



# REPAIR INSTRUCTIONS



[www.bandbmolders.com](http://www.bandbmolders.com)

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## REPAIR INSTRUCTIONS

### CAUTION:

Nautilus P1 System is designed for compartment use only and should not be used on any exterior application where continuous exposure to external elements exists.



### Polar White Part #'s

301-032-00002  
301-032-00006  
301-032-00011

### Black Part #'s

301-032-00003  
301-032-00005

### Atmospheric Vacuum Breaker/Check Valve

Part #501-009-00002



### Spin Weld Spray Head

Part #201-009-00001

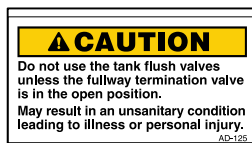


### ABS Tank Spray Head

Part #501-009-00001



OR



### Label

Part #103-002-00014





## REPAIR INSTRUCTIONS

**IMPORTANT!!**

**NEVER** push check valve on "**CITY WATER**" connection with pressure in line. This **WILL** cause irreparable damage to the check valve function.





## REPAIR INSTRUCTIONS

### Nautilus P1 Handle Position and Valve Routing Information

**WHITE HANDLE:** Receives water from water inlet on front of panel

Sideways – water goes into blue handle diverter



Down – water goes to pump inlet



**BLUE HANDLE:** Receives water from white handle valve/water inlet on front of panel

Sideways – water goes to or comes from fresh water tank



Down – water goes to fixtures (cold)



**BLACK HANDLE:** Is an on/off flow through valve that feeds pump from fresh water tank

Sideways - water will not flow through valve



Down – water goes to or comes from fresh water tank



**RED HANDLE:** Receives water from cold water supply line

Sideways - water goes to hot water fixtures without going through hot water heater



Up – water goes to hot water heater



**GREEN HANDLE:** Receives water from pump

Sideways - water goes to fresh water tank



Up – water goes to fixtures







## REPAIR INSTRUCTIONS

### PUMP SWITCH

B&B PN 104-005-00005 (white) & 104-005-00010 (black)

1. Remove (10) perimeter screws on flange of Nautilus panel to gain access to back side.



2. Disconnect power from back of pump switch.



3. On back of switch, compress locking fingers on top. Push top side of switch through panel.



4. On back of switch, compress bottom locking fingers. Push bottom side of switch through panel.





## REPAIR INSTRUCTIONS

### PUMP SWITCH

B&B PN 104-005-00005 (white) & 104-005-00010 (black)

5. Remove switch.



6. Insert new switch in panel.



7. Connect power to new pump switch.



8. Test pump switch and make sure it lights up when pump is in on position.





# REPAIR INSTRUCTIONS

## PUMP SWITCH

B&B PN 104-005-00005 (white) & 104-005-00010 (black)

9. Reinstall Nautilus panel in convenience center and secure with (10) screws.





# REPAIR INSTRUCTIONS

## COAX CONNECTOR

(B&B PN 104-005-00032)

1. Remove (10) perimeter screws on flange of Nautilus panel to gain access to back side.



2. Remove coax line attached to back of coax connector which you wish to replace.



3. From front side of panel, use a pair of pliers to firmly grasp coax connector.



4. Wiggle connector back and forth while pulling to remove. Some unnecessary force may be required.

5. Press new connector into vacated hole with your thumb.





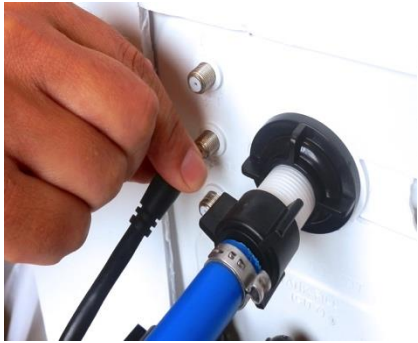


## REPAIR INSTRUCTIONS

### COAX CONNECTOR

(B&B PN 104-005-00032)

6. Reconnect coax line to back side of coax connector.



7. Reinstall Nautilus panel in convenience center and secure with (10) screws.





## REPAIR INSTRUCTIONS

### CITY WATER CONNECTION INLET

(B&B PN 301-036-00017 white)

1. Remove (10) perimeter screws on flange of Nautilus panel to gain access to back side.



2. Unscrew plumbing line connected to back of "WATER INLET."



3. On back of panel, insert thin flat head screwdriver under "WATER INLET" retainer clip.



4. Using screwdriver, lift retainer clip up.





## REPAIR INSTRUCTIONS

### CITY WATER CONNECTION INLET

(B&B PN 301-036-00017 white)

5. Remove retainer clip.



6. From front side of panel, pull "WATER INLET" out of panel.



7. Remove and save dust cover on "WATER INLET." You will reuse it.



8. Remove and save coupler on "WATER INLET." You will reuse it.





## REPAIR INSTRUCTIONS

### CITY WATER CONNECTION INLET

(B&B PN 301-036-00017 white)

9. Insert new check valve into coupler.



10. Assemble dust cover around check valve and back side of coupler



11. Dust cover should snap into front side of coupler without twisting dust cover strap.



12. From front side of panel, insert assembled "WATER INLET" into vacated hole.





## REPAIR INSTRUCTIONS

### CITY WATER CONNECTION INLET

(B&B PN 301-036-00017 white)

13. While holding inlet body in place, slide retainer clip into 2<sup>nd</sup> line of grooves on inlet body.



**NOTE:** Retainer clip will make a clicking sound when it locks into place.

14. Check to make sure coupler easily turns around check valve and dust cover strap.



15. Screw plumbing line onto "WATER INLET." Hand tighten + ¼ turn.



\*Do not over tighten as it may result in stress cracking.

16. Test system to make sure plumbing connections are free of leaks.



17. Reinstall Nautilus panel in convenience center and secure with (10) screws.







## REPAIR INSTRUCTIONS

### BALL VALVE – BLACK HANDLE

(B&B PN 501-008-0007)

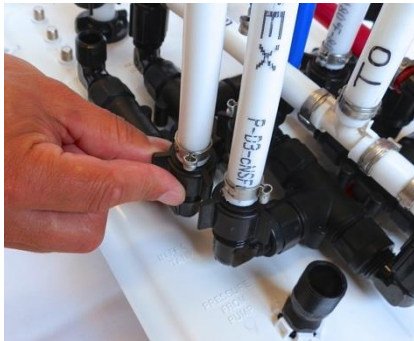
1. Remove (10) perimeter screws on flange of Nautilus panel to gain access to back side.



2. On back side of panel, unscrew plumbing line connected to ball valve end labeled "TO PUMP INLET."



3. On back side of panel, unscrew plumbing line connected to ball valve end labeled "IN FROM TANK."



4. On front side of panel, remove phillips-head screw in center of black handle.



***Important!*** Save the screw. You will need to use it on replacement valve.





## REPAIR INSTRUCTIONS

### BALL VALVE – BLACK HANDLE

(B&B PN 501-008-0007)

5. Remove black handle.



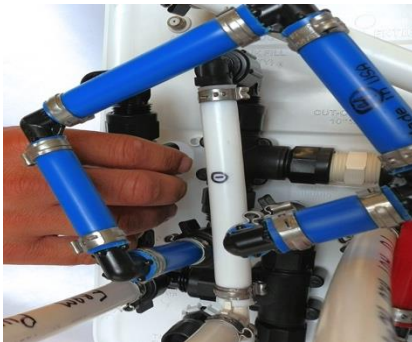
***Important!*** Save the handle. You will need to use it on replacement valve.

6. On front side of panel, remove (2) phillips-head screws that hold ball valve in place.

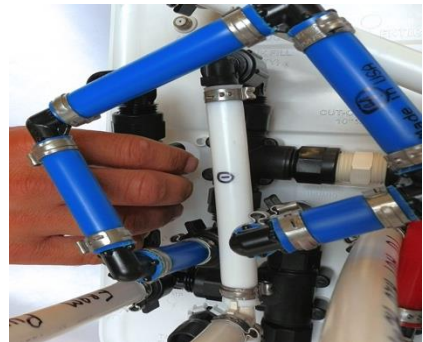


***Important!*** Save the screws. You will need to use them on replacement valve.

7. Ball valve can now be separated from panel.



8. Insert new ball valve in location vacated by old valve.





## REPAIR INSTRUCTIONS

### BALL VALVE – BLACK HANDLE

(B&B PN 501-008-0007)

9. Secure ball valve in place with (2) phillips-head screws.



\*Do not over tighten as it may result in stress cracking.

### **IMPORTANT!**

To ensure ball valve will work as intended, handle orientation is critical when any valve is replaced. Please refer to Handle Rotation Verification chart on last page.

10. Place black handle on valve stem so it is facing right.



10a. Handle will turn clockwise to down position if installed correctly.

- 10b. If handle does not turn clockwise, remove handle & reinstall it in down position. Handle should rotate counterclockwise to right facing position.  
10c. Once proper rotation is established, secure black handle with phillips-head screw.



\*Do not over tighten as it may result in stress cracking.



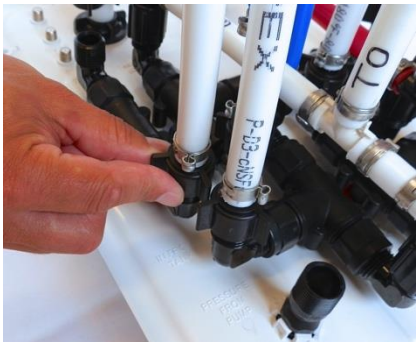


## REPAIR INSTRUCTIONS

### BALL VALVE – BLACK HANDLE

(B&B PN 501-008-0007)

11. Screw plumbing line running from **(Fresh Water Tank)** onto ball valve end labeled **"IN FROM TANK"** Hand tighten +  $\frac{1}{4}$  turn.



\*Do not over tighten as it may result in stress cracking.

12. Screw plumbing line running to **(Pump In)** onto ball valve end labeled **"TO PUMP INLET."** Hand tighten +  $\frac{1}{4}$  turn.



\*Do not over tighten as it may result in stress cracking.

13. Test system to make sure plumbing connections are free of leaks.



14. Reinstall Nautilus panel in convenience center and secure with (10) screws.



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## REPAIR INSTRUCTIONS

### SINGLE DIVERTER VALVE – RED HANDLE

(B&B PN 501-008-0008)

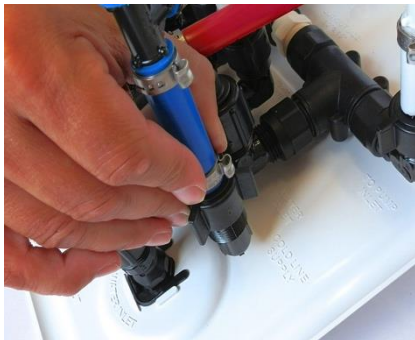
1. Remove (10) perimeter screws on flange of Nautilus panel to gain access to back side.



2. On back side of panel, unscrew plumbing line connected to diverter valve end labeled "HOT WATER OUT/LINE."



3. On back side of panel, unscrew plumbing line connected to diverter valve end labeled "COLD LINE SUPPLY."



4. On back side of panel, unscrew plumbing line connected to diverter valve end labeled "TO H2O HEATER."







## REPAIR INSTRUCTIONS

### SINGLE DIVERTER VALVE – RED HANDLE

(B&B PN 501-008-00008)

5. On front side of panel, remove phillips-head screw in center of red handle.



***IMPORTANT!*** Save the screw. You will need to use it on replacement valve.

6. Remove red handle.



***IMPORTANT!*** Save the handle. You will need to use it on replacement valve.

7. On front side of panel, remove (2) phillips-head screws that hold diverter valve in place.



***IMPORTANT!*** Save the screws. You will need to use them on replacement valve.

8. Diverter valve can now be separated from panel.





## REPAIR INSTRUCTIONS

### SINGLE DIVERTER VALVE – RED HANDLE

(B&B PN 501-008-0008)

9. Insert new diverter valve in location vacated by old diverter valve.



10. Secure in place with (2) phillips-head screws.



\*Do not over tighten as it may result in stress cracking.

### **IMPORTANT!**

To ensure diverter valve will work as intended, handle orientation is critical when any valve is replaced. Please refer to Handle Rotation Verification chart on last page.

11. Place red handle on valve stem so it is facing left.



- 11a. Handle will turn clockwise to up position if installed correctly.





## REPAIR INSTRUCTIONS

### SINGLE DIVERTER VALVE – RED HANDLE

(B&B PN 501-008-0008)

- 11b. If handle does not turn clockwise, remove handle & reinstall it in up position. Handle should rotate counterclockwise to left facing position.
- 11c. Once proper rotation is established, secure red handle with phillips-head screw.



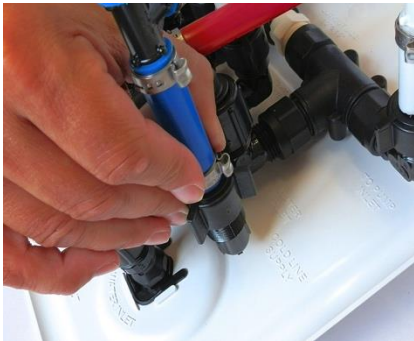
\*Do not over tighten as it may result in stress cracking.

12. Screw (**Hot H2O Heater In**) plumbing line onto diverter valve end labeled "**TO H2O HEATER.**" Hand tighten + ¼ turn.



\*Do not over tighten as it may result in stress cracking.

13. Screw (**Cold Water Supply**) plumbing line onto diverter valve end labeled "**COLD LINE SUPPLY.**" Hand tighten + ¼ turn.



\*Do not over tighten as it may result in stress cracking.

14. Screw (**Hot H2O Heater Out**) plumbing line onto diverter valve end labeled "**HOT WATER OUT/LINE.**" Hand tighten + ¼ turn.



\*Do not over tighten as it may result in stress cracking.





## REPAIR INSTRUCTIONS

### SINGLE DIVERTER VALVE – RED HANDLE

(B&B PN 501-008-00008)

15. Test system to make sure plumbing connections are free of leaks.



16. Reinstall Nautilus panel in convenience center and secure with (10) screws.







## REPAIR INSTRUCTIONS

### SINGLE DIVERTER VALVE – GREEN HANDLE

(B&B PN 501-008-00008)

1. Remove (10) perimeter screws on flange of Nautilus panel to gain access to back side.



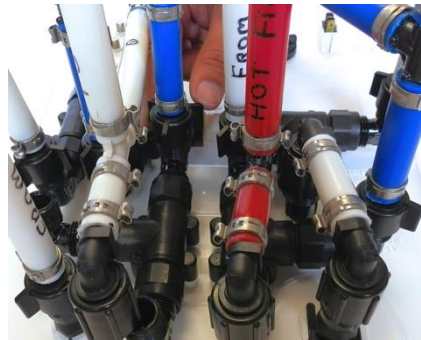
2. On back side of panel, unscrew plumbing line connected to diverter valve end labeled "TANK FILL PUMP."



3. On back side of panel, unscrew plumbing line connected to diverter valve end labeled "PRESSURE FROM PUMP."



4. On back side of panel, unscrew plumbing line connected to diverter valve end labeled "FIXTURES (PUMP)."







## REPAIR INSTRUCTIONS

### SINGLE DIVERTER VALVE – GREEN HANDLE

(B&B PN 501-008-00008)

5. On front side of panel, remove phillips-head screw in center of green handle.



***IMPORTANT!*** Save the screw. You will need to use it on replacement valve.

6. Remove green handle.



***IMPORTANT!*** Save the handle. You will need to use it on replacement valve.

7. On front side of panel, remove (2) phillips-head screws that hold diverter valve in place.



***IMPORTANT!*** Save the screws. You will need to use them on replacement valve.

8. Diverter valve can now be separated from panel.





## REPAIR INSTRUCTIONS

### SINGLE DIVERTER VALVE – GREEN HANDLE

(B&B PN 501-008-0008)

9. Insert new diverter valve in location vacated by old diverter valve.



10. Secure in place with (2) phillips-head screws.



- \*Do not over tighten as it may result in stress cracking.

### **IMPORTANT!**

To ensure diverter valve will work as intended, handle orientation is critical when any valve is replaced. Please refer to Handle Rotation Verification chart on last page.

11. Place green handle on valve stem so it is facing up.



- 11a. Handle will turn clockwise to right facing position if installed correctly.





## REPAIR INSTRUCTIONS

### SINGLE DIVERTER VALVE – GREEN HANDLE

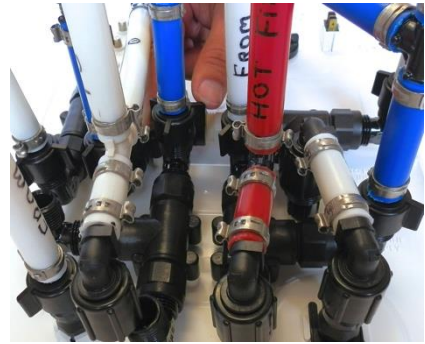
(B&B PN 501-008-00008)

- 11b. If handle does not turn clockwise, remove handle & reinstall it in right facing position. Handle should rotate counterclockwise to up position.
- 11c. Once proper rotation is established secure green handle with phillips-head screw.



\*Do not over tighten as it may result in stress cracking.

12. Screw **(Cold Water Supply)** plumbing line onto diverter valve end labeled "**FIXTURES (PUMP).**" Hand tighten +  $\frac{1}{4}$  turn.



\*Do not over tighten as it may result in stress cracking.

13. Screw **(Pump Out)** plumbing line onto diverter valve end labeled "**PRESSURE FROM PUMP.**" Hand tighten +  $\frac{1}{4}$  turn.



\*Do not over tighten as it may result in stress cracking.

14. Screw **(Fresh Tank In)** plumbing line onto diverter valve end labeled "**TANK FILL (PUMP).**" Hand tighten +  $\frac{1}{4}$  turn.



\*Do not over tighten as it may result in stress cracking.





## REPAIR INSTRUCTIONS

### SINGLE DIVERTER VALVE – GREEN HANDLE

(B&B PN 501-008-00008)

15. Test system to make sure plumbing connections are free of leaks.



16. Reinstall Nautilus panel in convenience center and secure with (10) screws.





## REPAIR INSTRUCTIONS

### DUAL DIVERTER VALVE – BLUE & WHITE HANDLES

(B&B PN 501-008-0009)

1. Remove (10) perimeter screws on flange of Nautilus panel to gain access to back side.



2. On back side of panel, unscrew plumbing line connected to diverter valve end labeled **"TO PUMP INLET."**



3. On back side of panel, unscrew plumbing line connected to diverter valve end labeled **"WATER INLET."**



4. On back side of panel, unscrew plumbing line connected to diverter valve end labeled **"TANK FILL (CITY)."**





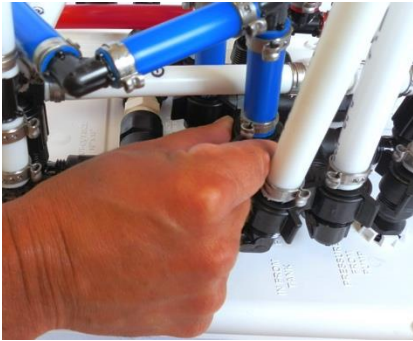


# REPAIR INSTRUCTIONS

## DUAL DIVERTER VALVE – BLUE & WHITE HANDLES

(B&B PN 501-008-0009)

5. On back side of panel, unscrew plumbing line connected to diverter valve end labeled "CITY TO FIXTURES."



6. On front side of panel, remove phillips-head screw in center of blue handle.



**IMPORTANT!** Save the screw. You will need to use it on replacement valve.

7. Remove blue handle.



**IMPORTANT!** Save the handle. You will need to use it on replacement valve.

8. On front side of panel, remove phillips-head screw in center of white handle.



**IMPORTANT!** Save the screw. You will need to use it on replacement valve.





## REPAIR INSTRUCTIONS

### DUAL DIVERTER VALVE – BLUE & WHITE HANDLES

(B&B PN 501-008-0009)

9. Remove white handle.



***IMPORTANT!*** Save the handle. You will need to use it on replacement valve.

10. On front side of panel, remove (4) phillips-head screws that hold the dual diverter valve in place.

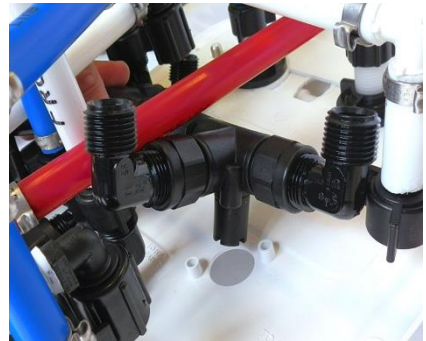


***IMPORTANT!*** Save the screws. You will need to use them on replacement valve.

11. Dual diverter valve can now be separated from panel.



12. Insert new dual diverter valve in location vacated by old dual diverter valve.





# REPAIR INSTRUCTIONS

## DUAL DIVERTER VALVE – BLUE & WHITE HANDLES

(B&B PN 501-008-0009)

13. Secure dual diverter valve in place with (4) phillips-head screws.



\*Do not over tighten as it may result in stress cracking.

### **IMPORTANT!**

To ensure diverter valve will work as intended, handle orientation is critical when any valve is replaced. Please refer to Handle Rotation Verification chart on last page.

14. Place white handle on valve stem on left side of panel so it is facing right.



- 14a. Handle will turn clockwise to down facing position if installed correctly.

- 14b. If handle does not turn clockwise, remove handle & reinstall it in down facing position. Handle should rotate counterclockwise to right facing position.  
14c. Once proper rotation is established, secure white handle with phillips-head screw.



\*Do not over tighten as it may result in stress cracking.





## REPAIR INSTRUCTIONS

### DUAL DIVERTER VALVE – BLUE & WHITE HANDLES

(B&B PN 501-008-00009)

15. Place blue handle on valve stem on right side of panel so it is facing down.



- 15a. Handle will turn clockwise to left facing position if installed correctly.

- 15b. If handle does not turn clockwise, remove handle & reinstall it in left facing position. Handle should rotate counterclockwise to down facing position.

- 15c. Once proper rotation is established, secure blue handle with phillips-head screw.



- \*Do not over tighten as it may result in stress cracking.

16. Screw **(Cold Water Supply)** plumbing line onto diverter valve end labeled "CITY TO FIXTURES." Hand-tighten + ¼ turn.



- \*Do not over tighten as it may result in stress cracking.

17. Screw **(Fresh Tank In)** plumbing line tank onto diverter valve end labeled "TANK FILL (CITY)." Hand tighten + ¼ turn.



- \*Do not over tighten as it may result in stress cracking.







## REPAIR INSTRUCTIONS

### SINGLE DIVERTER VALVE – BLUE & WHITE HANDLES

(B&B PN 501-008-00009)

18. Screw plumbing line coming from city water inlet (or filter) onto diverter valve end labeled "WATER INLET." Hand tighten +  $\frac{1}{4}$  turn.



\*Do not over tighten as it may result in stress cracking.

19. Screw (**Pump In**) plumbing line onto diverter valve end labeled "TO PUMP INLET." Hand tighten +  $\frac{1}{4}$  turn.



\*Do not over tighten as it may result in stress cracking.

20. Test system to make sure plumbing connections are free of leaks.



21. Reinstall Nautilus panel in convenience center and secure with (10) screws.







## REPAIR INSTRUCTIONS

### SHOWER HEAD

(B&B PN 105-005-00006 white)

1. At union of shower head and hose, loosen plastic coupler on shower hose until they can be separated.



2. Washer sandwiched between hose and head will be reused on replacement.



3. With washer in place, gently screw shower hose coupler onto threads of new shower head and hand tighten.



\*Do not over tighten as it may result in stress cracking.

4. Run water through shower to make sure it operates properly.





## REPAIR INSTRUCTIONS

### SHOWER HOSE

(B&B PN 105-003-00004 white)

1. At union of shower head and hose, loosen plastic coupler on shower hose until they can be separated.



2. At union of shower hose and faucet, loosen plastic coupler on shower hose until they can be separated.



3. With new washer installed, place coupler from one end of new shower hose onto faucet threads and hand tighten.



\*Do not over tighten as it may result in stress cracking.

4. With new washer installed, place shower hose coupler onto shower head threads and hand tighten.



\*Do not over tighten as it may result in stress cracking.

5. Run water through shower to make sure it operates properly.





## REPAIR INSTRUCTIONS

### SHOWER FAUCET

(B&B PN 105-003-00009 white)

1. Remove (10) perimeter screws on flange of Nautilus panel to gain access to back side.



2. On back side of panel, unscrew plumbing line connected to faucet end labeled "COLD."



3. On back side of panel, unscrew plumbing line connected to faucet end labeled "HOT."



4. On back side of panel, loosen and remove plastic nut holding "COLD" side of faucet in place.





## REPAIR INSTRUCTIONS

### SHOWER FAUCET

(B&B PN 105-003-00009 white)

5. On back side of panel, loosen and remove plastic nut holding "HOT" side of faucet in place.



6. Faucet can now be removed from front side of panel.



7. At union of shower hose and faucet, loosen plastic coupler on shower hose until they can be separated.



8. Washer sandwiched between shower hose and faucet will be reused on replacement.







## REPAIR INSTRUCTIONS

### SHOWER FAUCET

(B&B PN 105-003-00009 white)

9. With washer in place, locate shower hose coupler onto threads of new faucet and hand tighten.



\*Do not over tighten as it may result in stress cracking.

10. Insert new faucet into vacated slot.



11. On back side of panel, thread plastic nut onto "HOT" side of of new faucet and hand tighten.



\*Do not over tighten as it may result in stress cracking.

12. On back side of panel, thread plastic nut onto "COLD" side of of new faucet and hand tighten.



\*Do not over tighten as it may result in stress cracking.







## REPAIR INSTRUCTIONS

### SHOWER FAUCET

(B&B PN 105-003-00009 white)

13. Screw **(Cold Water Supply)** plumbing line onto faucet valve end labeled "**COLD.**" Hand tighten +  $\frac{1}{4}$  turn.



\*Do not over tighten as it may result in stress cracking.

14. Screw **(Hot Water Supply)** plumbing line onto faucet valve end labeled "**HOT.**" Hand tighten +  $\frac{1}{4}$  turn.



\*Do not over tighten as it may result in stress cracking.

15. Run water through shower to make sure it operates properly.



16. Reinstall Nautilus panel in convenience center and secure with (10) screws.





## REPAIR INSTRUCTIONS

### QUICK CONNECT SHOWER FAUCET

B&B PN 105-005-00002 (black) & 105-005-00005 (white)

1. Remove (10) perimeter screws on flange of Nautilus panel to gain access to back side.



2. On back side of panel, unscrew plumbing line connected to faucet end labeled "COLD."



3. On back side of panel, unscrew plumbing line connected to faucet end labeled "HOT."



4. On back side of panel, loosen and remove plastic nut holding "COLD" side of faucet in place.





## REPAIR INSTRUCTIONS

### QUICK CONNECT SHOWER FAUCET

B&B PN 105-005-00002 ( black ) & 105-005-00005 ( white )

5. On back side of panel, loosen and remove plastic nut holding "HOT" side of faucet in place.



6. Faucet can now be removed from front side of panel.



7. Insert new faucet into vacated slot.



8. On back side of panel, thread plastic nut onto "HOT" side of of new faucet and hand tighten.



\*Do not over tighten as it may result in stress cracking.





## REPAIR INSTRUCTIONS

### QUICK CONNECT SHOWER FAUCET

B&B PN 105-005-00002 (black) & 105-005-00005 (white)

9. On back side of panel, thread plastic nut onto "COLD" side of of new faucet and hand tighten.



\*Do not over tighten as it may result in stress cracking.

10. Screw (Cold Water Supply) plumbing line onto faucet valve end labeled "COLD." Hand tighten + ¼ turn.



\*Do not over tighten as it may result in stress cracking.

11. Screw (Hot Water Supply) plumbing line onto faucet valve end labeled "HOT." Hand tighten + ¼ turn.



\*Do not over tighten as it may result in stress cracking.

12. Run water through shower to make sure it operates properly.



13. Reinstall Nautilus panel in convenience center and secure with (10) screws.







# REPAIR INSTRUCTIONS

## HANDLE ROTATION VERIFICATION

