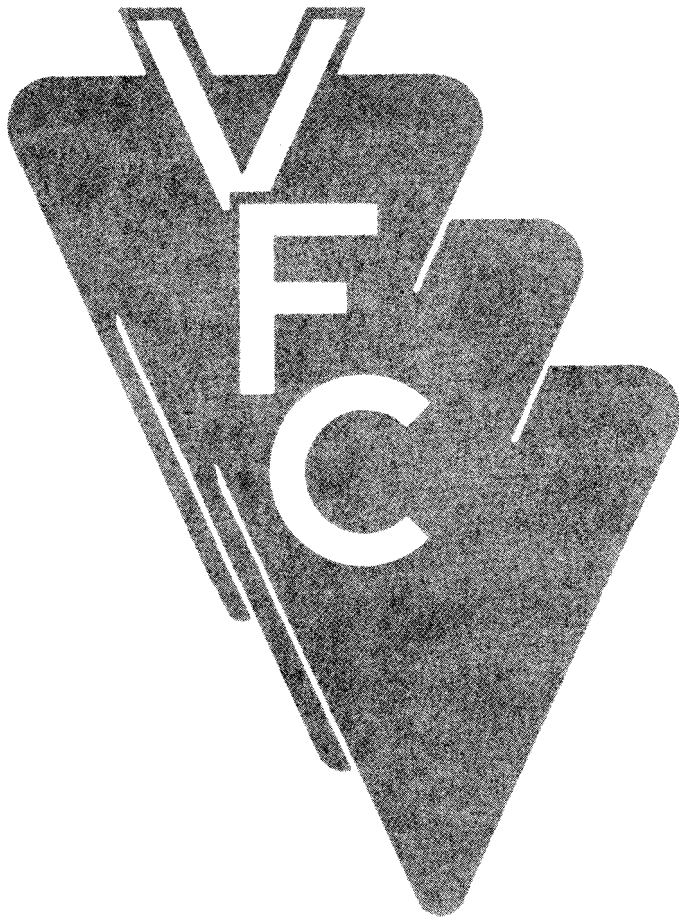
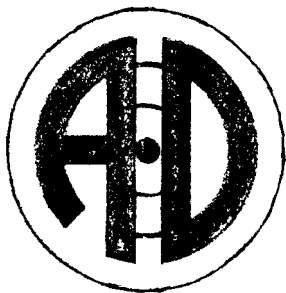


# METHODS AND TECHNIQUES MANUAL



VIBRATORY  
PARTS  
FEEDING  
EQUIPMENT

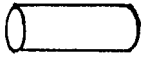











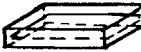





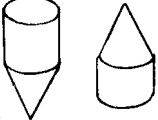

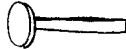


























*Compliments of*  
AUTOMATION DEVICES, INC.

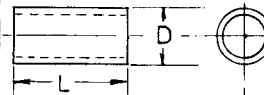
In a spirit of cooperation and helpfulness in modern machine design, VFC - a division of Automation Devices, Inc. - has compiled the following drawings from some of the techniques developed in their Engineering Department.

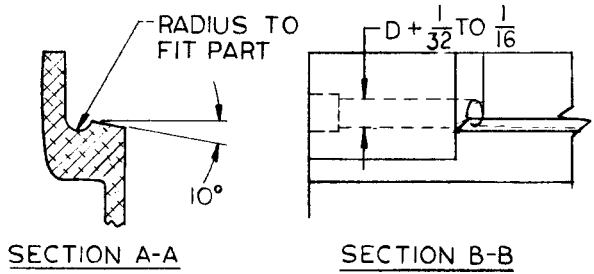
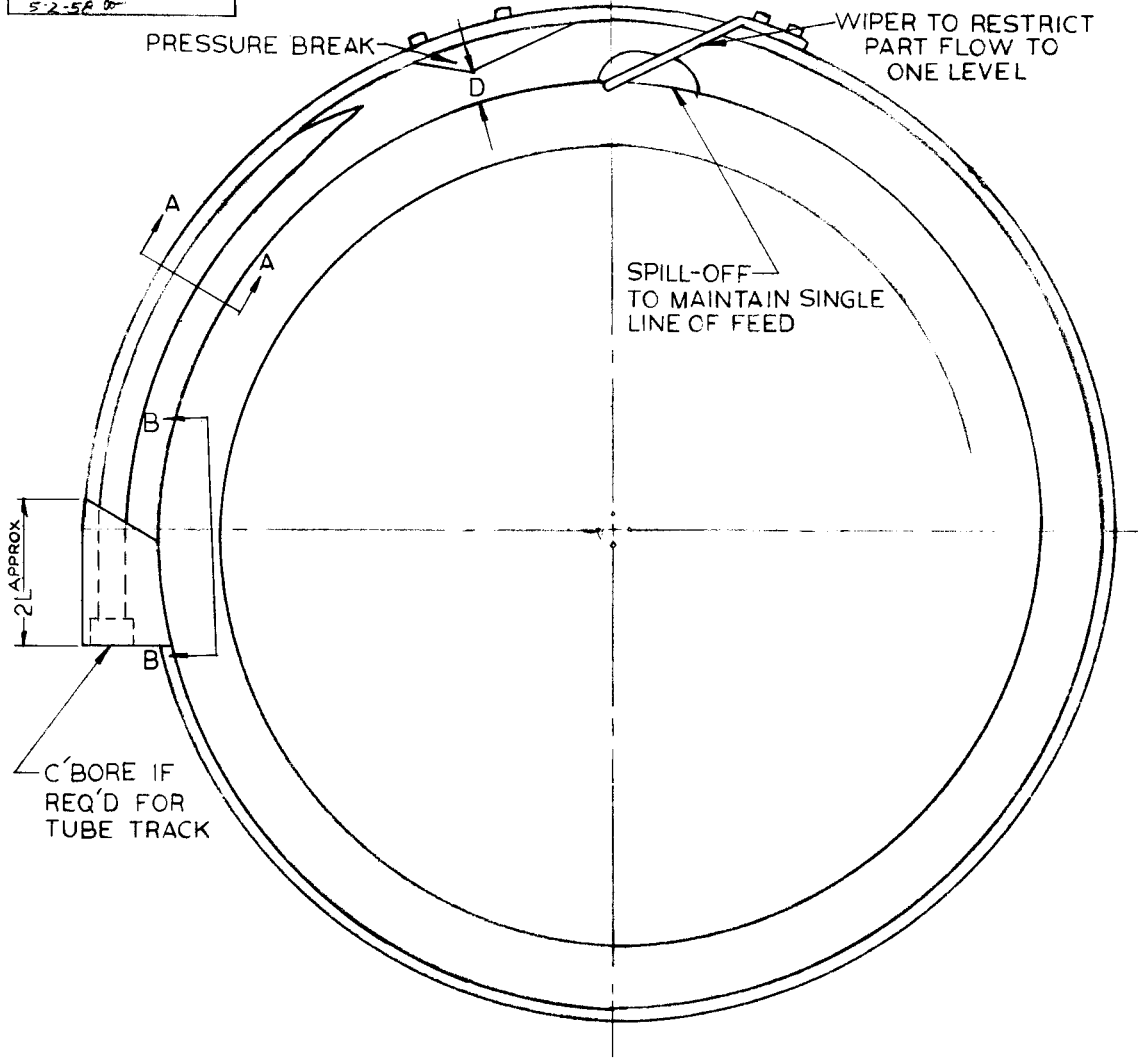
This service, for the benefit of vibratory parts feeder design, is made available to all interested in the advancement of efficient production methods.

Index to Feeder Design Specifications

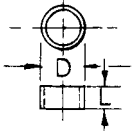
Case No.	Description	
1	Cylindrical Part - length greater than diameter	
2	Cylindrical Part - length less than diameter	
3	Cylindrical Part - length equals diameter	
4	Discs and flat washers	
5	Headed Parts	
6	Rectangular Part	
7	Angle stampings	
8	Formed metal part - Walls not equally thick	
9	Horseshoes	
10	Pointed parts with large heads	
11	Headed part or shell - body weight slightly greater than head weight - part may not hang.	
12	Cup on scallops	
13	Parts having a groove on one face - Method #1	
14	Formed metal cup	
15	Headed parts with short body - Retaining by form	
16	Dish shaped parts	
17	Slotted parts	
18	Strips with projection at one end	
19	Formed metal flanged cups	
20	Pointed parts feeding point leading	
21	Pointed pins feeding point trailing	
22	Headed pins feeding head first	
23	Headed pins feeding body first	

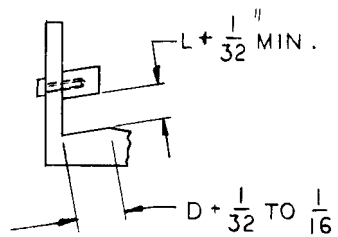
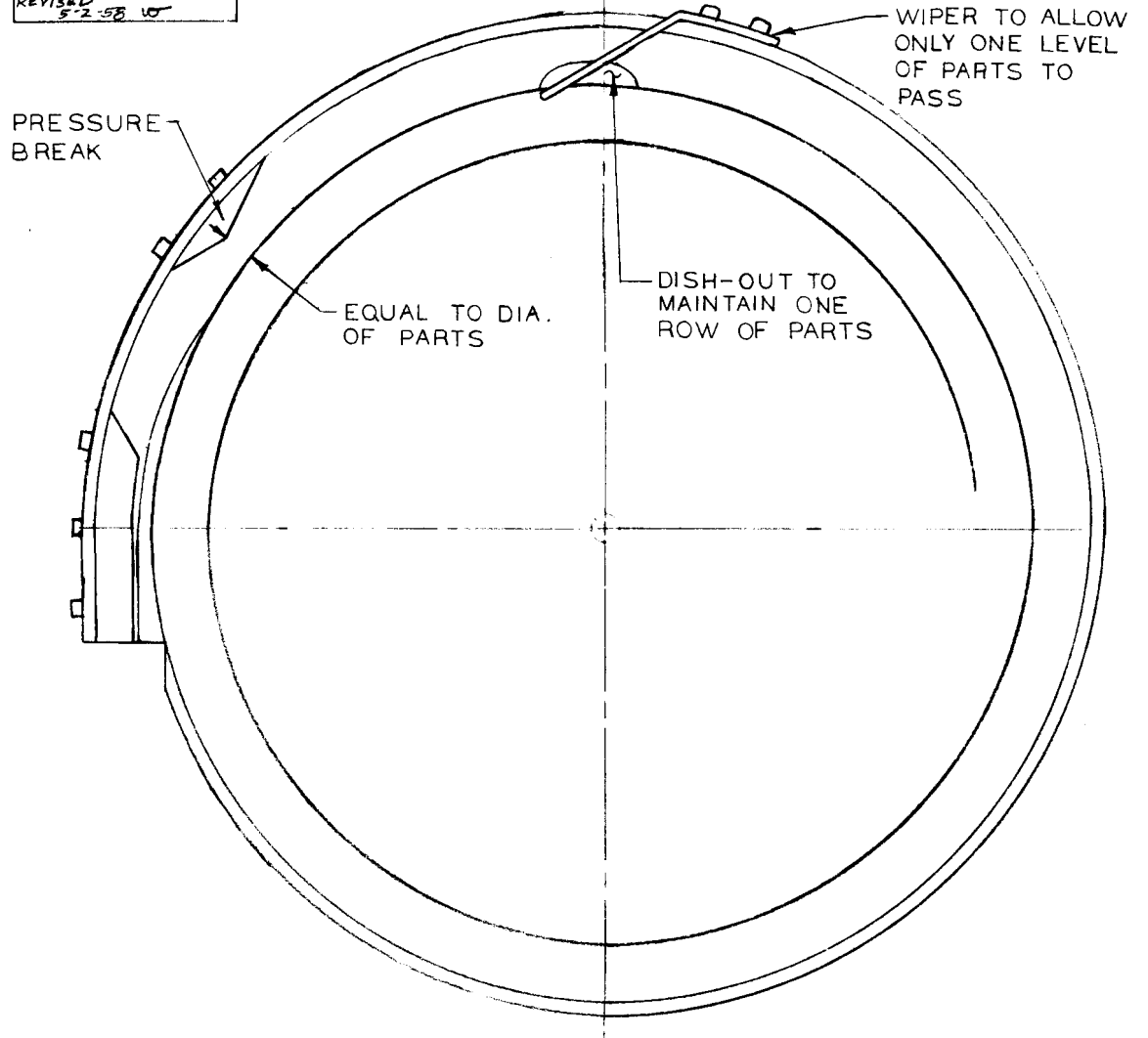
24	Electronic detection of metals	
25	Photo-electric detection of surface finish or color	
26	Very thin discs or washers	
27	Selection by fine dimple on end of part	
28	Shallow dished blanks and stampings	
29	Stacking flat washers and discs	
30	Stacking flat washers and discs to a height	
31	Orienting by center of gravity	
32	Irregular flat parts	
33	Parts with prongs or tabs	
34	Part with projecting pins	
35	Tapered parts	
36	Elbows	
37	Lock washer	
38	Parts having a groove on one face - Method #2	
39	Rectangular parts with offset key	
40	Very thin discs	
41	Rectangular "U" shaped parts	
42	Flat parts with raised center on one side	
43	Irregular shaped flat parts	
44	Transistors in hi-negative bowl	
45	Stacked bowls	
46	Pin length greater than diameter	
47	Pin-minimum length is three times diameter	
48	Headed pins with extra long bodies	
49	Pin with length greater than diameter	

<b>VIBRATORY FEEDER COMPANY</b> AUTOMATION PARK, BOX AD FAIRVIEW, PA. 16415 PHONE 814/474-5561		CASE NO. <b>1</b>	$L = D \times 1.2 \text{ MIN.}$ 
DWN R.L.L. DATE 6/4/56 CHK'D W DATE 6-23-56 REVISED 5-2-58	SCALE ~ SK. NO. 2004	<b>CYLINDERS</b> LENGTH GREATER THAN DIAMETER	PART BEING FED

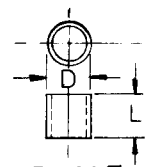


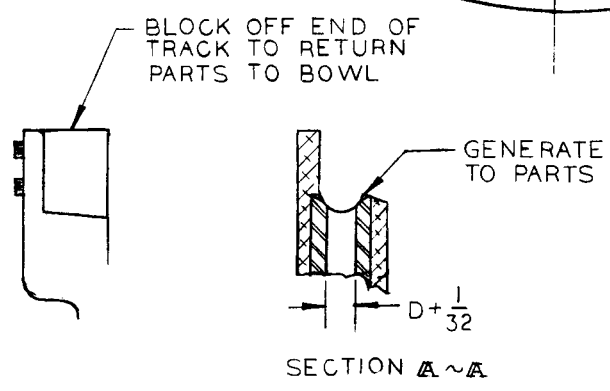
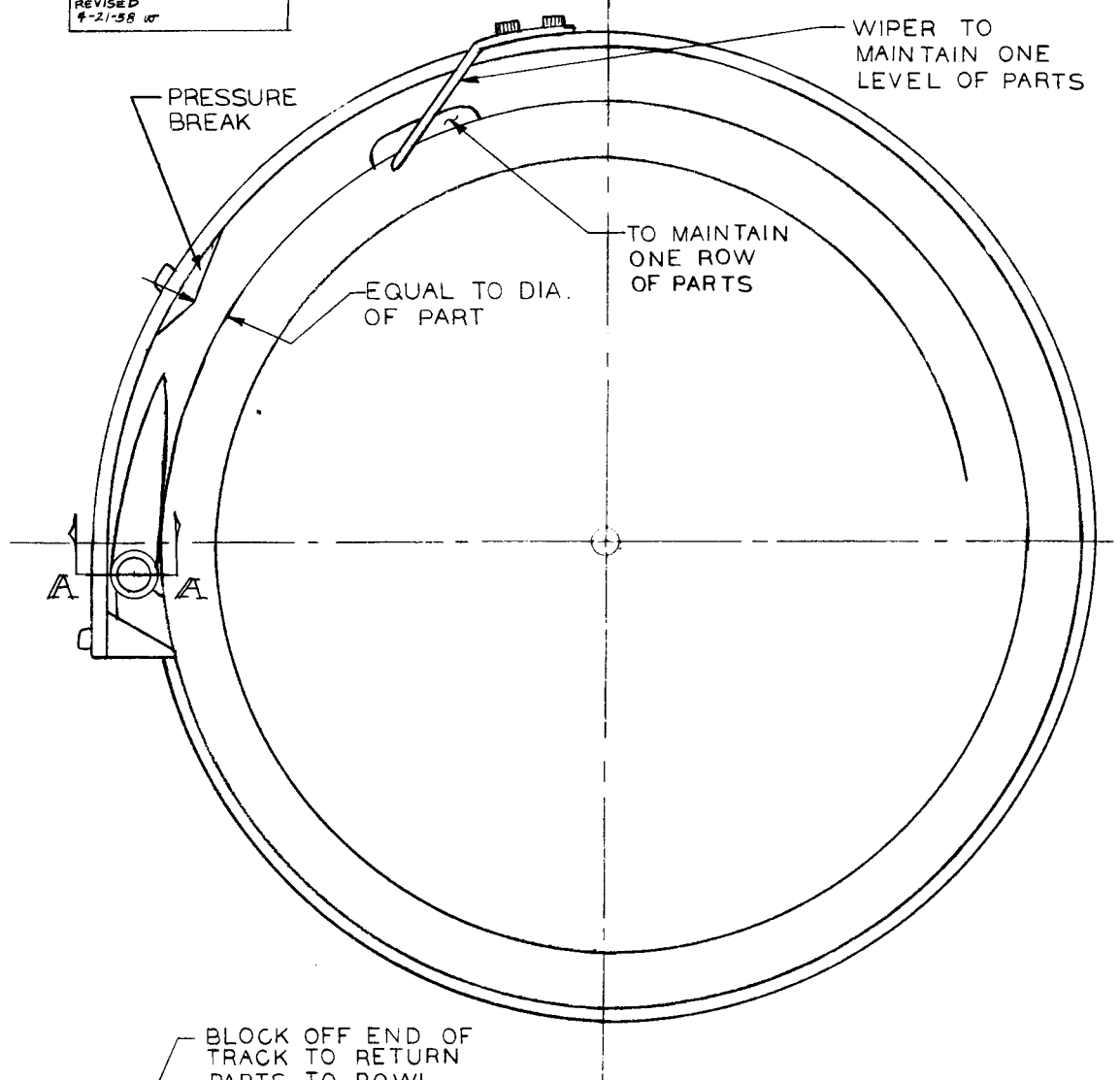
© 1966 BY VIBRATORY FEEDER CO.  
 A DIVISION OF  
 AUTOMATION DEVICES, INC.

<b>VIBRATORY FEEDER COMPANY</b> AUTOMATION PARK, BOX AD FAIRVIEW, PA. 16415 PHONE 814/474-5561		CASE NO. <b>2</b>	 <p>L = .8D MAX. PART BEING FED</p>
DWN R.L.L. DATE 6/4/56 CHK'D ✓ DATE 6-7-56 REVISED 5-2-58 ✓	SCALE ~ SK. NO. 2005	<b>CYLINDERS</b> LENGTH LESS THAN DIAMETER	

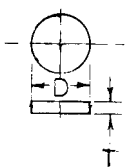


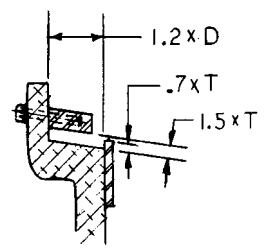
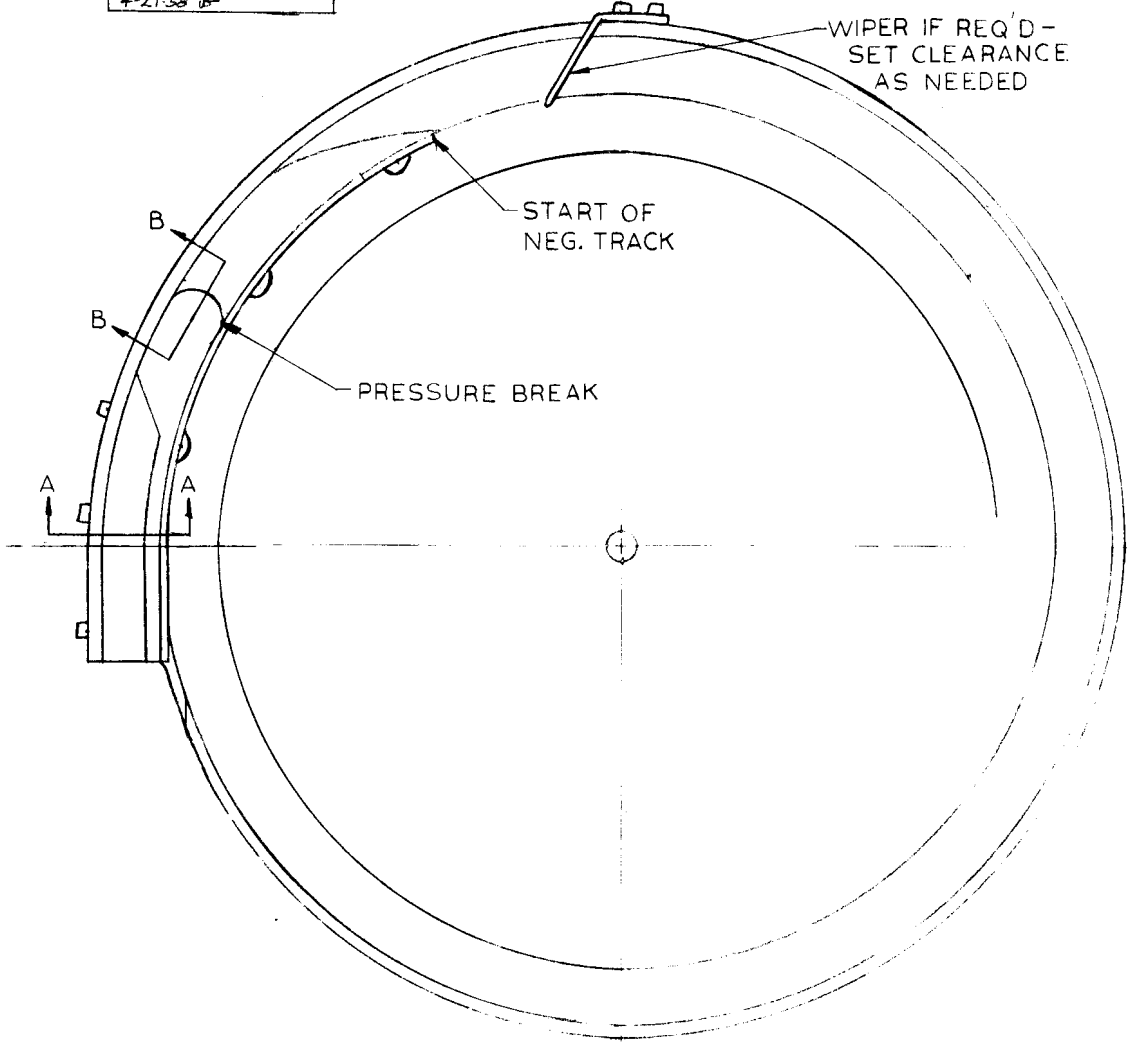
© 1966 BY VIBRATORY FEEDER CO.  
 A DIVISION OF  
 AUTOMATION DEVICES, INC.

<b>VIBRATORY FEEDER COMPANY</b> AUTOMATION PARK, BOX AD FAIRVIEW, PA. 16415 PHONE 814/474-5561		CASE NO. <b>3</b>	 $L = D \pm 20\%$ PART BEING FED
DWN R.L.L. DATE 6/4/56 CHK'D W DATE 6-7-56 <small>REVISED 4-21-58 W</small>	SCALE ~ SK. NO. 2006	CYLINDERS LENGTH EQUALS DIAMETER	

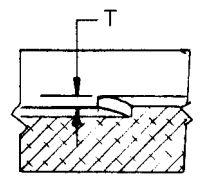


©1966 BY VIBRATORY FEEDER CO.  
 A DIVISION OF  
 AUTOMATION DEVICES, INC.

<b>VIBRATORY FEEDER COMPANY</b> AUTOMATION PARK, BOX AD FAIRVIEW, PA. 16415 PHONE 814/474-5561		CASE NO. <b>4</b>	 PART BEING FED
DWN R.L.L. DATE 6/4/56 CHK'D JT DATE 6-7-56 <small>REVISED 4-21-58 W</small>	SCALE ~ SK. NO. 2007	DISCS AND FLAT WASHERS	



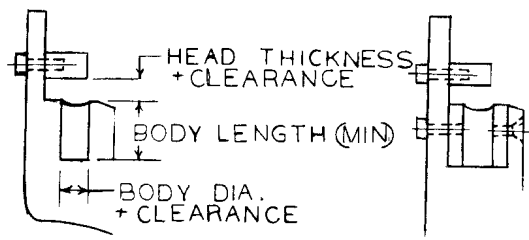
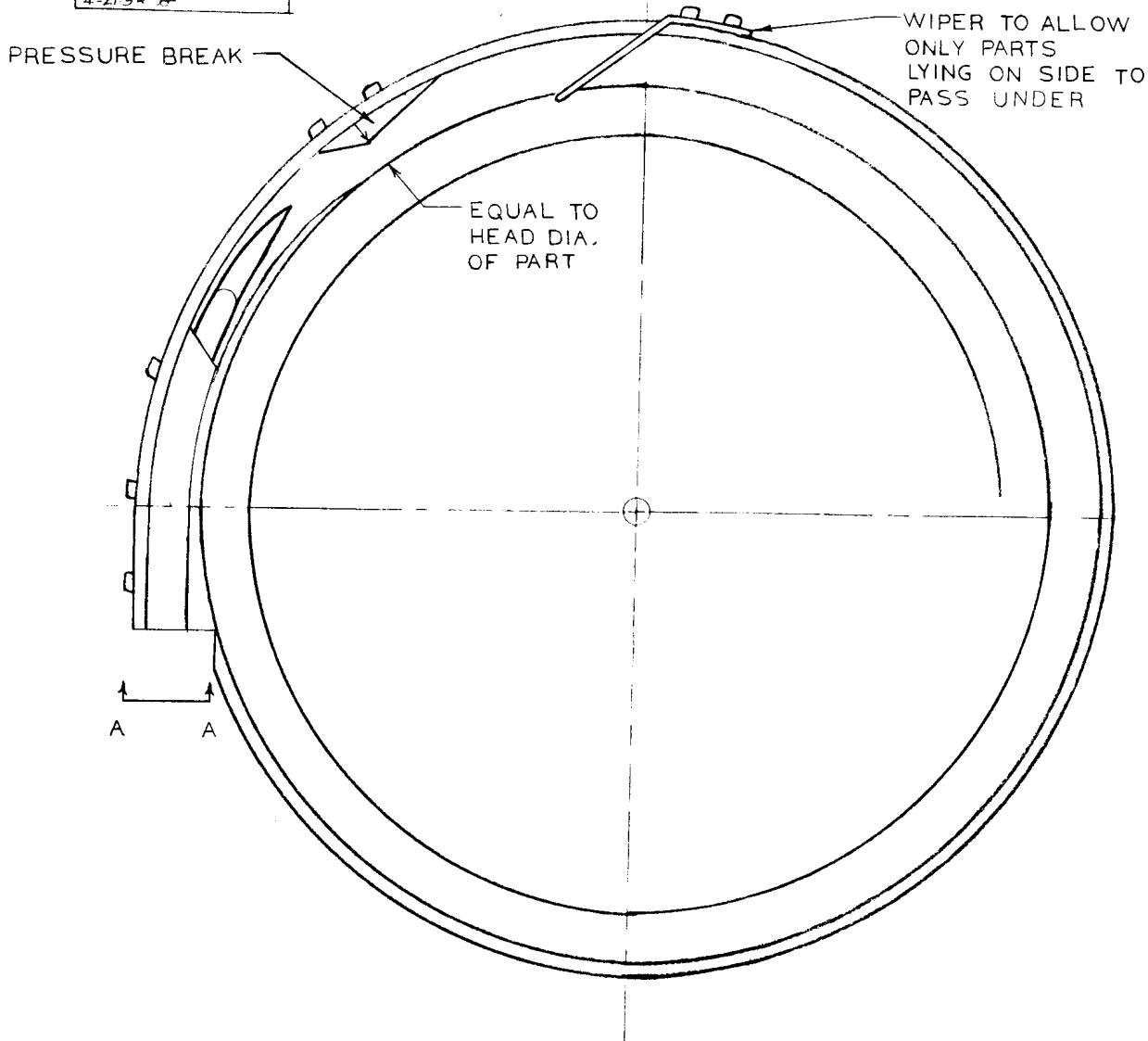
SECTION A-A



SECTION B-B

© 1966 BY VIBRATORY FEEDER CO.  
 A DIVISION OF  
 AUTOMATION DEVICES, INC.

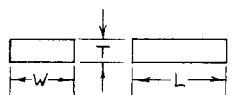
<b>VIBRATORY FEEDER CO.</b> AUTOMATION PARK, BOX AD FAIRVIEW, PA. 16415 PHONE 814/474-5561		CASE NO <b>5</b>	
DWN R. L. L. DATE 6/4/56 CHK'D W DATE 6-7-56 <small>REVISED 4-21-56</small>	SCALE	HEADED PART	PART FED
SK NO 2008			

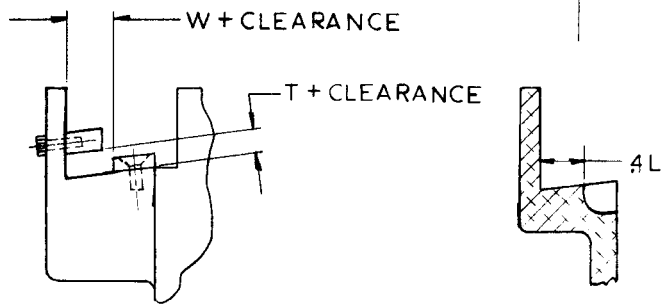
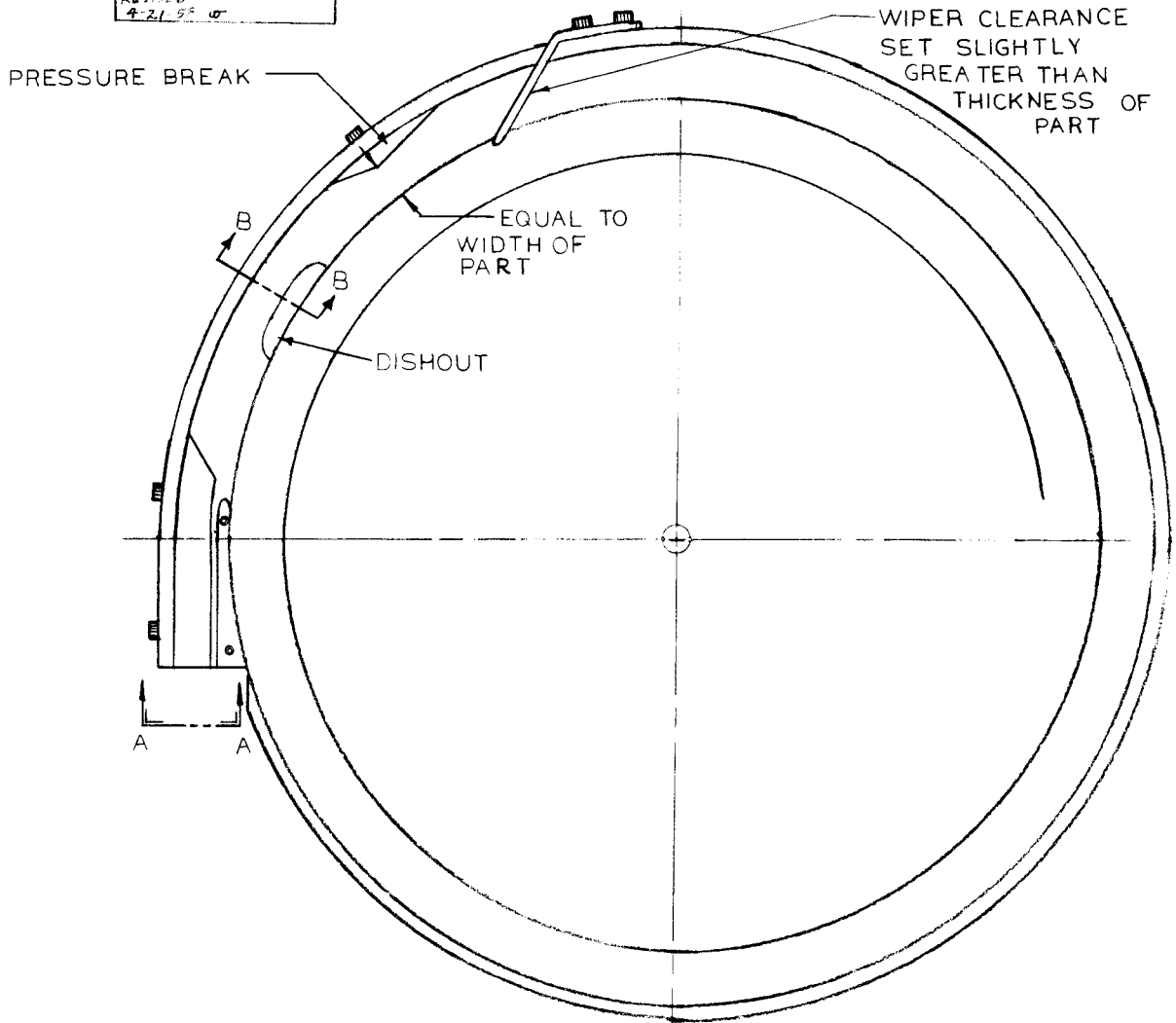


VIEW A~A

ALT. VIEW A~A  
 USE IF PART  
 CAUSES GREAT  
 AMOUNT OF WEAR

© 1966 BY VIBRATORY FEEDER CO.  
 A DIVISION OF  
 AUTOMATION DEVICES, INC.

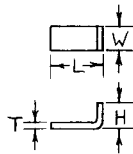
<b>VIBRATORY FEEDER CO.</b> AUTOMATION PARK, BOX A.D. FAIRVIEW, PA. 16415 PHONE 814/474-5561		CASE NO <b>6</b>	
DWN R.L.L. DATE 6/4/56 CKD W DATE 6-7-56 <small>REVISED 4-21-56 W</small>	SCALE ~ SK NO 2009	RECTANGULAR PART	

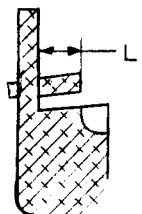
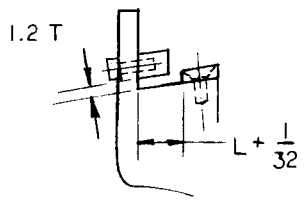
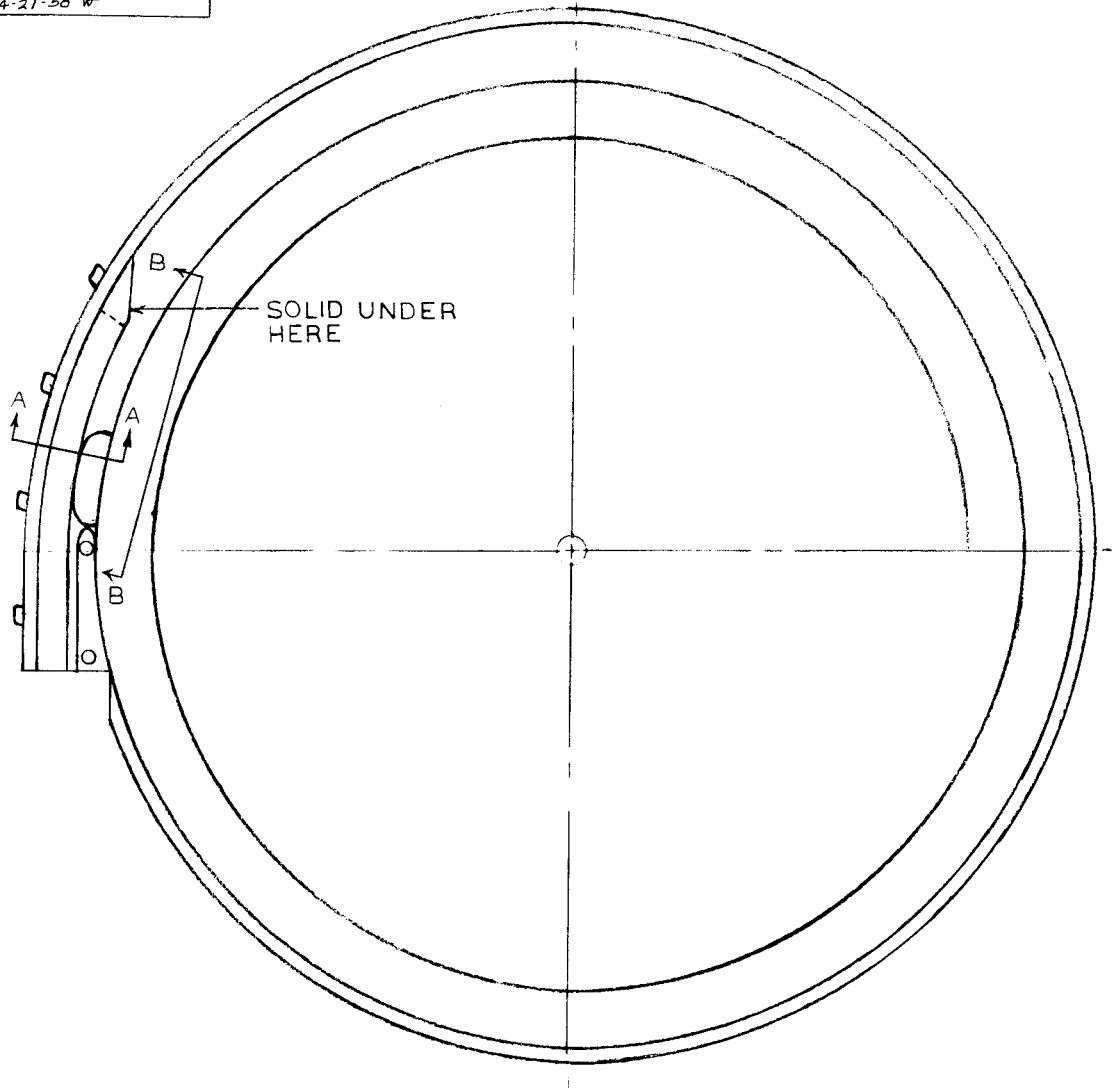


VIEW A~A

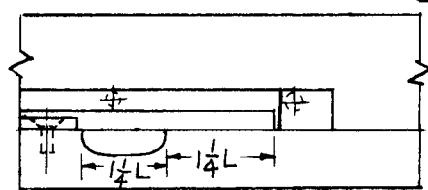
SECTION B~B

© 1966 BY VIBRATORY FEEDER CO.  
 A DIVISION OF  
 AUTOMATION DEVICES, INC.

VIBRATORY FEEDER CO. AUTOMATION PARK, BOX AD FAIRVIEW, PA. 16415 PHONE 814/474-5561		CASE NO <b>7</b>	
DWN R.L.L. DATE 6-4-56 CHKD W DATE 6-7-56 REVISED 4-21-58 W	SCALE ~ SK NO 2010	ANGLE STAMPING	

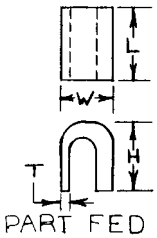



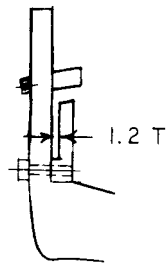
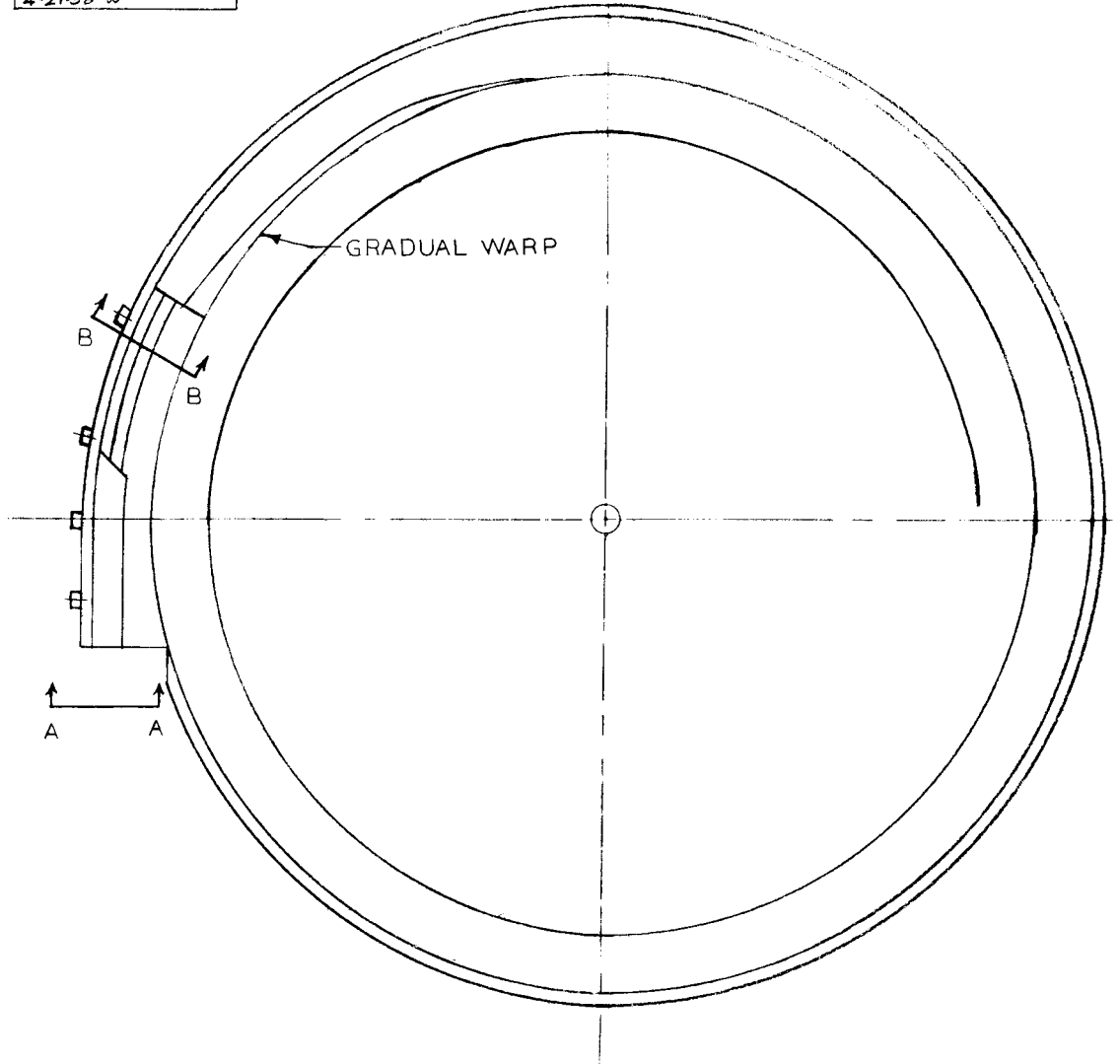
SECTION A~A



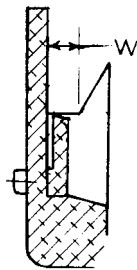
VIEW B~B

© 1966 BY VIBRATORY FEEDER CO.  
 A DIVISION OF  
 AUTOMATION DEVICES, INC.

VIBRATORY FEEDER CO. AUTOMATION PARK, BOX AD FAIRVIEW, PA. 16415 PHONE 814/474-5561		CASE NO <b>8</b>	
DWN R. L. L. DATE 6/4/56 CHKD W DATE 6-7-56 REVISED 4-21-58 W	SCALE  SK NO 2011	FORMED METAL PART-WALLS NOT EQUALLY THICK	

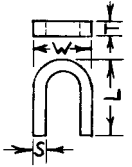


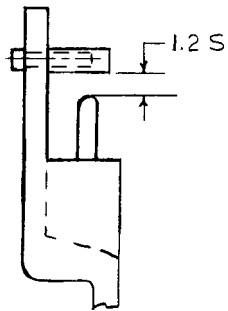
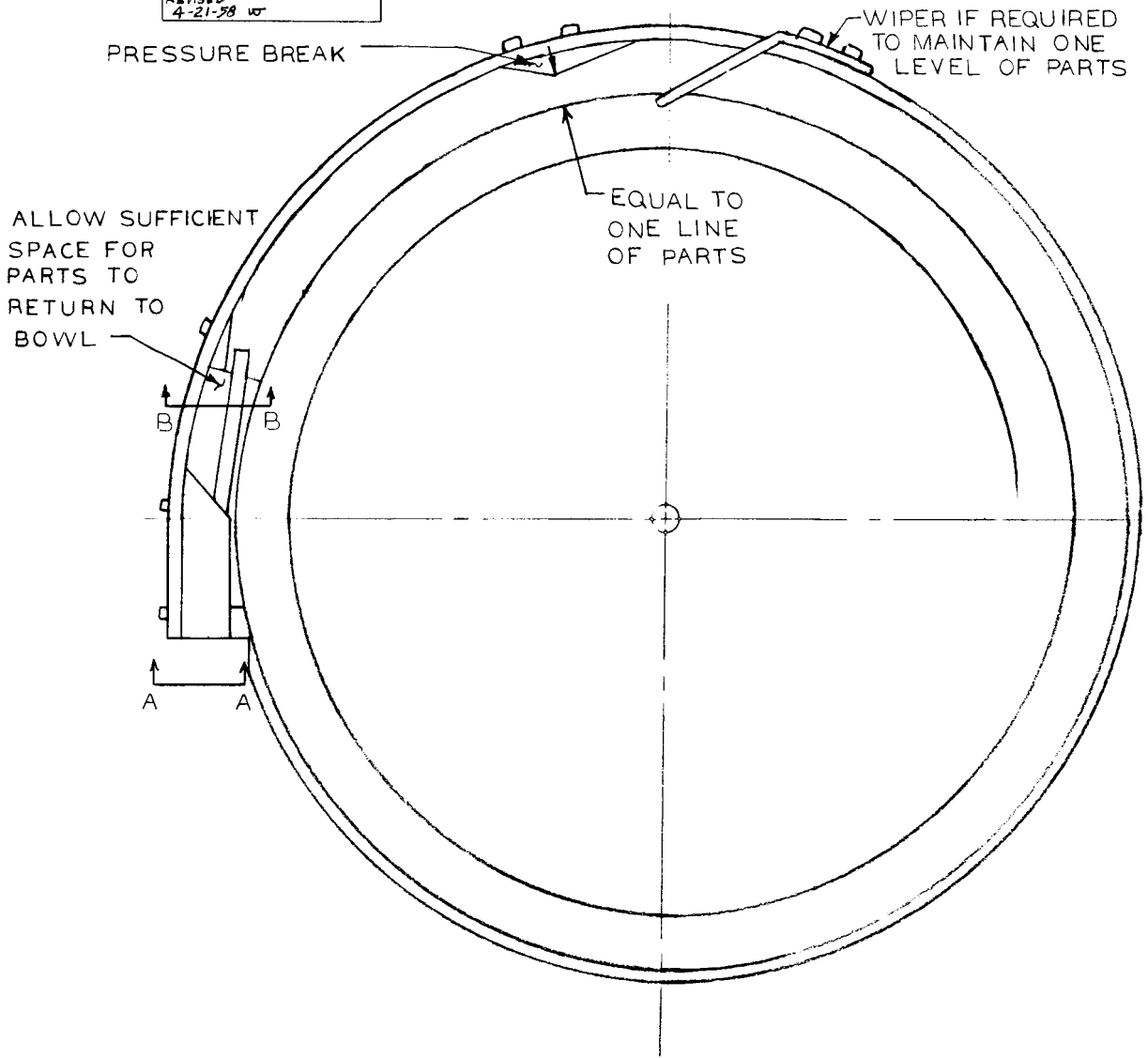
VIEW A~A



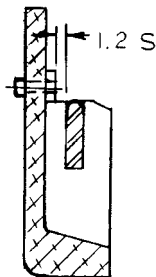
SECTION B~B

© 1966 BY VIBRATORY FEEDER CO.  
 A DIVISION OF  
 AUTOMATION DEVICES, INC.

VIBRATORY FEEDER CO AUTOMATION PARK, BOX AD FAIRVIEW, PA. 16415 PHONE 814/474-5561		CASE NO <b>9</b>	
DWN R.L.L. DATE 6/4/56 CHKD W DATE 6-7-56 REVISED 4-21-58 W	SCALE ~ SK. NO. 2012	HORSESHOES	



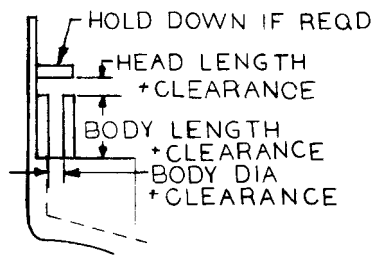
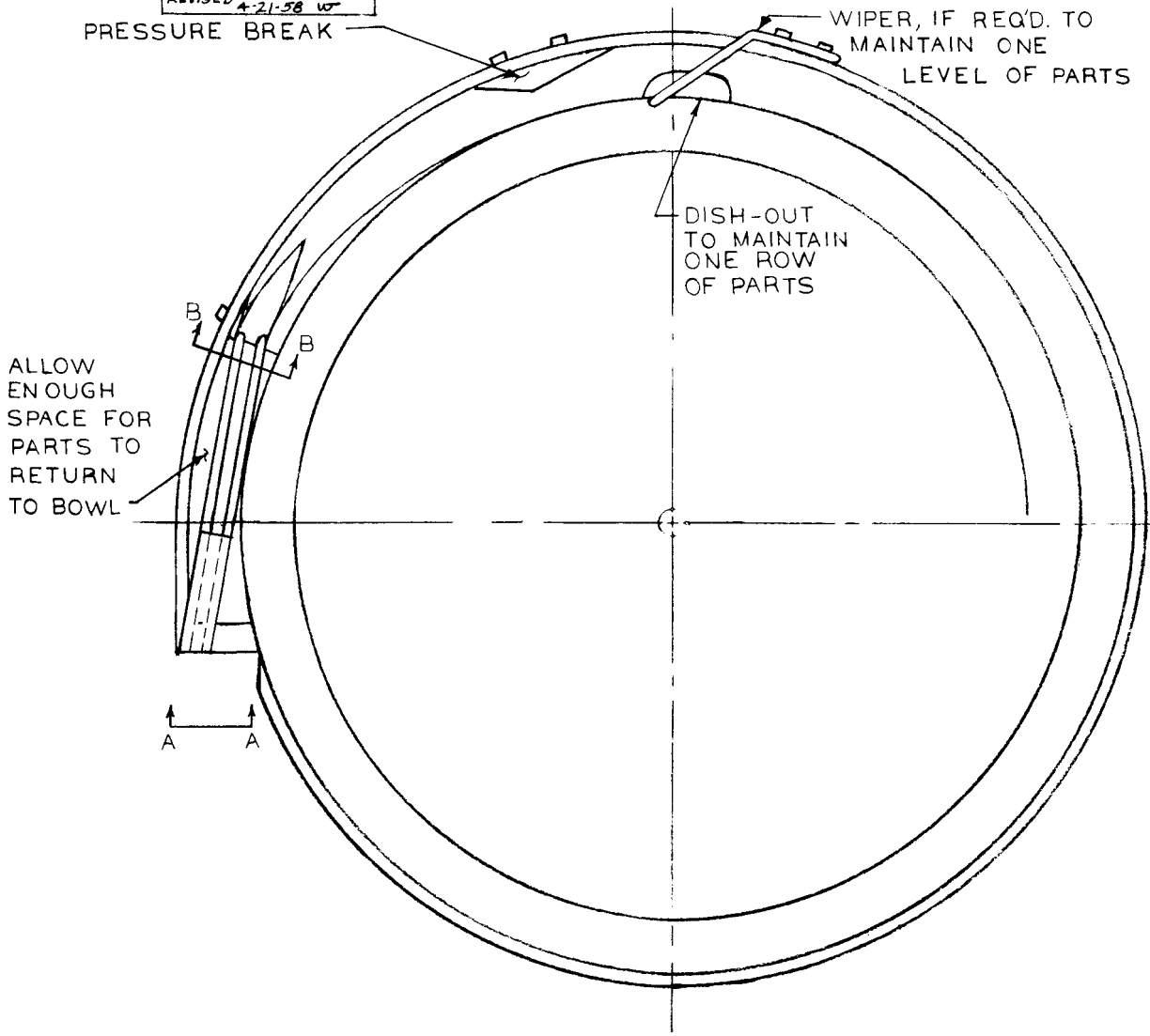
VIEW A~A



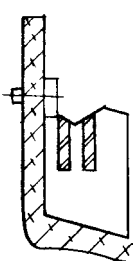
SECTION B~B

© 1966 BY VIBRATORY FEEDER CO.  
 A DIVISION OF  
 AUTOMATION DEVICES, INC.

VIBRATORY FEEDER CO. AUTOMATION PARK, BOX AD FAIRVIEW, PA. 16415 PHONE 814/474-5561		CASE NO <b>10</b>	
DWN R.L.L. DATE 6/4/56 CHKD W DATE 6-7-56 REVISED 4-21-58 W	SCALE $\sim$ SK. NO. 2013	POINTED PARTS WITH LARGE HEAD	

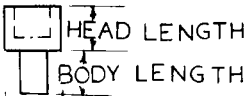
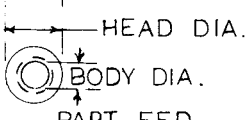


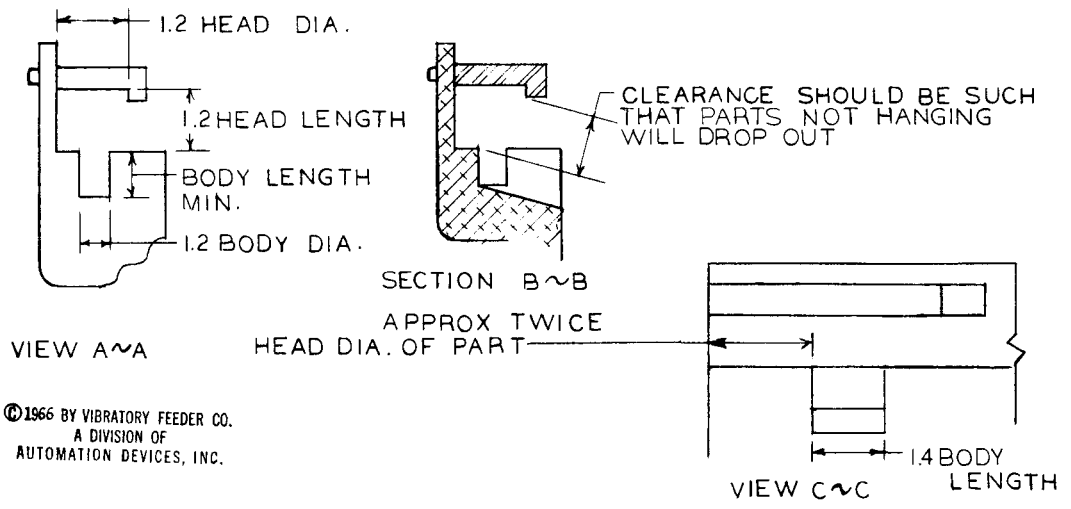
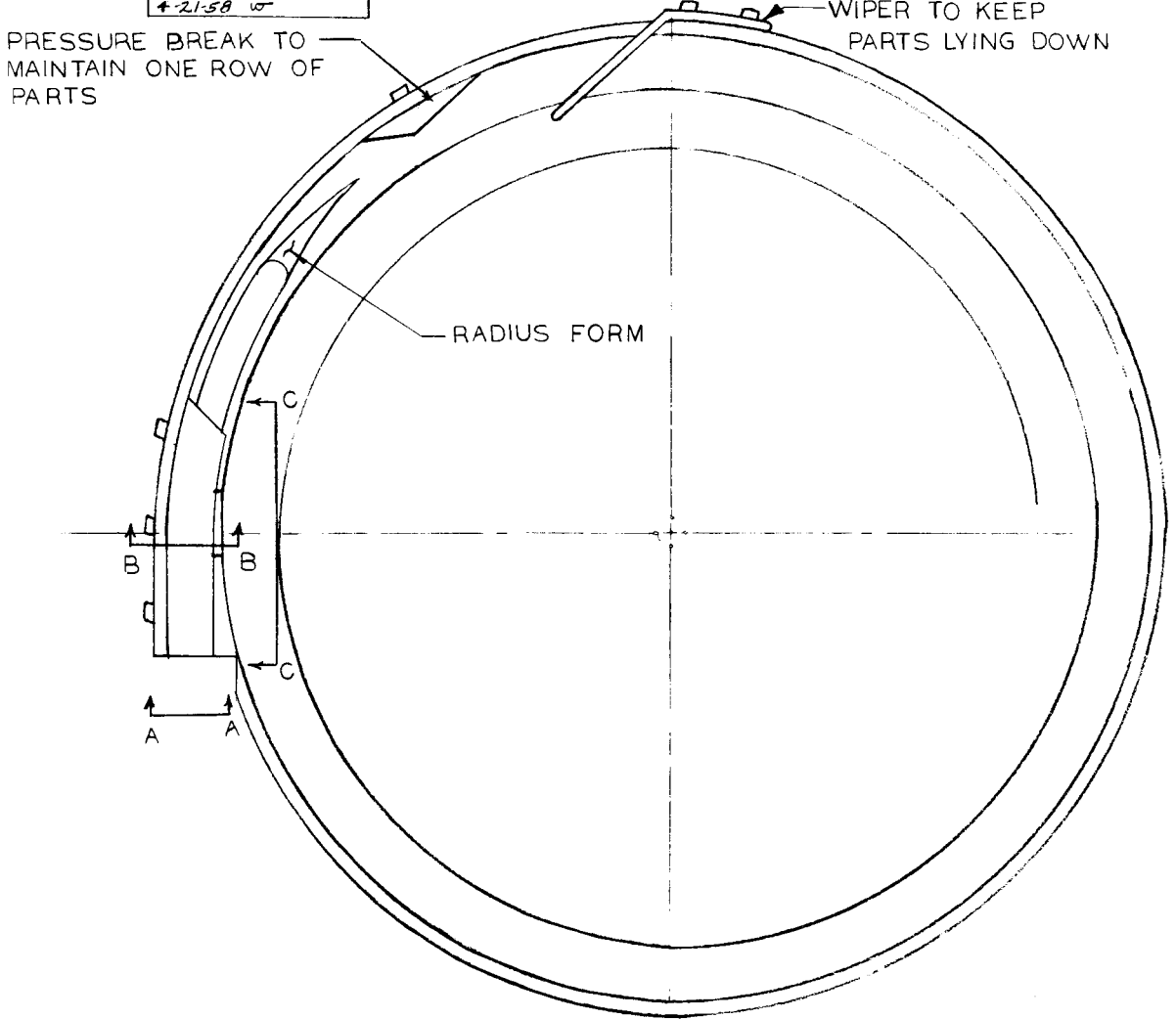
VIEW A~A



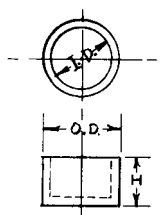

SECTION B~B

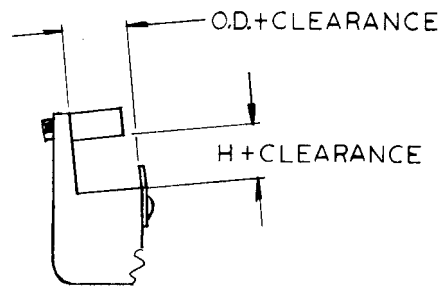
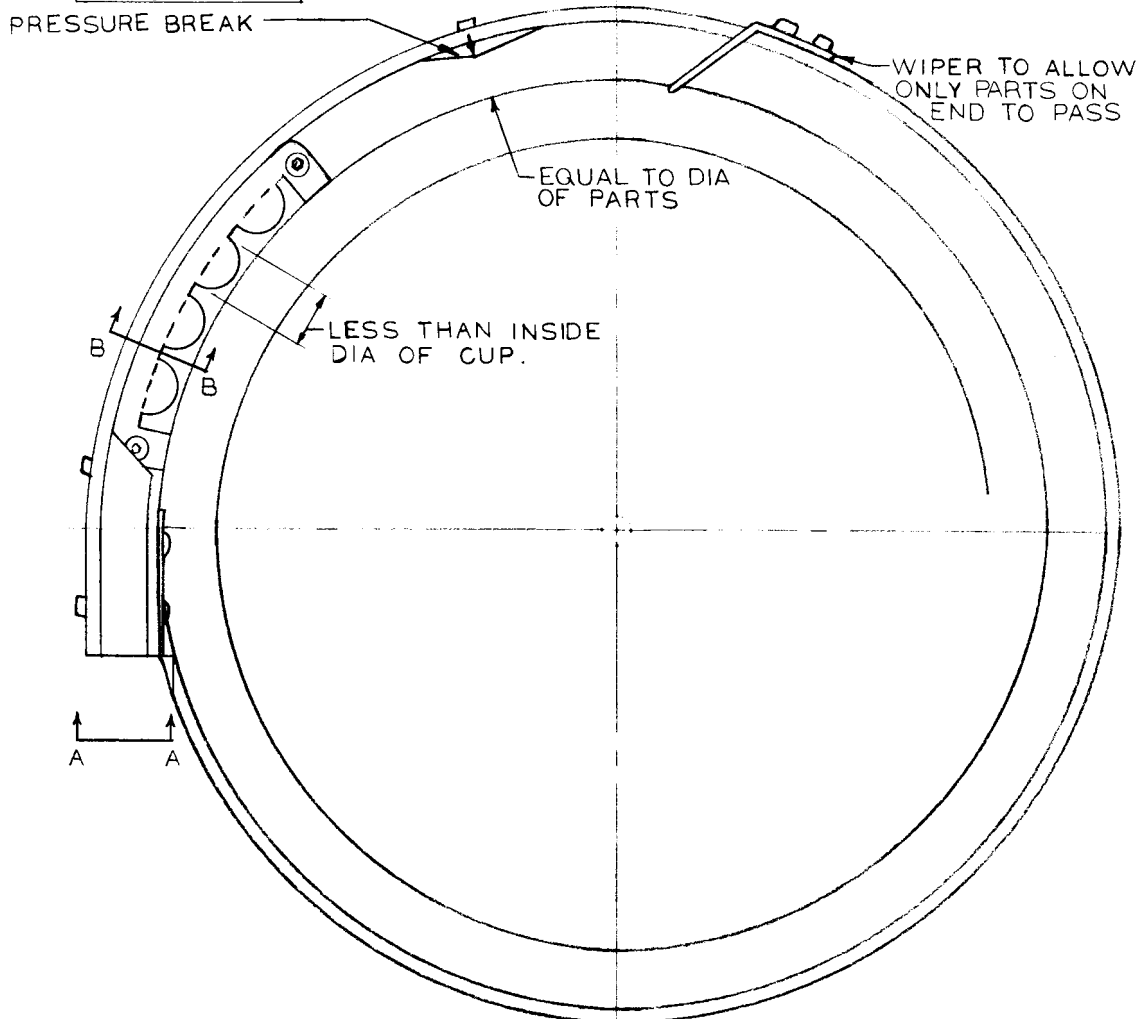
© 1966 BY VIBRATORY FEEDER CO.  
 A DIVISION OF  
 AUTOMATION DEVICES, INC.

<b>VIBRATOR FEEDER CO.</b> AUTOMATION PARK, BOX AD FAIRVIEW, PA. 16415 PHONE 814/474-5561		CASE NO <b>11</b>	 HEAD LENGTH BODY LENGTH
DWN. R.L.L. DATE 6/4/56 CHK'D ✓ DATE 6-7-56 REVISED 4-21-58 ✓	SCALE ~~~~~ SK NO 2014	HEADED PT OR SHELL BODY WT. SLIGHTLY GREATER THAN HEAD WT - PART MAY NOT HANG	 HEAD DIA. BODY DIA. PART FED

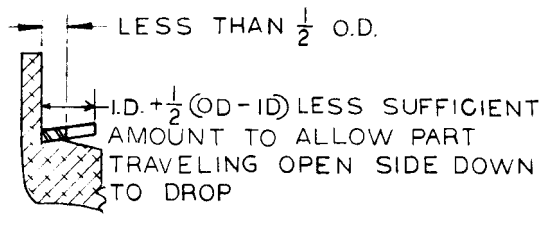


© 1966 BY VIBRATORY FEEDER CO.  
 A DIVISION OF  
 AUTOMATION DEVICES, INC.

VIBRATORY FEEDER CO. AUTOMATION PARK, BOX AD FAIRVIEW, PA. 16415 PHONE 814/474-5561		CASE NO <b>12</b>	
DWN R.L.L. DATE 6/4/56 CHK'D WJ DATE 6-7-56 REVISED 4-21-58 W	SCALE  SK. NO. 2015	CUP ON SCALLOPS	PART FED

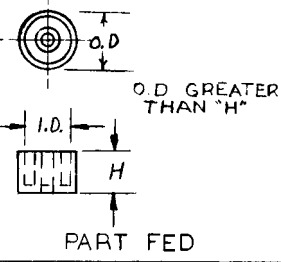



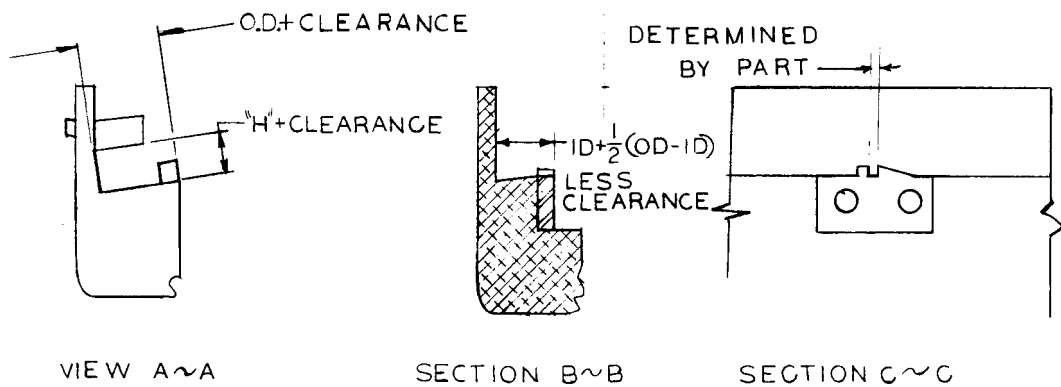
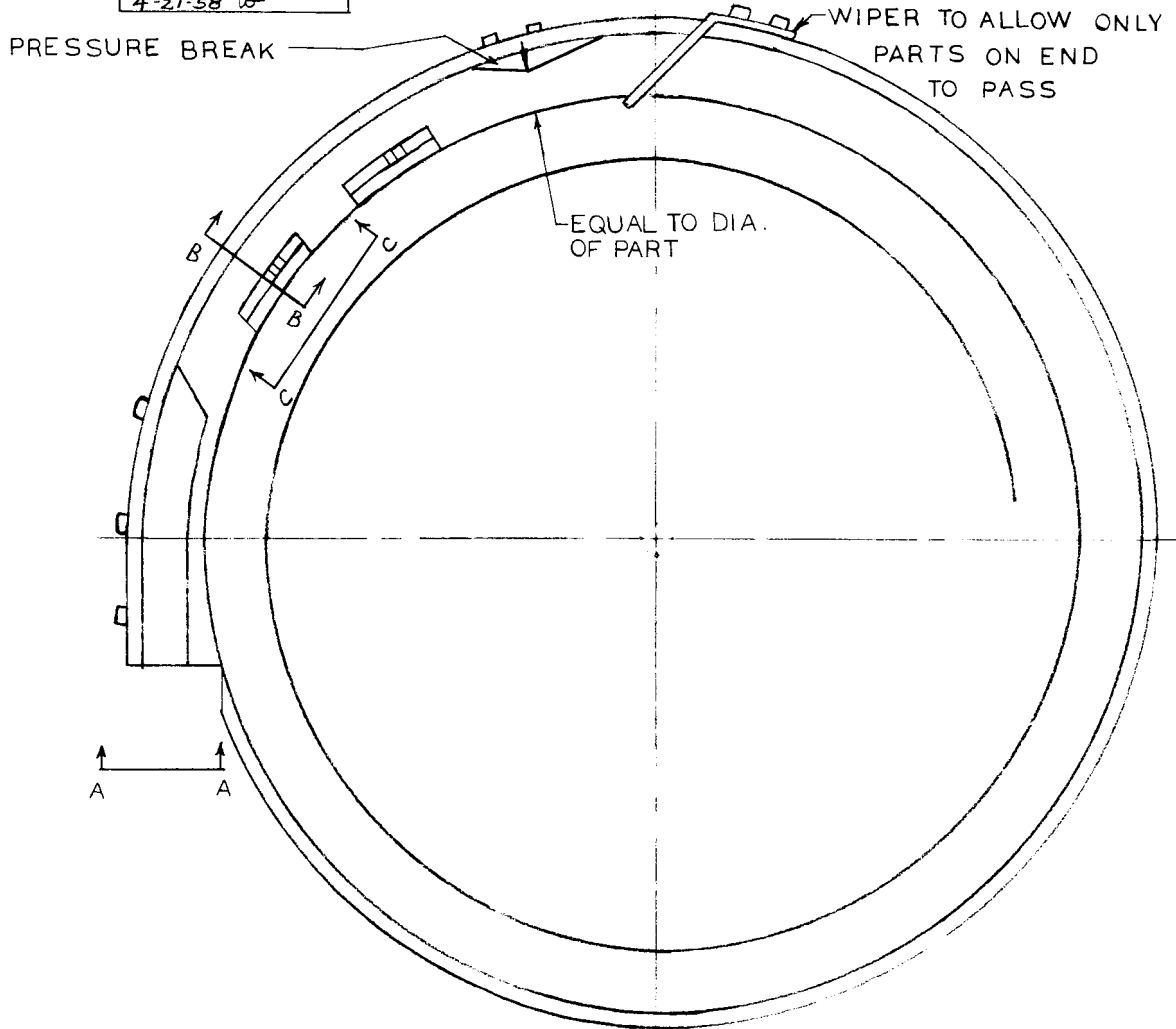
VIEW A~A



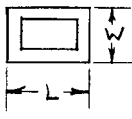

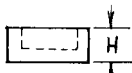
SECTION B~B

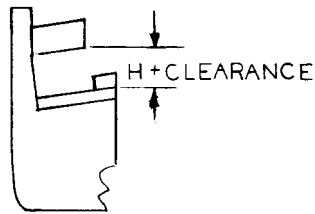
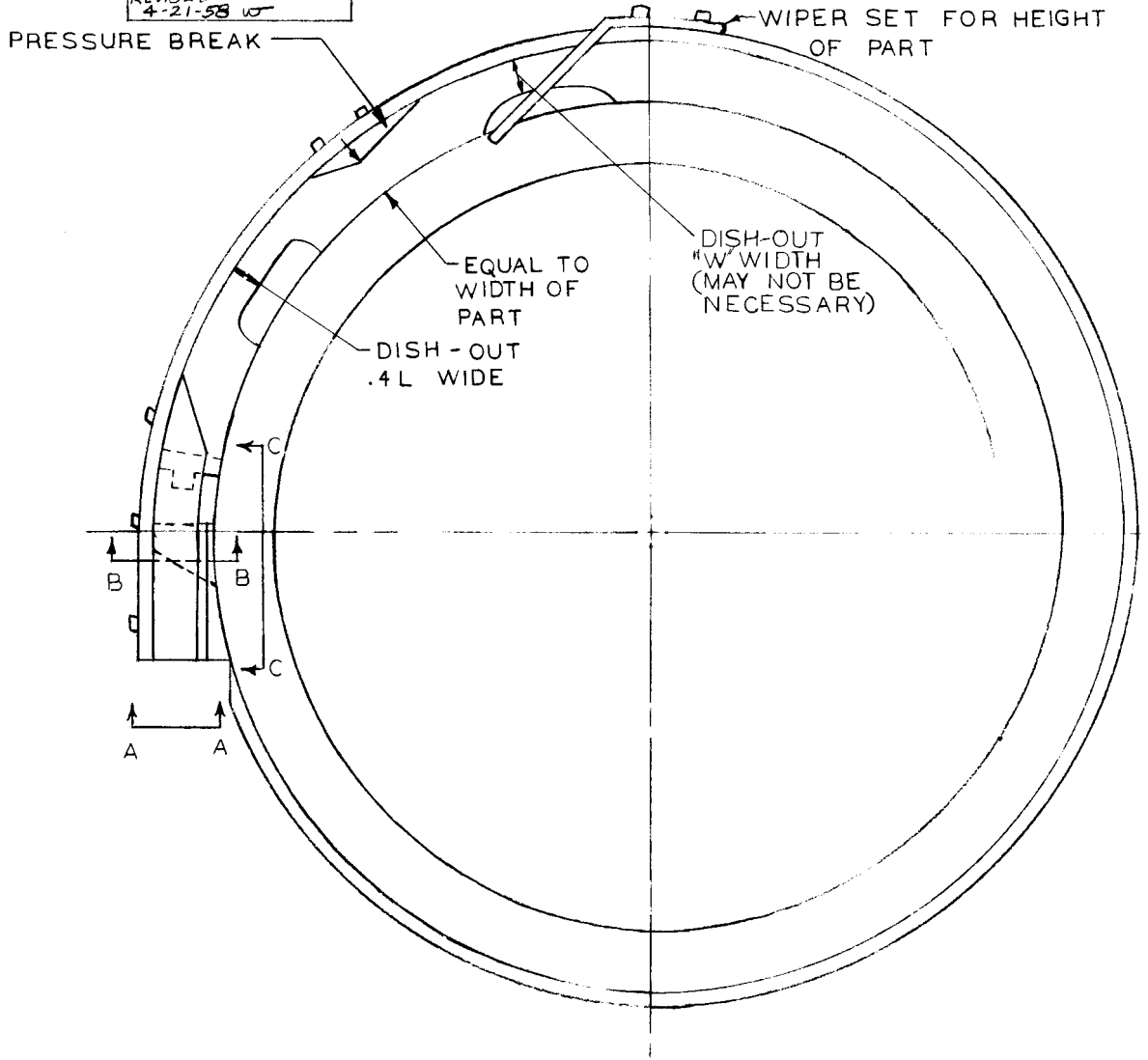
© 1966 BY VIBRATORY FEEDER CO.  
 A DIVISION OF  
 AUTOMATION DEVICES, INC.

VIBRATORY FEEDER CO. AUTOMATION PARK, BOX AD FAIRVIEW, PA. 16415 PHONE 814/474-5561		CASE NO <b>13</b>	
DWN R.L.L. DATE 6/4/56 CHKD ✓ DATE 6-7-56 <small>REVISED</small> 4-21-58 ✓	SCALE  SK. NO. 2016	PARTS HAVING A GROOVE ON ONE FACE	PART FED

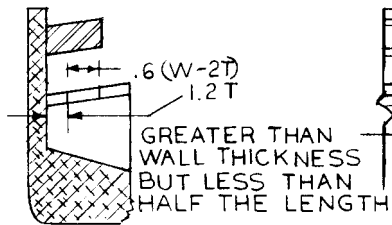


© 1966 BY VIBRATORY FEEDER CO.  
 A DIVISION OF  
 AUTOMATION DEVICES, INC.

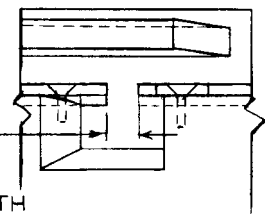
VIBRATORY FEEDER CO. AUTOMATION PARK, BOX AD FAIRVIEW, PA. 16415 PHONE 814/474-5561		CASE NO <b>14</b>	
DWN DATE 6/4/56 CHK'D W DATE 6-7-56 REVISED 4-21-58 W	R.L.L. SCALE  SK NO 2017	FORMED METAL CUPS	 PART FED





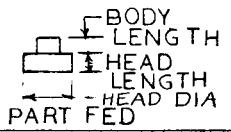
VIEW A~A

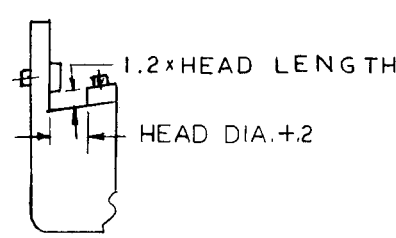
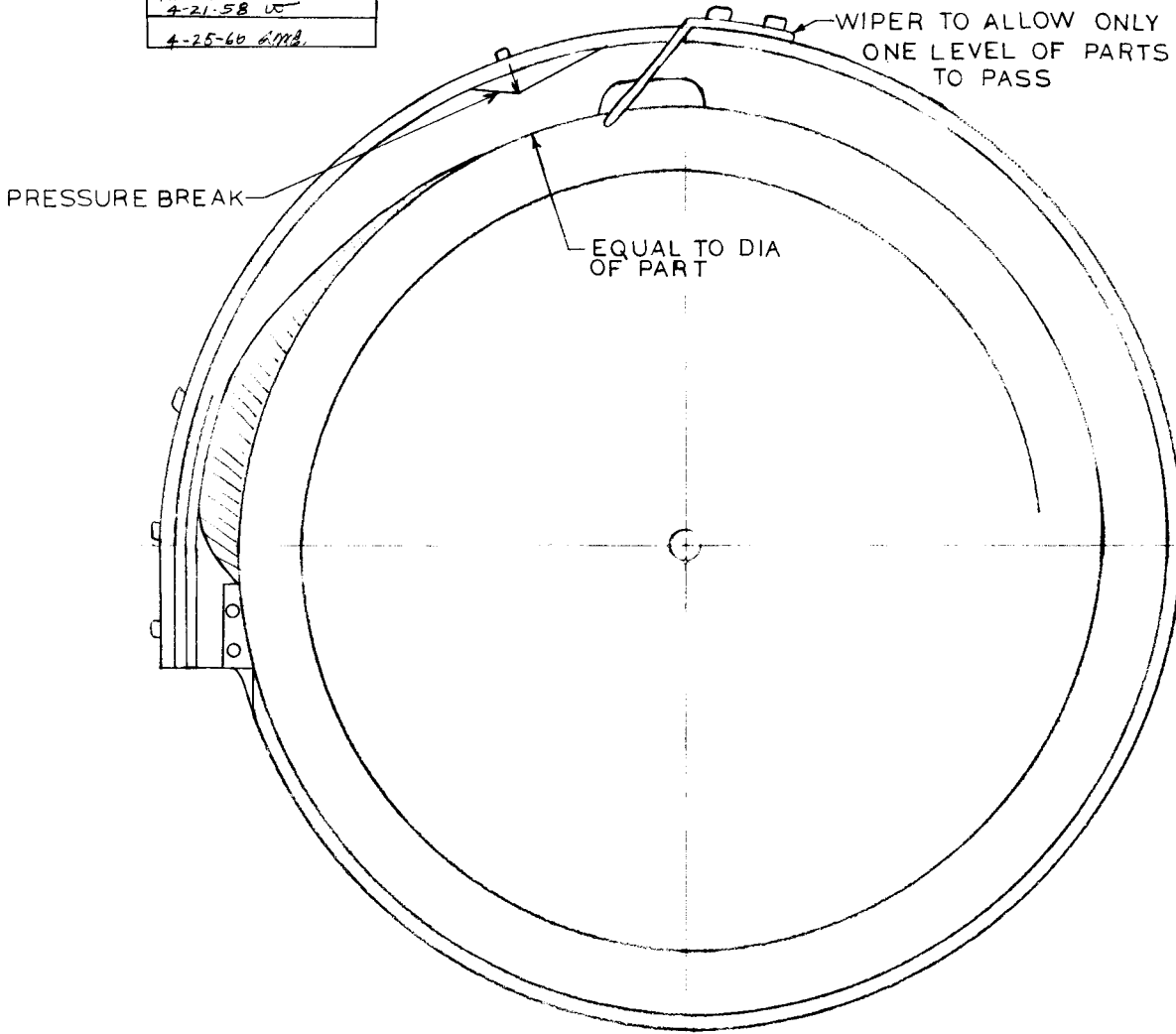


SECTION B~B



SECTION C~C

VIBRATORY FEEDER CO. AUTOMATION PARK, BOX AD FAIRVIEW, PA. 16415 PHONE 814/474-5561		CASE NO <b>15</b>	
DWN R.L.L. DATE 6/4/56 CHKD W DATE 6-7-56 REVISED 4-21-58 W 4-25-60 G.M.B.	SCALE  SK NO 2018	HEADED PARTS WITH SHORT BODY - RE- TAINING BY FORM	



© 1966 BY VIBRATORY FEEDER CO.  
 A DIVISION OF  
 AUTOMATION DEVICES, INC.