

REV.	PCN #	DATE	BY	DESCRIPTION
O.	20070247	01/10/07	DB	REMOVED 'TVIA' FROM INSIGNA LOCATION DESCRIPTION
D.	NA	07/13/08	DB	ADDED LP REGULATOR RELIEF VALVE SYMBOL
E.	NA	06/14/10	DB	ADDED WORK LIGHT, FUEL PUMP, AND FUEL PUMP TIMER

MASTER LEGEND

A/C	AIR CONDITIONER		BREAKAWAY SWITCH		CONV W/12V FUSE BLOCK		12V DOUBLE VANITY LIGHT
CV	CENTRAL VACUUM UNIT		CARBON MONOXIDE DETECTOR		12V CONVERTER		12V DOUBLE BULB SCONCE LIGHT
EX	ENGINE EXHAUST		CITY WATER INLET		12V FUSE BLOCK		12V FLEXIBLE LIGHT SYSTEM
FURN	COMFORT HEATING APPLIANCE		DRAIN OUTLET		12V RECEPTACLE		.28 Amp 12" Length / 21" Max Length.
GEN	GENERATOR SET		EMERGENCY EGRESS (17" X 24" MIN.)		12V STORAGE BATTERY		12V DOUBLE BULB WORK LIGHT
GF	GASOLINE FILL		FIRE EXTINGUISHER (LISTED 5B:C MIN.)		12V EXHAUST FAN		
HT	HOLDING TANK		FIRE EXTINGUISHER (LISTED 10B:C MIN.)		12V FAN/LIGHT COMBINATION		
LAV	LAVATORY		INSIGNIA LOCATION		12V BAR LIGHT		12V FUEL PUMP TIMER
LPG	LP STORAGE TANKS		L.P. DETECTOR		12V GLOBE LIGHT		12V FUEL PUMP
MP	MONITOR PANEL		MFG. ID LABEL		# = Number of bulbs in fixture.		
RAD	RADIO		POTABLE WATER FILL		12V HALOGEN LIGHT		
RAN	COOKING APPLIANCE		POTABLE WATER PUMP		12V FLORESCENT LIGHT		JUNCTION BOX
REF	REFRIGERATOR		SMOKE DETECTOR		12V PUCK LIGHT		115V DISTRIBUTION PANEL
SHW	SHOWER STALL		THERMOSTAT		12V SINGLE PANCAKE LIGHT		115V D.P./CONV/12V FUSE BLOCK
SK	KITCHEN SINK		COLD AIR RETURN		12V DOUBLE PANCAKE LIGHT		115V DUPLEX RECEPTACLE
TR	TRANSFER SWITCH		HEAT REGISTER (FLOOR)		12V PIN UP LIGHT		115V ELECTRICAL INLET
TS	BATH TUB/SHOWER		HEAT REGISTER (WALL)		12V SCACE LIGHT		115V EXHAUST FAN
WC	WATER CLOSET		T.V. JACK		12V STEP LIGHT		115V LIGHT FIXTURE
WH	WATER HEATER		PHONE JACK		FANTASTIC FAN		SINGLE POLE SWITCH
WT	WATER TANK		BATTERY DISCONNECT		12V PATIO/DOCKING LIGHT		
W/D	WASHER/ DRYER		LP REGULATOR RELIEF VALVE				TWO POLE DOUBLE THROW SWITCH

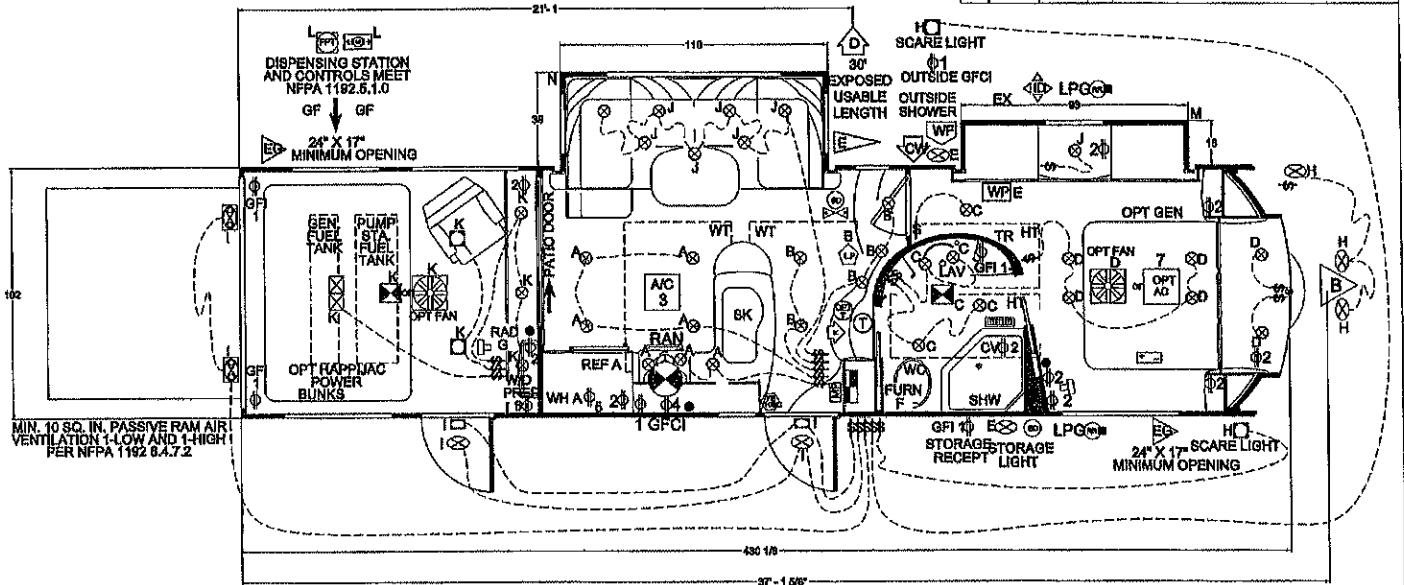
NOTE: 1). SYMBOLS TO BE CONSISTANT WITH ALL DUTCHMEN CODE DRAWINGS.

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APPROVAL	
Dutchmen Manufacturing, Inc.	
Dorham, NC 27834	
PHONE: (919) 334-1224	FAX: (919) 334-1224
SYNOPSIS: MASTER, LEGEND	DATE: 06/16/08
DUTCHMEN CODE DWGS	1-1 E 612003

3200
Voltage

REV	PCN #	DATE	BY	DESCRIPTION
A	-	07.30.10	02	2011 PHOTO PRINT PAC RELEASE



O	12	15	14 GA. STRANDED MISC
N	12	30	10 GA. STRANDED SOFA B/O
M	12	30	10 GA. STRANDED BED S/O
L	12	15	14 GA. STRANDED FP TIMER
K	12	15	14 GA. STRANDED GARAGE
J	12	15	14 GA. STRANDED SLIDEOUTS
I	12	15	12 GA. STRANDED EXTERIOR LIGHTS 2
H	12	15	14 GA. STRANDED EXTERIOR LIGHTS 1
G	12	15	14 GA. STRANDED ACCESSORIES
F	12	15	14 GA. STRANDED FURNACE
E	12	10	14 GA. STRANDED WATER PUMP
D	12	15	14 GA. STRANDED BEDROOM
C	12	15	14 GA. STRANDED BATHROOM
B	12	15	14 GA. STRANDED LIVING ROOM
A	12	15	14 GA. STRANDED KITCHEN
CIR.	VOLTS	AMPS	WIRE SIZE
LOADING			

* OPTIONAL CONVECTION MICROWAVE REQUIRES 20AMP BREAKER

CIR.	VOLTS	AMPS	WIRE SIZE	LOADING
06	120	20	14/2 GROUND	CONVERTER
07	120	20	12/2 GROUND	OPT. 2ND AIR CONDITIONER
08	120	15	14/2 GROUND	LAUNDRY
09	120	15	14/2 GROUND	WATER HEATER
04 *	120	20	12/2 GROUND	OPT. CONVECTION MICROWAVE
04	120	15	12/2 GROUND	MICROWAVE
03	120	20	12/2 GROUND	AIR CONDITIONER
02	120	15	14/2 GROUND	GENERAL RECEPTS
01	120	15	14/2 GROUND	GFI RECEPTS
CIR.	VOLTS	AMPS	WIRE SIZE	LOADING
CIRCUIT SCHEDULE				

NOTE:
INTERIOR FINISH MATERIALS HAVE A FLAME SPREAD OF LESS THAN 200
INTERIOR DOORS/PARTITIONS ARE NON-LOCKING
UNIT COMPLIES WITH NFPA 1192 (2008)
TOTAL SQUARE FEET OF UNIT = 351.62
60AMP SERVICE STANDARD
POWER CHORD LENGTH: 30 FT. (MINIMUM)

810282	HEATING
814523	SYSTEM, ELECTRICAL, 60AMP
1001152	SYSTEM, DRAINAGE
1001153	SYSTEM, LP
1001154	SYSTEM, WATER
DWG. #	SYSTEM
DRAWING REFERENCE	
APPROVAL	
Dutchmen Manufacturing, Inc.	
Goshen, IN 46530	
Phone: (874)834-1224 Fax: (874)833-2007	
DRAWING NAME	FLOOR PLAN, CODE
VERSION	V3200
PAGE OF 1000	1 2 A
DATE	08.11.10
DRAWN BY	JB
1001150	

Dutchmen Mfg. claims exclusive rights to the information documented herein. Manufacture of material shown, in part or in full, is prohibited by law without written consent from Dutchmen Mfg.

Converter: WECO/Chiang USA, Inc.
 Model Number: WES1100
 Input Rating: 105/10VAC/80Hz/620watts
 Output Rating: 600W/60/3.0VDC
 If separate Battery Charging Circuit Specify:
 Marked Battery Charging Amps: Not Separate

Load Calculation:
 Fill in following for 12V lights, fans, water pumps, refrigerators etc. connected to above converter, for the vehicle employing this converter will largest connected load Specify vehicle model number.

Fixture Type	Amps Each	X	No. Fixtures = 100% Load
Panacea Light Single	1.5		0
Panacea Light Double	3		3
Puck Light 3"	0.85		17.65
Puck Light 4"	1.66		24.9
Globe Light Double	3		0
Globe Light Double GJ	3.8		0
Globe Light Quad	6		0
Tulip Light	1.5		0
Decor Light	5.7		0
Indirect Lighting (spot)	0.28		0
Cosmetic Light	1.58		11.06
Radio Light	2.1		4.2
Work Light	1.7		3.4
Strip Light	0.27		0.54
Spot Light	1.5		1.5
Radio Vent	3		6
Plastic Vent	1		1
LP Detector	3.5		0
Range Hood	9.8		0
Furnace 35,000 BTU	41		11
Furnace 40,000 BTU	45		12
Radio	1.2		0.1
Water Heater	0.1		7
Water Pump	7		11
Fuel Pump	0.01		0.01
Fuel Pump Switch	0.01		80
Slideout Motor	15		
Total Amps	65		168.76

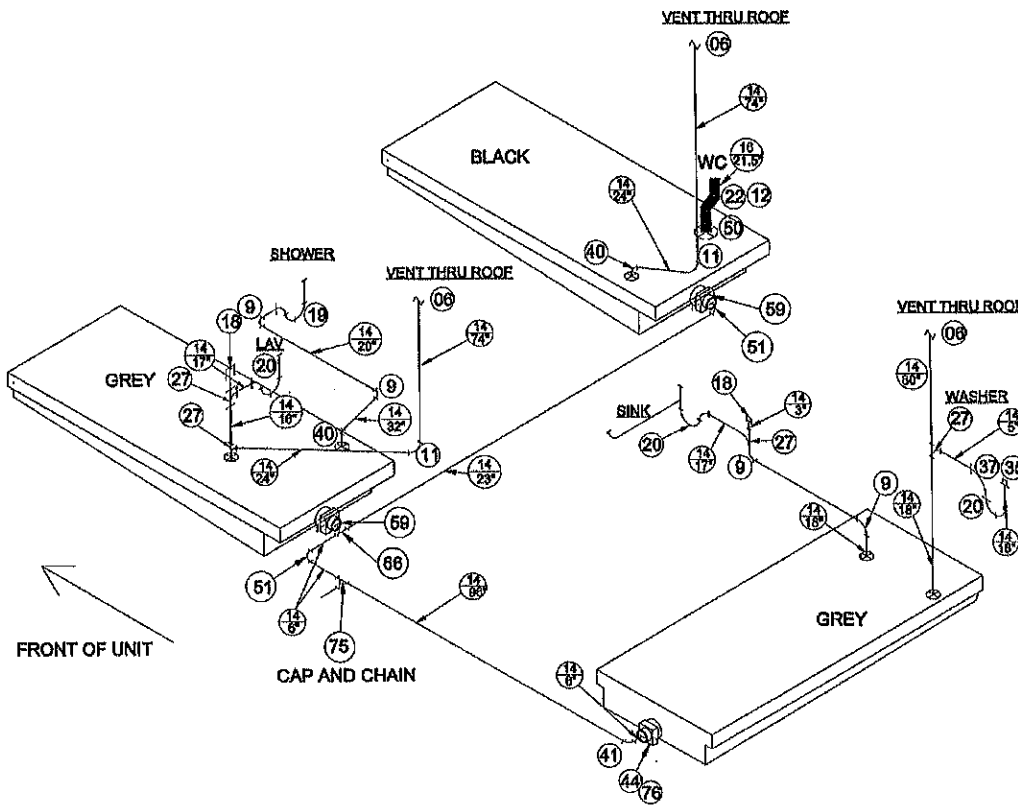
First 20 amps x 100%	=	20
Second 20 amps x 50%	=	10
Balance amps x 25%	=	32.19
Battery Charging amps x 100%	=	5
Minimum Acceptable Converter Output	=	67.19

References		Light Bulbs
Furnace 20,000 BTU	4.6 AMPS	812= 0.2 amps
Furnace 25,000 BTU	7.6 AMPS	C921= 1.46 amps
Furnace 31,000 BTU	7.6 AMPS	1003= 0.94 amps
Furnace 35,000 BTU	9.6 AMPS	1075= 1.90 amps
Furnace 40,000 BTU	11.0 AMPS	1141= 1.58 amps
		1156= 2.10 amps
		2099= 1.08 amps
		G4 Halogen= 1.66amps
		12" Fluorescent F40CW= 56 amp
		15" Fluorescent F45CW= 1.25 amps

Circuit Description (ZONES)	Total Amps/Circuit
A Kitchen	10.49
B Living Room	8.87
C Bath	8.18
D Bedroom	11.34
E Water Pump	10.16
F Furnace (Appliance)	11.00
G Accessories (Radio)	5.00
H Exterior Lighting 1	8.94
I Exterior Lighting 2	7.10
J S/O Lighting	6.80
K Garage	11.87
L Fuel Pump Timer	11.01
M S/O Bed	30.00
N S/O Sofa	30.00
O Misc	0.00
Total Consumption	168.76

* Note, when load per circuit exceeds 12 amps (12.0 to 12.8), increase wire size from 14 ga. to 12 ga.
 increase fuse from 15 amp. to 20 amp.
 Option Circuits may be used as increased and are not actually optional.
 Total Amps from Fixture Table to match Total Consumption on Circuit Table.
 Converter Calc V0200.XLS

REV	PCN #	DATE	BY:	DESCRIPTION
A	-	08/11/10	JB	2011 PHOTO PRINT PAC RELEASE



76	1	101890	3" x 1 1/2" TANK REDUCER
75	1	104035	3" x 3" X 1 1/2" 90DEG WALH
66	1	103391	WYE-3"X3"X3"
59	2	101884	CAP- 3" BAYONET/SEWER
51	2	101143	ELBOW- 3" 90 EXTRA LONG TURN
60	1	101141	ELBOW- 3" 45DEG LT
47	1	101139	ADAPTER- TERMINATION 3" BAY
46	1	101133	ADAPTER- TERMINATION 3" HUB
44	1	101129	VALVE- 1 1/2" TERMINATION HUB
41	1	101119	STREET ELBOW- 1 1/2" 90DEG XLT
40	2	101117	STREET ELBOW- 1 1/2 45DEG XLT
37	1	101111	ADAPTER- 1 1/2" CLEAN OUT
35	1	101107	PLUG- 1 1/2" CLEAN OUT
27	4	100502	TEE- 1 1/2" SANITARY
23	1	100491	STREET ELBOW- 3" 90DEG LT
22	1	100490	STREET ELBOW- 3" 45DEG LT
20	3	100448	P-TRAP- LAV/SINK 1 1/2"
19	1	100448	P-TRAP- TUB 1 1/2"
18	2	100448	PROVENT- 1 1/2" ANTI-SIPHON
16	148"	100433	PIPE- 3"
14	57"	100431	PIPE- 1 1/2"
12	1	100399	FLANGE- 4" X 3" HUB CLOSET
11	2	100377	ELBOW- 1 1/2" 45DEG LT
09	4	100376	ELBOW- 1 1/2" 90DEG XLT
06	3	100352	COUPLER 1 1/2"

ITEM	QTY	PART #	DESCRIPTION
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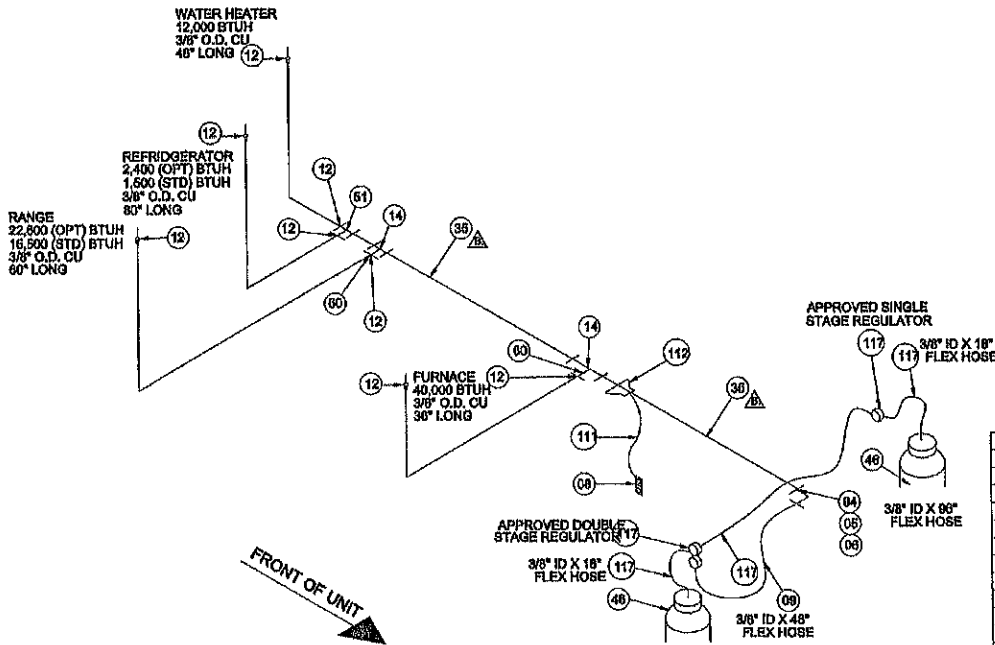
MATERIAL LIST			
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APPROVAL			
Dutchmen Manufacturing, Inc.			
Dordrecht, NJ 08050			
Phone: (674)634-1224 Fax: (674)633-3007			
DESIGN/DATE	1	1	1001152
SYSTEM, DRAINAGE			
VOLTAGH			
VOLTAGE 3200			
DATE	08/11/10	BY	J BARNES

NOTE: 1). ALL FIXTURE TRAPS ARE COUNTED AS 1 1/4" UNLESS OTHERWISE NOTED

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REV.	PCN #	DATE	BY:	DESCRIPTION
A.	-	07.30.10	JS	2010 FINAL PRINT PAG RELEASE
B.	2011-0387	08.10.10	CS	CHANGED BOTH BLACK PIPED TO 60"



117	1	146368	KIT-309 8PFT AUTO REGULATORS W/FLEX HOSES
112	1	101783	1/2" TO 1" ZINC DIE-CAST GROUND CLAMP
111	1	118788	#8 BARE COPPER WIRE
80	2	101348	ADAPTER-3/8" FL X 1/2" MPT
61	1	101226	TEE-COPPER 3/8 3/8 FL X 1/2 MPT
48	2	101800	LP-BOTTLE-30# CSA BOTTLE
35	2	101195	PIPE-LP-60" BLACK IRON
14	2	101160	TEE-LP-1/2" BLACK IRON PIPE
12	8	101120	NUT-3/8" FLARE SHORT FORGED
09	1	130316	HOSE-48" UL
08	1	101117	GROUND LUG-14-4 CU 1/4 HOLE
08	1	100327	BULKHEAD WASHER-3/4" GREEN GRD
08	1	100326	BULKHEAD NUT-1/2" GREEN GRD
04	1	101078	BULKHEAD CONNECT-1/2FL X 1/2FPT
ITEM	QTY	PART #	DESCRIPTION

MATERIAL LIST

APPROVAL

Dutchmen Manufacturing, Inc.

Cooper, NJ 46328
Phone: (874)554-1226 Fax: (874)553-5807

DRAWING NAME	SYSTEM, GAS, LP	PAGE OF REV.	1 1	1001163
VERSION	VOLTAGE 3200	DATE	08/11/10	JB

- 6) ALL PIPE 1/2" I.D. BLACK IRON.
5) ALL TUBING 3/8" O.D. TYPE L COPPER.
4) MAXIMUM DEVELOPED LENGTH=28'-6"
3) MAXIMUM BTUH INPUT=77,000 BTUH.
2) ALL LINES GROMMETED WHEN THEY PASS THROUGH STRUCTURAL MATERIAL.
NOTE: 1) SEE TRA LP GAS TEST REPORT DATED 6/12/06 FOR PIPE SIZE JUSTIFICATION.

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REV.	PCN#	DATE	BY	DESCRIPTION
A	20051036	07/25/05	RLG	REVISED CODE PRINTS FOR 2006 STANDARDS

FLOOR REGISTER
COMPLIES WITH NFPA 1102
QUANTITY, LOCATION, AND
ORIENTATION VARIES PER
MODEL.

**ALUMINUM DUCT
COLLAR**
.013" x 2 1/4" x 10"
COMPLIES WITH NFPA
1102-5.7.1
QUANTITY, LOCATION, AND
ORIENTATION VARIES PER
MODEL.

**ALUMINUM
PLENUM**
32"L X 26"W X 1 1/2"H

**8500 SERIES
FURNACE**

**5/8" FLOOR
DECKING**

**1 1/2" X 1 1/2"
ALUMINUM TUBE**

**.018"
GALVANIZED
DUCT MATERIAL**

**UNDER BELLY
DECKING**

DETAIL A

HEAT DUCT
1 1/2" X 10"
LENGTH VARIES PER MODEL
(SEE DETAIL A)

**GROUND
LUG**
8 GA. BARE
COPPER WIRE

**REGISTER
BOOT**

**4" ALUMINIZED
POLY FLEX. DUCT**
COMPLIES WITH
NFPA 1102-5.7.1
QUANTITY, LOCATION, AND
ORIENTATION VARIES PER
MODEL.

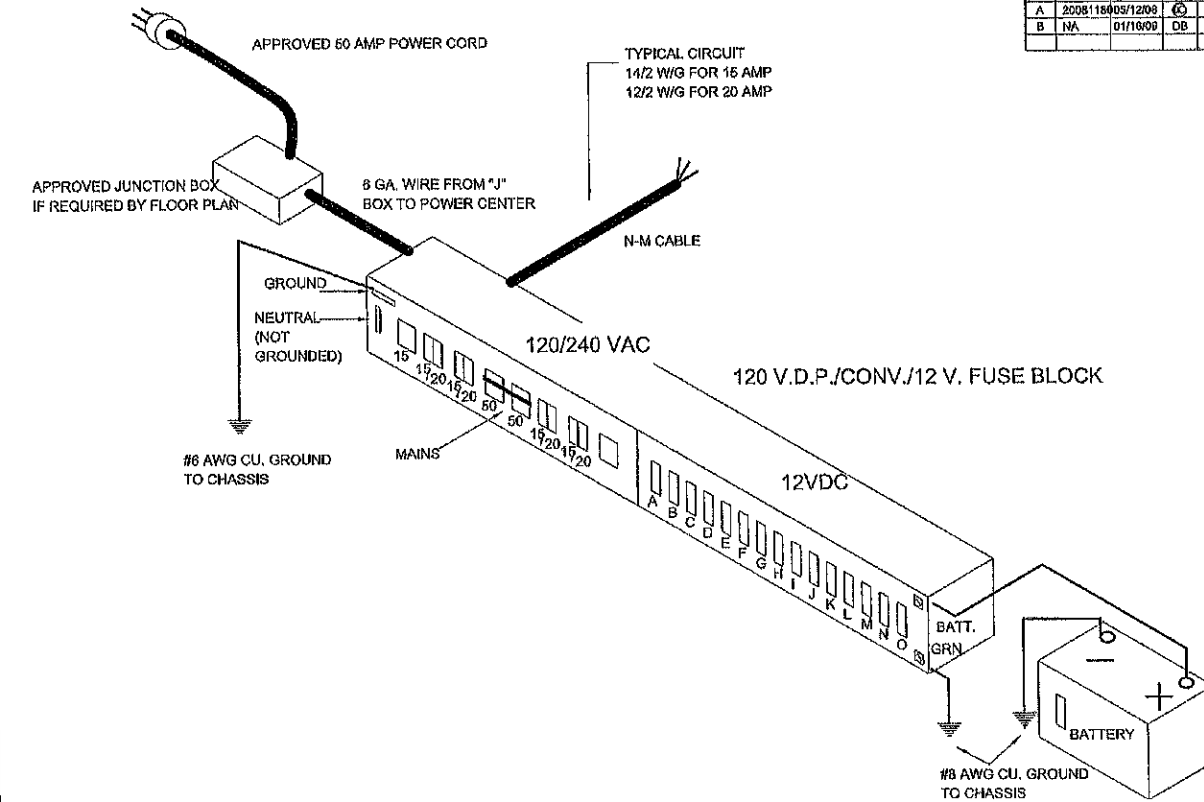
ADAPTER

NOTE: 1.) TYPICAL IN-FLOOR HEAT SYSTEM.

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APPROVAL		Dutchmen Manufacturing, Inc.	
DISTRIBUTION		COLORED, IN 40528	PAID 10/10/05
SYSTEM HEATING		11	AI 610262
COLORADO/GRAND JUNCTION		05/25/05	RLG

REV	PCN #	DATE	BY:	DESCRIPTION
A		20081109/1209	DB	NEW FOR 50 AMP SERVICE
B	NA	01/16/09	DB	UPDATED CSA CODE REFERENCE ON PAGE 2



2) 25' EXPOSED USABLE LENGTH POWER CORD

NOTE:1) REFER TO FLOOR PLAN FOR FUSE/BREAKER SIZES, WIRE SIZES, AND CIRCUIT LOADING

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Approval	
Dutchmen Manufacturing, Inc.	
Goshen, IN 46530	
Phone: (574) 634-1224 Fax: (574) 633-3007	
DRAWING NAME	SYSTEM, ELECTRICAL
DATE	05/12/08
REV	1
BY	AJ
CHECKED BY	614623
50 AMP SYSTEM	2