



IBM Radial Arm

User's Guide

OPTIONS
by IBM

19K4573



IBM Radial Arm

User's Guide

Note

Before using this information and the product it supports, read the information under Appendix B, "Warranty and notices" on page B-1.

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IBM

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Safety information

Before installing this product, read the safety information manual.

مج، يجب قراءة دات السلامة

Antes de instalar este produto, leia as Informações de Segurança.

在安装本产品之前，请仔细阅读 **Safety Information** (安全信息)。

Prije instalacije ovog produkta obavezno pročitajte Sigurnosne Upute.

Před instalací tohoto produktu si přečtěte příručku bezpečnostních instrukcí.

Læs sikkerhedsforskrifterne, før du installerer dette produkt.

Ennen kuin asennat tämän tuotteen, lue turvaohjeet kohdasta Safety Information.

Avant d'installer ce produit, lisez les consignes de sécurité.

Vor der Installation dieses Produkts die Sicherheitshinweise lesen.

Πριν εγκαταστήσετε το προϊόν αυτό, διαβάστε τις πληροφορίες ασφάλειας (safety information).

לפני שתתקינו מוצר זה, קראו את הוראות הבטיחות.

A termék telepítése előtt olvassa el a Biztonsági előírásokat!

Prima di installare questo prodotto, leggere le Informazioni sulla Sicurezza.

製品の設置の前に、安全情報をお読みください。

본 제품을 설치하기 전에 안전 정보를 읽으십시오.

Пред да се инсталира овој продукт, прочитајте информацијата за безбедност.

Lees voordat u dit product installeert eerst de veiligheidsvoorschriften.

Les sikkerhetsinformasjonen (Safety Information) før du installerer dette produktet.

Przed zainstalowaniem tego produktu, należy zapoznać się z książką "Informacje dotyczące bezpieczeństwa" (Safety Information).

Antes de instalar este produto, leia as Informações sobre Segurança.

Перед установкой продукта прочтите инструкции по технике безопасности.

Pred inštaláciou tohto zariadenia si pečítajte Bezpečnostné predpisy.

Pred namestitvijo tega proizvoda preberite Varnostne informacije.

Antes de instalar este producto lea la información de seguridad.

Läs säkerhetsinformationen innan du installerar den här produkten.

安裝本產品之前，請先閱讀「安全資訊」。

About this book

This manual contains instructions for installing and using the IBM Radial Arm. The manual is divided into two parts:

Part 1: Installation and user's guide

This guide contains the product description and installation instructions in the following languages:

- English
- German
- French
- Spanish
- Italian
- Brazilian Portuguese
- Japanese

Part 2: Appendixes

The appendixes contain help and service information, the product warranties, and notices.

Note: The illustrations in this manual might be slightly different from your hardware.

Installation and user's guide

This section contains the product description and installation instructions for the IBM® Radial Arm.

Registering your option

Thank you for purchasing OPTIONS by IBM. Please take a few moments to register your product and provide us with information that will help IBM to better serve you in the future. Your feedback is valuable to us in developing products and services that are important to you, as well as in developing better ways to communicate with you. Register your option on the IBM Web site at

<http://www.ibm.com/pc/register>

IBM will send you information and updates on your registered product unless you indicate on the Web site questionnaire that you do not want to receive further information.

Before you begin

To install the radial arm, you need a standard wrench, a Phillips screwdriver, and a flathead screwdriver.

Product description

The IBM Radial Arm is a movable arm that you can attach to your flat-panel computer monitor. The radial arm enables you to rotate the monitor up to 90 degrees, and to place the monitor in many viewing angles.

In addition to this manual, the following items are included in this option package.

Note: This option contains parts for six possible mounting positions; some mounting positions do not require all the parts listed.

- Safety information manual
- Four monitor adapter brackets and the following parts used to attach an adapter bracket to the monitor:
 - Four 10-32 x 3/8 in. flathead Phillips screws
 - Two M4 x 16 mm panhead Phillips screws
 - Four M4 x 12 mm panhead Phillips screws
 - One cable tie
 - Tilt-and-turn mechanism
- Cylindrical flex mount and the following parts used to attach the mount to a surface:
 - One large L-shaped bracket
 - One small L-shaped bracket
 - One 2 in.-diameter metal spacer
 - Two 2 in.-diameter circular foam pads
 - One 3/8-16 x 1/2 in. flathead socket cap screw
 - One 3/8-16 x 7/8 in. buttonhead socket screw
 - One 3/8-16 nylon stop nut
 - One 3/8-16 x 1 in. flathead socket screw
 - One 1/2-13 x 3 in. socket set screw

- One 3/8-16 x 2 1/2 in. hexhead bolt
- One 7/32 in. allen wrench
- Movable radial arm and the following parts used to attach the radial arm to the flex mount:
 - One 7/32 in. allen wrench (previously listed)
 - One 10-32 x 3/8 in. panhead Phillips screw (previously listed)
 - One tilter washer
 - One 3/32 in. allen wrench
 - One 4 in. Velcro adhesive strip

Installing the radial arm

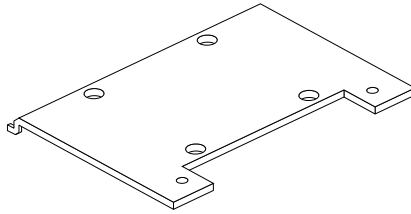
This section has instructions for assembling the three components of the radial arm.

Step 1. Attaching the adapter bracket to your monitor

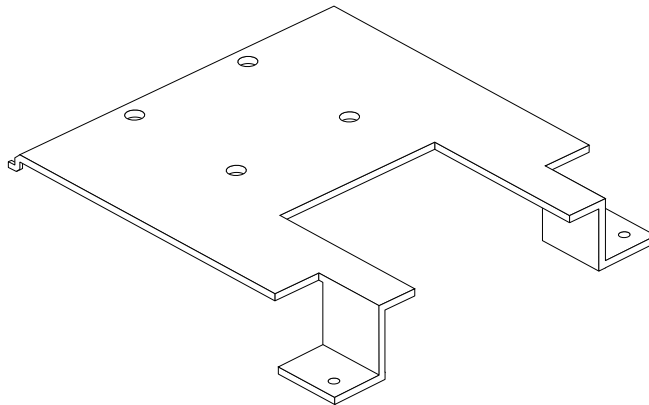
Follow these instructions to attach the monitor adapter bracket to your monitor.

1. Be sure that your computer and monitor are turned off before you begin this procedure.
2. Monitors have various plastic covers and guards over the tilt mechanism that secures the monitor to the monitor base. While the monitor is upright, remove the rear covers and guard on the base of the monitor. For more information about removing the covers and guard, see the documentation that comes with your monitor.
3. On a flat, padded work surface, gently tip the monitor face down.
4. Disconnect all cables and all cords from the base of the monitor.
5. If you are using a T55 monitor, do the following:
 - a. Use a Phillips screwdriver to unscrew the four screws that attach the monitor base to the tilt mechanism.
 - b. Remove the power cord from the tilt mechanism bracket by squeezing the cone-shaped end of the cable tie that attaches the cord to the bracket. When you squeeze the cone-shaped end, the cone-shaped end will slide through the hole in the bracket.
 - c. Remove the existing cable tie from the power cord, and replace it with the cable tie that comes with your option package. This cable tie helps keep the power cord from getting unplugged while you are using the arm.
 - d. Reconnect all cables and cords to the monitor.
 - e. Thread one of the screws you removed from the tilt mechanism bracket through the tong on the cable tie holding the power cord and then insert the screw into one of the lower screw holes.
 - f. Tighten the cable tie and carefully trim off any excess.
 - g. Go to step 8.
6. If you are using a T85 monitor, do the following:
 - a. Remove the back cover plate over the screws that hold the tilt mechanism and set it aside.

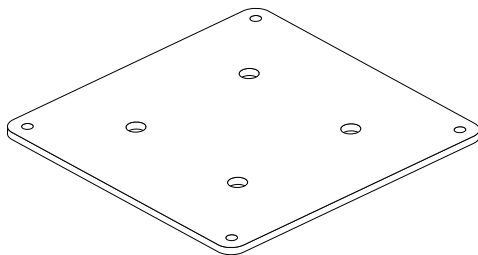
- b. Use your Phillips screwdriver to unscrew the six screws attaching the tilt mechanism to the monitor. Two of the screws are on the upper section, and four are on the bottom section of the tilt mechanism bracket.
 - c. Reconnect all cables and cords to the monitor.
 - d. Thread one of the screws you removed from the tilt mechanism bracket through the tong on the cable tie holding the power cord and then insert the screw into one of the lower screw holes.
 - e. Tighten the cable tie and carefully trim off any excess.
 - f. Go to step 8.
7. If you are using a monitor with a 75-mm or 100-mm hole pattern, go to the next step.
 8. Locate the monitor adapter brackets and the tilt-and-turn mechanism that are included in your option package. Four different brackets are available. Use the following illustrations to determine which one to use for your monitor.



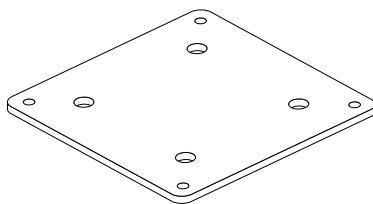
**T55 monitor adapter
bracket**



**T85 monitor adapter
bracket**



**100 mm square plate
monitor adapter
bracket**



**75 mm square plate
monitor adapter
bracket**

9. Locate the side of the bracket with countersunk holes. Attach the monitor adapter bracket to the tilt-and-turn mechanism by using a Phillips screwdriver to screw the four 10-32 x 3/8 in. flathead Phillips screws that come with the option through the countersunk holes and into the tilt-and-turn mechanism.
10. If you are using a T55 or T85 monitor, do the following:
 - a. Using the hooks on the monitor adapter bracket, hook the tilt-and-turn mechanism, with the monitor adapter bracket attached, to the monitor.
 - b. Align the two holes in the monitor adapter bracket with the two screw holes on the back of the monitor.
 - c. If you are using a T55 monitor, use two black M4 x 16 mm panhead Phillips screws to attach the tilt-and-turn mechanism and the attached monitor adapter

bracket to the monitor. If you are using a T85 monitor, use two black M4 x 12 mm panhead Phillips screws to attach the tilt-and-turn mechanism and the attached monitor adapter bracket to the monitor.

- d. Go to “Step 2. Attaching the flex mount to a surface” on page 1-5.
11. If you are using a monitor with a 75-mm or 100-mm hole pattern, do the following:
 - a. Use the four #10 Phillips flathead screws which come with your option to attach the monitor adapter bracket to the tilt-and-turn mechanism.
 - b. Align the four mounting holes in the monitor adapter bracket with the four mounting holes on the monitor.
 - c. Use four black M4 x 12 mm panhead Phillips screws to attach the tilt-and-turn mechanism and the attached monitor adapter bracket to the monitor.
 - d. Reconnect all cables and cords to the monitor.
 - e. Thread one of the screws you removed from the tilt mechanism bracket through the tong on the cable tie holding the power cord and then insert the screw into one of the lower screw holes.
 - f. Tighten the cable tie and carefully trim off any excess.
 - g. Go to “Step 2. Attaching the flex mount to a surface” on page 1-5.

Step 2. Attaching the flex mount to a surface

You can install the flex mount in one of the following positions:

- To the edge of a desk, through the grommet hole in a desk, or to the rear edge of a panel system desk
- To a wall or to a desk with no edge
- Through the surface of a desk

Before assembling the radial arm and attaching your monitor, determine which of the mounting positions you are going to use. This section provides instructions for each mounting position.

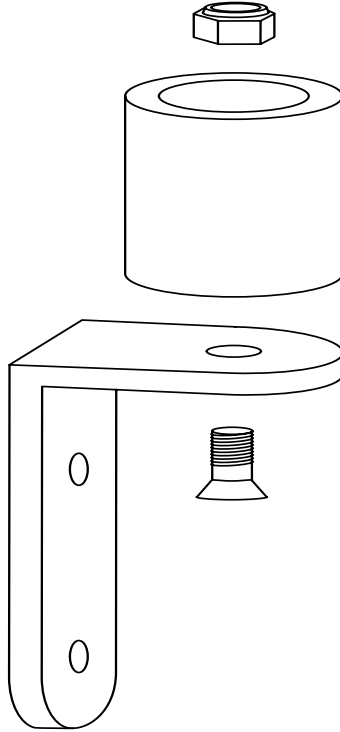
Attaching the flex mount to the edge of a desk, through a grommet hole in a desk, or to the rear edge of a panel system desk

Follow these instructions to install the flex mount to the edge of a desks, through a grommet hole in a desk, or to the rear edge of a panel system desk.

Note: If you are attaching the flex mount to a desk with a large edge, you might need a wood spacer to fill the extra space.

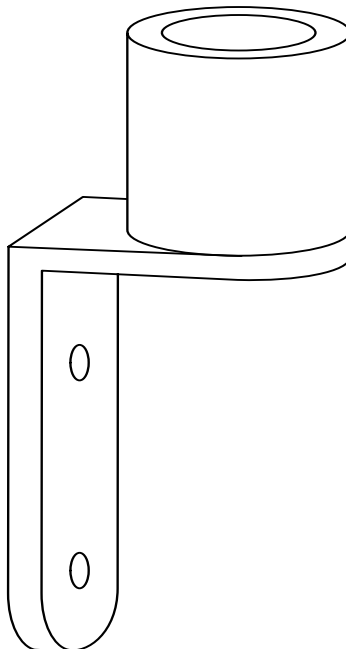
1. If you are attaching the flex mount through a grommet hole in a desk, remove the plastic grommet that covers the edges of the grommet hole.
2. Locate the silver nylon stop nut and the flex mount.
3. Drop the nut into the flex mount, with the rounded top of the nut facing up.
4. Locate the large L-shaped bracket and align the flex mount over the shorter end such that you are able to screw the two parts together.
5. Locate the 3/8-16 x 1 in. flathead socket cap screw.

The following illustration shows the silver nylon stop nut, the flex mount, the large L-shaped bracket, and the 3/8-16 x 1 in. flathead socket cap screw together.



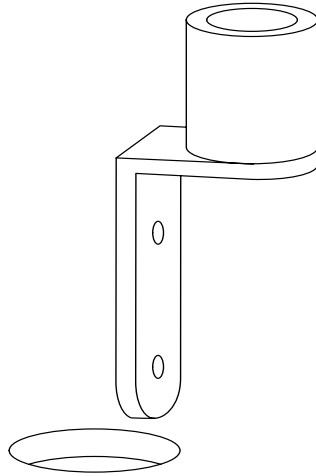
6. Insert the socket screw into the hole in the short end of the large L-shaped bracket, and insert the short end of the 7/32 in. allen wrench into the head of the screw.
7. Tighten the screw with the allen wrench, while holding onto the cylindrical mount with your other hand. Tighten the screw until the mount is no longer capable of rotating on the bracket.

The following illustration shows the flex mount attached to the large L-shaped bracket.

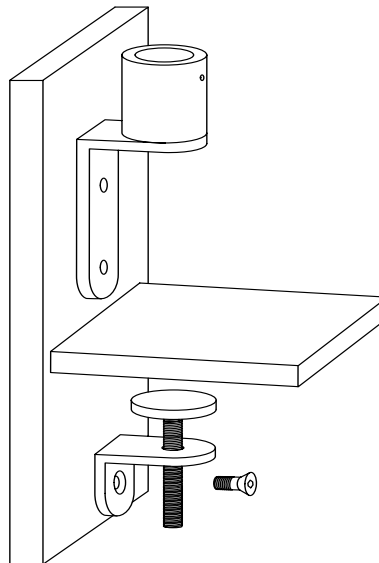


8. Locate the 2 in.-diameter circular foam pads, and peel the backing off one of them. Place the foam pad on the bottom of the short end of the large L-shaped bracket, so that it covers the flathead screw.

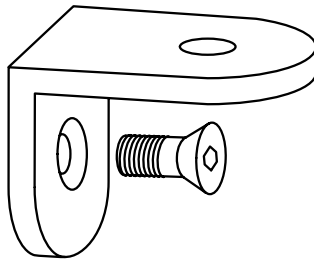
- If you are attaching the flex mount through the grommet hole in a desk, insert the long end of the large L-shaped bracket into the grommet hole. Be sure the bracket with the flex mount is sitting flat on the surface of your desk. The following illustration shows the flex mount being inserted into a grommet hole.



- If you are attaching the flex mount to the rear edge of a panel system desk, insert the large L-shaped bracket into the space between the desk edge and the rear panel. Position the mount before continuing. The following illustration shows the flex mount inserted into the space between the rear edge of the desk and the rear panel, and the positioning of the remaining parts of the flex mount.

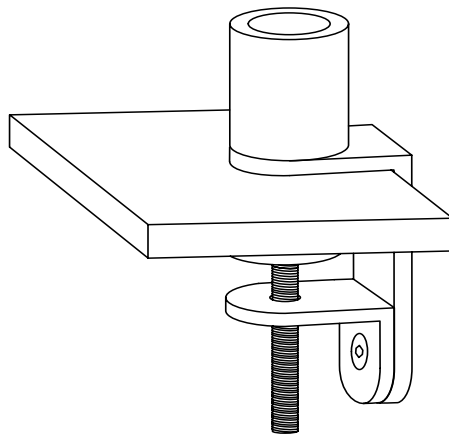


9. Locate the small L-shaped bracket, and the black 3/8-16 x 1/2 in. flathead socket cap screw.
10. Line up the hole in the short end of the small L-shaped bracket with the bottom hole in the long end of the larger L-shaped bracket.
11. Secure the small L-shaped bracket to the larger bracket using the black 3/8-16 x 1/2 in. flathead socket screw. The long end of the small bracket must be parallel to the short end of the large bracket, and lined up with the flex mount. The following illustration shows the small L-shaped bracket and the 3/8-16 x 1/2 in. flathead socket screw.

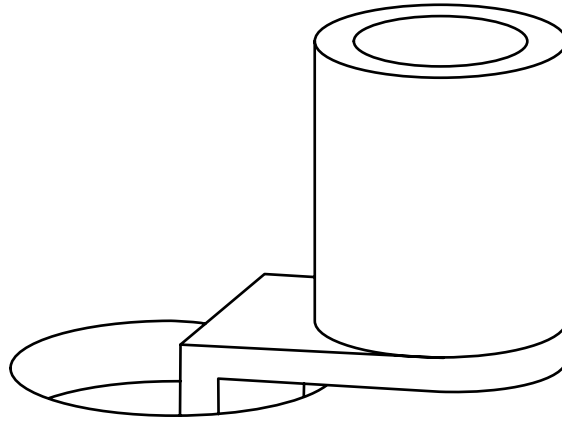


12. Locate the headless black 1/2-13 x 3 in. socket set screw, and insert it into the hole in the long end of the small L-shaped bracket.
13. Locate the circular metal spacer, and the second 2 in.-diameter circular foam pad.
14. Peel off the backing from the pad, and attach it to the metal spacer.
15. Line up the hole in the metal spacer with the 1/2-13 x 3 in. socket set screw. Fit the entire mount over the edge of your desk, and use a wrench (not included) to tighten the screw until the padded spacer is tightened against the underside of the desk.

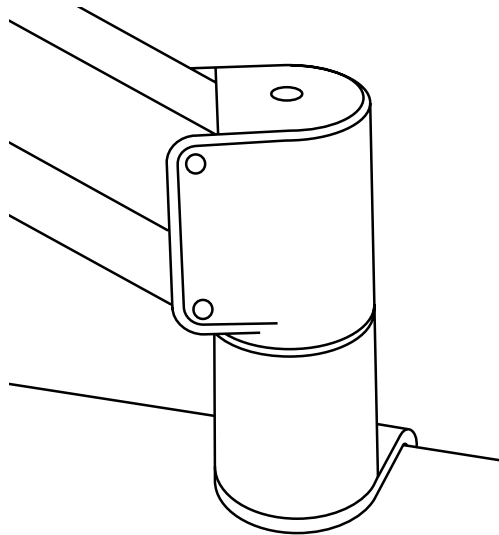
When mounted to the edge of a desk, your flex mount will look like the following illustration.



When mounted through the grommet hole in a desk, your flex mount will look like the following illustration.



When mounted to the rear edge of a panel system desk, your flex mount will look like the following illustration. In this illustration the radial arm is already attached to the flex mount.



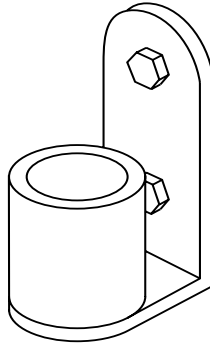
To continue installing your radial arm, go to “Step 3. Attaching your monitor to the radial arm” on page 1-13.

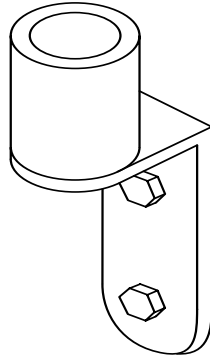
Attaching the flex mount to a wall or to a desk with no edge

Follow these instructions to attach the flex mount to a wall or to a desk with no edge.

1. If you are attaching the flex mount to a desk with no edge, drill two holes in the side of the desk for two wood screws (not included); then go to step 3. If you are attaching the flex mount to a wall, go to step 2.
2. Position the large L-shaped bracket against the wall over a secure stud. The long end of the bracket can face up or down.
3. Using two wood screws (not included), attach the bracket to the wall or to the desk.
4. Locate the silver nylon stop nut, and the flex mount.
5. Drop the nut into the cylinder of the flex mount, with the rounded top facing up.
6. Align the mount with the hole in the short end of the bracket.
7. Locate the 3/8-16 x 7/8 in. buttonhead socket cap screw.
8. Insert the buttonhead socket screw through the hole in the short end of the L-shaped bracket, and insert the short end of the 7/32 in. allen wrench into the head of the screw.
9. Tighten the screw with the allen wrench, while holding onto the cylindrical mount with your other hand. Tighten the screw until the mount is no longer capable of rotating on the bracket.

When you have completed these instructions, your flex mount will look like one of the following two illustrations.





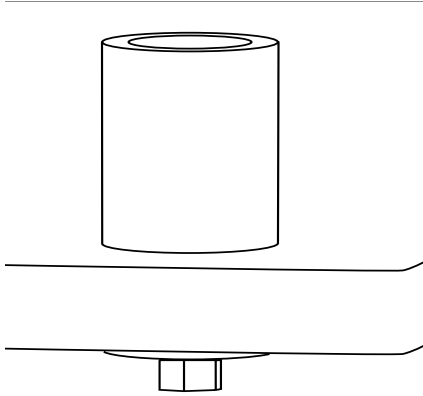
To continue installing your radial arm, go to “Step 3. Attaching your monitor to the radial arm” on page 1-13.

Attaching the flex mount through a desk surface

Follow these instructions to install the flex mount so that the bolts are secured through the surface of your desk.

1. When you have decided on the location for your flex mount, drill a 3/8 in. diameter hole through the work surface at that location.
2. Locate the circular foam pads, the cylindrical mount, and the 2 1/2 in. long 3/8-16 hexhead bolt.
3. Peel the backing off of one foam pad, and attach it to the bottom of the cylindrical mount.
4. Make a hole in the pad that is large enough to accommodate the hexhead bolt.
5. Insert the hexhead bolt through the hole in the bottom of the cylindrical mount and through the hole in your work surface.
6. Locate the metal spacer, and attach the second foam pad to it.
7. Make a hole in the pad large enough to accommodate the hexhead bolt.
8. Locate the silver nylon stop nut.
9. Slide the padded spacer onto the end of the hexhead bolt, and screw the stop nut onto the bolt with the rounded top of the nut facing down.
10. Use a wrench (not included) to tighten the stop nut until the padded spacer is tight against the bottom of your work surface.

When you have completed these instructions, your flex mount will look like the following illustration.



To continue installing your radial arm, go to “Step 3. Attaching your monitor to the radial arm”.

Step 3. Attaching your monitor to the radial arm

Follow these instructions to attach your monitor to the radial arm.

Note: You must attach the monitor to the radial arm before attaching the radial arm to the flex mount; otherwise you will not have the correct weight to adjust the counterbalance tension on the radial arm.

1. Insert the end of the tilt-and-turn mechanism on your monitor into the receptacle at the end of the radial arm.
2. Locate the tilter washer and the 10-32 x 3/8 in. panhead Phillips screw.
3. Position the washer so that it lines up with the hole on the bottom of the radial arm, and insert the screw through the washer and into the hole in the radial arm.
4. Tighten the screw firmly to secure the tilt-and-turn mechanism to the radial arm.
5. Rotate your flat panel monitor to its maximum horizontal position.
6. Use the 7/32 in. allen wrench to adjust the friction on the tilt-and-turn mechanism.

Step 4. Attaching the radial arm to the flex mount

Follow these instructions to attach the radial arm to the mount and adjust the counterbalance tension.

1. Locate the tilter washer, and insert it over the shaft at the end of the radial arm.
2. Insert the shaft of the radial arm into the flex mount.
3. Once the arm is securely in the mount, use the 7/32 in. allen wrench to adjust the counterbalance tension. Support the radial arm while you are adjusting the counterbalance.

4. Rotate the allen wrench counterclockwise to increase the counterbalance tension. This increases the amount of weight that the arm can support. If you need to decrease the counterbalance tension, turn the allen wrench clockwise.
Note: You might need to turn the allen wrench for many revolutions before noticing a difference in the counterbalance tension.
5. Once you have the counterbalance tension at the level desired, remove the plastic cover from the cable channel on the underside of the radial arm and route the monitor cables into the channel. You can remove the channel cover by using a flathead screwdriver to lift it up. Be sure to leave a loop of cable between the monitor and the arm, to facilitate rotation and tilting of the monitor.
6. When the cables are in place, replace the channel cover.
7. Locate the included Velcro adhesive strip.
8. Peel off the backing from one half of this strip, and attach it to one side of the monitor power converter. This is the box-shaped device which is attached to your power cable.
9. Peel off the backing from the other half of the Velcro strip and attach it to the underside of your work surface.
10. Attach the power converter to the underside of your work surface. This keeps the power cable out of the way.
11. You can make fine adjustments to the friction joints at the three articulation points of the arm. Use the 3/32 in. allen wrench for these adjustments.

You have now successfully installed your radial arm.

Appendix A. Help and service

This section contains information on how to obtain online and telephone technical support.

Online technical support

Online technical support is available during the life of your product. Online assistance can be obtained through the Personal Computing Support Web site and the IBM Automated Fax System.

<i>Online technical support</i>	
IBM Personal Computing Support Web site	http://www.pc.ibm.com/support
IBM Automated Fax System	1-800-426-3395 (U.S. and Canada)

During the warranty period, assistance for replacement or exchange of defective components is available. In addition, if your IBM option is installed in an IBM computer, you might be entitled to service at your location. Your technical support representative can help you determine the best alternative.

Telephone technical support

Marketing, installation, and configuration support through the HelpCenter will be withdrawn or made available for a fee, at IBM's discretion, 90 days after the option has been withdrawn from marketing. Additional support offerings, including step-by-step installation assistance, are available for a nominal fee.

To assist the technical support representative, have available as much of the following information as possible:

- Option name
- Option number
- Proof of purchase
- Computer manufacturer, model, serial number (if IBM), and manual
- Exact wording of the error message (if any)
- Description of the problem
- Hardware and software configuration information for your system

If possible, be at your computer. Your technical support representative might want to walk you through the problem during the call.

For the support telephone number and support hours by country, refer to the following table or to the enclosed technical support insert. If the number is not provided, contact your IBM reseller or IBM marketing representative. Response time may vary depending on the number and nature of the calls received.

<i>Support 24 hours a day, 7 days a week</i>	
Canada (Toronto only)	416-383-3344
Canada (all other)	1-800-565-3344
U.S.A. and Puerto Rico	1-800-772-2227

Appendix B. Warranty and notices

The warranty statements consist of two parts: Part 1 and Part 2. Part 1 varies by country. Part 2 is the same for both statements. Be sure to read both the Part 1 that applies to your country and Part 2.

- **United States, Puerto Rico, and Canada (Z125-4753-05 11/97)** (see “IBM Statement of Limited Warranty for the United States, Puerto Rico, and Canada (Part 1 - General Terms)”)
- **Worldwide except Canada, Puerto Rico, Turkey, and United States (Z125-5697-01 11/97)** (see “IBM Statement of Warranty Worldwide except Canada, Puerto Rico, Turkey, United States (Part 1 - General Terms)” on page B-4)
- **Worldwide Country-Unique Terms** (see “Part 2 - Worldwide Country-Unique Terms” on page B-7)

IBM Statement of Limited Warranty for the United States, Puerto Rico, and Canada (Part 1 - General Terms)

This Statement of Warranty includes Part 1 - General Terms and Part 2 - Country-unique Terms. The terms of Part 2 may replace or modify those of Part 1. The warranties provided by IBM in this Statement of Warranty apply only to Machines you purchase for your use, and not for resale, from IBM or your reseller. The term "Machine" means an IBM machine, its features, conversions, upgrades, elements, or accessories, or any combination of them. The term "Machine" does not include any software programs, whether pre-loaded with the Machine, installed subsequently or otherwise. Unless IBM specifies otherwise, the following warranties apply only in the country where you acquire the Machine. Nothing in this Statement of Warranty affects any statutory rights of consumers that cannot be waived or limited by contract. If you have any questions, contact IBM or your reseller.

Machine - IBM Radial Arm Kit
Warranty period* - One year

** Contact your place of purchase for warranty service information. Some IBM Machines are eligible for on-site warranty service depending on the country where service is performed.*

The IBM Warranty for Machines

IBM warrants that each Machine 1) is free from defects in materials and workmanship and 2) conforms to IBM's Official Published Specifications. The warranty period for a Machine is a specified, fixed period commencing on its Date of Installation. The date on your sales receipt is the Date of Installation, unless IBM or your reseller informs you otherwise.

During the warranty period IBM or your reseller, if approved by IBM to provide warranty service, will provide repair and exchange service for the Machine, without charge, under the type of service designated for the Machine and will manage and install engineering changes that apply to the Machine.

If a Machine does not function as warranted during the warranty period, and IBM or your reseller are unable to either 1) make it do so or 2) replace it with one that is at least functionally equivalent, you may return it to your place of purchase and your money will be refunded. The replacement may not be new, but will be in good working order.

Extent of Warranty

The warranty does not cover the repair or exchange of a Machine resulting from misuse, accident, modification, unsuitable physical or operating environment, improper maintenance by you, or failure caused by a product for which IBM is not responsible. The warranty is voided by removal or alteration of Machine or parts identification labels.

THESE WARRANTIES ARE YOUR EXCLUSIVE WARRANTIES AND REPLACE ALL OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THESE WARRANTIES GIVE YOU SPECIFIC LEGAL RIGHTS AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM JURISDICTION TO JURISDICTION. SOME JURISDICTIONS DO NOT ALLOW THE EXCLUSION OR LIMITATION OF EXPRESS OR IMPLIED WARRANTIES, SO THE ABOVE EXCLUSION OR LIMITATION MAY NOT APPLY TO YOU. IN THAT EVENT, SUCH WARRANTIES ARE LIMITED IN DURATION TO THE WARRANTY PERIOD. NO WARRANTIES APPLY AFTER THAT PERIOD.

Items Not Covered by Warranty

IBM does not warrant uninterrupted or error-free operation of a Machine.

Unless specified otherwise, IBM provides non-IBM machines **WITHOUT WARRANTIES OF ANY KIND.**

Any technical or other support provided for a Machine under warranty, such as assistance via telephone with "how-to" questions and those regarding Machine set-up and installation, will be provided **WITHOUT WARRANTIES OF ANY KIND.**

Warranty Service

To obtain warranty service for the Machine, contact your reseller or IBM. In the United States, call IBM at 1-800-772-2227. In Canada, call IBM at 1-800-565-3344. (In Toronto, call 416-383-3344.) You may be required to present proof of purchase.

IBM or your reseller provides certain types of repair and exchange service, either at your location or at a service center, to keep Machines in, or restore them to, conformance with their Specifications. IBM or your reseller will inform you of the available types of service for a Machine based on its country of installation. IBM may repair the failing Machine or exchange it at its discretion.

When warranty service involves the exchange of a Machine or part, the item IBM or your reseller replaces becomes its property and the replacement becomes yours. You represent that all removed items are genuine and unaltered. The replacement may not be new, but will be in good working order and at least functionally equivalent to the item replaced. The replacement assumes the warranty service status of the replaced item.

Any feature, conversion, or upgrade IBM or your reseller services must be installed on a Machine which is 1) for certain Machines, the designated, serial-numbered Machine and

2) at an engineering-change level compatible with the feature, conversion, or upgrade. Many features, conversions, or upgrades involve the removal of parts and their return to IBM. A part that replaces a removed part will assume the warranty service status of the removed part.

Before IBM or your reseller exchanges a Machine or part, you agree to remove all features, parts, options, alterations, and attachments not under warranty service.

You also agree to

1. ensure that the Machine is free of any legal obligations or restrictions that prevent its exchange;
2. obtain authorization from the owner to have IBM or your reseller service a Machine that you do not own; and
3. where applicable, before service is provided
 - a. follow the problem determination, problem analysis, and service request procedures that IBM or your reseller provides,
 - b. secure all programs, data, and funds contained in a Machine,
 - c. provide IBM or your reseller with sufficient, free, and safe access to your facilities to permit them to fulfill their obligations, and
 - d. inform IBM or your reseller of changes in a Machine's location.

IBM is responsible for loss of, or damage to, your Machine while it is 1) in IBM's possession or 2) in transit in those cases where IBM is responsible for the transportation charges.

Neither IBM nor your reseller is responsible for any of your confidential, proprietary or personal information contained in a Machine which you return to IBM or your reseller for any reason. You should remove all such information from the Machine prior to its return.

Production Status

Each IBM Machine is manufactured from new parts, or new and used parts. In some cases, the Machine may not be new and may have been previously installed. Regardless of the Machine's production status, IBM's appropriate warranty terms apply.

Limitation of Liability

Circumstances may arise where, because of a default on IBM's part or other liability, you are entitled to recover damages from IBM. In each such instance, regardless of the basis on which you are entitled to claim damages from IBM (including fundamental breach, negligence, misrepresentation, or other contract or tort claim), IBM is liable for no more than

1. damages for bodily injury (including death) and damage to real property and tangible personal property; and
2. the amount of any other actual direct damages, up to the greater of U.S. \$100,000 (or equivalent in local currency) or the charges (if recurring, 12 months' charges apply) for the Machine that is the subject of the claim.

This limit also applies to IBM's suppliers and your reseller. It is the maximum for which IBM, its suppliers, and your reseller are collectively responsible.

UNDER NO CIRCUMSTANCES IS IBM LIABLE FOR ANY OF THE FOLLOWING: 1) THIRD-PARTY CLAIMS AGAINST YOU FOR DAMAGES (OTHER THAN THOSE UNDER THE FIRST ITEM LISTED ABOVE); 2) LOSS

OF, OR DAMAGE TO, YOUR RECORDS OR DATA; OR 3) SPECIAL, INCIDENTAL, OR INDIRECT DAMAGES OR FOR ANY ECONOMIC CONSEQUENTIAL DAMAGES (INCLUDING LOST PROFITS OR SAVINGS), EVEN IF IBM, ITS SUPPLIERS OR YOUR RESELLER IS INFORMED OF THEIR POSSIBILITY. SOME JURISDICTIONS DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

IBM Statement of Warranty Worldwide except Canada, Puerto Rico, Turkey, United States (Part 1 - General Terms)

This Statement of Warranty includes Part 1 - General Terms and Part 2 - Country-unique Terms. The terms of Part 2 may replace or modify those of Part 1. The warranties provided by IBM in this Statement of Warranty apply only to Machines you purchase for your use, and not for resale, from IBM or your reseller. The term "Machine" means an IBM machine, its features, conversions, upgrades, elements, or accessories, or any combination of them. The term "Machine" does not include any software programs, whether pre-loaded with the Machine, installed subsequently or otherwise. Unless IBM specifies otherwise, the following warranties apply only in the country where you acquire the Machine. Nothing in this Statement of Warranty affects any statutory rights of consumers that cannot be waived or limited by contract. If you have any questions, contact IBM or your reseller.

Machine - IBM Radial Arm Kit
Warranty period* - One year

** Contact your place of purchase for warranty service information. Some IBM Machines are eligible for on-site warranty service depending on the country where service is performed.*

The IBM Warranty for Machines

IBM warrants that each Machine 1) is free from defects in materials and workmanship and 2) conforms to IBM's Official Published Specifications. The warranty period for a Machine is a specified, fixed period commencing on its Date of Installation. The date on your sales receipt is the Date of Installation, unless IBM or your reseller informs you otherwise.

During the warranty period IBM or your reseller, if approved by IBM to provide warranty service, will provide repair and exchange service for the Machine, without charge, under the type of service designated for the Machine and will manage and install engineering changes that apply to the Machine.

If a Machine does not function as warranted during the warranty period, and IBM or your reseller are unable to either 1) make it do so or 2) replace it with one that is at least functionally equivalent, you may return it to your place of purchase and your money will be refunded. The replacement may not be new, but will be in good working order.

Extent of Warranty

The warranty does not cover the repair or exchange of a Machine resulting from misuse, accident, modification, unsuitable physical or operating environment, improper

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maintenance by you, or failure caused by a product for which IBM is not responsible. The warranty is voided by removal or alteration of Machine or parts identification labels.

THESE WARRANTIES ARE YOUR EXCLUSIVE WARRANTIES AND REPLACE ALL OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THESE WARRANTIES GIVE YOU SPECIFIC LEGAL RIGHTS AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM JURISDICTION TO JURISDICTION. SOME JURISDICTIONS DO NOT ALLOW THE EXCLUSION OR LIMITATION OF EXPRESS OR IMPLIED WARRANTIES, SO THE ABOVE EXCLUSION OR LIMITATION MAY NOT APPLY TO YOU. IN THAT EVENT, SUCH WARRANTIES ARE LIMITED IN DURATION TO THE WARRANTY PERIOD. NO WARRANTIES APPLY AFTER THAT PERIOD.

Items Not Covered by Warranty

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Unless specified otherwise, IBM provides non-IBM machines **WITHOUT WARRANTIES OF ANY KIND.**

Any technical or other support provided for a Machine under warranty, such as assistance via telephone with "how-to" questions and those regarding Machine set-up and installation, will be provided **WITHOUT WARRANTIES OF ANY KIND.**

Warranty Service

To obtain warranty service for the Machine, contact your reseller or IBM. You may be required to present proof of purchase.

IBM or your reseller provides certain types of repair and exchange service, either at your location or at a service center, to keep Machines in, or restore them to, conformance with their Specifications. IBM or your reseller will inform you of the available types of service for a Machine based on its country of installation. IBM may repair the failing Machine or exchange it at its discretion.

When warranty service involves the exchange of a Machine or part, the item IBM or your reseller replaces becomes its property and the replacement becomes yours. You represent that all removed items are genuine and unaltered. The replacement may not be new, but will be in good working order and at least functionally equivalent to the item replaced. The replacement assumes the warranty service status of the replaced item.

Any feature, conversion, or upgrade IBM or your reseller services must be installed on a Machine which is 1) for certain Machines, the designated, serial-numbered Machine and 2) at an engineering-change level compatible with the feature, conversion, or upgrade. Many features, conversions, or upgrades involve the removal of parts and their return to IBM. A part that replaces a removed part will assume the warranty service status of the removed part.

Before IBM or your reseller exchanges a Machine or part, you agree to remove all features, parts, options, alterations, and attachments not under warranty service.

You also agree to

1. ensure that the Machine is free of any legal obligations or restrictions that prevent its exchange;
2. obtain authorization from the owner to have IBM or your reseller service a Machine that you do not own; and
3. where applicable, before service is provided
 - a. follow the problem determination, problem analysis, and service request procedures that IBM or your reseller provides,
 - b. secure all programs, data, and funds contained in a Machine,
 - c. provide IBM or your reseller with sufficient, free, and safe access to your facilities to permit them to fulfill their obligations, and
 - d. inform IBM or your reseller of changes in a Machine's location.

IBM is responsible for loss of, or damage to, your Machine while it is 1) in IBM's possession or 2) in transit in those cases where IBM is responsible for the transportation charges.

Neither IBM nor your reseller is responsible for any of your confidential, proprietary or personal information contained in a Machine which you return to IBM or your reseller for any reason. You should remove all such information from the Machine prior to its return.

Production Status

Each IBM Machine is manufactured from new parts, or new and used parts. In some cases, the Machine may not be new and may have been previously installed. Regardless of the Machine's production status, IBM's appropriate warranty terms apply.

Limitation of Liability

Circumstances may arise where, because of a default on IBM's part or other liability, you are entitled to recover damages from IBM. In each such instance, regardless of the basis on which you are entitled to claim damages from IBM (including fundamental breach, negligence, misrepresentation, or other contract or tort claim), IBM is liable for no more than

1. damages for bodily injury (including death) and damage to real property and tangible personal property; and
2. the amount of any other actual direct damages, up to the greater of U.S. \$100,000 (or equivalent in local currency) or the charges (if recurring, 12 months' charges apply) for the Machine that is the subject of the claim.

This limit also applies to IBM's suppliers and your reseller. It is the maximum for which IBM, its suppliers, and your reseller are collectively responsible.

UNDER NO CIRCUMSTANCES IS IBM LIABLE FOR ANY OF THE FOLLOWING: 1) THIRD-PARTY CLAIMS AGAINST YOU FOR DAMAGES (OTHER THAN THOSE UNDER THE FIRST ITEM LISTED ABOVE); 2) LOSS OF, OR DAMAGE TO, YOUR RECORDS OR DATA; OR 3) SPECIAL, INCIDENTAL, OR INDIRECT DAMAGES OR FOR ANY ECONOMIC CONSEQUENTIAL DAMAGES (INCLUDING LOST PROFITS OR SAVINGS), EVEN IF IBM, ITS SUPPLIERS OR YOUR RESELLER IS INFORMED OF THEIR POSSIBILITY. SOME JURISDICTIONS DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

Part 2 - Worldwide Country-Unique Terms

ASIA PACIFIC

AUSTRALIA: The IBM Warranty for Machines: The following paragraph is added to this Section:

The warranties specified in this Section are in addition to any rights you may have under the Trade Practices Act 1974 or other legislation and are only limited to the extent permitted by the applicable legislation.

Extent of Warranty: The following replaces the first and second sentences of this Section:

The warranty does not cover the repair or exchange of a Machine resulting from misuse, accident, modification, unsuitable physical or operating environment, operation in other than the Specified Operating Environment, improper maintenance by you, or failure caused by a product for which IBM is not responsible.

Limitation of Liability: The following is added to this Section:

Where IBM is in breach of a condition or warranty implied by the Trade Practices Act 1974, IBM's liability is limited to the repair or replacement of the goods or the supply of equivalent goods. Where that condition or warranty relates to right to sell, quiet possession or clear title, or the goods are of a kind ordinarily acquired for personal, domestic or household use or consumption, then none of the limitations in this paragraph apply.

PEOPLE'S REPUBLIC OF CHINA: Governing Law: The following is added to this Statement:

The laws of the State of New York govern this Statement.

INDIA: Limitation of Liability: The following replaces items 1 and 2 of this Section:

1. liability for bodily injury (including death) or damage to real property and tangible personal property will be limited to that caused by IBM's negligence;
2. as to any other actual damage arising in any situation involving nonperformance by IBM pursuant to, or in any way related to the subject of this Statement of Warranty, IBM's liability will be limited to the charge paid by you for the individual Machine that is the subject of the claim.

NEW ZEALAND: The IBM Warranty for Machines: The following paragraph is added to this Section:

The warranties specified in this Section are in addition to any rights you may have under the Consumer Guarantees Act 1993 or other legislation which cannot be excluded or limited. The Consumer Guarantees Act 1993 will not apply in respect of any goods which IBM provides, if you require the goods for the purposes of a business as defined in that Act.

Limitation of Liability: The following is added to this Section:

Where Machines are not acquired for the purposes of a business as defined in the Consumer Guarantees Act 1993, the limitations in this Section are subject to the limitations in that Act.

EUROPE, MIDDLE EAST, AFRICA (EMEA)

The following terms apply to all EMEA countries.

The terms of this Statement of Warranty apply to Machines purchased from an IBM reseller. If you purchased this Machine from IBM, the terms and conditions of the applicable IBM agreement prevail over this warranty statement.

Warranty Service

If you purchased an IBM Machine in Austria, Belgium, Denmark, Estonia, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland or United Kingdom, you may obtain warranty service for that Machine in any of those countries from either (1) an IBM reseller approved to perform warranty service or (2) from IBM.

If you purchased an IBM Personal Computer Machine in Albania, Armenia, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Georgia, Hungary, Kazakhstan, Kirghizia, Federal Republic of Yugoslavia, Former Yugoslav Republic of Macedonia (FYROM), Moldova, Poland, Romania, Russia, Slovak Republic, Slovenia, or Ukraine, you may obtain warranty service for that Machine in any of those countries from either (1) an IBM reseller approved to perform warranty service or (2) from IBM.

The applicable laws, Country-unique terms and competent court for this Statement are those of the country in which the warranty service is being provided. However, the laws of Austria govern this Statement if the warranty service is provided in Albania, Armenia, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Federal Republic of Yugoslavia, Georgia, Hungary, Kazakhstan, Kirghizia, Former Yugoslav Republic of Macedonia (FYROM), Moldova, Poland, Romania, Russia, Slovak Republic, Slovenia, and Ukraine.

The following terms apply to the country specified:

EGYPT: Limitation of Liability: The following replaces item 2 in this Section: 2. as to any other actual direct damages, IBM's liability will be limited to the total amount you paid for the Machine that is the subject of the claim.

Applicability of suppliers and resellers (unchanged).

FRANCE: Limitation of Liability: The following replaces the second sentence of the first paragraph of this Section:
In such instances, regardless of the basis on which you are entitled to claim damages from IBM, IBM is liable for no more than: (items 1 and 2 unchanged).

GERMANY: The IBM Warranty for Machines: The following replaces the first sentence of the first paragraph of this Section:
The warranty for an IBM Machine covers the functionality of the Machine for its normal use and the Machine's conformity to its Specifications.

The following paragraphs are added to this Section:
The minimum warranty period for Machines is six months.

In case IBM or your reseller are unable to repair an IBM Machine, you can alternatively ask for a partial refund as far as justified by the reduced value of the unrepaired Machine or ask for a cancellation of the respective agreement for such Machine and get your money refunded.

Extent of Warranty: The second paragraph does not apply.

Warranty Service: The following is added to this Section:
During the warranty period, transportation for delivery of the failing Machine to IBM will be at IBM's expense.

Production Status: The following paragraph replaces this Section:
Each Machine is newly manufactured. It may incorporate in addition to new parts, re-used parts as well.

Limitation of Liability: The following is added to this Section:
The limitations and exclusions specified in the Statement of Warranty will not apply to damages caused by IBM with fraud or gross negligence and for express warranty.

In item 2, replace "U.S. \$100,000" with "1.000.000 DEM."

The following sentence is added to the end of the first paragraph of item 2:
IBM's liability under this item is limited to the violation of essential contractual terms in cases of ordinary negligence.

IRELAND: Extent of Warranty: The following is added to this Section:
Except as expressly provided in these terms and conditions, all statutory conditions, including all warranties implied, but without prejudice to the generality of the foregoing all warranties implied by the Sale of Goods Act 1893 or the Sale of Goods and Supply of Services Act 1980 are hereby excluded.

Limitation of Liability: The following replaces items one and two of the first paragraph of this Section:

1. death or personal injury or physical damage to your real property solely caused by IBM's negligence; and 2. the amount of any other actual direct damages, up to the greater of Irish Pounds 75,000 or 125 percent of the charges (if recurring, the 12 months' charges apply) for the Machine that is the subject of the claim or which otherwise gives rise to the claim.

Applicability of suppliers and resellers (unchanged).

The following paragraph is added at the end of this Section:
IBM's entire liability and your sole remedy, whether in contract or in tort, in respect of any default shall be limited to damages.

ITALY: Limitation of Liability: The following replaces the second sentence in the first paragraph:

In each such instance unless otherwise provided by mandatory law, IBM is liable for no more than: (item 1 unchanged) 2) as to any other actual damage arising in all situations involving non-performance by IBM pursuant to, or in any way related to the subject matter of this Statement of Warranty, IBM's liability, will be limited to the total amount you paid for the Machine that is the subject of the claim.

Applicability of suppliers and resellers (unchanged).

The following replaces the second paragraph of this Section:
Unless otherwise provided by mandatory law, IBM and your reseller are not liable for any of the following: (items 1 and 2 unchanged) 3) indirect damages, even if IBM or your reseller is informed of their possibility.

SOUTH AFRICA, NAMIBIA, BOTSWANA, LESOTHO AND SWAZILAND:

Limitation of Liability: The following is added to this Section:
IBM's entire liability to you for actual damages arising in all situations involving

nonperformance by IBM in respect of the subject matter of this Statement of Warranty will be limited to the charge paid by you for the individual Machine that is the subject of your claim from IBM.

TURKIYE: Production Status: The following replaces this Section:
IBM fulfills customer orders for IBM Machines as newly manufactured in accordance with IBM's production standards.

UNITED KINGDOM: Limitation of Liability: The following replaces items 1 and 2 of the first paragraph of this Section:

1. death or personal injury or physical damage to your real property solely caused by IBM's negligence;
2. the amount of any other actual direct damages or loss, up to the greater of Pounds Sterling 150,000 or 125 percent of the charges (if recurring, the 12 months' charges apply) for the Machine that is the subject of the claim or which otherwise gives rise to the claim.

The following item is added to this paragraph:

3. breach of IBM's obligations implied by Section 12 of the Sale of Goods Act 1979 or Section 2 of the Supply of Goods and Services Act 1982.

Applicability of suppliers and resellers (unchanged).

The following is added to the end of this Section:

IBM's entire liability and your sole remedy, whether in contract or in tort, in respect of any default will be limited to damages.

NORTH AMERICA

CANADA: Warranty Service: The following is added to this section:
To obtain warranty service from IBM, call **1-800-565-3344**. In Toronto, call **416-383-3344**.

UNITED STATES OF AMERICA: Warranty Service: The following is added to this section:
To obtain warranty service from IBM, call **1-800-772-2227**.

Notices

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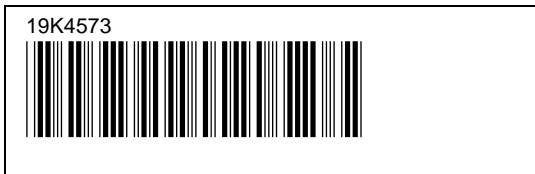
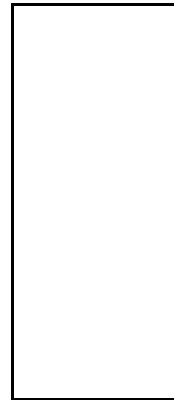
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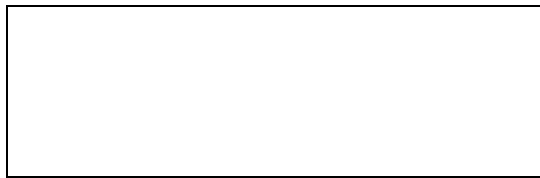
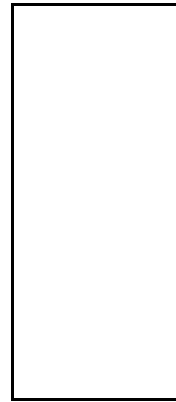
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