



US Department of Transportation
Federal Aviation Administration

MAJOR REPAIR AND ALTERATION (Airframe, Powerplant, Propeller, or Appliance)

Form Approved
OMB No. 2120-0020

For FAA Use Only

Office Identification

WP-27 AS

INSTRUCTIONS: Print or type all entries. See FAR 43.9, FAR 43 Appendix B, and AC 43.9-1 (or subsequent revision thereof) for instructions and disposition of this form. This report is required by law (49 U.S.C. 1421). Failure to report can result in a civil penalty not to exceed \$1,000 for each such violation (Section 901 Federal Aviation Act of 1958).

1. Aircraft	Make Republic	Model RC-3
	Serial No. 1000	Nationality and Registration Mark N5166B
2. Owner	Name (As shown on registration certificate) Davey Darrell L Davey Deborah A	
	Address (As shown on registration certificate) 6613 Santa Rosa Rd Camarillo Ca 93012-5672	

3. For FAA Use Only

Yoke PTT

The data identified herein complies with the applicable airworthiness requirements and is approved for the above described aircraft, subject to conformity inspection by a person authorized in FAR 43, Section 43.7

22 Sep 99 *[Signature]*
DATE SIGNATURE OAK-FSDO

4. Unit Identification

Unit	Make	Model	Serial No.	5. Type	
				Repair	Alteration
AIRFRAME	<i>~~~~~ (As described in Item 1 above) ~~~~~</i>				<input checked="" type="checkbox"/>
POWERPLANT					
PROPELLER					
APPLIANCE	Type				
	Manufacturer				

6. Conformity Statement

A. Agency's Name and Address Kenneth L. Thompson PO Box 411 Vineburg, Ca. 95487	B. Kind of Agency <input checked="" type="checkbox"/> U.S. Certificated Mechanic <input type="checkbox"/> Foreign Certificated Mechanic <input type="checkbox"/> Certificated Repair Station <input type="checkbox"/> Manufacturer	C. Certificate No. 545767051
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D. I certify that the repair and/or alteration made to the unit(s) identified in item 4 above and described on the reverse or attachments hereto have been made in accordance with the requirements of Part 43 of the U.S. Federal Aviation Regulations and that the information furnished herein is true and correct to the best of my knowledge.

Date <i>9-22-99</i>	Signature of Authorized Individual <i>Kent Thompson</i>
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7. Approval for Return To Service

Pursuant to the authority given persons specified below, the unit identified in item 4 was inspected in the manner prescribed by the Administrator of the Federal Aviation Administration and is **APPROVED** **REJECTED**

BY	FAA Fit. Standards Inspector	Manufacturer	<input checked="" type="checkbox"/>	Inspection Authorization	Other (Specify)
	FAA Designee	Repair Station		Person Approved by Transport Canada Airworthiness Group	
Date of Approval or Rejection <i>9-22-99</i>		Certificate or Designation No. 552273581	Signature of Authorized Individual <i>[Signature]</i> Douglas P. Smith		

NOTICE

Weight and balance or operating limitation changes shall be entered in the appropriate aircraft record. An alteration must be compatible with all previous alterations to assure continued conformity with the applicable airworthiness requirements.

8. Description of Work Accomplished

(If more space is required, attach additional sheets. Identify with aircraft nationality and registration mark and date work completed.)

Republic RC-3 N5166B Ser.# 1000

2. Description: Installed Schurter type MTP 1241.1055.7 momentary contact switch rated at 125ma@48vdc in pilot's yoke for push to talk comm switch. Counter bored aluminum yoke in web to accept switch and routed web for .026" dia. shellac coated solid strand armature wires. Recesses then filled with epoxy resin and sanded smooth with yoke surface. Wires are routed through aluminum yoke tube and connected to a 6" length of 18AWG recoil cord by wrapping and then soldering together with heat shrink tubing used for insulation. Lord 305 epoxy is applied to both ends of the recoil cord to secure wire firmly. Recoil cord is then connected to 22 AWG MIL -C-27500 shielded wire which is routed thru the control column to the ICS and does not interfere with control operation. This modification does not weaken the structure of aluminum yoke. Yoke tested as per AC 43.13 2A, ch. 1, para. 3 (d). Work done in accordance with AC 43.13 1A, Ch. 11, section 2, para.424, 429, section 3, para. 442, 443, 445 thru 451, fig. 11.7a, section 7, para. 514 thru 520.
3. Control, operation information: Push to talk
4. Servicing information: None
5. Maintenance instructions: Must be inspected annually in accordance with FAR 43 appendix D.
6. Trouble shooting information: None
7. Removal and replacement information: None
8. Diagrams: None
9. Special inspection requirements: None
10. Application of protective treatments: None
11. Data: None
12. List of special tools: None
13. For commuter category aircraft: N/A
14. Recommended overhaul periods: No additional overhaul time limitations
15. Airworthiness limitation section: No additional airworthiness limitations
16. Revision: A letter will be submitted to the local FSDO with a copy of the revised FAA form 337

Pg.1 of 4

Additional Sheets Are Attached

*U.S.GPO:1994-568-012/00019

RC-3 N5166B S/N 1000

PTT installation details

Switch - Schurter type MTP 1241.1055.7 momentary contact N.O.

Wire imbedded - 0.026" solid strand, shellac insulated

Wire from yoke to control arm - 18AWG recoil cord shielded

Wire from yoke to ICS - MIL-C-27500 22AWG shielded

Potting compound - JB Weld epoxy

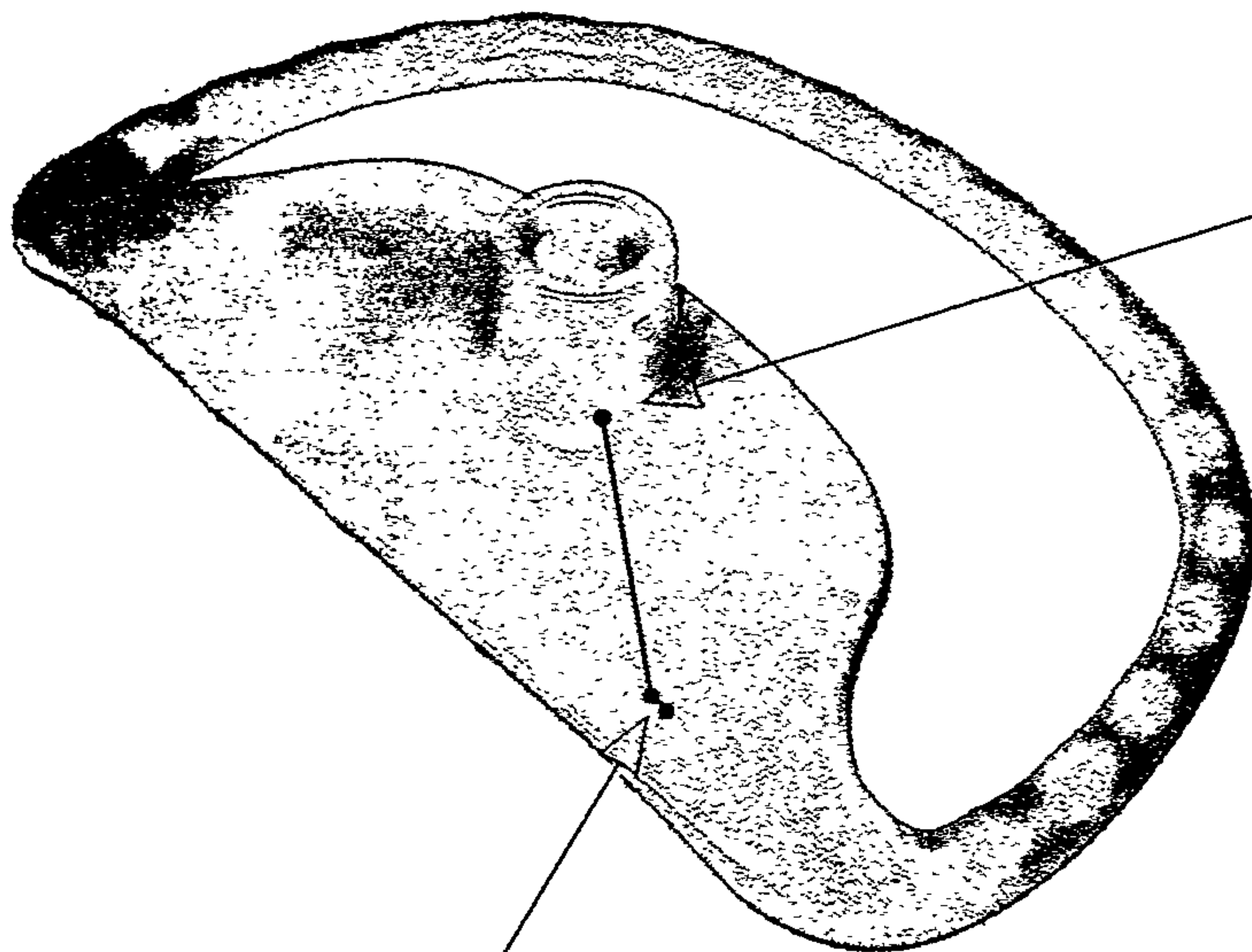
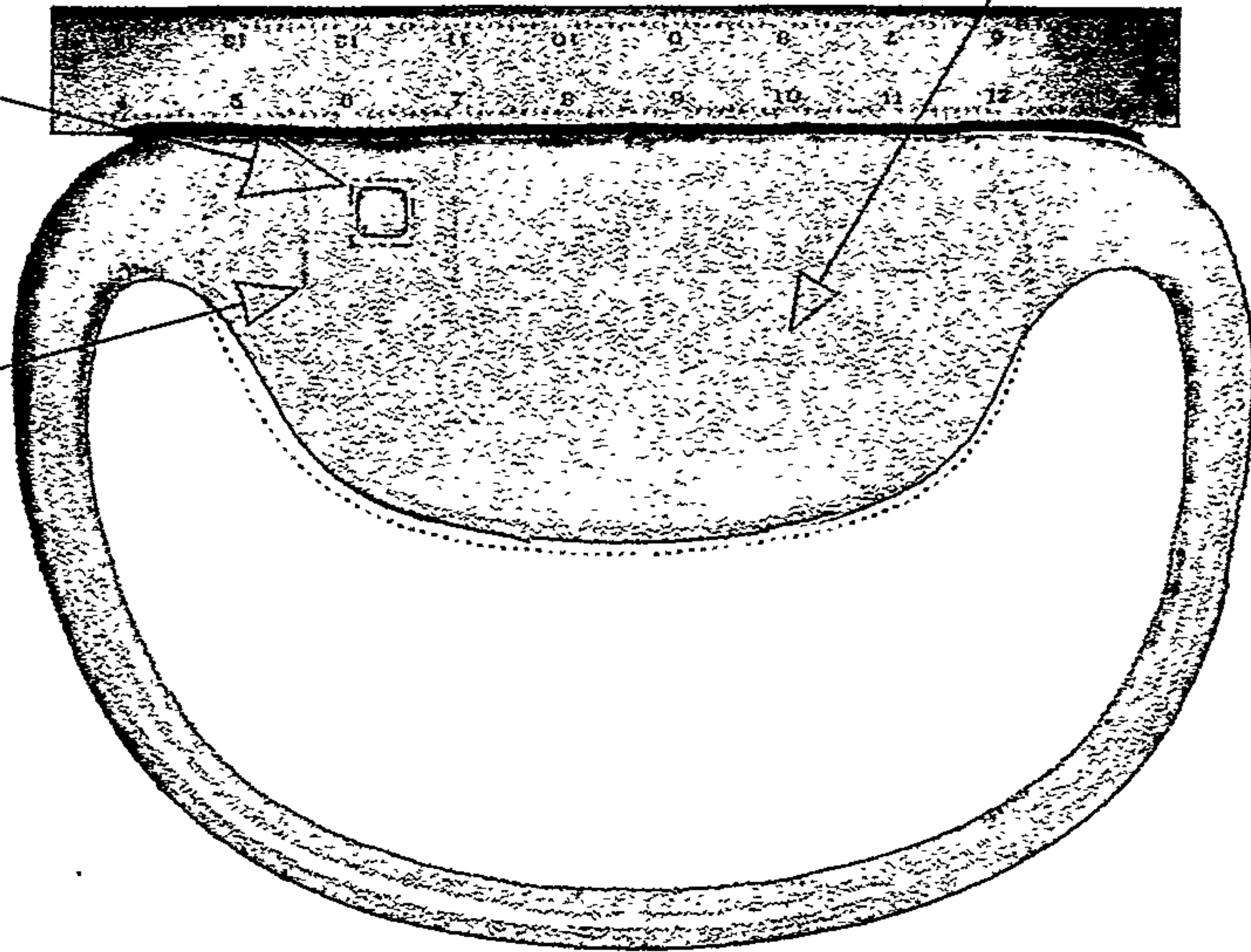
Yoke material - cast aluminum

Recess 0.500" square X 0.090" deep.

Cornners rounded and surfaces filed smooth

Thickness of this area - 0.200" avg.

Thickness of web in this area - 0.165"



Drill thru #30

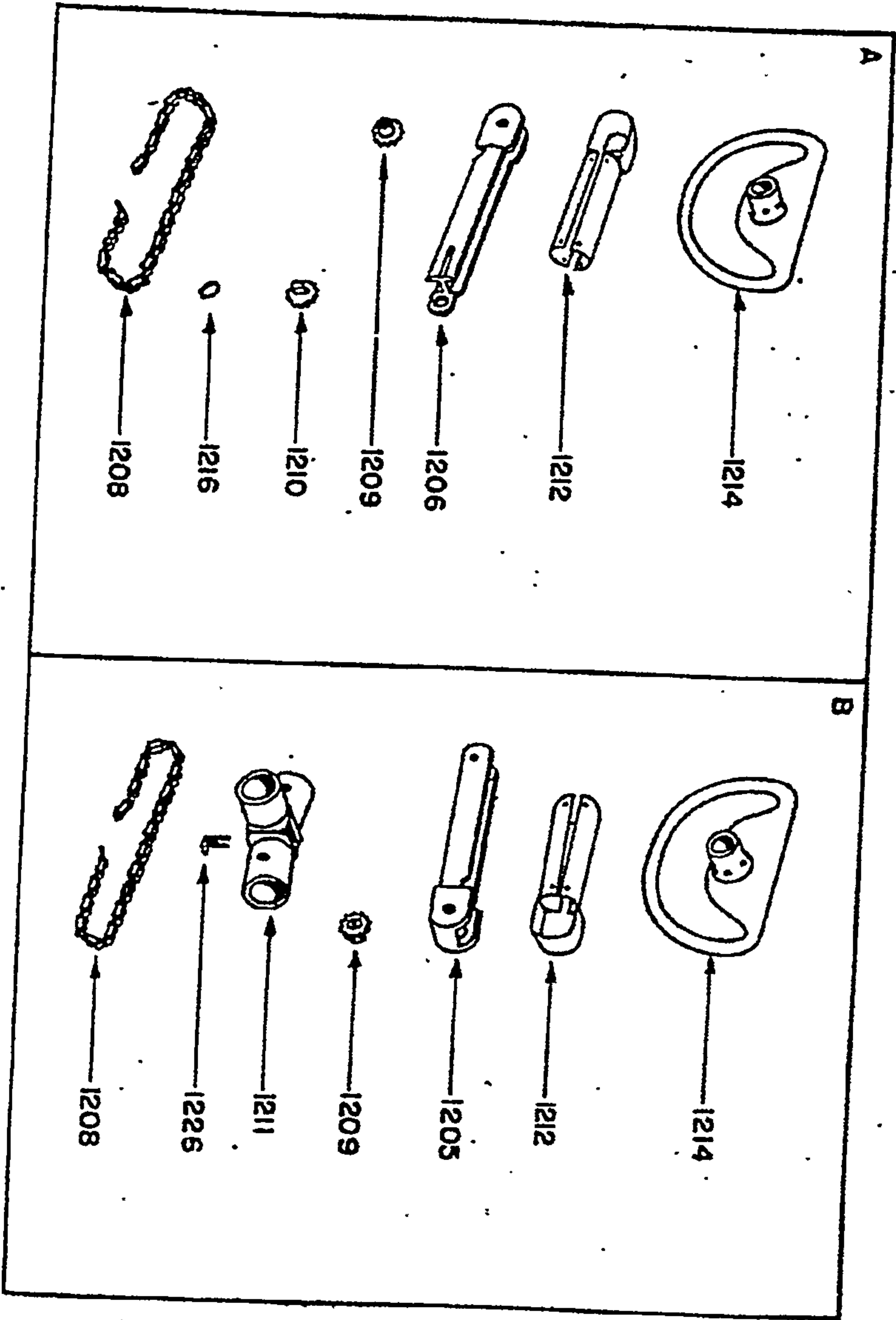
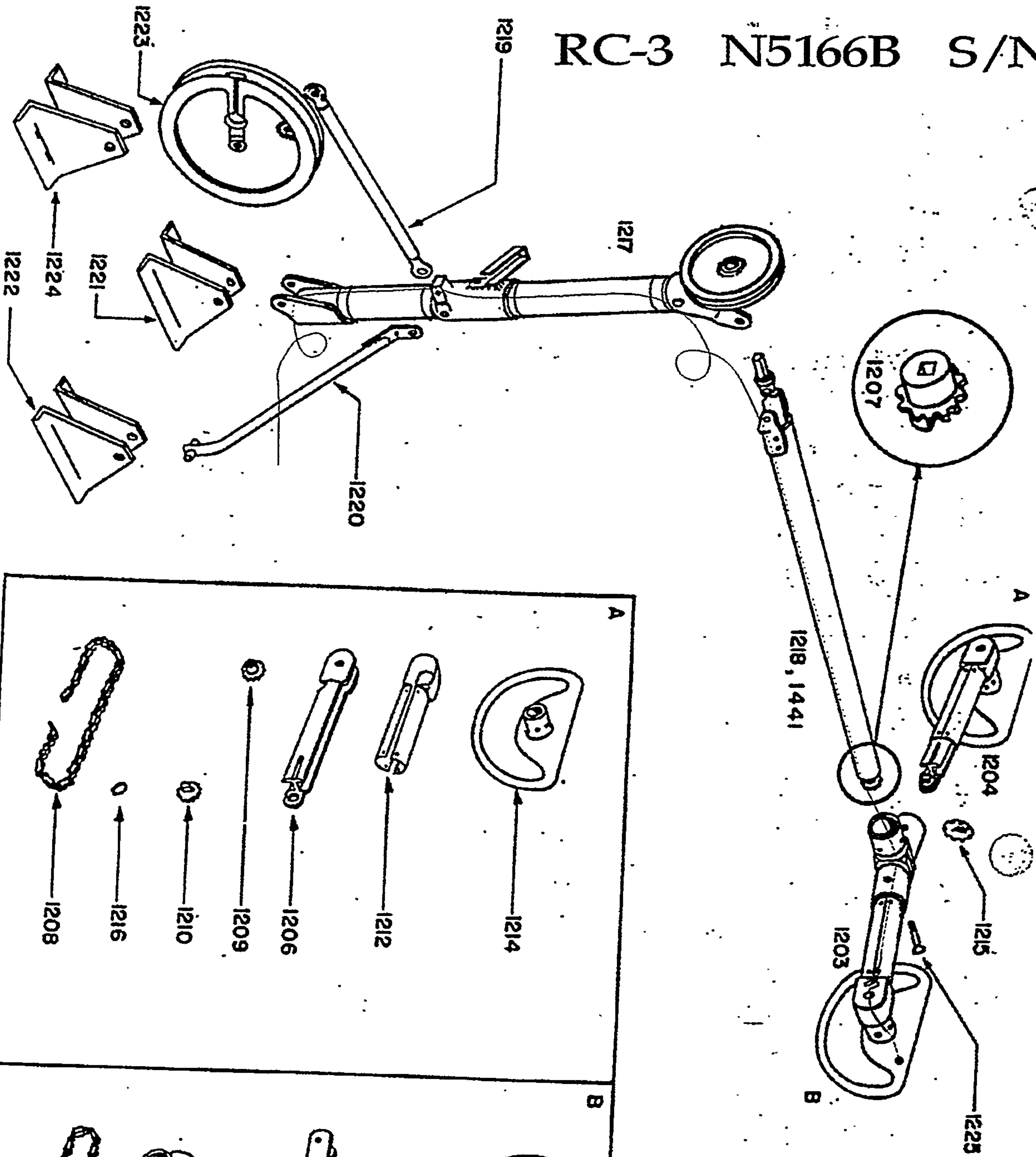
Profile of groove depth approx. 0.050"



Drill thru #30

Drill thru #50 (2 places)

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PTT installation details

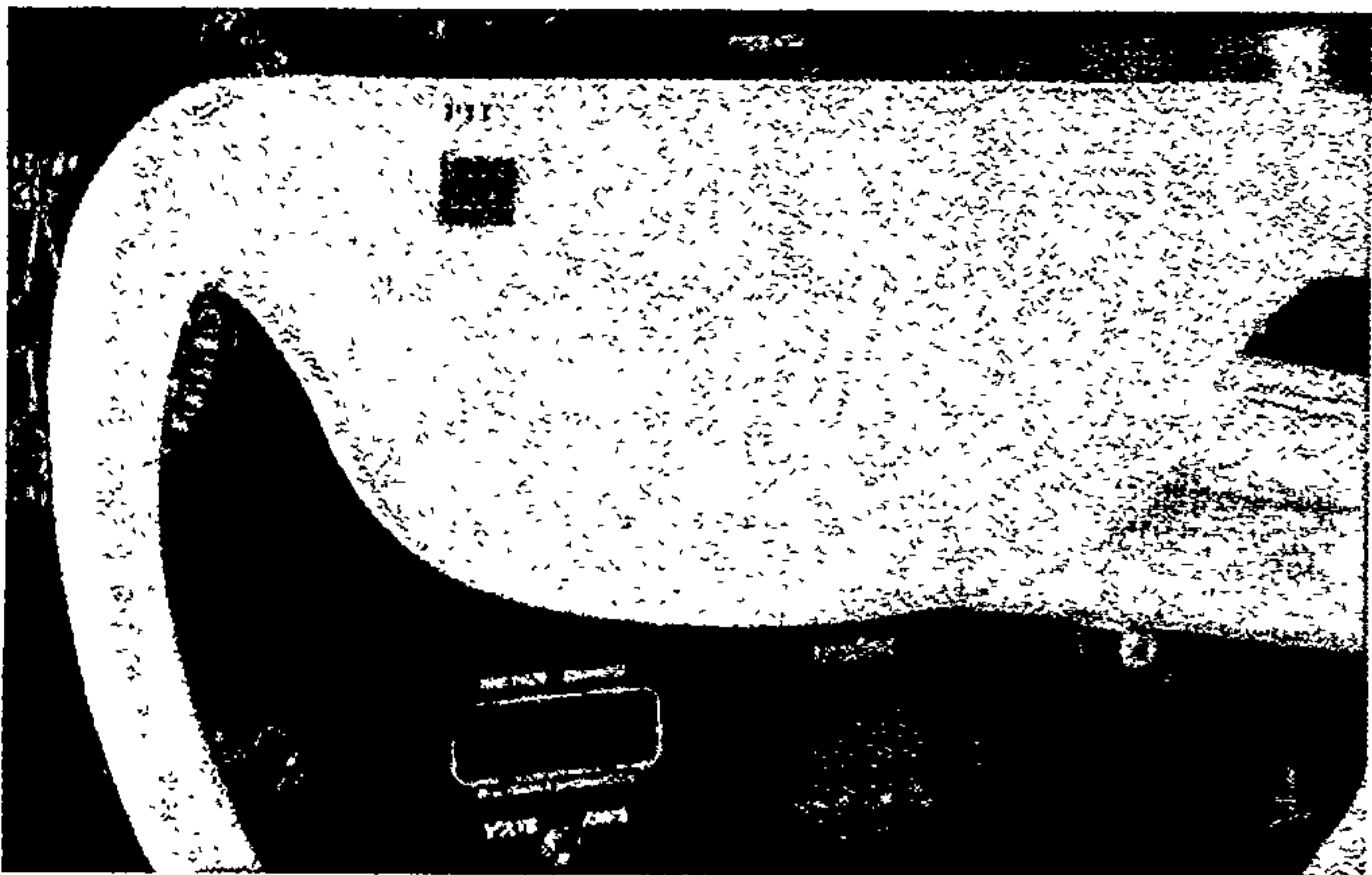


Fig. 1 - PTT in control wheel
Fig. 2 - Detail of PTT wires in control arm
Fig. 3 - PTT wire route at rear of control shaft
Fig. 4 - Wire detail at lower control column

Fig. 1

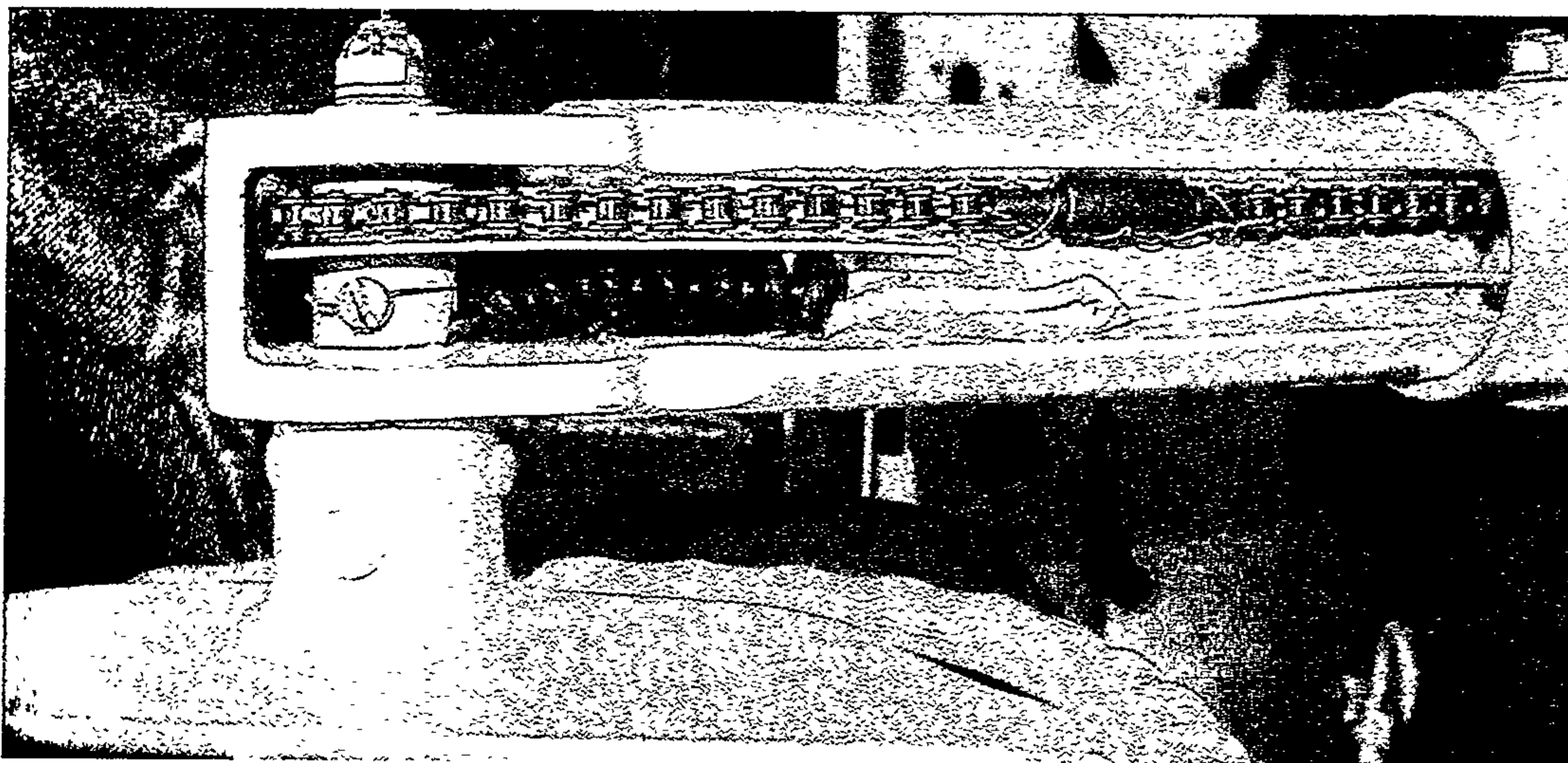


Fig. 2

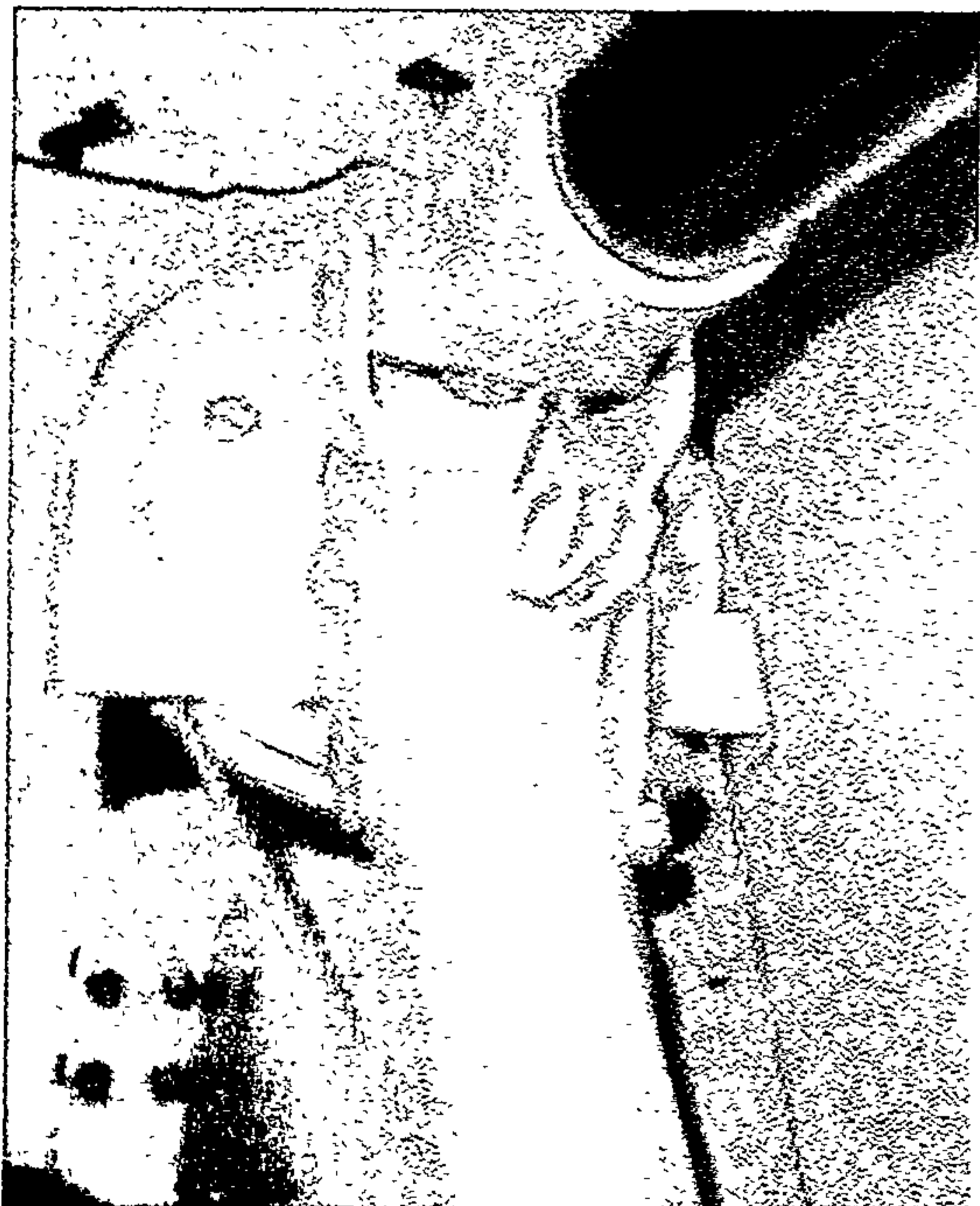


Fig. 3

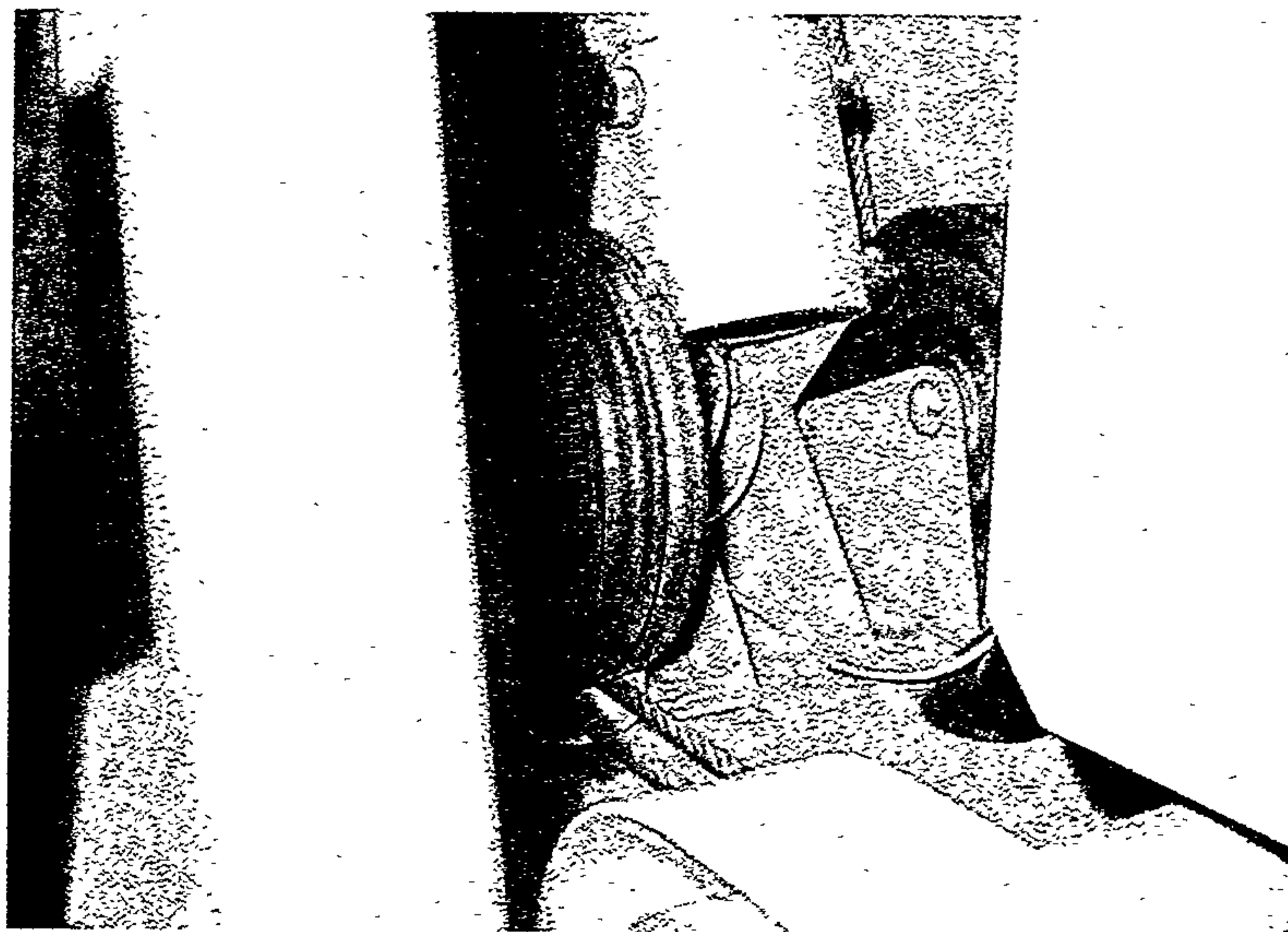


Fig. 4

9-22-99