

DF-5

60 Inch

Gas Train

9/13/2011

BILL OF MATERIALS

ITEM NUMBER	Description	Quantity
1	1-1/2" Quick Seal	1
2	1-1/2" x 4" Nipple	1
3	1-1/2" 90° Elbow	5
4	1-1/2" x 1-1/2" Nipple	13
5	1-1/2" Union	4
6	1-1/2" x 1-1/2" x 1/2" Tee	3
7	-5-15 w.c. Gas Pressure Gauge	1
8	1-1/2" K3A682T Solenoid Valve	1
9	1-1/2" V4055A1007 Hydraulic Actuator and V5055A1020 Valve	1
10	1-1/2" x 2-1/2" Nipple	2
11	Maxitrol 1-1/2" MR212D Modulating Valve	1
12	1/2" Male x 1/4" Female Reducer	2
13	1-1/2" Manual Ball Valve	1
14	1-1/2" x 10" Nipple	1
15	1-1/2" x 1-1/2" x 1-1/2" Tee	1
16	1-1/2" x 4" Nipple	2
17	1-1/2" Female x 2" Male Adapter	2
18	60" Dual Fuel Midco Burner	1
19	N/A	N/A
20	N/A	N/A
21	1/4" Brass Elbow	1
22	3/8" Male x 1/4" Female Reducer	1
23	325-3x3/8 Pilot Gas Regulator	1
24	3/8" 90° Elbow	1
25	3/8" Close Nipple (1-1/2")	1
26	3/8" x 2" Nipple	1
27	3/8" Pilot Shut Off Valve	1
28	1/2" Male x 3/8" Female Reducer	1
29	3/8" x 3" Nipple	1
30	Pyroseal Furnace Cement (AX # 2220)	
31	0-35" w.c. or 0-5 psi or 0-15 psi Pressure Gauge (check spec)	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.

External Ball Valve Shipped Loose in Control Cabinet

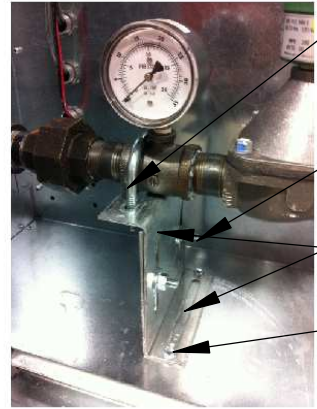
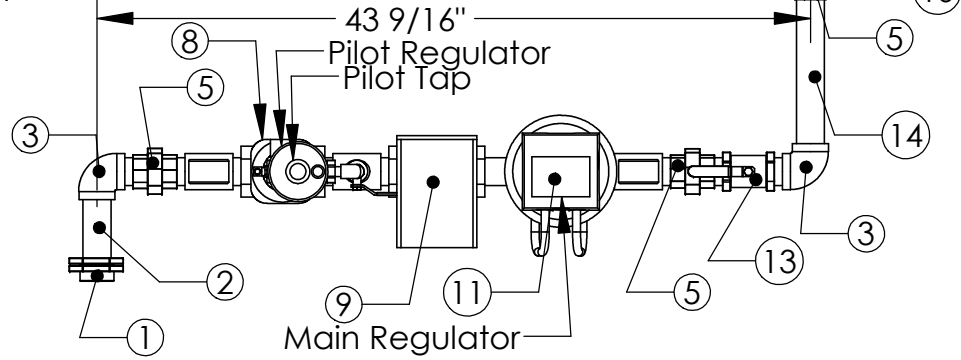
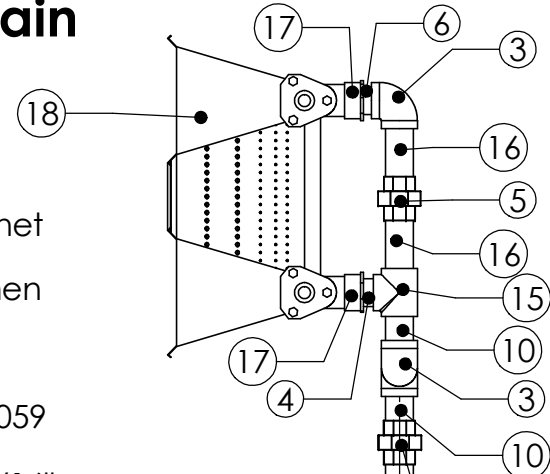
External High Gas Pressure Regulator Required when gas pressure exceeds 5 psi.:
 P/N = 243-8-2-1.5-OR-1-30 (25 psi. max.)

Item #9 is replaced by V4055D1019 and V5055C1059 for Proof of Closure Applications

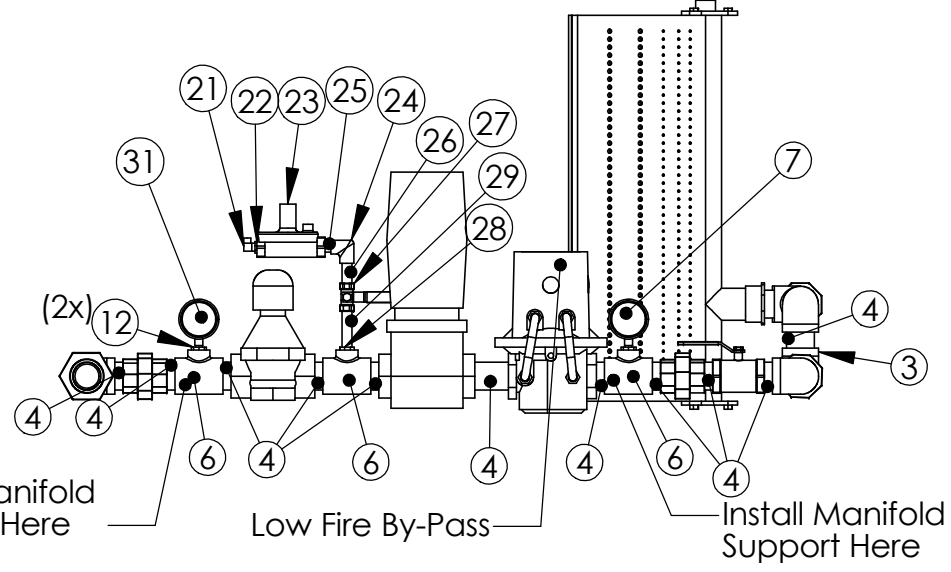
Item # 30 (not shown) used for burners built in house.



Standard Gas Train



- 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



Additional Notes:
 Burners riveted together with 3/16" rivets.
 Burner Cement used at all casting joints only.

Material: N/A	Part Number: N/A	Unless Otherwise Specified Dimensions are in Inches.
Blank Size: N/A x N/A	MACOLA/AX Number:	
Weight: N/A lbs	Drawing Name: DF 5 60 Inch Gas Train	
CONFIDENTIAL	Drawn By:	
	Parent Assembly: DF 5	
	Sheet: 2 of 4	
	Standard Tolerances are: Fractions: ±1/16 Decimal: .XX ±.05 .XXX ±.015 Angles: ±1°	

BILL OF MATERIALS

ITEM NUMBER	Description	Quantity
1	1-1/2" Quick Seal	1
2	1-1/2" x 4" Nipple	1
3	1-1/2" 90° Elbow	5
4	1-1/2" x 1-1/2" Nipple	13
5	1-1/2" Union	4
6	1-1/2" x 1-1/2" x 1/2" Tee	3
7	1/4" Square Head Pipe Plug	2
8	1-1/2" K3A682T Solenoid Valve	1
9	1-1/2" V4055A1007 Hydraulic Actuator and V5055A1020 Valve	1
10	1-1/2" x 2-1/2" Nipple	2
11	Maxitrol 1-1/2" MR212D Modulating Valve	1
12	1/2" Male x 1/4" Female Reducer	2
13	1-1/2" Manual Ball Valve	1
14	1-1/2" x 10" Nipple	1
15	1-1/2" x 1-1/2" x 1-1/2" Tee	1
16	1-1/2" x 4" Nipple	2
17	1-1/2" Female x 2" Male Adapter	2
18	60" Dual Fuel Mdco Burner	1
19	1/4" x 4" Nipple	4
20	1/4" x 1/4" x 1/4" Tee	2
21	1/4" Brass Elbow	1
22	3/8" Male x 1/4" Female Reducer	1
23	325-3x3/8 Pilot Gas Regulator	1
24	3/8" 90° Elbow	1
25	3/8" Close Nipple (1-1/2")	1
26	3/8" x 2" Nipple	1
27	3/8" Pilot Shut Off Valve	1
28	1/2" Male x 3/8" Female Reducer	1
29	3/8" x 3" Nipple	1
30	Optional Antunes HGP-A M1 Pressure Switch	1
31	Optional Antunes LGP-A M1 Pressure Switch	1
32	Pyroseal Furnace Cement (AX # 2220)	1

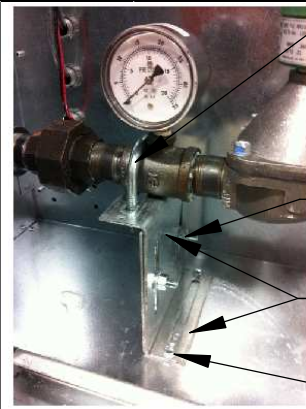
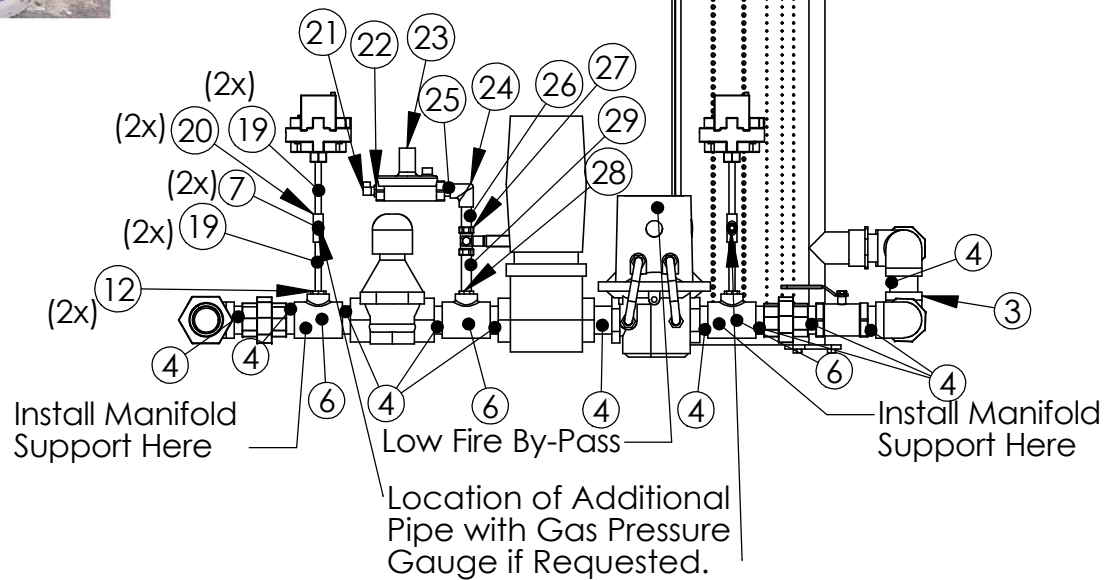
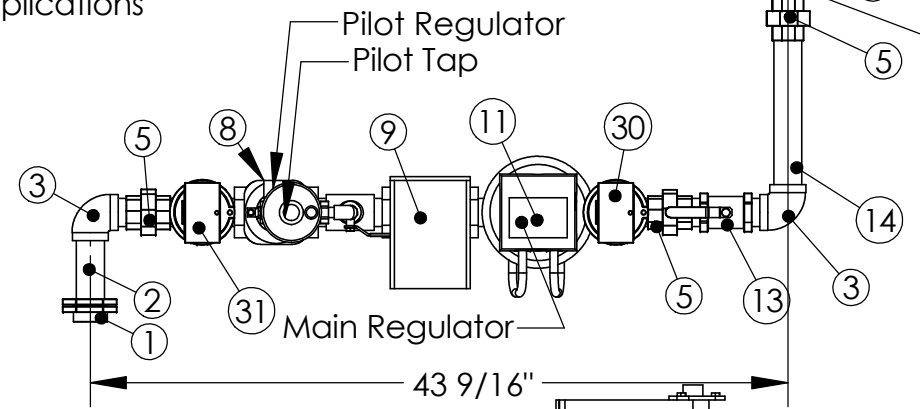
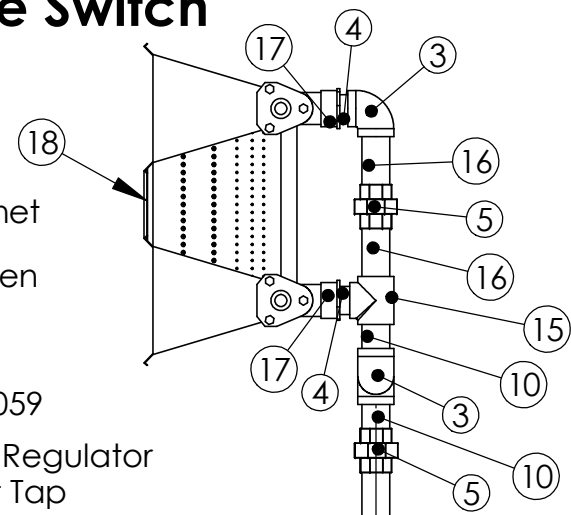
Gas Train w/Pressure Switch

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 Ball Valve Shipped Loose in Control Cabinet
 External High Gas Pressure Regulator Required when gas pressure exceeds 5 psi.:
 P/N = 243-8-2-1.5-OR-1-30 (25 psi. max.)

Item #9 is replaced by V4055D1019 and V5055C1059 for Proof of Closure Applications

Item # 32 (not shown) used for burners built in house.



- 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

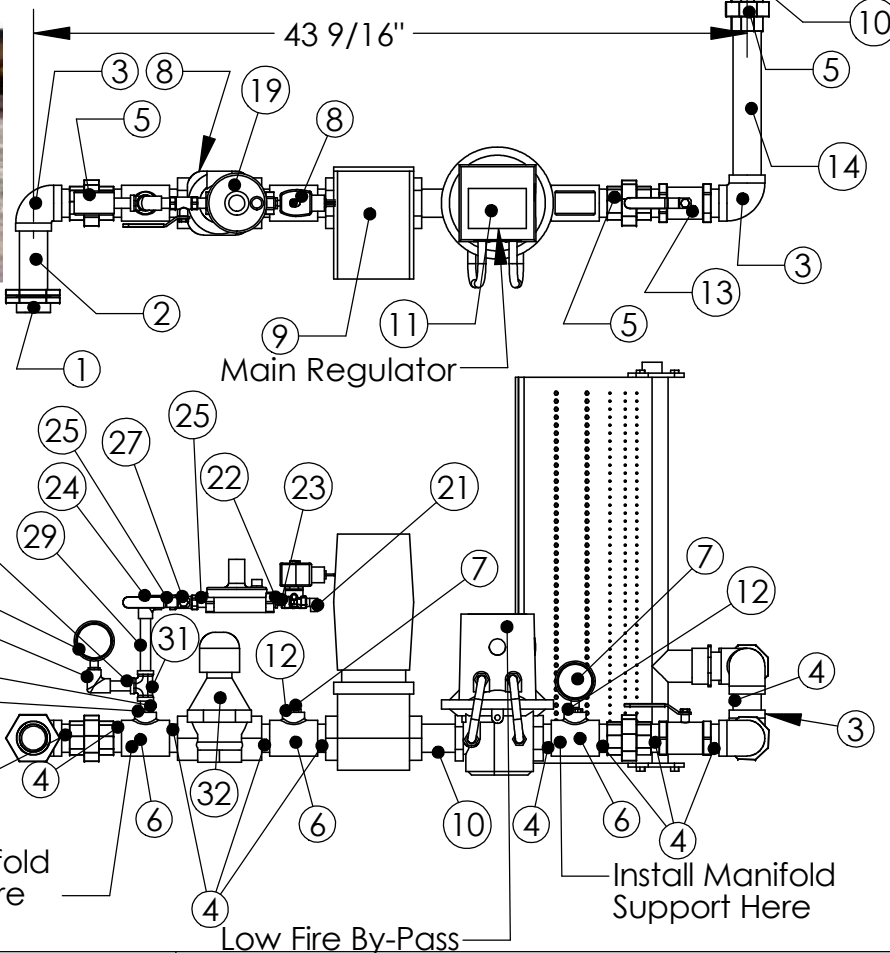
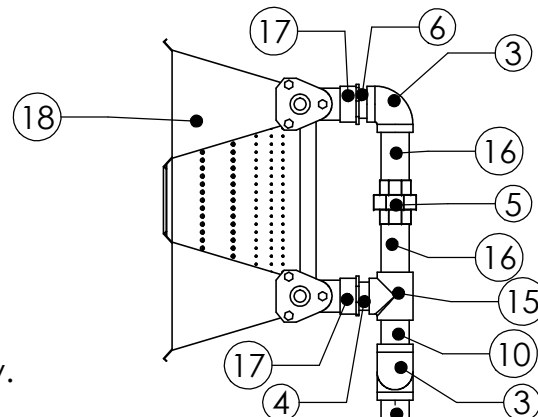
Additional Notes:
 Burners riveted together with 3/16" rivets.
 Burner Cement used at all casting joints only.

Material: N/A	Part Number: N/A	Unless Otherwise Specified Dimensions are in Inches.
Blank Size: N/A x N/A	MACOLA/AX Number:	
Weight: N/A lbs	Drawing Name: DF 5 60 Inch Gas Train	
CONFIDENTIAL	Drawn By:	
	Parent Assembly: DF 5	
	Sheet: 3 of 4	Standard Tolerances are: Fractions: ±1/16 Decimal: .XX±.05 .XXX±.015 Angles: ±1°

Gas Train w/Upstream Pilot

BILL OF MATERIALS		
ITEM NUMBER	Description	Quantity
1	1-1/2" Quick Seal	1
2	1-1/2" x 4" Nipple	1
3	1-1/2" 90° Elbow	5
4	1-1/2" x 1-1/2" Nipple	11
5	1-1/2" Union	4
6	1-1/2" x 1-1/2" x 1/2" Tee	3
7	-5-15 w.c. Gas Pressure Gauge	1
8	V4046C1021 Solenoid	1
9	1-1/2" V4055A1007 Hydraulic Actuator and V5055A1020 Valve	1
10	1-1/2" x 2-1/2" Nipple	3
11	Maxitrol 1-1/2" MR212D Modulating Valve	1
12	1/2" Male x 1/4" Female Reducer	2
13	1-1/2" Manual Ball Valve	1
14	1-1/2" x 10" Nipple	1
15	1-1/2" x 1-1/2" x 1-1/2" Tee	1
16	1-1/2" x 4" Nipple	2
17	1-1/2" Female x 2" Male Adapter	2
18	60" Dual Fuel Midco Burner	1
19	325-3x3/8 Pilot Gas Regulator	1
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21	1/4" Brass Elbow	1
22	3/8" Male x 1/4" Female Reducer	1
23	1/4" Close Nipple	1
24	3/8" 90° Elbow	2
25	3/8" Close Nipple (1-1/2")	3
26	3/8" x 2" Nipple	1
27	3/8" Manual Ball Valve	1
28	1/2" Male x 3/8" Female Reducer	1
29	3/8" x 4" Nipple	1
30	Pyroseal Furnace Cement (AX # 2220)	N/A
31	3/8" Tee	1
32	1-1/2" K3A682T Solenoid Valve	1

Additional Notes:
 Burners riveted together with 3/16" rivets.
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Material: N/A	Part Number: N/A
Blank Size: N/A x N/A	MACOLA/AX Number:
Weight: N/A lbs	Drawing Name: DF 5 60 Inch Gas Train
CONFIDENTIAL	Drawn By:
	Parent Assembly: DF 5
	Sheet: 4 of 4

Unless Otherwise Specified Dimensions are in Inches.
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 .XXX±.015
 Angles: ±1°