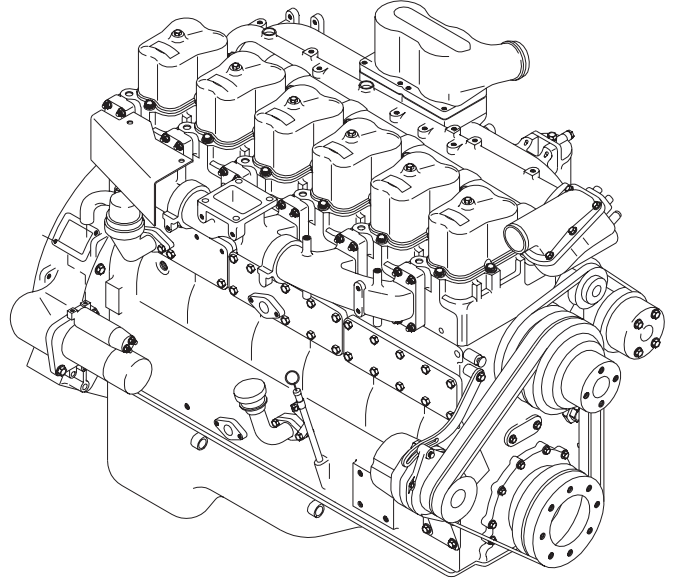


PBM12000D

GENERAC®
POWER SYSTEMS, INC.



12 LITER
D I E S E L

ENGINE
PARTS
MANUAL

P.O. BOX 8 WAUKESHA WI 53187

PHONE: (414) 544-4811 / FAX: (414) 544-0179

PRINTED IN U.S.A.

ISSUED: 006/18/99

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LEGEND

**“AR” AS REQUIRED
(STD) STANDARD SIZE
“O.S.” OVERSIZE
“U.S.” UNDERSIZE**

NOTICE!

THE INFORMATION IN THIS MANUAL IS KNOWN TO BE ACCURATE AS OF THE DATE OF RELEASE SHOWN ON THE COVER. HOWEVER, ENGINEERING CHANGES CAN OCCUR WITHOUT NOTICE. TO OBTAIN THE PROPER PARTS, PLEASE BE SURE TO USE THE MODEL NUMBER OF THE UNIT BEING SERVICED WHEN ORDERING FROM THIS MANUAL.

12L DIESEL SERVICE RECOMMENDATIONS

SPECIFICATIONS:

CRANKCASE OIL CAPACITY:
COOLING SYSTEM CAPACITY:

32.8 U.S. QUARTS (31 LITERS)
10.6 U.S. GALLONS (40 LITERS)

RECOMMENDED FLUIDS

COOLANT:

USE A 50/50 MIXTURE OF LOW SILICATE ETHYLENE GLYCOL BASE ANTI-FREEZE AND SOFT WATER. (IF DESIRED, A HIGH QUALITY RUST INHIBITOR MAY BE ADDED TO THE RECOMMENDED COOLANT MIXTURE.) WHEN ADDING COOLANT, ALWAYS ADD THE RECOMMENDED 50/50 MIXTURE.

ENGINE OIL:

USE A HIGH QUALITY DETERGENT OIL HAVING AAPI CLASSIFICATION "FOR SERVICE CC OR CD." THE SAE VISCOSITY RATING OF THE OIL SHOULD BE CAREFULLY SELECTED, BASED ON THE PREVAILING AMBIENT TEMPERATURE RANGE ANTICIPATED BEFORE THE NEXT OIL CHANGE. RECOMMENDED SAE VISCOSITY GRADES ARE AS FOLLOWS:

TEMPERATURE	RECOMMENDED OIL GRADE
ABOVE 90°F	SAE 40
32°F TO 90°F	SAE 30
12°F TO 32°F	SAE 20

PERIODIC MAINTENANCE SCHEDULE:

* Preventive Maintenance to be performed by an authorized mechanic.

** Preventive Maintenance to be performed by authorized operator.

A. AFTER FIRST 30 HOURS OF OPERATION

- *1. Check/adjust valve clearance.
- *2. Retorque engine cylinder head bolts.
- *3. Retorque intake/exhaust manifolds.
- *4. Retorque oil pan bolts.
- *5. Retorque engine fan bolts.
- *6. Test fuel injection nozzles.
- *7. Check injection timing.
- *8. Inspect wiring.
- *9. Change engine crankcase oil and oil filter
- *10. Inspect engine fan belts.
- *11. Inspect battery and cables.

B. EVERY MONTH

- **1. Test standby generator system.
- **2. Inspect battery and cables.
- **3. Check engine oil level.
- *4. Check gearbox oil level (if so equipped).
- **5. Check coolant level.

**6. Check generator ground connections.

**7. Test/inspect optional starting aids.

C. EVERY 120 HOURS OR EVERY THREE MONTHS (WHICHEVER COMES FIRST)

- **1. Inspect and test fuel system and connections.
- **2. Inspect exhaust system.
- **3. Inspect/test fuel supply system.

D. ONCE EVERY SIX MONTHS

- *1. Change engine oil and filter.
- *2. Lubricate engine controls.
- *3. Service engine air cleaner.
- *4. Service engine fuel filter.
- *5. Inspect AC generator.
- *6. Test engine safety controls.
- *7. Inspect fan belts.
- *8. Check engine coolant level.
- *9. Inspect engine cooling system hoses.
- *10. Check optional starting aids.
- *11. Check battery.
- *12. Check engine compression.
- *13. Check electrical connections.
- *14. Check/test annunciator panel.
- *15. Perform operational test.

12L DIESEL SERVICE RECOMMENDATIONS

E. ONCE ANNUALLY

- *1. Check engine valve clearance.
- *2. Test fuel injection nozzles.
- *3. Test injection nozzles.
- *4. Inspect all wiring.
- *5. Test engine starter operation.
- *6. Drain water from fuel tank.
- *7. Retorque fan bolts.

F. EVERY TWO YEARS

- *1. Replace all rubber hoses.
- *2. Replace engine fan belts.
- *3. Evaluate the Standby Generator System.
- *4. Drain, flush, refill cooling system.

G. EVERY 1000 OPERATING HOURS

- *1. Disassemble and inspect engine DC alternator.
- *2. Disassemble and inspect engine starter.
- *3. Retorque engine mounting brackets.
- *4. Retorque intake and exhaust manifold.
- *5. Retorque oil pan bolts.
- *6. Remove/test fuel injection pump.
- *7. Remove/test cooling system thermostat.

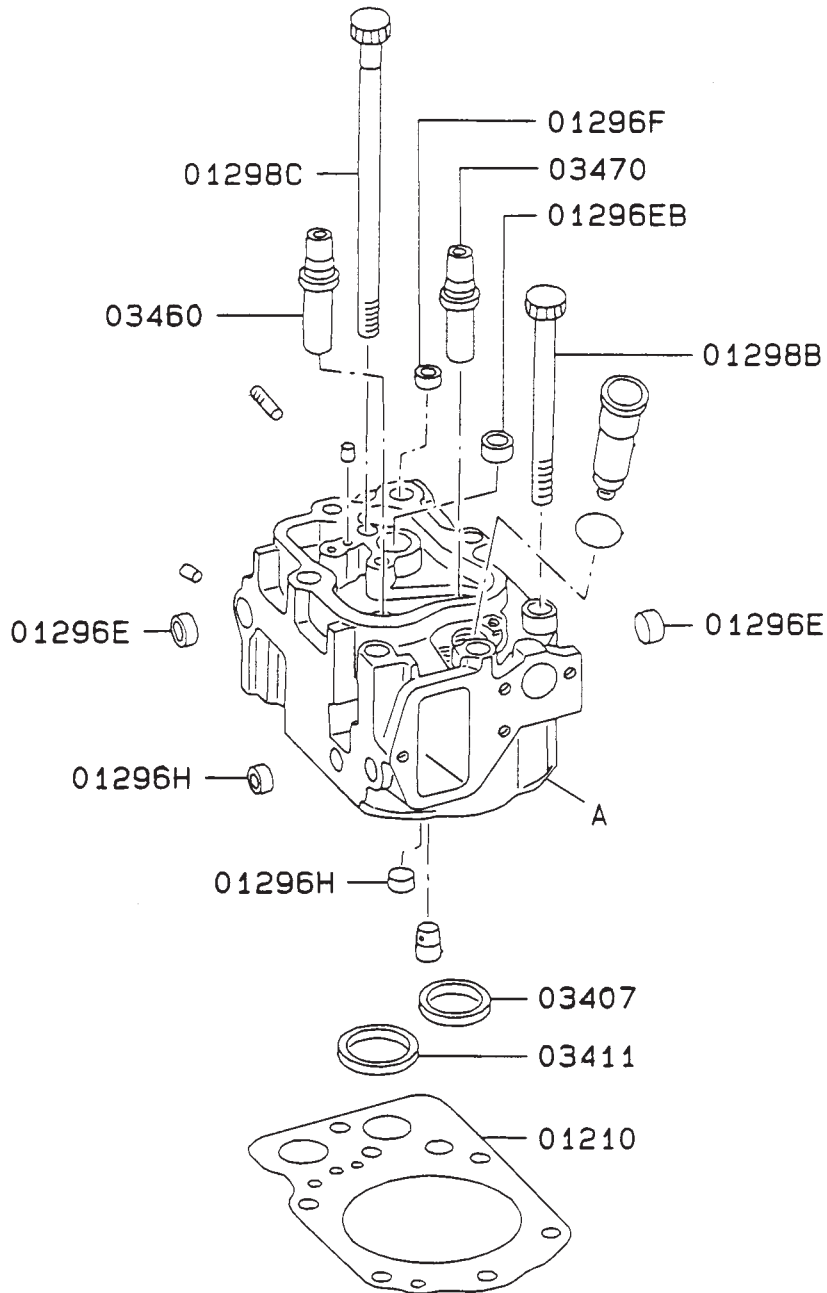
H. AS REQUIRED

- *1. Bleed engine fuel system.
- *2. Pre-oil turbocharger (if so equipped).

QUICK REFERENCE ENGINE PARTS

PART NUMBER	DESCRIPTION	QTY
104-A5399	GASKET KIT, ENGINE OVERHAUL	1
102-A5399	LINER AND PISTON KIT	AR
159-A5399	OIL SEAL, CRANKSHAFT, REAR	1
227-A5399	OIL PUMP ASSEMBLY	1
233-A5399	ELEMENT KIT, BY-PASS OIL FILTER	1
234-A5399	ELEMENT KIT, MAIN OIL FILTER	1
445-A5399	ELEMENT KIT, MAIN AND BY-PASS OIL FILTER	1
236-A5399	ELEMENT, OIL COOLER	1
244-A5399	FUEL FILTER	1
252-A5399	PUMP ASSEMBLY, FUEL INJECTION	1
259-A5399	PUMP ASSEMBLY, FUEL FEED	1
274-A5399	WATER PUMP ASSEMBLY	1
279-A5399	THERMOSTAT KIT	1
292-A5399	STARTER ASSEMBLY	1
293-A5399	ALTERNATOR ASSEMBLY	1

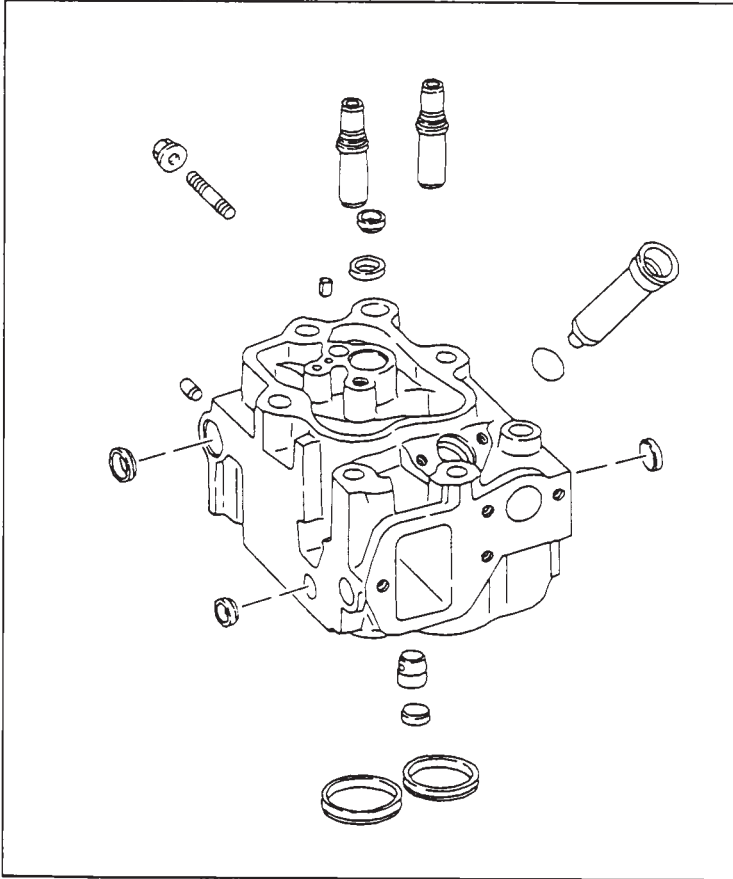
12L DIESEL CYLINDER HEAD COMPONENTS



ITEM	PART NUMBER	DESCRIPTION	QTY
01210	112-A5399	GASKET, CYLINDER HEAD	6
01296E	113-A5399	CAP, CYLINDER HEAD	12
01296EB	114-A5399	CAP, CYLINDER HEAD	6
01296F	115-A5399	CAP, CYLINDER HEAD	6
01296H	116-A5399	CAP, CYLINDER HEAD	12
01298B	117-A5399	BOLT, CYLINDER HEAD	36
01298C	118-A5399	BOLT, CYLINDER HEAD	6
03407	119-A5399	SEAT, EXHAUST VALVE	6
03411	120-A5399	SEAT, INTAKE VALVE	6
03460	121-A5399	GUIDE, INTAKE VALVE	6
03470	122-A5399	GUIDE, EXHAUST VALVE	6

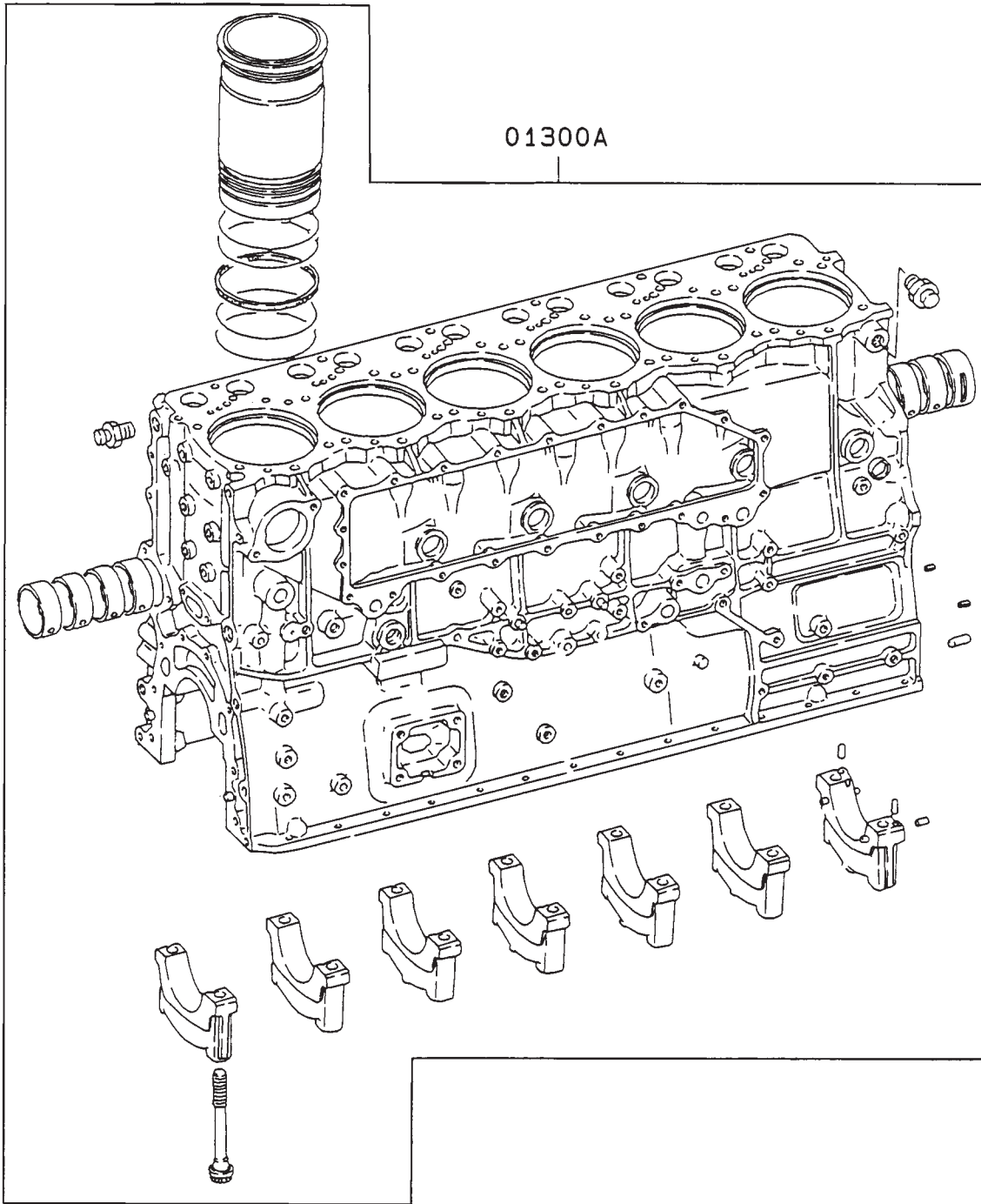
12L DIESEL CYLINDER HEAD ASSEMBLY

01200A



ITEM	PART NUMBER	DESCRIPTION	QTY
01200A	100-A5399	CYLINDER HEAD ASSEMBLY	6

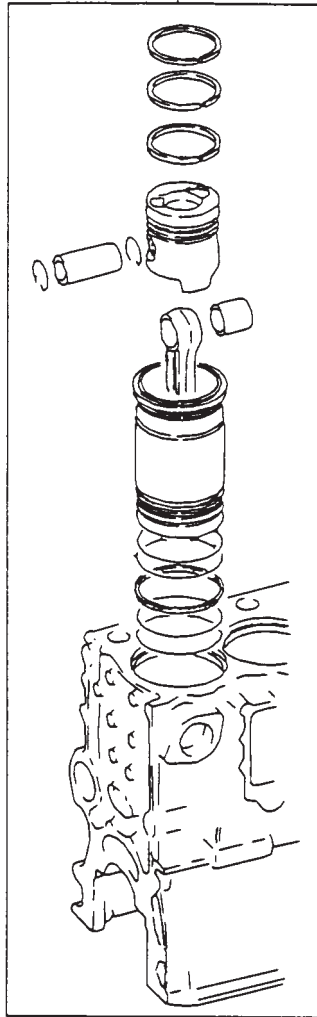
12L DIESEL CYLINDER BLOCK ASSEMBLY



ITEM	PART NUMBER	DESCRIPTION	QTY
01300A	101-A5399	CYLINDER BLOCK ASSEMBLY	1

12L DIESEL LINER AND PISTON KIT

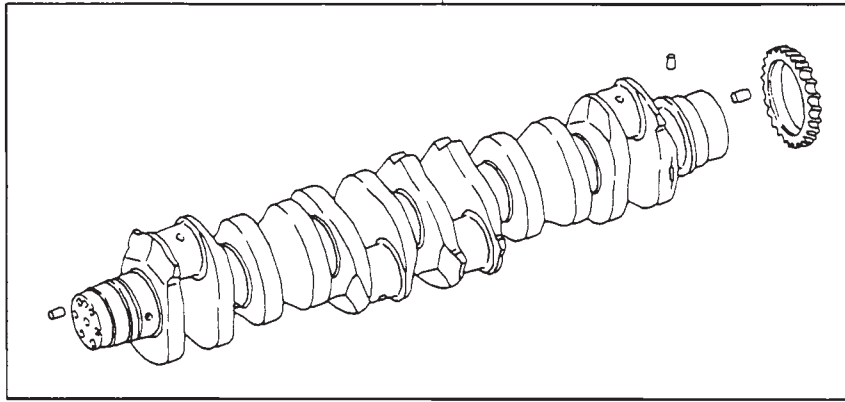
01340



ITEM	PART NUMBER	DESCRIPTION	QTY
01340	102-A5399	LINER AND PISTON KIT	3

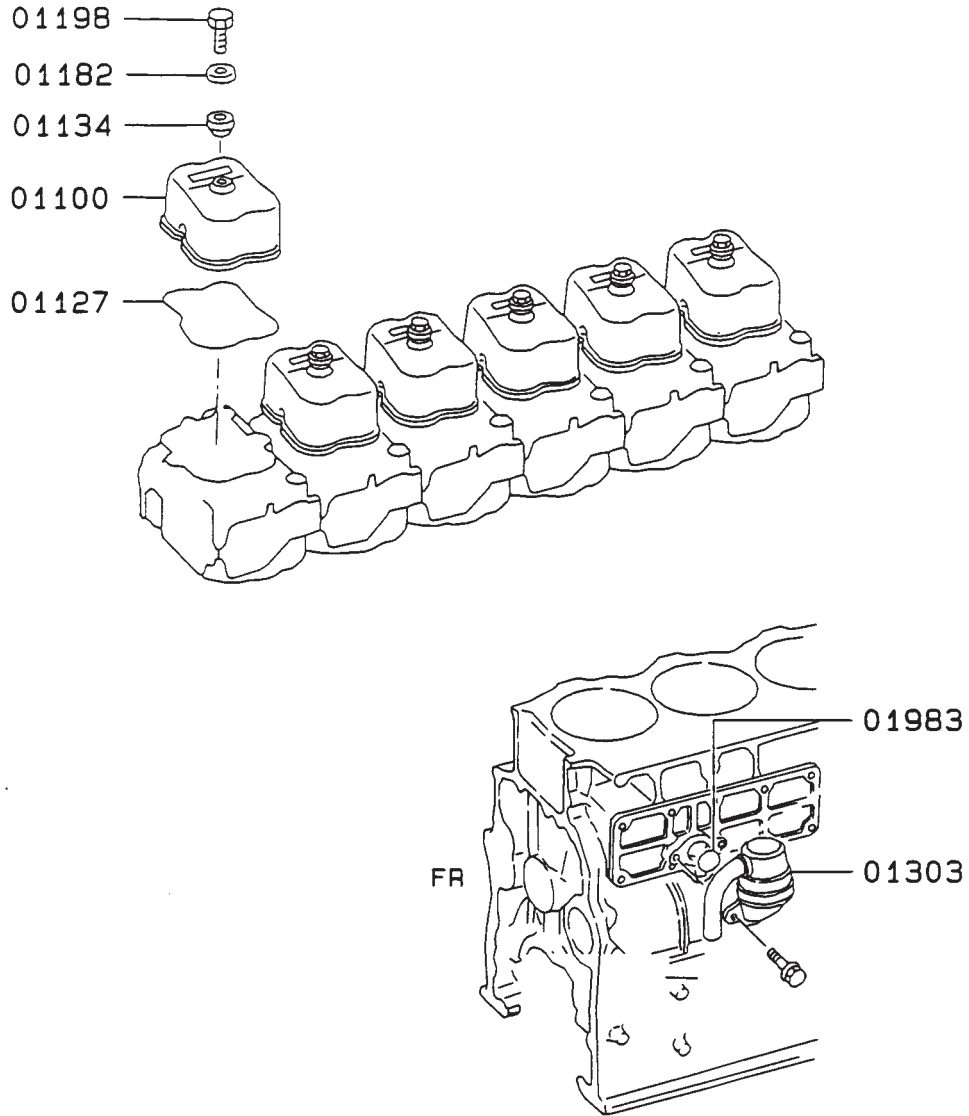
12L DIESEL CRANKSHAFT

03000A



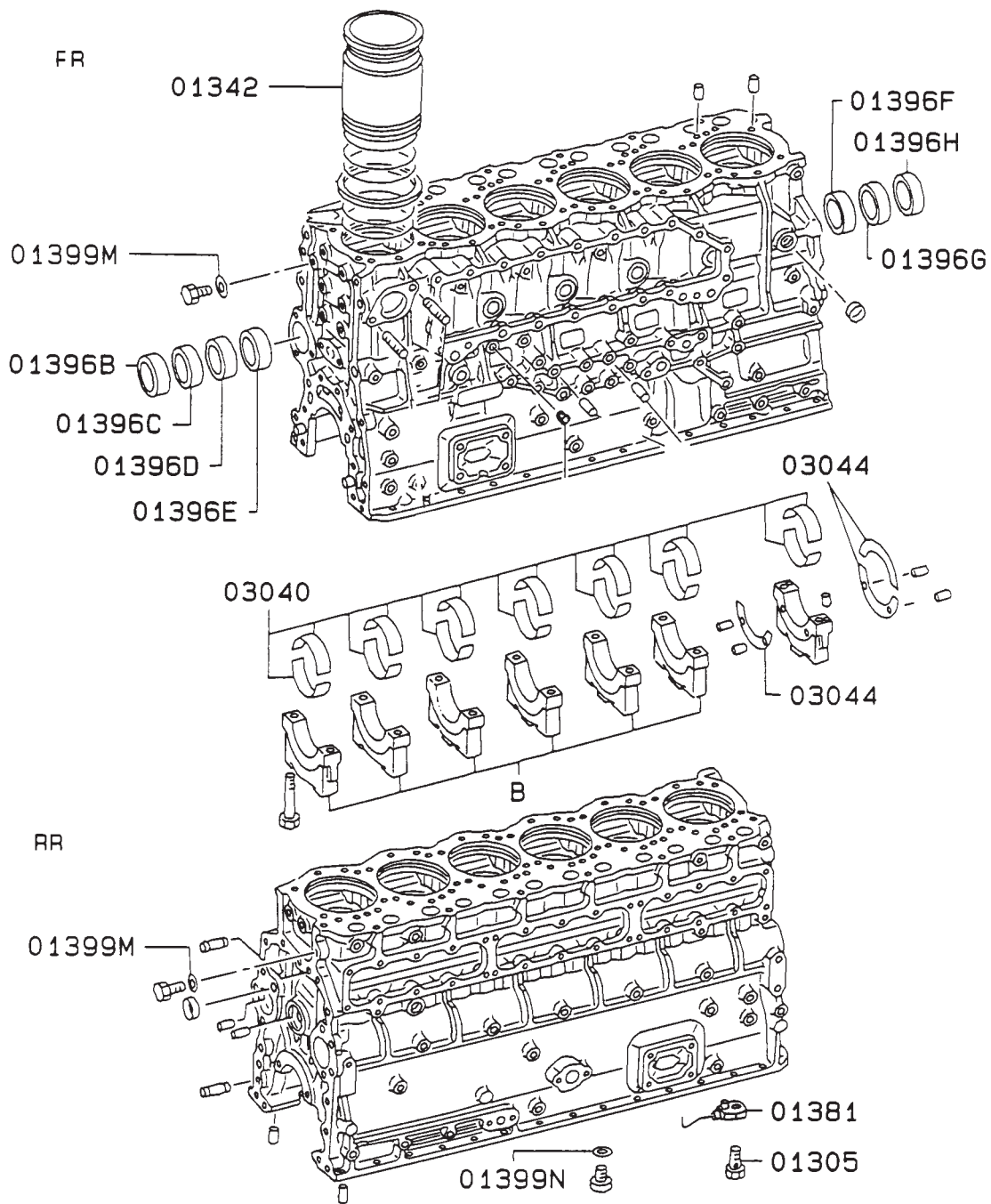
ITEM	PART NUMBER	DESCRIPTION	QTY
03000A	103-A5399	CRANKSHAFT ASSEMBLY	1

12L DIESEL ROCKER COVER AND BREATHER



ITEM	PART NUMBER	DESCRIPTION	QTY
01100	105-A5399	COVER, ROCKER	6
01127	106-A5399	O-RING, ROCKER COVER	6
01134	107-A5399	SEAL, ROCKER COVER BOLT	6
01182	108-A5399	WASHER, ROCKER COVER	6
01198	109-A5399	BOLT, ROCKER COVER	6
01303	110-A5399	BREATHER, ENGINE	1
01983	111-A5399	O-RING, ENGINE BREATHER	1

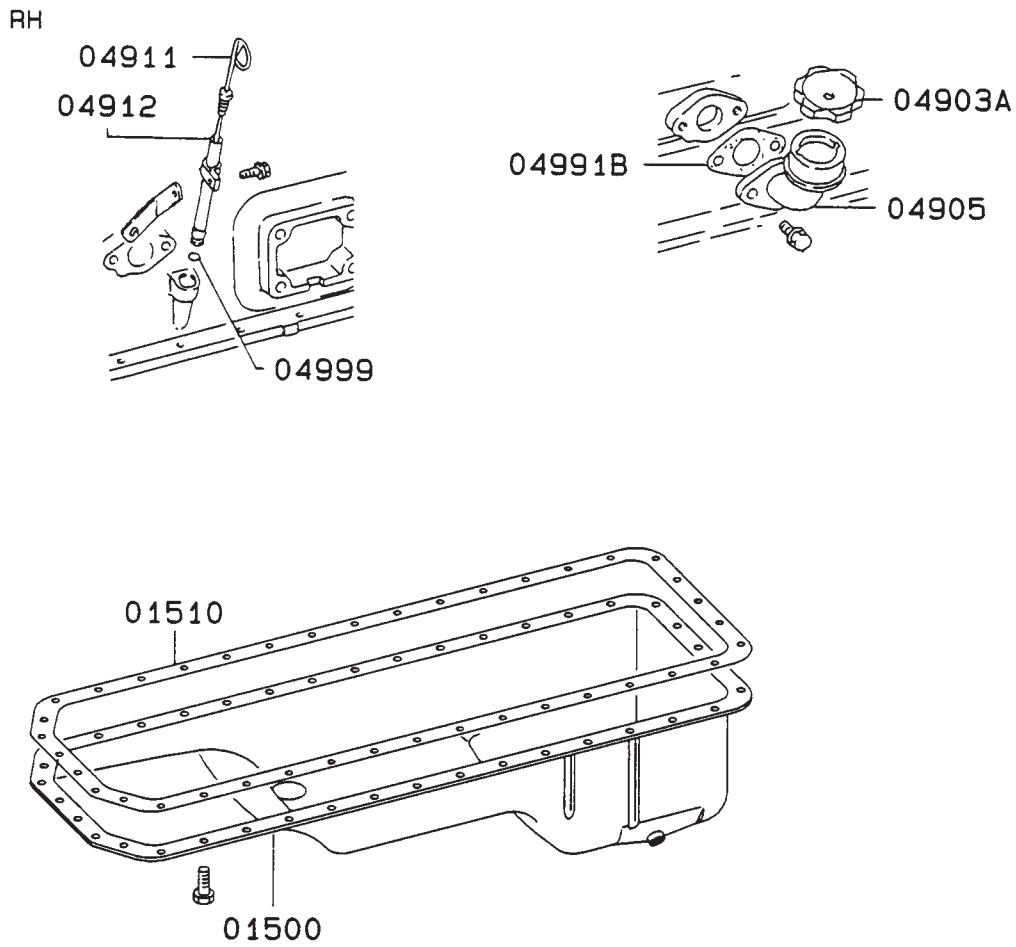
12L DIESEL CYLINDER BLOCK COMPONENTS



12L DIESEL CYLINDER BLOCK COMPONENTS

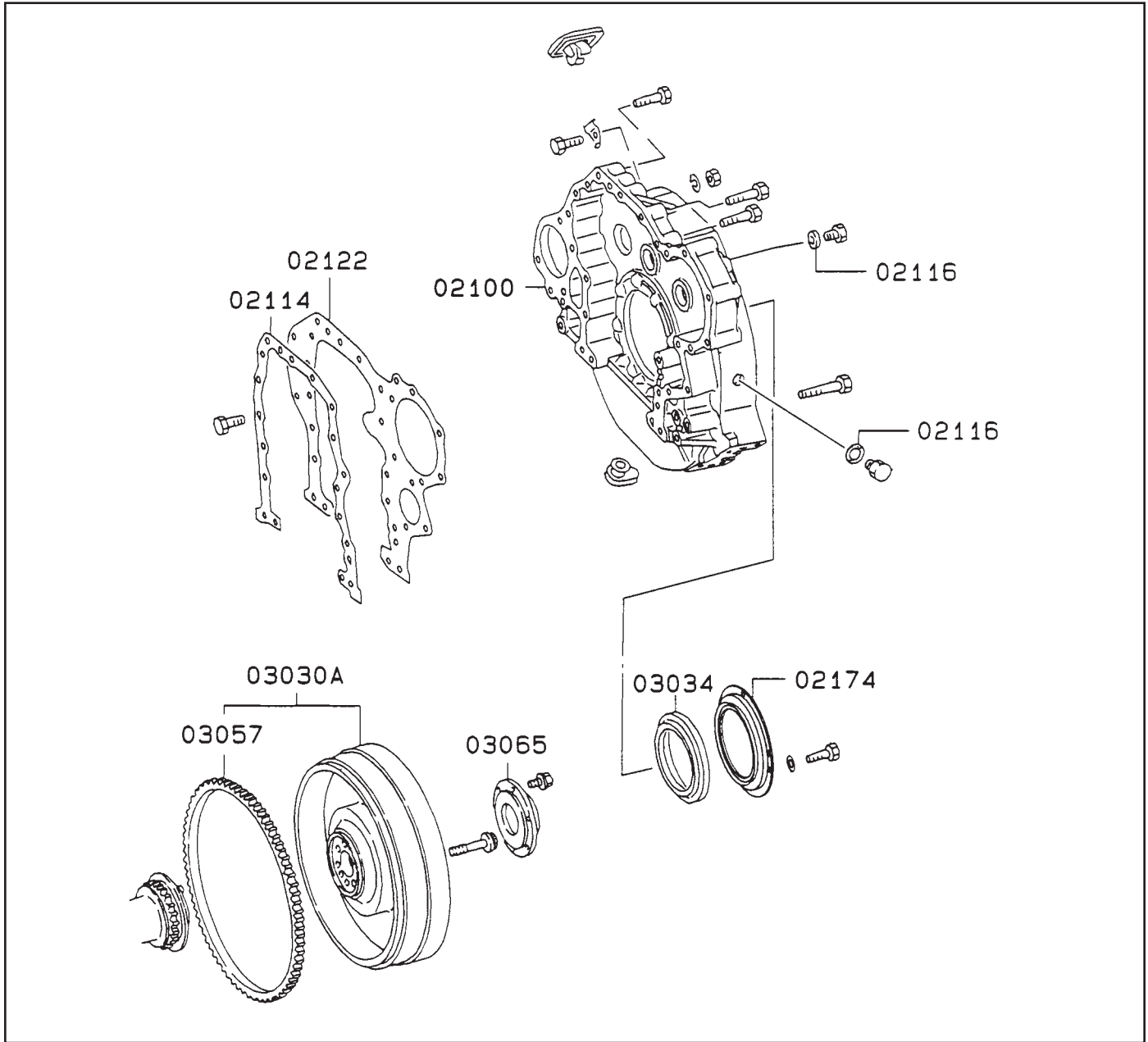
ITEM	PART NUMBER	DESCRIPTION	QTY
01305	123-A5399	CHECK VALVE, CYL. BLOCK PISTON LUBRICANT	6
01342	124-A5399	LINER, CYLINDER — "A" SIZE	AR
	125-A5399	LINER, CYLINDER — "B" SIZE	AR
	126-A5399	LINER, CYLINDER — "C" SIZE	AR
01381	127-A5399	OIL JET, CYLINDER	6
01396B	128-A5399	BUSHING, CYLINDER BLOCK	1
01396C	129-A5399	BUSHING, CYLINDER BLOCK	1
01396D	130-A5399	BUSHING, CYLINDER BLOCK	1
01396E	131-A5399	BUSHING, CYLINDER BLOCK	1
01396F	132-A5399	BUSHING, CYLINDER BLOCK	1
01396G	133-A5399	BUSHING, CYLINDER BLOCK	1
01396H	134-A5399	BUSHING, CYLINDER BLOCK	1
01399M	255-A5399	GASKET, CYLINDER BLOCK	2
01399N	430-A5399	GASKET, CYLINDER BLOCK	2
03040	135-A5399	BEARING SET, CRANKSHAFT — U/SIZE 0.25	1
	136-A5399	BEARING SET, CRANKSHAFT — U/SIZE 0.50	1
	137-A5399	BEARING SET, CRANKSHAFT — U/SIZE 0.75	1
	138-A5399	BEARING SET, CRANKSHAFT — U/SIZE 1.00	1
	139-A5399	BEARING SET, CRANKSHAFT — STD	1
03044	140-A5399	PLATE, CRANSHAFT THRUST — STD	3
	141-A5399	PLATE, CRANSHAFT THRUST — O/SIZE 0.15	3
	142-A5399	PLATE, CRANSHAFT THRUST — O/SIZE 0.30	3
	143-A5399	PLATE, CRANSHAFT THRUST — O/SIZE 0.45	3

12L DIESEL OIL PAN, FILLER AND GAUGE



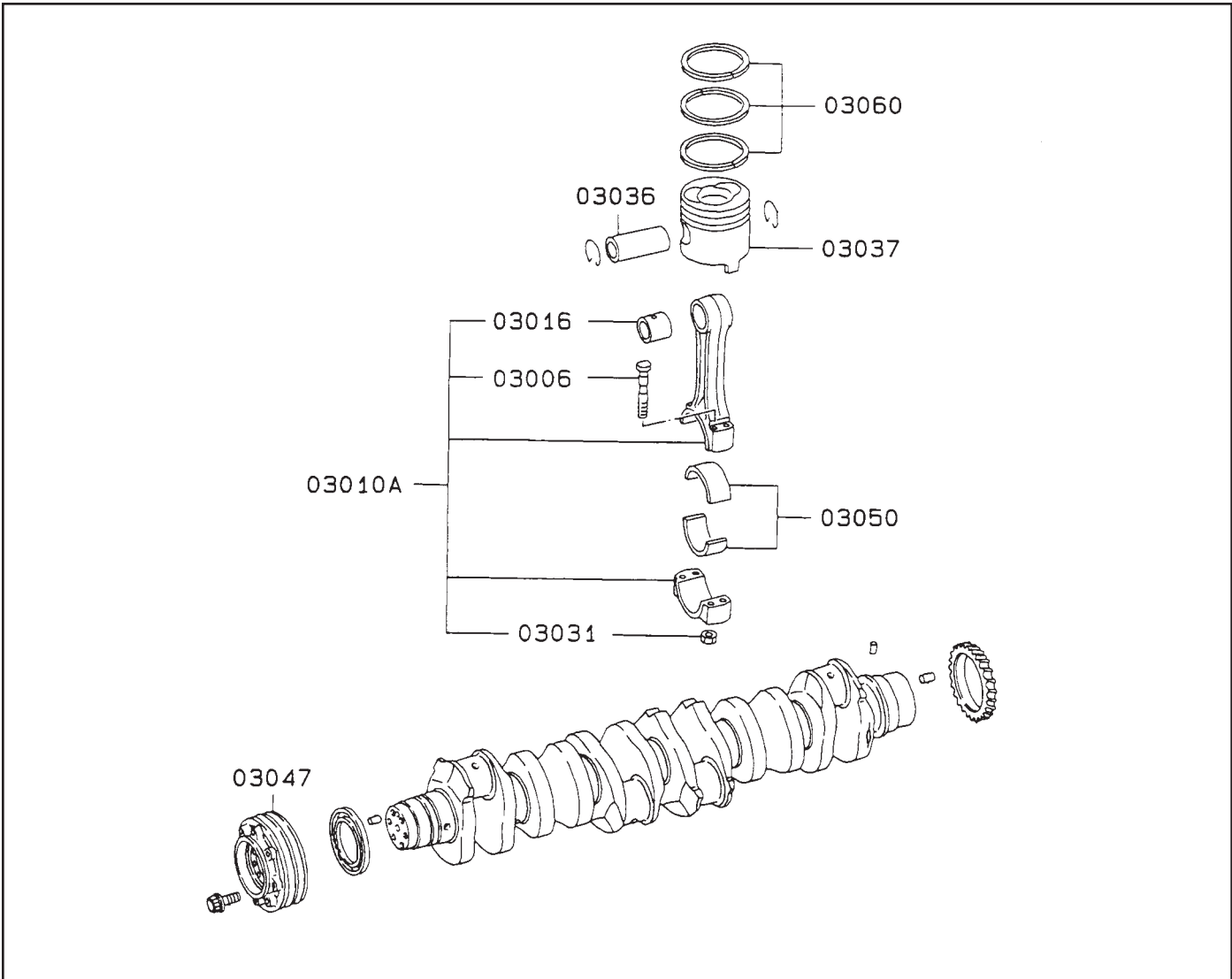
ITEM	PART NUMBER	DESCRIPTION	QTY
01500	144-A5399	OIL PAN, ENGINE	1
01510	145-A5399	GASKET, ENGINE OIL PAN	1
04903A	148-A5399	CAP ASSY, ENGINE OIL FILLER	1
04905	149-A5399	FILLER, ENGINE OIL	1
04911	150-A5399	GAUGE, ENGINE OIL LEVEL	1
04912	151-A5399	GUIDE, ENG. OIL LEVEL GAUGE	1
04991B	152-A5399	GASKET, ENG. OIL FILLER	1
04999	153-A5399	O-RING, ENG. OIL FILLER	1

12L DIESEL FLYWHEEL AND HOUSING



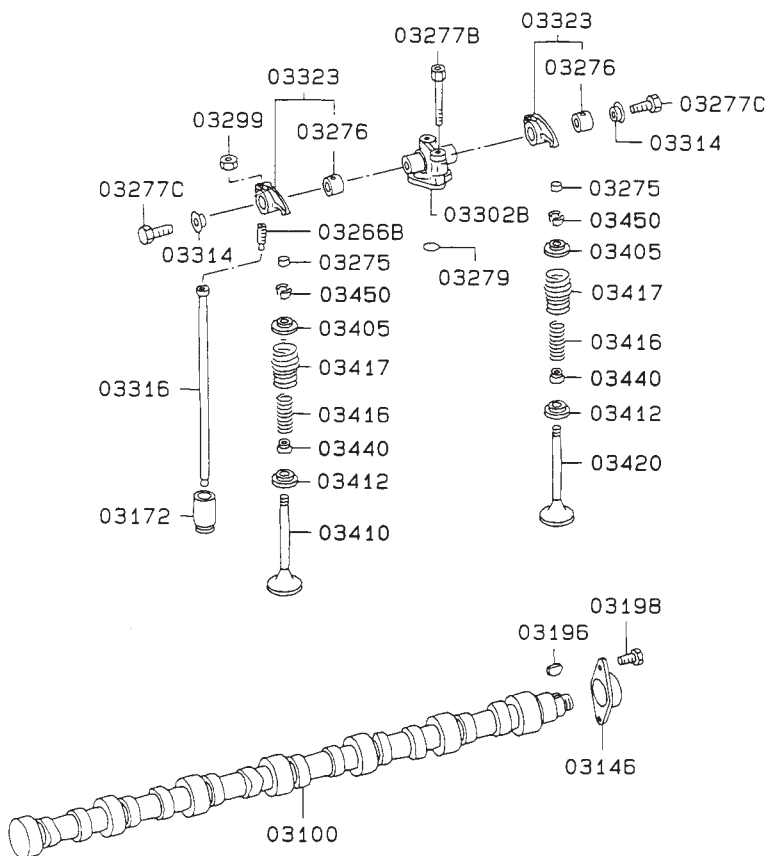
ITEM	PART NUMBER	DESCRIPTION	QTY
02100	154-A5399	HOUSING, FLYWHEEL	1
02114	155-A5399	GASKET, ENGINE REAR PLATE	1
02116	432-A5399	GASKET, FLYWHEEL HOUSING	1
02122	156-A5399	PLATE, CYLINDER BLOCK, REAR	1
02174	157-A5399	RETAINER, FLYWHEEL HOUSING OIL SEAL	1
03030A	158-A5399	FLYWHEEL ASSY	1
03034	159-A5399	OIL SEAL, CRANKSHAFT, REAR	1
03057	160-A5399	RING GEAR, FLYWHEEL	1
03065	161-A5399	RETAINER, FLYWHEEL DRIVE PINION BEARING	1

12L DIESEL PISTON AND CONNECTING ROD



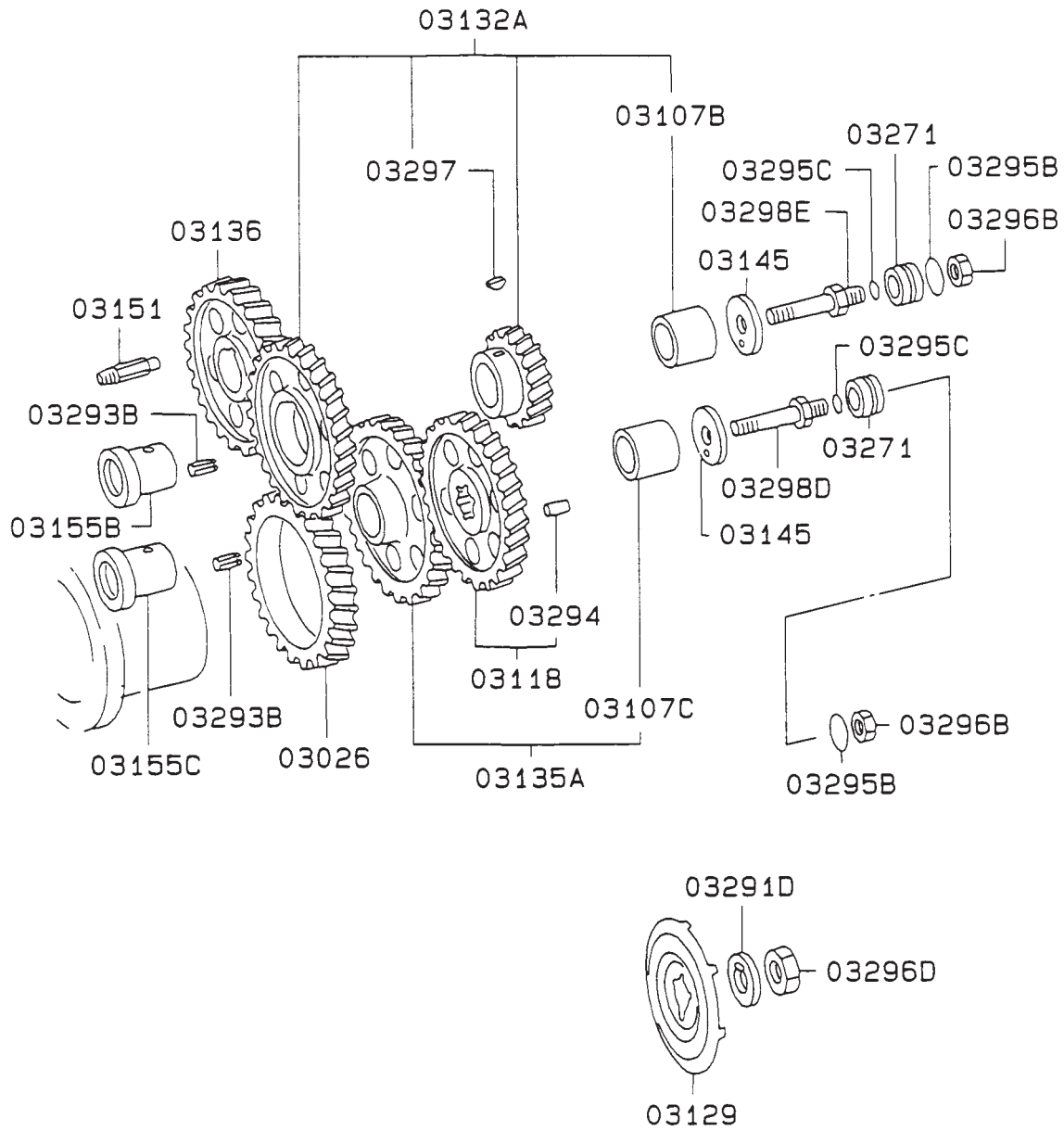
ITEM	PART NUMBER	DESCRIPTION	QTY
03006	433-A5399	BOLT, CONNECTING ROD	24
03010A	162-A5399	CONNECTING ROD ASSY	6
03016	163-A5399	BUSHING, CONNECTING ROD	6
03031	434-A5399	NUT, CONNECTING ROD	24
03036	164-A5399	PIN, PISTON	6
03037	165-A5399	PISTON — O.S. 0.50	6
	166-A5399	PISTON — O.S. 0.75	6
	167-A5399	PISTON — O.S. 1.00	6
03047	168-A5399	PULLEY, CRANKSHAFT	1
03050	169-A5399	BEARING SET, CONNECTING ROD — PLAIN, STD	1
	170-A5399	BEARING SET, CONNECTING ROD — PLAIN, U.S. 0.25	1
	435-A5399	BEARING SET, CONNECTING ROD — PLAIN, U.S. 0.50	1
	436-A5399	BEARING SET, CONNECTING ROD — PLAIN, U.S. 0.75	1
	437-A5399	BEARING SET, CONNECTING ROD — PLAIN, U.S. 1.00	1
03060	171-A5399	RING SET, PISTON — STD	1
	172-A5399	RING SET, PISTON — O.S. 0.50	1
	173-A5399	RING SET, PISTON — O.S. 0.75	1
	174-A5399	RING SET, PISTON — O.S. 1.00	1

12L DIESEL CAMSHAFT AND VALVE



ITEM	PART NUMBER	DESCRIPTION	QTY
03100	175-A5399	CAMSHAFT	1
03146	176-A5399	PLATE, CAMSHAFT THRUST	1
03172	177-A5399	TAPPET, VALVE	12
03196	178-A5399	KEY, CAMSHAFT	1
03198	179-A5399	BOLT, CAMSHAFT	2
03266B	180-A5399	SCREW, VALVE GEAR TRAIN	12
03275	181-A5399	CAP, VALVE GEAR TRAIN	12
03276	182-A5399	BUSHING, VALVE GEAR TRAIN	12
03277B	183-A5399	BOLT, VALVE GEAR TRAIN	6
03277C	184-A5399	BOLT, VALVE GEAR TRAIN	12
03279	185-A5399	O-RING, VALVE GEAR TRAIN	6
03299	186-A5399	NUT, VALVE GEAR TRAIN	12
03302B	187-A5399	BRACKET, ROCKER SHAFT	6
03314	188-A5399	PLATE, ROCKER SHAFT THRUST	12
03316	189-A5399	PUSH ROD, ROCKER ARM	12
03323	190-A5399	ROCKER ARM, INTAKE AND EXHAUST VALVE	12
03405	191-A5399	RETAINER, VALVE SPRING	12
03410	192-A5399	VALVE, INTAKE	6
03412	193-A5399	SEAT, VALVE SPRING	12
03416	194-A5399	SPRING, VALVE — INNER	12
03417	195-A5399	SPRING, VALVE — OUTER	12
03420	196-A5399	VALVE, EXHAUST	6
03440	197-A5399	SEAL, VALVE STEM	12
03450	198-A5399	LOCK, VALVE SPRING RETAINER	24

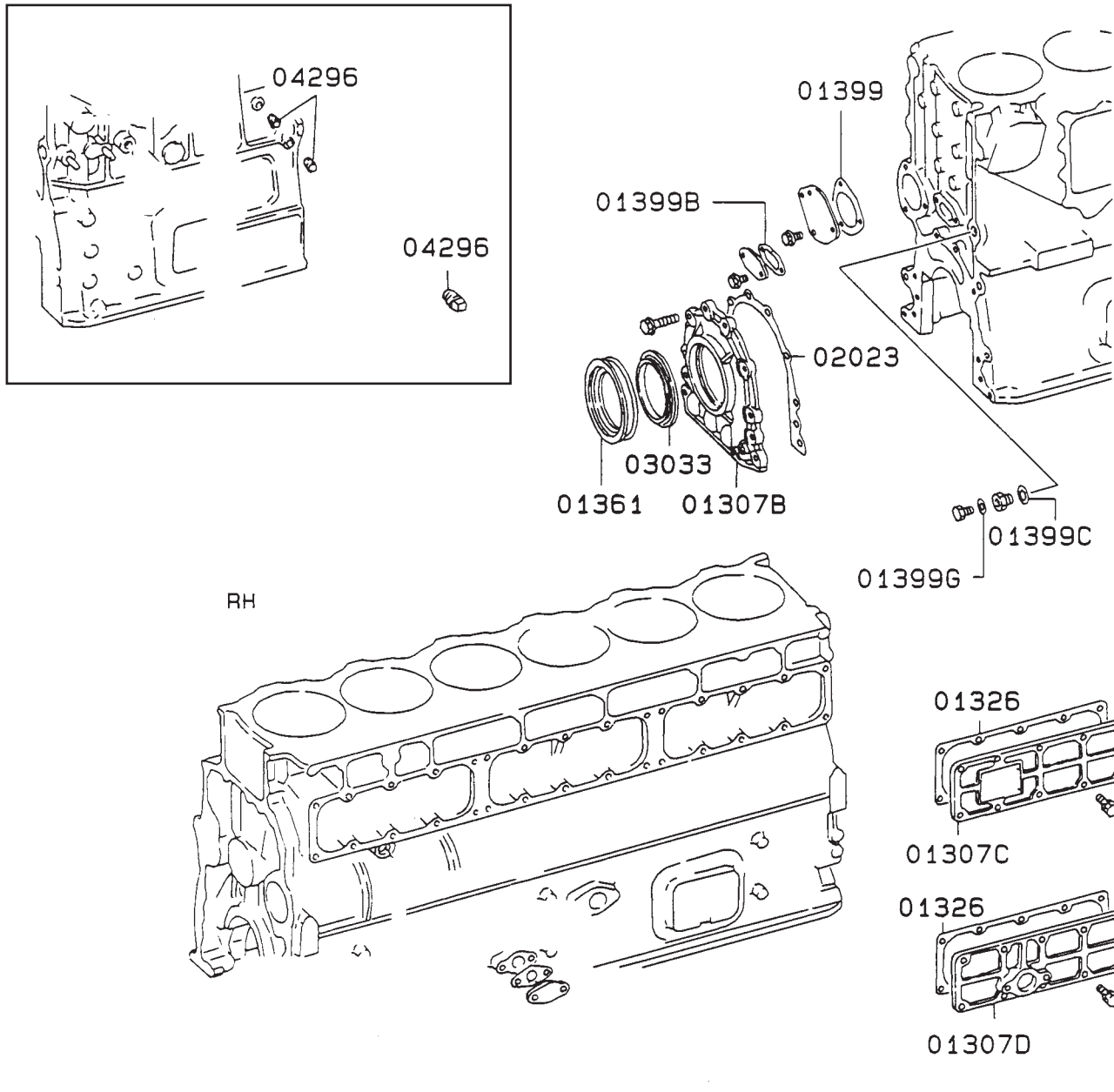
12L DIESEL TIMING GEAR



12L DIESEL TIMING GEAR

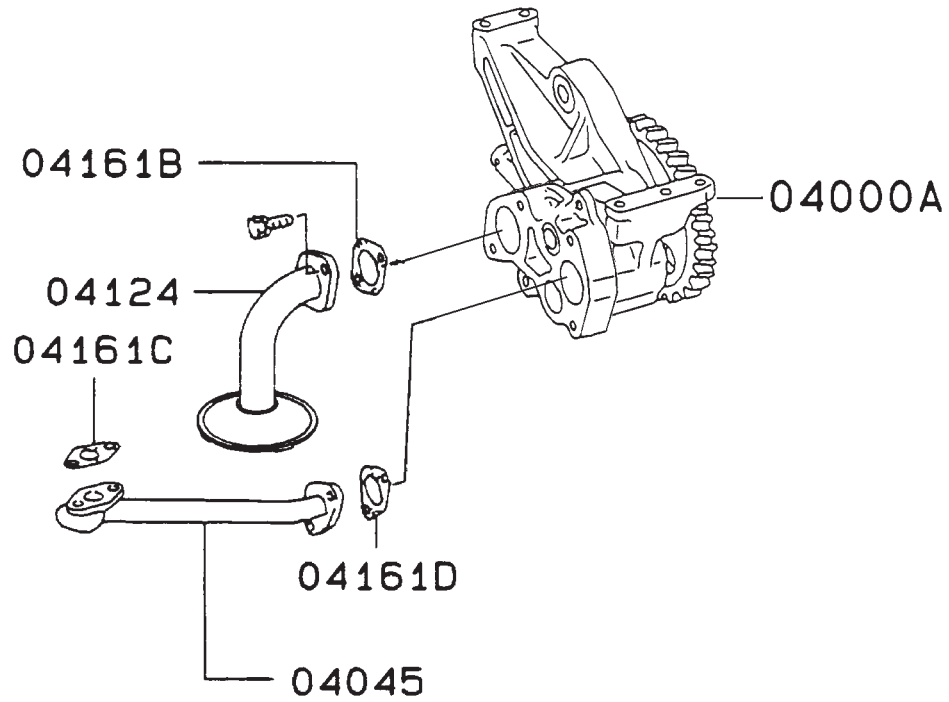
ITEM	PART NUMBER	DESCRIPTION	QTY
03026	199-A5399	GEAR, CRANKSHAFT	1
03107B	200-A5399	BUSHING, TIMING GEAR TRAIN	1
03107C	201-A5399	BUSHING, TIMING GEAR TRAIN	1
03118	202-A5399	GEAR, INJECTION PUMP DRIVE	1
03129	203-A5399	PLATE, INJECTION PUMP GEAR	1
03132A	204-A5399	GEAR ASSY, CAM IDLER	1
03135A	205-A5399	GEAR ASSY, INJECTION PUMP IDLER	1
03136	206-A5399	GEAR, CAMSHAFT	1
03145	207-A5399	PLATE, CAM IDLER GEAR THRUST	2
03151	208-A5399	PLUG, TIMING GEAR TRAIN	1
03155B	209-A5399	SHAFT, CAM IDLER GEAR	1
03155C	210-A5399	SHAFT, CAM IDLER GEAR	1
03271	211-A5399	COLLAR, TIMING GEAR TRAIN	2
03291D	212-A5399	WASHER, TIMING GEAR TRAIN	1
03293B	213-A5399	SPRING PIN, TIMING GEAR TRAIN	2
03294	214-A5399	PIN, TIMING GEAR TRAIN	2
03295B	215-A5399	O-RING, TIMING GEAR TRAIN	2
03295C	216-A5399	O-RING, TIMING GEAR TRAIN	2
03296B	217-A5399	NUT, TIMING GEAR TRAIN	2
03296D	218-A5399	NUT, TIMING GEAR TRAIN	1
03297	178-A5399	KEY, TIMING GEAR TRAIN	1
03298D	220-A5399	BOLT, TIMING GEAR TRAIN	1
03298E	221-A5399	BOLT, TIMING GEAR TRAIN	1

12L DIESEL ENGINE COVERS



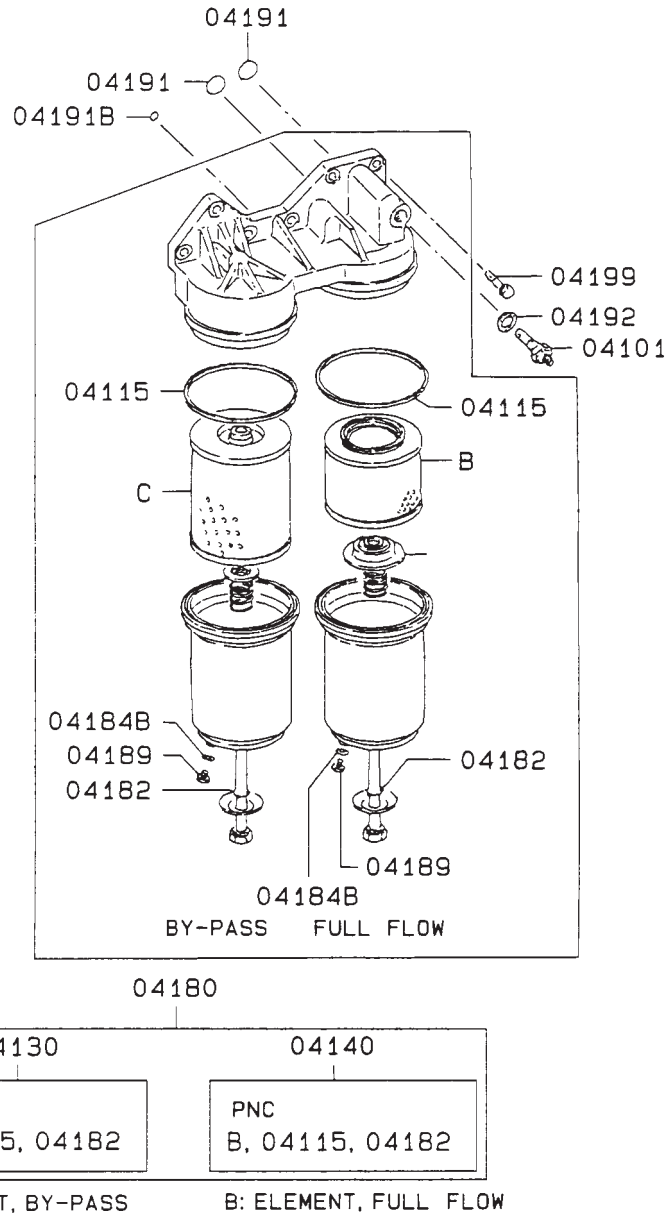
ITEM	PART NUMBER	DESCRIPTION	QTY
01307B	222-A5399	COVER, CYLINDER BLOCK	1
01307C	294-A5399	COVER, CYLINDER BLOCK	1
01307D	295-A5399	COVER, CYLINDER BLOCK	2
01326	223-A5399	GASKET, CYLINDER BLOCK SIDE COVER	3
01361	224-A5399	OIL SEAL, CYLINDER BLOCK FRONT COVER	1
01399	438-A5399	GASKET, CYLINDER BLOCK	1
01399B	439-A5399	GASKET, CYLINDER BLOCK	1
01399C	440-A5399	GASKET, CYLINDER BLOCK	1
01399G	441-A5399	GASKET, CYLINDER BLOCK	1
02023	225-A5399	GASKET, FRONT OIL SEAL CASE	1
03033	226-A5399	OIL SEAL, CRANKSHAFT, FRONT	1
04296	442-A5399	PLUG	5

12L DIESEL OIL PUMP AND STRAINER



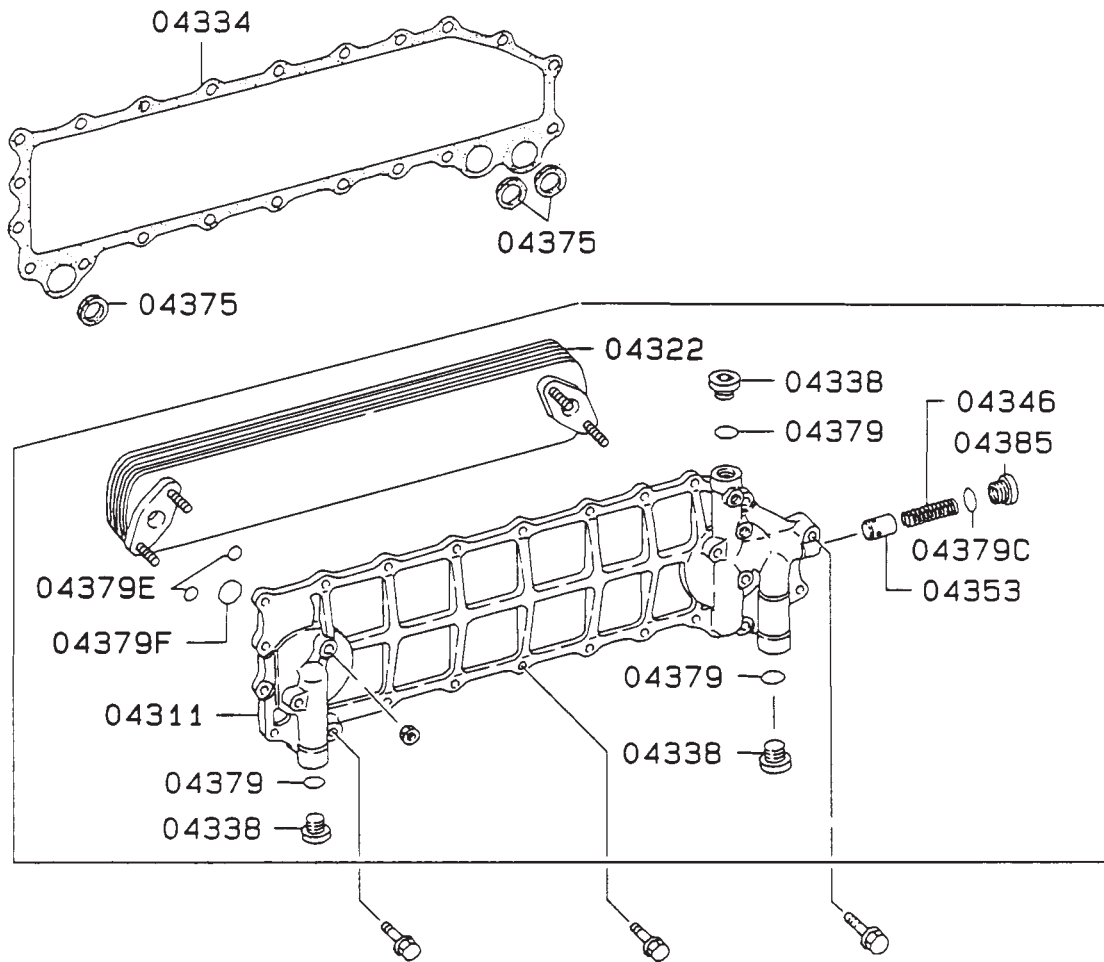
ITEM	PART NUMBER	DESCRIPTION	QTY
04000A	227-A5399	OIL PUMP ASSEMBLY	1
04045	228-A5399	TUBE, ENGINE OIL PUMP OUTLET	1
04124	229-A5399	STRAINER, ENGINE OIL PAN	1
04161B	230-A5399	GASKET, OIL STRAINER	1
04161C	231-A5399	GASKET, OIL STRAINER	1
04161D	232-A5399	GASKET, OIL STRAINER	1

12L DIESEL OIL FILTER



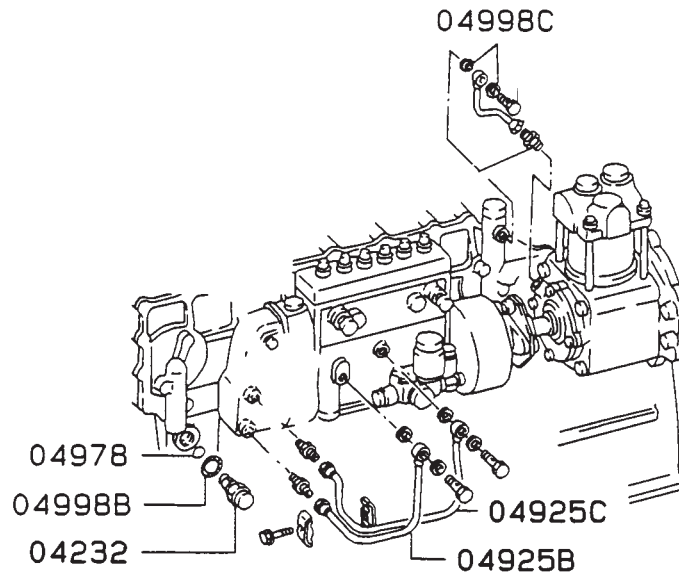
ITEM	PART NUMBER	DESCRIPTION	QTY
04101	443-A5399	SWITCH, OIL FILTER BY-PASS	1
04115	444-A5399	GASKET, OIL FILTER CASE	2
04130	233-A5399	ELEMENT KIT, BY-PASS OIL FILTER	1
04140	234-A5399	ELEMENT KIT, OIL FILTER	1
04180	445-A5399	ELEMENT KIT, MAIN AND BY-PASS OIL FILTER	1
04182	446-A5399	O-RING, OIL FILTER INNER	2
04184B	255-A5399	GASKET, OIL FILTER INNER	2
04189	448-A5399	PLUG, OIL FILTER	2
04191	449-A5399	O-RING, OIL FILTER	2
04191B	450-A5399	O-RING, OIL FILTER	1
04192	451-A5399	GASKET, OIL FILTER	1
04199	452-A5399	BOLT, OIL FILTER	7

12L DIESEL OIL COOLER



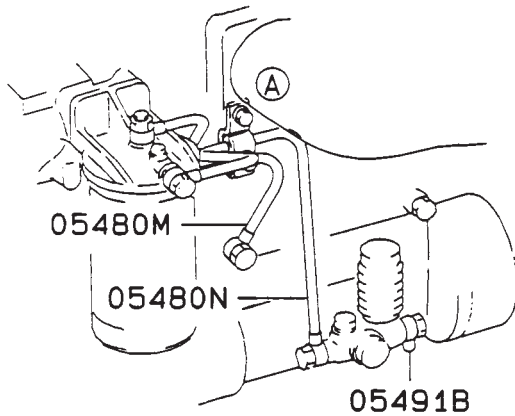
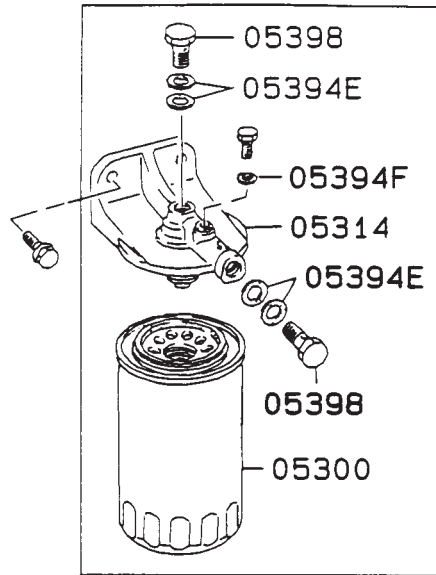
ITEM	PART NUMBER	DESCRIPTION	QTY
04311	235-A5399	COVER, ENGINE OIL COOLER	1
04322	236-A5399	ELEMENT, ENGINE OIL COOLER	1
04334	237-A5399	GASKET, ENGINR OIL COOLER COVER	1
04338	453-A5399	PLUG, ENGINE OIL COOLER	3
04346	454-A5399	SPRING, ENGINE OIL COOLER BY-PASS VALVE	1
04353	455-A5399	VALVE, ENGINE OIL COOLER BY-PASS	1
04375	238-A5399	O-RING, ENGINE OIL COOLER	3
04379	456-A5399	O-RING, ENGINE OIL COOLER, INNER	3
04379C	457-A5399	O-RING, ENGINE OIL COOLER, INNER	1
04379E	239-A5399	O-RING, ENGINE OIL COOLER, INNER	4
04379F	240-A5399	O-RING, ENGINE OIL COOLER, INNER	2
04385	458-A5399	PLUG, ENGINE OIL COOLER, INNER	1

12L DIESEL OIL LINES



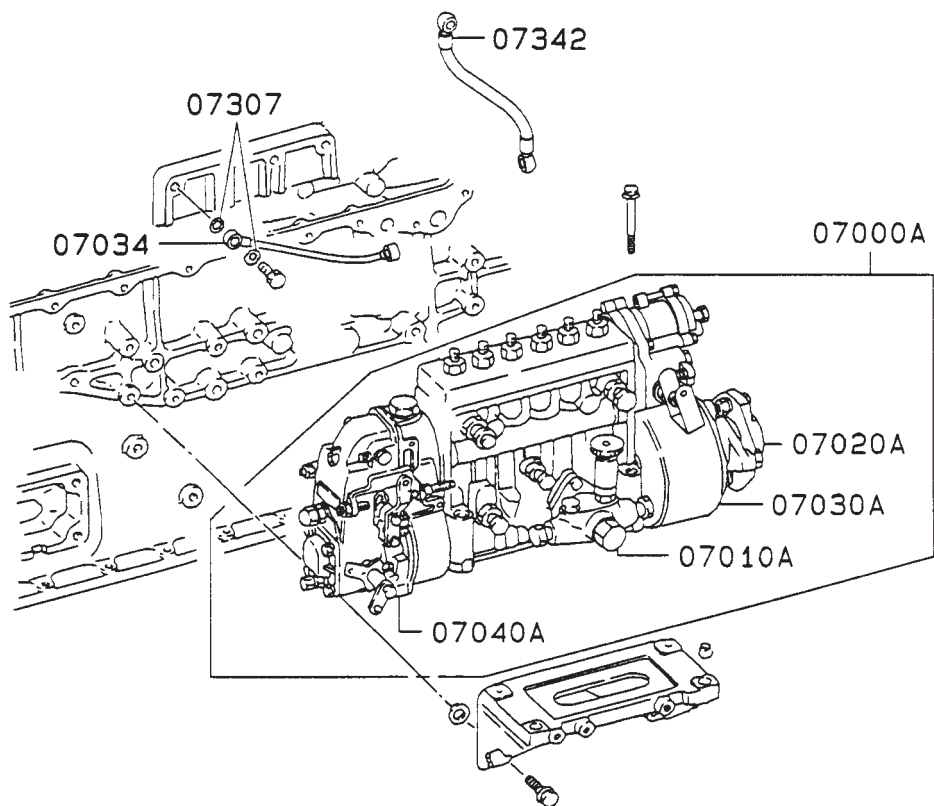
ITEM	PART NUMBER	DESCRIPTION	QTY
04232	241-A5399	VALVE, ENG. OIL PRESSURE REGULATING	1
04925B	242-A5399	TUBE, ENGINE OIL LINE	1
04925C	243-A5399	TUBE, ENGINE OIL LINE	1
04978	459-A5399	O-RING, ENGINE OIL LINE	1
04998B	440-A5399	GASKET, ENGINE OIL LINE	1
04998C	255-A5399	GASKET, ENGINE OIL LINE	2

12L DIESEL FUEL FILTER

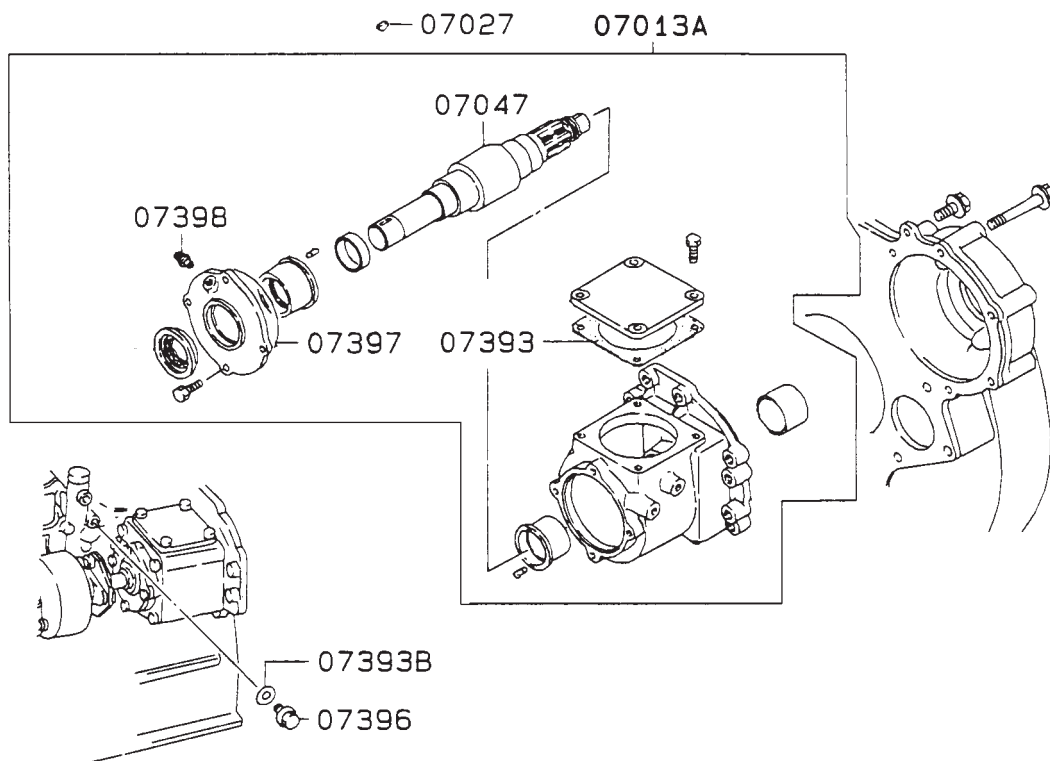


ITEM	PART NUMBER	DESCRIPTION	QTY
05300	244-A5399	FUEL FILTER	1
05314	245-A5399	HEAD, FUEL FILTER	1
05394E	246-A5399	GASKET, FUEL FILTER	4
05349F	247-A5399	GASKET, FUEL FILTER	1
05398	248-A5399	EYEBOLT, FUEL FILTER	2
05480M	249-A5399	TUBE, FUEL LINE	1
05480N	250-A5399	TUBE, FUEL LINE	1
05491B	251-A5399	JOINT, FUEL LINE	1

12L DIESEL FUEL INJECTION PUMP



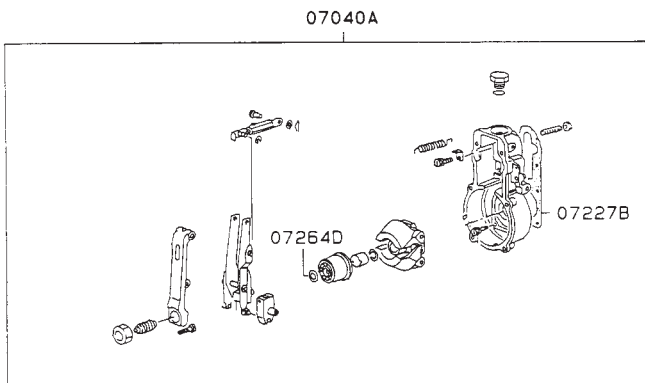
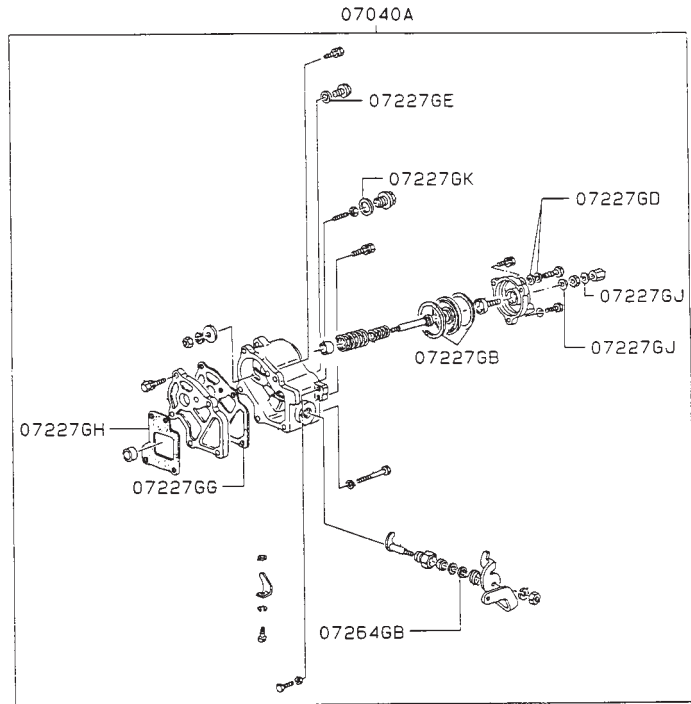
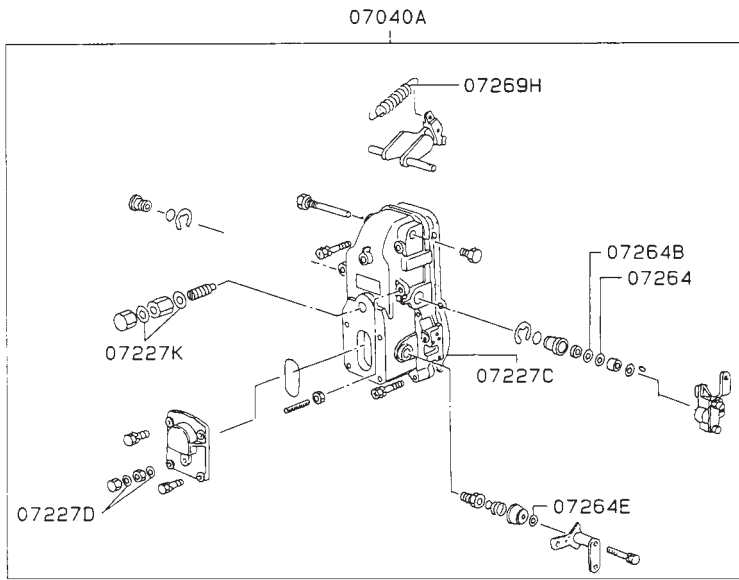
INJECTION PUMP DRIVE



12L DIESEL FUEL INJECTION PUMP

ITEM	PART NUMBER	DESCRIPTION	QTY
07000A	252-A5399	PUMP ASSEMBLY, FUEL INJECTION	1
07010A	259-A5399	PUMP ASSEMBLY, FUEL FEED	1
07013A	253-A5399	CASE ASSEMBLY, INJECTION PUMP DRIVE	1
07020A	260-A5399	COUPLING ASSEMBLY, INJECTION PUMP	1
07027	462-A5399	KEY, INJECTION PUMP CAMSHAFT DRIVE GEAR	1
07030A	463-A5399	TIMER ASSEMBLY, INJECTION PUMP	1
07034	254-A5399	PIPE, INJECTION PUMP BOOST COMPENSATOR	1
07040A	257-A5399	GOVERNOR ASSEMBLY, INJECTION PUMP	1
07047	465-A5399	SHAFT, INJECTION PUMP DRIVE GEAR	1
07307	255-A5399	GASKET, FUEL FEED PUMP	2
07342	256-A5399	HOSE, INJECTION PUMP	1
07393	466-A5399	GASKET, INJECTION PUMP DRIVE	1
07393B	432-A5399	GASKET, INJECTION PUMP DRIVE	1
07396	468-A5399	PLUG, INJECTION PUMP DRIVE	1
07397	469-A5399	O-RING, INJECTION PUMP DRIVE	1
07398	470-A5399	CONNECTOR, INJECTION PUMP DRIVE	1

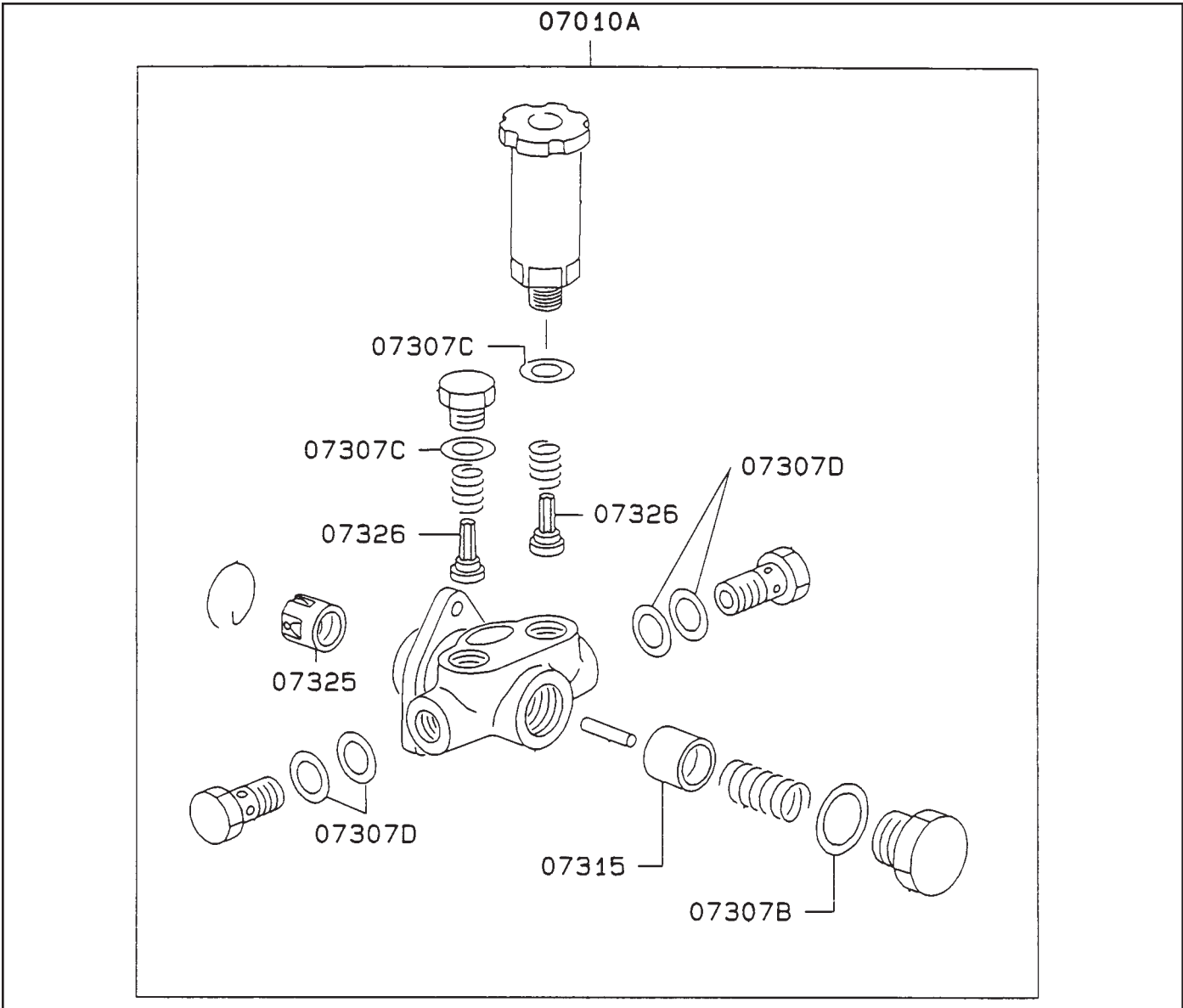
12L DIESEL GOVERNOR



12L DIESEL GOVERNOR

ITEM	PART NUMBER	DESCRIPTION	QTY
07040A	257-A5399	GOVERNOR ASSEMBLY, INJECTION PUMP	1
07227B	471-A5399	GASKET, INJECTION PUMP GOVERNOR	1
07227C	472-A5399	GASKET, INJECTION PUMP GOVERNOR	1
07227D	473-A5399	GASKET, INJECTION PUMP GOVERNOR	2
07227GB	474-A5399	GASKET, INJECTION PUMP GOVERNOR	2
07227GD	475-A5399	GASKET, INJECTION PUMP GOVERNOR	2
07227GE	476-A5399	GASKET, INJECTION PUMP GOVERNOR	1
07227GG	477-A5399	GASKET, INJECTION PUMP GOVERNOR	1
07227GH	478-A5399	GASKET, INJECTION PUMP GOVERNOR	1
07227GJ	479-A5399	GASKET, INJECTION PUMP GOVERNOR	2
07227GK	480-A5399	GASKET, INJECTION PUMP GOVERNOR	1
07227K	481-A5399	GASKET, INJECTION PUMP GOVERNOR	2
07262GB	482-A5399	SHAFT, INJECTION PUMP GOVERNOR	1
07264	483-A5399	SHIM, INJECTION PUMP GOVERNOR, 0.5	AR
07264B	484-A5399	SHIM, INJECTION PUMP GOVERNOR	AR
07264D	485-A5399	SHIM, INJECTION PUMP GOVERNOR, T=0.20	AR
	486-A5399	SHIM, INJECTION PUMP GOVERNOR, T=0.30	AR
	487-A5399	SHIM, INJECTION PUMP GOVERNOR, T=0.40	AR
	488-A5399	SHIM, INJECTION PUMP GOVERNOR, T=0.50	AR
	489-A5399	SHIM, INJECTION PUMP GOVERNOR, T=1.00	AR
	490-A5399	SHIM, INJECTION PUMP GOVERNOR, T=1.50	AR
	491-A5399	SHIM, INJECTION PUMP GOVERNOR, T=2.00	AR
	492-A5399	SHIM, INJECTION PUMP GOVERNOR, T=3.00	AR
	493-A5399	SHIM, INJECTION PUMP GOVERNOR, T=4.00	AR
07264E	494-A5399	SHIM, INJECTION PUMP GOVERNOR, T=0.20	AR
	495-A5399	SHIM, INJECTION PUMP GOVERNOR, T=0.25	AR
	496-A5399	SHIM, INJECTION PUMP GOVERNOR, T=0.30	AR
	497-A5399	SHIM, INJECTION PUMP GOVERNOR, T=0.35	AR
	498-A5399	SHIM, INJECTION PUMP GOVERNOR, T=0.40	AR
	499-A5399	SHIM, INJECTION PUMP GOVERNOR, T=0.50	AR
07264GB	500-A5399	SHIM, INJECTION PUMP GOVERNOR	AR
	501-A5399	SHIM, INJECTION PUMP GOVERNOR, T=0.20	AR
07269H	258-A5399	SPRING, INJECTION PUMP GOVERNOR	1

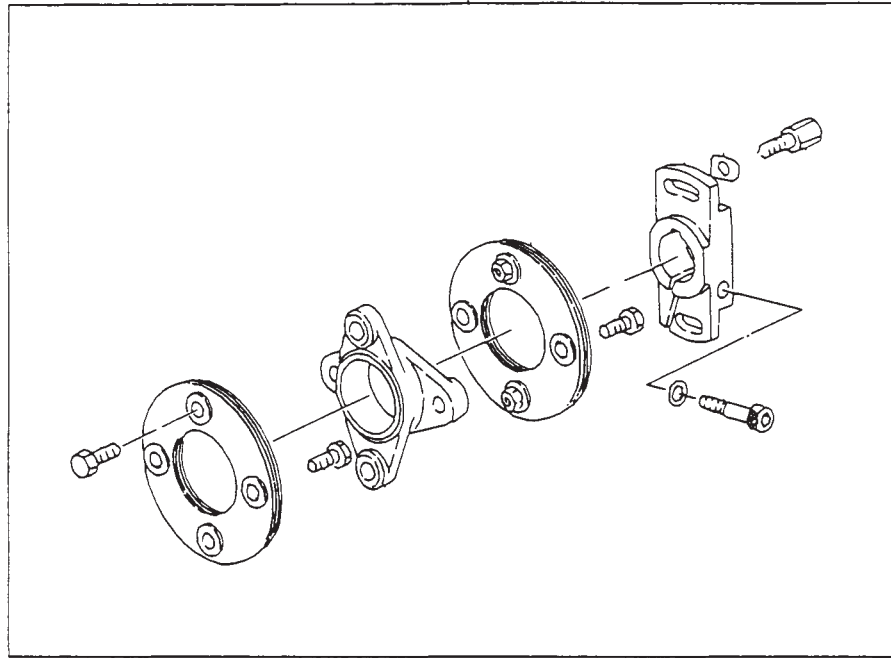
12L DIESEL FUEL FEED PUMP



ITEM	PART NUMBER	DESCRIPTION	QTY
07010A	259-A5399	PUMP ASSEMBLY, INJECTION PUMP FUEL FEED	1
07307B	502-A5399	GASKET, FUEL FEED PUMP	1
07307C	503-A5399	GASKET, FUEL FEED PUMP	2
07307D	504-A5399	GASKET, FUEL FEED PUMP	4
07315	505-A5399	PISTON, FUEL FEED PUMP	1
07325	506-A5399	TAPPET, FUEL FEED PUMP	1
07326	507-A5399	VALVE, FUEL FEED PUMP	2

12L DIESEL COUPLING

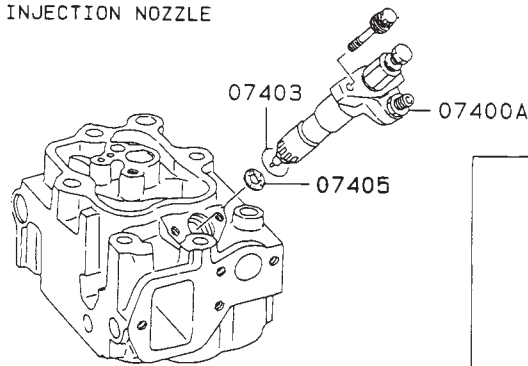
07020A



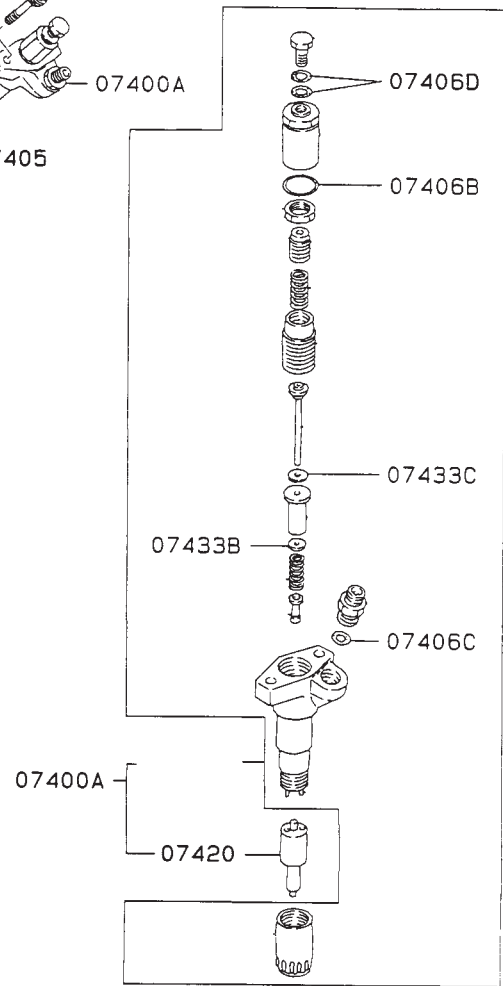
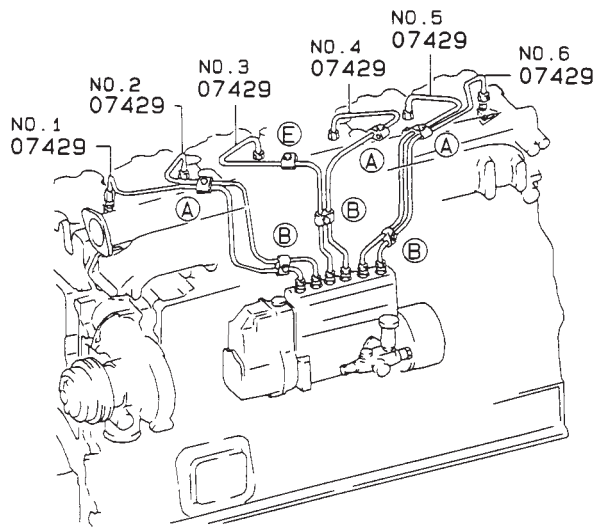
ITEM	PART NUMBER	DESCRIPTION	QTY
07020A	260-A5399	COUPLING ASSEMBLY, FUEL INJECTION PUMP	1

12L DIESEL INJECTION PIPE AND NOZZLE

INJECTION NOZZLE



INJECTION PIPE



ITEM	PART NUMBER	DESCRIPTION	QTY
07400A	261-A5399	NOZZLE AND HOLDER ASSEMBLY, FUEL INJECTION	6
07403	508-A5399	DUST SEAL, FUEL INJECTION NOZZLE HOLDER	6
07405	262-A5399	GASKET, FUEL INJECTION NOZZLE	6
07406B	509-A5399	GASKET, FUEL INJECTION NOZZLE INNER	6
07406C	510-A5399	GASKET, FUEL INJECTION NOZZLE INNER	6
07406D	511-A5399	GASKET, FUEL INJECTION NOZZLE INNER	12
07420	263-A5399	NOZZLE, FUEL INJECTION	6
07429	264-A5399	TUBE, FUEL INJECTION #2	1
	265-A5399	TUBE, FUEL INJECTION #3	1
	266-A5399	TUBE, FUEL INJECTION #4	1
	267-A5399	TUBE, FUEL INJECTION #5	1
	268-A5399	TUBE, FUEL INJECTION #6	1
	269-A5399	TUBE, FUEL INJECTION #1	1

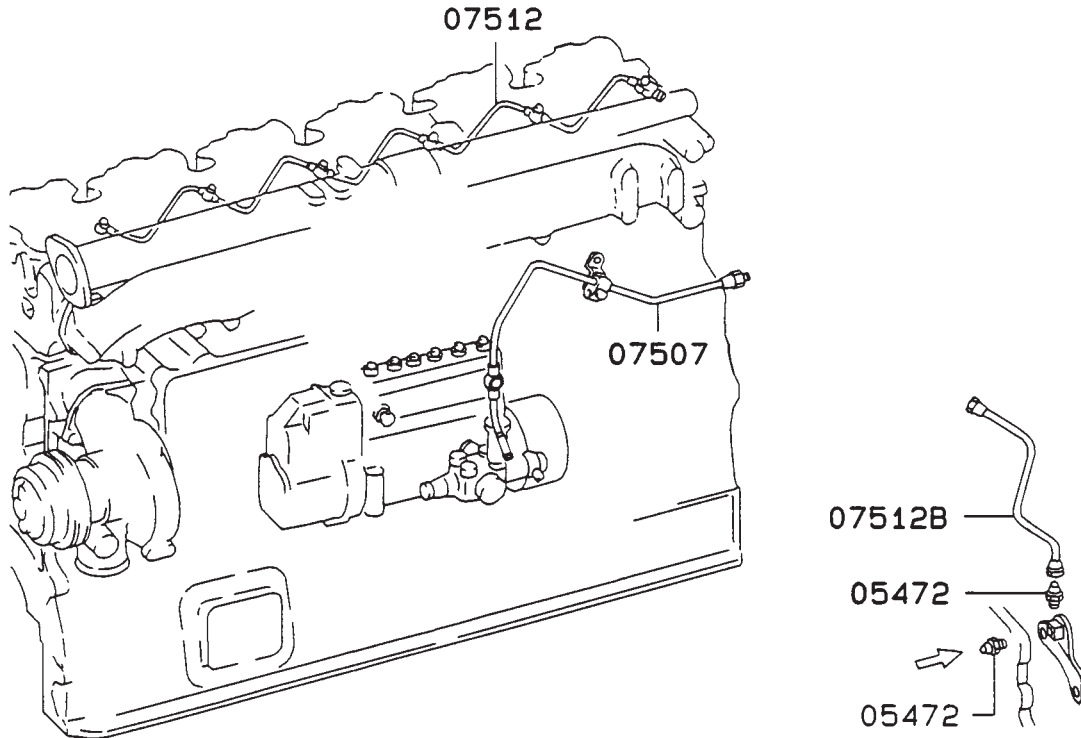
12L DIESEL INJECTION PIPE AND NOZZLE

ITEM	PART NUMBER	DESCRIPTION	QTY
07433B	296-A5399	SHIM, FUEL INJECTION NOZZLE T=0.100	AR
	297-A5399	SHIM, FUEL INJECTION NOZZLE T=0.200	AR
	298-A5399	SHIM, FUEL INJECTION NOZZLE T=0.300	AR
	299-A5399	SHIM, FUEL INJECTION NOZZLE T=0.400	AR
	300-A5399	SHIM, FUEL INJECTION NOZZLE T=0.500	AR
	301-A5399	SHIM, FUEL INJECTION NOZZLE T=0.520	AR
	302-A5399	SHIM, FUEL INJECTION NOZZLE T=0.540	AR
	303-A5399	SHIM, FUEL INJECTION NOZZLE T=0.560	AR
	304-A5399	SHIM, FUEL INJECTION NOZZLE T=0.580	AR
	305-A5399	SHIM, FUEL INJECTION NOZZLE T=0.600	AR
	306-A5399	SHIM, FUEL INJECTION NOZZLE T=0.62	AR
	307-A5399	SHIM, FUEL INJECTION NOZZLE T=0.64	AR
	308-A5399	SHIM, FUEL INJECTION NOZZLE T=0.66	AR
	309-A5399	SHIM, FUEL INJECTION NOZZLE T=0.68	AR
	310-A5399	SHIM, FUEL INJECTION NOZZLE T=0.700	AR
	311-A5399	SHIM, FUEL INJECTION NOZZLE T=0.72	AR
	312-A5399	SHIM, FUEL INJECTION NOZZLE T=0.74	AR
	313-A5399	SHIM, FUEL INJECTION NOZZLE T=0.76	AR
	314-A5399	SHIM, FUEL INJECTION NOZZLE T=0.78	AR
	315-A5399	SHIM, FUEL INJECTION NOZZLE T=0.800	AR
	316-A5399	SHIM, FUEL INJECTION NOZZLE T=0.82	AR
	317-A5399	SHIM, FUEL INJECTION NOZZLE T=0.84	AR
	318-A5399	SHIM, FUEL INJECTION NOZZLE T=0.86	AR
	319-A5399	SHIM, FUEL INJECTION NOZZLE T=0.88	AR
	320-A5399	SHIM, FUEL INJECTION NOZZLE T=0.900	AR
	321-A5399	SHIM, FUEL INJECTION NOZZLE T=0.92	AR
	322-A5399	SHIM, FUEL INJECTION NOZZLE T=0.94	AR
	323-A5399	SHIM, FUEL INJECTION NOZZLE T=0.96	AR
	324-A5399	SHIM, FUEL INJECTION NOZZLE T=0.98	AR
	325-A5399	SHIM, FUEL INJECTION NOZZLE T=1.000	AR
	326-A5399	SHIM, FUEL INJECTION NOZZLE T=1.02	AR
	327-A5399	SHIM, FUEL INJECTION NOZZLE T=1.04	AR
	328-A5399	SHIM, FUEL INJECTION NOZZLE T=1.06	AR
	329-A5399	SHIM, FUEL INJECTION NOZZLE T=1.08	AR
	330-A5399	SHIM, FUEL INJECTION NOZZLE T=1.10	AR
331-A5399	SHIM, FUEL INJECTION NOZZLE T=1.12	AR	
332-A5399	SHIM, FUEL INJECTION NOZZLE T=1.14	AR	
333-A5399	SHIM, FUEL INJECTION NOZZLE T=1.16	AR	
334-A5399	SHIM, FUEL INJECTION NOZZLE T=1.18	AR	
335-A5399	SHIM, FUEL INJECTION NOZZLE T=1.20	AR	
336-A5399	SHIM, FUEL INJECTION NOZZLE T=1.22	AR	
337-A5399	SHIM, FUEL INJECTION NOZZLE T=1.24	AR	
338-A5399	SHIM, FUEL INJECTION NOZZLE T=1.26	AR	
339-A5399	SHIM, FUEL INJECTION NOZZLE T=1.28	AR	
340-A5399	SHIM, FUEL INJECTION NOZZLE T=1.30	AR	
341-A5399	SHIM, FUEL INJECTION NOZZLE T=1.32	AR	
342-A5399	SHIM, FUEL INJECTION NOZZLE T=1.34	AR	
343-A5399	SHIM, FUEL INJECTION NOZZLE T=1.36	AR	
344-A5399	SHIM, FUEL INJECTION NOZZLE T=1.38	AR	
345-A5399	SHIM, FUEL INJECTION NOZZLE T=1.40	AR	
346-A5399	SHIM, FUEL INJECTION NOZZLE T=1.42	AR	
347-A5399	SHIM, FUEL INJECTION NOZZLE T=1.44	AR	
348-A5399	SHIM, FUEL INJECTION NOZZLE T=1.46	AR	
349-A5399	SHIM, FUEL INJECTION NOZZLE T=1.48	AR	
350-A5399	SHIM, FUEL INJECTION NOZZLE T=1.50	AR	
351-A5399	SHIM, FUEL INJECTION NOZZLE T=1.52	AR	
352-A5399	SHIM, FUEL INJECTION NOZZLE T=1.54	AR	
07433C	353-A5399	SHIM, FUEL INJECTION NOZZLE T=0.75	AR
	354-A5399	SHIM, FUEL INJECTION NOZZLE T=0.76	AR
	355-A5399	SHIM, FUEL INJECTION NOZZLE T=0.77	AR
	356-A5399	SHIM, FUEL INJECTION NOZZLE T=0.78	AR
	357-A5399	SHIM, FUEL INJECTION NOZZLE T=0.79	AR
	358-A5399	SHIM, FUEL INJECTION NOZZLE T=0.80	AR
	359-A5399	SHIM, FUEL INJECTION NOZZLE T=0.81	AR
	360-A5399	SHIM, FUEL INJECTION NOZZLE T=0.82	AR
	361-A5399	SHIM, FUEL INJECTION NOZZLE T=0.83	AR
	362-A5399	SHIM, FUEL INJECTION NOZZLE T=0.84	AR
	363-A5399	SHIM, FUEL INJECTION NOZZLE T=0.85	AR
	364-A5399	SHIM, FUEL INJECTION NOZZLE T=0.86	AR
	365-A5399	SHIM, FUEL INJECTION NOZZLE T=0.87	AR

12L DIESEL INJECTION PIPE AND NOZZLE

ITEM	PART NUMBER	DESCRIPTION	QTY
	366-A5399	SHIM, FUEL INJECTION NOZZLE T=0.88	AR
	367-A5399	SHIM, FUEL INJECTION NOZZLE T=0.89	AR
	368-A5399	SHIM, FUEL INJECTION NOZZLE T=0.90	AR
	369-A5399	SHIM, FUEL INJECTION NOZZLE T=0.91	AR
	370-A5399	SHIM, FUEL INJECTION NOZZLE T=0.92	AR
	371-A5399	SHIM, FUEL INJECTION NOZZLE T=0.93	AR
	372-A5399	SHIM, FUEL INJECTION NOZZLE T=0.94	AR
	373-A5399	SHIM, FUEL INJECTION NOZZLE T=0.95	AR
	374-A5399	SHIM, FUEL INJECTION NOZZLE T=0.96	AR
	375-A5399	SHIM, FUEL INJECTION NOZZLE T=0.97	AR
	376-A5399	SHIM, FUEL INJECTION NOZZLE T=0.98	AR
	377-A5399	SHIM, FUEL INJECTION NOZZLE T=0.99	AR
	378-A5399	SHIM, FUEL INJECTION NOZZLE T=1.00	AR
	379-A5399	SHIM, FUEL INJECTION NOZZLE T=1.01	AR
	380-A5399	SHIM, FUEL INJECTION NOZZLE T=1.02	AR
	381-A5399	SHIM, FUEL INJECTION NOZZLE T=1.03	AR
	382-A5399	SHIM, FUEL INJECTION NOZZLE T=1.04	AR
	383-A5399	SHIM, FUEL INJECTION NOZZLE T=1.05	AR
	384-A5399	SHIM, FUEL INJECTION NOZZLE T=1.06	AR
	385-A5399	SHIM, FUEL INJECTION NOZZLE T=1.07	AR
	386-A5399	SHIM, FUEL INJECTION NOZZLE T=1.08	AR
	387-A5399	SHIM, FUEL INJECTION NOZZLE T=1.09	AR
	388-A5399	SHIM, FUEL INJECTION NOZZLE T=1.10	AR
	389-A5399	SHIM, FUEL INJECTION NOZZLE T=1.11	AR
	390-A5399	SHIM, FUEL INJECTION NOZZLE T=1.12	AR
	391-A5399	SHIM, FUEL INJECTION NOZZLE T=1.13	AR
	392-A5399	SHIM, FUEL INJECTION NOZZLE T=1.14	AR
	393-A5399	SHIM, FUEL INJECTION NOZZLE T=1.15	AR
	394-A5399	SHIM, FUEL INJECTION NOZZLE T=1.16	AR
	395-A5399	SHIM, FUEL INJECTION NOZZLE T=1.17	AR
	396-A5399	SHIM, FUEL INJECTION NOZZLE T=1.18	AR
	397-A5399	SHIM, FUEL INJECTION NOZZLE T=1.19	AR
	398-A5399	SHIM, FUEL INJECTION NOZZLE T=1.20	AR
	399-A5399	SHIM, FUEL INJECTION NOZZLE T=1.21	AR
	400-A5399	SHIM, FUEL INJECTION NOZZLE T=1.22	AR
	401-A5399	SHIM, FUEL INJECTION NOZZLE T=1.23	AR
	402-A5399	SHIM, FUEL INJECTION NOZZLE T=1.24	AR
	403-A5399	SHIM, FUEL INJECTION NOZZLE T=1.25	AR
	404-A5399	SHIM, FUEL INJECTION NOZZLE T=1.26	AR
	405-A5399	SHIM, FUEL INJECTION NOZZLE T=1.27	AR
	406-A5399	SHIM, FUEL INJECTION NOZZLE T=1.28	AR
	407-A5399	SHIM, FUEL INJECTION NOZZLE T=1.29	AR
	408-A5399	SHIM, FUEL INJECTION NOZZLE T=1.30	AR
	409-A5399	SHIM, FUEL INJECTION NOZZLE T=1.31	AR
	410-A5399	SHIM, FUEL INJECTION NOZZLE T=1.32	AR
	411-A5399	SHIM, FUEL INJECTION NOZZLE T=1.33	AR
	412-A5399	SHIM, FUEL INJECTION NOZZLE T=1.34	AR
	413-A5399	SHIM, FUEL INJECTION NOZZLE T=1.35	AR
	414-A5399	SHIM, FUEL INJECTION NOZZLE T=1.36	AR
	415-A5399	SHIM, FUEL INJECTION NOZZLE T=1.37	AR
	416-A5399	SHIM, FUEL INJECTION NOZZLE T=1.38	AR
	417-A5399	SHIM, FUEL INJECTION NOZZLE T=1.39	AR
	418-A5399	SHIM, FUEL INJECTION NOZZLE T=1.40	AR
	419-A5399	SHIM, FUEL INJECTION NOZZLE T=1.41	AR
	420-A5399	SHIM, FUEL INJECTION NOZZLE T=1.42	AR
	421-A5399	SHIM, FUEL INJECTION NOZZLE T=1.43	AR
	422-A5399	SHIM, FUEL INJECTION NOZZLE T=1.44	AR
	423-A5399	SHIM, FUEL INJECTION NOZZLE T=1.45	AR
	424-A5399	SHIM, FUEL INJECTION NOZZLE T=1.46	AR
	425-A5399	SHIM, FUEL INJECTION NOZZLE T=1.47	AR
	426-A5399	SHIM, FUEL INJECTION NOZZLE T=1.48	AR
	427-A5399	SHIM, FUEL INJECTION NOZZLE T=1.49	AR
	428-A5399	SHIM, FUEL INJECTION NOZZLE T=1.50	AR

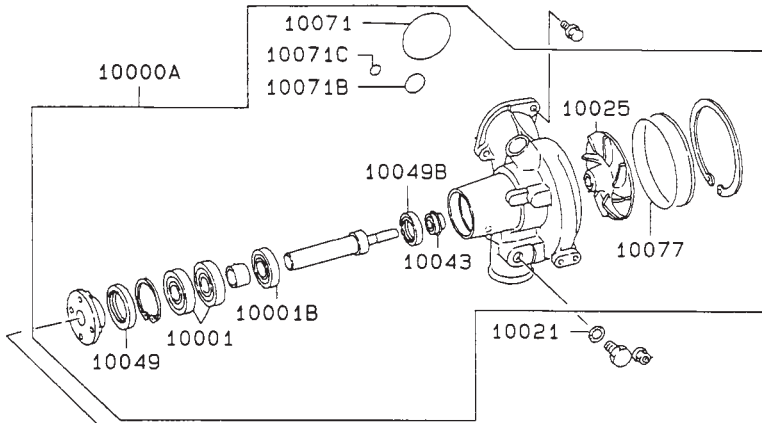
12L DIESEL FUEL RETURN HOSE



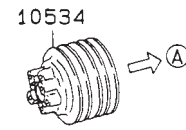
ITEM	PART NUMBER	DESCRIPTION	QTY
05472	270-A5399	JOINT, FUEL RETURN LINE	2
07507	271-A5399	TUBE, INJECTION PUMP FUEL OVERFLOW	1
07512	272-A5399	TUBE, FUEL INJECTION NOZZLE FUEL RETURN	1
07512B	273-A5399	TUBE, FUEL INJECTION NOZZLE FUEL RETURN	1

12L DIESEL WATER PUMP

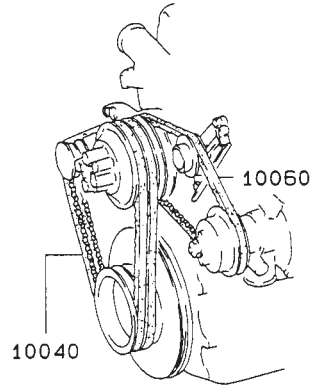
WATER PUMP



PULLEY



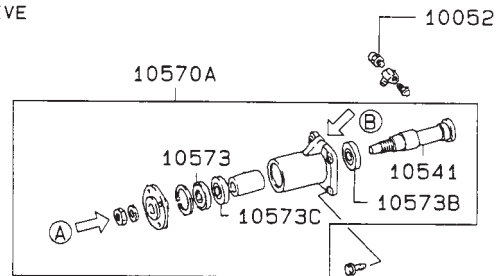
FAN BELT



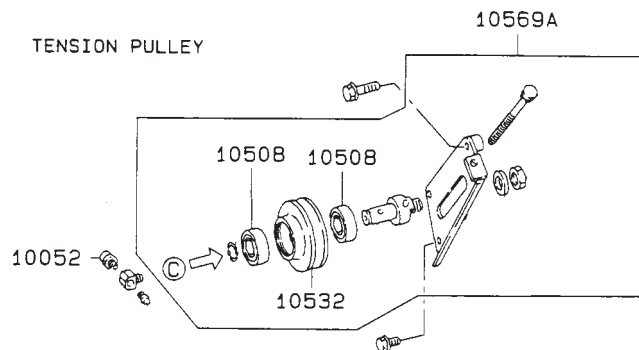
10010

- PNC
 10001, 10001B, 10025, 10043
 10044, 10049, 10049B, 10071
 10071B, 10071C, 10077

FAN DRIVE



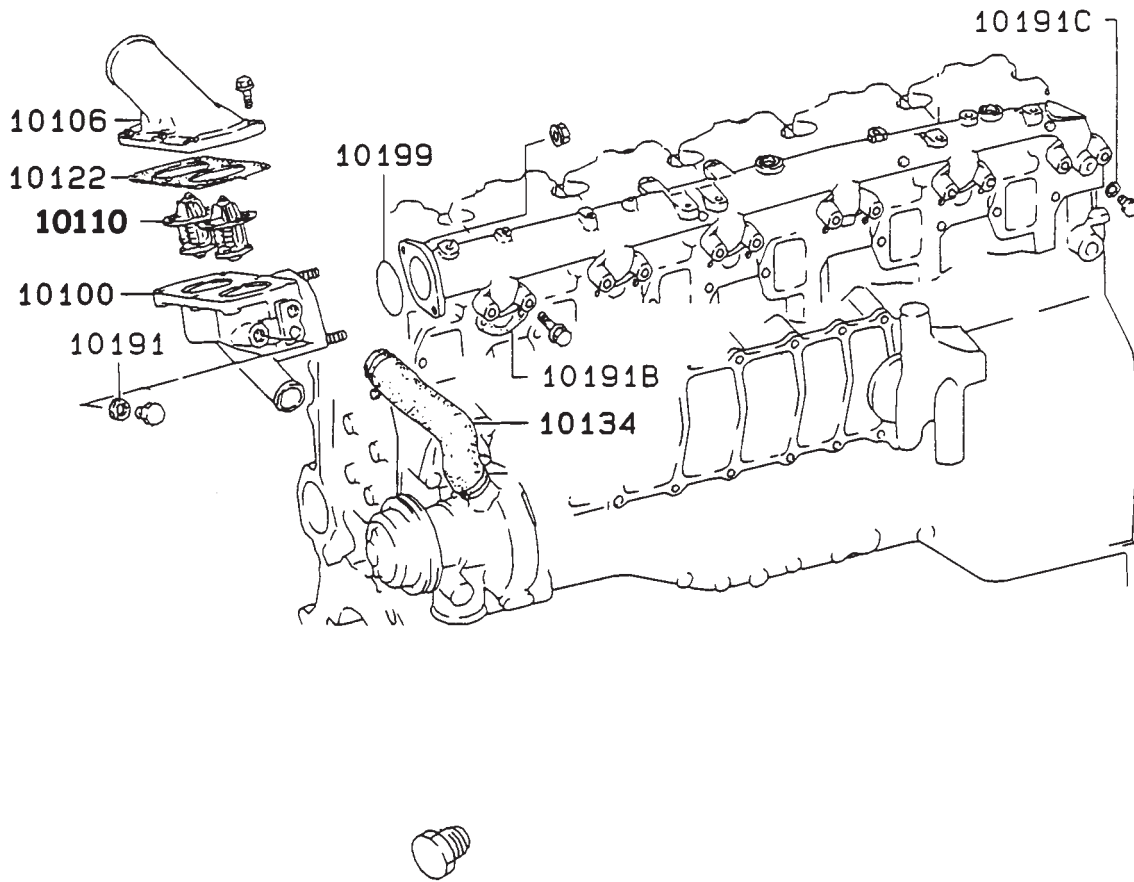
TENSION PULLEY



12L DIESEL WATER PUMP

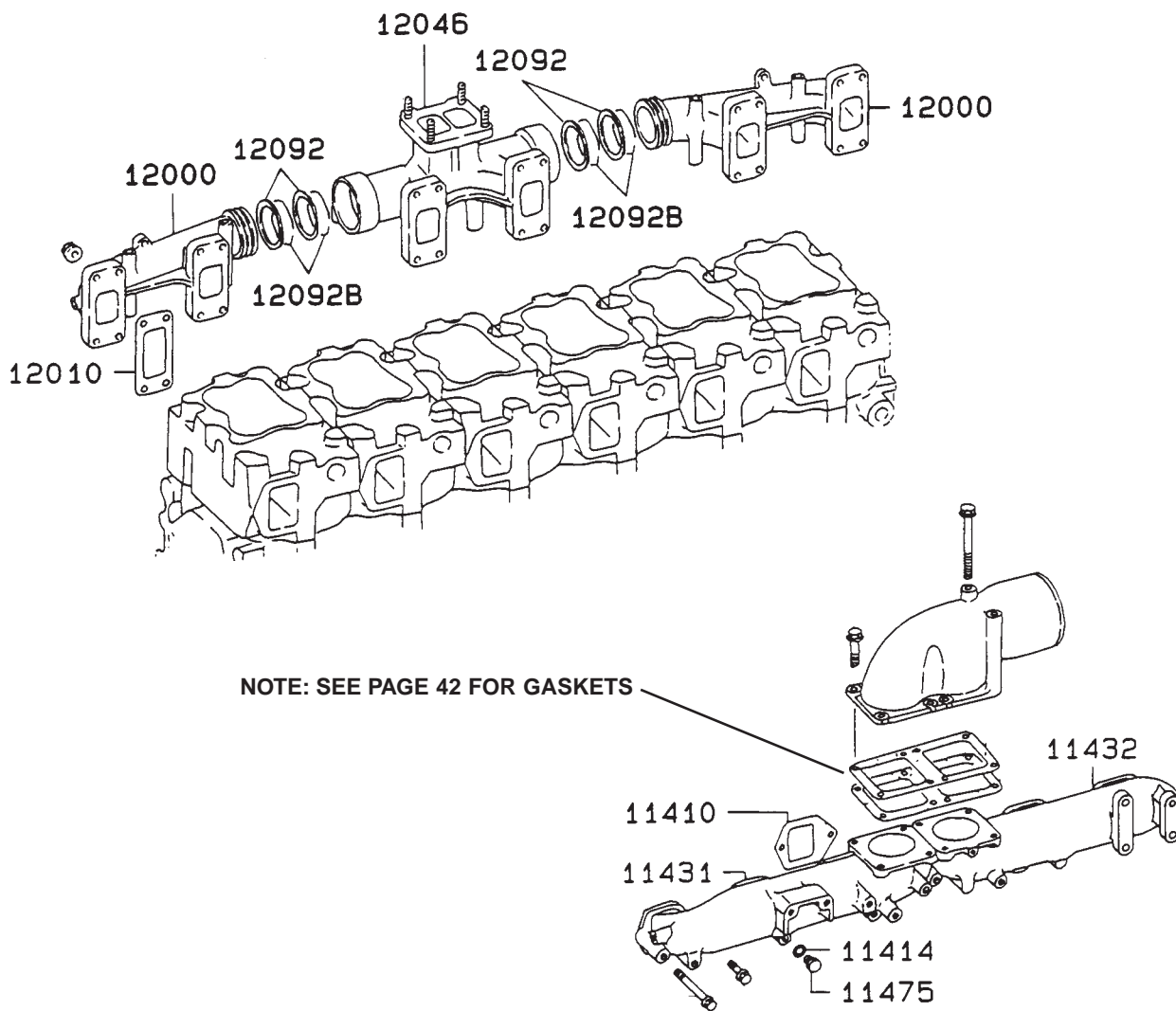
ITEM	PART NUMBER	DESCRIPTION	QTY
10000A	274-A5399	WATER PUMP ASSEMBLY	1
10001	512-A5399	BEARING, WATER PUMP	2
10001B	513-A5399	BEARING, WATER PUMP	1
10010	514-A5399	WATER PUMP KIT	1
10021	432-A5399	GASKET, WATER PUMP	1
10025	516-A5399	IMPELLER, WATER PUMP	1
10040	275-A5399	BELT, ALTERNATER	1
10043	517-A5399	SEAL UNIT, WATER PUMP SHAFT	1
10049	518-A5399	OIL SEAL, WATER PUMP SHAFT	1
10049B	519-A5399	OIL SEAL, WATER PUMP SHAFT	1
10052	520-A5399	VALVE, WATER PUMP GREASE ESCAPE	2
10060	276-A5399	BELT, WATER PUMP	1
10071	521-A5399	O-RING, WATER PUMP	1
10071B	522-A5399	O-RING, WATER PUMP	1
10071C	239-A5399	O-RING, WATER PUMP	1
10077	524-A5399	O-RING, WATER PUMP INNER	1
10508	525-A5399	BEARING, COOLING FAN IDLER SHAFT	1
10532	526-A5399	PULLEY, COOLING FAN IDLER	1
10534	527-A5399	PULLEY, COOLING FAN	1
10541	528-A5399	SHAFT, COOLING FAN DRIVE	1
10569A	529-A5399	PULLEY AND BRACKET ASSEMBLY, FAN IDLER	1
10570A	530-A5399	PULLEY AND CASE ASSEMBLY, COOLING FAN DRIVE	1
10573	531-A5399	BEARING, COOLING FAN PULLEY	1
10573B	532-A5399	BEARING, COOLING FAN PULLEY	1
10573C	533-A5399	BEARING, COOLING FAN PULLEY	1

12L DIESEL WATER PIPE AND THERMOSTAT



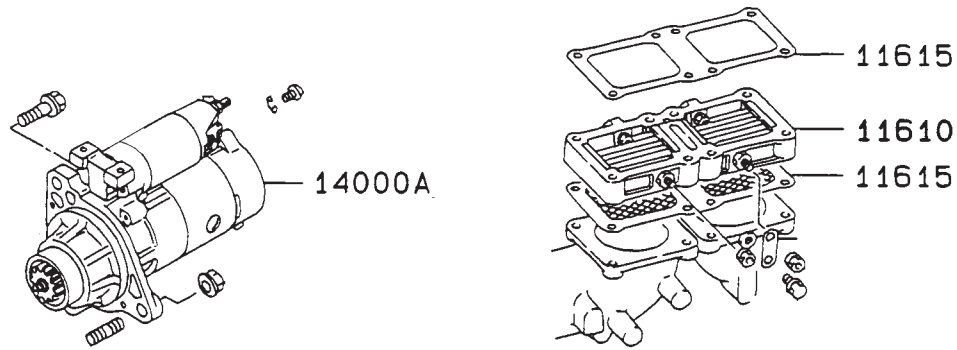
ITEM	PART NUMBER	DESCRIPTION	QTY
10100	277-A5399	CASE, THERMOSTAT	1
10106	278-A5399	COVER, THERMOSTAT CASE	1
10110	279-A5399	THERMOSTAT KIT (2 PIECES)	1
10122	280-A5399	GASKET, THERMOSTAT COVER	1
10134	281-A5399	HOSE, THERMOSTAT WATER BY-PASS	1
10191	432-A5399	GASKET, COOLING WATER LINE	1
10191B	535-A5399	GASKET, COOLING WATER LINE	6
10191C	441-A5399	GASKET, COOLING WATER LINE	1
10199	282-A5399	O-RING, COOLING WATER LINE	1

12L DIESEL INLET AND EXHAUST MANIFOLD



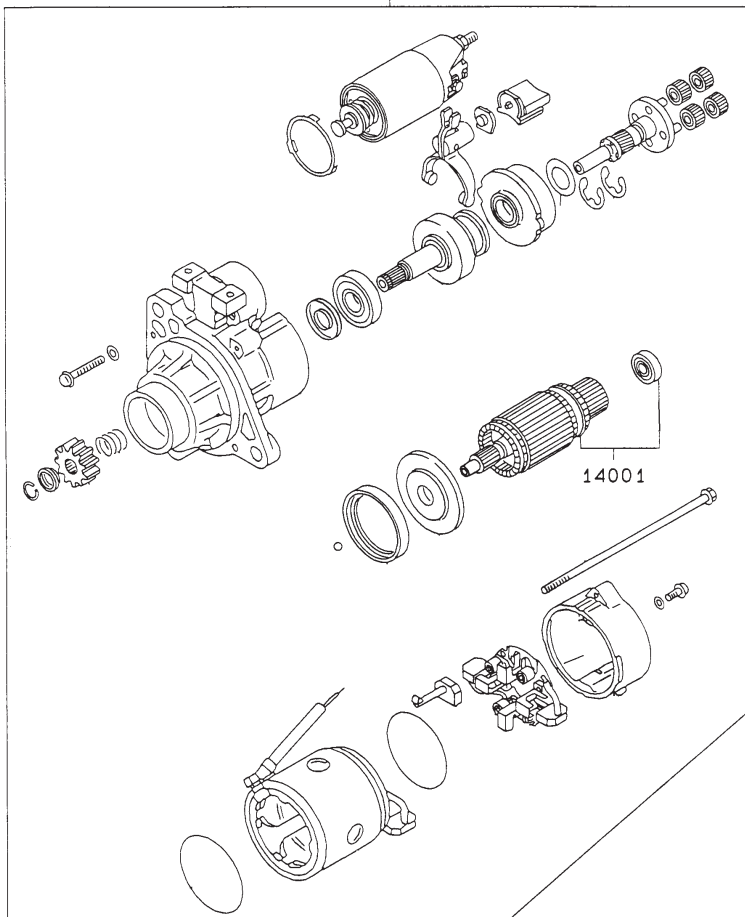
ITEM	PART NUMBER	DESCRIPTION	QTY
11410	283-A5399	GASKET, INLET MANIFOLD	6
11414	255-A5399	GASKET, INLET MANIFOLD COVER	1
11431	538-A5399	MANIFOLD, INLET, FRONT	1
11432	539-A5399	MANIFOLD, INLET, REAR	1
11475	540-A5399	PLUG, INLET MANIFOLD	1
12000	284-A5399	MANIFOLD, EXHAUST	2
12010	285-A5399	GASKET, EXHAUST MANIFOLD	6
12046	286-A5399	MANIFOLD, EXHAUST, CENTER	1
12092	287-A5399	SEAL RING, EXHAUST MANIFOLD	4
12092B	288-A5399	SEAL RING, EXHAUST MANIFOLD	4

12L DIESEL STARTER AND INTAKE AIR HEATER



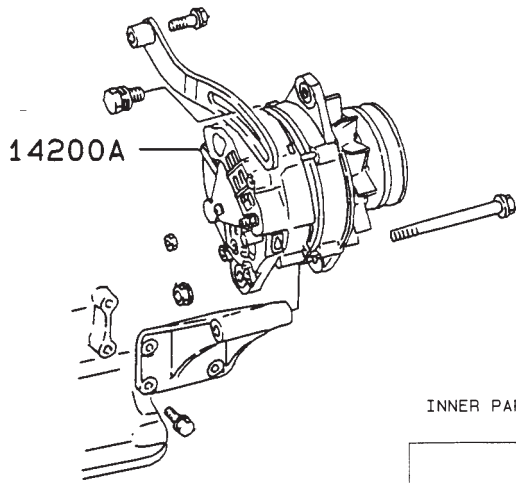
INNER PARTS

14000A



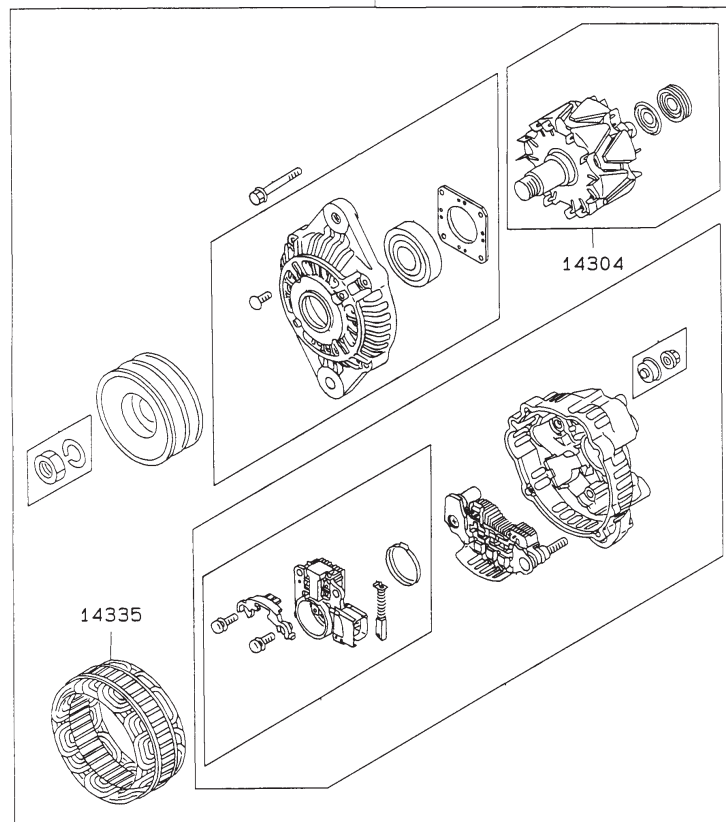
ITEM	PART NUMBER	DESCRIPTION	QTY
11610	289-A5399	HEATER, INTAKE AIR	1
11615	290-A5399	GASKET, INTAKE AIR HEATER	1
	291-A5399	GASKET, INTAKE AIR HEATER, W/ NET	1
14000A	292-A5399	STARTER ASSEMBLY	1
14001	541-A5399	ARMATURE KIT, STARTER	1

12L DIESEL ALTERNATOR



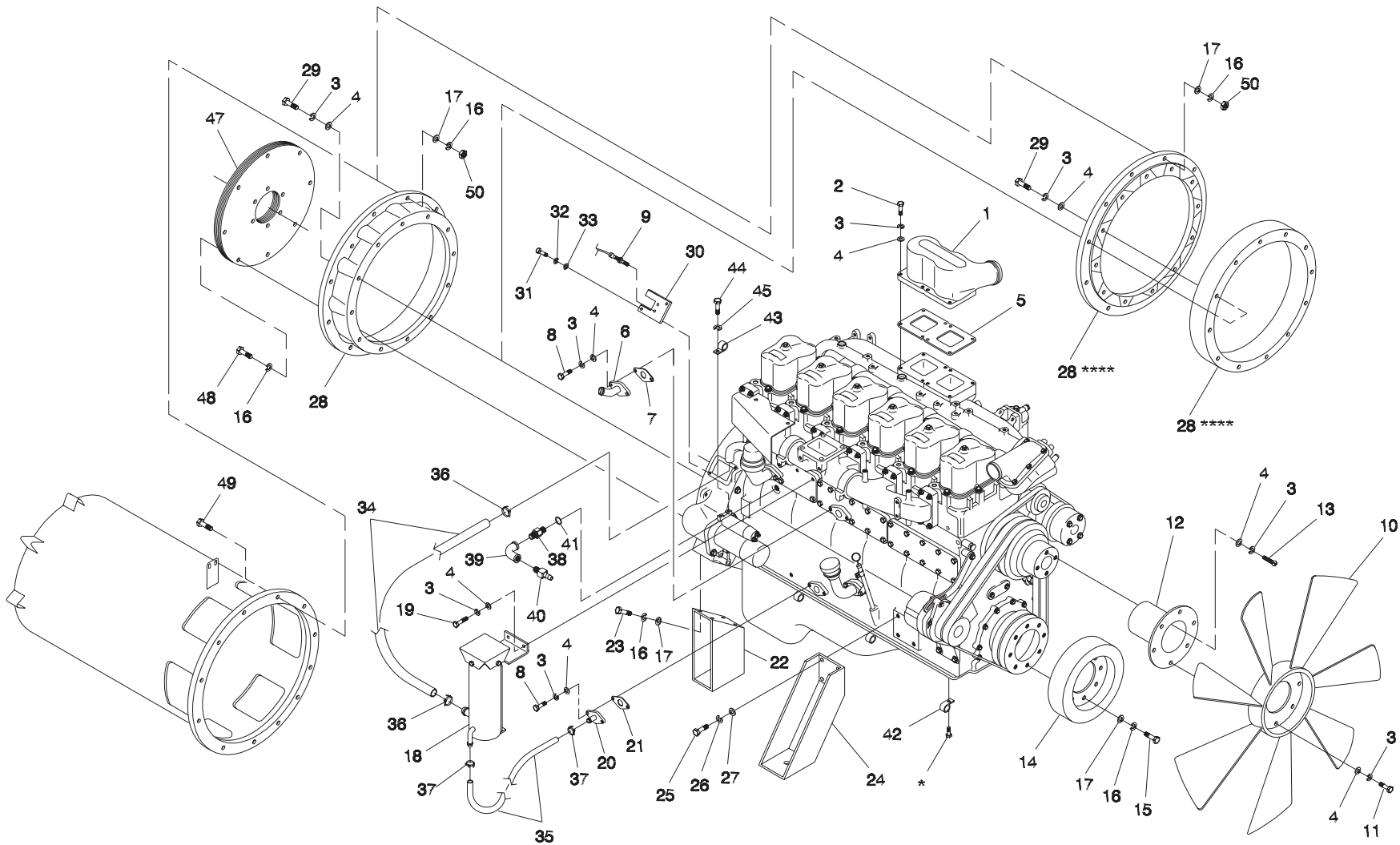
INNER PARTS

14200A



ITEM	PART NUMBER	DESCRIPTION	QTY
14200A	293-A5399	ALTERNATOR ASSEMBLY	1
14304	542-A5399	ROTOR KIT, ALTERNATOR	1
14335	543-A5399	STATR KIT, ALTERNATOR	1

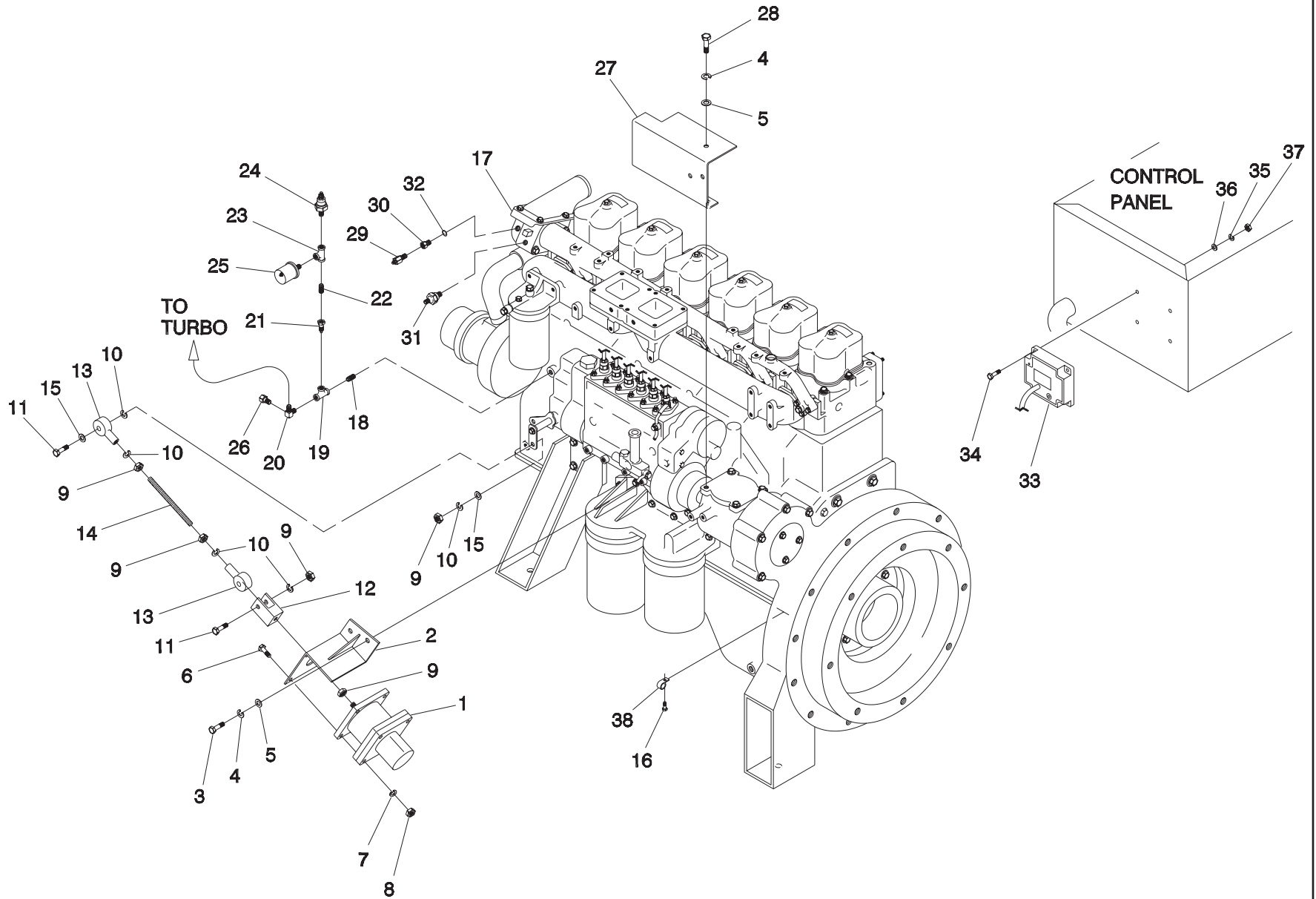
12L DIESEL ENGINE COMMON PARTS RIGHT SIDE



12L DIESEL ENGINE COMMON PARTS RIGHT SIDE

ITEM	PART NUMBER	DESCRIPTION	QTY
1	A6249	INTAKE MANIFOLD ADAPTER	1
2	49812	HHCS1.50 X 55MM	8
3	46526	LOCK WASHER M10	36
4	22131	FLAT WASHER M10	36
5	290-A5399	GASKET, AIR INTAKE	1
6	A7057	FLANGE, TURBO OIL RETURN	1
7	A7104	GASKET, TURBO OIL RETURN	1
8	51756	HHCS M 101.5 X 20MM	4
9	82130D	RPM SENSOR	1 (2***)
10	A6626	FAN30" O.D.	1
	78417****	FAN30" O.D.	1
11	49814	CAPSCREW, HEX HD. M101.5 X 25MM	6
12	A6653	FAN SPACER	1
	A7261****	FAN SPACER	1
13	60619	SHCS M101.5 X 40MM	4
	71623****	SHCS M101.5 X 55MM	4
14	A7391*	VISCOUS DAMPENER	1
15	63837	HHCS M121.75 X 30MM	8
16	51769	LOCK WASHER M12	36
17	49808	FLAT WASHER M12	28
18	A6652	AIR/OIL SEPARATOR ASSEMBLY	1
19	42911	HHCS M101.5 X 30MM	2
20	A6667	FLANGE, OIL RETURN (SEPARATOR)	1
21	A6763	GASKET, OIL RETURN (SEPARATOR)	1
22	A6055	ENGINE MOUNT, REAR	2
23	51768	HHCS M121.75 X 25MM	8
24	A6071	ENGINE MOUNT, FRONT	2
25	53555	HHCS M142.0 X 35MM	8
26	43123	LOCK WASHER M14	8
27	22132	FLAT WASHER M14	8
28	A5896	FLYWHEEL HOUSING ADAPTER	1
	A5431****	ADAPTER PLATE, SAE 1	1
	A6578****	SPACER, FLYWHEEL HOUSING	1
29	A7387	HHCS M101.5 X 40MM	12
	A7902****	HHCS M101.5 X 110MM	12
30	A6993	BRACKET, RPM SENSOR	1
31	39253	HHCS M81.25 X 20MM	2
32	22129	LOCK WASHER M8	2
33	22145	FLAT WASHER M8	2
34	35587	HOSE, 1" I.D. SAE 20RS	1 FT.
35	52223	HOSE, 1/2" I.D. SAE 30R2	1 FT.
36	57822	BAND CLAMP #8	2
37	57824	BAND CLAMP #16	2
38	A4282	ADAPTER M201.5 TO 1/2" NPT	1
39	30419	90 DEGREE ELBOW 1/2" NPT	1
40	44118	FITTING, STRAIGHT BARBED 1/2" NPT X 5/8"	1
41	95503	O-RING, 11/16" I.D. 7/8" O.D. X 3/32"	1
42	55934D	CLAMP, VINYL COATED	3
43	55934B	CLAMP, VINYL COATED	1
44	47411	HHCS M61.0 X 15MM	1
45	22097	LOCK WASHER M6	1
46	A6704**	WIRE HARNESS	1
47	21406	FLEX PLATE SAE 14	5
48	56767	SHCS M121.75 X 30MM LONG	8
49	81816	HHCS M121.75 X 55	12
	68406****	HHCS M121.75 X 60	12
50	45773	HEX NUT M121.75	12

- * PARTS SUPPLIED WITH ENGINE
- ** NOT SHOWN
- *** QUANTITY WITH "C" OR "D" CONTROL CONSOLE INSTALLED
- **** ALTERNATE PARTS



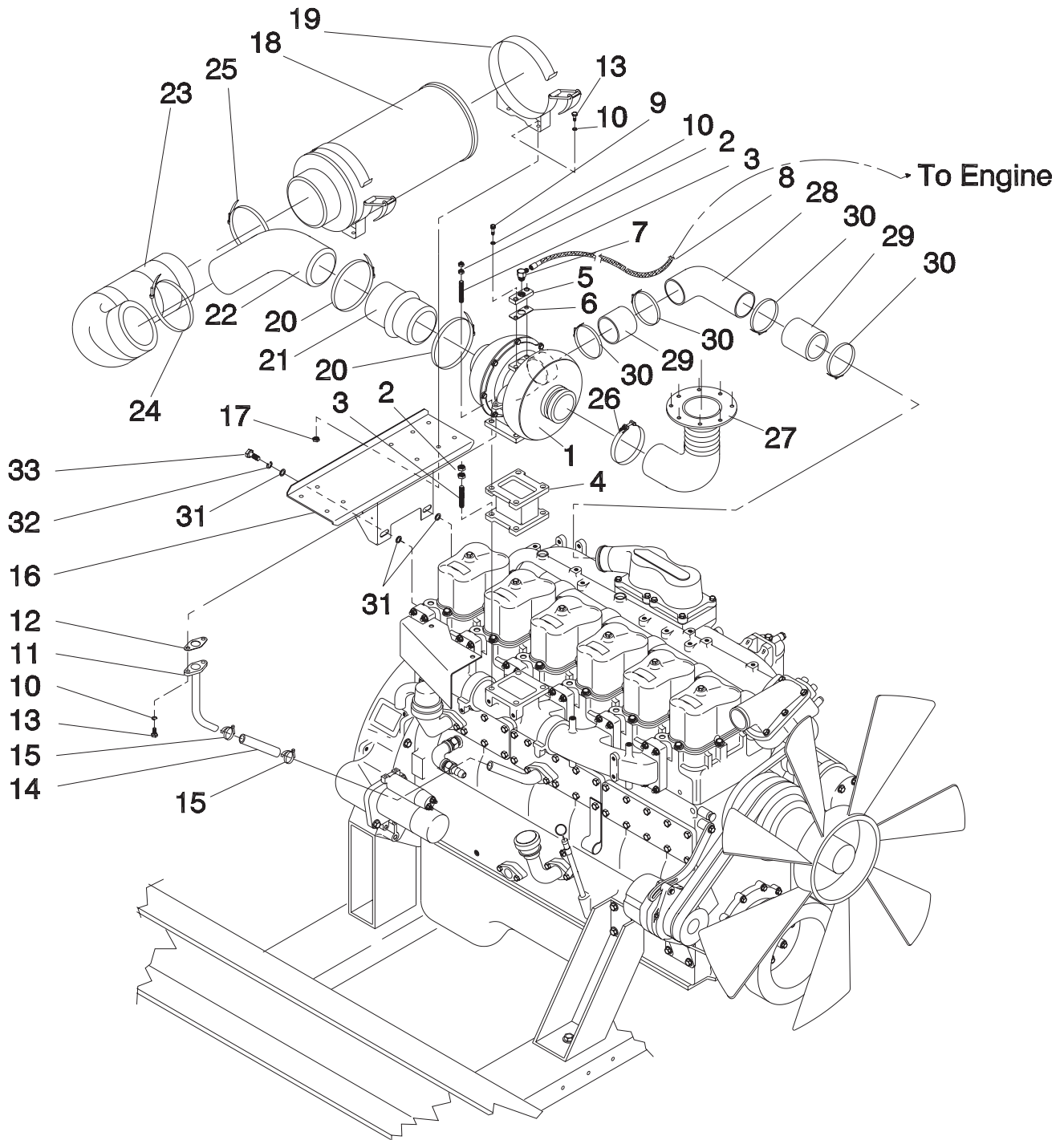
12L DIESEL ENGINE COMMON PARTS LEFT SIDE

12L DIESEL ENGINE COMMON PARTS LEFT SIDE

ITEM	PART NUMBER	DESCRIPTION	QTY
1	79944	ACTUATOR, LINEAR	1
2	A7103	MOUNTING BRACKET, ACTUATOR	1
3	51756	HHCS M101.5 X 20MM LONG	2
4	46526	LOCK WASHER M10	5
5	22131	FLAT WASHER M10	5
6	42568	HHCS M61.0 X 20MM LONG	4
7	22097	LOCK WASHER M6	4
8	49813	HEX NUT M61.0	4
9	22158	HEX NUT #10-32	5
10	22152	LOCK WASHER #10	5
11	22859	RHMS #10-32 X 3/4" LONG	2
12	80534	CLEVIS #10-32	1
13	90185	RODEND BEARING #10-32	2
14	A7418	THREADED ROD #10-32 X 60" LONG	1
15	38150	FLAT WASHER #8	2
16	**	HHCS M101.5 X 18	3
17	A8295	THERMOSTAT CASE, MACHINED	1
18	35467	CLO NIPPLE 3/8" NPT	1
19	27738A	PIPE TEE 3/8" NPT	1
20	64965	90 DEG. ADAPTER JIC NPT	1
	66267 *	90 DEG. ADAPTER JIC NPT (MACHINED)	1
21	55476	REDUCER BUSHING 3/8"1/8" NPT	1
22	35578	CLO NIPPLE 1/8" NPT	1
23	35430	PIPE TEE 1/8" NPT	1
24	A8584	OIL PRESSURE SWITCH	1
25	53666	OIL PRESSURE SENDER	1
26	62100 *	LOW OIL PRESSURE SWITCH	1
27	A7384	SHIELD, FUEL PUMP DRIVE	1
28	A7385	HHCS M101.5 X 15MM LONG (TAMPERPROOF)	3
29	35606	HIGH TEMPERATURE SWITCH	1
30	A7189	ADAPTER, M161.51/8" NPT	1
31	53667	TEMPERATURE SENDER	1
32	90072	O-RING 9/16" ID 3/4" OD X 3/32"	1
33	A7002	ACTUATOR CONTROLLER 24V	1
34	75477	SCREW, PHILLIPS M50.8 X 16MM LONG	4
35	49226	LOCK WASHER M5	4
36	23897	FLAT WASHER M5, #10	4
37	51716	HEX NUT M50.8	4
38	55934D	CLAMP, VINYL COATED	3

* OPTIONAL PRE-ALARM PARTS
 ** PARTS SUPPLIED WITH ENGINE

12L DIESEL AIR INTAKE AND TURBOCHARGER



12L DIESEL AIR INTAKE AND TURBOCHARGER

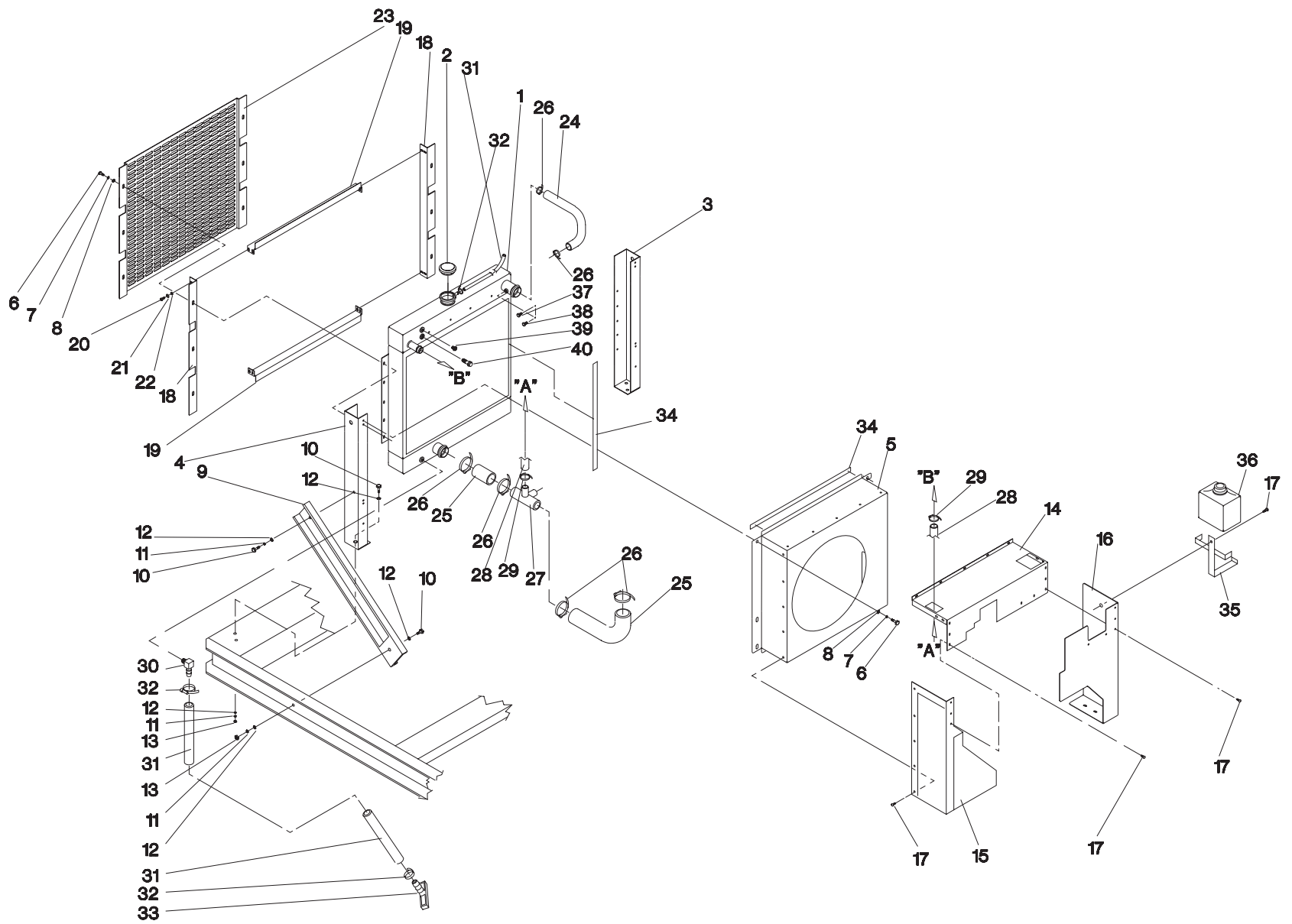
ITEM	PART NUMBER	DESCRIPTION	QTY
1	81245	TURBOCHARGER	1
2	88510	HEX NUT M10-1.5 S.S.	16
3	79922	STUD M10-1.5 X 61MM LONG S.S.	8
4	A6253	ADAPTOR, TURBOCHARGER	1
5	59660	ADAPTOR, OIL INLET	1
6	64973	GASKET, OIL INLET	1
7	64965	90 DEG. ADAPTOR JICNPT	1
8	64964	TURBO OIL LINE	1
9	57192	SHCS, M10-1.5 X 30MM LONG	2
10	46526	LOCK WASHER M10	8 (6***)
11	A6654	TUBE, TURBO OIL DRAIN	1
12	64974	GASKET, TURBO OIL OUTLET	1
13	49814	HHCS, M10-1.5 X 25MM LONG	6 (4***)
14	85964	HOSE 3/4" I.D. X 5" LONG-12CGH	1
15	57822	HOSE CLAMP #91	2
16	61704	BRACKET, AIR CLEANER	1
	A9062***	BRACKET, AIR CLEANER	1
17	52859	HEX NUT-LOCKING, M101.5	4 (2***)
18	61701	AIR CLEANER	1
	A9026***	DUAL-STAGE AIR CLEANER	1
19	61702	BAND, AIR CLEANER MOUNTING	2
	A9067***	BAND, AIR CLEANER MOUNTING	1
20	78190	HOSE CLAMP #80	2
21	57185	REDUCER, HUMP 4"31/2"	1
22	64963	TUBE, TURBO AIR INLET	1
	A9047***	TUBE, TURBO AIR INLET	1
23	61703	90 DEG. ELBOW 4"6"	1
24	58612	HOSE CLAMP, 6" MAXIMUM	1
25	61706	HOSE CLAMP, 7" MAXIMUM	1
26	64989	V-BAND CLAMP 4.5"	1
27	66730	FLEX EXHAUST ASSEMBLY	1
28	A6586*	TUBE, TURBO CROSSEVER	1
29	80773A*	HOSE, TURBO 3" I.D. X 3" LONG	2
30	86133E*	CLAMP HI TORQUE 35/8" MAXIMUM	4
31	49808	FLAT WASHER, M12	4 (6***)
32	43123	LOCK WASHER, M14	2 (3***)
33	52611	HHCS M142.0 X 75	2 (3***)

* USED ON "TURBO ONLY" MODELS(180KW).

** PARTS SUPPLIED WITH ENGINE.

*** PARTS USED WITH DUALSTAGE AIR CLEANER KIT A8888 INSTALLED.

12L DIESEL RADIATOR AND HOSES



12L DIESEL RADIATOR AND HOSES

ITEM	PART NUMBER	DESCRIPTION	QTY
1	A6164	RADIATOR	1
2	46627	RADIATOR CAP	1
3	A6153	RADIATOR SUPPORT, R.H.	1
4	A6153A	RADIATOR SUPPORT, L.H.	1
5	A6587	VENTURI	1
6	49814	HHCS M101.5 X 25MM LONG	18
7	46526	LOCK WASHERM10	18
8	22131	FLAT WASHERM10	18
9	A5876	SUPPORT BRACE	2
10	51768	HHCS, M121.75 X 25MM LONG	8
11	51769	LOCK WASHER M12	8
12	22250	FLAT WASHER M12	14
13	45773	HEX NUT, M121.75	6
14	A6435	FAN GUARD, TOP	1
15	A6434	FAN GUARD, LEFT SIDE	1
16	A6213	FAN GUARD, RIGHT SIDE	1
17	A2110	SWAGE FORM 1/4"20 X 1/2"	34
18*	A6856	DUCT, LEFT & RIGHT SIDE	2
19*	A6857	DUCT, TOP & BOTTOM	2
20*	42907	HHCS M81.25 X 16MM LONG	8
21*	22129	LOCK WASHERM8	8
22*	22145	FLAT WASHERM8	8
23**	A6885	STONE GUARD	1
24	A6245	HOSE, UPPER RADIATOR	1
25	A5790	HOSE, LOWER RADIATOR(CUT)	1
26	86133D	CLAMP, HOSE HITORQUE	6
27	A7075	PIPE, TEE CONNECTION	1
28	35587	HOSE, 1.0" I.D.	4.0 FT
29	57824	CLAMP, HOSE #16	2
30	49340	BARBED 90 DEG. ELBOW3/8" X 1/4" NPT	1
31	47290	HOSE, 3/8" I.D.	28" & 45"
32	40173	CLAMP, HOSE #6	3
33	36865	PETCOCK	1
34	52250	FOAM STRIP 3/4" X 1"	10.2 FT
35	80712	WATER BOTTLE BRACKET	1
36	76749	WATER BOTTLE	1
37	26925	PLUG, 3/8" NPT	1
38***	61920	HIGH TEMPERATURE SWITCH	1
39	26073A	PLUG, 1/4" NPT	1
40	57522	WATER LEVEL SENSOR	1

* OPTIONAL AIR DUCT KIT (A6918) PARTS

** OPTIONAL STONE GUARD (A7738) PARTS

*** OPTIONAL PREALARM PARTS (86641J) PARTS

