










**Processes**

-  MIG (GMAW) Welding
-  Flux Cored (FCAW)
-  Stick (SMAW) Welding
-  TIG (GTAW) Welding
-  Pulse TIG (GTAW) Welding
-  Air Plasma Cutting and Gouging with Spectrum® Unit
-  Air Carbon Arc (CAC-A) Cutting and Gouging

**Description**



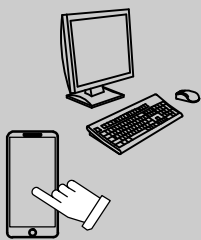
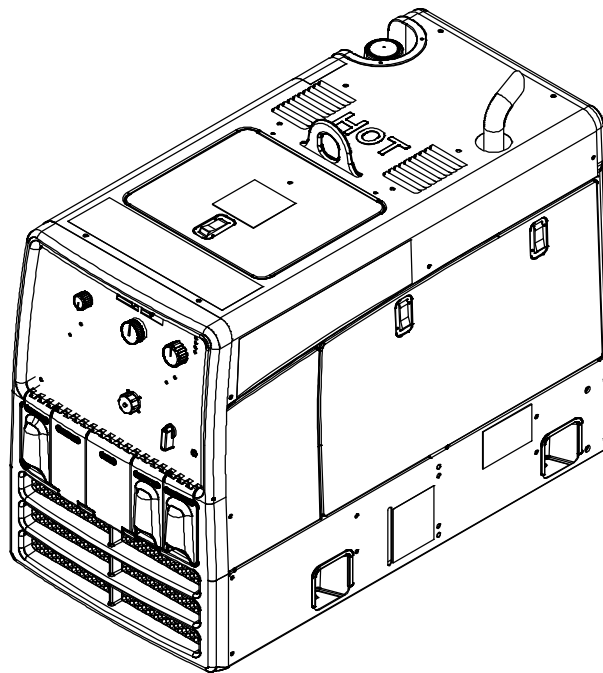
Engine Driven Welder/Generator

# Trailblazer® 325

# Trailblazer® 275

## PARTS LIST

Eff w/Serial No. MC180915R Thru MH451163R




For product information,  
Owner's Manual translations,  
and more, visit

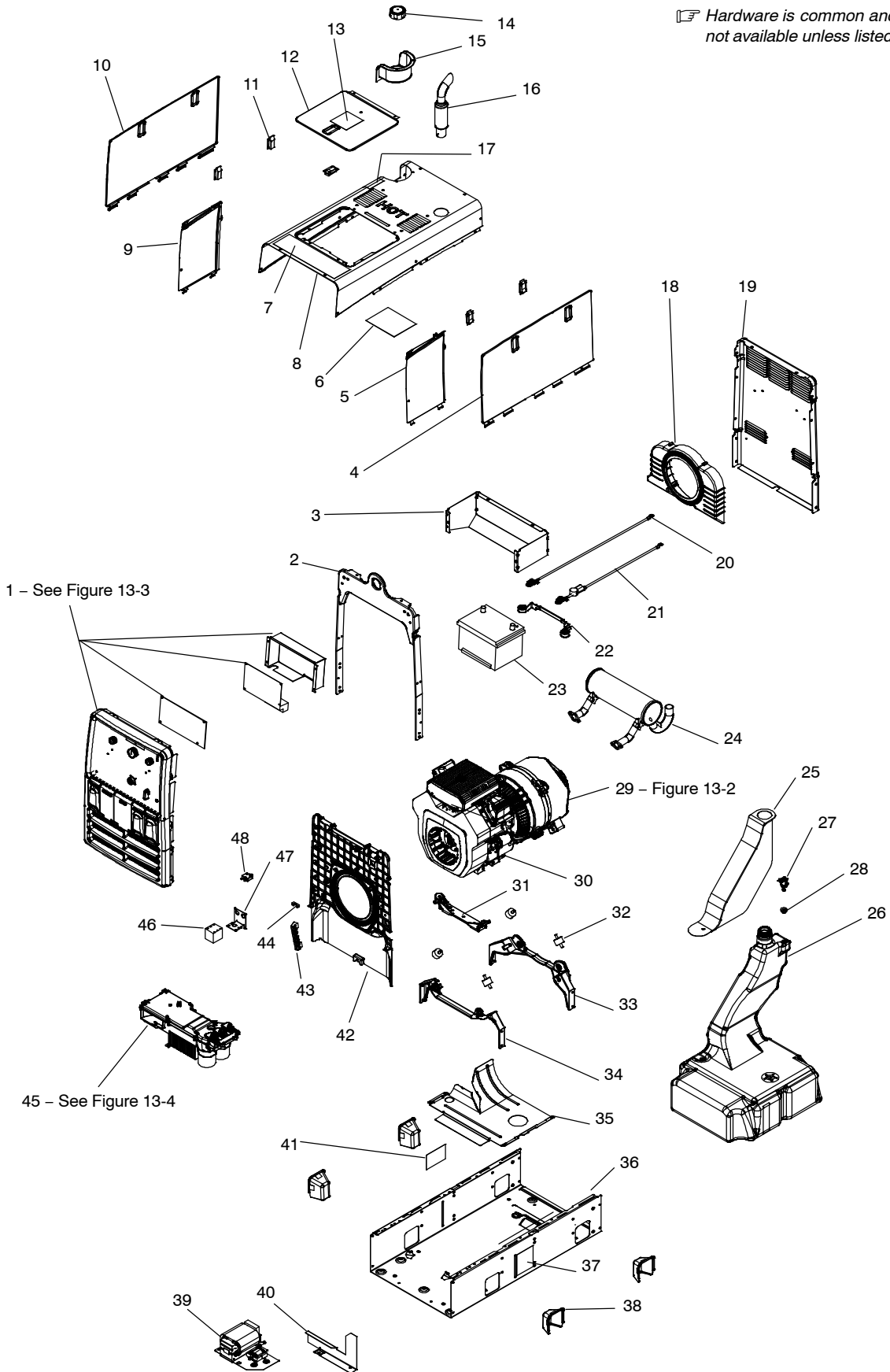
[www.MillerWelds.com](http://www.MillerWelds.com)

File: Engine Drive



# SECTION 13 – PARTS LIST EFF w/ SERIAL NO. MC180915R AND FOLLOWING

 Hardware is common and not available unless listed.



**Figure 13-1. Main Assembly (Kohler Engine Shown)**

253 861-A

# Eff w/ Serial No. MC180915R Thru MH451163R

Item No.	Dia. Mkgs.	Part No.	Description	Quantity
<b>Figure 13-1. Main Assembly</b>				
...	1	Figure 13-3	Front Panel Assembly	1
...	2	249241	Upright, Base	1
...	3	249256	Heat Shield, Muffler	1
...	4	249250	Door, Side RH	1
...	5	249248	Panel, Side RH	1
...	6	252069	Shield, Heat Reflective (Cover)	1
...	7	255052	Label, Warning General Precautionary CSA (Bilingual)	1
...	8	255909	Cover, Top Service Assembly	1
...		+249252	Cover, Top	1
...	9	249249	Panel, Side LH	1
...	10	249251	Door, Side LH	1
...	11	211370	Latch, Door	5
...	12	249244	Door Assy, Access Engine Top	1
...	13	233088	Label, Danger Using A Generator Indoors Can Kill	1
...		217395	Bumper, Door .500 OD X .250 High Nprn 70 Duro	11
...		220371	Seal, Rubber W/Adhesive .370 X .750 X 14.500	2
...		191626	Bumper, Door Access Engine	1
...		251160	Label, Engine Maintenance Kohler (Bilingual)	1
...	14	255707	Cap, Tank Screw-on W/Tether	1
...	15	181881	Grommet, Plastic Neck Filler Fuel	1
...	16	249317	Pipe, Exhaust Elbow w/Resonator	1
...	17	249302	Label, Warning Gasoline (EPA) Bilingual	1
...	18	249280	Baffle, Air Rear	1
...	19	249239	Panel, Rear	1
...	20	249615	Cable, Battery Negative (30.00 In)	1
...	21	245134	Cable, Battery Positive (25 In)	1
...	22	249330	Hold Down, Battery	1
...	23		Battery, Stor 12V CCA 420 Gp 58 Maint Free	1
...	24	249313	Muffler, Exhaust Engine (Kohler)	1
...	24	249741	Muffler, Exhaust Engine (Kohler EFI)	1
...		209057	Clamp, Muffler 1.625 Dia U Pld	1
...		189477	Gasket, Muffler	2
...	25	252215	Shield, Heat Reflective (Tank)	1
...	26	257484	Tank, Fuel 12.0 Gal w/Sender (Prior to MD460932R) (Includes)	1
...		238061	Sender, Fuel Gauge (Prior to MD460932R)	1
...		228054	Gasket, Fuel Sender/Fuel Tank	1
...		251541	Kit, EPA Vent System (Carbureted Engine) (Includes)	1
...		251543	Kit, EPA Vent System (EFI Engine) (Includes)	1
...	26	266531	Assy, Tank 12.0 Gal W/Vent Valve & Sender (Eff w/MD460932R) (Includes)	1
...		263999	Sender, Fuel Gauge (Eff w/MD460932R)	1
...		228054	Gasket, Fuel Sender/Fuel Tank	1
...	27	252645	Valve, Solenoid 2-way Normally Closed 14vdc 6.5 W	1
...	28	124253	Bushing, Tank Fuel	1
...		249616	Assy, Fuel Line W/Clamps (.500 Od X 4.000lg)	1
...	29	Figure 13-2	Generator Assembly	1
...	CT1	250761	Xfmr, Current Sensing	1
...	30	249784	Engine, <b>Gasoline</b> Elec Start E/Gov ( <b>Kohler CH730</b> )	1
...	30	249858	Engine, <b>LP Gas</b> Elec Start E/Gov ( <b>Kohler CH730</b> )	1
...		215984	Filter, Fuel In-Line .250 ( <b>Kohler CH730</b> )	1
...		230015	Tune-Up & Filter Kit, <b>Kohler CH730</b> (Includes)	1
...		230016	Air Filter Element, Kohler	1
...		066698	Oil Filter, Kohler	1
...		215985	Filter, Fuel W/Clamps & 1/4 In Fuel Line	1
...		067007	Spark Plug	2
...		230017	Air Filter Wrapper	1
...	30	259990	Engine, <b>Gasoline</b> Elec Start EFI ( <b>Kohler ECH730</b> )	1
...		246115	Tune-Up & Filter Kit, <b>Kohler ECH730</b> (Includes)	1
...		230016	Air Filter Element	1
...		066698	Oil Filter	1

# Eff w/ Serial No. MC180915R Thru MH451163R

Item No.	Dia. Mkgs.	Part No.	Description	Quantity
<b>Figure 13-1. Main Assembly (Continued)</b>				
.....		246117	Filter, Fuel W/Clamps (Primary)	1
.....		246123	Filter, Fuel W/Clamps (Secondary)	1
.....		067007	Spark Plug	2
.....		230017	Air Filter Wrapper	1
.....		264859	Sensor, Oxygen ( <b>Kohler ECH730</b> )	1
.....	F6	215621	Fuse, 30 Amp Ato Type ( <b>Kohler CH730</b> )	1
.....	F6	242712	Fuse, 15 Amp Automotive Blade ( <b>Kohler ECH730</b> )	1
.....	F6	021718	Fuse, Mintr GI 30. Amp 32 Volt ( <b>LP Gas</b> )	1
.. 31		249226	Bracket, Mtg Engine Kohler	1
.. 32		249255	Mount, Vibration	4
.. 33		249229	Bracket, Mtg Base Generator	1
.. 34		249228	Bracket, Mtg Base Engine	1
.. 35		249329	Cover, Fuel Tank	1
.. 36		+249254	Base	1
.. 37		227912	Label, Warning Do Not Weld On Base/Fuel Level	2
.. 38		211355	Cover, Base	4
.. 39	DC-Z	249789	Stabilizer Assy,	1
.. 39	DC-Z	◆249793	Stabilizer Assy, Sine Aux	1
.. 40		256934	Baffle, Heat Sink	1
.. 41		227913	Label, Warning Battery Explosion Can Blind	1
.. 42		249253	Baffle, Engine	1
.. 43	1T	172661	Block, Stud Connection 6 Position	1
.....		173734	Link, Jumper	1
.. 44		172731	Holder, Fuse Mintr .250 X 1.250 Clip Anti-pivot	1
.....	F5	*012655	Fuse, Mintr Cer 10. Amp 250 Volt	1
.. 45		Figure 13-4	Assy, IGBT/Capacitor (Trailblazer 275) (See Figure 13-4)	1
.. 45		Figure 13-5	Assy, IGBT/Capacitor (Trailblazer 325) (See Figure 13-5)	1
.....		257112	Washer, Dragon Tooth .270idx.680odx.031t Cop Pld	1
.. 46	CB5	◆233040	Supplementary Protector, Man Reset 3p 15A 277VAC	1
.. 47		◆255301	Bracket, Mtg Circuit Breaker	1
.. 48	CB4	083432	Supplementary Pro, Man Reset 1p 10A 250VAC Frict	1
.....		255939	Kit, Label (Trailblazer 275/325)	1

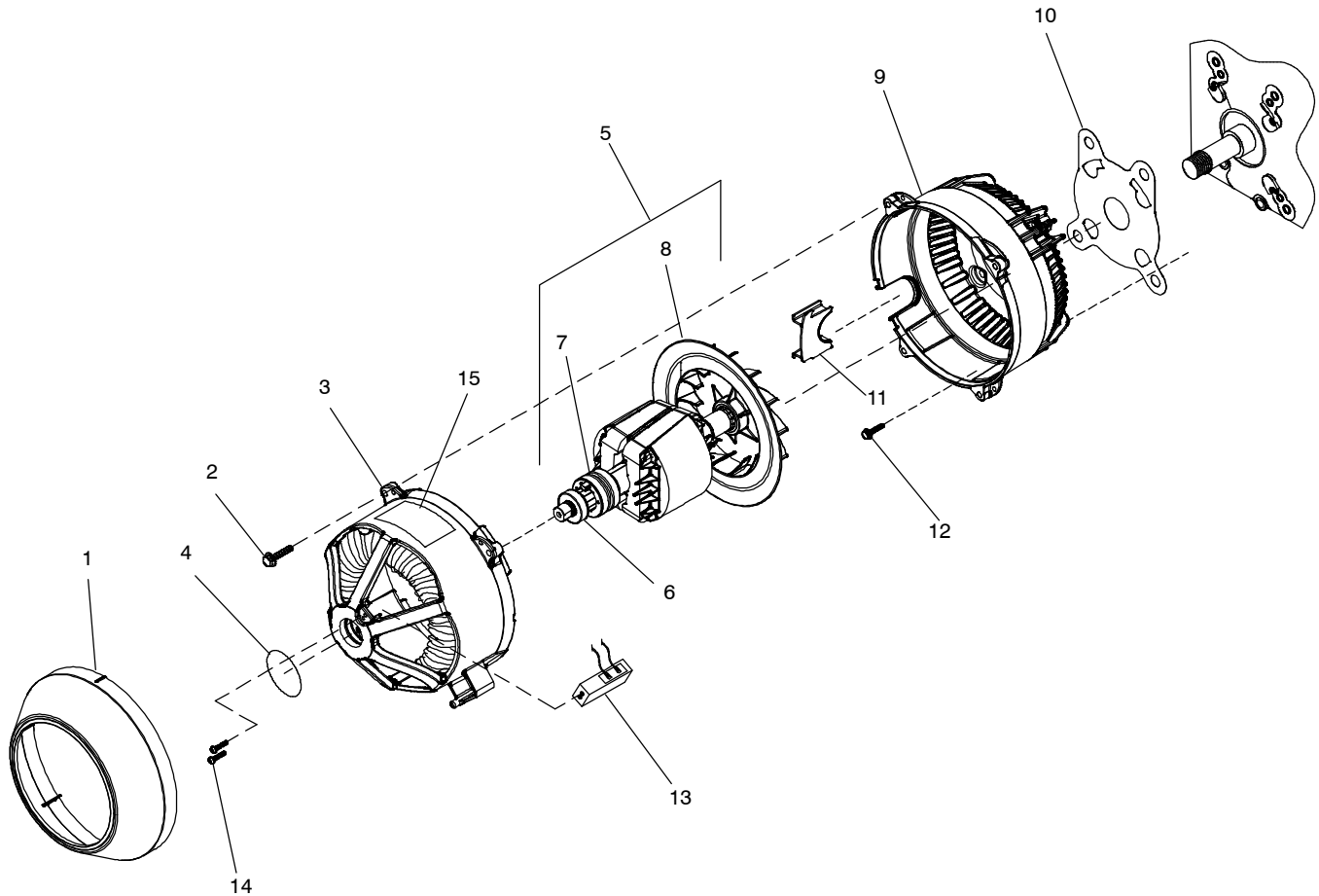
+When Ordering A Component Originally Displaying A Precautionary Label, The Label Should Also Be Ordered. Labels Available Separately Or As Part Of Label Kit.

◆Optional

\* Recommended Spare Parts.

**To maintain the factory original performance of your equipment, use only Manufacturer's Suggested Replacement Parts. Model and Serial Number required when ordering parts from your local distributor.**

# Eff w/ Serial No. MC180915R Thru MH451163R



253 848-A

**Figure 13-2. Generator**

Item No.	Part No.	Description	Quantity
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
**Figure 13-2. Generator (Figure 13-1 Item 29)**

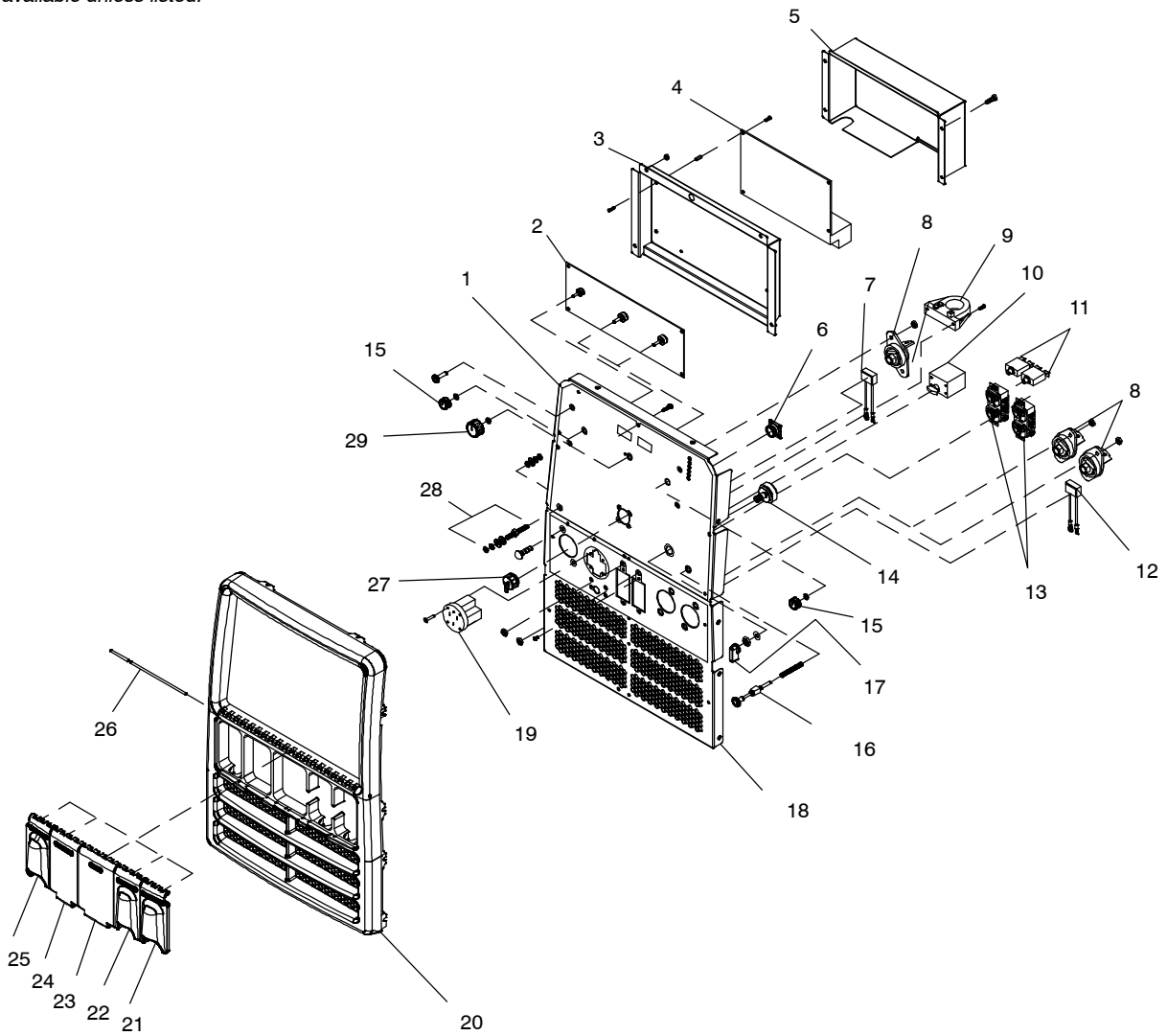
...	1	249240	.. Cover, Generator	1
...	2	142156	.. Screw, 375-16x1.75 Hexwhd.81d Gr8 Pld	4
...	3	+249327	.. Stator Generator Assy, Front	1
...	3	+250176	.. Stator Generator Assy, Front (Excel Power)	1
...	4	183419	.. O-Ring 1.984 Id X .139 Cs 70 Duro Viton	1
...	5	249258	.. Rotor Rotor, Generator (Includes)	1
...	6	181143	.. Bearing, Ball Rdl Sgl Row .984 X 2.047 X .591	1
...	7	181135	.. Ring, Collector Rotor	1
...	8	249259	.. Fan, Rotor Gen	1
...	9	249222	.. Adapter, Engine	1
...	10	250871	.. Baffle, Engine Adapter	1
...	11	249740	.. Grommet, Engine Adapter	1
...	12	250336	.. Screw, 437-14x1.50 Hexwhd.93d Gr8 Pld	4
...	13	205725	.. Brushholder Assy, Generator	1
...	14	136343	.. Screw, K50x 20 Pan Hd-Phl Stl Pld Pt Thread Forming	2
...	15	227724	.. Label, Warning Moving Parts Can Cause Serious Etc (Bilingual)	1

+When ordering a component originally displaying a precautionary label, the label should also be ordered. Labels available separately or as part of label kit.

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# Eff w/ Serial No. MC180915R Thru MH451163R

 Hardware is common and not available unless listed.



**Figure 13-3. Panel, Front w/Components**

253 851-B

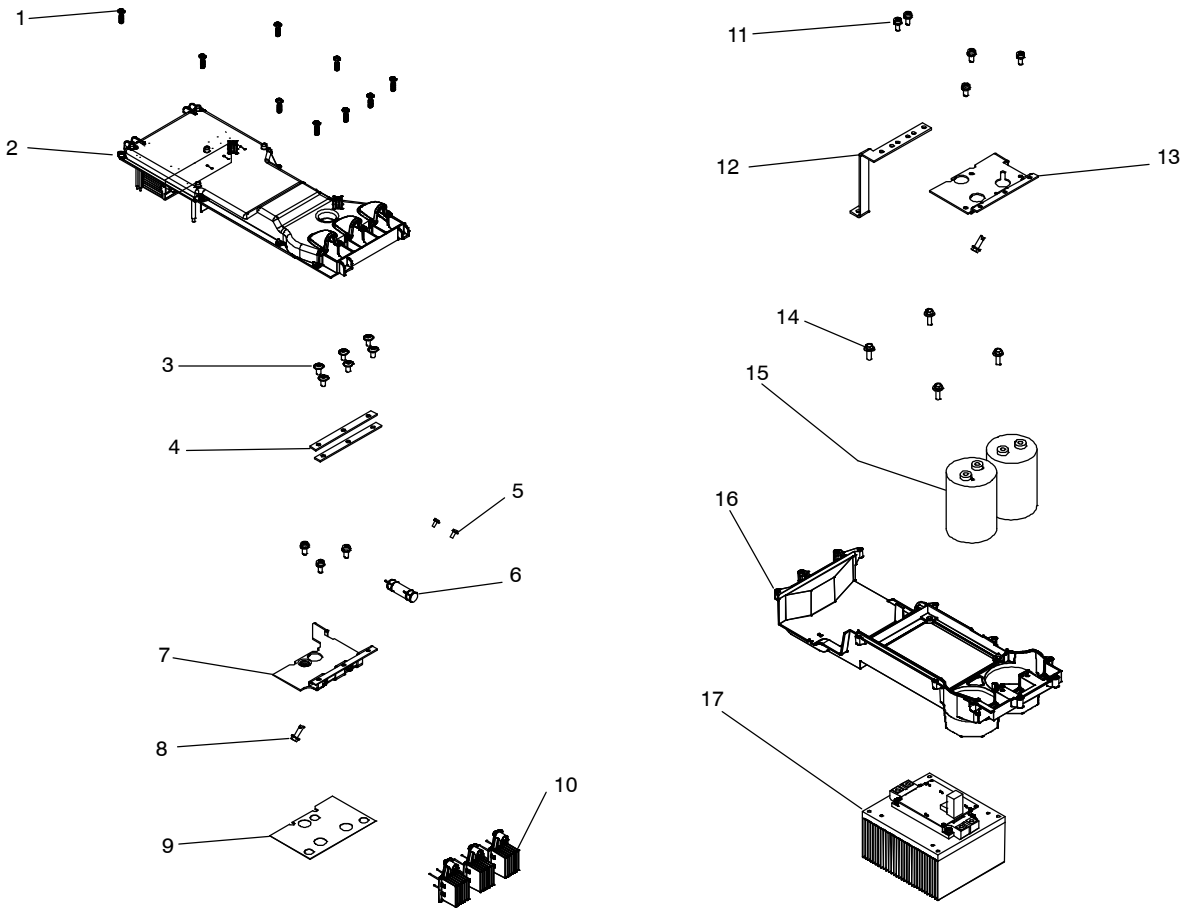
# Eff w/ Serial No. MC180915R Thru MH451163R

Item No.	Dia. Mkgs.	Part No.	Description	Quantity
<b>Figure 13-3. Panel, Front w/Components (Figure 13-1 Item 1)</b>				
1			Nameplate (Order By Model & Serial Number)	1
2	PC2	250303	Circuit Card Assy, Control (TB325)	1
2	PC2	250317	Circuit Card Assy, Control (TB275)	1
2	PC2	249557	Circuit Card Assy, Control (Units w/Battery Charging System)	1
		250713	Stand-off Support, PC Card Snap-in W/Post&Lock	2
3		256935	Cover, PC Board (Control) (Prior to MD341156R)	1
3		254952	Cover Control Board (Eff w/MD314156R)	1
4	PC1	273988	Circuit Card Assy, Power/Aux Regulator W/Program	1
5		250129	Cover, PC Board (Regulator) (Prior to MD341156R)	1
5		254951	Cover, Regulator Board (Eff w/MD314156R)	1
6	RC4	134735	Conn, Circ Ms/Cpc 14skt Size 20 Rcpt Panel Pushin	1
7	C3	222064	Capacitor, Polye Met Film .1 uF 500 VDC 10%	2
8	NEG	241433	Terminal, Pwr Output Black	2
	POS	241432	Terminal, Pwr Output Red	1
9	LEM	168829	Transducer, Current 1000A Module Max Open Loop	1
10	CB1	233039	Supplementary Protector, Man Reset 2p 50A 240VAC	1
11	CB2, CB3	093996	Supplementary Pro, Man Reset 1p 20A 250VAC Frict	1
12	C4	222065	Capacitor Module, Polyp Met Film .1 uF 500 VDC 10%	1
13	RC2, RC3	259980	Rcpt, Str Dx Grd GFCI w/Capacitors	2
13	RC2, RC3	◆259978	Rcpt, Str Dx w/Capacitors	2
13	RC3	◆237722	Rcpt, Str Dx Grd 2p3w 20A 125V *5-20r (Excel Power) (Prior to MD131233R)	1
13	RC3	◆262486	Rcpt, Str Dx Grd 2p3w 20A 125V *5-20r (Excel Power) (Eff w/MD131233R)	1
14	S2	217680	Switch, Ignition 4 Position W/Out Handle	1
15		207080	Knob, Pointer 1.125 Dia.	2
16		249320	Control, Push/Pull Snap-in 28.937 W/1.750 Extension <b>(Standard Models)</b>	1
		110463	Tubing, Corrugated Plastic Slit .250 Dia Xcoil	0.3437 ft
17		207073	Lever, Ignition Switch	1
18		254333	Panel, Front	1
19	RC1	182954	Rcpt, Str 3p4w 50A 125/250V Flush Mtg *14-50	1
		250723	Bezel Assembly (Includes)	1
20		211416	Bezel	1
21		257120	Cover, Output Stud Negative	1
22		257121	Cover, Output Stud Negative	1
23		216773	Cover, Receptacle Duplex 120V	1
24		216774	Cover, Receptacle Full Kva 120/240V	1
25		257119	Cover, Output Stud Positive	1
26		211405	Pin, Hinge	1
27		170391	Conn, Circ Ms Protective Cap Size 20 Nylon (Prior to ME260540R)	1
27		268085	Conn, Circ Ms Protective Cap Size 20 Nylon (Eff w/ME260540R)	1
28		197203	Grounding Stud Assy, Brass (Includes)	1
		083030	Stud, Brs .250-20 X 1.750 W/Hex Collar	1
		010915	Washer, Flat .257idx0.640odx.031t Brs	2
		163167	Washer, Lock .254idx0.489odx.062t Sst Split.250	1
		601836	Nut, 250-20 .50hex .19h Brs	1
29		218764	Knob, Pointer 1.625 Dia.	1

◆ Optional

**To maintain the factory original performance of your equipment, use only Manufacturer's Suggested Replacement Parts. Model and Serial Number required when ordering parts from your local distributor.**

# Eff w/ Serial No. MC180915R Thru MH451163R



254 794-A

**Figure 13-4. Assy, IGBT/Capacitor (Trailblazer 275 Models)**

Item No.	Dia. Mkgs.	Part No.	Description	Quantity
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**Figure 13-4. Assy, IGBT/Capacitor (Trailblazer 275 Models) (Figure 13-1, Item 45)**

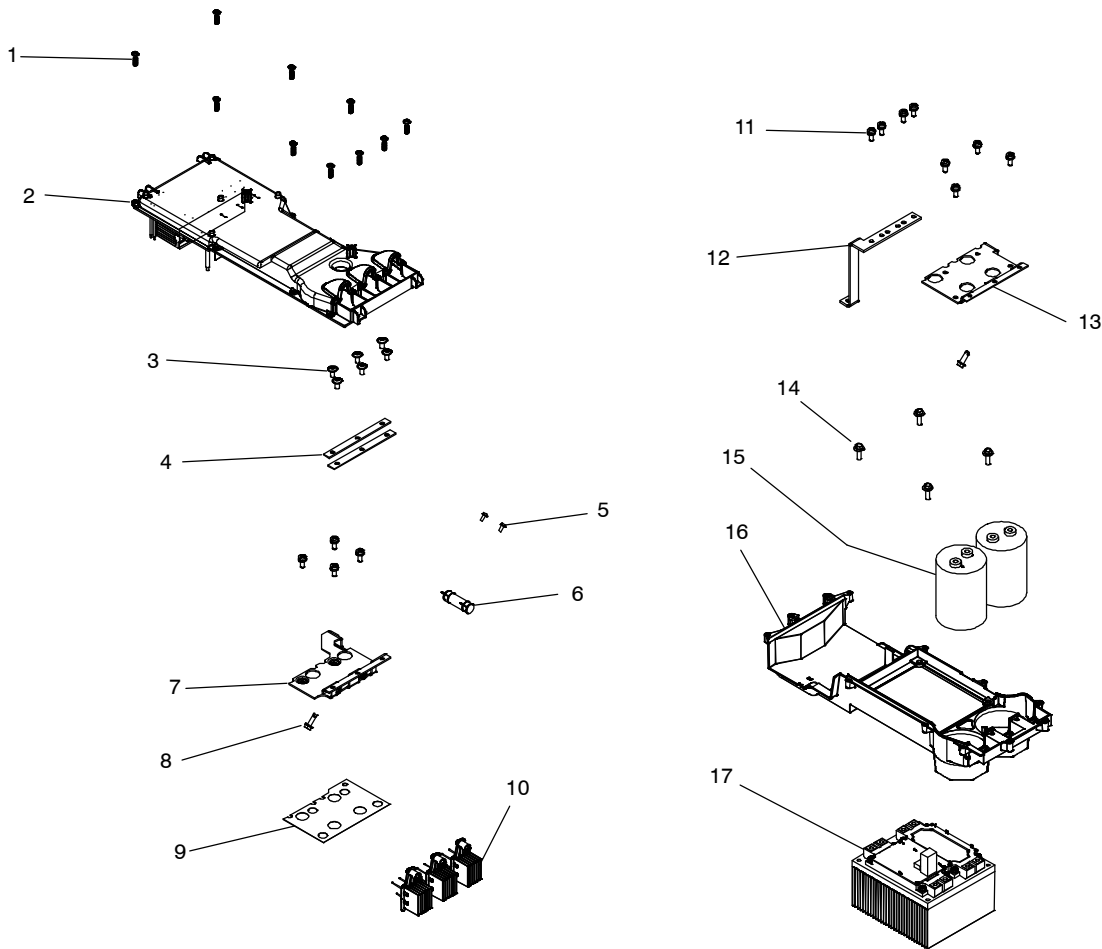
		247667	Assy, IGBT/Capacitor (Includes)	1
		◆247669	Assy, IGBT/Capacitor, Excel Synthetic Aux (Includes)	1
1		136343	Screw, K50x 20 Pan Hd-phl Stl Pld Pt Thread Forming	10
2		247664	Enclosure, Top ( <b>Standard Models</b> )	1
2		247666	Assy, 2k Sine Inverter, Pott W/Tray ( <b>Models w/ Excel Synth Aux</b> )	1
3		262660	Screw, 250-20x .37 Truss Hd-phl Thdfmg Stl Pld	6
4		247657	Bar, Rectifier Clamp	2
5		136420	Screw, 008-32x .37 Hexwhd.34d Stl Pld Slffmg Tap-rw	2
6	R1	079497	Resistor, Ww Fxd 25 W 2k Ohm	1
7		250502	Plate, Bus Negative,Single Module	1
8		604224	Screw, 250-20x .75 Hexwhd.50d Stl Pld Slffmg Tap-rw	2
9		250531	Insulator, Bus Plate Single Module	1
10	SR1, 2, 3	249845	Rectifier	3
11		229331	Screw, M 6-1.0x 16 Pan Hd-phl Stl Pld Sems	8
12		247662	Bar, Output Bus	1
13		250500	Plate, Bus Positive,Single Module	1
14		192725	Screw, 250-20x .75 Hexwhd.61d Gr5 Pld	4
15	C1, C2	249841	Capacitor, Elctlt 13000 uF 150 VDC Can 3.00 Dia	2
16		247665	Enclosure, Bottom	1
17		254792	Assy, IGBT Module/Heatsink	1

◆ Optional

**To maintain the factory original performance of your equipment, use only Manufacturer's Suggested Replacement Parts. Model and serial number required when ordering parts from your local distributor.**



# Eff w/ Serial No. MC180915R Thru MH451163R



**Figure 13-5. Assy, IGBT/Capacitor (Trailblazer 325 Models)**

254 825-A

Item No.	Dia. Mkgs.	Part No.	Description	Quantity
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**Figure 13-5. Assy, IGBT/Capacitor (Trailblazer 325 Models) (Figure 13-1, Item 45)**

.....		247668	.. Assy, IGBT/Capacitor (Includes) .....	1
.....		◆247670	.. Assy, IGBT/Capacitor, Synthetic Aux (Includes) .....	1
.....		◆262992	.. Assy, IGBT/Capacitor Excel Power (TB325 w/Battery Charging System) .....	1
... 1		136343	.... Screw, K50x 20 Pan Hd-phl Stl Pld Pt Thread Forming .....	10
... 2		247664	.... Enclosure, Top <b>(Standard Models)</b> .....	1
... 2		247666	.... Assy, 2k Sine Inverter,Potted W/Tray <b>(Models w/ Excel Synth Aux)</b> .....	1
... 2		263010	.... Enclosure, Top Batt Chg Potted w/Excel Power .....	1
... 3		262660	.... Screw, 250-20x .37 Truss Hd-phl Thdfmg Stl Pld .....	6
... 4		247657	.... Bar, Rectifier Clamp .....	2
... 5		136420	.... Screw, 008-32x .37 Hexwhd.34d Stl Pld Slffmg Tap-rw .....	2
... 6	R1	079497	.... Resistor, Ww Fxd 25 W 2k Ohm .....	1
... 7		247661	.... Plate, Bus Negative,Dual Module .....	1
... 8		604224	.... Screw, 250-20x .75 Hexwhd.50d Stl Pld Slffmg Tap-rw .....	2
... 9		247663	.... Insulator, Bus Plate Dual Module .....	1
... 10	SR1, 2, 3	249845	.... Rectifier .....	3
... 11		229331	.... Screw, M 6-1.0x 16 Pan Hd-phl Stl Pld Sems .....	12
... 12		247662	.... Bar, Output Bus .....	1
... 13		247660	.... Plate, Bus Positive,Dual Module .....	1
... 14		192725	.... Screw, 250-20x .75 Hexwhd.61d Gr5 Pld .....	4
... 15	C1, C2	249841	.... Capacitor, Elctlt 13000 uF 150 VDC Can 3.00 Dia .....	2
... 16		247665	.... Enclosure, Bottom .....	1
... 17		254793	.... Assy, IGBT Module/Heatsink .....	1

◆ Optional

**To maintain the factory original performance of your equipment, use only Manufacturer's Suggested Replacement Parts. Model and serial number required when ordering parts from your local distributor.**

# Eff w/ Serial No. MC180915R Thru MH451163R

☞ Some Wiring Harness Components (Switches, Relays, Circuit Breakers) Are Also Referenced Elsewhere In This Parts List. Purchase Components Separately Or As Part Of The Associated Wiring Harness.

Item No.	Dia. Mkgs.	Part No.	Description	Quantity
<b>Wiring Harnesses</b>				
		250126	<b>Harness, Wrg Unit (Includes)</b>	1
	RC5	113634	Conn, Rect Univ 084 6p/S 3row Rcpt Cable/Panel Lkg	1
	PLG8	177859	Conn, Body 5 Terminal	1
	PLG12,PLG23	240451	Conn, Rect Mini 045 12skt 2row Plug Cable Lkg/Lkg	2
	PLG13,PLG28	240449	Conn, Rect Mini 045 8skt 2row Plug Cable Lkg/Lkg	2
	PLG15	246982	Conn, Rect Mini 8skt/2row Plug Cable Lkg/Lkg Natura	1
	PLG9	240446	Conn, Rect Mini 045 2skt 2row Plug Cable Lkg/Lkg	1
	PLG21	135133	Conn, Rect Univ 084 9p/S 3row Rcpt Cable/Panel Lkg	1
	CT1	250761	Xfmr, Current Sensing	1
	PLG31	114063	Conn, Rect Univ 084 4p/S 1row Plug Cable Lkg	1
	RC32	114657	Conn, Rect Mini 045 4pin 2row Rcpt Cable/Panel Lkg	1
	PLG19,PLG29	240448	Conn, Rect Mini 045 6skt 2row Plug Cable Lkg/Lkg	2
	PLG33	140526	Conn, Rect Comm 062 Skt 24-18ga .1100d Brass-Tin	1
		240458	Pin, Lkg 2/4 Skt Housing	1
		240459	Pin, Lkg 6 Skt Housing	2
		240460	Pin, Lkg 8 Skt Housing	3
		240462	Pin, Lkg 12 Skt Housing	2
		257169	Lead Assy, Electronic Governor (Includes)	
		240447	Conn, Rect Mini 045 4skt 2row Plug Cable Lkg/Lkg	1
		257168	Conn, Rect Mini 045 4pin 2row Tpa Plug Housing	1
		240458	Pin, Lkg 2/4 Skt Housing	2
		250291	<b>Harness, Remote Control 14pin (Includes)</b>	1
	RC4	134735	Conn, Circ Ms/Cpc 14skt Size 20 Rcpt Panel Pushin	1
	PLG13	240449	Conn, Rect Mini 045 8skt 2row Plug Cable Lkg/Lkg	1
	CB4	083432	Supplementary Pro, Man Reset 1p 10a 250vac Frict	1
	PLG33	113750	Conn, Rect Mini 045 4skt 2row Plug Cable Lkg	1
		218729	<b>Harness, Wrg Current Transducer (Includes)</b>	1
		176121	Conn, Rect Univ 084 2p/S 1row Plug Cable Lkg	1
		114063	Conn, Rect Univ 084 4p/S 1row Plug Cable Lkg	2
		066104	Conn, Rect Univ 084 6p/S 3row Plug Cable Lkg	1
		247658	<b>Harness, Gate Drive (Includes)</b>	
	PLG1, 17	113751	Conn, Rect Mini 045 8skt 2row Plug Cable Lkg	2

# Eff w/ Serial No. MC180915R Thru MH451163R

Item No.	Dia. Mkgs.	Part No.	Description	Quantity
<b>Battery Charging System (Optional)</b>				
..... PC5	.....	260170 ..	Circuit Card Assy, Battery Charger Potted Board .....	1
..... RC7	.....	231162 ..	Housing, Rcpt Battery Charger 175 Amp Black .....	1
.....	.....	252964 ..	Bracket, Battery Charge Plug .....	1
..... W1	.....	252965 ..	Contact, Battery Charge .....	1
.....	.....	231927 ..	Dust Cover, 2 Pole Housing .....	1
.....	.....	250690 ..	Boot, Half Toggle Switch Lever (Black) .....	2
.....	.....	227734 ..	Label, Warning Battery Charging Precautions .....	1
..... PC6	.....	262617 ..	Circuit Card Assy, Bat Chrg Clamp Potted Board .....	1
..... R2	.....	263013 ..	Resistor, Ww Fxd 120w 0.10 Ohm W/Clips .....	1
.....	.....	262992 ..	Assy, IGBT/Capacitor Excel Power (Tb325 Batt Chg) .....	1
.....	.....	263010 ..	Enclosure, Top Batt Chg Potted W/Excel Power .....	1
.....	.....	254334 ..	Assy, Panel Front Tb 325 Batt Chg .....	1
.....	.....	253518 ..	Label, Nameplate Trailblazer 325 Efi W/Battery Chg .....	1
..... PC2	.....	249557 ..	Circuit Card Assy, Control W/Program Tb Batt Chg .....	1
.....	.....	263317 ..	Lead List, Small .....	1
.....	.....	252968 ..	Lead List, Large .....	1
..... S6, S7	.....	252970 ..	Harness, Wrg Unit .....	1
.....	.....	247873 ..	Ckt, Trailblazer 325 Battery Charge (Label) .....	1
.....	.....	260165 ..	Label, Rating Trailblazer 325 W/Battery Chg/Excel .....	1

+When ordering a component originally displaying a precautionary label, the label should also be ordered.  
**To maintain the factory original performance of your equipment, use only Manufacturer's Suggested Replacement Parts. Model and serial number required when ordering parts from your local distributor.**

**Miller Electric Mfg. LLC**

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