Gas Performance Data												
WJ-35-G-2017		**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**
% Burner output		**0%**	**10%**	**20%**	**30%**	**40%**	**50%**	**60%**	**70%**	**80%**	**90%**	**100%**
Heat input	**Btu/hr**	3,850,000	7,315,000	10,780,000	14,245,000	17,710,000	21,175,000	24,640,000	28,105,000	31,570,000	35,035,000	38,500,000
Gas Flow	**SCFH**	3,850	7,315	10,780	14,245	17,710	21,175	24,640	28,105	31,570	35,035	38,500
	M^3	109	207	305	403	501	600	698	796	894	992	1,090
Gas Mod. valve position	**%**	1.75	2.5	3	3.25	3.5	3.75	4.25	5	5.5	6	8
Gas Pressure in Train	**PSI**	5.96	5.84	5.8	5.69	5.73	5.95	5.85	5.83	5.53	5.59	5.43
	kPa	41.1	40.3	40.0	39.2	39.5	41.0	40.3	40.2	38.1	38.5	37.4
Dp at gas orifice (2.5" bore)	**"w.c"**	0.29	1.44	1.94	3.58	4.41	6.22	8.92	12.48	14.48	19.25	21.54
	Pa	72	359	483	892	1098	1549	2222	3109	3607	4795	5365
Gas Manifold Pressure	**"w.c"**	1.40	7.00	9.10	14.60	17.30	22.90	30.90	41.30	46.10	56.20	64.80
	Pa	349	1744	2267	3637	4309	5704	7697	10287	11483	13998	16141
Damper Position		0.5	2.75	3.25	4	4.25	4.75	5.5	6.25	6.75	7.5	8.75
Blower Body Pressure	**"w.c"**	23.3	22.1	21.6	20.7	20.5	20.2	19.6	19.4	19.2	19	19.1
	Pa	5,804	5,505	5,380	5,156	5,106	5,031	4,882	4,832	4,782	4,733	4,757
Burner Body Pressure	**"w.c"**	1.9	7.1	7.2	9.4	9.8	10.7	11.7	12.4	12.6	12.9	13.2
	Pa	473	1,768	1,793	2,341	2,441	2,665	2,914	3,089	3,138	3,213	3,288
Combustion Air Motor Power	**HP**	24	32.7	33.7	35.4	36.1	36.5	37.2	37.3	37.5	37.6	38
Combustion Air Motor Current	**Amp.**	27.3	35.3	36.5	38.1	38.5	39.1	39.5	39.8	40	40.2	40
Main Air Flow	**SCFH**	157,664	325,078	353,347	392,650	408,585	423,150	437,747	447,962	455,061	459,729	462,661
	M^3	4,465	9,205	10,006	11,119	11,570	11,982	12,396	12,685	12,886	13,018	13,101
Flame Length	**Feet**	2.75	2	2	2.33	2.08	2.33	2.33	2.5	3.16	4	5
Flame Diameter	**Feet**	2.5	2	2	2	2	2	2	2	2.33	2.87	3.5
Excess air	**%**	307%	342%	226%	174%	129%	99%	77%	58%	43%	30%	19%

16-252 Single motor

Match fuel flow rate with blower body pressure. The chart below shows this graphically. To use it, find the fuel flow on the horizontal axis, then move vertically to the curve and then horizontally to the left to find the required blower body pressure. These values were measured using a burner firing into atmospheric conditions. These are to be used as a starting point only. Final Setup must be determined using a combustion analyzer.