

_____"A" FROM: DON CARLSON
 BRANCH SERVICE MANAGERS

_____"B" DATE: JULY 10TH, 1978
 DISTRICT SERVICE MANAGERS

_____"C" SUBJECT: REVISED 32SM CHECKOUT PROCEDURE
 STAFF TECHNICAL STAFF

PURPOSE:

To provide a revised troubleshooting guide for use with the 32SM Amplifier Module.

MACHINES AFFECTED:

All machines using the 32SM amplifier module, the original model, P/N 32SM400474, or the new design, P/N 32SM500704.

PROCEDURE:

When an amplifier module problem is suspected, the attached guide should be used in the troubleshooting of the module. No module should be replaced unless a reading is taken that deviates from the checkout procedure.

REGARDS,

Don

DON CARLSON

DC/iam

ATTACHMENT:

FILING INSTRUCTIONS: F.E.R. MANUAL - CENTRIFUGAL
 TAB: CONTROLS



Number One
Air Conditioning
Maker

Division of Carrier Corporation

INSTRUCTION SHEET

For Use With: _____ Module _____

32SM400474
32SM500704

Part Description

Part Number

Module 32SM500704, is similar to 32SM400474, except as listed.

	TEST LOCATION	32SM400474	32SM500704
	83 to 28	28 ± 3 V.A.C.	12 ± 1.5 V.A.C.
	80 to 28	$+24 \pm 1$ V.D.C.	$9.1 \pm .5$ V.D.C.
	81 to 28	-24 ± 1 V.D.C.	Not Applicable
Chilled Water Temp.	29 to 28		
	30°F	-8.7 ± 1 V.D.C.	$+3.2 \pm .5$ V.D.C.
	35°	-7.2	+3.5
	40°	-5.5	+3.8
	45°	-4.0	+4.1
	50°	-2.7	+4.4
	55°	-0.8	+4.8
	60°	+0.9	+5.1
	65°	+2.6	+5.4
	25 to 28	-16 ± 1 V.D.C.	0 to .5 V.D.C.
	27 to 28	-16 ± 1 V.D.C.	0 to .5 V.D.C.

19CBs with auxiliary relay modules that look like Fig. 1, can use either module. Other 19CBs must use 32SM400474.

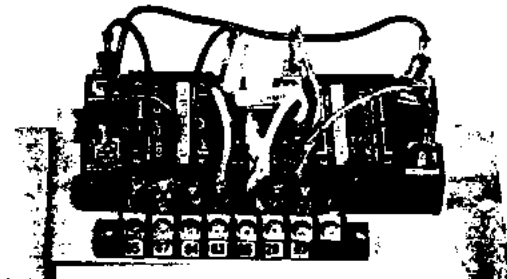


FIG. 1

Machines with pneumatic transducers with connections as shown below, can use either module. Other transducers will work only with 32SM400474.



Date: 9-14-78

Prepared By: L. Audet

Instruction Sheet Number 99TA550052

Tom

TO ZONE SERVICE ENGINEERS (A)
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 DON CARLSON (C)

Date: JULY 22, 1982
 From: FRANK A. BAGILEO
 Office: SERVICE ENGINEERING--CRANFORD
 Subject: ADDENDUM F.E.R. 77-~~8~~9
32SM CHECKOUT PROCEDURE

PURPOSE: To advise all field personnel of the difference in feedback resistances between linkage drive guide vane actuators and chain drive guide vane actuators

MACHINES AFFECTED: All 19DG, DH, DK, EA, EB and FA machines.

PROCEDURE: Following is the addendum to test point location 6 feedback resistances.

6. FEEDBACK RESISTANCE - CHAIN DRIVE

A. Terminals $\diamond 25$ to $\diamond 27$ 5000 ohm \pm 20%
 at actuator:

A1. Terminals $\circ 7$ to $\circ 8$ 5000 ohm \pm 20%

FEEDBACK RESISTANCES - LINKAGE DRIVE

A. Terminals $\diamond 25$ to $\diamond 27$ 10,000 ohm \pm 10%
 at actuator:

A1. Terminals $\circ 7$ to $\circ 8$ 10,000 ohm \pm 10%

ALL OTHER ITEMS ON 32SM CHECKOUT LIST ARE CORRECT

Regards,



Frank A. Bagileo

Filing Instructions: F.E.R. Manual - Centrifugal
 Tab: Controls

ACTUATOR IDENTIFICATION

LINKAGE DRIVE

Actuator Part Number

	<u>Part#</u>	<u>Torque (in.-lbs.)</u>	<u>Stroke^o</u>
1.	HF26BB061	220	150 \pm 3 ^o
2.	HF26BB056	400	150 \pm 3 ^o

Motors are identical except for torque valves.

Mating Potentiometer Part Number

<u>Part#</u>	<u>Resistance</u>	<u>Pot. Rotation</u>
HT24AV120	10,000 \pm 10%	360 ^o

CHAIN^o DRIVE

Actuator Part Number

	<u>Part#</u>	<u>Torque (in.-lbs.)</u>	<u>Stroke^o</u>
1.	HF26BB062	220	308 \pm 2 ^o
2.	HF26BB057	400	308 \pm 2 ^o

Mating Potentiometer Part Number

<u>Part#</u>	<u>Resistance</u>	<u>Pot. Rotation</u>
HT24AZ120	5,000 \pm 20%	352 ^o

Motors are identical except for torque valves.