

Cummins **Onan**



Parts Manual

Marine Generator Set

MDKBP (Spec A–C)

MDKBR (Spec A–C)

MDKBS (Spec A–B)

Introduction

This catalog applies to the standard marine generator sets listed below. Parts are arranged in groups of related items and each illustrated part is identified by a reference number corresponding to the same reference number in the parts list. Parts illustrations are typical. Unless otherwise mentioned in the description or page heading, parts are interchangeable between models. Throughout this catalog left and right sides are determined by facing the engine end (front) of the set.

<u>MODEL</u>	<u>HERTZ</u>
MDKBP/*	50/60
MDKBR/*	50/60
MDKBS/*	50/60

* – The diagonal line (/) in the model and specification number separates generator set characteristics from the specification number and letter. The specification number denotes customer requested options or deviations from the standard model. The specification letter advances (A to B, B to C, etc.) with major manufacturing changes.

WIRING DIAGRAM

630–2694 DC



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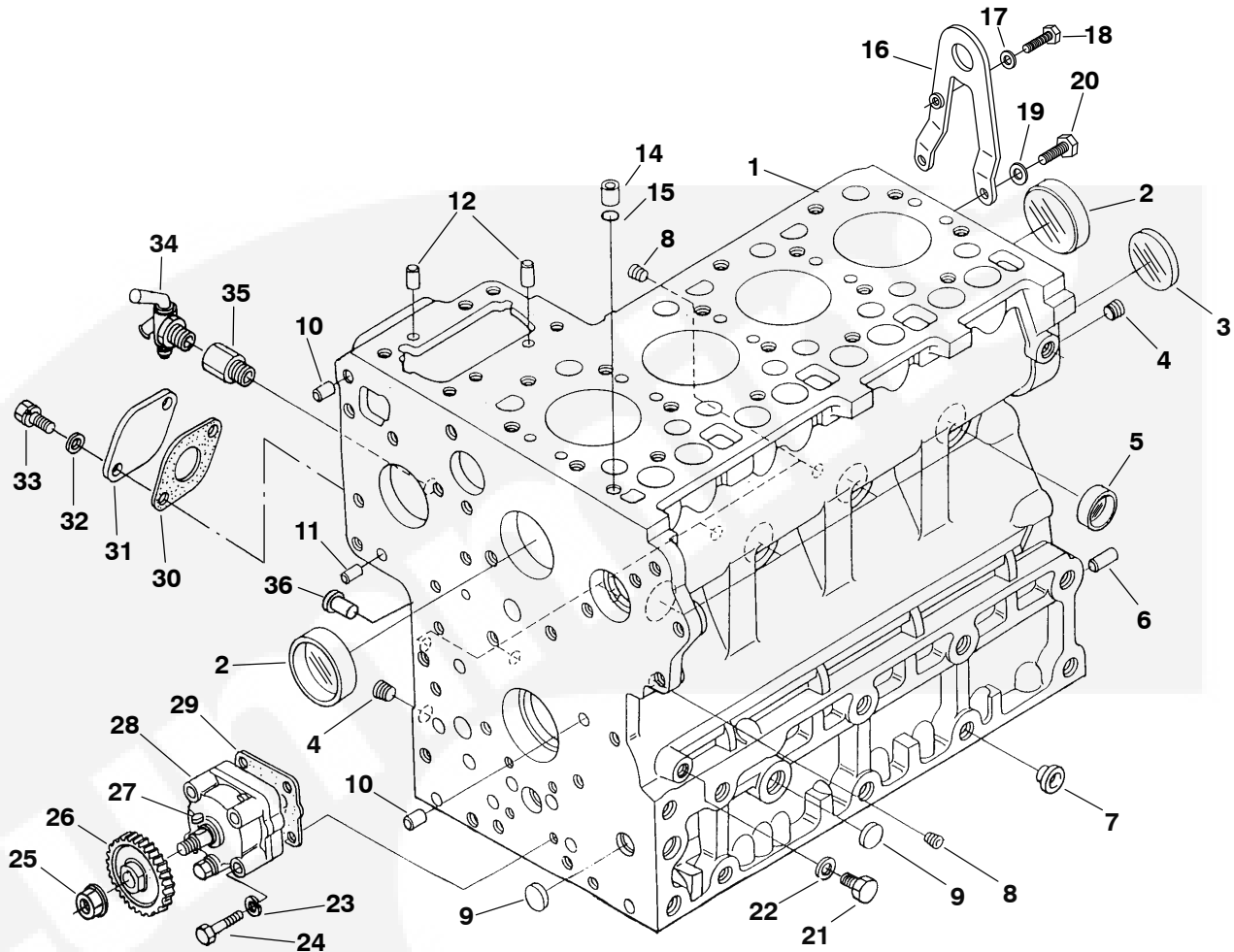
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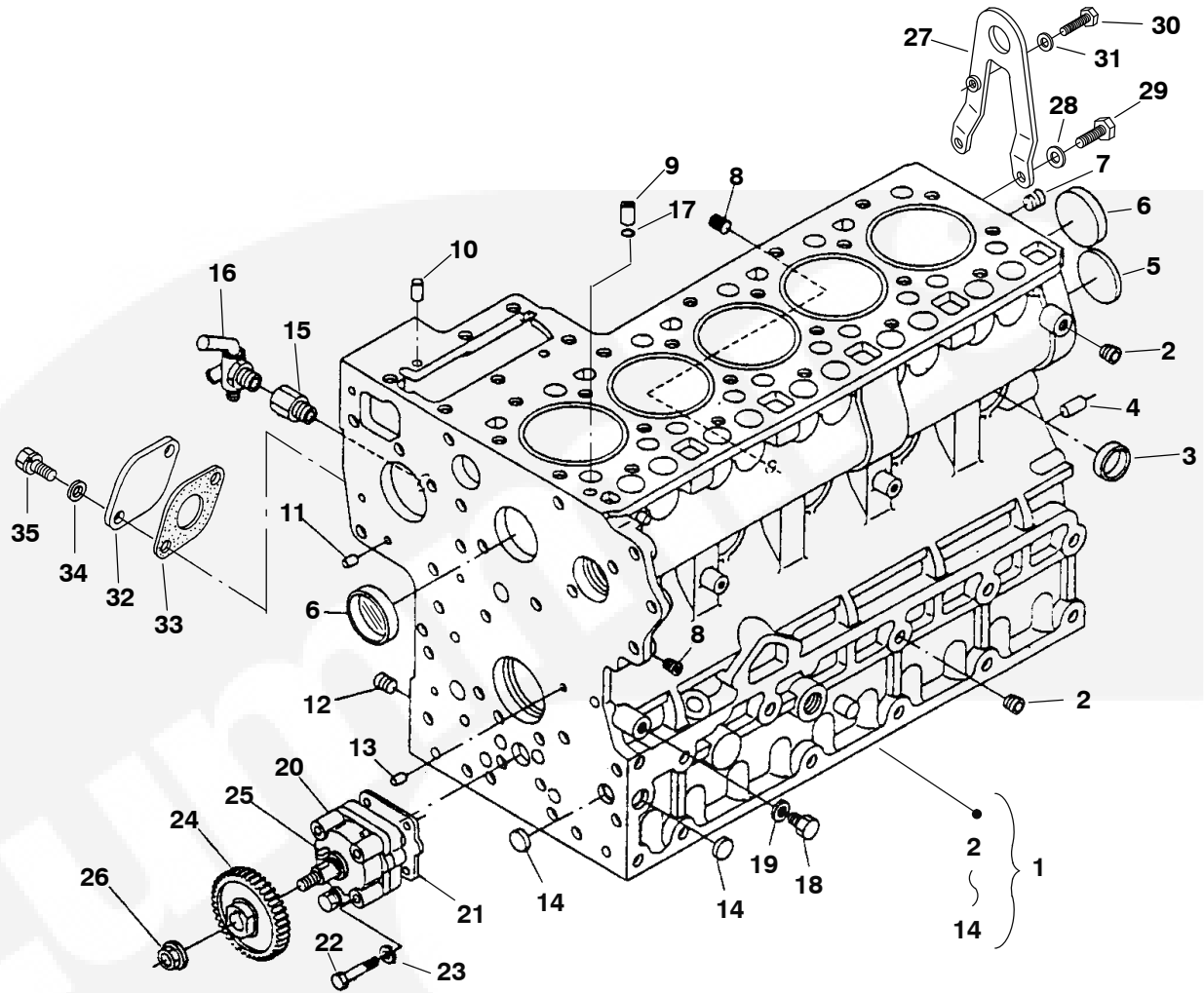
Cylinder Block, MDKBP, MDKBR



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1			Engine, Replacement	19	526-2140	2	Washer, Flat (M12)
	100-3893-01	1	12V	20	800-3033	2	Screw, Hex Head Cap (M12 x 1.25 x 25mm)
	100-3893-02	1	24V	21	185-5845	1	Plug
			MDKBR	22	185-2338	1	Gasket
	100-3894-01	1	12V	23	185-6759	4	Washer, Spring
	100-3894-02	1	24V	24	185-5850	4	Bolt
2	185-5841	2	Cap, Sealing	25	185-7031	1	Nut, Flange
3	185-5839	1	Plug	26	185-5851	1	Gear, Oil Pump Drive
4	185-2234	2	Plug	27	185-2352	1	Key
5	185-5840	6	Cap, Sealing	28	185-5848	1	Pump, Oil
6	185-5844	1	Pin, Straight	29	185-5849	1	Gasket, Oil Pump
7	185-5837	2	Plug	30	185-2125	1	Gasket, Hole Cover
8	185-2233	6	Plug	31	185-6784	1	Cover, Hole
9	185-6121	3	Plug	32	740-1004	2	Washer, Flat
10	185-5843	2	Pin, Straight	33	185-2388	2	Bolt
11	185-5842	2	Pin, Straight	34	185-5846	1	Cock, Drain
12	185-2350	2	Pin, Straight	35	185-5847	1	Joint, Drain Cock
13	185-5676	4	*Bolt	36	185-6039	1	Plug (MDKBP)
14	185-2094	1	Pin, Pipe				
15	185-2095	1	O'Ring				
16	403-6789-02	1	Bracket, Lifting				
17	526-2100	2	Washer (M8)				
18	800-2056	1	Screw, Hex Head Cap (M8 x 1.25 x 16mm)				

* - Parts Included in Keel Cooling Kit Found on Keel Cooling Dry Exhaust Page).

Cylinder Block, MDKBS

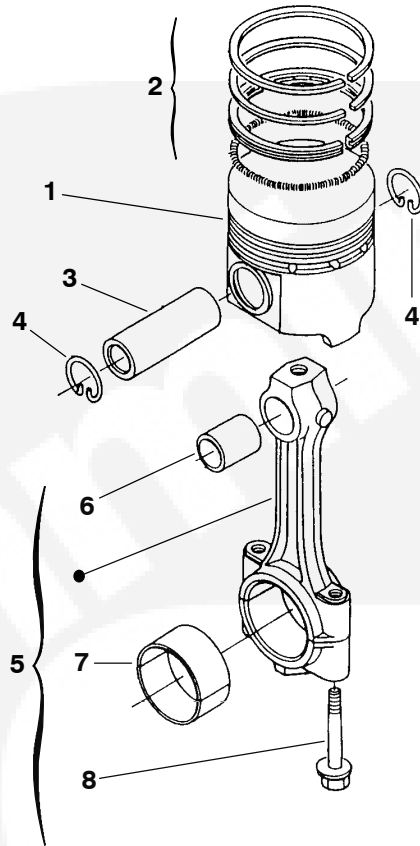


REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
			Engine, Replacement (MDKBS)	20	185-6041	1	Pump, Oil
	100-3895-01	1	12V	21	185-5849	1	Gasket, Oil Pump
	100-3895-02	1	24V	22	185-6042	4	Bolt
1	185-6038	1	Block Assy, Cylinder (Includes Parts Marked #)	23	185-6759	4	Washer, Spring
2	185-6039	4	#Plug	24	185-6043	1	Gear, Oil Pump Drive
3	185-5840	8	#Cap, Sealing	25	185-2352	1	Key
4	185-5844	1	#Pin, Straight	26	185-7031	1	Nut, Flange
5	185-6040	1	#Plug	27	403-3916-02	1	Bracket, Lifting
6	185-5841	2	#Cap, Sealing	28	526-2146	2	Washer, Flat (M12)
7	185-2234	2	#Plug	29	800-3033	2	Screw, Hex Head Cap (M12 x 1.25 x 25mm)
8	185-2233	7	#Plug	30	718-1035	1	Screw, Hex Head Cap (M8 x 1.25 x 16mm)
9	185-2094	1	#Pin, Pipe	31	526-2100	1	Washer (M8)
10	185-2350	2	#Pin, Straight	32	185-6784	1	Cover, Hole
11	185-5842	2	#Pin, Straight	33	185-2125	1	Gasket, Hole Cover
12	185-5837	2	#Plug	34	740-1004	2	Washer, Flat
13	185-5843	2	#Pin, Straight	35	185-2388	2	Bolt
14	185-6121	3	#Plug				
15	185-5847	1	Joint, Drain Cock				
16	185-5846	1	Cock, Drain				
17	185-2095	1	O'Ring				
18	185-5845	1	Plug				
19	185-2338	1	Gasket				

- Parts included in Cylinder Block Assy.

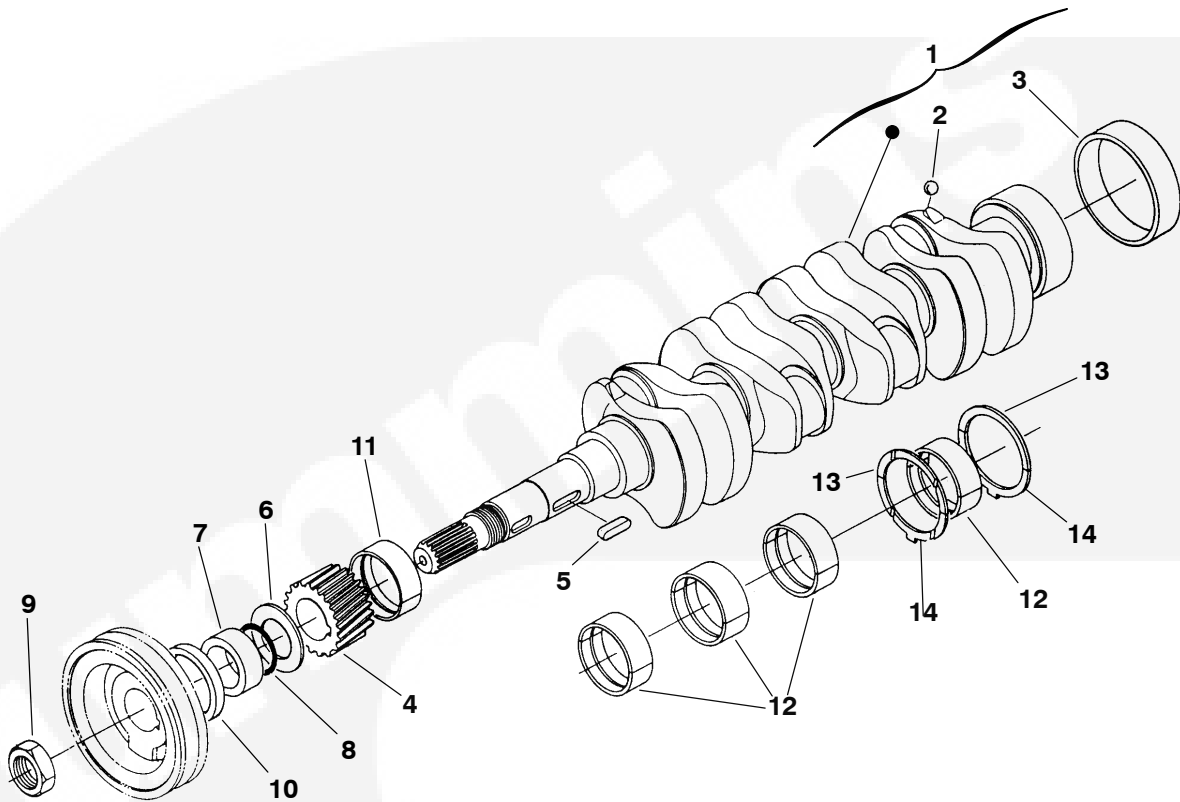
* - Parts Included in Keel Cooling Kit Listed on Keel Cooling-Dry Exhaust Page.

Piston



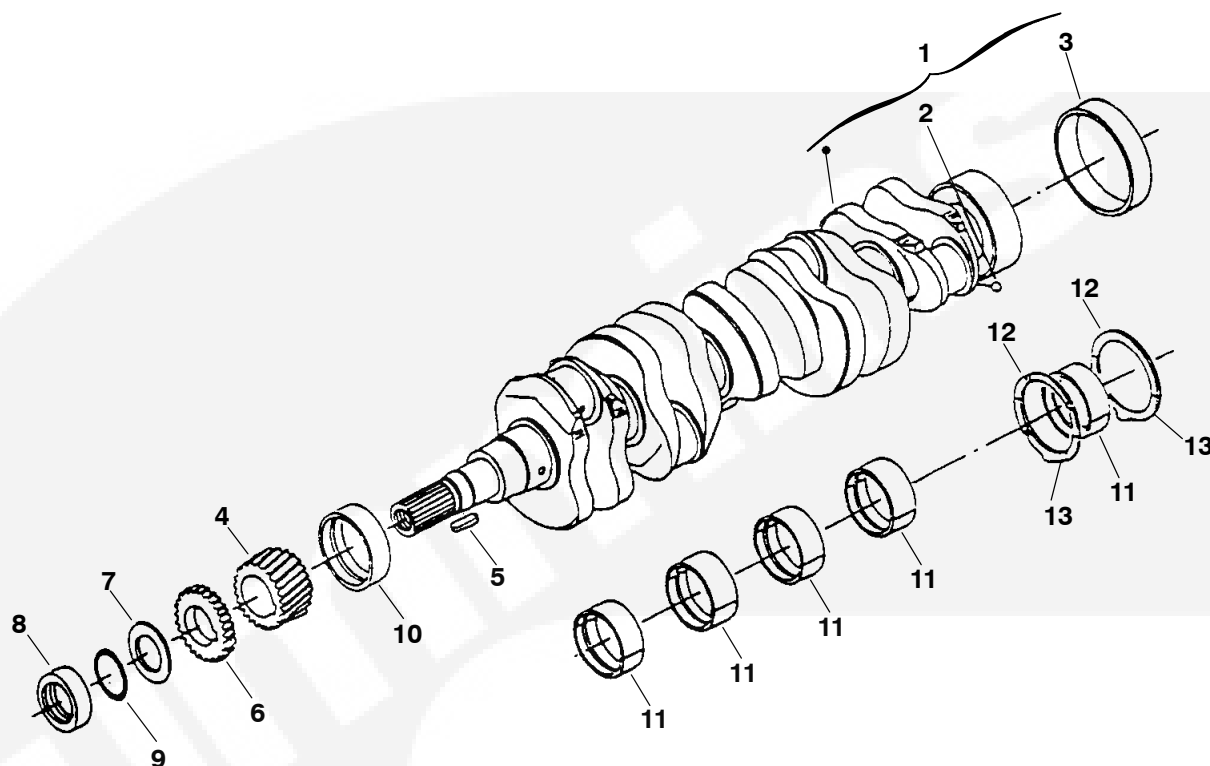
REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1			Piston	4			Ring, Retaining
	185-6767	4	MDKBP Standard		185-5916	8	MDKBP, MDKBR
	185-6768	4	MDKBP 0.5 mm Oversize		185-5916	10	MDKBS
			MDKBR	5			Rod Assy, Connecting (Includes Bushing, Bearing and Bolts)
	185-5913	4	Standard		185-5917	4	MDKBP, MDKBR
	185-6074	4	MDKBR 0.5 mm Oversize		185-5917	5	MDKBS
			MDKBS	6			Bushing
	185-5913	5	Standard		185-5918	4	MDKBP, MDKBR
	185-6074	5	MDKBS 0.5 mm Oversize		185-5918	5	MDKBS
2			Set, Ring	7			Bearing
			MDKBP				Standard
	185-6769	4	Standard		185-6076	4	MDKBP, MDKBR
	185-6770	4	MDKBP 0.5 mm Oversize		185-6076	5	MDKBS
			MDKBR				0.2 mm Undersize
	185-5914	4	Standard		185-5921	4	MDKBP, MDKBR
	185-6075	4	MDKBR 0.5 mm Oversize		185-5921	5	MDKBS
			MDKBS				0.4 mm Undersize
	185-5914	5	Standard		185-5922	4	MDKBP, MDKBR
	185-6075	5	MDKBS 0.5 mm Oversize		185-5922	5	MDKBS
3			Pin, Piston	8			Bolt
	185-5915	4	MDKBP, MDKBR		185-6771	8	MDKBP, MDKBR
	185-5915	5	MDKBS		185-6771	10	MDKBS

Crankshaft MDKBP, MDKBR



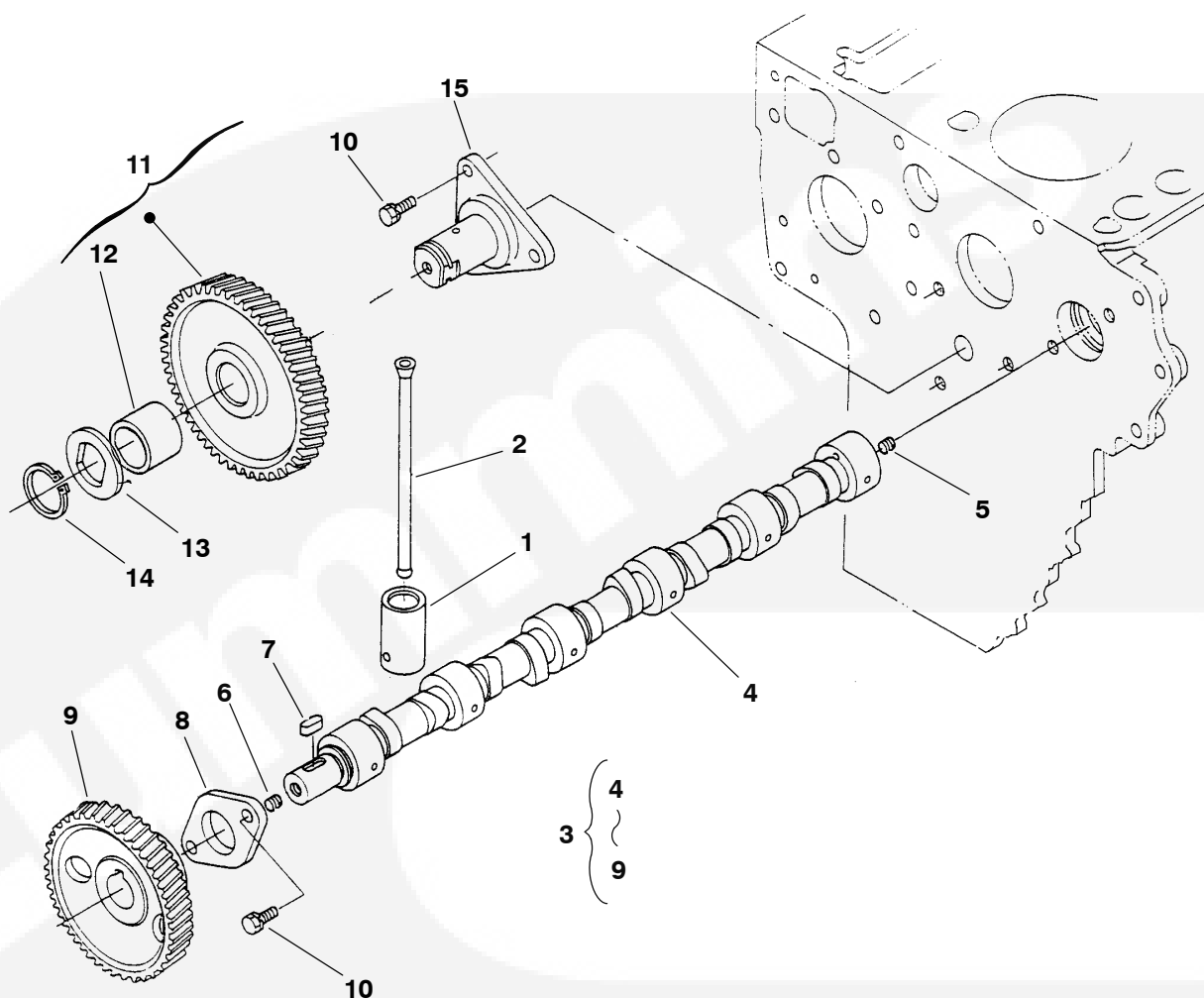
REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	185-5923	1	Crankshaft (Includes Balls and Sleeve)	12			Bearing, Main
2	185-5924	4	Ball	185-6086	4		Standard
3	185-5925	1	Sleeve	185-6976	4		0.2 mm Undersize
4	185-5926	1	Gear	185-5937	4		0.4 mm Undersize
5	185-5905	1	Key	13			Bearing, Upper Thrust
6	185-6973	1	Slinger, Oil	185-5938	2		Standard
7	185-5928	1	Collar	181-9044	2		0.2 mm Oversize
8	185-5929	1	O'Ring	185-6556	2		0.4 mm Oversize
9	185-5930	1	Nut	14	185-5941	2	Bearing, Lower Thrust
10	185-6204	1	Seal, Oil	185-5942	2		0.2 mm Oversize
11			Bearing	185-5943	2		0.4 mm Oversize
	185-6085	1	Standard				
	185-5933	1	0.2 mm Undersize				
	185-5934	1	0.4 mm Undersize				

Crankshaft MDKBS



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	185-7036	1	Crankshaft (Includes Balls and Sleeve)	11	185-6086	5	Bearing, Main Standard
2	185-5924	5	Ball		185-6976	5	0.2 mm Undersize
3	185-6079	1	Sleeve		185-5937	5	0.4 mm Undersize
4	185-6080	1	Gear	12	185-5938	2	Bearing, Upper Thrust Standard
5	185-6081	1	Key		181-9044	2	0.2 mm Oversize
6	185-6082	1	Gear, Oil Drive		185-6556	2	0.4 mm Oversize
7	185-6083	1	Slinger, Oil	13	185-5941	2	Bearing, Lower Thrust Standard
8	185-6084	1	Collar		185-6088	2	0.2 mm Oversize
9	185-5929	1	O'Ring		185-6089	2	0.4 mm Oversize
10			Bearing				
	185-6085	1	Standard				
	185-5933	1	0.2 mm Undersize				
	185-5934	1	0.4 mm Undersize				

Camshaft

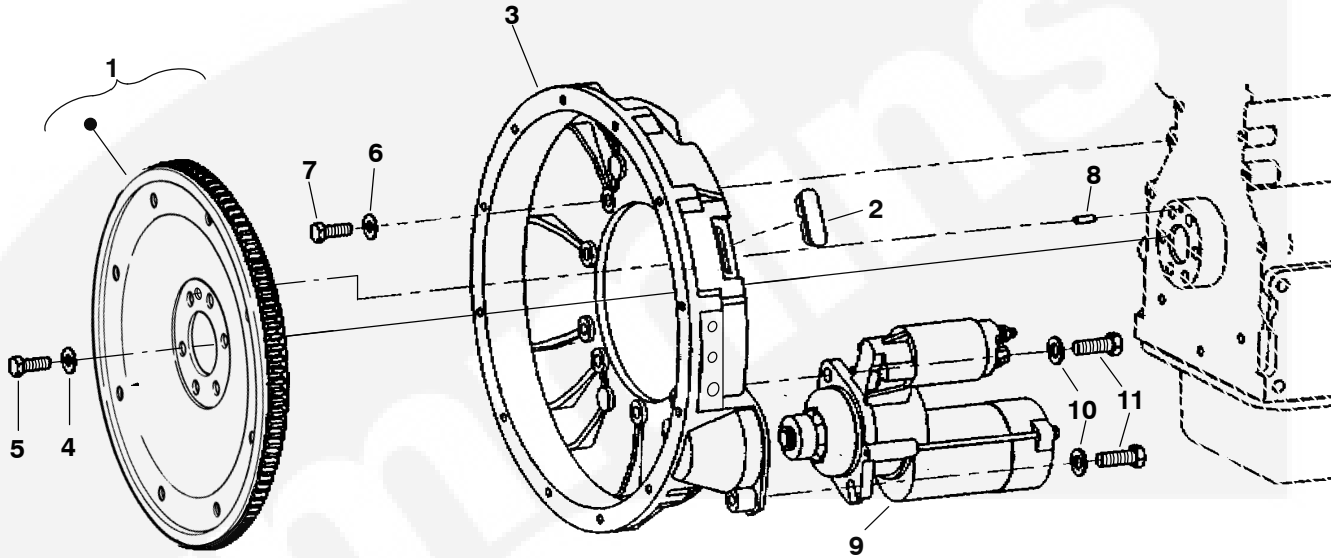


REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	185-5900	8	Tappet MDKBP, MDKBR
	185-5900	10	MDKBS
2	185-5901	8	Rod, Push MDKBP, MDKBR
	185-5901	10	MDKBS
3	185-5902	1	Camshaft Assy (Includes Parts Marked *) MDKBP, MDKBR
	185-6064	1	MDKBS
4	185-5903	1	*Camshaft MDKBP, MDKBR
	185-6065	1	MDKBS
5	185-6066	1	*Screw, Set
6	185-5558	1	*Screw, Set (MDKBS)
7	185-5905	1	*Key
8	185-5906	1	*Stopper, Camshaft

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
9	507-0012	1	*Gear, Camshaft MDKBP, MDKBR
	507-0007	1	MDKBS
10	185-2400	5	Bolt
11	185-5907	1	Gear Assy, Idle (Includes Bushing) MDKBP, MDKBR
	507-0008	1	MDKBS
12	185-5908	1	Bushing, Idle Gear MDKBP, MDKBR
	185-5908	2	MDKBS
13	406-1071	1	Collar
14	185-6072	1	Ring, External Retaining
15	120-1354	1	Shaft, Idle Gear

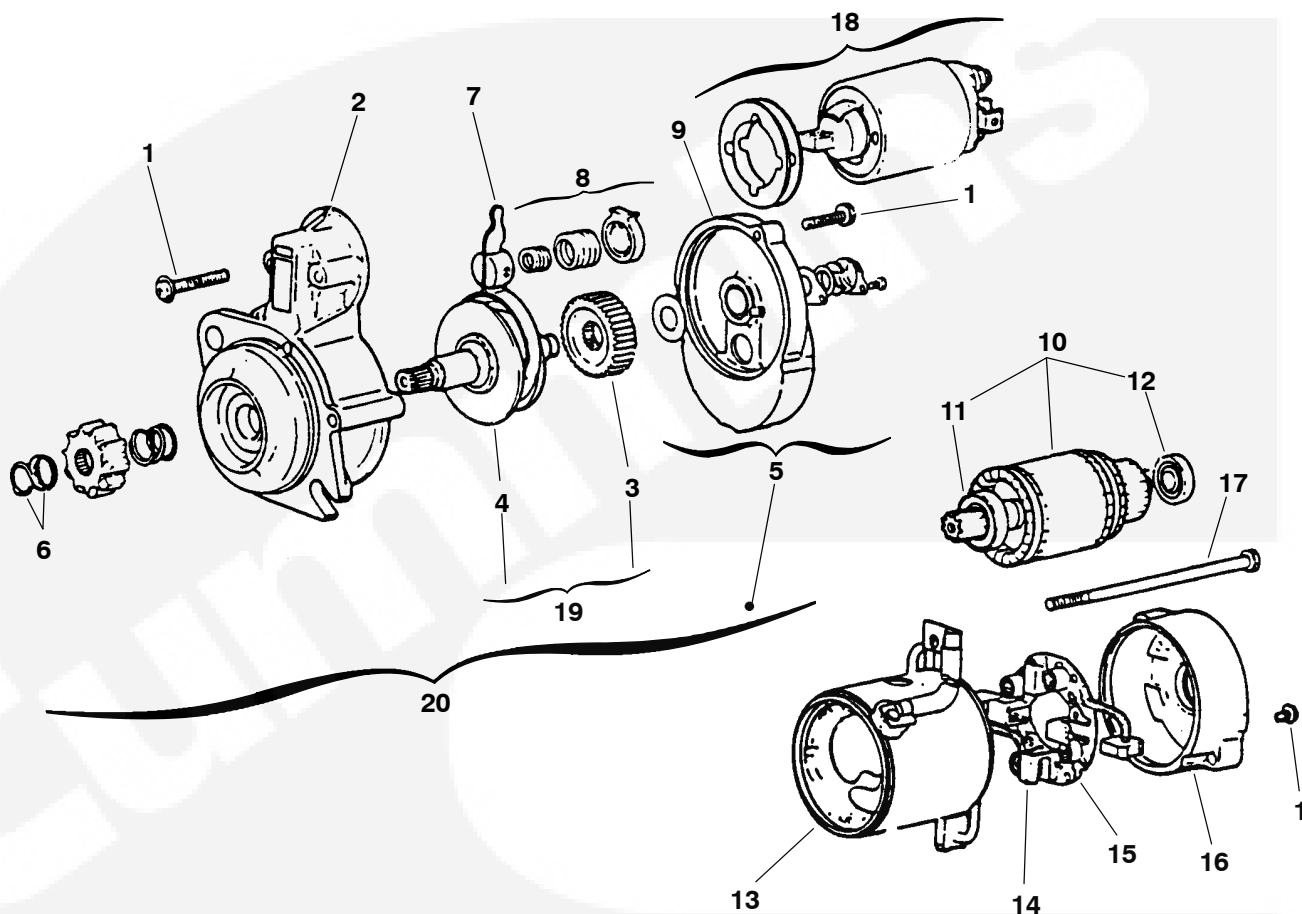
* - Parts Included in Camshaft Assy

Flywheel



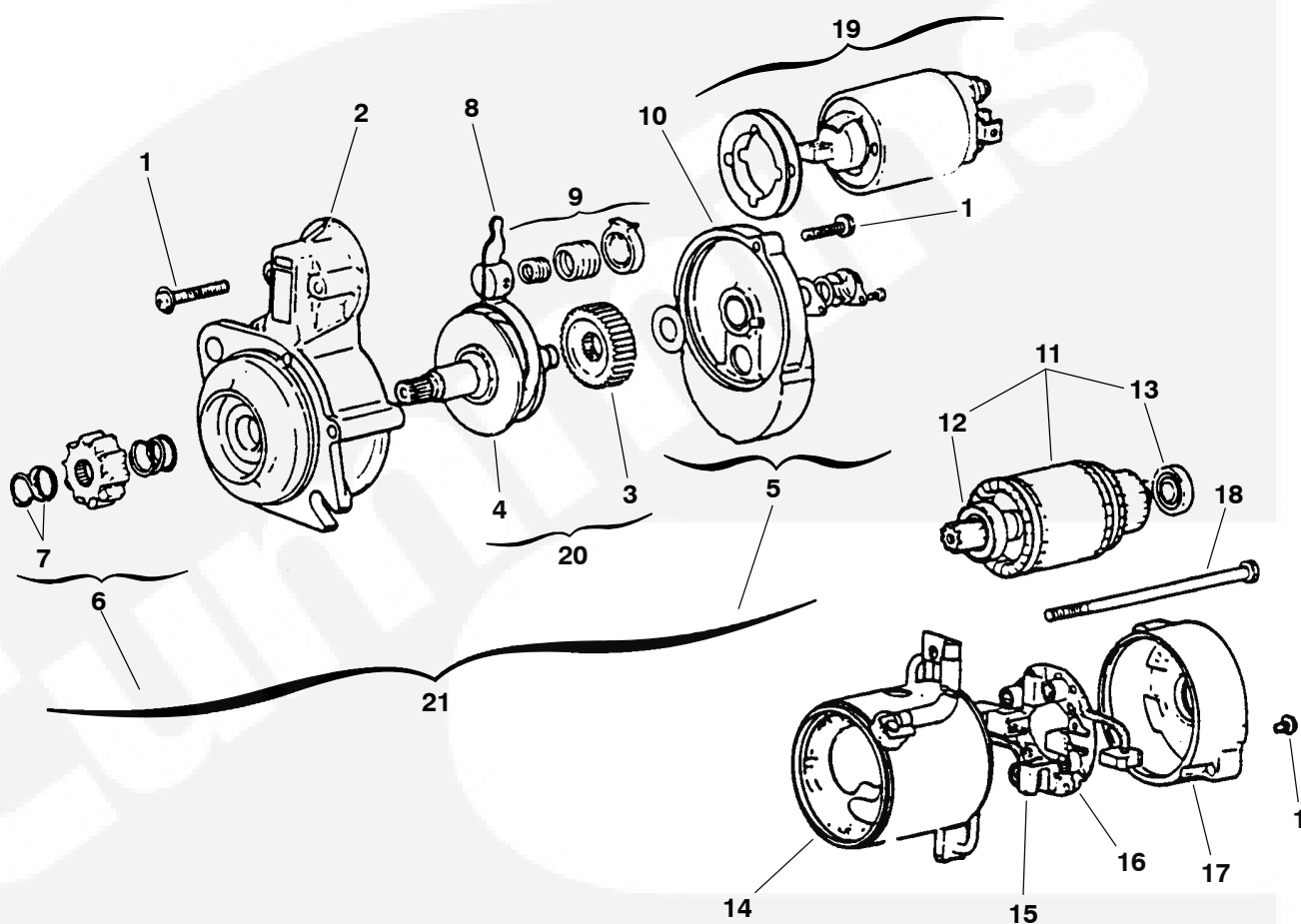
REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1			Flywheel Assy (Includes Ring Gear)	8	775-0061	1	Pin, Parallel Hard (MDKBP, MDKBR)
	104-1929	1	MDKBP, MDKBR	9			Starter (See Separate Page For Components)
	104-1927	1	MDKBS		191-1959	1	12V
2	101-0811	1	Plug, Hole		191-1550	1	24V
3	101-0821	1	Adapter, Engine	10	526-2140	2	Washer, Flat (M12)
4	526-0145	6	Washer, Flat (M12)	11	800-2113	2	Screw, Hex Head Cap (M12 x 1.75 x 35mm)
5	800-3031	6	Screw, Hex Head Cap (M12 x 1.25 x 30mm)				
6	526-0399-42	11	Washer, Flat (M10)				
7	800-3005	11	Screw, Hex Head Cap (M10 x 1.25 x 30mm)				

Starter Components (12V)



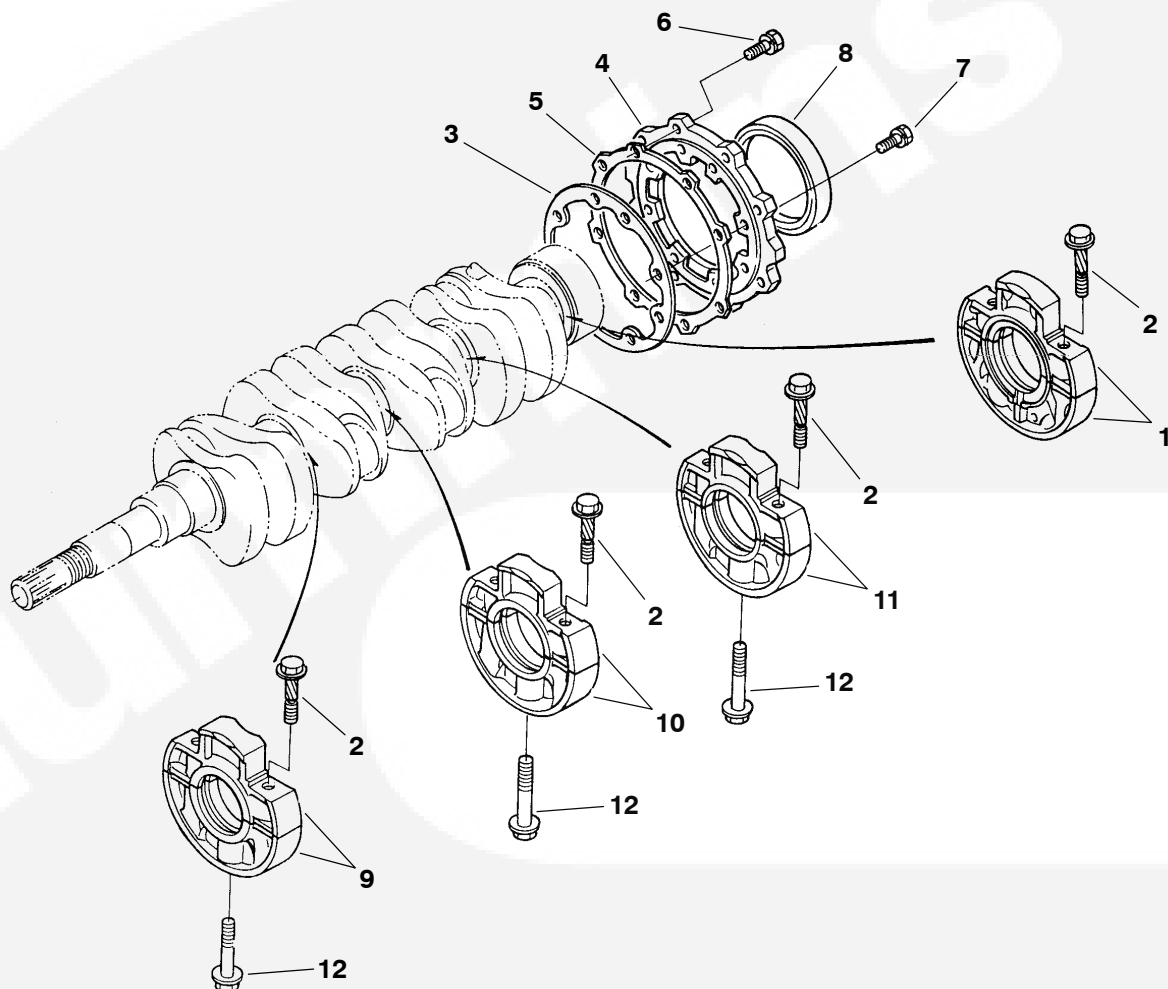
REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
	191-1959	1	Starter	11	191-1437	1	Bearing, Center
1	191-1450	4	Set, Screw	12	191-1436	1	Bearing, Rear
2	191-1449	1	Bracket Assy, Front	13	191-1992	1	Yoke Assy
3	191-1446	1	Gear	14	191-1993	1	Holder Assy, Brush
4	191-1445	1	Drive Assy	15	191-1433	1	Spring, Brush
5	191-1444	1	Cover Assy	16	191-1432	1	Bracket, Rear
6	191-1442	1	Stopper, Set	17	191-1431	1	Bolt, Set
7	191-1441	1	Lever Assy	18	191-1994	1	Switch, Solenoid
8	191-1991	1	Spring, Set	19	191-1447	1	Gear, Set
9	191-1439	1	Bracket Assy, Center	20	191-1448	1	Drive Assy
10	191-1438	1	Armature (Includes Bearings)				

Starter Components (24V)



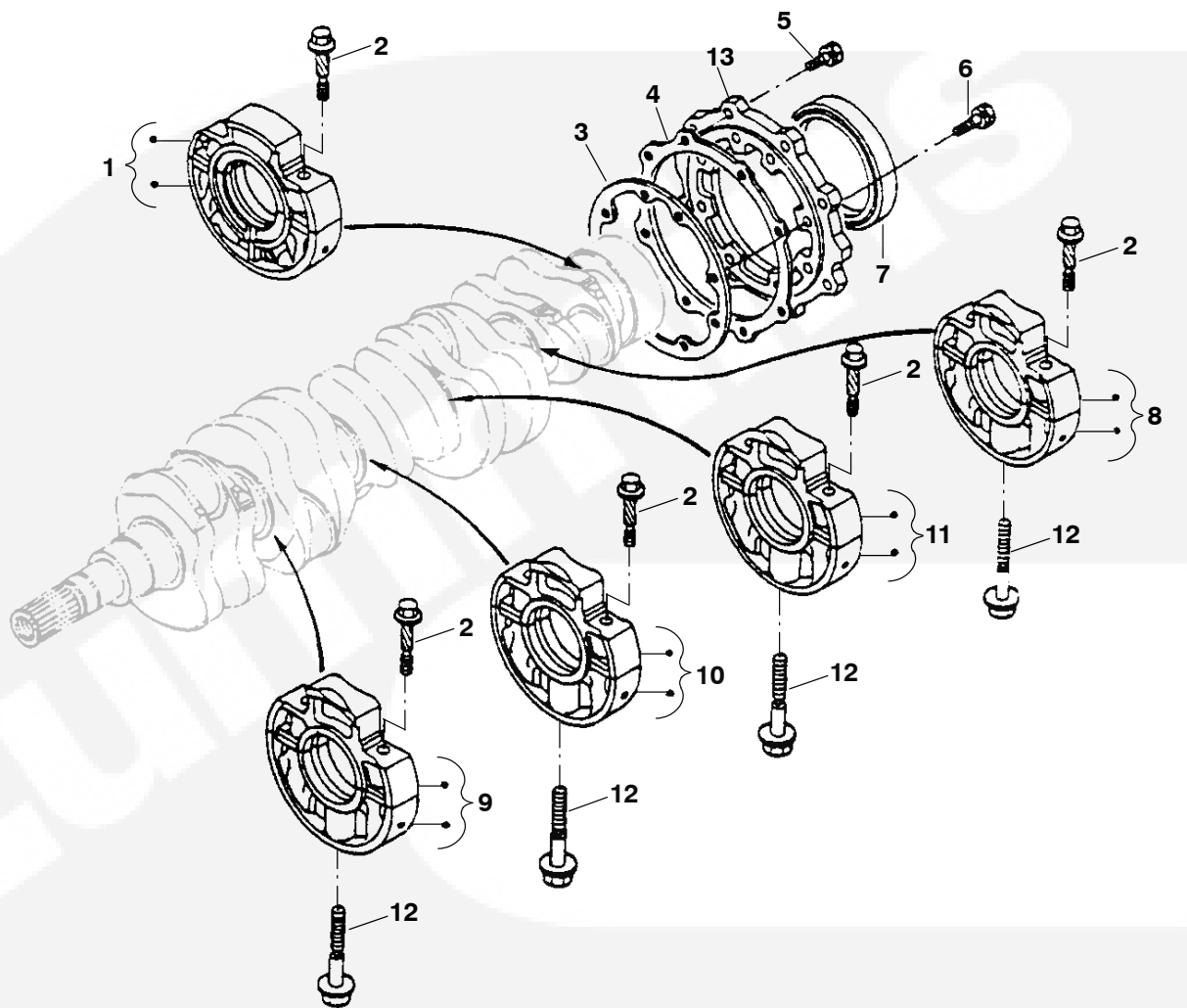
REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
	191-1550	1	Starter	11	191-1606	1	Armature (Includes Bearings)
1	191-1450	4	Set, Screw	12	191-1437	1	Bearing, Center Sleeve
2	191-1449	1	Bracket Assy, Front (Includes Bearing)	13	191-1436	1	Bearing, Rear Sleeve
3	191-1446	1	Gear	14	191-1607	1	Yoke Assy (Includes Pole Shoes, Field Coil, Positive Brushes)
4	191-1445	1	Drive	15	191-1608	1	Holder, Brush (Includes Negative Brushes)
5	191-1444	1	Cover Assy, Rear (Includes Cover Plate, Washers, Screws, and Snap Ring)	16	191-1433	4	Spring, Brush
6	191-1960	1	Pinion Set (Includes Pinion, Spring & Stopper Set)	17	191-1432	1	Bracket, Rear
7	191-1442	1	Stopper, Set (Includes Ring)	18	191-1431	1	Bolt, Set
8	191-1441	1	Lever Assy	19	191-1609	1	Switch, Solenoid (Includes Shims)
9	191-1440	1	Spring Set	20	191-1447	1	Gear, Set
10	191-1439	1	Bracket, Center	21	191-1448	1	Drive Assy

Main Bearing Housing MDKBP, MDKBR



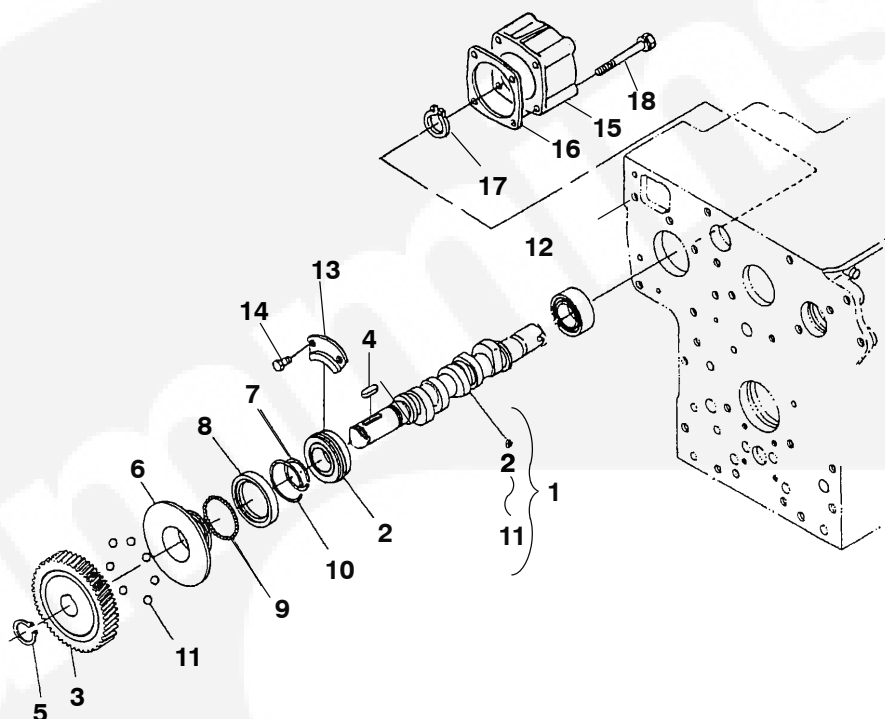
REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	185-5889	1	Housing, Main Bearing	7	185-2404	8	Bolt
2	185-5890	8	Bolt, Bearing Housing	8	185-5895	1	Seal, Oil
3	185-6766	1	Gasket, Bearing Housing	9	185-5896	1	Housing, Main Bearing
4	185-5892	1	Cover, Bearing Housing	10	185-2404	1	Housing, Main Bearing
5	185-5893	1	Gasket, Bearing Housing Cover	11	185-5898	1	Housing, Main Bearing
6	185-2403	8	Bolt	12	185-5899	3	Bolt, Bearing Housing

Main Bearing Housing MDKBS



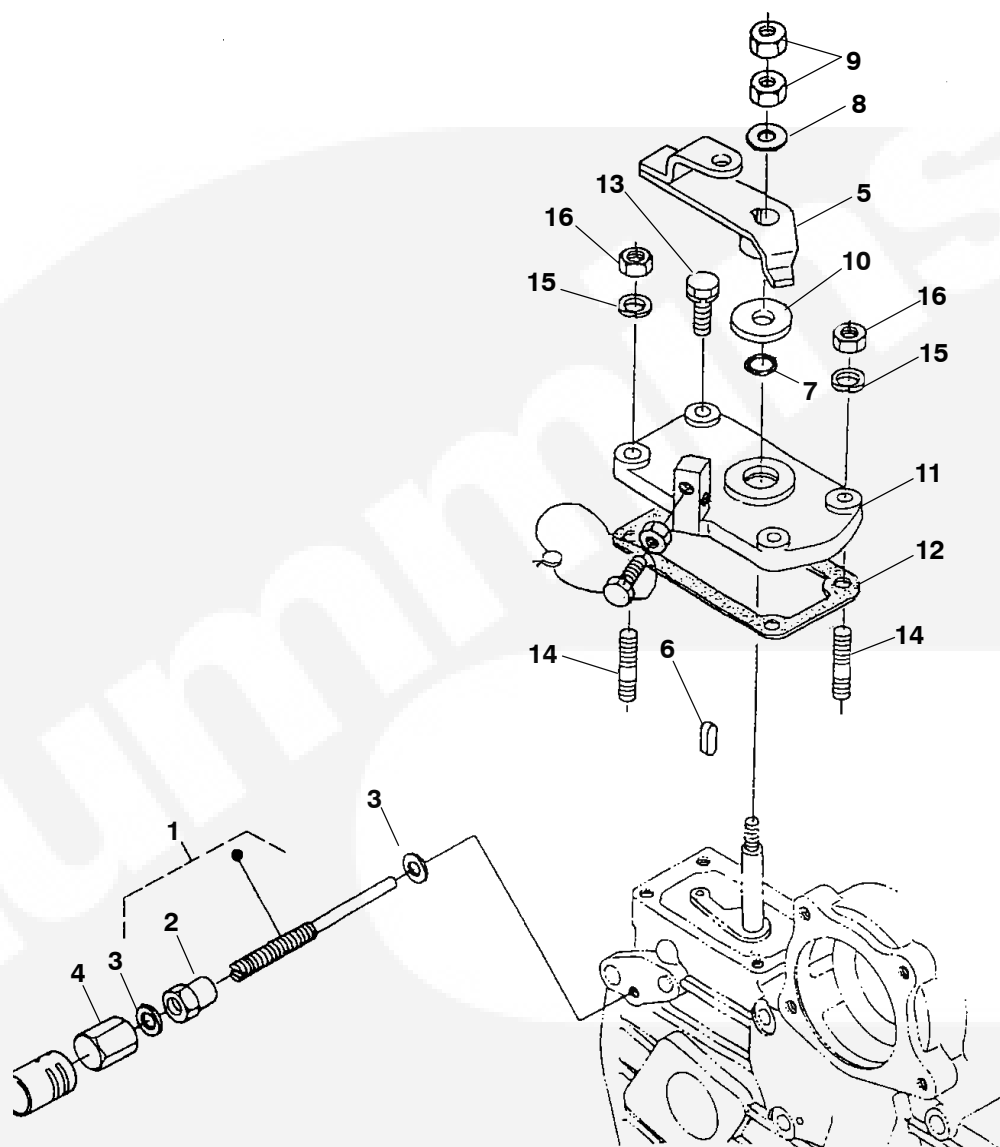
REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	185-5889	1	Housing, Main Bearing	8	232-4189	1	Housing, Main Bearing
2	185-5890	10	Bolt, Bearing Housing	9	185-5896	1	Housing, Main Bearing
3	185-6766	1	Gasket, Bearing Housing	10	185-2404	1	Housing, Main Bearing
4	185-5893	1	Gasket, Bearing Housing Cover	11	185-5898	1	Housing, Main Bearing
5	185-2403	8	Bolt	12	185-5899	4	Bolt, Bearing Housing
6	185-2404	8	Bolt	13	185-5892	1	Cover, Bearing Housing
7	185-6062	1	Seal, Oil				

Fuel Camshaft (MDKBS)



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	185-6211	1	Camshaft Assy, Fuel (Includes Parts Marked *)	10	518-0713	1	*Holder, Governor Weight
2	185-5947	1	*Bearing, Ball	11	105-0741	1	*Comp, Governor Weight
3	147-0882	1	*Gear, Injection Pump	12	185-7039	1	Weight, Governor
4	185-5949	1	*Key, Feather	13	185-5962	1	Pin, Governor
5	185-5950	1	*Clip, External Circular	14	185-6956	2	Bush, Governor
6	150-2798	1	*Sleeve, Governor	15	185-6772	1	Washer, Plain
7	518-0712	1	*Washer, Thrust	16	185-6982	1	Bearing, Ball
8	150-2800	1	*Collar, Governor Weight	17	185-5963	1	Washer, Plain
9	105-0740	7	*Shaft, Governor Weight	18	185-5676	2	Bearing, Ball

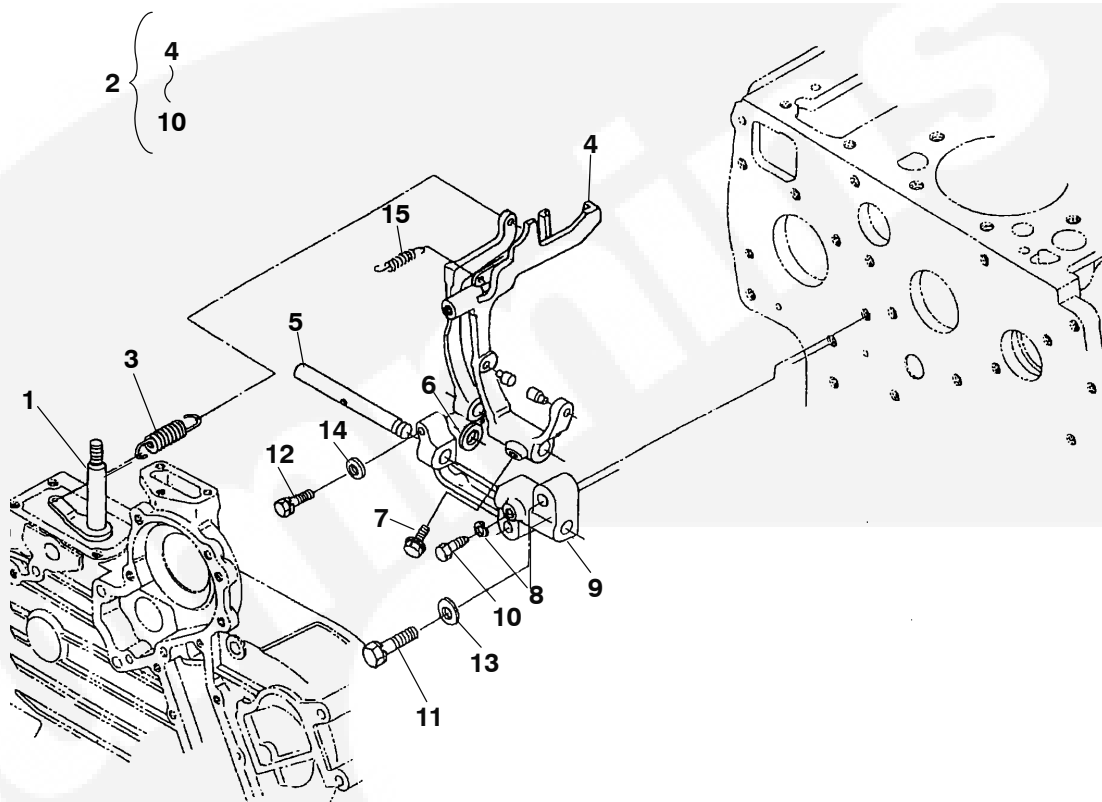
Speed Control



REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	150-2840	1	Bolt, Adjusting - Maximum Fuel
	185-6168	1	MDKBP, MDKBR
2	860-2032	1	Nut
3	185-2284	2	Gasket
4	185-5529	1	Nut
5	152-0370	1	Lever, Speed Control
6	185-5415	1	Key, Feather
7	509-0375	1	O'Ring

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
8	185-7221	1	Washer, Plain
9	185-3033	2	Nut
10	508-1191	1	Collar
11	152-0371	1	Plate, Speed Control
12	185-6180	1	Gasket
13	185-2390	2	Bolt
14	185-2105	2	Stud
15	185-6759	2	Washer, Spring
16	185-4255	2	Nut

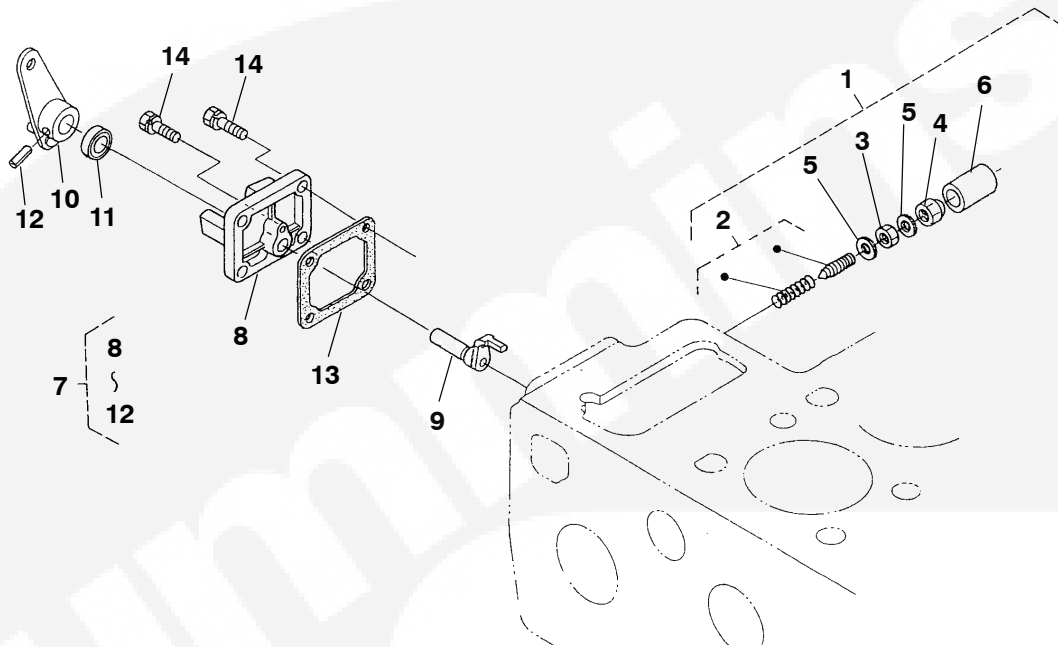
Governor



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	150-2801	1	Lever, Governor	8	185-6759	1	*Washer, Spring
	185-6156	1	MDKBP and MDKBR	9	150-2803	1	*Holder, Fork Lever
2	150-2889	1	MDKBS	10	800-6306	1	*Bolt
			Lever Assy, Fork (Includes Parts Marked *)	11	185-6781	2	Bolt
3			Spring, Governor	12	185-2392	1	Bolt
	506-0006	1	MDKBP and MDKBR	13	740-1006	2	Washer, Plain
	506-0040	1	MDKBS	14	740-1004	1	Washer, Plain
4	150-2802	1	*Lever Assy, Fork (Includes Pin)	15	506-0005	1	Spring, Start
5	150-2805	1	*Shaft, Fork Level				
6	185-6163	1	*Bolt				
7	800-6305	1	*Bolt, Flange				

* - Parts Included in Fork Lever Assy.

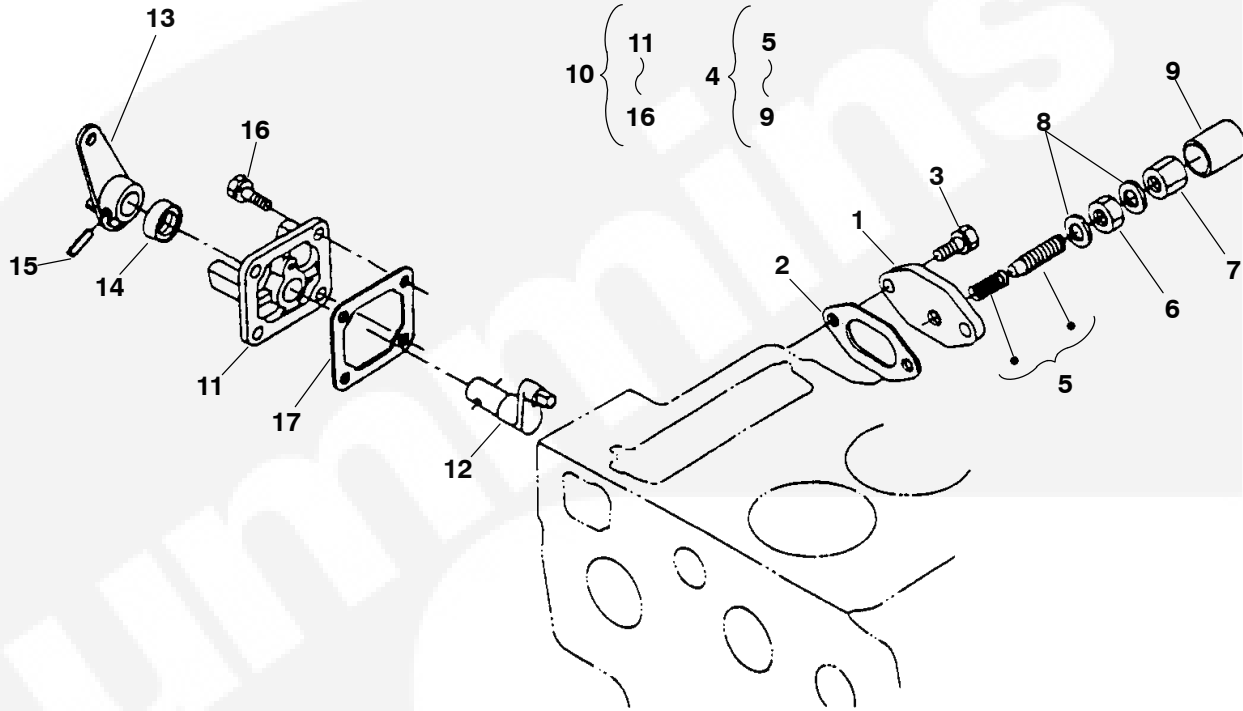
Engine Stop Lever MDKBP, MDKBR



REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	179-4996	1	Apparatus, Idling
2	150-2888	1	Assy. Bolt Adjustment
3	185-5969	1	Nut
4	185-5970	1	Nut
5	185-2338	2	Gasket
6	185-5971	1	Cap
7	185-6726	1	Assy. Lever, Engine Stop
8	185-5972	1	Gasket, Injection Pump Cover
9	185-6135	1	Shaft, Lever

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
10	185-6775	1	Lever, Engine Stop
11	185-2461	1	Seal, Oil
12	185-2351	1	Pin, Spring
13	101-0837	1	Gasket , Pump Cover
14	185-2389	4	Bolt

Engine Stop Lever MDKBS

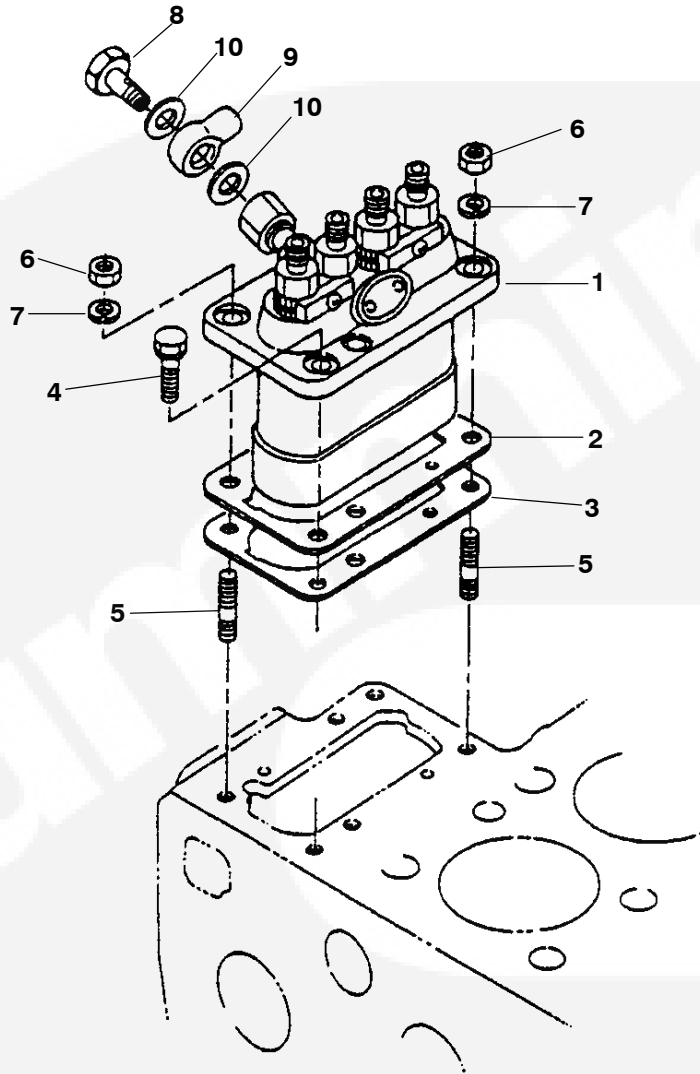


REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	185-6213	1	Cover	11	185-5972	1	# Cover, Injection Pump
2	185-7041	1	Gasket	12	185-6135	1	# Shaft, Lever
3	185-2388	2	Bolt	13	185-6775	1	# Lever, Engine Stop
4	179-4996	1	Bolt Assy, Adjusting – Governor Adjust (Includes Parts Marked *)	14	185-2461	1	# Seal, Oil
5	150-2888	1	*Bolt, Adjusting	15	185-2351	1	# Pin, Spring
6	185-5969	1	*Nut	16	185-2389	4	# Bolt
7	185-5970	1	*Nut, Cap	17	101-0837	1	Gasket
8	185-2338	2	*Gasket				
9	185-5971	1	*Cap				
10	185-6726	1	Lever Assy, Engine Stop (Includes Parts Marked #)				

* – Parts Included in Adjusting Bolt Assy.

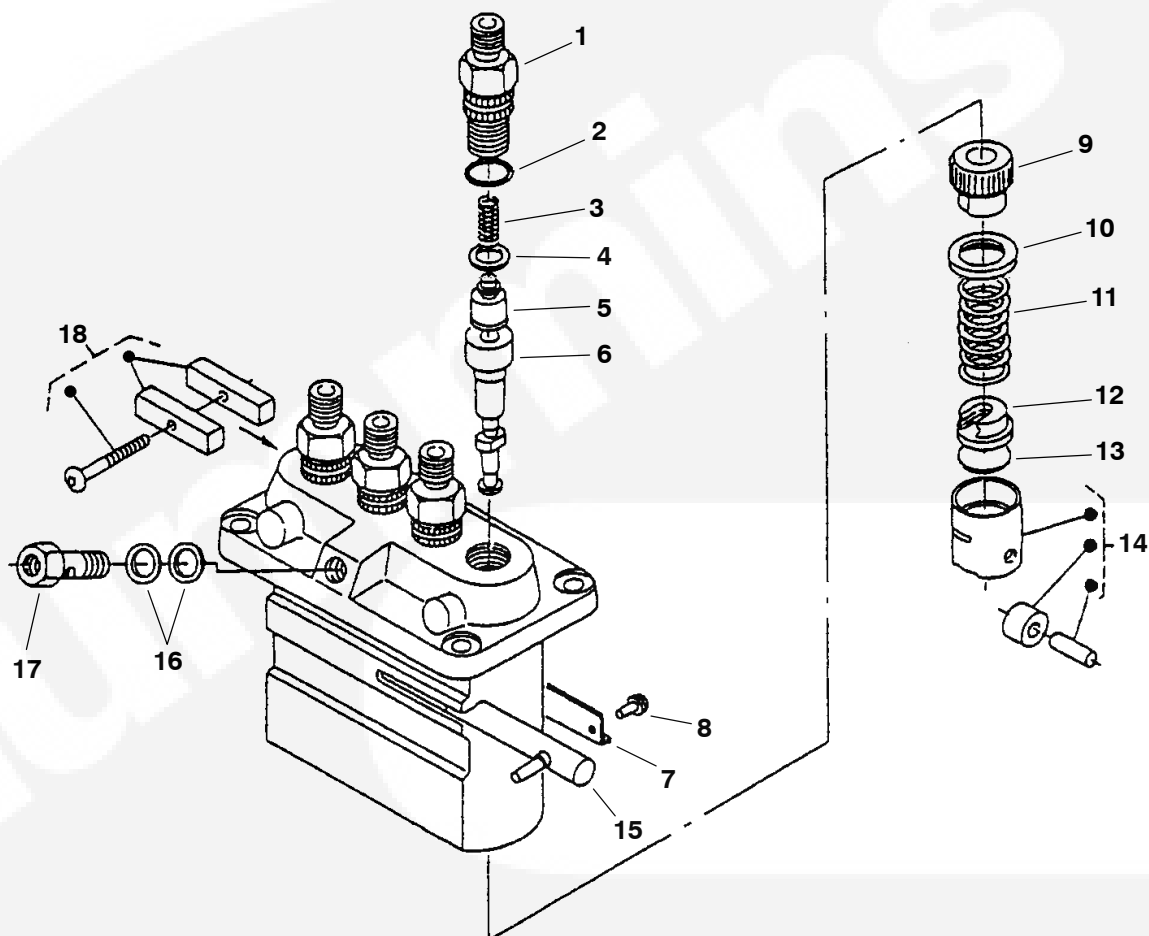
– Parts Included in Engine Stop Lever Assy.

Injection Pump MDKBP, MDKBR



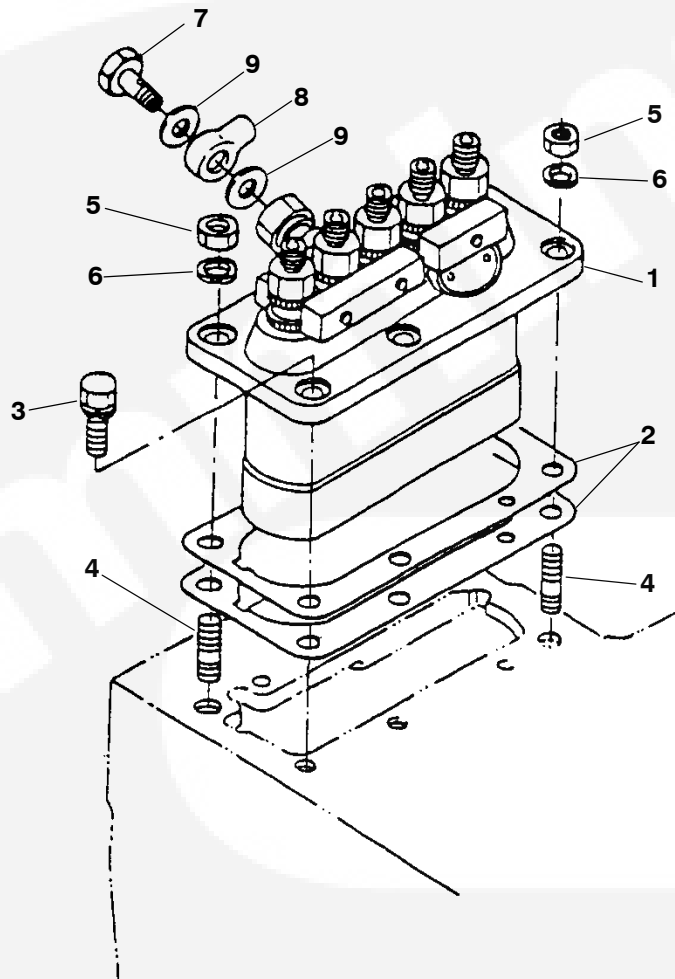
REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	147-0902	1	Pump Assy, Injection (See Separate Page for Components)	4	185-2402	4	Bolt
2			Shim	5	185-2106	2	Stud
	185-6756	2	.20mm	6	185-2367	2	Nut
	185-6757	2	.25mm	7	185-6957	2	Washer, Spring
3	185-6758	1	Shim,30mm	8	185-6777	1	Screw, Follow
				9	185-6418	1	Joint, Eye
				10	185-2578	2	Gasket

Injection Pump Components MDKBP, MDKBR



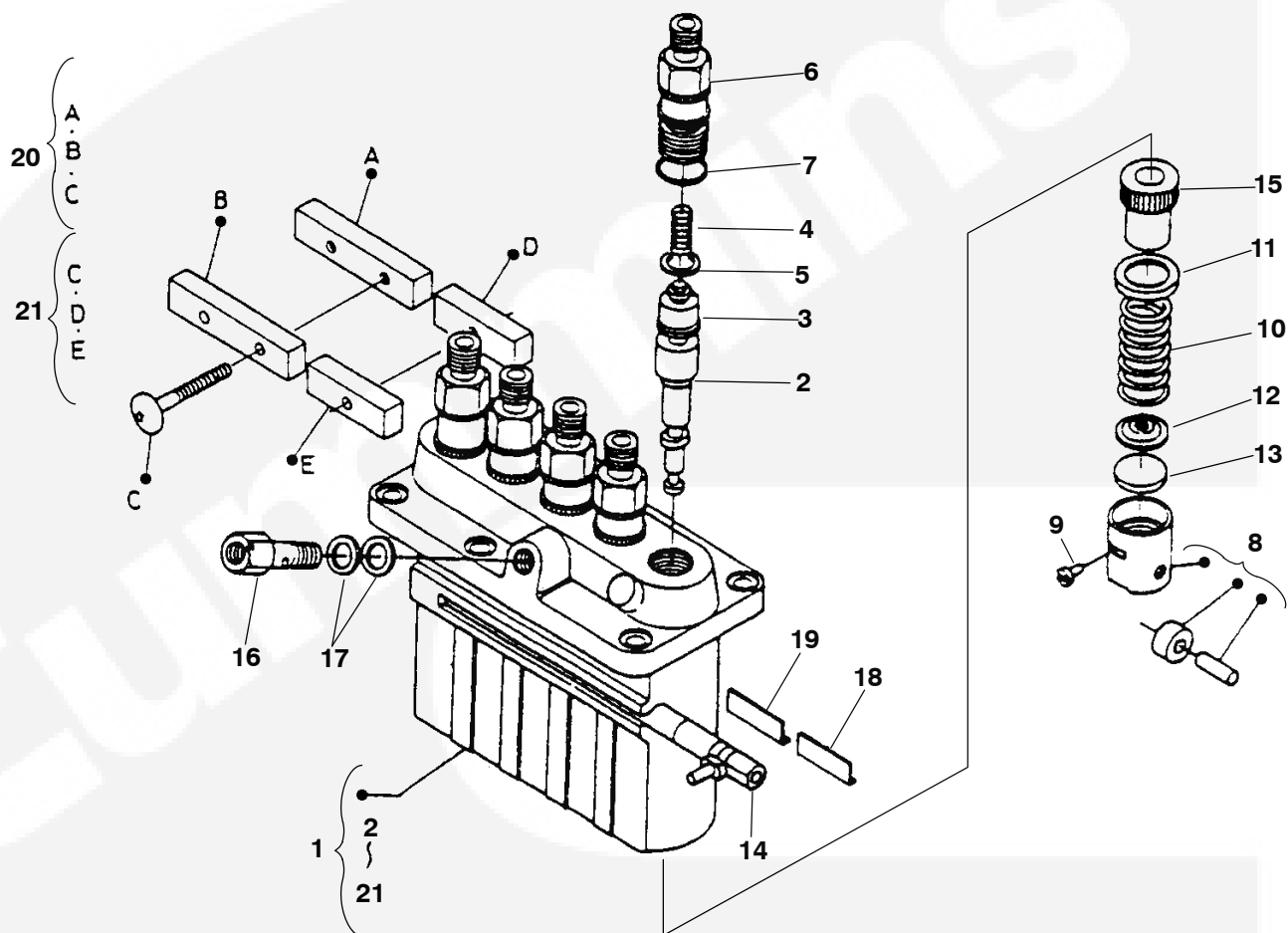
REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
	147-0902	1	Pump Assy, Injection	10	185-6148	4	Seat, Upper Spring
1	185-6142	4	Holder, Delivery Valve	11	185-6147	4	Spring, Plunger
2	185-6155	4	O'Ring	12	185-6778	4	Seat, Lower Spring
3	185-6218	4	Spring, Delivery Valve	13	185-6151	4	Shim
4	185-6141	4	Gasket, Delivery Valve	14	185-6144	4	Tappet Assy
5	185-6217	4	Valve, Delivery	15	185-6150	1	Rack, Control
6	147-0904	4	Plunger, Pump	16	185-6154	2	Gasket
7	185-6146	2	Plate	17	185-6153	1	Screw, Hollow
8	185-6145	4	Pin, Tappet Guide	18	185-6143	2	Lock Assy, Plate
9	185-6152	4	Sleeve, Control				

Injection Pump MDKBS



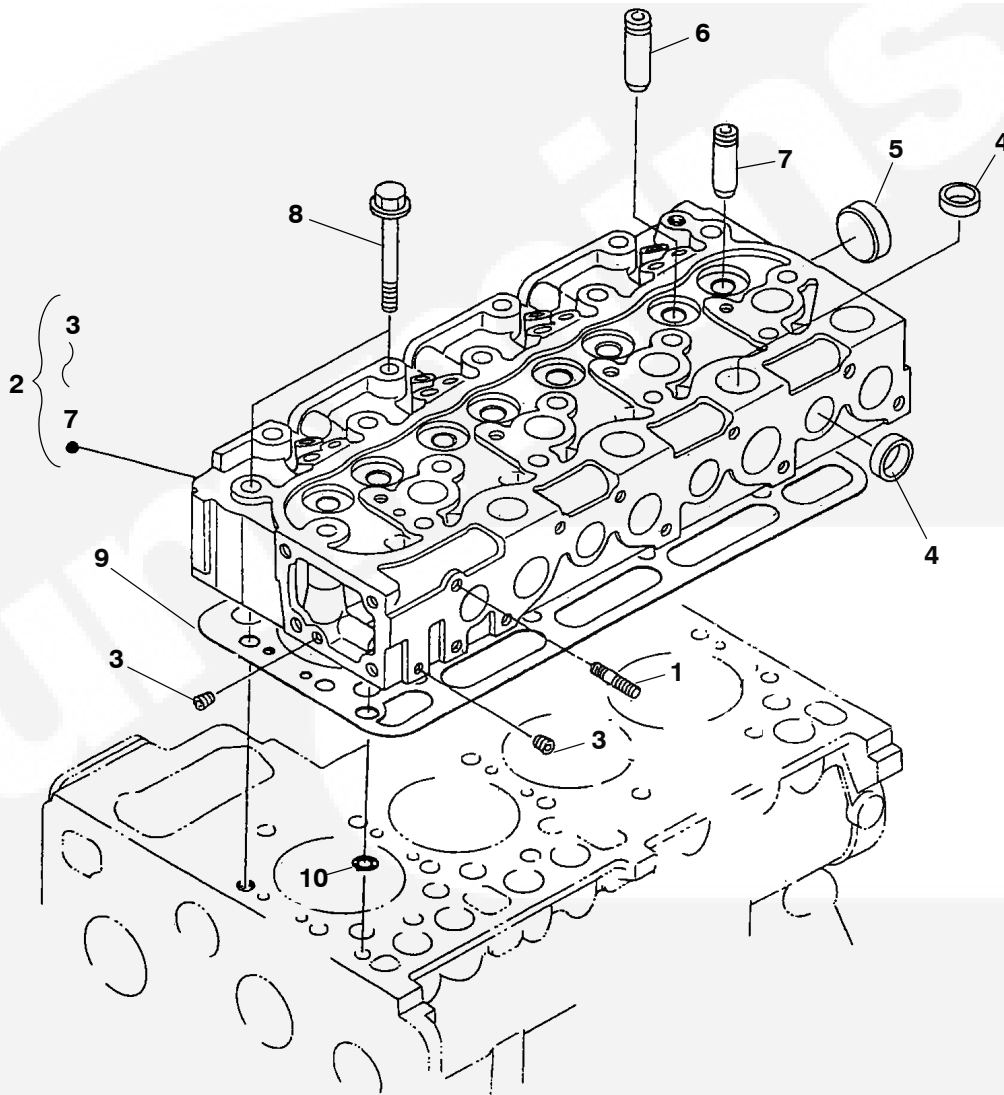
REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	147-0903	1	Pump Assy, Injection (See Separate Page for Components)	3	185-2402	4	Bolt
2			Shim	4	185-2362	2	Stud
	185-6796	1	.20mm	5	185-2367	2	Nut
	185-6091	1	.25mm	6	185-6957	2	Washer, Spring
	185-6795	1	.30mm	7	185-7045	1	Screw, Follow
				8	185-6418	1	Joint
				9	185-2578	2	Gasket

Injection Pump Components MDKBS



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	185-7443	1	Pump Assy, Injection	12	185-6778	5	Seat, Lower Spring
2	185-6216	5	Plunger, Pump	13	185-6151	5	Shim
3	185-6217	5	Valve, Delivery	14	185-6219	1	Rack, Control
4	185-6218	5	Spring, Delivery Valve	15	185-6152	5	Sleeve, Control
5	185-6141	5	Gasket, Delivery Valve	16	185-6153	1	Screw, Hollow
6	185-6142	5	Holder, Delivery Valve	17	185-6154	2	Gasket
7	185-6155	5	O'Ring	18	185-6146	1	Plate
8	185-6144	5	Tappet Assy	19	185-6994	1	Plate
9	185-6145	5	Pin, Tappet Guide	20	185-6143	1	Plate Assy, Lock
10	185-6147	5	Spring, Plunger	21	185-6220	1	Plate Assy, Lock
11	185-6148	5	Seat, Upper Spring				

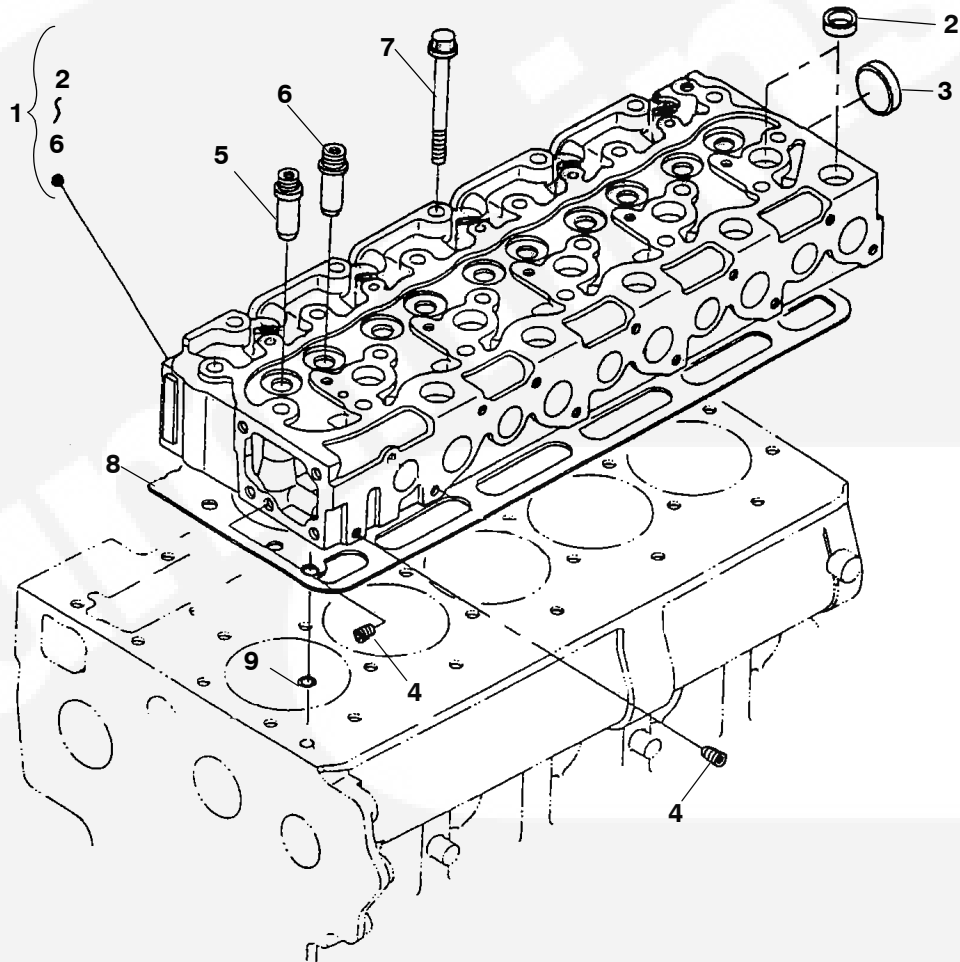
Cylinder Head MDKBP, MDKBR



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	185-2106	1	MDKBP	6	185-5862	4	*Guide, Inlet Valve
	185-6048	1	MDKBR	7	110-3987	4	*Guide, Exhaust Valve
2			Head Assy, Cylinder (Includes Parts Marked *)	8	185-5865	18	Bolt, Cylinder Head
	185-6763	1	MDKBP	9	185-6764	1	MDKBP
	185-5860	1	MDKBR		185-5866	1	MDKBR
3	185-2188	2	*Plug	10	185-2095	1	O'Ring
4	185-5861	12	*Cap, Sealing				
5	185-2412	1	*Cap, Sealing				

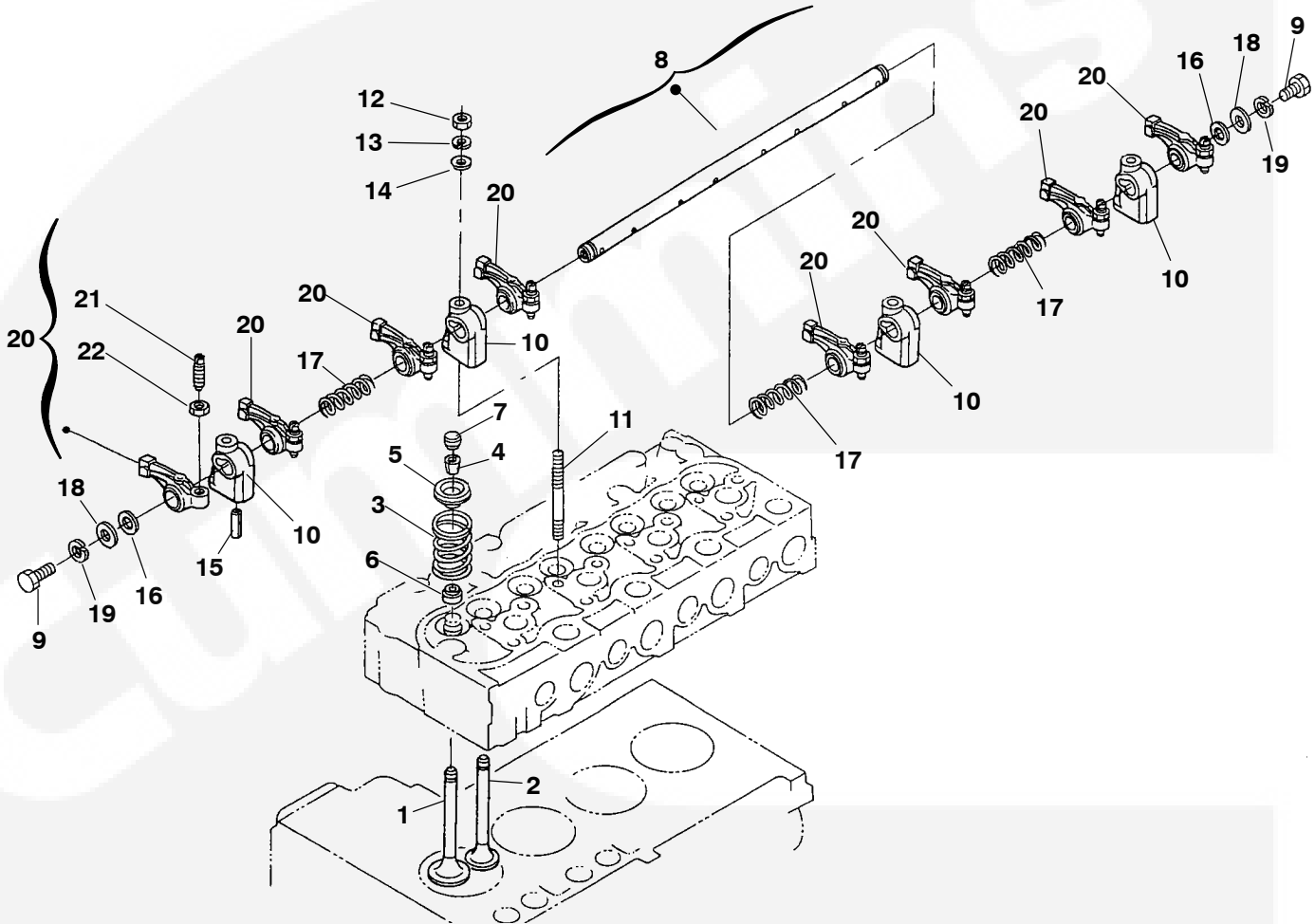
* - Parts Included in Cylinder Head Assy.

Cylinder Head MDKBS



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	185-6049	1	Head Assy, Cylinder (Includes Parts Marked #)	7	185-5865	22	Bolt, Cylinder Head
2	185-5861	15	#Cap, Sealing	8	185-6050	1	Gasket, Cylinder Head
3	185-2412	1	#Cap, Sealing	9	185-2095	1	O'Ring
4	185-2188	2	#Plug	# - Parts Included in Cylinder Head Assy.			
5	185-5862	5	#Guide, Inlet Valve				
6	110-3987	5	#Guide, Exhaust Valve				

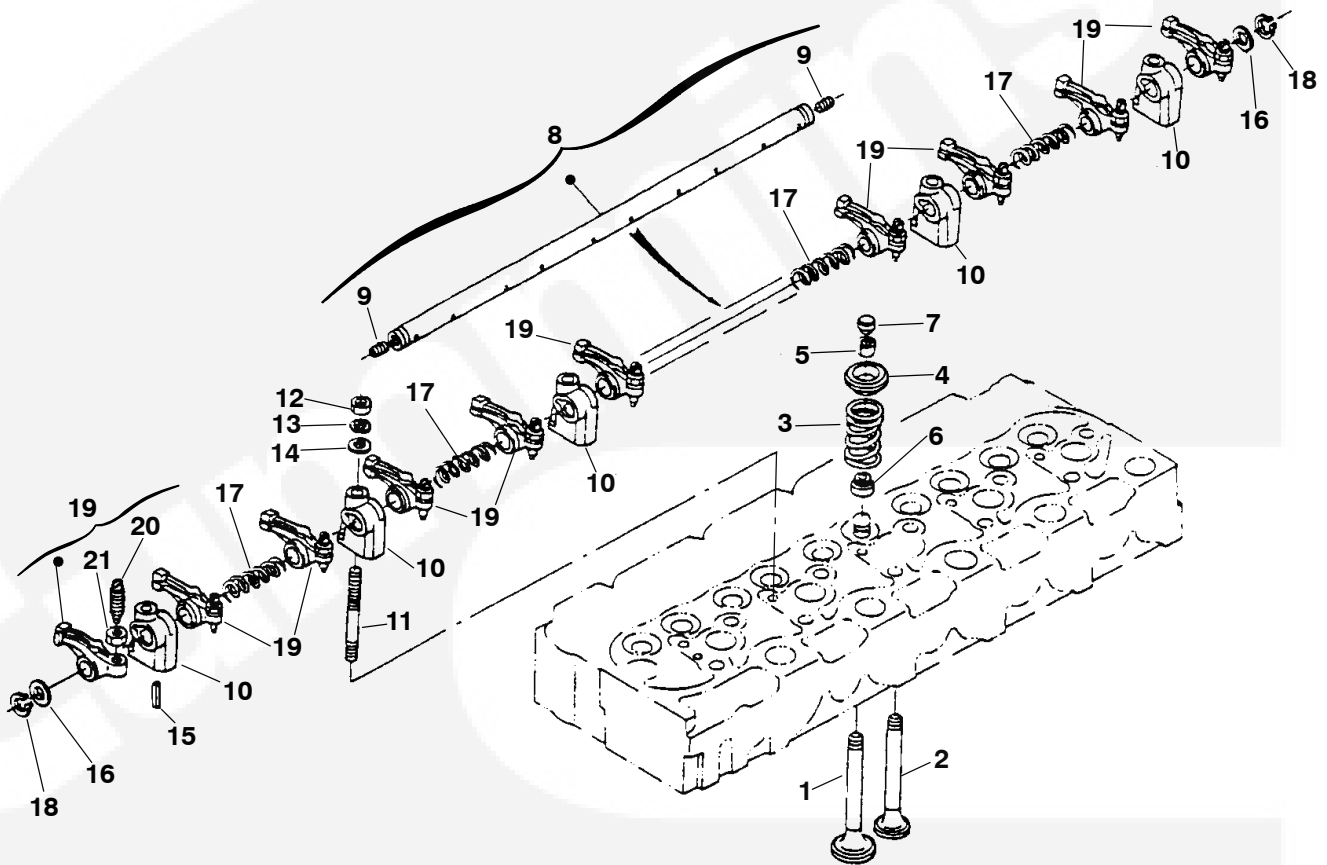
Rocker Arm MDKBP, MDKBR



REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	185-6107	4	Valve, Inlet
2	185-6108	4	Valve, Exhaust
3	185-6016	8	Spring, Valve
4	185-6017	8	Retainer, Valve Spring
5	110-3948	8	Collet, Valve Spring
6	185-6018	8	Seal, Valve Stem
7	185-6019	8	Cap, Valve
8	185-6020	1	Assy, Rocker Arm Shaft (Includes Set Screws)
9	800-6327	2	Screw, Set
10	185-6022	4	Bracket, Rocker Arm
11	185-6023	4	Stud
12	185-2367	4	Nut

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
13	185-6957	4	Washer, Spring
14	181-9016	4	Washer, Flat
15	185-6789	1	Pin, Spring
16	185-6025	2	Washer, Rocker Arm Shaft
17	185-6026	3	Spring, Rocker Arm
18	185-7221	2	Ring, External Retaining
19	185-6957	2	Washer, Spring
20	185-6028	8	Assy, Rocker Arm (Includes Screw and Nut)
21	185-6029	8	Screw, Adjusting
22	185-6030	8	Nut

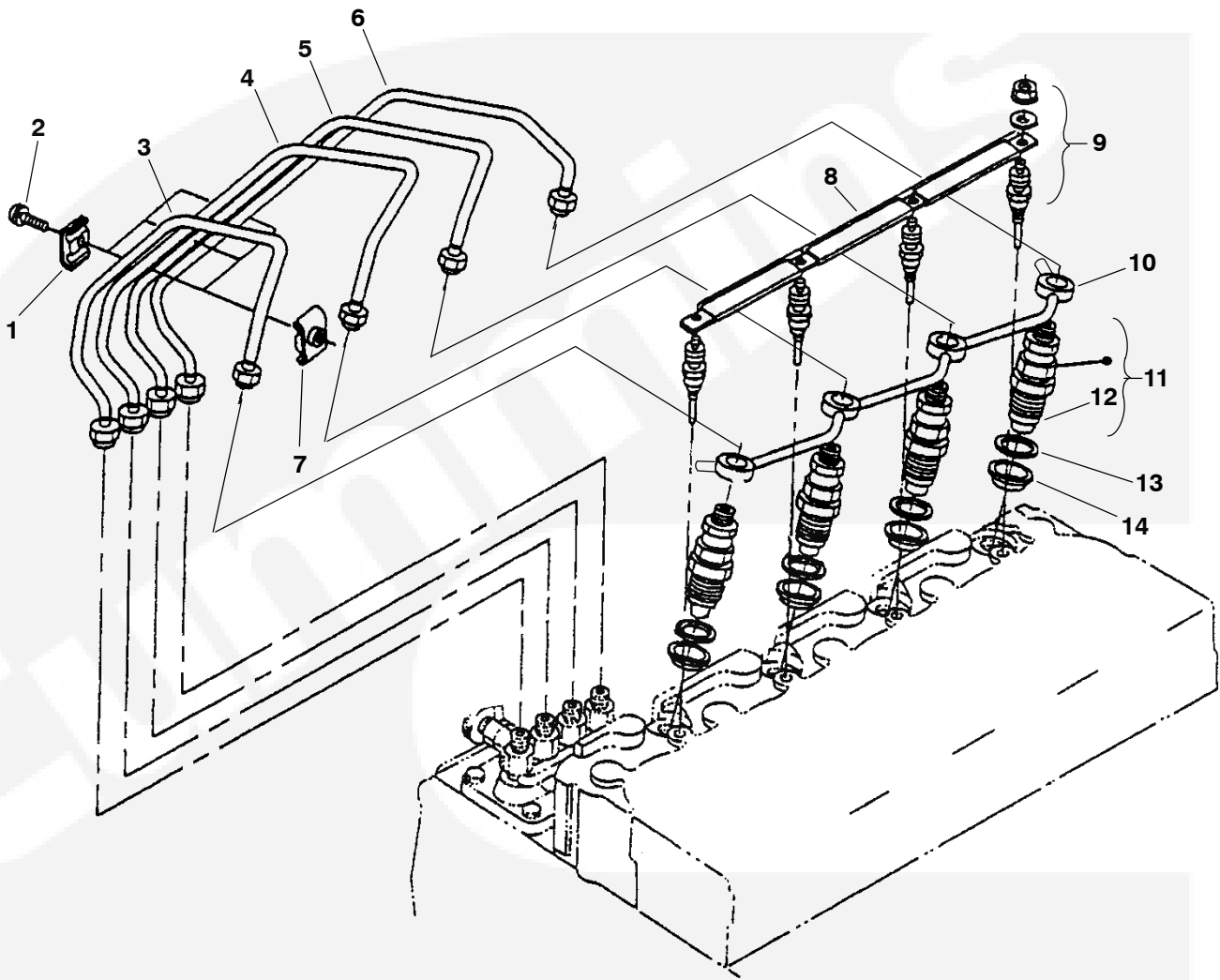
Rocker Arm MDKBS



REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	185-6107	5	Valve, Inlet
2	185-6108	5	Valve, Exhaust
3	185-6016	10	Spring, Valve
4	185-6017	10	Retainer, Valve Spring
5	185-3948	10	Collet, Valve Spring
6	185-6018	10	Seal, Valve Stem
7	185-6019	10	Cap, Valve
8	185-7063	1	Assy, Rocker Arm Shaft (Includes Set Screws)
9	185-6242	2	Screw, Set
10	185-6022	5	Bracket, Rocker Arm
11	185-6023	5	Stud

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
12	185-2367	5	Nut
13	185-6957	5	Washer, Spring
14	740-1006	5	Washer, Flat
15	185-6789	1	Pin, Spring
16	185-6025	2	Washer
17	185-6026	4	Spring, Rocker Arm
18	185-6027	2	Ring, External Retaining
19	185-6028	10	Assy, Rocker Arm (Includes Screw and Nut)
20	185-6029	10	Screw, Adjusting
21	185-6030	10	Nut

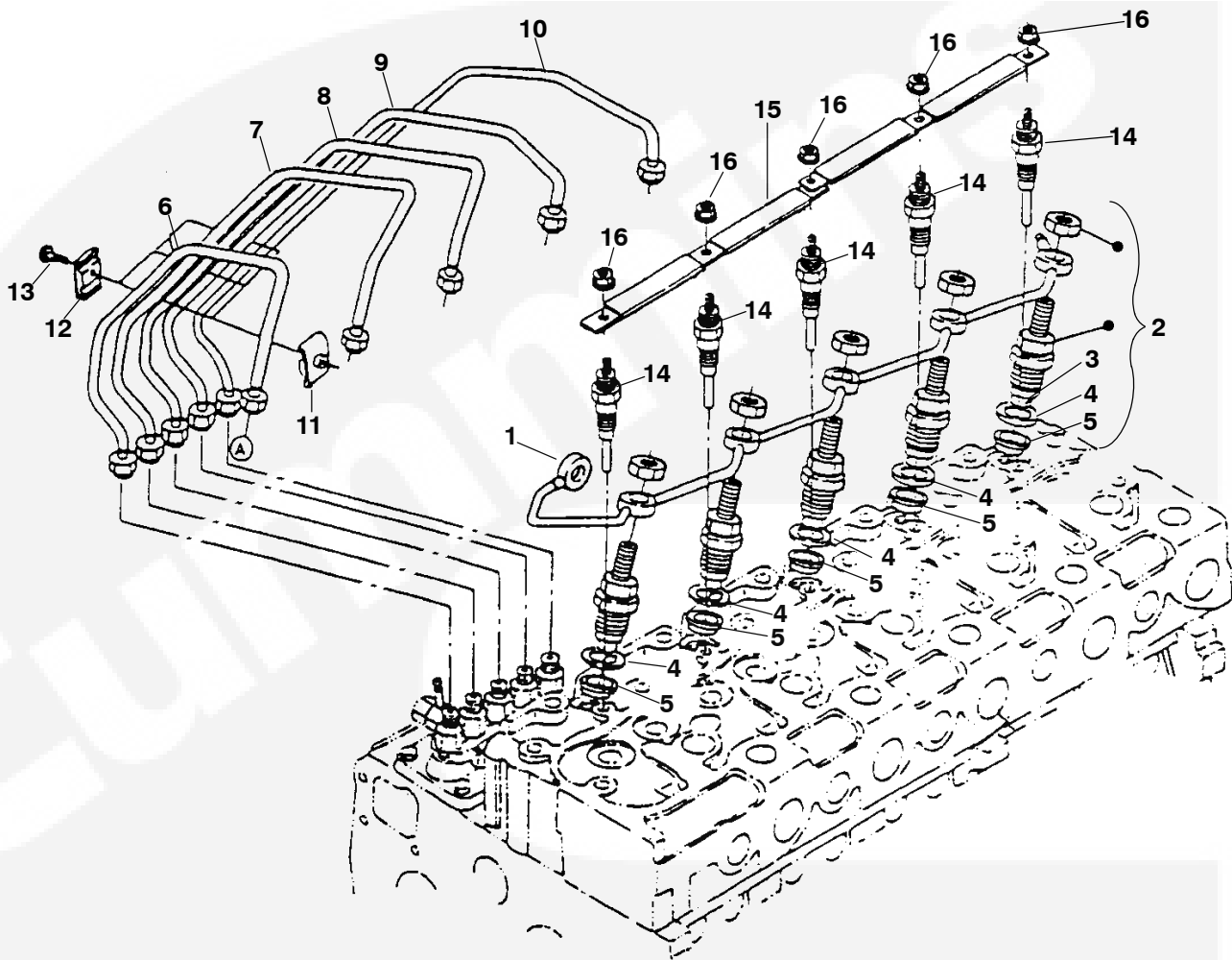
Nozzle Holder MDKBP, MDKBR



REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	185-2345	3	Clamp, Pipe
2	185-2385	3	Screw (With Washer)
3	185-5986	1	Pipe, Injection
4	185-5987	1	Pipe, Injection
5	501-0886	1	Pipe, Injection
6	185-5989	1	Pipe, Injection
7	185-5612	3	Clamp, Pipe
8	185-5991	1	Cord, Glow Plug
9			Assy, Glow Plug (Includes Nut and Washer)
	185-5990	4	12V
	185-6725	4	24V

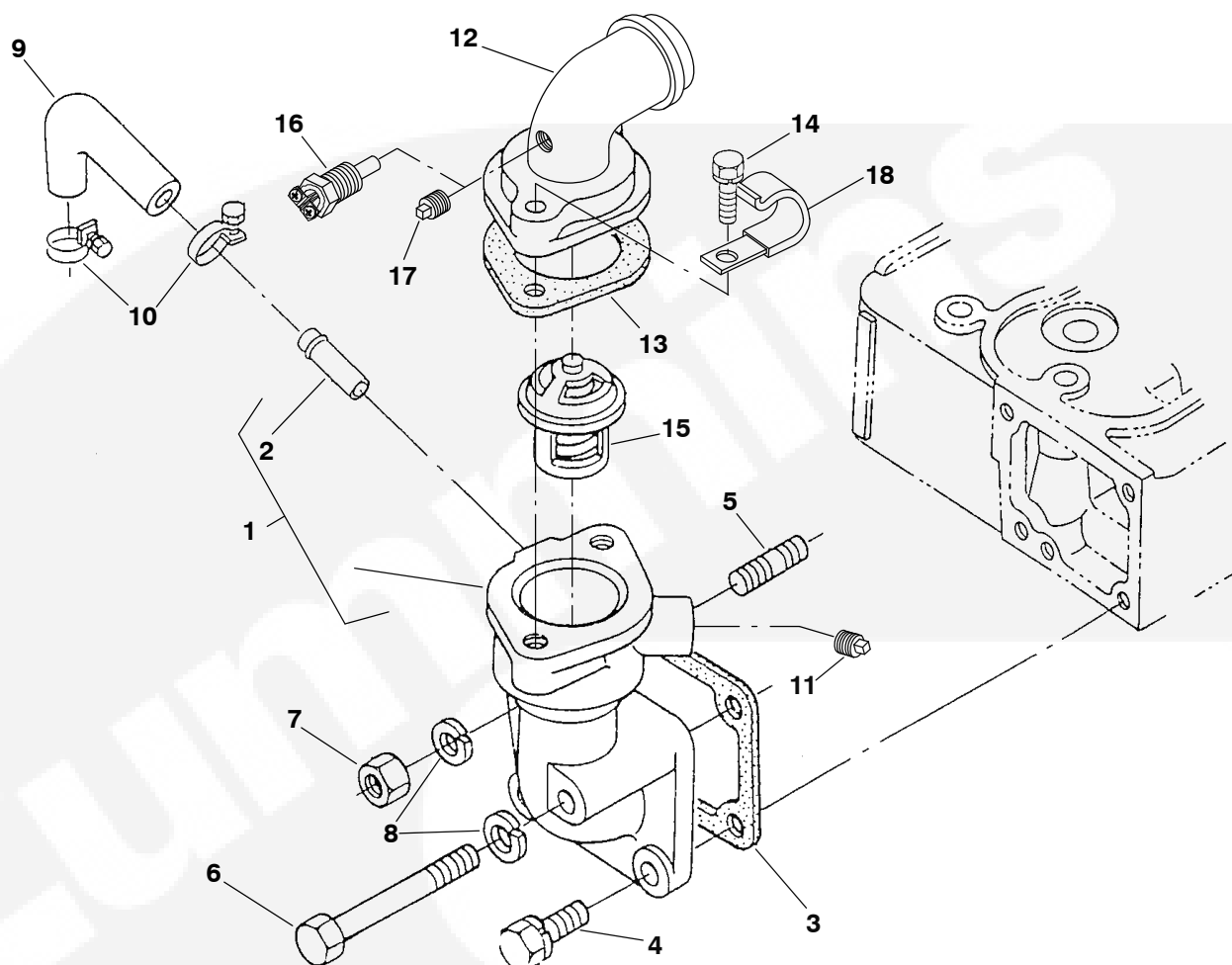
REF NO.	PART NO.	QTY USED	PART DESCRIPTION
10	185-6731	1	Pipe, Overflow
11	185-6094	4	Holder Assy, Nozzle (Includes Nozzle)
12	185-6095	4	Nozzle
13	185-5337	4	Gasket, Nozzle
14	185-5985	4	Seal, Heat

Nozzle Holder and Glow Plug MDKBS



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	185-7050	1	Pipe, Overflow	10	185-6100	1	Pipe, Injection
2	185-6094	5	Holder Assy, Nozzle (Includes Nozzle, Gasket and Heat Seal)	11	185-5612	5	Clamp, Pipe
3	185-6095	5	Nozzle	12	185-2345	5	Clamp, Pipe
4	185-5337	5	Gasket	13	185-2385	5	Screw (With Washer)
5	185-5985	5	Seal, Heat	14			Plug, Glow
6	185-6096	1	Pipe, Injection		185-5990	5	12V
7	185-6097	1	Pipe, Injection		185-6725	5	24V
8	185-6098	1	Pipe, Injection	15	185-6225	2	Cord, Glow Plug
9	185-6099	1	Pipe, Injection	16	185-5615	5	Nut, Flange

Water Outlet Flange

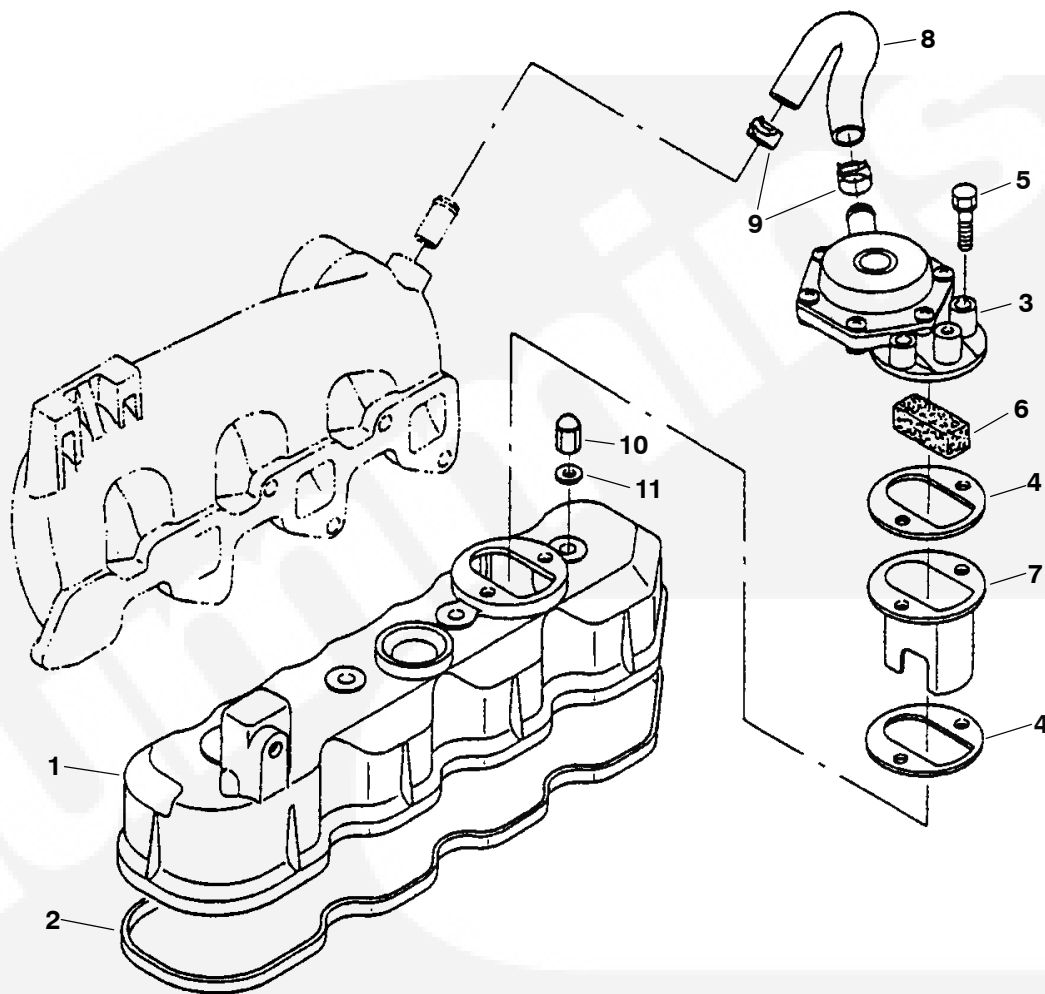


REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
			*Kit, Sender (Includes Water Temperature Sender)	12	185-6003	1	Cover, Thermostat
	300-5040	1	Negative Ground	13	185-6004	1	Gasket, Thermostat Cover
	300-5041	1	Isolated Ground	14	185-2565	2	Bolt
1	185-6788	1	Flange, Water Outlet (Includes Pipe)	15	185-6005	1	Thermostat
2	185-6103	1	Pipe, Water Return	16			+ Sender, Water Temperature (E2)
3	185-5999	1	Gasket		193-0318	1	Negative Ground
4	185-2401	2	Bolt		193-0457-01	1	Isolated Ground
5	185-6033	1	Stud	17	505-0110	1	Plug, Square Head Pipe (3/8") MDKBP, MDKBR
6			Bolt	18	518-0515	1	Clip, Wire (MDKBS)
	185-5443	1	MDKBP, MDKBR				
	185-7060	1	MDKBS				
7	185-2367	1	Nut				
8	185-6957	2	Washer, Spring				
9	185-6000	1	Pipe, Water Return				
10	185-6001	2	Band, Pipe				
11	185-5826	1	Plug				

* - Kit Also Includes Oil Pressure Sender Listed on Oil Pan Page.

+ - Water Temperature Sender ties to E2-2 Iso Harness (See Isolated Ground 338-4200-01)

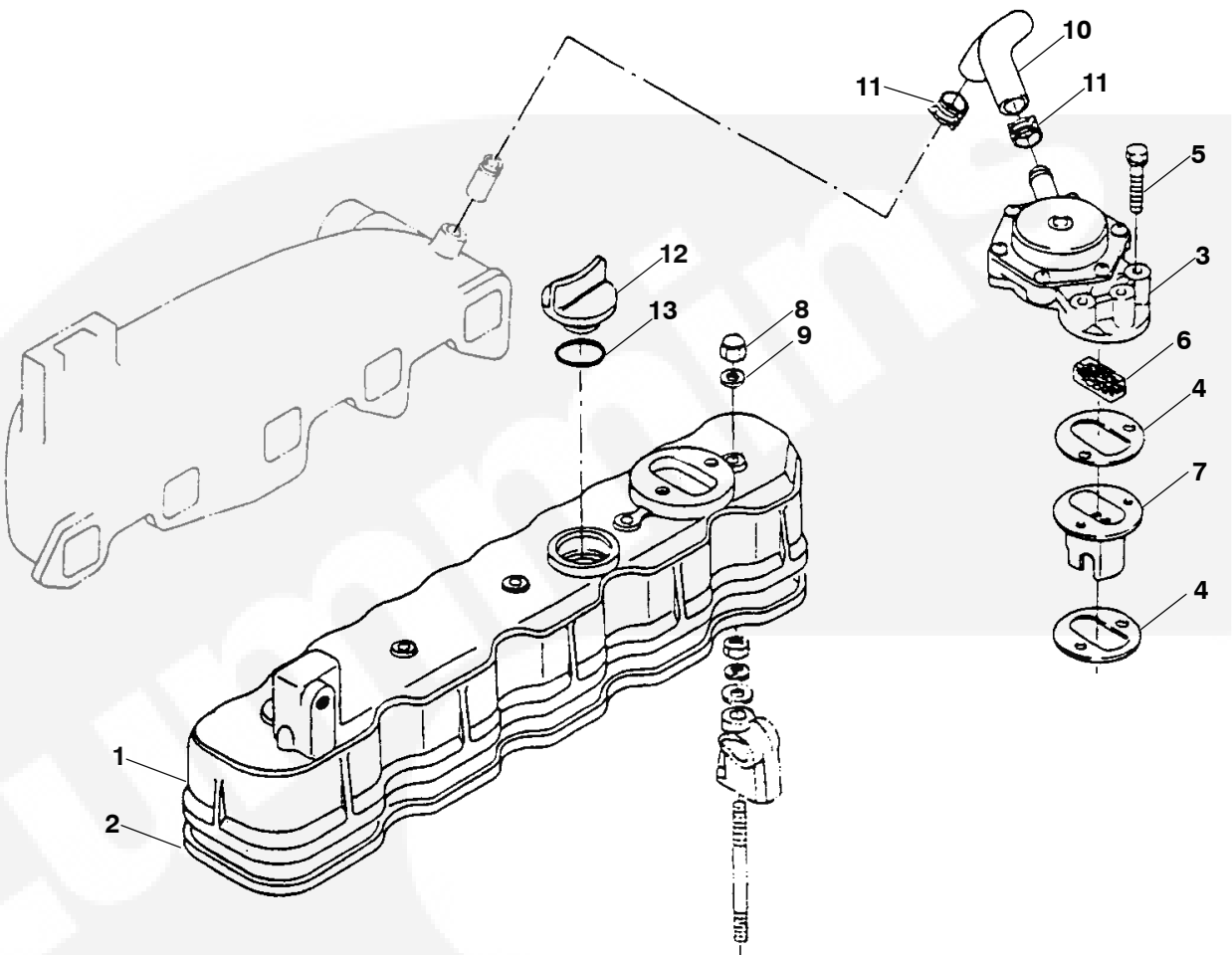
Cylinder Head Cover MDKBP, MDKBR



REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	185-6716	1	Cover, Cylinder Head
2	185-5887	1	Gasket, Cover
3	185-6720	1	Breather
4	185-6717	2	Gasket, Breather
5	718-1040	2	Bolt
6	185-6721	1	Element, Breather

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
7	185-6718	1	Plate
8	185-6719	1	Tube, Breather
9	185-6722	2	Clamp, Hose
10	185-5888	4	Nut, Cap
11	185-2338	4	Gasket

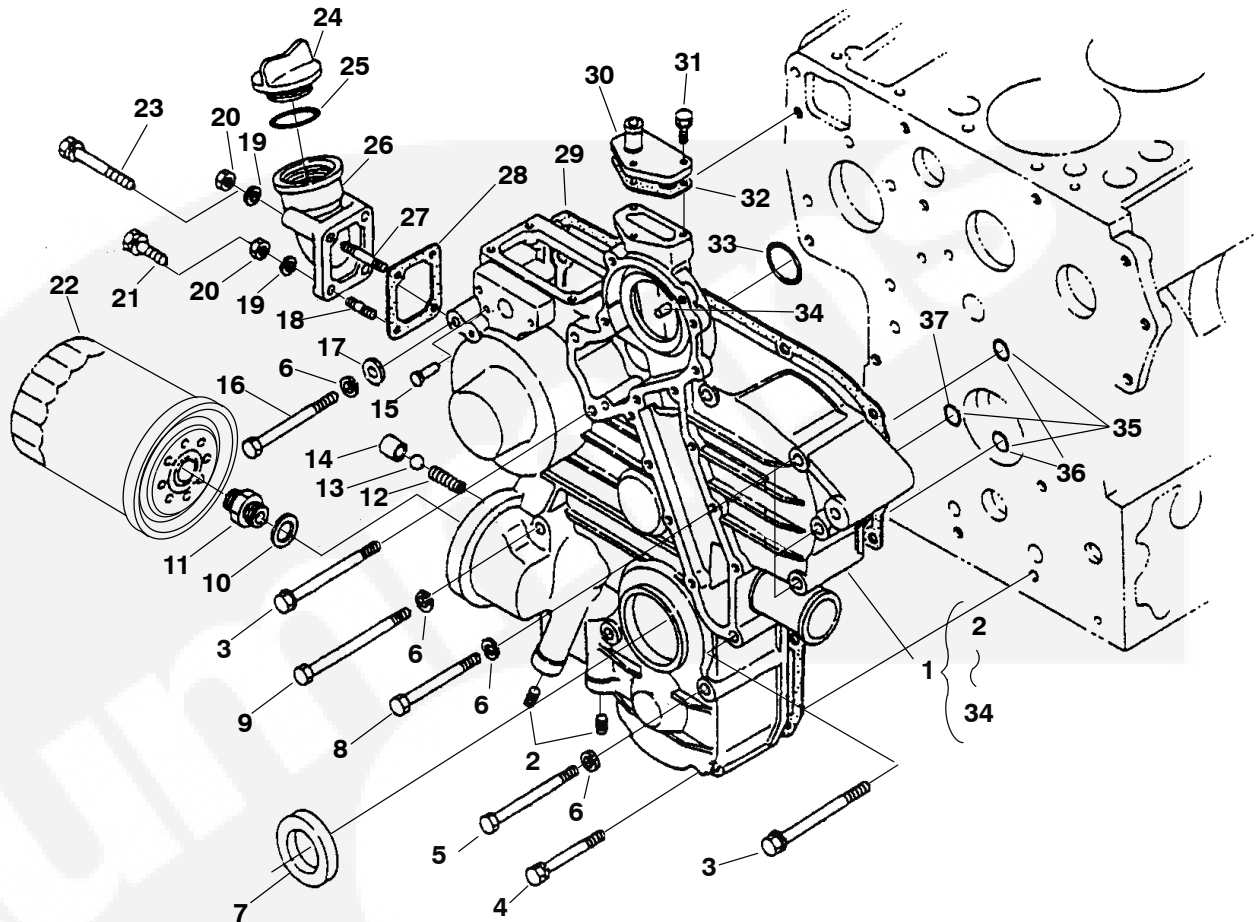
Cylinder Head Cover MDKBS



REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	185-6804	1	Cover, Cylinder Head
2	185-6054	1	Gasket, Cover
3	185-6720	1	Breather
4	185-6717	2	Gasket
5	718-1040	2	Bolt
6	185-6721	1	Element, Breather
7	185-6718	1	Plate

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
8	185-5888	5	Nut, Cap
9	185-2338	5	Gasket
10	185-6719	1	Tube, Breather
11	185-6722	2	Clamp
12	181-9000	1	Cover, Oil Fill
13	509-0414	1	O'Ring

Gearcase

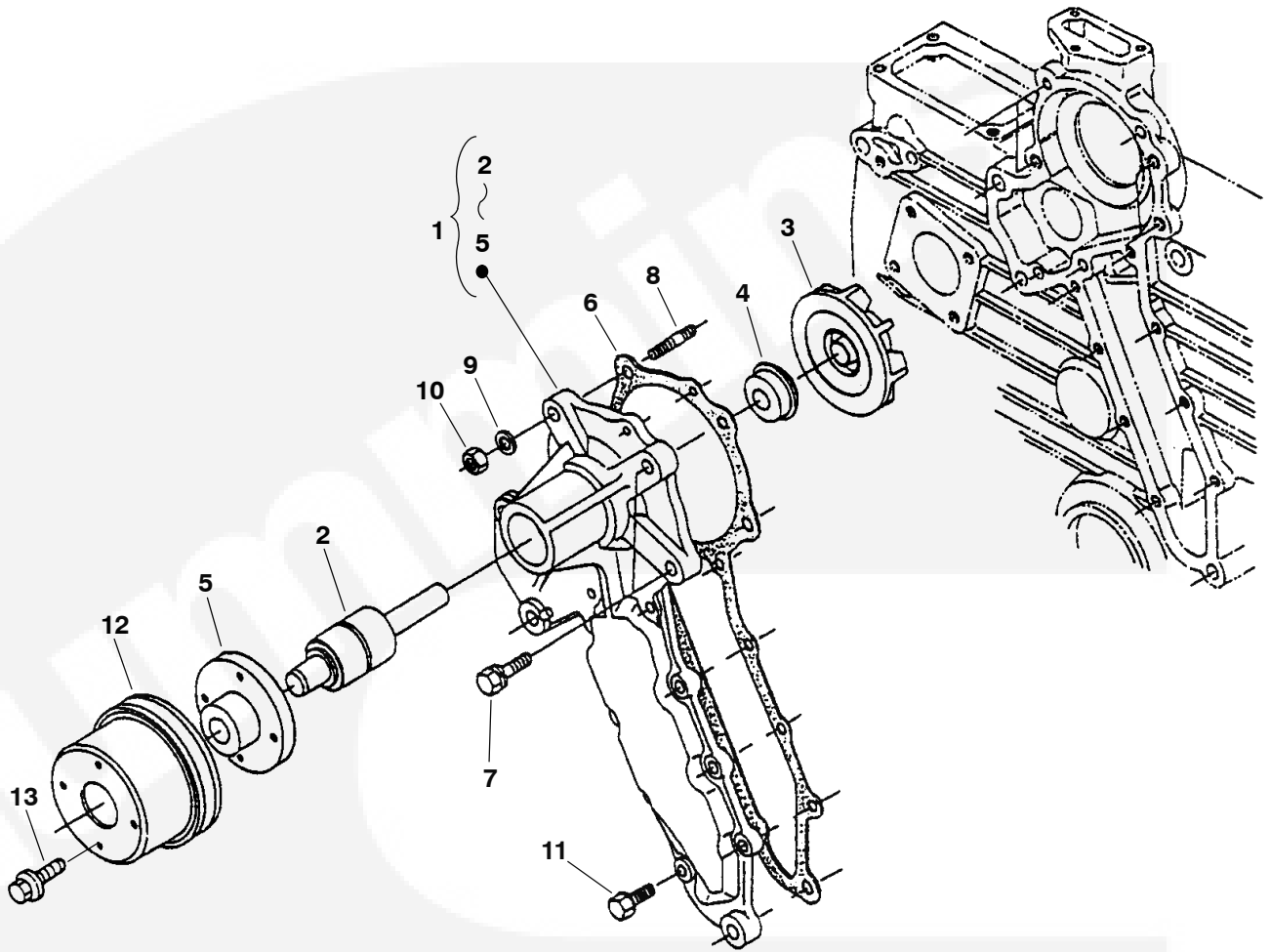


REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1			Gearcase Assy (Includes Parts Marked *)
	185-6765	1	MDKBP, MDKBR
	185-6765	1	MDKBS
2	185-5505	2	*Plug
3	185-5874	3	Bolt
4	185-2405	2	Bolt
5	185-5873	2	Bolt
6	185-6957	10	Washer, Spring
7	185-6204	1	Seal, Oil (MDKB S)
8	185-5443	5	Bolt
9	185-6078	2	Bolt
10	509-0415	1	Washer, Flat
11	505-2256	1	Joint, Pipe
12	185-5877	1	Spring
13	185-6711	1	Ball
14	185-5878	1	Seat, Valve
15	185-2102	1	*Pin, Start Spring
16	185-6961	1	Bolt
17	740-1006	1	Washer, Flat
18	185-6127	2	Stud (Bottom)(MDKBP, MDKBR)
19	185-6759	4	Washer, Spring(MDKBP, MDKBR)

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
20	185-4255	4	Nut (MDKBP, MDKBR)
21	185-2389	2	Bolt (Bottom)(MDKBS)
22	122-0810	1	Filter, Oil
23	185-5833	2	Bolt (Top)(MDKBS)
24	185-5407	1	Plug, Oil Fill
25	509-0414	1	O'Ring
26	185-6124	1	Flange, Oil Fill
27	185-6126	2	Stud (Top)(MDKBP, MDKBR)
28	185-6125	1	Gasket
29	185-6960	1	Gasket
30	185-5879	1	Flange, Water Return
31	185-2390	3	Bolt
32	132-0449	1	Gasket
33	185-5870	1	*O'Ring
34	185-5843	2	*Pin, Straight
35	185-5869	3	*O'Ring (MDKBP, MDKBR)
36	185-5869	2	*O'Ring (MDKBS)
37	185-5126	1	*O'Ring (MDKBS)

* - Parts Included in Gearcase Assy

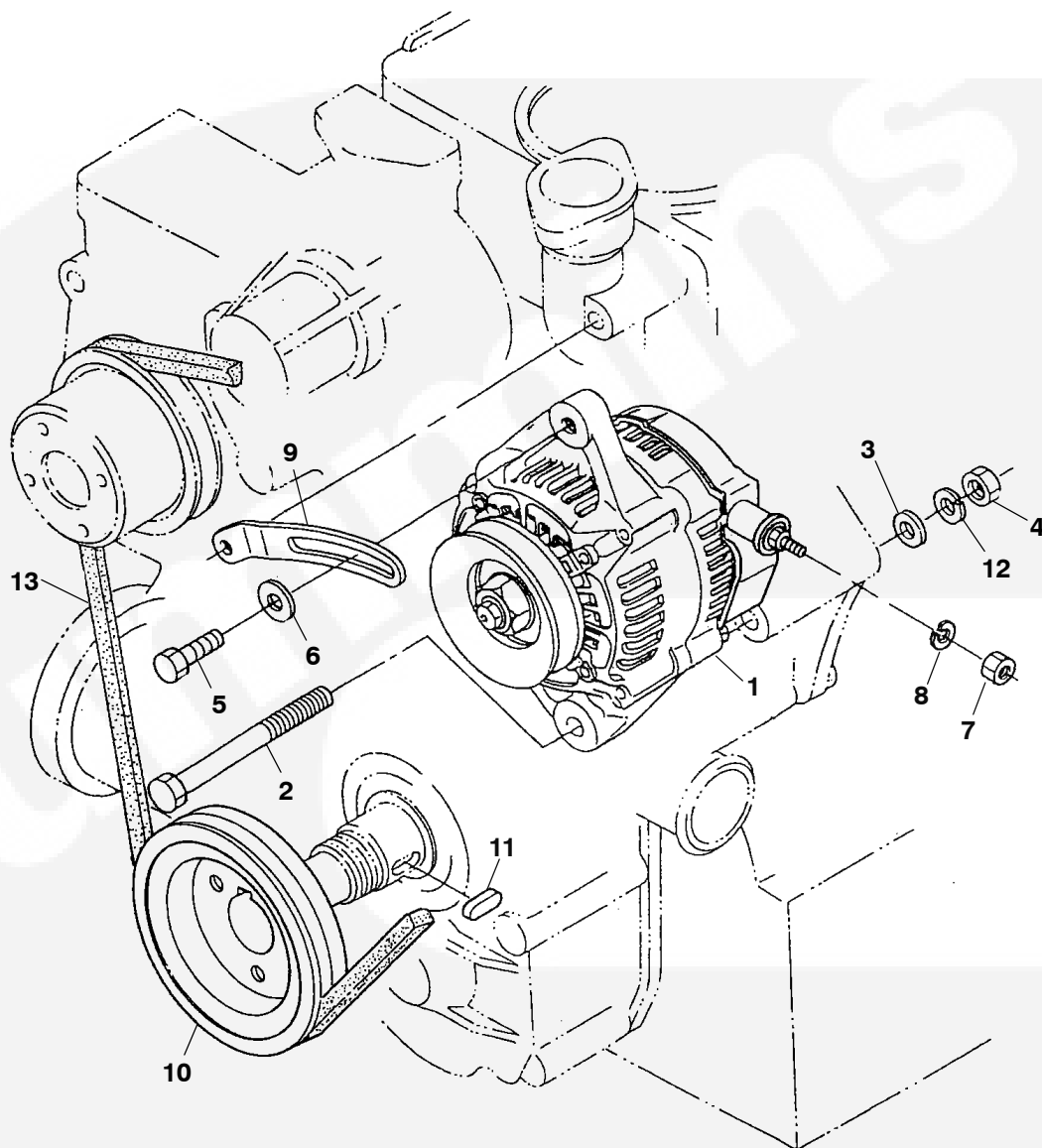
Water Pump



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1			Pump Assy, Water (Includes Parts Marked *)	7	185-2404	2	Bolt
	185-6006	1	MDKBP, MDKBR	8	185-6012	2	Stud
	132-0484	1	MDKBS	9	185-6957	2	Washer, Spring
2	185-6007	1	*Bearing, Ball	10	185-2367	2	Nut
3	132-0444	1	*Impeller	11	185-2389	8	Bolt
4	185-7021	1	*Seal	12	185-6013	1	Pulley
5			*Flange	13	800-6393	4	Bolt, Flange
	185-6010	1	MDKBP, MDKBR				
	185-6821	1	MDKBS				
6	185-6011	1	Gasket				

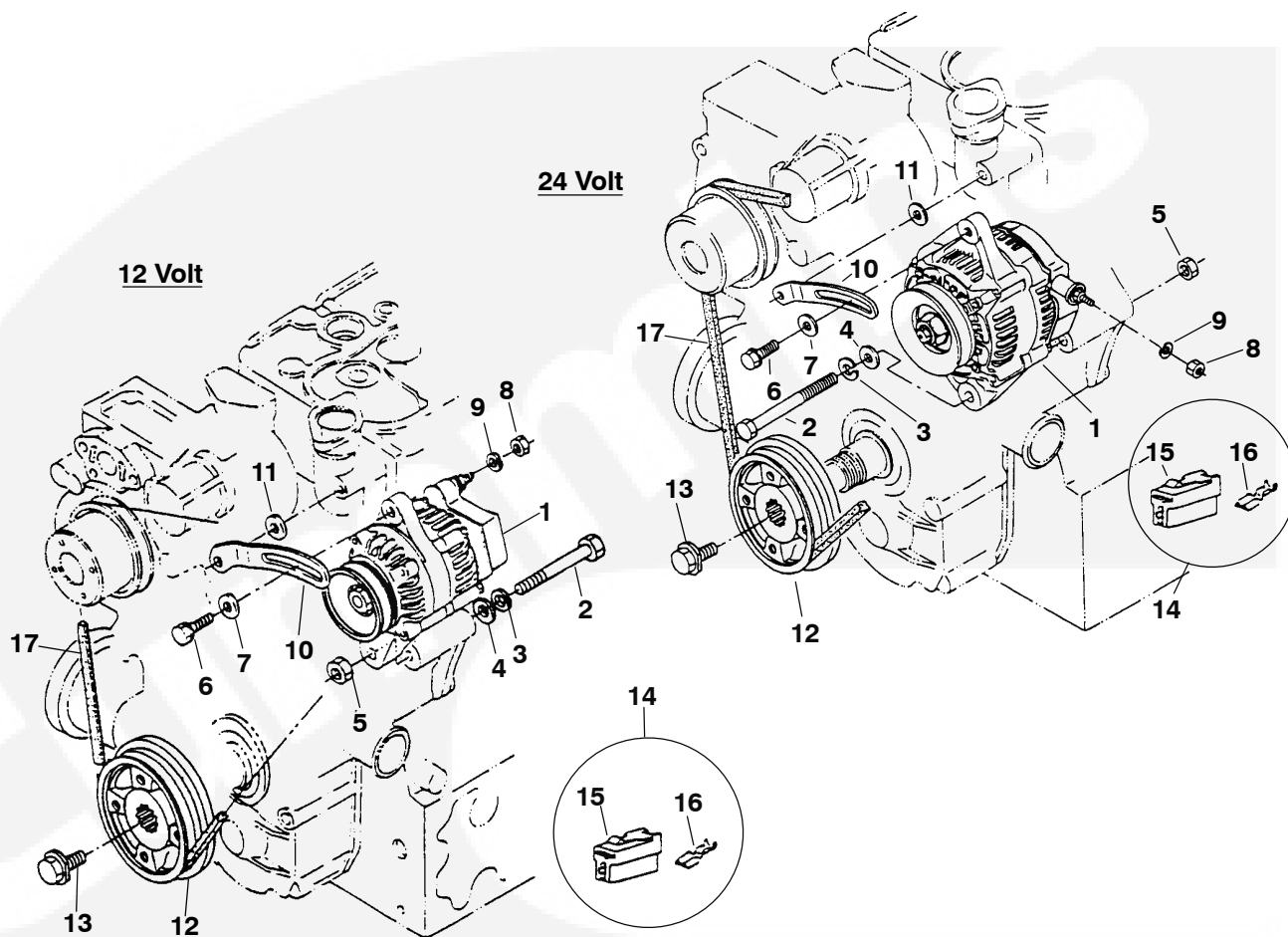
* - Parts Included in Water Pump Assy

Alternator **MDKBP, MDKBR (Negative Ground)**



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	185-6724	1	Alternator, Complete (See Separate Page for Components)	7	185-4255	1	Nut
2			Bolt	8	185-6759	1	Washer, Spring
	185-6734	1	MDKBP	9			Bracket, Adjusting
	185-6183	1	MDKBR		185-7012	1	12V
3	185-6630	1	Washer, Flat		185-6733	1	24V
4	185-5445	1	Nut	10	185-6730	1	Pulley, Fan Drive
5	185-2564	1	Bolt	11	185-5905	1	Key
6	185-6786	1	Washer, Flat	12	185-6785	1	Washer, Spring
				13	185-7055	1	Belt

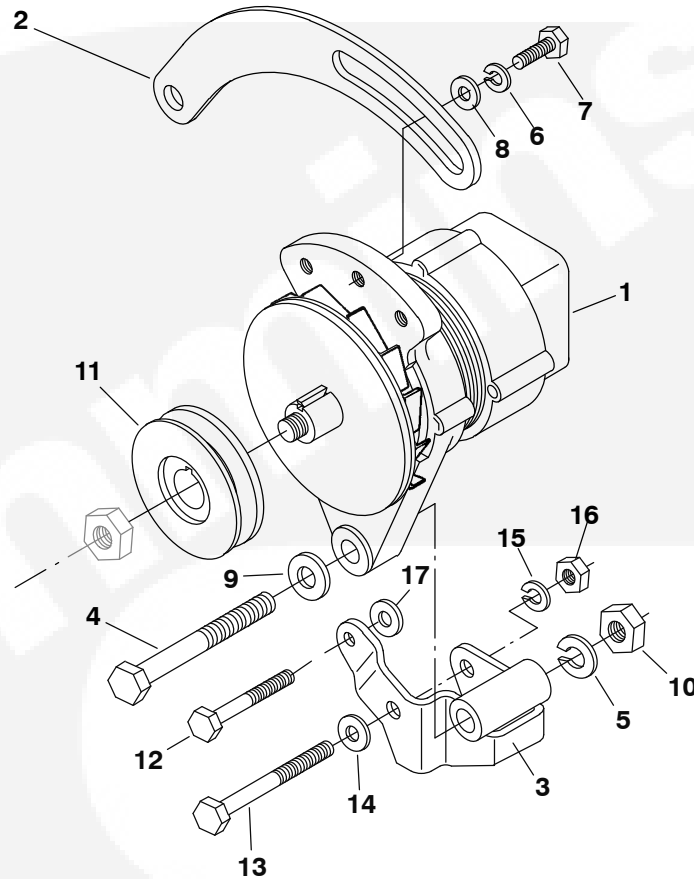
Alternator MDKBS (Negative Ground)



REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1			Alternator (See Separate Page for Components)
	185-5994	1	12V
	185-6724	1	24V
2	185-7052	1	Bolt
3	185-6785	1	Washer, Spring
4	185-6630	1	Washer, Flat
5	185-5445	1	Nut
6	185-2564	1	Bolt
7	185-6786	1	Washer, Flat
8	185-4255	1	Nut

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
9	185-6759	1	Washer, Spring
10	185-7012	1	Bracket, Adjusting
	185-6733	1	12V
	185-6733	1	24V
11	185-6228	1	Collar
12	185-7053	1	Pulley
13	185-7054	1	Bolt
14	185-5447	1	Coupler Assy
15	185-6440	1	Connector
16	185-6347	1	Terminal
17	185-7055	1	Belt

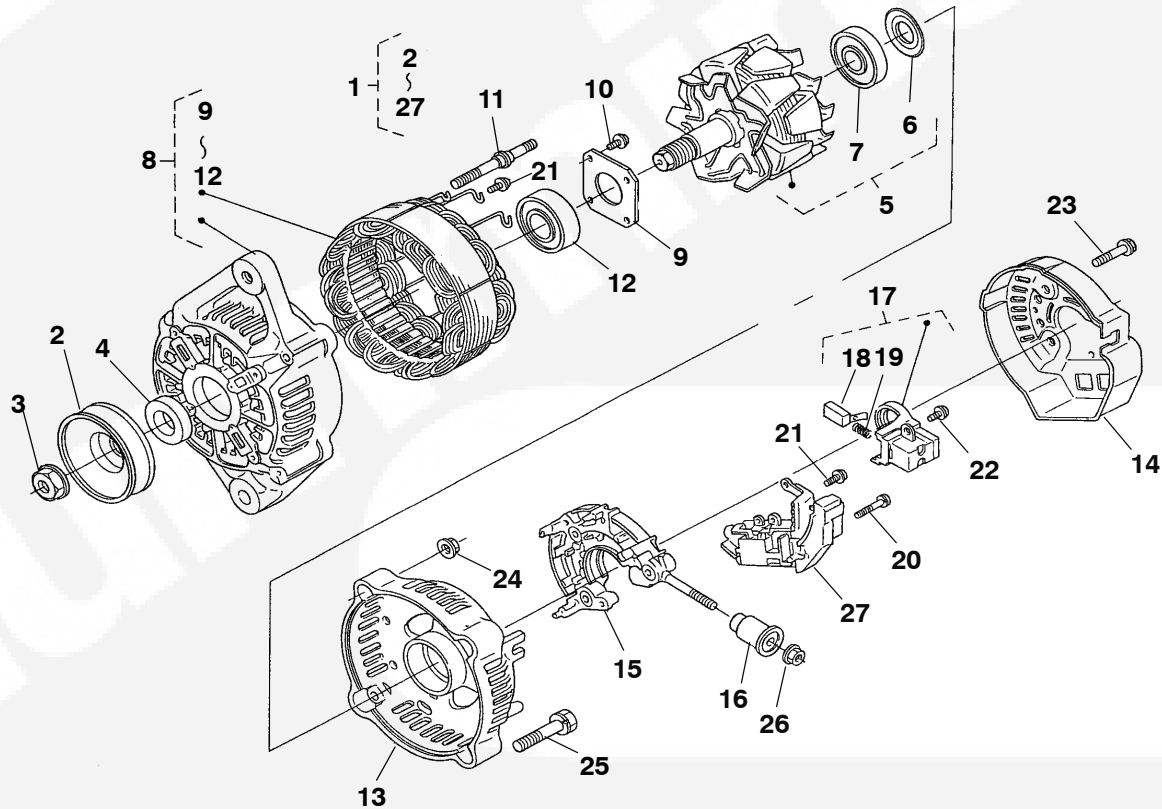
**Alternator
(Isolated Ground)
(12V/24V)**



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1			Alternator, Complete (No Components Available)	11	191-2170	1	Pulley, Alternator
	191-2169-02	1	12V	12	718-1048	1	Screw, Hex Head Cap (M8 x 80mm) (MDKBP, MDKBR)
	191-2169-01	1	24V		800-2071	1	(M8 x 90mm)(MDKBS)
2	191-2168-03	1	Strap, Alternator	13	800-2100	1	Screw, Hex Head Cap (M10 x 100)
3	191-2167-03	1	Bracket, Alternator	14	526-2120	1	Washer, (M10)
4	800-0104	1	Screw, Hex Head Cap (1/2-13 x 4-1/2")	15	850-2010	1	Washer, Lock (M10)
5	850-0060	1	Washer, Lock (1/2")	16	850-2009	1	Nut, Hex (M10)
6	526-0045	1	Washer, Flat (5/16")	17	526-0313	1	Washer (MDKBS)
7	800-0027	1	Screw, Hex Head Cap (5/16-18 x 7/8")				
8	850-0045	1	Washer, Lock (5/16")				
9	526-0219	1	Washer, Flat (1/2")				
10	862-0016	1	Nut (1/2-13)				

* - Alternator ties to G2-GND, Iso Ground Harness
(See Isolated Ground 338-4200-01)

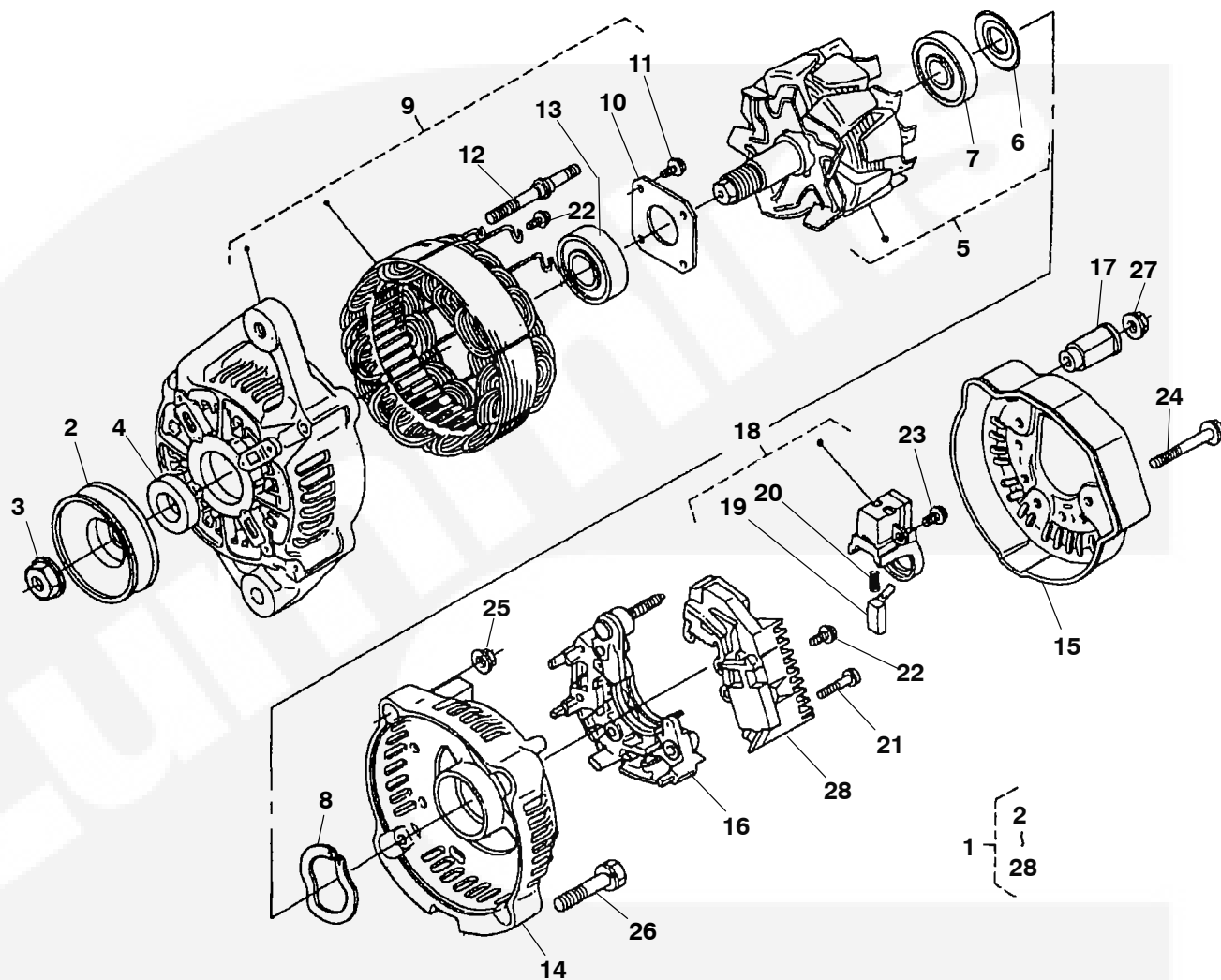
Alternator Components (Negative Ground) (24V)



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	185-6724	1	Alternator (12V)	16	185-5781	1	Insulation, Brush
2	185-6809	1	Pulley	17	185-6819	1	Holder Assy, Brush (Includes Brushes and Springs)
3	185-5768	1	Nut	18	185-5783	2	Brush
4	185-5769	1	Collar	19	185-5784	2	Spring, Brush
5	185-9263	1	Rotor (Includes Bearing and Cover)	20	185-5785	2	Screw, Round Head
6	185-5771	1	Cover, Bearing	21	185-5786	6	Screw, Round Head
7	185-6811	1	*Bearing	22	185-5787	1	Screw, Round Head
8	185-6812	1	Frame, Drive End (Includes Parts Marked *)	23	185-5788	3	Bolt
9	185-5774	1	*Plate, Retainer	24	185-5789	2	Nut
10	185-5775	4	*Screw, Round Head	25	185-5790	2	Bolt
11	185-7056	2	*Bolt, Through	26	185-2961	1	Nut
12	185-6813	1	Bearing	27	185-6820	1	Regulator
13	181-9096	1	Frame, End				
14	185-6815	1	Cover, End				
15	185-6816	1	Rectifier				

* - Parts Included in Drive End Frame

Alternator Components (Negative Ground) (12V)

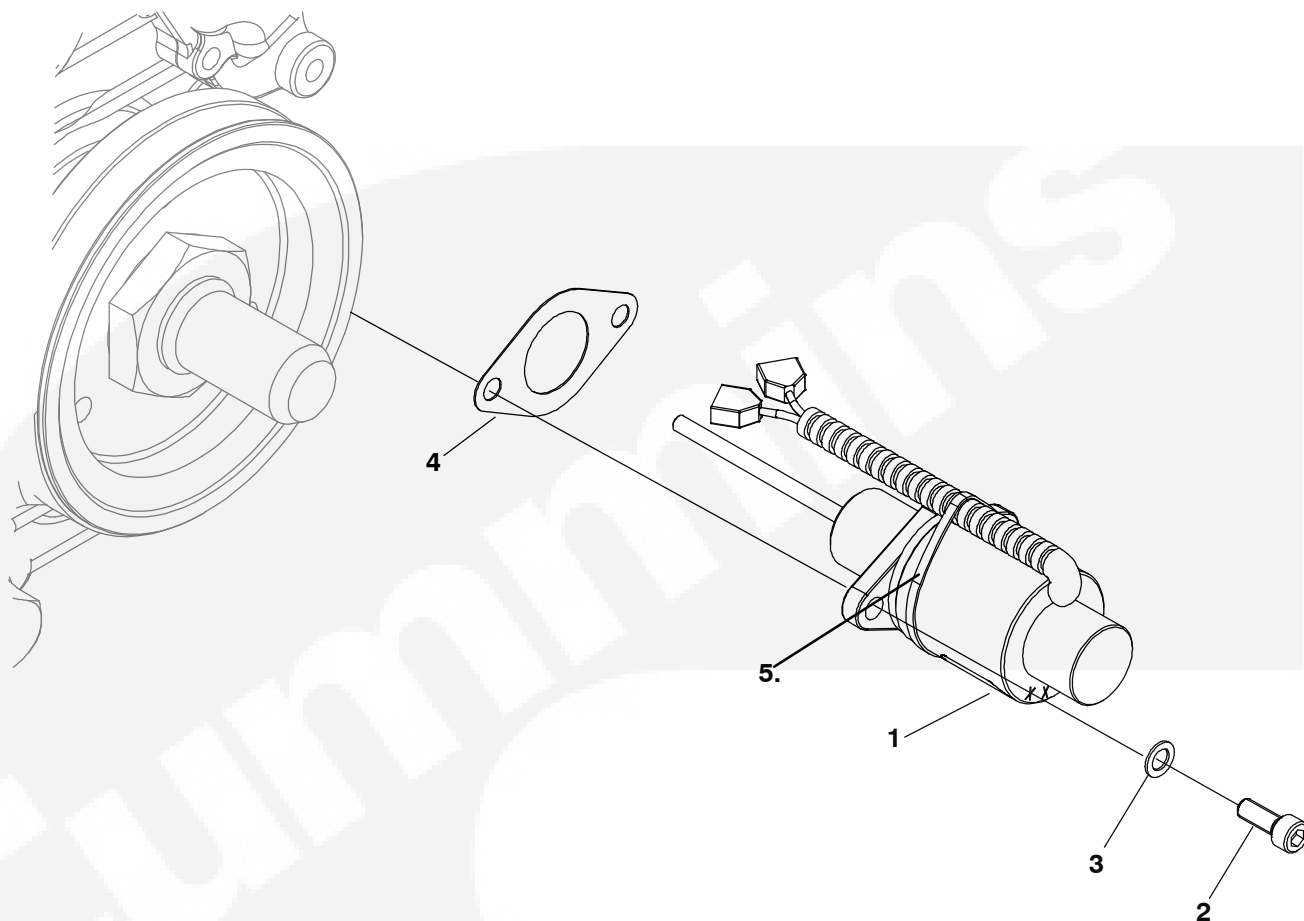


REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	185-5994	1	Assy., Alternator (12V)
2	185-6186	1	Pulley
3	185-5768	1	Nut
4	185-5769	1	Collar
5	185-9263	1	Rotor (Includes Bearing and Cover)
6	185-5771	1	Cover, Bearing
7	185-5777	1	Bearing
8	185-6787	1	Washer, Thrust
9	185-5773	1	Frame, Drive End (Includes Parts Marked *)
10	185-5774	1	*Plate, Retainer
11	185-5775	4	*Screw, Round Head
12	185-7056	2	*Bolt, Through
13	185-6813	1	*Bearing
14	185-6188	1	Frame, End
15	185-6189	1	Cover, End
16	185-6638	1	Rectifier

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
17	185-6191	1	Insulation, Brush
18	185-6819	1	Holder Assy, Brush (Includes Brushes and Springs)
19	185-5783	2	Brush
20	185-5784	2	Spring, Brush
21	185-5785	2	Screw, Round Head
22	185-5786	6	Screw, Round Head
23	185-5787	1	Screw, Round Head
24	185-5788	3	Bolt
25	185-5789	2	Nut
26	185-5790	2	Bolt
27	185-2961	1	Nut
28	185-5791	1	Regulator

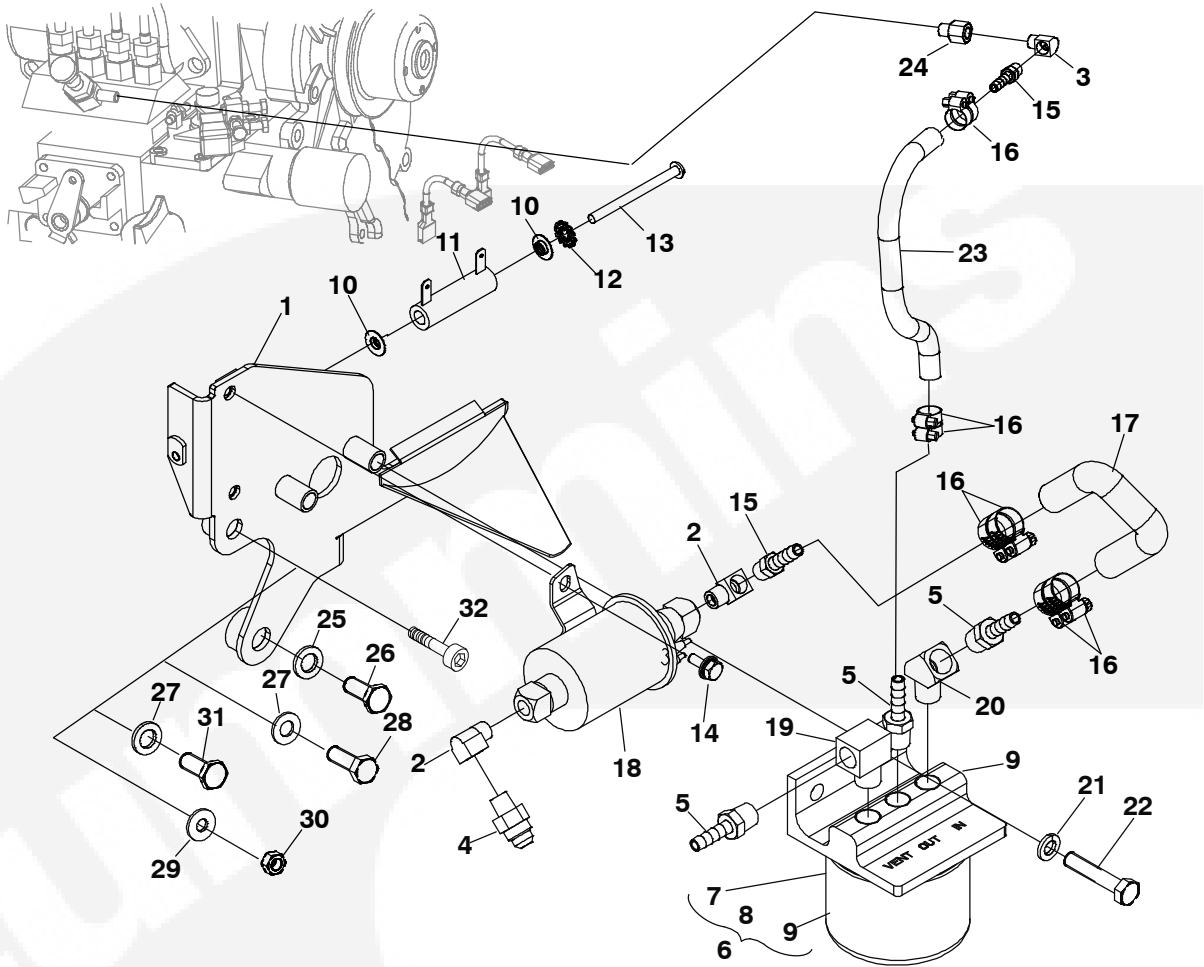
* - Parts Included in Drive End Frame

Governor Actuator



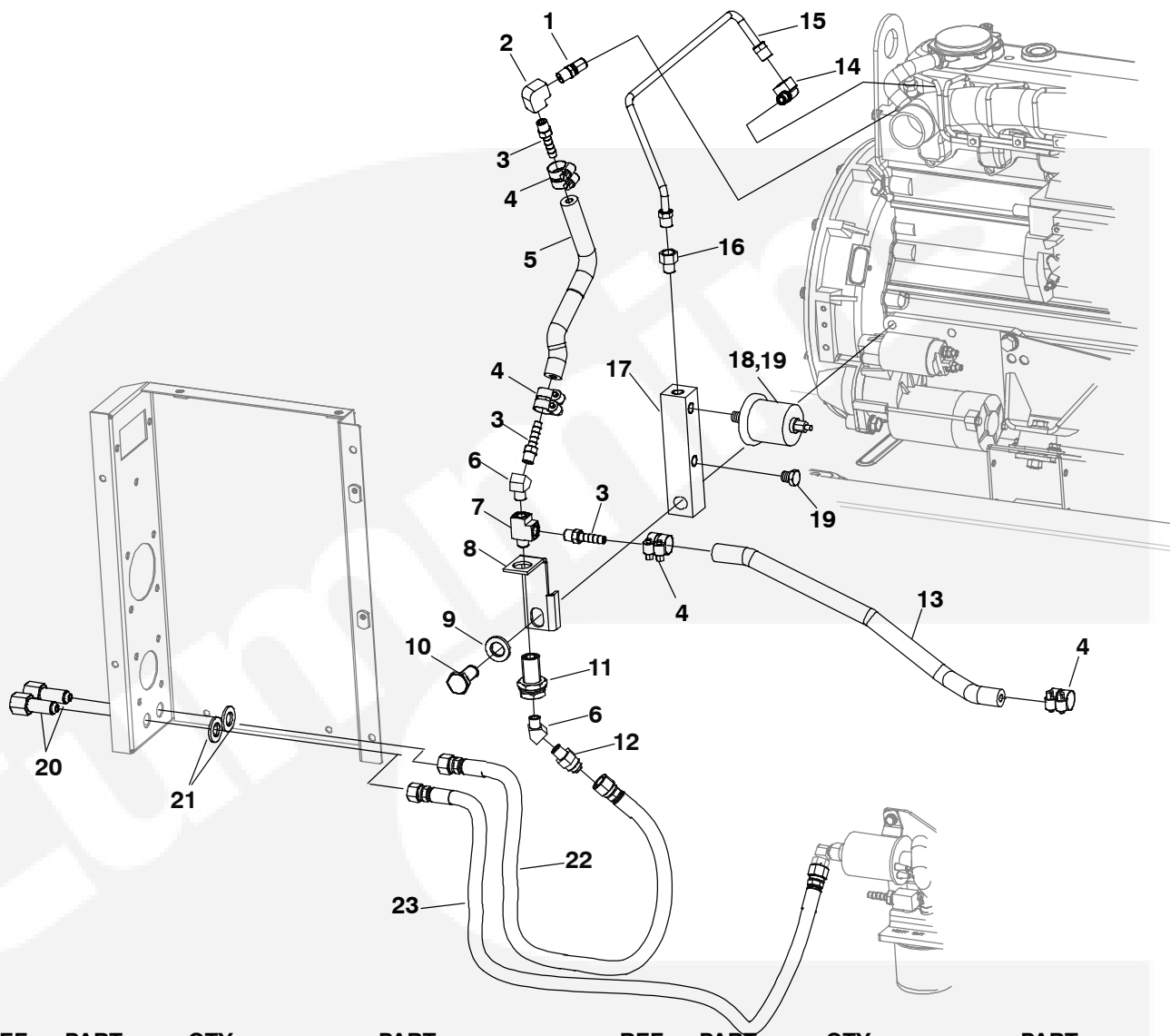
REF NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	306-5005-01	1	Actuator, Governor 12V
	306-5005-02	1	24V
2	725-1027	2	Screw, Socket Head Cap (M6 x 16mm)
3	526-0063	2	Washer, Copper (1/32")
4	184-0071	1	Gasket, Solenoid Cover
5	332-0942	1	Cable, Tie

Fuel Pump (Spec A-B)



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
			Assy, Fuel Pump (Includes Parts Marked *)	20	502-0156	1	*Elbow, 45° Street
	146-0827-01	1	12V	21	850-2008	2	*Washer, Lock Split (M8)
	146-0827-02	1	24V	22	718-1040	2	*Screw, Hex Head (M8 x 1.25 x 40)
1	149-2703-03	1	*Bracket, Fuel Pump	23	503-2200-02	1	*Hose, Fuel (1/4" x 13.26)
2	502-0020-01	2	*Elbow, Pipe	24	502-0175	1	*Adapter, Pipe (1/8"NPT)
3	502-0020-01	1	*Elbow, Pipe	25	526-0399-64	2	Washer, Flat (M12)
4	505-1490	1	*Connector, Male	26	800-3032	1	Screw, Hex Head Cap (M12 x 1.25 x 30mm)
5	502-1367-02	3	*Connector, Hose	27			Washer Flat (M10) Non PTO
6	149-2634-01	1	*Filter, Fuel (Includes Element, Plug and Filter Base)		526-2120	1	MDKBP and MDKBR
7	A026K278	1	*Element		526-2120	2	MDKBS
8	502-0028	1	*Plug, Drain	28	800-3005	1	Screw, Hex Head Cap (M10 x 1.25 x 30mm) (Non PTO MDKBP and MDKBR)
9	149-2635	1	*Base, Filter	29	526-2106	1	Washer, Flat (MDKBS)
10	304-0796	2	*Washer, Centering (24V)	30	750-1006	1	Nut, Hex (M8 x 1.25mm) (MDKBS)
11	350-1238	1	*Resistor (3.8 ohms) (24V)	31	815-0585	1	Screw, Hex Head Cap (M10 x 1.25 x 20mm) (Non PTO)
12	856-0003	1	*Washer, EIT (#10) (24V)	32	815-0904	1	Screw, Socket Head Cap (M10 x 1.25 x 20mm)
13	813-0112	1	*Screw, Round Head Machine (#10-32 x 2.5") (24V)				
14	821-6002-02	2	*Screw, Hex Flange (M6 x 1 x 14)				
15	502-1367-01	2	*Connector, Hose				
16	503-2309	8	*Clamp, Hose				
17	503-2200-01	1	*Hose, Fuel				
18	149-2646	1	*Pump, Fuel				
19	502-0054	1	*Elbow, Street Pipe				

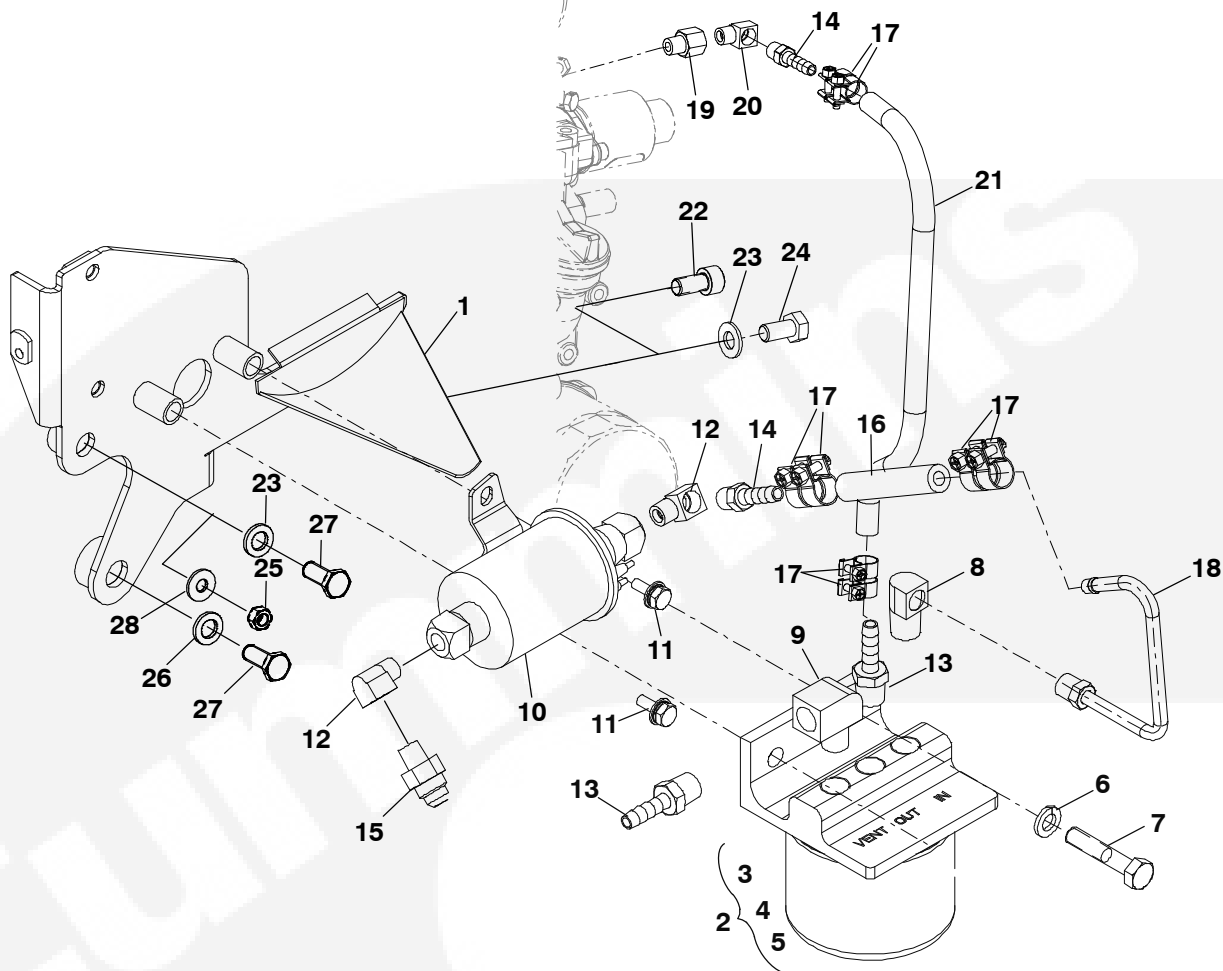
Fuel Return, Oil Sender (Spec A-B)



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
	149-2654	1	Kit, Fuel Adapter (5/16" Hose)	16	502-0003	1	Connector, Male IN
	149-2655	1	Kit, Fuel Adapter (3/8" Hose)	17	120-1319	1	Manifold, Oil Pressure
1	502-1245	1	Adapter, Pipe	18			Sender, Oil Pressure
2	502-0055	1	Elbow, Inverted Female		193-0244	1	Neg Ground with Gauges
3	502-1367-01	4	Connector, Hose		193-0430-01	1	Iso Ground with Gauges
4	A034B591	4	Clamp, Hose	19	502-0028	2	Plug, Hex Head Pipe
5	503-2200-01	1	Hose, Fuel (1/4" x 7.54")	20	505-1489	2	Connector, Female Bulkhead
6	502-0053	2	Elbow, 45° Street	21	526-0406	2	Washer, Flat (M14)
7	502-1368	1	Tee, Street (1/8 NPT)	22			Line, Transfer Fuel (Spec A)
8	149-2489-03	1	Support, Fuel Return		501-0672-02	1	MDKBP, MDKBR
9	526-0399-64	1	Washer, FI (M12)		501-0672-04	1	MDKBS
10	800-3029	1	Screw, Hex Head Cap (M12 x 1.25 x 45mm)	23			Line, Transfer Fuel (Spec A)
11	502-1244	1	Coupling, Anchor		501-0672-05	1	MDKBP, MDKBR
12	505-1490	1	Connector, Male		501-0672-06	1	MDKBS
13	503-2200-05	1	Hose, Fuel (1/4" x 20")				
14	503-1309	1	Elbow, Inverted Male				
15	122-0813	1	Line, Oil				

* - Oil Sender ties to E1-2, Iso Ground Harness
(See Isolated Ground 338-4200-01)

Fuel Pump MDKBP and MDKBR (Spec C)



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
			Assy, Fuel Pump (Includes Parts Marked *)	13	502-1367-02	2	Connector, Hose
	146-0827-01	1	12V	14	502-1367-01	6	Connector, Hose
	146-0827-02	1	24V	15	505-1490	1	Connector, Male
1	149-2814-03	1	Bracket, Fuel Pump	16	503-2806	1	Hose, Fuel
2	149-2634-01	1	Filter, Assy	17	A034B591	8	Clamp, Hose
3	149-2635	1	Base, Filter	18	501-0966	1	Line, Fuel
4	A026K278	1	Filter, Fuel Water Separator	19	502-0175	1	Adapter, Pipe
5	502-0028	1	Plug, Hex Head Pipe	20	502-0020-01	1	Elbow, Pipe
6	850-2008	2	Washer, Locking Split (M8)	21	503-2883-02	1	Hose, Fuel
7	800-2061	2	Screw, Hex Head Cap (M8 x 1.25 x 40mm)	22	815-0904	1	Screw, Socket Head Cap
8	502-0041	1	Elbow, Invt Male	23	526-2120	2	Washer, Flat (M12)
9	502-0054	1	Elbow, Street Pipe	24	815-3030	1	Screw, Hex Head Cap (M10 x 1.25 x 30mm)
10			Pump, Fuel	25	750-1006	1	Nut, Hex (M8x 1.25mm)
	149-2646	1	12V	26	526-0399-64	1	Washer, Flat (M12)
	149-2795	1	24V	27	800-3032	1	Screw, Hex Head
11	821-6002-02	2	Screw, Hex Head Sems (M6 x 1 x 12mm)	28	526-2106	1	Washer, Flat (M8)
12	502-0020	2	Elbow, Pipe				

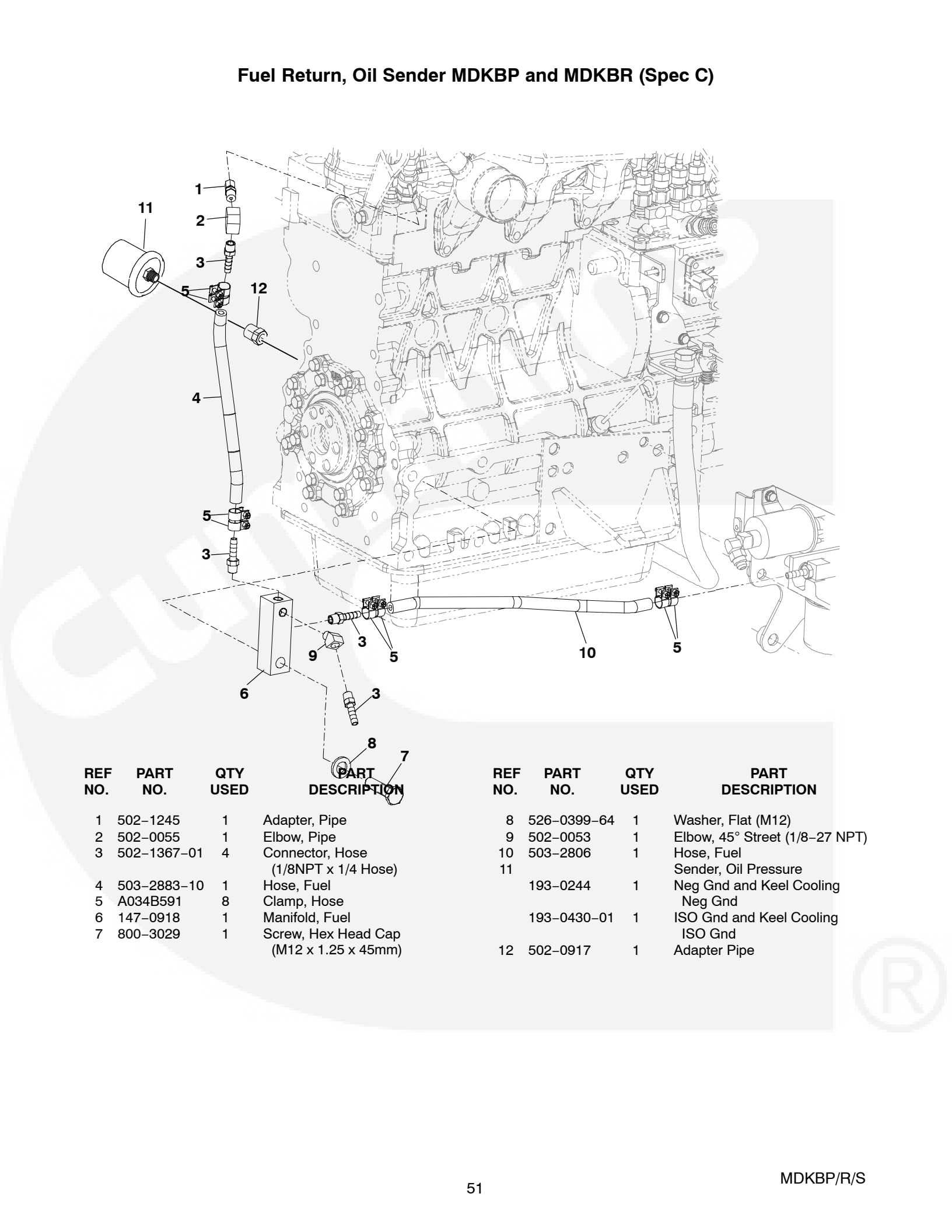
Fuel Return, Oil Sender MDKBP and MDKBR (Spec C)

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	502-1245	1	Adapter, Pipe
2	502-0055	1	Elbow, Pipe
3	502-1367-01	4	Connector, Hose (1/8NPT x 1/4 Hose)
4	503-2883-10	1	Hose, Fuel
5	A034B591	8	Clamp, Hose
6	147-0918	1	Manifold, Fuel
7	800-3029	1	Screw, Hex Head Cap (M12 x 1.25 x 45mm)

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
8	526-0399-64	1	Washer, Flat (M12)
9	502-0053	1	Elbow, 45° Street (1/8-27 NPT)
10	503-2806	1	Hose, Fuel
11	193-0244	1	Sender, Oil Pressure Neg Gnd and Keel Cooling Neg Gnd
	193-0430-01	1	ISO Gnd and Keel Cooling ISO Gnd
12	502-0917	1	Adapter Pipe

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MDKBP/R/S



Fuel Return, Oil Sender MDKBP and MDKBR (Spec C)

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	502-1245	1	Adapter, Pipe
2	502-0055	1	Elbow, Pipe
3	502-1367-01	4	Connector, Hose (1/8NPT x 1/4 Hose)
4	503-2883-10	1	Hose, Fuel
5	A034B591	8	Clamp, Hose
6	147-0918	1	Manifold, Fuel
7	800-3029	1	Screw, Hex Head Cap (M12 x 1.25 x 45mm)

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
8	526-0399-64	1	Washer, Flat (M12)
9	502-0053	1	Elbow, 45° Street (1/8-27 NPT)
10	503-2806	1	Hose, Fuel
11	193-0244	1	Sender, Oil Pressure Neg Gnd and Keel Cooling Neg Gnd
	193-0430-01	1	ISO Gnd and Keel Cooling ISO Gnd
12	502-0917	1	Adapter Pipe

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MDKBP/R/S

Fuel Return, Oil Sender MDKBP and MDKBR (Spec C)

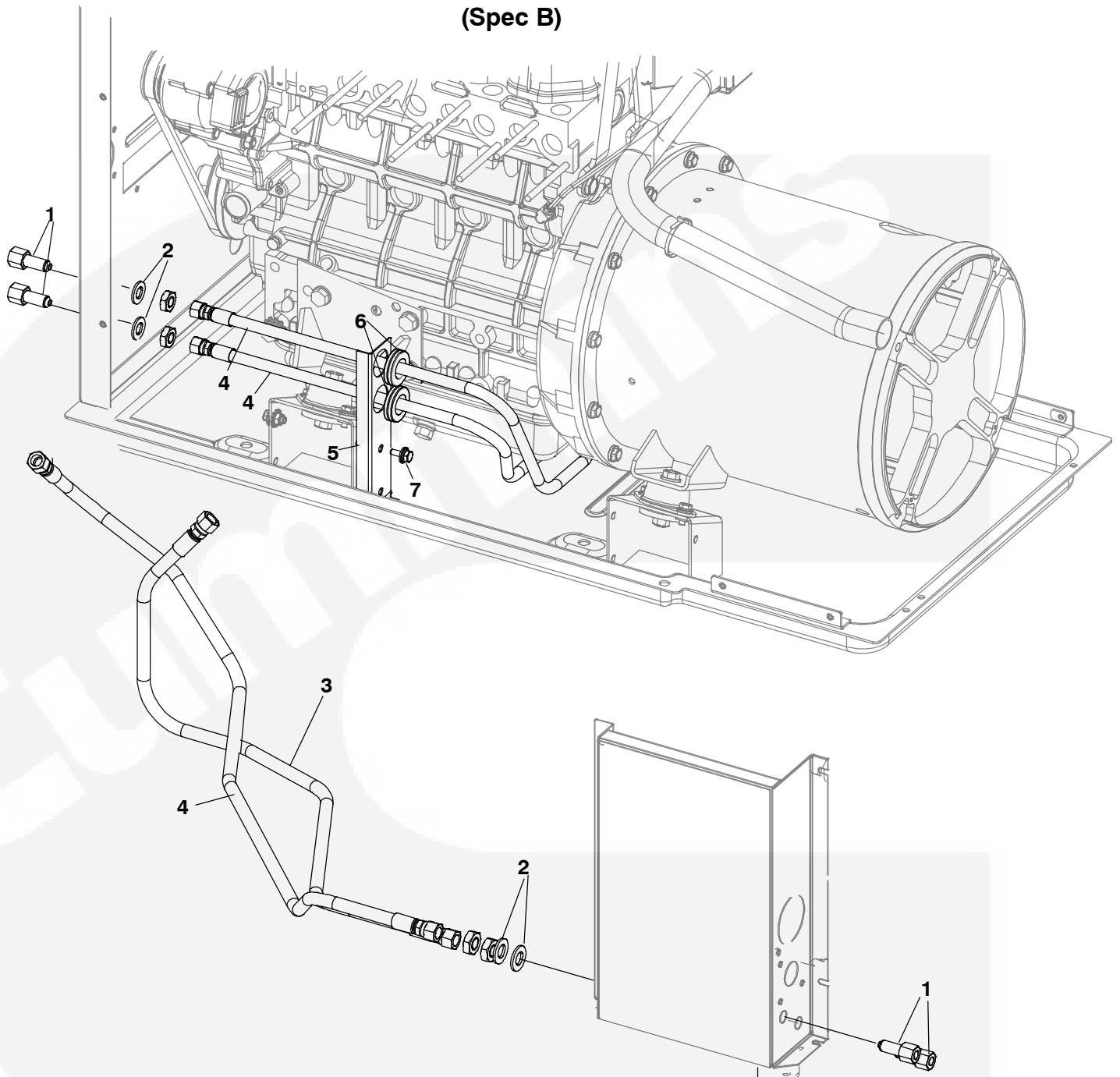
REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	502-1245	1	Adapter, Pipe
2	502-0055	1	Elbow, Pipe
3	502-1367-01	4	Connector, Hose (1/8NPT x 1/4 Hose)
4	503-2883-10	1	Hose, Fuel
5	A034B591	8	Clamp, Hose
6	147-0918	1	Manifold, Fuel
7	800-3029	1	Screw, Hex Head Cap (M12 x 1.25 x 45mm)

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
8	526-0399-64	1	Washer, Flat (M12)
9	502-0053	1	Elbow, 45° Street (1/8-27 NPT)
10	503-2806	1	Hose, Fuel
11	193-0244	1	Sender, Oil Pressure Neg Gnd and Keel Cooling Neg Gnd
	193-0430-01	1	ISO Gnd and Keel Cooling ISO Gnd
12	502-0917	1	Adapter Pipe

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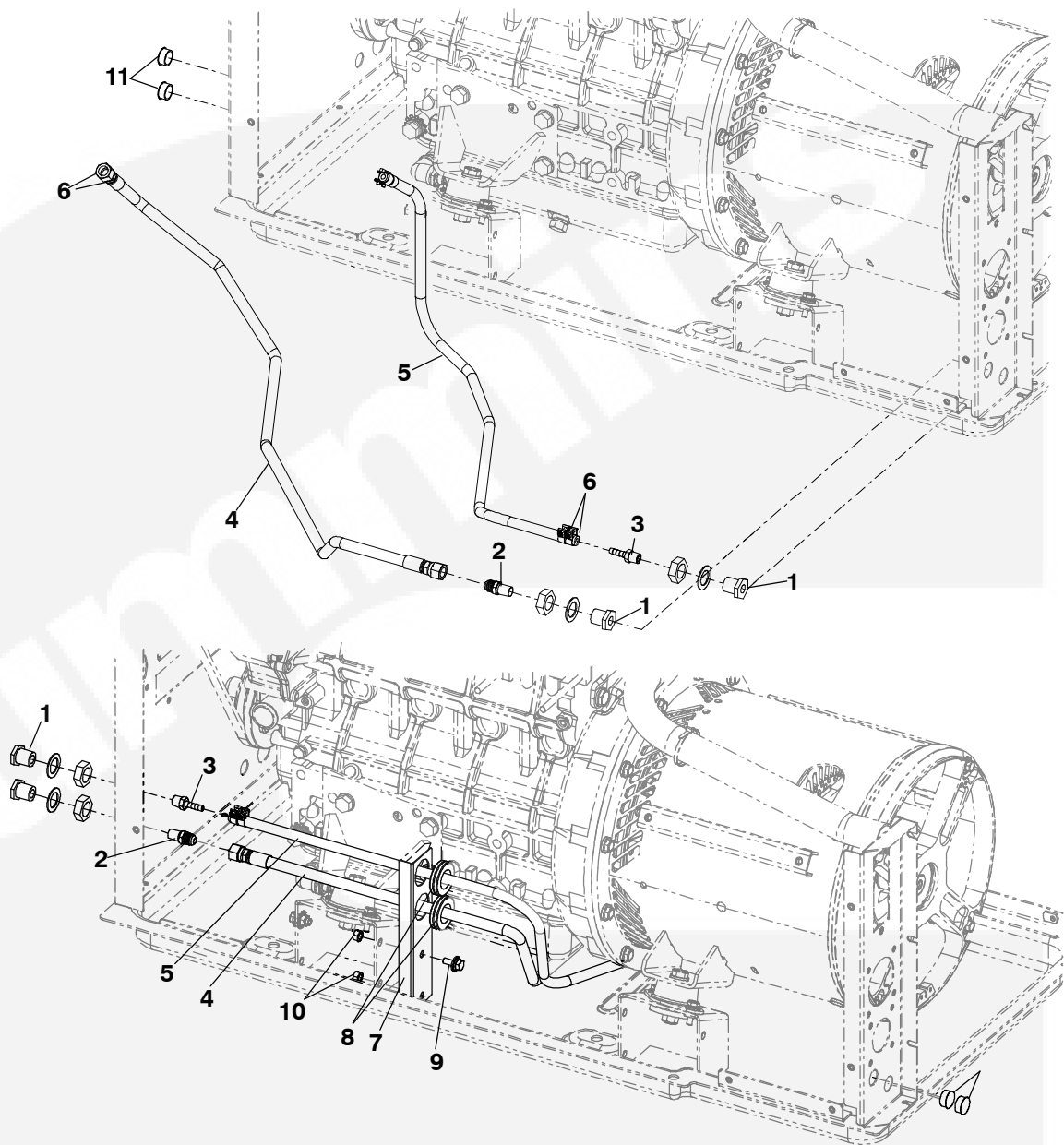
MDKBP/R/S

Fuel Transfer Lines (Spec B)



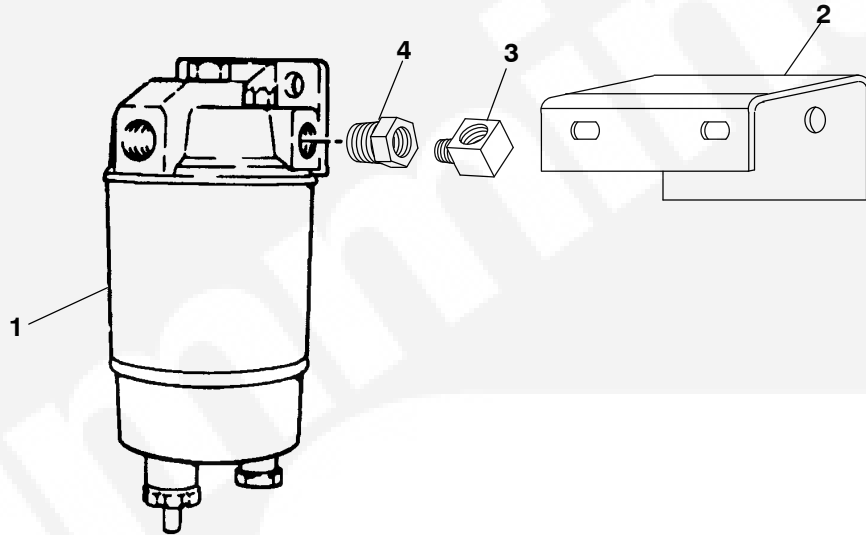
REF NO.	PART NO.	QTY. USED	PART DESCRIPTION	REF NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	505-1489	2	Connector, Bulkhead	5	149-2759-03	1	Bracket, Fuel Line (Front)
2	526-0406	2	Washer, Flat (M14)	6	508-0117	2	Grommet (Front)
3	503-2588-04	1	Hose, Fuel (MDKBP, MDKBR Front and Rear)	7	821-6003-02	2	Screw, Hex Head (Front)
4	503-2588-06	1	Hose, Fuel (MDKBP, MDKBR Front and Rear)				

Fuel Transfer Lines MDKBP and MDKBR (Spec C)



REF NO.	PART NO.	QTY. USED	PART DESCRIPTION	REF NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	502-1133	2	Coupling, Anchor	8	508-0117	1	Grommet (1") Front Housed
2	502-1615	1	Coupling, Hose	9	821-6003-01	2	Screw, Hex Head Sems (M8 x 1.25 x 16mm)
3	502-1367-02	1	Connector, Hose (1/4NPT x 1/4 Hose)	10	750-1006	2	Nut, Hex (M8 x 1.25mm) Not Shown
4	503-2588-04	1	Hose, Fuel	11	517-0136-01	2	Plug, Hole
5	503-2935-02	1	Hose, Fuel				
6	A034B591	4	Clamp, Hose				
7	149-2759-03	1	Bracket, Fuel Line (Front Housed Not Shown)				

Remote Water Separator

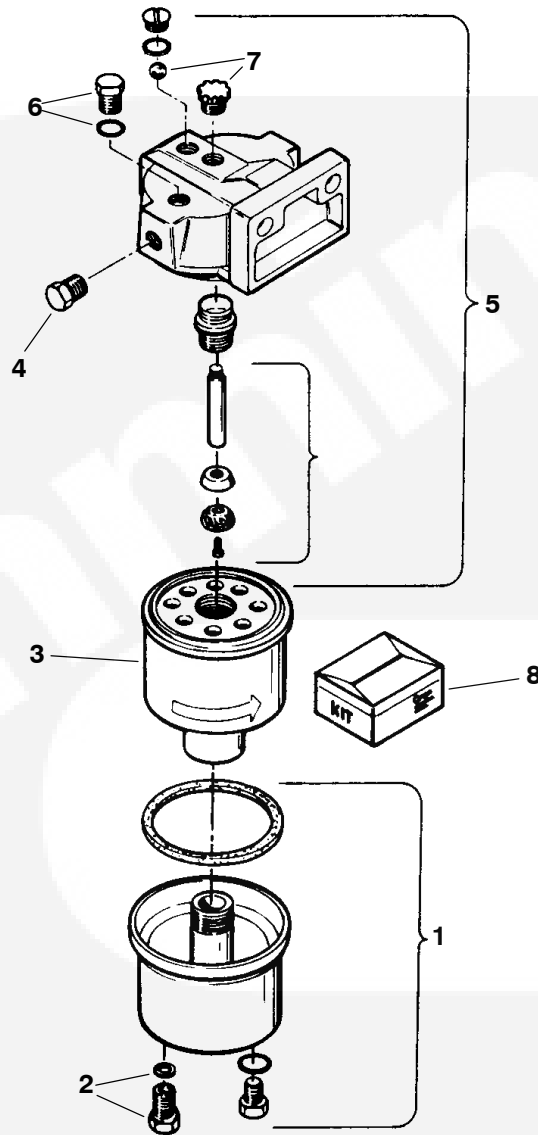


REF NO.	PART NO.	QTY. USED	PART DESCRIPTION
	149-2073	1	Kit, Remote Fuel/Water Separator
1	149-1908-05	1	Separator, Fuel/Water (See Separate Page for Components)

REF NO.	PART NO.	QTY. USED	PART DESCRIPTION
2	149-2041-03	1	Bracket, Separator Mounting
3	502-0020-01	1	Elbow, Street 90Degrees
4	502-0029	2	Bushing, Pipe

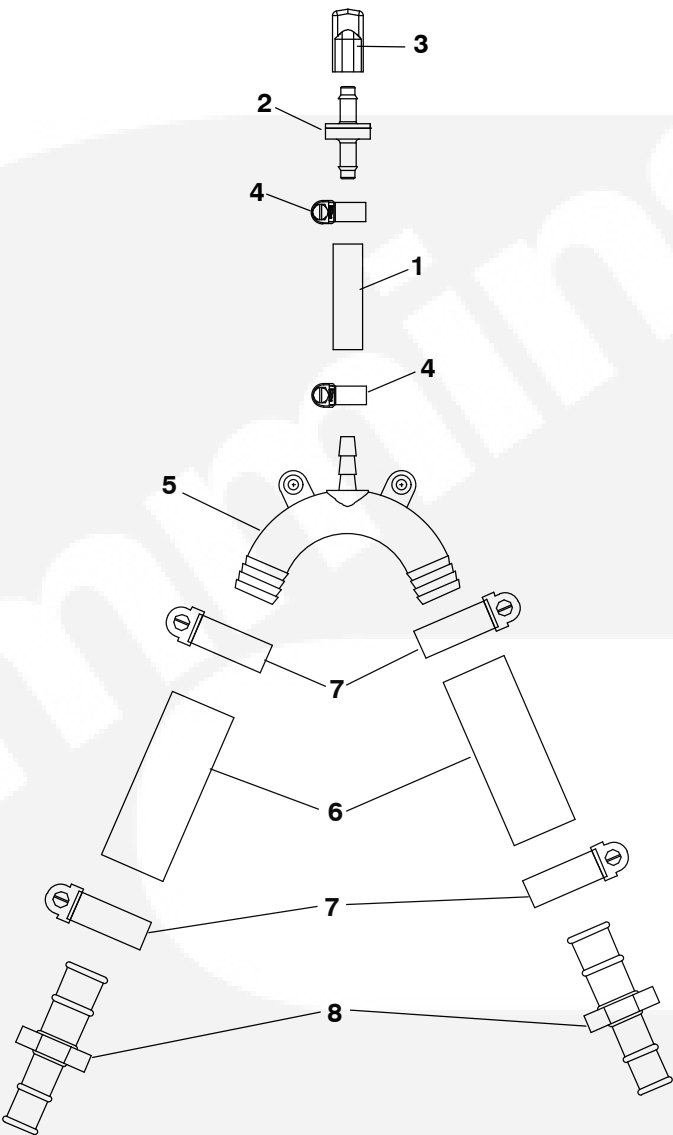


Water Separator Components



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

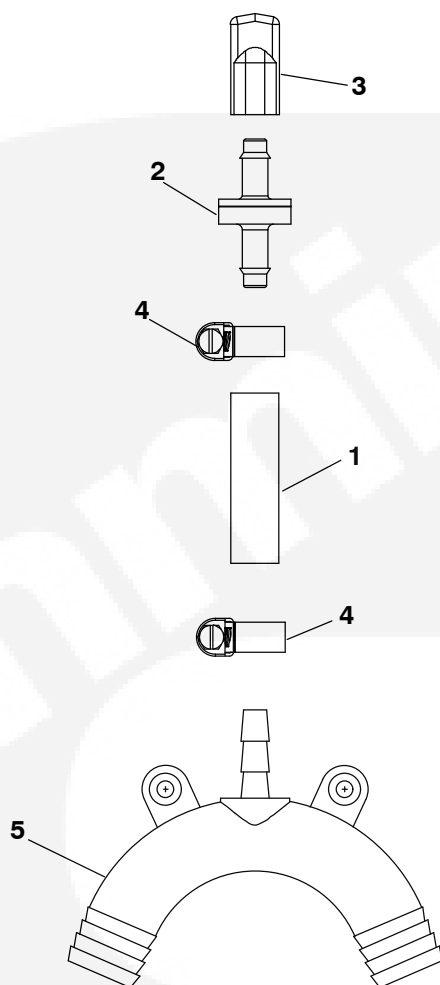
Break Siphon MDKBP, MDKBR



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
	541-0863	1	Kit, Siphon Break	7	503-0977	10	Clamp, Hose
1	503-2728-01	1	Hose, Coolant	8	502-1450	2	Adapter, Hose
2	504-0223	1	Valve, Check	9	508-1102	2	*Grommet, Rubber
3	502-1425-02	1	Cap, Tube				
4	503-2309	2	Clamp, Hose				
5	502-1463	1	Connector, Hose				
6	503-2394	2	Hose, Water				

* - Parts not shown but included in kit.

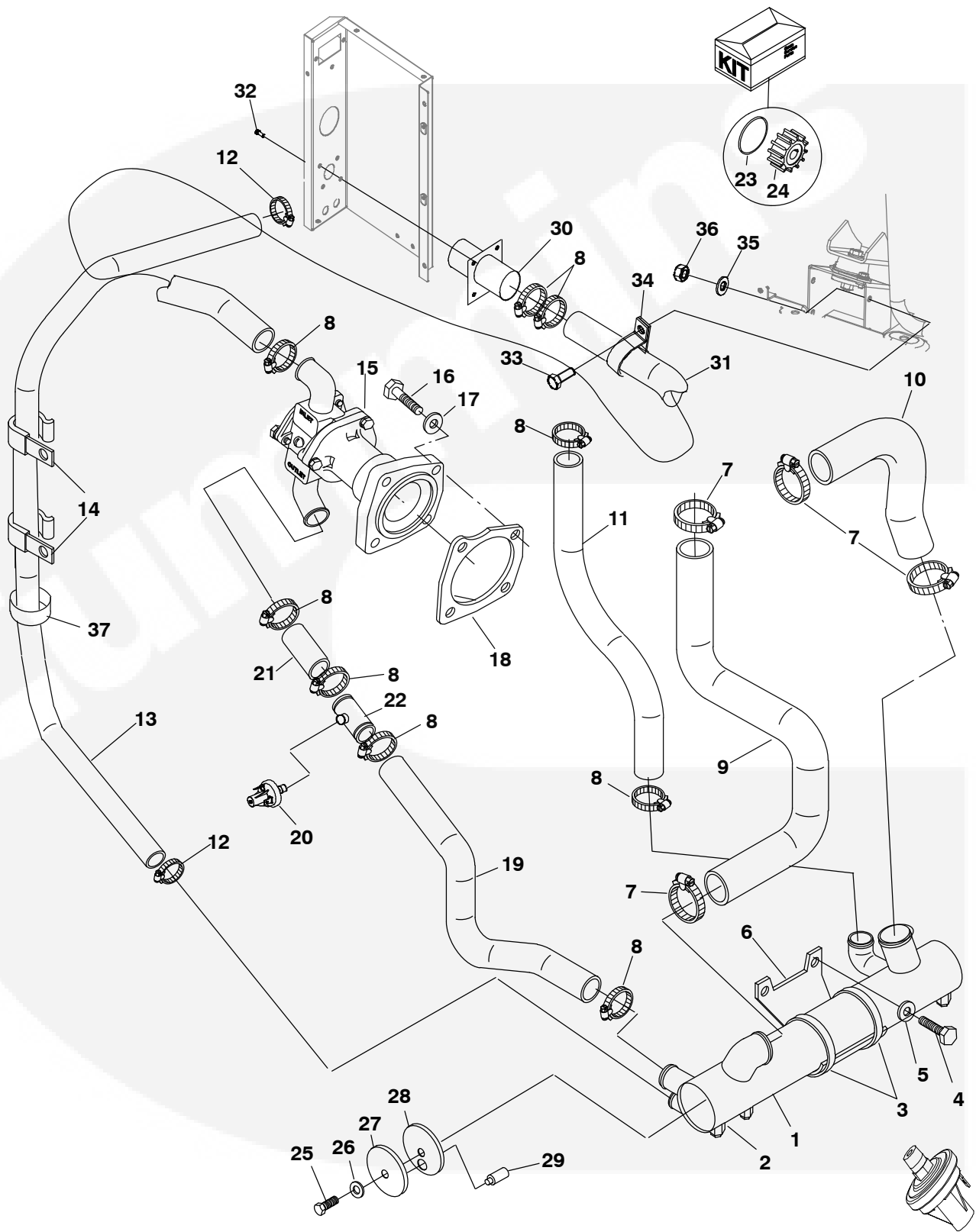
Break Siphon MDKBS



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
	541-0876-01	1	Kit, Siphon Break	6	503-0977	2	*Clamp, Hose
1	503-2728-01	1	Hose, Coolant	7	508-1102	2	*Grommet, Rubber
2	504-0223	1	Valve, Check				
3	502-1425-02	1	Cap, Tube				
4	503-2309	2	Clamp, Hose				
5	502-1463	1	Connector, Hose				

* - Parts not shown but included in kit.

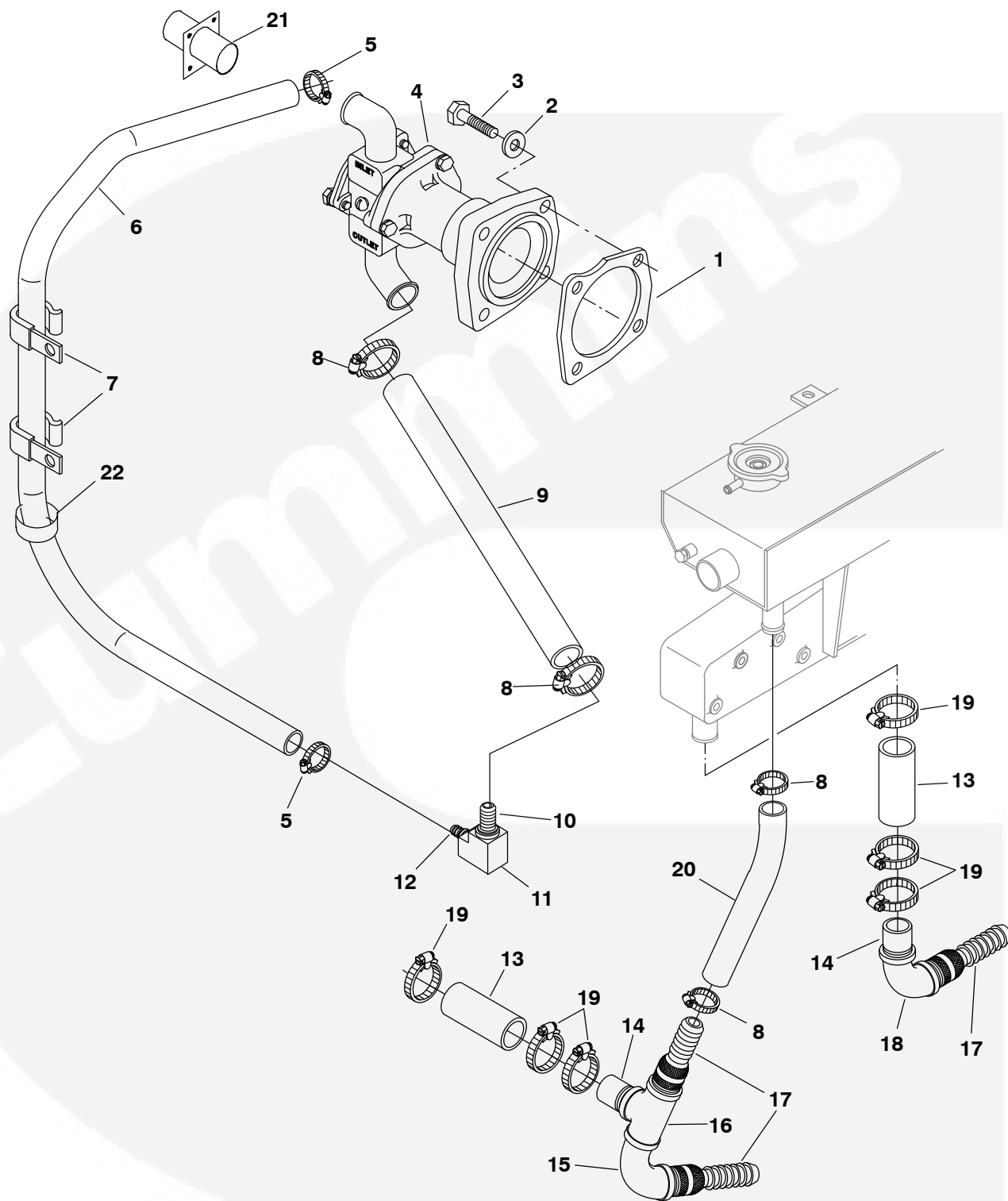
Heat Exchanger (Spec A-B)



Heat Exchanger (Spec A-B)

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
	130-4979	1	Kit, Heat Exchanger Zinc Pencil (Includes Parts Marked +)	19			Hose, Water Pump (1")
			(MDKBP, MDKBR)		503-2347-S0	1	MDKBP, MDKBR
	130-5012	1	+ Kit, End Cover (Includes Parts Marked *)		503-2349	1	MDKBS
	541-1521	1	Kit, Minor Service (Includes O'Rings and Impeller)	20	309-0667	1	Switch, Pressure
1			Exchanger, Heat	21	503-2350-01	1	Hose, Coolant
	130-6548-02	1	MDKBP, MDKBR	22	130-5387-01	1	Tube, Low Pressure Switch
	130-6549-02	1	MDKBS	23	132-0293	1	O'Ring
2	130-4434	1	Pencil, Zinc (w/Screw)	24	132-0499	1	Impeller
3			Clamp, Hose	25	800-0317	1	+ Screw, Hex Head (5/16-18 x 3/4")
	503-1143	2	(3")MDKBP, MDKBR	26	850-0165	1	+ Washer, Lock (5/16")
	503-1145	2	(3.25")MDKBS	27			*Cover, Heat Exchanger W/O Zinc Pencil Boss)
4	815-0585	2	Screw, Hex Head Cap (M10 x 1.25 x 20mm)		130-4567	1	W/O Zinc Pencil Hole
5	526-2120	2	Washer, Flat (M10)		130-4962-01	1	W/Zinc Pencil Boss)
6			Bracket, Heat Exchanger	28			*Gasket, Cover W/O Zinc Pencil Hole
	130-4234-03	1	MDKBP, MDKBR		130-4960	1	W/Zinc Pencil Hole
	130-4628-03	1	MDKBS	29	130-4961	1	*Pencil, Zinc (w/o Screw)
7	503-1138	8	Clamp, Hose (1-3/8")	30	405-7211	1	Connector, Bulkhead
8	503-1137	8	Clamp, Hose (1")	31			Hose, Coolant (Rear)
9	503-1977	1	Hose, Exhaust Manifold (1-3/8") (Includes Sleeving)		503-2350-07	1	MDKBP, MDKBR and MDKBS(Front)
10			Hose, Engine Coolant (1-3/8")		503-2350-02	1	MDKBP, MDKBR (Front)
	503-1896	1	MDKBP, MDKBR	32	821-6006-01	4	Screw, Hex Head Sems Stainless (M6 x 1 x 16mm)
	503-1998	1	MDKBS	33	870-2065-02	1	Screw, Hex Head Cap (M8 x 1.25 x 20mm)
11	503-0501	1	Hose, Coolant Tank Lower (1" x 22")				(Rear Out Begin Spec B)
12	503-0977	2	Clamp, Hose	34	503-1950	1	Clamp, Hose (Rear Begin Spec B)
13			Hose, Mixer	35	526-2100	1	Washer, Flat (M8) (Rear Begin Spec B)
	503-2122	1	(3/4 x 43") MDKBP, MDKBR	36	750-1006	1	Nut, Hex (M8) x 1.25mm)
	503-1013	1	(5/8 x 43") MDKBS				(Rear Begin Spec B)
14	327-0923	1	Clamp, "J"	37	130-4830	1	Clamp, Hose
15	132-0413	1	Pump, Raw Water (See Separate Page for Components)				
16	800-2057	4	Screw, Hex Head Cap (M8 x 1.25 x 30mm)	+ - Parts Included in Heat Exchanger Zinc Pencil Kit.			
17	526-2100	4	Washer, Flat (M8)	* - Parts Included in End Cover Kit.			
18	132-0346	1	Gasket, Water Pump				

Keel Cooling (Wet Exhaust Spec A-B)

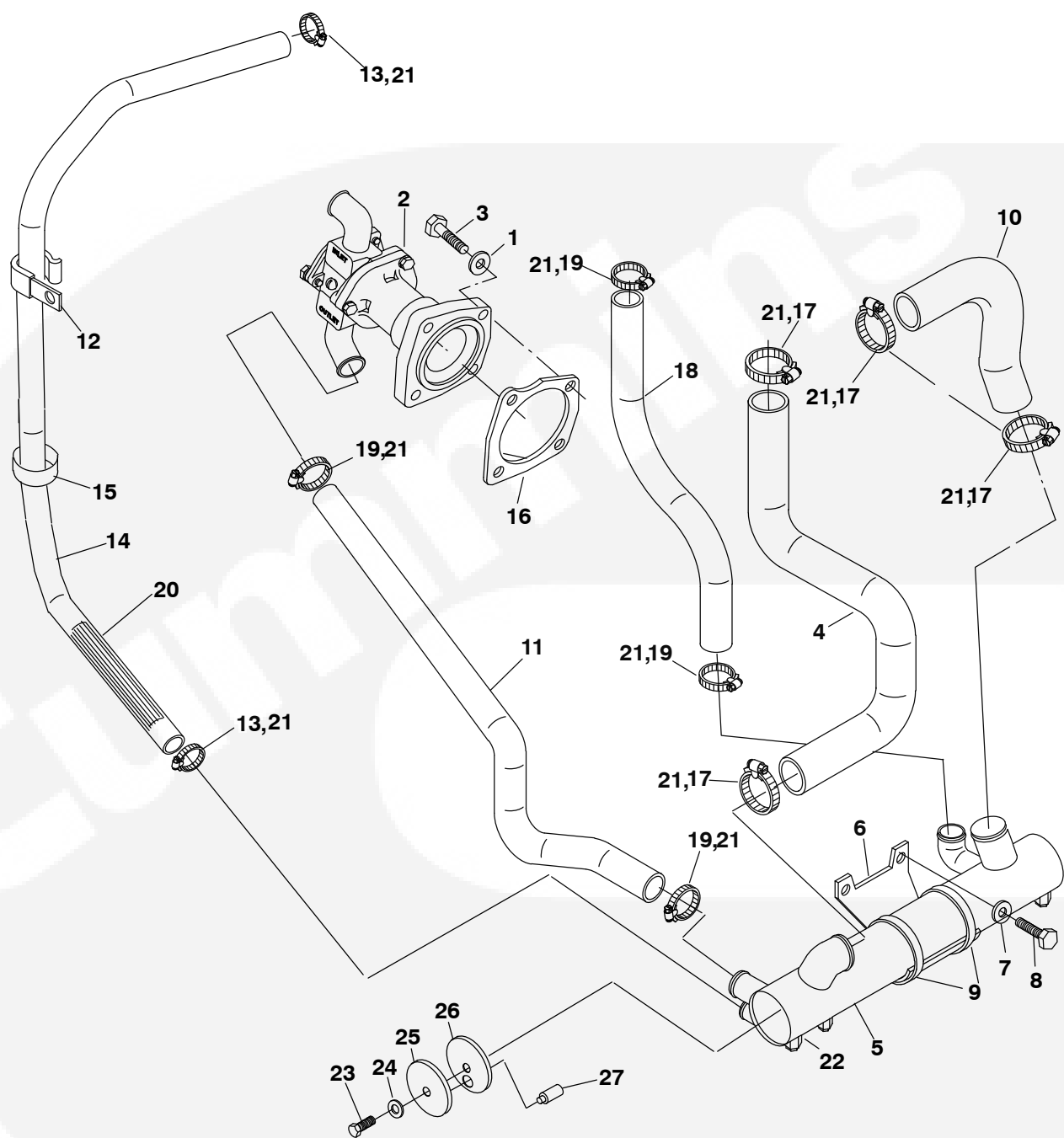


Keel Cooling **(Wet Exhaust Spec A-B)**

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
	155-3148-02	1	Kit, Keel Cooling (Includes Parts Marked *)	11	502-1297	1	*Elbow, 90°
	541-1523	1	Kit, Water Pump Service (Includes Impeller and O'Ring, Wear Plate, Cover, Lip Seal, Cam, Seal Washer)	12			*Adapter (3/4"NPT)
1	132-0346	1	Gasket, Water Pump		502-1295-01	1	5/8" Barb (MDKBP, MDKBR)
2	526-2100	4	Washer, Flat (M8)		502-1295-03	1	3/4" Barb (MDKBS)
3	718-1038	4	Screw, Hex Head Cap (M8 x 20mm)	13	503-2023	2	*Hose, Coolant (1-3/8" x 4")
4	132-0356	1	Pump, Raw Water	14	505-0446-01	2	*Nipple, Half
5	503-0977	2	Clamp, Hose	15	505-0003	1	*Elbow
6			Hose	16	505-0304	1	*Tee
	503-2122	1	MDKBP, MDKBR (3/4" x 36")	17	505-0759	2	*Barb, Hose
	503-1013	1	MDKBS	18	505-0041	1	*Elbow
7	332-2634	1	Clamp, "J"	19	503-1138	6	*Clamp, Hose (1-3/8")
8	503-1137	4	*Clamp, Hose (1")	20	503-2027	1	Hose, Coolant (1" x 10")
9	503-2079	1	Hose , Lower Coolant (Cut to Fit)				Screw, and Key) (MDKBS)
10	502-1295-02	1	*Adapter (3/4" NPT x 1" Barb)	21	405-7210	1	Connector, Bulkhead
				22	130-4830	1	Clamp, Hose

* - Parts Included in Keel Cooling Kit.

Heat Exchanger (Spec C MDKBP and MDKBR)



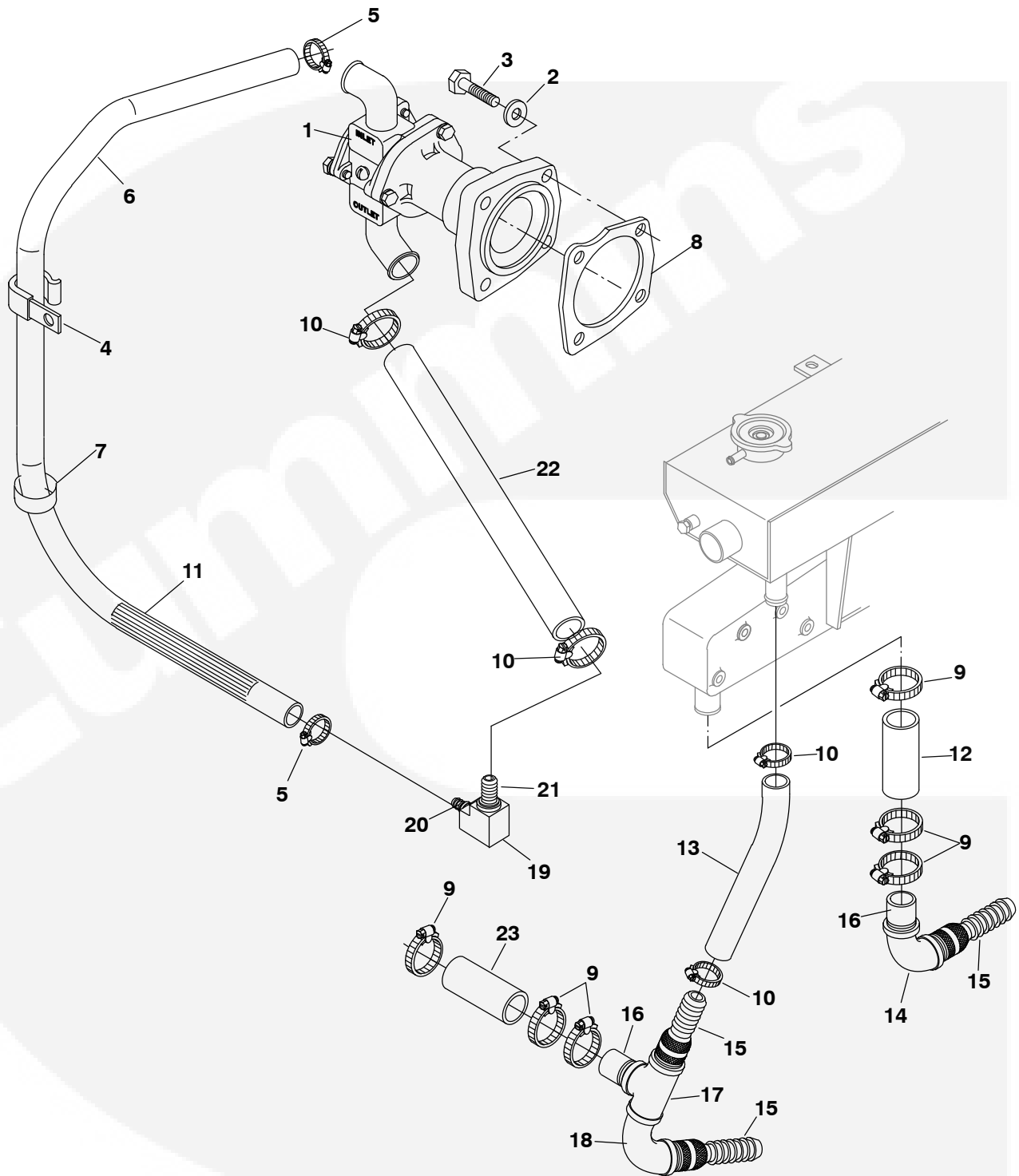
Heat Exchanger (Spec C MDKBP and MDKBR)

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	526-2100	5	Washer, Flat (M8)	19	503-1137	4	Clamp, Hose
2	132-0356	1	Pump, Water	20	898-1311-01	1	Sleeving (Wet Exhaust)
3	800-2057	4	Screw, Hex Head Cap (M8 x 1.25 x 20mm)	21	503-2823	14	Clamp, Hose (Cover) Dry Exhaust
4	503-1977	1	Hose		503-2823	16	Wet Exhaust
5	130-7490-02	1	Exchanger, Heater	22	130-4434	1	Pencil, Zinc (W/Screw)
6	130-4234-03	1	Bracket, Heater Exchanger	23	800-0317	1	Screw, Hex Head (5/16-18 x 3/4")
7	526-2120	2	Washer, Flat (M10)	24	850-0165	1	Washer Locking (5/16")
8	800-3030	2	Screw, Hex Head Cap ((M10 x 1.25 x 20mm)	25			Cover, Heat Exchanger
9	503-1143	2	Clamp, Hose		130-4567	1	W/O Zinc Pencil Hole
10	503-1896	1	Hose, Coolant		130-4962-01	1	W/ Zinc Pencil Hole
11	503-0501	1	Hose, Coolant	26			Gasket, Cover
12	332-2634	1	Clamp, "J" (Wet Exhaust)		130-4566	1	W/O Zinc Pencil Hole
13	503-1136	2	Clamp, Hose (Wet Exhaust)		130-4960	1	W/ Zinc Pencil Hole
14	503-2122	1	Hose, Coolant (Wet Exhaust)	27	130-4961	1	Pencil, Zinc (W/O Screw)
15	130-4830	1	Clamp, Hose (2 OD Wet Exhaust)				
16	132-0346	1	Gasket, Water Pump				
17	503-1138	8	Clamp, Hose				
18	503-2029	1	Hose, Coolant				

+ - Parts Included in Heat Exchanger Zinc Pencil Kit.

* - Parts Included in End Cover Kit.

Keel Cooling **(Wet Exhaust MDKBP and MDKBR Spec C)**

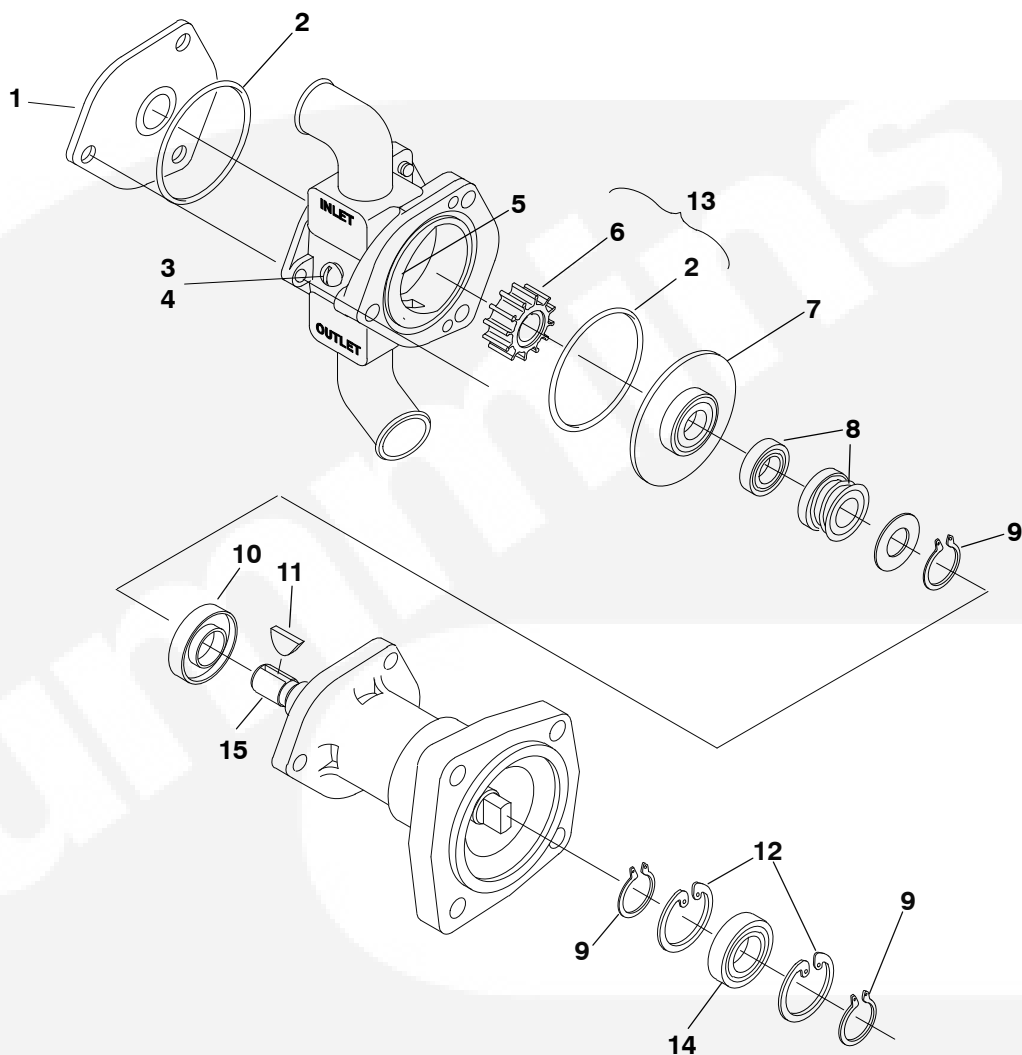


Keel Cooling
(Wet Exhaust MDKBP and MDKBR Spec C)

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	132-0413	1	Pump, Raw Water	14	505-0041	1	Elbow, (1 x 90)
2	526-2100	4	Washer, Flat (M8)	15	505-0759	3	Nipple, Combination
3	800-2057	4	Screw, Hex Head (M8 x 1.25 x 20mm)	16	505-0446-01	2	Nipple, Half
4	327-0923	1	Clamp "J"	17	505-0304	1	Tee (1")
5	503-1136	2	Clamp, Hose	18	505-0003	1	Elbow, (1" x 90)
6	503-2122-01	1	Hose, Coolant	19	502-1297	1	Elbow, 90
7	130-4830	1	Clamp, Hose	20	502-1295-01	1	Adapter, (3/4" x 5/8")
8	132-0346	1	Gasket, Water Pump	21	502-1295-02	1	Adapter, (3/4" x 1")
9	503-1138	10	Clamp, Hose	22	503-2079	1	Outlet, Keel Cooling
10	503-1137	4	Clamp, Hose	23	503-2823	2	Hose, Coolant
11	898-1311-01	2	Sleeving	24	503-2823	16	Cover, Hose Clamp
12	503-2023	2	Hose, Coolant				
13	503-2079	1	Outlet, Keel Cooling				

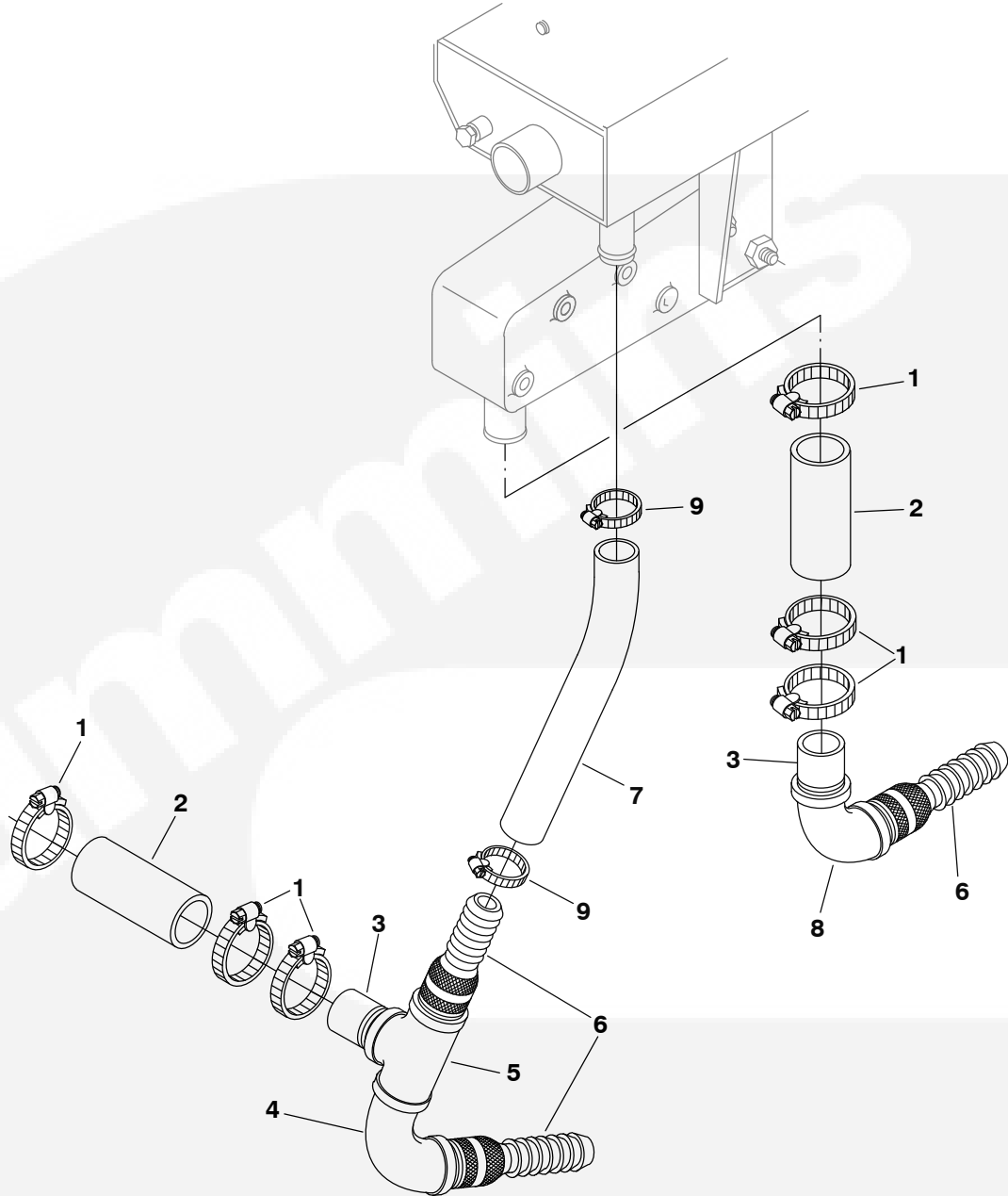
* - Parts Included in Keel Cooling Kit.

Water Pump Components



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
	541-1523	1	Kit, Major Service (Includes Parts Marked *)	9	132-0393	3	*Ring, Retaining
1	132-0384	1	*Cover	10	541-1523	1	*Seal, Lip
2	132-0293	2	*O'Ring	11	132-0391	1	*Key
3	132-0390	1	*Screw, Cam	12	132-0392	2	*Ring, Retaining
4	132-0389	1	*Washer, Sea	13	541-1521	1	Kit, Minor Water Pump Service (Includes Impeller and O'Ring)
5	132-0384	1	*Cam	14	132-0417	1	Bearing
6	132-0499	1	*Impeller	15	132-0416	1	Shaft
7	541-1523	1	*Plate, Wear		132-0420	1	Ring, Retaining (Not Shown)
8	132-0384	1	*Seal, Seat Assy				

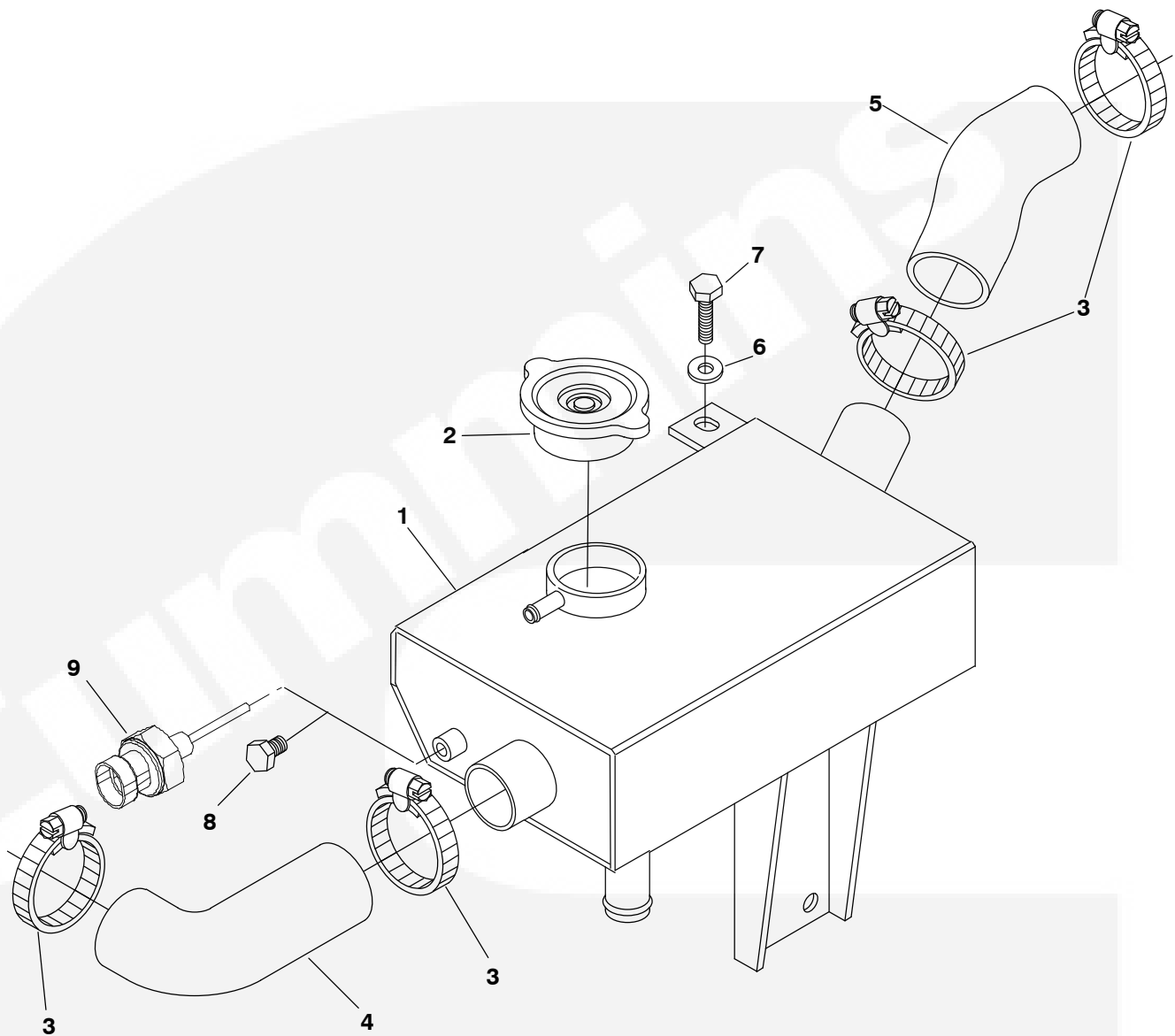
Keel Cooling System (Dry Exhaust)



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
	155-3087	1	Kit, Keel Cooling (Includes Parts Marked *)	7	503-2079	1	*Hose, Coolant (1" x 10")
	155-3284	1	Kit, Exhaust	8	505-0041	1	*Elbow
1	503-1138	6	Clamp, Hose (1-3/8")	9	503-1137	2	Clamp, Hose (1")
2	503-2023	2	*Hose, Coolant (1-3/8" x 4")				
3	505-0446-01	2	*Nipple, Half				
4	505-0003	1	*Elbow				
5	505-0304	1	Tee				
6	505-0759	2	*Barb, Hose				

* - Parts Included in Keel Cooling Kit. (Also Includes Cover, Gasket and Hardware Found on Cylinder Block Page.)

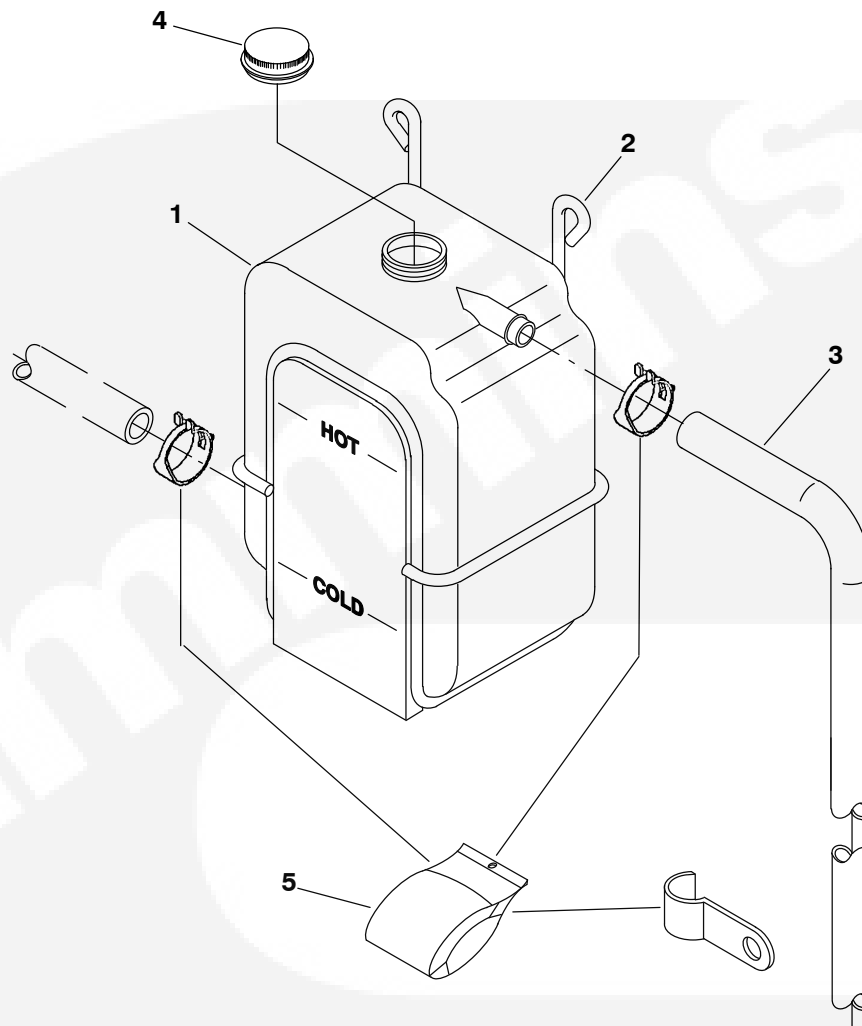
Coolant Tank



REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	130-4881-02	1	Tank, Coolant
2	130-3721	1	Cap, Tank
3			Clamp, Hose (1-3/8")
	503-1138	4	Heat Exchance
	503-1138	4	Keel Cooling
	503-2823	4	Wet
	503-2823	4	Dry
4			Hose, Upper Elbow
	503-1898	1	MDKBP, MDKBR
	503-1999	1	MDKBS

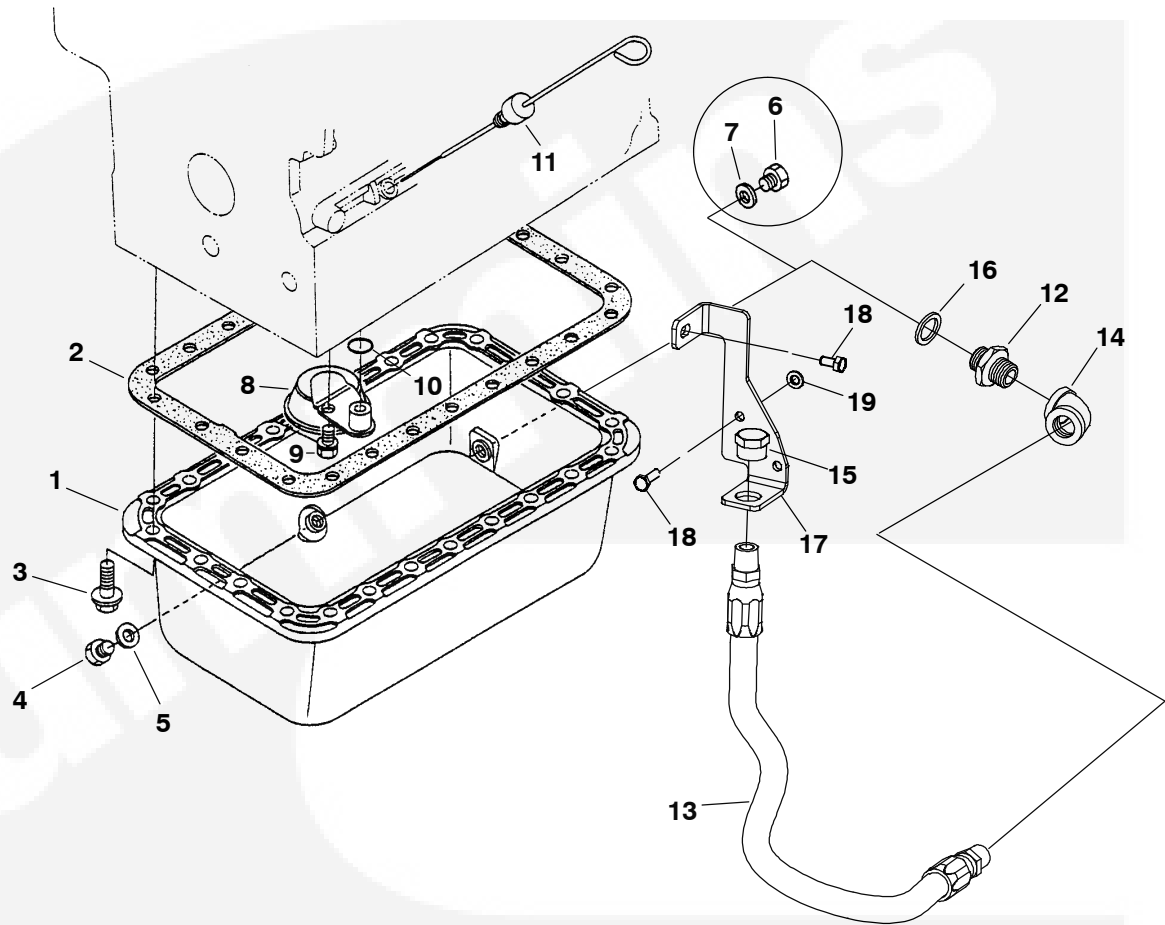
REF NO.	PART NO.	QTY USED	PART DESCRIPTION
5	503-1899	1	Hose, Upper "S"
			(1-3/8")
6	526-2100	1	Washer, Flat (M8)
7	800-2054	1	Screw, Hex Head Cap
			(M8 x 1.25 x 14mm)
8	502-0153	1	Plug, Hex Pipe (1/4)
9	193-0468	1	Sender, Low Coolant

Coolant Recovery



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
	130-3574	1	Kit, Coolant Recovery (Instructions Included)	3	503-1692	1	Hose (5/16 I.D. x 120" Lg.)
1	130-3570	1	Tank, Coolant Recovery	4	130-3572	1	Cap, Tank
2	130-3571	1	Hanger, Tank	5	130-3573	1	Hardware Package (Includes Mounting Hardware)

Oil Pan MDKBP, MDKBR

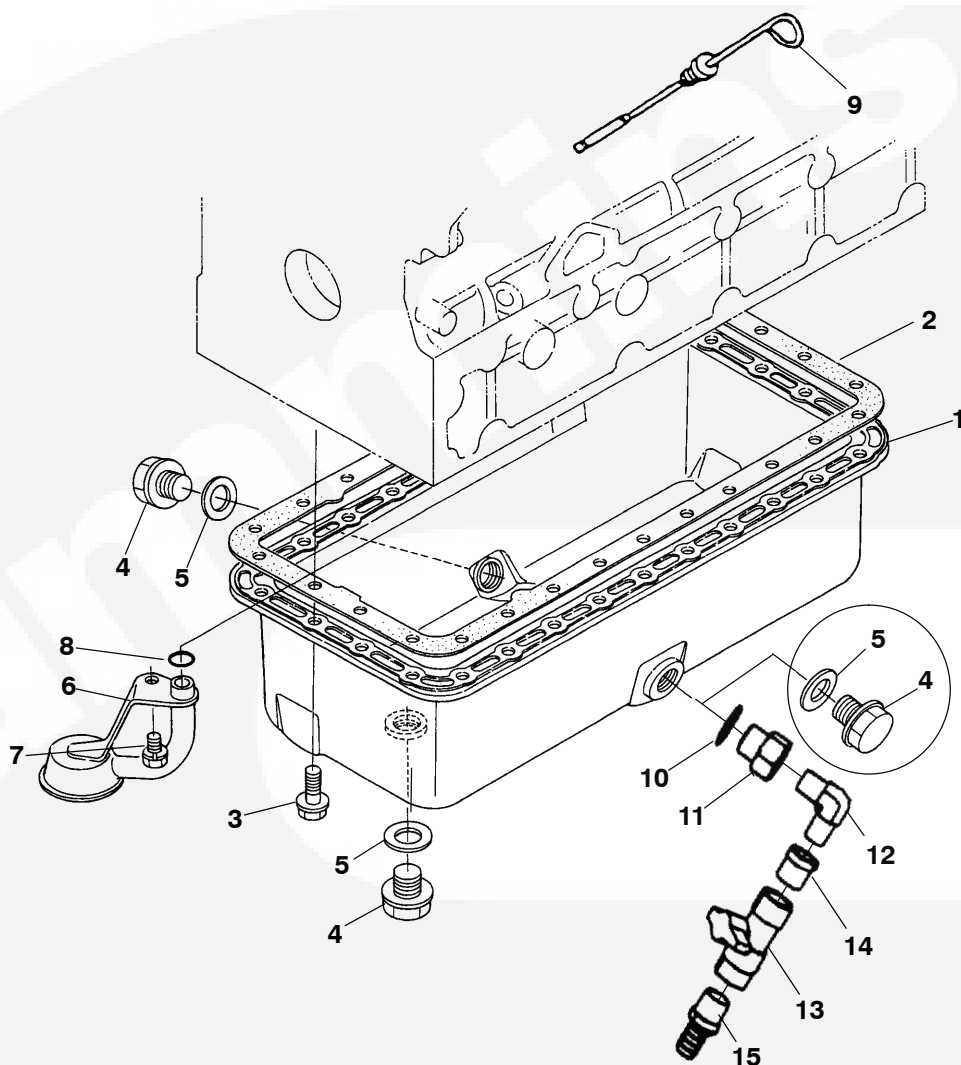


REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	185-6727	1	Pan, Oil
2	185-5854	1	Gasket
3	185-5855	24	Bolt, Flange
4	185-2096	1	Plug
5	509-0428	1	Gasket
6	185-6760	1	*Bolt
7	185-6761	1	*Gasket
8	185-6728	1	Tube, Oil Pickup
9	185-2563	1	Bolt
10	509-0411	1	O'Ring
11	185-6122	1	Indicator, Oil Level
12	102-1449-01	1	Adapter, Oil Drain
13	501-0910	1	Line, Flex Oil

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
14	502-0263	1	Elbow, Pipe 90°
15	502-1123	1	Cap, Pipe
16	526-0413	1	Washer, Oil Drain (.625ID x .875OD x .075Thk)
17			Bracket, Oil Drain
	120-1337-02	1	Spec A-B
	120-1382-02	1	Begin Spec C
18	821-6002-03	3	Screw, Hex Flanged (M6 x 1 x 16mm)
19	526-2081	2	Washer, Flat (M6)

* Bolt and Gasket Removed with Installation of Oil Drain.

Oil Pan MDKBS

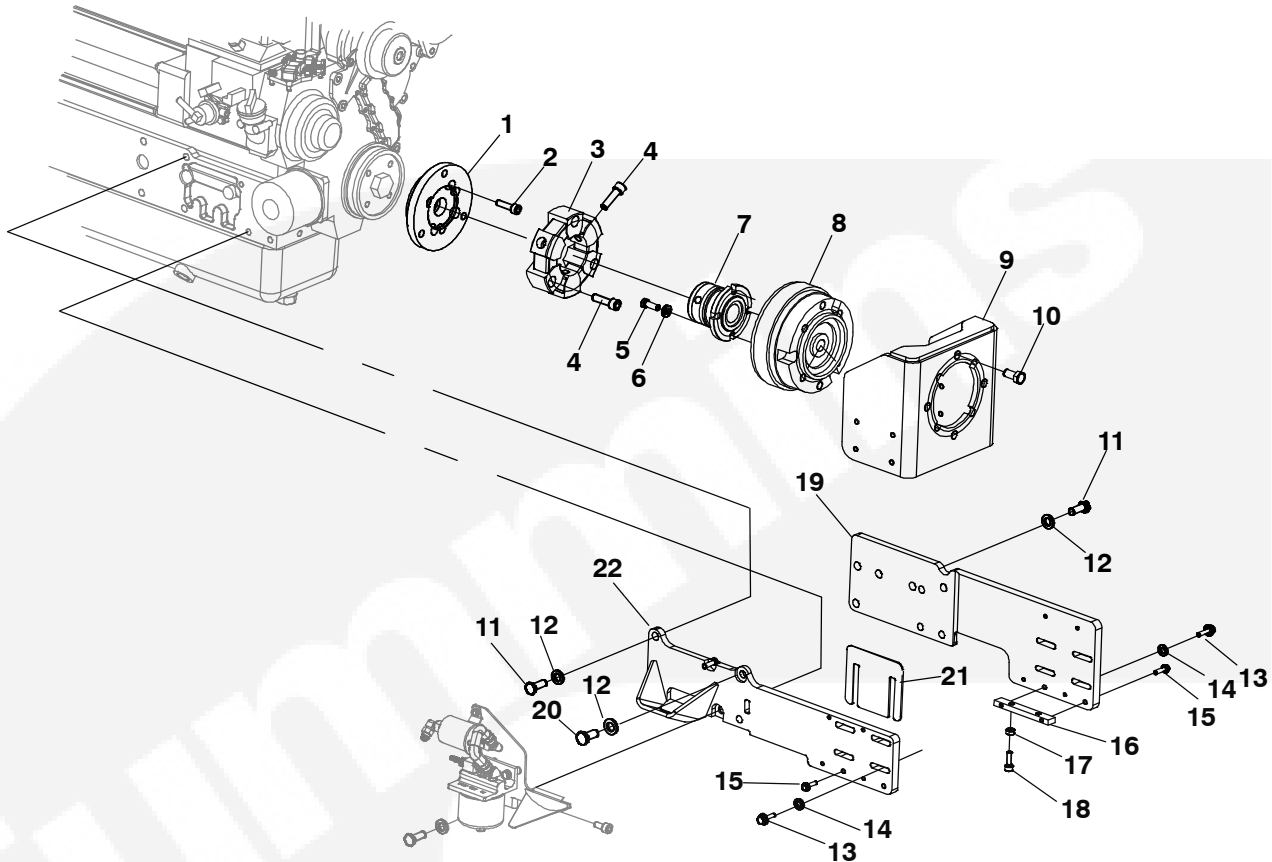


REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	185-6195	1	Pan, Oil
2	101-0847	1	Gasket
3	185-5855	28	Bolt, Flanged
4	185-6046	3	*Plug (Removed with Installation of Oil Drain)
5	185-5495	3	*Gasket (Removed with Installation of Oil Drain)
6	123-2326	1	Tube, Oil Pickup
7	185-6956	1	Bolt
8	509-0254	1	O'Ring
9	185-6061	1	Indicator, Oil Level

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
10	526-0329	1	Washer, Oil Drain (7/8")
11	102-1448-02	1	Adapter, Oil Drain
12	502-1273	1	Elbow, Pipe 90°
13	504-0011	1	Valve, Shutoff
14	502-0819	1	Bushing, Reducer
15	502-1006	1	Fitting, Hose Barb

* Circled Bolt and Gasket Removed with Installation of Oil Drain.

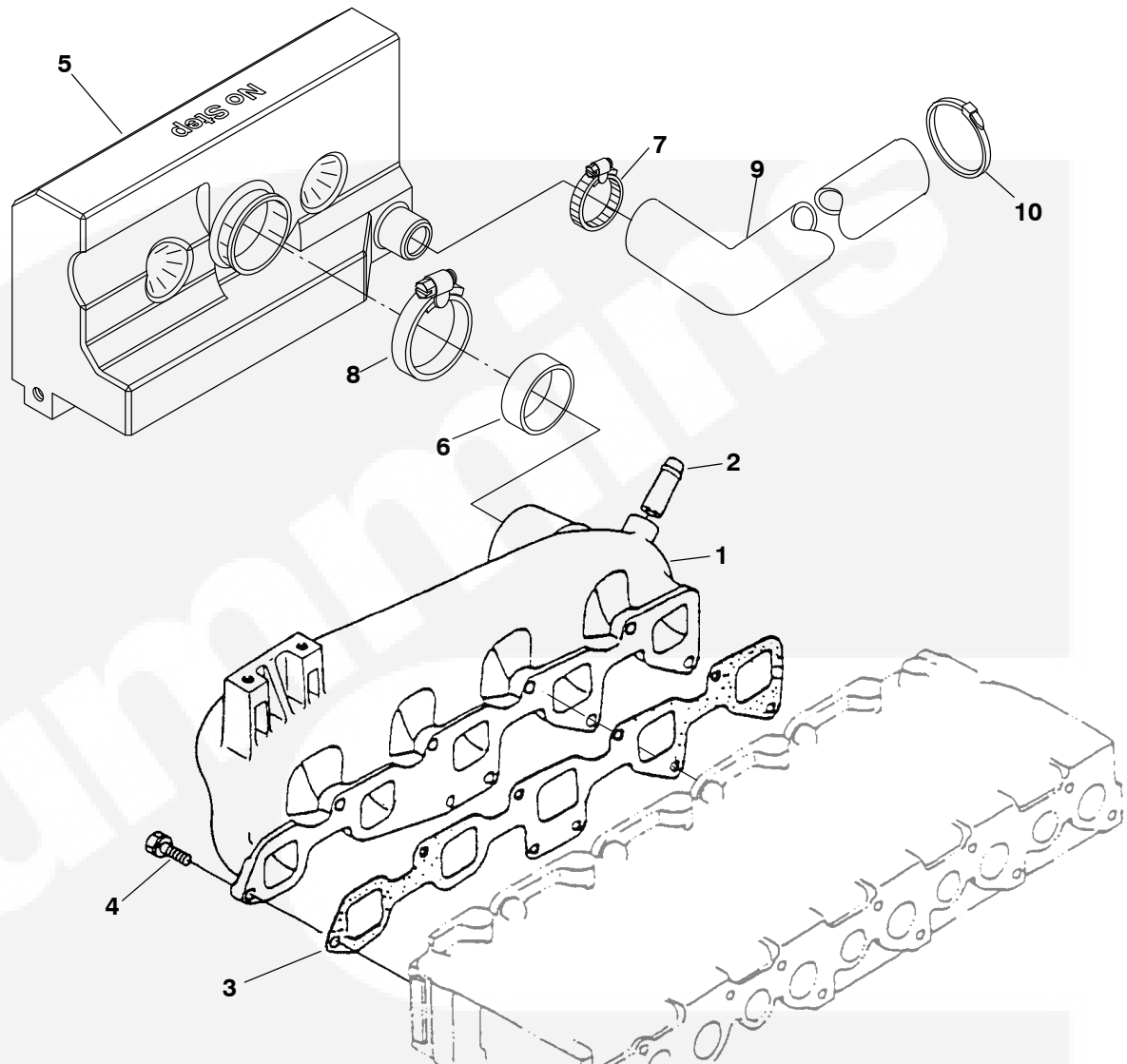
PTO



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
			Kit, PTO (Includes Parts Marked *)	9	190-0769-03	1	*Bracket, PTO Clutch
			MDKBP, MDKBR	10	800-0090	2	*Screw, Hex Head Cap (1/2-13 x 1.00")
	190-0776-01	1	12V	11	800-3032	9	*Screw, Hex Head Cap
	190-0776-02	1	24V	12	526-0399-64	10	*Washer, Flat (M12)
			MDKBS	13	800-3017-21	8	*Screw, Hex Head (M8 x 1.25 x 30mm))
	190-0776-03	1	12V	14	526-0451	8	*Washer, Flat Stainless (M8)
	190-0776-04	1	24V	15	821-2035	4	*Screw, Locking Flange (M6 x 1 x 25mm)
	190-0777	1	Kit, PTO Belt (Includes Tool Spacer and Belt)	16	190-0766-03	2	*Bracket, Mounting Pad
1			*Adapter, Coupling	17	862-0026-55	4	*Nut, Hex (M8)
	190-0763-02	1	MDKBP, MDKBR	18	815-0916	4	*Screw, Socket Head (M8 x 1.25 x 25mm)
	190-0764-02	1	MDKBS	19	190-0792-03	1	*Bracket, PTO (Left)
2			*Screw, Socket Head Cap (M8 x 1.25 x 35mm)	20	800-3033	1	*Screw, Hex Head Cap (M12 x 1.25 x 25mm)
	725-1053	3	MDKBP, MDKBR	21			*Shim, PTO
			(M8 x 1.25 x 35mm)		190-0771-02	AR	.12 GA
	815-0904-03	4	MDKBS(M10 x 1.25 x 35mm)		190-0771-04	AR	.14 GA
3	190-0768	1	*Coupling, Flex		190-0771-06	AR	.20 GA
4	725-1103	6	*Screw, Socket Head Cap (M12 x 1.75 x 40mm)	22	190-0770-03	1	*Bracket, PTO (Right)
5	801-1050	4	*Screw, Hex Head Cap (3/8-24 x 1")				
6	526-0174	4	*Washer, Flat				
7	190-0767-02	1	*Adapter, Coupling				
8			*Clutch				
	190-0729-01	1	12V				
	190-0729-02	1	24V				

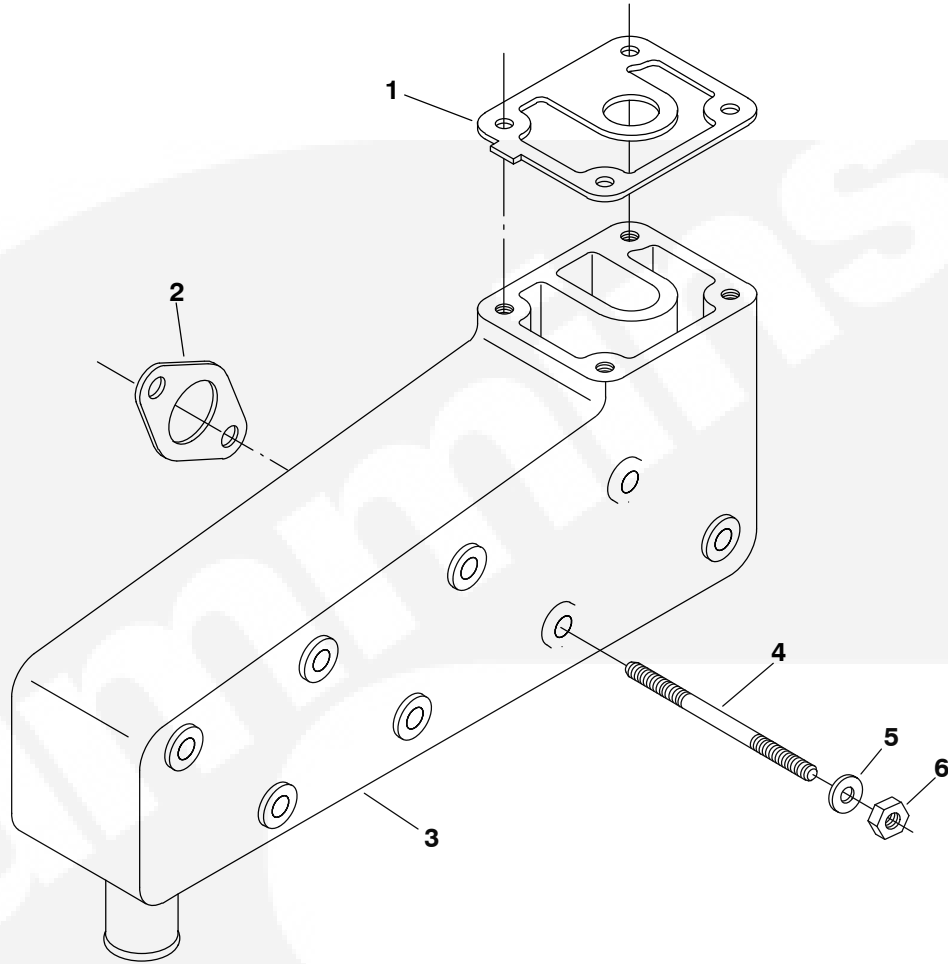
* - Parts Included in PTO Kit. (Also Includes Fuel Pump Mounting Hardware Found on Fuel Pump Page)

Intake Manifold



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1			Manifold Assy, Intake	6	140-3048	1	Sleeve, Air Intake
	185-6715	1	MDKBP, MDKBR	7			*Clamp, Hose
	185-6803	1	MDKBS		503-1138	1	MDKBP, MDKBR (1-3/8")
2	185-6723	1	Joint, Breather		503-1139	1	MDKBS (2")
3			Gasket	8	503-1143	1	Clamp, Hose (3")
	185-6035	1	MDKBP, MDKBR	9			Hose, Intake
	185-7065	1	MDKBS		503-1939	1	MDKBP, MDKBR (1-3/8 x 28")
4			Bolt		503-2009-01	1	MDKBS (1-3/8 x 31")
	185-2402	7	MDKBP, MDKBR	10	332-1389	1	Cable, Tie
	185-2402	9	MDKBS	11	503-2823	2	Cover, Hose Clamp
5			Resonator, Intake				
	140-2859	1	MDKBP, MDKBR				
	140-3021	1	MDKBS				

Exhaust Manifold

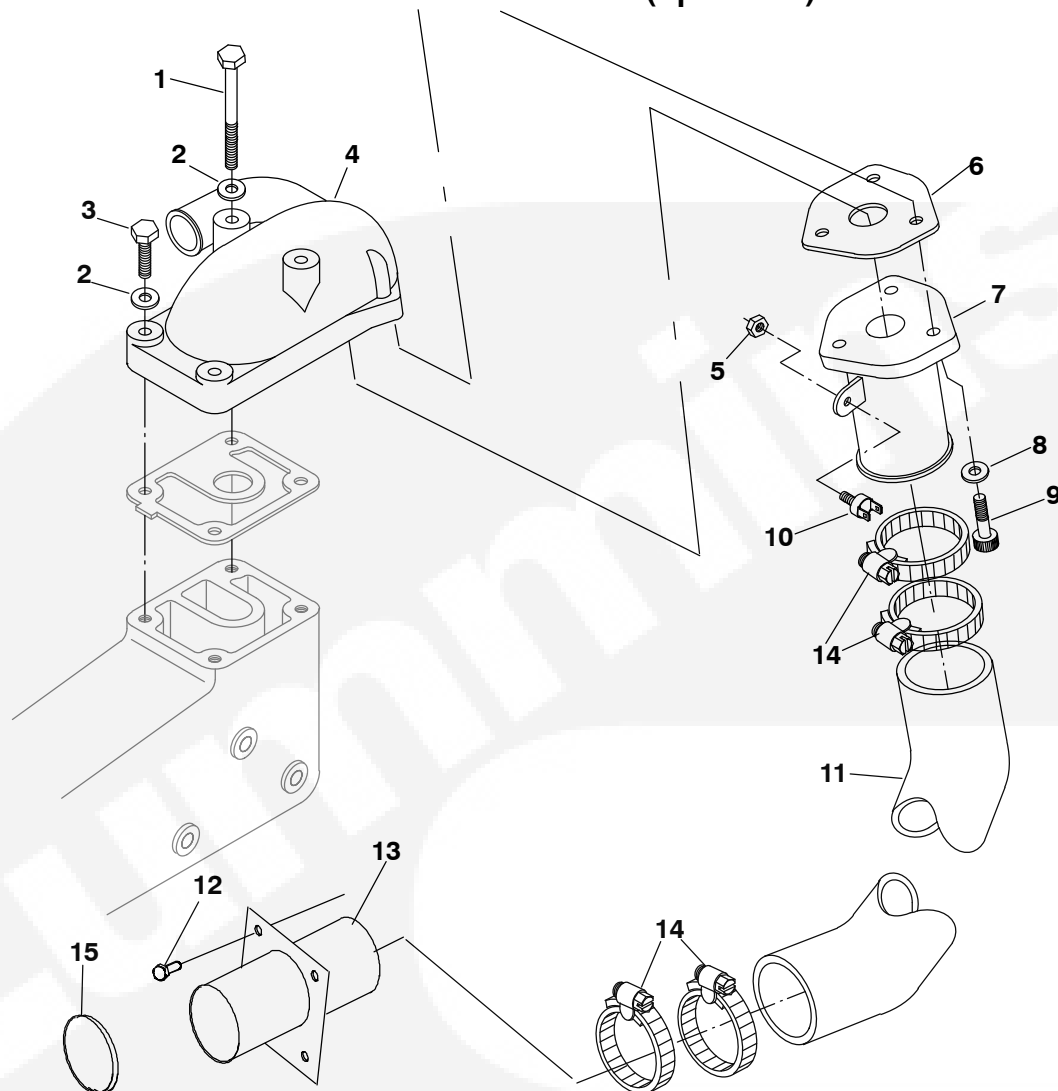


REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	155-2975	1	*Gasket, Riser, Adapter
2			Gasket, Exhaust Manifold
	154-2915	4	MDKBP, MDKBR
	154-2915	5	MDKBS
3			Manifold, Exhaust
	154-2887	1	MDKBP, MDKBR
	154-3002	1	MDKBS
4			Stud
	520-2218-01	8	MDKBP, MDKBR
	185-7064	10	MDKBS

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
5			Washer, Flat (M8)
	526-2100	8	MDKBP, MDKBR
	526-2100	10	MDKBS
6			Nut (M8 x 1.25)
	750-1006	8	MDKBP, MDKBR
	750-1006	10	MDKBS

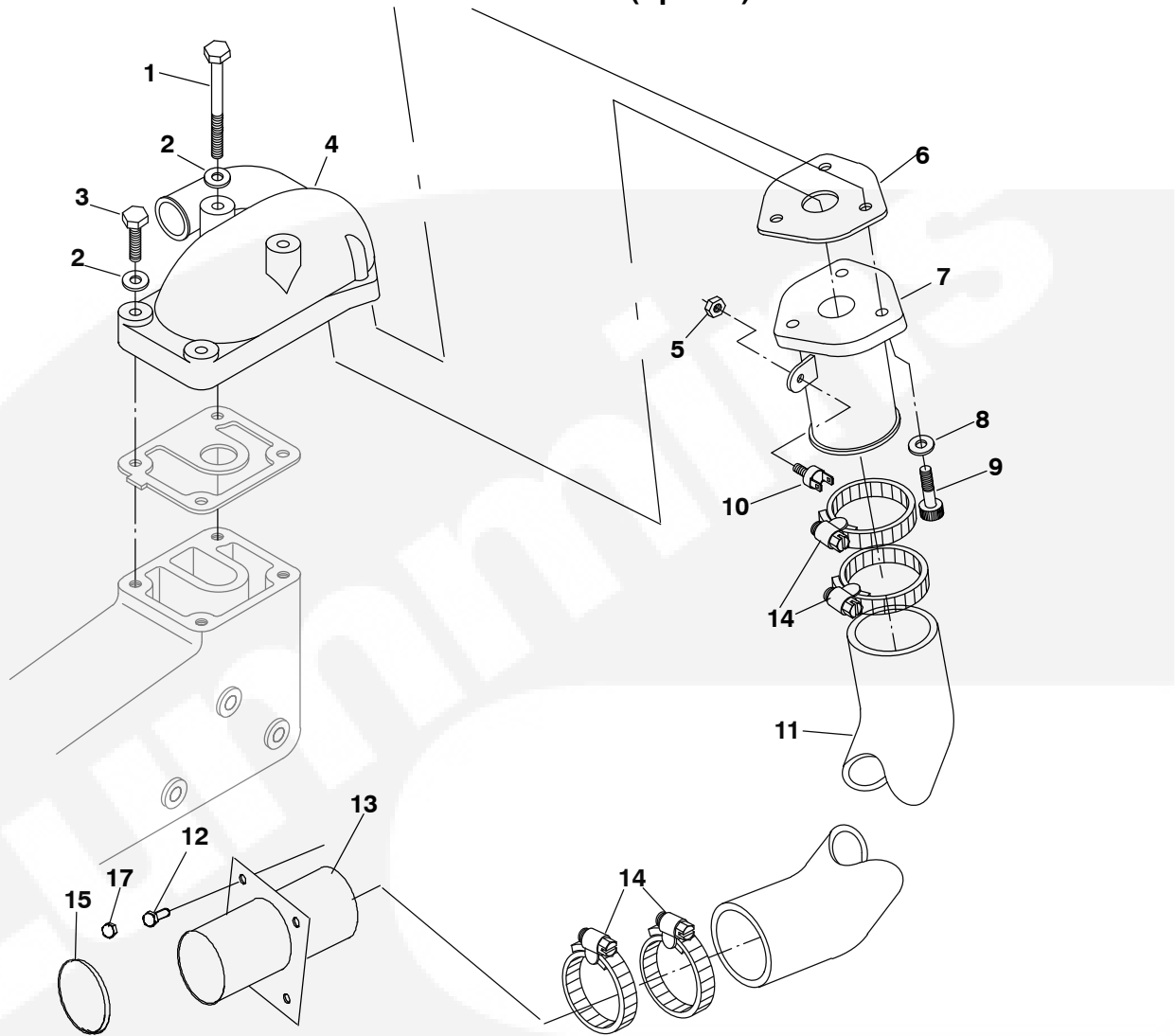
* - Part Included in Exhaust Adapter Kit Found on Dry Exhaust Page.

Wet Exhaust (Spec A-B)



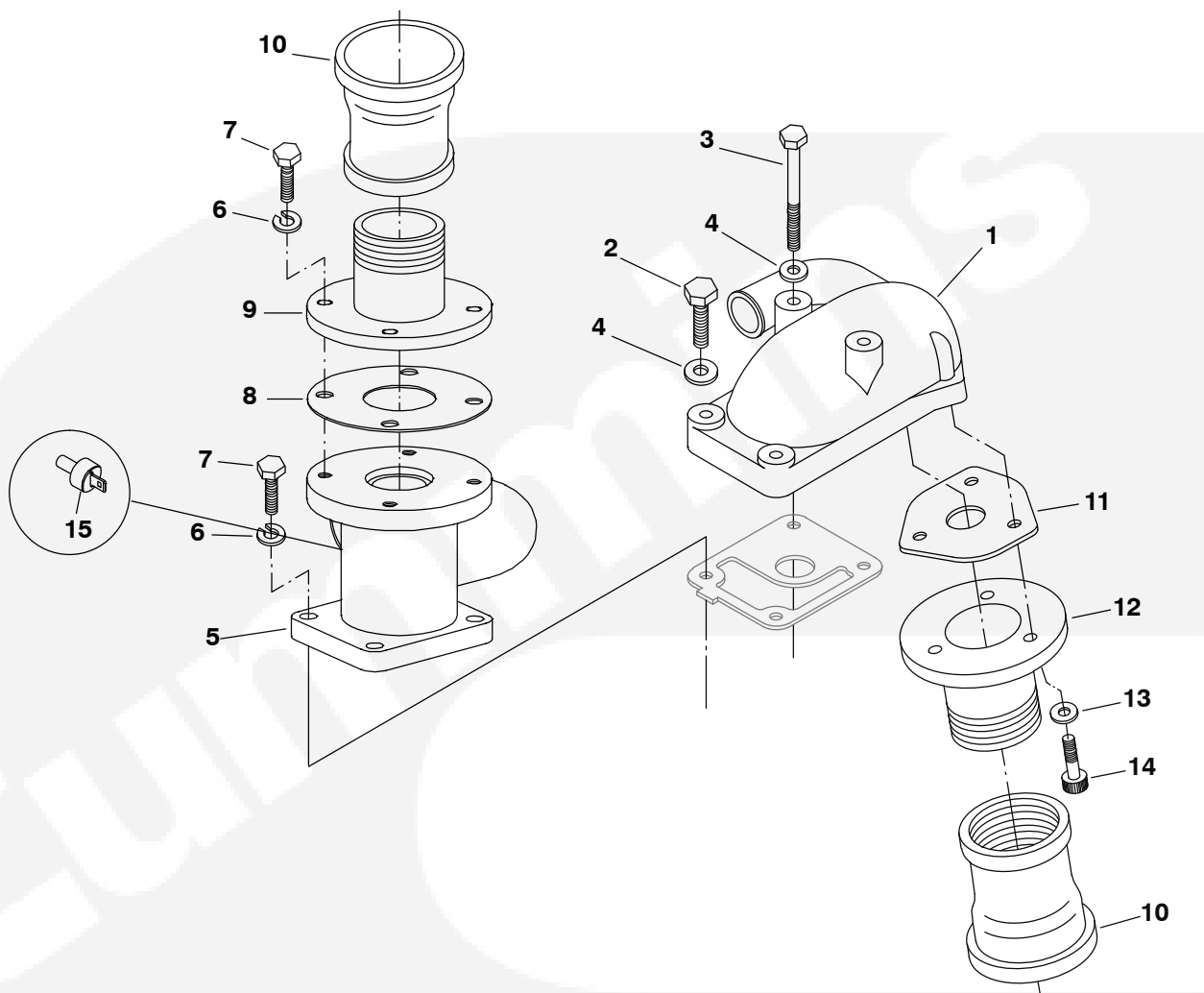
REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
			Kit, Exhaust (Wet)	11			Hose, Exhaust
	541-0852-01	1	MDKBP, MDKBR (Rear Out)				Front (Spec A)
	541-0852-02	1	MDKBP, MDKBR (Front Out)	503-2344	1		MDKBP, MDKBR
	541-0852-03	1	MDKBS (Rear Out)	503-2345	1		MDKBS
	541-0852-04	1	MDKBS (Front Out)				Rear (Spec A)
	155-3284	1	Kit, Exhaust (Wet)	501-0797-01	1		MDKBP, MDKBR
1	800-2067	2	Screw, Hex Head Cap (M8 x 1.25 x 70mm)	501-0797-02	1		MDKBS
							Front (Begin Spec B)
2	526-2100	4	Washer, Flat (M8)				Housed
3	718-1038	2	Screw, Hex Head Cap (M8 x 1.25 x 30mm)	503-2608-01	1		MDKBP, MDKBR
				503-2608-02	1		MDKBS
4	154-2891	1	Riser, Exhaust				Rear (Begin Spec B)
5	870-0221-01	1	Nut, Hex (8-32)	501-0909-01	1		MDKBP, MDKBR
6	155-3061	1	Gasket, Mixer	501-0909-02	1		MDKBS
7	154-3163	1	Mixer	12	821-6006-01	4	Screw, Hex Head Sems Stainless (M6 x 1 x 16mm)
8	740-1004	3	Washer, Flat (M6)	13	405-7210	1	Bulkhead, Exhaust Connector
9	802-2068	3	Screw, Socket Cap (M6 x 1 x 20mm)	14	503-1142	4	Clamp, Hose Exhaust
10	309-0597-01	1	Switch, High Exhaust Temperature (S5)	15	517-0136-09	1	Plug, Hole (Rear Out Housed)

Wet Exhaust (Spec C)



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
			Kit, Exhaust (Wet)				
	541-1472-01	1	MDKBP, MDKBR (Rear Out)	8	740-1004	3	Washer, Flat (M6)
	541-1472-02	1	MDKBP, MDKBR (Front Out)	9	802-2068	3	Screw, Socket Cap (M6 x 1 x 20mm)
	541-1472-03	1	MDKBS (Rear Out)	10	309-0597-01	1	Switch, High Exhaust Temperature (S5)
	541-1472-04	1	MDKBS (Front Out)	11	501-0909-01		Hose, Exhaust
1	800-2067	2	Screw, Hex Head Cap (M8 x 1.25 x 70mm)	12	800-6395-01	4	Screw, Hex Head Sems Stainless (M6 x 1 x 16mm)
2	526-2100	4	Washer, Flat (M8)	13	404-0057	1	Bulkhead, Exhaust Connector
3	800-2059	2	Screw, Hex Head Cap (M8 x 1.25 x 30mm)	14	503-1142	4	Clamp, Hose Exhaust
4	154-2891	1	Riser, Exhaust	15	517-0138-09	1	Plug, Hole (Rear Out Housed)
5	870-0221-01	1	Nut, Hex (8-32)	16	503-2823	4	Cap, Hose Clamp (Not Shown)
6	155-3061	1	Gasket, Mixer	17	517-0131-02	4	Plug (Rear Out Housing)
7	154-3163	1	Mixer				

Dry Exhaust (Up or Down)



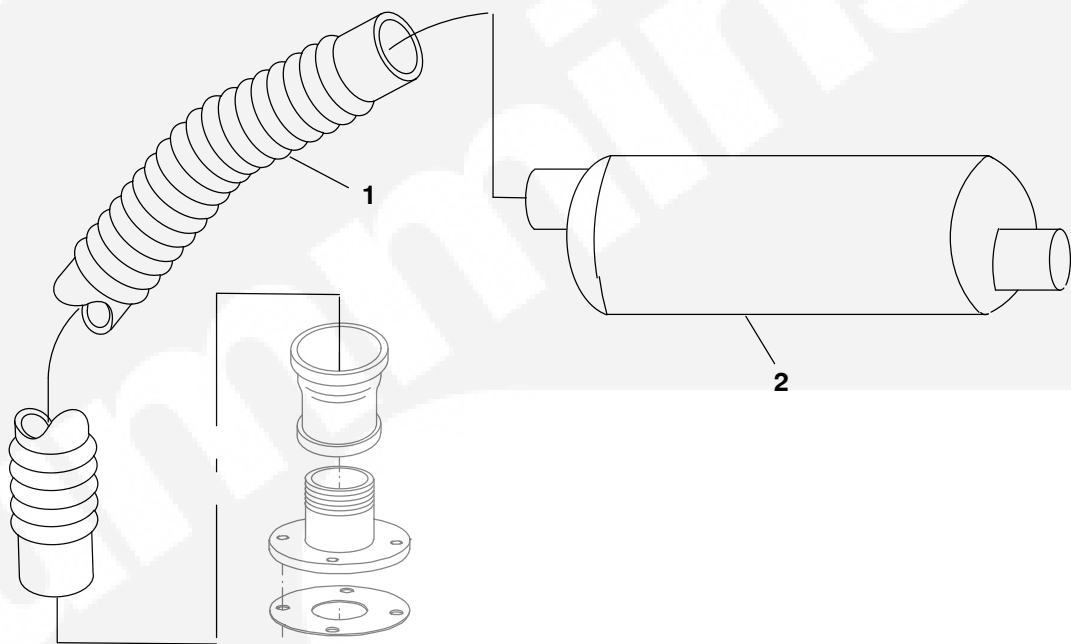
REF NO.	PART NO.	QTY USED	PART DESCRIPTION
	155-4690	1	Kit, Exhaust Adapter (Includes Parts Marked *)
	155-4691	1	Kit, Exhaust Flange (Includes Parts Marked +)
1	154-2891	1	Riser, Exhaust
2	718-1040	2	Screw, Hex Head Cap (M8 x 1.25 x 30mm)
3	800-2067	2	Screw, Hex Head Cap (M8 x 1.25 x 70mm)
4	526-2100	4	Washer, Flat (M8)
5	154-2963-02	1	*Adapter, Exhaust
6	850-2008	8	*Washer, Lock (M8)
7	718-1037	8	*Screw, Hex Head Cap (M8 x 1.25 x 25mm)

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
8	155-2981	1	*Gasket, Exhaust Adapter
9	155-3069-02	1	*Flange, Exhaust
10	505-0339-02	1	*Coupling, Reducer (2 x 1-1/2")
11	155-3061	1	+ Gasket, Exhaust (Mixer)
12	155-3068-02	1	+ Flange, Exhaust
13	740-1004	3	+ Washer, Flat (M6)
14	802-2068	3	+ Screw, Socket Cap (M6 x 1 x 20mm)
15	309-0597-01	1	Switch, Hi Exhaust Temperature

* - Parts Included in Exhaust Adapter Kit. (Also Includes Gasket on Exhaust Manifold Page.)

+ - Parts Included in Exhaust Flange Kit.

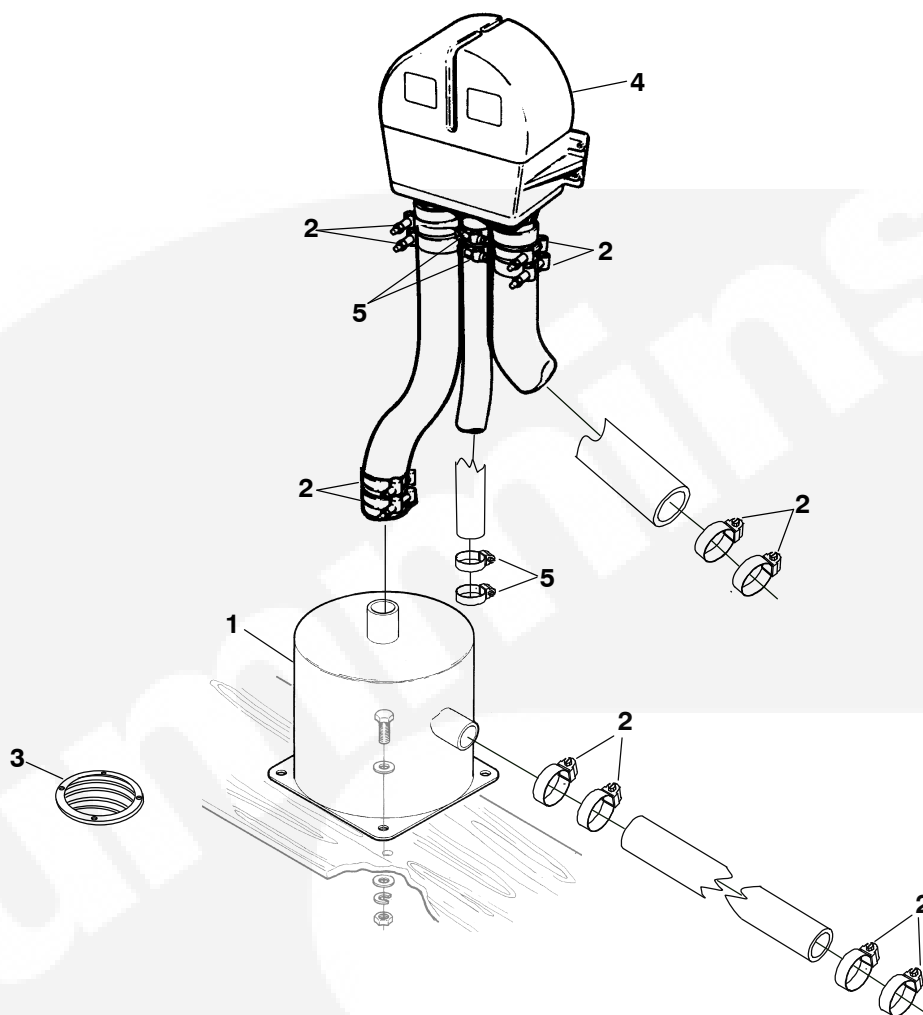
Muffler



REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	155-2355-04	1	Tube, Flexible Exhaust (2")
2	155-2063-09	1	Muffler, Dry Exhaust (Up) (2")
	155-2064-09	1	Industrial Critical



Water Separator, Muffler



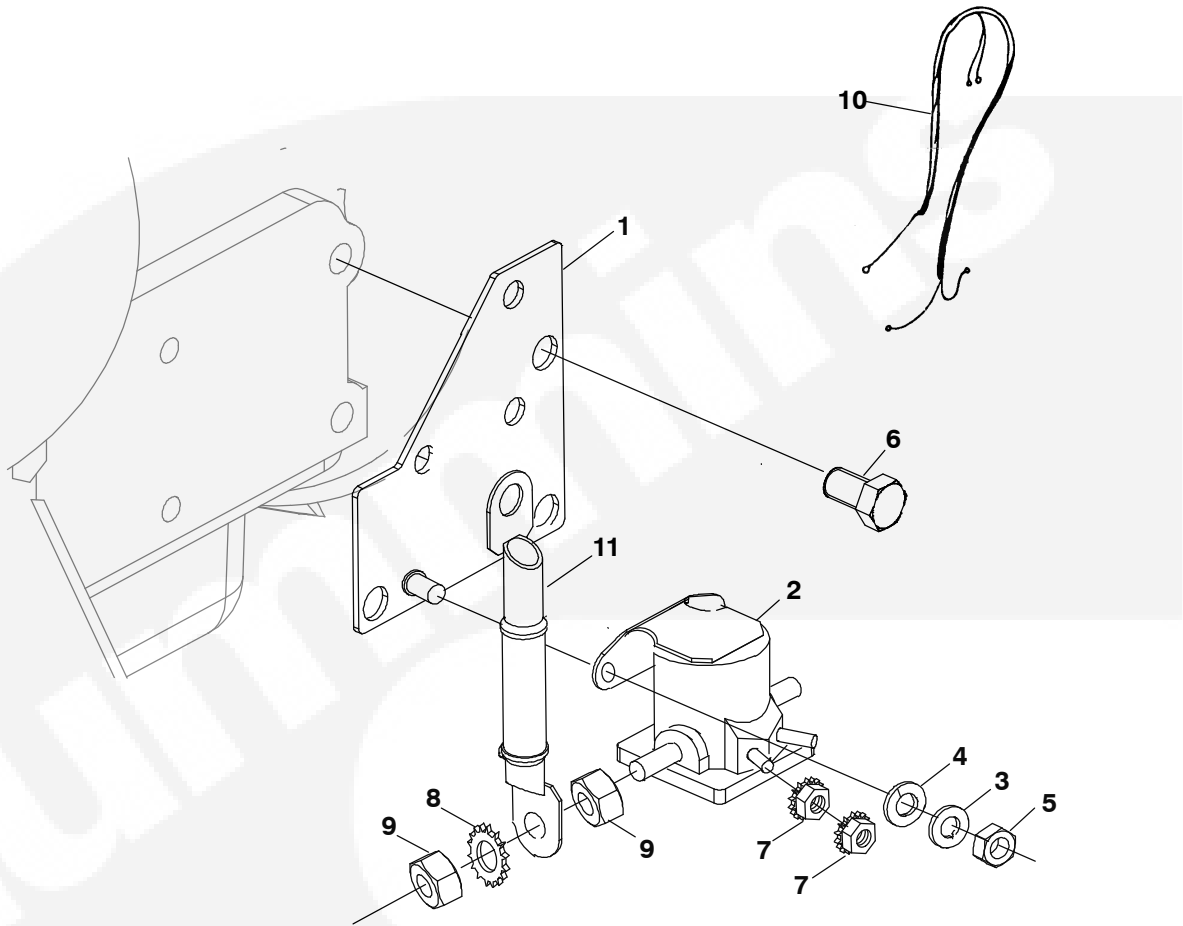
REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
			Kit, Muffler, Separator (Includes Parts Marked *)	2			Clamp, Hose (2")
	155-3217	1	MDKBP, MDKBR		503-1133	8	+ MDKBP, MDKBR
	155-3223	1	MDKBS		503-1133	4	+ Muffler Kit (2")
			Kit, Muffler (Includes Parts Marked +)		503-1133	10	# Separator Kit (2")
	155-2030	1	MDKBP, MDKBR		503-1133	8	* Muffler, Separator Kit (2")
	155-3222	1	MDKBS		503-1133	4	MDKBS
			Kit, Water Separator (Includes Parts Marked #)		503-1133	10	+ Muffler Kit (2-1/2")
	155-3216	1	MDKBP, MDKBR		503-1133	4	# Separator Kit (2")
	155-3224	1	MDKBS		503-1133	10	* Muffler/Separator Kit (2")
1			*+ Muffler, Marine	3	155-1002	1	*+ Strainer, Water Pickup
	155-2029	1	MDKBP, MDKBR	4			*#Separator, Water
	155-3220	1	MDKBS		155-3216	1	(2")MDKBP, MDKBR
					155-3221	1	(2-1/2")MDKBS
				5	503-1139	4	*#Clamp, Hose (1-1/2")

* - Parts Included in Muffler/Separator Kit.

+ - Parts Included in Muffler Kit.

- Parts Included in Water Separator Kit.

Isolated Ground

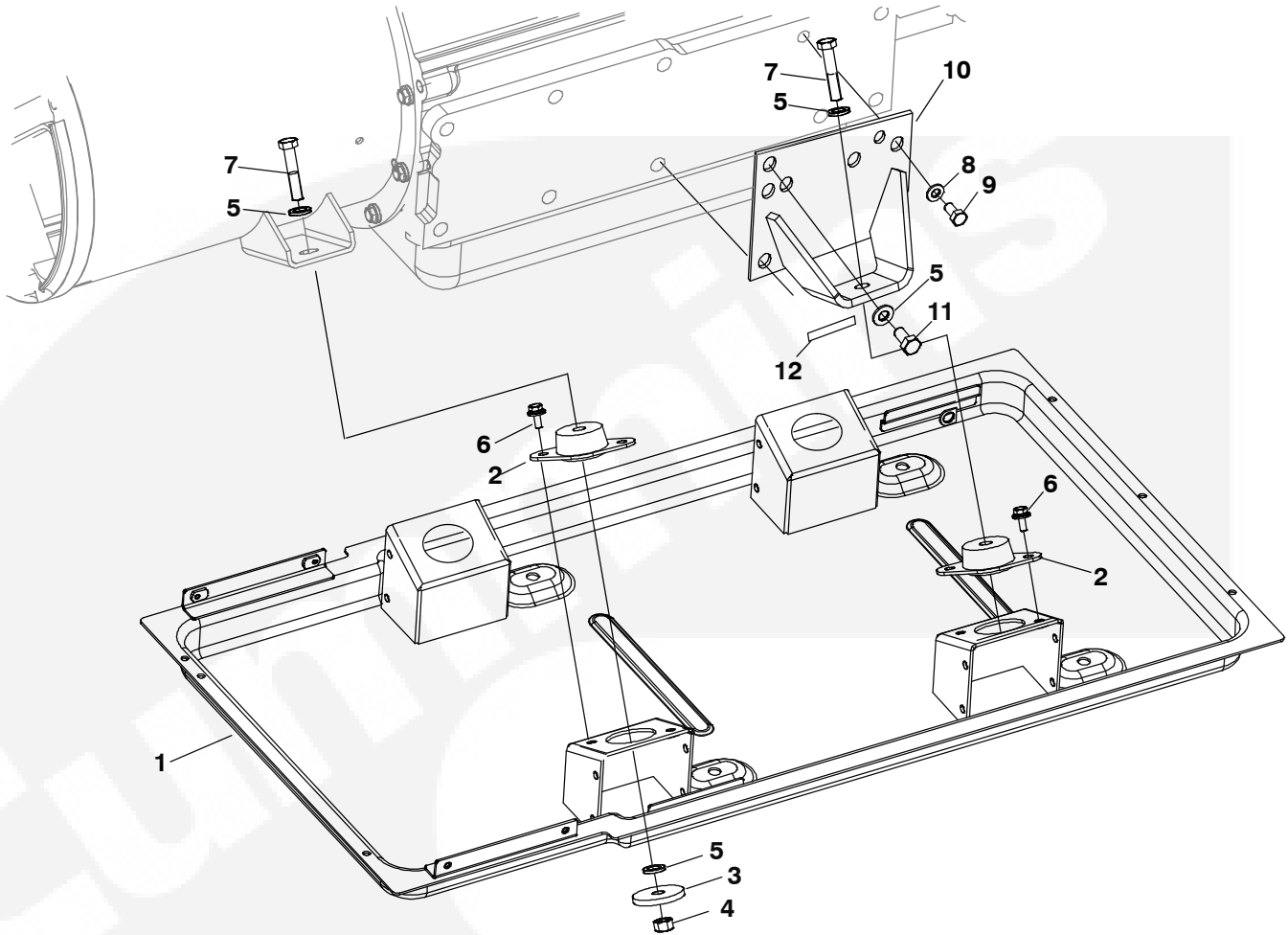


REF NO.	PART NO.	QTY. USED	PART DESCRIPTION
			Kit Isolated Ground (Includes Screws, Sending Units and Harness)
	541-0823	1	12V
1	541-0824	1	24V
	333-0662-01	1	Bracket, Solenoid
	333-0662-02	1	12V
			24V
2			*Relay, Solenoid
	307-1617	1	12V
	307-2656	1	24V
3	526-0399-58	2	Washer, Flat (M6)
4	850-0114-53	2	Washer, Split Lock (M6)

REF NO.	PART NO.	QTY. USED	PART DESCRIPTION
5	862-0026-54	2	Nut, Hex (M6)
6	800-3031	3	Screw, Hex Head Cap (M12 x 1.25 x 20)
7	870-0131	2	Nut, ET Hex (#10-32) (12V)
8	853-0016	2	Washer, ET Lock (5/16")
9	862-0026-30	2	Nut, Hex (5/16-24)
10	338-4200-01	1	Harness, Isolated Ground
11	338-4200-02	1	Harness, Ground

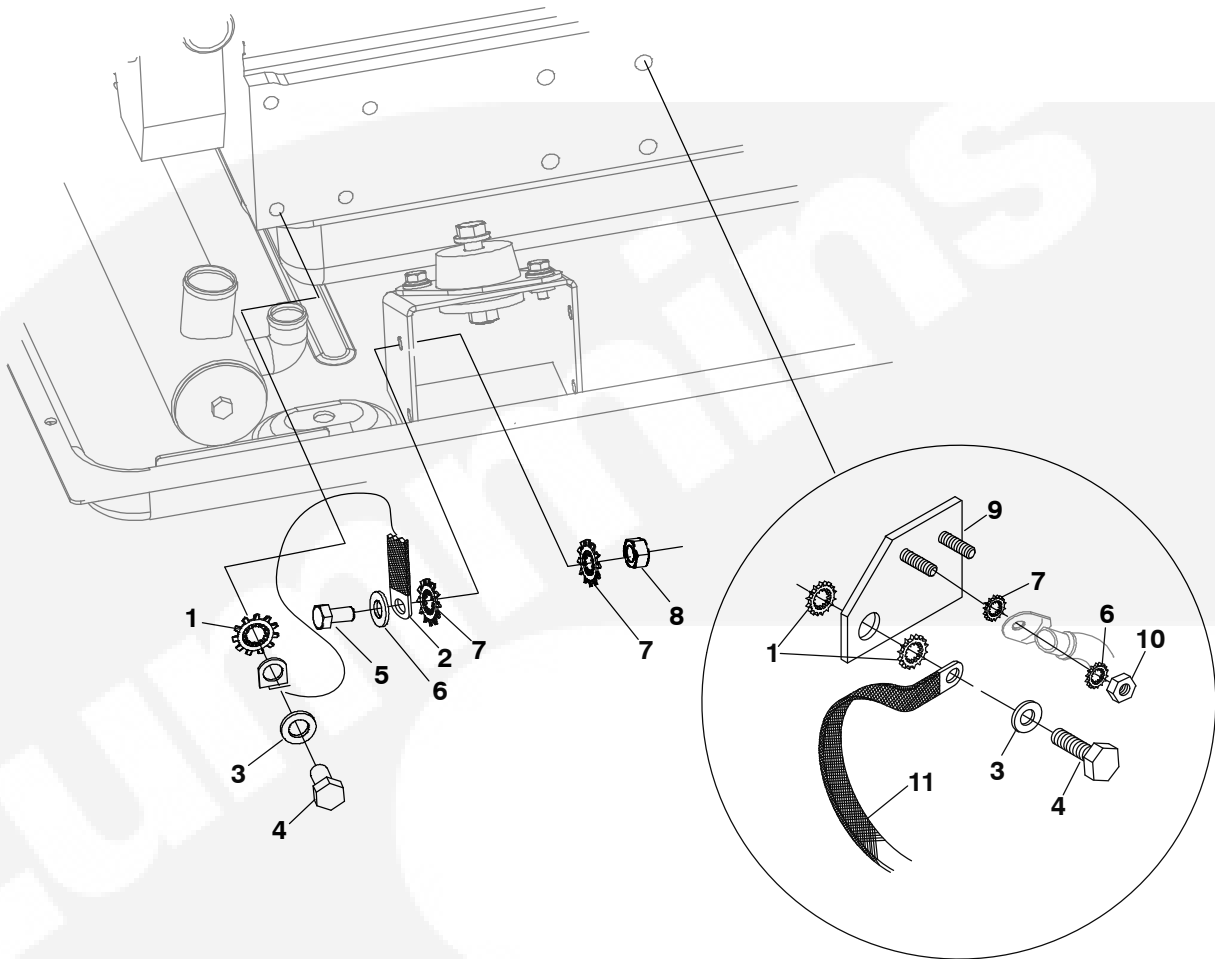
* - Relay Solenoid ties to B- and K9-1 Isolated Ground Harness (338-4200-01)

Mounting Base



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1			Base, Generator Mounting				
	403-4581-02	1	MDKBP, MDKBR	7	800-2118	4	(M8 x .25 x 20mm) Screw, Hex Head Cap
	403-4624-02	1	MDKBS				(M12 x 1.75 x 60mm)
2			Isolator, Mounting	8	526-2120	1	Washer, Rocker Ball (MDKBS)
			W/O PTO	9	800-3030	1	Screw, Hex Head Cap (MDKBS)
	403-3573	4	MDKBP, MDKBR				(M10 x 1.25 x 20mm)
	403-3955	4	MDKBS	10			Mount, Engine
			With PTO		403-4059-03	1	MDKBS
	403-3573	2	MDKBP, MDKBR		403-3972-04	1	MDKBS
	403-3955	2	MDKBP, MDKBR		403-4059-S3	2	MDKBP, MDKBR (Spec A-B)
	403-3955	2	MDKBS		403-6788-02	2	MDKBP, MDKBR
	403-4091	2	MDKBS				(Begin Spec C)
3	526-0172	4	Washer, Flat (M12)	11			Screw, Hex Head Cap
4	860-2010	4	Nut, Hex Machine				(M12 x 1.25 x 20mm)
			(M12 x 1.75mm)		800-3031	7	without PTO
5			Washer, Flat (M12)		800-3031	1	with PTO
	526-2140	19	Without PTO	12	508-0239	4"	Edging
	526-2140	13	With PTO				
6	821-6003-02	8	Screw, Hex Head Cap				

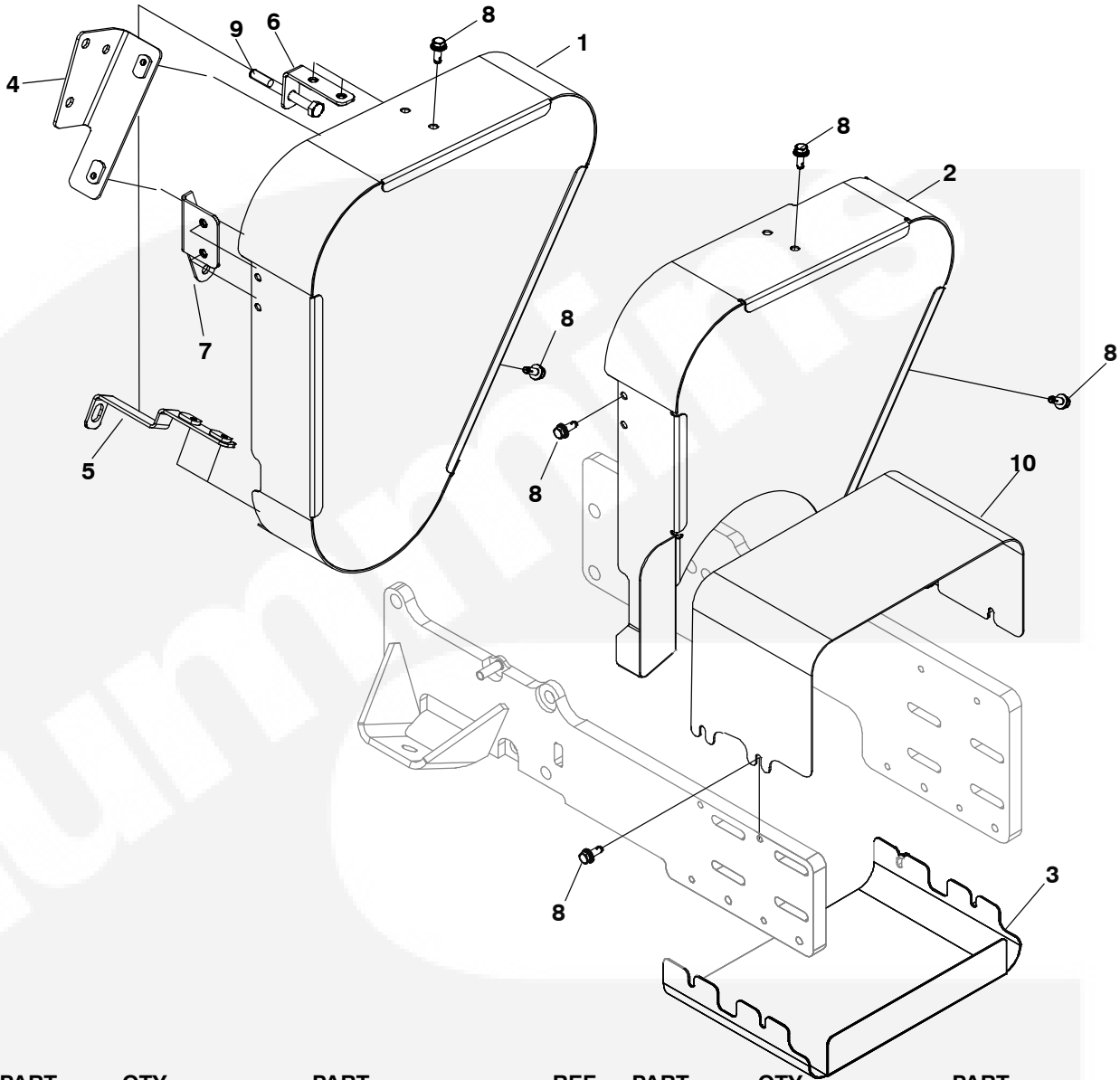
Grounding System



REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	856-0013	3	Washer, EIT Lock (1/2")
2	337-2785	1	Strap, Bond
3	526-2140	2	Washer, Flat (M12)
4	800-3032	1	Screw, Hex Head Cap (M12 x 1.25 x 30mm)
5	800-2057	1	Screw, Hex Head Cap (M8 x 1.25 x 20mm)
6	526-2100	2	Washer, Flat (M8)

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
7	856-0008	2	Washer, EIT Locking (5/16")
8	860-2008	1	Nut, Hex (M8 x 1.25mm)
9	337-2784-02	1	Bar, Bus
10	871-0025	1	Nut, Hex Brass (5/16-18")
11	337-0090-02	1	Strap, Electrical

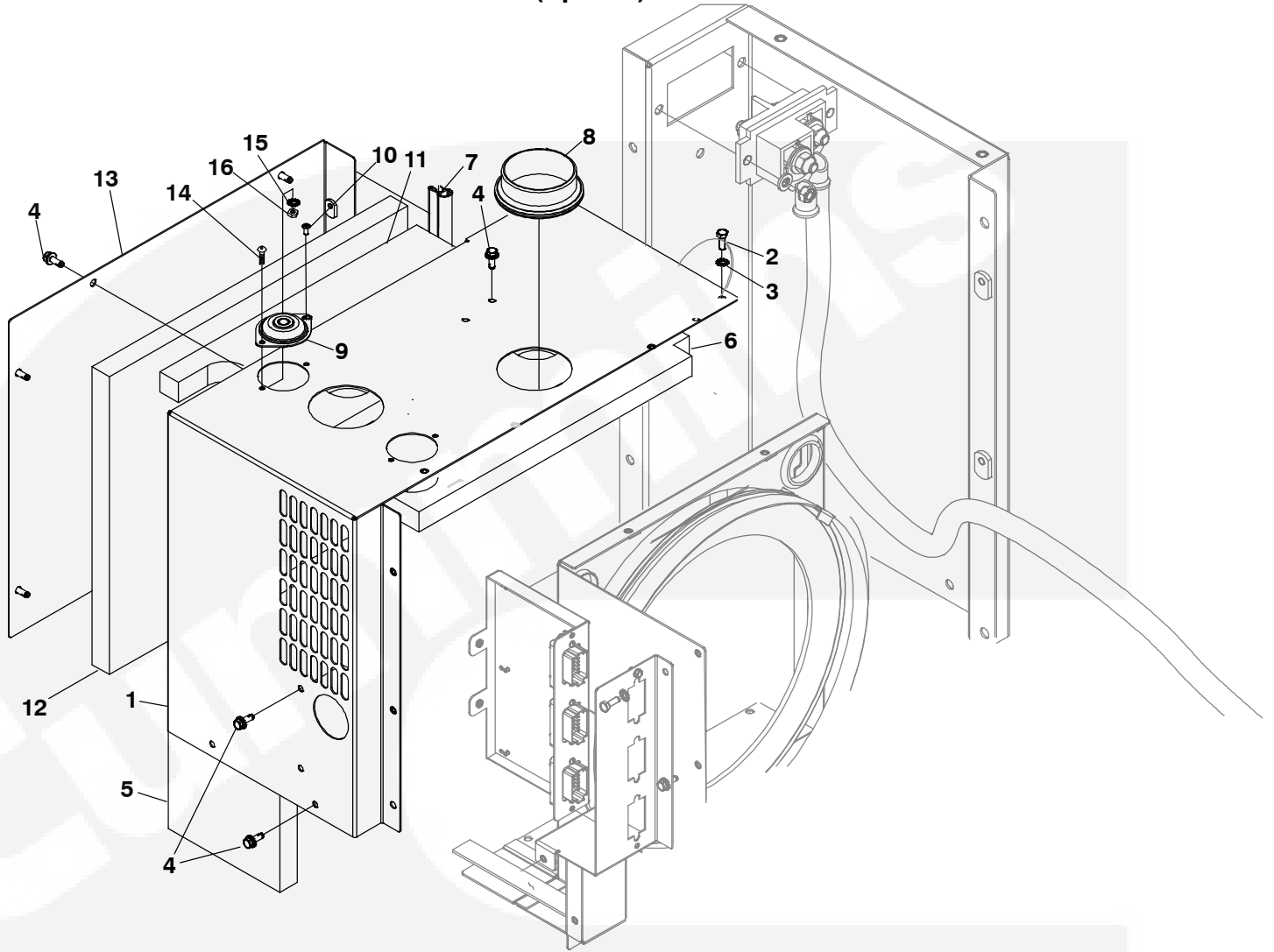
Belt Guard and PTO Belt Guard



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
	541-1474-01	1	Kit, Belt Guard (Neg Ground) (Includes Parts Marked*)	7	130-4381-03	1	*+~Bracket, Guard
	541-1474-02	1	Kit, Belt Guard (ISO Ground) (Includes Parts Marked+)	8	800-6395-01	8	*+~Screw, Hex Head Cap (M6 x 16) Negative Ground
	541-1474-03	1	Kit, Belt Guard (PTO) (Includes Parts Marked~)		800-6395-01	4	Isolated Ground
1			Guard, Belt W/O PTO		800-6395-01	14	PTO
	130-4652-03	1	Negative Ground	9	718-1047	1	*~Screw, Hex Head Cap (M6 x 1.25 x 75mm) Neg Ground and PTO
	130-4714-03	1	Isolated Ground	10	130-5469-03	1	~Coupling, Guard / PTO
2	130-5471-03	1	~Guard, Belt W/PTO	11	98-4798-01	1	*+~Label, Warning
3	130-5470-03	1	~Coupling Guard W/PTO				
4			Bracket, Guard				
	130-4382-03	1	*~ Negative Ground/PTO				
	130-4411-03	1	+ Isolated Ground				
5	130-4491-03	1	*Bracket, Guard (Negative Ground)				
6	130-4492-03	1	*~Bracket, Guard (Negative Ground/PTO)				

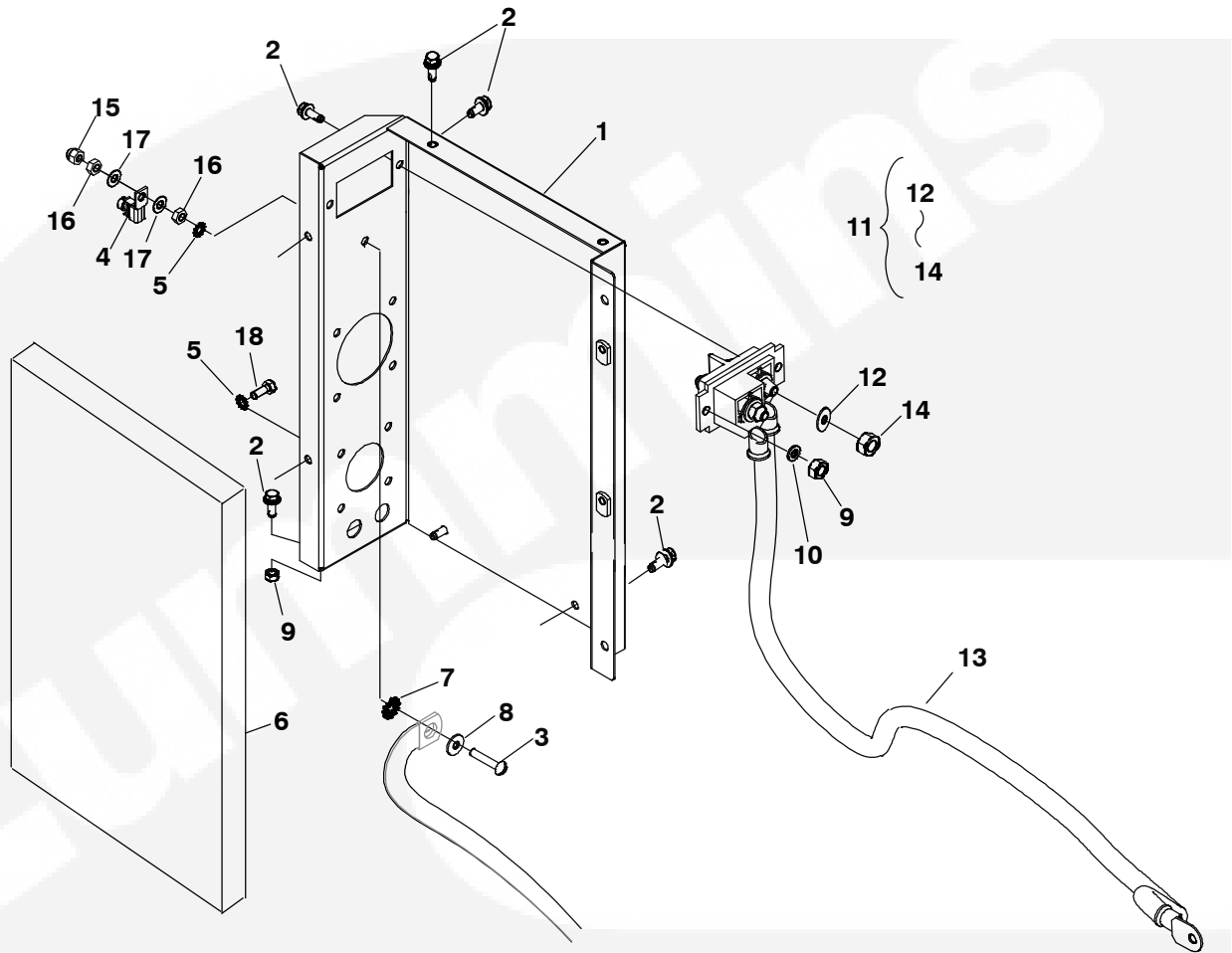
All Parts are for Unhoused Units Only
 * - Parts Included in Negative Gnd Belt Guard Kit
 + - Parts Included in ISO Gnd Belt Guard Kit
 ~ - Parts Included in PTO Belt Guard Kit

Generator Housing (Spec A)



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	405-6491-03	1	Panel, Housing Single Phase	7	895-0402	1	Seal, Weather (1.21')
	405-7429-03	1	Three Phase	8	508-1152	2	Grommet, Rubber
2	800-6033	3	Screw, Hex Head Cap (M6 x 1 x 16mm)	9	402-0681-01	3	Isolation, Vibration
3	853-2006	3	Washer Lock ET (M6)	10	818-0231-01	5	Rivet, Pop
4	821-6006-01	10	Screw, Hex Head Stainless (M6 x 1.0 x 16mm)	11	405-6686	1	Insulation, Panel (Top)
5			Insulation, Panel (Side)	12	405-6689	1	Insulation, Panel (Rear)
	405-6684	1	Single Phase	13	405-7208-03	1	Cover, Enclosure (Rear)
	405-7430	1	Three Phase	14	813-0100	1	Screw, Slotted Round Head (#10-32 x .50)
6	405-6685	1	Insulation, Panel (Top)	15	856-0003	1	Washer, EIT Lock (#10)
				16	870-0131	1	Nut, Sems

Generator Housing Panel (Spec A)

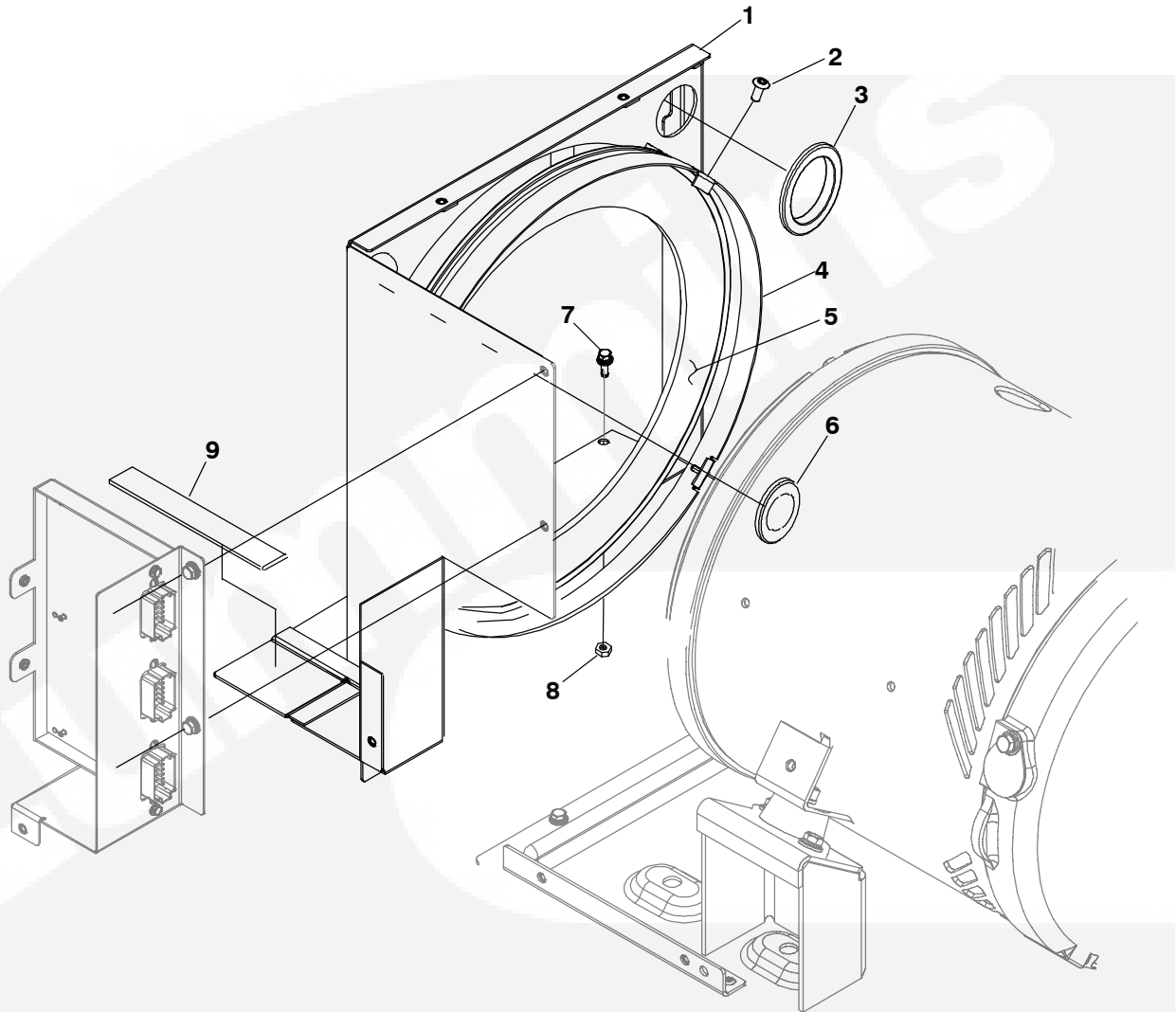


REF NO.	PART NO.	QTY. USED	PART DESCRIPTION
	541-1004	1	Kit, Panel (Gen)
1	405-6492-03	1	Panel, Housing
2	821-6006-01	7	Screw, Hex Sems Stainless Steel (M6 x 1 x 16mm)
3	810-0155	1	Screw, Round Head Brass (1/4-20 x 1-1/4)
4	332-0142	1	Lug, Solderless
5	853-2006	2	Washer, ET (M6)
6	405-6682	1	Insulation, Sound
7	856-0006	1	Washer, EIT (1/4")
8	526-2083	1	Washer, Flat (M6)
9	860-2057	4	Nut, Hex (M6)
10	526-2081	2	Washer, Flat
11	338-4176-03	1	Harness, Battery (Includes Parts Marked *)

REF NO.	PART NO.	QTY. USED	PART DESCRIPTION
12	526-0054	2	*Washer, Flat Brass (5/16")
13			*Cable, Welding
	334-0935-03	1	6.58' (MDKBP, MDKBR)
	334-0935-04	1	8' (MDKBS)
14	871-0025	2	*Nut, (5/16-18")
15	860-2036	1	Nut, Hex Acorn (1/4-20 Nylon)
16	871-0016	2	Nut, Hex Brass (1/4-20)
17	526-0052	2	Washer, Flat (1/4")
18	800-6033	3	Screw, Hex Head Cap (M6 x 1 x 16mm)

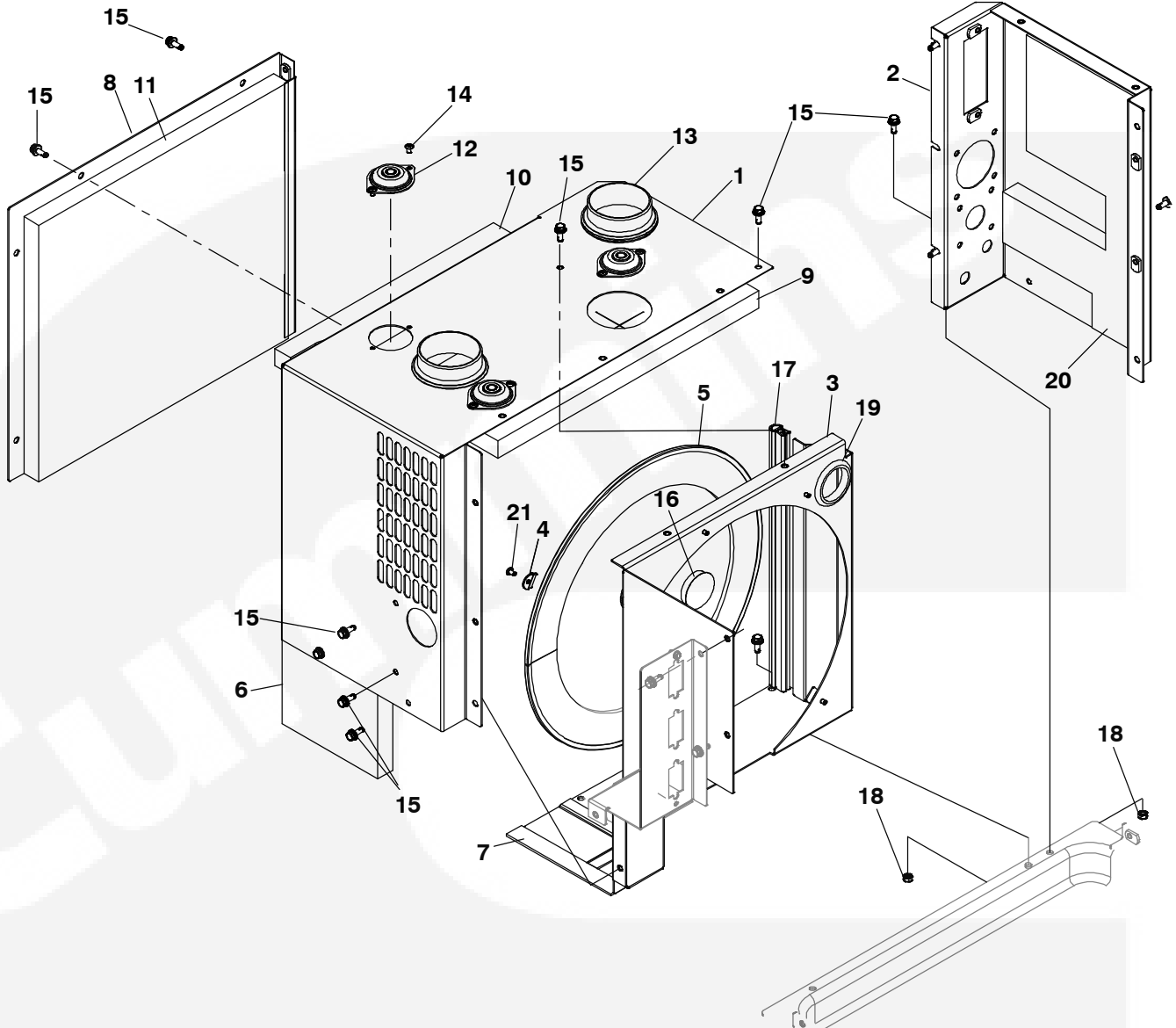
* - Parts Included in Battery Harness

Generator Baffle (Spec A)



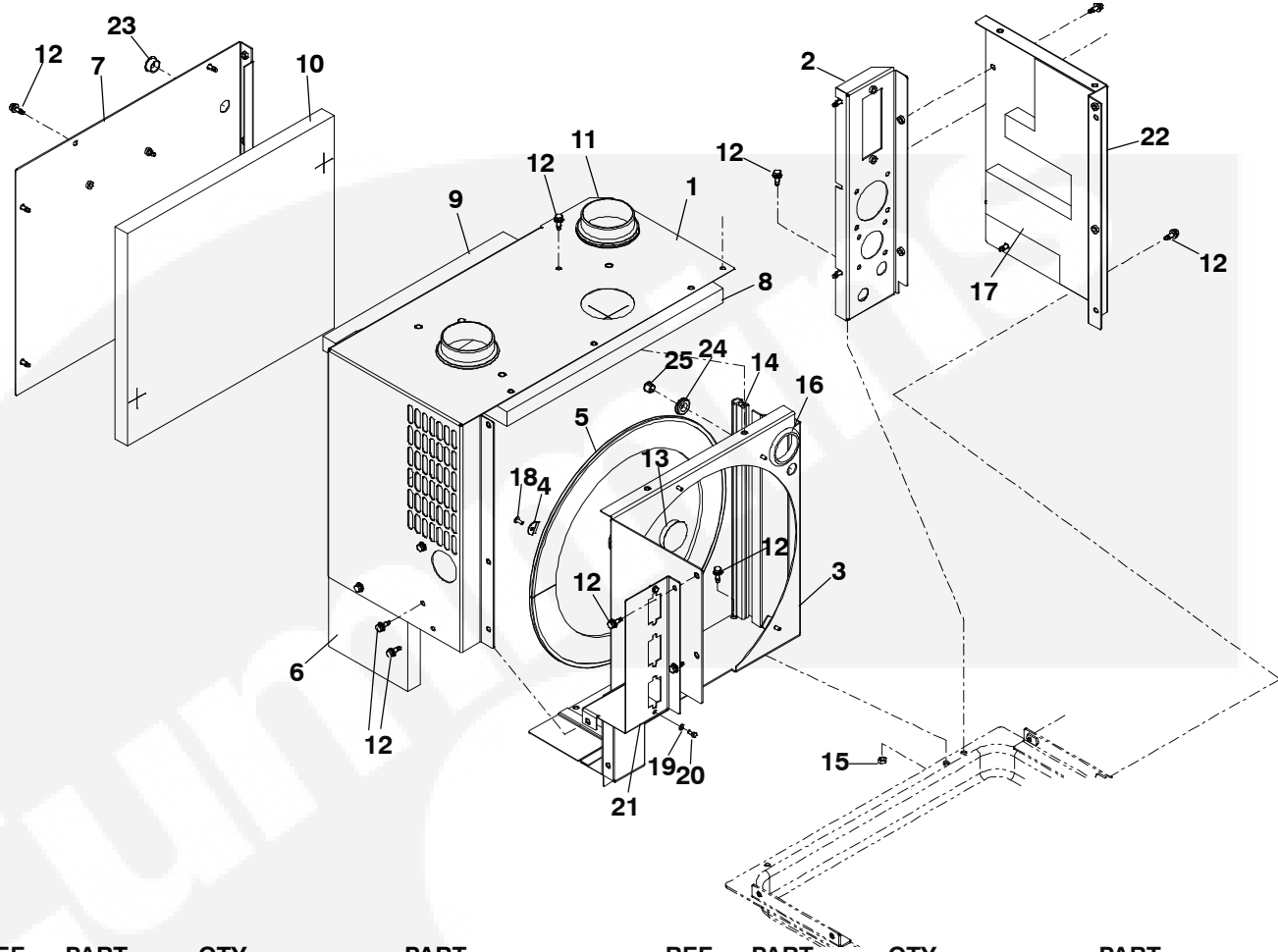
REF NO.	PART NO.	QTY. USED	PART DESCRIPTION	REF NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	405-7038-03	1	Baffle, Generator	6	517-0138-07	1	Plug, Hole
2	823-0002-02	4	Screw, Torx Thread Form (M4 x 0.7 x 8mm)	7	821-6006-01	4	Screw, Hex Head Sems Stainless (M6 x 1.0 x 16mm)
3	508-0051	1	Grommet, Rubber (MDKBP, MDKBR)	8	860-2057	2	Nut, Hex Head (M6 x 1mm)
4	405-7164-02	1	Bracket, Baffle	9	895-0308	7"	Tape, Polyurethane (MDKBS)
5	509-0368	1	Seal, Brush				

Generator Housing (Spec B)



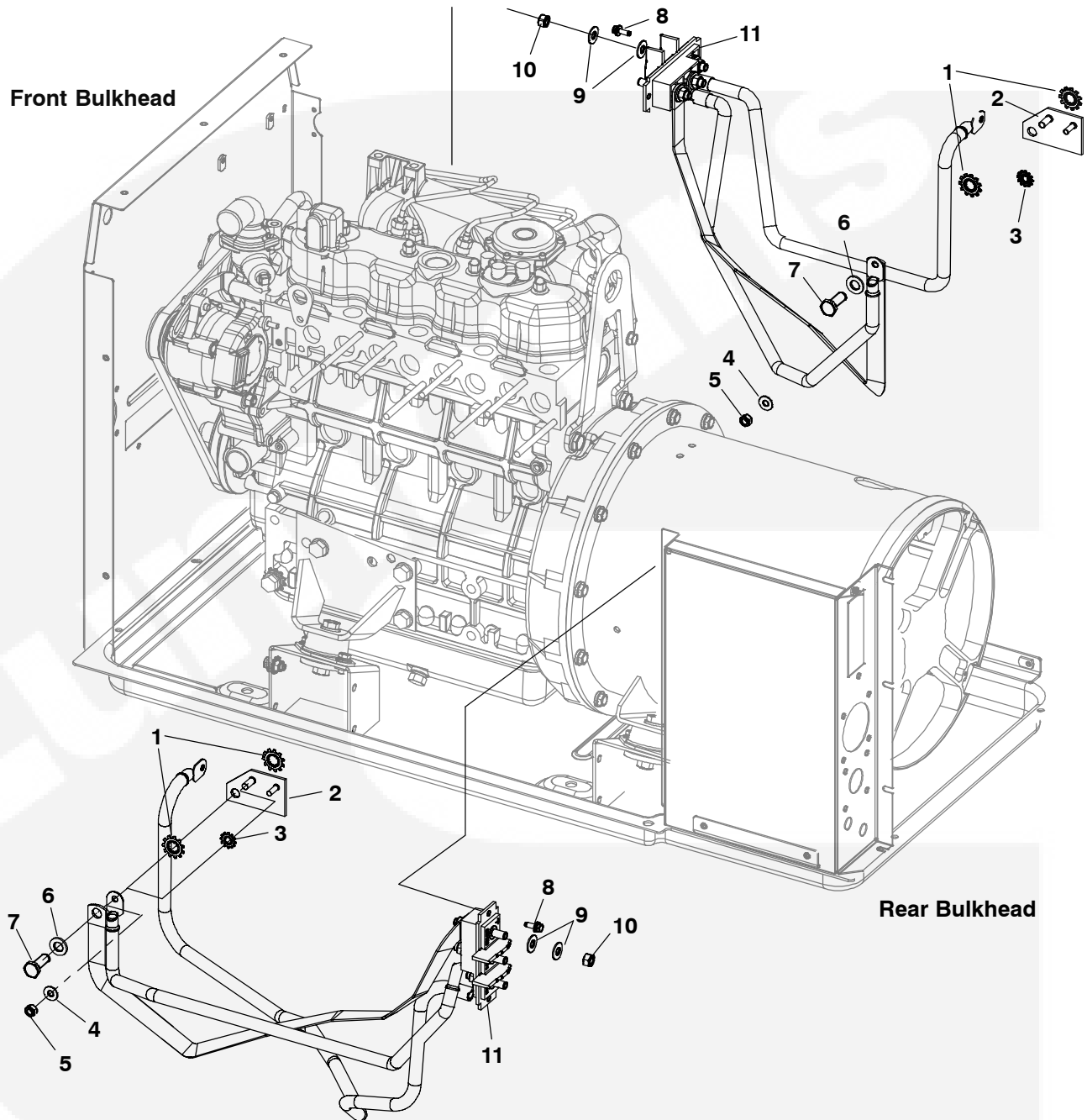
REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	405-6491-03	1	Panel, Housing Single Phase	12	402-0681-01	3	Isolator, Vibration
	405-7429-03	1	Three Phase	13	508-1152	2	Grommet, Rubber
2	405-8783-03	1	Panel, Housing	14	818-0231-01	6	Rivet, Pop
3	405-9077-03	1	Panel, Air Baffle	15	821-6006-01	21	Screw, Hex Head Sems Stainless (M6 x 1.0 x 16mm)
4	134-5299-02	5	Bracket, Fan	16	517-0138-07	1	Plug, Hole
5	509-0368	1	Seal, Brush	17	895-0402	1	Seal, Weather (1.23')
6	405-6684	1	Insulation, Panel Single Phase	18	860-2057	2	Nut, Hex (M6 x 1.0mm)
	405-7430	1	Three Phase	19	508-0051	1	Grommet (MDKBP and MDKBR)
7	895-0308	1	Tape Poly (7") MDKBS	20	405-9631	1	Insulation, Panel
8	405-9047-03	1	Cover, Enclosure (Rear)	21	818-0231-02	5	Rivet, Pop
9	405-9129	1	Insulation, Panel				
10	405-9079	1	Insulation, Enclosure (Single Phase)				
11	405-9078	1	Insulation, Cover				

Generator Housing (MDKBP and MDKBR Spec C)



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1			Panel, Housing	13	517-0138-07	1	Plug, Hole
	404-0018-03	1	Single Phase	14	895-0402	1	Seal, Weather (1.23')
	404-0023-03	1	Three Phase	15	860-2057	2	Nut, Hex (M6 x 1.0mm)
2	404-0019-03	1	Panel, Housing	16	508-0051	1	Grommet
3	404-0020-03	1	Panel, Air Baffle	17	405-9631	1	Insulation, Panel
4	134-5299-02	5	Bracket, Fan	18	818-0231-02	5	Rivet, Pop
5	509-0368	1	Seal, Brush	19	526-2050	2	Washer, Flat (M4)
6			Insulation, Panel	20	800-3042	2	Screw, Hex Head Cap (M4 x 0.7 x 10mm)
	405-6684	1	Single Phase	21	404-0022-03	1	Panel, Enclosure
	405-7430	1	Three Phase	22	404-0024-03	1	Panel, Enclosure
7	404-0021-03	1	Cover, Enclosure (Rear)	23	517-0136	1	Plug, Hole
8	405-9129	1	Insulation, Panel	24	508-0021	1	Grommet
9	405-9079	1	Insulation, Enclosure	25	517-0133	1	Plug, Hole
10	404-0045	1	Insulation, Cover				
11	508-1152	2	Grommet, Rubber				
12	800-6395-01	25	Screw, Hex Head Sems (M6 x 1.0 x 16mm)				

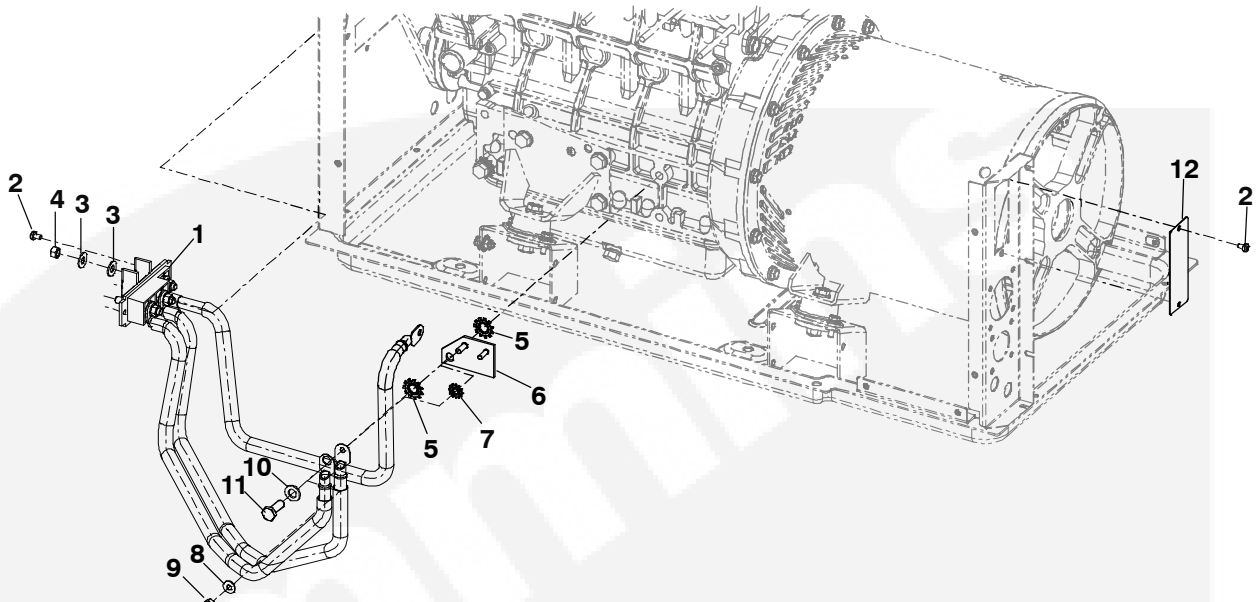
Battery Harness (Spec B)



REF NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	856-0013	2	Washer, ET Lock (1/2")
2	337-2784-02	1	Assy Bus, Bar (Neg Ground)
3	856-0008	1	Washer, ET Lock (5/16") (Neg Ground)
4	528-0054	1	Washer, Flat (Neg Ground)
5	871-0025	1	Nut, HB Full (5/16-18) (Neg Ground)
6	526-2140	1	Washer, Flat (M12)

REF NO.	PART NO.	QTY. USED	PART DESCRIPTION
7	800-3032	1	Screw, Hex Head Cap (M12 x 1.25 x 30mm)
8	823-1002-03	2	Screw, Pan Head Torx (M6 x 1.0 x 10mm)
9	526-0029	6	Washer, Flat
10	862-0003	3	Nut, Hex (3/8-16)
11			Harness, Battery
	338-4623-02	1	MDKBP and MDKBR
	338-4623-01	1	MDKBS

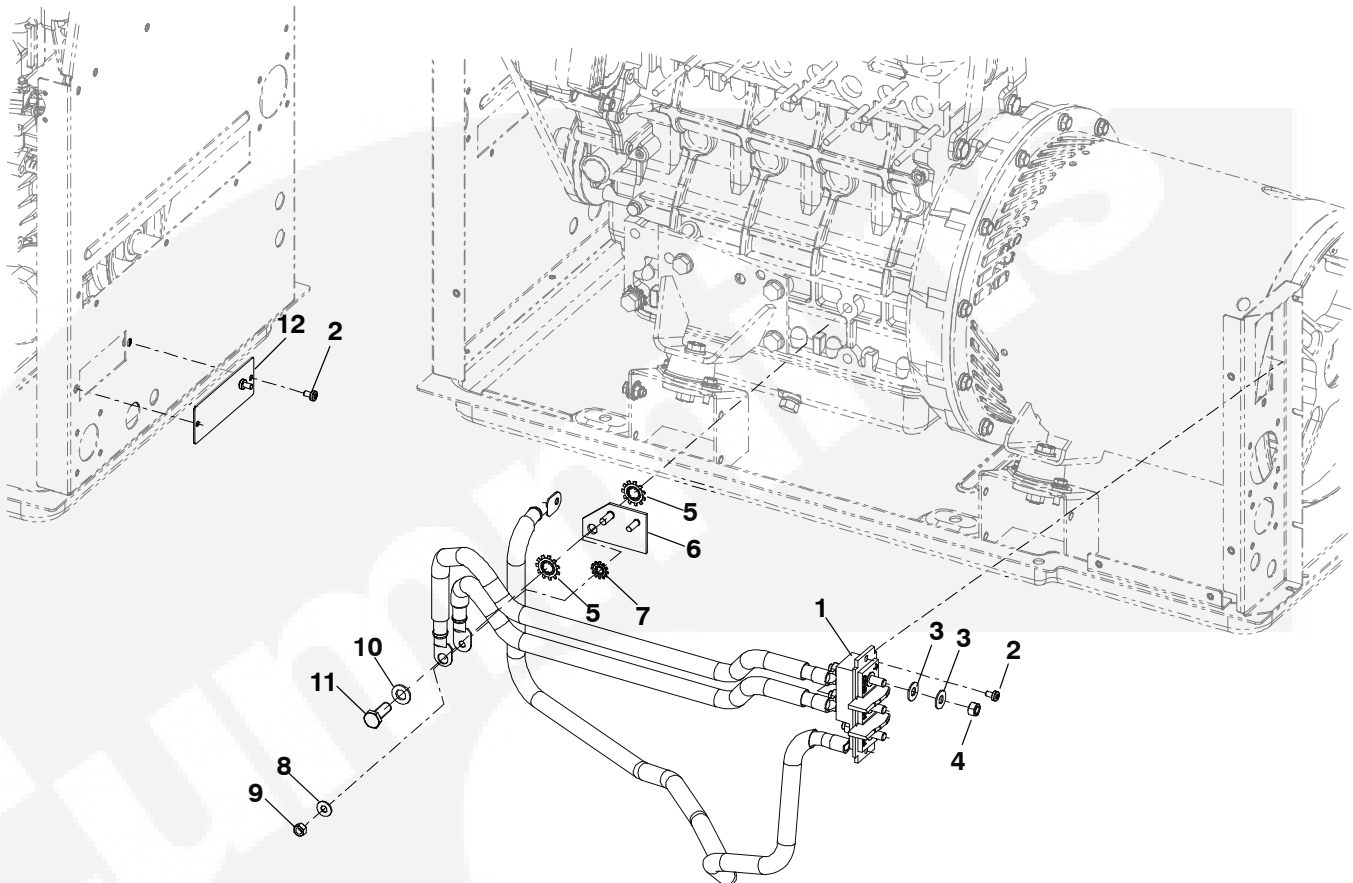
Battery Harness Front **(MDKBP and MDKBS Spec C)**



REF NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	338-4623-02	1	Harness, Battery
2	823-1002-03	4	Screw, Pan Head Torx (M6 x 1.0 x 10mm)
3	526-0029	6	Washer, Flat (1/2")
4	862-0003	3	Nut, Hex (3/8-16UNC)
5	856-0013	2	Washer, ETIT Locking (1/2")
6	337-2748-02	1	Assy Bus, Bar
7	856-0008	1	Washer, ETIT Locking (Neg GND 5/16")
8	526-0054	1	Washer, Flat Neg GND(8.33ID x 19.05OD)

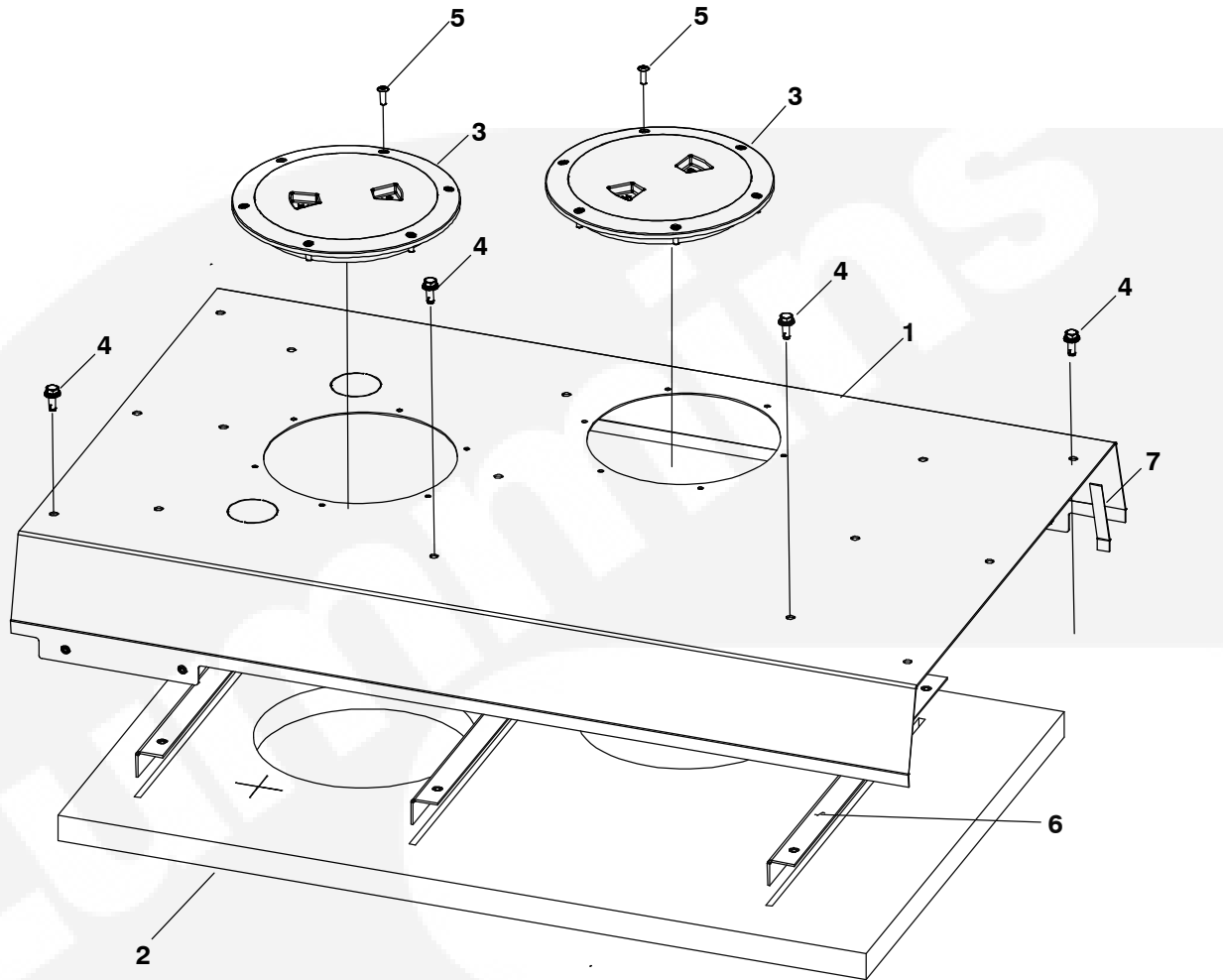
REF NO.	PART NO.	QTY. USED	PART DESCRIPTION
9	871-0025	1	Nut, HB Full (5/16-18)
10	526-2140	1	Washer, Flat (M12)
11	800-3032	1	Screw, Hex Head Cap (M12 x 1.25 x 30mm)
12	450-9764-02	1	Cover, Access

Battery Harness Rear (MDKBP and MDKBS Spec C)



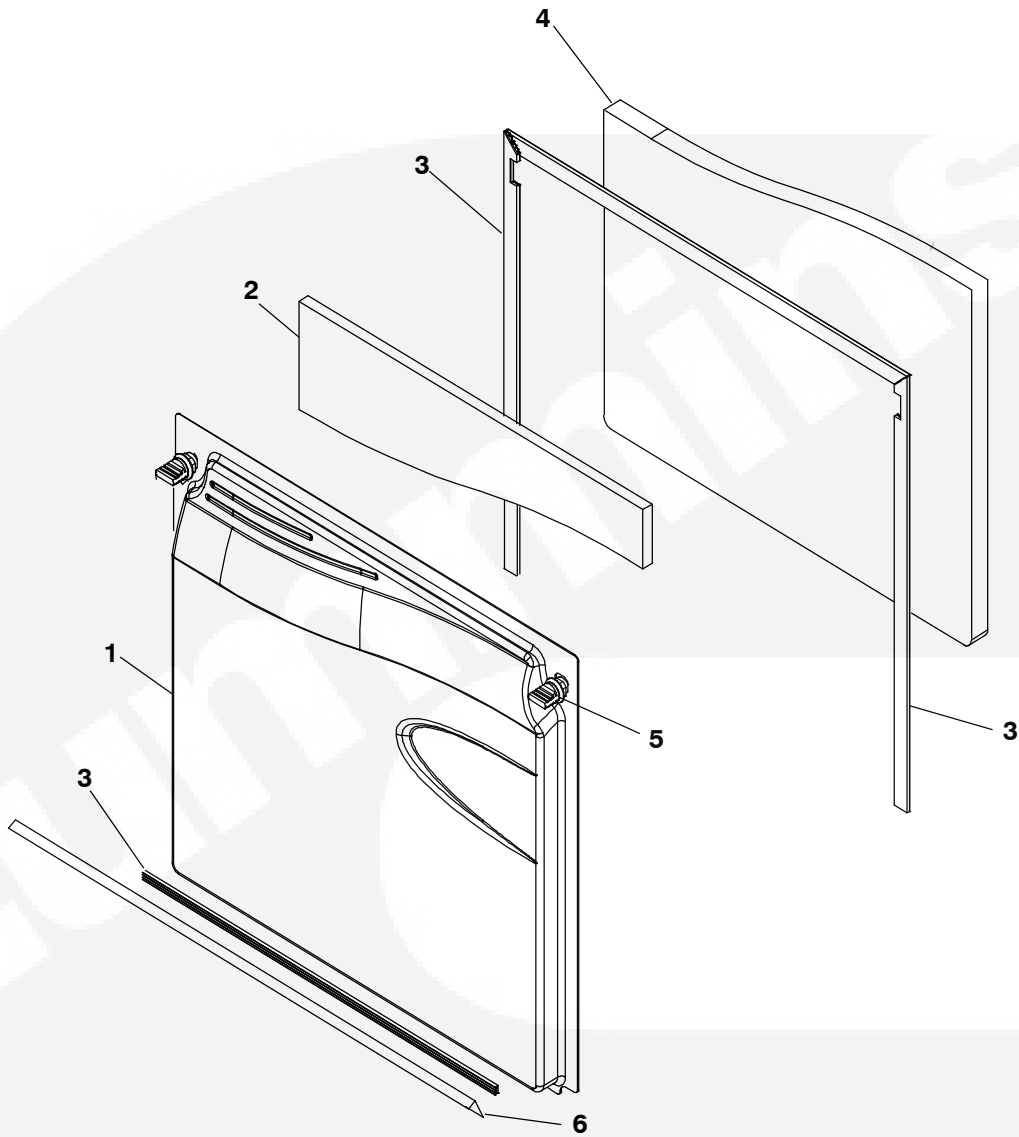
REF NO.	PART NO.	QTY. USED	PART DESCRIPTION	REF NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	338-4623-02	1	Harness, Battery	9	871-0025	1	Nut, HB Full (5/16-18)
2	823-1002-03	4	Screw, Pan Head Torx (M6 x 1.0 x 10mm)	10	526-2140	1	Washer, Flat (M12)
3	526-0029	6	Washer, Flat (1/2")	11	800-3032	1	Screw, Hex HEad Cap (M12 x 1.25 x 30mm)
4	862-0003	3	Nut, Hex (3/8-16UNC)	12	405-9764-02	1	Cover, Access
5	856-0013	2	Washer, ETIT Locking (1/2")				
6	337-2748-02	1	Assy Bus, Bar				
7	856-0008	1	Washer, ETIT Locking (Neg GND 5/16")				
8	526-0054	1	Washer, Flat Neg GND(8.33ID x 19.05OD)				

Engine Sound Shield MDKBP, MDKBR and MDKBS (Spec A-B)



REF NO.	PART NO.	QTY. USED	PART DESCRIPTION	REF NO.	PART NO.	QTY. USED	PART DESCRIPTION
			Kit, Sound Shield (Complete, Includes Roof, Doors, Ends And Insulation, Refer to Following Pages)	3	405-6340	2	*Cover, Access
	541-0830-01	1	MDKBP, MDKBR	4	821-6006-01	-	Screw, Hex Head Sems] (See Panel End Page for Totals)
	541-0830-02	1	MDKBS				(M6 x 1 x 16mm)
			Kit, Roof Panel (Includes Parts Marked *)	5	818-0239-03	12	Rivet, Pop
	405-7359-01	1	MDKBP, MDKBR	6	405-7345-02	3	*Stiffener, Enclosure (MDKBP, MDKBR)
	405-7359-02	1	MDKBS	7	405-5052	4	*Gasket, Baffle
1			*Panel, Roof	* - Parts Included in Roof Panel Kit.			
	405-6870-03	1	MDKBP, MDKBR				
	405-6971-03	1	MDKBS				
2			*Insulation, Roof				
	405-6990	1	MDKBP, MDKBR				
	405-6991	1	MDKBS				

Engine Sound Shield MDKBP, MDKBR and MDKBS (Spec A-B)

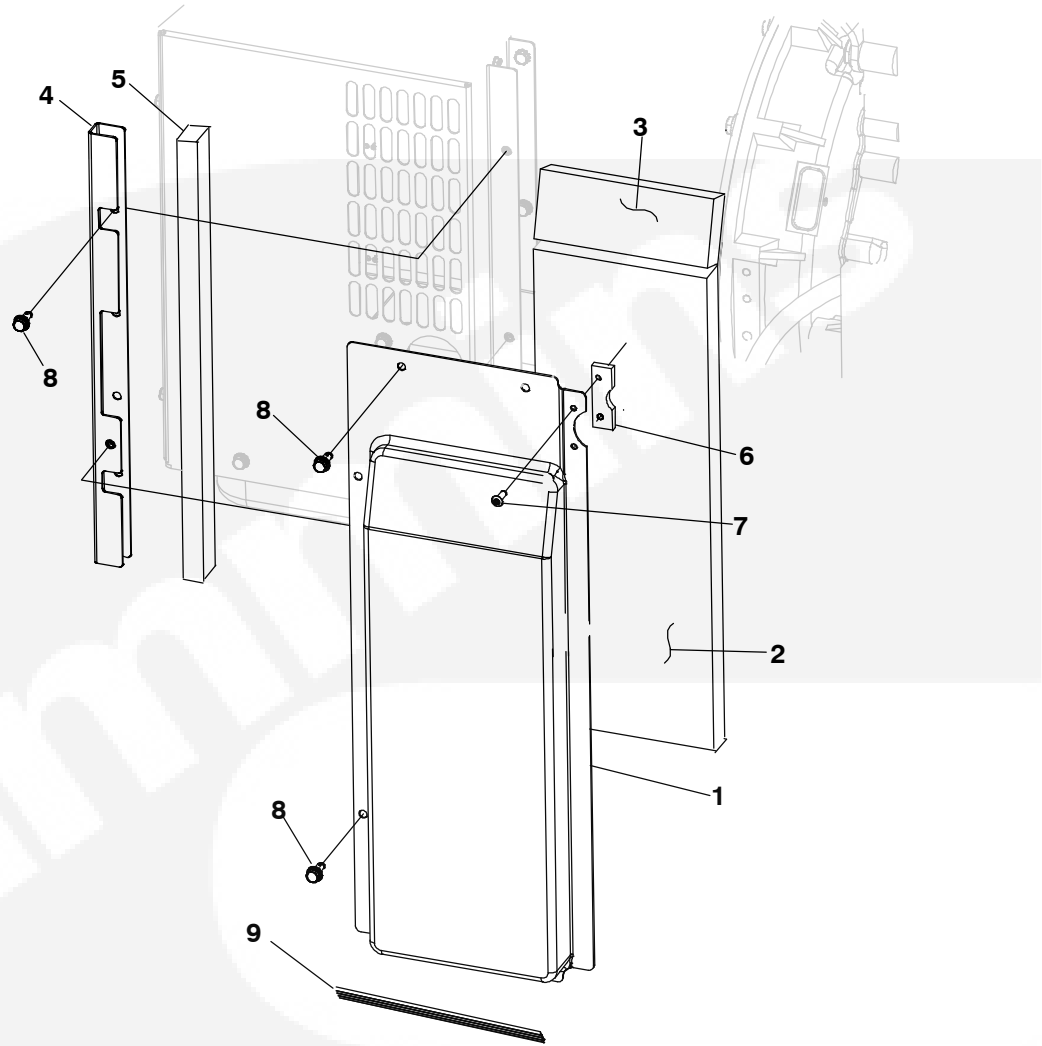


REF NO.	PART NO.	QTY. USED	PART DESCRIPTION
	405-6957-01	1	Kit, Door (Includes Parts Marked *)
1	405-6519-03	2	*Door, Sound Shield
2	405-6797	2	*Insulation, Door
3	895-0395	1	MDKBP, MDKBR 12.5'
	895-0395	1	MDKBS 13.2'
4	405-6687	2	*Insulation, Door

REF NO.	PART NO.	QTY. USED	PART DESCRIPTION
5	406-0958	2	*Latch, Door (1/4 Turn)
6	895-0411	5.6'	*Seal, Weather MDKBP, MDKBR
	895-0411	7.1'	MDKBS

* - Parts Included in Door Kit.

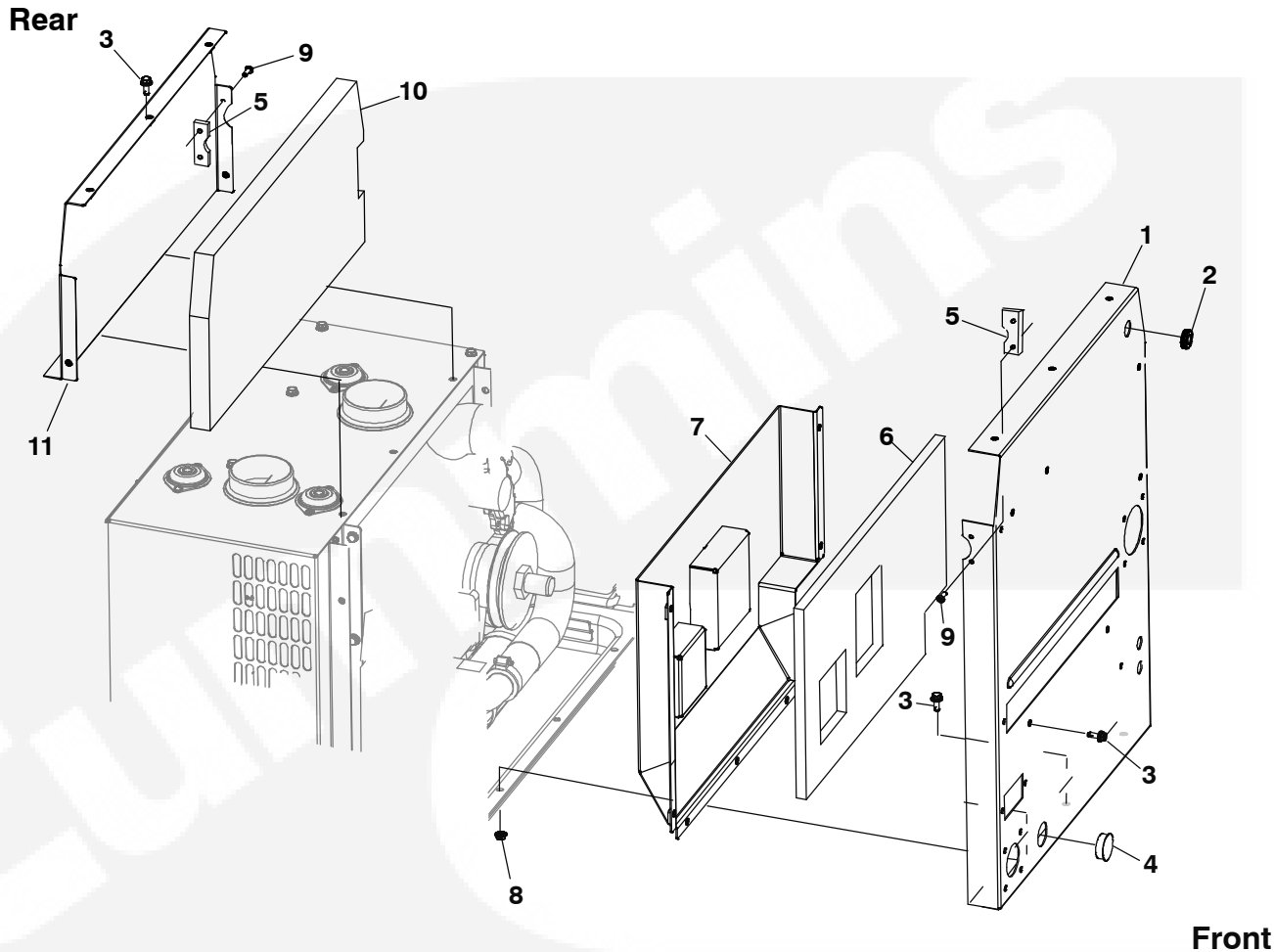
Engine Sound Shield MDKBP, MDKBR and MDKBS (Spec A-B)



REF NO.	PART NO.	QTY. USED	PART DESCRIPTION	REF NO.	PART NO.	QTY. USED	PART DESCRIPTION
			Kit, Access Panel (Includes Parts Marked *)	5	405-7347	1	*Insulation
	405-7357-01	1	MDKBP, MDKBR	6	406-1032	4	*Catch, Door
	405-7357-02	1	MDKBS	7	818-0217-03	4	*Rivet
1			*Panel, Access	8	821-6006-01	-	Screw, Hex Head Sems (See Panel Ends Page for Totals)
	405-6972-03	2	MDKBP, MDKBR				Stainless (M6 x 1 x 16mm)
	405-7102-03	2	MDKBS				*Seal, Weather
2			*Insulation, Access Panel Sound Lower	9			MDKBP, MDKBR (12.5')
	405-6995-01	2	MDKBP, MDKBR		895-0395	AR	MDKBS (13.2')
	405-6995-02	2	MDKBS		895-0395	AR	
3			*Insulation, Access Panel Sound, Upper				
	405-6993-01	2	MDKBP, MDKBR				
	405-6993-02	2	MDKBS				
4	405-7104-03	2	Spacer, Panel				

* - Parts Included in Access Panel Kit.

**Engine Sound Shield MDKBP, MDKBR and MDKBS (Spec A-B)
(Front and Rear with out PTO)**



REF NO.	PART NO.	QTY. USED	PART DESCRIPTION
	541-1005	1	Kit, Enclosure Panel (Includes Parts Marked #)
	405-7358-01	1	Kit, Enclosure Panel (Includes Parts Marked *)
	405-7360	1	Kit, Duct Panel (Includes Parts Marked +)
	405-7361	1	Kit, Roof Panel (Includes Parts Marked ~)
1	405-8826-03	1	##*Panel, Enclosure W/O PTO)
2	508-0021	1	#Grommet
3			#Screw, Hex Head Sems Stainless (M6 x1 x 16mm) W/O PTO)
	821-6006-01	39	MDKBP and MDKBR
	821-6006-01	30	MDKBS
			W/ PTO)
	821-6006-01	45	MDKBP and MDKBR
	821-6006-01	36	MDKBS

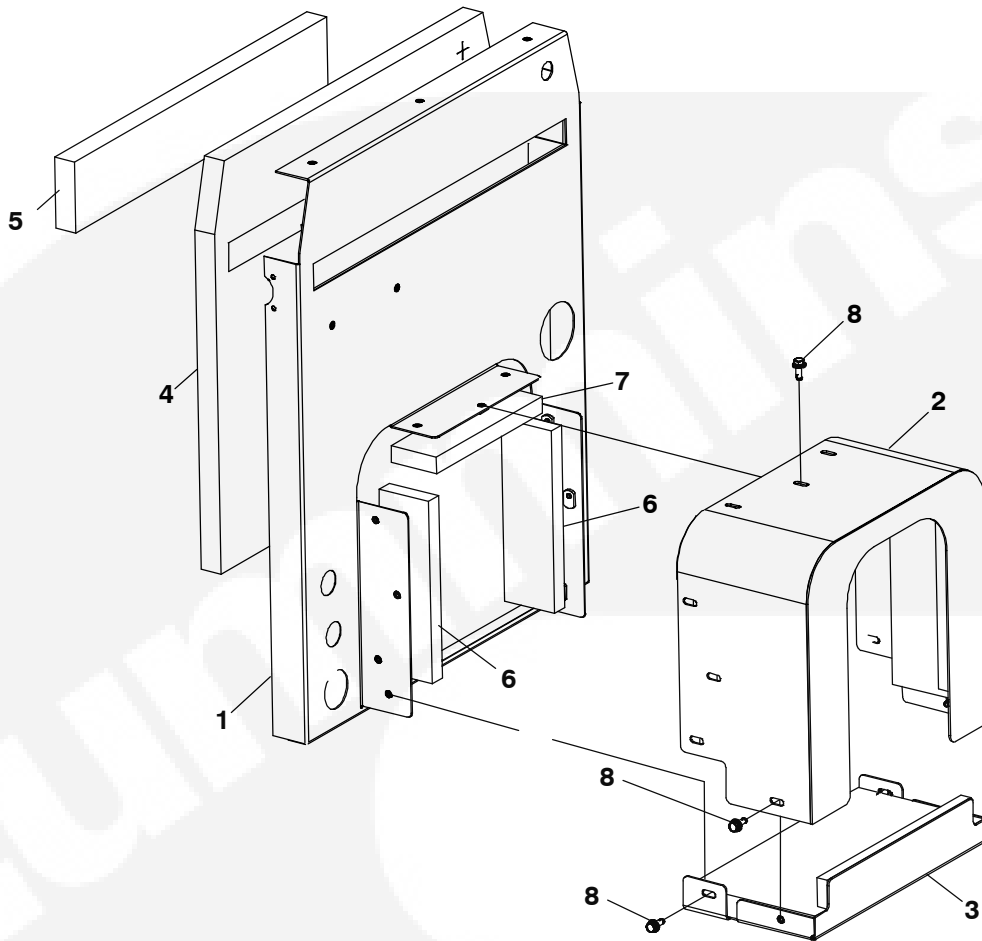
REF NO.	PART NO.	QTY. USED	PART DESCRIPTION
4	517-0138-04	1	*Plug, Hole (W/O PTO)
5	406-1032	4	*~Catch, Door
6	405-6992	1	+ Insulation, Duct (W/O PTO)
7	405-7350-03	1	+ Panel, Duct (W/O PTO)
8	870-2065-02	3	Nut, Lock Flanged (M6)
9	818-0231-01	4	~*Rivet
10	405-7179	1	~Insulation, Roof End
11	405-6871-03	1	~Panel, Roof End

* - Parts Included in Enclosure Panel Kit MDKBP, MDKBR, MDKBS.

+ - Parts Included in Duct Panel Kit MDKBP, MDKBR, MDKBS.

~ - Parts Included in Roof Panel Kit MDKBP, MDKBR and MDKBS.

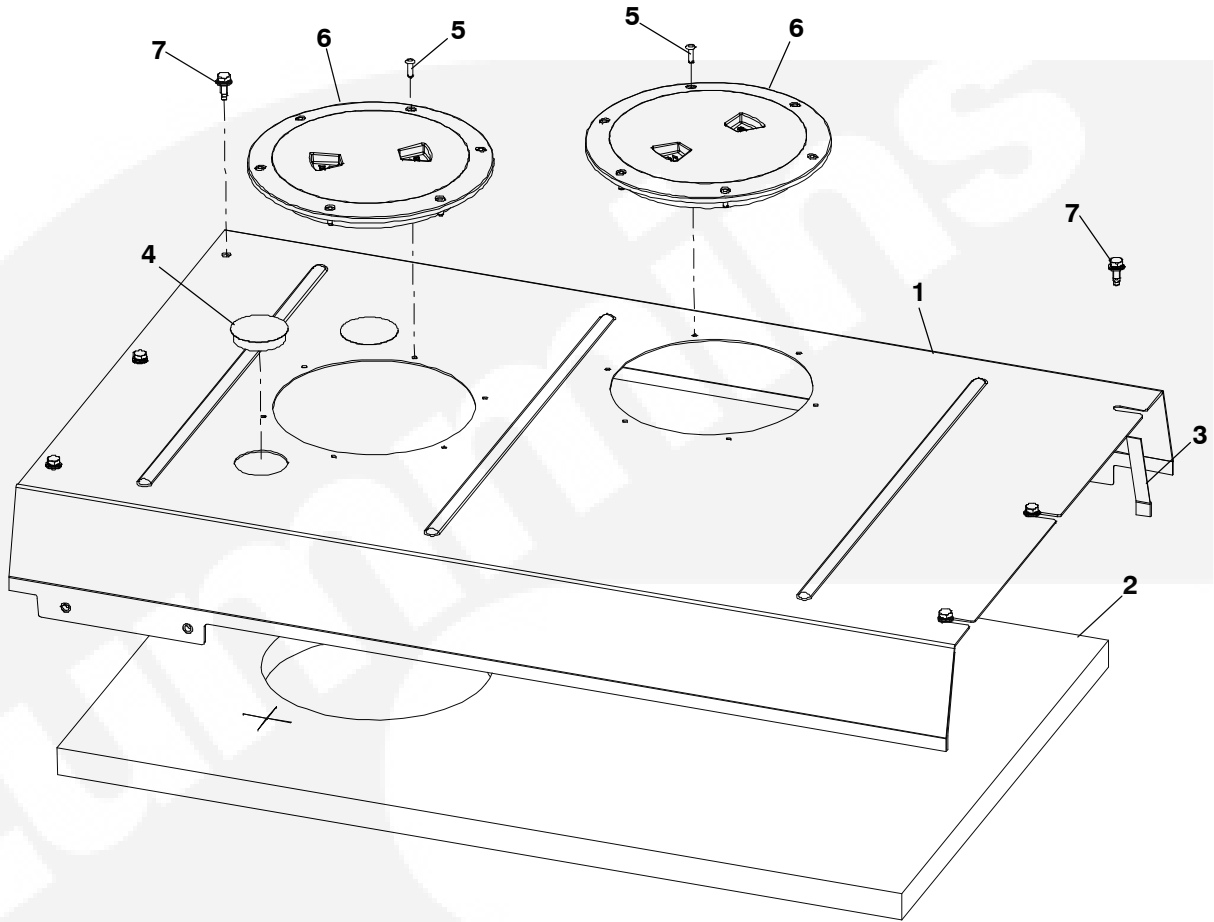
**Engine Sound Shield MDKBP, MDKBR and MDKBS (Spec A-B)
(Front w/PTO)**



REF NO.	PART NO.	QTY. USED	PART DESCRIPTION	REF NO.	PART NO.	QTY. USED	PART DESCRIPTION
	405-7358-02	1	Kit, Panel Enclosure (Includes Parts Marked *)	5	405-5010-02	1	*Insulation
	190-0778	1	Kit, Coupling Guard (Includes Parts Marked +)	6	405-6866	2	*+Insulation, Sound
1			*+Panel, Enclosure	7	405-6867	1	*+Insulation, Sound
	405-7230-03	1	Spec A	8	821-6006-01	15	+Screw, Hex Head Sems Stainless (M6 x1 x 16mm)
	405-8975-03	1	Begin Spec B				
2	405-6812-02	1	+Guard, Coupling				
3	405-6817	1	+Guard, Coupling (Lower)				
4			*+Insulation, Sound				
	405-7231	1	Spec A				
	405-9060	1	Begin Spec B				

* - Parts Included in Enclosure Panel Kit with PTO.
+ - Parts Included in Coupling Guard Kit with PTO.

Engine Sound Shield MDKBP and MDKBR (Spec C)

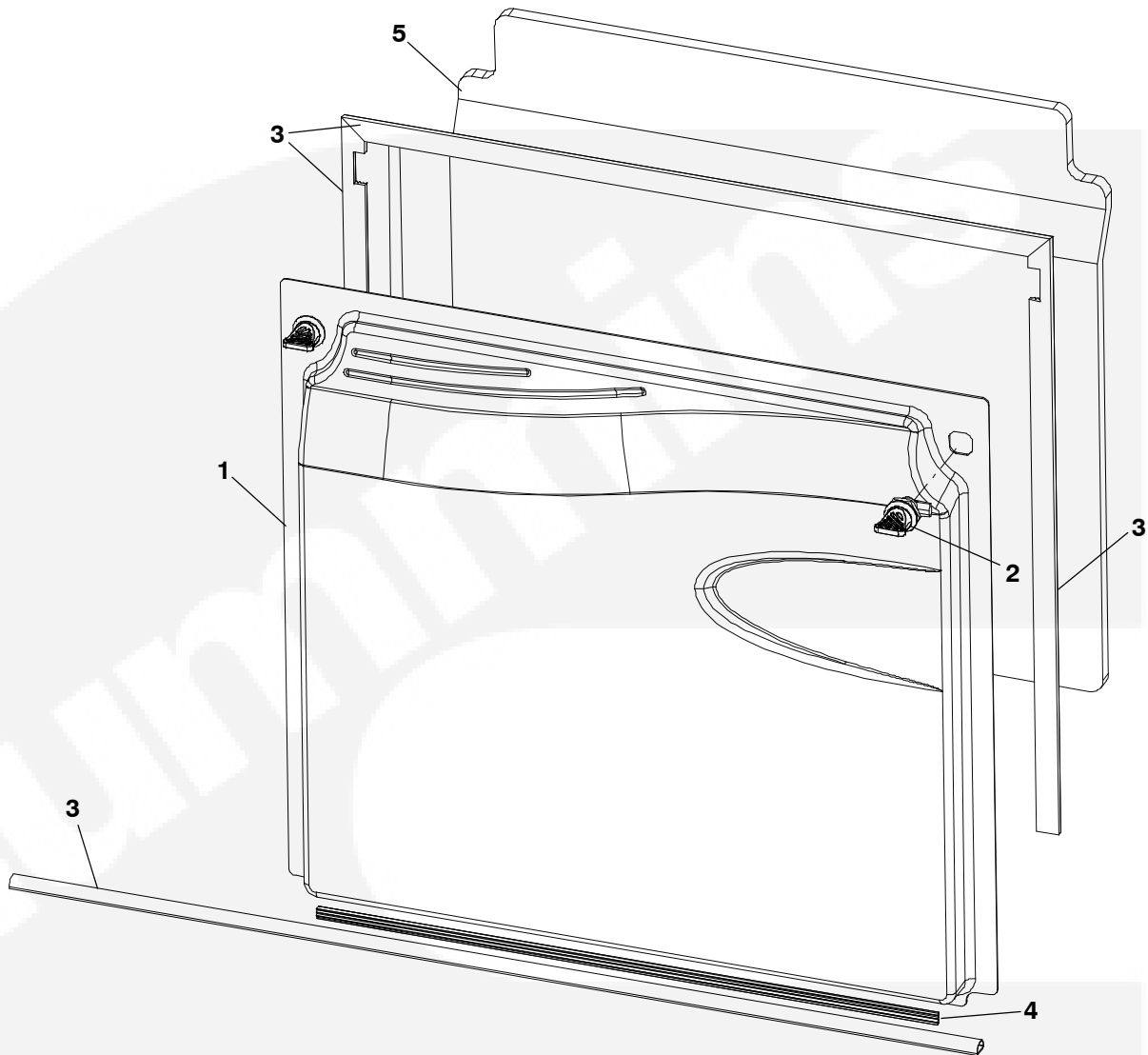


REF NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	404-0090-03	1	Panel, Roof
2	404-0091	1	Insulation, Roof
3	405-5052	4	Gasket, Baffle
4	517-0392-19	2	Plug, Hole
5	818-0239-03	12	Rivet, Pop

REF NO.	PART NO.	QTY. USED	PART DESCRIPTION
6	405-6340	2	Cover, Access
7	800-6395-01	6	Screw, Hex Head Sems (M6 x 1 x 16mm)

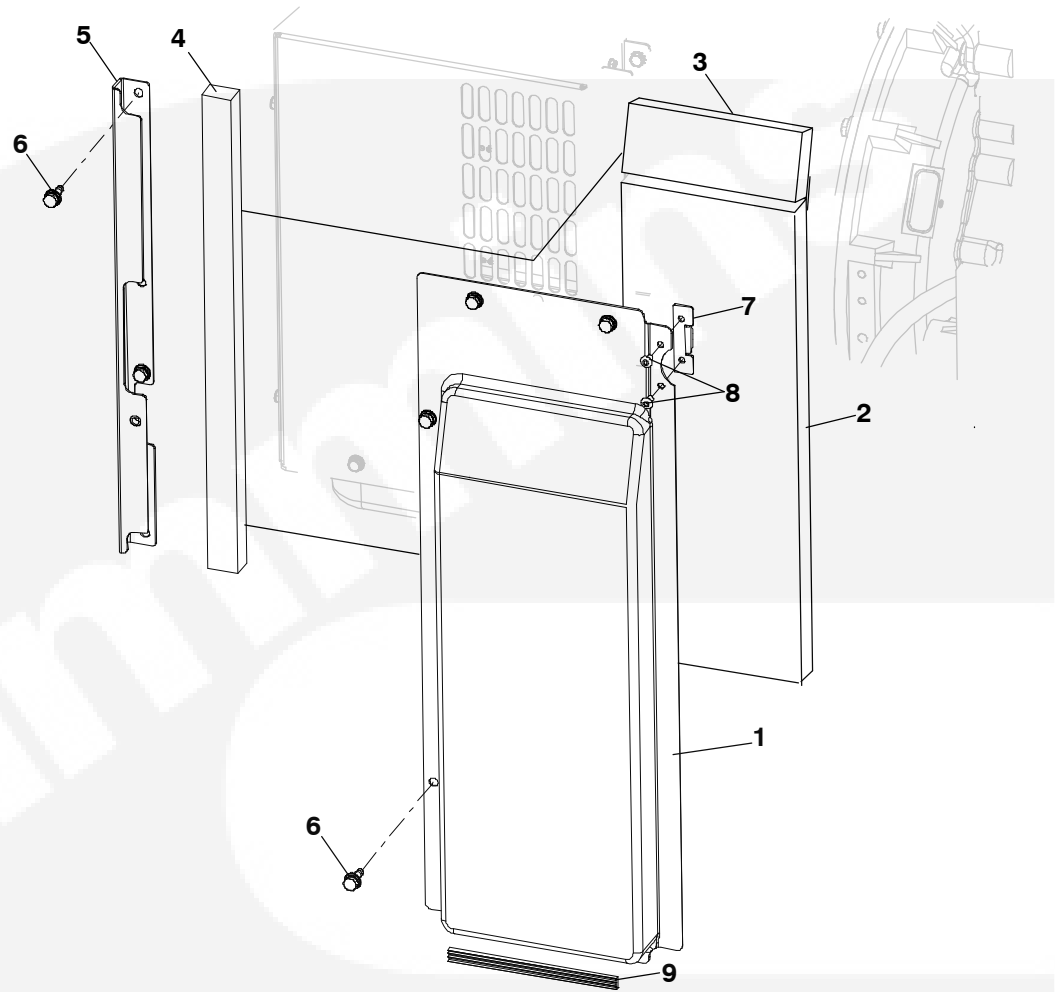


Engine Sound Shield MDKBP and MDKBR (Spec C)



REF NO.	PART NO.	QTY. USED	PART DESCRIPTION	REF NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	405-9751-03	1	Door, Access	4	895-0411	AR	Seal, Weather
2	406-0958	2	Latch, Door	5	405-9568	1	Insulation, Door
3	859-0395	AR	Seal, Weather (12.5)				

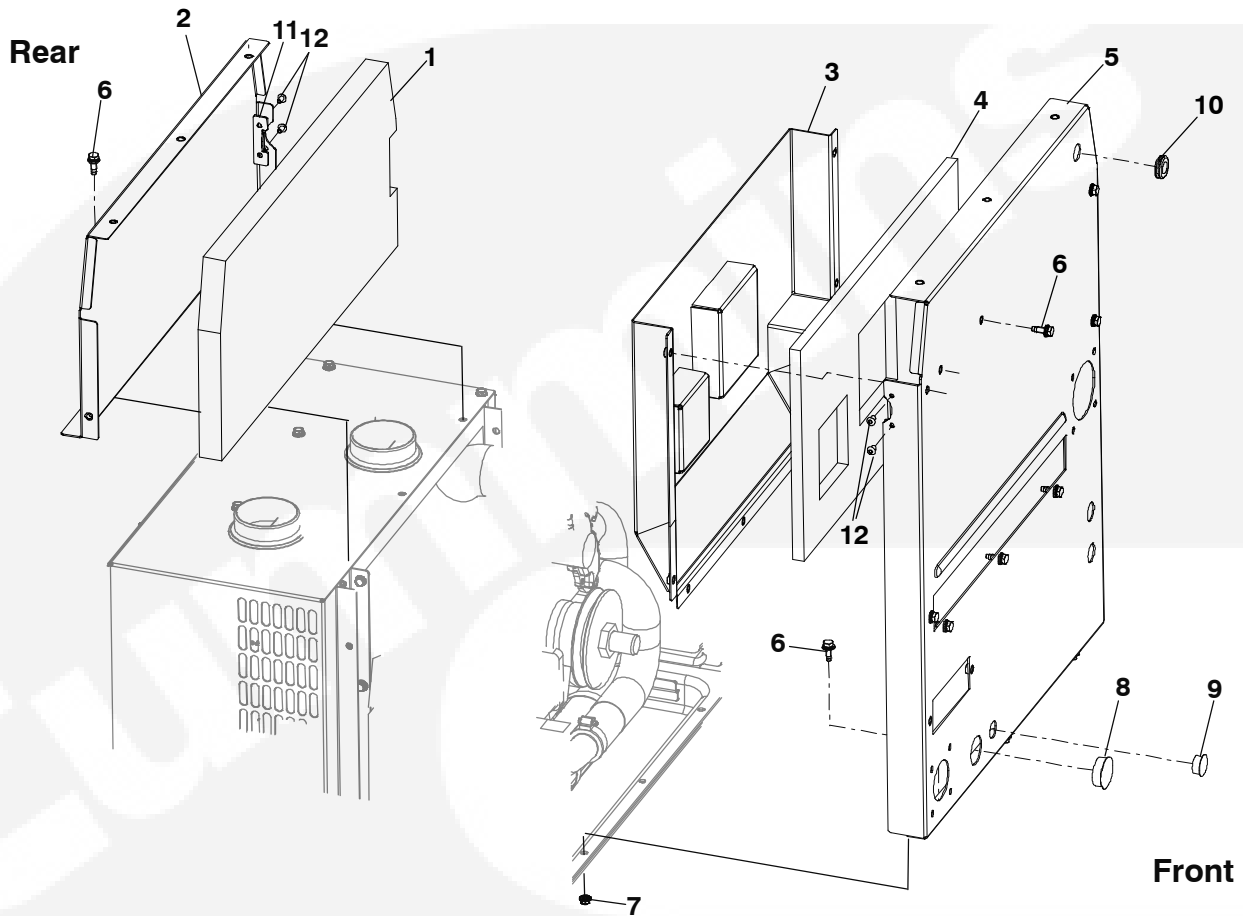
Engine Sound Shield MDKBP and MDKBR (Spec C)



REF NO.	PART NO.	QTY. USED	PART DESCRIPTION	REF NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	404-0097-03	1	Panel, Access	6	800-2027	6	Screw, Hex Head Sems (M6 x 1 x 16mm)
2	405-6995-01	1	Insulation, Sound	7	406-1032	2	Catch, Door
3	405-6993-01	1	Insulation, Sound	8	818-0231-01	4	Rivet, Pop
4	405-7347	1	Insulation, Sound	9	895-0395	AR	Seal, Weather
5	404-0098-03	1	Spacer, Panel				

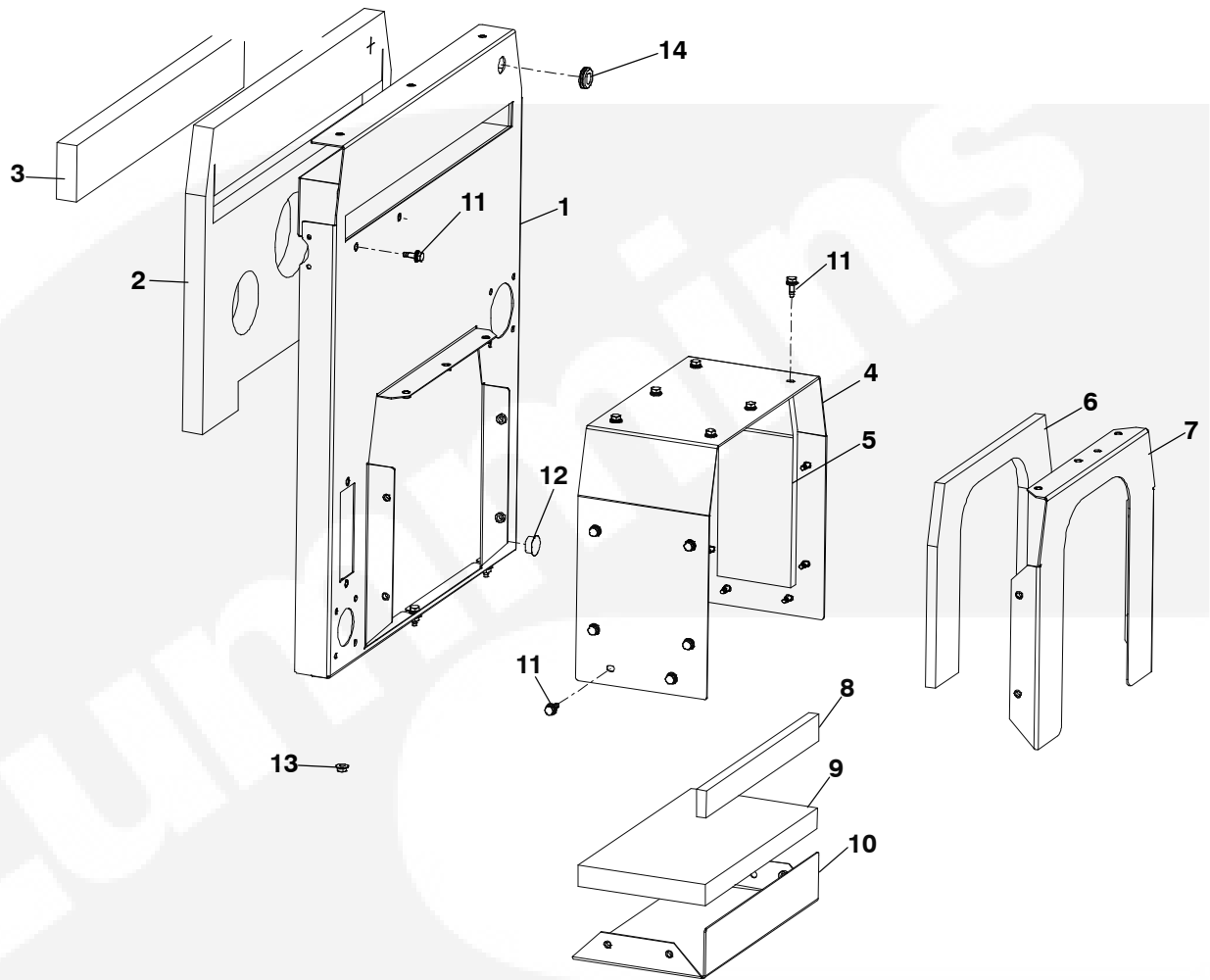


**Engine Sound Shield MDKBP and MDKBR (Spec C)
(Front and Rear with out PTO)**



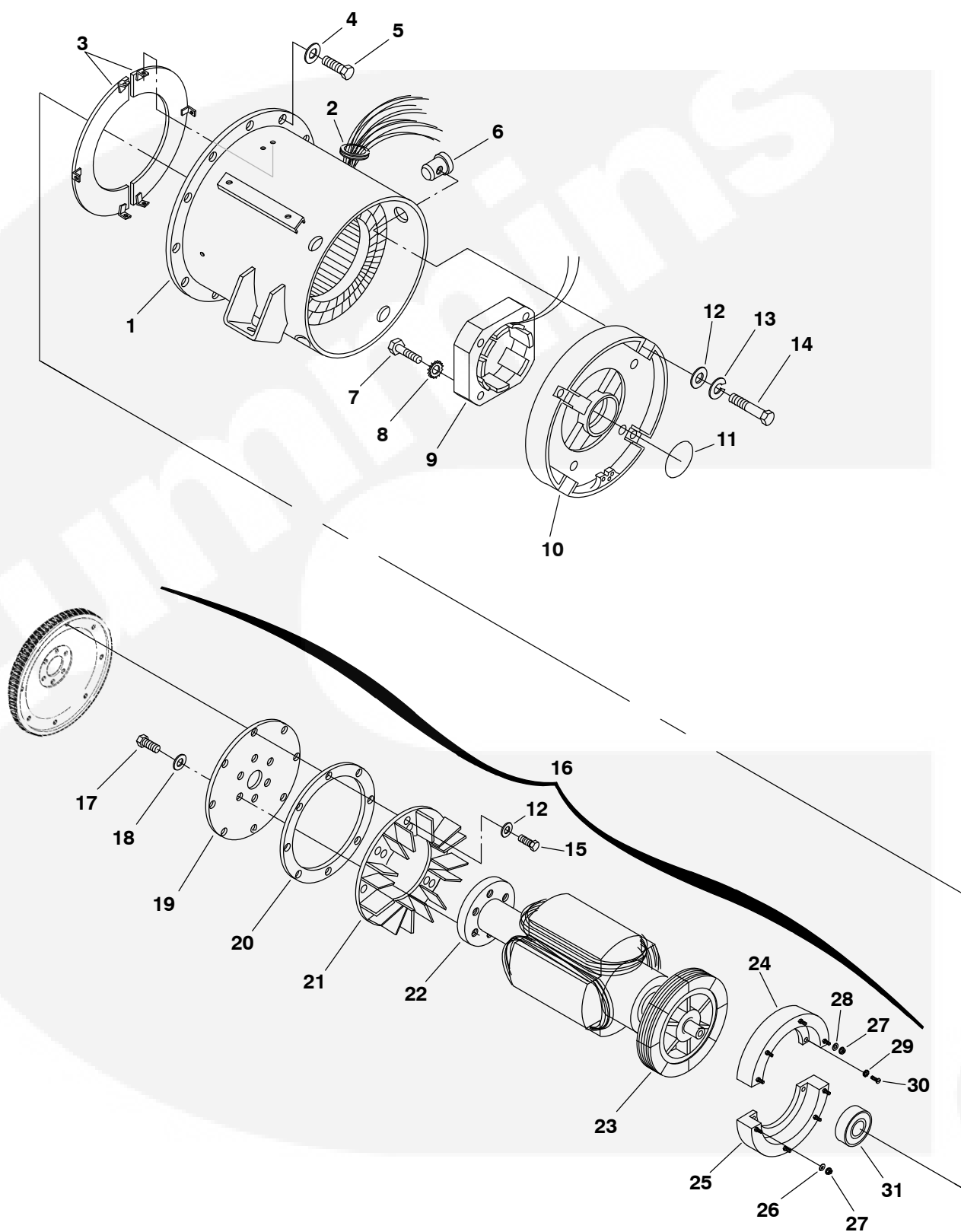
REF NO.	PART NO.	QTY. USED	PART DESCRIPTION	REF NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	405-7179	1	Insulation, Roof End	8	517-0138-04	1	Plug, Hole (W/O PTO)
2	404-0096-03	1	Panel, Roof End	9	517-0136	1	Plug, Hole
3	404-0092-03	1	Panel, Duct (W/O PTO)	10	508-0021	1	Grommet
4	405-6992	1	Insulation, Duct (W/O PTO)	11	406-1032	2	Catch, Door
5	404-0039-03	1	Panel, Enclosure (FrontW/O PTO)	12	818-0231-01	4	Rivet, Pop
6	800-6395-01	16	Screw, Hex Head Sems (M6 x 1 x16mm)				
7	870-2065-02	2	Nut, Lock Flanged (M6)				

Engine Sound Shield MDKBP and MDKBR (Spec C) (Front w/PTO)



REF NO.	PART NO.	QTY. USED	PART DESCRIPTION	REF NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	404-0040-03	1	Panel, Enclosure (Front PTO)	9	405-6819	1	Insulation, Sound (PTO)
2	404-0099	1	Insulation, Panel (PTO)	10	190-0893-03	1	Guard, PTO
3	404-0100	1	Insulation, Enclosure (PTO)	11	800-6395-01	24	Screw, Hex Head Sems (M6 x 1 x 16mm)
4	190-0890-03	1	Guard, PTO	12	517-0136	1	Plug, Hole
5	404-0160	1	Insulation, Sound (PTO)	13	870-2065-02	3	Nut, Hex Flanged (M6)
6	404-0161	1	Insulation, Sound (PTO)	14	508-0021	1	Grommet
7	190-0891-03	1	Guard, PTO				
8	404-0159	1	Insulation, Sound (PTO)				

Generator

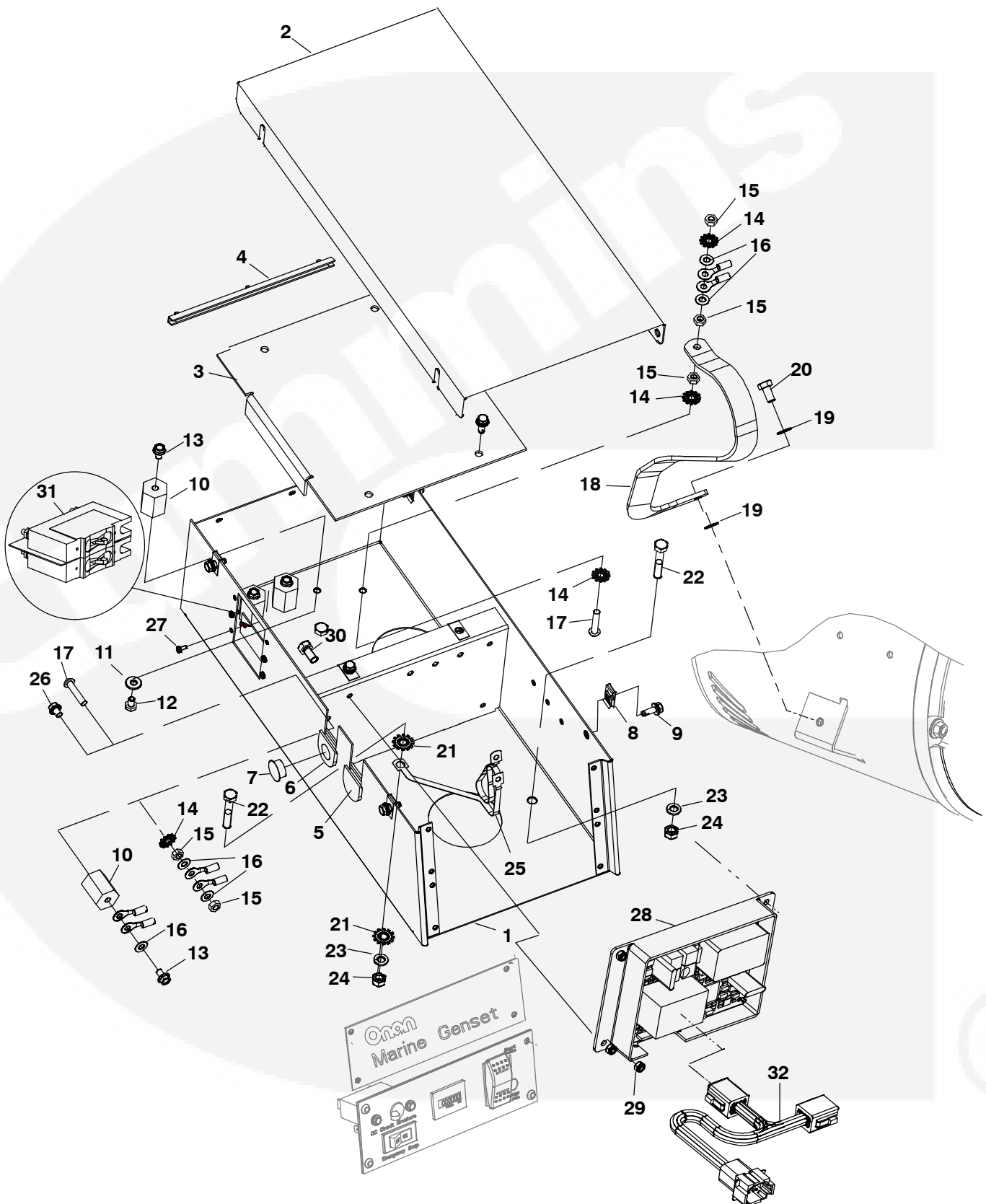


Generator

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1			Stator, Generator (Includes Grommet)	17			*Bolt, Hex Head Cap MDKBP, MDKBR (.50-13 UMC x 1.0")
			Single Phase	800-3010-64	6		
	220-4618-02	1	MDKBP	800-3017-52	6		MDKBS (M12 x 1.75 20mm)
	220-4618-04	1	MDKBR				
	220-4618-06	1	MDKBS	18			*Washer, Flat MDKBP, MDKBR (.50")
			Three Phase	526-0399-44	6		MDKBS (M12)
	220-4619-02	1	MDKBP	526-0399-73	6		
	220-4619-04	1	MDKBR				
	220-4619-06	1	MDKBS	19			*Disc, Drive MDKBP, MDKBR
2	508-1073	1	Grommet	232-3672-03	1		MDKBS
3	234-0935-02	2	Baffle, Air (3 Phase)	232-3945	1		
4	526-0174	12	Washer, Flat (3/8)	20	232-3826-02	1	*Spacer, Fan
5	800-0051	12	Screw, Hex Head Cap (3/8-16 x 1-1/4)	21	205-0229-02	1	*Fan, Generator
6	232-3706-02	4	Retainer, Endbell	22			*Hub, Drive MDKBP, MDKBR
7	815-0935	4	Screw, Hex Head Thread Forming (1/4-20 x 2")	232-3705-01	1		MDKBS
8	853-0013	4	Washer, ET Lock (1/4")	232-3815-04	1		
9	220-4413-02	1	Stator, Wound	23	201-3515-02	1	*Rotor, Wound (Excitor)
10	211-0465-02	1	Endbell	24	358-0069	1	*Rectifier (Positive)
11	509-0094	1	Seal, O'Ring	25	358-0070	1	*Rectifier (Negative)
12	526-0399-42	12	Washer, Flat (3/8)	26	526-0008	10	*Washer, Flat (#10)
13	850-0114-06	4	Washer, Lock (5/16")	27	870-0131-01	6	*Nut, ET Hex (.190-32)
14	800-0310-27	4	Screw, Hex Head Cap (5/16"-18 x 2-1/2")	28	526-0399-11	8	*Washer, Flat (#10)
15	800-0310-36	8	Screw, Hex Head Cap (3/8-16 x 1)	29	853-0008	4	*Washer, ET Lock (.190")
16			Rotor Assy, Generator (Includes Parts Marked *)	30	813-0100	4	*Screw, Pan Head Machine (.190-32 x .50")
	201-3517-02	1	MDKBP	31	510-0112	1	*Bearing, Ball
	201-3517-04	1	MDKBR				
	201-3517-06	1	MDKBS				

* - Parts Included in Generator Rotor Assy.

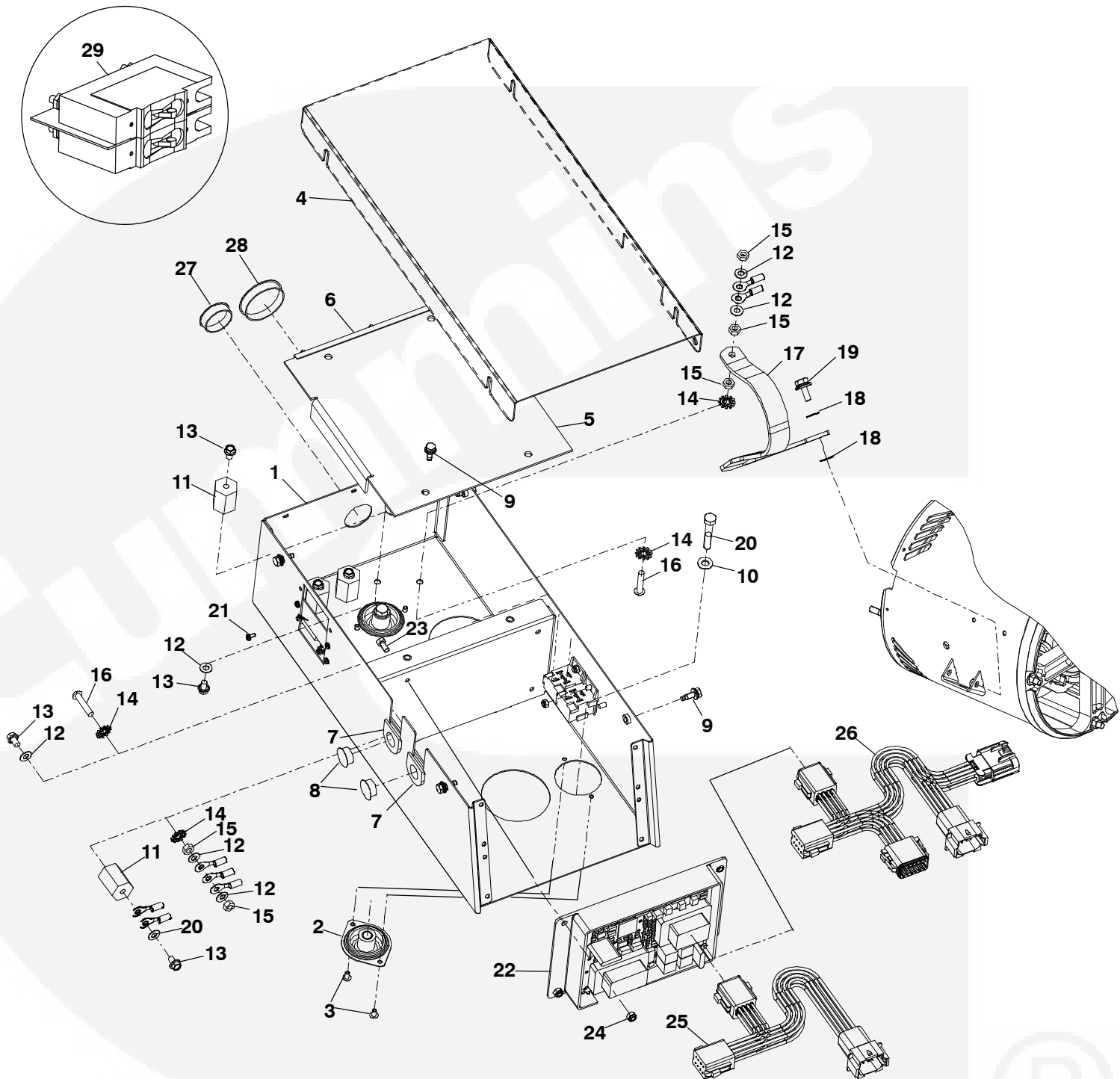
Control Box (Spec A-B)



Control Box (Spec A-B)

REF NO.	PART NO.	QTY. USED	PART DESCRIPTION	REF NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	319-5503-03	1	Control, Box	18	337-2795	1	Strap, Bond
2	319-4370-03	1	Cover, Control	19	853-0016	2	Washer, Lock
3	319-4404	1	Cover, Control	20	800-3017-18	1	Screw, Hex Head Cap (M8 x 1.25 x 16mm)
4	332-3750	1	Guide, Card	21	856-0008	2	Washer, EIT(5/16")
5	508-1105-01	1	Grommet, Remote	22	800-6062	3	Screw, Hex Head Cap (M8 x 1.25 x 45mm)
6	508-1105	1	Grommet, Remote	23	850-2058	3	Washer, Split Lock Stainless (M8)
7	517-0136	1	Plug, Hole	24	860-2058	3	Nut, Hex Stainless (M8 x 1.25mm)
8	870-2228	6	Clip, Nut	25	337-3508	1	Strap, Bond
9	821-6006-01	6	Screw, Hex Head Sems Stainless (M6 x 1 x 16mm)	26	821-0008	1	Screw, Locking Head Iso Gnd(1/4-20 x .31")
10			Standoff, Insulator	27			Screw, Pan Head XREC (6-32 x .31)
	332-2370	2	Neg Gnd Single Phase		815-0550-01	4	Single Phase
	332-2370	3	Neg Gnd Three Phase		815-0550-01	6	Three Phase
			Iso Gnd Single Phase	28			Assy, NIM PCB
	332-2370	4	Iso Gnd Three Phase		327-1659-01	1	NIM /J1939
11			Washer, Flat (1/4-20)		327-1659-02	1	NIM /Smartcraft
	526-0399-13	2	Single Phase	29	870-2062	4	Nut, Nylon Lock (M5) J1939 /Smartcraft
	526-0399-13	3	Three Phase	30	800-6002	4	Screw, Hex Head Sems (M5 x .8 x 10mm) J1939 /Smartcraft
12			Screw, Hex Head Cap (1/4-20 x .375")	31			Breaker, Circuit
	800-0310-01	2	Single Phase		320-1689-60	1	30Amps MDKBP
	800-0310-01	3	Three Phase		320-1689-07	1	45Amps MDKBR
13			Screw, Hex Flange (1/4-20 x 3/8")		320-1689-09	1	55Amps MDKBS
	821-0009	2	Neg Gnd Single Phase	32	338-4491	1	Harness, Accessory (NIM)
	821-0009	3	Neg Gnd Three Phase				
			Iso Gnd Single Phase				
	821-0009	4	Iso Three Phase				
14			Washer, Lock (1/4")				
	856-0006	4	Neg Gnd				
	856-0006	3	Iso Gnd				
15			Nut, Hex Brass (1/4-20)				
	871-0016	5	Neg Gnd				
	871-0016	3	Iso Gnd				
16			Washer, Flat Brass (1/4")				
	526-0052	4	Neg Gnd				
	526-0052	3	Iso Gnd				
17			Screw, Brass (1/4-20 x 1.25")				
	810-0155	2	Neg Gnd				
	810-0155	1	Iso Gnd				

Control Box (Spec C)

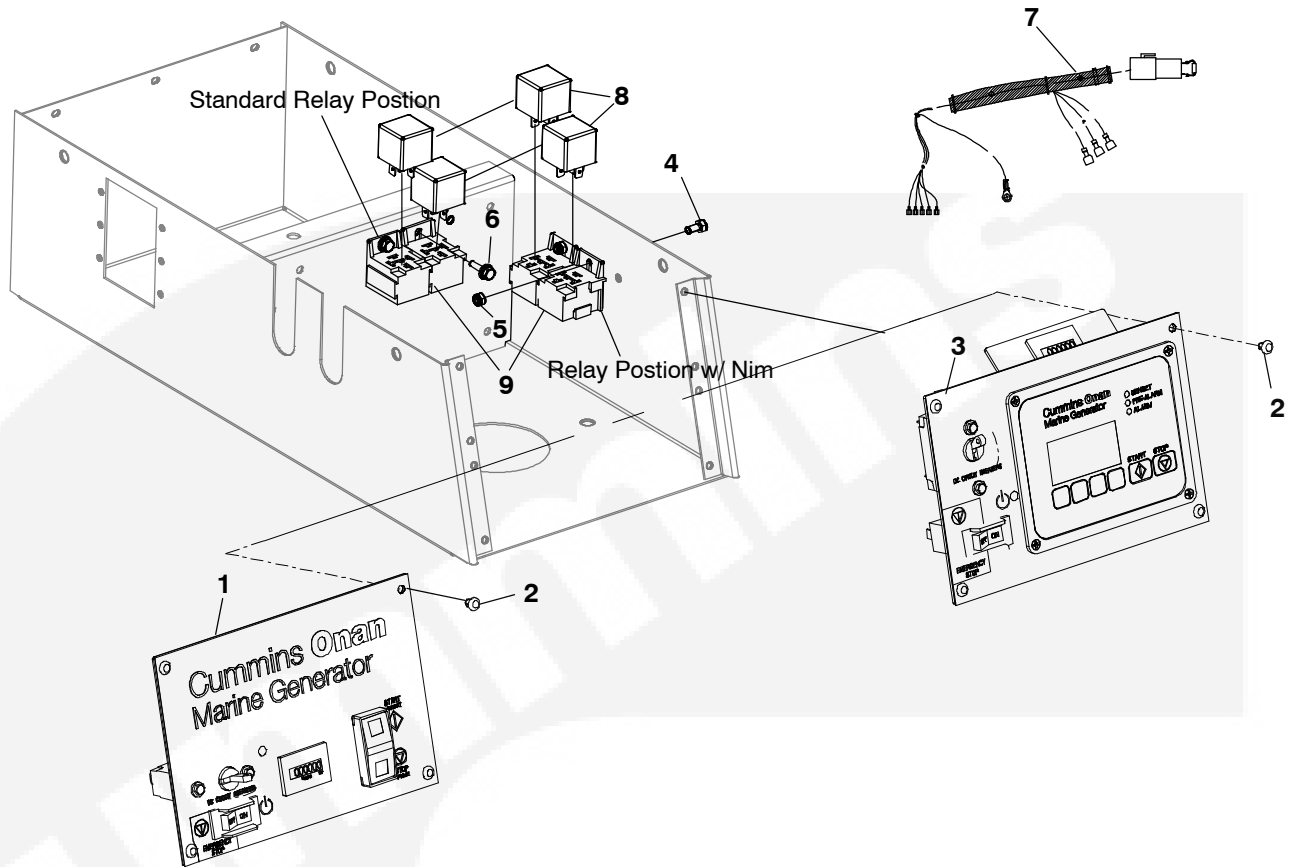


Control Box (Spec C)

REF NO.	PART NO.	QTY. USED	PART DESCRIPTION	REF NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	A029A758	1	Control, Box	19	821-6003-01	1	Screw, Hex Head Sems (M8 x 1.25 x 16mm)
2	402-0681-01	3	Isolator, Vibration	20	800-6062	3	Screw, Hex Head Cap (M8 x 1.25 x 45mm)
3	A030F179	6	Rivet, Flathead	21			Screw, XREC Phillips (#6-23 x .312")
4	319-6228-03	1	Cover, Box Control		815-0550-03	4	Neg GND 1 Phase 12 & 24V
5	319-4404	1	Cover				ISO GND 1 Phase 12 & 24V
6	332-3750	1	Guide, Card		815-0550-03	6	Neg GND 3 Phase 12 & 24V
7	508-1105	2	Grommet, Remote				ISO GND 3 Phase 12 & 24V
8	517-0136	2	Plug, Hole	22			PCB
9	A030B088	6	Screw, Hex Head Sems (M6 1.0 x 16mm)		327-1686-01	1	NIM/J1939
10	526-2100	3	Washer, Flat (M8)		327-1686-02	1	NIM/SmartCraft
11			Standoff, Insulator		327-1686-03	1	NIM/SmartCraft 2
	332-2370	2	Neg GND 1 Phase 12 & 24V	23	800-6002	4	Screw, Hex Head (M5 x 0.8 x 10mm)
	332-2370	3	Neg GND 3 Phase 12 & 24V				Nut, Nylon Locking (M5)
			ISO GND 1 Phase 12 & 24V	24	870-2062	2	Harness, Accessory (J1939 / SmartCraft)
			ISO GND 3 Phase 12 & 24V	25	338-4491	1	Harness, Accessory (SmartCraft 2)
12			Washer, Flat (6.75ID x 14.30D x .8mm)	26	338-4982	1	Plug, Hole
	526-0052	6	Neg GND 1 Phase 12 & 24V	27	517-0138-05	1	Plug, Hole
	526-0052	7	Neg GND 3 Phase 12 & 24V	28	517-0138-08	1	Breaker, Circuit
	526-0052	8	ISO GND 1 Phase 12 & 24V	29			MDKBP
	526-0052	9	ISO GND 3 Phase 12 & 24V				30Amps
13			Screw, Locking Head (1/4-20UNC x 14.30D x .8)		320-1689-04	1	35Amps
	821-0009	4	Neg GND 1 Phase 12 & 24V		320-1689-05	1	55Amps
	821-0009	6	Neg GND 3 Phase 12 & 24V		320-1689-12	1	MDKBR
			ISO GND 1 Phase 12 & 24V				40Amps
	821-0009	8	ISO GND 3 Phase 12 & 24V		320-1689-06	1	45Amps
14	856-0006	4	Washer, ETIT Locking (1/4")		320-1689-07	1	MDKBS
15	871-0016	5	Nut, Hex (1/4-20")				50Amps
16	810-0155	2	Screw, Round Head (1/4-20UNC x 1.25")		320-1689-08	1	55Amps
17	337-2795	1	Strap, Bond		320-1689-09	1	70Amps
18	853-0016	2	Washer, ET Locking (5/16")		320-1689-12	1	

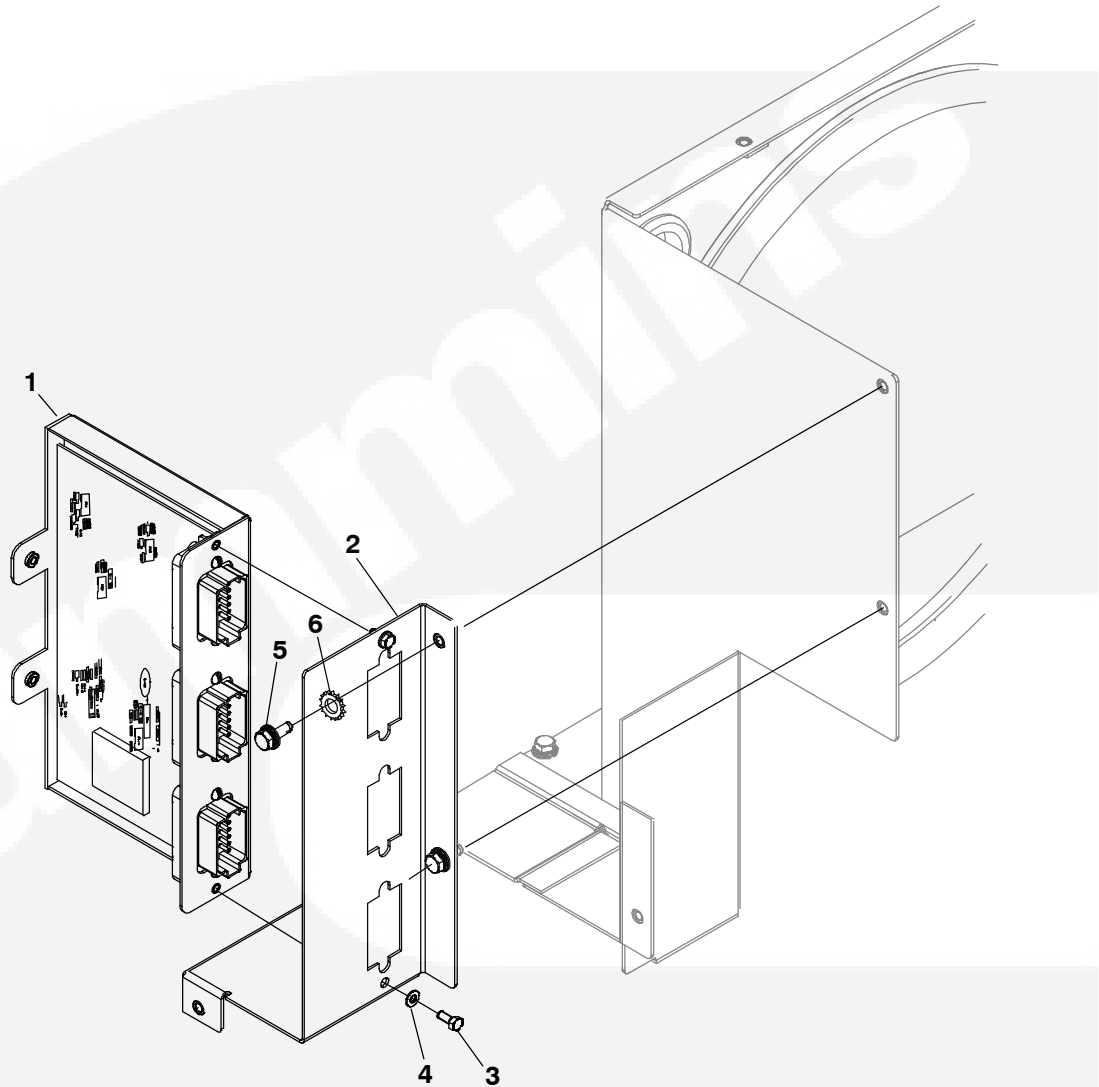
SmartCraft is a trademark of the Brunswick Corporation.

Control Panel Components



REF NO.	PART NO.	QTY. USED	PART DESCRIPTION	REF NO.	PART NO.	QTY. USED	PART DESCRIPTION
1			Assy, Engine Panel (Spec C See Control Panel for Parts)	6	821-6001-03	2	Screw, Hex Head Sems (M5 x .8 x 16mm) (Non NIM)
	300-6362-03	1	12V	7			Harness, Control
	300-6362-04	1	24V		338-4213	1	N/A
2	818-1150-03	8	Rivet, Drive Plastic (Std)		338-4414	1	Non Nim
3	300-6363-01	1	Assy, Control (Spec C)		338-4414	1	Nim
4	800-6002	2	Screw, Hex Head Cap (M5 x .8 x 10mm) (NIM)	8			Relays
					307-2767	2	12V
5	870-2062	2	Nut, Nylon Lock (M5) (NIM)		307-2819	2	24V
				9	323-1563	2	Contact, Relay

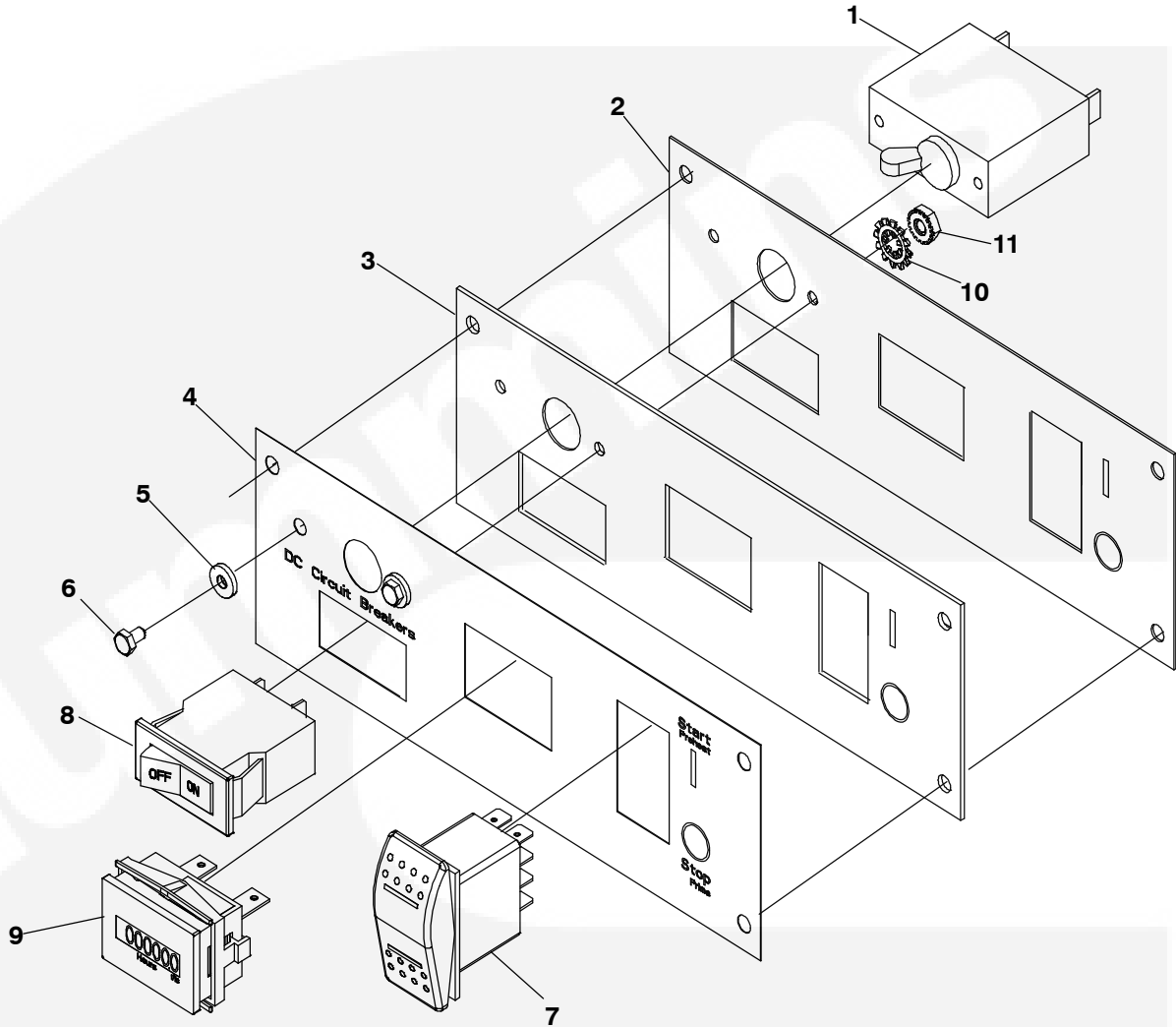
PCB Mounting



REF NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	327-1691		PCB, Control
2			Panel, UMC Mounting
	405-6522-03	1	Spec A-B
	404-0022-03	1	Begin Spec C
3	800-3042	2	Screw, Hex (M4)
	800-3042	2	Spec A-B
	800-6395-01	2	Begin Spec C
4	526-2050	2	Washer, Flat (M4)

REF NO.	PART NO.	QTY. USED	PART DESCRIPTION
5		2	Screw, Hex Head Sems Stainless (M6 x 1 x 16mm)
	800-6033	2	Spec A-B
	800-6395-01	2	Begin Spec C
6	853-2006	2	Washer, ET (M6) (Spec A-B)

Control Panel Components (Breaker Switch Option Spec A-B)

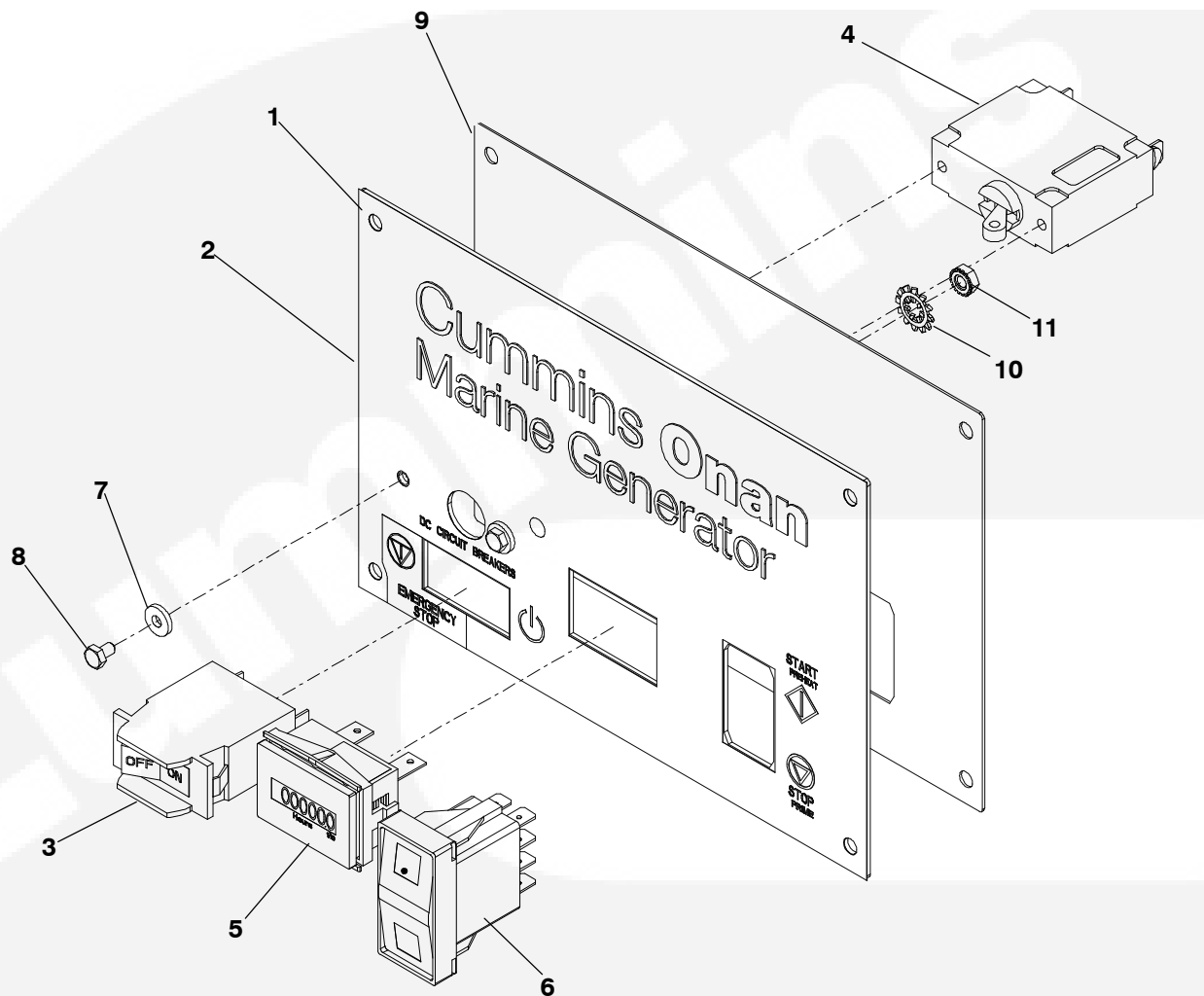


REF NO.	PART NO.	QTY. USED	PART DESCRIPTION
			Assy, Engine Panel (All Parts Included)
	300-5476-05	1	12V
	300-5476-06	1	24V
1	320-1862-01	1	Breaker, Circuit (50 Amp)
2	319-4467-02	1	Panel, Control (Ground)
3	319-4368-06	1	Panel, Control
4	98-7781	1	Label, Control
5	526-1002	2	Washer, Flat (#6)
6	800-0309-10	2	Screw, Hex Head (6-32 x 1/4")

REF NO.	PART NO.	QTY. USED	PART DESCRIPTION
7	308-1102	1	Switch, Rocker SPDT 24VDC
	308-1101	1	12VDC
8	320-1140	1	Breaker, Circuit (15 Amp)
9	302-2048	1	Meter, Hour
10	856-0003	1	Washer, EIT Lock (#10)
11	870-0131	1	Nut, Sems EIT

* - See Control Box for Location.

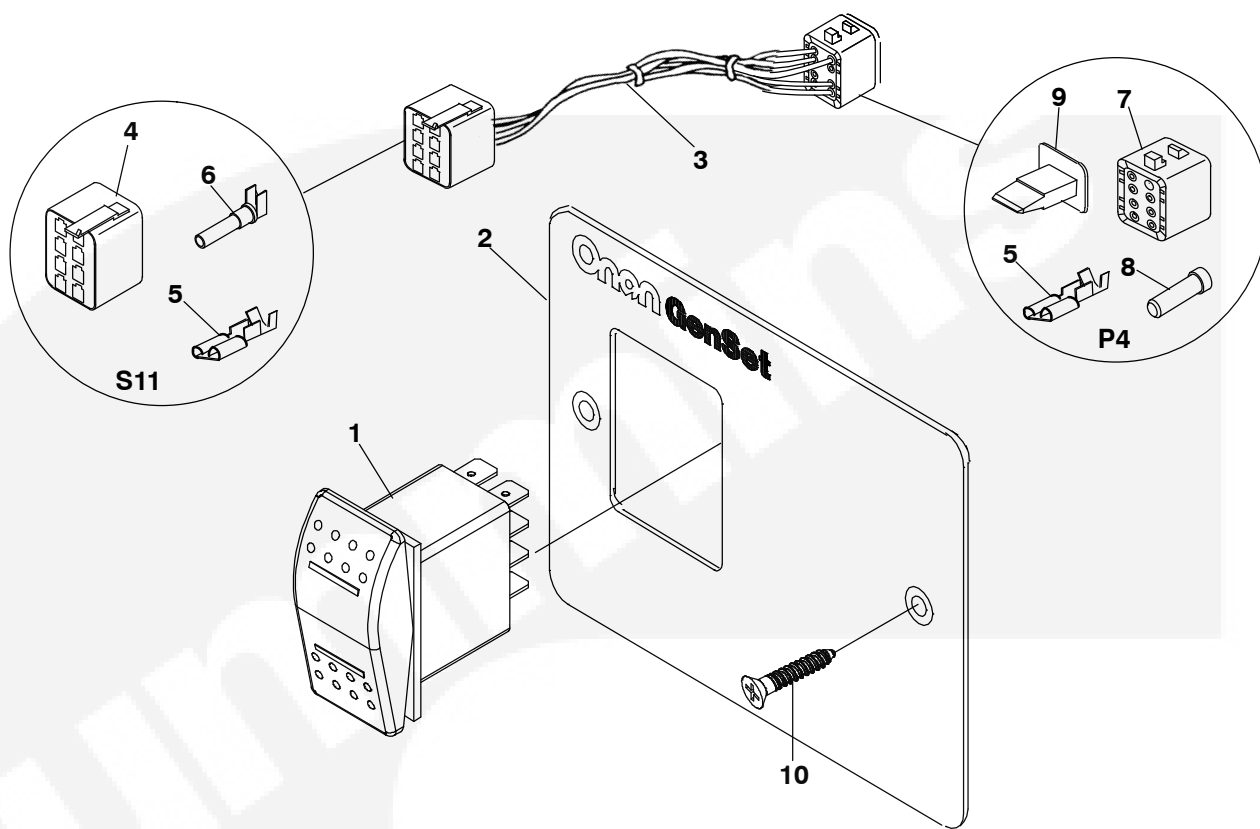
Control Panel Components (Breaker Switch Option Spec C)



REF NO.	PART NO.	QTY. USED	PART DESCRIPTION
			Assy, Engine Panel (All Parts Included)
	300-6362-03	1	12V
	300-6362-04	1	24V
1	300-6362-04	1	Panel, Control
2	98-8713	1	Label, Information (Control)
3	320-2361	1	Breaker Circuit
4	320-2362	1	Breaker Circuit
5	302-2048	1	Meter, Hour

REF NO.	PART NO.	QTY. USED	PART DESCRIPTION
6			Switch, Rocker
	308-1218	1	12VDC
	308-1219	1	24VDC
7	526-1002	2	Washer, Flat DAC
8	800-0309-10	2	Screw, Hex Head Mach (6-32 x 1/4")
9	319-6873	1	Panel, Control Box (Ground)
10	656-0003	1	Washer, EIT Lock (#10)
11	870-0131	1	Nut, Sems EIT (#10-32)

Remote Control Panel

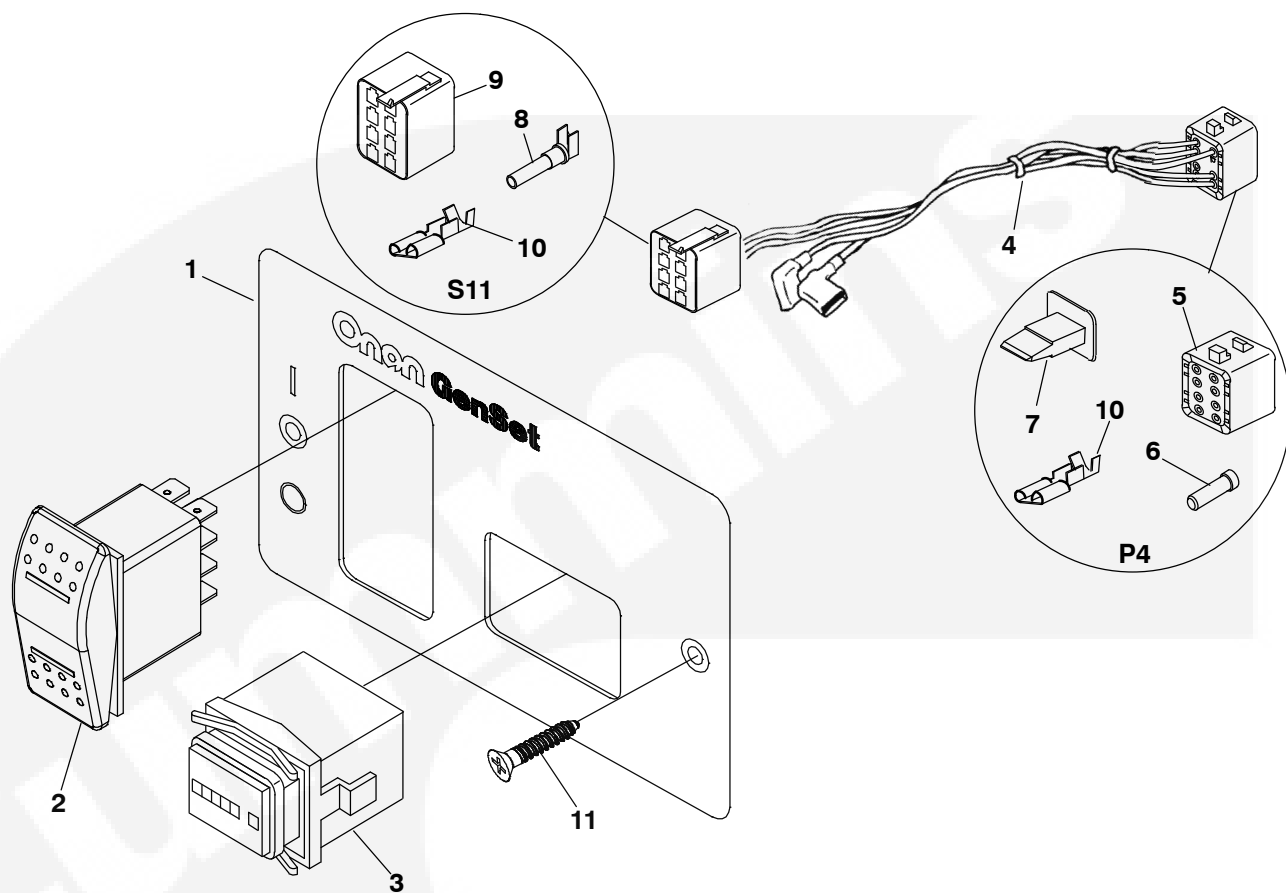


REF NO.	PART NO.	QTY. USED	PART DESCRIPTION	REF NO.	PART NO.	QTY. USED	PART DESCRIPTION
			Kit, Remote Switch Harness (Includes Parts Marked +)	6	323-1492	6	*Terminal, Socket
	541-0941-01	1	12V	7	323-1541	1	*Plug, (8 Pin)
	541-0941-02	1	24V	8	323-1491	3	*Plug, Seal
			Kit, Panel Remote (Includes Parts Marked #)	9	323-1543	1	*Wedge, Plug (8 Pin)
	300-5725-01	1	12V	10	815-0910	2	#Screw, Wood (#6 x 1)
	300-5725-02	1	24V	11	98-8092	1	+Label, Instructions
1			#+Switch, Rocker (S11)	12	98-8081	1	#+Label, Warning
	308-1101	1	12V				
	308-1102	1	24V				
2	319-6990	1	#Panel, Remote (Includes Printing)				
3	338-3988	1	#+Harness, Remote Panel (Includes Parts Marked *)				
4	308-1019	1	*Connector, Switch (S11)				
5	332-2890	6	*Terminal, Receptacle (.25")				

- Parts Included in Remote Panel.

+ - Parts Included in Remote Switch Harness. Instructions included in Kits only

Remote Control Panel w / Hour Meter

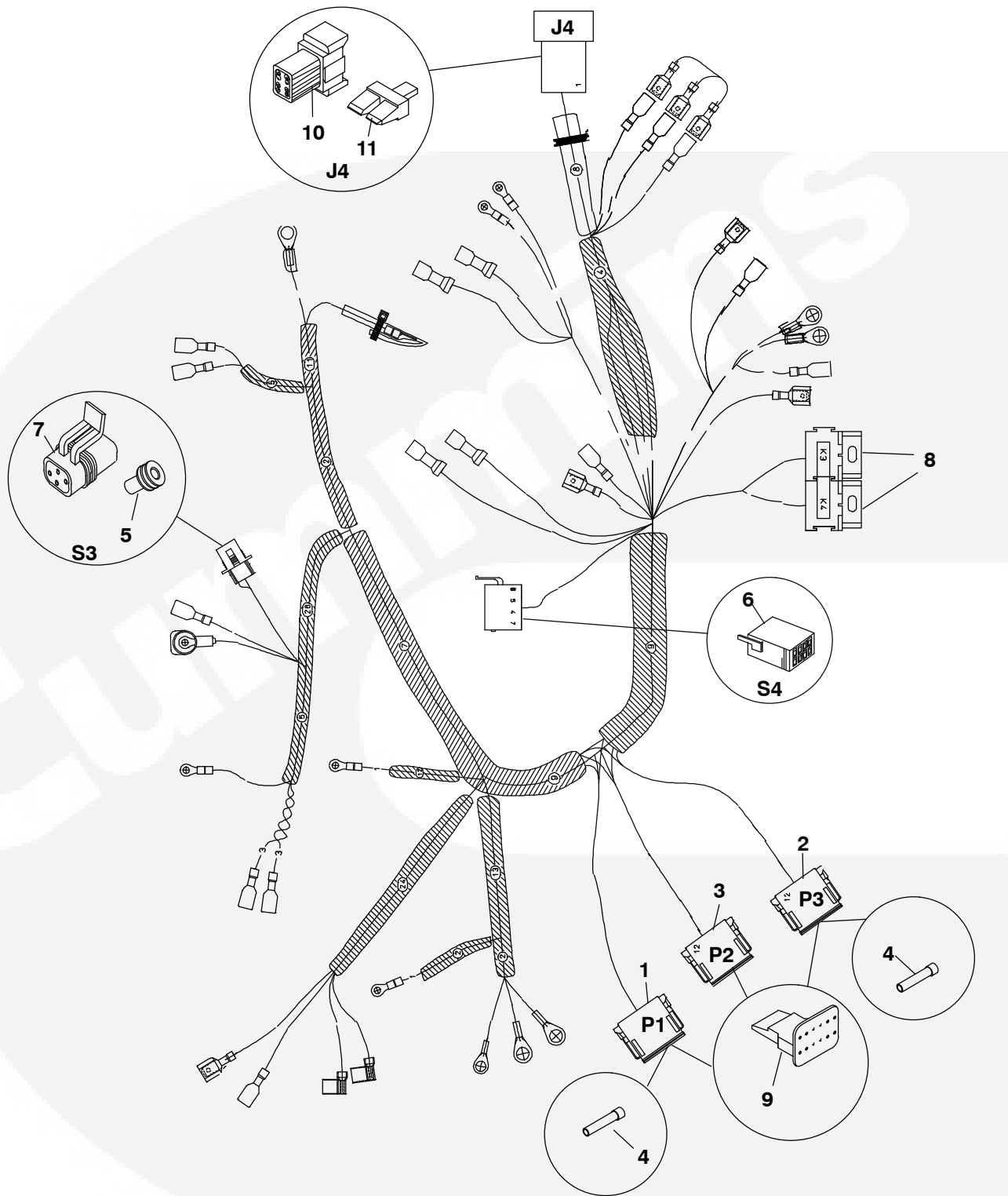


REF NO.	PART NO.	QTY. USED	PART DESCRIPTION
			Kit, Remote Panel
	300-5727-01	1	12V
	300-5727-02	1	24V
1	319-6992	1	Panel, Remote Printed
2			Switch, Rocker (S11)
	308-1101	1	12V
	308-1102	1	24V
3	302-2002	1	Meter, Hour (M11)
4	338-3990	1	Harness, Remote Panel (Includes Parts Marked *)
5	323-1541	1	*Plug (8 Pin) (P4)

REF NO.	PART NO.	QTY. USED	PART DESCRIPTION
6	323-1591	2	*Plug, Seal
7	323-1543	1	*Wedge, Plug (8 Pin)
8	323-1492	6	*Pin, Contact
9	308-1019	1	*Connector, Switch (S11)
10	332-2890	6	*Terminal, Receptacle (.25")
11	815-0910	2	Screw, Wood (#6 x 1)
12	98-8081	1	Label, Panel (Remote)

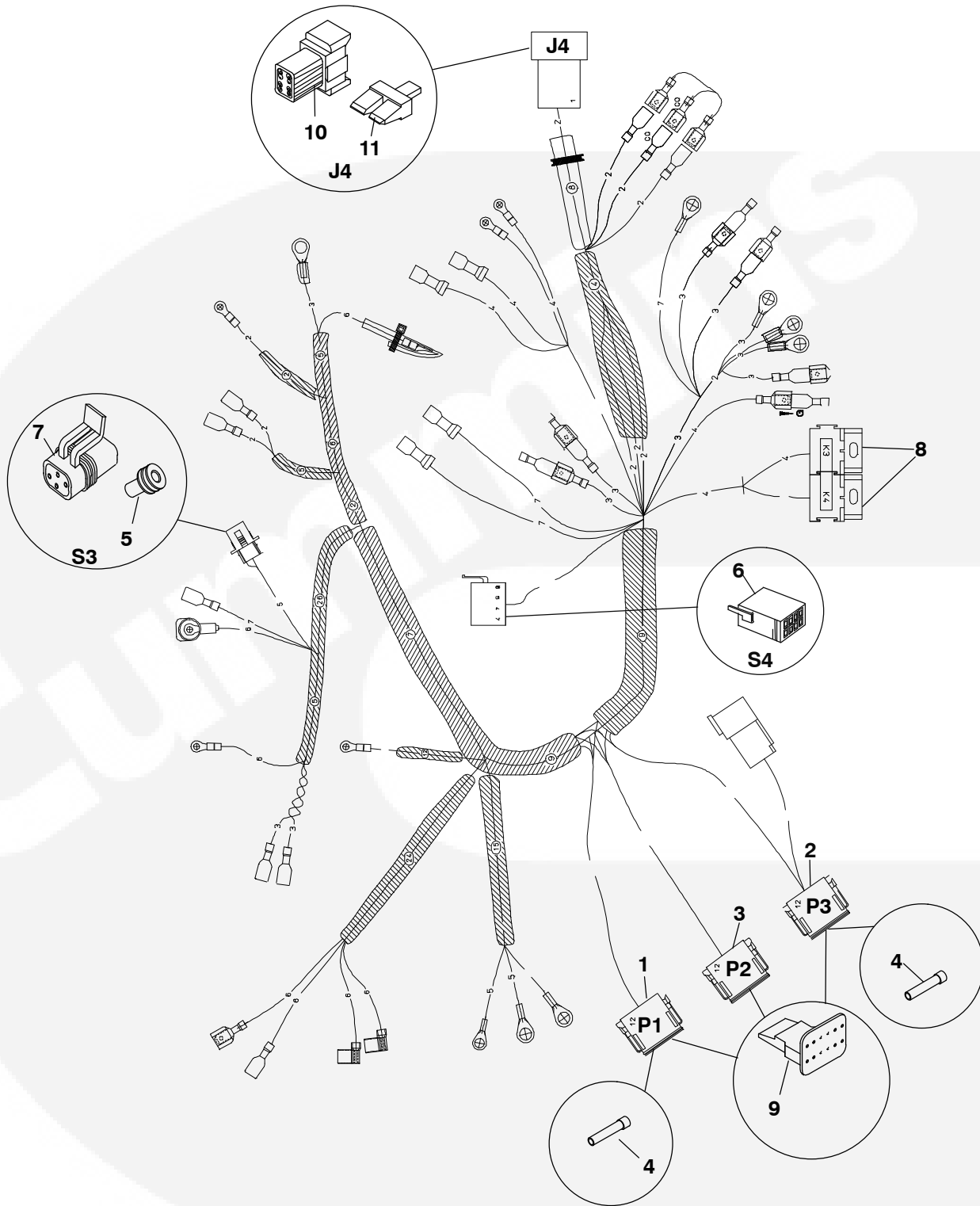
* - Parts Included in Remote Panel Wiring Harness.

Control Harness (Spec A-B)



REF NO.	PART NO.	QTY. USED	PART DESCRIPTION	REF NO.	PART NO.	QTY. USED	PART DESCRIPTION
	338-4412	1	Harness, Control	7	323-1765	1	Connector, Housing 4 Pin (S3)
1	323-1582-06	1	Plug (12 Pin, Black P1)	8	323-1563	1	Socket, Relay
2	323-1582-05	1	Plug (12 Pin, Gray P2)	9	323-1583	3	Plug, Wedge 12 Pin, P1, P2, P3
3	323-1582-07	1	Plug (12 Pin, Green P3)	10	323-1542	2	Connector, Receptacle 8 Pin (J4, J8)
4	323-1591	AR	Plug (P1)	11	323-1544	2	Receptacle, Wedge(J4, J8)
5	323-1708	AR	Seal,Cable(S3)	12	98-7917	1	Label, Information (Relay)
6	308-1019	1	Switch, Connector (S4)				

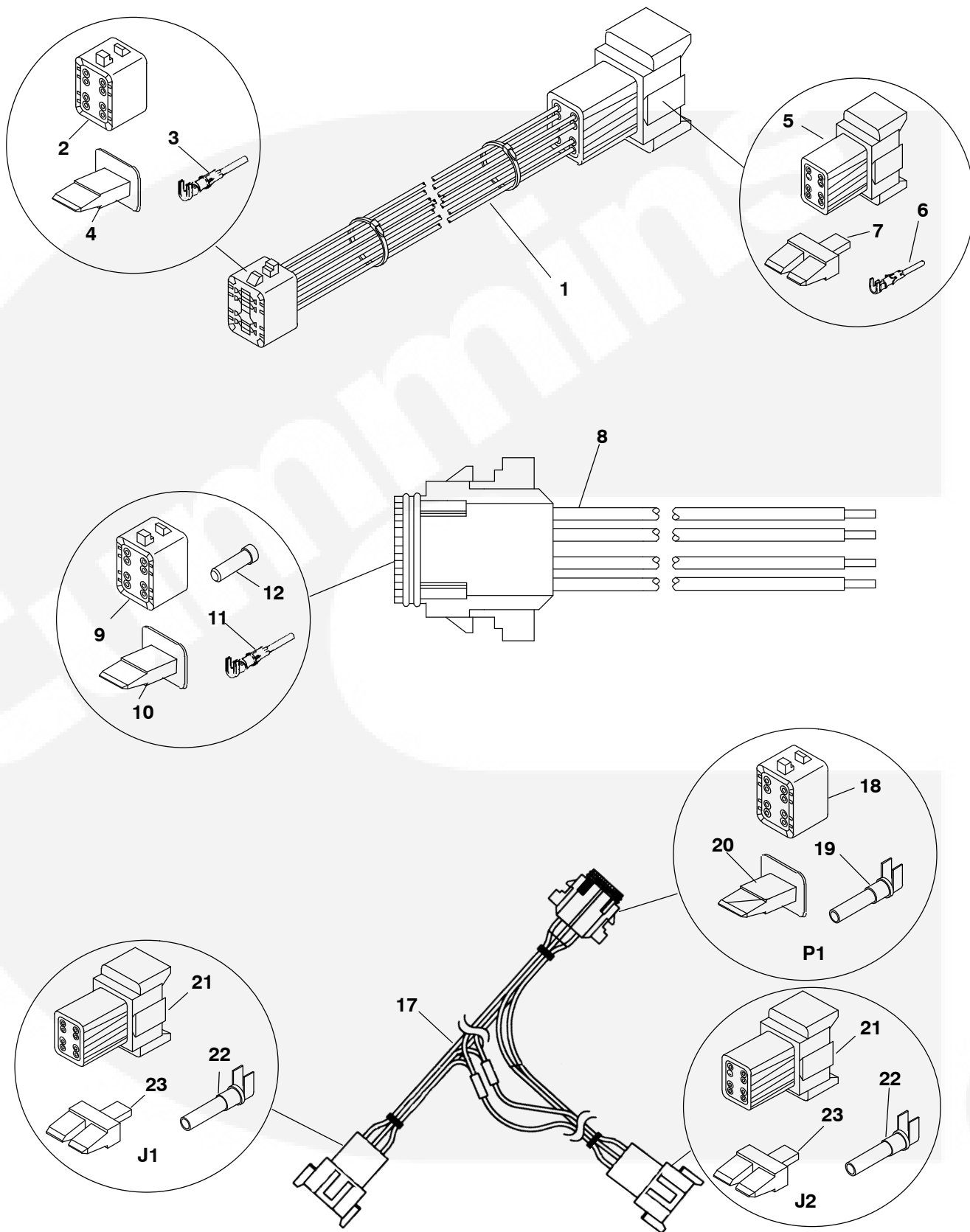
Control Harness (Spec C)



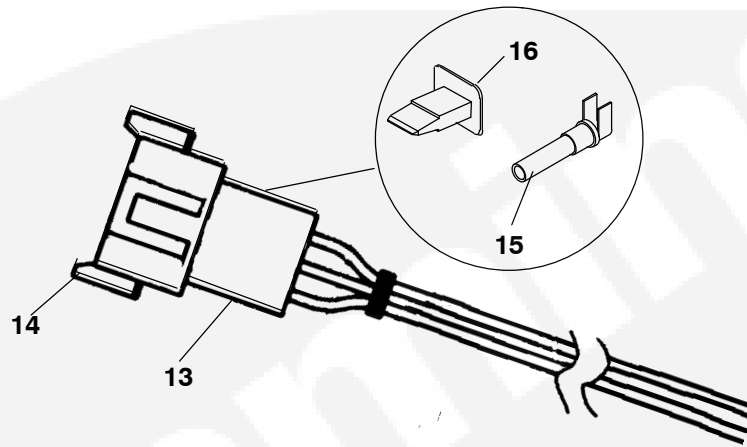
REF NO.	PART NO.	QTY. USED	PART DESCRIPTION
	338-4952	1	Harness, Control
1	323-1582-06	1	Plug (12 Pin, Black P1)
2	323-1582-05	1	Plug (12 Pin, Gray P2)
3	323-1582-07	1	Plug (12 Pin, Green P3)
4	323-1591	AR	Plug (P1)
5	323-1708	AR	Seal,Cable(S3)
6	308-1019	1	Switch, Connector (S4)

REF NO.	PART NO.	QTY. USED	PART DESCRIPTION
7	323-1765	1	Connector, Housing 4 Pin (S3)
8	323-1563	1	Socket, Relay
9	323-1583	3	Plug, Wedge 12 Pin, P1, P2, P3
10	323-1542	2	Connector, Receptacle 8 Pin (J4, J8)
11	323-1544	2	Receptacle, Wedge(J4, J8)
12	98-7917	1	Label, Information (Relay)

Wiring Harnesses



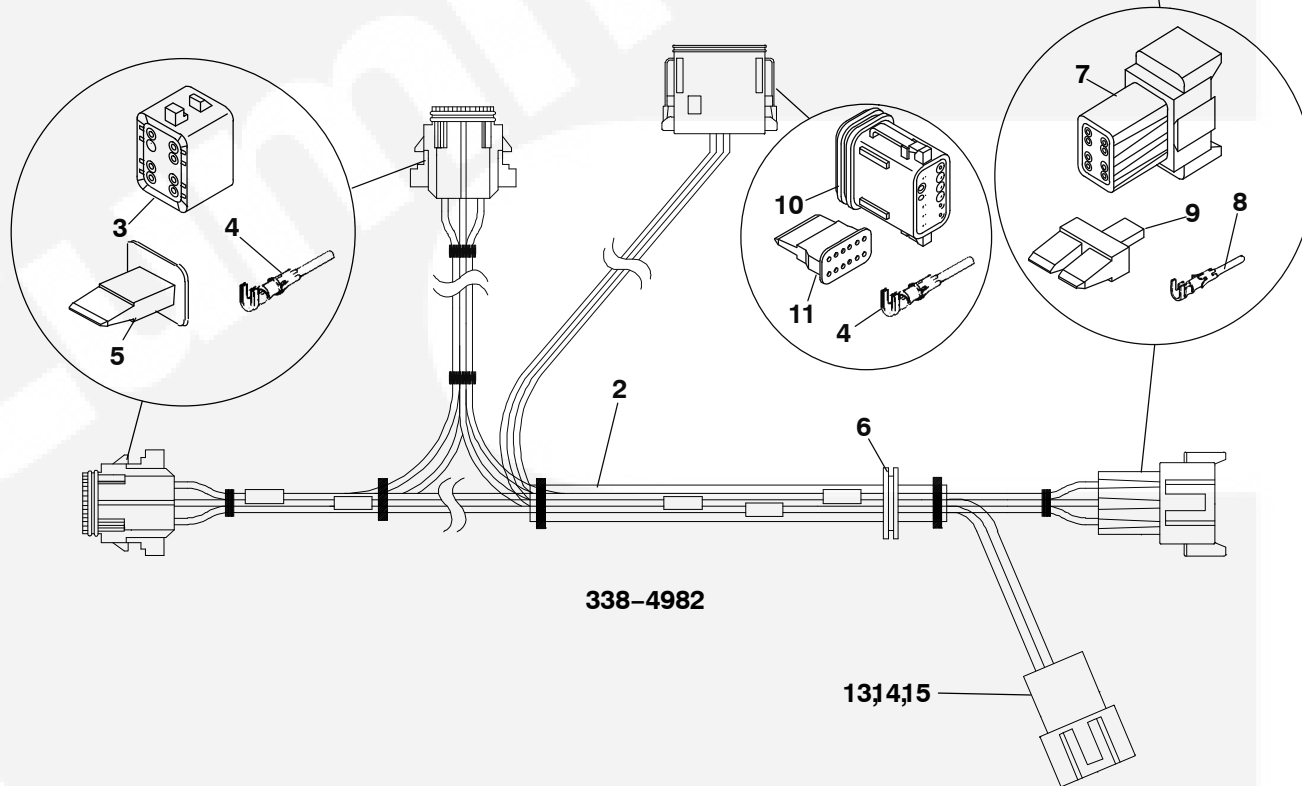
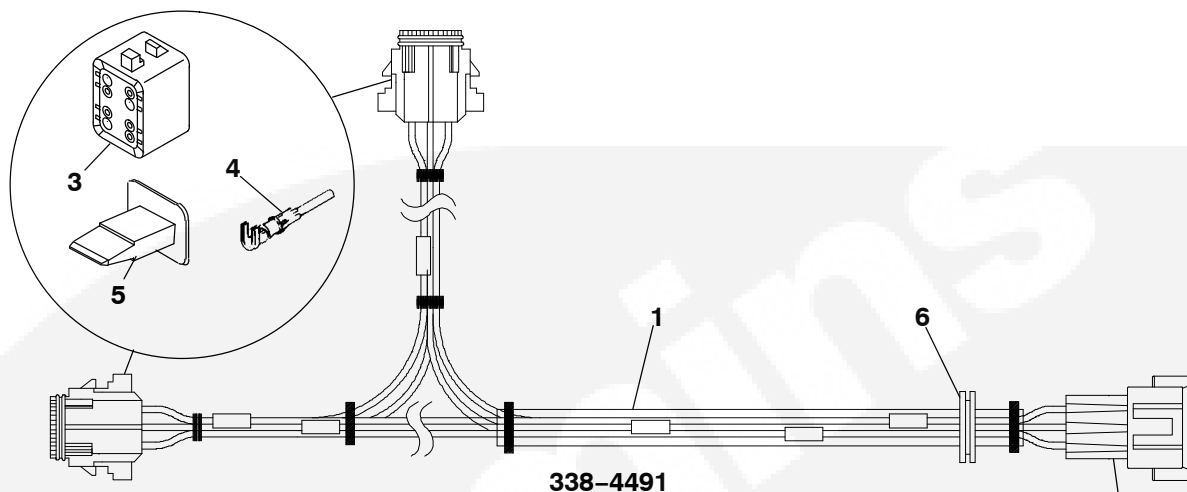
Wiring Harnesses



REF NO.	PART NO.	QTY. USED	PART DESCRIPTION	REF NO.	PART NO.	QTY. USED	PART DESCRIPTION
1			Harness, Remote Extension (Includes Parts Marked #)	13	338-4017	1	Harness, Pigtail (Includes Parts Marked @)
	338-3167	1	15 feet	14	323-1542	1	@Connector, Receptacle (8 Pin)
	338-3168	1	25 feet	15	323-1491	AR	+Terminal, Pin
	338-3169	1	45 feet	16	323-1544	2	@Wedge, Lock (8 Pin)
	338-3169-01	1	75 feet				
	338-3169-02	1	100 feet	17	338-4016	1	Harness, Junction (Includes Parts Marked +)
	338-3169-03	1	150 feet				
2	323-1541	1	#Plug (8 Pin)	18	323-1541	1	±°Plug, Connector (8 Pin)
3	323-1492	8	#Terminal, Socket	19	323-1492	AR	±°Terminal, Socket
4	323-1543	1	#Wedge, Plug (8 Pin)	20	323-1543	1	±°Wedge, Plug (8 Pin)
5	323-1542	1	#Receptacle, (8 Pin)	21	323-1542	2	+Connector, Receptacle (8 Pin)
6	323-1491	8	#Terminal, Pin	22	323-1491	AR	@Terminal, Pin
7	323-1544	1	#Wedge, Receptacle (8 Pin)	23	323-1544	2	+Wedge, Lock, Receptacle (8 Pin)
8	338-4223	1	Harness, Remote Panel				
9	323-1541	1	Plug (8 Pin)				
10	323-1543	1	Wedge, Plug (8Pin)				
11	323-1492	AR	Terminal, Socket				
12	323-1591	AR	Plug, Seal				

– Parts Included in Remote Extension Harness.
 * – Parts Included in Custom Pigtail Harness.
 ° – Parts Included in Adapter Harness.
 .+ – Parts Included in Junction Harness.
 .@ – Parts Included in Pigtail Harness.

Wiring Harnesses (Spec C)



REF NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	338-4491		Harness, Remote (Includes Parts marked *)
2	338-4982		Harness, Remote (Includes Parts marked +)
3	323-1541	2	*+ Connector, Plug (8Pin)
4	323-1492	1	*+ Terminal, Socket
5	323-1543	1	*+ Wedge, Plug (8 Pin)
6	508-1105	1	*+ Grommet
7	323-1542	1	*+ Connector, Receptacle

REF NO.	PART NO.	QTY. USED	PART DESCRIPTION
8	323-1491	8	*+ Terminal, Pin
9	323-1544	1	*+ Wedge, Receptacle (8 Pin)
10	323-1582	1	Connector, Plug (10Pin)
11	323-1583	1	Wedge, Plug (10Pin)
12	323-1492	1	Terminal, Socket
13	323-2524	1	Housing, Receptacle
14	323-2522	1	Seal, Connector
15	332-4287	1	Terminal, Pin

Labels, Kits

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
	98-2235-02	1	Label, Ground		130-4434	2	Pencil, Zinc
	98-4798-01	1	Label, Warning (Unhoused)		417-0223	2	Box, Cruise Kits
	98-5161	1	Label, Coolant (Housed)				
	98-8357	1	Label, Information (WD Reconnect)		100-3478-05	1	Kit, Cruise Includes All of The Following Items:
	98-5347	1	Label, Danger		A026K278	2	Filter, Fuel
	98-8354	1	Label, Information (Service)		122-0810	2	Filter, Oil
	98-5755	1	Label, Warning		541-1521	2	Kit Pump, Service
	98-6074-02	1	Label, Warning		185-7055	2	Belt
	98-8067	1	Label, Information (No Step) Housed		130-4434	2	Pencil, Zinc
					417-0223	2	Box, Cruise Kits
	98-7871	2	Label, Warning (Coolant) Unhoused		300-5725-01	1	Kit, Remote Panel
	98-7871	1	Label, Warning (Coolant) Housed		300-5725-02	1	Kit, Remote Panel
					332-3771	1	Kit, Terminal Boot
	98-6995	4	Label, Warning (Housed)		541-0853	1	Kit Label, Bulkhead Connectors (Spec A-B Only)
	98-8298	1	Label, Information (No Step)				
	98-6997	1	Label, Lifting Eye (Housed)		541-0941-01	1	Kit, Remote Switch
	98-7783	1	Label, Warning		541-0941-02	1	Kit, Remote Switch
	98-7850	2	Label, E-QD (Housed)				
	98-7963	1	Rear Bulkhead Connector,	Begin Spec C			
	98-7975	1	Rear Bulkhead Connector,				
	98-7984-01	1	Label, Information (PTO, Rear)		98-8601	1	Label, Information Sheet
	98-7984-02	1	Label, Information (PTO, Front)			4	Label, Warning
	98-7985-01	1	Label, Information (PTO, Rear)			1	Label, Information (No Step)
	98-7985-02	1	Label, Information (PTO, Front)			1	Label, Warning (Coolant)
	98-8362	1	Label, Information (Rear)			1	Label, Information (Coolant)
	98-8363	1	Label, Information (Rear)			1	Label, Information (Oil Fill)
	98-8364	1	Label, Information (Front)			1	Label, Information (Lifting)
	98-8365	1	Label, Information (Rear)		98-8689	1	Label, Information Sheet
						1	Label, Information
	98-8298	1	Label, Information (No Step)			1	Label, Information (Service)
	98-8367-01	1	Label, Information (PTO Rear)			1	Label, Warning
	98-8366-01	1	Label, Information (PTO Rear)			1	Label, Information (No Step)
	98-8367-02	1	Label, Information (PTO Front)			1	Label, Danger
	98-8366-02	1	Label, Information (PTO Front)			1	Label, Warning (Coolant)
						1	Label, Information Ground
	100-3478-04	1	Kit, Cruise Includes All of The Following Items:		98-8714	2	Label, Logo (Cummins, Onan)
	A026K278	2	Filter, Fuel		98-8715	2	Label, Logo (Cummins, Onan)
	122-0810	2	Filter, Oil		98-8717	1	Label, Logo (Cummins, Onan)
	541-1521	2	Kit Pump, Service		98-8701	1	Label, Information (Front)
	185-7055	2	Belt		98-8699	1	Label, Information (Rear)
					98-8703	1	Label, Information (PTO)

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