994197)	Ball, Rocker Lever	1	
9	3959128	Screw, Rkr Lever Adjusting	1	
	4995604	Lever, Rocker	1	
5	(4994198)	Socket, Rocker Lever	1	
	(4995606)	Lever, Rocker	1	
6	3927692	Nut, Heavy Hexagon	1	
8	(4994197)	Ball, Rocker Lever	1	
9	3959128	Screw, Rkr Lever Adjusting	1	
10	(3941927)	Lever, Rocker	1	Intake
11	3964908	Support, Rocker Lever	1	
12	3990127	Screw, Hex Flange Head Cap	2	
13	4928699	Shaft, Rocker Lever	2	
	4934573	Housing, Rocker Lever	1	
14	4899231	Gasket, Rkr Lever Housing	1	
	4938657	Housing, Rocker Lever	1	
15	(4938658)	Housing, Rocker Lever	1	
16	(4938676)	Sleeve	5	
17	3913638	Screw, Hex Flange Head Cap	3	M6 X 1.00 X 16
18	3287699	Harness, Wiring	3	
19	3287727	Clip, Wire Retaining	6	
20	4890404	Clip, Wire Retaining	3	
21	4896991	Stud	6	



rp900zm

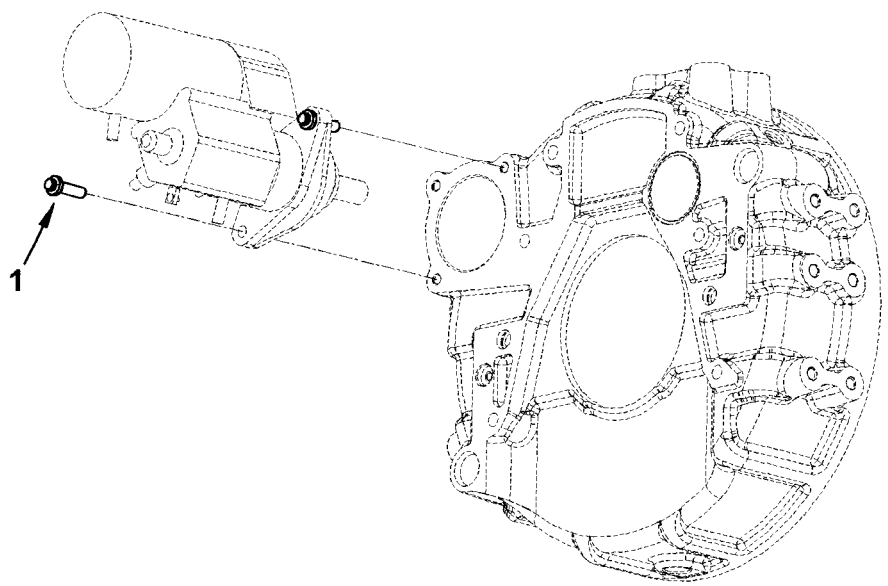
Ref No.	Part Number	Part Name	Req	Remarks
		VENT,ENGINE COOLANT		
		OPTION RP9094		Mr - rad plumbing, connection vent provision type: Threaded engine interface: 1/4in. NPTF orifice size (mm): 3.18 OEM Interface Thread Size: 7/16in. - 20 UNF OEM Interface Flare Angle: 45 Degrees Centerline of engine to OEM interface (mm): -76 Centerline of crank to OEM interface (mm): 429 front face of block to OEM interface (mm): -156.5 This is an orificed fitting (1/8in. orifice) For use with a positive deaeration Cooling system.
1	3943671	Fitting, Orifice	1	

Ref No.	Part Number	Part Name	Req	Remarks
		SOFTWARE,CALIBRATION		
		OPTION SC9462		Mr - software calibration CPL: 8610 Engine Control System: E2 I rated power: 215 BHP at 2500 RPM Peak torque: 655 lbs. FT at 1500 RPM Governed Power: 215 BHP At 2500 RPM Governed Torque: 452 Lbs. FT Certified By: EPA,CARB,Eu Application: Non Road cal restr: No Power Rating: Yes Calibration Voltage: 12 Or 24 speed input: N/A comment: None cert level: Tier 3,tier 3,stiiia not used: ECM controlled start aid: Yes Engine Family: "B" Series ambient air pressure sensor: Yes software phase: P111016 SC history: N/A manufacturer of record: Cummins.



sh950gw

Ref No.	Part Number	Part Name	Req	Remarks
		HEAT SHIELD		
		OPTION SH9047		Heat Shield
1	3926846	Screw, Hex Flange Head Cap	3	M8 X 1.25 X 20
2	4931529	Shield, Heat	1	

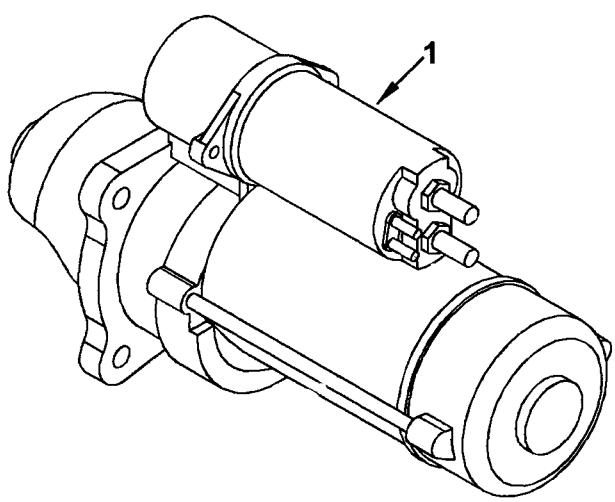


sm900zj

Ref No.	Part Number	Part Name	Req	Remarks
		MOUNTING,STARTING MOTOR		
		OPTION SM9790		Mr - starting motor mounting thread size: M10 x 1.5 - 6 h items supplied: Spacer thickness thickness (mm): 0 spacer mounting flange SAE type: N/A spacer included: Spacer male pilot diameter (mm): 0 spacer female pilot diameter (mm): 0 mounting hardware supplied: 2 capscrews mounting hardware supplier: Cummins.
1	3968470	Screw, Twelve Point Cap	2	

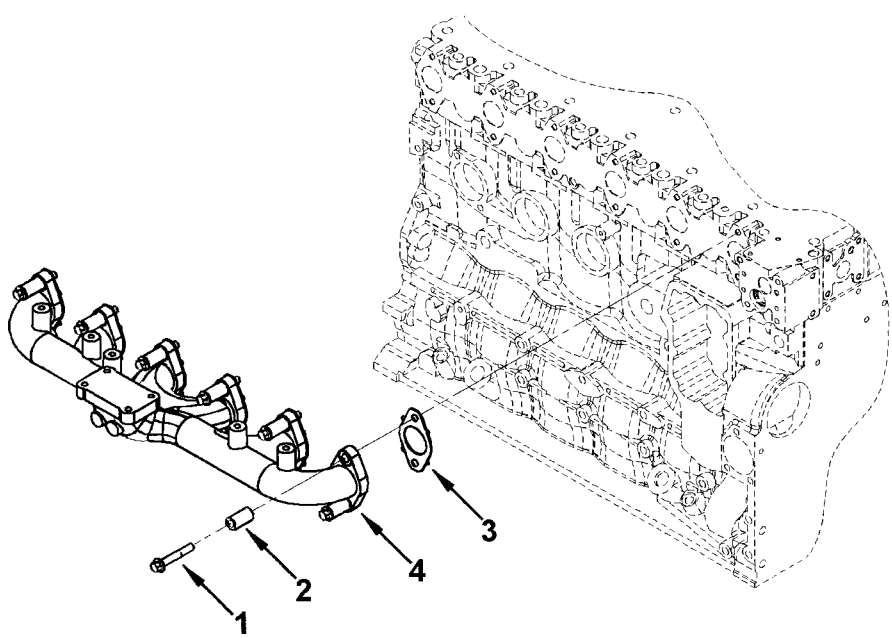
Ref No.	Part Number	Part Name	Req	Remarks
		PAINT **OPTION SS9190** No Content Option		Paint Engine Families: B,C, and D Paint Color: Titantium Black Valve Cover Type:Ti-Black and Red Hue 9 Value: 1.44 Chroma: .95 Gloss Level @ 60 Degrees: 95 Structure Language: 03 EBM Unique Characteristics

NOTES



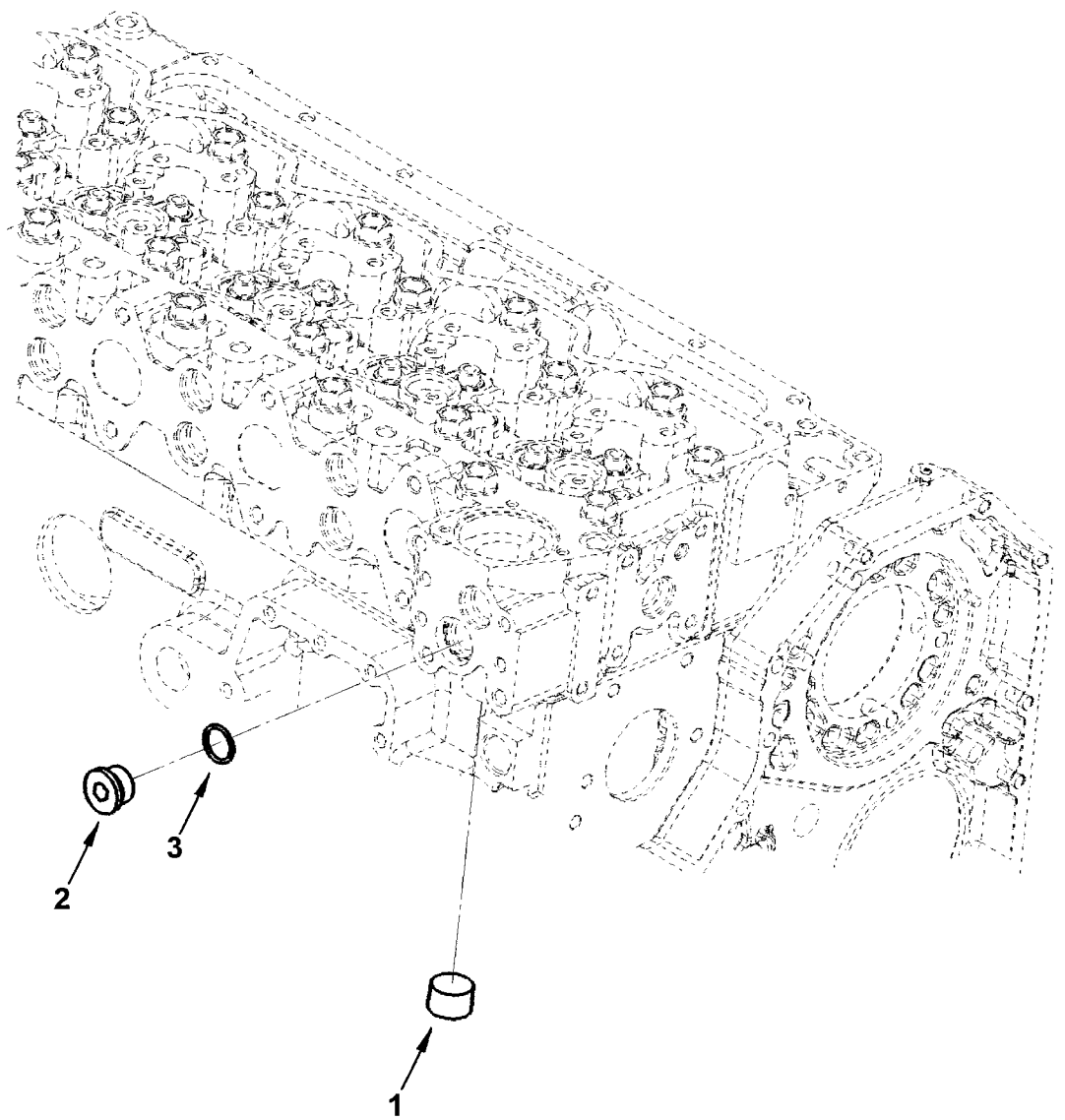
st951gi

Ref No.	Part Number	Part Name	Req	Remarks
		STARTING MOTOR		
		OPTION ST9371		Starting Motor
1	3971603	Motor, Starting	1	pinion diametral pitch: 8/10 Pinion Gear OD (mm): 40.5 Pinion gear Offset (mm): 3.2 Pinion Drive Type: Offset Mtg flange type: SAE #1 2 bolt 180 frame size diameter: 100mm pilot diameter: 88.9mm starter motor length: 244mm starter motor engine mounted angle (deg): 40.5 (+/- 15) Sealing Provision: Not Sealed supply method: Mounted removal length: 74.5 manufacturer: Denso Model: R4.0 Voltage: 12 kilowatt rating: 4.8 nameplate brand: Cummins jump start protection: Yes.



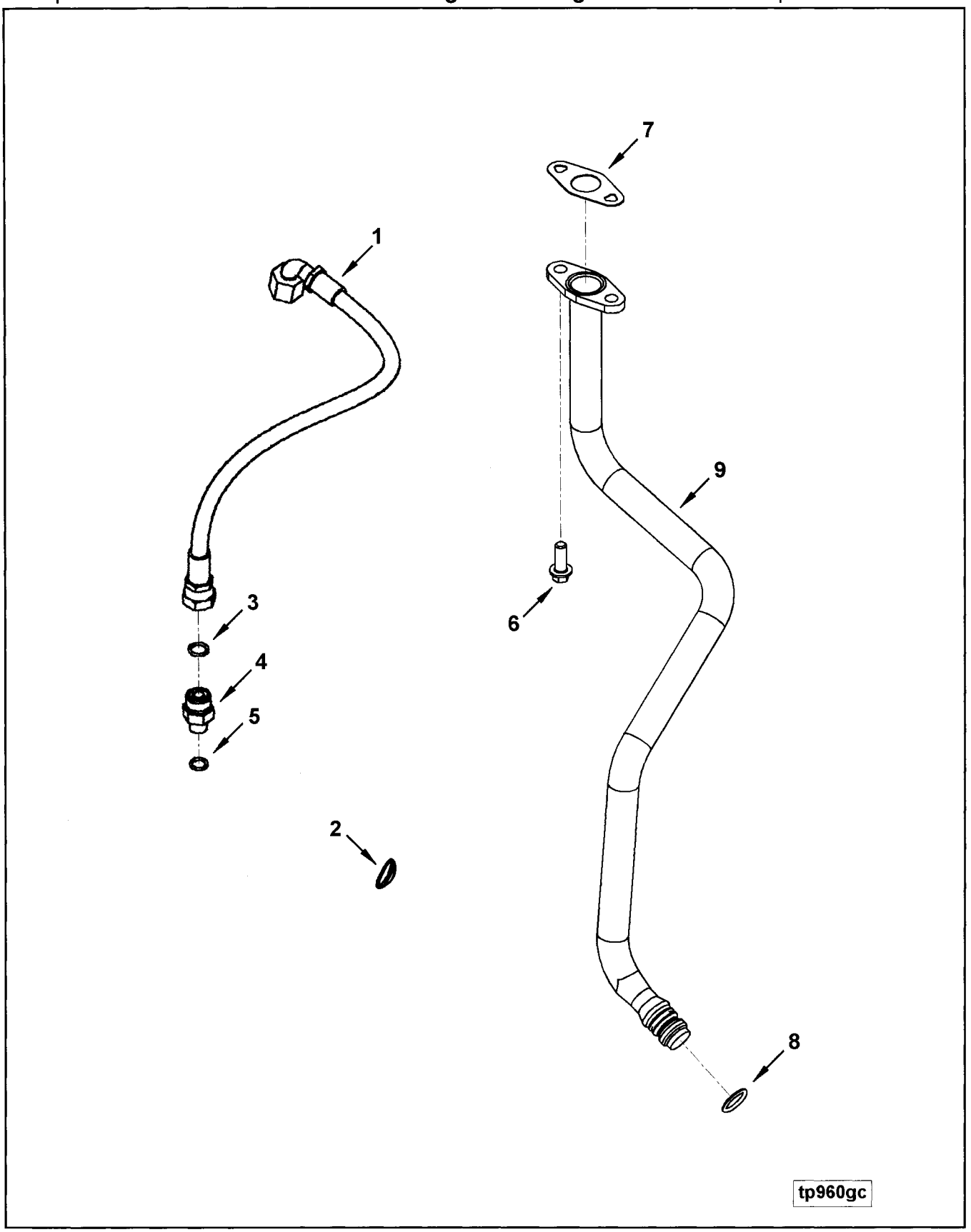
tb970gt

Ref No.	Part Number	Part Name	Req	Remarks
		TURBOCHARGER ARRANGEMENT		
		OPTION TB91137		Turbocharger Arrangement
				Engine Config: 6B Exh Outlet Loc: HMRO Exh Horiz CCL (mm): -177 Exh Vert CCL (mm): 528 Turbo Exh Loc FFOB (mm): -504 Engine Aspiration: Charged Air Cooled Turbo Type: Wastegate CPR Outlet Config: Half Marmon CPR Outlet Angle on Engine (deg): 5 Exh Outlet Config: Half Marmon Exh Manifold Studs: None Block Drain Boss: Front Base Turbo ID 17: 4038289, 4039630, 4039636
1	3944593	Screw, Hex Flange Head Cap	12	M10 X 1.5 X 65
2	3945252	Spacer, Mounting	12	
3	5266422	Gasket, Exhaust Manifold	6	
4	3973422	Manifold, Exhaust	1	

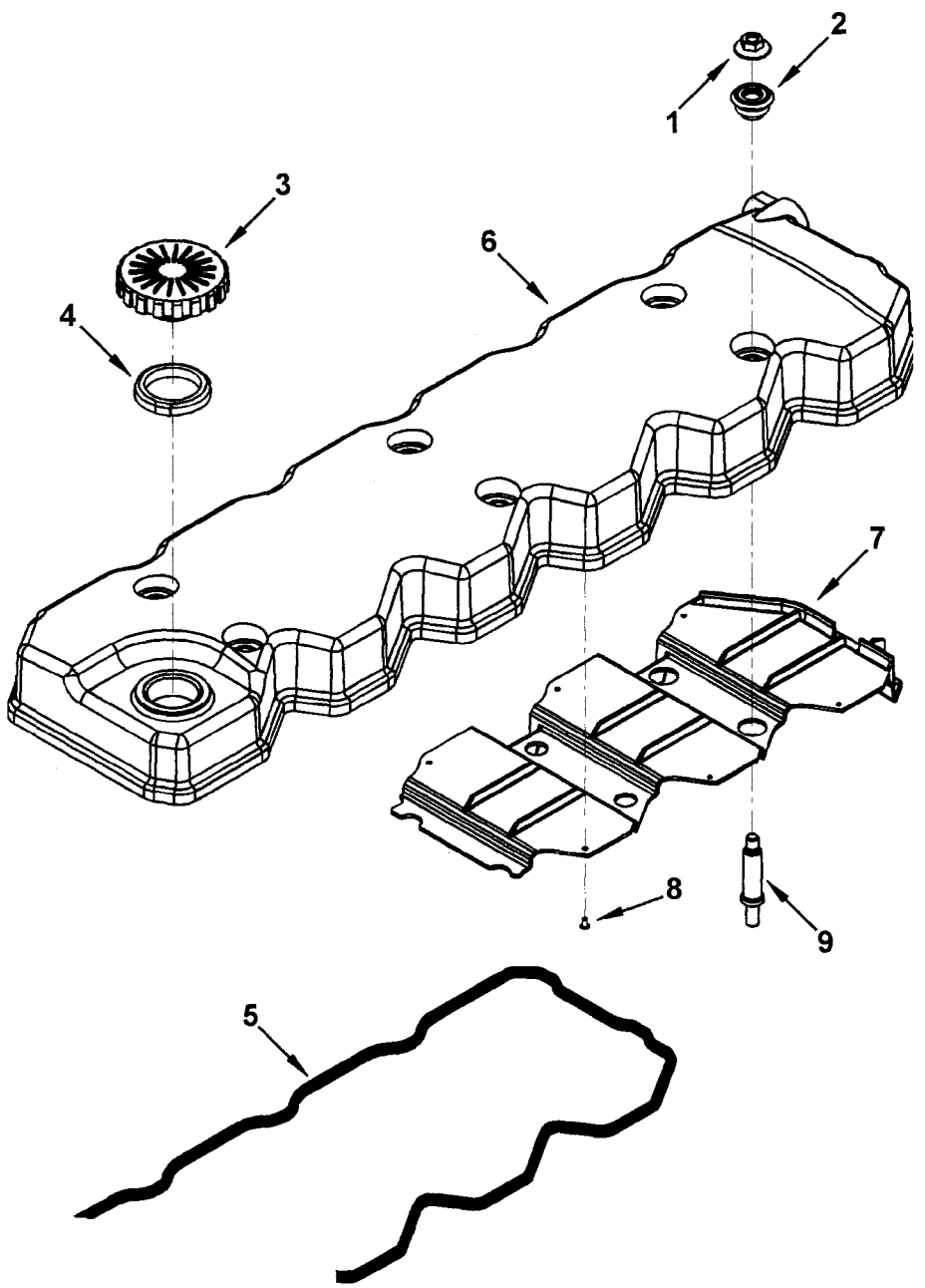


tk944gi

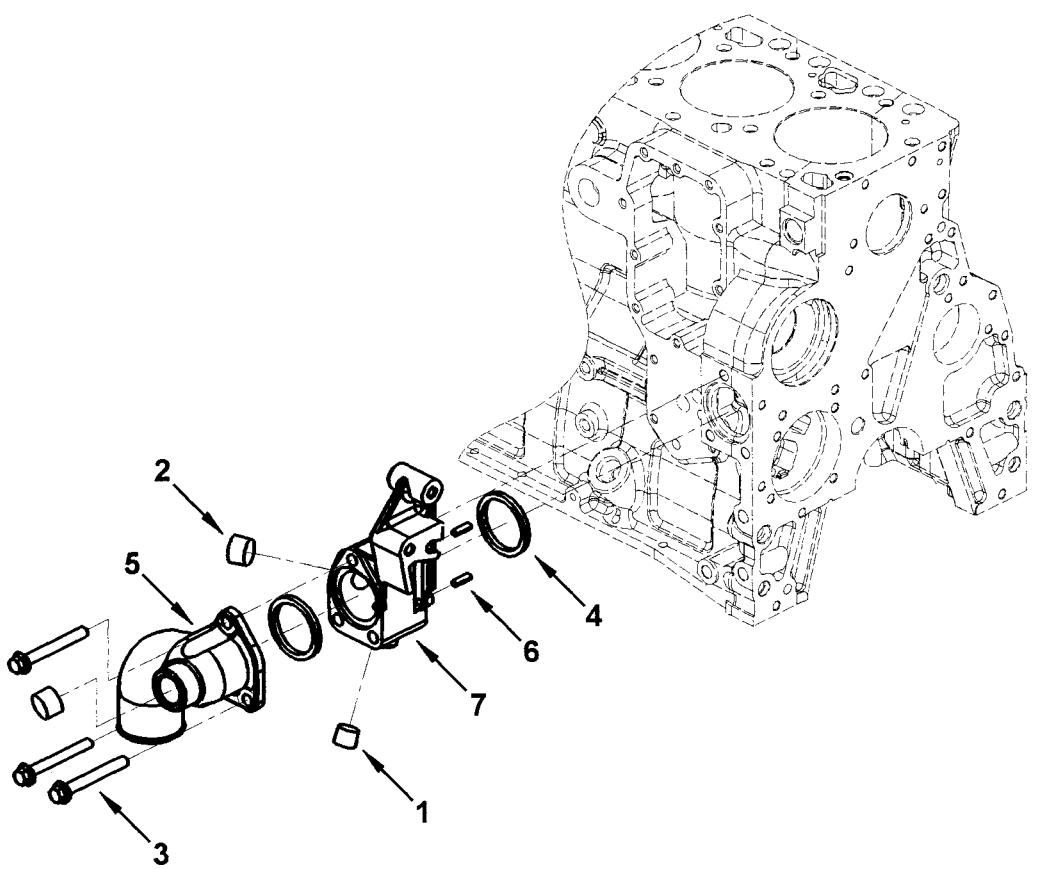
Ref No.	Part Number	Part Name	Req	Remarks
		COOLER,TOR CONVERTER OIL		
		OPTION TK9036		Mr - tor converter oil cooler
				For use when no torque converter is required. Pipe plug 3008469 may be used in place of 4933532.
1	4933532	Plug, Pipe	1	3/4 NPT
	3089238	Plug, Threaded	1	M22 X 1.50 X 15.5
2	(3089239)	Plug, Threaded	1	
3	3089240	Seal, O Ring	1	M22 X 1.50 X 15.5


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tp960gc

Ref No.	Part Number	Part Name	Req	Remarks
		TURBOCHARGER PLUMBING		
		OPTION TP97318		Turbocharger Plumbing
				engine design phase: Echo Engine Cylinders: 6 Engine Family: "B" Series Turbocharger exhaust location (mm): HMRO x = TBD y = TBD z = TBD Turbocharger Type: Wgt Oil Filter Mounted Location: Vertical Turbocharger supply line routing: Inboard exhaust brake capable: ? Block drain location: Front drain required exhaust manifold type: Dry bearing housing manufacturer: Holset Turbocharger Drain Line Type: Flexible bearing housing cooling provision: Oil cooled.
1	3920706	Plug, Expansion	1	
	4940183	Union, Male	2	
2	3678603	Seal, O Ring	1	
3	(4940182)	Connector, Male	1	
4	3922794	Seal, O Ring	1	
5	3900630	Screw, Hex Flange Head Cap	2	M8 X 1.25 X 20
6	4931365	Gasket, Oil Drain	1	
	3975076	Connection, Tur Oil Drain	1	
7	3928624	Seal, O Ring	2	
8	(3975077)	Connection, Tur Oil Drain	1	
9	3976464	Hose, Flexible	1	

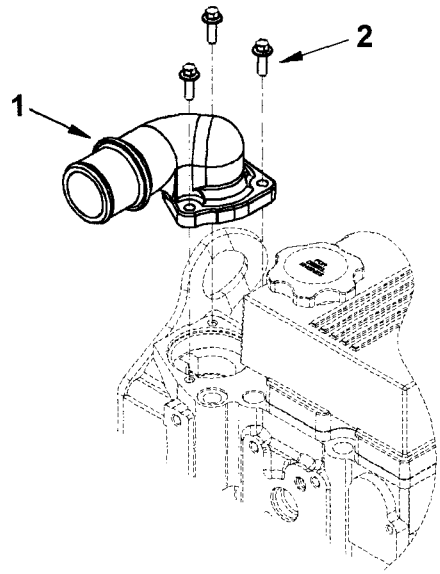

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vc953gv

Ref No.	Part Number	Part Name	Req	Remarks
		VALVE COVER ARRANGEMENT		
		OPTION VC9305		Valve Cover Arrangement
				compression brake compatible: No Engine Family: "B" Series Design Phase: Tier 3 Cylinders: 6 Fill Location: Rear Integral Breather: Yes.
1	4893936	Nut, Hexagon Flange	6	
2	4899239	Isolator, Noise	6	
	3976171	Cover, Valve	1	
	4895459	Cap, Filler	1	
3	(4895460)	Cap, Filler	1	
4	4895461	Gasket, Filler Cap	1	
5	4899226	Gasket, Valve Cover	1	
	3976172	Cover, Valve	1	
6	(3976173)	Cover, Valve	1	
7	(2830882)	Baffle, Breather	1	
8	3931532	Screw, Self Tapping Metal	8	
9	4896991	Stud	6	



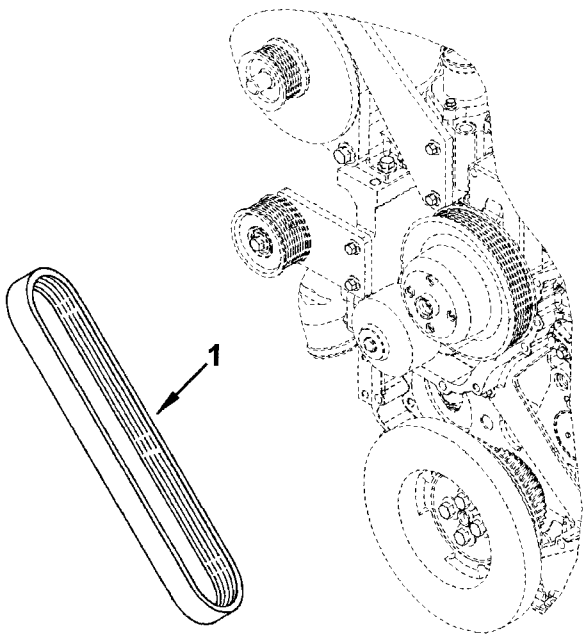
wi900zw

Ref No.	Part Number	Part Name	Req	Remarks
		WATER INLET CONNECTION		
		OPTION WI9177		Water Inlet Connection
				Engine Family: "B" Series Connection Outside Diameter (mm): 58.0 Connection Type: Beaded Connection Location: Vertical Down from engine centerline (mm): -277.0 from crank centerline (mm): 38.0 from front face of block (mm): -97.0 mounting for belt tensioner: Yes Provision For Alternator Brace: Yes tensioner pivot location (mm): 1: X = - 227.0, y = 195.0 ER plumbing port location (mm): None pipe plug 3008468 may be used in place of 4931643 Pipe plug 3008469 may be used in place of 4933532.
1	4931643	Plug, Pipe	1	
2	4933532	Plug, Pipe	2	
3	3900679	Screw, Hex Flange Head Cap	3	M10 X 1.50 X 80
4	4983908	Seal, Rectangular Ring	2	
5	3943149	Connection, Water Inlet	1	
	3943549	Connection, Water Inlet	1	
6	131584	Pin, Roll	2	
7	(4980267)	Connection, Water Inlet	1	



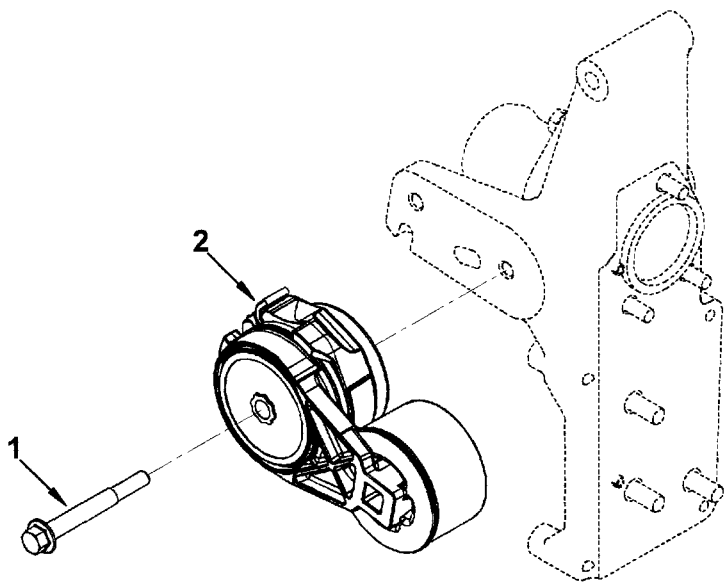
wo900ze

Ref No.	Part Number	Part Name	Req	Remarks
		WATER OUTLET CONNECTION		
		OPTION WO9068		Water Outlet Connection Connection Orientation: Horizontal, Forward Connection Outlet Diameter (mm): 44.4 Connection Outlet Location From Coord. Sys. (mm): X = 125 Y = 468 Z = 145
1	3943133	Connection, Water Outlet	1	
2	3901865	Screw, Hex Flange Head Cap	3	M6 X 1.00 X 20



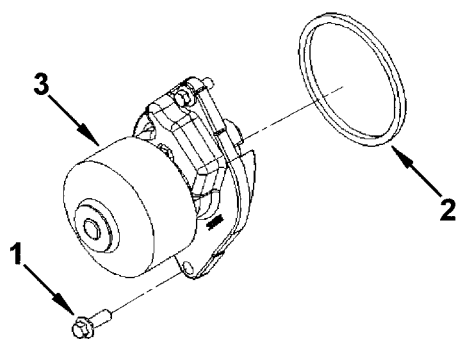
wp901zo

Ref No.	Part Number	Part Name	Req	Remarks
		WATER PUMP DRIVE		
		OPTION WP9300		Water Pump Drive Engine Family: "B" Series Tensioner Mounting Location (mm): X: -227.0 Y: 195.0 Alternator Center (mm): X: -287.99 Y: 339.15 Alternator Pulley Diameter (mm): 61.13 Engine Fan Center (mm): X: 49 Y: 202.0 Fan Pulley Diameter (mm): 159.13 Belt Length (mm): 1732.0 Damper Pulley Effective Diameter (mm): 173.76.
1	3979344	Belt, V Ribbed	1	



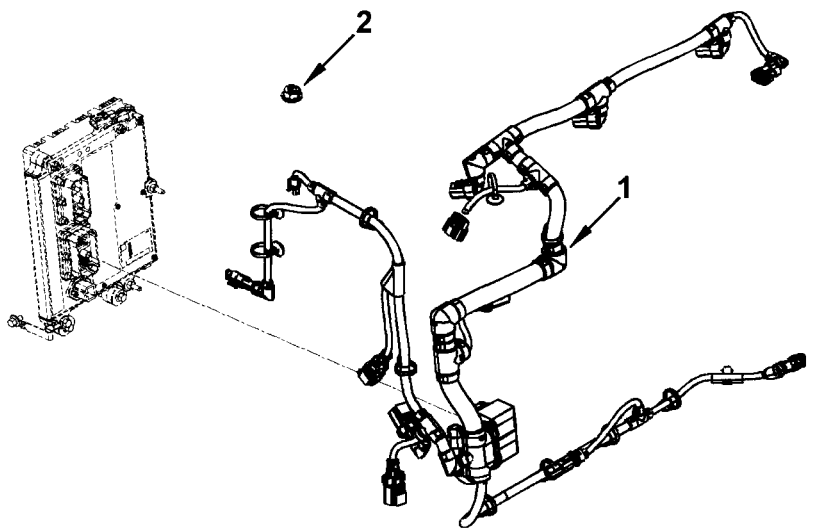
wp900zc

Ref No.	Part Number	Part Name	Req	Remarks
		BELT TENSIONER		
		OPTION WP97056		Belt Tensioner
				Tensioner mounting location(mm): X: -227.0 y: 195.0.
1	3900679	Screw, Hex Flange Head Cap	1	M10 X 1.50 X 80
2	3976834	Tensioner, Belt	1	



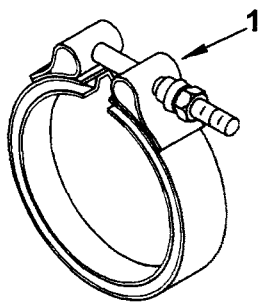
wp952ga

Ref No.	Part Number	Part Name	Req	Remarks
		WATER PUMP		
		OPTION WP9757		Water Pump
				Pulley Type: Standard Pulley Diameter: 88 Pulley Hardness: HRC 50 Water Pump Location From CL of Crank: -108 CL of Engine: 80 FFOB: 103.3
	2881804	Kit, Water Pump	1	Recon Equivalent 2881804 NX
1	3906698	Seal, Rectangular Ring	1	
2	(5260263)	Pump, Water	1	Serviced as 2881804
3	3941981	Screw, Hex Flange Head Cap	2	



wr961gt

Ref No.	Part Number	Part Name	Req	Remarks
		ENGINE CONTROL WRG HARNESS		
		OPTION WR9359		Engine Control Wrg Harness
				Engine Cylinders: 6 harness supplier: Cummins bracket supplier: Cummins Customer: Various Connection Type: 90 Degree OEM Connector Location: Not Mounted J1939 connector location: Front ECM location: On engine Speed Sensor Location: Front Cover Voltage: 12 or 24 real time clock battery: No to suit oil pressure switch located in front gear cover Suitable for tier3 applications only.
1	4988598	Harness, Wiring	1	
2	3900589	Nut, Hexagon Flange	1	M8 X 1.25



xs950gp

Ref No.	Part Number	Part Name	Req	Remarks
		EXHAUST OUTLET CONNECTION OPTION XS9254		Exhaust Outlet Connection Engine Configuration: "B" Series Connection Configuration: None Connection Outside Diameter (mm): N/A Turbine Outlet Flange Type: Half Marmon Supported on Exhaust Manifold: No Groove Width (mm): 6.65 Clamp ID (mm): 76.2 Includes Vee Band Clamp Only
1	3903652	Clamp, V Band	1	

Group No. 17.01 **Set,Upper Engine Gasket**

Ref No.	Part Number	Part Name	Req	Remarks
		SET,UPPER ENGINE GASKET		
	4955229	Set, Upper Engine Gasket		
	2830409	Seal, O Ring	1	
	3678603	Seal, O Ring	2	
	3678925	Seal, O Ring	1	M10 X 1.00
	3867646	Seal, O Ring	1	
	3906698	Seal, Rectangular Ring	1	
	(3919869)	Gear, Idler	1	
	3922794	Seal, O Ring	2	
	3928624	Seal, O Ring	2	
	3947530	Gasket, Int Manifold Cover	1	
	3949530	Gasket, Turbocharger	1	
	3954829	Seal, Thermostat	1	
	3955339	Gasket, Exhaust Manifold	6	
	3963983	Washer, Sealing	5	
	3963988	Washer, Sealing	1	
	3963990	Washer, Sealing	7	
	3969988	Gasket, Connection	2	
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	3977393	Seal, O Ring	6	
	4010643	Seal, O Ring	2	
	4891288	Gasket, Oil Drain	2	
	4896897	Gasket, Acc Drive Cover	1	
	4898372	Seal, O Ring	1	
	4899226	Gasket, Valve Cover	1	
	4899231	Gasket, Rkr Lever Housing	1	
	4931365	Gasket, Oil Drain	1	
	4932210	Gasket, Cylinder Head	1	

Group No. 17.01 **Set,Lower Engine Gasket**

Ref No.	Part Number	Part Name	Req	Remarks
		SET,LOWER ENGINE GASKET		
	4955230	Set, Lower Engine Gasket		
	2830409	Seal, O Ring	1	
	2830559	Gasket, Oil Cooler Core	1	Serviced as 3977913
	2831077	Gasket, Filter Head	1	
	3902425	Washer, Sealing	1	
	3906252	Seal, Rectangular Ring	1	
	3906697	Seal, Rectangular Ring	2	
	3906698	Seal, Rectangular Ring	1	
	3929457	Seal, O Ring	1	
	3939258	Gasket, Cover Plate	1	
	3939357	Gasket, Cover Plate	1	
	3949562	Gasket, Flange	1	
	3959797	Gasket, Oil Pan	1	
	3963988	Washer, Sealing	1	
	3963990	Washer, Sealing	1	
	3974127	Gasket, Filter Head	1	Serviced as 3977913
	4890832	Seal, Oil	1	
	4895710	Seal, O Ring	1	
	4898301	Gasket, Oil Suc Connection	1	
	4898372	Seal, O Ring	1	
	4934344	Gasket, Oil Pan	1	
	4955372	Kit, Rear Crank Seal	1	
	(3904325)	Tool, Seal Installation	1	
	(3909409)	Tool, Seal Installation	1	
	(4936646)	Seal, Oil	1	Serviced as 4955372

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