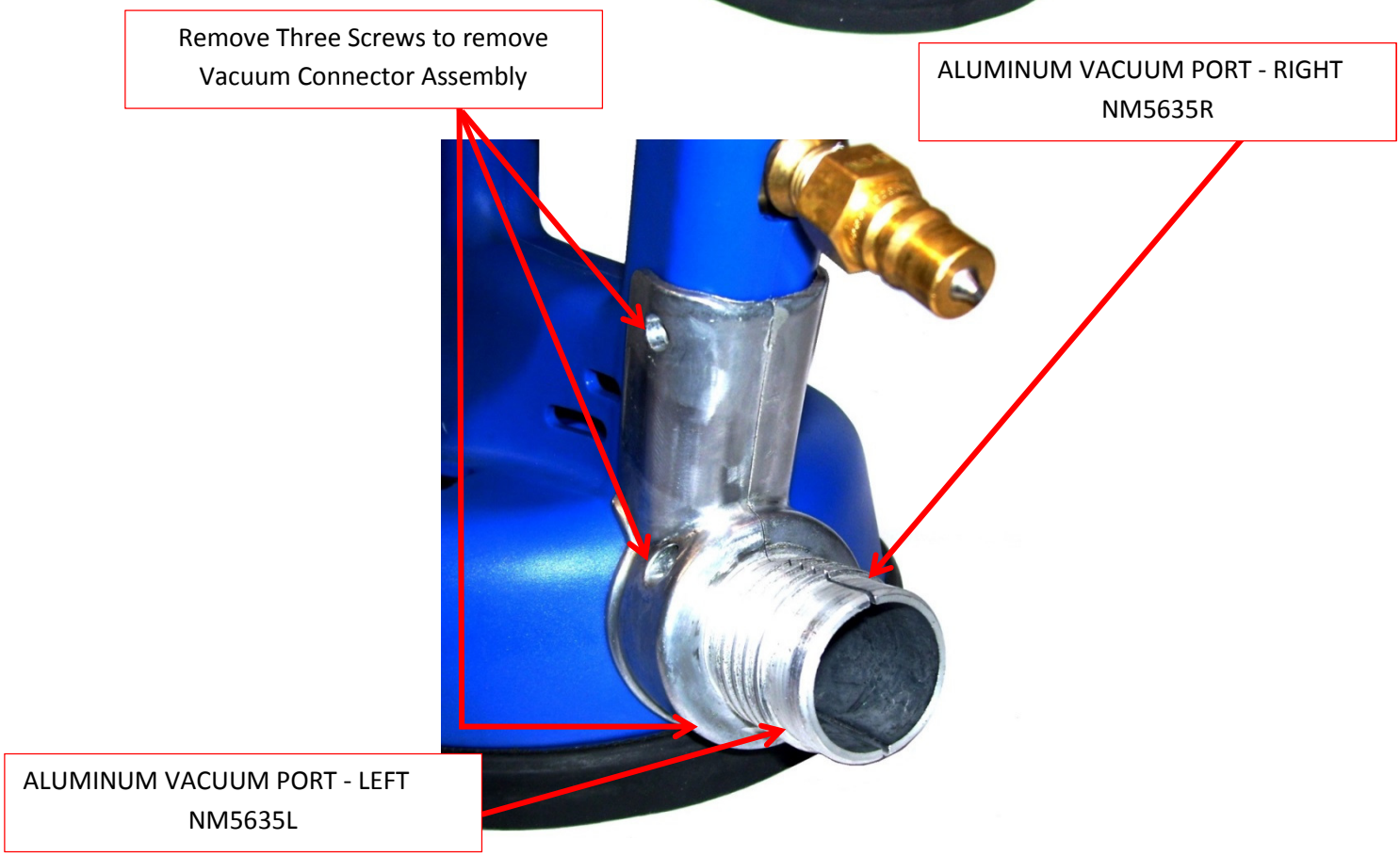
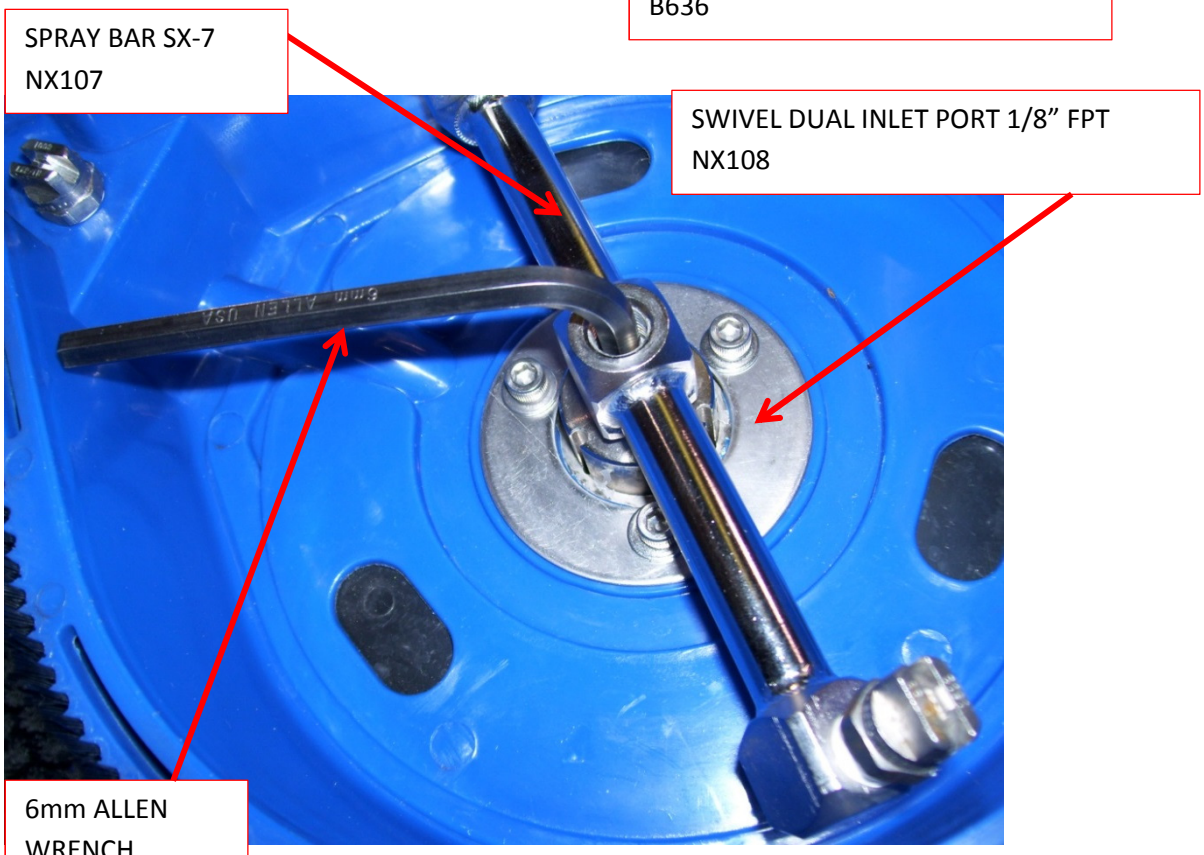
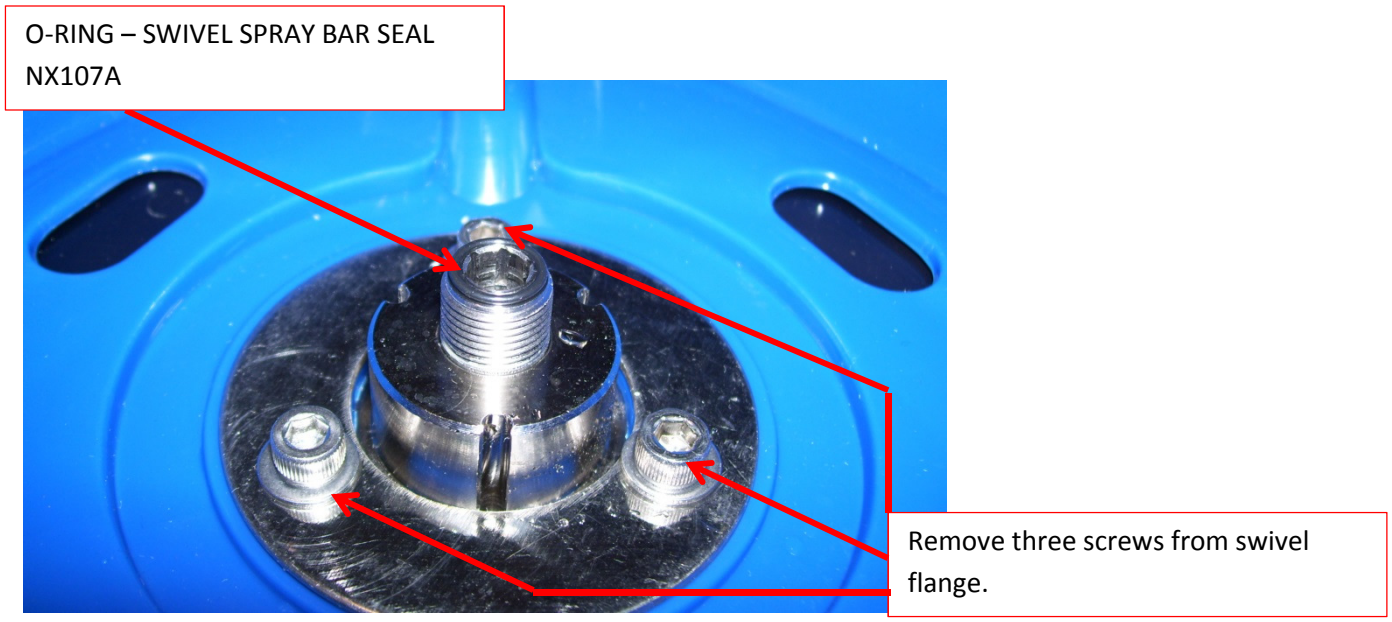
Dis-assembly of the SX-7 to access the valve

1. Remove Vacuum Connector Assembly from the back of the SX-7. It is attached with three screws.



2. Remove the Spray Bar Assembly & front VeeJet from the bottom of the SX-7.
    a. First remove Spray Bar Plug.
    b. Use 6mm Allen Wrench to hold swivel and unscrew Spray Bar from Swivel. Be careful not to lose o-ring between swivel & spray bar.
    c. Use a 1/2” socket wrench to remove front VeeJet.



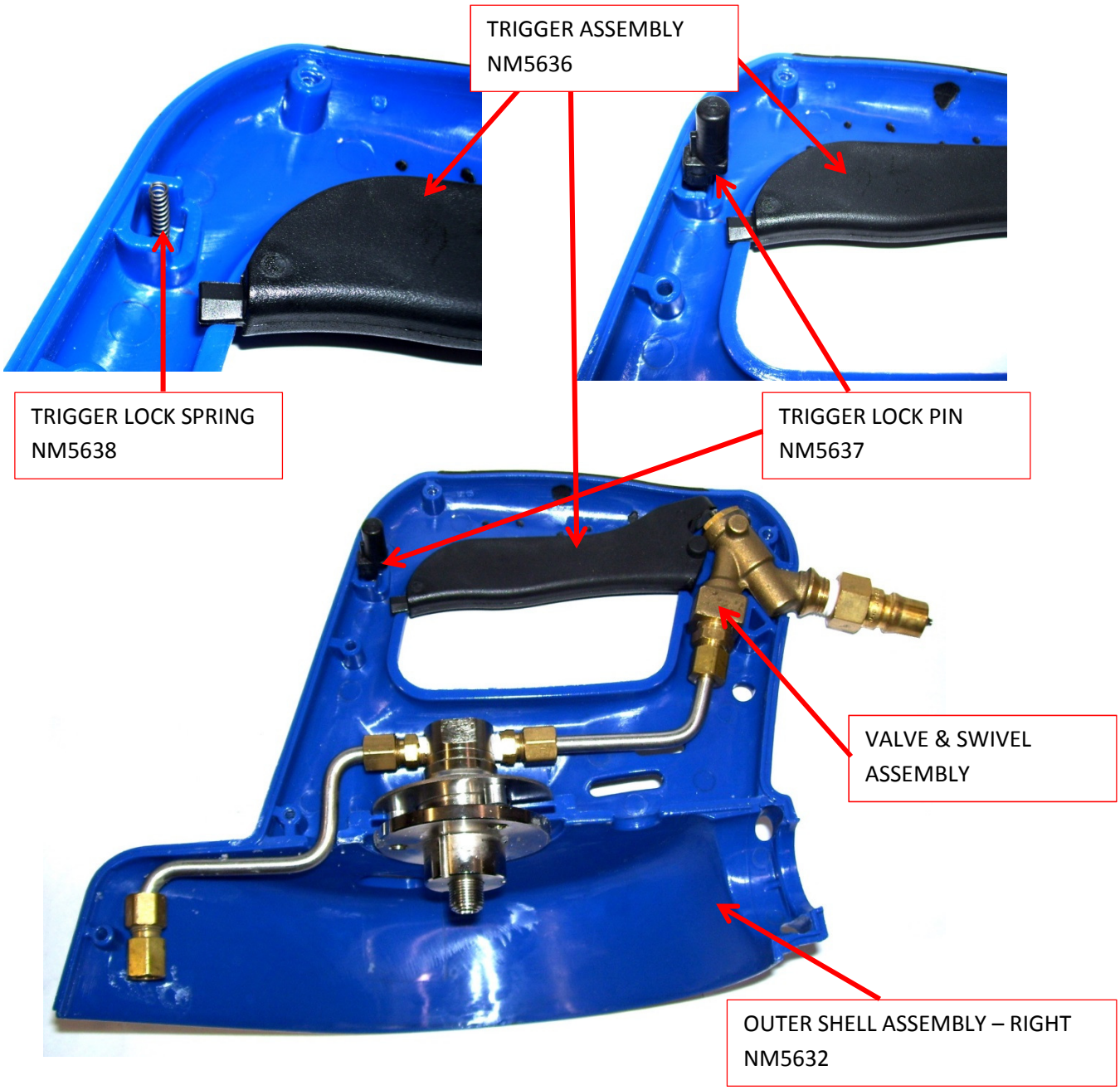


3. Remove the three screws from the swivel flange.
4. You can now separate the Outer Shell of the SX-7 from the Inner Shell, Vent Ring & Base Skirt.

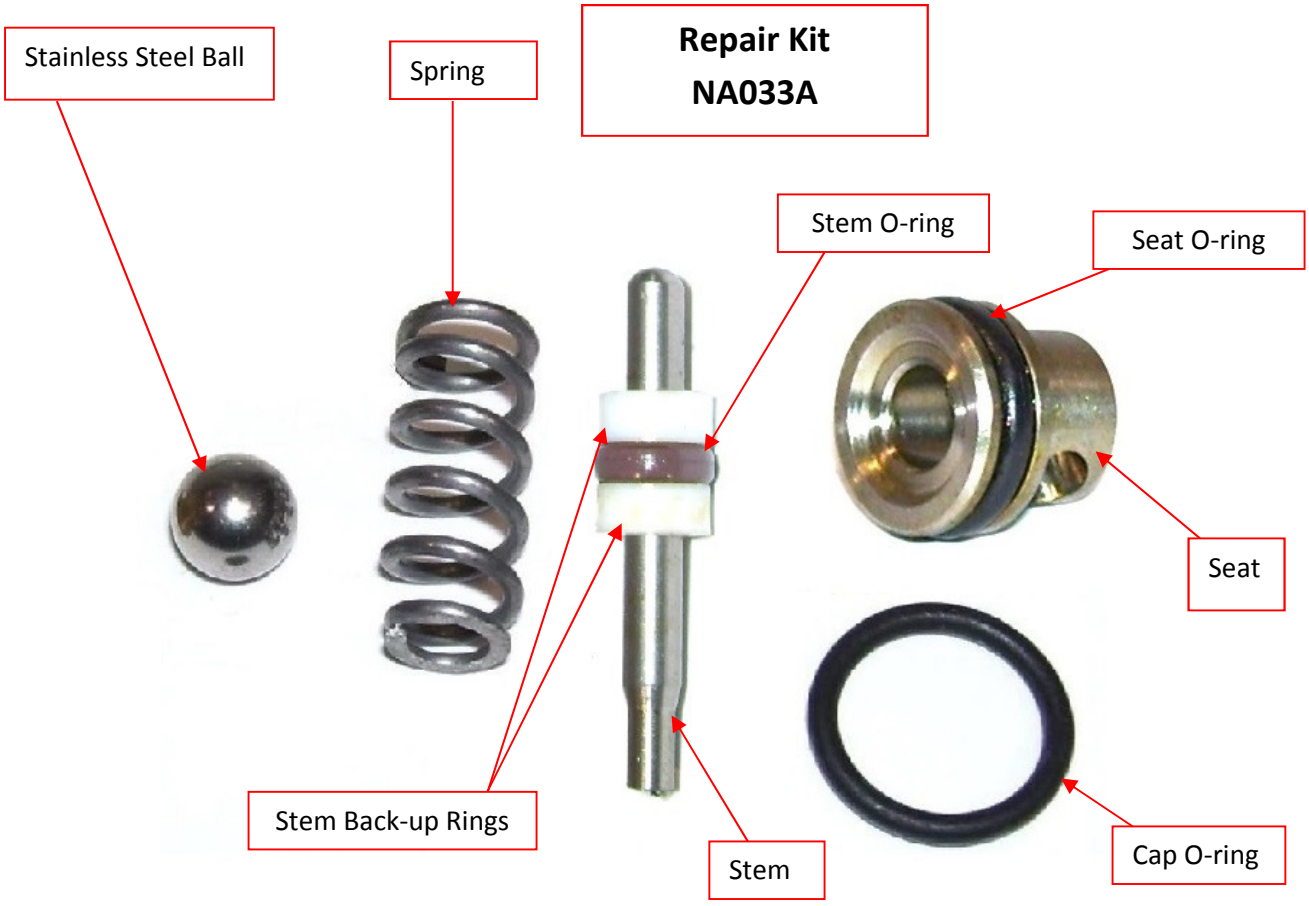

TRIGGER LOCK PIN
NM5637
Remove 5 screws to separate outer shell & access the valve.
OUTER SHELL ASSEMBLY – LEFT
NM5631


SEAL - INNER SHELL SX-7
NM5630A
VENT RING SX-7
NM5634
INNER SHELL ASSEMBLY WITH BRUSH SX-7
NM5630

5. You can now separate the Right & Left sides of the Outer Shell to access the valve. Remove the five screws holding the two halves together. When you separate the shell make sure you do not lose the Trigger Lock Pin, Trigger Lock Spring and Valve Trigger as you pull the shell apart.

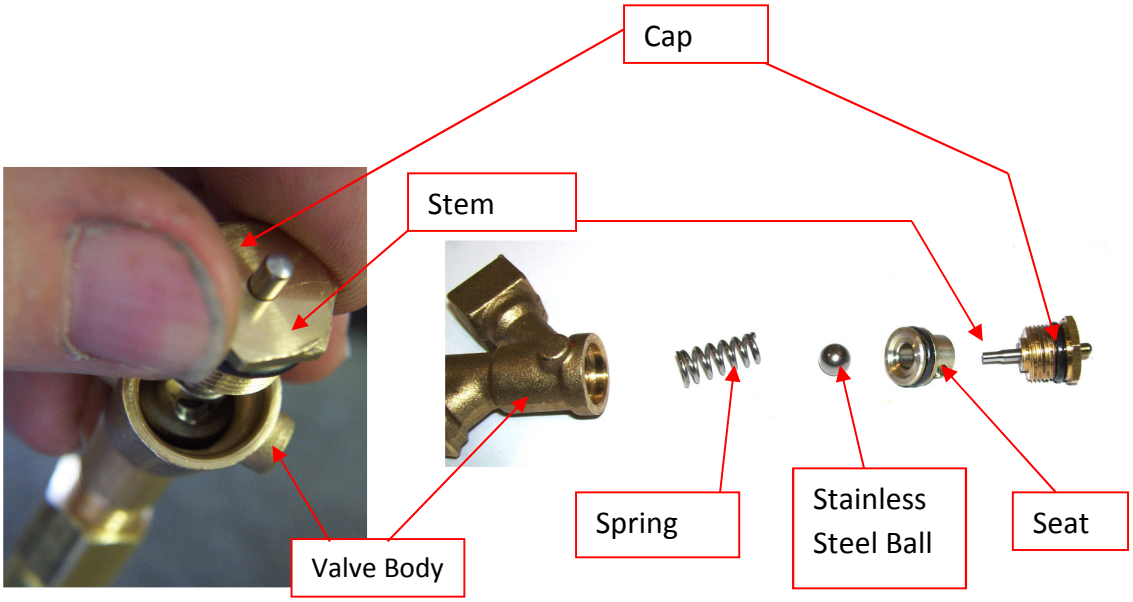


6. Pull the Valve & Swivel Assembly out of the shell. You do not need to separate the valve from the assembly to repair the valve. Be careful not to bend or change the position of the tubing. Moving these parts will make it more difficult to re-install the Valve & Swivel assembly.

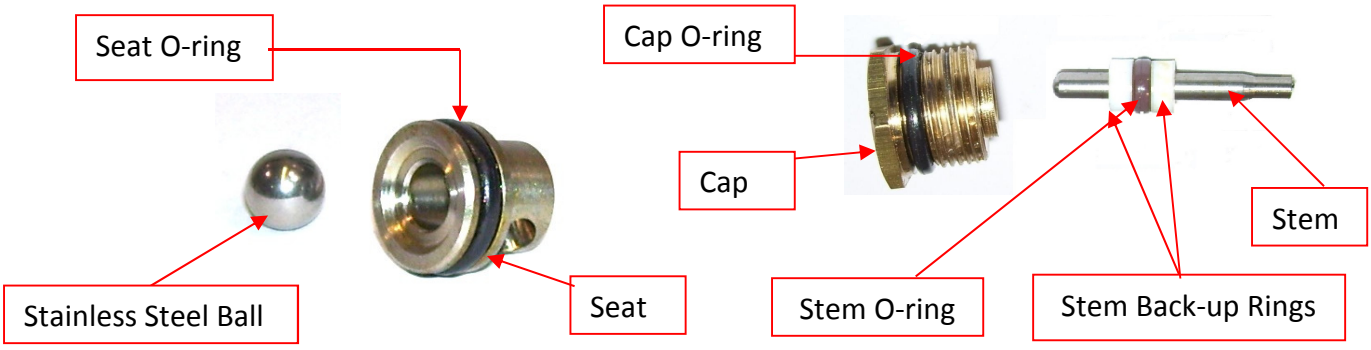


Repairing the NA033 Valve

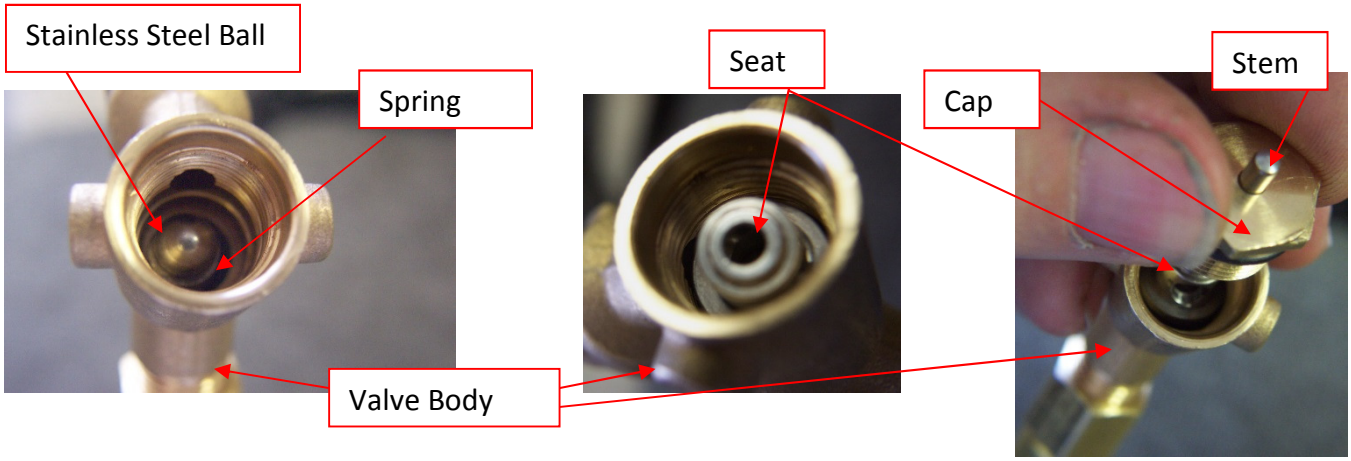
1. Use a 16mm wrench to remove the cap from the valve body.



2. Examine the Cap, Spring, Seat and Steel Ball for signs of wear or pitting. Replace Spring as needed. Replace the Seat o-ring. Replace Steel Ball as needed. Remove Stem from Cap and replace seals as needed. If the valve body, cap or seat is worn or damaged, replace the whole valve **(NA033)**.



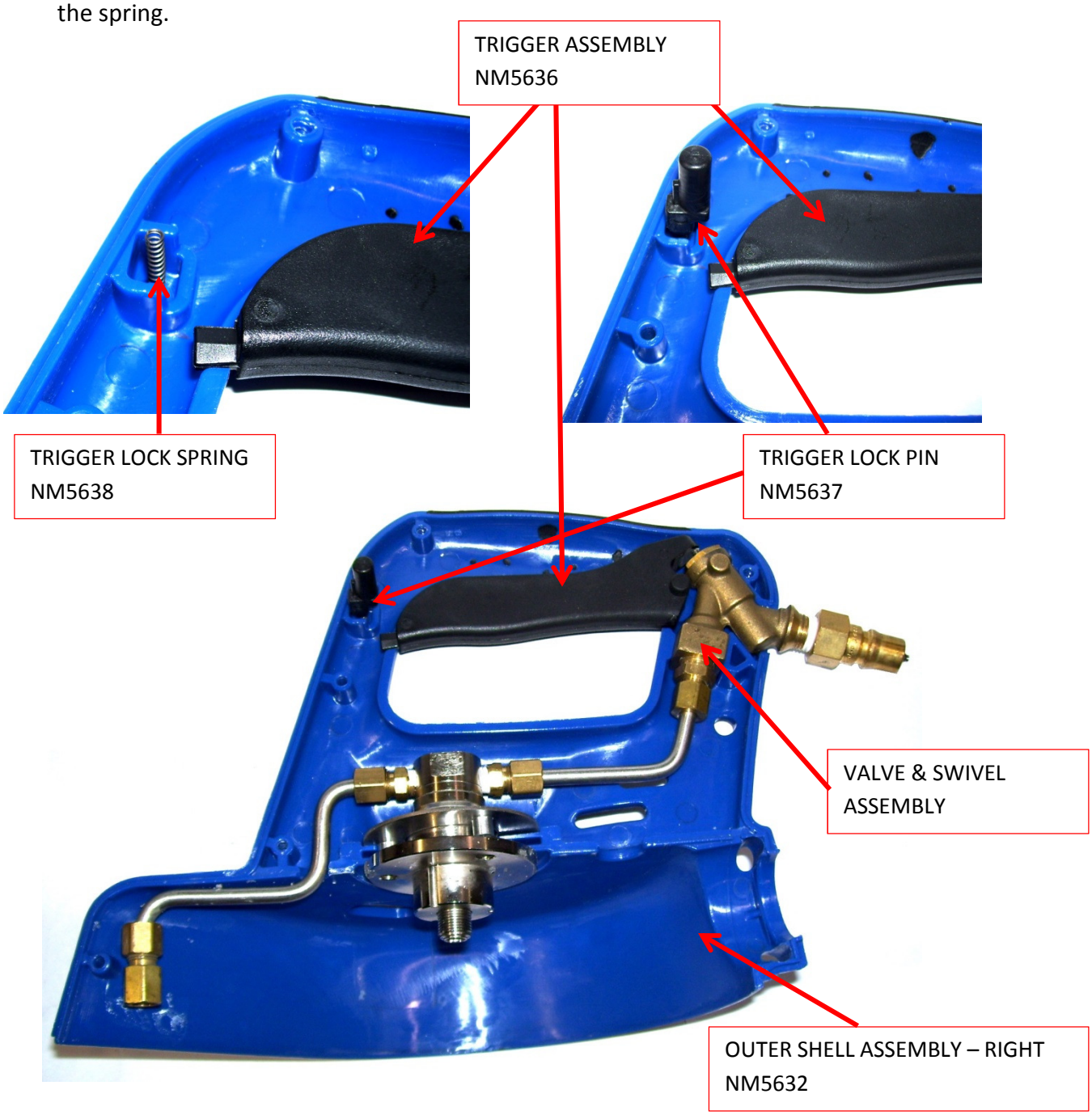
3. Re-assemble the Valve using new parts as needed. Repair Kit **(NA033A)** contains commonly used repair parts for the **NA033** Valve.
    a. Lubricate the Stem and slide the o-ring and back-up rings on to the stem.
    b. Insert the stem into the bottom of the cap and push the stem up through the top of the cap while seating the o-ring & back-up rings into the cap.
    c. Place the Spring into the Valve Body and set the Steel Ball on top of the Spring.
    d. Place the Seat with the curved seating surface against the Steel Ball.
    e. Apply Loctite 242 or similar thread sealant on the Cap threads. With the Stem, o-ring and back-up rings in place, thread the Cap into the Valve Body and tighten.

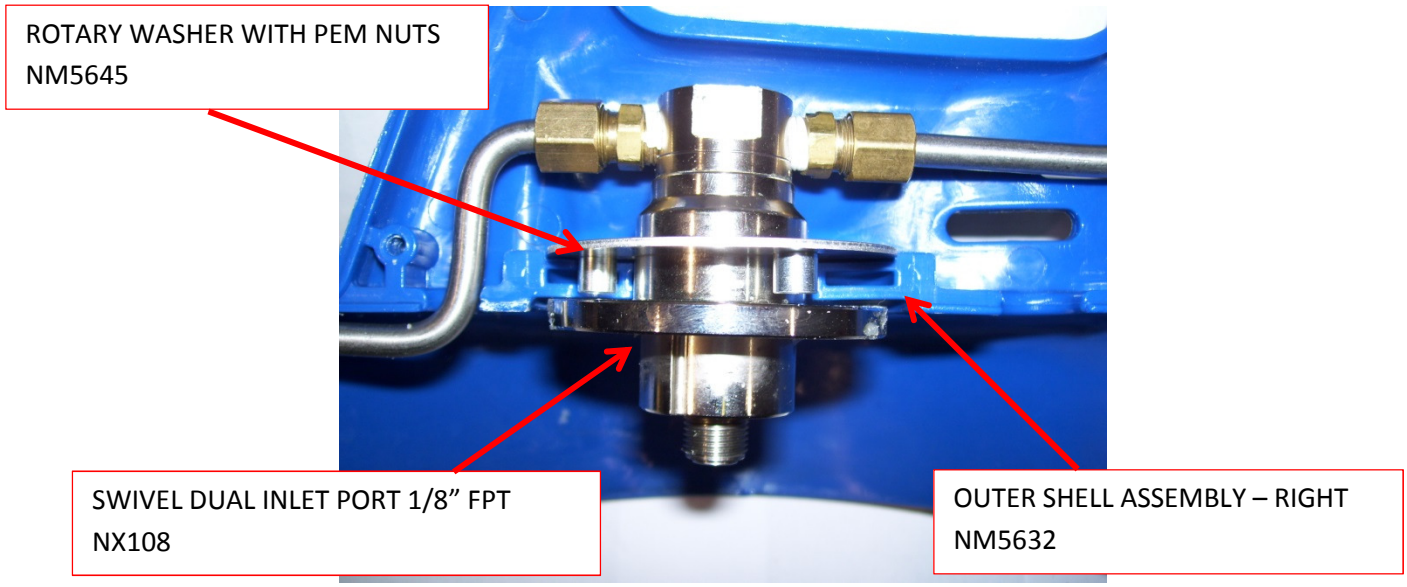


4. Re-assemble the SX-7.

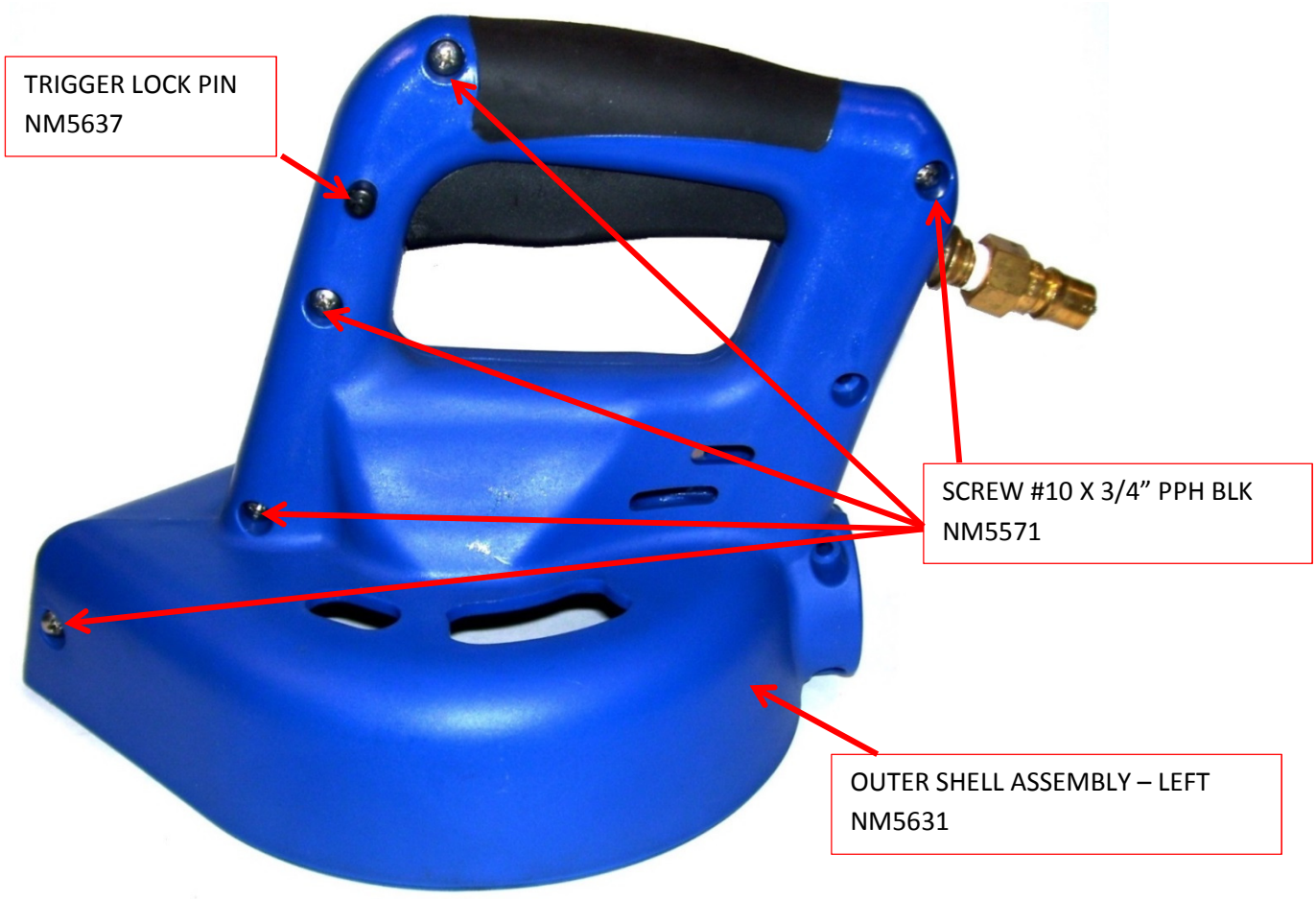
Re-assembly of the SX-7

1. Place Valve & Swivel Assembly into the Right Outer Shell NM5632. Insert the bottom lip of the Right Side of the Outer Shell NM5632 between the Rotary Washer with PEM nuts NM5645 and Swivel NX108 on the Valve & Swivel Assembly. Align PEM nuts with holes in Swivel Flange. One PEM nut will fit in the notch in Left Outer Shell.
2. Place Trigger into Right Outer Shell.
3. Place Trigger Lock Spring Pin into the Right Outer Shell. Place the Trigger Lock Pin on top of the spring.



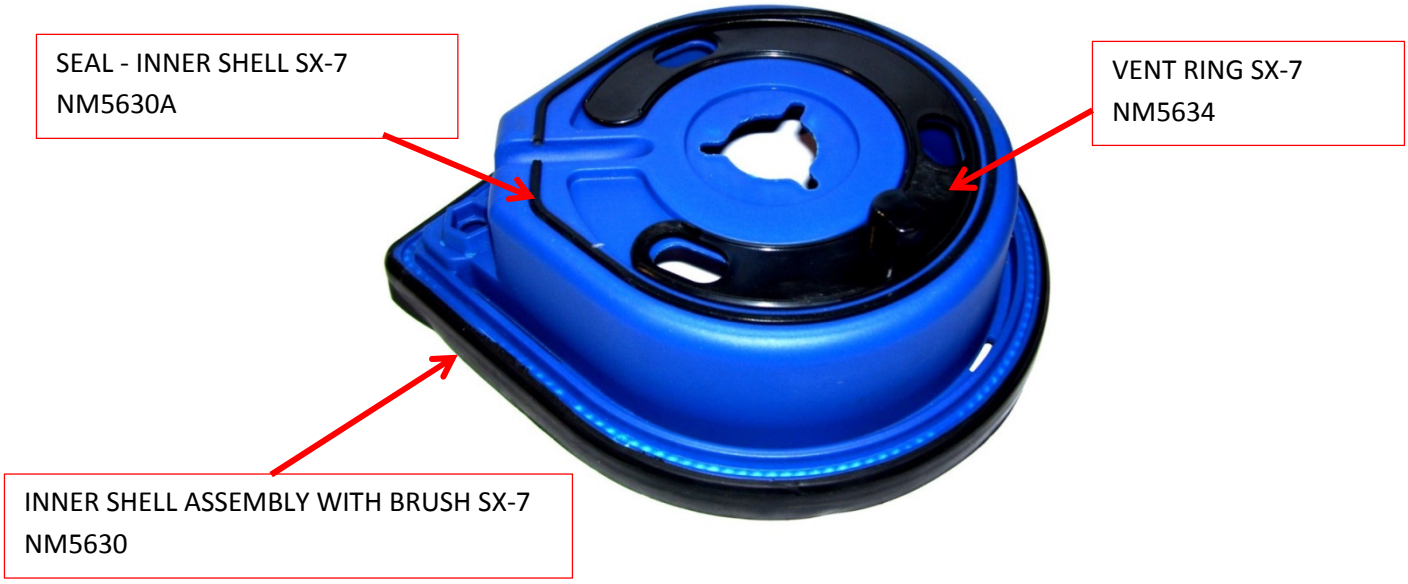


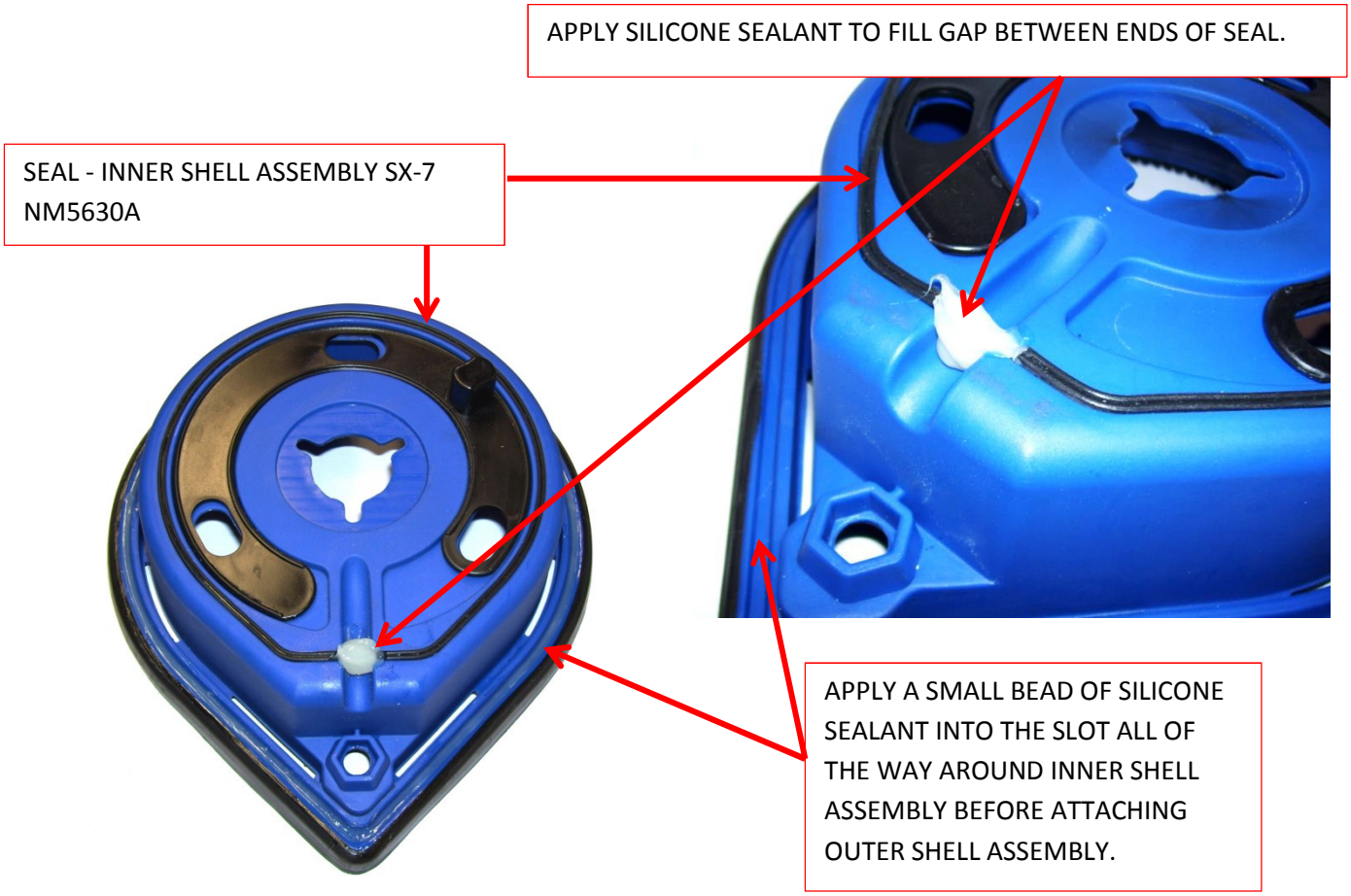
4. Place the Left Outer Shell NM5631 on top of the Right Outer Shell NM5632. Align Shell & Trigger Locking Pin for pin to extend out through hole in Left Outer Shell.
5. Snap the two Outer Shell sides together. Make sure Trigger & Trigger Lock move & function properly. Repair as needed and then secure Outer Shell Assembly with five screws NM5571.



6. Place the Vent Ring NM5634 and Seal NM5630A on top of the Inner ShellNM5630.
7. Apply silicone sealant to fill groove in gap between the ends of the seal.

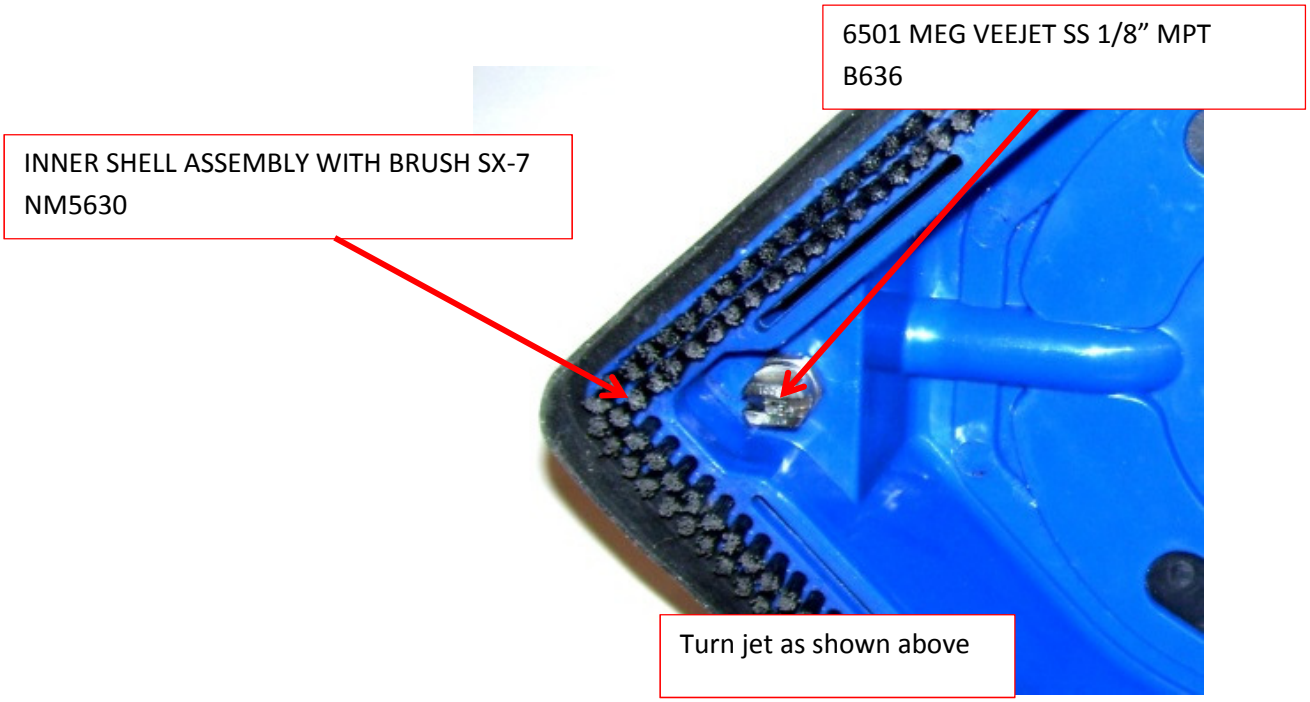
8. Apply a small bead of silicone into slot around base of Inner Shell Assembly. Proceed to Step #17 and attach Outer Shell Assembly to Inner Shell Assembly before silicone sealant dries.



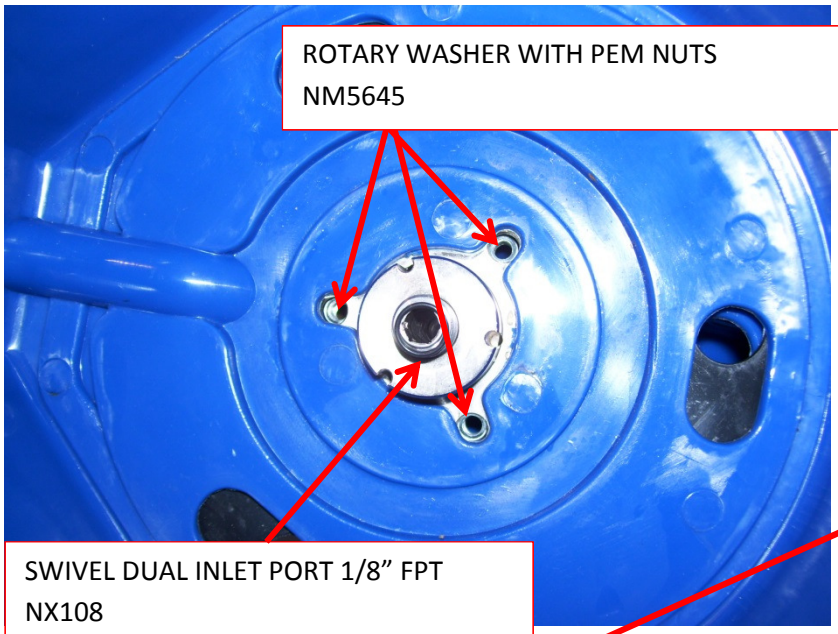


9. Place the Outer Shell Assembly on top of the Inner Shell Assembly. The tab of the vent ring fits up through the slot on the Left Outer Shell. Make sure Compression fitting on Front Bend SS tube fits into the recess on the front of the Inner Shell.

10. Install the 6501 Meg VeeJet with 1/8" MPT B636 into the compression fitting BR305 up through the front lip of the Inner Shell Assembly. Apply Teflon tape to jet threads before installing jet. Turn Jet so slot on jet is toward point of brush.



11. Secure the Outer Shell Assembly to the Inner Shell. Place the Rotary Washer NM5644 over the bottom of the swivel NX108 and secure with three screws NM4478 and flat washers NM4255. Apply Blue Loctite Thread Locker 242 to screws before installing.

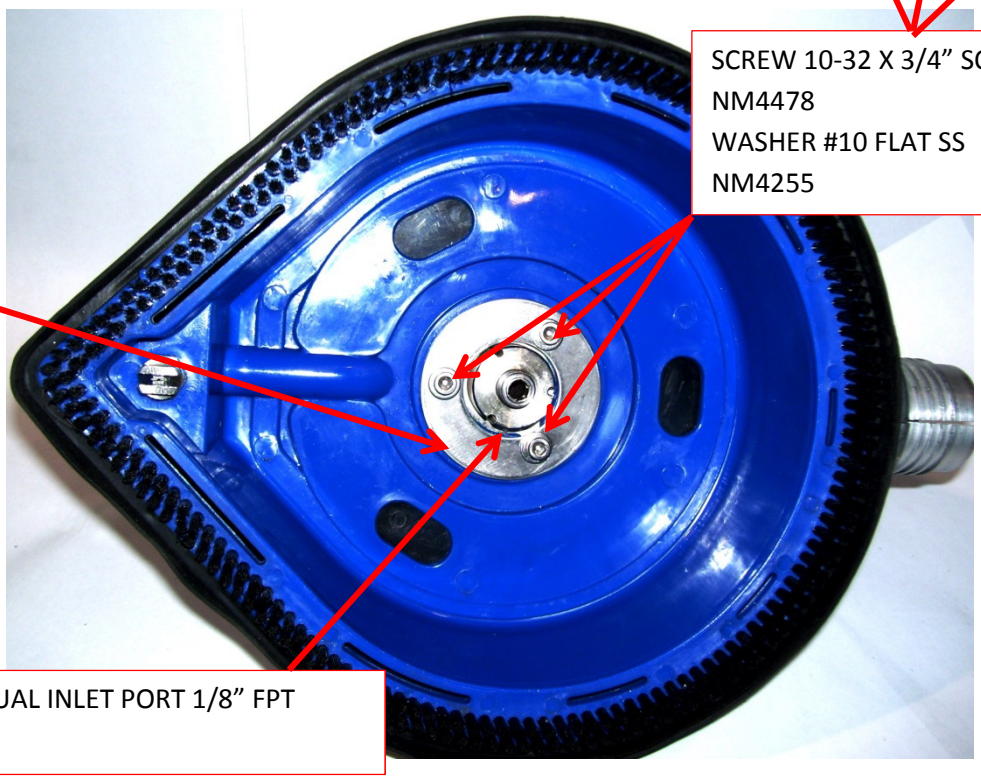


ROTARY WASHER WITH PEM NUTS
NM5645

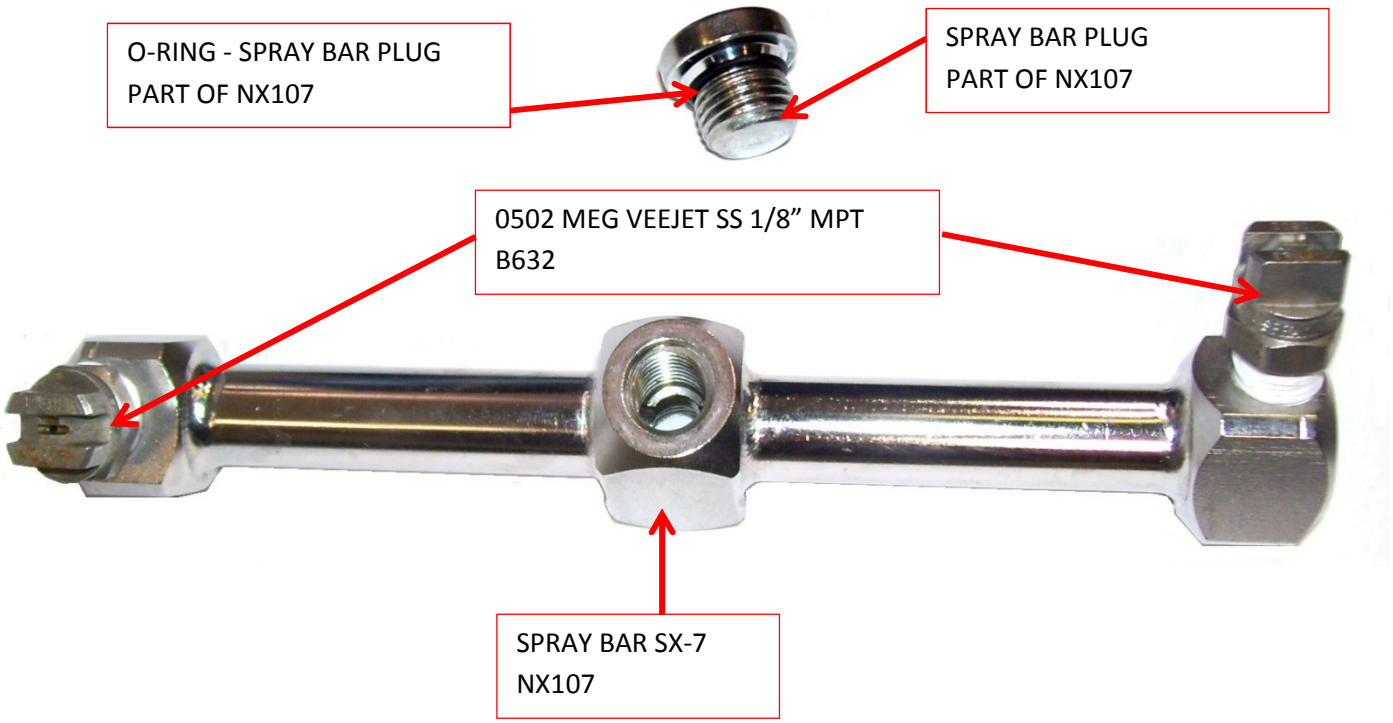
SWIVEL DUAL INLET PORT 1/8" FPT
NX108

ROTARY WASHER
NM5644

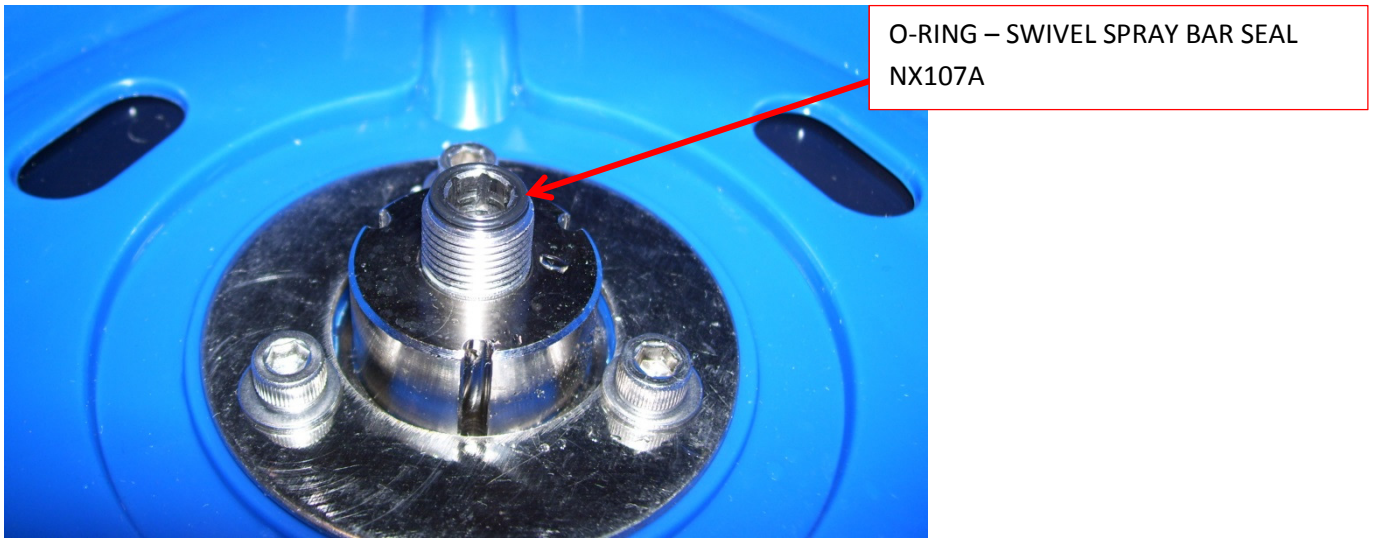
SCREW 10-32 X 3/4" SOCHD SS
NM4478
WASHER #10 FLAT SS
NM4255



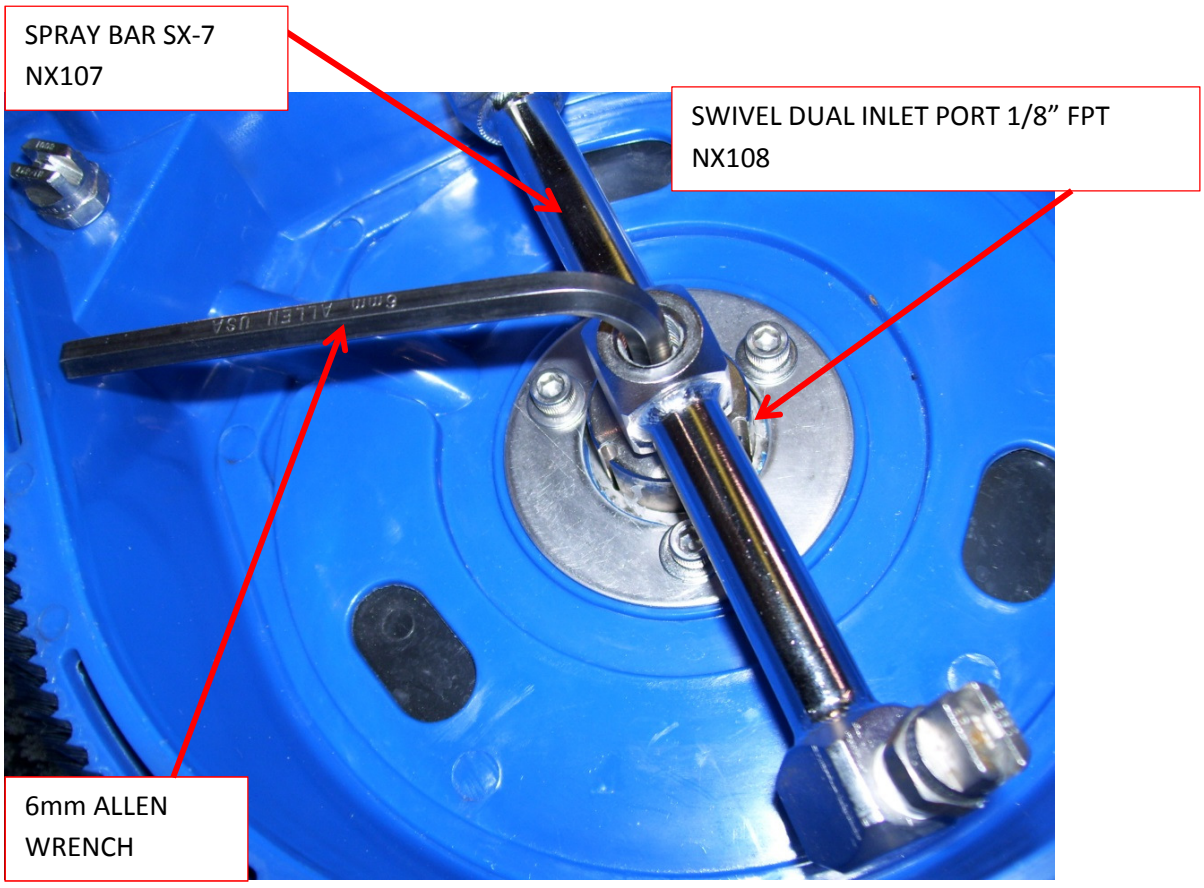
SWIVEL DUAL INLET PORT 1/8" FPT
NX108



12. Place o-ring NX107A on the end of swivel shaft.



13. Place Spray Bar onto Swivel threads. Insert 6mm Allen Wrench through Spray Bar to hold Swivel as you turn the Spray Bar clockwise to attach and tighten Spray Bar on Swivel.



14. Make sure o-ring is in place on Spray Bar Plug. Thread plug into the Spray Bar. Use a 5mm Allen wrench to tighten plug.
15. Test the operation of the SX-7 before returning the tool to service.