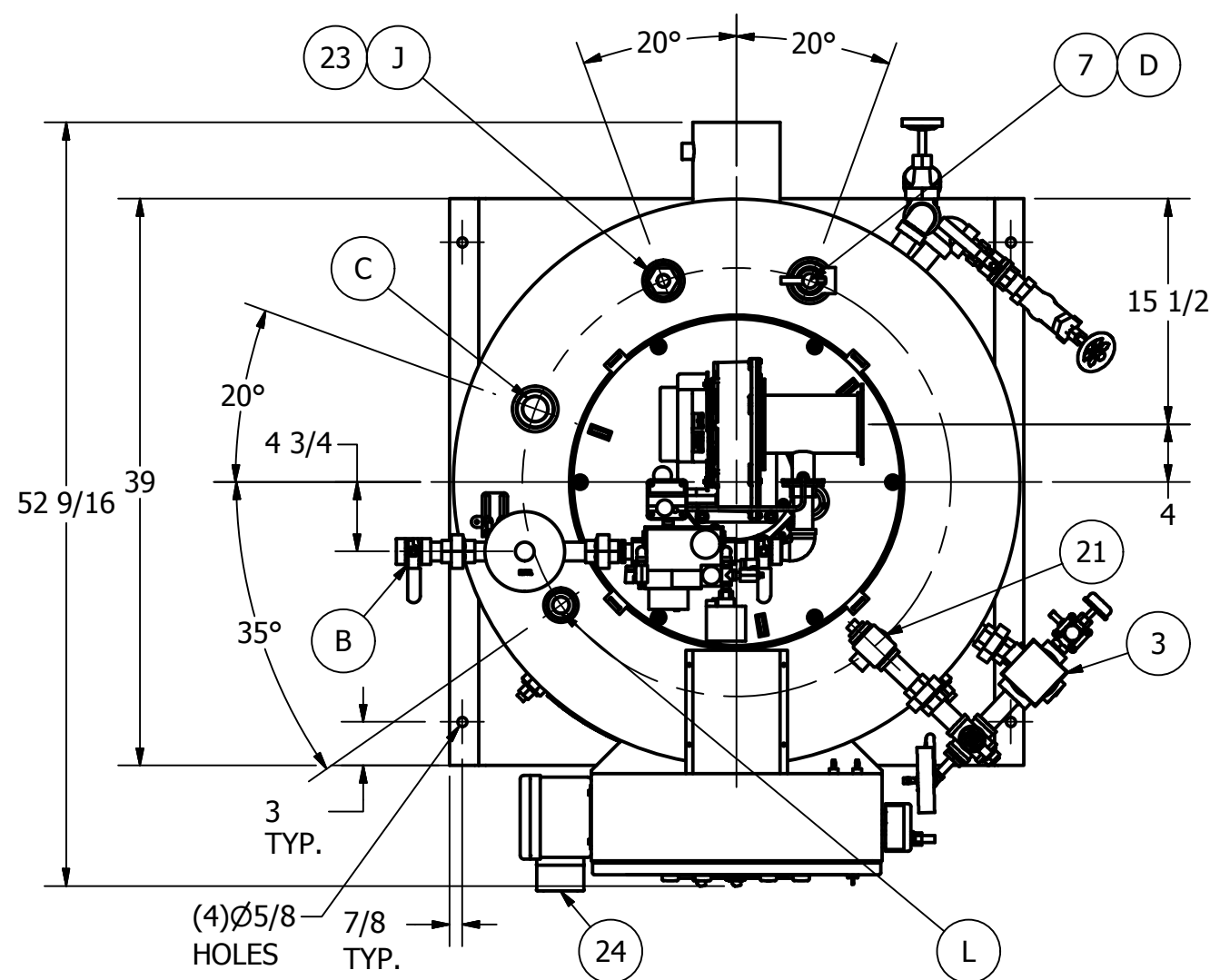


ITEM	DESCRIPTION
1	CONTROL PANEL
2	BURNER HOUSING COVER
3	CONTROL/TRIM PIPING
4	VALVE, GAS 120VAC 3/4" NPT.
5	HANDHOLES (4)
6	4 1/2" O.D. PIPE COMBUSTION AIR DIRECT VENT KIT (OPTIONAL)
7	RELIEF VALVE, KUNKLE, 6010DCE, 1/2" INLET (SET @ 150#)
8	1" BLOWDOWN PIPING (OPTIONAL)
9	1" FEED WATER PIPING (OPTIONAL)
10	1" GAS TRAIN PIPING
11	BLOWER MOTOR, 115V 50/60HZ 335 W
12	BURNER SIGHT GLASS
13	LEAKAGE TEST COCKS(3)
14	LOW GAS PRESSURE SWITCH
15	HIGH GAS PRESSURE SWITCH
16	GAS PRESSURE REGULATOR, MAXITROL, RV#61
17	1" BALL VALVE (2)
18	BURNER CAN UNIT
19	COMBUSTION AIR PROVING SWITCH
20	LOW WATER AND PUMP CONTROL
21	AUX. LOW WATER CUT OFF
22	STEAM PRESSURE GAUGE
23	COLLECTOR PIPE (OPTIONAL)
24	CHEMICAL FEED PUMP

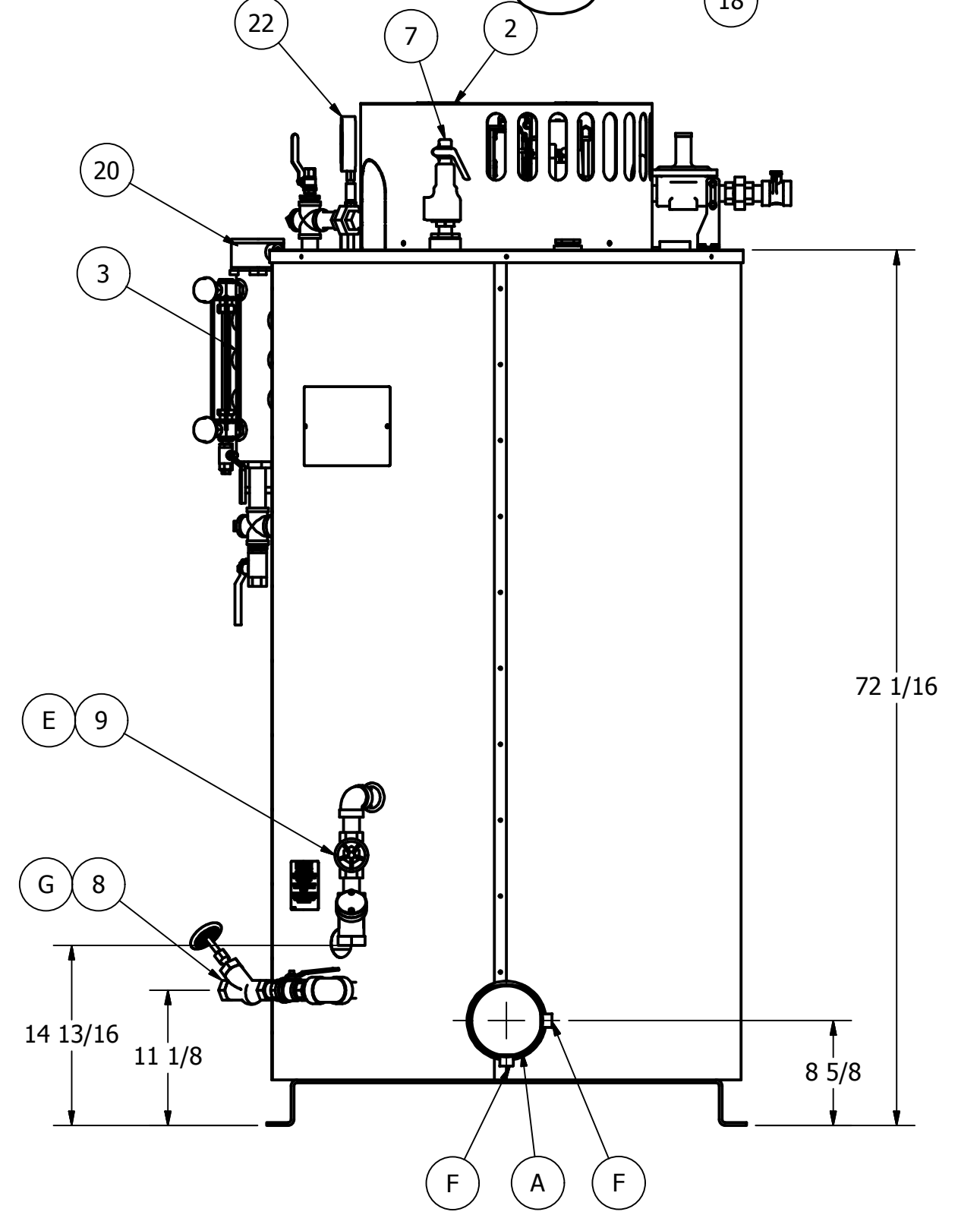
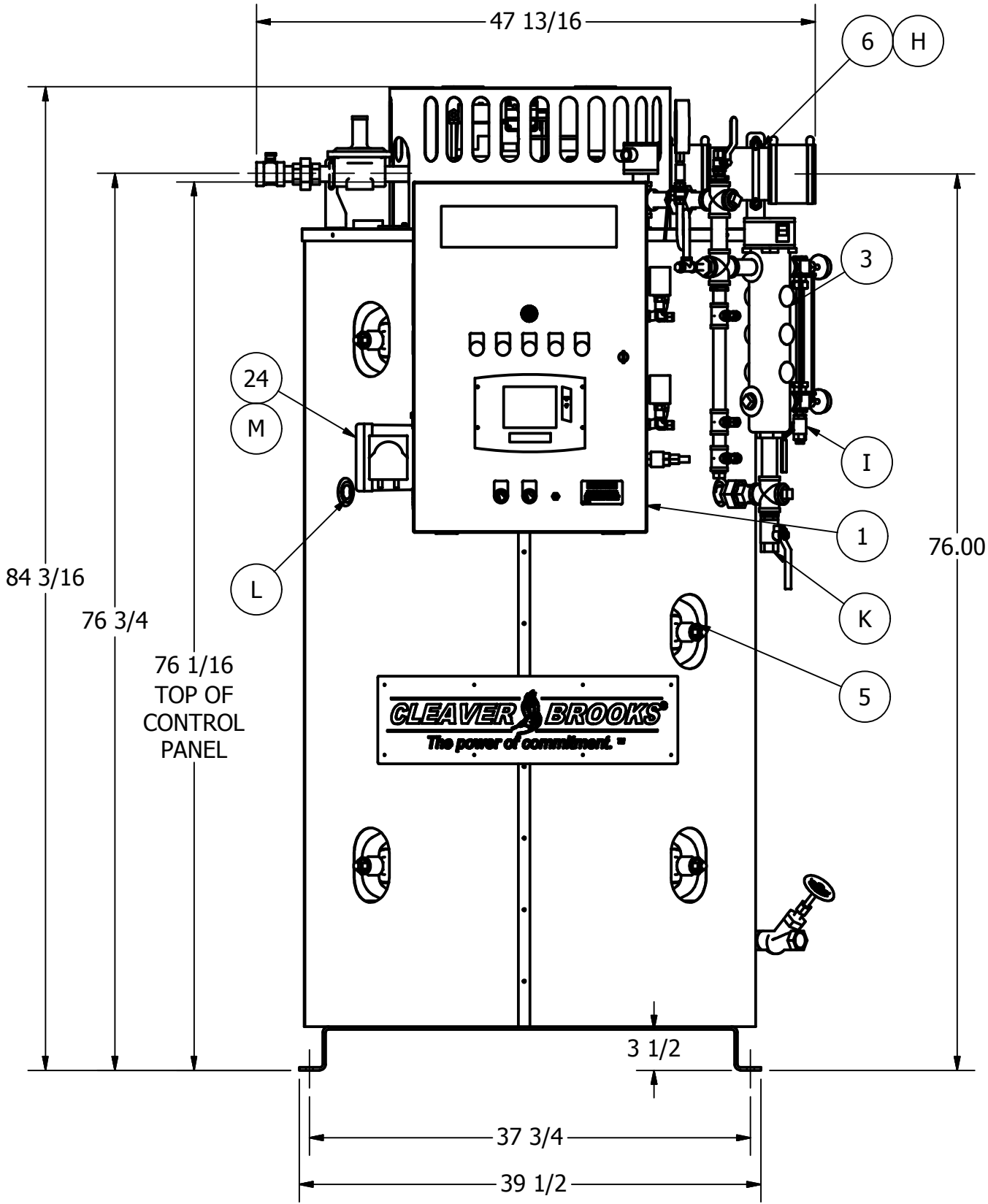
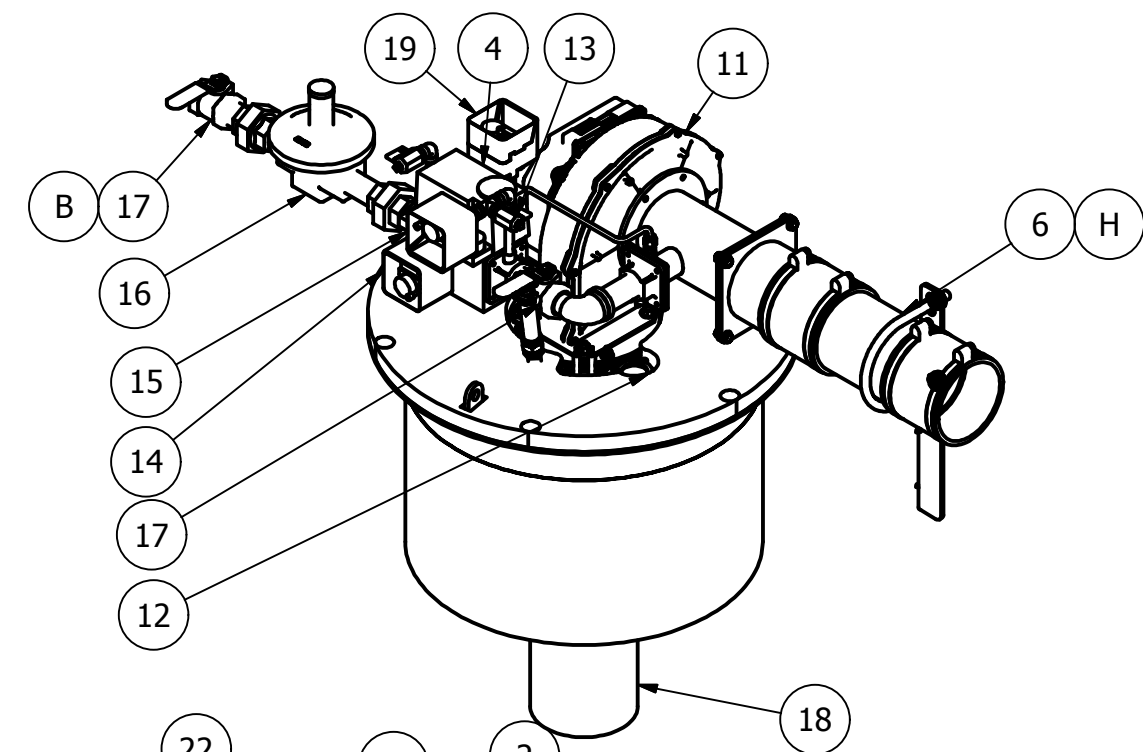
- NOTES:**
1. BOILER IS DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH THE ASME BOILER AND PRESSURE VESSEL CODE: SECTION I.
 2. BOILER HAS 2" BLANKET INSULATION, COVERED WITH SECTIONAL STAINLESS STEEL SHEET METAL LAGGING.
 3. ASME CSD-1 COMPLIANT.
 4. UNIT IS FACTORY FIRE TESTED.
 5. BURNER IS FULLY MODULATING WITH 4:1 TURN DOWN.

ITEM	COMPONENTS:
A	6" STACK OUTLET
B	1" NPT. GAS SUPPLY
C	1 1/2" NPT STEAM OUTLET
D	3/4" RELIEF VALVE OUTLET
E	1" NPT. FEED WATER
F	1/2" NPT. CONDENSATE DRAIN & O2 SAMPLE
G	1" NPT. BLOWDOWN
H	4" DIA. COMB. AIR/DIRECT VENT
I	1/4" NPT. GAUGE GLASS DRAIN
J	1 1/4" NPT. SURFACE BLOWOFF CONNECTION
K	3/4" NPT. WATER COLUMN DRAIN
L	1" NPT. OPTIONAL ALWCO(2)
M	1/4" I.D. CHEMICAL FEED INLET AND OUTLET

SHIPPING DATA	
BOILER SIZE: 53" L X 39 1/2" W X 84 3/16" H	
BOILER WIEGHT: 2540 LBS	
BOILER DATA	
FUEL: NATURAL GAS	
INPUT: 826 MBH	
OUTPUT: 669 MBH	
FIRESIDE HEATING SURFACE: 128 SQ.FT.	
EXTENDED HEATING SURFACE: 112 SQ.FT.	
BOILER HEATING SURFACE: 16 SQ.FT.	
MINIMUM GAS PRESSURE REQUIRED: 7.5" W.C.	
MAXIMUM GAS PRESSURE REQUIRED: 28" W.C.	
VOLTAGE: 120/1/60	



CAUTION
 Dimensions shown are approximate and should not be used in restrictive layouts or to prefabricate assemblies unless Cleaver-Brooks has been consulted. It is strongly recommended that the customer request as-built certified drawings for these cases.



REVISIONS	EN#	DATE	CP	CP	LS	LS	CP
	01	01/30/09	CP				
	F						
	02	01/18/11	CP				
	ADDED						
	DIMENSIONS &						
	BASE DESIGN						
	CHANGE						
	UPDATE.						
	03	07/06/12	LS				
	ADDED ITEM 24.						
	REVISED						
	SHIPPING &						
	BOILER DATA.						

WARNING: Changes, modifications or alterations are strictly prohibited. Changes to this drawing and subsequent modification of equipment could result in damage to the equipment and/or serious personal injury.

ALL MATERIAL SIZES ON BILL OF MATERIAL ARE FOR REFERENCE ONLY. DRAWING DIMENSIONS MUST BE FOLLOWED.	
TOLERANCE, UNLESS OTHERWISE SPECIFIED:	
FRACTIONAL ±	DECIMAL ±
HOLE LOCATIONS ±	ANGLES ±
DRILLED, PUNCHED OR SLOTTED HOLES ±	
SIZE	SHT 1 OF 1
C	

DRAWN BY:	CP
CHECKED BY:	DJD
DATE:	1/15/2009
SCALE:	N.T.S.

CleaverBrooks®

DIMENSIONAL DIAGRAM
 20HP CFV, 150# STEAM

DRWG. NO. **CFV 20HP DD** REV **03**

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