



AT&T Private Pay Phone *Plus*

Owner's Manual

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AT&T Private Pay Phone *Plus*

Owners Manual

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Telephone Safety

The telephone is one of the safest appliances you own. There are, however, a few situations when a telephone user needs to be cautious.

Use of the telephone near water.

The telephone should not be close to a washbasin, shower, or swimming pool. Immersion of the telephone receiver in water could cause an electrical shock.

Use of the telephone during an electrical storm.

You should avoid using the telephone during an electrical storm. Although protective devices and proper grounding limit abnormal electrical surges from entering the telephone, absolute protection is impossible. There is a remote risk of a dangerous electrical shock from lightning.

Use of the telephone to report a gas leak.

If you think you have found a gas leak, you should not use a telephone in the vicinity of the leak. The telephone contains electrical contacts that could generate a tiny spark when you lift the receiver and dial.

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SECTION I PREPARATION

Congratulations on the purchase of your new AT&T Private Pay Phone *Plus*, which has been designed and manufactured to AT&T standards of convenience and reliability. The phone is easy to install and easy to maintain. Read all the instructions in this manual carefully before unpacking your phone.

A Introduction

Your AT&T Private Pay Phone *Plus* is a coin-operated telephone with the capabilities of the coin-operated telephones owned by your local telephone company. The difference is that the profit is yours. You decide where the phone will be mounted, how it will be mounted, and how much it will charge for local and long distance calls. The AT&T Private Pay Phone *Plus* may be connected to most local telephone services as if it were a residential telephone.

Advanced telephone technology is part of the design of your telephone. Features include the following:

- Indoor/Outdoor Installation
- State-of-the-Art Answer Detection
- Compatibility with Inductively Coupled Hearing Aids
- Coin Chute Jam Prevention
- Various Anti-Fraud Features
- Memory Retention During Power Loss
- Voice Synthesized "Operator Substitute"
- Simple and Complex Rate Structure Support
- Remote Programming
- Remote Diagnostics and Trouble Alarms
- Remote Cash Count
- Flexible Rates Programming
- 10 speed dial numbers

B. Preliminary Planning

What your AT&T Private Pay Phone *Plus* will charge for a local or long distance call depends on what rates are programmed for the phone. How the phone responds to certain diagnostic alarms also depends on how the phone is programmed.

You may choose to program your telephone(s) yourself, or you may choose to subscribe to AT&T's programming service. Other rate services are also available.

You can program all the rates and pay phone information yourself using a personal computer (PC) running a CoinSoft[™] program. You will also be able to monitor the diagnostic alarms and other messages about your phone's condition yourself, at your PC. Using the computer, your telephones can "tell" you when some problems occur, when the coin box is getting full, how much cash is in each coin box, how many calls have been made at each telephone, and other business information.

A variety of options exists for rate programming, monitoring alarms and conditions, and changing programming. To request rate programming, or to examine your programming and customizing options, see your AT&T dealer.

Whether you or AT&T does your rate programming, you can easily have your pay phone charge the same rates as the public coin telephones owned by the local phone companies.

To request rate programming, call your AT&T dealer or consult the AT&T General Business Systems Source Book.

SECTION II PRE-INSTALLATION CHECKLIST

A. *Getting Ready*

To get ready to install your AT&T Private Pay Phone *Plus* complete the following:

Site Selection

If you have not already done so, select the site for your AT&T Private Pay Phone *Plus*. Consider the following when selecting a mounting site:

- Check your state P.U.C. (Public Utility Commission) regulations to make sure that a phone can be installed at the selected site
- Be sure the site has good visibility and accessibility
- Watch for potential safety hazards, such as stairs or doors, at the site
- Be sure the phone will not normally be subjected to driving rain, salt spray, or splashed salt water from snow melt-off
- Be sure a strong vertical surface is available for mounting, or choose a mounting enclosure (see below)
- Be sure telephone service, electrical service, and a secure ground connection are available at the chosen site
- Locate the phone and associated wiring away from neon fixtures, video games, or other equipment that may cause interference

If you would like assistance in choosing a site for your pay phone, or if you would like AT&T to install your pay phones, contact the dealer who sold you your phones. Service warranties are also available from AT&T.

Phone Service Application

If you have not already done so, apply to your local telephone company for phone service. Be sure to subscribe to direct long distance service as well as local service. **If available, the selected line should have a feature that prohibits operator-assisted calls from being charged to the line.** This includes incoming collect calls (reversed charges) and third party calls. For more specific telephone service considerations, see page 18.

NOTE: If you are considering installation of your pay phone(s) behind a PBX, you must see Appendix B before installing.

Power Service Secured

Your AT&T Private Pay Phone *Plus* requires a 110-volt outlet within about 30 feet of the selected site if you use the 22-gauge power cable supplied with your phone (see "Electrical Service" in Section III for specific wire sizes and allowed distances from the phone). The outlet must be protected from unauthorized access.

Programming Decisions

The rates your AT&T Private Pay *Plus* will charge your customers are programmed into the phone remotely. All programming decisions should be made before installation, although these decisions can be changed later.

B. Enclosure Choice

The AT&T Private Pay Phone *Plus* may be mounted onto a wall with or without a backboard. The mounting surface must be a vertical surface with enough strength to provide secure fastening of the phone. The phone may also be mounted with one of the following enclosures, available from AT&T:

- Econo Shelf (KS-22235) (use indoors only)
- The Silencer (KS-22642) (use indoors or outdoors)
- The Sentry 22 (KS-23222) (use indoors or outdoors)
- The Sentry 23 (KS-23223) (use indoors or outdoors)

Your AT&T representative can help you decide what enclosure best suits the installation of your phone. For more specific enclosure information, see page 18.

C. Pre-Installation Assembly

We strongly recommend that you assemble and power-up your phone before installation.

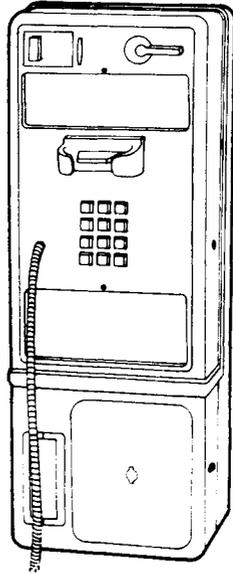
Parts Checklist

Following is a list of the parts you should have in your telephone package. On the next page are pictures of the parts to help you identify them. Make a check in the box that follows the listing of the part as you find that part. Some items are packed inside the telephone coin box. Those items are listed on page 10 with the instructions for removing the coin box.

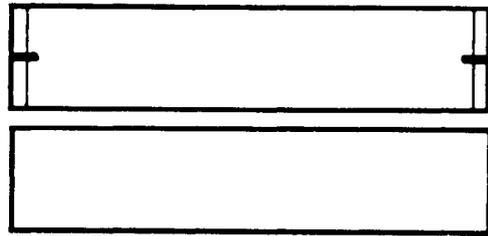
1. One *Owner's Manual* (this book)
2. One coin telephone set
3. Instruction card sheet and two covers
4. One telephone number card and cover
5. One T-Key (*Do not insert keys into any locks until you are instructed to do so*)
6. Two coin vault door lock keys (*Do not insert keys into any locks until you are instructed to do so*)
7. Two front housing lock keys (*Do not insert keys into any locks until you are instructed to do so*)

Now turn to page 10.

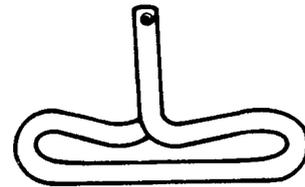
Checklist Items



2



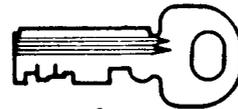
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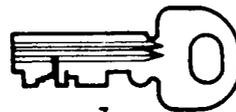
5

(Coins returned) (See Owner Manual)		SPEED DIAL # (1-10)
LOCAL CALLS: \$ for minutes \$ for each additional minutes	NO CHANGE PROVIDED	
DIRECTORY ASSISTANCE: Within this Area Code \$ dial Outside this Area Code \$ dial		
EMERGENCY: dial 800 NUMBERS \$ dial 800 - Number LOCAL OPERATOR dial TOLL OPER		
(Coins returned) 1 LISTEN FOR TONE 2 DIAL CALL 3 DEPOSIT COINS		
LOCAL CALLS: \$ for minutes \$ for each additional minutes	NO CHANGE PROVIDED	
DIRECTORY ASSISTANCE: Within this Area Code \$ dial Outside this Area Code \$ dial		
EMERGENCY: dial 800 NUMBERS \$ dial 800 - Number LOCAL OPERATOR dial TOLL OPER		
Calling Card Calls	Within this Area Code Number Outside this Area Code Area Code - Number Wait for special tone, then dial Telephone Credit Card Number	
Collect and 3rd Party Calls	Within this Area Code Number Outside this Area Code Area Code - Number Wait for special tone, then dial 0 for Operator	
Station-to-Station Calls	Within this Area Code Number Outside this Area Code Area Code - Number	
Coin Return This phone is owned by This location is Free calls (No Coins needed)	Repair Service	

3



6



7

Using the following instructions, remove the coin box from the telephone. You may need a pair of pliers to remove the coin box.

Using the picture on the right as a guide, unlock the coin vault lock on the lower right side of the phone.

Insert the T-key into the coin vault door lock. Turn counter-clockwise to release and remove the coin vault door.

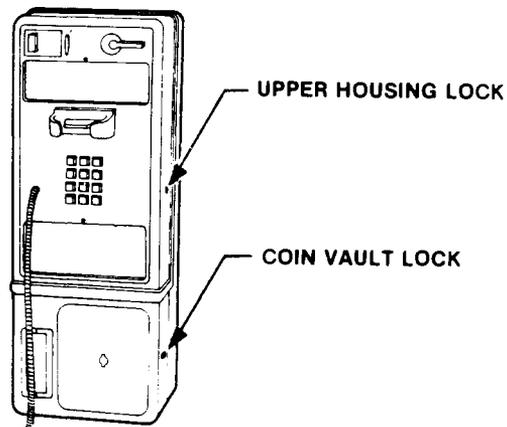
Pull on the coin box handle (you may use pliers) to remove the coin box lock from the coin vault. Pull the coin box straight out.

Remove items packed in the coin box. Push in and reset the coin box lock (see Figure 12 on page 31 if you need help with the resetting). Replace the coin box, reversing the above procedure. Remove the T-key.

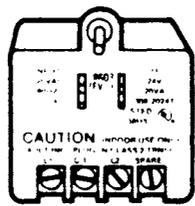
Now complete the parts checklist, checking the box after each item is found. Use the pictures on the next page to help you identify items.

8. One power transformer
9. One 30-ft power cable (D-station wire)
10. One 7-ft modular two-conductor telephone line cord
If additional length is required, use an extension. Do not replace this cord with four-conductor cord unless another set is sharing this pay phone's line.
11. Packet containing four security studs
12. Packet containing seven mounting screws
13. One packet of out-of-service labels

Save your sales receipt in case you ever need repair service.



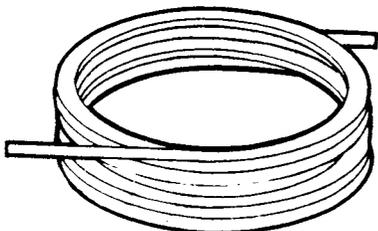
Checklist of Items in Coin Box



8



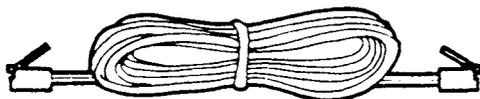
11



9



12



10

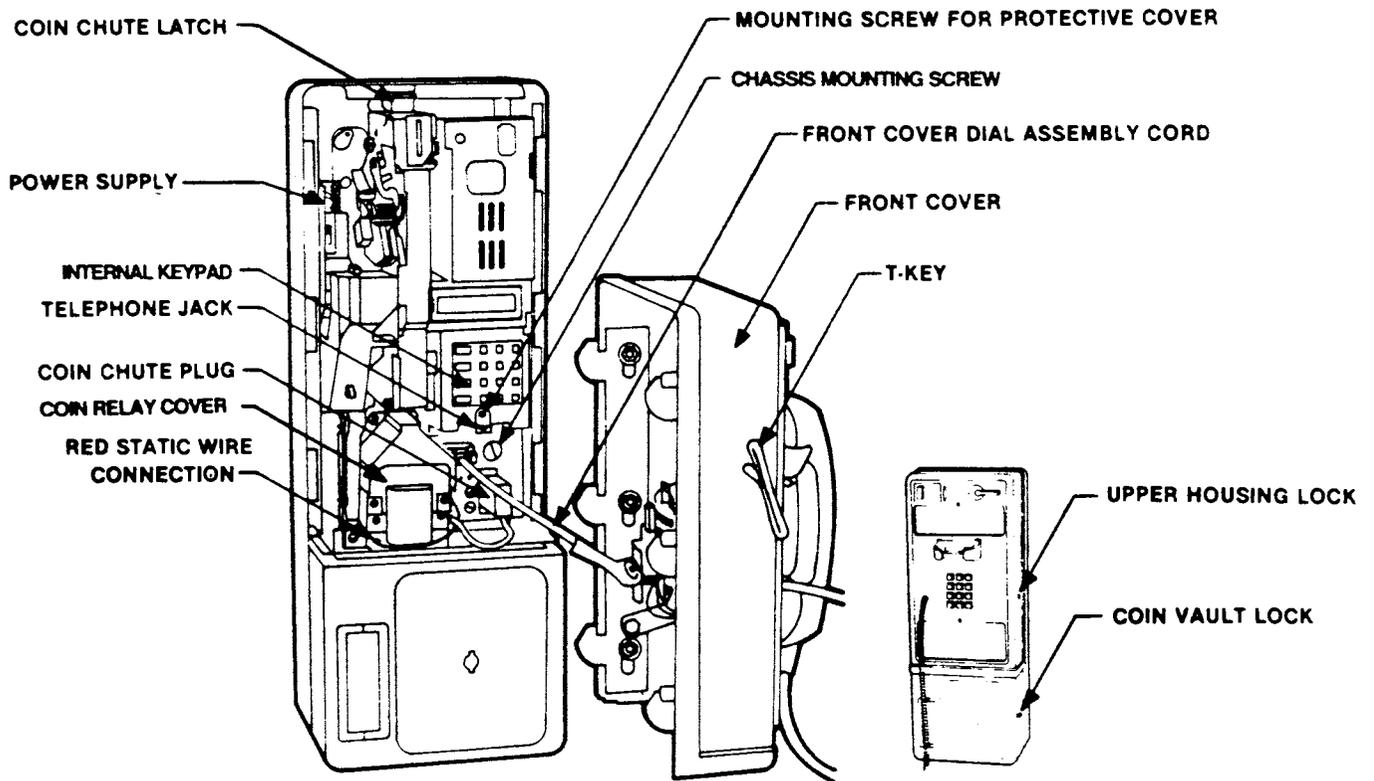


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Pre-installation Power-up

Check the telephone before completing the permanent installation by performing the following pre-installation power-up. *You will need a small screwdriver and a wire stripper to complete the temporary power connection.*

Figure 1 Parts of the AT&T Private Pay Phone *Plus*



Following are the steps to perform the pre-installation power-up:

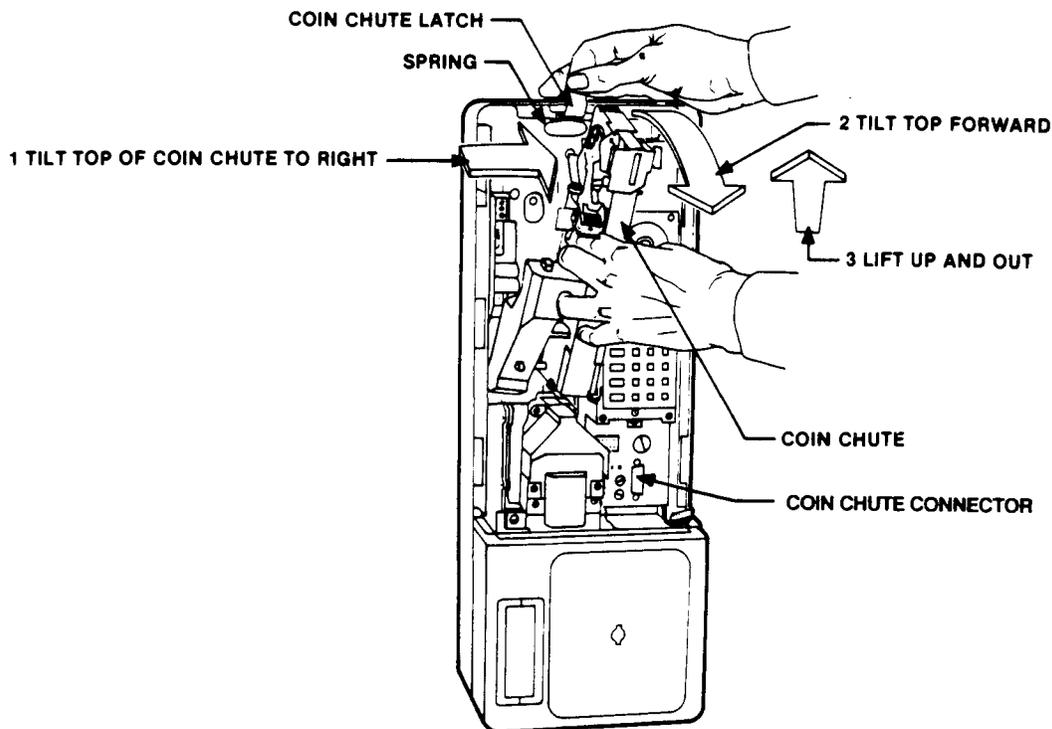
1. Remove Front Cover

- Using the key labeled 29A or 29B, unlock the upper housing lock on the right side of the telephone.
- Insert the T-key into the keyhole on the left side of the telephone. Unlock the front cover of the phone by turning the T-key counterclockwise. Do not remove the T-key.
- Gently pull the front cover from the base housing. Unplug the front cover dial assembly plug from its socket underneath the internal keypad within the base.
- Make sure the red static ground wire is attached to its screw on the inside floor of the main housing.

2. Remove Coin Chute from Phone

- Loosen the mounting screw on the plastic protective cover of the chassis. Remove the plastic protective cover by pulling the bottom of the plastic cover forward, and then lift the plastic cover off the base.
- Remove the plastic coin relay cover.
- Unlatch and unplug the coin chute plug from its socket underneath the internal keypad.
- Push up the coin chute latch above the coin chute. Release the spring located above the coin chute between the coin chute and the base housing by pushing the spring up (toward the top of the housing) with your thumb.
- Remove the coin chute.

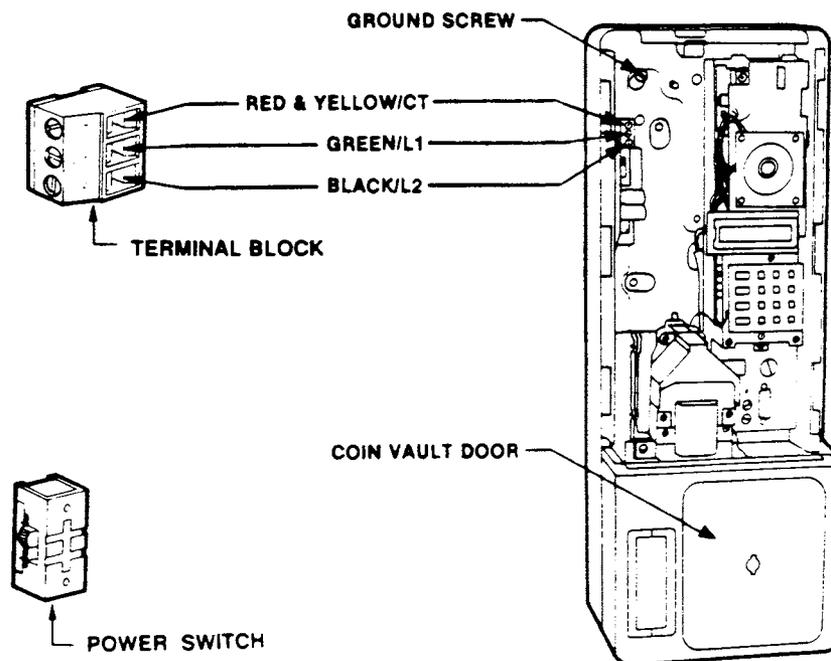
Figure 2 Removing the Coin Chute



3. Temporarily Connect 24V Power Cable to Phone

- Using a wire stripper, strip about 2 inches of the outer jacket from one end of the electrical power cable.
- If the rubber grommet in the back of the telephone is not already split, use a pair of scissors or utility knife to cut the grommet from the hole part way up and from the hole part way down. The power cord must be threaded through the grommet. (For additional help, see Figure 10.) The grommet is there to keep out moisture and dust, so do not cut a larger slit than necessary.
- If a terminal block is used on the power supply board, strip 1/4 inch insulation from the red, yellow, green, and black power cable wires. Then loosen the terminal block's connection screws labeled CT, L1, and L2. See Figure 3. If your telephone is equipped with a power switch, be sure it is set to the OFF position.
- Insert wires into the following connection terminals:
red and yellow wires into connection terminal **CT**
green wire into connection terminal **L1**
black wire into connection terminal **L2**
- Pull gently on the wires to confirm the connection.
- **Ground the phone housing.** This is an important part of the procedure. If you are not sure how to ground the housing, see "Grounding the AT&T Private Pay Phone *Plus*" in Section III.

Figure 3 Connect Power Cable



4. Temporarily Connect Power Cable to Power Transformer

- Strip about 2 inches of the outer jacket from the other end of the electrical power cable.
- Strip about 1/2 inch insulation from the 4 exposed wires.
- Make sure the color of each small wire attached to a labeled connector on the power supply board corresponds to the same color of wire and label on the terminal block of the power transformer:
 - **red and yellow** wires to CT
 - **green** wire to L1
 - **black** wire to L2
- Connect each wire to the appropriately-labeled screw terminal on the power transformer.

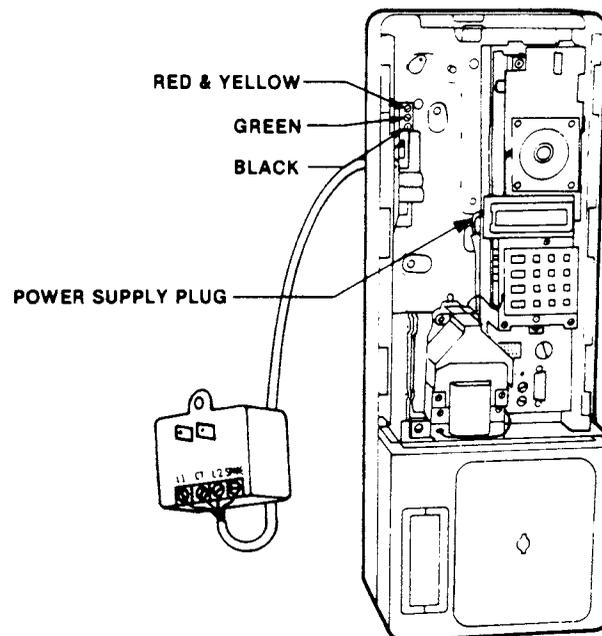
NOTE: The terminal labeled "SPARE" on the power transformer is not used.

NOTE: Make sure wires are secure and the ends are not sticking out. Unsecured wire ends touching the metal plates will cause a short when power is restored.

CAUTION

Confirm that wire connections at the power transformer and the power supply board's terminal block are matching.

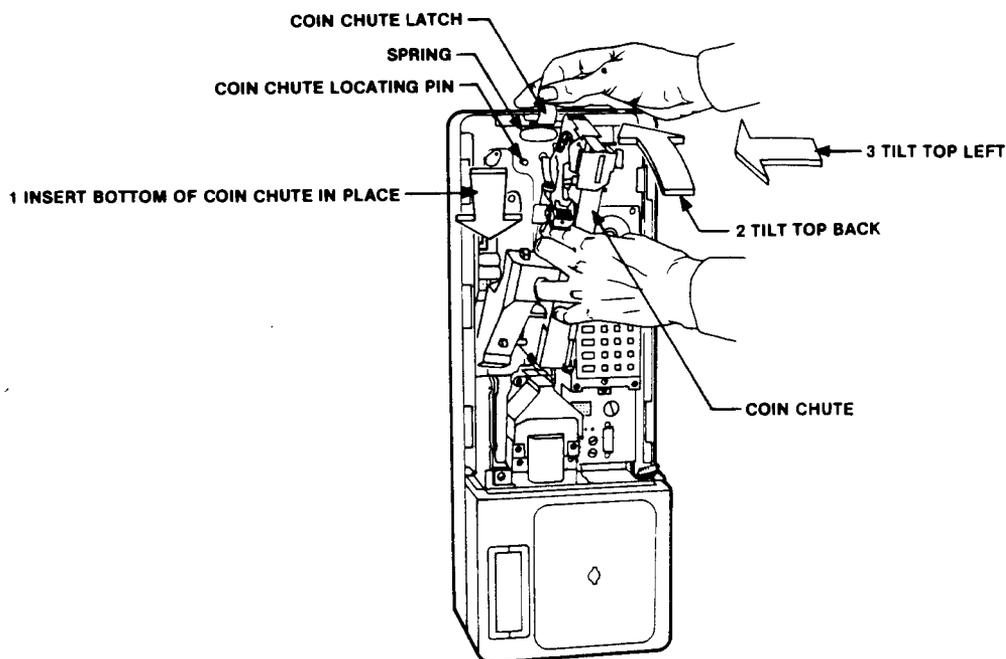
Figure 4 Connect Power Wire to Power Transformer



5. Place Coin Chute Back Into Phone

- Make sure that the coin slot on the coin chute is facing towards you.
- Refer to Figure 5. Place the coin chute back into the base housing. The coin chute should be aligned with the locating pins. Push the coin chute back until it is against the back wall of the base housing. Make sure the power supply cables are routed below the coin chute and against the back wall.
- Push up on the latch above the coin chute on the base housing (make sure the spring is inserted into its holding area on top of chute), and then push the latch down.
- Insert the coin chute plug into its connector (located below the internal keypad) and latch.
- Replace the plastic cover that protects the chassis, and screw plastic cover to chassis.
- Replace plastic coin relay cover.

Figure 5 Replace Coin Chute



6. Plug in Power Transformer

WARNING

TO REDUCE THE RISK OF ELECTRICAL SHOCK, DISCONNECT POWER TO THE RECEPTACLE BEFORE INSTALLING OR REMOVING THE UNIT. TAPE THE COVER PLATE TO THE RECEPTACLE BOX. WHEN REMOVING THE RECEPTACLE COVER SCREW, COVER MAY FALL ACROSS PLUG PINS OR RECEPTACLE MAY BECOME DISPLACED.

- Plug the power transformer into a 110-volt outlet. It may be necessary to remove the captive screw on the power transformer. After testing the phone, replace the screw since it may be needed for final installation.
- If your phone is equipped with a power switch, be sure it is set at the ON position.

7. Plug in Telephone Line Cord
 - Push one end of the telephone line cord through the rubber grommet and into the jack just below the chassis cover. If the rubber grommet has not been cut to allow for the cord and plug, see page 14. Plug the other end into a working telephone line jack. Pick up the handset and listen for dialtone. Dial a number. If the call is placed successfully, the phone may be installed permanently.
8. Disconnect Power Transformer and Power Wires
 - Unplug the power transformer from the outlet and remove the power wires from the transformer.
 - Remove the front cover of the phone, following instructions on page 13.
 - If your power supply is equipped with a switch, turn the power switch to OFF.
 - Hold the power supply board against the housing and disconnect the power wires from the power supply board. *NOTE: You may have to remove the coin chute to disconnect the power wires from the power supply board.*
9. Disconnect the telephone line cord.
10. Replace Front Cover
 - Plug the dial assembly cord from the front cover into its socket underneath the internal keypad.
 - Slide the front cover back onto the base housing.
 - Secure the front cover to the base housing by turning the T-key clockwise.
 - Remove the T-key.
 - Using the lock key in the lock on the right side, lock the front cover.

Your AT&T Private Pay Phone *Plus* is now ready to be installed at its installation site. We recommend that rate programming be completed before the phone is installed.

SECTION III MOUNTING INSTRUCTIONS

A. Installation Considerations

Note the following considerations when selecting a mounting site for your AT&T Private Pay Phone *Plus*:

- Check the site for good visibility and accessibility.
- Make sure that there are no potential safety hazards (stairs or doorways) near the phone.
- Locate the phone and associated wiring away from neon fixtures, video games, or other equipment that may cause interference.
- At outdoor locations make sure the phone will not be normally subjected to driving rain, salt spray, or splashed salt water from snow melt-off on sidewalks or roads. If the phone is to be exposed to the weather, an enclosure is recommended.
- The mounting surface must be a vertical surface sturdy enough to provide secure fastening for the phone.
- Be sure telephone service, electrical service, and a secure ground connection are available at the site.

Indoor Locations

The AT&T Private Pay Phone *Plus* can be mounted onto a wall with or without a backboard. A backboard can provide a more secure connection when necessary. The phone can also be mounted onto the AT&T Econo Shelf enclosure (KS-22235), or one of the outdoor enclosures listed below. After installation is complete, the power transformer and all wires, cords, and sockets must be protected from the elements and vandalism.

Outdoor Locations

The AT&T Private Pay Phone *Plus* may be mounted in one of the following AT&T outdoor enclosures:

- The Silencer (KS-22642)
- The Sentry 22 (KS-23222)
- The Sentry 23 (KS-23223)

A post (either KS-23224 or KS-23225) is required for mounting these enclosures. The enclosures have provision for mounting the telephone and electrical service outlets and connecting a ground wire. After installation is complete, the power transformer and all wires, cords, and sockets must be protected from the elements and vandalism.

Telephone Service

Your local telephone company must provide a network interface for the site. That may be already in place. Wiring from the network interface to the AT&T Private Pay Phone *Plus* may be done by you, an electrician, or a telephone installer. The wiring at the site must terminate in a modular jack.

Only the AT&T Private Pay Phone *Plus* should be attached to the telephone line. Any additional telephone must be connected to the AT&T Private Pay Phone *Plus*, not to the telephone wire between the network interface and the AT&T Private Pay Phone *Plus*. (See Appendix A.)

Select the following telephone services from your local telephone company:

- Local service
- Long distance service
- Do not select any Custom Calling features, such as Call Waiting.
- As a deterrent against fraud, if your local telephone company offers the service, you may want to subscribe to a feature that **prohibits operator assisted calls from being charged to the pay phone line**. Only direct dialing charges should be charged to the line. Reversed charges, 3rd party charges, and collect calls to the AT&T Private Pay Phone *Plus* should not be allowed. Check with your local telephone company to make sure that your line has such a feature, if available.

NOTE: State P.U.C. regulations may specify that the AT&T Private Pay Phone Plus has to be connected to a special telephone line. Check with your local telephone company.

Electrical Service

The AT&T Private Pay Phone *Plus* connects to a 110-volt outlet for power. A 30-foot power cable has been provided as part of the phone package. The 110-volt outlet must be within 30 feet of the AT&T Private Pay Phone *Plus* if you are using 22-gauge wire. If you use 20-gauge wire, the maximum distance is 48 feet, and if you use 18-gauge wire the maximum distance is 76 feet (only one wire is needed for the "CT" connection when using 18-gauge copper wire). Exceeding these maximums may prevent the phone from receiving enough power to operate.

If necessary, install (or have installed) an electrical outlet nearer the phone. Be sure the outlet can be protected against unauthorized access.

Grounding

The AT&T Private Pay Phone *Plus* must be grounded for proper operation and electrical safety. Also, the phone's ground must be bonded (electrically connected) to the ground used for 110-volt power and telephone service.

WARNING

Failure to ground and bond the pay phone 110-volt electrical power and telephone service properly can result in risk of dangerous electrical shock from lightning. If secure grounds can not be obtained as explained below, contact a qualified electrician to do the service.

Grounding the AT&T Private Pay Phone Plus

The ground at the AT&T Private Pay Phone *Plus* can consist of one of the following:

- A ground wire connected to the phone directly. (The phone has a location for attachment of a ground wire.) Refer to Figure 3.
- A ground wire connected to a phone enclosure. (The AT&T enclosures have a location for attachment of a ground wire.)
- A pedestal mount that is attached to a concrete encased ground, as defined in No. 5, below. If in doubt that a concrete base is grounded, use a ground wire.

When a ground wire is required, we recommend a 14-AWG or larger copper wire with no splices. Use the shortest possible length of ground wire. The ground wire is not supplied with the AT&T Private Pay Phone *Plus*.

For outside installations, or when an electric ground is not available, attach a ground wire to one of the following grounds:

1. The ground post of a telephone company installed station protector if permitted by local electrical code.
2. Power Service Ground -- This includes the grounding electrode conductor, metallic service raceways and conduit, and the service equipment enclosure.
3. Grounded Metal Water Pipe -- The pipe must be electrically continuous, and in direct contact with the earth for 10 feet or more.
4. Grounded Building Steel -- Ground directly to the system of a building (e.g. a ring ground).
5. Concrete Encased Ground -- An electrode consisting of at least 20 feet (total length) of steel reinforcing bars or rods, 1/2-inch diameter minimum, set in at least 2 inches of concrete that is in direct contact with moist earth.
6. Where none of the above electrodes are available, one or more of the following made electrodes must be used:
 - a. Local metal underground system or structure.
 - b. Rod and pipe electrodes. Driven electrodes must have at least 8 feet of length in contact with the soil.
 - c. Plate electrodes.

WARNING

When one of the above made electrodes is used, the ground conductor of both the telephone and electrical power systems must be attached to the same ground connection.

Grounding the Electrical Service

Electrical service must be grounded according to local electrical codes. In addition, for outdoor installations the 110-volt outlet must be bonded to the phone's ground. The bonding can consist of any of the following:

- Use of a metal 110-volt outlet box mounted in or to the phone enclosure.
- For 110-volt wiring run in metal conduit, connect a ground wire from the conduit to the phone's ground. Buried or underground conduit is effectively grounded.
- Extending the green wire ground from the 110-volt outlet box to the phone's ground. This method should only be necessary when plastic outlet boxes are used or if the 110-volt outlet is located indoors.

Grounding the Telephone System

The telephone company will install a station protector that grounds the telephone line in case of overvoltage (such as lightning). For outdoor installations, a station protector must be located at or near (within 3 feet horizontally) the AT&T Private Pay Phone *Plus*. If the telephone company's station protector is not within 3 feet of the phone, an additional station protector using gas tubes must be installed at the phone. AT&T enclosures have provisions for mounting a station protector. The protector ground must be connected to the phone's ground.

Connect the line terminals of the protector and the telephone line to a modular connecting

block. Use this connector block for the phone's telephone connection. Refer to Figure 6.

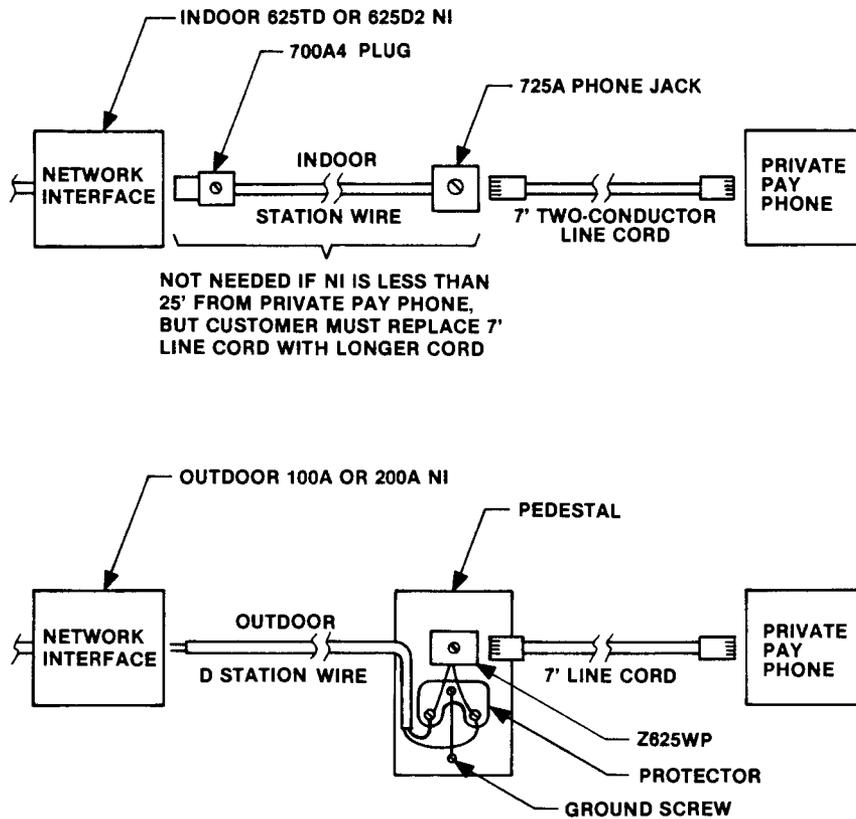


Figure 6 Additional Station Protector Installation

Security Devices

Security devices can be added to your AT&T Private Pay Phone *Plus* to discourage thievery, vandalism, and monetary fraud. Primary concern should be given to protecting the A.C. transformer, power cord, and telephone line cord. Security devices include locks, studs, through-wall fasteners, booths, special backplates, covers, ring seals, armored cords, and alarm switches.

For information on obtaining and installing security devices for your AT&T Private Pay Phone *Plus*, see the AT&T General Business Systems Source Book or consult the dealer from whom you purchased the phone.

B. Mounting an AT&T Private Pay Phone Plus without an Enclosure

Once you have decided on a possible mounting site, measure the mounting space to be sure that the phone (including backboard if a backboard is being used) will fit onto the mounting area.

The mounting area must be a vertical surface. A vertical surface is needed to insure that the coin chute within the phone functions properly. Use a spirit level to determine if the surface is vertical. Use the level in the following way:

1. Place the spirit level vertically against the mounting surface on which the phone is to be installed.
2. When a vertical reading is obtained, the end of the level opposite the point of contact should be no farther from the mounting surface than shown in Table 1 below.

TABLE 1 VERTICAL SURFACE SPIRIT PARAMETERS

SPIRIT LEVEL LENGTH	MAXIMUM ALLOWABLE DISTANCE OUT OF PLUMB
18 inches	15/32 inch
24 inches	5/8 inch
30 inches	25/32 inch
36 inches	15/16 inch

Once a surface has been determined to be vertical, you must determine the size and type of fasteners (screws) to use in order to mount the phone. Refer to Table 2 for this information.

Note: When additional security is required, use through-wall fasteners.

TABLE 2 FASTENERS USED IN MOUNTING BACKBOARDS

FASTENERS USED IN MOUNTING BACKBOARDS

MOUNTING SURFACES					HOLE SIZE REQUIRED	FASTENERS	
SOFTWOOD	HARDWOOD	MASONRY (CONCRETE OR BRICK) (NOTE 1)	PLASTER BOARD AND PLASTER ON LATH (NOTE 2)	PLASTER ON CINDER BLOCK, HOLLOW TILE, OR METAL STUDS		SIZE AND TYPE	QUANTITY (NOTE 3)
•					1/8 OR NO. 30	1-3/4 INCH NO. 14 FLATHEAD TAPPING SCREW	7
	•					1-1/4 INCH NO. 14 FLATHEAD TAPPING SCREW	
		•			1/2	1/4-20 BY 1-1/2 FLATHEAD MACHINE SCREW IN 1/4 by 1-1/4 INCH EXPANSION SHIELD	
			•		1/8 OR NO. 30	1-3/4 INCH NO. 14 FLATHEAD TAPPING SCREW, SECURE IN STUD A MINIMUM OF 1 INCH	6
				•	3/4	1/4 BY 4-INCH ROUNDHEAD TOGGLE BOLT *	

The phone must be flush against the vertical surface when mounted. Therefore you must either: drill a hole through the surface for the telephone line cord, power cable, and ground wire; put a "groove" in the surface for the telephone line cord, power cable, and ground wire; or purchase a coin telephone backboard. Refer to Figure 7 for illustrations of these mounting options.

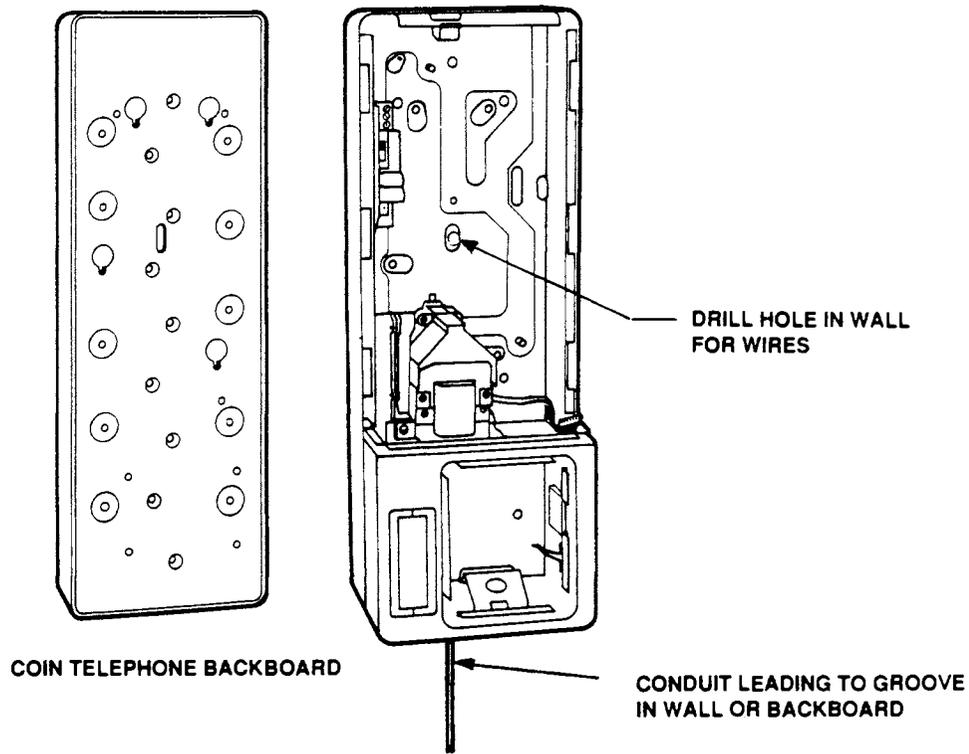


Figure 7 Mounting Options

Before attempting to mount your AT&T Private Pay Phone *Plus*, familiarize yourself with the phone parts illustrated in Figure 8 below.

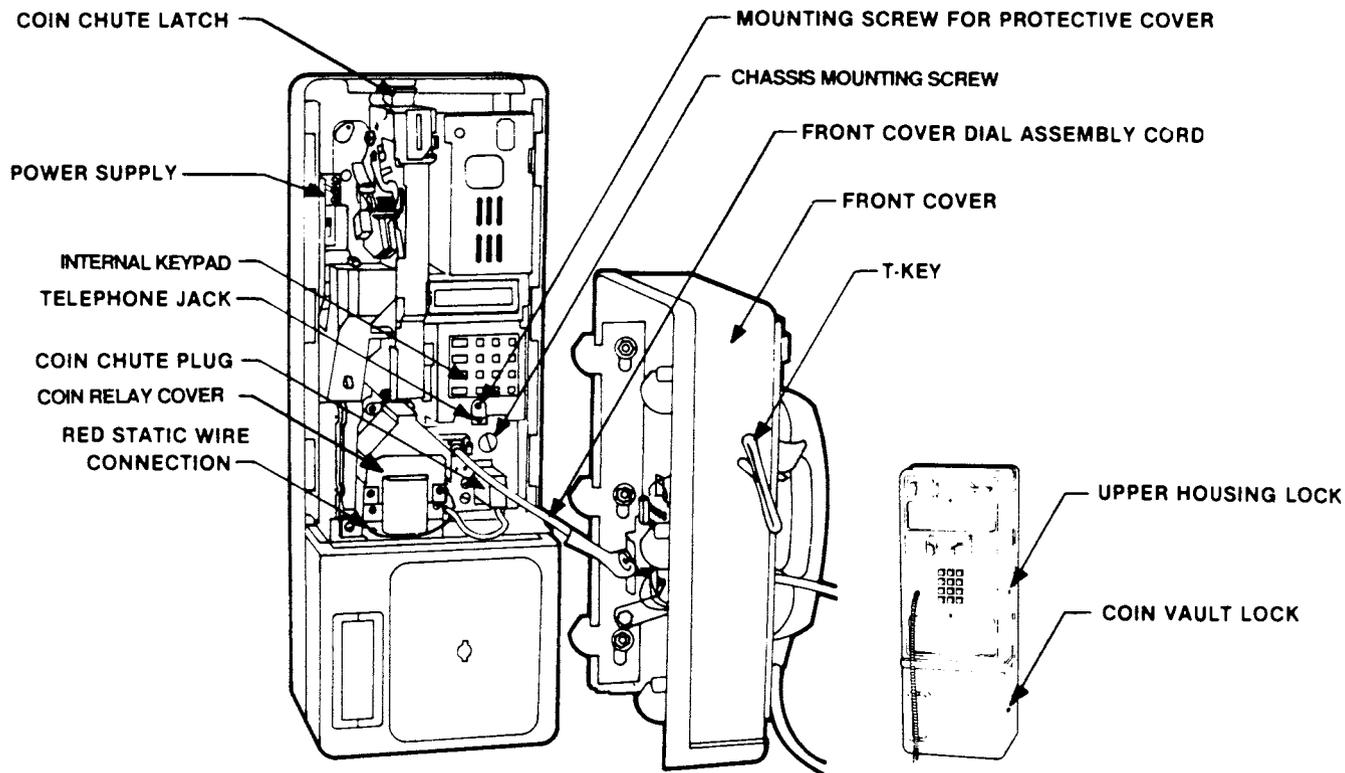


Figure 8 Pay Phone Components

Perform the following steps to mount the phone onto a wall with or without a backboard:

1. Remove Front Cover From Phone

- Refer to Figure 8.
- Use the correct key, it should be labeled 29A or 29B, to unlock the front cover lock on the right side of the phone.

NOTE: The key that locks and unlocks the front cover lock (right side) will only work for the phone (or phones if a group purchase is made) that it came with. Label the key and phone set(s).

- Insert the T-key into the keyhole on the left side of phone, and unlock the front cover of the phone by turning the T-key counterclockwise. Do not remove the T-key.
- Gently pull the front cover from the base housing. Unplug the front cover dial assembly cord from its socket underneath the internal keypad within the base.

2. Remove coin chute

- Refer to Figure 2.

- Loosen the mounting screw on the plastic protective cover of the chassis. Remove the plastic protective cover by pulling the bottom of the plastic cover forward, and then lift the cover off the base.
- Remove the plastic coin relay cover.
- Unlatch and unplug the coin chute plug from its socket underneath the internal keypad.
- Push up the coin chute latch above the coin chute. Release the spring located above the coin chute between the coin chute and the base housing by pushing the spring up (toward the top of the housing) with your thumb. Refer to Figure 2.
- Remove the coin chute.

3. Remove Chassis

- Refer to Figure 8.
- Remove the yellow and black wires from the bottom of chassis.
- Remove the red static ground wire that is attached to the inside floor of the main housing.
- Disconnect the two brown coin box sensor wires from the top printed wiring board by gently pulling away the coin box sensor connector from the board and removing the wires. *DO NOT ALLOW THE WIRES TO BEND OR TOUCH EACH OTHER.*
- Remove the power-supply plug from the left-hand side of the chassis. Refer to Figure 4.
- Unlatch and unplug the single orange wire plug from the top of the front printed wiring board.
- Loosen the chassis mounting screw until screw is free of housing. (The screw can not be removed from the chassis.)
- Slide the chassis down from its housing bracket located at top of inside housing.
- Remove chassis.

4. Remove Coin Box

- Refer to Figure 8.
- Unlock the coin vault lock on the lower right side of the phone.
- Remove the T-key from the upper housing.
- Insert the T-key into coin vault door lock and turn counter-clockwise to release and remove the coin vault door.
- Pull on the coin box handle to remove the coin box from the coin vault. (Note: Pull the coin box straight out.)

5. Remove Rubber Grommet

- Remove the rubber grommet from the hole it protects (inside housing). Refer to Figure 9.

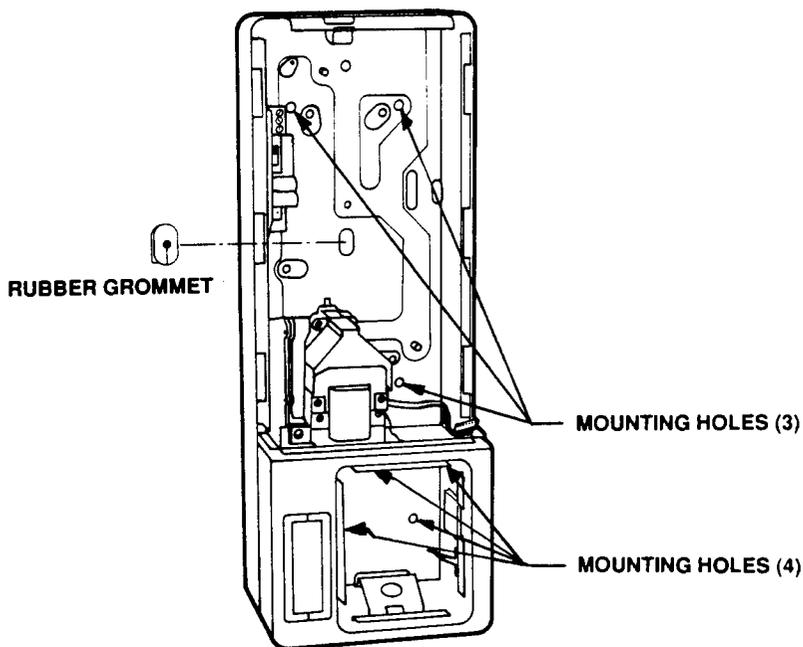


Figure 9 Rubber Grommet Location and Mounting Holes

6. Mark and Drill Mounting Holes

- Refer to Table 2 for drill sizes and screws required.
- Have an assistant hold the phone housing against the wall. (The coin insert slot should be 54" from the floor, so that the top of the housing is about 56" from the floor.) Use a spirit level to make sure the housing is vertical. Then use a pencil or pen to mark on surface (through appropriate holes inside housing) where holes are to be drilled for mounting screws. Refer to Figure 9 for the housing mounting screw holes.
- Mark where the wire entrance hole (rubber grommet hole) will be if a hole is to be drilled through the wall for the electrical power cable, ground wire, and 2-conductor telephone cord. Refer to Figure 9.

NOTE: If the phone is being mounted at a location where a telephone cord has already been routed (i.e. where the phone is replacing a coin telephone), then use the telephone wire cord that is already there.

- If you are using the "groove" method, determine where groove should go and groove surface. (Note: A groove may not be necessary if you are using a 178A Backboard, and do not plan to drill a hole through the wall. Refer to Figure 7.)
- Drill all necessary holes.

7. Lay Power Cable, Ground Wire, and Telephone Line Cord

- Lay the power cable, ground wire, and 2-conductor telephone line cord. If a hole was drilled through the wall, put them through hole. If a groove was placed on the wall, channel them along groove. (You may need to tape the cable, wire, and line cord down in groove.) In either case, make sure they can reach their respective connections. Refer to Figure 6.

8. Mount AT&T Private Pay Phone *Plus* Housing

- If a backboard is being used, place the electrical power cable, ground wire, and 2-conductor telephone line cord through the wire entrance hole on backboard. Then mount the backboard to the surface. Install the four security studs (shipped loose) into the back of the phone.
- Place electrical power cable, ground wire, and 2-conductor telephone line cord through wire entrance hole in phone (outside to inside). Refer to Figure 7.
- If the rubber grommet is not already cut, use a pair of scissors or a utility knife to cut the hole in the grommet part of the way up and part of the way down. The grommet is there to keep out moisture and dust, so don't cut more than necessary. Bring electrical power cable, ground wire, and telephone line cord through center hole of grommet. Refer to Figure 10.
- Place rubber grommet back into base housing (thus sealing the opening in the back of the base housing). See Figure 10.
- If a backboard is being used, place the security studs protruding from the back of the phone into the keyhole slots on the backboard and let the phone drop into position. Screw the phone to the backboard using the seven mounting screws shipped with the phone (see Figure 9).
- If a backboard is not being use, have an assistant hold the phone's housing against mounting surface with holes aligned. Insert screws (make sure the phone is vertical -- Table 1) and tighten. The phone housing should now be firmly mounted against surface.

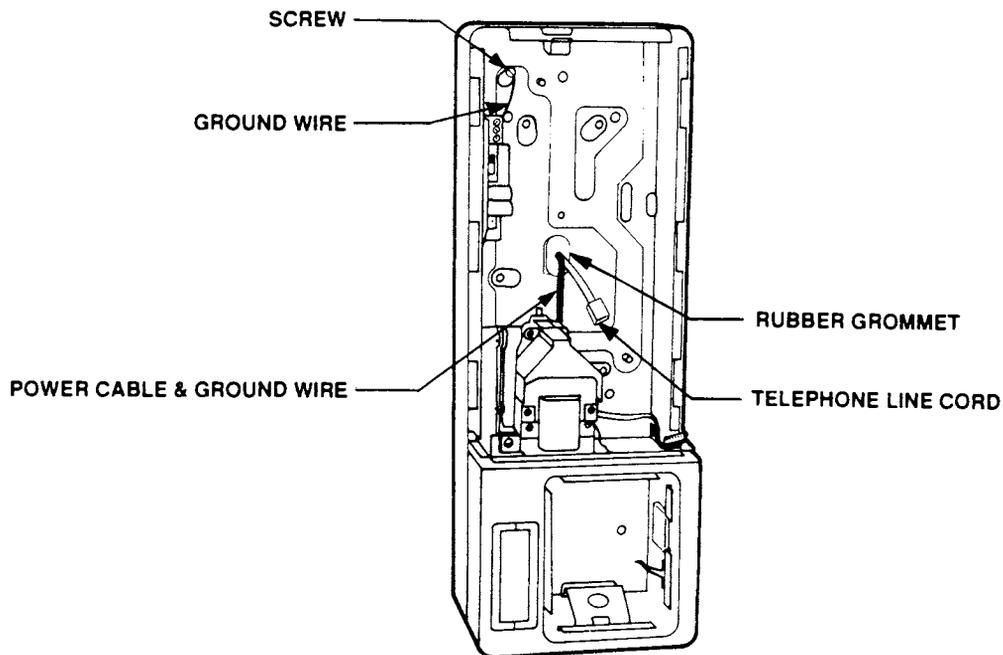


Figure 10 Rubber Grommet Use and Ground Location

Using a pair of scissors or a utility knife, cut the rubber grommet part of the way up from the hole and part of the way down from the hole so that the ground wire, power cord, and telephone line cord can be brought through the hole. The grommet is there for protection from moisture and dust, so do not cut more than necessary.

9. Connect Ground Wire to Phone Housing

- Dress the wire down and below where the coin chute fits flush against the back wall of the housing.
- Connect the ground wire brought inside the phone to the phone's housing. Refer to Figure 10.

10. Connect 24V Power Cable to Power Supply Board

- If you haven't done so, strip about 2 inches of the outer jacket from the end of the electrical power cable inside the phone's housing.
- If a terminal block is used on the power supply board, strip 1/4 inch from the outer jackets of the red, yellow, green, and black power cable wires. Then loosen the terminal block's connection screws labeled CT, L1, and L2. Refer to Figure 11.
- Insert the red and yellow wires into the connection terminal labeled CT, the green wire into connection terminal L1, and the black wire into connection terminal L2. Refer to Figure 11.

- If a terminal block is on the power supply board, tighten each terminal block screw so that wires are locked into place. Refer to Figure 12. Gently pull each wire within the terminal block to confirm the connection.

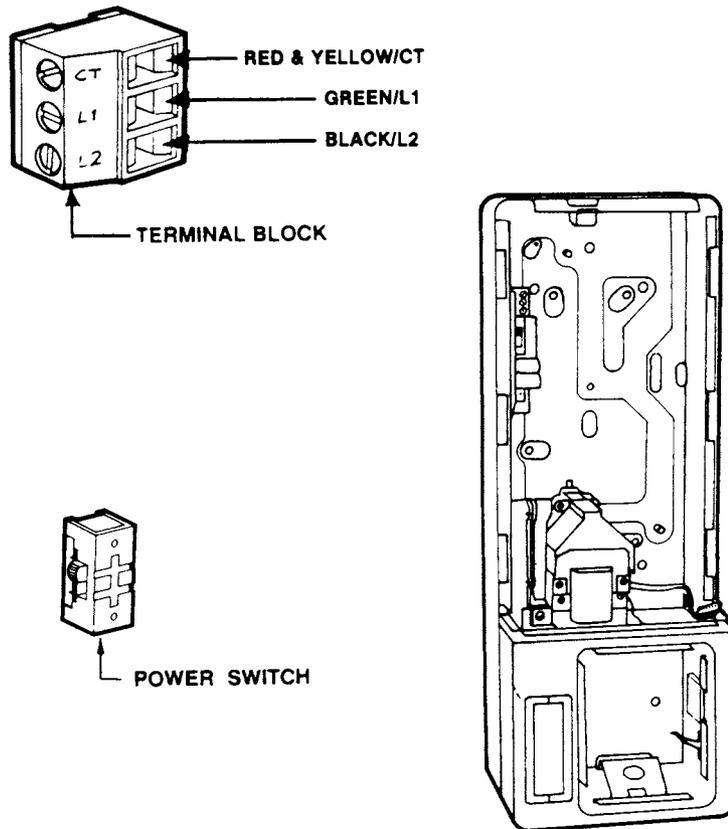


Figure 11 Wiring Connectors On Power Supply Board

11. Replace coin box and coin vault door

- Push in and reset the lock inside the coin box cover. Refer to Figure 12.
- Place coin box back into coin vault (handle facing out), and push straight in. (Note: When pushing the coin box into the vault, apply some pressure at the top front surface and slightly more pressure at the left side. See Figure 12.)
- Replace coin vault door and secure with T-key.
- Lock coin vault. (The lock is on lower-right side of the phone.)

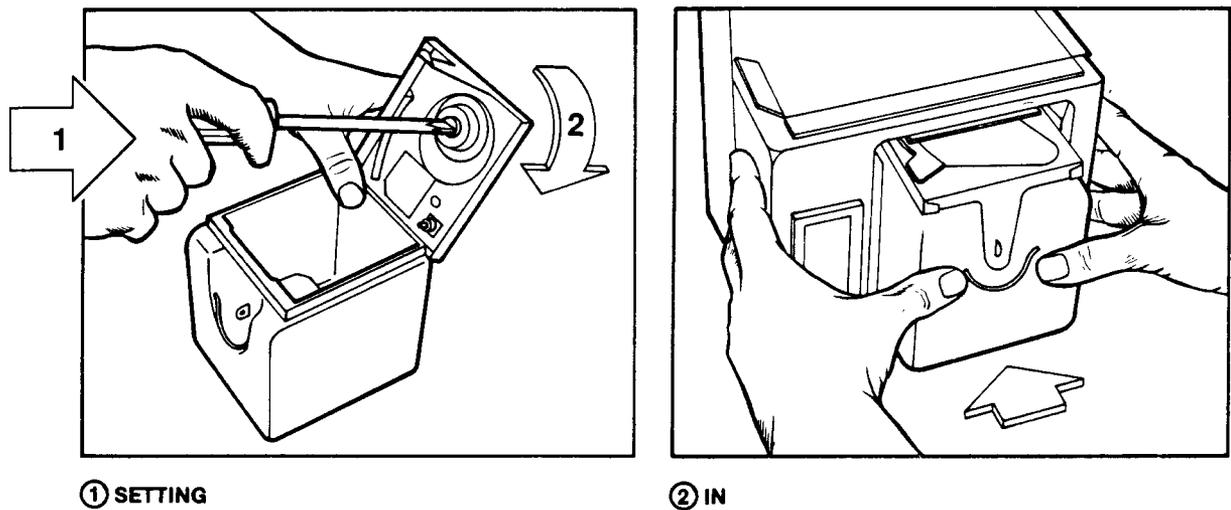


Figure 12 Resetting Coin Box Lock

12. Replace Chassis

- Refer to Figure 8.
- Place the chassis back into housing (bottom of chassis in first with internal keypad facing you) and slide upwards into its housing bracket located at top of inside housing.
- Tighten the chassis mounting screw until the chassis is firmly against housing.
- Install the two brown coin box sensor leads. The ends of the wires should be stripped about 1/4 inch and should be very straight. Gently pulling the coin box sensor connector away from the board to open, insert each coin box sensor wire into the connector until the ends of the wires touch the board. Be sure the wires are straight **BEFORE** you attempt inserting them. *DO NOT ALLOW THE WIRES TO BEND OR TOUCH EACH OTHER. Push the connector down to lock the wires into place.*
- Insert the power-supply plug into its socket on the left-hand side of the chassis (see Figure 4).
- Plug the single orange wire plug into the 60Hz connector which is just below the coin box sensor connection.
- Attach the red static ground wire back to its screw on the inside floor of the main housing.
- Attach the black and yellow wires to their positions on the bottom of the chassis (black → B and yellow → Y).
- Gently pull each wire within the terminal block to confirm the connection.

- Make sure that all connections, including the small and large ribbon connections, are secure.

13. Plug 2-Conductor Telephone Line Cord Into Phone

- Plug the end of the telephone line cord inside the base housing into the modular telephone jack located below the internal keypad. (Note: Make sure the modular line cord is placed so that the coin chute will fit back into place.) Refer to Figure 8.

NOTE: If the telephone line wire cord you are using does not have a plug, purchase a 700A4 telephone wire plug from your local AT&T Phone Center. Follow the instructions that come with the plug, but attach the telephone wire to the plug by stripping the outer jacket from the telephone wire. Place the red wire into the "G" hole, and place the green wire into the "R" hole. Cut off the yellow and black wires (be sure you don't connect them). USE A TWO-CONDUCTOR LINE CORD ONLY unless you are installing an additional phone (see Appendix A)

14. Replace Coin Chute

- Refer to Figures 5 and 8.
- Make sure that the coin slot on the coin chute is facing towards you.
- Place the coin chute back into the base housing. The coin chute should be aligned with the locating pins. Push the coin chute back until it is against the back wall of the base housing. Make sure the power supply cables are routed below the coin chute and against the back wall. Refer to Figure 5.
- Push up on the latch on the phone's housing above the coin chute (the latch automatically resets the spring), and then push the latch down.
- Plug the coin chute plug into its socket below the internal keypad and latch.
- Replace the plastic cover that protects the chassis, and then tighten screw.
- If the power supply board has a power switch, turn it to ON position.

15. Establish Electrical Power

The transformer, power cable, and telephone line cord should be protected from vandalism (covered and hidden from view). A "double transformer" (COMCODE 405-382-383) is available for instances where two phones are to share one transformer. To power up the AT&T Private Pay Phone *Plus*

WARNING

TO REDUCE THE RISK OF ELECTRICAL SHOCK, DISCONNECT POWER TO THE RECEPTACLE BEFORE INSTALLING OR REMOVING THE UNIT. TAPE THE COVER PLATE TO THE RECEPTACLE BOX OR WHEN REMOVING THE RECEPTACLE COVER SCREW, COVER MAY BECOME DISPLACED AND FALL ACROSS PLUG PINS.

- Connect power cable to A.C. transformer. Determine the length of power cable needed to reach the A.C. Transformer. Cut off any excess cable.
- Refer to Figure 4.

- Strip about 2 inches of the outer jacket from the other end of the electrical power cable.
- Strip about 1/2 inch of insulation from the 4 wires now exposed.
- Make sure that the color of each small wire attached to the power supply board inside the base housing corresponds to the same color of wire and label of terminal on the power transformer. (Red and yellow wires both to CT, green wire to L1, and black wire to L2.)
- Connect each wire to its appropriate labeled terminal on the power transformer. Gently pull each wire within the terminal block to confirm the connection.

NOTE: The wires and labels should match those used on the power supply board inside the phone. The terminal labeled "SPARE" on the power transformer is not used. No bare wires should be exposed past the adapter housing.

- If your phone is equipped with a power switch, make sure it is in the OFF position.
- Plug power transformer into a 110 A.C. outlet. Plug telephone line cord into a modular phone jack.
- If your phone is equipped with a power switch, turn it to the ON position.
- Restore power to the A.C. outlet.

NOTE: If you are connecting an additional phone to your AT&T Private Pay Phone Plus refer to Appendix A.

16. Replace Phone's Front Cover

- Refer to Figure 8.
- Plug the front cover dial assembly cord into its socket underneath the internal keypad
- Slide the front cover back onto base housing.
- Secure the front cover to the phone's housing with the T-key, and then remove the T-key.
- Lock the front cover to the phone's housing.

C. Mounting the AT&T Private Pay Phone Plus with an Enclosure

Mounting Phone to the Econo Shelf Enclosure

The Econo Shelf is shipped fully assembled for ease of installation. It has a built-in directory shelf that can hold two 4-inch telephone directories side-by-side. The mounting site for the Econo Shelf must be at least 31 inches in height and 23 inches in width. Ideally, the mounting (wall) bracket of the shelf should be mounted 49 inches from the floor to obtain a coin slot height of 4-1/2 feet.

The mounting area must be a vertical surface. A vertical surface is needed to insure that the coin chute within the phone functions properly. Use a spirit level to determine if the surface is vertical. Use the Level in the following way:

1. Place the spirit level vertically against the mounting surface on which the Econo Shelf is to be installed.
2. When a vertical reading is obtained, the end of the Level opposite the point of contact shall be no farther from the mounting surface than shown in Table 1.

Once a surface has been determined to be vertical, you must obtain the fasteners (screws) necessary to mount the Econo Shelf. The fasteners must be 1/4 inch in diameter. Refer to Table 2. (Note: When additional security is required, use through-wall fasteners.)

A hole is usually drilled through the wall (at Econo Shelf wire-entrance point) for the telephone line cord, power cable, and ground wire before the Econo Shelf is installed. The modular phone jack and power transformer can be protected against vandalism by a special Adapter Kit, KS-23412, for the Econo Shelf.

Mounting Econo Shelf to Wall without Adapter Kit

To mount an Econo Shelf to a wall:

1. Either drill a hole through the wall for the 2-conductor telephone line cord, power cable, and ground wire, or use the vertical groove on the backwall of the Econo Shelf for placement of the line cord, power cable, and ground wire. (The groove provides both wire placement and flush surface mounting.)
2. Install the mounting bracket to the wall (49 inches from the floor) using appropriate fasteners. The fasteners must be 1/4 inch in diameter. Refer to Figure 13.
3. Place 2-conductor telephone line cord, power cable, and ground wire as required. (Either through hole in wall or taped to wall so that a groove on the Econo Shelf can be placed over the wiring).
4. Bring line cord, power cable, and ground wire through center hole in back panel (outside to inside), then hang the enclosure onto the wall bracket and attach enclosure to wall with six (6) 3/8 inch diameter flat head screws. Mounting holes are provided in the back panel of the shelf. Refer to Figure 13. (The Econo Shelf should be flush against the wall, and should not pinch any wiring.)
5. Mount phone to back panel. Refer to the "Mounting the AT&T Private Pay Phone *Plus* to Econo Shelf" description in this section.

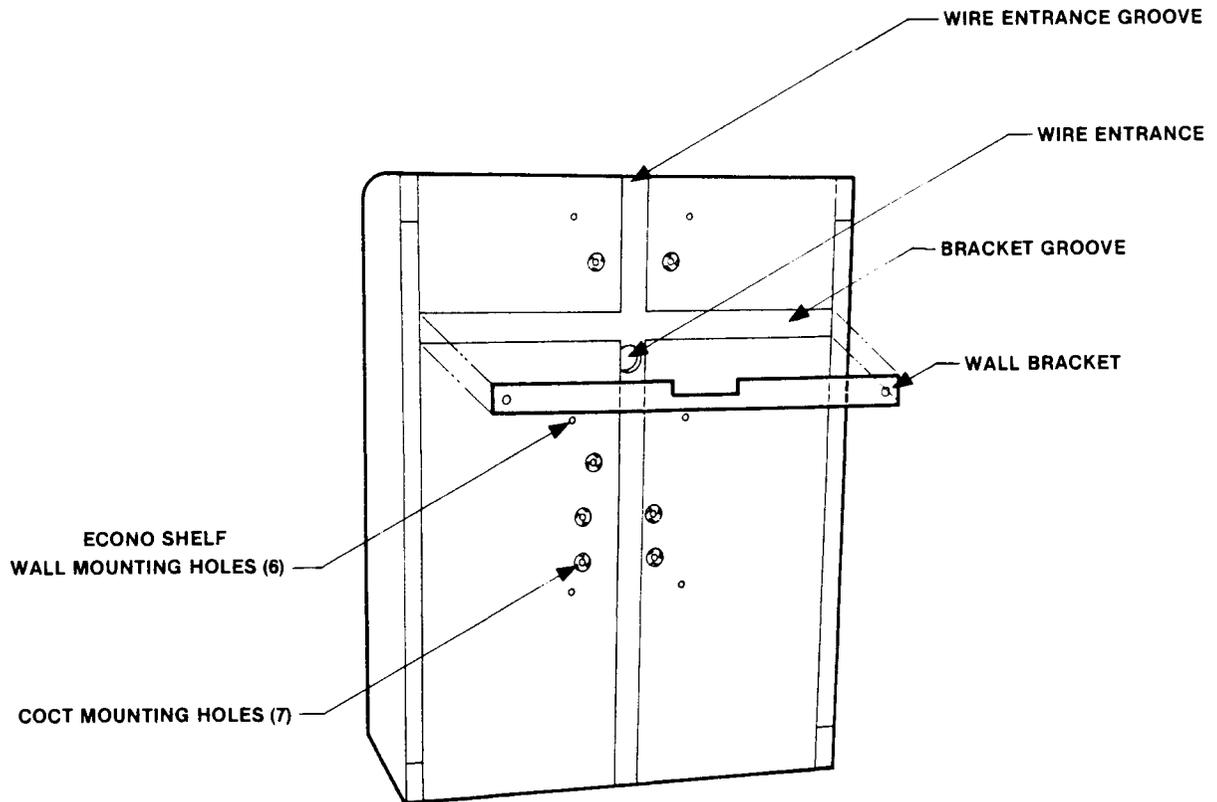


Figure 13 Mounting Econo Shelf

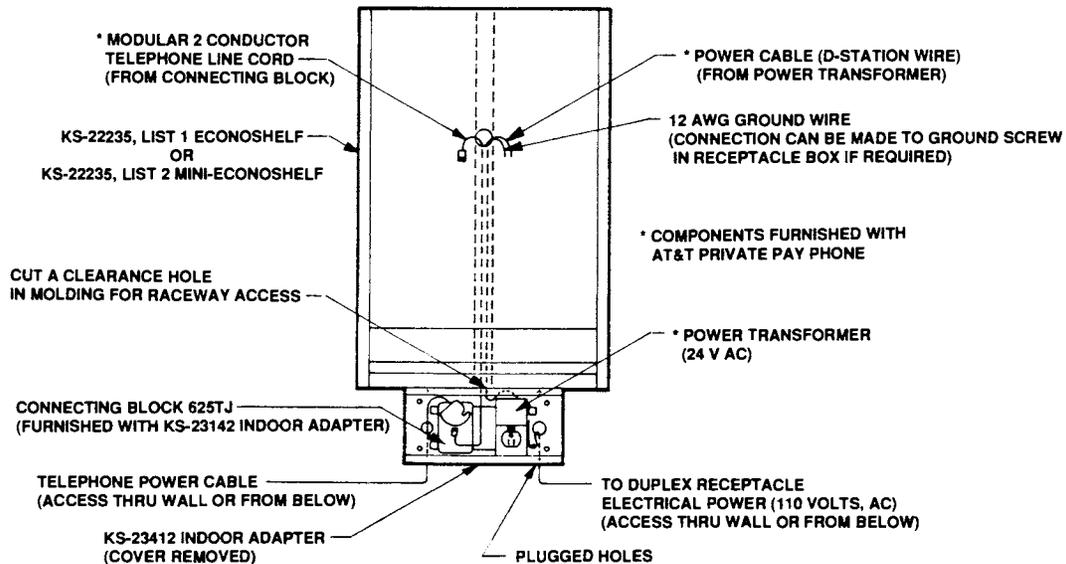
Mounting Econo Shelf to Wall with Adapter Kit

To mount an Econo Shelf and Adapter Kit to a wall:

1. Install the mounting bracket to the wall (49 inches from the floor) using appropriate fasteners. The fasteners must be 1/4 inch in diameter. Refer to Figure 13.
2. Hang the enclosure onto the wall bracket, and attach the enclosure to wall with six (6) 3/8 inch diameter flat head screws. Mounting holes are provided in the back panel of the shelf. Refer to Figure 13. (The Econo Shelf should be flush against the wall, and should not pinch any wiring.)
3. Cut a clearance hole into the bottom molding of the Econo Shelf (at vertical groove). The clearance hole will provide access to the wire routing groove on the backwall of the shelf.

4. Remove cover of adapter, and center adapter enclosure under shelf as shown in Figure 14.
5. Use indoor adapter enclosure as a template and mark mounting holes (4). If power is to be accessed through wall, mark telephone and electrical access holes (2). Refer to Figure 14.
6. Drill holes.
7. Attach adapter enclosure to wall using appropriate fasteners for wall type. Refer to Table 2.
8. Power the duplex receptacle (110 Vac) within the adapter enclosure in accordance with your local electrical codes. (Note: Access receptacle through wall or from below adapter enclosure. A ground screw is located within the receptacle box.)
9. Power the telephone connecting block within the adapter enclosure in accordance with AT&T installation instructions for modular jack 625TJ. (Note: Access telephone connecting block through wall or from below adapter enclosure.)
10. Use the slot in the top rear of the adapter enclosure for access to the vertical groove on the backwall of the Econo Shelf when running wires from telephone. Replace cover of adapter enclosure when telephone is powered up.

Figure 14 Econo Shelf with Adapter Kit



Mounting the AT&T Private Pay Phone Plus to Econo Shelf

Before attempting to mount the phone, familiarize yourself with the phone parts illustrated in Figure 8. Then do the following steps to mount an AT&T Private Pay Phone *Plus* on to an Econo Shelf:

1. Perform Steps 1-5 In The "Mounting the AT&T Private Pay Phone *Plus* without an Enclosure" Description Above.
2. Mount phone's housing
 - Place the electrical power cable, ground wire, and 2-conductor telephone line cord through the wire entrance hole in the phone (outside to inside). Refer to Figure 7.
 - Cut the rubber grommet and bring electrical power cable, ground wire, and telephone line cord through the center hole of grommet. Refer to Figure 10.
 - Place the rubber grommet back into the base housing (thus sealing the opening in the back of the base housing). See Figure 10.
 - Have an assistant hold the phone's housing against the back panel of Econo Shelf with holes aligned.
 - Insert the seven mounting screws (make sure the phone is vertical) and tighten (see Figure 9). The phone housing should now be firmly mounted against back panel of Econo Shelf.
3. Perform Steps 9 - 16 in the "Mounting the AT&T Private Pay Phone *Plus* without an Enclosure" Description Above.

Mounting the AT&T Private Pay Phone Plus to the Silencer, Sentry 22, or Sentry 23 Enclosure

The Silencer, Sentry 22, and Sentry 23 Enclosures protect users from high noise levels at indoor or outdoor locations. The Silencer has a cylindrical steel housing, roof, and writing shelf. The Sentry 22 has an aluminum housing, roof, and writing shelf. The Sentry 23 has a housing with aluminum sidewalls, steel roof, and steel writing shelf. Optional features for these enclosures include: roof lighting (outdoor version), directory hangers, and illuminated Charge-a-Call signs. These enclosures are mounted to either a free-standing Sentry II Post/Base or a Sentry II Backboard.

Specifications for the Silencer Enclosure are:

- Height -- 50-5/8 in. (indoor version) or 55-1/2 in. (outdoor version)
- Depth -- 20-1/2 in.
- Weight -- 105 lbs. (indoor version) or 122 lbs. (outdoor version)

Specifications for the Sentry 22 are:

- Height -- 31 in.
- Depth -- 9 in.
- Width -- 14-1/2 in.
- Weight -- 16 lbs.

Specifications for the Sentry 23 are:

- Height -- 45 in.
- Depth -- 11 in.
- Width -- 21-1/4 in.
- Weight -- 50 lbs.

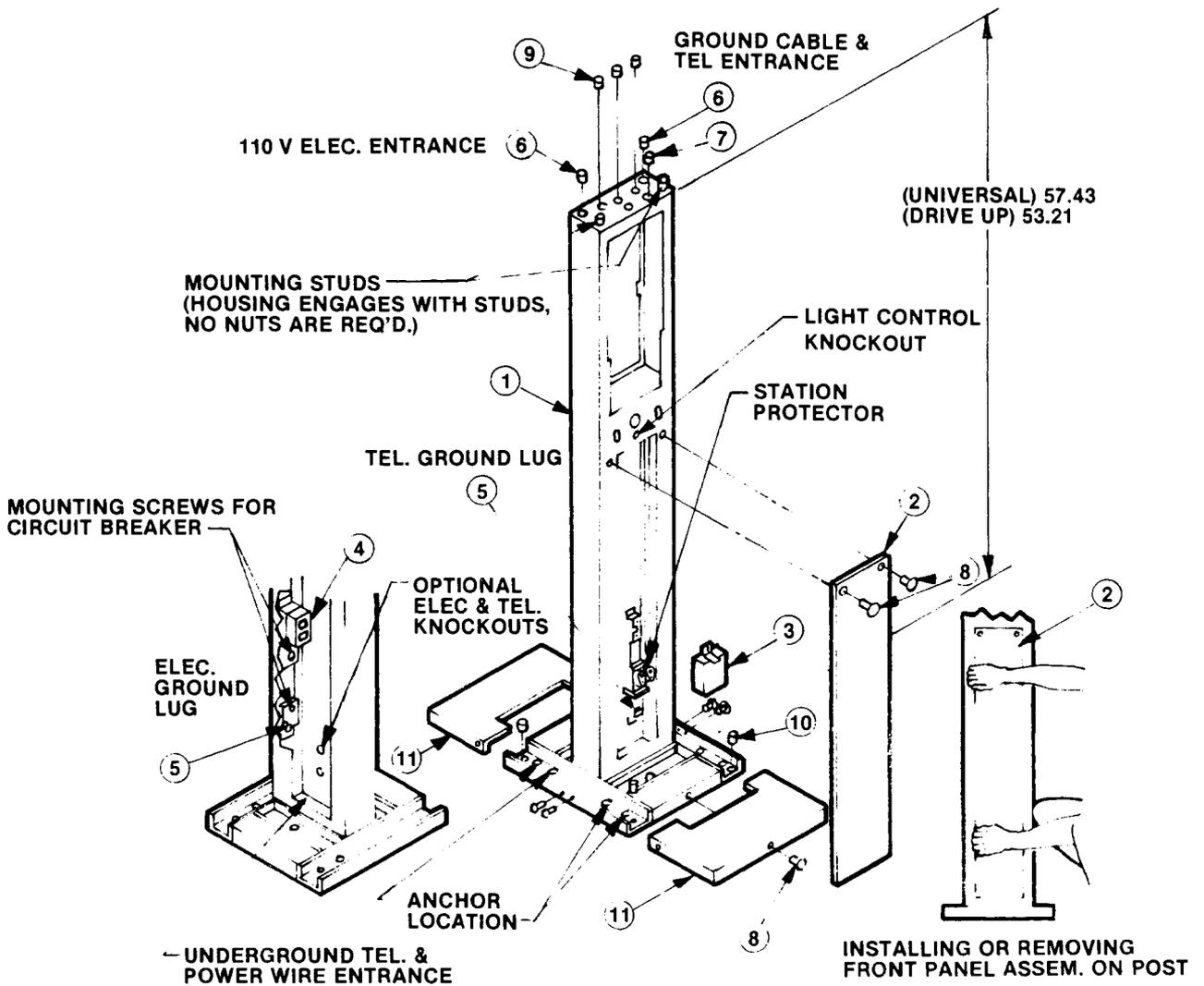
The Sentry II Post/Base combination offers security and vandal resistance with low investment and maintenance costs. This Post/Base is available for both universal (coin slot height 54 in.) and drive-up (coin slot height 48 in.) applications. It is constructed of steel and finished in a baked black vinyl. The top portion of the post has a 3-inch recessed mounting area for the phone.

NOTE: The front of the post allows for light control and a circuit breaker, both of which can be ordered with the post. Should your installation require the telephone to be mounted to a wall, a Sentry II Backboard (KS-23225) is also available. Refer to your AT&T Dealer for information on obtaining a Sentry II Backboard with or without a Backboard Adapter (KS-23428).

The mounting area for the post must be a level and structurally sound surface. A vertical phone mounting surface is needed to insure that the coin chute within the phone functions properly.

Once a structurally-sound surface has been determined, you must obtain the fasteners (anchors) necessary to mount the post. Eight anchors are required at the base (4 on each side) of the post for mounting purposes. Refer to Figure 15. Setscrews (Item 10) provide leveling jacks to assure a vertical phone mounting.

Before the post can be mounted a power cable, 2-conductor telephone line cord, and ground wire must be laid. Entrance holes for the power cable, telephone line cord, and ground wire are provided at the top and bottom of the post for overhead or underground entrance. An aluminum panel on the front of the post provides access to an electrical outlet box and protector for terminating the power and telephone service coming to the post, and for mounting an optional light control and circuit-breaker. Refer to Figures 15 and 16.



ITEM	DESCRIPTION	QTY.
1	POST	1
2	PANEL ASSEMBLY	1
3	COVER, PROTECTOR	1
4	UTILITY BOX, RECEPTACLE & PLATE	1
5	LUG, GROUNDING	2
6	PLUG, 1/2-14 NPT, PLASTIC	2
7	PLUG, 3/8-18 NPT, PLASTIC	1
8	SCREW, SECURITY BUTTON HD. #10-32x1/2 LG.	8
9	SCREW, SET, SOC 1/2-13x3/8 LG - STL.	3
10	SCREW, SET, SOC 1/4-20x3/4 LG - STL	4
11	COVER	2

Figure 15 Sentry II Post/Base

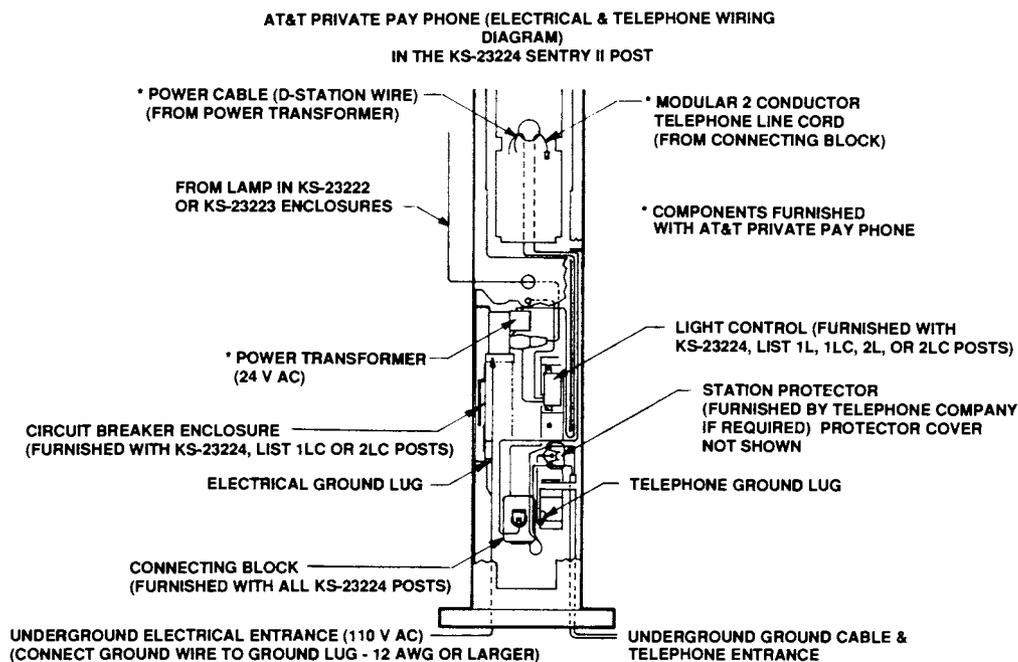


Figure 16 Sentry II Post/Base

Installing the Sentry II Post/Base

To get the best noise protection, orient the post in a direction so that the front opening of the enclosure will not face an excessive noise source (streets, railroads, etc.).

To mount the post:

1. Remove Panel From Post.
 - Refer to Figure 15.
 - Remove the 2 security screws at the top of panel (Item 2).
 - Brace your knee against the right side of the post as viewed from the front (Item 2).
 - Place both of your hands on the opposite side of the panel (Item 2).
 - Pull the top and bottom of the panel simultaneously towards the right side of the post (Item 2).

- When the locking flange on the left side of the panel clears the post, pivot the flange (left side) away from the post.
 - Pull the panel to the left and away from the post.
2. Place Power Cable, Ground Wire, and 2-Conductor Telephone Cord Into Post.
 - Use the top (Item 6) or underground entrance on post. Refer to Figures 15 and 16.
 3. Attach Post to Surface.
 - Place anchors into the floor. Then place mounting bolts through the post base (into the anchors) to attach the base to the surface. Setscrews (Item 10) are used to level post while anchoring post into position. Refer to Figure 15.
 4. Use a spirit level to determine if the surface where the phone mounts is vertical. Use the level in the following way:
 - Place the level vertically against the phone mounting surface on the post.
 - When a vertical reading is obtained, the end of the level opposite the point of contact should be no farther from the mounting surface than shown in Table 1. You may need to adjust the leveling screws (Figure 15).
 5. Mount Enclosure to Post.
 - Refer to either the "Mounting Silencer to Sentry II Post Or Sentry II Backboard" or "Mounting Sentry 22 or 23 to Post or Backboard" descriptions below.

Installing the Sentry II Backboard with Backboard Adapter

To get the best noise protection, orient the backboard in a direction so that the front opening of the enclosure will not face an excessive noise source. The Sentry II Backboard Adapter should be used in outdoor locations to keep the power and telephone connections from being exposed.

To mount the backboard:

1. Make sure the mounting surface for the Sentry II Backboard is vertical. Refer to Table 1.
2. Remove the 2 security screws from the bottom of the backboard. Save these screws. Discard the backboard bottom plate.
3. Put the 3-inch long spacer screws through the adapter and into the backboard as shown in Figure 17. These screws allow space for wiring.
4. Route and connect wiring as shown in Figure 17.
5. Hold the backboard against the wall so that the top end is 57 1/4 inches from the floor.
6. Use a pencil or pen to mark on the surface (through at least 6 holes on the backboard) where holes are to be drilled for screws.
7. Use Table 2 as a guide for drill sizes and recommended mounting screws. Drill holes at marked locations.

8. Screw backboard to surface with mounting screws. Make sure the backboard is vertical. Refer to Table 1.
9. Slide the adapter up to the bottom of the backboard. Replace the 3-inch long spacer screws with the 2 security screws that were removed in Step 2. The adapter should be securely fastened to the backboard.
10. Mount Enclosure to Post. Refer to either the "Mounting Silencer to Sentry II Post or Sentry II Backboard," or "Mounting Sentry 22 or 23 to Post or Backboard" descriptions below.

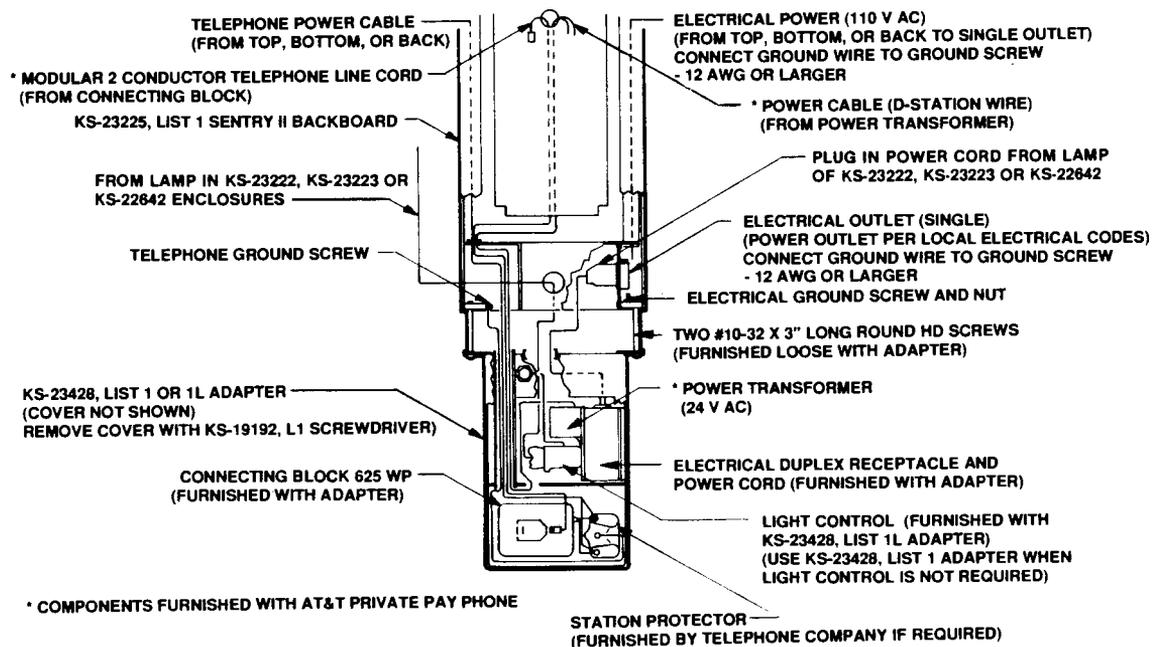


Figure 17 Sentry II Backboard with Adapter

Installing the Sentry II Backboard without Backboard Adapter

To get the best noise protection, orient the backboard in a direction so that the front opening of the enclosure will not face an excessive noise source.

To mount the backboard:

1. Make sure the mounting surface for the Sentry II Backboard is vertical. Refer to Table 1.
2. Hold the backboard against the wall so that the top end is 57 1/4 inches from the floor.
3. Use a pencil or pen to mark on the surface (through at least 6 holes on the backboard) where holes are to be drilled for screws.
4. Use Table 2 as a guide for drill sizes and recommended mounting screws. Drill holes at marked locations.
5. Screw backboard to surface with mounting screws. Make sure the backboard is vertical. Refer to Table 1.
6. Refer to Figure 18 for Sentry II Backboard layout.
7. Mount Enclosure to Post. Refer to either the "Mounting Silencer to Sentry II Post or Sentry II Backboard," or "Mounting Sentry 22 or 23 to Post or Backboard" descriptions that follow.

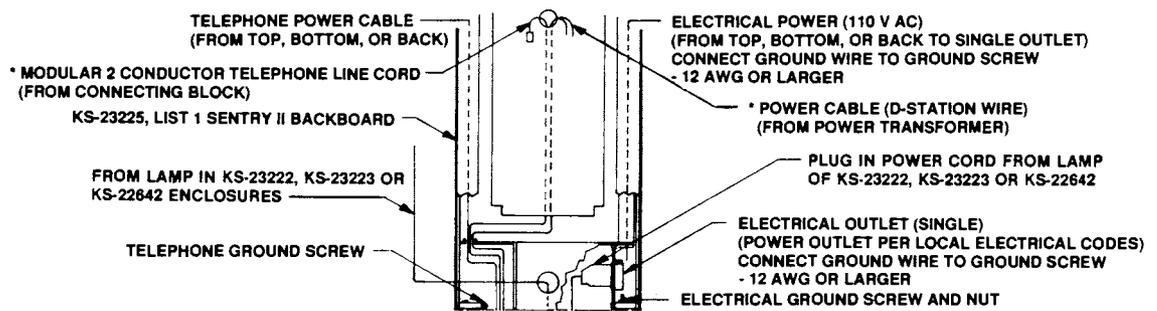
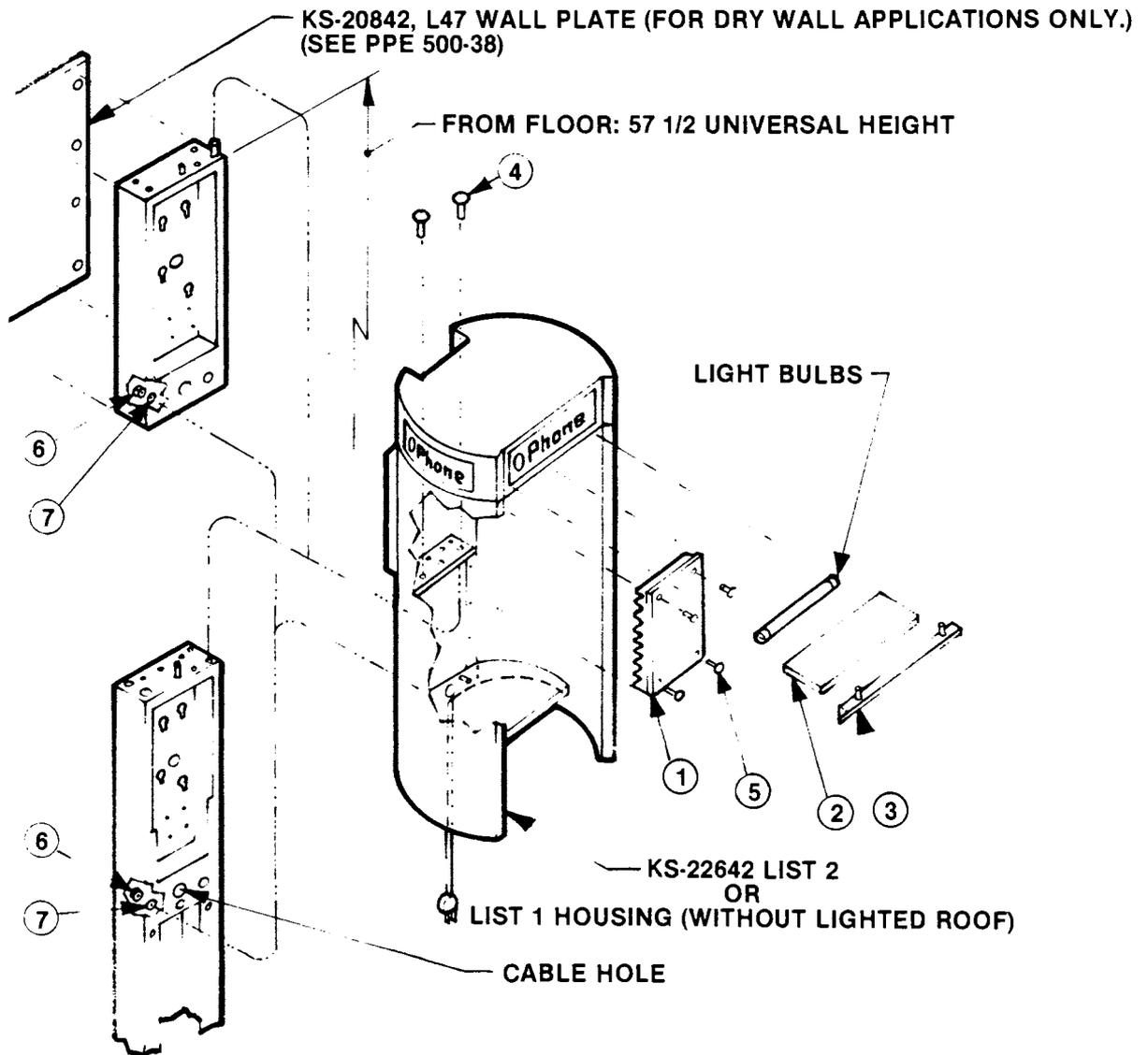


Figure 18 Sentry II Backboard without Adapter

Mounting Silencer to Sentry II Post or Sentry II Backboard

The Sentry II Backboard is designed like the top portion of the Sentry II Post/Base. If a mast is to be installed onto the post, install the mast after installing the enclosure. To mount Silencer:

1. Refer to Figure 19.
2. Remove the four security screws (Item 5) from the center panel (Item 1) of Silencer housing.
3. Remove the center panel (Item 1) from the Silencer housing.
4. Remove enclosure mounting studs from the top of the post or backboard (refer to Figure 15), and install them back into the same holes from the opposite side (inside to outside).
5. Position the Silencer housing onto the post or backboard. (Guide electrical cord through the cable hole, outside to inside, if housing has a lighted roof.)
6. Secure the top portion of the Silencer housing to the enclosure mounting studs on top of the post or backboard.
7. Secure the shelf of the Silencer housing to the post or backboard using nuts and washers (Items 6 and 7).
8. Tighten all mounting screws.
9. If the Silencer housing has a lighted roof and a post is being used, plug the electrical cord into the receptacle provided in the bottom of the post (Figure 15, Item 4).



ITEM	PIECE	DESCRIPTION	QTY.
1	L-906310	CENTER PANEL	1
2	B-994788	DIFFUSER	1
3	B-994705	FRONT BEZEL ASSEMBLY	1
4		SCREW, HEX HD. PLT. STL. .375-16x1"	2
5		SCREW, TAMPER PROOF .190-32x1/2.	4
6		NUT, HEX HD.' CRES. .312-18;	2
7		WASHER, PLAIN, CRES. 5/16	2

Figure 19 Attaching Silencer to Post

Mounting Sentry 22 or 23 to Sentry II Post or Backboard

The Sentry II Backboard is designed like the top portion of the Sentry II Post/Base. If a mast is to be installed onto the post, install the mast after installing the enclosure. To mount Sentry 22 or 23:

1. Refer to Figure 20.
2. Remove enclosure mounting studs from the top of the post or backboard, and install them back into the same holes from the opposite side (inside to outside).
3. Remove the two hex head screws and washers from lower rear of enclosure housing, and remove enclosure housing cover.
4. Secure the top portion of enclosure housing by engaging the studs on the top of the post or backboard with mating holes in the bottom of the housing ceiling brace, while holding enclosure housing at an angle.
5. Allow the lower portion of the enclosure housing to swing into place. (If there is a lighted roof on the enclosure housing, guide electrical cord through the cable hole in post or backboard.)
6. Secure lower portion of enclosure housing from inside of post or backboard with two screws and washers which were removed in Step 3.
7. If the enclosure housing has a lighted roof and a post is being used, plug electrical cord into receptacle provided in bottom of post.

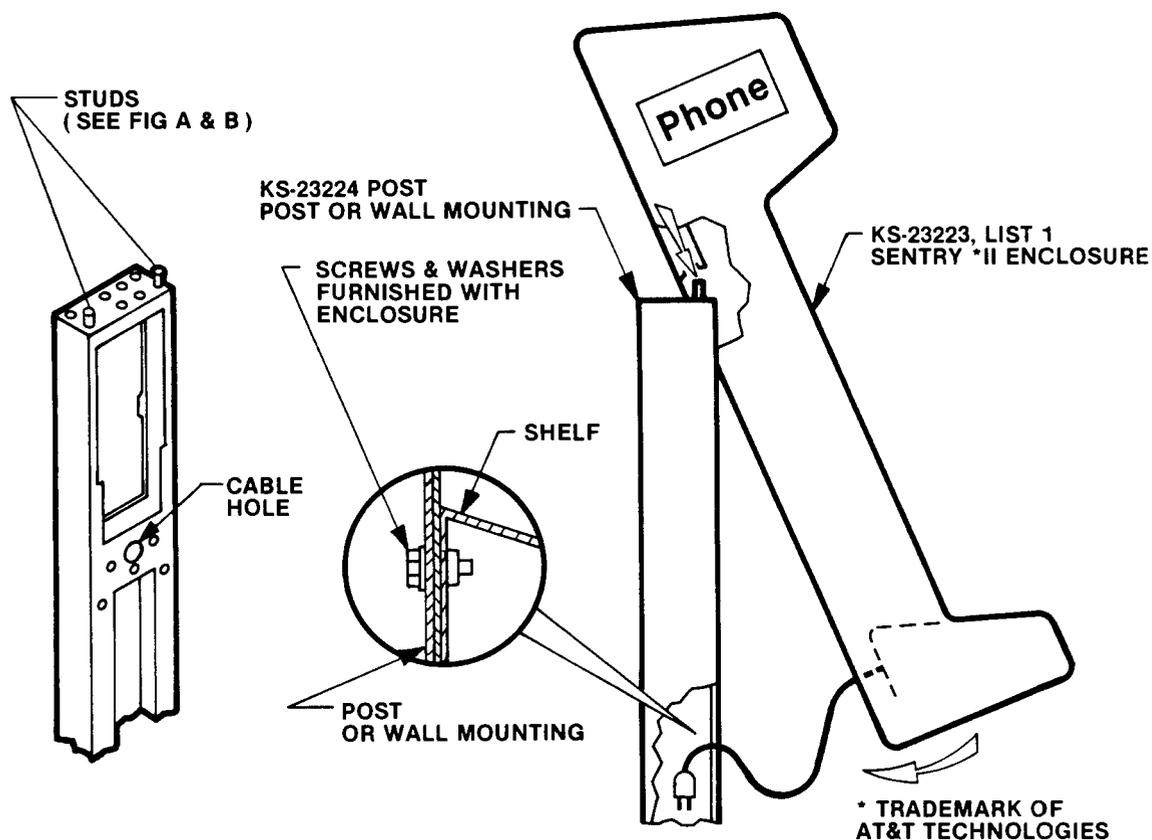


Figure 20 Attaching Sentry 22 or 23 to Post

NOTE: For access to fluorescent lamps and ceiling compartment, remove security screws at the rear of the diffuser. Slide diffuser back to disengage it from front lip, and then remove it from the enclosure.

To remove the enclosure when a mast has been installed, unplug the electrical cord at the receptacle and remove the lower mounting screws. Lift the enclosure straight up until it disengages from top studs. Bring the enclosure straight forward away from post while guiding cord out of hole. Reverse these instructions to reinstall enclosure.

Mount the Pay Phone to Enclosure

Before attempting to mount the phone, familiarize yourself with the phone parts illustrated in Figure 8. Then do the following steps to mount the AT&T Private Pay Phone *Plus* onto a Silencer, Sentry 22, or Sentry 23 Enclosure:

1. Perform Steps 1-5 In The "Mounting the AT&T Private Pay Phone *Plus* without an Enclosure" Description Above.
2. Mount AT&T Private Pay Phone *Plus* Housing.
 - Install the security studs (4) into the back of the phone.
 - Place the electrical power cable, ground wire, and 2-conductor telephone line cord through wire entrance hole in phone (outside to inside). Refer to Figure 7.
 - Place the four security studs inside the keyhole slots in the mounting surface and allow the phone to drop into position.
 - Have an assistant hold the phone's housing against the back panel of enclosure with holes aligned.
 - Insert the seven mounting screws (make sure the phone is vertical) and tighten. The phone's housing should now be firmly mounted against back panel of enclosure.
 - Cut rubber grommet and bring electrical power cable, ground wire, and telephone line cord through center hole of grommet. Refer to Figure 10.
 - Place rubber grommet back into base housing (thus sealing the opening in the back of the base housing). See Figure 10.
3. Perform Steps 9 - 16 In The "Mounting the AT&T Private Pay Phone *Plus* without an Enclosure" Description Above. If the Sentry II Post/Base is being used, the 110-volt outlet and the modular phone jack are on the post. After plugging in the power transformer and line cord, attach post panel and base covers to post.

*D. Final Installation Procedures**Have The Pay Phone Programmed*

The pay phone must be programmed so it can charge correctly. Contact the person who is doing the programming to report that the phone is installed.

Confirm That The Pay Phone Is Operating Properly

Appendix C is a checklist for testing the pay phone's installation and programming. You will want to remove that page and make as many copies as there are pay phones to install. Fill out the forms as you go through the tests.

The following will be necessary to perform these tests.

1. Assistants whom you will be calling from the pay phone. (You will need to place both local and long distance calls.)
2. A watch that can measure seconds
3. Enough change for placing at least eight calls, two which must be long distance
4. Copies of Appendix C

Instruction and Number Cards

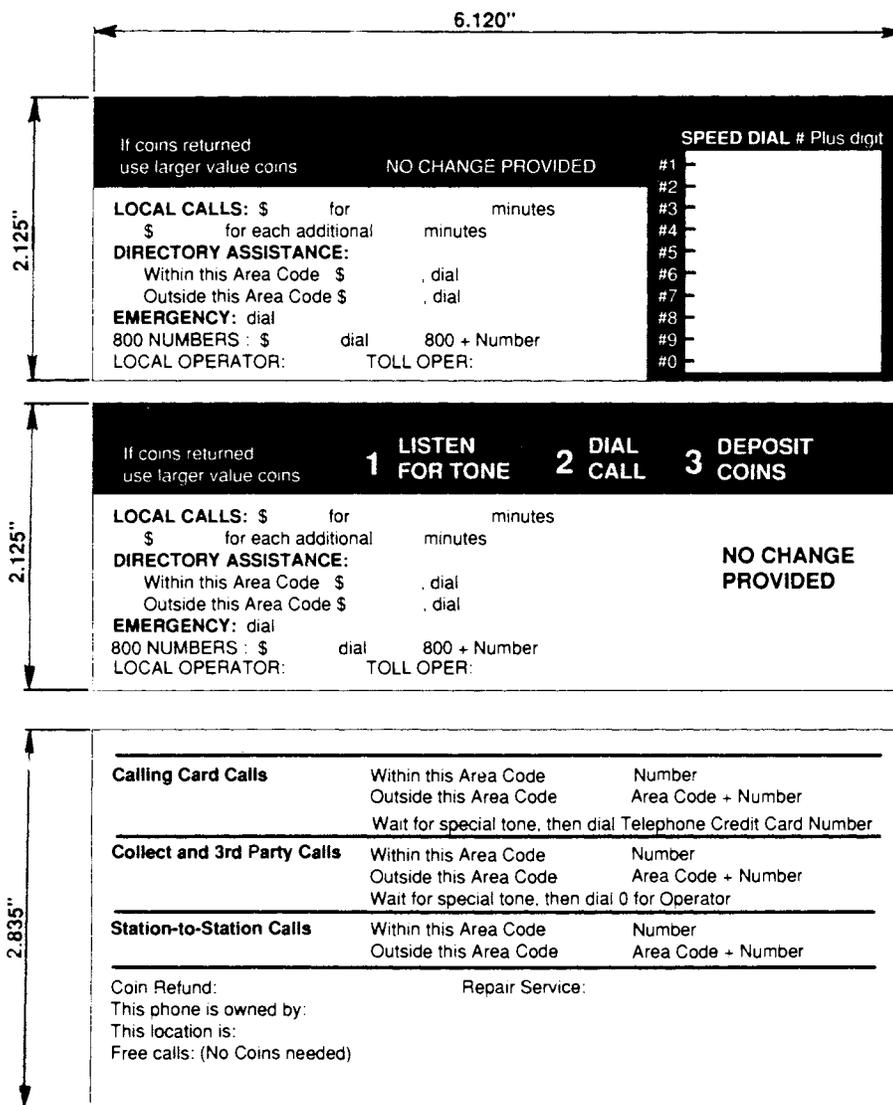
Two Instruction Cards containing dialing information are shipped as part of the AT&T Private Pay Phone *Plus* package. Refer to Figure 21. You will have to write or type some information on the card (see Figure 21). If you plan to have additional cards made, weatherproof bristol paper (100-150 lb.) is recommended.

NOTICE

AT&T is not responsible for the information typed or written on cards. The owner must check with the Public Utilities Commission (P.U.C.) about what is needed for the area in which the phone is installed.

Figure 21 shows the two choices for the smaller of the customer instruction cards. Use the card shown at the top if your pay phone is programmed to provide "Speed Dial" numbers. If your phone will not offer "Speed Dial" numbers, you may use the other card.

Figure 21 Customer Instruction Cards



Installing and Removing Instruction Cards

Do the following to install the customer instruction cards:

NOTE: These instructions apply for both the top and bottom card.

1. Loosen the card locking setscrew in the faceplate (refer to Figure 22) by turning it counterclockwise with a No. 4 (.050) Allen wrench.
2. Push the top edge of the card up under the faceplate, and slide the card down into place.
3. Place the card cover over card. (The top edge of card cover should also be under the faceplate.) Slide the card cover down into place.
4. Ensure that the card is seated properly in slot.
5. Tighten the card locking setscrew in faceplate by turning clockwise.

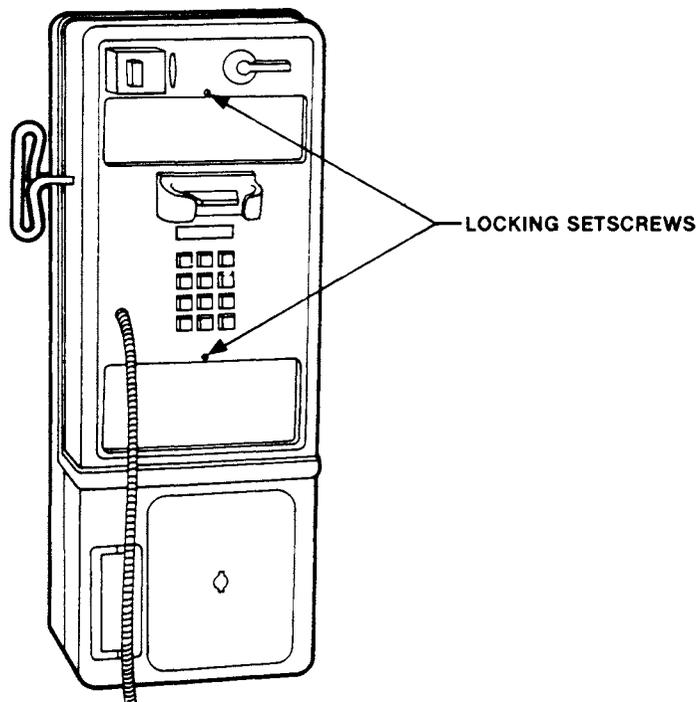


Figure 22 Card Locking Setscrews

Do the following to remove the customer instruction cards:

NOTE: These instructions apply for both the top and bottom card.

1. Loosen setscrew in faceplate by turning it counterclockwise.
2. Push up on card cover and instruction card with your fingers.
3. Pry bottom of card cover and instruction card out with small screwdriver or equivalent.

Installing and Removing Number Card

Do the following to install or remove the number card:

1. Write the telephone number of the AT&T Private Pay Phone *Plus* on the card. Insert the card into its slot on the phone, and then insert the number card cover into the slot. To remove the telephone number card, either use a paper clip or your finger to pry the cover and card from the slot.

SECTION IV USING ON-SITE FEATURES

Some sales, maintenance, and security information is accessible on-site via the display on the chassis. To access this information, remove the front cover from the AT&T Private Pay Phone *Plus* and unplug the dial assembly cord (see picture, page 12). Use the keypad and display on the chassis to obtain on-site feature information.

You must use your security code to access the information. The code is set at 000 at the factory.

When the telephone is in the access mode it cannot be used to make calls, so when you are finished accessing on-site features, press the "START/STOP" button to exit the mode so that your telephone is ready for use by your customer.

A. Access Sales Information

Your AT&T Private Pay Phone *Plus* keeps track of the number of calls, kinds of calls, and how full the coin box is, as well as keeping a perpetual cash count and a current cash count. Most of the information is available to you through the use of the display on the chassis (see picture, page 12). The current cash count is available to you via the handset.

To access the current cash count (the cash that is in the coin box at this time), with the handset on hook (hung up) press the "2" on the phone dial and then enter the current security code. Lift the handset and the synthesized voice will give you the current cash tally.

To access other sales information, open the front of the telephone. The display on the chassis will show the time and date. Press the "START/STOP" button on the internal keypad. Enter your security code, using the numeric keypad, and press the "ENTER" button. You will be offered several options. Press "1" to see the Perpetual Cash Count, "2" to see the Coin Box Status, and "3" to see the Call Counts information.

Press the "CHANGE MENU" button to access other information or the "START/STOP" button to exit the access mode.

NOTE: The set will time out and go back to the time and date display from these features.

1. Perpetual Cash Count

At the alternating display, press "1." The number given as the "Cash Count" is a perpetual count, or the total amount collected by the phone since installation. The count cannot be erased and starts over with 0 when it reaches \$100,000. Keep track of the perpetual cash count. The cash count previously taken *plus* the amount in the phone's coin box *should equal* the current perpetual cash count shown on the display.

Press the "CHANGE MENU" button to go back to alternating choices of on-site features. Press the "START/STOP" button to return to the initial date/time display.

2. Coin Box Status

At the alternating display, press "2." The display will show how full the coin box is and whether or not it is still accepting coins. The percent of fullness automatically resets when you empty the coin box. The display will also inform you if the coin box has been removed. Press the "CHANGE MENU" button to go back to alternating choices of on-site features. Press the "START/STOP" button to return to the initial date/time display.

3. Call Counts

Press "3" at the alternating display. When you access call counts information you will receive displays of the number of intra-lata calls made (calls within the lata), the number of inter-lata calls made (calls outside the lata), and the number of other calls made.

Press the "CHANGE MENU" button to go back to alternating choices of on-site features. Press the "START/STOP" button to return to the initial date/time display.

B. Diagnostics (Alarms)

At the initial display (time/date), press the "START/STOP" button. Enter your security code and press the "ENTER" button. Alternating choices of on-site features will be displayed. Press 4 on the internal keyboard to access alarm information.

Remember, the telephone cannot be used to make calls when in the mode to access on-site features. Be sure you press the "START/STOP" button to exit access to on-site features so that the phone is again ready for use by your customers.

On-Hook Alarm

Press "2" for the On-Hook Alarm information. The display will show the number of days the handset (receiver) has been on the hook (cradle) without being picked up. If you removed the handset while taking off the front cover of the phone, the display will show 0.

Press the "CHANGE MENU" button to access more on-site information. Press the "START/STOP" button to exit.

Answer Detect Alarm

Press "3" for the Answer Detect Alarm information. The display will show the state of answer detect.

Press the "CHANGE MENU" button to access more on-site information. Press the "START/STOP" button to exit.

Insufficient Deposit Alarm

Press "4." The display will show the number of consecutive times customers have tried to place a call but were unable to deposit enough coinage for the call. The information could indicate a coin jam or other kind of blockage.

Press the "CHANGE MENU" button to access more on-site information. Press the "START/STOP" button to exit.

C. Program Options

There are two kinds of pay phone security that can be controlled both at the set and from the PC that remotely programs the pay phone. (1) The pay phone password is required for the pay phone and the PC to exchange information, whether rate programming from the PC to the set, or alarm and other status information from the set to the PC. (2) Turning on Call Back Security can prevent this information exchange when the PC calls the pay phone, forcing the pay phone to call the PC to verify the source of the call before communicating. At the phone, you can reset the password to the factory setting, PayPhone, and you can turn Call Back Security off and on.

At the alternating choices menu, press 5. You may be offered two choices:

RESET PASSWORD

TURN OFF CALL BACK SECURITY

1. Reset Password

The remote programming source requires a password to program the set. The password is factory set at "PayPhone." The password may have been changed by the remote programming source. To reset the password to "PayPhone," press 1.

2. Turn Off Call Back Security

Press 2 to turn off the call back security feature. *If the feature is already turned off, you will not see the display.*

Press the "CHANGE MENU" button to access more on-site information. Press the "START/STOP" button to go back to the initial display.

NOTE: If you move your pay phone to another phone line, it must be reprogrammed. It cannot be reprogrammed while Call Back Security is ON. Turn OFF Call Back Security at the set before moving the phone.

D. Change Security Code

The security code is factory set at 000. You should change the security code as soon as your telephone is installed. At the alternating display of on-site features choices, press both the "YES" and "NO" buttons simultaneously. You will be prompted to enter a new security code. Enter the 3-digit code you have selected and press the "ENTER" button. You will be prompted to enter it again, exactly as you did the first time. When you have re-entered the new code and pressed the "ENTER" button, you will be returned to the alternating display of choices.

The security code can be changed remotely, which will override the security code set on-site.

SECTION V MAINTENANCE

A. *Troubleshooting*

If an AT&T Private Pay Phone does not operate properly, try the following troubleshooting procedures before seeking repair assistance.

- NO DIAL TONE
 - Make sure power is supplied to the phone, and all connections are correct.
 - Inspect the power wire connections on the power supply board and transformer.
 - Make sure the front housing is plugged into its socket underneath the programming keypad. Refer to Figure 1.
 - Make sure the phone is not in the mode to access on-site features.
 - Make sure the phone is not currently on line to the remote programming source.
 - Check with your telephone company to make sure your local service has not been temporarily changed to low-voltage equipment.
- NO RESPONSE TO DIAL BUTTONS
 - Make sure the front housing is plugged into its socket underneath the programming keypad. Refer to Figure 1.
 - Make sure the phone is not currently on line to the remote programming source.
- NO SPEECH PROMPT FOR DEPOSIT
 - Make sure the number dialed is not programmed as a free number.
- PRIVATE PAY PHONE DOES NOT DIAL OUT
 - Make sure the line to which the Private Pay Phone is connected is working properly.
 - Make sure the 2-conductor telephone line cord is plugged in at both ends. (If a 267D jack is being used, the telephone line cord coming from the Private Pay Phone must be 4-conductor line cord. This line cord must be connected to the socket labeled "PHONE" on the 267D jack.)
 - Make sure the phone is not being excluded by another telephone on the line (See Appendix A).
 - Make sure enough money has been deposited for the call being made.
 - Check the number dialed to make sure it has not been programmed as restricted.
- COINS NOT RECOGNIZED
 - Make sure the coin chute plug is plugged into its socket that is located below the programming keypad. Refer to Figure 1.
 - Make sure the coin chute is not jammed. (If it is, see page 64.)
 - Make sure the phone is not in the mode to access on-site features.
 - Make sure the phone is vertical within the specifications outlined in the installation procedures (See page 22).

- REFUND AND COLLECTION PROBLEMS
 - Make sure all power supply connections are correct.
 - Make sure that the wires at the bottom of the chassis are screwed down on their proper terminals. See Figure 3.
 - Check with the customer to make sure that the receiver was not off the hook for more than thirty seconds after receiving "SIT" (Special Information Tone--the tone that precedes a "call cannot be placed" message from the operator).
- TELEPHONE DOES NOT RING
 - Make sure the phone is programmed for an audible ring. Through the remote programming of the pay phone, "ringing" may be set to "OFF" or for a low number of rings.
 - Make sure the phone is not in the mode to access on-site features.
- PC CANNOT COMMUNICATE WITH PAY PHONE
 - Make sure the front housing is plugged into its socket underneath the programming keypad. Refer to Figure 1.
 - Make sure the phone is not in the mode to access on-site features.
 - Make sure, if the phone has been moved to a different line since initial programming, that Call Back Security is not on at the set.
- OTHER PROBLEMS
 - Make sure the boards in the programming chassis are seated securely.
 - Make sure you have followed all the instructions in this manual. If you continue to have problems, consult the Maintenance Manual or call the AT&T Business Customer Service Center at 1-800-628-2888. The call is toll free.

MAINTENANCE

The AT&T Private Pay Phone *Plus* is an electronic device and should be protected from direct exposure to water or any other liquids. The outside housings may be wiped clean with a soft cloth that has been slightly dampened with water and a mild detergent. Do not use solvents, spray liquids, or abrasive cleaners.

A list of manuals, spare parts, and optional equipment starts on page 70. If you elect to replace a defective component, spare parts can be ordered from AT&T using the COMCODE number given. Use only genuine AT&T parts for such replacements.

Maintenance Manual

More detailed information on maintenance of the AT&T Private Pay Phone *Plus* is contained in the operational Maintenance Manual. The Maintenance Manual is intended for use by trained telephone-craft persons.

B. Replacement of Mechanical Components

Some hardware components are more likely to sustain vandalism or damage from improper use. If physical damage is not readily visible, determine what is wrong using the troubleshooting lists starting on page 57. Usually, problems with the coin chute are due to jams. Problems with the hopper assembly, coin relay, totalizer, coin dial unit, and handset are due to loose connections or vandalism. While most repair procedures should be handled by trained repair personnel, you may wish to handle the replacement of some mechanical components. On page 70 is a list of spare parts and optional equipment.

Instructions are included for replacing the following hardware components:

1. Coin Dial Unit -- This is the keypad assembly that attaches to the front cover housing. The number being called is entered on this keypad. The switch hook assembly is a part of the coin dial unit.
2. Handset G3AS-3 -- This is the hand held voice transmitter and receiver assembly. It also includes an armored cord assembly to guard against vandalism. The handset is hearing aid compatible.
3. Coin Chute 20A -- This is the coin handling mechanism that provides coin/slug discrimination. The coin chute also selects the correct coin path for each denomination of coin.
4. Return Chute Assembly -- This plastic chute connects the coin hopper assembly to the coin return assembly. The return chute assembly provides the path for coins being refunded to the user.
5. Coin Return Assembly -- This is the chrome plated slot on the front of the lower housing that the user inserts his/her fingers into to collect returned coins.
6. Coin Box -- This is the box at the bottom of the phone in which the coins are stored.
7. LOUD Button Assembly -- This is the box on the front of the phone in which the LOUD button is installed. It also contains a magnetic slug blocking feature.

1. *Equipment Needed*

You will need the keys provided with the phone and the security code for the phone. The following equipment is needed for maintenance of the components.

- AT&T Private Pay Phone *Plus* Maintenance Manual
- AT&T Private Pay Phone *Plus* Owner's Manual
- Small and medium (includes short handled) screwdrivers
- Medium right-angle screwdriver
- Pliers
- 719A Tool (T-key)
- 787A Dime Clear-out Tool
- Orange Stick
- Additional AT&T Private Pay Phone *Plus* Mechanical Components

Additionally, if you are troubleshooting the phone at some place away from the installation site (i.e. the phone has been disconnected and removed from its installation location), you will need the following items:

- One AT&T Private Pay Phone *Plus* Power Transformer
- Power Cable (D-Station Wire)
- Modular 2-Conductor Telephone Line Cord

2. Removing and Replacing the Coin Dial Unit

To Remove the Coin Dial Unit:

1. Turn power OFF.
2. Refer to Figure 23.
3. Remove handset strain relief brackets by removing coverplate mounting screw.
4. Disconnect the red, green, yellow, and black handset leads from the terminal board. Be sure you retighten screws where other leads are still connected.
5. Loosen the cord stay-hook screw and remove the cord stay-hook.
6. Disconnect LOUD button leads from the terminal board (terminals 2 and 11).
7. Remove the armored handset cord. This is done pulling the cord through the hole and into the coverplate. Pull the wire leads through first, then the cylindrical fitting on the end of the wire rope.
8. Remove old coin dial unit by removing the 4 unit mounting screws. Save these screws, and the braided ground strap, for reuse.

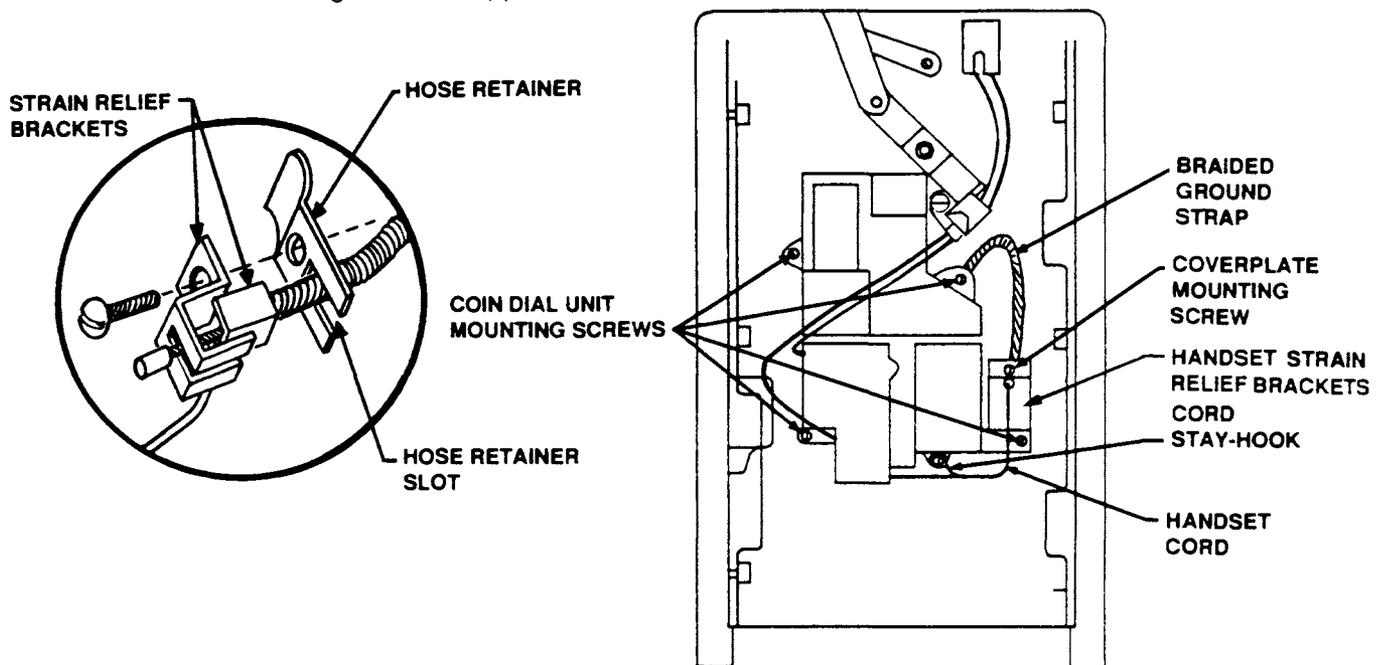


Figure 23 Coin Dial Unit

To Install a Coin Dial Unit:

1. Refer to Figure 23.
2. Attach the new coin dial unit (with braided ground attached) using the 4 mounting screws. Then insert end of handset cord through the hole in the new coin dial unit by feeding the cylindrical fitting on the end of the wire rope through first.

3. Attach the hose retainer to the metal hose of the handset cord, sliding the crimp at the end of the hose into the hose retainer slot.
4. Position the other two brackets next to the hose retainer with the larger one restraining the wire rope.
5. Make sure the braided ground strap is attached under the coverplate mounting screw head. Attach the strain relief assembly to the coin dial unit, using the new coverplate mounting screw supplied.
6. Attach the cord stay hook and tighten screw.
7. Connect the 4 handset leads to the terminal board as follows:

<u>Lead Color</u>	<u>Terminal Number</u>
Red	15
Green	3
Yellow	8
Black	4

8. Connect LOUD button leads at terminals 2 and 11, making sure that the wire being connected is routed behind the black line cable.
9. Turn power back ON.

3. *Removing and Replacing the Handset*

To Remove the Handset:

1. Turn power OFF.
2. Refer to Figure 23.
3. Disconnect the red, green, yellow, and black handset leads from the terminal board. Be sure you retighten screws where other leads are still connected.
4. Loosen the cord stay-hook screw and remove the cord stay-hook.
5. Remove handset strain relief brackets by removing the coverplate mounting screw.
6. Extract handset cord through hole in faceplate. (First feed the four spade tip leads through, then the cylindrical fitting on the end of the wire rope.)

To Install a New Handset:

1. Refer to Figure 23.
2. Insert new handset cord through hole in faceplate. (First feed the cylindrical fitting on the end of the wire rope through, then the four spade tip leads.)
3. Attach the hose retainer to the metal hose of the handset cord, sliding the crimp at the end of the hose into the hose retainer slot.
4. Position the other two brackets next to the hose retainer with the larger one restraining the wire rope.
5. Make sure the braided ground strap is attached under the coverplate mounting screw head. Attach the strain relief assembly coin dial unit.
6. Tighten the cord stay-hook screw.
7. Connect the 4 handset leads to the terminal board as follows:

<u>Lead Color</u>	<u>Terminal Number</u>
Red	15
Green	3
Yellow	8
Black	4

8. Turn power back ON.

4. *Removing and Replacing the Coin Chute*

To Remove the Coin Chute:

1. Turn power OFF.
2. Refer to Figure 24.
3. Loosen the mounting screw on the plastic protective cover of the chassis. Remove the plastic protective cover by pulling the bottom of the plastic cover forward, and then lift the plastic cover off the base.
4. Unlatch and unplug the coin chute plug from its connector underneath the internal keypad.
5. Push up the latch that is located above the coin chute. Then release the spring located above the coin chute (between coin chute and base housing) by pushing the spring with your thumb.
6. Remove the coin chute.

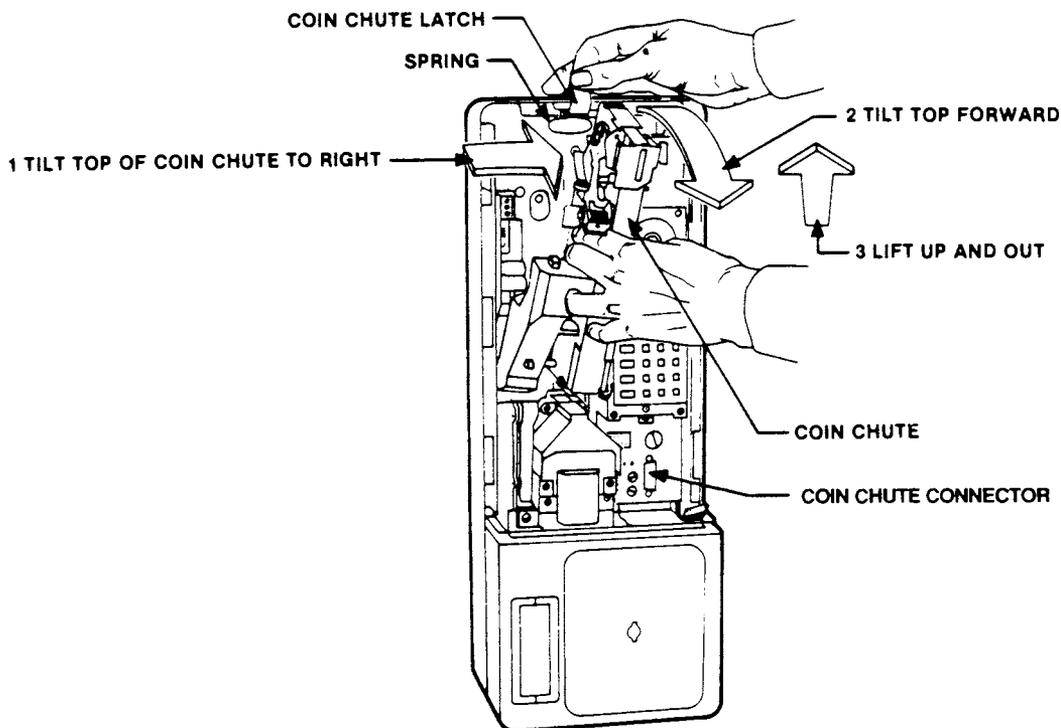


Figure 24 Coin Chute

To Unjam the Coin Chute:

1. Remove the coin chute. (Refer to "Remove the Coin Chute" section above if necessary.)

2. Swing the upper plate assembly of the coin chute open by pulling up and releasing the coin entrance slot (refer to Figure 24). Then, while still holding the upper plate assembly open, turn the coin chute over and shake.
3. Turn the coin chute right side up, and swing open the section (which contains magnets) that was under the upper plate assembly. Clean off any foreign material adhering to the magnets, and if possible remove stuck coins with either your hand or an orange stick. (If necessary, use a 787A Dime Clear-out Tool or a small screwdriver.)

NOTE: Be very careful not to damage the coin chute if using a small screwdriver. Do not loosen coin chute assembly screws.

4. If coins are still jammed (Figure 25 shows dimes overlapped), remove the 47A2 Signal Unit (Totalizer) from lower portion of coin chute. (Refer to the "Signal Unit 47A2" section in this Chapter.)
5. Use the 787A Tool to either hook the edge or top surface of overlapped dimes, and then carefully separate dimes or pull dimes out.

NOTE: Two overlapped dimes should not be pulled past lower dime divider leg with 787A Tool hooked on dime edge. Refer to Figure 25.

6. Shake coin chute to allow any other dimes to fall out.

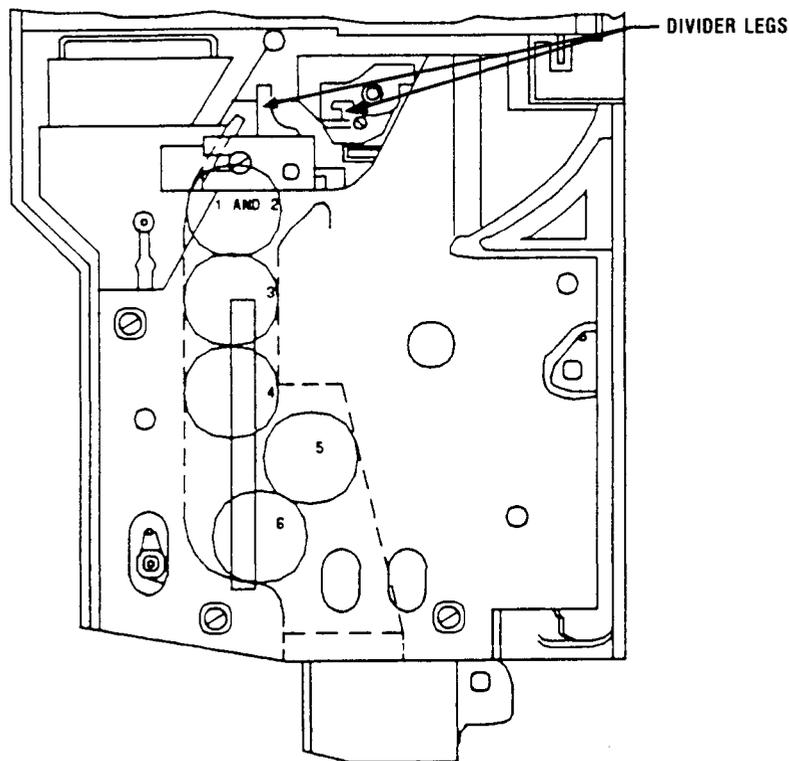
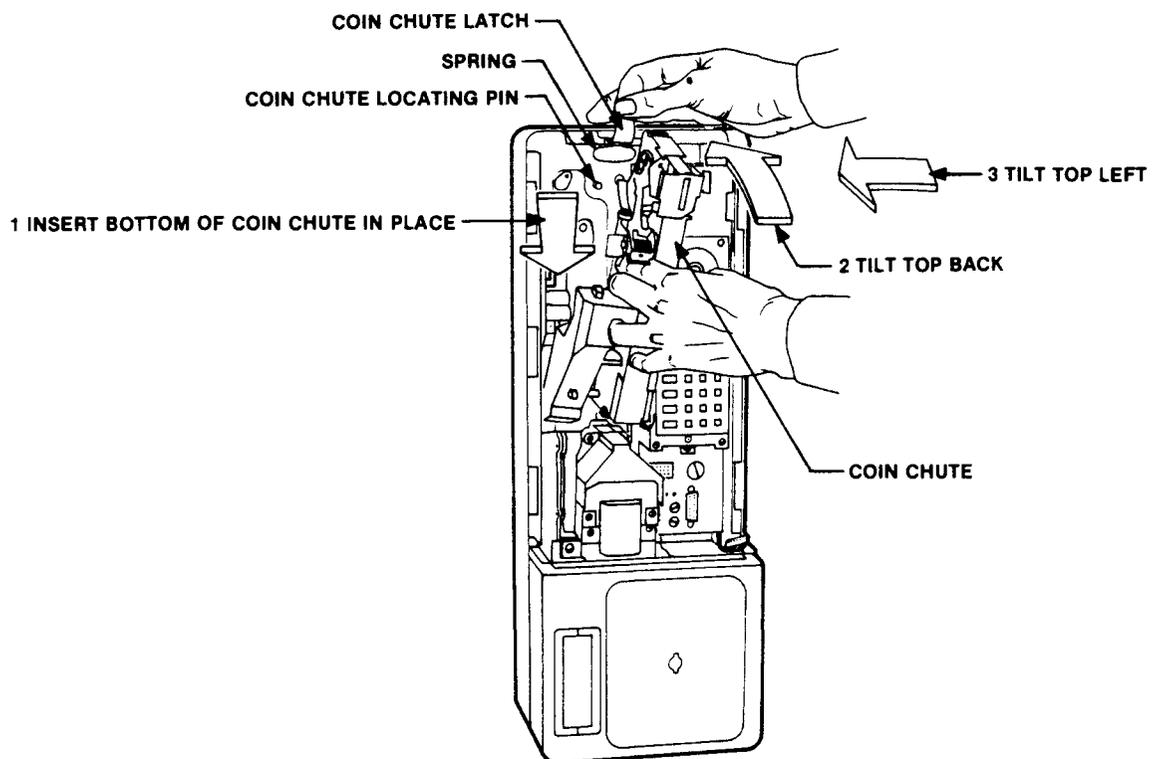


Figure 25 Coin Chute

To Replace the Coin Chute:

1. Attach the 47A2 Signal Unit (totalizer) to the coin chute.
2. Refer to Figure 26.
3. Make sure the power supply cables are routed below the coin chute and against the back wall. Make sure that the coin slot on the coin chute is facing towards you. Close the upper plate assembly of the coin chute, and snap the coin entrance slot back (Figure 24) into place.
4. Making sure the power supply cables are routed below the coin chute and against the back wall, place the coin chute back into the base housing. The coin chute should be aligned with the locating pins. Push the coin chute back until it is against the back wall of the base housing.
5. Push up on the latch above the coin chute on the base housing (the latch automatically resets the spring), and then push latch down.

**Figure 26 Coin Chute**

6. Insert the coin chute plug into its connector that is located below the internal keypad and latch.
7. Replace plastic cover that protects the chassis, and then screw plastic cover to chassis.
8. Turn power back ON.

5. *Removing and Replacing the Return Chute*

To Remove the Plastic Return Chute Assembly:

1. Turn power OFF.
2. Remove the coin chute. (Refer to "Remove the Coin Chute" section in this Chapter.)
3. Loosen the return chute assembly mounting screw and screw bracket. Refer to Figure 27.
4. Pull up on the return chute assembly and remove it from the phone.

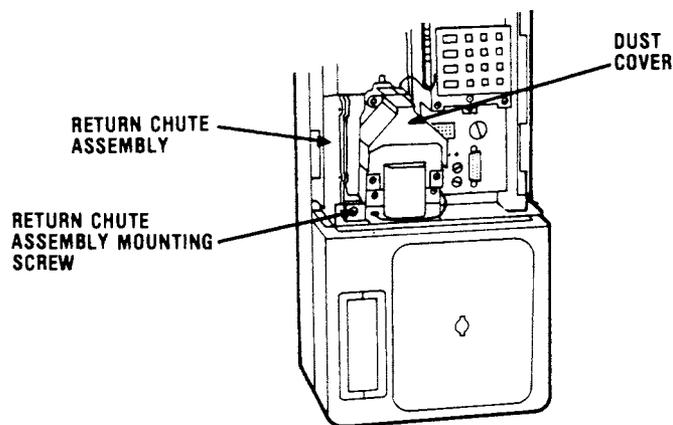


Figure 27 Return Chute

To Replace the Plastic Return Chute Assembly:

1. Push the return chute assembly down into its mounting hole. The return chute's mounting slot should align with its screw mounting hole. (The plastic hooks on the side of the return chute should hook onto the side of the Hopper Assembly.)
2. Replace and tighten the return chute assembly's mounting screw. (Note: Make sure the mounting screw's bracket is in place.)
3. Replace the coin chute. (Refer to "Replace the Coin Chute" section in this Chapter.)
4. Turn power back ON.

6. Removing and Replacing the Coin Return

To Remove the Coin Return Assembly:

1. Turn power OFF.
2. Remove the coin chute. (Refer to "Remove the Coin Chute" section in this Chapter.)
3. Remove the plastic return chute assembly. (Refer to "Remove the Return Chute Assembly" section in this Chapter.)
4. Remove the coin return holding screw. Refer to Figure 28.
5. Pry loose and then pull out the coin return assembly from the front of the phone. (Pull forward and lift up, then rotate the bottom out and up.)

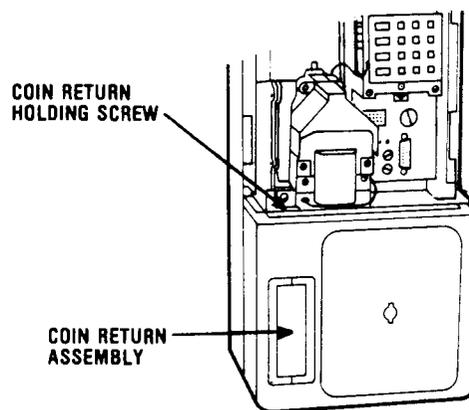


Figure 28 Coin Return

To Replace the Coin Return Assembly:

1. Insert the coin return assembly into its slot on the front of the phone.
2. Replace and tighten the coin return holding screw. Refer to Figure 28.
3. Replace the plastic return chute assembly. (Refer to "Replace the Return Chute Assembly" section in this Chapter.)
4. Replace the coin chute. (Refer to "Replace the Coin Chute" section in this Chapter.)
5. Turn power back ON.

7. Removing and Replacing the Coin Box

To Remove the Coin Box:

1. Turn power OFF.
2. Unlock the coin vault lock on the lower right side of the phone.
3. Insert and turn the T-key into the coin vault door lock to release and remove the coin vault door.
4. Pull on the coin box handle (use pliers if necessary) to remove the coin box from the coin vault. (Note: Pull the coin box straight out.)

To Replace the Coin Box:

1. Reset lock on top of coin box by pushing IN with a screwdriver and turning. Refer to Figure 29.
2. Place coin box back into coin vault (handle facing out), and push in. (Note: When pushing the coin box into the vault, apply pressure at the top front surface and slightly more pressure to the left side. Refer to Figure 29.)
3. Replace coin vault door and secure with T-key.
4. Lock coin vault. (The lock is on lower-right side of the phone.)
5. Turn power back ON.

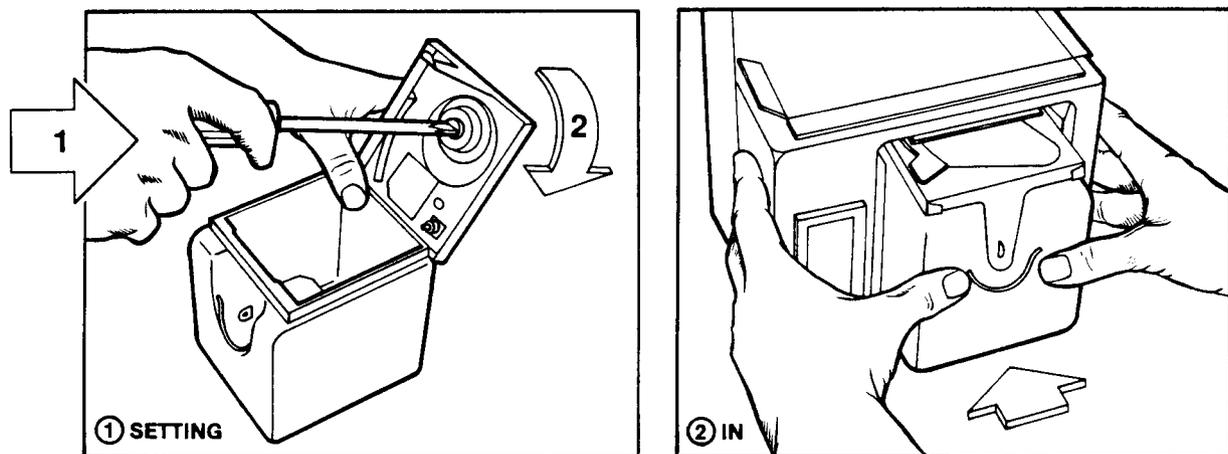


Figure 29 Coin Box

8. Removing and Replacing the LOUD Button Assembly

Turn power OFF. Locate two nuts inside the front of the phone, behind the LOUD button. Using a 3/8" socket, unscrew the nuts and remove the plate. Disconnect the wires from the terminal board and pull out the LOUD button assembly. Retighten screws where other wires are still connected.

To replace the assembly, insert the wires from the new component through the bottom hole. Seat the new assembly on the front of the phone, making sure the wires stay at the bottom slot of the bottom hole. Replace the plate, making sure the slot end is down so as not to interfere with the wires. Replace nuts and reconnect the wires at terminals 2 and 11. A red wire is also connected at terminal 2, so make sure that wire is still on the terminal. Turn power back ON.

C. Spare Parts and Optional Equipment

DESCRIPTION	COMCODE
Backboard 178 A 3	101-165-694
Board, Answer Detection	845-549-070
Board, Chassis Sub-assembly	845-550-151
Board, Keypad/Display	845-780-733
Board, Microprocessor	845-780-725
Board, Power Supply	845-549-765
Board, Speech	845-780-717
Brkt Card Holder	812-169-472
Card Retainer	812-558-039
Chassis 36A (Electronic)	105-306-997
Coin Chute 20 A	102-279-395
Coin Cover Unit 72B5-03 (Front Cover)	105-293-732
Coin, Dial Unit 62B1-44	105-293-740
Coin Relay 1 A (without Hopper)	101-755-650
Coin Relay 1AA (with Hopper)	101-755-668
Coin Return Assembly	812-165-462
Coin Return Assembly Screw	311-558-956
Coin Return Lever Assembly	840-358-725
Coin Vault Door 2A-3	101-002-145
Coin Vault Rail 1D	100-400-613
Coin Vault Receptacle 1C-86	101-903-151
Coin Vault Recpt Cover 1E	101-146-546
CoinSoft User Manual	846-003-382
Cord, Modular D2R-29	103-732-541
Dial Assembly (button unit only)	845-547-900
Econo Adapter Kit	405-247-446
Face Plate	845-680-669
Graffiti Remover (B) AT-9009	402-987-127
Handset G3AS-3	105-256-374
Handset Hook	840-358-303
Hopper Assembly	811-557-172
Housing Assembly	845-680-891
Instruction Sheet	846-001-485
Leveling Device KS-22437	402-617-401
Lock 29B E/W 2 keys	105-162-754
Lock 30C E/W 2 Keys	102-230-836
Loud Button Assy	845-881-333
Maintenance Manual	846-003-366
Number Card	845-774-967
Orange Stick (L2) KS-6320	997-786-512
Out-of-Service Label E-4914	400-411-864
Outdoor Adapter	KS23428L1 pr 1A
Overspray Lacquer (L1) KS-21426	401-494-067
Owner's Manual	846-003-341

Continued on next page

Internal Note
 : 222 700

DESCRIPTION	COMCODE
Power Transformer	405-172-099
Power Transformer Cord	845-458-744
Power Transformer (Double)	405-382-383
Protector 123E2A	103-671-608
Return Chute Assembly	811-557-305
Security Stud P40Y061	834-080-616
700A4 Plug	103-941-464
Signal Unit (Totalizer) 47A2	103-287-538
Spacer, LOUD Button	845-881-291
Tool 528A (cleans key slots)	100-753-623
Tool 719A (T-key)	100-755-594
Tool 787A (clears dimes)	102-333-671
Washer, Number Card	845-775-030
Window, Lower	845-680-917
Window, Upper	845-680-909

APPENDIX A

USE WITH ADDITIONAL PHONE

The AT&T Private Pay Phone *Plus* has the capability of allowing an additional telephone to be linked to it. When another telephone is linked to the AT&T Private Pay Phone *Plus*, both the AT&T Private Pay Phone *Plus* and the other telephone will ring when a call is made to either phone. Either telephone can be used to answer the call, but once the call is answered with one of the telephones the other cannot be used to listen in on the call. This is also true when a call is made from the AT&T Private Pay Phone *Plus* or the linked telephone. (Note: The telephone that is not used when answering or making a call is "dead" until the call is finished.) The AT&T Private Pay Phone *Plus* operates this way because of a special circuit that has been built into it. This circuit is called the Exclusion Circuit and it assures privacy.

You may, however, "pass" a call between the pay phone and the additional, or remote, telephone. To pass a call from the pay phone to the remote telephone, follow these steps:

- Take the remote telephone off-hook (pick up receiver)
- After about a second, hang up pay phone

To pass a call from the remote telephone to the pay phone, follow these steps:

- Take the pay phone off-hook (pick up receiver)
- At pay phone, press * button
- After about a second, hang up remote phone

To link an additional telephone to the AT&T Private Pay Phone *Plus*, a special adapter (specifically an AT&T 267D T-Adapter) is needed. You will also need a 4-conductor modular telephone line cord. An AT&T 267D T-Adapter and 4-conductor line cord (at various lengths) can be purchased at any AT&T Phone Center.

One of two methods can be used to wire an additional telephone to your Private Pay Phone. The method used depends on the distance between the Private Pay Phone and the additional telephone. If the distance is 25 feet or less, use Method 1. If the distance is more than 25 feet, use Method 2.

CAUTION

The methods and equipment outlined below will reduce the chance of loss of service when connecting an additional telephone pay phone. All connections and wires should be protected. Any deviation from the methods outlined above may cause loss of service and damage to your Private Pay Phone. To prevent this from happening, you may want to have a qualified telephone service technician install the wiring necessary to connect an additional telephone to your Private Pay Phone.

METHOD 1: 25 Ft. Or Less

If 25 feet or less of 4-conductor telephone line cord is needed, the following items are used:

- An AT&T 4-Conductor line cord in the required length.
- An AT&T 267D T-Adapter.

Perform the following to link an additional telephone to your AT&T Private Pay Phone *Plus*:

1. Refer to Figure A-1.
2. Follow the installation instructions in Section 3. Instead of using the 2-conductor line cord supplied with the Private Pay Phone for installation (as stated in Section 3), use the 4-conductor line cord that you purchased. Connect the 4-conductor telephone line cord to your Private Pay Phone.
3. Plug the AT&T 267D T-Adapter into a modular telephone line jack.
4. Connect the other end of the 4-conductor line cord coming from the Private Pay Phone into the socket labeled "PHONE" on the AT&T 267D T-Adapter.
5. Plug the line cord from the other telephone into the socket labeled "LINE 2" on the AT&T 267D T-Adapter.

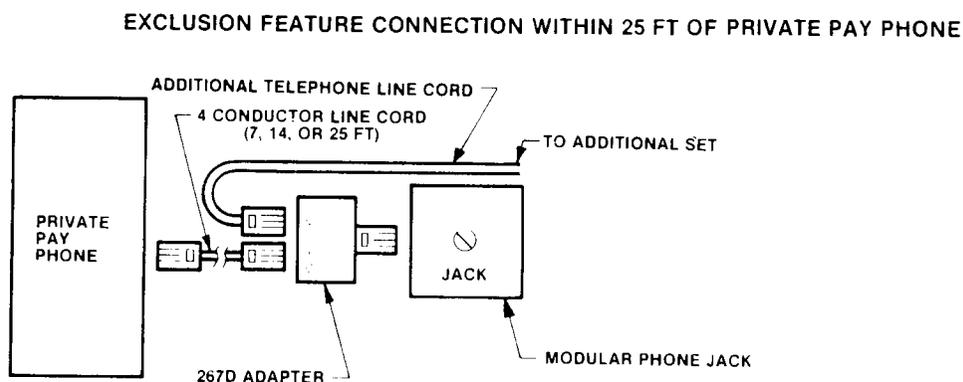


Figure A-1. Wiring For less than 25-Ft. Distance Between Telephones

METHOD 2: More Than 25 Ft.

If you need more than 25 feet of 4-conductor telephone line cord, the following items are used:

- D-Station Wire in the required length.
- 4-Conductor line cord in the required length.
- An AT&T 267D T-Adapter
- Two RJ14 telephone jacks (not including Private Pay Phone telephone jack). Refer to Figure A-2.

Perform the following to link an additional telephone to your Private Pay Phone:

1. Implement the wiring layout shown in Figure A-2 below.
2. Follow the installation instructions in Section 3. Instead of using the 2-conductor line cord supplied with the Private Pay Phone for installation (as stated in Section 3), use the 4-conductor line cord that you purchased. Connect the 4-conductor telephone line

- cord to your Private Pay Phone.
3. Plug the AT&T 267D T-Adapter into a modular telephone line jack.
 4. Connect the other end of the 4-conductor line cord coming from the Private Pay Phone into the socket labeled "PHONE" on the AT&T 267D T-Adapter.
 5. Using the 2-conductor telephone line cord shipped with your Private Pay Phone set, connect Jack A (see below) into the socket labeled "LINE 2" on the AT&T 267D T-Adapter.
 6. Connect your extension phone to Jack B.

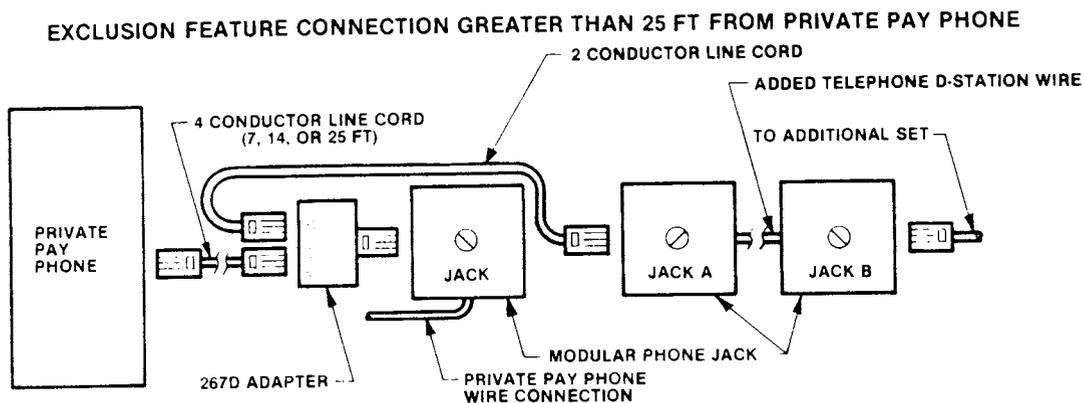


Figure A-2. Wiring For Over 25-Ft. Distance Between Telephones

APPENDIX B

USE BEHIND PBX

Because of the way some PBX systems interface with the network, the AT&T Private Pay Phone *Plus* may not work with your system. There are many kinds of PBX systems, and the only way to be sure if the phone will work installed behind a particular system is to discuss the installation with your dealer. Following are some general guidelines:

1. Check the P.U.C. regulations for your state. There may be restrictions on installing a pay phone behind a PBX.
2. You cannot install the pay phone behind PBX's without outward dialing capability and enough lines to handle all the calls on the system most of the time. The pay phone will abort a call if a line is not available. The phone may be programmed for a PBX access code, if necessary.
3. You cannot install the pay phone behind a PBX system without direct inward dialing capability. The phone must be accessible via its own telephone number so that it can be programmed.
4. You cannot install the pay phone behind a low voltage PBX system. The phone requires 25 volts on-hook.
5. You cannot install the pay phone on a PBX system with auto-route selection. Choosing a route may take too long to establish a call and the phone will abort the call.
6. Do not include the pay phone telephone number in a PBX hunt group.
7. Administer the pay phone number without call waiting, call forwarding, or toll restriction features.
8. Because of the way some PBX's interface with the network, use touch tone dialing only.

**APPENDIX C
TESTING THE PAY PHONE**

1. Place a local call requiring a deposit. When the call is answered, make sure the far-end party stays on the line until the pay phone collects the coins into the coin box.
 - Did the pay phone ask for the correct amount of money? _____
 - Did it collect the money as it should? _____

2. Place a long distance call for which the charge is greater than \$0.40. Be sure you know what the charge should be. After you dial the number, record the amount the pay phone asks for. Deposit **ONLY** a nickel, a dime, and a quarter. Listen for the additional charge. Hang up.
 - What was the charge for the call? _____
 - Was that charge correct? _____
 - What was the amount requested after the \$0.40 deposit? _____
 - Was that amount correct (call charge - \$0.40)? _____
 - Was the money refunded properly? _____

3. Dial Tone Test - Do this test six times. (Include one long distance call.) Place a call that requires coins. Make sure the far-end party stays on the line until the coins fall into the coin box. Tell the far-end party to hang up and record the time UNTIL dial tone occurs. **DO NOT HANG UP THE PAY PHONE.** When, and if, dial tone occurs, try to place another call. Record the results in the table below.
 - TIME - If dial tone resumed in less than 40 seconds, record "15" for that call. If dial tone resumed in between 40 and 120 seconds, record "30." If dial tone has not resumed within 120 seconds, record an "n."
 - FRAUD - If you could place a second call with no deposit, record a "Y."

CALL	1	2	3	4	5	6
TIME						
FRAUD						

Hang up the phone and do the test again until you have tried six times.

If there are any Y's for FRAUD, programming for End-To-End signaling needs to be changed to the smallest number in the TIME row (15 or 30). Inform the person responsible for programming the pay phone.

If the Coin Box Removed alarm is set to ON, do the last three steps. If it is OFF, you are done.

4. Remove the front cover of the pay phone and watch the display as you remove the coin box.
 - Do you see "WAITING" or "CALLING" or a similar message? _____

5. Empty the coin box and replace it.

6. Confirm that the Coin Box Removed alarm has been received at the PC and report any problems.

GLOSSARY OF TERMS

AWG -- American Wire Gauge. A standard used to determine the thickness of a wire.

LATA -- Local Access and Transport Area. Term used for your local calling zone.

Local Calls -- Calls that are not considered long distance. Programming options for local calls include local exchanges inside the home area code, local exchanges in different area codes, and the time period and charge for local calls.

Network Interface -- The connector where service is supplied by the local telephone company.

N11 Rate -- Any 3-digit call ending in 11 except for 011, 111, 411, or 911. N11 numbers are reserved for special services (eg. Telephone company repair services).

Operator Assistance Rate -- The AT&T Private Pay Phone *Plus* recognizes 0, 00, or 10xxx-0 (alone or followed by a telephone number) as an operator assistance call.

Other Calls (Sales Information) -- A count that includes free calls, Directory Assistance calls, Operator calls, 911 calls, N11 calls, and 1-800 calls.

Perpetual Count -- A counting method that is continuous and cannot be erased.

P.U.C. -- Public Utility Commission. Regulates utilities within a state.

Remote Programming Source -- PC on which all phone programming is completed.

Security Code -- The code necessary to program rates, review rates, or access sales information within the AT&T Private Pay Phone *Plus*.

Security Stud -- A shoulder bolt used to attach an AT&T Private Pay Phone *Plus* to a backboard or an enclosure.

Spirit Level -- A device for establishing a vertical or horizontal line or plane.

Station Protector -- A device that limits the voltage on a telephone line.

Toll Calls -- Calls that are considered to be long distance.

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**INTERFERENCE INFORMATION
FCC REGULATIONS PERTAINING TO THIS EQUIPMENT
NOTICE**

Federal Communications Commission (FCC) rules require that you be notified of the following:

FCC Part 15 Information

Some telephone equipment generates and uses radio-frequency energy and, if not installed and used properly, may cause interference to radio and television reception.

Your AT&T product has been tested and found to meet the standards for a Class B digital device, as specified in Part 15 of the FCC Rules. These specifications are designed to provide reasonable protection against harmful interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation.

If your AT&T product causes interference to radio or television reception when it is in use, you might correct the interference with any one or all of these measures:

1. Where it can be done safely, re-orient the receiving television or radio antenna.
2. To the extent possible, relocate the television, radio, or other receiver with respect to the telephone equipment.
3. If your telephone product runs on AC power, plug your product into an AC outlet that's not on the same circuit as one used by your radio or television.

If you need assistance, you can call the AT&T Business Customer Service Center at 1-800-628-2888.

FCC Part 68 Registration Information

Your new AT&T product has been registered with the Federal Communications Commission (FCC). This product complies with standards in Part 68 of the FCC rules. You should be aware of the following:

1. CONNECTION AND USE WITH THE NATIONWIDE TELEPHONE NETWORK

The FCC requires that you connect your telephone equipment to the nationwide telephone network through a modular telephone outlet or jack. The modular telephone outlet or jack to which the telephone must be connected is a USOC RJ11C or RJ11W.

This equipment may not be used with Party Line Service or with Coin Telephone Lines.

To comply with state tariffs, the telephone company must be given notification prior to connection. In some states, prior approval of connection must be obtained from the state Public Utility Commission, Public Service Commission or state Corporation Commission.

2. INFORMATION FOR THE TELEPHONE COMPANY

Upon request of your local telephone company, you are required to provide them with the following information:

- A. The "line" to which you will connect the telephone equipment (that is, your phone number), and
- B. The telephone equipment's FCC registration number and ringer equivalence number. These numbers are on the back or bottom of your telephone equipment.

The REN is useful to determine how many devices you may connect to your telephone line and still hear them ring when your telephone line is called. In most, but not all areas, the sum of all REN's should be 5 or less. You may want to contact your local telephone company.

3. REPAIR INSTRUCTIONS

If it is determined that your telephone equipment is malfunctioning, the FCC requires that it not be used and that it be unplugged from the modular outlet until the problem has been corrected. Repairs to this telephone can only be made by the manufacturer or its authorized agents or by others who may be authorized by the FCC.

For repair procedures, follow the instructions outlined under the AT&T Limited Warranty.

4. RIGHTS OF THE TELEPHONE COMPANY

If telephone equipment is causing harm to the telephone network, the telephone company may temporarily discontinue your telephone service. If possible, they'll notify you before they interrupt service. If advance notice isn't practical, you'll be notified as soon as possible. You'll be given the opportunity to correct the problem, and you'll be informed of your right to file a complaint with the FCC.

Your telephone company may make changes in its facilities, equipment, operations or procedures that could affect the proper functioning of your AT&T product. If such changes are planned, you'll be notified.

5. THIS TELEPHONE IS COMPATIBLE WITH INDUCTIVELY COUPLED HEARING AIDS.

6. PROGRAMMING/TESTING EMERGENCY NUMBERS

Although testing the programming of emergency numbers is not a recommended procedure, if you make a call to an emergency number:

- A. You must remain on the line and briefly explain the reason for the call before hanging up.
- B. Programming/testing of emergency numbers should be performed in the early morning or late evening (off-peak hours).

AT&T LIMITED WARRANTY

WHAT IS COVERED:

Any defect in material or workmanship.

FOR HOW LONG:

One year.

WHAT WE WILL DO:

If your AT&T product is defective and returned within 30 days of the date it was purchased, we will replace it at no charge to you. If returned after 30 days but within one year of the date purchased, we will repair it or, at our option, replace it at no charge to you.

If we repair your AT&T product, we may use new or reconditioned replacement parts. If we choose to replace your AT&T product, we may replace it with a new or reconditioned one of the same design. The repair or replacement will be warranted for either (a) 90 days or (b) the remainder of the original one year warranty period, whichever is longer.

LIMITATIONS:

Implied warranties, including those of fitness for a particular purpose and merchantability (an unwritten warranty that the product is fit for ordinary use), are limited to one year from date of purchase. We will not pay for loss of time, inconvenience, loss of use of your AT&T product, or property damage caused by your AT&T product or its failure to work, or any other incidental or consequential damages.

Some states do not allow limitations on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages, so the above exclusions or limitations may not apply to you.

WHAT WE ASK YOU TO DO:

To get warranty service for your AT&T product, you must provide proof of the date of purchase. Within 30 days of the date it was purchased, return your AT&T product to your place of purchase for immediate replacement. Afterward, call our Service Center toll-free at 1-800-222-3111 for the address of an authorized service location. If you ship your AT&T product to the authorized service location, you must prepay all shipping costs. We suggest that you retain your original packing material in the event you need to ship your AT&T product. When sending your AT&T product to a service location, include your name, address, phone number, proof of purchase, and a description of the operating problem. After repairing or replacing your AT&T product, we will ship it to your home at no cost to you.

Repair or replacement of your AT&T product at an authorized service location is your exclusive remedy.

WHAT THIS WARRANTY DOES NOT COVER:

This warranty does not cover defects resulting from accidents, alterations, unauthorized repair, failure to follow instructions, misuse, fire, flood, and acts of God. Nor do we warrant your AT&T product to be compatible with any particular telephone equipment or party line, key telephone systems or more sophisticated customer premises switching systems. If your AT&T product is not covered by our warranty, call us toll-free on 1-800-222-3111 for advice whether we will repair your AT&T product and other repair information, including charges. We, at our option, may replace rather than repair, your AT&T product with a new or reconditioned one of the same or similar design. The repair or replacement will be warranted for 90 days.

This warranty is the only one we give on your AT&T product, and it sets forth all our responsibilities regarding your AT&T product. There are no other express warranties.

STATE LAW RIGHTS:

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. Some telephone equipment generates and uses radio-frequency energy and, if not installed and used properly, may cause interference to radio and television reception.

If you need assistance, you can call our National Service Center at 1-800-222-3111.