



Coach House

PLATINUM[®]

Section 3

Electrical Systems

Ford Motor Company



**E-450
SUPER DUTY CHASSIS**

Rev: 082015

Electrical Systems

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Power Converter

Your Coach House **PLATINUM** is equipped with a power converter that supplies the motorhome with 110 volts AC (Alternating Current) and 12 volts DC (Direct Current). The source of power can be from the:

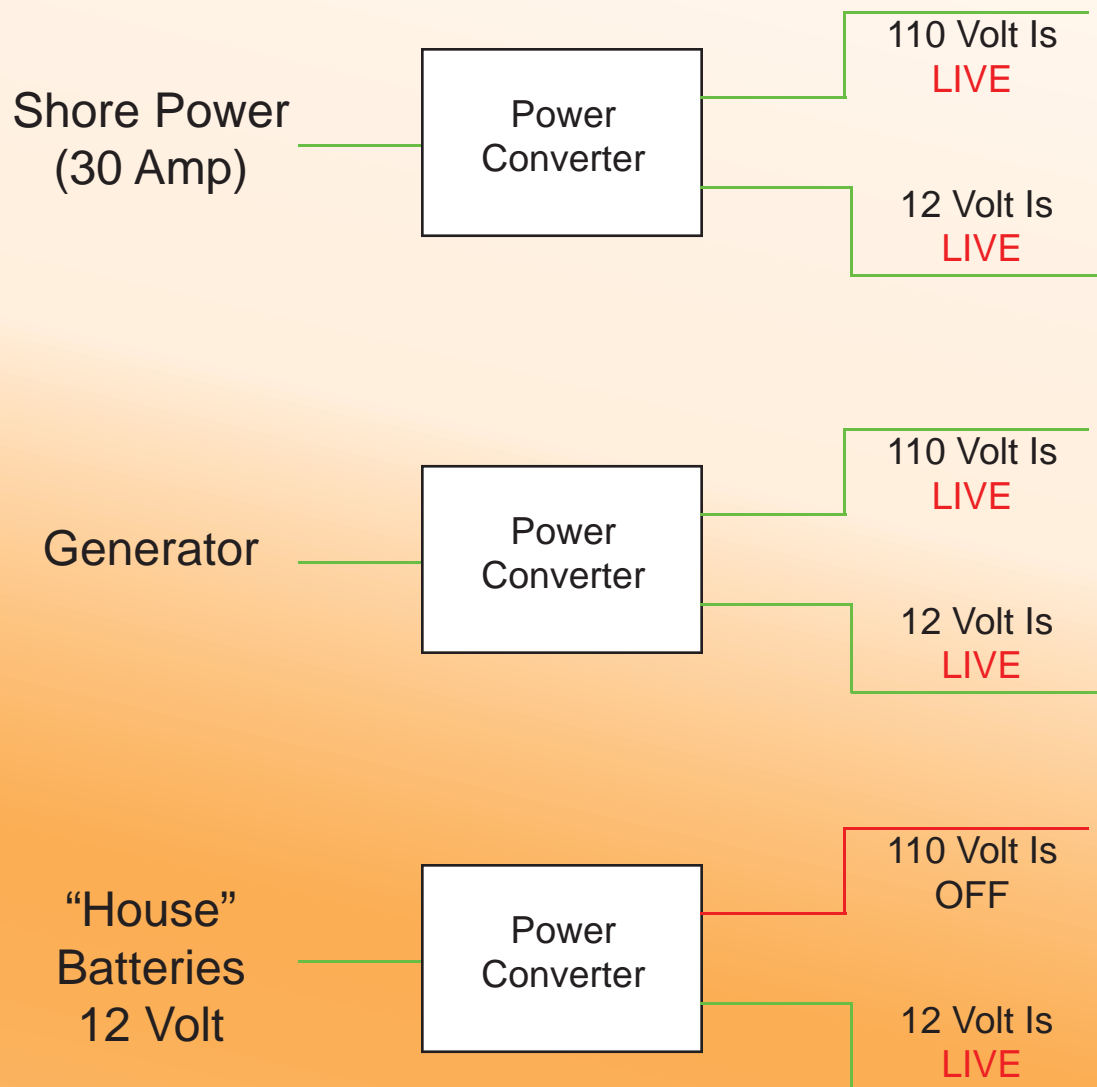
- 1) Auxiliary "House" 12 volt batteries
- 2) 110 volt external power cord (Shore Power)
- 3) Generator

Power Converter Location:

<u>MODEL #</u>	<u>Location</u>
220	Driver's Side Under Twin Bed
221 XL	Under Rear Dinette Seat
232 XL	Driver's Side Under Closet
261 XL	Passenger's Side Under Dry Storage Cabinet
261 XL (Twin Bed)	Driver's Side Under Twin Bed
261 XL (Sleeper Sofa)	Passenger's Side Under Dry Storage Cabinet
271 XL	Driver's Side Under Twin Bed
272 XL	Driver's Side (In the Bedroom under Drawers)



The converter is equipped with an automatic switchover relay to prevent both the generator and the external power cord from being connected to the converter at the same time. When either the external power cord or the generator is being used, both the 110 volt AC system and the 12 volt DC system will be activated inside the motorhome. When neither of these is connected, the 12 volt auxiliary batteries will activate only the 12 volt DC system.



Progressive Dynamics Power Converter

Instruction Manual

Insert Progressive Dynamics Manual Here

Circuit Breaker & Fuses

The location of the power converter can be found by looking for a black plastic box approximately 6" high x 12" wide. Location of the converter for your model is listed on page 3-5.

The door can be opened with a "push" touch and the circuit breakers and fuses can be located. The 110 volt AC breakers are located on the right with the first breaker on the left being the MAIN POWER, and the remaining breakers for the circuits as labeled on the door. The 12 volt DC fuses are the automotive push in type links and are located on the left side. The top two breakers are for system use, and do not feed the motorhome. The 12 volt DC circuits are labeled on the door.

There is an auxiliary 12 volt fuse panel located above the driver's side seat in a compartment behind a smoked plexiglass door.

Diagrams of the Fuse Panels for your model are located on the next two pages.

CAUTION

Whenever working on the electrical system, the system or circuit being worked on should be deactivated by disconnecting the power and/or throwing the main circuit breaker and safe procedures should be followed to prevent electrical shock. Any modifications made to the system should only be done by a professional to assure compliance with the codes and to assure safe installation practices.

Main Fuse Panel



(1000 Watt Xantrex)

110 Volt System

Breakers

30	20	15	20	15	20
Amp	Amp	Amp	Amp	Amp	Amp

Main Power

Microwave

Water Heater

1000 Watt Inverter

Converter Box (12 Volt)

Air Conditioner

30 30
System Use System Use

<u>30</u>	<u>Refrigerator</u>
<u>30</u>	<u>Sofa</u>
<u>10</u>	<u>Water Pump</u>
<u>20</u>	<u>Lights and Fans</u>
<u>10</u>	<u>Spare Circuit to Tower Control Panel</u>
<u>15</u>	<u>Furnace</u>
<u>10</u>	<u>T.V.</u>
<u>20</u>	<u>Accessories and Tank Heaters</u>
<u>10</u>	<u>Air Conditioner Circuit Board</u>
<u>3</u>	<u>L.P. Common</u>
<u>5</u>	<u>L.P. Tank Solenoid</u>
	<u>Blank</u>

Main Fuse Panel in Coverter Box

Auxiliary Fuse Panel (Above Driver's Seat)

<u>Circuit</u>	<u>Amp</u>	<u>Device</u>
1	10A	Motorized Awning
2	5A	T.V. Channel Box
3	1A	T.V. Antenna Rotor
4	5A	Satellite (Optional)
5	5A	Engine Assist Solenoid (Hot Water Heater)
6	10A	CO and LP Detectors

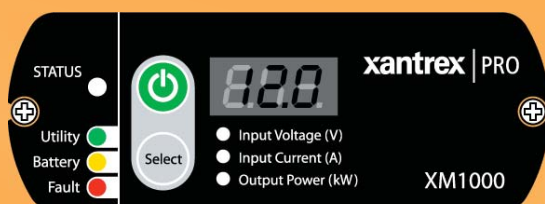
Xantrex Pro-Sine Inverter

The 1000 Watt Xantrex Modified Sine Wave Inverter is recognized as industry leading in power source supply. It operates from the 12V auxiliary batteries and inverts 12V power DC to 120 AC power.

The inverter has a remote status panel which shows the current status of the charging operations and battery condition monitoring of DC volts. This panel is usually located near the floor on the bed base in most FORD units. Detailed information on the inverter and the remote panel are included in the Xantrex owner's manual.

The Master Cut-Off Switch must be in the ON position for the inverter to operate.

***** The inverter shut-off is NOT automatic. The inverter may be ON which will result in running down the auxiliary batteries. *****



Detachable remote panel for convenient system status monitoring

PRO XM1000/1800

INVERTERS

xantrexTM
Smart choice for powerTM

XM 1000 and XM 1800 modified sine wave inverters with transfer switch, designed for RVs and boats

Available in:

1000 W

1800 W



Designed for RV and marine electrical systems that already have a battery charger or generator installed, Xantrex PRO Inverters deliver modified sine wave power for small appliances, TVs, and other onboard electronics from a battery bank. The XM 1000 and 1800 models are the perfect complement to generators when shore power is unavailable, to quietly and efficiently provide household power when needed.

The Xantrex PRO Series design is both user friendly and versatile. These inverters feature a detachable digital remote control to display precise inverter, AC source and battery status information from one convenient location. A built-in transfer switch automatically detects when generator or shore power status changes to ensure power is always available.

Both XM 1000 and 1800 models are designed for demanding RV and marine conditions. They meet FCC Class B regulations to eliminate interference potential with other electronics, while UL 458 certification means they meet strict RV and marine safety standards. Versatile enough to be mounted either horizontally or vertically, these inverters can be easily installed to fit into any compartment. Conformal coated boards also minimize the chance of problems from moist operating conditions.

Product Features

- » 1000 / 1800W inverter easily powers TVs, small appliances, and other electronics
- » Built-in 15A circuit breaker on AC pass-through
- » Up to 15A/20A pass through for hardwired loads for XM1000/XM1800 respectively
- » Digital remote control displays power output, AC source and battery voltage
- » Detachable remote control can be mounted wherever convenient
- » Conformal coated electronics provide moisture resistance
- » Designed to be hard-wired using a terminal strip or by connecting AC through a GFCI receptacle (included)



Detachable remote panel for convenient system status monitoring

Protection Features

- » Battery over-voltage and under-voltage protection
- » Over temperature shutdown
- » Automatic overload protection
- » Short-circuit protection
- » Ground fault protection

Applications:



Recreational vehicles



Marine



Heavy duty trucks



Work vehicles



Buses / coaches



Specialty vehicles



ETL listed to CSA Standard C22.2 No. 107.1 and UL 458* with Marine supplement

*For marine supplement compliance drip shield in specific mounting orientation is required. See installation guide



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PRO XM1000/1800

INVERTERS



Electrical specifications – inverter	XM 1000	XM 1800
Output power (continuous)	1000 W	1800 W
Surge rating	2000 W	3600 W
Output current (continuous)	8.3 A	15.0 A
Output voltage range	115 V +/- 10 V	115 V +/- 10 V
Output frequency regulation	60 Hz +/- 1 Hz	60 Hz +/- 1 Hz
Output wave form	Modified sine wave	Modified sine wave
Peak efficiency	88%	88%
No-load input power (producing output voltage)	< 6 W	< 6 W
Power draw in standby mode	< 2 W	< 2 W
Input operating voltage range	11.0 - 15.5 Vdc	11.0 - 15.5 Vdc
Transfer relay rating	15 A	20 A
Transfer time	40 ms	40 ms

General specifications		
Operating temperature range	32°F - 104°F (0°C - 40°C)	32°F - 104°F (0°C - 40°C)
Storage temperature range	-4°F - 140°F (-20°C - 60°C)	-4°F - 140°F (-20°C - 60°C)
AC receptacles	2	2
Recommended DC fuse	150 A	250 A
Unit weight	8.0 lb (3.6 kg)	10.6 lb (4.8 kg)
Unit dimensions (H x W x L)	4.0 x 8.3 x 12.9" (103 x 211 x 329 mm)	4.0 x 8.3 x 12.9" (103 x 211 x 329 mm)
Warranty	One year	One year
Part number	806-1010	806-1810

Regulatory and environmental compliance

ETL listed to CSA Standard C22.2 No. 107.1, UL458 with marine supplement*

Specifications are subject to change without notice. *When used with drip shield, part #808-1050.

Ultimate Power Battery Seperator



All Coach House FORD Chassis models have an Ultimate Power Battery Seperator installed which electronically senses the condition of your battery system. The Seperator will control the charging of your "house" and engine batteries automatically assuming the batteries are able to receive a charge. (You need to check your batteries on a regular basis to ascertain their viability).

Although the Ultimate Power Battery Seperator works automatically, you can read about its performance and maintenance in the quick reference guide provided here.

Solid State Battery Separator (Quick Reference/Install Guide)



Bi-Directional Models: BSD125, BSD175, BSD200 & BSD250

Features:

- Prevents excessive battery discharge by automatically disconnecting loads
- Assist start allowing current flow from auxiliary battery to chassis battery
- Weather Resistant, Compact Size and Low Profile
- Minimal Voltage Drop
- 100% solid state design - No moving parts to cause arcing and electrical noise
- Automatic shutdown protection for over temperature, short-circuit, over-current and loss of ground.

Introduction

Ultimate Power introduces state-of-the-art technology in its solution to isolate the chassis and auxiliary batteries while providing an option to assist start a weakened or dead battery. Our battery separators use solid-state, micro processing algorithms that sense current draw and voltage levels that control the steady flow of electricity between both sets of batteries.

The normal operating process follows that the auxiliary battery charges from the chassis battery and alternator, while the chassis battery is shielded from auxiliary battery load discharges. Conversely, shore-power, a battery charger, generator or power inverter connected to the auxiliary battery can supply charging current to the chassis battery.

The separator continues to sense current and voltage differentials. The green LED is lit when the switch is closed to allow current to pass between battery sets. The red LED lights when it detects either battery at low voltage or disconnects and opens the circuit to prevent damage to the stronger battery. A flashing green LED indicates over current or over temperature (85°C/185°F) cut-off; and a flashing red LED indicates over voltage cut-off (16 VDC).

The separator is designed to prevent both battery sets from failure. It has a connector that can act as an assist start switch to allow the auxiliary battery to bypass the circuit and supply current to the chassis battery to help start the motor.

Theory of Operation

When the engine is running, the alternator begins supplying current to the chassis battery and the auxiliary battery. When the chassis battery reaches connect voltage (13.1/13.5 VDC) for 20 seconds, and the auxiliary battery's voltage no lower than 8.0 VDC, the BSD switch closes allowing current to flow to both batteries. This charges the auxiliary battery. Please note that both batteries must achieve 8.0 VDC for the BSD switch to remain closed. Less than that, the connection opens to eliminate the possibility of a shorted auxiliary battery. If current reaches more than 110% of its continuous rating for 500 milliseconds, the BSD switch will disconnect. It automatically resets every 20 seconds.

When the engine is stopped, current no longer runs from the alternator to charge the batteries. Therefore, the batteries are in discharge mode. When both batteries' voltage dips below disconnect voltage (12.8/13.2 VDC) for 10 seconds, the BSD switch is opened, separating the auxiliary from the chassis battery.

Specifications				
Model	BSD125	BSD175	BSD200	BSD250
Rated Current@ Mount A*	125 Amps	175 Amps	200 Amps	250 Amps
Rated Current@ Mount B**	100 Amps	130 Amps	150 Amps	175 Amps
Max Voltage Drop @ Mount A*	0.33Vdc	0.34Vdc	0.24Vdc	0.24Vdc
Max Voltage Drop @ Mount B**	0.5Vdc	0.52Vdc	0.32Vdc	0.36Vdc
Logic Power Current Draw	5 milliamps			
Operating Voltage Range (VDC)	8 to 16			
Nominal Operating Temperature	68°F (20°C)			
Over Current Trip	Over 110% for 500 milliseconds, resets every 20s			
LED Indicator Status	Solid Green: Connect			
	Solid Red: Low voltage cut off (both below 8V)			
	Flashing Red: Over voltage cut off (over 16V), freq. 1Hz			
	Flashing Green: Over current or over temp cut off, freq. 1Hz			
	Dim: Cut off			
High Temperature Protection	185°F (85°C)			
High Temperature Recover	140°F (60°C)			
Power Terminals	M10 copper stud with tin plating and stainless steel locking nuts			
Power Terminal Torque	10 to 15 ft. lbs.			
Ground Connection	1/4 inch male faston blade terminal			
Dimensions (Inches)	4.25 x 4.5 x 2.25		5 x 4.5 x 2.25	
Weight (lbs.)	1.48		1.76	

Mount A* - Mounting surface such as an aluminum plate 1.5 x 4.5 x 23.5 inch or larger
Mount B** - Mounting surface such as wood, plastic or free air

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Assist Start

In the event that a discharged chassis battery is in a weakened state, there is a connector post on the BSD that can engage it as a bypass circuit and draw 12.0 VDC power from the auxiliary battery.

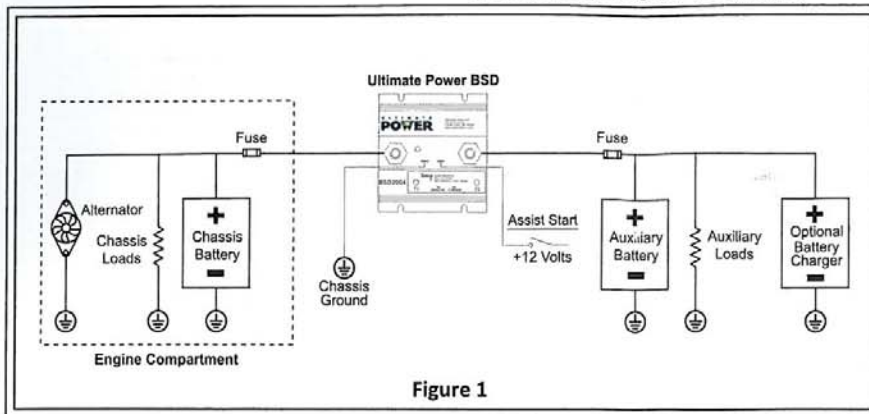
This manual assist start function allows the BDS switch to close when activated from a remote location using 16# AGW and a momentary switch that is mounted near the dashboard on the driver's side. The connector closes the switch for the time that assist start is carried out. Please note that one battery must be above 8.0 VDC and the other above 1.0VDC for this manual control to operate. If the BSD senses current that is 150% over its continuous rating for more than 2 seconds, the BSD switch will shut off. It will reset after removing the Assist Start control input and reapplying it.

Voltage setting of DIP switches

Voltage Setting	DIP Switches	Connect	Disconnect
0		13.1Vdc	12.8Vdc
1		13.5Vdc	13.2Vdc

Updated on 12-9-2013

Installation Guide



Fusing and Battery Cable: A properly sized fuse must be installed in each cable connecting from the BSD to the chassis and auxiliary battery positive terminal (Refer to Figure 1). Each fuse must be located within 16 inches of the respective battery.

Important: Do not weld on the vehicle with the Bi-Directional Battery Separator installed as damage to the unit may result. In the event that electric welding is necessary, please disconnect the cables attached to the T1 and T2 terminal posts. Damage due to electric welding while the BDS is installed can void the Ultimate Power Advance Replacement warranty.

Safety Precautions: This product requires the installer to be trained for installation and work on vehicle electrical systems. We recommend that all wiring meet the SAE and applicable vehicle manufacturer's wiring specifications. Inspect the product and all other components for damage before starting the installation. Do not perform the installation if any problems exist.

Mounting Location:

- The BSD, although sealed, must be mounted in a protected dry area and away from heat sources.
- The BSD is not designed for exposure to saltwater spray, environmental debris or power washing.
- It must be mounted to a flat metal surface that maintains ambient temperature.
- The module must not be mounted in the engine compartment or any location near the engine's heat.
- Take into consideration the routing of the two battery cables.
- Connect only the battery cables to the BSD power terminals.

NOTE: Do not use these terminals for a junction post.

NOTE: The BSD performs optimally mounted to a metal surface. If mounted on a non-metallic surface, maximum current capacity diminishes by 25%.

Grounding:

Proper operation of the BSD is dependent on a good quality ground system. Both the chassis battery and the auxiliary battery must be connected to a solid common ground. The BSD must be connected to this common ground. Connect a #16 AWG ground wire with a 0.25" blade socket to the common battery ground.

NOTE: The best ground is at the chassis battery's negative terminal.

Connecting the Power Cables and Fuse:

Prepare the two cables to the batteries using a suitable size cable for the current required (Refer to Table A) and install a crimped lug terminal on the end. Install a fuse in each battery cable. The fuse rating must match the BSD rated current capacity. Terminal T1 is connected to the positive terminal of the chassis battery and terminal T2 is connected to the positive terminal of the auxiliary battery.

NOTE: Torque Separator nuts to 10-15 ft. lbs.

NOTE: (Table A) Cable length should not exceed 20 ft. Max

Safety Fuse and Cable Size

BSD Model	Minimum Fuse Size	AWG
BSD-125	150 amps	#4
BSD-175	200 amps	#2
BSD-200	225 amps	#2
BSD-250	275 amps	#1/0

Table A

NOTE: (Table A) Cable length should not exceed 20 ft. Max

Separator Status	Voltage		LED Indicator	Operation of BSD with connect voltage @ 13.5V and disconnect voltage @ 13.2V. For the other DIP setting, the connect and voltage vary accordingly.
	Chassis Battery	Auxiliary Battery		
Connect	$\geq 13.5V$	$\geq 8.0V$	Solid Green	In the chassis battery and auxiliary battery, when the voltage of one rises above 13.5 volts for 20 seconds, and the other battery's voltage is no lower than 8.0 VDC the BSD switch will connect the two batteries. If the BSD current is exceeded to 110% rated for 500 milliseconds, the BSD switch will turn off. It will automatically reset every 20 seconds.
	$\geq 8.0V$	$\geq 13.5V$		
Disconnect 1	$<13.5V$ or $\geq 8.0V$	$\geq 8.0V$	Dim	Powered On
Disconnect 2	$<13.2V$	$<13.2V$	Dim	When the voltage of the combined batteries drops below 13.2 VDC for 10 seconds the BSD switch opens, isolating the auxiliary battery from the chassis battery and alternator.
Disconnect 3	$<8.0V$	$<8.0V$	Solid Red	Low voltage
Disconnect 4	$>16.0V$	$\geq 8.0V$	Flashing Red	Over voltage
	$\geq 8.0V$	$>16.0V$		
Disconnect 5	$\geq 13.5V$	$\geq 8.0V$	Flashing Green	Over current or over temp protection
	$\geq 8.0V$	$\geq 13.5V$		
Assist Start	$\geq 8.0V$	$\geq 1.0V$	Solid Green	The Assist Start function enables the BSD to connect the auxiliary battery to the over-discharged chassis battery to aid engine starting. It also enables an external battery charger to charge the auxiliary and chassis battery. When it is activated, the BSD offers a surge current of 150% rating for 2 seconds before it turns off. It will reset after removing the Assist Start control input and reapplying it. One battery must be above 8.0 VDC and the other above 1.0VDC for this manual control to operate.
	$\geq 1.0V$	$\geq 8.0V$		

**ULTIMATE
POWER**

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Generator



All FORD E-450 Chassis models are equipped with a:



4.0 kW ONAN (Gasoline) Microquiet Generator

Ford Chassis Generators feed directly from your fuel tank. No special fuel fill is needed to power your generator.

Safety Note:

Cummins Generators will not operate if your gasoline fuel tank is less than 1/4 tank full. This feature will ensure that your vehicle has sufficient reserve fuel available for other uses.

The instruction manual supplied with the generator should be carefully reviewed. Care should be taken not to exceed the capacity of the generator to prevent any possible damage to the generator unit.

Insert Cummins Generator Manual Here

Auxiliary "House" Batteries



Auxiliary batteries are mounted on a slide-out tray next to the entry door for easy access.



Your Ford Chassis may have two (2) or three (3) batteries depending on how it was originally equipped at the factory.



FORD Chassis

Interstate Deep Cycle Group 27 Model DCM0090

2 Standard 1 Extra (Optional) 3 Total

The auxiliary batteries are charged either by:

- 1) The *Alternator* of the motor home while driving
- 2) The *Power Converter* when external 120 Volt AC power is connected
- 3) The *Generator*

Care should be taken to prevent the auxiliary batteries from being totally discharged by making sure that all of the lights, fans, and appliances are turned off when the motor home is not in use. Whenever the motor home is not used for a period of time, the 120 Volt power cord should be plugged in once a month for 8 to 12 hours to bring up the charge on the auxiliary batteries. The master 12 Volt electrical switch (found to the right immediately upon entering the main motor home door) must be ON for the converter charger to charge the auxiliary batteries. Refer to the power center instruction sheet for further information. A totally discharged battery will not normally recharge as quickly, or in the same manner as a low battery. Professional help should be used when attempting to charge a totally discharged battery.

The engine battery of the motor home is not charged from the power converter. The engine battery should be periodically checked and maintained. Refer to the Chassis Owners Manual for recommended engine battery maintenance.

DCM0090



**DEEP CYCLE
MOBILITY**



**DCM0090
VALVE-REGULATED
LEAD-ACID BATTERY
FOR DEEP-CYCLE
APPLICATIONS**

FEATURES

- Robust plate for extended cycle life.
- Computer-generated grid design optimized for high-power density.
- Low-calcium grid alloy for reduced gas emissions and ease of recycling.
- Flame-arresting, one-way pressure-relief vent for safety and long life.
- UL-recognized component.
- Multicell design for economy of installation and maintenance.
- Case and cover available in standard polypropylene.
- Thermally welded case-to-cover bond to eliminate leakage.
- Removable handles.
- Can be used in any orientation. Upright, side or end mounting recommended.
- Absorbent Glass Mat (AGM) technology for efficient gas recombination of up to 99% and freedom from electrolyte maintenance.
- Not restricted for air transport — complies with IATA/ICAO Special Provision A67.
- Not restricted for surface transport — classified as nonhazardous material as related to DOT-CFR Title 49 parts 171-189.
- Not restricted for water transport — classified as nonhazardous material per IMDG Amendment 27.
- Longest cycle life available.
- Manufactured by an ISO9001 certified facility.

12 Volts – 90 Ampere-Hour Capacity @ 20-Hour Rate

Ampere-Hour Capacity to 1.75 Volts per Cell @ 77°F (25°C)
10.5 Volts per 12 Volt Battery

Approximate Discharge in Hours	20	10	5	1
Amp-Hour Capacity	92	84	67	46

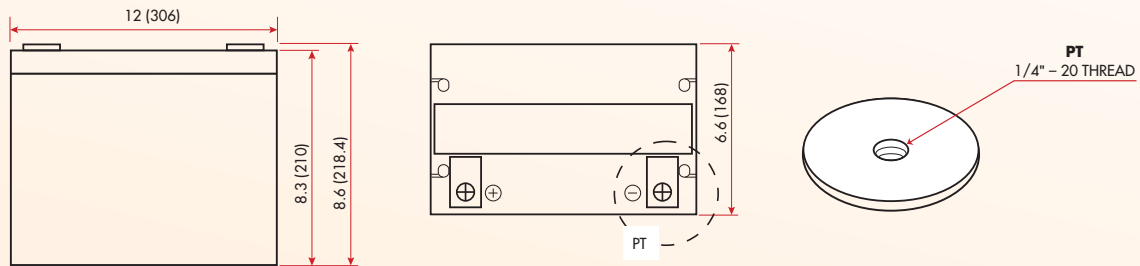
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DCM0090 – Specifications

*All dimensions in inches and (millimeters). All dimensions are for reference only. Contact an Interstate representative for complete dimensional information.

Cells Per Unit	Voltage Per Unit	Weight	Electrolyte	Max. Discharge Current	Short Circuit Current	Ohms Imped. 60 Hz
6	12	60.2 lbs. 27.3 kg	Absorbed H ₂ SO ₄ SG = 1.30	450 Amps	1350 Amps @ 0.1 sec.	8 mΩ

Capacity	90 Ah @ 20 hr. rate to 1.75 volts per cell @ 77°F (25°C)
Operating Temperature Range (with temperature compensation)	Discharge: -40°F (-40°C) to +160°F (71°C) Charge: -10°F (-23°C) to +140°F (60°C)
Recommended Operating Temperature Range	+74°F (23°C) to +80°F (27°C)
Equalization and Cycle Service Charging and Current Limits	≤ 36 A, 14.5 V – 14.9 V
Self Discharge	Interstate batteries may be stored for up to six months at 77°F (25°C), and then a freshening charge is required. For higher temperatures, the time interval will be shorter.
Terminal	Insert, threaded female, 1/4" – 20 (hardware included)

Constant Current Discharge Ratings – Amperes @ 77°F (25°C)

Operating Time to End Point Voltage (in hours)

End Point Volts/Cell		5 min	10 min	15 min	30 min	1 hr	2 hr	3 hr	4 hr	5 hr	8 hr	10 hr	20 hr
9.60V	A	309.3	225.7	158.8	96.1	50.2	29.3	21.5	16.7	13.8	9.7	8.8	4.7
	W	3284.6	2480.4	1687	1020.8	581	338.6	249.1	194	159.7	112.9	102	54.9
10.20V	A	272.5	205.7	142.1	91.1	47.2	27.9	20.9	16.3	13.5	9.5	8.5	4.6
	W	3025.5	2283.1	1577.5	1011.6	545.9	323.5	242.4	188.9	125.5	110.4	99.5	53.5
10.50V	A	262.5	195.6	133.8	88.6	46	27.3	20.4	16.1	13.4	9.4	8.4	4.6
	W	2977	2218.7	1516.5	1004.9	528.4	316	236.6	185.6	154.7	109.5	97.8	52.8
10.80V	A	252.5	185.6	125.4	86.1	44.3	26.6	19.9	15.8	13	9.2	8.4	4.5
	W	2938.5	2160.2	1459.7	1002.4	514.1	309.3	231.6	182.2	152.2	107	97	52.6
11.10V	A	242.4	175.6	117	83.6	42.6	25.9	19.2	15.3	12.7	8.9	7.9	4.3
	W	2885	2089.2	1392.8	994.8	507.5	308.5	229.1	181.4	151.3	106.2	94.5	51

Maintenance of Batteries

Batteries have a “life” which is determined by the number of charging/discharging “cycles”. When your system is not in use, proper care should be taken to extend the battery life by following simple procedures:

Short Term Storage:

- 1) Turn off the Interior Battery Switch (located inside the Motorhome Entry Door to the right).
- 2) Ensure that all current drains have been eliminated. (Turn off all appliances)

Long Term Storage:

- 1) Turn off the Interior Battery Switch (located inside the Motorhome Entry Door to the right).
- 2) Disconnect the “House” Batteries by removing the Main “Positive” (red) cable(s).



Note: Do not disconnect the short red cables between your batteries. Only disconnect the “long” red cable(s) which feed your motorhome.

- 3) Connect a Battery Maintenance Device (Charging System) to your “House” Battery Bank. Chargers and Maintenance Devices are readily available at Auto Parts Stores, RV Dealers, or your local Hardware Store.

Engine Battery Maintenance:

Please refer to your Chassis Owner’s Manual to correctly maintain your engine battery.

**Insert Battery Maintenance Manual in
See Through Pocket Here**

80 Amp Breaker

Your Coach House **PLATINUM** has an electrical system circuit breaker to prevent damage to your electrical system. The 80 Amp breaker will 'trip' if an overload situation occurs. Push in the red button to reset the breaker.

80 Amp Breaker Locations

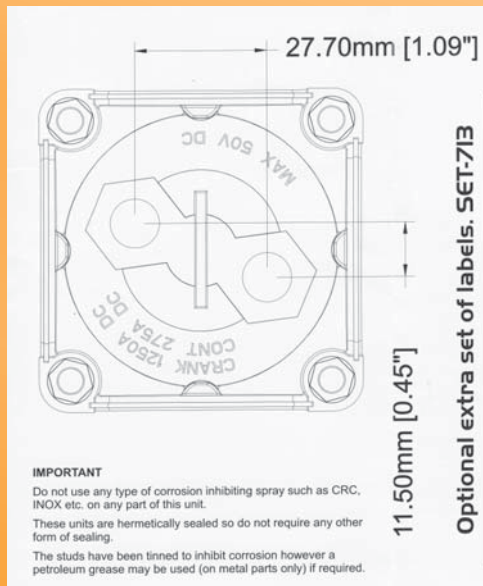
<u>Model #</u>	<u>Location</u>
220	Side of Galley Cabinet as you enter motorhome (on left)
221 XL	Under the Dinette Seat (Front)
232 XL	Front Edge of the Galley (Lower Cabinet)
261 XL	Under the Dinette Seat (Front)
261 XL (Twin Bed)	Side of Galley Cabinet as you enter motorhome (on left)
261 XL (Sleeper Sofa)	Under the Dinette Seat (Front)
271 XL	Behind the Lounge Chair (On the Galley Cabinet)
272 XL	Behind the Lounge Chair (On the Galley Cabinet)



Battery Switch

The battery switch is located at the exterior side door, on the cabinet behind the passenger's seat. Auxiliary batteries are being used when the switch is in the on position. Always turn the battery switch to the off position when the motor home is not being used, to prevent the auxiliary batteries from being drained.

NOTE: Auxiliary batteries will NOT charge from engine alternator or converter with battery switch in the "OFF" position.



Auxiliary Start Over-Ride Switch

In the event that your engine battery does not have the power to start your motorhome, your **PLATINUM** is equipped with an Auxilliary Start Over-Ride Switch which will “tie” the house batteries to the engine battery to give an extra “boost” of power to start your motorhome engine.

Push the white switch and HOLD IT DOWN while starting your vehicle with the key.

The Over-Ride Switch is located on the dash panel just above your left knee when sitting in the driver’s seat.



GFCI Receptacles

A GFCI receptacle is different from conventional receptacles. In the event of a ground fault, a GFCI will trip and quickly stop the flow of electricity to prevent serious injury. All Coach House **PLATINUM** models have GFCI receptacles in the galley and the bathroom. See the GFCI manual for more information.



How to test your GFCI Outlet:

Step 1: Plug a lamp into the GFCI.

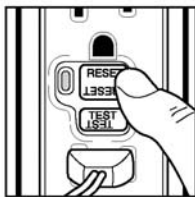
Step 2: Turn on the lamp.

Step 3: Push the TEST button on the GFCI. The GFCI should trip, stopping the flow of electricity to the lamp. Note that the RESET button will pop-out.



If the lamp DOESN'T turn off when the TEST button is pushed, the GFCI is not working properly and should be replaced immediately.

If the lamp DOES turn off when the TEST button is pushed, the GFCI is working properly and should be tested monthly. To restore power, press the RESET button.



If the power is not restored when the RESET button is pushed, the GFCI is not working properly and should be replaced immediately.

For more information on GFCIs and how to test monthly, go to

www.tools.passandseymour.com/gfci

or to participate in an interactive GFCI demo online, go to

www.electrical-safety.org

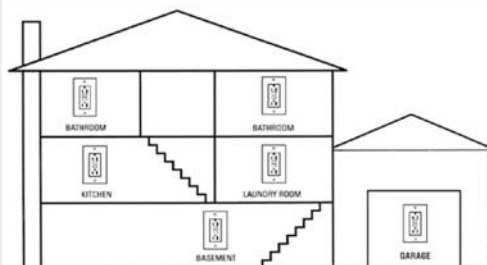
What is a GFCI Outlet?

A Ground Fault Circuit Interrupter (GFCI) Outlet protects you from serious injury due to electrical shock from:

- Hazardous leakage levels from appliances and tools
- Exposure to moisture while operating electrical equipment
- Frayed or damaged electrical wiring

Where are your GFCIs located?

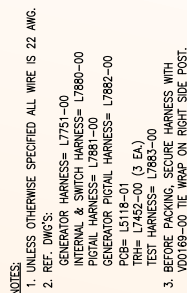
GFCI protection is required per the *National Electrical Code®* (NEC) for outlets servicing bathrooms, kitchen countertops, unfinished basements, garages, utility sinks, and outdoor locations.



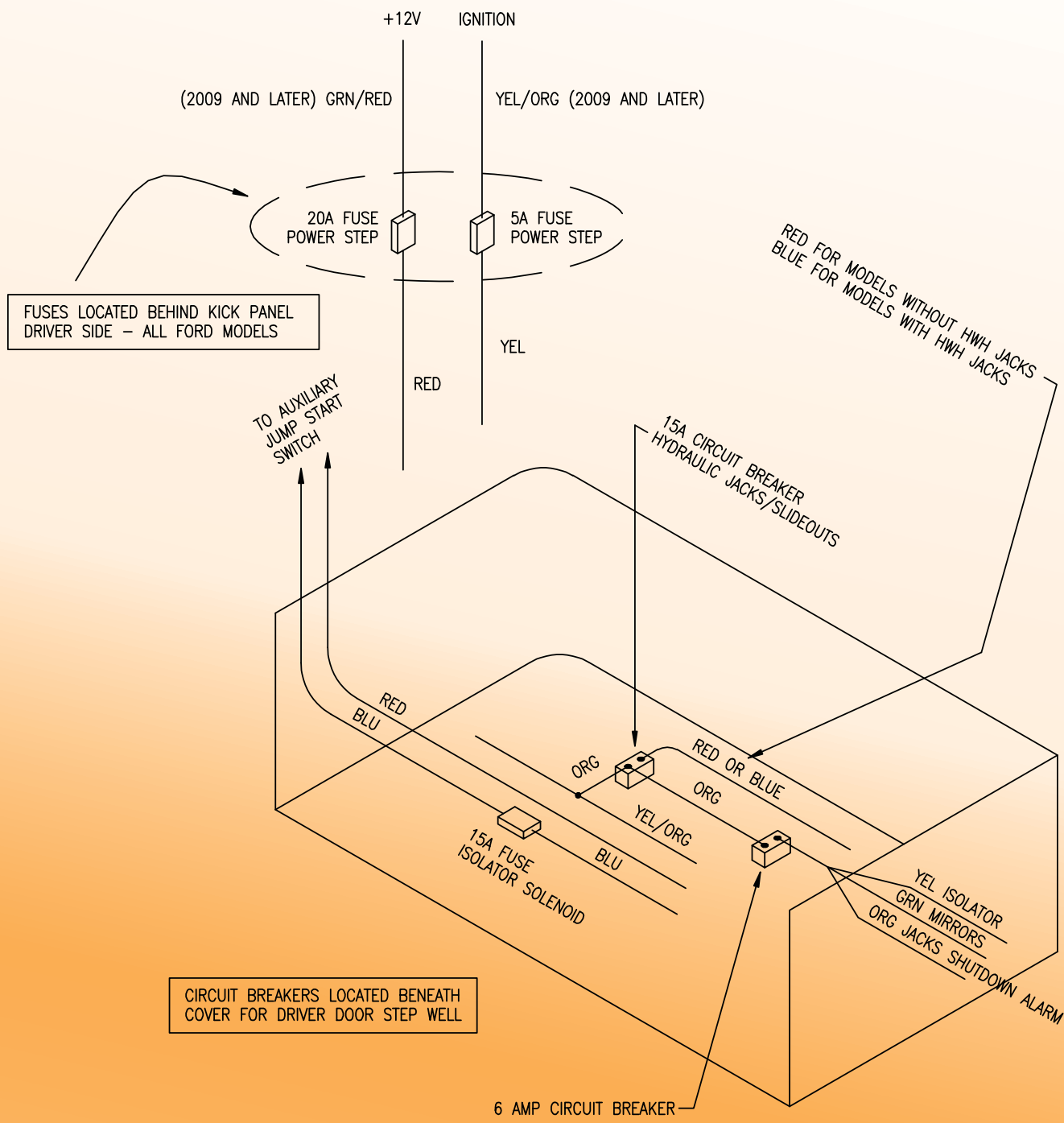
Legrand/Pass & Seymour is a proud sponsor of:




Main Control Panel Wiring Diagrams

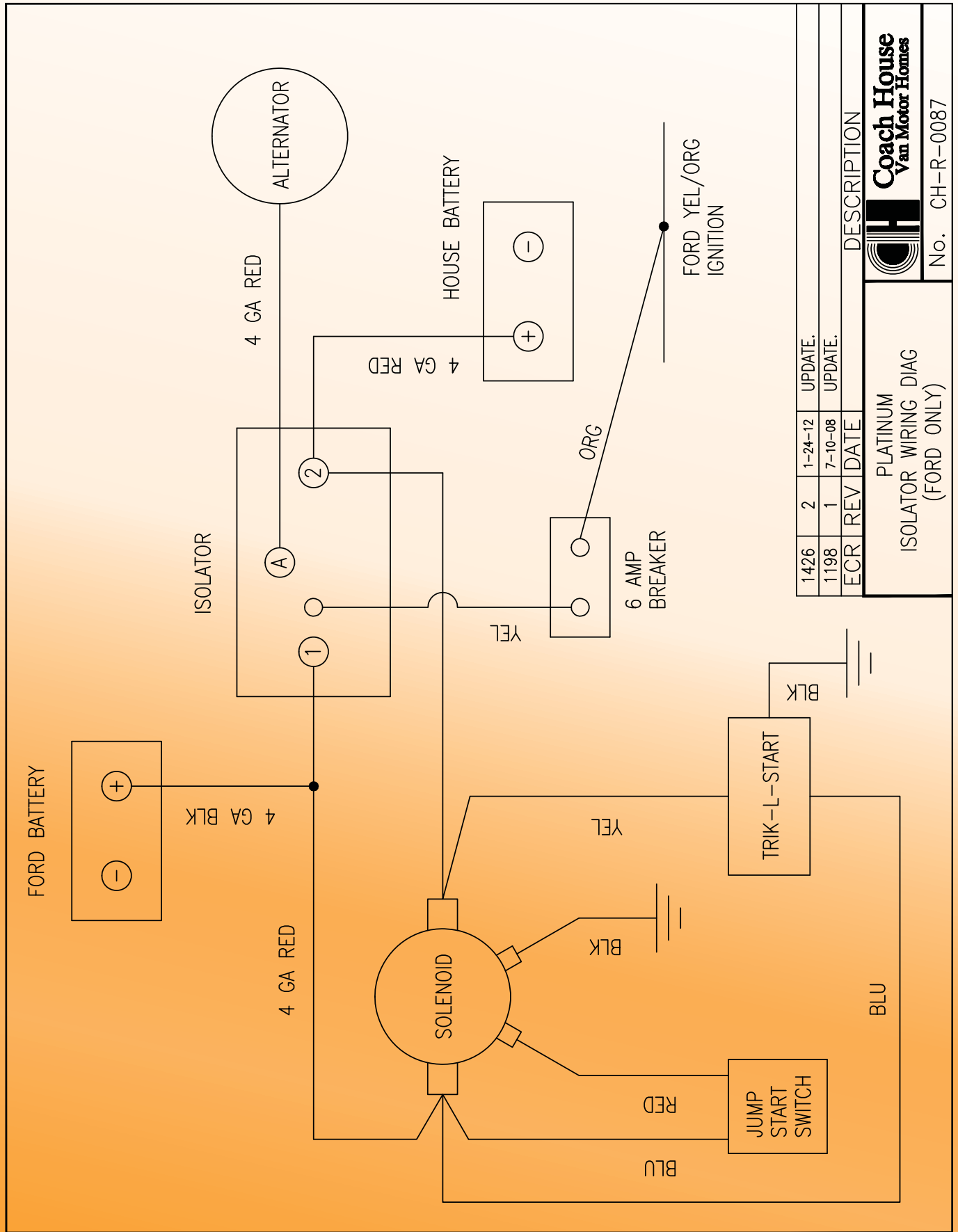


ENGLISH (TOLERANCE UNLESS SPECIFIED)
 0 PL.±.040 1 PL.±.020
 2 PL.±.010 3 PL.±.005
 FRACTIONS ±1/64



1479	2	4-30-13	UPDATE WIRING PER D112.
1415	1	11-8-11	UPDATE FUSE LOCATION.
	0	11-12-09	
ECR	REV	DATE	DESCRIPTION
FUSE & CIRCUIT BREAKER LOCATION FOR POWER STEP, HYDRAULIC JACKS, POWER MIRROR, & ALTERNATOR (FORD)			 Coach House Van Motor Homes
			No. CH-R-0089

SHEET 1 OF 2



1426	2	1-24-12	UPDATE.
1198	1	7-10-08	UPDATE.
ECR REV		DATE	DESCRIPTION
PLATINUM ISOLATOR WIRING DIAG (FORD ONLY)			
			Coach House Van Motor Homes
			No. CH-R-0087

