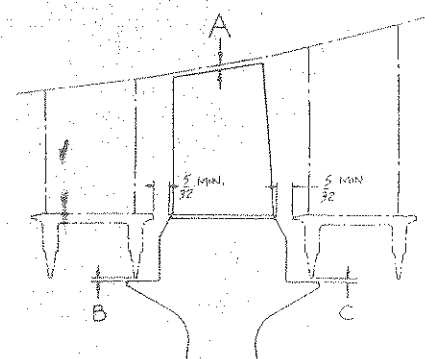
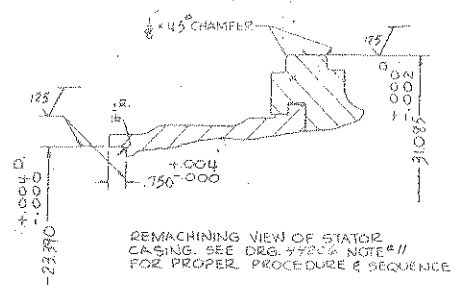


NOTES:
 1. FINISH-DRAWING COMPENSATION MUST BE APPLIED AT ALL
 MOUNTING POINTS (BOLTS, STUDS & NUT THREADS) AT FINAL
 ASSEMBLY ONLY. USE FETERO-C5 FLANGE COMPOUND
 2. ALL PARTS ARE MANUFACTURED BY NATIONAL
 ENGINEERING PRODUCTS INC. WASHINGTON, D.C.
 3. WEIGH CASING ASSEMBLY & REPORT WEIGHT
 TO ENGINEERING DEPARTMENT.
 4. EXPANDED ASSEMBLY NOTES SEE DRG. 44206.

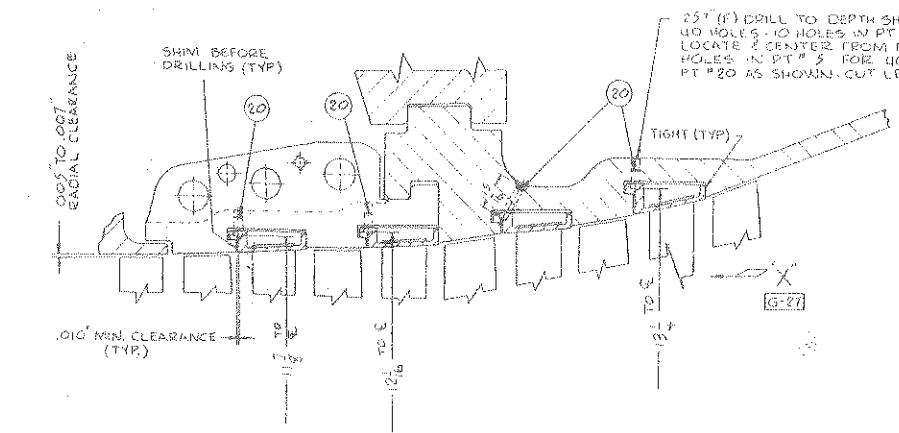


TABULATION OF RADIAL CLEARANCES

DISC STAGE	A	B	C
1	.060 TO .064		.055 TO .057
2	.060 TO .064	.055 TO .057	.055 TO .057
3	.050 TO .054	.040 TO .042	.040 TO .042
4	.050 TO .054	.040 TO .042	.040 TO .042
5	.050 TO .054	.040 TO .042	



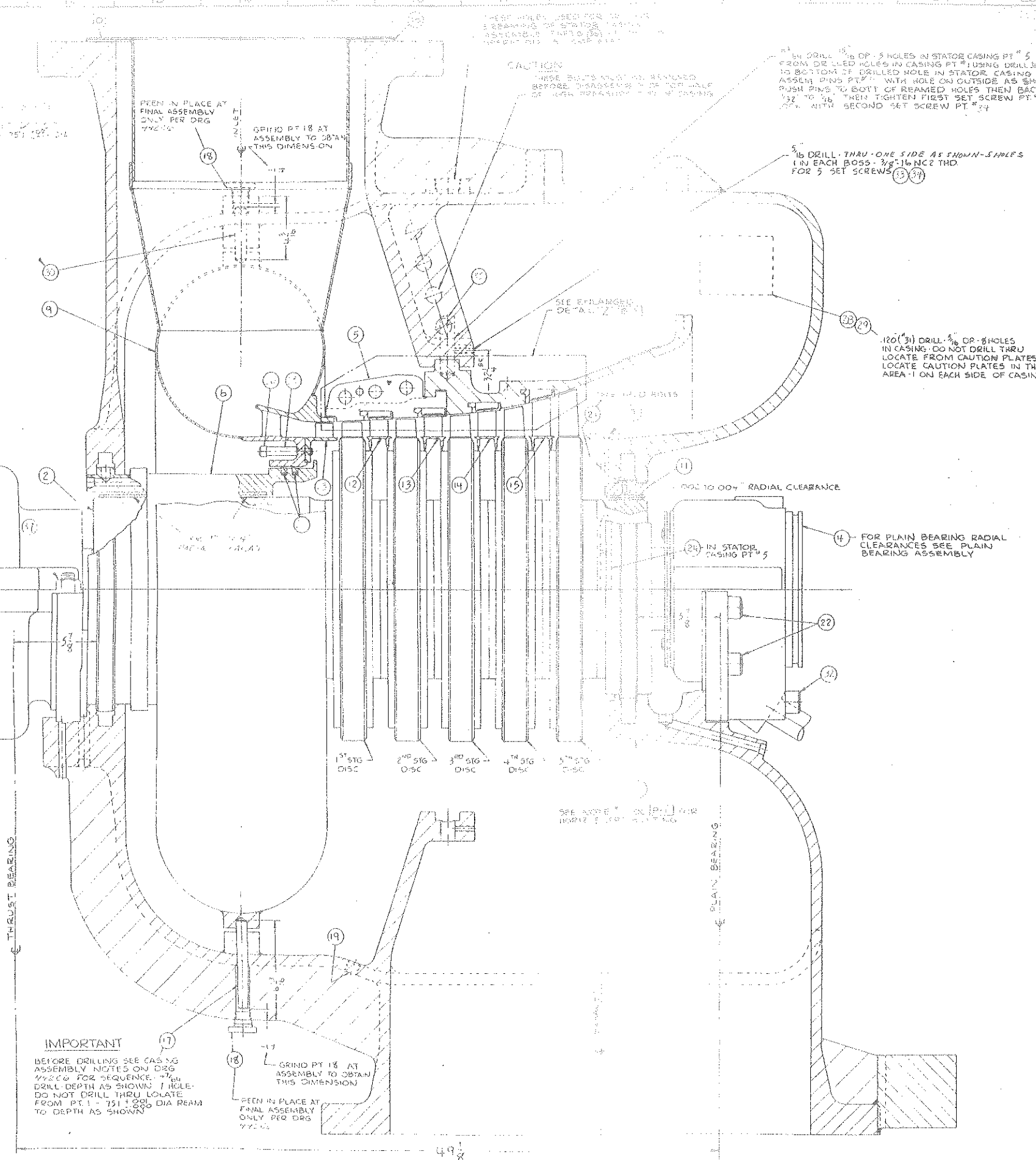
REMANUFACTURING VIEW OF STATOR
 CASING. SEE DRG. 44206 NOTE #11
 FOR PROPER PROCEDURE & SEQUENCE



ENLARGED DETAIL "Z" (1/8)
 SCALE 6 IN 1 FT

IMPORTANT:
 BEFORE DRILLING SEE CASING
 ASSEMBLY NOTES ON DRG.
 44206 FOR SEQUENCE. DO NOT
 DRILL DEPTH AS SHOWN. DO NOT
 DRILL THRU LOCATE FROM PT 1 - 751 ± .001 DIA REAM
 TO DEPTH AS SHOWN

FOR THRUST BEARING RADIAL
 CLEARANCES SEE THRUST
 BEARING ASSEMBLY



CAUTION:
 THESE BOLTS MUST BE REMOVED
 BEFORE DISASSEMBLY. DO NOT WALK
 ON THEM. IF THEY ARE REMOVED, THEY
 MUST BE REPLACED WITH NEW BOLTS.

DO NOT DRILL 1/8" DIA HOLES IN STATOR CASING PT 5. U
 FROM DEEDED HOLES IN CASING PT 5 USING DRILLING
 TO BOTTOM OF DRILLED HOLE IN STATOR CASING. P
 ASSEMBLY PINS PT 5 WITH HOLE ON OUTSIDE AS SHOWN
 PUSH PINS TO BOTTOM OF REAMED HOLES THEN BACK
 1/2" TO 1/4" THEN TIGHTEN FIRST SET SCREW PT 5
 WITH SECOND SET SCREW PT 5

1/8" DRILL THRU ONE SIDE AS SHOWN - SHIP
 IN EACH BOSS - 3/8" 16 NC2 THD
 FOR 5 SET SCREWS

1/20 (3/16) DRILL 1/8" DIA HOLES
 IN CASING DO NOT DRILL THRU
 LOCATE FROM CAUTION PLATES
 LOCATE CAUTION PLATES IN THIS
 AREA - 1 ON EACH SIDE OF CASING

0.002 TO 0.004" RADIAL CLEARANCE

FOR PLAIN BEARING RADIAL
 CLEARANCES SEE PLAIN
 BEARING ASSEMBLY

IMPORTANT:
 BEFORE DRILLING SEE CASING
 ASSEMBLY NOTES ON DRG.
 44206 FOR SEQUENCE. DO NOT
 DRILL DEPTH AS SHOWN. DO NOT
 DRILL THRU LOCATE FROM PT 1 - 751 ± .001 DIA REAM
 TO DEPTH AS SHOWN

GRIND PT 18 AT
 ASSEMBLY TO OBTAIN
 THIS DIMENSION

PEEN IN PLACE AT
 FINAL ASSEMBLY
 ONLY PER DRG
 44206

UNLESS OTHERWISE SPECIFIED

STAINLESS STEEL	304
ALUMINUM	6061-T6
COPPER	C110
BRASS	C360
STEEL	A36
IRON	1018
WELDS	WELDED
FINISH	AS MANUFACTURED
TEMPERATURE	AS MANUFACTURED
STRESS	AS MANUFACTURED
WARRANTY	AS MANUFACTURED

NOTE: THE FOLLOWING DIMENSIONS ARE FOR THE EXPANDER ASSEMBLY ONLY. THE DIMENSIONS FOR THE COMPRESSOR ASSEMBLY ARE SHOWN IN THE DRAWING OF THE COMPRESSOR ASSEMBLY.

FOR THRUST BEARING RADIAL CLEARANCES SEE THRUST BEARING ASSEMBLY

CAUTION: THESE DIMENSIONS ARE STANDARD BEFORE THE EXPANDER IS ASSEMBLED. IF THE DIMENSIONS OF THE EXPANDER ARE NOT STANDARD, THE DIMENSIONS OF THE EXPANDER MUST BE USED.

IN DRILLING OF 5 HOLES IN STATOR CASING PT 5, LOCATE FROM DRILLED HOLES IN CASING PT 5 USING DRILLING 1.000-1.000 BEAM TO BOTTOM OF DRILLED HOLE IN STATOR CASING PT 5. ASSEMBLE PINS PT 5 WITH HOLE ON OUTSIDE AS SHOWN. PUSH PINS TO BOTTOM OF BEAMED HOLES THEN BACK OUT TO 1/2" TO 1/4". THEN TIGHTEN FIRST SET SCREW PT 5 2 1/2" WITH SECOND SET SCREW PT 5 2 1/2"

1/8" DRILL THRU ONE SIDE AT SHOWN SHIMLES IN EACH BOSS. 3/8" 1/8" NC2 THD. FOR 5 SET SCREWS

1/20 (31) DRILL 1/8" DP HOLES IN CASING. DO NOT DRILL THRU. LOCATE FROM CAUTION PLATES PT 2. LOCATE CAUTION PLATES IN THIS AREA-1 ON EACH SIDE OF CASING

SEE TO 0.004" RADIAL CLEARANCE

FOR PLAIN BEARING RADIAL CLEARANCES SEE PLAIN BEARING ASSEMBLY

VIEW FROM X-C-B FOR PARTS 12, 13, 14 & 15

INSERT ALL TEN (10) STATOR BLADE SEGMENTS INTO THEIR SPECIFIED HOLDING GROOVES IN THE STATOR CASING PART 5 & CLOSE UP ALL CLEARANCES BETWEEN INDIVIDUAL SEGMENTS MEASURE THE TOTAL ASSEMBLED RING CLEARANCE & DIVIDE THIS CLEARANCE BY TEN (10) THE NUMBER OF SEGMENTS PER RING. THIS WILL GIVE THE NECESSARY GAP BETWEEN THE SEGMENTS WHICH WILL EVENLY COMPENSATE FOR EXPANSION OF SEGMENTS. THIS IS TO BE APPROXIMATELY .032 SHIM THK AS SHOWN. ONCE THE GAP BETWEEN SEGMENTS HAS BEEN DETERMINED, POSITION SEGMENTS WITH REQUIRED AMOUNT OF SHIMS BETWEEN THEM, WITH STATOR BLADE SEGMENT ASSEMBLED IN STATOR CASING & PROPERLY POSITIONED, DRILL THRU CASING & INTO SEGMENTS AS SHOWN IN ENLARGED DETAIL Z-B. ADJUST PIN LENGTH TO 1/8" LESS THAN HOLE DEPTH, INSTALL PINS & PEEN EDGES OF HOLES TO SECURE PINS.

IMPORTANT

BEFORE DRILLING SEE CASING ASSEMBLY NOTES ON DRG 44220 FOR SEQUENCE. DRILL DEPTH AS SHOWN. 1 HOLE. DO NOT DRILL THRU. LOCATE FROM PT 1 - 751 1.000 DIA BEAM TO DEPTH AS SHOWN.

GRIND PT 18 AT ASSEMBLY TO OBTAIN THIS DIMENSION

PEEN IN PLACE AT FINAL ASSEMBLY ONLY PER DRG 44220

DATE	PARTS LIST	LOCAL NO.
2/1/6	174 44220-1	262 44220-1

QUAN	PART	NAME	PART	NO.	PA
INGERSOLL-RAND CO.					
PHILIPSBURG, N.J.					
EXPANDER ASSEMBLY					
DATE	2/1/6	SCALE	1/2" = 1'-0"	DESIGNED BY	340074
DR	340074	CHKD BY		APPROVED BY	