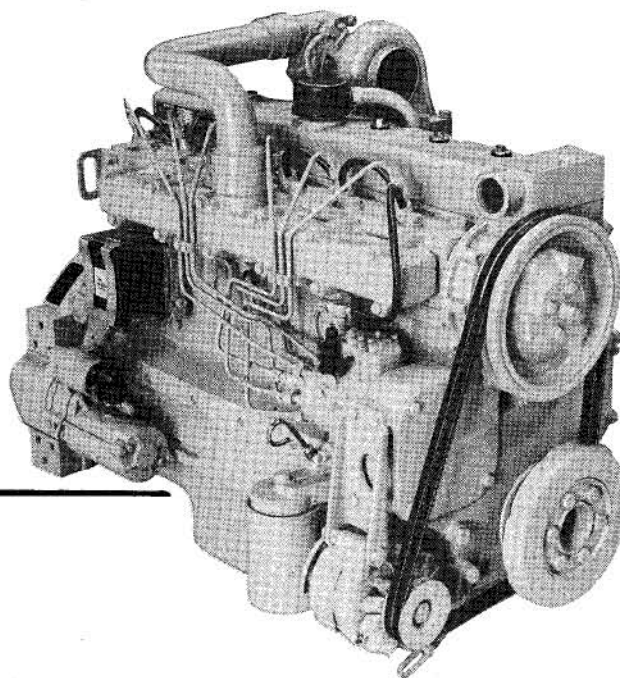


Onan

Parts Manual

L634T-I
L634T-P
Engine
Diesel



934-0253

8-87

(SPEC A-C — INDUSTRIAL ENGINE)

(SPEC A-C — POWER UNIT)

Replaces

3-86 (Spec A-C — Industrial Engine)

(Spec A — Power Unit)

Printed in U.S.A.

INTRODUCTION	4
ILLUSTRATED INDUSTRIAL ENGINE SECTION BEGINS	6
ILLUSTRATED POWER UNIT SECTION BEGINS	53
MODEL SPECIFICATION NUMBER TO OPTION CODE TABLE	82-84

INDUSTRIAL ENGINE SECTION INDEX

DESCRIPTION	PAGE	DESCRIPTION	PAGE
Adapter, Generator	36	Kit, Gasket - Valve Grind	8,9
Adapter, Oil Filter	19	Kit, Repair - Coolant Pump	30,31
Adapter, Transmission	37,38	Light, Indicator	47
Alternator	42	Line, Injection	12,13
Alternator Components	43	Line, Oil - Remote Filter	19
Belt, Coolant Pump	30,31	Line, Oil - Turbocharger Feed	24,25
Block, Cylinder	6,7	Line, Oil Drain - Remote	21
Bracket, Lifting	8,9	Manifold, Exhaust	24,25
Camshaft	6,7	Manifold, Intake	22
Cap, Oil Fill - Gearcase	10,11	Mount, Engine - Front	49
Cap, Oil Fill - Rocker Cover	20	Paint - Touch Up	51
Cap, Pressure - Radiator	34	Pan, Oil	17,18
Clutch, Power Take-Off	51	Pickup, Oil	17,18
Connection, Coolant Heater	28	Piston	6,7
Connector, Coolant Outlet	28	Plug, Glow	47
Controller, Glow Plug	47	Power Take-Off	6,7,10,11
Cooler, Oil	6,7	Pulley, Alternator	30,31
Cover, Rocker	20	Pulley, Coolant Pump	30-32
Crankshaft	6,7	Pulley, Crankshaft	30-32,50
Damper, Crankshaft	6,7	Pulley, Idler	44
Drain, Oil - Remote	21	Pump, Coolant	30-32
Drain, Oil - Turbocharger	24,25	Pump, Fuel Transfer	15
Elbow, Exhaust - Turbocharger	26	Pump, Injection	12,13
Element, Water Separator	16	Pump, Oil	10,11
Fan, Cooling	33	Pump Components, Injection	14
Filter, Fuel	15	Radiator	34
Filter, Oil	19	Resistor, Ballast	47
Flange, Exhaust	26	Sealant, Thread	51
Flexplate	41	Sensor, Speed - Magnetic	48
Flywheel	39,40	Separator, Water	16
Fuse	47	Shroud, Radiator	34
Gear, Injection Pump	10,11	Spacer, Fan	33
Gearcase	10,11	Starter	45
Guard, Fan	33	Starter Components	46
Head, Cylinder	8,9	Switch, High Water Temperature	48
Heater, Engine Block	27	Switch, Low Oil Pressure	48
Hose, Radiator	34	Thermostat	30-32
Housing, Flywheel	35	Tube, Cross Over	24,25
Indicator, Oil Level	17,18	Tube, Oil Fill - Gearcase	10,11
Injector, Fuel	12,13	Turbocharger	24,25
Kit, Gasket - Lower End	6,7		

POWER UNIT SECTION INDEX

DESCRIPTION	PAGE
Alternator	69
Alternator Components	70
Ammeter	72,73
Bracket, Lifting	55,56,64,65
Cap, Pressure - Radiator	61-63
Cap, Rain - Exhaust Pipe	58
Cap, Rain - Muffler	58
Channel, Radiator Mounting	66
Cleaner, Air	55-57
Clutch, Power Take-Off	81
Control - Power Unit	72,73
Control, Throttle	74
Doors, Lockable - Housing	80
Elbow, Exhaust - Turbocharger	59
Element, Air Cleaner	55-57
Element, Water Separator	53
Fan, Cooling	60
Frame, Control Panel	73
Fuse	72,73
Gauge, Oil Pressure	72,73
Gauge, Water Temperature	72,73
Guard, Belt	67,68
Guard, Fan	60-62
Harness, Wiring	72,73
Hood, Air Inlet	55,56
Hose, Radiator	61-63
Housing	76-79
Indicator, Restriction	55

DESCRIPTION	PAGE
Isolator, Vibration - Control	72,73
Isolator, Vibration - Radiator	61,62,64
Light, Indicator	72,73
Line, Flexible Fuel	53
Line, Oil Pressure - Control	72,73
Meter, Tachometer/Hour	71
Meter, Time Totalizing	73
Mount, Engine	75
Muffler	58
Panel, Control	72,73
Pipe, Exhaust	58
Precleaner, Air Cleaner	57
Radiator	61-63
Relay, Shutdown	72,73
Relay, Solenoid	72,73
Resistor, Ballast	72,73
Rod, Stabilizer - Radiator	61-63
Sensor, Speed - Magnetic	71
Separator, Water	53
Separator Components, Water	54
Shroud, Radiator	61-63
Spacer, Fan	60
Support, Housing	78,79
Support, Radiator	61,62,64-66
Switch, High Water Temperature	71
Switch, Low Oil Pressure	71
Switch, Start/Stop	72,73
Switch, Toggle	72,73
Tachometer	73

INTRODUCTION

To assist your Onan Dealer in giving you prompt and efficient replacement parts service, a Sales Option Code plate is part of your Onan nameplate and lists Sales Option Code numbers that identify factory installed parts unique to your engine. Corresponding Code Numbers are listed at the top of each parts group and are used to determine correct replacement parts. For early built Industrial Engines that do not have the rocker cover mounted nameplate and early built Power Units that do not have the radiator shroud mounted nameplate, refer to the table at the rear of this manual.

This parts manual is divided into two sections each of which is controlled by a separate nameplate. The Industrial Engine Section includes service replacement parts for Sales Option Code numbers listed on the rocker cover nameplate. The Power Unit Section includes service replacement parts for Sales Option Code numbers listed on the radiator shroud nameplate. Only the Power Units have the second shroud mounted nameplate. When ordering replacement parts for a Power Unit the model and specification number from both nameplates must be provided.

The diagonal line (/) in the model and specification number separates engine characteristics from the specification number and letter. The specification letter on each nameplate may advance (A to B, B to C, etc.) independently of each other with major manufacturing changes. This letter designation, when used in the Part Description, also applies when ordering replacement parts. Left (non-accessory) and right (accessory) sides are determined by facing the rear or drive end (Flywheel) of the engine.

Listed below are Sales Option Code Modifier numbers that may appear on your Onan Nameplate. These code numbers have no direct service replaceable parts and only modify another related Sales Option Code number by identifying a distinctive feature(s). Parts that differ as a result of the modifier are identified in the parts description for that part.

- 15AJ (Fuel System for #2 Diesel Fuel)
- 15AK (Fuel System for Jet A or JP-5 Fuel)
- 15AL (Fuel System for JP-4 Fuel)
- 15AU (Bosch Injection Pump in place of Stanadyne Injection Pump)
- 23CB (No Belts)
- 23CC (No Belts or Alternator Pulley)
- 23CD (Double Pulley and Belts to Replace Single)
- 23CE (Single Pulley and Belts to Replace Double)
- 31AG (12 Volt System)
- 31AH (24 Volt System)
- 31AJ (32 Volt System)
- 35AJ (Fuel Solenoid - Energized to Run)
- 35AK (Fuel Solenoid - Energized to Run, Manual Override)
- 35AL (Fuel Solenoid - Energized to Shut Off, Manual Override)
- 45AA (Auxiliary Gear Drive)
- 45AT (Two Groove Crankshaft Pulley to Replace Single)
- 47 (Literature and Shipping Hardware)
(Alpha letters after the number 47 are variable depending on model)
(Sales Code 47 is not a modifier, however, there are no service replaceable parts)

INDUSTRIAL ENGINE SECTION

This section contains replacement parts for the Industrial Engine as listed by Sales Option Code number on the rocker cover nameplate.

MODEL IDENTIFICATION LABEL

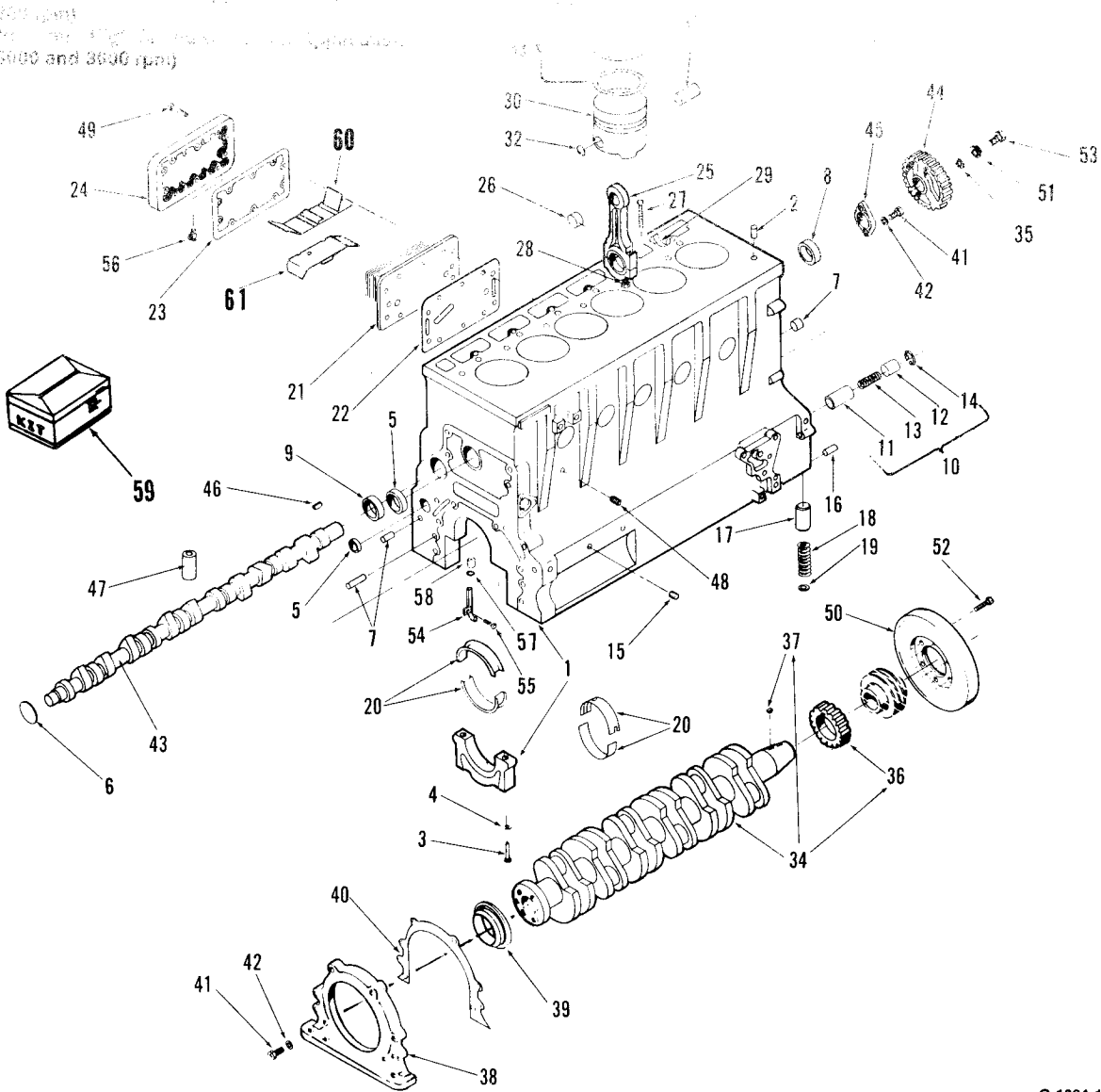
Onan Engine	Model No	
	Serial No	
	Rated RPM	
	Static Timing	BTDC
	Lube Oil Capacity	
	Fuel: Diesel	Firing Order
	Valve Lash	
Onan Corporation Minneapolis Minnesota 55432 U.S.A.		

Sales Option Codes				

Made in U.S.A.

For handy reference, insert your rocker cover nameplate and Sales Option Code information in the spaces above.

CYLINDER BLOCK



C-1064-1

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION	REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	110-3297	1	Block Assembly, Cylinder (Includes Parts Marked*)	8	101-0511	1	*Bearing, Camshaft - Front
2	110-2978	2	*Pin, Cylinder Head Alignment	9	101-0471	6	*Bearing, Camshaft - Intermediate and Rear
3	720-1801	14	*Screw, Cap - Hex Head - Special	10	123-1613	1	*Valve Assembly, Pressure Relief (Includes Parts Marked +)
4	740-1801	14	*Washer, Flat - Special	11	123-1515	1	+Body, Relief Valve
5	PLUG, CUP			12	123-1514	1	+Piston, Relief Valve
	517-0141	6	*50.8 MM Stainless Steel	13	123-1508	1	+Spring, Relief Valve
	517-0144	2	*12.7 MM Steel	14	518-0410	1	+Ring, Retaining
	517-0146	1	*31.75 MM Stainless Steel	15	PLUG, PIPE		
	517-0250	1	54.37 MM Stainless Steel (Oversize)		502-0153	7	*6.35 MM - Brass
6	517-0140	1	*Plug, Welch (57.15 MM) - Steel		505-0274	6	*3.17 MM - Steel
7	PIN, ALIGNMENT				516-2102	1	*Pin, Regulator Valve Spring
	775-0074	2	* 8 MM x 20 MM	16	123-1514	1	*Piston, Regulator Valve
	775-0089	2	*10 MM x 20 MM	18	123-1511	1	*Spring, Regulator Valve
	775-0078	2	* 8 MM x 40 MM	19	740-1004	1	*Washer, Flat (M6)

CYLINDER BLOCK

Code 11AA (Low Speed Variable to 2600 rpm)
 Code 11AB (Premium - High Speed Variable to 3600 rpm)
 Code 11AC (Low Speed Generator Application - 1500 and 1800 rpm)
 Code 11AE (Premium - High Speed Generator Application - 3000 and 3600 rpm)

5100-0713
 5100-0718
 5100-0720
 5100-0721

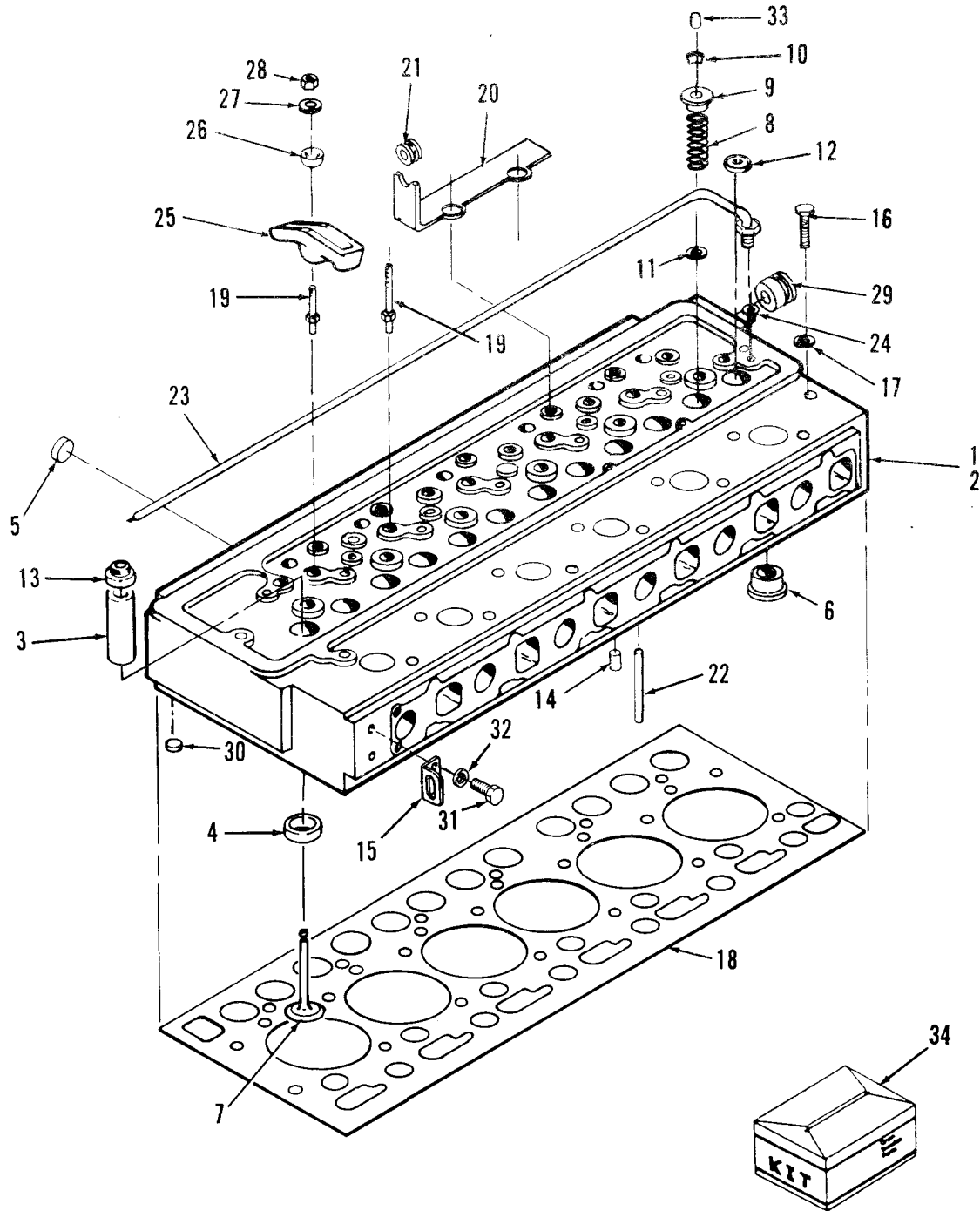
REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
20	BEARING KIT, MAIN (Includes Upper and Lower Bearing Half)		
	101-0689	1	Front (Standard)
	101-0681	1	Center (Standard)
	101-0685	4	Intermediate (Except Center) (Standard)
	101-0677	1	Rear (Standard)
21	COOLER, OIL		
	102-1024	1	Codes 11AA, 11AC
	102-1120	1	Code 11AB, 11AE
22	102-0973	1	Gasket, Oil Cooler
23	102-0975	1	Gasket, Oil Cooler Cover
24	COVER, OIL COOLER		
	102-1131	1	Codes 11AA, 11AC
	102-1254	1	Code 11AB, 11AE
25	114-0313	6	Rod, Connecting (Includes Finished Bearing, Bolts and Nuts)
26	114-0316	6	Bushing, Connecting Rod (Semi Finished)
27	114-0315	12	Bolt, Connecting Rod
28	114-0318	12	Nut, Connecting Rod
29	114-0320	12	Bearing, Connecting Rod - Standard (Half)
30	PISTON AND PIN KIT (Includes Retaining Rings)		
			Codes 11AA, 11AC
	112-0214	6	Standard
	112-0215	6	0.25 MM Oversize
	112-0216	6	0.50 MM Oversize
	112-0217	6	0.75 MM Oversize
	112-0218	6	1.0 MM Oversize
			Code 11AB, 11AE
	112-0221	6	Standard
	112-0222	6	0.25 MM Oversize
	112-0223	6	0.50 MM Oversize
	112-0224	6	0.75 MM Oversize
	112-0225	6	1.0 MM Oversize
31	112-0165	6	Pin, Piston
32	518-0409	12	Ring, Retaining - Piston Pin
33	RING KIT, PISTON		
	113-0261	6	Standard
	113-0262	6	0.25 MM Oversize
	113-0263	6	0.50 MM Oversize
	113-0264	6	0.75 MM Oversize
	113-0265	6	1.0 MM Oversize
34	104-1576	1	Crankshaft and Gear (Includes Key)
35	510-0140	1	Bearing, Ball - Camshaft - Engines With Front PTO
36	GEAR, CRANKSHAFT		
	104-1138	1	Engines Without Front PTO
	104-1418	1	Engines With Front PTO

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
37	515-0245	1	Key, Woodruff (Special)
38	101-0713	1	Plate, Rear Seal (Includes Seal)
39	509-0203	1	Seal, Oil - Rear (Includes Wear Sleeve)
40	101-0600	1	Gasket, Rear Seal Plate
41	718-1037	8	Screw, Cap - Hex Head (M8 x 25 MM)
42	740-1006	8	Washer, Flat (M8)
43	105-0512	1	Camshaft
44	GEAR, CAMSHAFT		
	105-0515	1	Engines Without Front PTO
	105-0552	1	Engines With Front PTO
45	105-0534	1	Retainer, Camshaft
46	515-0245	1	Key, Camshaft Gear
47	115-0275	12	Tappet
48	502-0775	1	*Plug, Pipe (3/8") Engines Without Code 23AW
49	SCREW, SOCKET HEAD		
	725-1058	10	Codes 11AA, 11AC (M8 x 66 MM)
	725-1061	10	Codes 11AB, 11AE (M8 x 80 MM)
50	DAMPER, CRANKSHAFT		
	104-1485	1	All Except 3600 RPM Generator Application Engines
	104-1547	1	3600 RPM Generator Application Engines
51	105-0569	1	Retainer, Camshaft Bearing - Engines With Front PTO
52	720-1807	6	Screw, Cap - Hex Head (Special) - Codes 11AA, 11AB, 11AE
53	720-1039	1	Screw, Cap - Hex Head (M8 x 35 MM) Engines With Front PTO
54	110-3206	6	*Nozzle, Piston Cooling
55	815-0564	6	*Screw, Machine - But Head (M6 x 20 MM)
56	504-0028	1	Valve, Coolant Drain
57	509-0178	6	*Seal, O-Ring
58	110-3235	6	*Sleeve, Cooling Piston
59	168-0173	1	Gasket Kit, Lower End
60	BAFFLE, OIL COOLER - TOP		
	102-1167	1	Codes 11AA, 11AC
	102-1155	1	Codes 11AB, 11AE
61	BAFFLE, OIL COOLER - BOTTOM		
	102-1166	1	Codes 11AA, 11AC
	102-1153	1	Codes 11AB, 11AE

* - Parts Included in 110-3297 Cylinder Block Assembly.
 + - Parts Included in 123-1613 Pressure Relief Valve Assembly.

CYLINDER HEAD

20-1111A-01 (20-1111A-01) 20-1111A-01
 20-1111A-01 (20-1111A-01) 20-1111A-01
 20-1111A-01 (20-1111A-01) 20-1111A-01
 20-1111A-01 (20-1111A-01) 20-1111A-01
 20-1111A-01 (20-1111A-01) 20-1111A-01



CYLINDER HEAD

5100-0819

Code 11AA (Low Speed Variable to 2600 rpm)

Code 11AB (Premium - High Speed Variable to 3600 rpm)

Code 11AC (Low Speed Generator Application - 1500 and 1800 rpm)

Code 11AE (Premium - High Speed Generator Application - 3000 and 3600 rpm)

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	110-3298	1	Head Assembly, Cylinder (Includes Valve Guides, Valve Seats, Cup Plugs, Rotators, Valves, Springs, Retainers, Water Pump Adapter, Collets, Wear Plates, Sleeves and Seals)
2	110-3455	1	Head, Cylinder (Includes Seats, Water Pump Adapter, Rotators and Guides)
3	GUIDE, VALVE (Semi Finished)		
	110-3495	6	Intake (Std.)
	110-3496	6	Exhaust (Std.)
4	SEAT, VALVE		
			Intake
	110-3226-01	6	Standard
	110-3226-02	6	.25 MM Oversize
	110-3226-03	6	.50 MM Oversize
			Exhaust
	110-2781-01	6	Standard
	110-2781-02	6	.25 MM Oversize
	110-2781-03	6	.50 MM Oversize
5	PLUG, CUP		
	517-0142	11	38.1 MM
	517-0146	4	31.75 MM
	517-0162	6	19.05 MM
6	110-3039	6	Plug, Hot (Swirl)
7	VALVE		
	110-3218	6	Intake
	110-3260	6	Exhaust
8	110-3300	12	Spring, Valve
9	110-3015	12	Retainer, Valve Spring
10	110-2752	24	Collet, Valve Lock
11	PLATE, VALVE SPRING WEAR		
	110-2991	12	Spec A and B
	110-2991	6	Begin Spec C (Exhaust)
12	110-3326	6	Rotator, Valve (Intake) Begin Spec C (NOTE: Intake valve rotators are included with all replacement cylinder heads.)
13	110-3228	12	Seal Assembly, Valve Stem
14	110-2979	6	Sleeve, Sealing
15	403-1875	2	Bracket, Lifting
16	720-1802	26	Screw, Cap - Hex Head (M12 x 130 MM)
17	740-1801	20	Washer, Flat (M12)
18	110-3225	1	Gasket, Cylinder Head
19	STUD, ROCKER ARM		
	115-0204	6	Short
	115-0270	6	Long
20	115-0313	3	Guide, Push Rod
21	508-0228	3	Grommet
22	115-0253	12	Pushrod
23	120-0920	1	Tube, Rocker Arm Oil
24	502-0003	1	Connector, Inverted Male
25	115-0316	12	Arm, Rocker
26	115-0202	12	Ball, Rocker Arm
27	526-2119	12	Washer, Flat
28	115-0315	12	Locknut, Rocker Arm
29	ADAPTER, WATER PUMP		
	110-3045	1	Standard
	110-3490	1	0.5 MM Oversize
30	517-0167	1	Plug, Cup (22.6 MM) Code 11AA, 11AC
31	718-1053	4	Screw, Cap - Hex Head (M10 x 20 MM)
32	740-1008	4	Washer, Flat (M10)
33	110-3245	12	Cap, Valve Stem (Not Used on some early models)
34	168-0174	1	Gasket Kit, Valve Grind

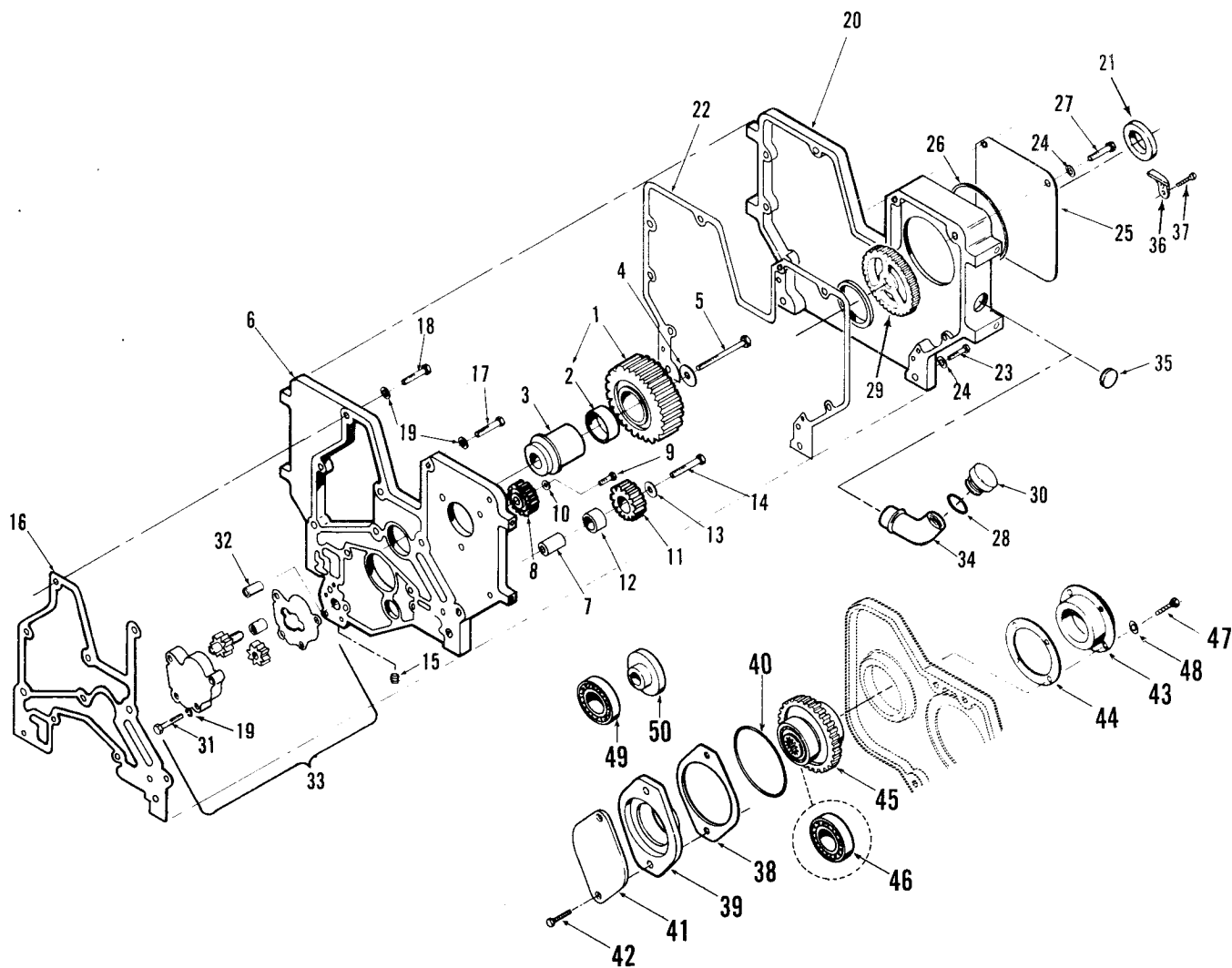
GEARCASE

Code 11AA (Low Speed Variable to 2600 rpm)

Code 11AB (Premium - High Speed Variable to 3600 rpm)

Code 11AC (Low Speed Generator Application - 1500 and 1800 rpm)

Code 11AE (Premium - High Speed Generator Application - 3000 and 3600 rpm)



XC-1062

GEARCASE

Code 11AA (Low Speed Variable to 2600 rpm)
 Code 11AB (Premium - High Speed Variable to 3600 rpm)
 Code 11AC (Low Speed Generator Application - 1500 and 1800 rpm)
 Code 11AE (Premium - High Speed Generator Application - 3000 and 3600 rpm)

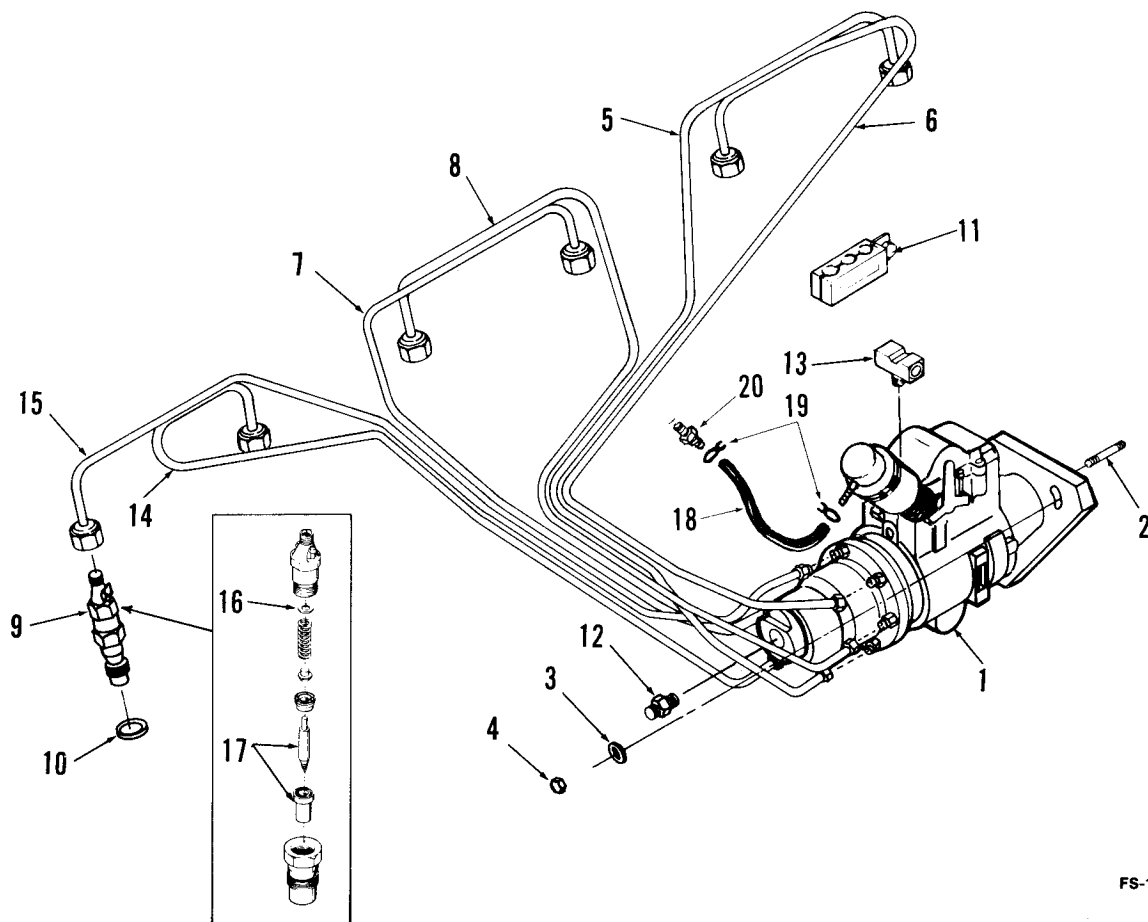
5100-0380
 5100-0404
 5100-0464
 5100-0727
 5100-0728
 5100-0868

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION	REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	GEAR, IDLER			25	103-0735	1	Cover, Injection Pump Gear
	105-0513	1	Engines Without Front PTO (Includes Finished Bearing)	26	509-0263	1	Seal, O-Ring
	105-0555	1	Engines With Front PTO	27	SCREW, CAP - HEX HEAD		
2	105-0519	1	Bearing, Idler Gear (Semi Finished) Engines Without Front PTO		718-1048	1	M8 × 80 MM
					718-1044	2	M8 × 60 MM
					718-1036	1	M8 × 20 MM
3	SHAFT, IDLER GEAR			28	509-0142	1	Seal, O-Ring Engines With Code 17AM
	105-0508	1	Engines Without Front PTO	29	147-0427	1	Gear, Injection Pump
	105-0572	1	Engines With Front PTO	30	123-1647	1	Cap - Oil Fill - Engines With Code 17AM
4	526-2127	1	Washer, Flat (M10) Engines Without Front PTO	31	718-1044	2	Screw, Cap - Hex Head (M8 × 60 MM)
5	718-1064	1	Screw, Cap - Hex Head (M10 × 75 MM)	32	120-0979	1	Bearing, Oil Pump Drive Shaft
6	BACKPLATE, GEARCASE			33	120-1091	1	Pump Kit, Oil (Includes Drive Shaft Bearing)
	103-0716	1	Engines Without Front PTO	34	123-1558	1	Tube, Oil Fill - Engines With Code 17AM
	103-0725	1	Engines With Front PTO	35	517-0188	1	Plug, Cap (Engines Without Code 17AM)
7	120-0983	1	Shaft, Oil Pump Idler Gear	36	103-0750	1	Plate, Timing (Use began during Spec B)
8	120-0885	1	Gear, Oil Pump Drive	37	815-0578	2	Screw, Cap - Hex Head (M6 × 14 MM) (Use began during Spec B)
9	718-1035	1	Screw, Cap - Hex Head (M8 × 16 MM)	38	121-0039	1	Gasket, Adapter - Engines With Front PTO
10	526-2106	1	Washer, Flat	39	121-0038	1	Adapter, Hyd. Pump - Engines With Front PTO
11	120-1063	1	Gear, Oil Pump Idler (Includes Finished Bearing)	40	509-0175	1	Seal, O-Ring - Engines With Front PTO
12	120-1041	1	Bearing, Oil Pump Idler Gear (Semi Finished)	41	121-0040	1	Cover, Adapter - Engines With Front PTO
13	526-2107	1	Washer, Flat	42	718-1075	2	Screw, Cap - Hex Head (M12 × 35MM) Engines With Front PTO
14	718-1035	1	Screw, Cap - Hex Head (M8 × 16 MM)	43	101-0710	1	Support, Camshaft Bearing - Engines With Front PTO
15	725-1802	1	Screw, Hex Socket Set (M16 × 16 MM)	44	101-0711	1	Gasket, Bearing Support - Engines With Front PTO
16	103-0733	1	Gasket, Gearcase Backplate	45	105-0571	1	Gear Assembly, PTO (Includes Bearings) Engines With Front PTO
17	SCREW, CAP - HEX HEAD			46	510-0141	2	Bearing, PTO Gear - Engines With Front PTO
	718-1037	1	M8 × 25 MM	47	718-1037	4	Screw, Cap - Hex Head (M8 × 25 MM) Engines With Front PTO
	718-1039	2	M8 × 35 MM	48	740-1006	4	Washer, Flat (M8) Engines With Front PTO
18	725-1801	2	Screw, Low Socket Head Cap (M8 × 16 MM)	49	510-0139	1	Bearing, Idler Gear - Engines With Front PTO
19	740-1006	11	Washer, Flat (M8)	50	105-0556	1	Retainer, Idler Gear - Engines With Front PTO
20	GEARCASE (Includes Oil Seal)						
			Engines Without Front PTO				
	103-0744	1	Without Side Oil Fill				
	103-0746	1	With Side Oil Fill (Includes Oil Fill Tube)				
	103-0745	1	Engines With Front PTO				
21	509-0191	1	Seal, Oil (Includes Wear Sleeve)				
22	GASKET, GEARCASE						
	103-0731	1	Engines Without Front PTO				
	103-0723	1	Engines With Front PTO				
23	SCREW, CAP - HEX HEAD						
	718-1046	2	M8 × 70 MM				
	718-1085	4	M12 × 85 MM (Engines Without Code 41AA, 41AH)				
	718-1043	5	M8 × 55MM				
24	WASHER, FLAT						
	740-1006	4	M8				
	740-1010	4	M12				

FUEL INJECTION

Code 13AA (2600-2000 RPM Variable)
 Code 13AB (3600-2300 RPM Variable)
 Code 13AC (1800 RPM Fixed)
 Code 13AD (3000 RPM Fixed)
 Code 13AE (1500 RPM Fixed)
 Code 13AF (3600-2800 RPM Variable)
 Code 13AG (3600-2800 RPM Variable)
 Code 13AH (3600-2800 RPM Variable)
 Code 13AJ (3600-2800 RPM Variable)

Code 13AK (2600-2000 RPM Variable)
 Code 13AL (2600-2000 RPM Variable)
 Code 13AM (2600-2000 RPM Variable)
 Code 13AP (3600 RPM Fixed)
 Code 13BA (2600-2000 RPM Variable)
 Code 13BB (2600-2000 RPM Variable)
 Code 13BC (2600-2000 RPM Variable)
 Code 13BD (2600-2000 RPM Variable)



FS-1566

FUEL INJECTION

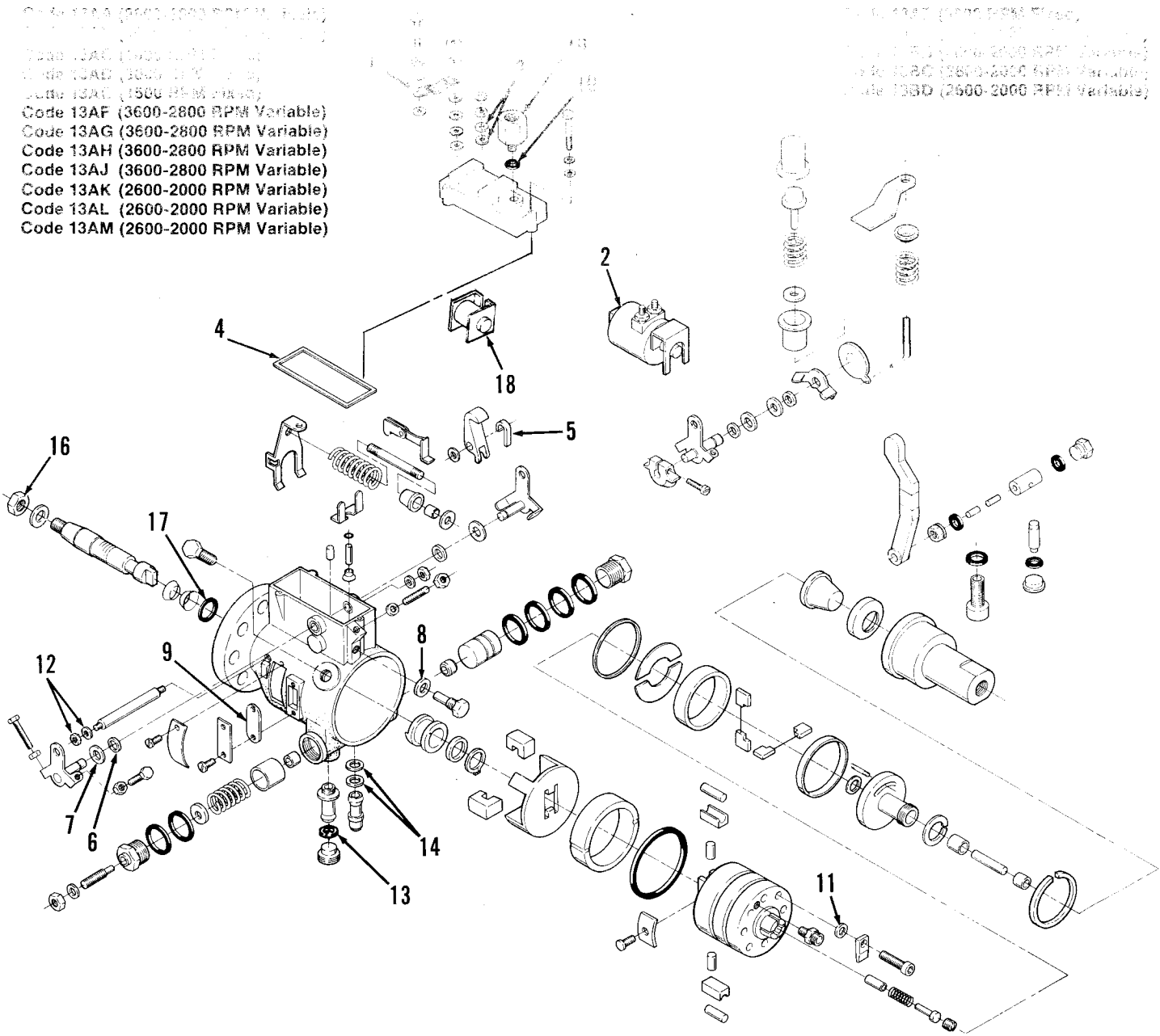
Code 13AA (2600-2000 RPM Variable)	5100-0382
Code 13AB (3600-2800 RPM Variable)	5100-0609
Code 13AC (1800 RPM Fixed)	5100-0808
Code 13AD (3000 RPM Fixed)	5100-0814
Code 13AE (1500 RPM Fixed)	
Code 13AF (3600-2800 RPM Variable)	Code 13BB (2600-2000 RPM Variable)
Code 13AG (3600-2800 RPM Variable)	Code 13BC (2600-2000 RPM Variable)
Code 13AH (3600-2800 RPM Variable)	Code 13BD (2600-2000 RPM Variable)
Code 13AJ (3600-2800 RPM Variable)	
Code 13AK (2600-2000 RPM Variable)	
Code 13AL (2600-2000 RPM Variable)	
Code 13AM (2600-2000 RPM Variable)	
Code 13AP (3600 RPM Fixed)	
Code 13BA (2600-2000 RPM Variable)	

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION	REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	PUMP, FUEL INJECTION (See Separate Group for Components)			11	CLAMP, FUEL LINE		
			Code 13AA		147-0672	3	Clamps Two Lines
			Without Aneroid		147-0673	2	Clamps Three Lines
			12 Volt Pump		147-0674	1	Clamps Six Lines
	147-0465-09	1	Jet A Fuel Not Required	12	502-0733	1	Connector
	147-0465-11	1	Jet A Fuel Required	13	502-0057	1	Tee, Pipe - Special
	147-0465-14	1	24 Volt Pump	14	147-0670	1	Line, Fuel Injection (No. 5)
			(JP 4 Fuel Required)	15	147-0671	1	Line, Fuel Injection (No. 6)
			With Aneroid	16	WASHER, INJECTION NOZZLE SHIM		
	147-0465-08	1	Jet A Fuel Not Required		147-0617	As Req.	0.80 MM
	147-0465-10	1	Jet A Fuel Required		147-0618	As Req.	0.84 MM
			Code 13AB,AF,AG,AH,AJ		147-0619	As Req.	0.88 MM
			Without Aneroid		147-0620	As Req.	0.92 MM
	147-0465-05	1	Jet A Fuel Not Required		147-0621	As Req.	0.96 MM
	147-0465-07	1	Jet A Fuel Required		147-0622	As Req.	1.00 MM
			With Aneroid		147-0623	As Req.	1.04 MM
	147-0465-04	1	Jet A Fuel Not Required		147-0624	As Req.	1.08 MM
	147-0465-06	1	Jet A Fuel Required		147-0625	As Req.	1.12 MM
	147-0465-02	1	Code 13AC,AE		147-0626	As Req.	1.16 MM
	147-0465-12	1	Code 13AD,AP		147-0627	As Req.	1.20 MM
			Code 13AK,AL,AM		147-0628	As Req.	1.24 MM
			Without Aneroid		147-0629	As Req.	1.28 MM
	147-0465-09	1	Jet A Fuel Not Required		147-0630	As Req.	1.32 MM
	147-0465-11	1	Jet A Fuel Required		147-0631	As Req.	1.36 MM
			With Aneroid		147-0632	As Req.	1.40 MM
	147-0465-08	1	Jet A Fuel Not Required		147-0633	As Req.	1.44 MM
	147-0465-10	1	Jet A Fuel Required		147-0634	As Req.	1.48 MM
			Code 13AU		147-0635	As Req.	1.52 MM
			With Aneroid		147-0636	As Req.	1.56 MM
	147-0465-04	1	Jet A Fuel Not Required		147-0637	As Req.	1.60 MM
	147-0465-06	1	Jet A Fuel Required		147-0638	As Req.	1.64 MM
	147-0465-06	1	Code 13AV,AW,AY,AZ		147-0639	As Req.	1.68 MM
			Code 13BA,BB,BC,BD		147-0640	As Req.	1.72 MM
			With Aneroid		147-0641	As Req.	1.76 MM
	147-0465-08	1	Jet A Fuel Not Required		147-0642	As Req.	1.80 MM
	147-0465-10	1	Jet A Fuel Required		147-0643	As Req.	1.84 MM
2	520-2403	3	Stud, Injection Pump (M8)		147-0644	As Req.	1.88 MM
3	526-2106	3	Washer, Flat (M8)		147-0645	As Req.	1.92 MM
4	750-1006	3	Nut, Hex (M8)		147-0646	As Req.	1.96 MM
5	147-0666	1	Line, Fuel Injection (No. 1)	17	147-0647	6	Tip, Nozzle
6	147-0667	1	Line, Fuel Injection (No. 2)	18	503-1271	1	Line, Aneroid
7	147-0668	1	Line, Fuel Injection (No. 3)	19	503-0301	2	Clamp, Hose
8	147-0669	1	Line, Fuel Injection (No. 4)	20	502-0877	1	Fitting, Hose (Barbed)
9	147-0701	6	Injector, Fuel (Includes Seal)				
10	147-0436	6	Seal, Injector				

FUEL INJECTION PUMP COMPONENTS

Code 13AA (3600-2800 RPM Variable)
 Code 13AB (3600-2800 RPM Variable)
 Code 13AC (3600-2800 RPM Variable)
 Code 13AD (3600-2800 RPM Variable)
 Code 13AE (3600-2800 RPM Variable)
 Code 13AF (3600-2800 RPM Variable)
 Code 13AG (3600-2800 RPM Variable)
 Code 13AH (3600-2800 RPM Variable)
 Code 13AJ (3600-2800 RPM Variable)
 Code 13AK (2600-2000 RPM Variable)
 Code 13AL (2600-2000 RPM Variable)
 Code 13AM (2600-2000 RPM Variable)

Code 13AT (2600-2000 RPM Variable)
 Code 13AU (2600-2000 RPM Variable)
 Code 13AV (2600-2000 RPM Variable)
 Code 13AW (2600-2000 RPM Variable)
 Code 13AX (2600-2000 RPM Variable)
 Code 13AY (2600-2000 RPM Variable)
 Code 13AZ (2600-2000 RPM Variable)



REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
	PUMP, FUEL INJECTION (Complete) (See Fuel Injection Group)		
1	147-0592	1	Strap, Terminal Grounding
2	SOLENOID AND FRAME KIT		
	147-0593	1	12 Volt
	147-0703	1	24 Volt
3	147-0591	2	Washer, Terminal Insulating
4	147-0590	1	Gasket, Governor Cover
5	147-0589	1	Clip, Shaft Retaining (Not required on some pumps)
6	147-0588	2	Seal, Throttle Shaft
7	147-0587	2	Washer, Throttle Shaft Seal
8	147-0586	1	Washer, Guide Stud
9	147-0585	1	Gasket, Timing Line Cover
10	147-0584	1	Seal, Return Line Connector
11	147-0583	1	Seal, Locking Plate

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
12	147-0582	2	Seal, Pivot Shaft
13	147-0581	1	Seal, Advance Screw Hole Plug
14	147-0580	2	Seal, Head Locating Screws (Some pumps require 1)
15	CONNECTOR, RETURN LINE		
	147-0579	1	12 Volt Pumps
	147-0728	1	24 Volt Pumps
16	147-0578	1	Nut, Drive Shaft
17	509-0265	1	Seal, Pilot Tube
18	147-	1	Solenoid (Cold Advance) 24 Volt Pumps

NOTE: For component parts not listed contact manufacturer shown on nameplate.

FUEL SYSTEM

Code 15AA (Low Pressure, Glass Filter, With Drain)

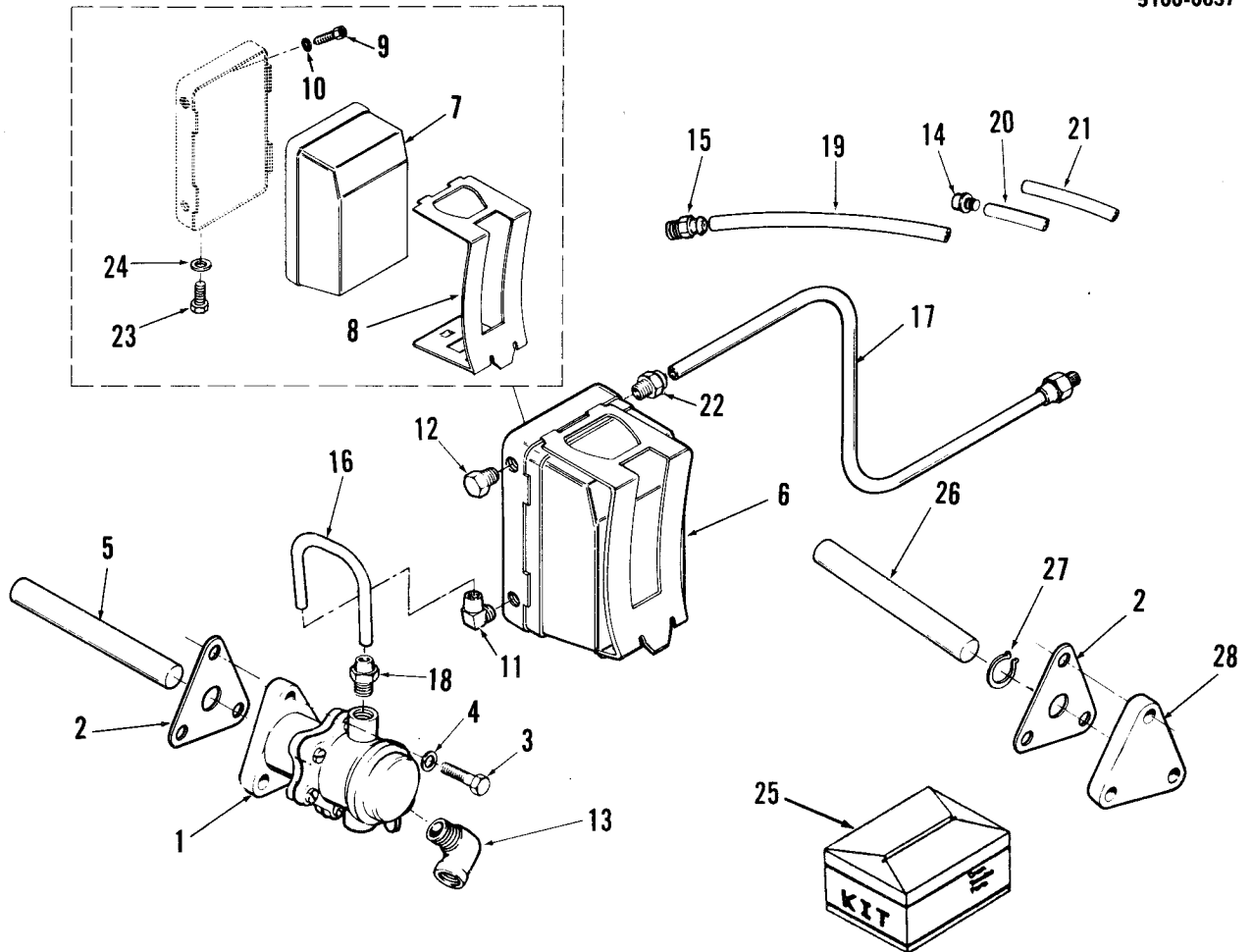
Code 15AC (Without Transfer Pump)

Code 15AG (Low Pressure, Glass Filter, With Drain)

5100-0018

5100-0143

5100-0637



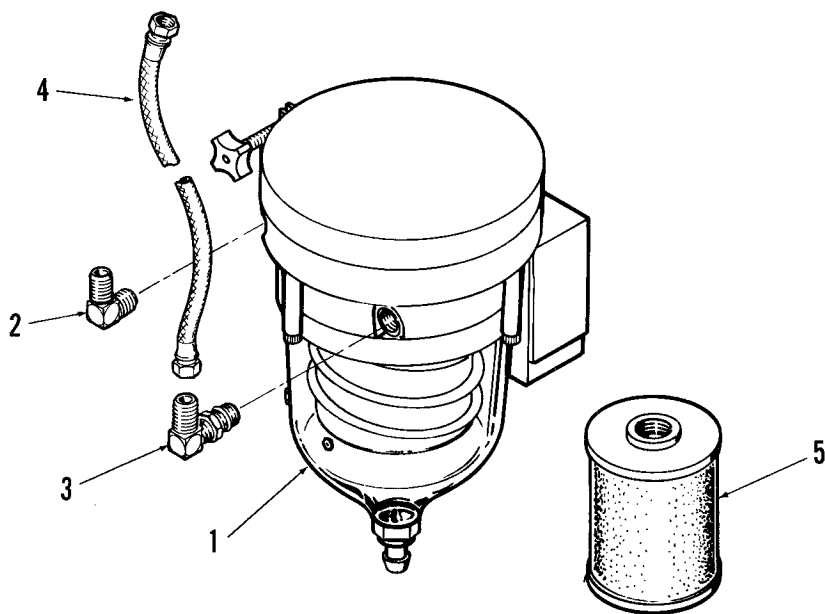
REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	PUMP KIT, FUEL TRANSFER (Includes Mounting Gasket)		
	149-2067	1	Spec A
	149-2068	1	Begin Spec B
	149-2068	1	Code 15AG - Spec B
2	149-1728	1	Gasket, Fuel Transfer Pump
3	SCREW, CAP - HEX HEAD		
	718-1021	3	M6 x 20 MM - Code 15AA, 15AG
	718-1020	3	M6 x 16 MM - Code 15AC
4	740-1004	3	Washer, Flat (M6)
5	149-1732	1	Pushrod, Fuel Transfer Pump
			- Code 15AA, 15AG
6	149-1755	1	Filter Assembly (Includes Filter, Base, Clamp, Drain Plug, Drain Seal and Plugs)
7	149-1754	1	Filter Only, Fuel
8	149-1801	1	Clamp, Fuel Filter
9	725-1074	2	Screw, Cap - Socket Head (M10 x 20 MM)
10	740-1008	2	Washer, Flat (M10)
11	502-0774	1	Elbow, Flareless Tube Fitting - Code 15AA, 15AG (Includes Sleeve and Nut)
12	502-0153	2	Plug, Pipe (1/4")
13	502-0054	1	Elbow, Pipe - Begin Spec B - Code 15AA, 15AG
14	502-0736	1	Plug

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
15	502-0738	1	Connector, Male
16	LINE, FUEL - Code 15AA, 15AG		
	149-1797	1	Spec A
	149-2002	1	Begin Spec B
17	149-1796	1	Line, Fuel
18	FITTING, TRANSFER PUMP OUTLET - Code 15AA, 15AG (Includes Sleeve and Nut)		
	502-0774	1	Elbow, Flareless Tube - Spec A
	502-0773	1	Connector, Flareless Tube - Begin Spec B
19	503-1055	1	Line, Fuel Return (Flexible) 380 MM Long
20	503-1054	1	Line, Fuel Return (Flexible) 25 MM Long
21	503-1053	5	Line, Fuel Return (Flexible) 180 MM Long
22	502-0773	1	Connector, Flareless Tube Fitting (Includes Sleeve and Nut)
23	149-1835	1	Plug, Filter Drain
24	149-1836	1	Gasket, Filter Drain Plug
25	149-2069	1	Repair Package - Fuel Pump - Code 15AA, 15AG
26	149-1744	1	Plug, Pushrod Hole - Code 15AC
27	518-0413	1	Ring, Retaining - Code 15AC
28	149-1745	1	Plate, Fuel Pump Opening in Cylinder Block - Code 15AC

WATER SEPARATOR

Code 15AD

5100-0339



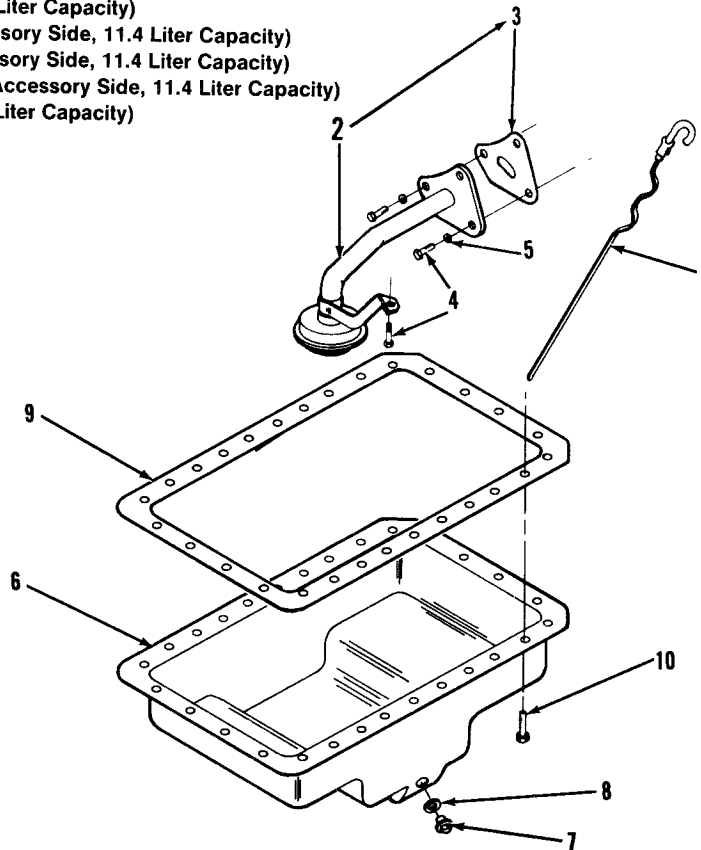
FS-1500

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	149-1866	1	Separator, Water
2	502-0041	1	Elbow, Inverted Male
3	502-0840	1	Elbow, O-Ring Boss
4	501-0450	1	Line, Flexible - Fuel
5	149-1865	1	Element, Water Separator

OIL PAN (CENTER SUMP)

Code 17AA (20° Tilt - Drain to Accessory Side, 11.4 Liter Capacity)
 Code 17AB (30° Tilt - Drain to Accessory Side, 11.4 Liter Capacity)
 Code 17AE (20° Tilt - Drain to Rear, 11.4 Liter Capacity)
 Code 17AG (20° Tilt - Drain to Non-Accessory Side, 11.4 Liter Capacity)
 Code 17AH (30° Tilt - Drain to Non-Accessory Side, 11.4 Liter Capacity)
 Code 17AP (20° Tilt - Drain to Front and Accessory Side, 11.4 Liter Capacity)
 Code 17BG (20° Tilt - Drain to Side, 13.2 Liter Capacity)

5100-0384
 5100-0803
 5100-0807
 5100-1104



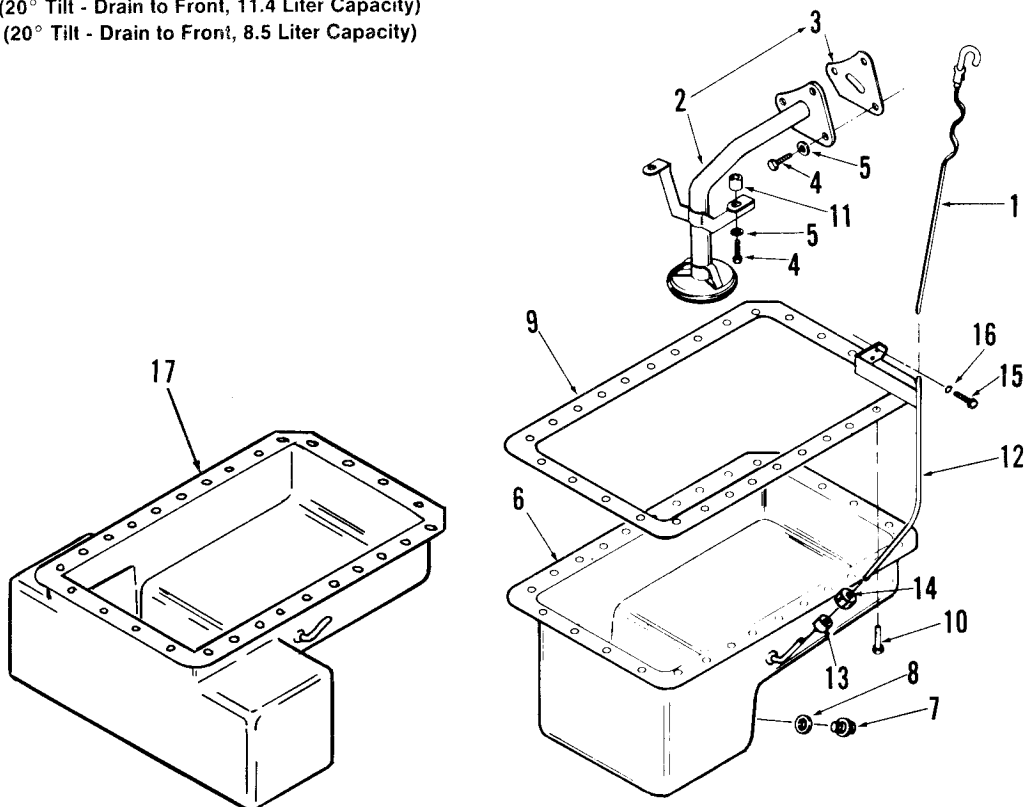
LS-1059

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	INDICATOR, OIL LEVEL		
	123-1582	1	Codes 17AA, 17AE, 17AG, 17AP, 17BG
	123-1652	1	Codes 17AB, 17AH
2	CUP AND TUBE KIT, OIL PICKUP (Includes Gasket)		
	120-1124	1	Codes 17AB, 17AH, 17BG
	120-1088	1	Codes 17AA, 17AE, 17AG, 17AP
3	120-0917	1	Gasket, Oil Pickup
4	SCREW, CAP - HEX HEAD		
	718-1048	2	M8 × 80 MM
	718-1046	2	M8 × 70 MM
	718-1036	2	M8 × 20MM
5	740-1006	4	Washer, Flat (M8)
6	PAN, OIL (Includes Plug and Plug Gasket)		
	102-1190	1	Codes 17AA, 17AE, 17AG, 17AP
	102-1191	1	Codes 17AB, 17AH, 17BG
7	PLUG, OIL DRAIN		
	102-1146	1	All Except Code 17AP
	102-1146	2	Code 17AP
8	GASKET, OIL DRAIN PLUG		
	102-1147	1	All Except Code 17AP
	102-1147	2	Code 17AP
9	102-1036	1	Gasket, Oil Pan
10	815-0547	36	Screw, Cap - Hex Head (Includes Washer) M8 × 20 MM

OIL PAN (REAR SUMP)

Code 17BJ (20° Tilt - Drain to Front, 11.4 Liter Capacity)
Code 17BK (20° Tilt - Drain to Front, 8.5 Liter Capacity)

5100-1059
5100-1122

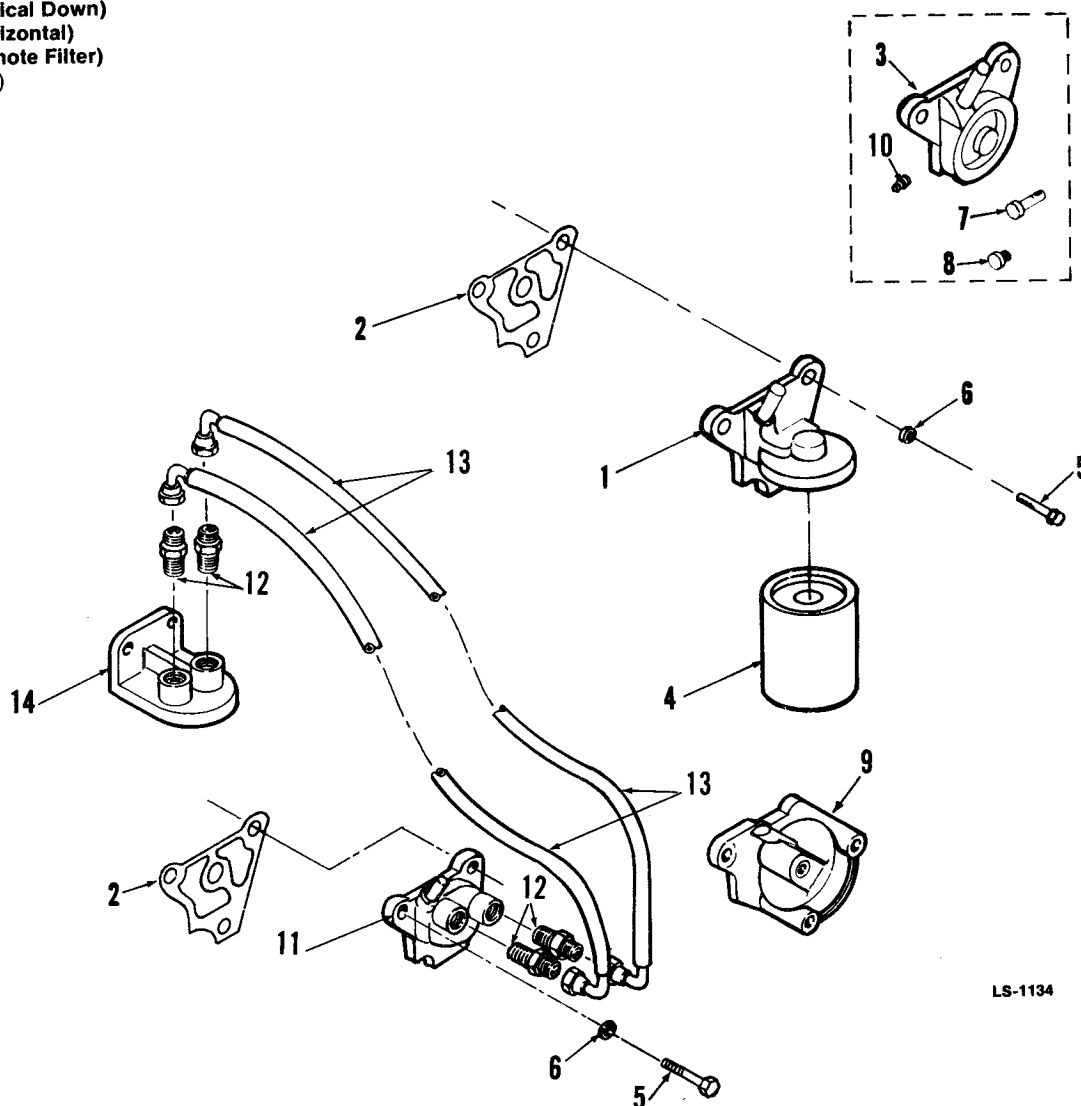


REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	INDICATOR, OIL LEVEL		
	123-1667	1	Code 17BJ
	123-1711-11	1	Code 17BK
2	120-1149	1	Pickup Kit, Oil (Includes Gasket)
3	120-0917	1	Gasket, Oil Pickup
4	SCREW, CAP - HEX HEAD		
	718-1056	2	M10 x 35 MM
	718-1048	2	M8 x 80 MM
	718-1036	1	M8 x 20 MM
5	WASHER, FLAT		
	740-1006	3	M8
	740-1008	2	M10
6	102-1280	1	Pan, Oil - Code 17BK
7	102-1146	1	Plug, Oil Drain
8	102-1147	1	Gasket, Oil Drain Plug
9	102-1036	1	Gasket, Oil Pan
10	815-0547	36	Screw, Cap - Hex Head (Includes Washer) - M8 x 20 MM
11	191-1321	2	Spacer, Oil Pickup
12	TUBE, OIL LEVEL		
	123-1759-01	1	Code 17BJ
	123-1666	1	Code 17BK
13	502-0966	1	Sleeve, Flareless Tube
14	502-0967	1	Nut, Flareless Tube
15	718-1018	2	Screw, Cap - Hex Head (M6 x 12 MM)
16	740-1004	2	Washer, Flat (M6)
17	102-1315	1	Pan, Oil - Code 17BJ

OIL FILTER

Code 17AJ (Vertical Down)
 Code 17AK (Horizontal)
 Code 17AS (Remote Filter)
 Code 17AW (45°)

5100-0454



LS-1134

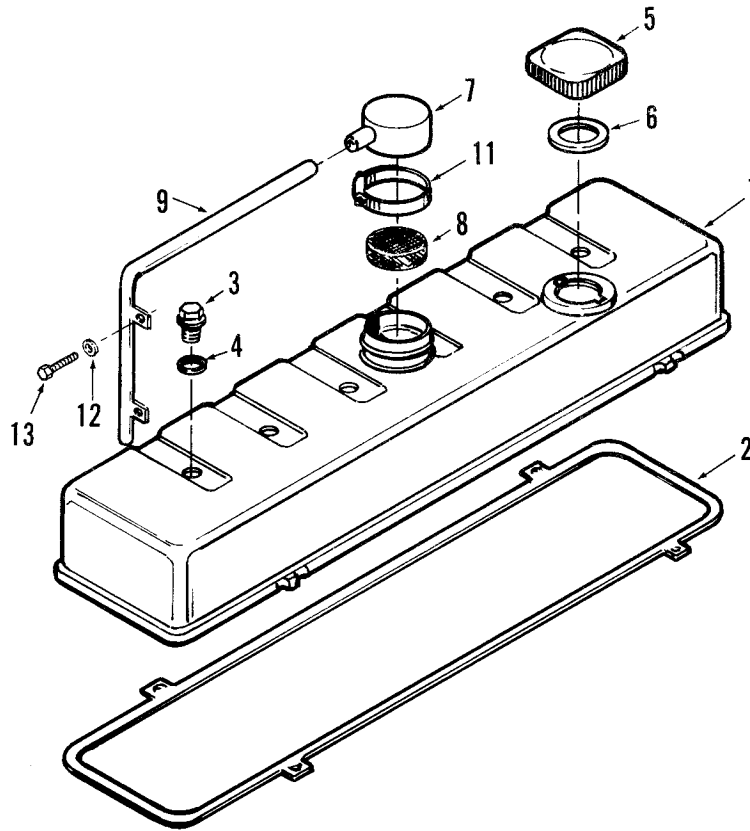
REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	122-0613	1	Adapter, Oil Filter (Includes Gasket) - Code 17AJ
2	122-0635	1	Gasket, Oil Filter Adapter
3	122-0614	1	Adapter, Oil Filter (Includes Gasket) - Code 17AK
4	122-0550	1	Filter, Oil
5	SCREW, CAP - HEX HEAD		
	718-1037	3	M8 × 25 MM - Code 17AJ
	718-1039	1	M8 × 35 MM - Code 17AK
	718-1040	2	M8 × 40 MM - Code 17AK
	718-1040	3	M8 × 40 MM - Code 17AS
	718-1037	1	M8 × 25 MM - Code 17AW
	718-1804	2	M8 × 110 MM - Code 17AW
6	WASHER, FLAT (M8)		
	526-2108	3	Code 17AJ, 17AS, 17AW
	526-2108	2	Code 17AK
	740-1802	1	Code 17AK

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
7	725-1053	1	Screw, Socket Head Cap (M8 × 35MM) - Code 17AK
8	505-0274	1	Plug, Pipe (3.175 MM) - Code 17AK, 17AW
9	122-0606	1	Adapter, Oil Filter - Code 17AW
10	505-0266	1	Plug, Pipe (3/8") - Code 17AK - Used During Spec B
11	122-0612	1	Adapter Kit, Oil Filter (Includes Mounting Gasket) - Code 17AS
12	502-0873	4	Adapter, Oil Lines - Code 17AS
13	501-0479	2	Line, Oil - Code 17AS
14	122-0581	1	Base, Oil Filter - Code 17AS

ROCKER COVER

Code 17AL (Top Center)
Code 17AM (Top Center and Side Gearcase)

5100-0385
5100-0762



LS-1119

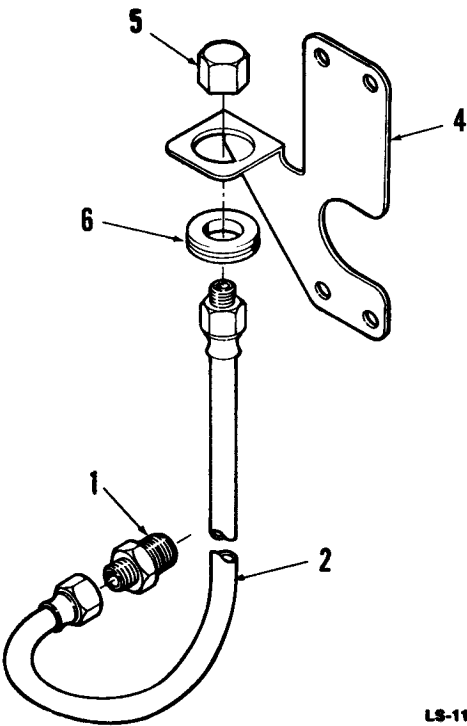
REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	115-0347	1	Cover Kit, Rocker
2	115-0244	1	Gasket, Rocker Cover
3	115-0320	6	Capnut, Rocker Cover
4	115-0232	6	Gasket, Capnut
5	123-1605	1	Cap, Oil Fill (Includes Gasket)
6	123-1518	1	Gasket, Oil Fill Cap
7	123-1583	1	Cover, Breather
8	123-1675	1	Element, Breather
9	123-1589	1	Tube, Breather
11	503-1143	1	Clamp, Hose
12	740-1801	2	Washer, Flat (M12)
13	718-1072	2	Screw, Cap - Hex Head (M12 x 20 MM)

NOTE: Additional parts for Code 17AM will be found in the Gearcase Group.

REMOTE OIL DRAIN

Code 17BA

**5100-0570
5100-0610**

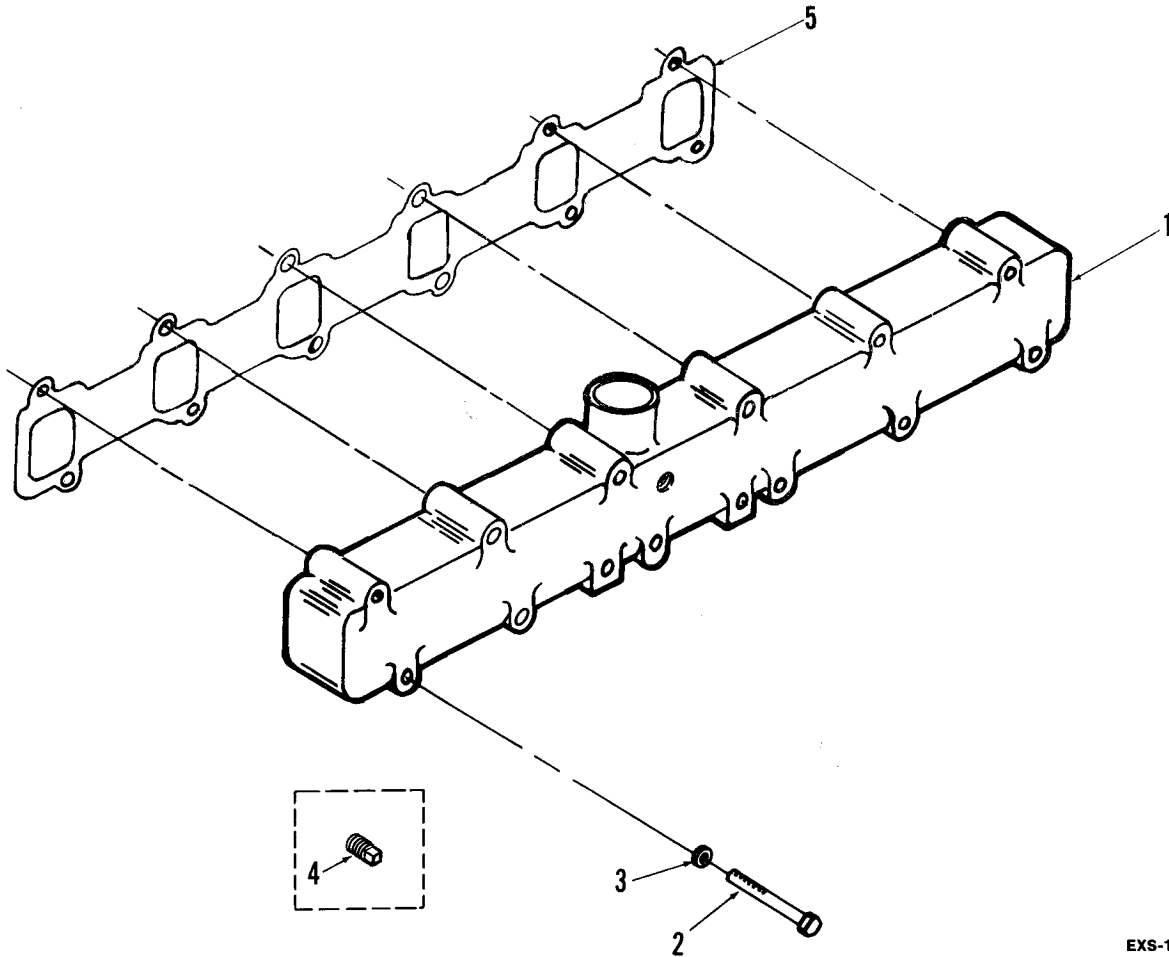


REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	102-1237	1	Adapter, Oil Drain
2	LINE, OIL DRAIN		
	501-0482	1	Used With 20° Tilt Oil Pan (615 MM Long)
	501-0494	1	Used With 30° Tilt Oil Pan (787 MM Long)
4	102-1235	1	Bracket, Oil Drain
5	502-0876	1	Cap, Pipe
6	508-0250	1	Grommet

INTAKE MANIFOLD

Code 19AA (Center Up)

5100-0481

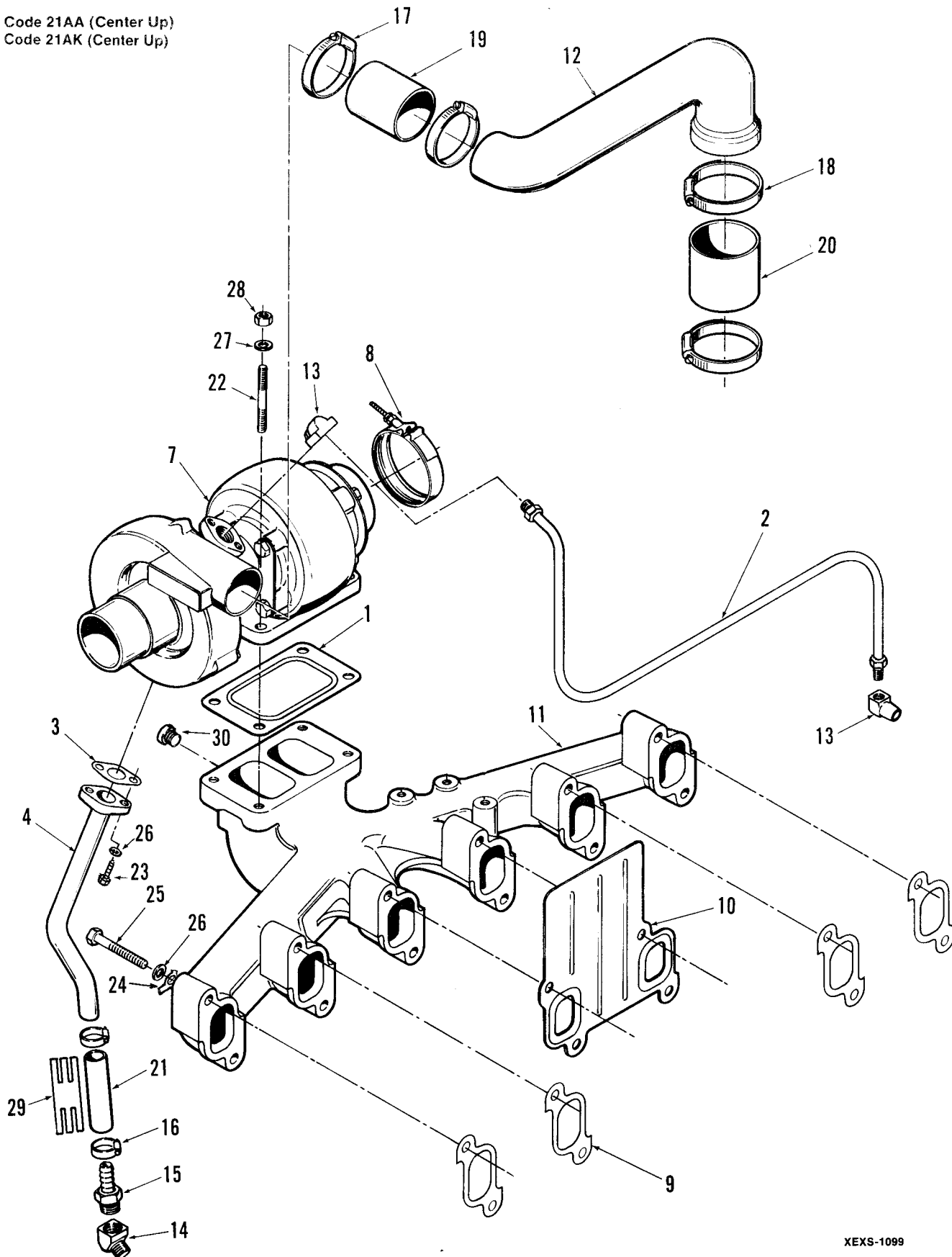


EXS-1050-1

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	154-2461	1	Manifold, Intake
2	718-1801	12	Screw, Cap - Hex Head (M8 x 85 MM)
3	740-1006	12	Washer, Flat (M8)
4	505-0274	1	Plug, Pipe (Generator Application Engines)
5	154-2300	1	Gasket, Intake Manifold

EXHAUST MANIFOLD AND TURBOCHARGER

Code 21AA (Center Up)
Code 21AK (Center Up)



XEXS-1099

EXHAUST MANIFOLD AND TURBOCHARGER

Code 21AA (Center Up)
Code 21AK (Center Up)

5100-0386
5100-0466
5100-0700
5100-0997
5100-1033

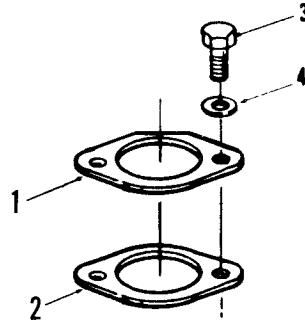
NOTE: Early models with Sales Code 21AA also included Exhaust Elbow parts listed separately under Sales Code 21AS. The use of Sales Code 21AS for Exhaust Elbow parts occurred during Spec C.

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	127-0324	1	Gasket, Turbocharger
2	127-0122	1	Line, Oil (Feed)
3	127-0338	1	Gasket, Oil Drain Flange
4	127-0341	1	Drain, Oil - Turbo
7	TURBOCHARGER		
			Code 21AA
	127-0313-03	1	1500 and 1800 RPM
	127-0313-01	1	3600 RPM
	127-0313-02	1	Code 21AK - 2600 RPM
8	127-0315	1	Clamp, V
9	154-2162	4	Gasket, Exhaust Manifold
10	154-2325	1	Gasket, Exhaust Manifold
11	154-2578	1	Manifold, Exhaust
12	154-2351	1	Tube, Cross Over
13	502-0825	2	Elbow, Inverted Flare
14	502-0826	1	Elbow, Street (45°)
15	502-0827	1	Adapter, Pipe to Hose
16	503-1136	2	Clamp, Hose
17	503-1141	2	Clamp, Hose
18	503-1142	2	Clamp, Hose
19	503-1159	1	Hose (50.8 MM × 80 MM)
20	503-1160	1	Hose (63.5 MM × 80 MM)
21	503-1161	1	Hose (19.5 MM × 70 MM)
22	520-2407	4	Stud
23	720-1035	2	Screw, Cap - Hex Head (M8 × 16 MM)
24	154-2648	12	Washer, Lock Tab
25	800-2516	12	Screw, Cap - Hex Head (M8 × 40 MM)
26	740-1006	14	Washer, Flat (M8)
27	740-1008	4	Washer, Flat (M10)
28	750-1008	4	Nut, Hex (M10)
29	127-0344	1	Shield, Heat
30	505-0180	2	Plug, Pipe - Countersunk

EXHAUST FLANGE

Code 21AG

5100-1051

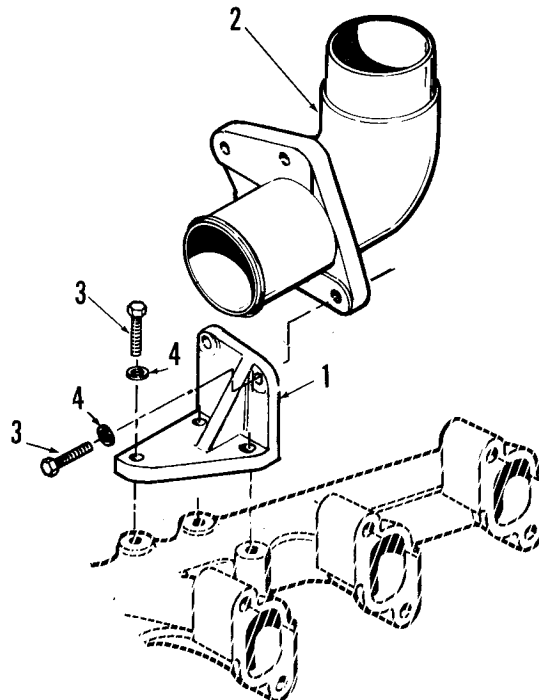


REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	155-1921	1	Flange, Exhaust
2	155-1920	1	Gasket
3	718-1054	2	Screw, Cap - Hex Head (M10 × 25 MM)
4	526-0253	2	Washer, Flat (3/8")

EXHAUST ELBOW

Code 21AS

5100-0998



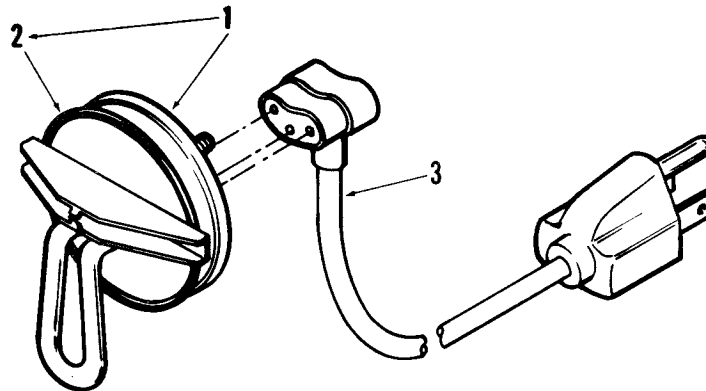
XEXS-1099-1

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	127-0129	1	Bracket, Exhaust Duct
2	127-0130	1	Flange, Exhaust Discharge
3	720-1037	5	Screw, Cap - Hex Head (M8 × 25 MM)
4	740-1006	5	Washer, Flat (M8)

ENGINE BLOCK HEATER

Code 23AL (600 Watt)

5100-0540



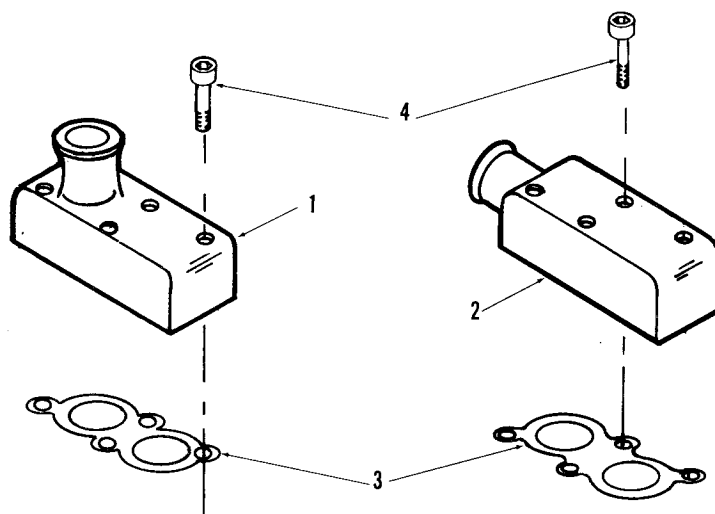
M-1597

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	333-0187	1	Heater (Includes O-Ring Seal) ,
2	509-0104	1	Seal, O-Ring
3	335-0158	1	Cord, Heater

COOLANT OUTLET CONNECTOR

Code 23AA (Vertical, Accessory Side)
 Code 23AB (Horizontal, Non-Accessory Side)
 Code 23AC (Horizontal, Accessory Side)
 Code 23CP (Vertical, Non-Accessory Side)

5100-0129



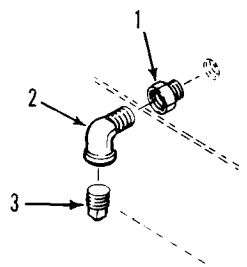
REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	309-0473	1	Cover, Thermostat (Includes Gasket) - Code 23AA, 23CP
2	COVER, THERMOSTAT (Includes Gasket) Code 23AB		
	309-0474	1	Engines With Coolant Pump Code 23AF, BA, BE, BJ, BP
	309-0475	1	Engines With Coolant Pump Code 23AS
	309-0474	1	Code 23AC
3	309-0424	1	Gasket, Thermostat Cover
4	SCREW CAP - SOCKET HEAD		
	725-1056	4	M8 × 50 MM - Code 23AA, 23CP
	725-1058	4	M8 × 60 MM - Code 23AB, 23AC

CS-1112

COOLANT HEATER CONNECTION

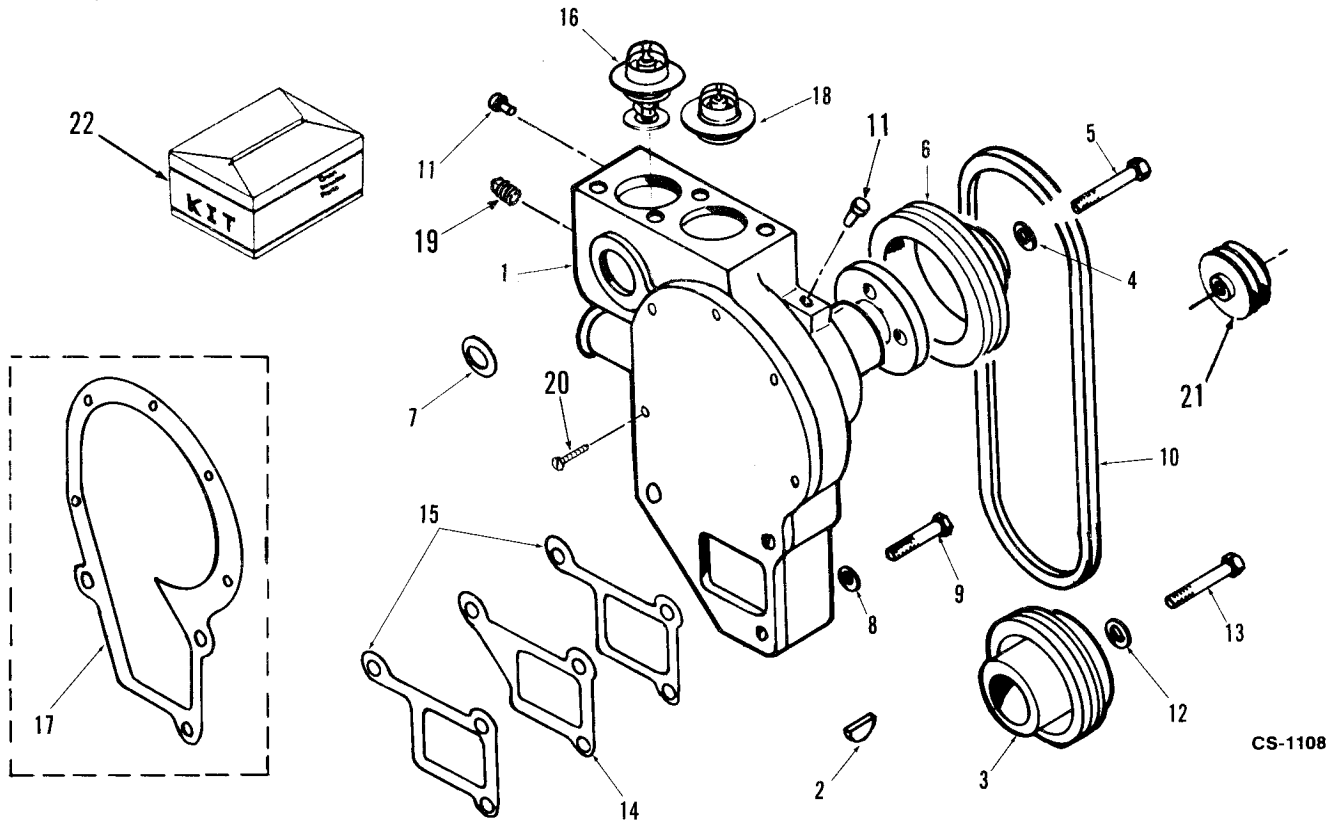
Code 23AW

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	505-0017	1	Bushing
2	502-0156	1	Elbow, Street
3	502-0153	1	Plug, Brass



COOLANT PUMP

Code 23AF (Low Flow, .97 Drive Ratio)
Code 23BA (High Flow, .81 Drive Ratio)
Code 23BE (Low Flow, 1.29 Drive Ratio)
Code 23BJ (High Flow, .73 Drive Ratio)
Code 23BP (Low Flow, 1.29 Drive Ratio - No Belt)



COOLANT PUMP

Code 23AF (Low Flow, .97 Drive Ratio)
 Code 23BA (High Flow, .81 Drive Ratio)
 Code 23BE (Low Flow, 1.29 Drive Ratio)
 Code 23BJ (High Flow, .73 Drive Ratio)
 Code 23BP (Low Flow, 1.29 Drive Ratio - No Belt)

5100-0763 5100-0773
 5100-0764 5100-0774
 5100-0769 5100-0779-01
 5100-0770-01 5100-0779-02
 5100-0771-02 5100-0793
 5100-0772-01 5100-0797
 5100-0772-03

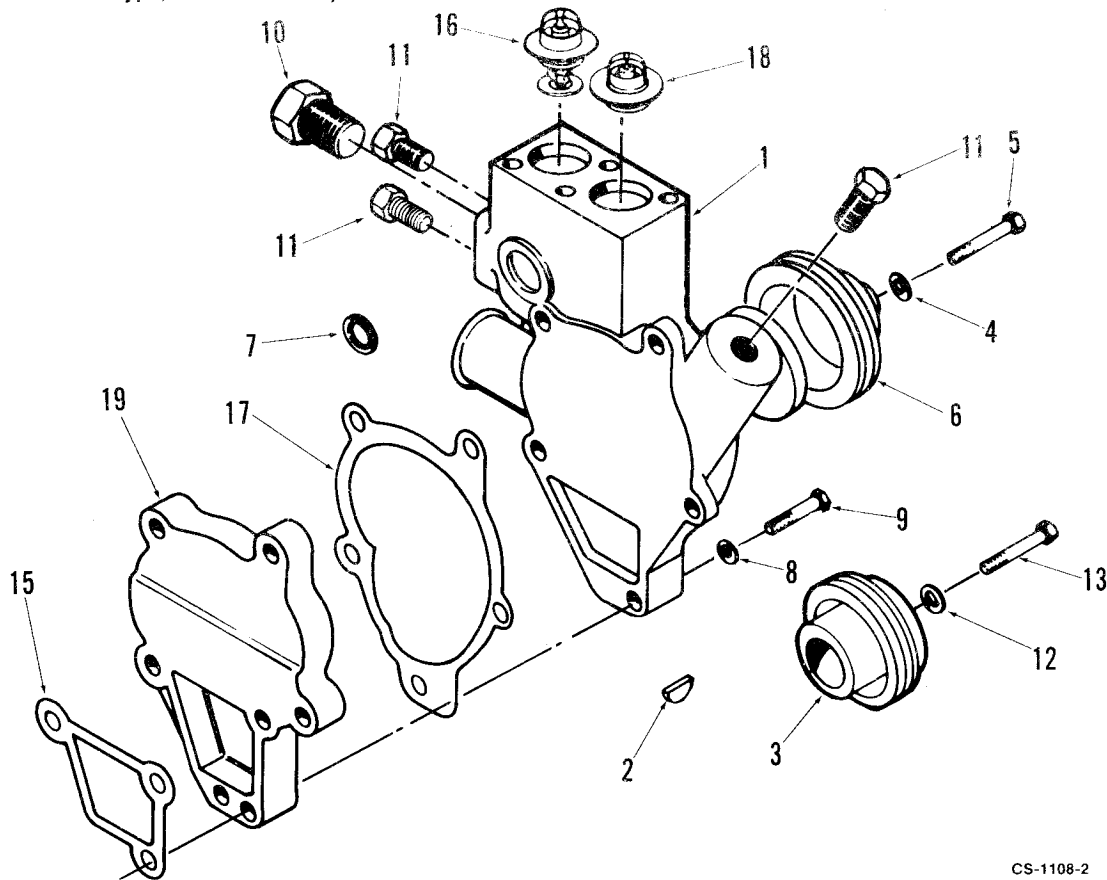
REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	PUMP KIT, COOLANT (Includes Mounting Gaskets)		
	131-0349	1	Code 23BA, 23BJ
	131-0351	1	Code 23AF, 23BE, 23BP
2	515-0245	1	Key, Woodruff
3	PULLEY, CRANKSHAFT		
	104-1472	1	Single Groove - Code 23AF, 23BE, 23BP
			Double Groove
	104-1468	1	Code 23AF, 23BE, 23BJ
	104-1467	1	Code 23BA
4	740-1006	4	Washer, Flat (M8)
5	718-1035	4	Screw, Cap - Hex Head (M8 × 16 MM)
6	PULLEY, COOLANT PUMP		
			Single Groove
	131-0344	1	Code 23AF
	131-0342	1	Code 23BE, 23BP
			Double Groove
	131-0345	1	Code 23AF, 23BA
	131-0343	1	Code 23BE
	131-0347	1	Code 23BJ
7	509-0264	1	Seal O-Ring
8	740-1006	3	Washer, Flat (M8)
9	718-1044	3	Screw, Cap - Hex Head (M8 × 60 MM)
10	BELT, COOLANT PUMP AND ALTERNATOR DRIVE		
			Code 23AF (Some Engines Require 2)
	511-0147-15	1	Single Groove Pulleys
	511-0147-15	1	Double Groove Pulleys
	511-0147-17	1	High Mounted Idler Pulley
			Code 23BA
	511-0147-13	2	High Mounted Alternator
	511-0147-01	2	Low Mounted Alternator
			Code 23BE (With Double Groove Pulleys)
	511-0147-13	2	High Mounted Alternator
	511-0147-08	2	Low Mounted Alternator
			Code 23BJ (Some Engines Require 2)
	511-0147-03	2	High Mounted Alternator
	511-0147-06	2	Low Mounted Alternator
	511-0147-06	1	High Mounted Idler Pulley

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
11	502-0775	3	Plug, Brass - Hex Head (3/8")
12	526-0283	1	Washer, Flat (M8)
13	720-1123	1	Screw, Cap - Hex Head (M16 × 60 MM)
14	131-0324	1	Spacer, Coolant Pump
15	131-0294	2	Gasket, Coolant Pump Mounting
16	309-0458	1	Thermostat Kit (192°)
			Includes Cover Gasket
17	131-0335	1	Gasket, Coolant Pump Backplate
18	309-0462	1	Thermostat Kit (180°)
			Includes Cover Gasket
19	502-0317	1	Plug, Pipe - Hex Head (3/4")
20	815-0612	5	Screw, Countersunk - Flat Head - Torque Drive (Special)
21	PULLEY, ALTERNATOR		
			Single Groove
	191-1338	1	71.7 MM Diameter
	191-1339	1	78 MM Diameter
			Double Groove
	191-1342	1	71.7 MM Diameter
	191-1333	1	78 MM Diameter
22	KIT, REPAIR - Coolant Pump (Includes Gaskets, Seal, Hub, Bearing, Impeller and Backplate Mounting Screws)		
	541-0214-04	1	Code 23AF, 23BE, 23BP
	541-0214-03	1	Code 23BA, 23BJ

COOLANT PUMP

Code 23AS (Automotive Type, 1.18 Drive Ratio)

5100-0891
5100-0893



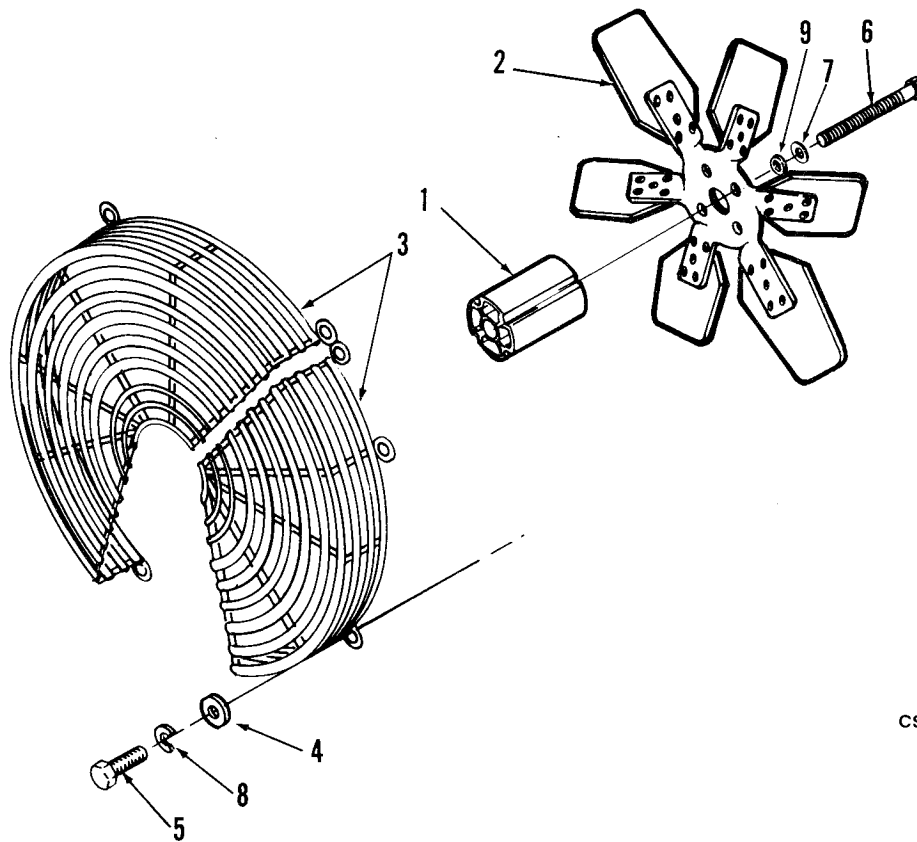
CS-1108-2

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	131-0421	1	Pump Kit, Coolant (Includes Mounting Gaskets)
2	515-0245	1	Key, Pulley
3	104-1515	1	Pulley, Crankshaft
4	740-1006	4	Washer, Flat (M8)
5	718-1036	4	Screw, Cap - Hex Head (M8 x 20 MM)
6	131-0412	1	Pulley, Coolant Pump
7	509-0264	1	Seal, O-Ring
8	740-1006	4	Washer, Flat (M8)
9	SCREW, CAP - HEX HEAD		
	718-1041	4	Pump to Base (M8 x 45 MM)
	718-1046	1	Pump to Block (M8 x 70 MM)
	725-1051	2	Base to Block (M8 x 25 MM)
10	502-0317	1	Plug, Pipe - Hex (3/4")
11	502-0775	3	Plug, Pipe - Brass Hex (3/8")
12	526-0283	1	Washer, Flat (M8)
13	720-1123	1	Screw, Cap - Hex Head (M16 x 60 MM)
15	131-0409	1	Gasket, Coolant Pump Mounting
16	309-0458	1	Thermostat Kit (192°) Includes Cover Gasket
17	131-0408	1	Gasket, Coolant Pump Base
18	309-0462	1	Thermostat Kit (180°) Includes Cover Gasket
19	131-0406	1	Base, Coolant Pump

COOLING SYSTEM - FAN

Code 23AU (Blower Fan and 102 MM Spacer)
Code 23CK (Blower Fan and 65 MM Spacer)

5100-0939

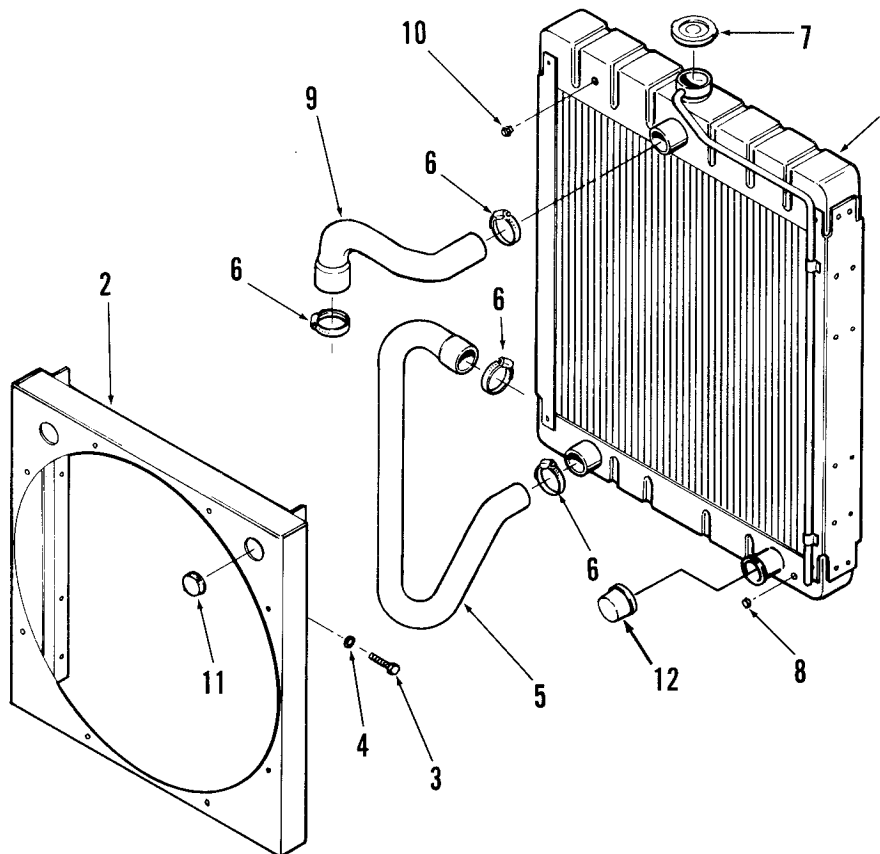


CS-1166

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	SPACER, FAN 130-1877	1	Code 23AU
	130-1876	1	Code 23CK
2	FAN, COOLING 130-2433	1	Code 23AU
	130-2305	1	Code 23CK
3	GUARD, FAN - Code 23CK 130-2260	1	Left Hand
	130-2264	1	Right Hand
4	526-0180	9	Washer, Flat (1/4") Code 23CK
5	800-2034	9	Screw, Cap - Hex Head (M6 × 20 MM) Code 23CK
6	SCREW, CAP - HEX HEAD 800-2074	4	M8 × 120 MM - Code 23AU
	800-2071	4	M8 × 90 MM - Code 23CK
7	740-1006	4	Washer, Flat (M8)
8	850-2006	9	Washer, Lock (M6) Code 23CK
9	526-0122	4	Washer, Flat (5/16") Code 23AU

COOLING SYSTEM - RADIATOR

Code 23CK



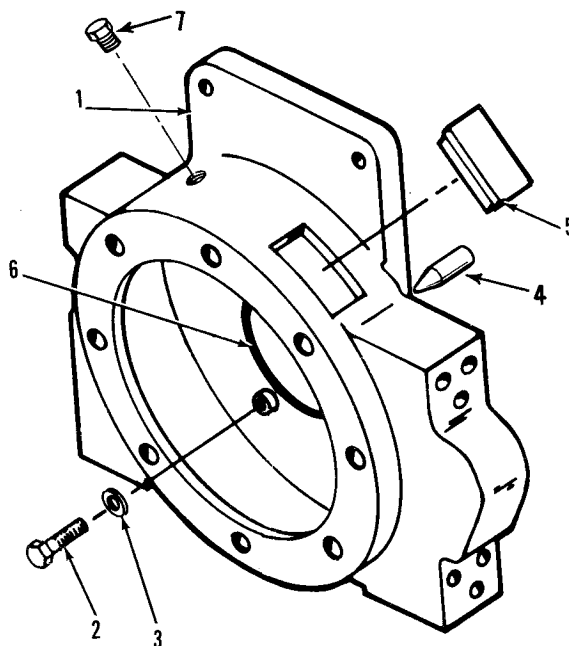
CS-1304

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	130-1818	1	Radiator
2	130-2525	1	Shroud
3	718-1032	8	Screw, Cap - Hex Head (M8 x 10 MM)
4	850-2008	8	Washer, Lock (M8)
5	503-1430	1	Hose, Radiator - Lower
6	503-0365	4	Clamp, Hose
7	130-2003	1	Cap, Pressure
8	504-0003	1	Cock, Drain
9	503-1431	1	Hose, Radiator - Upper
10	502-0153	1	Plug, Pipe (1/4")
11	517-0150	2	Plug, Hole (Cooling Systems Without Stabilizer Rods)
12	CAP, RADIATOR (Lower Hose Fitting)		
	517-0263	1	1-1/2" ID
	517-0264	1	1-3/4" ID

FLYWHEEL HOUSING

Code 27AA (SAE 5 Without Magnetic Pickup)
 Code 27AB (SAE 4 Without Magnetic Pickup)
 Code 27AC (SAE 3 Without Magnetic Pickup)
 Code 27AE (SAE 5 With One Magnetic Pickup - Metric Tapped)
 Code 27AF (SAE 4 With One Magnetic Pickup 70° From Horizontal)
 Code 27AG (SAE 3 With One Magnetic Pickup)
 Code 27AH (SAE 4 With Two Magnetic Pickups)
 Code 27AN (SAE 4 With One Magnetic Pickup 47° From Horizontal)
 Code 27AV (SAE 5 With One Magnetic Pickup - English Tapped)

5100-0974
 5100-0214



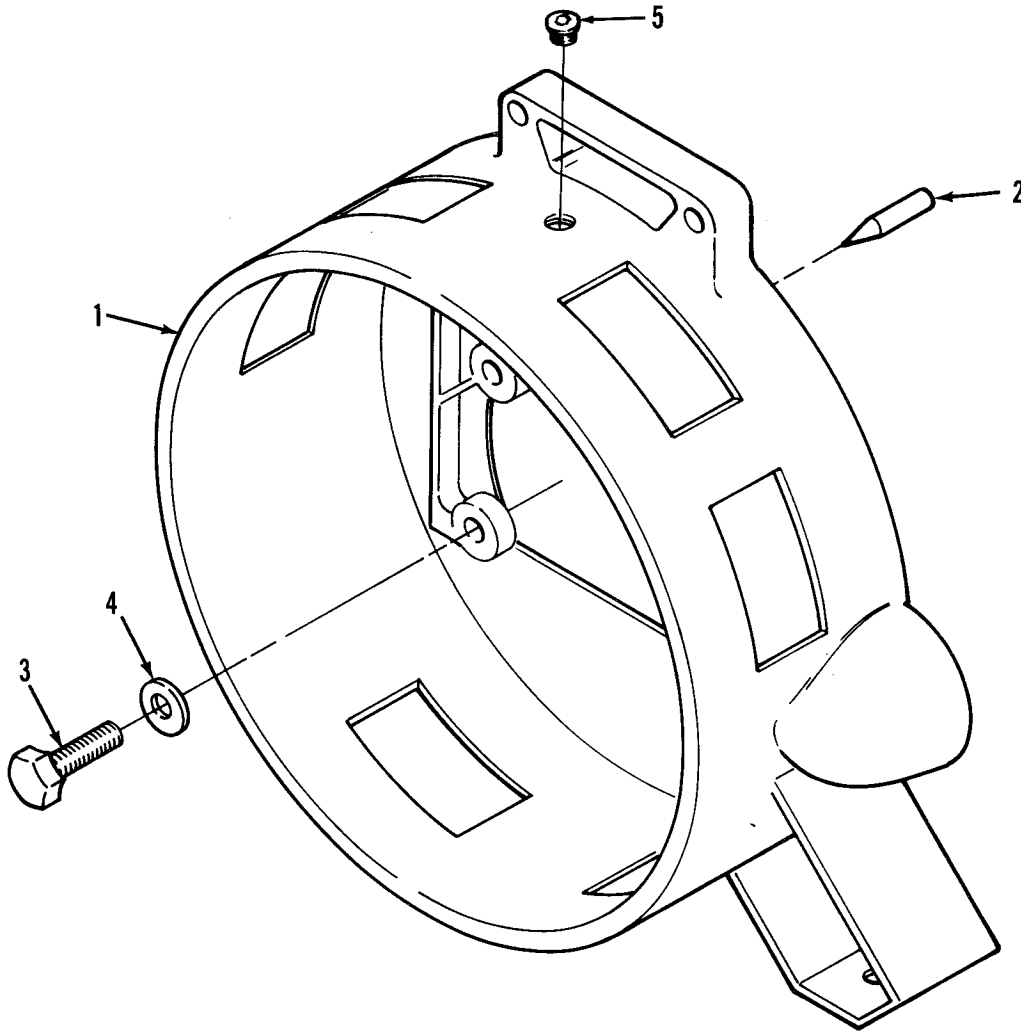
CS-1109

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	HOUSING, FLYWHEEL (Includes Seal and Indicator)		
	101-0719	1	Code 27AA
	101-0740-04	1	Code 27AB
	101-0714	1	Code 27AC
	101-0720	1	Code 27AE
	101-0740-01	1	Code 27AF
	101-0715	1	Code 27AG
	101-0740-03	1	Code 27AH
	101-0740-02	1	Code 27AN
	101-0698-03	1	Code 27AV
2	718-1078	6	Screw, Cap - Hex Head (M12 x 50 MM)
3	740-1801	6	Washer, Flat (M12)
4	160-1292	1	Indicator, Timing
5	101-0592	1	Plug, Timing Window
6	101-0630	1	Seal, Flywheel Housing
7	PLUG, CAP		
	517-0265	1	Code 27AE, 27AF, 27AG, 27AN (5/8-24)
	517-0265	2	Code 27AH (5/8-24)
	517-0259	1	Code 27AV (3/4-16)

GENERATOR ADAPTER

Code 27AJ

5100-1041-02

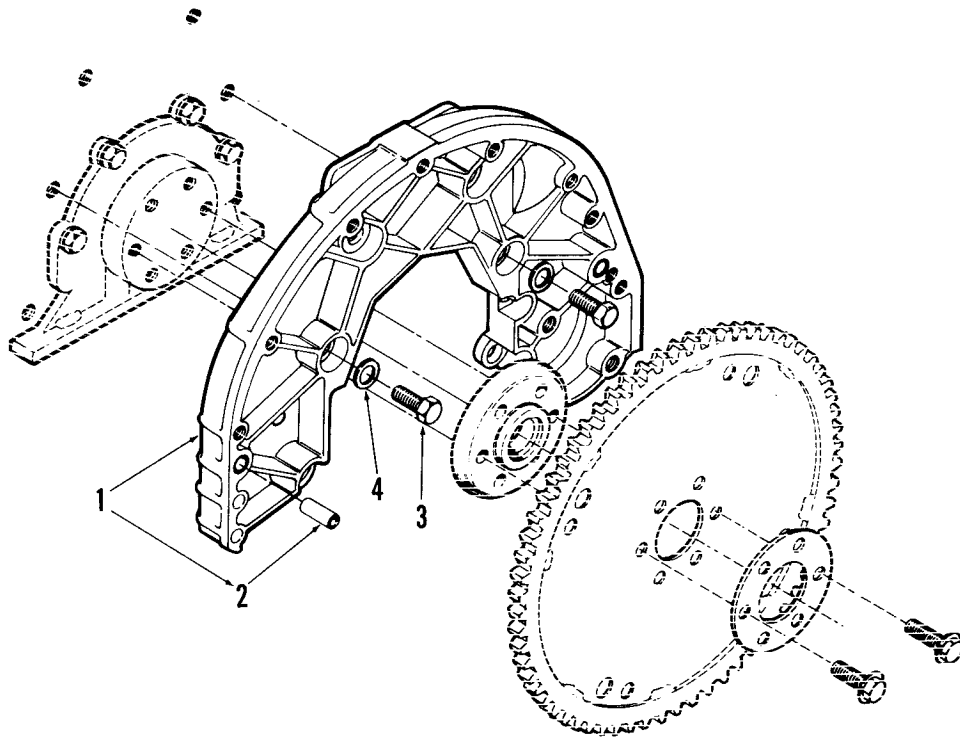


REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	231-0289	1	Adapter Assembly, Generator (Includes Timing Indicator)
2	160-1292	1	Indicator, Timing
3	718-1078	6	Screw, Cap - Hex Head (M12 x 50 MM)
4	740-1801	6	Washer, Flat (M12)
5	517-0265	1	Plug, Cap (5/8-24)

TRANSMISSION ADAPTER

Code 27AL (Ford)

5100-0603



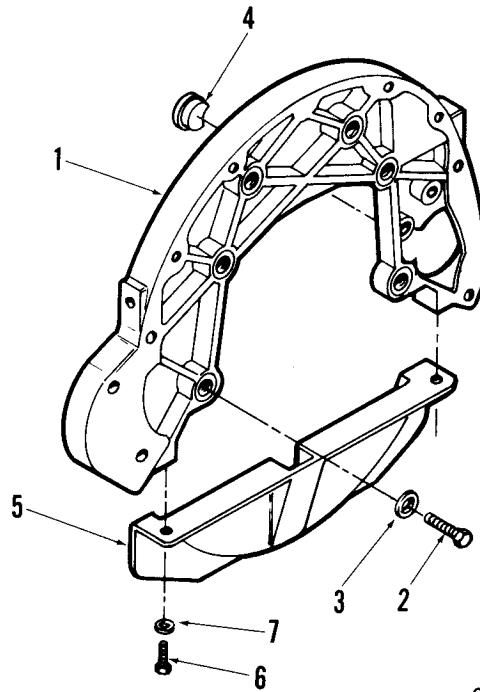
CT-1082

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	190-0622-02	1	Adapter Assembly, Transmission (Includes Dowel Pins)
2	516-0217	2	Pin, Dowel
3	718-1076	6	Screw, Cap - Hex Head (M12 x 40 MM)
4	740-1801	6	Washer, Flat (M12)

TRANSMISSION ADAPTER

Code 27AP (Chrysler 318 Case)

5100-1082

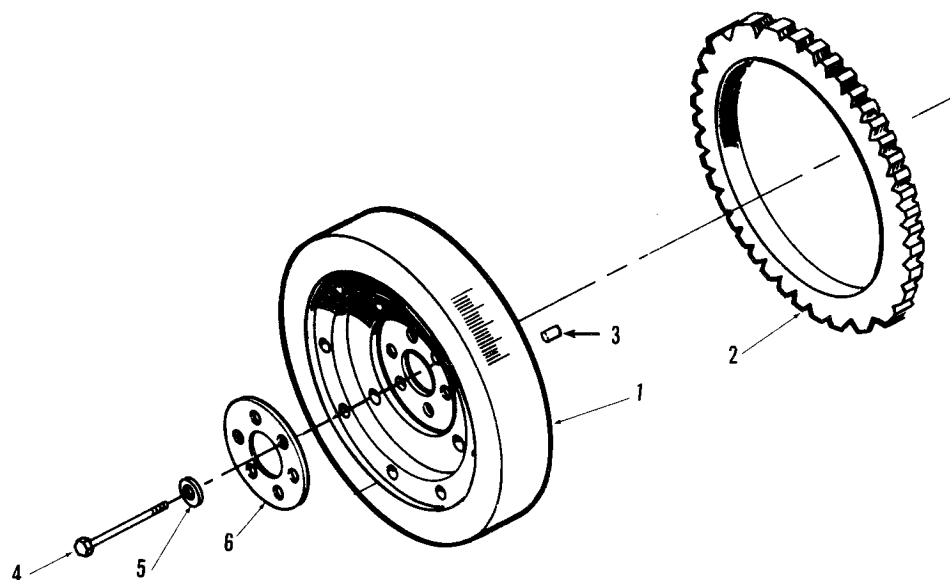


CT-1082-2

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	101-0746-01	1	Adapter, Transmission
2	718-1076	6	Screw, Cap - Hex Head (M12 x 40 MM)
3	740-1801	6	Washer, Flat (M12)
4	517-0238	1	Plug, Access Hole
5	104-1647	1	Cover, Flywheel
6	815-0634	2	Screw, Cap - Hex Head (With Nylon Locking Element) Special
7	526-2083	2	Washer, Flat (M6)

FLYWHEEL

Code 29AA (7.5" Over Center)
 Code 29AD (10.0" Over Center)
 Code 29AF (11.0" Flat Face)
 Code 29AG (11.5" Over Center)
 Code 29AK (Generator Application - SAE #500)
 Code 29AT (Generator Application - SAE #5)



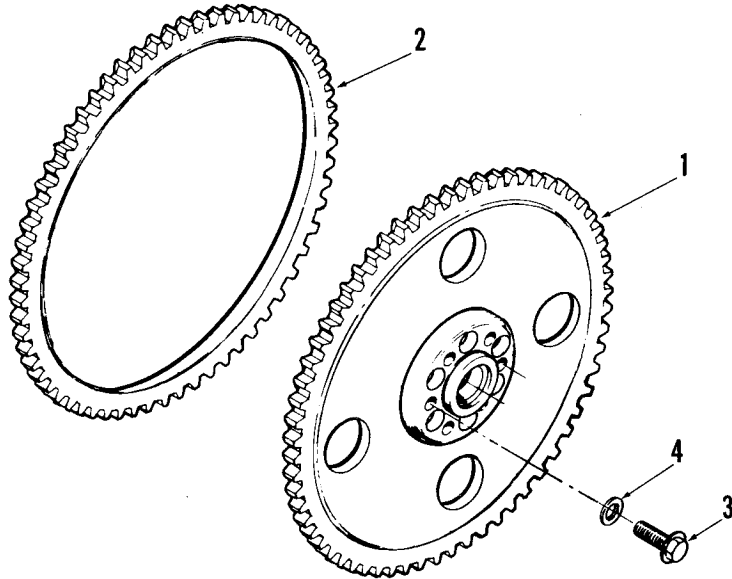
CS-1110

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	FLYWHEEL (Includes Ring Gear and Alignment Pin)		
	104-1504	1	Code 29AA
	104-1505	1	Code 29AD
	104-1389	1	Code 29AF
	104-1506	1	Code 29AG
	104-1503	1	Code 29AK
	104-1462	1	Code 29AT
2	GEAR, RING		
	104-1169	1	Code 29AA, 29AT
	104-1185	1	Code 29AD, 29AF, 29AK
	104-1184	1	Code 29AG
3	104-1171	1	Pin, Alignment
4	SCREW, CAP - HEX HEAD		
	720-1804	6	M10 x 38 MM - Code 29AA, 29AK, 29AT
	720-1805	6	M10 x 45 MM - Code 29AD, 29AF, 29AG
5	740-1008	6	Washer, Flat (M10) - Code 29AA, 29AK, 29AT
6	104-1036	1	Washer, Flat - Code 29AD, 29AF, 29AG

FLYWHEEL

Code 29AZ (Chrysler A727 Automatic Transmission)

5100-1084



CT-1082-3

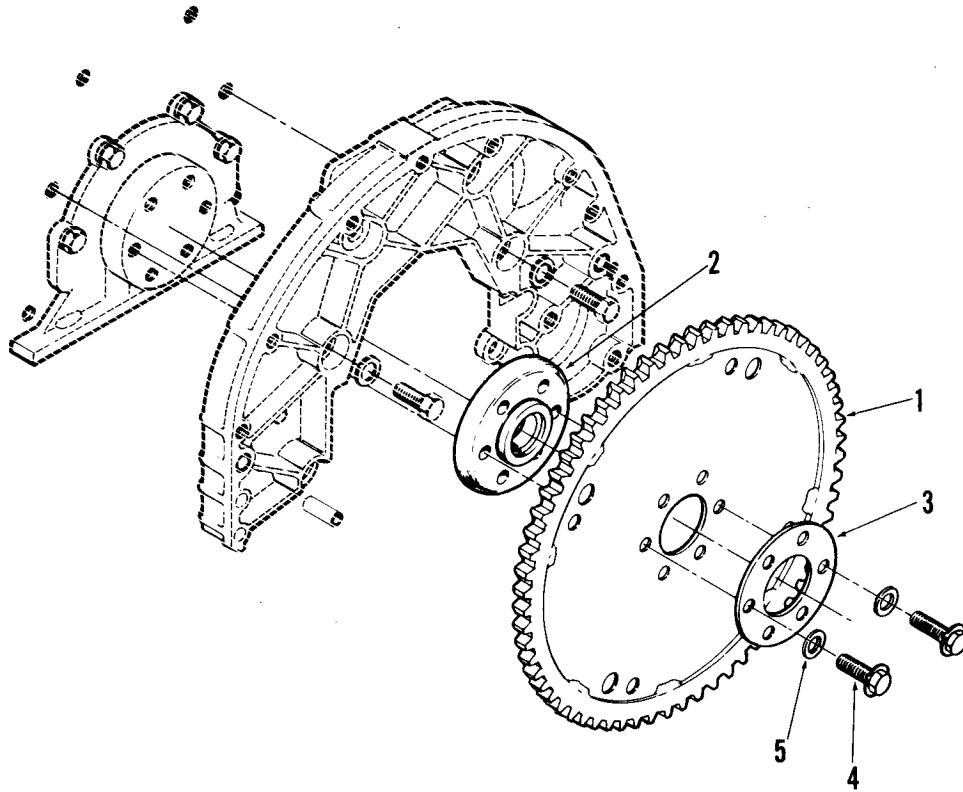
REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	104-1630	1	*Flywheel Assembly (Includes Ring Gear)
2	104-1169	1	Gear, Ring
3	720-1805	6	Screw, Cap - Hex Head (M10 x 45 MM)
4	740-1008	6	Washer, Flat (M10)

* - Chrysler part number 4058428, Torque Converter Drive Plate, is used to mate with Chrysler A727 Torque Converter.

FLEXPLATE

Code 29AP (Ford Automatic Transmission)

5100-0602



CT-1082-1

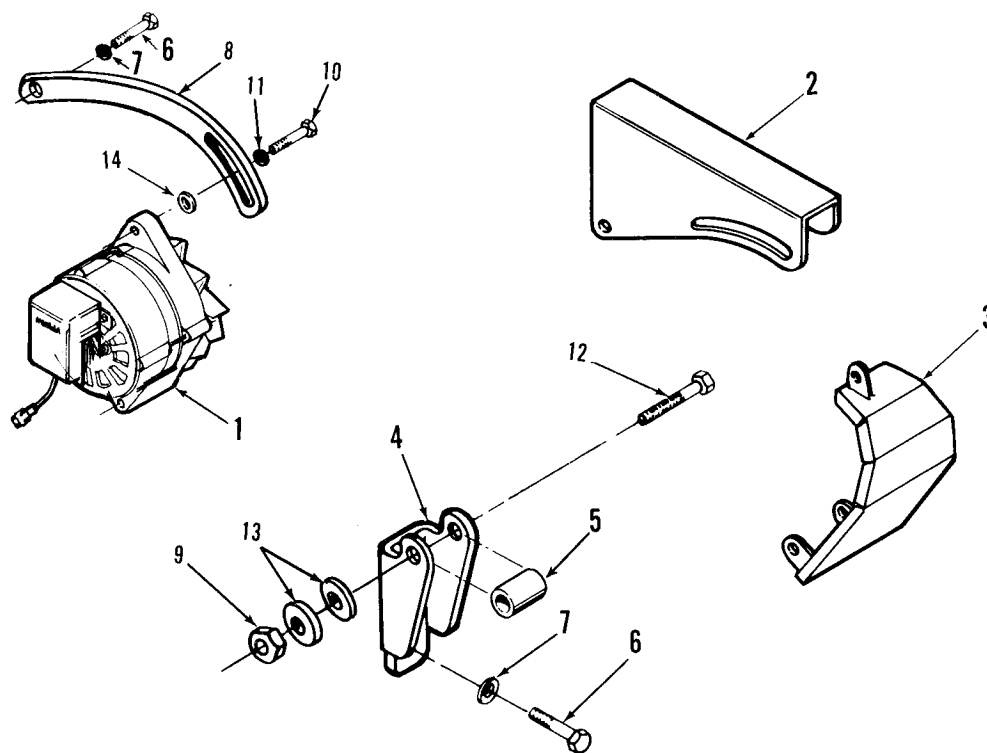
REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	104-1667	1	Flexplate
2	104-1536	1	Hub, Flexplate
3	104-1497	1	Clamp, Flexplate
4	720-1804	6	Screw, Cap - Flange Hex Head (M10 x 38 MM)
5	740-1008	6	Washer, Flat (M10)

ALTERNATOR

5100-0781
5100-0899
5100-0948

Code 31AA (High Mount Accessory Side - 37 Amp, 12 Volt)
Code 31AB (Low Mount Accessory Side - 37 Amp, 12 Volt)
Code 31AC (High Mount Accessory Side - 62 Amp, 12 Volt)
Code 31AD (Low Mount Accessory Side - 62 Amp, 12 Volt)

Code 31AE (High Mount Accessory Side - No Alternator)
Code 31AF (Low Mount Accessory Side - No Alternator)
Code 31AR (High Mount Accessory Side - 35 Amp, 24 Volt)
Code 31AU (Belt and Alternator Guard, High Mount Accessory Side)



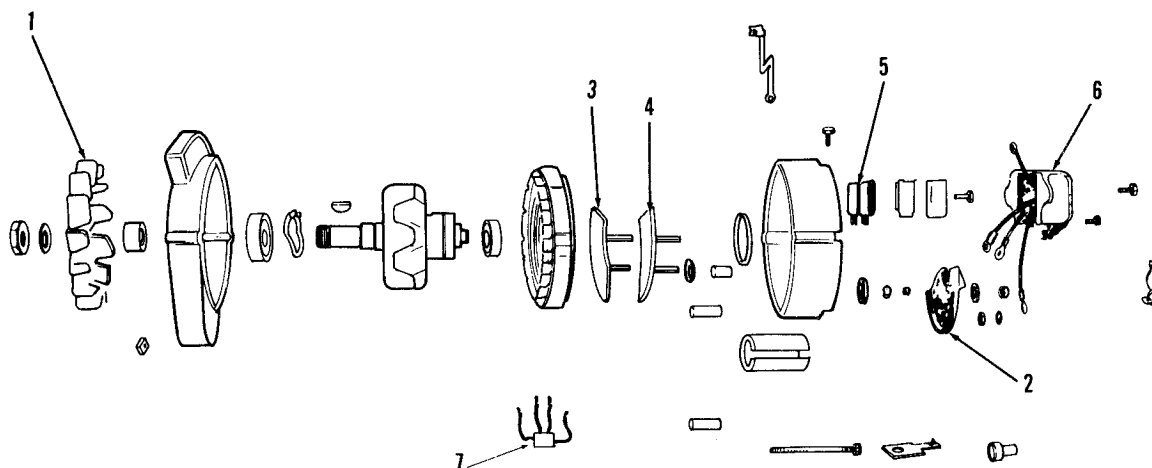
ES-1170-1

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	ALTERNATOR (See Separate Group for Components)		
	191-1525	1	Code 31AA, 31AB
	191-1526	1	Code 31AC, 31AD
	191-1570	1	Code 31AR
2	130-2784	1	Guard, Belt - Code 31AU
3	191-1677	1	Guard, Alternator - Code 31AU
4	BRACKET, ALTERNATOR MOUNTING		
	191-1332	1	Code 31AB, 31AD, 31AF
	191-1331	1	Code 31AA, 31AC, 31AE, 31AR
5	191-1321	1	Spacer, Alternator Bracket (Engines Without Code 31AK)
6	SCREW, CAP - HEX HEAD		
	718-1037	4	Code 31AA, 31AC, 31AE, 31AF, 31AR (M8 x 25 MM)
	718-1036	1	Code 31AA, 31AC, 31AE, 31AR (M8 x 20 MM)
	718-1037	5	Code 31AB, 31AD (M8 x 25 MM)

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
7	WASHER, FLAT (M8)		
	740-1006	5	Code 31AA, 31AB, 31AC, 31AD, 31AE, 31AR
	740-1006	4	Code 31AF
8	STRAP, ALTERNATOR ADJUSTING		
	191-1312	1	Code 31AB, 31AD, 31AF
	191-1365	1	Code 31AA, 31AC, 31AE, 31AR (Engines Without Code 31AU)
9	860-2009	1	Nut, Hex (M10)
10	800-2058	1	Screw, Cap - Hex Head (M8 x 25 MM) - Code 31AA, 31AC, 31AR
11	526-2106	1	Washer, Flat (M8) - Code 31AA, 31AC, 31AR
12	800-2100	1	Screw, Cap - Hex Head (M10 x 100 MM)
13	526-2123	2	Washer, Flat (M10)
14	191-1322	1	Spacer, Alternator Strap

ALTERNATOR COMPONENTS

Code 31AA (High Mount Accessory Side - 37 Amp, 12 Volt)
 Code 31AB (Low Mount Accessory Side - 37 Amp, 12 Volt)
 Code 31AC (High Mount Accessory Side - 62 Amp, 12 Volt)
 Code 31AD (Low Mount Accessory Side - 62 Amp, 12 Volt)
 Code 31AR (High Mount Accessory Side - 35 Amp, 24 Volt)



ES-1292

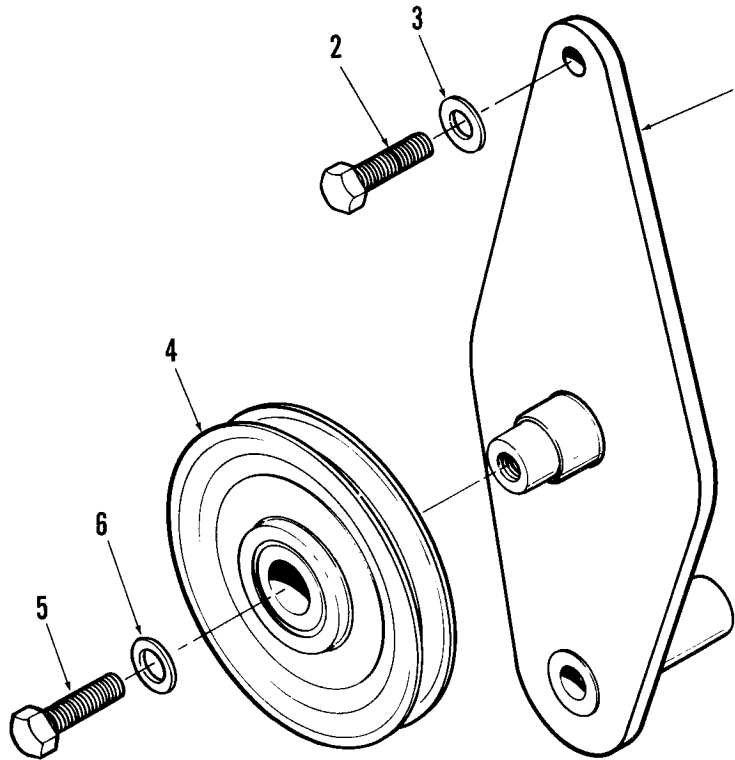
NOTE: Component part numbers for 35 Amp Alternator not available at time of printing.

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION	REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
ALTERNATOR - COMPLETE				4	DIODE, RECTIFIER - POSITIVE		
	191-1525	1	Code 31AA, 31AB - Used on Late Models - Has No Isolation Diodes on Back Side of Alternator (Replaces Early Models With Isolation Diode Assembly on Back Side of Alternator)	191-1452	1		Used on Early Models with Isolation Diode Assembly
	191-1526	1	Code 31AC, 31AD	191-1559	1		Used on Late Models without Isolation Diode Assembly
	191-1570	1	Code 31AR	5	BRUSH ASSEMBLY		
1	191-0943	1	Fan, Alternator	191-0659	1		Used on Early Models with Isolation Diode Assembly
2	191-1454	1	Diode Assembly, Isolation - Used on Early Models	191-1558	1		Used on Late Models without Isolation Diode Assembly
3	DIODE, RECTIFIER - NEGATIVE			6	REGULATOR, VOLTAGE		
	191-1453	1	Used on Early Models with Isolation Diode Assembly	191-1457	1		Used on Early Models with Isolation Diode Assembly
	191-1560	1	Used on Late Models without Isolation Diode Assembly	191-1557	1		Used on Late Models without Isolation Diode Assembly
				7	191-1556	1	Diode, Trio - Used on Late Models without Isolation Diode Assembly

IDLER PULLEY

Code 31AK

5100-0444



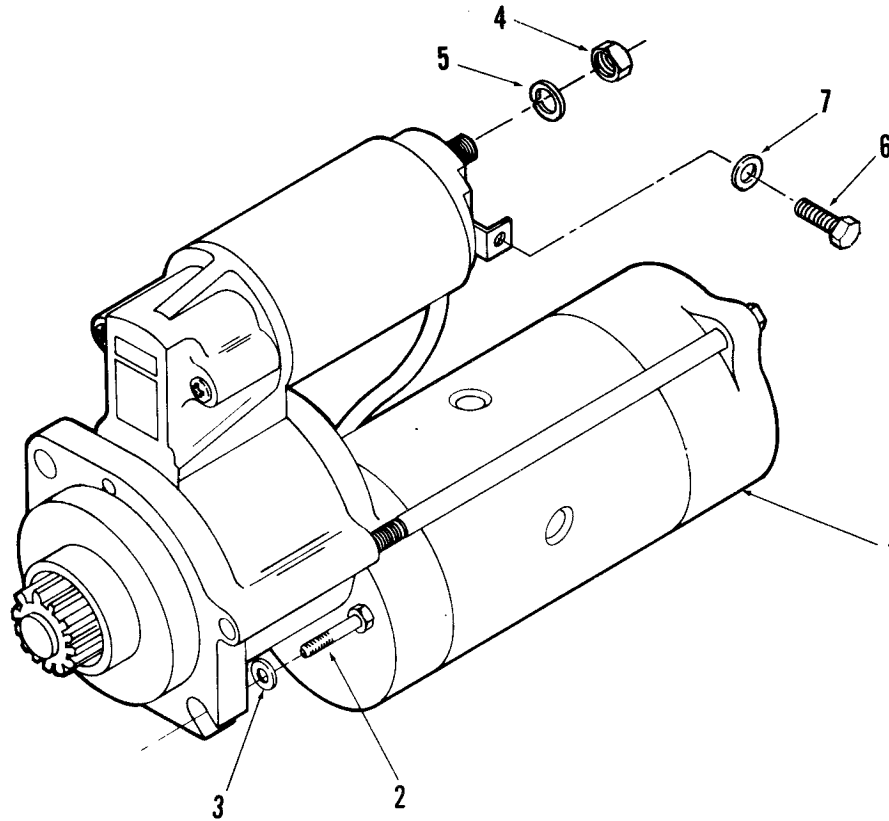
M-1666

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	130-2430	1	Plate, Idler
2	718-1036	1	Screw, Cap - Hex Head (M8 × 20 MM)
3	526-0122	1	Washer, Flat (5/16")
4	130-2279	1	Pulley, Idler
5	718-1053	1	Screw, Cap - Hex Head (M10 × 20 MM)
6	740-1008	1	Washer, Flat (M10)

STARTER

Code 33AA (12 or 24 Volt, 2.6 kW)
Code 33AU (12 Volt, 3.2 kW)

5100-0082
5100-0411
5100-1145



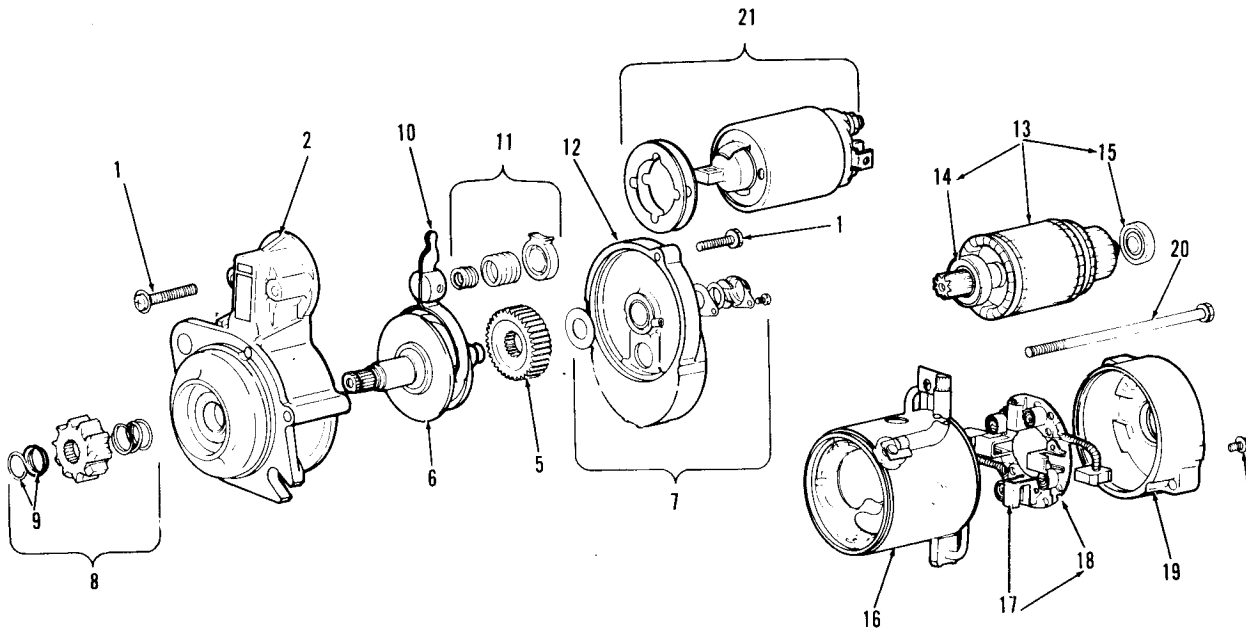
XES-1169

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	STARTER (Includes Switch Terminal Hardware) (See Separate Group for Components)		
	191-1394	1	12 Volt Code 33AA
	191-1807	1	Code 33AU
	191-1550	1	24 Volt - Code 33AA
2	720-1806	2	Screw, Cap - Flanged Hex Head (M12 × 30 MM)
3	740-1010	2	Washer, Flat (M12)
4	860-2008	1	Nut, Hex (M8) B+ Terminal
5	850-2008	1	Washer, Lock - Spring (M8) B+ Terminal
6	718-1002	1	Screw, Cap - Hex Head (M5 × 8 MM) Solenoid Terminal
7	850-2005	1	Washer, Lock - Spring (M5) Solenoid Terminal

STARTER COMPONENTS

Code 33AA (12 or 24 Volt, 2.6 kW)

Code 33AU (12 Volt, 3.2 kW)



XES-1255

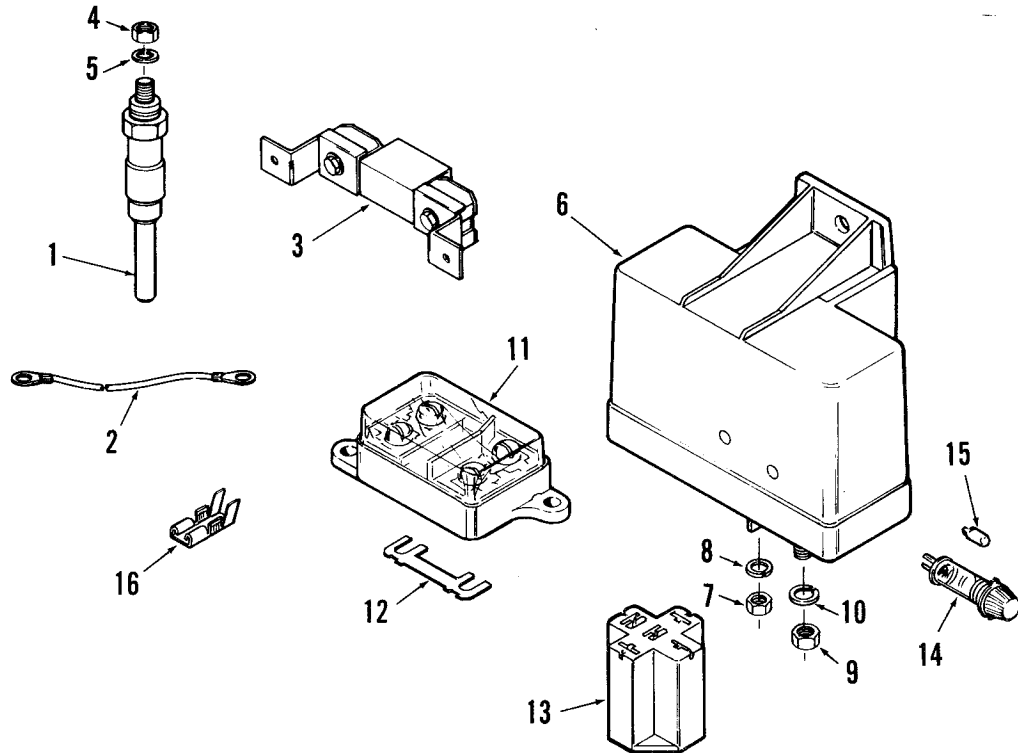
REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
STARTER (Complete)			
	191-1394	1	12 Volt Code 33AA
	191-1807	1	Code 33AU
	191-1550	1	24 Volt - Code 33AA
1	191-1450	1	Screw Set
2	BRACKET ASSEMBLY, FRONT (Includes Bearing)		
	191-1449	1	12 Volt
	191-1605	1	24 Volt
5	191-1446	1	Gear
6	191-1445	1	Clutch
7	191-1444	1	Cover Set (Includes Cover, Plate, Washers, Snap Ring, and Screws)
8	191-1443	1	Pinion Set (Includes Pinion, Spring, and Stopper Set)
9	191-1442	1	Stopper Set (Includes Stopper and Ring)
10	191-1441	1	Lever Assembly
11	191-1440	1	Spring Set
12	191-1439	1	Bracket Assembly, Center
13	ARMATURE ASSEMBLY (Includes Bearings)		
			12 Volt
	191-1438	1	Code 33AA
	191-1854	1	Code 33AU
	191-1606	1	24 Volt - Code 33AA

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
14	191-1437	1	Bearing, Center
15	191-1436	1	Bearing, Rear
16	YOKE ASSEMBLY (Includes Pole Shoes, Field Coil and Positive Brushes)		
			12 Volt
	191-1435	1	Code 33AA
	191-1853	1	Code 33AU
	191-1607	1	24 Volt - Code 33AA
17	HOLDER, BRUSH (Includes Negative Brushes)		
			12 Volt
	191-1434	1	Code 33AA
	191-1852	1	Code 33AU
	191-1608	1	24 Volt - Code 33AA
18	SPRING, BRUSH		
	191-1433	4	Code 33AA
	191-1851	4	Code 33AU
19	191-1432	1	Bracket, Rear
20	BOLT SET		
	191-1431	1	Code 33AA
	191-1850	1	Code 33AU
21	SWITCH ASSEMBLY		
	191-1430	1	12 Volt
	191-1609	1	24 Volt

GLOW PLUG

Code 33AD (12 Volt 20 Second Glow Plugs, Lead and Ballast Resistor)
 Code 33AE (12 Volt 7 Second Glow Plugs, Lead and Control)
 Code 33AG (24 Volt 60 Second Glow Plugs, Lead and Ballast Resistor)
 Code 33AN (12 Volt 20 Second Glow Plugs and Lead)
 Code 33AR (12 Volt 7 Second Glow Plugs and Lead)

5100-0177
 5100-0315
 5100-0343
 5100-0543
 5100-0629



M-1565

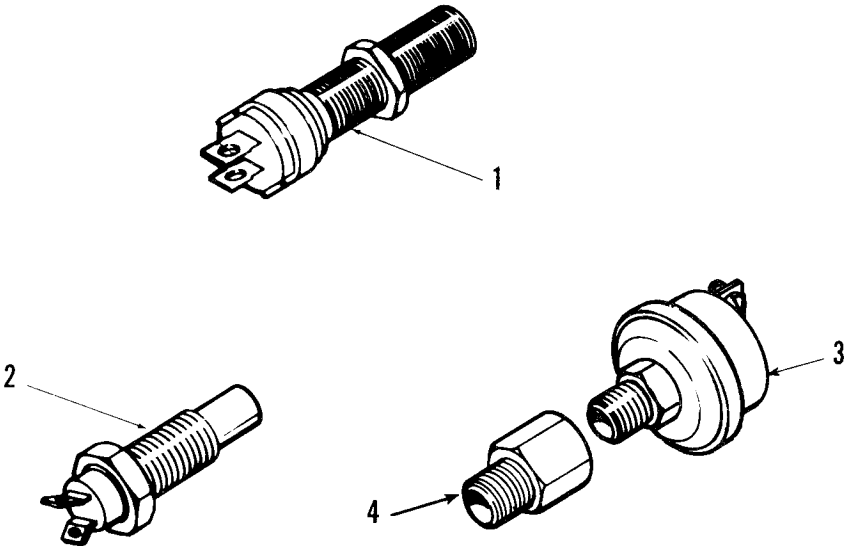
REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	PLUG, GLOW		
	333-0195	6	Code 33AD, 33AN
	333-0220	6	Code 33AE, 33AR
	333-0226	6	Code 33AG
2	336-4131	5	Lead, Glow Plug
3	RESISTOR, BALLAST		
	333-0198	1	Code 33AD
	333-0234	1	Code 33AG
4	750-1002	6	Nut, Hex (M5)
5	850-2005	6	Washer, Lock - Spring (M5)
6	333-0245	1	Controller, Glow Plug - Code 33AE
7	750-1002	1	Nut, Hex (M5) - Code 33AE

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
8	850-2005	1	Washer, Lock-Spring (M5) - Code 33AE
9	750-1004	1	Nut, Hex (M6) - Code 33AE
10	850-2006	1	Washer, Lock-Spring (M6) - Code 33AE
11	321-0263	1	Holder, Fuse - Code 33AE
12	321-0262-01	1	Fuse, Strip (80 Ampere) - Code 33AE
13	307-1690	1	Plug, Harness - Code 33AE
14	322-0354	1	Light, Indicator - Code 33AE
15	322-0353	1	Lamp, Indicator - Code 33AE
16	332-1497	4	Connector, Terminal - Code 33AE

SWITCHES

Code 35AC (Low Oil Pressure and High Water Temperature Switches)
Code 35AE (Magnetic Speed Sensor)

5100-0261
5100-0340
5100-0920



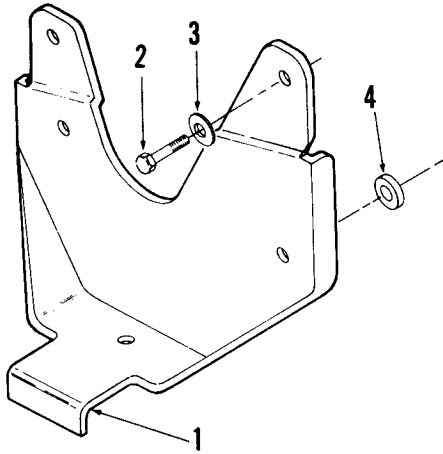
M-1489

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	150-1925	1	Sensor, Speed - Magnetic - Code 35AE
2	309-0482	1	Switch, High Water Temperature - Code 35AC
3	309-0177	1	Switch, Low Oil Pressure - Code 35AC
4	502-0944	1	Adapter - Code 35AC (Not Required on All Engines)

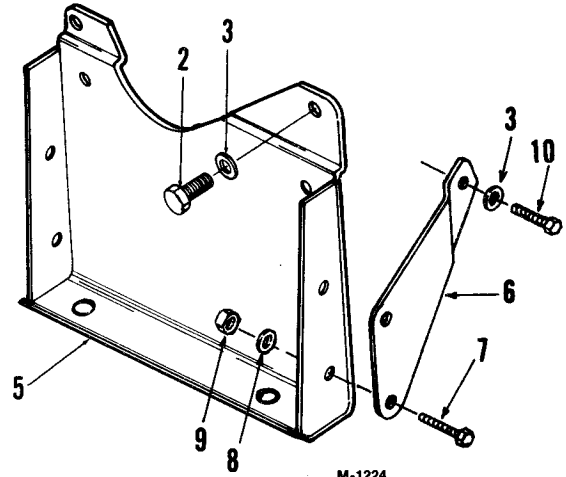
FRONT ENGINE MOUNT

Code 41AA (Single Point)
Code 41AH (Rigid Four Point - Without Radiator Support Arms)

5100-0065
5100-1034



M-1548



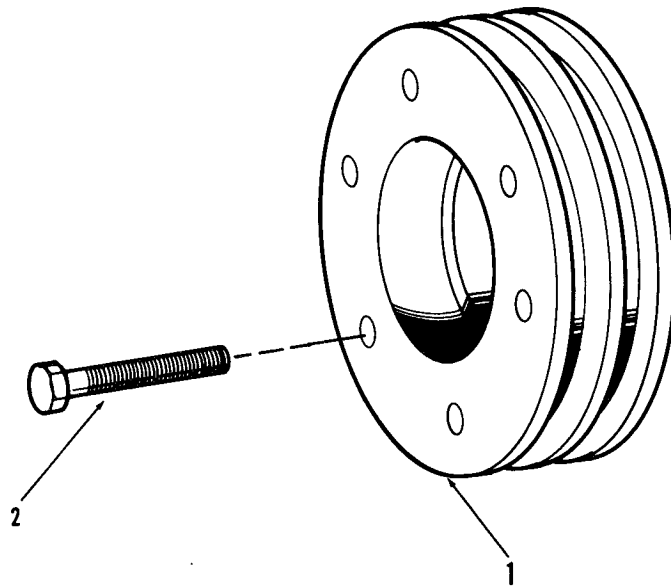
M-1224

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	403-1925	1	Bracket, Mount - Code 41AA
2	SCREW, CAP - HEX HEAD		
	718-1086	2	M12 × 90 MM (Top)
	718-1802	2	M12 × 95 MM (Bottom)
3	WASHER, FLAT (M12)		
	740-1010	4	Code 41AA
	740-1010	6	Code 41AH
4	403-1932	2	Spacer, Bracket Mounting - Code 41AA
5	403-2033	1	Bracket, Mount - Code 41AH
6	SUPPORT - Code 41AH		
	130-2797	1	Right Hand
	130-2798	1	Left Hand
7	718-1074	4	Screw, Cap - Hex Head (M12 × 30 MM) Code 41AH
8	850-2012	4	Washer, Lock (M12) Code 41AH
9	750-1010	4	Nut, Hex (M12) Code 41AH
10	718-1073	2	Screw, Cap - Hex Head (M12 × 25 MM) Code 41AH

CRANKSHAFT PULLEY

Code 45AB (Double Groove)

5100-0167



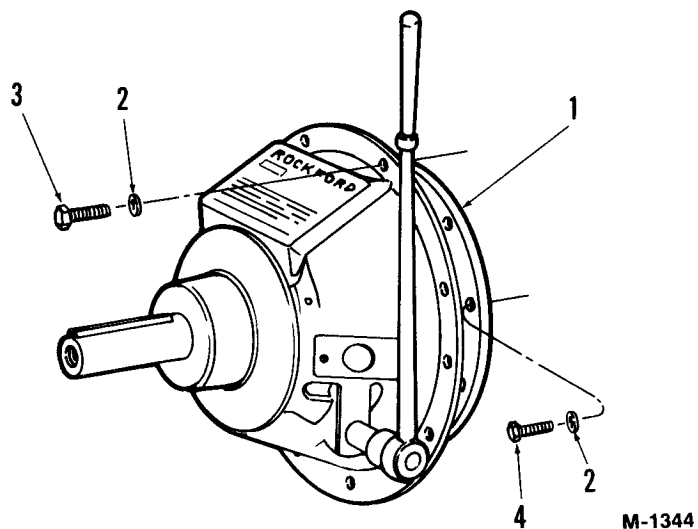
CT-1042

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	104-1374	1	Pulley, Crankshaft
2	720-1064	6	Screw, Cap - Hex Head (M10 × 75 MM)

CLUTCH

Code 45AD (10.0" Over Center)

5100-0181



REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	190-0594	1	Clutch, Power Take-Off
2	740-1008	20	Washer, Flat (M10)
3	718-1054	12	Screw, Cap - Hex Head (M10 x 25 MM)
4	718-1056	8	Screw, Cap - Hex Head (M10 x 35 MM)

NOTE: For component parts contact manufacturer shown on nameplate.

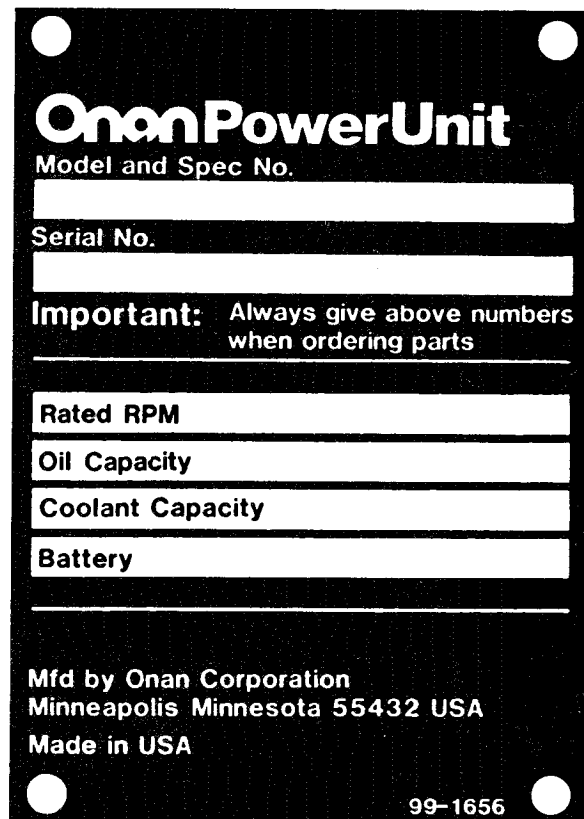
PAINT AND THREAD SEALANT

PART NO.	QTY. USED	PART DESCRIPTION
525-0454		Paint, Greige (13 oz. Pressurized Spray Can)
518-0452		Sealant, Thread (50 cc Bottle)

POWER UNIT SECTION

This section contains replacement parts for the Power Unit as listed by Sales Option Code number on the radiator shroud nameplate.

MODEL IDENTIFICATION LABEL



Onan Power Unit
Model and Spec No. _____
Serial No. _____
Important: Always give above numbers
when ordering parts

Rated RPM _____
Oil Capacity _____
Coolant Capacity _____
Battery _____

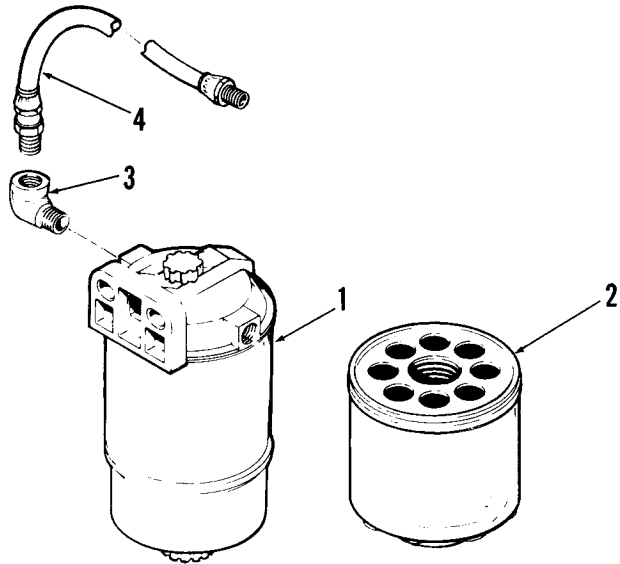
Mfd by Onan Corporation
Minneapolis Minnesota 55432 USA
Made in USA
99-1656

For handy reference, insert your radiator shroud nameplate and Sales Option Code information in the spaces above.

WATER SEPARATOR

Code 15AE

5100-0873



FS-1631-3

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	149-1908-05	1	Separator, Water (Includes Element) (See Separate Page for Components)
2	149-1914-01	1	Element, Water Separator (Includes Seals)
3	502-0054	2	Elbow, Street Pipe
4	501-0496	1	Line, Fuel (24")

FLEXIBLE FUEL LINE

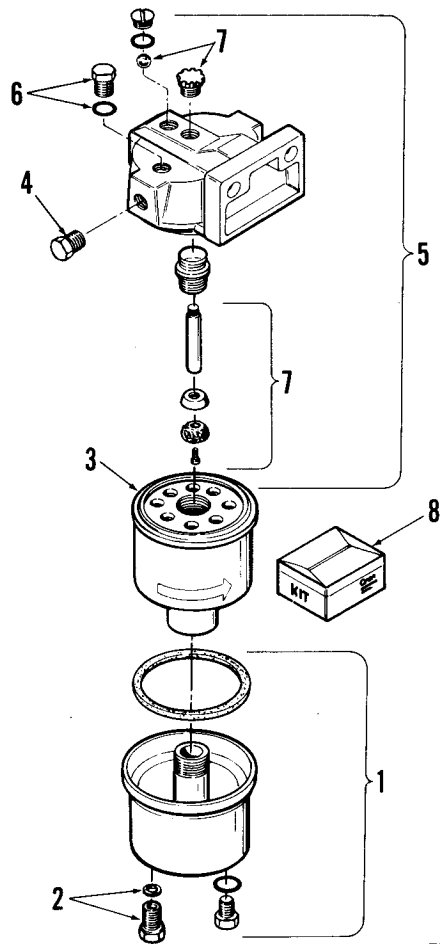
Code 15AF

5100-0515



REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	501-0002	1	Line, Flexible Fuel (7")
2	502-0041	1	Elbow, Male

WATER SEPARATOR COMPONENTS



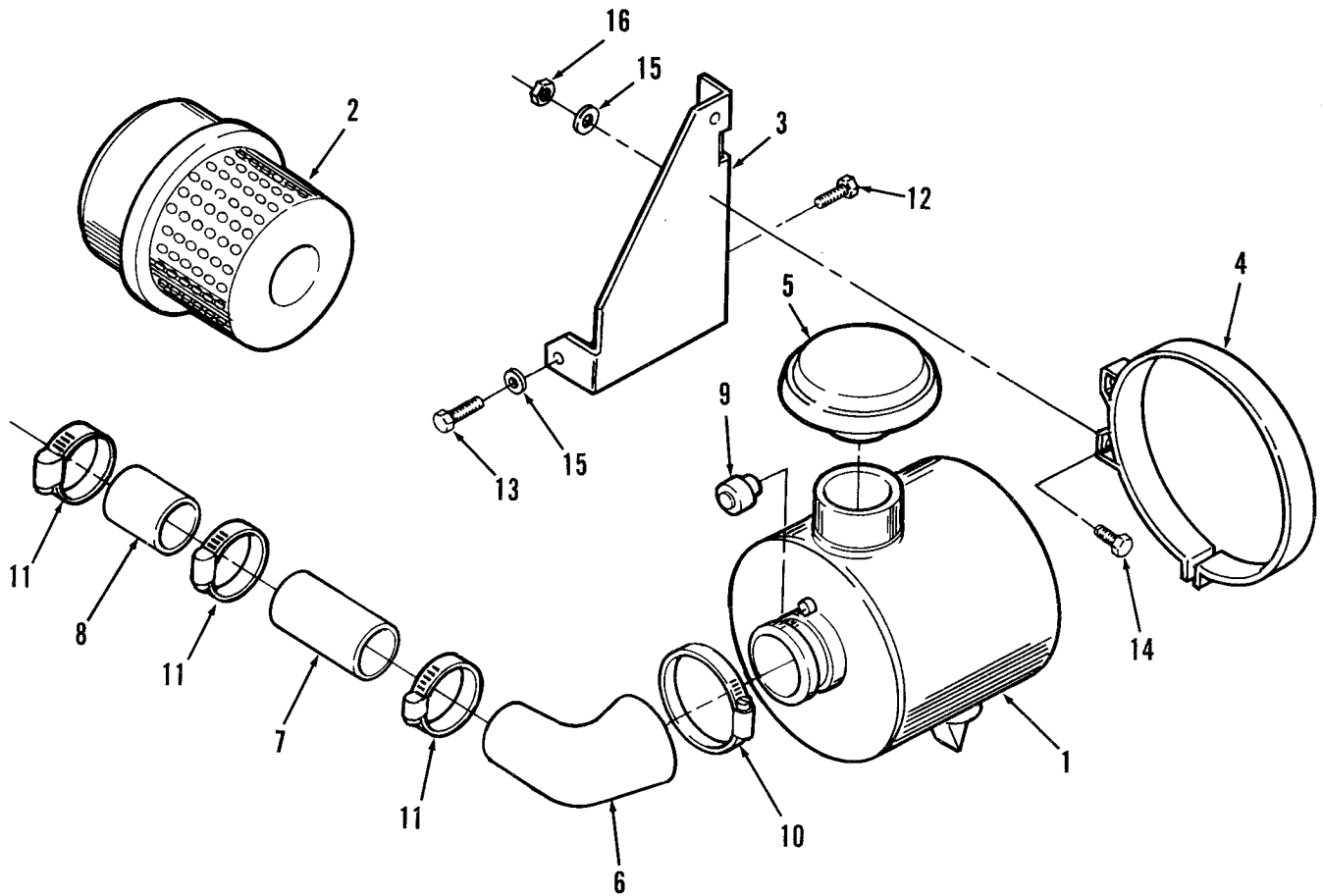
FS-1631-2

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
	149-1908-05	1	Separator, Water (Complete)
1	149-2046	1	Bowl Kit, Metal - Replacement (Includes Plug, O-Rings and Drain Assembly)
2	149-1953	1	Drain Assembly (Includes Knob and Seal)
3	149-1914-01	1	Element (Includes Seals)
4	502-0153	1	Plug, Hex (1/4")
5	149-1949	1	Head Assembly - Replacement (Includes Vent Plug, O-Rings, Seal, Cap, Tube and Pump Assembly)
6	149-1952	1	Plug, Vent (Includes O-Ring)
7	149-2047	1	Pump Assembly (Includes Plunger, Retainer, Shaft, Check Ball, Knob and Screw)
8	149-2045	1	O-Ring Kit (Includes Seal and Plunger)

AIR CLEANER

Code 19AB (Medium Duty, Single Stage)

5100-0942

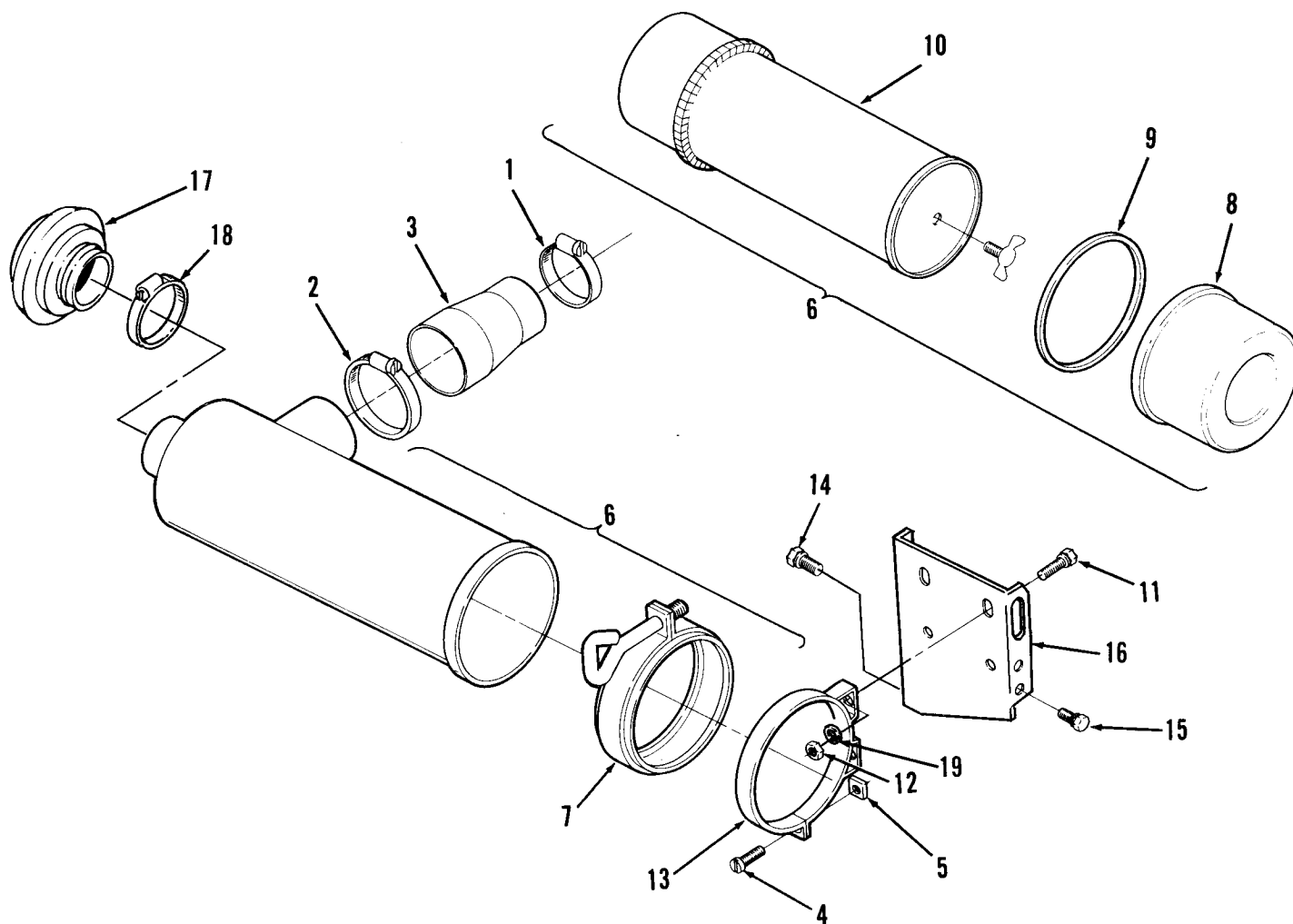


REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	140-1975	1	Cleaner, Air (Includes Element)
2	140-2003	1	Element, Air Cleaner
3	140-1974	1	Bracket, Mounting
4	140-0649	1	Band, Air Cleaner
5	140-1995-01	1	Hood, Air Inlet
6	503-1386	1	Elbow
7	140-1994	1	Tube, Air Inlet
8	503-1160	1	Hose
9	140-2008	1	Indicator, Restriction
10	503-1180	1	Clamp
11	503-1144	3	Clamp
12	800-2112	1	Screw, Cap - Hex Head (M12 × 30 MM)
13	800-2086	2	Screw, Cap - Hex Head (M10 × 25 MM)
14	800-2085	2	Screw, Cap - Hex Head (M10 × 20 MM)
15	526-2123	4	Washer, Flat (M10)
16	860-2009	2	Nut, Hex (M10)

AIR CLEANER

Code 19AK (Medium Duty, Single Stage)

5100-0616



REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	503-1087	1	Clamp, Hose
2	503-1180	1	Clamp, Hose
3	140-1895	1	Reducer, Hose
4	812-0153	2	Screw, Machine - Round Head (1/4-20 x 1")
5	863-0002	2	Nut, Square (1/4-20)
6	140-1905	1	Cleaner Assembly, Air (Includes Thumbscrew and Parts Marked *)
7	140-1935	1	*Clamp
8	140-1933	1	*Cup
9	140-1934	1	*Seal, O-Ring
10	140-1932	1	*Element

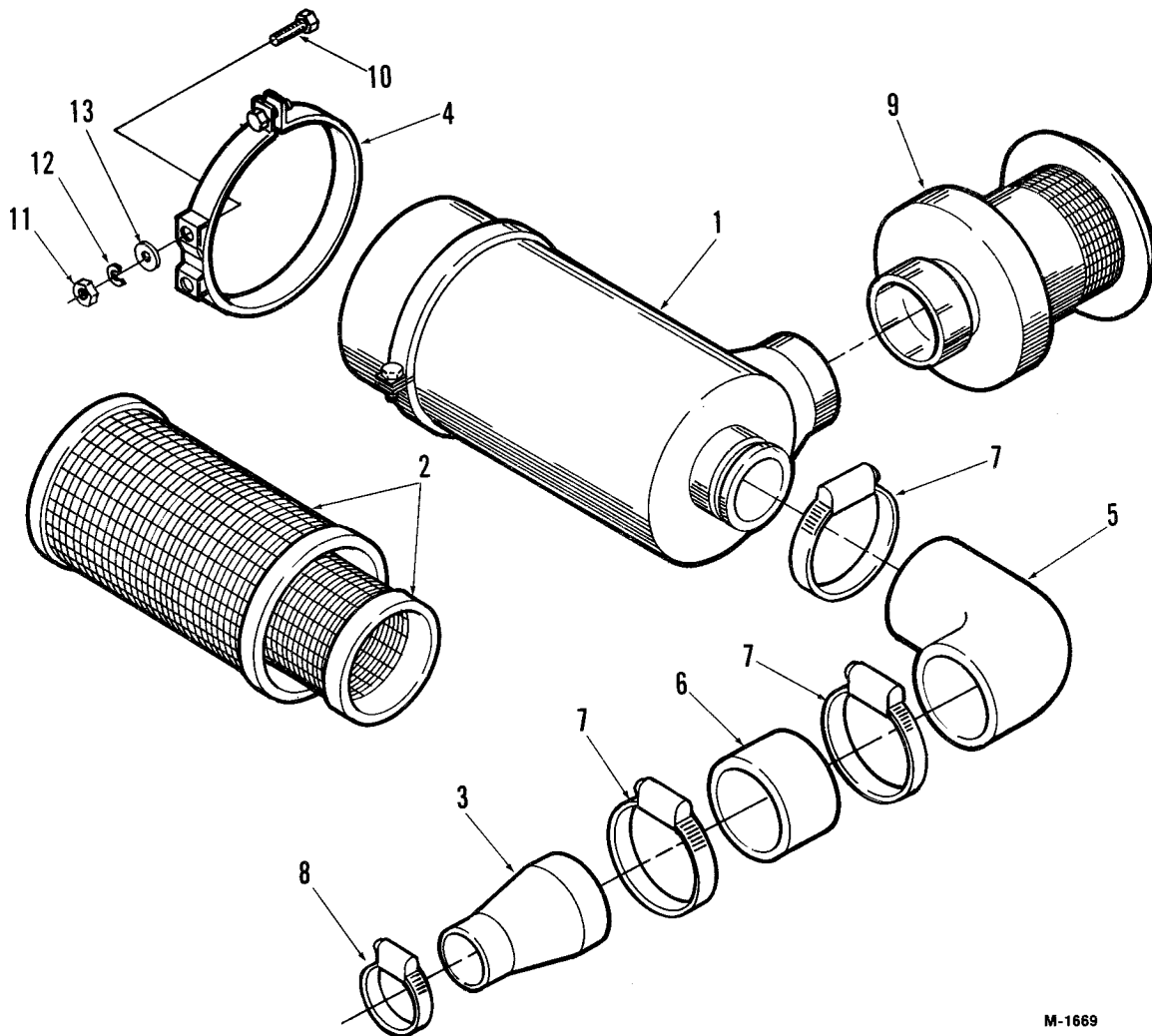
REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
11	718-1053	4	Screw, Cap - Hex Head (M10 x 20 MM)
12	750-1008	4	Nut, Hex (M10)
13	140-0649	2	Band, Mounting
14	718-1074	1	Screw, Cap - Hex Head (M12 x 30 MM)
15	718-1054	2	Screw, Cap - Hex Head (M10 x 25 MM)
16	140-1918	1	Bracket, Mounting
17	140-1575	1	Hood, Air Inlet
18	503-0612	1	Clamp
19	740-1008	4	Washer, Flat (M10)

* - Parts Included in 140-1905 Air Cleaner Assembly.

AIR CLEANER

Code 19AL (Medium Duty, Dual Stage)

5100-0848



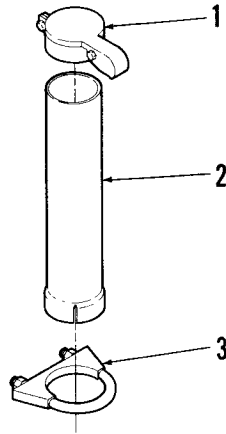
M-1669

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	140-1600	1	Cleaner, Air (Includes Elements)
2	ELEMENT, AIR CLEANER		
	140-1621	1	Primary
	140-1622	1	Secondary
3	140-1895	1	Reducer, Hose
4	140-1599	2	Band, Mounting
5	503-1360	1	Elbow, Rubber
6	130-2535	1	Tube, Steel (80 MM)
7	503-0529	3	Clamp, Hose
8	503-1087	1	Clamp, Hose
9	140-1926	1	Precleaner
10	800-2085	4	Screw, Cap - Hex Head (M10 x 20 MM)
11	860-2009	4	Nut, Hex (M10)
12	850-2010	4	Washer, Lock (M10)
13	526-2119	4	Washer, Flat (M10)

EXHAUST PIPE

Code 21AD (With Rain Cap)

5100-0943



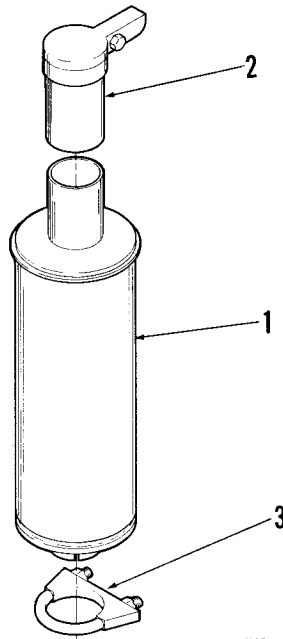
EXS-1154

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	155-2062-03	1	Cap, Rain
2	155-2104	1	Pipe, Exhaust
3	155-2115	1	Clamp

MUFFLER

Code 21AE (With Rain Cap)

5100-0849



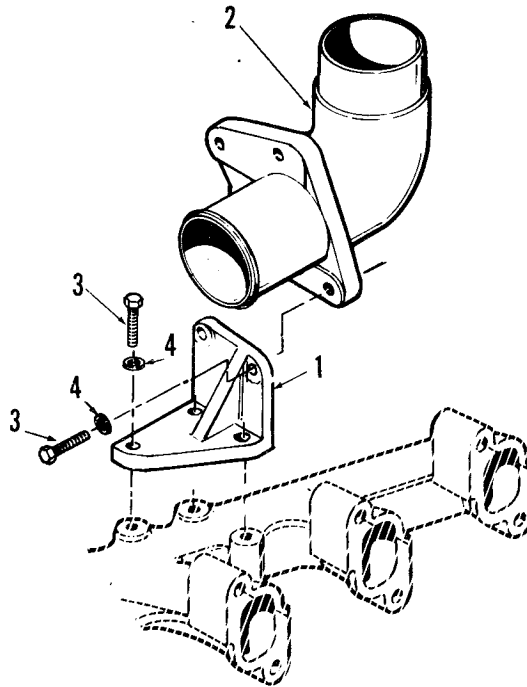
EXS-1155

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	155-2045	1	Muffler
2	155-2046	1	Cap, Rain
3	155-2115	1	Clamp

EXHAUST ELBOW

Code 21AS

5100-0998



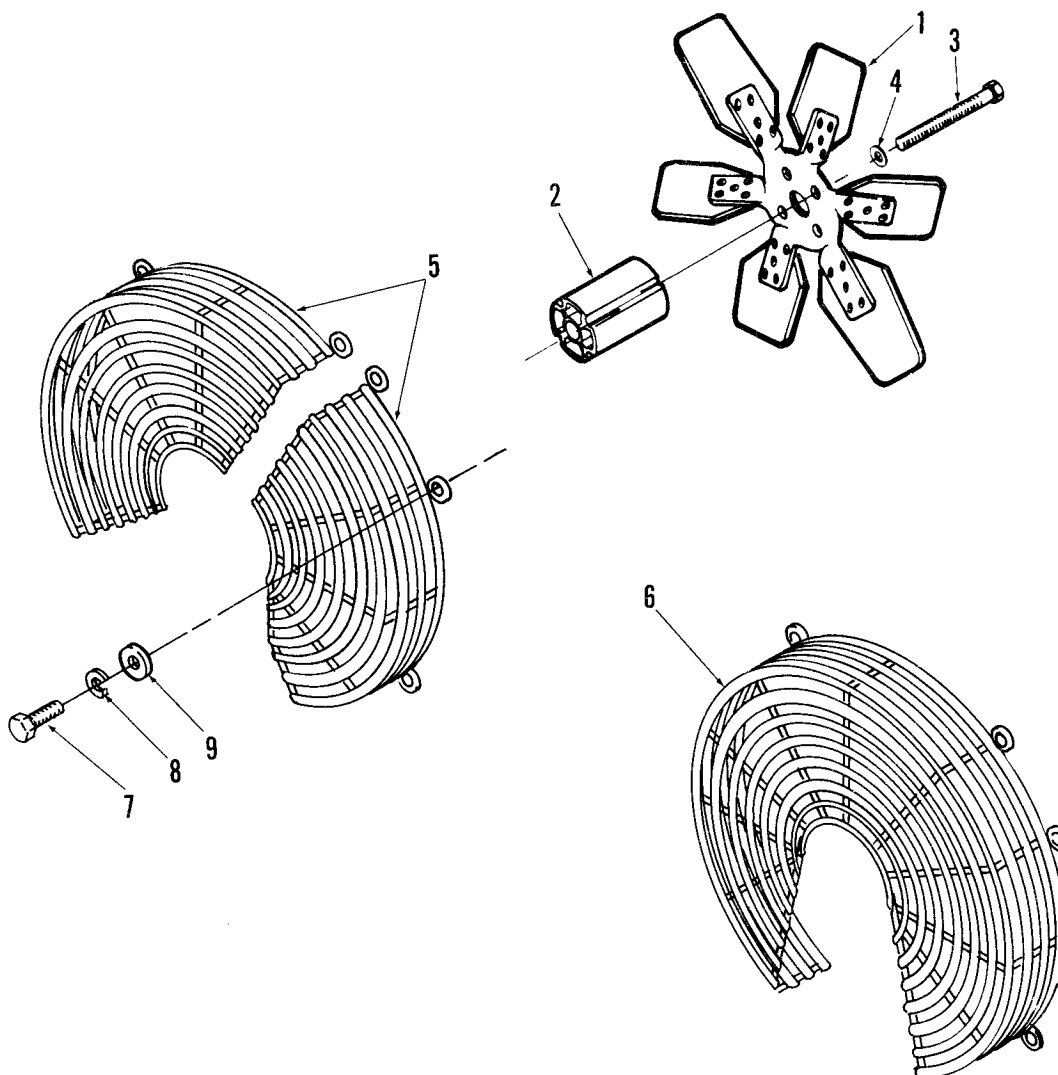
XEXS-1099-1

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	127-0129	1	Bracket, Exhaust Duct
2	127-0130	1	Flange, Exhaust Discharge
3	720-1037	5	Screw, Cap - Hex Head (M8 × 25 MM)
4	740-1006	5	Washer, Flat (M8)

COOLING SYSTEM - FAN

Code 23AJ (Suction Fan and 65 MM Spacer)
 Code 23AK (Blower Fan and 65 MM Spacer)
 Code 23BN (Blower Fan and 65 MM Spacer)
 Code 23BV (Blower Fan and 65 MM Spacer)
 Code 23BZ (Suction Fan and 89 MM Spacer)

5100-0621
 5100-0850
 5100-0896
 5100-1026



CS-1306

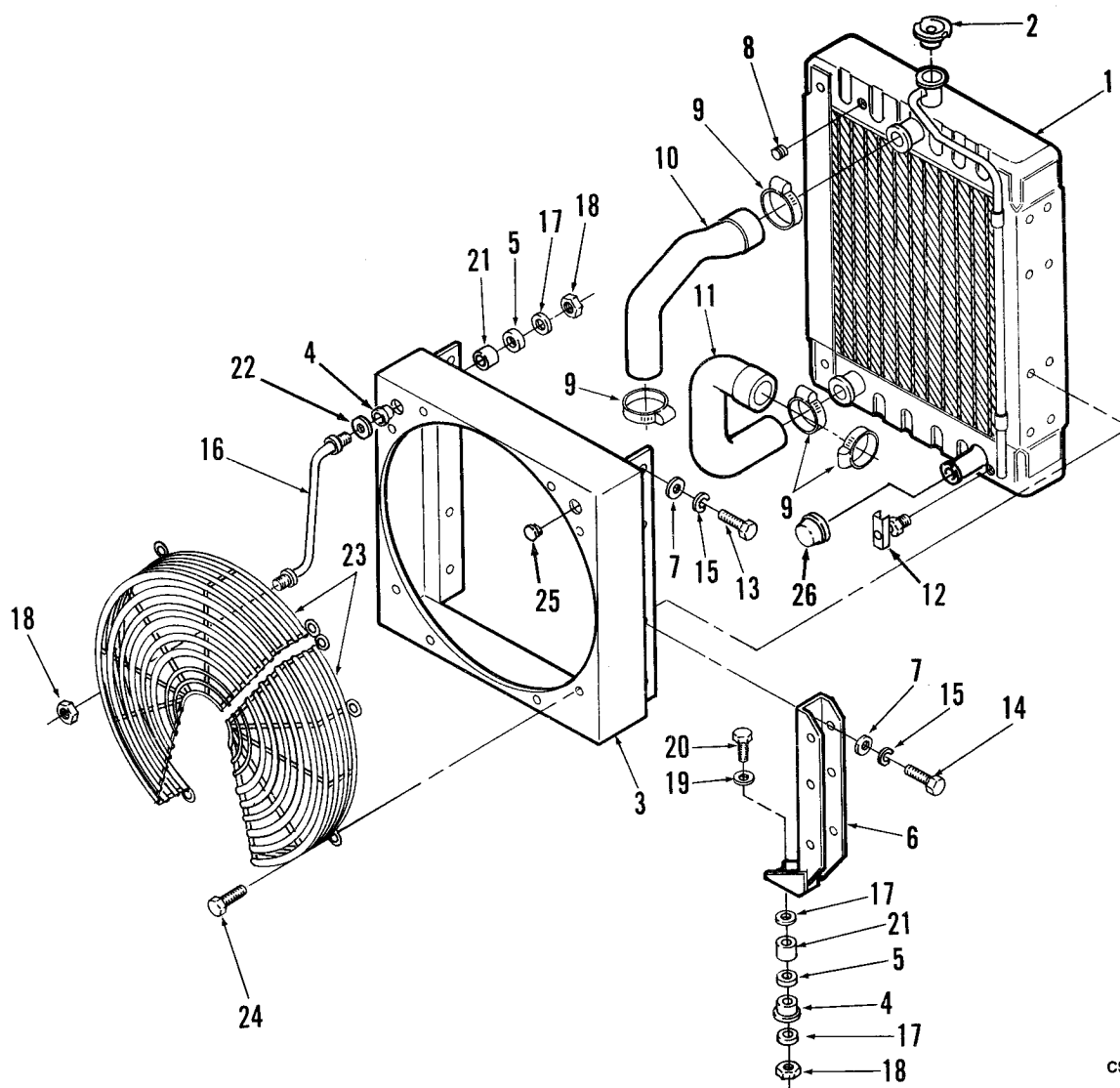
REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	FAN, COOLING		
	130-2795	1	Code 23AJ
	130-2305	1	Code 23AK, 23BN, 23BV
	130-2534	1	Code 23BZ
2	SPACER, FAN		
	130-1876	1	Code 23AJ, 23AK, 23BN, 23BV
	130-1874	1	Code 23BZ
3	SCREW, CAP - HEX HEAD		
	800-2071	4	M8 × 90 MM - Code 23AJ, 23AK, 23BN, 23BV
	718-1803	4	M8 × 115 MM - Code 23BZ
4	740-1006	4	Washer, Flat (M8)
5	GUARD, FAN - Code 23BV		
	130-2649	1	Left Hand
	130-2648	1	Right Hand

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
6	130-2533	1	Guard, Fan - Code 23BZ
7	SCREW, CAP - HEX HEAD		
	800-2033	6	Code 23BV M6 × 16 MM
	800-2034	1	M6 × 20 MM
	718-1020	8	Code 23BZ - M6 × 16 MM
8	WASHER, LOCK (M6)		
	850-2006	7	Code 23BV
	850-2006	8	Code 23BZ
9	WASHER, FLAT (1/4")		
	526-0180	7	Code 23BV
	526-0180	8	Code 23BZ

COOLING SYSTEM - RADIATOR (SPEC A AND B)

Code 23AJ
Code 23BN

5100-0897



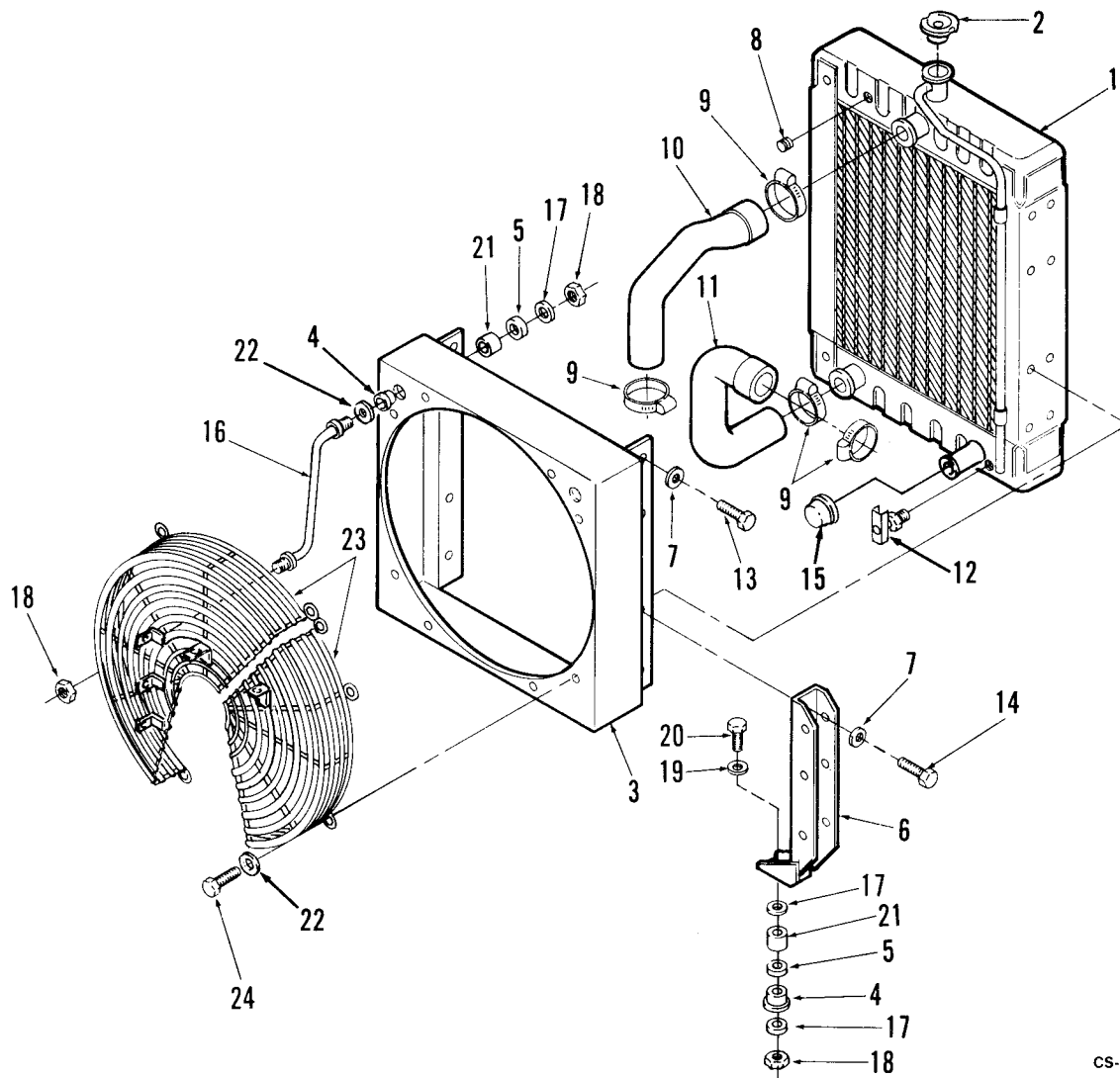
CS-1307

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION	REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	130-1818	1	Radiator	17	526-0322	6	Washer, Isolator (2" O.D.)
2	130-2003	1	Cap, Pressure	18	860-2010	6	Nut, Locking (M12)
3	130-2525	1	Shroud	19	740-1010	4	Washer, Flat (M12)
4	402-0547	4	Isolator, Bushing	20	718-1079	2	Screw, Cap - Hex Head (M12 x 55 MM)
5	402-0548	4	Isolator, Ring	21	130-2458	4	Spacer, Isolator
6	130-2768	2	Support, Radiator	22	526-0087	2	Washer, Flat (1-17/64" ID x 1-3/4" OD x 1/16" Thk)
7	740-1006	8	Washer, Flat (M8)	23	GUARD, FAN		
8	502-0153	1	Plug, Pipe (1/4")	130-2260	1	Left Hand	
9	503-0365	4	Clamp, Hose	130-2264	1	Right Hand	
10	503-1095	1	Hose, Radiator - Upper	24	800-2033	9	Screw, Cap - Hex Head Flange (M6 x 16 MM)
11	503-1346	1	Hose, Radiator - Lower	25	517-0150	2	Plug, Hole (Cooling Systems Without Stabilizer Rods)
12	504-0003	1	Cock, Drain	26	CAP, RADIATOR (Lower Hose Fitting)		
13	800-2050	4	Screw, Cap - Hex Head (M8 x 10 MM)	517-0263	1	1-1/2" ID	
14	800-2054	4	Screw, Cap - Hex Head (M8 x 14 MM)	517-0264	1	1-3/4" ID	
15	850-2008	8	Washer, Lock (M8)				
16	130-2336	2	Rod, Stabilizer				

COOLING SYSTEM - RADIATOR (SPEC C)

Code 23AJ
Code 23BN

5100-1155



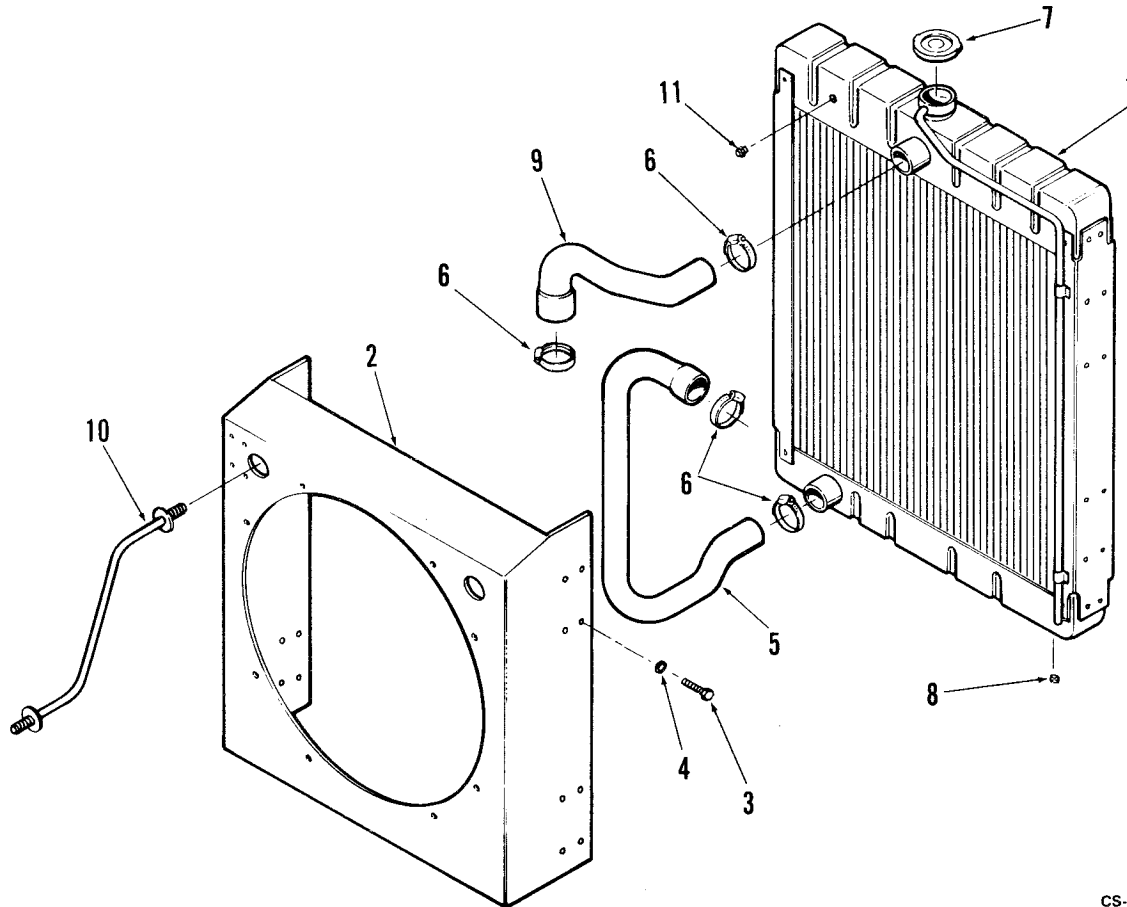
CS-1307

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION	REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	130-1818	1	Radiator	15	CAP, RADIATOR (Lower Hose Fitting)		
2	130-2003	1	Cap, Pressure	517-0263	1	1-1/2" ID	
3	130-2525	1	Shroud	517-0264	1	1-3/4" ID	
4	402-0547	4	Isolator, Bushing	16	130-2336	2	Rod, Stabilizer
5	402-0548	4	Isolator, Ring	17	526-0322	6	Washer, Isolator (2" O.D.)
6	130-2768	2	Support, Radiator	18	860-2010	6	Nut, Locking (M12)
7	740-1006	8	Washer, Flat (M8)	19	740-1010	4	Washer, Flat (M12)
8	502-0153	1	Plug, Pipe (1/4")	20	718-1079	2	Screw, Cap - Hex Head (M12 x 55 MM)
9	503-0365	4	Clamp, Hose	21	130-2458	4	Spacer, Isolator
10	503-1095	1	Hose, Radiator - Upper	22	740-1004	9	Washer, Flat (M6)
11	503-1346	1	Hose, Radiator - Lower	23	GUARD, FAN		
12	504-0003	1	Cock, Drain	130-3073	1	Left Hand	
13	800-2050	4	Screw, Cap - Hex Head (M8 x 10 MM)	130-3072	1	Right Hand	
14	800-2054	4	Screw, Cap - Hex Head (M8 x 14 MM)	24	800-2033	9	Screw, Cap - Hex Head (M6 x 16 MM)

COOLING SYSTEM - RADIATOR

Code 23BV
Code 23BZ

5100-0618



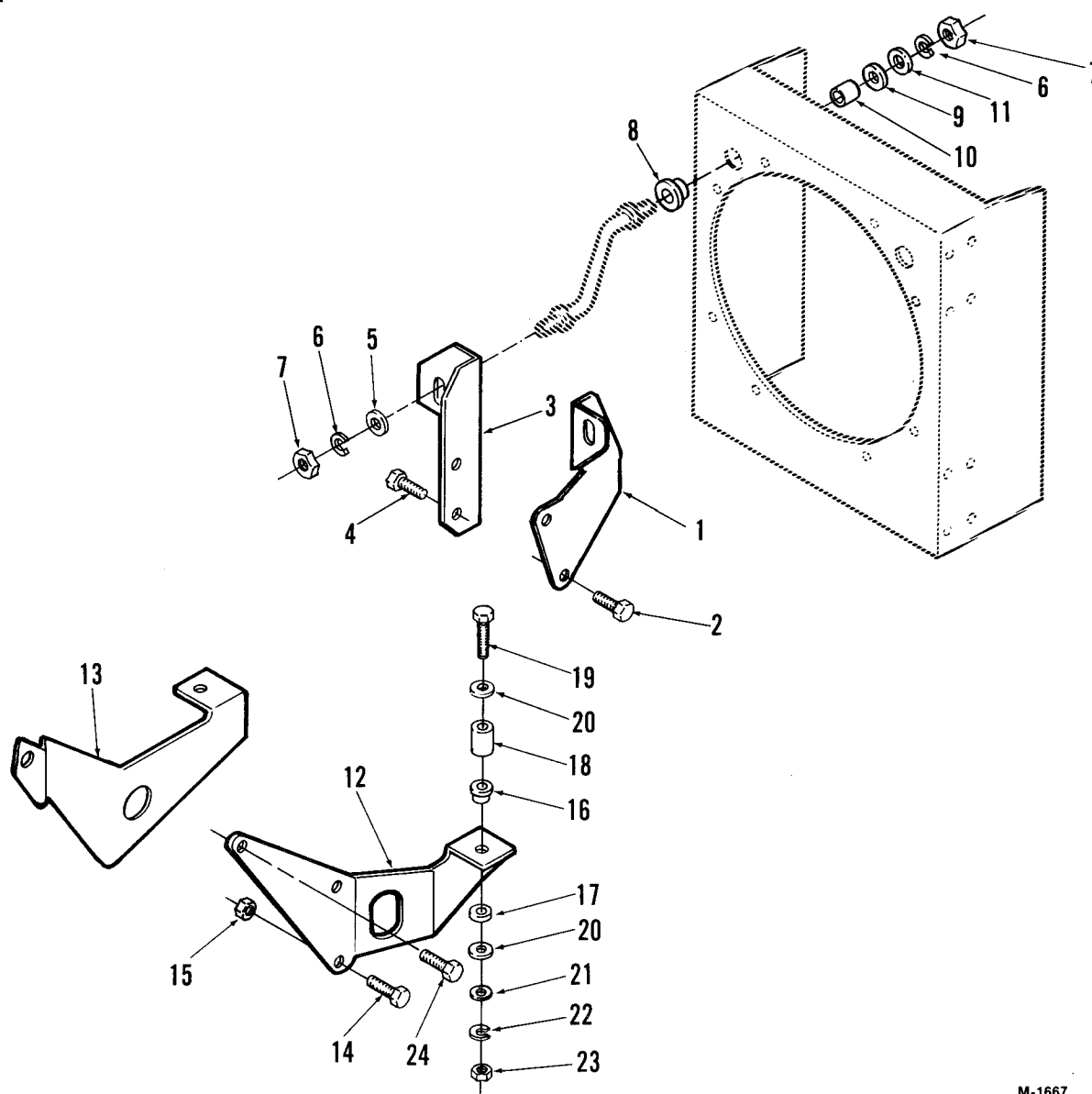
CS-1304-1

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	130-2308	1	Radiator
2	130-2384	1	Shroud
3	800-2054	16	Screw, Cap - Hex Head (M8 x 14 MM)
4	850-2008	16	Washer, Lock (M8)
5	503-1282	1	Hose, Radiator - Lower
6	503-0365	4	Clamp, Hose
7	130-2003	1	Cap, Pressure
8	504-0063	1	Cock, Drain
9	503-1334	1	Hose, Radiator - Upper
10	130-2705	2	Rod, Stabilizer
11	502-0153	1	Plug, Pipe (1/4")

COOLING SYSTEM - RADIATOR MOUNTING

Code 23BV
Code 23BZ

5100-0619



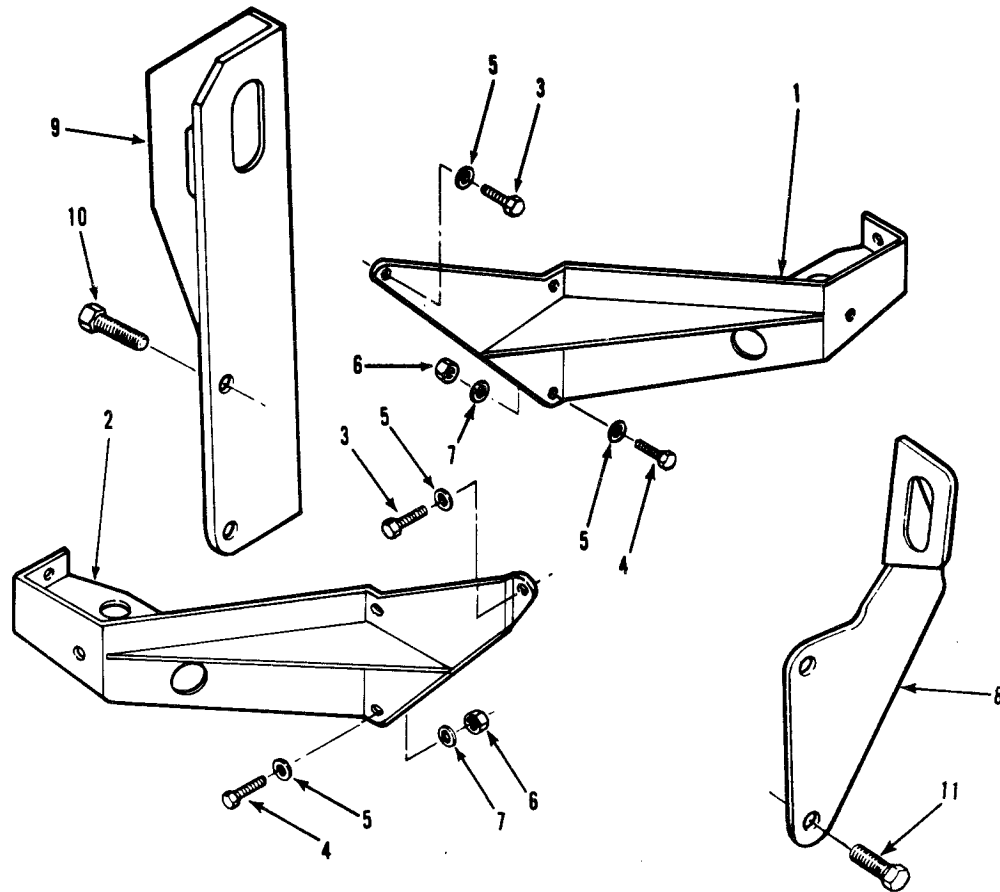
M-1667

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION	REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	130-2838	1	Support, Upper Radiator (Right Hand)	12	130-2341	1	Bracket, Radiator (Right Hand)
2	800-2071	2	Screw, Cap - Hex Head (M8 x 90 MM)	13	130-2342	1	Bracket, Radiator (Left Hand)
3	130-2338	1	Support, Upper Radiator (Left Hand)	14	800-2112	4	Screw, Cap - Hex Head (M12 x 30 MM)
4	800-2086	2	Screw, Cap - Hex Head (M10 x 25 MM)	15	750-1010	4	Nut, Hex (M12)
5	526-0100	2	Washer, Flat (M12 x 35 MM O.D.)	16	402-0547	2	Isolator, Bushing
6	850-2012	4	Washer, Lock (M12)	17	402-0548	2	Isolator, Ring
7	860-2010	4	Nut, Hex (M12)	18	130-2425	2	Spacer, Isolator
8	402-0547	2	Isolator, Bushing	19	800-2118	2	Screw, Cap - Hex Head (M12 x 60 MM)
9	402-0548	2	Isolator, Ring	20	526-0322	4	Washer, Isolator (2" O.D.)
10	130-2425	2	Spacer, Isolator	21	526-0100	2	Washer, Flat (M12 x 35 MM O.D.)
11	526-0322	2	Washer, Isolator (2" O.D.)	22	850-2012	2	Washer, Lock (M12)
				23	750-1010	2	Nut, Hex (M12)
				24	800-2111	2	Screw, Cap - Hex Head (M12 x 25 MM)

RADIATOR SUPPORTS (SPEC A AND B)

Code 23AJ
Code 23BN

5100-0668

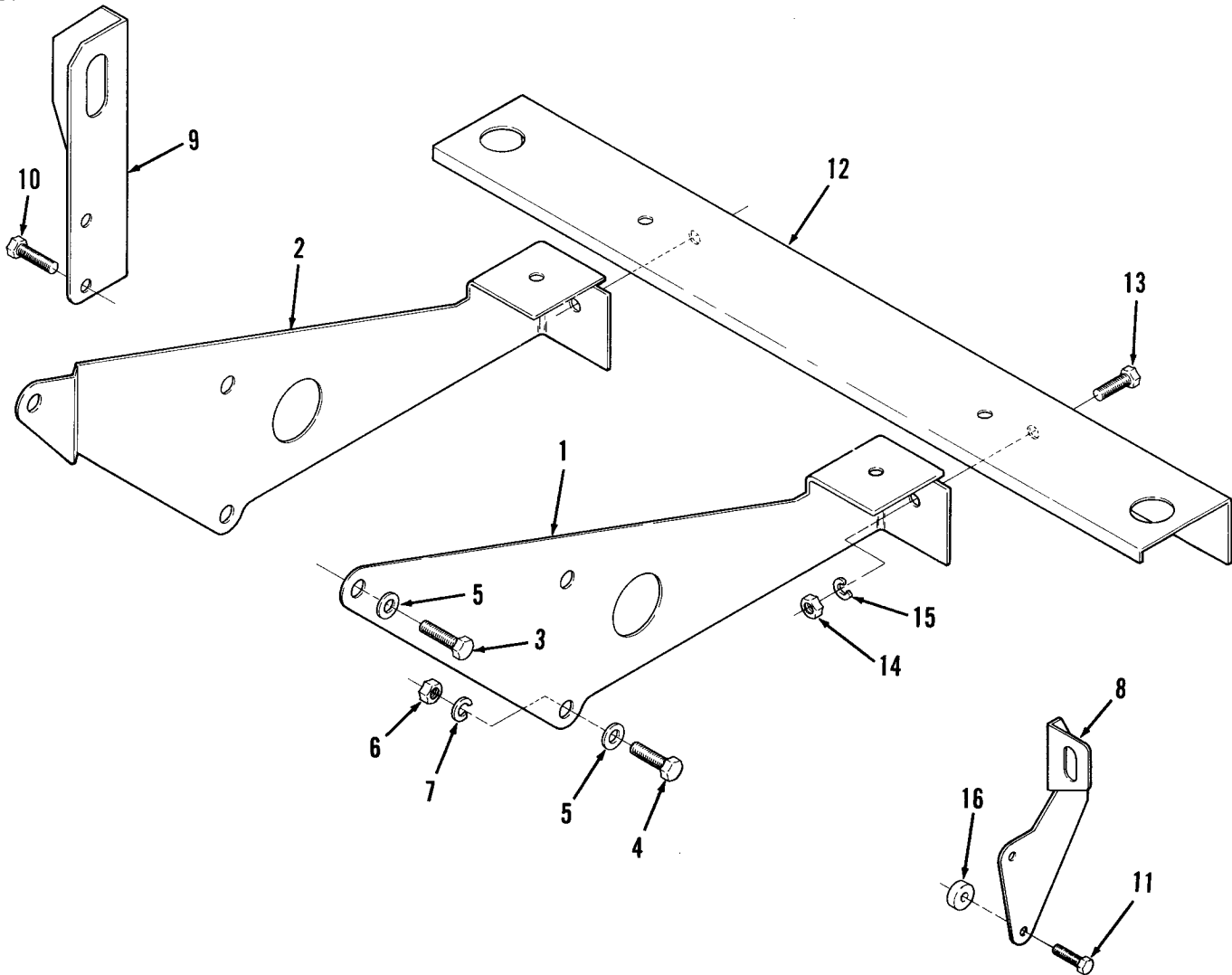


REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	130-2463	1	Support, Lower Radiator (Right Hand)
2	130-2464	1	Support, Lower Radiator (Left Hand)
3	800-2110	2	Screw, Cap - Hex Head (M12 x 20 MM)
4	800-2112	4	Screw, Cap - Hex Head (M12 x 30 MM)
5	740-1010	6	Washer, Flat (M12)
6	860-2010	4	Nut, Hex (M12)
7	850-2012	4	Washer, Lock-Spring (M12)
8	130-2838	1	Support, Upper Radiator (Right Hand)
9	130-2338	1	Support, Upper Radiator (Left Hand)
10	800-2086	2	Screw, Cap - Hex Head (M10 x 25 MM)
11	800-2071	2	Screw, Cap - Hex Head (M8 x 90 MM)

RADIATOR SUPPORTS (SPEC C)

5100-1144

Code 23AK
Code 23BN



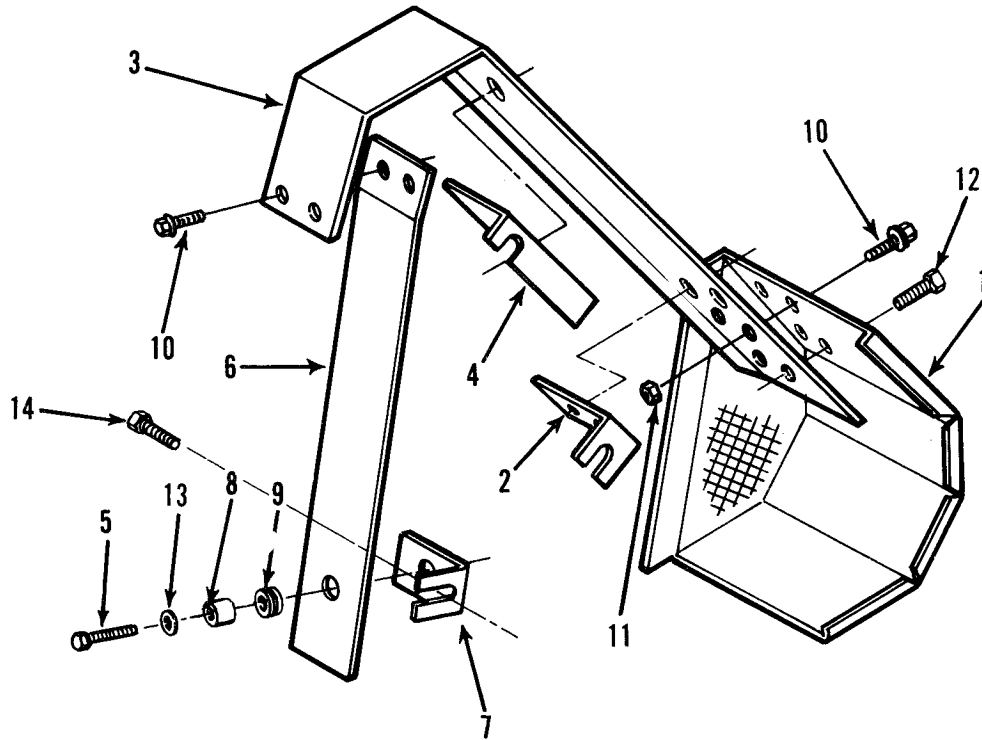
REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	130-3048	1	Support, Lower Radiator (Right Hand)
2	130-3049	1	Support, Lower Radiator (Left Hand)
3	800-2110	2	Screw, Cap - Hex Head (M12 x 20 MM)
4	800-2112	4	Screw, Cap - Hex Head (M12 x 30 MM)
5	526-2148	6	Washer, Flat (M12)
6	860-2010	4	Nut, Hex (M12)
7	850-2012	4	Washer, Lock-Spring (M12)
8	130-2838	1	Support, Upper Radiator (Right Hand)

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
9	130-2338	1	Support, Upper Radiator (Left Hand)
10	800-2086	2	Screw, Cap - Hex Head (M10 x 25 MM)
11	718-1807	2	Screw, Cap - Hex Head (M8 x 95 MM)
12	130-3050	1	Channel, Radiator Mounting
13	800-2057	4	Screw, Cap - Hex Head (M8 x 20 MM)
14	860-2008	4	Nut, Hex (M8)
15	526-2103	4	Washer, Flat (M8)
16	191-1322	1	Spacer

BELT GUARD (SPEC A AND B)

5100-0851

Code 23AJ (Low Alternator)
Code 23BN (Low Alternator)
Code 23BV (Low Alternator)
Code 23BZ (Low Alternator)



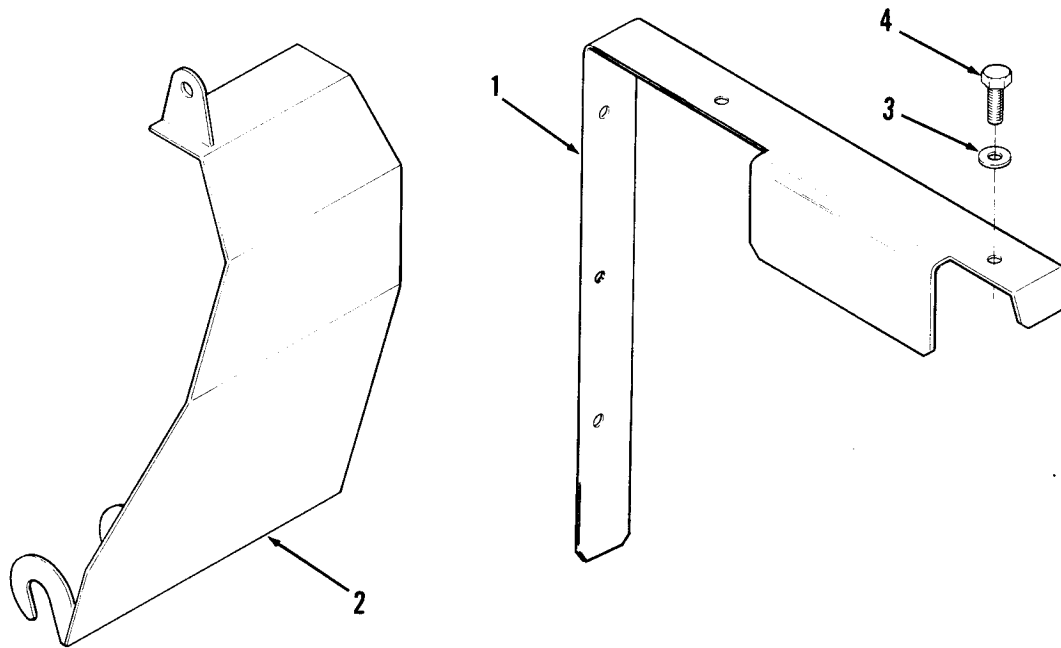
M-1595-1

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	191-1539	1	Guard, Alternator Belt
2	191-1655	1	Bracket, Belt Guard
3	191-1656	1	Guard, Alternator Belt
4	191-1580	1	Bracket, Belt Guard
5	821-2033	4	Screw, Locking Head (M6 × 16 MM)
6	191-1577	1	Guard, Alternator Belt
7	191-1590	1	Bracket, Alternator Belt
8	402-0546	4	Insert, Isolator
9	508-0248	4	Grommet
10	821-2032	4	Screw, Locking Head (M6 × 12 MM)
11	870-2054	2	Nut, Locking Flange (M6)
12	821-0010	2	Screw, Locking Head (1/4-20 × 1/2")
13	526-0021	4	Washer, Flat (1/4")
14	718-1044	1	Screw, Cap - Hex Head (M8 × 60 MM)

BELT GUARD (SPEC C)

Code 23AJ
Code 23AK
Code 23BN

5100-1153

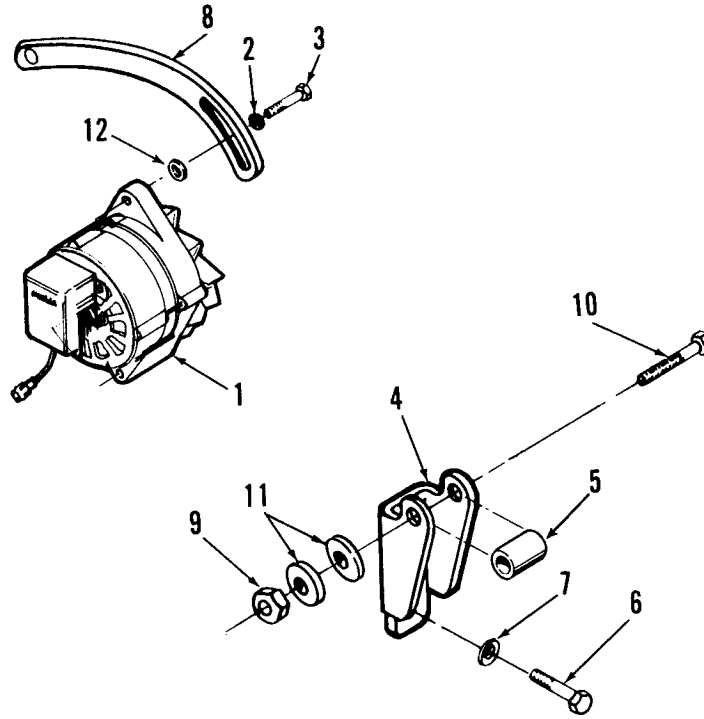


REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	130-3071	1	Guard, Belt
2	191-1741	1	Guard, Alternator
3	526-2103	5	Washer, Flat (M8)
4	800-2052	5	Screw, Cap - Hex Head (M8 x 12 MM)

ALTERNATOR

Code 31AB (Low Mount Accessory Side - 12 Volt, 37 Amp)
Code 31AD (Low Mount Accessory Side - 12 Volt, 62 Amp)

5100-0782
5100-0785
5100-0786

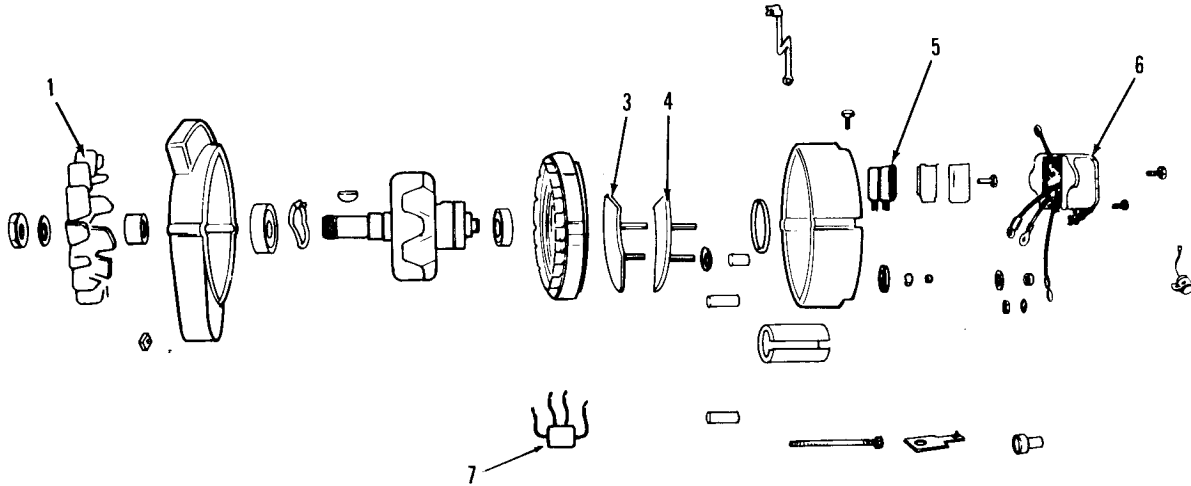


ES-1170-1

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	ALTERNATOR (See Separate Page for Components)		
	191-1525	1	Code 31AB
	191-1526	1	Code 31AD
2	526-2106	1	Washer, Flat (M8)
3	800-2058	1	Screw, Cap - Hex Head (M8 x 25 MM)
4	191-1332	1	Bracket, Alternator Mounting
5	191-1321	1	Spacer, Alternator Bracket
6	718-1037	4	Screw, Cap - Hex Head (M8 x 25 MM)
7	740-1006	4	Washer, Flat (M8)
8	191-1312	1	Strap, Alternator Adjusting
9	860-2009	1	Nut, Hex (M10)
10	800-2100	2	Screw, Cap - Hex Head (M10 x 100 MM)
11	526-2123	2	Washer, Flat (M10)
12	191-1322	1	Spacer, Alternator Strap

ALTERNATOR COMPONENTS

Code 31AB (Low Mount Accessory Side - 12 Volt, 37 Amp)
Code 31AD (Low Mount Accessory Side - 12 Volt, 62 Amp)



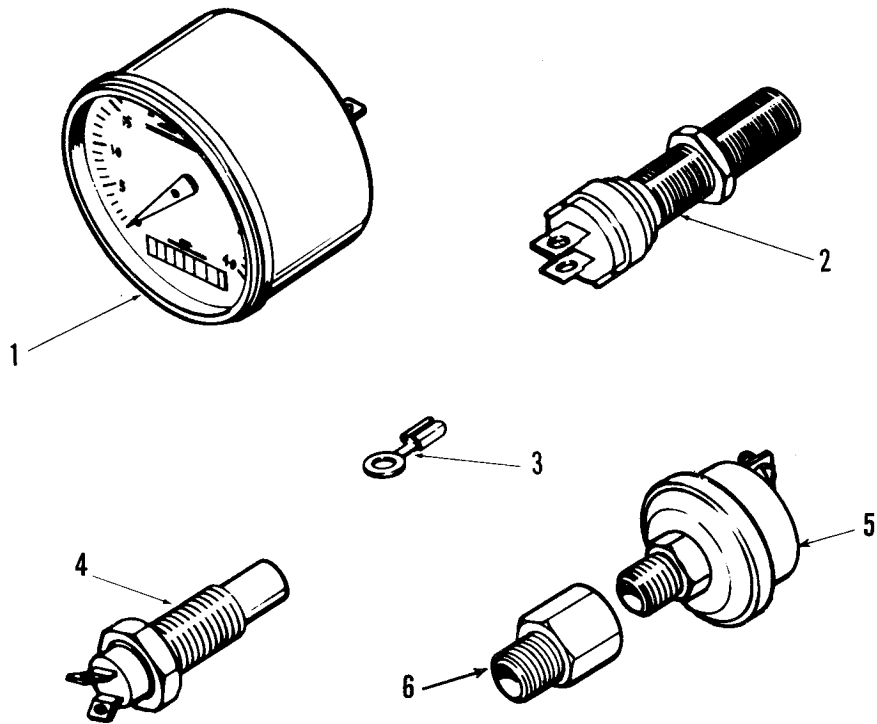
ES-1470

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
ALTERNATOR - COMPLETE			
	191-1525	1	Code 31AB
	191-1526	1	Code 31AD
1	191-0943	1	Fan, Alternator
3	191-1560	1	Diode, Rectifier - Negative
4	191-1559	1	Diode, Rectifier - Positive
5	191-1558	1	Brush Assembly
6	191-1557	1	Regulator, Voltage
7	191-1556	1	Diode, Trio

TACHOMETER AND SWITCHES

Code 35AC (Low Oil Pressure and High Water Temperature Switches)
 Code 35AE (Magnetic Speed Sensor)
 Code 35AF (Tachometer/Hour Meter)

5100-0340
 5100-0341
 5100-0920

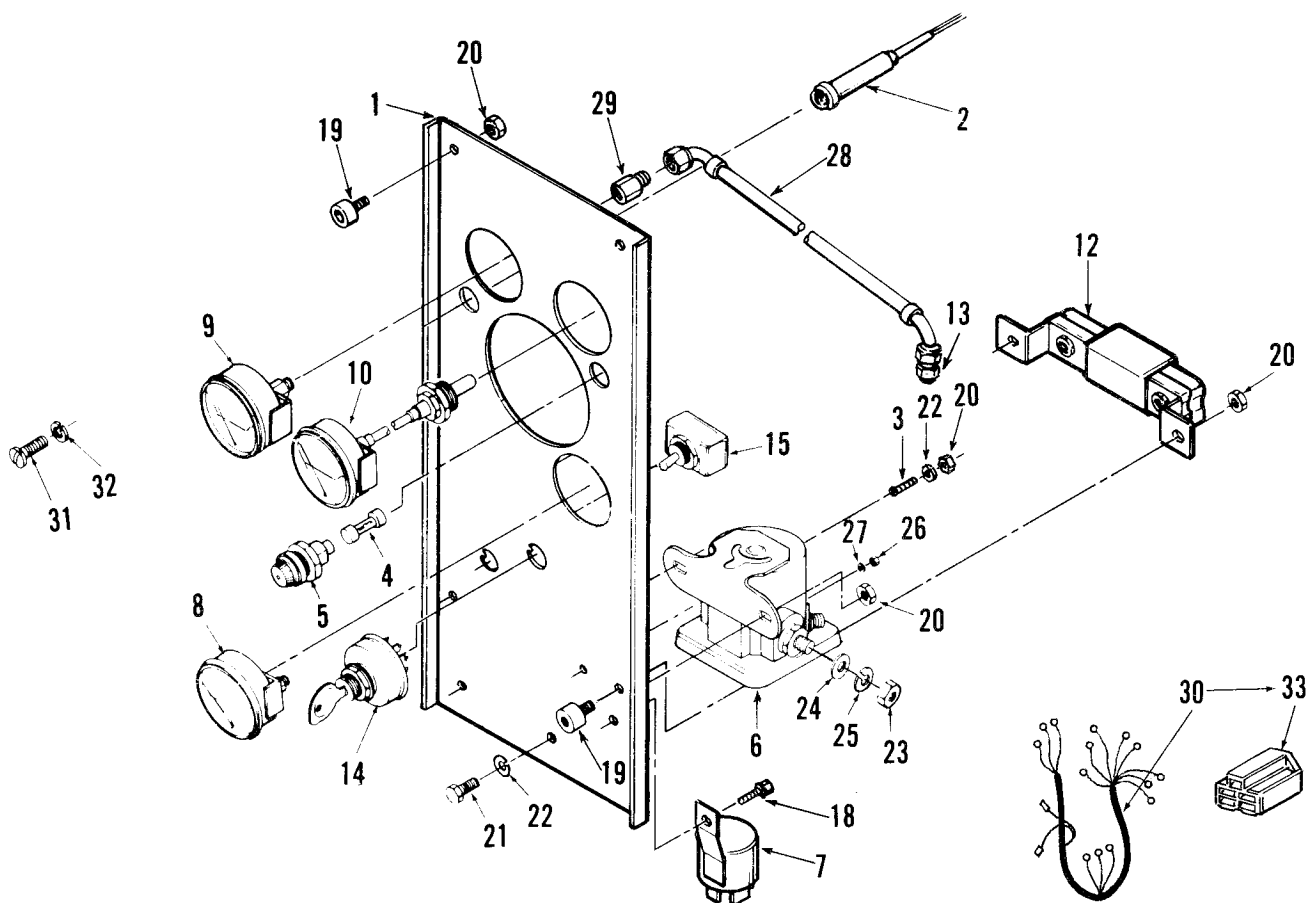


REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	302-1438	1	Meter, Tachometer/Hour - Code 35AF
2	150-1925	1	Sensor, Speed - Magnetic - Code 35AE, 35AF
3	332-0807	5	Terminal - Code 35AF
4	309-0482	1	Switch, High Water Temperature - Code 35AC
5	309-0177	1	Switch, Low Oil Pressure - Code 35AC
6	502-0944	1	Adapter - Code 35AC (Not Required on All Engines)

CONTROL - POWER UNIT

Code 35AM

5100-0852



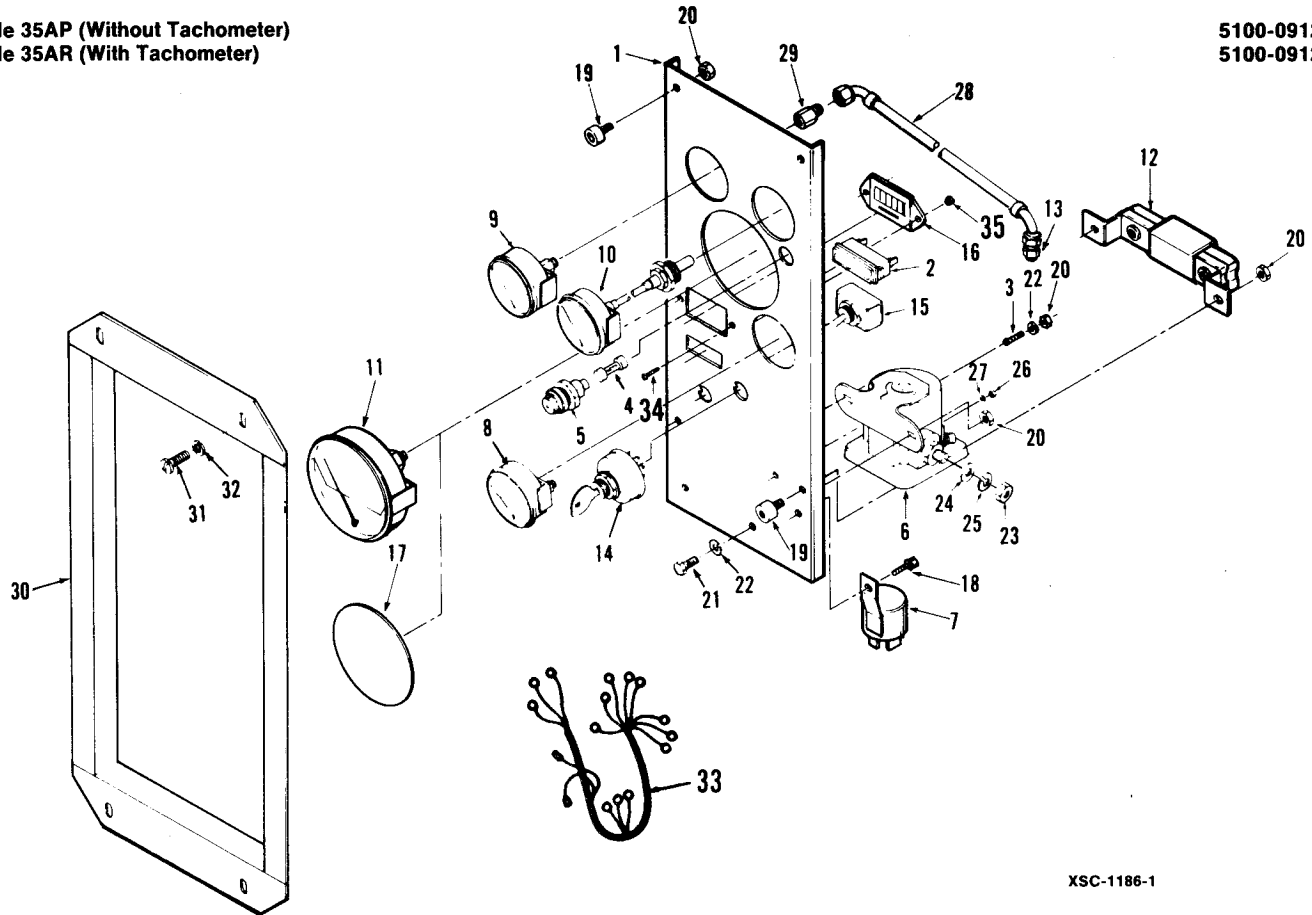
XSC-1186-2

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION	REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	301-9004	1	Panel, Control	19	402-0507	4	Isolator, Vibration
2	322-0365	1	Lamp, Indicator	20	750-1004	7	Nut, Hex (M6)
3	718-1021	1	Screw, Cap - Hex Head (M6 x 20 MM) Grounding Stud	21	718-1018	2	Screw, Cap - Hex Head (M6 x 12 MM)
4	321-0254	1	Fuse	22	850-2006	3	Washer, Lock-Spring (M6)
5	321-0175	1	Holder, Fuse	23	868-0002	2	Nut, Hex - Jam (5/16-24)
6	307-1031	1	Relay, Solenoid (Start) (Includes Terminal Hardware)	24	526-0022	2	Washer, Flat (5/16")
7	307-1886	1	Relay (Shutdown)	25	850-0045	2	Washer, Lock-Spring (5/16")
8	302-0063	1	Ammeter (Includes Mounting Hardware)	26	870-0131	1	Nut, Hex - ET (#10-32)
9	193-0378	1	Gauge, Oil Pressure	27	526-0008	1	Washer, Flat (#10)
10	193-0377	1	Gauge, Water Temperature (Includes 3/8-18 Hex Reducer)	28	501-0493	1	Line, Oil Pressure
12	333-0198	1	Resistor, Ballast	29	502-0808	1	Nipple, Hose Adapter (Female)
13	502-0807	1	Nipple, Hose Adapter (Male)	30	338-1847	1	Harness, Wiring (Includes Connector Body)
14	308-0385	1	Switch, (Includes Keys)	31	718-1017	4	Screw, Cap - Hex Head (M6 x 10 MM)
15	308-0792	1	Switch, Toggle	32	850-2006	4	Washer, Lock-Spring (M6)
18	718-1002	1	Screw, Locking Head (M5 x 8 MM)	33	323-0987	1	Body, Connector

CONTROL - POWER UNIT

Code 35AP (Without Tachometer)
Code 35AR (With Tachometer)

5100-0912-02
5100-0912-04



XSC-1186-1

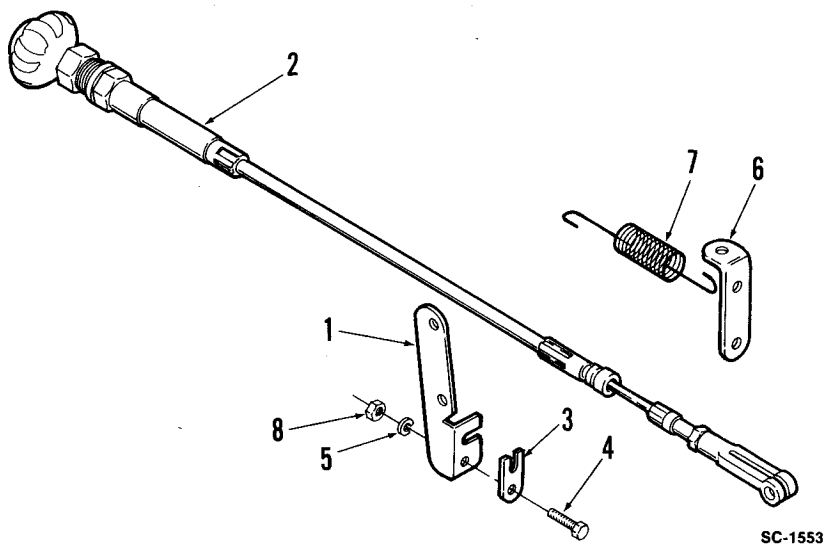
REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION	REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	301-8990	1	*Panel, Control	17	517-0190	1	Plug, Hole - Code 35AP
2	322-0302	1	Light, Indicator	18	718-1002	1	Screw, Locking Head (M5 x 8 MM)
3	718-1021	1	Screw, Cap - Hex Head (M6 x 20 MM) Grounding Stud	19	402-0507	4	Isolator, Vibration
4	321-0254	1	Fuse	20	750-1004	7	Nut, Hex (M6)
5	321-0175	1	Holder, Fuse	21	718-1018	2	Screw, Cap - Hex Head (M6 x 12 MM)
6	307-1031	1	Relay, Solenoid (Start) (Includes Terminal Hardware)	22	850-2006	3	Washer, Lock-Spring (M6)
7	307-1886	1	Relay (Shutdown)	23	868-0002	2	Nut, Hex - Jam (5/16-24)
8	302-0063	1	Ammeter (Includes Mounting Hardware)	24	526-0022	2	Washer, Flat (5/16")
9	GAUGE, OIL PRESSURE			25	850-0045	2	Washer, Lock-Spring (5/16")
	193-0378	1	Spec A	26	870-0131	1	Nut, Hex - ET (#10-32)
	193-0394	1	Spec C	27	526-0008	1	Washer, Flat (#10)
10	GAUGE, WATER TEMPERATURE (Includes 3/8-18 Hex Reducer)			28	501-0438	1	Line, Oil Pressure
	193-0377	1	Spec A	29	502-0808	1	Nipple, Hose Adapter (Female)
	193-0393	1	Spec C	30	301-6709	1	*Frame, Control Panel (Not required on all engines)
11	302-1719	1	Tachometer (Includes Mounting Hardware) Code 35AR	31	800-2027	4	Screw, Cap - Hex Head (M6 x 10 MM)
12	333-0198	1	Resistor, Ballast	32	850-2006	4	Washer, Lock-Spring (M6)
13	502-0807	1	Nipple, Hose Adapter (Male)	33	HARNESS, WIRING		
14	308-0385	1	Switch, (Includes Keys)		338-1813-02	1	Engines Without Tachometer
15	308-0792	1	Switch, Toggle		338-1813-01	1	Engines With Tachometer
16	302-0885	1	Meter, Time Totalizing	34	812-0061	2	Screw, Machine - Round Head (#6-32 x 3/8")
				35	870-1183	2	Nut, Hex - With ET (#6-32)

* **NOTE:** Control Panel width was increased 12.0 MM to 144.0 MM eliminating the need for the control Panel Frame. This change occurred during Spec A.

THROTTLE CONTROL

Code 39AA

5100-0944

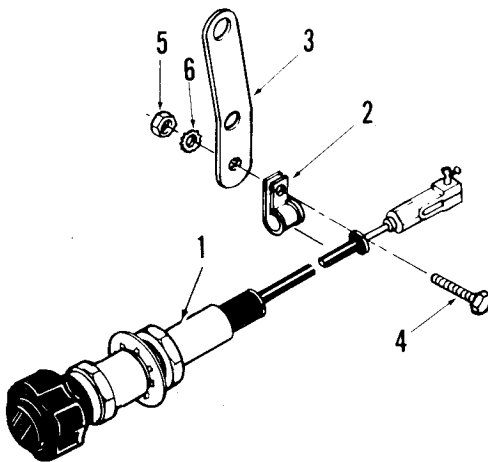


REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	152-0252	1	Bracket, Cable
2	152-0254	1	Cable, Speed Adjusting
3	152-0253	1	Clamp, Cable
4	800-2033	1	Screw, Cap - Hex Head (M6 × 16 MM)
5	850-2006	1	Washer, Lock - Spring (M6)
6	150-2144	1	Bracket, Spring
7	150-2056	1	Spring, Accelerator Return
8	860-2007	1	Nut, Hex (M6)

THROTTLE CONTROL

Code 39AD

5100-0853

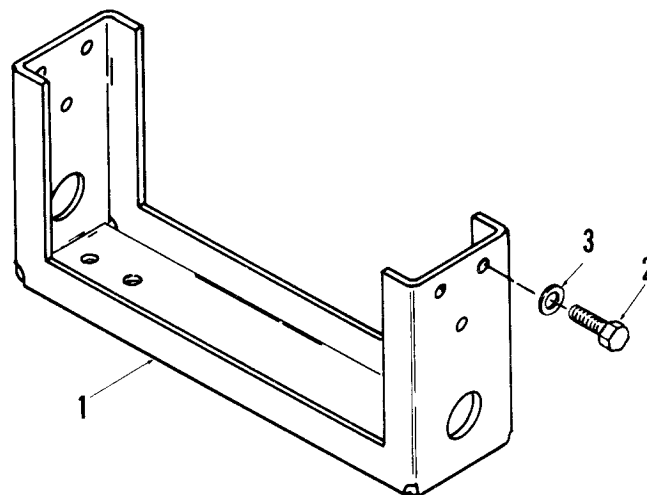
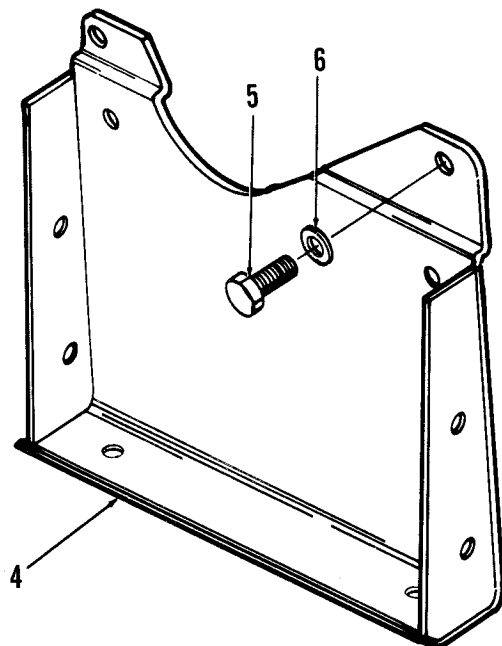


REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	152-0246	1	Control, Vernier
2	518-0454	2	Clamp, Mounting
3	150-2061	2	Bracket, Mounting
4	718-1003	2	Screw, Cap - Hex Head (M5 × 10 MM)
5	750-1002	2	Nut, Hex (M5)
6	853-2005	2	Washer, Lock - ET (M5)

ENGINE MOUNT

Code 41AB

5100-0197
5100-0207
5100-0854
5100-0855



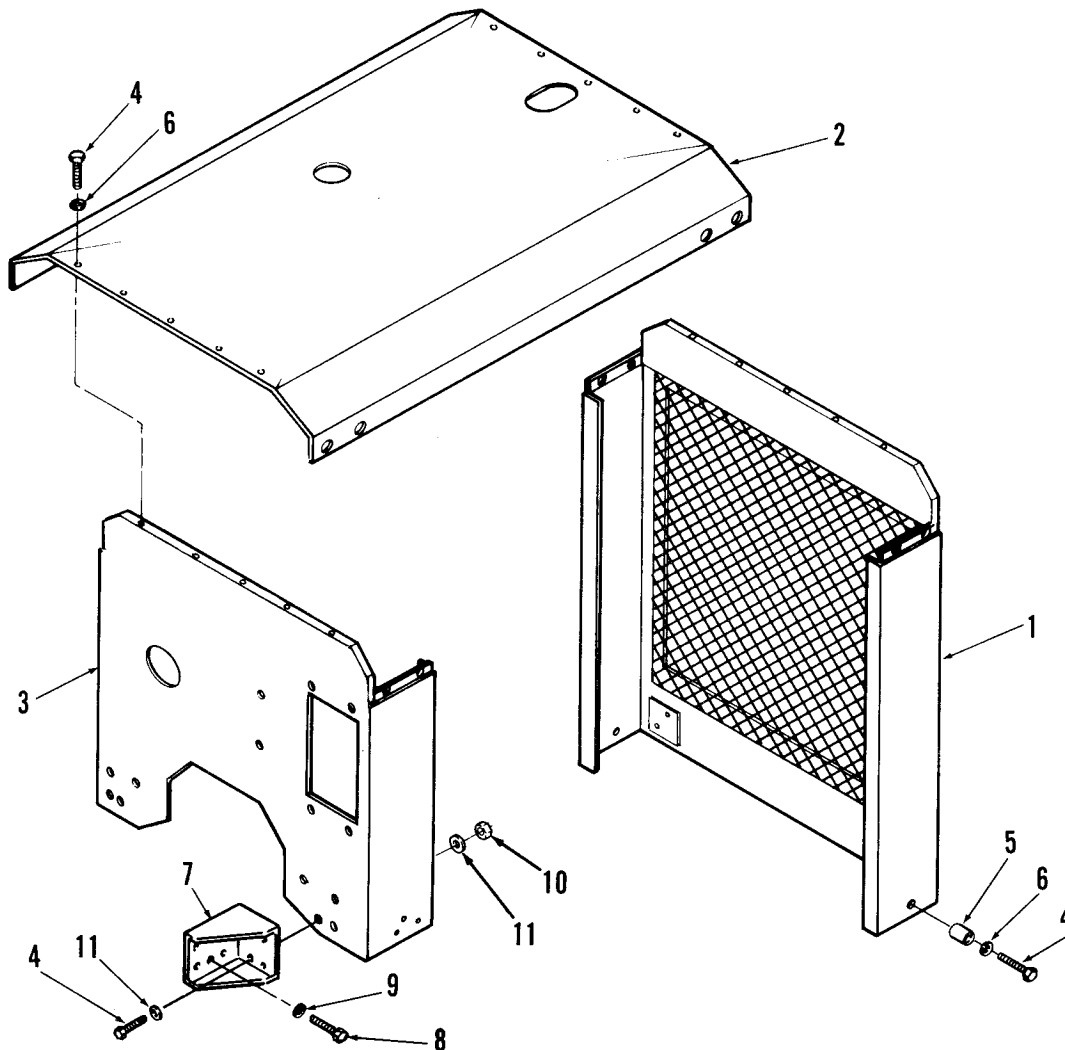
M-1224

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	BRACKET, MOUNTING - REAR		
	403-1973	1	Engines Without 30° Oil Pan
	403-2278	1	Engines With 30° Oil Pan
2	718-1073	6	Screw, Cap - Hex Head (M12 × 25 MM)
3	850-2012	6	Washer, Lock - Spring (M12)
4	BRACKET, MOUNTING - FRONT		
	403-2033	1	Engines Without 30° Oil Pan
	403-2277	1	Engines With 30° Oil Pan
5	SCREW, CAP - HEX HEAD		
	718-1086	2	M12 × 90 MM (Top)
	718-1802	2	M12 × 95 MM (Bottom)
6	740-1010	4	Washer, Flat (M12)

HOUSING (SPEC A AND B)

Code 43AA

5500-0057



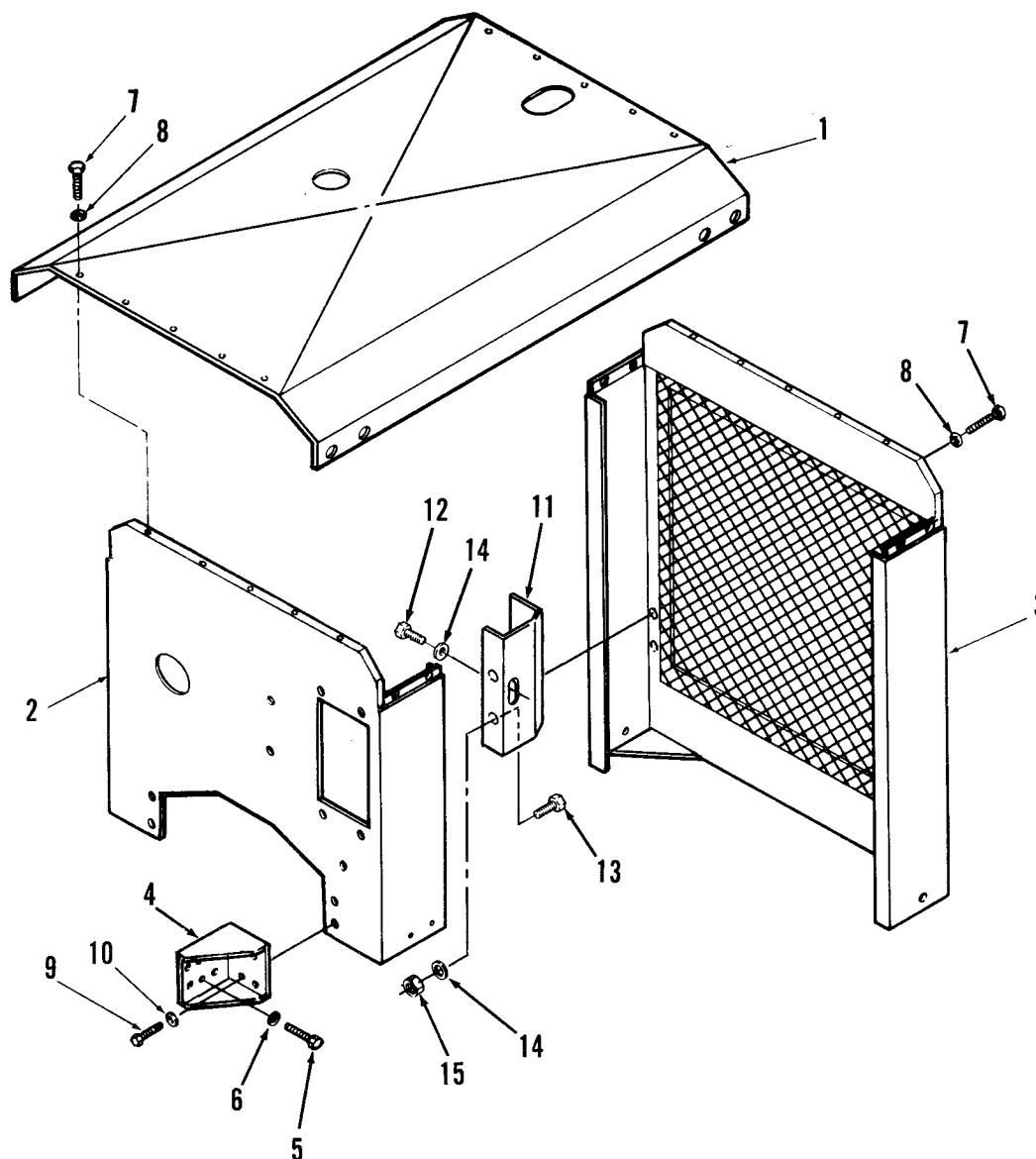
M-1342-1

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	405-3388	1	Housing, Radiator
2	405-3382	1	Roof, Housing
3	405-3384	1	Housing, Rear
4	SCREW, CAP - HEX HEAD		
	800-2052	22	M8 x 12 MM
	800-2062	2	M8 x 45 MM
	718-1053	4	M10 x 20 MM
5	405-2886	2	Spacer
6	740-1006	24	Washer, Flat (M8)
7	405-3599	2	Bracket, Rear Housing
8	800-2111	4	Screw, Cap - Hex Head (M12 x 25 MM)
9	740-1010	4	Washer, Flat (M12)
10	750-1008	4	Nut, Hex (M10)
11	740-1008	8	Washer, Flat (M10)

HOUSING (SPEC C)

Code 43AA

5500-0075

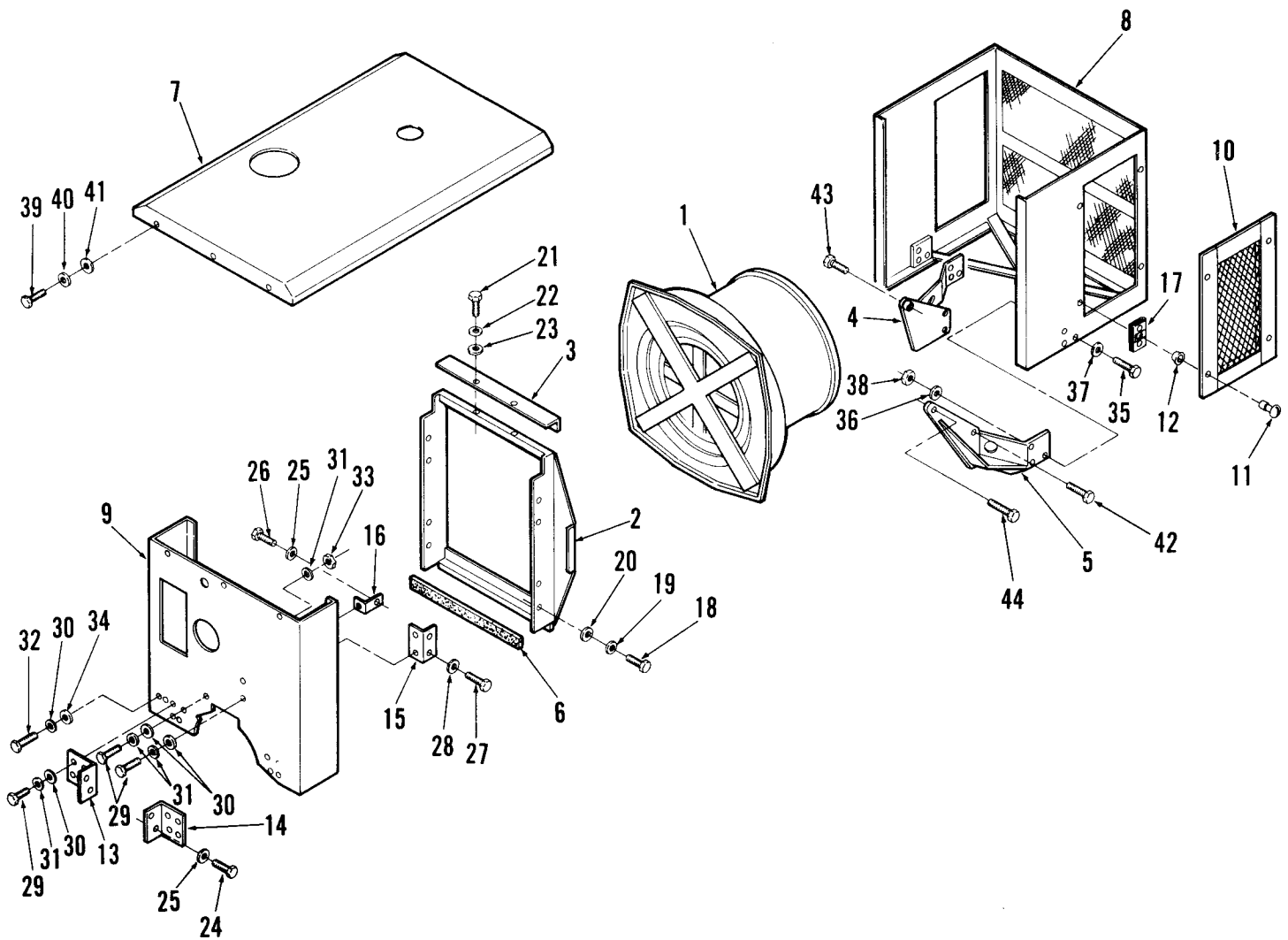


REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	405-3382	1	Roof, Housing
2	405-3384	1	Housing, Rear
3	405-3788	1	Housing, Radiator
4	405-3599	2	Bracket, Rear Housing
5	800-2111	4	Screw, Cap - Hex Head (M12 x 25 MM)
6	526-2148	4	Washer, Flat (M12)
7	800-2052	22	Screw, Cap - Hex Head (M8 x 12 MM)
8	526-2108	22	Washer, Flat (M8)

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
9	800-2085	4	Screw, Cap - Hex Head (M10 x 20 MM)
10	526-2123	4	Washer, Flat (M10)
11	405-3786	2	Bracket, Housing Support
12	800-2052	2	Screw, Cap - Hex Head (M8 x 12 MM)
13	800-2057	4	Screw, Cap - Hex Head (M8 x 20 MM)
14	526-2103	6	Washer, Flat (M8)
15	860-2008	4	Nut, Hex (M8)

HOUSING

Code 43AD (With Rotating Screen)



M-1670

HOUSING

Code 43AD (With Rotating Screen)

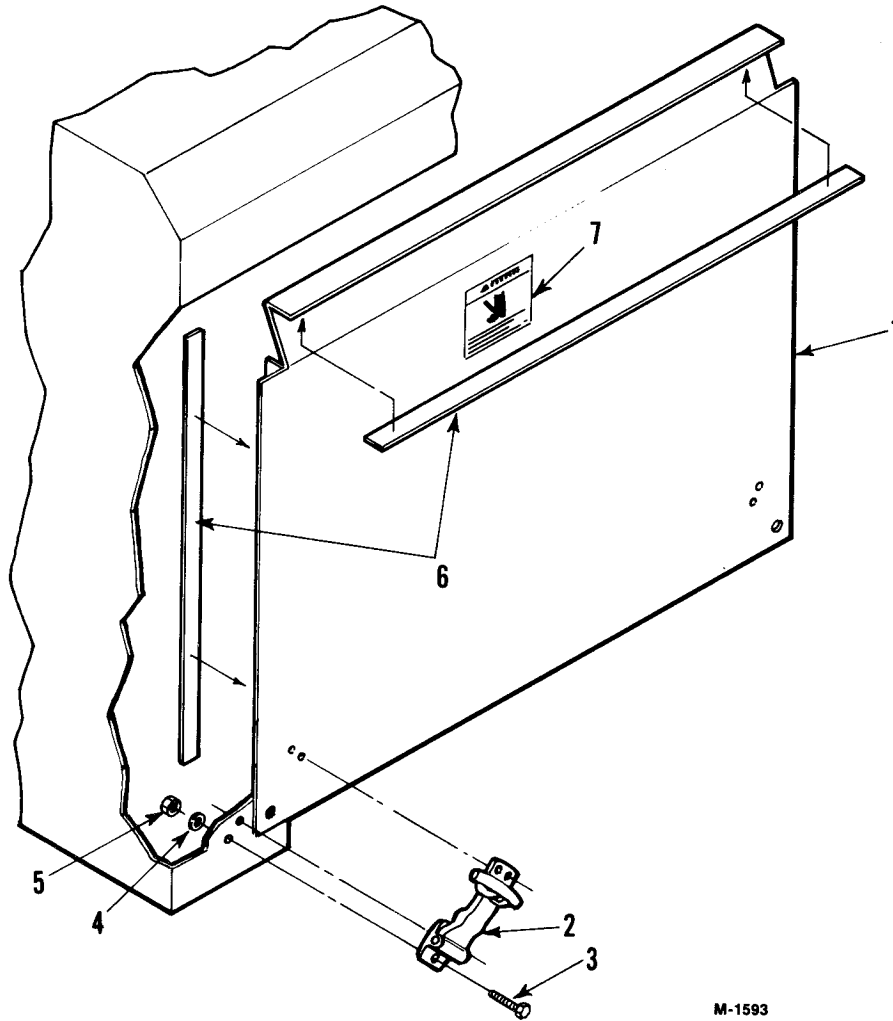
5500-0053

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	130-2536	1	Screen, Rotating
2	130-2532	1	Shroud, Screen Mounting
3	130-2529	3	Bracket, Holddown
4	405-3314	1	Support, Housing - Left Hand
5	405-3313	1	Support, Housing - Right Hand
6	895-0279	4	Stripping, Weather
7	405-3322	1	Roof
8	405-3320	1	Housing, Front
9	405-3323	1	Housing, Rear
10	405-3338	2	Door Assembly (Includes Studs and Grommets)
11	406-0461	8	Stud, Door Mounting
12	508-0224	8	Grommet, Stud Mounting
13	405-2917	1	Bracket, Mounting - Left Hand
14	405-2918	1	Bracket, Mounting - Right Hand
15	405-2877	1	Bracket, Mounting - Rear Housing to Cylinder Head
16	405-2878	1	Bracket, Mounting - Rear Housing to Cylinder Block
17	406-0462	8	Receptacle, Spring
18	718-1034	8	Screw, Cap - Hex Head (M8 × 14 MM)
19	850-2008	8	Washer, Lock (M8)
20	740-1006	8	Washer, Flat (M8)
21	718-1017	6	Screw, Cap - Hex Head (M6 × 10 MM)
22	850-2006	6	Washer, Lock (M6)
23	526-2081	6	Washer, Flat (M6)
24	718-1073	4	Screw, Cap - Hex Head (M12 × 25 MM)
25	850-2012	5	Washer, Lock (M12)
26	718-1071	1	Screw, Cap - Hex Head (M12 × 16 MM)
27	718-1052	2	Screw, Cap - Hex Head (M10 × 16 MM)
28	850-2010	2	Washer, Lock (M10)
29	718-1035	9	Screw, Cap - Hex Head (M8 × 16 MM)
30	740-1006	11	Washer, Flat (M8)
31	850-2008	11	Washer, Lock (M8)
32	718-1038	2	Screw, Cap - Hex Head (M8 × 30 MM)
33	750-1006	2	Nut, Hex (M8)
34	856-2008	1	Washer, Lock - EIT (M8)
35	718-1037	6	Screw, Cap - Hex Head (M8 × 25 MM)
36	850-2008	6	Washer, Lock (M8)
37	740-1006	6	Washer, Flat (M8)
38	750-1006	6	Nut, Hex (M8)
39	718-1018	16	Screw, Cap - Hex Head (M6 × 12 MM)
40	850-2006	16	Washer, Lock (M6)
41	526-2081	16	Washer, Flat (M6)
42	718-1075	4	Screw, Cap - Hex Head (M12 × 35 MM)
43	718-1077	1	Screw, Cap - Hex Head (M12 × 45 MM)
44	718-1074	1	Screw, Cap - Hex Head (M12 × 30 MM)

LOCKABLE DOORS - SPEC A

Code 43AE (Lockable Door, Accessory Side)

5100-1119



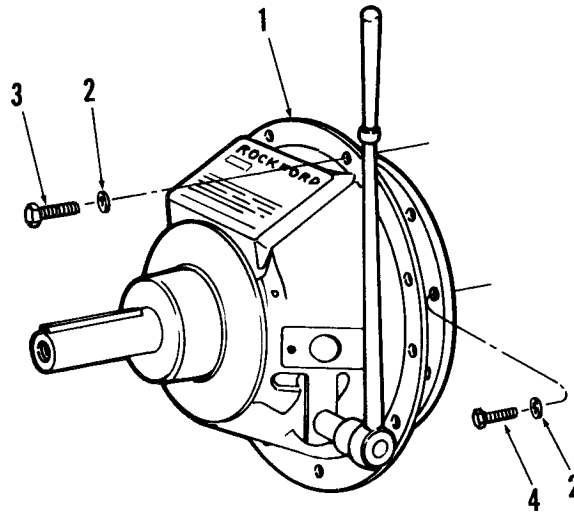
NOTE: These lockable doors **MUST** be used with a blower type cooling fan.

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	405-3308	1	Door
2	406-0562	2	Latch, Door (Includes Keeper)
3	718-1004	8	Screw, Cap - Hex Head (M5 × 12 MM)
4	740-1002	8	Washer, Flat (M5)
5	750-1002	8	Nut, Hex (M5)
6	405-3339	1	Gasket, Door (1829 MM)
7	98-5333	1	Label, Caution

CLUTCH

Code 45AD (10.0" Over Center)

5100-0181



M-1344-1

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	190-0594	1	Clutch, Power Take-Off
2	740-1008	20	Washer, Flat (M10)
3	718-1054	12	Screw, Cap - Hex Head (M10 × 25 MM)
4	718-1056	8	Screw, Cap - Hex Head (M10 × 35 MM)

NOTE: For component parts contact manufacturer shown on nameplate.

MODEL SPECIFICATION NUMBER TO OPTION CODE TABLE

The front of this parts manual states that an option code identification plate is attached to each engine. This plate lists all the option codes used to manufacture and service the engine. Early production engines have been manufactured and shipped less this plate leaving no proper identification of component parts. This table lists the applicable option codes below the specification number. For your convenience, Sales Option Codes for the Power Units are combined with Sales Option Codes that apply to the Industrial Engine portion. Using the specification number from your engine nameplate determine the option codes that apply to your engine.

SPEC NO.	10067	10068	10100	10115	10116	10117	10122	10123	10129	10137	10147	10148	10158	10159	10171	10172	10173	10178
	11AC	11AC	11AB	11AC	11AC	11AA	11AB	11AA	11AC	11AB	11AC	11AC	11AE	11AE	11AC	11AC	11AB	11AA
	13AE	13AE	13AB	13AE	13AC	13AA	13AU	13AA	13AE	13AB	13AE	13AC	13AP	13AD	13AE	13AE	13AB	13AL
	15AA	15AA	15AA	15AA	15AA	15AL	15AA	15AA	15AA	15AA	15AA	15AA	15AA	15AA	15AA	15AA	15AA	15AL
	17AA	17AA	17AA	17AA	17AA	15AM	15AJ	15AJ	17AA	17AA	15AJ	15AJ	15AJ	15AJ	17AA	17AA	15AK	15AM
OPTION	17AJ	17AJ	17AL	17AJ	17AJ	15AN	17AA	17AA	17AJ	17AJ	17AA	17AA	17AJ	17AJ	17AJ	17AJ	17AA	17AA
	17AM	17AM	17AJ	17AM	17AM	17AA	17AJ	17AJ	17AM	17AL	17AJ	17AJ	17AM	17AM	17AM	17AM	17AJ	17AJ
	19AA	19AA	19AA	19AA	19AA	17AJ	17AL	17AL	19AA	19AA	17AM	17AM	17BA	17BA	19AA	19AA	17AL	17AM
CODE	21AA	21AA	21AA	21AA	21AA	17AM	19AA	19AA	21AA	21AA	17BA	17BA	17BG	17BG	21AA	21AA	19AA	19AA
	23AA	23AA	23AC	23AA	23AA	19AA	21AA	21AA	23AA	23AB	19AA	19AA	19AA	19AA	23AA	23AA	21AA	19AP
	23BP	23BP	23BJ	23BP	23BP	21AK	23AB	23AB	23BE	23BJ	21AA	21AA	21AA	21AA	23BP	23BP	23AB	21AK
NUMBERS	27AF	27AF	27AA	31AG	31AG	23AC	23BJ	23AF	27AF	27AC	21AS	21AS	23AA	23AA	27AF	27AF	23BJ	21AS
	29AK	29AK	29AA	33AA	33AA	23BJ	27AB	27AB	29AD	29AG	23AA	23AA	23AW	23AW	29AD	29AD	27AA	23AC
	31AG	31AG	31AB	33AR	33AR	23CE	29AD	29AD	31AA	31AA	23AW	23AW	23BA	23BA	31AG	31AG	29AA	23BH
	33AA	33AA	33AA	41AA	41AA	27AE	31AA	31AA	31AG	31AG	23BE	23BE	27AF	27AF	33AA	33AA	31AA	23CE
	33AR	33AR	33AN			29AA	31AG	31AG	33AA	33AA	23CC	23CC	29AK	29AK	33AR	33AR	31AG	23CK
	41AA	41AA				31AH	33AA	33AA	33AR	33AN	27AJ	27AJ	31AG	31AG	41AA	41AA	33AA	27AG
						33AA	33AN	33AN	35AC		29AT	29AT	33AA	33AA			33AD	29AG
						33AG	35AJ	35AJ	41AA		31AF	31AF	33AR	33AR			35AJ	31AH
						35AK					31AG	31AG	35AJ	35AJ				31AK
						45AK					33AA	33AA	41AA	41AA				33AA
											33AR	33AR						33AG
											35AJ	35AJ						35AE
											41AA	41AA						35AK
																		35AT
																		39AE
																		45AK

SPEC NO.	10199	10200	10207	10219	10226	10228 PU	10239	10242	10256	10257	10283	10287 PU	10288 PU	10294	10301	10305	10311	10313	10324
	11AC	11AC	11AB	11AB	11AB	11AB	11AA	11AB	11AB	11AB	11AE	11AA	11AA	11AB	11AA	11AB	11AB	11AB	11AB
	13AE	13AC	13AB	13AG	13AP	13AW	13BC	13AB	13AU	13AW	13AD	13AA	13AA	13AB	13AA	13AB	13AB	13AB	13AH
	15AA	15AA	15AA	15AG	15AA	15AE	15AC	15AA	15AA	15AA	15AA	15AA	15AA	15AA	15AA	15AA	15AA	15AA	15AA
	17AA	15AJ	15AD	15AJ	15AJ	15AG	15AJ	15AJ	15AJ	15AJ	15AJ	15AJ	15AF	15AK	15AJ	15AJ	15AD	15AJ	15AJ
OPTION	17AJ	17AA	17AA	17AB	17AA	15AJ	17AA	17AA	17AA	17AA	17AK	17AJ	15AJ	17AJ	17AJ	17AJ	15AJ	17AA	17AA
	17AM	17AJ	17AJ	17AJ	17AJ	17AB	17AK	17AK	17AJ	17AJ	17AL	17AL	17AJ	17AL	17AL	17AL	17AA	17AJ	17AJ
	17BA	17AM	17AL	17AM	17AL	17AJ	17AL	17AM	17AL	17AL	17BG	17AP	17AL	17BJ	17AP	17AP	17AJ	17AL	17AL
CODE	19AA	17BA	19AA	19AA	19AA	17AM	19AA	17BA	19AA	19AA	19AA	19AA	17AP	19AA	19AA	19AA	17AL	19AA	19AA
	21AA	19AA	21AA	21AA	21AA	19AA	21AA	19AA	21AA	21AA	21AA	19AB	19AA	21AA	21AA	21AA	19AA	21AA	21AA
	23AA	21AA	23AA	23AC	23AB	19AL	23AA	21AA	23AA	23AA	23AA	21AA	19AB	23AB	23AA	23AA	21AA	21AS	21AS
NUMBERS	23AW	23AA	23AF	23BJ	23BJ	21AA	23BJ	23AB	23BJ	23BJ	23AU	21AS	21AA	23AS	23AF	23BJ	21AS	23AB	23AB
	23BP	23AW	27AB	27AF	27AG	21AE	27AF	23BJ	27AG	27AF	23BA	23AA	21AS	23CC	27AF	27AF	23AA	23BJ	23BA
	31AG	23BP	29AD	29AD	29AG	23AC	29AD	27AE	29AG	29AD	27AF	23AF	23AA	31AE	29AD	29AD	23BJ	27AB	27AC
	33AA	31AG	31AA	31AG	31AA	23BJ	31AE	29AA	31AE	31AA	29AD	23BN	23AF	31AG	31AA	31AA	27AF	29AD	29AG
	33AR	33AA	31AG	33AA	31AG	23BZ	31AG	31AA	31AG	31AG	31AA	27AF	23BN	33AA	31AG	31AG	29AD	31AA	31AA
	41AA	33AR	33AA	33AN	33AA	27AF	33AA	31AG	33AA	33AA	31AG	29AD	27AF	33AN	33AA	33AA	31AA	31AG	31AG
		35AJ	33AD	35AJ	33AD	29AD	33AD	33AA	33AD	33AD	33AA	31AA	29AD	35AJ	33AD	33AD	31AG	33AA	33AA
		41AA	45AA		35AJ	31AB	35AJ	33AD	35AJ	35AC	33AD	31AG	31AA		35AJ	35AJ	33AA	33AD	33AN
			45AB			31AG	45AA	35AJ	45AA	35AJ	35AC	33AA	31AG				33AD	35AC	35AJ
			45AD			33AA	45AB			45AA	35AJ	33AD	33AA				35AE	35AJ	
						33AN				45AB		35AJ	33AD				35AJ		
						35AF						41AB	35AJ						
						35AJ							35AP						
						35AM							39AA						
						39AD							41AB						
						41AB							43AA						
						43AD													
						45AD													

SPEC NO.	10327	10328 PU	10329	10330 PU	10340	10346	10355	10356 PU	10360	10379	10393	10394	10409 PU	10410 PU	10452	10536	10545	10598	10600
	11AA	11AA	11AB	11AB	11AB	11AB	11AC	11AC	11AC	11AB	11AE	11AE	11AB	11AB	11AB	11AB	11AA	11AB	11AA
	13AA	13AA	13AG	13AG	13AB	13AB	13AC	13AC	13AC	13AU	13AP	13AD	13AB	13AB	13AU	13AB	13AA	13AH	13AA
	15AA	15AA	15AA	15AA	15AA	15AA	15AA	15AA	15AA	15AA	15AA	15AA	15AA	15AA	15AA	15AA	15AA	15AA	15AL
	15AJ	15AF	15AJ	15AF	15AJ	15AD	15AJ	15AJ	15AJ	15AJ	15AJ	15AJ	15AJ	15AF	15AK	15AJ	15AJ	15AJ	15AM
OPTION	17AA	15AJ	17AA	15AJ	17AA	15AJ	17AA	17AA	17AA	17AB	17AJ	17AJ	17AJ	15AJ	17AA	17AA	17AJ	17AK	15AN
	17AJ	17AA	17AJ	17AA	17AJ	17AA	17AJ	17AJ	17AJ	17AJ	17AL	17AL	17AL	17AJ	17AJ	17AJ	17AL	17AL	17AA
	17AM	17AJ	17AM	17AJ	17AL	17AJ	17AL	17AL	17AL	17AL	17BA	17BA	17AP	17AL	17AL	17AM	17AP	17AP	17AJ
CODE	19AA	17AM	19AA	17AM	19AA	17AM	19AA	19AA	19AA	19AA	17BG	17BG	19AA	17AP	19AA	19AA	19AA	19AA	17AM
	21AA	19AA	21AA	19AA	21AA	19AA	21AA	19AB	19AB	21AA	19AA	19AA	19AB	19AA	21AA	21AA	21AA	21AA	19AA
	21AS	19AB	21AS	19AB	23AA	21AA	21AS	21AA	21AA	21AS	21AA	21AA	21AA	19AB	21AS	21AS	23AA	21AS	21AK
NUMBERS	23AA	21AA	23AA	21AA	23AF	21AG	23AA	21AS	21AG	23AA	21AS	21AS	21AS	21AA	23AC	23AC	23AF	23AA	23AC
	23AF	21AD	23BJ	21AD	27AB	21AS	23BE	23AA	21AS	23BJ	23AA	23AA	23AA	21AS	23BJ	23BA	27AF	23BH	23BH
	27AF	21AS	27AF	21AS	29AD	23AC	27AF	23BE	23AA	31AC	23AW	23AW	23AK	23AA	27AF	27AF	29AD	27AG	23CE
	29AD	23AA	29AD	23AA	31AA	23BJ	29AD	23BN	23BE	31AG	23BA	23BA	23BJ	23AK	29AD	29AD	31AA	29AG	27AE
	31AB	23AF	31AB	23AJ	31AG	27AF	31AB	27AF	27AF	33AE	23CC	23CC	27AF	23BJ	31AB	31AA	31AG	31AE	29AA
	31AG	23AJ	31AG	23BJ	33AA	29AD	31AG	29AD	29AD	35AJ	27AN	27AN	29AD	27AF	31AG	31AG	33AA	31AG	31AH
	33AA	27AF	33AA	27AF	33AD	31AA	33AA	31AB	31AB	45AB	29AK	29AK	31AA	29AD	33AA	33AA	33AD	33AA	31AK
	33AD	29AD	33AD	29AD	35AJ	31AG	33AR	31AG	31AG		31AF	31AF	31AG	31AA	33AN	33AD	35AJ	33AD	33AA
	35AJ	31AB	35AJ	31AB	45AA	33AA	35AJ	33AA	33AA		31AG	31AG	33AA	31AG	35AJ	35AJ	45AA	35AJ	33AG
		31AG		31AG		33AD		33AR	33AR		33AA	33AA	33AD	33AA	45AA				35AK
		33AA		33AA		35AJ		35AJ	35AJ		33AR	33AR	35AJ	33AD					45AK
		33AD		33AD				41AB	41AH		35AJ	35AJ	41AB	35AJ					
		35AE		35AE							41AA	41AA		35AP					
		35AJ		35AJ										39AA					
		35AR		35AR										41AB					
		39AA		39AA										43AA					
		41AB		41AB															
		43AA		43AA															

SPEC NO.	10611 PU	10636	10644 PU	10653	10673
OPTION	11AB	11AA	11AA	11AB	11AA
	13AG	13AA	13AA	13AB	13AA
	15AA	15AA	15AL	15AA	15AA
	15AE	15AK	15AM	15AJ	15AK
	15AJ	17AJ	15AN	17AB	17AJ
	17AB	17AL	17AA	17AJ	17AL
CODE	17AJ	17BK	17AJ	17AL	17BK
	17AM	19AA	17AM	19AA	19AA
	19AA	21AA	19AA	21AA	21AA
NUMBERS	19AL	23AA	19AK	21AS	23AA
	21AA	23AL	21AK	23AA	23AL
	21AE	23CR	23AC	23BJ	23CR
	21AS	23CZ	23BH	27AL	27AP
	23AC	27AP	23BV	29AP	29AZ
	23BJ	29AZ	23CE	31AC	31AC
	23BZ	31AA	27AE	31AG	31AG
	27AF	31AG	29AA	33AA	33AA
	29AD	33AA	31AH	33AE	33AE
	31AD	33AE	31AK	35AJ	35AJ
	31AG	35AJ	33AA	45AB	45AT
	33AA	45AT	33AG		
	33AN		35AC		
	35AF		35AE		
	35AJ		35AK		
	35AM		39AE		
	39AD		41AB		
	41AB		45AK		
	43AD				
	45AD				



Onan Corporation
1400 73rd Avenue N.E.
Minneapolis, Minnesota 55432

Telephone: (612) 574-5000
Telex: 275477
Cable ONAN