



SYMMONS®

SCOT S-60 Series

Slow-Closing Temperature Lavatory Faucet

Metering Faucet S-61 Series

Metering Lavatory Faucet

Installation & Service Instructions

Important: Water lines MUST be thoroughly flushed BEFORE and AFTER installing the faucet to prevent foreign matter i.e. copper chips, sand, stones, etc. from clogging and possibly damaging the sealing surfaces of the cartridge.

Note: Recommended minimum operating water supply pressure is 40 psi.

INSTALLATION

(Supply stop valves must have a 3/8" O.D. compression outlet.)

1. **S-60 Series:** Remove nut and ferrule from supply stops, install in-line check/screen assembly (LL-71B) on male outlet of stops.
2. Install SPF-KIT loosely on faucet. Position faucet through sink or counter with mounting gasket under base. Secure faucet tightening nuts from under side.
3. Install drain assembly. Seal under flange with putty.
4. **S-60 Series:** Carefully bend copper supplies to meet water supplies using palms of hands to avoid kinking tubing or fracturing solder joints. **DO NOT REMOVE** tape on copper supplies. Connect hot supply to left tube and cold supply to right tube using appropriate lengths of 3/8" O.D. tubing between faucet supplies and in-line check/screen assembly.

S-61 Series: Connect cold or tempered supply to faucet supply using appropriate length of 3/8" O.D. tubing between faucet and in-line check/screen assembly.

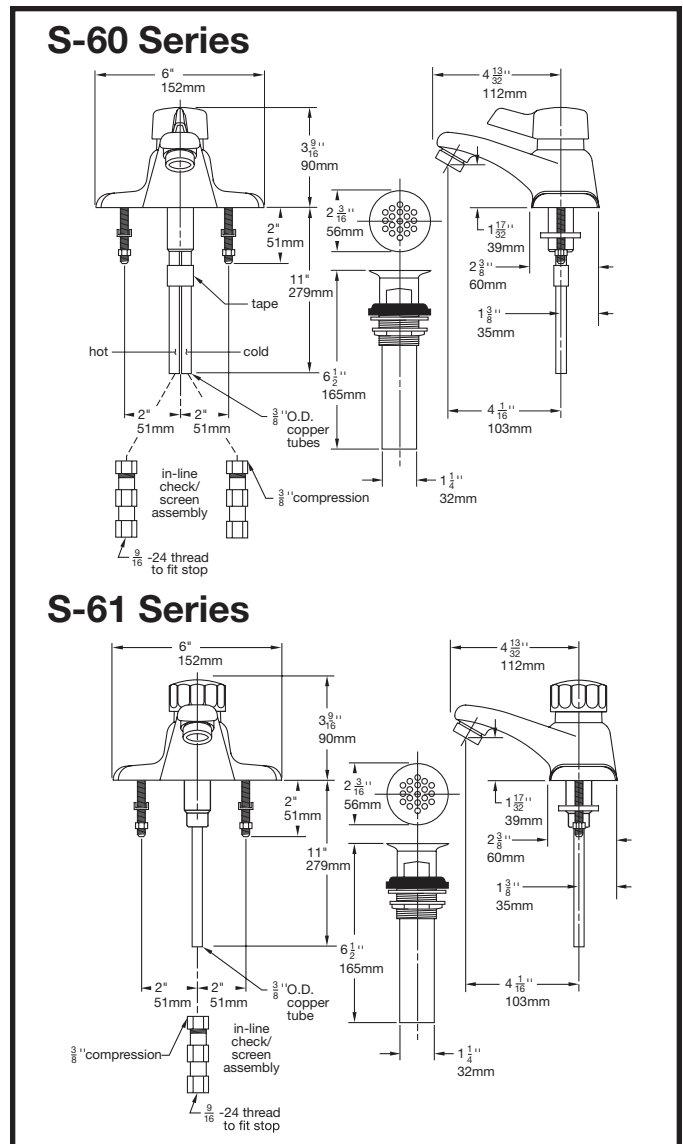
5. **S-60 Series:** To flush faucet remove aerator (LN-100 or LN-101) and turn valve handle to full cold position. Open supply and depress handle holding down for 10 seconds, rotate handle to hot position, open supply and repeat above procedure. Hold down handle and rotate from left to right to flush lines thoroughly. Allow faucet to shut off and replace aerator.

S-61 Series: To flush faucet remove aerator (LN-100 or LN-101) and open supply stop depress handle and hold down for 10 seconds. Repeat several times and allow faucet to shut off. Replace aerator.

Adjustment of cycle time and temperature

After faucet has been operated through a number of cycles and supply water temperature is at designed levels, adjustments to these features can be made as follows.

Cycle Time: Faucet is factory set to shortest cycle time with 7 timing washers (LL-28). To increase time, loosen allen screw (LL-27) with a 3/32" hex socket key, remove handle (LT-100 or RL-156) and remove one or more of the washers (LL-28) on stem. To reduce time, add washers.



Note: When setting MAXIMUM cycle time, you MUST maintain at least 5 timing washers (LL-28) so as not to exceed (per ASME A112.18.1) 25 gal/cycle at 60 psi.

Temperature limit adjustment (S-60 Series only):

Loosen allen screw (LL-27) with a 3/32" hex socket key. Remove handle (RL-156), loosen nut (LL-6) and turn stem (LL-1A) to desired maximum temperature (110°F recommended). Turn limit stop washer (LL-23N) clockwise until a positive stop is reached against back of faucet. Tighten nut (LL-6), replace and tighten handle (RL-156). Faucet will operate from the full cold position to the maximum hot temperature that has been set.

Reverse operation (S-60 Series only)

For piping simplicity in back to back installation or when hot supply is on right, the faucets internal operation can be quickly reversed.

Remove handle (RL-156), nut (LL-6), and limit stop washers (LL-22N) & (LL-23N), turn stem 180° so that red marking is facing toward front.

Replace limit stop washers, adjust to desired temperature (see adjustment procedure in preceding paragraph), reassemble faucet reversing above procedure.

Faucet will operate from the full cold position to the maximum hot temperature that has been set.

SCOT® S-60 Series

Parts

LL-4A	Piston washer screw
LL-6	Limit stop retainer nut
LL-11A	Piston cylinder
LL-22N	Limit stop washer (fixed)
LL-23N	Limit stop washer (adjustable)
LL-24	Control rod
LL-31	Retaining ring
LL-32-JIB	Piston spring
LL-37A	Shut-off washer
LL-44	Spindle guide large o-ring
LL-46	Control spindle small o-ring
LL-47	Control spindle large o-ring
LL-49	Piston quadring

Repair Parts

LL-1A	Complete control cartridge
LL-1B	Complete control cartridge for quick-closing
LL-3N	Upper housing
LL-27	Handle set screw
LL-28	Cycle time washers (7)
LL-35	Thrust washer
LL-48	Upper housing o-rings (3)
LL-71B	In-line check/screen assembly (2)
RL-156	Handle and set screw
LL-106	Base plate gasket
LN-100	Aerator and key (vandal resistant 0.5 gpm)
LT-4AA	Piston assembly
SPF-KIT	Mounting Kit
SPF-102	8" deck plate
RL-266	Control spindle kit
RL-267	Piston spring and cylinder kit
RL-268	Limit stop hardware kit
RL-269	Check seat kit
RL-272	O-ring kit (contains LL-44, LL-46, LL-47, LL-48, LL-49)

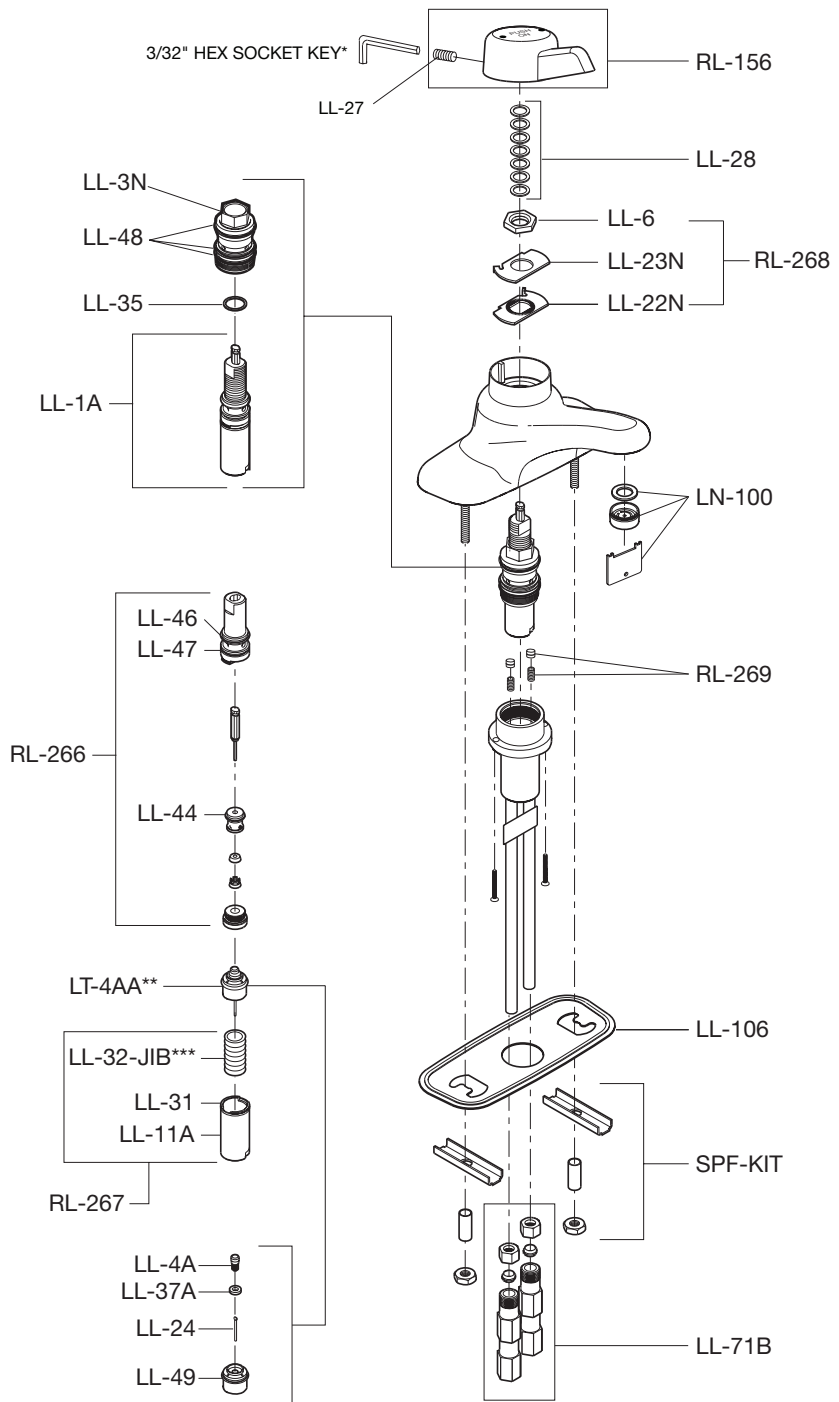
Tools required for disassembly

Standard tools required:

Adjustable or 11/16" and 3/4" open end wrench, small phillips screwdriver, pliers, 3/4" deep socket, 3/32" hex socket key*

Notes:

- *1) Item not included.
- **2) Use caution not to damage piston quadring while servicing piston assembly (LT-4AA).
- ***3) Do not squeeze ends of spring (LL-32-JIB) causing spring to fully compress.



Metering Faucet S-61 Series

Parts

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LL-28	Cycle time washers (7)
LL-35	Thrust washer
LL-48	Upper housing o-rings (3)
LT-71B	In-line check/screen assembly
LT-100	Handle and set screw
LL-106	Base plate gasket
LN-100	Aerator and key (vandal resistant 0.5 gpm)
LT-4AA	Piston assembly
SPF-KIT	Mounting Kit
SPF-102	8" deck plate
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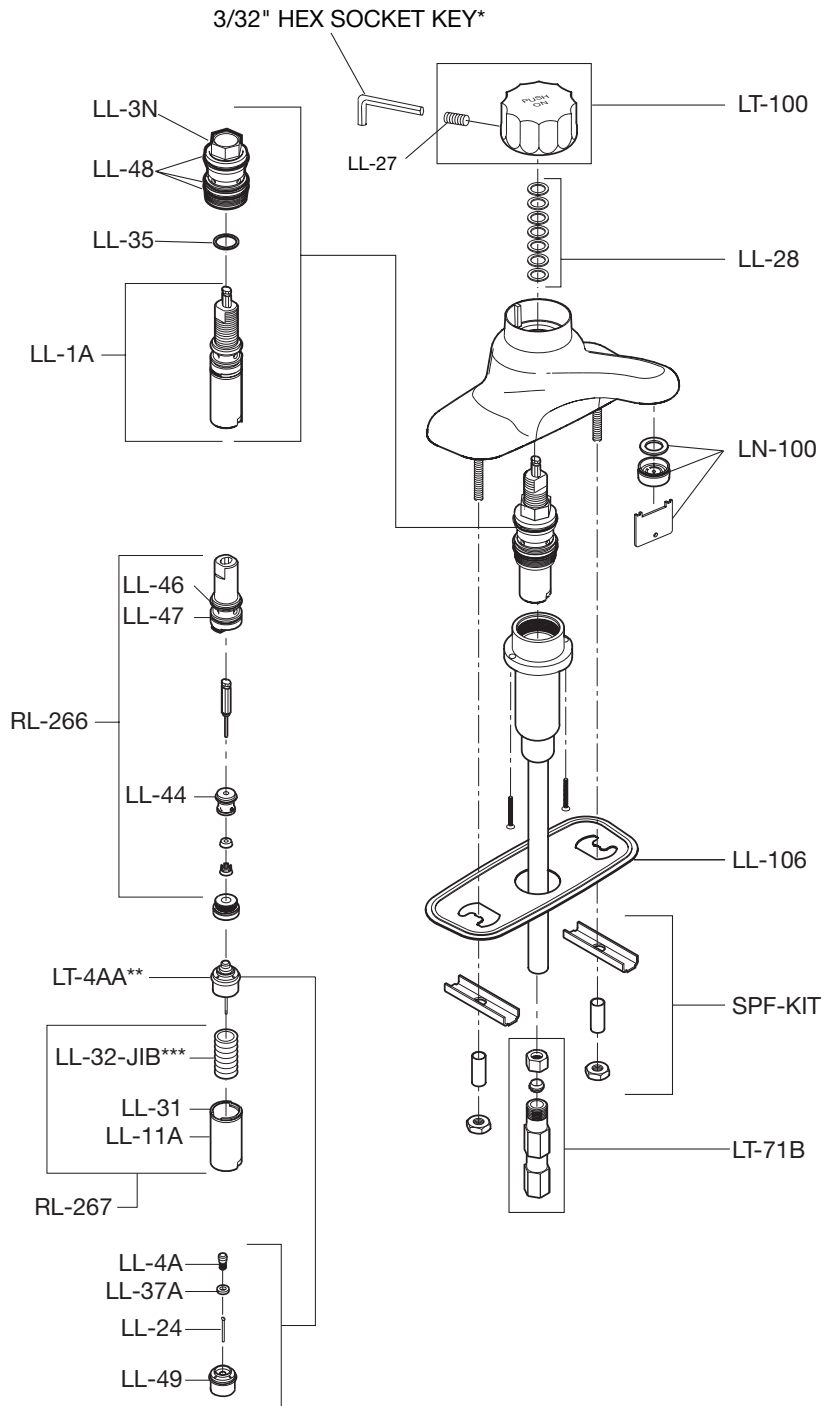
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Notes:

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**2) Use caution not to damage piston quadring while servicing piston assembly (LT-4AA).

***3) Do not squeeze ends of spring (LL-32-JIB) causing spring to fully compress.



SERVICE INSTRUCTIONS

- General repair will require the repair or replacement of the cartridge unit.
- Shut off water supply to the faucet.
- Remove handle with 3/32" hex socket key.
- S-60 Series:** Remove cycle time washers (LL-28), limit stop retainer nut (LL-6), and limit stop washers (LL-22N and LL-23N).
S-61 Series: Remove cycle time washers (LL-28).
- S-60 Series:** Remove upper housing (LL-3N) with an adjustable wrench, slide housing off control cartridge (LL-1A).
S-61 Series: Remove upper housing (LL-3N) with an adjustable wrench, slide housing off control cartridge (LL-1A).
- S-60 Series:** Control cartridge (LL-1A) can be either replaced or repaired at this point. Disassemble cartridge by opening retaining ring (LL-31) and sliding down piston cylinder (LL-11A).
S-61 Series: Control cartridge (LL-1A) can be either replaced or repaired at this point.
- S-60 Series:** Ordinary service requires only the replacement of the piston/o-ring assembly (LT-4AA) and spring (LL-32-JIB). For complete replacement of cartridge order repair part LL-1A.
S-61 Series: Ordinary service requires only the replacement of the piston/o-ring assembly (LT-4AA) and spring (LL-32-JIB). For complete replacement of cartridge order repair part LL-1A.
- S-60 Series:** When re-installing cartridge be sure to align red marking facing back on a normal installation and towards the front on a reverse operation installation.
- Reassemble, reversing above procedure.

TROUBLE SHOOTING CHART

Problem	Cause	Solution (Follow service instructions)
Faucet runs to long or to short.	Timing	Remove handle - then add washers (LL-28) to stem to shorten time or remove washers to lengthen time.
Faucet drips	Seat washer worn or foreign matter (chips, dirt, solder, etc.) is between washer and seat surface.	Disassemble cartridge and remove piston (LT-4AA). Unscrew LL-4A and clean seat washer (LL-37A). Check S.S. pin (LL-24) for burr then reassemble.
Faucet runs constantly.	Seat washer not closing on seat surface or seat washer and/or seat surface worn.	Remove piston (LT-4AA) and spring (LL-32-JIB). Check for burr on pin (LL-24) and check spring. Both LT-4AA and LL-32-JIB may have to be replaced. Excessive wear may require cartridge replacement LL-1A.
Water leaks from under handle.	Stem washers worn.	Remove cartridge and replace with o-rings LL-48. If leak persists replace control spindle kit RL-266.
Faucet leaks on or under counter.	Supply housing o-rings worn.	Replace LL-48 o-rings.
Faucet bleeding between hot and cold (SCOT S-60 series only).	LL-71B check/screens not installed.	Two chrome plated 3/8" check/screens are supplied with every faucet and must be installed.
Faucet bleeding between hot and cold (SCOT S-60 series only).	LL-71B check/screens are installed.	Replace LL-13 seats.
Handle is loose.	Set screw has loosened.	Tighten set screw.
Handle is sticking to cartridge.	Accumulation of sediment in cartridge.	Remove handle (RL-156) and all timing washers (LL-28) from cartridge. Secure handle back onto cartridge. After moving handle to the hot position, cycle faucet by pressing down on handle. Cycle faucet 12 times. Remove handle and replace timing washers.

5 Year Warranty - for industrial/commercial installations. Refer to www.symmons.com/warranty for complete warranty information.

For California Residents

WARNING: This product contains chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm.

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