Report By:

National TAB
1329 E. KEMPER ROAD
SUITE 4210
CINCINNATI, OH 45246

NATIONAL TAB

Comfort. Under control.

Report: TAB REPORT
Function: Test, Adjust, & Balance
Date: 05/04/2023

PROJECT

Project Eagle (Liberty, MO)

1551 SHEPHERD RD

LIBERTY, MO 64083

Client

Metro Air Conditioning

8151 McCoy

Shawnee, KS 66227

National TAB

Project: Project Eagle (Liberty, MO)

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National TAB

Project: Project Eagle (Liberty, MO)

System/Unit: AHU/RTU

Comfort. Under control.

Asset: RTU-1 AREA:125

Unit Data		
	Design	**Actual**
MFG	NA	CARRIER
Serial Num	-	3422C09161
Model Num	DD	48FCDA04A1M6A6F0C0
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	1 METAL MESH
OA Filter Size 1	-	14.25X28.25
Num PreFilter 1	-	2
PreFilter Size 1	-	16X25X2

Motor Data		
	Design	**Actual**
Motor MFG	-	NL
Frame	-	NL
Horsepower	1	1
Motor Rpm	-	1406
Phase	3	3
Rated Voltage	460	460
Rated Amperage	0.9	0.9
Service Factor	-	NL

Test Data		
	Design	**Actual**
SF CFM	1150	1164
RA CFM	1075	1085
OA CFM	75	79
RL Voltage	460	489/491/492
RL Amperage	0.9	0.54/0.56/0.61
OA Damper Position	-	2.30V/3%

Performance Data		
	Design	**Actual**
MA Plenum SP	-	-0.12"
Fan Suction SP	-	-0.31"
Fan Discharge SP	-	0.31"
Total ESP	0.50	0.43"
Fan Total SP	0.54	0.62"

Completed By: Jacob Davidson

Notes: Speed set at 7.22VDC position B 20% Motor label not accessible. Motor data taken from submittals and unit label

National TAB

Project:Project Eagle (Liberty, MO)

AHU/RTU

Comfort. Under control.

Diffuser Supply (GRD)

RTU-1/125

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
SGRD1	123	SD-1	10	250	351	274	109.6
SGRD2	125	LSD-1	10	250	329	256	102.4
SGRD3	125	LSD-1	10	250	326	254	101.6
SGRD4	125	SD-1	10	400	487	380	95.0

Completed By: Jacob Davidson on

National TAB

Project: Project Eagle (Liberty, MO)

System/Unit: AHU/RTU

Comfort. Under control.

Asset: RTU-2 AREA:120

Unit Data		
	Design	**Actual**
MFG	NA	CARRIER
Serial Num	-	2722C10247
Model Num	DD	48FCEA06A2M6A6F0C0
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	1 METAL MESH
OA Filter Size 1	-	14.25X28.25
Num PreFilter 1	-	2
PreFilter Size 1	-	16X25X2

Motor Data		
	Design	**Actual**
Motor MFG	-	NL
Frame	-	NL
Horsepower	1	1
Motor Rpm	-	1769
Phase	3	3
Rated Voltage	460	460
Rated Amperage	1.9	1.9
Service Factor	-	NL

Test Data		
	Design	**Actual**
SF CFM	2000	1987
RA CFM	1700	1665
OA CFM	300	322
RL Voltage	460	491/492/490
RL Amperage	1.9	1.04/1.06/1.09
OA Damper Position	-	4.30V/28%

Performance Data		
	Design	**Actual**
MA Plenum SP	-	-0.26"
Fan Suction SP	-	-0.64"
Fan Discharge SP	-	0.43"
Total ESP	0.75	0.69"
Fan Total SP	0.87	1.07"

Completed By: Jacob Davidson

Notes: UNIT GIVES A "SHUTDOWN ALARM" ERROR MESSAGE WHEN HEATING. Speed set at 7.18VDC position B 200% Motor label not accessible. Motor data taken from submittals and unit label

National TAB

Project:Project Eagle (Liberty, MO)

AHU/RTU

Comfort. Under control.

Diffuser Supply (GRD)

RTU-2/120

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
SGRD1	120	SD-1	10	325	330	318	97.8
SGRD2	120	SD-1	10	325	335	320	98.5
SGRD3	120	SD-1	10	325	388	281	86.5
SGRD4	120	LSD-1	8	125	124	116	92.8
SGRD5	120	LSD-1	10	250	262	234	93.6
SGRD6	120	LSD-1	10	250	349	312	124.8
SGRD7	120	LSD-1	10	250	260	253	101.2
SGRD8	120	LSD-1	8	150	158	153	102.0

Completed By: Jacob Davidson on

Asset	Notes
SGRD6	DIFFUSER IS FULLY OPEN. UNABLE TO CLOSE DIFFUSER WITHOUT PUTTING THE REST OF THE SYSTEM OUT OF BALANCE DU E TO DAMPERS HAVING LOCKED POSITIONS.

National TAB

Project: Project Eagle (Liberty, MO)

System/Unit: AHU/RTU

Comfort. Under control.

Asset: RTU-3 AREA:120

Unit Data		
	Design	**Actual**
MFG	CARRIER	CARRIER
Serial Num	-	3122P60878
Model Num	BELT	48TCED14E2M6A6F0J0
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	1 METAL MESH
OA Filter Size 1	-	19.25X35
Num PreFilter 1	-	4
PreFilter Size 1	-	20X20X2

Test Data		
	Design	**Actual**
SF CFM	4500	3902
SF RPM	1059	878/1060
RA CFM	3700	
OA CFM	800	
RL Voltage	460	492/496/491
RL Amperage	4.6	3.75/3.83/4.21
OA Damper Position	-	
Brake Horse Power	3.42	

Motor Data		
	Design	**Actual**
Motor MFG	-	MARATHON
Frame	-	56HZ
Horsepower	5	NL
Motor Rpm	-	1750
Phase	3	3
Rated Voltage	460	230/460
Rated Amperage	5.3	9.2/4.6
Service Factor	-	1.15

Performance Data		
	Design	**Actual**
MA Plenum SP	-	
Fan Suction SP	-	
Fan Discharge SP	-	
Total ESP	0.75	
Fan Total SP	1.01	

Drive Data		
	Design	**Actual**
Motor Sheave Size	-	4.75”
Motor Bore Size	-	7/8”
Motor Sheave SetPt	-	5 TURNS OUT
Fan Sheave Size	-	7.25”
Fan Sheave Bore	-	1”
Belt CL Distance	-	16.75”
Num of Belts	-	1
Belt Size	-	AX49

Completed By: Michael Gabbert

Notes: UNIT HAS MAJOR LEAKAGE AT DISCHARGE COMPARTMENT. UNABLE TO SPEED UP UNIT UNTIL THIS IS RECONCILED.

Diffuser Supply (GRD)

RTU-3/120

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
SGRD1	122	SD-1	10	350	330	252	72.0
SGRD2	121	SD-1	10	350	283	309	88.3
SGRD3	120	SD-1	12	475	379	415	87.4
SGRD4	120	SD-1	12	475	342	414	87.2
SGRD5	120	SD-1	12	475	361	458	96.4
SGRD6	120	SD-1	12	475	298	387	81.5
SGRD7	120	SD-1	12	475	326	412	86.7
SGRD8	120	SD-1	12	475	366	450	94.7
SGRD9	120	SD-1	12	475	615	367	77.3
SGRD10	120	SD-1	12	475	402	438	92.2

Completed By: Michael Gabbert on

National TAB

Project: Project Eagle (Liberty, MO)

System/Unit: AHU/RTU

Comfort. Under control.

Asset: RTU-4 AREA:111

Unit Data		
	Design	**Actual**
MFG	NA	CARRIER
Serial Num	-	2722C10395
Model Num	DD	48FCEM07A2M6A6F0C0
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	1 METAL MESH
OA Filter Size 1	-	14.25x28.25
Num PreFilter 1	-	4
PreFilter Size 1	-	16X16X2

Motor Data		
	Design	**Actual**
Motor MFG	-	NL
Frame	-	NL
Horsepower	2	1.8
Motor Rpm	-	2055
Phase	3	3
Rated Voltage	460	460
Rated Amperage	2.2	2.2
Service Factor	-	NL

Test Data		
	Design	**Actual**
SF CFM	2400	2415
RA CFM	2175	2177
OA CFM	225	238
RL Voltage	460	493/494/496
RL Amperage	2.2	0.72/0.74/0.76
OA Damper Position	-	10%/2.85V

Performance Data		
	Design	**Actual**
MA Plenum SP	-	-0.16”
Fan Suction SP	-	-0.30”
Fan Discharge SP	-	0.27”
Total ESP	0.75	0.43"
Fan Total SP	0.92	0.57"

Completed By: Jacob Davidson

Notes: Speed set at 9.03VDC position C 60% Motor label not accessible. Motor data taken from submittals and unit label

National TAB

Project:Project Eagle (Liberty, MO)

AHU/RTU

Comfort. Under control.

Diffuser Supply (GRD)

RTU-4/111

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
SGRD1	112	SD-1	12	325	296	342	105.2
SGRD2	111	LSD-1	10/1.133	250	226	260	104.0
SGRD3	111	LSD-1	10/1.133	250	216	250	100.0
SGRD4	111	LSD-1	10/1.133	250	210	242	96.8
SGRD5	111	LSD-1	10/1.133	250	219	252	100.8
SGRD6	110	SD-1	10	275	263	301	109.5
SGRD7	129	SD-1	8	125	116	134	107.2
SGRD8	111	SD-1	8	225	165	190	84.4
SGRD9	111	SD-1	8	225	196	226	100.4
SGRD10	111	SD-1	8	225	187	216	96.0

Completed By: Jacob Davidson on

Asset	Notes
SGRD8	DAMPER FULLY OPEN. UNABLE TO PUSH ANYMORE AIR TO DIFFUSER WITHOUT PUTTING OTHERS OUT OF BALANCE. DIFFUSER IS IN OPEN OFFICE AND WILL NOT CAUSE COMFORT ISSUES.

National TAB

Project: Project Eagle (Liberty, MO)

System/Unit: AHU/RTU

Comfort. Under control.

Asset: RTU-5 AREA:148

Unit Data		
	Design	**Actual**
MFG	NA	CARRIER
Serial Num	-	3422C09266
Model Num	DD	48FCEA05A1M6A6F0C0
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	1 NETAL MESH
OA Filter Size 1	-	14.25X28.25
Num PreFilter 1	-	2
PreFilter Size 1	-	16X25X2

Motor Data		
	Design	**Actual**
Motor MFG	-	NL
Frame	-	NL
Horsepower	0.50	1/2
Motor Rpm	-	1478
Phase	3	3
Rated Voltage	460	460
Rated Amperage	1.2	1.2
Service Factor	-	NL

Test Data		
	Design	**Actual**
SF CFM	1420	1483
RA CFM	1290	1345
OA CFM	130	138
RL Voltage	460	496
RL Amperage	1.2	0.76
OA Damper Position	-	6%/2.55V

Performance Data		
	Design	**Actual**
MA Plenum SP	-	-0.31”
Fan Suction SP	-	-0.46”
Fan Discharge SP	-	0.20”
Total ESP	0.50	0.51"
Fan Total SP	0.56	0.66"

Completed By: Jacob Davidson

Notes: Speed set at 7.51VDC position B 50% Motor label not accessible. Motor data taken from submittals and unit label

National TAB

Project:Project Eagle (Liberty, MO)

AHU/RTU

Comfort. Under control.

Diffuser Supply (GRD)

RTU-5/148

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
SGRD1	113	SD-1	10	200	187	215	107.5
SGRD2	111	SD-1	10	350	289	360	102.9
SGRD3	114	SD-1	10	275	259	299	108.7
SGRD4	111	SD-1	10	350	300	362	103.4
SGRD5	145	SD-1	8	125	187	123	98.4
SGRD6	146	SD-3	6	40	77	42	105.0
SGRD7	147	SD-3	6	40	76	43	107.5
SGRD8	148	SD-3	6	40	75	39	97.5

Completed By: Jacob Davidson on

National TAB

Project: Project Eagle (Liberty, MO)

System/Unit: AHU/RTU

Comfort. Under control.

Asset: RTU-6 AREA:128

Unit Data		
	Design	**Actual**
MFG	CARRIER	CARRIER
Serial Num	-	2822P78973
Model Num	BELT	48TCEM08E2M6A6F0C0
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	1 METAL MESH
OA Filter Size 1	-	19.25X35.25
Num PreFilter 1	-	4
PreFilter Size 1	-	16X20X2

Motor Data		
	Design	**Actual**
Motor MFG	-	MARATHON MOTORS
Frame	-	56HZ
Horsepower	0.75	NL
Motor Rpm	-	1725
Phase	3	3
Rated Voltage	460	460
Rated Amperage	4.2	4.3
Service Factor	-	1.15

Drive Data		
	Design	**Actual**
Motor Sheave Size	-	4.75”
Motor Bore Size	-	7/8”
Motor Sheave SetPt	-	4 TURNS OUT
Fan Sheave Size	-	8.25”
Fan Sheave Bore	-	1”
Belt CL Distance	-	17.5”
Num of Belts	-	1
Belt Size	-	AX52

Test Data		
	Design	**Actual**
SF CFM	2700	2904
SF RPM	790	812
RA CFM	2125	2334
OA CFM	575	570
RL Voltage	460	496/495/495
RL Amperage	4.2	2.91/3.03/3.21
OA Damper Position	-	29%/4.35V

Performance Data		
	Design	**Actual**
MA Plenum SP	-	-0.44”
Fan Suction SP	-	-0.66”
Fan Discharge SP	-	0.53”
Total ESP	0.75	0.97"
Fan Total SP	0.83	1.19"

Completed By: Jacob Davidson

Notes:

National TAB

Project:Project Eagle (Liberty, MO)

AHU/RTU

Comfort. Under control.

Diffuser Supply (GRD)

RTU-6/128

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
SGRD1	128	SD-1	12	450	494	480	106.7
SGRD2	128	SD-1	12	450	439	494	109.8
SGRD3	128	SD-1	12	450	461	485	107.8
SGRD4	128	SD-1	12	450	437	475	105.6
SGRD5	128	SD-1	12	450	489	482	107.1
SGRD6	128	SD-1	12	450	450	488	108.4

Completed By: Jacob Davidson on

National TAB

Project: Project Eagle (Liberty, MO)

System/Unit: AHU/RTU

Comfort. Under control.

Asset: RTU-7 AREA:107

Unit Data		
	Design	**Actual**
MFG	CARRIER	CARRIER
Serial Num	-	3222P61140
Model Num	BELT	48TCDM12A2M6A6F0C0
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	1 METAL MESH
OA Filter Size 1	-	19.25x35.25
Num PreFilter 1	-	4
PreFilter Size 1	-	20X20X2

Motor Data		
	Design	**Actual**
Motor MFG	-	MARATHON MOTORS
Frame	-	56HZ
Horsepower	0.75	NL
Motor Rpm	-	1725
Phase	3	3
Rated Voltage	460	460
Rated Amperage	5.3	5.3
Service Factor	-	1.15

Drive Data		
	Design	**Actual**
Motor Sheave Size	-	4.75”
Motor Bore Size	-	7/8 in.
Motor Sheave SetPt	-	4 TURNS OUT
Fan Sheave Size	-	7.25”
Fan Sheave Bore	-	1 in.
Belt CL Distance	-	17”
Num of Belts	-	1
Belt Size	-	AX49

Test Data		
	Design	**Actual**
SF CFM	3900	3961
SF RPM	965	876
RA CFM	3700	3742
OA CFM	200	219
RL Voltage	460	497/496/495
RL Amperage	5.3	4.32/4.41/4.52
OA Damper Position	-	1%/2.10V

Performance Data		
	Design	**Actual**
MA Plenum SP	-	-0.61”
Fan Suction SP	-	-0.88”
Fan Discharge SP	-	0.51”
Total ESP	0.75	1.12”
Fan Total SP	0.94	1.39”

Completed By: Jacob Davidson

Notes:

National TAB

Project:Project Eagle (Liberty, MO)

AHU/RTU

Comfort. Under control.

Diffuser Supply (GRD)

RTU-7/107

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
SGRD1	107	SD-1	12	650	664	619	95.2
SGRD2	107	SD-1	12	650	602	646	99.4
SGRD3	107	SD-1	12	650	709	668	102.8
SGRD4	107	SD-1	12	650	710	670	103.1
SGRD5	107	SD-1	12	650	600	699	107.5
SGRD6	107	SD-1	12	650	516	659	101.4

Completed By: Jacob Davidson on

National TAB

Project: Project Eagle (Liberty, MO)

System/Unit: AHU/RTU

Comfort. Under control.

Asset: RTU-8 AREA:130

Unit Data		
	Design	**Actual**
MFG	CARRIER	CARRIER
Serial Num	-	2822P78972
Model Num	BELT	48TCEM08A2M6A6F0C0
Configuration	VERTICAL	VERTICAL
Num OA Filters 1	-	1 METAL MESH
OA Filter Size 1	-	19.25X35
Num PreFilter 1	-	4
PreFilter Size 1	-	16X20X2

Motor Data		
	Design	**Actual**
Motor MFG	-	MARATHON
Frame	-	56HZ
Horsepower	0.75	NL
Motor Rpm	-	1725
Phase	3	3
Rated Voltage	460	460
Rated Amperage	4.2	4.3
Service Factor	-	1.15

Drive Data		
	Design	**Actual**
Motor Sheave Size	-	4.75"
Motor Bore Size	-	7/8"
Motor Sheave SetPt	-	5 TURNS OUT
Fan Sheave Size	-	8.25"
Fan Sheave Bore	-	1"
Belt CL Distance	-	17.5"
Num of Belts	-	1
Belt Size	-	AX52

Test Data		
	Design	**Actual**
SF CFM	2685	2833
SF RPM	788	807
RA CFM	2385	2569
OA CFM	300	328
RL Voltage	460	496/495/496
RL Amperage	4.2	2.74/2.86/3.24
OA Damper Position	-	4.05V/ 25%

Performance Data		
	Design	**Actual**
MA Plenum SP	-	-0.42"
Fan Suction SP	-	-0.72"
Fan Discharge SP	-	0.64"
Total ESP	0.75	1.06"
Fan Total SP	0.83	1.36"

Completed By: Michael Gabbert

Notes: DIFFUSER TOTALS FOR EXHAUST DO NOT ADD UP TO THE RETURN AIR VALUE. OA AND SUPPLY CONFIRMED TO BE CORRECT.

National TAB

Project:Project Eagle (Liberty, MO)

AHU/RTU

Comfort. Under control.

Diffuser Supply (GRD)

RTU-8/130

Asset							
Asset Name	**Location**	**Type**	**Size**	**DESIGN CFM**	**CFM(1)**	**FINAL CFM**	**% to design**
SGRD1	130	SD-1	10	400	438	438	109.5
SGRD2	132	SD-1	10	300	300	300	100.0
SGRD3	133	SD-1	8	100	116	108	108.0
SGRD4	134	SD-3	6	40	44	43	107.5
SGRD5	135	SD-3	6	40	42	42	105.0
SGRD6	136	SD-3	6	40	41	41	102.5
SGRD7	137	SD-3	6	40	42	42	105.0
SGRD8	137	SD-1	6	75	80	80	106.7
SGRD9	132	SD-1	8	200	204	204	102.0
SGRD10	132	LSD-1	10	275	325	301	109.5
SGRD11	132	LSD-1	10	275	322	300	109.1
SGRD12	131	LSD-1	10	350	351	351	100.3
SGRD13	130	LSD-1	10	275	308	299	108.7
SGRD14	130	LSD-1	10	275	284	284	103.3

Diffuser Ret/Exh (GRD)

RTU-8/130

Asset								
Asset Name	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**	**FINAL CFM**	**% to design**
EGRD1	RG-1	16	950	1	1002	928	928	97.7
EGRD2	RG-1	18	1385	1	1161	1076	1076	77.7

Completed By: Jacob Davidson on

Asset	Notes
EGRD2	DAMPER FULLY OPEN

National TAB

Project: Project Eagle (Liberty, MO)

System/Unit: FAN - Exhaust

Comfort. Under control.

Asset: CEF-1-1 AREA:126

Unit Data		
	Design	**Actual**
MFG	NA	GREENHECK
Model Num	DD	SP-A110
Serial Num	-	20260580
Type	CEILING	CEILING

Test Data		
	Design	**Actual**
CFM	75	91
RL Voltage	-	108V
RL Amperage	-	0.15A
Total ESP	0.25	0.15"

Motor Data		
	Design	**Actual**
Motor MFG	-	GREENHECK
Frame	-	NL
Horsepower	14W	NL
Motor Rpm	894	950
Phase	1	1
Voltage (rated)	115	115
Amperage (rated)	-	0.19
Service Factor	-	NL

Completed By: Jacob Davidson

Notes: FAN WAS SEALED, HOWEVER SPEED IS STILL HIGHER THAN DESIGN. SPEED IS SET TO LOWEST SETTING.

National TAB

Project: Project Eagle (Liberty, MO)

System/Unit: FAN - Exhaust

Comfort. Under control.

Asset: CEF-1-2 AREA:127

Unit Data		
	Design	**Actual**
MFG	NA	GREENHECK
Model Num	DD	SP-A110
Serial Num	-	20260579
Type	CEILING	CEILING

Test Data		
	Design	**Actual**
CFM	75	97
RL Voltage	-	108V
RL Amperage	-	0.15A
Total ESP	0.25	0.14"

Motor Data		
	Design	**Actual**
Motor MFG	-	GREENHECK
Frame	-	NL
Horsepower	14W	NL
Motor Rpm	894	950
Phase	1	1
Voltage (rated)	115	115
Amperage (rated)	-	0.19
Service Factor	-	NL

Completed By: Jacob Davidson

Notes: FAN WAS SEALED, HOWEVER SPEED IS STILL HIGHER THAN DESIGN. SPEED IS SET TO LOWEST SETTING.

National TAB

Project: Project Eagle (Liberty, MO)

System/Unit: FAN - Exhaust

Comfort. Under control.

Asset: CEF-1-3 AREA:140

Unit Data		
	Design	**Actual**
MFG	NA	GREENHECK
Model Num	DD	SP-A110
Serial Num	-	20260578
Type	CEILING	CEILING

Test Data		
	Design	**Actual**
CFM	75	108
RL Voltage	-	111
RL Amperage	-	0.15"
Total ESP	0.25	0.03"

Motor Data		
	Design	**Actual**
Motor MFG	-	GREENHECK
Frame	-	NL
Horsepower	14W	NL
Motor Rpm	894	950
Phase	1	1
Voltage (rated)	115	115
Amperage (rated)	-	0.19
Service Factor	-	NL

Completed By: Jacob Davidson

Notes: FAN WAS SEALED, HOWEVER SPEED IS STILL HIGHER THAN DESIGN. SPEED IS SET TO LOWEST SETTING.

National TAB

Project: Project Eagle (Liberty, MO)

System/Unit: FAN - Exhaust

Comfort. Under control.

Asset: EF-1 AREA:WAREHOUSE

Unit Data		
	Design	**Actual**
MFG	NA	GREENHECK
Model Num	BELT	GB-420-50-1-52-X
Serial Num	-	20261313
Type	-	DOWNBLAST

Motor Data		
	Design	**Actual**
Motor MFG	-	BALDOR
Frame	-	184T
Horsepower	5	5
Motor Rpm	1725	1750
Phase	3	3
Voltage (rated)	460	230/460
Amperage (rated)	-	13.2/6.6
Service Factor	-	1.15

Drive Data		
	Design	**Actual**
Motor Sheave Size	-	2VP50
Motor Bore Size	-	1-1/8"
Motor Sheave SetPt	-	3 TURNS OUT
Fan Sheave Size	-	15"
Fan Sheave Bore	-	1-1/4"
Belt CL Distance	-	16"
Num of Belts	-	2
Belt Size	-	AX57

Test Data		
	Design	**Actual**
CFM	20000	
Fan RPM	500	504
RL Voltage	-	NOT SAFE
RL Amperage	-	NOT SAFE
Suction ESP	-	NOT SAFE
Discharge ESP	-	NOT SAFE
Total ESP	0.125	NOT SAFE
Brake Horse Power	-	NA

Completed By: Michael Gabbert

Notes:

National TAB

Project: Project Eagle (Liberty, MO)

System/Unit: FAN - Exhaust

Comfort. Under control.

Asset: EF-2 AREA:MEZZANINE

Unit Data		
	Design	**Actual**
MFG	NA	GREENHECK
Model Num	BELT	GB-420-50-1-52-X
Serial Num	-	20261314
Type	-	DOWNBLAST

Motor Data		
	Design	**Actual**
Motor MFG	-	BALDOR
Frame	-	184T
Horsepower	5	5
Motor Rpm	1725	1750
Phase	3	3
Voltage (rated)	460	230/460
Amperage (rated)	-	13.2/6.6
Service Factor	-	1.15

Drive Data		
	Design	**Actual**
Motor Sheave Size	-	2VP50
Motor Bore Size	-	1-1/8"
Motor Sheave SetPt	-	3 TURNS OUT
Fan Sheave Size	-	15"
Fan Sheave Bore	-	1-1/4"
Belt CL Distance	-	16"
Num of Belts	-	2
Belt Size	-	AX57

Test Data		
	Design	**Actual**
CFM	20000	
Fan RPM	500	2541
RL Voltage	-	NOT SAFE
RL Amperage	-	NOT SAFE
Suction ESP	-	NOT SAFE
Discharge ESP	-	NOT SAFE
Total ESP	0.125	NOT SAFE
Brake Horse Power	-	UTO

Completed By: Michael Gabbert

Notes:

National TAB

Project: Project Eagle (Liberty, MO)

System/Unit: FAN - Exhaust

Comfort. Under control.

Asset: EF-3 AREA:WAREHOUSE

Unit Data		
	Design	**Actual**
MFG	NA	GREENHECK
Model Num	BELT	GB-420-50-1-52-X
Serial Num	-	20261315
Type	-	DOWNBLAST

Motor Data		
	Design	**Actual**
Motor MFG	-	BALDOR
Frame	-	184T
Horsepower	5	5
Motor Rpm	1725	1750
Phase	3	3
Voltage (rated)	460	230/460
Amperage (rated)	-	13.2/6.6
Service Factor	-	1.15

Drive Data		
	Design	**Actual**
Motor Sheave Size	-	2VP50
Motor Bore Size	-	1-1/8"
Motor Sheave SetPt	-	3 TURNS OUT
Fan Sheave Size	-	15"
Fan Sheave Bore	-	1-1/4"
Belt CL Distance	-	16"
Num of Belts	-	2
Belt Size	-	AX57

Test Data		
	Design	**Actual**
CFM	20000	
Fan RPM	500	
RL Voltage	-	460
RL Amperage	-	7.6
Suction ESP	-	
Discharge ESP	-	
Total ESP	0.125	
Brake Horse Power	-	

Completed By: Michael Gabbert

Notes:

National TAB

Project: Project Eagle (Liberty, MO)

System/Unit: FAN - Exhaust

Comfort. Under control.

Asset: EF-4 AREA:WAREHOUSE

Unit Data		
	Design	**Actual**
MFG	NA	GREENHECK
Model Num	BELT	GB-420-50-1-52-X
Serial Num	-	20261316
Type	-	DOWNBLAST

Motor Data		
	Design	**Actual**
Motor MFG	-	BALDOR
Frame	-	184T
Horsepower	5	5
Motor Rpm	1725	1750
Phase	3	3
Voltage (rated)	460	230/460
Amperage (rated)	-	13.2/6.6
Service Factor	-	1.15

Drive Data		
	Design	**Actual**
Motor Sheave Size	-	2VP50
Motor Bore Size	-	1-1/8"
Motor Sheave SetPt	-	3 TURNS OUT
Fan Sheave Size	-	15"
Fan Sheave Bore	-	1-1/4"
Belt CL Distance	-	16"
Num of Belts	-	2
Belt Size	-	AX57

Test Data		
	Design	**Actual**
CFM	20000	
Fan RPM	500	
RL Voltage	-	460
RL Amperage	-	7.6
Suction ESP	-	
Discharge ESP	-	
Total ESP	0.125	
Brake Horse Power	-	

Completed By: Michael Gabbert

Notes:

National TAB

Project: Project Eagle (Liberty, MO)

System/Unit: FAN - Exhaust

Comfort. Under control.

Asset: EF-5 AREA:MEZZANINE

Unit Data		
	Design	**Actual**
MFG	NA	GREENHECK
Model Num	BELT	GB-420-50-1-52-X
Serial Num	-	20261317
Type	-	DOWNBLAST

Motor Data		
	Design	**Actual**
Motor MFG	-	BALDOR
Frame	-	184T
Horsepower	5	5
Motor Rpm	1725	1750
Phase	3	3
Voltage (rated)	460	230/460
Amperage (rated)	-	13.2/6.6
Service Factor	-	1.15

Drive Data		
	Design	**Actual**
Motor Sheave Size	-	2VP50
Motor Bore Size	-	1-1/8"
Motor Sheave SetPt	-	3 TURNS OUT
Fan Sheave Size	-	15"
Fan Sheave Bore	-	1-1/4"
Belt CL Distance	-	16"
Num of Belts	-	2
Belt Size	-	AX57

Test Data		
	Design	**Actual**
CFM	20000	
Fan RPM	500	
RL Voltage	-	460
RL Amperage	-	7.6
Suction ESP	-	
Discharge ESP	-	
Total ESP	0.125	
Brake Horse Power	-	

Completed By: Michael Gabbert

Notes:

National TAB

Project: Project Eagle (Liberty, MO)

System/Unit: FAN - Exhaust

Comfort. Under control.

Asset: EF-6 AREA:WAREHOUSE

Unit Data		
	Design	**Actual**
MFG	NA	GREENHECK
Model Num	BELT	GB-420-50-1-52-X
Serial Num	-	20261318
Type	-	DOWNBLAST

Motor Data		
	Design	**Actual**
Motor MFG	-	BALDOR
Frame	-	184T
Horsepower	5	5
Motor Rpm	1725	1750
Phase	3	3
Voltage (rated)	460	230/460
Amperage (rated)	-	13.2/6.6
Service Factor	-	1.15

Drive Data		
	Design	**Actual**
Motor Sheave Size	-	2VP50
Motor Bore Size	-	1-1/8"
Motor Sheave SetPt	-	3 TURNS OUT
Fan Sheave Size	-	15"
Fan Sheave Bore	-	1-1/4"
Belt CL Distance	-	16"
Num of Belts	-	2
Belt Size	-	AX57

Test Data		
	Design	**Actual**
CFM	20000	
Fan RPM	500	
RL Voltage	-	460
RL Amperage	-	7.6
Suction ESP	-	
Discharge ESP	-	
Total ESP	0.125	
Brake Horse Power	-	

Completed By: Michael Gabbert

Notes:

National TAB

Project: Project Eagle (Liberty, MO)

System/Unit: FAN - Exhaust

Comfort. Under control.

Asset: EF-7 AREA:121

Unit Data		
	Design	**Actual**
MFG	NA	GREENHECK
Model Num	DD	G-143-B-4-1-22-X
Serial Num	-	20261404
Type	CRE	DOWNBLAST

Test Data		
	Design	**Actual**
CFM	1000	1780
RL Voltage	-	NOT SAFE
RL Amperage	-	3.29
Total ESP	0.50	-0.47"

Motor Data		
	Design	**Actual**
Motor MFG	-	GREENHECK
Frame	-	48Y
Horsepower	0.25	1/4
Motor Rpm	1140	1140
Phase	1	1
Voltage (rated)	115	115
Amperage (rated)	-	3.2
Service Factor	-	1.0

Completed By: Michael Gabbert

Notes:

National TAB

Project:Project Eagle (Liberty, MO)

FAN - Exhaust

Comfort. Under control.

Diffuser Ret/Exh (GRD)

EF-7/121

Asset								
Asset Name	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**	**FINAL CFM**	**% to design**
EGRD1	EX-4	6	100	1	161	167		-
EGRD2	EX-2	10	250	1	536	432		-
EGRD3	EX-2	8	200	1	344	363		-
EGRD4	EX-2	10	250	1	464	422		-
EGRD5	EX-2	8	200	1	275	327		-

Completed By: Michael Gabbert on

National TAB

Project: Project Eagle (Liberty, MO)

System/Unit: FAN - Exhaust

Comfort. Under control.

Asset: EF-8 AREA:148

Unit Data		
	Design	**Actual**
MFG	NA	GREENHECK
Model Num	DD	G-097-A-4-1-19-X
Serial Num	-	20261471
Type	CRE	DOWNBLAST

Test Data		
	Design	**Actual**
CFM	200	254
RL Voltage	-	NOT SAFE
RL Amperage	-	NOT SAFE
Total ESP	0.50	0.15"

Motor Data		
	Design	**Actual**
Motor MFG	-	GREENHECK
Frame	-	48Y
Horsepower	0.25	1/4
Motor Rpm	-	1725
Phase	1	1
Voltage (rated)	115	115
Amperage (rated)	-	3.1
Service Factor	-	1.0

Completed By: Michael Gabbert

Notes: FAN SPEED MINIMIZED

National TAB

Project:Project Eagle (Liberty, MO)

FAN - Exhaust

Comfort. Under control.

Diffuser Ret/Exh (GRD)

EF-8/148

Asset								
Asset Name	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**	**FINAL CFM**	**% to design**
EGRD1	EX-4	6	50	1	62	65		-
EGRD2	EX-4	6	50	1	82	68		-
EGRD3	EX-4	6	50	1	73	72		-
EGRD4	EX-4	6	50	1	67	74		-

Completed By: Michael Gabbert on

National TAB

Project: Project Eagle (Liberty, MO)

System/Unit: FAN - Exhaust

Comfort. Under control.

Asset: EF-9 AREA:138

Unit Data		
	Design	**Actual**
MFG	NA	GREENHECK
Model Num	DD	G-098-8-4-1
Serial Num	-	20261527
Type	CRE	DOWNBLAST

Test Data		
	Design	**Actual**
CFM	250	502
RL Voltage	-	NOT SAFE
RL Amperage	-	1.5
Total ESP	0.50	-0.21

Motor Data		
	Design	**Actual**
Motor MFG	-	GREENHECK
Frame	-	48Y
Horsepower	0.25	1/4
Motor Rpm	1140	1140
Phase	1	1
Voltage (rated)	115	115
Amperage (rated)	-	3.2
Service Factor	-	1

Completed By: Michael Gabbert

Notes:

National TAB

Project:Project Eagle (Liberty, MO)

FAN - Exhaust

Comfort. Under control.

Diffuser Ret/Exh (GRD)

EF-9/138

Asset								
Asset Name	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**	**FINAL CFM**	**% to design**
EGRD1	EX-4	6	50	1	91	108		-
EGRD2	EX-4	6	50	1	85	97		-
EGRD3	EX-4	6	50	1	108	103		-
EGRD4	EX-4	6	50	1	105	95		-
EGRD5	EX-4	6	50	1	114	99		-

Completed By: Michael Gabbert on

National TAB

Project: Project Eagle (Liberty, MO)

System/Unit: FAN - Exhaust

Comfort. Under control.

Asset: EF-10 AREA:BATTERY CHG

Unit Data		
	Design	**Actual**
MFG	NA	GREENHECK
Model Num	BELT	GB-200-15-1-30-X
Serial Num	-	20261559
Type	-	DOWNBLAST

Motor Data		
	Design	**Actual**
Motor MFG	-	BALDOR
Frame	-	184
Horsepower	1.5	1.5
Motor Rpm	1725	1735
Phase	1	1
Voltage (rated)	115	115/230
Amperage (rated)	-	16.4/8.2
Service Factor	-	1.15

Drive Data		
	Design	**Actual**
Motor Sheave Size	-	3.75"
Motor Bore Size	-	7/8"
Motor Sheave SetPt	-	3 TURNS OUT
Fan Sheave Size	-	AK66
Fan Sheave Bore	-	3/4"
Belt CL Distance	-	7.25"
Num of Belts	-	1
Belt Size	-	AX28

Test Data		
	Design	**Actual**
CFM	4000	
Fan RPM	838	837
RL Voltage	-	NOT SAFE
RL Amperage	-	NOT SAFE
Suction ESP	-	-0.53"
Discharge ESP	-	ATM
Total ESP	0.325	0.53"

Completed By: Michael Gabbert

Notes: TECH IS UNABLE TO REACH DIFFUSERS. UNIT BALANCED TO TOTALS AS A RESULT

National TAB

Project:Project Eagle (Liberty, MO)

FAN - Exhaust

Comfort. Under control.

Diffuser Ret/Exh (GRD)

EF-10/BATTERY CHG

Asset								
Asset Name	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**	**FINAL CFM**	**% to design**
EGRD1	SG-2	14X12	600					-
EGRD2	SG-2	14X12	600					-
EGRD3	SG-2	14X12	600					-
EGRD4	SG-2	14X12	600					-
EGRD5	SG-2	14X12	600					-

Completed By: Michael Gabbert on

National TAB

Project: Project Eagle (Liberty, MO)

System/Unit: FAN - Exhaust

Comfort. Under control.

Asset: EF-11 AREA:BATTERY CHG

Unit Data		
	Design	**Actual**
MFG	NA	GREENHECK
Model Num	BELT	GB-200-15-1-30-X
Serial Num	-	20261560
Type	-	DOWNBLAST

Motor Data		
	Design	**Actual**
Motor MFG	-	BALDOR
Frame	-	184
Horsepower	1.5	1.5
Motor Rpm	1725	1735
Phase	1	60
Voltage (rated)	115	115/230
Amperage (rated)	-	16.4/8.2
Service Factor	-	1.15

Drive Data		
	Design	**Actual**
Motor Sheave Size	-	3.75"
Motor Bore Size	-	7/8"
Motor Sheave SetPt	-	3 TURNS OUT
Fan Sheave Size	-	AK66
Fan Sheave Bore	-	3/4
Belt CL Distance	-	7.25
Num of Belts	-	1
Belt Size	-	AX28

Test Data		
	Design	**Actual**
CFM	4000	
Fan RPM	838	838
RL Voltage	-	NOT SAFE
RL Amperage	-	NOT SAFE
Suction ESP	-	-0.47"
Discharge ESP	-	ATM
Total ESP	0.325	0.47"

Completed By: Michael Gabbert

Notes: TECH IS UNABLE TO REACH DIFFUSERS. BALANCING TO TOTALS

National TAB

Project:Project Eagle (Liberty, MO)

FAN - Exhaust

Comfort. Under control.

Diffuser Ret/Exh (GRD)

EF-11/BATTERY CHG

Asset								
Asset Name	**Type**	**Size**	**DESIGN CFM**	**AK**	**CFM(1)**	**CFM(2)**	**FINAL CFM**	**% to design**
EGRD1	SG-2	14X12	400					-
EGRD2	SG-2	14X12	400					-
EGRD3	SG-2	14X12	400					-
EGRD4	SG-2	14X12	400					-
EGRD5	SG-2	14X12	400					-
EGRD6	SG-2	14X12	400					-
EGRD7	SG-2	14X12	400					-
EGRD8	SG-2	14X12	400					-
EGRD9	SG-2	14X12	400					-
EGRD10	SG-2	14X12	400					-

Completed By: Michael Gabbert on

National TAB

Project: Project Eagle (Liberty, MO)

System/Unit: FAN - Exhaust

Comfort. Under control.

Asset: EF-A9 AREA:1

Unit Data		
	Design	**Actual**
MFG	NA	GREENHECK
Model Num	DD	G-123-A-5-1-19-X
Serial Num	-	20261572
Type	CRE	DOWNBLAST

Test Data		
	Design	**Actual**
CFM	1500	1500
RL Voltage	-	NOT SAFE
RL Amperage	-	5.7
Total ESP	0.25	0.27

Motor Data		
	Design	**Actual**
Motor MFG	-	NIDEC
Frame	-	NL
Horsepower	0.5	1/2
Motor Rpm	1725	1650
Phase	1	1
Voltage (rated)	115	115/230
Amperage (rated)	-	5.4/2.7
Service Factor	-	1.0

Completed By: Michael Gabbert

Notes: UNABLE TO ACCESS DUCTWORK TO MEASURE AIRFLOW DIRECTLY. SET FAN TO DESIGN STATIC PRESSURE HOWEVER MOTOR WAS OVERAMPING. INCREASED FAN SPEED UNTIL MOTOR WAS BELOW FLA. LEFT AT APPROXIMATELY 2250 CFM.

National TAB

Project: Project Eagle (Liberty, MO)

System/Unit: FAN - Exhaust

Comfort. Under control.

Asset: EF-B10 AREA:1

Unit Data		
	Design	**Actual**
MFG	NA	GREENHECK
Model Num	DD	G-123-A-5-1-19-X
Serial Num	-	20261582
Type	CRE	DOWNBLAST

Test Data		
	Design	**Actual**
CFM	1500	
RL Voltage	-	NOT SAFE
RL Amperage	-	NOT SAFE
Total ESP	0.25	-1.04"

Motor Data		
	Design	**Actual**
Motor MFG	-	NIDEC
Frame	-	NL
Horsepower	0.5	1/2
Motor Rpm	1725	1650
Phase	1	1
Voltage (rated)	115	115/230
Amperage (rated)	-	5.4/2.7
Service Factor	-	1

Completed By: Michael Gabbert

Notes:

National TAB

Project: Project Eagle (Liberty, MO)

System/Unit: FAN - Supply

Comfort. Under control.

Asset: MAU-1 AREA:WAREHOUSE

Unit Data		
	Design	**Actual**
MFG	RUPP AIR SYSTEMS	RUPP AIR SYSTEMS
Model Num	RAM-M 27	RAM-M 27
Serial Num	-	4946628
Type	-	GAS FIRED MAU
Configuration	-	VERTICAL

Motor Data		
	Design	**Actual**
Motor MFG	-	TECO WESTHINGHOUSE
Frame	-	213T
Horsepower	-	7.5
Motor Rpm	-	1755
Phase	-	3
Voltage (rated)	-	230/460
Amperage (rated)	-	19.1/9.55
Service Factor	-	1.15

Drive Data		
	Design	**Actual**
Motor Sheave Size	-	6.5"
Motor Bore Size	-	1-3/8"
Fan Sheave Size	-	25"
Fan Sheave Bore	-	2-7/16"
Belt CL Distance	-	26"
Num of Belts	-	2
Belt Size	-	5VX-1030
Belt Alignment Verified	-	VERIFIED GOOD

Gas Heat		
	Design	**Actual**
Heater Operates (y/n)	-	YES
Flame Status (pass/fail)	-	PASS
Inlet Air Temp SetPt	-	50
Discharge Air Temp SetPt	-	60 MIN 120 MAX
Air Flow Switch SP Actual	-	0.37"

Test Data		
	Design	**Actual**
CFM	20000	18248
SF RPM	-	388
Motor RPM	-	1765
RL Voltage	-	485/484/485
RL Amperage	-	7.1/7.2/7.4
Total ESP	-	UTO
Fan Discharge SP	-	UTO

General		
	Design	**Actual**
Fan Rotation Correct	-	YES

Completed By: Jacob Davidson

Notes: OA SETPOINT 7.0 VDC 10451 CFM OA

National TAB

Project: Project Eagle (Liberty, MO)

System/Unit: FAN - Supply

Comfort. Under control.

Asset: MAU-2 AREA:WAREHOUSE

Unit Data		
	Design	**Actual**
MFG	RUPP AIR SYSTEMS	RUPP AIR SYSTEMS
Model Num	RAM-M 27	RAM-M 27
Serial Num	-	4946628
Type	-	GAS FIRED MAU
Configuration	-	VERTICAL

Motor Data		
	Design	**Actual**
Motor MFG	-	TECO WESTHINGHOUSE
Frame	-	213T
Horsepower	-	7.5
Motor Rpm	-	1755
Phase	-	3
Voltage (rated)	-	230/460
Amperage (rated)	-	19.1/9.55
Service Factor	-	1.15

Drive Data		
	Design	**Actual**
Motor Sheave Size	-	6.5"
Motor Bore Size	-	1-3/8"
Fan Sheave Size	-	25"
Fan Sheave Bore	-	2-7/16"
Belt CL Distance	-	26"
Num of Belts	-	2
Belt Size	-	5VX-1030
Belt Alignment Verified	-	VERIFIED GOOD

Gas Heat		
	Design	**Actual**
Heater Operates (y/n)	-	YES
Flame Status (pass/fail)	-	PASS
Inlet Air Temp SetPt	-	50
Discharge Air Temp SetPt	-	60MIN 120 MAX
Air Flow Switch SP Actual	-	0.39"

Test Data		
	Design	**Actual**
CFM	20000	18466
SF RPM	-	389
Motor RPM	-	1765
RL Voltage	-	487/486/485
RL Amperage	-	6.9/7.1/7.3
Total ESP	-	UTO
Fan Discharge SP	-	UTO

General		
	Design	**Actual**
Fan Rotation Correct	-	YES

Completed By: Jacob Davidson

Notes: OA SETPOINT 7.0 VDC 10842 CFM OA

National TAB

Project: Project Eagle (Liberty, MO)

System/Unit: FAN - Supply

Comfort. Under control.

Asset: MAU-3 AREA:WAREHOUSE

Unit Data		
	Design	**Actual**
MFG	RUPP AIR SYSTEMS	RUPP AIR SYSTEMS
Model Num	RAM-M 27	RAM-M 27
Serial Num	-	4946628
Type	-	GAS FIRED MAU
Configuration	-	VERTICAL

Motor Data		
	Design	**Actual**
Motor MFG	-	TECO WESTINGHOUSE
Frame	-	213T
Horsepower	-	7.5
Motor Rpm	-	1755
Phase	-	3
Voltage (rated)	-	230/460
Amperage (rated)	-	19.1/9.55
Service Factor	-	1.15

Drive Data		
	Design	**Actual**
Motor Sheave Size	-	6.5"
Motor Bore Size	-	1-3/8"
Fan Sheave Size	-	25"
Fan Sheave Bore	-	2-7/16"
Belt CL Distance	-	26"
Num of Belts	-	2
Belt Size	-	5VX-1030
Belt Alignment Verified	-	VERIFIED GOOD

Gas Heat		
	Design	**Actual**
Heater Operates (y/n)	-	YES
Flame Status (pass/fail)	-	PASS
Inlet Air Temp SetPt	-	50
Discharge Air Temp SetPt	-	60 MIN 120 MAX
Air Flow Switch SP Actual	-	

Test Data		
	Design	**Actual**
CFM	20000	
SF RPM	-	
Motor RPM	-	
RL Voltage	-	
RL Amperage	-	
Total ESP	-	
Fan Discharge SP	-	

General		
	Design	**Actual**
Fan Rotation Correct	-	YES

Completed By: Jacob Davidson

Notes: 16 - 20X25X2 OA FILTERS OA SETPOINT 7.0 VDC 10166 CFM OA

National TAB

Project: Project Eagle (Liberty, MO)

System/Unit: FAN - Supply

Comfort. Under control.

Asset: MAU-4 AREA:WAREHOUSE

Unit Data		
	Design	**Actual**
MFG	RUPP AIR SYSTEMS	RUPP AIR SYSTEMS
Model Num	RAM-M 27	RAM-M 27
Serial Num	-	4946628
Type	-	GAS FIRED MAU
Configuration	-	VERTICAL

Motor Data		
	Design	**Actual**
Motor MFG	-	TECO WESTINGHOUSE
Frame	-	213T
Horsepower	-	7.5
Motor Rpm	-	1755
Phase	-	3
Voltage (rated)	-	230/460
Amperage (rated)	-	19.1/9.55
Service Factor	-	1.15

Drive Data		
	Design	**Actual**
Motor Sheave Size	-	6.5"
Motor Bore Size	-	1-3/8"
Fan Sheave Size	-	25"
Fan Sheave Bore	-	2-7/16"
Belt CL Distance	-	26"
Num of Belts	-	2
Belt Size	-	5VX-1030
Belt Alignment Verified	-	VERIFIED GOOD

Gas Heat		
	Design	**Actual**
Heater Operates (y/n)	-	YES
Flame Status (pass/fail)	-	PASS
Inlet Air Temp SetPt	-	50
Discharge Air Temp SetPt	-	60 MIN 120 MAX
Air Flow Switch SP Actual	-	0.42"

Test Data		
	Design	**Actual**
CFM	20000	17250
SF RPM	-	390
Motor RPM	-	1768
RL Voltage	-	485/484/485
RL Amperage	-	6.9/7.0/7.3
Total ESP	-	UTO
Fan Discharge SP	-	UTO

General		
	Design	**Actual**
Fan Rotation Correct	-	YES

Completed By: Jacob Davidson

Notes: 16 - 20X25X2 OA FILTERS OA SETPOINT 7.0 VDC 10166 CFM OA

National TAB

Project: Project Eagle (Liberty, MO)

System/Unit: FAN - Supply

Comfort. Under control.

Asset: MAU-5 AREA:WAREHOUSE

Unit Data		
	Design	**Actual**
MFG	RUPP AIR SYSTEMS	RUPP AIR SYSTEMS
Model Num	RAM-M 27	RAM-M 27
Serial Num	-	4946628
Type	-	GAS FIRED MAU
Configuration	-	VERTICAL

Motor Data		
	Design	**Actual**
Motor MFG	-	TECO WESTHINGHOUSE
Frame	-	213T
Horsepower	-	7.5
Motor Rpm	-	1755
Phase	-	3
Voltage (rated)	-	230/460
Amperage (rated)	-	19.1/9.55
Service Factor	-	1.15

Drive Data		
	Design	**Actual**
Motor Sheave Size	-	6.5"
Motor Bore Size	-	1-3/8"
Fan Sheave Size	-	25"
Fan Sheave Bore	-	2-7/16"
Belt CL Distance	-	26"
Num of Belts	-	2
Belt Size	-	5VX-1030
Belt Alignment Verified	-	VERIFIED GOOD

Gas Heat		
	Design	**Actual**
Heater Operates (y/n)	-	YES
Flame Status (pass/fail)	-	PASS
Inlet Air Temp SetPt	-	50
Discharge Air Temp SetPt	-	60 MIN 120 MAX
Air Flow Switch SP Actual	-	0.31'

Test Data		
	Design	**Actual**
CFM	20000	18078
SF RPM	-	408
Motor RPM	-	1771
RL Voltage	-	485/485/486
RL Amperage	-	8.2/8.4/8.5
Total ESP	-	UTO
Fan Discharge SP	-	UTO

General		
	Design	**Actual**
Fan Rotation Correct	-	YES

Completed By: Jacob Davidson

Notes: 16 - 20X25X2 OA FILTERS OA SETPOINT 7.5VDC 10028 CFM OA

National TAB

Project: Project Eagle (Liberty, MO)

System/Unit: FAN - Supply

Comfort. Under control.

Asset: MAU-6 AREA:WAREHOUSE

Unit Data		
	Design	**Actual**
MFG	RUPP AIR SYSTEMS	RUPP AIR SYSTEMS
Model Num	RAM-M 27	RAM-M 27
Serial Num	-	4946628
Type	-	GAS FIRED MAU
Configuration	-	VERTICAL

Motor Data		
	Design	**Actual**
Motor MFG	-	TECO WESTHINGHOUSE
Frame	-	213T
Horsepower	-	7.5
Motor Rpm	-	1755
Phase	-	3
Voltage (rated)	-	230/460
Amperage (rated)	-	19.1/9.55
Service Factor	-	1.15

Drive Data		
	Design	**Actual**
Motor Sheave Size	-	6.5"
Motor Bore Size	-	1-3/8"
Fan Sheave Size	-	25"
Fan Sheave Bore	-	2-7/16"
Belt CL Distance	-	26"
Num of Belts	-	2
Belt Size	-	5VX-1030
Belt Alignment Verified	-	VERIFIED GOOD

Gas Heat		
	Design	**Actual**
Heater Operates (y/n)	-	YES
Flame Status (pass/fail)	-	PASS
Inlet Air Temp SetPt	-	50
Discharge Air Temp SetPt	-	60 MIN 120 MAX
Air Flow Switch SP Actual	-	0.49"

Test Data		
	Design	**Actual**
CFM	20000	17756
SF RPM	-	415
Motor RPM	-	1775
RL Voltage	-	485/484/485
RL Amperage	-	8.3/8.2/8.0
Total ESP	-	UTO
Fan Discharge SP	-	UTO

General		
	Design	**Actual**
Fan Rotation Correct	-	YES

Completed By: Jacob Davidson

Notes: 16 - 20X25X2 OA FILTERS OA SETPOINT 7.5VDC 10258 CFM OA