

Ryan Company Boiler Installation and Combustion Report

Date Technician Customer On Site Contractor Building Engineer	Representative Technician Company City, State Phone Number Phone number					
Boiler National Board # Model #	Make Serial #					
Electrical Drawing #	ModSync Serial #					
Burner Make	Electrical Drawing #					
Burner Model #	Burner Serial #					
Installation						
General						
Boiler Location						
Base is of Incombustible Material	-					
Combustion Air is Sufficient for All Fuel Fired						
Ventilation Maintains Equipment Temperature						
Room Pressure Is Maintained at Neutral Atm	•					
Room is Vented by Natural Means (Vents and						
Boiler Clearance is Suitable for Maintenance						
Condensate Piping/Trap Installed Correctly	list height					
Voltage Supplied Meets Equipment Specifica Individual Equipment is Fused Properly	tion					
Venting						
Intake Material Type						
Intake Venting Size						
Intake Venting Length						
Number Of 90's In Inlet Piping						
Exhaust Material Type						
Exhaust Venting Size						
Exhaust Venting Length						
Number Of 90's In Exhaust Piping						
Exhaust Vertical Height						
Are Terminations Vertical Or Horizontal?						
Horizontal Distance Between Intake And Exhaust	erminations					
Vertical Distance Between Intake And Exhaust Ter	minations					
Is Venting System Stand Alone Or Commonly Vent	ed?					
Is Venting System Power-Vented?						
If Common Vented What Is The Set Pressure Of Th	e Fan?					
What Is The Common Pressure With All The Boiler						
Filter And Shutoff Valve Before Oil Pump?	Š					
Is Check Valve Installed On System Return Line?						



Feed Water Pump 1	
Pump Make and Model	
Pump Motor Horsepower	
Pump Motor Voltage	
Pump Motor Full Load Amperage	
Pump Motor Efficiency	
Pump Motor Power Factor	
Pump Rotation is Correct	
Pump is Bled and Primed	
Isolation Valve is Installed, Pump is Serviceable	
Feed Water Pump 2	
Pump Make and Model	
Pump Motor Horsepower	
Pump Motor Voltage	
Pump Motor Full Load Amperage	
Pump Motor Efficiency	
Pump Motor Power Factor	
Pump Rotation is Correct	
Pump is Bled and Primed	
Isolation Valve is Installed, Pump is Serviceable	
Circulating Pump 1 (Hot Water Models)	
Pump Make and Model	
Pump Motor Horsepower	
Pump Motor Voltage	
Pump Motor Full Load Amperage	
Pump Motor Efficiency	
Pump Motor Power Factor	
Pump Rotation is Correct	
Pump is Bled and Primed	
Isolation Valve is Installed, Pump is Serviceable	
Circulating Duman (Mat Water Madala)	
Circulating Pump 2 (Hot Water Models)	
Pump Make and Model	
Pump Motor Horsepower	
Pump Motor Voltage	
Pump Motor Full Load Amperage	
Pump Motor Efficiency	
Pump Motor Power Factor	
Pump Rotation is Correct	
Pump is Bled and Primed	
Isolation Valve is Installed, Pump is Serviceable	



Pipework	
Pipework is of Proper Material	
Piping is Properly Supported	
Boiler Safety Valves Piped Correctly	
How is boiler piped? (Primary secondary) or	
Burner	
Burner BTU'S	
Operation Type	
Fuel Type	
Maximum Input	
Minimum Input	
Furnace Pressure at 100%	
Maximum Fuel Pressure	
Pilot Type	
Blower Motor	
Burner Blower Motor Horsepower	
Burner Blower Motor Voltage	
Namepiate Voltage Matches Supplied Voltage	
Blower Rotation is Correct	
Blower Size	
Gas Train	
Static Pressure At Beginning of Gas Train	
Vent Connections Terminate Safely to Atmosphere	
Oil Pump	
Oil Pump is Bled and Primed	
Filter and Shutoff Valve Before Oil Pump	
Check Valve Installed on Return Line	
Inlet Pressure to Fuel Oil Pump is Less Than 3 PSIG	
Inlet Pressure to Fuel Oil Pump is More than -8" Hg. Record	
Air Compressor Provided & Installed Correctly (Air Atomizing)	
Building Management System	
BMS Make & Model	
How are Boilers Being Staged	
What are Outdoor Reset Parameters	
What is Outdoor Temperature Shut Down	



Operation

General							
Flame Safeguard Make a	ind Model .						
Flame Detection Device I	Make and N	/lodel					
Temperature/Pressure C	ontrol Make	e and Model					
Incoming Gas Pressure.							
Main Gas Regulator Mak							,
Main Gas Regulator Spri							
Main Gas Regulator Sprii							
Pilot Gas Regulator Make							
Pilot Gas Regulator Sprin	a Color						
Pilot Gas Regulator Sprin	a Depth						
Pilot Gas Pressure							
Pilot Air Required							
Oil Pump Make and Mod							
Back Pressure Valve Mal	ke and Mod		-				
Oil Nozzle Size, Spray Pa	ttern Snra	v Anale	-				
Oli Nozzie Olze, Opray i a	attern, opra	y Angle					
Motor Readings		<u>Amperage</u>			<u>Voltage</u>		
g.	L1	L2	L3	L1 – L2	L2 – L3	L1 – L3	
Blower Motor Low Fire							
Blower Motor High Fire							
Feed Water Pump 1							
Feed Water Pump 2							
Circ Pump Motor, Cold							
Circ Pump Motor, Hot							
Pump Circuit Gauge Reading		•	-				
Boiler Inlet Cold				Hot			
Pump Suction Cold		Pı	ımp Sucti	on Hot	· ·		
System Running Checks							
System is Filtered (Hot Water N	/lodels)						
System Checks O.K. for Leaks	at Tempera	ature					
NOTES:							
140120.							



Firing Position	light	1	2	3	4	5	6	7	8	9	10	11
Fuel Position							•	•				
Air Position												
Aux Position												
VSD Position												
FGR Position												
Fuel Pressure												
Over Burner Pressure												
Under Burner Pressure												
O2							-					
CO2												
CO PPM												
NOx @ 3%												
Excess Air												
Ambient Temperature												
Stack Temperature												
Stack Draft										•		
Inlet Water Temp												
Outlet Water Temp												
Efficiency												
Combustion Settings	Gas 2	/ Oil	<u>i</u>		<u>j</u>		<u>i</u>	<u>.i</u>				
Firing Position	light	1	2	3	4	5	6	7	8	9	10	11
Fuel Position	iigiit	1		3		J		'			10	
Air Position												
Aux Position												
VSD Position												
FGR Position												
COMBUSTION HD SET												
Oil PUMP PSI												
SUPPLY H20 TEMP												
RETURN H20 TEMP												
02												
CO2												
CO PPM												
NOx @ 3%												
Smoke SPOT												
Excess Air												
Ambient Temperature	+	<u> </u>	+				<u> </u>	<u> </u>				
Stack Temperature	-	-	+					<u> </u>				
Stack Draft												
Efficiency												
Inlet Water Temp												
Outlet Water Temp												
Oll FIRING POSITION												



Safety Checks (check all safeties below for proper operation and document the final settings.)

Device	Setting	Operational Yes "√"	Device	Setting	Operational Yes "\"
Low Water Safety			Burner Motor overload		
Air Switch			Air Filter Switch		
Low Gas Pressure			Fuel Train leak test		
High Gas Pressure			Soap/Meter		
Temperature Limit			Low Oil Pressure Switch		
Temperature Controller			High Oil Pressure Switch		
Proof of Closure			Oil Pump motor overload		

Honeywell R7910A SOLA Controller

Burner Cycles	
Burner Hours	
Controller Cycles	
Controller Hours	

Honeywell R7910A SOLA Controller Lockout History

	<u> </u>					
	CYCLE	HOUR	CODE	STATE	TIMER	FIRST OUT
H1						
H2						
Н3						
Н4						
H5						
Н6						
H7						

Siemens LMV 37

P-161 Total Faults	
P-162 Operating Hours	
P-166 Number of Startups	

Siemens LMV 37

_	Error	Diagnostic	Error	Error	Startup		Description of fault
Parameter	Code	Code	Class	Phase	Counter	Output	
700	:01	:02	:03	:04	:05 (a #)	:06 (a #)	
701							
702							
703							
704							
705							
706	·						
707							

Siemens LMV 51

Lockout	Description of Code	Date:	Time:	Code:	Diag:	Phase:	Start No	Load:	Fuel		
1											
2											
3											

