



"As Built" Burner Specification Sheet

Job Number	J073866-0	Qty	3	Order Number	B052747	Line Number	1
Customer	VICTORY ENERGY OPERATIONS			Purchase Order	18128		
Job Name	JEFFERSON BARRACKS VAMC						
Burner Model	LNICM11A-GO-30						
Burner Mode of Operation	MOD ODP	Serial Number	051349576-78				
Code	NFPA,FM,CSD1						
UL Label							
Heat Exchanger Make	VICTORY ENERGY	Heat Exchanger Model	DT-2-57				
Heat Exchanger Type	Water Tube						
Combustion Chamber Pressure	2.74						
Job Site Altitude	495FT	Clearance Checked By					
Clipped Circuit Board PN							
Gas High Fire Rate	42,143	MBH					
Oil High Fire Rate	287	GPH	PSIG Pump				
Fuel Oil Grade							
UL Group - Gas			UL Group - Oil				
Gas Type	NATURAL						
High Fire Manifold Pressure**	10.2	IN. WC	Side Orifice Drill Size				
Gas Regulator Outlet Pressure	24.1	IN. WC	RPTD Job Pressure	420.0	IN. WC		
Minimum Supply Pressure	70.8	IN. WC	Max Design Pressure *	420.0	IN. WC		
Wiring Diagram	GO-J073866-6						
Gas Piping Diagram	PDG-J073866-3						
Oil Piping Diagram	PDO-J073866-4						
General Arrangement Drawing	LNICM11A-GO-30_J073866-CAddl. Dwg.						
Remote Panel Diagram	Addl. Dwg.						
Additional Drawings	90N157C						
Control Voltage	115V	Single Phase	60	HZ	Full Load Amps	6.0	
Blower Motor Voltage	460V	3	PH	60	HZ	Full Load Amps	34.0
Oil Pump Motor Voltage			PH		HZ	Full Load Amps	
Compressor Motor Voltage			PH		HZ	Full Load Amps	
Minimum Circuit Ampacity	12.0	Gas Inlet Location					
Ignition System	GAS PILOT SCANNER						
Diffuser Blade Setting	Blast Tube Flange Set						
Comments:							
Compressor and remote oil pump by others.							

Vertical FGR inlet

Nozzle air pressure 74.9 psi

Nozzle oil pressure 84.9 psi

****Approximate operating pressure at the Manifold Inlet for initial start-up. Final Pressure should be determined after checking actual flow with gas meter. Stack temperature, CO, CO2, O2, and Furnace Pressure will help in determining actual input when gas meter is not available for this unit.**

***All components are rated for the Max Design Pressure specified, that pressure must not be exceeded.**

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Job Number: J0738660

Item: LNICM11A-GO-30

Qty: 3.00

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PFI Part No.	U/M	Qty	Material Description	Ship Loose
004660	FT	1	LD-500-1 LOW DENSITY 1/2 INCH 1000 DEGREE FIBERGLASS BRAIDED ROPE P/N 21032	
056282	EA	1	30 HP 3550 RPM 208/230/460/3 TEFC 286T FR. HIGH EFFICIENCY BALDOR MOTOR SPEC. 09F436Y842G1	
060120	EA	2	M6184F-1014 HONEYWELL MODUTROL MOTOR	
060613	EA	2	2000-400-090-126-019-20-000000-0-0-00 H.W. HERCULINE MOTOR	
060642	EA	2	50017460-003 120 VAC 50/60 HZ. HONEYWELL INTERNAL TRANSFORMER	
062121	EA	1	CHE6SCA-E6RSA 3/8" SQ. TO 3/8" ROUND SET SCREW, 400 IN-LB/SQM 56.6 TO DAMPER	
062122	EA	1	CHE6SCA-E8RSA 3/8" SQ TO 1/2" ROUND SET SCREW, 400 IN-LB/SQM 56.6 TO DAMPER	
062126	EA	1	CHE10RSA-E8RSA SIEMENS COUPLING	
062127	EA	1	CHE10RSA-E10RSA COUPLING 5/8 ROUND SET SCREW TO 5/8 ROUND SET SCREW, 400 LBS.	
090566	EA	1	222 100% CHICAGO DESIGN 62 3500 RPM CW WHEEL WITH 1-7/8" BORE	
141200	EA	6	802B-PSABXSX ALLEN BRADLEY OR BZE6-2RQ HONEYWELL MICRO SWITCH	
151601	EA	1	B429VXFM#2114 400 PSI ASHCROFT LOW OIL PRESSURE SWITCH, MANUAL RESET	
151602	EA	1	B428VXFM#2114 400 PSI ASHCROFT HIGH OIL PRESSURE SWITCH, MANUAL RESET	
161613	EA	1	C6097A-1038 12" TO 60" W.C. H.W. LOW GAS PRESSURE SWITCH (1/4" NPT MOUNT)	
161614	EA	1	C6097A-1095 0.4 TO 5 IN. H.W. LOW GAS PR ESSURE SWITCH, MANUAL RESET, 1/4" NPT MOUNT	
161750	EA	1	C6097B-1028/B HONEYWELL HIGH GAS PRESSURE 3-21" FM, MANUAL RESET (1/4" NPT. MOUNT)	
161800	EA	3	32003039-001 H.W. POSITION INDICATION LA	

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161800...	EA...	3...	MP KIT FOR C6097A & B PRESSURE SWITCHES	...
171005	EA	2	B424VXFMXG6 100 PSI ASHCROFT LOW AIR PRESSURE SWITCH, AUTO RESET	
171140	EA	1	JD-2 ANTUNES AIR SWITCH WITH RED 0.1-24 INCH W.C. SPRING	
201331	EA	2	3 INCH MAXON 5000CP GAS VALVE, CAST IRON BODY, FLANGED CONNECTIONS, WITH 23436 PROOF OF CLOSURE SWITCH, 6 SECOND TIMING	
202650	EA	2	8040H8 3/8 INCH 15 PSI NEMA 4 120 VOLT 50/60 HZ. ASCO PILOT VALVE	
211451	EA	2	HOV1B302T171 N.C. 1/2" P/C, FM APPROVED ASCO OIL VALVE, 120 VOLT 50/60 HZ.	
211820	EA	1	3/4 INCH TYPE 129S43 MAGNETROL N.C. SOLENOID VALVE 180 PSI 400 DEG. F. 120 VOLT	
214710	EA	1	P21S 1/2 INCH T.L.V. THERMO DISC STEAMTRAP 300 PSIG AT 752 DEG F	
220215	EA	1	3/4 INCH 22985-0005 CASH DIFFERENTIAL STEAM PRESSURE REGULATOR, 2 TO 20 PSI DIFFERENTIAL PRESSURE RANGE	
234110	EA	2	1/2 INCH 509T MILWAUKEE SWING CHECK VALVE 125# SWP, 200# WOG	
234720	EA	2	T453B 3/4 INCH NIBCO CHECK VALVE WITH BRONZE DISC	
241200	EA	1	3/4 INCH NUMBER GATE VALVE, 125# WSP, 200# WOG, 100-004	
262200	EA	1	B-1/2-24-TW-1 HAUCK MODULATING OIL VALVE	
273600	EA	1	501221-1 112BV 3 INCH ECLIPSE MANUAL BUTTERFLY VALVE	
284050	EA	1	8030G083 ASCO 3/4 INCH 120/60 NEMA 4 N.O. VENT VALVE	
284490	EA	1	STO-A 1-1/2 INCH MAXON N.O. VENT VALVE ASSY. NUMBER 28098	
303546	EA	1	3" 1098-EGR FISHER REGULATOR, 125FF CAST IRON BODY WITH SIZE 70 ACTUATOR, DUAL PILOTS, 15 PSI INLET, 24" WC	
305320	EA	2	043-B (496)1/2 SENSUS REGULATOR WITH 1/8" ORIFICE & GREEN 6" TO 14" W.C. SPRING	

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320001	EA	1	1092-PF-G 6000 VOLT 50/60 HZ. ALLANSON GAS IGNITION TRANSFORMER WITH GROUND WIRE	
351320	EA	1	80-104 3/4 INCH APOLLO STEAM/6 OIL BALL VALVE	
351580	EA	2	1/4 INCH T58570SSL FULL PORT BRONZE NIBCO BALL VALVE WITH LOCKING HANDLE	
		6	1/4 INCH T58570SSL FULL PORT BRONZE NIBCO BALL VALVE WITH LOCKING HANDLE	
351590	EA	4	3/8 INCH T58570SSC FULL PORT BRONZE NIBCO BALL VALVE WITH LOCKING HANDLE	
		1	3/8 INCH T58570SSC FULL PORT BRONZE NIBCO BALL VALVE WITH LOCKING HANDLE	
351595	EA	2	1/2" T58570LL FULL PORT BRONZE BALL NIBCO BALL VALVE WITH LOCKING HANDLE	
351600	EA	1	3/4 INCH T5857066LL FULL PORT BRONZE NIBCO BALL VALVE WITH LOCKING HANDLE	
		1	3/4 INCH T5857066LL FULL PORT BRONZE NIBCO BALL VALVE WITH LOCKING HANDLE	
351630	EA	1	1-1/2 INCH T5857066SSC FULL PORT BRONZE NIBCO BALL VALVE WITH STAINLESS TRIM & LOCKING HANDLE	
352820	EA	1	1/2" FIGURE 605 HOMESTEAD 3 WAY PLUG VALVE STYLE D LESS F WRENCH	
353000	EA	1	SIZE F HANDLE ONLY FOR HOMESTEAD 1 INCH GAS COCK	
375200	EA	1	45UV5-1009 FIREYE SELF CHECK SCANNER FOR FLAME MONITOR CONTROLS	
465551	EA	1	0-15" 4-1/2" DIAL, 1/4" LM, PHENOLIC CASE, W/ 0.2" INCRUMENTS PLP4260-45PHENOLIC WINTERS GAUGE	
465552	EA	1	0-32" 4-1/2" DIAL, 1/4" LM, ALUM. CASE, PLP4251-CD WINTERS GAUGE 0.2" INCRUMENTS	
465554	EA	1	0-160 PSI, 4-1/2" DIAL, 1/4" LM PPC5085-45G/C2 LIQUID FILLED WINTERS GAUGE W/ 1 PSI INCRUMENTS	
465556	EA	1	0-55", 4-1/2" DIAL, 1/4" LOWER MOUNT, PLP4252 ALUMINUM CASE	
465557	EA	4	0-200", 4-1/2" DIAL, 1/4" LOWER MOUNT, PLP4266, ALUMINUM CASE	
490130	EA	1	R31451055 4-1/2" DIAL WINTERS THERMOMETER, 50-250 DEG. F.	

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504007	EA	2	MODEL 5510-A AARELL POSITION FEEDBACK POSITIONER ASSEMBLY, 24 VDC LOOP POWERED 4-20 maDC SIGNAL	
534610	EA	1	O RING, 2" O.D. X 1.875 I.D., BUNA N, 94 52K119 (PACKAGED 100 PER PACKAGE)	
538001	EA	1	P/F AIR ATOMIZING NOZZLE, 300-80, DWG. 90L352C-7	
610400	EA	1	SLU-35 ILSCO GROUNDING LUG	
612010	EA	98	019904225 ENTRELEC D6/8.ADO 14-16 GAUGE ADO, SCREW TERMINAL, GREY BLOCK	
612130	EA	2	0199075.26 ENTRELEC D6/8.ADO 14-16 GAUGE AQO, TERMINAL RED (GAS VALVE)	
734350	EA	1	MODEL G 13018-26-5U-0030 CUNO AUTOKLEAN OIL FILTER	
734670	EA	1	3/4 IN. ABB20 KENT OIL FLOW METER	
800021	EA	1	SQN71 MOD MOTOR TO 10MM SHAFT COUPLER	
850110	EA	2	1-1/2 IN. CAST IRON COMPANION FLANGE	
850200	EA	2	3 INCH COMPANION FLANGE	
860351	EA	1	1/8 X 5-3/4 SCHEDULE 80 BLACK PIPE NIPPLE	
861561	EA	3	1/4 X 1-1/2 SCHEDULE 80 STANDARD BLACK PIPE NIPPLE	
861562	EA	6	1/4 X 2 SCHEDULE 80 STANDARD BLACK PIPE NIPPLE	
861701	EA	7	1/4 x 2-1/2" SCHEDULE 80 STANDARD BLACK PIPE NIPPLE	
861711	EA	1	1/4 X 3 SCHEDULE 80 STANDARD BLACK PIPE NIPPLE	
862501	EA	4	3/8 X 2 SCHEDULE 80 BLACK PIPE NIPPLE	
862502	EA	1	3/8 X 2-1/2 SCHEDULE 80 BLACK PIPE NIPPLE	
862552	EA	2	3/8 X 3 SCHEDULE 80 BLACK PIPE NIPPLE	
862554	EA	2	3/8 X 5 SCHEDULE 80 BLACK PIPE NIPPLE	
862652	EA	1	3/8 X 4 SCHEDULE 80 STANDARD BLACK PIPE	
862751	EA	1	3/8 X 6 SCHEDULE 80 BLACK PIPE NIPPLE	
862770	EA	20	3/8 X 1-1/2 SCHEDULE 80 STANDARD BLACK PIPE NIPPLE	
		5	3/8 X 1-1/2 SCHEDULE 80 STANDARD BLACK PIPE NIPPLE	
862773	EA	1	3/8 X 10-1/2 SCHEDULE 80 STANDARD BLACK	

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862773...	EA...	1...	PIPE NIPPLE	...
862780	EA	1	3/8 X 12-1/4 SCHEDULE 80 BLACK PIPE NIPPLE	
863121	EA	26	1/2 X 1-1/2 SCHEDULE 80 STANDARD BLACK PIPE NIPPLE	
		3	1/2 X 1-1/2 SCHEDULE 80 STANDARD BLACK PIPE NIPPLE	
863122	EA	9	1/2 X 2 SCHEDULE 80 STANDARD BLACK PIPE NIPPLE	
863123	EA	1	1/2 X 2-1/2 SCHEDULE 80 STANDARD BLACK PIPE NIPPLE	
863346	EA	1	1/2 X 3 SCHEDULE 80 BLACK PIPE NIPPLE	
863351	EA	2	1/2 X 4 SCHEDULE 80 STANDARD BLACK PIPE NIPPLE	
863361	EA	2	1/2 X 4-1/2 SCHEDULE 80 STANDARD BLACK PIPE NIPPLE	
863451	EA	1	1/2 X 5 SCHEDULE 80 STANDARD BLACK PIPE NIPPLE	
863501	EA	1	1/2 X 18 SCHEDULE 80 BLACK PIPE NIPPLE	
863546	EA	1	1/2 X 3-1/2 SCHEDULE 80 BLACK PIPE NIPPLE	
		3	1/2 X 3-1/2 SCHEDULE 80 BLACK PIPE NIPPLE	
		1	1/2 X 3-1/2 SCHEDULE 80 BLACK PIPE NIPPLE	
863547	EA	1	1/2 X 5-1/2 SCHEDULE 80 PIPE NIPPLE	
		1	1/2 X 5-1/2 SCHEDULE 80 PIPE NIPPLE	
863561	EA	1	1/2 X 6 SCHEDULE 80 STANDARD BLACK PIPE NIPPLE	
		3	1/2 X 6 SCHEDULE 80 STANDARD BLACK PIPE NIPPLE	
863799	EA	1	1/2 X 8 SCHEDULE 80 STANDARD BLACK PIPE NIPPLE	
863800	EA	1	1/2 X 8 SCHEDULE 40 STD. BLACK PIPE NIPPLE	
863823	EA	1	1/2 X 13-1/2 SCHEDULE 80 BLACK PIPE NIPPLE	
863845	EA	1	1/2 X 21 SCHEDULE 80 BLACK PIPE NIPPLE	
863846	EA	1	1/2 X 24-1/2 SCHEDULE 80 BLACK PIPE NIPPLE	
863862	EA	1	1/2 X 14-1/2 SCHEDULE 80 BLACK PIPE NIPPLE	

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863862...	EA...	1...	LE	...
863872	EA	21	3/4 X 2 SCHEDULE 80 STANDARD BLACK PIPE NIPPLE	
864053	EA	7	3/4 X 4 SCHEDULE 80 BLACK PIPE NIPPLE	
864154	EA	1	3/4 X 6 SCHEDULE 80 BLACK SEAMLESS PIPE NIPPLE	
864713	EA	1	1 X 8-3/4 SCHEDULE 80 BLACK PIPE NIPPLE	
867176	EA	4	1/2" 3000# 90 DEG. PIPE ELBOW	
		17	1/2" 3000# 90 DEG. PIPE ELBOW	
867203	EA	2	3/4 3000# FORGED STEEL 90 DEG. PIPE ELBO W	
867225	EA	13	3/8 3000# FORGED STEEL 90 DEG. PIPE ELBO W	
867252	EA	1	1" 3000# BLACK 90 DEG. PIPE ELBOW	
867351	EA	2	1-1/2" 3000# FORGED STEEL 90 DEG. PIPE E LBOW	
867554	EA	2	4" 3000# 90 DEG. PIPE ELBOW	
869648	EA	2	1/4" 3000# BLACK 90 DEG. PIPE ELBOW	
870352	EA	1	1/2" 3000# PIPE CROSS	
871051	EA	1	3/8 X 1/4 3000# FORGED STEEL HEX BUSHING	
		4	3/8 X 1/4 3000# FORGED STEEL HEX BUSHING	
871212	EA	5	1/2 X 1/4 3000# BLACK HEX BUSHING	
871221	EA	1	1/2 X 3/8 3000# HEX REDUCER BUSHING	
		1	1/2 X 3/8 3000# HEX REDUCER BUSHING	
871353	EA	3	3/4 X 1/4 3000# BLACK HEX BUSHING	
871354	EA	2	1 X 3/4 3000# HEX REDUCER BUSHING	
871401	EA	1	3/4 X 3/8 3000# HEX REDUCER BUSHING	
		2	3/4 X 3/8 3000# HEX REDUCER BUSHING	
871454	EA	4	3/4 X 1/2 3000# HEX REDUCER BUSHING	
873052	EA	4	1/4" 3000# FORGED STEEL PIPE TEE	
		4	1/4" 3000# FORGED STEEL PIPE TEE	
		1	1/4" 3000# FORGED STEEL PIPE TEE	
873103	EA	1	3/8" 3000# PIPE TEE	
		7	3/8" 3000# PIPE TEE	
873150	EA	1	1/2 STANDARD BLACK MALLEABLE IRON BANDED PIPE TEE	
873153	EA	7	1/2" 3000# PIPE TEE	
873204	EA	8	3/4 3000# PIPE TEE	
873992	EA	1	3 X 3 X 1-1/2 WELD TEE	
876101	EA	1	3/4 X 3/8 3000# REDUCER COUPLING	
876102	EA	1	3/4 X 1/2 3000# REDUCER COUPLING	

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876102...	EA...	2	3/4 X 1/2 3000# REDUCER COUPLING	
876851	EA	1	4 X 3 3000# REDUCER COUPLING	
878051	EA	1	1/4" 3000# FORGED STEEL UNION	
878103	EA	4	3/8" 3000# forged steel union	
878177	EA	2	1/2" 3000# UNION	
		9	1/2" 3000# UNION	
		7	1/2" 3000# UNION	
878181	EA	7	3/4" 3000# UNION	
		3	3/4" 3000# UNION	
878182	EA	2	1" 3000# UNION	
878501	EA	1	3" 3000# UNION	
		2	3" 3000# UNION	
878700	EA	1	1/4" 3000# PIPE COUPLING	
		7	1/4" 3000# PIPE COUPLING	
879061	EA	4	1/4" 3000# BLACK PIPE PLUG	
879101	EA	4	3/8" 3000# PIPE PLUG	
		2	3/8" 3000# PIPE PLUG	
879580	EA	1	1/2 IN. STEEL HEX PIPE CAP	
879612	EA	1	3/4" 3000# PIPE CAP	
910770	FT	5	3/8 INCH O.D. X .035 3003-0 ALUMINUM TUBE	L
910850	EA	1	1IN. X 15IN. CARBON STEEL FLEX HOSE 1IN. MALE PIPE BOTH ENDS	
910851	EA	1	3/8 X 15 PENFLEX SERIES 7800 S.S. BRAIDED FLEX HOSE WITH 3/8" MP EACH END	
910870	EA	1	1/2 X 6 STAINLESS STEEL FLEX HOSE W/ 1/2 IN. MALE PIPE EACH END	
912794	EA	1	CM9/14 REQ. REFRACTORY DIMENSIONS TAG PER DRAWING M380MC-5	
960050	EA	1	NON ASBESTOS GASKET FOR 1-1/2" COMPANION FLANGE	
960110	EA	12	NON ASBESTOS GASKET FOR 3 INCH COMPANION FLANGE	
		2	NON ASBESTOS GASKET FOR 3 INCH COMPANION FLANGE	
960200	EA	1	STANDARD NON ASBESTOS GASKET FOR 10 INCH COMPANION FLANGE	
980060	EA	1	3/8 INCH MODEL 740 FULL BORE BALL VALVE WITH LONG HANDLE P/N 55421	
		3	3/8 INCH MODEL 740 FULL BORE BALL VALVE WITH LONG HANDLE P/N 55421	

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986000	EA	1	F3-180F, FILTER FAB, 3" FLANGED GAS FILTER, 10 MICRON, 15 PSI	
986001	EA	2	F38M-180T, FILTER FAB, 3/8" GAS FILTER, 5 MICRON, 40 CFH @ 15# LINE PRESURE	L
A12366	EA	2	CM MICRO SWITCH BRKT	
A12380	EA	1	JD-2 PRESSURE SWITCH BRACKET	
A13222	EA	1	DUAL MICRO SWITCH BRACKET 10" IFGR	
A13234	EA	1	OIL TRAIN SUPPORT 1/2 PIPE X 7 1/4	
A13238	EA	1	LINE SUPPORT U-BOLT 1/2 PIPE X 6 3/4	
A13268	EA	1	PILOT TRAIN SUPPORT 3/8 PIPE X 5 3/8	
A25517	EA	1	CM11 AIR INLET SILENCER ASSY DUAL ROW	
A26033	EA	1	CM11 REFRACTORY DISCOVERY "D" TYPE BOILER - VICTORY ENERGY	L
A26083	EA	2	6 X 6 NEMA 4 JUNCTION BOX STANDOFF	
A26408	EA	1	CM11 BLAST TUBE 1" LOWERED GAS INLET	
A26463	EA	1	CM10 DAMPER SERVO BRKT HERCULINE 2000	
A26494	EA	1	HW MOD MOTOR 3" ECLIPSE BRACKET WITH MICRO SWITCH	
A26537	EA	1	10" IFGR HERCULINE 2000 BRACKET MKII	
A30617	EA	1	HW MOD MOTOR B/F-1/2 HAUCK VALVE BRACKET WITH MICRO SWITCH	
B12102	EA	14	CM11/11A 3/8 X 4 GAS JET WITH ORF	
B12151	EA	4	CM10B-11 ROPE RETENTION BRKT	
B14037	EA	1	CM9-14 SIGHT GLASS COVER PLATE	
B14145	EA	1	CM11 TUBE ACCESS PLATE	
B14347	EA	1	CM11 DAMPER BACK PLATE	
B14348	EA	1	CM11/12 DAMPER FRONT PLATE	
B14349	EA	1	CM11 DAMPER TOP WRAP	
B14350	EA	2	CM11 DAMPER SIDE PLATES W/ BEARINGS	

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B14351	EA	1	CM11 LONG DAMPER AXLE	
B14353	EA	2	CM11 DAMPER SHORT AXLE	
B14354	EA	1	CM11 DAMPER FRONT ANGLE	
B14355	EA	2	CM11 DAMPER BLADE STOP	
B14356	EA	1	CM11 DAMPER SAFTEY SCREEN	
B14357	EA	1	CM11 DAMPER BACK ANGLE	
B14359	EA	1	CM11 DPR BASE RIGHT SIDE ANGLE	
B14360	EA	1	CM11 DPR BASE LEFT SIDE ANGLE	
B14524	EA	1	CM11 #222 72% CHICAGO AIR INLET DRILLED	
B14903	EA	1	3/8-24 ALL THRD DPR CROSS LINK ROD 2.969	
B14905	EA	1	3/8-24 ALL THRD CROSS LINK 2.994"	
B20620	EA	1	CM11 222 CHICAGO AIR HOUSING WELD ASSEMBLY	
B20657	EA	1	CM11 222 CHICAGO 284TS FR MOTOR PLATE ASSY	
B20751	EA	1	CM NOZZLE ADAPTOR WELD ASSEMBLY	
B20760	EA	1	CM11 7.625" DIA DIFFUSER WELD ASSEMBLY	
B20798	EA	1	10" IFGR 90 DEGREE ADAPTOR ASSEMBLY WITH DRAIN SHORTER	
B20812	EA	3	CM11 DAMPER BLADE WELD ASSY	
B30012	EA	1	CM11 AAT OIL GUN ASSEMBLY	
B30303	EA	1	10 INCH SINGLE BLADE IFGR DAMPER ASSEMBLY	
E10637	EA	2	EXTENDED PANEL BOX MOUNTING BRACKET 4.718" USED ON C2,3,7,8	

BILL OF MATERIAL

As-Built

Date: 11/22/13
Page 10 of 17

Customer: VICTORY ENERGY OPERATIONS - 100711

Purchase Order: 18128

Job Number: J0738660

Item: LNICM11A-GO-30

Qty: 3.00

Order Number: B052747 - 1

PFI Part No.	U/M	Qty	Material Description	Ship Loose
E12001	EA	1	C-P2020 HOFFMAN CHASSIS	
M10277	EA	3	MICRO SWITCH CAM 1/2" I.D.	
M10283	EA	1	MICRO SWITCH CAM 3/8" I.D.	
M10284	EA	2	MICRO SWITCH CAM 5/8" I.D.	
M10479	EA	1	1/2 NPT COMPANION FLANGE	
M10497	EA	2	INVENSYS 043-B REGULATOR BRACKET	
M10498	EA	1	BRACKET FOR CASH ACME 3/4" TYPE "B" REG	
M10604	EA	2	C-MAX PROOF OF CLOSURE OIL VALVE BRACKET WHEN LOCATED ON PANEL BOX; ALSO SPEC	
M20058	EA	1	5/8" I.D. DUAL CROSS STRAP ARM ASSY TAPD	
M20065	EA	2	2.125 DAMPER ARM ASSY 5/8" I.D. TAPPED	
M20112	EA	1	LARGE BURNER PED PLATE WELD ASSEMBLY	
M20483	EA	2	3" FIGURE 612 HOMESTEAD FLANGED GAS COC WITH HANDLE CSD1	
M89103	EA	1	HMOV EXTENSION SHAFT	
R19254	EA	1	10" IFGR INLET FLANGE	
X00006	EA	7	3" 150 LB. SLIP-ON FLANGE	
X02034	EA	2	1/4 INCH STD BLACK HALF COUPLING	
X02095	EA	1	1/8 90 DEGREE BRASS STREET ELBOW 116-2	
X02450	EA	12	40MST FAFNIR FLANGETTE NOTE: PACKAGED TWO PER BOX	
X02470	EA	6	RA010RRB FAFNIR BALL BRNG. 5/8	
X02622	EA	1	1/4 BRASS HEX NIPPLE 122-4	
X02677	EA	1	3/8 X 1/4 COMP-MP STR 68-64	
X04289	EA	4	3/8-24 ROD END BALL JOINT RIGHT 6072K174	
X08148	EA	2	A-404NF NEMA 4 HOFFMAN ENCLOSURE 4 X 4 X 3	
X08210	EA	1	C-SD20208 NEMA 4,12,13 HOFFMAN ENCLOSURE 20 X 20 X 8	
X09166	EA	32	5/8-11 X 4-1/2 SA-193-B7 STUD	
		8	5/8-11 X 4-1/2 SA-193-B7 STUD	

BILL OF MATERIAL

As-Built

Date: 11/22/13
Page 11 of 11

Customer: VICTORY ENERGY OPERATIONS - 100711

Purchase Order: 18128

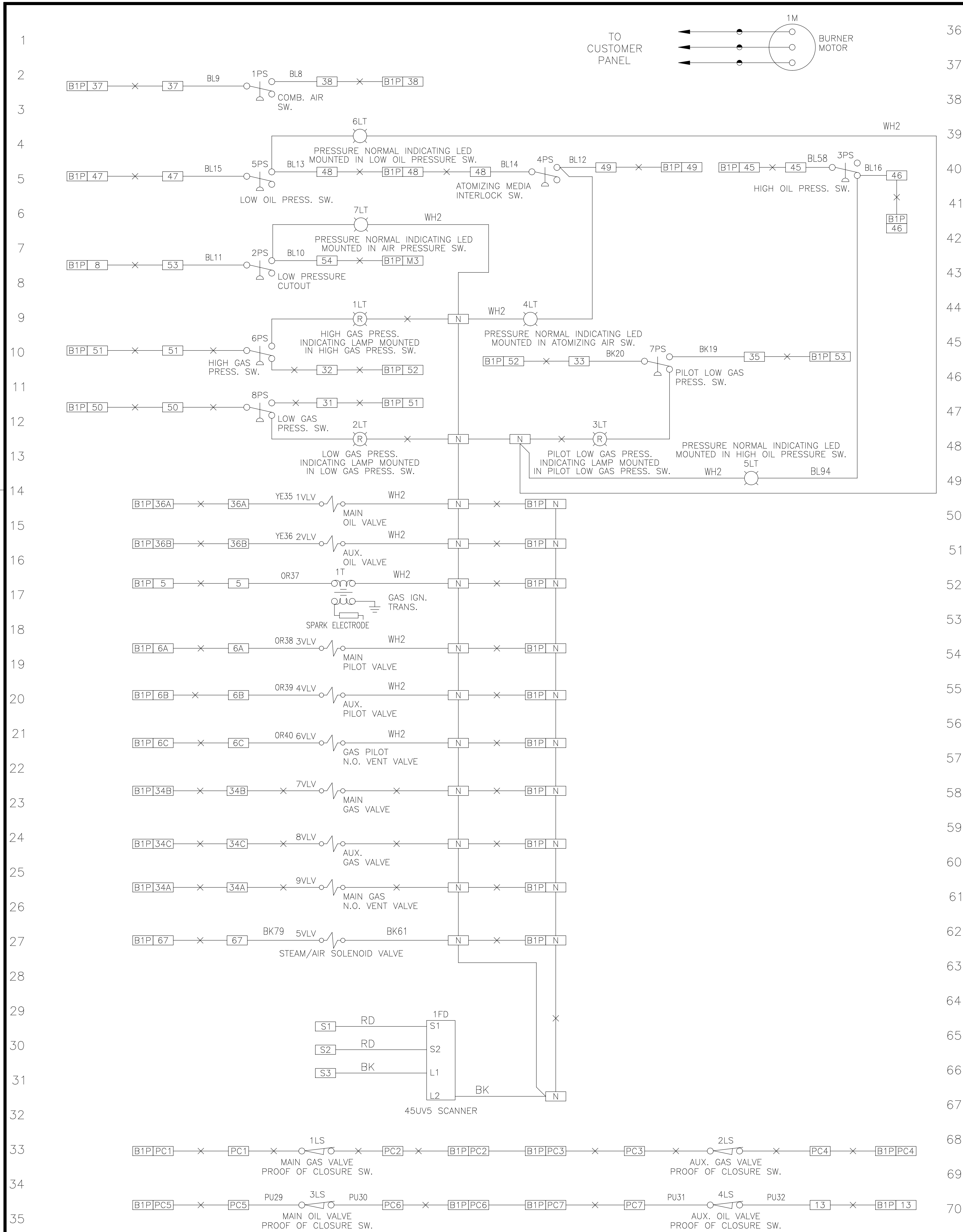
Job Number: J0738660

Item: LNICM11A-GO-30

Qty: 3.00

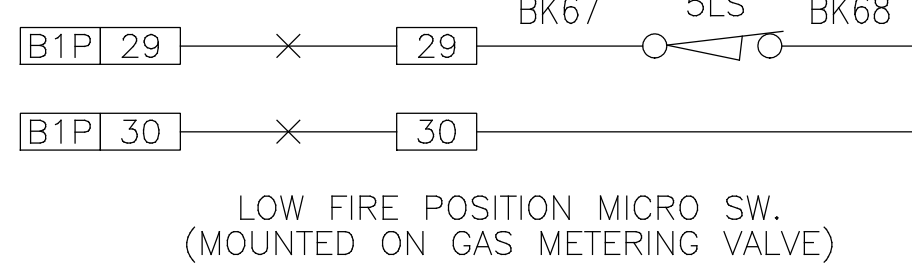
Order Number: B052747 - 1

PFI Part No.	U/M	Qty	Material Description	Ship Loose
X09246	EA	15	10-32 X 1-1/4 18-8 S.S. ROUND PHILLIPS HEAD MACHINE SCREW	
X09252	EA	4	3/8 X 1 X 25/64 X .050 18-8 S.S. FLAT WASHER	
X09253	EA	4	3/8 X 1/2 HEX SOCKET HEAD SHOULDER SCREW	
X09292	EA	12	1/4-20 X 3/4 CARRIAGE BOLT GRADE 2 (ZINC PLATED)	
X09301	EA	2	1/4-20 DOUBLE TAB WELD NUT	
		2	1/4-20 DOUBLE TAB WELD NUT	
X09346	EA	8	1/4-20 X 3/4 HEX HEAD CAP SCREW	
X09412	EA	12	3/8-16 X 1-1/2 HEX HD CAP SCREW	
X09436	EA	16	5/8-11 X 3 HEX HEAD CAP SCREW	
X09557	EA	15	10-32 NYLON INSET HEX LOCK NUT 90631A411	
X09565	EA	16	5/8-11 HEX NUT, GRADE 2	
X09566	EA	4	5/16-18 WHIZ NUT	
X09569	EA	4	3/8-24 RIGHT HAND HEX NUT PLATED	
X09578	EA	64	5/8-11 HEX NUT, SA-194-2H	
		16	5/8-11 HEX NUT, SA-194-2H	
X09664	EA	16	5/8 LOCK WASHER	
X09709	FT	18	3/8-24 RIGHT HAND ALL THREAD ROD PLATED	
X09731	EA	1	2 INCH DIA. 1/8 INCH THICK BOROSILICATE SIGHT GLASS 8477K48	
X09775	EA	4	1/4-20 X 3-1/2 U BOLT	
			1-3/8 IN. INSIDE DIMENSION BETWEEN LEGS,	
X09795	IN	44	173220.05 PREPUNCHED DIN RAIL	
X09828	EA	1	A606CHNF NENA 4 CONTINUOUS HINGE HOFFMAN ENCLOSURE 6 X 6 X 4	
Y00756	FT	7	3" SCHEDULE 40 SEAMLESS BLACK PIPE	

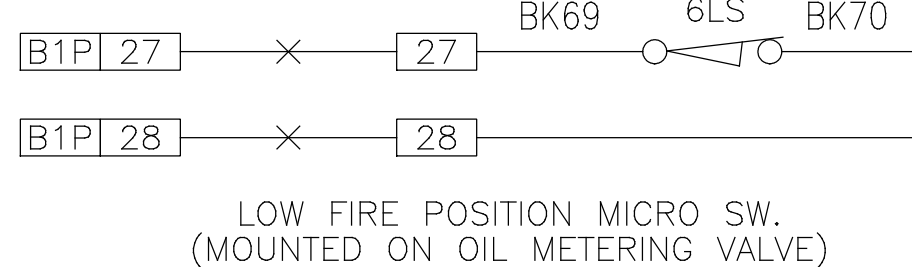


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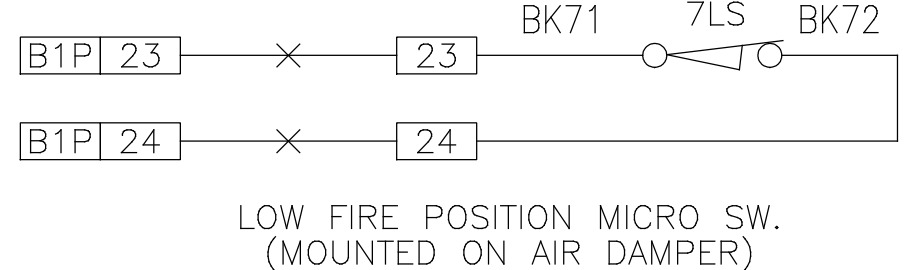
GAS FLOW VALVE
LOW FIRE START SW.



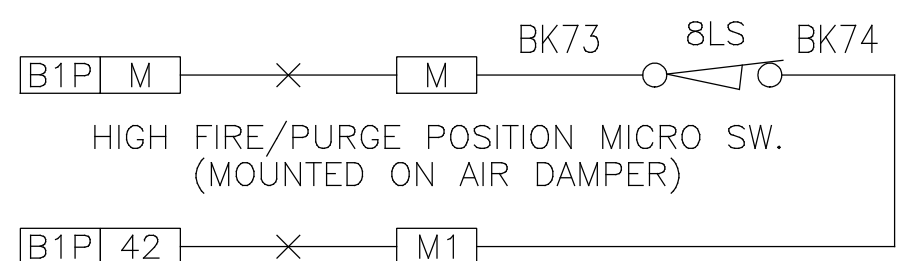
OIL FLOW VALVE
LOW FIRE START SW.



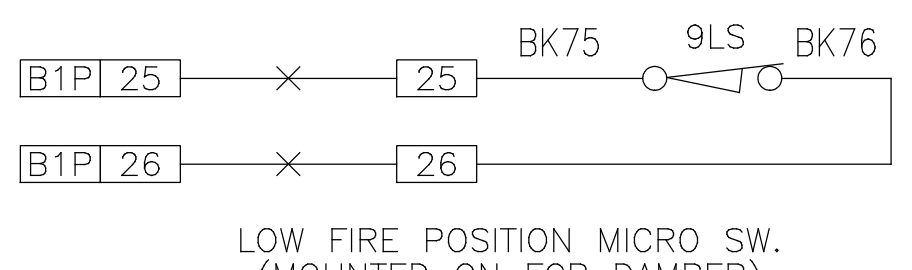
COMBUSTION AIR DAMPER
LOW FIRE START SW.



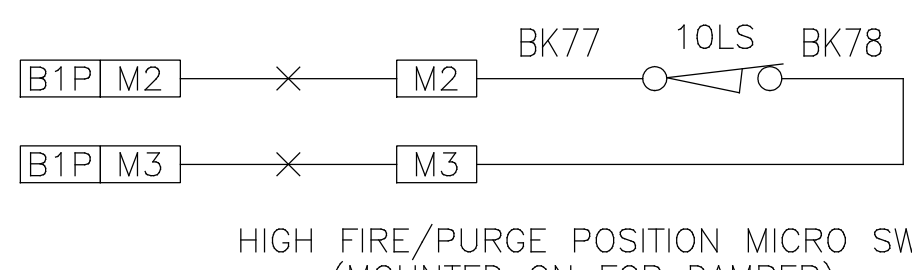
COMBUSTION AIR DAMPER
HIGH FIRE PURGE SW.



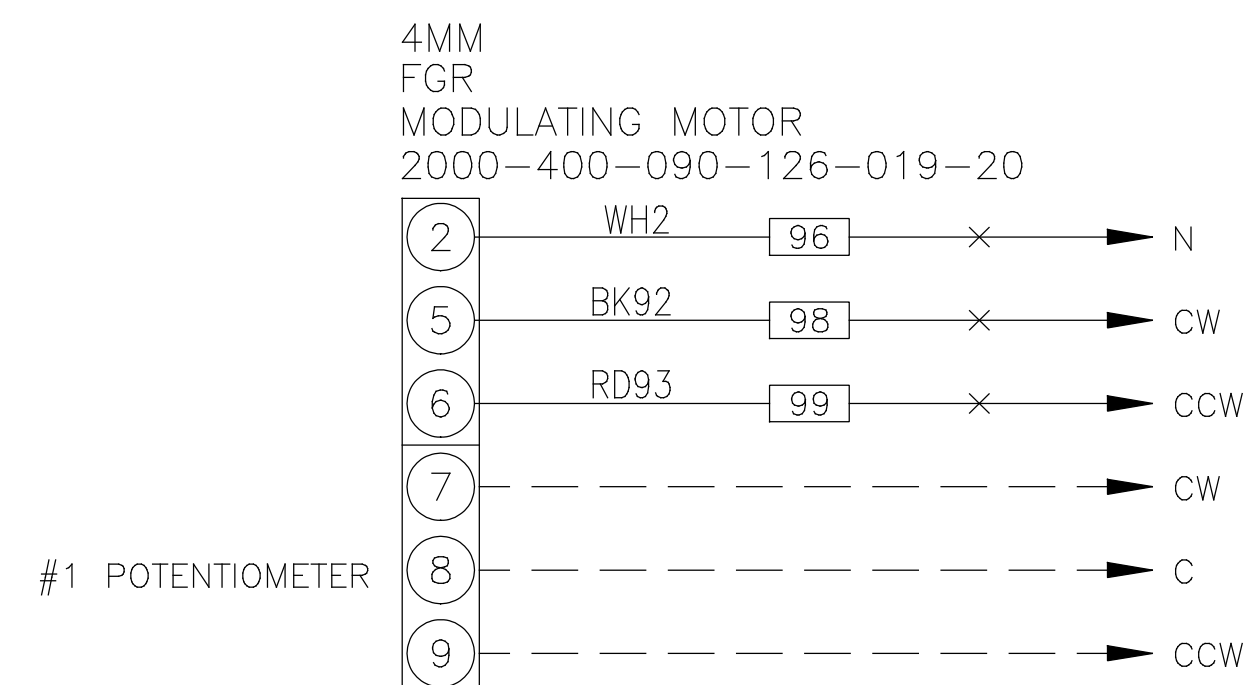
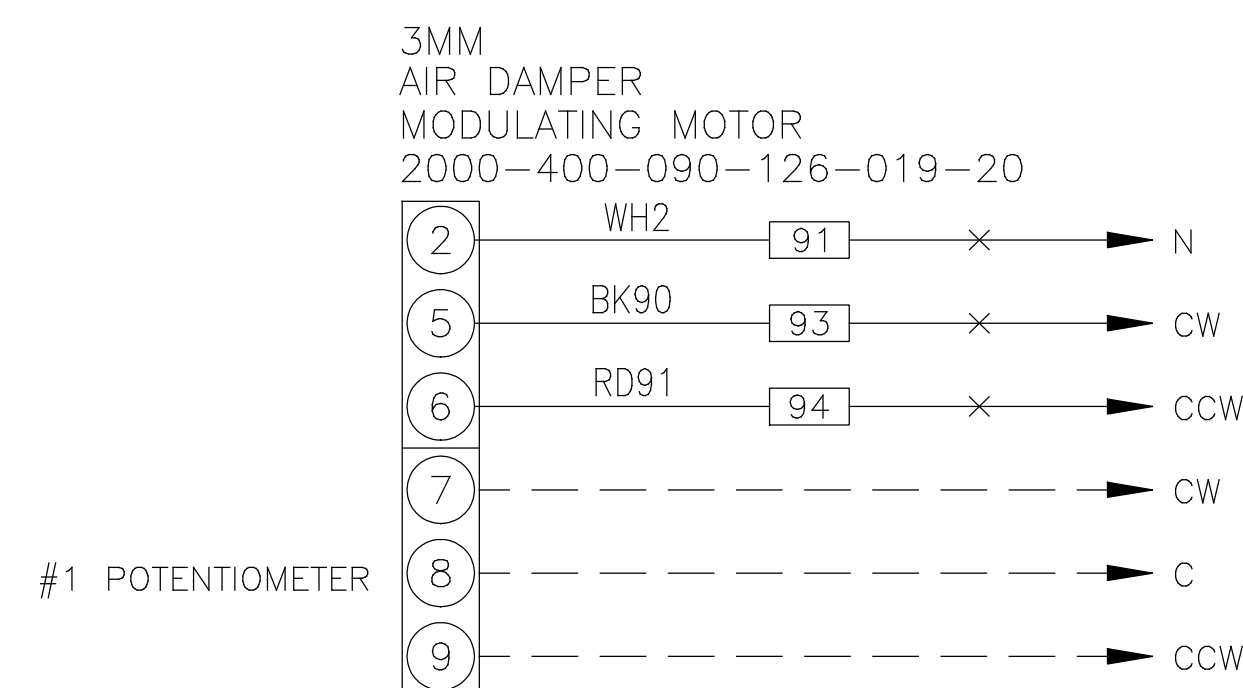
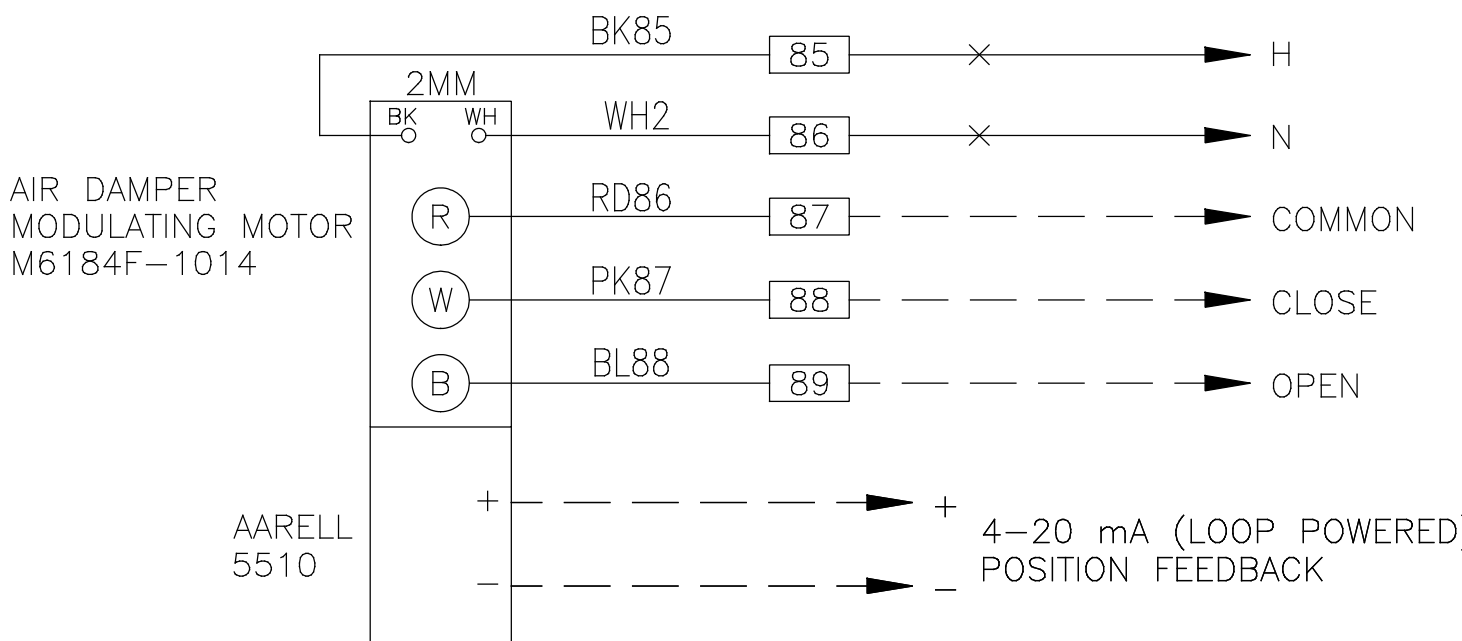
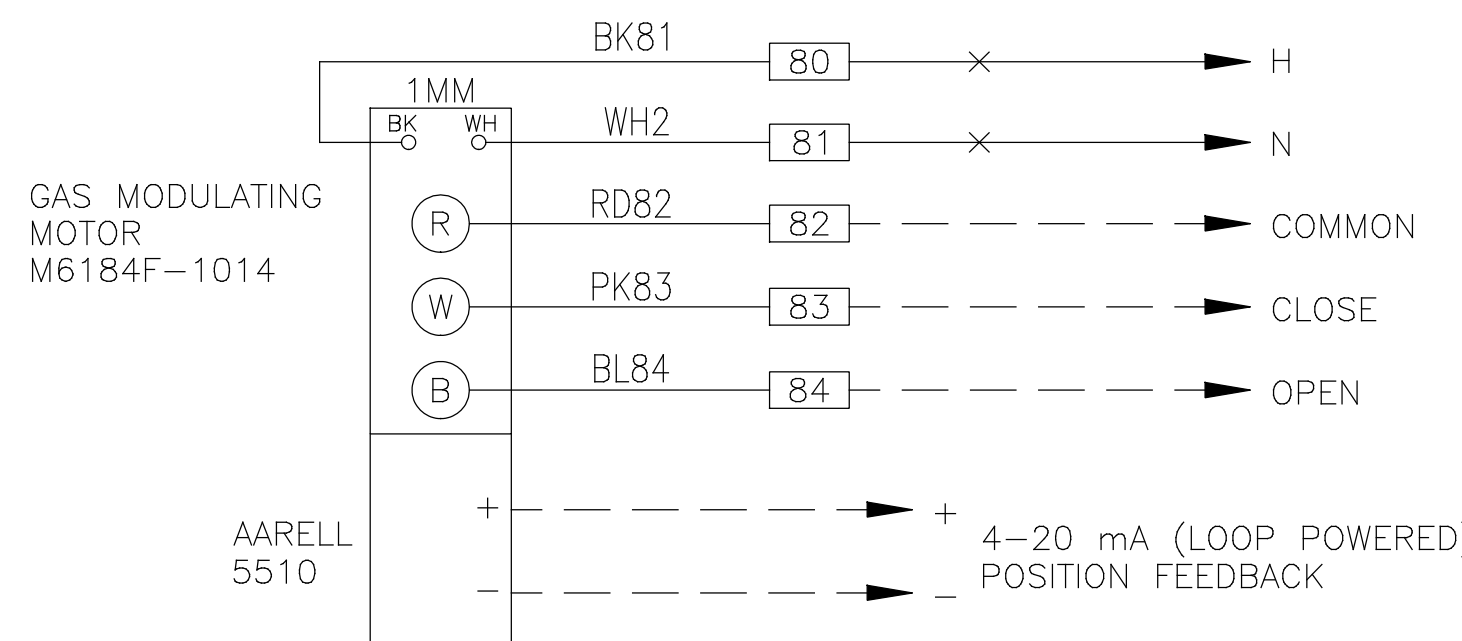
FGR DAMPER
LOW FIRE START SW.



FGR DAMPER
HIGH FIRE/PURGE SW.



LISTED GROUNDING BAR AND/OR
GREEN SCREW MOUNTED IN PANEL
AND WIRED TO EARTH GROUND,
LABELED "EQUIPMENT GROUND"



BURNER TERMINAL STRIP ARRANGEMENT:

32 31 37 38 33 35 45 46 47 48 48 49 50 51 53 54 67 80 81 83 84 85 86 87 88 89 91 93 94 96 98 99 S1 S2 S3 PC1 PC2 PC3 PC4 PC5 PC6 PC7 13 36A 36B 5 6A 6B 6C 34A 34B 34C N N N N N N N N N N N N N N N N

BURNER TERMINAL STRIP ARRANGEMENT (CONT.): M M1 23 24 25 26 27 28 29 30 M2 M3

"USE COPPER CONDUCTORS ONLY."

CAUTION: THROW ALL DISCONNECTS TO OFF
BEFORE SERVICING.

G — EQUIPMENT GND. CONDUCTOR
F — FLAME CIRCUIT: RUN IN SEPARATE
CONDUIT OR SHIELDED CABLE

FACTORY WIRING

24V — FIELD WIRING
115V — SEE SPEC. SHEET
200- — FOR VOLTAGE

EQUIPMENT SHOWN ON DIAGRAM IS ONLY PROVIDED AND
MOUNTED BY POWER FLAME IF SPECIFICALLY CALLED FOR
ON BURNER SPEC. SHEET

SET DIPS 5, 6, AND 8 ON THE 221508A
RESISTOR BOARD TO THE DOWN POSITION
FOR 1 DRIVE MOTOR, 4-20mA CONTROL.

SINGLE VALVE WITH P.O.C.
SW. MAY OMIT AUX. GAS VALVE.
(APPLICABLE TO UNITS WITH
INPUTS BELOW 5,000 MBH)

CAUTION: ALL FIELD WIRING MUST
BE WIRED AS SHOWN ON
WIRING DIAGRAM.

ADD GREEN GROUND WIRE TO
GROUNDING BUS FOR PILOT
VALVES WITH GROUND WIRE.

LAST NUMBER USED: 94

COLOR CODE

BK — BLACK
WH — WHITE
RD — RED
BL — BLUE
PK — PINK
OR — ORANGE
YE — YELLOW
PU — PURPLE
GR — GREEN
GY — GRAY

TERMINALS IN
CONTROL PANEL

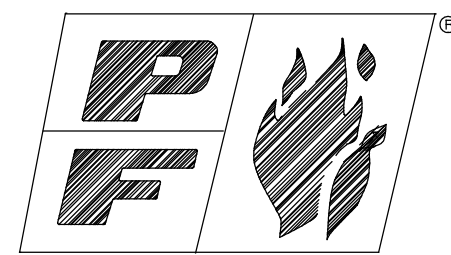
B1P

6 ADDITION OF 7LT & ADD COLORS	EM/SES	6/26/13
5 ADDITION OF 4LT, 5LT, 6LT	EM/SES	6/18/13
4 RESUBMIT - REVISED 3MM & 4MM	JG/SES	3/20/13
3 CHANGE SCANNER	JG/SES	2/21/13
2 RESUBMIT - REMOVE PURGE VALVE	JG/SES	2/13/13
1 RESUBMIT - REVISED WIRING, ADD PURGE VALVE & TERMS.	JG/SES	1/15/13
REVISION	REV'D.	DATE

Power Flame Incorporated

2001 SOUTH 21st STREET
PARSONS, KANSAS 67357

PHONE (620) 421-0480
FAX (620) 421-0948



DRAWN: EM APPVD: SES CODE: NFPA PARENT:68566 DATE:11/28/12 DWG.: GO-J073866-6

PARAMETERS: LTGA-XXXX/U-L&G-AS-II-TX-XX-BX-RP-X-XX-XX-XXX-XX-XXX-NFP-SERVOS

TITLE: GAS/OIL BURNER COMPONENTS
WIRED TO TERMINALS

JOB NAME:
JEFFERSON BARRACKS VAMC

PROPRIETARY AND CONFIDENTIAL NOTICE: THE CONTENTS OF THIS TEMPLATE CONSTITUTE PROPRIETARY AND CONFIDENTIAL INFORMATION OWNED BY POWER FLAME INCORPORATED.
IT SHALL NOT BE REPRODUCED, IN WHOLE OR IN PART, AND SHALL NOT BE DISCLOSED TO ANYONE OUTSIDE POWER FLAME WITHOUT THE PRIOR EXPRESS APPROVAL OF POWER FLAME.



EQUIPMENT SHOWN ON DIAGRAM IS ONLY PROVIDED AND MOUNTED BY POWER FLEET IF SPECIFICALLY CALLED FOR ON BURNER SPEC. SHEET.

NOTE: WHEN PILOT GAS PRESS. REG. IS AGA CERTIFIED DEVICE WITH INTEGRAL LEAK LIMITING ORIFICE, SUCH AS RV-20, RV-10 AND RV-12, VENT LINE FOR PILOT GAS PRESS. REG. MAY NOT BE REQ'D. UNLESS SPEC'D. BY OTHER CODES.


(NO PROVISION FOR EXTERNAL VENTING ON RV-10 & 12)
(RV-20 HAS OPTIONAL VENTING WITH P/N. 30912)

REFER TO SPECIFIC REGULATOR LITERATURE FOR
RECOMMENDED STRAIGHT RUN OF PIPING BEFORE/AFTER
REGULATOR AND SENSING LINE (IF APPLIC.)

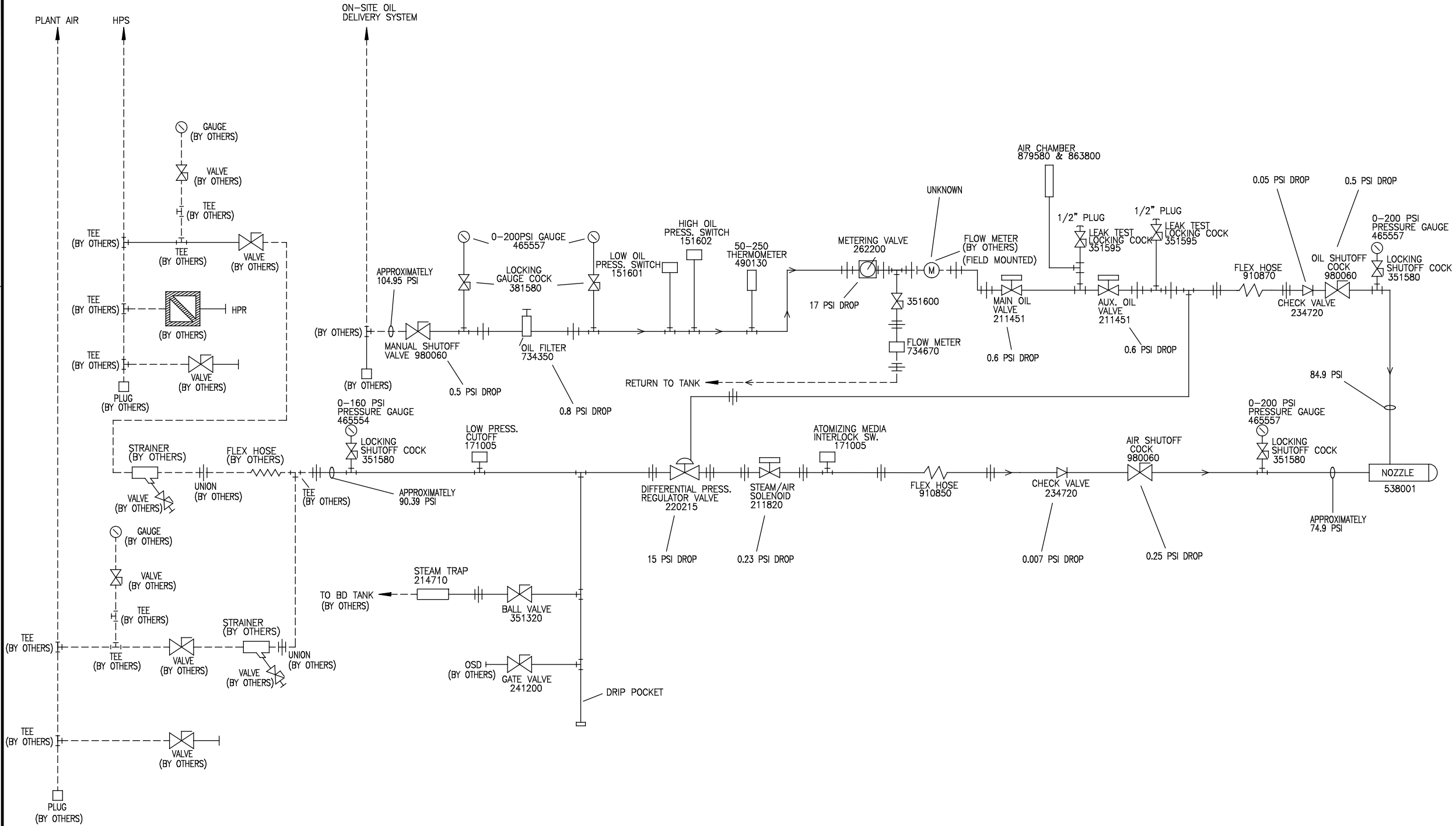
CAUTION: ALL FIELD PIPED COMPONENTS MUST BE MOUNTED IN THE PROPER LOCATION AND PROPER DIRECTION OF GAS FLOW.

BOILER 1, 2, & 3 FUEL TRAIN
NATURAL GAS AND PROPANE

————— FACTORY PIPED
----- FIELD PIPED

			<h1>Power Flame Incorporated</h1>								
			2001 SOUTH 21 ST STREET		PHONE (620) 421-0480						
			PARSONS, KANSAS 67357		FAX (620) 421-0948						
3 REVISED MAX DIMENSION			JG/SES	5/10/13	DRAWING: EM	APP'D: SES	CODE: NFPA	PARENT: 73866	DATE: 11/28/12	DWG.: PDG-J073866-3	
2 RESUBMIT - MOVED PILOT			EM/SES	2/12/13	PARAMETERS: N/A						
1 RESUBMIT - CHANGED ITEMS 5, 12, 13, 19, & 21			JG/SES	1/15/13	TITLE: GAS PIPING FOR MODULATION BURNER WITH INPUTS 12,500,000 AND ABOVE BTU'S					JOB NAME: JEFFERSON BARRACKS VAMC	
REVISION			REV'D.	DATE							

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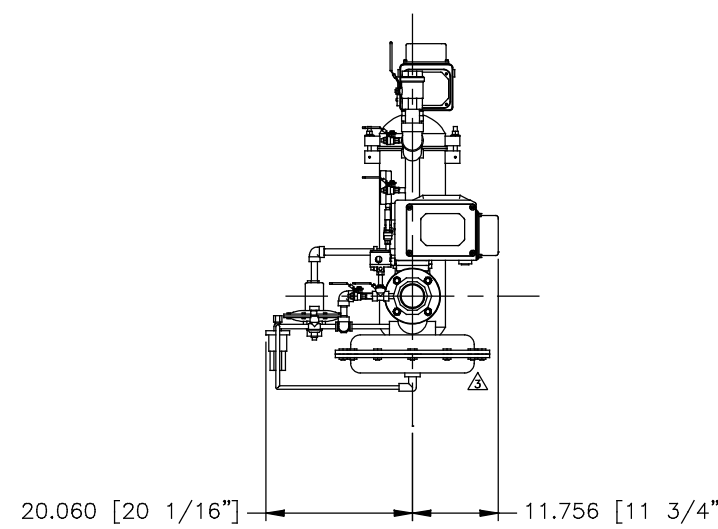
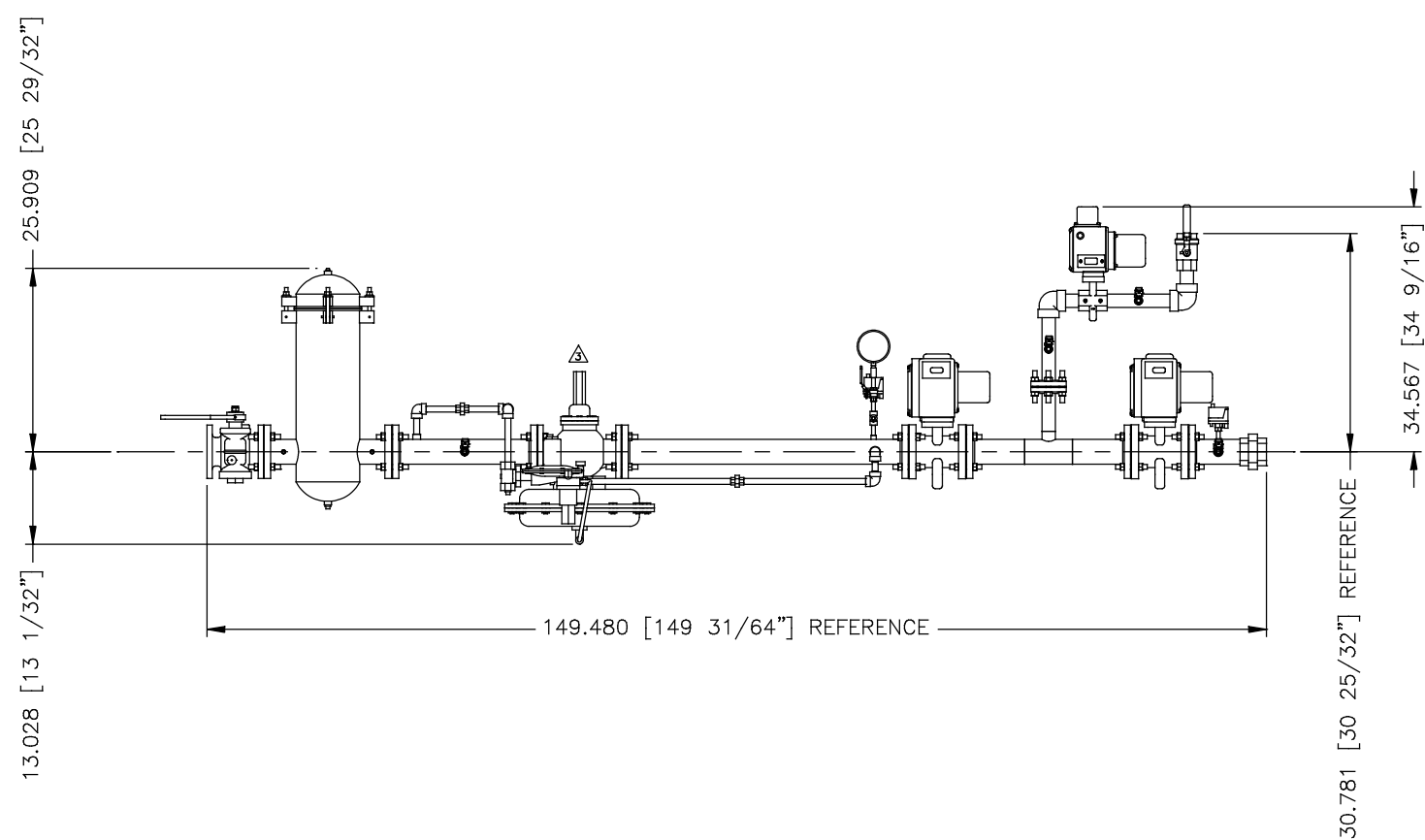
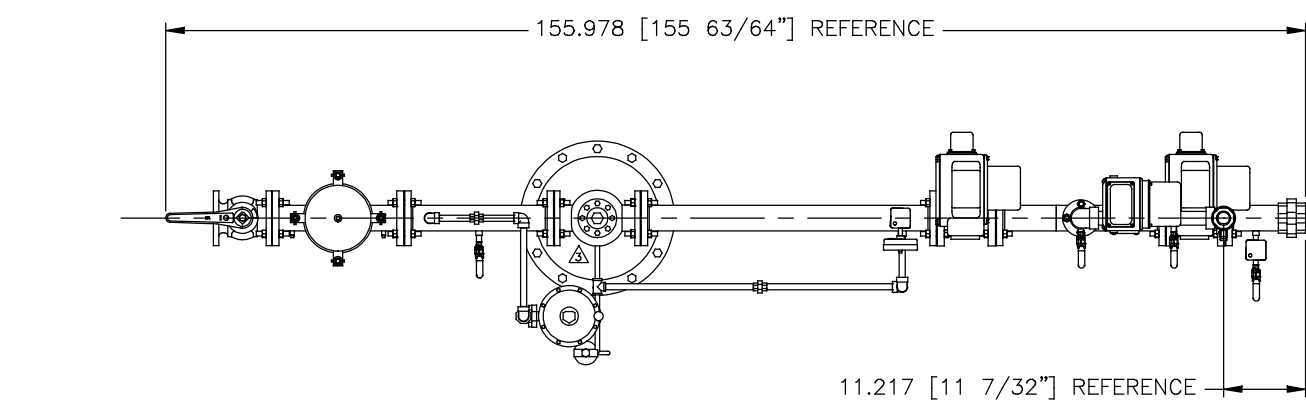
DO NOT USE TEFLON TAPE

EQUIPMENT SHOWN ON DIAGRAM IS ONLY PROVIDED AND MOUNTED BY POWER FLAME IF SPECIFICALLY CALLED FOR ON BURNER SPEC. SHEET.

- |--- FIELD PIPED UNION
- |--- FACTORY PIPED UNION
- FACTORY PIPED
- FIELD PIPED

CAUTION: ALL FIELD PIPING MUST BE MOUNTED IN THE PROPER LOCATION AND IN PROPER DIRECTION OF OIL FLOW.

4 ADDITION OF AIR CHAMBER	EM/SES	6/24/13							
3 RESUBMIT – REVISED LEAK TEST LOCKING COCKS & PLUGS	JG/SES	3/20/13	DRAWN: EM	APPVD: SES	CODE: UL/FM,CSD-1,NFPA-31	PARENT:62035	DATE:11/28/13	DWG.: PDO-J073866-4	
2 RESUBMIT	EM/SES	2/12/13	PARAMETERS: N/A						
1 RESUBMIT– REVISING PIPING & ADD PURGE VALVE	JG/SES	1/15/13	TITLE: CM #2 PIPING SCHEMATIC FULL MOD.				JOB NAME:		
REVISION	REV'D.	DATE					JEFFERSON BARRACKS VAMC		



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NOTE:
 ALL PIPE ASTM SA-106-B SCHEDULE 40 (OR SCHEDULE 80 AS REQUIRED)
 ALL FLANGES ASTM A105 CLASS 150
 ALL FITTINGS ASTM A105 CLASS 3000

REVISION	REV'D	DATE

Power Flame Incorporated
2001 SOUTH 21st STREET PHONE (620) 421-0480
 PARSONS, KANSAS 67357 FAX (620) 421-0948

DWN. BY: CA	CHKD. BY:	DRAWING SCALE: FULL	SCALE: 1=1	DATE: 12/11/12
DO NOT SCALE FROM DRAWING			FILE LOC:	NETWORK
TITLE: NATURAL GAS TRAIN STYLE A J073866				DWG. NO. 90N157C-3

⚠ NOTE:

⚠ ADDED PIPE AND FITTING REQUIREMENTS

⚠ REVISED GAS TRAIN PER CUSTOMER CHANGE

CA

CA

CA

6/12/13

2/14/13

1/16/13

TOLERANCES
 FAB ±1/32", WELD ±1/16"
 ON ALL DIMENSIONS
 EXCEPT AS NOTED.

[] DIMENSIONS - REFERENCE ONLY