DF-4 30 Inch Greater Than 1100 MBH Gas Train 08/23/2019

	BILL OF MATERIALS		
ITEM NUMBER	Description	Quantity	Standard (
1	1-1/4" Quick Seal	1	
2	1-1/4" x 4-1/2" Nipple	1	NOTES:
3	1-1/4" 90° Elbow	3	Gas Type: Natural or LP
4	1-1/4" Close Nipple (1-5/8")	8	Inlet Pressure: 7 in. w.c
5	1-1/4" Union	3	Max. Natural Gas Manifo
6	1-1/4" x 1-1/4" x 1/2" Tee	3	Max. LP Manifold Pressure
7	-5-15 w.c. Gas Pressure Gauge	1	
8	1-1/4" x 2" Nipple	2	External High Gas Pressur
9	1-1/4" 8214265 Solenoid Valve	1	gas pressure exceeds 5 p
10	1-1/4" V4055A1007 Hydraulic Actuator and V5055A1012 Valve	1	P/N = 143-80-2-1.25-BW-1
11	Maxitrol 1-1/2" MR212D Modulating Valve	1	Itam #10 is replaced by)
12	1-1/4" Manual Ball Valve	1	Item #10 is replaced by \
13 14	1-1/4" x 11" Nipple 1-1/4" x 8" Nipple	1	for Proof of Closure Appli
14	1-1/4" x 8 Nipple	1	
16	1-1/4" Female x 2" Male Adapter	1	-
17	30" Dual Fuel Midco Burner	1	-
18	1/4" Brass Elbow	1	•
19	3/8" Male x 1/4" Female Reducer	1	
20	325-3x3/8 Pilot Gas Regulator	1	
21	3/8" 90° Elbow	1	
22	3/8" x 1-1/2" Nipple	1	(3)
23	3/8" x 2-1/2" Nipple	2	
24	3/8" Pilot Shut Off Valve	1	
25	1/2" Male x 3/8" Female Reducer	1	(2)
26	1-1/4" 90° Street Elbow	1	Ę
27	1-1/2" Male x 1-1/4" Female Reducer	2	\square
28	1/2" Male x 1/4" Female Reducer	2	
29	0-35" w.c. or 0-5 psi or 0-15 psi Pressure Gauge (check spec)	1	
	42026 3/8 U-Bolt, washer, and locknuts		

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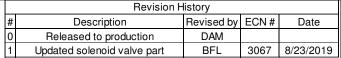
-5/16 Bolt, washer, and locknuts

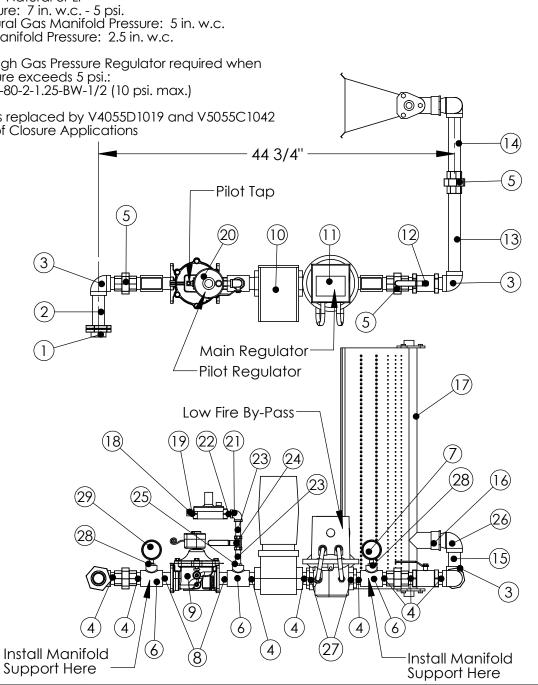
(2 Places)

-M1067H1M Bracket (2 Places)

-5/16 x 3/4 Self Tapping Sheet Metal Screws (2 Places)







Material: N/A	Part Number: N/A	Unless Otherwize Specified
Blank Size: N/A x N/A	MACOLA/AX Number: N/A	Dimensions are in Inches.
Weight: N/A lbs	Drawing Name: DF 4 30 Gas Train	Standard Tolerances are:
	Drawn By: WBG	Fractions: ±1/16 Decimal: .XX±.05
	Parent Assembly: DF 4	.XXX ±.015
	Sheet: 2 of 5	Angles: ±1°

BILL OF MATERIALS				
ITEM NUMBER	Description	Quantity		
1	1-1/4" Quick Seal	1		
2	1-1/4" x 4-1/2" Nipple	1		
3	1-1/4" 90° Elbow	3		
4	1-1/4" Close Nipple (1-5/8")	7		
5	1-1/4" Union	3	C	
6	1-1/4" x 1-1/4" x 1/2" Tee	3	lr	
7	1/4" Square Head Pipe Plug	2	Ν	
8	1-1/4" x 2" Nipple	3	N	
9	1-1/4" 8214265 Solenoid Valve	1		
10	1-1/4" V4055A1007 Hydraulic Actuator and V5055A1012 Valve	1		
11	Maxitrol 1-1/2" MR212D Modulating Valve	1	E	
12	1-1/4" Manual Ball Valve	1	C P	
13	1-1/4" x 11" Nipple	1	P	
14	1-1/4" x 8" Nipple	1		
15	1-1/4" x 2-3/4" Nipple	1	lt	
16	1-1/4" Female x 2" Male Adapter	1	f	
17	30" Dual Fuel Midco Burner	1		
18	1/4" Brass Elbow	1		
19	3/8" Male x 1/4" Female Reducer	1		
20	325-3x3/8 Pilot Gas Regulator	1		
21	3/8" 90° Elbow	1		
22	3/8" x 1-1/2" Nipple	1		
23	3/8" x 2-1/2" Nipple	2		
24	3/8" Pilot Shut Off Valve	1		
25	1/2" Male x 3/8" Female Reducer	1		
26	1-1/4" 90° Street Elbow	1		
27	1-1/2" Male x 1-1/4" Female Reducer	2		
28	1/2" Male x 1/4" Female Reducer	2		
29	1/4" Close Nipple (7/8")	4		
30	1/4" x 1/4" x 1/4" Tee	2		
31	Optional GMH-A4-4-4 Pressure Switch	1		
32	Optional GML-A4-4-4 Pressure Switch	1		



42026 3/8 U-Bolt, washer, and locknuts (2 Places)

5/16 Bolt, washer, and locknuts (2 Places)

M1067H1M Bracket (2 Places)

5/16 x 3/4 Self Tapping Sheet Metal Screws (2 Places)

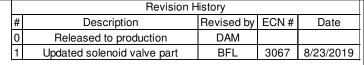
Gas Train w/Pressure Switch

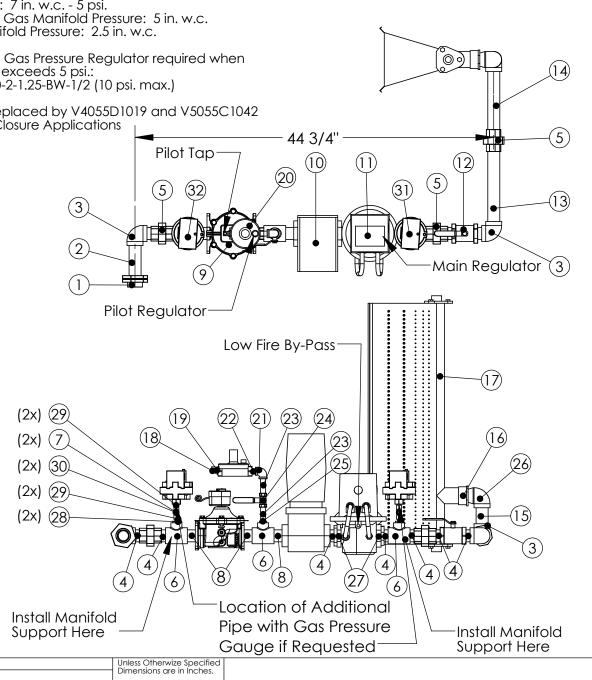
NOTES:

Gas Type: Natural or LP Inlet Pressure: 7 in. w.c. - 5 psi. Max. Natural Gas Manifold Pressure: 5 in. w.c. Max. LP Manifold Pressure: 2.5 in. w.c.

External High Gas Pressure Regulator required when gas pressure exceeds 5 psi.: P/N = 143-80-2-1.25-BW-1/2 (10 psi. max.)

Item #10 is replaced by V4055D1019 and V5055C1042 for Proof of Closure Applications





Material: N/A	Part Number: N/A	Unless Otherwize Specified
Blank Size: N/A x N/A	MACOLA/AX Number: N/A	Dimensions are in Inches.
Weight: N/A lbs	Drawing Name: DF 4 30 Gas Train	Standard Tolerances are:
	Drawn By: WBG	Fractions: ±1/16 Decimal: .XX±.05
	Parent Assembly: DF 4	.XXX ±.015
	Sheet: 3 of 5	Angles: ±1°

BILL OF MATERIALS			
ITEM NUMBER	Description	Quantity	
1	1-1/4" Quick Seal	1	
2	1-1/4" x 4-1/2" Nipple	1	
3	1-1/4" 90° Elbow	3	
4	1-1/4" Close Nipple (1-1/2")	7	
5	1-1/4" Union	3	
6	1-1/4" x 1-1/4" x 1/2" Tee	3	
7	1/4" Square Head Pipe Plug	1	
8	1-1/4" x 2" Nipple	3	
9	325-3x3/8 Pilot Gas Regulator	1	
10	1-1/4" V4055A1007 Hydraulic Actuator and V5055A1012 Valve	1	
11	Maxitrol 1-1/2" MR212D Modulating Valve	1	
12	1-1/4" Manual Ball Valve	1	
13	1-1/4" x 11" Nipple	1	
14	1-1/4" x 8" Nipple	1	
15	1-1/4" x 2-3/4" Nipple	1	
16	1-1/4" Female x 2" Male Adapter	1	
17	30" Dual Fuel Midco Burner	1	
18	1/4" Brass Elbow	1	
19	3/8" Male x 1/4" Female Reducer	2	
20	V4046C1021 Solenoid	1	
21	3/8" x 1-1/2" Nipple	1	
22	3/8" Manual Ball Valve	1	
23	1/2" Male x 3/8" Female Reducer	1	
24	1-1/4" 90° Street Elbow	1	
25	1-1/2" Male x 1-1/4" Female Reducer	2	
26	1/2" Male x 1/4" Female Reducer	2	
27	0-35" w.c. or 0-5 psi or 0-15 psi Pressure Gauge (check spec)	1	
28	3/8" x 4" Nipple	2	
29	3/8" Tee	1	
30	1/4" x 11" Close Nipple	1	
31	1-1/4" 8214265 Solenoid Valve	1	
32	-5-15 w.c. Gas Pressure Gauge	1	

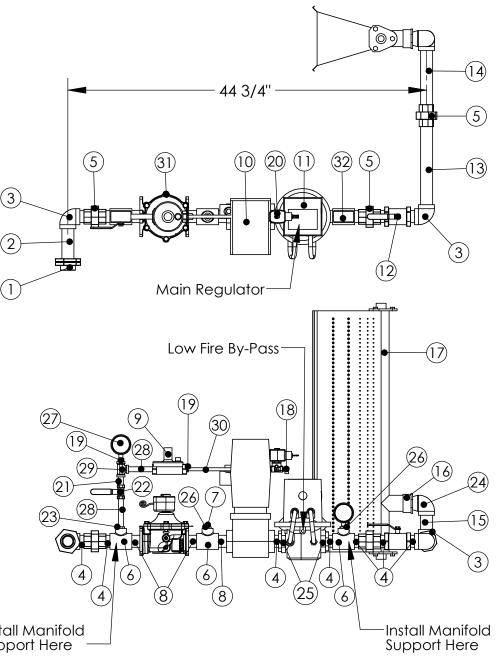
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Gas Train w/ Upstream Pilot

Revision History				
#	Description	Revised by	ECN#	Date
0	Released to production	DAM		
1	Updated solenoid valve part	BFL	3067	8/23/2019
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Install Manifold Support Here

Material: N/A	Part Number: N/A	Unless Otherwize Specified
Blank Size: N/A x N/A	MACOLA/AX Number: N/A	Dimensions are in Inches.
Weight: N/A lbs	Drawing Name: DF 4 30 Gas Train	Standard Tolerances are:
	Drawn By: DDH	Fractions: ±1/16 Decimal: .XX±.05
	Parent Assembly: DF 4	.XXX ±.015 Angles: ±1°
	Sheet: 4 of 5	Angles: ±1°

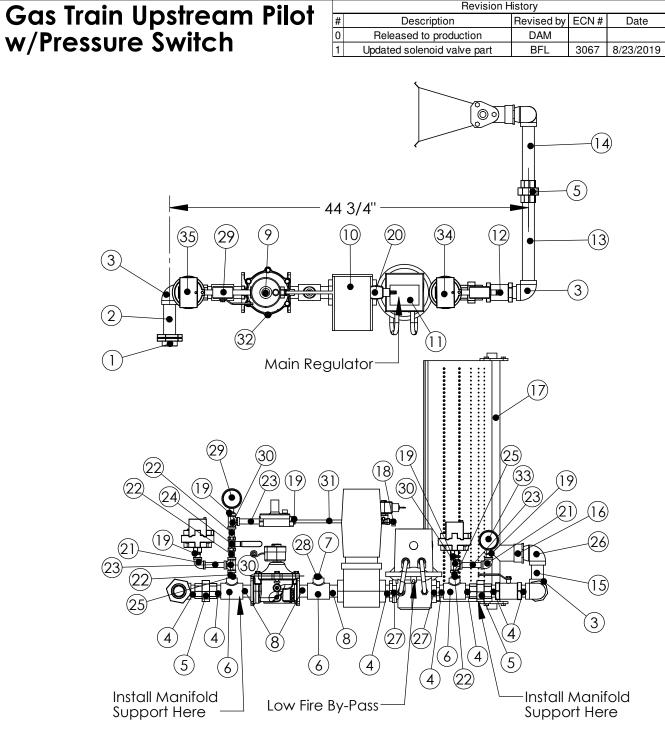
BILL OF MATERIALS		
ITEM NUMBER	Description	Quantity
1	1-1/4" Quick Seal	1
2	1-1/4" x 4-1/2" Nipple	1
3	1-1/4" 90° Elbow	3
4	1-1/4" Close Nipple (1-5/8")	7
5	1-1/4" Union	3
6	1-1/4" x 1-1/4" x 1/2" Tee	3
7	1/4" Square Head Pipe Plug	1
8	1-1/4" x 2" Nipple	3
9	325-3x3/8 Pilot Gas Regulator	1
10	1-1/4" V4055A1007 Hydraulic Actuator and V5055A1012 Valve	1
11	Maxitrol 1-1/2" MR212D Modulating Valve	1
12	1-1/4" Manual Ball Valve	1
13	1-1/4" x 11" Nipple	1
14	1-1/4" x 8" Nipple	1
15	1-1/4" x 2-1/2" Nipple	1
16	1-1/4" Female x 2" Male Adapter	1
17	30" Dual Fuel Midco Burner	1
18	1/4" Brass Elbow	1
19	3/8" Male x 1/4" Female Reducer	5
20	V4046C1021 Solenoid	1
21	3/8" 90° Elbow	2
22	3/8" x 1-1/2" Nipple	4
23	3/8" x 3" Nipple	3
24	3/8" Manual Ball Valve	1
25	1/2" Male x 3/8" Female Reducer	2
26	1-1/4" 90° Street Elbow	1
27	1-1/2" Male x 1-1/4" Female Reducer	2
28	1/2" Male x 1/4" Female Reducer	1
29	0-35" w.c. or 0-5 psi or 0-15 psi Pressure Gauge (check spec)	1
30	3/8" Tee	3
31	1/4" x 11" Nipple	1
32	1-1/4" 8214265 Solenoid Valve	1
33	-5-15 w.c. Gas Pressure Gauge	1
34	Optional GMH-A4-4-4 Pressure Switch	1
35	Optional GML-A4-4-4 Pressure Switch	1

NOTES:

Gas Type: Natural or LP Inlet Pressure: 7 in. w.c. - 5 psi. Max. Natural Gas Manifold Pressure: 5 in. w.c. Max. LP Manifold Pressure: 2.5 in. w.c.

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Material: N/A	Part Number: N/A	Unless Otherwize Specified
Blank Size: N/A x N/A	MACOLA/AX Number: N/A	Dimensions are in Inches.
Weight: N/A lbs	Drawing Name: DF 4 30 Gas Train	Standard Tolerances are:
	Drawn By: WBG	Fractions: ±1/16 Decimal: .XX±.05
	Parent Assembly: DF 4 30	.XXX ±.015
	Sheet: 5 of 5	Angles: ±1°