



## **HOME WIRING GUIDE**

### **FACTS EVERY HOME/BUILDING OWNER SHOULD KNOW**

The point where TELUS responsibility ends is called the Service Provider Demarcation Point. The Service Provider Demarcation Point means the point of interconnection of TELUS' Basic Service and the customer-provided premise wiring. Often this point is a small grey box called a Network Protection Device, located on the exterior of your house or a small Customer Connecting Block located inside your house, usually near the electrical panel.

As an owner or customer you are responsible for installation, maintenance and repair of all telephone wiring beyond the Service Provider Demarcation Point, in the same way as you are responsible for electrical wiring inside your home or building. Your telephone wiring must meet federal wiring standards that are designed to ensure user safety. TELUS does not allow the connection of non-standard telephone wiring to the TELUS Network Protection Device or Customer Connecting Block.

One of the benefits of being responsible for telephone wiring is that you're free to choose the installation or repair method of your choice. If you are building a new home or renovating, be sure to pre-wire your telephone needs before the drywall is installed. You can consult your Yellow Pages<sup>®</sup> Directory for a list of qualified building or electrical contractors, have TELUS do the job, or complete the work yourself.

### **WHAT YOU NEED TO KNOW AS A CUSTOMER**

As a customer, you are responsible for the installation, maintenance and repair of all telephone wiring beyond the Service Provider Demarcation Point. If you require installation or repair of telephone wiring or jacks inside the building where you live, and you are not the building owner, you should discuss your requirements with your property manager/owner.

### **Residential Inquiries**

**310-2255**

(A local call anywhere in Alberta)

### **Business Inquiries**

**310-3100**

(A local call anywhere in Alberta)

## HINTS FOR DO-IT-YOURSELFERS

Jacks may not appear exactly as diagramed in instructions.

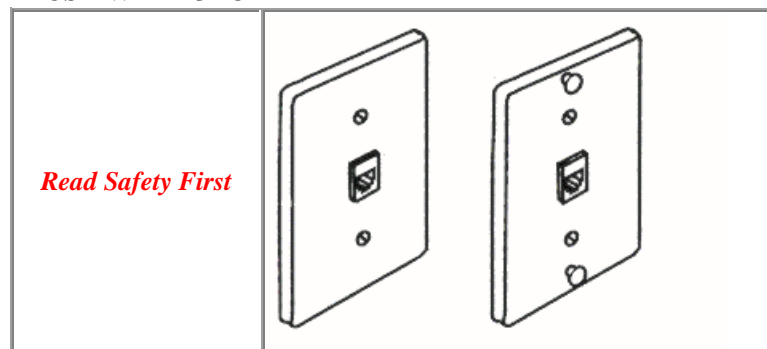
Wiring colors inside the cable have changed recently. Equivalencies between old and new wire colours and the new connecting block are shown below. Follow the appropriate colour codes when installing jacks/wiring.

Old Cable	New Cable	2 Pair Connecting Block
red	blue/white	Line 1 "R"
green	white/blue	Line 1 "T"
black	orange/white	Line 2 "R"
yellow	white/orange	Line 2 "T"

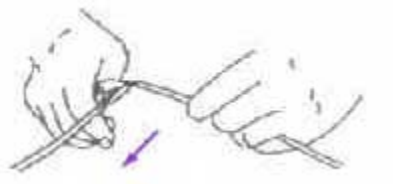


**Note:** As you read through installation instructions, new colours are listed with the old colours in brackets afterward.

## FLUSH WALL JACK



1. a) Lift the receiver off the hook of a working phone as described in Safety First.
- b) Strip beige cover 50 mm (2") from end of cable. (Do not damage wires)



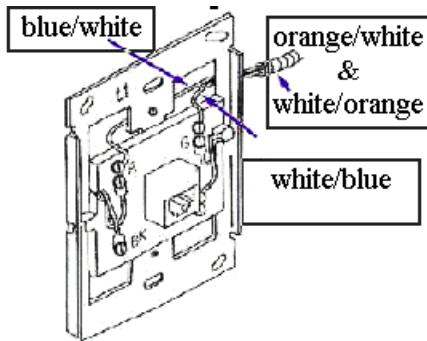
- c) Strip 20 mm (3/4") insulation off the blue/white (red) and white/blue (green) wires. Twist orange/white and white/orange (yellow and black) wires out of the way.

## SAFETY FIRST

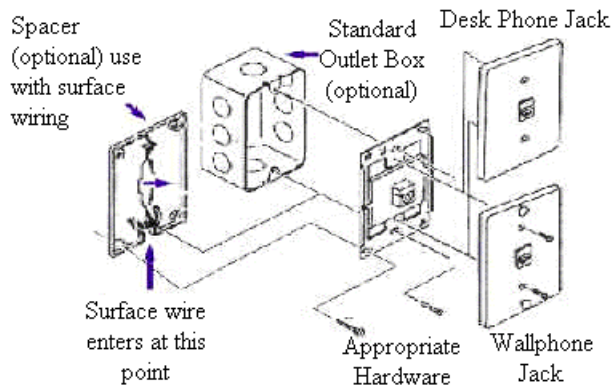
- Read all instructions before proceeding.
- Follow all local electrical codes. For further information, contact the Provincial Electrical Protection Branch
- Lift the receiver off the hook of one of the working telephones to make the line busy when installing a jack or wiring.
- Connect the jack to telephone wires only.

d) Connect blue/white (red) wire to red wire terminal of jack. ("R" or "R1")

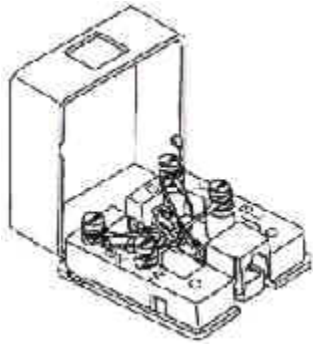
e) Connect white/blue (green) wire to green wire terminal of jack. ("G" or "T1")



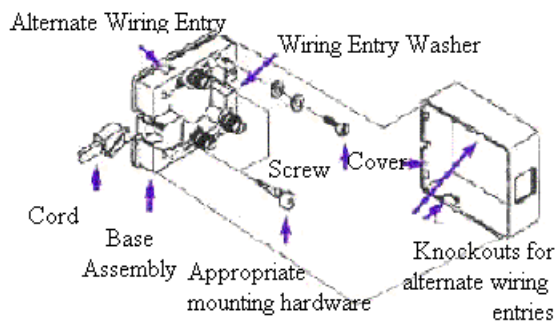
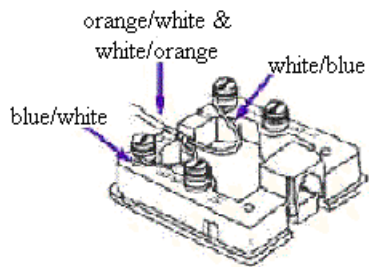
2. a) Screw jack to outlet box.  
b) Replace coverplate.  
c) Replace receiver removed in step 1a.
3. **Test** (see at the end of document - "Testing")
- 4.



## BASEBOARD JACK

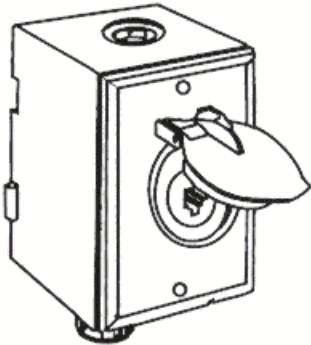


1. Follow steps **1a** to **1e** for Flush Wall Jack.
2. a) Screw jack to baseboard with two long wood screws (Face jack sideways to avoid collecting dirt and moisture).  
b) Snap coverplate back on.  
c) Replace receiver removed in step **1a**.
3. Test (see at the end of document - "Testing")

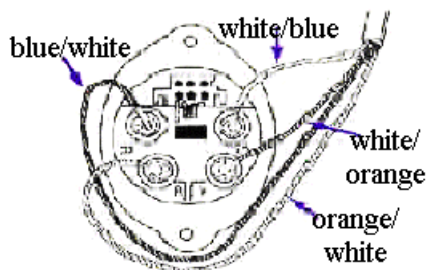


## HOME OUTDOOR JACK

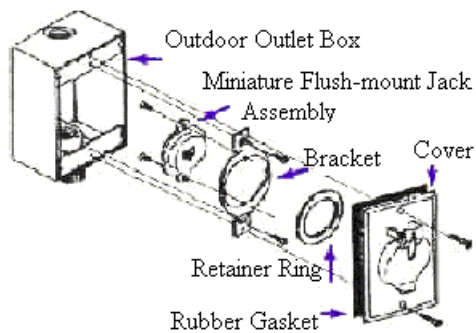
*Read Safety First*



- 1 a) Secure jack to bracket using 2 short, flat screws.
- b) Follow steps **1a** to **1e** for Flush Wall Jack.
- c) Connect white/orange (yellow) wire to yellow wire terminal of jack ("Y").
- d) Connect orange/white (black) wire to black wire terminal of jack ("B").
- e) Fold slack wire out of the way to allow easy replacement of cover.



- 2 a) Secure jack & bracket to box with two 10 mm long flathead screws.
- b) Place retaining ring on jack.
- c) Place gasket on coverplate.
- d) Secure coverplate to box with 10 mm oval head, chrome screws.
- e) Replace receiver removed in step 1b



- 3 **Test** (see end of document -- "Testing").

## HOME WIRING

### *Read Safety First*

Supplies:

- Needle nose pliers
- Small hammer
- Hand or electric drill with 5 mm or larger bit
- Approved four conductor 24 gauge telephone cable (solid wire)
- Insulated staples (3 per metre of cable)

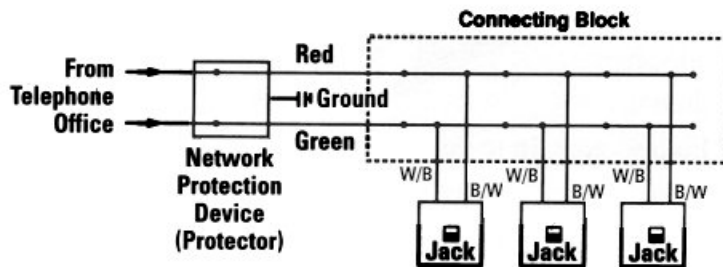
Colour coding differs for new cable. See "Safety First" for colour coding.

#### 1 Plan best wire route

- Telephone wire must go from desired jack location to connecting block or Network Protection Device (Protector).  
Note: Protector is usually near where telephone cable enters building. Connecting block is usually near electrical panel or mounted on a floor joist.
- Plan for jacks in accessible dry locations.
- Avoid routes which will encounter future construction, abrasions, dampness and power wires. Routes must be at least 50 mm (2") from power wires, as per the Canadian Electrical Code.
- Route must follow a supported path (through floor joists, over ceilings, along/behind baseboards).

#### 2 Install wire & required jacks

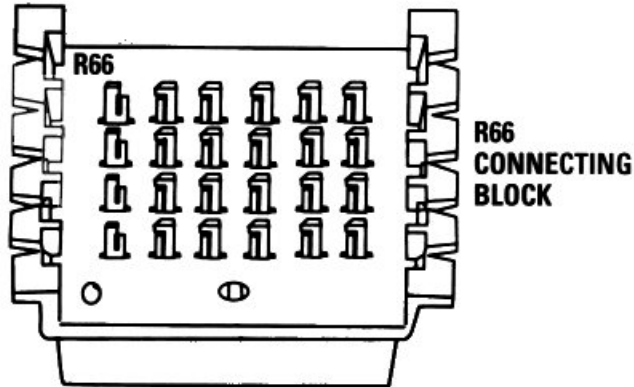
- When crossing floor joist, drill through joist and insert wire.
- Secure wire ever 1/2 metre with a staple (avoid kinks and sharp bends in the cable).



- If staples pierce cable, replace damaged portion.
- Leave 1/2 metre of cable at both ends.
- Connect jacks to cable - (see jack installation instructions above).

### 3 Connect new cable to existing telephone circuit

- a. Make telephone busy by lifting the receiver off of one working phone.
- b. If your home is equipped with a R66 (66B4) or 2 pair connecting block, proceed, if not, go to step 3g.
- c. One wire can be connected per pin (6 wires/row).

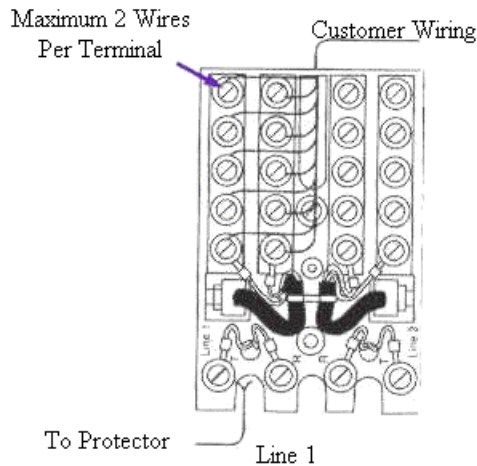


- d. R66 Connecting Block: Connect blue/white (red) wire to any spare pin in the first row. Connect white/blue (green) wire to any spare pin in the second row.

- Note:
- It is not necessary to strip the insulation off the wires.
  - Use needlenose pliers to push wire into pin slots.
  - Pin cuts insulation to make electrical connection.
  - Ensure wire ends do not touch any other pins.

- e. 2 PAIR CONNECTING BLOCK

Connect blue/white (red) wire to any spare terminal in row labeled Line 1 "R". Connect white/blue (green) wire to any spare terminal in row labeled Line 1 "T"



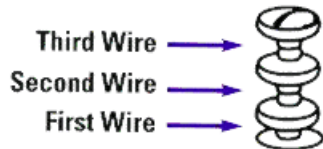
f. NETWORK PROTECTION DEVICE (PROTECTOR)

If R66 or 2 pair connecting block is not available, the new cable may be connected to the protector in the same manner as existing telephone cables.

\*\* Strip the insulation off wires

Note: - It is necessary to strip the insulation off the wires.

- More than one wire may be attached to each terminal (10 wires/ row).



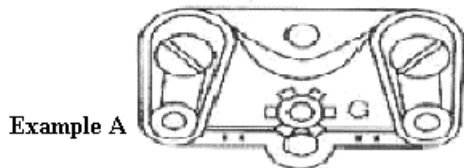
g) Connect wires securely between brass washers. (see diagram above)

h) Connect blue/white (red) wire to red wire terminal of protector.

i) Connect white/blue (green) wire terminal of protector.

j) Ensure all spare wires do not contact any other wires.

NETWORK PROTECTION DEVICE (Protector)



Example B

4 Test

TESTING

- 1 Place an outgoing call at each jack.
- 2 Receive an incoming call on each jack.
- 3 If all jacks are not functional, check the following:

A) No dial tone at any outlet

- Check all wiring for a short circuit between blue/white (red) and white/blue (green) wires.

B) No dial tone, new outlet only

- Check if existing wires from new outlet correctly connect to the existing telephone wires.

C) Dial tone, but touch buttons do not work

- Reverse the blue/white (red) and white/blue (green) wires on the red wire and green wire terminals on the jack that does not work.