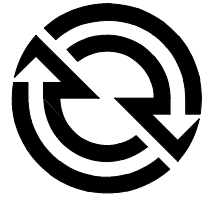


# Engine Parts

# DETROIT DIESEL

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Diesel Engine

Generator Model:

**650/750 kW**

Engine Series:

12V-2000

Engine Model:

R123-7M36



6SP2000 MAY 2004

# SERIES 2000

## Parts

## Catalog

### Detroit Diesel® SERIES 2000™ Diesel Engines

***Illustrated Service Parts Catalogs are now available on CD-ROM***

Speed up your parts counter and eliminate confusion. Look up parts by unit serial number on CD-ROM.

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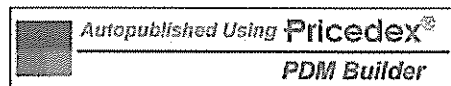
**Illustrated Service Parts Catalog** by Engine Series. Contains all engine types and illustrations.

**Contact your local Detroit Diesel Distributor to order your CD-ROM.**

**NOTE:**

Additional copies of this parts catalog may be purchased from Detroit Diesel Distributors. See your yellow pages -- under *Engines, Diesel*.

**DETROIT DIESEL**



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13400 Outer Drive, West / Detroit, Michigan 48239-4001  
Telephone: 313-592-5000  
Fax: 313-592-3878  
Email: [parts.catalog@detroitdiesel.com](mailto:parts.catalog@detroitdiesel.com)  
[www.detroitdiesel.com](http://www.detroitdiesel.com)

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## METRICS AT WORK

Detroit Diesel Engines contain parts dimensioned in the metric system as well as in the customary system. Many fasteners are metric and are very close in dimension to familiar customary fasteners in the inch system. It is important to note that, during any maintenance procedures, replacement fasteners must have the same measurements and strengths as those removed, whether metric or customary.

Numbers on the heads of metric bolts and on the surfaces of metric nuts indicate their strength. Customary bolts use radial lines for this purpose, while most customary nuts do not have strength markings.



### CAUTION:

**Using mismatched or incorrect fasteners can lead to engine damage. In some cases, engine damage can have consequences that may result in personal injury and or vehicle/ equipment damage.**

Fasteners removed from the engine should be saved for re-use in the same locations whenever possible. Where the fasteners are not satisfactory for re-use, care should be taken to select a replacement that matches the original.

For information and assistance, see your Detroit Diesel Service Outlet.

### **NOTE:**

**Metric Hardware is identified in the Parts Catalogs through its unique nomenclature. Conventional hardware can always be recognized by the inch marks ("), common to diameter and length.**

# GENERAL INFORMATION

Your engine serial number should be kept readily available. It can be used to identify the correct service parts, warranty information, and available extended coverage.

All engine components in this catalog are divided in to major categories, groups, and sub-groups.

Within each sub-group different designs of similar parts are shown, each being designated by a type number. The type number in one sub-group has no relationship to the same type number in another sub-group.

To locate a part, first establish the category and group where the part is used (see the Alphabetical Index or Group Nomenclature page), then, determine the type number (on earlier units the type number can be found on the engine option label). With this information, turn to the proper category and group and locate the type number at the top of the page. All parts applicable to the type are indicated by a quantity in the column under the type

AR = as required.

NS = not serviced. The serviced part will be in a note or use the like part with a quantity in the type column.

OBS = obsolete, no replacement.

## ALPHABETICAL INDEX

The Alphabetical Index is particularly helpful when only a part name is known and the category, group, sub-group cannot readily be determined. Parts are listed alphabetically by noun name, followed by a description of the application of the part and the final sub-group location.

The information and illustrations in this publication are based on the information in effect at the time of approval for printing. The right is reserved to make changes at any time without notice.

## REMANUFACTURED PARTS

A leading E or R identifies part numbers that require the return of your old core component.

A leading E in the part number designates a new exchange part.

A leading R in the part number designates a remanufactured part.

An R preceding the part description means the part is available as an E or R part number.

## ELECTRONIC PARTS CATALOGS

Speed up your parts counter and eliminate confusion. Look up parts by using your unit serial number on CD-ROM. You can receive regular Parts Catalog updates by subscribing to the POWER Service Parts CD-ROM. 2 cycle, 4 cycle or both can be sent to your location 4 time a year. In addition to the PSP CD, DDC offers 2 non-subscription Service Parts Catalogs on CD-ROM: an illustrated Custom Parts Catalog - The CPC contains information specific to your unit serial number; And a complete illustrated Service Parts Catalog by Series. Contact your local Detroit Diesel Distributor to order your CD-ROM.

## YOUR PARTS ORDER WILL BE HANDLED MORE EFFICIENTLY IF YOU -

1. Provide the following information for material ordered:
  - A. Category, group and sub-group in parts catalog in which the part is specified
  - B. Quantity desired
  - C. Part Number
  - D. Complete Name
  - E. The Type number for the serial number concerned
  - F. Unit Serial Number
  - G. "TYPE" rather than "WRITE" the above information
2. Furnish complete shipping instruction. This is particularly important in case the order is not to be handled in the regular manner. Indicate whether shipment should be made via parcel post, express, air freight, etc
3. Confirm all telegraph and telephone orders immediately, clearly making any such orders "CONFIRMING" to avoid duplication of shipment of such orders.



- 01 ENGINE (LESS MAJOR ASSEMBLIES)**
  - 01.1 CYLINDER BLOCK
  - 01.2 CYLINDER HEAD
  - 01.2A ENGINE LIFTER BRACKET
  - 01.3 CRANKSHAFT, OIL SEALS AND STABILIZERS
  - 01.3A CRANKSHAFT FRONT COVER
  - 01.3B VIBRATION DAMPER
  - 01.4A FLYWHEEL
  - 01.5A FLYWHEEL, HOUSING
  - 01.6 CONNECTING ROD AND PISTON
  - 01.8A ROCKER COVER
- 02 FUEL SYSTEM**
  - 02.1A FUEL INJECTOR/CNG CONTROLS
  - 02.1B INJECTOR, CONTROLS ELECTRONIC
  - 02.2 FUEL PUMP
  - 02.3A FUEL FILTER AND STRAINER
  - 02.5A FUEL LINES AND FUEL COOLER
- 03 AIR SYSTEM**
  - 03.1A AIR CLEANER AND/OR ADAPTOR
  - 03.3C AIR INTAKE MANIFOLD
  - 03.5A TURBOCHARGER, INTERCOOLER AND AFTERCOOLER
  - 03.7 INTERCOOLER/AFTERCOOLER
- 04 LUBRICATING SYSTEM**
  - 04.1A OIL PUMP
  - 04.2A OIL FILTER
  - 04.4A OIL COOLER AND MARINE GEAR LINES
  - 04.7A OIL PAN
  - 04.8A VENTILATING SYSTEM
- 05 COOLING SYSTEM**
  - 05.1 FRESH WATER PUMP
  - 05.2B THERMOSTAT
  - 05.2C WATER BYPASS TUBE
  - 05.3B WATER CONNECTIONS
  - 05.4A FAN
- 06 EXHAUST SYSTEM**
  - 06.1A EXHAUST MANIFOLD AND/OR CONNECTIONS
- 07 ELECTRICAL INSTRUMENTS**
  - 07.1A BATTERY, CHARGING GENERATOR
  - 07.3A STARTING MOTOR





PART NAME	GROUP NO.	PART NAME	GROUP NO.
<b>A</b>			
ADAPTOR, AIR CLEANER MOUNTING	03.1A085	BRACKET, STARTING MOTOR SUPPORT	07.3A007
AIR INTAKE MANIFOLD	03.3C801	BELT, GENERATOR DRIVE	07.1A575
AIR CLEANER ASSY.	03.1A001	BRACKET, GENERATOR MOUNTING	07.1A595
ADAPTOR, OIL FILTER COVER	04.2A291	<b>C</b>	
ADAPTOR, OIL FILTER ASSY.	04.2A352	CRANKSHAFT ASSY.	01.3001
ADAPTOR, EXHAUST MANIFOLD	06.1A003	COVER, GEAR CASE	01.3A158
ARM, GENERATOR BRUSH	07.1A170	COVER, CRANKSHAFT FRONT	01.3A160
<b>B</b>		COVER, ENGINE FRONT LOWER	01.3A162
BLOCK, CYLINDER	01.1001	COVER, ENGINE FRONT ACCESSORY DRIVE	01.3A191
BRACKET, ENGINE LIFTER-FRONT	01.2A070	COVER, CRANKSHAFT FRONT COVER SMALL HOLE	01.3A195
BRACKET, ENGINE LIFTER - REAR	01.2A080	COVER, FLYWHEEL HOUSING LARGE HOLE	01.5A030
BOLT, ENGINE LIFTER EYE	01.2A100	COVER, FLYWHEEL HOUSING SMALL HOLE	01.5A050
BUSHING, CONNECTING ROD PISTON	01.6040	COVER, FLYWHEEL HOUSING ACCESSORY HOLE	01.5A061
BEARING, CONNECTING ROD PISTON PIN	01.6090	COVER, STARTING MOTOR HOLE	01.5A070
BRACKET ASSY., ELECTRONIC CONTROL MODULE MOUNTING	02.1B503	COVER, FLYWHEEL HOUSING INSPECTION HOLE	01.5A080
BOLT, ROCKER COVER	01.8A460	COVER, FLYWHEEL HOUSING	01.5A085
BRACKET, BOAT BUILDER INTERFACE MODULE	02.1B514	COVER, FLYWHEEL HOUSING OIL HOLE	01.5A117
BRACKET, WIRING HARNESS	02.1B745	CONNECTING ROD ASSY.	01.6001
BRACKET, FUEL STRAINER MOUNTING	02.3A260	COVER ASSY., ROCKER	01.8A450
BRACKET, FUEL FILTER MOUNTING	02.3A530	CLAMP, INJECTOR	02.1A270
BLOCK, FUEL SYSTEM JUNCTION	02.5A250	CONNECTOR, COMMUNICATIONS	02.1B765
BRACKET, INTERCOOLER MOUNTING	03.7003	COVER, FUEL STRAINER	02.3A080
BALL, LUBE OIL STRAINER BYPASS VALVE	04.2A130	CABLE	02.1B910
BRACKET, OIL COOLER HOUSING SUPPORT	04.4A100	CLAMP, AIR INLET PIPE HOSE	03.1A280
BREATHER ASSY.	04.8A045	COVER, FUEL FILTER	02.3A390
BASE, BREATHER	04.8A048	CLIP, FUEL PUMP TO FILTER HOSE	02.5A120
BODY, BREATHER OR SEPARATOR	04.8A050	CLIP, FUEL PUMP TO JUNCTION BLOCK HOSE	02.5A146
BRACKET, BREATHER/COLLECTOR MOUNTING	04.8A056	CLIP, FILTER TO FUEL MANIFOLD TUBE	02.5A155
BRACKETS, COLLECTOR	04.8A260	CLIP, FILTER OUTLET TUBE	02.5A156
BRACKET, WATER CROSSOVER TUBE	05.3B475	CLIP, FUEL SUPPLY CROSSOVER TUBE	02.5A164
BLADE, FAN HIGH LOW AND CRANKSHAFT MOUNTED	05.4A010	CLIP, CYLINDER HEAD INLET	02.5A180
BRACKET, FAN SUPPORT	05.4A027	CLIP, FUEL DRAIN	02.5A220
BRACKET, FAN BELT TENSIONER ASSY.	05.4A342	CONNECTOR, TURBOCHARGER EXHAUST INLET	03.5A305
BRACKET, EXHAUST MANIFOLD SUPPORT	06.1A002	CLIP, TURBOCHARGER OIL SUPPLY TUBE	03.5A502
BOLT, EXHAUST MANIFOLD TO HEAD	06.1A025	COLLECTOR ASSY.	04.8A200
BRACKET, GENERATOR ADJUSTING STRAP	07.1A582	COVER, OIL FILTER	04.2A290
		CORE, OIL COOLER ENGINE	04.4A001
		CORE, OIL COOLER-MARINE GEAR	04.4A002

PART NAME	GROUP NO.	PART NAME	GROUP NO.
COOLER ASSY., OIL COOLER	04.4A005	FLANGE, OIL DRAIN	01.3A185
COVER, OIL COOLER HOUSING	04.4A060	FLYWHEEL ASSY.	01.4A001
CONNECTOR, BREATHER TUBE	04.8A021	FORK, FUEL PUMP COUPLING	02.2220
CLAMP, BREATHER TUBE	04.8A039	FILTER ASSY., FUEL	02.3A310
CLIP, BREATHER TUBE	04.8A040	FILTER ASSY., SPIN ON FUEL	02.3A316
CONNECTIONS, COLLECTOR	04.8A250	FILTER UNIT, BREATHER	04.8A060
COVER, FRESH WATER PUMP BODY	05.1031	FLANGE, OIL PUMP COVER	04.1A222
COVER, THERMOSTAT HOUSING	05.2B120	FILTER ASSY., OIL	04.2A240
CONNECTION, HEAT EXCHANGER WATER OUTLET	05.3B312	FLANGE, EXHAUST MANIFOLD WATER OUTLET	06.1A140
CONNECTION, HEAT EXCHANGER INLET	05.3B314	FLANGE, THERMO FAN DRIVE	05.4A368
CONNECTION, OIL COOLER WATER INLET	05.3B350		
CLAMP, OIL COOLER WATER INLET CONNECTION	05.3B366	<b>G</b>	
CONNECTION, EXHAUST MANIFOLD FRESH WATER INLET	05.3B430	GASKET, CYLINDER HEAD COMPRESSION	01.2010
CLAMP, EXHAUST MANIFOLD FRESH WATER INLET HOSE	05.3B434	GEAR, CRANKSHAFT TIMING	01.3145
CONNECTOR, EXHAUST MANIFOLD FRESH WATER OUTLET	05.3B436	GASKET, CRANKSHAFT FRONT COVER	01.3A170
CLIP, WATER CROSSOVER TUBE	05.3B476	GASKET, ENGINE FRONT ACCESSORY DRIVE	01.3A192
CYLINDER, SEQUENTIAL ACTUATOR	06.1A008	GASKET, CRANKSHAFT FRONT COVER SMALL HOLE COVER	01.3A196
COVER, EXHAUST MANIFOLD	06.1A015	GEAR, FLYWHEEL RING	01.4A010
COVER, STARTING MOTOR HOLE	07.3A738	GASKET, FLYWHEEL HOUSING	01.5A010
Clamp, Starting Motor Solenoid Plunger Boot	07.3A410	GASKET, FLYWHEEL HOUSING LARGE HOLE COVER	01.5A040
		GASKET, FLYWHEEL HOUSING SMALL HOLE COVER	01.5A060
<b>D</b>		GASKET, FLYWHEEL HOUSING ACCESSORY HOLE COVER	01.5A062
DAMPER, VIBRATION	01.3B210	GASKET, FLYWHEEL HOUSING COVER	01.5A095
DISC, FUEL PUMP DRIVE	02.2228	GASKET, FLYWHEEL HOUSING OIL HOLE COVER	01.5A118
		GEAR ASSY., IDLER	01.5A129
<b>E</b>		GASKET, ROCKER COVER	01.8A455
ELEMENT, FUEL STRAINER	02.3A010	GASKET, FUEL PUMP TO ENGINE OR DRIVE ASSEMBLY	02.2007
ELEMENT, AIR CLEANER	03.1A050	GASKET, AIR CLEANER MOUNTING ADAPTOR	03.1A087
ELBOW AIR INTAKE MANIFOLD	03.3C808	GASKET, AIR INTAKE MANIFOLD	03.3C803
ELEMENT, FUEL FILTER	02.3A320	GASKET, CYLINDER HEAD VENT	04.8A110
EXHAUST ADAPTOR, WASTEGATE	03.5A015	GASKET, TURBOCHARGER EXHAUST INLET CONNECTION	03.5A307
ELEMENT, OIL FILTER	04.2A250	GASKET, INTERCOOLER/CHARGE AIR COOLER	03.5A446
EXTENSION, BREATHER TUBE	04.8A010	GASKET, LUBE OIL STRAINER BYPASS VALVE	04.2A160
ELBOW, EXHAUST MANIFOLD	06.1A018	GASKET, OIL FILTER ADAPTOR TO OIL COOLER ADAPTOR	04.2A293
ELBOW, THERMOSTAT HOUSING COVER OUTLET	05.2B122	GASKET, OIL FILTER BYPASS VALVE HOUSING	04.2A389
ELBOW, FRONT COVER WATER OUTLET	05.3B490	GASKET, OIL COOLER CORE PLATE	04.4A020
EXPANDER, EXHAUST MANIFOLD	06.1A006		
ELBOW, EXHAUST CROSSOVER TUBE	06.1A181		
<b>F</b>			

PART NAME	GROUP NO.
GASKET, OIL COOLER CORE-INNER	04.4A030
GASKET, OIL COOLER BYPASS VALVE PLUG	04.4A170
GASKET, OIL PAN TO BLOCK	04.7A030
GASKET, LOWER OIL PAN	04.7A040
GASKET, BREATHER BODY OR SEPARATOR	04.8A070
GASKET, EXHAUST MANIFOLD	06.1A010
GASKET, EXHAUST MANIFOLD ADAPTOR	06.1A012
GASKET, EXHAUST CROSSOVER TUBE	06.1A183
GENERATOR ASSY.	07.1A001
GASKET, FRESH WATER PUMP	05.1010
GASKET, FRESH WATER PUMP BODY COVER	05.1032
GASKET, THERMOSTAT HOUSING	05.2B110
GASKET, THERMOSTAT HOUSING COVER	05.2B130
GASKET, OIL COOLER WATER INLET CONNECTION	05.3B360
GASKET, FRONT COVER WATER OUTLET ELBOW	05.3B491
GASKET, EXHAUST MANIFOLD COVER	06.1A017
GUARD, GENERATOR DRIVE BELT AND PULLEY	07.1A585
GASKET, STARTING MOTOR	07.3A004

## H

HEAD ASSY., CYLINDER	01.2001
HOUSING ASSY., GEAR CASE	01.3A156
HUB, VIBRATION DAMPER	01.3B230
HUB, FLYWHEEL FLEXIBLE COUPLING	01.4A080
HOUSING ASSY., FLYWHEEL	01.5A001
HUB, IDLER GEAR	01.5A130
HARNESS, ECM BOAT BUILDER INTERFACE MODULE	02.1B690
HARNESS, ELECTRONIC DISTRIBUTOR UNIT TO INJECTOR	02.1B700
HARNESS, INTERFACE	02.1B703
HARNESS, ENGINE SENSORS TO ECM	02.1B704
HARNESS ASSY., INJECTOR SOLENOID WIRING	02.1B705
HARNESS, ENGINE SENSORS TO DISCONNECT	02.1B720
HARNESS, POWER INTERFACE	02.1B740
HOSE, AIR INLET PIPE	03.1A270
HOSE, FUEL SUPPLY	02.5A009
HOSE, FUEL PUMP OUTLET TO FILTER	02.5A110
HOSE, FUEL PUMP TO JUNCTION BLOCK	02.5A144
HOSE, FILTER TO CYLINDER HEAD	02.5A160

PART NAME	GROUP NO.
HOSE, JUNCTION BLOCK TO BOOST COOLER	02.5A183
HOSE, FUEL DRAIN CROSSOVER	02.5A206
HOSE, FUEL DRAIN	02.5A215
HOSE ASSY., AIR VENT BLEEDER	02.5A530
HOUSING/BASE, INTERCOOLER CHARGE AIR COOLER	03.5A432
Hose, Collector Inlet	04.8A062
HOSE, TURBOCHARGER AIR OUTLET CONNECTION	03.5A420
HOUSING, OIL FILTER BYPASS VALVE	04.2A388
HOUSING, OIL COOLER-ENGINE	04.4A050
HOUSING, TRANSFER OIL/WATER	04.4A189
HOSE, OIL COOLER INLET OIL	04.4A192
HOSE, OIL COOLER OUTLET OIL	04.4A195
HOSE, BREATHER EXTENSION	04.8A175
HOSE, OIL DRAIN	04.8A187
HOUSING, THERMOSTAT	05.2B090
HOSE, THERMOSTAT HOUSING WATER OUTLET	05.2B105
HOUSING, WATER DISTRIBUTION	05.2B155
HOSE, WATER BYPASS TUBE	05.2C165
HOSE, TURBOCHARGER WATER INLET	05.3B273
HOSE, DE-AERATION	05.3B283
HOSE, OIL COOLER WATER INLET CONNECTION	05.3B365
HOSE, OIL COOLER WATER OUTLET	05.3B422
HOSE, EXHAUST MANIFOLD FRESH WATER INLET	05.3B432
HOSE, FRESH WATER OUTLET	05.3B446
HOSE, WATER CROSSOVER TUBE	05.3B474
HOSE, OIL DRAIN	05.4A021
HOSE., OIL SUPPLY	05.4A022

## I

INJECTOR ASSY.	02.1A001
INDICATOR/SENSOR, AIR CLEANER RESTRICTION	03.1A002
INTERCOOLER, TURBOCHARGER	03.5A425
INTERCOOLER ASSY./ CHARGE AIR COOLER	03.7001
INSTALLATION KIT, BREATHER	04.8A046

## K

KIT, CYLINDER LINER AND SEALS	01.6181
KIT, COOLANT LEVEL SENSOR	02.1B670
KIT WASTEGATE ACTUATOR	03.5A004

PART NAME	GROUP NO.	PART NAME	GROUP NO.
<b>L</b>		RETAINER, BREATHER PAD	04.8A065
LINER, CYLINDER	01.6180	RELAY ASSY., STARTER MOTOR TIME DELAY	07.3A737
LINE, FUEL INJECTION INTERNAL	02.1A006	<b>S</b>	
LIMITER ASSY., COLLECTOR VACCUM	04.8A240	SPACER, CRANKSHAFT REAR OIL SEAL	01.3065
<b>M</b>		SHELL, CRANKSHAFT MAIN BEARING	01.3090
MODULE ASSY., ELECTRONIC CONTROL (ECM)	02.1B501	SEAL, CRANKSHAFT OIL FRONT	01.3A166
MODULE, INTERFACE	02.1B512	SLEEVE, CRANKSHAFT OIL SEAL	01.3A167
MANIFOLD, EXHAUST	06.1A001	SLEEVE, VIBRATION DAMPER HUB	01.3B232
MOTOR ASSY., STARTING	07.3A001	SEAL, CRANKSHAFT OIL	01.5A004
<b>P</b>		SUPPORT ASSY., CRANKSHAFT REAR	01.5A021
PLATE, FLYWHEEL FLEXIBLE COUPLING	01.4A085	SHELL, CONNECTING ROD BEARING	01.6100
PLATE, FLYWHEEL HOUSING BELL COVER	01.5A003	SEAL, CYLINDER LINER	01.6190
PISTON KIT	01.6110	SERVICE KIT, INJECTOR	02.1A002
PIN, PISTON	01.6140	SUPPORT, INJECTOR CLAMP	02.1A275
PLATE ASSY., ELECTRONIC DISTRIBUTOR UNIT COLD	02.1B520	SHIELD, WATER ECM	02.1B523
Pipe Assy., Fuel Injector	02.2008	SENSOR, MAG. CRANKSHAFT	02.1B620
PUMP ASSY., FUEL	02.2001	SENSOR, OIL, FUEL OR COOLANT TEMPERATURE	02.1B630
PRIMER PUMP, FUEL	02.5A490	SENSOR/KIT, AIR PRESSURE/TURBO BOOST	02.1B650
PUMP ASSY., OIL	04.1A001	SENSOR, COOLANT LEVEL	02.1B665
PLUG, LUBE OIL STRAINER BYPASS VALVE	04.2A150	SENSOR, COOLANT PRESSURE	02.1B675
PLUG, OIL COOLER BYPASS VALVE	04.4A160	STUD, INJECTOR CLAMP	02.1A280
PAN, OIL	04.7A001	SENSOR, OIL OR FUEL PRESSURE	02.1B600
PAN, OIL UPPER	04.7A010	SENSOR, MAG. IDLER	02.1B610
PAN, OIL LOWER	04.7A020	SENSOR, TURBO SPEED	02.1B646
PLUG, OIL PAN DRAIN	04.7A080	SENSOR, AIR TEMPERATURE	02.1B647
PIPE ASSY, BREATHER	04.8A001	SENSOR, FUEL MONITOR	02.1B667
PUMP ASSY., FRESH WATER	05.1001	SCREW, FUEL FILTER COVER	02.3A410
PULLEY AND HUB ASSY., FAN	05.4A015	SEPARATOR, FUEL WATER	02.3A590
PULLEY, FAN BELT IDLER	05.4A330	SHIELDING, FLEXIBLE HOSE	02.5A255
PULLEY, GENERATOR	07.1A500	SPRING, LUBE OIL STRAINER BYPASS VALVE BALL	04.2A140
PULLEY, BELT TENSIONER ALTERNATOR	07.1A925	SHELL ASSY., OIL COOLER TUBE TYPE	04.4A003
PULLEY, GENERATOR DRIVE	07.1A505	SPRING, OIL COOLER BYPASS VALVE	04.4A150
<b>R</b>		SHELL, BREATHER	04.8A055
RING SET, PISTON	01.6115	STUD, EXHAUST MANIFOLD TO HEAD	06.1A020
RING, PISTON COMPRESSION	01.6120	STUD, EXHAUST MANIFOLD OUTLET	06.1A050
RING, PISTON OIL CONTROL	01.6130	SHIELD, GENERATOR	07.1A005
RETAINER, PISTON PIN	01.6150	SPRING, GENERATOR BRUSH	07.1A160
REGULATOR/VALVE, BREATHER PIPE	04.8A003	STUD, FRESH WATER PUMP MOUNTING	05.1020
		SPACER, FAN BLADE	05.4A011
		SUPPORT, FAN MOUNTING	05.4A025
		SPACER, FAN SUPPORT BRACKET	05.4A028

PART NAME	GROUP NO.	PART NAME	GROUP NO.
SCREW, FAN BRACKET ADJUSTING	05.4A290	VALVE, LUBE OIL STRAINER BYPASS	04.2A120
STUD, EXHAUST MANIFOLD TO TURBOCHARGER	06.1A022	VALVE, OIL COOLER BYPASS	04.4A140
STRAP, GENERATOR ADJUSTING	07.1A580	VALVE, SOLENOID	05.4A186
SUPPORT, GENERATOR BRACKET	07.1A596	VALVE, SEQUENTIAL ACTUATOR	06.1A007

**T**

TUBE, OIL COOLER INLET	01.3A186
TUBE ASSY., FUEL SUPPLY	02.1A004
TIP ASSY., INJECTOR SPRAY	02.1A235
TUBE, INJECTOR HOLE	02.1A290
TUBE, FUEL PUMP TO FILTER	02.5A100
TUBE, FUEL PUMP OUTLET TO FUEL COOLER	02.5A111
TUBE, FUEL FILTER TO JUNCTION BLOCK	02.5A148
TUBE, FILTER TO CYLINDER HEAD	02.5A149
TUBE, FILTER TO FUEL MANIFOLD	02.5A150
TUBE, COOLER TO FILTER HEAD	02.5A153
TUBE, FUEL SUPPLY CROSSOVER	02.5A163
TUBE, JUNCTION BLOCK TO CYLINDER HEAD	02.5A175
TUBE, FUEL DRAIN CROSSOVER	02.5A205
TUBE, FUEL DRAIN	02.5A210
TURBOCHARGER	03.5A001
TUBE, TURBOCHARGER OIL RETURN	03.5A505
TUBE, TURBOCHARGER OIL SUPPLY	03.5A500
TUBE, INTERCOOLER WATER INLET	03.7070
TUBE, OIL COOLER WATER OUTLET	04.4A270
TUBE, OIL PAN DRAIN	04.7A100
THERMOSTAT ASSY.	05.2B050
TUBE ASSY., WATER PUMP INLET	05.2B070
TUBE, WATER BYPASS	05.2C160
TUBE WATER BYPASS VENT	05.2C250
TUBE, TURBOCHARGER WATER RETURN	05.3B269
TUBE, WATER PUMP INLET	05.3B329
TENSIONER, BELT	05.4A340
TUBE, EXHAUST CROSSOVER	06.1A180

**V**

Valve Assy., Fuel Pump Check	02.2035
VALVE, FUEL SYSTEM SHUTOFF	02.5A260
VALVE, FUEL DRAIN CHECK	02.5A209
VENT, CYLINDER HEAD	04.8A100
VALVE BODY ASSY., WASTEGATE	03.5A014



- 01 ENGINE (LESS MAJOR ASSEMBLIES)**
  - 01.1 CYLINDER BLOCK
  - 01.2 CYLINDER HEAD
  - 01.2A ENGINE LIFTER BRACKET
  - 01.3 CRANKSHAFT, OIL SEALS AND STABILIZERS
  - 01.3A CRANKSHAFT FRONT COVER
  - 01.3B VIBRATION DAMPER
  - 01.4A FLYWHEEL
  - 01.5A FLYWHEEL, HOUSING
  - 01.6 CONNECTING ROD AND PISTON
  - 01.8A ROCKER COVER
- 02 FUEL SYSTEM**
  - 02.1A FUEL INJECTOR/CNG CONTROLS
  - 02.1B INJECTOR, CONTROLS ELECTRONIC
  - 02.2 FUEL PUMP
  - 02.3A FUEL FILTER AND STRAINER
  - 02.5A FUEL LINES AND FUEL COOLER
- 03 AIR SYSTEM**
  - 03.1A AIR CLEANER AND/OR ADAPTOR
  - 03.3C AIR INTAKE MANIFOLD
  - 03.5A TURBOCHARGER, INTERCOOLER AND AFTERCOOLER
  - 03.7 INTERCOOLER/AFTERCOOLER
- 04 LUBRICATING SYSTEM**
  - 04.1A OIL PUMP
  - 04.2A OIL FILTER
  - 04.4A OIL COOLER AND MARINE GEAR LINES
  - 04.7A OIL PAN
  - 04.8A VENTILATING SYSTEM
- 05 COOLING SYSTEM**
  - 05.1 FRESH WATER PUMP
  - 05.2B THERMOSTAT
  - 05.2C WATER BYPASS TUBE
  - 05.3B WATER CONNECTIONS
  - 05.4A FAN
- 06 EXHAUST SYSTEM**
  - 06.1A EXHAUST MANIFOLD AND/OR CONNECTIONS
- 07 ELECTRICAL INSTRUMENTS**
  - 07.1A BATTERY, CHARGING GENERATOR
  - 07.3A STARTING MOTOR







				TYPES										
01.1 CYLINDER BLOCK														
FIG REF.	PART NO.	NAME AND DESCRIPTION	ASSY. QTY.	6	6	3								
01.1001		<b>BLOCK, CYLINDER</b>												
	000908010002	PLUG THREADED	1											
	5350101405	BLOCK ASSY., CYLINDER 12V	1											
	000908030002	PLUG SCREW M30 X 1.5 STL	2											
	000908052003	PLUG M52X1.5 STL DBL 8451.21	5											
	001474004018	CYL GROOVE PIN 4X10	2											
	007603014102	WASHER, A14 X 18 COPPER	4											
	007603030101	WASHER, A30 X 36 COPPER	2											
	007603052401	RING	5											
	007604014102	PLUG AM14X1.5	4											
	5249970020	CAP, SEALING	5											
	5350111201	CRANKCASE, 12V	1											
	5360110271	NOZZLE	1											
	5360511210	BEARING, THRUST S2000	1											
	5360512710	BUSHING CAM	6											
	5410100023	CAP, MAIN BEARING (INCLUDES 2-000007008	6											
	5410100123	CAP ASSY., MAIN BEARING THRUST	1											
	5410110071	BOLT, MAIN BEARING CAP (S2000)	NS											
	5419900101	BOLT, MAIN BEARING CAP CROSS	14											
	5550160233	SEALING CAP	12											
	735073004000	PLUG, RIVET TYPE M4	1											
	5360110471	BOLT, M18 X 2 X 173 10.9 MAIN BRG CAP	14											

# DETROIT DIESEL

SERIES 2000

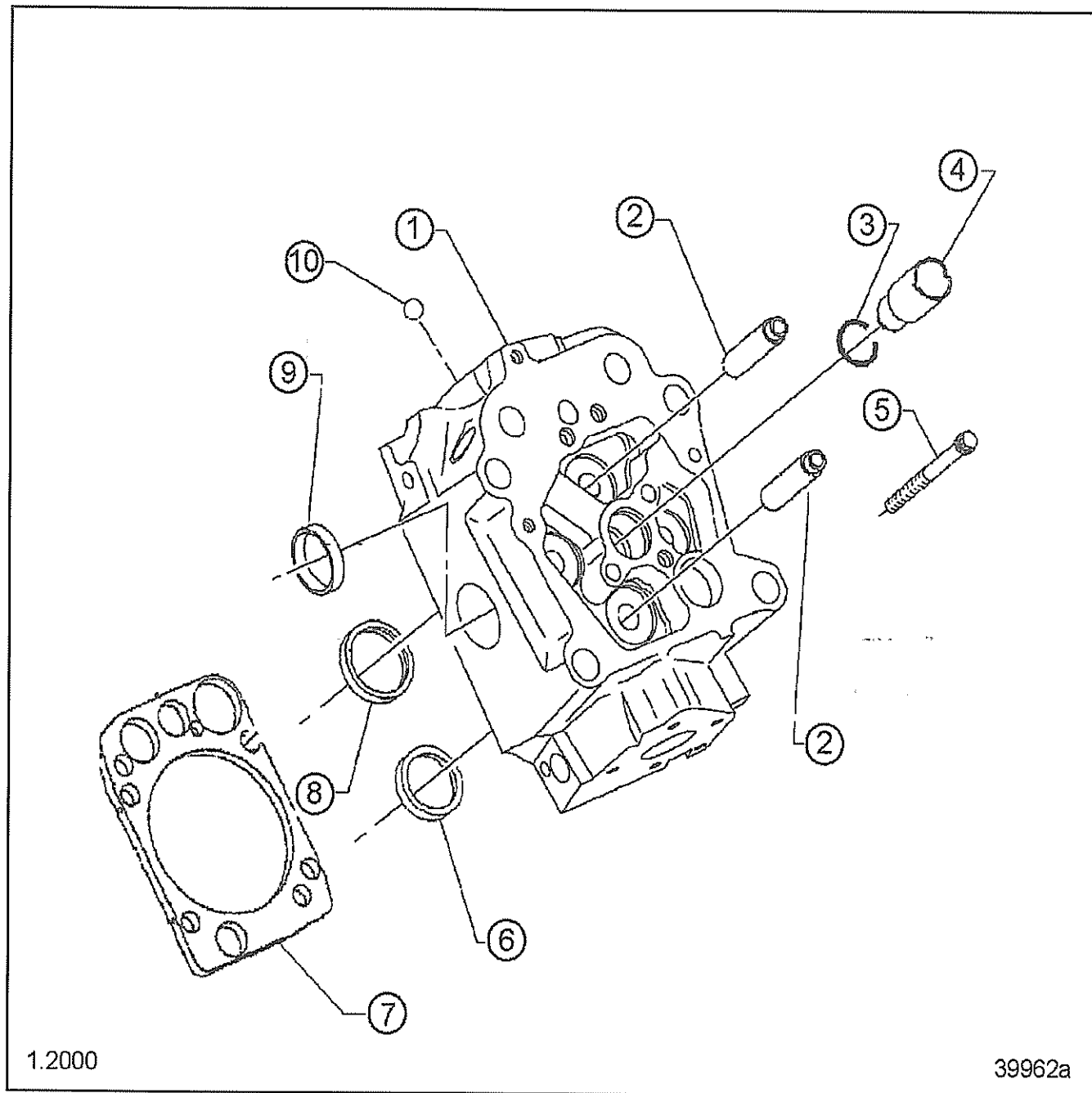


FIG 1 of 01.2

			TYPES										
01.2 CYLINDER HEAD													
FIG REF.	PART NO.	NAME AND DESCRIPTION	ASSY. QTY.	5	2	8							
01.2001		<b>HEAD ASSY., CYLINDER</b>											
	5220100220	Head Assy., Cylinder Complete	12										
	5419900001	BOLT, CYLINDER HEAD MOUNTING	48										
	6019920325	PIN, SLOT SPR. 10.05 X 15	24										
01.2010		<b>GASKET, CYLINDER HEAD COMPRESSION</b>											
	5410160920	GASKET, CYLINDER HEAD	12										

# DETROIT DIESEL

SERIES 2000

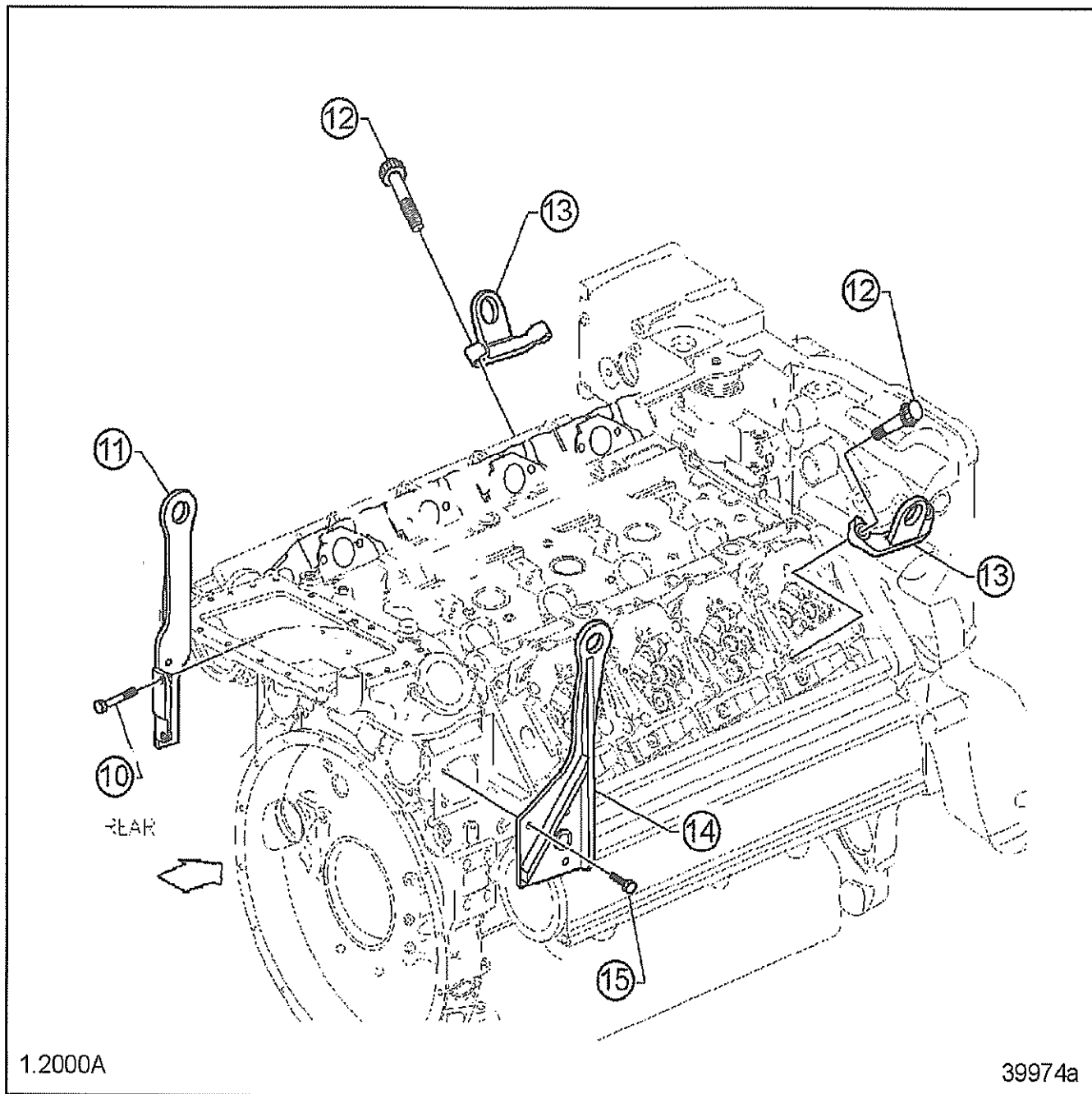


FIG 1 of 01.2A

				TYPES											
01.2A ENGINE LIFTER BRACKET															
FIG REF.	PART NO.	NAME AND DESCRIPTION	ASSY. QTY.												
	01.2A070	BRACKET, ENGINE LIFTER-FRONT		3											
	000007025103	pin, dowel		6											
	000931012033	BOLT, M12 X 50		5											
	000931012223	bolt, m12 1.75 x 60 10.9 hex		5											
	007349013002	WASHER M13		10											
	5222240240	bracket		2											
	01.2A080	BRACKET, ENGINE LIFTER - REAR													
	000125017014	WASHER A17 140HV		4											
	304017016027	BOLT, M16 X 50		4											
	5222230241	bracket, rear		1											

# DETROIT DIESEL

SERIES 2000

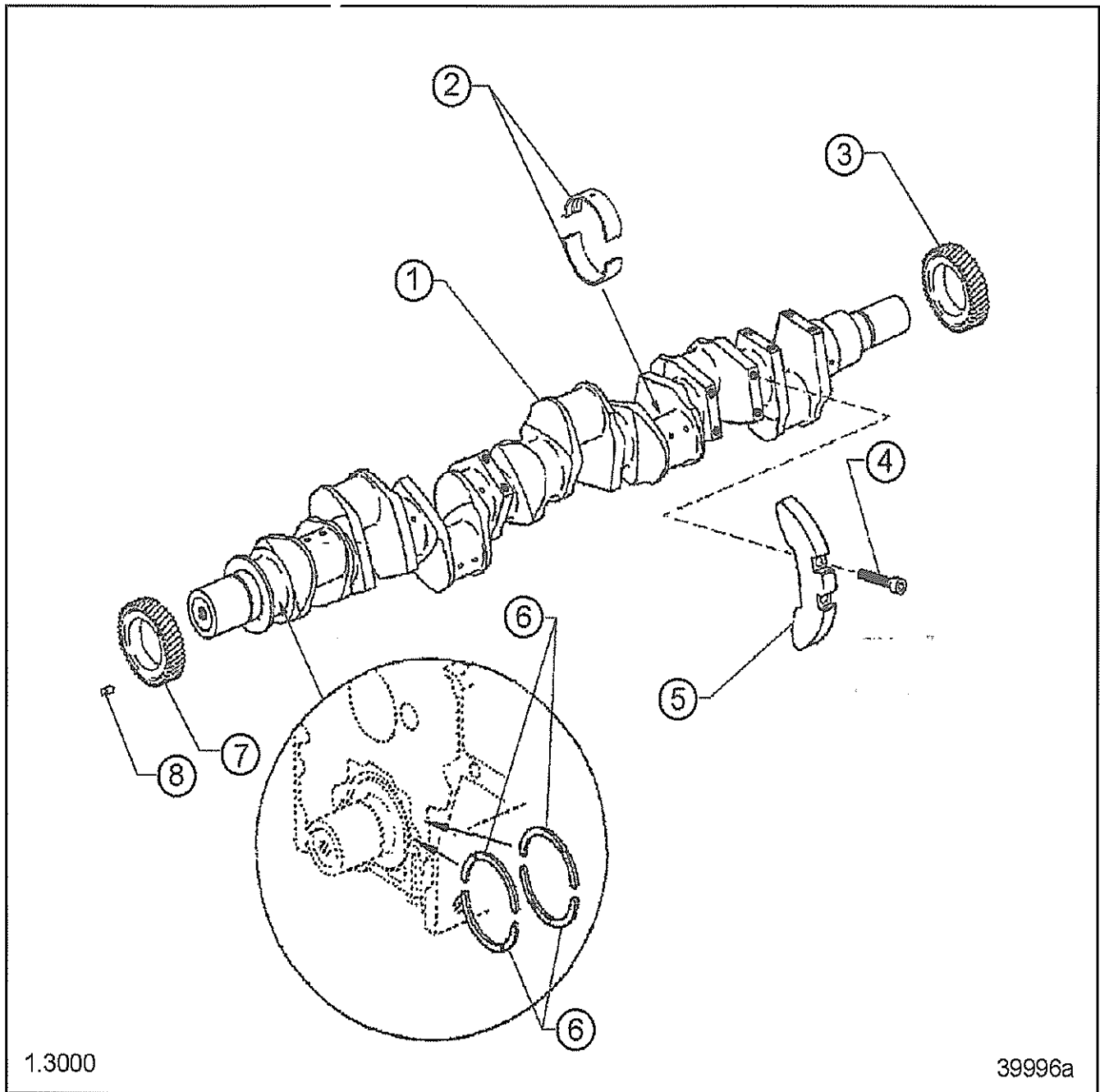


FIG 1 of 01.3

FIG REF.	PART NO.	NAME AND DESCRIPTION	ASSY. QTY.	TYPES									
		<b>01.3 CRANKSHAFT, OIL SEALS AND STABILIZERS</b>		2									
				0									
				6									
	<b>01.3001</b>	<b>CRANKSHAFT ASSY.</b>											
	5220301101	crankshaft assy., 12V		1									
	<b>01.3090</b>	<b>SHELL, CRANKSHAFT MAIN BEARING</b>											
	23528399	KIT, MAIN BEARING STD		7									
	23528400	SHELL SET, .10 UNDERSIZE		AR									
	23528401	SHELL SET, .25 UNDERSIZE		AR									
	23528402	SHELL SET, .50 UNDERSIZE		AR									
	23528403	SHELL SET, .75 UNDERSIZE		AR									
	23528404	SHELL SET, 1.00 UNDERSIZE		AR									
	5410330962	THRUST WASHER, 5.375 W		4									



01.3A CRANKSHAFT FRONT COVER					TYPES									
FIG REF.	PART NO.	NAME AND DESCRIPTION	ASSY. QTY.											
	<b>01.3A156</b>	<b>HOUSING ASSY., GEAR CASE</b>		2										
	000125008427	WASHER A8.4		6										
	000125010524	WASHER A10.5		20										
	000125017014	WASHER A17 140HV		6										
	000931008189	BOLT, M8 1.25 X 85 8.8		2										
	000931010247	BOLT, M10 X 120		9										
	000931010296	BOLT M10 1.50 X 85 8.8 DBL8421 DIN 931		5										
	000931010336	BOLT, M10 X 130 LG		5										
	000931016046	bolt, m16 2.00 x 95 8.8 hex		3										
	000931016051	bolt, m16 2.00 x 140 8.8 hex		1										
	000931016077	BOLT, M16 2.00 X 120 8.8		2										
	304017008084	BOLT, M8 X 35 8.8		4										
	304017008088	BOLT, M8 1.25 x 55 8.8; USE: 304017008084		NS										
	5220100633	housing, gear case assy.tb/td		1										
	5222020007	hub - -		1										
	5352000044	gear, idler assy.		1										
	5551870640	BRACKET, L 51 X 38 X 20		1										
	<b>01.3A158</b>	<b>COVER, GEAR CASE</b>												
	000007008210	PIN, M8 X 24		2										
	000125010524	WASHER A10.5		3										
	000931010239	BOLT, M10 X 80 8.8		8										
	000933010116	BOLT, M10 X 45		5										
	000933010150	BOLT, M10 X 55		1										
	5220100117	cover, gear case assy. tb/td		1										
	<b>01.3A170</b>	<b>GASKET, CRANKSHAFT FRONT COVER</b>												
	5360150280	GASKET		1										
	700429027003	ring-o, 27 x 4 mmn 429		1										
	700429028003			2										
	700429080001	SEAL RING, 80 X 5		1										
	700429095004	O-RING, 95 X 5		2										

**DETROIT DIESEL**

SERIES 2000

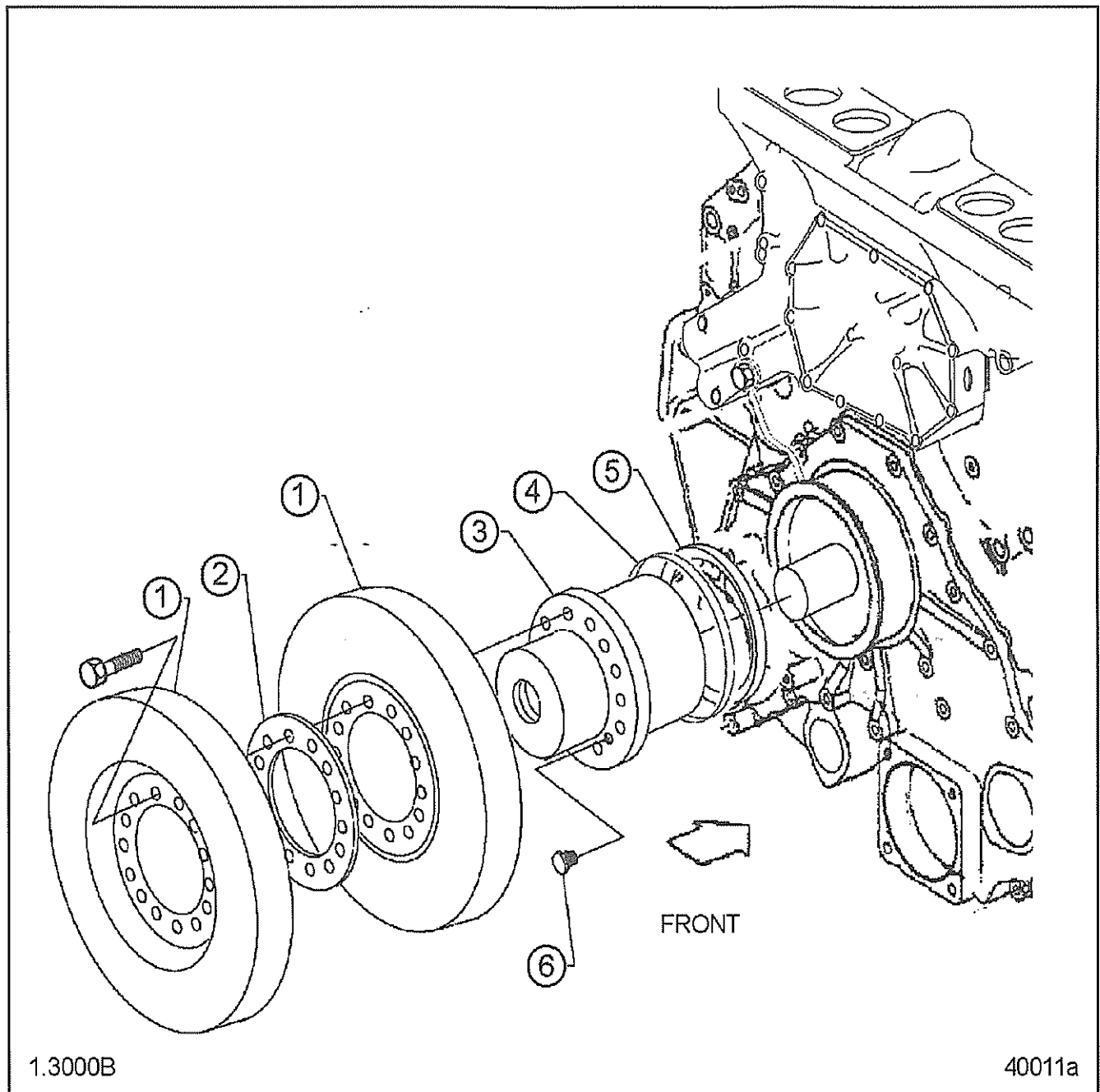


FIG 1 of 01.3B



**DETROIT DIESEL**

SERIES 2000

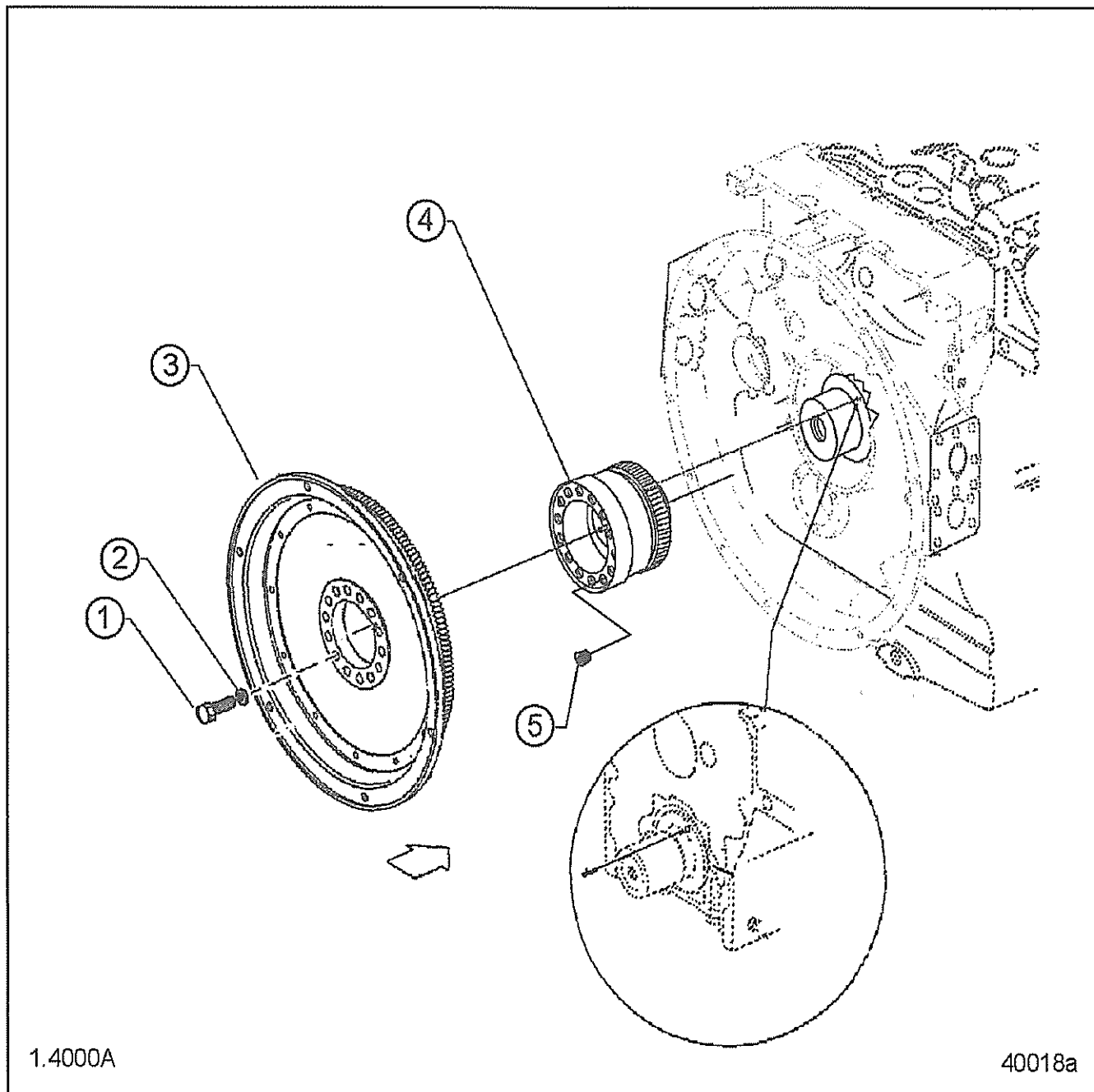


FIG 1 of 01.4A

				TYPES									
01.4A FLYWHEEL													
FIG REF.	PART NO.	NAME AND DESCRIPTION	ASSY. QTY.	1									
				3									
				1									
				4									
	01.4A001	FLYWHEEL ASSY.											
	000000002976	bolt, m16 x 1.5 x 55 iso 8676 10.9		14									
	0249975047	seal, lip shaft radial		1									
	5220300905	flywheel assy.		1									
	700521016200	WASHER, M16 X 2		14									
	8809970210	DOWEL PIN M91CE S2000		1									
	01.4A080	HUB, FLYWHEEL FLEXIBLE COUPLING											
	5220320107	hub, tb/td flywheel		1									

				TYPES											
01.5A FLYWHEEL, HOUSING															
FIG REF.	PART NO.	NAME AND DESCRIPTION	ASSY. QTY.	9											
	<b>01.5A001</b>	<b>HOUSING ASSY., FLYWHEEL</b>		4											
	000000003238	Bolt, M12 x 1.5 x 80	2	8											
	000000003239	Bolt, M12 X 1.5 X 140	8												
	000125008427	WASHER A8.4	2												
	000125013012	WASHER A13	14												
	000933008028	BOLT, M8 X 18 8.8	2												
	000934012023	Nut, Hex M12; USE: 308673012002	NS												
	000939012100	Stud, M12 x 1.5 x 80 10.9	4												
	308673012002		4												
	5220101037	Housing, Flywheel TB/TD	1												
	5220320015	Pointer	1												
	700429020003	SEAL RING, 20 X 4	1												
	<b>01.5A003</b>	<b>PLATE, FLYWHEEL HOUSING BELL COVER</b>													
	000000001039	BOLT M10 X 40 8.8 16V4000	2												
	000125008427	WASHER A8.4	6												
	000125010524	WASHER A10.5	4												
	000933010092	BOLT M10 X 30.0 LG	1												
	000933010116	BOLT, M10 X 45	1												
	136M52010/1	BRACKET	1												
	304017008084	BOLT, M8 X 35 8.8	5												
	304017008085	BOLT, M8 X 40 8.8	1												
	5220110621	Plate, Blanking	1												
	5225460043	BRACKET	1												
	<b>01.5A010</b>	<b>GASKET, FLYWHEEL HOUSING</b>													
	5220130180	Gasket	1												
	<b>01.5A085</b>	<b>COVER, FLYWHEEL HOUSING</b>													
	000125008427	WASHER A8.4	4												
	0005312081	Cable, Clamp Quick	1												
	304017008079	BOLT, M8 X 20 8.8	3												
	304017008084	BOLT, M8 X 35 8.8	1												
	5220130333	Cover	2												
	5511530050	SPACER, 10MM X 18MM	1												
	700327010000	GROMMET, M10	1												
	916016008202	CLAMP, BRSGU 8/20	1												

01.6 CONNECTING ROD AND PISTON					TYPES									
FIG REF.	PART NO.	NAME AND DESCRIPTION	ASSY. QTY.											
	<b>01.6001</b>	<b>CONNECTING ROD ASSY.</b>		8										
	5410380071	BOLT, CONNECTING ROD (USE W/SPLIT LINE ROD)		3										
	5410380450	bushing, conrod		9										
	5420300520	conrod assy.		24										
	<b>01.6100</b>	<b>SHELL, CONNECTING ROD BEARING</b>		1										
	5360382410	BEARING, UPPER CONN ROD STD		12										
	5420382211	BEARING, LOWER CONN ROD STD		16										
	<b>01.6110</b>	<b>PISTON KIT</b>		16										
	5220302417	piston/rings/pin, 14:1		12										
	<b>01.6180</b>	<b>LINER, CYLINDER</b>												
	5360110359	RING, OIL CONTROL LINER M91CE		12										
	5360110410	LINER, CYLINDER CARBON SCRAPER		12										
	<b>01.6190</b>	<b>SEAL, CYLINDER LINER</b>												
	0229974948	RING, SEAL LINER LOWER		24										
	5410110059	SEAL RING, BRASS UPPER		12										

		TYPES											
		01.8A ROCKER COVER											
FIG REF.	PART NO.	NAME AND DESCRIPTION	ASSY. QTY.	6									
	01.8A450	COVER ASSY., ROCKER	5	9									
	5310160605	COVER, VALVE S2000		7									
	01.8A455	GASKET, ROCKER COVER		7									
	5310160021	GASKET, VALVE COVER											
	01.8A460	BOLT, ROCKER COVER											
	910105008022	BOLT, ROCKER COVER MOUNTING S2000	14										



- 01 ENGINE (LESS MAJOR ASSEMBLIES)
  - 01.1 CYLINDER BLOCK
  - 01.2 CYLINDER HEAD
  - 01.2A ENGINE LIFTER BRACKET
  - 01.3 CRANKSHAFT, OIL SEALS AND STABILIZERS
  - 01.3A CRANKSHAFT FRONT COVER
  - 01.3B VIBRATION DAMPER
  - 01.4A FLYWHEEL
  - 01.5A FLYWHEEL, HOUSING
  - 01.6 CONNECTING ROD AND PISTON
  - 01.8A ROCKER COVER
- 02 FUEL SYSTEM
  - 02.1A FUEL INJECTOR/CNG CONTROLS
  - 02.1B INJECTOR, CONTROLS ELECTRONIC
  - 02.2 FUEL PUMP
  - 02.3A FUEL FILTER AND STRAINER
  - 02.5A FUEL LINES AND FUEL COOLER
- 03 AIR SYSTEM
  - 03.1A AIR CLEANER AND/OR ADAPTOR
  - 03.3C AIR INTAKE MANIFOLD
  - 03.5A TURBOCHARGER, INTERCOOLER AND AFTERCOOLER
  - 03.7 INTERCOOLER/AFTERCOOLER
- 04 LUBRICATING SYSTEM
  - 04.1A OIL PUMP
  - 04.2A OIL FILTER
  - 04.4A OIL COOLER AND MARINE GEAR LINES
  - 04.7A OIL PAN
  - 04.8A VENTILATING SYSTEM
- 05 COOLING SYSTEM
  - 05.1 FRESH WATER PUMP
  - 05.2B THERMOSTAT
  - 05.2C WATER BYPASS TUBE
  - 05.3B WATER CONNECTIONS
  - 05.4A FAN
- 06 EXHAUST SYSTEM
  - 06.1A EXHAUST MANIFOLD AND/OR CONNECTIONS
- 07 ELECTRICAL INSTRUMENTS
  - 07.1A BATTERY, CHARGING GENERATOR
  - 07.3A STARTING MOTOR

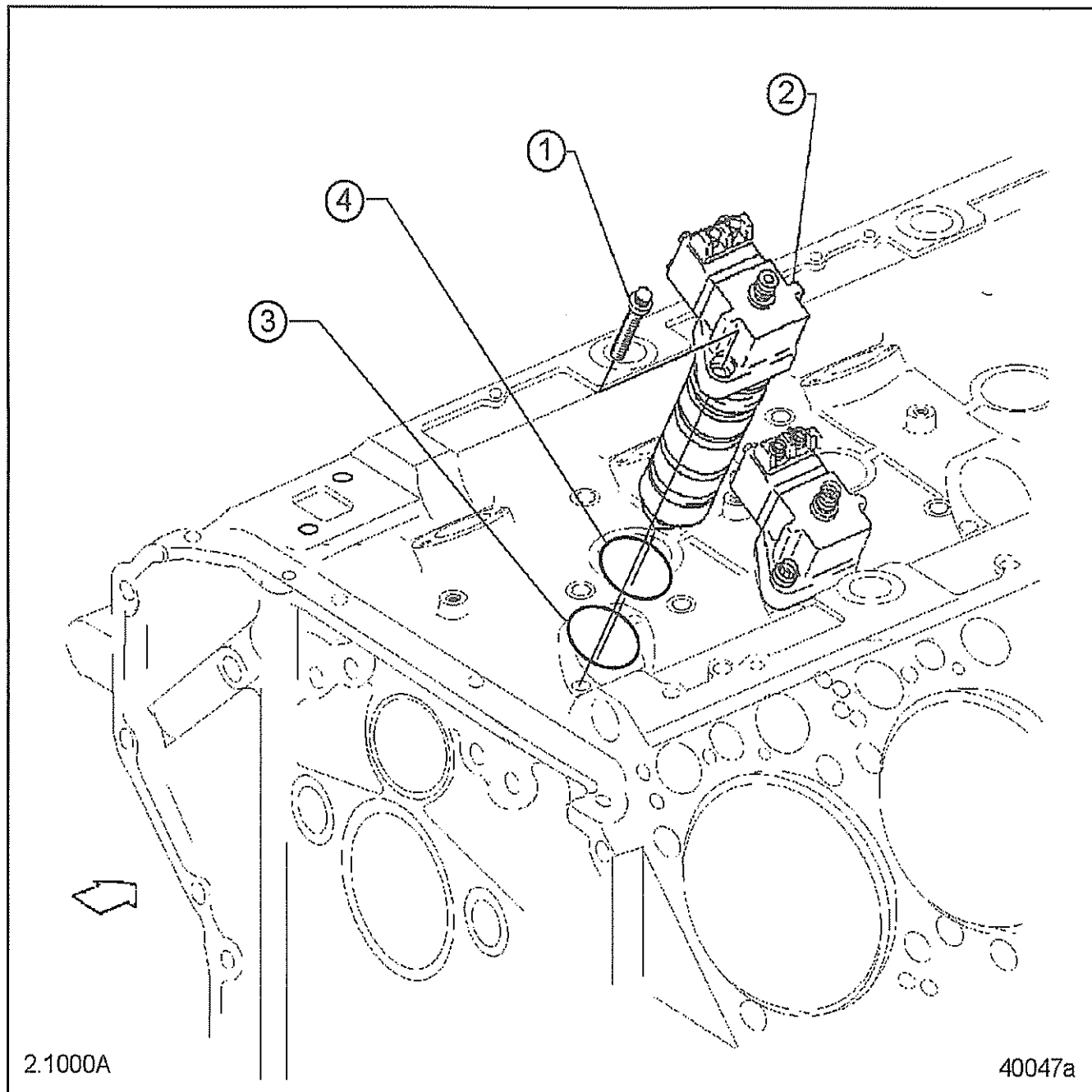
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1000 1000  
1000 1000

**DETROIT DIESEL**

SERIES 2000



**FIG 1 of 02.1A**

**DETROIT DIESEL**

SERIES 2000

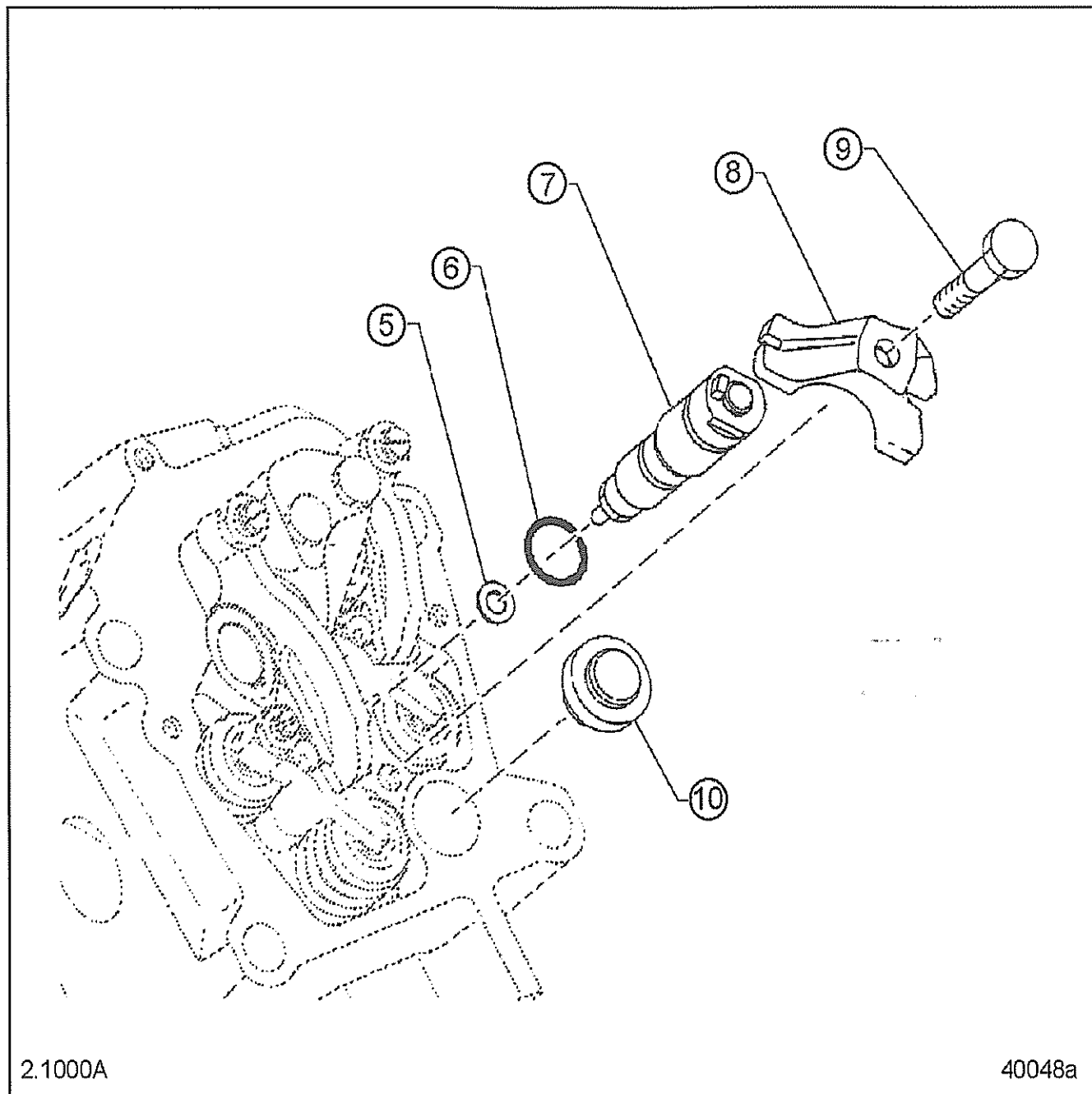


FIG 2 of 02.1A

**DETROIT DIESEL**

SERIES 2000

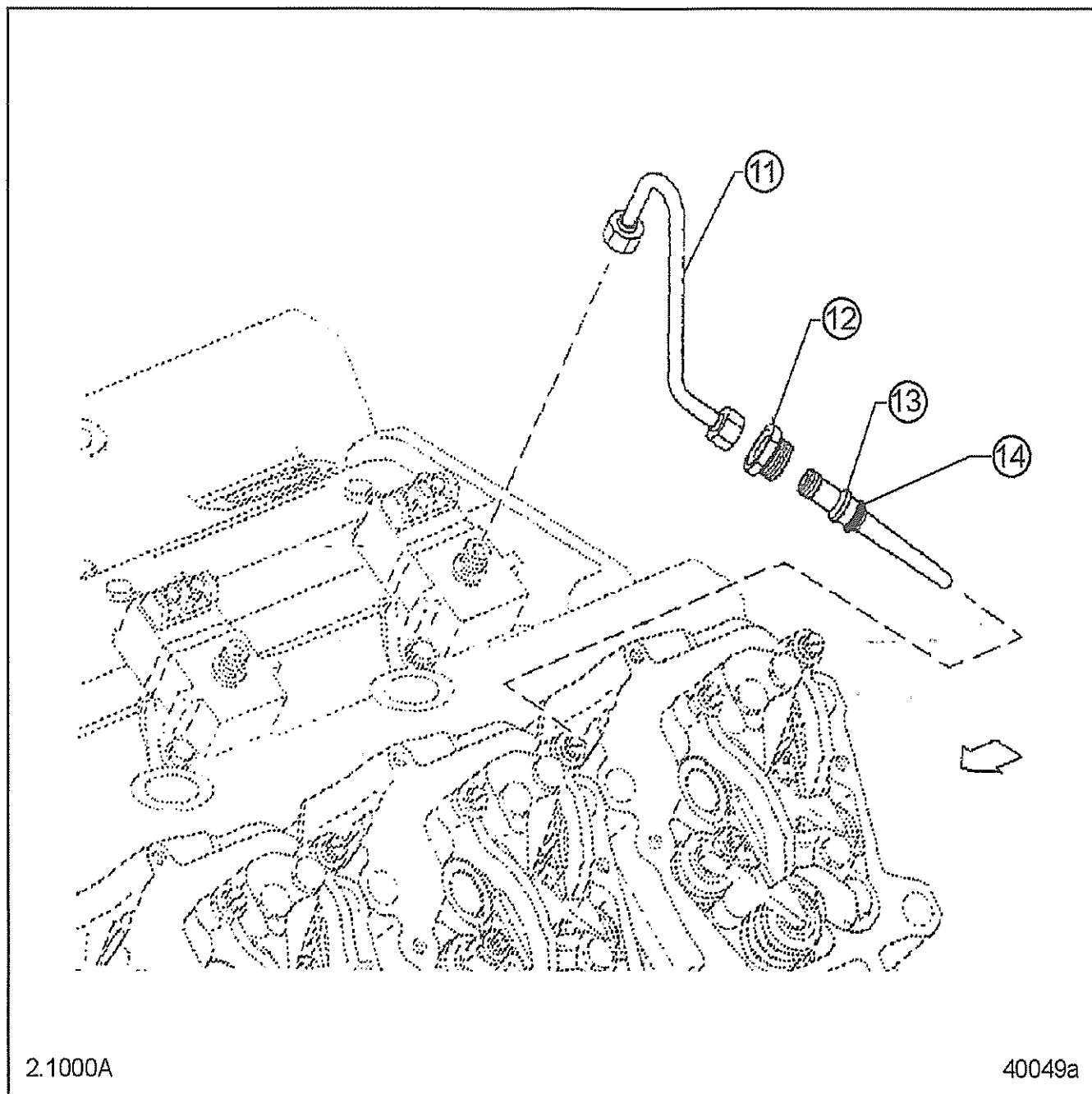


FIG 3 of 02.1A

				TYPES											
02.1A FUEL INJECTOR/CNG CONTROLS															
FIG REF.	PART NO.	NAME AND DESCRIPTION	ASSY. QTY.	5	5										
				2	3										
				2	2										
	<b>02.1A001</b>	<b>INJECTOR ASSY.</b>													
2:7	0010108651	Injector			12										
1:2	0050709601	PUMP INJECTION M91CE S2000		12											
	0239976448	SEAL RING, UPPER 47 X 2.5	1												
	0239976548	SEAL RING, LOWER 45 X 2.5	1												
1:1	5419900301	BOLT, M10 12PT UNIT PUMP		24											
	<b>02.1A004</b>	<b>TUBE ASSY., FUEL SUPPLY</b>													
3:11	5220705132	Tube, Fuel High Pressure External		12											
	<b>02.1A006</b>	<b>LINE, FUEL INJECTION INTERNAL</b>													
3:12	0000170824	Tube Assy., Fuel Injector		12											
3:12	5410170071	RETAINER NUT M22 X 1.50 M91CE S2000		12											
	<b>02.1A270</b>	<b>CLAMP, INJECTOR</b>													
2:8	5410780535	CLAMP. INJECTOR NOZZLE			12										
	<b>02.1A275</b>	<b>SUPPORT, INJECTOR CLAMP</b>													
2:10	5410100535	Plug Assy. Injector Clamp W/O-Ring		12											

				TYPES									
FIG REF.	PART NO.	NAME AND DESCRIPTION	ASSY. QTY.										
				9 6 0	9 6 1	9 8 6							
		<b>02.1B INJECTOR, CONTROLS ELECTRONIC</b>											
	<b>02.1B501</b>	<b>MODULE ASSY., ELECTRONIC CONTROL (ECM)</b>											
	5275304760	CONTROL UNIT, ELECTRONIC	1										
	<b>02.1B610</b>	<b>SENSOR, MAG. IDLER</b>											
	0005357433	SENSOR, SPEED				2							
	<b>02.1B630</b>	<b>SENSOR, OIL, FUEL OR COOLANT TEMPERATURE</b>											
	0035352531	SENSOR, PRESSURE (10 BAR)				1							
	<b>02.1B647</b>	<b>SENSOR, AIR TEMPERATURE</b>											
	0005356430	SENSOR, AIR/FUEL/WATER TEMPERATURE				4							
	<b>02.1B650</b>	<b>SENSOR/KIT , AIR PRESSURE/TURBO BOOST</b>											
	0035352731	SENSOR, PRESSURE				1							
	<b>02.1B700</b>	<b>HARNESS, ELECTRONIC DISTRIBUTOR UNIT TO INJECTOR</b>											
	000125006431	WASHER A6.4 14 OHV DBL8451.11 DIN 125				6							
	000933006074	BOLT, M6 X 10				6							
	5365305821	Harness, Wiring assy. Injector				1							
	916016022203	Clamp, Brsgu				6							
	<b>02.1B704</b>	<b>HARNESS, ENGINE SENSORS TO ECM</b>											
	000125006431	WASHER A6.4 14 OHV DBL8451.11 DIN 125			2								
	000125008427	WASHER A8.4			8								
	000125010524	WASHER A10.5			2								
	0005334943	bracket, TOP DN17			1								
	0005335043	RETAINER, TOP DN10			1								
	0005461220	STRIP ASM			1								
	000933006175	BOLT, M6 X 16 8.8			1								
	000933010035	BOLT, M10 X 25			1								
	000933010089	BOLT M10 X 20			1								
	000934006006	NUT, HEX M6			1								
	000934008008	NUT, HEX M8			5								
	304017008079	BOLT, M8 X 20 8.8			3								
	5221530026	DAMPER, SPR ADJ WRG HARNESS			4								
	5221531640	RETAINER			1								
	5241506473	BRACKET ASSY., wiring harness			1								
	5241534240	BRACKET, 62.5 X 55 37.5 X 2.5			1								
	5365305921	Harness, Wiring assy. Sensor				1							
	<b>02.1B745</b>	<b>BRACKET, WIRING HARNESS</b>											
	5221532240	Bracket			1								
	5241505776	Bracket			1								
	8831530240	Bracket			1								

		TYPES									
FIG REF.	PART NO.	NAME AND DESCRIPTION	ASSY. QTY.	9	9	9					
				6	6	8					
				0	1	6					
	02.1B745	BRACKET, WIRING HARNESS									



					TYPES									
02.2 FUEL PUMP					3									
FIG REF.	PART NO.	NAME AND DESCRIPTION	ASSY. QTY.	5	7									
	<b>02.2001</b>	<b>PUMP ASSY., FUEL</b>												
	00000003110	Bolt, M8 1.25 x 60 10.9		1										
	000125008427	WASHER A8.4		3										
	000125013012	WASHER A13		2										
	000933012056	BOLT M12X30MM		2										
	0009900384	Union, Banjo		1										
	0019903463	Screw, Banjo		3										
	007603018101	007603018101		9										
	304017008079	BOLT, M8 X 20 8.8		3										
	5220700181	Hose, Fuel Tube Assy.		1										
	5220700281	Hose Assy., Fuel Line		1										
	5220703781	Hose, Fuel Tube Supply		1										
	5220780031	Union, 30 x 36		1										
	5220781241	Bracket, 66 x 20 x 6		1										
	5220900150	Pump, Fuel Priming		1										
	5220910045	Flange		1										
	5319971132	PLUG ASSY., M18 X 1.5		2										
	5360910201	PUMP ASSY., FUEL 16V; USE: E23526550		NS										
	700294015004	RING O 15.5 X 2.5 MMN 294 M91CE S2000		2										
	915001013003	NUT		1										
	915005013004	CONE, SEALING		1										
	E23526550			1										
	<b>02.2007</b>	<b>GASKET, FUEL PUMP TO ENGINE OR DRIVE ASSEMBLY</b>												
	5220910080	Gasket		1										
	5360780380	GASKET M91CE 16V S2000		6										
	<b>02.2008</b>	<b>Pipe Assy., Fuel Injector</b>												
	304017008091	Bolt, M8 1.25 x 55 10.9 Hex		5										
	5220701177	Pipework Assy., Fuel Manifold		1										
	5221531540	Bracket, 50 x 16 x 5		5										
	<b>02.2035</b>	<b>Valve Assy., Fuel Pump Check</b>												
	000125008427	WASHER A8.4		2										
	304017008077	BOLT, M8 X 16 8.8		2										
	5220700046	Valve, Non Return		1										
	5220700346	Valve, Press Relief Assy.		1										
	<b>02.2228</b>	<b>DISC, FUEL PUMP DRIVE</b>												
	000125008427	WASHER A8.4		3										
	05150193	GASKET (FUEL PUMP TO DRIVE ASSY.) (5.1010)		1										
	304017008083	BOLT, M8 X 30		3										
	5220910071	Bolt, M10 x 49.5 6.5 42CRM00		1										
	5360910525	Driver, M91CE		1										
	5360920080	Gasket; USE: 05150193		NS										

			TYPES											
02.2 FUEL PUMP														
FIG REF.	PART NO.	NAME AND DESCRIPTION	ASSY. QTY.	3	7	5								
	02.2228	DISC, FUEL PUMP DRIVE												

				TYPES											
02.3A FUEL FILTER AND STRAINER															
FIG	PART NO.	NAME AND DESCRIPTION	ASSY.	1											
REF.			QTY.	1											
	02.3A260	BRACKET, FUEL STRAINER MOUNTING	0	4											
	5220900541	Bracket		1											
	02.3A310	FILTER ASSY., FUEL													
	0020922801	FILTER, EASY CHANGE		1											

02.5A FUEL LINES AND FUEL COOLER				TYPES											
FIG REF.	PART NO.	NAME AND DESCRIPTION	ASSY. QTY.	2	4	8	7								
	02.5A205	TUBE, FUEL DRAIN CROSSOVER													
	000125008427	WASHER A8.4	1												
	304017008077	BOLT, M8 X 16 8.8	1												
	5220704681	Hose Assy., Fuel Line	1												
	5220705432	Hose Assy., Fuel Line	1												
	916016006202	CLAMP, BRSGU	1												

- 01 ENGINE (LESS MAJOR ASSEMBLIES)
  - 01.1 CYLINDER BLOCK
  - 01.2 CYLINDER HEAD
  - 01.2A ENGINE LIFTER BRACKET
  - 01.3 CRANKSHAFT, OIL SEALS AND STABILIZERS
  - 01.3A CRANKSHAFT FRONT COVER
  - 01.3B VIBRATION DAMPER
  - 01.4A FLYWHEEL
  - 01.5A FLYWHEEL, HOUSING
  - 01.6 CONNECTING ROD AND PISTON
  - 01.8A ROCKER COVER
- 02 FUEL SYSTEM
  - 02.1A FUEL INJECTOR/CNG CONTROLS
  - 02.1B INJECTOR, CONTROLS ELECTRONIC
  - 02.2 FUEL PUMP
  - 02.3A FUEL FILTER AND STRAINER
  - 02.5A FUEL LINES AND FUEL COOLER
- 03 AIR SYSTEM
  - 03.1A AIR CLEANER AND/OR ADAPTOR
  - 03.3C AIR INTAKE MANIFOLD
  - 03.5A TURBOCHARGER, INTERCOOLER AND AFTERCOOLER
  - 03.7 INTERCOOLER/AFTERCOOLER
- 04 LUBRICATING SYSTEM
  - 04.1A OIL PUMP
  - 04.2A OIL FILTER
  - 04.4A OIL COOLER AND MARINE GEAR LINES
  - 04.7A OIL PAN
  - 04.8A VENTILATING SYSTEM
- 05 COOLING SYSTEM
  - 05.1 FRESH WATER PUMP
  - 05.2B THERMOSTAT
  - 05.2C WATER BYPASS TUBE
  - 05.3B WATER CONNECTIONS
  - 05.4A FAN
- 06 EXHAUST SYSTEM
  - 06.1A EXHAUST MANIFOLD AND/OR CONNECTIONS
- 07 ELECTRICAL INSTRUMENTS
  - 07.1A BATTERY, CHARGING GENERATOR
  - 07.3A STARTING MOTOR



		TYPES										
FIG REF.	PART NO.	NAME AND DESCRIPTION	ASSY. QTY.									
				4								
		03.1A AIR CLEANER AND/OR ADAPTOR		0								
				0								
				0								
				2								
				2								

				TYPES											
03.3C AIR INTAKE MANIFOLD				5	6										
FIG REF.	PART NO.	NAME AND DESCRIPTION	ASSY. QTY.	9	0										
	<b>03.3C801</b>	<b>AIR INTAKE MANIFOLD</b>													
	000000000681	CLAMP 160-180X13-SW8-W3 MBN 10223 POLYAM	4												
	0000943268	GAUGE VACUUM MARINE	2												
	000125008427	WASHER A8.4	2	3											
	000125010524	WASHER A10.5	5												
	0005334843	RETAINER, TOP DN23			2										
	0005334943	bracket, TOP DN17			1										
	0005335043	RETAINER, TOP DN10	2	3											
	000908010002	PLUG THREADED		2											
	000913008103	screw, grub m8 x 20 45h		12											
	000933010093	BOLT M10 X 35	4												
	000933010144	BOLT, M10 X 60.0 LG	1												
	000933010150	BOLT, M10 X 55	2												
	000934010005	NUT	1												
	0009973375	ADAPTOR, FITTING W/SINTERED FILTER	2												
	007349008002	WASHER	1	15											
	007349010002	WASHER, 10.5 STL	3												
	007603010107	RING SALING A10 X 16 DIN7603 ST DBL8451			2										
	304017008077	BOLT, M8 X 16 8.8			3										
	304017008079	BOLT, M8 X 20 8.8			3										
	304017008081	BOLT, M8 X 25 8.8 LG	2												
	304017008084	BOLT, M8 X 35 8.8			12										
	304017008087	BOLT, M8 X 50 8.8	1												
	304017008088	BOLT, M8 1.25 x 55 8.8; USE: 304017008084			NS										
	5220900141	bracket	1												
	5220981538	manifold, charge air			1										
	5241504273	BRACKET, M60CE			1										
	5241505076	bracket	1												
	5241505573	RETAINER ASSY., WRG HARNESS			2										
	5241506473	BRACKET ASSY., wiring harness			3										
	5241508673	retainer assy	1												
	5620984139	BRACKET	1												
	700336160004	sleeve, rubber 160 x 140mmn 336	2												
	700429530000	ring-o, 530 x 5mmn 429 m90ce			1										
	<b>03.3C803</b>	<b>GASKET, AIR INTAKE MANIFOLD</b>													
	4571410080	GASKET, INTAKE MANIFOLD			12										
	<b>03.3C808</b>	<b>ELBOW AIR INTAKE MANIFOLD</b>													
	5220900128	elbow	2												



				TYPES											
		<b>03.5A TURBOCHARGER, INTERCOOLER AND AFTERCOOLER</b>		2	2										
				0	0										
<b>FIG</b>	<b>PART NO.</b>	<b>NAME AND DESCRIPTION</b>	<b>ASSY.</b>	8	8										
<b>REF.</b>			<b>QTY.</b>	7	8										
	<b>03.5A001</b>	<b>TURBOCHARGER</b>													
	0070963899	Turbocharger, Exhaust			2										
	<b>03.5A432</b>	<b>HOUSING/BASE, INTERCOOLER CHARGE AIR COOLER</b>													
	000125008427	WASHER A8.4		4											
	0005335043	RETAINER, TOP DN10		2											
	000908014001	PLUG, M14 X 1.5		1											
	007349008002	WASHER		2											
	007603014102	WASHER, A14 X 18 COPPER		1											
	271511030000	GASKET, 30 X 53 X 1.5		2											
	304017008081	BOLT, M8 X 25 8.8 LG		4											
	304017008085	BOLT, M8 X 40 8.8		2											
	5220140045	Flange		2											
	5241506473	BRACKET ASSY., wiring harness		2											
	<b>03.5A500</b>	<b>TUBE, TURBOCHARGER OIL SUPPLY</b>													
		<i>REFER TO AIR BOX DRAIN TYPE FOR TURBO OIL DRAIN LINES.</i>													
	000125010524	WASHER A10.5		2											
	000933010094	BOLT, M10 X 40 8.8		2											
	4471870180	GASKET		1											
	5221803119	Line, Oil		1											
	700325015100	CLAMP, TUBE HALF		4											
	700327010000	GROMMET, M10		2											
	<b>03.5A502</b>	<b>CLIP, TURBOCHARGER OIL SUPPLY TUBE</b>													
	000125008427	WASHER A8.4		4											
	000933012056	BOLT M12X30MM		8											
	007349008002	WASHER		4											
	007349013002	WASHER M13		8											
	304017008081	BOLT, M8 X 25 8.8 LG		4											
	304032008014	Nut, Hex M8		4											
	5221870340	Bracket		1											
	5221870440	Bracket		1											
	5221870640	Bracket		2											
	916016022202	CLAMP, BRSGU		4											
	<b>03.5A505</b>	<b>TUBE, TURBOCHARGER OIL RETURN</b>													
	000125008427	WASHER A8.4		5											
	000125010524	WASHER A10.5		6											
	0005334843	RETAINER, TOP DN23		1											
	000933010035	BOLT, M10 X 25		4											
	000933010094	BOLT, M10 X 40 8.8		2											
	007349008002	WASHER		1											

FIG REF.	PART NO.	NAME AND DESCRIPTION	ASSY. QTY.	TYPES											
				2	2										
		<b>03.5A TURBOCHARGER, INTERCOOLER AND AFTERCOOLER</b>		0	0										
				8	8										
				7	8										
	<b>03.5A505</b>	<b>TUBE, TURBOCHARGER OIL RETURN</b>													
	007603014102	WASHER, A14 X 18 COPPER		3											
	304017008077	BOLT, M8 X 16 8.8		1											
	304017008084	BOLT, M8 X 35 8.8		2											
	304017008085	BOLT, M8 X 40 8.8		1											
	304017008087	BOLT, M8 X 50 8.8		1											
	304032008014	Nut, Hex M8		1											
	4471870180	GASKET		1											
	5221801922	Line, Oil Return		2											
	5221802019	Line, Oil		1											
	5221802819	Line, Oil		1											
	5221803219	Line, Oil		1											
	5221803319	Line, Oil		1											
	5241506076	Bracket		1											
	5501871280	GASKET -		2											-
	5569970674	FITTING		1											
	700325015100	CLAMP, TUBE HALF		8											
	700327010000	GROMMET, M10		4											
	915011008101	BOLT, BANJO M8		1											
	915013008002	REDUCER		1											
	916016010203	CLAMP, BRSGU 10/20		1											

03.7 INTERCOOLER/AFTERCOOLER				TYPES											
FIG REF.	PART NO.	NAME AND DESCRIPTION	ASSY. QTY.	7											
	03.7001	INTERCOOLER ASSY./ CHARGE AIR COOLER		9											
	000931008173	BOLT, M8 X 65 8.8		3											
	000933008114	BOLT, M8 X 22		6											
	0030987420	intercooler		1											
	007349008002	WASHER		1											
	5220980074	pin		2											
	03.7003	BRACKET, INTERCOOLER MOUNTING													
	000125008427	WASHER A8.4		12											
	000933008171			1											
	304014008029	BOLT, M8 X 70 8.8		2											
	5220940027	bracket		1											
	5500210040	BRACKET		2											
	03.7070	TUBE, INTERCOOLER WATER INLET													
	5220981207	pipe, charge-air		2											
	700429075001	SEAL RING, 75 X 5		2											
	700429085002	SEAL RING, 85 X 6		2											



- 01 ENGINE (LESS MAJOR ASSEMBLIES)
  - 01.1 CYLINDER BLOCK
  - 01.2 CYLINDER HEAD
  - 01.2A ENGINE LIFTER BRACKET
  - 01.3 CRANKSHAFT, OIL SEALS AND STABILIZERS
  - 01.3A CRANKSHAFT FRONT COVER
  - 01.3B VIBRATION DAMPER
  - 01.4A FLYWHEEL
  - 01.5A FLYWHEEL, HOUSING
  - 01.6 CONNECTING ROD AND PISTON
  - 01.8A ROCKER COVER
- 02 FUEL SYSTEM
  - 02.1A FUEL INJECTOR/CNG CONTROLS
  - 02.1B INJECTOR, CONTROLS ELECTRONIC
  - 02.2 FUEL PUMP
  - 02.3A FUEL FILTER AND STRAINER
  - 02.5A FUEL LINES AND FUEL COOLER
- 03 AIR SYSTEM
  - 03.1A AIR CLEANER AND/OR ADAPTOR
  - 03.3C AIR INTAKE MANIFOLD
  - 03.5A TURBOCHARGER, INTERCOOLER AND AFTERCOOLER
  - 03.7 INTERCOOLER/AFTERCOOLER
- 04 LUBRICATING SYSTEM
  - 04.1A OIL PUMP
  - 04.2A OIL FILTER
  - 04.4A OIL COOLER AND MARINE GEAR LINES
  - 04.7A OIL PAN
  - 04.8A VENTILATING SYSTEM
- 05 COOLING SYSTEM
  - 05.1 FRESH WATER PUMP
  - 05.2B THERMOSTAT
  - 05.2C WATER BYPASS TUBE
  - 05.3B WATER CONNECTIONS
  - 05.4A FAN
- 06 EXHAUST SYSTEM
  - 06.1A EXHAUST MANIFOLD AND/OR CONNECTIONS
- 07 ELECTRICAL INSTRUMENTS
  - 07.1A BATTERY, CHARGING GENERATOR
  - 07.3A STARTING MOTOR

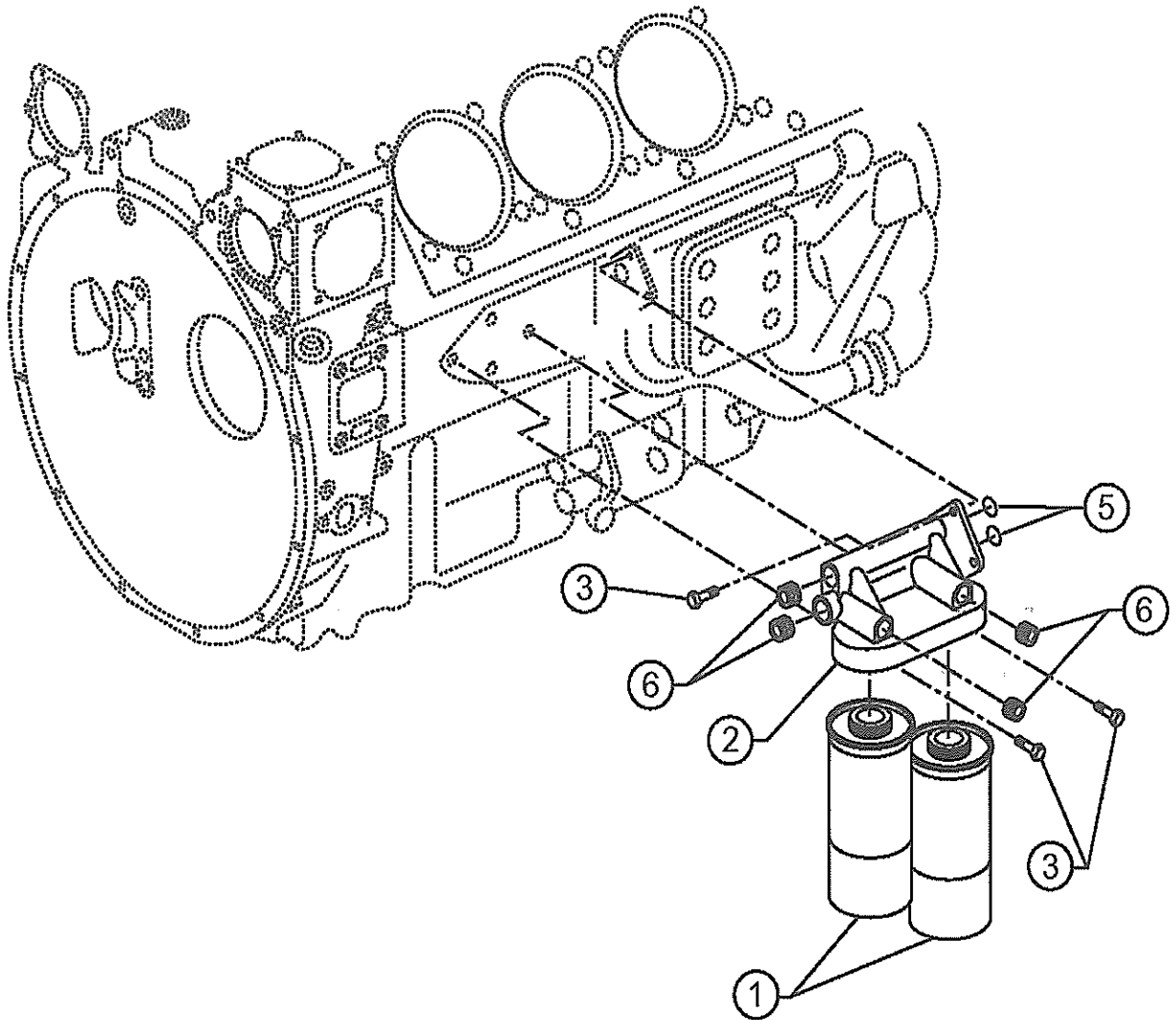
04



				TYPES									
04.1A OIL PUMP					2								
					4								
FIG	PART NO.	NAME AND DESCRIPTION	ASSY.		0								
REF.			QTY.										
04.1A001		PUMP ASSY., OIL											
	000125010524	WASHER A10.5		3									
	000931010154	BOLT M10 X 110.0 LG; USE: 304014010021		NS									
	0021805101	Pump Assy., Oil		1									
	304014010021			3									
04.1A222		FLANGE, OIL PUMP COVER											
	000125008427	WASHER A8.4		6									
	000912008009	Screw, M8 1.25 x 20 8.8 Hex		3									
	304017008081	BOLT, M8 X 25 8.8 LG		6									
	5221870053	Pipe, Plug-In		1									
	5221870245	Flange, Oil Pump		2									
	5221870345	Flange, Oil Pump		1									
	700429040003	O-Ring, 40 x 5		2									
	700429055001	SEAL RING, 55 X 5		1									
	700429063000	SEAL RING, 63 X 5		2									

**DETROIT DIESEL**

SERIES 2000



4.2000A

40752a

FIG 1 of 04.2A



				TYPES									
04.2A OIL FILTER													
FIG REF.	PART NO.	NAME AND DESCRIPTION	ASSY. QTY.	7									
	<b>04.2A250</b>	<b>ELEMENT, OIL FILTER</b>		2									
1:1	0031845301	FILTER ELEMENT OIL 302X136 M90CE/M91CE		0									
	<b>04.2A291</b>	<b>ADAPTOR, OIL FILTER COVER</b>		2									
	000125010524	WASHER A10.5		3									
1:3	000931010336	BOLT, M10 X 130 LG		3									
1:2	5221800138	Adaptor, Oil Filter		1									
	<b>04.2A293</b>	<b>GASKET, OIL FILTER ADAPTOR TO OIL COOLER ADAPTOR</b>											
1:5	700429042002	O-Ring, 42 x 4 MMN429		2									

**DETROIT DIESEL**

SERIES 2000

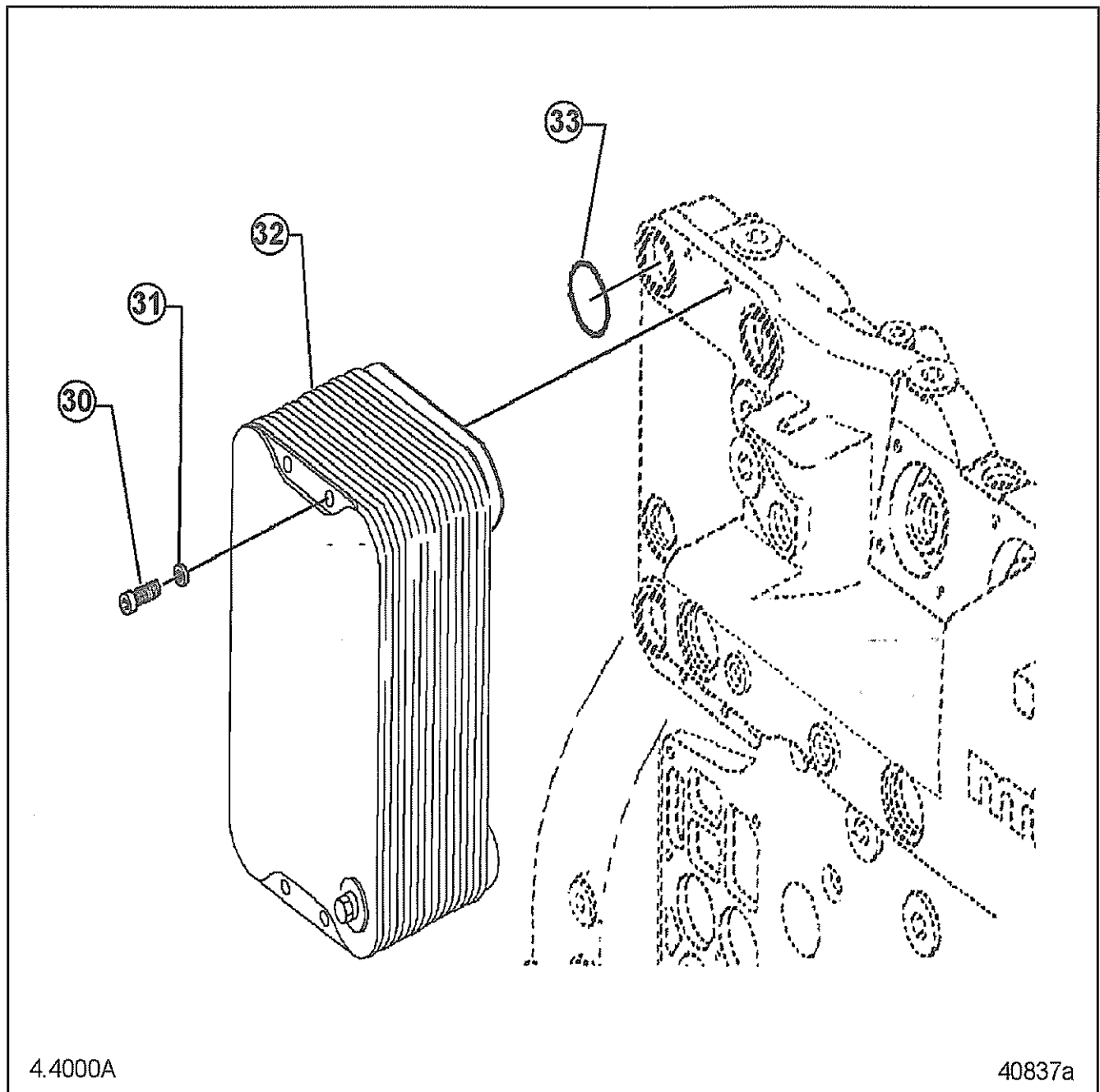


FIG 1 of 04.4A



				TYPES									
04.7A OIL PAN													
FIG REF.	PART NO.	NAME AND DESCRIPTION	ASSY. QTY.	1									
				0									
				6									
				7									
04.7A001		PAN, OIL											
	000125008427	WASHER A8.4	26										
	000125010524	WASHER A10.5	3										
	000912008062	BOLT, M8 1.25 X 50	3										
	000933010150	BOLT, M10 X 55	3										
	200433008400	WASHER	3										
	304017008087	BOLT, M8 X 50 8.8	26										
	5220141202	Pan, Oil	1										
04.7A030		GASKET, OIL PAN TO BLOCK											
	5220140222	Gasket, Oil Pan	1										
04.7A080		PLUG, OIL PAN DRAIN											
	000910030000	Plug, M30 x 1.5	4										
	000910038000	Plug, M38 x 1.5	1										
	007603030101	WASHER, A30 X 36 COPPER	4										
	007603038101	WASHER, A38 A 44 COPPER	1										
04.7A100		TUBE, OIL PAN DRAIN											
	007603016105	WASHER, A16 X 20 COPPER	3										
	007603038101	WASHER, A38 A 44 COPPER	1										
	5221800022	Line, Oil Return	1										
	5221801522	Line, Oil Return	1										
	700223008000	Bolt, Banjo A8 MMN223	1										
	915013010001	UNION, M10 N	1										
	915013032000	ADAPTOR 32 N15013 DBL8451.21 M91CE S2000	1										

# DETROIT DIESEL

SERIES 2000

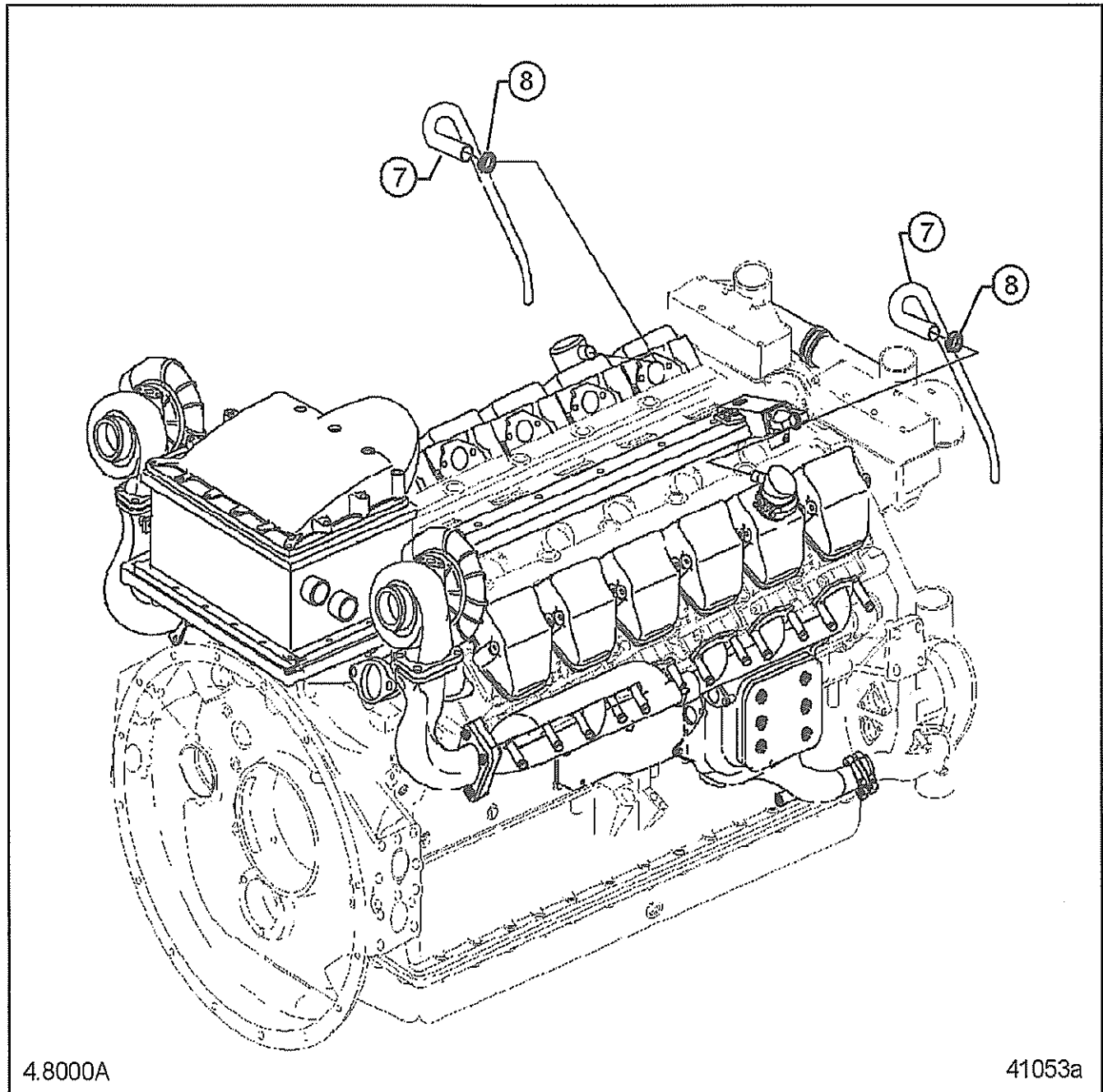


FIG 1 of 04.8A

04.8A VENTILATING SYSTEM					TYPES									
FIG REF.	PART NO.	NAME AND DESCRIPTION	ASSY. QTY.											
	<b>04.8A001</b>	<b>PIPE ASSY, BREATHER</b>		1										
	000000000668	CLAMP		2										
	5220102370	Line, Vent Eng Breather		4										
	5220102570	Tube		3										
	5220102670	Line, Vent Eng Breather		1										
	<b>04.8A039</b>	<b>CLAMP, BREATHER TUBE</b>												
	000000000667	CLAMP 20-32X13-SW8-W3 MBN10223 POLYAMID		3										
	007349008002	WASHER		1										
	916016035201	CLAMP BRSGU 35/20 N16016 M91CE S2000		2										
	<b>04.8A050</b>	<b>BODY, BREATHER OR SEPARATOR</b>		1										
	0000187135	SEPARATOR, OIL		12										
	007603022105	SEAL, RING		2										
	007603038101	WASHER, A38 A 44 COPPER		2										
	007604022102	Screw Plug		2										
	5220180170	Union, Screw Fitting		1										
	915007013000	REDUCER, M22 X 1.5/M16 X 1.5		2										
	<b>04.8A056</b>	<b>BRACKET, BREATHER/COLLECTOR MOUNTING</b>		1										
	000125006431	WASHER A6.4 14 OHV DBL8451.11 DIN 125		12										
	304017006063	BOLT, M6 1.00 X 25 8.8		12										
	5360100134	SUPPORT ARM M91CE S2000		1										
	<b>04.8A062</b>	<b>Hose, Collector Inlet</b>												
	000000000667	CLAMP 20-32X13-SW8-W3 MBN10223 POLYAMID		6										
	000125008427	WASHER A8.4		5										
	000934008008	NUT, HEX M8		3										
	304017008077	BOLT, M8 X 16 8.8		1										
	304017008079	BOLT, M8 X 20 8.8		1										
	304017008086	BOLT, M8 X 45 8.8		2										
	3669970682	Hose, Intake 620.0 Lg		1										
	3769971582	Hose, Intake		5										
	3909970382	Hose, Intake		1										
	4449975052	Hose, Intake 145MM		1										
	5220100082	Tube, Flexible		1										
	5229970782	Hose, Intake 140MM		1										
	5502030043	BRACKET		1										
	700327012000	GROMMET, M12		2										
	916016024201	CLAMP BRSGU 24/20 N16016 M91CE S2000		1										
	916016035201	CLAMP BRSGU 35/20 N16016 M91CE S2000		1										
	<b>04.8A100</b>	<b>VENT, CYLINDER HEAD</b>												
	5220100030	cover, cylinder head		5										
	910105008022	BOLT, ROCKER COVER MOUNTING S2000		10										

04.8A VENTILATING SYSTEM				TYPES									
FIG REF.	PART NO.	NAME AND DESCRIPTION	ASSY. QTY.	1	2	3	4	5	6	7	8	9	10
	04.8A100	VENT, CYLINDER HEAD		1									
	04.8A110	GASKET, CYLINDER HEAD VENT		2									
	5310160021	GASKET, VALVE COVER		4									
				3									
	04.8A187	HOSE, OIL DRAIN											
	000125008427	WASHER A8.4		5									
	007603016105	WASHER, A16 X 20 COPPER		4									
	304014008029	BOLT, M8 X 70 8.8		2									
	304017008085	BOLT, M8 X 40 8.8		3									
	5220181640	Bracket, 65.9 x 20		1									
	5221806419	Line, Oil		1									
	5221806519	Line, Oil		1									
	700325018100	CLAMP, HALF TUBE		14									
	700325018109	CLAMP, HALF		2									
	700327012000	GROMMET, M12		6									
	900195008107	Insert, Thread		2									
	915011010101	Bolt, Banjo		1									
	04.8A260	BRACKETS, COLLECTOR											
	000125008427	WASHER A8.4		8									
	304017008079	BOLT, M8 X 20 8.8		8									
	5220180540	Bracket		1									





- 01 **ENGINE (LESS MAJOR ASSEMBLIES)**
  - 01.1 CYLINDER BLOCK
  - 01.2 CYLINDER HEAD
  - 01.2A ENGINE LIFTER BRACKET
  - 01.3 CRANKSHAFT, OIL SEALS AND STABILIZERS
  - 01.3A CRANKSHAFT FRONT COVER
  - 01.3B VIBRATION DAMPER
  - 01.4A FLYWHEEL
  - 01.5A FLYWHEEL, HOUSING
  - 01.6 CONNECTING ROD AND PISTON
  - 01.8A ROCKER COVER
- 02 **FUEL SYSTEM**
  - 02.1A FUEL INJECTOR/CNG CONTROLS
  - 02.1B INJECTOR, CONTROLS ELECTRONIC
  - 02.2 FUEL PUMP
  - 02.3A FUEL FILTER AND STRAINER
  - 02.5A FUEL LINES AND FUEL COOLER
- 03 **AIR SYSTEM**
  - 03.1A AIR CLEANER AND/OR ADAPTOR
  - 03.3C AIR INTAKE MANIFOLD
  - 03.5A TURBOCHARGER, INTERCOOLER AND AFTERCOOLER
  - 03.7 INTERCOOLER/AFTERCOOLER
- 04 **LUBRICATING SYSTEM**
  - 04.1A OIL PUMP
  - 04.2A OIL FILTER
  - 04.4A OIL COOLER AND MARINE GEAR LINES
  - 04.7A OIL PAN
  - 04.8A VENTILATING SYSTEM
- 05 **COOLING SYSTEM**
  - 05.1 FRESH WATER PUMP
  - 05.2B THERMOSTAT
  - 05.2C WATER BYPASS TUBE
  - 05.3B WATER CONNECTIONS
  - 05.4A FAN
- 06 **EXHAUST SYSTEM**
  - 06.1A EXHAUST MANIFOLD AND/OR CONNECTIONS
- 07 **ELECTRICAL INSTRUMENTS**
  - 07.1A BATTERY, CHARGING GENERATOR
  - 07.3A STARTING MOTOR



				TYPES									
05.1 FRESH WATER PUMP													
FIG REF.	PART NO.	NAME AND DESCRIPTION	ASSY. QTY.	3	8	2							
	<b>05.1001</b>	<b>PUMP ASSY., FRESH WATER</b>											
	000125008427	WASHER A8.4	2										
	000125013012	WASHER A13	3										
	000908018002	PLUG, M18 X 1.5	1										
	000931008209	BOLT, M8 X 95	2										
	000931008219	BOLT, M8 X 110 8.8	2										
	000931012241		3										
	5222001701	PUMP ASSY., WATER 16V2000	1										
	5222030222	elbow	1										
	5222031840	RETAINER	1										
	<b>05.1010</b>	<b>GASKET, FRESH WATER PUMP</b>											
	5611871680	GASKET	1										
	700429090000	O-RING 90 X 5 MMN 429 M91CE S2000	2										

				TYPES									
05.2B THERMOSTAT					5								
					3								
FIG	PART NO.	NAME AND DESCRIPTION	ASSY.	4									
REF.			QTY.										
05.2B050		THERMOSTAT ASSY.											
	0052031775	Thermostat, Actuator 120 Deg C		3									
05.2B090		HOUSING, THERMOSTAT											
	000125008427	WASHER A8.4		10									
	000125010524	WASHER A10.5		2									
	0005335043	RETAINER, TOP DN10		1									
	000908026005	PLUG M26X1.5 ST		1									
	000931008144	BOLT, M8 X 120		2									
	000931008207	BOLT, M8 X 90 8.8		2									
	000931008219	BOLT, M8 X 110 8.8		3									
	000931008257	Bolt, M8 1.25 x 115 8.8-A Hex		3									
	000933010035	BOLT, M10 X 25		1									
	000933010089	BOLT M10 X 20		1									
	007349008002	WASHER		2									
	007603026104	WASHER A26X31 COPPER		1									
	5220780741	Clip, 90 Deg		1									
	5220781341	Retainer		1									
	5222000516	Housing, Thermostat		1									
	5222030222	elbow		1									
	5222031940	Bracket, Retainer		1									
	5241507173	Retainer		1									
	5501310441	Retainer		1									
	735151010100	WASHER, A10.5		1									
	8331501573	RETAINER		2									
05.2B110		GASKET, THERMOSTAT HOUSING											
	0002034480	SEALING RING; USE: 05132155		NS									
	05132155	SEAL		3									
	5611871680	GASKET		1									
	700429075001	SEAL RING, 75 X 5		1									

				TYPES									
05.2C WATER BYPASS TUBE													
FIG REF.	PART NO.	NAME AND DESCRIPTION	ASSY. QTY.	5	1	2							
	05.2C250	TUBE WATER BYPASS VENT											
	000125008427	WASHER A8.4	5										
	000934008008	NUT, HEX M8	2										
	007603014102	WASHER, A14 X 18 COPPER	1										
	007603030101	WASHER, A30 X 36 COPPER	1										
	304017008079	BOLT, M8 X 20 8.8	1										
	304017008084	BOLT, M8 X 35 8.8	1										
	304017008085	BOLT, M8 X 40 8.8	1										
	5222000082	Tube Assy., Vent Line	1										
	5222000218	Elbow, Vent Line	1										
	5569920001	BUSHING, 20 X 15	1										
	700325015100	CLAMP, TUBE HALF	2										
	915001006003	NUT	1										
	915001025004	NUT, DOMED	1										
	915005006000	CONE, SEALING	1										
	915005025002	SEALING CONE 28 MBN 15005 ST M91CE S2000	1										
	915013008002	REDUCER	1										
	915013025001	UNION	1										
	916016010203	CLAMP, BRSGU 10/20	1										
	916016018202	CLAMP, BRSGU 18/20	2										

## TYPES

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				TYPES									
05.4A FAN													
FIG REF.	PART NO.	NAME AND DESCRIPTION	ASSY. QTY.	1	9	0	8	0					
	<b>05.4A021</b>	<b>HOSE, OIL DRAIN</b>											
	007603012111	WASHER, A12 X 15.5 COPPER			3								
	5221805219	Line, Oil			1								
	5221805719	Line, Oil			1								
	5582540367	Nozzle			1								
	915013006002	UNION			3								
	<b>05.4A022</b>	<b>HOSE., OIL SUPPLY</b>											
	000125008427	WASHER A8.4			1								
	007603018104	RING, SEALING A18 X 24			2								
	304017008085	BOLT, M8 X 40 8.8			1								
	5221803919	Line, Oil			1								
	700160000010	Elbow, 90Deg			1								
	700325018100	CLAMP, HALF TUBE			2								
	700327012000	GROMMET, M12			1								
	735038010111	Hose			1								
	8331501773	BRACKET, W/NUT			1								
	915006010002	UNION			2								
	916016020202	CLAMP BRSGU 20/20 N16016 M91CE S2000			1								
	<b>05.4A330</b>	<b>PULLEY, FAN BELT IDLER</b>											
	000125017014	WASHER A17 140HV		10									
	304014016005	BOLT, M16 X90		10									
	5221550115	PULLEY, BELT		1									
	5222061010	belt, pulley		1									
	5222061510	belt, pulley		1									
	5229970292	kit, v belt		1									
	<b>05.4A340</b>	<b>TENSIONER, BELT</b>											
	000000003062	Bolt, m10 1.50 x 130		3									
	5222000070	roller, tensioning		1									
	<b>05.4A368</b>	<b>FLANGE, THERMO FAN DRIVE</b>											
	000125010524	WASHER A10.5		12									
	000933010150	BOLT, M10 X 55		12									
	5222060045	Flange		1									





- 01 ENGINE (LESS MAJOR ASSEMBLIES)
  - 01.1 CYLINDER BLOCK
  - 01.2 CYLINDER HEAD
  - 01.2A ENGINE LIFTER BRACKET
  - 01.3 CRANKSHAFT, OIL SEALS AND STABILIZERS
  - 01.3A CRANKSHAFT FRONT COVER
  - 01.3B VIBRATION DAMPER
  - 01.4A FLYWHEEL
  - 01.5A FLYWHEEL, HOUSING
  - 01.6 CONNECTING ROD AND PISTON
  - 01.8A ROCKER COVER
- 02 FUEL SYSTEM
  - 02.1A FUEL INJECTOR/CNG CONTROLS
  - 02.1B INJECTOR, CONTROLS ELECTRONIC
  - 02.2 FUEL PUMP
  - 02.3A FUEL FILTER AND STRAINER
  - 02.5A FUEL LINES AND FUEL COOLER
- 03 AIR SYSTEM
  - 03.1A AIR CLEANER AND/OR ADAPTOR
  - 03.3C AIR INTAKE MANIFOLD
  - 03.5A TURBOCHARGER, INTERCOOLER AND AFTERCOOLER
  - 03.7 INTERCOOLER/AFTERCOOLER
- 04 LUBRICATING SYSTEM
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				TYPES									
FIG REF.	PART NO.	NAME AND DESCRIPTION	ASSY. QTY.										
				8	8								
		06.1A EXHAUST MANIFOLD AND/OR CONNECTIONS		2	2								
				3	4								
	06.1A010	GASKET, EXHAUST MANIFOLD											
	0001423657	Seal ring			8								
	4601420080	GASKET			12								
	5411420180	GASKET; USE: 4601420080			NS								
	5501423680	Gasket		2									
	06.1A018	ELBOW, EXHAUST MANIFOLD											
	000908018003	Plug, m18 x 1.5 threaded		6									
	200931010001	Bolt, m10 1.50 x 130		4									
	200933010001	Bolt, m10 1.50 x 35		6									
	5221420001	Elbow, exhaust end			4								
	5221422101	Elbow, exhaust			2								
	5501421501	Elbow, exhaust		2									
	06.1A020	STUD, EXHAUST MANIFOLD TO HEAD											
	200934010000	NUT, HEX M10			8								
	200939010006	Stud, m10 x 30 nicr20tial ah			8								
	207603018301	Washer, c18 x 22		6									
	5509901540	WASHER		10	8								
	06.1A025	BOLT, EXHAUST MANIFOLD TO HEAD											
	200933010027	Bolt, m10 1.50 x 105			24								
	4031420212	CLAMP, EXHAUST MANIFOLD			20								
	5221420012	Spacer, 36 x 24.5			4								



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# DETROIT DIESEL

SERIES 2000

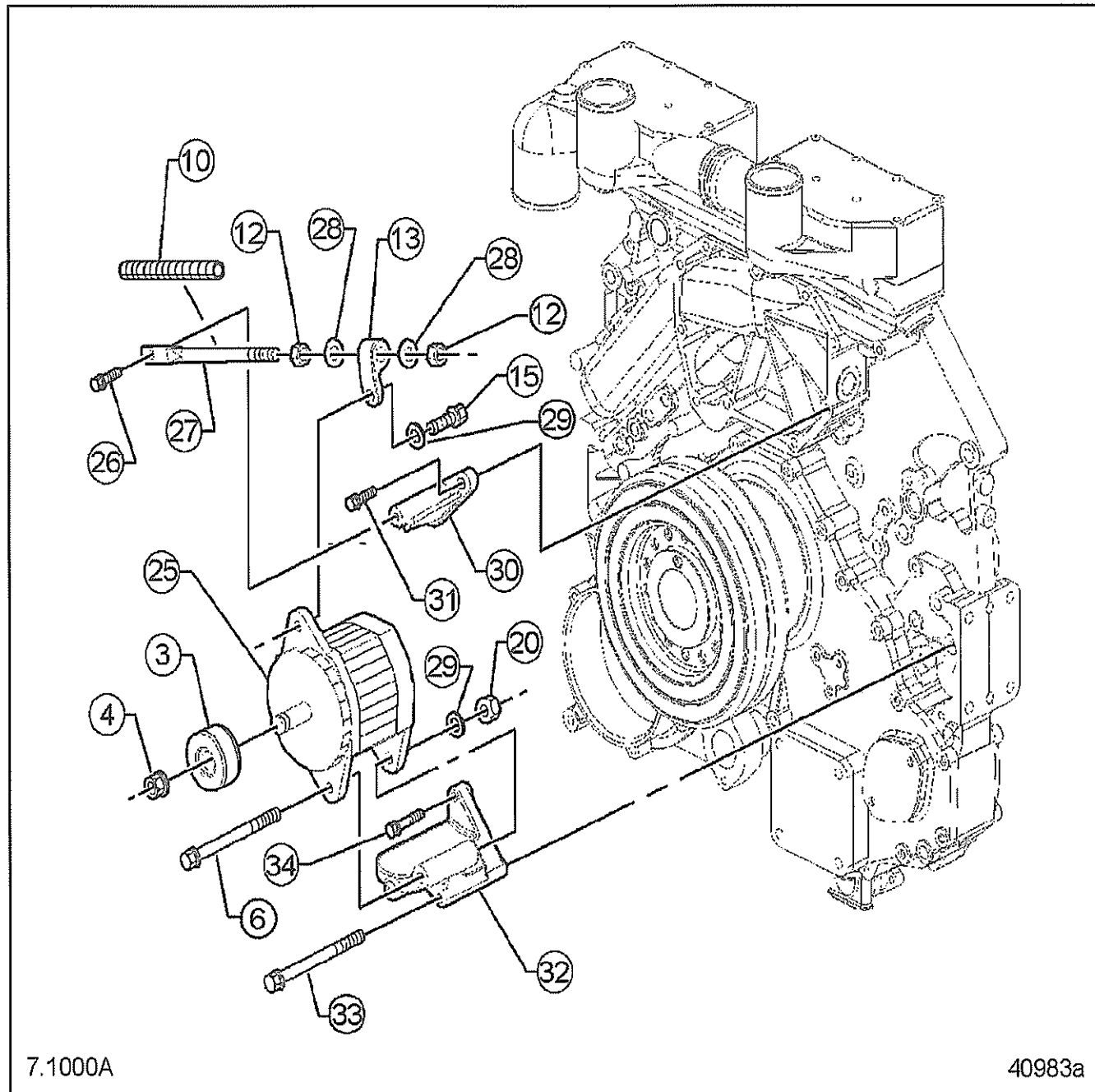


FIG 1 of 07.1A

				TYPES									
<b>07.1A BATTERY, CHARGING GENERATOR</b>					2								
					6								
<b>FIG</b>	<b>PART NO.</b>	<b>NAME AND DESCRIPTION</b>	<b>ASSY.</b>		6								
<b>REF.</b>			<b>QTY.</b>		4								
<b>07.1A001</b>		<b>GENERATOR ASSY.</b>											
	000125013012	WASHER A13		2									
	000931012216	BOLT, M12 1.75 X 160 8.8		1									
	000934012008	NUT, HEX M12		1									
	19010182	GEN CHR G AC 24V70A NG CW/CCW 21SI		1									
<b>07.1A500</b>		<b>PULLEY, GENERATOR</b>											
	5221550215	pulley, belt		1									
<b>07.1A575</b>		<b>BELT, GENERATOR DRIVE</b>											
	0139973692	belt, poly-v		1									
<b>07.1A582</b>		<b>BRACKET, GENERATOR ADJUSTING STRAP</b>											
	000125013012	WASHER A13		2									
	000931012150	BOLT, M12 1.75 X 90 8.8		1									
	000934012008	NUT, HEX M12		1									
	00186689	BOLT, 1/2"-13X2"		1									
	3141550528	clamp		1									
	3521550272	nut, hex m12		1									
	5221550076	washer		1									
	5221580170	bolt, adjusting m12 x 85 x 12.7		1									
<b>07.1A595</b>		<b>BRACKET, GENERATOR MOUNTING</b>											
	000125010524	WASHER A10.5		4									
	000933010150	BOLT, M10 X 55		4									
	5221550435	support		1									



				TYPES											
07.3A STARTING MOTOR					4										
FIG REF.	PART NO.	NAME AND DESCRIPTION	ASSY. QTY.		4										
					6										
	<b>07.3A001</b>	<b>MOTOR ASSY., STARTING</b>													
	000125013012	WASHER A13			3										
	000934012008	NUT, HEX M12			3										
	000939012098				3										
	0051519901	STARTER, DELCO 24V M90CE			1										
	5360130845	FLANGE, M91CE			1										
	<b>07.3A007</b>	<b>BRACKET, STARTING MOTOR SUPPORT</b>													
	000125006431	WASHER A6.4 14 OHV DBL8451.11 DIN 125			2										
	000933006175	BOLT, M6 X 16 8.8			1										
	000934006006	NUT, HEX M6			1										
	569SK0413	Bracket			1										
	<b>07.3A410</b>	<b>Clamp, Starting Motor Solenoid Plunger Boot</b>													
	916016008200	Clamp			1										





**DETROIT DIESEL**

**CORPORATION**



13400 Outer Drive, West / Detroit, Michigan 48239-4001