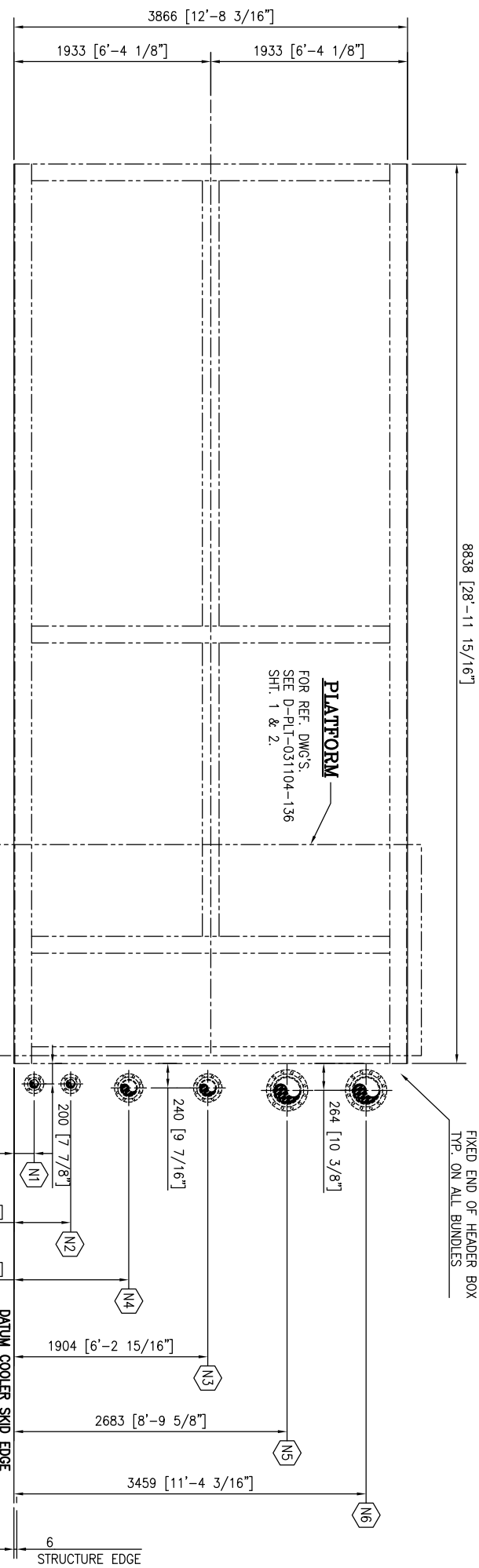
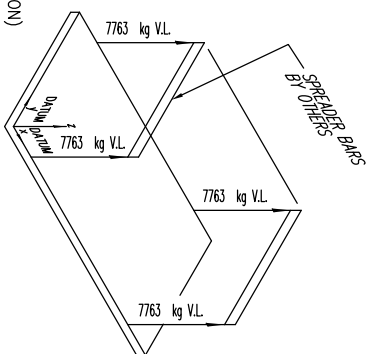


NOZZLE SCHEDULE					
MARK	SIZE	RATING	FACING	SERVICE	ELEVATION
N1	3 NPS	150#	RFWN	AUXILIARY WATER INLET (AC-1225)	SPEC.
N2	3 NPS	150#	RFWN	AUXILIARY WATER OUTLET (AC-1225)	SPEC.
N3	6 NPS	150#	RFWN	ENGINE JACKET WATER INLET (AC-1220)	SPEC.
N4	6 NPS	150#	RFWN	ENGINE JACKET WATER OUTLET (AC-1220)	SPEC.
N5	10 NPS	300#	RFWN	AFTERCooler INLET (AC-1210)	SPEC.
N6	10 NPS	300#	RFWN	AFTERCooler OUTLET (AC-1210)	SPEC.

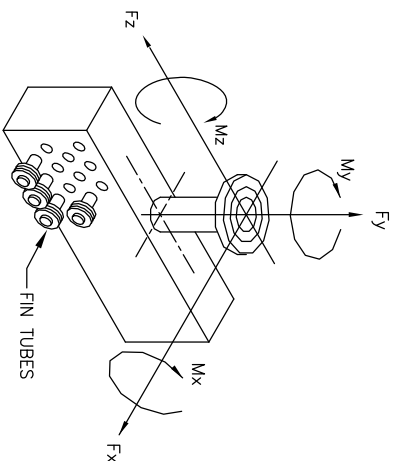


NOTE: WEIGHTS SHOWN IN DIAGRAM INCLUDE 50% EXCESS FOR DYNAMIC LOADING. (WEIGHT BASED ON SHIPPING CONDITION)

- 1) TOTAL COOLER ASSEMBLY WEIGHT WITHOUT DYNAMIC LOADING: 23,200 kgs
INCLUDES: STRUCTURAL STEEL, BUNDLES, LOUVERS, HAIL GUARDS, SILENCER & EXPANSION TANK AND L&P.
- 2) SHIPPING WEIGHT W/O DYNAMIC LOADING: 20,700 kgs
INCLUDES: STRUCTURAL STEEL, BUNDLES, HAIL GUARDS & LOUVERS
- 3) SHIP LOOSE WT. = 2500 kg.
INCLUDES: LADDER, PLATFORM, SILENCER & EXPANSION TANK.

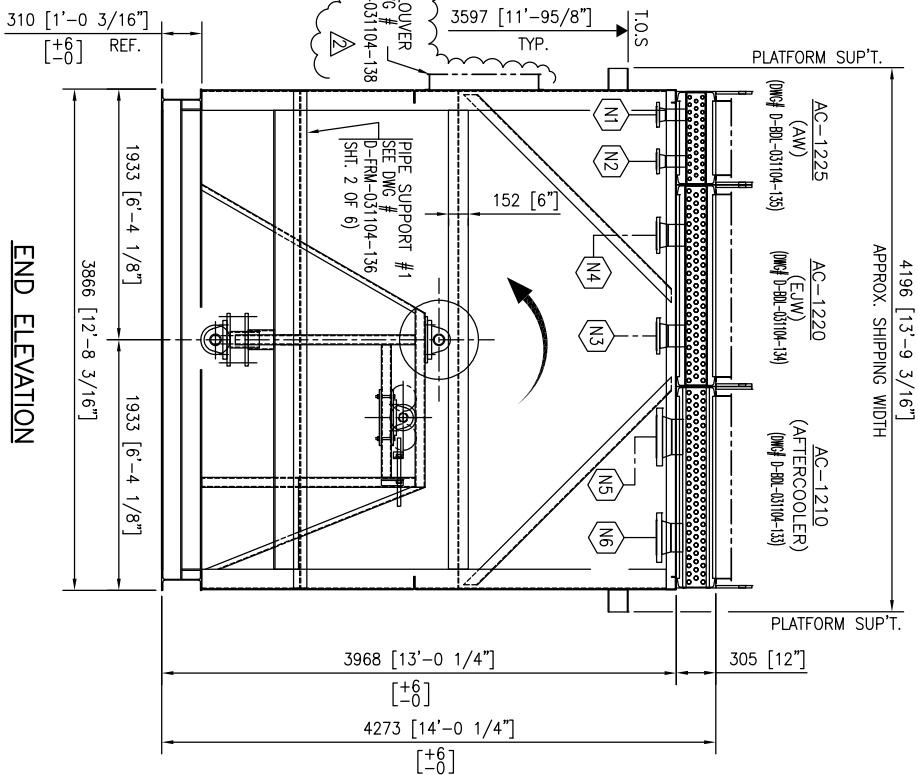
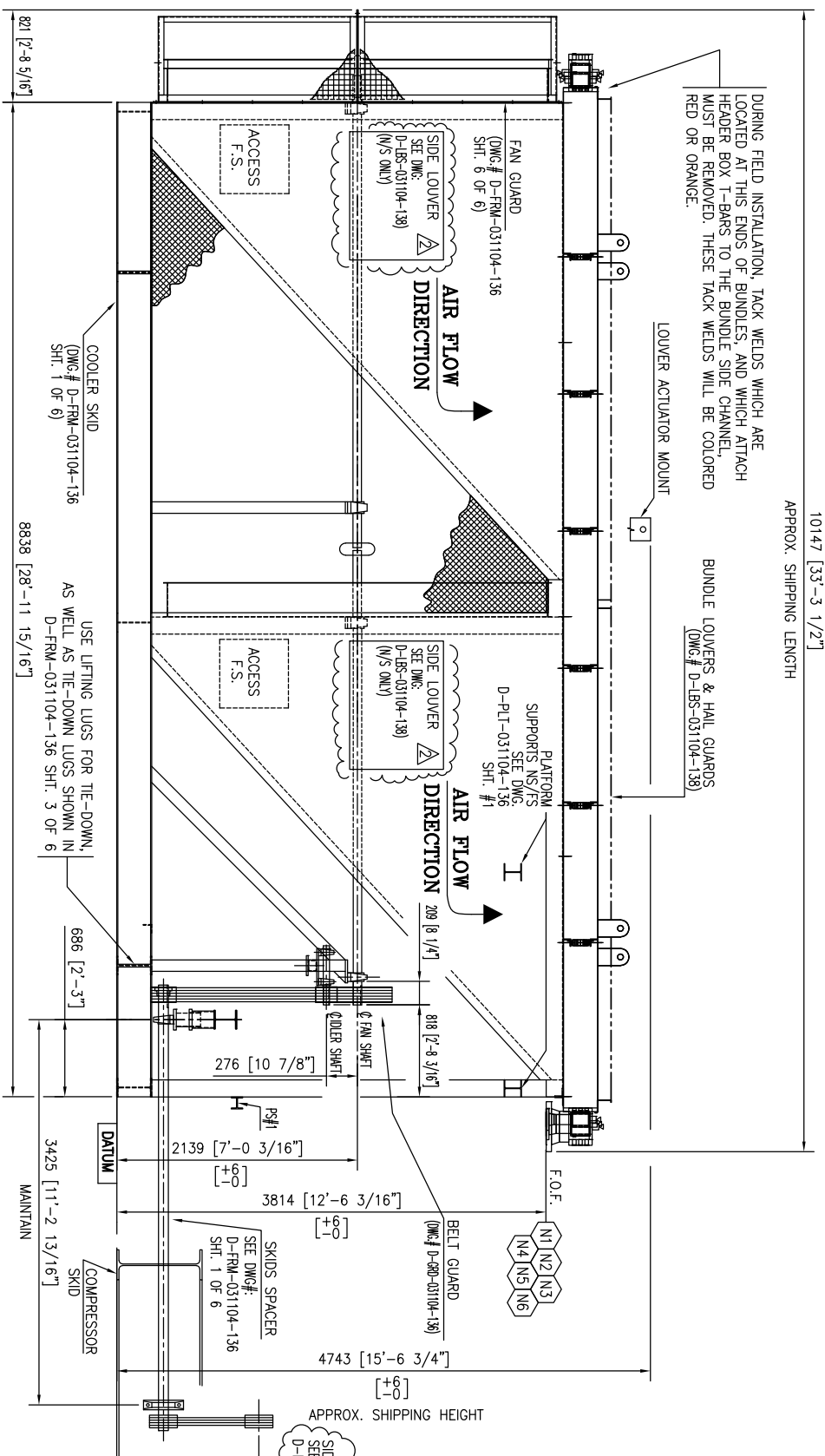


C. OF G.:
(DIMS FROM DATUM)
x = 4419 mm
y = 1933 mm
z = 2955 mm



10 NPS NOZZLES		3 NPS NOZZLES	
MAXIMUM ALLOWABLE NOZZLE LOADS		MAXIMUM ALLOWABLE NOZZLE LOADS	
F x	3000 lb	F x	900 lb
Fy	6000 lb	Fy	760 lb
Fz	3000 lb	Fz	900 lb
Mx	6000 ft-lb	Mx	600 ft-lb
My	9000 ft-lb	My	900 ft-lb
Mz	3760 ft-lb	Mz	600 ft-lb

MAXIMUM ALLOWABLE NOZZLE LOADS	
Fx	1800 lb
Fy	2260 lb
Fz	2260 lb
Mx	3160 ft.-lb
My	4500 ft.-lb
Mz	2400 ft.-lb



1. COPIED FROM C1715-6HOS4-3, THEN MODIFIED

2 ADDED SIDE LOUVER LOCATION PER CLIENT REQ'D.
1 ISSUED FOR CONSTRUCTION

H. LE	03/05/20	JD	LW
H. LE	03/04/16	IB	LW

J. RUST	B.D./H. LE
03/04/16	00/09/26
L. VADNAI	JD/IB
03/04/16	00/10/20

1:30

TOM BROWN INC.
1478 HP PAVILLION SOUTH COMPRESSOR
MULTIFAN COOLER-FOR WAUKESHA L7042GSI ENGINE
MDL.: 1HV2-132-360-F
D-LYT-031104-138 SHEET 1 OF 3

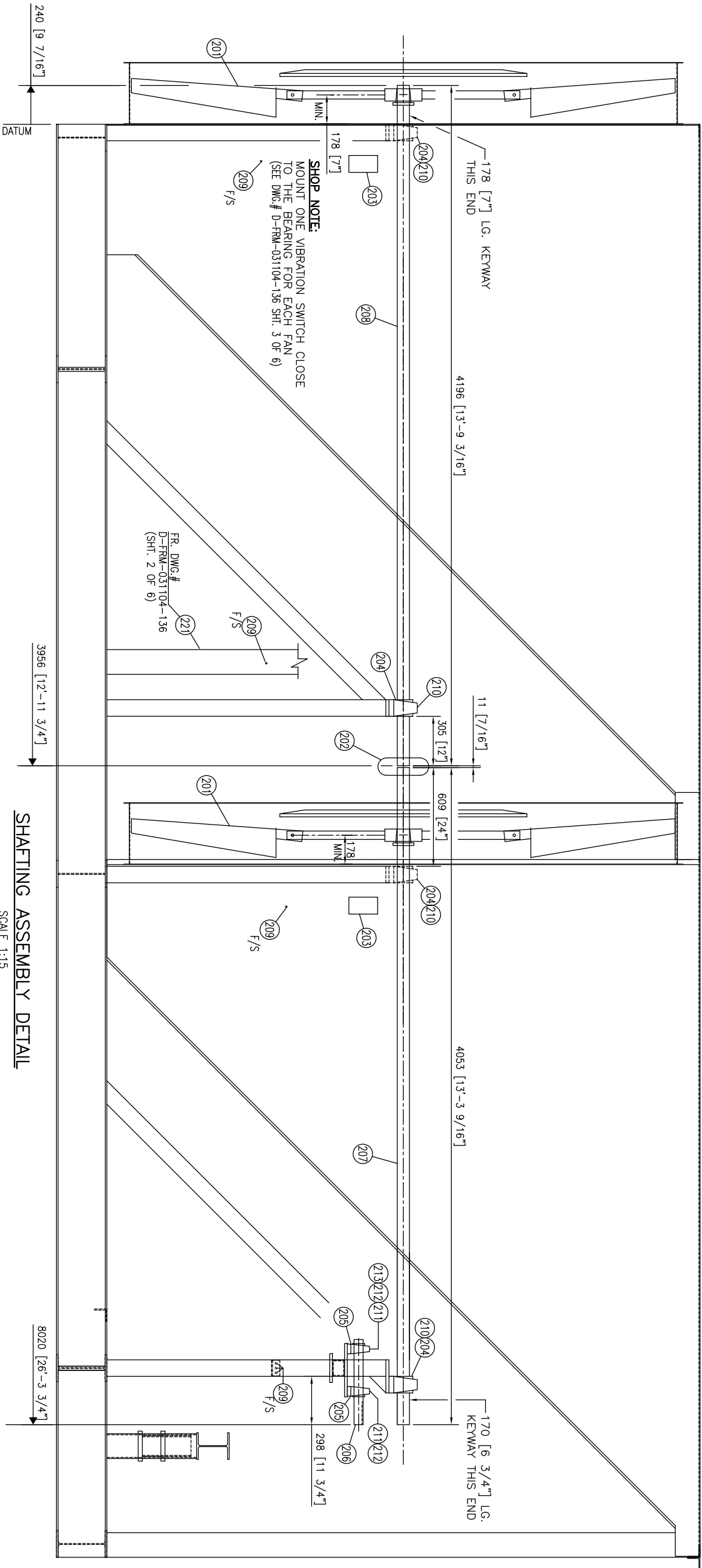
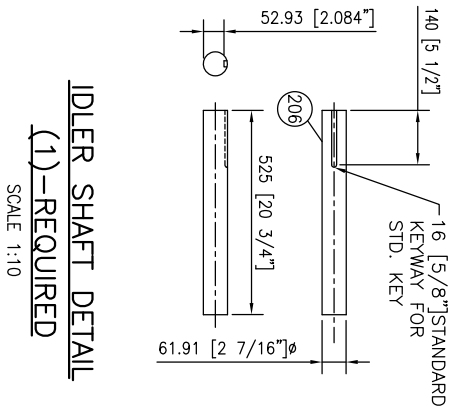
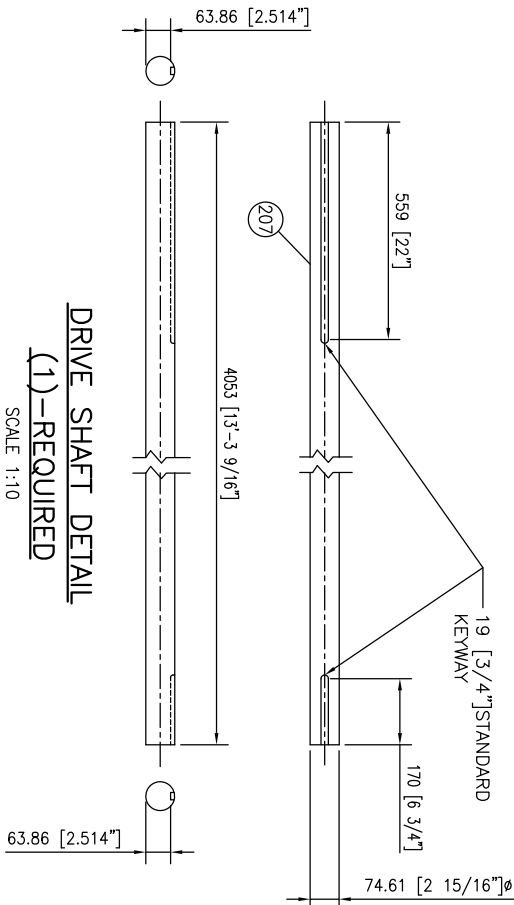
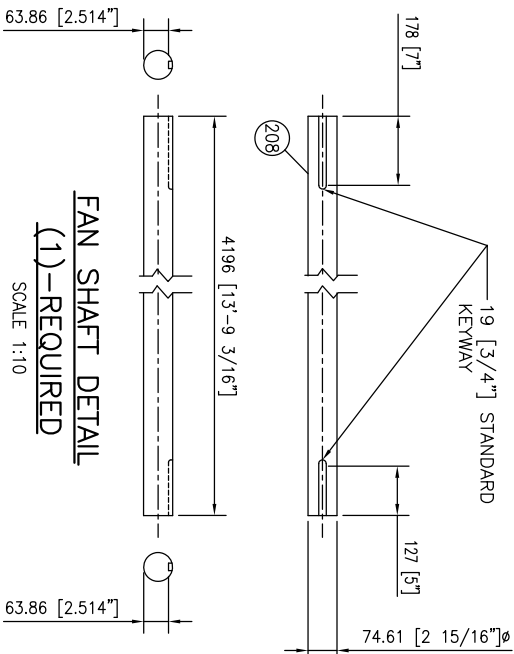
2011-12-01

2

V:\DATE: 2003/06/11 11:48 AM V:\PBS03\03104\20-DRAWINGS\CLR\LT-03104-138.DWG

BILL OF MATERIAL

TAG #	ITEM	QTY	PART NO.	DESCRIPTION
*	201	2		11Ø FAN: CLASS 10000, SERIES 60 VT, ENGINE DRIVE
				c/w (7) BLADES, 12" O/D HUB MANUAL ARRANGMENT,
				ØD BUSHING TYPE "J" 2-15/16" Ø BORE c/w STD. KEYWAY,
				12.6° CLEVIS ANGLE CCW ROTATION WHEN VIEWED FROM ENGINE DRIVE END.
*				COUPLINGS: DODGE PARA-FLEX MODEL PX120, (2) #1010608 FLANGE ASSEMBLIES,
	CPG, 302	202	1	(1) #0111112 FLEXIBLE ELEMENT & (2) 74.6 BORE #3020 TAPER-LOCK BUSHINGS
*	VSH-12204/B	203	2	VIBRATION SWITCHES MURPHY VS2-EX CSA APPROVED, XP, 24 VDC, CONTACTS OPEN ON HI
*	BRG-2994/B/C/D	204	4	BEARING: 74.61 (2 15/16") Ø SERIES 216 IRON PILLOW BLOCK, PART # 126821 DODGE
*	BRG-2984/B	205	2	BEARING: 61.91 (2 7/16") Ø SERIES 214 IRON PILLOW BLOCK, PART # 126818 DODGE
		206	1	ROUND BAR: 61.91 Ø x 525 LG.(SEE DETAIL, KEYWAYS REQ'D MACHINING) C1045 T6&P
		207	1	ROUND BAR: 74.6 Ø x 4053 LG.(SEE DETAIL, KEYWAYS REQ'D MACHINING) C1045 T6&P
		208	1	ROUND BAR: 74.6 Ø x 4196 LG.(SEE DETAIL, KEYWAYS REQ'D MACHINING) C1045 T6&P
		209	6	TUBE FITTING: FEMALE BULKHEAD CONNECTOR- 1/4" T x 1/8" NPT 316SS SWAGelok® SS-400-71-2
		210	4	TUBE FITTING: MALE CONNECTOR- 1/4" T x 1/8" NPT 316SS SWAGelok® SS-400-1-2
		211	2	GREASE HOSE: 1/8" NPT x 457 (18") LG, 3000psi WORKING PRESSURE, LINCOLN GUARDIAN 6218 OR EQUIV.
		212	2	TUBE FITTING: FEMALE CONNECTOR- 1/4" T x 1/8" NPT 316SS SWAGelok® SS-400-7-2
		213	1	TUBE FITTING: STREET ELBOW- 1/8" NPT 316SS SWAGelok® SS-2-SE
*PURCHASED BY ENGINEER				

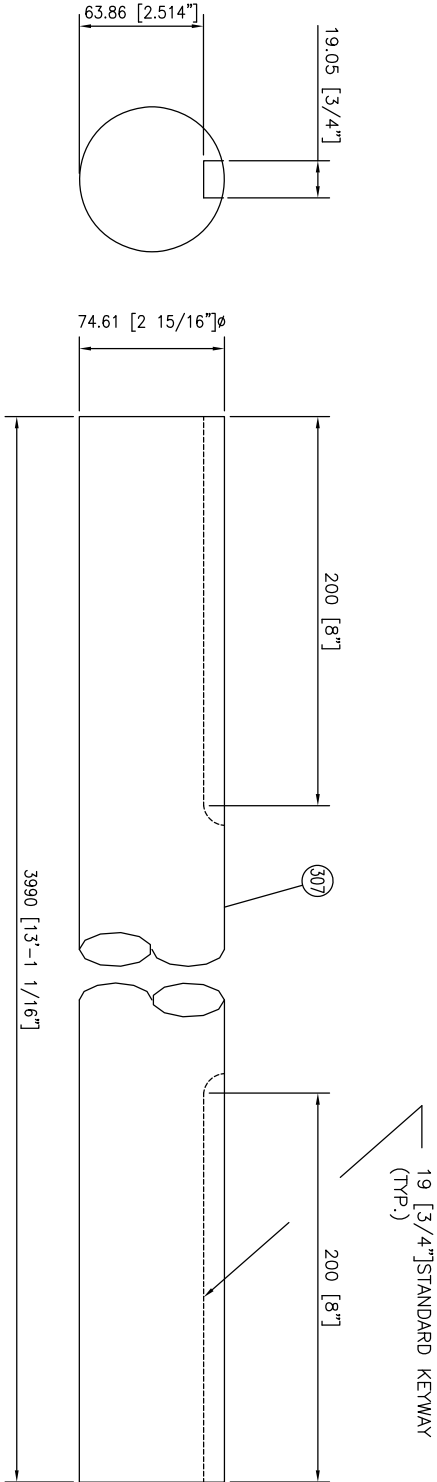


1. SHOP USE METRIC DIM'S TO BUILD. IMPERIAL DIM'S FOR REF. ONLY
2. CUT LENGTHS ARE EXACT c/w TOL. +0/-3
3. WEIGHT OF EQUIPMENT ON THIS PAGE: 620 KG.
4. COPIED FROM C1715-6H054-3, THEN MODIFIED

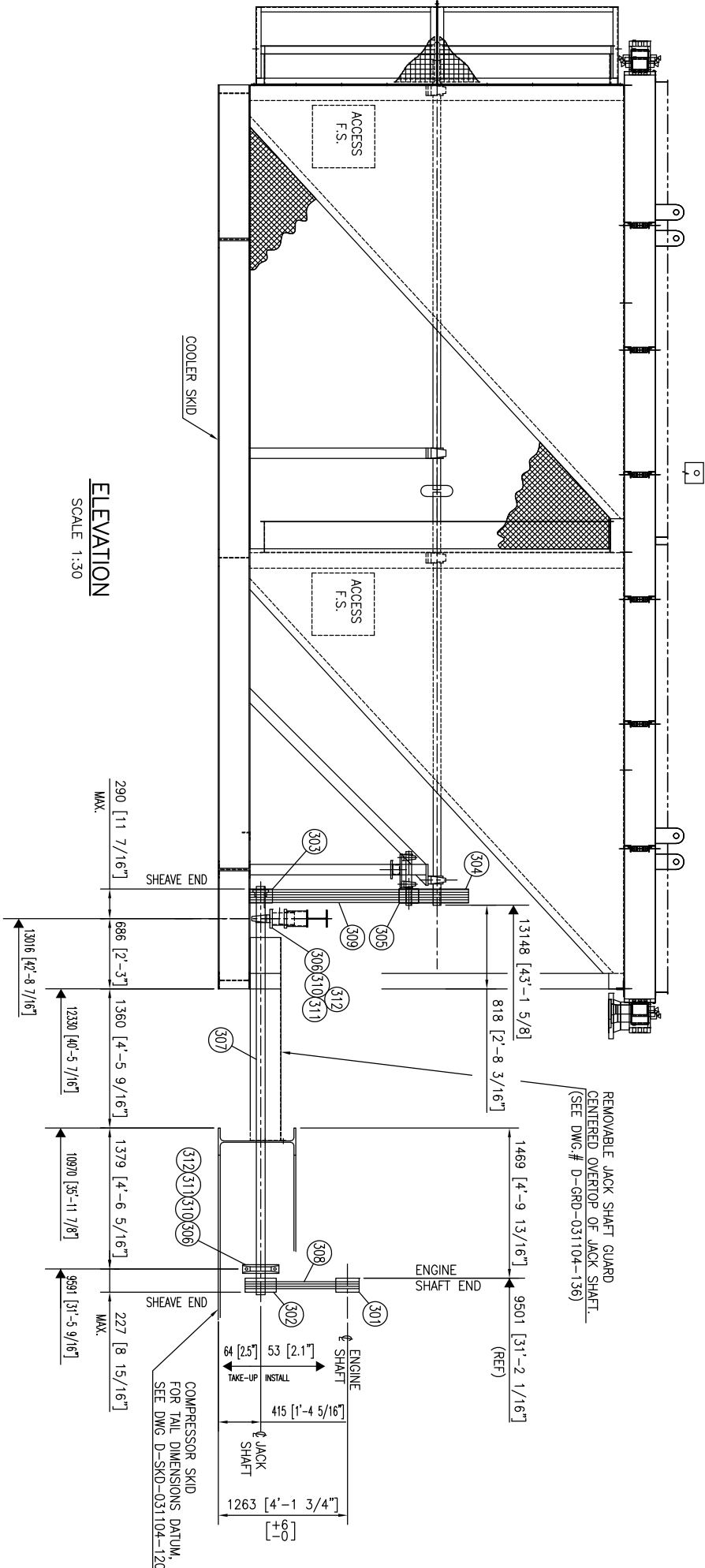
BILL OF MATERIAL

TAG # ITEM QUA PART NO.				DESCRIPTION
	SHV-297	301	1	SHEAVE (ENGINE SHAFT): C-5-9.0" DATUM Ø, TYPE AT C/W OD E-BUSHING 76.2mm (3") Ø BORE W/ SHALLOW KEYWAY (REF.)
	SHV-295	302	1	SHEAVE (JACK SHAFT, ENGINE END): C-5-12.0" DATUM Ø, TYPE AT C/W OD-E BUSHING 74.61mm Ø BORE W/ SHALLOW KEYWAY
	SHV-296	303	1	SHEAVE (JACK SHAFT, COOLER END): C-5-9.0" DATUM Ø , TYPE AT C/W OD E-BUSHING 74.61mm Ø BORE W/ SHALLOW KEYWAY
	SHV-299	304	1	SHEAVE (FAN): C-5-24.0" DATUM Ø, TYPE D3 C/W OD-E BUSHING, 74.61mm Ø BORE W/ STD. KEYWAY
	SHV-298	305	1	SHEAVE (IDLER): C-5-8.0" DATUM Ø, TYPE AT C/W OD-E BUSHING, 69.91mm Ø BORE W/ STD. KEYWAY
	BRG-295/296	306	2	BEARING: 74.61mm (2 15/16) Ø SERIES 216 IRON PILLOW BLOCK, PART #126821, ROUND BAR: 74.61mm Ø x 3990 LG. (SEE DETAILS. KEYWAYS REQUIRE MACHINING) C1045 TG & P
		307	1	371050
	BLT-300	308	5	C-BELTS: C-97 MATCHED BELTS.
	BLT-301	309	5	CX-BELTS: CX-195 MATCHED BELTS.
		310	2	GREASE HOSE: 1/8" NPT x 457 (18") LG. 3000psi WORKING PRESSURE. LINCOLN GUARDIAN 6218 OR EQUAL
		311	2	TUBE FITTING: FEMALE CONNECTOR- 1/4" T x 1/8" NPT 316SS SWAGelok# SS-400-7-2
		312	2	TUBE FITTING: FEMALE BULKHEAD CONNECTOR- 1/4" T x 1/8" NPT 316SS SWAGelok# SS-400-71-2

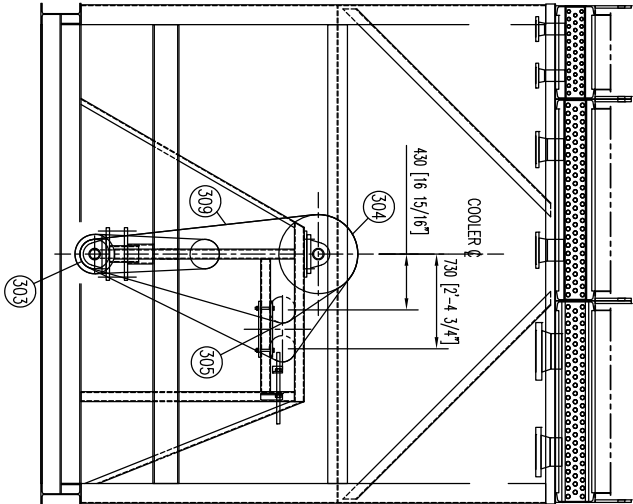
* PURCHASED BY ENGINEER



JACK SHAFT DETAIL
SCALE 1:2



ELEVATION
SCALE 1:30



DRIVE END VIEW
SCALE 1:30

1. WEIGHT OF EQUIPMENT ON THIS PAGE: 300 KG.
2. COPIED FROM C1715-6H054-3, THEN MODIFIED.

X:\P1\B:\0937106\41-14148-14\B0937106\20-DRAWINGS\CL\LT-031104-138.DWG

- 2
 - 1
- CHANGED LENGTH OF ITEM #307 TO 3990 (WAS 3943) FROM BOM
ISSUED FOR CONSTRUCTION

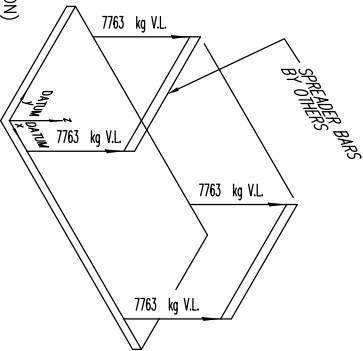
H. LE 03/04/24
H. LE 03/04/16
IB
LV

J. RUST
00/09/26

B.D./H. LE
00/09/26
J.D./IB
00/10/20
AS NOTED

TOM BROWN INC.
1478 HP PAVILION SOUTH COMPRESSOR
MULTIFAN COOLER-FOR WAUKESHA L7042GSI ENGINE
MDL.: 1HW2-132-360-F
D-LYT-031104-138

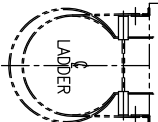
NOZZLE SCHEDULE			SERVICE	Q ELEVATION
MK	SIZE	RATING	FACING	
N1	3 NPS	150#	RFWN	AUXILIARY WATER INLET (AC-1225)
N2	3 NPS	150#	RFWN	AUXILIARY WATER OUTLET (AC-1225)
N3	6 NPS	150#	RFWN	ENGINE JACKET WATER INLET (AC-1220)
N4	6 NPS	150#	RFWN	ENGINE JACKET WATER OUTLET (AC-1220)
N5	10 NPS	300#	RFWN	AFTERCooler INLET (AC-1210)
N6	10 NPS	300#	RFWN	AFTERCooler OUTLET (AC-1210)



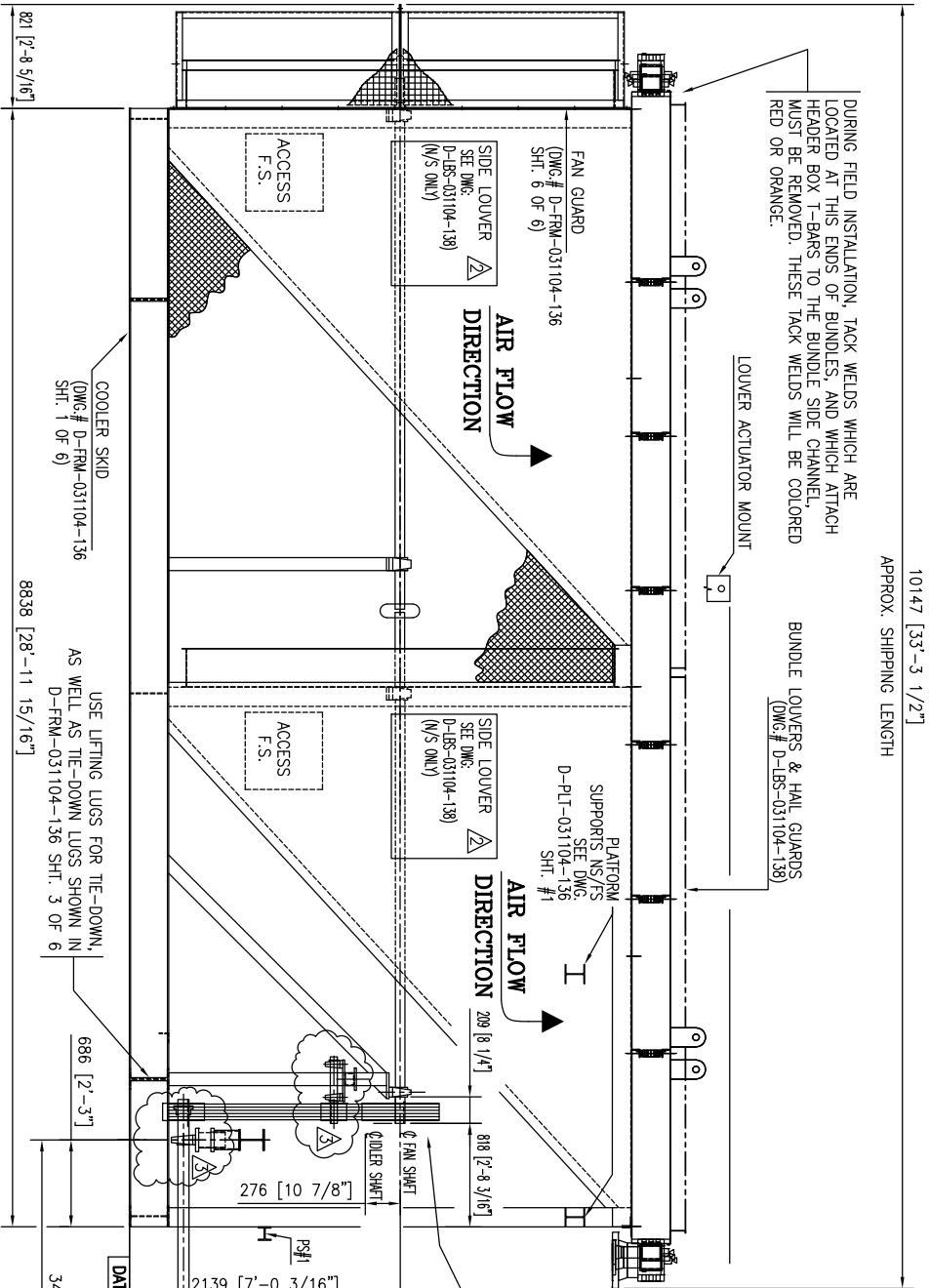
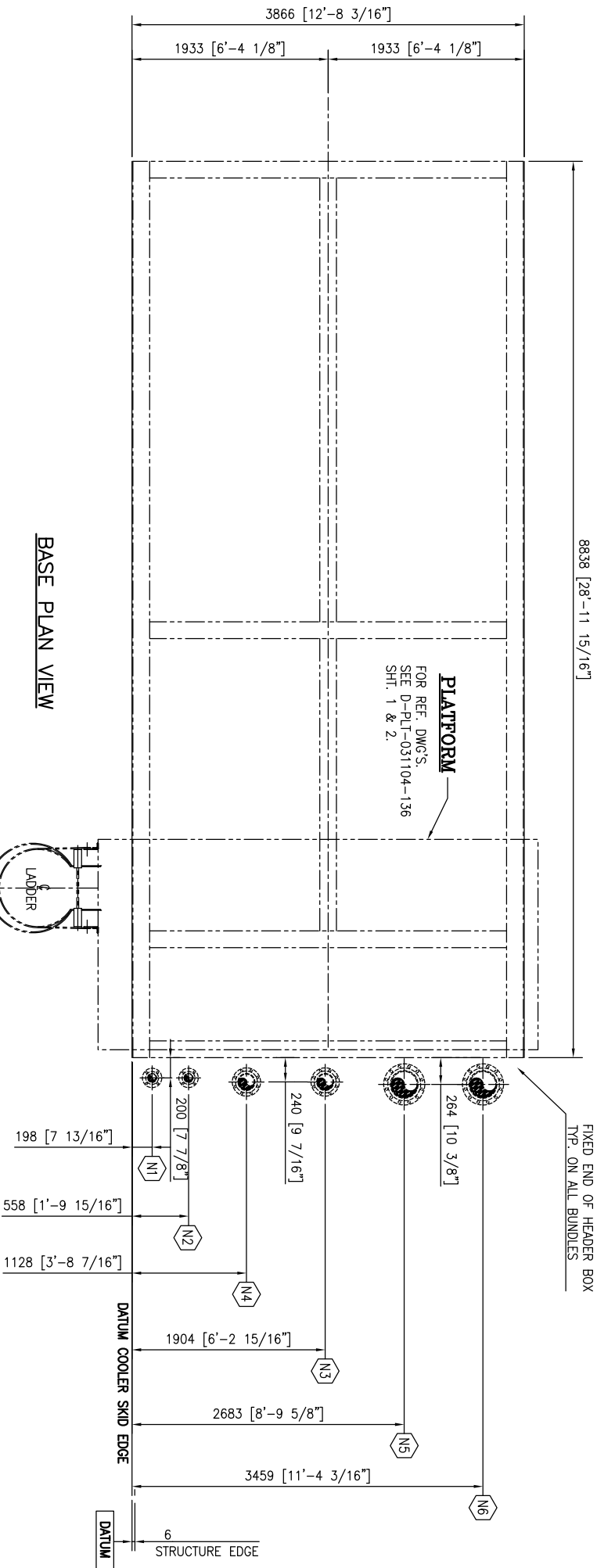
- NOTE:
WEIGHTS SHOWN IN DIAGRAM INCLUDE 50% EXCESS FOR DYNAMIC LOADING (WEIGHT BASED ON SHIPPING CONDITION)
- 1) TOTAL COOLER ASSEMBLY WEIGHT WITHOUT DYNAMIC LOADING: 23,200 kgs
INCLUDES: STRUCTURAL STEEL, BUNDLES, LOUVERS HAIL GUARDS, SILENCER & EXPANSION TANK AND L&P.
 - 2) SHIPPING WEIGHT W/O DYNAMIC LOADING: 20,700 kgs
INCLUDES: STRUCTURAL STEEL, BUNDLES, HAIL GUARDS & LOUVERS
 - 3) SHIP LOOSE WT. = 2500 kg.
INCLUDES: LADDER, PLATFORM, SILENCER & EXPANSION TANK.

C. OF G.:
(DIMS FROM DATUM):
x = 4419 mm
y = 1933 mm
z = 2955 mm

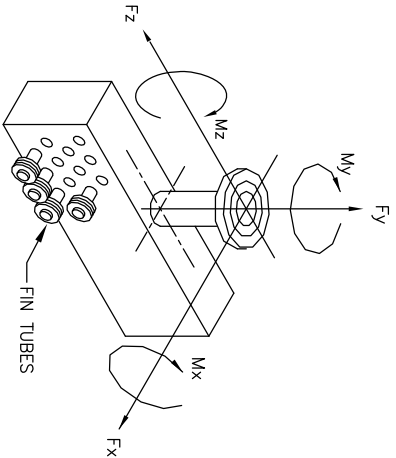
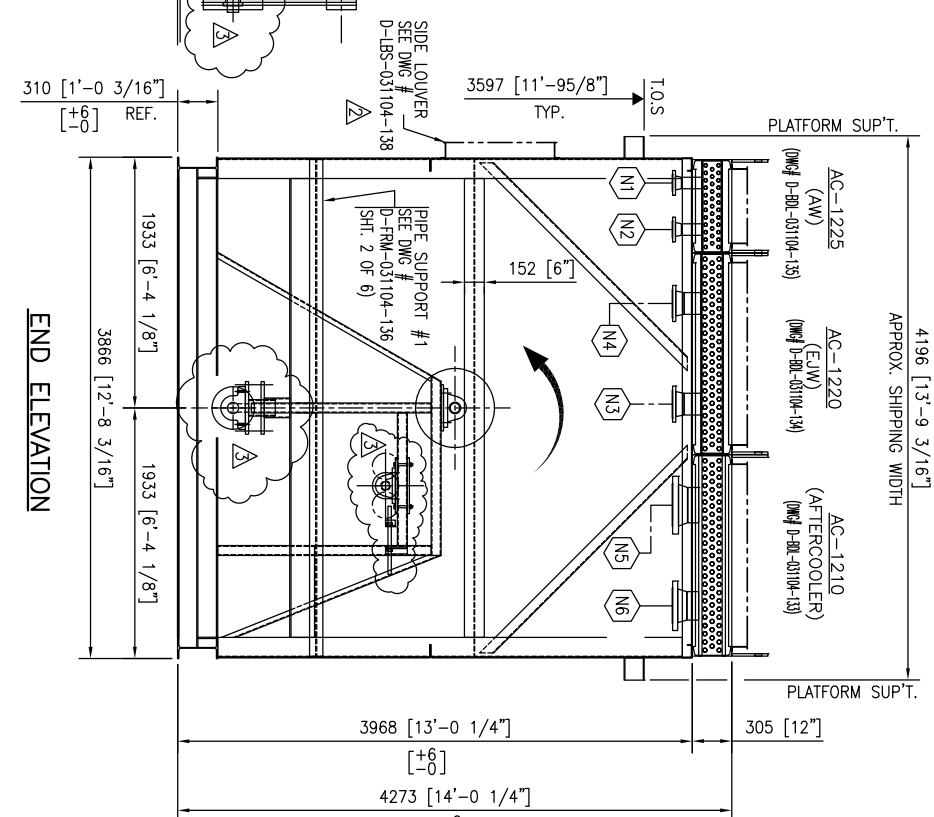
LIFTING DIAGRAM
FOR COOLER ASSEMBLY
AC-1225/1220/1210



BASE PLAN VIEW



END ELEVATION



10 NPS NOZZLES (N5/N6)			3 NPS NOZZLES (N1/N2)		
MAXIMUM ALLOWABLE NOZZLE LOADS			MAXIMUM ALLOWABLE NOZZLE LOADS		
Fx	3000 lb		Fx	900 lb	
Fy	6000 lb		Fy	760 lb	
Fz	3000 lb		Fz	900 lb	
Mx	6000 ft-lb		Mx	600 ft-lb	
My	9000 ft-lb		My	900 ft-lb	
Mz	3760 ft-lb		Mz	600 ft-lb	

6 NPS NOZZLES (N3/N4)			MAXIMUM ALLOWABLE NOZZLE LOADS		
MAXIMUM ALLOWABLE NOZZLE LOADS			MAXIMUM ALLOWABLE NOZZLE LOADS		
Fx	1800 lb		Fx	1800 lb	
Fy	2260 lb		Fy	2260 lb	
Fz	2260 lb		Fz	2260 lb	
Mx	3160 ft-lb		Mx	3160 ft-lb	
My	4500 ft-lb		My	4500 ft-lb	
Mz	2400 ft-lb		Mz	2400 ft-lb	

1. COPIED FROM C1715-6HOS4-3, THEN MODIFIED

- 3 AS BUILT - GENERAL REVISIONS.
- 2 ADDED SIDE LOUVER LOCATION PER CLIENT REQ'D.
- 1 ISSUED FOR CONSTRUCTION

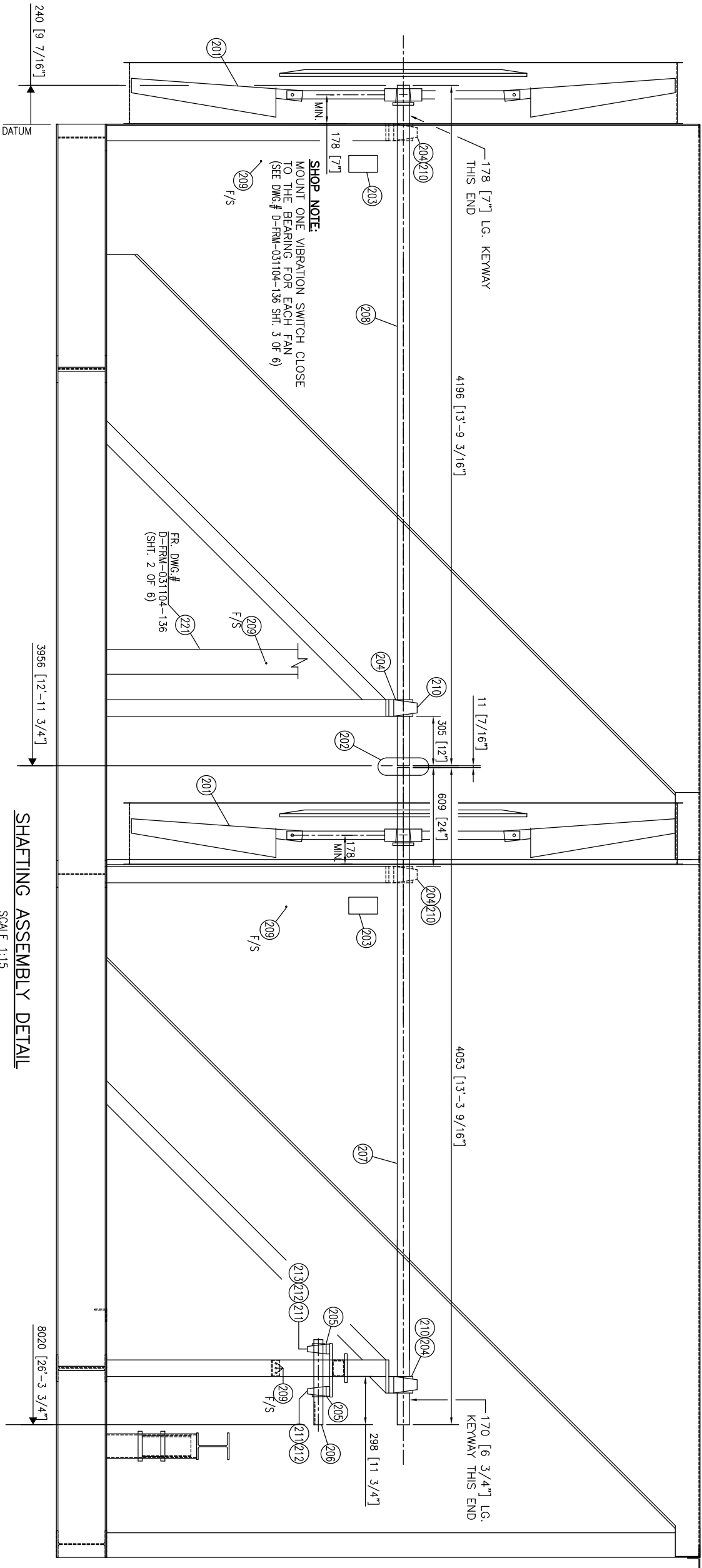
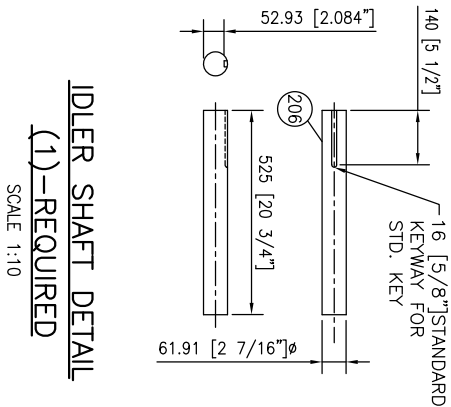
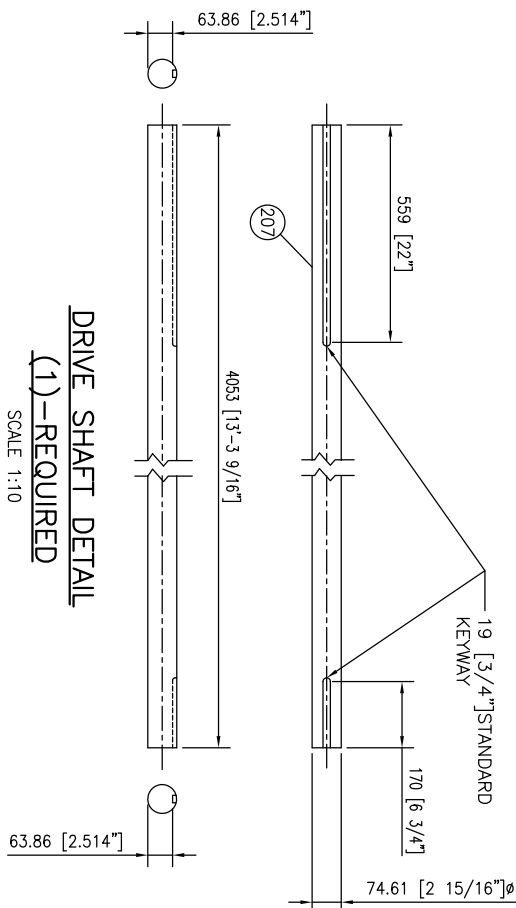
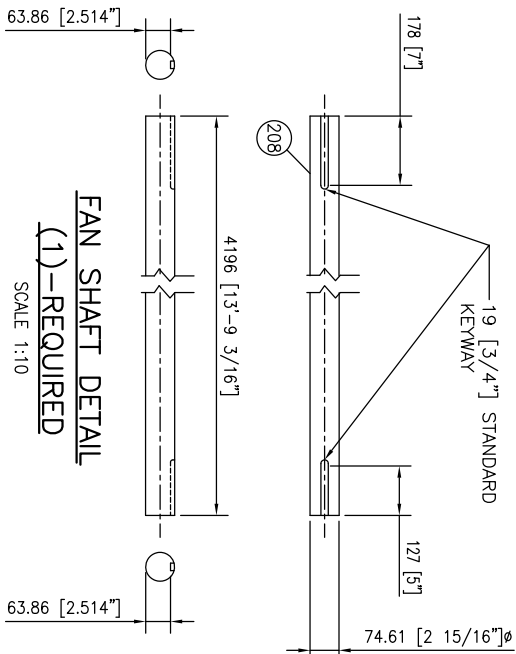
D.R. 04/03/18 JD
H. LE 03/05/20 JD
H. LE 03/04/16 IB

J. RUST 03/04/16
B.D./H. LE 00/09/26
JD/IB 00/10/20
L. VADNAI 03/04/16

TOM BROWN INC.
1478 HP PAVILLION SOUTH COMPRESSOR
MULTIFAN COOLER-FOR WAUKESHA L7042GSI ENGINE
MDL.: 1HW2-132-360-F
D-LYT-031104-138 SHEET 1 OF 3

BILL OF MATERIAL

TAG #	ITEM	QTY	PART NO.	DESCRIPTION
*	201	2		11Ø FAN: CLASS 10000, SERIES 60 VT, ENGINE DRIVE
				c/w (7) BLADES, 12" O/D HUB MANUAL ARRANGMENT,
				ØD BUSHING TYPE "J" 2-15/16" Ø BORE c/w STD. KEYWAY,
				12.6° CLEVIS ANGLE CCW ROTATION WHEN VIEWED FROM ENGINE DRIVE END.
*	202	1		COUPLINGS: DODGE PARA-FLEX MODEL PX120, (2) #010608 FLANGE ASSEMBLIES,
				(1) #0111112 FLEXIBLE ELEMENT & (2) 74.6 BORE #3020 TAPER-LOCK BUSHINGS
*	203	2		VIBRATION SWITCHES MURPHY VSZ-EX CSA APPROVED, XP, 24 VDC, CONTACTS OPEN ON HI
*	204	4		BEARING: 74.61 (2 15/16") Ø SERIES 216 IRON PILLOW BLOCK, PART # 126821 DODGE
*	205	2		BEARING: 61.91 (2 7/16") Ø SERIES 214 IRON PILLOW BLOCK, PART # 126818 DODGE
	206	1	371049	ROUND BAR: 61.91 Ø x 525 LG.(SEE DETAIL, KEYWAYS REQ'D MACHINING) C1045 T6&P
	207	1	371050	ROUND BAR: 74.6 Ø x 4053 LG.(SEE DETAIL, KEYWAYS REQ'D MACHINING) C1045 T6&P
	208	1	371050	ROUND BAR: 74.6 Ø x 4196 LG.(SEE DETAIL, KEYWAYS REQ'D MACHINING) C1045 T6&P
	209	6		TUBE FITTING: FEMALE BULKHEAD CONNECTOR- 1/4" T x 1/8" NPT 316SS SWAGelok® SS-400-71-2
	210	4		TUBE FITTING: MALE CONNECTOR- 1/4" T x 1/8" NPT 316SS SWAGelok® SS-400-1-2
	211	2		GREASE HOSE: 1/8" NPT x 457 (18") LG, 3000psi WORKING PRESSURE LINCOLN GUARDIAN 6218 OR EQUIV.
	212	2		TUBE FITTING: FEMALE CONNECTOR- 1/4" T x 1/8" NPT 316SS SWAGelok® SS-400-7-2
	213	1		TUBE FITTING: STREET ELBOW- 1/8" NPT 316SS SWAGelok® SS-2-SE
*PURCHASED BY ENGINEER				

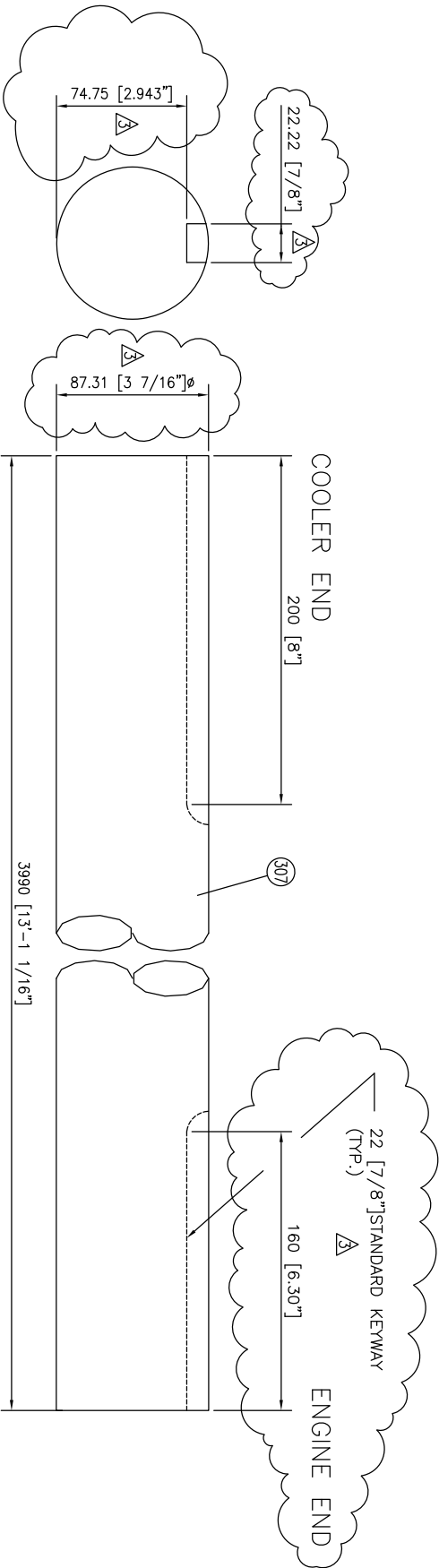


1. SHOP USE METRIC DIM'S TO BUILD. IMPERIAL DIM'S FOR REF. ONLY
2. CUT LENGTHS ARE EXACT c/w TOL. +0/-3
3. WEIGHT OF EQUIPMENT ON THIS PAGE: 620 KG.
4. COPIED FROM C1715-6H054-3, THEN MODIFIED

BILL OF MATERIAL

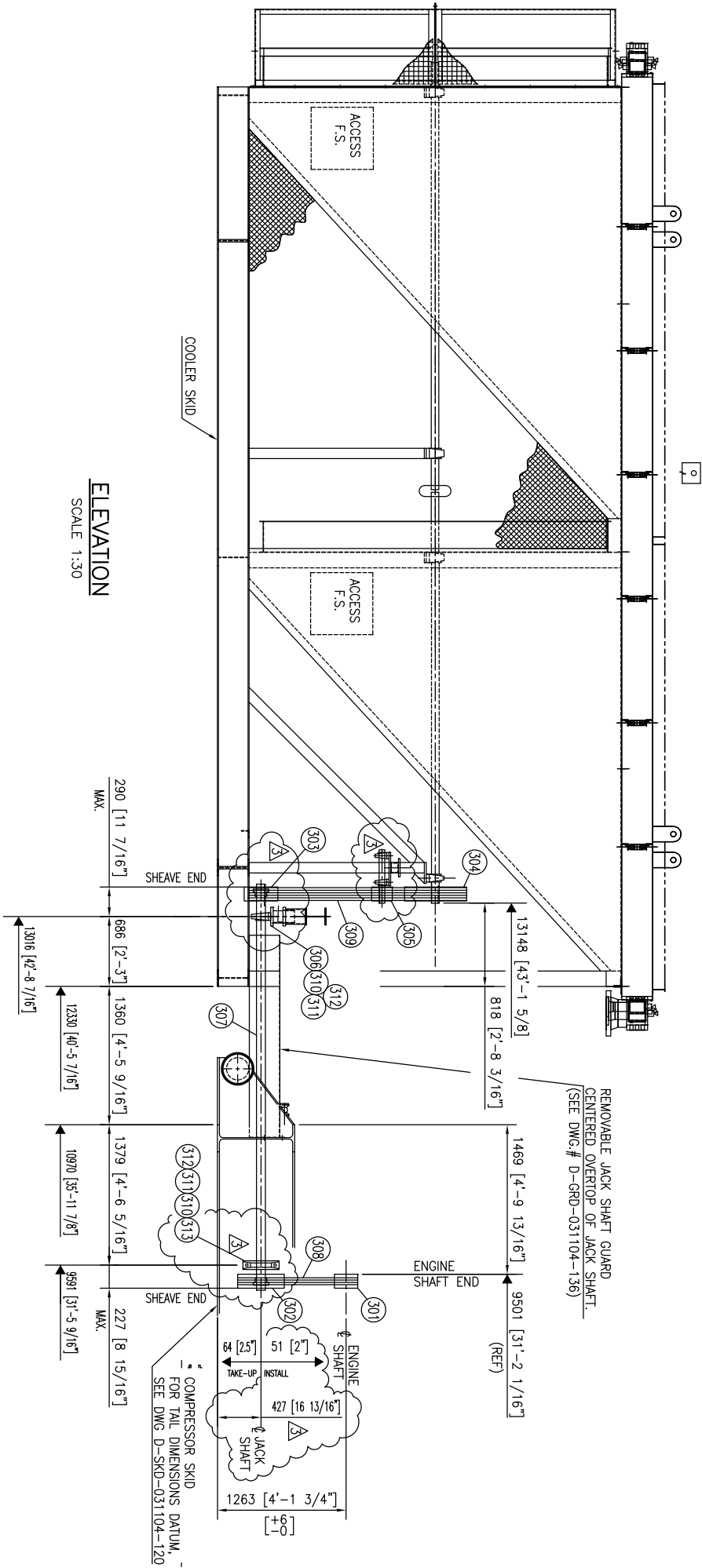
DESCRIPTION			
TAG #	ITEM	QUANTITY	PART NO.
	SHV-297	301	1
*	SHEAVE (ENGINE SHAFT): C-5-9.0" DATUM Ø, TYPE A1 C/W OD E-BUSHING		
	SHV-295	302	1
*	SHEAVE (JACK SHAFT, ENGINE END): C-5-18.0" DATUM Ø, TYPE A3 C/W		
	SHV-296	303	1
*	OD-E BUSHING 87.31mm Ø BORE W/ SHALLOW KEYWAY		
	SHV-299	304	1
*	SHEAVE (JACK SHAFT, COOLER END): C-5-13.0" DATUM Ø , TYPE A3 C/W		
	SHV-298	305	1
*	OD E-BUSHING 87.31mm Ø BORE W/ SHALLOW KEYWAY		
	SHV-299	304	1
*	SHEAVE (FAN): C-5-24.0" DATUM Ø, TYPE D3 C/W OD-F BUSHING,		
	SHV-298	305	1
*	SHEAVE (IDLER): C-5-8.0" DATUM Ø, TYPE A1 C/W OD-E BUSHING,		
	BRG-295	306	1
*	69.91mm Ø BORE W/ STD. KEYWAY		
	BRG-296	307	1
*	ROUND BAR: 87.31mm Ø x 3990 LG. (SEE DETAILS. KEYWAYS REQUIRE MACHINING) C1045 TG & P		
	BLT-300	308	5
*	C-BELTS: C-106 MATCHED BELTS.		
	BLT-301	309	5
*	C-BELTS: C-195 MATCHED BELTS.		
		310	2
*	GREASE HOSE: 1/8" NPT x 457 (18") LG. 3000PSI WORKING PRESSURE. LINCOLN GUARDIAN 6218 OR EQUIV.		
		311	2
*	TUBE FITTING: FEMALE BULKHEAD CONNECTOR- 1/4" T x 1/8" NPT 316SS SWAGelok# SS-400-7-2		
		312	2
*	TUBE FITTING: FEMALE BULKHEAD CONNECTOR- 1/4" T x 1/8" NPT 316SS SWAGelok# SS-400-71-2		
	BRG-296	313	1
*	BEARING: 87.31mm (3 7/16") S-2000 NON-EXPANSION TYPE PILLOW BLOCK, PART #044631, DODGE		

* PURCHASED BY ENGINEER



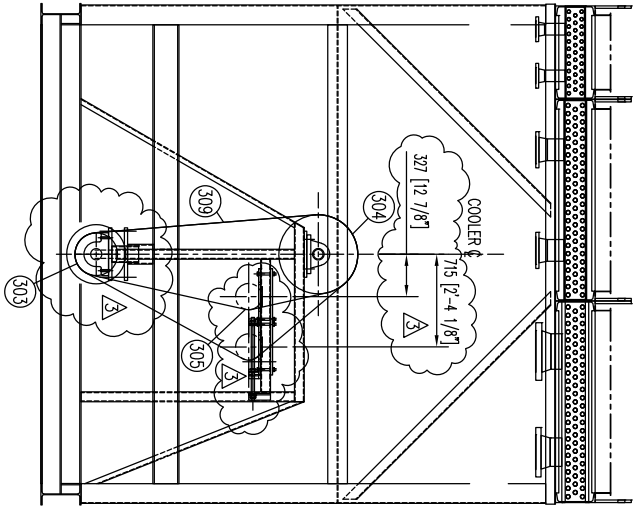
JACK SHAFT DETAIL

SCALE 1:2



ELEVATION

SCALE 1:30



DRIVE END VIEW

SCALE 1:30

1. WEIGHT OF EQUIPMENT ON THIS PAGE: 300 KG.
2. COPIED FROM C1715-6H054-3, THEN MODIFIED.

X:\P15-2094\3649-1018-14\B036503\B3103\20-DRAWINGS\CL\LT-031104-138 [3.4375 JACKSHAFT].DWG dreimer

- 3 AS BUILT - GENERAL REVISIONS:
- 2 CHANGED LENGTH OF ITEM #307 TO 3990 (WAS 3943) FROM BOM
- 1 ISSUED FOR CONSTRUCTION

D.R. 04/03/18 JD
H. LE 03/04/24 IB
H. LE 03/04/16 LV

J. RUST
00/09/26
J.D./IB
00/10/20

L. VADNAI
03/04/16
AS NOTED

TOM BROWN INC.
1478 HP PAVILION SOUTH COMPRESSOR
MULTIFAN COOLER-FOR WAUKESHA L7042GSI ENGINE
MDL.: 1HW2-132-360-F
D-LYT-031104-138

SHEET 3 OF 3