

DF-4 24 Inch

Gas Train

8/23/2019

**BILL OF MATERIALS**

ITEM NUMBER	Description	Quantity
1	1-1/4" Quick Seal	1
2	1-1/4" Male to 1" Female Reducer	1
3	1" x 3-3/4" Nipple	1
4	1" 90° Elbow	4
5	1" x 2" Nipple	2
6	1" Union	3
7	1" x 1" x 1/4" Tee	2
8	-5-15 w.c. Gas Pressure Gauge	1
9	1" 8214250 Solenoid Valve	2
10	Maxitrol 1-1/2" MR212D Modulating Valve	1
11	1" Manual Ball Valve	1
12	1" x 10" Nipple	1
13	1" x 9" Nipple	1
14	1" x CLOSE (1-1/2") Nipple	10
15	1" Female x 2" Male Adapter	1
16	1-1/2" Male x 1" Female Reducer	2
17	24" 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 1-1/8" Nipple	1
23	3/8" x 2-1/2" Nipple	2
24	3/8" Pilot Shut Off Ball Valve	1
25	1" x 1" x 3/8" Tee	1
26	0-35" w.c. or 0-5 psi or 0-15 psi Pressure Gauge (check spec)	1

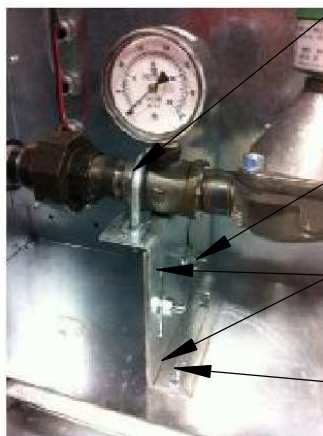
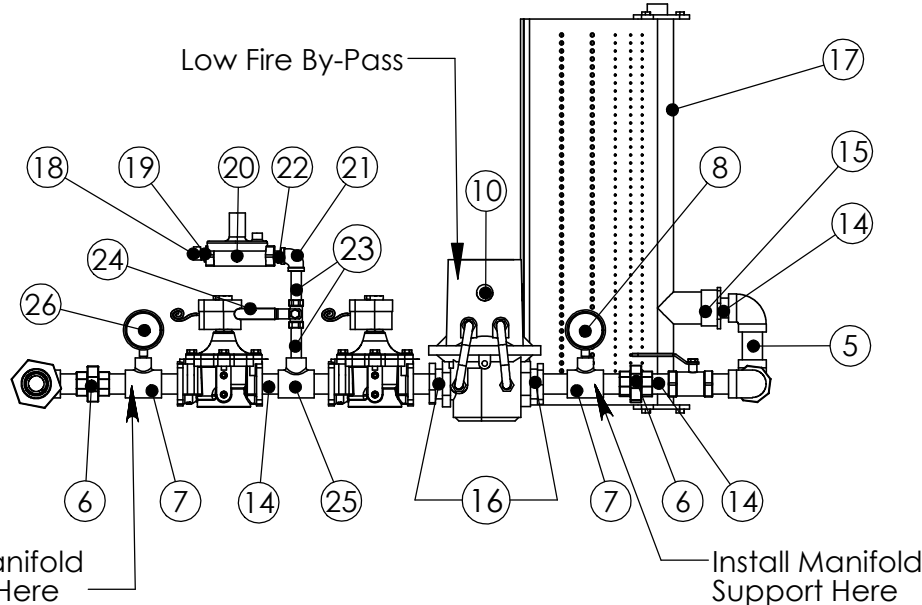
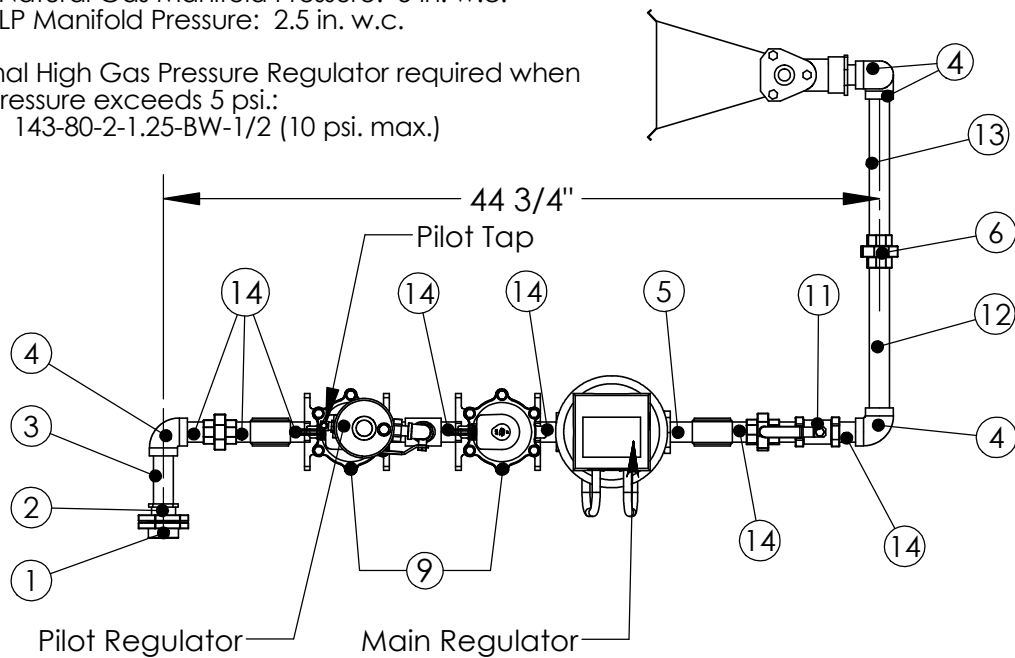
# Standard Gas Train

**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.)

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



- 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)

Material: N/A  
 Blank Size: N/A x N/A  
 Weight: N/A lbs

Part Number: N/A  
 MACOLA/AX Number: N/A  
 Drawing Name: DF 4 24 Gas Train  
 Drawn By: WBG  
 Parent Assembly: DF 4  
 Sheet: 2 of 5

Unless Otherwise Specified Dimensions are in Inches.  
 Standard Tolerances are:  
 Fractions: ±1/16  
 Decimal: .XX ±.05  
 .XXX ±.015  
 Angles: ±1°

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ITEM NUMBER	Description	Quantity
1	1-1/4" Quick Seal	1
2	1-1/4" Male to 1" Female Reducer	1
3	1" x 3-3/4" Nipple	1
4	1" 90° Elbow	4
5	1" x 2" Nipple	2
6	1" Union	3
7	1" x 1" x 1/4" Tee	2
8	1/4" Square Head Pipe Plug	2
9	1" 8214250 Solenoid Valve	2
10	Maxitrol 1-1/2" MR212D Modulating Valve	1
11	1" Manual Ball Valve	1
12	1" x 10" Nipple	1
13	1" x 9" Nipple	1
14	1" x CLOSE (1-1/2") Nipple	10
15	1" Female x 2" Male Adapter	1
16	1-1/2" Male x 1" Female Reducer	2
17	24" 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 1-1/8" Nipple	1
23	3/8" x 2-1/2" Nipple	2
24	3/8" Pilot Shut Off Valve	1
25	1/4" CLOSE Nipple (7/8")	4
26	1/4" x 1/4" x 1/4" Tee	2
27	Optional GMH-A4-4-4 Pressure Switch	1
28	Optional GML-A4-4-4 Pressure Switch	1
29	1" x 1" x 3/8" Tee	1

# Gas Train w/Pressure Switch

## NOTES:

Gas Type: Natural or LP

Inlet Pressure: 7 in. w.c. - 5 psi.

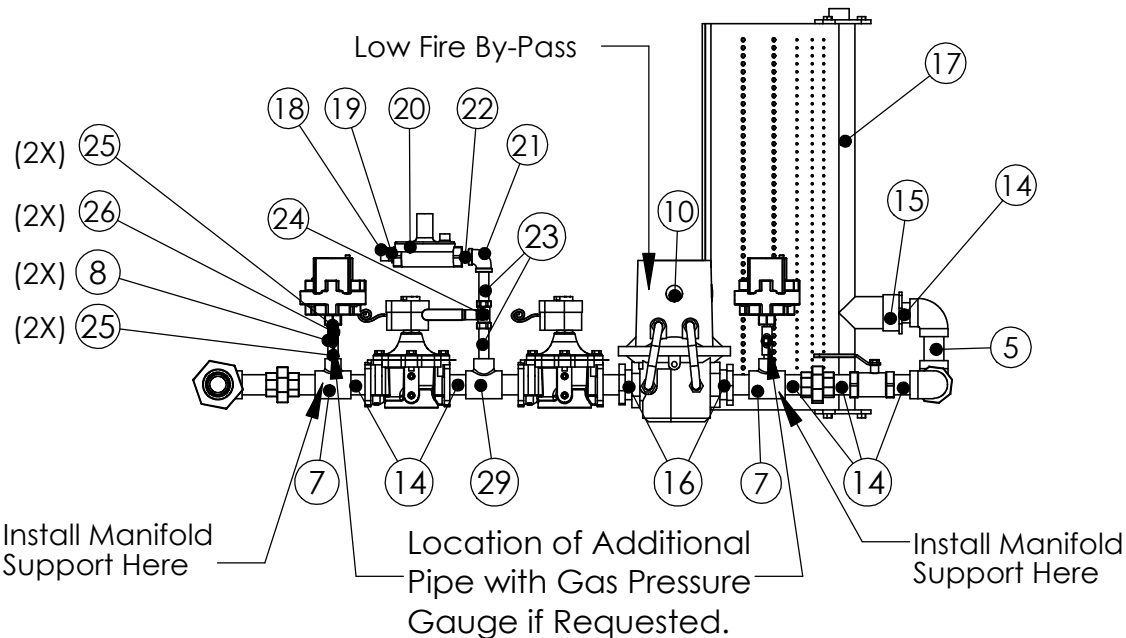
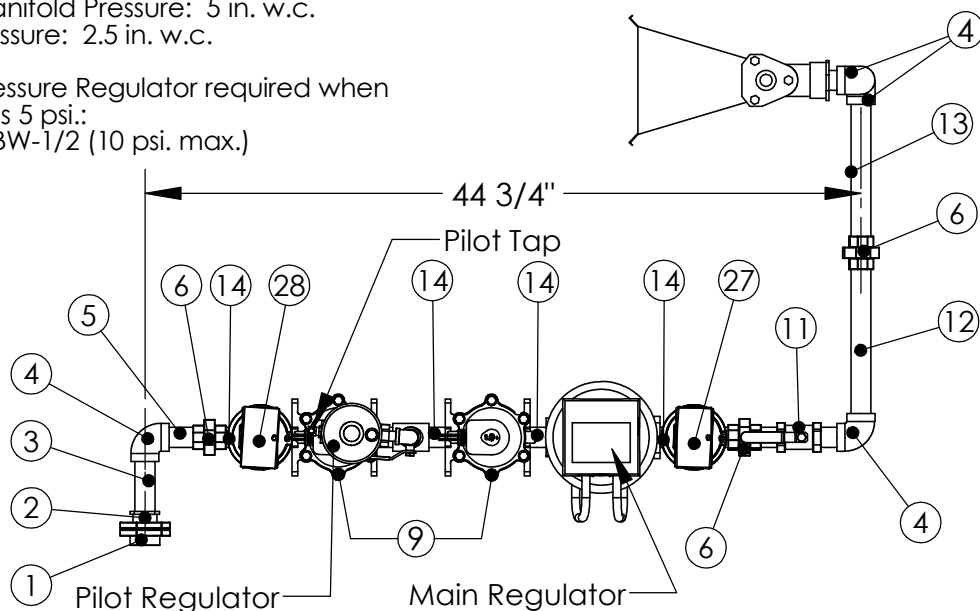
Max. Natural Gas Manifold Pressure: 5 in. w.c.

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.)

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



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)

Material: N/A  
Blank Size: N/A x N/A  
Weight: N/A lbs

Part Number: N/A  
MACOLA/AX Number: N/A  
Drawing Name: DF 4 24 Gas Train  
Drawn By: WBG  
Parent Assembly: DF 4  
Sheet: 3 of 5

Unless Otherwise Specified  
Dimensions are in Inches.

Standard Tolerances are:  
Fractions: ±1/16  
Decimal: .XX±.05  
.XXX±.015  
Angles: ±1°

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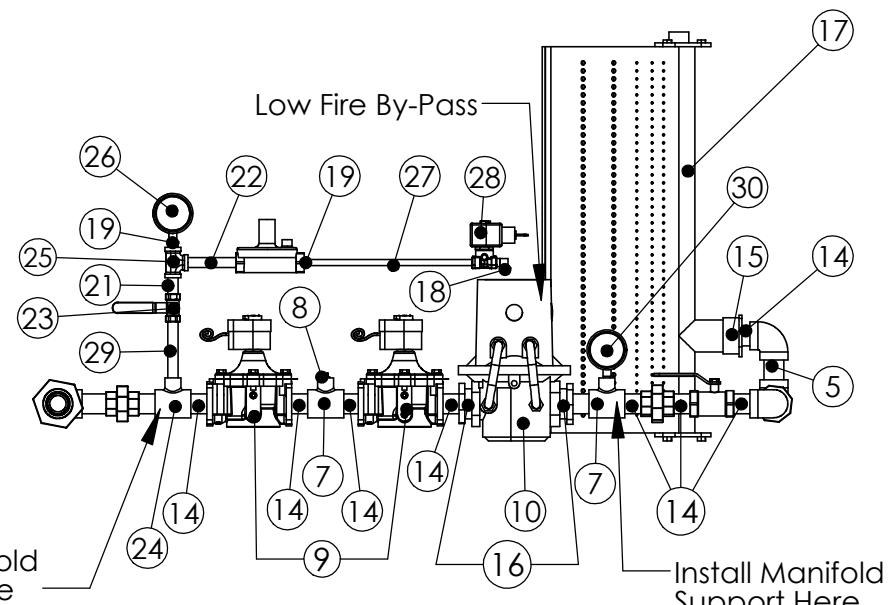
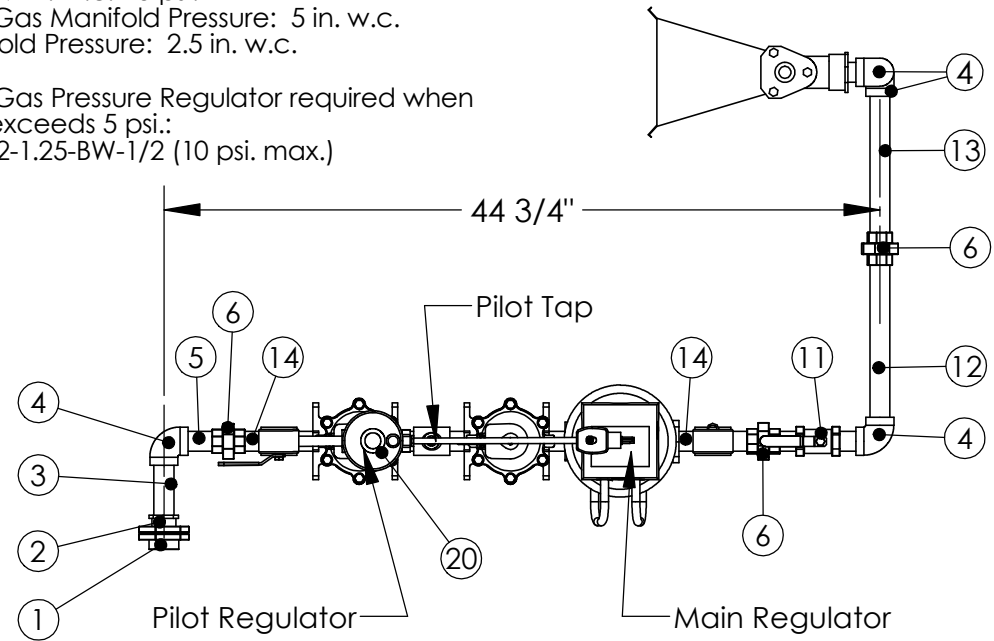
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ITEM NUMBER	Description	Quantity
1	1-1/4" Quick Seal	1
2	1-1/4" Male to 1" Female Reducer	1
3	1" x 3-3/4" Nipple	1
4	1" 90° Elbow	4
5	1" x 2" Nipple	2
6	1" Union	3
7	1" x 1" x 1/4" Tee	2
8	1/4" Square Head Pipe Plug	1
9	1" 8214250 Solenoid Valve	2
10	Maxitrol 1-1/2" MR212D Modulating Valve	1
11	1" Manual Ball Valve	1
12	1" x 10" Nipple	1
13	1" x 9" Nipple	1
14	1" x CLOSE (1-1/2") Nipple	10
15	1" Female x 2" Male Adapter	1
16	1-1/2" Male x 1" Female Reducer	2
17	24" Dual Fuel Midco Burner	1
18	1/4" Brass Elbow	1
19	3/8" Male x 1/4" Female Reducer	2
20	325-3x3/8 Pilot Gas Regulator	1
21	3/8" x 1-1/8" Nipple	1
22	3/8" x 3-1/2" Nipple	1
23	3/8" Manual Ball Valve	1
24	1" x 1" x 3/8" Tee	1
25	3/8" Tee	1
26	0-35" w.c. or 0-5 psi or 0-15 psi Pressure Gauge (check spec)	1
27	1/4" x 11" Nipple	1
28	V4046C1021 Solenoid	1
29	3/8" x 4" Nipple	1
30	-5-15 w.c. Gas Pressure Gauge	1

# Gas Train w/Upstream Pilot

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.:  
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- M1067H1M Bracket  
(2 Places)
- 5/16 x 3/4 Self Tapping  
Sheet Metal Screws  
(2 Places)

Material: N/A  
 Blank Size: N/A x N/A  
 Weight: N/A lbs

Part Number: N/A  
 MACOLA/AX Number: N/A  
 Drawing Name: DF 4 24 Gas Train  
 Drawn By: DDH  
 Parent Assembly: DF 4  
 Sheet: 4 of 5

Unless Otherwise Specified  
 Dimensions are in Inches.  
 Standard Tolerances are:  
 Fractions: ±1/16  
 Decimal: .XX±.05  
 .XXX±.015  
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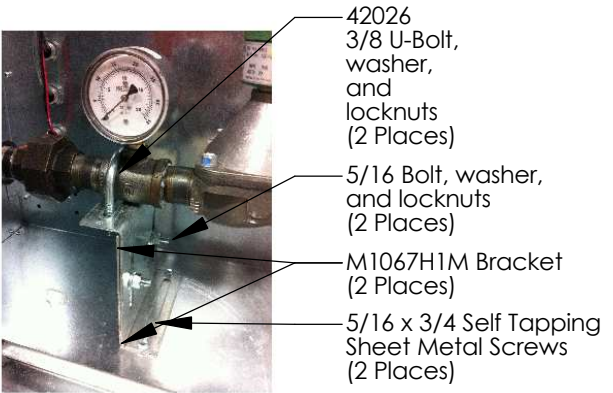
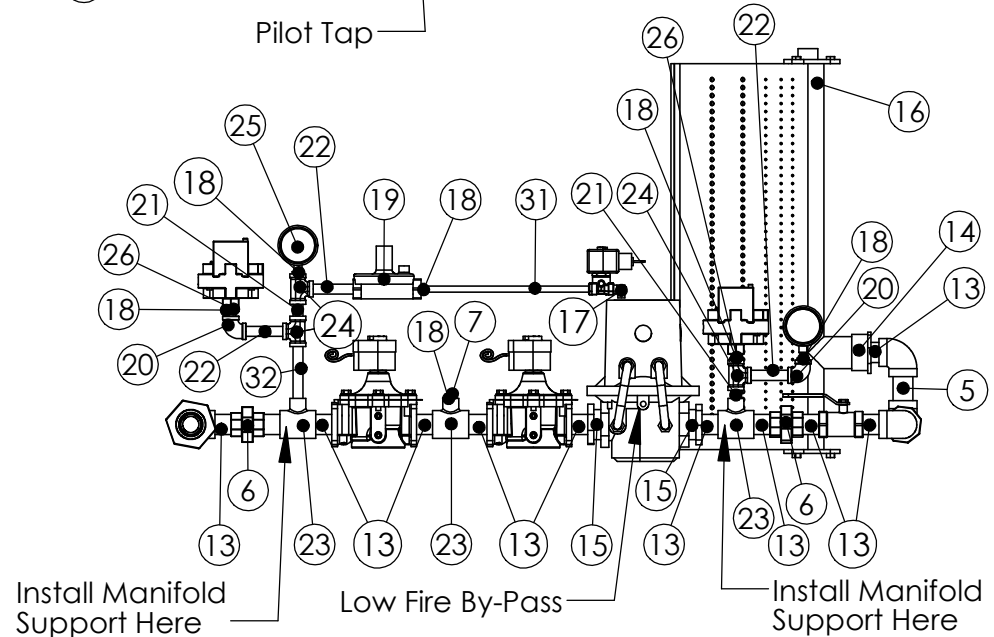
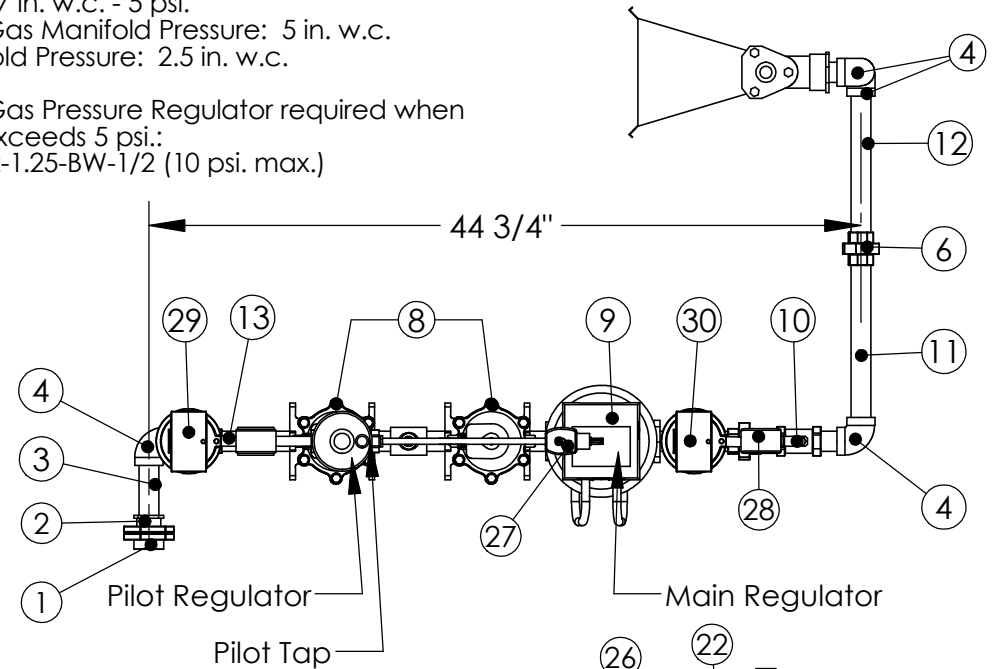
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6	1" Union	3
7	1/4" Square Head Pipe Plug	1
8	1" 8214250 Solenoid Valve	2
9	Maxitrol 1-1/2" MR212D Modulating Valve	1
10	1" Manual Ball Valve	1
11	1" x 10" Nipple	1
12	1" x 9" Nipple	1
13	1" x CLOSE (1-1/2") Nipple	11
14	1" Female x 2" Male Adapter	1
15	1-1/2" Male x 1" Female Reducer	2
16	24" Dual Fuel Midco Burner	1
17	1/4" Brass Elbow	1
18	3/8" Male x 1/4" Female Reducer	6
19	325-3x3/8 Pilot Gas Regulator	1
20	3/8" 90° Elbow	2
21	3/8" x 1-1/8" Nipple	2
22	3/8" x 3" Nipple	3
23	1" x 1" x 3/8" Tee	3
24	3/8" Tee	3
25	0-35" w.c. or 0-5 psi or 0-15 psi Pressure Gauge (check spec)	1
26	1/4" x 7/8" Nipple	2
27	V4046C1021 Solenoid	1
28	-5-15 w.c. Gas Pressure Gauge	1
29	Optional GML-A4-4-4 Pressure Switch	1
30	Optional GMH-A4-4-4 Pressure Switch	1
31	1/4" x 11" Nipple	1
32	3/8" x 4" Nipple	1

# Gas Train Upstream Pilot w/Pressure Switches

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



Material: N/A  
 Blank Size: N/A x N/A  
 Weight: N/A lbs

Part Number: N/A  
 MACOLA/AX Number: N/A  
 Drawing Name: DF 4 24 Gas Train  
 Drawn By: WBG  
 Parent Assembly: DF 4  
 Sheet: 5 of 5

Unless Otherwise Specified Dimensions are in Inches.  
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