

January 26, 1955

No. 15

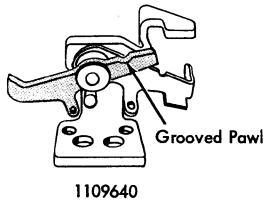
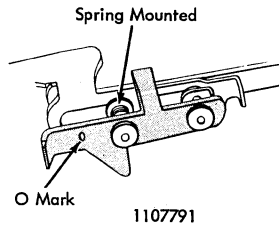
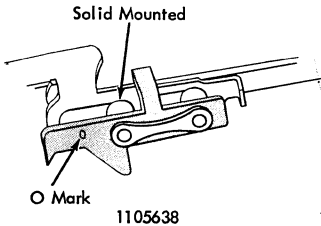
TYPE BAR REST PAD

Service calls resulting from the special anti-rebound type rest, part #1093882 or #1093883, jumping out of position can be minimized by using the following method. Install a type bar spring through retainer clip, part #1093670, and around the basket frame assembly. The use of a type bar spring on each side will not jeopardize the function of the type rest assembly.

* * * *

MODEL B PARTS IDENTIFICATION

Tabular levers and escapement pawl bracket assemblies now have certain characteristics or contain markings which identify the various pitches. The following illustrations are furnished to aid you in this identification.



(over)

Tabular lever for 8-9-10 pitch machines, part #1105628, and escapement pawl bracket assembly for 14 - 5/32 pitch machines, part #1070386, have no marking.

* * * *

OPERATIONAL CAM REMOVAL

To facilitate removal of the tabular, space bar, back space, and carriage return cams from Standard ET's the following method may be employed:

1. Remove front cover.
2. Remove cam knockout bar assembly.
3. Remove key lever fulcrum wire sufficiently to drop all key levers in the area of the cam to be removed.
4. Disconnect operating links from the cam to be removed.
5. Remove operational cam fulcrum wire.
6. Spread the appropriate key levers and remove cam out through the top of the machine.

Because of interference with the margin set key lever, the shift cam must be removed in the normal manner.

* * * *

DEFECTIVE MATERIAL

From time to time, defective ET parts are returned to the plant on an RMER. As stated in CEM #383, all defective parts returned to Poughkeepsie are to be tagged with a Defective Parts Card, IBM 910821.

* * * *

CEM CHANGE

CEM #390 erroneously refers to Lift Platen under "PURPOSE" and "MACHINES AFFECTED". Since the rear rail parts of Model B Lift Platen typewriters are similar to the Model A, rebound check lever mounting bracket, part #1072086, must be used.

* * * *

NEWS LETTER ITEMS

ET News Letter #1 requested that comments be directed to ET "News Letter", Poughkeepsie. We solicit your ideas and appreciate your efforts in getting them to us. However, so that you will be eligible to receive recognition for any accepted idea, items should be submitted through the use of the IBM Suggestion Plan.

* * * *

NEW SERVICE CODE

For District Demonstrator and Display Equipment, a new Service Code 24, entitled "District Demonstrators and Display ET's", has been established for use for all Customer Engineering service on this equipment. An ET Service Sticker should be placed on the inside top cover of each District Demonstrator and Display ET with the following clearly noted: "District Demonstrator - Use Service Code 24".

* * * *

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LIGHTENED TYPE BARS

CEM #387 described a method for reducing the type bar weight to reduce embossing of the small area punctuation characters. We are pleased to announce that lightened type bars will be installed in positions 32, 36, 38, 39, 40, 41, and 42 of all ET's during manufacture effective with Standard typewriters above approximate serial #354226 and Executives above approximate serial #116290.

* * * *

SUGGESTION DRAWING PREPARATION

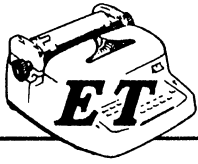
While drawings are not always required, there are some instances where submission of drawings aids in presentation of an idea and also simplifies investigation.

Try the following procedure the next time you plan to include a drawing:

Trace over drawing in Manuals or Parts Catalogs using the first sheet of the Suggestion Form. Finish up by retracing over the remaining suggestion sheets, at the same time, making alterations required to illustrate your idea.

This method has proven helpful to other suggesters in the past----will it aid you?

* * * *



News Letter

CUSTOMER ENGINEERING

February 8, 1955

No. 16

NEW PRODUCTS

We are pleased to devote this issue of the News Letter to the new ET products recently announced at the Hundred Per Cent Club meetings so that each Customer Engineer will be familiar with the latest developments in the IBM Electric Typewriter field.

* * * *

IBM CARD POSITIONING PLATEN



(over)



IBM

The IBM card positioning platen is used in conjunction with the publications industry and is designed for a rapid feeding of IBM cards both in and out of the typewriter.

The platen is equipped with a 44-tooth ratchet and No. 1 rubber. A metal card holding blade, containing an adjustable card guide, runs its full length. An enlarged left hand platen knob, approximately 2 1/2" in diameter, allows a fast and efficient method of positioning the platen. With a downward motion of the hand applied on the left hand platen knob, the card is fed to a predetermined first writing line. The rotation of the platen is stopped by an adjustable platen radial stop located on the left end of the platen shaft. An upward hand motion causes the tab card to be ejected from the platen and, concurrently positions the platen so that the card holding blade is in a position to accept another card. The left hand platen knob contains a clutch which, when the platen is forced against its stops, will allow the platen knob to continue turning, thereby eliminating undue wear or breakage of parts.

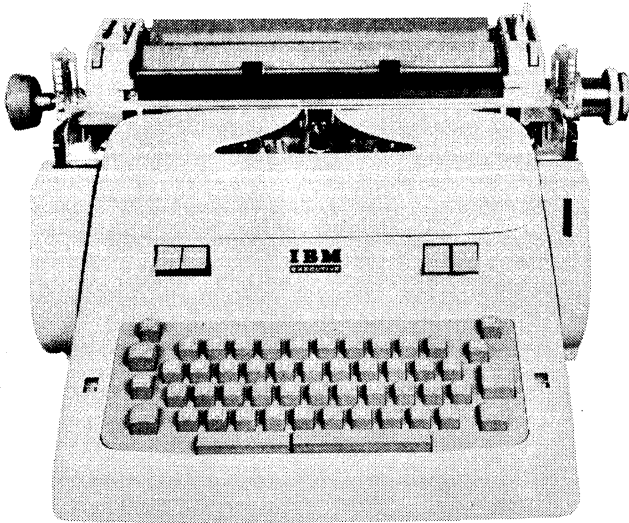
This platen is adaptable to the 12" Standard Model B1 ET.

* * * *

VISIBLE INDEX CARD HOLDING ATTACHMENT

This feature provides a means of holding and feeding the type of card known as Flex-O-Print, Individual Visible Index, Acme Visible, etc.

The Visible Index Card Holding Attachment consists of a card carrier which travels vertically in the area normally occupied by the front scale. Two elongated slots in the card carrier serve as guides for its vertical motion. The card carrier has a spring blade running the length of the platen which holds the card in typing position by friction. Vertical motion of the carrier is provided by means of two gear sectors, each mounted to a collar on each end of the platen.



A supplementary latch operates in the platen ratchet to provide for the line spacing of cards while the usual detent roller is available for the line spacing of correspondence. By means of a three-position detent release lever, both the supplementary latch and ratchet detent can be released.

An adjustable vertical stop and an adjustable horizontal card stop are installed for accurate positioning of the card. Cards of varying lengths can be used depending on the length of the carriage and from one to three writing lines can be typed with this attachment.

A typewriter can be converted either to card typing or to correspondence use by simple measures.

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(over)

DUAL PURPOSE PLATEN



This feature permits typing of both cards and correspondence with the same platen.

The card holding feature is the same as now used except that the Card Holding device extends only 6 3/8" from the right end of the platen. The remaining portion of the platen may be used for correspondence. The platen contains No. 1 rubber.

Two left-hand margin stops are used to permit setting for either correspondence or cards. The right hand margin stop has been omitted to permit a longer writing line.

* * * *

In addition to the above features, three new and distinct type styles have been added to the IBM Library of available type. Samples of the new type are shown below.

IBM EXECUTIVE ARCADIA

IBM Electric Typewriters bring quality, ease, and speed to today's typing. With only a feather-light touch required to release the electrically-powered keys, unnecessary hand and arm motion has been eliminated. All operating keys - the carriage return, tabulator, shift, and back spacer - are located on the nearly level keyboard and are released with the same light touch. Better quality of typewritten work, increased speed and ease of operation, and the ability to produce many legible carbon copies are only a few of the advantages of IBM Electric Typewriters.

234567890-1';/.,
@#\$%&*()_!"?:?
abcdefghijklmnopqrstuvwxy
ABCDEFGHIJKLMNopQRSTUVWXYZ

IBM PRESTIGE PICA

IBM Electric Typewriters bring quality, ease, and speed to today's typing. With only a feather-light touch required to release the electrically-powered keys, unnecessary hand and arm motion has been eliminated. All operating keys - the carriage return, tabulator, shift, and back spacer - are located on the nearly level keyboard and are released with the same light touch. Better quality of typewritten work, increased speed and ease of operation, and the ability to produce many legible carbon copies are only a few of the advantages of IBM Electric Typewriters.

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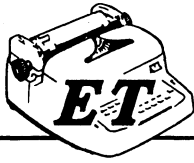
234567890-½';/.,
@#%&*() ¼":?
abcdefghijklmnopqrstuvwxy
ABCDEFGHIJKLMNPOQRSTUVWXYZ

IBM EXECUTIVE REGISTRY

IBM Electric Typewriters bring quality, ease, and speed to today's typing. With only a feather-light touch required to release the electrically-powered keys, unnecessary hand and arm motion has been eliminated. All operating keys - the carriage return, tabulator, shift, and back spacer - are located on the nearly level keyboard and are released with the same light touch. Better quality of typewritten work, increased speed and ease of operation, and the ability to produce many legible carbon copies are only a few of the advantages of IBM Electric Typewriters.

234567890-1';/.,
@#%&*() !":?
abcdefghijklmnopqrstuvwxy
ABCDEFGHIJKLMNPOQRSTUVWXYZ

* * * *



March 28, 1955

No. 17

REPEAT/NON-REPEAT KEY LEVERS

Troubles resulting from typamatic key lever springs falling off or breaking can be minimized by installing a new key lever. As stated in ET News Letter #14, the depth of the step on the tripping lug of the key lever has been increased, thereby permitting the repeat operation to occur as the plunger bottoms on the guide comb. In this way, the spring will not be exposed to excess key lever travel and ultimate spring breakage or disengagement.

After installation, the key lever should be adjusted by raising or lowering the tripping lug to cause repeat operation as the plunger bottoms on the guide comb.

* * * *

IBM CLEANING FLUID

The new IBM Cleaning Fluid, part #450608, must be used only in well ventilated areas. It should be applied with a cloth, and is not to be used in open trays, with a brush, in a spray, or in excessive quantities.

Further precautions should be exercised as follows:

1. Avoid prolonged or repeated contact with skin.
2. Avoid prolonged or repeated breathing of vapor.
3. Avoid getting fluid on asphalt tile floors, desks, etc.

(over)



Solvents will dry skin by removing natural skin oils. Drying of skin should always be avoided, especially in cold weather. Use sparingly on wadded cloth or on cloth wrapped around an object to minimize contact with skin. Persons with skin breaks on their hands or anyone sensitive to solvents should wear rubber gloves that can be purchased locally. Protective Hand Cream, EAM part #450405, applied to the hands before using IBM Cleaning fluid, offers additional protection against drying of skin. Hands should be washed thoroughly after using Cleaning Fluid.

Any solvent will remove wax or varnish and will bleach asphalt tile floors. Wipe up immediately if accidentally spilled. Wipe the can clean before setting it on floor or desk.

* * * *

CEM CHANGE

That part of ET CEM #363, paragraph 3 under Information, which reads "one part water and three parts cement", should be corrected to read "one part water and four parts cement".

* * * *

SERVICE CODE 32

We wish to call your attention to the fact that Customer Engineering Code 32 (Engineering Changes - Installed Machines) should be used only when authorized by Customer Engineering Memorandums.

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TYPE BAR U-BAR LINK

The need for escapement trip spring, part #1090341, has been eliminated in typewriters equipped with the new spring trip link announced in ET CEM #404. These springs have been eliminated during manufacture of all Standard and Lift Platen ETs' beginning with approximate serial #360977.

* * * *

RIBBON LIFT GUIDE REMOVAL

Removal of the ribbon lift guide from typewriters attached to an Automatic Device can be done faster and with less effort in the following manner. Remove the platen. Remove type bars 18 through 25 to create a large enough opening for access to the ribbon lift guide adjustable clevis.

* * * *

INTERMEDIATE PULLEY SHAFT NOISE

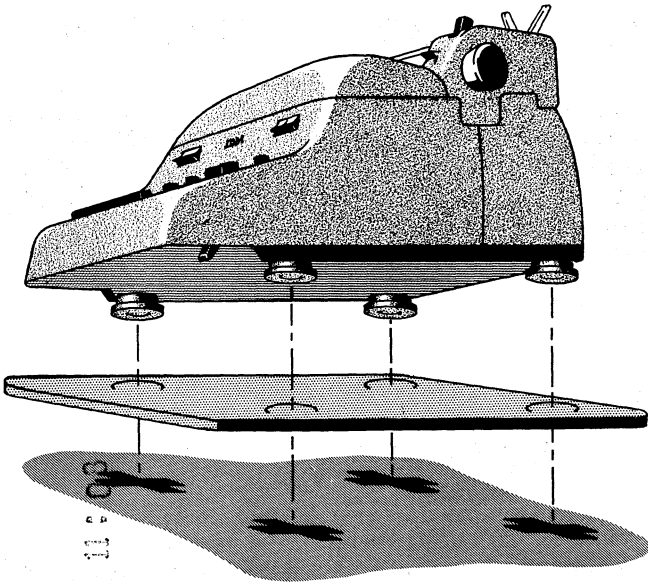
We would like to reiterate the importance of lubricating the intermediate pulley shaft. As stated in ET News Letter #7, a lack of sufficient grease will cause a loud noise which usually disappears temporarily by turning the machine off and immediately on again. (A small amount of oil added to the grease will increase the mobility of the grease).

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TYPEWRITER MOUNTING

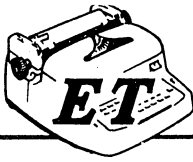
It is not always possible to mount an ET to a desk, particularly loaned machines, demonstrators, and typewriters which are moved frequently. A simple method of securing typewriters in these categories is to form crosses using pieces of friction tape and stick them on the desk (under the typewriter pad) directly below each base foot.



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CHICAGO SOUTH
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1955 APR 6 AM 11:03

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April 29, 1955

No. 18

IMPORTANCE OF USING THE CORRECT SERVICE CODE ON THE C. E. CALL REPORT - GENERAL

The proper application of service codes is necessary in order to effectively control C. E. divisional operations in the field, at the Plants, and at WHQ. Service code information is used in the preparation of numerous personnel, expense and trouble analysis reports which are distributed to management personnel not only in the Customer Engineering Department but in many other IBM departments as well.

These codes are not established indiscriminately. Each one serves a particular and valuable purpose. Some are used for the development of machine improvements; many of them keep us up to date on customer activity; others assist us in keeping a close control of field personnel operations. It is therefore the responsibility and duty of each Customer Engineer to select the service code that is most appropriate to the specific job or assignment he is given to do.

To assist in the correct application of service codes, we are listing below a clarification of some of the codes which are frequently misused by the Branch Offices:

02 - REPAIRS - PREVENTIVE MAINTENANCE (EAM)

When making an 08 call, all time incurred making repairs must be applied to 02.

03 - REPAIRS - NEW EQUIPMENT GUARANTEE (ET-TE)

Under no circumstances should time spent making repairs due to defective parts or improper assembly at the Plants be charged to this code. This type of work should be coded to 12.

05 - FURNITURE AND FIXTURE MACHINES (ET-TE)

When this code is used, the applicable IBM Equipment Code must always be inserted on the call report.

07 - REPAIRS - MAINTENANCE AGREEMENT MACHINES (ET-TE)

Whenever possible, upon completion of an 07 call, if inspection is overdue or shortly due, the inspection should be made and a separate 09 call report should be prepared. Do not use this code for power failures or other customer-caused trouble.

08 - PREVENTIVE MAINTENANCE (EAM)

Dividing total time equally between 08 and 02 or 08 and 01 is incorrect. The C. E. Call Report should always reflect the actual time spent on each of these codes. When changing Type 552 ribbon, charge time to 01 unless this work is done as part of an inspection, in which case it should be charged to 02.

12 - REPAIRS - NEW EQUIPMENT (EAM-ET-TE)

This code is to be used only when defective parts or improper assembly at the Plants are involved. All calls on new equipment during the first ninety days after installation are not necessarily Code 12. Sales and Engineering changes on newly installed equipment should not be charged to this code.

14 - CUSTOMER ERROR (IBM)

This code should be used whenever trouble is caused by customer people dropping paper clips or other metal objects into the mechanism of the machines. Do not use 01. Use this code also for power or air conditioning failures.

15 - DEFECTIVE IBM CARDS AND SUPPLIES (EAM-ET)

16 - DEFECTIVE NON-IBM CARDS AND SUPPLIES (EAM-ET)

These codes include not only time spent locating the trouble but also the time spent correcting the trouble, such as removing ink from chute blades and contact rolls.

18 - REPAIRS - CUSTOMER ATTACHMENTS

During an 08 call, any time spent cleaning the type and type-bars because of customer-owned inking devices must be charged to this code.

19 - RECONDITION SPARE SUB-ASSEMBLIES (EAM-ET)

This code should be used on any maintenance of sub-assemblies regardless of whether such sub-assemblies were removed on codes 01, 02, 08 or 12.

20 - INSTALLATION OF EQUIPMENT (EAM-ET-TE)

Applies to unpacking, testing and supervision of installation. Repairs due to Plant error must be coded to 12, unless equipment was damaged in transit, in which event 39 should be used.

21 - SUPERVISION OF INSTALLATION - INSTITUTIONAL (TE)

Use only on institutional systems. Does not apply to commercial installations.

26 - REPAIRS - GOOD WILL (ET-TE)

Branch Manager's authorization must be obtained before making call. Call reports containing this code must be initialed by Customer Engineering Manager.

31 - SALES CHANGES - INSTALLED MACHINES (EAM-ET-TE)

32 - ENGINEERING CHANGES - INSTALLED MACHINES (IBM)

33 - SAFETY CHANGES - INSTALLED MACHINES (EAM)

34 - QUALITY CONTROL - INSTALLED MACHINES (EAM-ET)

Authorized Sales, Engineering, Safety and Quality Control changes are frequently miscoded to 01. Code 31 also includes TE equipment in consigned stock. Codes 32, 33, and 34 are to be used only when authorized by CEM. CEM authorization is also necessary for Codes 42, 43 and 44.

36 - VINYL APPEARANCE PROGRAM - INSTALLED MACHINES (EAM)

46 - VINYL APPEARANCE PROGRAM - FIELD TRANSFER MACHINES (EAM)

These codes should not be used on equipment not having vinyl covers. Check the covers before writing the call report.

39 - REPAIRS - EQUIPMENT DAMAGED IN TRANSIT (IBM)

In transit damage is frequently overlooked when the equipment is installed and when repairs or adjustments are made

at a later date, the work is incorrectly coded to 12. All equipment should be thoroughly examined for shipping damage at the time it is installed.

51 - TRAVEL TIME - SPECIAL TRIPS (IBM)

This code should not be used for territorial coverage nor traveling for inter-territorial or inter-office assistance. This time should be inserted under "Actual" and "Total" hours on the C. E. Call Report - leave travel hours blank.

66 - OBTAINING PARTS AND RETURNING STOCK (IBM)

This code must be used when withdrawing or returning parts to Branch Office stock. Do not include this time in 60 or 63.

70 - SALES ASSISTANCE AND SYSTEMS SERVICE (IBM)

Call reports bearing this code must be reviewed and initialed by the Branch Manager and C. E. Manager. Time charged to this code includes assistance and instruction given to customer's employees at time of installation of new or reconditioned machine.

73 - MISCELLANEOUS

Customer Engineers assigned to EDPM installations should use this code for time spent studying machine circuitry. It should not be used when analyzing specific machine trouble. Whenever machines are involved on this code, be sure to insert type and serial number on call report.

Machine type must be shown on all EAM call reports covering Codes 01 through 20, 30 through 49, 54 and 55; also code 73 when machines are involved.

Travel time is not applicable to the following codes: 51, 82, 83, 85 and 86.

Do not check "Daily O/T" or "Sat/Sun/Hol" blocks on call report when using lost time codes 80, 82, 83, 85 and 86.

* * * *

IBM Equipment Code 5

This code is to be used only for work performed on IBM equipment installed in the Regional Offices. This is the only time when the "Special Use" block on the call report may be used.

IBM Equipment Code 9

This code is used only for work performed on IBM equipment installed at WHQ or the Plants. The WHQ or Plant department number in which the equipment is located must be indicated in the "Other Office" block on the call report.

* * * *

Service Code 78 was discontinued in IBM Letter No. 4808 dated April 19, 1955. It was replaced by new Service Code 80, as follows:

80 - PERSONAL INJURY

IBM To be used whenever lost time is incurred due to personal injury during working hours. Includes all visits to doctor or hospital and any other lost time directly attributable to such injury. Insert full explanation on initial call report and file Injury Report in every case.

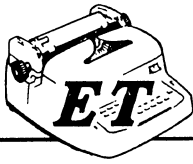
* * * *

Customer Engineering Service Code Folder, form 10-4112-1, is in process of being revised. The new definitions will include the foregoing information.

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THE SERVICE CODE USED MUST ALWAYS
BE APPLICABLE TO THE DIVISION IN
WHICH THE WORK IS PERFORMED.

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News Letter

CUSTOMER ENGINEERING

May 13, 1955

No. 19

On April 29, Mr. R. L. Krauss announced a new edition of the small size ET Parts Price List and Reference Material booklet. This booklet has been designed to make your job easier and to provide additional aids to render better service to our customers.

1. It has been redesigned for quicker and easier reference.
2. It is supplied in loose leaf form so individual pages can be reprinted as necessary to keep the booklet on an up-to-date basis.
3. The pages are six hole punched for easy insertion in the new leather Call Report Folder* equipped with rings.
4. The printed matter was typed in its entirety on the IBM Executive Typewriter with Mid-Century type for good legibility.
5. Space is utilized more effectively by printing the items across the short dimension of the page. This allows more items per page and reduces the total number of pages.

*Customer Engineers who have been issued the new Call Report Folder (currently being shipped to the field when ordered by an office on an "as required" basis) should remove the booklet covers and insert the pages as previously described. All others will use the booklet with the covers provided.

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CARBON RIBBON ATTACHMENT

Installation of the escapement wheel on a carbon ribbon attachment can be facilitated by cutting the compression spring, part #1073299, approximately in half.

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(over)



IBM

CAM LATCH SPRINGS

A simple method of correcting difficulties whereby letter cam latch springs fall off or break, particularly on typamatic characters, is as follows. Cut off approximately 1/4 of the loops from one end of the spring. Pull enough looped material out straight to make up for the shortened spring; then form a new end loop and reinstall the spring so that the stretched straight wire is to the rear and in the area which is normally struck by the cam latch.

* * * *

TYPE BAR GUIDE IMPROVEMENT

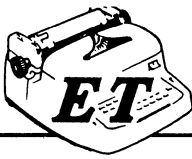
The corrosion resistance of type bar guides has been improved by increasing the amount of nickel over a thin copper flash. After the nickel plating, chromium is applied. The guides are also being protected with an application of a corrosion inhibiting material prior to soldering. This material is removed after soldering.

* * * *

SUGGESTIONS

All suggestions are date stamped in the Suggestion Department which allows a central control and insures uniform handling. However, a procedure has been in effect and will continue whereby consideration is given for suggestions from distant mailing points. In this way, the suggestor is not penalized because a suggestion takes a longer period of time to reach the Suggestion Department.

* * * *



News Letter

CUSTOMER ENGINEERING

May 17, 1955

No. 20

MACHINE IMPROVEMENTS

Recent activity to reduce undesirable sounds in all IBM Electric Typewriters has resulted in a number of improvements which are now in current production typewriters. These improvements include the following:

Carriage End Covers

The lower portion of the carriage end covers has been modified so that it engages the carriage end frame providing a tight fit thereby preventing rattle during typing. The hinged section has been formed to provide a slight interference fit with the mating parts thereby reducing rattle.

Front Paper Table

A strip of felt has been added to the underside of the front paper table.

Ribbon

Pressure sensitive labels have been applied to both sides of all fabric ribbon spools.

Carriage Release Lever

Additional spring washers have been added between carriage end frame and release lever to reduce rattle of the release lever in the carriage end cover slot.

Top Cover Assembly

All typewriter front top covers have been modified by adding necessary holes to accept rubber grommets designed to insulate the top cover section from the front case.

(over)



IBM

Rear Frame Grommets

Rubber grommets have been installed in the rear frame. This will eliminate metal to metal contact of the rear case section with rear frame.

Adapter Bracket

The thickness of the rubber grommets has been increased to eliminate metal to metal contact between the adapter bracket and side frames.

Extensive research in sound evaluation is continuing. When additional changes are incorporated, we will again inform you.

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V BELT DRIVE

Thrust washer, #1106172, used on positive belt drive intermediate shaft can also be used on the intermediate pulley shafts of the V-belt drive mechanism. Installing washers (as required) between the intermediate pulley and side frame will reduce noise in that area.

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TYPE BARS

All type bars with assigned part numbers, listed on pages 59 and 60 of the new ET Parts List & Reference Material booklet, and pages C-9 through C-12 of the ET Parts Catalog are now stocked in all Parts Distribution Centers. These part numbers will be found in the latest PDC booklet issued March 1, 1955.

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CUSTOMER ENGINEERING SERVICE CODE 26

Service Code 26 (Repairs - Good Will) should be used only with the approval of your Manager or Supervisor.

* * * *

IBM FORM LINE SELECTOR

IBM form line selector installation instructions, which are included in each B/M, suggest removing the platen release button so as to prevent accidental loss of previously set stop positions. Installation of a carriage roller inside the left hand platen knob provides a method for making the release button inoperative and provides a better appearing correction.

* * * *

PARTS CATALOG CORRECTION

Page H-3 Ribbon Mechanism (Figure 1) Section of the ET Parts Catalog should be corrected as follows:

F-7 should show part number as 1000223

F-9 should show part number as 1072842

* * * *

CLEANING TYPE

When customers inquire as to materials and methods for cleaning type on IBM ETs, they should be referred to page 21 of the instruction booklet, "Partners in Perfection" or page 29 of instruction booklet, "How to Make a Perfect Impression". These booklets are delivered with each new typewriter in which we recommend the methods of cleaning type.

(over)

While many cleaning materials remove ink and dirt from the type faces, in some instances these foreign particles may be forced down into the typewriter. Deposits of these foreign particles in the segment, cam latches, cams, power roll and other parts may cause considerable service difficulty. If any situations arise where assistance is necessary, contact your Customer Engineering Manager or Supervisor.

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DIRECT-TO-PLATE ALIGNMENT

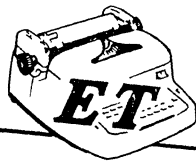
The Sales Department recently announced that special direct-to-plate alignment on new ET's and the additional \$18.00 charge has been discontinued. This has been made possible because of high manufacturing standards and new procedures developed for direct-to-plate typing through extensive research.

New procedures include the use of the IBM Backing Sheet, a #1 platen, the 5550-2 acetate ribbon and the lightened type bars. By using these materials and properly setting the Multiple Copy Control Lever, the major critical aspects of plate writing are minimized and will enable our customers to produce higher quality masters than heretofore attainable by special alignment at additional cost.

All new ET's earmarked for plate writing by the Sales Representative will be equipped with a #1 platen, regardless of model or type style and will be aligned by normal production methods. In those instances where typewriters on plate writing applications are also used on correspondence or fill-in work, an additional platen may be required, depending on the application and/or type style.

For other details covering this procedure, refer to ET CEM #387 dated June 28, 1954.

* * * *



June 30, 1955

No. 21

**executive
campaign**

May-June-July 1955

To All ET Customer Engineering Personnel -

ET Customer Engineering salutes the ET Salesmen for bringing in the best May sales record in the history of the ET Division.

We are happy to participate in the Sales Tribute honoring our Executive Vice Presidents, Mr. L. H. La Motte and Mr. A. L. Williams. Your efforts in assisting the Salesmen to achieve this outstanding record in May are greatly appreciated.

We urge you to continue this fine work during the remainder of the Tribute Period by communicating to the Sales Department every possible Sales lead and by making sure all service situations are handled promptly so that the Salesmen can devote full time to building up equally outstanding records in June and July.

R. L. Krauss
R. L. Krauss

Customer Engineering means Service and good Service means Business

TOP salesmen honor TOP executives
IBM



IBM

UNEVEN LEFT HAND MARGIN - 4 and 5B

Occasional trouble is experienced whereby the carriage will stop in the overbank position after carriage return. If, after all carriage return adjustments are made in accordance with Reference Manual Instructions, trouble still exists, the following action may eliminate the condition:

Manually push the carriage to the extreme right, without a pawl release operation. While holding the carriage in this position, observe the clearance between the grouping latch and intermediate grouping lever. Through adjustment of the Margin Control Plate (page 13 Model 4 and 5B section of the Reference Manual) the clearance should be kept to a very minimum. This adjustment eliminates the necessity for making any changes in the grouping setting.

* * * *

ET TOOLS

The four ET Tools part numbers 9504484, 9504486, 9900015 and 9900016 indicated in ET CEM #388 as not immediately available, are now available. The tools they replace are now obsolete and should no longer be ordered.

* * * *

PAPER FEED

Paper slippage and roll back difficulties may sometimes be traced to burrs on the feed roll shafts. Since burrs will not always show up by spinning the feed rolls, the shafts should be checked by applying pressure to the feed rolls while turning; also removing shafts for examination is recommended. Burrs can be removed by polishing the shafts with Behr Manning Durite 600A or crocus cloth. Relubricate the shafts with #6 oil before replacing them in the typewriter.

* * * *

LEGIBLE SUGGESTION FORM COPIES

Instructions at the top of the suggestion form includes "Use a typewriter or write plainly with a hard lead pencil on a hard surface so all copies are legible". Very often the Suggestion Department has to write over the #4 Acknowledgement Copy, particularly to insure that the name and address of the suggestor are readable. Your cooperation will aid in speeding up suggestion processing.

* * * *

MODEL B CARRIAGE CHANGE

Platen yoke eccentric nuts, part #1090879, have been removed from Model B carriage since field and assembly line experience indicates that satisfactory adjustment can be obtained by the use of the existing washers, part #1090049.

* * * *

TYPE BASKET SETTING

The following procedure is furnished to aid in adjustment of the type basket which is a replacement or one which has two or more broken segment support springs:

1. Prior to removal of the segment support springs, carefully mark the castings at the ends of the springs.
2. After removal of the segment support springs, check for burrs on the castings at all points of contact with the segment support springs.
3. Install the new segment support springs in the same positions as the former ones. Also, reinstall any "shifting off" shims found when removing springs.
4. The multiple copy control lever should be toward the front of the typewriter. The basket may then be adjusted to the correct ring and cylinder with the platen, as the adjustment of the platen has usually not been changed. This may be done by loosening the screws holding one or two segment support springs at a time, shifting their positions slightly, and then retightening. When a spring has been repositioned on one side, the screw holding the spring on the other side should be loosened and retightened for relief. The ring and cylinder adjustments should be checked with type bars from each side of the basket and in both the upper and lower case.

(over)

5. After the correct ring and cylinder adjustments are re-stored and the characters type even on top and bottom, the shift toggle springs should be removed and the basket checked for floating freely at a point about 1/16" below a point half way between the upper and lower shift stops. If the support is lower than the prescribed position, remove one of the upper segment support springs and form a continuous upward curve in it. This may be done by turning it over and forming it downward by drawing it across an edge such as the edge of a bench or desk. Avoid pliers or forming tools, as a sharp bend may weaken the spring and invite breakage. Duplicate the operation on the other upper segment support spring until the proper position is obtained.
6. With the shift toggle springs removed, the basket should vibrate freely when struck. If the basket will not vibrate freely, it indicates unequal adjustment of the shift toggle bracket screws.
7. Following the above adjustments, the pin clearance should be checked for the correct amount and equality.
8. The platen should be checked from end to end by ring and cylinder feel and by typing, to indicate whether or not it is parallel to the rails.

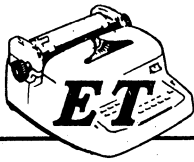
* * * *

PARTS CATALOG CORRECTION

Page two (J-10) Model A1 Carriage and Rail Section should include the following:

K-2	1093646	Star Wheel 10 Tooth
K-2*	1077202	Star Wheel 9 Tooth (Used on Standard ET's below approximate serial #42948 and Executive below approximate serial #10000)

* * * *



News Letter

CUSTOMER ENGINEERING

July 29, 1955

No. 22

CLUTCH KNOCKOUT LINK

Clutch knockout link, part #1105507, has been redesigned to minimize breakage in Model A typewriters. The design includes a double loop instead of the horseshoe loop. At present this new design is available for field use only. The former design will continue to be installed in Model B typewriters until the present stock is exhausted. Link, part #1100050, for the Decimal Tab ET is also being changed to include the double loop and will be furnished in the near future. Part numbers and prices remain the same.



* * * *

CARRIAGE TRUCKS

Model B carriage trucks have been modified by molding slight spherical bumps in the slots to retain the carriage rollers, thereby eliminating the need for the nylon retainer, part #1103858. Standard and Lift Platen ET's above approximate serial #381036 and Executive ET's above approximate serial #124766 are equipped with these newly designed trucks.

* * * *

CONDENSER INSULATION

We wish to call your attention to the fact that two improved condenser insulations are available for use with all 2 and 3 mfd. condensers employing the detached mounting bracket. The insulation is a 'wrap around' design and provides an electrical insulation between the condenser and its clamp instead of between the clamp and rear frame. Illustration and

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IBM

part numbers are included in the revised Electrical section of the ET Parts Catalog.

* * * *

LUBRICATION

It has been brought to our attention that an excessive amount of oil was applied to the feed roll center brackets causing oil to appear on the original copy. Where this condition exists, steps should be taken to remove this oil from the center brackets, being certain to remove any which may have worked its way onto the deflectors.

The assembly line is continually employing methods for improving the lubrication of typewriters during their manufacture. One such method is the inspection made by means of a black light. The typewriter is placed under the light which causes the lubricants to fluoresce thereby assuring proper lubrication as well as indicating excessive amounts in all areas.

* * * *

TYPEWRITER SEGMENTS

Another step ahead in the improvement of impression has taken place through recent changes in the process of manufacturing ET segments. Methods have now been employed whereby segments are plated after the slots are milled in

1. Elimination of rust which sometimes occurs in the segment slot, particularly during this time of year when a condition of high humidity exists.
2. Reduction of the black gummy deposit on the sides of typebars, which was a result of free release of carbon from the segment material.

* * * *

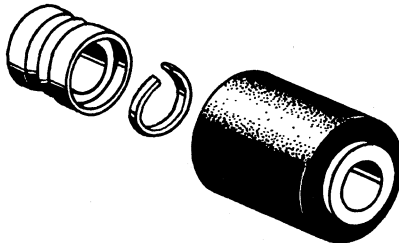
RIBBON FEED CAM

When the ribbon feed cam continues to slip on the power roll after all other adjustments fail, the following action should correct this difficulty: Disconnect spring #1102139 from hole in cam frame and hook over cam frame above the hole, or, disconnect spring from stud on the side frame and connect to the side frame of the typewriter below the stud.

* * * *

BAIL ROLL TENSION

The bushing of the bail roll assembly, part #1000382, is manufactured in two parts, therefore, the tension spring may be easily removed and formed to increase its tension. Use a small screw driver to remove one half of the two-section bushing for access to the tension spring.



* * * *

TOLL BILLER

Where it is found that additional tension is required on the Line Finder Stop Pawl, part #1107270, reposition the end of spring, part #1107275, from the front top of the pawl to the slot in the rear of the pawl. The spring in that position will not interfere with the function of the platen indexing assembly connecting link.

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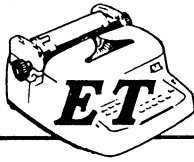
PARTS LIST CORRECTION

Page 9, Parts List and Reference Material booklet, condenser part #1106594, the parenthetical information should read "For use with all 230 Volt AC and Black Nameplate Motors other than specified for condensers #1107025 and #1072125".

Condenser, part #1107025, the parenthetical information should read "For use with 115 Volt Red Nameplate Motor only".

Page 41, Rails - Model B1 change part #1260208 - Floating Escapement Pawl Bracket Assem. with spring - 8-9-10-12P, to part #1261047.

* * * *



News Letter

CUSTOMER ENGINEERING

October 7, 1955

No. 24

CONGRATULATIONS!

It was with a great deal of pride that we read in the September 5 issue of Business Machines that during July, for the first time in the history of the Suggestion Plan, both the highest and second highest awards went to ET Customer Engineering personnel. ET Customer Engineering Manager M. K. Weingarth of St. Louis, with his sixth award, captured first place; second place was won by Mr. R. B. Munroe, ET Customer Engineering Supervisor, Chicago South, with his seventh award.

* * * *

REPORTING TROUBLESOME ITEMS

On occasions where troublesome items are encountered which require immediate action, notify your supervisor immediately. If you feel that you have a possible solution to a given problem, tell him of it. Your supervisor will then make the appropriate communications with the Customer Engineering Department here at the Plant.

A suggestion may then be submitted, giving the solution. This should be done within 30 days. Cross-referencing of information regarding contact with the Plant is helpful in suggestion investigation. Indicate that a suggestion is being submitted. Note on the suggestion form the name of the individual contacted.

The above procedure insures more efficient communications all around!

* * * *

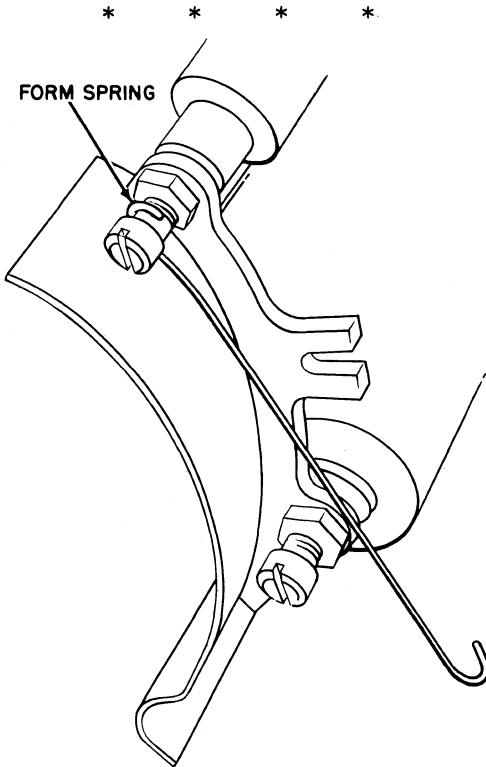
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IBM

PAPER DEFLECTOR RETAINING SPRING

For easier, quicker removal and replacement of the paper deflector on Lift Platen typewriters, form one end of the retaining spring to be permanently hooked over the front feed roll adjusting screw. The springs will slide into place much easier and can be hooked over the rear screws without difficulty.



MOTOR AND DRIVE CHANGES

Engineering investigation indicates that the motor shields are not required and have been removed from all R and M motors. This meets with Underwriters Laboratory approval. Care should be exercised to avoid damage to the motor windings when using tools in the area of the motor.

Due to interference between the line lock bellcrank and the left hand motor bracket of the new ring mounted motors, it has been necessary to adjust motors in Standard model typewriters farther to the rear. Use of drive belt, part #1100630 (yellow identification) resulted in a tight belt adjustment. Drive belt, part #1100435 (green identification) permits proper belt adjustment and will be used on all Standard 60 cycle and DC typewriters.

Drive belt #1100630, will be used in Executive typewriters until present stock is reduced to Field requirements. At that time, drive belt #1100435 will be used exclusively.

* * * *

ESCAPEMENT RACK CHANGE

In process at the present time is a change to mount the 12" and 16" carriage tension tapes to the escapement racks. This will allow use of the same tension tapes as used on Model A's.

Due to the change over, some carriages received in the field will have the new style tension tape mounting while others will have the former style. Second stage carriages received should be checked to determine whether or not the carriage frame contains a hole for hook mounting the tension tape. If not, a Model A tension tape may be used by fastening it in the escapement rack. A CEM, soon to be released, will inform you of part number changes.

* * * *

BUSINESS SHOWS - SERVICE CODES

There are two types of Business Shows -- Formal and Local. A Formal Business Show is one which is initiated by the World Headquarters Business Shows Department. Local shows are held by a Branch Office upon the decision of local management.

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Customer Engineers who service IBM equipment at a Business Show should be familiar with the type of show being held, whether Formal or Local. If a Formal Show, (WHQ sponsored) Customer Engineering Call Reports should indicate the applicable mechanical service code (i. e. 01, 02, etc.) or code 73 for non-mechanical time. In addition, IBM Equipment code 6 must be indicated on the Call Report.

Call Reports for Local Shows should indicate code 47 for all mechanical time and service code 70 for all non-mechanical time. IBM Equipment code 6 must not be entered on these call reports.

* * * *

ET PARTS LIST AND REFERENCE
MATERIAL CORRECTIONS:

Page 39, Delete parts #1093927 - Pivot Link Spring RH and 1093928 -Pivot Link Spring LH. Add part #1103686 Lifter Spring.

Page 63 (Black Carbon Paper Ribbons) add the following:

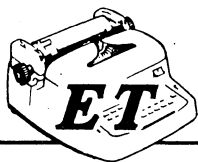
1010899	No. 3111	9/32" Model 04	10.00 (doz.)
1010900	No. 3211	9/32" Model 04	7.30 (doz.)

* * * *

PARTS CATALOG CORRECTION:

Page 7, Model A and B Electrical Drive Mechanism, change part number of item D-1105838 Extension Cord, 2 conductor to #1105939.

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October 25, 1955

No. 25

230 VOLT AC MOTORS

The red nameplate 230 volt 60 cycle motors modified for "ring mounting" as described in ET CEM #424 will not be available until December. Until that time it will be necessary to use the black nameplate motor #1071794 with finned rubber motor mountings.

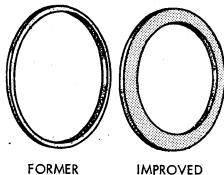
If it is desired to change from a ring mounted 115 volt 60 cycle motor to a 230 volt 60 cycle motor, order motor #1110742. The black nameplate motor will be furnished with the necessary conversion parts.

* * * *

AIR CYLINDER GASKET

The air cylinder gaskets have been improved by making them of a rubberized cork material which forms a better oil seal than the former plain cork material. To prevent buckling, the gaskets have been made wider. The new gasket is interchangeable with the former one and the part number remains the same (1100842).

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CHANGEABLE TYPE BARS

The part numbers listed on page 4 of ET CEM #348 have been changed. The new part number (1260238) is listed in the Cam and Typebar Section of the Parts Catalog and should be added to CEM #348. All information required for a special type bar order must also be included.

* * * *

THREE UNIT SPACE BAR INTERPOSER

A suggested method for easier adjustment of the Executive three unit space bar interposer link is to remove either the shift lock or position 2 key button. This will allow working from above on all Model A's and those Model B's equipped with keyplates which are attached from the bottom with screws.

* * * *

FORMSCARRIER BLADE SUPPORT POSTS

To prevent carbons from coming out of the edges of fanfold forms or getting into the pins of a pin feed platen, it is necessary that the blade support posts be adjusted properly. The positioning strap (1100981 or 1100982) on each post should first be rotated to remove excess motion of the blades in the blade support posts. The blade support posts should then be located to make the blades parallel to the bracket on which the posts are mounted (or directed slightly toward the inside fold of fanfold forms).

* * * *

NEW PARTS FOR ET's

Only new parts should be used for repairing or reconditioning IBM Electric Typewriters. The exceptions are reconditioned motors or platens, if desired by the customer. All parts replaced on IBM Electric Typewriters owned by the Federal Government must be new.

* * * *

CUSTOMER ENGINEERING REFERENCE MANUAL

Revisions are being made to condense various sections of the Reference Manual. These revisions will incorporate information now in active CEM's. The CEM index, which is issued periodically, will omit all inactive CEM's as well as those which are incorporated into the Reference Manual. CEM's listed in the index as inactive are to be removed from the Manual binder to keep it as light as possible. It also makes possible the keeping of all pages in one binder.

* * * *

DESK MOUNT CLIP FASTENER

The L. H. desk mount clip fastener should always be replaced by pushing it on from the rear. Noise and wear of the driven belt may result if the clip fastener is installed from the front (because of the upward form of the clip contacting the driven belt).

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PRESTIGE PICA "m"

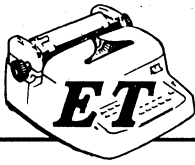
The lower case Prestige Pica "m" has been redesigned. It is now slightly narrower for better appearance in a double combination (m m). The part number listed in the Parts Catalog and the catalog number listed in the Type Available Catalog are correct for the new design. The former (wide) design may be obtained under catalog number 1113226.

* * * *

MOTOR END BELLS

To obtain highest quality motors, it is necessary to select armatures or rotors, end bells and field assemblies which have matching dimensions. Because of this it is impractical to supply replacement end bells. Replacement should be made with a complete motor.

* * * *



News Letter

CUSTOMER ENGINEERING

December 16, 1955

No. 26

THANKS!

Due to the promptness of many field offices in communicating with us and the untiring efforts of our Manufacturing, Engineering and Quality Departments, several recent problems have been resolved in the following manner:

Carbon Ribbon Drive Spring (1109958) - Investigation indicated that the spring was not being joined properly. One end of the spring is now being twisted backward approximately three times prior to joining the two ends, thereby allowing the spring to wind itself within its coils after re-joining.

Type Bar U - Bar Breakage - Investigation disclosed burrs on the washers which attributed to spring fracture and eventual breakage. More rigid Quality checks will insure a smooth surface and result in less spring breakage. Other corrective measures are being investigated by our Engineering Department.

Oil Spots on platens, feed rolls, typed material, etc. - At the present time, the Manufacturing organization is reviewing all points of lubrication and is setting up procedures for having these points lubricated at the time of assembly. Extensive research will continue along these lines to assure that lubricants will not be transferred to platens, feed rolls, and typed material.

* * * *

EXECUTIVE ESCAPEMENT

Two methods for checking the vertical adjustment of the 'floating' type interposer cage in addition to those shown in ET CEM #425 are as follows:

1. Disconnect the pawl aligning link from the back space bell crank and pull slowly on the link with a spring hook.

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IBM

Observe that none of the escapement pawls move the interposer cage; or,

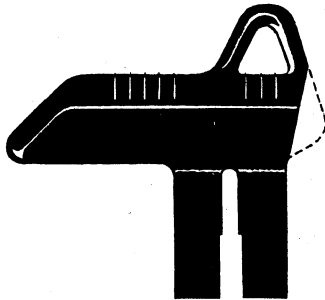
2. Trip back space cam with the power off and observe any cage movement while turning power roll slowly by hand.

* * * *

LINE GAGE CARD HOLDER

Standard Typewriters (10 and 12 pitch) are now being equipped with an improved off-set line gage card holder. Part numbers and price remain the same. Off-set card holders shown in ET CEM #391 are now obsolete and will no longer be available.

To overcome stubborn underprinting conditions, it may be found necessary to install the stainless steel underprinting shield, part #1109834, on typewriters equipped with the newly designed card holders. Due to added material of the card holders, it will be necessary to remove a portion of the LH and RH card holders as illustrated.



* * * *

PAPER BAIL ROLL SPRING

Replacement springs for paper bail rolls are now available to the field under part #1079098. This eliminates replacing the complete bail roll in cases of extreme wear or loss of the original spring. Insertion of a small screwdriver be-

tween the rubber cover and the metal insert will facilitate removal after the bail roll has been removed from the bail shaft. Unit price of the spring is .02. Add to Parts Catalog and Price Lists.

* * * *

CE SERVICE CODE REVISIONS

The following revised definitions of Customer Engineering Service Codes 62, 64, 70 and 74 replace those currently contained in the CE Service Code Folder, form 10 - 4112.

Code 62 Supervision in the Field
IBM Performance of managerial and supervisory duties away from office by CE Managers, Supervisors and CE's-in-charge; including voluntary customer calls.
Refer: Code 64

Code 64 Supervisory Assistance on Codes 01 - 49
IBM Time spent by CE Managers, Supervisors and CE's-in-charge instructing Customer Engineers on codes 01 - 49 either by direction or example. NOTE: When supervisory personnel perform mechanical work not primarily for instructional purposes or while working alone, the applicable mechanical service code must be used.
Refer: Codes 61, 62

Code 70 Sales Assistance and Systems Service
EAM- Assisting sales representative on demonstra-
EDPM- tions, surveys, machine specifications, ap-
ET plications, etc. Includes emergency cutting of skip bars, wiring customer's control panels, instructing machine operators in the wiring of control panels and assisting customer in running reports.
IBM NOTE: All CE call reports bearing this code must be reviewed and initialed by the Branch Manager and CE Manager on a daily basis.

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Code 74 Good Will Call

IBM Voluntary call on a customer to inquire about equipment performance. If mechanical work is performed, use applicable service code. Calling on ET/TE customers to solicit reconditioning work or assist in the sale of Maintenance Agreements.
NOTE: CE Managers, Supervisors, and CE's-in-charge use Code 62.

* * * *

PARTS CATALOG CORRECTIONS

Model A and B Electrical Drive Mechanism, Page 3
 C-3 change part number 1091507 to part number 1071312
 C-3 delete part number 139929
Model A-1 and B-1 Space Bar Mechanism, Page 3
 Add A-1071441 Space Bar Model A-1.

ET PARTS LIST AND REFERENCE
MATERIAL CORRECTIONS

Page 22, Part #1074395 Pressure Roller Assembly - change price from \$1.65 to \$1.05.
Page 41, Part #1090341 - change description from 'screw' to 'spring'.
Page 84, Part #1270681 - change description from Model B-4 to B-1.
 Part #1270680 - change description from Model B-1 to B-4.

CEM CORRECTION

CEM #424, part #1108512, clamp motor mount, add: (2 required).

* * * *



News Letter

CUSTOMER ENGINEERING

December 20, 1955

No. 27

MERRY CHRISTMAS

The year 1955 will go down as a milestone in the annals of the ET Division. Never before in the history of the Division have so many significant events taken place:

The announcement of the new Typewriter Plant at Kingston where, in the words of Mr. H. W. Miller, Jr., our General Manager, "the Typewriter will be King" --- the Executive Vice President Campaign which produced the best sales record for any combined three months in the Division's history --- the wonderful announcement which made the ET Division a separate operating unit of IBM --- the appointment of a Coordinator of ET Customer Engineering to serve as liaison between the Manufacturing and Engineering organizations, the Field and WHQ --- the inauguration of five new positions in the Division - ET District Customer Engineering Managers - creating a more direct line of communication between the Field and WHQ --- and the promotion of more ET Customer Engineers to positions of greater responsibility than in any previous years.

You can be proud of your contribution to the outstanding record that made these 'headline' events possible and look ahead with confidence to a year of increased responsibility and greater opportunity in 1956.

The ET Customer Engineering Staff at WHQ and the Plant joins me in thanking you for your splendid assistance and wishing you and your families

A HAPPY AND JOYFUL NEW YEAR

R. L. Krauss



IBM

STEEL STOP LETTER CAM

A service call described as a sticking key may appear to the Customer Engineer as a binding cam trip lever. However, further investigation may reveal a broken steel stop on the steel bodied letter cam. A simplified method for detecting this is as follows: Hold the type bar of the affected cam against the platen and move the cam away from its stop, allowing it to snap back to its restored position. If a metallic sound is heard, the steel stop is satisfactory. If a dull sound is heard, the metal stop is broken.

* * * *

ESCAPEMENT PAWL BLOCK REMOVAL

Removal of the escapement pawl block from Model A and B Executives can be accomplished without removing the margin rack or tab rack by using the following procedure:

1. Remove L. H. carriage end cover.
2. Remove margin set lever.
3. Loosen final stop screws (on Model A) or lower the final stop (on Model B).
4. Push carriage until L.H. carriage frame is on top of the horizontal portion of the tabular lever. Brace carriage so it will not move. (Further movement to the right is prevented by the tension tape).
5. Follow the rest of the procedure as outlined in the ET Reference Manual.

* * * *

TYPE SHIELD

As an aid to prevent the ribbon from catching on the nylon underprinting shield, part #1260385, place a dull crease in the center of the shield by folding the L.H. over the R.H. end. Install the shield with the crease toward the platen.

* * * *

ELECTRICAL INTERFERENCE (SWITCH)

If a clicking or popping noise occurs in nearby electrical equipment such as radio, television, or intercommunication sets when the typewriter switch is turned on or off, it may be eliminated by connecting a 600 volt .05 mfd. condenser to the terminals of the switch. This condenser should be purchased locally.

* * * *

CARRIAGE TRUCK ROLLERS

When an eccentric (out of round) carriage truck roller, part #1018782, is suspected of causing difficulty, an easy method for detection is to roll each roller on a smooth surface and observe whether or not it rolls at a steady or unsteady rate. This method eliminates unnecessary replacement of good rollers.

* * * *

FLOATING INTERPOSER CAGE

There have been a few reports of skipping after operation of a two-unit character or two-unit space bar. Investigation reveals that it is possible for the three-unit interposer to creep forward and trip off an extra escapement pawl at times, due to a lack of sufficient spring tension. This trouble can usually be eliminated by cutting off 3 or 4 coils of the three-unit interposer spring, part #129649.

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THINK SAFETY

In recent months, we have received some reports of injury to customer personnel and damage to customer equipment. We should all train ourselves to be safety conscious, reviewing every possible safety hazard which might result from the work we are about to do or which we have just completed. Concurrently, we should be concerned with the protection of our customers' equipment. Here are a few examples recently reported to us:

A typewriter was fastened to the platform of a swivel platform style desk but the Customer Engineer forgot to fasten the platform to the steel shelf after completing a service job. When the operator was folding the panel to put the ET away, the typewriter slid off and struck her feet. Complying with ET CEM #360, this situation would have been prevented. Also, customers should be encouraged to allow fastening of all typewriters to desks which fold, store, collapse, etc.

An accident occurred when a Line-A-Time, extended to its full height, struck an operator in the back when the Customer Engineer lifted the typewriter from the desk.

Cleaning fluid, oil, graphite, etc., spilled on desk tops or floors, burrs or scratches on desk tops, dropping of typewriters or other equipment -- these and other careless work habits will lead to serious criticism of the Customer Engineer and/or IBM as well.

* * * *

ET PARTS CATALOG CORRECTIONS

Assessories and Attachments Section - Form Line Selector Illustration Page 2 - Remove reference A7. This gear is available only with B6 Assembly.

Parts Listing Page 3 - Change reference A7 to A4 and correct part description to read "1108506 Gear, Platen-Standard Model (for 3/8" shaft). Also, to description of part #1106873 add "for 1/4" shaft".

* * * *