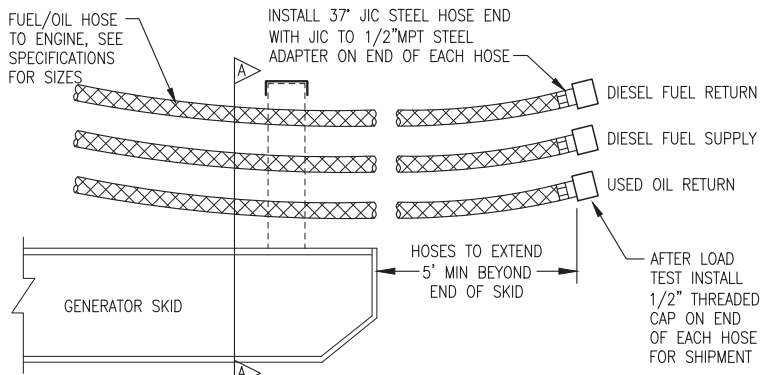
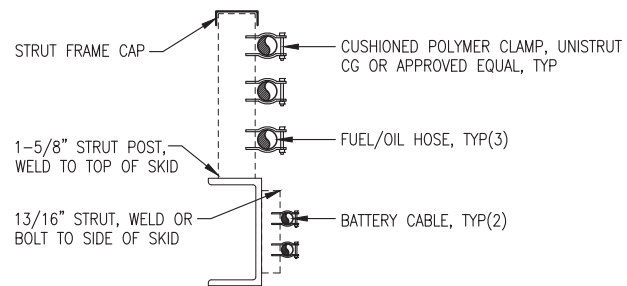


LEFT SKID PLAN (TOP) VIEW



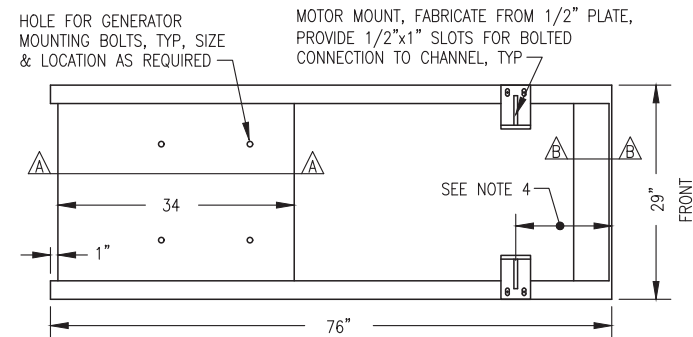
ELEVATION (SIDE) VIEW



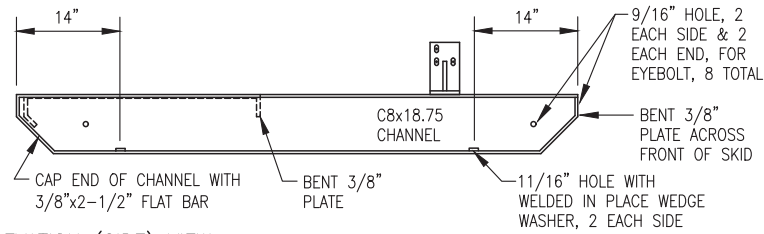
SECTION A-A

NOTE:  
GROUP HOSES ON LEFT SKID AS SHOWN TO COORDINATE WITH COOLANT HOSES ABOVE.

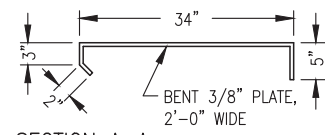
1 FUEL/OIL HOSE & BATTERY CABLE INSTALLATION  
M3.4 NO SCALE



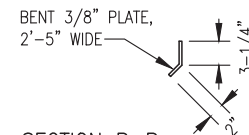
PLAN (TOP) VIEW



ELEVATION (SIDE) VIEW



SECTION A-A

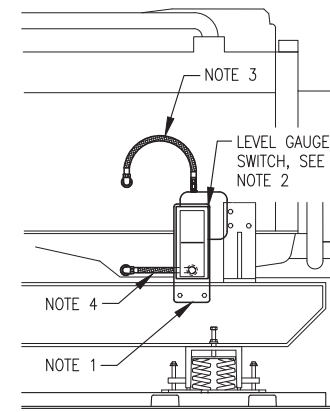


SECTION B-B

NOTES:

- 1) FABRICATE FROM ASTM A-36 STEEL. BEND PLATES & CUT ENDS OF CHANNELS AT 90° & 45° AS SHOWN.
- 2) EXCEPT WHERE INDICATED AS BOLTED MAKE ALL CONNECTIONS WITH CONTINUOUS WELDS (FILLET OR FULL-PENETRATION GROOVE AS REQUIRED) IN ACCORDANCE WITH CURRENT AWS STANDARD CODE.
- 3) ROUND ALL CORNERS & GRIND WELDS SMOOTH AFTER FABRICATION. PAINT TO MATCH ENGINE-GENERATOR.
- 4) PLACE UNIT ON SKID SO THAT THE EXHAUST RISER CENTERLINE IS 39" FROM THE FRONT OF THE SKID.

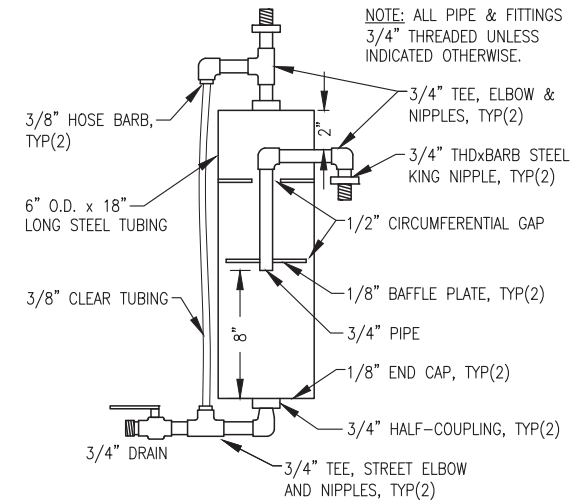
2 TYPICAL GENERATOR SKID FABRICATION  
M3.4 NO SCALE



NOTES:

- 1) 1/4" STEEL SUPPORT PLATE PRE-DRILLED TO MATCH GAUGE/SWITCH MOUNTS AND BOTTOM HOSE ENTRANCE. BOLT TO INSIDE (BACK) OF CHANNEL SKID AT HEIGHT AS REQUIRED TO CENTER GAUGE AT NORMAL FULL OIL LEVEL.
- 2) MOUNT OIL LEVEL GAUGE/SWITCH TO STEEL SUPPORT PLATE WITH RUBBER SHOCK MOUNTS. ADJUST SWITCH CONTACTS TO 1/2" ABOVE AND BELOW NORMAL FULL LEVEL. PAINT MARK A RED LINE AT BOTH SWITCH LEVELS.
- 3) CONNECT TOP (VENT) PORT TO ENGINE CRANK CASE WITH #8 HOSE WITH 1/2" OR 3/8" NPT JIC SWIVEL ENDS. ROUTE UPPER HOSE WITH HIGH POINT 4" MIN ABOVE TOP OF GAUGE.
- 4) CONNECT BOTTOM PORT TO ENGINE OIL PAN WITH #8 HOSE WITH 1/2" OR 3/8" NPT JIC SWIVEL ENDS. DO NOT TEE INTO OIL DRAIN LINE. ROUTE LOWER HOSE BACK THROUGH PRE-DRILLED HOLE IN STEEL PLATE.

3 TYPICAL OIL LEVEL GAUGE/SWITCH INSTALLATION  
M3.4 NO SCALE



4 CONDENSATE TRAP FABRICATION  
M3.4 NO SCALE

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MARCH 2022

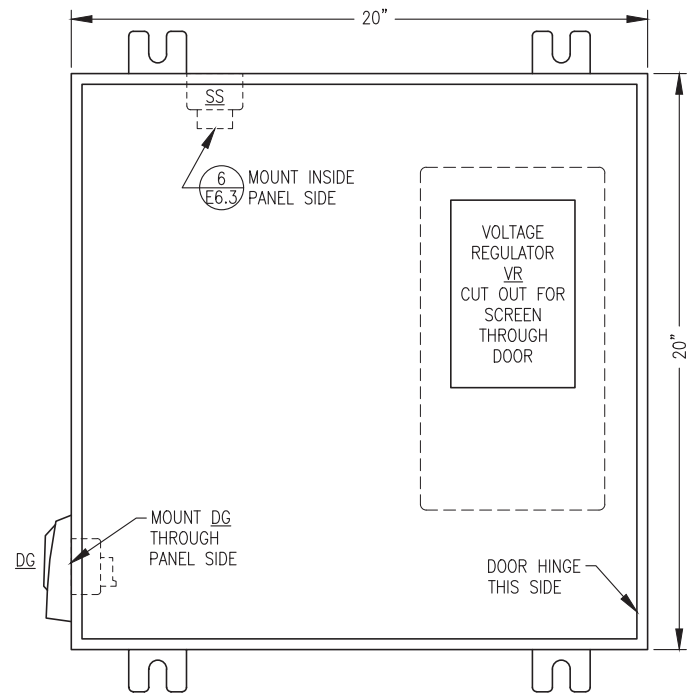


PROJECT:  
RAMPART POWER SYSTEM UPGRADE

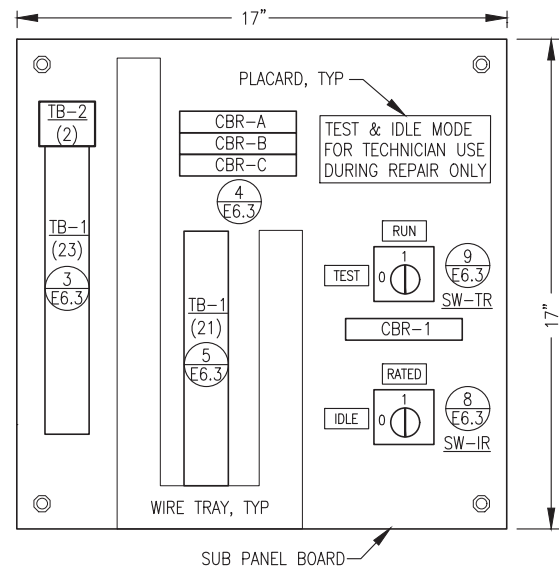
TITLE:  
GENERATOR FABRICATION DETAILS

	DRAWN BY: JTD	SCALE: AS NOTED
	DESIGNED BY: BCG	DATE: 3/15/22
FILE NAME: RAM_PP_M2-M7	SHEET:	M3.4
PROJECT NUMBER:		

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**1** JUNCTION BOX FRONT PANEL LAYOUT  
E6.3 NO SCALE



**2** JUNCTION BOX SUB PANEL LAYOUT  
E6.3 NO SCALE

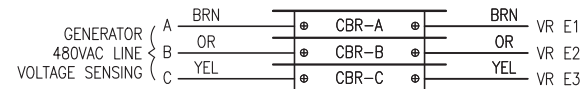
BILL OF MATERIALS				BRAND SPECIFIC NOTE: SPECIFIC PARTS MANUFACTURER AND MODEL SELECTED NOT ONLY TO MEET PERFORMANCE FUNCTION BUT ALSO TO COORDINATE AND INTERFACE WITH OTHER DEVICES AND SYSTEMS. APPROVED EQUAL SUBSTITUTIONS WILL BE ALLOWED ONLY BY ENGINEER'S APPROVAL. TO OBTAIN APPROVAL, SUBMITTALS MUST CLEARLY DEMONSTRATE HOW SUBSTITUTE ITEM MEETS OR EXCEEDS SPECIFIED ITEM QUALITY AND PERFORMANCE CHARACTERISTICS AND ALSO COMPLIES WITH MECHANICAL AND/OR ELECTRICAL CONNECTIONS AND PHYSICAL LAYOUT REQUIREMENTS.
TAG	MANUFACTURER	MODEL	DESCRIPTION	
CBR-A/B/C	ALLEN-BRADLEY	1489-M1-C010	RAIL MOUNT CIRCUIT BREAKER, 1P, 1A	
CBR-1	ALLEN-BRADLEY	1489-M1-C050	RAIL MOUNT CIRCUIT BREAKER, 1P, 5A	
DG	JOHN DEERE	DG-14	DIAGNOSTIC GAUGE WITH HARNESS PROGRAMMED FOR MARINE TIER 3 WITH UNIQUE JOHN DEERE FAULT CODE	
ENCL.	HOFFMAN	A20H20ALP	20x20x8" NEMA 12 BACK PANEL	
SS	HOFFMAN	A20P20	STARTER AUXILIARY SOLENOID, 24V	
SW-IR/SW-TR	ALLEN-BRADLEY	194L-A12-225-2	CHANGEOVER SWITCH, 12A, 2P 90 DEGREE I-O HANDLE	
TB-1	IDEC	BNH15LW	15A DIN RAIL-MOUNT TERMINAL BLOCK	
TB-2	IDEC	BNH50W	50A DIN RAIL-MOUNT TERMINAL BLOCK	
VR	BASLER	DECS-150 5NS1V1N1S	DIGITAL VOLTAGE REGULATOR	

**SHOP FABRICATION NOTES:**

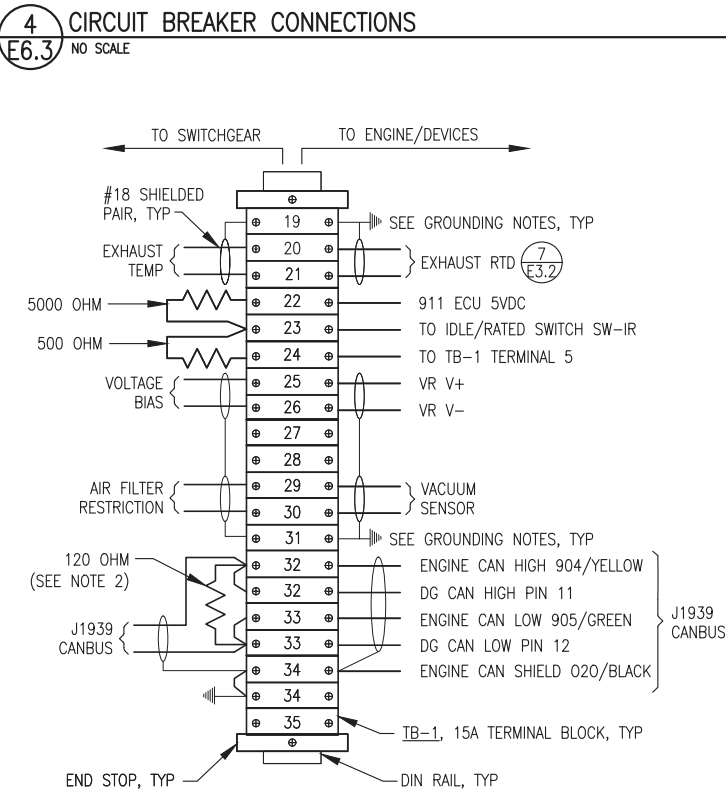
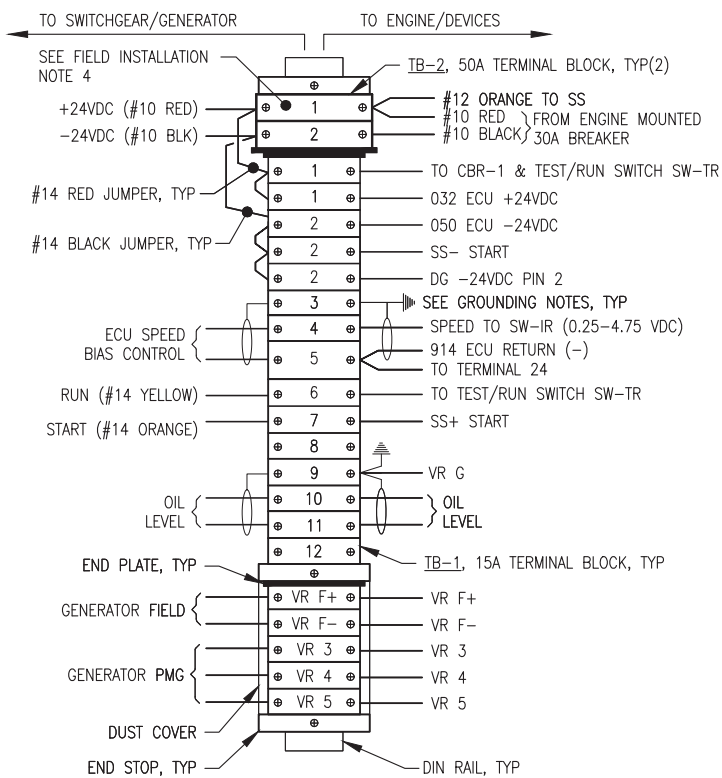
- 1) PROVIDE ASSEMBLY WITH ALL DEVICES AND WIRING INDICATED.
- 2) INSTALL IN A NEMA 12 ENCLOSURE WITH MOUNTING FLANGES AT BACK, A MIN 14 GAUGE INTERIOR BACK PANEL AND HINGED LOCKABLE DOOR. SIZE AS INDICATED.
- 3) PROVIDE DIN RAIL, TERMINAL END PLATES, TERMINAL END STOPS, TERMINAL DUST COVERS AND OTHER MISCELLANEOUS HARDWARE AS REQUIRED TO MATCH TERMINALS. LABEL ALL TERMINALS EXACTLY AS INDICATED ON THE DETAILS.
- 4) ALL WIRE #14AWG EXCEPT WHERE SPECIFICALLY INDICATED OTHERWISE. LABEL BOTH ENDS OF ALL JUMPERS WITH THE ENGINE PANEL TERMINAL NUMBER.
- 5) PROVIDE MECHANICAL GROUND LUGS FASTENED TO BACK PANEL AND GROUNDED TO ENGINE-GENERATOR. GROUND ALL SHIELD DRAIN WIRES TO LUGS AT BACK PANEL ONLY.
- 6) PROVIDE WIRING HARNESSSES FOR CONNECTION TO GENERATOR AND TO ENGINE. INSTALL WIRES IN LIQUID TIGHT FLEX OR FLEXIBLE PLASTIC WIRE LOOM AND PROVIDE SERVICE LOOPS IN ACCORDANCE WITH SPECIFICATIONS.
- 7) SHOP TEST EACH NEW ENGINE-GENERATOR WITH ASSOCIATED JUNCTION BOX PERMANENTLY CONNECTED. UPON COMPLETION OF TESTING, COIL WIRING HARNESSSES AND SECURE JUNCTION BOX TO GENERATOR FOR SHIPPING.

**FIELD INSTALLATION NOTES:**

- 1) PERFORM ALL FIELD WIRING IN ACCORDANCE WITH SPECIFICATIONS. LABEL BOTH ENDS OF ALL FIELD WIRING WITH THE ENGINE PANEL TERMINAL NUMBER.
- 2) ON SHIELDED CONDUCTORS GROUND ALL SHIELD DRAIN WIRES AT ENGINE J-BOX ONLY. CLIP DRAIN WIRES AT OPPOSITE ENDS.



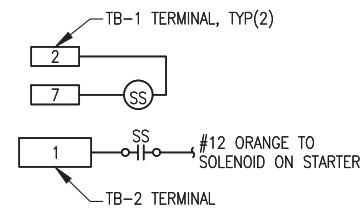
**3** TERMINAL STRIP CONNECTIONS  
E6.3 NO SCALE



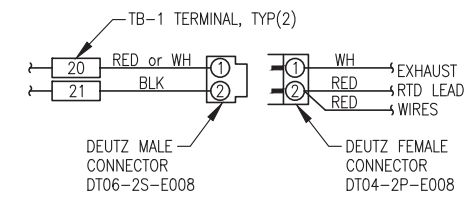
- NOTES: 1) ALL RESISTORS 0.25W.  
2) REMOVE RESISTOR IF ENGINE WIRING HARNESS HAS 120 OHM END OF LINE RESISTOR.

**4** CIRCUIT BREAKER CONNECTIONS  
E6.3 NO SCALE

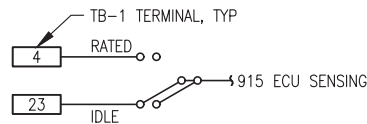
**5** TERMINAL STRIP CONNECTIONS  
E6.3 NO SCALE



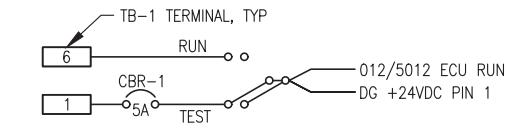
**6** STARTER AUX SOLENOID SS WIRING  
E6.3 NO SCALE



**7** EXHAUST RTD CONNECTOR  
E6.3 NO SCALE



**8** IDLE/RATED SWITCH SW-IR WIRING  
E6.3 NO SCALE



**9** TEST/RUN SWITCH SW-TR WIRING  
E6.3 NO SCALE

**3** TERMINAL STRIP CONNECTIONS  
E6.3 NO SCALE

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CONSTRUCTION  
MARCH 2022



PROJECT: <b>RAMPART POWER SYSTEM UPGRADE</b>	
TITLE: <b>24VDC ENGINE WIRING JUNCTION BOX</b>	
DRAWN BY: JTD	SCALE: NO SCALE
DESIGNED BY: CWV/BCG	DATE: 3/15/22
FILE NAME: RAM PP E6	SHEET: <b>E6.3</b>
PROJECT NUMBER:	



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