

How  
to  
operate  
the  
**555**  
Cord  
Switchboard

**Pacific Telephone**

*Part of the Nationwide Bell System*



## *To the PBX*



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*Strive for Fast, Accurate,  
and Courteous Service,  
always*

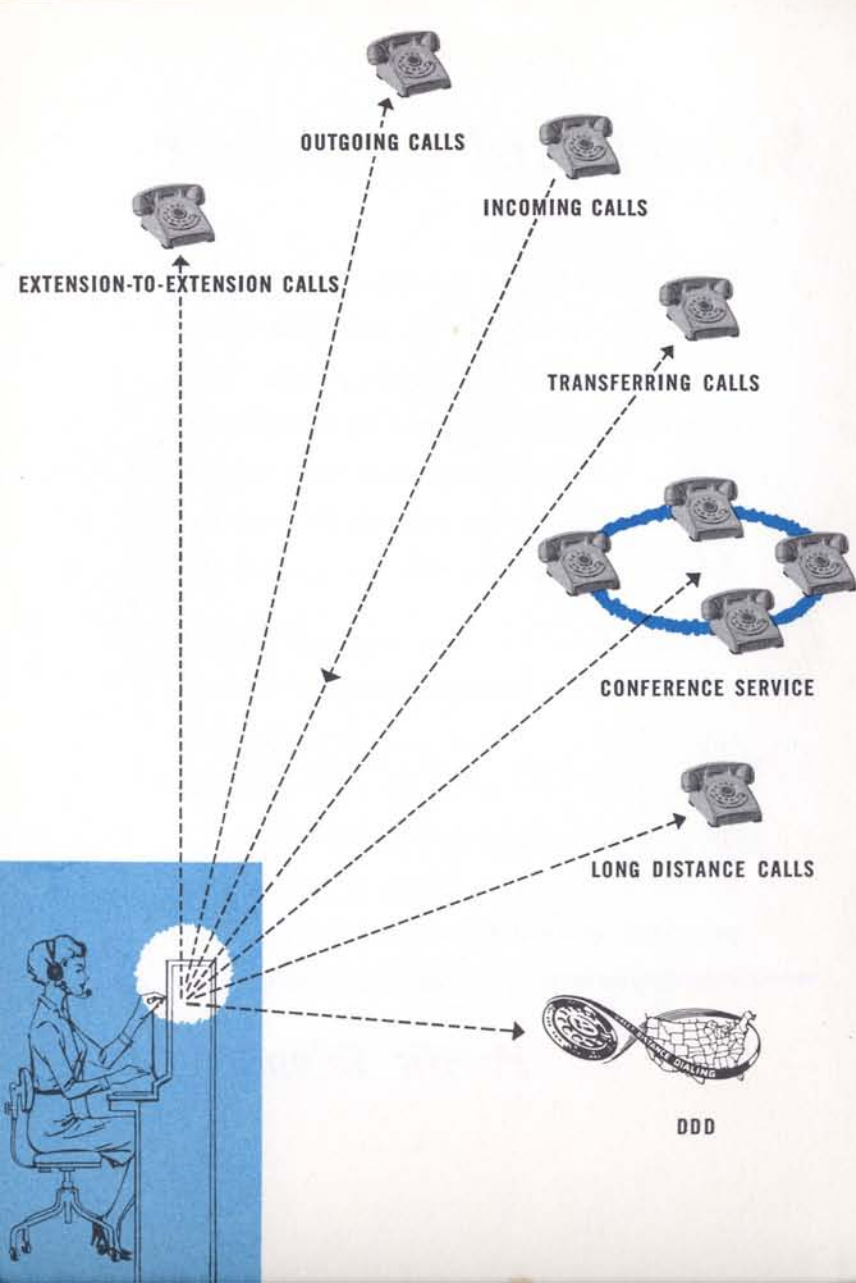
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## *Switchboard Attendant*

The quality of the telephone service you give to the people in your organization and to customers and others calling your Company depends on the operating methods and equipment arrangements at your switchboard and in our central offices. And too, it depends on a personal interest in each call.

We both have a mutual responsibility for providing good telephone service. To make sure the service is fast, accurate, and courteous, your operating methods and ours should be coordinated. We offer this booklet to you with that in mind. It explains the principal operating features of your switchboard. We hope you will find it helpful.

*Pacific Telephone*

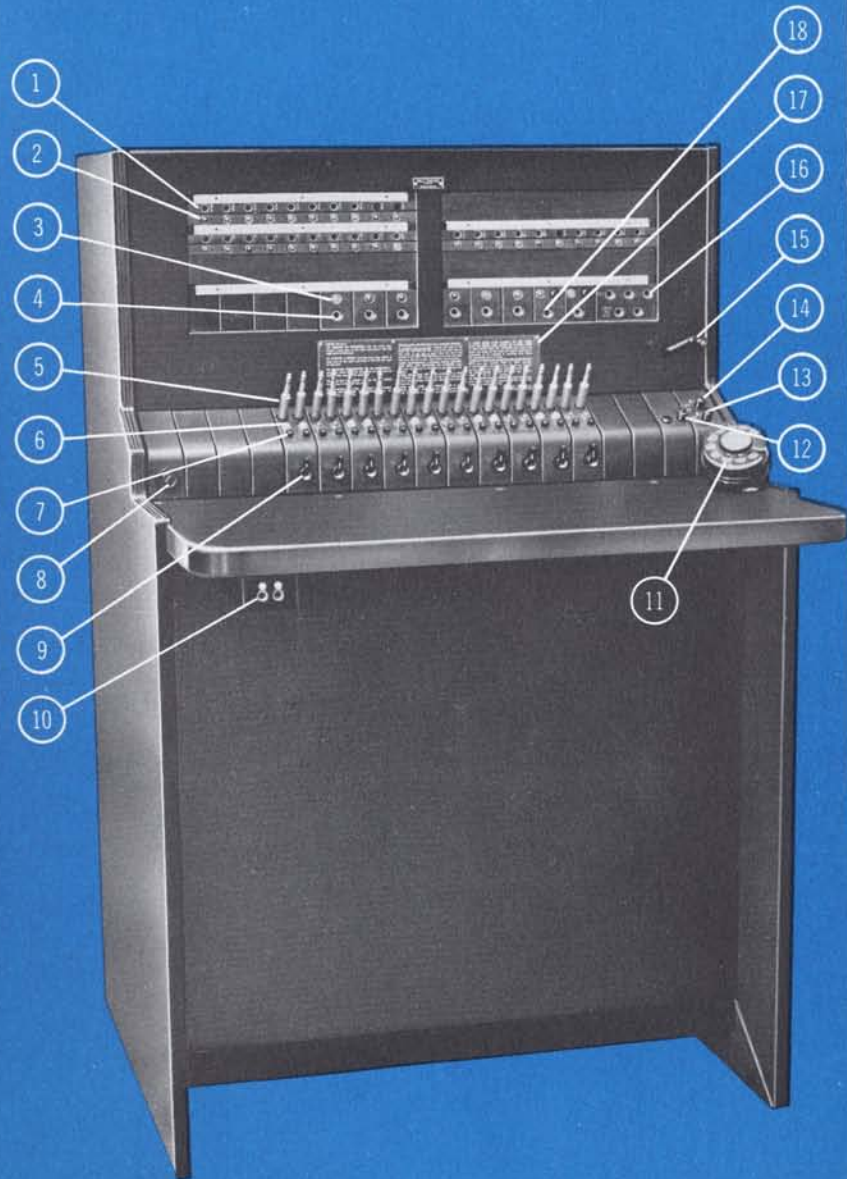


## TABLE OF CONTENTS

Description of the 555 Cord Switchboard . . .	4
Incoming Call . . . . .	6
Outgoing Call Dialed by Extension User . . .	8
Outgoing Call Placed by PBX Attendant . . .	10
Extension-to-Extension Call . . . . .	12
Transferring an Incoming Call . . . . .	14
Recalling the Central Office Operator . . . .	14
Disconnect Signals . . . . .	14
Conference Service . . . . .	16
Night Connections . . . . .	18
Order of Attention to Signals . . . . .	20
Tie Trunks . . . . .	21
Equipment Trouble . . . . .	21
Battery Supply Failure . . . . .	22
Ringing Power Failure . . . . .	22
Long Distance Calls	
Direct Distance Dialing . . . . .	23
Placing Calls with the Long Distance Operator . . . . .	24
Delayed Calls . . . . .	26
Good Switchboard Service . . . . .	27
At Your Service . . . . .	30
Your Service Adviser . . . . .	31

## Description of the 555 Type Switchboard

- |                          |                             |
|--------------------------|-----------------------------|
| ① Extension Jacks        | ⑩ Attendant's Set Jack      |
| ② Extension Lamps        | ⑪ Attendant's Dial          |
| ③ Trunk Lamps            | ⑫ Splitting Key             |
| ④ Trunk Jacks            | ⑬ Battery Switch            |
| ⑤ Connecting Cords       | ⑭ Buzzer Turn-Off Switch    |
| ⑥ Cord Supervisory Lamps | ⑮ Hand Generator Crank      |
| ⑦ Ringing Keys           | ⑯ Conference Jack Equipment |
| ⑧ Buzzer Adjustment Key  | ⑰ Chart                     |
| ⑨ Lever Keys             | ⑱ Tie Trunk                 |



## Incoming Call

### Answering the Call *(Top photo)*

When a trunk lamp lights(1), turn the lever key, below an idle pair of cords, to the right (2) *talking position* and, using the corresponding left cord (3), plug into the trunk jack (4) associated with the trunk signal (1).

Answer immediately with your firm name.

### Establishing Connection *(Lower photo)*

While you are accepting and acknowledging the order, pick up the right cord (5) of the pair used in answering.

If the called extension is not busy, insert the plug of this cord in the jack of the called extension (6).

Ring the called extension by depressing the right ringing key (7).

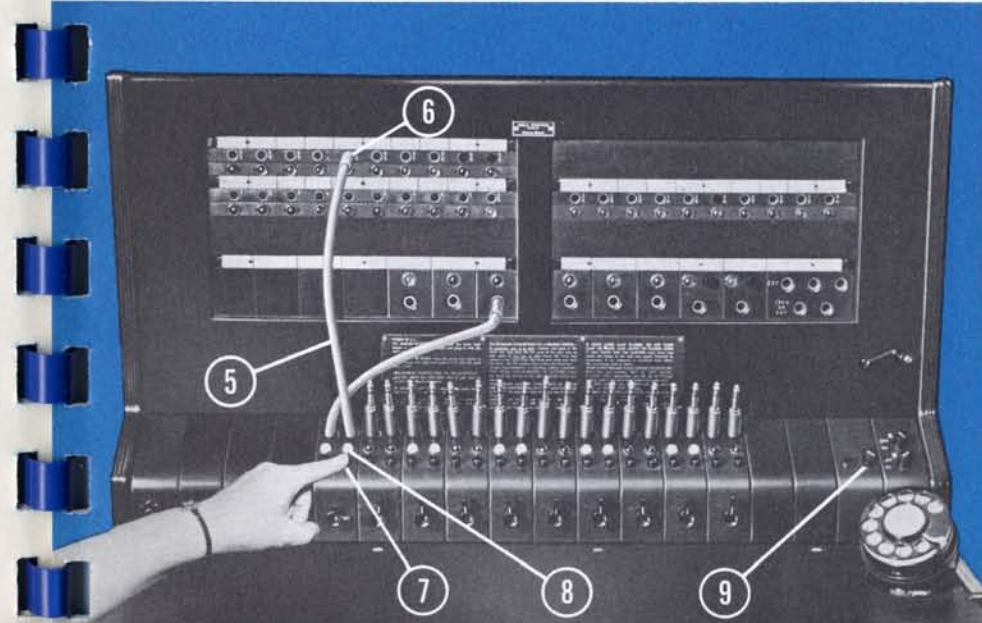
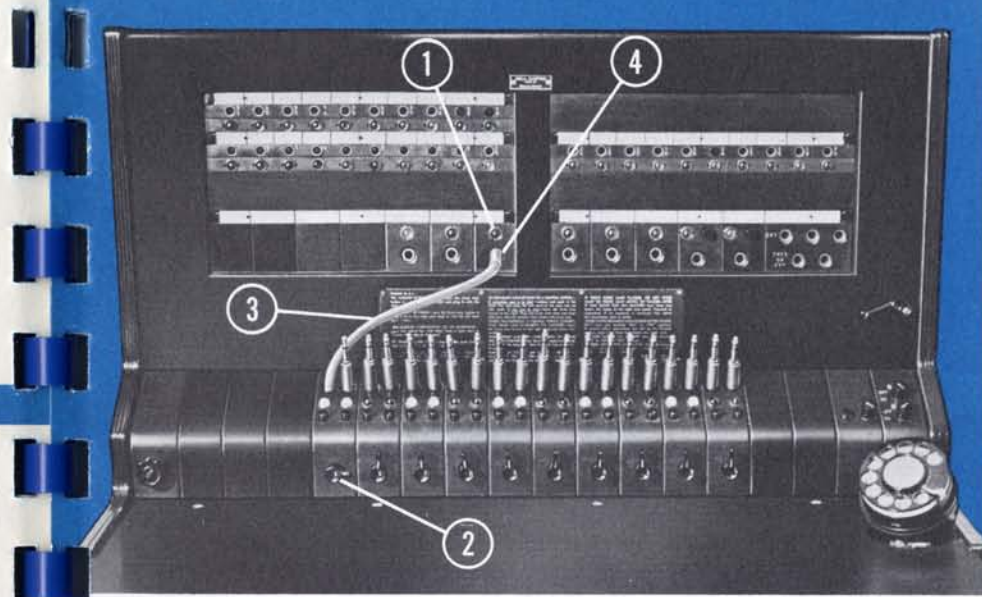
Restore the lever key to normal (*upright*) position.

The right cord supervisory lamp (8) lights when you plug into the extension jack, and remains lighted until the called extension answers.

### Splitting Key

If you wish to talk to the called extension without being heard by the party on the trunk line, before ringing turn the "splitting key" (9) clockwise.

Restore the "splitting key" to normal to complete the connection between trunk and extension.



## Outgoing Call

DIALED BY EXTENSION USER

### Answering the Call

When an extension lamp lights, turn the lever key, below an idle pair of cords, to the right (*talking position*).

Using the corresponding right cord, plug into the extension jack associated with the extension signal.

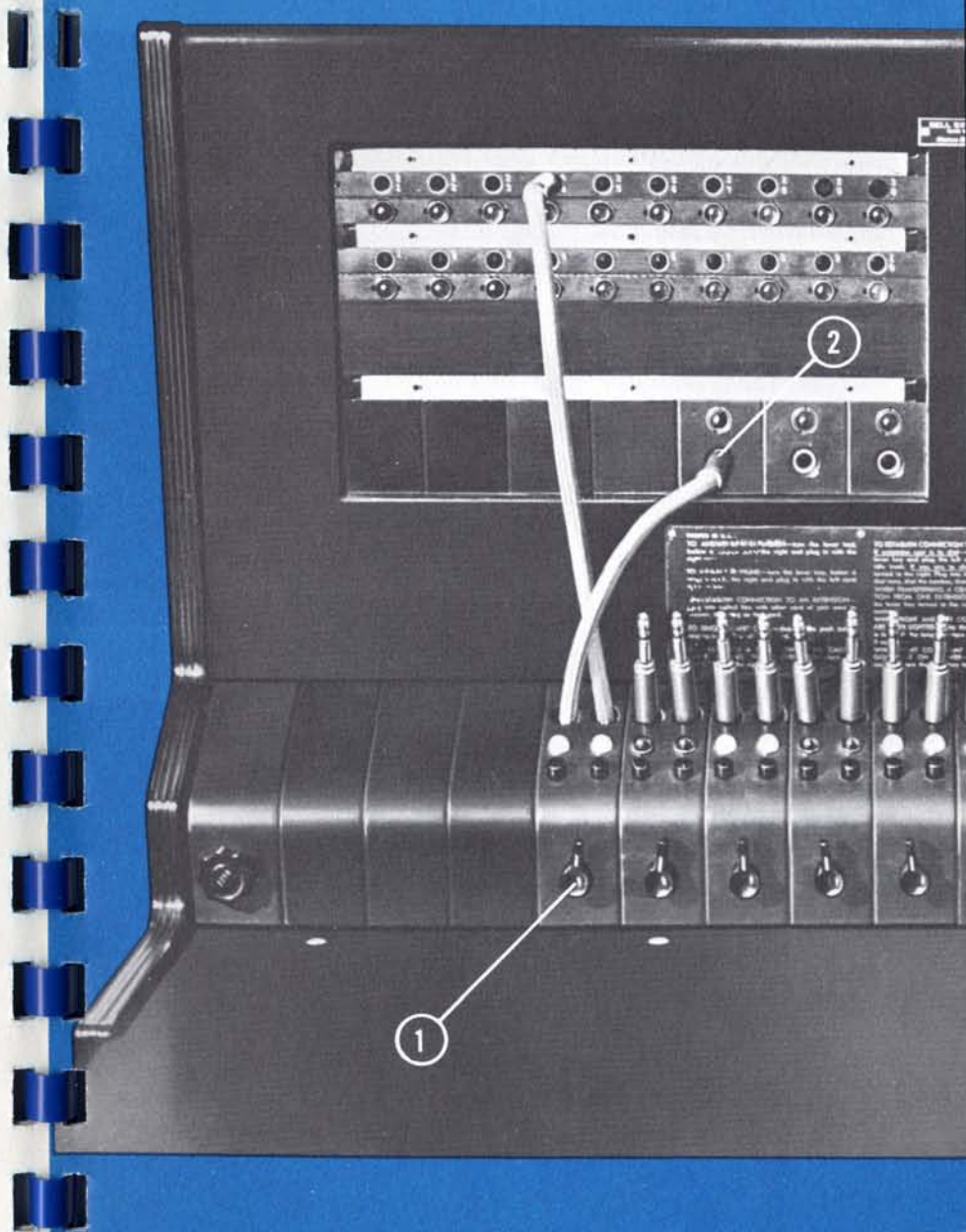
Answer with an appropriate phrase.

### Establishing the Connection

Acknowledge the order, operate the lever key to normal (*upright*) position and then push it in to the through-dialing position (1). Be sure to operate the through-dialing key on all outgoing calls where the extension user does his own dialing.

With the left cord of the pair used in answering, plug into an idle trunk (2), selecting a trunk as near the end of the trunk group as possible.

Leave the lever key in the through-dialing position (*pushed in*) until after you have taken down both cords.



## Outgoing Call

PLACED BY PBX ATTENDANT

### Answering the Call

When an extension lamp lights, turn the lever key (1), below an idle pair of cords, to the right (*talking position*). Using the corresponding right cord, plug into the extension jack associated with the extension signal.

Answer with appropriate phrase.

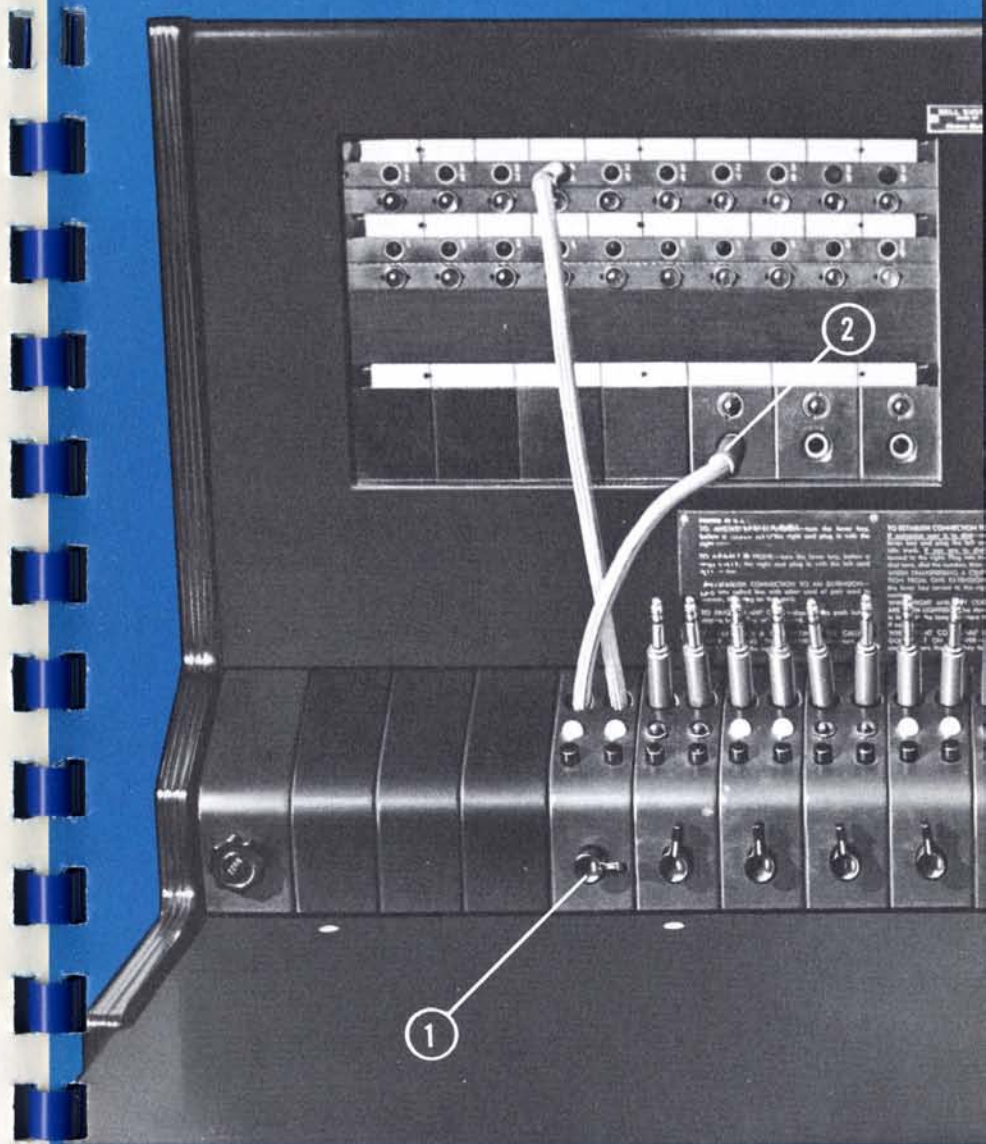
### Establishing Connection

Acknowledge the order and with the left cord of the pair used in answering, plug into an idle trunk (2), selecting a trunk as near the end of the trunk group as possible.

Wait for dial tone, which indicates that the central office equipment is ready to receive your call. Then dial the number.

If the extension user is holding the line, restore the lever key to normal (*upright*) position. If the extension user has hung up, either ring him back and request him to hold the line, or remain on the connection yourself until the called party answers.

Manual Central Offices: If your switchboard is served from a manual central office, pass the order as soon as the operator answers.



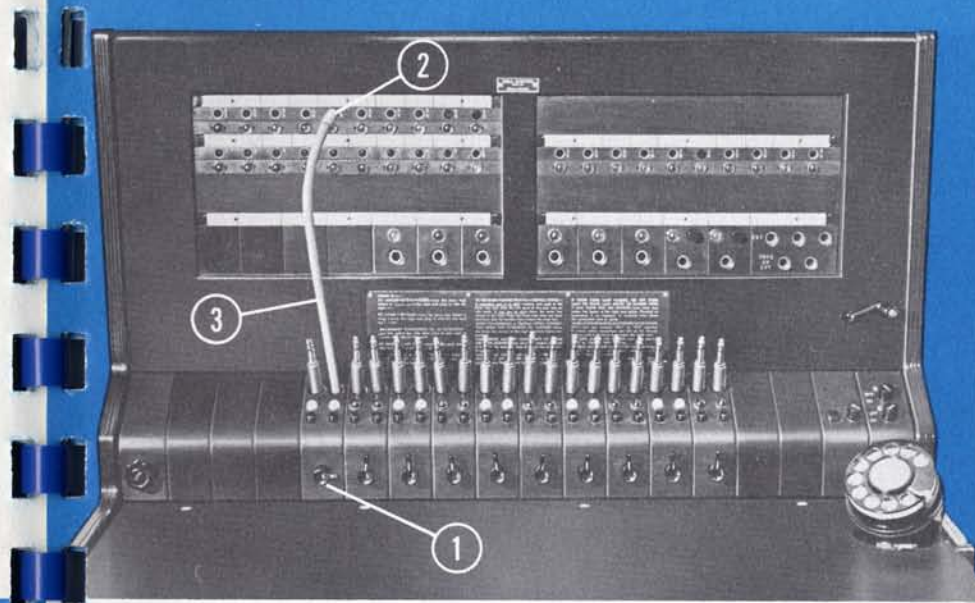
## Extension-to-Extension Call

### Answering the Call

When an extension lamp lights, turn the lever key, below an idle pair of cords, to the right (1), the talking position.

Plug into the extension jack (2), associated with the extension signal, with the corresponding right cord (3).

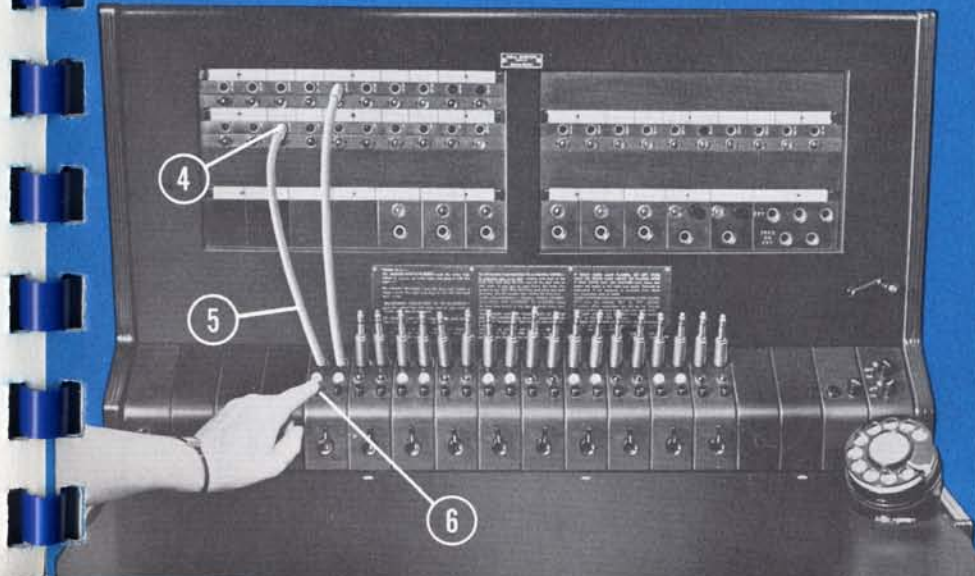
Answer with an appropriate phrase.



### Establishing Connection

Acknowledge the order and plug into the jack of the called extension (4) with the left cord of the pair used in answering (5).

Ring the called extension by depressing the ringing key (6) associated with the left cord.





## Transferring an Incoming Call

If you are requested to transfer an incoming call, keep the lever key in the talking position (*right*) to avoid a cutoff, remove the plug from the first extension line jack and insert it in the jack of the desired extension, provided it is not busy, and ring.

If the desired extension is busy, report this to the calling person. Then proceed as on a new call to a busy extension, giving frequent progress reports and being governed by any change in instructions given.

*Note:* If the transfer of a call is requested verbally, turn the lever key to the right before making the transfer.

## Recalling the Central Office Operator

To recall the central office operator, operate the talking key, then remove and re-insert the plug in the trunk jack about twice a second until the operator answers.

## Disconnect Signals

When the extension user replaces the receiver on the hook, the associated cord signal will light.

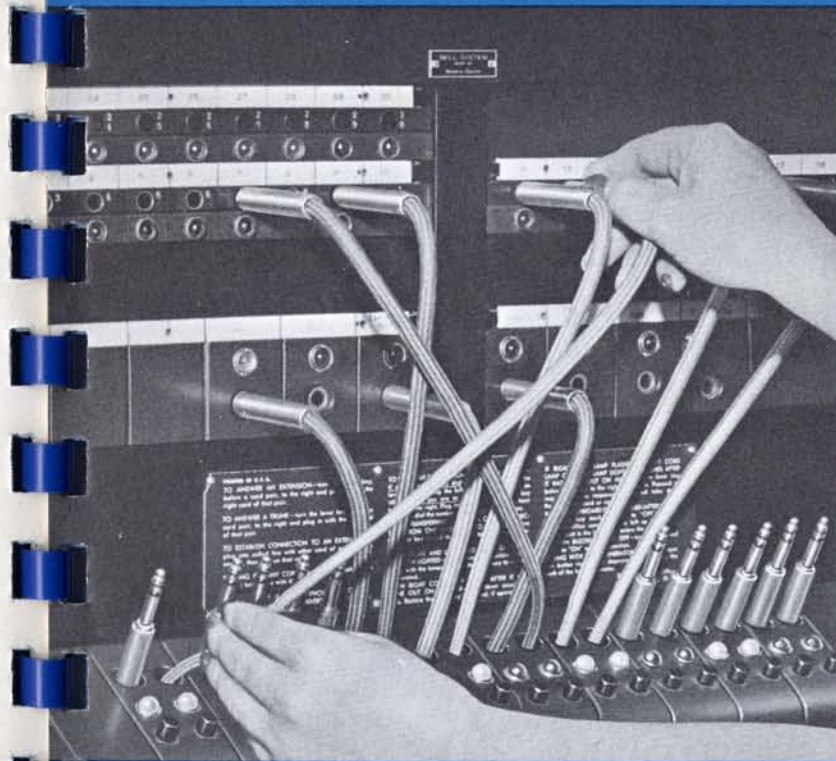
Watch connections closely so you'll see the supervisory lamp go out when the called extension answers. Do not mistake slow answers from extensions for disconnect signals.

After a disconnect signal is received, disconnect as soon as possible, without interfering with other operating work.

Take down the left cord first and then the right cord.

Always grasp the shell of the plug rather than the cord itself.

Trace cords by hand as well as by eye, in order to avoid cut-offs on other connections. Be careful not to disturb plugs in adjacent jacks.



*"...trace cords by hand as well as by eye..."*

## Conference Service

### How to Operate a 5-Jack Conference Circuit

Two jacks for use with trunks, tie lines or extensions, designated TRKS or EXT.

Three jacks for use with extensions only, designated, EXT.

The picture on the opposite page shows a conference connection where a party connected over a trunk is in conference with three extensions.

Mr. "A" on extension 8 requests a conference with Mr. "B" on extension 10, Mr. "C" on extension 12 and Mr. "D" on YU 2-1131.

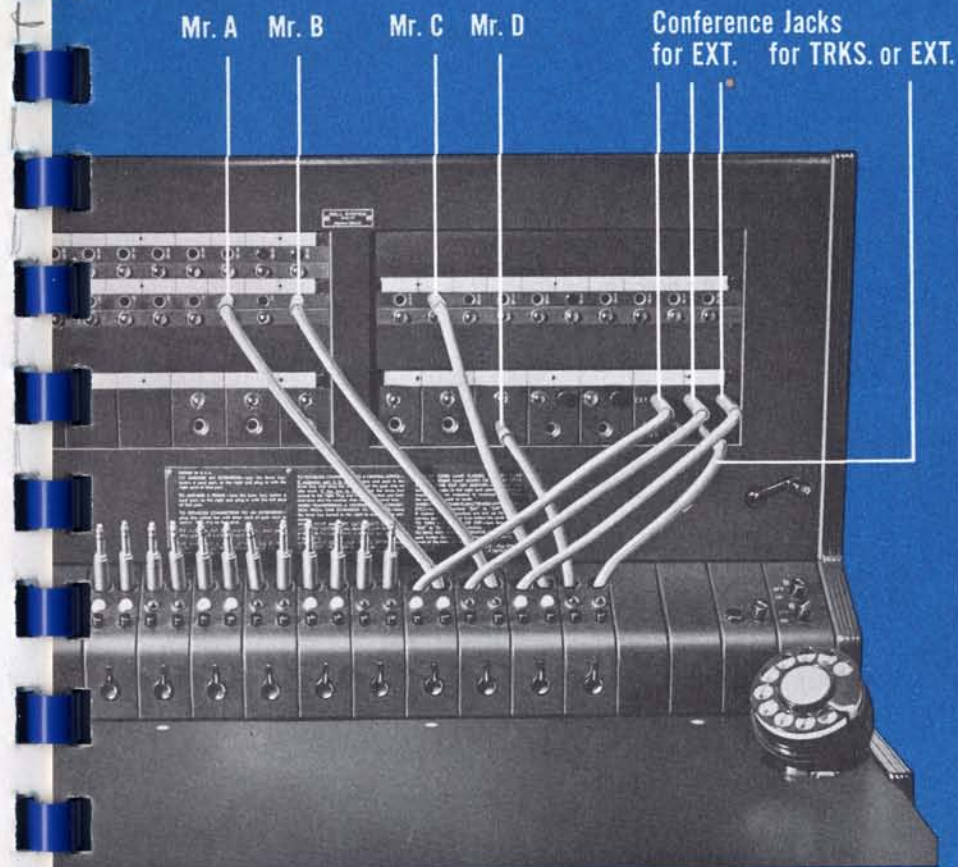
Insert left cord of pair used in answering Mr. "A" in a conference jack designated "EXT."

Using the right cords of idle pairs, ring extension 10 and extension 12 and say, for example . . . "Mr. 'A' requests a conference". Then insert the corresponding left cords in conference jacks designated "EXT."

Using the left cord of another idle pair, select a trunk and establish connection to YU 2-1131. Insert the right cord of this pair in a conference jack designated "TRKS or EXT" thus completing the conference connection.

All keys must be in normal position for the duration of the conference.

When a disconnect signal is received from an extension, disconnect.



## Night Connections

### Establishing Night Connections

Insert the right cord (1) in the extension jack of each extension to receive night service.

Push the lever keys (2) associated with the cord pairs used, to the through-dialing position (*in*).

Insert the corresponding left cords (3) in the particular trunk jacks specified for night service.

Turn the buzzer and battery switches to the "OFF" position.

Place the night connection card on the switchboard.

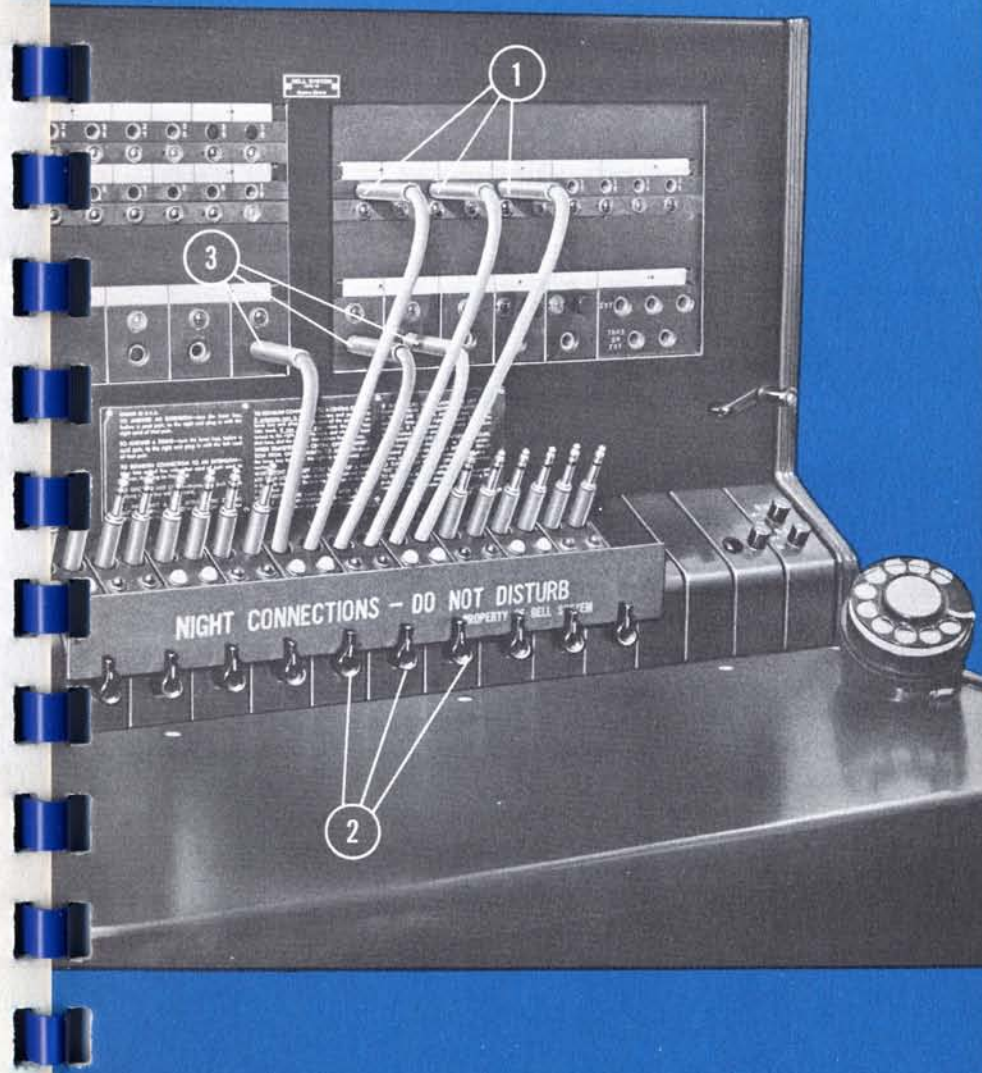
### Releasing Night Connections

Remove the night connection card.

Turn the buzzer and battery switches to the "ON" position. Supervisory signals will then appear on connections which are not in use.

Release each connection on which a disconnect signal appears, first the left cord (3), then the right cord (1).

Restore (pull out) the lever keys to their normal positions.



## Order of Attention to Signals

Signals should be answered in the order of their appearance, but when signals of different kinds appear at the same time, they should be given attention in the following order . . .

### 1<sup>st</sup> Recall (Flashing) Signals

Give precedence to recall signals over all other signals. Recall Signals indicate that your immediate attention is required on an existing connection.

### 2<sup>nd</sup> Incoming Trunk Signals

Prompt answers to these signals gives customers a good impression of you and your firm.

### 3<sup>rd</sup> Incoming Tie Trunk Signals

Tie trunks are provided on a shared basis. Prompt answers to these signals insure equitable use.

### 4<sup>th</sup> Extension Signals

Extension signals represent calls from your own organization. They are important and should receive prompt attention, but they are of secondary consideration, compared to an incoming trunk signal.

### 5<sup>th</sup> Disconnect Signals

Release cords promptly when a disconnect signal appears. Take down connections as an overlap operation; that is, while doing other work . . . such as ringing.

## Tie Trunks

Tie trunks enable extension users of one private branch exchange to place calls through their switchboard to the extensions of another private branch exchange, without securing connection through the central office.

There are several types of tie trunks with corresponding differences in operation. Your Service Adviser will be glad to teach you the operation of any tie trunks provided at your switchboard.

## Equipment Trouble

Report switchboard or station equipment out of order promptly to Telephone Company "Repair Service".

Test all faults before reporting them to "Repair Service". Be sure you are reporting actual trouble.

Report extension trouble by station number, not by name.

Do not drink coffee or other beverages at your switchboard. Do not set vases of flowers or any receptacle containing liquids on the top of your switchboard! If spilled, they can put the P.B.X. switchboard out of service.

## Battery Supply Failure

Should the battery supply to your switchboard fail, indicated by the non-functioning of the switchboard signals, operate the lever key associated with any idle cord pair into the through dialing position (*in*) and connect an idle trunk to an extension telephone located close to your switchboard. Call Telephone Company "Repair Service" from this extension and report the trouble. During the interval prior to restoration of the battery supply, incoming calls may be answered and outgoing service given by connecting all central office trunks to extension telephones in the manner you put up night connections. Do not turn the battery switch to the "OFF" position. With the battery switch in the "ON" position, restoration of the battery supply will be indicated by the lighting of the right cord supervisory lamps associated with the connections established but not being used.

## Ringin Power Failure

Immediately report the condition to Telephone Company "Repair Service". If a hand generator is provided, you can ring an extension during a ringin power failure by depressing the associated ringin key while turning the crank of the hand generator.

## Long Distance Calls



### Direct Distance Dialing (DDD)

Direct Distance Dialing is the fast, convenient and economical way to dial Station-to-Station Long Distance calls to most telephones throughout the country.

The United States and Canada have been divided into more than 100 telephone numbering areas. Each area has its own three-digit number—called an "Area Code". The purpose of this code is to give you an "express" route direct to the State or general area in which the telephone you are calling is located. The numbering area in which your switchboard is located is known as your Home Area. Your Home Area Code is used by people calling from outside your area to dial your switchboard. But you do not use it to dial calls within your Home Area.

The telephone numbers you can dial direct must have seven numerals or two letters and five numerals.

Some of the cities you can dial direct are listed in the introductory pages of your local telephone directory. If the city you want to dial is not listed, ask the long distance operator if it can be dialed direct. She'll tell you if it's dialable and will give you the area code if one is needed. Whenever you get the Area Code and telephone number of a person in an out-of-town point, add them to your list of frequently called numbers.

If you don't know the telephone number, dial the long distance operator. Ask her for Information in the city you wish to dial. If the area has a Universal Information Operator, do not dial

the long distance operator but dial the DDD code, if required, the area code and the number 555-1212. There is no charge for these Information calls.

## How to Dial a DDD Call

In some places you start by dialing the code 112. This connects you with the DDD equipment.

*In your Home Area*—Just dial the telephone number you want. You don't need to dial the Area Code on calls to places in your Home Area.

*Outside your Home Area*—Dial the Area Code for the place you are calling. Then dial the telephone number.

## Operator May Ask for Your Number

In some cases, after you have dialed a DDD call, an Operator will come on the line briefly and ask, "Your number, please?" Be sure to give her the number of your switchboard. This information is necessary to permit your call to go through.

*If you reach a Wrong Number*—Ask the person who answers what city you reached. Then dial the Long Distance Operator and tell her. Give her your telephone number and the place reached. She will cancel the charge.

## Placing Calls with Long Distance Operator

Dial the Long Distance Operator for calls such as Person-to-Person, Collect, Credit Card Calls, and Conference Calls. Also, in those areas not yet served by DDD, place Station-to-Station Calls with the Long Distance Operator.

## Call by Number

The Long Distance Operator is able to complete a Station-to-Station call in less than 30 seconds if she has the number. When she does not have the number, the average time to complete the call is about three times as long. If you don't know the telephone number, ask the Long Distance Operator for Information in the city you wish to call. Whenever you get the area code and telephone number of a person in an out-of-town point, add them to your list of frequently called numbers.

## Placing the Call

Ask the extension user to hold the line, and connect him to the Long Distance Operator so that he can give his call to her directly.

If you have to place the call for the extension user, obtain the necessary details and ask him to hold the line. Then reach the Long Distance Operator and give her the details of the call in the following order:

1. The Area Code followed by the telephone number.
2. On person-to-person calls, the name of desired party.
3. Special Instructions, if any, such as "Collect".
4. Give your number when the operator asks for it.

This method of placing calls with the Operator is illustrated in the following examples:

216-CH 5-2345

617-SH 3-9900, Collect

314-752-5194, Mr. Hilbert

## Delayed Calls

When a call is not completed and it is not then canceled, it is treated as a delayed call. In such instances, the extension user should give the Long Distance Operator his name and extension number so that when she is ready on the call, it can be speeded through to completion.

## Good Switchboard Service

### Voice and Manner

Speak distinctly, without haste or impatience, in a natural and pleasant tone of voice.

### Plugging In

Operate your talking key before plugging in to answer a call. Then speak immediately. In many cases, the calling party is charged for the call from the time you insert the plug in the trunk jack. Also, when you plug in to answer a call, the ringing signal stops. For these reasons, avoid plugging out a trunk signal until you are ready to answer the call.

### Acknowledging an Order

Getting a call off to a good start gives the impression of alert, courteous and efficient service. Acknowledge each request with an appropriate phrase to indicate to the calling party that his request is understood. If you are not sure of an order, question it. Do not take a chance as this could result in a wrong number or incorrect report.

### Progress Reports

If the completion of a call is delayed for any reason, give progress reports every 30 or 40 seconds. This indicates courtesy and efficiency. The calling party can't hear you ring the extension telephone and he can't signal you to ask why his call is being delayed. A report such as, "Mr. Wilson's line is still busy" or, "I'll ring Mr. Wilson's telephone again" lets the

customer know you are on the job and ready to serve him. When an extension becomes available, after a delay, a courteous "I can ring Mr. Wilson's line now. Thank you for waiting," leaves a good impression with your customer.

## **Disconnect Promptly**

Release equipment for new calls by disconnecting promptly. Trace the cords with your hand as well as with your eye. Remove the plugs by the shell without disturbing others in adjacent jacks. Remove the left cord first, then the right cord.

## **Accuracy**

This is important in giving good telephone service. It prevents wrong numbers, double connections, cutoffs and incorrect reports.

## **Pleasing Telephone Habits**

Make good service better. Let your callers finish their requests or acknowledge your report before you leave the line. On some calls if you "jot it down" you may eliminate the need for asking the caller to repeat unnecessarily.

Courtesy pays big dividends. As a PBX attendant, your courtesy can do more to win public favor for your company than anything else.

Telephone habits of your extension users play an important part in good service. Ask their help in handling calls properly. Let your management know about any conditions which interfere with good service, such as slow answers at certain extensions, excessively busy extensions or faulty telephone usage.

## **Maintain a List of Telephone Numbers**

Encourage your extension users to keep their own list of frequently called numbers. Copies of the "Blue Book of Telephone Numbers" may be obtained for this purpose from your Service Adviser, or by calling the telephone company business office. New or changed numbers should be added or corrected on all lists.



BLUE BOOK  
OF  
TELEPHONE  
NUMBERS





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*How to make  
Good Telephone Service  
even better*

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Call by number.

Use Direct Distance Dialing  
where possible.

Keep a list of frequently called  
numbers in a personal  
telephone number booklet.