



Prop **Fuji 43 engine with Fuji Muffler**  
 Operator **Chris Harris**  
 Date **2010-11-02** Time **12:47:41**

shaft order #N/A Hz harmonics: 1st 2nd 3rd  
 #N/A #N/A #N/A  
 blade order #N/A Hz  
 #N/A #N/A #N/A  
 dB  
 dB(A)  
 dB(C)

**9100 RPM / Fuji 43 Engine with FUJI Muffler - Sound Test**

Level II aural nondetectability limits (dB)

1/3 Oct Band Frequency (Hz)	Nondetectability Distance (m)																
	10	20	30	100	200	300	400	500	750	1000	1250	1500	2000	3000	4000	5000	6000
50	35.1	35.1	35.1	35.1	35.1	35.1	35.1	35.1	35.1	35.1	35.1	35.1	35.1	35.1	35.1	35.1	35.1
63	32.4	32.4	32.4	32.4	32.4	32.4	32.4	32.4	32.4	32.4	32.4	32.4	32.4	32.4	32.4	32.4	32.4
80	38.4	38.4	38.4	38.4	38.4	38.4	38.4	38.4	38.4	38.4	38.4	38.4	38.4	38.4	38.4	38.4	38.4
100	42.3	42.3	42.3	42.3	42.3	42.3	42.3	42.3	42.3	42.3	42.3	42.3	42.3	42.3	42.3	42.3	42.3
125	41.6	41.6	41.6	41.6	41.6	41.6	41.6	41.6	41.6	41.6	41.6	41.6	41.6	41.6	41.6	41.6	41.6
160	48.1	48.1	48.1	48.1	48.1	48.1	48.1	48.1	48.1	48.1	48.1	48.1	48.1	48.1	48.1	48.1	48.1
200	43.8	43.8	43.8	43.8	43.8	43.8	43.8	43.8	43.8	43.8	43.8	43.8	43.8	43.8	43.8	43.8	43.8
250	42.1	42.1	42.1	42.1	42.1	42.1	42.1	42.1	42.1	42.1	42.1	42.1	42.1	42.1	42.1	42.1	42.1
315	49.2	49.2	49.2	49.2	49.2	49.2	49.2	49.2	49.2	49.2	49.2	49.2	49.2	49.2	49.2	49.2	49.2
400	48.8	48.8	48.8	48.8	48.8	48.8	48.8	48.8	48.8	48.8	48.8	48.8	48.8	48.8	48.8	48.8	48.8
500	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7
630	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7
800	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3
1000	57.7	57.7	57.7	57.7	57.7	57.7	57.7	57.7	57.7	57.7	57.7	57.7	57.7	57.7	57.7	57.7	57.7
1250	73.0	73.0	73.0	73.0	73.0	73.0	73.0	73.0	73.0	73.0	73.0	73.0	73.0	73.0	73.0	73.0	73.0
1600	58.2	58.2	58.2	58.2	58.2	58.2	58.2	58.2	58.2	58.2	58.2	58.2	58.2	58.2	58.2	58.2	NA
2000	72.8	72.8	72.8	72.8	72.8	72.8	72.8	72.8	72.8	72.8	72.8	72.8	72.8	72.8	72.8	72.8	NA
2500	70.4	70.4	70.4	70.4	70.4	70.4	70.4	70.4	70.4	70.4	70.4	70.4	70.4	70.4	NA	NA	NA
3150	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6	NA	NA	NA
4000	73.7	73.7	73.7	73.7	73.7	73.7	73.7	73.7	73.7	73.7	73.7	73.7	73.7	NA	NA	NA	NA
5000	77.5	77.5	77.5	77.5	77.5	77.5	77.5	77.5	77.5	77.5	77.5	77.5	77.5	NA	NA	NA	NA
6300	79.2	79.2	79.2	79.2	79.2	79.2	79.2	79.2	79.2	79.2	NA	NA	NA	NA	NA	NA	NA
8000	82.8	82.8	82.8	82.8	82.8	82.8	82.8	82.8	NA	NA	NA	NA	NA	NA	NA	NA	NA
10000	89.8	89.8	89.8	89.8	89.8	89.8	89.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Measurement Distance (m)	2	2	2	2*	2*	2*	2*	2*	2*	2*	2*	2*	2*	2*	2*	2*	2*



Prop **FUJI 43 with NO muffler sound test 9100 rpm**  
 Operator **Chris Harris**  
 Date **2010-11-02** Time **12:57:28**

shaft order #N/A Hz harmonics: 1st #N/A 2nd #N/A 3rd #N/A  
 blade order #N/A Hz #N/A #N/A #N/A  
 dB  
 dB(A)  
 dB(C)

**9100 RPM / FUJI 43 With NO Muffler - Sound Test**

Level II aural nondetectability limits (dB)

1/3 Oct Band Frequency (Hz)	Nondetectability Distance (m)																
	10	20	30	100	200	300	400	500	750	1000	1250	1500	2000	3000	4000	5000	6000
50	32.5	32.5	32.5	32.5	32.5	32.5	32.5	32.5	32.5	32.5	32.5	32.5	32.5	32.5	32.5	32.5	32.5
63	32.5	32.5	32.5	32.5	32.5	32.5	32.5	32.5	32.5	32.5	32.5	32.5	32.5	32.5	32.5	32.5	32.5
80	37.8	37.8	37.8	37.8	37.8	37.8	37.8	37.8	37.8	37.8	37.8	37.8	37.8	37.8	37.8	37.8	37.8
100	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0
125	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9	41.9
160	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0
200	46.1	46.1	46.1	46.1	46.1	46.1	46.1	46.1	46.1	46.1	46.1	46.1	46.1	46.1	46.1	46.1	46.1
250	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3
315	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0
400	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0
500	53.3	53.3	53.3	53.3	53.3	53.3	53.3	53.3	53.3	53.3	53.3	53.3	53.3	53.3	53.3	53.3	53.3
630	79.6	79.6	79.6	79.6	79.6	79.6	79.6	79.6	79.6	79.6	79.6	79.6	79.6	79.6	79.6	79.6	79.6
800	51.3	51.3	51.3	51.3	51.3	51.3	51.3	51.3	51.3	51.3	51.3	51.3	51.3	51.3	51.3	51.3	51.3
1000	59.7	59.7	59.7	59.7	59.7	59.7	59.7	59.7	59.7	59.7	59.7	59.7	59.7	59.7	59.7	59.7	59.7
1250	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2
1600	61.0	61.0	61.0	61.0	61.0	61.0	61.0	61.0	61.0	61.0	61.0	61.0	61.0	61.0	61.0	61.0	NA
2000	79.7	79.7	79.7	79.7	79.7	79.7	79.7	79.7	79.7	79.7	79.7	79.7	79.7	79.7	79.7	79.7	NA
2500	70.4	70.4	70.4	70.4	70.4	70.4	70.4	70.4	70.4	70.4	70.4	70.4	70.4	70.4	NA	NA	NA
3150	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3	NA	NA	NA
4000	78.8	78.8	78.8	78.8	78.8	78.8	78.8	78.8	78.8	78.8	78.8	78.8	78.8	NA	NA	NA	NA
5000	81.4	81.4	81.4	81.4	81.4	81.4	81.4	81.4	81.4	81.4	81.4	81.4	NA	NA	NA	NA	NA
6300	83.1	83.1	83.1	83.1	83.1	83.1	83.1	83.1	83.1	83.1	NA	NA	NA	NA	NA	NA	NA
8000	84.1	84.1	84.1	84.1	84.1	84.1	84.1	84.1	84.1	NA	NA	NA	NA	NA	NA	NA	NA
10000	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5	NA	NA	NA	NA	NA	NA	NA	NA	NA
Measurement Distance (m)	2	2	2	2*	2*	2*	2*	2*	2*	2*	2*	2*	2*	2*	2*	2*	2*



Prop **Fuji 43 @ 9100 rpm w/NWUAV Muffler**  
 Operator **Chris Harris**  
 Date **2010-11-02** Time **12:32:03**

shaft order #N/A Hz harmonics: 1st 2nd 3rd  
 #N/A #N/A #N/A  
 blade order #N/A Hz  
 #N/A #N/A #N/A  
 dB  
 dB(A)  
 dB(C)

9100 RPM / FUJI 43 with NWUAV Muffler																	
Level II aural nondetectability limits (dB)																	
1/3 Oct Band Frequency (Hz)	Nondetectability Distance (m)																
	10	20	30	100	200	300	400	500	750	1000	1250	1500	2000	3000	4000	5000	6000
50	33.8	33.8	33.8	33.8	33.8	33.8	33.8	33.8	33.8	33.8	33.8	33.8	33.8	33.8	33.8	33.8	33.8
63	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3
80	39.8	39.8	39.8	39.8	39.8	39.8	39.8	39.8	39.8	39.8	39.8	39.8	39.8	39.8	39.8	39.8	39.8
100	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7	42.7
125	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6	42.6
160	47.0	47.0	47.0	47.0	47.0	47.0	47.0	47.0	47.0	47.0	47.0	47.0	47.0	47.0	47.0	47.0	47.0
200	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2
250	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3
315	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0
400	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8	47.8
500	53.4	53.4	53.4	53.4	53.4	53.4	53.4	53.4	53.4	53.4	53.4	53.4	53.4	53.4	53.4	53.4	53.4
630	66.4	66.4	66.4	66.4	66.4	66.4	66.4	66.4	66.4	66.4	66.4	66.4	66.4	66.4	66.4	66.4	66.4
800	48.4	48.4	48.4	48.4	48.4	48.4	48.4	48.4	48.4	48.4	48.4	48.4	48.4	48.4	48.4	48.4	48.4
1000	59.5	59.5	59.5	59.5	59.5	59.5	59.5	59.5	59.5	59.5	59.5	59.5	59.5	59.5	59.5	59.5	59.5
1250	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0
1600	55.2	55.2	55.2	55.2	55.2	55.2	55.2	55.2	55.2	55.2	55.2	55.2	55.2	55.2	55.2	55.2	NA
2000	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	60.7	NA
2500	72.8	72.8	72.8	72.8	72.8	72.8	72.8	72.8	72.8	72.8	72.8	72.8	72.8	72.8	72.8	NA	NA
3150	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	NA	NA
4000	64.8	64.8	64.8	64.8	64.8	64.8	64.8	64.8	64.8	64.8	64.8	64.8	64.8	64.8	NA	NA	NA
5000	69.4	69.4	69.4	69.4	69.4	69.4	69.4	69.4	69.4	69.4	69.4	69.4	69.4	NA	NA	NA	NA
6300	72.2	72.2	72.2	72.2	72.2	72.2	72.2	72.2	72.2	72.2	NA	NA	NA	NA	NA	NA	NA
8000	78.2	78.2	78.2	78.2	78.2	78.2	78.2	78.2	78.2	NA	NA	NA	NA	NA	NA	NA	NA
10000	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	NA	NA	NA	NA	NA	NA	NA	NA	NA
Measurement Distance (m)	2	2	2	2*	2*	2*	2*	2*	2*	2*	2*	2*	2*	2*	2*	2*	2*