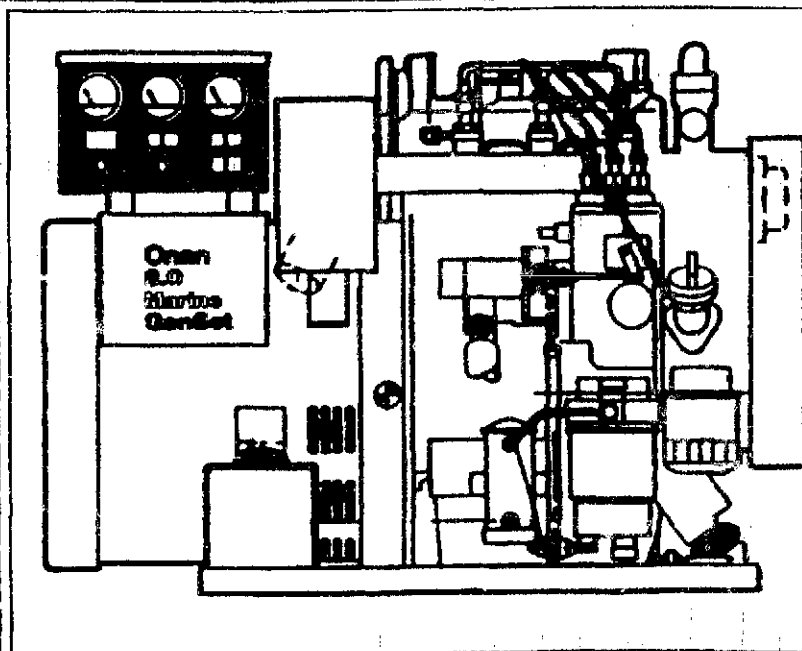


The following catalog
has gaps in its page
numbers, or doesn't
have any numbers.
We have chosen to
leave the page
numbering in the
order that Acrobat
assigns it.

Onan

PARTS CATALOG

MDKD Generating Set



Marine Electric Generating Set

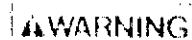
981-0222
10-91 (SPEC A-C)
Replaces 12-88 (SPEC A-C)

SAFETY PRECAUTIONS

The following symbols are used in Onan manuals to alert users to the potentially dangerous conditions relating to maintenance of the equipment and replacement of parts. Please read and observe.



DANGER This symbol warns of immediate hazards which will result in severe personal injury or death.



WARNING This symbol refers to a hazard or unsafe practice which can result in severe personal injury or death.



CAUTION This symbol refers to a hazard or unsafe practice which can result in personal injury or product or property damage.

MODEL IDENTIFICATION

To avoid errors or delay in filling your parts order, always give the MODEL, SPEC NO., and SERIAL NO. from the Onan nameplate.

For handy reference, insert your nameplate information in the spaces below:

MODEL AND SPEC NO. _____

SERIAL NO. _____

PRODUCT SAFETY PRECAUTIONS



Contact with USED ENGINE OILS has been identified by a United States federal agency and some USA state agencies as causing CANCER or REPRODUCTIVE TOXICITY. When checking or changing engine oils take all necessary precautions not to ingest, breathe the fumes or contact the used oil.



Contact with ASBESTOS has been identified by a United States federal agency and some USA state agencies as causing CANCER or REPRODUCTIVE TOXICITY. When handling engine gaskets take all necessary precautions not to ingest, breathe or contact the dust from the gaskets! Use adequate ventilation and wear protective gloves, masks and clothing!



Contact with BENZINE and LEAD, found in gasoline, fuel additives and solvents has been identified by a United States federal agency and some USA agencies as causing CANCER or REPRODUCTIVE TOXICITY. When checking, draining or adding gasoline and fuel additives, or using solvents take all necessary precautions not to ingest, breathe the fumes, or contact the liquids. Use adequate ventilation and wear protective gloves, masks and clothing!

This Parts Manual applies to the Standard Generator Sets listed below. The illustrations are arranged in groups of related items, and each part or assembly is identified by a Reference Number. All parts illustrated are typical, and unless otherwise mentioned in the description column of the parts lists, the parts are interchangeable between models.

These typical illustrations are subject to change and reflect only the latest replacement parts arrangement. The Right and Left side of the Set are determined by FACING the engine end (Front) of the Set.

Set Data Table

MODEL IDENTIFICATION	RATING	MODEL IDENTIFICATION	RATING
6.5 MDKD-*/#0	6,500 WATTS	8.0 MDKD-*/#0	8,000 WATTS

- * - Voltage Codes follow model letter designations.
- # - Specification Number: Number 1 is Standard, all others indicate variations.
- 0 - Specification Letter: Letter advances (A to B, B to C, etc) with major manufacturing changes.
- + - These Generators are reconnectible, refer to Operator's Manual for wiring data.

Electrical Data Table

- | | |
|--|--|
| B - 120/240 Volt, 60 Hertz, 1 Phase, 3 Wire | 1R - 120 Volt, 1 Phase, 2 Wire |
| C - 120/208 Volt, 60 Hertz, 3 Phase, 4 Wire | 3R - 120/240 Volt, 1 Phase, 3 Wire |
| D - 120/240 Volt, 60 Hertz, 3 Phase, 4 Wire | 3CR - 120/240 Volt, 1 Phase, 4 W (Reconnectible) |
| G - 277/480 Volt, 60 Hertz, 3 Phase, 4 Wire | 4 - 120/208 Volt, 3 Phase, 4 Wire |
| J - 120/240 Volt, 60 Hertz, 3 Phase, 4 Wire | 4X - 277/480 Volt, 3 Phase, 4 Wire |
| L - Reconnectible, 60 Hertz (Broad Range) | 50 - 120/240 Volt, 3 Phase, 4 W (Delta Wound) |
| P - 120/240 Volt, 50 Hertz, 1 Phase, 4 Wire | 9X - 347/600 Volt, 3 Phase, 4 Wire |
| Z - Reconnectible, 50 Hertz (Broad Range) | 18 - Broad Range, 1 & 3 Phase, 12 Wire |
| R - Special (Specification Number Req'd to Identify) | |

Index

- Adapter, Generator 15
- Adjuster, Idle - Governor 31
- Alarm/Tight - Water Sensor 29
- Alternator 36,37
- Alternator, Components 37
- Arm, Rocker 5
- Armature, Starter 16
- Assembly, Base - Housing 54
- Assembly, Box - Control 47
- Assembly, Control - Speed 32
- Assembly, Housing - Air Intake 54
- Assembly, Sound Shield 53
- Assembly, Stop 31
- Baffle, Breather 4
- Bearing, Ball 23
- Bearing, Crankshaft 9
- Bearing, Sleeve 9
- Belt, Drive - Alternator 36
- Belt, Drive - Water Pump 41
- Block, Cylinder 7
- Bolt, Eye 15
- Box, Control 47
- Bracket, Adjusting 36
- Bracket, Lifting - Cylinder Head 6
- Bracket, Lifting - Generator Adapter 15
- Bracket, Mounting - Solenoid 31
- Bracket, Mounting - Heat Exchanger 39
- Bracket, Pan - Drip 54
- Bracket, Stop Lever 31
- Bracket, Support - Overspeed Contact & Switch 32
- Breaker, Circuit 48
- Bushing, Sleeve 11
- Cap 31
- Cap, Oil Fill 4,12
- Cap, Radiator 21
- Channel, Rubber 39
- Clamp, Heat Exchanger 39
- Clutch, Starter 16
- Cock, Drain 39
- Cock, Valve 13
- Coil, Field - Starter 16
- Collar, Spring 5
- Control 48
- Control, Idle - Governor 31
- Cooling System 39
- Cover, Cylinder Head 4
- Cover, Mounting Hole - Fuel Pump 23
- Cover, Thermostat 42
- Crankcase 7
- Crankshaft 9
- Cross, Pipe - Iron 15
- Cup, Pickup - Oil 13
- Cup, Sealing - Cylinder Block 7
- Cup, Sealing - Cylinder Head 6
- Elbow, Pipe - Street, 90° 13,14
- Element, Breather 4
- Element, Filter 29
- Exchanger, Heat 39
- Exhaust, Adapter 21
- Filter, Fuel Pump - Electrical 27
- Filter, Oil 12
- Filter, Separator 27,29
- Flange, Shaft - Water Pump 41
- Flywheel 15
- Follower, Cam 30
- Gasket, Cylinder Block 7
- Gasket, Cylinder Head 6
- Gasket, Exhaust - Manifold 21
- Gasket, Governor - Style I 12
- Gear, Ring 15
- Gearcase, Style I & II 12
- Generator 51
- Governor 30
- Grommet 35,53,51,47
- Guard, Belt 36
- Guide, Oil Indicator 13
- Guide, Valve - Inlet & Exhaust 6
- Harness, Wiring - Engine to Control 34
- Harness, Wiring - Remote Control Panel 57,58
- Head, Cylinder 6
- Heater, Engine (Mod) 43
- Holder, Bearing 10
- Holder, Fuse 34
- Holder, Lever - Governor 30
- Holder, Weight 23
- Housing, Control - Speed 32
- Housing, Drive End - Starter 16
- Housing, Gen and Control 54
- Housing, Oil Fill 12
- Housing, Thermostat 42
- Hose, Exhaust 19
- Hose, Overflow 59
- Hose, Rubber - Preformed 39
- Impeller 40,41
- Indicator, Oil Level 13
- Insulator, Terminal 16
- Joint, Ball 31
- Kit, Replacement - Pump Assy 29
- Lever, Control - Speed 32
- Lever, Drive - Starter 16
- Lever, Governor 30
- Lever, Stop 31
- Line, Fuel - Flexible 14,27
- Line, Fuel - Injection 17
- Liner, Cylinder 7
- Manifold, Inlet and Exhaust 21
- Meter, Condition - Battery 58
- Meter, Totalizing - Time 58
- Mount, Vibration 55,56
- Muffler, Exhaust 19
- Nozzle, Injection - Fuel 17,18
- O-Ring, Gearcase 12,13
- Pan, Drip 55,56
- Pan, Oil 13
- Panel, Control - Remote (Basic) 57
- Panel, Control - Remote (Deluxe) 58
- Pin, Piston 9
- Pin, Straight - Headless 23
- Piston 9
- Plate, Breather 4
- Plate, Cover - Bearing 10
- Plate, Cover - Cylinder Block 7
- Plate, Cover (Style I Governor) 12
- Plate, End 21
- Plate, Locking - Bolt/Nut 15

Index

- Plate, Mounting - Fuel Filter 27
Plate, Mounting - Fuel Pump 27
Plate, Retaining 11,23
Plug, Glow (12 VDC) 17
Plug, Pipe - Socket Drive 12,42
Point, Contact - Electrical 33
Pulley, Alternator 38
Pulley, Water Pump 41
Pump, Fuel - Electrical 27
Pump, Injection - Components 24
Pump, Injection - Fuel 23
Pump, Oil ?
Pump, Water - Engine 41
Pump, Water - Raw 39
Pump, Water - Raw - Components 40

Regulator, Voltage 34,44
Relay 45
Retainer, Ball - Governor 23
Retainer, Spring 5
Ring, Retaining 11,16,23
Ring Set, Piston 9
Rod, Connecting 9
Rod, Push 11
Roller 23
Rotor 51

Saddle, Mounting - Control 47
Seal, Oil - Crankshaft 10,12
Sender, Pressure (E1) 14,15
Sender, Temperature - Engine Coolant (E2) 6
Shaft Assembly, Fuel 23
Shaft, Rocker Arm 5
Shield, Breather 4
Shim, Cylinder Head 6
Shim, Injection Nozzle 18
Silencer, Air 35
Skid Weldment 55,56

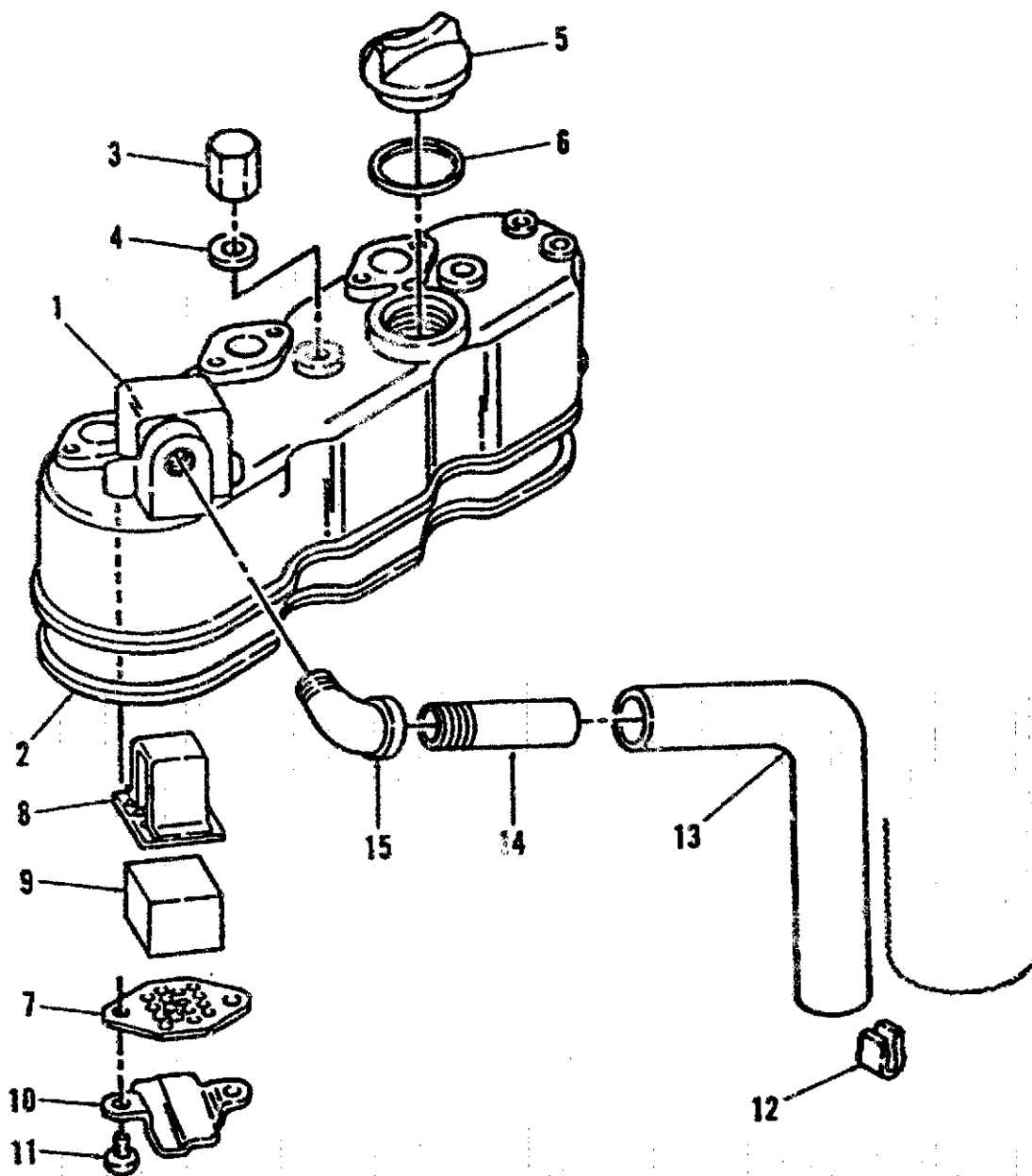
Sleeve, Crankshaft 9
Slinger, Oil 9
Solenoid 18,31
Sound Shield 53
Spacer 11,13
Spacer, Mounting - Fuel Filter 27
Spacer, Sleeve 55,56
Spring, Compression 5
Spring, Governor 30
Starter 15
Stator, Generator 51
Strainer, Water - thru Hull 19
Strap, Bonding 47,54,55,56
Stud 21,23,9,31,32,42
Support, Engine 55,56
Support, Saddle 47
Switch, Overspeed 33
Switch, Pressure (S1) & (S6) 14,15
Switch, Rocker 57,58
Switch, Thermostatic (S2) 42
Switch, Thermostatic - High Exhaust Temperature 21

Tank, Recovery 59
Tappet 11,24
Tee, Pipe 43
Tee, Pipe - Brass 14
Tee, Pipe - Iron 15
Thermostat 42
Tube, Exhaust - Outlet 21

Valve, Cock 13
Valve, Exhaust 5
Valve, Inlet 5
Valve, Relief - Pressure 12
Valve, Relief - Vacuum 19

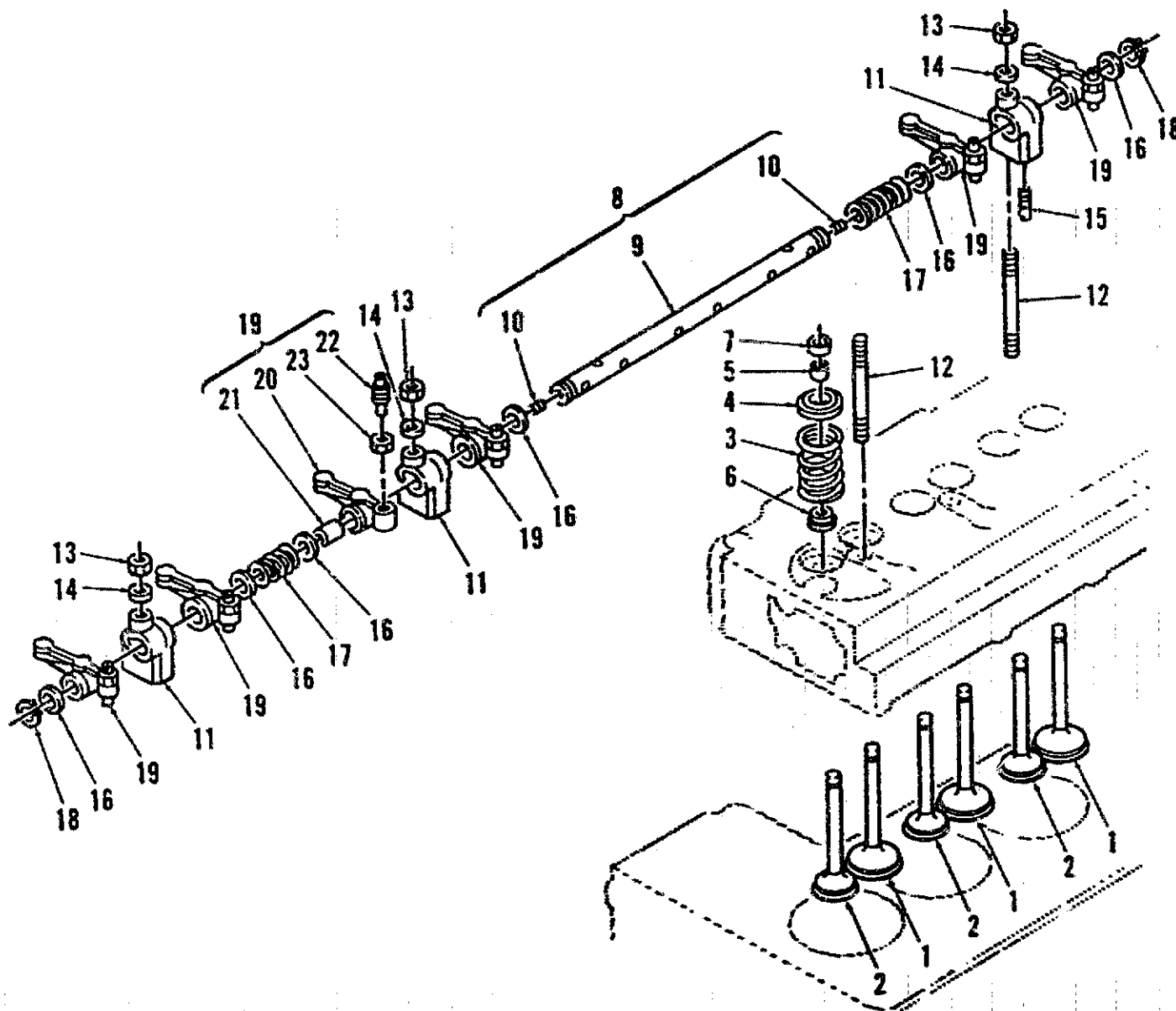
Weight, Governor (Includes Pivot Pins) 23

Valve Cover and Breather



REF. NO.	PART NO.	QTY USED	PART DESCRIPTION	REF. NO.	PART NO.	QTY USED	PART DESCRIPTION
1	185-2280	1	Cover, Cylinder Head	10	185-2288	1	Shield, Breather
2	185-2217	1	Gasket	11	185-2384	2	Screw, Machine - Pan Head with Lockwasher
3	185-2290	3	Nut, Cap	12	518-0449	1	Clip, Retaining
4	185-2291	3	Seal, Oil	13	503-1321	1	Hose, Rubber (7/16" ID x 5/8" OD x 26-1/2" LG)
5	185-2093	1	Cap, Oil Fill	14	505-0302	1	Nipple, Pipe - Half
6	185-2349	1	O-Ring	15	505-0011	1	Elbow, Pipe - Street, 90°
7	185-2287	1	Plate, Breather				
8	185-2230	1	Baffle, Breather				
9	185-2232	1	Element, Breather				

Rocker Arm

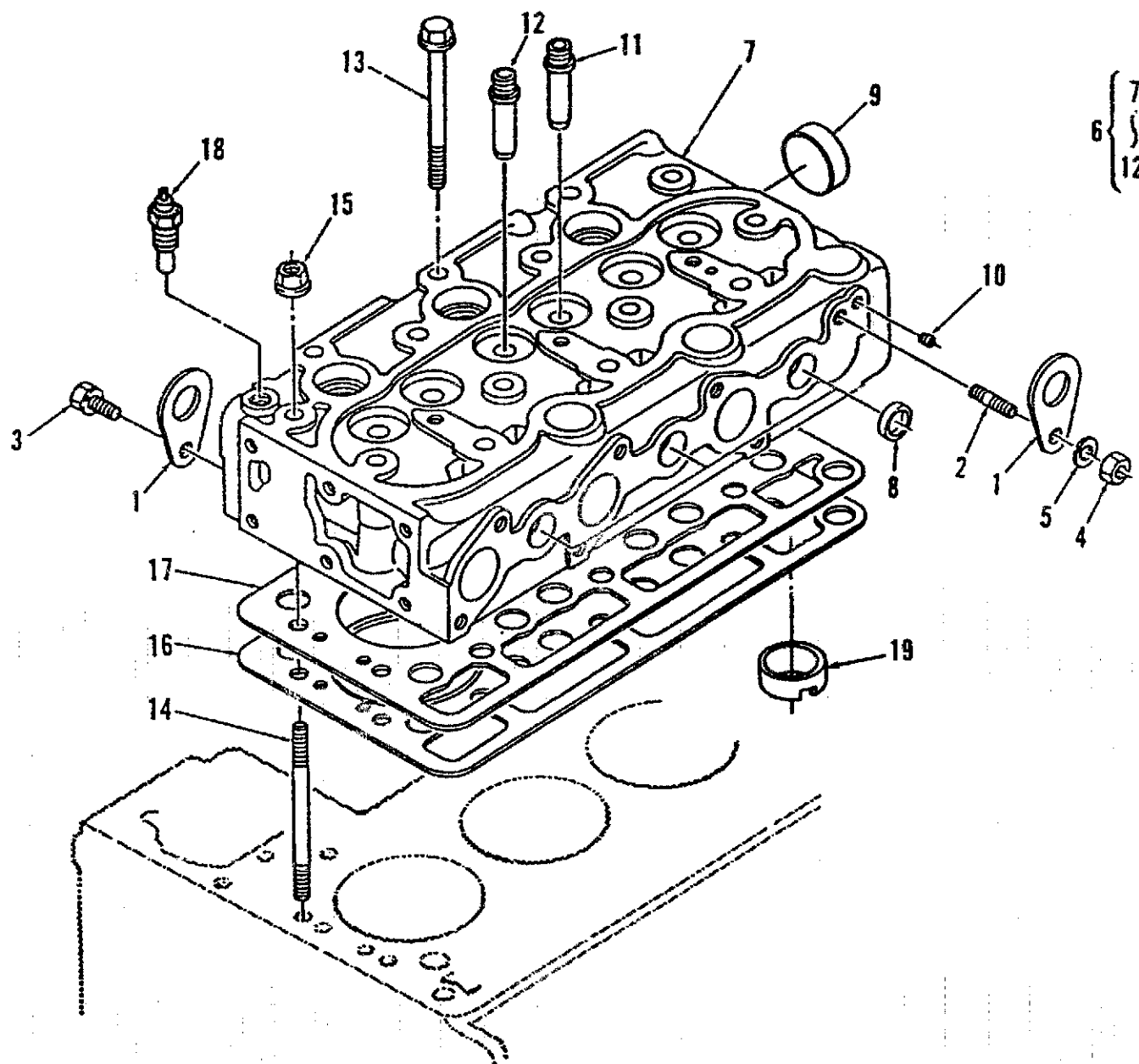


VT-1031

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	185-2060	3	Valve, Inlet
2	185-2061	3	Valve, Exhaust
3	185-2079	6	Spring, Compression
4	185-2076	6	Retainer, Spring
5	185-2077	12	Coilet, Spring
6	185-2078	3	Seal, Oil - Inlet Valve
7	185-2431	3	Seal, Oil - Exhaust Valve
8	185-2080	6	Cap, Valve Stem
9	185-2215	1	Shaft, Rocker Arm
10	NFS		Shaft
11	185-2228	2	Setscrow
12	185-2216	3	Bracket, Support

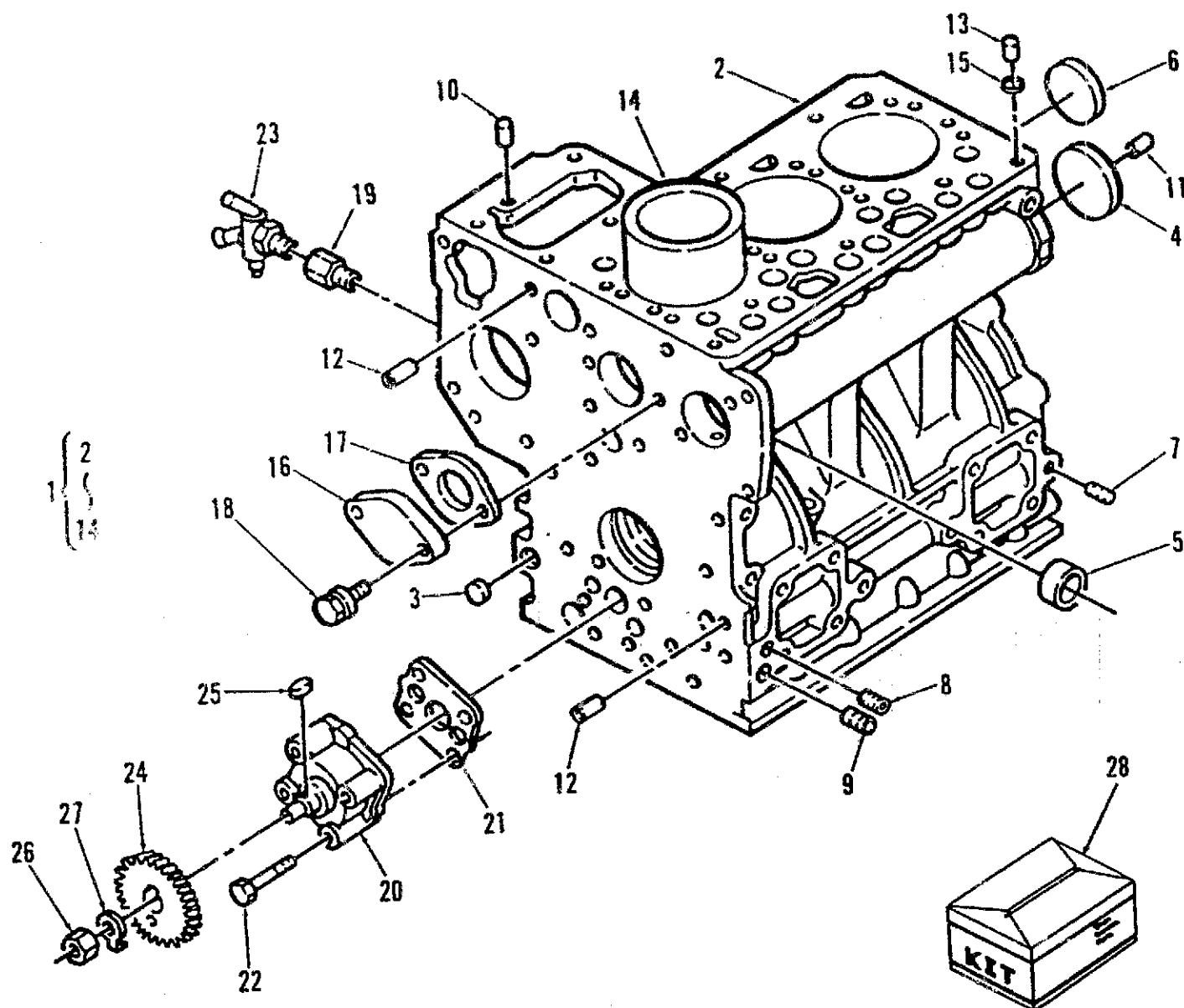
REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
12	185-2292	3	Stud
13	185-2179	3	Nut, Hex
14	185-2184	3	Washer, Flat
15	185-2072	1	Setscrow
16	185-2073	6	Washer, Flat
17	185-2070	2	Spring, Compression
18	185-2368	2	Ring, Retaining
19	185-2062	6	Rocker Arm
20	NFS		Arm
21	185-2063	6	Bushing, Sleeve
22	185-2407	6	Adjusting Screw
23	185-2408	6	Nut, Hex

Cylinder Head



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	185-2414	2	Bracket, Lifting	11	185-2068	3	Guide, Valve Inlet
2	185-2361	1	Stud	12	185-2069	3	Guide, Valve - Exhaust
3	185-2399	1	Screw, Cap - Hex Head with Lockwasher (M8 x 1.25 x 16mm)	13	185-2053	12	Bolt, Hex - Cylinder Head
4	185-2367	1	Nut, Hex (M8 x 1.25)	14	185-2052	2	Stud
5	185-2381	1	Washer, Lock - Spring (M8)	15	185-2054	2	Nut, Hex
6	185-2049	1	Head, Cylinder	16	185-2056	1	Gasket, Cylinder Head
7	NFS	1	Head, Cylinder	17	185-2057	2	Shim
8	185-2413	5	Cup, Sealing	18	193-0318	1	Sender, Temperature - Engine Coolant (E2)
9	185-2411	1	Cup, Sealing	19	185-2477	1	Combustion Chamber
10	185-2188	2	Plug, Pipe - Socket Drive				

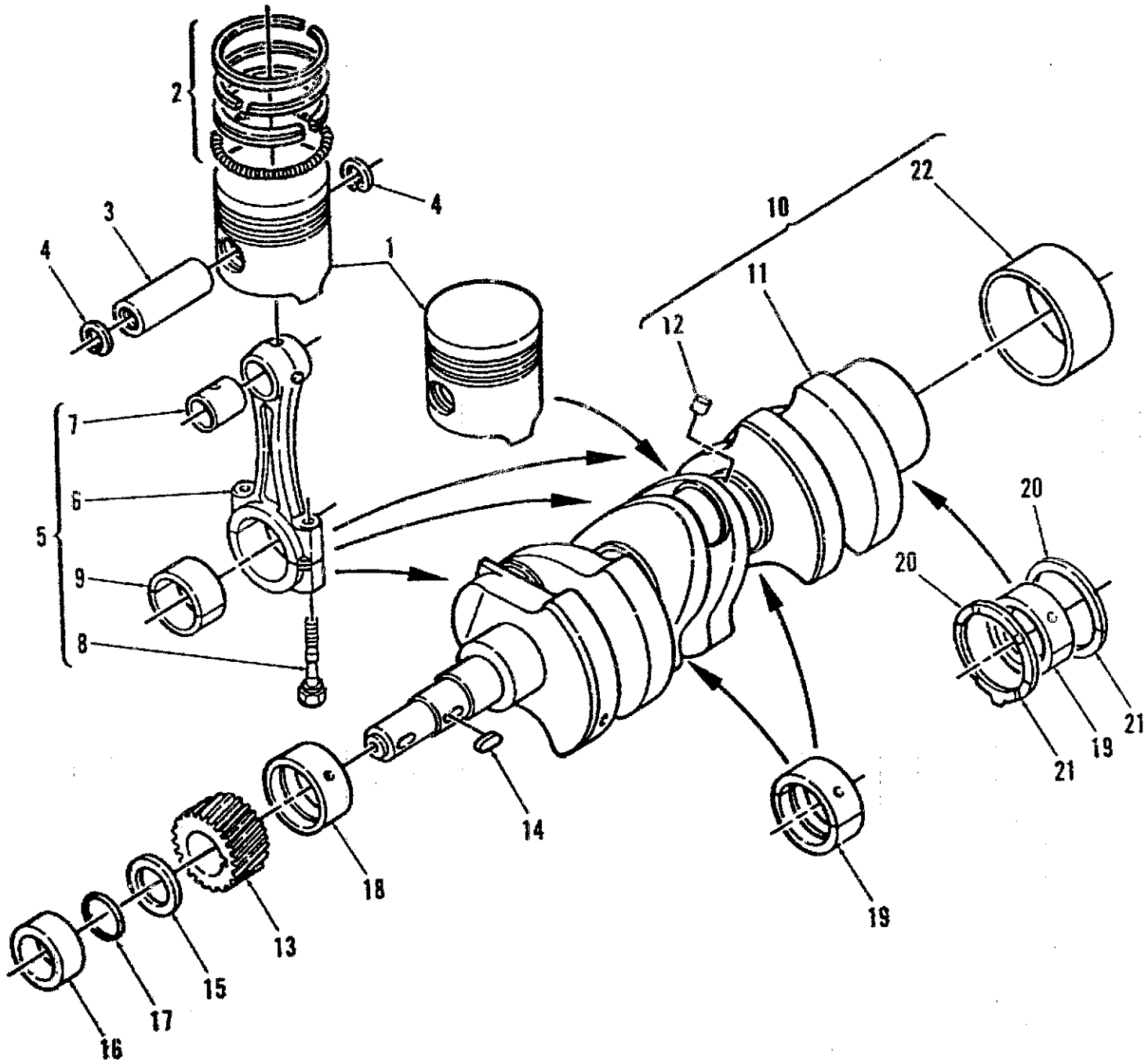
Cylinder Block & Oil Pump



C-1091

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION	REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	185-2001	1	Crankcase Block	15	185-2095	1	O-Ring
2	NFS			16	185-2176	1	Plate, Cover
3	185-2355	3	Plug, Expansion	17	185-2177	1	Gasket
4	185-2356	1	Plug, Expansion	18	185-2389	2	Screw, Cap - Hex Head (M6 x 1 x 18MM)
5	185-2411	5	Cup, Sealing	19	185-2229	1	Plug, Hex
6	185-2412	1	Cup, Sealing	20	185-2155	1	Pump, Oil
7	185-2188	6	Plug	21	185-2156	1	Gasket
8	185-2233	3	Plug	22	185-2409	4	Bolt, Hex with Lockwasher
9	185-2234	1	Plug	23	185-2337	1	Cock, Drain
10	185-2350	2	Pin, Straight, Headless	24	185-2293	1	Gear, Drive - Oil Pump
11	775-0072	2	Pin, Straight, Headless	25	185-2352	1	Key
12	185-2115	2	Pin, Hollow	26	185-2365	1	Nut, Hex (M10 x 1.5)
13	185-2094	1	Pin, Hollow	27	185-2382	1	Washer, Lock - Spring (M10)
14	185-2007	3	Liner, Cylinder	28	185-2313	1	Kit, Gasket

Crankshaft & Piston

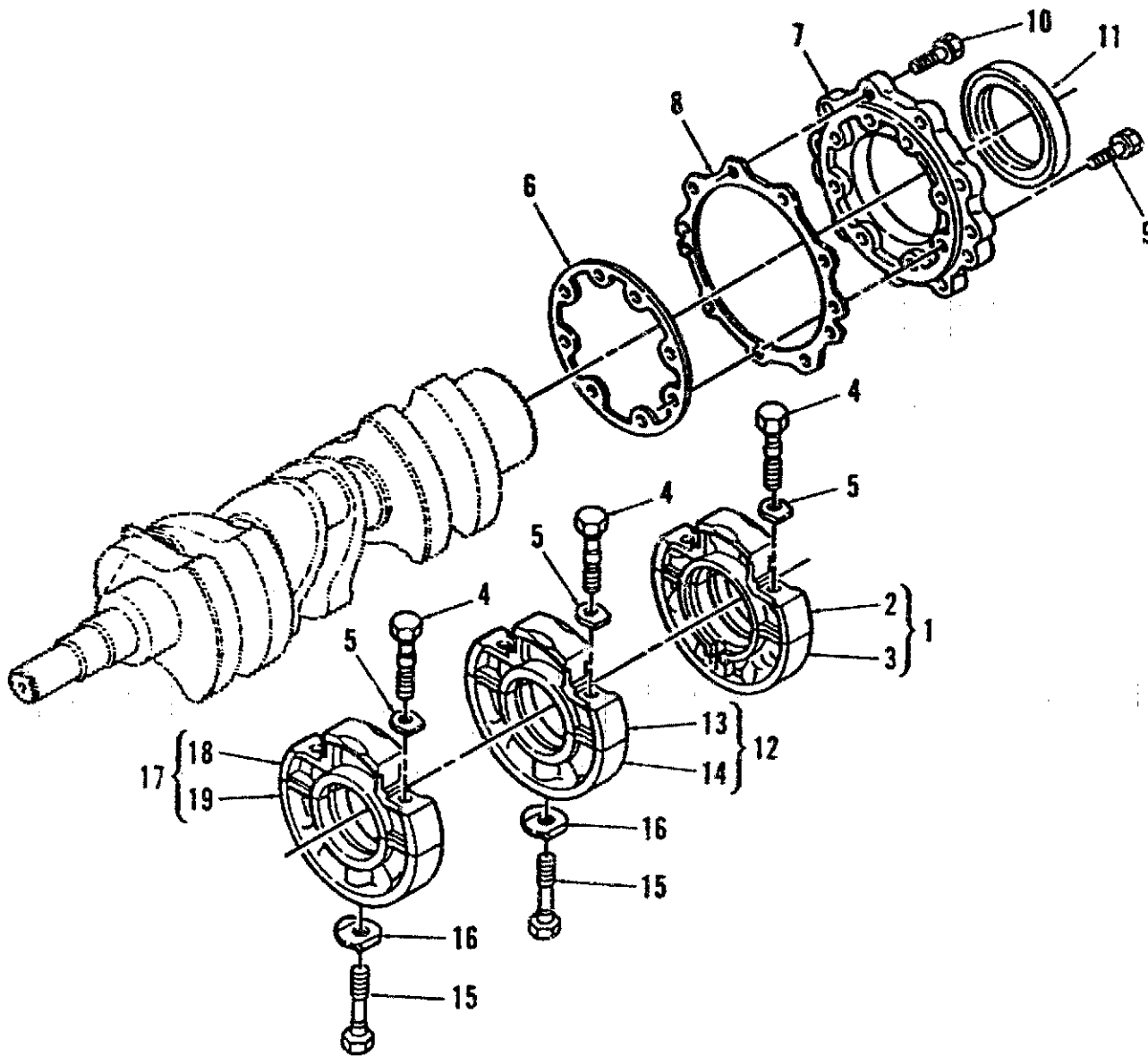


Crankshaft and Piston

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1			Piston	16	185-2250	1	Spacer, Sleeve
	185-2434	2	* Standard (#1 & 3 Cylinders Only)	17	185-2348	1	O-Ring
	185-2435	2	* 0.5mm Oversize (#1 & 3 Cylinders Only)	18	185-2020	1	Bearing, Crankshaft Standard
	185-2428	1	* Standard (#2 Cylinder Only)		185-2024	1	0.2mm Undersize
	185-2429	1	* 0.5mm Oversize (#2 Cylinder Only)		185-2025	1	0.4mm Undersize
2			Ring Set	19	185-2021	3	Bearing Set Standard
	185-2010	3	Standard		185-2026	3	0.2mm Undersize
	185-2011	3	0.5mm Oversize		185-2027	3	0.4mm Undersize
3	185-2015	3	Pin, Piston	20	185-2022	2	Bearing, Thrust Standard
4	185-2016	6	Ring, Retaining		185-2028	2	0.2mm Oversize
5	185-2012	3	Rod, Connecting		185-2029	2	0.4mm Oversize
6	NFS		Rod	21			Bearing, Thrust Standard
7	185-2017	3	Bearing, Sleeve		185-2023	2	Standard
8	185-2018	6	Bolt, Hex - Rod Cap		185-2030	2	0.2mm Oversize
9			Bearing Set		185-2031	2	0.4mm Oversize
	185-2013	3	Standard	22	185-2033	1	Sleeve, Crankshaft
	185-2019	3	0.2mm Undersize				
	185-2014	3	0.4mm Undersize				
10	185-2041	1	Crankshaft				
11	NFS		Crankshaft				
12	NFS		Plug				
13	185-2043	1	Gear				
14	185-2353	1	Key				
15	185-2087	1	Slinger, Oil				

* Note - Governor variations within models:
 Style I has a flyball type system; Style II has a flyweight type system. (See the Gearcase Illustration for visual external differences, and the Fuel System - Injection Pump for internal differences.)

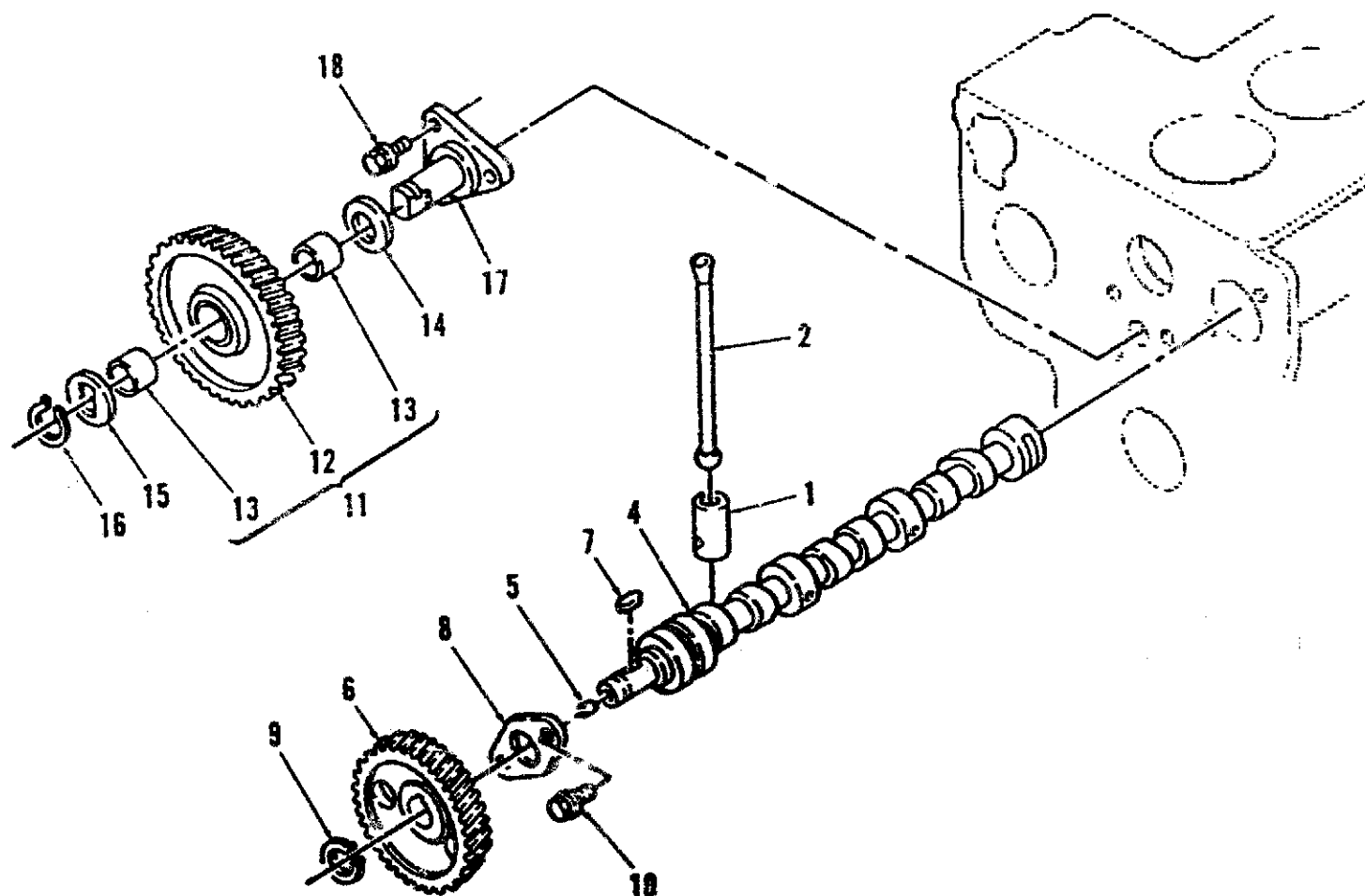
Main Bearing Holders



REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	185-2035	1	Holder, Bearing - Main, Rear
2	NFS		Holder, Bearing - Half, Upper
3	NFS		Holder, Bearing - Half, Lower
4	185-2037	6	Bolt, Hex
5	185-2039	6	Retainer, Bolt/Nut
6	185-2036	1	Gasket
7	185-2254	1	Cover Plate - Bearing
8	185-2127	1	Gasket
9	185-2390	9	Screw, Cap - Hex Head with Lockwasher (M6 x 1 x 20mm)
10	185-2391	8	Screw, Cap - Hex Head with Lockwasher (M6 x 1 x 25mm)

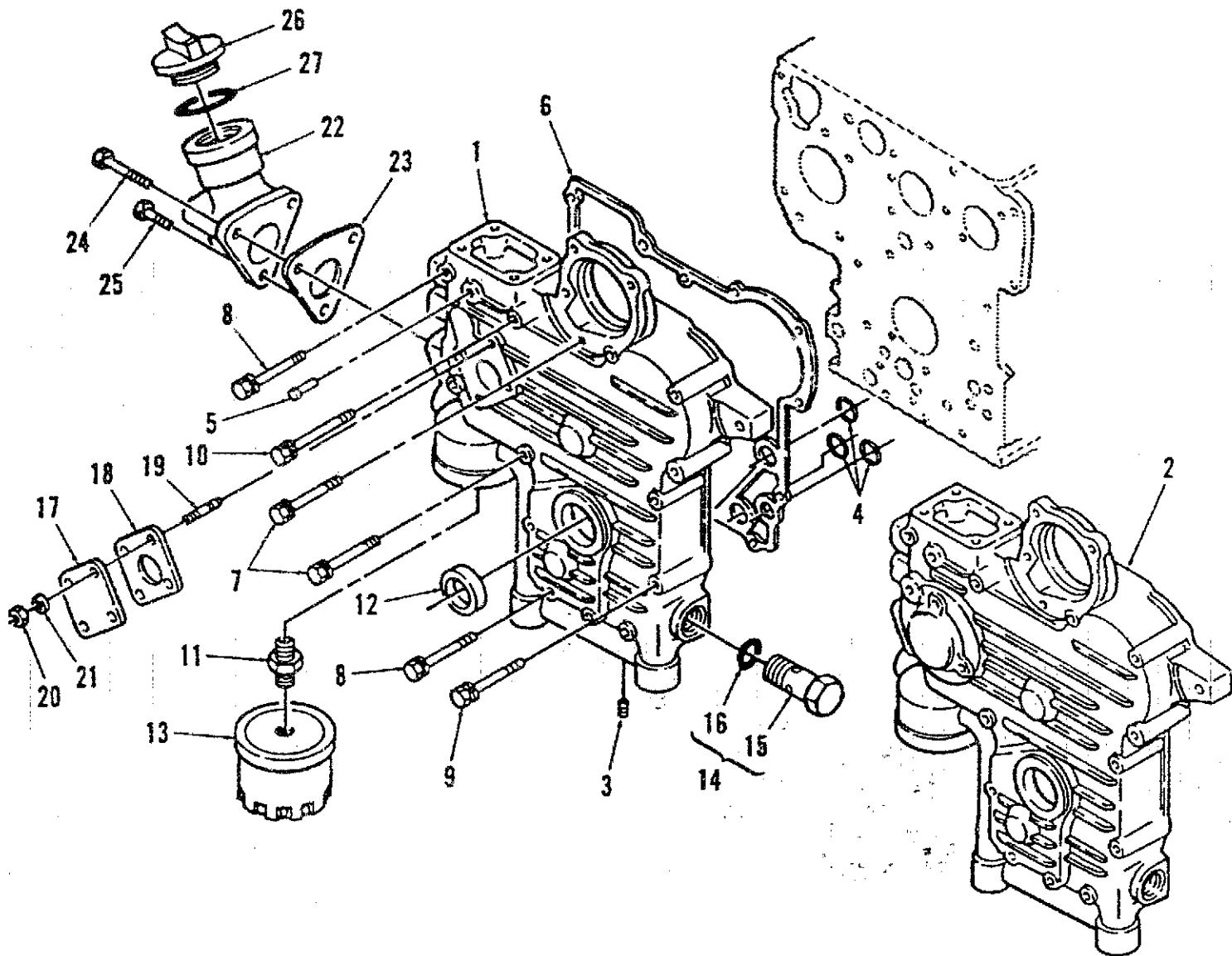
REF NO.	PART NO.	QTY USED	PART DESCRIPTION
11	185-2055	1	Seal, Oil - Crankshaft, Rear
12	185-2034	1	Holder, Bearing - Main, Center
13	NFS		Holder, Bearing - Half, Upper
14	NFS		Holder, Bearing - Half, Lower
15	185-2038	2	Bolt, Hex
16	185-2040	2	Retainer, Bolt/Nut
17	185-2213	1	Holder, Bearing - Main, Front
18	NFS		Holder, Bearing - Half, Upper
19	NFS		Holder, Bearing - Half, Lower

Camshaft



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	185-2075	6	Tappet	11	185-2042	1	Gear
2	185-2074	6	Rod, Push	12	NFS		Gear
4	185-2082	1	Camshaft	13	185-2048	2	Bushing, Sleeve
5	185-2190	2	Plug	14	185-2046	1	Spacer
6	185-2086	1	Gear	15	185-2047	1	Spacer
7	185-2353	1	Key	16	185-2045	1	Ring, Retaining
8	185-2084	1	Plate, Retaining	17	185-2044	1	Shaft
9	185-2369	1	Ring, Retaining	18	185-2388	3	Screw, Cap - Hex Head with Lockwasher (M6 x 1 x 16mm)
10	185-2387	2	Screw, Cap - Hex Head with Lockwasher (M6 x 1 x 14mm)				

Gearcase & Oil Filter

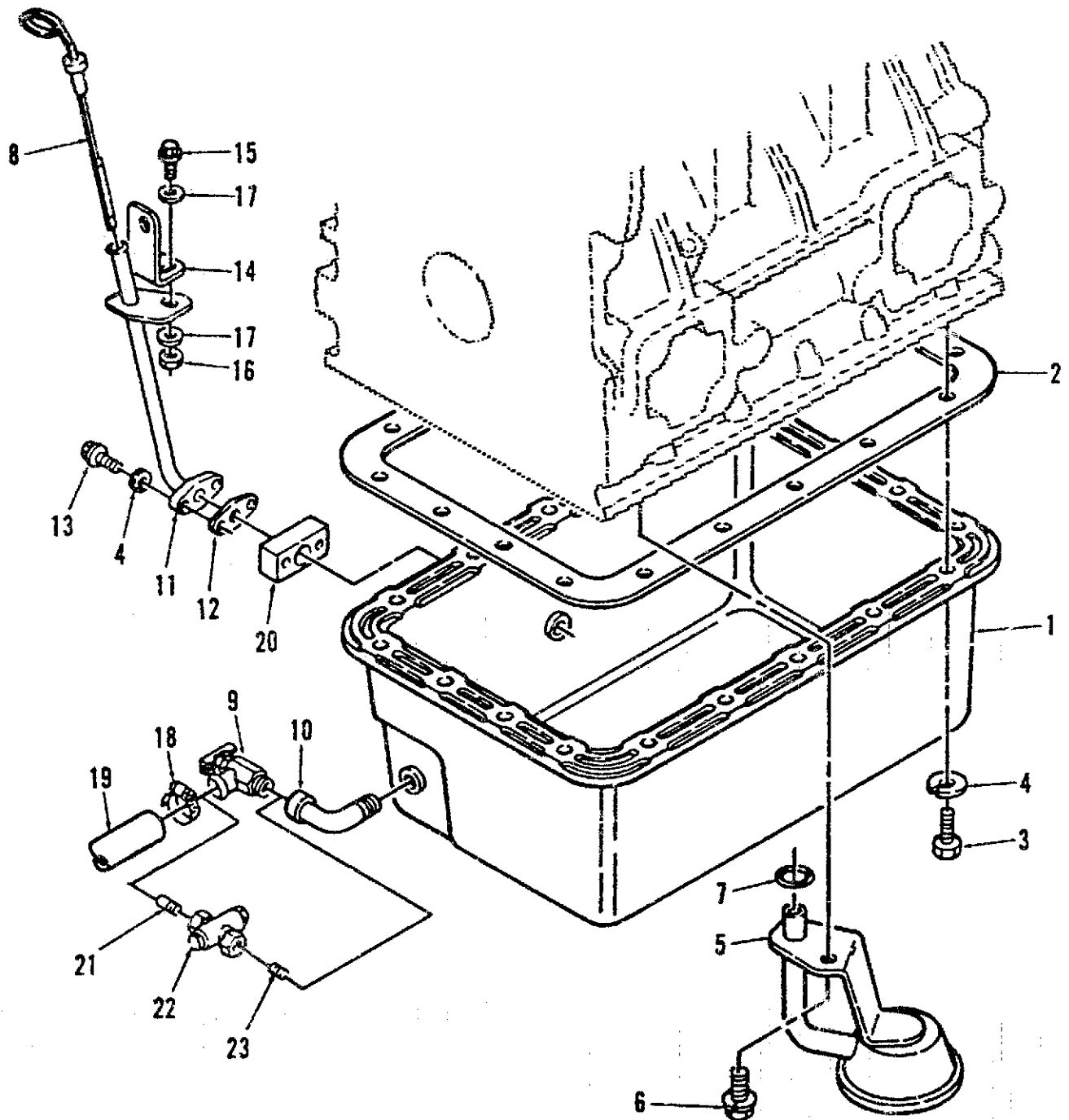


LS-1133

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION	REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	185-2051	1	Gearcase (Style I Governor)	14	185-2157	1	Valve, Relief - Pressure
2	185-2430	1	Gearcase (Style II Governor)	15	NFS		Valve
3	185-2189	2	Plug, Pipe - Socket Drive	16	185-2372	1	O-Ring
4	185-2374	3	O-Ring	17	185-2153	1	Plate, Cover (Style I Gov.)
5	185-2102	1	Pin, Straight	18	185-2104	1	Gasket (Style I Gov.)
6	185-2058	1	Gasket	19	185-2105	4	Stud
7	185-2395	7	Screw, Cap - Hex Head with Lockwasher (M6 x 1 x 60MM)	20	750-1004	4	Nut, Hex (M6 x 1)
8	185-2396	5	Screw, Cap - Hex Head with Lockwasher (M6 x 1 x 65MM)	21	185-2380	4	Washer, Lock - Spring (M6)
9	185-2397	1	Screw, Cap - Hex Head with Lockwasher (M6 x 1 x 70MM)	22	185-2296	1	Housing, Oil Fill
10	185-2398	1	Screw, Cap - Hex Head with Lockwasher (M6 x 1 x 75MM)	23	185-2309	1	Gasket
11	185-2124	1	Nipple, Pipe - Hex	24	185-2394	2	Screw, Cap - Hex Head with Lockwasher (M6 x 1 x 50MM)
12	185-2317	1	Seal, Oil - Crankshaft	25	185-2390	1	Screw, Cap - Hex Head with Lockwasher (M6 x 1 x 20MM)
13	185-2123	1	Filter, Oil	26	185-2093	1	Cap, Oil Fill
				27	185-2349	1	O-Ring

NOTE: See introduction for governor style identification

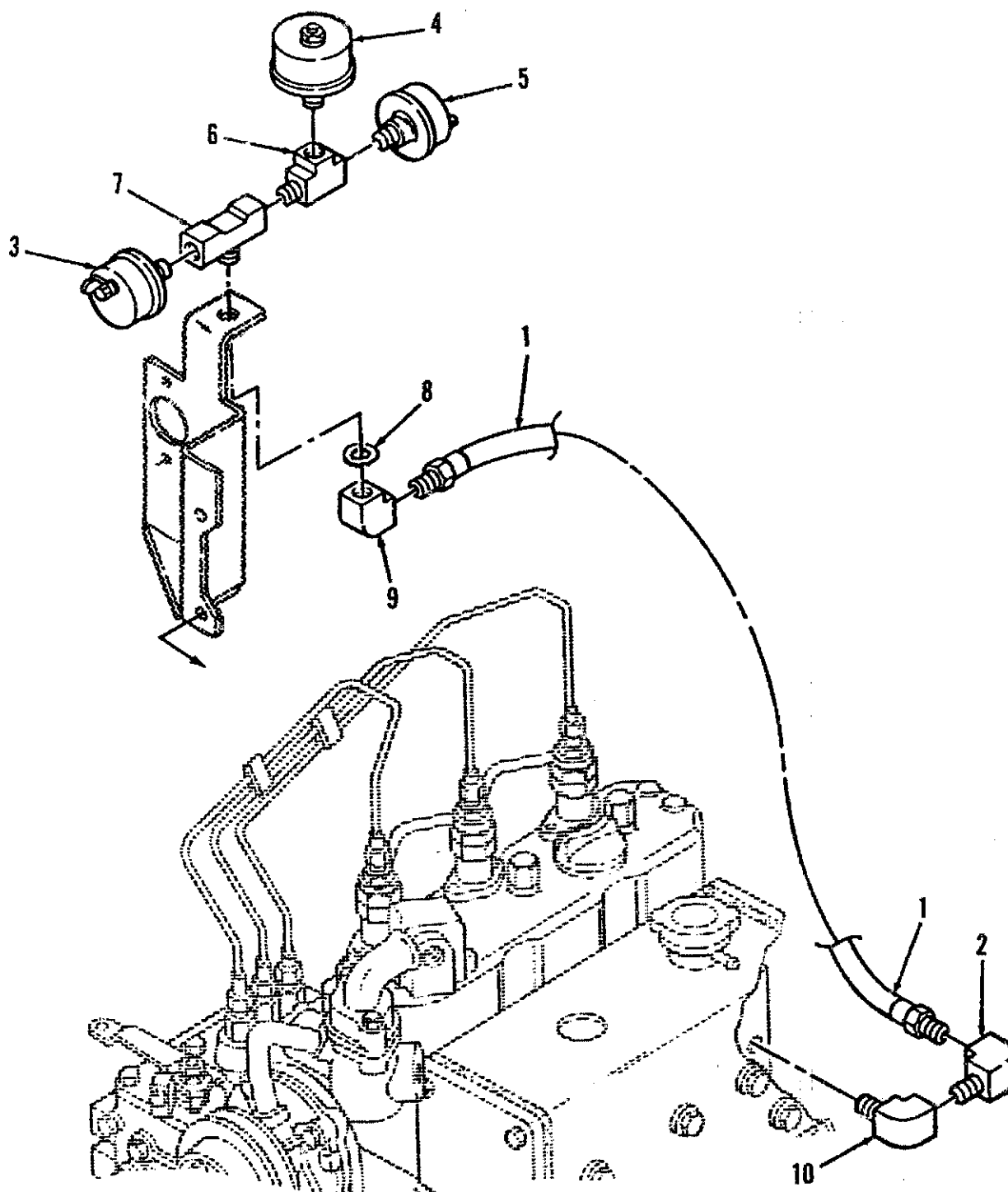
Oil Pan & Dipstick



REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	185-2281	1	Pan, Oil
2	185-2212	1	Gasket
3	185-2226	18	Bolt, Hex with Lockwasher
4	185-2380	1	Washer, Lock - Spring (M6)
5	185-2220	1	Cup, Pickup - Oil
6	185-2399	1	Screw, Cap - Hex Head with Lockwasher (M8 x 1.25 x 16mm)
7	185-2371	1	O-Ring
8	185-2209	1	Indicator, Oil Level
9	504-0092	1	Cock, Valve (used through November 1984)
10	505-0120	1	Elbow, Pipe - Street, 90°
11	185-2210	1	Guide, Oil Indicator
12	185-2410	2	Gasket
13	800-2036	2	Screw, Cap - Hex Head (M6 x 1 x 30mm)

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
14	185-2211	1	Bracket, Oil Indicator Guide
15	185-2400	1	Screw, Cap - Hex Head with Lockwasher (M8 x 1.25 x 18mm)
16	185-2366	1	Nut, Hex (M8 x 1.25)
17	185-2377	3	Washer, Flat (M8)
18	503-0197	1	Clamp, Hose
19	503-0891	1	Hose, Rubber
20	123-1628	1	Spacer
21	505-0135	1	Nipple, Half - Used Beginning November 1984
22	504-0030	1	Valve, Cock - Used Beginning November 1984
23	505-0101	1	Nipple, Close - Used Beginning November 1984

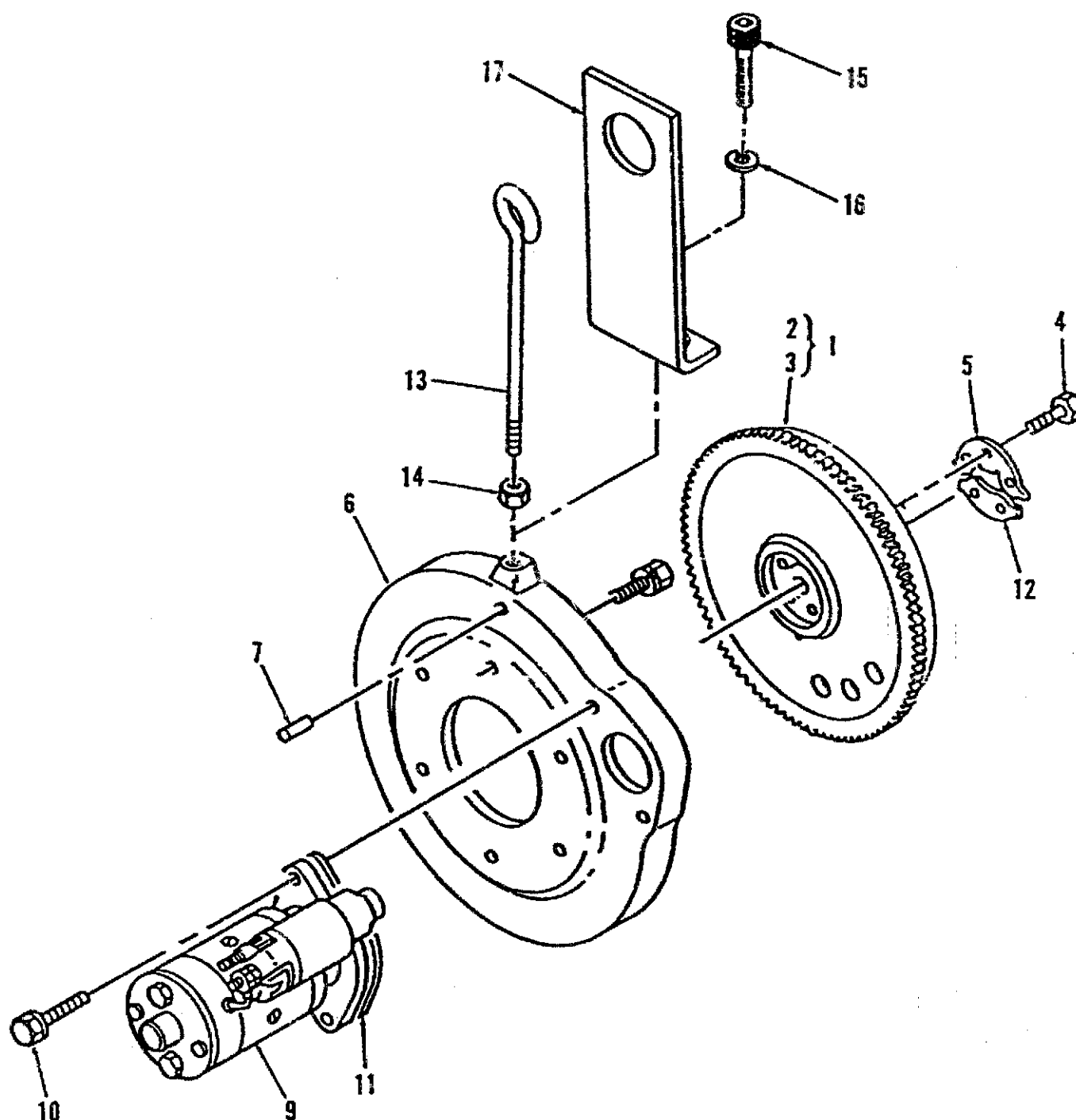
Oil Pressure Switches



REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	501-0005	1	Line, Fuel - Flexible
2	505-0049	1	Elbow, Pipe - Street, 90°
3	309-0159	1	Switch, Pressure (S6) (Power Latch)
4			Sender, Pressure - Oil (E1) (Not Used On All Applications)
	193-0244	1	Single Pole
	193-0404	1	Double Pole
5			Switch, Pressure (S1) (Shutdown)
	309-0561-05	1	Single Pole
	309-0578	1	Double Pole
6	502-0058	1	Tee, Pipe - Brass (1/8) (Not Used On All Applications)
7	502-0057	1	Tee, Pipe - Brass (1/8)

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
8	856-0023	1	Washer, Lock - IT (7/16")
9	502-0005	1	Elbow, Pipe - 90°, Brass
10			Elbow, Pipe - Street, 90°
	505-0049	1	Used through February 1984
	505-1342	1	Used Beginning March 1984
		1	Stud, Solenoid - Stop
		1	Solenoid, Stop
		1	Ball, Joint
		1	Ball, Joint
		2	Screw, RHM (#10-32 x .62")
		2	Nut (#10-32)
		2	Nut, Tappet (1/4-28)
		2	Washer, Lock - EIT (#10)

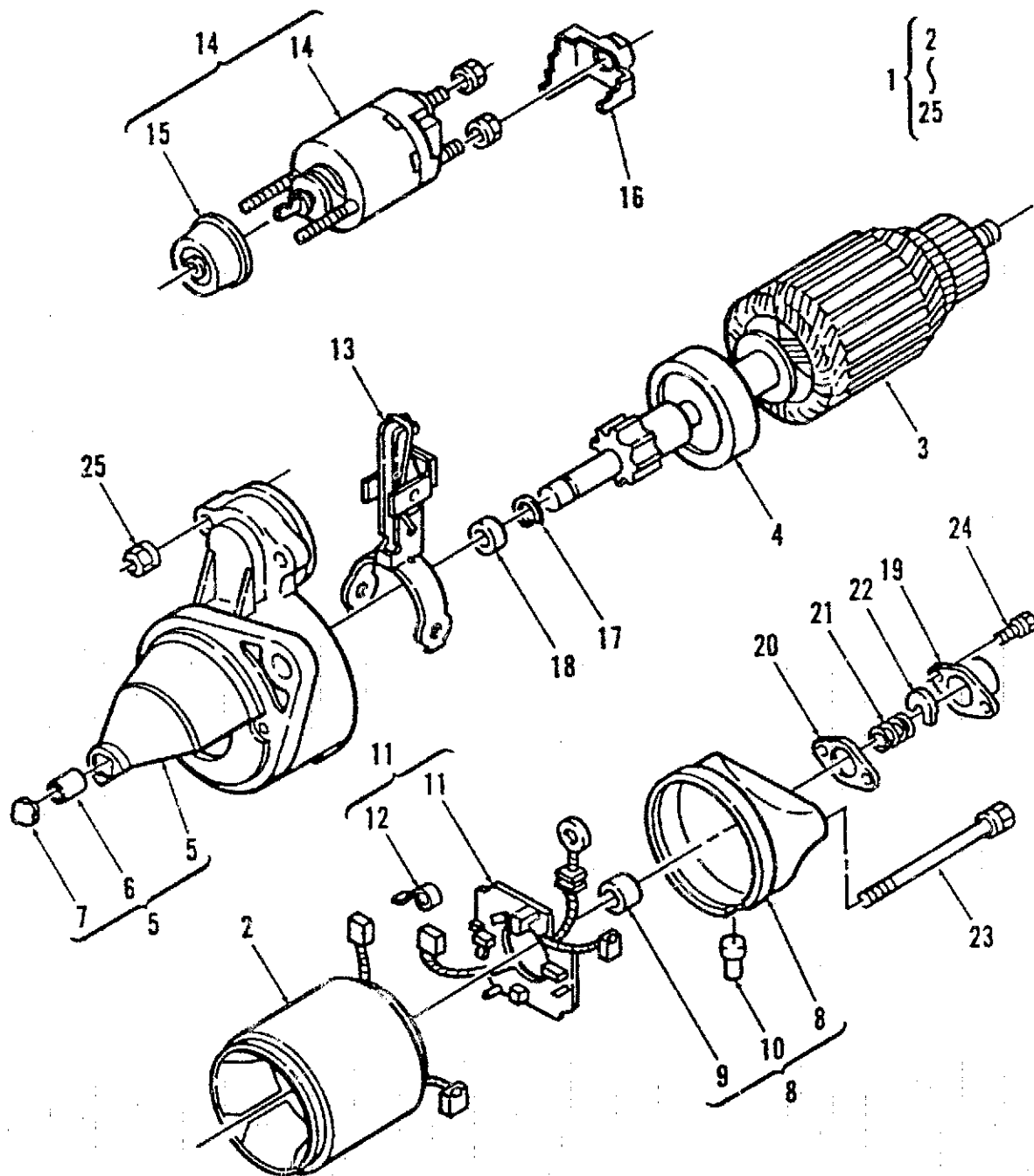
Flywheel and Starter



REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	185-2308	1	Flywheel (Includes Gear Ring)
2	NFS		Flywheel
3	185-2170	1	Gear, Ring
4	185-2301	5	Bolt, Hex
5	185-2218	1	Plate, Locking - Bolt/Nut
6	185-2417	1	Adapter, Generator
7	775-0072	1	Pin, Straight
8	185-2178	8	Bolt, Hex with Lockwasher
9	185-2116	1	Starter (12VDC) (See Separate Figure for Replacement Parts)
10	185-2404	2	Screw, Cap - Hex Head with Lockwasher (M8 x 1.25 x 28mm)

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
11	185-2314	1	Gasket
12	185-2219	1	Plate, Locking - Bolt/Nut
13	403-2214	1	Bolt, Eye (Used Through Spec A)
14	862-0003	1	Nut, Hex (3/8-16) (Used Through Spec A)
15	802-0072	1	Screw, Socket Head (3/8-16 x 1")
16	850-0050	1	Washer, Lock - Spring (3/8")
17	403-2634	1	Bracket, Lifting (Begin Spec B)

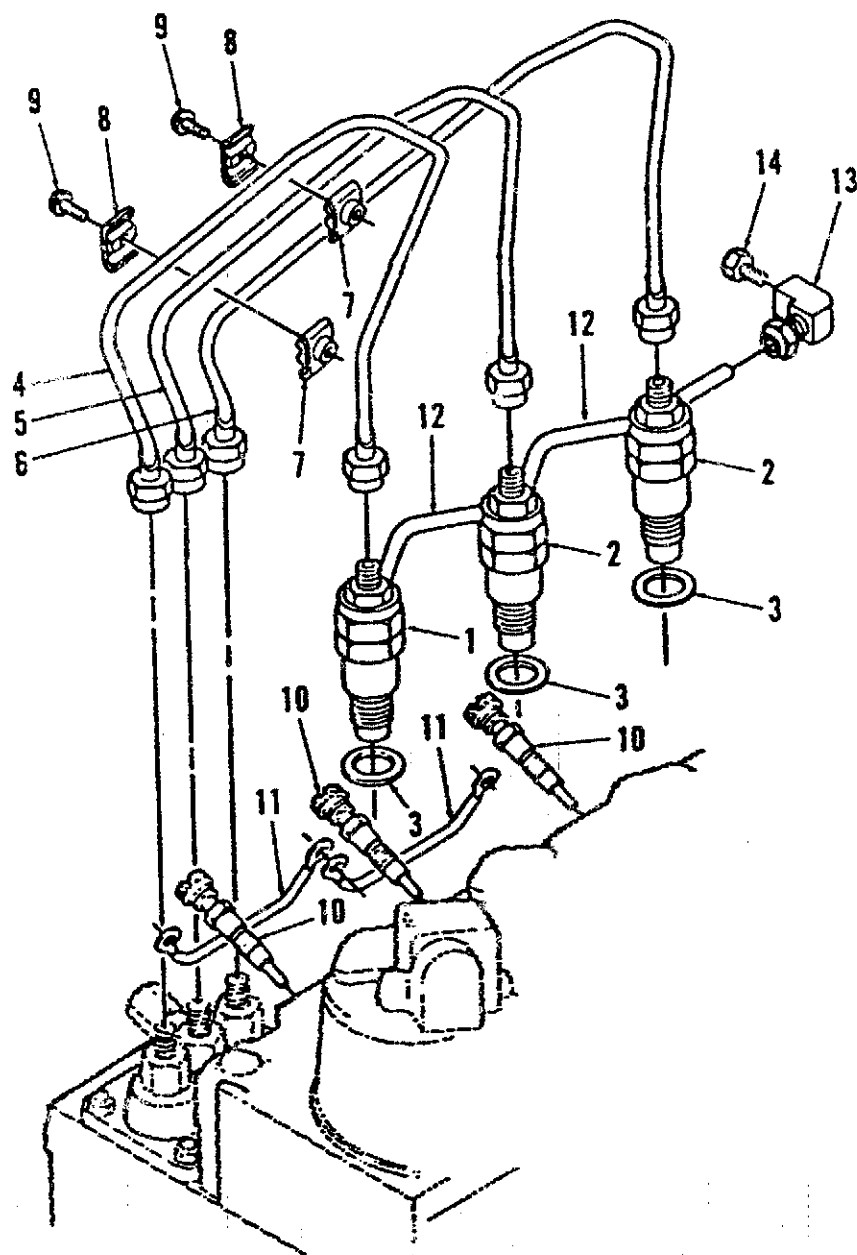
Starter - Exploded View



ES-1474

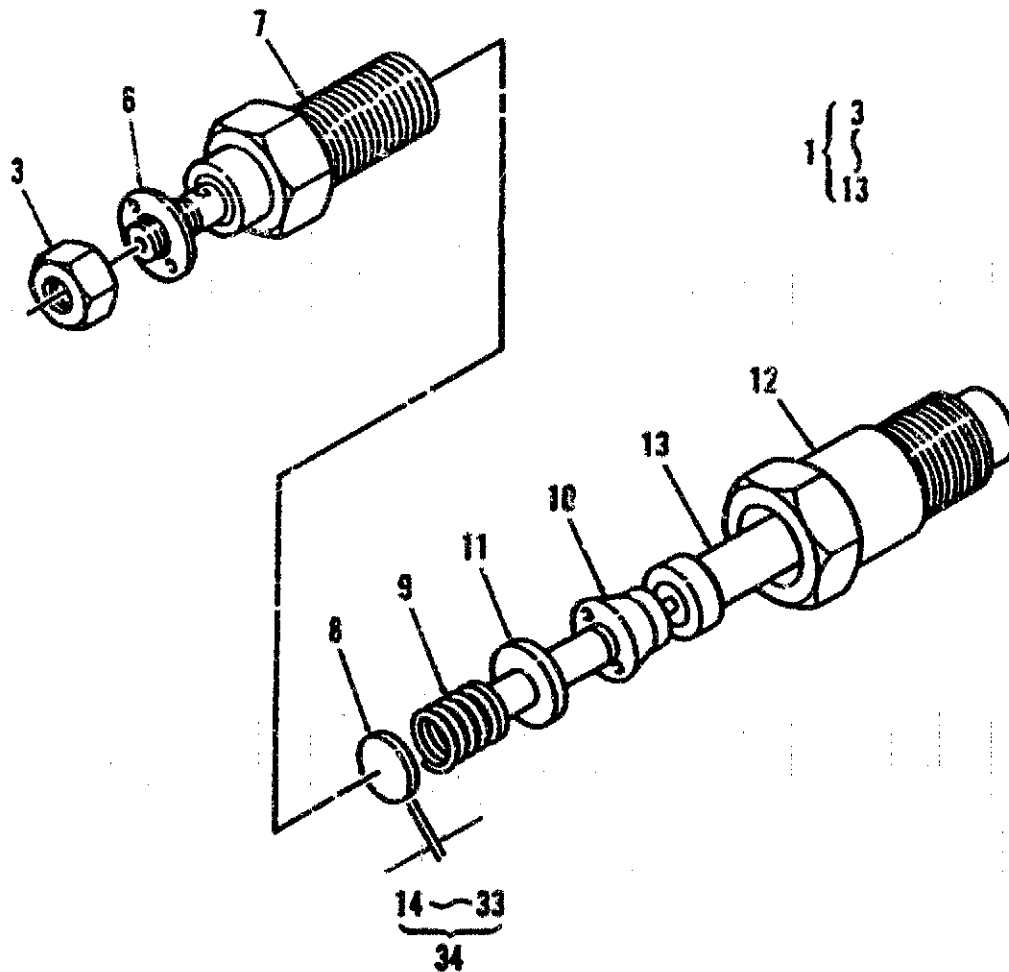
REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION	REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	185-2116	1	Starter (12VDC) (Complete)	14	185-2117	1	Solenoid
2	185-2322	1	Coil, Field	15	185-2331	1	Cover, Plunger
3	185-2321	1	Armature	16	185-2323	1	Insulator, Terminal
4	185-2319	1	Clutch	17	185-2111	1	Ring, Retaining
5	185-2118	1	Housing, Drive End	18	185-2195	1	Spacer, Sleeve
6	185-2295	1	Bushing, Sleeve	19	185-2332	1	Housing
7	185-2335	1	Cover	20	185-2333	1	Gasket
8	185-2326	1	Housing, Brush End	21	185-2325	1	Spring
9	185-2327	1	Bushing, Sleeve	22	185-2324	1	Clip, Retaining
10	185-2119	1	Cover	23	185-2328	2	Bolt, Hex
11	185-2329	1	Brush Rig	24	185-2383	2	Screw, Machine - Pan Head with Lockwasher (M4 x .5 x 14MM)
12	185-2330	4	Spring	25	185-2334	2	Nut, Hex
13	185-2320	1	Lever, Drive				

Glow Plug & Injection Nozzles



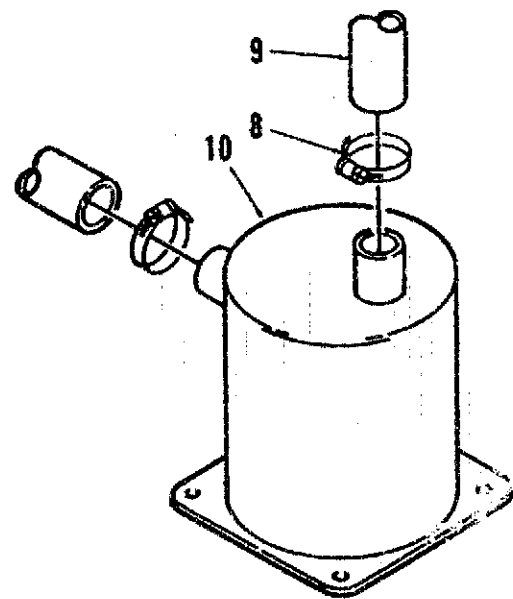
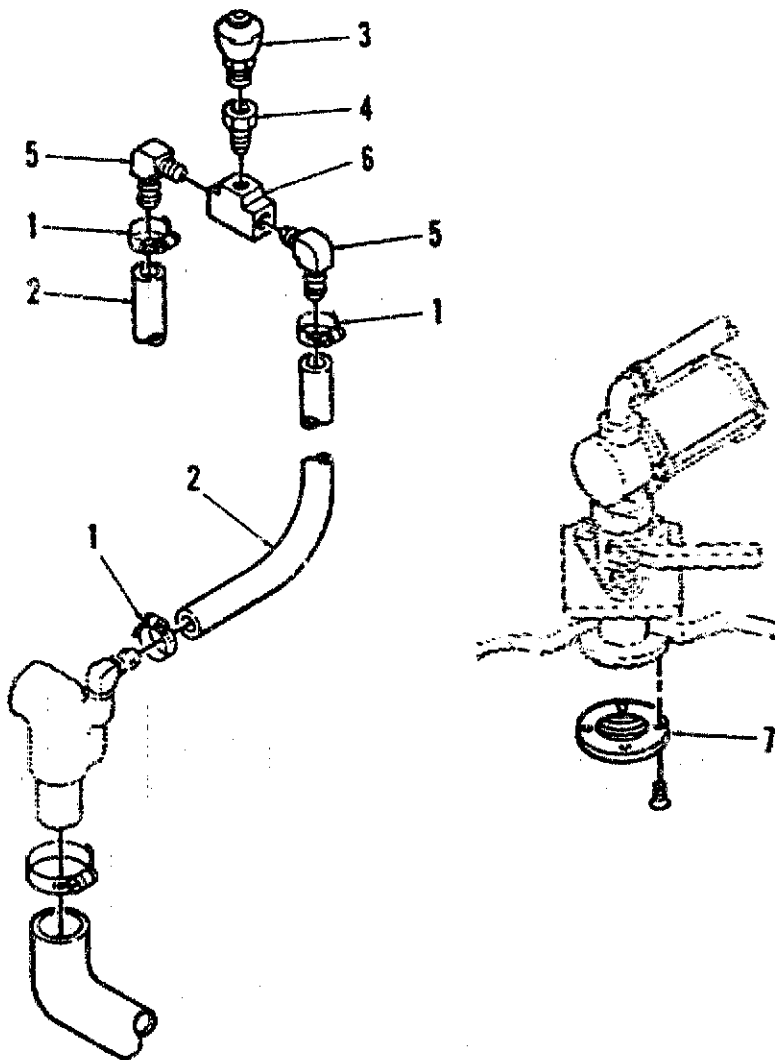
REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	185-2436	1	Nozzle, Injection - Fuel (See Separate Page for Components)	8	185-2345	2	Clamp
2	185-2436	2	Nozzle, Injection - Fuel (See Separate Page for Components)	9	185-2385	2	Screw, Machine - Pan Head with Lockwasher (M5 x .8 x 20mm)
3	185-2294	3	Gasket	10	185-2289	3	Plug, Glow (12 VDC)
4	185-2159	1	Line, Fuel - Injection	11	185-2172	2	Lead, Electrical
5	185-2160	1	Line, Fuel - Injection	12	185-2437	1	Tube, Fuel - Overflow
6	185-2224	1	Line, Fuel - Injection	13	502-0886	1	Elbow, Tube to Pipe, 90°
7	185-2344	2	Clamp	14	502-0175	1	Adapter, Pipe - Hex (Used Beginning November 1984)

Injection Nozzle - Components



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	185-2436	1	Nozzle, Injection (Complete)	20	185-2138	1	Shim (1.30mm)
3	185-2107	1	Nut, Hex	21	185-2139	1	Shim (1.35mm)
6	185-2109	1	Washer, Flat	22	185-2140	1	Shim (1.40mm)
7	NFS	1	Screw, Adjusting - Pressure	23	185-2141	1	Shim (1.45mm)
8	185-2099	1	Shim	24	185-2142	1	Shim (1.50mm)
9	185-2098	1	Spring	25	185-2143	1	Shim (1.55mm)
10	185-2101	1	Spacer	26	185-2144	1	Shim (1.60mm)
11	185-2097	1	Spindle	27	185-2145	1	Shim (1.65mm)
12	185-2100	1	Holder, Nozzle	28	185-2146	1	Shim (1.70mm)
13	185-2459	1	Nozzle, Injection - Fuel	29	185-2147	1	Shim (1.75mm)
14	185-2132	1	Shim (1.00mm)	30	185-2148	1	Shim (1.80mm)
15	185-2133	1	Shim (1.05mm)	31	185-2149	1	Shim (1.85mm)
16	185-2134	1	Shim (1.10mm)	32	185-2150	1	Shim (1.90mm)
17	185-2135	1	Shim (1.15mm)	33	185-2151	1	Shim (1.95mm)
18	185-2136	1	Shim (1.20mm)	34	185-2444	1	Shim Pkg
19	185-2137	1	Shim (1.25mm)				

Marine Exhaust System

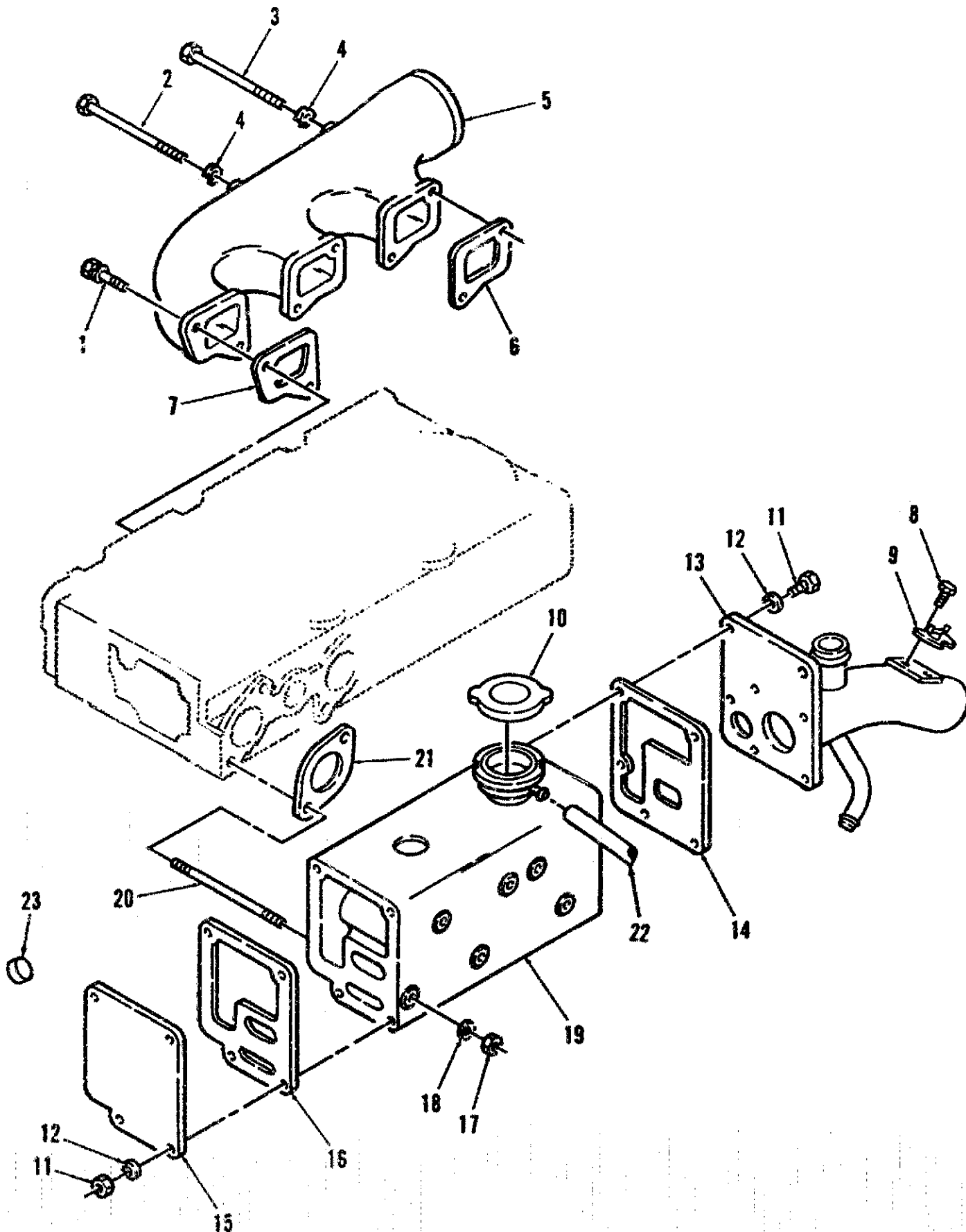


EXS-1109

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1			Clamp, Hose (Select)
	503-0685	4	3/8" to 1/2" Hose Size
	503-0446	4	7/16" to 3/4" Hose Size
	503-0547	4	1/2" to 7/8" Hose Size
	503-0183	4	9/16" to 1-1/16" Hose Size
	503-0398	4	13/16" to 1-3/4" Hose Size
2			Hose, Rubber (Select)
	503-0890	2	1/2" ID x 27/32" OD x 24" LG
	503-0658	2	1/2" ID x 27/32" OD x 48" LG
	503-0803	2	1/2" ID x 27/32" OD x 144" LG
	503-1163	2	1" ID x 1-3/8" OD x 24" LG
	503-1202	2	1" ID x 1-3/8" OD x 72" LG
3	504-0062	1	Valve, Vacuum Relief (1/2" NPT)
4	502-0270	1	Adapter, Hex - Brass (3/8" NPT x 1/2" NPT)
5			Elbow, Pipe To Hose (Select)
	502-0237	2	1/2" NPT x 3/8" ID Hose
	502-0881	2	3/4" NPT x 1" ID Hose
6			Tee, Pipe - Brass (Select)
	502-0090	1	3/8" NPT - three places
	502-0883	1	3/4" NPT x 3/4" NPT x 1/2" NPT
7	155-1002	1	Strainer, Water - Thru Hull

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
8			Clamp, Hose (Select)
	503-0429	8	1-1/16" to 2" Hose Size
	503-0365	8	1-9/16" to 2-1/2" Hose Size
	503-0514	8	1-13/16" to 3" Hose Size
	503-0354	8	2-1/2" to 3-1/4" Hose Size
	503-0648	8	2-9/16" to 3-1/2" Hose Size
	503-0612	8	3-5/16" to 4-1/4" Hose Size
	503-1180	8	4" to 4-3/4" Hose Size
9			Hose, Exhaust - (Select)
	503-1293	1	1-5/8" ID x 2-1/32" OD x 120" LG
	503-1296	1	1-7/8" ID x 2-9/32" OD x 120" LG
	503-1353	1	2" ID x 2-13/32" OD x 120" LG
	503-1299	1	2-1/4" ID x 2-5/8" OD x 120" LG
	503-1302	1	2-1/2" ID x 2-15/16" OD x 120" LG
	503-1305	1	2-7/8" ID x 3-7/16" OD x 120" LG
	503-1308	1	3-1/2" ID x 4-3/32" OD x 120" LG
10			Muffler, Exhaust
	155-2029	1	2" OD Inlet Outlet
	155-2009	1	2-1/4" OD Inlet Outlet
	155-2010	1	2-1/2" OD Inlet Outlet
	155-2011	1	2-7/8" OD Inlet Outlet
	155-2012	1	3-1/2" OD Inlet Outlet

Inlet/Exhaust Manifold



Inlet/Exhaust Manifold

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	185-2390	4	Screw, Cap - Hex Head with Lockwasher (M6 x 1 x 20mm)	12	850-0040	8	Washer, Lock - Spring (1/4")
2	185-2253	1	Bolt, Hex	13	155-2003	1	Tube, Exhaust
3	185-2225	1	Bolt, Hex		155-2316	1	Standard Cooled Units
4	850-2006	2	Washer, Lock - Spring (M6)	14	154-2455	1	Keel Cooled Units
5	185-2307	1	Manifold, Inlet	15	154-2459	1	Gasket
6	185-2129	1	Gasket	16	154-2456	1	Plate, End
7	185-2130	2	Gasket	17	860-2007	1	Gasket
8	815-0504	2	Screw, Tapping - Hex Washer Head (#6-32 x 3/8") (Standard Cooled Only)	18	850-2006	6	Nut, Hex (M6)
9	309-0295	1	Switch, Thermostatic - High Exhaust Temperature (Standard Cooled Only)	19	154-2475	1	Washer, Lock - Spring (M6)
10	130-2760-01	1	Cap, Radiator (7 lb)	20	520-2036	6	Manifold, Exhaust - Water Cooled
11	821-0015	8	Screw, Self-locking - Hex Washer Head (1/4-20 x 3/4")	21	185-2131	3	Stud
				22	503-0276	1	Gasket
				23	517-0142	1	Hose (2') (Keel Cooling Only)
							Plug, Cup (1-1/2") (Used after June 1989)



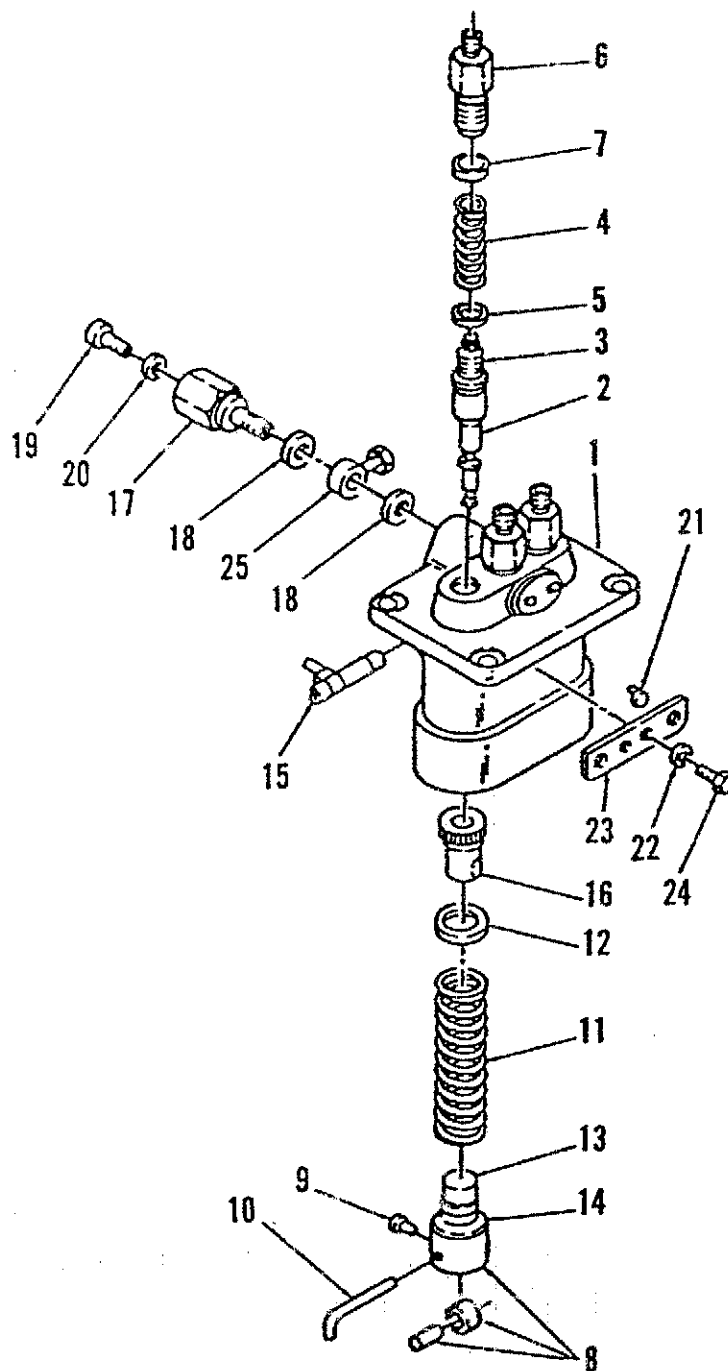
Fuel System Injection Pump and Driveshaft

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	185-2221	1	Pump, Injection - Fuel (See Separate Page for Components)	23	185-2418	1	Lockwasher (M6 x 1 x 12mm Cover, Fuel Pump Mounting Hole
2	185-2223	4	Shim (0.15mm)	24	185-2125	1	Gasket
3	185-2402	2	Screw, Cap - Hex Head with Lockwasher (M8 x 1.25 x 22mm)	25	185-2359	2	Stud (M6 x 1 x 16mm)
4	185-2106	2	Stud (M8 x 1.25)	26	750-1004	2	Nut, Hex (M6 x 1)
5	185-2367	2	Nut, Hex (M8 x 1.25)	27	185-2380	2	Washer, Lock - Spring (M6)
6	185-2381	2	Washer, Lock - Spring (M8)	28	185-2448	1	Gear
7	185-2083	1	*Shaft Assembly, Fuel (Style I Governor)	29	185-2443	2	Roller
8	185-2446	1	*Shaft Assembly, Fuel (Style II Governor)	30	NFS	2	Pin, Straight - Headed
9	185-2316	1	Bearing, Ball	31	185-2452	2	Pin, Straight - Headless
10	185-2158	1	Gear	32	815-2454	2	Weight, Governor (Includes Pivot Pins)
11	185-2354	1	Key	33	185-2453	1	Holder, Weight
12	185-2162	1	Retainer, Ball - Governor	34	185-2449	1	Sleeve
13	185-2163	1	Ring, Retaining	35	185-2451	1	Collar
14	185-2164	1	Race, Ball - Governor	36	185-2450	1	Washer, Thrust
15	185-2357	30	Ball	37	185-2447	1	Bearing, Ball
16	185-2165	1	Ring, Retaining				
17	185-2358	7	Ball				
18	185-2369	1	Ring, Retaining				
19	815-2315	1	Bearing, Ball				
20	185-2370	1	Ring, Retaining				
21	185-2085	1	Plate, Retaining				
22	185-2386	2	Screw, Cap - Hex Head with				

* Note - Governor variations within models:
Style I has a flyball type system; Style II
has a flyweight type system. (See the Gearcase
Illustration for visual external differences,
and the Fuel System - Injection Pump for in-
ternal differences.)

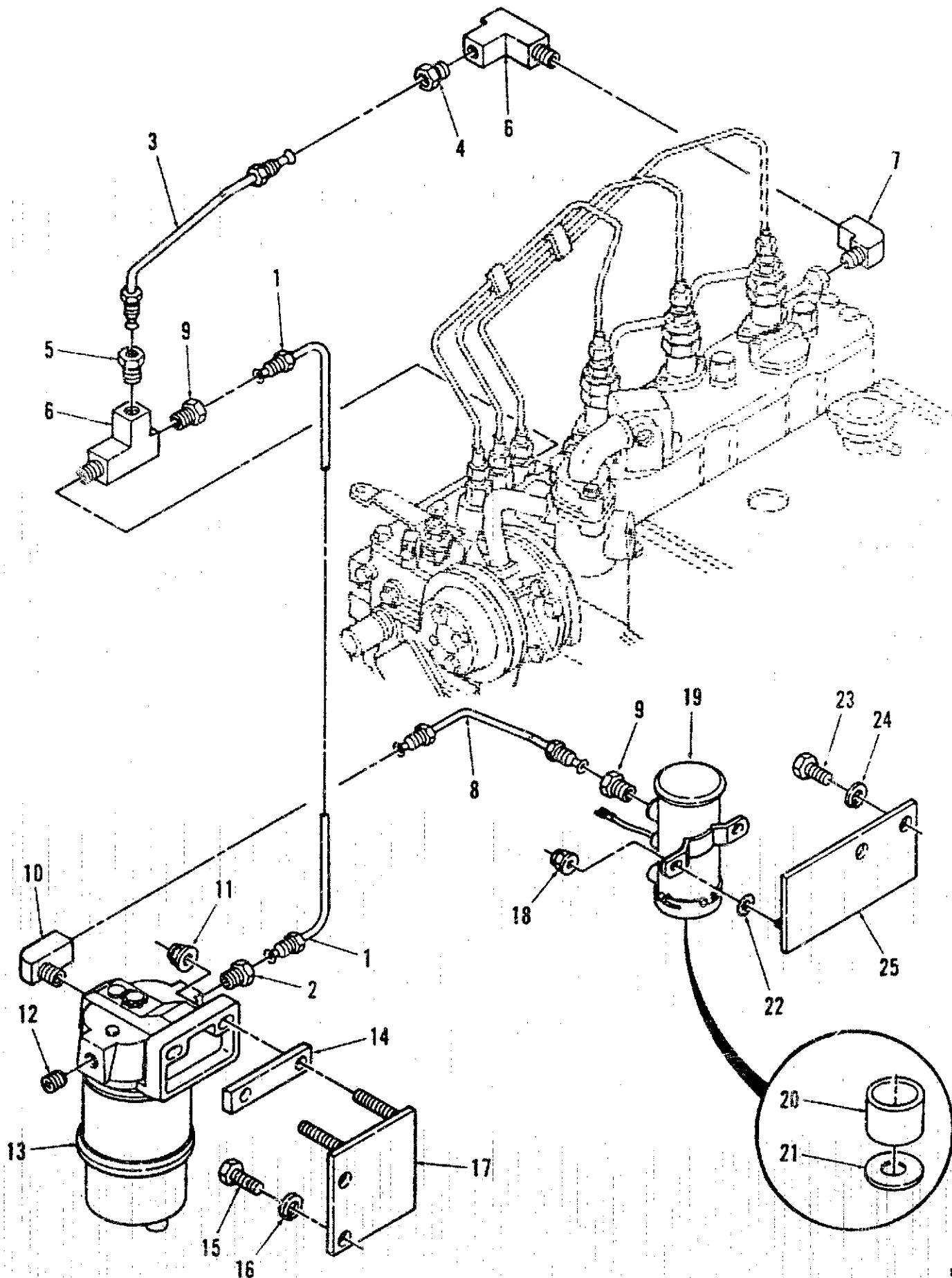


Injection Pump - Components



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	NFS		Housing, Pump	14	NFS		Shim
2	NFS		Plunger, Delivery Valve	15	NFS		Shaft, Fuel Control
3	NFS		Valve, Delivery	16	NFS		Sleeve, Fuel Control
4	NFS		Spring	17	NFS		Vent, Air
5	185-2196	3	Gasket	18	185-2197	2	O-Ring
6	NFS		Connector, Fuel Line	19	NFS		Screw, Cap - Hex Head (Air Vent)
7	185-2198	3	O-Ring	20	185-2318	1	O-Ring
8	NFS		Tappet (Includes Roller and Shaft)	21	NFS		Collar
9	NFS		Pin, Shouldered	22	NFS		Washer, Lock - Spring
10	NFS		Pin, Roller Shaft	23	NFS		Plate, Adjusting
11	NFS		Spring	24	NFS		Screw, Cap - Hex Head
12	NFS		Seat, Spring - Upper	25	185-2415	1	Adapter, Line - Fuel
13	NFS		Seat, Spring - Lower				

Fuel System - Filter & Pump

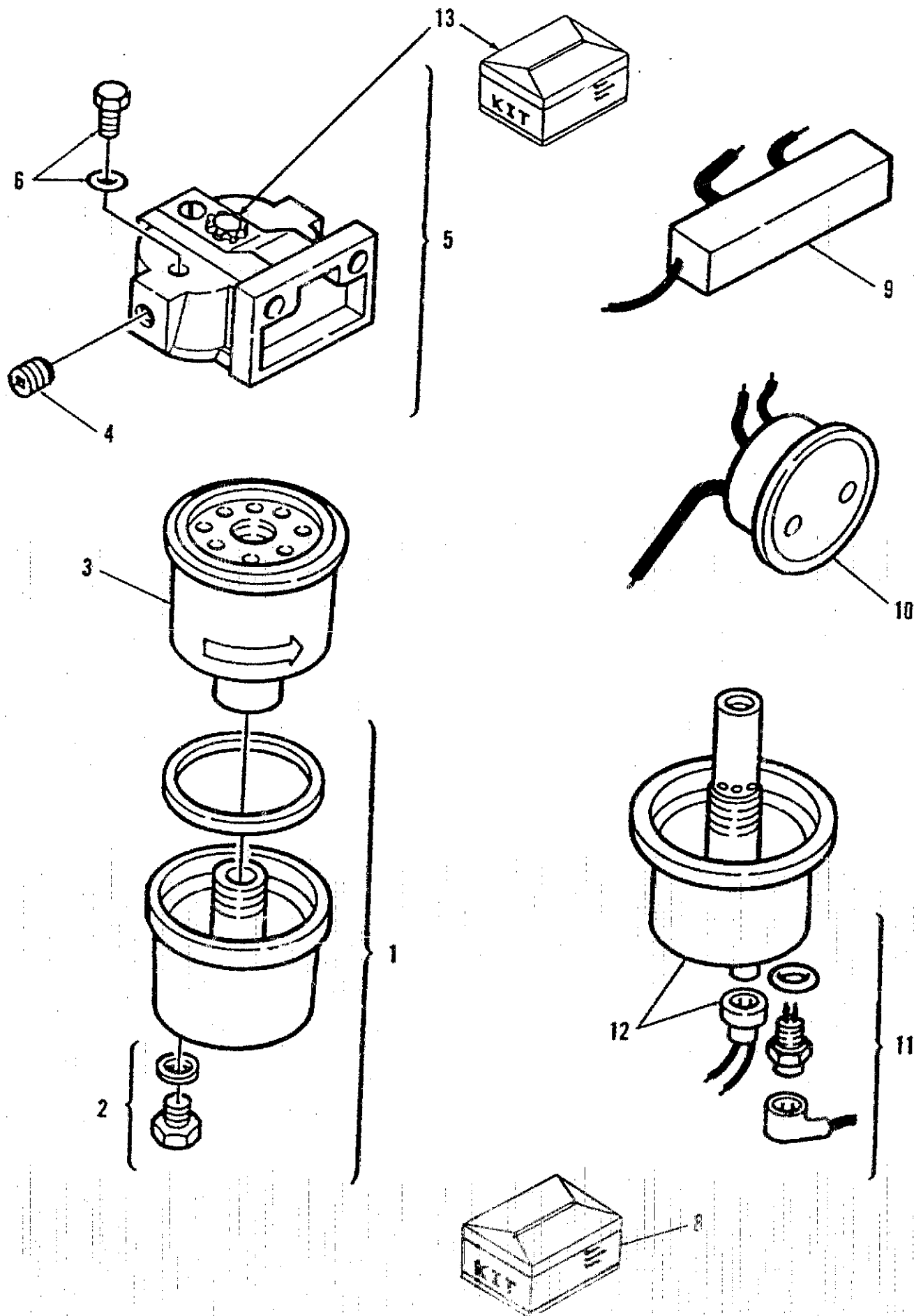


FS-1557

Fuel System - With Electrical Pump and Filter

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	149-1945	1	Line, Fuel	14	149-1922	1	Spacer, Filter - Fuel
2	502-0033	1	Adapter, Pipe - Hex	15	815-0600	2	Screw, Cap - Hex Head (M10 x 1.25 x 25mm)
3	149-1944	1	Line, Fuel	16	850-2010	2	Washer, Lock - Spring (M10)
4	502-0281	1	Adapter, Pipe - Hex with Restrictor Plug	17	149-1920	1	Plate, Mounting - Fuel Filter
5	502-0097	1	Adapter, Pipe - Hex	18	870-0212	2	Nut, Self-locking - Hex Washer Head (1/4-20)
6	502-0058	2	Pipe, Tee	19	149-1828	1	Pump, Fuel - Electric (12 VD)
7	502-0886	1	Elbow, Tube to Pipe - 90°	20	149-1445	1	Filter, Pump - Fuel
8	149-1932	1	Line, Fuel	21	149-1446	1	Gasket, Cover - Fuel Pump
9	502-0003	2	Adapter, Pipe - Hex	22	855-0006	2	Washer, Lock - EIT (1/4)
10	502-0041	1	Pipe, Elbow - Street, 90°, Brass	23	815-0586	2	Screw, Cap - Hex Head (M10 x 1.25 x 16mm)
11	870-0257	2	Nut, Self-Locking - Hex Washer Head (5/16-18)	24	850-2010	2	Washer, Lock - Spring (M10)
12	505-0180	1	Plug, Pipe - Square Socket Drive	25	149-1921	1	Plate, Mounting - Fuel Pump
13			Filter/Separator, Fuel - Pressure Type (See Separate Group for Components)				
	149-1908-04	1	Without Electric Fuel Heater and Bowl Heater				
	149-1908-06	1	With Electric Fuel Heater and Bowl Heater				

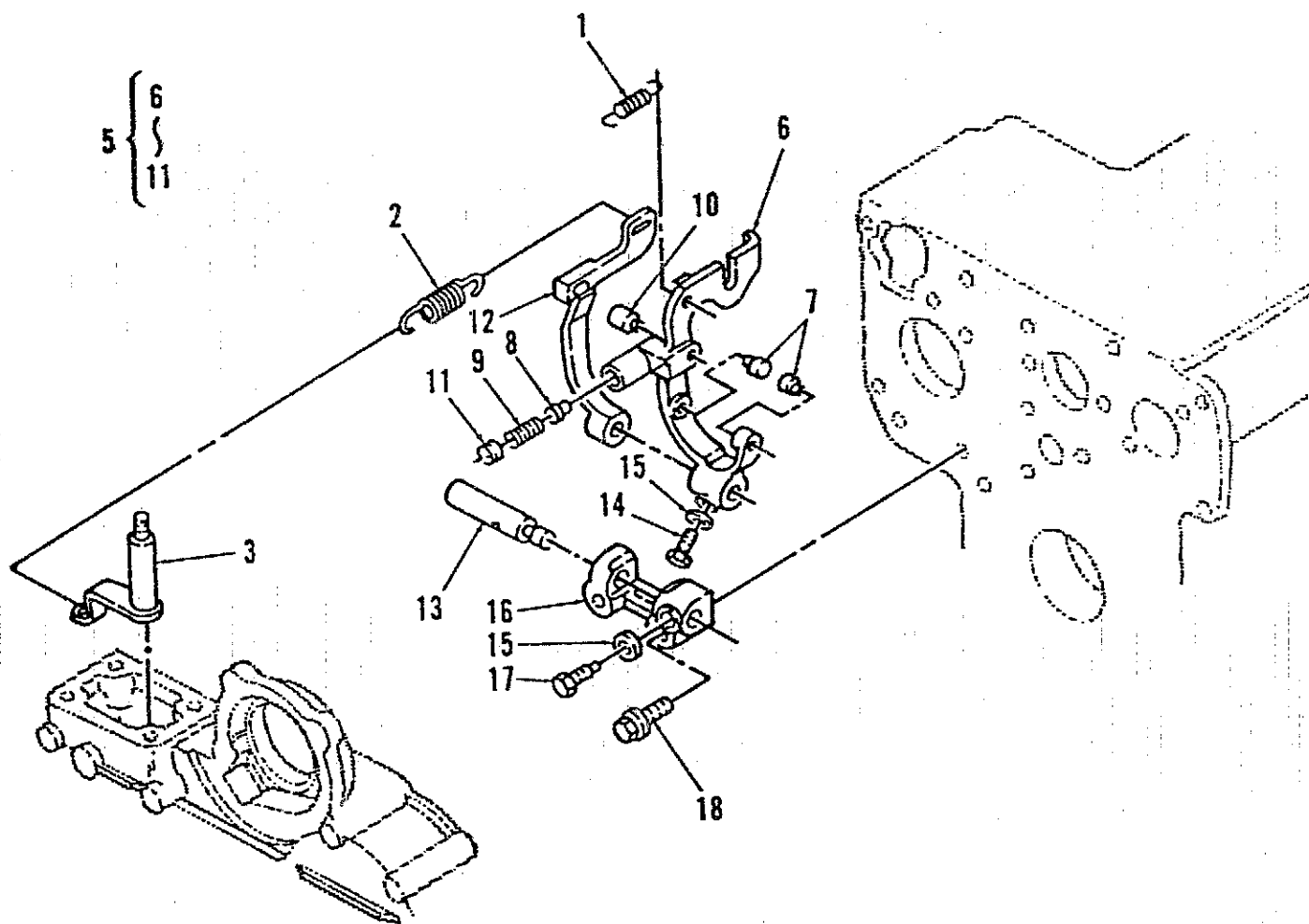
Fuel/Water Separator



Fuel/Water Separator

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
			Filter/Separator, Fuel Complete (Pressure Applications)	8	149-2045	1	Seal Kit, Separator - Fuel/Water (Includes all O-Ring Seals and Plunger)
	149-1908-04	1	Without Fuel and Bowl Heaters	9	149-1971	1	Alarm/Tight - Water Sensor (Rectangular)
	149-1908-06	1	With Fuel and Bowl Heaters	10			Alarm/Tight - Water Sensor (Round)
1	149-2046	1	Bowl, Metal - Replacement (Includes Seals, Plugs, and Drain Assembly)		149-1972	1	12 Volt DC
2	149-1953	1	Drain Assembly (Includes Knob and Seal)		149-2048	1	24 Volt DC
3	149-1914-04	1	Element, Filter (Includes O-Ring Seal) (2 Micron)	11	149-2044	1	Probe Assembly (Includes Connector and O-Ring Seal)
4	502-0180	1	Plug, Pipe - Square Socket Drive	12			Heater Assembly (Includes Metal Bowl)
5	149-1949	1	Head Assembly, Replacement (Includes Vent Plug, O-Ring Seals, Pump Assembly and Tube)		149-1978	1	12 Volt DC
6	149-1952	1	Plug, Vent (Includes Seal)		149-1970	1	24 Volt DC
				13	149-2047	1	Replacement Kit - Pump (Includes Knob, Shaft, Plunger, Ball and Ring) (The only way to get a replacement knob!)

Governor

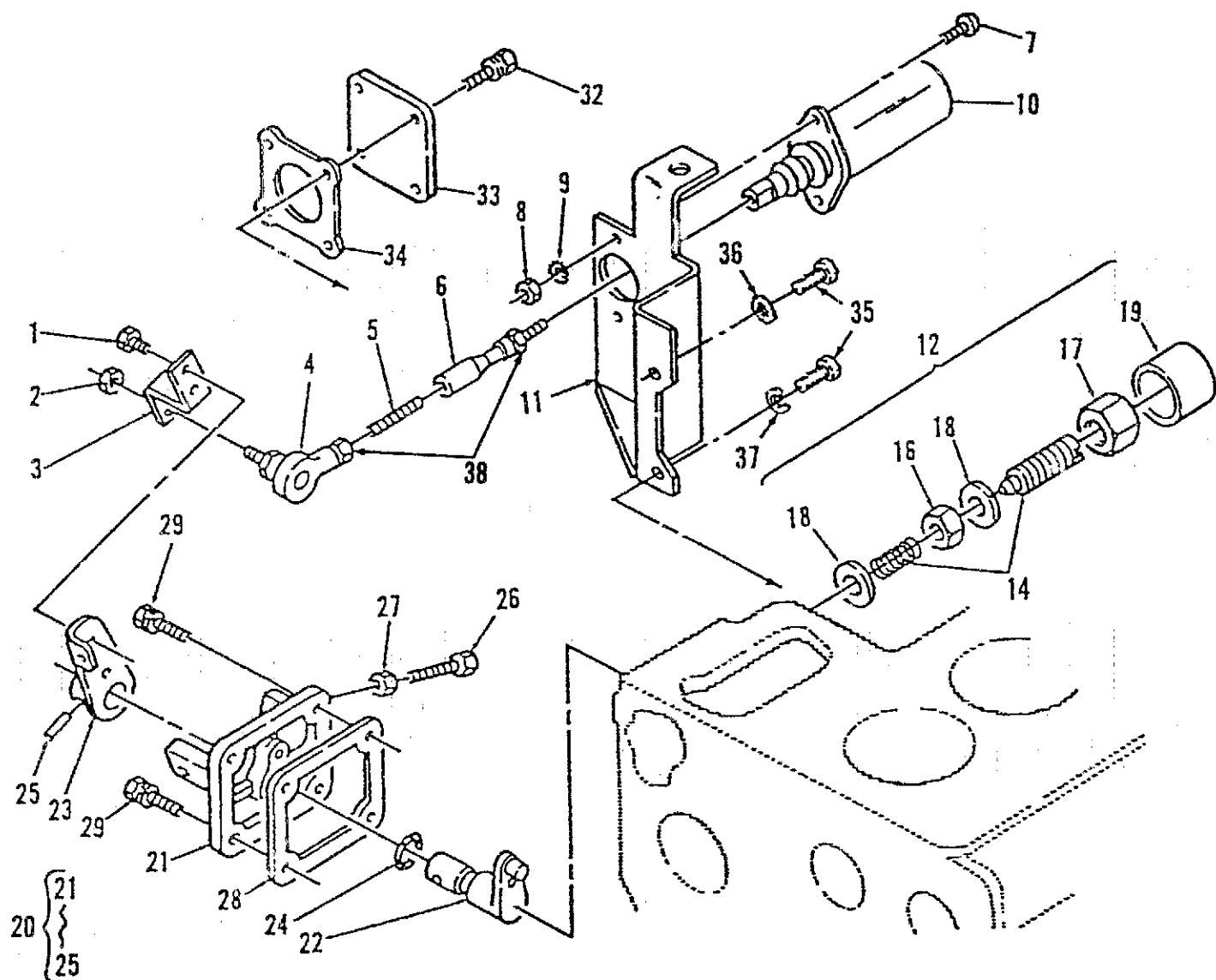


REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	185-2103	1	Spring
2			Spring, Governor
			* Style I
	185-2466	1	50 Hz
	185-2427	1	60 Hz
	185-2440	1	* Style II
3	185-2261	1	Lever, with Shaft - Governor
5	185-2310	1	*Lever Assembly, Governor (Style I Gov.)
	185-2441	1	*Lever Assembly, Governor (Style II Gov.)
6	NFS		Lever
7	NFS		Follower, Cam
8	NFS		Plug
9	NFS		Spring
10	NFS		Pivot
11	NFS		Screw, Adjusting
12	185-2262	1	Lever, Governor (Style I Gov.)
	185-2442	1	Lever, Governor (Style II Gov.)

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
13	185-2166	1	Shaft
14	718-1006	1	Screw, Cap - Hex Head (M5 x .5 x 16mm)
15	185-2379	1	Washer, Lock - Spring (M5)
16	185-2167	1	Holder, Lever - Governor
17	185-2173	1	Bolt, Hex
18	185-2392	2	Screw, Cap - Hex Head with Lockwasher (M6 x 1 x 28mm)

* Note - Governor variations within models: Style I has a flyball type system; Style II has a flyweight type system. (See the Gearcase Illustration for visual external differences, and the Fuel System - Injection Pump for internal differences.)

Stop Assembly



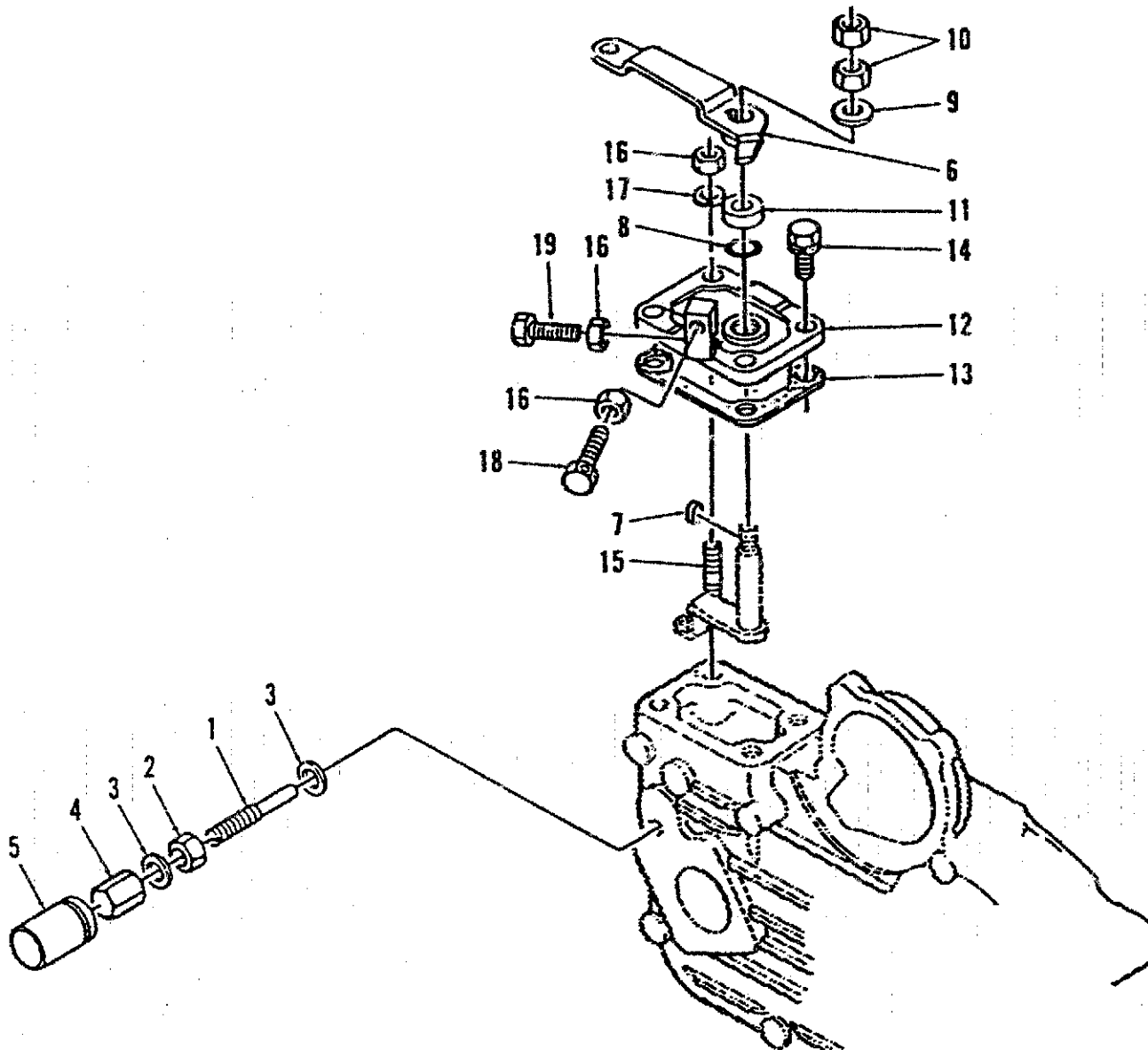
REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	815-0181	2	Screw, Tapping - Hex Head (#10-32 x 1/2")
2	115-0025	1	Nut, Hex (1/4-28 UNF)
3	150-1991	1	Bracket, Stop Lever
4	150-1995	1	Ball Joint (1/4-28 UNF)
5	520-0939	1	Stud (1/4-28 x 1-1/2" LG)
6	150-1733	1	Ball Joint (1/4-28 UNF)
7	813-0102	2	Screw, Machine - Round Head (#10-32 x 5/8")
8	870-0131	2	Nut, Hex with ET Lockwasher (#10-32)
9	856-0003	2	Washer, Lock - EIT (#10)
10	307-2546	1	Solenoid, Electric (12 VDC)
11	150-1992	1	Bracket, Solenoid Mounting
12	185-2258	1	Style I
	185-2432	1	Style II
14	185-2259	1	Adjuster, Idle - Governor
	185-2433	1	Style I
	185-2180	1	Style II
16	185-2180	1	Nut, Hex
17	185-2182	1	Cap Nut
18	185-2338	2	Seal, Oil
19	185-2161	1	Cap

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
20	185-2462	1	Lever, Stop (Includes Parts Marked *)
21	185-2257	1	*Cover
22	NFS		*Shaft
23	NFS		*Lever
24	185-2347	1	*O-Ring
	185-2461	1	Seal, Oil
25	185-2351	1	*Pin, Spring
26	185-2342	1	Bolt, Hex
27	750-1004	1	Nut, Hex (M6 x 1)
28	185-2114	1	Gasket
29	185-2389	4	Screw, Cap - Hex Head with Lockwasher (M6 x 1 x 18mm)
32	185-2400	4	Screw, Cap - Hex Head with Lockwasher (M8 x 1.25 x 18mm)
33	185-2126	1	Cover
34	185-2120	1	Gasket
35	800-2057	2	Screw, Hex Head (M8 x 1.25 x 20mm)
36	856-0008	1	Washer, Lock - External, Internal Tooth (M8)
37	850-2008	1	Washer, Lock
38	115-0025	2	Nut (1/4-28)

* - Parts Included in Stop Lever Assembly

Redistribution or publication of this document by any means, is strictly prohibited.

Speed Control Assembly



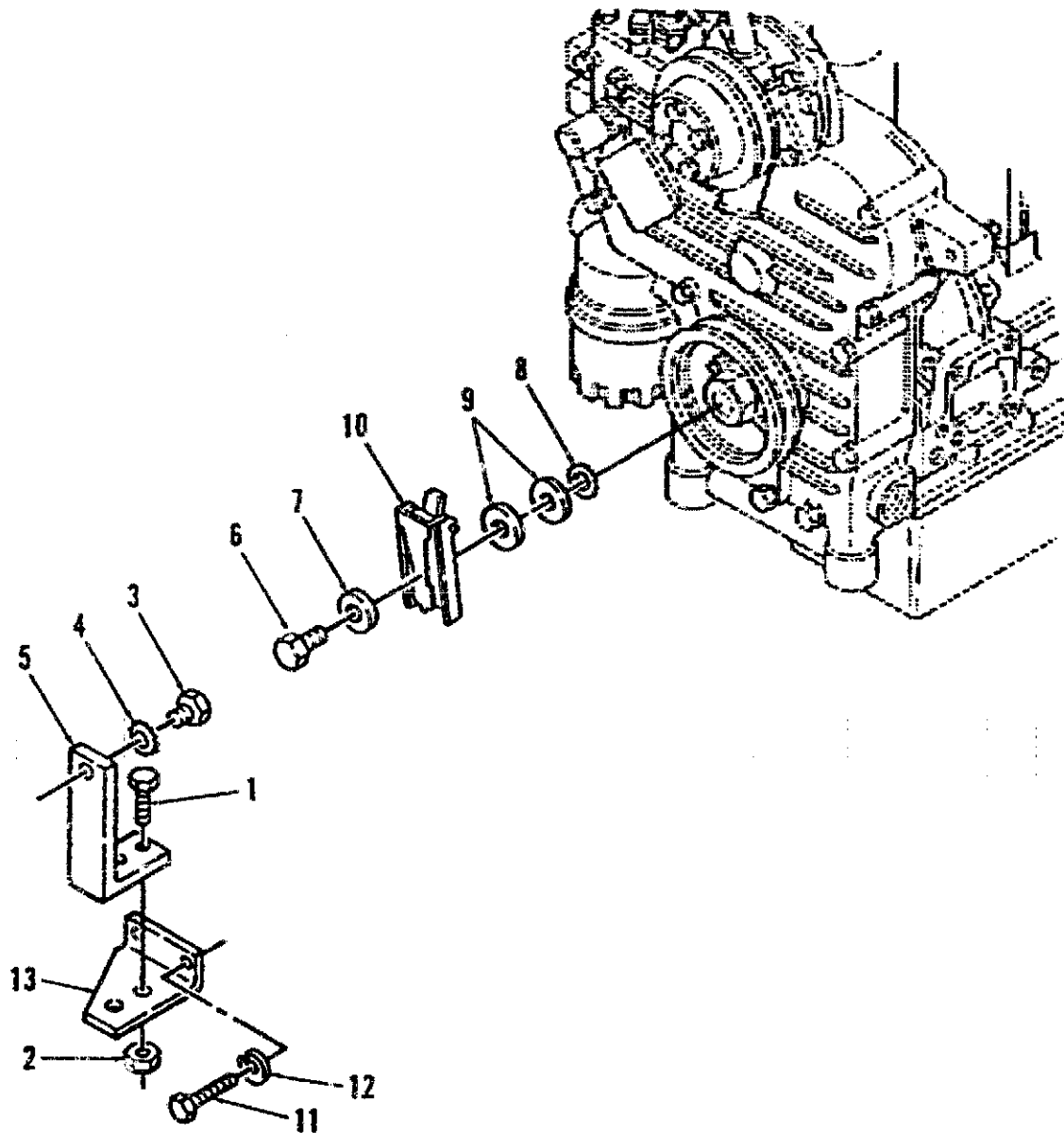
FS-1559

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	185-2260	1	Screw, Adjusting
	185-2438	1	* Style I
2	185-2248	1	* Style II
3	185-2284	3	Nut, Hex
4	185-2282	1	Seal, Oil
5	185-2283	1	Cap Nut
6	185-2264	1	Cap
7	185-2187	1	Lever, Control - Speed
8	185-2373	1	Key
9	185-2376	1	O-Ring
10	185-2364	1	Washer, Flat (M6)
11	185-2169	1	Nut, Hex (M6 x 1)
12	185-2263	1	Bearing, Sleeve
13	185-2168	1	Housing, Control - Speed
		1	Gasket

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
14	185-2390	3	Screw, Cap - Hex Head with Lockwasher (M6 x 1 x 20mm)
15	185-2105	1	Stud
16	750-1004	3	Nut, Hex (M6 x 1)
17	185-2380	1	Washer, Lock - Spring (M6)
18	815-0649	1	Bolt, Hex - Lever Stop
19	185-2439	1	Bolt, Hex - Lever Stop

* Note - Governor variations within models: Style I has a flyball type system; Style II has a flyweight type system. (See the Gearcase Illustration for visual external differences, and the Fuel System - Injection Pump for internal differences.)

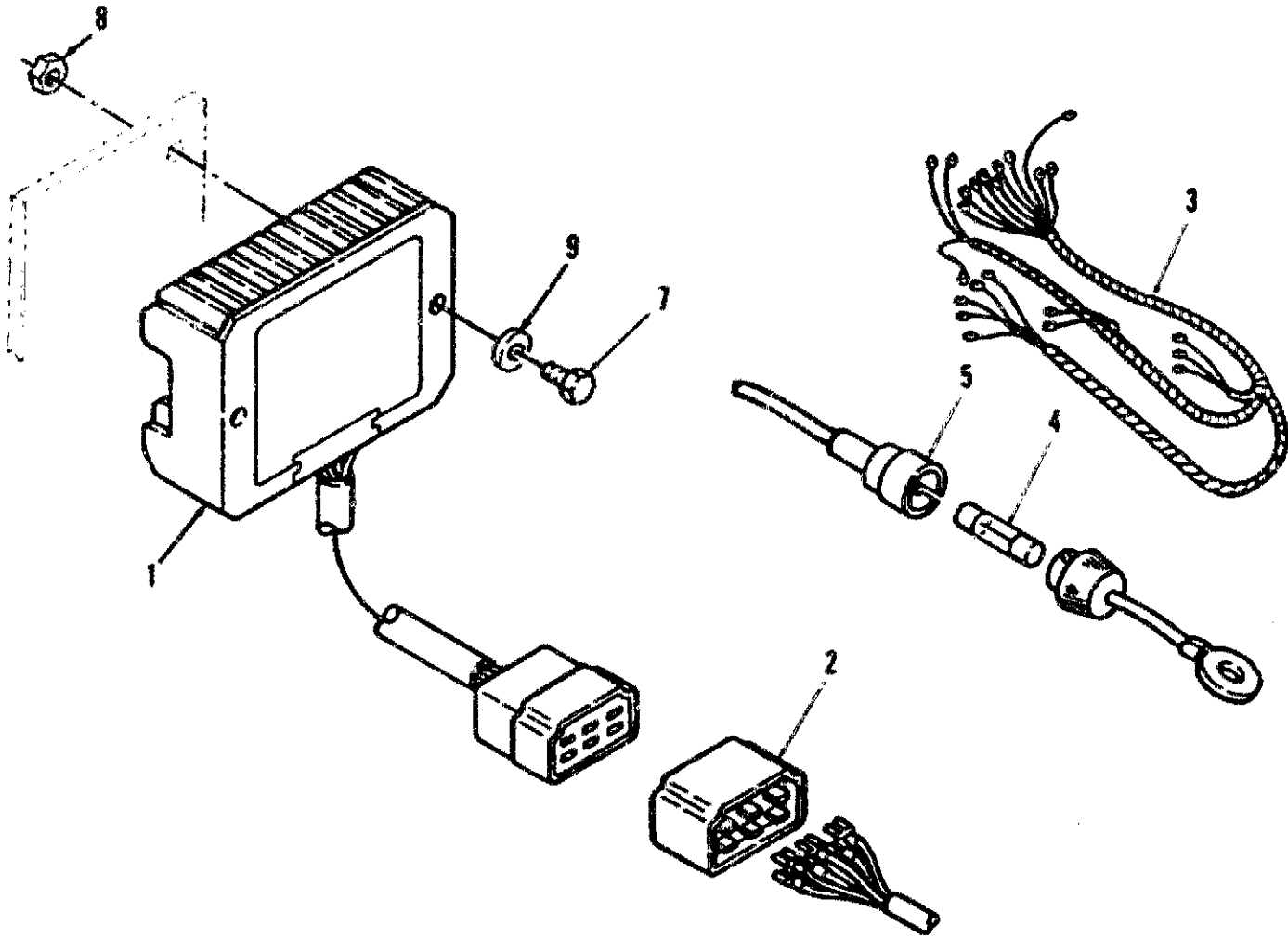
Overspeed Switch



REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	821-0015	2	Screw, Self-locking - Hex Washer Head (1/4-20 x 3/4")
2	870-0212	2	Nut, Self-locking - Hex Washer Head (1/4-20)
3	150-2011	1	Point, Contact - Electrical (1/4-20 x 3/8")
4	853-0013	1	Washer, Lock - ET (1/4")
5	150-2009	1	Bracket, Support - Overspeed Contact (Nonmetallic)
6	800-2057	1	Screw, Cap - Hex Head (M8 x 1.25 x 20mm)

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
7	850-2008	1	Washer, Lock - Spring (M8)
8	856-0008	1	Washer, Lock - EIT (5/16")
9	526-0113	2	Washer, Flat (5/16")
10	150-0717	1	Switch, Overspeed
11	800-2044	2	Screw, Cap - Hex Head (M6 x 1.0 x 70mm)
12	850-2006	2	Washer, Lock - Spring (M6)
13	150-2010	1	Bracket, Support - Overspeed Switch

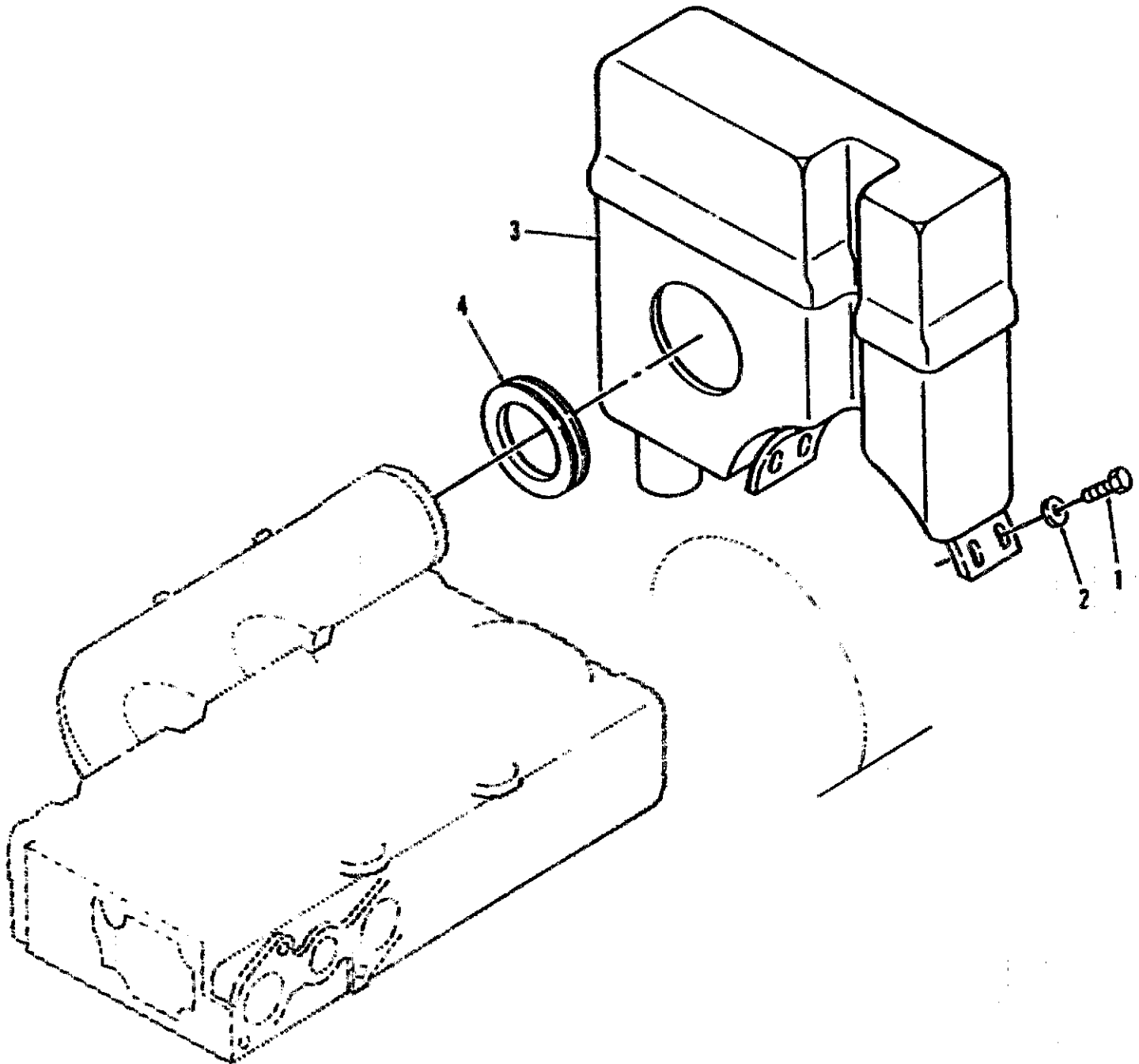
Voltage Regulator & Wiring Harness



REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	185-2252	1	Regulator, Voltage (12 VDC)
	815-0236	4	Screw, Tapping - Hex Head (5/16-18 x 5/8")
2	185-2424	1	Adaptor, Electrical Connector harness, Wiring - Engine to Control Manual
	338-2274-01	1	Standard (Without S4)
	338-2274-02	1	Used with S4 (Overspeed) Remote
	338-1825-01	1	Without Overspeed Switch
	338-1825-02	1	With Overspeed Switch

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
4	321-0113	1	Fuse, Cartridge (30 Amp, 32 VDC, Slo Blo)
5	321-0267	1	Holder, Fuse
6	304-0776	1	Resistor, Fixed, Wirewound (R1) 5 Ohm, 10 Watt (Part of Engine to Control Wiring Harness)
7	815-0544	2	Screw, Round Head Machine - Cross-Recessed with Internal Teeth (#6-32 x 1/2)
8	870-0050	2	Nut, Self-Locking (6-32)
9	526-1002	2	Washer, Flat (#6)

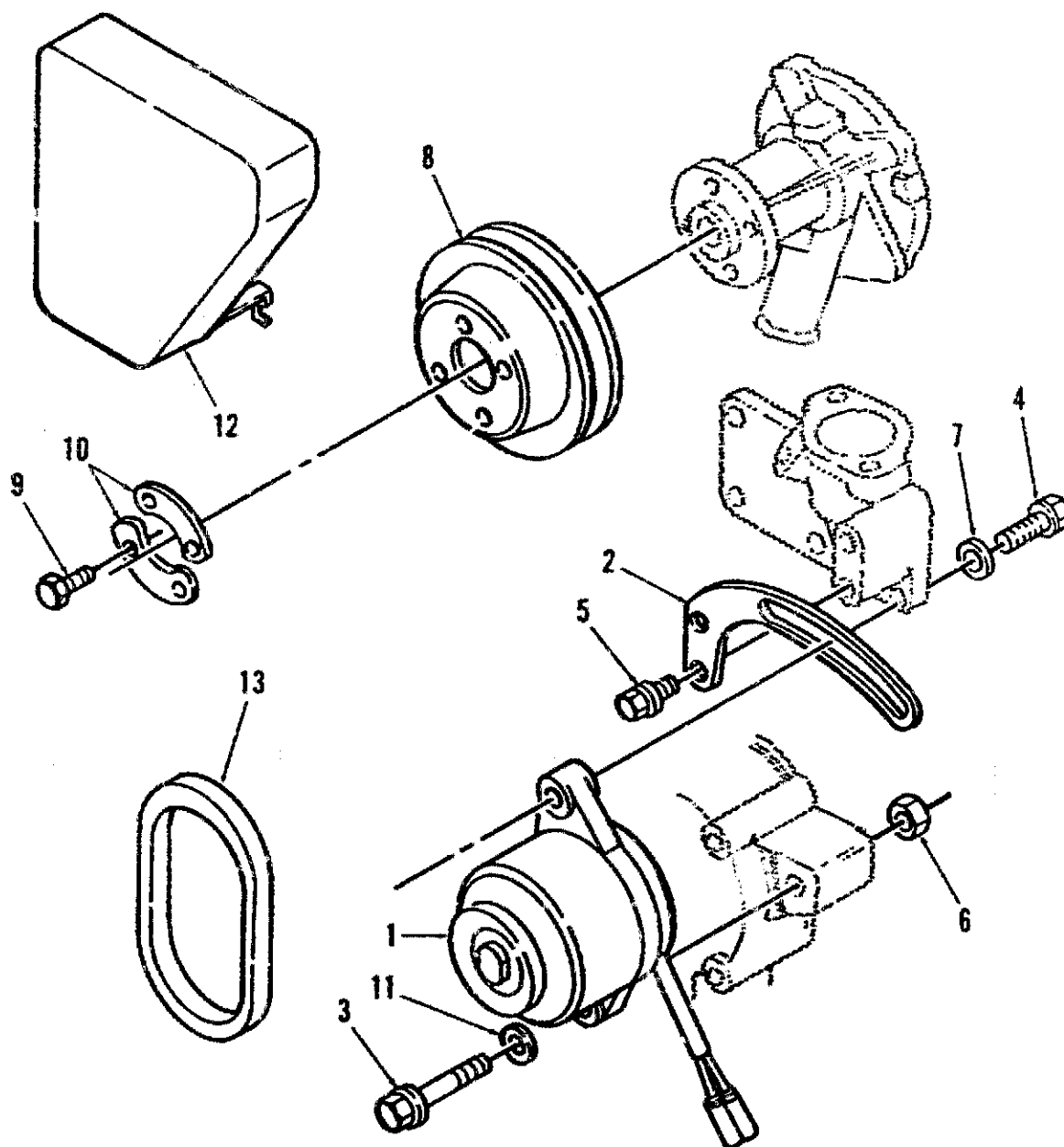
Air Silencer



REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	815-0261	4	Screw, Hex Head - Self-Tapping (1/4-20 x 1/2") or use -
	821-0010	4	Screw, Self-locking - Hex Washer Head (1/4-20 x 1/2")

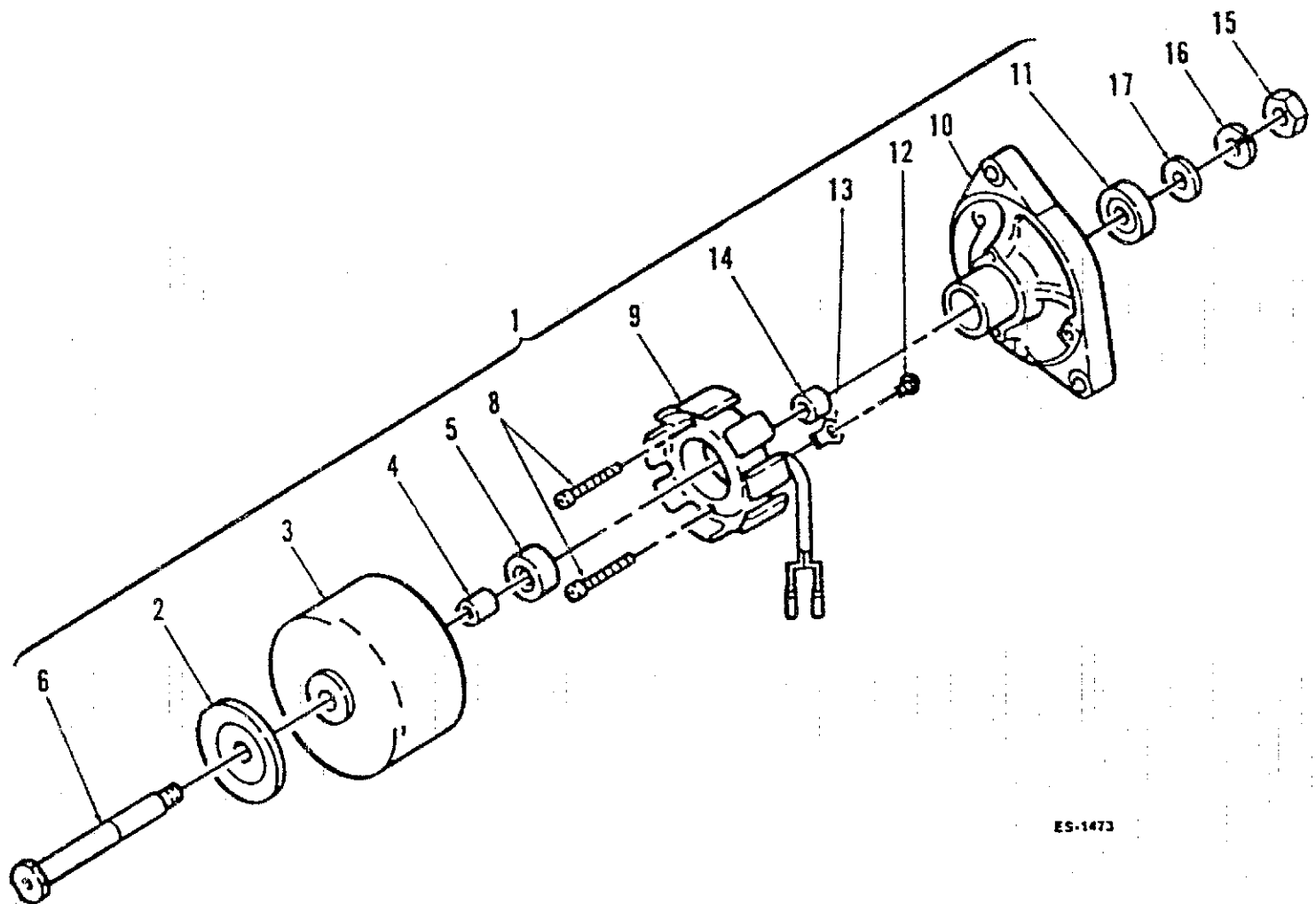
REF NO.	PART NO.	QTY USED	PART DESCRIPTION
2	526-0018	4	Washer, Flat (17/64" ID x 5/8" OD x 1/16" Thk)
3	140-1656	1	Silencer, Air
4	508-0011	1	Grommet (2-3/8" OD x 1-3/4" ID)

Alternator



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	185-2266	1	Alternator (12 VDC) (See Separate Page for Components)	6	750-1006	1	Nut, Hex (M8 x 1.25)
2	185-2273	1	Bracket, Adjusting	7	185-2377	1	Washer, Flat (M8)
3	185-2405	1	Screw, Cap - Hex Head with Lockwasher (M8 x 1.25 x 60mm)	8	185-2247	1	Pulley
4	185-2403	1	Screw, Cap - Hex Head with Lockwasher (M8 x 1.25 x 25mm)	9	718-1018	4	Screw, Cap - Hex Head (M6 x 1 x 12mm)
5	185-2388	1	Screw, Cap - Hex Head with Lockwasher (M6 x 1 x 16mm)	10	185-2346	2	Plate, Locking - Bolt/Nut
				11	185-2378	1	Washer, Flat (M8)
				12	130-2473	1	Guard, Belt
				13	185-2275	1	Belt, Drive

Alternator - Components

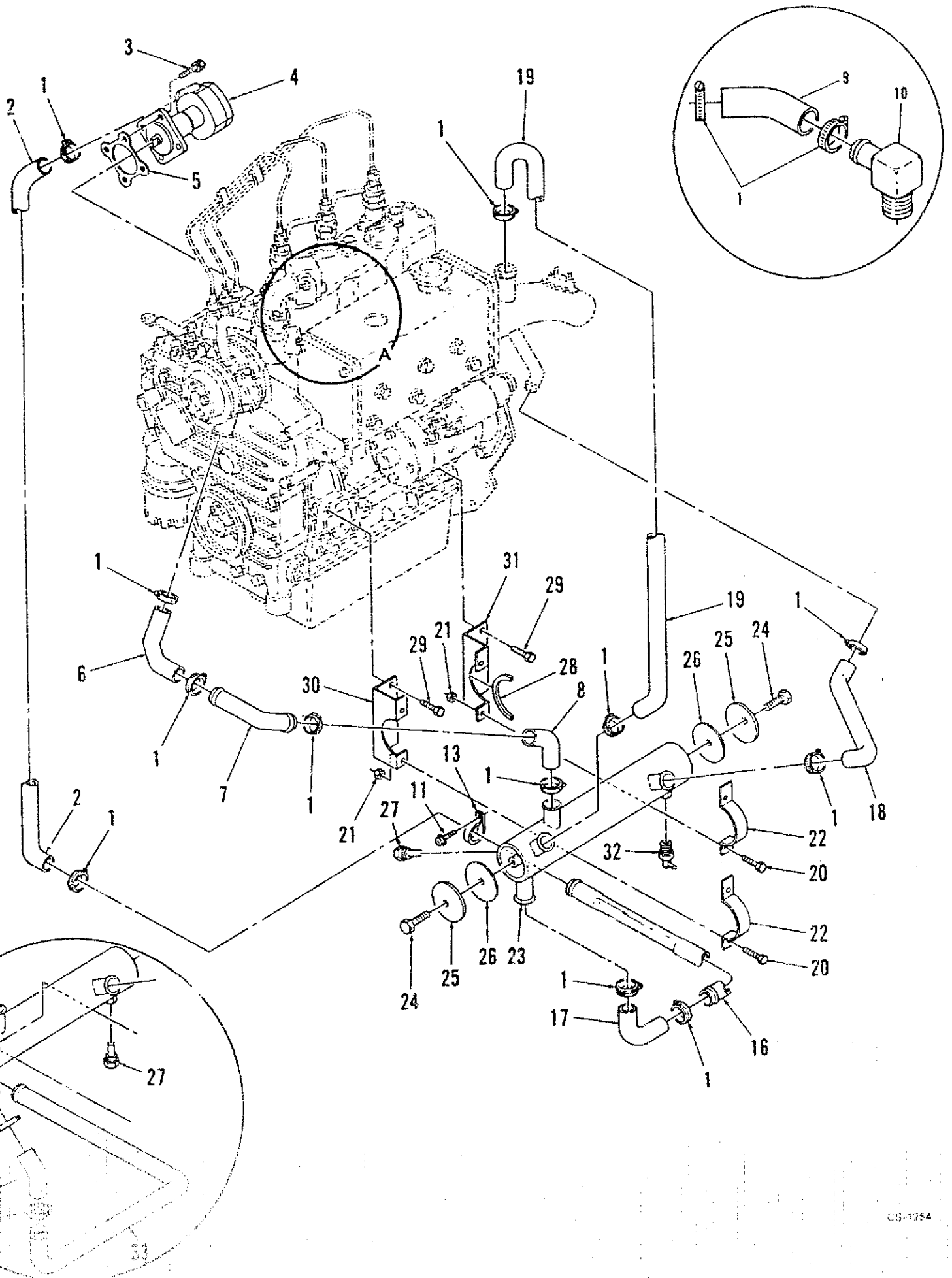


ES-1473

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	185-2266	1	Alternator (12 VDC)
2	185-2269	1	Pulley
3	185-2267	1	Rotor
4	185-2270	1	Spacer, Sleeve
5	185-2246	1	Bearing, Ball
6	185-2245	1	Shaft, Rotor
8	185-2183	2	Screw, Machine - Round Head, Cross-Recessed Drive, with Lockwasher
9	185-2272	1	Stator

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
10	185-2268	1	Housing, Alternator
11	185-2246	1	Bearing, Ball
12	185-2249	1	Screw, Machine - Round Head - Cross-Recessed Drive, with Lockwasher
13	185-2271	1	Clamp, Electrical Cord
14	185-2171	1	Spacer, Sleeve
15	185-2181	1	Nut, Hex
16	185-2186	1	Washer, Lock - Spring
17	185-2185	1	Washer, Flat

Cooling System



CS-1254

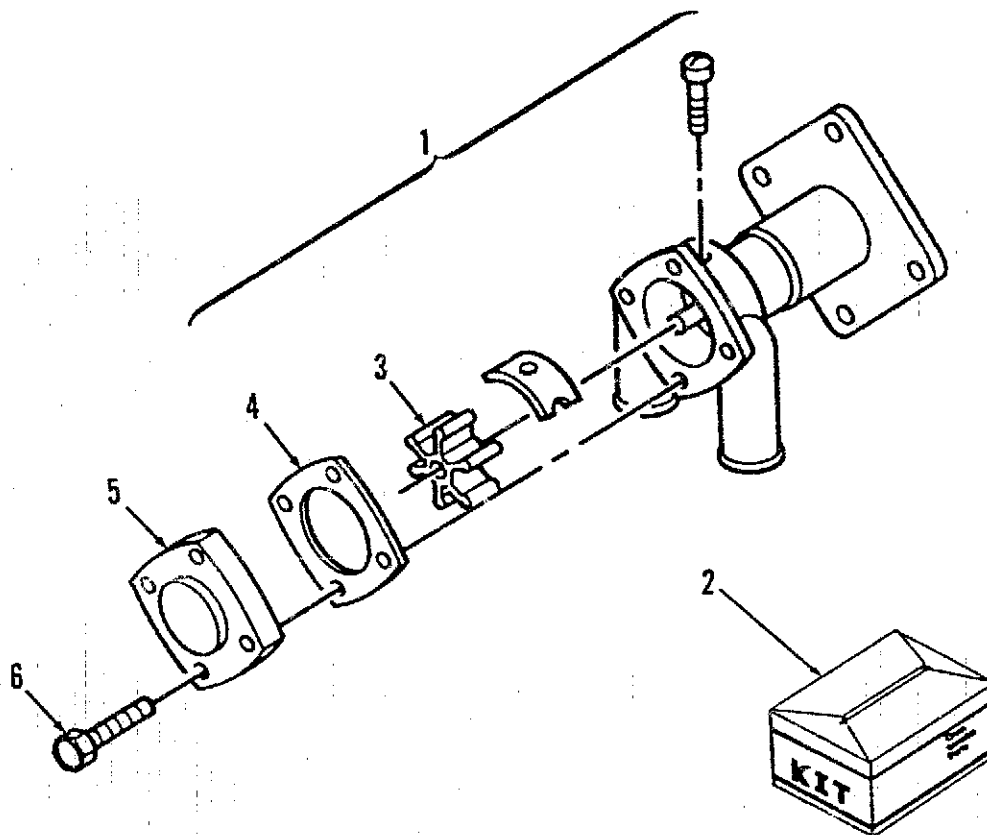
Cooling System

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	503-0189	14	Clamp, Hose	21	870-0212	4	Nut, Self-locking - Hex Washer Head (1/4-20)
2	503-1284	1	Hose, Rubber - Preformed	22	130-0632	2	Clamp, Exchanger - Heat
3	185-2400	4	Screw, Cap - Hex Head with Lockwasher (M8 x 1.25 x 18mm)	23	130-2343	1	Exchanger, Heat (Includes Parts Marked *) (Used Beginning October 1983)
4	132-0277	1	Pump, Water (See Separate Page For Components)	24	815-0300	2	*Screw, Cap - Hex Head, Brass (5/16-18 x 12")
5	185-2120	1	Gasket	25	130-1031	2	*Cover, End
6	503-1267	1	Hose, Rubber - Preformed	26	130-0959	2	*Gasket
7	130-2372	1	Tube, Water - Preformed	27	130-1341	1	*Pencil, Zinc
8	503-1269	1	Hose, Rubber - Preformed	28	508-1025	2	Channel, Rubber
9	503-1270	1	Hose, Rubber - Preformed	29	815-0586	4	Screw, Cap - Hex Head (M10 x 1.25 x 16mm)
10	502-0878	1	Adapter, Pipe to Hose	30	130-2331	1	Bracket, Mounting - Heat Exchanger
11	822-2067	2	Screw, Machine - Pan Head with ET Lockwasher (#10-24 x 1/2")	31	130-2332	1	Bracket, Mounting - Heat Exchanger
13	332-1024	2	Clamp, Loop	32	504-0003	1	Cock, Drain
16	130-2426	1	Tube, Water - Preformed (Used beginning October 1983)	33	130-2371	1	Tube, Water - Preformed (Used through September 1983)
17	503-1331	1	Hose, Rubber - Preformed (Used beginning October 1983)	34	503-1314	1	Hose, Rubber - Preformed (Used through September 1983)
18	503-1266	1	Hose, Rubber - Preformed (Standard Cooled Only)	35	#	1	Exchanger, Heat (Includes Parts Marked *) (Used through September 1983)
19	503-1265	1	Hose, Rubber - Preformed (Standard Cooled Only)				
20	821-0010	4	Screw, Self-locking - Hex Washer Head (1/4-20 x 1/2")				

* Parts included in Heat Exchanger.

This part no longer available, for replacement order Water Tube 130-2426, Hose 503-1331 and Heat Exchanger 130-2343.

Water Pump - Components

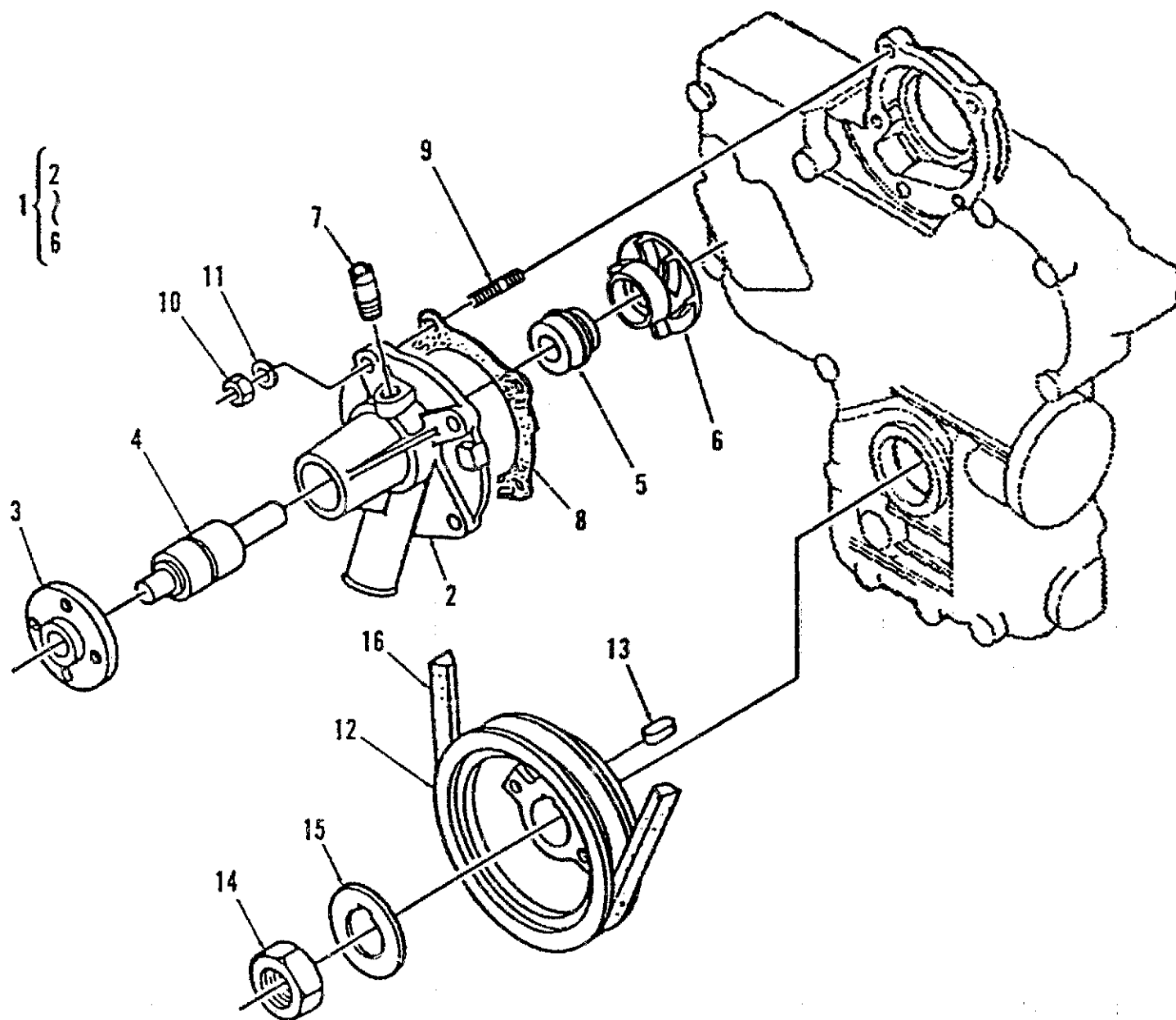


REF NO.	PART NO.	QTY USED	PART DESCRIPTION
	132-0277	1	Pump, Water
1	132-0282	1	Replacement Kit, Impeller (Includes Impeller, Gasket, Cam, and Screw)
2	132-0281	1	Overhaul Kit, Pump (Includes Parts Marked *)

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
3	132-0316	1	*Impeller
4	132-0315	1	*Gasket Old Type 509-0522 New
5	132-0313	1	Cover Old Type 132-0519 New
6	132-0314	1	*Screw, Nylok

* - Parts Included in Pump Overhaul Kit.

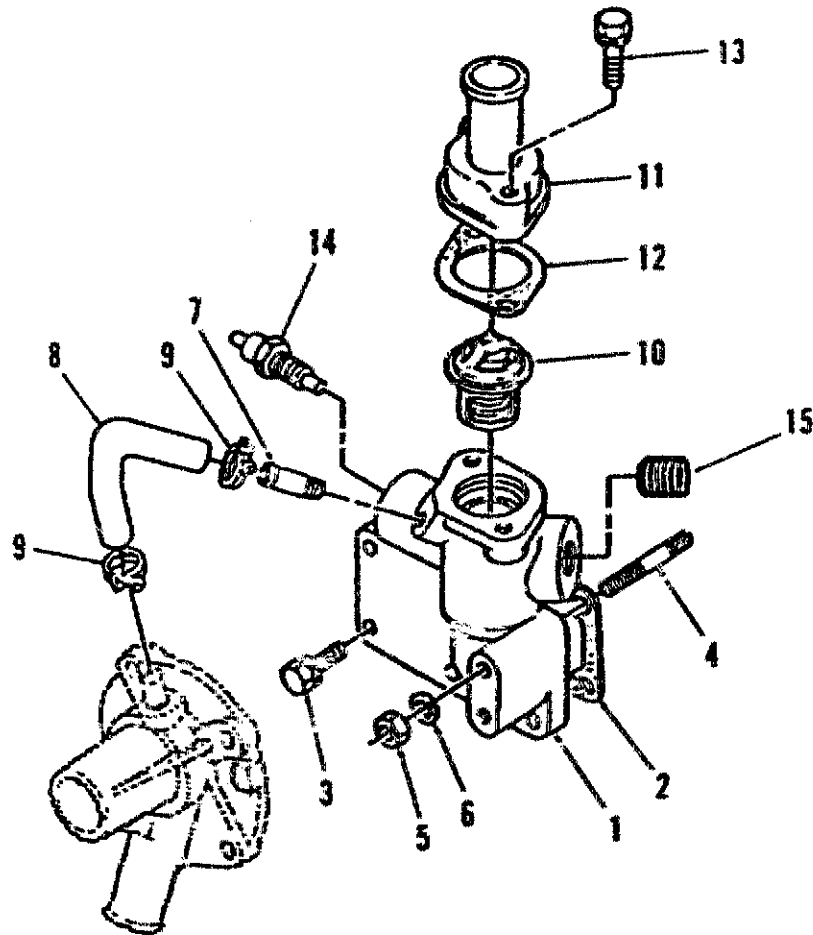
Water Pump



REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	185-2236	1	Pump, Water
2	NFS		Housing, Pump
3	185-2243	1	Flange, Pump Shaft
4	185-2244	1	Shaft with Bearing
5	185-2237	1	Seal
6	185-2242	1	Impeller
7	185-2239	1	Adapter, Hose
8	185-2241	1	Gasket

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
9	185-2363	4	Stud
10	750-1004	4	Nut, Hex (M6 x 1)
11	185-2380	4	Washer, Lock - Spring (M6)
12	185-2251	1	Pulley
13	185-2353	1	Key
14	185-2088	1	Nut, Hex
15	185-2207	1	Washer, Flat - Keyed
16	185-2275	1	Belt, Drive

Cooling System Thermostat & Housing

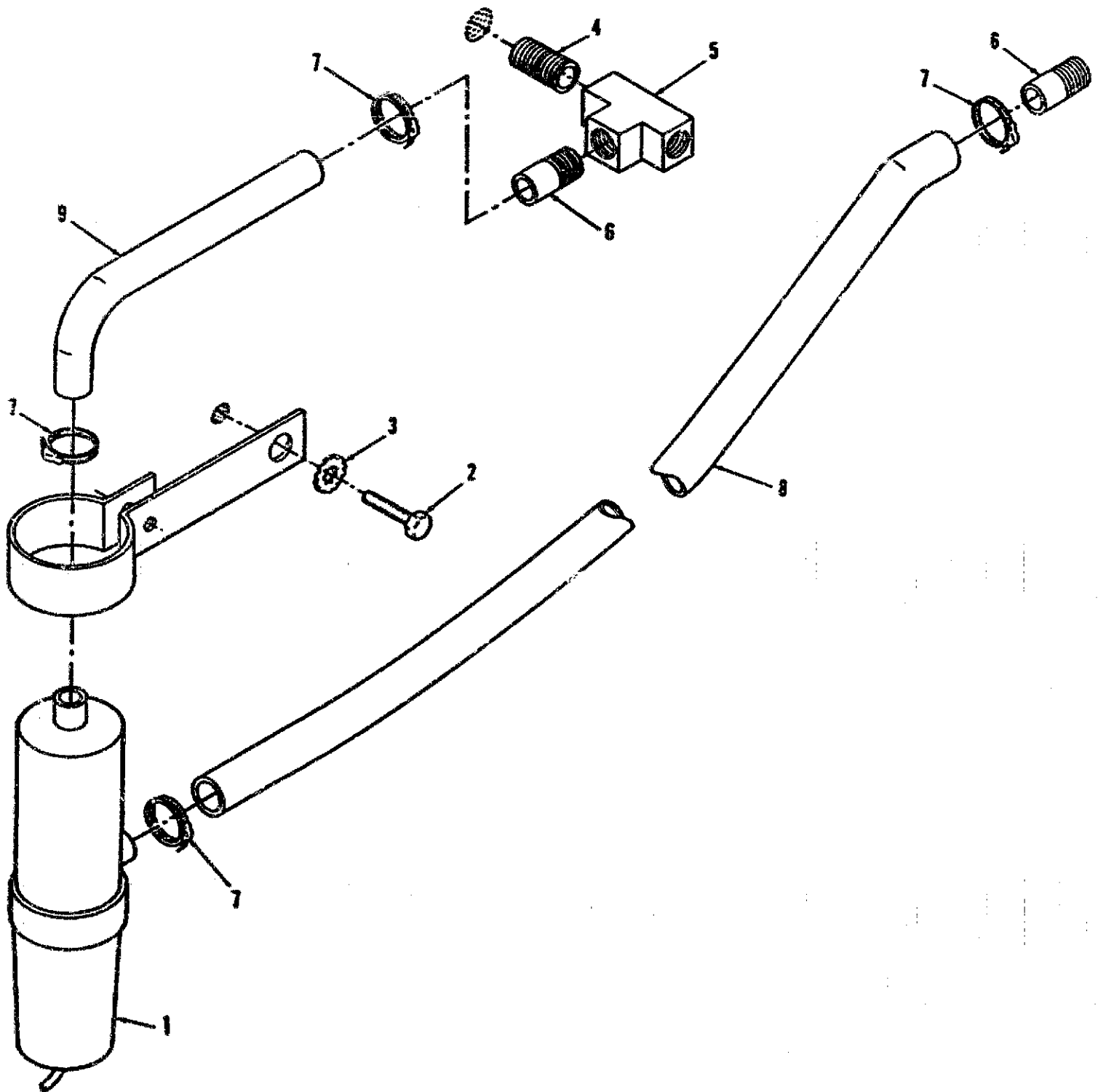


CS-1231

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	185-2311	1	Housing, Thermostat
2	185-2175	1	Gasket
3	185-2388	5	Screw, Cap - Hex Head with Lockwasher (M6 x 1 x 16mm)
4	185-2360	1	Stud
5	750-1004	1	Nut, Hex (M6 x 1)
6	185-2380	1	Washer, Lock - Spring (M6)
7	185-2239	1	Adapter, Hose
8	185-2300	1	Hose, Rubber - Preformed
9	185-2240	2	Clamp, Hose

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
10	185-2235	1	Thermostat
11	185-2423	1	Cover, Thermostat
12	185-2238	1	Gasket
13	185-2393	2	Screw, Cap - Hex Head with Lockwasher (M6 x 1 x 35mm)
14	309-0513	1	Switch, Thermostat - High Engine Temperature Shutdown (S2)
15	505-0266	1	Plug, Pipe - Square Socket Drive

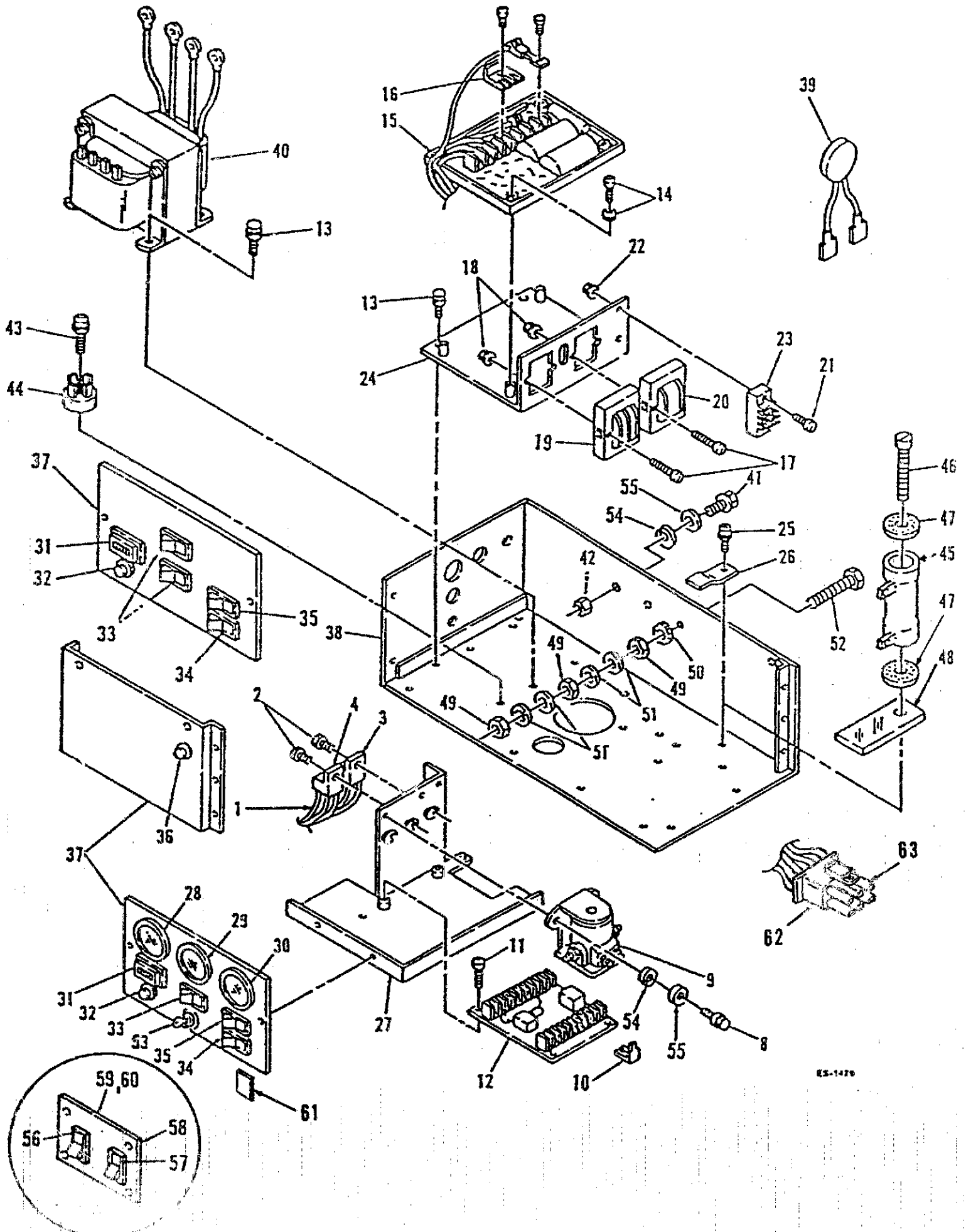
Engine Heater



REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	333-0406-01	1	Heater, Engine
2	815-0586	1	Screw, Cap - Hex Head (M10 x 1.25 x 16mm)
3	856-0010	1	Washer, Lock - EIT (M10)
4	505-0306	1	Nipple, Pipe

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
5	505-0060	1	Tee, Pipe
6	505-0135	2	Nipple, Pipe - Half
7	503-0183	4	Clamp, Hose (#10)
8	502-0712	1	Hose, Heater (28" Lg)
9	503-0261	1	Hose, Water (8.5" Lg)

Control

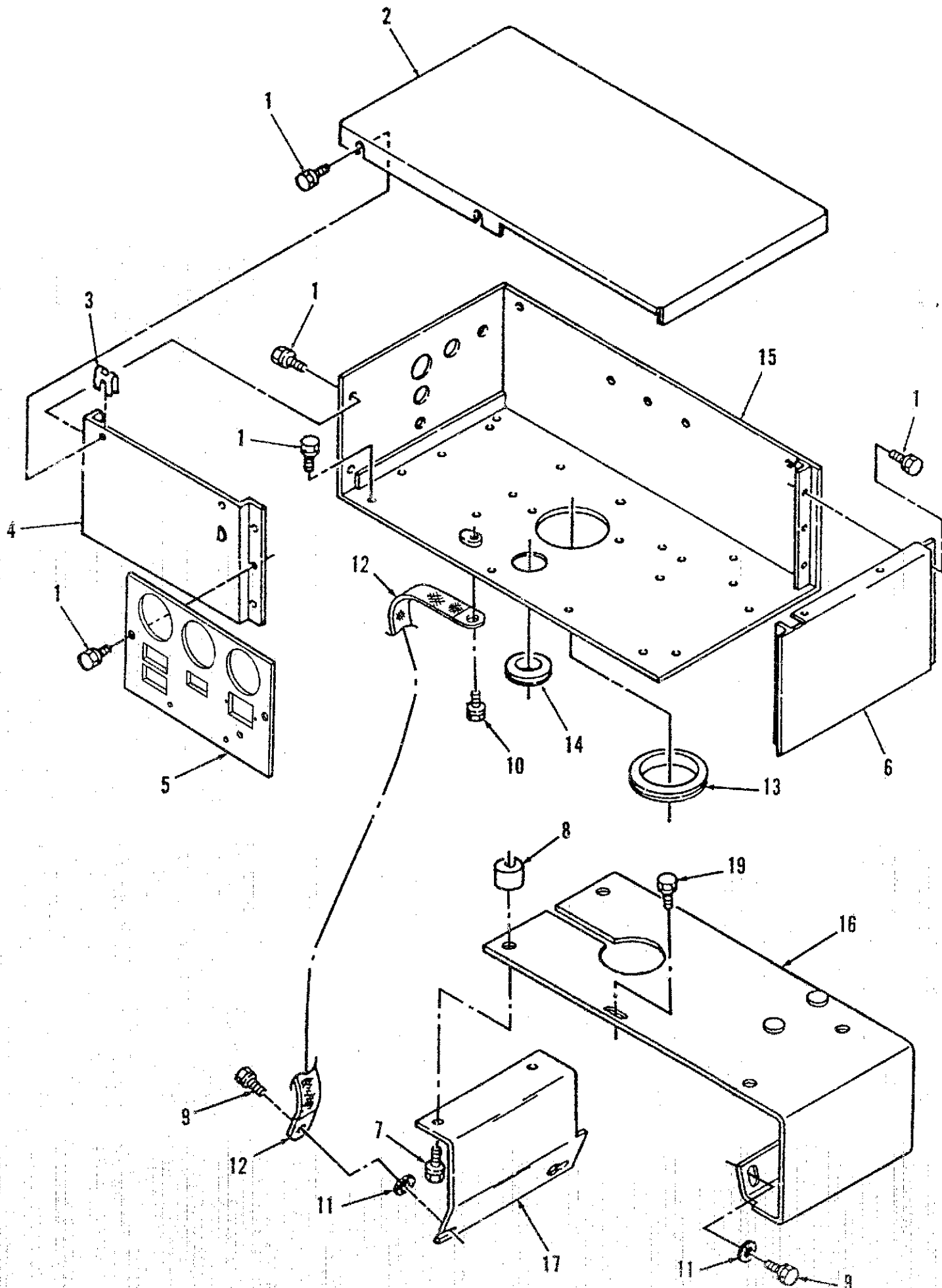


ES-1470

Control

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1			Harness, Wiring - Control (Includes K13, K14 Relays)	39	305-0703	1	Suppressor, Voltage (RV21) - Single Phase Sets
	338-2274-01	1	Used without S4 (Overspeed)	40			Transformer, Voltage Regulating (T21) - Single Phase Sets
	338-2274-02	1	Used with S4 (Overspeed)				
	338-2486	1	2 Pole without S4 (Overspeed)				
2	821-0004	2	Screw, Self-locking - Hex Washer Head (#10-32 x 5/16")		315-0572	1	60 Hz
3	307-1886	1	Relay (K13)		315-0583	1	50 Hz
4	307-1886	1	Relay (K14)	41	821-0003	2	Screw, Self-locking - Hex Washer Head (1/4-20 x 1/2")
8	821-0003	2	Screw, Self-locking - Hex Washer Head (1/4-20 x 1/2")	37			Panels (See Control Box Assembly Figure for Identification)
9	307-1617	1	Solenoid, Electric - 12 VDC (K11)	38			Box, Control (See Control Box Assembly Figure for Identification)
10	332-1364	2	Lug, Terminal - Right Angle				
11	815-0544	4	Screw, Machine - Round Head Cross-Recessed Drive with IT Lockwasher (#6-32 x 1/2")	39	305-0703	1	Suppressor, Voltage (RV21) - Single Phase Sets
12	300-2604	1	Board, Circuit - Printer (Engine Monitor) (A11)	40			Transformer, Voltage Regulating (T21) - Single Phase Sets
13	821-0004	7	Screw, Self-locking - Hex Washer Head (#10-32 x 5/16")		315-0572	1	60 Hz
15	305-0688	1	Regulator, Voltage - Switching (VR12)		315-0583	1	50 Hz
	812-0071	4	Screw, Machine - Round Head (#6-32 x 1-1/2")	41	821-0003	2	Screw, Self-locking - Hex Washer Head (1/4-20 x 1/2") - Single Phase Sets
	853-0003	4	Washer, Lock - ET (#6)	42	332-2370	2	Standoff, Insulating - Hex (TB21, 22) - Single Phase Sets
16	332-2605	1	Jumper, Terminal				
17	812-0070	4	Screw, Machine - Round Head (#6-32 x 1-1/4")	43	815-0346	1	Screw, Machine - Round Head Brass with IT Lockwasher (#10-32 x 4/8") - Single Phase Sets
18	870-0183	4	Nut, Hex - with ET Lockwasher (#6-32)				
19	315-0386	1	Transformer, Voltage Ref (T21)	44	305-0696	1	Rectifier, Bridge (CR21) - Single Phase Sets
20	315-0391	1	Reactor (CMR21)	45	304-0776	1	Resistor, Fixed (R1) 5 Ohm 10 Watt (Part of Engine to Control Wiring Harness) - Manual Start Sets
21	812-0063	2	Screw, Machine - Round Head (#6-32 x 1/2")				
22	870-0183	2	Nut, Hex - with ET Lockwasher (#6-32)	46	812-0090	1	Screw, Machine - Round Head (#8-32 x 2-1/4") - Manual Start Sets
23	332-1655	1	Block, Terminal (TB21)				
24	301-3719	1	Panel, Mounting - Regulator	47	508-0015	2	Washer, Flat - Fiber (#8) - Manual Start Sets
25	815-0544	1	Screw, Machine - Round Head Cross-Recessed Drive with IT Lockwasher (#6-32 x 1/2")	48	304-0580	1	Plate, Insulating - Manual Start Sets
26	518-0437	1	Clip, Holddown				
27	301-8454	1	Tray, Control - Relay Mounting	49	871-0016	3	Nut, Hex - Brass - Manual Start Sets (1/4-20)
28	193-0352	1	Gauge, Pressure - Oil (M12)	50	856-0006	2	Washer, Lock - EIT (1/4) - Manual Start Sets
29	193-0351	1	Gauge, Temperature - Coolant (M13)				
30	302-1641	1	Voltmeter - 12 VDC (M14)	51	526-0052	4	Washer, Flat - Brass (1/4") Manual Start Sets
	302-0270	1	Clamp, Mounting	52	821-0012	1	Screw, Self-Locking - Hex Washer Head (1/4-20 x 1-1/8") - Manual Start Sets
	526-0049	36	Washer, Flat (#10)				
	871-0010	6	Nut, Hex (#10-32)	53	308-0779	1	Switch, Selector (S11) - Manual Start Sets
31	302-0885	1	Meter, Totalizing - Time (M11)				
	815-0544	2	Screw, Machine - Round Head Cross-Recessed Drive with IT Lockwasher (#6-32 x 1/2")		308-0843	1	Key
	870-0183	2	Nut, Hex - with ET Lockwasher (#6-32)	54	850-0040	3	Washer, Lock (1/4)
				55	526-0018	3	Washer, Flat (1/4)
32	320-1139	1	Breaker, Circuit - 1/2 Amp, 50 VDC (CB12)	56	308-0827	1	Switch, Start/Run/Stop - Remote Units
33	320-1140	2	Breaker, Circuit - 15 Amp, 32 VDC, 125 VAC (CB11, 13)	57	308-0826	1	Switch, Preheat - Remote Units
34	308-0778	1	Switch, Rocker - Preheat (S12)	58	301-9484	1	Panel, Remote - Remote Units
35	308-0739	1	Switch, Rocker - Start/Stop (S11)	59	98-5496	1	Decal, Panel (Front) - Remote Units
36	320-1121	1	Breaker, Circuit - 3 Amp, 250 VAC (CB21)	60	98-5497	1	Decal, Panel (Rear) - Remote Units
37			Panels (See Control Box Assembly Figure for Identification)	61	98-5104	1	Decal, Panel - DC
				62	323-1325	1	Cap, Connector
38			Box, Control (See Control Box Assembly Figure for Identification)	63	323-1200	1	Terminal, Female

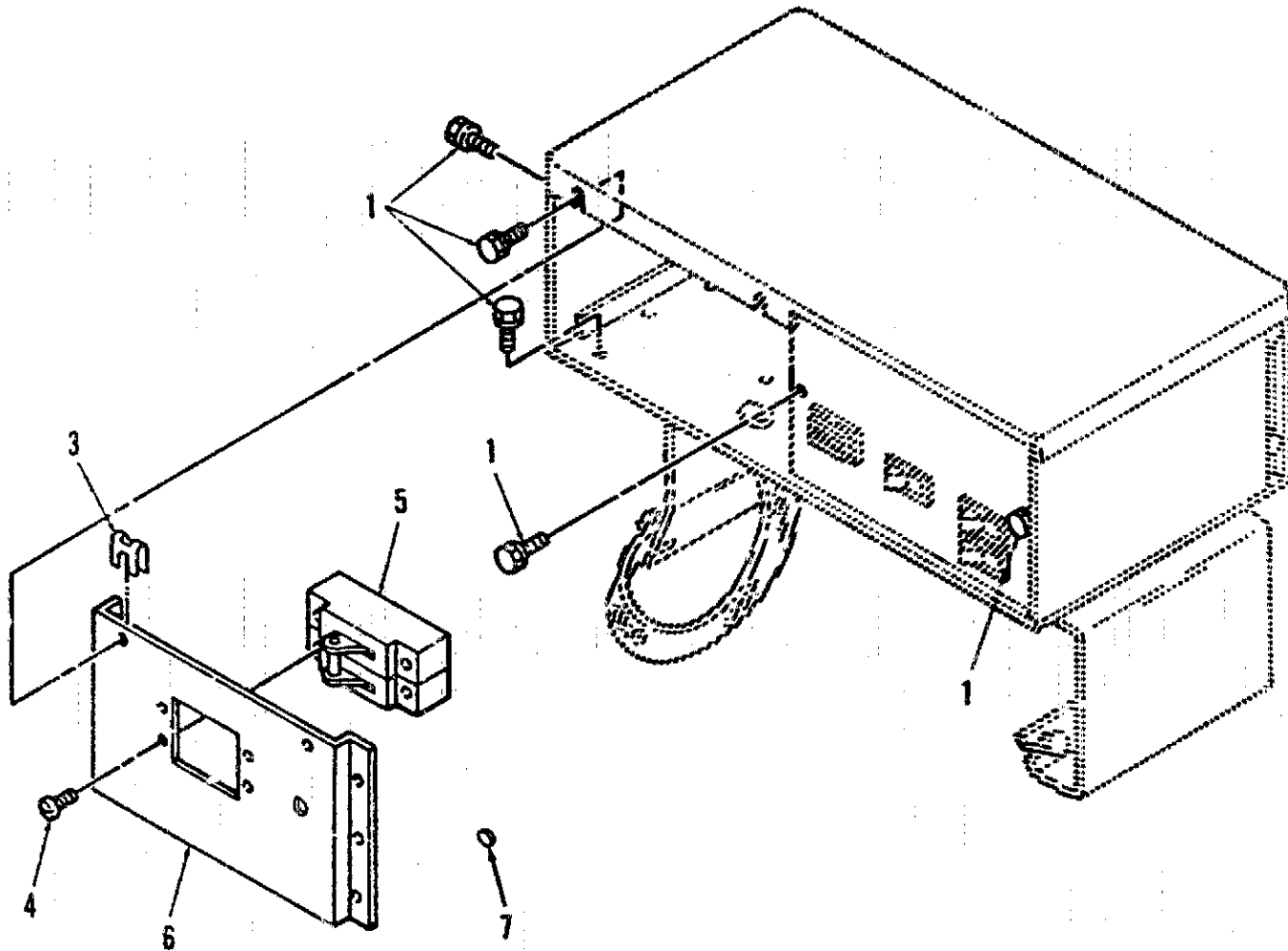
Control Box Assembly



Control Box Assembly

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	815-0544	16	Screw, Self-locking - Hex Washer Head (1/4-20 x 5/8")	6	301-8450	1	Panel, End
2	301-8447	1	Cover, Control	7	821-0014	4	Screw, Self-locking - Hex Washer Head (5/16-18 x 1/2")
3	870-0398	6	Nut, Retaining (#10-32)	8	402-0078	4	Mount, Vibration
4			Panel, Control - Generator	9	815-0236	4	Screw, Tapping - Hex Washer Head (5/16-18 x 5/8") or use
	301-8445	1	Without Hole for Circuit Breaker	10	800-0025	1	Screw, Self-locking - Hex Washer Head (5/16-18 x 5/8")
	301-8569	1	With Hole for Circuit Breaker	11	856-0008	4	Washer, Lock - EIT (5/16")
5			Panel, Control - Engine	12	337-0049	1	Strap, Ground - Electrical
			Manual Start Sets	13	508-0115	2	Grommet (2-1/8" ID x 2-7/8" OD)
	319-0202	1	With Holes for Time Totalizing Meter, Selector Switch and Round Circuit Breaker	14	508-0117	1	Grommet (1-1/8" ID x 1-3/8" OD)
	319-0203	2	With Holes for Three Gauges, Time Totalizing Meter, Selector Switch and Round Circuit Breaker	15	301-8453	1	Box, Control
			Remote Start Sets	16	301-8446	1	Saddle, Mounting - Control
	301-8451	1	With Holes for Two Switches, Rectangular Circuit Breaker, Time Totalizing Meter and Round Circuit Breaker	17	301-8634	1	Support, Saddle
	301-8452	1	With Holes for Three Gauges, Two Switches, Rectangular Circuit Breaker, Time Totalizing Meter and Round Circuit Breaker	19	821-0009	1	Screw, Self-Locking - Hex Washer Head (1/4-20 x 3/8")

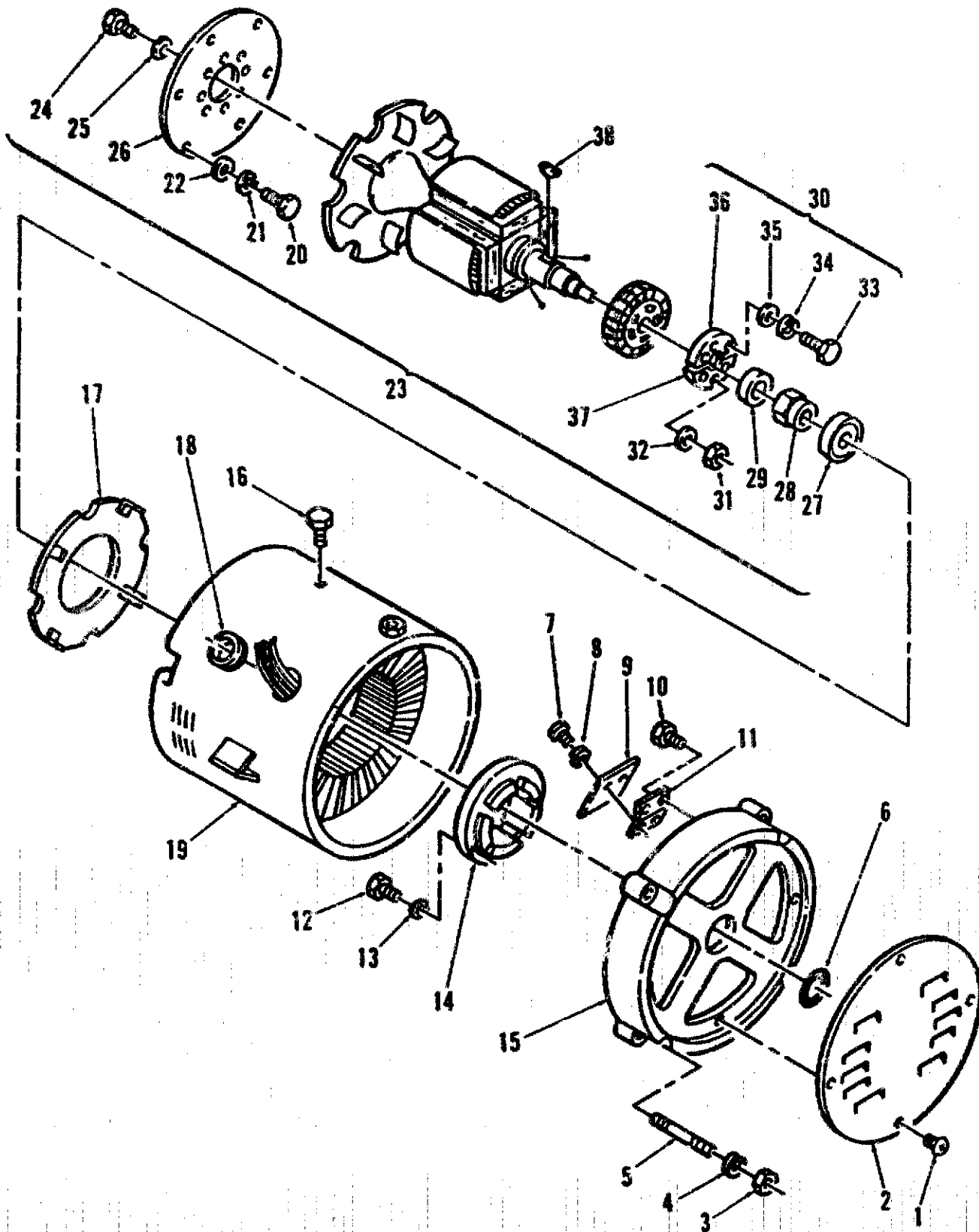
Circuit Breaker



REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	821-0005	11	Screw, Self-locking - Hex Washer Head (#10-32 x 1/2")
3	870-0398	6	Nut, Retaining (#10-32)
4	812-0063	AR	Screw, Machine - Round Head
5			Breaker, Circuit
	320-1255	1	1 Pole 70 Amp
	320-1247	1	2 Pole 40 Amp

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
6			Panel, Breaker - Circuit
	301-9447	1	1 Pole Breaker Hole With Round C/B Hole
	301-9446	1	2 Pole Breaker Hole With Round C/B Hole
7	517-0015	AR	Plug, Hole

Generator Assembly



G-1158

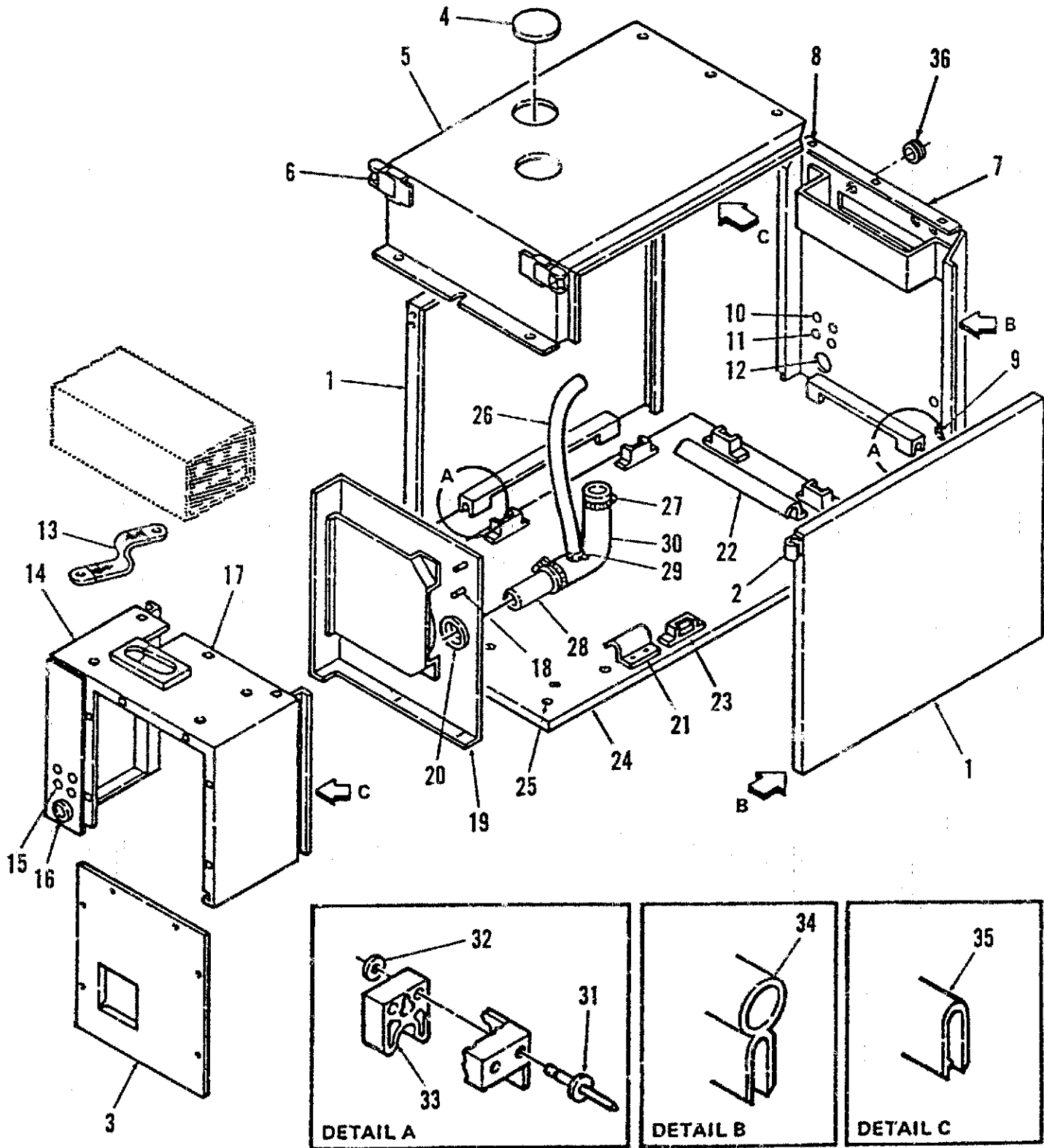
Generator Assembly

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	813-0100	4	Screw, Machine - Round Head (#10-32 x 1/2")	20	718-1036	6	Screw, Cap - Hex Head (M8 x 1.25 x 20mm)
2	234-0767	1	Cover, End Bell	21	850-2008	6	Washer, Lock - Spring (M8)
3	862-0011	4	Nut, Hex (3/8-16)	22	526-0115	6	Washer, Flat (11/32" ID x 11/16" OD x 1/16" THK)
4	850-0050	4	Washer, Lock - Spring (3/8")	23			Rotor Assembly, Gen (Includes Parts Marked *)
5			Stud				
	520-0935	4	(3/8-16 UNC x 13" LG)		201-3131	1	6.0 thru 8.0 kW, Code 18 (Extended Stack)
	520-0936	4	(3/8-16 UNC x 13-3/4" LG)		201-3130	1	6.0 thru 8.0 kW, Codes 3C, 53C, 18.518, 1R
	520-0937	4	(3/8-16 UNC x 14-5/16" LG)				
6	509-0094	1	O-Ring	24	800-0519	6	*Bolt, Hex - Slotted - Grade 8 (3/8-16 x 3/4")
7	813-0098	2	Screw, Machine - Round Head (#10-32 x 3/8")	25	526-0390	3	*Washer, Flat (3/8")
8	856-0003	2	Washer, Lock - EIT (#10)	26	232-2826	1	*Disk, Drive
9	232-2418	1	Terminal Board	27	510-0112	1	*Bearing, Ball
10	815-0194	2	Screw, Tapping - Hex Head W/ET Lockwasher (#10-32 x 3/8")	28	870-0284	1	*Nut, Self-locking - Hex (1-1/8-12)
11	232-3038	1	Bracket, Mounting - Terminal Board	29	232-3017	1	*Spacer, Sleeve
12	800-0009	2	Screw, Cap - Hex Head (1/4-20 x 1-1/2")	30			*Rotor Assembly, Exciter (Includes Parts Marked *)
13	853-0013	2	Washer, Lock - ET (1/4")		201-2151	1	Standard
14			Stator, Exciter		201-2299	1	Environmental Protected
	220-2009	1	Standard	31	870-0131	6	++Nut, Self-locking - Hex with ET Lockwasher (#10-32)
	220-2308	1	Environmental Protected	32	526-0008	6	++Washer, Flat (#10)
15	211-0370	1	End Bell	33	813-0100	4	++Screw, Machine - Round Head (#10-32 x 1/2")
16	821-0015	4	Screw, Self-locking - Hex Washer Head (1/4-20 x 3/4")	34	853-0008	4	++Washer, Lock - ET (#10)
17	234-0766	1	Baffle, Air	35	526-0008	4	++Washer, Flat (#10)
18	508-0183	1	Grommet (1-1/2" ID x 2-1/8" OD)	36	358-0069	1	++Rectifier Assembly - Positive
19			Stator, Generator	37	358-0070	1	++Rectifier Assembly - Negative
	220-3912	1	6-6.5 kW, Code 53C (Standard) 1R	38	515-0094	1	*Key, Woodruff (#6)
	220-4023	1	6-6.5 kW, Code 53C (Environmental Protected)				
	220-3929	1	6-6.5 kW, Code 518				
	220-3904	1	7.5-8 kW, Code 3CR, 1R, 3R (Standard)				
	220-4015	1	7.5-8 kW, Code 3CR, 1R, 3R (Environmental Protected)				
	220-3921	1	7.5-8 kW, Code 18				
	220-3922	1	7.5-8 kW, Code 18 (Extended Stack)				

* - Parts Included in Rotor Assembly.

+ - Parts Included in Exciter Rotor Assembly.

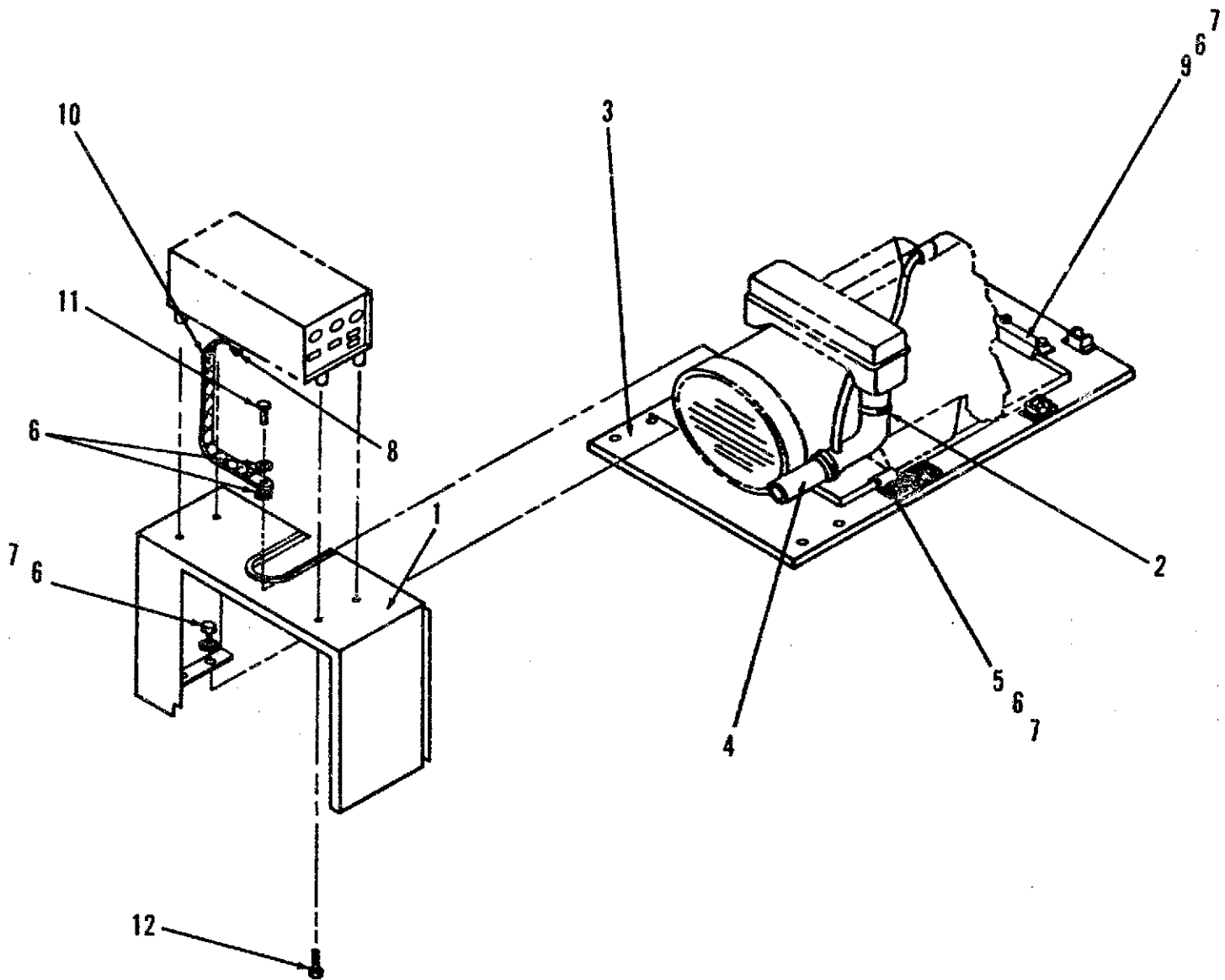
Sound Shield Assembly



Sound Shield Assembly

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	405-3286	2	Door Assembly (Includes Latch Strikes and Pivot Clips)	18			Regulator, Voltage - DC (See Separate Page for Components)
2	406-0528-01	2	Strike, Latch		870-0050	2	Nut, Hex (6-32)
	818-0194	4	Rivet, Stainless Steel		526-1002	2	Washer, Flat (#6)
3	405-3282	1	Panel, Rear - Housing (Includes Edging Seal)	19	405-3273	1	Baffle Assembly (Includes Grommet)
	800-0708	6	Screw, Cap - Hex Head (1/4-20 x 1/2")		800-0730	3	Screw, Cap - Hex Head (5/16-18 x 1")
	854-1014	6	Washer, Lock - IT, (1/4")		856-0008	3	Washer, Lock - EIT (5/16")
4	405-3292	2	Cover, Access	20	508-0055	1	Grommet
5	405-3290	1	Roof Assembly (Includes Latch Catches and Edging Seal)	21	405-3262	2	Bracket, Holddown - Drip Pan
	800-0708	6	Screw, Cap - Hex Head (1/4-20 x 1/2")		800-0730	4	Screw, Cap - Hex Head (5/16-18 x 1")
	854-1014	6	Washer, Lock - IT (1/4")		856-1008	4	Washer, Lock - EIT (5/16")
6	406-0528-02	2	Catch, Latch	22	405-1265	1	Clamp, Drip Pan
	818-0194	4	Rivet, Stainless Steel		800-0730	3	Screw, Cap - Hex Head (5/16-18 x 1")
7	405-3279	1	Panel Assembly, Front (Includes Grommets, Plugs, Pivot Clips, Retained Nuts, Edging Seal)		856-1008	3	Washer, Lock - EIT (5/16")
				23	405-3298	6	Bracket, Pin - Pivot
					800-0730	12	Screw, Cap - Hex Head (5/16-18 x 1")
8	870-0414	3	Nut, Retainer (1/4-20)		856-1008	12	Washer, Lock - EIT (5/16")
9	508-0055	1	Grommet	24	405-3261	1	Base, Mounting - Sound Shield (Includes Tee Nuts)
10	517-0137	2	Plug, Button	25	870-0413	29	Nut, Tee (5/16-18)
11	508-0071	4	Grommet	26	503-1275	1	Hose, Rubber - Breather (Trim to Fit)
12	517-0216	1	Plug, Button	27	503-0429	2	Clamp, Hose
13	337-2161	1	Strap, Ground - Electrical	28	140-1914	1	Tube, Metal - Air
	800-0730	1	Screw, Cap - Hex Head (5/16"-18 x 1")	29	123-0733	1	Connector, Tube
	856-1008	2	Washer, Lock - EIT (5/16")		851-0011	1	Retainer, Spring Grip
14	405-3268	1	Housing Assembly (Includes Grommets, Plugs, Retained Nuts and Edging)	30	503-1332	1	Hose, Elbow - Air
				31	818-0150	AR	Rivet, Drive Pin (Two per Clip)
	800-0730	4	Screw, Cap - Hex Head (5/16-18 x 1")	32	526-0003	AR	Washer, Flat (#8)
	856-1008	4	Washer, Lock - EIT (5/16")	33	405-3152	AR	Clip, Door - Plastic
15	517-0137	4	Plug, Button	34	508-1011	AR	Seal, Edging
16	508-0235	1	Grommet	35	508-0210	AR	Seal, Edging
17	870-0414	9	Nut, Retainer (1/4-20)	36	508-0021	1	Grommet

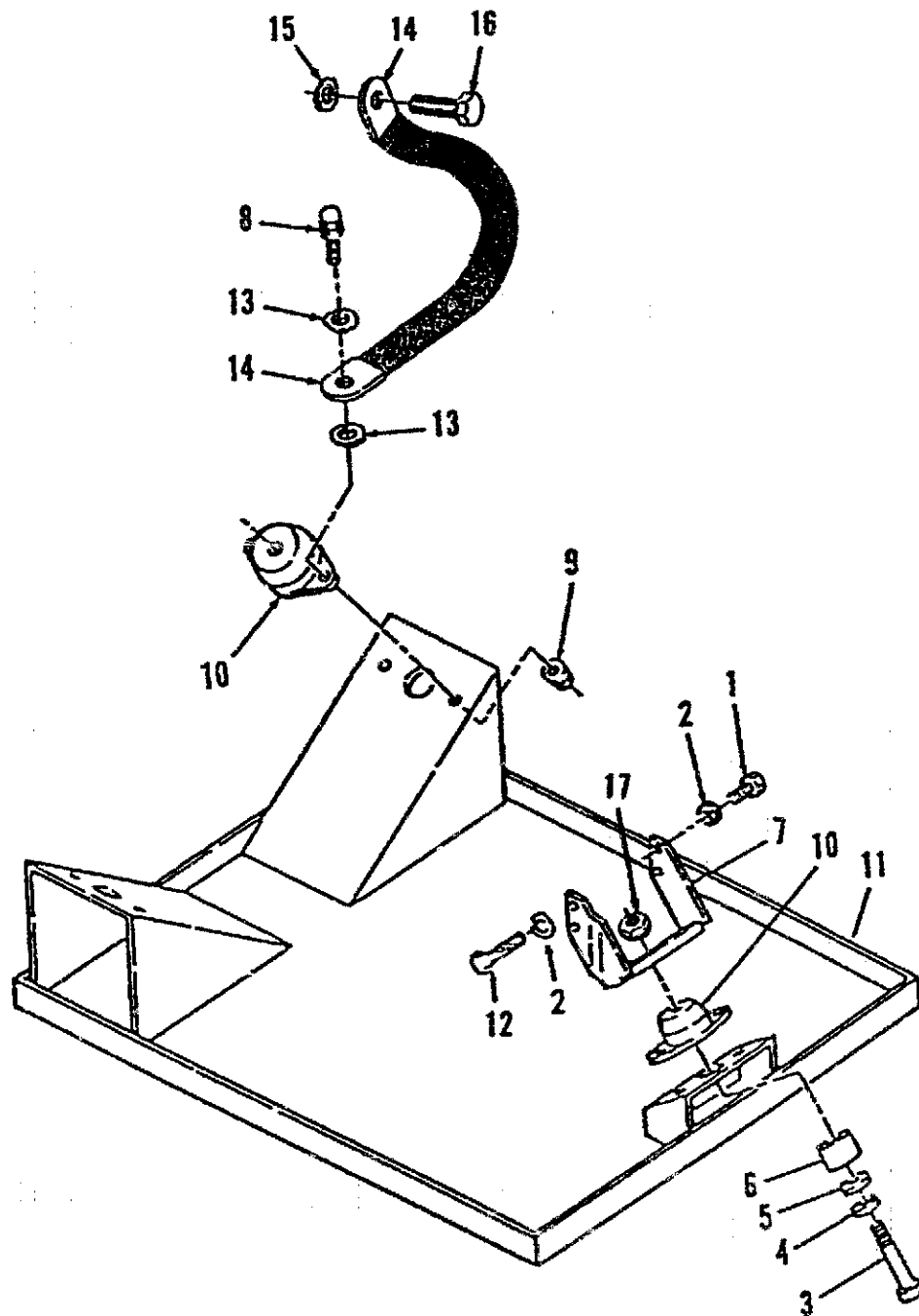
Gen Housing and Control (Spec C)



REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	405-3268	1	Housing Assy, Gen
2	503-0429	1	Clamp, Hose
3	405-3943	1	Base, Housing
4	503-1329	1	Housing, Intake - Air
5	405-3262	2	Bracket, Pan - Drip
6	856-0008	13	Washer, Lock - EIT (5/16)
7	800-0730	11	Screw, Cres - Hex Head (5/16-18 x 1")

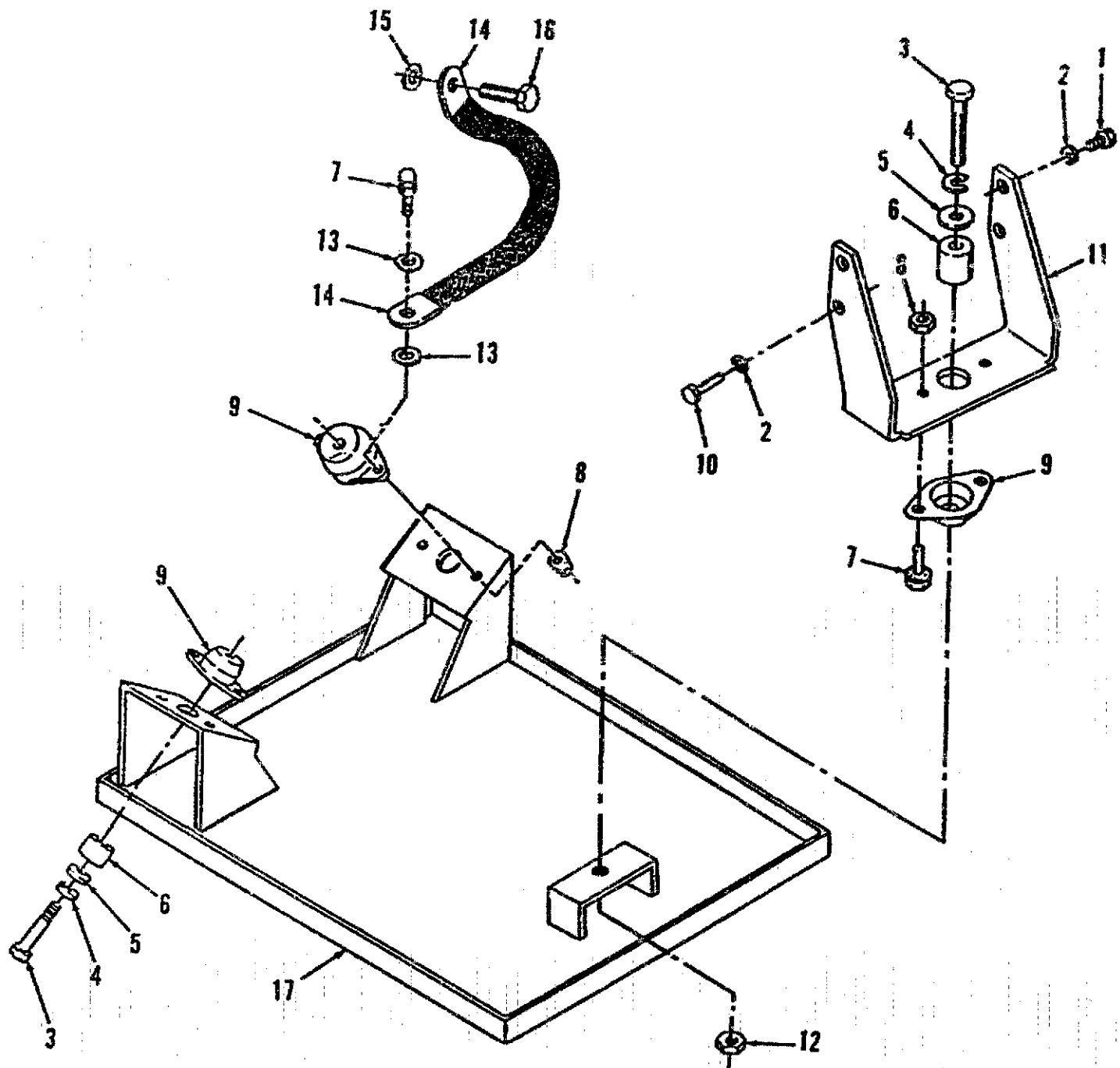
REF NO.	PART NO.	QTY USED	PART DESCRIPTION
8	800-0025	Ref.	Screw, Cap - Hex Head (5/16-18 x 5/8")
9	405-1265	1	Clamp, Pan - Drip
10	337-2161	1	Strap, Bond
11	815-0236	1	Screw, Thread Forming - Hex Head (5/16-18 x 5/8")
12	821-0014	4	Screw, Flange - Lock Head (5/16-18 x 1/2")

**Drip Pan and Mounts
(Spec A and B)
And All Sound Shield Units**



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	815-0585	2	Screw, Cap - Hex Head (M10 x 1.25 x 20mm)	10	402-0544	3	Mount, Vibration
2	850-2010	4	Washer, Lock - Spring (M10)	11	403-2203	1	Pan, Drip
3	800-0573	3	Screw, Cap - Hex Head (3/8-16 x 2-1/4")	12	815-0600	2	Screw, Cap - Hex Head (M10 x 1.25 x 25mm)
4	850-0050	3	Washer, Lock - Spring (3/8")	13	856-0008	2	Washer, Lock - EIT (5/16")
5	526-0077	3	Washer, Flat (3/8")	14	337-0081	1	Strap, Bonding
6	403-2213	3	Spacer, Sleeve	15	856-0010	1	Washer, Lock - EIT (3/8)
7	403-2194	1	Support, Engine	16	815-0384	1	Screw, Self-Locking - Hex Washer Head (3/8-16 x 3/4")
8	821-0016	6	Screw, Self-locking - Hex Washer Head (5/16-18 x 3/4")	17	870-0138	3	Nut, Self-Locking (3/8-16)
9	870-0257	6	Nut, Self-locking - Hex Washer Head (5/16-18)				

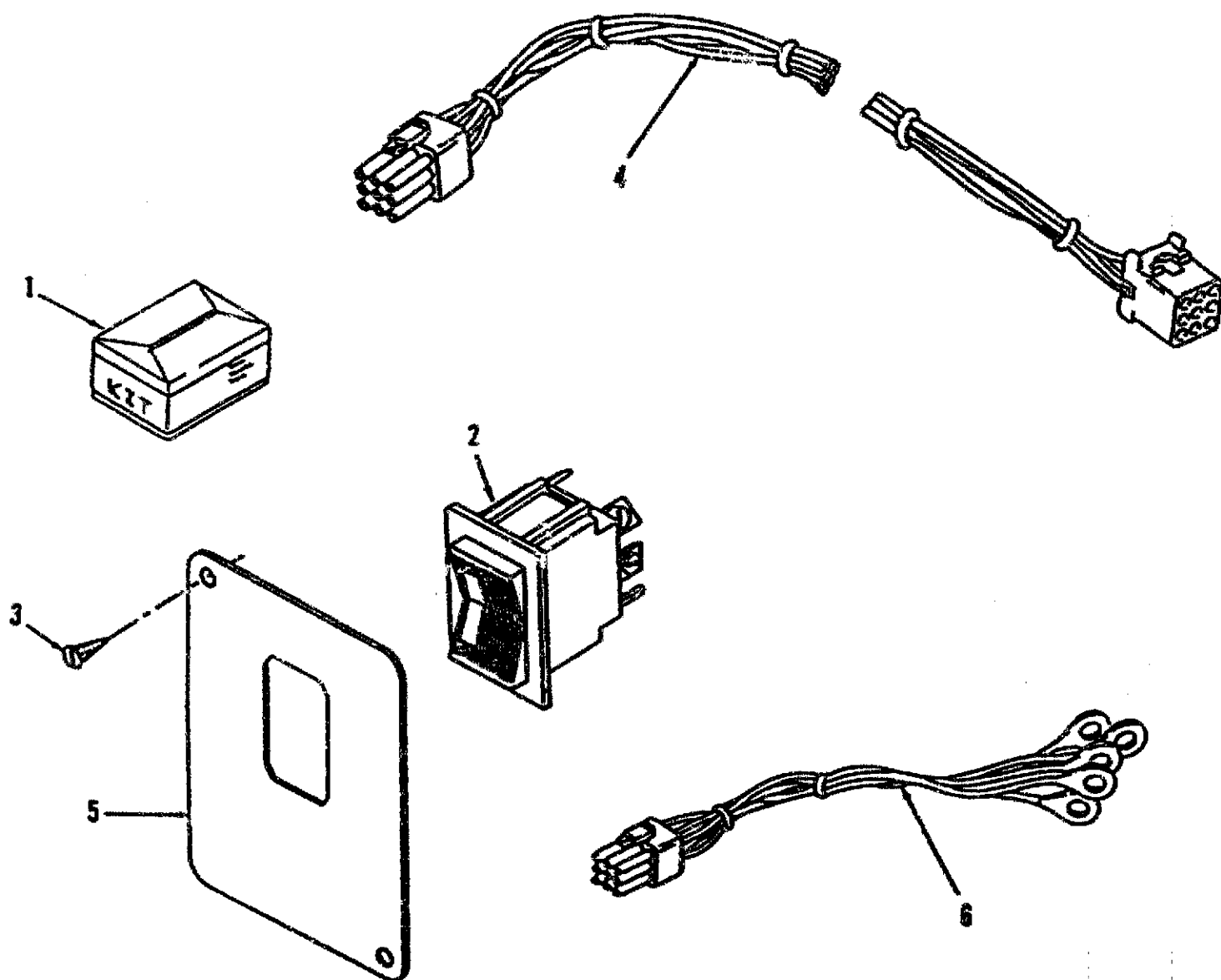
Drip Pan and Mounts (Spec C)



REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	815-0585	2	Screw, Cap - Hex Head (M10 x 1-1/4 x 20mm)
2	850-2010	4	Washer, Lock - Spring (M10)
3	800-0573	3	Screw, Cap - Hex Head (3/8-16 x 2-1/4")
4	850-0050	3	Washer, Lock - Spring (3/8")
5	526-0014	3	Washer, Flat (29/64" ID x 1-1/2" OD x 1/8" Thk)
6	403-2213	3	Spacer, Sleeve
7	821-0016	6	Screw, Self-locking - Hex Washer Head (5/16-18 x 3/4")
8	870-0257	6	Nut, Self-locking - Hex Washer Head (5/16-18)

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
9	402-0544	3	Mount, Vibration
10	815-0600	2	Screw, Cap - Hex Head (M10 x 1-1/4 x 25mm)
11	403-2711-01	1	Support, Engine
12	870-0138	1	Nut, Self-locking (3/8-16)
13	856-0008	2	Washer, Lock - EIT (5/16)
14	337-0081	1	Strap, Bonding
15	856-0010	1	Washer, Lock - EIT (3/8)
16	815-0384	1	Screw, Self-locking - Hex Washer Head (3/8-16 x 3/4")
17	403-2741	1	Pan, Drip

Remote Control Panel (Basic)

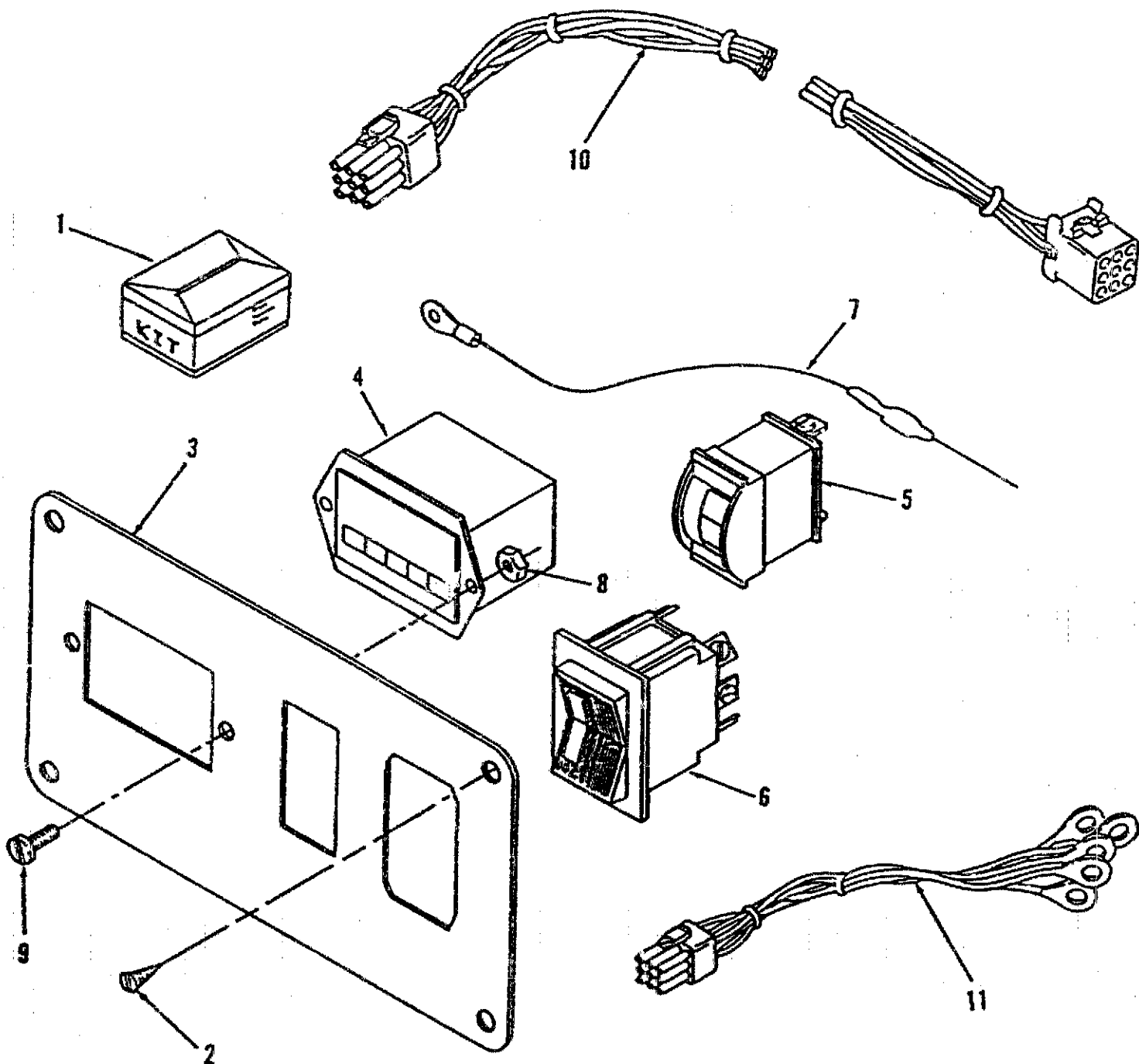


REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	300-3468	1	Panel Kit, Control - Remote (Includes Parts Marked *)
2			*Switch, Rocker
	308-0827	1	12 Volt
	308-0975	1	24 Volt
3	815-0380	2	*Screw, Wood - Oval Head Cross Recessed (85 x 1/2")
4			harness, Wiring
	338-2237	1	Fifteen Feet
	338-2238	1	Twenty-Five Feet

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
5	319-0491	1	*Panel, Control (Does Not Include Front and Back Decals)
	98-5948	1	Decal, Panel - Rear
	98-5949	1	Decal, Panel - Front
6	338-2362-01	1	Harness, Wiring - Remote Control Panel
7	323-1291	1	Plug (Use with 323-1199 Pins)
8	323-1325	1	Cap (Use with 323-1200 Socket)

* - Parts Included in Remote Control Panel Kit.

Remote Control Panel (Deluxe)

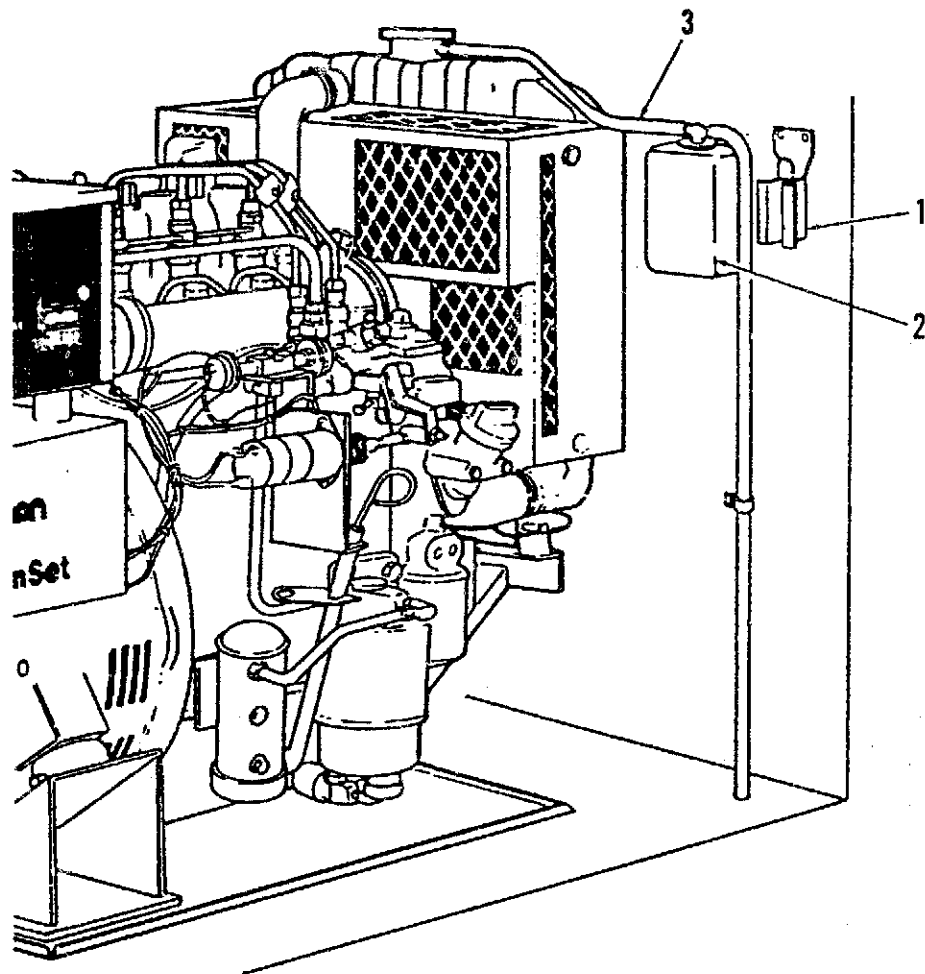


REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	300-3467	1	Panel Kit, Control - Remote (Includes Parts Marked *)
2	815-0380	4	*Screw, Wood - Oval Head, Cross Recessed (#5 x 1/2")
3	319-0492	1	*Panel, Control (Does Not Include Front and Back Decals)
	98-0944	1	Decal, Panel - Rear
	98-5946	1	Decal, Panel - Front
4	302-0885	1	*Meter, Totalizing - Time
5	302-0888	1	*Meter, Condition - Battery

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
6	308-0827	1	*Switch, Rocker 12 Volt
	308-0975	1	24 Volt
7	359-0034	1	*Diode and Lead Assembly
8	870-0183	2	*Nut, Hex (#6-32)
9	815-0385	2	*Screw, Machine - Round Head (6-32 x 1/2")
10	338-2237	1	Harness Wiring Fifteen Feet
	338-2238	1	Twenty-Five Feet
11	329-2362-01	1	harness, Wiring - Remote Control Panel

* - Parts Included in Remote Control Panel Kit.

Coolant Tank



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	130-2780	1	Bracket	3		1	Hose, Overflow (Comes with Recovery Tank)
2	130-2779	1	Tank, Recovery				

Numerical Index

Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
98-5104	45	149-1953	29	185-2028	9	185-2088	41
98-5496	45	149-1970	29	185-2029	9	185-2093	4
98-5497	45	149-1971	29	185-2030	9	185-2093	12
98-5944	58	149-1972	29	185-2031	9	185-2094	7
98-5946	57	149-1978	29	185-2033	9	185-2095	7
98-5946	58	149-2044	29	185-2034	10	185-2097	18
98-5949	57	149-2045	29	185-2035	10	185-2098	18
115-0025	31	149-2046	29	185-2036	10	185-2099	18
123-0733	53	149-2047	29	185-2037	10	185-2100	18
123-1628	13	149-2048	29	185-2038	10	185-2101	18
130-0632	39	150-0717	33	185-2039	10	185-2102	12
130-0959	39	150-1733	31	185-2040	10	185-2103	30
130-1031	39	150-1991	31	185-2041	9	185-2104	12
130-1341	39	150-1992	31	185-2042	11	185-2105	12
130-2331	39	150-1995	31	185-2043	9	185-2105	32
130-2332	39	150-2009	33	185-2044	11	185-2106	23
130-2343	39	150-2010	33	185-2045	11	185-2107	18
130-2371	39	150-2011	33	185-2046	11	185-2109	18
130-2372	39	154-2455	21	185-2047	11	185-2111	16
130-2426	39	154-2456	21	185-2048	11	185-2114	31
130-2473	36	154-2459	21	185-2049	6	185-2115	7
130-2760-01	21	154-2475	21	185-2051	12	185-2116	15
130-2779	59	155-1002	19	185-2052	6	185-2116	16
130-2780	59	155-2003	21	185-2053	6	185-2117	16
132-0277	39	155-2009	19	185-2054	6	185-2118	16
132-0277	40	155-2010	19	185-2055	10	185-2119	16
132-0281	40	155-2011	19	185-2056	6	185-2120	31
132-0282	40	155-2012	19	185-2057	6	185-2120	39
132-0313	40	155-2029	19	185-2058	12	185-2123	12
132-0314	40	155-2316	21	185-2060	5	185-2124	12
132-0315	40	185-2001	7	185-2061	5	185-2125	23
132-0316	40	185-2007	7	185-2062	5	185-2126	31
140-1896	35	185-2010	9	185-2063	5	185-2127	10
140-1914	53	185-2011	9	185-2068	6	185-2129	21
149-1445	27	185-2012	9	185-2069	6	185-2130	21
149-1446	27	185-2013	9	185-2072	5	185-2131	21
149-1828	27	185-2014	9	185-2073	5	185-2132	18
149-1908-04	27	185-2015	9	185-2074	11	185-2133	18
149-1908-04	29	185-2016	9	185-2075	11	185-2134	18
149-1908-06	27	185-2017	9	185-2076	5	185-2135	18
149-1908-06	29	185-2018	9	185-2077	5	185-2136	18
149-1914-04	29	185-2019	9	185-2078	5	185-2137	18
149-1920	27	185-2020	9	185-2079	5	185-2138	18
149-1921	27	185-2021	9	185-2080	5	185-2139	18
149-1922	27	185-2022	9	185-2082	11	185-2140	18
149-1932	27	185-2023	9	185-2083	23	185-2141	18
149-1944	27	185-2024	9	185-2084	11	185-2142	18
149-1945	27	185-2025	9	185-2085	23	185-2143	18
149-1949	29	185-2026	9	185-2086	11	185-2144	18
149-1952	29	185-2027	9	185-2087	9	185-2145	18

Numerical Index

Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
185-2146	18	185-2211	13	185-2266	37	185-2332	16
185-2147	18	185-2212	13	185-2267	37	185-2333	16
185-2148	18	185-2213	10	185-2268	37	185-2334	16
185-2149	18	185-2215	5	185-2269	37	185-2335	16
185-2150	18	185-2216	5	185-2270	37	185-2337	7
185-2151	18	185-2217	4	185-2271	37	185-2338	31
185-2153	12	185-2218	15	185-2272	37	185-2342	31
185-2155	7	185-2219	15	185-2273	36	185-2344	17
185-2156	7	185-2220	13	185-2275	36	185-2345	17
185-2157	12	185-2221	23	185-2275	41	185-2346	36
185-2158	23	185-2223	23	185-2280	4	185-2347	31
185-2159	17	185-2224	17	185-2281	13	185-2348	9
185-2160	17	185-2225	21	185-2282	32	185-2349	4
185-2161	31	185-2226	13	185-2283	32	185-2349	12
185-2162	23	185-2228	5	185-2284	32	185-2350	7
185-2163	23	185-2229	7	185-2287	4	185-2351	31
185-2164	23	185-2230	4	185-2288	4	185-2352	7
185-2165	23	185-2232	4	185-2289	17	185-2353	9
185-2166	30	185-2233	7	185-2290	4	185-2353	11
185-2167	30	185-2234	7	185-2291	4	185-2353	41
185-2168	32	185-2235	42	185-2292	5	185-2354	23
185-2169	32	185-2236	41	185-2293	7	185-2355	7
185-2170	15	185-2237	41	185-2294	17	185-2356	7
185-2171	37	185-2238	42	185-2295	16	185-2357	23
185-2172	17	185-2239	41	185-2296	12	185-2358	23
185-2173	30	185-2239	42	185-2300	42	185-2359	23
185-2175	42	185-2240	42	185-2301	15	185-2360	42
185-2176	7	185-2241	41	185-2307	21	185-2361	6
185-2177	7	185-2242	41	185-2308	15	185-2363	41
185-2178	15	185-2243	41	185-2309	12	185-2364	32
185-2179	5	185-2244	41	185-2310	30	185-2365	7
185-2180	31	185-2245	37	185-2311	42	185-2366	13
185-2181	37	185-2246	37	185-2313	7	185-2367	6
185-2182	31	185-2247	36	185-2314	15	185-2367	23
185-2183	37	185-2248	32	185-2316	23	185-2368	5
185-2184	5	185-2249	37	185-2317	12	185-2369	11
185-2185	37	185-2250	9	185-2318	24	185-2369	23
185-2186	37	185-2251	41	185-2319	16	185-2370	23
185-2187	32	185-2252	34	185-2320	16	185-2371	13
185-2188	6	185-2253	21	185-2321	16	185-2372	12
185-2188	7	185-2254	10	185-2322	16	185-2373	32
185-2189	12	185-2257	31	185-2323	16	185-2374	12
185-2190	11	185-2258	31	185-2324	16	185-2376	32
185-2195	16	185-2259	31	185-2325	16	185-2377	13
185-2196	24	185-2260	32	185-2326	16	185-2377	36
185-2197	24	185-2261	30	185-2327	16	185-2378	36
185-2198	24	185-2262	30	185-2328	16	185-2379	30
185-2207	41	185-2263	32	185-2329	16	185-2380	12
185-2209	13	185-2264	32	185-2330	16	185-2380	13
185-2210	13	185-2266	36	185-2331	16	185-2380	23

Numerical Index

Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
185-2380	32	185-2424	34	220-4015	51	309-0295	21
185-2380	41	185-2427	30	220-4023	51	309-0513	42
185-2380	42	185-2423	9	232-2418	51	309-0561-05	14
185-2381	6	185-2429	9	232-2826	51	309-0578	14
185-2381	23	185-2430	12	232-3017	51	315-0386	45
185-2382	7	185-2431	5	232-3038	51	315-0391	45
185-2383	16	185-2432	31	234-0766	51	315-0572	45
185-2384	4	185-2433	31	234-0767	51	315-0583	45
185-2385	17	185-2434	9	300-2604	45	319-0202	47
185-2386	23	185-2435	9	300-3467	58	319-0203	47
185-2387	11	185-2436	17	300-3468	57	319-0491	57
185-2388	11	185-2436	18	301-3719	45	319-0492	58
185-2388	36	185-2437	17	301-8445	47	320-1121	45
185-2388	42	185-2438	32	301-8446	47	320-1139	45
185-2389	7	185-2439	32	301-8447	47	320-1140	45
185-2389	31	185-2440	30	301-8450	47	320-1247	48
185-2390	10	185-2441	30	301-8451	47	320-1255	48
185-2390	12	185-2442	30	301-8452	47	321-0113	34
185-2390	21	185-2443	23	301-8453	47	321-0267	34
185-2390	32	185-2444	18	301-8454	45	323-1200	45
185-2391	10	185-2446	23	301-8569	47	323-1291	57
185-2392	30	185-2447	23	301-8634	47	323-1325	45
185-2393	42	185-2448	23	301-9446	48	323-1325	57
185-2394	12	185-2449	23	301-9447	48	332-1024	39
185-2395	12	185-2450	23	301-9484	45	332-1564	45
185-2396	12	185-2451	23	302-0270	45	332-1655	45
185-2397	12	185-2452	23	302-0885	45	332-2370	45
185-2398	12	185-2453	23	302-0885	58	332-2605	45
185-2399	6	185-2459	18	302-0888	58	333-0406-01	43
185-2399	13	185-2461	31	302-1641	45	337-0049	47
185-2400	13	185-2462	31	304-0580	45	337-0081	55
185-2400	31	185-2466	30	304-0776	34	337-0081	56
185-2400	39	185-2477	6	304-0776	45	337-2161	53
185-2402	23	193-0244	14	305-0688	45	337-2161	54
185-2403	36	193-0318	6	305-0696	45	338-1825-01	34
185-2404	15	193-0351	45	305-0703	45	338-1825-02	34
185-2405	36	193-0352	45	307-1617	45	338-2237	57
185-2407	5	193-0404	14	307-1886	45	338-2237	58
185-2408	5	201-2151	51	307-2546	31	338-2238	57
185-2409	7	201-2299	51	308-0739	45	338-2238	58
185-2410	13	201-3130	51	308-0778	45	338-2274-01	34
185-2411	6	201-3131	51	308-0779	45	338-2274-01	45
185-2411	7	211-0370	51	308-0826	45	338-2274-02	34
185-2412	7	220-2009	51	308-0827	45	338-2274-02	45
185-2413	6	220-2308	51	308-0827	57	338-2362-01	57
185-2414	6	220-3904	51	308-0827	58	338-2362-01	58
185-2415	24	220-3912	51	308-0843	45	338-2486	45
185-2417	15	220-3921	51	308-0975	57	358-0069	51
185-2418	23	220-3922	51	308-0975	58	358-0070	51
185-2423	42	220-3929	51	309-0159	14	359-0034	58

Numerical Index

Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
402-0078	47	503-0183	43	505-0060	43	718-1018	26
402-0544	55	503-0189	39	505-0101	13	718-1036	51
402-0544	56	503-0197	13	505-0120	13	750-1004	12
403-2194	55	503-0261	43	505-0135	13	750-1004	23
403-2203	55	503-0276	21	505-0135	43	750-1004	31
403-2213	55	503-0354	19	505-0180	27	750-1004	32
403-2213	56	503-0365	19	505-0266	42	750-1004	41
403-2214	15	503-0398	19	505-0302	4	750-1004	42
403-2634	15	503-0429	19	505-0306	43	750-1006	36
403-2711-01	56	503-0429	53	505-1342	14	775-0072	7
403-2741	56	503-0429	54	508-0015	45	775-0072	15
405-1265	53	503-0446	19	508-0021	53	800-0009	51
405-1265	54	503-0514	19	508-0051	35	800-0025	47
405-3152	53	503-0547	19	508-0055	53	800-0025	54
405-3261	53	503-0612	19	508-0071	53	800-0519	51
405-3262	53	503-0648	19	508-0115	47	800-0573	55
405-3262	54	503-0658	19	508-0117	47	800-0573	56
405-3268	53	503-0685	19	508-0183	51	800-0708	53
405-3268	54	503-0712	43	508-0210	53	800-0730	53
405-3273	53	503-0803	19	508-0235	53	800-0730	54
405-3279	53	503-0890	19	508-1011	53	800-2036	13
405-3282	53	503-0891	13	508-1025	39	800-2044	33
405-3286	53	503-1163	19	509-0094	51	800-2057	31
405-3290	53	503-1180	19	510-0112	51	800-2057	33
405-3292	53	503-1202	19	515-0094	51	802-0072	15
405-3298	53	503-1265	39	517-0015	48	812-0063	45
405-3943	54	503-1266	39	517-0137	53	812-0063	48
406-0528-01	53	503-1267	39	517-0142	21	812-0070	45
406-0528-02	53	503-1269	39	517-0216	53	812-0071	45
501-0005	14	503-1270	39	518-0437	45	812-0090	45
502-0003	27	503-1275	53	518-0449	4	813-0098	51
502-0005	14	503-1284	39	520-0025	51	813-0100	51
502-0033	27	503-1293	19	520-0936	51	813-0102	31
502-0041	27	503-1296	19	520-0937	51	815-0181	31
502-0057	14	503-1299	19	520-0939	31	815-0194	51
502-0058	14	503-1302	19	520-2036	21	815-0236	34
502-0058	27	503-1305	19	526-0003	53	815-0236	47
502-0090	19	503-1308	19	526-0008	51	815-0236	54
502-0097	27	503-1314	39	526-0014	56	815-0261	35
502-0175	17	503-1321	4	526-0018	35	815-0300	39
502-0180	29	503-1329	54	526-0018	45	815-0346	45
502-0237	19	503-1331	39	526-0049	45	815-0380	57
502-0270	19	503-1332	53	526-0052	45	815-0380	58
502-0281	27	503-1353	19	526-0077	55	815-0384	55
502-0878	39	504-0003	39	526-0113	33	815-0384	56
502-0881	19	504-0030	13	526-0115	51	815-0385	58
502-0883	19	504-0062	19	526-0390	51	815-0504	21
502-0886	17	504-0092	13	526-1002	34	815-0544	34
502-0886	27	505-0011	4	526-1002	53	815-0544	45
503-0183	19	505-0049	14	718-1006	30	815-0544	47

Numerical Index

Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
815-0585	55	856-0006	27				
815-0585	56	856-0006	45				
815-0586	27	856-0008	31				
815-0586	39	856-0008	33				
815-0586	43	856-0008	47				
815-0600	27	856-0008	53				
815-0600	55	856-0008	54				
815-0600	56	856-0008	55				
815-0649	32	856-0008	56				
815-2315	23	856-0010	43				
815-2454	23	856-0010	55				
818-0150	53	856-0010	56				
818-0194	53	856-0023	14				
821-0003	45	856-1008	53				
821-0004	45	860-2007	21				
821-0005	48	862-0003	15				
821-0009	47	862-0011	51				
821-0010	35	870-0050	34				
821-0010	39	870-0050	53				
821-0012	45	870-0131	31				
821-0014	47	870-0131	51				
821-0014	54	870-0138	55				
821-0015	21	870-0138	56				
821-0015	33	870-0183	45				
821-0015	51	870-0183	58				
821-0016	55	870-0212	27				
821-0016	56	870-0212	33				
822-2067	39	870-0212	39				
850-0040	21	870-0257	27				
850-0040	45	870-0257	55				
850-0050	15	870-0257	56				
850-0050	51	870-0284	51				
850-0050	55	870-0398	47				
850-0050	56	870-0398	48				
850-2006	21	870-0413	53				
850-2006	33	870-0414	53				
850-2008	31	871-0010	45				
850-2008	33	871-0016	45				
850-2008	51						
850-2010	27						
850-2010	55						
850-2010	56						
851-0011	53						
853-0003	45						
853-0008	51						
853-0013	33						
853-0013	51						
854-1014	53						
855-0003	31						
856-0003	51						