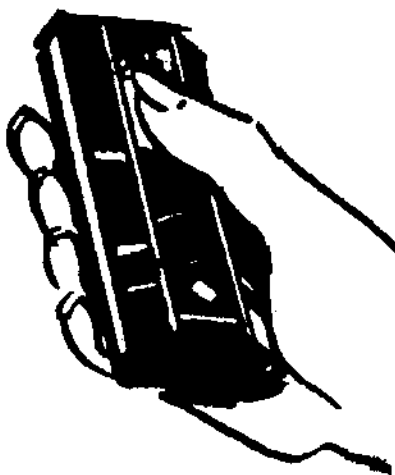




MPC 4

Automatic Garage Door Opener

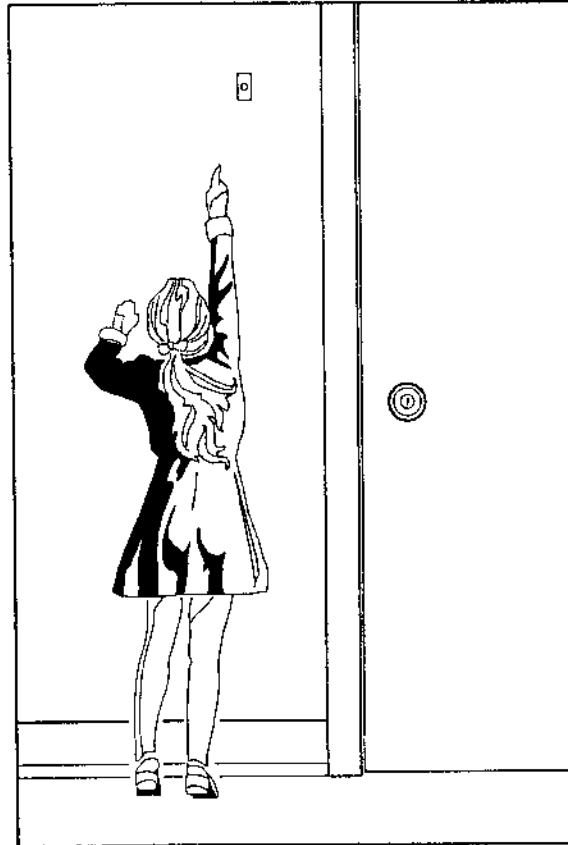
INSTALLATION INSTRUCTIONS
(Accredited B&D Installer Only)



OWNERS HANDBOOK INSIDE

W A R N I N G

Position The Push Button Correctly



The push button must be positioned out of reach of children (about 1.5 metres above the floor) and away from all moving door parts. The push button must be positioned and operated where the door is completely in view.

A. IMPORTANT INFORMATION. PLEASE READ CAREFULLY BEFORE BEGINNING THE INSTALLATION

1. Operation of the Door.

An automatic garage door opener cannot activate a garage door that is in poor working condition. The door must operate freely and must be well balanced. If necessary, the door must be repaired and the springs adjusted. Garage door springs are under great tension; if adjustment, repair or replacement of springs is required, contact your nearest B&D Dealer*. Do not attempt to make these repairs, adjustments or replacements yourself. For Panelift doors, it may be necessary to lubricate the springs with spray to prevent binding.

* For details on your nearest B&D Dealer, refer to the 'Garage Doors & Fittings' section of the Yellow Pages.

2. Headroom

Ensure that the clearance above the highest point of the door travel is at least 75mm for standard installation (55mm for minimum headroom installation).

3. Reinforcement of the Door

The door may require substantial reinforcement in the area where the drive arm is attached, in order to prevent any damage during powered operation.

4. Installation of the Header Bracket

The header bracket supports most of the force applied by the garage door opener when activating the door. This header bracket must be fixed to a beam or a rigid support member.

5. Existing Lock

The existing lock should be made inoperable to avoid damage to the door. The garage door opener will act as a lock when the door is closed.

6. Remote Button Location

Install the remote button out of the reach of children. Misuse of the button or transmitter could result in serious injury. Do not position the remote button near any moving parts, especially the door fittings.

7. Access to the Back Panel.

The set-up switches (limit set and code set) are located on the rear panel of the power head. Ensure access is available to these switches.

8. Electrical Connections

The installation and wiring of this garage door opener must comply with local building and electrical codes. If an extension cord is used it must contain an earth wire.

9. Routine Maintenance

Disconnect electric power to the garage door opener before removing covers or making repairs. Failure to disconnect power could result in electric shock.

10. Emergency Release Handle

The door can be operated manually after disengaging it from the garage door opener. Simply pull down on the handle. Do not use the emergency release rope and handle to pull the door open or closed.

To re-connect the door to the garage door opener, move the carriage lever into the horizontal position and activate the garage door opener via the remote button or the transmitter. The connection will be made automatically.

11. Attachment of Powerhead to Ceiling

The powerhead must be attached to a structural support. Make sure all mounting screws are secure. **Never** rely on wall board, plaster or partition board, etc, to provide secure anchor points.

12. Safety

Do not permit children to play with or operate the garage door opener, either via the remote button or the transmitter. Children and pets should be clear of the door opening when the garage door is in motion.

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Contents Of The Carton

- 1 Powerhead
- 1 Idler bracket assembly
- 1 Door bracket
- 1 Lintel bracket
- 1 Carriage assembly
- 1 Hand-held transmitter with
 9v battery
- 1 Chain bag
- 1 Straight arm
- 1 Bent arm
- 1 Push button bag
- 1 Small parts bag
- 1 Tube spacer
- 1 Owners manual
- 1 Safety label

Contents of Small Parts Pack

- 1 Clevis pin Dia 8mm x 90mm
- 1 Clevis pin Dia 8mm x 22mm
- 2 Clevis pin spring retainers
- 1 Emergency release rope
- 1 Emergency release handle
- 1 Shoulder bolt 5/16" x 1"
- 2 Cuphead bolts 1/4" x 1/2"
- 2 Nuts 1/4"
- 4 Nuts 5/16"
- 2 Hex bolts 5/16" x 3/4"
- 2 Washers 5/16" x 3/4"
- 2 8.0mm coach screws
- 1 10 tooth sprocket
- 1 Cerclip

Contents of Chain Bag

- 1 Chain
- 2 Connecting links
- 1 Connector pin
- 1 Tensioner bracket
- 1 Adjuster rod

Contents of Push Button Bag

- 1 Push button
- 8m Wire
- 10 Insulated staples

B. INSTALLATION INSTRUCTIONS

Step 1 - Mounting Lintel Bracket

- i) The lintel bracket must be rigidly fastened to a structural support on the header wall. Reinforce the wall if necessary.
- ii) Positioning of the lintel bracket varies according to the door type. Identify your door type from the following illustrations below (Figure 1).

For one piece doors (Jamb and Track type fitting) and sectional overhead doors with the spring assembly attached at the end of the track opposite the header wall (Figures 1-A,B,C) proceed from step 1 a).

For sectional overhead doors with the spring assembly mounted on the header wall, follow a similar procedure, but mount the lintel bracket immediately above the spring assembly. (Figure 1-D)

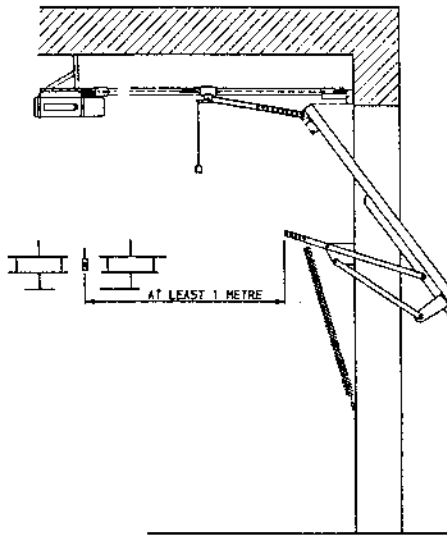


Figure 1-A
One piece door "Jamb Type Fitting"

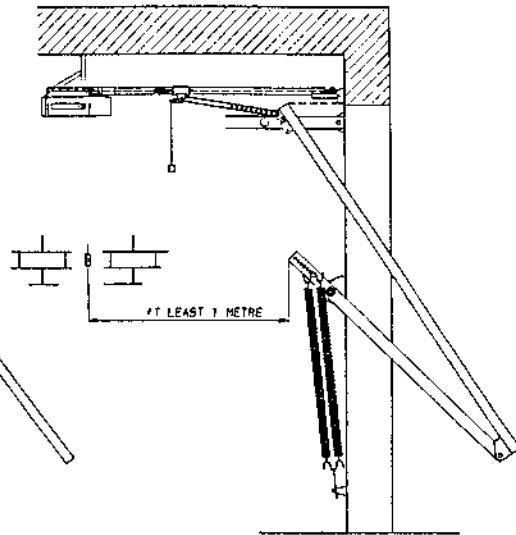


Figure 1-B
One piece door "Track Type Fitting"

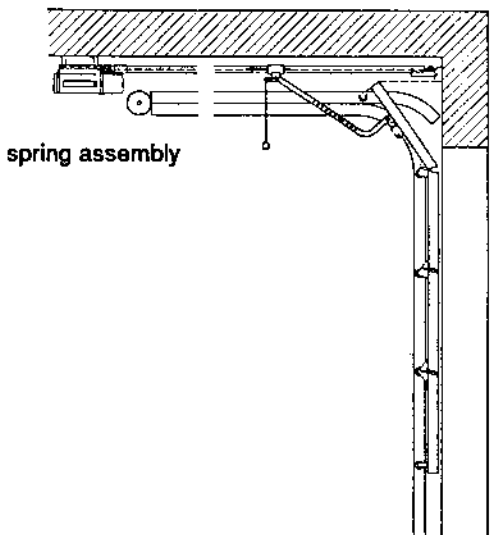


Figure 1-C
Sectional overhead door
spring assembly at end of track

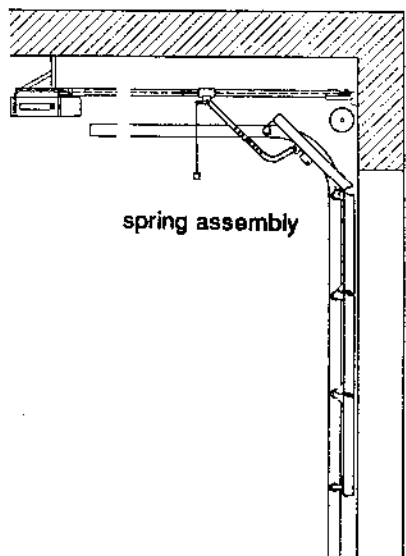
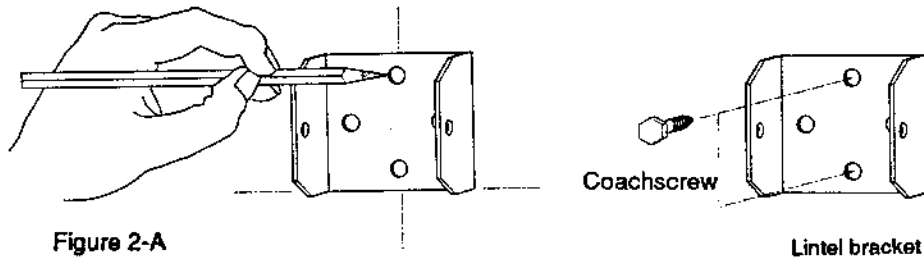


Figure 1-D
Sectional overhead door
spring assembly mounted
on the header wall

- a) With the door closed determine the centre of the door (across the door). Mark the centre line on the top of the door and on the header wall directly above.
- b) Lift the door slowly and find its highest point of travel.
- c) Place a support under the door to hold it in this position.
- d) Measure with a tape measure the distance from the floor to the top of the door, or from the ceiling to the top of the door (whichever is most convenient).
- e) Remove the support and close the door.
- f) Transfer this height to the header wall above the door and mark a horizontal line.
- g) Measure the distance between the horizontal line and the ceiling.
- h) Mark and drill pilot holes for the two coach screws used for mounting. The top and bottom holes are for a standard bracket.
- i) If fixing to timber, secure the lintel bracket to the header wall using two 8mm coach screws supplied.
- j) If fixing to brickwork or concrete, use 10mm wall plugs and 8mm coach screws.



Step 2 - Door Bracket Attachment

To prevent damage to the door during powered operation, reinforcement of the door may be required before fastening the door bracket. Contact your nearest B&D Dealer for advice.

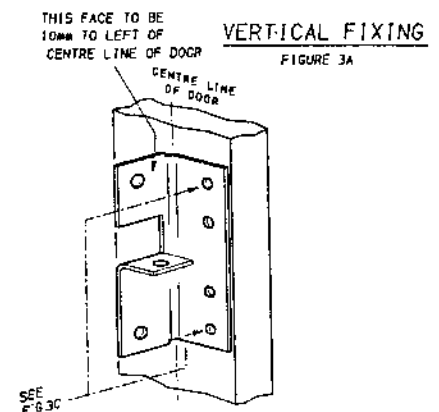
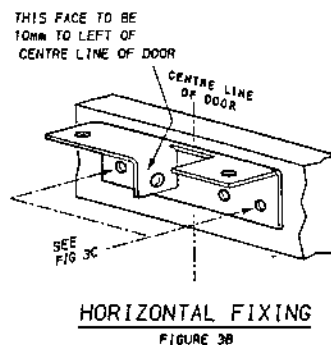
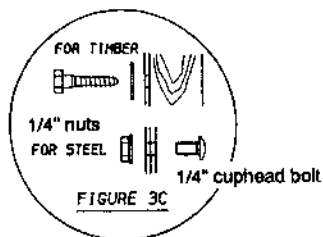
Mounting the door bracket varies according to door type:

1. Sectional Overhead Door Type

- a) The door bracket should be installed on the top panel approximately one third of the way down from the top of the panel (Figure 13-A).
- b) Locate the bracket in line with the vertical centre line of the door. Mark top and bottom hole locations (See Figure 3-C).
- c) Drill 7mm pilot holes. Attach the door bracket with the two 1/4" cuphead bolts and nuts (See Figure 3-A).

2. One Piece Door (Jamb and Track type fittings)

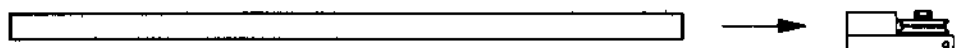
- a) The door bracket should be installed at the top edge of the door.
- b) Locate the door bracket in line with the vertical centre line of the door (see Figure 3-B). Mark left and right hole locations.
- c) For timber doors, fasten the bracket to the door with four 6mm x 24mm long wood screws (not supplied). For steel or aluminium doors, drill a 7mm hole in the frame of the door and fasten the bracket to the door with the two 1/4" x 1/2" cuphead bolts and nuts supplied (See Figure 3-B).



Step 3 - Connect Idler Bracket Assembly To Drive Tube

Attach the tube to the idler bracket assembly. It will be necessary to use moderate force on the brackets by tapping with a soft hammer, or by placing a block of wood on the bracket and tapping with a standard hammer. The tube is fully engaged when resting against the stop on the bracket (See Figure 4).

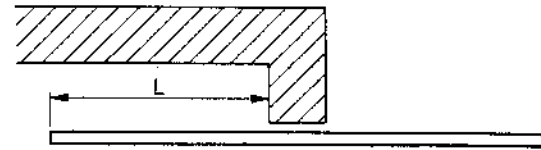
Figure 4



Step 4 - Cutting Drive Tube To Length (Only necessary if a minimum length tube required)

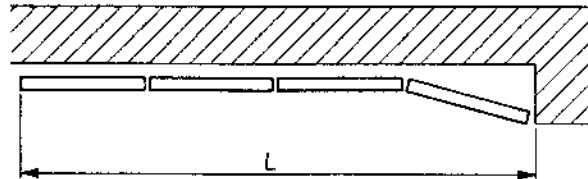
- Open the door to the fully open position.
- Measure the distance from the header wall to the edge of the door (Figure 5, length L).
- Add these distances depending on the door type :
 - * At least 860mm for sectional doors with the spring assembly at the rear of the track (Figure 1-C)
 - * At least 560mm for other door types (See Figures 1-A, 1-B, 1-D)
- Cut the tube to length (Figure 6).

Figure 5



EXAMPLE:

Distance from header wall to top edge of door	2500mm
Add 860mm (door type refer Figure 1-C)	+860mm
Length of tube including return bracket assembly (minimum)	3460mm



Step 5 - Place Carriage On Drive Tube

Slide the carriage assembly onto the tube so that the arrow is pointing to the idler bracket assembly (Figure 6).

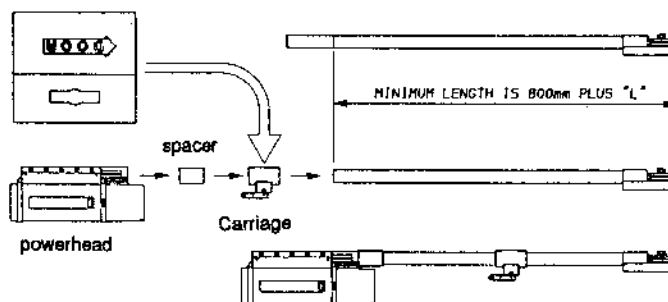
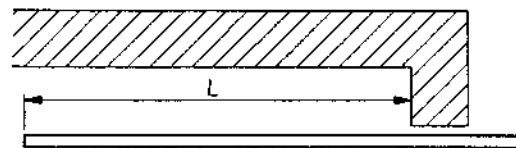


Figure 6

Step 6 - Spacer On Tube

Slide the tube spacer onto the drive tube, between the powerhead and the carriage assembly (Figure 6).

Step 7 - Connect Drive Tube To Power Head

Insert the tube into the tube bracket on the powerhead (Figure 6). Use a rotary motion on the tube as you are inserting it into the bracket. The end of tube must be resting against the shoulder of the tube bracket.

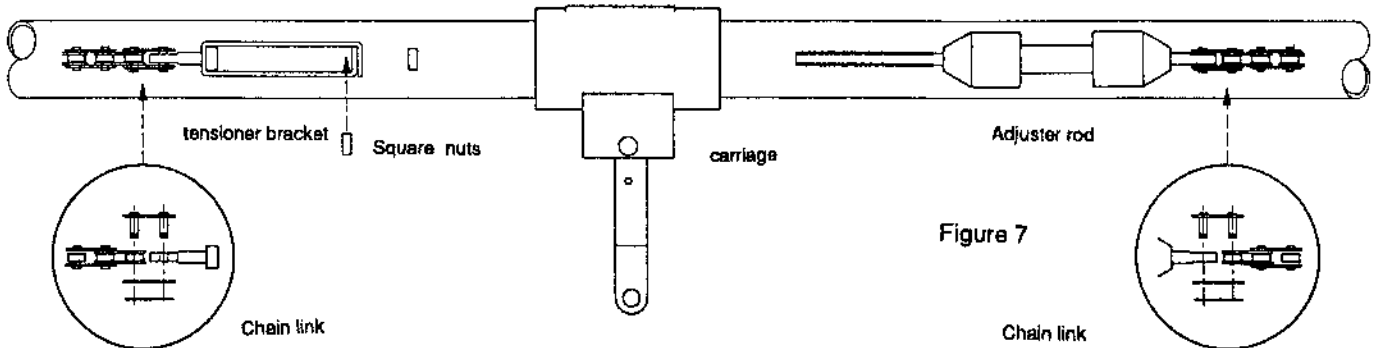
Step 8 - Selecting The Correct Sprocket

The powerhead is fitted with a 8 tooth sprocket. An optional 10 tooth sprocket can be fitted when the opener is installed on any sectional overhead door (Figures 1-C and 1-D) or one-piece door "track type fitting" to increase the operating speed. (Figure 1-B). To exchange sprockets:

- Remove the circlip and the sprocket from the drive shaft.
- Place the 10 tooth sprocket on the shaft. Turn the sprocket to engage the two slots in the pin. Fasten the sprocket in place with the new circlip.

Step 9 - Chain Assembly

- Position the carriage approximately halfway along the tube.
- Lay the chain on a clean, flat surface alongside the tube.
- Insert the adjuster rod in the carriage and lock into place by moving the release lever in the horizontal position.
- Wrap the chain around the idler pulley.
- Follow along the tube and wrap the chain around the drive sprocket.
- If the drive tube has been cut, then cut the chain to the correct length. Use a 3mm punch and hammer or a chain breaker to drive one pin out from the chain plate. Remove the connecting link from the connector pin and attach the chain to the tensioner bracket, via the connector pin, with the connecting link (Figure 7).
- Attach the first square nut to the connector rod and insert the thread into the hole of the tensioner bracket.
- Attach the second square nut to the adjuster rod, inside the tensioner bracket. Do not tighten the square nut at this stage.



Step 10 - Tension Chain

- Tension the chain by turning the bracket tensioner.
- The tension is correct when the chain sag is between 10mm and 15mm (Figure 8).
- Tighten the first square nut against the bracket tensioner to lock.

When this step has been completed, the garage door opener should resemble Figure 9.

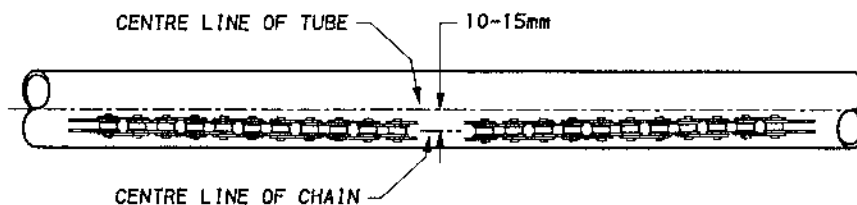


Figure 8

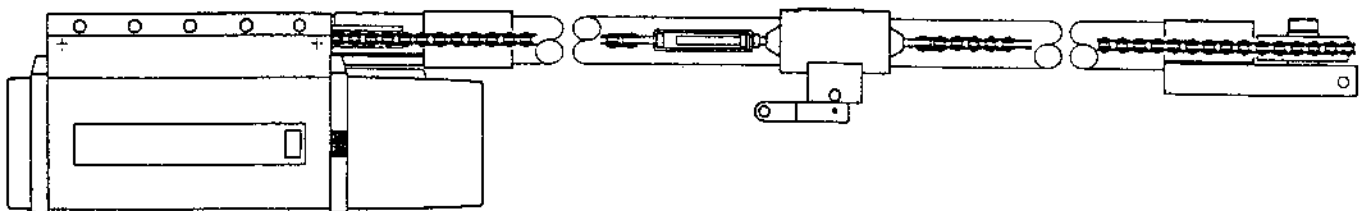
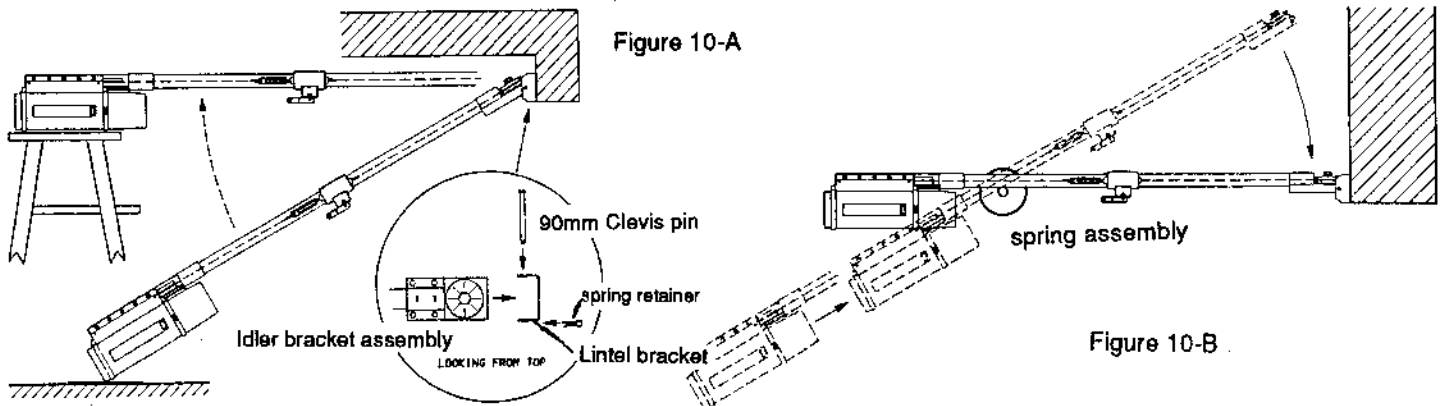


Figure 9

Step 11 - Idler Bracket To Lintel Bracket (Figures 10-A and 10-B)

- a) Move the door to the fully closed position.
- b) For a door of type A and B (as defined in Step 1):
 - i) Place the powerhead on the floor, using a piece of board to protect the cover.
 - ii) Attach the idler bracket assembly to the lintel bracket with the 90mm long clevis pin.
 - iii) Lock the pin in place with the spring retainer.
 - iv) Raise the powerhead to the approximate final position and support with a ladder (Figure 10A).
- c) For a door of type C and D (as defined in Step 1):
 - i) The powerhead and the drive tube need to be guided over the spring assembly to attach the bracket assembly to the lintel bracket (Figure 10B). Support the opener in its approximate final position with a ladder.
 - ii) Attach the idler bracket to the lintel bracket with the 90mm long clevis pin.
 - iii) Lock the spring in place with the spring retainer.



Step 12 - Attaching The Powerhead To The Ceiling (Figure 11-A and 11-B)

* The powerhead must be attached to a structural support. Plaster, plaster board, particle board, etc, will not support the powerhead under operating conditions.

* Use of perforated angle (20mm x 20mm x 1mm thick- not supplied) to secure the garage door opener is recommended. Contact your B&D Dealer if you require assistance.

- a) Open the door to the fully opened position. Check if the power head is high enough:
 - i) Neither the door nor any part of the door (handle, etc) should hit the drive tube.
 - ii) For sectional doors, the drive tube should clear the door by 20mm when fully open.
 - iii) For one piece doors, the drive tube should clear the highest point of the door travel by at least 20mm (refer Step 1).
- b) Line up the centre of the tube with the centre line marked on the top of the door.
- c) Find a **structurally sound location** to fix the powerhead to the ceiling.
- d) Cut a 600mm long angle to act as a support base. Secure the angle to the ceiling. Make sure the screws are long enough to penetrate the ceiling by 20mm.
- e) Cut two pieces of angle for vertical support. Attach both angles to the ceiling angle support with two 8mm x 15mm screws, nuts and washers (not supplied).
- f) Attach the powerhead to the opposite end of the vertical supports with two M8 screws, nuts and washers (not supplied). Use the holes at the front of the powerhead for this attachment.
- g) Cut two other pieces of angle to be attached between the middle of the two vertical supports and the holes at the back of the powerhead, to act as diagonal bracing. Attach both pieces with two M8 screws, nuts and washers (not supplied).
- h) Open and close the door manually to ensure that the door moves freely and does not hit the drive tube.

For low headroom installations, it is recommended to secure the unit with four vertical supports, as shown in Figure 11-B.

Should the unit appear noisy, increase the bracing to prevent vibration.

Ensure that the powerhead is in line with the drive tube or the chain will not line up with the sprocket and create noise.

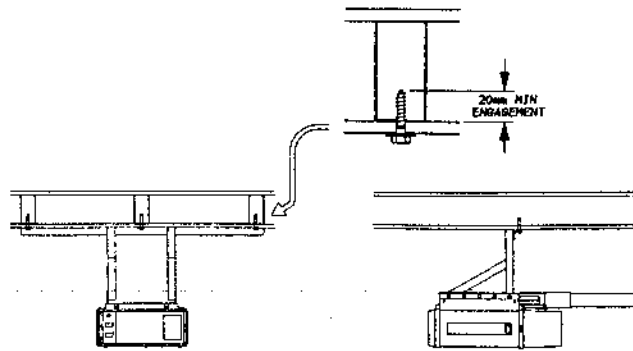


Figure 11-A

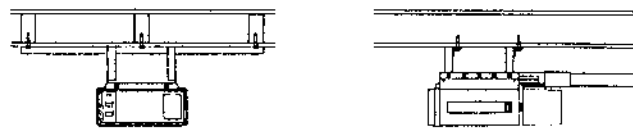


Figure 11-B

Step 13 - Installation Of Door Arms

* Before starting this step, disengage the carriage by moving the lever into the vertical position and move the door to the fully closed position.

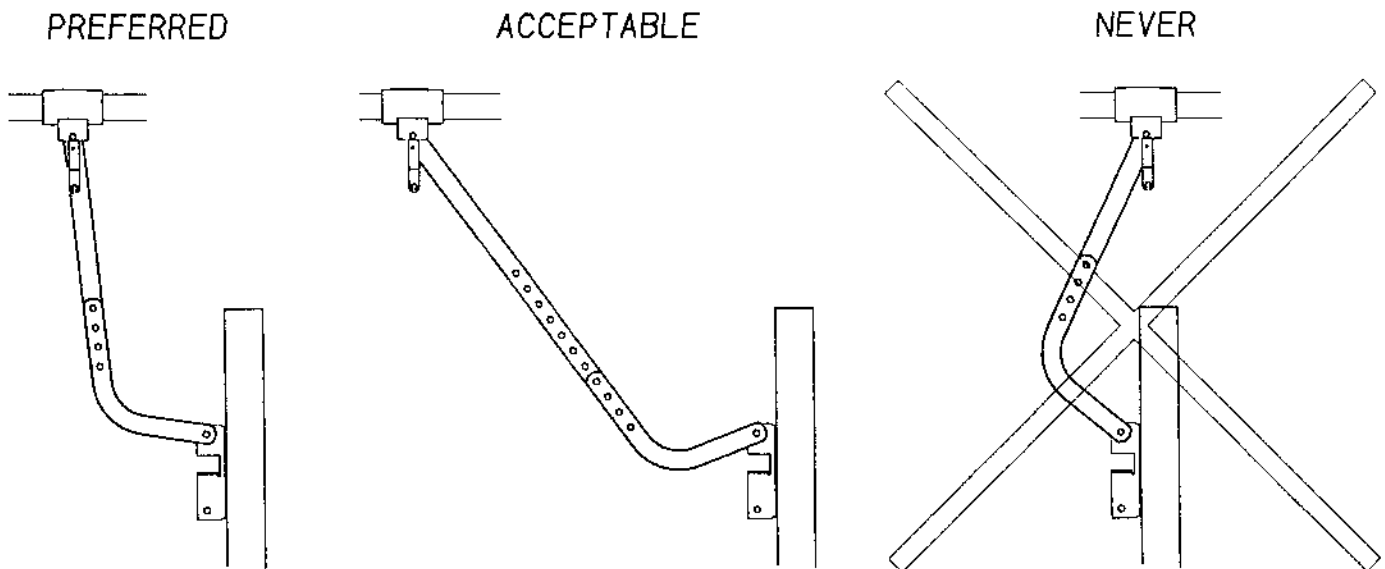


Figure 12-A
Sectional overhead door

Figure 12-B

Figure 12-C

The installation procedures vary according to door type.

1. Sectional Overhead Door Type (PANELIFT™) - (Figure 13-A)

* For sectional doors, when attaching the door arms to the door bracket and carriage it is important to have a slight angle toward the powerhead (see Figure 12-A). At the end of this step, door arms must not be as shown in Figure 12-C.

- i) Connect the bent arm to the door bracket with the 5/16" shoulder bolt and two nuts (Figure 13).
- ii) Connect the straight arm to the carriage with the Dia 8mm x 22mm clevis pin and spring retainer (See Figure 13).
- iii) Fasten the two arms together with the 5/16" bolts, nuts and washers (supplied). Use the appropriate holes in the straight arm in order to have the door arm at an angle of about 10 degrees from the vertical toward the powerhead. Straight arm may need to be cut to length.

2. One Piece Door - Jamb And Track Type Fitting (TILT-A-DOR™) - (Figure 13-B)

- i) The straight arm may be cut to length if necessary. Refer Figure 13-B for preferred configuration.
- ii) Connect the straight arm to the door bracket with the 5/16" shoulder bolt and two nuts (supplied).
- iii) Connect the opposite end to the carriage with the 22mm clevis pin and clip.

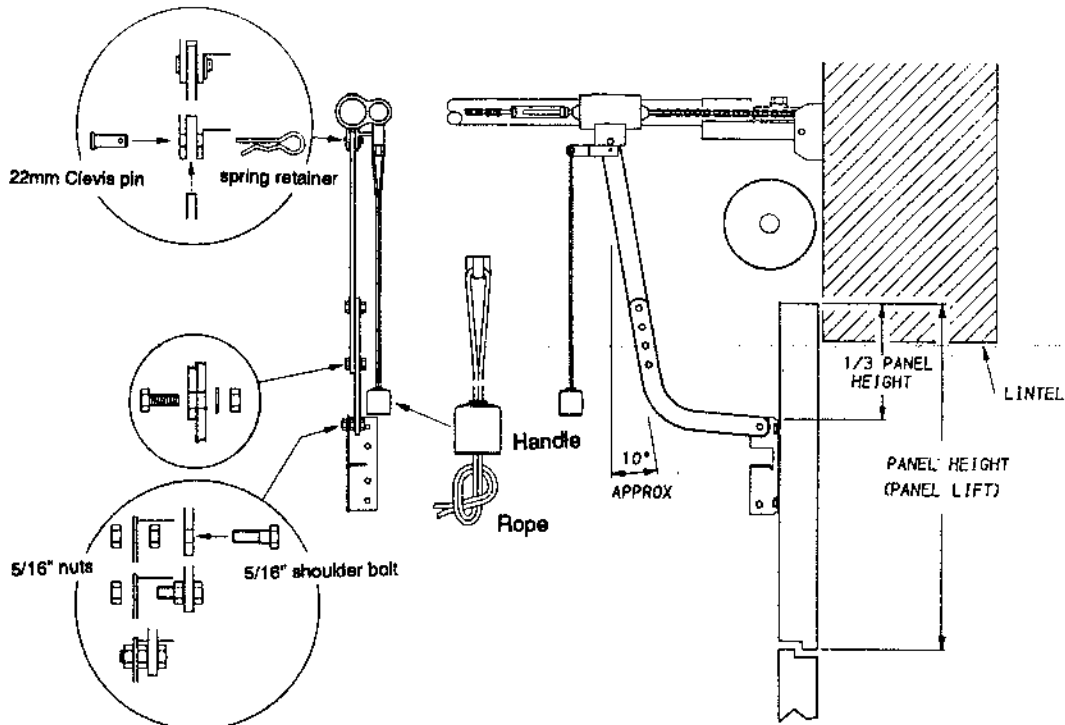


Figure 13-B

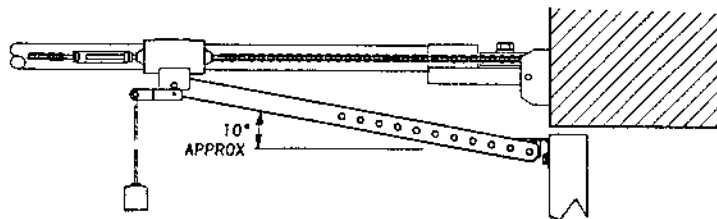


Figure 13-A

Step 14 - Place Handle On Carriage

- Thread one end of the rope through the rope eyelet of the carriage lever and then thread both ends through the hole at the top of the handle.
- Adjust the rope length so that the handle is approximately 2m above the floor.
- Secure with an overhand knot (See Figure 13-A).

Use the emergency release lever only to disengage the door. Do not use the rope and the handle to pull the door open or closed.

Step 15 - Installation Of Push Button

Install the push button out of reach of children, at approximately 1.5m off the floor. For safety, the push button must be at least 1m away from door fittings and other moving door hardware. Mount the push button in a location where the door is easily visible.

- Unwind the roll of wire.
 - Connect the plug to the powerhead (Figure 14).
 - Attach the wire to the ceiling with the insulated staples provided, leaving a slack in the wire between the unit and the first staple. Ensure the staples do not penetrate the insulation of the wire.
 - Cut the wire to the required length. Strip approximately 10mm of insulation from the end of the wire and connect to the screw terminal of the push button.
 - Fasten the remote button to an inside wall with the two screws provided.
 - Attach the safety label to the wall adjacent to the push button.
- Ensure that the remote button is beyond the reach of children and positioned greater than 1m from moving door hardware.

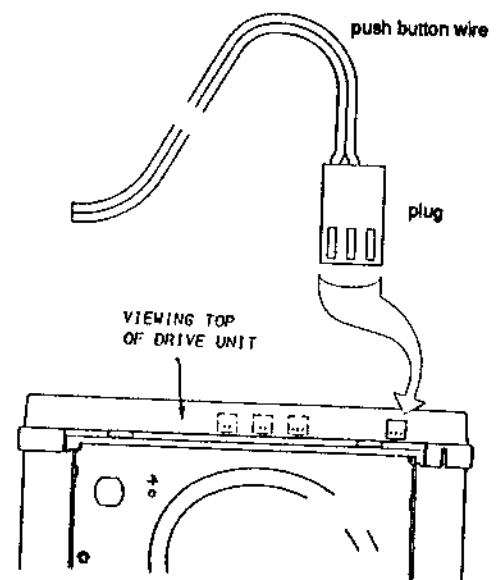


Figure 14

Step 16 - Set The Limits

- Place the carriage release lever in the vertical position (carriage disengaged) and move the door to the fully closed position.
- Move the release lever to the horizontal position (engaged position).
- Plug the power cord in to a correctly earthed power point.
- Switch on power at the power point. The courtesy light should come on indicating all controls are active.
- LIMIT SET LED light should be on indicating the unit is in Limit Set mode. If not, press the limit set button once to enter limit set mode (Figure 15-A).
- Press and hold down the wall push button to drive the carriage until the adjuster rod is fully inserted into the carriage and engaged with the carriage tongue.
- Press LIMIT SET button on the powerhead to accept the lower limit. LIMIT SET LED light will now be flashing, indicating the lower limit has been accepted and the unit is now ready to set the upper limit (Figure 15-B).
- Press and hold down the wall push button to drive the door up to the desired upper limit.
- Press LIMIT SET button on power head to accept the upper limit. LIMIT SET LED light will extinguish, indicating limits have been accepted.

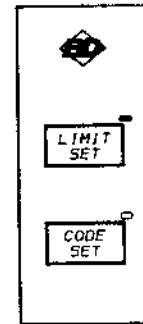


Figure 15-A

"LIMIT SET MODE"
Set the bottom limit

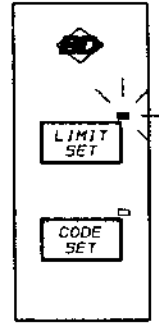


Figure 15-B

"LIMIT SET MODE"
Set the top limit

***After setting the limits, the door may initially not close completely as the garage door opener requires at least three cycles to learn closing characteristics of the door.**

***To change the limits at any time, press LIMIT SET button once and follow steps f) to i).**

Step 17 - Safety Systems

The garage door opener is equipped with an electronic obstacle detection system. The sensitivity of the system is set automatically, and continually adjusts itself for maximum sensitivity.

WARNING: The obstacle detection system requires 5 complete door operations to achieve maximum sensitivity.

After five operations of the door, place a 300mm high rigid object under the door. Operate the door in the down direction. The door must reverse on contact with the obstruction. Remove the obstruction and operate the garage door opener. The door must complete a normal closing cycle.

Step 18 - Remote Controls

Remote controls consist of a transmitter and a receiver. The transmitter sends a coded security signal. The receiver is incorporated in the powerhead electronics. It receives a signal to initiate a door cycle. The transmitter is equipped with a small external switch on the side of the transmitter case (See Figure 16). This switch has two positions to access two control channels.

1. Setting The Security Code In The Transmitter

The transmitter code is randomly preset at the factory. This code can be easily changed.

- Remove the battery cover.
- Set your own code by changing the position of the switches numbered 1 to 8 on the code switch block (Figure 16).
- Replace the battery cover.

Avoid all '+', '-', '0' and all symmetrical patterns when setting your code.

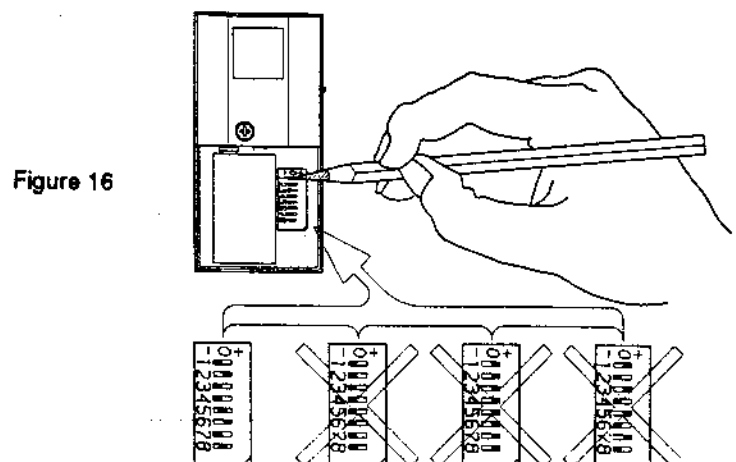


Figure 16

2. Setting The Security Code In The Receiver (one garage door opener)

When setting the code in the receiver of the garage door opener, select the up position of the side switch on the transmitter and proceed as follows:

- Press the code set button on the powerhead. The CODE SET LED light will come on indicating that the unit is in code set mode (Figure 17).
- Press the transmitter button for one second. Ensure that the transmitter is at a distance of at least 1m from the powerhead. The CODE SET LED light will extinguish and the courtesy light will illuminate for about 10 seconds when the code is accepted.
- Be sure that there are no obstructions or persons in the path of the garage door. Press transmitter to verify the system operation.

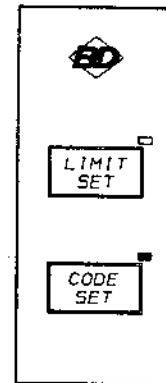


Figure 17

"CODE SET MODE"
Set security code in receiver

3. Setting The Security Code In The Receiver (two garage door openers)

- To set the code in the first garage door opener proceed as described in Step 18-2. above.
 - When setting the code in the second garage door opener, move the side switch on the transmitter to the down position (Figure 18) and follow the procedure from Step 18-2) above.
- To activate the first garage door opener with the transmitter, the side switch must be in the up position.
To activate the second garage door opener, the side switch must be in the down position (Figure 18).

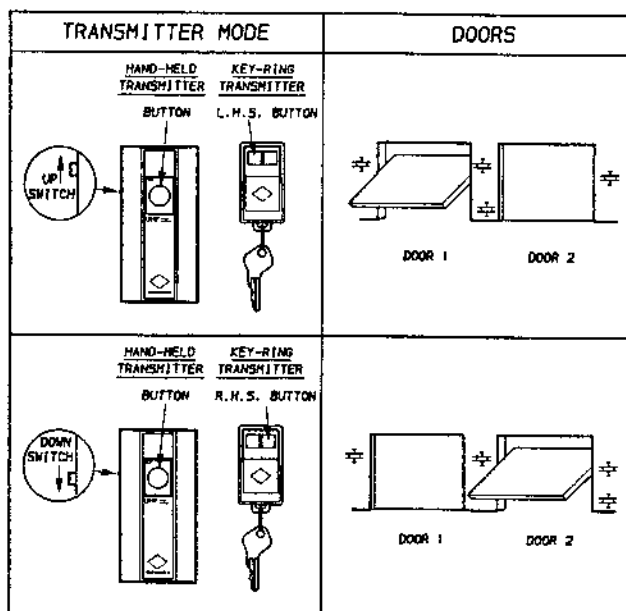


Figure 18

4. Using the Hand-held transmitter and Keyring transmitter

The transmitter features a two channel radio which, with the two push buttons, allows you to operate two devices, in tandem or independently.

The keyring transmitter security code is randomly preset at the factory. The code is recorded on a coding card included in the keyring transmitter package. This code cannot be changed.

To use both types of transmitters, you must ensure that the security code in the hand-held transmitter and the keyring transmitter are identical. To change the code in the hand transmitter proceed as follows:

- Remove the battery cover.
- Change the position of the switches numbered 1 to 8 on the code switch block, so that they correspond with the settings on the keyring transmitter which are recorded on the coding card.
- After the code has been set in the powerhead receiver with the keyring transmitter, press the hand-held transmitter to verify the garage door opener responds to this transmitter. If not, check the code setting again in the hand transmitter. The left-hand side button of the keyring transmitter corresponds to the up position of the side switch of the hand-held transmitter. The right-hand button corresponds to the down position (see Figure 19).

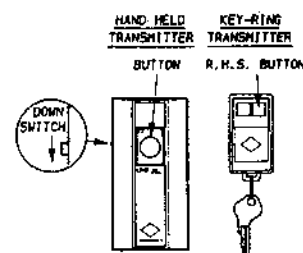


Figure 19

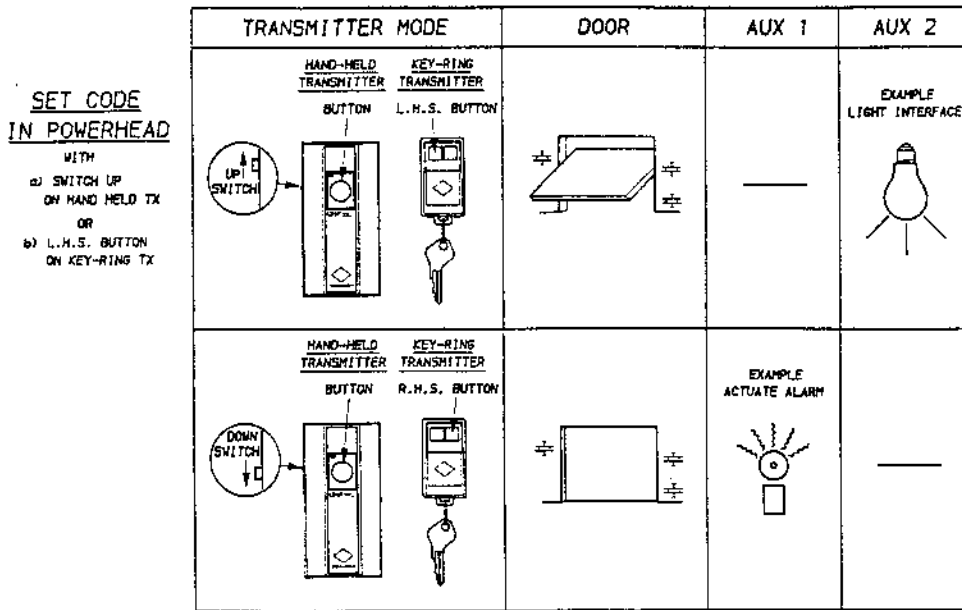
5. Setting The Security Code In The Receiver (one door and auxillary outputs)

External devices can be connected to the auxillary outputs 1 and 2, located on the back panel of the powerhead (see Figure 21).

The two channel transmitter (hand-held or keyring transmitter) can independently operate the door and either one of the two auxillary outputs. The other auxillary output will be activated in parallel with door operation.

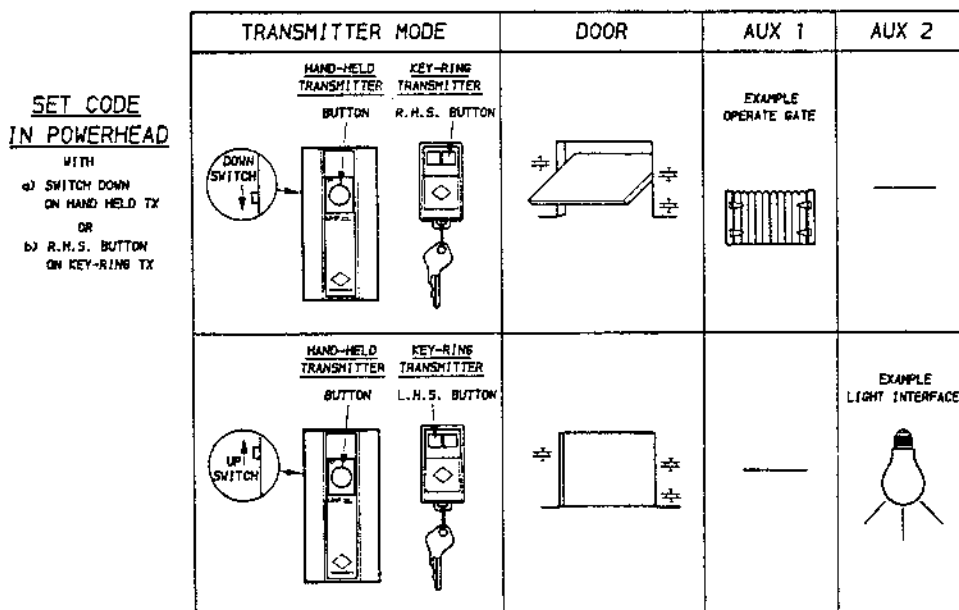
The auxillary output (1 or 2) which is activated in parallel with the door depends on how the code is set in the receiver :
 a) If, when setting the code in the receiver, the side switch is in the up position on the hand-held transmitter, or if you use the left-hand side button on the keyring transmitter, the transmitters will operate the door and the auxillary outputs as shown in Figure 20-A.

Figure 20-A



b) If, when setting the code in the receiver, the side switch is in the down position on the hand transmitter, or if you use the right-hand side button on the keyring transmitter, the two transmitters will operate the door and auxillary outputs as shown in Figure 20-B.

Figure 20-B



Refer to Step 19 for specification and configuration options for Auxillary Outputs.

Step 19 - External Connections (if required)

Push Button Connections:

This three pin connector is used to connect the push button supplied with the garage door opener. To connect this push button, refer to Step 15 of this manual. This connector can also be used to connect a remote button with LED. To connect this remote button with LED, refer to the instruction supplied with the kit.

Additionally, the "door not closed" signal could be interfaced to an alarm system. The available power supply is 5V (DC), 10mA.

External Receiver Connection (Figure 21):

This three pin connector is to facilitate the connection of an external receiver. The 12 volt pin (Figure 19) is used to supply power to the external receiver. The available power supply is 12V (DC), 25mA. The signal pin is used as input to activate the garage door opener. To connect the cable, refer to the installation instruction supplied in this kit. The plastic wall that covers the connection must be carefully cut away with a sharp knife in order to plug in the cable.

Auxiliary Drive Output 2 (Figure 21):

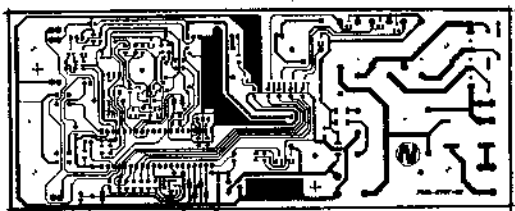
This two pin connector can be used to control an auxiliary device via the second radio channel. The available power supply is 12V (DC), 50mA. The plastic wall that covers the connection must be carefully cut away with a sharp knife in order to plug in the cable. The output is configured in the factory to provide a toggled ON / OFF control. The output can be configured to provide a pulse of approximately one second, by cutting a link on the PCB.

To cut the soldered link:

- Disconnect electric power to the garage door opener.
- Remove the two screws that attach the end cap to the powerhead.
- Remove the endcap from the powerhead. Disconnect the three electrical terminals and multi-pin connector from the circuit board.
- Remove the six screws that attach the to the endcap.
- Locate the correct link to be cut - on the rear side of the circuit board (Figure 22). Cut the link with a sharp blade.
- Attach the circuit board to the endcap with the six screws.
- Reconnect the three terminals and the multi-pin connector to the circuit board.
- Fasten the endcap to the chassis with the two screws.

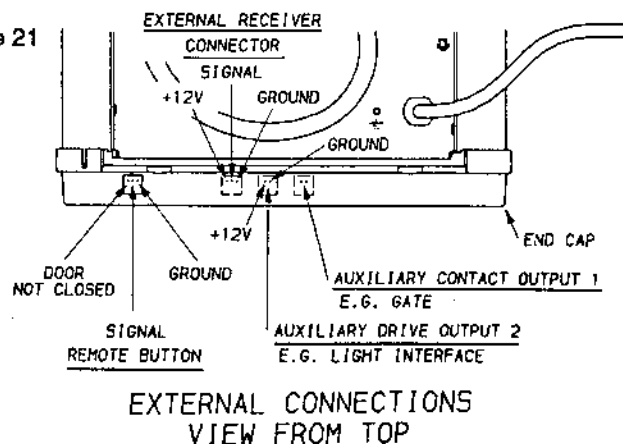
Auxiliary Contact Output 1 (Figure 21):

This two pin connector can be used to control an auxiliary device via the second radio channel. To connect the cable, refer to the installation instruction provided in the kit. The plastic wall that covers the connection must be carefully cut away with a sharp knife in order to plug in the cable. The output is configured in the factory to provide a closure of the relay for approximately 1 second. The switching capacity of the output is 24V (DC), 5A. The output can be configured to provide a toggled ON / OFF control by cutting a link on the circuit board. To cut the link, follow a similar procedure as described for auxiliary output 2, but cut the link related to auxiliary output 1 (Figure 22).



Auxiliary Contact Output 1 Auxiliary Drive Output 2 Figure 22

Figure 21



Step 20 - Self Test Procedure

WARNING; The door limits will be lost once the "Self Test" procedure is activated. Door limits will need to be re-programmed.

This self test routine allows the user to check that the powerhead is functioning correctly. Once initiated, the unit will proceed automatically through a sequence of predefined tests assessing the status of the motor, circuit board and wiring. Should a fault be detected, the procedure temporarily stops, displaying an error code for one minute before continuing with the next step of the test (refer to the table for definitions of error codes).

The powerhead should be tested:

- at installation and
- at any time when the unit appears to have malfunctioned.

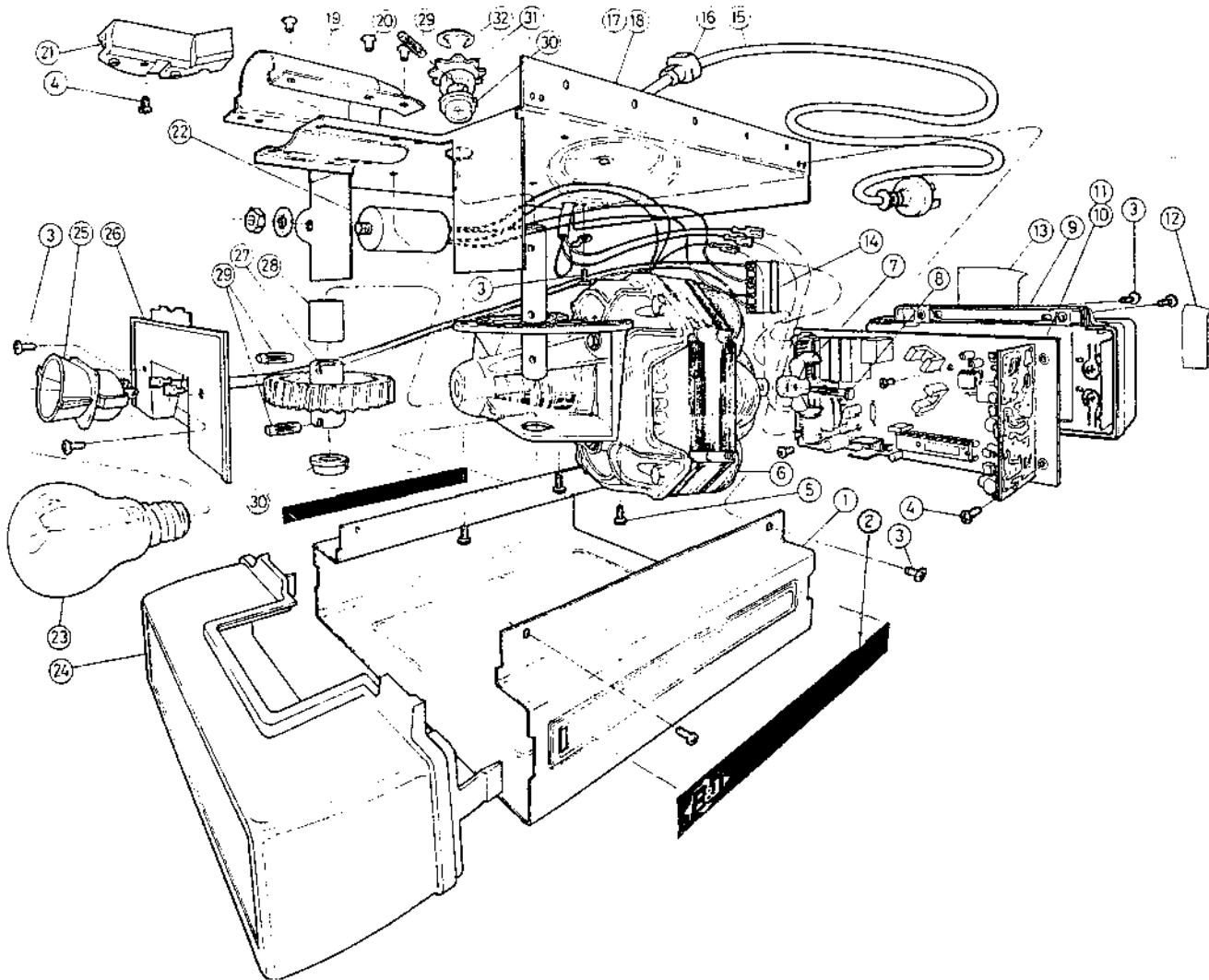
When conducting the test:

- the door should be engaged
- all accessories should be connected.

STEP	TEST BEING PERFORMED	TEST MODE INDICATION				ERROR INDICATION				POSSIBLE FAULT
		240V COURTESY LIGHT	LIMIT SET	CODE SET	DOOR NOT CLOSED LED	LIMIT SET	CODE SET	DOOR NOT CLOSED LED		
START 1) If the power is on and the limits set, press and hold CODE SET, then press the wall button and hold both buttons for 2 seconds. OR 2) If the limits are not set: i) Power off ii) Press and hold both Code Set and wall button iii) Switch power on.										
	Auxiliary 1 output: ON for 1 sec		Flashing	alternately	ON					
	Auxiliary output 2: ON for 1 sec		Flashing	alternately	ON					
	LIGHT ON Motor drives down for 0.5 sec. If door is down, motor will then drive UP for 0.5 sec.		Flashing	alternately	ON					
	Motor drives UP for 0.5 sec.		Flashing	alternately	ON	ON	ON	Flashing	Motor, internal wiring, encoder, circuit, door spring tension, motor capacitor, light and motor relays.	
	Motor drives DOWN for 0.5 sec.		Flashing	alternately	ON	OFF	ON	Flashing	Motor, door spring tension, wrong sprocket fitted.	
	Low voltage detection (factory test only)		Flashing	alternately	OFF					
	Memory test.		Flashes once			ON	OFF	Flashing	Microprocessor, memory chip.	
	Radio receiver test.		ON (for 10 secs)	ON	OFF	Code Set LED does not go off when transmitter button is pressed.			Radio receiver, transmitter	
1) Press transmitter for 1 second or if transmitter not available, 2) Press Code Set again (Original code will be retained). or 3) Wait 2 minutes (original code will be retained). or 4) Switch power off (original code will be retained).			OFF	OFF	OFF					
END OF SELF TEST			OFF	OFF	OFF	ON	OFF	OFF		

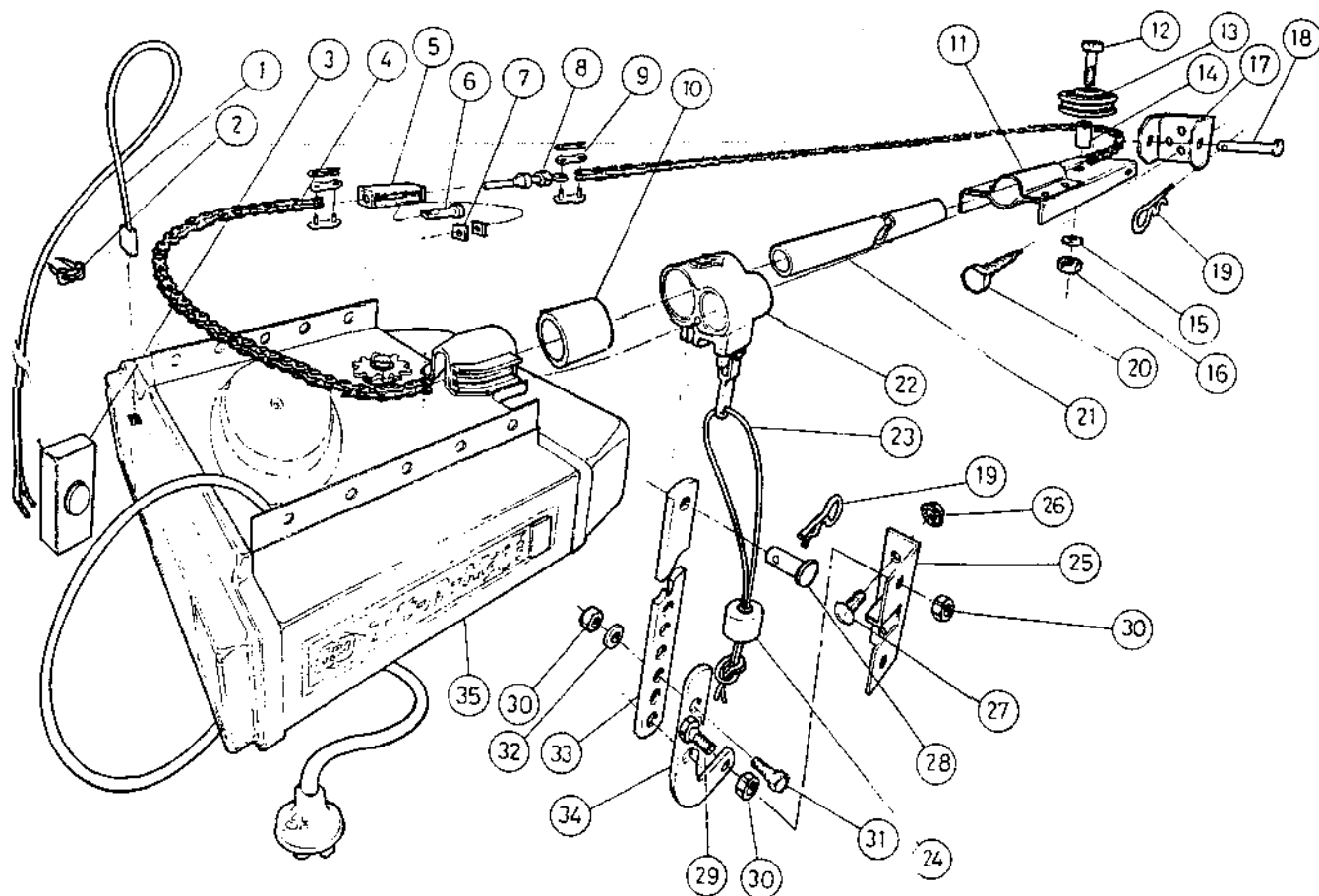
At the conclusion of the test, the unit will remain in limit set mode, awaiting limits to be set.

EXPLODED VIEW - POWERHEAD



ITEM	PART No	DESCRIPTION
1	60204	COVER CHASSIS
2	60202	DECAL CHASSIS COVER
3	60203	SCREW TT8-32 X 9 P/H
4	45702	SCREW HI-LO 7/19 X 12.5
5	7410	SCREW 10-32 X 13 P/H
6	60110	ASSY MOTOR GEAR BOX
7	60144	WHEEL ENCODER Ø5 MTG HOLE (PN 60141 Ø3 MTG HOLE)
8	60143	PIN MOUNTING
9	60211	CAP END
10	60230	ASSY P.C.B. CONTROL COMPLETE
11	60320	ASSY P.C.B. RECEIVER
12	60212	DECAL CONTROL PANEL
13	60213	DECAL COMPLIANCE
14	60185	HARNESS WIRING
15	60184	CORD POWER 240V
16	5398	GRIP CORD
17	60170	ASSY CHASSIS & SADDLE
18	60157	CHASSIS
19	60161	SADDLE TRACK-DRIVE END
20	60608	RIVET R5004 X 9/32
21	60166	GUIDE CHAIN
22	60151	CAPACITOR MOTOR 400V 15uF (WITH WASHER & NUT)
23	60221	BULB 240V 100W E27/25 FROSTED
24	60222	DIFFUSER
25	60188	ASSY LAMPHOLDER
26	60215	MOUNTING LAMPHOLDER
27	60126	GEAR HELICAL
28	60127	SPACER GEAR
29	60135	PIN Ø5 X 22
30	60132	BEARING PLAIN
31	60175	10 TEETH SPROCKET (PN 60173 8 TEETH SPROCKET)
32	60176	CIRCLIP

EXPLODED VIEW - TRACK ASSEMBLY



ITEM	PART No	DESCRIPTION
1	60403	HARNES WALL SWITCH
2	60801	STAPLE INSULATED 12 x 6.4
3	60402	SWITCH WALL
4	60601	CHAIN 1/2" PITCH x 1/8"
5	60616	BRACKET TENSIONER
6	60628	PIN CONNECTOR
7	60621	NUT M6 SQUARE
8	60618	ASSY. ADJUSTER
9	60619	LINK CHAIN JOINING 1/2" PITCH x 1/8"
10	60603	SPACER TRACK
11	60631	ASSY. BRACKET & SADDLE
12	60613	BOLT HEX. M12 x 45 LONG
13	60612	PULLEY IDLER
14	60605	SLEEVE 16.5 O.D. x 25 LONG
15	60615	WASHER SPRING M12
16	60614	NUT HEX. M12
17	60604	BRACKET L INTEL
18	60609	PIN PIVOT #8 x 90 LONG
19	60611	RETAINER SPRING #2.5
20	775	SCREW COACH HEX. HD. #8 x 38 LONG
21	44797	GALTUBE 2800 LONG
22	60630	ASSY. CARRIAGE
23	60640	ROPE DISENGAGE
24	60641	HANDLE DISENGAGE
25	60647	BRACKET DOOR
26	2702	NUT 1/4" UNC FLANGED
27	2709	BOLT 1/4" UNC x 1/2" LONG - CH SPECIAL
28	60655	PIN PIVOT #8 x 22 LONG
29	60652	BOLT SHOULDER 5/16" BSW x 18 LONG
30	5459	NUT HEX. 5/16" BSW
31	12724	SCREW SET 5/16" BSW x 3/4" HEX. HD.
32	12607	WASHER GAL 5/16" I.D. x 1" O.D.
33	60642	ARM CARRIAGE
34	60643	ARM DOOR
35	60100	ASSY. POWERHEAD COMPLETE



MPC 4

Automatic Garage Door Opener

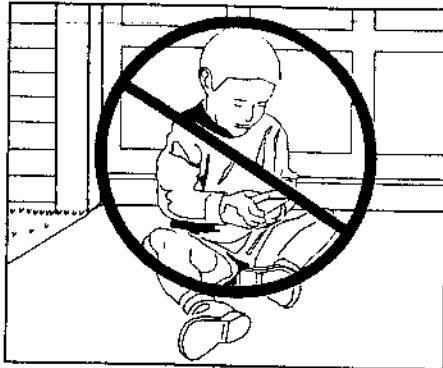
OWNER'S HANDBOOK

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B) Setting The Security Code In The Receiver (one Opener)	
C) Setting The Security Code In The Receiver (two Openers)	
D) Using The Handheld Transmitter And Keyring Transmitter	
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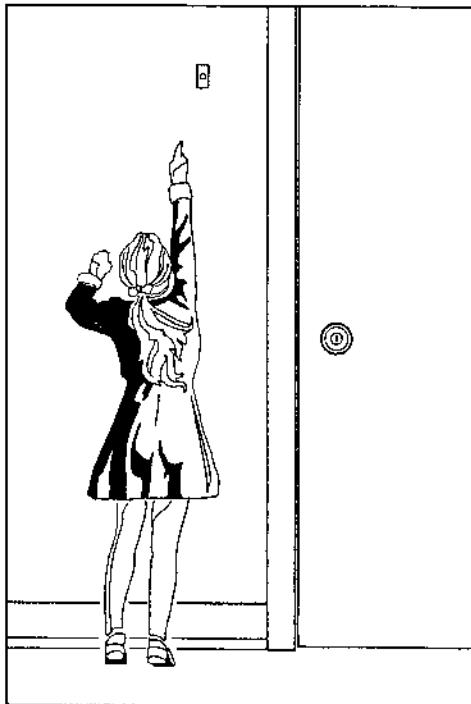
W A R N I N G

Garage Door Openers Are
Not Toys



Keep both hand and keyring transmitters out of reach of children. Never allow children to play with or use the transmitter.

Keep The Door In Sight When Using The Opener



Always keep the garage door in sight until it completely closes when operating the unit by the remote button or hand transmitter. Never allow children to "beat the door" in either its up or down cycle. Teach children never to play under an open garage door.

CONGRATULATIONS! Your garage door is now equipped with arguably the most advanced domestic garage door opener in the world. The new B&D CONTROLL-A-DOOR™ MPC 4 automatic opener features :

- * state-of-the-art microprocessor hardware
- * STM (Self Test Mode) software for powerhead and door performance analysis
- * permanent reprogrammable memory of personal security code. Automatic restoration of code, door travel limits and door operating characteristics after power failure
- * 3 minute automatic timeout courtesy light with 100W bulb for improved illumination
- * powerful remote hand transmitters
- * B&D quality and reliability

This handbook should be read thoroughly before operating the opener.

It contains helpful information on:

- limit settings
- safety systems
- remote controls
- changing batteries in both hand and keyring transmitters
- security code and limit setting instructions
- trouble shooting and product indicators

WARNING

This garage door opener is not a toy. Never allow children to operate the opener with either the hand transmitter or remote push button.

Teach children not to play under an open garage door. Never allow children to play "beat the door" on its downward travel.

Always operate the opener in full view of the garage door.

Check that the garage door is fully closed before driving away.

1. Powered Operation

Pressing the hand transmitter, keyring transmitter or wall push button will open or close the door.

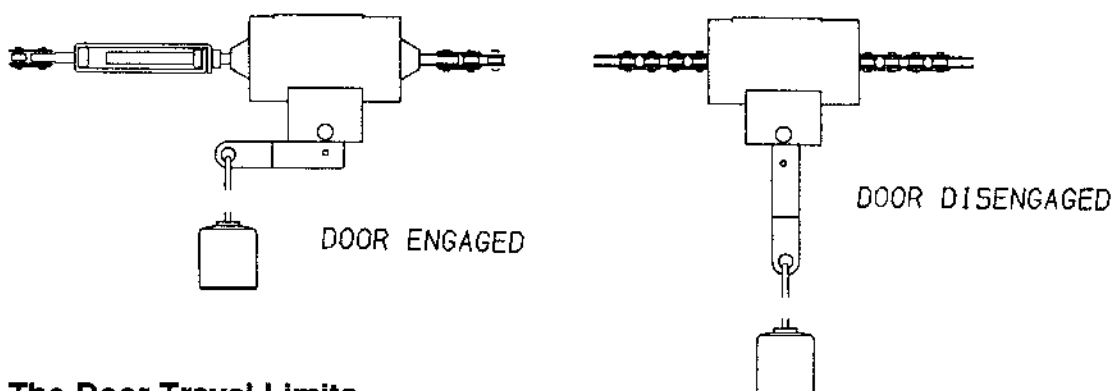
Pressing the hand transmitter, keyring transmitter or wall push button while the garage door is travelling down, will reverse the door.

Pressing the hand transmitter, keyring transmitter or wall push button while the garage door is travelling up, will stop the door (allowing entry / exit for pets or for fresh air-flow).

2. Manual Operation

In the event of power failure, the door can be operated manually by disconnecting it from the opener. Simply pull down on the handle so that the lever is in the vertical position to disengage the door from the opener. To re-engage, snap the lever back into the horizontal position. Press either the push button or transmitter to reconnect the door automatically to the opener.

Use the emergency release lever only to disengage the door. Do not use the rope and the handle to pull the door open or closed.

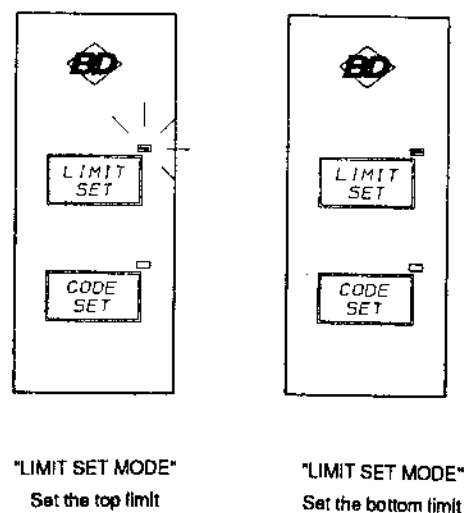


3. Setting The Door Travel Limits

*To change the limits at any time, proceed as follows:

- Place the carriage release lever in the vertical position (carriage disengaged) and move the door to the fully closed position.
- Move the release lever to the horizontal position (engaged position).
- Press the limit set button once to enter limit set mode. LIMIT SET LED will now be on indicating the unit is in Limit Set Mode.
- Press and hold down the wall push button to drive the carriage until the adjuster rod is fully inserted into the carriage and engaged with the carriage tongue.
- Press LIMIT SET button on the powerhead to accept the lower limit. LIMIT SET LED light will now be flashing, indicating the lower limit has been accepted and the unit is now ready to set the upper limit.
- Press and hold down the wall push button to drive the door up to the desired upper limit.
- Press LIMIT SET button on power head to accept the upper limit. LIMIT SET LED light will extinguish, indicating limits have been accepted.

*After setting the limits, the door may initially not close completely as the garage door opener requires at least three cycles to learn closing characteristics of the door.



4. Safety Systems

The garage door opener is equipped with an electronic obstacle detection system. The sensitivity of the system is set automatically, and continually adjusts itself for maximum sensitivity.

WARNING: The obstacle detection system requires 5 complete door operations to achieve maximum sensitivity. Run the safety system reverse test at least once a year (refer Step 17-Safety Systems from the installation instructions).

5. Remote Controls

Remote controls consist of a transmitter and a receiver. The transmitter sends a coded security signal. The receiver is incorporated in the powerhead electronics. It receives a signal to initiate a door cycle. The transmitter is equipped with a small external switch on the side of the transmitter case. This switch has two positions to access two control channels.

A. Setting The Security Code In The Transmitter

The transmitter code is randomly preset at the factory. This code can be easily changed.

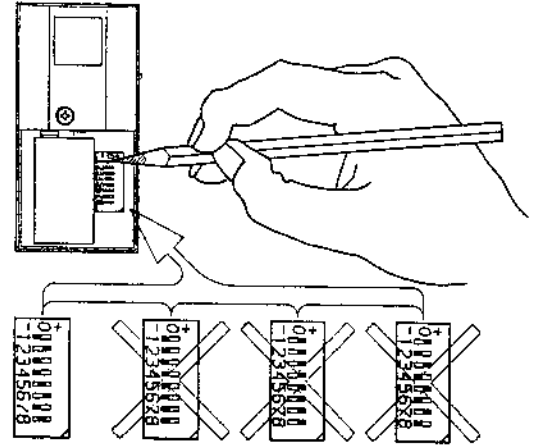
- Remove the battery cover.
- Set your own code by changing the position of the switches numbered 1 to 8 on the code switch block (Figure 16).
- Replace the battery cover.

Avoid all '+', '-', '0' and all symmetrical patterns when setting your code.

B. Setting The Security Code In The Receiver (one garage door opener)

When setting the code in the receiver of the garage door opener, select the up position of the side switch on the transmitter and proceed as follows:

- Press the code set button on the powerhead. The CODE SET LED light will come on indicating that the unit is in code set mode.
- Press the transmitter button for one second. Ensure that the transmitter is at a distance of at least 1m from the powerhead. The CODE SET LED light will extinguish and the courtesy light will illuminate for about 10 seconds when the code is accepted.
- Be sure that there are no obstructions or persons in the path of the garage door. Press transmitter to verify the system operation.

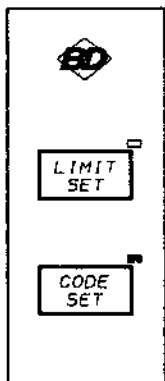


C. Setting The Security Code In The Receiver (two garage door openers)

- To set the code in the first garage door opener proceed as described in Step 5-B above.
- When setting the code in the second garage door opener, move the side switch on the transmitter to the down position (Figure 18) and follow the procedure from Step 5-B above.

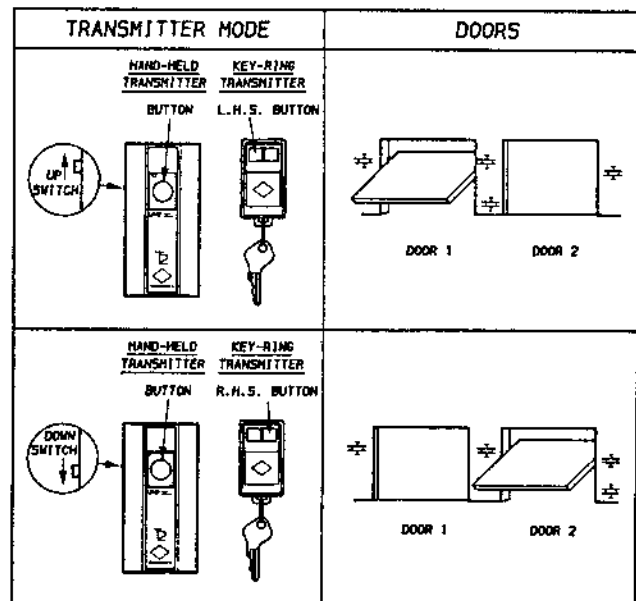
To activate the first garage door opener with the transmitter, the side switch must be in the up position.

To activate the second garage door opener, the side switch must be in the down position.



"CODE SET MODE"

Set security code in receiver



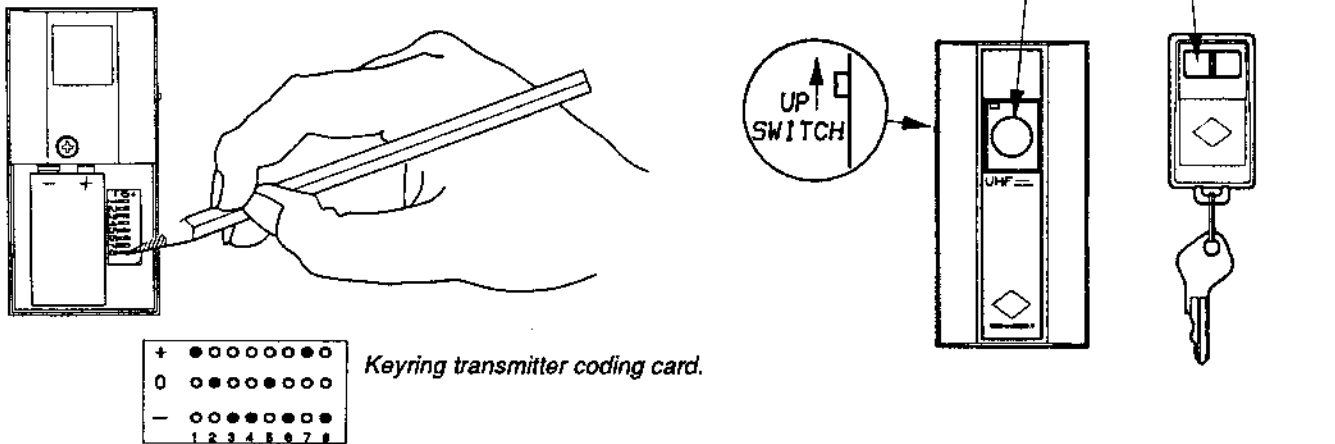
D. Using the Hand-held transmitter and Keyring transmitter

The transmitter features a two channel radio which, with the two push buttons, allows you to operate two devices, in tandem or independantly.

The keyring transmitter security code is randomly preset at the factory. The code is recorded on a coding card included in the keyring transmitter package. This code cannot be changed.

To use both types of transmitters, you must ensure that the security code in the hand-held transmitter and the keyring transmitter are identical. To change the code in the hand transmitter, proceed as follows:

- Remove the battery cover.
- Change the position of the switches numbered 1 to 8 on the code switch block, so that they correspond with the settings on the keyring transmitter which are recorded on the coding card.
- After the code has been set in the powerhead receiver with the keyring transmitter, press the hand-held transmitter to verify the garage door opener responds to this transmitter. If not, check the code setting again in the hand transmitter. The left-hand side button of the keyring transmitter corresponds to the up position of the side switch of the hand-held transmitter. The right-hand button corresponds to the down position.



E. Setting The Security Code In The Receiver (one door and auxillary outputs)

External devices can be connected to the auxillary outputs 1 and 2, located on the back panel of the powerhead (see Figure 21 of the installation instructions).

The two channel transmitter (hand-held or keyring transmitter) can independently operate the door and either one of the two auxillary outputs. The other auxillary output will be activated in parallel with door operation.

The auxillary output (1 or 2) which is activated in parallel with the door depends on how the code is set in the receiver :

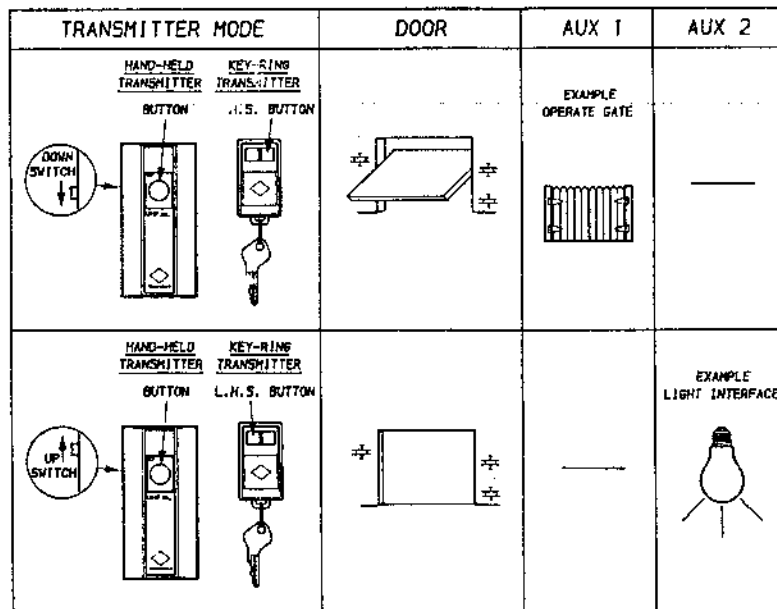
- If, when setting the code in the receiver, the side switch is in the up position on the hand-held transmitter, or if you use the left-hand side button on the keyring transmitter, the transmitters will operate the door and the auxillary outputs.

	TRANSMITTER MODE	DOOR	AUX 1	AUX 2
<p>SET CODE IN POWERHEAD</p> <p>WITH</p> <p>a) SWITCH UP ON HAND HELD TX OR b) L.H.S. BUTTON ON KEY-RING TX</p>	<p>HAND-HELD TRANSMITTER BUTTON</p> <p>KEY-RING TRANSMITTER L.H.S. BUTTON</p>			<p>EXAMPLE LIGHT INTERFACE</p>
	<p>HAND-HELD TRANSMITTER DOWN SWITCH</p> <p>KEY-RING TRANSMITTER R.H.S. BUTTON</p>		<p>EXAMPLE ACTUATE ALARM</p>	

b) If, when setting the code in the receiver, the side switch is in the down position on the hand transmitter, or if you use the right-hand side button on the keyring transmitter, the two transmitters will operate the door and auxillary outputs.

**SET CODE
IN POWERHEAD**

- WITH
- a) SWITCH DOWN ON HAND HELD TX
 - OR
 - b) R.H.S. BUTTON ON KEY-RING TX



F. Transmitter battery replacement

a) HAND-HELD TRANSMITTER

The transmitter is supplied with a 9 volt battery. The battery should provide adequate power for approximately one year. If the transmitter range reduces, check the battery power and replace if necessary. To replace the battery:

- i) Remove the battery cover from the rear of the hand-held transmitter by depressing the top edge of the cover and sliding in a downward direction.
- ii) Remove the old battery and insert a new battery in the battery compartment. Refer to the marking on the case for correct polarity.
- iii) Replace the battery cover.

It is recommended that an alkaline battery be used.

b) KEYRING TRANSMITTER

The keyring transmitter is supplied with two 3 volt (lithium/manganese dioxide) batteries CR 2016. These batteries should provide adequate power for approximately one year. If the transmitter range weakens, check the battery power and replace if necessary.

Use only lithium / manganese dioxide batteries, 3.0V type CR2016 (button cell configuration) for the keyring transmitter. This battery type is used to power popular electronic goods such as watches and calculators and is readily available from leading department stores, chemists, electrical stores and watch makers.

To replace the batteries:

- i) Remove the two connecting screws located on the back of the transmitter case and separate the two halves.
- ii) Remove the old batteries and replace with the new batteries. Ensure the battery polarity is as shown on the printed circuit board (+ of battery should be visible).
- iii) Replace the battery cover and connecting screws.

Operating range of the remote controls may vary due to atmospheric conditions or radio signals in the immediate area of your garage door opener.

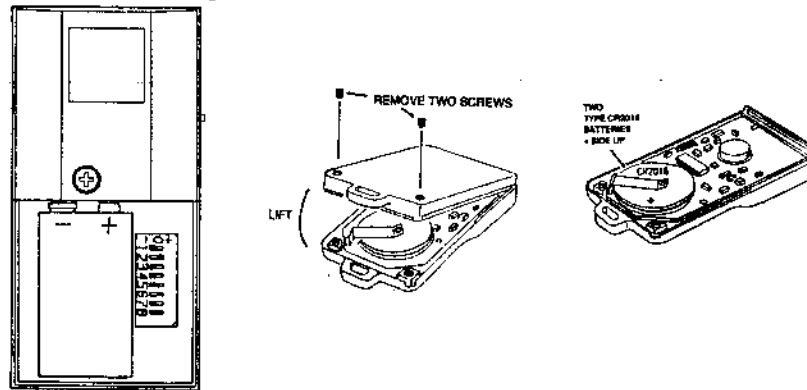
The garage door opener may not respond to the transmitter if it is within 1m of the powerhead. It is necessary to pause for half a second between each press of the transmitter button, to allow the powerhead to respond correctly.

Operating range of remote controls may be reduced due to the position of the antenna. Ensure the antenna is fully extended. Do not extend the antenna alongside any metal components.

The 240 volt light will be activated whenever the door is activated and will remain on for approximately 3 minutes.

Transmitter battery replacement

Figure 21



Auxiliary Output Specifications

	Auxiliary Contact Output 1	Auxiliary Drive Output 2
VOLTAGE	24V (DC)	12V (DC)
CURRENT (max)	5 A	50 m A

Refer to Step 19 of the installation instructions for further details about external connections.

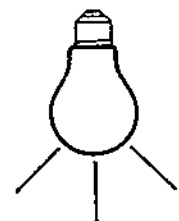
6. Replacing The Light Bulb

WARNING ! WHEN REPLACING THE LIGHT BULB, USE A MAXIMUM OF 100W ONLY. USE OF A MORE POWERFUL WATTAGE BULB MAY RESULT IN DAMAGE TO THE OPENER POWER-HEAD.

To replace the 100W bulb :

1. Switch off the power at the power point.
2. Depress the clips and remove the light diffuser from the powerhead.
3. Unscrew the bulb anti-clockwise and replace.
4. Push the light diffuser onto the powerhead until both left and right clips are engaged in the chassis cover.
5. Switch on power. (All previous settings will be automatically restored when power is resumed)

More maximum bulb life, it is recommended to use a rough service (commercial type) bulb.



MAXIMUM OF 100W ONLY.

7. Trouble Shooting Guide

Problem	Possible Cause	Solution
1. GARAGE DOOR OPENER DOES NOT ACTIVATE.	<p>No power to garage door opener.</p> <p>Consistent running of motor has caused overheating.</p> <p>Defective circuit board.</p> <p>Door lock not disconnected.</p> <p>Power not on.</p>	<p>Check to see if there is power at the outlet by connecting and testing another appliance.</p> <p>The two LED's code set and limit set will be on. Wait 2 - 3 minutes for the LED's to extinguish.</p> <p>To be replaced by a B&D Dealer.</p> <p>Disconnect door lock.</p> <p>Turn on power at the power point.</p>
2. COURTESY LIGHT DOES NOT WORK.	<p>Burnt out bulb.</p> <p>Defective circuit board.</p>	<p>Replace bulb.</p> <p>To be replaced by a B&D Dealer.</p>
3. DOOR REVERSES ON DOWN TRAVEL.	<p>Garage door springing incorrect.</p> <p>Door is obstructed.</p> <p>If reversing occurs on contact with floor, limits are set too harshly.</p> <p>Door is closing too tight against the frame of the door opening.</p>	<p>Spring tension to be re-adjusted by a B&D Dealer.</p> <p>Pull red emergency release handle. Manually operate the door to locate the obstruction.</p> <p>Reset the limits.</p> <p>Adjust door fitting to reduce friction.</p>
4. DOOR STOPS ON WAY UP.	<p>Garage door spring incorrect.</p> <p>Door rubbing against door opening.</p>	<p>Spring tension to be re-adjusted by a B&D Dealer.</p> <p>Pull red emergency release handle. Adjust door fittings to reduce door friction.</p>
5. DOOR RESPONDS TO PUSH BUTTON BUT NOT TRANSMITTER.	<p>Battery condition.</p> <p>Code not set.</p> <p>Antenna position.</p> <p>Antenna wire broken.</p> <p>Location of transmitter in car.</p> <p>Distance of transmitter from powerhead.</p> <p>Overload detected (LED's will be flashing).</p>	<p>Check battery of transmitter. Check if transmitter LED comes on when pressing the button.</p> <p>Reset the security code on the receiver.</p> <p>Check if antenna wire on the back panel of the garage door opener is fully extended and not in contact with metal components.</p> <p>Contact your nearest B&D Dealer.</p> <p>Relocate hand transmitter in car.</p> <p>Is hand transmitter at least 1 metre from the powerhead?</p> <p>Switch off power and back on again to reset powerhead.</p>
6. DOOR RESPONDS TO TRANSMITTER BUT NOT PUSH BUTTON.	<p>Push button wire damaged.</p>	<p>Check push button wire for break or open circuit.</p>
7. GARAGE DOOR OPENER OPERATES BY ITSELF	<p>Neighbour with garage door opener using the same code.</p> <p>Loose push button wire making short circuit.</p>	<p>Change the position of the switches in the transmitter and reset the code in the receiver.</p> <p>Check push button wire.</p>
8. NOISY POWERHEAD	<p>Chain not lined up correctly.</p> <p>Chain too loose.</p> <p>Incorrect mounting of powerhead.</p>	<p>Adjust powerhead in line with the drive tube.</p> <p>Adjust chain tension.</p> <p>Add bracing.</p>

8. Product Indicators

Indication	Cause	Action
1. LIMIT SET LED ON AND STEADY	Limit set mode.	Set bottom limit. (Refer Step 16)
2. LIMIT SET LED ON AND FLASHING	Bottom limit accepted.	Set top limit (Refer Step 16)
3. NO LED ON	Both limits accepted.	
4. CODE SET LED ON. COURTESY LIGHT OFF.	Code set mode.	Set code (Refer Step 18)
5. CODE SET LED OFF - COURTESY LIGHT ON FOR 10 SECONDS	Code accepted.	
6. BOTH LED'S FLASH. DOOR DOES NOT OPERATE FROM TRANSMITTER. DOOR DOES OPERATE FROM WALL SWITCH.	Door overload on way up.	Pull emergency release handle and check door manually for smooth operation. Door may require service. Switch power off and back on again to reset powerhead.
7. BOTH LED'S FLASH. DOOR DOES NOT OPERATE FROM TRANSMITTER OR ANY BUTTON.	Door overload.	Pull emergency release handle and check door manually to locate any obstructions. Door may require service. Switch off power and back on again to reset powerhead.
8. BOTH LED'S ON	Motor overheated.	Wait 2-3 minutes for motor to cool down and LED's to extinguish.
9. BOTH LED'S FLASH UNTIL DOOR REACHES FULLY OPENED POSITION.	Door reversed.	Disengage and check door manually for smooth operation. Door may require service.

9. Self Test Procedure

See instructions next page.

	240V COURTESY LIGHT	LIMIT SET	CODE SET	DOOR NOT CLOSED LED	LIMIT SET	CODE SET	DOOR NOT CLOSED LED
START							
1) If the power is on and the limits set, press and hold CODE SET, then press the wall button and hold both buttons for 2 seconds.							
OR							
2) If the limits are not set:							
i) Power off							
ii) Press and hold both Code Set and wall button							
iii) Switch power on.							
Auxiliary 1 output: ON for 1 sec		Flashing	alternately	ON			
Auxiliary output 2: ON for 1 sec		Flashing	alternately	ON			
LIGHT ON Motor drives down for 0.5 sec. If door is down, motor will then drive UP for 0.5 sec.		Flashing	alternately	ON			
Motor drives UP for 0.5 sec.		Flashing	alternately	ON	ON	ON	Flashing
Motor drives DOWN for 0.5 sec.		Flashing	alternately	ON	OFF	ON	Flashing
Low voltage detection (factory test only)		Flashing	alternately	OFF			
Memory test.	Flashes once				ON	OFF	Flashing
Radio receiver test.	ON (for 10 sec's)	OFF	ON	OFF	Code Set LED does not go off when transmitter button is pressed.		
1) Press transmitter for 1 second or if transmitter not available,							
2) Press Code Set again (Original code will be retained).							
OR							
3) Wait 2 minutes (original code will be retained).							
OR							
4) Switch power off (original code will be retained).							
END OF SELF TEST	OFF	ON	OFF	OFF			

At the conclusion of the test, the unit will remain in limit set mode, awaiting limits to be set.

10. Maintenance

Chain Tension Adjustment And Lubrication

The chain may stretch over a period of time. The chain tension should be adjusted every two years. The chain may also require lubrication every two years.

11. Optional Accessories

Key Ring Transmitter (Part number 60900)

This transmitter will accommodate a set of keys and features a two channel radio.

Remote Button With LED Kit (Part number 60904)

Includes a wall switch with 12.5 metres of cable. The push button enables you to operate the door from inside the garage. An LED light is on when the door is not closed. This LED indicator is useful as a reminder to the home owner to close the door.

External Disengagement Device (Part number T7012)

This accessory is essential when the garage door is the only access to the garage (coffin garage). This device allows the garage door opener to be disengaged from outside the garage in the event of a power failure.

Auxiliary Channel Interface Kit (Part number 60903)

Provides 12.5m of cable to interface an auxiliary device (external light, for instance) to be controlled via the auxiliary radio channel in the transmitter.

External Radio Interface Kit (Part number 60905)

Provides 12.5 metres of 3 core cable to connect the powerhead to an external receiver. The available power supply for an external receiver is 12V (DC), 25mA. The external receiver can be used to send a signal to the powerhead to activate the garage door opener.

Keyswitch (Part number 47887)

A keyswitch to operate the door can be located outside the garage at a convenient position and used when a transmitter is not at hand.



Warranty, Terms & Conditions

- In these terms and conditions:
"B&D" means Clyde Industries Limited (A.C.N. 000 002 031) trading as B&D Australia.
"Buyer" means the person who purchases a unit or units manufactured by B&D.
"Unit" or "Units" means B&D Secure-A-Door, B&D Roll-A-Door, B&D Control-A-Door, B&D Tilt-A-Matic, B&D Panelift and B&D Tilt-A-Dor Fittings and includes all components, parts and fittings supplied by B&D.
 - These terms and conditions apply to every sale of a Unit/Units by B&D to a Buyer and in the event that such Buyer purchases the Unit/Units for resale, such resale shall be effected on the terms and conditions set out therein except for price and such resale shall be deemed to be effected on such terms and conditions in the name and on behalf of the parties to such resale transaction only, save for the warranty in Clause 8 which is given in the name and on behalf of B&D only.
 - The risk of loss or damage to the Unit/Units shall pass to the Buyer:
 - In the case of a contract for supply only of the Unit/Units immediately upon delivery to the Buyer or a nominated carrier for transportation to the buyer or to a place or site nominated by the Buyer or at the Buyer's discretion; or
 - In the case of a contract for supply and installation of the Unit/Units immediately upon delivery of the Unit/Units to the installation site or the Buyer or a nominated carrier for transportation to the installation site.Such delivery shall in every situation be deemed to be delivery to the Buyer and acceptance by the Buyer of the Unit/Units whether or not the Buyer is present at the time of delivery to sign a receipt for the Unit/Units.
 - Where the Unit/Units are made to suit floor levels, heights or opening sizes not inspected by B&D, but the sizes and levels are guaranteed by the Buyer, any error in the given dimensions will not entitle the Buyer to reject the Unit/Units and the Buyer will be responsible for any costs involved in the alteration of made up Unit/Units, the cost of unsuitable Unit/Units and the supply of any replacements.
 - Any dates given to the Buyer for delivery or installation are estimates only and while B&D shall use its best endeavours to meet such dates the Buyer acknowledges and agrees that no liability shall attach to the Seller for any loss or damage, direct or consequential, arising out of any delay in delivery or installation or for non-delivery from any cause whatsoever. If for any cause that is, in the opinion of B&D beyond B&D's control B&D is unable to deliver or install the Unit/Units either within a reasonable time, or at all, the contract shall be voidable at B&D's option with no right of either party to claim any damages.
 - These terms and conditions constitute the entire agreement for the sale of the Unit/Units between the parties and shall only be varied, modified or rescinded by written agreement executed by B&D and shall prevail over any differing terms and conditions purported to be incorporated into the contract of sale of the Unit/Units by the Buyer or B&D or otherwise alleged to have been agreed.
 - Subject to Clause 8 of these terms and conditions and in particular paragraph H thereof, B&D shall neither be subject to nor incur and the buyer releases B&D from any claim or liability (including consequential loss or damage, loss of use or profit) by reason of delay, defective or faulty components or materials or workmanship, negligence, or any act, matter or thing done, admitted or omitted by B&D or the unsuitability of the Unit/Units for the Buyer's purpose and the Buyer acknowledges that he did not rely on the skill or judgement of B&D in selecting and ordering the Unit/Units for the purpose for which the same was required by the Buyer.
 - Subject to Clause 8 hereof or as otherwise agreed in writing by B&D, the Buyer may not return the Unit/Units or any part or parts thereof after delivery or installation (as applicable) has been affected. Any claims for return of the Unit/Units or any parts thereof must be made within 7 days of the date of the said delivery.
- 8A. B&D hereby warrants:
- All new B&D Roll-A-Door to be free from defects in material and workmanship for a period of
 - Seven years if used under normal domestic and household service and conditions.
 - One year if used under normal industrial and commercial service and conditions.
 - B&D warrants all new B&D Secure-A-Door to be free from defect in material and workmanship for a period of two years if used under normal service and conditions from the date of purchase.
 - All B&D Tilt-A-Matic, B&D Panelift and B&D Tilt-A-Dor fittings to be free from defects in materials and workmanship for a period of one year if used under normal domestic and household, industrial and commercial service and conditions.
 - All B&D Control-A-Door units to be free of defect in materials and workmanship for a period of 2 years if used under normal domestic conditions.
 - Where B&D Control-A-Door and B&D Tilt-A-Matic are installed on doors where operational frequency will exceed one thousand (1000) operations in any three (3) months, the warranty is limited to three (3) months from the date of purchase.
 - Where residential model B&D Control-A-Door and B&D Tilt-A-Matic are installed on commercial and industrial situations, the warranty is limited to three (3) months from date of purchase.
- WITH THE EXCEPTION THAT -**
- The surface coatings on all new Unit/Units are warranted to be free from defects in material and workmanship for a period of one year under normal use and service, from the date of purchase providing that the original installation was correctly performed and that appropriate care of the Unit/Units has been taken by the Buyer and service as recommended by B&D has been maintained by the Buyer. This warranty does not cover damage to the surface coatings and/or the base materials of the Unit/Units caused by proximity to the seafront, industrial fallout areas or similar corrosive conditions. B&D obligations under this warranty are limited to rectifying any such defects in material and workmanship, proved to B&D's satisfaction within the period of time detailed above, in a manner B&D considers reasonable including, if necessary, the touch-up of surface coatings.
- B. (i) Where the Unit/Units have been installed by B&D, B&D warrants that such installation shall be free from defects in materials or workmanship in normal use,

service and operation for a period of one (1) year from date of installation and that the Buyer shall be entitled to free service by B&D to remedy any such defects. The Buyer will pay for any service call made by B&D or when in the opinion of B&D these call are made for the purpose of adjustment and not for the purpose of remedying a defect to which this warranty applies.

(ii) Where the Unit/Units have not been installed by B&D, B&D, in addition to any warranty which may be offered by the party who installed the Unit/Units will, within a reasonable period of time after notification of the defect by the Buyer and on return of the defective part or Unit/Units, repair or, at its option, replace any defective part or Unit/Units, without charge provided that all costs of disconnections, re-installation and freight shall be borne by the Buyer.

C. Notification and Proof to be Given by the Buyer.

In the event of any defect in the Unit/Units arising, the Buyer must notify directly B&D and must establish to the reasonable satisfaction of B&D the date of purchase or installation (as the case may be) by way of invoice.

D. Future Modifications

B&D may make such modifications to any existing or future models of the Unit/Units as it may deem necessary without incurring any obligation to incorporate such modifications in the Unit/Units previously sold or to which this warranty may apply.

E. General

Subject to paragraph H hereof, the obligations of B&D under this warranty are limited to those contained above and

(i) all express or implied statements, warranties, terms or conditions whether arising by virtue or otherwise relating to the condition, quality, safety or fitness for any purpose of the Unit/Units or installation thereof or hereby expressly excluded; and

(ii) B&D shall not be subject to nor incur and the Buyer releases B&D from any claim or liability (including consequential loss or damage and loss of use or profit) by reason of delay, defective or faulty materials or workmanship, negligence or any act, matter or thing done, admitted or omitted by B&D.

F. The warranty constituted by paragraphs A to E above shall apply only to Buyers who are Australian residents. In the case of original retail sales to persons other than Australian residents, B&D subject to paragraph H below, limits its liability absolutely to the extent permitted by law.

G. Exclusion

Subject to paragraph H hereof, this warranty does not extend to and B&D will be relieved of all obligations, responsibilities and liabilities (direct or consequential) in the event that defects in or malfunction of the Unit/Units are directly or indirectly due to or result from:

- lack of proper maintenance or care of the Unit/Units
- incorrect or unreasonable use
- faulty installation which is not carried out by B&D
- failure to observe any instructions or directions provided with the Unit/Units or given to the Buyer by the installer
- modifications or repairs made or attempted to be made by any unauthorised person
- incorrect installation or adjustment of the Unit/Units by persons other than B&D

H. Statutory Warranties

It is expressly provided that the warranties above or any terms and conditions of them or other statement contained in this document or other literature given to the Buyer shall not be read or applied so as to purport to exclude, restrict or modify or have the effect of excluding, restricting or modifying the application in relation to the supply of the Unit/Units of all or any of the provisions of Divisions 2 and 2A of Part V of the Trade Practices Act, 1974 ("The Act") as amended or the exercise of a right conferred by such a provision or any liability of B&D for breach of a condition or warranty implied by such provisions or any other conditions or warranties implied by any relevant State Act or Territorial Ordinance or by the general law and which by law cannot be excluded, restricted or modified provided that to the extent that the Act permits B&D to limit its liability for a breach of condition or warranty implied by the Act, then B&D's liability for such breach shall be limited to the payment of the cost of replacing the goods or acquiring equivalent goods or of repairing the goods.

9. B&D shall not be liable for any loss or damage caused directly or indirectly by:

- Operating a B&D Roll-A-Door or B&D Panelift by any device, electronically operated or otherwise, which is not manufactured by B&D and installed by B&D.
- Any masonry, rendered or other surfaces cracking or collapsing during or after the installation of the Unit/Units.
- Any defect or deterioration of timber including drying out after installation of the Unit/Units.
- Any weakening or collapse of the structure to which the Unit/Units are affixed occurring at any time after installation.
- Any damage to or deterioration in the condition of the Unit/Units occurring after delivery and prior to installation.

B&D Australia

NSW - 34-36 Marigold Street, Revesby 2212	Ph: (02) 722 5555
Wollongong - 212 Corrimal Street, Wollongong 2500	Ph: (042) 26 2288
Victoria - Canterbury Road, Kilsyth 3137	Ph: (03) 9728 1566
Geelong - 5/6-B Shepherd Court, Nth Geelong 3215	Ph: (052) 9721 832
Footscray - 3/496 Geelong Road, Footscray 3011	Ph: (03) 9314 5789
Queensland - 37-47 Cobalt Street, Carole Park 4300	Ph: (07) 3271 2500
SA - 5 Peekarra St., Regency Park 5010	Ph: (08) 340 3411
WA - 225 Balcatta Road, Balcatta 6021	Ph: (09) 344 3333
*Tasmania - Tom Moore & Son 86 Bass Hwy, Cooeee 7320	Ph: (004) 31 4388

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