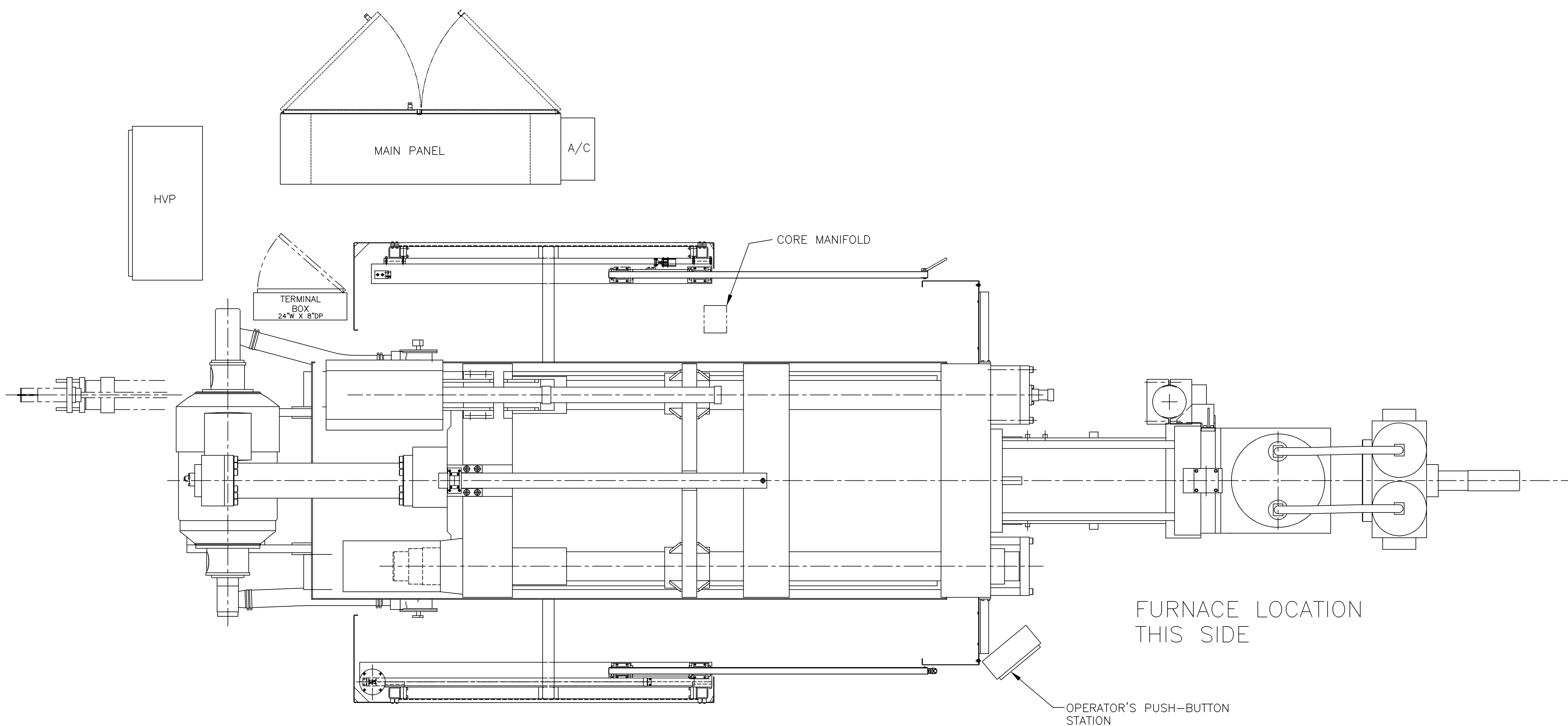
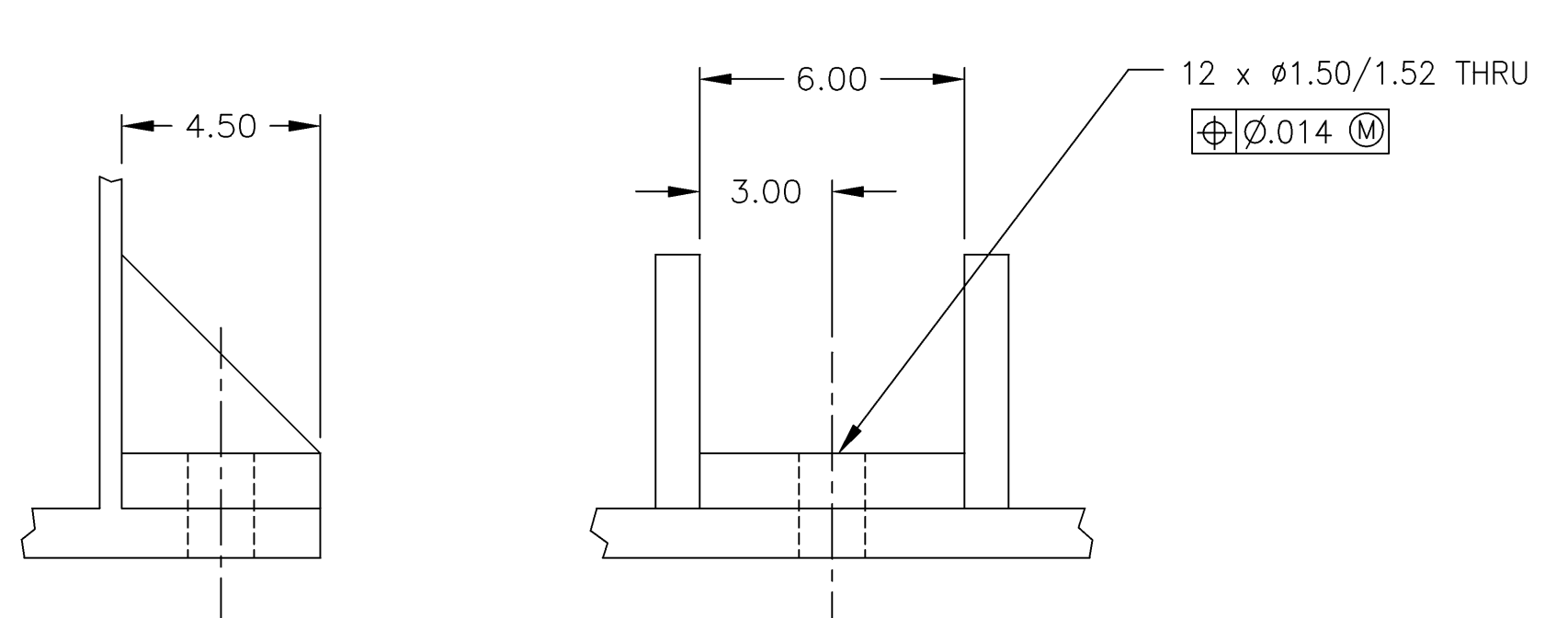
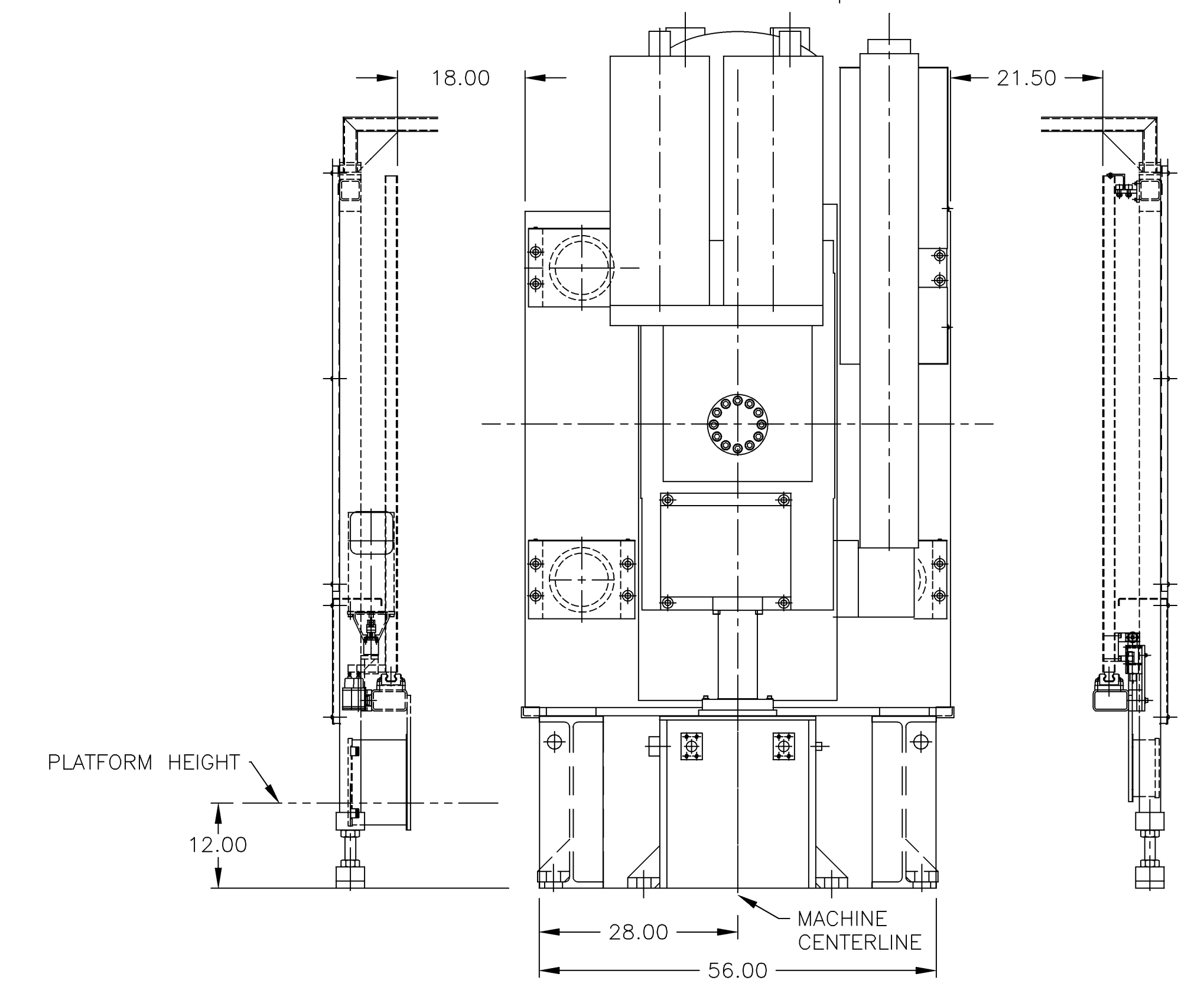
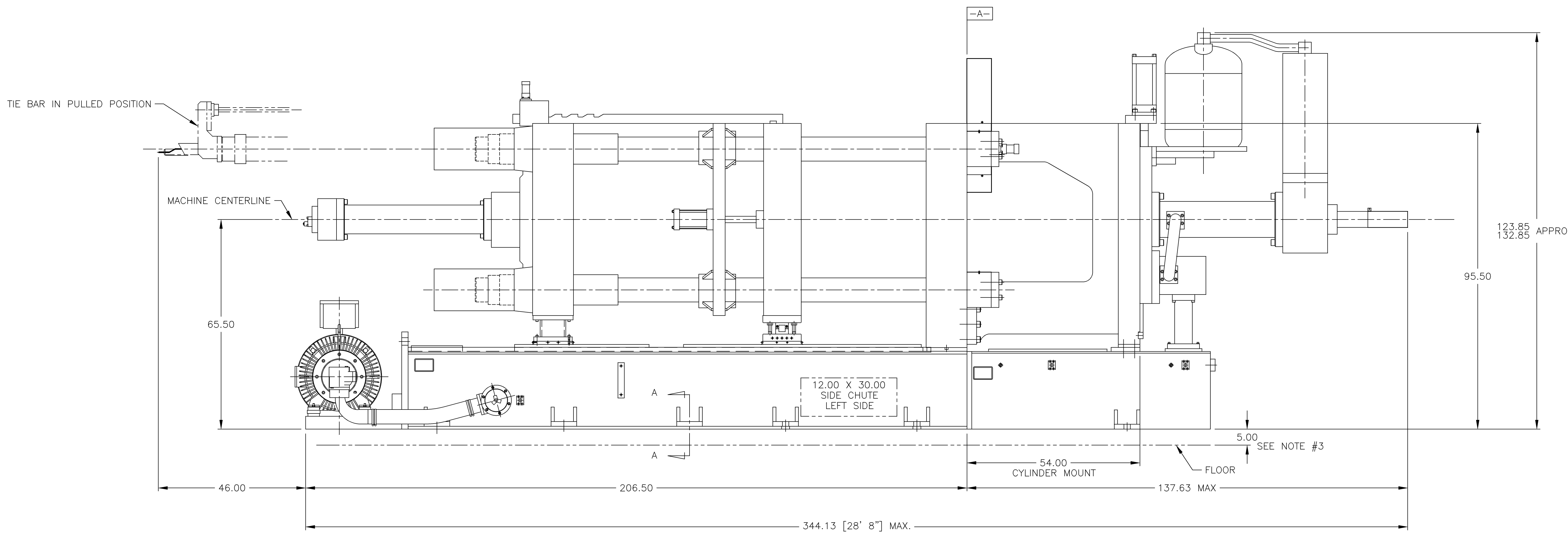


REVISIONS					
REV	DESCRIPTION	BY	DATE	ZONE	M/CK'D
A	ORIGINAL DRAWING				KWH



MACHINE SPECIFICATIONS	
MODEL	836 ALUMINUM
LOCKING TONNAGE	900 TONS
SPACE BETWEEN BARS	36.50" x 36.50"
TIE BAR DIAMETER	7.50" DIA
TIE BAR CENTERS	44.00" x 44.00"
STATIONARY PLATEN (T x W x H)	12.75 x 60.00 x 70.00
MOVABLE PLATEN (T x W x H)	11.75 x 60.00 x 60.00
DIE STROKE	22.00
DIE HEIGHT	17.00" - 37.00"
SHOT CYLINDER	7.00 B, 4.00 R, 21.00 - 27.00 ADJUSTABLE STROKE
SHOT POSITIONS	CENTERLINE TO -9.00 BELOW
RESERVOIR CAPACITY (APPROX.)	444 GAL.
HYDRAULIC FLUID	WATER GLYCOL SUITABLE FOR 4500 PSI - HOUGHTON 419R OR EQUIVALENT. PRINCE MACHINE WILL RUN OFF THIS MACHINE USING HOUGHTON 419R. CUSTOMER FLUID MUST BE COMPATIBLE W/ Buna-N SEALS AND HOUGHTON 419R. SEAL MATERIAL SAMPLES ARE AVAILABLE FOR TESTING IF COMPATIBILITY IS UNCERTAIN.
SHIPPING WEIGHT	95,000 LBS
LUBE SYSTEM	TRABON OIL
RECOMMENDED LUBRICATION (TYPE & WEIGHT)	MOBIL VACTRA OIL #4 SLC OR EQUIVALENT. PRINCE MACHINE WILL RUN OFF THIS MACHINE USING MOBIL VACTRA OIL #4 SLC. CUSTOMER LUBRICANT MUST BE COMPATIBLE WITH MOBIL VACTRA OIL #4 SLC.
WATER REQUIREMENTS	35 GPM @ 80 DEGREES F.
AIR REQUIREMENTS	60 PSI 5 CFM CONTINUOUS
* INCLUDES REQUIREMENTS FOR MACHINE LUBRICATION, AND SAFETY DEVICE. DOES NOT INCLUDE ANCILLARY EQUIPMENT SUCH AS TRIM PRESS, SPRAY, QUENCH, AND PLUNGER LUBE.	

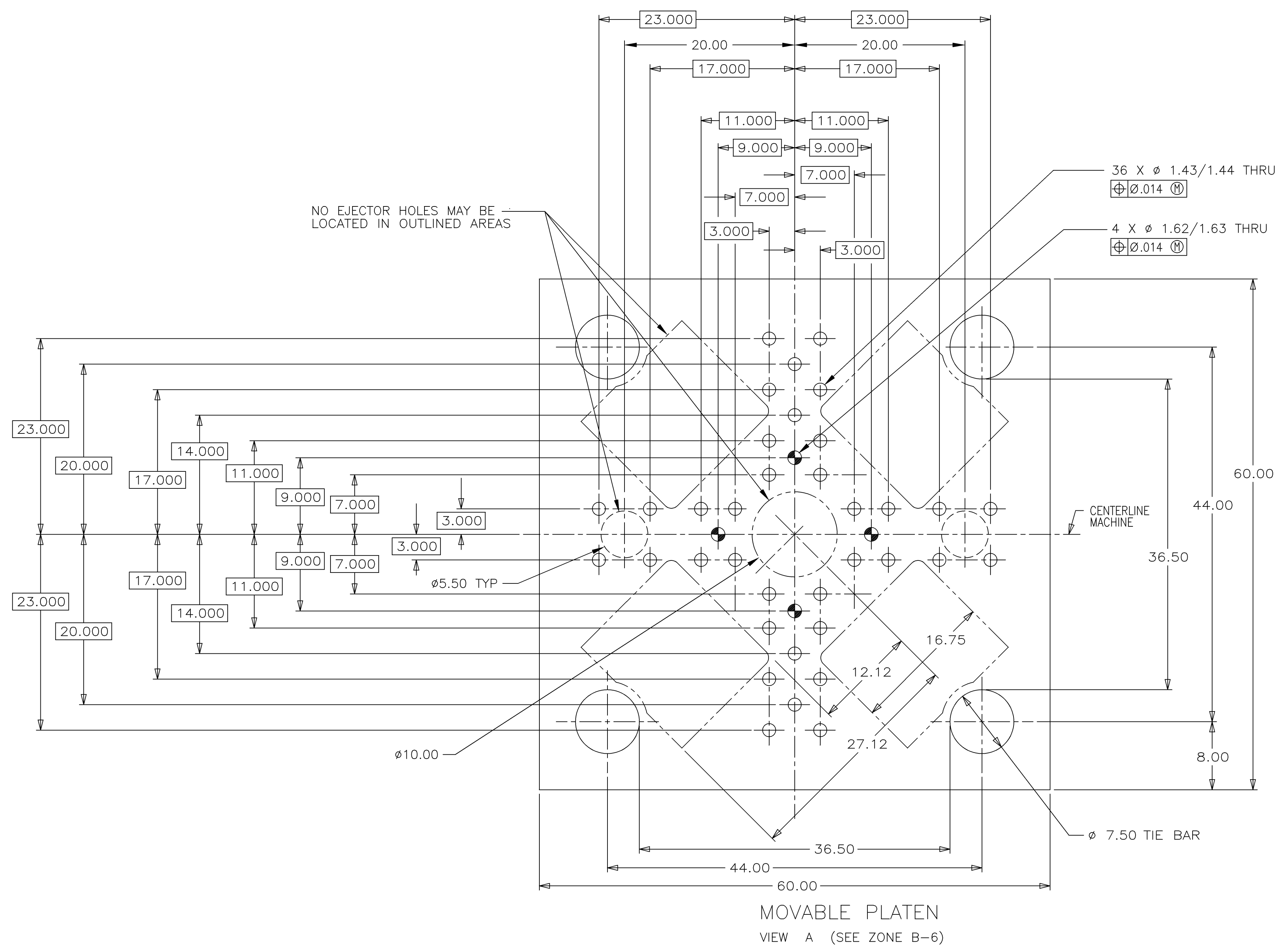


REFERENCE DRAWINGS	
DWG NO	DRAWING NAME
72614-E	DIE INTERFACE
72615-D	SHOT END LAYOUT
72617-D	SUPPORT POINTS AND FLOOR LOADING
72616-E	LADLE AND FURNACE INTERFACE

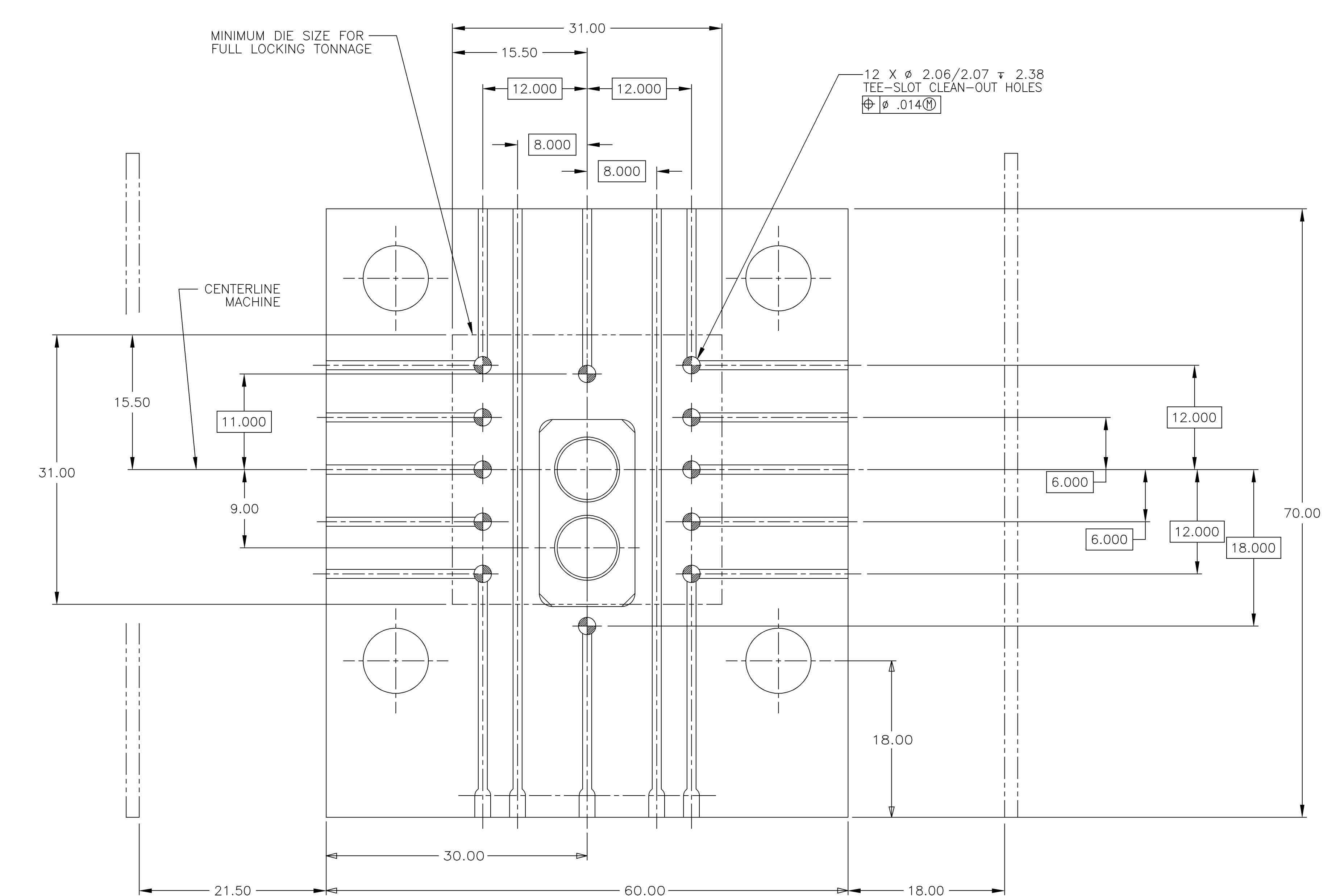
NOTES: 1. DO NOT SCALE DRAWING

PROPRIETARY THIS MATERIAL IS THE EXCLUSIVE PROPERTY OF PRINCE MACHINE CORPORATION AND MUST BE RETURNED TO PRINCE IMMEDIATELY UPON REQUEST. THIS MATERIAL AND THE INFORMATION ILLUSTRATED OR CONTAINED HEREIN MAY NOT BE REPRODUCED, COPIED, USED OR TRANSMITTED IN ANY MANNER OR BY ANY MEANS WITHOUT THE PRIOR WRITTEN CONSENT OF PRINCE MACHINE CORPORATION.		GENERAL INFORMATION, MODEL 836 DRAWING NO: 72613-E SHEET: 1 OF 1	
MATERIAL: ALUMINUM HEAT TREATMENT: T6 FINISHED SIZE: AS SHOWN EST. WEIGHT: 95,000 LBS TOLERANCES: X ±.06 XX ±.03 XXX ±.025 XXXX ±.021	CATEGORY: 9-10-99 CLASS: 9-10-99 SURCLASS: 9-10-99 REV: 72079-E DESIGNED BY: 1	THIRD ANGLE PROJECTION NAME: PRINCE MACHINE DATE: 9-10-99 SCALE: 1:16 DRAWING NO: 72613-E SHEET: 1 OF 1	REVISION LEVEL: A
NO MANUAL CHANGES		UNLESS OTHERWISE SPECIFIED, ALL FINISHES, TOLERANCES AND DIMENSIONS SHALL CONFORM TO PRINCE SPECIFICATION 40000-S	

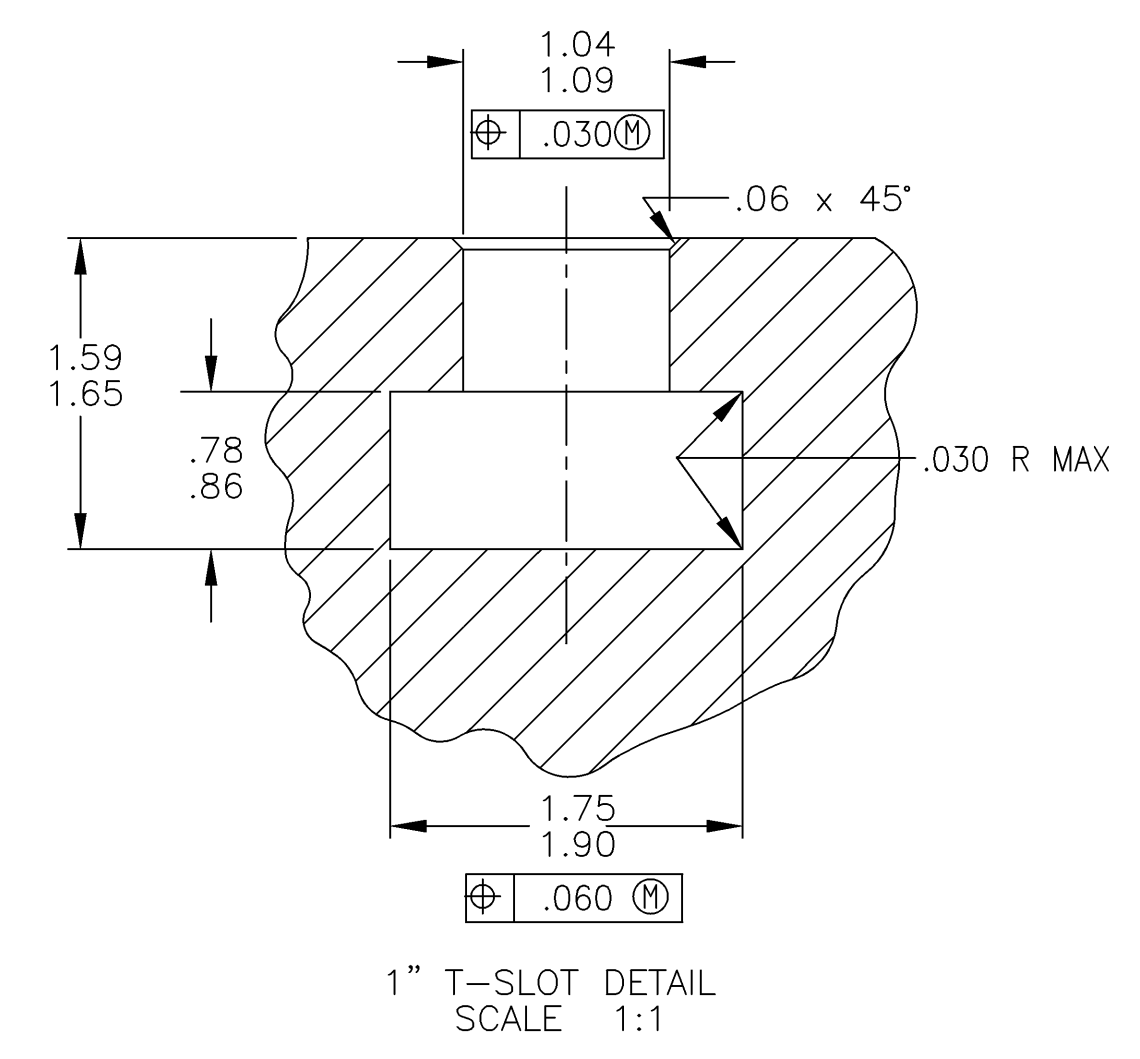
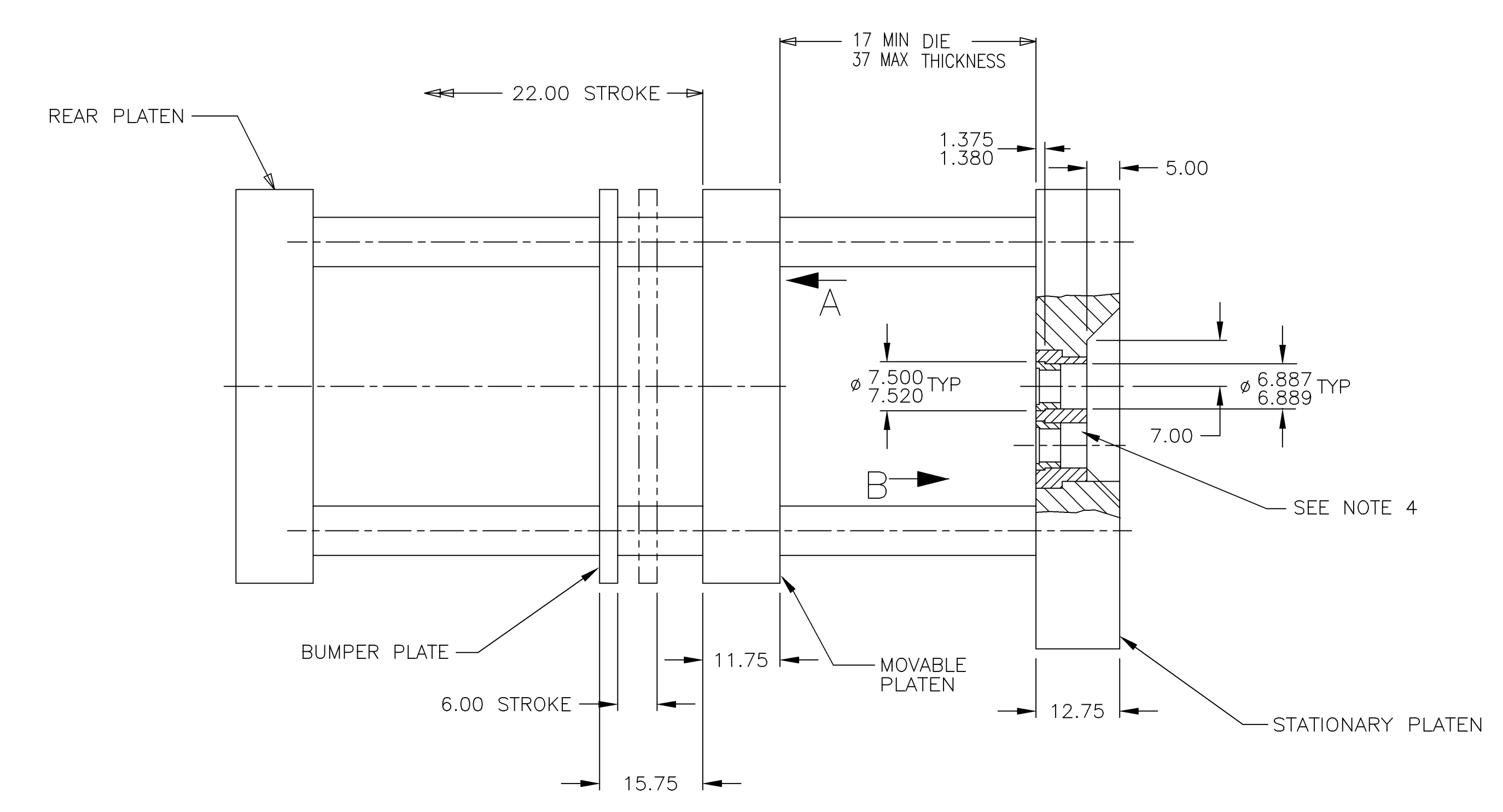
REVISIONS					
REV	DESCRIPTION	BY	DATE	ZONE	M/CK'D
A	ORIGINAL DRAWING				KWH



MOVABLE PLATEN
VIEW A (SEE ZONE B-6)



STATIONARY PLATEN
VIEW B (SEE ZONE B-6)



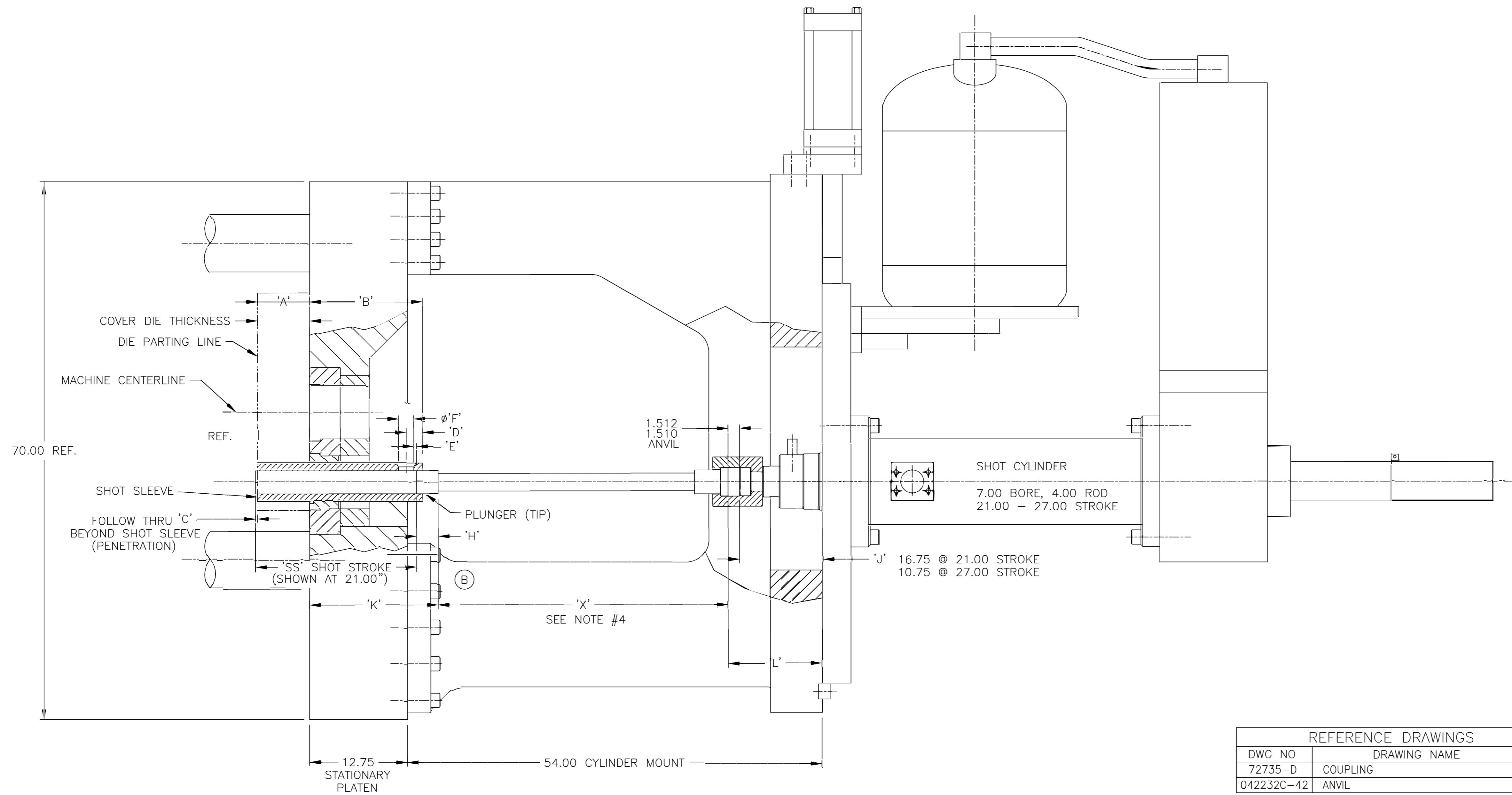
- NOTES: 1. DO NOT SCALE DRAWING
2. LOCATION OF T-SLOTS AND CLAMP STAKE HOLES IN MOVABLE PLATEN SAME AS STATIONARY PLATEN
3. INSERT SHOWN AT CENTERLINE AND 9.00 BELOW CENTERLINE SHOT POSITIONS.

PROPRIETARY THIS MATERIAL IS THE EXCLUSIVE PROPERTY OF PRINCE MACHINE CORPORATION AND MUST BE RETURNED TO PRINCE IMMEDIATELY UPON REQUEST. THIS MATERIAL AND THE INFORMATION ILLUSTRATED OR CONTAINED HEREIN MAY NOT BE REPRODUCED, COPIED, USED OR TRANSMITTED IN WHOLE OR IN PART IN ANY MANNER WITHOUT THE PRIOR WRITTEN CONSENT OF PRINCE MACHINE CORPORATION.		MATERIAL: HEAT TREATMENT: FINISH SIZE: EST. WEIGHT:		PRINCE MACHINE DIE INTERFACE MODEL 836	
TOLERANCES: XX ±.06 XXX ±.03 XXXX ±.02 XXXXX ±.01	CLASS: DA0008 TYPICAL: --- ASST. NO: ---	THIRD ANGLE PROJECTION 	DRAWN BY: MTD DATE: 9-16-98 SCALE: NONE SHEET: 1 OF 1	DRAWING NO.: 72614-E REVISION LEVEL: A	NO MANUAL CHANGES

REVISIONS						
REV	DESCRIPTION	BY	DATE	ZONE	M	CK'D
A	ORIGINAL DRAWING					KWH
B	10.75 WAS 14.75, 1.512 WAS 1.50, ADDED 'H', REVISED LOCATION OF 'K' DIM	MLH	10/16/02	D-2 D-2 B-5 B-5		MLH

PLUNGER LENGTH CALCULATIONS

- CALCULATE DESIRED SHOT STROKE.
SHOT STROKE (SS)= A + B + C - D + E + (.5 F)
- CALCULATE DIMENSION 'J' (FOR ADJUSTING STROKE LIMITER)
J= 10.75 + (27.00 - SS)
- CALCULATE PLUNGER LENGTH
L= J + 1.512
K= B - D + E + (.5 F) + H
PLUNGER LENGTH (X)= 66.75 - K - L



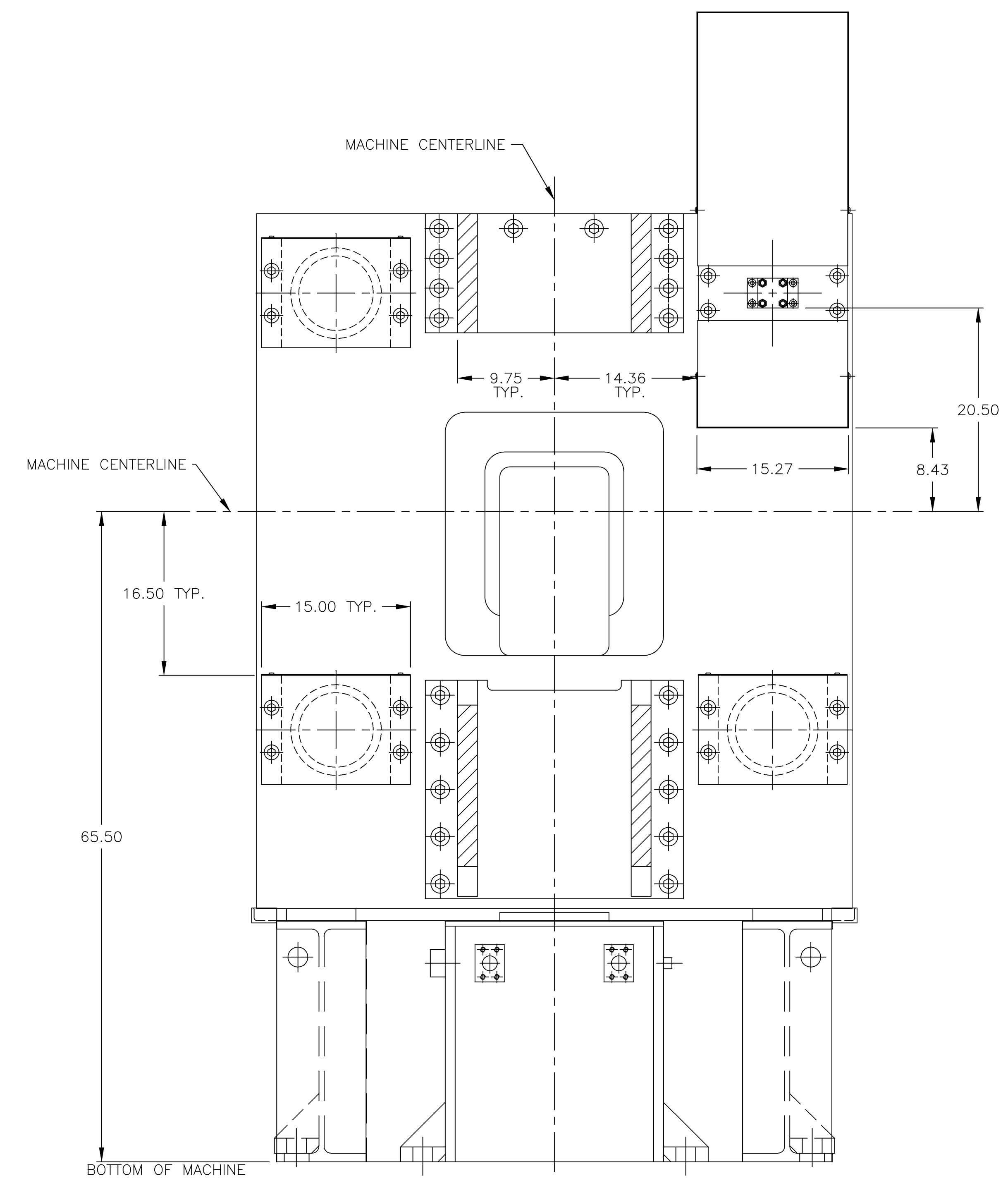
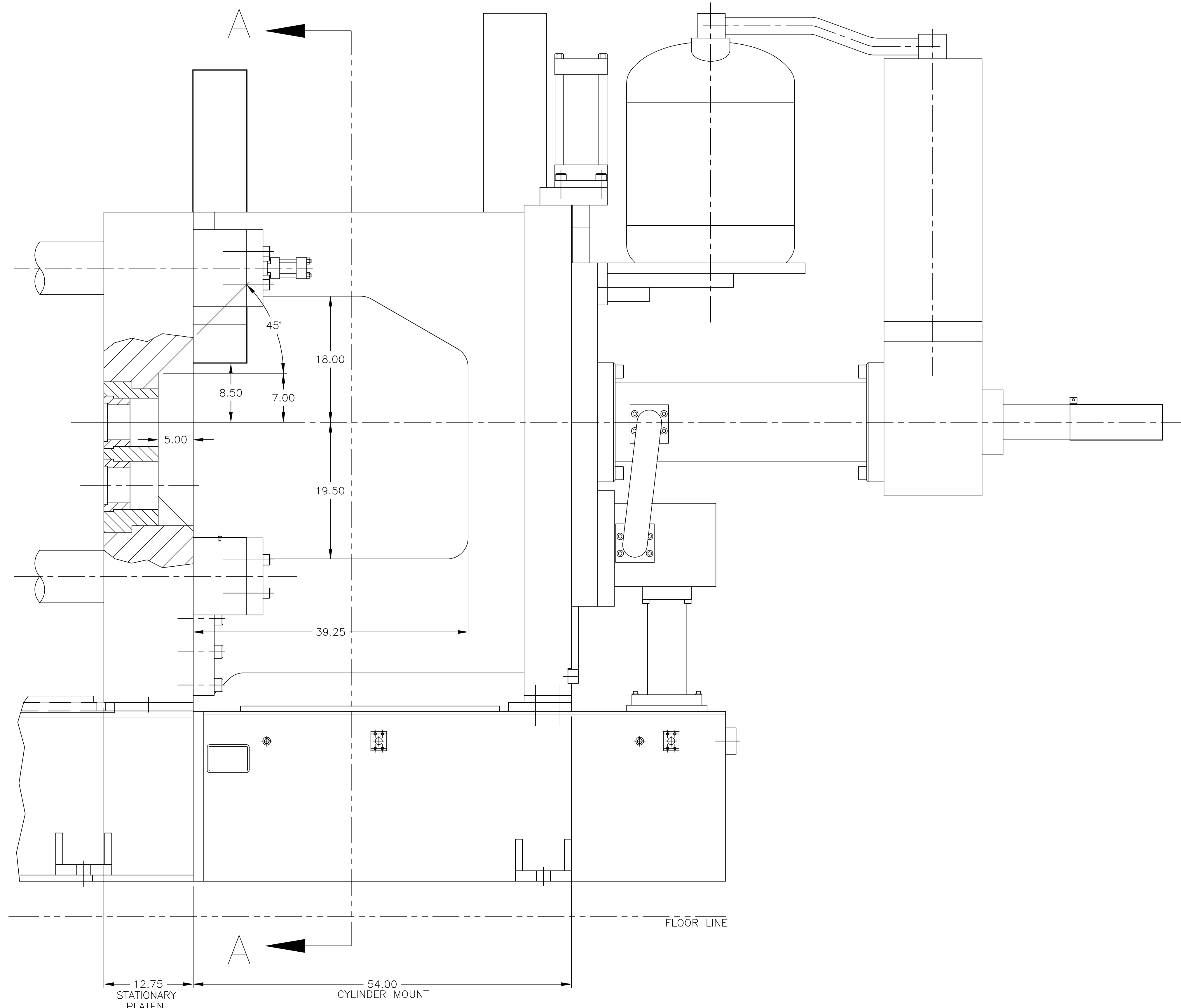
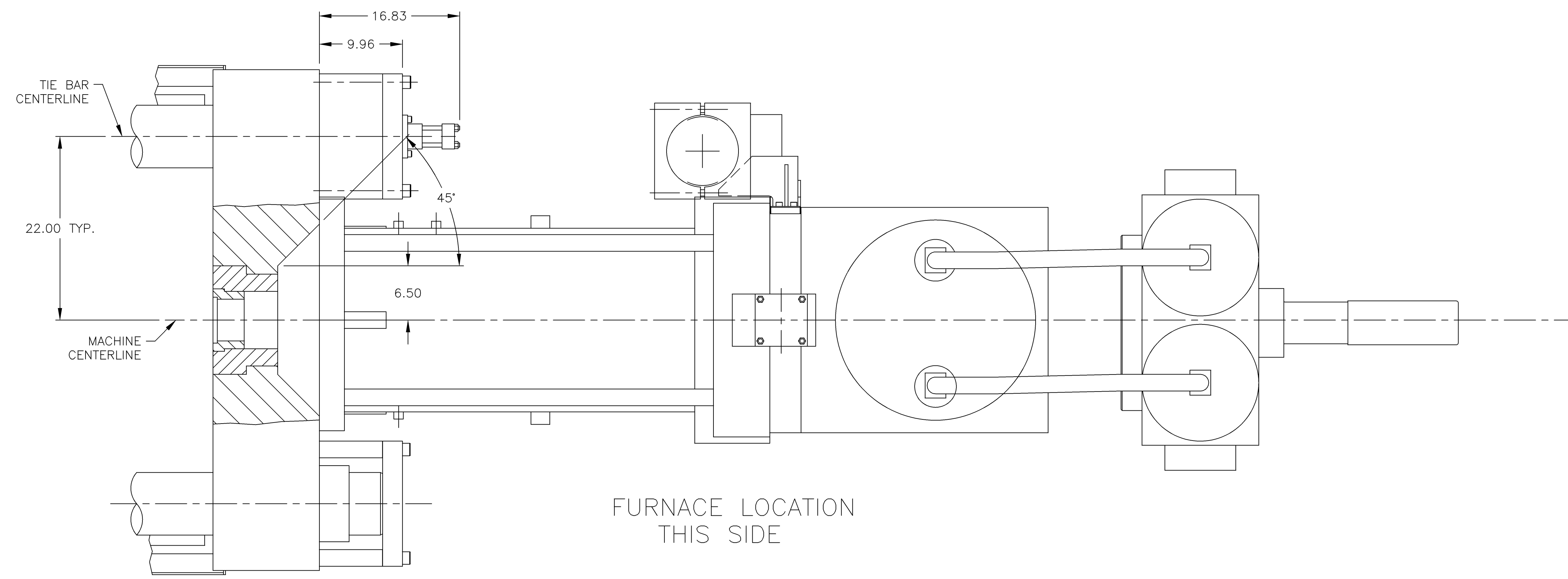
REFERENCE DRAWINGS	
DWG NO	DRAWING NAME
72735-D	COUPLING
042232C-42	ANVIL

- TO DETERMINE PLUNGER ROD LENGTH (DIMENSION 'X') SEVERAL FACTORS MUST BE KNOWN IN ADDITION TO THE DIMENSIONS GIVEN:
 - SHOT SLEEVE DIMENSIONS ('A','B','D','E')
 - POUR HOLE SIZE ('F')
 - PLUNGER (TIP) LENGTH ('H')
 - FOLLOW THRU BEYOND SHOT SLEEVE ('C')
 - SHOT CYLINDER STROKE ('SS')
- THE PURPOSE OF THIS DOCUMENT IS TO HELP DETERMINE PLUNGER ROD LENGTH (DIMENSION 'X')
- DIMENSIONS ARE NOMINAL WITH NO TOLERANCE IMPLIED. DISREGARD TITLE BLOCK TOLERANCE INFORMATION

NOTES: 1. DO NOT SCALE DRAWING

PROPRIETARY THIS MATERIAL IS THE EXCLUSIVE PROPERTY OF IDRAPRINCE AND MUST BE RETURNED TO IDRAPRINCE IMMEDIATELY UPON REQUEST THIS MATERIAL AND THE INFORMATION ILLUSTRATED OR CONTAINED HEREIN MAY NOT BE REPRODUCED, COPIED, USED OR TRANSMITTED IN WHOLE OR IN PART IN ANY WAY WITHOUT THE PRIOR WRITTEN CONSENT OF IDRAPRINCE.	MATERIAL		HEAT TREATMENT			THIRD ANGLE PROJECTION 	NAME SHOT END LAYOUT, MODEL 836	
	FINISHED SIZE		EST. WEIGHT					
	TOLERANCES: .X ±.06 .XX ±.03 .XXX ±.005 .XXXX ±.001		CATEGORY	CLASS	DA0008	DRAWN BY MTD	DATE 9-10-99	SCALE 1:8
	UNLESS OTHERWISE SPECIFIED: ⌀ 0.014 @ ALL THRU HOLES ⌀ 0.014 @ ALL TAPPED HOLES		ALL FINISHES, TOLERANCES AND DIMENSIONS SHALL CONFORM TO IDRAPRINCE SPECIFICATION 40000-S		ASSY NO. SUBCLASS	REF 72085-D	1 OF 1	DRAWING NO. 72615-D

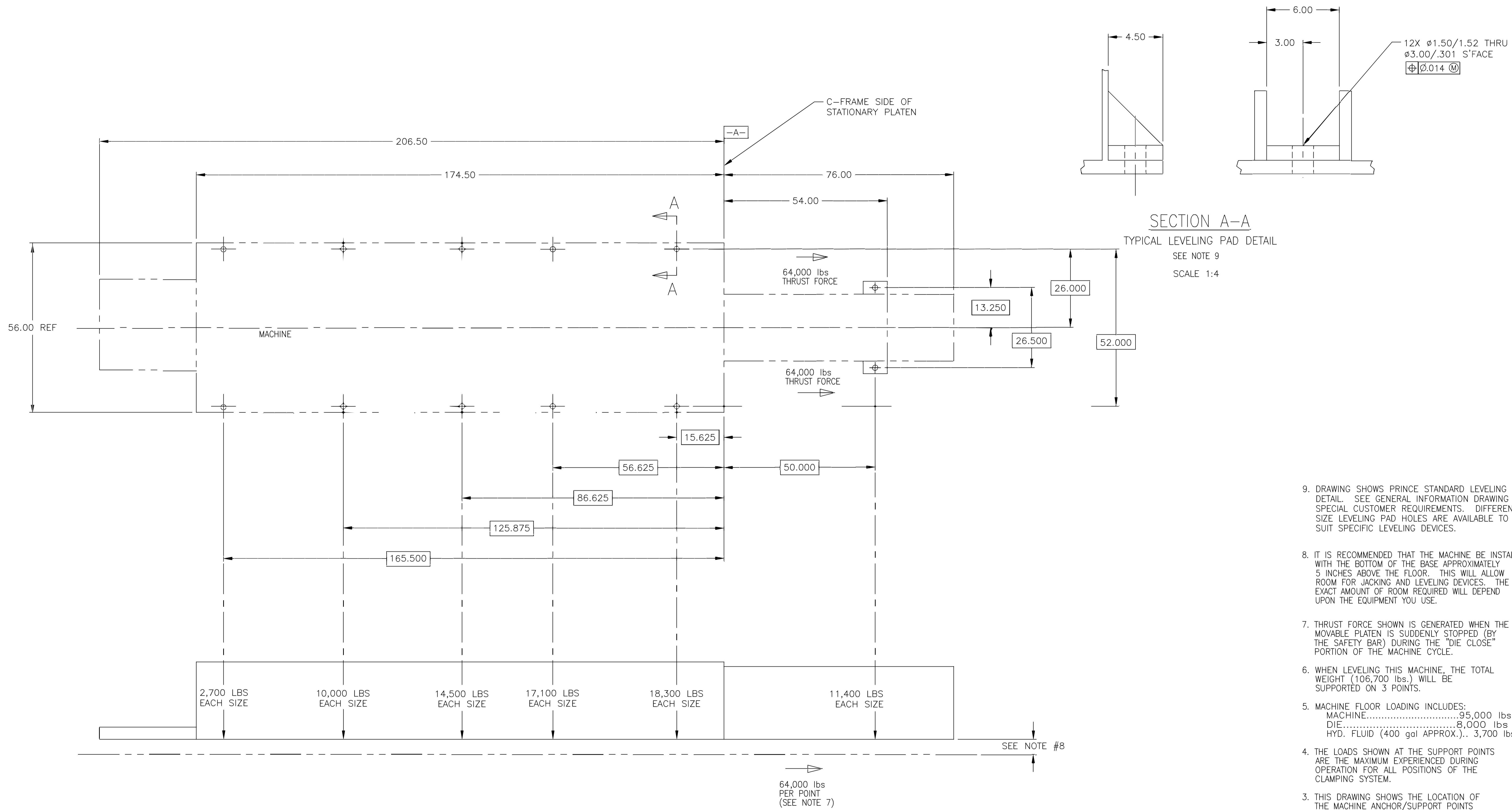
REVISIONS						
REV	DESCRIPTION	BY	DATE	ZONE	M	CK'D
A	ORIGINAL DRAWING					KWH



2. DIMENSIONS ARE NOMINAL WITH NO TOLERANCE IMPLIED. DISREGARD TITLE BLOCK TOLERANCE INFORMATION.
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PROPRIETARY THIS MATERIAL IS THE EXCLUSIVE PROPERTY OF PRINCE MACHINE CORPORATION AND MUST BE RETURNED TO PRINCE IMMEDIATELY UPON REQUEST. THIS MATERIAL AND THE INFORMATION ILLUSTRATED OR CONTAINED HEREIN MAY NOT BE REPRODUCED, COPIED, USED OR TRANSMITTED IN ANY MANNER OR BY ANY MEANS WITHOUT THE PRIOR WRITTEN CONSENT OF PRINCE MACHINE CORPORATION.		MATERIAL: HEAT TREATMENT: FINISHED SIZE:		PRINCE MACHINE LAYOUT, LADLE AND FURNACE INTERFACE, MODEL 836A	
EST. WEIGHT: TOLERANCES: XX ±.06 XXX ±.03 XXXX ±.025 XXXXX ±.021	CATEGORY: CLASS: SUBCLASS:	THIRD ANGLE PROJECTION DRAWN BY: MTD DATE: 9-13-99 SCALE: 1:8 SHEET: 1 of 1	DRAWING NO.: 72137-E REVISION LEVEL: A	UNLESS OTHERWISE SPECIFIED, ALL FINISHES, TOLERANCES AND DIMENSIONS SHALL CONFORM TO PRINCE SPECIFICATION 40000-S	
NO MANUAL CHANGES		72616-E			

REVISIONS					
REV	DESCRIPTION	BY	DATE	ZONE	CHK'D
A	ORIGINAL DRAWING				KWH



9. DRAWING SHOWS PRINCE STANDARD LEVELING PAD DETAIL. SEE GENERAL INFORMATION DRAWING FOR SPECIAL CUSTOMER REQUIREMENTS. DIFFERENT SIZE LEVELING PAD HOLES ARE AVAILABLE TO SUIT SPECIFIC LEVELING DEVICES.
8. IT IS RECOMMENDED THAT THE MACHINE BE INSTALLED WITH THE BOTTOM OF THE BASE APPROXIMATELY 5 INCHES ABOVE THE FLOOR. THIS WILL ALLOW ROOM FOR JACKING AND LEVELING DEVICES. THE EXACT AMOUNT OF ROOM REQUIRED WILL DEPEND UPON THE EQUIPMENT YOU USE.
7. THRUST FORCE SHOWN IS GENERATED WHEN THE MOVABLE PLATEN IS SUDDENLY STOPPED (BY THE SAFETY BAR) DURING THE "DIE CLOSE" PORTION OF THE MACHINE CYCLE.
6. WHEN LEVELING THIS MACHINE, THE TOTAL WEIGHT (106,700 lbs.) WILL BE SUPPORTED ON 3 POINTS.
5. MACHINE FLOOR LOADING INCLUDES:
MACHINE.....95,000 lbs
DIE.....8,000 lbs
HYD. FLUID (400 gal APPROX.).. 3,700 lbs
4. THE LOADS SHOWN AT THE SUPPORT POINTS ARE THE MAXIMUM EXPERIENCED DURING OPERATION FOR ALL POSITIONS OF THE CLAMPING SYSTEM.
3. THIS DRAWING SHOWS THE LOCATION OF THE MACHINE ANCHOR/SUPPORT POINTS AND FLOOR LOADING. THIS SHOULD BE USED FOR DETERMINING FOUNDATION REQUIREMENTS AND SUITABILITY OF LEVELING SUPPORT DEVICES.
2. DESIGN REF LOAD DIAGRAM #62260-D

NOTES: 1. DO NOT SCALE DRAWING

PROPRIETARY <small>THIS MATERIAL IS THE EXCLUSIVE PROPERTY OF PRINCE MACHINE CORPORATION AND MUST BE RETURNED TO PRINCE IMMEDIATELY UPON REQUEST. THIS MATERIAL AND THE INFORMATION ILLUSTRATED OR CONTAINED HEREIN MAY NOT BE REPRODUCED, COPIED, USED OR TRANSMITTED IN WHOLE OR IN PART IN ANY WAY WITHOUT THE PRIOR WRITTEN CONSENT OF PRINCE MACHINE CORPORATION.</small>		MATERIAL HEAT TREATMENT FINISHED SIZE EST. WEIGHT		PRINCE MACHINE	
TOLERANCES .X ±.06 .XXX ±.03 .XXXX ±.005 .XXXX ±.001		CATEGORY CLASS DA000B		THIRD ANGLE PROJECTION DRAWN BY MTD	
UNLESS OTHERWISE SPECIFIED ALL FINISHES, TOLERANCES AND DIMENSIONS SHALL CONFORM TO PRINCE SPECIFICATION 40000-S		SUBCLASS ASSY NO.		DATE 5-28-99 SCALE 1:16 DRAWING NO. 72617-D REVISION LEVEL A	
NO MANUAL CHANGES		REF 72111-D		1 OF 1	