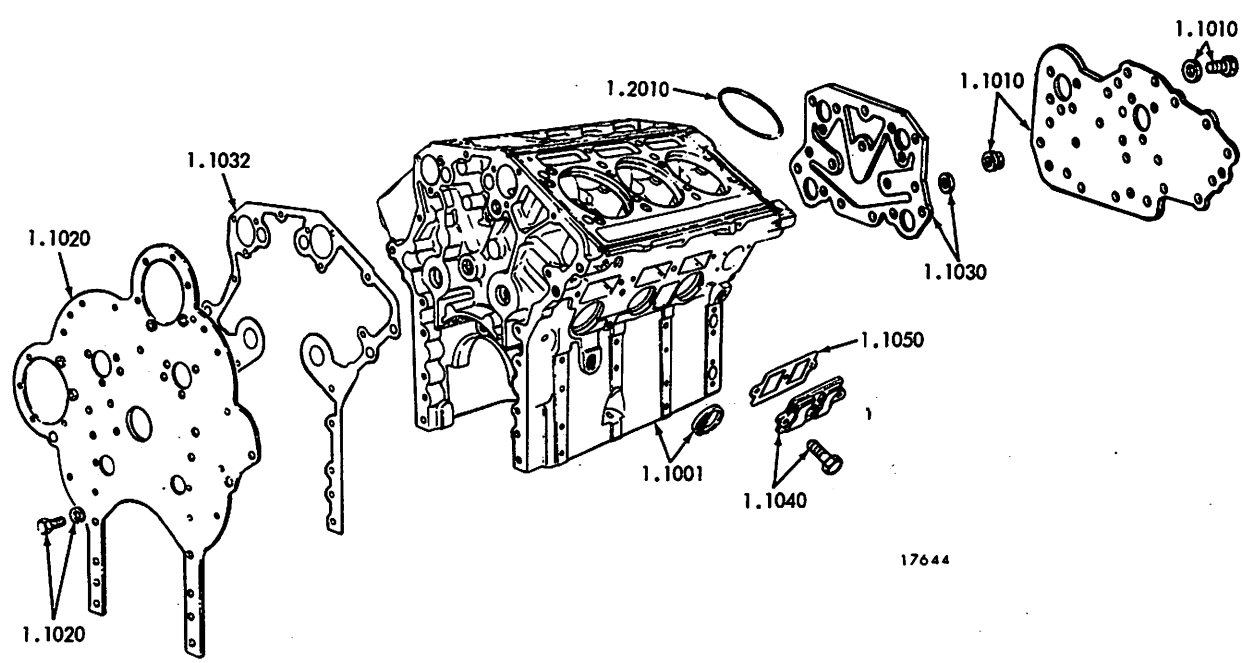


GROUP NOMENCLATURE

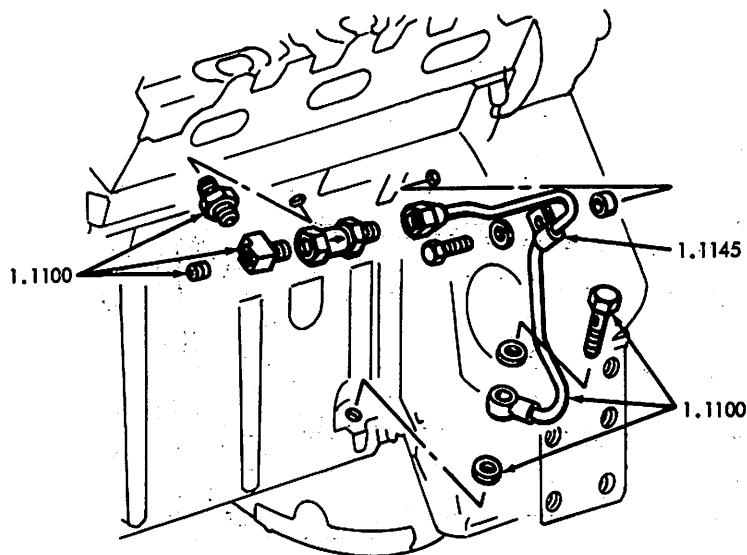
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1.0000	ENGINE (less major assemblies)	5.0000	COOLING SYSTEM (CONT'D)
1.1000	Cylinder Block	5.4000A	Fan
1.1000A	Air Box Drains	5.4000B	Fan Shroud
1.2000	Cylinder Head	5.5000A	Heat Exchanger or Keel Cooling
1.2000A	Engine Lifter Bracket	5.6000A	Raw Water Pump
1.3000	Crankshaft, Oil Seals and Stabilizers	5.7000A	Water Filter
1.3000A	Crankshaft Front Cover		
1.3000B	Vibration Damper	6.0000	EXHAUST SYSTEM
1.3000C	Crankshaft Pulley	6.1000A	Exhaust Manifold and/or Connections
1.3000D	Crankshaft Pulley Belt	6.2000A	Exhaust Muffler and/or Connections
1.4000A	Flywheel		
1.5000A	Flywheel Housing	7.0000	ELECTRICAL --INSTRUMENTS
1.5000B	Flywheel Housing Adaptor	7.1000A	Battery Charging Generator
1.6000	Connecting Rod and Piston	7.2000A	Battery Cables
1.7000	Camshaft and Gear Train	7.2000B	Automatic Starting
1.7000A	Balance Weight Cover	7.2000B	Automatic Starting (Twin and Quad)
1.7000B	Accessory Drive	7.3000A	Starting Motor
1.8000	Valve and Injector Operating Mechanism	7.4000A	Instruments
1.8000A	Rocker Cover	7.4000A	Instruments (Twin and Quad)
		7.4000B	Tachometer Drive
2.0000	FUEL SYSTEM	7.4000B	Tachometer Drive (Twin and Quad)
2.1000A	Fuel Injector	7.4000C	Shutoff, Alarm and O/S Governor
2.1000B	Injector Controls Electronic	7.4000C	Shutoff, Alarm and O/S Governor (Twin and Quad)
2.2000	Fuel Pump	7.5000A	Power Generator
2.2000A	Fuel Pump Drain	7.6000A	Control Cabinet
2.3000A	Fuel Filter and Strainer	7.6000A	Control Cabinet (Twin and Quad)
2.3000A	Fuel Filter and Strainer (Twin and Quad)	7.7000A	Wiring Harness
2.4000	Fuel Manifold and/or Connections	7.8000A	Air Heater
2.4000A	Dual Fuel System	7.8000A	Air Heater (Twin and Quad)
2.5000A	Fuel Lines and Fuel Cooler	7.10000A	Hydraulic Governor Solenoid
2.5000A	Fuel Lines and Fuel Cooler (Twin and Quad)		
2.6000A	Fuel Tank	8.0000	POWER TAKE-OFF
2.6000B	Electric Governor	8.1000A	Power Take-off and/or Clutch
2.7000A	Mechanical Governor	8.1000A	Power Take-off and/or Clutch (Twin and Quad)
2.8000A	Hydraulic Governor	8.3000A	Torque Converter
2.9000	Injector Controls	8.3000A	Torque Converter (Twin and Quad)
2.9000	Injector Controls (Twin and Quad)	8.3000B	Transmission Lines
2.9000A	Throttle Controls		
2.9000A	Throttle Controls (Twin and Quad)	9.0000	TRANSMISSION AND PROPULSION
3.0000	AIR SYSTEM	9.1000A	Hydraulic Marine Gear
3.1000A	Air Cleaner and/or Adaptor	9.1000A	Hydraulic Marine Gear (Twin and Quad)
3.2000A	Air Silencer	9.2000A	Reverse and Reduction Gear (mechanical)
3.3000A	Air Inlet Housing	9.3000A	Power Transfer Case
3.4000	Blower and Drive	9.3000A	Power Transfer Gear (Twin and Quad)
3.4000A	Blower Drive Shaft	9.4000	Transmission—Highway
3.4000B	Blower End Plate Cover	9.7000	Transmission—Off-highway
3.5000A	Turbocharger, Intercooler, and Aftercooler	9.9000	Transmission—Rail Car
4.0000	LUBRICATING SYSTEM	10.0000	SHEET METAL
4.1000A	Oil Pump	10.1000A	Engine Hood
4.1000B	Oil Distribution System		
4.1000C	Oil Pressure Regulator	11.0000	ENGINE MOUNTING
4.2000A	Oil Filter	11.1000A	Engine Mounting and Base
4.3000A	Oil Filter Lines	11.1000A	Engine Mounting and Base (Twin and Quad)
4.4000A	Oil Cooler and Marine Gear Lines		
4.5000A	Oil Filler	12.0000	MISCELLANEOUS
4.6000A	Dipstick	12.2000A	Bilge Pump
4.7000A	Oil Pan	12.3000A	Vacuum Pump
4.8000A	Ventilating System	12.4000A	Air Compressor
		12.5000A	Hydraulic Pump
5.0000	COOLING SYSTEM	12.6000A	Gasoline Starter
5.1000	Fresh Water Pump	12.6000B	Air Starter
5.1000A	Fresh Water Pump Cover	12.6000C	Cold Weather Starting Aid
5.2000A	Water Outlet Manifold and/or Elbow	12.6000D	Hydraulic Starter
5.2000B	Thermostat	12.6000E	Hydraulic Starter Accessories
5.2000C	Water Bypass Tube	12.8000A	Supplies
5.3000A	Radiator	12.8000B	Fabrication Material
5.3000B	Water Connections	12.8000C	Miscellaneous Service Kits and Sets
		12.8000D	Miscellaneous Service Parts



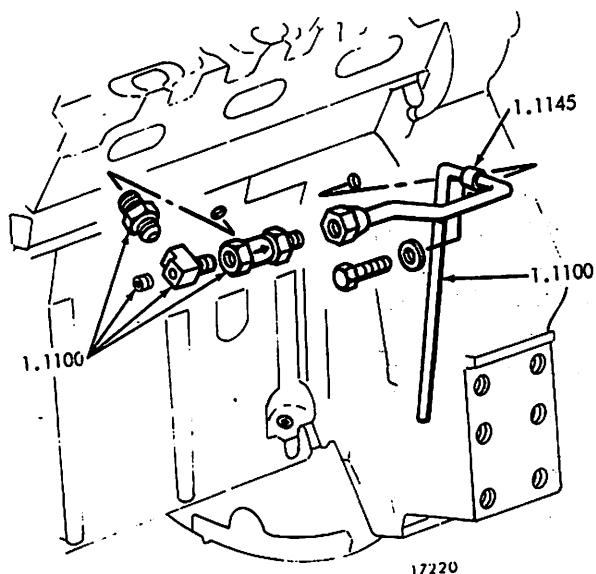
17644

FIG. 1A CYLINDER BLOCK



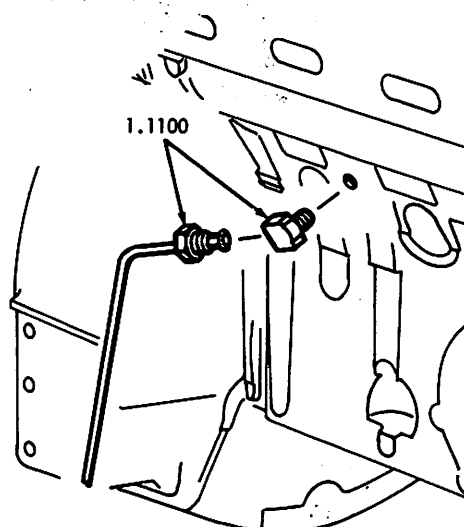
16667

FIG. 1D



17220

FIG. 1F



16667

FIG. 1E

AIR BOX DRAINS

Figs. 1D, 1E & 1F of 1.0000

Sept., 1980

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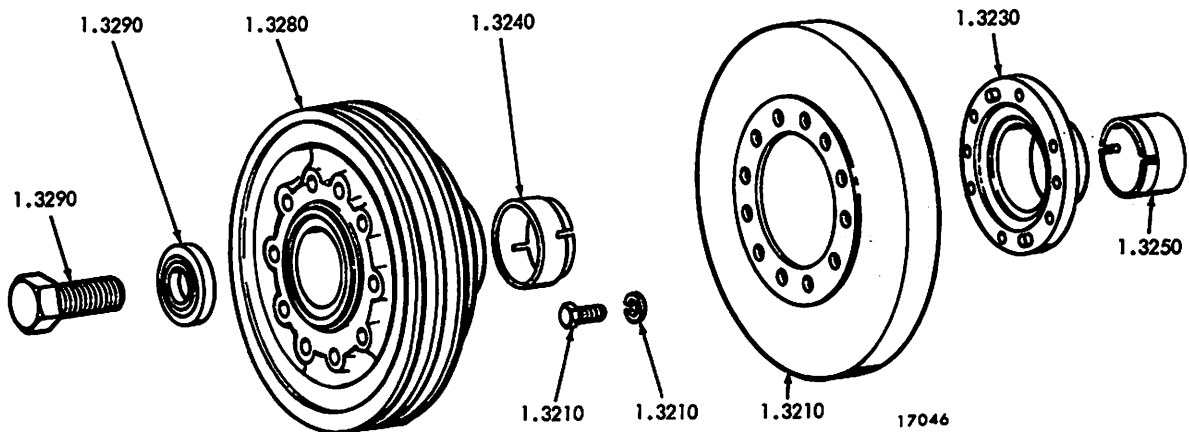


FIG. 3A CRANKSHAFT PULLEY, VIBRATION DAMPER AND HUB

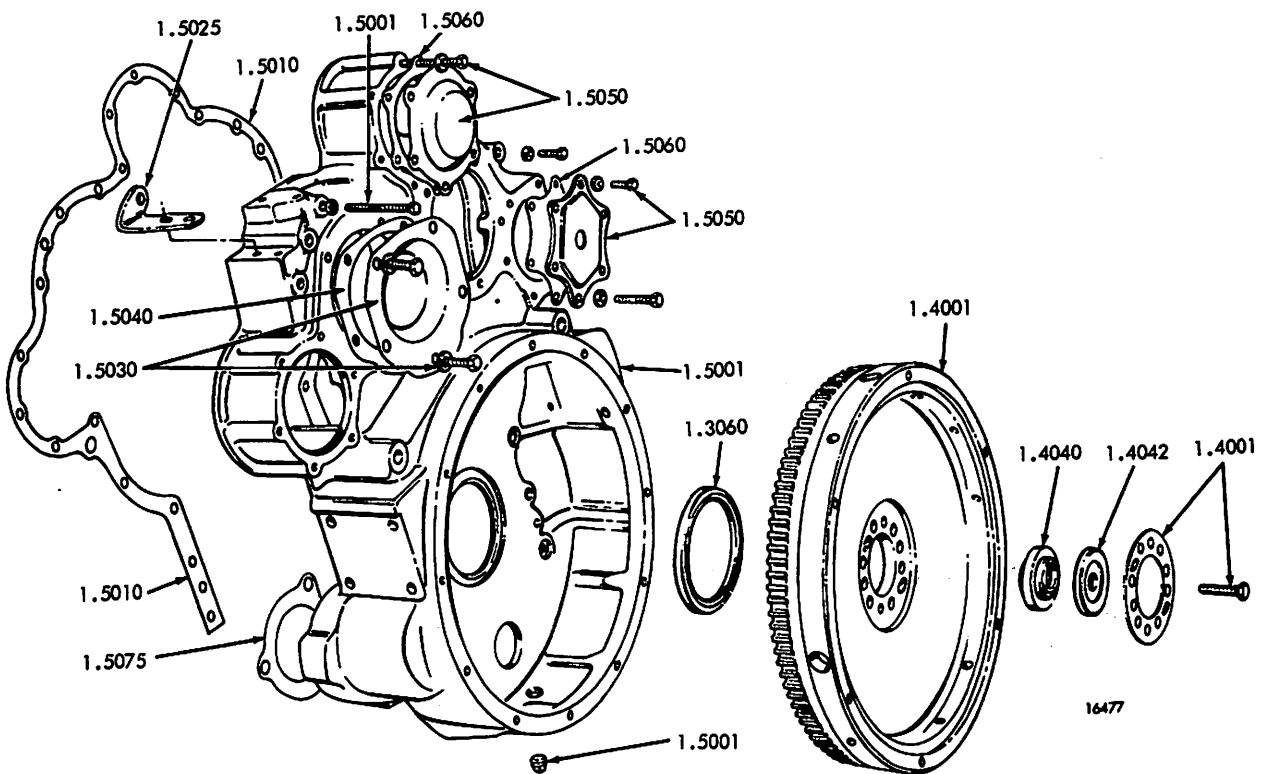


FIG. 3B FLYWHEEL AND FLYWHEEL HOUSING

Figs. 3A & 3B of 1.0000

April, 1983

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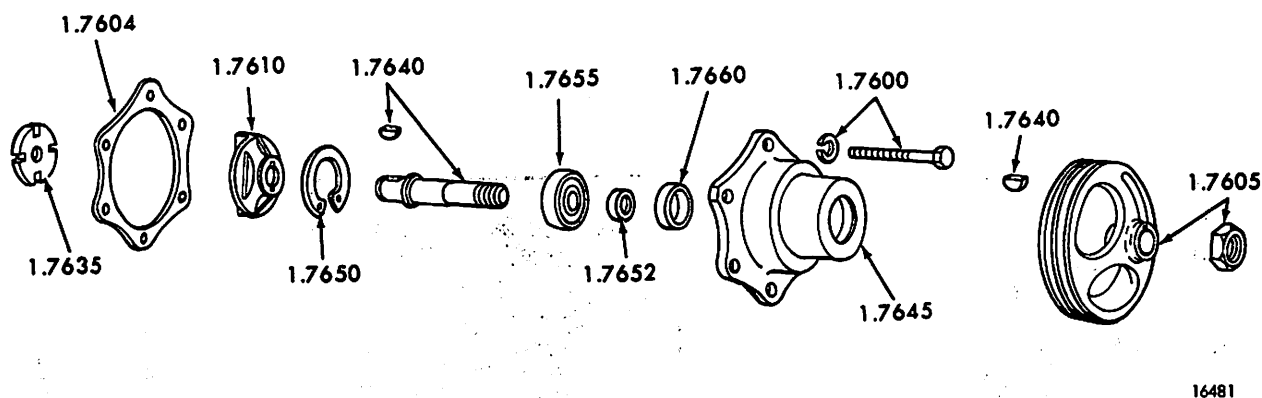


FIG. 7A ACCESSORY DRIVE

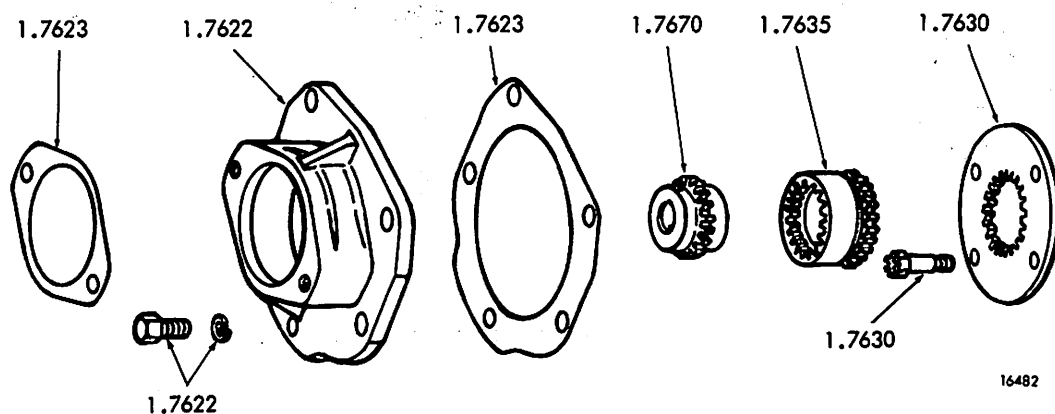


FIG. 7B ACCESSORY DRIVE

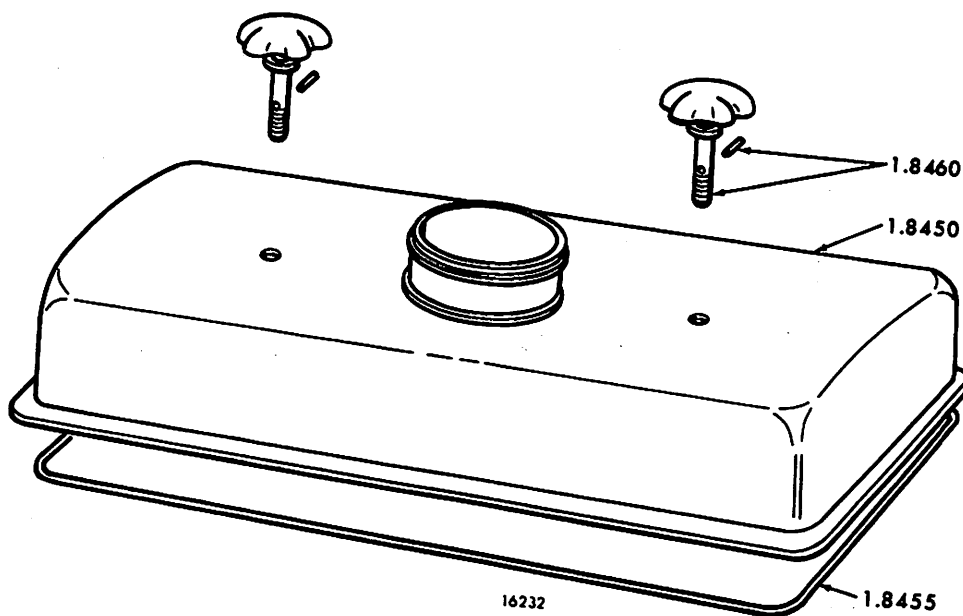


FIG. 9A ROCKER COVER (Stamped)

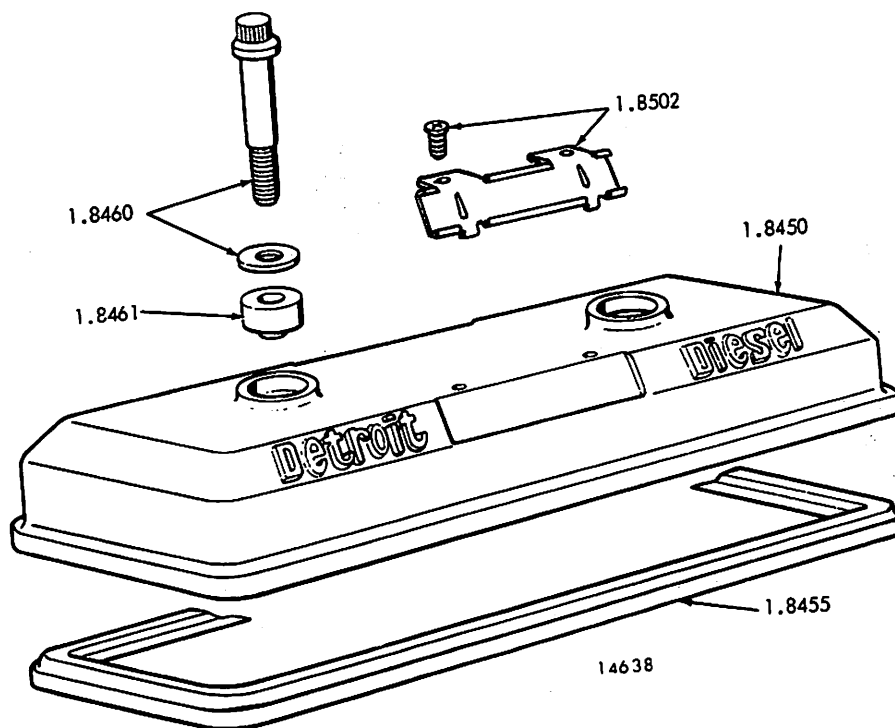
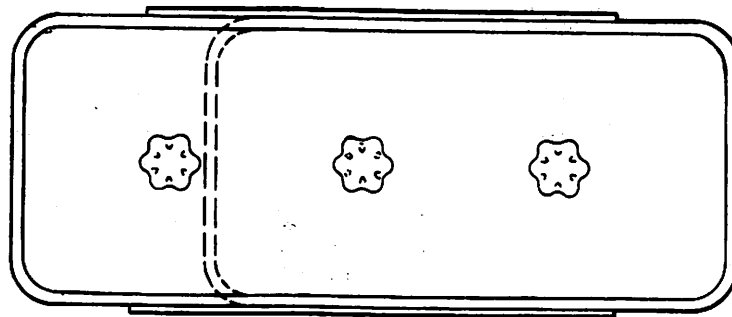
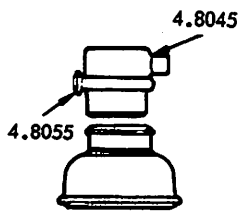


FIG. 10A ROCKER COVER (CAST)

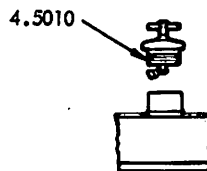


8, 16-V92

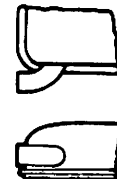
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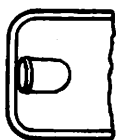
A
BREATHER



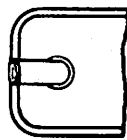
B
FILLER



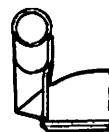
C
BREATHER



D
FILLER



E
FILLER



F
FILLER



G
BREATHER AND FILLER

NOTE: OIL FILLER CAPS ARE NOT BRAZED TO ROCKER COVER
ARE SHOWN IN SECTION 4.5000A.

NOTE: BREATHER COMPONENTS ARE SHOWN IN SECTION
4.8000A, EXCEPT FOR TUBES BRAZED TO ROCKER COVERS.

FIG. 10B ROCKER COVER OIL FILLER AND BREATHER LOCATION

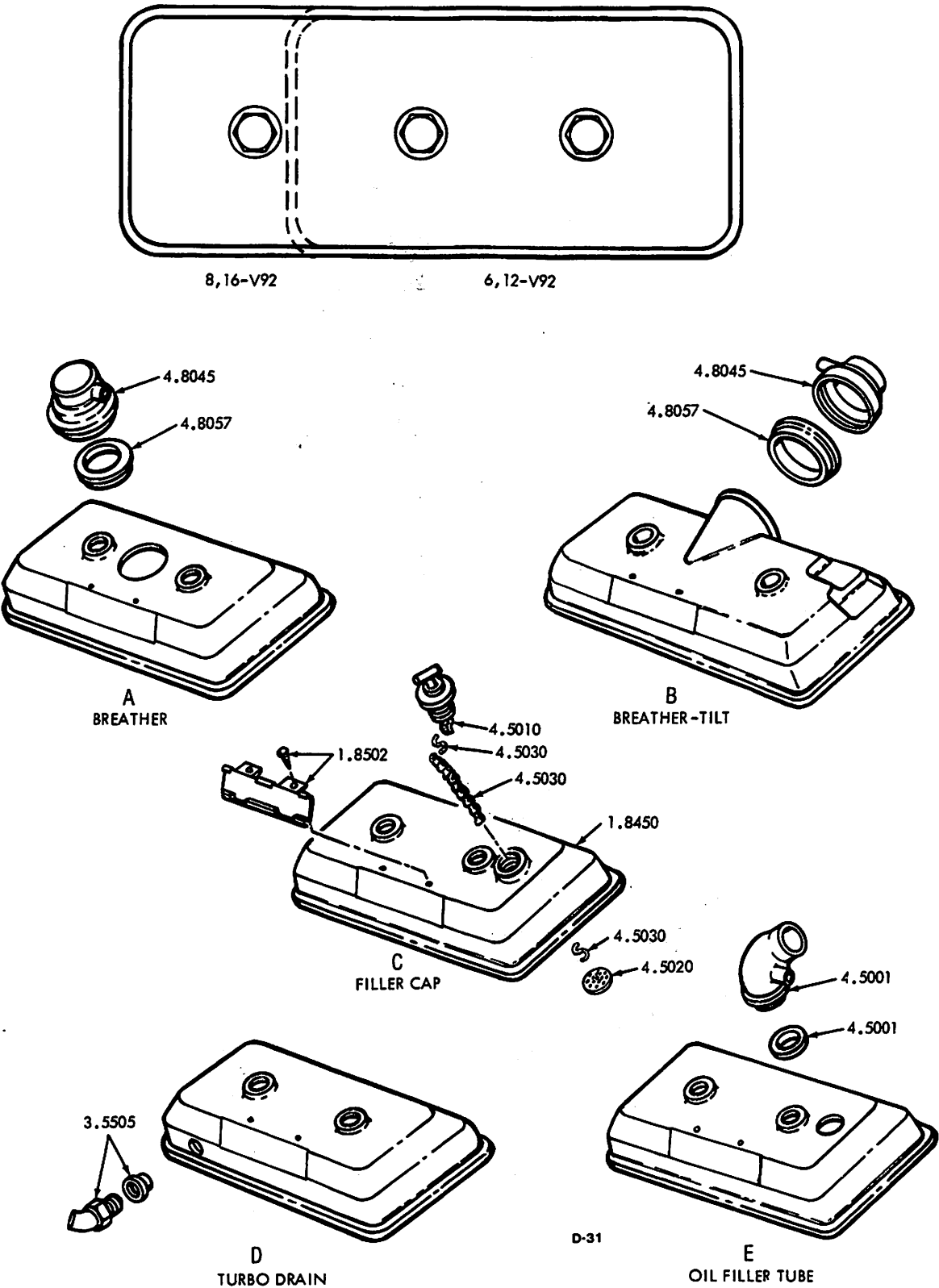


FIG. 10C ROCKER COVER OIL FILLER AND BREATHER LOCATION

GROUP NOMENCLATURE

0000	ENGINE (less major assemblies)	5 0000	COOLING SYSTEM (CONT'D)
1 1000	Cylinder Block	5 4000A	Fan
1 1000A	Air Box Drains	5 4000B	Fan Shroud
1 2000	Cylinder Head	5 5000A	Heat Exchanger or Keel Cooling
1 2000A	Engine Lifter Bracket	5 6000A	Raw Water Pump
1 3000	Crankshaft, Oil Seals and Stabilizers	5 7000A	Water Filter
1 3000A	Crankshaft Front Cover		
1 3000B	Vibration Damper	6 0000	EXHAUST SYSTEM
1 3000C	Crankshaft Pulley	6 1000A	Exhaust Manifold and/or Connections
1 3000D	Crankshaft Pulley Belt	6 2000A	Exhaust Muffler and/or Connections
1 4000A	Flywheel		
1 5000A	Flywheel Housing	7 0000	ELECTRICAL—INSTRUMENTS
1 5000B	Flywheel Housing Adaptor	7 1000A	Battery Charging Generator
1 6000	Connecting Rod and Piston	7 2000A	Battery Cables
1 7000	Camshaft and Gear Train	7 2000B	Automatic Starting
1 7000A	Balance Weight Cover	7 2000B	Automatic Starting (Twin and Quad)
1 7000B	Accessory Drive	7 3000A	Starting Motor
1 8000	Valve and Injector Operating Mechanism	7 4000A	Instruments
1 8000A	Rocker Cover	7 4000A	Instruments (Twin and Quad)
		7 4000B	Tachometer Drive
0000	FUEL SYSTEM	7 4000B	Tachometer Drive (Twin and Quad)
2.1000A	Fuel Injector	7 4000C	Shutoff, Alarm and O.S. Governor
2.1000B	Injector Controls Electronic	7 4000C	Shutoff, Alarm and O.S. Governor (Twin and Quad)
2.2000	Fuel Pump	7 5000A	Power Generator
2.2000A	Fuel Pump Drain	7 6000A	Control Cabinet
2.3000A	Fuel Filter and Strainer	7 6000A	Control Cabinet (Twin and Quad)
2.3000A	Fuel Filter and Strainer (Twin and Quad)	7 7000A	Wiring Harness
2.4000	Fuel Manifold and/or Connections	7 8000A	Air Heater
2.4000A	Dual Fuel System	7 8000A	Air Heater (Twin and Quad)
2.5000A	Fuel Lines and Fuel Cooler	7 10000A	Hydraulic Governor Solenoid
2.5000A	Fuel Lines and Fuel Cooler (Twin and Quad)		
2.6000A	Fuel Tank	8 0000	POWER TAKE-OFF
2.6000B	Electric Governor	8 1000A	Power Take-off and/or Clutch
2.7000A	Mechanical Governor	8 1000A	Power Take-off and/or Clutch (Twin and Quad)
2.8000A	Hydraulic Governor	8 3000A	Torque Converter
2.9000	Injector Controls	8 3000A	Torque Converter (Twin and Quad)
2.9000	Injector Controls (Twin and Quad)	8 3000B	Transmission Lines
2.9000A	Throttle Controls		
2.9000A	Throttle Controls (Twin and Quad)	9 0000	TRANSMISSION AND PROPULSION
000	AIR SYSTEM	9 1000A	Hydraulic Marine Gear
3 1000A	Air Cleaner and/or Adaptor	9 1000A	Hydraulic Marine Gear (Twin and Quad)
3 2000A	Air Silencer	9 2000A	Reverse and Reduction Gear (mechanical)
3 3000A	Air Inlet Housing	9 3000A	Power Transfer Case
3 4000	Blower and Drive	9 3000A	Power Transfer Gear (Twin and Quad)
3 4000A	Blower Drive Shaft	9 4000	Transmission—Highway
3 4000B	Blower End Plate Cover	9 7000	Transmission—Off-highway
3 5000A	Turbocharger, Intercooler, and Aftercooler	9 9000	Transmission—Rail Car
000	LUBRICATING SYSTEM	10 0000	SHEET METAL
4.1000A	Oil Pump	10 1000A	Engine Hood
4.1000B	Oil Distribution System		
4.1000C	Oil Pressure Regulator	11 0000	ENGINE MOUNTING
4.2000A	Oil Filter	11.1000A	Engine Mounting and Base
4.3000A	Oil Filter Lines	11.1000A	Engine Mounting and Base (Twin and Quad)
4.4000A	Oil Cooler and Marine Gear Lines		
4.5000A	Oil Filler	12 0000	MISCELLANEOUS
4.6000A	Dipstick	12 2000A	Bilge Pump
4.7000A	Oil Pan	12 3000A	Vacuum Pump
4.8000A	Ventilating System	12 4000A	Air Compressor
		12 5000A	Hydraulic Pump
		12 6000A	Gasoline Starter
		12 6000B	Air Starter
		12 6000C	Cold Weather Starting Aid
		12 6000D	Hydraulic Starter
		12 6000E	Hydraulic Starter Accessories
		12 8000A	Supplies
		12 8000B	Fabrication Material
		12 8000C	Miscellaneous Service Kits and Sets
		12 8000D	Miscellaneous Service Parts
000	COOLING SYSTEM		
5.1000	Fresh Water Pump		
5.1000A	Fresh Water Pump Cover		
5.2000A	Water Outlet Manifold and/or Elbow		
5.2000B	Thermostat		
5.2000C	Water Bypass Tube		
5.3000A	Radiator		
5.3000B	Water Connections		

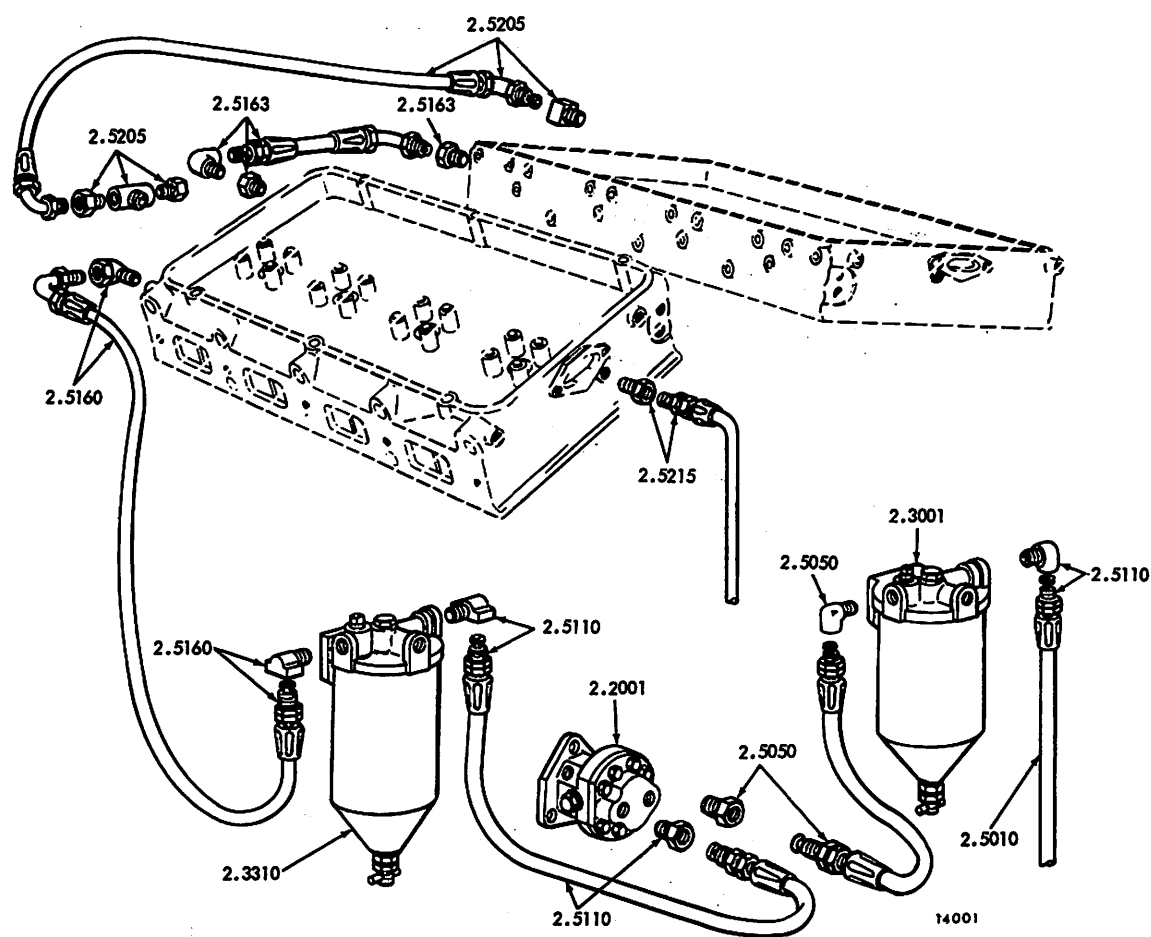


FIG. 4A TYPICAL FUEL SYSTEM

GROUP NOMENCLATURE

1.0000	ENGINE (less major assemblies)	5.0000	COOLING SYSTEM (CONT'D)
1.1000	Cylinder Block	5.4000A	Fan
1.1000A	Air Box Drains	5.4000B	Fan Shroud
1.2000	Cylinder Head	5.5000A	Heat Exchanger or Keel Cooling
1.2000A	Engine Lifter Bracket	5.6000A	Raw Water Pump
1.3000	Crankshaft, Oil Seals and Stabilizers	5.7000A	Water Filter
1.3000A	Crankshaft Front Cover		
1.3000B	Vibration Damper	6.0000	EXHAUST SYSTEM
1.3000C	Crankshaft Pulley	6.1000A	Exhaust Manifold and/or Connections
1.3000D	Crankshaft Pulley Belt	6.2000A	Exhaust Muffler and/or Connections
1.4000A	Flywheel		
1.5000A	Flywheel Housing	7.0000	ELECTRICAL—INSTRUMENTS
1.5000B	Flywheel Housing Adaptor	7.1000A	Battery Charging Generator
1.6000	Connecting Rod and Piston	7.2000A	Battery Cables
1.7000	Camshaft and Gear Train	7.2000B	Automatic Starting
1.7000A	Balance Weight Cover	7.2000B	Automatic Starting (Twin and Quad)
1.7000B	Accessory Drive	7.3000A	Starting Motor
1.8000	Valve and Injector Operating Mechanism	7.4000A	Instruments
1.8000A	Rocker Cover	7.4000A	Instruments (Twin and Quad)
		7.4000B	Tachometer Drive
2.0000	FUEL SYSTEM	7.4000B	Tachometer Drive (Twin and Quad)
2.1000A	Fuel Injector	7.4000C	Shutoff, Alarm and O.S. Governor
2.1000B	Injector Controls Electronic	7.4000C	Shutoff, Alarm and O.S. Governor (Twin and Quad)
2.2000	Fuel Pump	7.5000A	Power Generator
2.2000A	Fuel Pump Drain	7.6000A	Control Cabinet
2.3000A	Fuel Filter and Strainer	7.6000A	Control Cabinet (Twin and Quad)
2.3000A	Fuel Filter and Strainer (Twin and Quad)	7.7000A	Wiring Harness
2.4000	Fuel Manifold and/or Connections	7.8000A	Air Heater
2.4000A	Dual Fuel System	7.8000A	Air Heater (Twin and Quad)
2.5000A	Fuel Lines and Fuel Cooler	7.1000A	Hydraulic Governor Solenoid
2.5000A	Fuel Lines and Fuel Cooler (Twin and Quad)		
2.6000A	Fuel Tank	8.0000	POWER TAKE-OFF
2.6000B	Electric Governor	8.1000A	Power Take-off and/or Clutch
2.7000A	Mechanical Governor	8.1000A	Power Take-off and/or Clutch (Twin and Quad)
2.8000A	Hydraulic Governor	8.3000A	Torque Converter
2.9000	Injector Controls	8.3000A	Torque Converter (Twin and Quad)
2.9000	Injector Controls (Twin and Quad)	8.3000B	Transmission Lines
2.9000A	Throttle Controls		
2.9000A	Throttle Controls (Twin and Quad)	9.0000	TRANSMISSION AND PROPULSION
3.0000	AIR SYSTEM	9.1000A	Hydraulic Marine Gear
3.1000A	Air Cleaner and/or Adaptor	9.1000A	Hydraulic Marine Gear (Twin and Quad)
3.2000A	Air Silencer	9.2000A	Reverse and Reduction Gear (mechanical)
3.3000A	Air Inlet Housing	9.3000A	Power Transfer Case
3.4000	Blower and Drive	9.3000A	Power Transfer Gear (Twin and Quad)
3.4000A	Blower Drive Shaft	9.4000	Transmission—Highway
3.4000B	Blower End Plate Cover	9.7000	Transmission—Off-highway
3.5000A	Turbocharger, Intercooler, and Aftercooler	9.9000	Transmission—Rail Car
4.0000	LUBRICATING SYSTEM		
4.1000A	Oil Pump	10.0000	SHEET METAL
4.1000B	Oil Distribution System	10.1000A	Engine Hood
4.1000C	Oil Pressure Regulator		
4.2000A	Oil Filter	11.0000	ENGINE MOUNTING
4.3000A	Oil Filter Lines	11.1000A	Engine Mounting and Base
4.4000A	Oil Cooler and Marine Gear Lines	11.1000A	Engine Mounting and Base (Twin and Quad)
4.5000A	Oil Filter		
4.6000A	Dipstick	12.0000	MISCELLANEOUS
4.7000A	Oil Pan	12.2000A	Bilge Pump
4.8000A	Ventilating System	12.3000A	Vacuum Pump
5.0000	COOLING SYSTEM	12.4000A	Air Compressor
5.1000	Fresh Water Pump	12.5000A	Hydraulic Pump
5.1000A	Fresh Water Pump Cover	12.6000A	Gasoline Starter
5.2000A	Water Outlet Manifold and/or Elbow	12.6000B	Air Starter
5.2000B	Thermostat	12.6000C	Cold Weather Starting Aid
5.2000C	Water Bypass Tube	12.6000D	Hydraulic Starter
5.3000A	Radiator	12.6000E	Hydraulic Starter Accessories
5.3000B	Water Connections	12.8000A	Supplies
		12.8000B	Fabrication Material
		12.8000C	Miscellaneous Service Kits and Sets
		12.8000D	Miscellaneous Service Parts

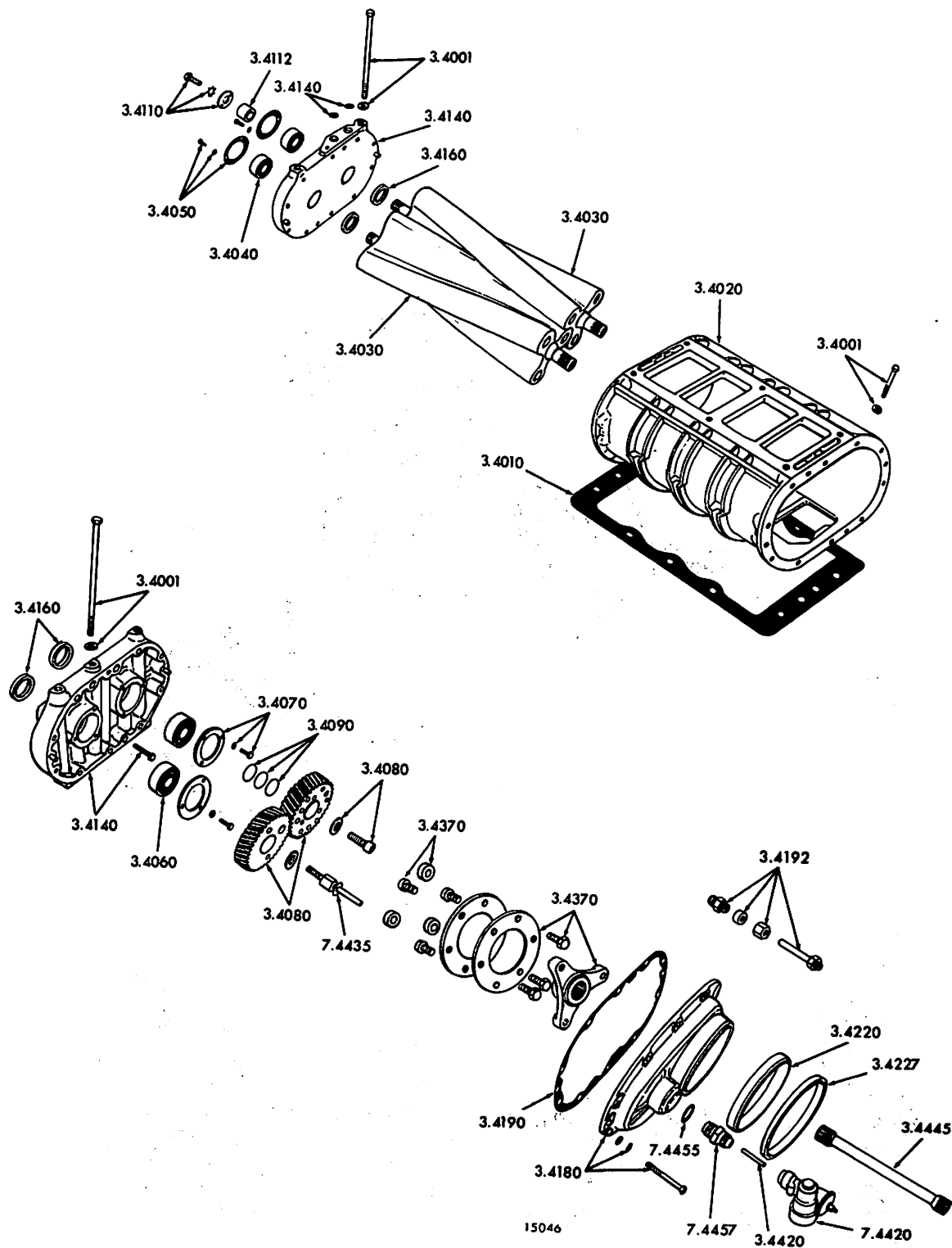
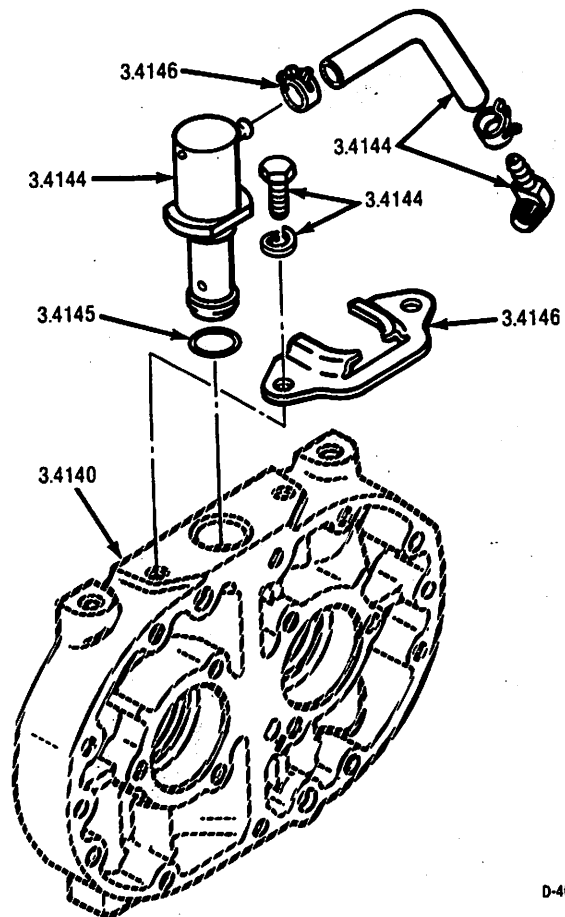


FIG. 4A BLOWER

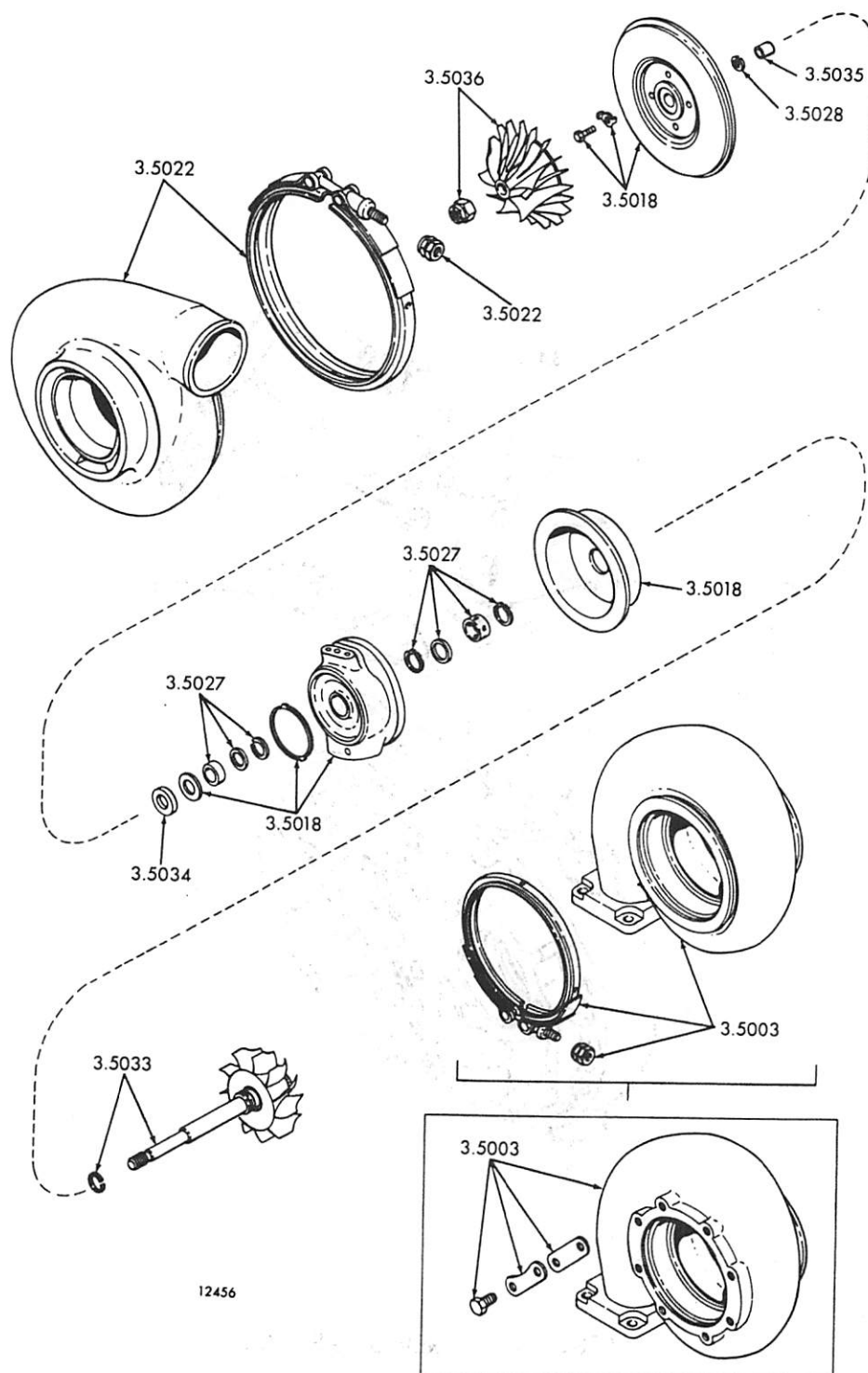
Fig. 4A of 3.0000



D-40

FIG. 4D BLOWER BYPASS VALVE

FIG. 4D of 3.0000



12456

FIG. 5A TURBOCHARGER ASSEMBLY (T18A40)

Fig. 5A of 3.0000

March, 1982

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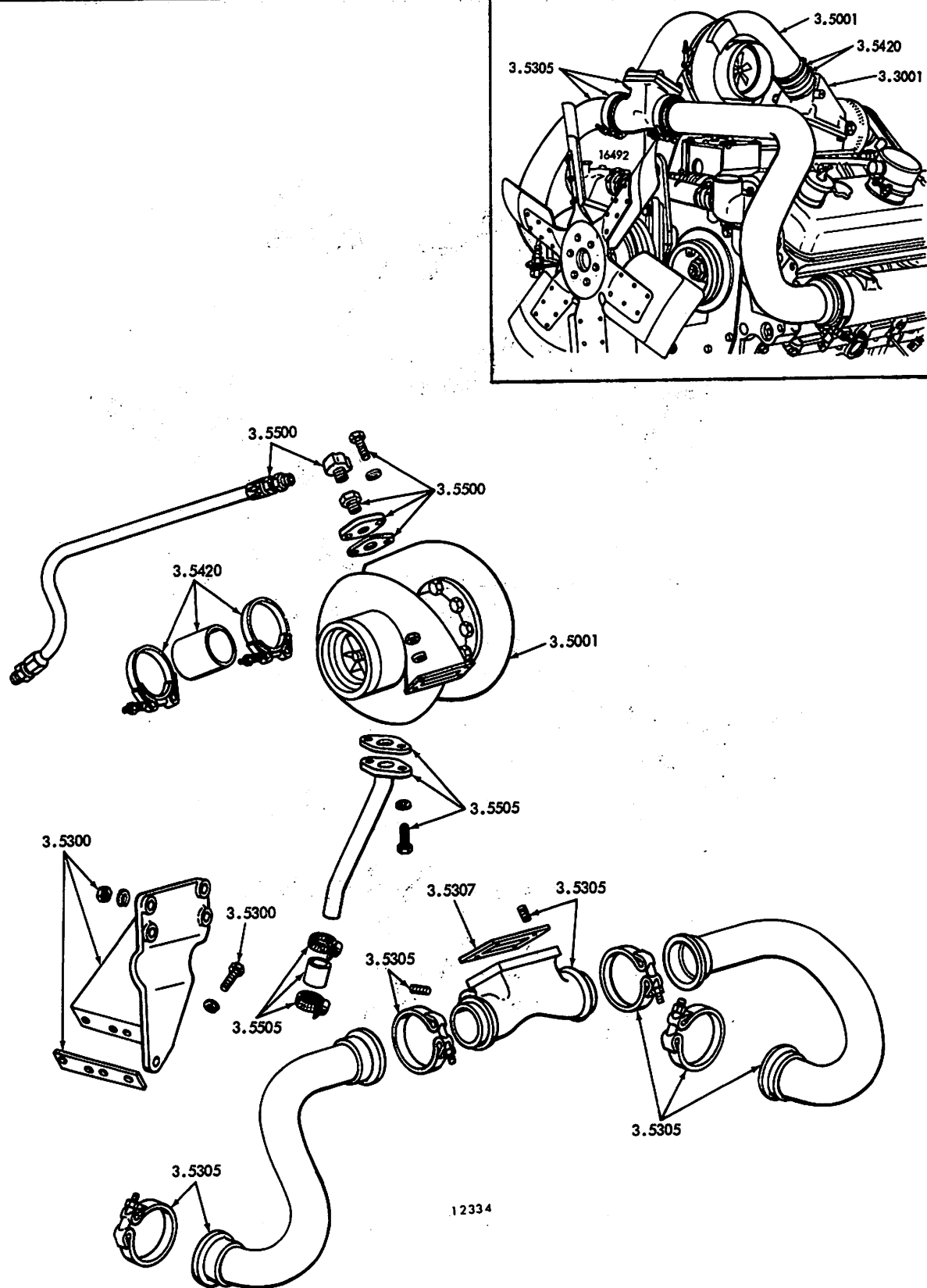


FIG. 5B TURBOCHARGER INSTALLATION

Fig. 5B of 3.0000

March, 1982

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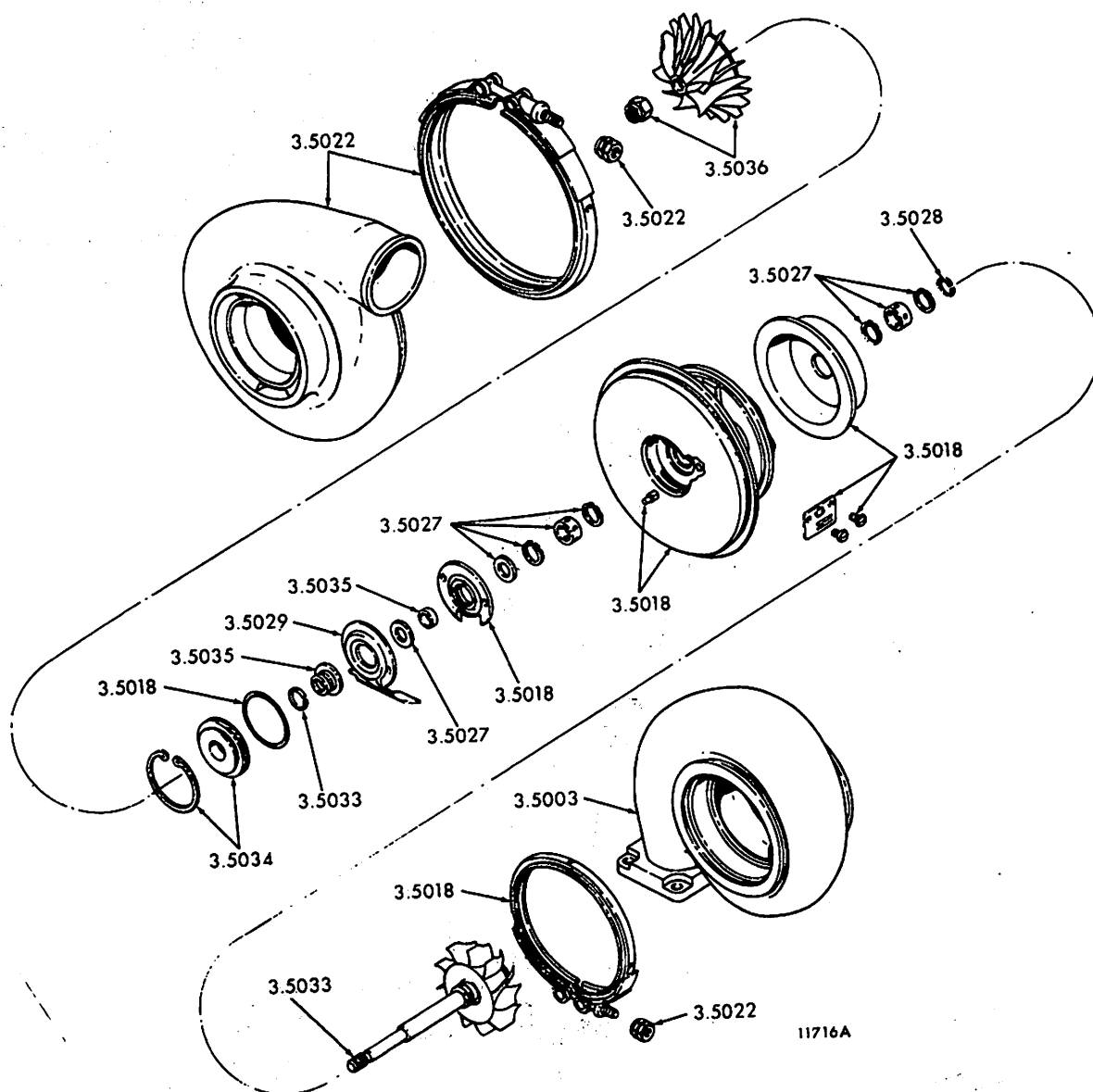


FIG. 5C TURBOCHARGER ASSEMBLY (4MF-782)

Fig. 5C of 3.0000

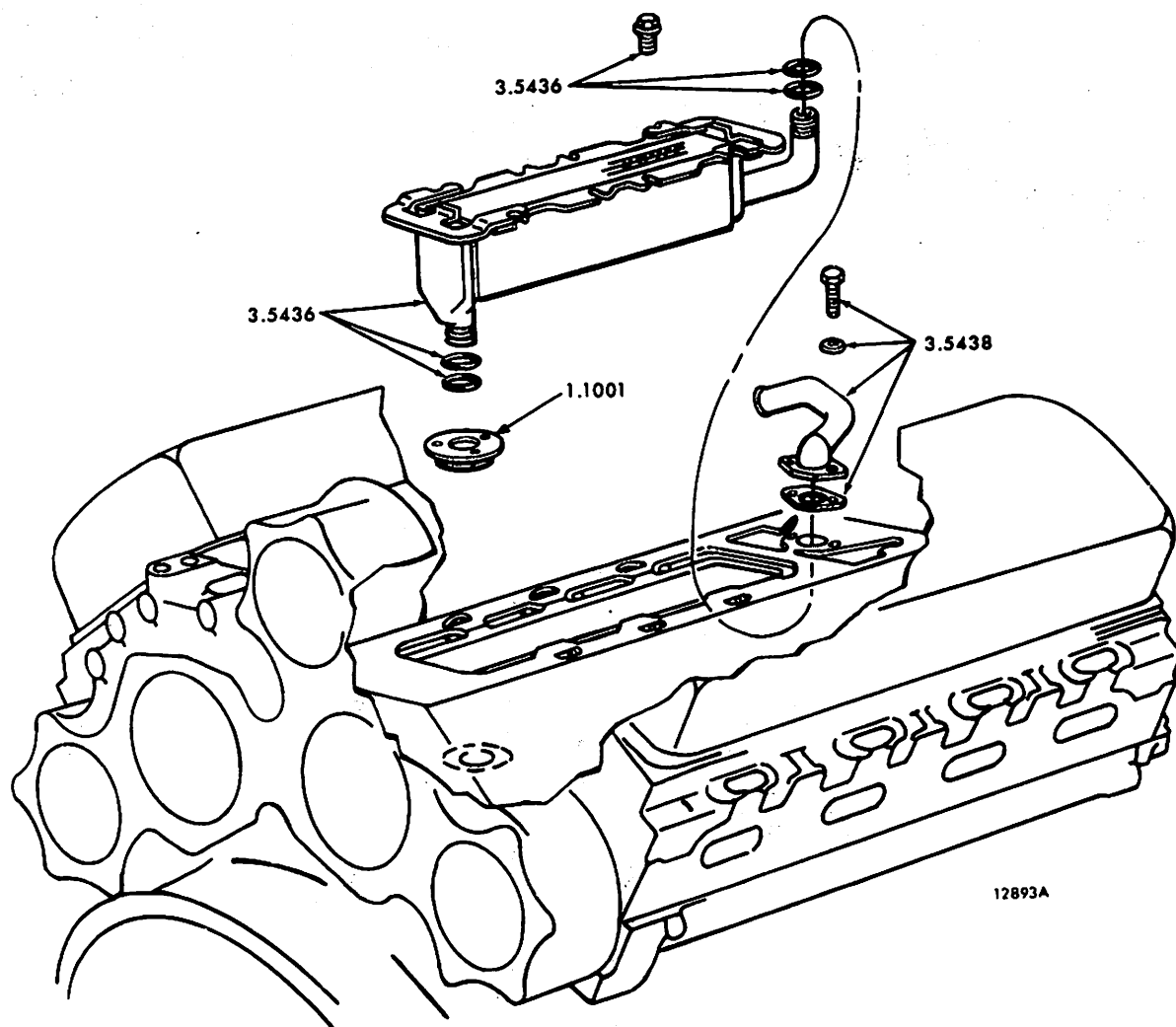


FIG. 5D AFTERCOOLER

Fig. 5D of 3.0000

GROUP NOMENCLATURE

1 0000	ENGINE (less major assemblies)	5 0000	COOLING SYSTEM (CONT'D)
1 1000	Cylinder Block	5 4000A	Fan
1 1000A	Air Box Drains	5 4000B	Fan Shroud
1 2000	Cylinder Head	5 5000A	Heat Exchanger or Keel Cooling
1 2000A	Engine Lifter Bracket	5 6000A	Raw Water Pump
1 3000	Crankshaft, Oil Seals and Stabilizers	5 7000A	Water Filter
1 3000A	Crankshaft Front Cover		
1 3000B	Vibration Damper	6 0000	EXHAUST SYSTEM
1 3000C	Crankshaft Pulley	6 1000A	Exhaust Manifold and/or Connections
1 3000D	Crankshaft Pulley Belt	6 2000A	Exhaust Muffler and/or Connections
1 4000A	Flywheel		
1 5000A	Flywheel Housing	7 0000	ELECTRICAL—INSTRUMENTS
1 5000B	Flywheel Housing Adaptor	7 1000A	Battery Charging Generator
1 6000	Connecting Rod and Piston	7 2000A	Battery Cables
1 7000	Camshaft and Gear Train	7 2000B	Automatic Starting
1 7000A	Balance Weight Cover	7 2000B	Automatic Starting (Twin and Quad)
1 7000B	Accessory Drive	7 3000A	Starting Motor
1 8000	Valve and Injector Operating Mechanism	7 4000A	Instruments
1 8000A	Rocker Cover	7 4000A	Instruments (Twin and Quad)
		7 4000B	Tachometer Drive
2 0000	FUEL SYSTEM	7 4000B	Tachometer Drive (Twin and Quad)
2 1000A	Fuel Injector	7 4000C	Shutoff, Alarm and O.S. Governor
2 1000B	Injector Controls Electronic	7 4000C	Shutoff, Alarm and O.S. Governor (Twin and Quad)
2 2000	Fuel Pump	7 5000A	Power Generator
2 2000A	Fuel Pump Drain	7 6000A	Control Cabinet
2 3000A	Fuel Filter and Strainer	7 6000A	Control Cabinet (Twin and Quad)
2 3000A	Fuel Filter and Strainer (Twin and Quad)	7 7000A	Wiring Harness
2 4000	Fuel Manifold and/or Connections	7 8000A	Air Heater
2 4000A	Dual Fuel System	7 8000A	Air Heater (Twin and Quad)
2 5000A	Fuel Lines and Fuel Cooler	7 10000A	Hydraulic Governor Solenoid
2 5000A	Fuel Lines and Fuel Cooler (Twin and Quad)		
2 6000A	Fuel Tank	8 0000	POWER TAKE-OFF
2 6000B	Electric Governor	8 1000A	Power Take-off and/or Clutch
2 7000A	Mechanical Governor	8 1000A	Power Take-off and/or Clutch (Twin and Quad)
2 8000A	Hydraulic Governor	8 3000A	Torque Converter
2 9000	Injector Controls	8 3000A	Torque Converter (Twin and Quad)
2 9000	Injector Controls (Twin and Quad)	8 3000B	Transmission Lines
2 9000A	Throttle Controls		
2 9000A	Throttle Controls (Twin and Quad)	9 0000	TRANSMISSION AND PROPULSION
3 0000	AIR SYSTEM	9 1000A	Hydraulic Marine Gear
3 1000A	Air Cleaner and/or Adaptor	9 1000A	Hydraulic Marine Gear (Twin and Quad)
3 2000A	Air Silencer	9 2000A	Reverse and Reduction Gear (mechanical)
3 3000A	Air Inlet Housing	9 3000A	Power Transfer Case
3 4000	Blower and Drive	9 3000A	Power Transfer Gear (Twin and Quad)
3 4000A	Blower Drive Shaft	9 4000	Transmission—Highway
3 4000B	Blower End Plate Cover	9 7000	Transmission—Off-highway
3 5000A	Turbocharger, Intercooler, and Aftercooler	9 9000	Transmission—Rail Car
4.0000	LUBRICATING SYSTEM	10 0000	SHEET METAL
4 1000A	Oil Pump	10 1000A	Engine Hood
4 1000B	Oil Distribution System		
4 1000C	Oil Pressure Regulator	11.0000	ENGINE MOUNTING
4 2000A	Oil Filter	11 1000A	Engine Mounting and Base
4 3000A	Oil Filter Lines	11 1000A	Engine Mounting and Base (Twin and Quad)
4 4000A	Oil Cooler and Marine Gear Lines		
4 5000A	Oil Filler	12.0000	MISCELLANEOUS
4 6000A	Dipstick	12 2000A	Bilge Pump
4 7000A	Oil Pan	12 3000A	Vacuum Pump
4 8000A	Ventilating System	12 4000A	Air Compressor
		12 5000A	Hydraulic Pump
5.0000	COOLING SYSTEM	12 6000A	Gasoline Starter
5 1000	Fresh Water Pump	12 6000B	Air Starter
5 1000A	Fresh Water Pump Cover	12 6000C	Cold Weather Starting Aid
5 2000A	Water Outlet Manifold and/or Elbow	12 6000D	Hydraulic Starter
5 2000B	Thermostat	12 6000E	Hydraulic Starter Accessories
5 2000C	Water Bypass Tube	12 8000A	Supplies
5 3000A	Radiator	12 8000B	Fabrication Material
5 3000B	Water Connections	12 8000C	Miscellaneous Service Kits and Sets
		12 8000D	Miscellaneous Service Parts

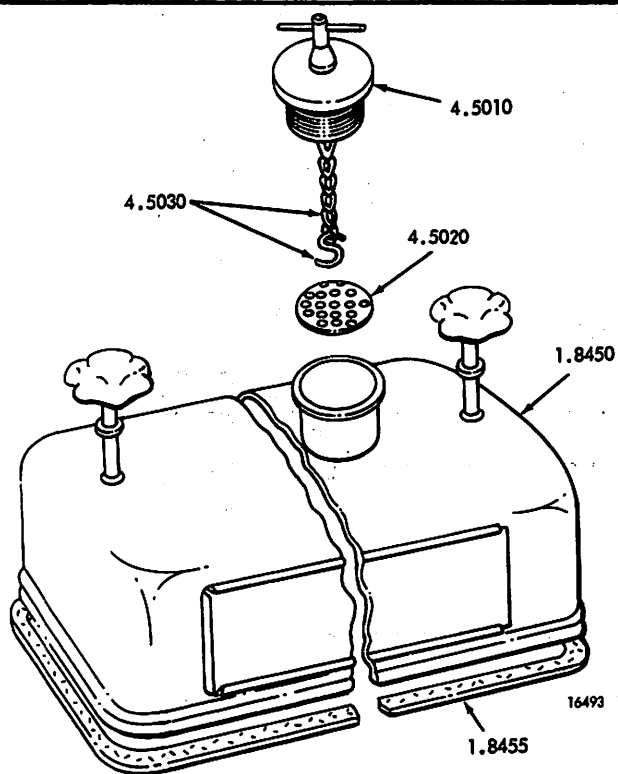


FIG. 6A OIL FILLER CAP
(Squeeze Type)

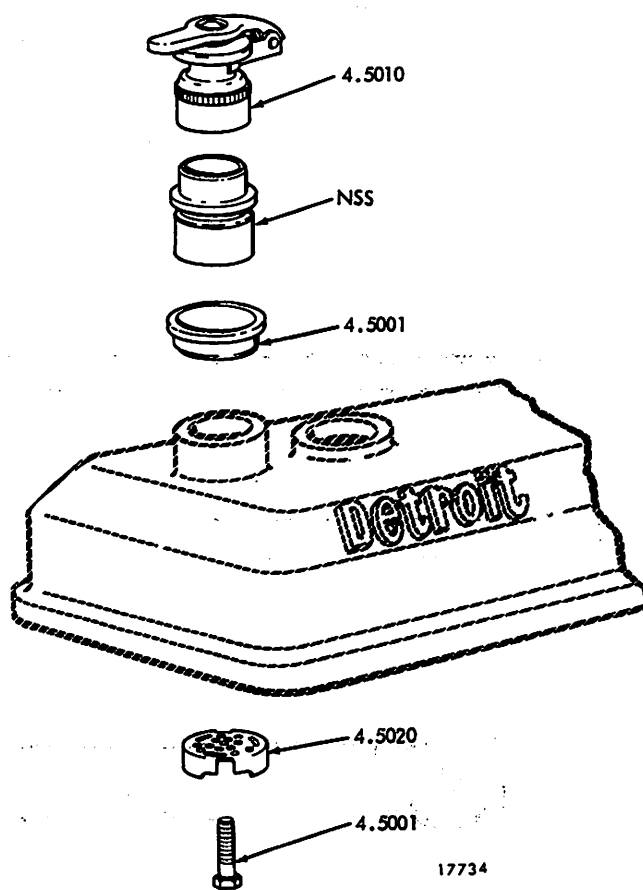
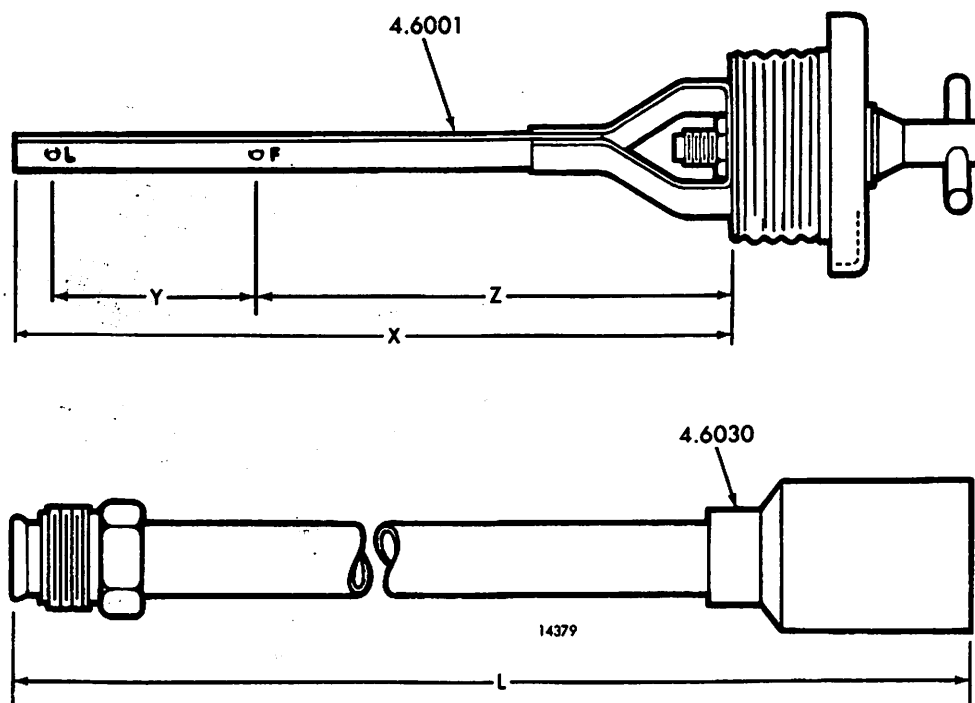
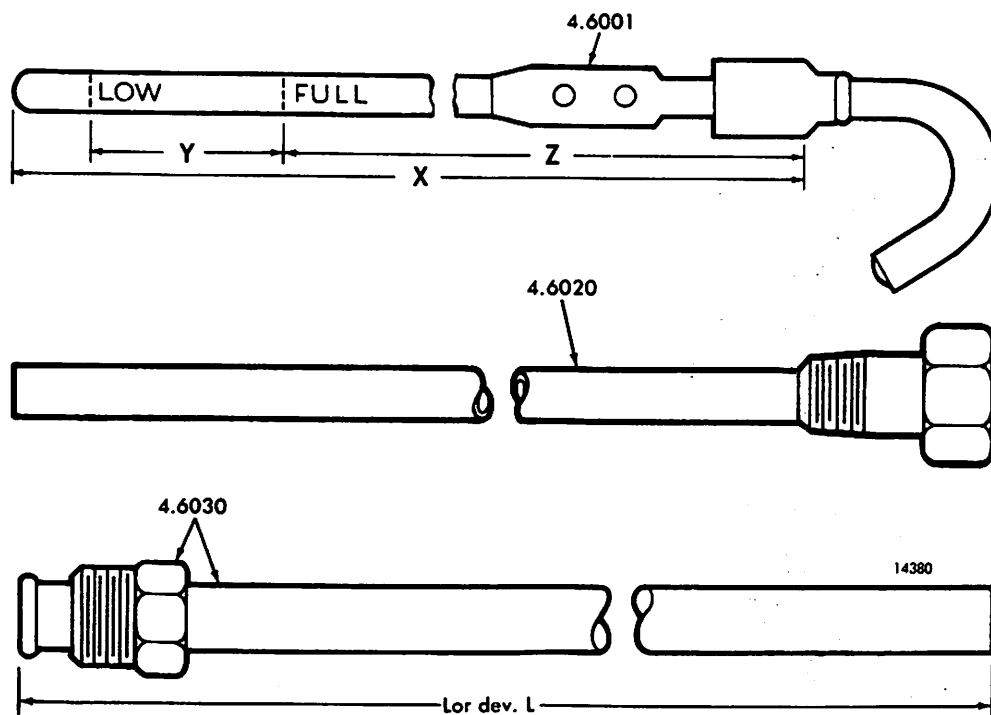


FIG. 6B OIL FILLER CAP
(Spring Loaded)

Figs. 6A & 6B of 4.0000



FIGS. 7A & 7B of 4.0000

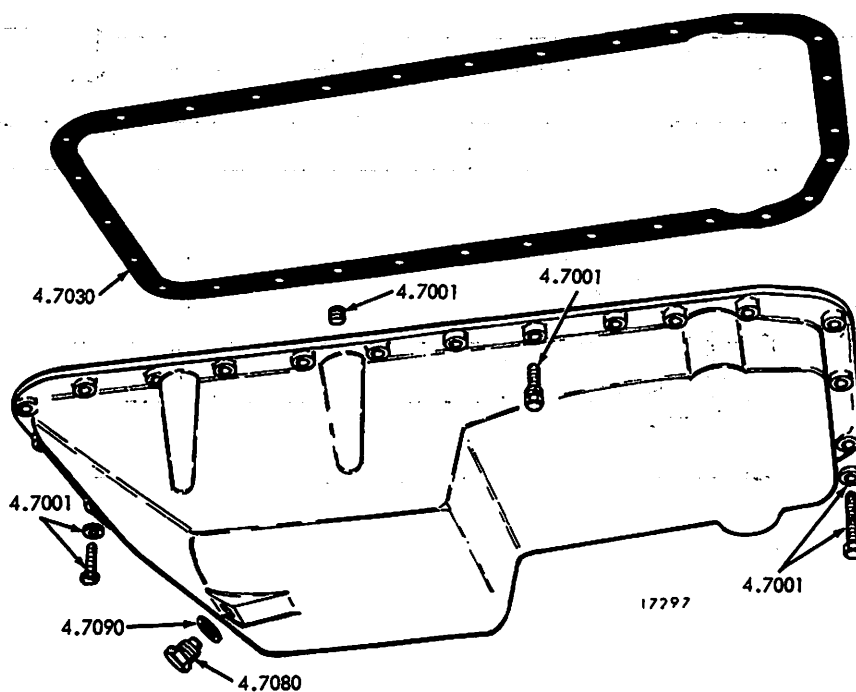


FIG. 8A OIL PAN (6V & 8V)

Fig. 8A of 4.0000

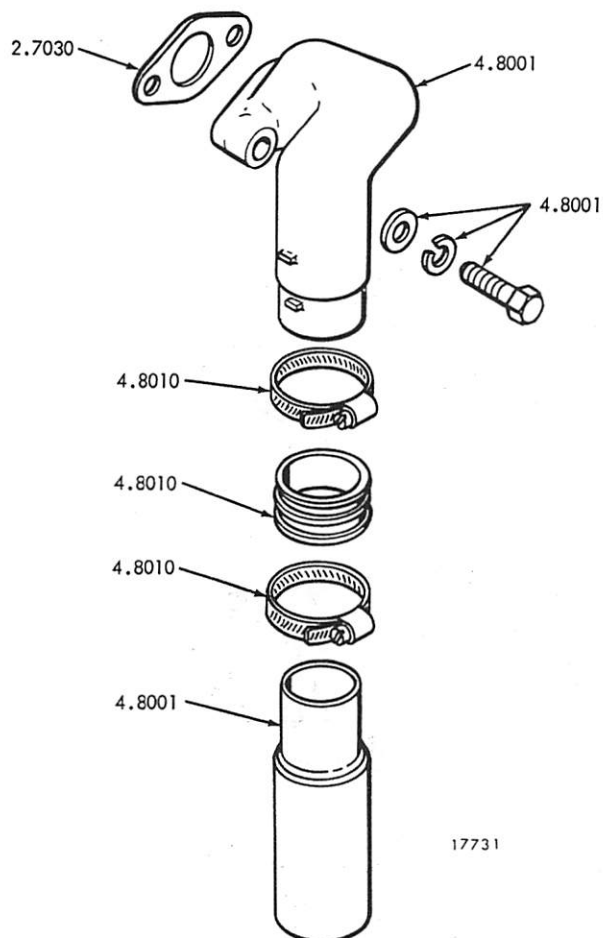


FIG. 9A VENTILATING SYSTEM

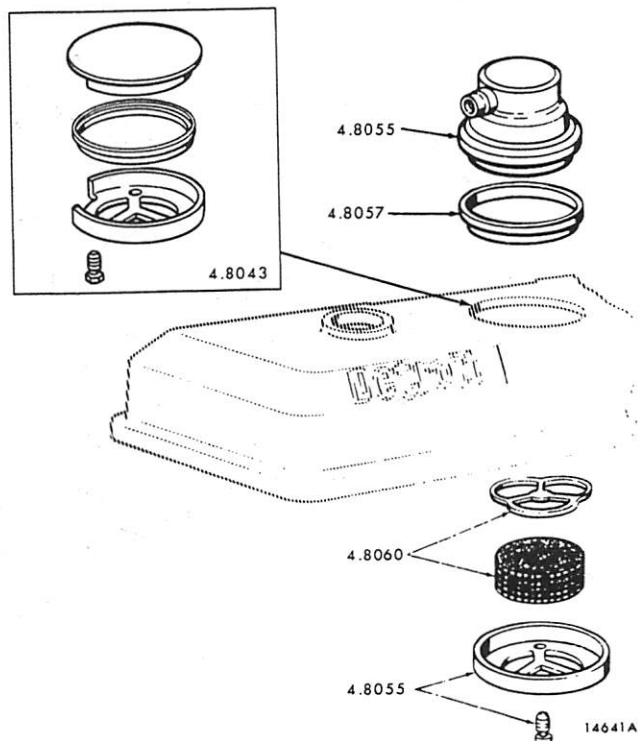


FIG. 9B VENTILATING SYSTEM (ON ROCKER COVER)

Figs. 9A & 9B of 4.0000

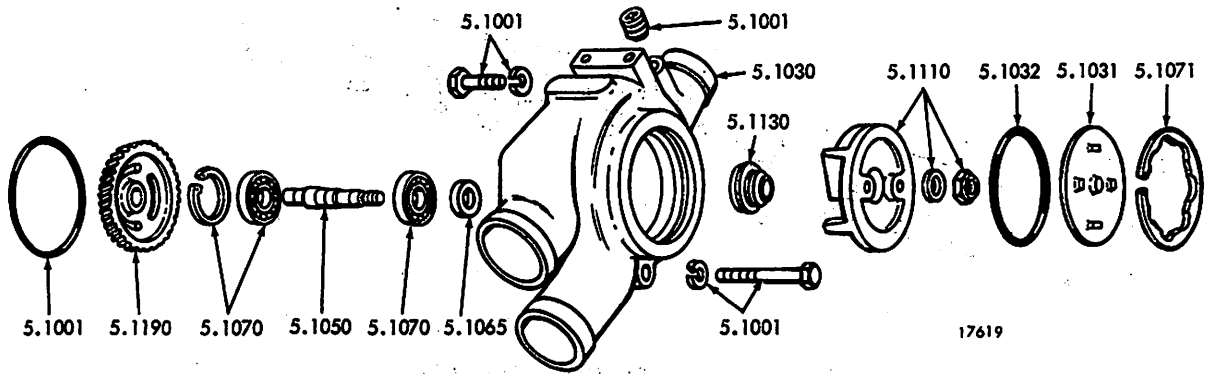


FIG. 1A FRESH WATER PUMP (6 and 8V)

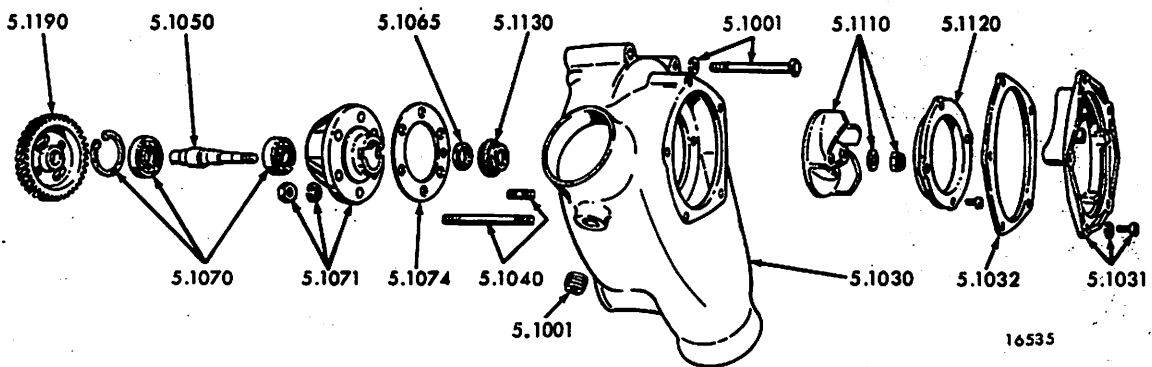


FIG. 1B FRESH WATER PUMP (12 and 16V)

Figs. 1A & 1B of 5.0000

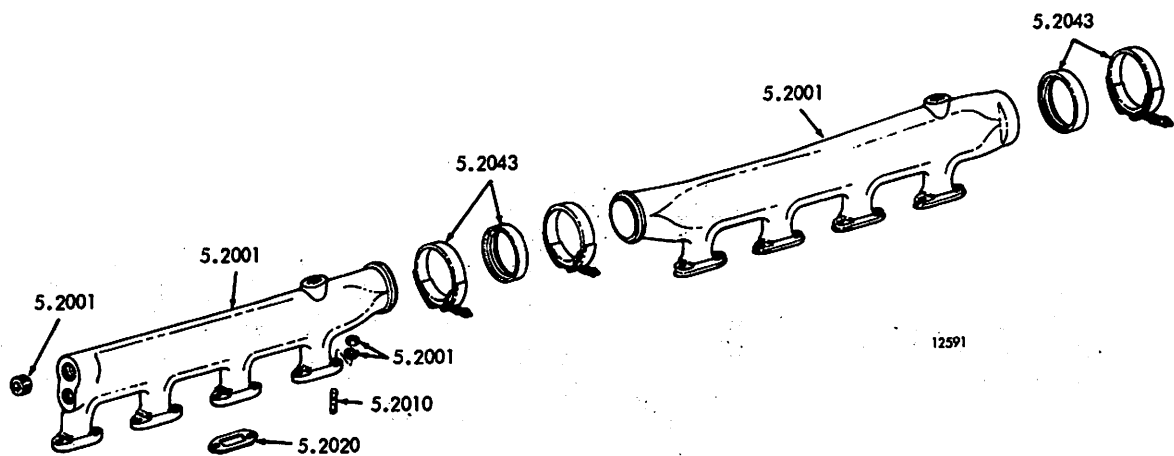


FIG. 2A WATER MANIFOLD (16V)

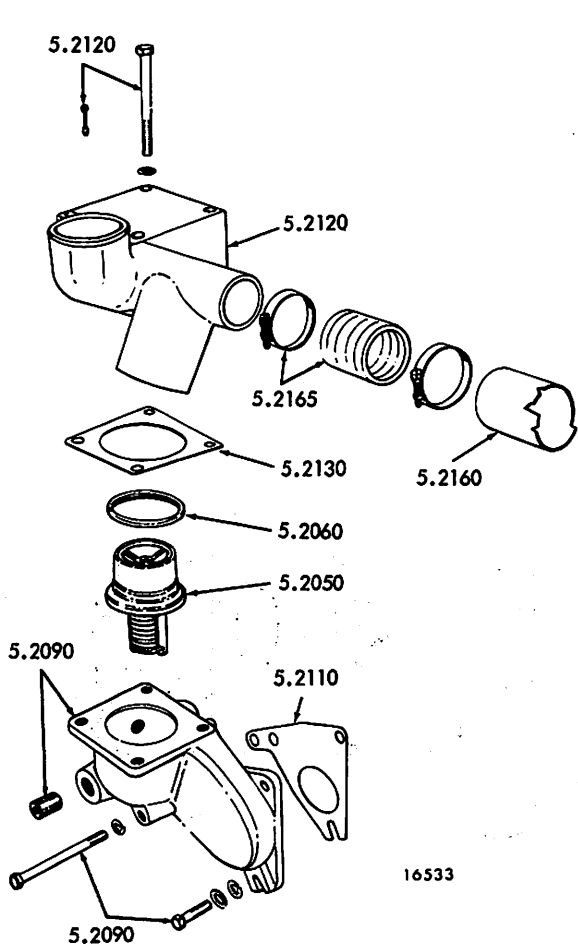


FIG. 3A RIGHT BANK

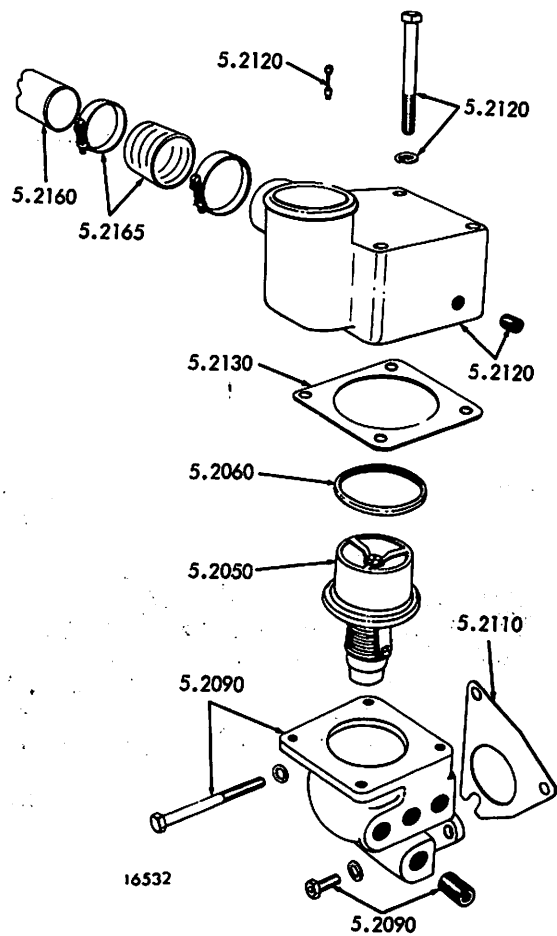


FIG. 3B LEFT BANK

THERMOSTAT AND WATER BY PASS TUBE

Figs. 2A, 3A & 3B of 5.0000

GROUP NOMENCLATURE

1 0000	ENGINE (less major assemblies)	5.0000	COOLING SYSTEM (CONT'D)
1 1000	Cylinder Block	5 4000A	Fan
1 1000A	Air Box Drains	5 4000B	Fan Shroud
1 2000	Cylinder Head	5 5000A	Heat Exchanger or Keel Cooling
1 2000A	Engine Lifter Bracket	5 6000A	Raw Water Pump
1 3000	Crankshaft, Oil Seals and Stabilizers	5 7000A	Water Filter
1 3000A	Crankshaft Front Cover		
1 3000F	Vibration Damper	6.0000	EXHAUST SYSTEM
1 3000C	Crankshaft Pulley	6.1000A	Exhaust Manifold and/or Connections
1 3000D	Crankshaft Pulley Belt	6.2000A	Exhaust Muffler and/or Connections
1 4000A	Flywheel		
1 5000A	Flywheel Housing	7.0000	ELECTRICAL--INSTRUMENTS
1 5000B	Flywheel Housing Adaptor	7.1000A	Battery Charging Generator
1 6000	Connecting Rod and Piston	7.2000A	Battery Cables
1 7000	Camshaft and Gear Train	7.2000B	Automatic Starting
1 7000A	Balance Weight Cover	7.2000B	Automatic Starting (Twin and Quad)
1 7000B	Accessory Drive	7.3000A	Starting Motor
1 8000	Valve and Injector Operating Mechanism	7.4000A	Instruments
1 8000A	Rocker Cover	7 4000A	Instruments (Twin and Quad)
		7 4000B	Tachometer Drive
2 0000	FUEL SYSTEM	7 4000B	Tachometer Drive (Twin and Quad)
2 1000A	Fuel Injector	7 4000C	Shutoff, Alarm and O.S. Governor
2 1000B	Injector Controls Electronic	7 4000C	Shutoff, Alarm and O.S. Governor (Twin and Quad)
2 2000	Fuel Pump	7 5000A	Power Generator
2 2000A	Fuel Pump Drain	7 6000A	Control Cabinet
2 3000A	Fuel Filter and Strainer	7 6000A	Control Cabinet (Twin and Quad)
2 3000A	Fuel Filter and Strainer (Twin and Quad)	7 7000A	Wiring Harness
2 4000	Fuel Manifold and/or Connections	7 8000A	Air Heater
2 4000A	Dual Fuel System	7 8000A	Air Heater (Twin and Quad)
2 5000A	Fuel Lines and Fuel Cooler	7 10000A	Hydraulic Governor Solenoid
2 5000A	Fuel Lines and Fuel Cooler (Twin and Quad)		
2 6000A	Fuel Tank	8 0000	POWER TAKE-OFF
2 6000B	Electric Governor	8 1000A	Power Take-off and/or Clutch
2 7000A	Mechanical Governor	8 1000A	Power Take-off and/or Clutch (Twin and Quad)
2 8000A	Hydraulic Governor	8 3000A	Torque Converter
2 9000	Injector Controls	8 3000A	Torque Converter (Twin and Quad)
2 9000	Injector Controls (Twin and Quad)	8 3000B	Transmission Lines
2 9000A	Throttle Controls		
2 9000A	Throttle Controls (Twin and Quad)	9.0000	TRANSMISSION AND PROPULSION
3 0000	AIR SYSTEM	9 1000A	Hydraulic Marine Gear
3 1000A	Air Cleaner and/or Adaptor	9 1000A	Hydraulic Marine Gear (Twin and Quad)
3 2000A	Air Silencer	9 2000A	Reverse and Reduction Gear (mechanical)
3 3000A	Air Inlet Housing	9 3000A	Power Transfer Case
3 4000	Blower and Drive	9 3000A	Power Transfer Gear (Twin and Quad)
3 4000A	Blower Drive Shaft	9 4000	Transmission--Highway
3 4000B	Blower End Plate Cover	9 7000	Transmission--Off-highway
3 5000A	Turbocharger, Intercooler, and Aftercooler	9 9000	Transmission--Rail Car
4 0000	LUBRICATING SYSTEM	10 0000	SHEET METAL
4 1000A	Oil Pump	10 1000A	Engine Hood
4 1000B	Oil Distribution System		
4 1000C	Oil Pressure Regulator	11.0000	ENGINE MOUNTING
4 2000A	Oil Filter	11 1000A	Engine Mounting and Base
4 3000A	Oil Filter Lines	11 1000A	Engine Mounting and Base (Twin and Quad)
4 4000A	Oil Cooler and Marine Gear Lines		
4 5000A	Oil Filler	12.0000	MISCELLANEOUS
4 6000A	Dipstick	12 2000A	Bilge Pump
4 7000A	Oil Pan	12 3000A	Vacuum Pump
4 8000A	Ventilating System	12 4000A	Air Compressor
5.0000	COOLING SYSTEM	12 5000A	Hydraulic Pump
5 1000	Fresh Water Pump	12 6000A	Gasoline Starter
5 1000A	Fresh Water Pump Cover	12 6000B	Air Starter
5 2000A	Water Outlet Manifold and/or Elbow	12 6000C	Cold Weather Starting Aid
5 2000B	Thermostat	12 6000D	Hydraulic Starter
5 2000C	Water Bypass Tube	12 6000E	Hydraulic Starter Accessories
5 3000A	Radiator	12 8000A	Supplies
5 3000B	Water Connections	12 8000B	Fabrication Material
		12 8000C	Miscellaneous Service Kits and Sets
		12 8000D	Miscellaneous Service Parts

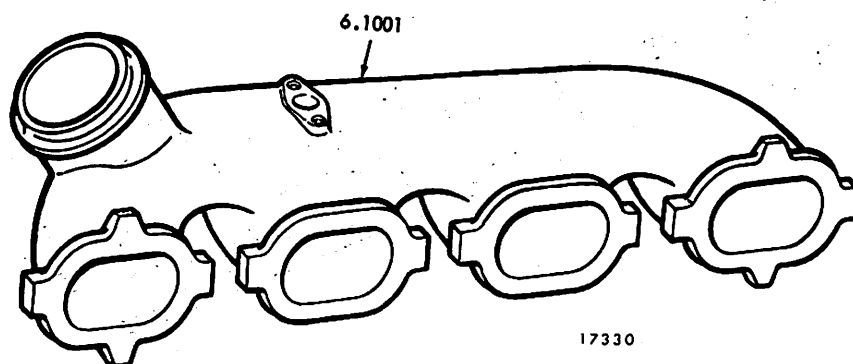


FIG. 1A EXHAUST MANIFOLD
(VERTICAL END-OUTLET, MARMON)

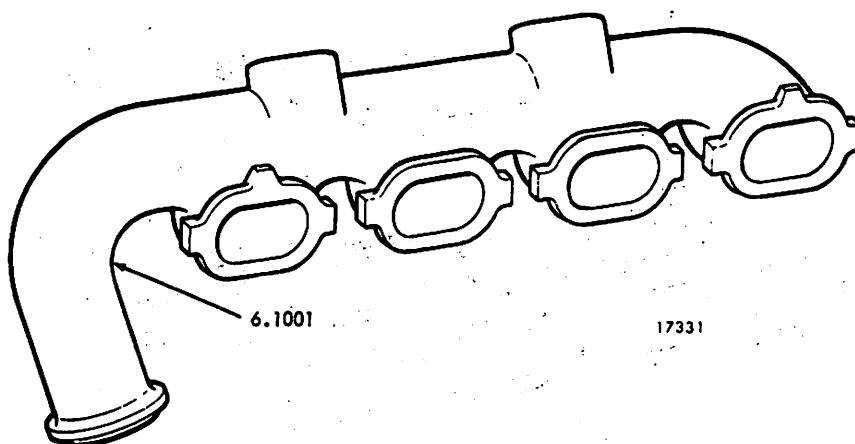


FIG. 2A EXHAUST MANIFOLD
(TURBO END-OUTLET, MARMON)

Figs. 1A & 2A of 6.0000

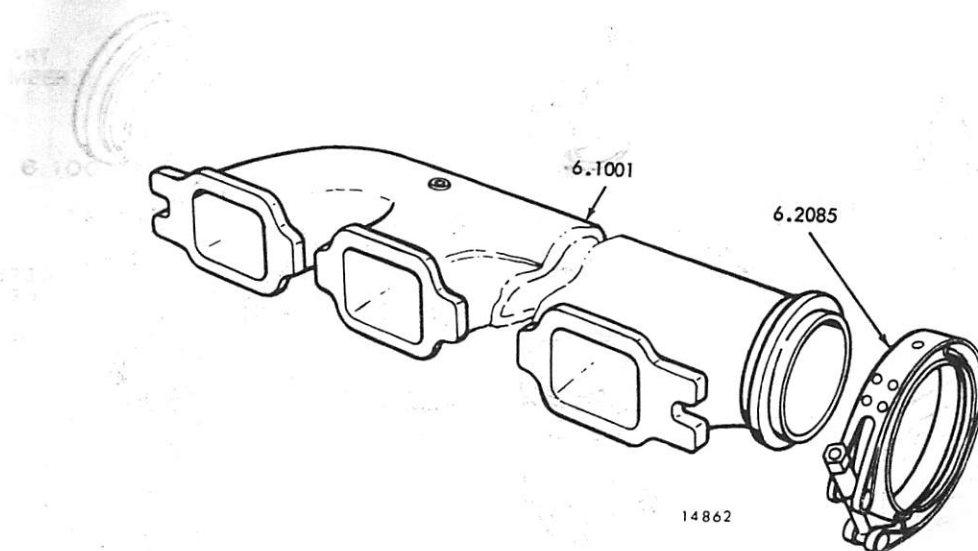


FIG. 11A EXHAUST MANIFOLD
(HORIZONTAL END OUTLET, MARMON)

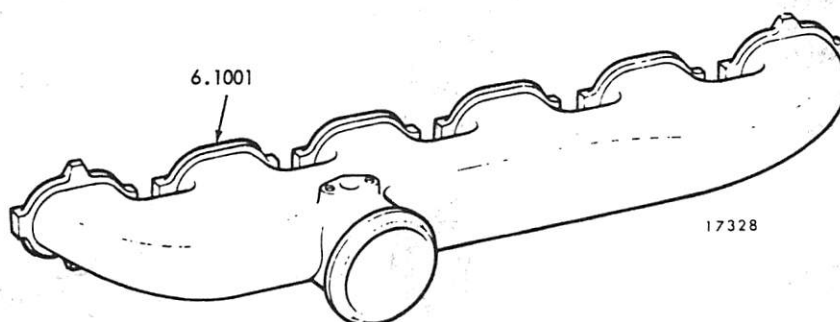
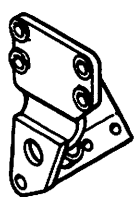
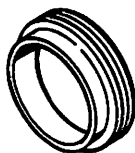


FIG. 12A EXHAUST MANIFOLD
(SIDE OUTLET, OFFSET, MARMON)

Figs. 11A & 12A of 6.0000



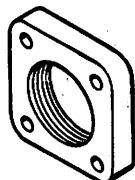
6.2035
ITEM 1



6.2085
ITEM 2



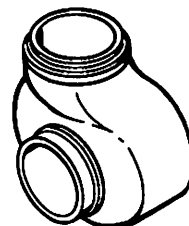
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ITEM 3



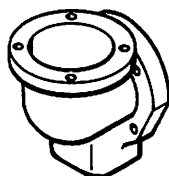
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ITEM 4



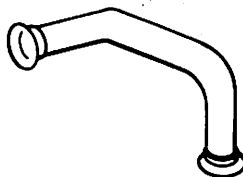
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ITEM 5



6.2085
ITEM 6



6.2085
ITEM 7



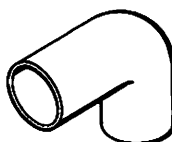
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ITEM 8



6.2085
ITEM 9



6.2085
ITEM 10



6.2090
ITEM 11



6.2095
ITEM 12



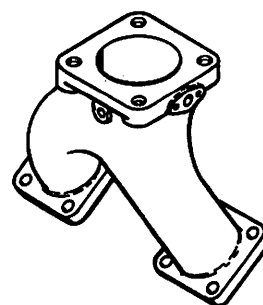
6.2105
ITEM 13



6.2105
ITEM 14



6.2115
ITEM 15



6.2120
ITEM 16

172 64

FIG. 13A EXHAUST MUFFLER CONNECTIONS

Fig. 13A of 6.0000

GROUP NOMENCLATURE

1 0000	ENGINE (less major assemblies)	5 0000	COOLING SYSTEM (CONT'D)
1 1000	Cylinder Block	5 4000A	Fan
1 1000A	Air Box Drains	5 4000B	Fan Shroud
1 2000	Cylinder Head	5 5000A	Heat Exchanger or Keel Cooling
1 2000A	Engine Lifter Bracket	5 6000A	Raw Water Pump
1 3000	Crankshaft, Oil Seals and Stabilizers	5 7000A	Water Filter
1 3000A	Crankshaft Front Cover		
1 3000B	Vibration Damper	6 0000	EXHAUST SYSTEM
1 3000C	Crankshaft Pulley	6 1000A	Exhaust Manifold and/or Connections
1 3000D	Crankshaft Pulley Belt	6 2000A	Exhaust Muffler and/or Connections
1 4000A	Flywheel		
1 5000A	Flywheel Housing	7 0000	ELECTRICAL—INSTRUMENTS
1 5000B	Flywheel Housing Adaptor	7 1000A	Battery Charging Generator
1 6000	Connecting Rod and Piston	7 2000A	Battery Cables
1 7000	Camshaft and Gear Train	7 2000B	Automatic Starting
1 7000A	Balance Weight Cover	7 2000B	Automatic Starting (Twin and Quad)
1 7000B	Accessory Drive	7 3000A	Starting Motor
1 8000	Valve and Injector Operating Mechanism	7 4000A	Instruments
1 8000A	Rocker Cover	7 4000A	Instruments (Twin and Quad)
		7 4000B	Tachometer Drive
		7 4000B	Tachometer Drive (Twin and Quad)
		7 4000C	Shutoff, Alarm and O.S. Governor
		7 4000C	Shutoff, Alarm and O.S. Governor (Twin and Quad)
		7 5000A	Power Generator
		7 6000A	Control Cabinet
		7 6000A	Control Cabinet (Twin and Quad)
		7 7000A	Wiring Harness
		7 8000A	Air Heater
		7 8000A	Air Heater (Twin and Quad)
		7 10000A	Hydraulic Governor Solenoid
2 0000	FUEL SYSTEM	8 0000	POWER TAKE-OFF
2 1000A	Fuel Injector	8 1000A	Power Take-off and/or Clutch
2 1000B	Injector Controls Electronic	8 1000A	Power Take-off and/or Clutch (Twin and Quad)
2 2000	Fuel Pump	8 3000A	Torque Converter
2 2000A	Fuel Pump Drain	8 3000A	Torque Converter (Twin and Quad)
2 3000A	Fuel Filter and Strainer	8 3000B	Transmission Lines
2 3000A	Fuel Filter and Strainer (Twin and Quad)		
2 4000	Fuel Manifold and/or Connections		
2 4000A	Dual Fuel System		
2 5000A	Fuel Lines and Fuel Cooler		
2 5000A	Fuel Lines and Fuel Cooler (Twin and Quad)		
2 6000A	Fuel Tank		
2 6000B	Electric Governor		
2 7000A	Mechanical Governor		
2 8000A	Hydraulic Governor		
2 9000	Injector Controls		
2 9000	Injector Controls (Twin and Quad)		
2 9000A	Throttle Controls		
2 9000A	Throttle Controls (Twin and Quad)		
3 0000	AIR SYSTEM	9 0000	TRANSMISSION AND PROPULSION
3 1000A	Air Cleaner and/or Adaptor	9 1000A	Hydraulic Marine Gear
3 2000A	Air Silencer	9 1000A	Hydraulic Marine Gear (Twin and Quad)
3 3000A	Air Inlet Housing	9 2000A	Reverse and Reduction Gear (mechanical)
3 4000	Blower and Drive	9 3000A	Power Transfer Case
3 4000A	Blower Drive Shaft	9 3000A	Power Transfer Gear (Twin and Quad)
3 4000B	Blower End Plate Cover	9 4000	Transmission—Highway
3 5000A	Turbocharger, Intercooler, and Aftercooler	9 7000	Transmission—Oil-highway
		9 9000	Transmission—Rail Car
4 0000	LUBRICATING SYSTEM	10 0000	SHEET METAL
4 1000A	Oil Pump	10 1000A	Engine Hood
4 1000B	Oil Distribution System		
4 1000C	Oil Pressure Regulator	11 0000	ENGINE MOUNTING
4 2000A	Oil Filter	11 1000A	Engine Mounting and Base
4 3000A	Oil Filter Lines	11 1000A	Engine Mounting and Base (Twin and Quad)
4 4000A	Oil Cooler and Marine Gear Lines		
4 5000A	Oil Filler		
4 6000A	Dipstick		
4 7000A	Oil Pan		
4 8000A	Ventilating System		
5 0000	COOLING SYSTEM	12 0000	MISCELLANEOUS
5 1000	Fresh Water Pump	12 2000A	Bilge Pump
5 1000A	Fresh Water Pump Cover	12 3000A	Vacuum Pump
5 2000A	Water Outlet Manifold and/or Elbow	12 4000A	Air Compressor
5 2000B	Thermostat	12 5000A	Hydraulic Pump
5 2000C	Water Regress Tube	12 6000A	Gasoline Starter
5 3000A	Radiator	12 6000B	Air Starter
5 3000B	Water Connections	12 6000C	Cold Weather Starting Aid
		12 6000D	Hydraulic Starter
		12 6000E	Hydraulic Starter Accessories
		12 8000A	Supplies
		12 8000B	Lubrication Material
		12 8000C	Miscellaneous Service Kits and Sets
		12 8000D	Miscellaneous Service Parts

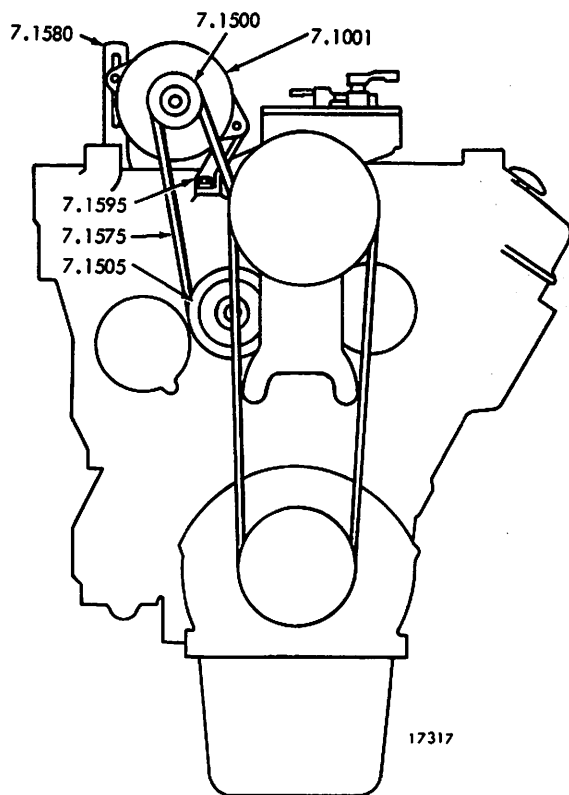


FIG. 1A

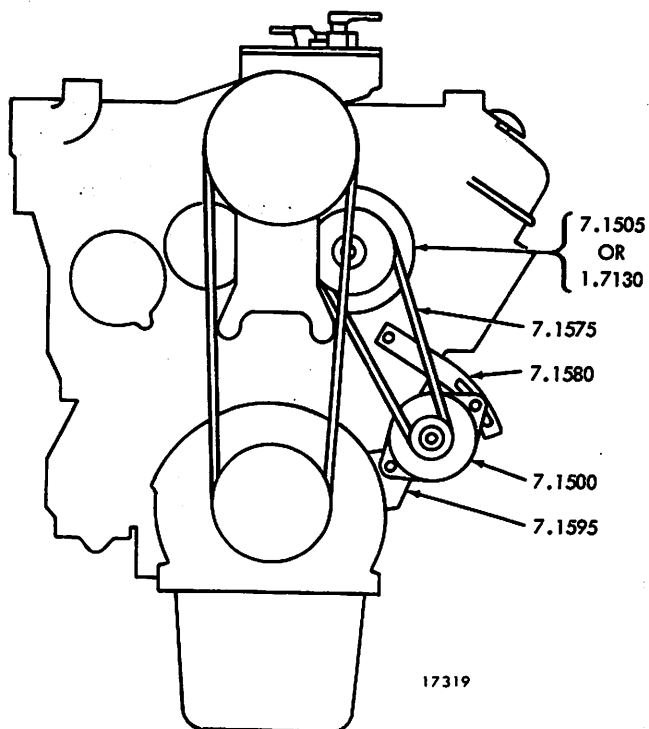


FIG. 1B

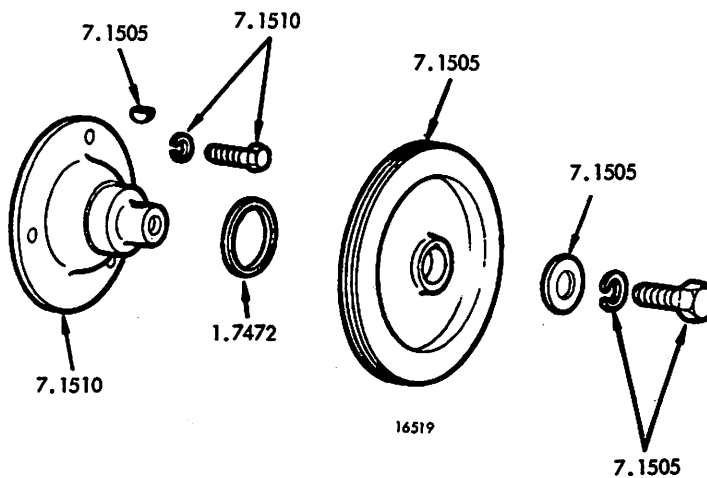


FIG. 1C

CAMSHAFT DRIVEN

BATTERY CHARGING GENERATOR

Figs. 1A, 1B & 1C of 7.0000

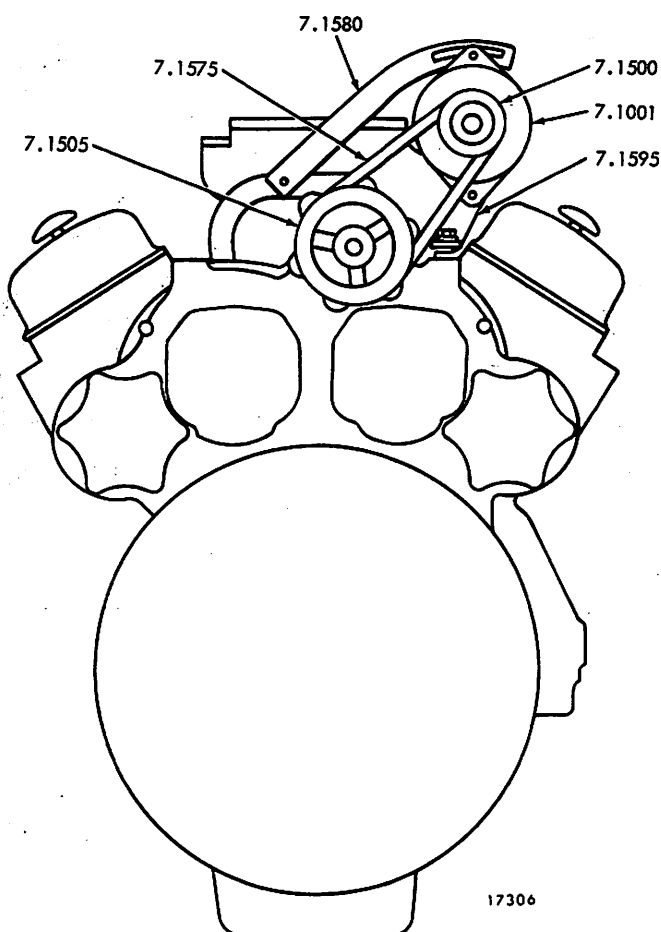


FIG. 1D

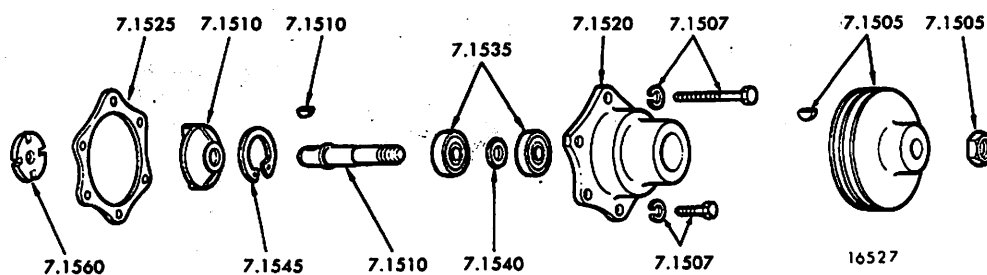


FIG. 1E

BLOWER DRIVE SHAFT DRIVEN
BATTERY CHARGING GENERATOR

Figs. 1D & 1E of 7.0000

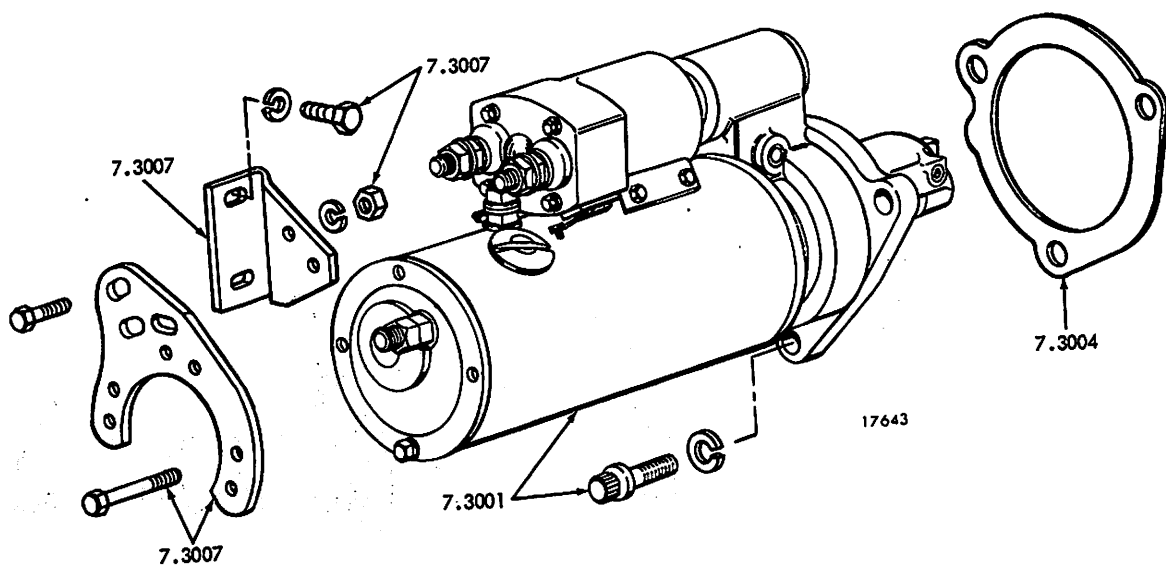


FIG. 3A STARTING MOTOR

Fig. 3A of 7.0000

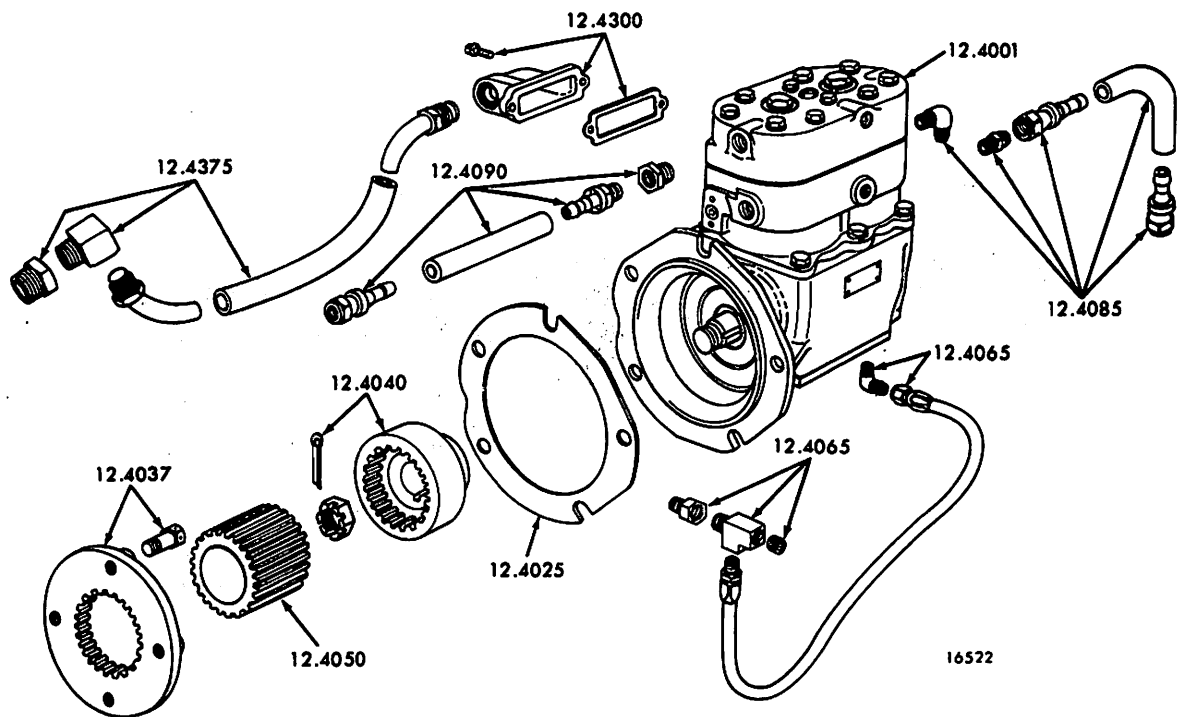


FIG. 1A AIR COMPRESSOR (Flange Mounted)

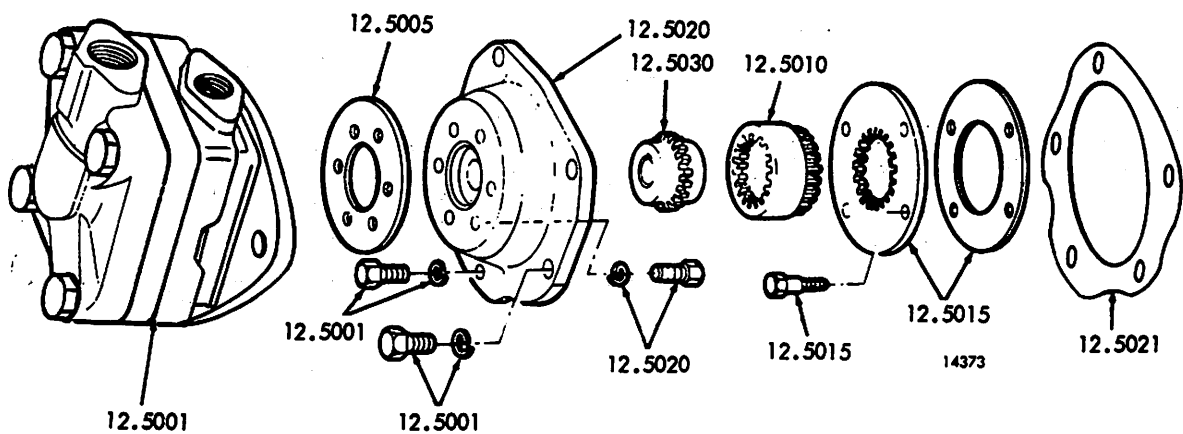


FIG. 1B HYDRAULIC PUMP AND DRIVE

Figs. 1A & 1B of 12.0000