

SCHEDULE 2

FRONT BEARING HOUSING, COMPRESSOR
SHAFTS, ROTORS AND OUTLET CASING

AVON Mk. 20800 SERIES

Ref. No. on Diagram	Parts and Description	Dimensions New	Permissible Worn Dimension	Clearance New	Permissible Worn Clearance	Remarks
1	INLET GUIDE VANE PIVOT BUSH IN FRONT BEARING HOUSING	Housing - bore	<u>0.9375</u> 0.9385	-	<u>0.0015</u> 0.0030	-
		Bush - dia.	<u>0.9355</u> 0.9360	-	-	-
2	INLET GUIDE VANE PIVOT IN BUSH	Bush - bore	<u>0.750</u> 0.751	0.754	<u>0.006</u> 0.008	0.010
		Pivot - dia.	<u>0.743</u> 0.744	0.740	-	
3	AXIAL CLEARANCE BETWEEN INLET GUIDE VANE REAR SUPPORT RING AND STAGE 1 ROTOR BLADE	-	-	<u>Min.</u> 0.128	-	Minimum check clearance on engine build. This figure is cold nipped on allowable clearance, with end float of centre bearing taken up, with rotor fully forward.
4	ROTOR BLADE TIP CLEAR- ANCES	Stage 1 to front of stage 10	-	-	<u>0.060</u> 0.090	-
		Rear of stage 10 to stage 15	-	-	<u>0.065</u> 0.095	-
6	AXIAL CLEARANCE BETWEEN REAR OF STAGE 1 ROTOR BLADE PLAT- FORM AND FRONT EDGE OF STAGE 1 STATOR SHROUD	Blades - width of flange	<u>0.221</u> 0.223	-	<u>0.006</u> 0.006	-
			-	-	<u>0.280</u> 0.358	-

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7	STAGES 4 AND 5 STATOR RETAINING RINGS IN COMPRESSOR CASING Casing - width of groove	<u>0.175</u>	-			
		<u>0.177</u>		<u>0.003</u>	-	
	Ring - width of flange	<u>0.170</u>	-	<u>0.007</u>		
		<u>0.172</u>				
8	STAGE 4 STATOR BLADES IN RETAINING RING Ring - width of groove	<u>0.225</u>	-			
		<u>0.226</u>		<u>0.002</u>	-	
	Blade - width of flange	<u>0.221</u>	-	<u>0.005</u>		
		<u>0.223</u>				
9	STAGE 5 STATOR BLADES IN RETAINING RING Ring - width of groove	<u>0.225</u>	-			
		<u>0.226</u>		<u>0.001</u>	-	
	Blade - width of flange	<u>0.222</u>	-	<u>0.004</u>		
		<u>0.224</u>				
10	STAGE 6 ROTOR BLADES IN FRONT COMPRESSOR CASING Casing - width of groove	<u>0.175</u>	-			
		<u>0.177</u>		<u>0.001</u>	-	
	Blade - width of flange	<u>0.172</u>	-	<u>0.005</u>		
		<u>0.174</u>				
11	STAGES 7, 8 AND 9 STATOR BLADES IN INTERMEDIATE COMPRESSOR CASING Casing - width of groove	<u>0.150</u>	-			
		<u>0.152</u>		<u>0.001</u>	-	
	Blade - width of flange	<u>0.147</u>	-	<u>0.005</u>		
		<u>0.159</u>				

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12	STAGE 10 STATOR FLANGED RETAINING RINGS IN COMPRESSOR OUTLET CASING	Casing - bore	<u>30.906</u> 30.909	-	<u>0.008</u> 0.014	-	
		Ring - dia.	<u>30.895</u> 30.898	-	-	-	
13	STAGES 10-14 STATORS AND O. G. V. IN RETAINING RINGS AND OUTLET CASING	Ring - width of groove	<u>0.075</u> 0.077	-	<u>0.003</u> 0.007	-	
		Blade - width of flange	<u>0.070</u> 0.072	-	-	-	
14	STAGES 10 AND 11 STATOR RETAINING RING IN OUT- LET CASING	Casing - bore	<u>30.756</u> 30.759	-	<u>0.008</u> 0.014	-	
		Ring - dia.	<u>30.745</u> 30.748	-	-	-	
15	STAGES 11 AND 12 STATOR RETAINING RING IN OUT- LET CASING	Casing - bore	<u>30.356</u> 30.359	-	<u>0.008</u> 0.014	-	
		Ring - dia.	<u>30.345</u> 30.348	-	-	-	
16	STAGES 12 AND 13 STATOR RETAINING RING IN OUT- LET CASING	Casing - bore	<u>29.956</u> 29.959	-	<u>0.008</u> 0.014	-	
		Ring - dia.	<u>29.945</u> 29.948	-	-	-	

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Ref. No. on Diagram	Parts and Description	Dimensions New	Permissible Worn Dimension	Clearance New	Permissible Worn Clearance	Remarks
17	STAGES 13 AND 14 STATOR RETAINING RING IN OUT- LET CASING Casing - bore	<u>29.556</u>	-			
		29.559		<u>0.008</u>	-	
	Ring - dia.	<u>29.545</u>	-	<u>0.014</u>		
		29.548				
18	STAGE 14 STATOR RETAINING RING IN OUT- LET CASING Casing - bore	<u>29.156</u>	-			
		29.159		<u>0.008</u>	-	
	Ring - dia.	<u>29.145</u>	-	<u>0.014</u>		
		29.148				
19	O.G. V. RETAINING RING IN STAGE 14 STATOR RETAINING RING Stator ring - bore	<u>28.990</u>	-			
		28.994		<u>0.002</u>	-	
	O. g. v. ring - dia.	<u>28.985</u>	-	<u>0.009</u>		
		28.988				
20	RADIAL CLEARANCE BETWEEN O. G. V. AND STAGE 15 SEAL CARRIER	-	-	<u>0.010</u> 0.027	-	
21	STAGE 15 SEALING RING IN CARRIER Carrier - bore	<u>23.500</u>	-			
		23.502		Tight <u>0.004</u>	-	Mod. 1960
	Ring - dia.	<u>23.502</u>	-	<u>0.000</u>		
		23.504				
22	CLEARANCE ON DIAMETER BETWEEN STAGE 15 SEAL AND SEALING RING Ring - bore	<u>22.227</u>	-			
		22.229		<u>0.052</u>	-	Mod. 1960
	Seal - dia.	<u>22.173</u>	-	<u>0.056</u>		
		22.175				

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23	COMPRESSOR REAR SHAFT FRONT LABYRINTH SEAL ON SHAFT. Seal - bore	<u>7.989</u>	-	Tight	-	
		<u>7.990</u>		<u>0.016</u>		
	Shaft - dia.	<u>8.004</u>	-	0.014		
		<u>8.005</u>		Tight		
24	COMPRESSOR REAR SHAFT REAR LABYRINTH SEAL ON SHAFT Seal - bore	<u>5.250</u>	-	Tight	-	
		<u>5.251</u>		<u>0.004</u>		
	Shaft - dia.	<u>5.253</u>	-	0.002		
		<u>5.254</u>		Tight		
25	REAR COMPRESSOR SHAFT AND WHEELCASE DRIVING PINION Backlash between serrations	-	-	<u>0.001</u>	0.006	
				<u>0.003</u>		
26	BUSH IN WHEELCASE DRIVING PINION Pinion - bore	<u>4.8000</u>	-	Tight	-	
		<u>4.8005</u>		<u>0.002</u>		
	Bush - dia.	<u>4.8015</u>	-	0.001		
		<u>4.8020</u>		Tight		
27	WHEELCASE DRIVING PINION BUSH ON REAR SHAFT Bush - bore	<u>4.5000</u>	4.5025		0.003	
		<u>4.5005</u>		<u>0.0005</u>		
	Shaft - dia.	<u>4.4990</u>	4.4970	<u>0.0015</u>		
		<u>4.4995</u>				

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Ref. No. on Diagram	Parts and Description	Dimensions New	Permissible Worn Dimension	Clearance New	Permissible Worn Clearance	Remarks
28	CENTRE COUPLING SCREWED BALL IN REAR SHAFT Shaft - spherical bore	<u>4.0005</u>	4.0020	<u>0.0005</u> 0.0015	0.002	
		4.0010				
	Ball - spherical dia.	<u>3.9995</u>	3.9985	0.0010 0.0017		
		4.0000				
29	STAGES 14-15 PIN RETAIN- ING RING IN STAGE 15 WHEEL Wheel - bore	<u>23.500</u>	-	<u>0.007</u> 0.014		
		23.505				
	Ring - dia.	<u>23.491</u>	-	Tight 0.005 0.001 Tight		
		23.493				
30	STAGES 14-15 PIN RETAIN- ING RING IN STAGE 14 WHEEL Wheel - bore	<u>23.488</u>	-	0.007 0.013	-	Pre-Mod. 1446
		23.490				
	Ring - dia.	<u>23.491</u>	-	0.0005 0.0045		
		23.493				
31	STAGES 13-14 PIN RETAIN- ING RING IN STAGE 14 WHEEL. Wheel - bore	<u>23.500</u>	-	0.0005 0.0045	-	Mod. 1446
		23.505				
	Ring - dia.	<u>23.492</u>	-	0.0005 0.0045		
		23.493				
Wheel - bore	<u>23.4935</u>	-	0.0005 0.0045			
	23.4955					
Ring - dia.	<u>23.4910</u>	-	0.0005 0.0045			
	23.4930					

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32	STAGE 13 - 14 PIN RETAIN- ING RING IN STAGE 13 WHEEL						
	Wheel - bore	<u>23.488</u> 23.489	-	Tight <u>0.005</u>	-	Pre-Mod. 1446	
	Ring - dia.	<u>23.492</u> 23.493	-	0.003 Tight			
	Wheel - bore	<u>23.488</u> 23.490	-	Tight <u>0.005</u>	-		Mod. 1446
	Ring - dia.	<u>23.491</u> 23.493	-	0.001 Tight			
	33	STAGE 12-13 PIN RETAINING RING IN STAGE 13 WHEEL					
		Wheel - bore	<u>23.4935</u> 23.4945	-	<u>0.0005</u> 0.0025	-	Pre-Mod. 1446
		Ring - dia.	<u>23.4920</u> 23.4930	-			
Wheel - bore		<u>23.4935</u> 23.4955	-	<u>0.0005</u> 0.0045	-	Mod. 1446	
Ring - dia.		<u>23.4910</u> 23.4930	-				
34		STAGE 12-13 PIN RETAINING RING IN STAGE 12 WHEEL					
		Wheel - bore	<u>23.488</u> 23.489	-	Tight <u>0.005</u>	-	Pre-Mod. 1446
		Ring - dia.	<u>23.492</u> 23.493	-	0.003 Tight		
	Wheel - bore	<u>23.488</u> 23.490	-	Tight <u>0.005</u>	-	Mod. 1446	
	Ring - dia.	<u>23.491</u> 23.493	-	0.001 Tight			

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Ref. No. on Diagram	Parts and Description	Dimensions New	Permissible Worn Dimension	Clearance New	Permissible Worn Clearance	Remarks	
35	STAGES 11-12 PIN RETAIN- ING RING IN STAGE 12 WHEEL.						
	Wheel - bore	<u>23.4935</u> 23.4945	-	<u>0.0005</u> 0.0025	-	Pre-Mod. 1446	
	Ring - dia.	<u>23.4920</u> 23.4930	-				
	Wheel - bore	<u>23.4935</u> 23.4955	-	<u>0.0005</u> 0.0045	-	Mod. 1446	
	Ring - dia.	<u>23.4910</u> 23.4930	-				
	36	STAGES 11-12 PIN RETAIN- ING RING IN STAGE 11 WHEEL					
		Wheel - bore	<u>23.488</u> 23.489	-	Tight <u>0.005</u>	-	Pre-Mod. 1446
		Ring - dia.	<u>23.492</u> 23.493	-	0.003 Tight		
Wheel - bore		<u>23.488</u> 23.490	-	Tight <u>0.005</u>	-	Mod. 1446	
Ring - dia.		<u>23.491</u> 23.493	-	0.001 Tight			
37		STAGES 10-11 PIN RETAIN- ING RING IN STAGE 11 WHEEL					
		Wheel - bore	<u>23.4935</u> 23.4945	-	<u>0.0005</u> 0.0025	-	Pre-Mod. 1446
		Ring - dia.	<u>23.4920</u> 23.4930	-			
	Wheel - bore	<u>23.4935</u> 23.4955	-	<u>0.0005</u> 0.0045	-	Mod. 1446	
	Ring - dia.	<u>23.4910</u> 23.4930	-				

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38	STAGES 10-11 PIN RETAIN- ING RING IN STAGE 10 WHEEL Wheel - bore	23.488	-	Tight	-	Pre-Mod. 1446	
		23.489	-	0.005	-		
	Ring - dia.	23.492	-	0.003	-		
		23.493	-	Tight	-		
	Wheel - bore	23.488	-	Tight	-		Mod. 1446
		23.490	-	0.005	-		
	Ring - dia.	23.491	-	0.001	-		
		23.493	-	Tight	-		
39	STAGES 9-10 PIN RETAIN- ING RING IN STAGE 10 WHEEL Wheel - bore	23.4935	-	0.0005	-	Pre-Mod. 1446	
		23.4945	-	0.0025	-		
	Ring - dia.	23.4920	-	-	-		
		23.4930	-	-	-		
	Wheel - bore	23.4935	-	0.0005	-	Mod. 1446	
		23.4955	-	0.0045	-		
	Ring - dia.	23.4910	-	-	-		
		23.4930	-	-	-		
40	STAGES 9-10 PIN RETAINING RING IN STAGE 9 WHEEL Wheel - bore	23.487	-	Tight	-	Pre-Mod. 1446	
		23.489	-	0.006	-		
	Ring - dia.	23.492	-	0.003	-		
		23.493	-	Tight	-		
	Wheel - bore	23.488	-	Tight	-	Mod. 1446	
		23.490	-	0.005	-		
	Ring - dia.	23.491	-	0.001	-		
		23.493	-	Tight	-		

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Ref. No. on Diagram	Parts and Description	Dimensions New	Permissible Worn Dimension	Clearance New	Permissible Worn Clearance	Remarks
41	STAGES 8-9 PIN RETAINING RING IN STAGE 9 WHEEL Wheel - bore	<u>23.4935</u>	-			Pre-Mod. & Mod. 1446
		23.4955		<u>0.0005</u>	-	
	Ring - dia.	<u>23.4910</u>	-	<u>0.0045</u>		
		23.4930				
42	STAGE 8-9 PIN RETAINING RING IN STAGE 8 WHEEL Wheel - bore	<u>23.488</u>	-			
		23.490		Tight <u>0.005</u>	-	
	Ring - dia.	<u>23.491</u>	-	<u>0.001</u>		
		23.493		Tight		
43	STAGES 7-8 PIN RETAINING RING IN STAGE 8 WHEEL Wheel - bore	<u>23.4935</u>	-			
		23.4955		<u>0.0005</u>	-	
	Ring - dia.	<u>23.4910</u>	-	<u>0.0045</u>		
		23.4930				
44	STAGE 7-8 PIN RETAINING RING IN STAGE 7 WHEEL Wheel - bore	<u>23.448</u>	-			
		23.449		Tight <u>0.004</u>	-	
	Ring - dia.	<u>23.450</u>	-	<u>0.001</u>		
		23.452		Tight		
45	STAGE 6-7 PIN RETAINING RING IN STAGE 7 WHEEL Wheel - bore	<u>23.4500</u>	-			
		23.4510		<u>0.0005</u>	-	
	Ring - dia.	<u>23.4485</u>	-	<u>0.0025</u>		
		23.4495				
46	STAGES 6-7 PIN RETAINING RING IN STAGE 6 WHEEL Wheel - bore	<u>23.448</u>	-			
		23.449		Tight <u>0.005</u>	-	
	Ring - dia.	<u>23.452</u>	-	<u>0.003</u>		
		23.453		Tight		

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47	STAGES 5-6 SPACER IN STAGE 6 WHEEL Wheel - bore	<u>22.1250</u>	-			
		22.1260		0.0005		
	Spacer - dia.	<u>22.1225</u>	-	0.0035		
		22.1245				
48	STAGES 5-6 SPACER IN STAGE 5 WHEEL Spacer - bore	<u>21.849</u>	-			
		21.851		Tight 0.004		
	Wheel - dia.	<u>21.852</u>	-	0.001		
		21.853		Tight		
49	STAGES 4-5 SPACER IN STAGE 5 WHEEL Wheel - bore	<u>21.400</u>	-			
		21.401		0.0005		
	Spacer - dia.	<u>21.3985</u>	-	0.0025		
		21.3995				
50	STAGES 4-5 SPACER IN STAGE 4 WHEEL Spacer - bore	<u>20.350</u>	-			
		20.351		Tight 0.003		
	Wheel - dia.	<u>20.352</u>	-	0.001		
		20.353		Tight		
51	STAGES 3-4 SPACER IN STAGE 4 WHEEL Wheel - bore	<u>19.800</u>	-			
		19.801		0.0005		
	Spacer - dia.	<u>19.7985</u>	-	0.0025		
		19.7995				
52	STAGES 3-4 SPACER IN STAGE 3 WHEEL Spacer - bore	<u>18.525</u>	-			
		18.526		Tight 0.003		
	Wheel - dia.	<u>18.527</u>	-	0.001		
		18.528		Tight		

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53	STAGES 2-3 SPACER IN STAGE 3 WHEEL Wheel - bore	<u>17.9000</u>	-			
		17.9010		<u>0.0005</u>		
	Spacer - dia.	<u>17.8985</u>	-	<u>0.0025</u>		
		17.8995				
54	STAGES 2-3 SPACER IN STAGE 2 WHEEL Wheel - bore	<u>16.500</u>	-			
		16.501		Tight <u>0.003</u>		
	Spacer - dia.	<u>16.502</u>	-	<u>0.001</u>		
		16.503		Tight		
55	STAGES 1-2 SPACER IN STAGE 2 WHEEL Wheel - bore	<u>15.700</u>	-			
		15.701		<u>0.007</u>		
	Spacer - dia.	<u>15.691</u>	-	<u>0.010</u>		
		15.693				
56	STAGES 1-2 SPACER IN STAGE 1 WHEEL Spacer - bore	<u>13.949</u>	-			
		13.951		Tight <u>0.005</u>		
	Wheel - dia.	<u>13.952</u>	-	<u>0.001</u>		
		13.954		Tight		
57	RADIAL CLEARANCE BETWEEN ACTUATING RING ROLLERS AND TRACK	-	-	<u>0.0115</u> <u>0.0145</u>	0.016	Pre-Mod. & Mod. 2254
58	ACTUATING RING ROLLER IN ACTUATING RINGTRACK Ring - width of track	<u>0.3125</u>	0.3180			
		0.3135		<u>0.0125</u>	0.018	Pre-Mod. & Mod. 2254
	Roller - width	<u>0.299</u>	0.2945	<u>0.0145</u>		
		0.300				

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59	I. G. V. OPERATING LEVER TRUNNION IN ACTUATING RING Ring - bore	0.5000	-	0.0040	-	Pre-Mod. 2254
		0.5010	-	0.0055	-	
	Trunnion - dia.	0.4955	-			
		0.4960	-			
	Ring - bore	0.500	-	0.014	-	Mod. 2254
		0.501	-	0.016	-	
	Trunnion - dia.	0.485	-			
		0.486	-			
60	I. G. V. OPERATING LEVER IN TRUNNION Trunnion - bore	0.2500	0.2525	0.0025	0.005	Pre-Mod. & Mod. 2254
		0.2505		0.0035		
	Lever - dia.	0.2470*	0.2450			
		0.2475				
61	I. G. V. OPERATING LEVER IN SUPPORT RINGS Rings - bore	0.4375	0.4415	0.001	0.005	Measured at greatest diameter on spherical bore and diameter
		0.4385		0.003		
	Lever - dia.	0.4355	0.4325			
		0.4365				
62	END FLOAT OF OPERATING LEVER IN SUPPORT RINGS	-	-	0.005 0.007	0.009	
63	BUSHES IN STAGE 1 ROTOR BLADE Blade - bore	0.65620	-	Tight	-	
		0.65645	-	0.0033		
	Bush - dia.	0.65925	-	0.0028		
		0.65950	-	Tight		

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64	STAGE 1 BLADE RETAINING PIN IN WHEEL AND BUSH Wheel and bush - bore	<u>0.5937</u>	-			.579 .016 ----- .595 .060 ----- .655
		0.5947		0.0147	-	
	Pin - dia.	<u>0.5785</u>	-	0.0162		
		0.5790				
65	BUSH IN STAGE 2 ROTOR BLADE Blade - bore	<u>0.53120</u>	-			}
		0.53145		Tight 0.0027	-	
	Bush - dia.	<u>0.53365</u>	-	0.0022		
		0.53390		Tight		
66	STAGE 2 BLADE RETAINING PIN IN WHEEL AND BUSH Wheel and bush - bore	<u>0.4687</u>	-			} SA. 64126 T 64
		0.4697		0.0147	-	
	Pin - dia.	<u>0.4535</u>	-	0.0162		
		0.4540				
67	BUSH IN STAGE 3 ROTOR BLADE Blade - bore	<u>0.50000</u>	-			
		0.50025		Tight 0.0025	-	
	Bush - dia.	<u>0.50225</u>	-	0.0020		
		0.50250		Tight		
68	STAGE 3 BLADE RETAINING PIN IN WHEEL AND BUSH Wheel and bush - bore	<u>0.4375</u>	-			
		0.4385		0.0150	-	
	Pin - dia.	<u>0.4220</u>	-	0.0165		
		0.4225				
69	BUSH IN STAGE 4 ROTOR BLADE Blade - bore	<u>0.43750</u>	-			
		0.43775		Tight 0.0022	-	
	Bush - dia.	<u>0.43945</u>	-	0.0017		
		0.43970		Tight		

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SCHEDULE 2 (continued)

FRONT BEARING HOUSING, COMPRESSOR
SHAFTS, ROTORS AND OUTLET CASING

AVON Mk. 20800 SERIES

Ref. No. on Diagram	Parts and Description	Dimensions New	Permissible Worn Dimension	Clearance New	Permissible Worn Clearance	Remarks
70	STAGE 4 BLADE RETAINING PIN IN WHEEL AND BUSH Wheel and bush bore	<u>0.3750</u>	-	<u>0.0150</u>	-	
		0.3760		0.0165		
	Pin - dia.	<u>0.3595</u>	-			
		0.3600				
71	STAGE 5 BLADE RETAINING PIN IN WHEEL AND BLADE Wheel and blade - bore	<u>0.3125</u>	-	<u>0.0150</u>	-	
		0.3135		0.0165		
	Pin - dia.	<u>0.2970</u>	-			
		0.2975				
72	AXIAL CLEARANCE BETWEEN STAGE 6 ROTOR BLADE TRAILING EDGE AND STAGE 6 STATOR LEADING EDGE	-	-	<u>0.2094</u> 0.2634	-	
73	RADIAL CLEARANCE BETWEEN STATOR BLADES AND PIN RETAINING RINGS	Stage 6	-	<u>0.065</u> 0.080	-	
		Stage 7, 8 and 9	-	<u>0.065</u> 0.084	-	
		Stages 10-14	-	<u>0.063</u> 0.082	-	
74	BLADE RETAINING PINS IN STAGES 6 and 7 ROTOR BLADES AND WHEELS Wheel and blade - bore	<u>0.2812</u>	-	<u>0.0152</u>	-	
		0.2822		0.0167		
	Pin - dia.	<u>0.2655</u>	-			
		0.2660				
75	AXIAL CLEARANCE BETWEEN STAGE 10 ROTOR TRAILING EDGE AND STAGE 10 STATOR LEADING EDGE	-	-	<u>0.1944</u> 0.2324	-	

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SCHEDULE 2 (continued)

FRONT BEARING HOUSING, COMPRESSOR
SHAFTS, ROTORS AND OUTLET CASING

AVON Mk. 20800 SERIES

Ref. No. on Diagram	Parts and Description	Dimensions New	Permissible Worn Dimension	Clearance New	Permissible Worn Clearance	Remarks
76	STAGES 8, 9, 10 and 11 BLADE RETAINING PINS IN WHEELS AND BLADES Wheel and blade - bore	<u>0.4219</u>	-			
		0.4229		<u>0.0199</u>	-	
		<u>0.4015</u>	-	<u>0.0214</u>		
		0.4020				
77	SETTING DISTANCE FROM FRONT FACE OF STAGE 10 STATOR FLANGED LOCATING RING TO REAR OF STAGE 15 ROTOR WHEEL OUTER FLANGE	-	-	<u>9.784</u>	-	This figure is given in the cold nipped condition with centre bearing end float taken up with rotor fully forward.
				9.794		
78	STAGES 12, 13, 14 and 15 BLADE RETAINING PINS IN WHEELS AND BLADES Wheel and blade - bore	<u>0.3750</u>	-			
		0.3760		<u>0.0050</u>	-	
		<u>0.3695</u>	-	<u>0.0065</u>		
		0.3700				
79	TAPER BOLTS IN STAGE 15 WHEEL, SEAL AND REAR SHAFT Clearance between head of bolt and rear face of seal.	-	-	<u>0.020</u>	-	Before tightening bolt.
				0.050		
80	STAGE 15 OUTER AIR SEAL- ING RING IN CARRIER. Carrier - bore	<u>23.500</u>	-			
		23.502		Tight <u>0.004</u>	-	Pre-Mod. 1960
		<u>23.502</u>	-	<u>0.000</u>		
		23.504				
81	RADIAL CLEARANCE BETWEEN OUTER AIR SEALING RING AND SEAL Rear	-	-	<u>0.035</u>	-	
				0.037		
		-	-	<u>0.028</u>	-	
				0.030		

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SCHEDULE 2 (continued).

FRONT BEARING HOUSING COMPRESSOR
SHAFTS, ROTORS AND OUTLET CASING

AVON MR. 20800 SERIES

Ref. No. on Diagram	Parts and Description	Dimensions New	Permissible Worn Dimension	Clearance New	Permissible Worn Clearance	Remarks	
82	STAGE 15 INNER AIR SEAL- ING RING IN CARRIER. Carrier - bore	22.110	-	Tight 0.004 0.000	-	Pre-Mod. 1960	
		22.112	-				
	Ring - dia.	22.112	-	-	-		
		22.114	-				
83	RADIAL CLEARANCE BETWEEN INNER AIR SEALING RING AND SEAL Front	-	-	0.028 0.030	-	Pre-Mod. 1960	
		-	-	0.034 0.036	-		
	Rear	-	-	-	-		
		-	-				
84	TAPER BOLTS IN FRONT AND REAR SHAFTS Clearance between head of bolt and rear face of flange	-	-	0.020 0.050	-	Before tightening bolt.	
		-	-	-	-		
85	TAPER BOLTS IN FRONT SHAFT AND 15th STAGE WHEEL Clearance between head of bolt and rear face of flange	-	-	0.020 0.050	-	Before tightening bolt.	
		-	-	-	-		
86	RADIAL CLEARANCE BETWEEN STAGE 4 STATOR SHROUD AND STAGES 4-5 SPACER	-	-	0.060 0.085	-		
		-	-	-	-		
87	RADIAL CLEARANCE BE- TWEEN STAGE 3 STATOR SHROUD AND STAGES 3-4 SPACER	-	-	0.060 0.085	-		
		-	-	-	-		
88	RADIAL CLEARANCE BETWEEN STAGE 2 STATOR SHROUD AND STAGES 2-3 SPACER	-	-	0.060 0.085	-		
		-	-	-	-		
89	RADIAL CLEARANCE BETWEEN STAGE 1 STATOR SHROUD AND STAGE 1-2 SPACER	-	-	0.060 0.085	-	Pre-Mod. 1605	
		-	-	0.052 0.064	-		
			-	-	-	-	Mod. 1605
			-	-	-	-	

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SCHEDULE 2 (continued)

FRONT BEARING HOUSING, COMPRESSOR
SHAFTS, ROTORS AND OUTLET CASING

AVON Mk. 20800 SERIES

Ref. No. on Diagram	Parts and Description	Dimensions New	Permissible Worn Dimension	Clearance New	Permissible Worn Clearance	Remarks		
90	FRONT BEARING AIR SEAL IN HOUSING Housing - bore	<u>6.8500</u>	-	Tight <u>0.0010</u>	-	Mod. 1815		
		6.8510						
	Seal - dia.	<u>6.8505</u>	-	0.0005 Clear				
		6.8510						
91	OIL AND AIR SEALING LAND ON STAGE 1 WHEEL Land - bore	<u>5.015</u>	-	Tight <u>0.002</u>	-			
		5.016						
	Wheel - dia.	<u>5.015</u>	-	0.001 Clear				
		5.017						
92	COMPRESSOR NIP	-	-	-	-	The amount of nip load required is that sufficient to produce a movement of hub, relative to rim of stage 1 disc, of 0.016.		
93	CLEARANCE ON DIAMETER BETWEEN FRONT BEAR- ING AIR SEAL AND SEAL- ING LAND. Front end	<u>6.350</u>	-	0.015 <u>0.019</u>	-	Mod. 1815 Conical slope between largest and smallest diameter sealing fins.		
		6.352						
	Land - dia.	<u>6.333</u>	-					
		6.335						
	Rear end	<u>6.350</u>	-	0.007 <u>0.011</u>	-			
		6.352						
	Land - dia.	<u>6.341</u>	-					
		6.343						
	94	CLEARANCE ON DIAMETER BETWEEN FRONT BEAR- ING OIL SEAL AND SEAL- ING LAND Seal - bore	<u>5.250</u>	-	0.012 <u>0.014</u>		-	
			5.251					
Land - dia.		<u>5.237</u>	-					
		5.238						

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SCHEDULE 2 (continued)

FRONT BEARING HOUSING, COMPRESSOR
SHAFTS, ROTORS AND OUTLET CASING

AVON Mk. 20800 SERIES

Ref. No. on Diagram	Parts and Description	Dimensions New	Permissible Worn Dimension	Clearance New	Permissible Worn Clearance	Remarks
95	OIL AND AIR SEALING LAND ON FRONT COMPRESSOR SHAFT Land - bore	<u>3.7500</u>	-	Tight	-	
		3.75030	-	<u>0.00050</u>	-	
	Shaft - dia.	<u>3.75025</u>	-	0.00005	-	
		3.75050	-	Clear	-	
96	FRONT BEARING AIR SEAL IN HOUSING Seal nip	-	-	<u>0.001</u>	-	Mod. 1815.
		-	-	0.003	-	
97	FRONT ROLLER BEARING INNER RACE ON SHAFT Race - bore	<u>3.74970</u>	-	Tight	-	
		3.75020	-	<u>0.00080</u>	-	
	Shaft - dia.	<u>3.75025</u>	-	0.00005	-	
		3.75050	-	Tight	-	
98	CLEARANCE ON DIAMETER OF FRONT ROLLER BEAR- ING IN OUTER RACE Race - bore	<u>4.8750</u>	-	0.003	0.006	Dimension over rollers.
		4.8755	-	<u>0.004</u>		
	Bearing - dia.	<u>4.8715</u>	-	0.004		
		4.8720	-	-		
99	ROLLER BEARING OUTER RACE IN FRONT BEARING HOUSING -Housing - bore	<u>5.2500</u>	-	0.000		
		5.2505	-	<u>0.001</u>		
	Race - dia.	<u>5.2495</u>	-	0.001		
		5.2500	-	-		

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SCHEDULE 2 (continued)

FRONT BEARING HOUSING, COMPRESSOR
SHAFTS, ROTORS AND OUTLET CASING

AVON Mk. 20800 SERIES

Ref. No. on Diagram	Parts and Description	Dimensions New	Permissible Worn Dimension	Clearance New	Permissible Worn Clearance	Remarks		
100	CLEARANCE ON DIAMETER BETWEEN FRONT BEAR- ING AIR SEALS AND SEALING LAND							
	Front end							
	Seal - bore	<u>6.350</u> 6.352	-	0.015 0.019	-	Pre-Mod. 1815 Conical slope between largest and smallest diameter sealing fins.		
	Land - dia.	<u>6.333</u> 6.335	-					
	Rear end							
	Seal - bore	<u>6.350</u> 6.352	-	0.007 0.011	-			
	Land - dia.	<u>6.341</u> 6.343	-					
	101	FRONT BEARING AIR SEALS IN HOUSING						
		Nip	-	-	0.001 0.003		-	Pre-Mod. 1815
102	FRONT BEARING AIR SEALS IN HOUSING							
	Housing - bore	<u>6.8500</u> 6.8510	-	Tight 0.0035	-		Pre-Mod. 1815	
	Seal - dia.	<u>6.8525</u> 6.8535	-	0.0015 Tight				
103	ACTUATING RING ROLLERS IN ACTUATING RING							
	Ring - bore	<u>0.3125</u> 0.3135	0.3155	0.0010 0.0025	0.004	Pre-Mod. 2254		
	Roller - dia.	<u>0.3110</u> 0.3115	0.3085					
	Ring - bore	<u>0.3125</u> 0.3135	0.3155	0.0080 0.0095	0.011		Mod. 2254	
	Roller - dia.	<u>0.3040</u> 0.3045	0.3015					

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SCHEDULE 2 (continued)

FRONT BEARING HOUSING, COMPRESSOR
SHAFTS, ROTORS AND OUTLET CASING

AVON Mk. 20800 SERIES

Ref. No. on Diagram	Parts and Description	Dimensions New	Permissible Worn Dimension	Clearance New	Permissible Worn Clearance	Remarks
104	STATOR BLADES IN COMPRESSOR CASING CIRCUMFERENTIAL GAPS MEASURED ADJACENT TO PORT AND STARBOARD SPLIT LINES.					Blades to be choc-a- bloc to port and star- board side with edge of blade platform in line with bottom of recess in plate as shown.
	Stage 1 (Pre-Mod. 1605)	-	-	<u>0.0125</u> 0.0825	-	
	(Mod. 1605.)	-	-	<u>0.0125</u> 0.0225	-	
	Stage 2	-	-	<u>0.0125</u> 0.0825	-	
	Stage 3	-	-	<u>0.020</u> 0.090	-	
105	STATOR BLADES IN COMPRESSOR CASING, CIRCUMFERENTIAL GAPS MEASURED ADJACENT TO PORT AND STARBOARD SPLIT LINES					Blades to be choc-a- block to port and star- board split lines as shown.
	Stage 4	-	-	<u>0.020</u> 0.090	-	
106	STATOR BLADES IN COMPRESSOR CASING, CIRCUMFERENTIAL GAPS MEASURED ADJACENT TO PORT AND STARBOARD SPLIT LINES.					Pre-Mod. 1234 } Blades to be Mod. 1234 } choc-a-bloc to port and star- board split lines as shown
	Stage 5	-	-	<u>0.025</u> 0.095	-	
		-	-	<u>0.0125</u> 0.0225	-	
		-	-	<u>0.0125</u> 0.0225	-	

SCHEDULE 2 (continued)

FRONT BEARING HOUSING, COMPRESSOR
SHAFTS, ROTORS AND OUTLET CASING

AVON Mk. 20800 SERIES

Ref. No. on Diagram	Parts and Description	Dimensions New	Permissible Worn Dimension	Clearance New	Permissible Worn Clearance	Remarks			
107	STATOR BLADES IN COMPRESSOR CASING, CIRCUMFERENTIAL GAP MEASURED ADJACENT TO PORT AND STARBOARD SPLIT LINES. Stage 6	-	-	<u>0.025</u> 0.095	-	Pre-Mod. 1234 Mod. 1234 Pre-Mod. 1234 Mod. 1234 Blades to be choc-a-bloc to port and starboard split lines as shown.			
		-	-	<u>0.0125</u> 0.0225	-				
		-	-	<u>0.045</u> 0.115	-				
		-	-	<u>0.0125</u> 0.0225	-				
		108	STATOR BLADES IN COMPRESSOR CASINGS, CIRCUMFERENTIAL GAP MEASURED ADJACENT TO PORT SPLIT LINE Stage 8	-	-		<u>0.050</u> 0.120	-	Pre-Mod. 1234. Mod. 1234 Pre-Mod. 1234. Mod. 1234 Blades to be choc-a-bloc to starboard split line as shown.
				-	-		<u>0.0125</u> 0.0225	-	
				-	-		<u>0.055</u> 0.125	-	
				-	-		<u>0.0125</u> 0.0225	-	
109	STATOR BLADES IN COMPRESSOR CASINGS, CIRCUMFERENTIAL GAP MEASURED ADJACENT TO STARBOARD SPLIT LINE Stage 8	-	-	<u>0.092</u> 0.162	-	Pre-Mod. 1234 Mod. 1234 Pre-Mod. 1234 Mod. 1234 Blades to be choc-a-bloc to port split line as shown.			
		-	-	<u>0.0125</u> 0.0225	-				
		-	-	<u>0.091</u> 0.061	-				
		-	-	<u>0.0125</u> 0.0225	-				
		Stage 9	-	-	<u>0.091</u> 0.061		-		
			-	-	<u>0.0125</u> 0.0225		-		

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SCHEDULE 2 (continued)

FRONT BEARING HOUSING, COMPRESSOR
SHAFTS, ROTORS AND OUTLET CASING

AVON Mk. 20800 SERIES

Ref. No. on Diagram	Parts and Description	Dimensions New	Permissible Worn Dimension	Clearance New	Permissible Worn Clearance	Remarks
110	STATOR BLADES AND OUT- LET GUIDE VANES IN COM- PRESSOR OUTLET CASING, QUARTER STAGE BLADE CIRCUMFERENTIAL CLEARANCE Stage 10-14 and o.g.v.	-	-	0.025	-	Pre-Mod. 1234 With blades assembled in the retaining rings and the blades of the quarter stage and also the preceding location blade held choc-a-bloc against the blade stop slots in direction indicated, the quarter stage blade clearance is the measured dimension shown.
		-	-	<u>0.0125</u> 0.0225	-	Mod. 1234
111	OPERATING LEVERS IN OPERATING INLET GUIDE VANES. Backlash between serrations.	-	-	<u>0.0009</u> 0.0030	0.006	
112	OPERATING LEVERS IN BEARING SLEEVE Sleeve - bore	<u>0.502</u> 0.504	0.508	<u>0.004</u> 0.007	0.010	
	Lever - dia.	<u>0.497</u> 0.498	0.492			
113	OPERATING LEVERS IN BALL BEARING Bearing - bore	<u>0.49980</u> 0.50020	-	Tight <u>0.00020</u>	-	
	Lever - dia.	<u>0.49975</u> 0.50000	-	<u>0.00045</u> Clear	-	

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SCHEDULE 2 (continued)

FRONT BEARING HOUSING, COMPRESSOR
SHAFTS, ROTORS AND OUTLET CASING

AVON Mk. 20800 SERIES

Ref. No. on Diagram	Parts and Description	Dimensions New	Permissible Worn Dimension	Clearance New	Permissible Worn Clearance	Remarks
114	BALL BEARING IN BEARING SLEEVE Sleeve - bore	<u>1.3125</u>	-	<u>0.0003</u>	-	
		1.3130		0.0013		
	Bearing - dia.	<u>1.3117</u>	-			
		1.3122				
115	BALL BEARING End float between inner and outer races.	-	-	0.0055	-	
116	BEARING SLEEVE IN CONTROL HOUSING Housing - bore	<u>1.4250</u>	-	<u>0.000</u>	-	
		1.4255		0.001		
	Sleeve - dia.	<u>1.4245</u>	-			
		1.4250				
171	CONTROL SHAFT SEALING RINGS IN OPERATING LEVER GROOVES Groove - width	<u>0.040</u>	0.045	<u>0.001</u>	0.006	
		0.041		0.003		
	Ring - width	<u>0.038</u>	0.034			
		0.039				
118	CONTROL SHAFT SEALING RINGS ON OPERATING LEVER Ring gap	-	-	<u>0.001</u> 0.005	-	Measured in a 0.502 diameter gauge
119	SPHERICAL BUSHES IN CONNECTING LINK Link - bore	<u>0.5625</u>	0.5655	<u>0.001</u>	0.004	
		0.5630		0.002		
	Bush - dia.	<u>0.5610</u>	0.5585			
		0.5615				

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SCHEDULE 2 (continued)

FRONT BEARING HOUSING, COMPRESSOR
SHAFTS, ROTORS AND OUTLET CASING

AVON Mk. 20800 SERIES

Ref. No. on Diagram	Parts and Description	Dimensions New	Permissible Worn Dimension	Clearance New	Permissible Worn Clearance	Remarks
120	CONTROL LEVER SCREWS IN SPHERICAL BUSHES	0.2969	0.2994	0.0005	0.003	
		0.2974				
	Screw - dia.	0.2959	0.2939	0.0015		
		0.2964				
121	CONTROL LEVER SCREWS IN OPERATING LEVERS	0.2969	-	0.0005	-	
		0.2974		0.0015		
	Screw - dia.	0.2959	-			
		0.2964				
122	ROTOR BLADES IN ROTOR WHEELS, CLEARANCE BETWEEN BLADE FLANKS					This flank clearance is to be checked by insert- ing a feeler guage in the space between adjacent blade platforms. Size of feeler is to give the minimum figure for each stage as quoted. It is important that the feeler should enter until its end contacts the wheel diameter beneath the blades. Only one feeler should be inserted at a time. While the flank clearance is being check- ed the blades are not to be under any restraint other than that imposed by the retaining pins.
	Stages 1 to 5	-	-	Min. 0.033		
	Stages 6 and 7	-	-	Min. 0.032		
	Stage 8 (Pre-Mod.and Mod. 1446)	-	-	Min. 0.043		
	Stages 9 - 11 (Pre-Mod. 1446)	-	-	Min. 0.043		
	Mod. 1446	-	-	Min. 0.015		
Stages 12 to 15	-	-	Min. 0.015			
123	ROTOR BLADES IN ROTOR WHEELS, BLADE TIP ROCK					The blades should be free to rock about the pin axis through an angle of 4° minimum each side of blade radial centre line, when the blade is in the running position, i. e. pulled outwards to limit of pin clearance.

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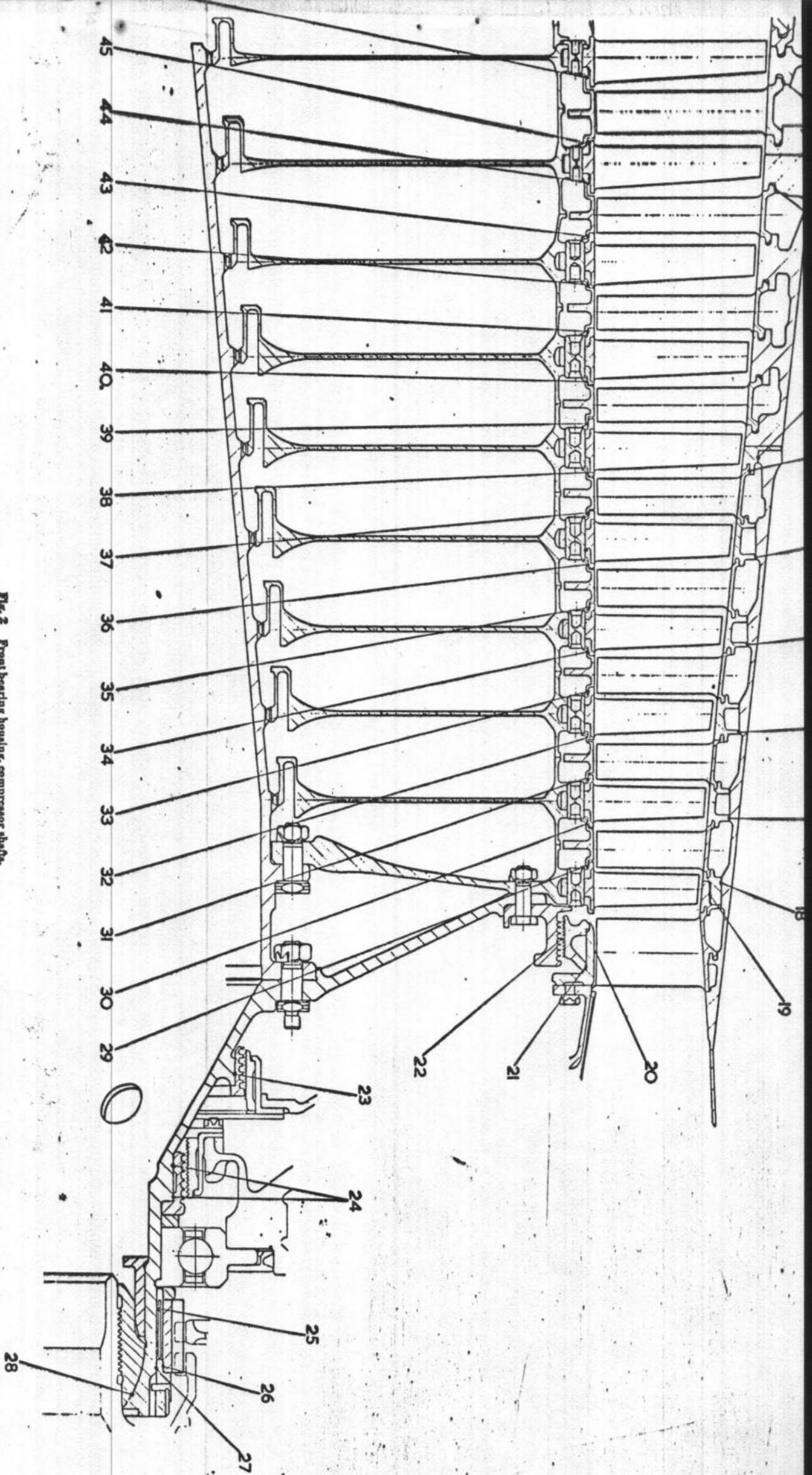


Fig. 2 Front bearing housing, compressor shaft, rotors and outlet casing

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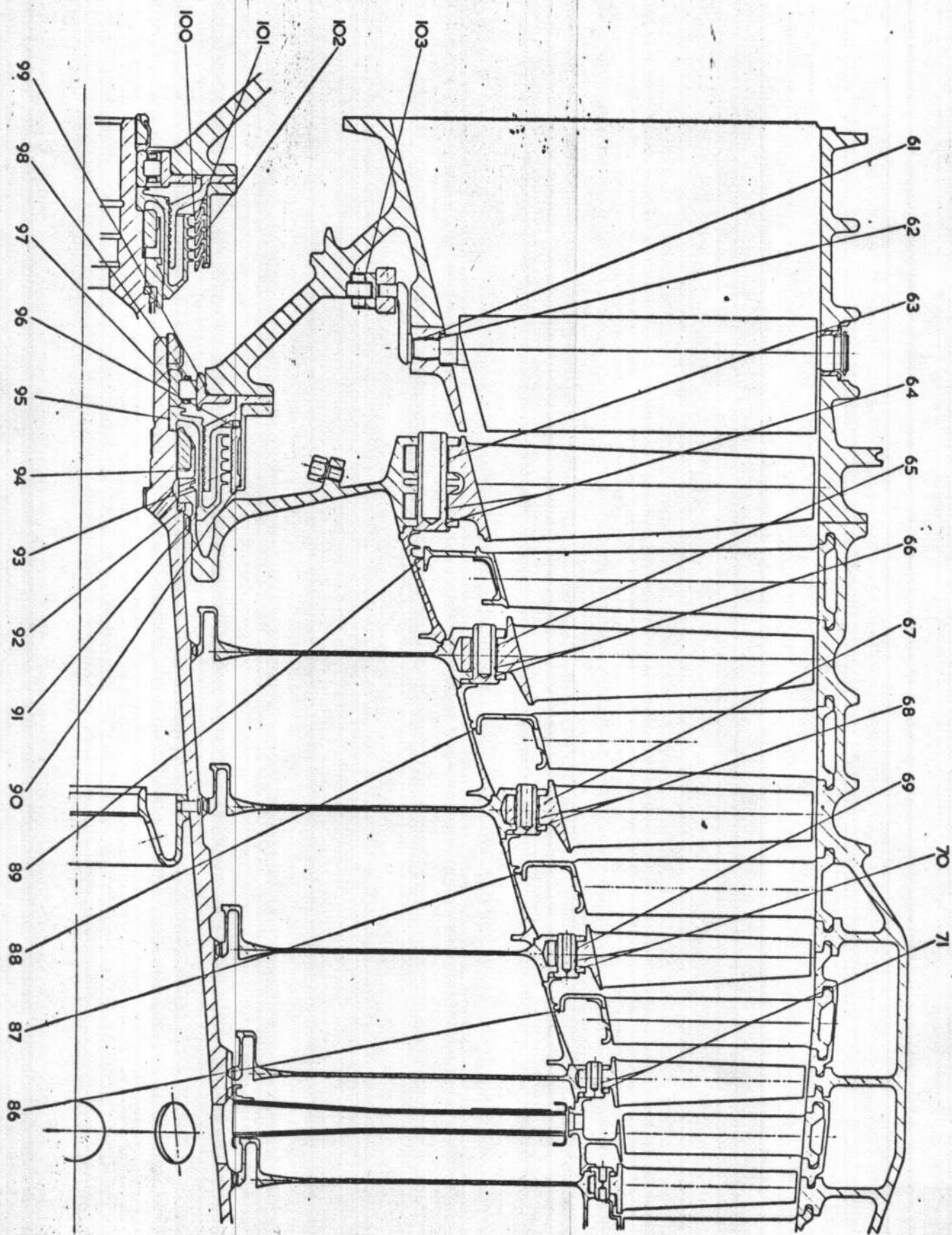


Fig. 3 Front bearing housing, compressor shafts, rotors and outlet casing

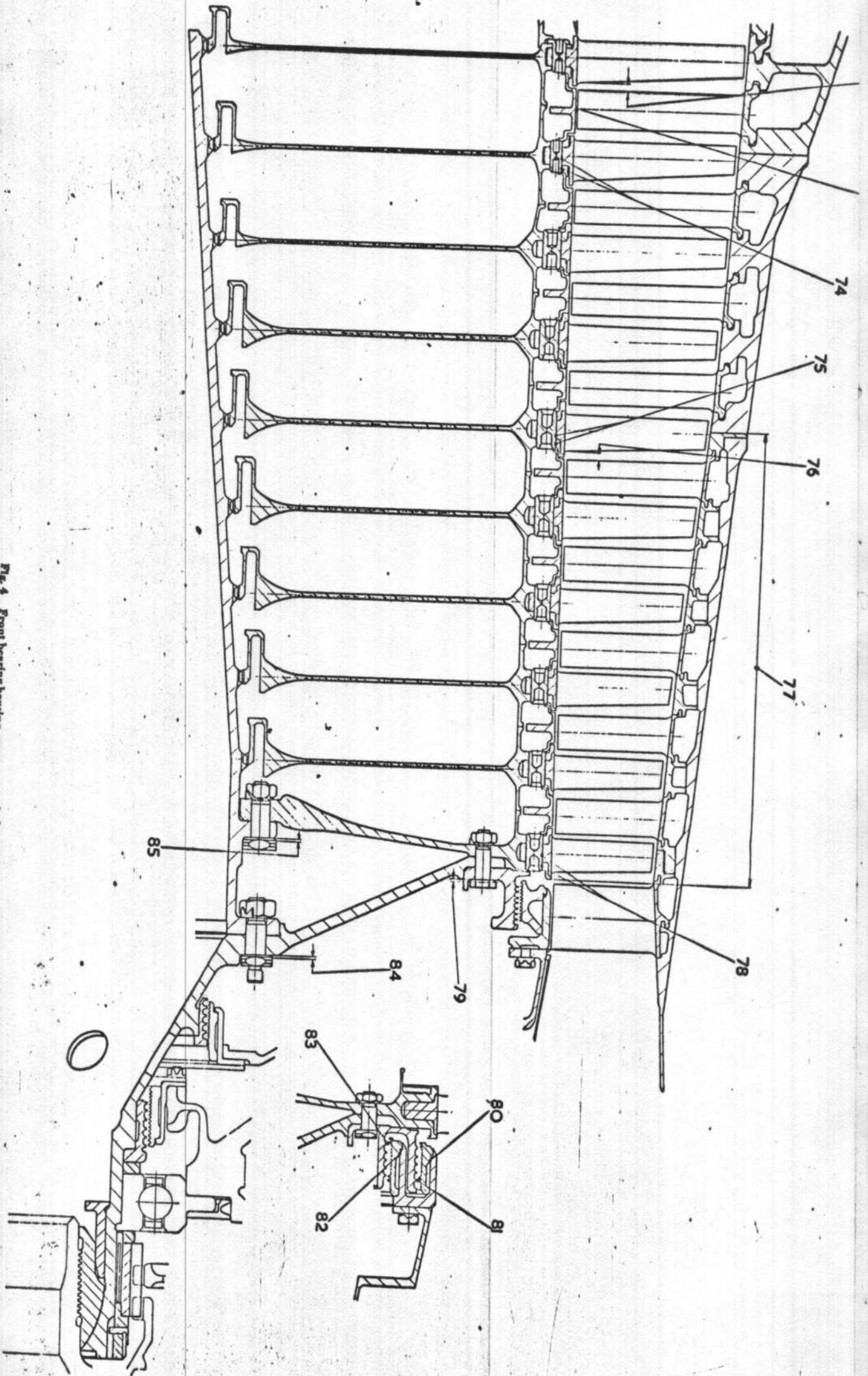


Fig. 4 Front bearing housing, compressor shaft, rotors and outlet casing

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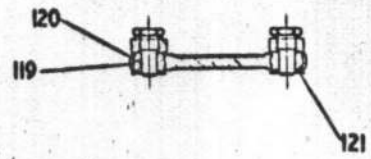
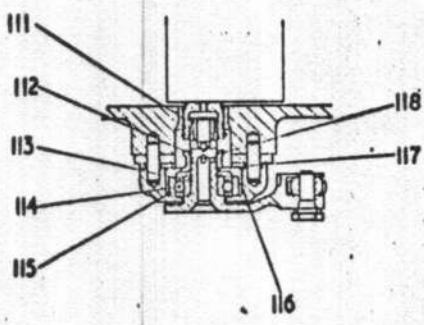
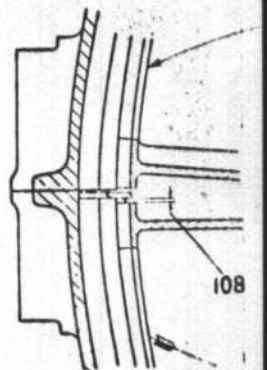
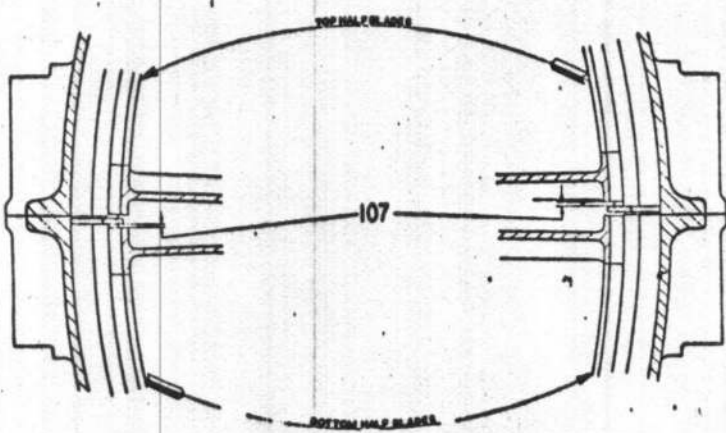
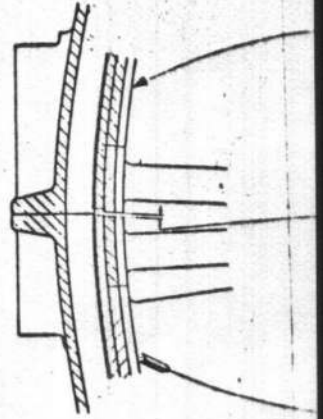
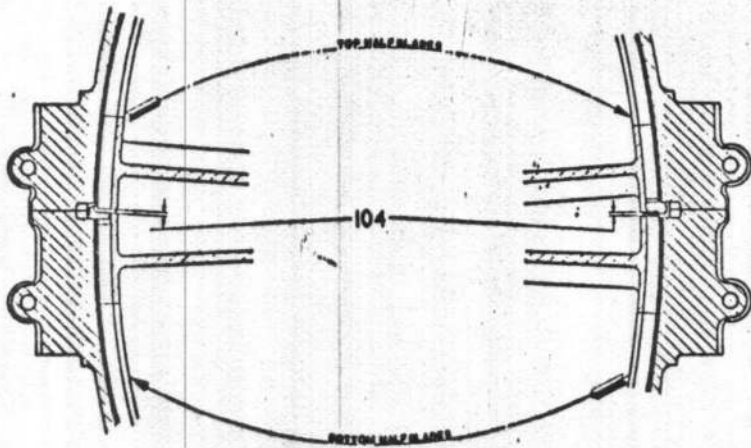
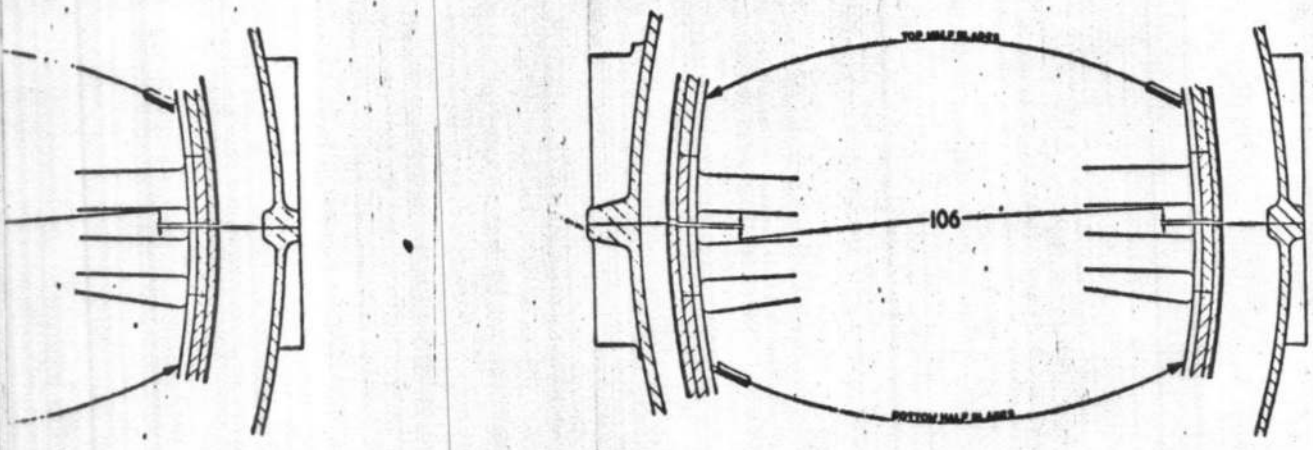
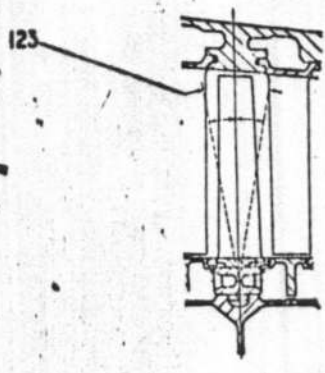
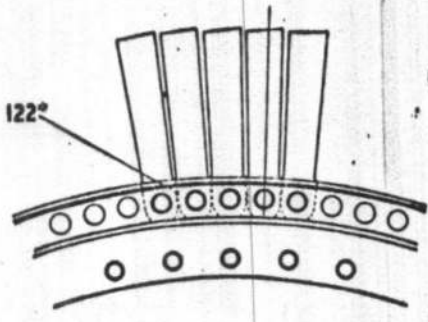
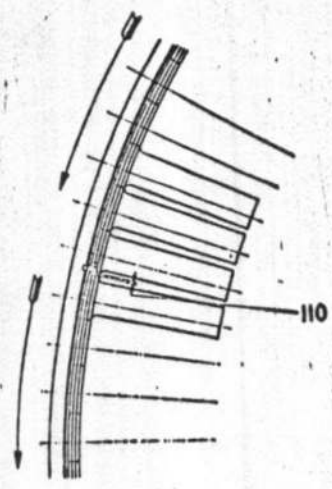
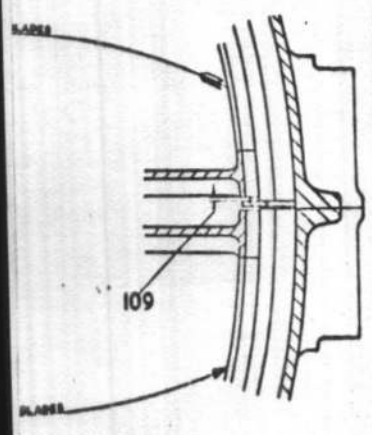


Fig. 5 Front



ARROWS TO
INDICATE



compressor shaft,
bearing

ED

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