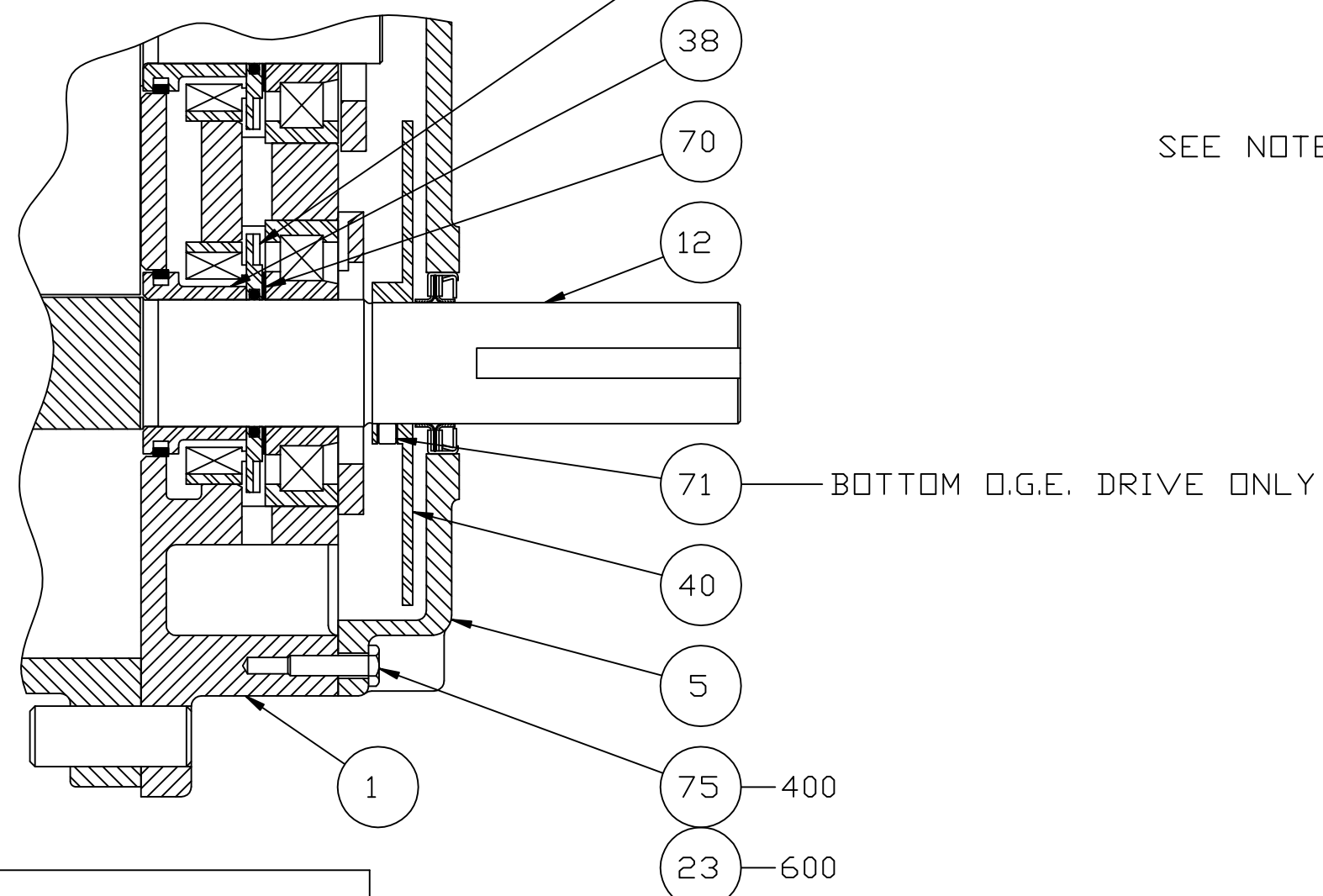


NOTES:

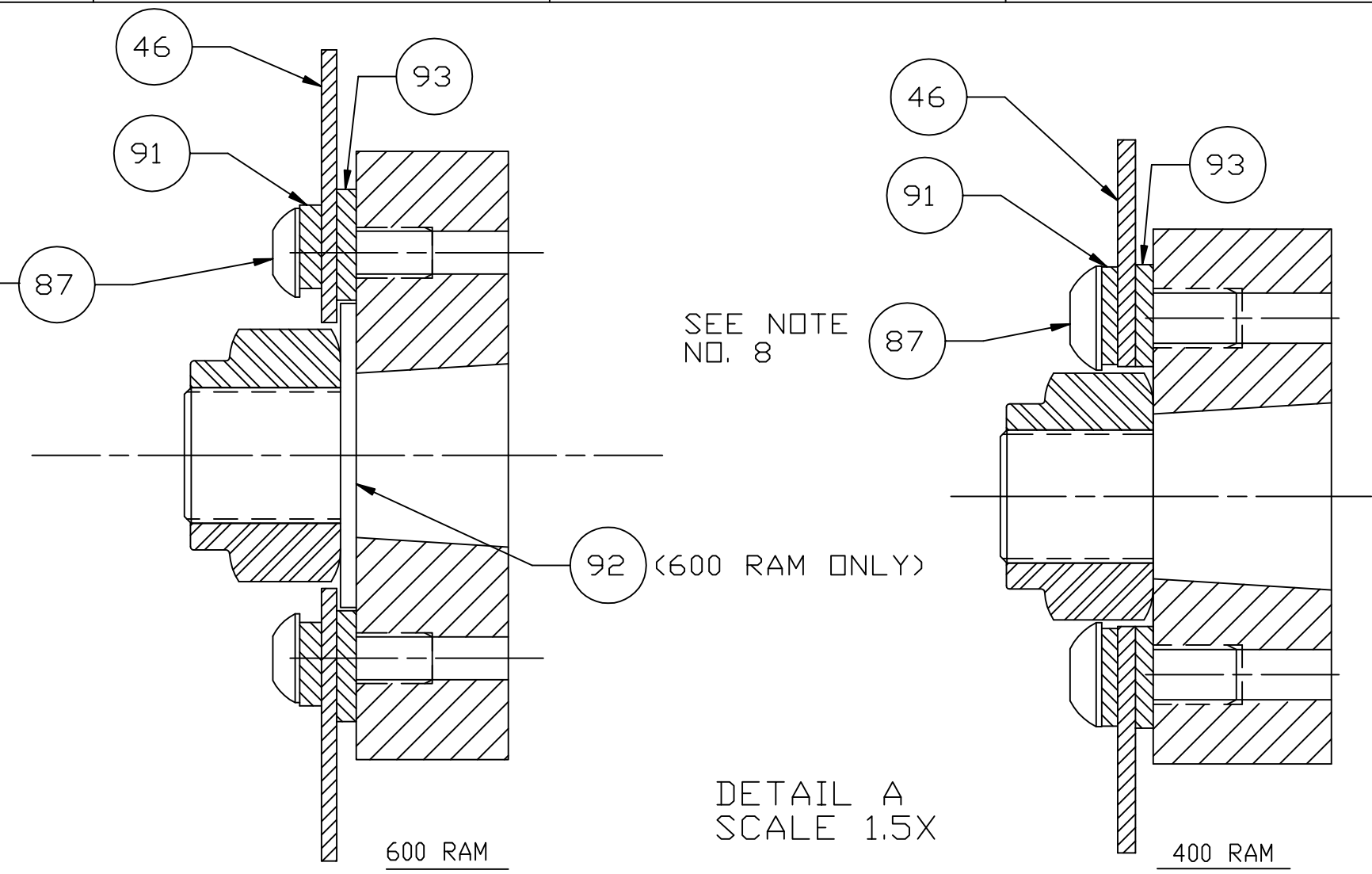
1. DRIVE END COVER TO BE PINNED TO HEADPLATE AFTER ALIGNING SEAL BORE WITH SHAFT WITHIN .001
 2. USE TEFLON SEALANT ON ALL PIPE THREADS & CYLINDER TO HEADPLATE FLANGE FOR WHISP AIR GAS PUMP UNITS ONLY.
 3. ITEMS 34 & 54 MUST BE INSTALLED WITH OIL GROOVE AT TOP.
 4. TORQUE TO 400 FT.LBS.-400 TORQUE TO 630 FT.LBS.-600
 5. TORQUE TO 75 FT.LBS.-400 TORQUE TO 140 FT.LBS.-600
- APPLY LOCKTITE TO SCREW THREADS & BOTH FACES OF WASHER & SLINGER.
6. TORQUE TO 35 FT.LBS. (HEADPLATE)
 7. TORQUE TO 10 FT.LBS. (GEARBOX/END COVER)
 8. LOCKTIGHT AND TORQUE TO FT.LBS.-75
 9. TWO 1/2 X 3/4 BUSHINGS FOR BREATHERS ON 600 RAM SERIES ONLY
 10. INSTALL PER ROTATION

BOTTOM DRIVE OPTION

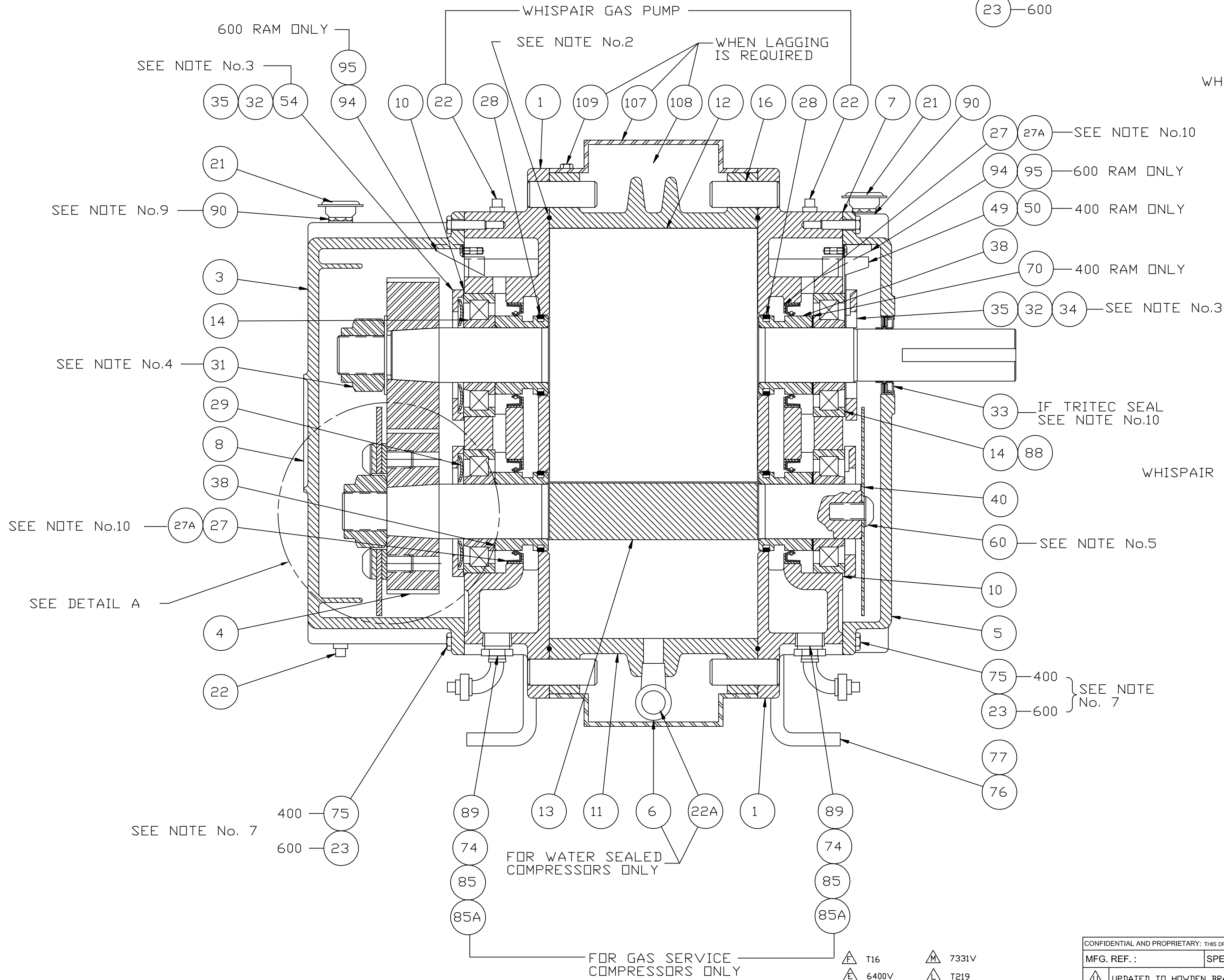
ALSO SHOWN AS GAS SERVICE



SEE NOTE NO. 8



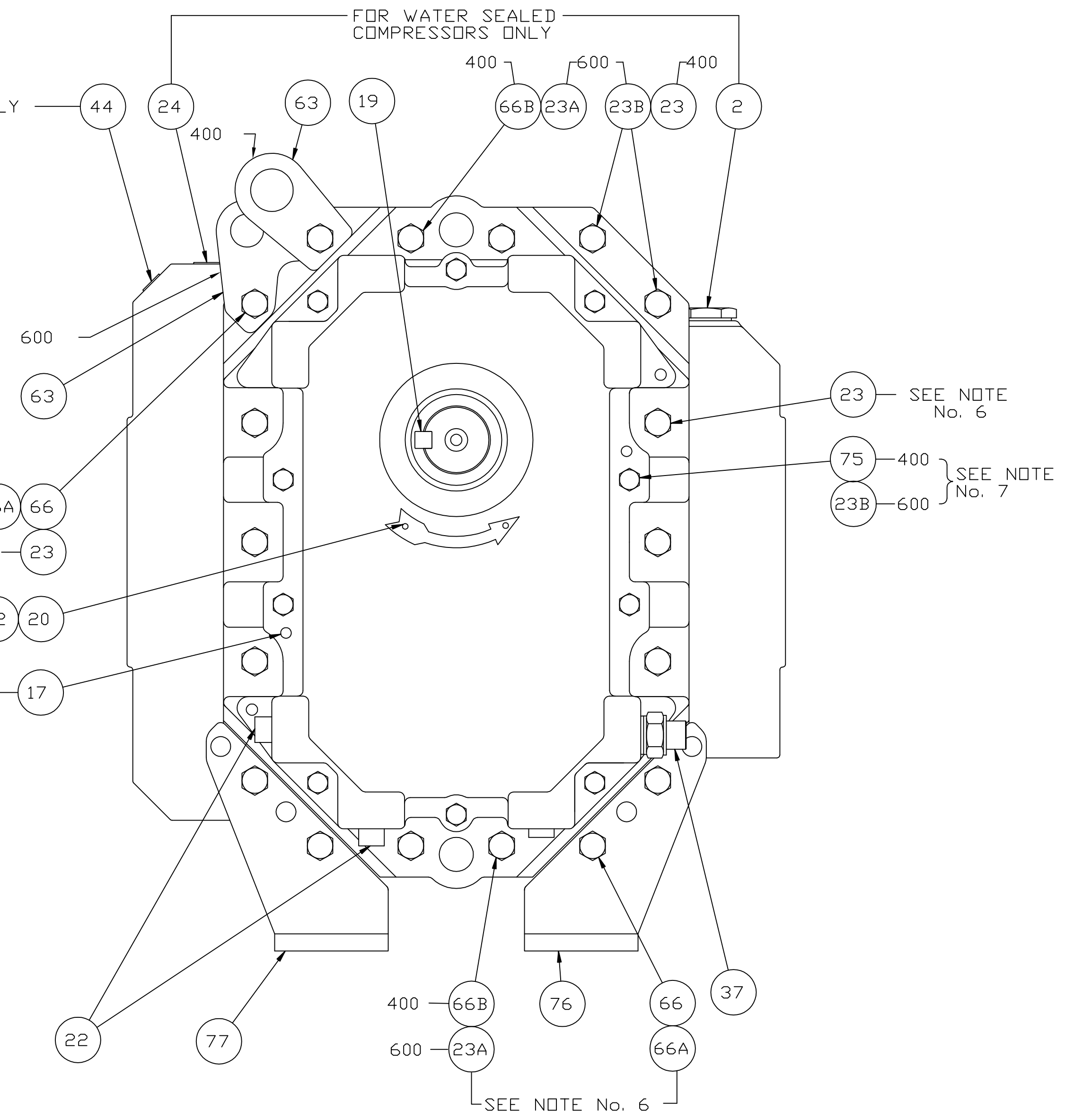
DETAIL A SCALE 1.5X



WHISPAIR UNITS ONLY

WHISPAIR UNITS ONLY

SEE NOTE NO.1



RAM/RAM-J/RAM-GJ/RAM-VJ

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MFG. REF. :		SPEC SECTION:			ENGINEER CO.:			MATERIAL:		PATT. No.	
6400V		MPM 1/11/16 16916V			MNM CERTIFIED			DR. NEP 11/26/96		T1 DO NOT SCALE FOR DIMENSIONS UNLESS OTHERWISE SPECIFIED	
5964V		JJ 9/25/09 10781V			RDA PURCHASE ORDER:			CHKD.BMS 11/26/96		T2: FINISH IN 1/8 INCHES	
5767V		DAB 7/18/07 8203V			RDA PROJECT LOCATION:			APP. RDA 11/27/96		ANCHOR BOLT LOCATIONS 1.31	
5560V		AKP 1/20/06 7654V			RDA EQUIPMENT No.:			DBV. NEP 11/28/96		ANCHOR BOLT LOCATIONS 4.07	
5048V		BY DATE DATE CHANGE NOTICE			RDA DATE (M/D/Y):			CAD FORMAT AUTO CAD		ANCHOR BOLT LOCATIONS 4.07	
		T16 7331V			CAD FILE / DIRECTORY 81881A23 / XASR			SCALE 6"=1'-0"		DATE MIDY	
		T219						DR. NEP 11/26/96		ORDER No.	
		K194 7591V						DIMENSIONAL TOLERANCES PER: ASME Y14.5		GEOMETRIC TOLERANCE PER: ASME Y14.5	
		T52 7450V						T1: TWO PLACE DECIMALS ± .005		DO NOT SCALE FOR DIMENSIONS UNLESS OTHERWISE SPECIFIED	
		T22 7412V						T2: FINISH IN 1/8 INCHES		ANCHOR BOLT LOCATIONS 1.31	
		T43 7331V						THIRD ANGLE PROJECTION		THIRD ANGLE PROJECTION	

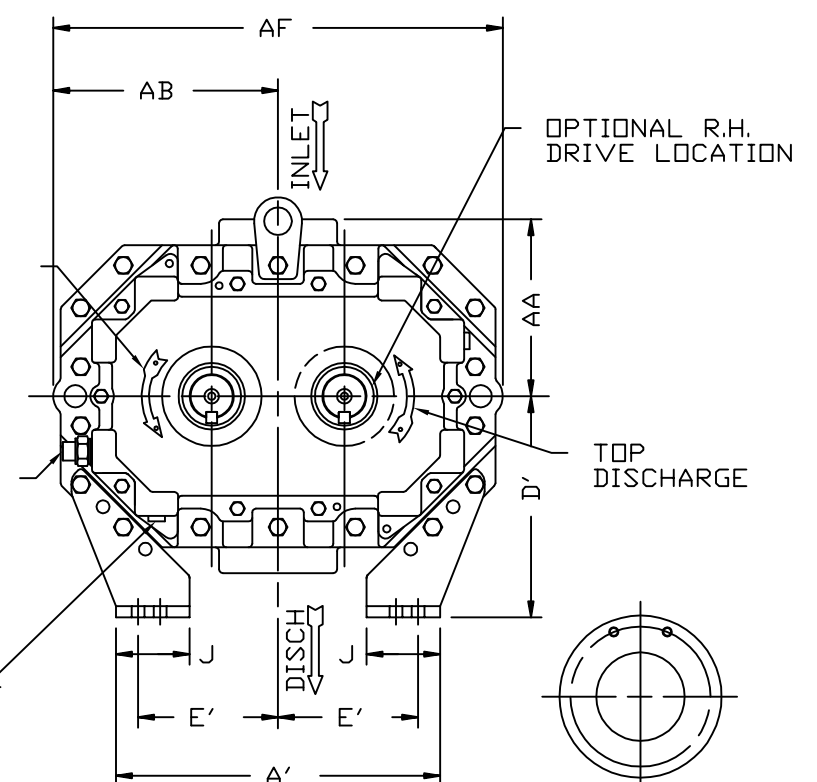
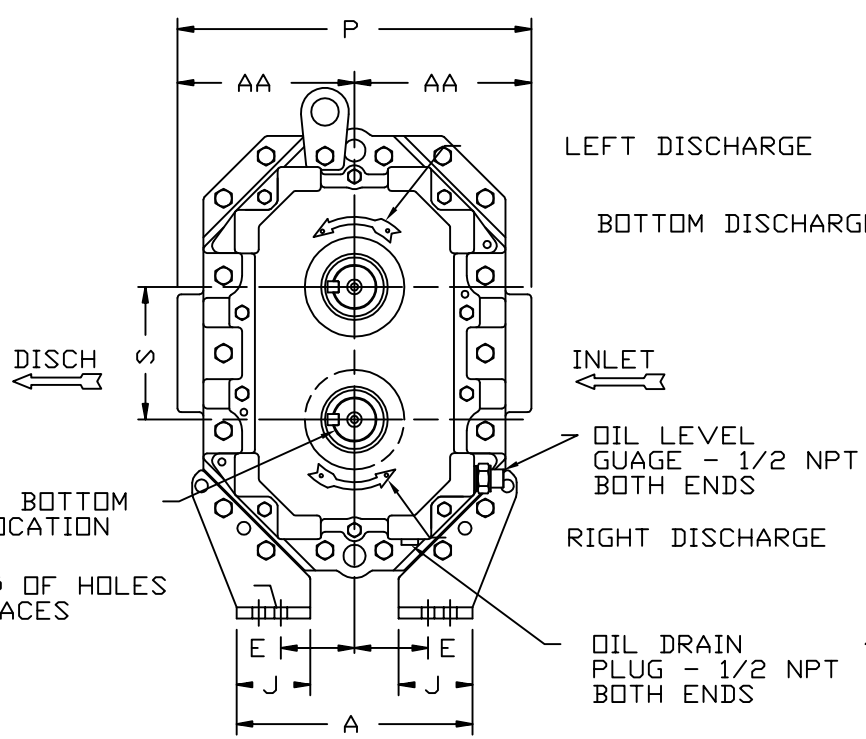
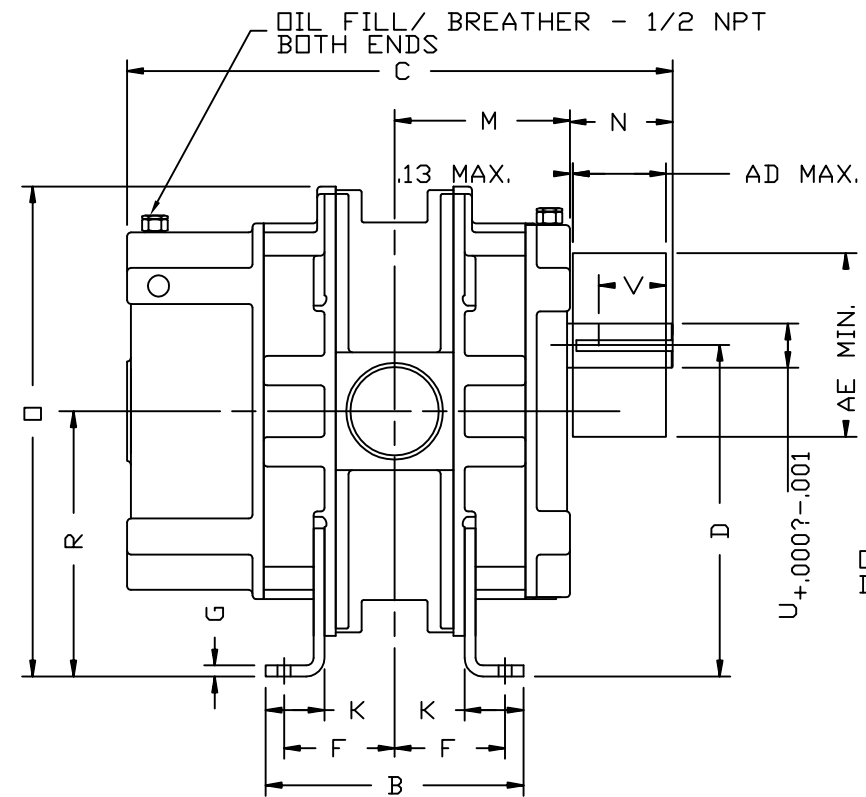
Howden

CONNEYSVILLE, IN USA
P: 765-827-9200 F: 765-827-9266

SECTIONAL ASSEMBLY
400/600 RAM

81881023
SHEET 1 OF 1

REV
U



W - INLET
W' - DISCHARGE
AD - MAXIMUM SHEAVE WIDTH
(SEE OVERHUNG LOAD LIMIT K-24102)
AE - MINIMUM SHEAVE DIAMETER
(SEE OVERHUNG LOAD LIMIT K-24102)
ALL DIMENSIONS IN INCHES

INLET & DISCHARGE FLANGES TO
MATE FLUSH & SQUARE WITH
FLAT FACE FLANGE ONLY.
USE FULL FACE GASKETS.
V-BELT DRIVEN UNITS: MOTOR
TO BE LOCATED ON INLET SIDE
OF BLOWER.

A 5048V B 5048V C 5560V D 5767V
E 5986V F 6006V

FLG	5"	6"	8"	10"
OPENING	5"	6"	8"	10"
BOLT CIRCLE	8.50	9.50	11.75	14.25
FLANGE O.D.	10.00	11.00	13.50	16.00
No TAPPED HOLES	8	8	8	12
SIZE HOLES	3/4-10	3/4-10	3/4-10	7/8-9
TAP DEPTH	1.13	1.13	1.13	1.13

FRAME SIZE	A	A'	B	C	D	D'	E	E'	F	G	H	J	K	M	N	O	P	R	S	U	V	KEYWAY	W	W'	AA	AB	AD	AE	AF	APPROX WEIGHT
404	8.00	11.00	8.75	18.50	11.25	7.50	2.50	4.75	3.75	.38	44	2.50	2.00	5.95	3.48	16.63	12.00	9.00	4.50	1.50	2.75	.375X.188	3*NPT	3*NPT	6.00	7.63	3.06	7.10	15.25	230
406	"	"	10.75	20.50	"	"	"	"	4.75	"	"	"	"	6.95	"	"	"	"	"	"	"	"	4*NPT	4*NPT	"	"	"	"	"	260
409	"	"	13.75	23.50	"	"	"	"	6.25	"	"	"	"	8.45	"	"	11.00	"	"	"	"	"	"	"	5.50	"	"	"	"	300
412	"	"	16.75	26.50	"	"	"	"	7.75	"	"	"	"	9.95	"	"	"	"	"	"	"	"	6*FLG	6*FLG	"	"	"	"	"	360
418	"	"	22.75	32.50	"	"	"	"	10.75	"	"	"	"	12.95	"	"	"	"	"	"	"	"	8*FLG	8*FLG	"	"	"	"	"	440
612	11.00	17.00	16.75	28.24	15.00	9.00	4.00	7.00	7.31	.38	75	3.00	2.00	10.43	4.30	22.13	18.00	12.00	6.00	2.00	3.00	.500x.250	8*FLG	8*FLG	9.00	10.13	4.44	8.50	20.00	575
616	9.00	15.00	20.75	32.19	15.00	9.00	3.50	6.50	9.75	.38	56	2.50	2.00	12.41	4.30	22.00	14.50	12.00	6.00	2.00	3.63	.500x.250	8*FLG	8*FLG	7.25	10.00	4.44	8.50	20.00	650
624	"	"	28.75	40.19	"	"	"	"	13.75	"	"	"	"	16.41	"	"	"	"	"	"	"	"	10*FLG	10*FLG	"	"	"	"	"	775

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MFG. REF.:		SPEC SECTION:				ENGINEER CO.:				MAT'L:		PATT. No.		GEOMETRIC TOLERANCE PER: EP938			ORDER No.		
ADDED 612, UPDATED TO HOWDEN		MPM		1/25/16		16916V		MNM		DR. RDR		DIMENSIONAL TOLERANCES PER UNLESS OTHERWISE SPECIFIED T1		DO NOT SCALE FOR DIMENSIONS ALL DIMENSIONS SHOWN IN BRACKETS [] ARE MILLIMETERS			THIRD ANGLE PROJECTION		
REMOVED AA'		RDR		6484V						CHKD.BMS		T1: TWO PLACE DECIMALS (.XX) ±.015 THREE PLACE DECIMALS (.XXX) ±.005 FRACTIONAL ±1/64		T2: ANCHOR BOLT LOCATIONS ±.13 BLOWER INLET & DISCHARGE LOCATIONS ±.25 ALL OTHER DIMENSIONS REFERENCE		FINISH IN μ INCHES	Howden		
REV DIM "H" ON 600		RDR		6294V		BMS		AGP		APP. RDA		400/600 SERIES RAM (NON-WHISPAIR) RAM		Connersville, IN USA P: 765-827-9200 F: 765-827-9266			REV		
REV DIM "AF" ON 600		RDR		6260V		BMS		AGP		DBV.				85	L				
REVISIONS		BY		DATE M/D/Y		CHANGE NOTICE		CHKD APP		CAD FORMAT AUTO CAD		CAD FILE / DIRECTORY 78390A21 / XXAD		SCALE NTS		DATE M/D/Y		78390021	SHEET 1 OF X