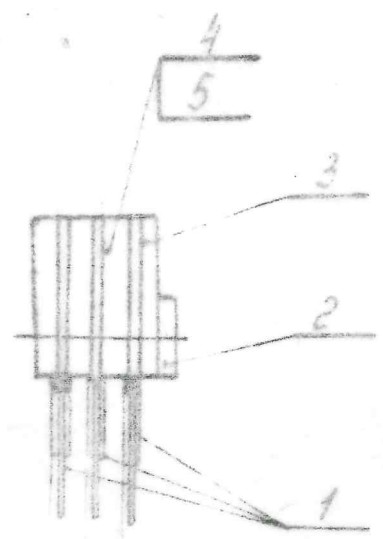
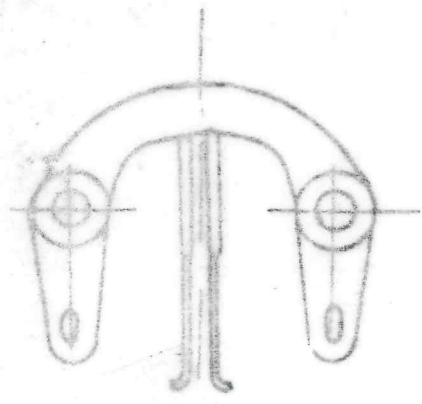


127 CB 10



1) Tolerances on dimensions between springs are $\pm 0,5$ mm. It is adjusted by gaskets Ref. No. 4 and 5.

2) Assemble using bakelite varnish ЛБс-1, GOST 901-78. and allow to dry as per instructions K04,34,048.

3) Filing of bush flush with gasket is allowed.

5	2100400027	Gasket	4	
4	210040026	Gasket	4	
3	352,10,00,002	Gasket	4	
2	269,06,15,001	Bush	2	
1	127-cb11	Brush holder with brushes	3	
S.No.	DESIGNATION	DESCRIPTION	Qty.	Remarks.

127-cb10

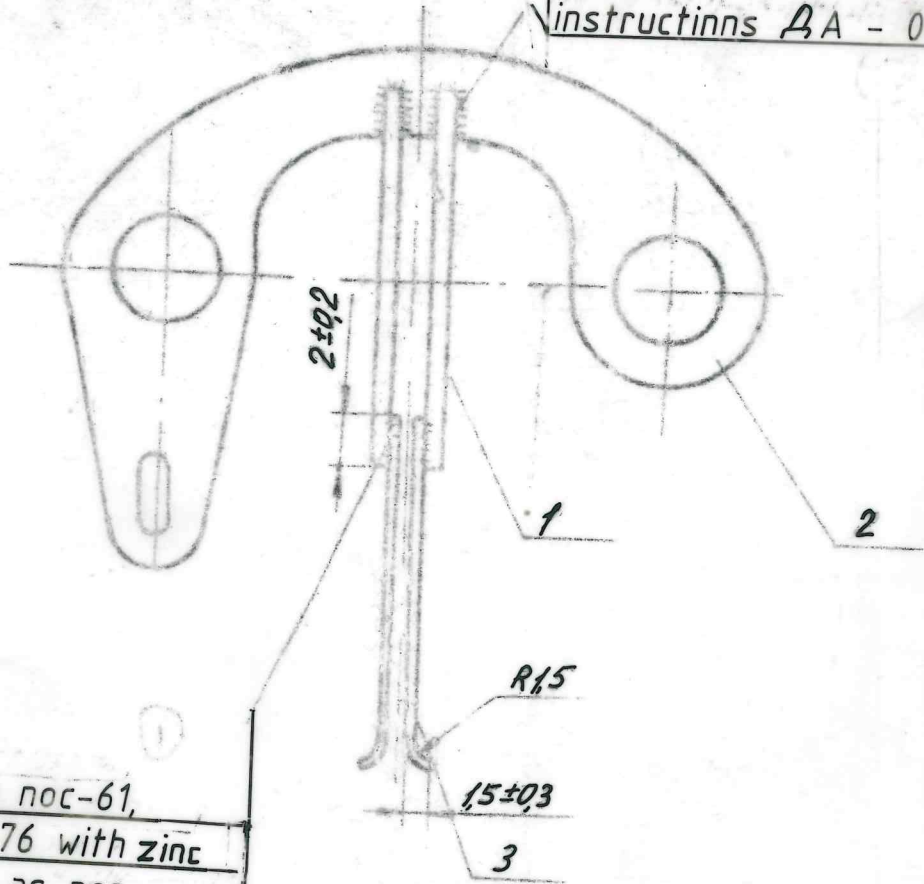
SN	SHT	DOC NO	SIGN	DATE
DRAWN		Y.R.Ganesh		19.5.84
EDT/CHKD		D.K.JAIN	<i>[Signature]</i>	24.5.89
F/M, DC		S.H.RAO	<i>[Signature]</i>	3/1/6
DIV/OFFR		D.A. BABU	<i>[Signature]</i>	5/1/8
		NAME	SIGN	DATE

BLOCK ASSEMBLY UNIT

SHEET	WEIGHT	SCALE
	26502	2:1
TOTAL SHEETS		
ORDNANCE FACTORY PROJECT HYDERABAD		

127-cb11

Solder using noc-61, GOST-21931-76 with flux ЛТИ as per instructions ДА - 0443-003.



Solder using noc-61, GOST 21931-76 with zinc chloride as per instructions ДА-0443-003.

3	160 - 217	Brush	2	
2	9Д 7,736,000	Brush holder	1	
1	2690621001	Spring	2	
S.No.	DESIGNATION	DESCRIPTION	Qty.	Remarks

127-cb11

SNOSHT	DOC NO	SIGN	DATE
DRAWN	Y.R.Ganesh		13.5.84
EDT,CHKD	B.Sarkhel	<i>B.Sarkhel</i>	17.5.84
F/M,DC	S.H.RAO	<i>S.H.RAO</i>	31/5
DIV.OFFR	D.A. Sankar	<i>D.A. Sankar</i>	31/5
	NAME	SIGN	DATE

BRUSH HOLDER WITH BRUSH.

SHEET	WEIGHT	SCALE
A		10:1
TOTAL SHEETS		
ORDNANCE FACTORY		
PROJECT		
HYDERABAD		

D/30-69

ORDNANCE FACTORY PROJECT HYDERABAD	
TOTAL SHEETS	A
0.181gm	5:1
SHEETS WEIGHT	SCALE

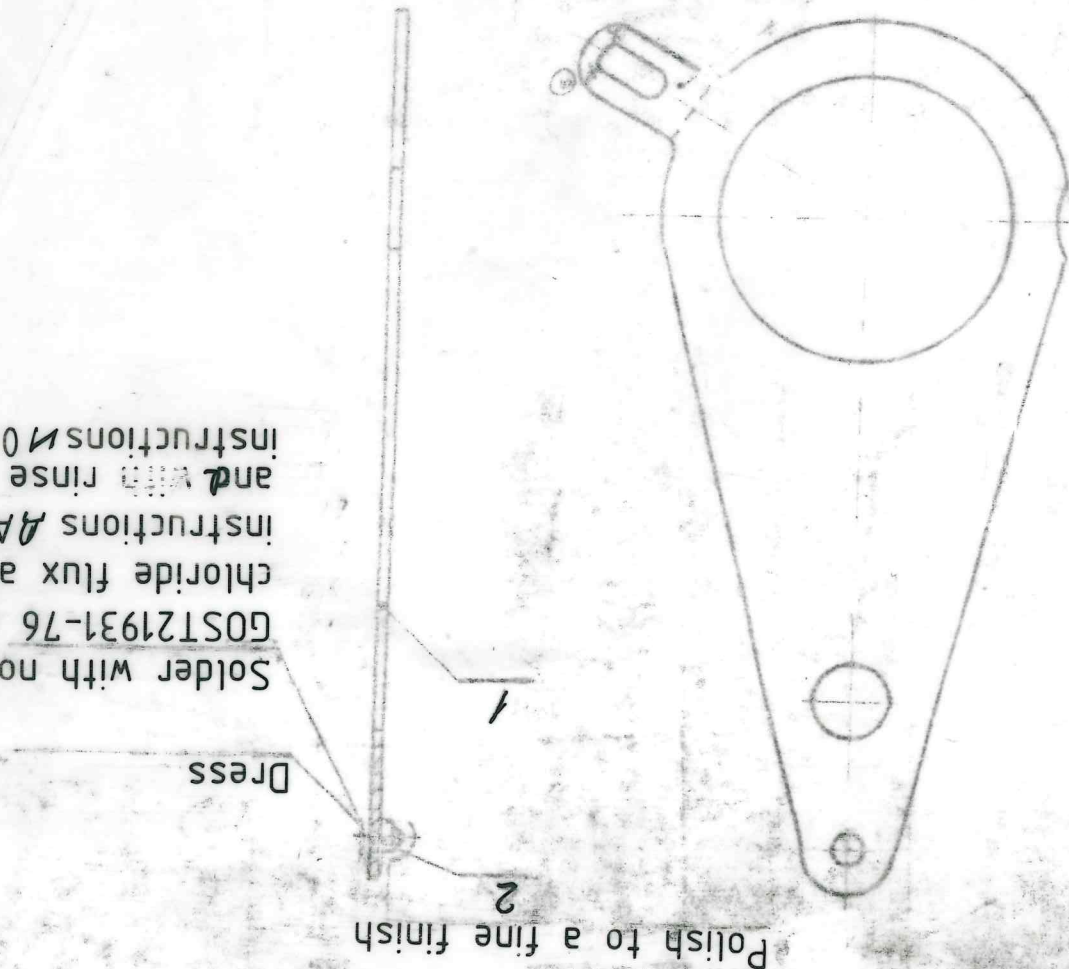
127-6812

CONTACT SPRING

SINO SHEET	DOCNO	SIGN	DATE
DRAWN BY	V.J.RAO	14.5.84	
EDITED	B. B.	17.5.84	
CHECKED BY	S. H. RAO	21/5	
FOREMAN OF DC	S. H. RAO	21/5	
DIVISIONAL OFFICER	S. H. RAO	21/5	

Ref No	Designation	Description	Qty	Remarks
1	160-84	Contact spring	1	
2	160-44	Contact II	1	

1 Tin with solder noc61, GOST 21931-76 with zinc chloride flux as per instructions AA-0443-003 and rinse as per instructions NO.153.356.



Polish to a fine finish

Dress

Solder with noc 61,

GOST21931-76 with zinc

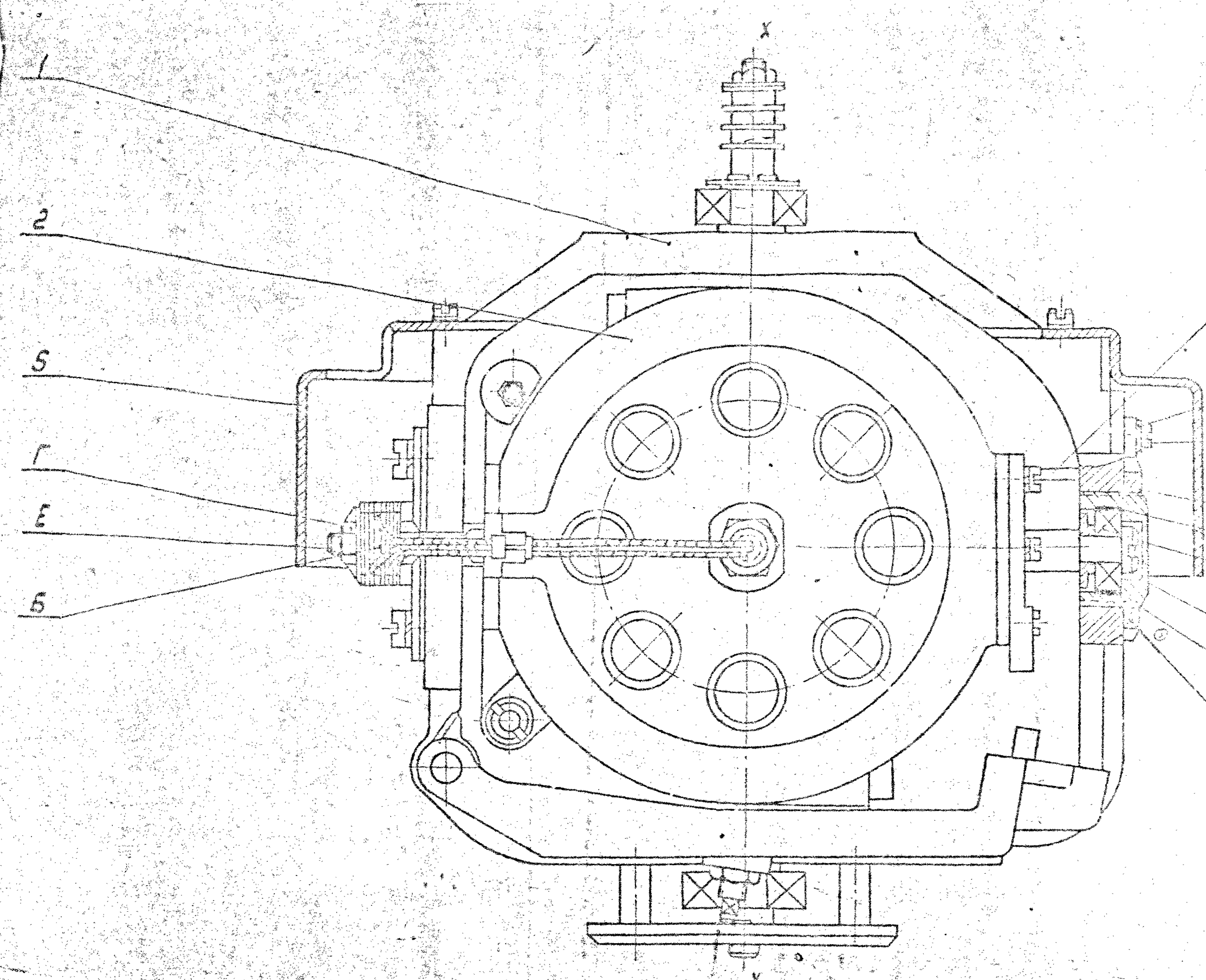
chloride flux as per

instructions AA-0443-003

and with rinse as per

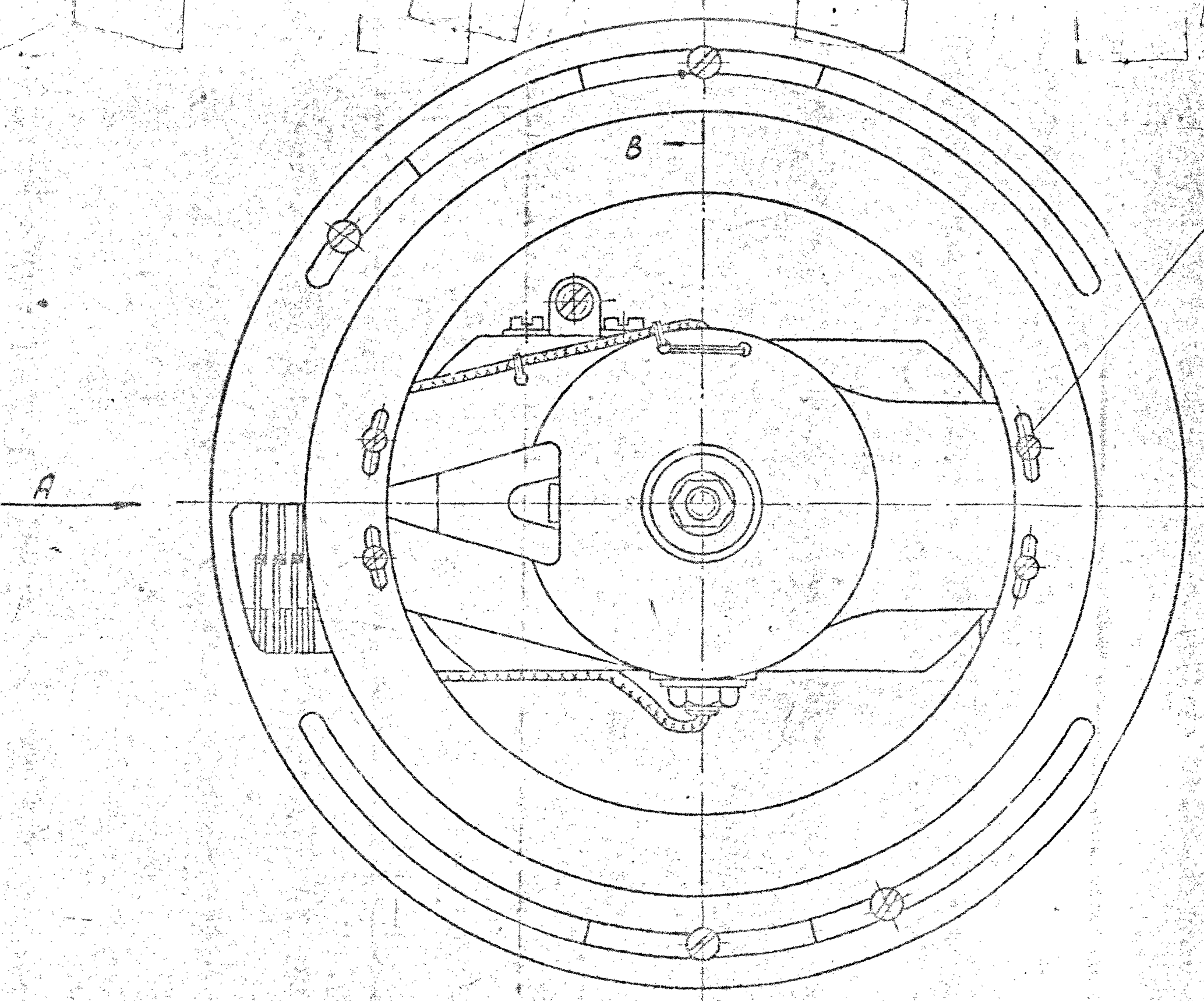
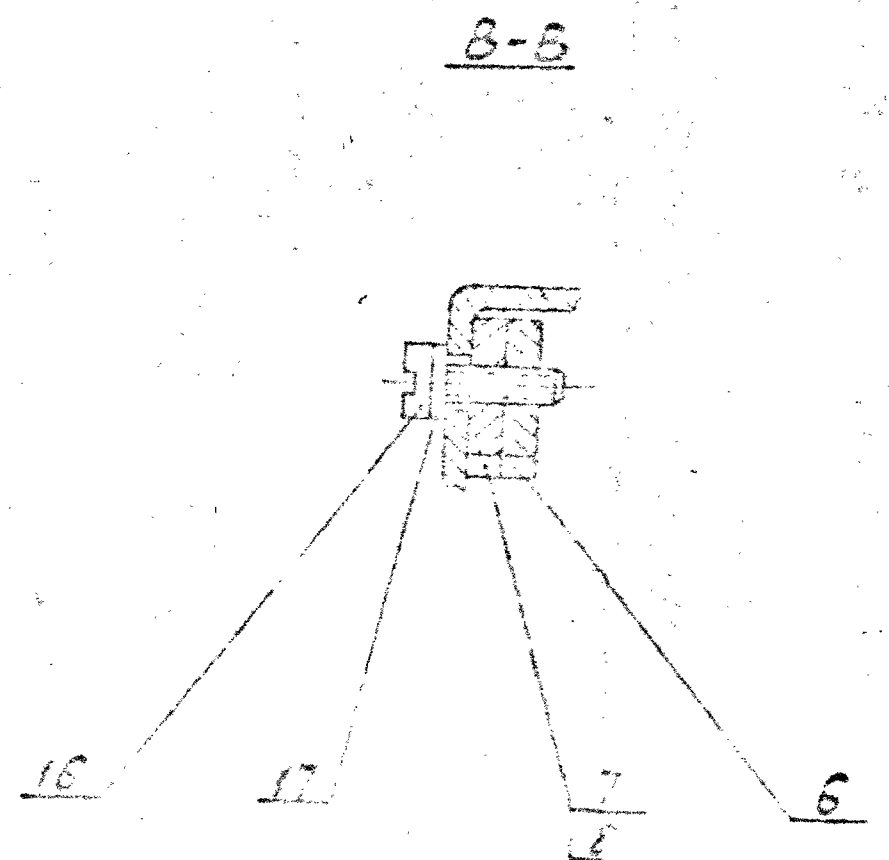
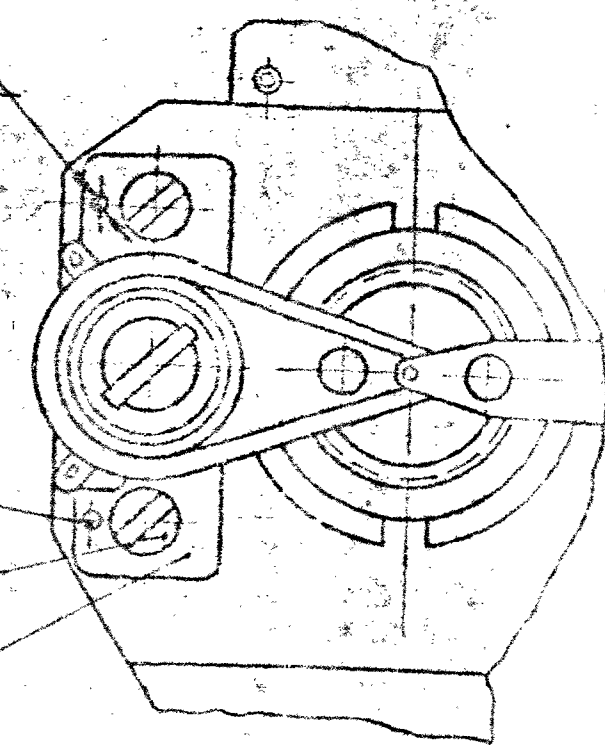
instructions NO.153.356

127-6812



Drill 2 holes $\phi 0.9^{+0.06}$ along the hole in unit Ref. No.3 and secure it with pin.

VIEW-A (Without card).



1. Axial play of gyro unit should be 0.02 to 0.04 mm.
2. Cage frame tooth should mesh into the cam slot in caged position by 0.8 to 2 mm. It can be adjusted by thrust screw.
3. Index of card "3" should be placed on the side of contact unit, Ref.No.3.
4. Adjust height of unit "B" with nuts "Г" and pin "E". Clearance between unit "B" and card, Ref. no. 5, should be at least 0.5 mm.
5. Statistically balance the cardan assembly unit to indifferent equilibrium with respect to x-x axis by shifting the loads, Ref. Nos; 6, 7 and 8, along the circular slot in the card. Put loads, Ref. Nos; 6, 7 and 8, whenever necessary. Load Ref. No;8, is not shown for clarity. Carryout balancing after the final setting of card in the unit.
6. Frictional torque along the horizontal axis should not exceed 0.5 g.cm.
7. End play of card, Ref. No.5, with respect to x-x axis should not exceed 0.3 mm.
8. Mounting is carried out as per diagram 127Cx3, the gyro-motor should rotate anti-clockwise if viewed from terminal ends.
9. Solder with ПОС-61 with flux ЛТИ as per instructions ДА. 04.43.002. Seal soldered places with varnish ЛК-Н3, as per instructions БТ-33. Bare ends of conductors should not exceed 0.5 mm.
10. After balancing loads, Ref. Nos; 6, 7, 8 and bracket are coated with primer $\phi 1-086$ as per instructions 6CO.045.102 Lock screw ref.no;16 with primer $\phi 1-086$.
11. Lubricate bearing, Ref. No;20, with oil 132-20, 3 drops for one bearing.
12. Check the unit as per Technical specifications 127-c814.
13. Lubricate the tooth of cage frame and surface of cam with lubricant ОКБ-122-7 GOST 181792-72.
14. Place the gasket, Ref. No;21, whenever necessary.
15. Clearance between special screws 127-46 and cage frame 127-c828 should be at least 0.5 mm.
16. Secure screws, Ref. No;15, with primer $\phi 1-0\phi 6$.
17. Contact pressure 7 ± 1 g of conductors is adjusted by shifting the sliding groups with gaskets, and by bending contact plates 127-49 and 127-51.
18. Uniform rotation of cardan assembly unit in both directions in horizontal position of plane of external frame is allowed when balancing is carriedout.

REF No.	DESIGNATION	DESCRIPTION	QTY	REMARKS
21	160-112	GASKET	1	
20	A234M	BEARING	2	
19	3402A-05-2.5-5.5	WASHER	2	
18		WASHER 2.0CT1-11533-74		
17	3402A-05-2-4.5	WASHER	4	
16	3157A-2-5	SCREW	9	
15	3157A-2.5-8	SCREW	2	
14	3481A-1C3-6	CYLINDRICAL WASHER	2	
13	953-115	PROTECTIVE WASHER	2	
12	953-40	LOCK NUT	2	
11	127-86	NUT	2	
10	127-84	GYRO UNIT STOP	1	
9	127-50	BUSH	2	
8	127-43	LOAD	4	
7	127-40	LOAD	7	
6	127-39	LOAD	4	
5	9A7.021.010	CARD	1	
4	127-2	CORRUGATED BAND	2	
3	127-c822	CONTACT UNIT	1	
2	127-c818	GYRO UNIT	1	
1	127-c815	FRAME WITH COMPONENTS	1	

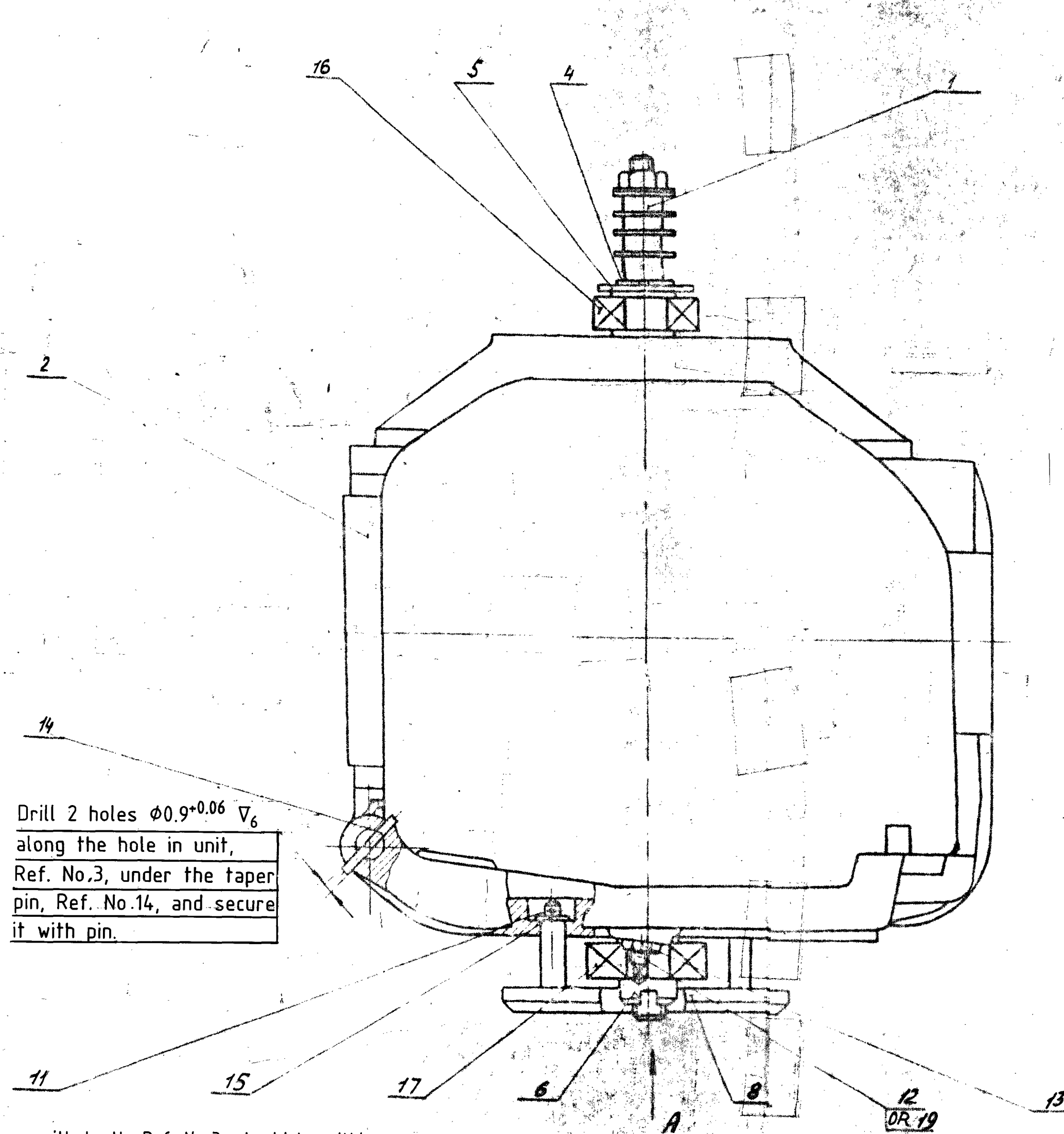
DESIGNED BY	CHKD BY	SIGN	DATE
DRAWN BY	CHKD BY		17.5.84
EDITED AND CHECKED BY			
FOREMAN OF DC			
DIVISIONAL OFFICER			

CARDAN ASSEMBLY UNIT

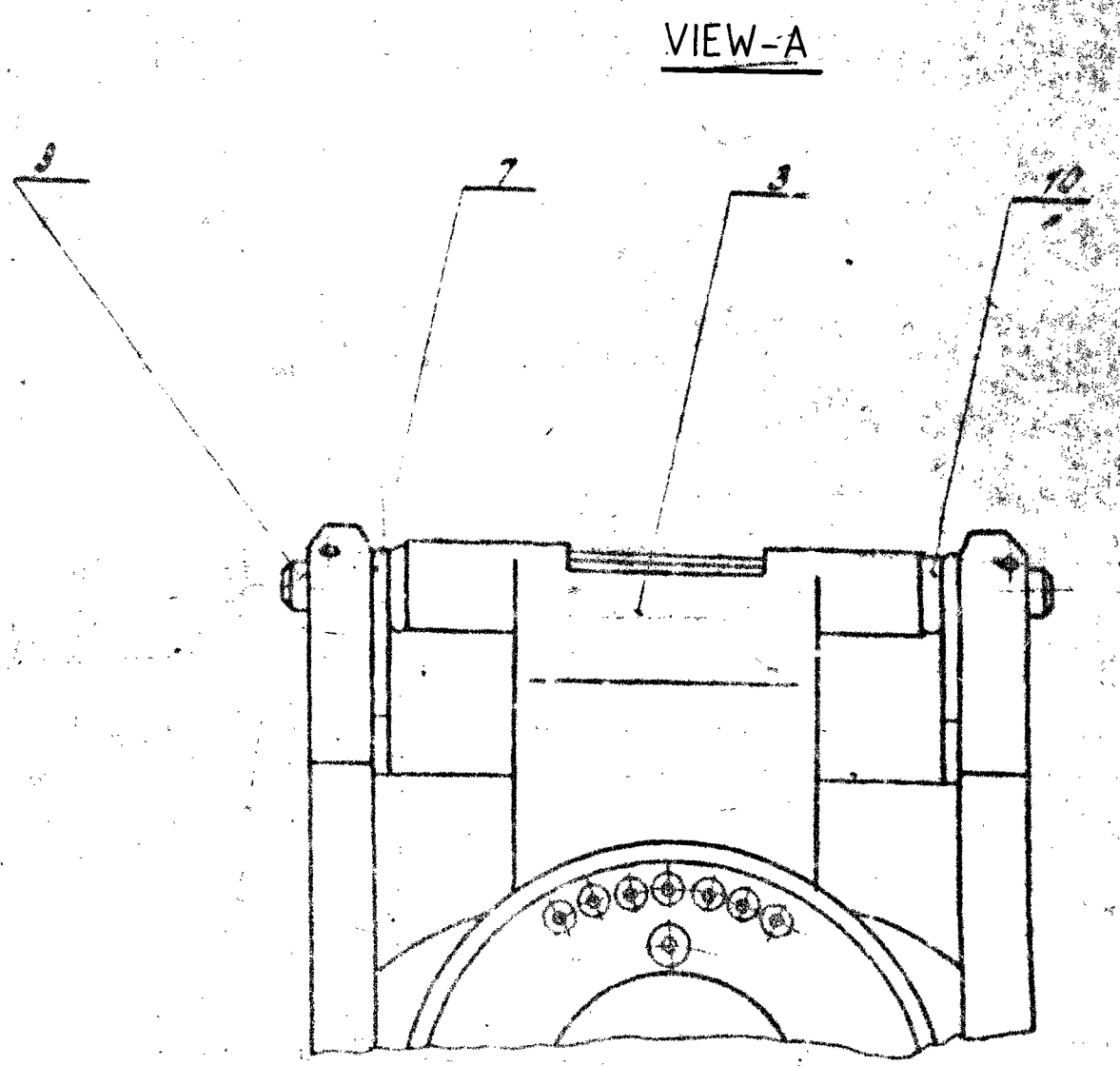
127-c814

SHEETS | WEIGHT | SCALE

TOTAL SHEETS



Drill 2 holes $\phi 0.9^{+0.06}$ ∇_6 along the hole in unit, Ref. No.3, under the taper pin, Ref. No.14, and secure it with pin.



1. Axial play of cage frame with tooth, Ref. No;3, should be within the limits of 0.02 to 0.06 mm. Check the play in the unit without springs, Ref. No;7. It should work smoothly. Grinding of part, Ref. No;10, is permitted.
2. Clearance between the frame with axle, Ref. No;2, and angle plates of unit, Ref. No;3, should be within the limits of 0.05 to 0.25 mm. It is allowed to straighten unit, Ref. No;3, to ensure the required clearance by wooden hammer having weight not exceeding 30 g. with handle length of 150 mm.
3. Conductors, coming from collectors, are placed in a special slot on frame, Ref. No;2, tied with threads and coated with adhesive БФ-4, GOST 12172-74.
4. Lubricate bearings, Ref. Nos; 16 and 17, with oil 132-20, TY 6-02-897-78.
5. Install collector on adhesive БФ-4, GOST 12172-74.

REF. NO.	DESIGNATION	DESCRIPTION	QTY.	REMARKS
		Extra thread M30 Black	0.2M	GOST 6309-80.
19	252-193	Thrust screw	2	
17	A6005K1	Bearing	1	
16	A1000095 KY	Bearing	1	
15	3402A-0.5-2-4.5 kd	Washer	2	
14	3494A-1-10	Taper pin	2	
13	160-332	Special nut	2	
12	160-265	Thrust screw	2	
11	160-75	Wire	2	
10	160-57	Special washer	2	
9	160-56	Axle	1	
8	160-c814	Cage ring with supports	1	
7	127-93	Thrust spring	1	
6	127-86	Nut	1	
5	127-87	Protective washer	1	
4	562M56-5-kd	Lock ring	1	
3	127-c828	Cage frame with tooth	1	
2	127-c825	Frame with axle	1	
1	9Д6.617.000	Collector	1	

SLNO	SHEET	DOCNO	SIGN	DATE
DRAWN BY		CH.V.RAO		18.5.84
EDITED AND CHECKED BY		D.K.JAIN		19.5.84
FOREMAN OF DC		S.H.RAO		21.5.84
DIVISIONAL OFFICER		D.N.M.		21.5.84

FRAME WITH COMPONENTS

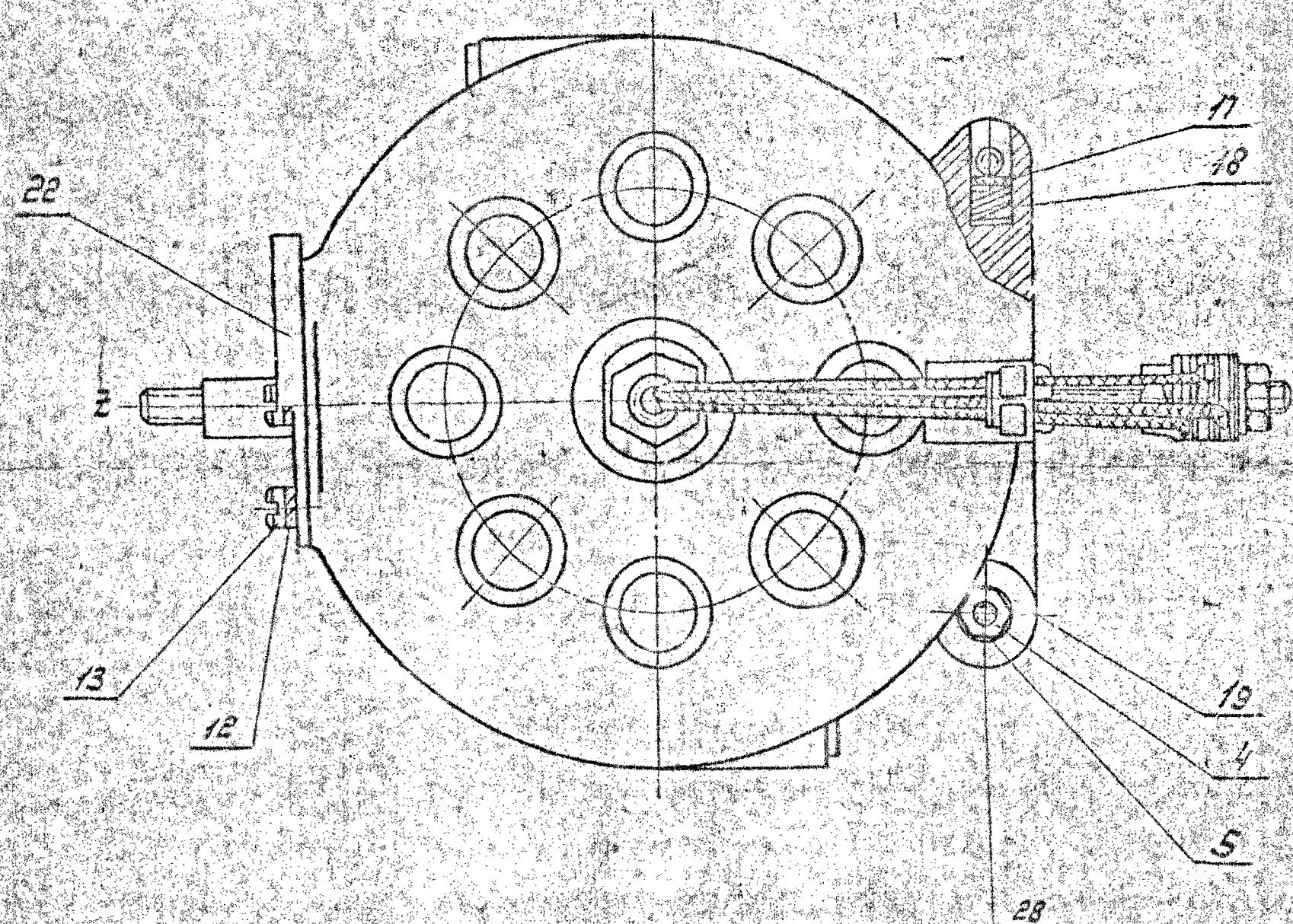
127-C815

SHEETS	WEIGHT	SCALE
1		2:1

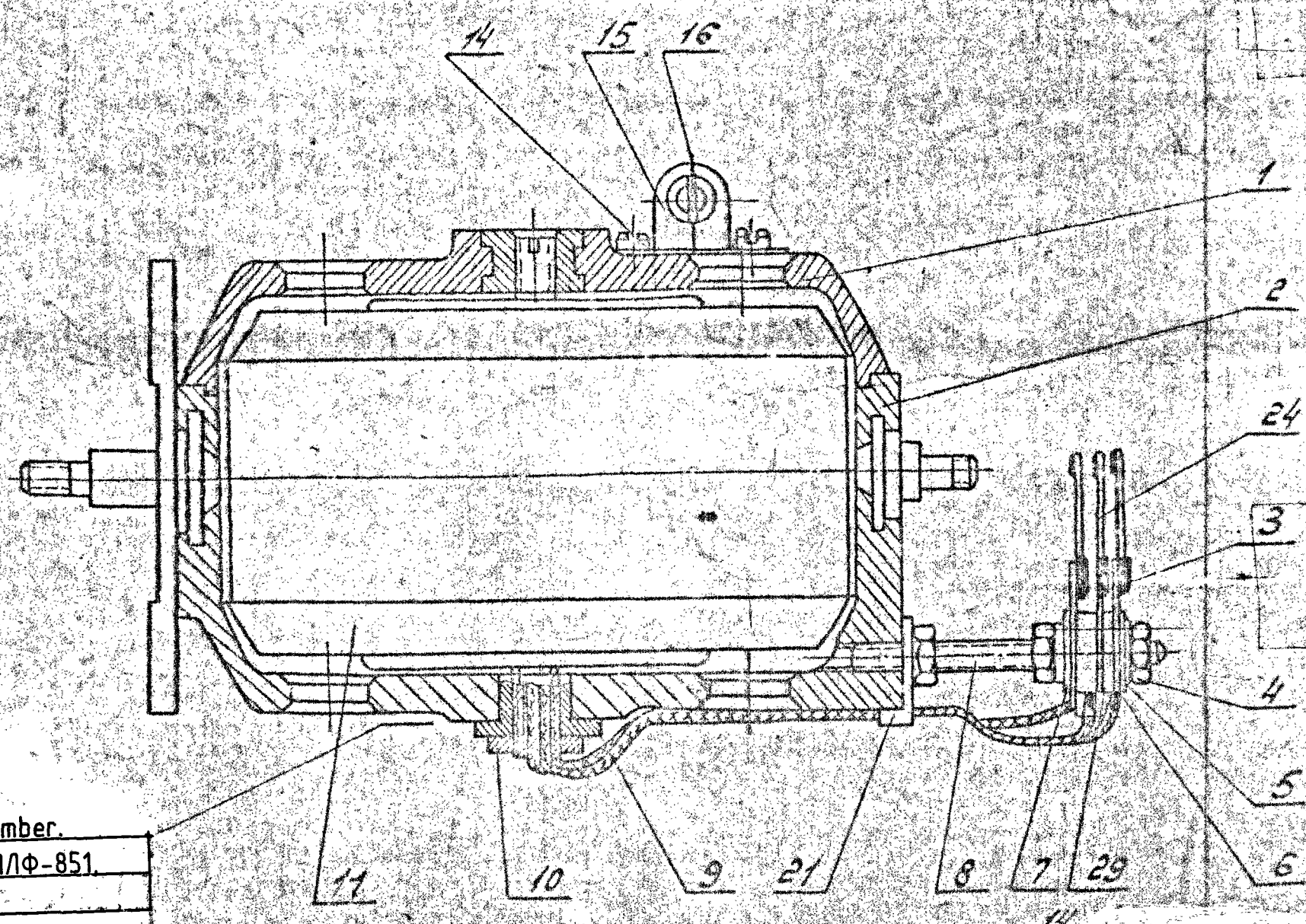
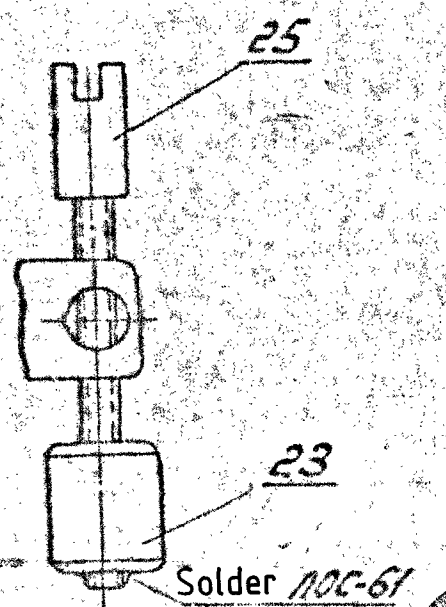
TOTAL SHEETS: 1

ORDNANCE FACTORY PROJECT

8182-121



VIEW-A



1. Displacement of sides of cam hinge in the cage, Ref. No;22, with respect to axis of symmetry of body should not exceed 0.3 mm.
2. Screws which are not locked with spring washers are secured with primer Φ 1-086.
3. Solder wires with ПСС-61, GOST 21931-76 with flux ЛТЦ as per instructions ДА-0443-003. Bare wire ends should not exceed 0.5 mm.
4. Statically balance the gyro unit with respect to axis zz with loads, Ref. Nos; 16 and 19, by initially setting screw, Ref. No;25, with nuts, Ref. No;23, to the mid position with respect to the lug.
5. Drill 2 holes $\Phi 1.5^{+0.06} \nabla_5$ along hole with part, Ref. No;22, and secure with pins, Ref. No;26.
6. Drill hole $\Phi 0.7^{+0.06} \nabla_6$ to a common depth $7A_7$ along the hole in unit, Ref. No;1, and secure it with pin, Ref. No;27.
7. Parts, Ref. Nos; 26, 27 and 30, are not shown for clarity.
8. Clearance between gyromotor rotor and nozzle should be 0.03 to 0.2, check with Technological cover.
9. Coat the nut, Ref. No;4, with primer Φ 1-086 as per instructions 6C0.045.102.
10. Cover, Ref. No;1, and body, Ref. No;2, should be made into a set and machined as per drg. 127-c826.
11. Install gaskets, Ref. No;6, when necessary. Gasket, Ref.No;29, may be installed instead of gasket. Ref. No 6.
12. Projection of screw, Ref. No;25, from the nut, Ref. No;23, should not exceed 1 mm. Secure nut, Ref. No;23, with primer Φ 1-086.
13. Balancing loads may be soldered with solder ПСС-61. After balancing, coat the loads with varnish Φ 1-086 as per instructions 6C0.045.102.
14. Seal the soldered places with varnish AK-113, GOST 23832-72 as per instructions БТ-33.

No	Part No	Description	Quantity
30	III-TB-40-230- -2x0.4-10	Steeve	1
	Glue БФ-4		
29	127-69	Gasket	3
28	3471-53-28	Special screw	1
27	3484A-08G5	Cylindrical pin	1
26	3484A-16G5	Cylindrical pin	2
25	127-46	Special screw	1
24	127-c88	Contact	1
23	127-66	Nut	2
22	127-45	Cam	1
21	127-82	Clamp	1
20			
19	127-57	Balancing load	6
18	308.383.015	Spring	1
17	127-59	Gasket	1
16	13203.83.018	Balancing screw	1
15	127-67	Bracket	1
14	3157A-2-3	Screw	2
13	3157A-2-6	Screw	3
12		Washer 2.05*1.1533-74.	3
11	3590000000	Gyromotor	1
10	160-330	Lock nut	1
9	160-329	Threaded bush	1
8	127-25	Stud	1
7	127-68	Bush	1
6	127-61	Gasket	3
5	3402A-05- -2.5-3.5	Washer	5
4	3320A-2.5	Nut	5
3	127-c87	Contact	2
2	127-c819	Gyro unit body with nozzles	1
1	127-c820	Gyro unit cover	1

Place for serial number.
Mark with paint ТНФ-851.
ТУ 29-02-889-79.

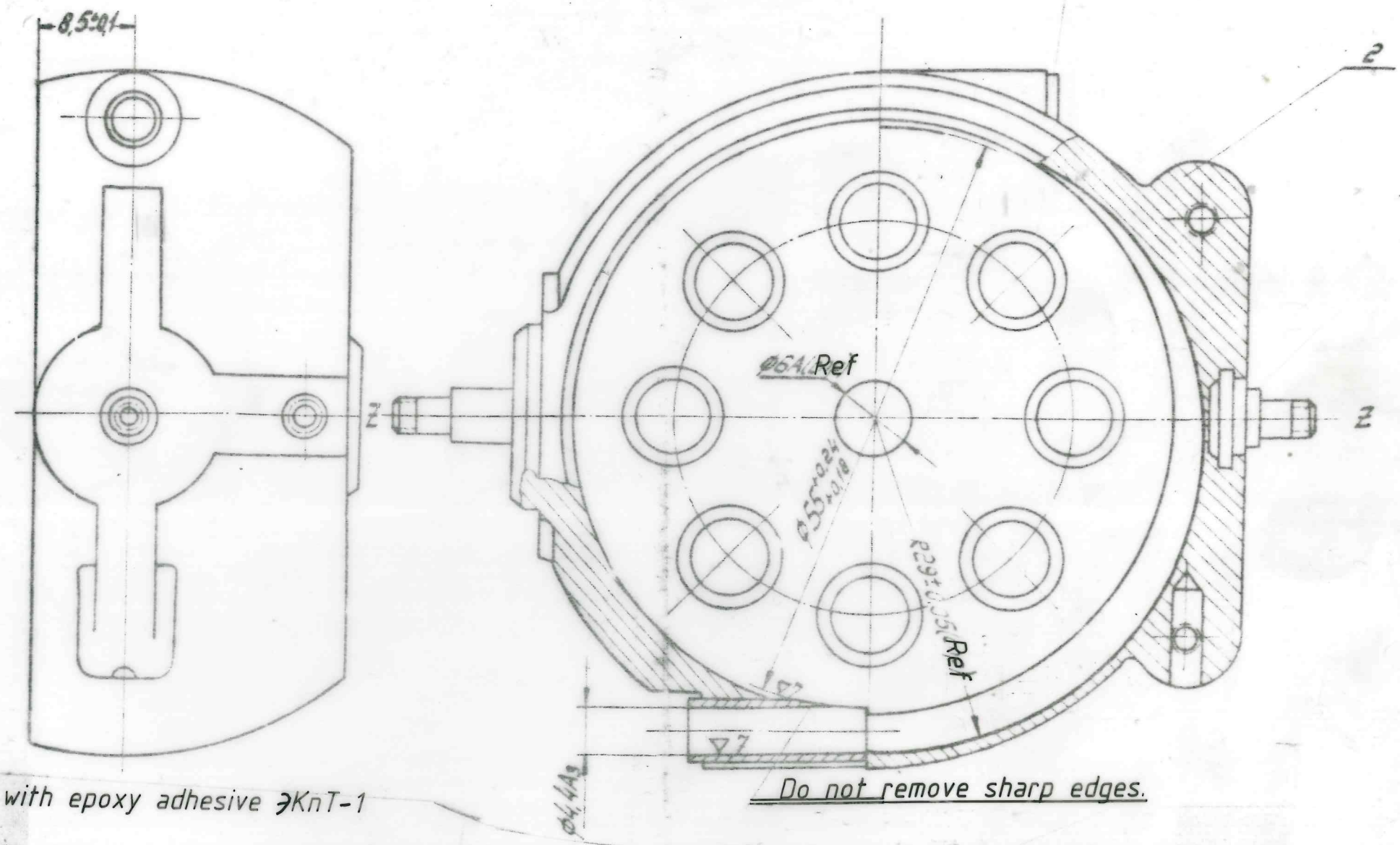
NO	DOC NO	SIGN	DATE
DRAWN	CH.V.RAO	[Signature]	18.5.84
EDT	CH.KC	[Signature]	19.5.84
F/M DC	S.H.280	[Signature]	2/6

127-C818

GYRO UNIT

SHEET	WEIGHT	SCALE
1/1		2:1
TOTAL SHEETS		
ORDNANCE FACTORY		

Box



- 1) Install part Ref. No. with epoxy adhesive α KnT-1 without filler.
- 2) Non-parallelity of axis zz and axis of $\phi 4,4A_3$ should not exceed 0,05.
- 3) Steps between $\phi 4,4A_3$ and $R 29\pm 0$ is not permitted.
- 4) Coating may be removed in the slot over $R 29\pm 0.05$ at the joint with nozzle.



S.No	DESIGNATION	DESCRIPTION	Qty.	Remarks.
2	127-c523	Body of gyro unit.	1	
11	127-89	Nozzle.	2	

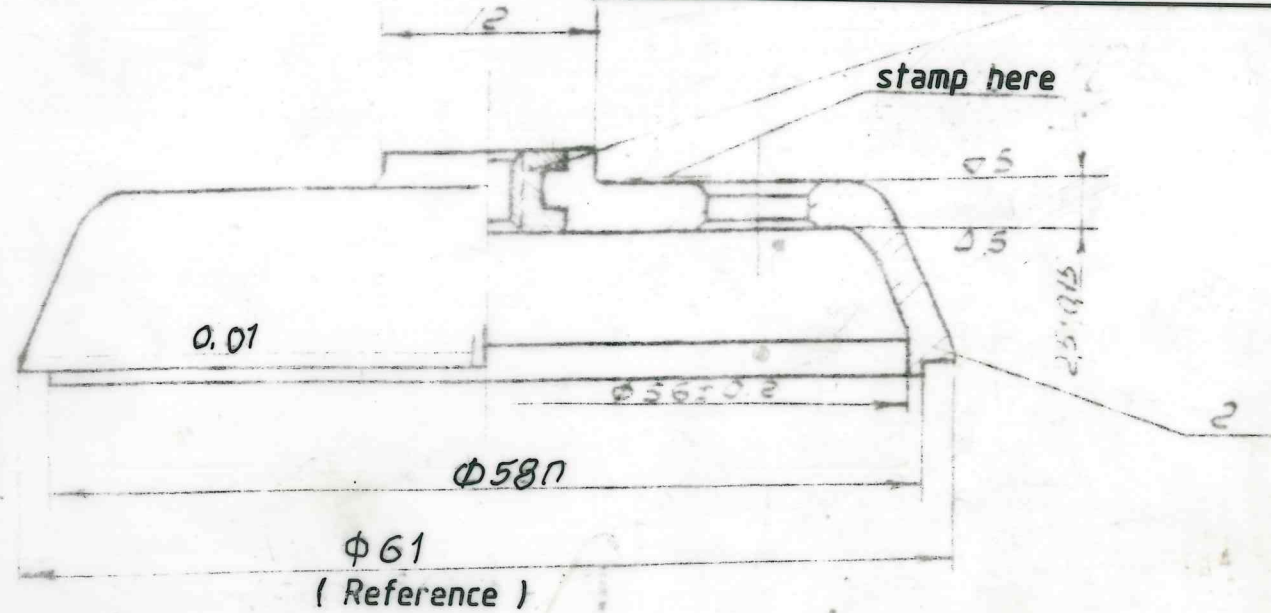
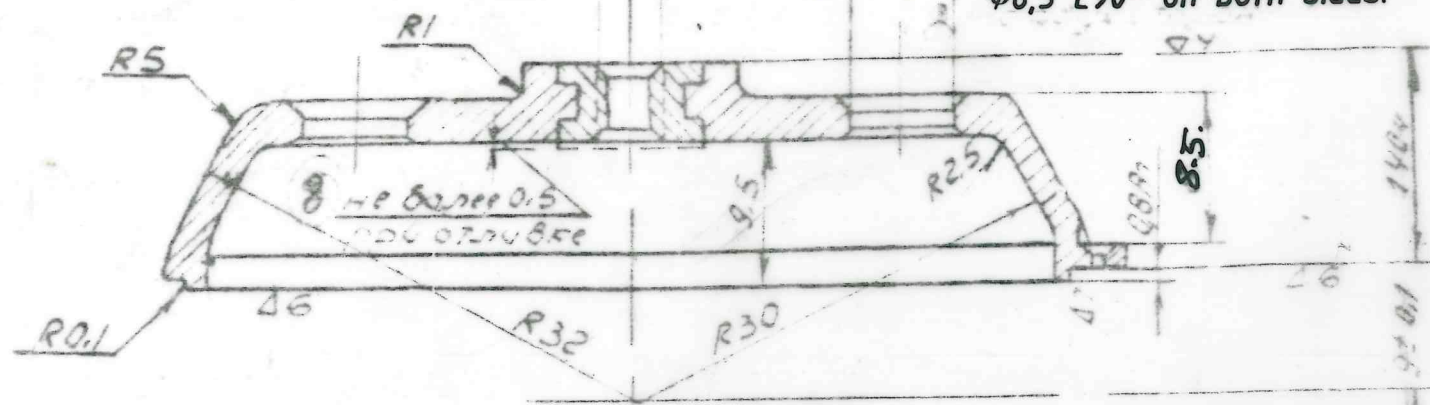
SLNO	SHEET	DOCNO	SIGN	DATE	GYRO METER BODY WITH NOZZLES 127-c819 SHEETS WEIGHT SCALE TOTAL SHEETS ORDNANCE FACTORY PROJECT HYDERABAD
DRAWN BY		Y.R.Ganesh		17.5.84	
EDITED AND CHECKED BY		D.K. JAIN		18.5.84	
FOREMAN OF DC		S. HRAO		2/6	
DIVISIONAL OFFICER		D.A. JAIN		4/6	
		NAME	SIGN	DATE	

0292-L21

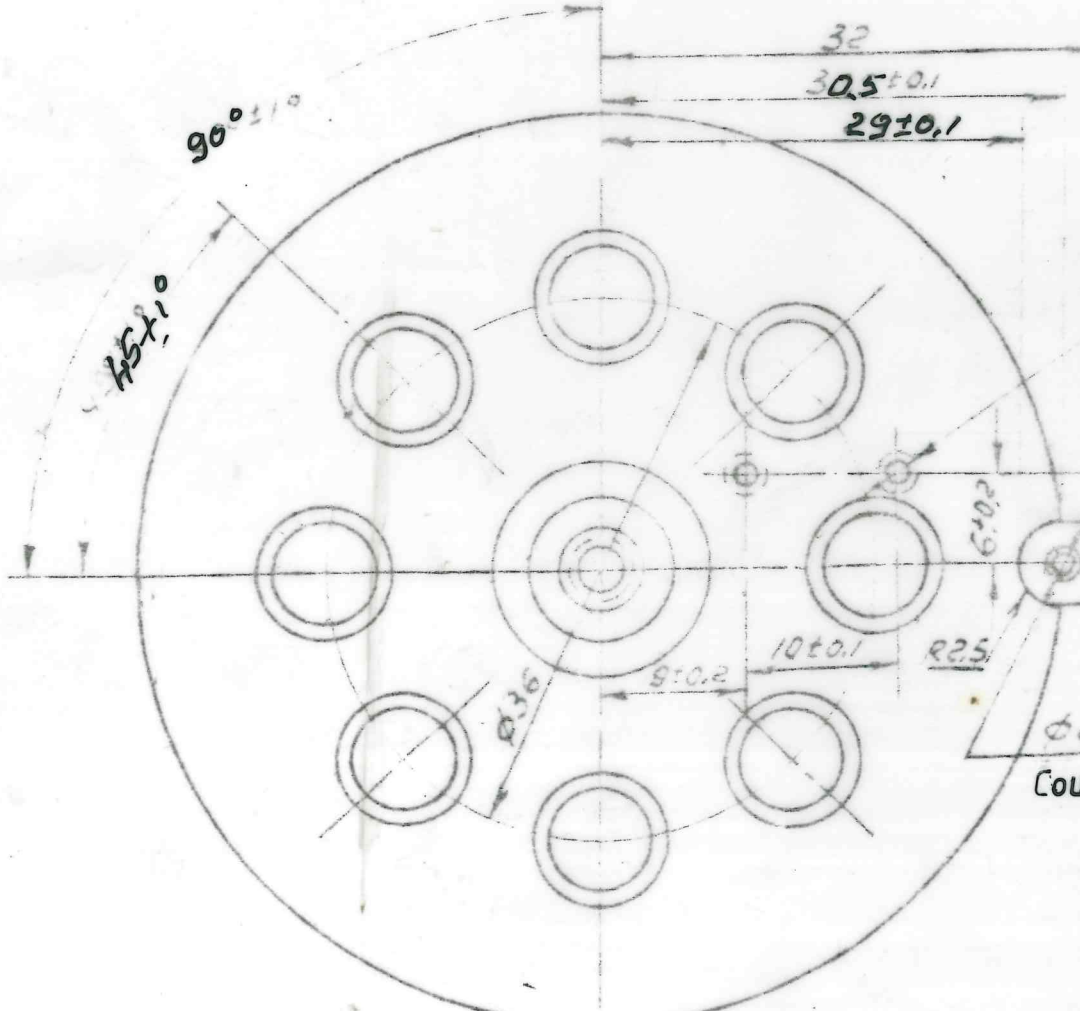
Surface finish	Unless otherwise specified
Heat treatment	See Item 2.
Coating	Chemically oxidized.

Counter sink M 4,5x0,5
cl.2 5 ϕ 4,8A₅ L 120°
on both sides.

Counter sink 8 holes ϕ 7,0
 ϕ 8,5 L90° on both sides.



127 LN



Counter sink M2x0,4 2holes
 ϕ 2,3 L90°

Counter sink ϕ 1,2 L90° ∇ 5.

- 1) Part is made by pressure die casting. Unspecified pattern drafts, are made by R=0,5. Casting dimensions with unspecified tolerances are made with accuracy $\pm 0,2$ mm.
- 2) Aging is performed after casting and before final machining at $t = 170^{\circ} \pm 10^{\circ}$ for 4 hours and at $t = 50^{\circ}$ to 60° C for 2 hours.
- 3) Technical requirements are as per OST 1,80020-71. (2nd group).
- 4) R₅ is specified for die it is not subjected to checking in part.

2	Aluminium alloy	A-2	GOST 2685-75
1	160331 Bush	1	
SNo	Designation	Description	Qty. Remarks.

SINO. SHEET DOC.NO. SIGN. DATE
 DRAWN Y.R.Ganesh 17/5/86
 EDITED & CHECKED
 FOREMAN OF D.C. SHRAO 3/6
 DIVISIONAL OFFICER D.A. 4/6
 NAME SIGN DATE

GYRO UNIT COVER

127-C020

sheets	weight	scale