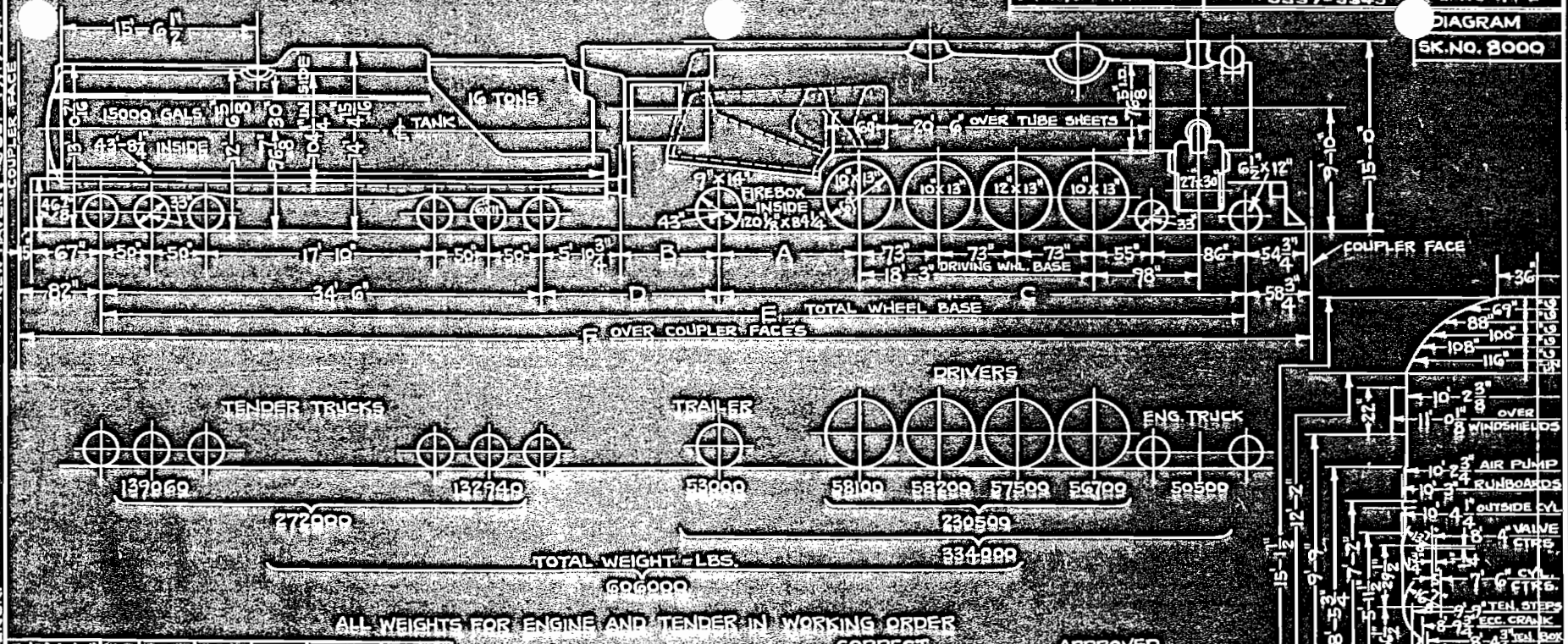
V-1-a, V-2 TENDERS | ENG'S. 3325, 29, 30, 3337-3343 | CLASS R-1-b

DIAGRAM

SK. NO. 8000



ALL WEIGHTS FOR ENGINE AND TENDER IN WORKING ORDER

ENG. NO'S.	A	B	C	D	E	F
3325, 29, 30, 3337-3339	120	7'-10 1/2"	40'-0"	13'-9 1/4"	88'-3 1/4"	100'-0"
3340-3343	130	7'-1 1/2"	40'-10"	13'-0 1/4"	88'-4 1/4"	100'-1"

CORRECT

ASST. M.E.

APPROVED

M.E.

C.M.E.

ITEM	BOILER	HEATING SURFACE	LENGTH	DIA.	GAUGE OR THICK.
1	BOILER TUBES - 216 - SPACING 1 1/16"	2597	20'-6"	2 1/4"	#12 MIN.
2	BOILER FLUES - 40 - SPACING 3/4"	1176	20'-6"	5 1/2"	#10 MIN.
3	TOTAL TUBES AND FLUES	3773	—	—	—
4	FIREBOX PROPER	214	—	—	—
5	COMBUSTION CHAMBER	106	—	—	—
6	SYPHONS - 2 FIREBOX - 1 COMB. CHAMBER	95	—	—	—
7	TOTAL FIREBOX	415	—	—	—
8	TOTAL EVAPORATING HEATING SURFACE	4188	—	—	—
9	TOTAL SUPERHEATING HEATING SURFACE	1009	—	—	—
10	TUBE SHEETS - FRONT 9/16" - BACK 1/2"				
11	GRATE AREA	70.3 SQ. FT.			
12	WEIGHT WATER 2 1/2" GAUGES				
13					
14					
15					

DESIGN DATA	
CALCULATED EVAPORATION	LBS./HR.
TUBES @ 8.52 LBS.	22130 LBS.
FLUES @ 9.86 LBS.	11600 LBS.
FIREBOX @ 55 LBS.	11770 LBS.
COMBUSTION CHAMBER @ 55 LBS.	5830 LBS.
3 SYPHONS @ 55 LBS.	5225 LBS.
TOTAL EVAPORATION	56555 LBS.
STEAM CONSUMPTION (2624 x 20.8)	54580 LBS.
BOILER FACTOR	104 %
FIREBOX H.S. TO GRATE AREA	5.90
TOTAL EVAP. H.S. TO FIREBOX H.S.	10.09
TOTAL EVAP. H.S. TO SUPHTG. H.S.	4.15
ASH PAN AIR OPENING GAS AREA THRU TUBES AND FLUES	105 %
FRAME CTRS. 41" - FRAME WIDTH 6"	

GENERAL DATA	
BOILER PRESSURE	200 LBS.
TRACTIVE EFFORT	53900 LBS.
FACTOR OF ADHESION	4.27
MAX. CURVATURE	19°
ENGINE TRUCK SWING	4 1/4"
COAL CAPACITY	16 TONS
WATER CAPACITY	15000 GALS.
STOKER	"LT-1" CONVERSION
VALVE GEAR	BAKER
HEATER	ELESCO.
TRAILING TRUCK SWING	6 1/4"
MAX. CUT-OFF	82.9%
THROTTLE - CHAMBERS DOME TYPE - INSIDE CONN.	

NEW HAVEN, JULY 19, 1944

N.Y., N.H. & H.R.R. - OFFICE OF MECH. ENGR.

DR TR CK IN

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