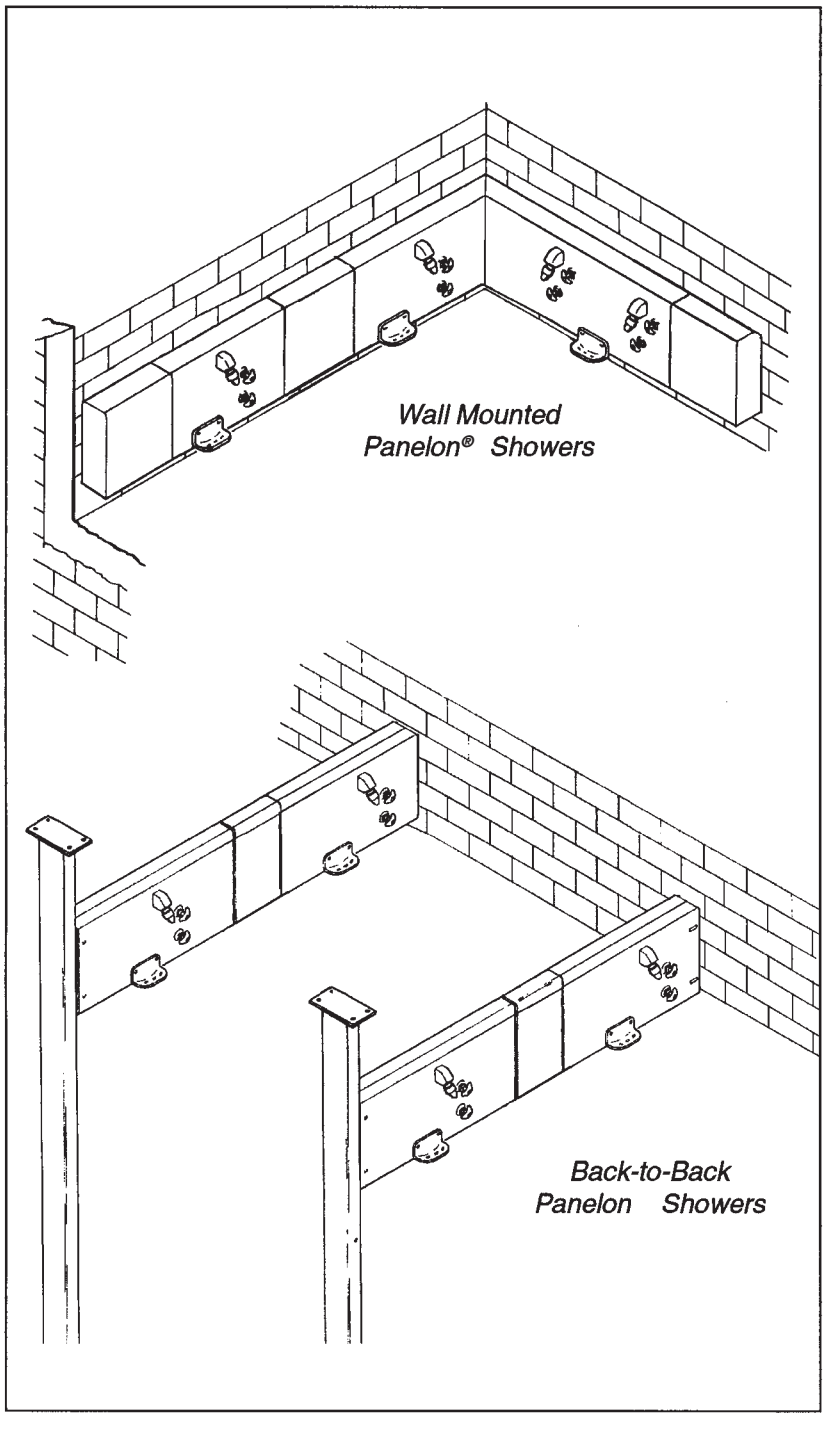


Installation and Maintenance Instructions

Bradley Panelon® Showers - Wall Mounted and Back-to-Back Models

Read and save this manual, which contains maintenance and repair information, for future reference.

Bradley

P.O. Box 309, Menomonee Falls, WI 53052
PHONE (414) 251-6000 FAX (414) 251-5817

215-207 Rev. A; EN 92-461

About Your Bradley Panelon™ Shower

You have made a smart economical choice by purchasing a Bradley Panelon™ Shower. Your Panelon™ Showers have been custom fabricated for your shower room layout. The Bradley Panelon™ line includes wall mounted showers and back-to-back showers.

Panelons™ are constructed of heavy gauge stainless steel and are vandal-resistant. Panelons™ can be mounted at any height (see the recommended heights below).

Recommended Shower Heights

Age	Male	Female
Adult	6'0" (1.83m)	5'6" (1.68m)
Teenage	6'0" (1.83m)	5'6" (1.68m)
Pre-teens	5'6" (1.68m)	5'6" (1.68m)

(Finish floor to showerhead tip)

Bradley Panelon™ showers are durably built for long-lasting and dependable use.

Components

Material: Bradley Panelon™ showers are constructed of Type 304 stainless steel. Shower panels and stanchions are 16 gauge. All exposed parts are either No. 4 finish stainless steel or chrome-plated brass.

Supply Inlets: Supply inlets are male copper tube sized as follows:

1-4 Heads = 3/4" NCT Diameter
5-8 Heads = 1" NCT Diameter
9-12 Heads = 1-1/4" NCT Diameter
12 & Over = 1-1/2" NCT Diameter

Installation: Installation is fast and easy. All Panelon™ showers are factory assembled and pre-piped, tested for proper operation, and ready for connection to plumbing supplies.

What You Need to Provide for Installation

Your Bradley Panelon™ Shower comes complete with all the components needed for installation; however, tools and some supplies must be supplied by you.

Tools Recommended:

- Tools needed to install wall/floor anchors and fasten 1/4" diameter screws
- Tools needed to connect water supply(s)
- #10-24 screwdriver
- Allen wrench
- Tape measure and level
- (OPTIONAL) Drill with 5/32 drill bit for installing shroud

Supplies Required:

- Water supply inlets
- Wall/floor/ceiling anchors and 1/4" diameter screws for mounting wall bracket(s) and/or stanchions
- Shims if necessary
- Teflon pipe tape or pipe dope
- Grout
- (OPTIONAL) 1/4" diameter screws for mounting shroud brackets

Table of Contents

Panelon Wall Mounted Showers Installation

Refer to Figure 1 below and Figure 2 on page 5 when installing your Panelon Showers.

Steps

NOTE: Flush supply lines before making connections.

1. Rough-in supply piping to wall showers as shown in Figure 1 below.
2. Carefully check plans and/or specifications to determine showerhead tip height specified.
3. Measure up from the finished floor to locate the showerhead tip height, then, using "D" dimension (see Figure 1), scribe a horizontal line on the wall indicating the centerline of the anchoring hole for the top wall brackets.

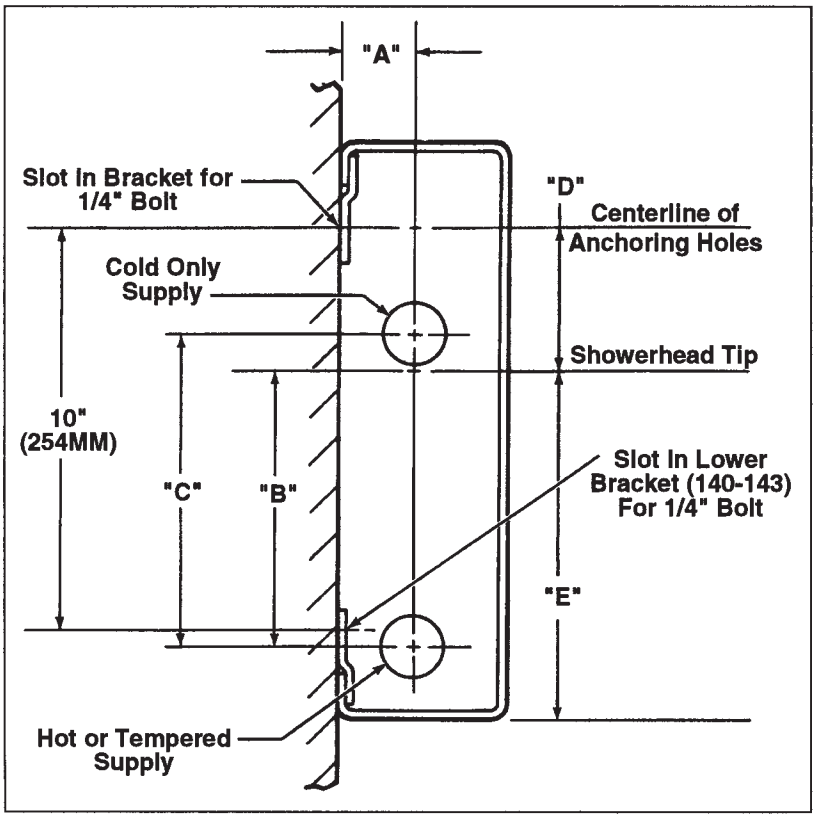


Figure 1

4. Measure down 10" from the centerline of the anchor holes and scribe a horizontal centerline for the lower wall brackets (see Figure 1).
5. Use the room layout drawing (identified by a PA number) for proper panel number and location. Select a panel and position the panel on the wall. Scribe a vertical line at the upper edge at both ends of the shower panel.

Dimension	Type of Valve				
	Remote Controlled	Tempered	Hot and Cold	Pressure Balancing	Metering
"A"	2-3/4" (70MM)	1" (25MM)	1-3/4" (44MM)	1-3/4" (44MM)	1-1/4" (32MM)
"B" Without Ball Joint	2-1/2" (64MM)	2" (51MM)	6-7/8" (175MM)	6-7/8" (175MM)	6" (152MM)
"B" With Ball Joint	1-5/8" (41MM)	1-1/8" (29MM)	6" (152MM)	6" (152MM)	5-1/8" (130MM)
"C"	---	---	7-3/4" (197MM)	7-3/4" (197MM)	---

Dimension	Without Ball Joint	With Ball Joint
"D"	3-1/2" (89MM)	4-3/8" (111MM)
"E"	8-1/2" (216MM)	7-5/8" (194MM)

Panelon Wall Mounted Installation Continued ...

Refer to Figure 1 on page 3 and Figure 2 on page 5 when installing your Panelon Showers.

6. Locate and secure the 18" long wall bracket to the wall according to the following procedure, locating from the vertical lines scribed in Step 3 on page 3.

   A. SHOWER PANELS UNDER 40" IN LENGTH
   Use one bracket per panel. Center panels between the scribed lines.

   B. SHOWER PANELS BETWEEN 40" AND 80" IN LENGTH
   Use two brackets per panel. Locate one bracket 10" from each scribed line to the center of the bracket.

   C. SHOWER PANELS BETWEEN 80" and 120" IN LENGTH
   Use three brackets per panel. Center one bracket between the scribed lines and one bracket 10" from each scribed line to the center of the bracket.

7. On scribed line for lower bracket from Step 3 on page 3, install two anchors for each panel section, approximately 1-1/2" in from outer edges of panel.

8. Hang a shower panel on the wall bracket(s), position the shower panel between the scribed lines from Step 4 on page 3, and secure the lower brackets.

9. Repeat Steps 4, 5, 6, and 7 for each shower panel.

10. Make necessary supply connections at access panels and/or corners to inlet supply stubs (fittings supplied by installer). NOTE: When a straight run exceeds 20 feet in length, a slip type coupling or an expansion joint is recommended to allow for contraction and expansion. Also, union connections are recommended at access panels, corners, and supply inlets.

11. Locate and secure support clips as shown in Figure 2 on page 5. Align the top of the clip with the upper and lower surfaces of the panel.

12. With the access panels, ends, and corners in place, secure all overlays with the #10-24 x 1/2" long, stainless steel Allen key buttonhead screws provided.

Panelon Wall Mounted Installation Continued ...

Use Figure 2 with Installation Steps 1-12 on pages 3 and 4.

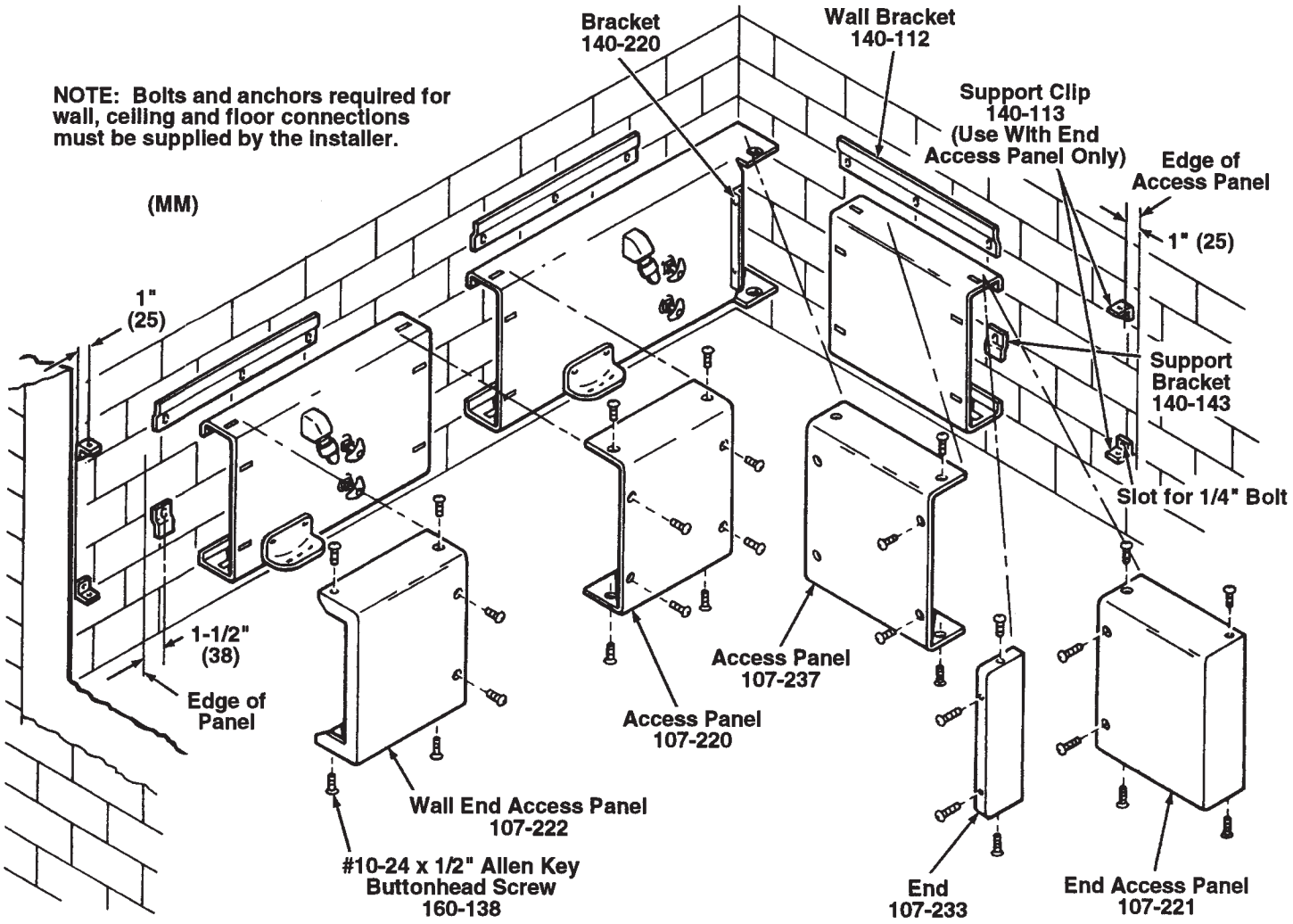


Figure 2

Panelon Back-to-Back Shower Installation

Refer to Figure 3 below and Figure 4 on page 8 when installing your Panelon Showers.

Steps

NOTE: Flush supply lines before making connections.

1. Rough-in supply piping to showers as shown in Figure 3 below and in Figure 4 on page 8 (piping supplied by installer).

2. Use the room layout (identified by a PA number) to determine the proper location of each shower panel. Follow the proper procedure(s) required:

   A. FOR SHOWER PANEL TO WALL CONNECTION

   (1) Carefully check plans and/or specifications to determine showerhead tip height. Measure up from the finished floor to locate showerhead tip height, then, using "D" and "E" dimensions, scribe horizontal lines on the wall (see Figure 3).

   (2) Locate and secure the 18" and 22" long wall brackets as shown in section view "A-A" in Figure 3 on the shower panel centerline and horizontal line scribed in Step 2-A-1.

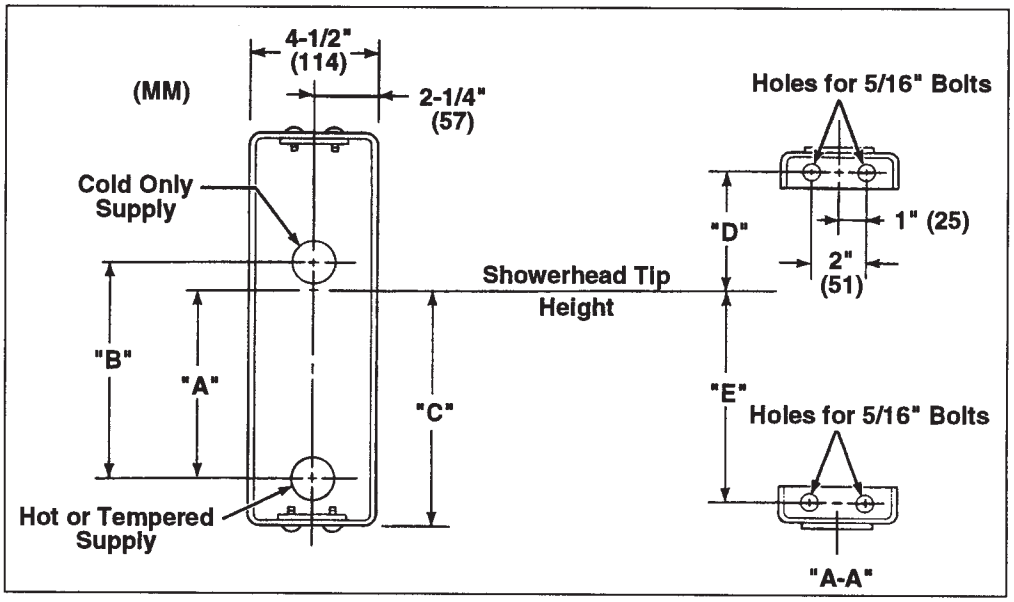


Figure 3

Dimension	Type of Valve				
	Remote Control	Tempered	Hot and Cold	Pressure Balancing	Metering
"A" Without Ball Joint	2-1/2" (64MM)	2" (51MM)	6-7/8" (175MM)	6-7/8" (175MM)	6" (152MM)
"A" With Ball Joint	1-5/8" (41MM)	1-1/8" (29MM)	6" (152MM)	6" (152MM)	5-1/8" (130MM)
"B"	---	---	7-3/4" (197MM)	7-3/4" (197MM)	---

Dimension	"C"	"D"	"E"
Without Ball Joint	8-1/2" (216MM)	4-13/16" (122MM)	7-13/16" (198MM)
With Ball Joint	7-5/8" (194MM)	5-11/16" (144MM)	6-15/16" (176MM)

Refer to Figure 3 on page 6 and Figure 4 on page 8 when installing your Panelon Showers.

(3) Using a support, slide the shower panel on to the wall brackets. Position the shower panel as indicated on the room layout (identified by a PA number). Assemble bolts (160-162), lockwashers (142-002BK), and nuts (161-036) through shower panel wall brackets. Tighten the bolts securely. See Figure 4 on page 8.

B. FOR SHOWER PANEL TO STANCHION CONNECTION

(1) If shower panel also requires wall connection, make wall connections first as explained in Step 2 on page 6.

(2) With the shower panel supported in position, slide the stanchion into place and loosely secure to the shower panel with the #10-24 x 1/2" long screws provided. NOTE: If the stanchion goes to the ceiling, slip the ceiling adjustment sleeve into the stanchion top first. See Figure 4 on page 8.

(3) Using the flanges as templates, mark hole locations on the floor and/or ceiling. Remove stanchion and install suitable floor and ceiling anchors (supplied by installer). Repeat Step 2-B-2, and tighten screws securely. NOTE: Shim as required (supplied by installer) and grout after the flanges are fastened to the floor.

(4) If a ceiling adjustment sleeve is used, secure the ceiling flange to the ceiling and secure tightly with the #10-24 x 1/2" long screws provided.

3. Repeat Step 2 on page 6 for each shower panel.

4. Make necessary supply connections at access panels and/or corners to inlet supply stubs. (fittings supplied by installer). NOTE: When a straight run exceeds 20 feet in length, a slip type coupling or an expansion joint is recommended to allow for contraction and expansion. Also, union connections are recommended at access panels, corners, and supply inlets.

5. Assemble access panels and corners with the #10-24 x 1/2" long screws provided.

Panelon Back-to-Back Shower Installation Continued ...

Use Figure 4 with Installation Steps 1-5 on pages 6 and 7.

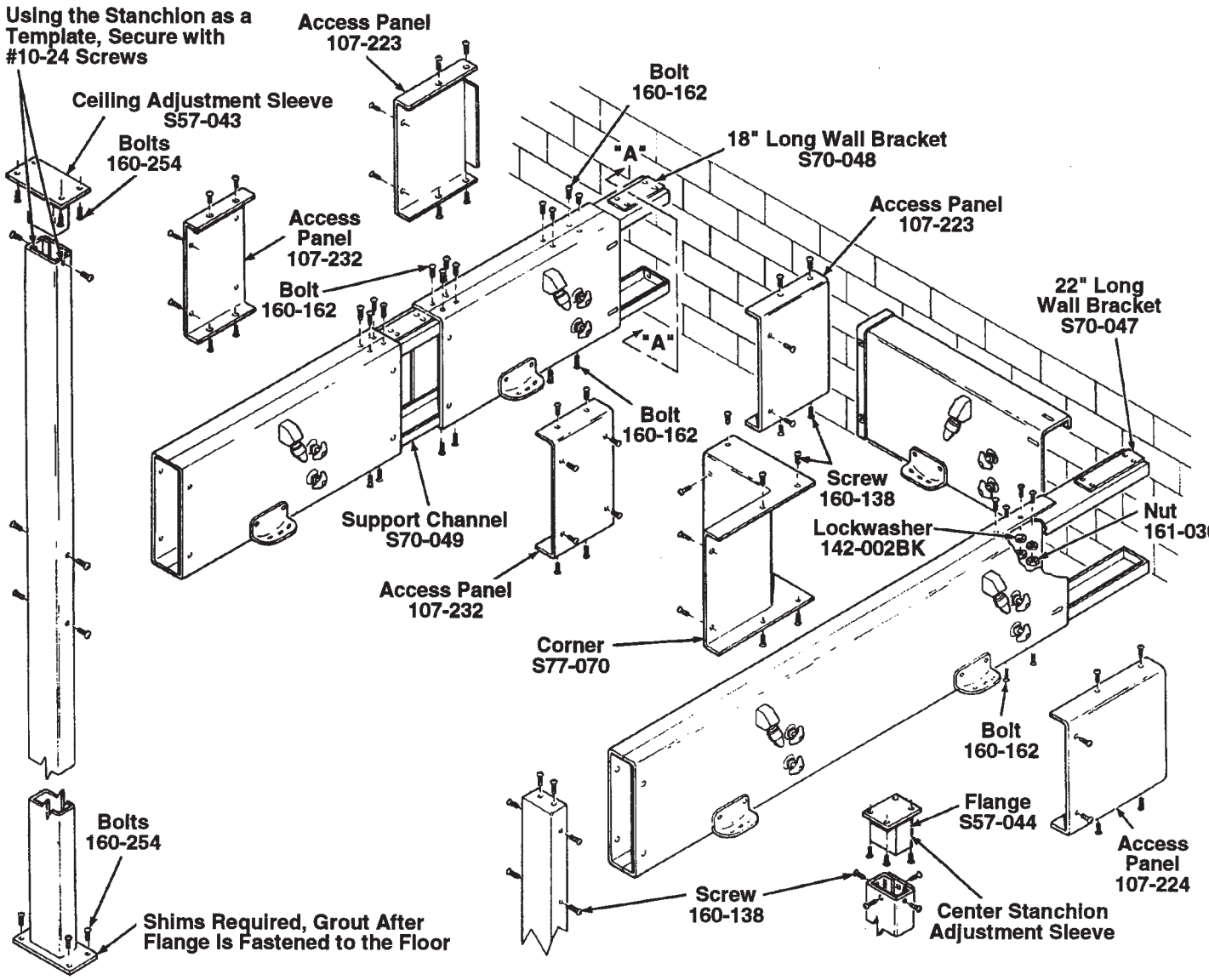


Figure 4

Panelon Shower Shroud Installation (Optional)

Steps

1. Position the wall bracket on top of the shower as shown in Figure 5 and secure with 1/4" diameter screws (supplied by installer).
2. Position the slip ring against the ceiling and in line with the bracket installed in Step 1 (see Figure 5).
3. With bracket and slip ring secured, position the shroud in place and secure the shroud to the lower bracket with screws provided (see Figure 5).
4. Using the holes at the top of the shroud as a template, drill and tap #10-24 holes in the slip ring.
5. Secure the shroud to the slip ring with the #10-24 screws provided (see Figure 5).

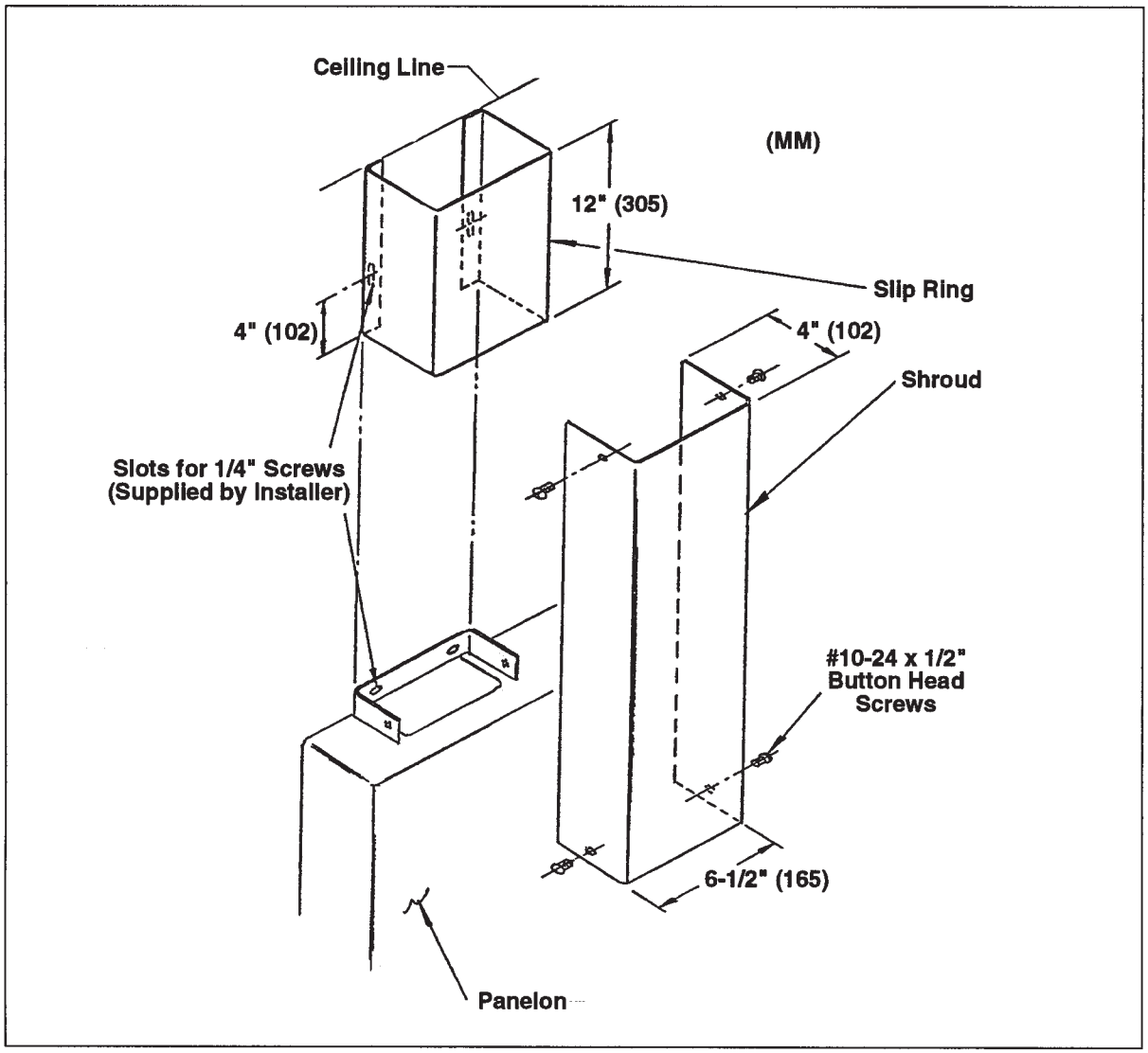
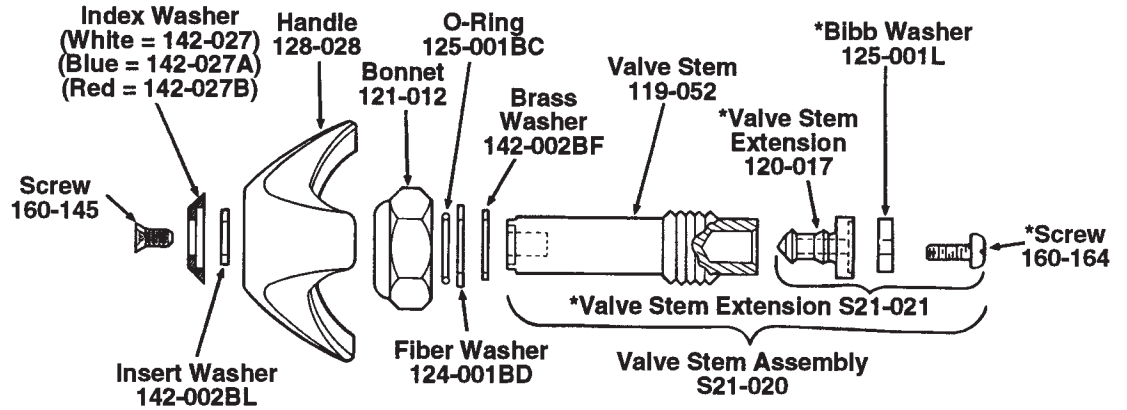


Figure 5

Hot, Cold, and Single Bradley Compression Shower Valve



***NOTE: It is not recommended that the component of the stem assemblies be ordered individually. It is likely that valve stem extension 120-017 can not be removed without breaking because it is made of Celcon plastic. If breakage occurs, that portion of the plastic remaining in valve stem 119-052 will have to be drilled out. It is our recommendation that valve stem assembly S21-020 always be replaced completely.**

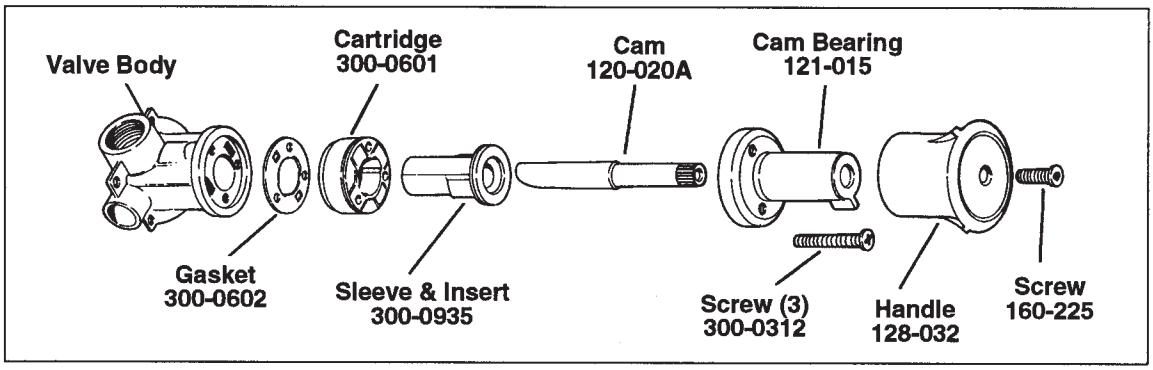
Repair Kits

S02-031	Complete valve stem and handle assembly with White Index Washer (tempered)
S02-031A	Complete valve stem and handle assembly with Blue Index Washer (cold)
S02-031B	Complete Valve stem and handle assembly with Red Index Washer (hot)

Used in Conjunction with the Following Parts:

118-009	Valve Body
124-001K	Fiber Washer for Valve Body
117-002	Valve Seat
150-035	Escutcheon

Bradley Bradtrol™ Valve

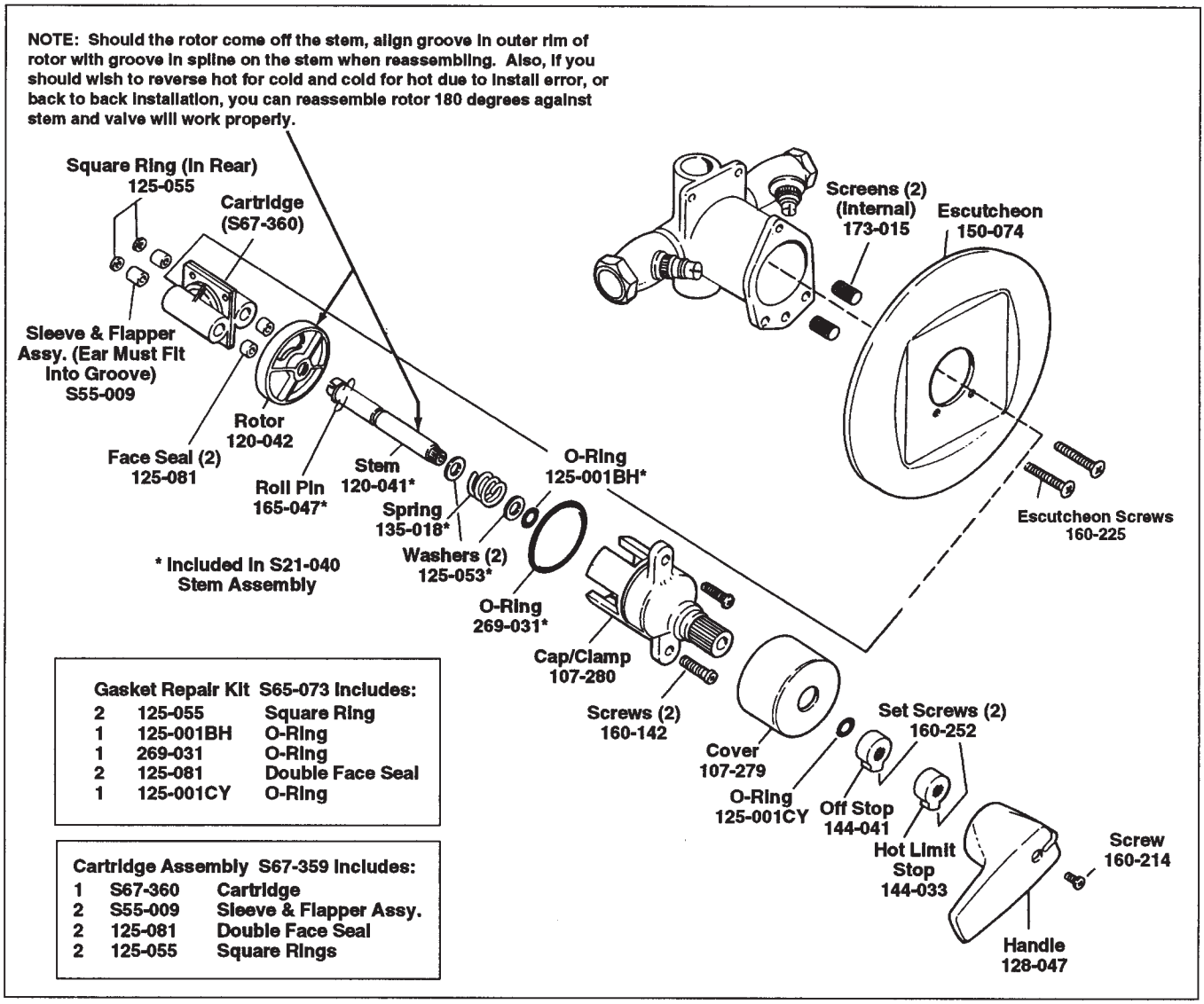


Bradley Repair Kit No. 300-0760 Includes:

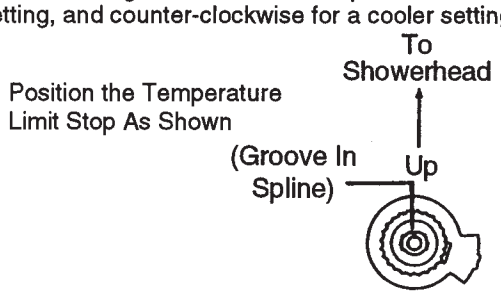
300-0935	Sleeve and Insert
300-0602	Gasket
300-0601	Cartridge

Valve Assembly S21-025 Includes:

300-0602	Gasket
300-0601	Cartridge
300-0935	Sleeve and Insert
120-020A	Cam
121-015	Cam Bearing
300-0312	Screws (3)



Valves are equipped with a Temperature Limit Stop which can be used to limit the temperature of tempered water discharged. To adjust the temperature, remove the handle and loosen the set screw. Remove the limit stop and reposition to desired setting. Turn the Limit Stop clockwise for a hotter setting, and counter-clockwise for a cooler setting.



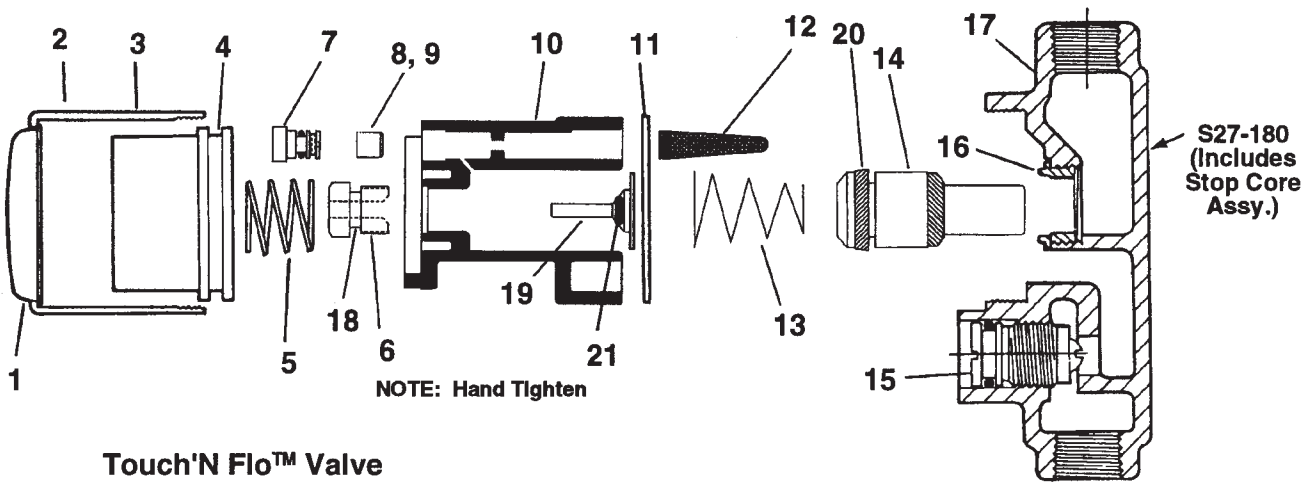
NOTE: When replacing the double face seals, lubricate the top face with a small amount of silicone lubricant reassembling.

When assembling cap into valve body, use silicone lubricant on 269-031 O-Ring, to prevent twisting of O-Ring.

If lubricant is not available, a slight film of soap may be used.

WARNING: Failure to adjust the maximum temperature limit stop to a safe shower temperature - no more than 105° F - could result in the user being scalded.

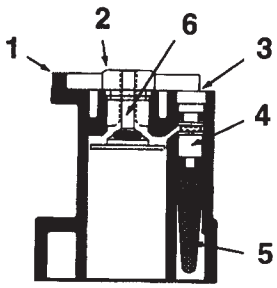
Bradley Touch'N Flo™ Shower Valve



Touch'N Flo™ Valve

No.	Part No.	Description
1	128-048	Pushbutton
2	107-243	Cover 1-5/8" Long
3	107-253	Cover (Individ. Only) 2-3/4" Long
4	182-065	Spacer (Individ. Only)
5	135-034	Spring
6*	S68-005	Guide
7	S21-032	Screw Assembly
8	S88-039	Standard Fixed Orifice Assembly
9	S88-039C	Longer Cycle Orifice Assembly
10	118-210	Body
11	169-250	Gasket
12	173-012	Filter
13	135-028	Conical Spring
14*	S64-014	Plunger Assembly
15	S27-070	Internal Stop Core
16	117-030	Seat (Assemble with Teflon Dope)
17	118-121	Bottom Body
18	125-001BF	O-Ring
19*	S64-034	Poppet Assembly
20	125-078	U-Cup (Viton, Brown)
21	125-001DB	O-Ring

*Note: Item #6 Includes 125-001BF O-Ring
Item #14 Includes 125-049 Cup Washer
Item #19 Includes 125-001DB O-Ring



Body Assembly Kit S73-019S

No.	Qty.	Part No.	Description
1	1	118-210	Body
2	1	S68-005	Guide Assembly
3	1	S21-032	Adjusting Screw Assembly
4	1	S88-039	Fixed Orifice Assembly
5	1	173-012	Filter
6	1	S64-034	Poppet Assembly

Apply a Thin Coat of Silicone Lubricant
All Around I.D. - 1" Deep

Escutcheon and Screws (Not Shown) Must Be Ordered Separately as Follows:

150-077 Escutcheon
160-255 Escutcheon Screw

May consider plunger assembly S64-033 if extreme low water pressure condition exists.

Bradley Touch'N Flo™ Shower Valve Continued ...

Refer to the Touch'N Flo™ Figure on Page 12

IF VALVE WILL NOT SHUT OFF

1. Remove escutcheon.
2. Remove cover (Items 2 or 3). Note: The push-button, and spring will also come loose with the cover.
3. Using a 3/32" Allen Key, turn adjusting screw (Item 7) counter-clockwise until adjusting screw is flush with body (Item 10). If valve continues to run, proceed with the next step.
4. Turn integral stop (Item 15) to shut off water, remove body assembly (Item 10) and check for:
   A. A loose or worn valve seat (Item 16).
   B. Any obstruction between seat and plunger assembly.
   C. Loose, missing or plugged filter (Item 12), in body assembly. If either condition exists, replace entire body assembly (S73-019S).
   D. Missing plunger assembly (Item 14). Conical washer worn or not centered on plunger assembly. Replace if either condition exists.
   E. Reassemble valve body assembly S73-019S and turn water on.
   F. If valve still continues to run, proceed with Step 5.
5. Shut off water to shower, remove integral stop (Item 15), and check if bibb washer and screw have become disassembled and have remained in passageway or if any other foreign matter may be obstructing water flow. If integral stop core is defective, replace with a new unit, reassemble and test.

IF VALVE WILL NOT TURN ON

1. Check if all stops are open.
2. Integral stop washer may have slipped off retaining screw, allowing it to obstruct passageway. Remove washer and replace integral stop (Item 15) with a new unit.
3. Poppet guide (Item 6) may be screwed into body (Item 10) too tightly, this applies to older versions only. On current style, seal is made from poppet guide O-Ring 125-001BF to body, and poppet assembly to guide with 125-001DB O-Ring integral to poppet.
4. Conical piston spring (Item 13) may be in upside down. Narrow end of spring should engage the piston.

IF VALVE TIMING IS UNSTABLE AT CYCLES IN EXCESS OF ONE MINUTE

1. Make certain to depress push button (Item 1) and hold for **one** second to test cycle.
2. Listen to shower for evidence of strong flowing fluctuations. If these exist when other showerheads are used, check building supply stops for full open, if strainers are clean and tempering valves are on.
3. If timing drifts steadily longer or shorter, remove orifice and hold up to light to see if passageway is clear for small amount of water to pass. Replace in cavity with O-Ring side first.

Repair Kit S65-071 Includes:

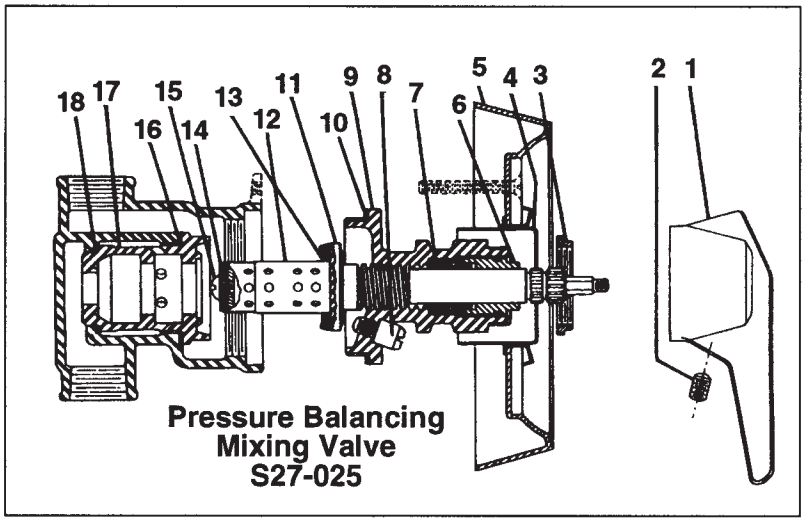
S73-019S	Body Assembly
135-028	Conical Spring
S64-014	Plunger Assembly

Repair Kit S65-070 Includes:

S88-039	Fixed Orifice Assembly
135-028	Conical Spring
169-250	Gasket
173-012	Filter
S64-014	Plunger Assembly
125-001BF	O-Ring
125-001DB	O-Ring

Bradley Pressure Balancing Mixing Valve

No.	Qty.	Part No.	Description
1	1	169-264	Handle
2*	1	169-265	Handle Screw
3	1	169-397	Dome Lock Nut
4	1	169-398	Dome Cover
5	1	S27-091	Escutcheon and Screw
6	1	169-399	Packing Nut
7*	1	169-266	Packing
8	1	S27-092	Limit Stop Assembly
9	1	169-401	Cap
10*	1	169-402	Cap Gasket
11*	1	169-259	Cold Washer Retainer
12	1	169-404	Flow Control Spindle
13*	1	169-262	Cold Washer
14*	1	169-260	Hot Washer
15*	1	169-261	Hot Washer Screw
16	1	169-408	Top and Bottom Seat Gasket
17	1	169-409	Renewable Seat



*Included in Washer and Gasket Kit Number S65-048

Service Suggestions: Open valve to about warm position. Loosen the handle screw and remove the handle. Remove the escutcheon, unscrew dial locknut and remove the dome cover. Unscrew the valve cap with the complete assembly. Leave packing nut in place while unscrewing cap to avoid distorting end of cap. When cap is unscrewed, entire working unit may be removed.

The perforated cylinder is an integral part of flow control spindle and does not unscrew. The cylinder is hollow and contains a piston. The piston is free-moving and provides pressure-balancing feature of valve. By sliding back and forth under any variation in pressure, the piston opens or throttles hot and cold water ports to control proper delivery ratio of each, and so maintains constant even temperature. Control action is entirely automatic, and piston is sealed into cylinder, and neither cylinder nor piston should be tampered with. Under no circumstances should wrench or pliers be used on cylinder. It is a carefully machined unit and any marking or gouging will destroy its function.

The piston should be free inside cylinder at all times, and should click back and forth when assembly is shaken. After long service in rugged waters, it is possible that mineral or other deposits may block piston's action. Normally, tapping handle end of spindle against solid object will free piston. If it is so solidly plugged that this is not effective, replace entire spindle assembly.

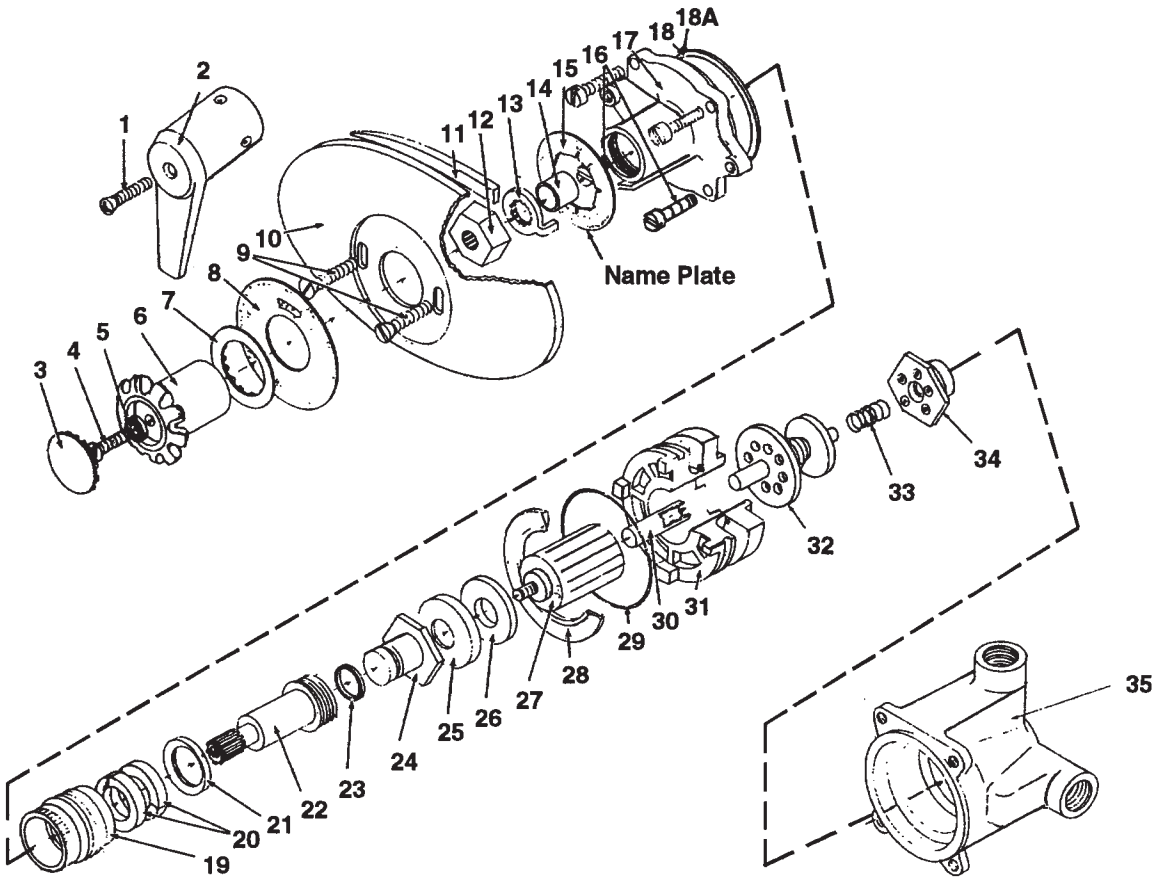
Ordinary service requires only replacement of hot and cold washers. To replace cold washer, remove large knurled washer retainer. To replace hot washer, remove washer screw. It is essential that both hot and cold washers be replaced at same time, even if only one appears to require attention. Washer and gasket kit (S65-048) should be used for this service. Use only pressure balancing valve washers.

In extreme cases or after long years of service, body seat may require replacement. Body seat is removable after removal of the four mounting screws.

NOTE: When reassembling valve after any repairs, be sure cylinder is drawn close to cap before screwing cap back into position.

Valves are equipped with a limit stop. This stop, located below dome cover, can be used to limit temperature of tempered water discharge. TO ADJUST: Open valve and turn handle to maximum desired discharge temperature. Unscrew limit stop cap, screw in adjusting set screw until it seats. While still holding valve open to desired position, replace limit stop cap and tighten securely against its gasket.

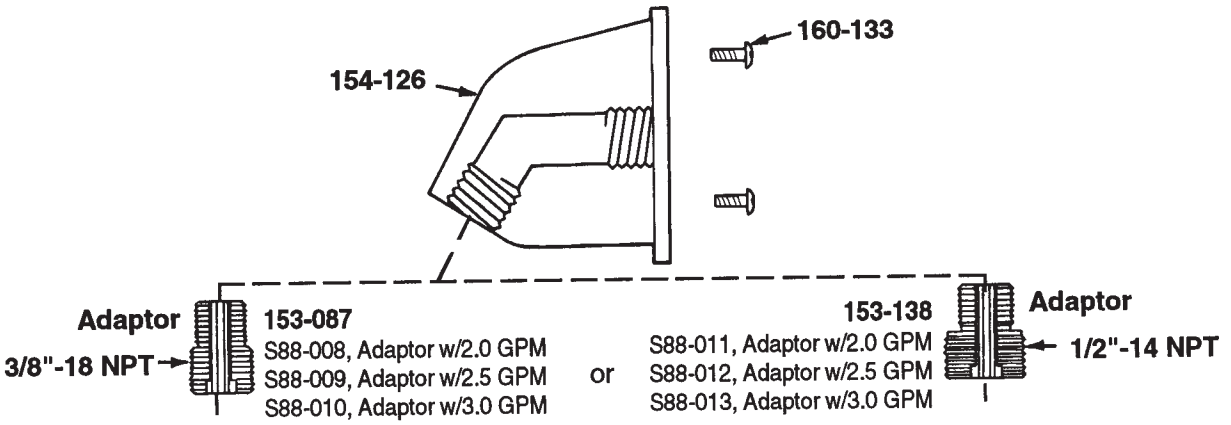
WARNING: Failure to adjust the maximum temperature limit stop to a safe shower temperature - no more than 105° F - could result in the user being scalded.

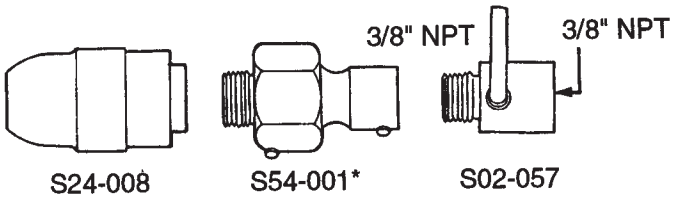


No.	Description	No.	Description	No.	Description	No.	Description
1	Screw	10	Dial Plate	18A	Bonnet O-Ring	27	Thermal Motor
2	Lever Handle Assembly	11	Gasket	19	Packing Gland	28	Spacer Ring
3	Plug Button	12	Handle Adaptor	20	Packing Rings	29	Combination Seat O-Ring
4	Screw	13	Temperature Stop	21	Packing Stop Ring	30	Motor Sleeve
5	Washer	14	Spacer Sleeve	22	Adjustable Stem	31	Combination Seat
6	Handle	15	Identification Tag	23	Motor Quad Ring	32	Valve Assembly
7	Retainer	16	Screws	24	Shut-Off Disc Nut	33	Valve Return Spring
8	Dial Insert	17	Bonnet	25	Shut-Off Disc Retainer	34	Hot Water Seat
9	Screw	18	Bonnet Gasket	26	Shut-Off Disc	35	Body Port

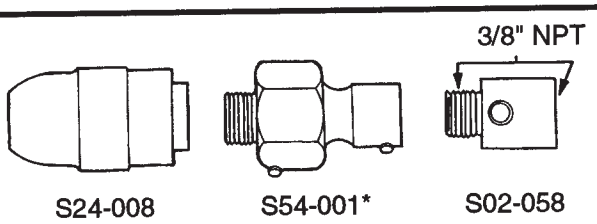
Figures courtesy of MCC Powers Process Controls, Skokie, Illinois

Bradley Showerheads

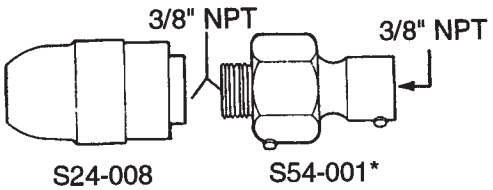




Ball Joint Assembly With Lever Handle Volume Control
S24-104

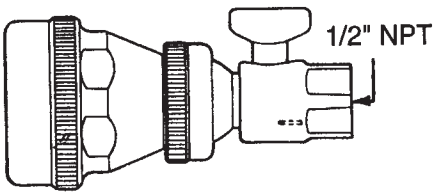


Ball Joint Assembly With Allen Key Volume Control
S24-103

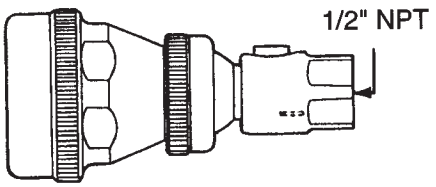


Ball Joint Assembly
S24-102

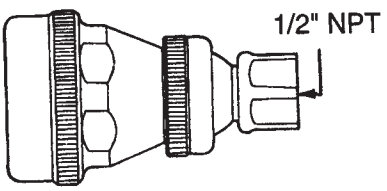
Deluxe Showerhead



Lever Handle Volume Control Ball Joint
S24-096



Allen Key Volume Control Ball Joint
S24-099



Ball Joint
S24-093

*Also Available: S54-002 Lockable Ball Joint
S54-003 One Way Lockable Ball Joint

Care and Cleaning of Stainless Steel Panelon Shower

Periodic and frequent cleaning will greatly prolong the service life of stainless steel equipment and, at the same time, maintain a bright surface of pleasing appearance. The amount and frequency of cleaning depends on service conditions involved.

Follow these suggestions:

1. CLEANLINESS IS OF UTMOST IMPORTANCE: Ordinary deposits of dirt and grease are quickly removed with soap and water. Whenever possible, the metal should be thoroughly rinsed and dried after washing. To get rid of tightly adhering deposits, use stainless steel polishing powder. In all cases, rubbing should be in the direction of polishing lines.

   WARNING: Never use ordinary steel wool or steel brushes on stainless steel. Always use stainless steel wool or stainless steel brushes.

2. DO NOT PERMIT SALTY SOLUTIONS TO EVAPORATE and dry on stainless steel.

3. RUST: Sometimes the appearance of rust streaks on stainless steel leads to the belief that the stainless steel is rusting. Look for the source of the rust in some iron or steel not actually a part of the stainless steel structure. A steel nail or screw may cause the trouble. NOTE: Strongly acidic or caustic cleaners may attack the steel causing a reddish film to appear. The use of these cleaners should be avoided.

Showerhead Cleaning

If the showerhead delivers an uneven spray, remove the showerhead from the unit, disassemble, and remove foreign matter. Then reassemble showerhead and reinstall into unit.

Panelon Shower Warranty Information

Bradley Corporation warrants to commercial and institutional purchasers only each unit free from defects in material and workmanship under normal use and service upon the following terms and conditions:

1. This warranty is limited to replacing or repairing, at our option, transportation charges prepaid by the purchaser, any Bradley unit or part thereof which our inspection shall show to have been defective within the limitations of this warranty.

2. The period during which Panelon™ Shower components are warranted is one (1) year, measured from the date of our invoice.

3. This warranty does not cover installation or any other labor charges and does not apply to any units which have been damaged by accident, abuse, improper installation or improper maintenance.

4. The replacement or repair of defective units as stated in this warranty shall constitute the sole remedy of the purchaser and the sole liability of Bradley Corporation under this warranty. Bradley Corporation shall not otherwise be liable under any circumstances for incidental, consequential or indirect damages caused by defects in the repair or replacement thereof.

5. This warranty extends only to commercial and institutional purchasers and does not extend to any others, including consumer customers of commercial and institutional purchasers.

6. THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE.