



INSTALLATION INSTRUCTIONS

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PN 4416409
SHEET 1 OF 8

ENG CHANGE NO	SEE EC	846189			
DATE OF CHANGE	HISTORY	10DEC82			

WRITTEN BY: H. LAWES

CHECKED BY:

APPROVED BY: R. RILEY

FIELD SUPPORT/DPCE REVIEW: D. MENTZER

TITLE: VACUUM TUBING REPLACEMENT.

STATUS: FIELD USE

BEFORE INSTALLATION (STEPS 1 THRU 8)

1.0 MACHINES AFFECTED:

3420 ALL

2.0 PREREQUISITE/CONCURRENT/COMPANION:

2.1 PREREQUISITE: NONE

CHECK POINT: CRACKED OR LEAKING VACUUM TUBING OR 5 YEARS SINCE LAST INSTALLATION OR REPLACEMENT.

2.2 CONCURRENT: (MAY BE INSTALLED TOGETHER)

NONE

2.3 COMPANION: (MAY BE INSTALLED SEPARATELY)

NONE

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3.0	<u>B/M'S TO BE INSTALLED:</u> NOTE: 1. CHECK B/M PREREQUISITES TO CONFIRM THAT YOU HAVE THE CORRECT B/M AND THAT YOUR MACHINE HAS ALL PREREQUISITES INSTALLED. <div style="text-align: center;"> <u>B/M TO BE INSTALLED</u> 4416409 </div>													
4.0	<u>PREPARATION:</u> 4.1 FAMILIARIZE YOURSELF WITH THE PURPOSE AND DETAILS OF THIS INSTALLATION INSTRUCTION. 4.1 CHECK ALL ITEMS AND COUNT PARTS LISTED ON THE B/M TO BE INSTALLED TO DETERMINE THAT ALL PARTS WERE RECEIVED. SAVE B/M AS IT IS AN INTEGRAL PART OF THESE INSTRUCTIONS.													
5.0	<u>PROGRAM UPDATE:</u> NONE													
6.0	<u>PURPOSE AND DESCRIPTION:</u> 6.1 PURPOSE - IMPROVE PNEUMATIC RELIABILITY 6.2 DESCRIPTION - RELEASE FIELD B/M 4416409 TO REPLACE THE VACUUM TUBING EVERY FIVE YEARS OR SOONER AS REQUIRED.													
7.0	<u>INSTALLATION TIME:</u> <table border="0" style="width: 100%;"> <tr> <td style="width: 33%;"><u>MAN HOURS</u></td> <td style="width: 33%;"><u>NO OF CE'S</u></td> <td style="width: 33%;"><u>MACHINE HOURS</u></td> <td style="width: 33%;"><u>SYSTEM HOURS</u></td> </tr> <tr> <td style="text-align: center;">1.0</td> <td style="text-align: center;">1</td> <td style="text-align: center;">1.0</td> <td style="text-align: center;">.2</td> </tr> </table>						<u>MAN HOURS</u>	<u>NO OF CE'S</u>	<u>MACHINE HOURS</u>	<u>SYSTEM HOURS</u>	1.0	1	1.0	.2
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1.0	1	1.0	.2											
8.0	<u>SPECIAL TOOLS AND/OR MATERIALS REQUIRED:</u> NONE													

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INSTALLATION (STEPS 9, 10 AND 11)

9.0 SAFETY:

AS INSTALLATION BEGINS, OBSERVE ALL NORMAL PRECAUTIONS AS OUTLINED IN THE CE SAFETY PRACTICES, FOUND ON THE FIRST PAGE OF EACH MLM VOLUME.
CAUTION: IF KNIFE IS USED TO ASSIST IN TUBING REMOVAL EXTREME CARE MUST BE MAINTAINED.

10.0 DETAILS OF INSTALLATION:

NOTE: 1. THIS PROCEDURE IS WRITTEN TO REPLACE EXISTING TUBING. REMOVE THE EXISTING TUBING AND ATTACHING HARDWARE AT THE BEGINNING OF EACH STEP. RETAIN THE ATTACHING HARDWARE FOR INSTALLING THE NEW TUBING. ALL TUBES DO NOT HAVE ATTACHING HARDWARE. ROUTE ALL NEW TUBES IN THE SAME MANNER AS THE OLD TUBES AND IF REQUIRED TRIM LENGTH TO AVOID KINKING.

2. DUE TO AGE AND MACHINE ENVIRONMENT THE TUBING REMOVAL MAY BE DIFFICULT. CUTTING THE TUBING AT ITS CONNECTION POINT WILL AID IN REMOVAL. CARE MUST BE TAKEN NOT TO DAMAGE ANY CONNECTING PARTS DURING REMOVAL.

3. RECONNECTION OF THE REPLACEMENT TUBING MAY BE AIDED BY LUBRICATING THE TUBING PRIOR TO INSTALLING. IF THIS METHOD IS USED, TAPE UNIT CLEANER P/N 8493001 IS THE ONLY ACCEPTABLE LUBRICANT.

10.0.1 MACHINE PREPARATION:

1. FOR IMPROVED ACCESS DURING INSTALLATION, DISCONNECT RIGHT REEL MOTOR COOLING HOSE FROM MOTOR AND RD/WR CARD COOLING HOSE FROM COOLING SHROUD.
2. OPEN FRONT DOOR AND REMOVE LEFT AND RIGHT INNER COVERS.
3. OPEN VACUUM COLUMN DOOR AND REMOVE CENTER FRONT INNER COVER.

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10.1 3420 MODEL 3,4,5, & 6 ONLY, WITHOUT EC 847202.
INSTALL TUBE, PART 2512738, (A) FROM THE
TRANSFER VALVE TO THE PLENUM ASM.

10.2 3420 MODEL 7 & 8 OR MODEL 3,4,5,6 WITH EC 847202.
INSTALL TUBE, PART 2522894, (E) FROM THE PLENUM
TO THE IN-LINE ORIFICE.

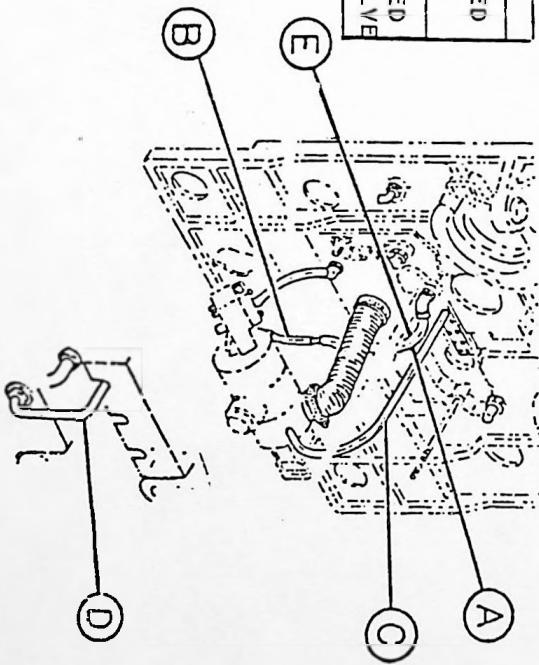
INSTALL TUBE, PART 2522893, (B) FROM THE ORIFICE
TO THE TRANSFER VALVE.

NOTE: POSITION ORIFICE AS STATED.

TAPE UNIT MODEL	ORIFICE DIRECTION
3,4,5,6 OR 7	ARROW ON ORIFICE IS POINTED TOWARD THE TRANSFER VALVE
8	ARROW ON ORIFICE IS POINTED AWAY FROM THE TRANSFER VALVE

10.3 INSTALL THE CLEANER BLOCK TUBE AS FOLLOWS:

PART 1766567 (C)
FOR MACHINES WITH CONFIGURATION, (D) TRIM
TUBING P/N 1766567 TO APPROX. 8.0 (203.2 mm)
BEFORE INSTALLING.



IBM INSTALLATION INSTRUCTIONS

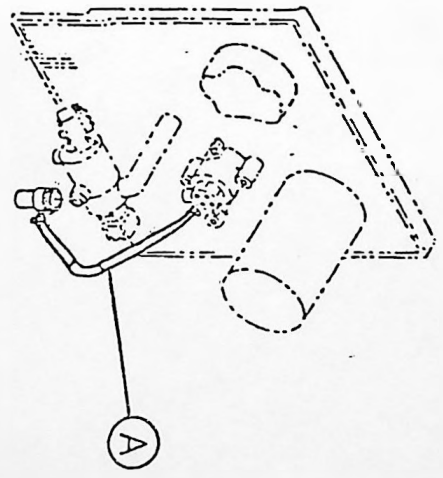
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10.4 3420 MODEL 8 ONLY
INSTALL TUBE ASM PART 4452307, (A)
FROM THE CAPSTAN MOTOR TO THE
VACUUM TEE.

NOTE: AT THIS TIME RECONNECT COOLING
HOSES REMOVED FOR ACCESS.



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10.5 INSTALL VACUUM COLUMN TO VACUUM SWITCH TUBES AS FOLLOWS:

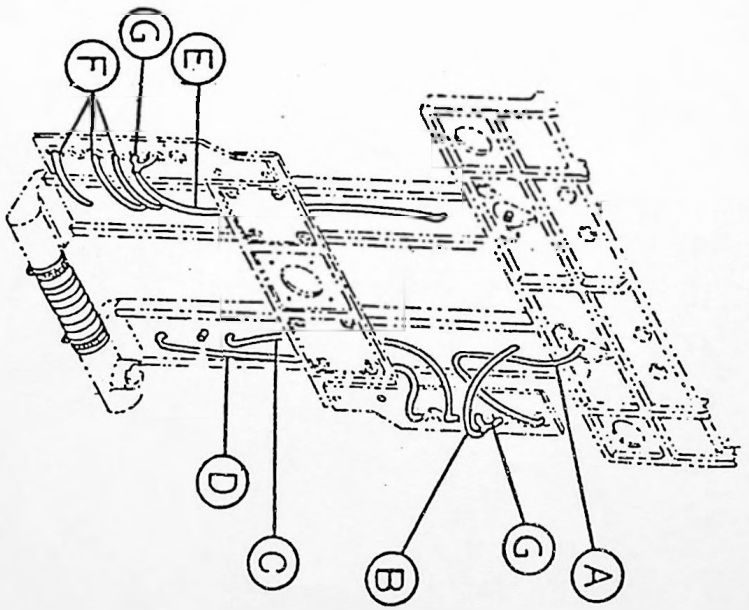
NOTE: FOR IMPROVED ACCESS TUBING (A) AND UPPER CONNECTION OF TUBE (E) MAY BE REMOVED FROM REAR OF MACHINE.

- PART 2512743(2) (A) (C)
- PART 2512744 (B)
- PART 2512742(2) (D) (E)
- PART 2512745(3) (F)

INSTALL P/N 4169595 BETWEEN THE TEE AND TUBING AS REQUIRED (G)

10.6 MISCELLANEOUS

1. VERIFY THAT ALL HOSES AND TUBING ARE CONNECTED.
2. REPLACE ANY COVERS REMOVED DURING EARLIER STEPS AT THIS TIME.



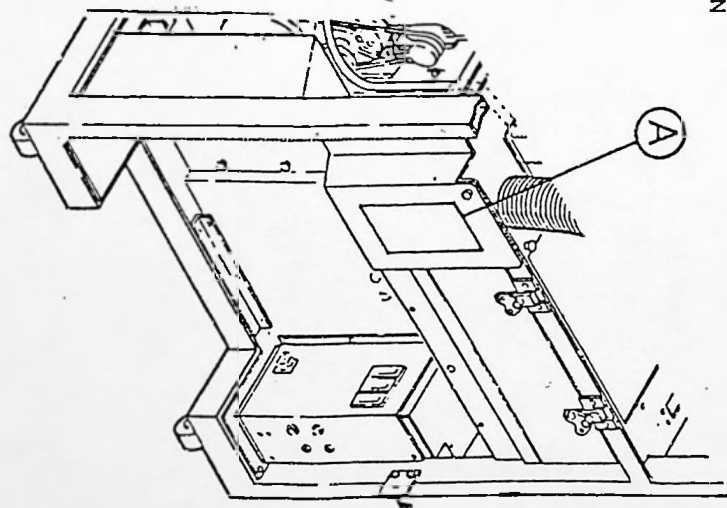
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10.7 MARK THE DUE DATE (MONTH-YEAR) IN INK IN THE SPACE PROVIDED ON THE LABEL, PART 4469377 FOR VACUUM TUBING. THE DUE DATE IS TODAY PLUS FIVE YEARS.

NOTE: IF LABEL P/N 4469377 IS NOT INSTALLED OR REQUIRES RE-PLACEMENT, ORDER AND ATTACH TO UPPER PNEUMATICS SUPPLY COVER (A). ANY EXISTING DUE DATE INFORMATION MUST BE TRANSFERRED TO THIS LABEL AT THIS TIME.



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14.0 PARTS DISPOSITION:

14.1 PURCHASED MACHINES: REFER TO OWNERSHIP OF PARTS MATRIX TO DETERMINE THE CORRECT OWNER OF REMOVED/UNUSED PARTS. ALL PARTS DETERMINED TO BE THE PROPERTY OF IBM SHOULD BE PROCESSED AS STATED IN THE RENTAL MACHINES DIRECTIONS BELOW.

14.2 RENTAL MACHINES:

14.2 PROVIDE ALL PARTS TO BE THE IBM BRANCH OFFICE FOR POTENTIAL RETURN IN ACCORDANCE WITH EXISTING RETURN, RECOVER, AND RECLAMATION PROGRAMS.

14.3 WORLD TRADE

14.3.1 RETURN ALL PARTS TO COUNTRY CENTRAL STOCK PER EXISTING LOCAL PROCEDURE.

15.0 MACHINE RECORDS:

NONE

END OF INSTRUCTIONS

17MAR83 1327

PG-001

ORG LOC BLDG LEPT ADDR:EE
G90 TUCA 0001 T30Q ELSTON,0 398 0

FIELD ENGINEERING BILL-4416409

EC LEVEL- 846189 LOC-SJXX

MACHINE TYPE-3420-FLD,

TITLE- 3420 P.M. KIT VACUUM TUBING REPLACEMENT

MAINTENANCE REFERENCE MATERIAL

CK	PART NUMBER	QUANTITY	U/M	FRU	NAME	DESCRIPTION	REFERENCE/EC
	4416409	1	1		F/BM & II		846189

PARTS AND ASSEMBLIES

CK	PART NUMBER	QUANTITY	U/M	FRU	NAME	DESCRIPTION	REFERENCE/EC
	1766567	1	1		TUBING		
	2512738	1	1		TUBING		
	2512742	2	1		TUBING		
	2512743	2	1		TUBING		
	2512744	1	1		TUBING		
	2512745	3	1		TUBING		
	2522893	1	1		TUBING		
	2522894	1	1		TUBING		
	4169595	3	1		ADAPTOR		
	4452307	1	1		TUBING ASM		

COMMENTS- NONE

END OF BILL OF MATERIAL

LAST PAGE