

ROBINSON HELICOPTER COMPANY
24747 CRENSHAW BLVD.
TORRANCE, CA 90505

SERVICE LETTER #1

DATE: July 22, 1980

SUBJECT: Cabin heat blower assembly A643

ROTORCRAFT AFFECTED: Model R22 S/N #0006 through # 0022

TIME OF COMPLIANCE: At next inspection

MATERIALS REQUIRED: A782-1 Blower Housing
Mechanics hand tools

INSTALLATION PROCEDURE:

Remove the existing Cabin Heat Blower Assembly. Disassemble to remove the plastic housing and replace with the fiberglass housing as per the following:

I. Removal of the blower assembly from the helicopter

1. Disconnect power lead from the blower motor.
2. Remove four (4) AN525-832R16 screws from side skirt.
3. Remove spacer ring and screen along with the trim ring.
4. Remove the NAS1304-20 bolt that attaches the blower motor and ground wire to the frame and remove the blower assembly.

II. Blower assembly with new fiberglass housing

1. Using a 5/64" Allen wrench, loosen the set screw that attaches the blower cage to the motor shaft; remove the cage.
2. Clip the safety wire that holds the (4) AN503-6-6 screws and remove screws.
3. Disassemble the backing plate, blower housing, mounting bracket and motor.
4. Save all hardware and brackets for reassembly of blower and discard old blower housing.

III. Blower assembly with new fiberglass housing

1. Assemble blower using the reverse of the above procedure being sure to mount the mounting bracket as shown on the enclosed drawing. NOTE: Motor shaft should protrude .46" from blower cage on reinstallation.

IV. Reinstallation of blower motor to helicopter

1. Reinstall the four (4) AN525-832R16 screws through the side skirt, screen around the spacer ring and through the trim ring into the blower housing.
2. Install NAS1304-20 bolt through the mounting bracket and the frame, placing the ground wire terminal under the nut side of the bolt (outboard).
3. Torque the NAS1304-20 bolt to 100in/lb palnut and torque stripe.

V. Installation trouble-shooting

1. If mounting bracket will not line up with frame mount:
 - a. Remove blower from ship and disassemble.
 - b. Enlarge the four (4) holes in the blower housing that attach the housing to the motor to .250".
 - c. Reassemble blower leaving blower cage out. Do not safety the four (4) motor mount screws.

- d. Install the blower assembly in the ship leaving out the screen.
- e. Loosen the four motor mount screws, rotate the motor and bracket to align the mounting bracket with the frame mount.
- f. Tighten the four motor mount screws.
- g. Remove the blower assembly and safety the four (4) motor mount screws.
- h. Install the blower cage, as per section IV.

NOTE: If the mounting bracket will not align in step e, Section V, the mounting bracket to frame hole may be elongated in the bracket only.

It is suggested that if the mounting bracket hole is enlarged, that a large area washer be installed on the bolthead side and frame side of the mounting bracket. This may require a slightly longer NAS1304 bolt.

DISPOSITION OF REMOVED PARTS: Render unserviceable and discard.

AN 503-6-6 SCREW ~ 4 REQ'D
LOCKWIRE PER MS33540

AN 525-832 R16
SCREW ~ 4 REQ'D.

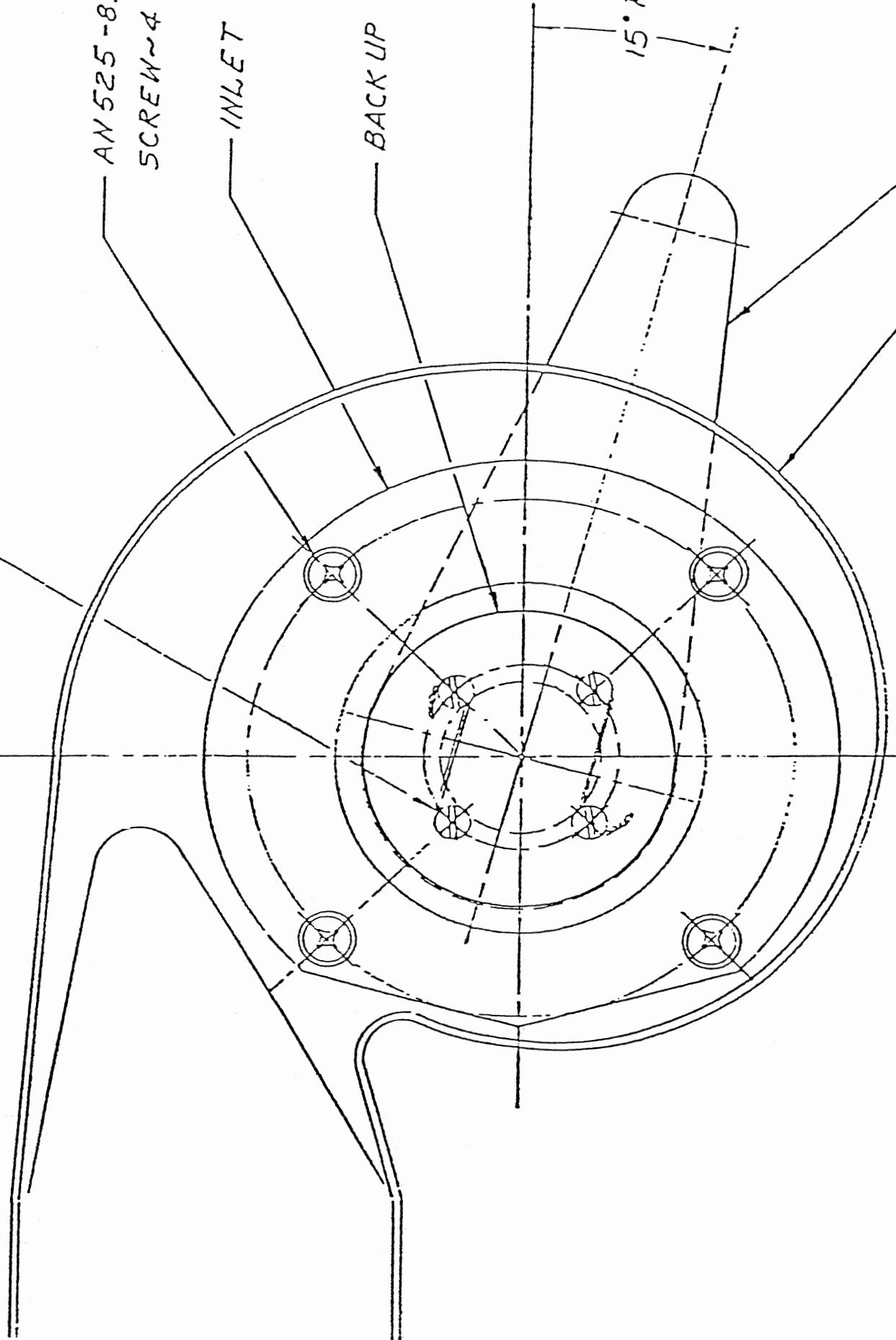
INLET

BACK UP PLATE

15° REF

A624-1 PLATE

A782-3 HOUSING



(CAGE BLOWER NOT SHOWN FOR CLARITY)