ARKANSAS POWER & LIGHT COMPANY
POST OFFICE BOX 551 LITTLE ROCK, ARKANSAS 72203 (501) 371-4422

February 22, 1979

WILLIAM CAVANAUGH III
Vice President
Generation & Construction

THIS DOCUMENT CONTAINS POOR QUALITY PAGES

1-029-9

Director of Nuclear Reactor Regulation
ATTN: Mr. R. W. Reid, Chief
Operating Reactor Branch #4
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Subject: Arkansas Nuclear One - Unit 1
Docket No. 50-313
License No. DPR-51
Proposed Technical Specification
(File: 1511.1)

Gentlemen:

Enclosed is a proposed change to the Arkansas Nuclear One - Unit 1 (ANO-1) Technical Specification 4.2.6. The basis for this change is discussed below.

ANO-1 Reactor Coolant Pump Motors (RCPM) are an early model from Allis-Chalmers manufactured such that the flywheels are "shrunk-to-fit" on the shaft. The manufacturer has stated that these flywheels were not intended to be removable and has strongly recommended that they not be removed from their shafts. Without removal, it is impossible to meet the present technical specification calling for complete surface examination.

In lieu of a complete surface examination of the flywheel we propose to do a complete ultrasonic volumetric examination and a surface examination of all exposed surfaces accessible through the access ports at approximately 10-year intervals, during the plant shut down coinciding with the inservice inspection schedule. To facilitate your review, we have enclosed RCPM drawings showing the flywheels and the access ports.

Inspection of RCPM flywheels is scheduled for our upcoming refueling shut down. We request an expedient review of this proposed change in order that we might implement the surface inspection requirements for this outage.

We have determined, in accordance with 10CFR170, this technical specification change request is a class III change request as it involves a single safety

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issue. Accordingly, we have enclosed a check for $4000.

Very truly yours,

William Cavanaugh III

WC:ERG:lg

Enclosure

STATE OF ARKANSAS)
) SS
COUNTY OF PULASKI)

William Cavanaugh III, being duly sworn, states that he is Executive Director, Generation & Construction, for Arkansas Power & Light Company; that he is authorized on the part of said Company to sign and file with the Nuclear Regulatory Commission this Supplementary Information; that he has reviewed or caused to have reviewed all of the statements contained in such information, and that all such statements made and matters set forth therein are true and correct to the best of his knowledge, information and belief.

William Cavanaugh III

SUBSCRIBED AND SWORN TO before me, a Notary Public in and for the County and State above named, this 22nd day of February 1979.

Robert E. Stiles
Notary Public

My Commission Expires:

February 17, 1982

IS-261 Item	Component	Exception
6.4	Bolting 2Ø	Not Applicable
6.6	Integrally Welded Valve Supports	Not Applicable

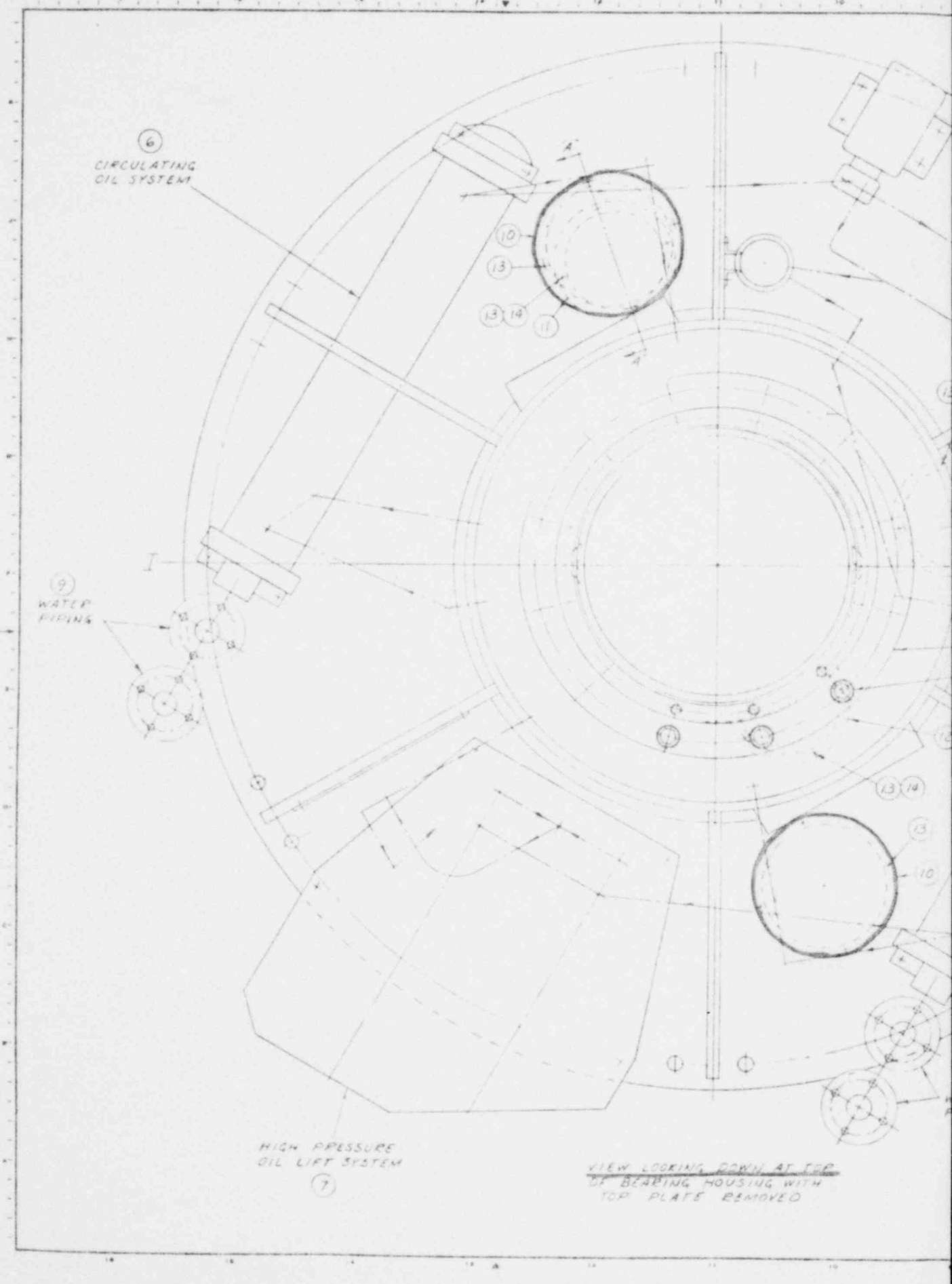
4.2.3 The structural integrity of the reactor coolant system boundary shall be maintained at the level required by the original acceptance standards throughout the life of the station. Any evidence, as a result of the tests outlined in Table IS-261 of Section XI of the code, that defects have developed or grown, shall be investigated.

4.2.4 To assure the structural integrity of the reactor internals throughout the life of the unit, the two sets of main internals bolts (connecting the core barrel to the core support, shield and to the lower grid cylinder) shall remain in place and under tension. This will be verified by visual inspection to determine that the welded bolt locking caps remain in place. All locking caps will be inspected after hot functional testing and whenever the internals are removed from the vessel during a refueling or maintenance shutdown. The core barrel to core support shield caps will be inspected each refueling shutdown.

4.2.5 Sufficient records of each inspection shall be kept to allow comparison and evaluation of future inspections.

4.2.6 Surface and volumetric examination of the reactor coolant pump flywheels will be conducted coincident with refueling or maintenance shutdowns such that within a 10 year period after startup all four reactor coolant pump flywheels will be examined. The extent of coverage will be limited to those areas of the flywheel which are accessible without motor disassembly, i.e., can be reached through the access ports. Also, if radiation levels at the lower access ports are prohibitive, only the upper access ports will be used.

4.2.7 The reactor vessel material irradiation surveillance specimens removed from the reactor vessel in 1976 shall be installed, irradiated in and withdrawn from the Davis-Besse Unit No. 1 reactor vessel in accordance with the schedule shown in Table 4.2.-1. Following withdrawal of each capsule listed in Table 4.2-1, Arkansas Power & Light Company shall be responsible for testing the specimens and submitting a report of test results in accordance with 10 CFR 50, Appendix H.



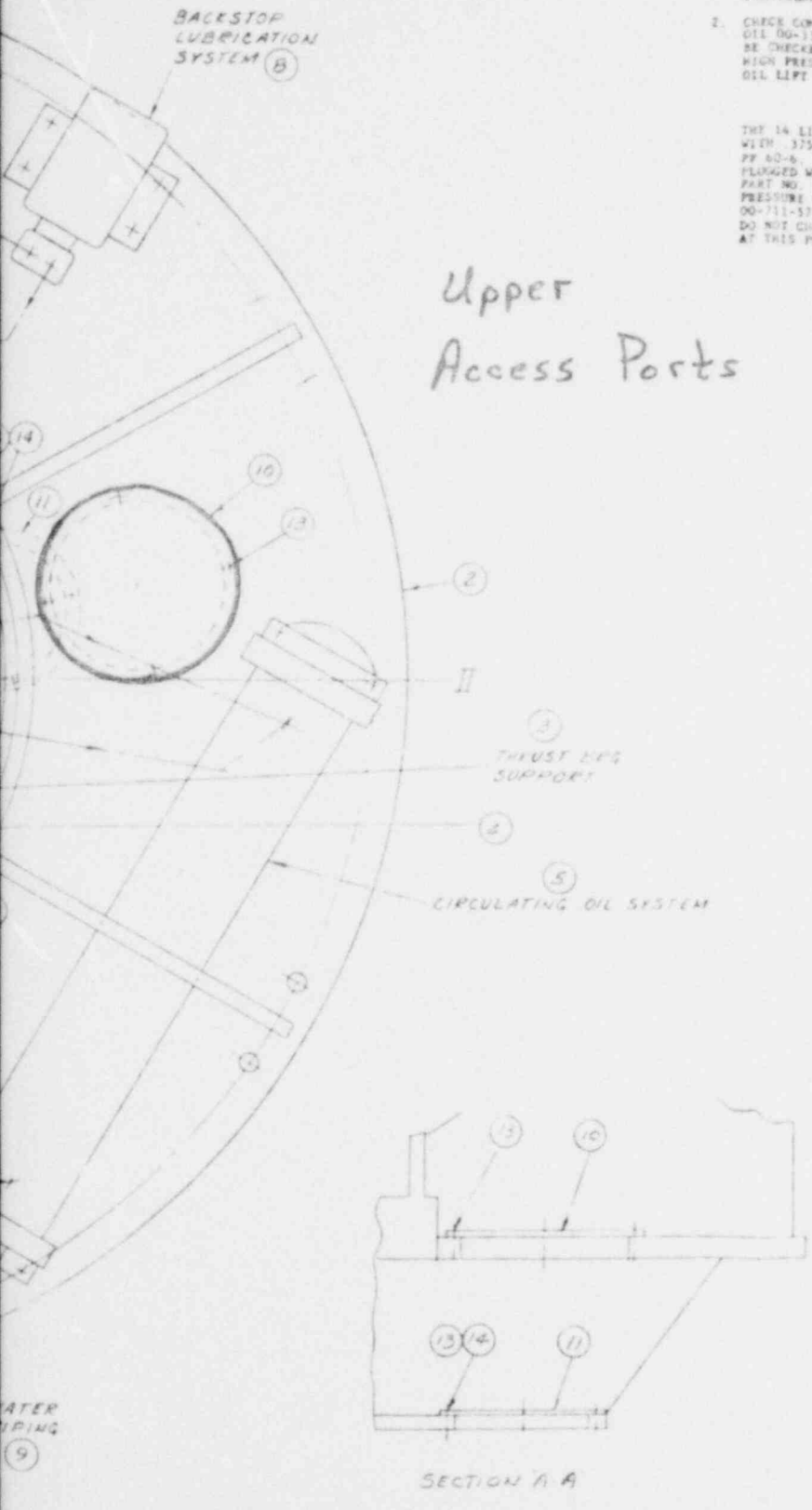
VIEW LOOKING DOWN AT TOP OF BEARING HOUSING WITH TOP PLATE REMOVED

01	8-21-69	AP

NOTES:

1. FLUSH COMPLETE SYSTEM TO REMOVE ALL DIRT & FOREIGN PARTICLES.
2. CHECK COMPLETE SYSTEM FOR LEAKS USING LUBRICATING OIL 00-339-521-068. HIGH PRESSURE OIL SYSTEM IS TO BE CHECKED AT 3000 P.S.I.
   HIGH PRESSURE PIPE PLUGS ARE REQUIRED TO PLUG THE OIL LIFT LINES FOR CHECKING.

THE 14 LINES FOR THE BEARING SHOES ARE TO BE PLUGGED WITH .375 HIGH PRESSURE PIPE PLUGS, FLODAR PART NO. PF 60-6, 00-711-572-503 & THE BACKSTOP LINE IS TO BE PLUGGED WITH A .375 HIGH PRESSURE COUPLING FLODAR PART NO. PF 11-6, 00-711-049-503 & A .375 HIGH PRESSURE PIPE PLUG, FLODAR PART NO. PF 60-6, 00-711-572-503.
DO NOT CHECK BACKSTOP LUBRICATION SYSTEM, IT. NO. 8, AT THIS PRESSURE.

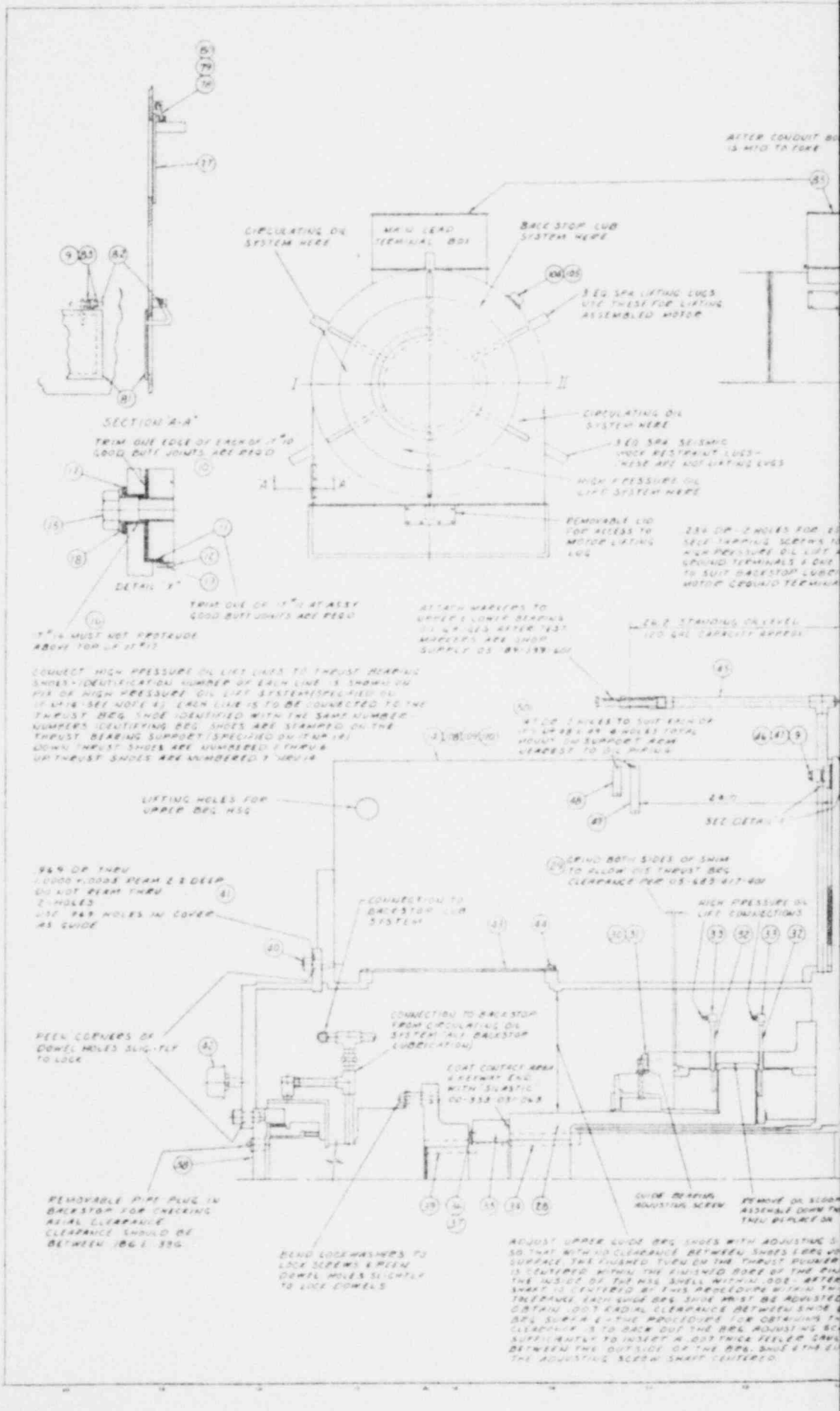


SECTION A-A

05-682-982-504 38822

CONFIDENTIAL - PROPERTY OF ALLIS-CHALMERS MFG. CO. 3005 MI PLANT			NAME THRUST BEARING HOUSING
UNLESS OTHERWISE SPECIFIED: 1. PLACE DEC ± 2. PLACE DEC ± 3. PLACE DEC ±	ANGULAR ±	MACHINED SURFACE TEXTURE	MATL
FOR TOLERANCES NOT SPECIFIED SEE STANDARD SHOP PRACTICE STANDARDS			SIZE
DR RC 3-3-69	05-416-736-404		SPEC NO.
CH 3-21-69	SCALE NTS	SHEET	PART NO. 05-416-736-404

	05-416-736-404	01


SECTION A-A
DETAIL 'F'
CIRCULATING OIL SYSTEM HERE
MAIN LEAD TERMINAL BOX
BACK STOP LUB SYSTEM HERE
3 EQ SPA LIFTING LUGS USE THESE FOR LIFTING ASSEMBLED MOTOR
CIRCULATING OIL SYSTEM HERE
3 EQ SPA SEISMIC SHOCK RESTRAINT LUGS - THESE ARE NOT LIFTING LUGS
HIGH PRESSURE OIL LIFT SYSTEM HERE
REMOVABLE LID FOR ACCESS TO MOTOR LIFTING LUG
TRIM OUT EDGE OF EACH OF 17 TO GOOD BUTT JOINTS ARE REQ'D
TRIM OUT OF 17 TO AT ASSY GOOD BUTT JOINTS ARE REQ'D
17 TO 16 MUST NOT PROTRUDE ABOVE TOP OF 17
CONNECT HIGH PRESSURE OIL LIFT LINES TO THRUST BEARING SHOES - IDENTIFICATION NUMBER OF EACH LINE IS SHOWN ON PIP OR HIGH PRESSURE OIL LIFT SYSTEM (SPECIFIED ON ITEM 16 - SEE NOTE 6). EACH LINE IS TO BE CONNECTED TO THE THRUST BRG SHOE IDENTIFIED WITH THE SAME NUMBER. NUMBERS IDENTIFYING BRG SHOES ARE STAMPED ON THE THRUST BEARING SUPPORT (SPECIFIED ON ITEM 16) DOWN THRUST SHOES ARE NUMBERED 1 THRU 6 UP THRUST SHOES ARE NUMBERED 7 THRU 14
ATTACH MARKERS TO UPPER & LOWER BEARING OIL LINES AFTER TEST. MARKERS ARE SHOP SUPPLY 03-89-339 WIRE
LIFTING HOLES FOR UPPER BRG HSG
SEE DETAIL 'F'
GRIND BOTH SIDES OF SHIM TO ALLOW 015 THRUST BRG CLEARANCE PER 03-683 617-601
HIGH PRESSURE OIL LIFT CONNECTIONS
CONNECTION TO BACKSTOP LUB SYSTEM
CONNECTION TO BACKSTOP FROM CIRCULATING OIL SYSTEM (ALT BACKSTOP LUBRICATION)
PEEN CORNERS OF DOWEL HOLES SLIGHTLY TO LOCK
SEAT CONTACT AREA & KEYWAY END WITH SILASTIC 00-338 OR EQ
REMOVABLE PIPE PLUG IN BACKSTOP FOR CHECKING AXIAL CLEARANCE CLEARANCE SHOULD BE BETWEEN .186 & .336
BEND LOCK WASHERS TO LOCK SCREWS & PEEN DOWEL HOLES SLIGHTLY TO LOCK DOWELS
GUIDE BEARING ADJUSTING SCREW
ADJUST UPPER GUIDE BRG SHOES WITH ADJUSTING S SO THAT WITH NO CLEARANCE BETWEEN SHOES & BRG SURFACE THE FINISHED TURN ON THE THRUST RUNNER IS CENTERED WITHIN THE FINISHED BORE OF THE BRG THE INSIDE OF THE HSG SHELL WITH .008 - AFTER SHAFT IS CENTERED BY THIS PROCEDURE WITHIN TH TOLERANCE, EACH GUIDE BRG SHOE MUST BE ADJUSTED OBTAIN .007 RADIAL CLEARANCE BETWEEN SHOE BRG SUPPLY & - THE PROCEDURE FOR OBTAINING TH CLEARANCE IS TO BACK OUT THE BRG ADJUST WG SC SUFFICIENTLY TO INSERT A .007 THICK FEELER GAU BETWEEN THE OUTSIDE OF THE BRG SHOE & THE I THE ADJUSTING SCREW IS SHAFT CENTERED.
AFTER CONDUIT BO IS MTD TO FORE
2 EQ SPA STANDING ON STEEL 120 GAL CAPACITY APPROX
AT OP 2 HOLES TO SUIT KEIN OF 4 HOLES TOTAL MOUNT ON SUPPORT ARM LEAREST TO OIL PIPING
2 EQ SPA
SEE DETAIL 'F'

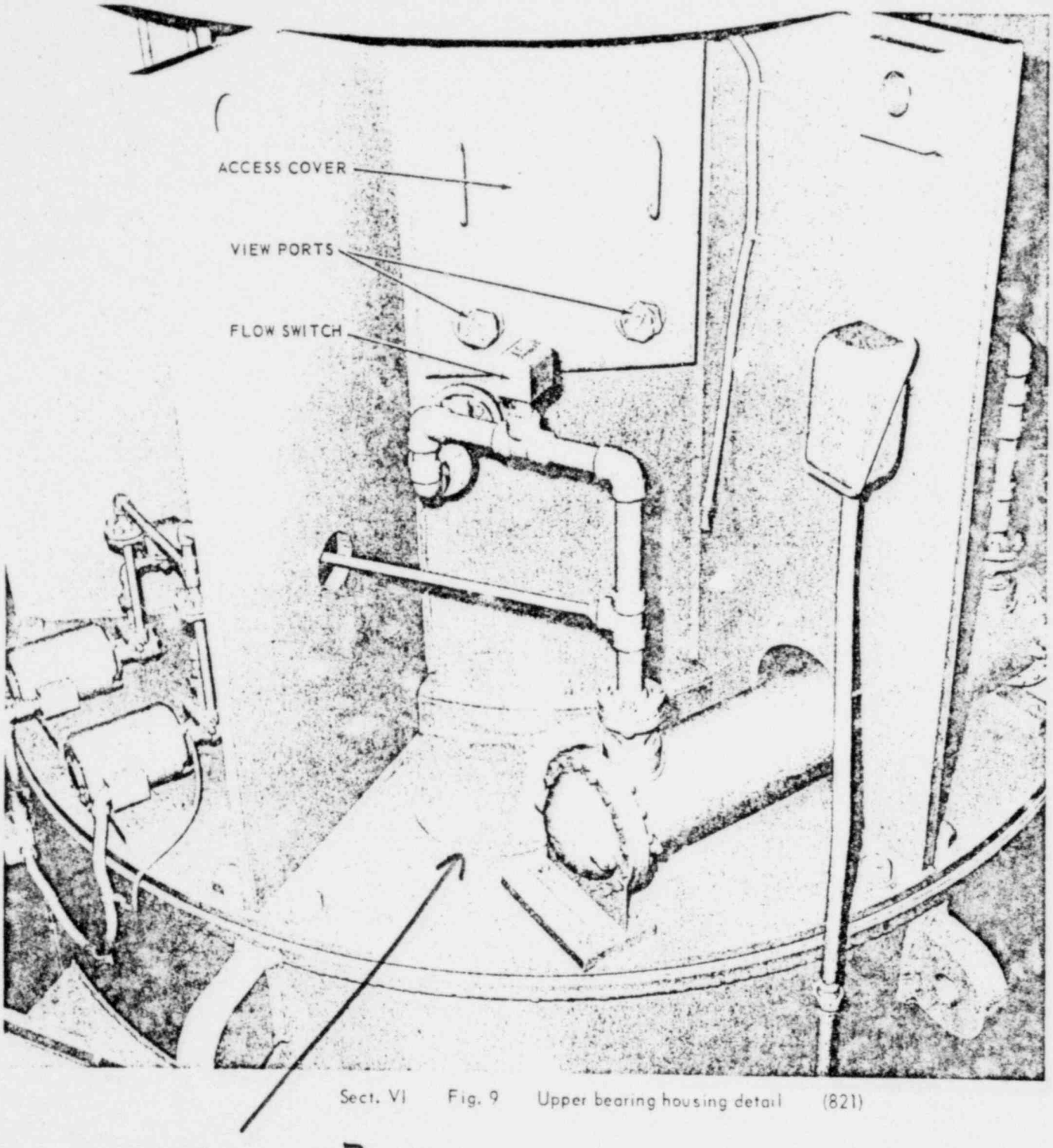
NOTES:

1. ALL ITEMS ON THIS DRAWING ARE IDENTICAL TO THE ITEM NUMBER AS LISTED ON THE MOTOR PARTS LIST.
2. COAT ALL MATING JOINTS AND OIL PIPING JOINTS MADE AT ASSEMBLY WITH PIPE JOINT COMPOUND.
3. REFER TO OUTLINE DRAWING 05-308-011-901 FOR RELATIONSHIP BETWEEN ASSEMBLIES.
4. OIL SYSTEMS ARE SPECIFIED ON UPPER BEARING HOUSING ASSEMBLY, 1" DIA.
5. BALANCE ROTOR AFTER MOTOR IS ASSEMBLED. BALANCE TOLERANCE PER 05-32-372-901. BALANCE SCREWS ARE SHOP SUPPLY.
6. BEFORE ASSEMBLING ROTOR INTO STATOR: MOUNT PINS AND INSULSLEEVE, ITEMS 14 & 15, INTO LOWER BEARING HOUSING, IT HAS 4. THESE ARE GUIDES FOR POSITIONING LOWER BEARING HOUSING AND BAFFLE. PLACE LOWER AIR BAFFLE, IT HAS 3, ON TOP OF LOWER BEARING HOUSING SO THAT THE 2 PINS ON THE TOP OF THE HOUSING PROTRUDE THRU THE HOLES PROVIDED NEAR THE INNER EDGE OF THE AIR BAFFLE LOWER. THIS ASSEMBLY INTO THE FORE AS THIS ASSEMBLY APPROACHES ITS FINAL DESTINATION, ADJUST SO THAT THE PINS, IT WILL WILL PASS THRU THE LOCATING HOLES IN THE FORE. THIS PLACES THE BAFFLE IN SKIM POSITION THAT FURTHER LOWERING OF THE ASSEMBLY ALSO CORRECTLY LOCATES THE BAFFLE SO THAT THE PINS AT THE OUTER EDGE OF THE BAFFLE WILL ENGAGE THE BAFFLE LOCATING HOLES IN THE STATOR FORE.

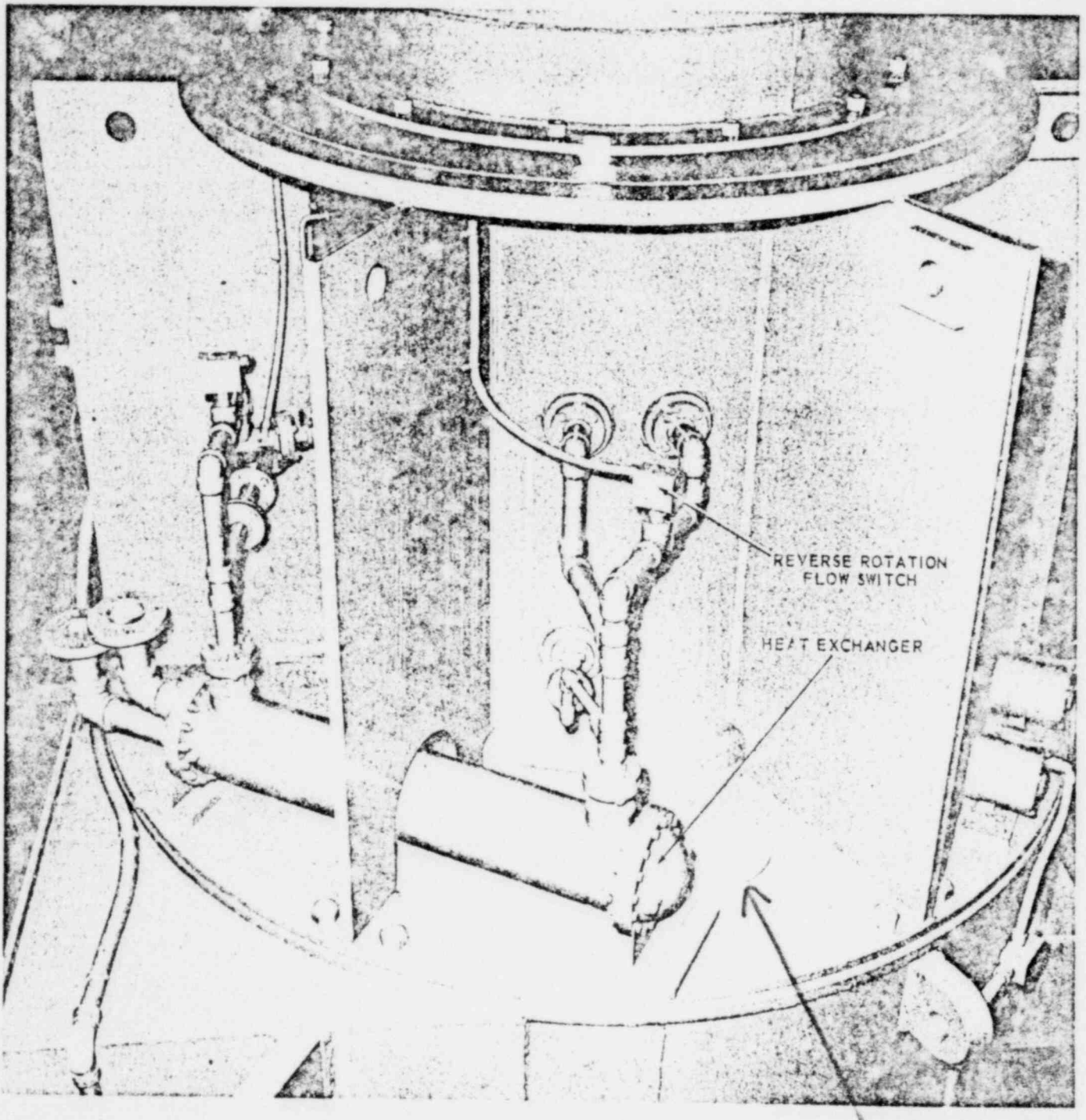
Flywheels

Access Parts

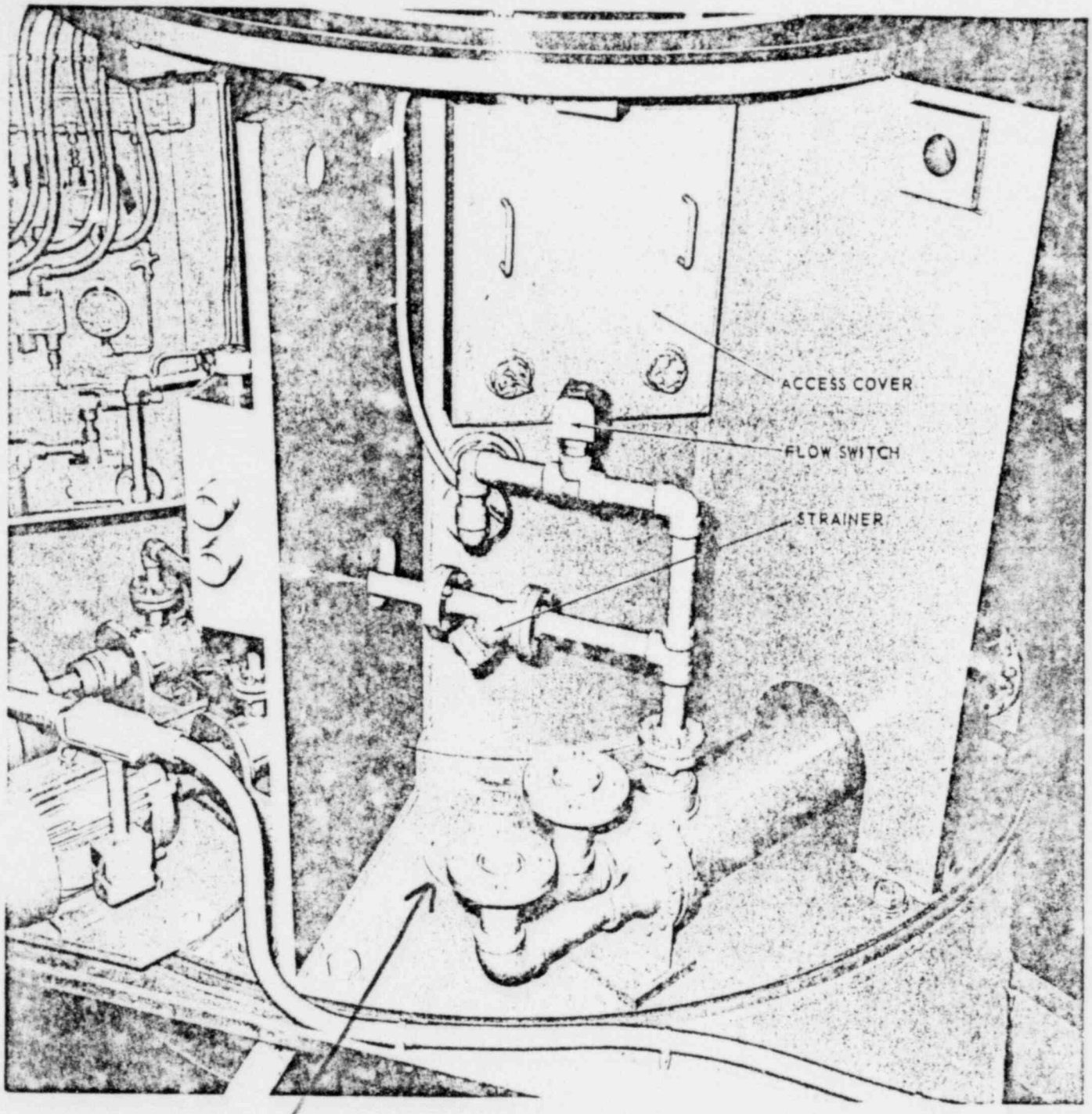
ALLIS-CHALMERS MFG. CO.	MOTOR ASSEMBLY
	AVG & 50-2A
	05-327-989-302



Sect. VI Fig. 9 Upper bearing housing detail (821)



Sect. VI Fig. 8 Upper bearing housing detail (821)



Sect. VI Fig. 6 Upper bearing housing detail (821)

Access Port