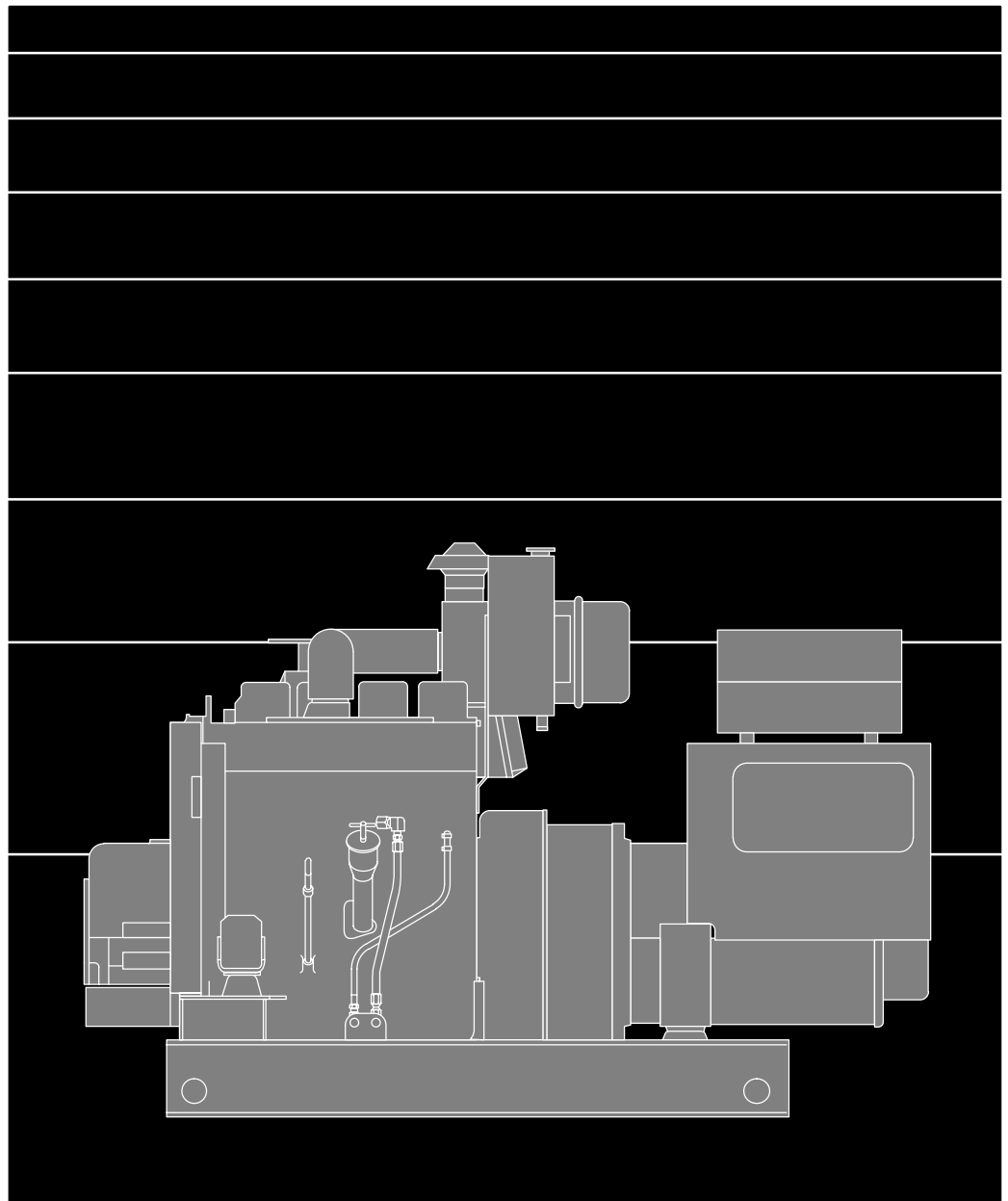


# **Onan** Parts Catalog

**MCGBA MCGCA MCGDA MCGDB  
MCGGA MDGDA MDGDB MDGDC  
MDGDD**

## **Marine Generator Set**



Printed in U.S.A.

960-0206B 4-2001

MCGBA, MCGCA, MCGDA, MCGDB, MCGGA, MDGDA, MDGDB (Spec D)  
MDGDC, MDGDD (Spec A)

## MODEL IDENTIFICATION

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

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

\_\_\_\_\_  
MODEL AND SPEC NO.

\_\_\_\_\_  
SERIAL NO.

\_\_\_\_\_  
SOFTWARE VERSION AND DATE

## SAFETY PRECAUTIONS

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

 **DANGER**

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

 **WARNING**

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

 **CAUTION**

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

## PRODUCT SAFETY PRECAUTIONS

 **WARNING**

***Service and repair of Onan equipment must be performed by trained, experienced personnel only. Improper service or repair may result in property damage, severe personal injury or death. Do not use this catalog as a guide to servicing your equipment. Read and follow the IMPORTANT SAFETY INSTRUCTIONS in the Service Manual appropriate for the equipment you are working on.***

 **WARNING**

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

 **WARNING**

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

 **WARNING**

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

## Introduction

This catalog applies to Onan Generator Models MCGBA, MCGCA, MCGDA, MCGDB, MCGGA, MDGDA, MDGDB, MDGDC and MDGDD as listed in the Generator Set Data Table. 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.

Engine parts that have been modified or added by Onan are identified in this catalog. All other engine replacement parts must be ordered from the engine manufacturer by referring to the engine manufacturer's nameplate and supplying all available information. Contact your nearest engine parts dealer for assistance in ordering replacement parts.

## Replacement Engine

Onan/Cummins Generator Model	Cummins Engine Model
30MCGBA	4B 3.9-D(M) Configuration No. D381036MX02
35MCGBA	4B 3.9-D(M) Configuration No. D381036MX02
35MCGCA	4B T3.9-D(M) Configuration No. D382035MX02
45MCGCA	4B T3.9-D(M) Configuration No. D382035MX02
45MCGGA	6B 5.9-D(M) Configuration No. D401052MX02
55MCGGA	6B 5.9-D(M) Configuration No. D401052MX02
60MCGDA	6B T5.9-D(M) Configuration No. D402051MX02
65MCGDB	6B T5.9-D(M) Configuration No. D402051MX02
70MCGDA	6B T5.9-D(M) Configuration No. D402051MX02
90MCGDB	6B T5.9-D(M) Configuration No. D402051MX02
45MDGDC	6B T5.9-G Configuration No. D402012GX02
55MDGDC	6B T5.9-G Configuration No. D402012GX02
60MDGDD	6B T5.9-G Configuration No. D402012GX02
65MDGDA	6B T5.9-D(M) Configuration No. D402051MX02
70MDGDD	6B T5.9-G Configuration No. D402012GX02
75MDGDA	6B T5.9-D(M) Configuration No. D402051MX02
75MDGDB	6B T5.9-D(M) Configuration No. D402051MX02
95MDGDB	6B T5.9-D(M) Configuration No. D402051MX02

Replacement engines cannot be ordered from Onan. Order from your nearest Cummins distributor.

### Generator Set Data Table

Model and Specification	Electrical Data					Battery Voltage
	Watts	Volts	Hertz	Wire	Phase	
30MCGBA*	30,000	#	50	4 or 12	1 or 3	12 or 24 VDC
35MCGBA*	35,000	#	60	4 or 12	1 or 3	12 or 24 VDC
35MCGCA*	35,000	#	50	4 or 12	1 or 3	12 or 24 VDC
45MCGCA*	45,000	#	60	4 or 12	1 or 3	12 or 24 VDC
45MCGGA*	45,000	#	50	4 or 12	1 or 3	12 or 24 VDC
55MCGGA*	55,000	#	60	4 or 12	1 or 3	12 or 24 VDC
60MCGDA*	60,000	#	50	4 or 12	1 or 3	12 or 24 VDC
65MCGDB*	65,000	#	50	4 or 12	1 or 3	12 or 24 VDC
70MCGDA*	70,000	#	60	4 or 12	1 or 3	12 or 24 VDC
90MCGDB*	90,000	#	60	4 or 12	1 or 3	12 or 24 VDC
45MDGDC*	45,000	#	50	4 or 12	1 or 3	12 or 24 VDC
55MDGDC*	55,000	#	60	4 or 12	1 or 3	12 or 24 VDC
60MDGDD*	60,000	#	50	4 or 12	1 or 3	12 or 24 VDC
65MDGDA*	65,000	#	50	4 or 12	1 or 3	12 or 24 VDC
70MDGDD*	70,000	#	60	4 or 12	1 or 3	12 or 24 VDC
75MDGDA*	75,000	#	60	4 or 12	1 or 3	12 or 24 VDC
75MDGDB*	75,000	#	50	4 or 12	1 or 3	12 or 24 VDC
95MDGDB*	95,000	#	60	4 or 12	1 or 3	12 or 24 VDC

# – Broad range reconnectible.

\* – The specification number denotes customer requested options or deviations from a standard model.  
The specification letter advances (D to E, E to F, etc.) with major manufacturing changes.

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## Abbreviations

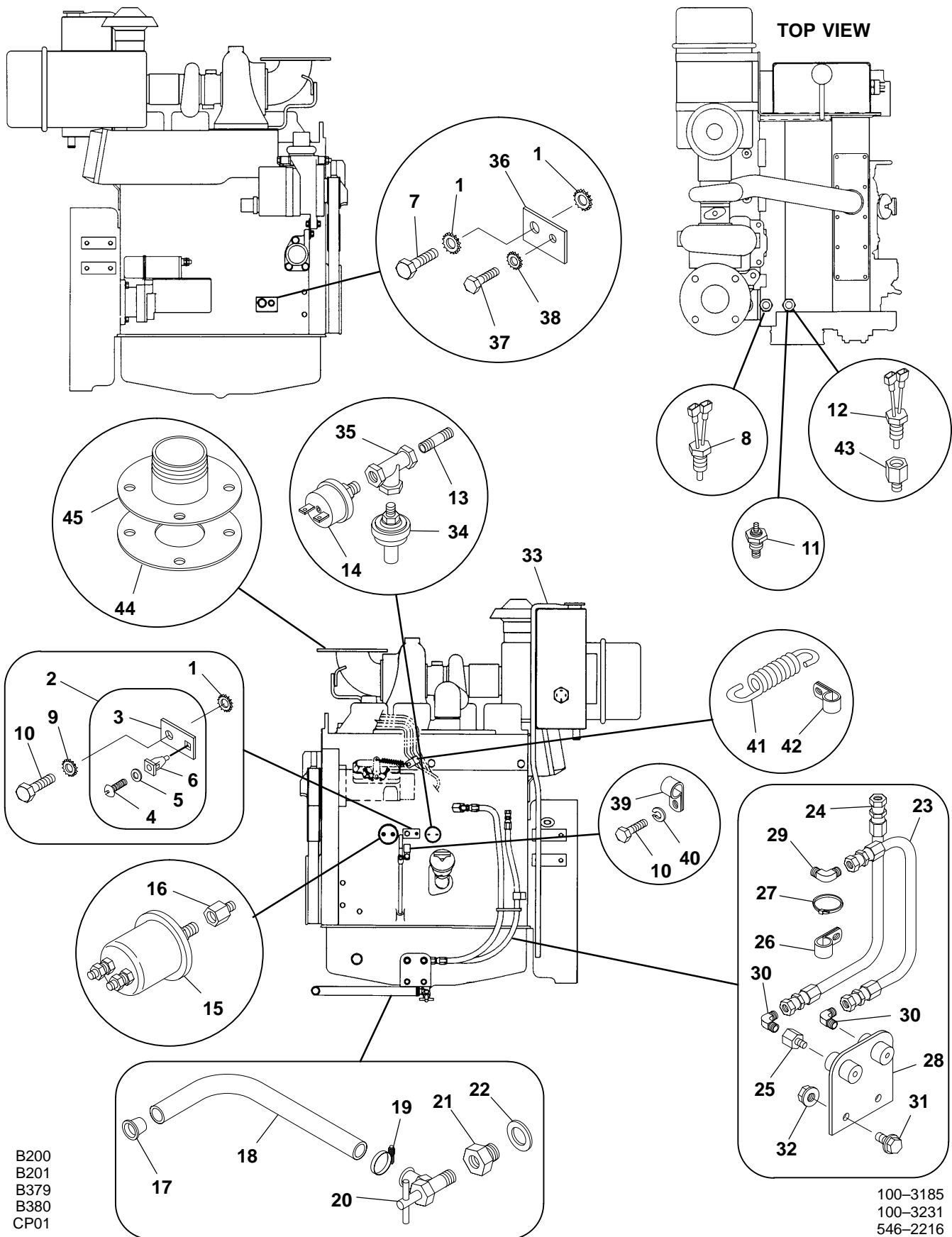
Some of the following abbreviations may be used throughout this Parts Catalog;

Alternating Current	AC	Millimeter	mm
Ampere	Amp	Not For Sale	NFS
As Required	A/R	Nominal Pipe Thread	NPT
Automatic Voltage Regulator	AVR	Outside Diameter	OD
American Wire Gauge	AWG	Ounce	oz.
Degree	Deg	Phase	Ph
Direct Current	DC	Printed Circuit	PC
External Tooth	ET	Right	RT
External/Internal Tooth	EIT	Specification	Spec
Ground Fault Interrupter	GFI	Thick	Thk
Inside Diameter	ID	Union National Coarse	UNC
Internal Tooth	IT	Union National Fine	UNF
Kilowatt	kW	Volts Alternating Current	VAC
Liquid Petroleum Gas	LPG	Volts Direct Current	VDC
Left	LT	With	W/(ET, IT, EIT)
Meter	M(Meter Number)		

## Paint and Thread Sealant

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
	525-0700-02	—	Paint, Marine Brite-White (12 oz. Pressurized Spray Can)		518-0601	—	Sealant, Thread (6 ml Tube)

# External Engine Parts MCGBA, MCGCA



## External Engine Parts MCGBA. MCGCA

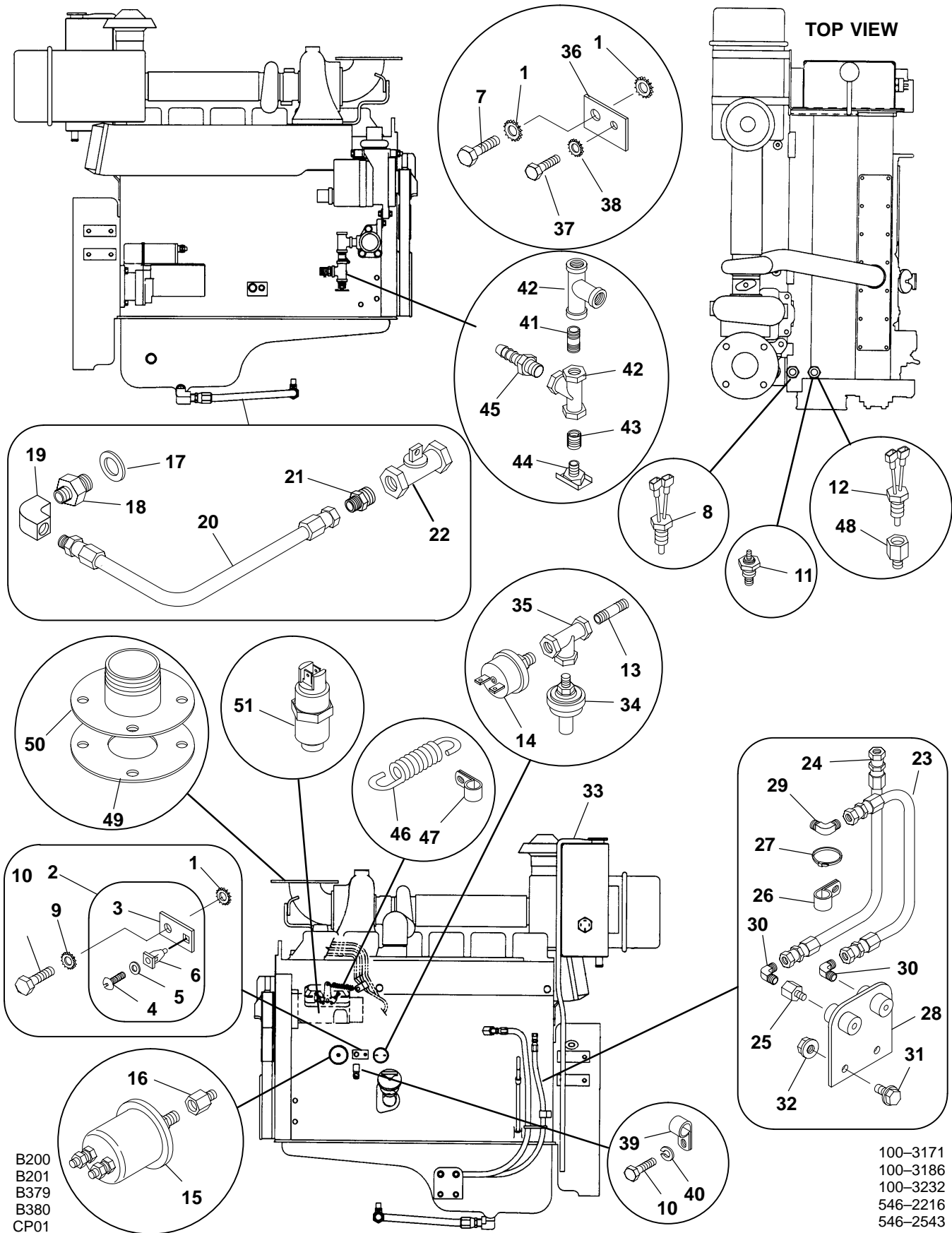
REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	856-0013	3	Washer, Lock W/EIT (1/2")	25	502-0176	1	Adapter, Pipe (1/4")
2	332-1292	1	Bracket Assembly, Terminal (Includes Parts Marked *)	26	518-0548-08	1	Clamp, Hose
3	332-1281	1	* Bracket, Terminal Mounting	27	332-1794	1	Tie, Cable
4	809-0036	1	* Screw, Round Head (#8 x 7/8")	28	148-0925	1	Bracket Assembly, Remote Fuel
5	508-0015	1	* Washer, Fiber (#8)	29	502-1043-03	1	Elbow, Male Adapter (1/4-18) (Sets Without Fuel Filter)
6	870-0263	1	* Nut, Insulating – Square Head (#8)	30	502-1043-03	2	Elbow, Male Adapter (1/4-18)
7	800-2112	1	Screw, Cap – Hex Head (M12 x 30mm)	31	821-0016	2	Screw, Self-Locking – Hex Washer Head (5/16-18 x 3/4")
8	309-0618	1	Switch, High Exhaust Temperature (S114)	32	870-0257	2	Nut, Self-Locking – Hex Flange (5/16-18)
9	856-0010	2	Washer, Lock W/EIT (3/8")	33	503-0276	–	Hose – Bulk (5/16" ID) (Order by the Foot – 4 Feet Required)
10	800-2054	2	Screw, Cap – Hex Head (M8 x 14mm)	34	309-0159	1	Switch, Oil Pressure (S107)
11	193-0375	1	# Sender, Water Temperature (1/2-14) (E126)	35	505-0059	1	Tee, Pipe (1/8")
12	193-0429-01	1	♦ Sender, Water Temperature (1/2") (E126)	36	319-1248	1	Plate, Ground
13	505-0104	1	Nipple, Pipe (1/8" x 1-1/2")	37	800-0024	1	Screw, Cap – Hex Head (5/16-18 x 1/2")
14	309-0561	1	Switch, Low Oil Pressure (S110)	38	856-0008	1	Washer, Lock W/EIT (5/16")
15			Sender, Oil Pressure (E123)	39	332-1356	1	Clamp, Loop
	193-0244	1	# Negative Ground Electrical System	40	850-2008	1	Washer, Lock – Spring (M8)
	193-0430-01	1	♦ Isolated Ground Electrical System	41	150-2546	1	Spring, Extension
16	502-0175	1	Adapter, Pipe (1/8-27)	42	518-0350	1	Clamp, Insulated
17	517-0291	1	Plug, Taper	43	505-0231	1	♦ Bushing, Reducer (1/2" to 3/8")
18	503-0227	–	Hose, Bulk (5/8" ID) (Order by the Foot – 2 Feet Required)	44	155-2543	1	Gasket, Exhaust
19	503-0131	1	Clamp, Hose	45	155-3334	1	Connection, Exhaust Outlet – MCGBA
20	504-0176	1	Valve, Oil Drain				
21	102-1415	1	Adapter, Oil Drain (M18 to 3/8")				
22	102-1356	1	Gasket, Oil Drain				
23	501-0586	1	Hose Assembly, Fuel (Supply) (1/2-20, 24-1/2" Long)				
24	501-0609	1	Hose Assembly, Fuel (Return) (1/2-20, 22-1/4" Long)				

\* Parts Included in 332-1292 – Terminal Bracket Assembly

# Used on Engines with a Negative Ground Electrical System

♦ Used on Engines with an Isolated Ground Electrical System

# **External Engine Parts** **MCGDA, MCGDB, MCGGA, MDGDA, MDGDB**



# **External Engine Parts** **MCGDA, MCGDB, MCGGA, MDGDA, MDGDB**

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	856-0013	3	Washer, Lock W/EIT (1/2")	32	870-0257	2	Nut, Self-Locking – Hex Flange (5/16-18)
2	332-1292	1	Bracket Assembly, Terminal (Includes Parts Marked *)	33	503-0276	–	Hose – Bulk (5/16" ID) (Order by the Foot – 4 Feet Required)
3	332-1281	1	* Bracket, Terminal Mounting	34	309-0159	1	Switch, Oil Pressure (S107)
4	809-0036	1	* Screw, Round Head (#8 x 7/8")	35	505-0059	1	Tee, Pipe (1/8")
5	508-0015	1	* Washer, Fiber (#8)	36	319-1248	1	Plate, Ground
6	870-0263	1	* Nut, Insulating – Square Head (#8)	37	800-0024	1	Screw, Cap – Hex Head (5/16-18 x 1/2")
7	800-2112	1	Screw, Cap – Hex Head (M12 x 30mm)	38	856-0008	1	Washer, Lock W/EIT (5/16")
8	309-0618	1	Switch, High Exhaust Temperature (S114)	39	332-1356	1	Clamp, Loop
9	856-0010	2	Washer, Lock W/EIT (3/8")	40	850-2008	1	Washer, Lock – Spring (M8)
10	800-2054	2	Screw, Cap – Hex Head (M8 x 14mm)	41	505-0106	1	Nipple, Short (1/2" x 1-1/2")
11	193-0375	1	# Sender, Water Temperature (1/2-14) (E126)	42	505-0108	2	Tee, Pipe (1/2")
12	193-0429-01	1	◆ Sender, Water Temperature (1/2") (E126)	43	505-0117	1	Bushing, Flush Face (1/2-14)
13	505-0104	1	Nipple, Pipe (1/8" x 1-1/2")	44	504-0028	1	Cock, Drain (3/8")
14	309-0561	1	Switch, Low Oil Pressure (S110)	45	502-0827	1	Hose, Barb (1/2-14)
15			Sender, Oil Pressure (E123)	46	150-2546	1	Spring, Extension (MCGDA, MCGDB, MDGDA, MDGDB)
	193-0244	1	# Negative Ground Electrical System	47	518-0350	1	Clamp, Insulated (MCGDA, MCGDB, MDGDA, MDGDB)
	193-0430-01	1	◆ Isolated Ground Electrical System	48	505-0231	1	◆ Bushing, Reducer (1/2" to 3/8")
16	502-0175	1	Adapter, Pipe (1/8-27)	49	155-2543	1	Gasket, Exhaust
17	102-1356	1	Gasket, Oil Drain	50	155-3334	1	Connection, Exhaust Outlet – MCGGA
18	102-1237	1	Adapter, Oil Drain (M18 to 1/2-14)	51			Solenoid, Fuel Shutoff MCGDA, MCGDB, MDGDA, MDGDB
19	502-1132	1	Elbow, 90 Degree (1/2-14)	3921930	1	~	12 Volt
20	501-0575	1	Hose Assembly, Oil (3/4-16 to 1/2-14, 23.3" Long)	3921976	1	~	24 Volt
21	502-1131	1	Adapter, Male (1/2-14)				MCGGA
22	504-0011	1	Valve, Shutoff (1/2-14)	307-2725-02	1	◆	12 Volt
23	501-0586	1	Hose, Fuel – Supply (1/2-20, 24-1/2" Long)				Isolated Ground Electrical System
24	501-0609	1	Hose, Fuel – Return (1/2-20, 22-1/4" Long)	307-2725-03	1	#	Negative Ground Electrical System
25	502-0176	1	Adapter, Pipe (1/4")				24 Volt
26	518-0548-08	1	Clamp, Hose	307-2725-01	1	◆	Isolated Ground Electrical System
27	332-1794	1	Tie, Cable	3905125	1	~#	Negative Ground Electrical System
28	148-0925	1	Bracket, Remote Fuel				
29	502-1043-03	1	Elbow, Male Adapter (1/4-18) (Sets Without Fuel Filter)				
30	502-1043-03	2	Elbow, Male Adapter (1/4-18)				
31	821-0016	2	Screw, Self-Locking – Hex Washer Head (5/16-18 x 3/4")				

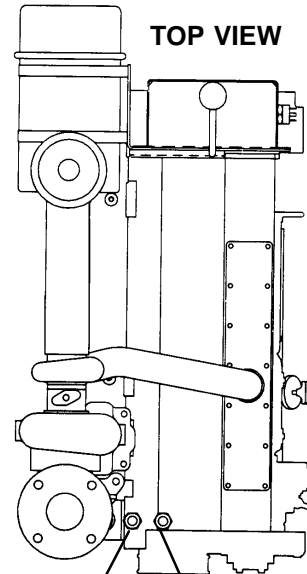
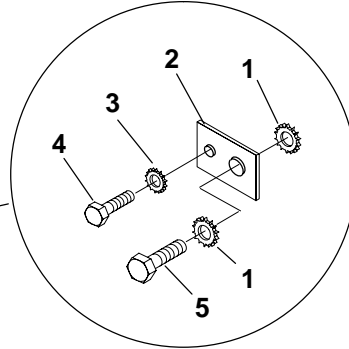
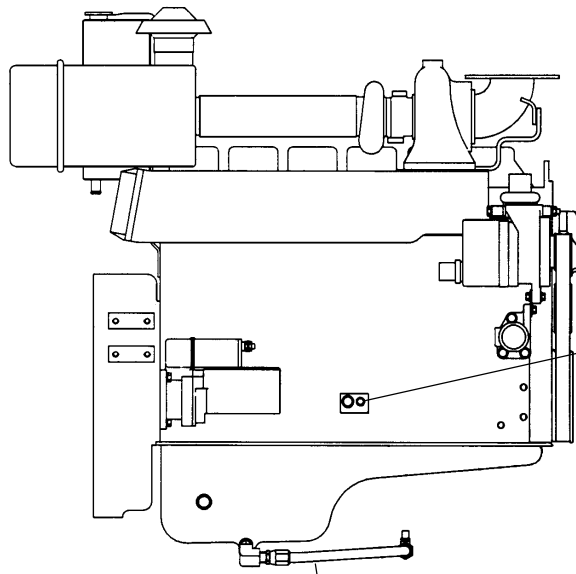
\* Parts Included in 332-1292 – Terminal Bracket Assembly

# Used on Engines with a Negative Ground Electrical System

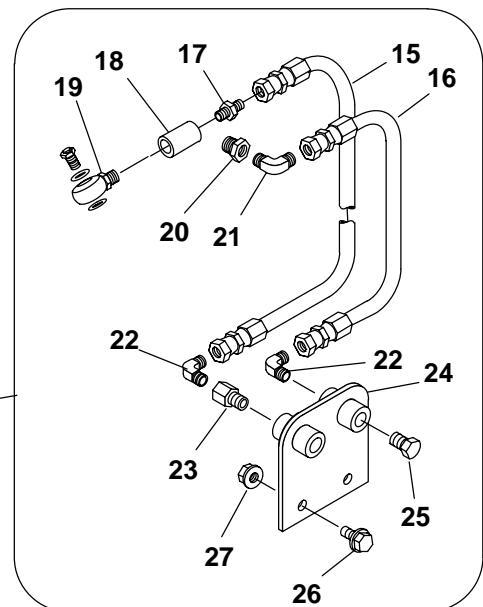
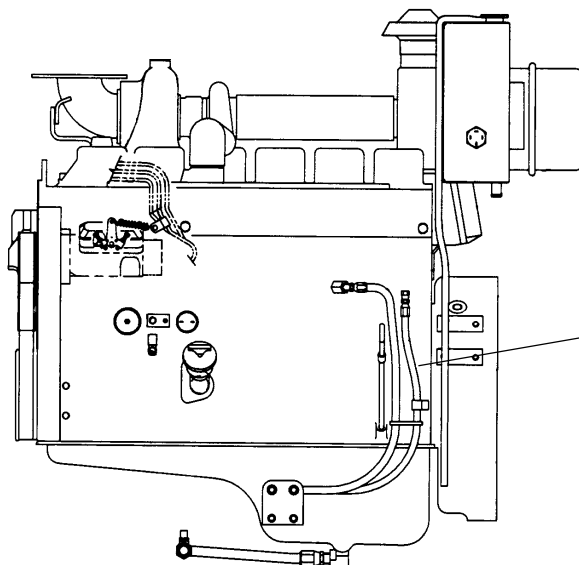
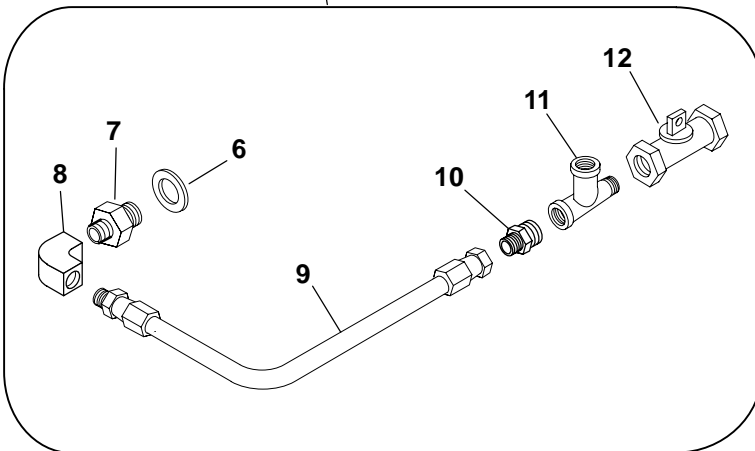
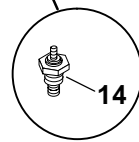
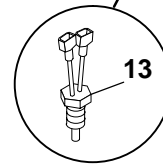
◆ Used on Engines with an Isolated Ground Electrical System

~ Cummins Part Number

# External Engine Parts MDGDC, MDGDD



TOP VIEW



B200  
B201  
B379  
B380  
CP01

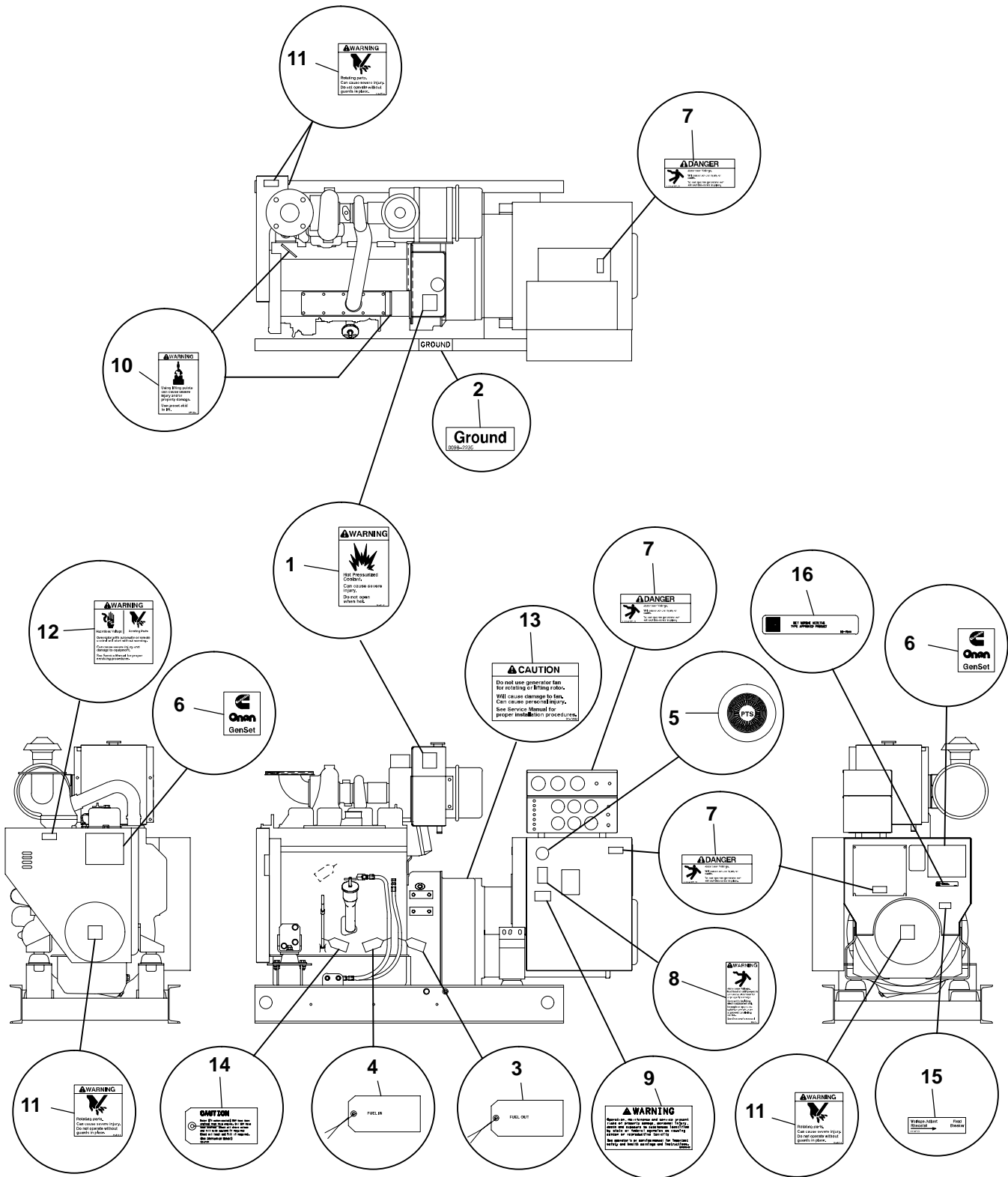
100-3575-01/02

# External Engine Parts MDGDC, MDGDD

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	856-0013	2	#Washer, Lock W/EIT (1/2")	15	501-0679	1	Hose, Fuel
2	319-1248	1	#Plate, Ground	16	501-0586	1	Hose, Fuel (1/2-20, 24-1/2" Long)
3	856-0008	1	#Washer, Lock W/EIT (5/16")	17	502-1045-12	1	Connector, Male
4	800-0310-17	1	#Screw, Cap - Hex Head (5/16-18 x 1/2")	18	505-0027	1	Coupling
5	800-3017-54	1	#Screw, Cap - Hex Head (M12 x 30mm)	19	502-1316	1	Connector, Banjo
6	102-1356	1	Gasket, Oil Drain	20	502-0029-04	1	Bushing, Reducer
7	102-1237	1	Adapter, Oil Drain (M18 to 1/2-14)	21	502-1043-03	1	Elbow, Male Adapter (1/4-18)
8	502-1132	1	Elbow, 90 Degree (1/2-14)	22	502-1043-03	2	Elbow, Male Adapter (1/4-18)
9	501-0575	1	Hose Assy, Oil (3/4-16 to 1/2-14, 23.3" Long)	23	502-0176	1	Adapter, Pipe (1/4")
10	502-1131	1	Adapter, Male (1/2-14)	24	148-0925	1	Bracket, Remote Fuel
11	505-0959	1	Tee, Street	25	502-0153	2	Plug, Hex Head
12	504-0011	1	Valve, Shutoff	26	821-2046	2	Screw, Self-Locking Hex Washer Head (5/16-18 x 3/4")
13	309-0618	1	Switch, High Exhaust Temperature (S114)	27	870-0550-07	2	Nut, Self-Locking Hex Flange (5/16-18)
14			Sender, Water Temperature (1/2-14) (E126)				
	193-0375	1	# Negative Ground Electrical System				# Used on Engines with a Negative Ground Electrical System
	193-0429-01	1	♦ Isolated Ground Electrical System				♦ Used on Engines with an Isolated Ground Electrical System

# Labels and Tags

## MCGBA, MCGCA, MCGDA, MCGDB, MCGGA, MDGDA, MDGDB



CP01

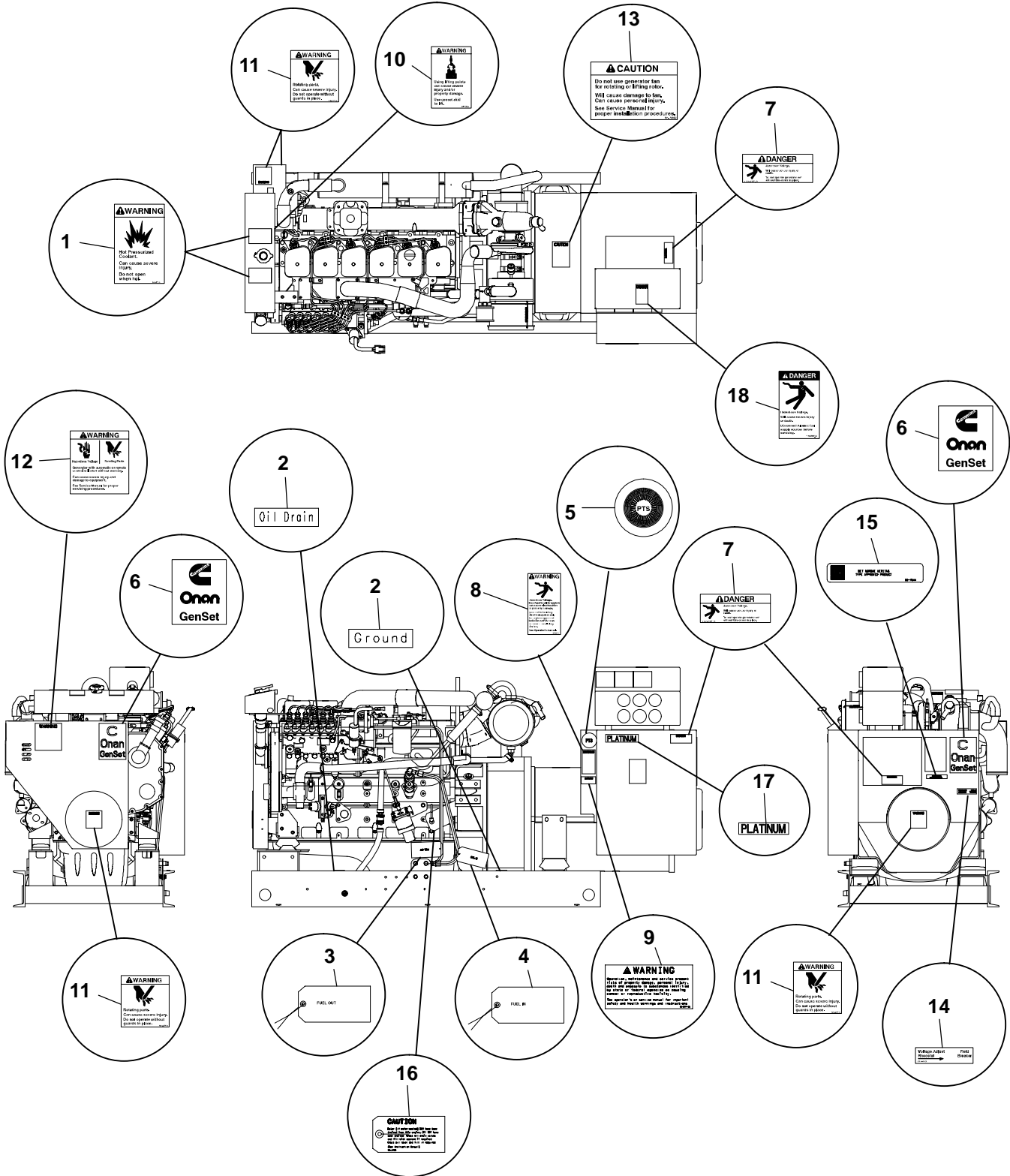
546-2216



**Labels and Tags**  
**MCGBA, MCGCA, MCGDA, MCGDB, MCGGA, MDGDA, MDGDB**

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	098-4730	2	Label, Warning (Pressurized Coolant)	10	098-5822	2	Label, Warning (Lifting)
2	098-2235	1	Label, Ground	11	098-4798	4	Label, Warning (Rotating Parts)
3	098-3171	1	Tag, Fuel Out	12	098-4732	1	Label, Warning (Hazardous Voltage and Rotating Parts)
4	098-3172	1	Tag, Fuel In	13	098-5842	1	Label, Caution
5	098-4500	2	Label, Prototype Tested	14	098-2124	1	Tag, Warning (Oil and Coolant Levels)
6	098-6139-04	2	Label, Model	15	098-6320	1	Label, Voltage Adjustment
7	098-5347	5	Label, Danger (Hazardous Voltage)	16	098-7644	1	Label, DNV Type Product Approved
8	098-5759	2	Label, Warning (Hazardous Voltage)				
9	098-6074-02	2	Label, Warning				

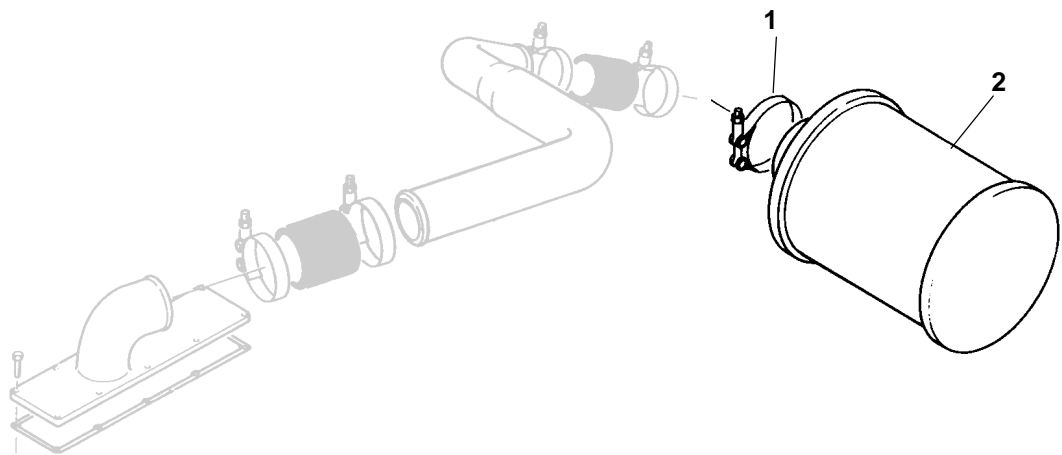
## Labels and Tags MDGDC, MDGDD



**Labels and Tags  
MDGDC, MDGDD**

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	098-4730	2	Label, Warning (Pressurized Coolant)	11	098-4798-01	4	Label, Warning (Rotating Parts)
2	098-6775	1	Label (Ground and Oil Drain)	12	098-4732	1	Label, Warning (Hazardous Voltage and Rotating Parts)
3	098-3171	1	Tag, Fuel Out	13	098-5842	1	Label, Caution
4	098-3172	1	Tag, Fuel In	14	098-6320	1	Label, Voltage Adjustment
5	098-4500	2	Label, Prototype Tested	15	098-7644	1	Label, DNV Type Product
6	098-6139-08	2	Label, Model	16	098-2124	1	Tag, Warning (Oil and Coolant Levels)
7	098-5347	4	Label, Danger (Hazardous Voltage)	17	098-7682	1	Label, Model Identification
8	098-5759	2	Label, Warning (Hazardous Voltage)	18	098-5387	1	Label, Danger
9	098-6074-02	2	Label, Warning				
10	098-5822	1	Label, Warning (Lifting)				

**Air Cleaner**  
**MCGCA, MCGDA, MCGDB,**  
**MDGDA, MDGDB**

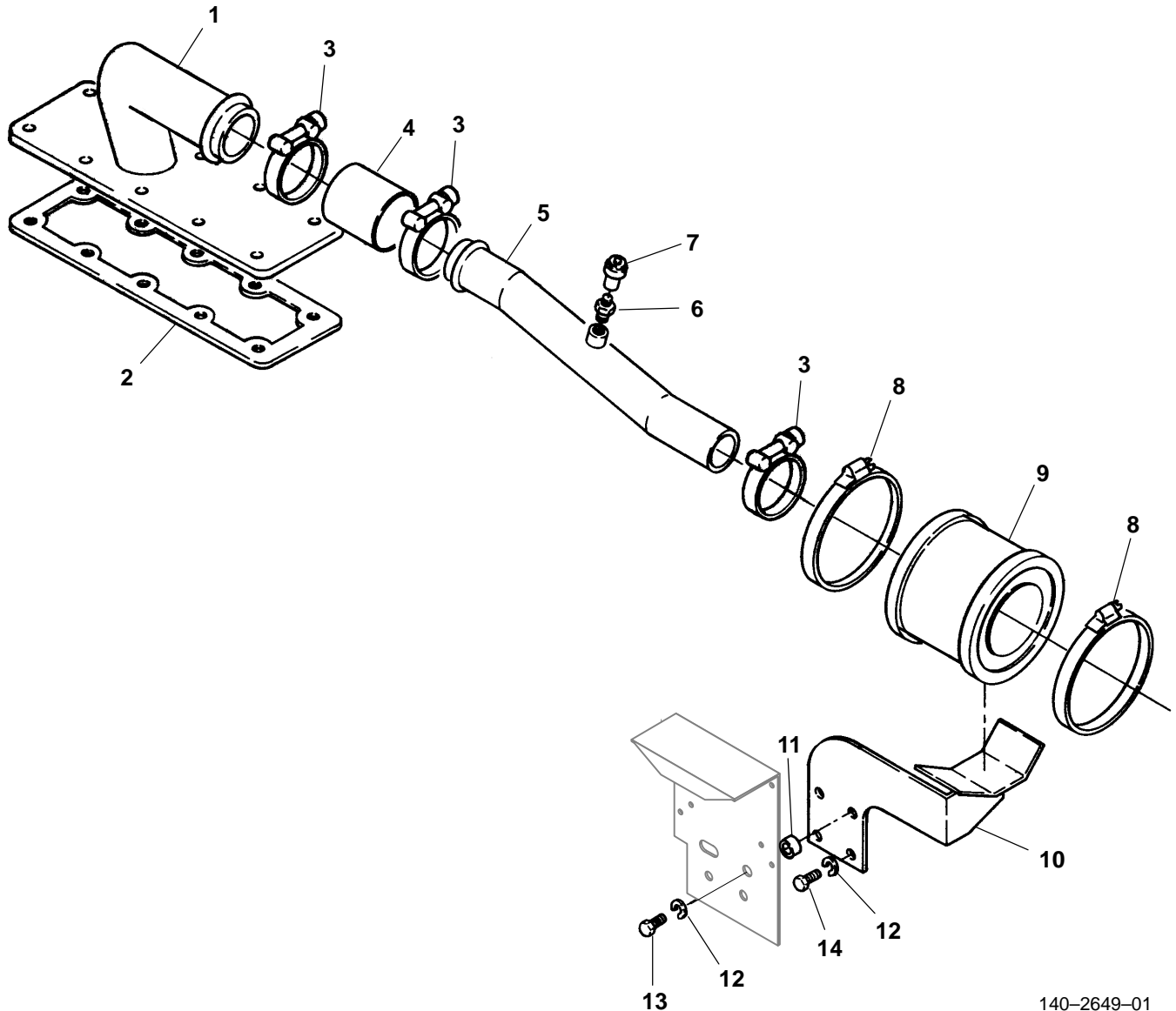


539-1319  
539-1327

Z592

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	503-0868	1	Clamp, T-Bolt	2	140-2660	1	Cleaner, Air (No Replaceable Element)

# Air Cleaner MCGBA, MCGGA

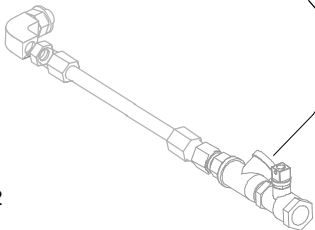


Z592

140-2649-01  
140-2648-02,-03

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1			Cover, Intake Manifold				
	154-2831	1	MCGBA		140-2646-01	1	MCGBA
	154-2832-01	1	MCGGA		140-2646-02	1	MCGGA
2			Gasket, Intake Manifold Cover	10	140-2643	1	Bracket, Air Cleaner
	154-2833-01	1	MCGBA	11	191-1988-00	2	Spacer, Alternator Bracket (1/2" ID x 5/8" Long)
	154-2833-02	1	MCGGA	12	850-2012	4	Washer, Spring Lock (M12)
3	503-0867	3	Clamp, Hose	13	800-2115	2	Screw, Cap – Hex Head (M12 x 45mm)
4	503-1708	1	Hose, Radiator (2-1/2" ID x 4")	14			Screw, Cap – Hex Head (M12 x 20mm)
5	140-2641	1	Tube, Air Cleaner		800-2110	2	With Electronic Governor
6	140-1260	1	Fitting, Safety Filter		800-2110	4	Without Electronic Governor
7	140-2008	1	Indicator, Service				
8	140-2647	2	Clamp, Air Cleaner				
9			Cleaner, Air				

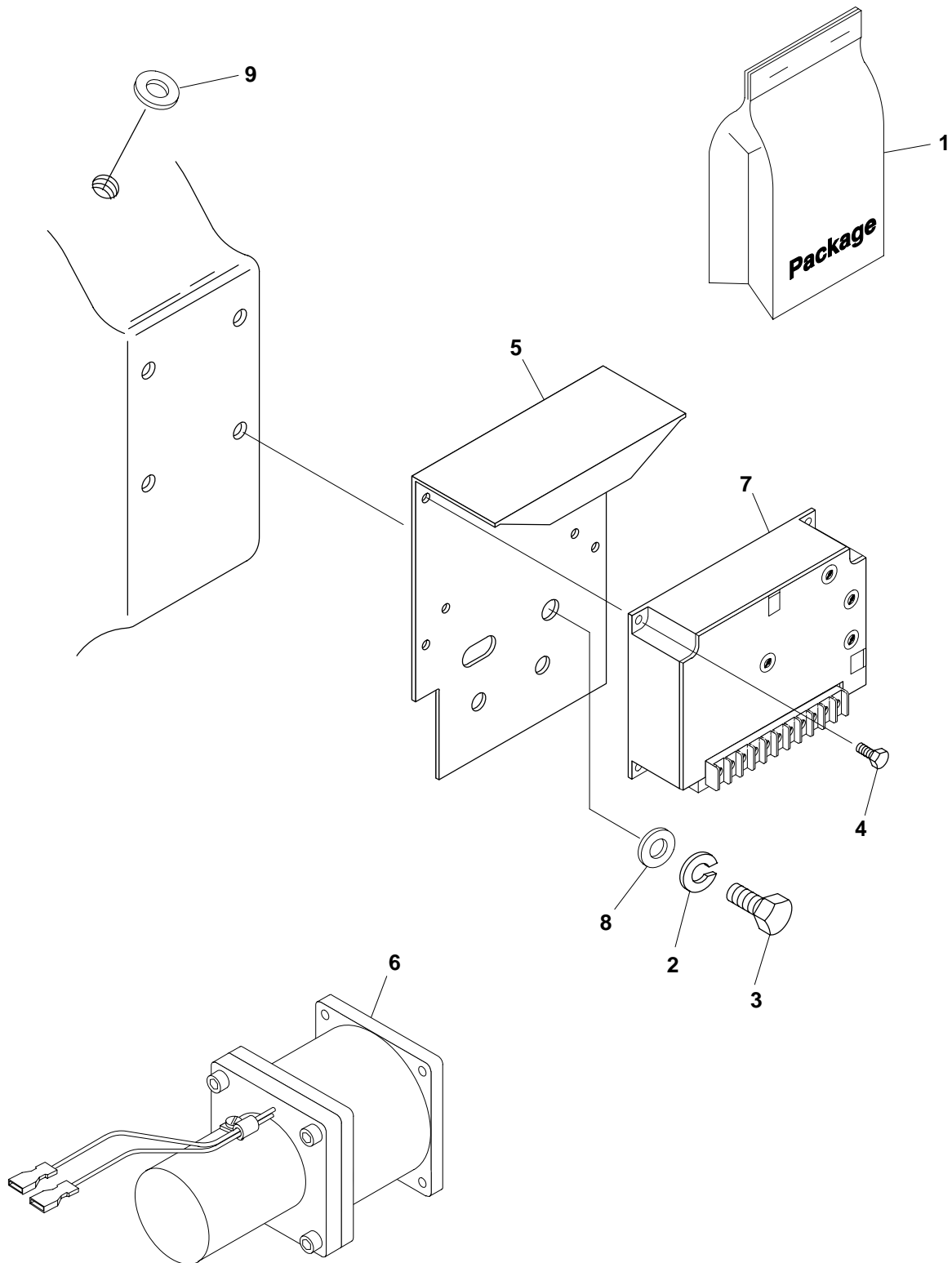
A technical line drawing of a pump assembly. It shows a cylindrical pump body with various ports and a flange. A dashed line points to a specific component, likely the pump head or a seal, which is the subject of the subsequent text.



**Air Cleaner  
MDGDC, MDGDD**

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	140-3218	1	Cleaner Assembly, Air (Includes Parts Marked *)	14	502-0979	1	Foot – 3 Feet Required) *Connector, Hose Barbed – Male (1/2")
2	140-3328	1	*Housing, Air Cleaner	15	140-3257	1	*Valve, Check
3	140-3253	1	*Element, Air Cleaner	16	502-1387	1	*Connector, Hose Barbed – * Female (For 1/2" ID Hose)
4	140-3329	1	*Cover, Air Cleaner	17	503-1138	3	*Clamp, Hose
5	506-0001	3	*Spring, Extension	18	503-1134	5	*Clamp, Hose
6	503-0575	1	*Elbow, Hose (1-3/4" ID)	19	503-1813-07	2	*Clamp, T-Bolt
7	140-2008	1	*Indicator, Service	20	501-0692	1	*Hose, Oil Drain (Order by the Foot – 1 Foot Required)
8	503-1707	1	*Hose, Intake (2-1/2" ID)	21	502-1317	1	Fitting, Hose Barbed
9	140-3254	1	*Body, Vacuum Regulator	* Parts Included in 140-3218 Air Cleaner Assembly			
10	140-3255	1	*Hose, Breather				
11	140-3256	1	*Filter, Vacuum Regulator (Includes Hose Clamp)				
12	140-3262	1	*Elbow, Hose (130 Deg)				
13	501-0692	1	*Hose, Oil Drain (Order by the				

**Electronic Governor**  
**MCGBA, MCGCA, MCGDA, MCGDB, MDGDA, MDGDB**

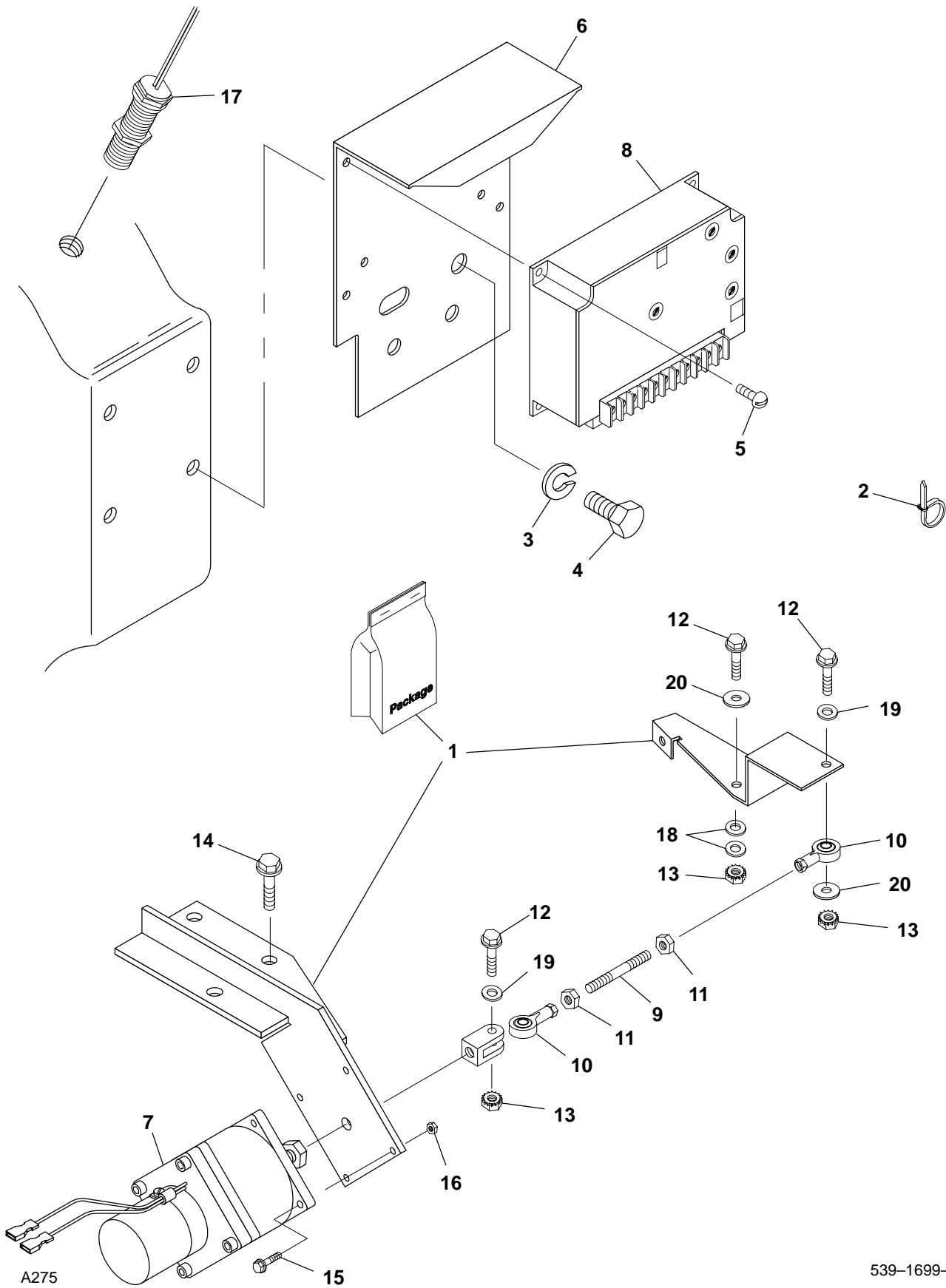




**Electronic Governor**  
**MCGBA, MCGCA, MCGDA, MCGDB, MDGDA, MDGDB**

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	150-2578	1	Package, Governor – Mounting (Includes Actuator Mounting Bracket, M10 Bracket Screws, M10 Lock Washers, Actuator Shaft Clevis, Jam Nut Clevis, Male and Female Rod End Bearings, 10-32 Screws, 10-32 Nuts, Actuator to Bracket Mounting Screws, 1/4" Lock Washers, 1/4-28 Hex Nuts, Magnetic Pick-up, Wire Lugs, and #10 Lock Washers)	2	850-2012	2	Washer, Lock – Spring (M12)
				3	800-2110	2	Screw, Cap – Hex Head (M12 x 20mm)
				4	821-0005	4	Screw, Self-Locking – Hex Washer Head (#10-32 x 1/2")
				5	149-2309	1	Bracket, Fuel Filter
				6			Actuator, Governor
					150-2331-00	1	12V
					150-2331-01	1	24V
				7			Control, Governor (A16)
					151-0715-03	1	12V
					151-0715-04	1	24V
				8	526-2140	2	Washer, Flat (M12)
				9	526-0425	1	Washer, Flat (3/4")

# Electronic Governor MCGGA

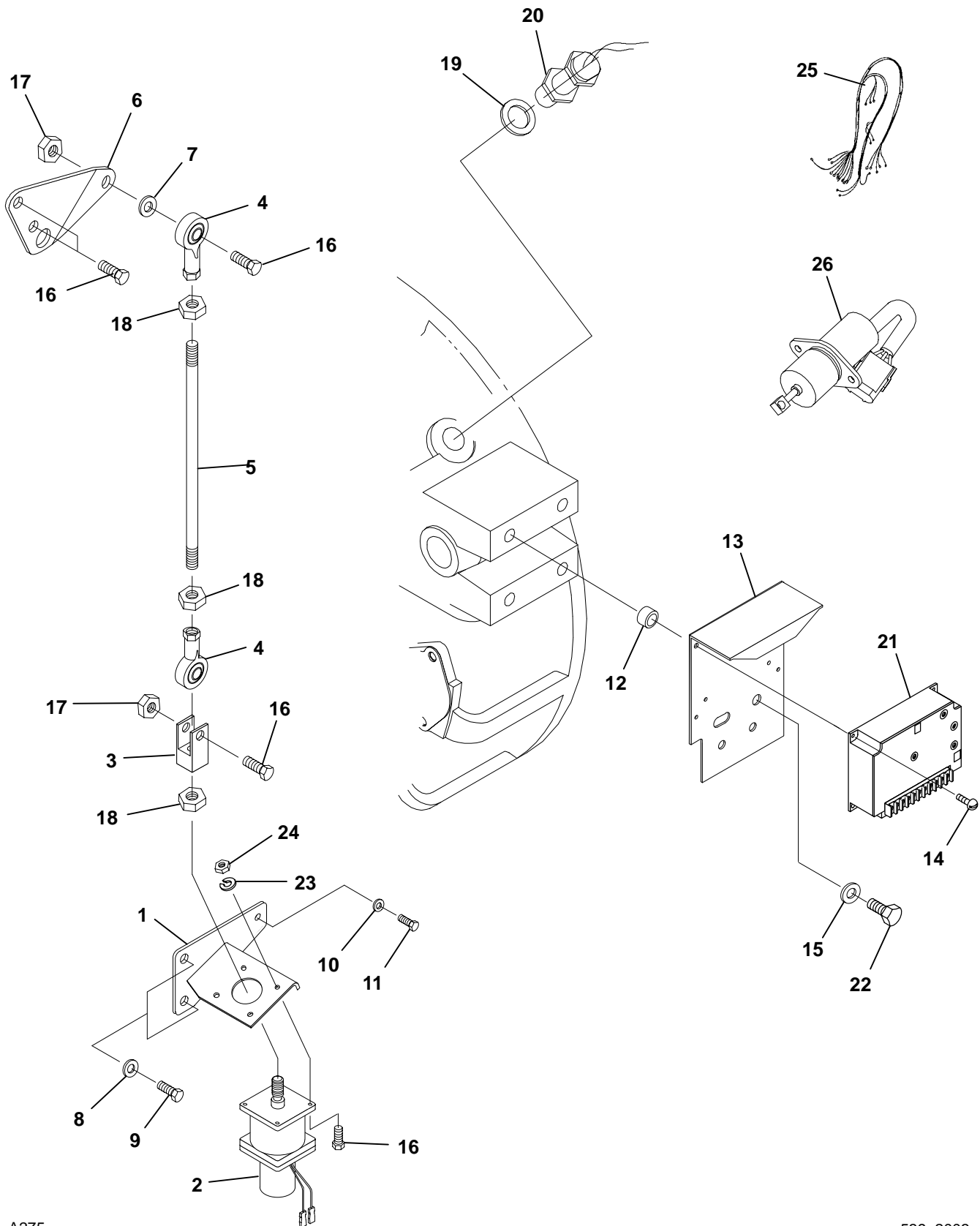


539-1699-03/04

## Electronic Governor MCGGA

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	150-2477	1	Package, Governor – Mounting (Includes Actuator Mounting Bracket, Clevis, and Add-On Fuel Lever)	9	150-2218-03	1	Rod, Governor
				10	150-2251	2	End, Rod
				11	870-0053	2	Nut, Hex (#10-32)
				12	815-0172	3	Screw, Hex Head (#10-32 x 1")
2	332-1445	1	Tie, Cable (Use As Required)	13	870-0131	3	Nut, Hex W/ET (#10-32)
3	850-2012	2	Washer, Lock – Spring (M12)	14	821-2061	3	Screw, Self-Locking – Hex Washer Head (M10 x 1-1/2")
4	800-2110	2	Screw, Cap – Hex Head (M12 x 20mm)				
5	813-0098	4	Screw, Round Head (#10-32 x 3/8")	15	800-0007	4	Screw, Cap – Hex Head (1/4-20 x 1")
6	149-2309	1	Bracket, Fuel Filter	16	870-0212	4	Nut, Self-Locking – Hex Washer Head (1/4-20)
7			Actuator, Governor				
	151-0708-01	1	12V	17	150-2201	1	Sensor, Speed – Magnetic Pickup
	151-0708-02	1	24V				
8			Control, Governor (A16)	18	526-0196	2	Washer, Flat (#10)
	151-0715-03	1	12V – CE Certified	19	526-0008	3	Washer, Flat (#10)
	151-0715-04	1	24V – CE Certified	20	526-0179	2	Washer, Flat (#10)

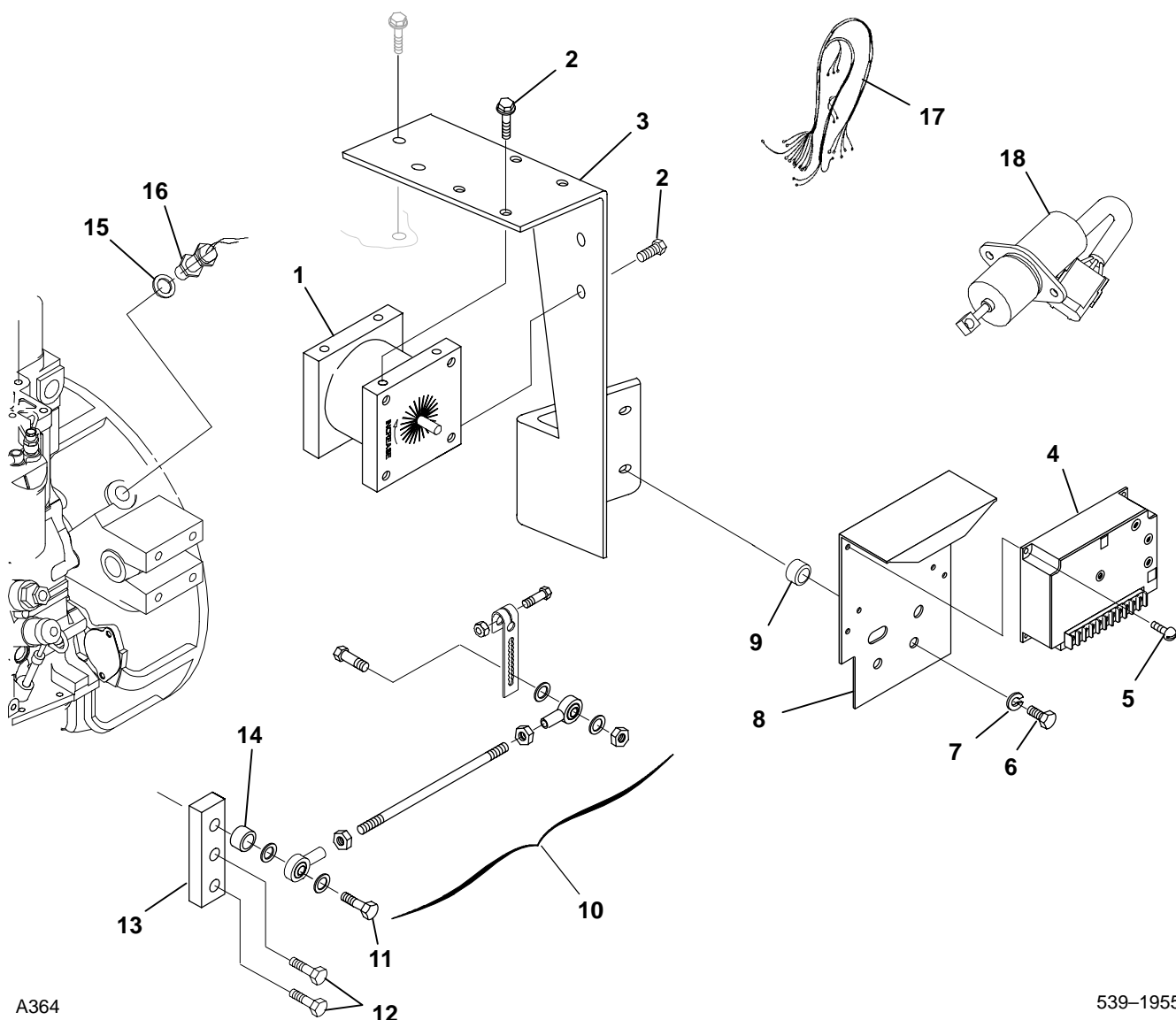
# Electronic Governor – Barber Coleman MDGDC, MDGDD



**Electronic Governor – Barber Coleman  
MDGDC, MDGDD**

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	150-2760-02	1	Bracket, Electronic Governor				(M6 x 20mm)
2			Actuator, Electronic Governor	17	870-0506	2	Nut, Lock – Nylon (M6)
	151-0708-01	1	12V	18	868-0001	3	Hut, Hex – Jam (1/4-28)
	151-0708-02	1	24V	19	526-0425	1	Washer, Flat (1/2")
3	150-2682	1	Clevis, Governor	20	150-2201	1	Sensor, Speed – Magnetic Pickup
4	150-2120	2	Rod, End				Control, Electronic Governor
5	150-2763-02	1	Rod, Governor	21			12V
6	150-2761-02	1	Level, Governor Control		151-0715-03	1	24V
7	526-0399-58	2	Washer, Flat (M6)		151-0715-04	1	24V
8	850-2012	2	Washer, Flat (M12)	22	800-3017-56	2	Screw, Cap – Hex Head (M12 x 40mm)
9	800-2111	2	Screw, Cap – Hex Head (M12 x 25mm)	23	850-0114-53	4	Washer, Lock – Spring (M6)
10	850-2008	1	Washer, Flat (M8)	24	862-0026-53	4	Nut, Hex (M6)
11	800-2057	1	Screw, Cap – Hex Head (M8 x 20mm)	25			Harness
12	191-1988	2	Spacer, Alternator Bracket		338-3840-01	1	12V
13	149-2309	1	Bracket, Fuel Filter		338-3840-02	1	24V
14	821-6001-02	4	Screw, Self-Locking – Hex Washer Head (M5 x 12mm)	26			Solenoid, Stop
					307-2946	1	12V
15	526-0399-64	2	Washer, Flat (M12)		3934172*	1	24V
16	800-3017-04	8	Screw, Cap – Hex Head	* Cummins Part Number			

# Electronic Governor – Woodward MDGDC, MDGDD

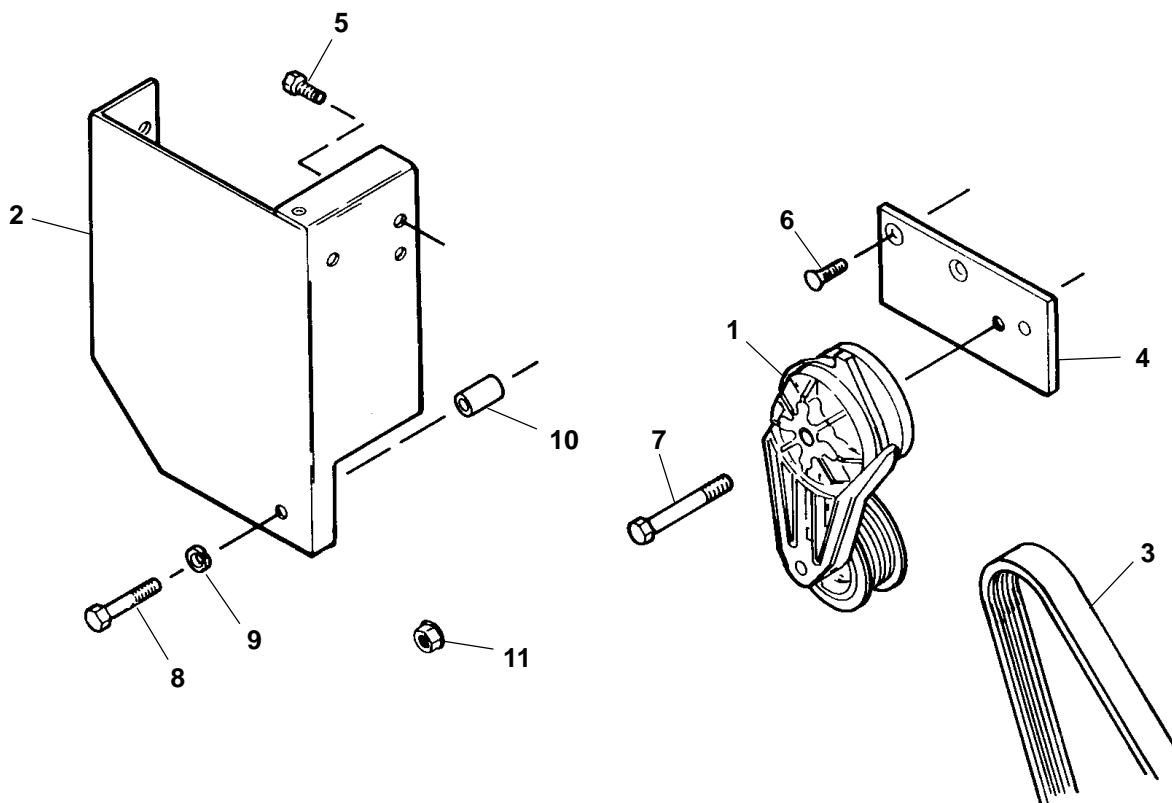


A364

539-1955

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	150-2610-01	1	Actuator, Electronic Governor 12V	10	150-2613	1	Linkage, Governor
	150-2610-02	1	24V	11	800-2038	1	Screw, Cap – Hex Head (M6 x 40mm)
2	821-5002-05	7	Screw, Self-Locking – Hex Washer Head (1/4–20 x 3/4")	12	800-3017-04	2	Screw, Cap – Hex Head (M67 x 20mm)
3	150-2609-02	1	Bracket, Governor Control	13	150-2736-02	1	Arm, Lever
4	150-2611-01	1	Control, Electric Governor 12V	14	150-2737-02	1	Spacer
	150-2611-02	1	24V	15	526-0425	1	Washer, Flat
5	821-6001-02	4	Screw, Self-Locking – Hex Washer Head (M5 x 12mm)	16	150-2201	1	Speed Sensor, Magnetic Pickup
6	800-3017-56	2	Screw, Cap – Hex Head (M12 x 1.75 x 40mm)	17			Harness
7	526-0399-64	2	Washer, Flat (M12)		338-3840-01	1	12V
8	150-2608-03	1	Bracket, Control Support		338-3840-02	1	24V
9	191-1988	2	Spacer, Alternator Bracket	18	307-2946	1	Solenoid, Stop – 12V Electronic Governors

## Belt Tensioner (Without Alternator)

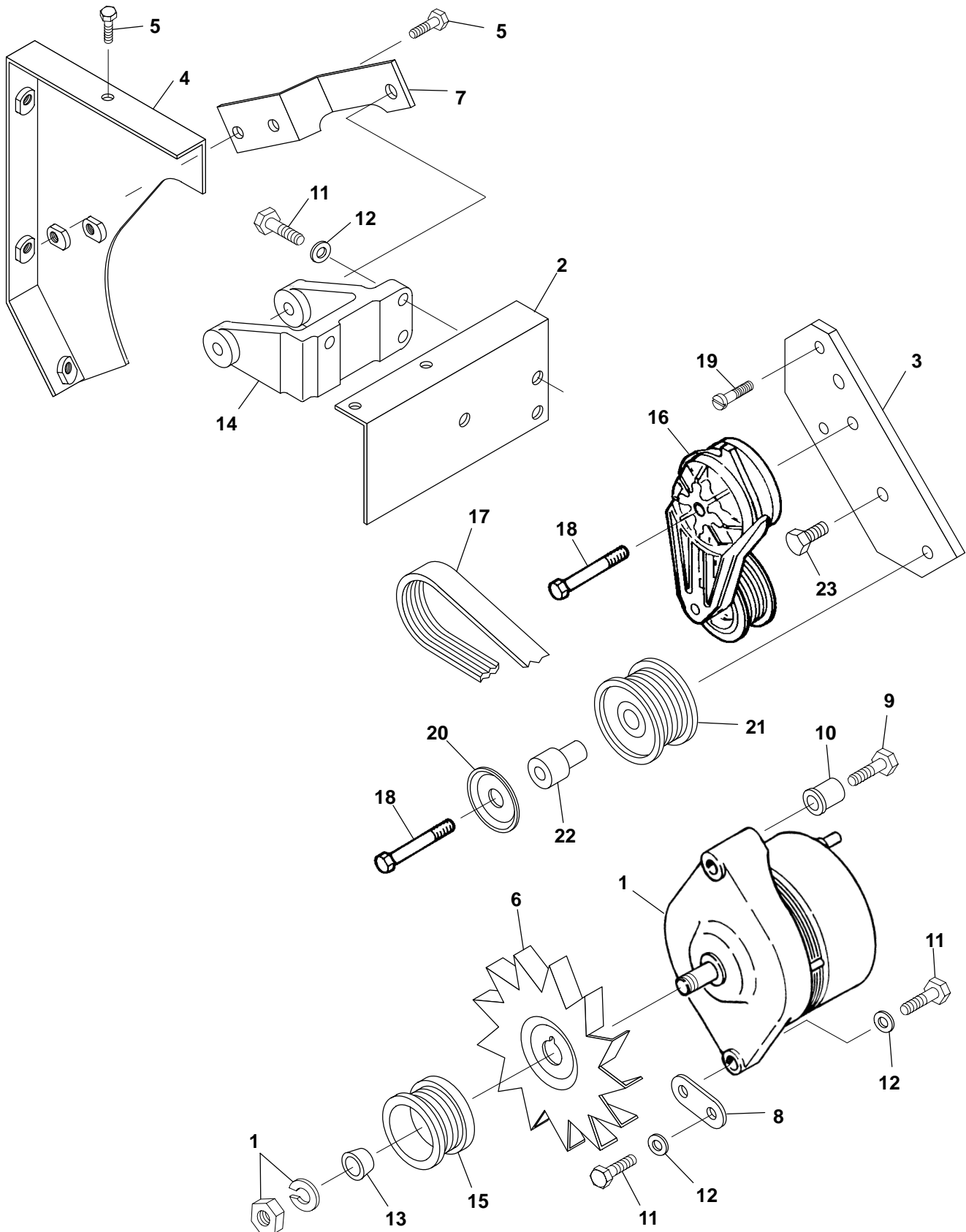


A039

179-2631

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	191-1965	1	Tensioner, Belt	7	815-0797-02	1	Screw, Cap – Hex Flange Head (M10 x 70mm)
2	130-3829-02	1	Guard, Alternator	8	800-2063	1	Screw, Cap – Hex Head (M8 x 50mm)
3	511-0161-09	1	Belt, V-Ribbed	9	526-2100	1	Washer, Flat (M8)
4	191-2092-02	1	Bracket, Belt Tensioner	10	370-4080-02	1	Spacer, Guard
5	821-2045	3	Screw, Self-Locking – Hex Washer Head (M8 x 16mm)	11	870-0212	3	Nut, Hex – Self-Locking (1/4-20)
6	815-0893	2	Screw, Cap – Flat Head (M8 x 25mm)				

# **Alternator (Negative Ground Electrical System)**

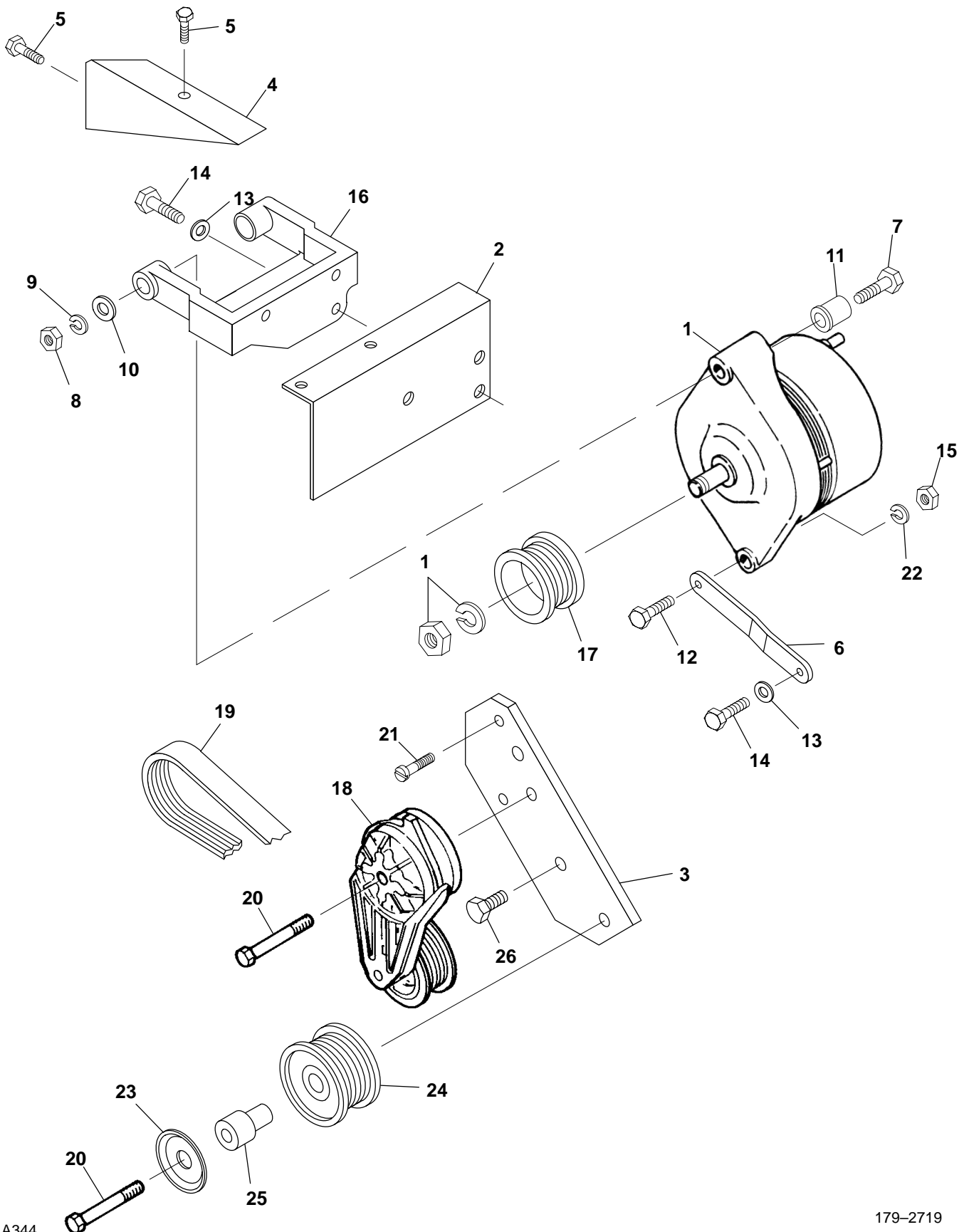




## Alternator (Negative Ground Electrical System)

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1			Alternator (Includes Voltage Regulator [Ref. No. 1A], M16 Nut, and M16 Spring Washer) (G102)	10	191-1989-07	1	Spacer, Mounting
	191-1983-01	1	12 Volt – Blue Dot	11	800-2059	5	Screw, Cap – Hex Head (M8 x 30mm)
	191-1983-02	1	24 Volt – Green Dot	12	526-2100	5	Washer, Flat (M8)
1A			Regulator, Voltage (Not Illustrated)	13	191-2067	1	Pulley, Retainer
	191-2120	1	12 Volt	14	191-1990	1	Support, Alternator
	191-2121	1	24 Volt	15	191-2066	1	Pulley, Alternator
2	130-3819	1	Bracket, Belt Guard	16	191-2149-02	1	Tensioner, Belt
3	191-2232	1	Bracket, Belt Tensioner	17	511-0161-15	1	Belt, V Ribbed
4	130-3828	1	Guard, Belt	18	815-0797-02	2	Screw, Self-Locking – Hex Washer Head (M10 x 70mm)
5	821-0010	9	Screw, Self-Locking – Hex Washer Head (1/4-20 x 1/2")	19	815-0893	2	Screw, Cap – Flat Head (M8 x 25mm)
6	191-1981	1	Fan, Alternator	20	190-0735	1	Shield, Dust
7	130-3920	1	Bracket, Alternator	21	512-0188	1	Pulley, Idler
8	191-2068-01	1	Brace, Alternator	22	191-2195	1	Shaft, Idler
9	815-0797-01	1	Screw, Self-Locking – Hex Washer Head (M10 x 95mm)	23	800-2062	1	Screw, Cap – Hex Head (M8 x 45mm)

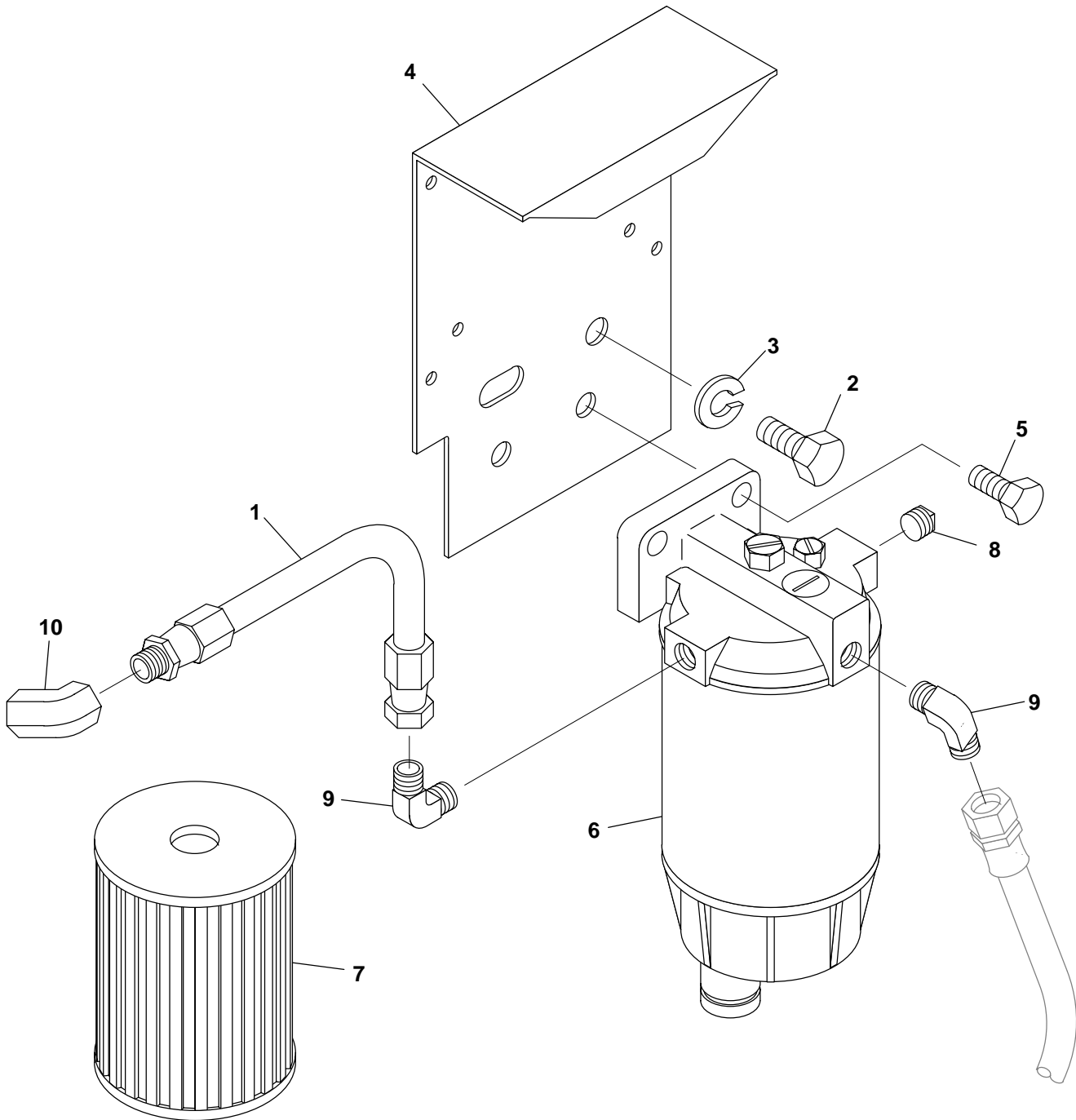
# **Alternator (Isolated Ground Electrical System)**



## Alternator (Isolated Ground Electrical System)

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1			Alternator (Includes Washer and Nut) (G102)	13	526-2100	5	Washer, Flat (M8)
	191-1966-01	1	12 Volt, 75 Amp	14	800-2059	4	Screw, Cap – Hex Head (M8 x 30mm)
	191-1966-02	1	24 Volt, 55 Amp	15	860-2008	1	Nut, Hex (M8)
2	130-3819	1	Bracket, Belt Guard	16	191-2069	1	Support, Alternator
3	191-2232	1	Bracket, Belt Tensioner	17	191-2080	1	Pulley, Alternator
4	130-3823	1	Guard, Belt	18	191-2149-02	1	Tensioner, Belt
5	821-0018	2	Screw, Self-Locking – Hex Washer Head (1/4-20 x 15/8")	19	511-0161-16	1	Belt, V Ribbed
				20	815-0797-02	2	Screw, Self-Locking – Hex Washer Head (M10 x 70mm)
6	191-2081	1	Brace, Alternator				
7	815-0797-03	1	Screw, Self-Locking – Hex Washer Head (M10 x 150mm)	21	815-0893	2	Screw, Cap – Flat Head (M8 x 25mm)
8	860-2009	1	Nut, Hex (M10)	22	850-2008	1	Washer, Lock – Spring (M8)
9	850-2010	1	Washer, Lock – Spring (M10)	23	190-0735	1	Shield, Dust
10	526-2120	1	Washer, Flat (M10)	24	512-0188	1	Pulley, Idler
11	191-1989-04	1	Spacer, Mounting	25	191-2195	1	Shaft, Idler
12	800-2061	1	Screw, Cap – Hex Head (M8 x 40mm)	26	800-2062	1	Screw, Cap – Hex Head (M8 x 45mm)

## Fuel Filter

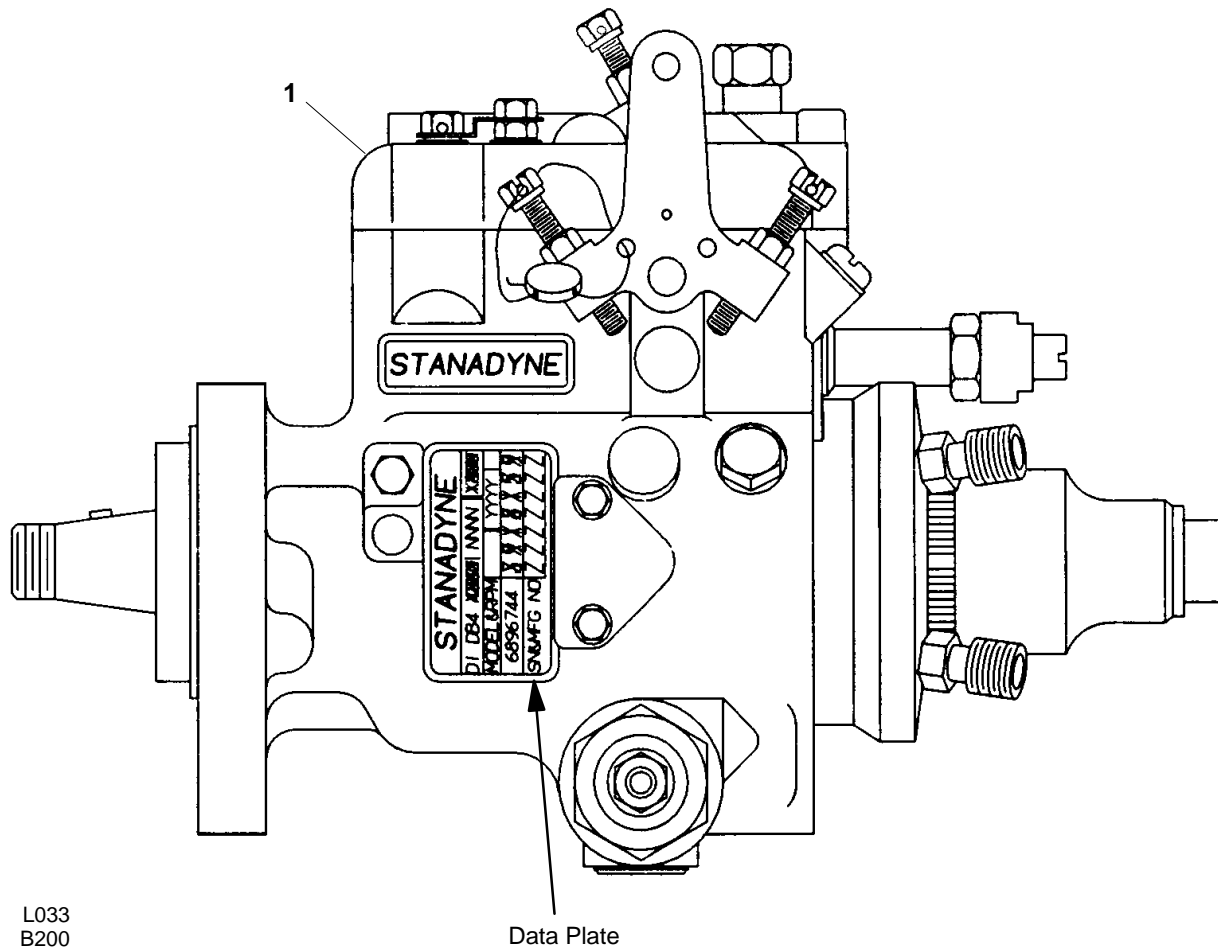


C156

179-0675

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	501-0573	1	Hose, Fuel	8	505-0055	1	Plug, Square Head Pipe (1/4")
2	800-2110	2	Screw, Cap – Hex Head (M12 x 20mm)	9	502-1043-03	2	Elbow, Male Adaptor – 90 Degree (1/4-18)
3	850-2012	2	Washer, Lock (M12)	10	502-0156	1	Elbow, Street Pipe – 45 Degree (1/4") (Replaces 90 Degree Elbow [Ref. No. 29, Pages 9 and 11])
4	149-2309	1	Bracket, Fuel Filter				
5	821-0030	2	Screw, Self-Locking – Hex Washer Head (3/8-16 x 1")				
6	149-2564	1	Filter, Fuel				
7	149-2565	1	Element, Fuel Filter				

## Fuel Injection Pump



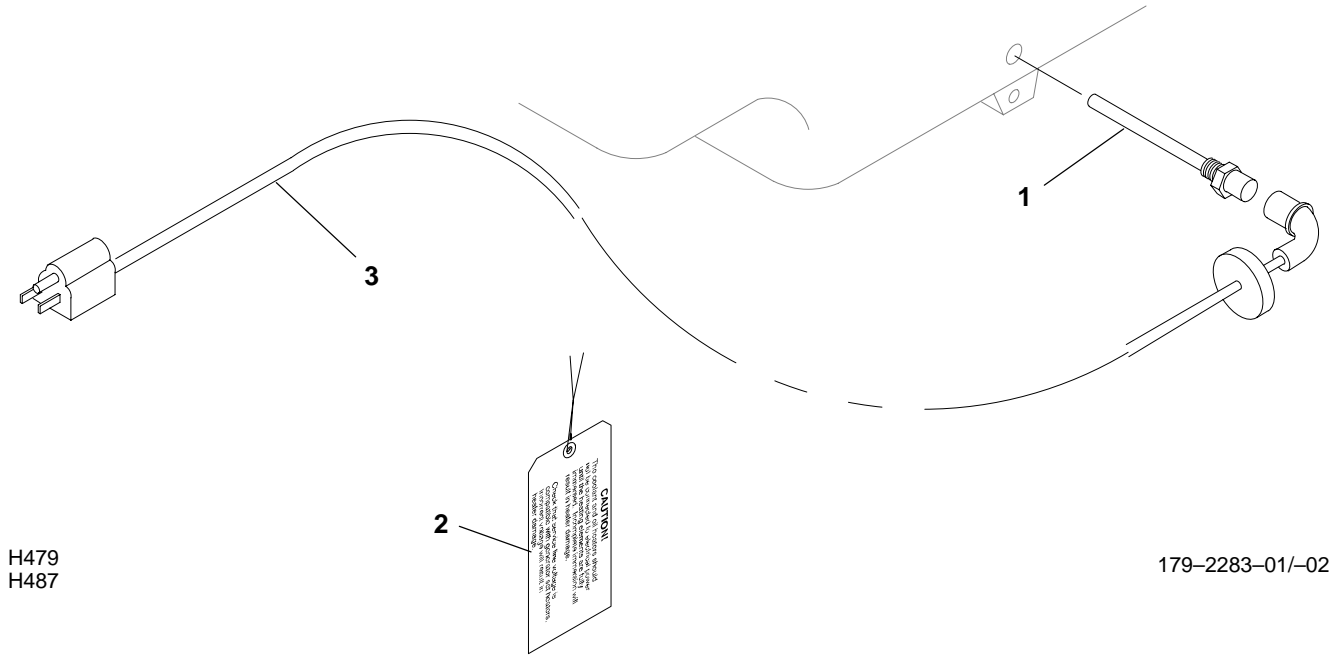
L033  
B200  
B380

149-2373

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1			* Pump, Fuel Injection	3	149-2372-01	1	Cover, Solenoid (Not Used with 149-2373-01 thru 149-2373-05)
	149-2373-01	1	3918973	4	420-0565	1	Tool, Retaining
	149-2373-02	1	3918972	5	880-0515	1	Seal, Cap
	149-2373-05	1	3918968				
	149-2373-06	1	3919106				
	149-2373-07	1	3919105				
	149-2373-09	1	3919102				
	149-2373-10	1	3919101				
	149-2373-11	1	3919112				
	149-2373-12	1	3919111				
	149-2373-13	1	3919109				
	149-2373-15	1	3919107				
2	150-2527-01	1	Spring, Governor (Not used with 149-2373-06 thru 149-2373-10)				

\* For the correct Fuel Injection Pump service replacement part number for your generator set, refer to the Serial Number and Manufacturing Number (SN&MFG NO) located on the Data Plate and compare it to those listed in the Part Description column. To order the Fuel Injection Pump, use the 149-2373-XX part number.

## Oil Heater

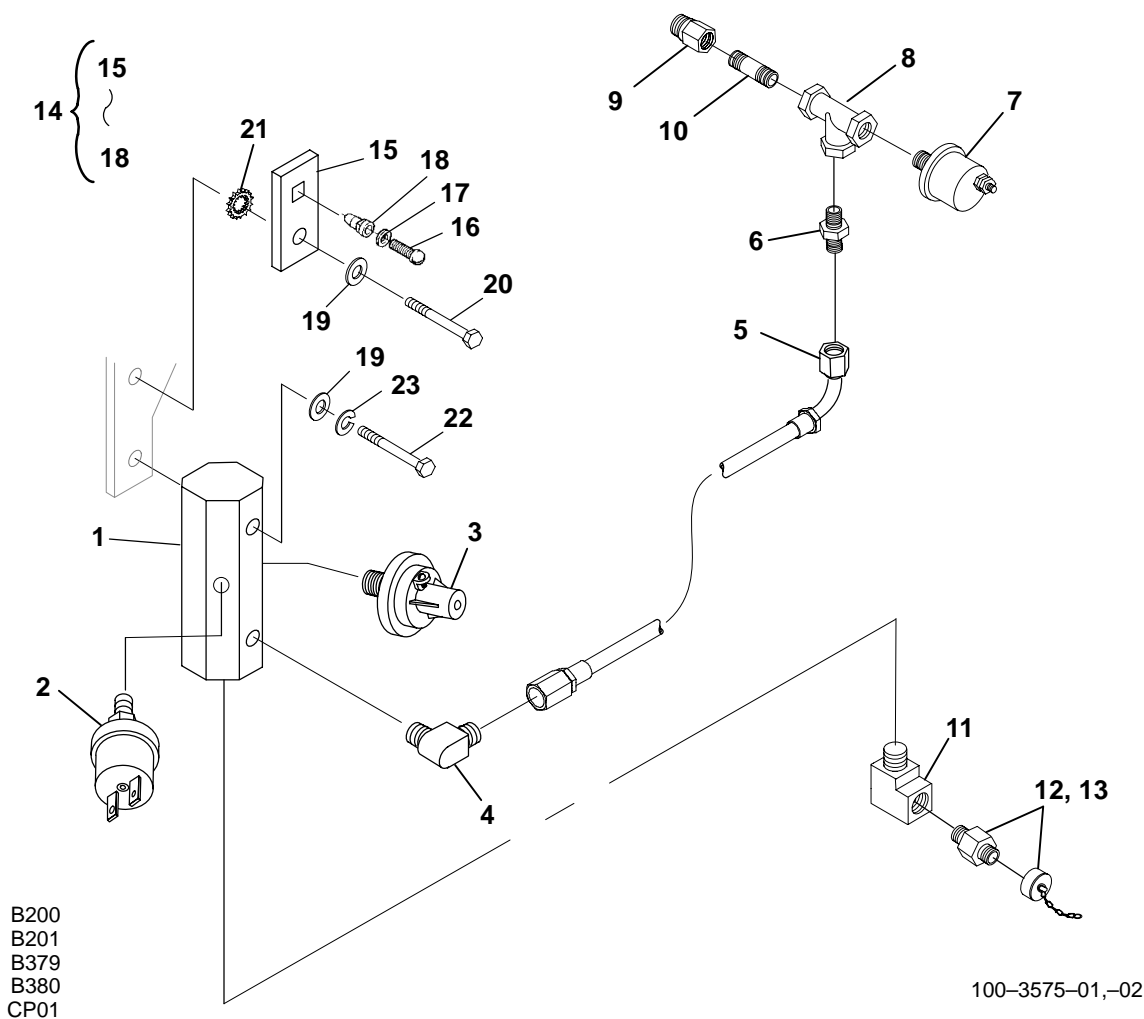


H479  
H487

179-2283-01/-02

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1			Heater, Oil (150 Watt)	3			Cable, Oil Heater (72" Long)
	333-0429-01	1	120 Volt		335-0168-01	1	120 Volt
	333-0429-02	1	240 Volt		335-0168-02	1	240 Volt
2	098-6030	1	Tag, Caution				

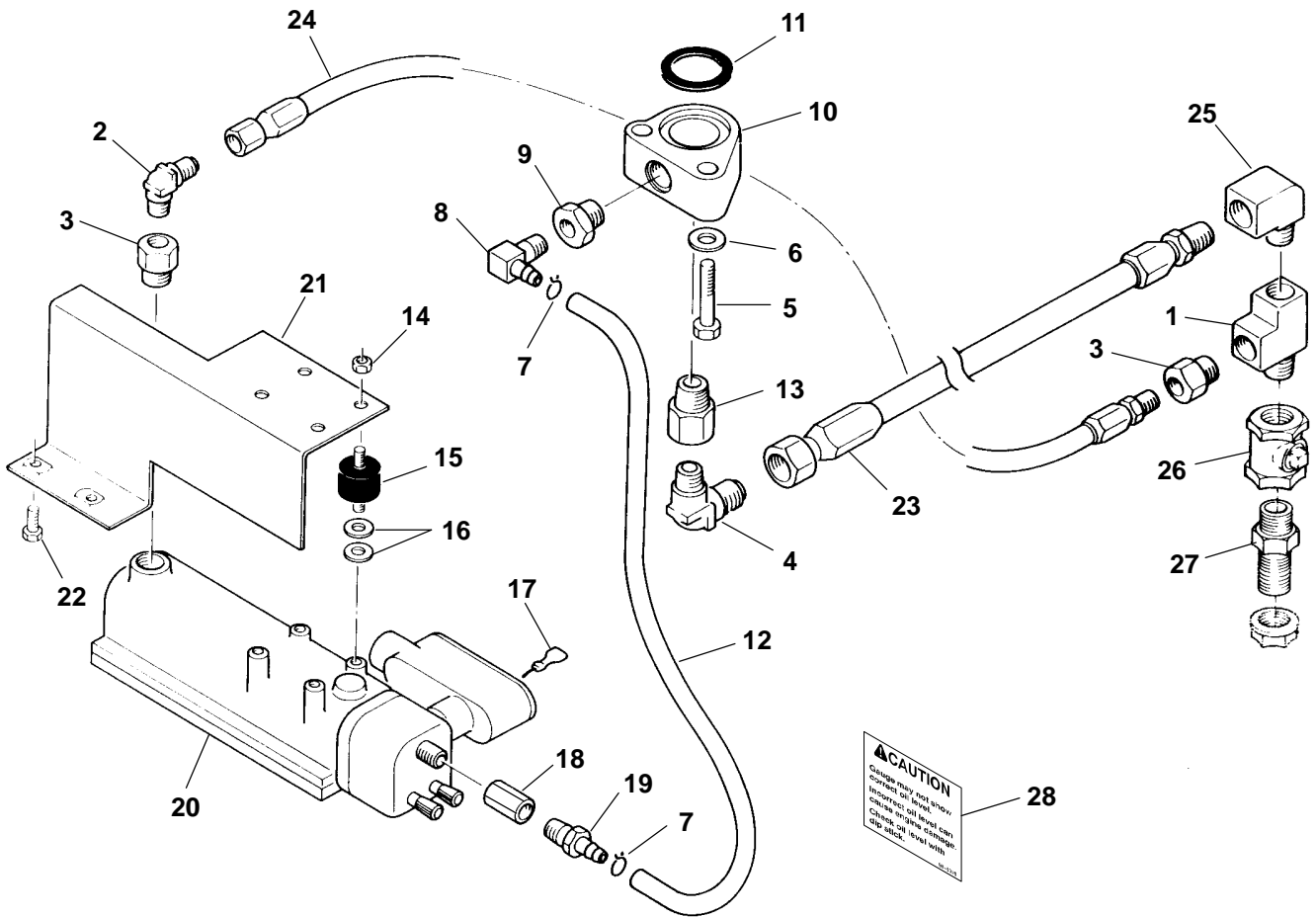
## Oil Pressure Manifold MDGDC, MDGDD



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	154-3078	1	Manifold, Oil Pressure	13	102-1490-01	1	Valve, Oil Sampler
2	309-0641-03	1	Switch, Low Oil Pressure (S110)	14	332-1292	1	Bracket Assembly, Terminal (Includes Parts Marked *)
3	309-0159	1	Switch, Oil Pressure (S107)	15	332-1281	1	*Bracket, Terminal Mounting
4	502-0404	1	Elbow	16	809-0036	1	*Screw, Round Head (#8 x 7/8")
5	501-0685	1	Line, Oil	17	508-0015	1	*Washer, Fiber (#8)
6	502-1240	1	Connector, Male	18	870-0263	1	*Nut, Insulating Square Head (#8)
7			Sender, Oil Pressure (E123) (Includes 10-32 Hex Nut, Lock Washer, and Flat Washer)	19	526-2100	2	Washer, Flat (M8)
	193-0244-01	1	# Negative Ground Electrical System	20	800-2059	1	Screw, Cap – Hex Head (M8 x 30mm)
	193-0430-01	1	♦ Isolated Ground Electrical System	21	856-0008	1	Washer, Lock W/EIT (5/16")
8	505-0059	1	Tee, Pipe	22	800-2063	1	Screw, Cap – Hex Head (M8 x 50mm)
9	505-1557	1	Fitting, Adapter	23	850-2008	1	Washer, Lock – Spring (M8)
10	505-0104	1	Nipple, Short				
11	502-0020	1	Elbow, Pipe				
12	102-1490-00	1	Kit, Oil Sampler (Includes Sampler Valve w/Cover and Sampler Bottle w/Cover)				

\* – Parts Included in 332-1292 – Terminal Bracket Assembly.  
# Used on Engines with a Negative Ground Electrical System  
♦ Used on Engines with an Isolated Ground Electrical System

# **Low Oil Level Switch MCGBA, MCGCA**



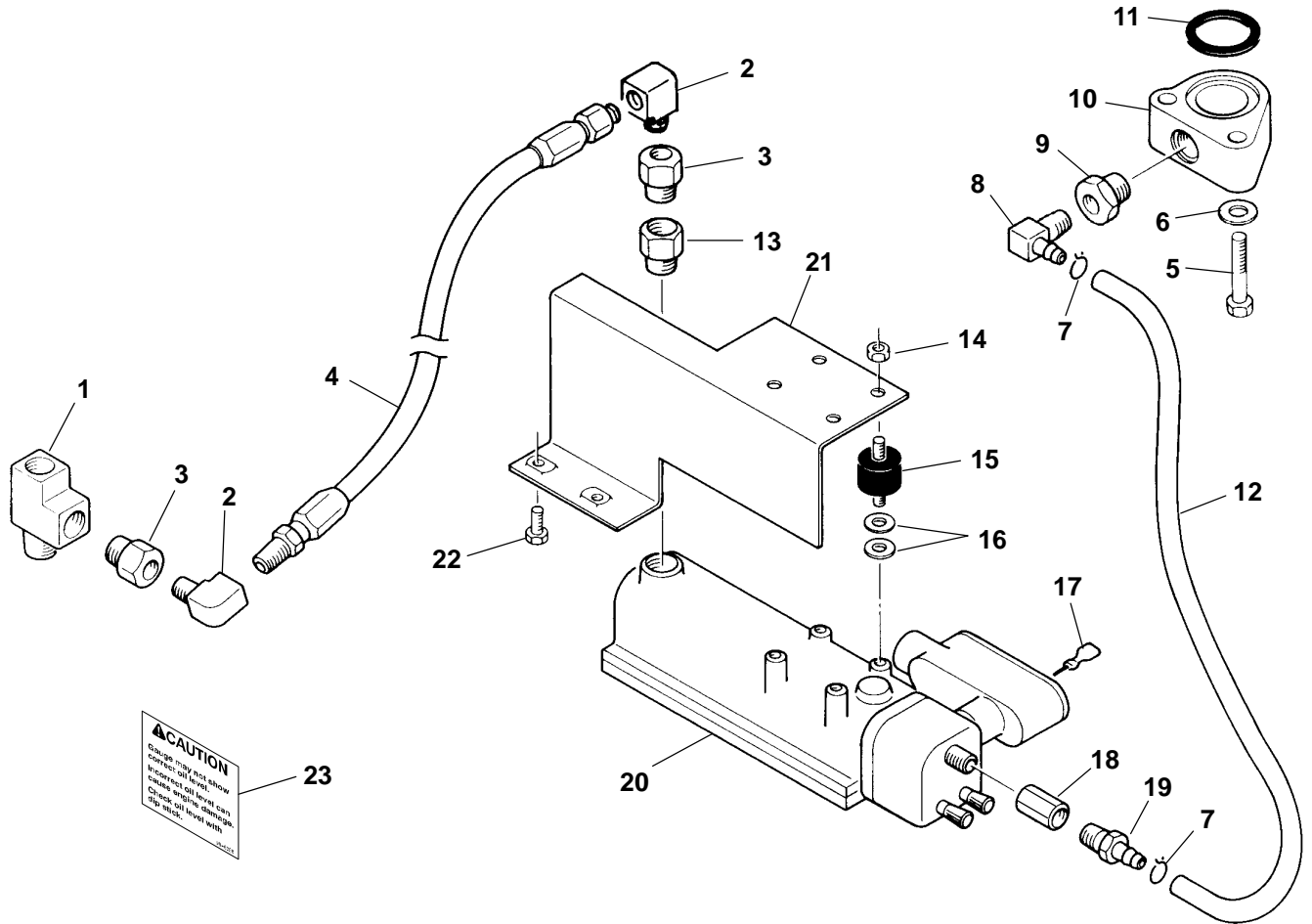
H512

539-1305

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	502-1149	1	Tee, Street (1/2")	14	870-0212	4	Nut, Hex – Self-Locking (1/4–20)
2	502-1043-03	1	Elbow, Male Adapter (1/4–18)	15	402-0610	2	Isolator, Vibration
3	502-0802	2	Bushing (1/2" to 1/4")	16	526-0018	8	Washer, Flat (1/4")
4	502-1043-05	1	Elbow, Male Adapter (3/8–18)	17	332-2430	2	Terminal, Faston (1/4")
5	800-2120	2	Screw, Cap – Hex Head (M12 x 70mm)	18	502-0051	1	Coupling (9/16" x 1/8")
6	526-2140	2	Washer, Flat (M12)	19	502-0395	1	Connector, Hose (1/8")
7	503-0731	2	Clamp, Hose	20	309-0619	1	Switch, Oil Level (S113)
8	502-0313-00	1	Elbow (1/8–27) (For 1/4" Hose)	21	309-0620	1	Bracket, Oil Level
9	505-0151	1	Bushing, Reducer (1/2" to 1/8")	22	821-0018	2	Screw, Self-Locking – Hex Washer Head (1/4–20 x 5/8")
10	122-0789-02	1	Connection, Spacer	23	501-0588	1	Hose Assembly, Oil (1/2–14 to 3/4–16, Length = 19.69")
11	509-0281-03	1	Seal, Rectangular Ring	24	501-0576	1	Hose Assembly, Oil (1/4–18 to 1/2–20, Length = 21")
12	503-1418	–	Hose – Bulk (1/4" ID) (Order by the Foot – 1 Foot Required)	25	502-0133	1	Elbow, Street – 90 Degree (1/2")
13	502-1074-01	1	Adapter (3/8") (Use with Remote Oil Filter)	26	504-0011	1	Valve, Shutoff
				27	502-1148	1	Coupling, Bulkhead
				28	098-6398	1	Label, Caution



# **Low Oil Level Switch** **MCGDA, MCGDB, MCGGA, MDGDA, MDGDB, MDGDC, MDGDD**

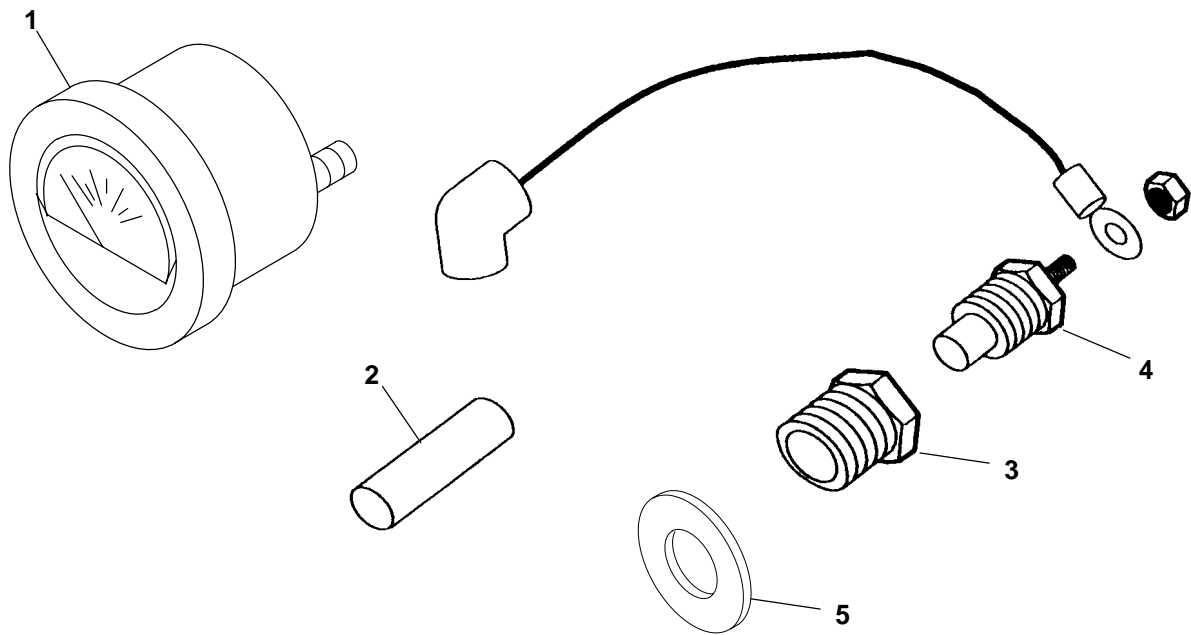


H512

539-1306

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	502-1149	1	Tee, Street (1/2")	13	502-0176	1	Adapter (1/4") (Use with Remote Oil Filter)
2	502-1043-03	2	Elbow, Male Adapter (1/4-18)	14	870-0212	4	Nut, Hex – Self-Locking (1/4-20)
3	502-0802	2	Bushing (1/2" to 1/4")	15	402-0610	2	Isolator, Vibration
4	501-0587	1	Hose Assembly, Oil (1/2-20, Length = 10-1/4")	16	526-0018	8	Washer, Flat (1/4")
5	800-2120	2	Screw, Cap – Hex Head (M12 x 70mm)	17	332-2430	2	Terminal, Faston (1/4")
6	526-2140	2	Washer, Flat (M12)	18	502-0051	1	Coupling (9/16" x 1/8")
7	503-0731	2	Clamp, Hose	19	502-0395	1	Connector, Hose (1/8")
8	502-0313-00	1	Elbow (1/8-27) (For 1/4" Hose)	20	309-0619	1	Switch, Oil Level (S113)
9	505-0151	1	Bushing, Reducer (1/2" to 1/8")	21	309-0620	1	Bracket, Oil Level
10	122-0789-02	1	Connection, Spacer	22	821-0018	2	Screw, Self-Locking – Hex Washer Head (1/4-20 x 5/8")
11	509-0281-03	1	Seal, Rectangular Ring	23	098-6398	1	Label, Caution
12	503-1418	-	Hose – Bulk (1/4" ID) (Order by the Foot – 2 Feet Required)				

Oil Temperature Gauge

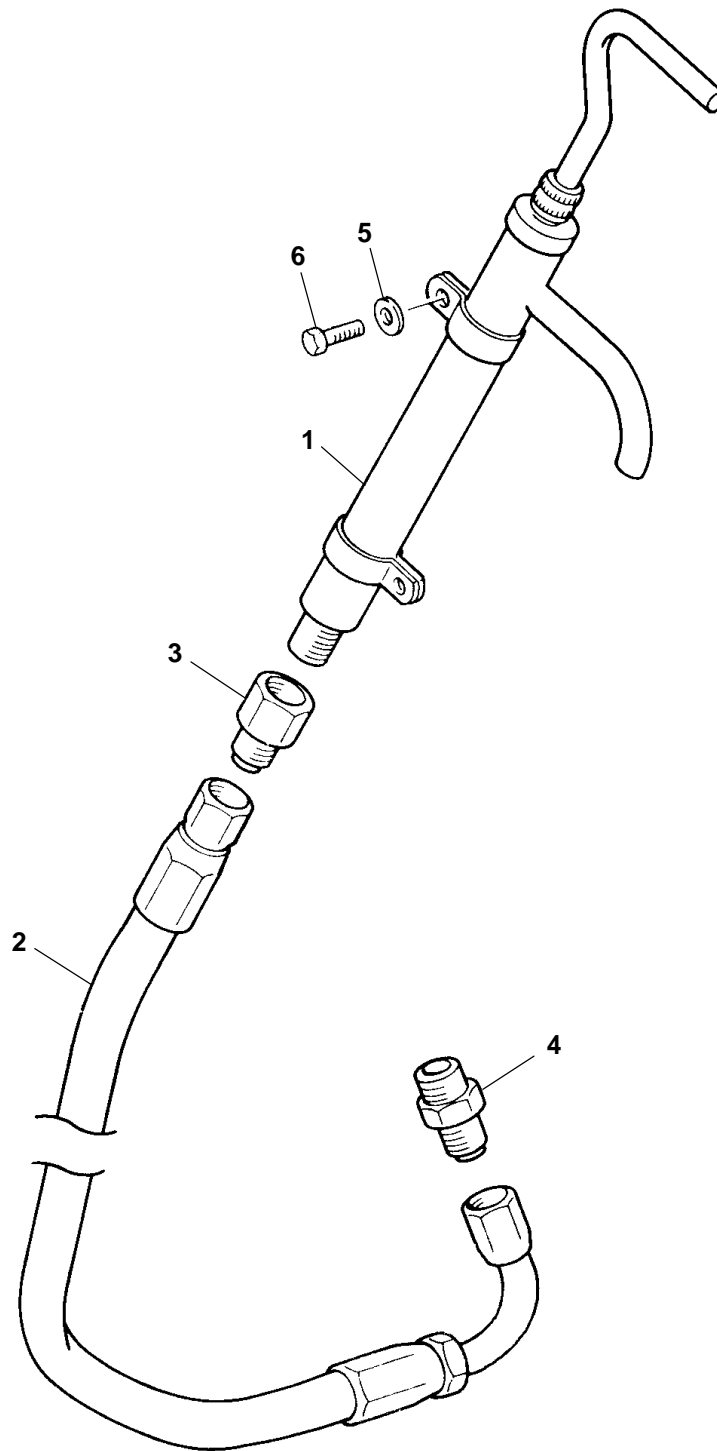


K486

539-1249-01,02, 03, 04

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	193-0435	1	Gauge, Oil Temperature (M126)	4			Sender, Oil Temperature (M129)
2	193-0250	1	Resistor (Used with 24 Volt Sets)		193-0388	1	Negative Ground Electrical System
3	505-1373	1	Bushing, Reducer (M22 to 1/8") (Includes Sealing Washer)		193-0429-02	1	Isolated Ground Electrical System
				5	526-0320	1	Washer, Flat

## Oil Sump Pump

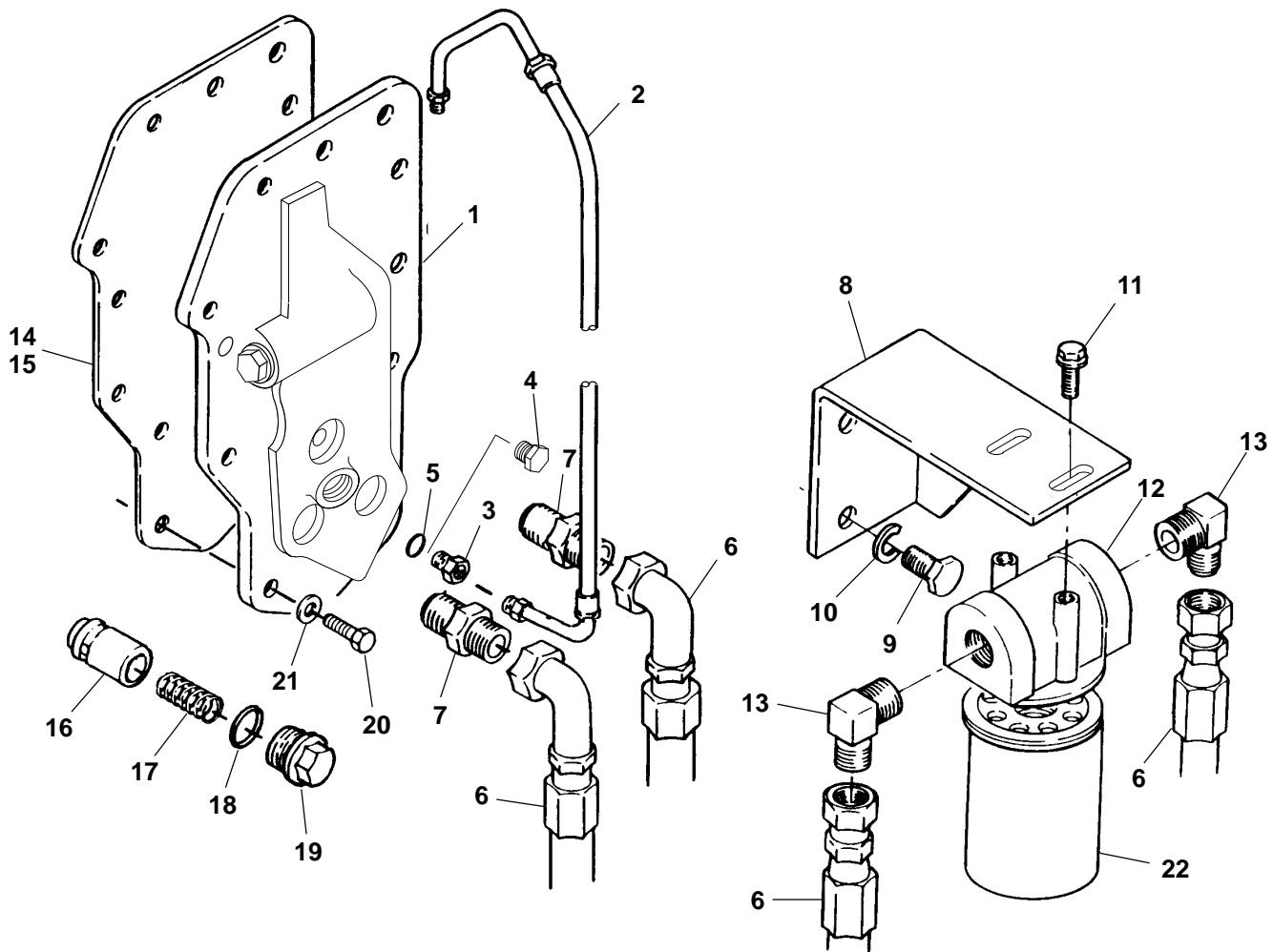


H520

539-0953-00/-01

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	120-1200	1	Pump, Oil Sump	3	502-1130	1	Adapter, Hose (1/2-14 to 3/4-16)
2	501-0532	1	Hose, Oil (3/4-16) (25" Long)	4	502-1213	1	Adapter (M18 to 3/4-16) (Includes O-Ring and Washer)
	501-0574	1	MCGDA, MCGDB, MCGGA MDGDA, MDGDB, MDGDC, MDGDD - (47.3" Long)	5	526-0122	16	Washer, Flat (5/16")
				6	800-2062	2	Screw, Cap - Hex Head (M8 x 45mm)

## Remote Oil Filter

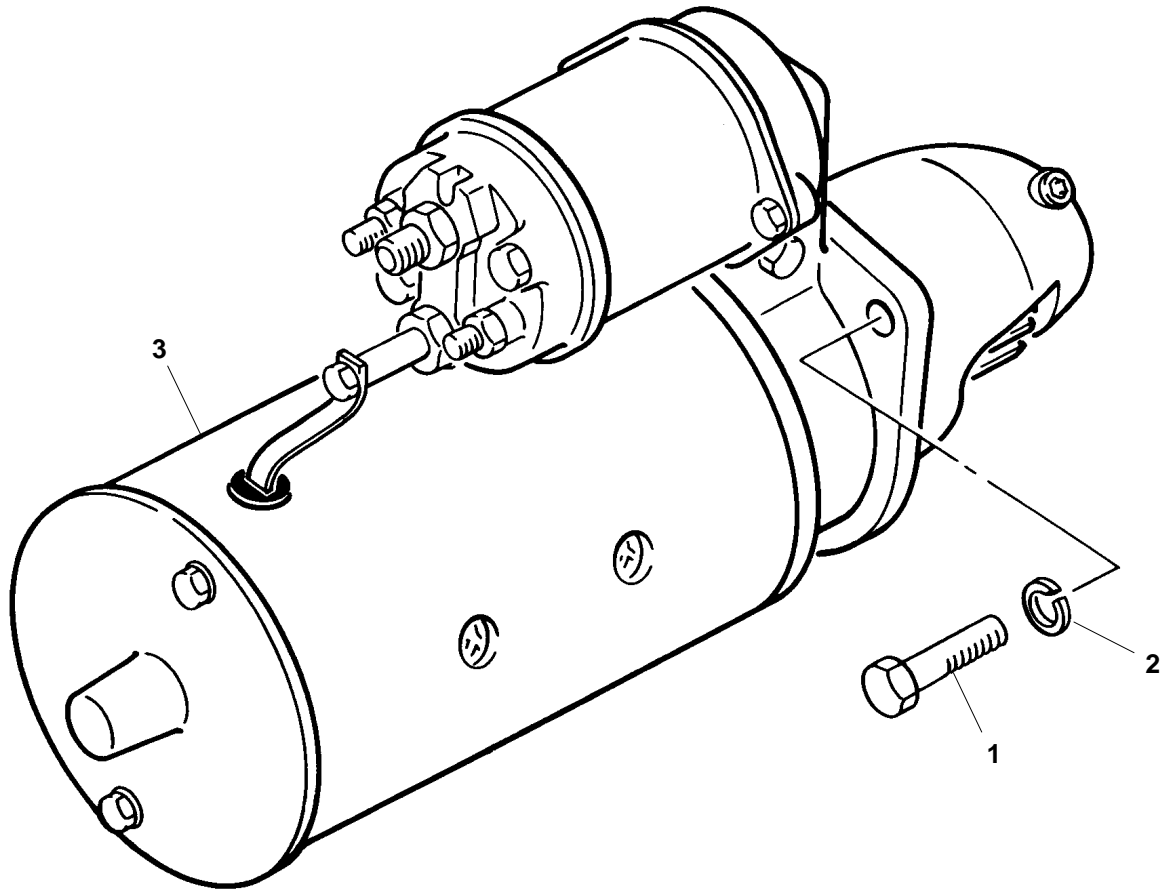


H519

179-2628-01/02/03/04/05

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	102-1450	1	Cover, Lube Oil Filter	7	505-1491	2	Adapter, Pipe (7/8-14 to 1-1/16-12) (Includes O-Ring)
2	501-0571-14	1	MCGCA - 4 Cylinder with Turbo (660.2mm Long)	8	122-0781	1	Bracket, Oil Filter
	501-0571-15	1	MCGDA, MCGDB, MDGDA, MDGDB - 6 Cylinder with Turbo (736.2mm Long)	9	800-2112	2	Screw, Cap - Hex Head (M12 x 30mm)
	501-0597-01	1	MCGCA - 4 Cylinder with Turbo, Low Profile (34" Long)	10	850-2012	2	Washer, Lock - Spring (M12)
	501-0597-02	1	MCGDA, MCGDB, MDGDA, MDGDB, MDGDC, MDGDD - 6 Cylinder with Turbo, Low Profile (42-1/2" Long)	11	821-0018	2	Screw, Self-Locking - Hex Washer Head (1/4-20 x 5/8")
3	502-1169	1	Connector, Female (5/8-18 to M12) - MCGCA, MCGDA, MCGDB, MDGDA, MDGDB, MDGDC, MDGDD	12	122-0783	1	Head, Lube - Oil Filter
4	505-1468	1	Plug (M12) - MCGBA, MCGGA	13	502-1127	2	Elbow - 90 Degree
5	509-0290-04	1	Seal, O-Ring	14	122-0790	1	Gasket, Filter Head
6	501-0572	2	Hose, Oil	15	102-1428	1	Gasket, Oil Cooler Core
				16	102-1431	1	Plunger, Pressure Regulator
				17	102-1430	1	Spring, Compression
				18	509-0288-05	1	Seal, O-Ring
				19	505-1462	1	Plug, Threaded
				20	800-2063	1	Screw, Cap - Hex Head (M8 x 50mm)
				21	526-2100	1	Washer, Flat (M8)
				22	122-0712	1	Filter, Lube Oil

## Starter

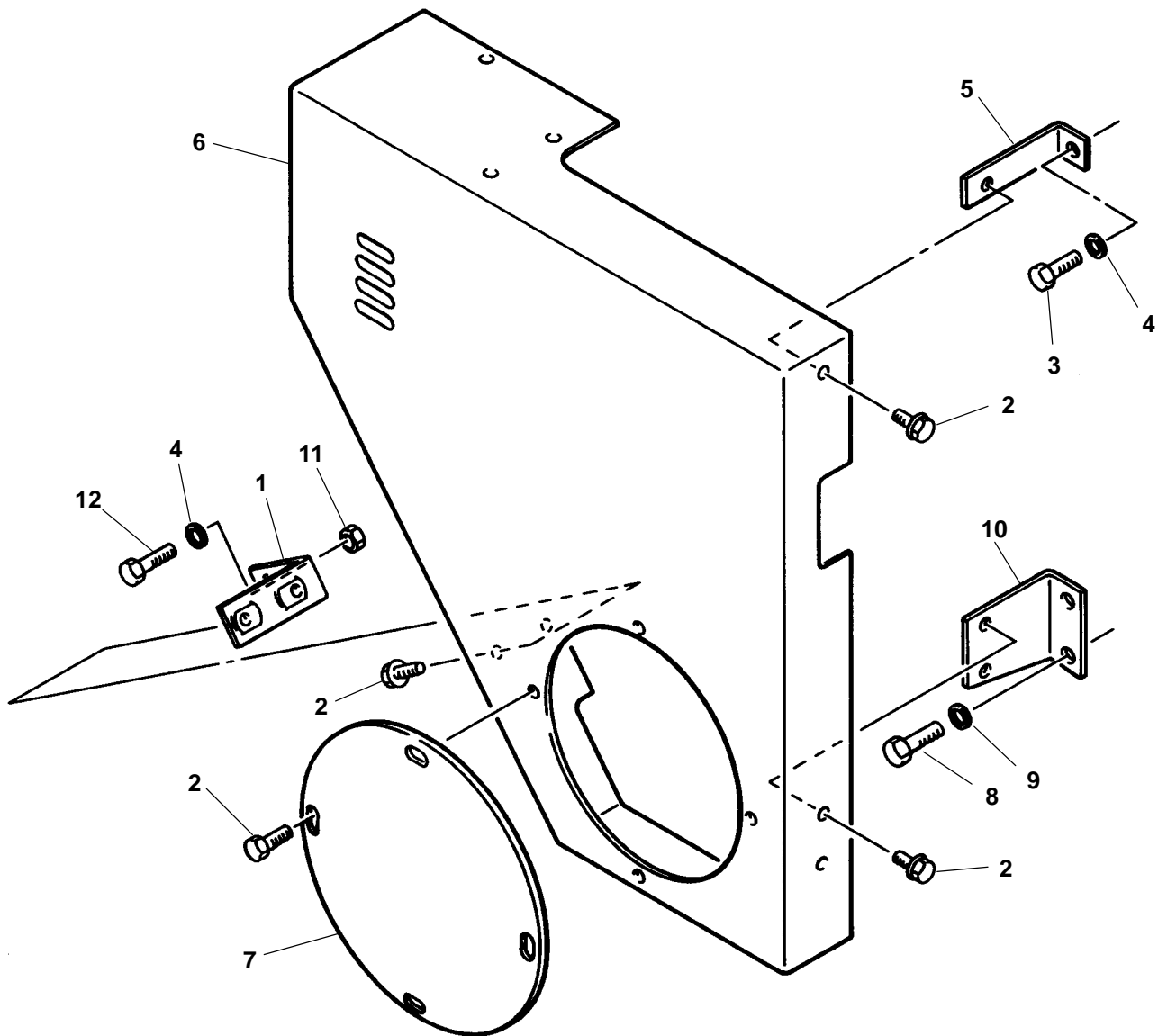


A343

179-2629-01/03/04/05

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	800-2088	3	Screw, Cap – Hex Head (M10 x 35mm)	3			Starter (B108)
2	850-2010	3	Washer, Lock (M10)	191-1961		1	12 Volt, Negative Ground
				191-1963-01		1	12 Volt, Isolated Ground
				191-2103		1	24 Volt, Negative Ground
				191-1963-02		1	24 Volt, Isolated Ground

## Belt Guard

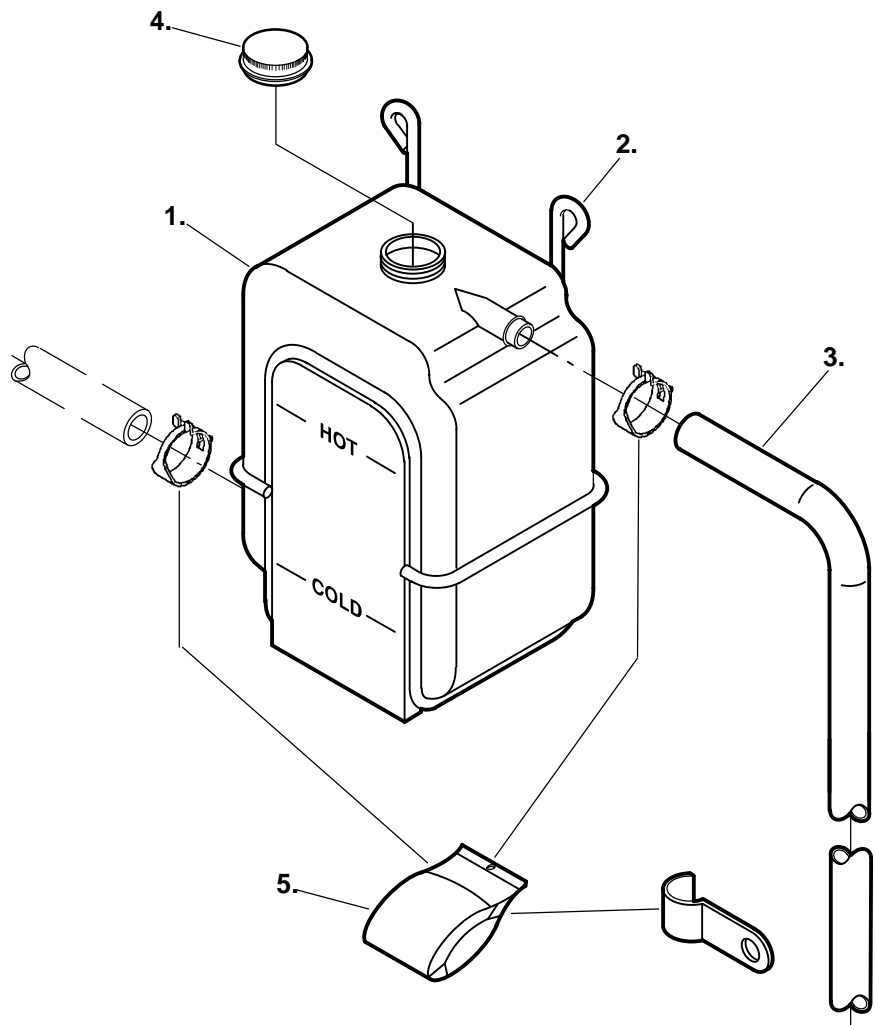


CP01

130-3816

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	130-3821	1	Bracket, Belt Guard	7	130-3818	1	Cover, Belt Guard
2	821-0010	11	Screw, Self-Locking – Hex Washer Head (1/4-20 x 1/2")	8	800-2111	2	Screw, Cap – Hex Head (M12 x 25mm)
3	800-2085	1	Screw, Cap – Hex Head (M10 x 20mm)	9	850-2012	2	Washer, Lock – Spring (M12)
4	850-2010	2	Washer, Lock – Spring (M10)	10	130-3822	1	Bracket, Belt Guard
5	130-3820	1	Bracket, Belt Guard	11	860-2009	1	Nut, Hex (M10)
6	130-3817	1	Guard, Belt	12	800-2086	1	Screw, Cap – Hex Head (M10 x 25mm)

Coolant Recovery

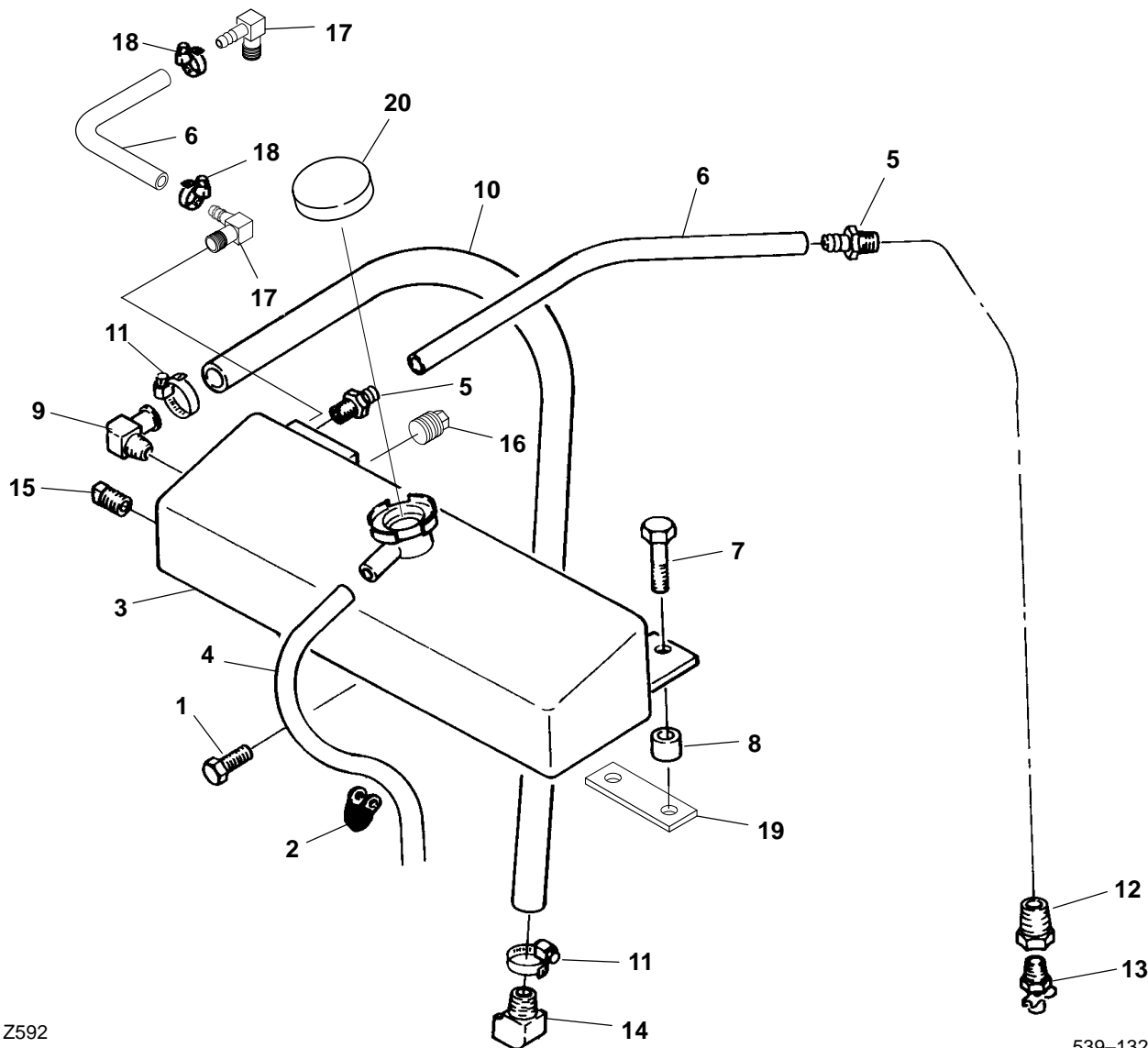


130-3574

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

## Expansion Tank

### MCGBA, MCGGA



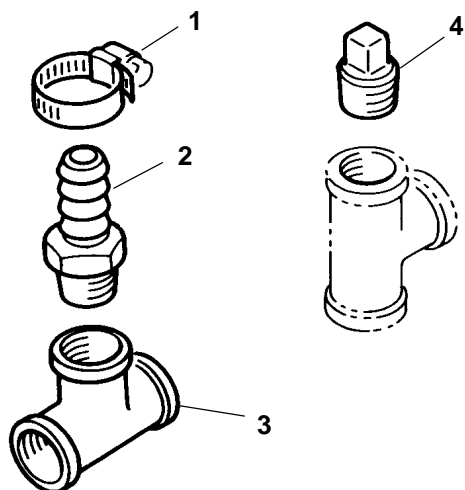
Z592

539-1320-01/02

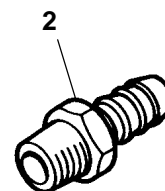
REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	821-2046	3	Screw, Self-Locking – Hex Washer Head (M8 x 20mm)	10	503-1466	–	Hose – Bulk (3/4" ID) (Order by the Foot – Two Feet Required)
2	332-1554	2	Clamp, Loop	11	503-0183	4	Clamp, Hose
3	130-3921	1	Tank, Expansion	12	505-0151	1	Bushing, Reducer (1/2" to 1/8")
4	503-0276	–	Hose – Bulk (5/16" ID) (Order by the Foot – Three Feet Required)	13	504-0005	1	Cock, Drain (1/8")
5	502-0395	2	Connector, Hose (1/8" Pipe to 1/4" Hose)	14	502-0133	1	Elbow, Street – 90 Degree (1/2")
6	503-1418	–	Hose – Bulk (1/4" ID) (Order by the Foot – Two Feet Required)	15	505-0056	1	Plug, Square Head Pipe (1/2")
				16	502-0028	3	Plug, Hex Head Pipe (1/8")
				17	502-0313-00	2	Elbow – 90 Degree (1/8-27 Pipe to 5/16" Hose)
7	821-2067	2	Screw, Self-Locking – Hex Head (M10 x 55mm)	18	503-0685	4	Clamp, Hose
8	191-1988-01	2	Spacer, Alternator Bracket (13/16")	19	130-4275-02	1	Spacer, Plate (Not Used With Electronic Governor)
9	502-1030	2	Connector, Hose – 90 Degree (1/2" Pipe to 3/4" Hose)	20	130-3721-01	1	Cap, Radiator (15 PSI)



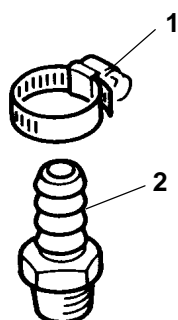
## Cooling System



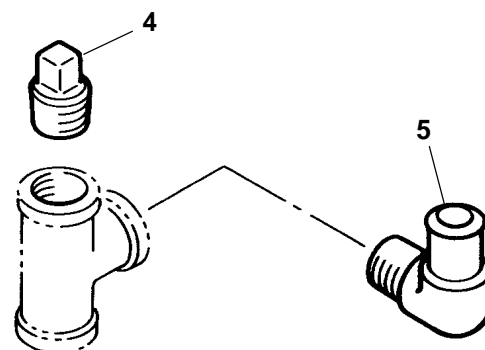
**Keel Cooling  
Isolated Ground Alternator  
Standard Lube Filter Arrangement**



**Heat Exchanger Cooling  
Any Alternator  
Remote Lube Filter Arrangement**



**Keel Cooling  
Any Alternator  
Remote Lube Filter Arrangement**



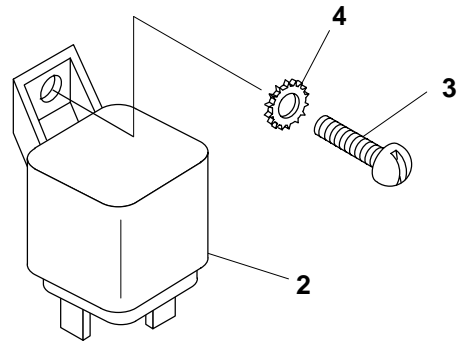
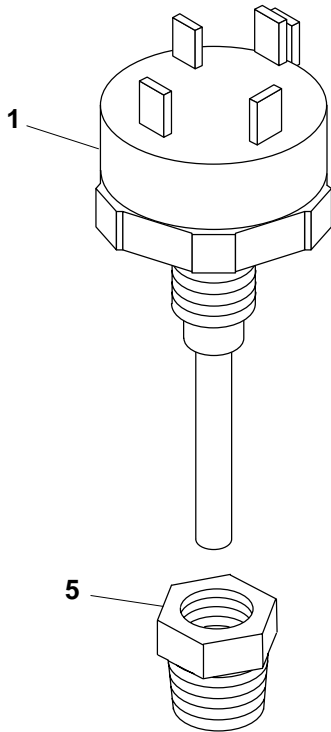
**Heat Exchanger Cooling  
Isolated Ground Alternator  
Standard Lube Filter Arrangement**

E033  
E079

179-1346-01/02/03/04

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	503-0183	2	Clamp, Hose (Keel Cooling) Isolated Ground Alternator with Standard Lube Filter Arrangement	4	505-0056	1	Plug, Pipe – Square Head (1/2") (Keel Cooling or Heat Exchanger Cooling with Isolated Ground Alternator and Standard Lube Filter Arrangement)
	503-0183	3	Any Alternator with Remote Lube Filter Arrangement	5	502-1030	1	Connector, Hose – 90 Degree (3/4") (Heat Exchanger Cooling with Isolated Ground Alternator and Standard Lube Filter Arrangement)
2	502-0827	3	Barb, Hose (3/4") Keel Cooling				
	502-0827	1	Heat Exchanger Cooling with Any Alternator and Remote Lube Filter Arrangement				
3	505-0108	1	Tee, Pipe (1/2") (Keel Cooling with Isolated Ground Alternator, and Standard Lube Filter Arrangement)				

## Low Coolant Level Sender

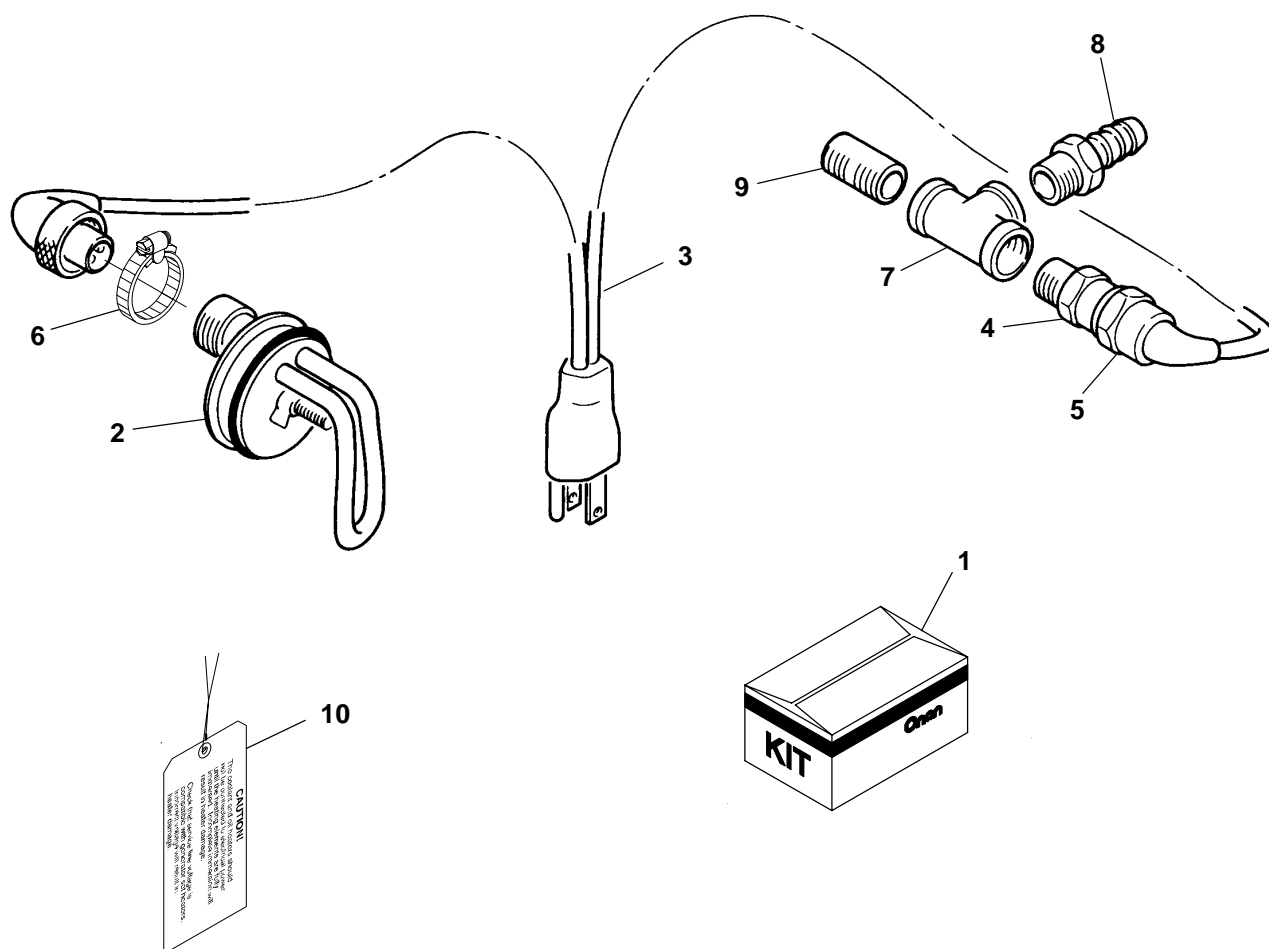


H389  
H512

179-1349  
179-1457-01/02

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	193-0467	1	Sender, Low Coolant Level (E126)	3	812-0076	1	Screw, Machine – Round Head (#8–32 x 5/16")
2			Relay, Low Oil Level (K112)	4	853-0005	1	Washer, Lock – ET (#8)
	307-1886	1	12 Volt	5	505-0018	1	Reducer, Bushing (1/2" to 1/4")
	307-2643	1	24 Volt				

## Engine Coolant Heater



H504  
H505

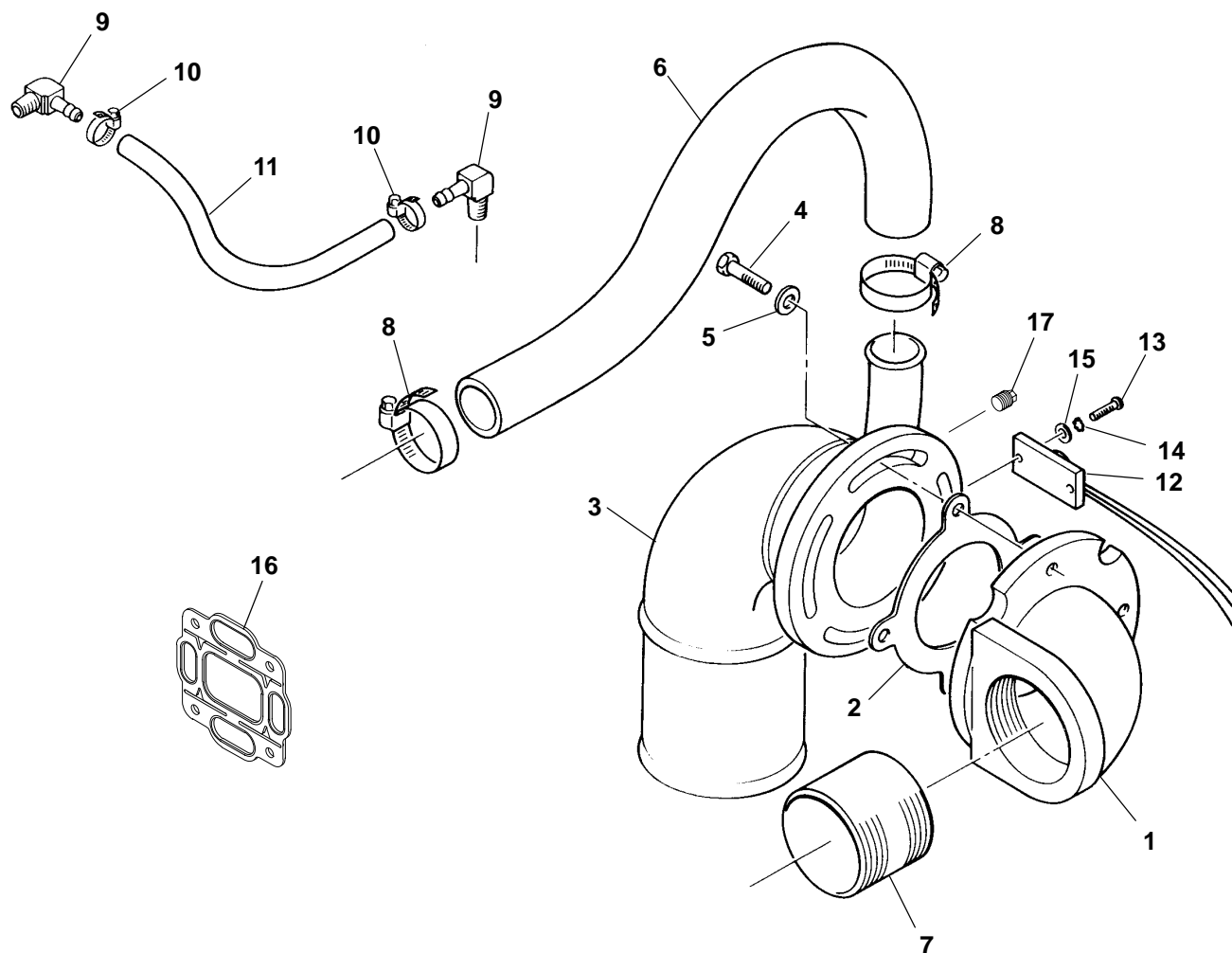
179-2248-01/02

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	333-0588-01	1	Kit, Heater – Engine Coolant 120 Volt (Includes Parts Marked *)	4	333-0511	1	*# Well, Thermostat
	333-0588-02	1	240 Volt (Includes Parts Marked #)	5	333-0478	1	*# Thermostat
2			Heater, Engine Coolant (1000W)	6	503-1919-12	1	*# Clamp
	333-0557-01	1	* 120 Volt	7	505-0108	1	Tee (1/2")
	333-0557-02	1	# 240 Volt	8	502-0827	1	Fitting, Hose (3/4")
3			Harness, Wiring	9	505-0100	1	Nipple, Close (1/2" x 1-1/8")
	333-0475	1	* 120 Volt	10	098-6030	1	Tag, Caution
	333-0476	1	# 240 Volt				

\* Parts Included in 333-0588-01 Engine Coolant Heater Kit

# Parts Included in 333-0588-02 Engine Coolant Heater Kit

## Water-Cooled Exhaust Elbow

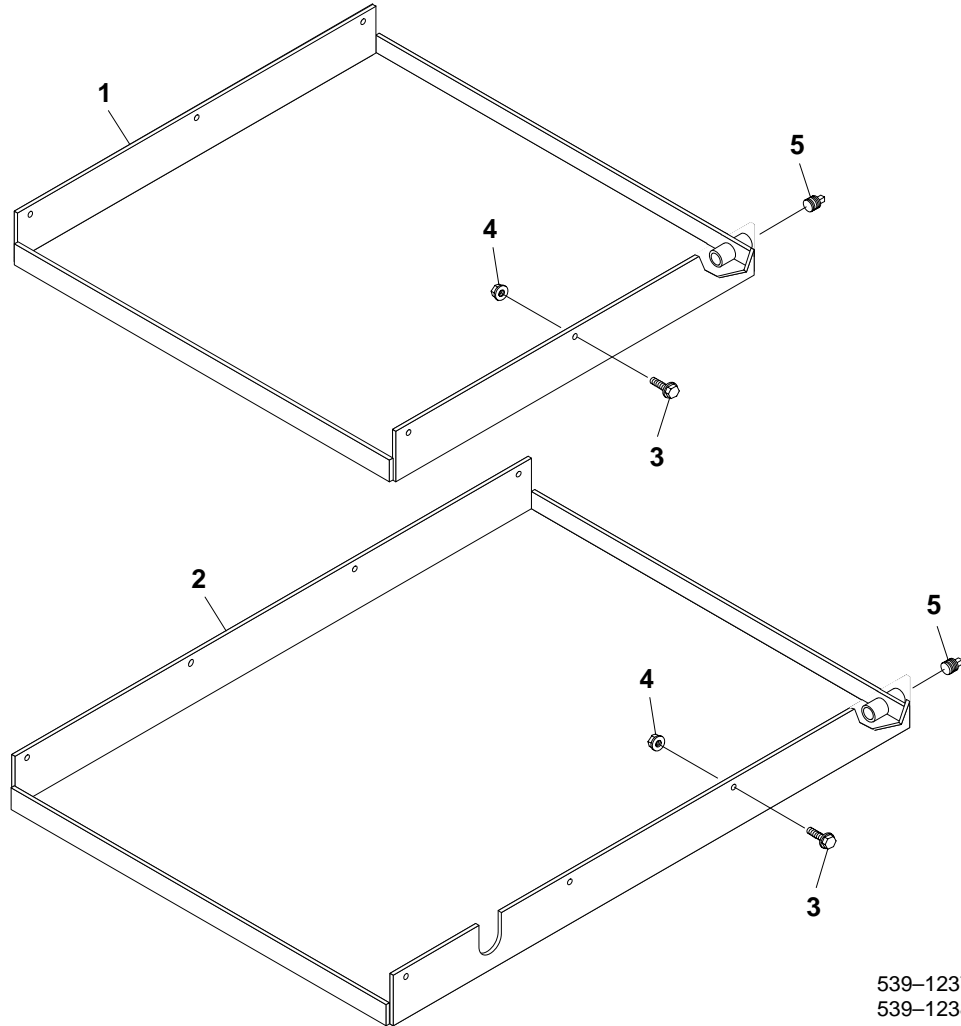


E086

179-1714  
179-1715

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	505-1461	1	Elbow, Flange - 90 Degree (MCGBA, MCGGA)	10	503-0685	2	Clamp, Hose
2	127-0410	1	Gasket, Elbow	11	503-1418	-	Hose - Bulk (1/4" ID) (Order by the Foot - 1 Foot Required)
3	155-2601	1	Elbow, Exhaust	12	309-0631	1	Switch, Temperature - High Exhaust (S114)
4	800-2513	1	Screw, Cap - Hex Head (M8 x 20mm) (MCGBA, MCGGA)	13	812-0059	2	Screw, Machine - Round Head (#6-32 x 1/4")
5	526-2100	4	Washer, Flat (M8) (MCGBA, MCGGA)	14	856-0001	2	Washer, Lock - EIT (#6)
6	503-1815	1	Hose, Turbocharger (1-1/4" ID)	15	526-1002	2	Washer, Flat (#6)
7	505-1460	1	Nipple, Short (2-1/2" x 3") (MCGBA, MCGGA)	16	127-0409	2	Gasket, Turbocharger (MCGBA, MCGGA)
8	503-1138	2	Clamp, Hose	17	502-0028	1	Plug, Pipe - Hex Head (1/8") (MCGBA, MCGGA)
9	502-0313	2	Elbow, (1/8-27 NPT)				

## Drip Pan

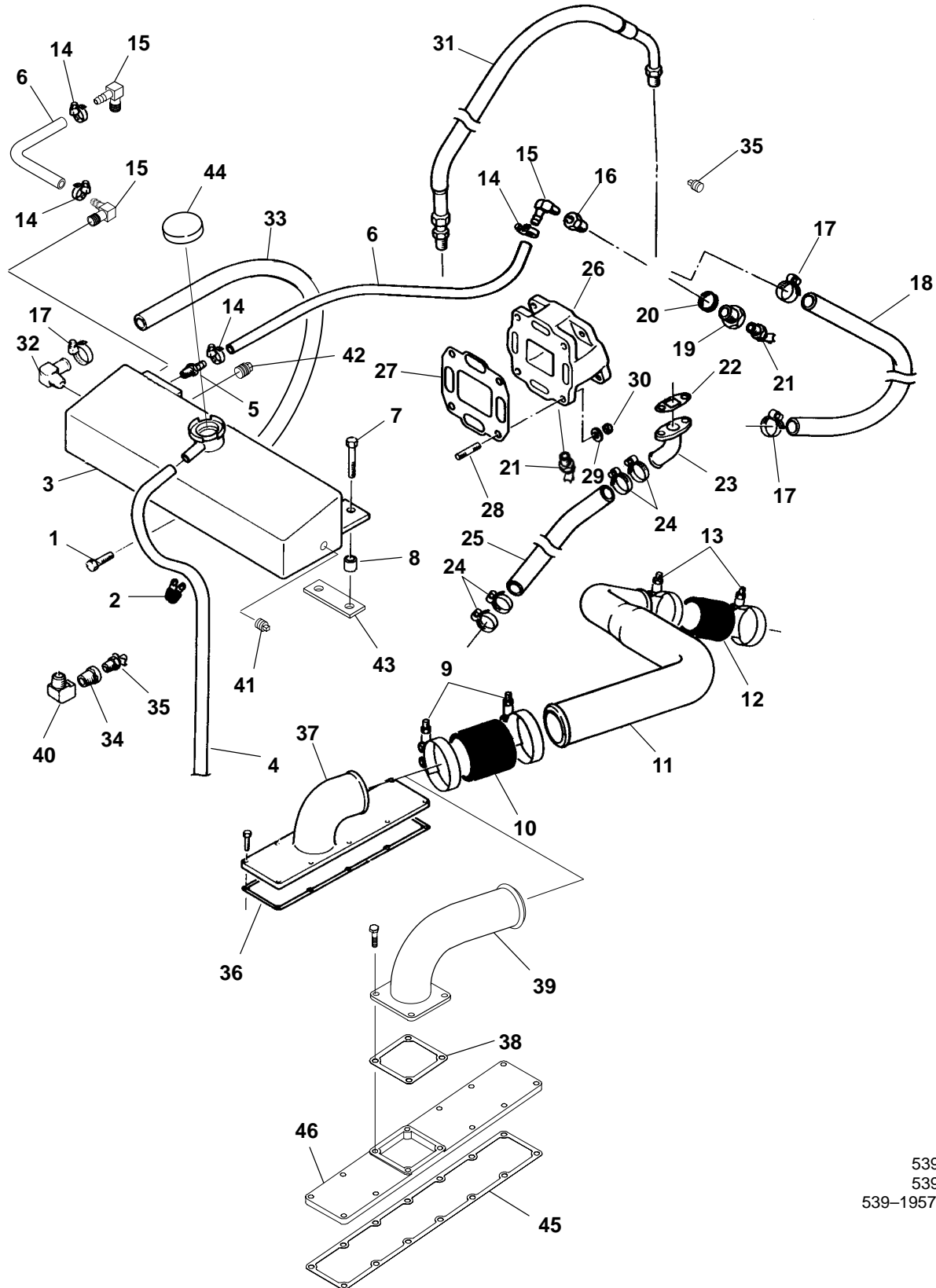


F146

539-1237  
539-1238

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	403-3144	1	Pan, Drip – MCGBA, MCGCA	4			Nut, Self-Locking (1/4-20)
2	403-3145	1	Pan, Drip – MCGDA, MCGDB, MCGGA, MDGDA, MDGDB, MDGDC, MDGDD		870-0212	6	MCGBA, MCGCA
					870-0212	8	MCGDA, MCGDB, MCGGA, MDGDA, MDGDB, MDGDC, MDGDD
3			Screw, Self-Locking – Hex Washer Head (1/4-20 x 5/8")	5	505-0055	1	Plug, Square Head (1/4")
	821-0018	6	MCGBA, MCGCA				
	821-0018	8	MCGDA, MCGDB, MCGGA, MDGDA, MDGDB, MDGDC, MDGDD				

**Rear Turbocharger  
MCGCA, MCGDA, MCGDB, MDGDA,  
MDGDB, MDGDC, MDGDD**

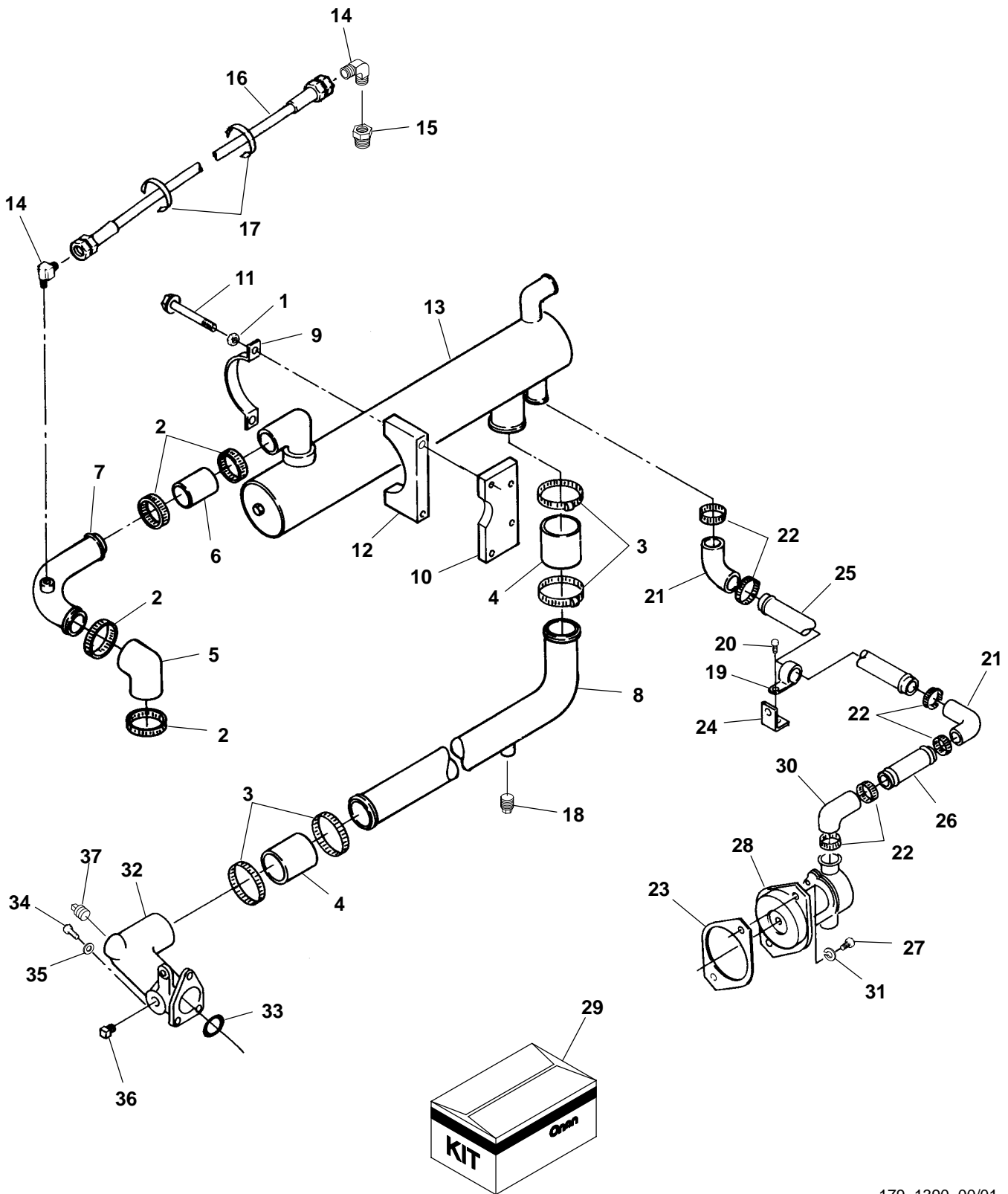


539-1319  
539-1327  
539-1957-01/02

**Rear Turbocharger**  
**MCGCA, MCGDA, MCGDB, MDGDA,**  
**MDGDB, MDGDC, MDGDD**

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	821-2046	3	Screw, Self-Locking Hex Washer Head (M8 x 20mm)	20	509-0286	1	Washer, Sealing (1")
2	332-1554	2	Clamp, Loop	21	504-0003	2	Cock, Drain (1/4")
3	130-3921	1	Tank, Expansion	22	127-0406	1	Gasket, Turbocharger Oil Drain
4	503-0276	1	Hose, Bulk (5/16" ID x 3') (Order by the Foot – Three Feet Required)	23	127-0405	1	Connection, Oil Drain
5	502-0395	1	Connector, Hose (1/8" Pipe to 1/4" Hose)	24	503-1136	4	Clamp, Hose
6			Hose, Bulk (1/4" ID) (Order by the Foot )	25			Hose, Drain (7/8" ID)
	503-1418	1	Three Feet – MCGCA		503-1814-01	1	26" – MCGCA
	503-1418	1	Four Feet Required – MCGDA, MCGDB, MDGDA, MDGDB, MDGDC and MDGDD (Generator Sets Cooled with Heat Exchanger)		503-1814-02	1	35" – MCGDA, MCGDB, MDGDA, MDGDB, MDGDC, MDGDD
7	821-2067	2	Screw, Self-Locking Hex Head (M10 x 55mm)	26	127-0408-01	1	Adapter, Turbocharger
8	191-1988-01	2	Spacer, Alternator Bracket (13/16")	27	127-0409	3	Gasket, Turbocharger
9	503-1812-01	2	Clamp, T Bolt	28	520-2430-06	4	Stud (50mm)
10	501-0594-11	1	Hose (2-1/2" ID)	29	526-2120	4	Washer, Flat (M10)
11	140-2654	1	Tube, Air Intake	30	860-2009	4	Nut, Hex (M10)
12	501-0594-12	1	Hose (2" ID)	31			Hose, Flexible
13	503-1813-09	2	Clamp, T Bolt		501-0590-01	1	787.4mm – MCGCA
14			Clamp, Hose		501-0590-02	1	1003.3mm – MCGDA, MCGDB, MDGDA, MDGDB, MDGDC, MDGDD
	503-0685	4	MCGDA, MCGDB, MDGDA, MDGDB	32	502-1030	2	Connector, Hose – 90 Degree (1/2" Pipe to 3/4" Hose)
	503-0685	4	MDGDC and MDGDD	33	503-1466	1	Hose, Bulk (3/4" ID) (Order by the Foot – Two feet Required)
			Generator Sets Cooled with Heat Exchanger	34	505-0151	1	Bushing, Reducer (1/2" to 1/8")
	503-0685	2	Keel Cooled Generator Sets	35	504-0005	1	Cock, Drain (1/8")
15			Elbow – 90 Degree (1/8-27 Pipe to 5/16" Hose)	36			Gasket, Manifold Cover
	502-0313	3	MCGDA, MCGDB, MDGDA, MDGDB		154-2833-01	1	MCGCA
	502-0313	3	MDGDC and MDGDD		154-2833-02	1	MCGDA, MCGDB, MDGDA, MDGDB
			Generator Sets Cooled with Heat Exchanger				Cover, Intake Manifold
	502-0313	1	Keel Cooled Generator Sets	37			MCGCA
16	505-0007	1	Bushing, Reducer (1/4" to 1/8")		154-2831	1	MCGDA, MCGDB, MDGDA, MDGDB
17			Clamp, Hose		154-2832-01	1	MDGDA, MDGDB
	503-0183	4	MCGDA, MCGDB, MDGDA, MDGDB	38	154-3088	1	Gasket, Crossover Tube (MDGDC, MDGDD)
	503-0183	4	MDGDC and MDGDD	39	154-3081-02	1	Tube, Crossover (MDGDC, MDGDD)
			Generator Sets Cooled with Heat Exchanger	40	502-0133	1	Elbow, Street – 90 Degree (1/2")
	503-0183	2	Keel Cooled Generator Sets	41	505-0056	1	Plug, Square Head Pipe (1/2")
18	503-1466	1	Hose, Bulk (3/4" ID) (Order by the Foot – Two Feet Required)	42			Plug, Hex Head Pipe (1/8")
19	505-1459	1	Adapter, Reducing (M25 to 1/4")		502-0028	3	MCGDA, MCGDB, MDGDA, MDGDB
					502-0028	3	MDGDC and MDGDD
							Generator Sets Cooled with Heat Exchanger
					502-0028	2	Keel Cooled Generator Sets
				43	130-4275-02	1	Spacer, Plate
				44	130-3721-01	1	Cap, Radiator (15 PSI)
				45	154-3086	1	Gasket, Manifold Cover
							MDGDC, MDGDD
				46	154-3087	1	Cover, Intake Manifold
							MDGDC, MDGDD

# Heat Exchanger MCGBA, MCGCA, MCGDA, MCGDB, MCGGA, MDGDA, MDGDB



E079

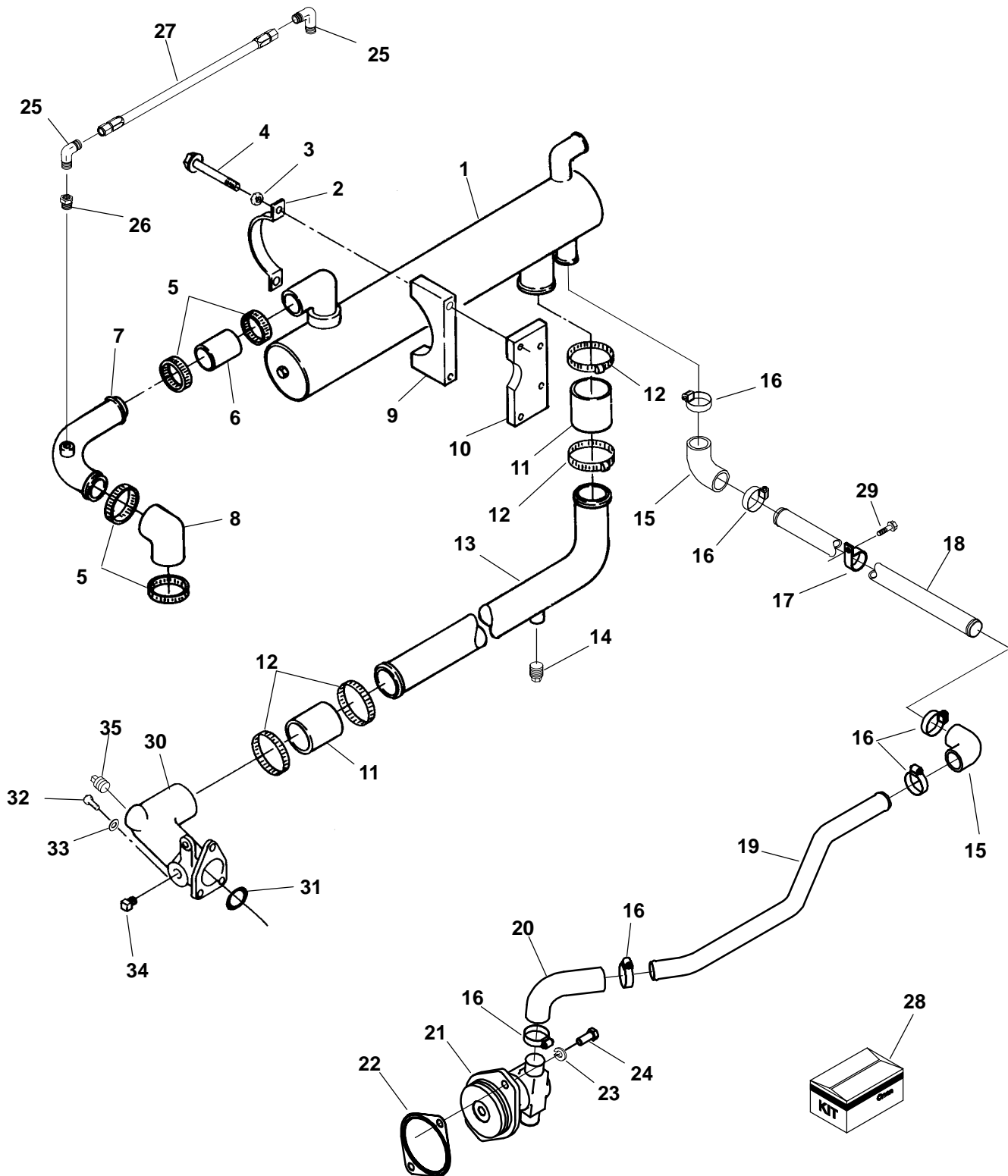
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179-1391-00/01



**Heat Exchanger**  
**MCGBA, MCGCA, MCGDA, MCGDB, MCGGA, MDGDA, MDGDB**

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	850-2010	4	Washer, Lock – Spring (M10)	17	332-1794	2	Tie, Cable
2	503-0365	4	Clamp, Hose	18	502-0028	1	Plug, Pipe – Hex Head (1/8")
3	503-1586	4	Clamp, Hose	19	518-0548-02	1	Clip
4	501-0598	2	Hose, Flex	20	800-0047	1	Screw, Cap – Hex Head (3/8-16 x 5/8")
5	503-1822	1	Hose, Elbow (1-3/4" ID)	21	503-1821-01	2	Hose, Elbow (1-1/4" ID)
6	501-0599	1	Hose, Flex	22	503-1138	6	Clamp, Hose
7	130-3964	1	Tube, Water Transfer	23	121-0074-03	1	Gasket, Hydraulic Pump
8			Tube, Water Transfer	24	130-4183-01	1	Brace, Hose
	130-3962	1	MCGBA, MCGCA	25	130-3961-05	1	Tube, Sea Water Hose
	130-3963	1	MCGDA, MCGDB, MCGGA, MDGDA, MDGDB	26			Tube, Sea Water Hose
9	503-1823	2	Clamp, Retaining		130-3961-03	1	MCGBA, MCGCA
10	130-3958	2	Bracket, Heat Exchanger		130-3961-04	1	MCGDA, MCGDB, MCGGA
11	815-0797-01	4	Screw, Cap – Hex Head (M10 x 95mm)	27	800-2112	2	Screw, Cap – Hex Head (M12 x 30mm)
12	402-0648	2	Isolator, Vibration	28	130-3960	1	Pump, Sea Water
13			Exchanger, Heat	29	130-4738	1	Kit, Repair – Sea Water Pump
	130-3959-01	1	MCGBA, MCGCA	30	503-1820	1	Pipe
	130-3959-02	1	MCGDA, MCGDB, MCGGA, MDGDA, MDGDB	31	850-2012	2	Washer, Lock (M12)
14	502-1043-01	2	Elbow, 90° – Male Adaptor (1/8")	32	130-3965	1	Connection, Water Inlet
15	502-1074-02	1	Adapter (1/8")	33	509-0281-04	1	Seal, Ring – Rectangular
16			Hose, Flexible (7/16-20)	34	800-2086	3	Screw, Cap – Hex Head (M10 x 25mm)
	501-0600-23	1	MCGBA, MCGCA (685.8mm Long)	35	526-2120	3	Washer, Flat (M10)
			MCGDA, MCGDB, MCGGA, MDGDA, MDGDB (914.4mm Long)	36	505-0247	1	Plug, Pipe – Square Head (1/2")
	501-0600-25	1		37	505-0056	1	Plug, Square Head Pipe (1/2") (Used with Remote Oil Filter)

# Heat Exchanger MDGDC. MDGDD



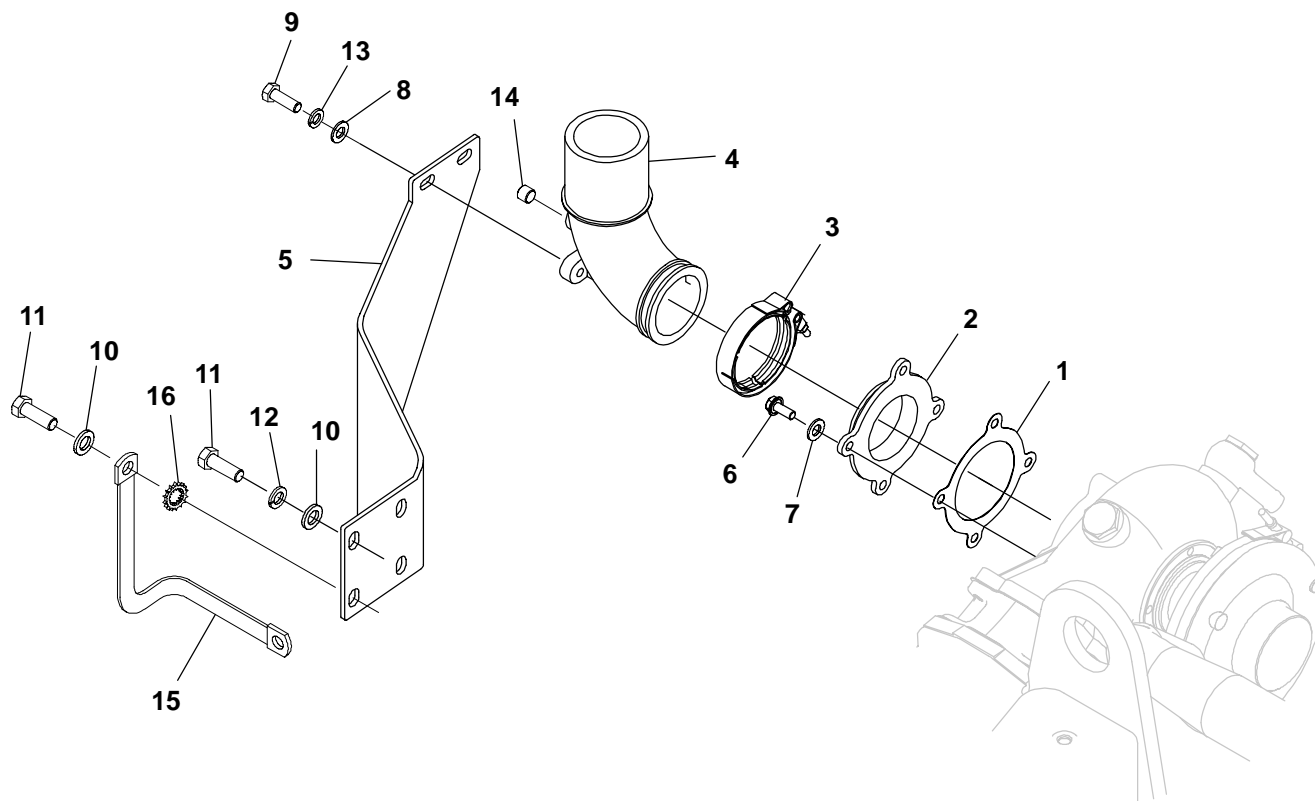
E079

539-1952

## Heat Exchanger MDGDC. MDGDD

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	130-3959-02	1	Exchanger, Heat	20	503-1820	1	Hose, Elbow (31.75mm ID)
2	503-1823	2	Clamp, Retaining	21	130-3960	1	Pump, Sea Water
3	850-2010	4	Washer, Spring Lock (M10)	22	121-0074-03	1	Gasket, Water Pump
4	815-0797-01	4	Screw, Cap – Hex Head (M10 x 1.5 x 95mm)	23	850-2012	2	Washer, Lock (M12)
5	503-1141	4	Clamp, Hose	24	800-2112	2	Screw, Cap – Hex Head (M12 x 30mm)
6	501-0599	1	Hose, Flex	25	502-1043-01	2	Elbow, 90° Male Adaptor (1/8")
7	130-3964	1	Tube, Water Transfer	26	502-1074-02	1	Adapter (1/8")
8	503-1822	1	Hose, Elbow (1-3/4" ID)	27	501-0600-25	1	Hose, Flexible (7/16-20)
9	402-0648	2	Isolator, Vibration	28	130-4738	1	Kit, Sea Water Pump Repair
10	130-3958	2	Bracket, Heat Exchanger	29	800-0047	1	Screw, Cap – Hex Head (3/8-16 x 5/8")
11	501-0598	2	Hose, Flex	30	130-3965	1	Connection, Water Inlet
12	503-1143	4	Clamp, Hose	31	509-0281-04	1	Seal, Ring – Rectangular
13	130-3963	1	Tube, Water Transfer	32	800-2086	3	Screw, Cap – Hex Head (M10 x 25mm)
14	502-0028	1	Plug, Hex Head Pipe (1/8")	33	526-2120	3	Washer, Flat (M10)
15	503-1821-01	2	Hose, Elbow (1-1/4" ID)	34	505-0247	1	Plug, Pipe – Square Head (1/2")
16	503-1138	6	Clamp, Hose	35	505-0056	1	Plug, Square Head Pipe (1/2") (Used with Remote Oil Filter)
17	518-0548-02	1	Clip, Tube				
18	130-3961-05	1	Tube, Transfer				
19	154-3083-02	1	Tube, Transfer				

## Dry Exhaust MDGDC. MDGDD

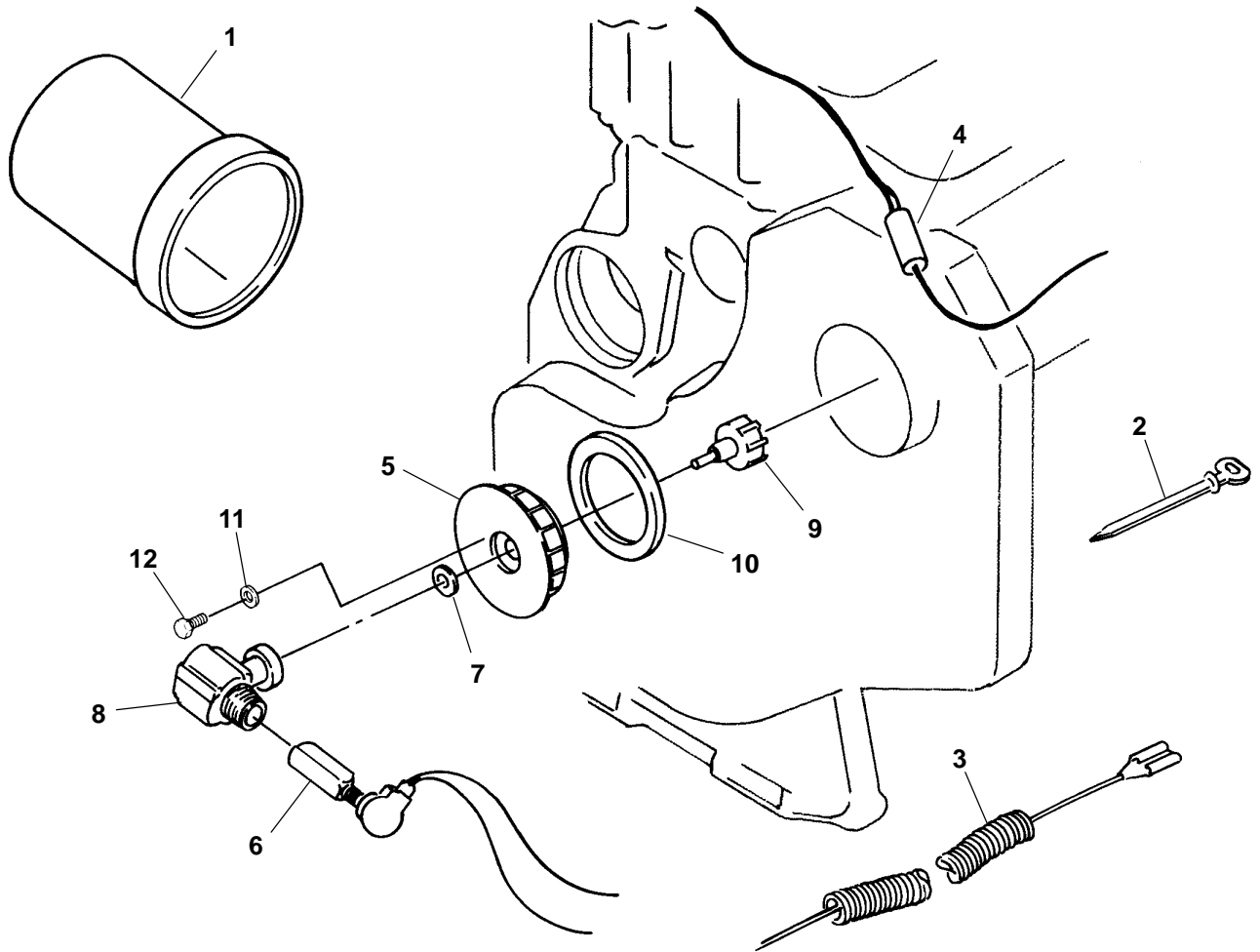


A148

539-1954

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	127-0410	1	Gasket, Exhaust	10	526-2140	4	Washer, Flat (M12)
2	155-3323	1	Adapter, Turbo Outlet	11	800-2112	4	Screw, Cap - Hex Head (M12 x 30mm)
3	155-2565	1	Clamp, V Band	12	850-2012	3	Washer, Lock - Spring (M12)
4	155-3170	1	Adapter, Exhaust	13	850-0114-55	2	Washer, Lock - Spring (M10)
5	155-3324-02	1	Bracket, Exhaust Support	14	505-0180	1	Plug (1/4")
6	800-2513	4	Screw, Self-Locking - Hex Washer Head (M8 x 35mm)	15	337-0090	1	Strap, Electrical
7	850-2008	4	Washer, Lock - Spring (M8)	16	856-0013	1	Washer, Lock W/EIT (1/2")
8	526-0399-62	2	Washer, Flat (M10)				
9	800-2085	2	Screw, Cap - Hex Head (M10 x 20mm)				

## Tachometer



K145

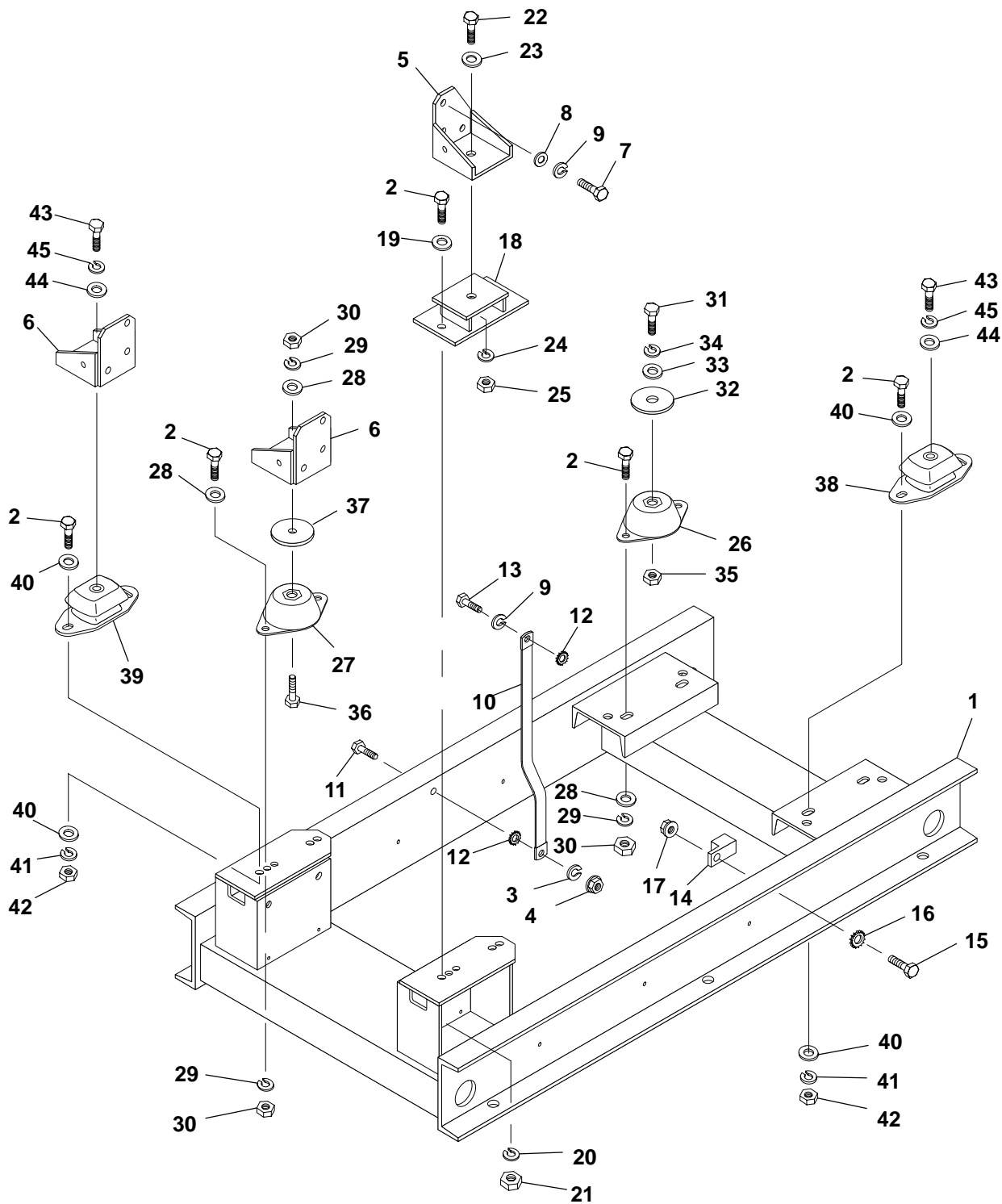
300-3812-00/01

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	302-1873-01	1	Tachometer (12V) (M131)	9	302-1960	1	* Hub, Tachometer Drive Coupling
2	332-1445	1	Tie, Cable (Use As Required)	10	509-0281-08	1	* Seal, Rectangular Ring (72.39mm ID)
3	338-2712	1	Harness, Tachometer	11	526-2080	2	* Washer, Flat (M6)
4	332-1506	1	# Splice, Window	12	800-2029	2	* Screw, Cap - Hex Head (M6 x 12mm)
5	302-1959	1	* Adaptor, Tachometer Takeoff Drive				
6	302-1931	1	* Sender, Tachometer (M131)				
7	509-0281-18	1	* Seal, Rectangular Ring (25.12mm ID)				
8	302-1958-03	1	* Adapter, Angle Drive (7/8-18)				

# Used On Models With Alternator

\* Used On Models Without Alternator

# Skid MCGBA, MCGCA



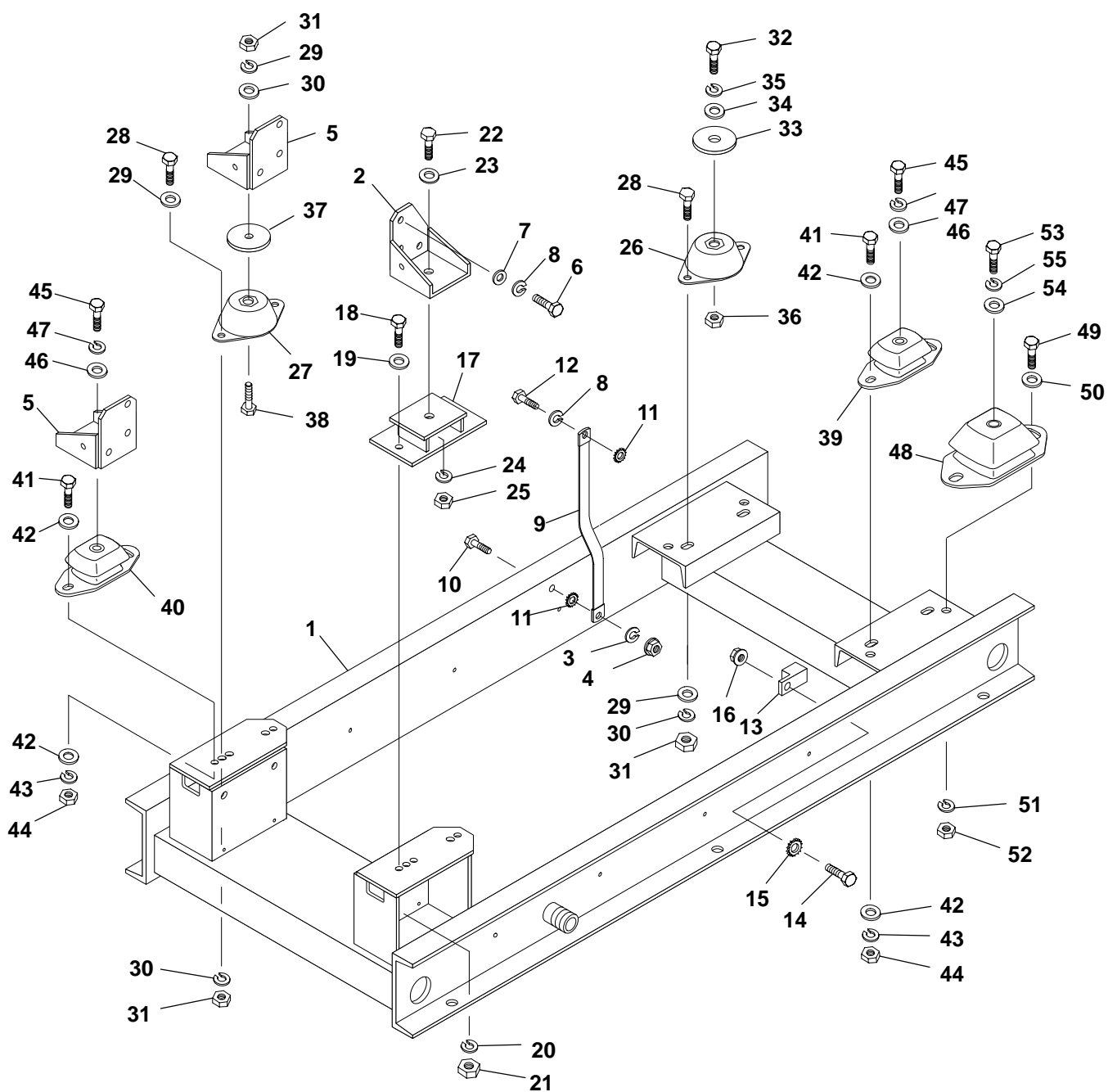
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F157  
F158

403-3121  
403-3137-01/02  
403-3138-01

## Skid MCGBA, MCGCA

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	403-2956	1	Skid	26	402-0030	2	Cushion, Vibration Isolation Mounting (Rear)
2	800-0091	8	Screw, Cap – Hex Head (1/2–13 x 1–1/4")	27	402-0466	2	Cushion, Vibration Isolation Mounting (Front)
3	850-0060	1	Washer, Lock – Spring (1/2")	28	526-0219	10	Washer, Flat (1/2")
4	862-0016	1	Nut, Hex (1/2–13)	29	850-0060	10	Washer, Lock – Spring (1/2")
5	403-3115	1	Bracket, Engine Mounting (Right Side)	30	862-0016	10	Nut, Hex (1/2–13)
6	403-3116	1	Bracket, Engine Mounting (Left Side)	31	800-0156	2	Screw, Cap – Hex Head (3/4–10 x 2–1/4")
7	800-2112	6	Screw, Cap – Hex Head (M12 x 30mm)	32	526-0389	2	Washer, Snubbing (3/4")
8	526-2140	6	Washer, Flat (M12)	33	526-0027	2	Washer, Flat (3/4")
9	850-2012	7	Washer, Lock – Spring (M12)	34	850-0079	2	Washer, Lock – Spring (3/4")
10	337-0090	1	Strap, Electrical	35	862-0008	2	Nut, Hex (3/4–10)
11	800-0090	1	Screw, Cap – Hex Head (1/2–13 x 1")	36	800-0092	2	Screw, Cap – Hex Head (1/2–13 x 1–1/2")
12	856-0013	2	Washer, Lock – W/EIT (1/2")	37	526-0182	2	Washer, Snubbing (1/2")
13	800-2111	1	Screw, Cap – Hex Head (M12 x 25mm)	<b>With Enhanced Vibration Isolators (Square Style):</b>			
14	332-1473	1	Lug, Solderless (225 Amp)	38			Cushion, Vibration Isolation Mounting (Rear)
15	800-0027	1	Screw, Cap – Hex Head (5/16–18 x 7/8")		402-0630-02	2	Generator Frame Size 2C, 2D, 2E
16	856-0008	1	Washer, Lock – W/EIT (5/16")		402-0630-03	2	Generator Frame Size 2F, 2G, 3C, 3D, 3E
17	870-0257	1	Nut, Hex – Self-Locking (5/16–18)	39			Cushion, Vibration Isolation Mounting (Front)
<b>Without Vibration Isolators:</b>					402-0630-01	2	Without Power Takeoff
18	402-0642	4	Mount, Deisolation		402-0630-02	2	With Power Takeoff
19	526-0219	8	Washer, Flat (1/2")	40	526-0219	16	Washer, Flat (1/2")
20	850-0060	8	Washer, Lock – Spring (1/2")	41	850-0060	8	Washer, Lock – Spring (1/2")
21	862-0016	8	Nut, Hex (1/2–13)	42	862-0016	8	Nut, Hex (1/2–13)
22	800-0133	4	Screw, Cap – Hex Head (5/8–11 x 1–3/4")	43	800-2173	4	Screw, Cap – Hex Head (M16 x 40mm)
23	526-0112	4	Washer, Flat (5/8")	44	526-2183	4	Washer, Flat (M16)
24	850-0070	4	Washer, Lock – Spring (5/8")	45	850-2016	4	Washer, Lock – Spring (M16)
25	862-0019	4	Nut, Hex (5/8–11)				
<b>With Vibration Isolators (Round Style):</b>							

**Skid**  
**MCGDA, MCGDB, MCGGA, MDGDA,**  
**MDGDB, MDGDC, MDGDD**



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F157  
F158

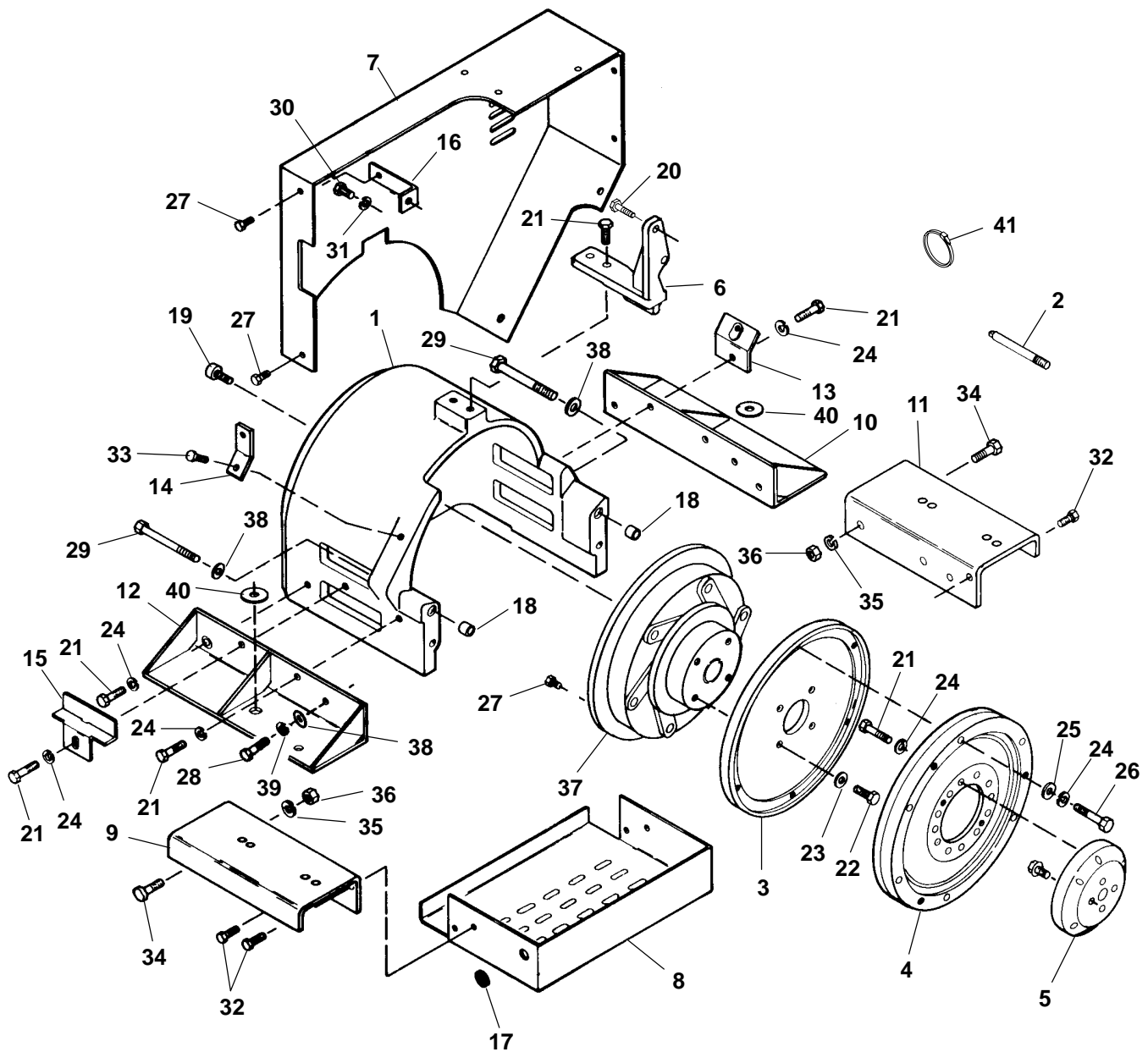
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403-3123-01/02  
403-3138-02



**Skid**  
**MCGDA, MCGDB, MCGGA, MDGDA,**  
**MDGDB, MDGDC, MDGDD**

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	403-3124	1	Skid	<b>With Enhanced Vibration Isolators (Square Style):</b>			
2	403-3115	1	Bracket, Engine Mounting (Right Side)	39	402-0630-03	2	Cushion, Vibration Isolation Mounting (Rear) (Generator Frame Size 2F, 2G, 3C, 3D) (Mounting holes for cushion are 5-1/2" apart)
3	850-0060	1	Washer, Lock – Spring (1/2")	40			Cushion, Vibration Isolation Mounting (Front)
4	862-0016	1	Nut, Hex (1/2-13)		402-0630-01	2	Without Power Takeoff
5	403-3116	1	Bracket, Engine Mounting (Left Side)	41	402-0630-02	2	With Power Takeoff
6	800-2112	6	Screw, Cap – Hex Head (M12 x 30mm)				Screw, Cap – Hex Head (1/2-13 x 1-1/4")
7	526-2140	6	Washer, Flat (M12)	42	800-0091	8	Generator Frame Size 2F, 2G, 3C, 3D
8	850-2012	7	Washer, Lock – Spring (M12)		800-0091	4	Generator Frame Size 3E, 3F, 3G, 3H
9	337-0090	1	Strap, Electrical	43	526-0219	16	Washer, Flat (1/2")
10	800-0090	1	Screw, Cap – Hex Head (1/2-13 x 1")		526-0219	8	Generator Frame Size 2F, 2G, 3C, 3D
11	856-0013	2	Washer, Lock – W/EIT (1/2")	44			Generator Frame Size 3E, 3F, 3G, 3H
12	800-2111	1	Screw, Cap – Hex Head (M12 x 25mm)		850-0060	8	Washer, Lock – Spring (1/2")
13	332-1473	1	Lug, Solderless (225 Amp)	45	850-0060	4	Generator Frame Size 2F, 2G, 3C, 3D
14	800-0027	1	Screw, Cap – Hex Head (5/16-18 x 7/8")		862-0016	8	Generator Frame Size 3E, 3F, 3G, 3H
15	856-0008	1	Washer, Lock – W/EIT (5/16")	46	862-0016	4	Screw, Cap – Hex Head (M16 x 40mm)
16	870-0257	1	Nut, Hex – Self-Locking (5/16-18)		800-2173	4	Generator Frame Size 2F, 2G, 3C, 3D
<b>Without Vibration Isolators:</b>				47	800-2173	2	Generator Frame Size 3E, 3F, 3G, 3H
17	402-0642	4	Mount, Deisolation		526-2183	4	Washer, Flat (M16)
18	800-0091	8	Screw, Cap – Hex Head (1/2-13 x 1-1/4")	48	526-2183	2	Generator Frame Size 2F, 2G, 3C, 3D
19	526-0219	8	Washer, Flat (1/2")				Generator Frame Size 3E, 3F, 3G, 3H
20	850-0060	8	Washer, Lock – Spring (1/2")	49	850-2016	4	Washer, Lock – Spring (M16)
21	862-0016	8	Nut, Hex (1/2-13)		850-2016	2	Generator Frame Size 2F, 2G, 3C, 3D
22	800-0133	4	Screw, Cap – Hex Head (5/8-11 x 1-3/4")	50			Generator Frame Size 3E, 3F, 3G, 3H
23	526-0112	4	Washer, Flat (5/8")		402-0643-02	2	* Cushion, Vibration Isolation Mounting (Rear) (Mounting holes for cushion are 7-5/32" apart)
24	850-0070	4	Washer, Lock – Spring (5/8")	51	800-0132	4	* Screw, Cap – Hex Head (5/8-11 x 1-1/2")
25	862-0019	4	Nut, Hex (5/8-11)		526-0112	4	* Washer, Flat (5/8")
<b>With Vibration Isolators (Round Style):</b>				52	850-0070	4	* Washer, Lock – Spring (5/8")
26			Cushion, Vibration Isolation Mounting (Rear)		862-0019	4	* Nut, Hex (5/8-11)
	402-0030	2	Generator Frame Size 2F, 2G, 3C, 3D, 3E	53	800-2204	2	* Screw, Cap – Hex Head (M20 x 50mm)
	402-0644	2	Generator Frame Size 3F, 3G, 3H (Not Used With MCGGA or MDGDC)		526-2203	2	* Washer, Flat (M20)
27	402-0466	2	Cushion, Vibration Isolation Mounting (Front)	54	850-2020	2	* Washer, Lock – Spring (M20)
28	800-0091	8	Screw, Cap – Hex Head (1/2-13 x 1-1/4")				
29	526-0219	10	Washer, Flat (1/2")	* Used With Generator Frame Size 3E, 3F, 3G, 3H			
30	850-0060	10	Washer, Lock – Spring (1/2")				
31	862-0016	10	Nut, Hex (1/2-13)				
32	800-0156	2	Screw, Cap – Hex Head (3/4-10 x 2-1/4")				
33	526-0389	2	Washer, Snubbing (3/4")				
34	526-0027	2	Washer, Flat (3/4")				
35	850-0079	2	Washer, Lock – Spring (3/4")				
36	862-0008	2	Nut, Hex (3/4-10)				
37	526-0182	2	Washer, Snubbing (1/2")				
38	800-0092	2	Screw, Cap – Hex Head (1/2-13 x 1-1/2")				

# Power Takeoff



A348  
A357

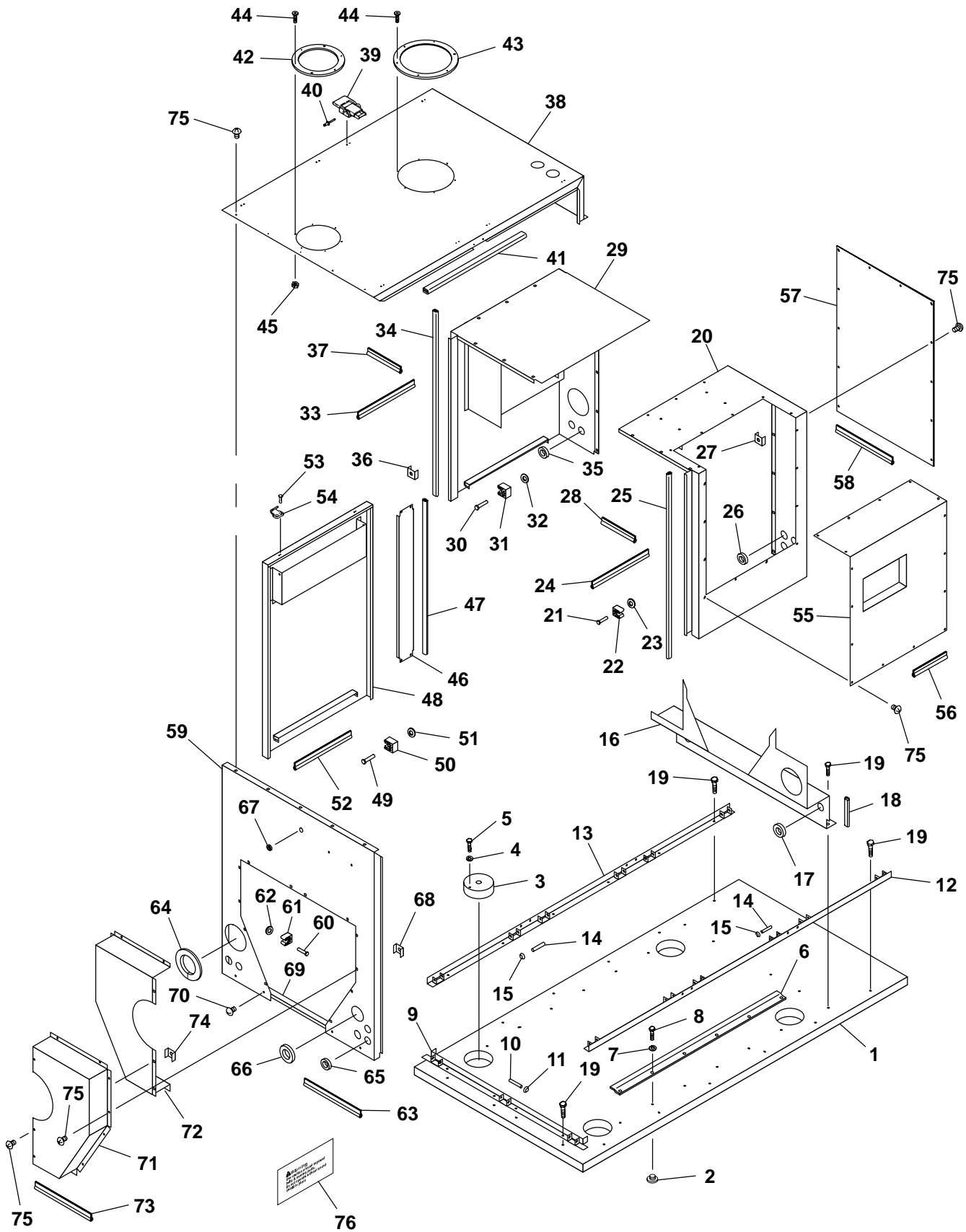
539-1406-01 thru -08

## Power Takeoff



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	190-0721-02	1	Housing, Power Takeoff	25	526-1274	6	Washer, Flat (3/8")
2	815-0813	2	Screw, Cap – Square Head (M12 x 108mm)	26	800-0054	6	Screw, Cap – Hex Head (3/8–16 x 2")
3	190-0717-02	1	Adapter, Drive Coupling	27			Screw, Self-Locking – Hex Washer Head (1/4–20 x 1/2")
4	190-0720	1	Coupling, Flexible		821-0010	4	* Sets Without Sound Shield
5	190-0716-02	1	Adapter, Drive Coupling		821-0010	1	Sets With Sound Shield
6	190-0718-02	1	Support, Power Takeoff	28	800-2112	4	Screw, Cap – Hex Head (M12 x 30mm)
7	130-4108-02	1	* Guard, Belt	29	815-0797-04	4	Screw, Self-Locking – Hex Washer Head (M12 x 120mm)
8	190-0723-02	1	Guard, Bottom Power Takeoff	30	800-2085	1	* Screw, Cap – Hex Head (M10 x 20mm)
9	403-3381-03	1	Bracket, Engine Mounting (Right Side)	31	850-2010	1	* Washer, Lock – Spring (M10)
10	403-3379-02	1	Support, Front Engine (Left Side)	32	821-0018	4	Screw, Self-Locking – Hex Head (1/4–20 x 5/8")
11	403-3381-04	1	Bracket, Engine Mounting (Left Side)	33	821-0028	1	* Screw, Self-Locking – Hex Washer Head (3/8–16 x 1/2")
12	403-3380-02	1	Support, Front Engine (Right Side)	34	800-0091	4	Screw, Cap – Hex Head (1/2–13 x 1–1/4")
13	130-4109-02	1	* Bracket, Belt Guard (Left Side)	35	862-0016	4	Nut, Hex (1/2–13)
14	130-4110-02	1	* Bracket, Belt Guard (Right Side)	36	850-0058	4	Washer, Lock – Spring (1/2")
15	190-0722-02	2	Guard, Front Power Takeoff	37			Clutch
16	130-3820	1	* Bracket, Belt Guard		190-0719-01	1	12 Volt, 70 Horsepower
17	508-0008	1	Grommet, Rubber		190-0719-02	1	24 Volt, 70 Horsepower
18	370-4082-01	2	Dowel, Ring (15mm ID x 10mm)		190-0724-01	1	24 Volt, 100 Horsepower
19	802-0072	8	Screw, Socket Head (3/8–16 x 1")		190-0724-02	1	12 Volt, 100 Horsepower
20	800-2058	2	Screw, Cap – Hex Head (M8 x 25mm)	38	526-2148	8	Washer, Flat (M12)
21	800-0052	14	Screw, Cap – Hex Head (3/8–16 x 1–1/2")	39	850-2012	4	Washer, Lock – Spring (M12)
22	805-0027	4	Bolt, Place (7/16–20 x 7/8")	40	526-2183	2	Washer, Flat (17/32")
23	526-1186	4	Washer, Flat (7/16")	41	332-1794	1	Tie, Cable (Use As Required)
24	850-0048	18	Washer, Lock – Spring (3/8")				

\* Used on Sets Without Sound Shield

# Housing

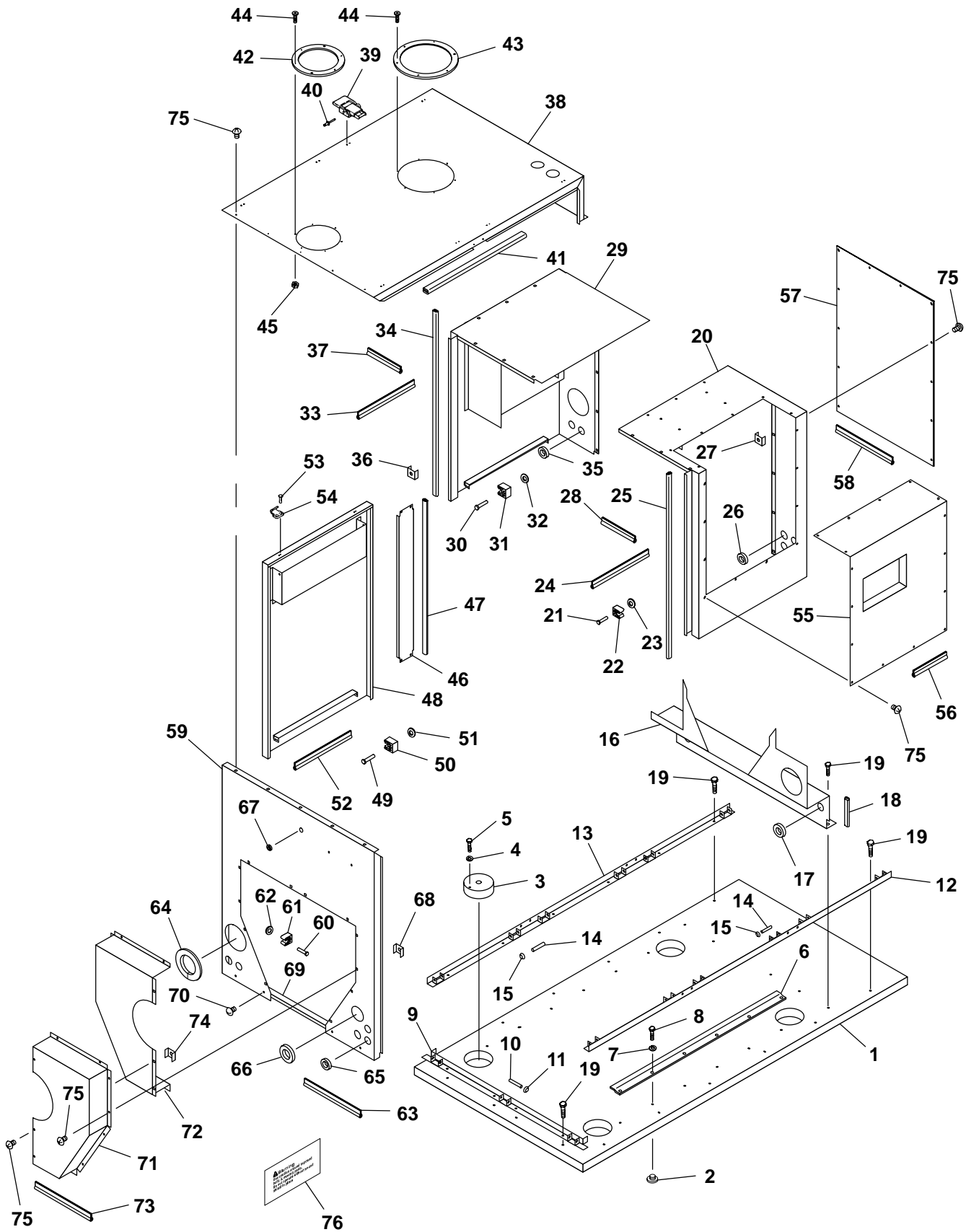


## Housing

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1			Base, Housing	21	818-0150	4	<del>Rivet</del> , Drive – Aluminum
	405-4485-02	1	4 Cylinder Engine	22	405-1872	2	<del>Clip</del> , Door (3/8")
	405-4486-03	1	6 Cylinder Engine, Generator Frame Size 2F, 2G, 3C, 3D	23	526-0003	4	<del>Washer</del> , Flat (#8)
	405-4486-04	1	6 Cylinder Engine, Generator Frame Size 3E, 3F, 3G, 3H	24	508-1011	–	<del>Seal</del> , Edge – Bulk (Order by the Foot – 3 Feet Required)
2	870-0413	12	Nut, Tee (5/16–18)	25	508-0210	–	<del>Edging</del> – Bulk (Order by the Foot – 3 Feet Required)
3	403-3298	4	Spacer, Skid Mounting	26	508-0117	5	<del>Grommet</del> (1" ID)
4	526-0076	4	Washer, Flat (5/16")	27	870-0110	9	<del>Nut</del> , Retainer (1/4–20)
5	815-0290	4	Screw, Self-Locking – Hex Washer Head (1/4–20 x 5/8")	28	508-0330	–	<del>Seal</del> , Edge – Bulk (Order by the Foot – 1 Foot Required)
6	405-4484-03	2	Clamp, Skid	29			Housing Assembly, Generator (Left Side) (Includes Housing Frame, Insulation, and Parts Marked  )
7	850-0045	12	Washer, Lock – Spring (5/16")		405-4512	1	Generator Frame Size 2C, 2D, 2E, 2F, 2G, 3C, 3D
8	800-0031	12	Screw, Cap – Hex Head (5/16–18 x 1–1/2")		405-4513	1	Generator Frame Size 3E, 3F, 3G, 3H
9	405-4483	1	Rail Assembly, Front (Includes Rail and Bracket Assembly, Clip Pin [Ref. No. 10], and Push Cap Nut [Ref. No. 11])	30	818-0150	4	<del>Rivet</del> , Drive – Aluminum
10	405-3111	3	Pin, Clip (3/8" x 2")	31	405-1872	2	<del>Clip</del> , Door (3/8")
11	870-0400	6	Nut, Push Cap (3/8")	32	526-0003	4	<del>Washer</del> , Flat (#8)
12			Rail Assembly, Door (Right Side) (Includes Rail and Bracket Assembly, Clip Pin [Ref. No. 14], and Push Cap Nut [Ref. No. 15])	33			<del>Seal</del> , Edge – Bulk (Order by the Foot)
	405-4474	1	4 Cylinder Engine		508-1011	–	Generator Frame Size 2C, 2D, 2E, 2F, 2G, 3C, 3D (3 Feet Required)
13	405-4480	1	6 Cylinder Engine		508-1011	–	Generator Frame Size 3E, 3F, 3G, 3H (4 Feet Required)
			Rail Assembly, Door (Left Side) (Includes Rail and Bracket Assembly, Clip Pin [Ref. No. 14], and Push Cap Nut [Ref. No. 15])	34	508-0210	–	<del>Edging</del> – Bulk (Order by the Foot – 4 Feet Required)
	405-4474	1	4 Cylinder Engine	35	508-0117	2	<del>Grommet</del> (1" ID)
	405-4477	1	6 Cylinder Engine	36	870-0110	12	<del>Nut</del> , Retainer (1/4–20)
14	405-3111	6	Pin, Clip (3/8" x 2")		870-0110	13	Generator Frame Size 2C, 2D, 2E, 2F, 2G, 3C, 3D
15	870-0400	12	Nut, Push Cap (3/8")		870-0110	13	Generator Frame Size 3E, 3F, 3G, 3H
16			Baffle Assembly, Generator (Includes Baffle, Insulation, Grommet [Ref. No. 17], and Edging [Ref. No. 18])	37	508-0330	–	<del>Seal</del> , Edge – Bulk (Order by the Foot – 3 Feet Required)
	405-4516	1	Generator Frame Size 2C, 2D, 2E, 2F, 2G				<del>Parts</del> Included in 405-4506 and 405-4507 Right Housing Assembly
	405-4517	1	Generator Frame Size 3C, 3D, 3E, 3F, 3G, 3H				<del>Parts</del> Included in 405-4512 and 405-4513 Left Housing Assembly
17	508-0117	3	Grommet (1" ID)				* Parts Included in 405-4450 and 405-4457 Housing Roof Assembly
18	508-0210	–	Edging – Bulk (Order by the Foot – 4 Feet Required)				<del>Parts</del> Included in 405-4446 and 405-4454 Housing Door Assembly
19	808-0045	24	Screw, Round Head (#12 x 7/8")				♦ Parts Included in 405-4465 and 405-4466 Front Panel Assembly
20			Housing Assembly, Generator (Right Side) (Includes Housing Frame, Insulation, and Parts Marked  )				
	405-4506	1	Generator Frame Size 2C, 2D, 2E, 2F, 2G, 3C, 3D				
	405-4507	1	Generator Frame Size 3E, 3F, 3G, 3H				

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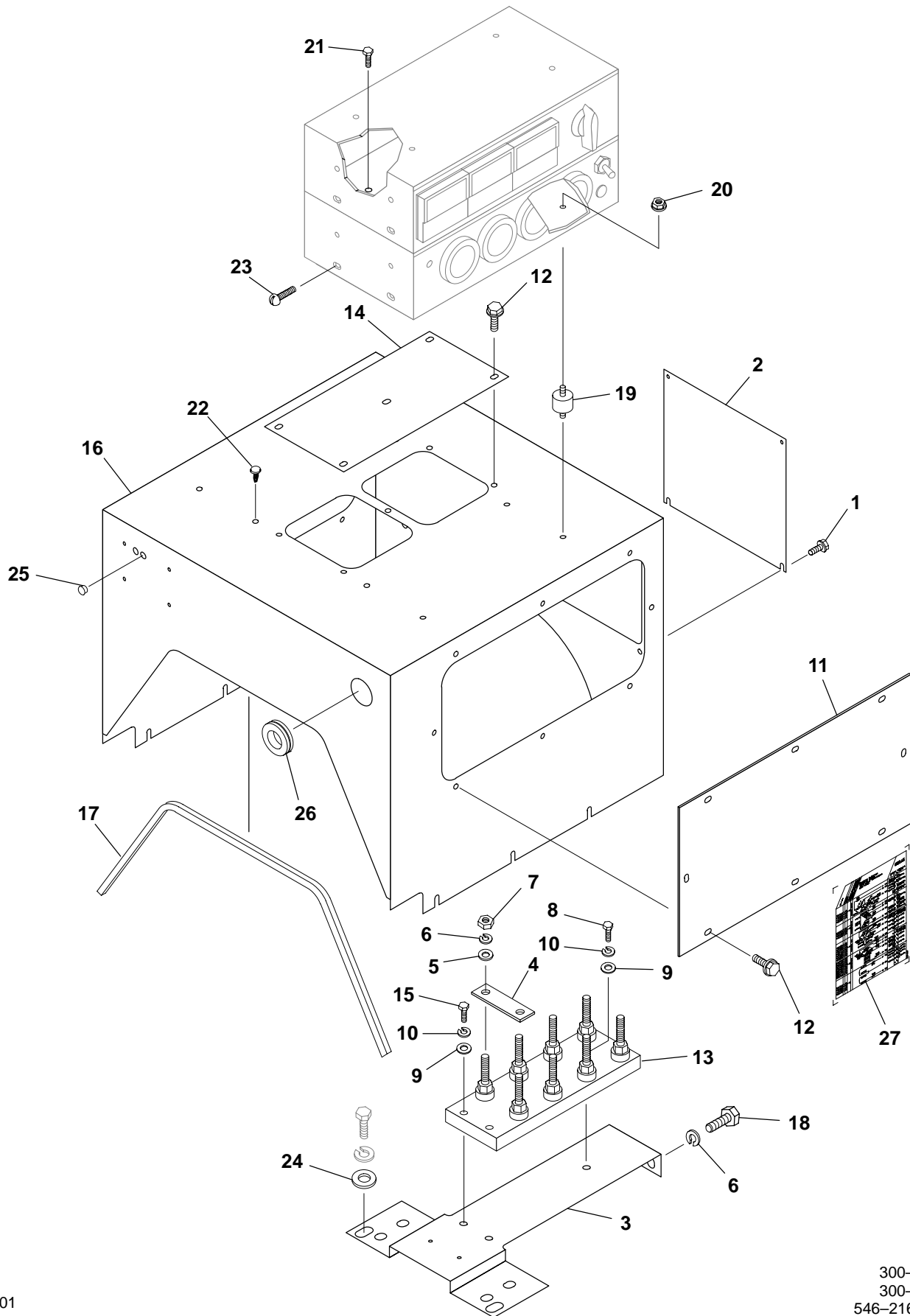
# Housing



## Housing

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
38			Roof Assembly, Housing (Includes Housing Roof, Insulation, and Parts Marked *)	63			♦ Seal, Edge – Bulk (Order by the Foot)
	405-4450	1	4 Cylinder Engine		508-1011	–	Without Power Takeoff – 3 Feet Required
	405-4457	1	6 Cylinder Engine		508-1011	–	With Power Takeoff – 2 Feet Required
39	406-0528-02	8	* Catch, Spring	64	508-0210	–	♦ Edging – Bulk (Order by the Foot – 8 Feet Required)
40	818-0194	16	* Rivet, Stainless Steel	65	508-0117	5	♦ Grommet (1" ID)
41			* Edging – Bulk (Order by the Foot)	66	508-0115	1	♦ Grommet (2-1/8" ID)
	508-0210	–	4 Cylinder Engine – 9 Feet Required	67	508-0021	1	♦ Grommet (1/2" ID)
	508-0210	–	6 Cylinder Engine – 10 Feet Required	68			♦ Nut, Retainer (1/4-20)
42	405-4528	1	* Cover, Access (Used for 6-11/16" Opening)		870-0110	5	Without Power Takeoff
43	405-4529	1	* Cover, Access (Used for 8-5/8" Opening)		870-0110	17	With Power Takeoff
44	815-0807	12	* Screw, Flat Head – Cross Recess (10-24 x 5/8")	69	405-4468-03	1	♦ Support Assembly, Front (Used Only on Sets with Power Takeoff)
45	870-0427	12	* Nut, Hex (10-24)	70	815-0765	4	♦ Screw, Truss Head – Cross Recess (1/4-20 x 1/2") (Used Only on Sets with Power Takeoff)
46	405-4471	2	Support Assembly, Roof (Includes Roof Support, Insulation, and Edging [Ref. No. 47])	71	405-4522	1	Cover Assembly (Right Side) (Used Only on Sets with Power Takeoff) (Includes Cover, Insulation, and Edge Seal [Ref. No. 73])
47	508-0210	–	Edging – Bulk (Order by the Foot – 4 Feet Required)	72	405-4523	1	Cover Assembly (Left Side) (Used Only on Sets with Power Takeoff) (Includes Cover, Insulation, Edge Seal [Ref. No. 73] and Retainer Nut [Ref. No. 74])
48			Door Assembly, Housing (Includes Door, Insulation, and Parts Marked *)	73	508-1011	–	Seal, Edge – Bulk (Order by the Foot – 1 Foot Required)
	405-4446	4	4 Cylinder Engine	74	870-0110	3	Nut, Retainer (1/4-20)
	405-4454	4	6 Cylinder Engine	75			Screw, Truss Head – Cross Recess (1/4-20 x 1/2")
49	818-0150	4	<del>Rivet, Drive – Aluminum</del>				<b>Without Power Takeoff</b>
50	405-1872	2	<del>Clip, Door (3/8")</del>		815-0765	50	Generator Frame Size 2C, 2D, 2E, 2F, 2G, 3C, 3D
51	526-0003	4	<del>Washer, Flat (#8)</del>		815-0765	51	Generator Frame Size 3E, 3F, 3G, 3H
52	508-1011	–	<del>Seal, Edge – Bulk (Order by the Foot – 2 Feet Required)</del>		815-0765	67	<b>With Power Takeoff</b> Generator Frame Size 2C, 2D, 2E, 2F, 2G, 3C, 3D
53	818-0194	4	<del>Rivet, Stainless Steel</del>		815-0765	68	Generator Frame Size 3E, 3F, 3G, 3H
54	406-0528-01	2	<del>Strike, Spring Catch</del>	76	098-5082	4	Label, Warning
55			Cover Assembly, Generator Housing (Includes Cover, Insulation, and Edge Seal [Ref. No. 56])				
	405-4552	1	Generator Frame Size 2C, 2D, 2E, 2F, 2G, 3C, 3D				
	405-4574	1	Generator Frame Size 3E, 3F, 3G, 3H				
56	508-0330	–	Seal, Edge – Bulk (Order by the Foot – 5 Feet Required)				
57	405-4515	1	Panel Assembly, Generator Housing (Includes Panel, Insulation, and Edge Seal [Ref. No. 58])				
58	508-1011	–	Seal, Edge – Bulk (Order by the Foot – 2 Feet Required)				
59			Panel Assembly, Front (Includes Panel, Insulation, and Parts Marked ♦)				
	405-4465	1	Without Power Takeoff				
	405-4466	1	With Power Takeoff				
60	818-0150	6	♦ Rivet, Drive – Aluminum				
61	405-1872	3	♦ Clip, Door (3/8")				
62	526-0003	6	♦ Washer, Flat (#8)				

# Control Housing



CP01

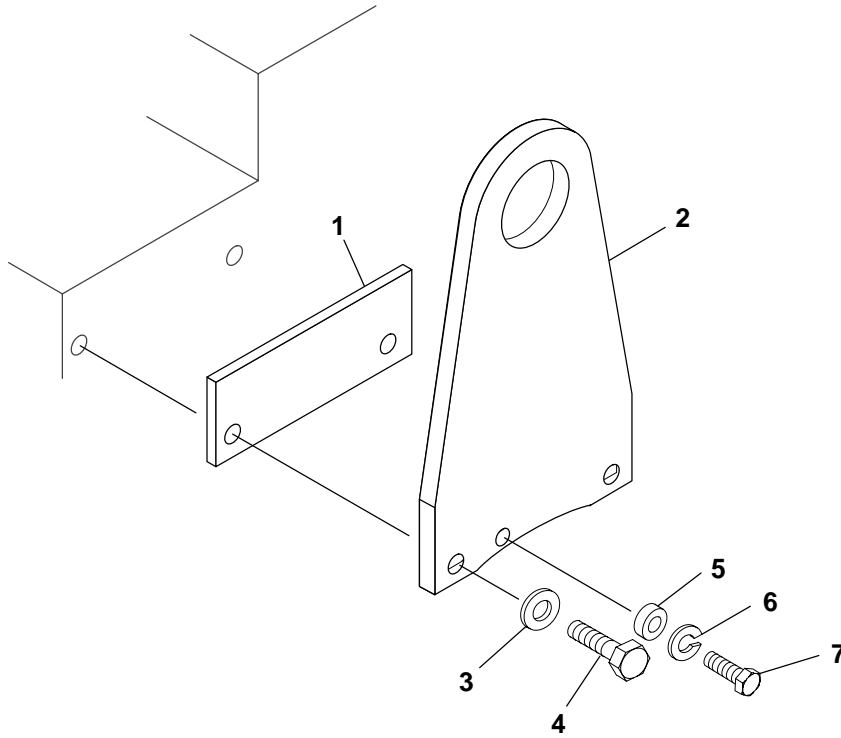
300-3800  
300-3801  
546-2167-01



## Control Housing

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	821-2021	4	Screw, Self-Locking – Hex Washer Head (M5 x 12mm)	17			Seal, Edge
2	305-0933	1	Cover, Automatic Voltage Regulator		305-0837-02	1	UC27 Generator (650mm Long)
3	319-1063	1	Bracket, Terminal		305-0837-04	1	UC22 Generator (500mm Long)
4	332-2987	4	Link, Terminal	18	800-2085	2	Screw, Cap – Hex Head (M10 x 20mm)
5	526-2120	8	Washer, Flat (M10)	19	402-0610	4	Isolator, Vibration
6	850-2010	10	Washer, Lock – Spring (M10)	20	870-0212	4	Nut, Hex – Flange (1/4-20)
7	860-2009	8	Nut, Hex (M10)	21	821-0010	4	Screw, Self-Locking – Hex Washer Head (1/4-20 x 1/2") (Used with AC Meter Panel Option)
8	800-0030	1	Screw, Cap – Hex Head (5/16-18 x 1-1/4")				
9	526-0115	3	Washer, Flat (5/16")	22	517-0290	4	Plug, Hole
10	850-0045	3	Washer, Lock – Spring (5/16")	23	812-0148	8	Screw, Machine – Round Head (1/4-20 x 1/2")
11	319-1052	2	Cover, Saddle – Side	24	526-0028	2	Washer, Flat (1/2") (Used with UC27 Generator Only)
12	821-0018	21	Screw, Self-Locking – Hex Washer Head (1/4-20 x 5/8")	25	517-0131	2	Plug, Hole
13	232-3421	1	Block, Main Terminal	26	508-0117	1	Grommet (Fits 1-3/8" Dia Hole)
14	319-1053	1	Cover, Saddle – Top	27	098-6987	1	Label, Generator Cover
15	800-0031	2	Screw, Cap – Hex Head (5/16-18 x 1-1/2")				
16			Saddle, Control Housing				
	319-1071	1	UC27 Generator				
	319-2555-02	1	UC22 Generator				

## Lift Bracket

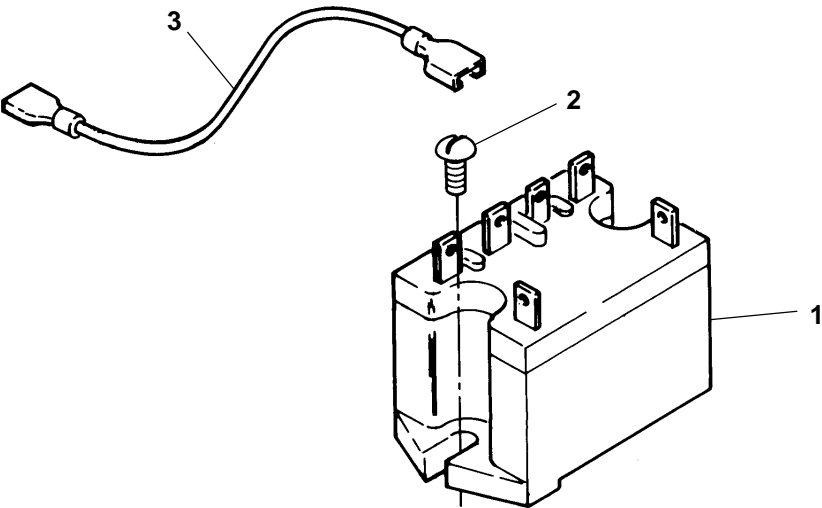


F010

403-3344

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	403-3299-03	1	Spacer, Lift Bracket	5	370-4052	1	Spacer, Pump Mounting
2	403-3292-03	1	Bracket, Lifting	6	850-0045	1	Washer, Lock – Spring (5/16")
3	740-1010	2	Washer, Flat (M12)	7	800-0028	1	Screw, Cap – Hex Head (5/16-18 x 1")
4	720-1075	2	Screw, Cap – Hex Head (M12 x 35mm)				

Start Disconnect Relay

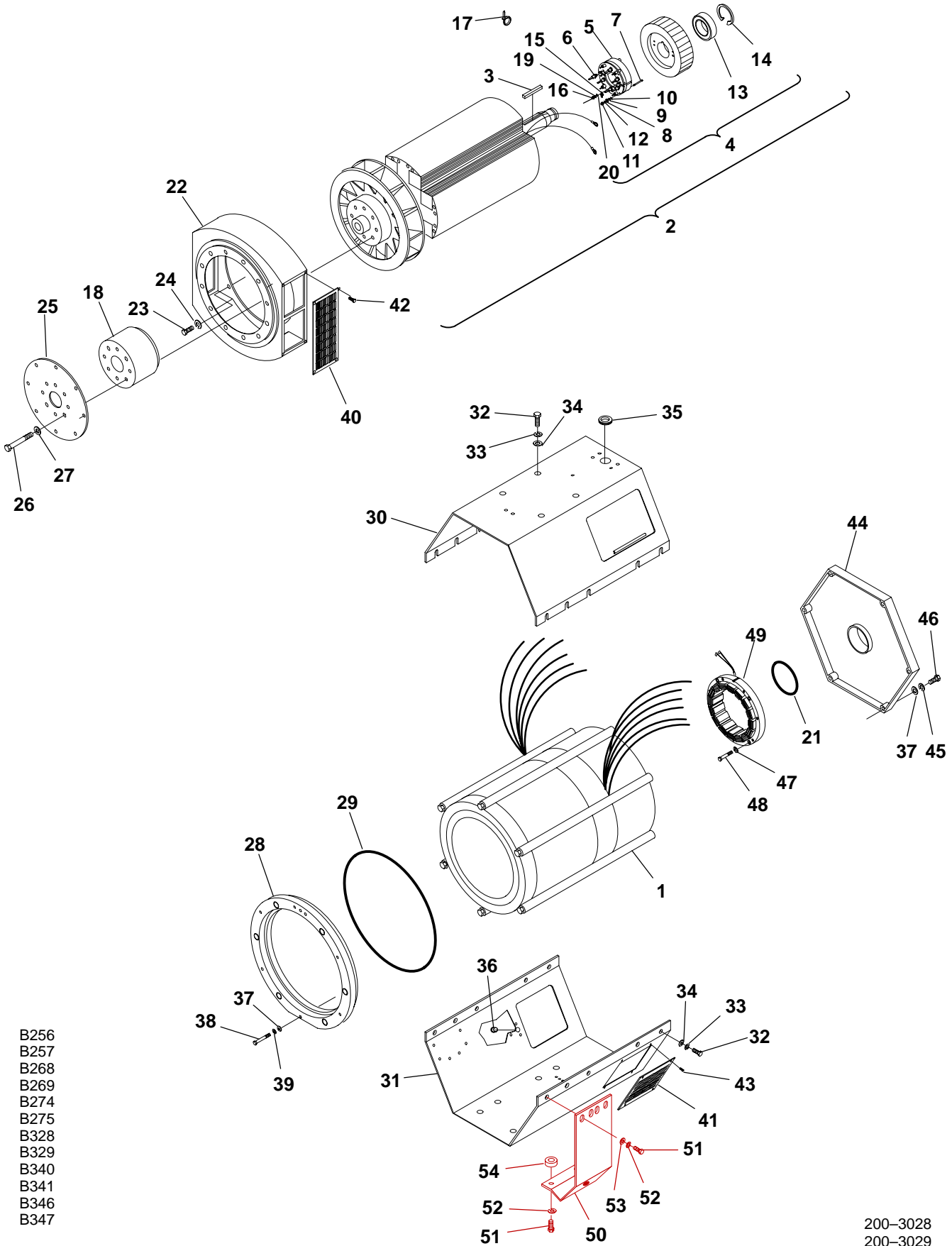


CP01

179-2632

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	307-2677-03	1	Relay, Start Disconnect (240 Volt) (K132)	3	226-4150	2	Lead, Start Disconnect (K132-5 to Aux 7, K132-6 to Aux 8)
2	812-0077	2	Screw, Round Head Machine (#8-32 x 3/8")				

# Generator



## Generator

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	—	1	Stator, Generator (See Pages 78 thru 82 for Part Numbers)	15	304-0807	1	* Varistor
2			Rotor Assembly, Generator (Includes Parts Marked*)	16	860-2006	2	* Nut, Hex (M5)
			<b>UC22 Generator</b>	17	332-3227	1	* Tie, Cable (Use As Required)
	201-3496-01	1	130mm Stack Length	18			* Hub, Generator Drive
	201-3496-02	1	160mm Stack Length		232-3438	1	UC22 Generator
	201-3496-03	1	180mm Stack Length		232-3695	1	UC27 Generator
	201-3496-04	1	240mm Stack Length	19	850-2005	2	* Washer, Lock – Spring (M5)
	201-3496-05	1	300mm Stack Length	20	526-2060	2	* Washer, Flat (M5)
			<b>UC27 Generator</b>	21			O-Ring
	201-3497-01	1	165mm Stack Length		509-0266-01	1	UC22 Generator
	201-3497-02	1	190mm Stack Length		509-0266-02	1	UC27 Generator
	201-3497-03	1	230mm Stack Length	22			Adapter, Generator
	201-3497-04	1	285mm Stack Length		231-0316	1	UC22 Generator
	201-3497-05	1	335mm Stack Length		231-0317	1	UC27 Generator
	201-3497-06	1	375mm Stack Length	23			Screw, Cap – Hex Head
3			* Key, Exciter Rotor		800-3017-41	6	<b>UC22 Generator</b> (M10 x 45mm)
			<b>UC22 Generator</b>				<b>UC27 Generator</b>
	515-0298-01	1	130 or 160mm Stack Length		800-3017-42	5	M10 x 50mm
	515-0298-02	1	180, 240, or 300mm Stack Length		800-3017-44	1	M10 x 60mm (12 O'clock Position)
			<b>UC27 Generator</b>	24	850-0114-55	6	Washer, Lock – Spring (M10)
	515-0298-02	1	165 or 190mm Stack Length	25			Disc, Generator Drive
	515-0298-03	1	230, 285, 335, or 375mm Stack Length		232-3699	2	UC22 Generator
4			* Rotor Assembly, Exciter (Includes Parts Marked ♦)		232-3699	3	UC27 Generator
			<b>UC22 Generator</b>	26	720-1119	8	Screw, Cap – Hex Head (M16 x 40mm)
	201-3434-01	1	130 or 160mm Stack Length	27	526-0259	8	Washer, Flat (5/8")
	201-3434-02	1	180, 240, or 300mm Stack Length	28			Adapter, Generator Stator
			<b>UC27 Generator</b>		231-0318	1	UC22 Generator
	201-3434-02	1	165 or 190mm Stack Length		231-0319	1	UC27 Generator
	201-3434-03	1	230, 285, 335, or 375mm Stack Length	29	508-0139	—	Seal, Edging – Bulk (Order by the Foot 3 Feet Required)
5			*♦ Rectifier Assembly (Includes Parts Marked #)	30			Cover, Stator – Top
	357-0091	1	Forward (With Positive Diode)		234-0936-01	1	<b>UC22 Generator</b>
	357-0092	1	Reverse (With Negative Diode)		234-0936-02	1	130 or 160mm Stack Length
6			*♦# Diode		234-0936-03	1	180 or 240mm Stack Length
	358-0135-01	3	Positive				300mm Stack Length
	358-0135-02	3	Negative		234-0937-01	1	<b>UC27 Generator</b>
7	800-3009	3	*♦# Screw, Cap – Hex Head (M4 x 35mm) (CR1,2,3,4,5,6)		234-0937-02	1	165 or 190mm Stack Length
8	860-2005	3	*♦# Nut, Hex (M4)		234-0937-03	1	230 or 285mm Stack Length
9	850-2004	3	*♦# Washer, Lock – Spring (M4)		234-0937-04	1	335mm Stack Length
10	526-2050	3	*♦# Washer, Flat (M4)	31			375mm Stack Length
11	870-2064-01	6	*♦ Nut, Locking – Nylon (M4)				Cover, Stator – Bottom
12	526-2050	6	*♦ Washer, Flat (M4)		232-3819-01	1	<b>UC22 Generator</b>
13			* Bearing, Ball		232-3819-02	1	130 or 160mm Stack Length
	510-0165	1	UC22 Generator		232-3819-03	1	180 or 240mm Stack Length
	510-0164	1	UC27 Generator				300mm Stack Length
14			* Ring, Exciter Retaining		232-3820-01	1	<b>UC27 Generator</b>
	518-0122	1	UC22 Generator		232-3820-02	1	165 or 190mm Stack Length
	518-0083	1	UC27 Generator		232-3820-03	1	230 or 285mm Stack Length
					232-3820-04	1	335mm Stack Length
							375mm Stack Length

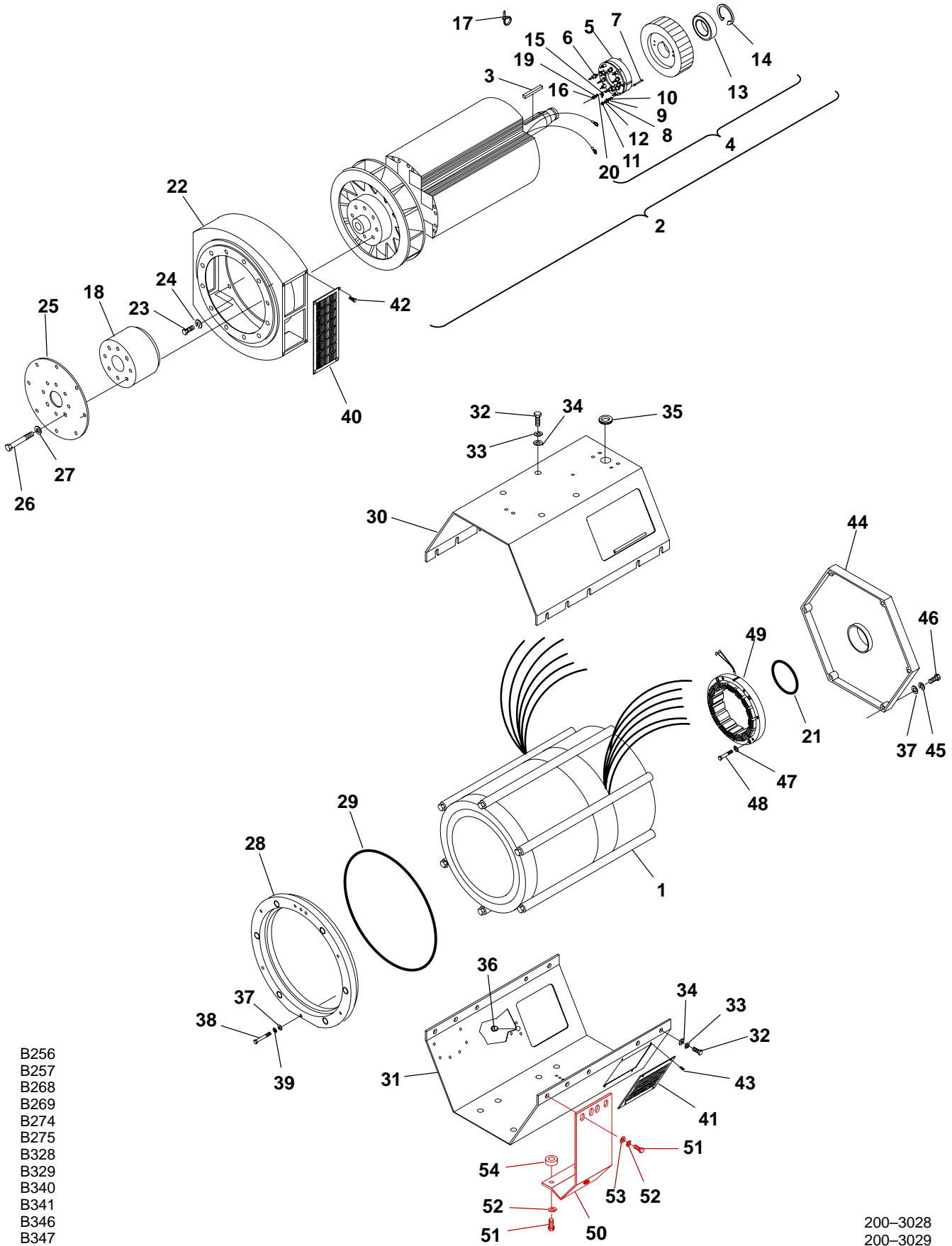
\* Parts Included in Generator Rotor Assemblies

♦ Parts Included in Exciter Rotor Assemblies

# Parts Included in Rectifier Assemblies

**Continued . . .**

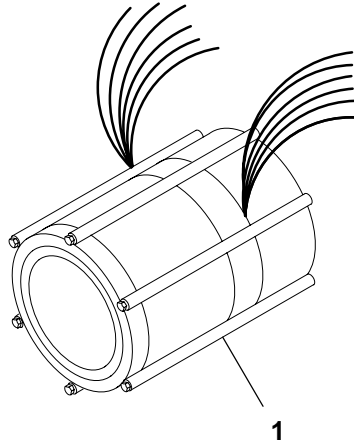
## Generator



## Generator

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
32			Screw, Cap – Hex Head M10 x 25mm (UC22 Generator)	45			Washer, Lock – Spring M8 (UC22 Generator)
	800-3017-37	8	130 or 160mm Stack Length		850-0114-54	6	M10 (UC27 Generator)
	800-3017-37	10	180, 240, or 300mm Stack Length	46	850-0114-55	6	Screw, Cap – Hex Head M8 x 25mm (UC22 Generator)
	800-3017-54	10	M12 x 30mm (UC27 Generator)		800-3017-20	6	M10 x 30mm (UC27 Generator)
33			Washer, Lock – Spring M10 (UC22 Generator)	47	850-2006	4	Washer, Lock – Spring (M6)
	850-0114-55	8	130 or 160mm Stack Length	48			Screw, Cap – Hex Head (M6) <b>UC22 Generator</b>
	850-0114-55	10	180, 240, or 300mm Stack Length		800-2039	4	130 or 160mm Stack Length
	850-0114-56	10	M12 (UC27 Generator)		800-2042	4	180, 240, or 300mm Stack Length
34			Washer, Flat M10 (UC22 Generator)		800-2042	4	<b>UC27 Generator</b> 165 or 190mm Stack Length
	526-0399-62	8	130 or 160mm Stack Length		800-2046	4	230, 285, 335, or 375mm Stack Length
	526-0399-62	10	180, 240, or 300mm Stack Length	49			Stator, Excitor <b>UC22 Generator</b>
	526-0399-64	10	M12 (UC27 Generator)		220-4293-04	1	130 or 160mm Stack Length
35	508-1057	1	Grommet		220-4293-05	1	180, 240, or 300mm Stack Length
36	517-0135	1	Plug, Hole				<b>UC27 Generator</b> 165 or 190mm Stack Length
37			Washer, Flat M8 (UC22 Generator)		220-4293-06	1	230, 285, 335, or 375mm Stack Length
	232-3441	12	M10 (UC27 Generator)	50			Bracket, Generator Mounting UC22 Generator
	526-0423	12	Screw, Cap – Hex Head M8 x 25mm (UC22 Generator)		232-3452	2	UC27 Generator
38	800-3017-20	6	M10 x 30mm (UC27 Generator)	51	232-3454	2	Screw, Cap – Hex head M10 (UC22 Generator)
	800-3017-38	6	Washer, Lock – Spring M8 (UC22 Generator)		800-3017-38	8	M12 (UC27 Generator)
39			M10 (UC27 Generator)	52	800-3017-55	8	Washer, Lock – Spring M10 (UC22 Generator)
	850-0114-54	6	Guard, Fan – Generator		850-1114-55	8	M12 (UC27 Generator)
	850-0114-55	6	UC22 Generator	53	850-1114-56	8	Washer, Flat M10 (UC22 Generator)
40	234-0863	2	UC27 Generator		526-0399-62	4	M12 (UC27 Generator)
	234-0867	2	Screen, Air Inlet		526-0399-64	4	Spacer, Mounting Foot
41			UC22 Generator	54			UC22 Generator
	234-0878	2	UC27 Generator		232-3730-03	4	UC27 Generator
	234-0879	2	Screw, Self-Locking – Hex Washer Head (M5 x 10mm)		232-3730-04	4	
42	821-6001-01	8	Screw, Self-Locking – Hex Washer Head (M5 x 12mm)	* Parts Included in Generator Rotor Assemblies			
43	821-6001-02	8	Bell, End	♦ Parts Included in Exciter Rotor Assemblies			
44			UC22 Generator	# Parts Included in Rectifier Assemblies			
	211-0422	1	UC27 Generator				
	211-0423	1					

## Generator Stator MCGBA, MCGCA



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220-4447  
220-4448

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
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1			Stator, Generator
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### MCGBA (UC22 Generator):

220-4447-02	1	<b>4 Lead</b> , Single Phase, Non-reconnectible 160mm Stack Length, 105 Deg C, 50 Hertz
220-4447-03	1	180mm Stack Length, 80 Deg C, 50 Hertz
220-4447-07	1	160mm Stack Length, 80 Deg C, 60 Hertz
220-4447-07	1	160mm Stack Length, 105 Deg C, 60 Hertz
		<b>12 Lead</b> , Single or Three Phase, Reconnectible, Broad Range
220-4447-11	1	130mm Stack Length, 105 Deg C, 50 Hertz
220-4447-11	1	130mm Stack Length, 105 Deg C, 60 Hertz
220-4447-12	1	160mm Stack Length, 80 Deg C, 50 Hertz
220-4447-12	1	160mm Stack Length, 80 Deg C, 60 Hertz
220-4447-14	1	240mm Stack Length, 80 Deg C, 50 Hertz
220-4447-14	1	240mm Stack Length, 105 Deg C, 50 Hertz
220-4447-14	1	240mm Stack Length, 105 Deg C, 60 Hertz
220-4447-15	1	300mm Stack Length, 80 Deg C, 60 Hertz

### MCGCA:

#### UC22 Generator

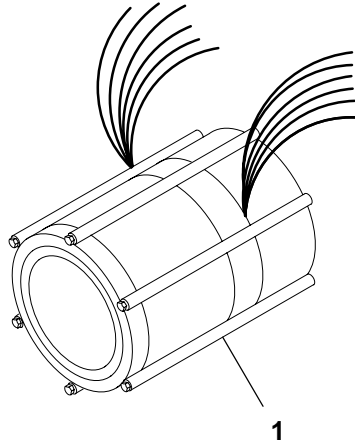
220-4447-03	1	<b>4 Lead</b> , Single Phase, Non-reconnectible 180mm Stack Length, 105 Deg C, 50 Hertz
220-4447-04	1	240mm Stack Length, 80 Deg C, 50 Hertz
220-4447-08	1	180mm Stack Length, 105 Deg C, 60 Hertz
220-4447-09	1	240mm Stack Length, 80 Deg C, 60 Hertz
		<b>12 Lead</b> , Single or Three Phase, Reconnectible, Broad Range
220-4447-13	1	180mm Stack Length, 105 Deg C, 50 Hertz
220-4447-13	1	180mm Stack Length, 105 Deg C, 60 Hertz
220-4447-14	1	240mm Stack Length, 80 Deg C, 50 Hertz
220-4447-14	1	240mm Stack Length, 80 Deg C, 60 Hertz
220-4447-15	1	300mm Stack Length, 105 Deg C, 50 Hertz
220-4447-15	1	300mm Stack Length, 105 Deg C, 60 Hertz

#### UC27 Generator

		<b>12 Lead</b> , Single or Three Phase, Reconnectible, Broad Range
220-4448-13	1	165mm Stack Length, 80 Deg, 50 Hertz
220-4448-13	1	165mm Stack Length, 80 Deg, 60 Hertz



## Generator Stator MCGDA, MCGDB



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220-4448

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
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1			Stator, Generator (UC27)
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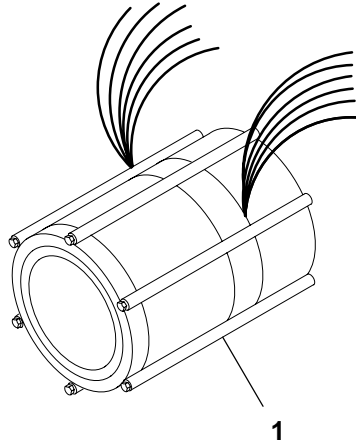
### MCGDA:

	<b>4 Lead, Single Phase, Non-reconnectible</b>
220-4448-02	190mm Stack Length, 105 Deg C, 50 Hertz
220-4448-03	230mm Stack Length, 80 Deg C, 50 Hertz
220-4448-07	165mm Stack Length, 105 Deg C, 60 Hertz
220-4448-08	190mm Stack Length, 80 Deg C, 60 Hertz
	<b>12 Lead, Single or Three Phase, Reconnectible, Broad Range</b>
220-4448-13	165mm Stack Length, 105 Deg C, 50 Hertz
220-4448-13	165mm Stack Length, 105 Deg C, 60 Hertz
220-4448-14	190mm Stack Length, 80 Deg C, 50 Hertz
220-4448-14	190mm Stack Length, 80 Deg C, 60 Hertz
220-4448-14	190mm Stack Length, 105 Deg C, 50 Hertz
220-4448-15	230mm Stack Length, 80 Deg C, 50 Hertz
220-4448-16	285mm Stack Length, 80 Deg C, 60 Hertz
220-4448-16	285mm Stack Length, 105 Deg C, 60 Hertz

### MCGDB:

	<b>4 Lead, Single Phase, Non-reconnectible</b>
220-4448-02	190mm Stack Length, 105 Deg C, 50 Hertz
220-4448-03	230mm Stack Length, 80 Deg C, 50 Hertz
220-4448-09	230mm Stack Length, 105 Deg C, 60 Hertz
220-4448-10	285mm Stack Length, 80 Deg C, 60 Hertz
	<b>12 Lead, Single or Three Phase, Reconnectible, Broad Range</b>
220-4448-14	190mm Stack Length, 80 Deg C, 50 Hertz
220-4448-14	190mm Stack Length, 105 Deg C, 50 Hertz
220-4448-14	190mm Stack Length, 105 Deg C, 60 Hertz
220-4448-15	230mm Stack Length, 80 Deg C, 50 Hertz
220-4448-15	230mm Stack Length, 80 Deg C, 60 Hertz
220-4448-15	230mm Stack Length, 105 Deg C, 50 Hertz
220-4448-18	375mm Stack Length, 80 Deg C, 60 Hertz
220-4448-18	375mm Stack Length, 105 Deg C, 60 Hertz

## Generator Stator MCGGA

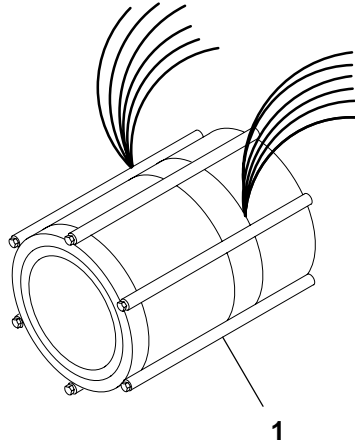


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220-4447  
220-4448

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1			Stator, Generator
			<b>UC22 Generator</b>
			<b>4 Lead</b> , Single Phase, Non-reconnectible
	220-4447-04	1	240mm Stack Length, 80 Deg C, 50 Hertz
	220-4447-04	1	240mm Stack Length, 105 Deg C, 50 Hertz
	220-4447-09	1	240mm Stack Length, 105 Deg C, 60 Hertz
	220-4447-10	1	300mm Stack Length, 80 Deg C, 60 Hertz
			<b>12 Lead</b> , Single or Three Phase, Reconnectible, Broad Range
	220-4447-14	1	240mm Stack Length, 80 Deg C, 50 Hertz
	220-4447-14	1	240mm Stack Length, 105 Deg C, 50 Hertz
	220-4447-14	1	240mm Stack Length, 105 Deg C, 60 Hertz
	220-4447-15	1	300mm Stack Length, 80 Deg C, 60 Hertz
			<b>UC27 Generator</b>
			<b>12 Lead</b> , Single or Three Phase, Reconnectible, Broad Range
	220-4448-14	1	190mm Stack Length, 80 Deg C, 50 Hertz
	220-4448-14	1	190mm Stack Length, 105 Deg C, 50 Hertz
	220-4448-14	1	190mm Stack Length, 105 Deg C, 60 Hertz
	220-4448-15	1	230mm Stack Length, 80 Deg C, 60 Hertz

## Generator Stator MDGDA, MDGDB



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220-4448

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
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1			Stator, Generator (UC27)
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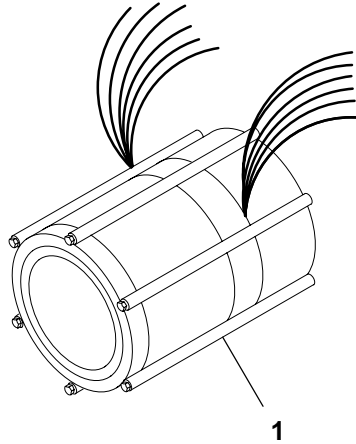
### MDGDA:

		<b>4 Lead</b> , Single Phase, Non-reconnectible
220-4448-02	1	190mm Stack Length, 105 Deg C, 50 Hertz
220-4448-03	1	230mm Stack Length, 80 Deg C, 50 Hertz
220-4448-07	1	165mm Stack Length, 105 Deg C, 60 Hertz
220-4448-08	1	190mm Stack Length, 80 Deg C, 60 Hertz
		<b>12 Lead</b> , Single or Three Phase, Reconnectible, Broad Range
220-4448-13	1	165mm Stack Length, 105 Deg C, 50 Hertz
220-4448-13	1	165mm Stack Length, 105 Deg C, 60 Hertz
220-4448-14	1	190mm Stack Length, 80 Deg C, 50 Hertz
220-4448-14	1	190mm Stack Length, 80 Deg C, 60 Hertz
220-4448-16	1	285mm Stack Length, 80 Deg C, 50 Hertz
220-4448-16	1	285mm Stack Length, 80 Deg C, 60 Hertz
220-4448-16	1	285mm Stack Length, 105 Deg C, 50 Hertz
220-4448-16	1	285mm Stack Length, 105 Deg C, 60 Hertz

### MDGDB:

		<b>4 Lead</b> , Single Phase, Non-reconnectible
220-4448-02	1	190mm Stack Length, 105 Deg C, 50 Hertz
220-4448-03	1	230mm Stack Length, 80 Deg C, 50 Hertz
220-4448-09	1	230mm Stack Length, 105 Deg C, 60 Hertz
220-4448-10	1	285mm Stack Length, 80 Deg C, 60 Hertz
		<b>12 Lead</b> , Single or Three Phase, Reconnectible, Broad Range
220-4448-14	1	190mm Stack Length, 105 Deg C, 50 Hertz
220-4448-14	1	190mm Stack Length, 105 Deg C, 60 Hertz
220-4448-15	1	230mm Stack Length, 80 Deg C, 50 Hertz
220-4448-15	1	230mm Stack Length, 80 Deg C, 60 Hertz
220-4448-17	1	335mm Stack Length, 105 Deg C, 50 Hertz
220-4448-18	1	375mm Stack Length, 80 Deg C, 50 Hertz
220-4448-18	1	375mm Stack Length, 80 Deg C, 60 Hertz
220-4448-18	1	375mm Stack Length, 105 Deg C, 60 Hertz

## Generator Stator MDGDC, MDGDD



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1

Stator, Generator

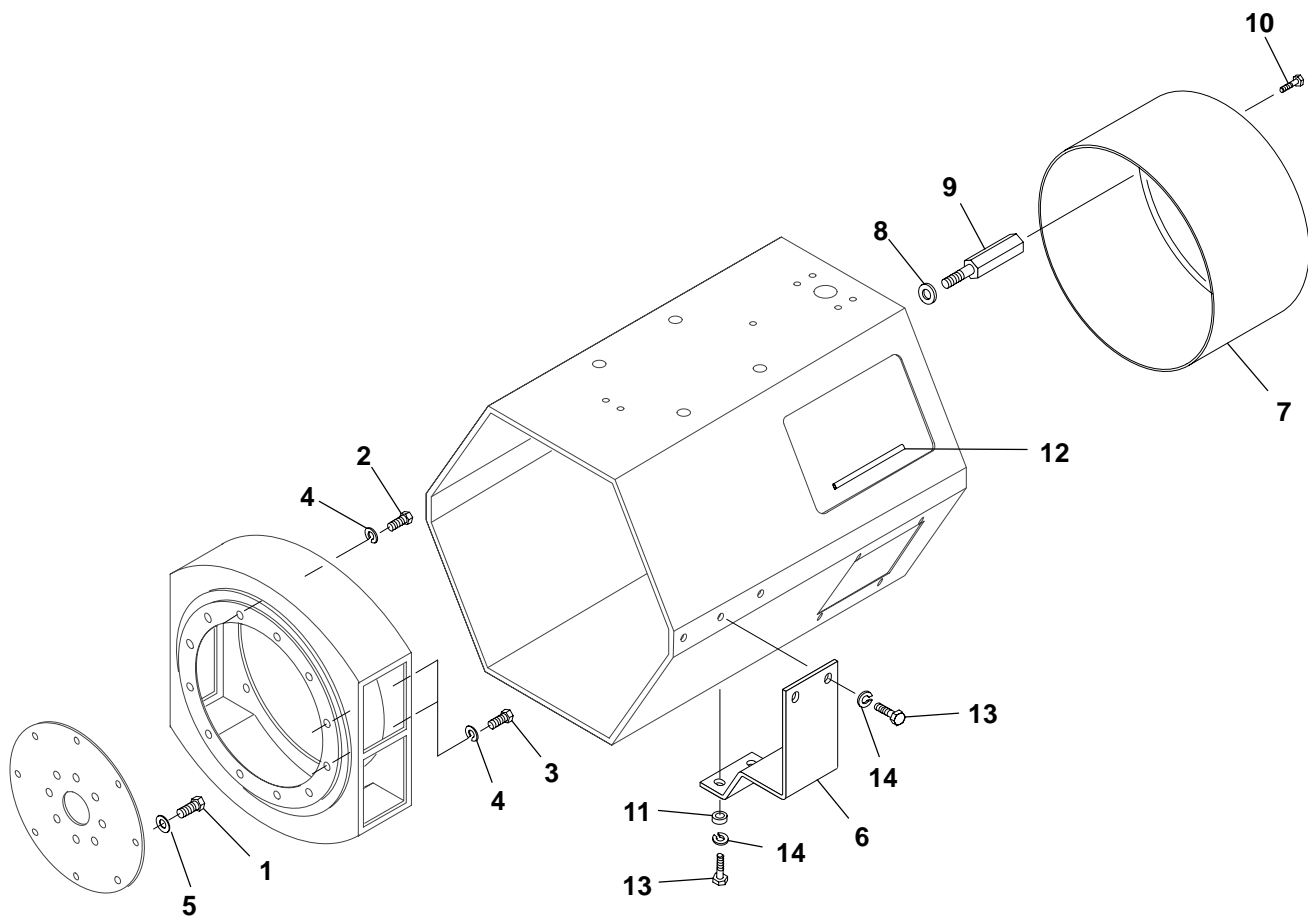
### MDGDC:

		<b>UC22 Generator</b>
		<b>4 Lead</b> , Single Phase, Non-reconnectible
220-4447-04	1	240mm Stack Length, 80 Deg C, 50 Hertz
220-4447-04	1	240mm Stack Length, 105 Deg C, 50 Hertz
220-4447-09	1	240mm Stack Length, 105 Deg C, 60 Hertz
220-4447-10	1	300mm Stack Length, 80 Deg C, 60 Hertz
		<b>12 Lead</b> , Single or Three Phase, Reconnectible, Broad Range
220-4447-14	1	240mm Stack Length, 80 Deg C, 50 Hertz
220-4447-14	1	240mm Stack Length, 105 Deg C, 50 Hertz
220-4447-14	1	240mm Stack Length, 105 Deg C, 60 Hertz
220-4447-15	1	300mm Stack Length, 80 Deg C, 60 Hertz
		<b>UC27 Generator</b>
		<b>12 Lead</b> , Single or Three Phase, Reconnectible, Broad Range
220-4448-14	1	190mm Stack Length, 80 Deg C, 50 Hertz
220-4448-14	1	190mm Stack Length, 105 Deg C, 50 Hertz
220-4448-14	1	190mm Stack Length, 105 Deg C, 60 Hertz
220-4448-15	1	230mm Stack Length, 80 Deg C, 60 Hertz

### MDGDD:

		<b>UC27 Generator</b>
		<b>4 Lead</b> , Single Phase, Non-reconnectible
220-4448-02	1	190mm Stack Length, 105 Deg C, 50 Hertz
220-4448-03	1	230mm Stack Length, 80 Deg C, 50 Hertz
220-4448-07	1	165mm Stack Length, 105 Deg C, 60 Hertz
220-4448-08	1	190mm Stack Length, 80 Deg C, 60 Hertz
		<b>12 Lead</b> , Single or Three Phase, Reconnectible, Broad Range
220-4448-13	1	165mm Stack Length, 105 Deg C, 50 Hertz
220-4448-13	1	165mm Stack Length, 105 Deg C, 60 Hertz
220-4448-14	1	190mm Stack Length, 80 Deg C, 50 Hertz
220-4448-14	1	190mm Stack Length, 80 Deg C, 60 Hertz
220-4448-14	1	190mm Stack Length, 105 Deg C, 50 Hertz
220-4448-15	1	230mm Stack Length, 80 Deg C, 50 Hertz
220-4448-16	1	285mm Stack Length, 80 Deg C, 60 Hertz
220-4448-16	1	285mm Stack Length, 105 Deg C, 60 Hertz

## Generator Mounting

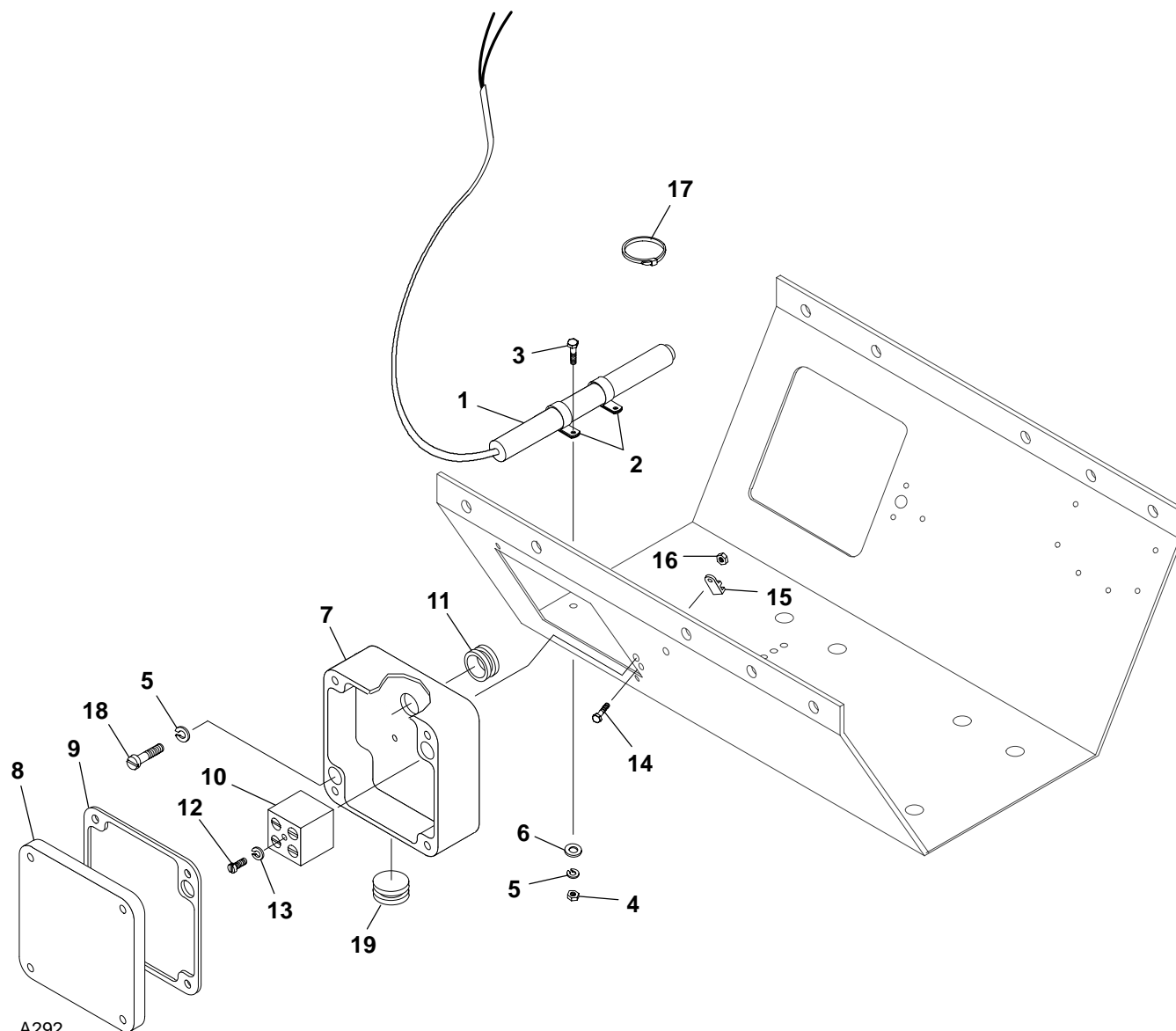


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539-1229  
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539-1231

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	805-0018	8	Bolt, Place (3/8-16 x 1")	7	234-0875-01	1	Cover, End Bell
2			Screw, Cap – Hex Head	8	526-2080	8	Washer, Flat (M6)
	800-2088	8	M10 x 35mm – UC22	9	232-3462-01	4	Spacer, Cover
			Generator	10	821-2020	4	Screw, Lock (M5 x 10mm)
	800-2088	12	M10 x 35mm – UC27	11			Spacer, Mounting Foot
			Generator		232-3730-03	4	UC22 Generator
3	800-2090	4	Screw, Cap – Hex Head		232-3730-04	4	UC27 Generator
			(M10 x 45mm) (UC22	12	508-0305-02	–	Edging – Bulk (Order by the
			Generator)				Foot – 5 Feet Required)
4	850-2010	12	Washer, Lock – Spring (M10)	13			Screw, Cap – Hex Head
5	526-0174	8	Washer, Flat (3/8")		800-2088	8	M10 x 35mm – UC22
6			Bracket, Generator Mounting				Generator
	403-2958-01	2	UC22 Generator		800-2112	8	M12 x 30mm – UC27
			UC27 Generator				Generator
	403-3119	2	MCGBA, MCGCA,	14			Washer, Lock – Spring
			MDGDC		850-2010	8	M10 – UC22 Generator
	403-3120	2	MCGDA, MCGDB,		850-2012	8	M12 – UC27 Generator
			MCGGA, MDGDA,				
			MDGDB, MDGDC,				
			MDGDD				

## Generator Heater

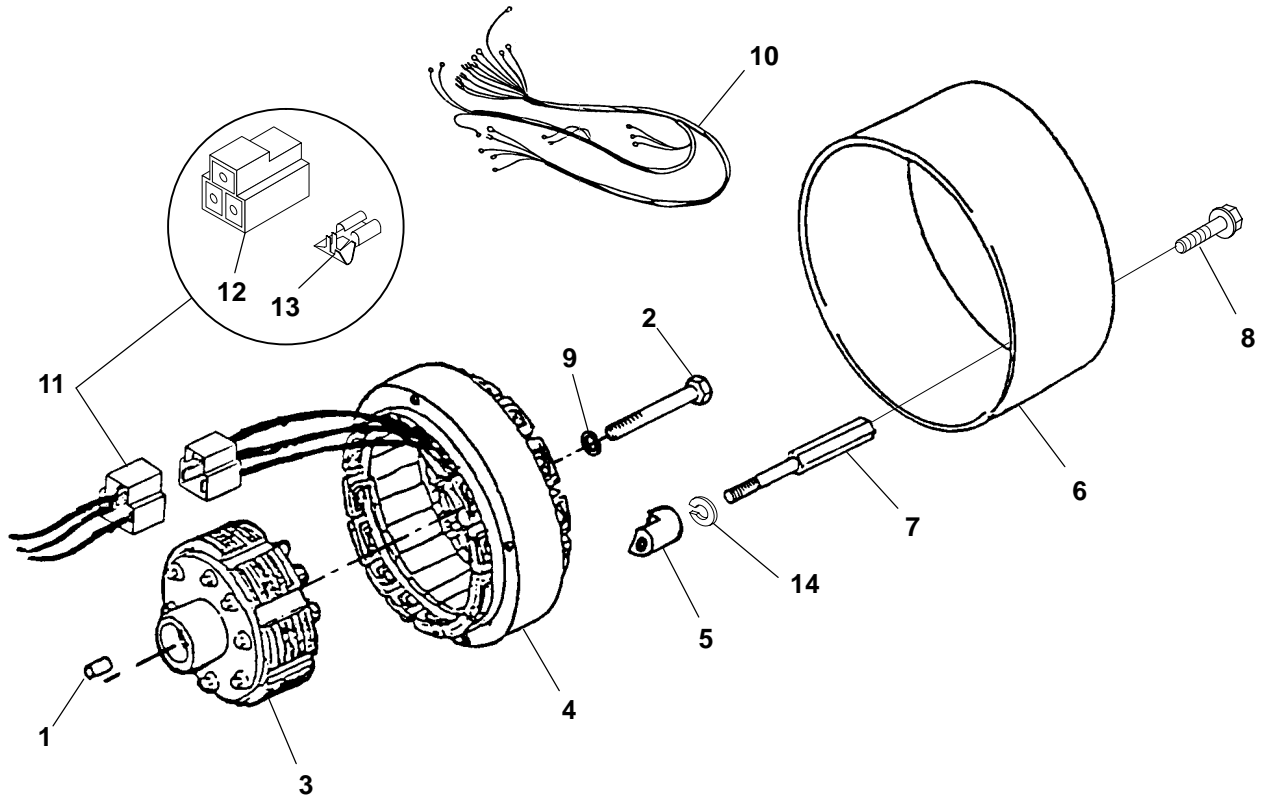


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179-2286-01/02

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	333-0438-07	1	Cartridge, Heater	9	330-0141-04	1	Gasket, Terminal Box
	333-0438-08	1	110-125 Volts	10	332-3023	1	Block, Terminal
2	332-3024-11	2	220-260 Volts	11	508-0228	1	Grommet
3	822-3075	6	Clamp, Loop	12	822-3047	1	Screw, Pan Head (M3 x 20)
4	860-2005	2	Screw, Pan Head (M4 x 16)	13	850-2003	1	Washer, Lock (M3)
			Nut, Hex – Steel Machine (M4)	14	800-3034	1	Screw, Cap – Hex Head (M4 x 12mm)
5	850-2004	4	Washer, Lock – Spring (M4)	15	332-3228	1	Mount, Cable Tie
6	526-2050	2	Washer, Flat (M4)	16	870-2064-01	1	Nut, Nyloc
7	330-0142	1	Box, Terminal – Heater (Includes Cover and Gasket [Ref. No. 8 and 9])	17	332-1389	1	Tie, Cable
8	330-0141-03	1	Cover, Terminal Box	18	815-0792-04	2	Screw, Pan – Crescent Head (M4 x 12mm)
				19	517-0021	1	Plug, Dot Button

## Permanent Magnet Exciter

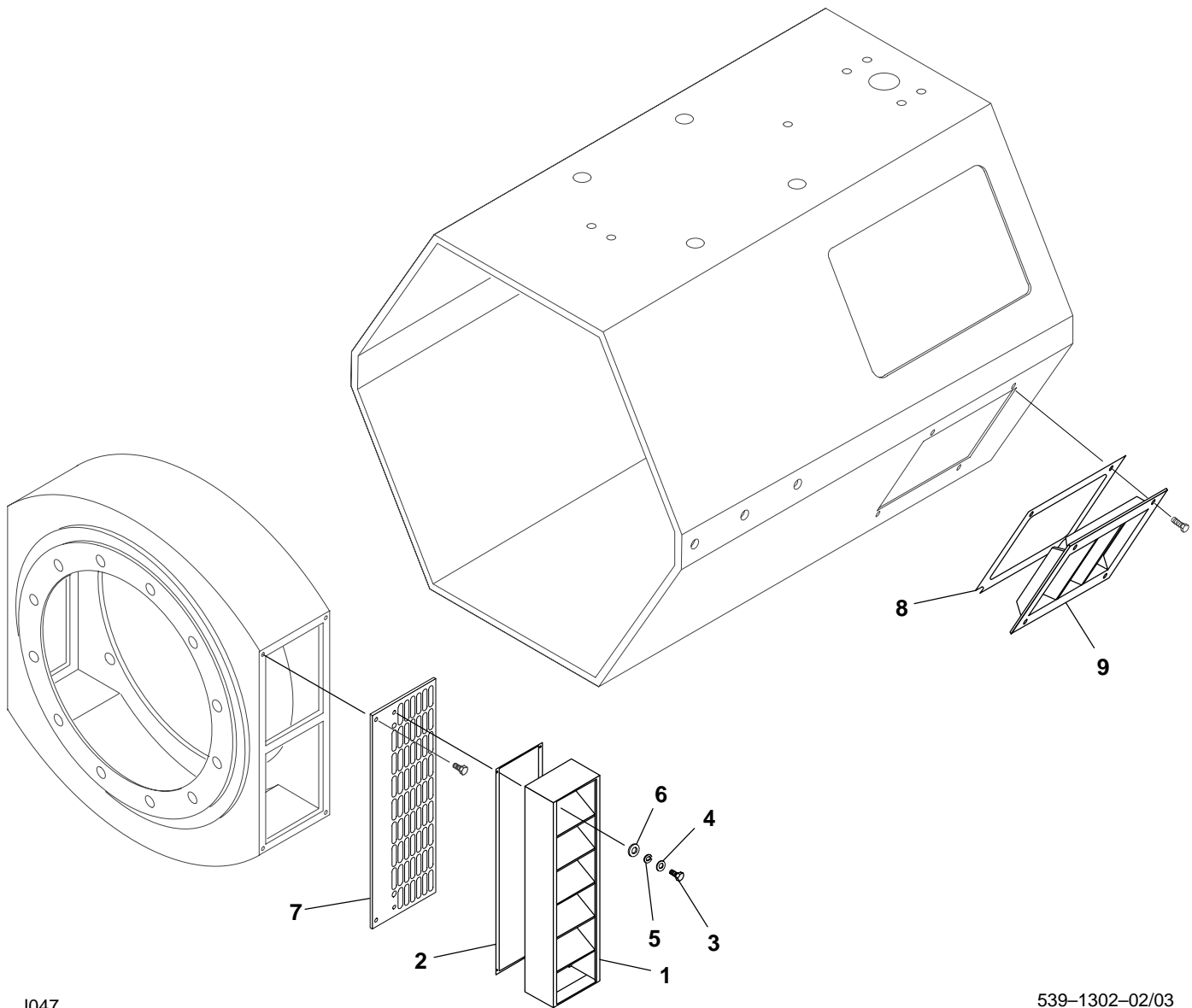


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200-1286

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	775-0049	1	Pin, Dowel	10	338-3149	1	Harness, Wiring (AUX-P2, P3, P4 to VR21-P2, P3, P4) (40" Long, 3 Wires)
2	815-0761-01	1	Bolt, Hex Head (M10 x 90mm)	11	338-3265	1	Harness, Wiring (P2, P3, P4 to P2, P3, P4) (30" Long, 3 Wires) (Includes Terminal Housing and Receptacle Terminal [Ref. No. 12 and 13])
3	201-3446	1	Rotor	12	332-3021	1	Housing, Terminal
4	220-4233	1	Stator	13	332-3124	3	Terminal, Receptacle
5	232-3972	4	Clamp	14	850-2006	4	Washer, Lock - Spring (M6)
6	234-0875-02	1	Cover, End Bell				
7	232-3462-03	4	Spacer				
8	821-6001-01	4	Screw, Self-Locking - Hex Washer Head (M5 x 10mm)				
9	850-2010	1	Washer, Lock - Spring (M10)				

## Louver



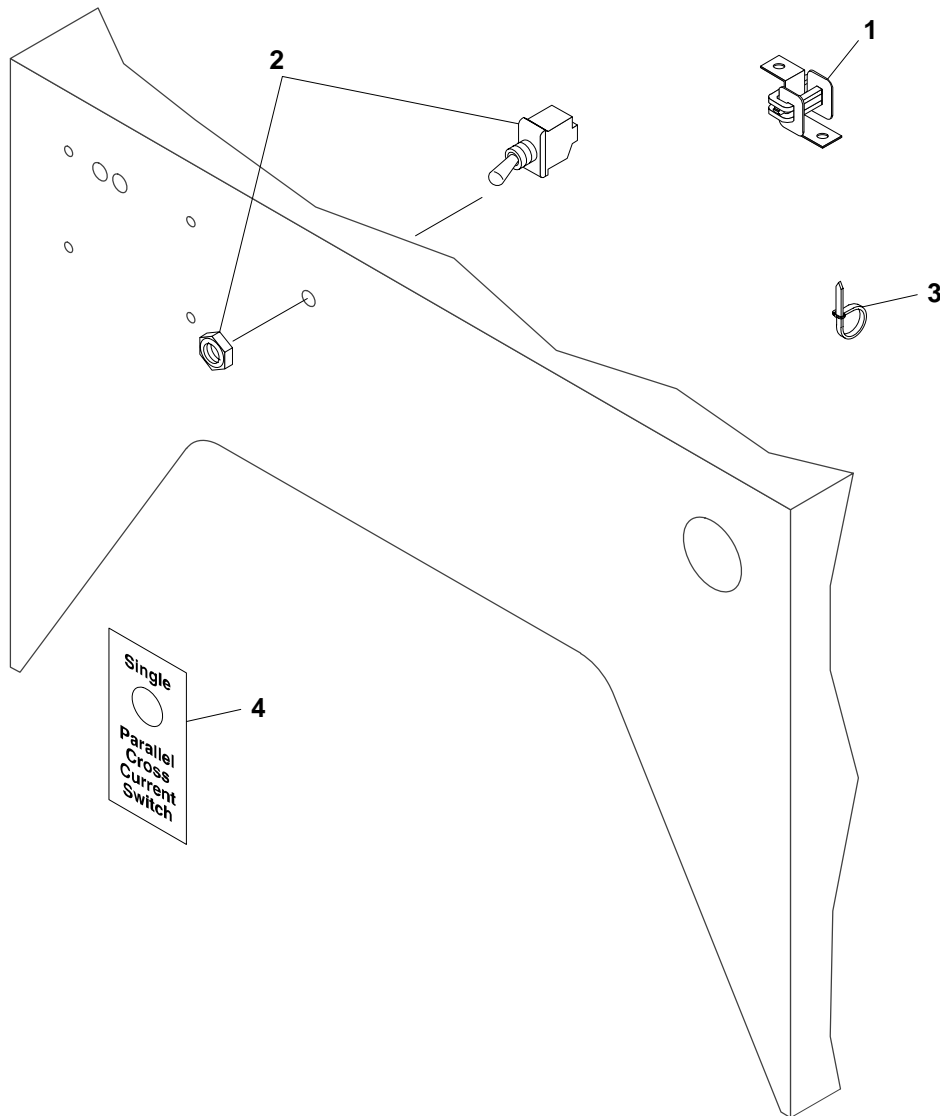
J047

539-1302-02/03

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1			Louver	5	850-2005	8	Washer, Lock – Spring (M5)
	234-0922-01	2	UC22 Generator	6	526-0021	8	Washer, Flat (M6)
	234-0922-02	2	UC27 Generator	7	234-0958-02	2	Guard, Fan (UC22 Generator)
2			Gasket	8	234-0963	2	Gasket, Automatic Voltage Regulator
	234-0923-01	2	UC22 Generator	9			Louver, Inlet
	234-0923-02	2	UC27 Generator		234-0964	2	UC22 Generator
3	800-2008	8	Screw, Cap – Hex Head (M5 x 16mm)		234-0965	2	UC27 Generator
4	526-2060	8	Washer, Flat (M5)				



## Crosscurrent

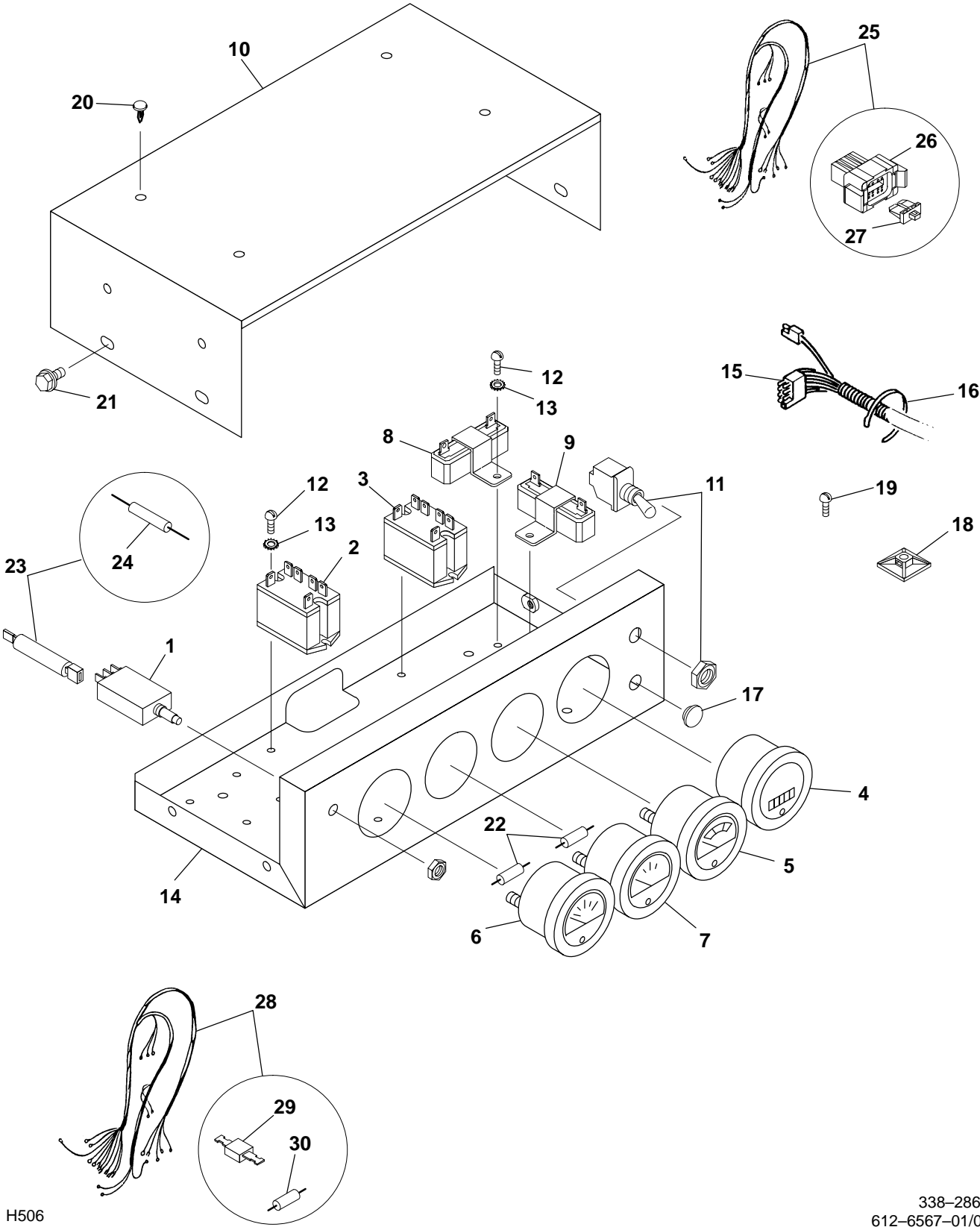


K611

300-4040-00/-01/02

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	302-1852-06	1	Transformer, Current Generator Frame 3, Current = 400:0.32 – MCGCA, MCGDA, MCGDB, MCGGA, MDGDA, MDGDB, MDGDC, MDGDD	2	308-0069	1	Switch, Toggle – Crosscurrent (S22)
	302-1852-05	1	Generator Frame 2, Current = 200:0.32 – MCGCA, MCGGA, MDGDC	3	332-0942	1	Tie, Cable (Used As Required)
	302-2017	1	Generator Frame 2, Current = 60:0.36 – MCGBA, MCGCA	4	098-2313	1	Label, Cross Current

DC Control – Standard



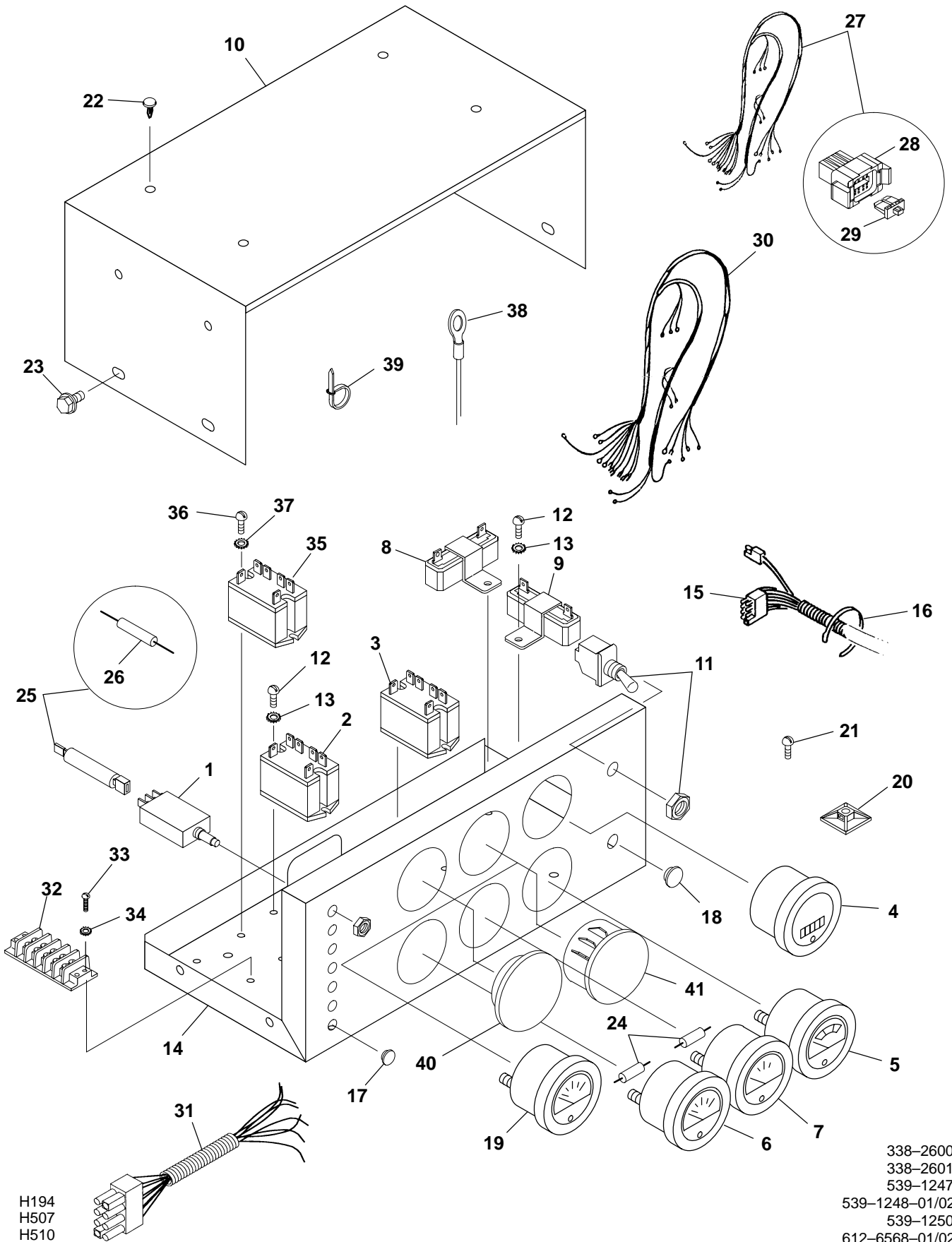
H506

338-2869  
612-6567-01/02

## DC Control – Standard

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	320-1706-01	1	Breaker, Circuit (Fault) (CB115)	14	319-1059	1	Box, Control
2			Relay, Crank (K104)	15	338-2602	1	Harness, DC Control (P1, P4)
	307-2677-04	1	12 Volt	16	332-1445	1	Tie, Cable (Use As Required)
	307-2677-01	1	24 Volt	17	517-0132	8	Plug
3			Relay, Run (K105)	18	332-2420	3	Mount, Cable Tie
	307-2677-04	1	12 Volt	19	812-0148	2	Screw, Round Head Machine (1/4-20 x 1/2")
	307-2677-01	1	24 Volt	20	517-0290	8	Plug
4	302-1836	1	Hourmeter (M119)	21	800-0707	4	Screw, Cres Cap – Hex Head (1/4-20 x 1/2")
5			Voltmeter, DC (M121)	22	193-0250	2	Resistor, 24 Volt (R124 and R127)
	302-1641	1	12 Volt	23	226-4704	7	Lead (Includes Resistor [Ref. No. 24])
	302-1642	1	24 Volt	24	304-0815	1	Resistor, Power (3 Ohm, 5 Watt) (R115)
6	193-0466	1	Gauge, Oil Pressure (M124)	25	338-3425	1	Harness, Remote Panel (J3) (Includes Receptacle and Wedge [Ref. No. 26 and 27])
7	193-0351	1	Gauge, Water Temperature (M127)	26	323-1542	1	Receptacle (8 Pin) (J3)
8			Resistor, Wirewound (R104)	27	323-1544	1	Wedge, Receptacle (8 Pin)
	353-0094-05	1	12 Volt, 12 Ohm	28	338-2869	1	Harness, Engine (J1, J4) – 4/6 Cylinder (Includes Diode and Fuse [Ref. No. 29 and 30])
	353-0094-01	1	24 Volt, 50 Ohm	29	357-0030	1	Diode (CR1)
9			Resistor, Wirewound (R105)	30	321-0113	1	Fuse, 30 Amp (F101)
	353-0094-05	1	12 Volt, 12 Ohm				
	353-0094-01	1	24 Volt, 50 Ohm				
10	319-1062	1	Cover, Control				
11	308-0950	1	Switch, Toggle – Start/Run/ Stop (S103)				
12	812-0076	7	Screw, Round Head Machine (#8-32 x 5/16")				
13	853-0005	7	Washer, Lock – W/ET (#8)				

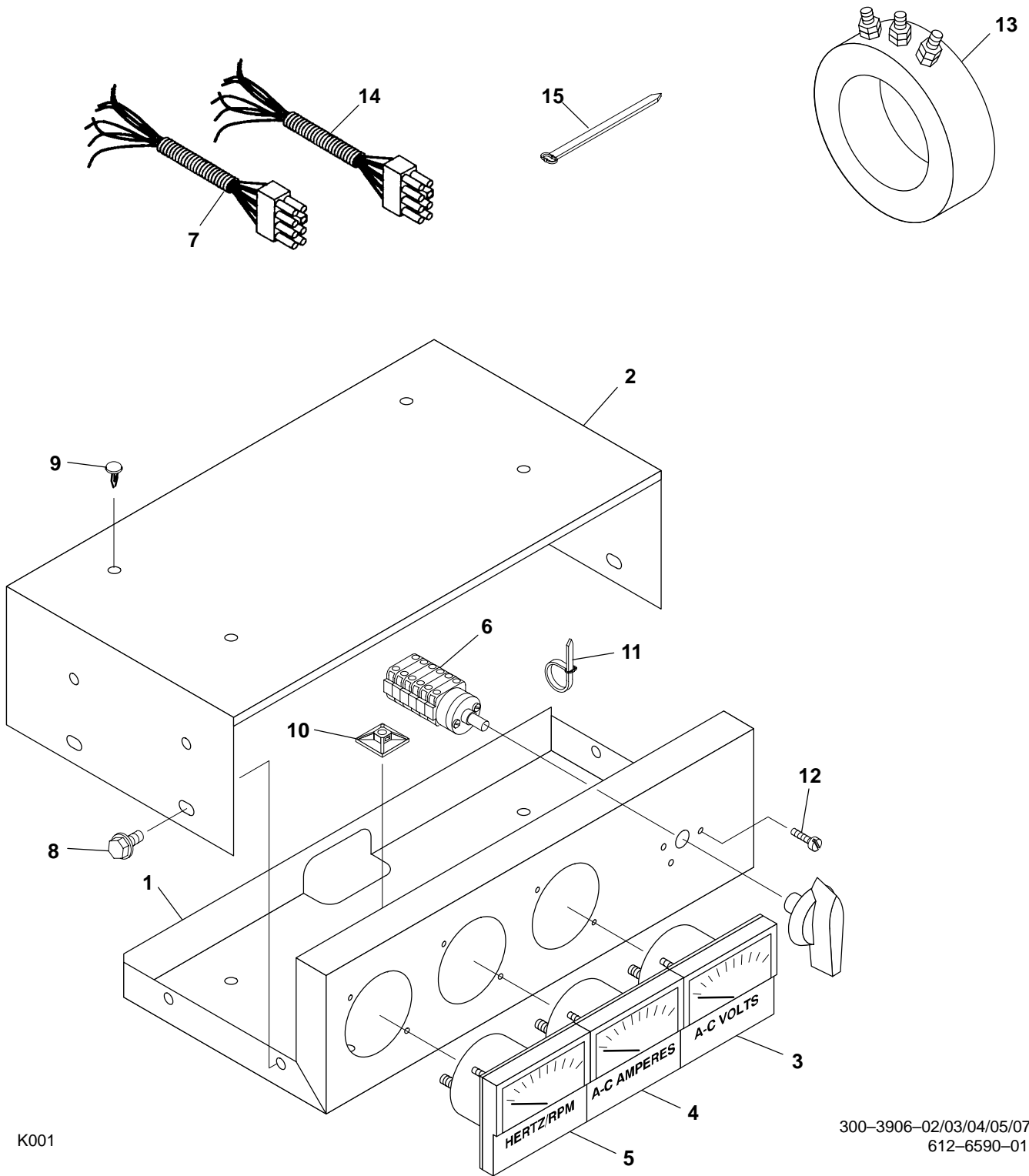
## DC Control – Optional



## DC Control – Optional

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	320-1706-01		Breaker, Circuit –	21	812-0148	2	Screw, Round Head Machine (1/4-20 x 1/2")
		1	Fault (OS) (CB115) (Gray)	22	517-0290	8	Plug
		1	Sea Water Flow (CB114) (Aqua)	23	800-0707	4	Screw, Cres Cap – Hex Head (1/4-20 x 1/2")
		1	High Exhaust Temperature (CB113) (Purple)	24	193-0250	2	Resistor, 24 Volt (R124 and R127)
		1	Low Oil Level (CB112) (Brown)	25	226-4704	7	Lead (Includes Resistor [Ref. No. 26])
		1	Low Coolant Level (CB111) (Pink)	26	304-0815	7	Resistor, Power (3 Ohm, 5 Watt) (R115)
		1	Heater (CB110) (Blue)	27	338-3425	1	Harness, Remote Panel (J3) (Includes Receptacle and Wedge [Ref. No. 28 and 29])
		1	Low Oil Pressure (CB109) (Light Brown)				
2			Relay, Crank (K104)	28	323-1542	1	Receptacle (8 Pin) (J3)
	307-2677-04	1	12 Volt	29	323-1544	1	Wedge, Receptacle (8 Pin)
	307-2677-01	1	24 Volt	30			Harness, Engine (P2)
3			Relay, Run (K105)		338-2600	1	MCGBA, MCGCA – 4 Cylinder
	307-2677-04	1	12 Volt		338-2601	1	MCGDA, MCGDB, MCGGA
	307-2677-01	1	24 Volt				MDGDA, MDGDB, MDGDC, MDGDD – 6 Cylinder
4	302-1836	1	Hourmeter (M119)				
5			Voltmeter, DC (M120)				
	302-1641	1	12 Volt				
	302-1642	1	24 Volt				
6	193-0466	1	Gauge, Oil Pressure (M122)	31	338-2603	1	Harness, Options (CB115-2 to TB110-1 and J2 to M129-S, M131-S, TB110-2,4,5,6,7,8)
7	193-0351	1	Gauge, Water Temperature (M125)				
8			Resistor, Wirewound (R104)	32	332-3066	1	Block, Terminal (TB110)
	353-0094-05	1	12 Volt, 12 Ohm	33	812-0081	2	Screw, Machine, Round Head (#8-32 x 5/8")
	353-0094-01	1	24 Volt, 50 Ohm				
9			Resistor, Wirewound (R105)	34	853-0005	2	Washer, Lock W/ET (#8)
	353-0094-05	1	12 Volt, 12 Ohm	35			Relay, Alarm (K109)
	353-0094-01	1	24 Volt, 50 Ohm		307-2727-02	1	12 Volt
10	319-1061	1	Cover, Control		307-2727-03	1	24 Volt
11	308-0950	1	Switch, Toggle – Start/Run/Stop (S103)	36	812-0076	2	Screw, Machine – Round Head (#8-32 x 5/16")
12	812-0076	7	Screw, Machine – Round Head (#8-32 x 5/16")	37	853-0005	2	Washer, Lock W/ET (#8)
13	853-0005	7	Washer, Lock – W/ET (#8)	38			Lead, Alarm Relay
14	319-1058	1	Box, Control		226-4152-01	1	K105-3 to K109-2 and K109-2 to K109-3
15	338-2602	1	Harness, DC Control (P1, P4)		226-4152-02	1	K109-5 to K109-4 and K109-4 to K105-4
16	332-1445	1	Tie, Cable (Use As Required)		226-4152-03	1	K109-6 to CB115-3
17	517-0131	6	Plug				
18	517-0132	1	Plug	39	332-0941	1	Tie, Cable (Use As Required)
19	302-1723	2	Ammeter (Blank Scale) (M129, M131)	40	517-0301	1	Plug
20	332-2420	2	Mount, Cable Tie	41	517-0340	1	Plug, Dome

# AC Control Panel



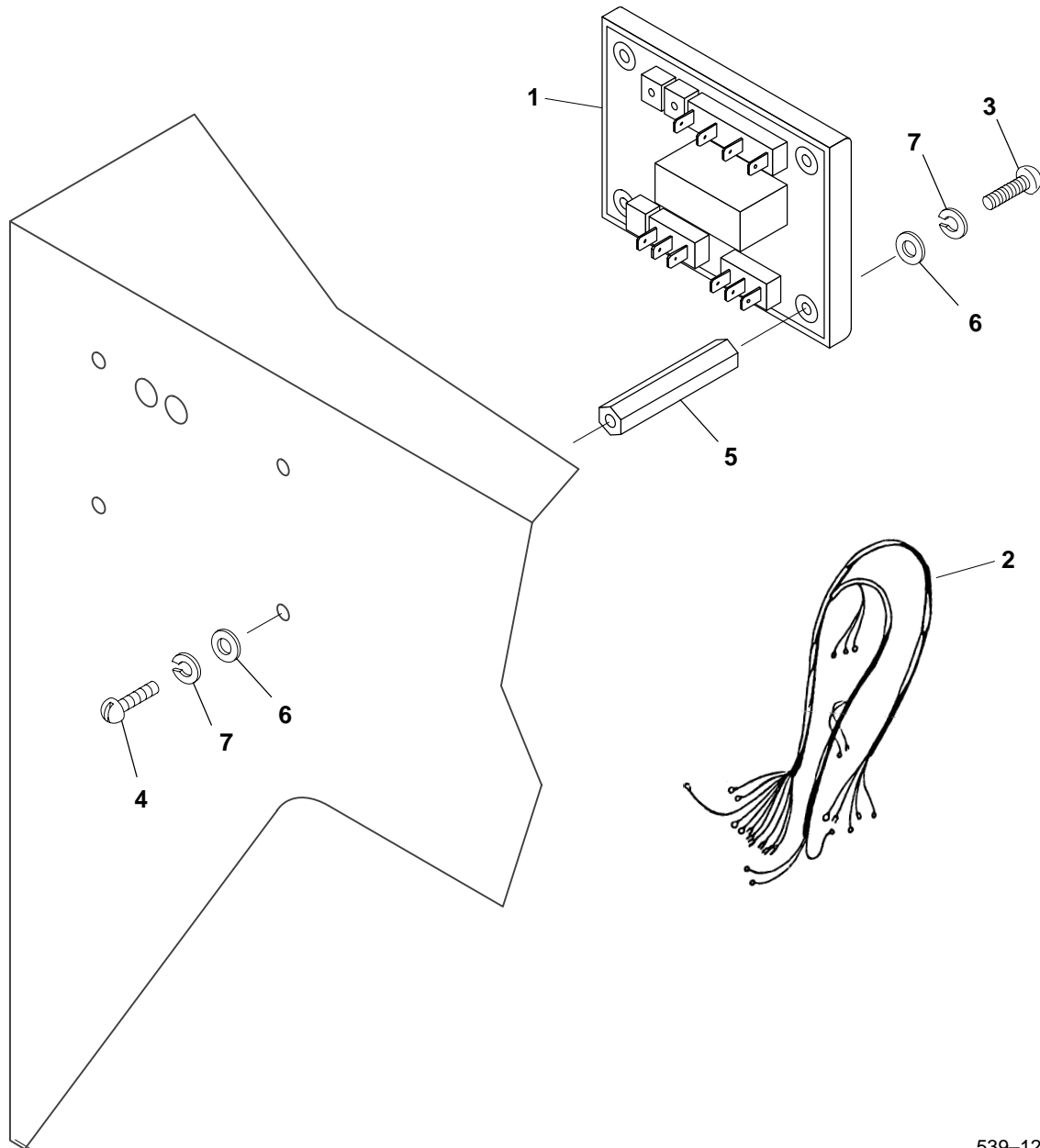
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300-3906-02/03/04/05/07  
612-6590-01

## AC Control Panel

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	319-1060	1	Panel, AC Control	10	332-2420	1	Mount, Cable Tie
2	319-1062-01	1	Cover, Control	11	332-0941	1	Tie, Cable (Used with AC Control Harness)
3	302-1148	1	Voltmeter, AC (M21)	12	815-0875-02	3	Screw, Machine – Pan Head (M4 x 8mm)
4			Ammeter (M22)	13			Transformer, Current
	302-1147	1	Scale = 0-75, 0-150 (MCGBA)		302-1794-01		0-75 (1-2), 0-150 (1-3) (MCGBA)
	302-1683	1	Scale = 0-100, 0-200 (MCGCA)		302-1794-02		0-100 (1-2), 0-200 (1-3) (MCGCA)
	302-1684	1	Scale = 0-150, 0-300 (MCGBA, MCGDA, MCGGA, MDGDA, MDGDC, MDGDD)		302-1794-03		0-150 (1-2), 0-300 (1-3) (MCGBA, MCGDA, MCGGA, MDGDA, MDGDC, MDGDD)
	302-1685	1	Scale = 0-200, 0-400 (MCGCA, MCGDB, MCGGA, MDGDB, MDGDC)		302-1794-04		0-200 (1-2), 0-400 (1-3) (MCGCA, MCGDB, MCGGA, MDGDB, MDGDC)
	302-1725	1	Scale = 0-375, 0-750 (MCGDA, MCGDB, MDGDA, MDGDB, MDGDD)		302-1794-07		0-375 (1-2), 0-750 (1-3) (MCGDA, MCGDB, MDGDA, MDGDB, MDGDD)
5	302-1968	1	Meter, Frequency (M23)	14	338-2695	1	Harness, AC Generator (J5)
6	308-1052	1	Switch, Rotary (Volt and Ammeter) (S21)	15	332-1389	1	Tie, Cable (Use as Required – Used with AC Generator Harness)
7	338-2693	1	Harness, AC Control (P5)				
8	800-0707	4	Screw, Cres Cap – Hex head (1/4-20 x 1/2")				
9	517-0290	8	Plug, Hole				

## Electronic Overspeed



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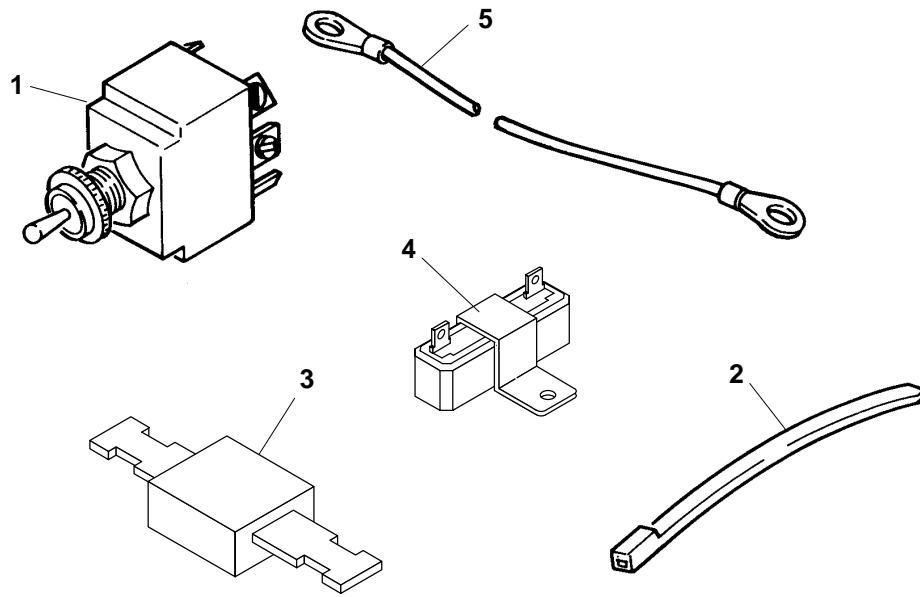
539-1246-01/02

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	305-0902-01	1	Module, Frequency 12 Volt
	305-0902-02	1	24 Volt
2	338-2642	1	Harness, Overspeed
3	813-0108	4	Screw, Steel Machine – Round Head (10-32 x 1-1/2")

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
4	813-0097	4	Screw, Steel Machine – Round Head (10-32 x 5/16")
5	870-0493	4	Spacer, Threaded Hex
6	526-0008	8	Washer, Flat (#10)
7	850-0030	8	Washer, Lock – Spring (#10)



## Fault Bypass

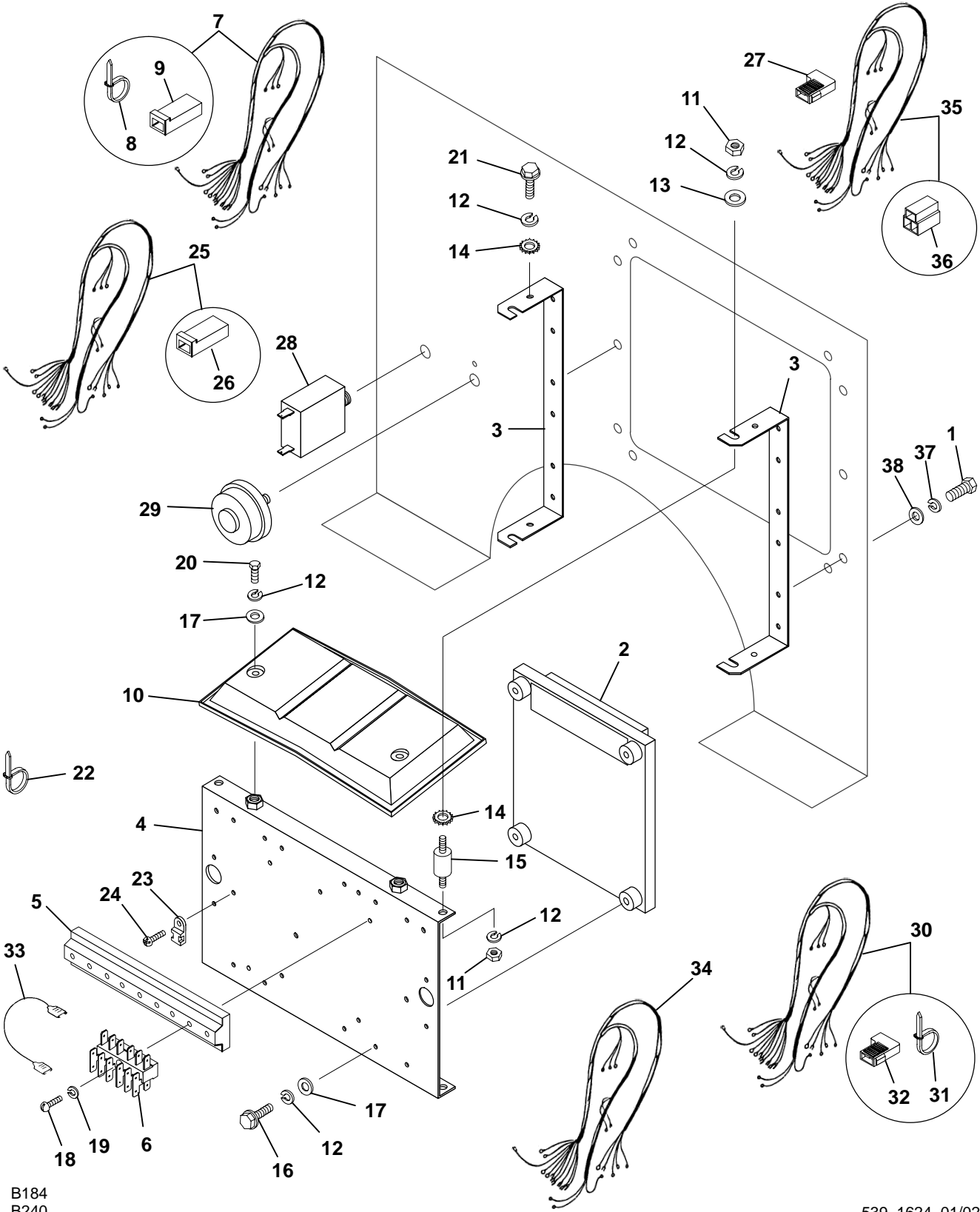


K838

539-1251-00/-01

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	308-0951	1	Switch, Toggle (Fault Override) (S117)	5			Lead, Fault Bypass
2	332-1445	1	Tie, Cable (Use as Required)		226-4154-01	1	S117-1 to CB115-3 (15") and S117-1 to R117-1 (6")
3	357-0030	1	Rectifier, Silicon (CR108)		226-4154-02	1	S117-2 to M121-I (11")
4			Resistor		226-4154-03	1	S117-3 to K105-4 (15") and K105-4 to CR108-1 (2")
	353-0094-05	1	12 Volt		226-4154-04	1	R117-2 to R105-2 (6")
	353-0094-01	1	24 Volt				

# Automatic Voltage Regulator MCGBA, MCGCA



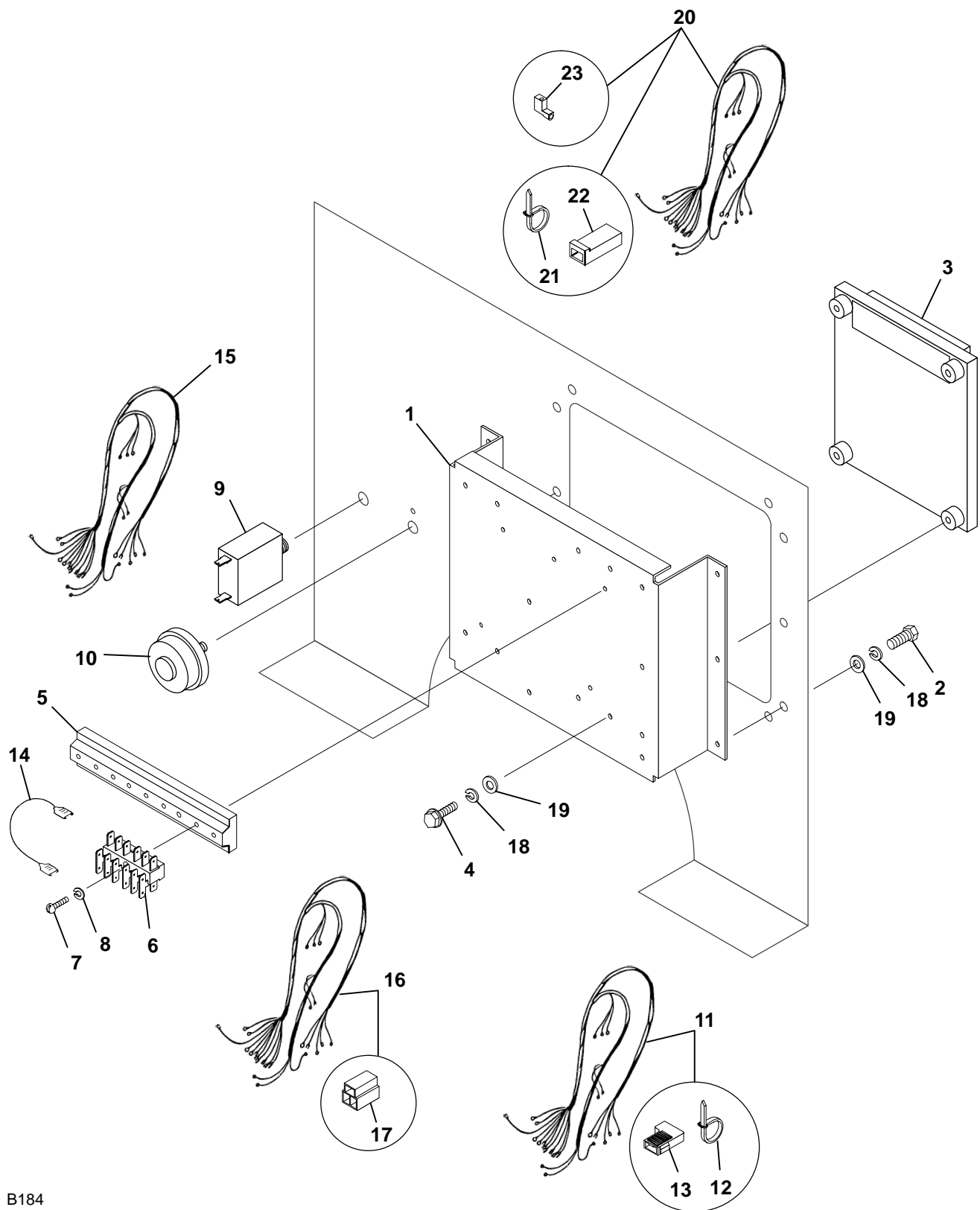
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B240

539-1624-01/02

# Automatic Voltage Regulator MCGBA, MCGCA

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	815-0793-03	6	Screw, Self-Locking – Hex Washer Head (M5 x 12mm)	21	815-0793-03	2	Screw, Self-Locking – Hex Washer Head (M5 x 12mm)
2			Regulator, Voltage (VR21)	22	332-0942	3	Tie, Cable – Self-Locking
	305-0824	1	Standard Generator (SX440)	23	332-3228	2	Mount, Cable Tie
	305-0823	1	Generator with Permanent Magnetic Exciter (MX321)	24	815-0792-02	2	Screw, Pan – Crescent Head (M4 x 8mm)
3	232-3686	2	Bracket, Automatic Voltage Regulator	25	338-2679	1	Harness, Wiring (Includes Receptacle Housing [Ref. No. 26]) (VR21-6,7,8, 1,2, X+, XX–, P2,3,4, K1,2 E0,E1 to TB1-6,7,8,1,2, X+, XX–, P2,3,4, K1,2, 7,8) (Used with MX321 Voltage Regulator)
4	232-3687	1	Plate, Mounting – Automatic Voltage Regulator	26	332-0819	14	Connector, Housing
5	232-3536	1	Base, Terminal Block	27	332-3123	3	Housing, Terminal (Used with Generator with Permanent Magnetic Exciter) (Installed Over 90 Deg Terminals of PMG Wiring Harness [Ref. No. 35])
6			Block, Terminal (TB1)	28	320-1688-01	1	Breaker, Circuit (Without Auxiliary Contacts)
	332-3007	3	Standard Generator	29			Potentiometer
	332-3007	1	Generator with Permanent Magnetic Exciter		303-0261	1	Standard Generator
7	338-2549	1	Harness, Wiring (Includes Cable Tie and Receptacle Housing Connectors [Ref. No. 8 and 9]) (VR21-1,2,3, P2,3,4, X+, XX– to TB1-1,2,3, P2,3,4, X+, XX–) (8 Wire – 4-1/2") (Used with SX440 Voltage Regulator)		303-0285-01	1	Generator with Permanent Magnetic Exciter
8	332-1445	1	Tie, Cable	30	338-2548	1	Harness, Wiring (Includes Cable Ties and Receptacle Housing [Ref. No. 31 and 32]) (Generator Main Terminal Block 6,7,8 to TB1-6,7,8) (3 Wire – 26")
9	332-0819	8	Connector, Housing	31	332-1445	1	Tie, Cable (Use as Required)
			Receptacle	32	332-3123	3	Housing, Receptacle
10	232-3688	1	Cover, Automatic Voltage Regulator	33	226-4162	2	Lead, Circuit Breaker (Used with Standard Generator)
11	860-2006	8	Nut, Hex (M5)	34	338-2609	1	Harness, Wiring – Circuit Breaker (Aux-K1,2, Aux 1,2 to CB21-1,2, R21-1,2) (4 Wire – 19")
12			Washer, Lock – Spring (M5)	35	338-2547	1	Harness, Wiring (Generator with Permanent Magnetic Exciter) (Includes Terminal Housing [Ref. No. 36]) (Aux-P2,3,4 to P2,3,4) (3 Wire – 40")
	850-2005	16	Standard Generator	36	332-3021	1	Housing, Terminal
	850-2005	18	Generator with Permanent Magnetic Exciter	37	850-2005	6	Washer, Lock – Spring (M5)
13	526-0179	4	Washer, Flat	38	526-2060	6	Washer, Flat (M5)
14	853-2005	6	Washer, Lock – ET (M5)				
15	402-0652	4	Mount, Vibration				
16			Screw, Self-Locking – Hex Head (M5 x 30mm)				
	815-0793-07	4	Standard Generator				
	815-0793-07	6	Generator with Permanent Magnetic Exciter				
17			Washer, Flat (M5)				
	526-2060	6	Standard Generator				
	526-2060	8	Generator with Permanent Magnetic Exciter				
18	815-0792-08	3	Screw, Pan Head – Cross-Recessed (M4 x 30mm)				
19	850-2004	3	Washer, Lock – Spring (M4)				
20	718-1009	2	Screw, Cap – Hex Head (M5 x 30mm)				

**Automatic Voltage Regulator  
MCGDA, MCGDB, MCGGA, MDGDA,  
MDGDB, MDGDC, MDGDD**



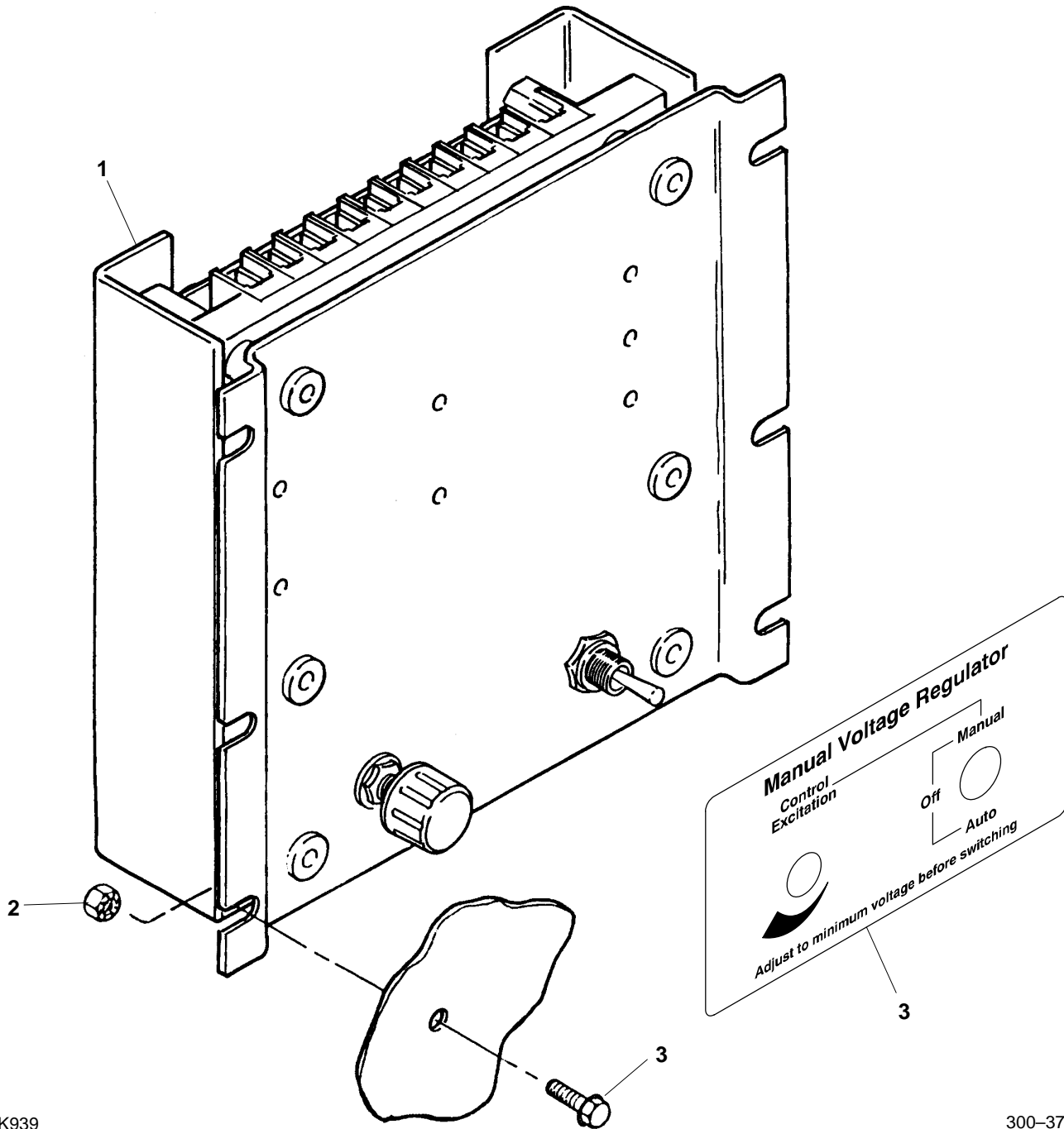
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539-1253-01/02

**Automatic Voltage Regulator  
MCGDA, MCGDB, MCGGA, MDGDA,  
MDGDB, MDGDC, MDGDD**

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	305-0848-01	1	Bracket, Automatic Voltage Regulator	16	338-2547	1	Harness, Wiring – Permanent Magnetic Exciter Generator (Includes Terminal Housing [Ref. No. 17]) (Aux-P2,3,4 to P2,3,4) (3 Wire – 40")
2	815-0793-03	6	Screw, Self-Locking – Hex Washer Head (M5 x 12mm)				Housing, Terminal
3			Regulator, Voltage (VR21)	17	332-3021	1	Washer, Lock – Spring (M5)
	305-0824	1	Standard Generator (SX440)	18	850-2005	10	Washer, Flat (M5)
	305-0823	1	Generator with Permanent Magnetic Exciter (MX321)	19	526-2060	10	Harness, Wiring
4	815-0793-07	6	Screw, Self-Locking – Hex Head (M5 x 30mm)	20			Standard Generator (Includes Cable Tie and Receptacle Housing Connectors [Ref. No. 21 and 22]) (VR21-1,2,3, P2,3,4, X+, XX– to TB1-1,2,3, P2,3,4, X+, XX–) (8 Wire – 4–1/2") (Used with SX440 Voltage Regulator)
5	232-3536	1	Base, Terminal Block		338-2549	1	Generator with Permanent Magnetic Exciter (Includes Receptacle Terminal [Ref. No. 23]) (VR21-1,2,6,7,8, X+, XX–, P2,3,4 to TB1-1,2, 6,7,8, X+, XX–, P2,3,4) (Used With MX321 Voltage Regulator)
6	332-3007	3	Block, Terminal (TB1)				Tie, Cable
7	815-0792-08	3	Screw, Pan Head – Cross-Recessed (M4 x 30mm)				Connector, Housing
8	850-2004	3	Washer, Lock – Spring (M4)				Receptacle
9	320-1688-01	1	Breaker, Circuit (Without Auxiliary Contacts)				Terminal, Receptacle
10			Potentiometer				
	303-0261	1	Standard Generator				
	303-0285-01	1	Generator with Permanent Magnetic Exciter		338-2608	1	
11	338-2548	1	Harness, Wiring (Includes Cable Ties and Receptacle Housing [Ref. No. 12 and 13])				
12	332-1445	1	Tie, Cable (Use as Required)				
13	332-3123	3	Housing, Receptacle				
14			Lead, Circuit Breaker				
	226-4162	2	Standard Generator	21	332-1445	1	
	226-4162	4	Generator with Permanent Magnetic Exciter	22	332-0819	8	
15	338-2609	1	Harness, Wiring – Circuit Breaker (Aux-K1,2, Aux 1,2 to CB21-1,2, R21-1,2) (4 Wire – 19")	23	332-2572	1	

## Manual Voltage Regulator

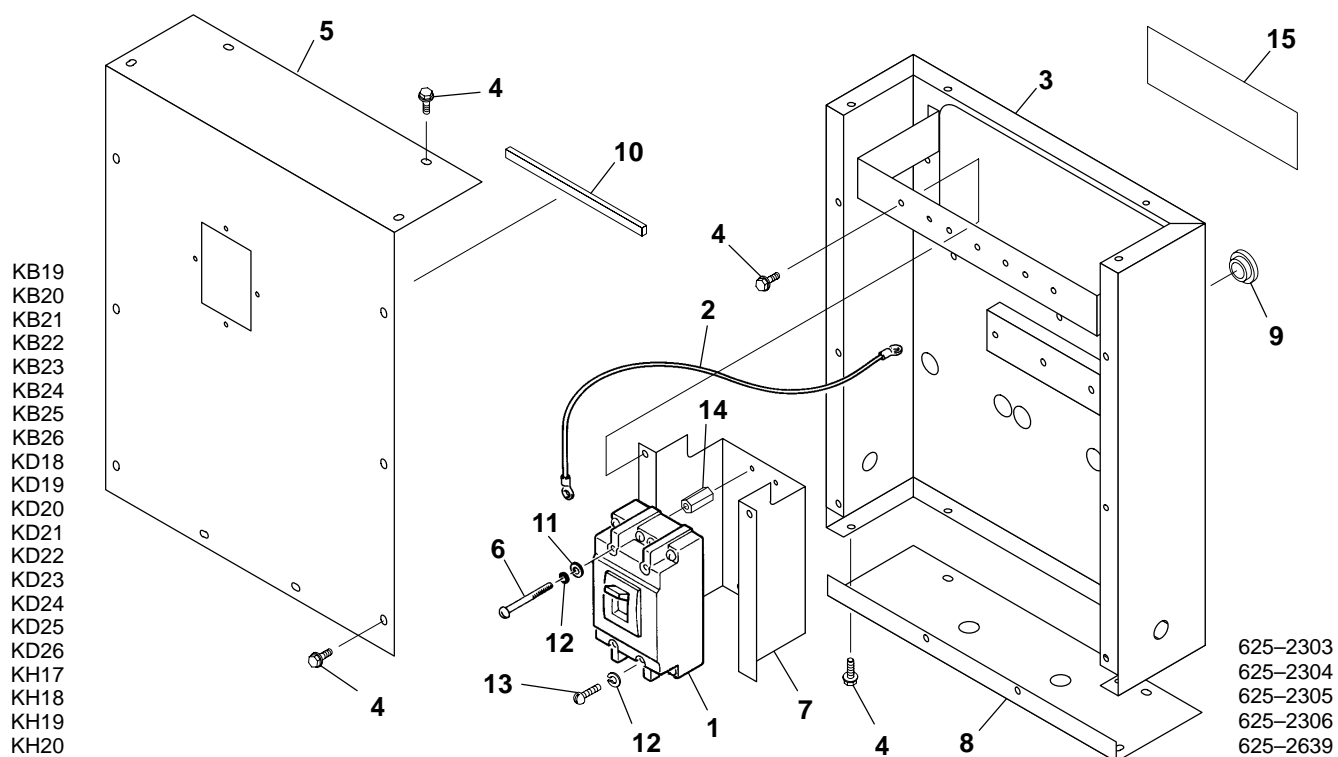


K939

300-3712

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	305-0817	1	Regulator, Voltage – Manual (Model MVR-1)	4	098-6149	1	Decal, Manual Voltage Regulator
2	870-0131	4	Nut, Hex – W/ET (10-32)				
3	821-0005	4	Screw, Self-Locking – Hex Washer Head (10-32 x 1/2")				

## Circuit Breaker



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1		1	Breaker, Circuit (See Tables on Pages 102 and 103)	7	319-1076	1	Bracket, Circuit Breaker (Used on Circuit Breakers with 70 – 225 Amps)
2			Lead, Circuit Breaker (Use As Required)	8	319-1075	1	Cover, Bottom
			<b>All Except MCGBA and MCGCA with 70 Amps</b>	9	517-0289	6	Plug
	226-1587	1	33" Long, Marked "L0"	10	895-0305-03	1	Foam (200mm Long)
	226-3455-01	1	17" Long, Marked "L1"	11			Washer, Flat
	226-3455-02	1	17" Long, Marked "L2"		526-0048	2	2 Pole, 125 – 225 Amp (#8)
	226-3455-03	1	17" Long, Marked "L3"		526-0048	4	3 Pole, 125 – 225 Amp (240 Volt) (#8)
			<b>MCGBA and MCGCA with 70 Amps</b>		740-1004	2	3 Pole, 125 – 175 Amp (600 Volt) and 250 – 400 Amp
	226-3456-01	1	17" Long, Marked "L1"	12			Washer, Lock – Spring
	226-3456-02	1	17" Long, Marked "L2"		850-0025	2	2 Pole, 125 – 225 Amp (#8)
	226-3456-03	1	17" Long, Marked "L3"		850-0025	4	3 Pole, 70 – 225 Amp (240 Volt) (#8)
	226-3505-02	1	30" Long, Marked "L0"		850-0040	4	3 Pole, 125 – 175 Amp (600 Volt) and 250 – 400 Amp (1/4")
3	319-1080	1	Box, Circuit Breaker	13	812-0164	2	Screw, Machine – Round Head (1/2-20 x 4-1/4") (250 – 400 Amp and 125 – 175 Amp, 3 Pole, 600 Volt Circuit Breakers)
4			Screw, Self-Locking – Hex Washer Head (1/4-20 x 1/2")	14	862-0025	2	Nut, Coupling (1/4-20 x 7/8") (250 – 400 Amp and 125 – 175 Amp, 3 Pole, 600 Volt Circuit Breakers)
	821-0010	28	70 – 225 Amp	15	091-0002	1	Strip, Copper (Used for wrapping ends of leads before securing to circuit breakers) (Use as Required)
	821-0010	24	250 – 400 Amp				
5			Cover, Front				
	319-1647-02	1	70 – 100 Amp				
	319-1074-01	1	125 – 225 Amp				
	319-1072-01	1	250 – 400 Amp				
6			Screw, Round Head Machine 1/4-20 x 4-1/4"				
	812-0092	2	2 Pole, 125 – 225 Amp				
	812-0092	4	3 Pole, 125 – 225 Amp (240 Volt)				
	812-0157	2	3 Pole, 125 – 175 Amp (600 Volt) and 250 – 400 Amp				
	812-0093	4	8-32 x 3", 3 Pole, 70 – 100 Amp				

## Circuit Breaker

### 2 POLE – 240 VOLT

AMPS	CIRCUIT BREAKER PART NUMBER				MODELS USED ON
	STANDARD	WITH AUXILIARY CONTACTS	WITH 12 VOLT DC SHUNT TRIP	WITH 24 VOLT DC SHUNT TRIP	
150	320-1555-02	320-1556-02	320-1557-02	320-1557-12	MCGBA
175	320-1555-03	320-1556-03	320-1557-03	320-1557-13	MCGBA, MCGCA
200	320-1555-04	320-1556-04	320-1557-04	320-1557-14	MCGBA, MCGCA, MCGGA, MDGDC
225	320-1555-05	320-1556-05	320-1557-05	320-1557-15	MCGBA, MCGCA, MCGGA, MDGDC
250	320-1555-11	320-1556-11	320-1557-51	320-1557-59	MCGCA, MCGGA, MDGDC
300	320-1555-12	320-1556-12	320-1557-52	320-1557-60	MCGCA, MCGDA, MCGGA, MDGDA, MDGDC, MDGDD
350	320-1555-13	320-1556-13	320-1557-53	320-1557-61	MCGDA, MCGGA, MDGDA, MDGDC, MDGDD
400	320-1555-14	320-1556-14	320-1557-54	320-1557-62	MCGDA, MCGDB, MDGDA, MDGDB, MDGDD

### 3 POLE – 240 VOLT

AMPS	CIRCUIT BREAKER PART NUMBER				MODELS USED ON
	STANDARD	WITH AUXILIARY CONTACTS	WITH 12 VOLT SHUNT TRIP	WITH 24 VOLT SHUNT TRIP	
125	320-1555-06	320-1556-06	320-1557-06	320-1557-16	MCGBA, MCGCA, MCGGA, MDGDC
150	320-1555-07	320-1556-07	320-1557-07	320-1557-17	MCGBA, MCGCA, MCGGA, MDGDC
175	320-1555-08	320-1556-08	320-1557-08	320-1557-18	MCGCA, MCGDA, MCGGA, MDGDA, MDGDC, MDGDD
200	320-1555-09	320-1556-09	320-1557-09	320-1557-19	MCGDA, MCGDB, MCGGA, MDGDA, MDGDB, MDGDC, MDGDD
225	320-1555-10	320-1556-10	320-1557-10	320-1557-20	MCGDA, MCGDB, MCGGA, MDGDA, MDGDB, MDGDC
250	320-1555-15	320-1556-15	320-1557-55	320-1557-63	MCGDA, MCGDB, MDGDA, MDGDB, MDGDD
300	320-1555-16	320-1556-16	320-1557-56	320-1557-64	MCGDA, MCGDB, MDGDA, MDGDB, MDGDD
350	320-1555-17	320-1556-17	320-1557-57	320-1557-65	MCGDB, MDGDB
400	320-1555-18	320-1556-18	320-1557-58	320-1557-66	MCGDB, MDGDB

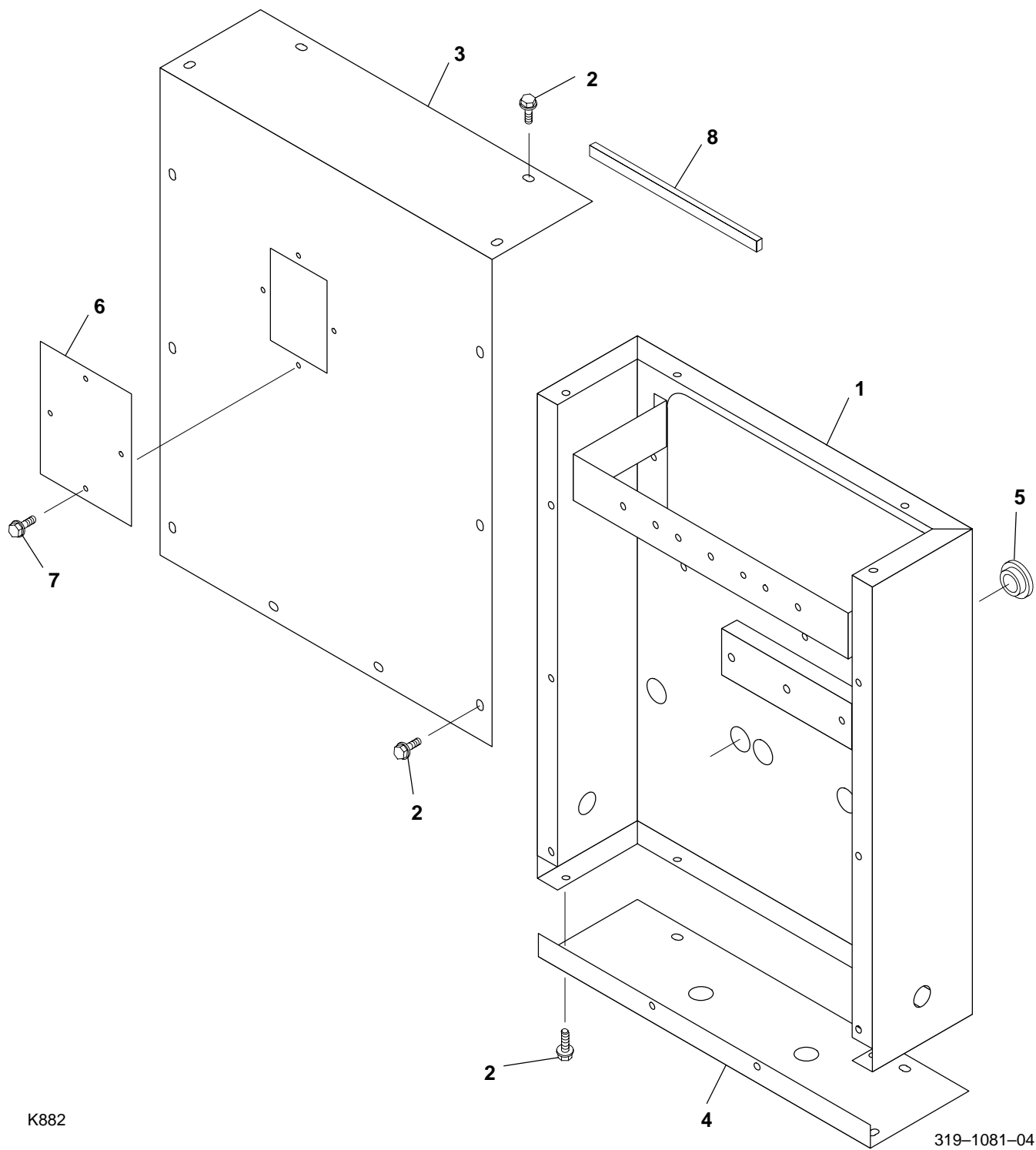


## Circuit Breaker

### 3 POLE – 600 VOLT

AMPS	CIRCUIT BREAKER PART NUMBER				MODELS USED ON
	STANDARD	WITH AUXILIARY CONTACTS	WITH 12 VOLT SHUNT TRIP	WITH 24 VOLT SHUNT TRIP	
70	320-1458-42	—	—	—	MCGBA
80	320-1458-43	—	—	—	MCGCA
100	320-1458-45	—	—	—	MCGGA, MDGDC
125	320-1460-01	—	—	—	MCGDA, MDGDD
150	320-1460-02	—	—	—	MCGDB, MDGDA
175	320-1460-03	—	—	—	MDGDB

Entrance Box



K882

319-1081-04

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	319-1080	1	Box, Entrance	5	517-0289	6	Plug
2	821-0010	24	Screw, Self-Locking – Hex Washer Head (1/4-20 x 1/2")	6	319-1867-02	1	Cover, Circuit Breaker
3	319-1072-02	1	Cover, Circuit Breaker – Front	7	821-0005	4	Screw, Self-Locking – Hex Head (10-32 x 1/2")
4	319-1075	1	Cover, Circuit Breaker – Bottom	8	895-0305-03	1	Foam (200mm Long)

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