

Metering Faucet S-61 Series

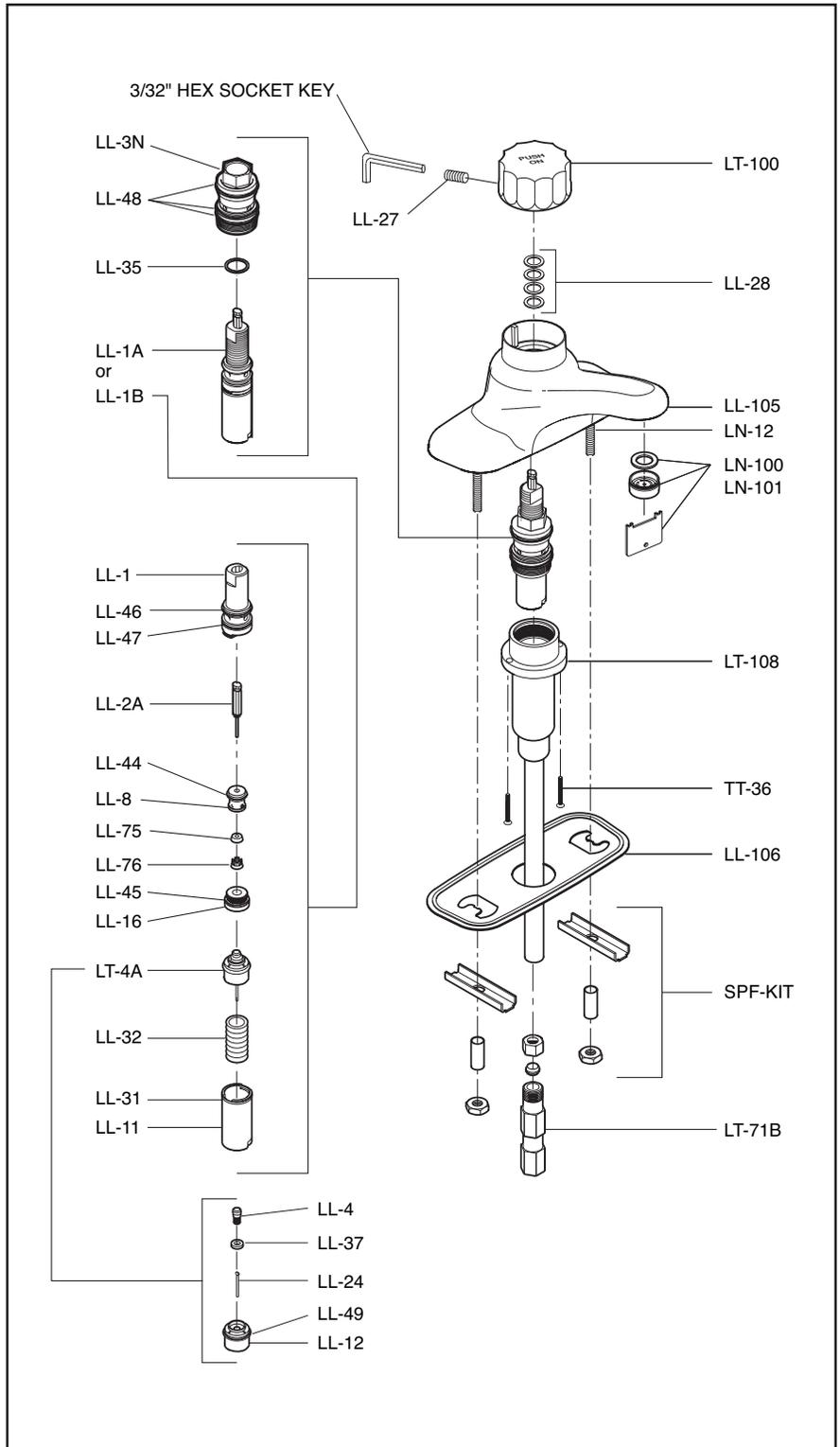
LL-1	Control spindle
LL-1A	Control cartridge
LL-1B	Control cartridge for quick-closing
LL-2A	Cycle spindle assembly
LL-3N	Upper housing
LL-4	Piston washer screw
LL-8	Cycle spindle guide
LL-11	Piston cylinder
LL-12	Piston
LL-16	Shut-off seat
LL-24	Control rod
LL-27	Handle set screw
LL-28	Cycle time washers
LL-31	Retaining ring
LL-32	Piston spring
LL-35	Thrust washer
LL-37	Shut-off washer
LL-44	Spindle guide large o-ring
LL-45	Shut-off seat o-ring
LL-46	Control spindle small o-ring
LL-47	Control spindle large o-ring
LL-48	Upper housing o-rings (3)
LL-49	Piston o-ring
LL-75	Spindle guide huva cup
LL-76	Huva cup retainer
LL-105	Shell
LL-106	Base plate gasket
LN-12	Anchor stud
LN-100	Aerator (vandal resistant 0.5 gpm)
LN-101	Aerator (vandal resistant)
LT-4A	Piston assembly
LT-71B	In-line check/screen assembly
LT-100	Handle
LT-108	Supply housing
SPF-KIT	Mounting Kit
TT-36	Undercover plate screws (2)

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

Repair Kit LL consists of:

LL-4, LL-8, LL-13, LL-24, LL-31, LL-32, LL-33,
LL-35, LL-37, LL-42, LL-43, LL-44, LL-45, LL-46,
LL-47, LL-48, LL-49, LL-73, LL-75, LL-76.



SERVICE INSTRUCTIONS

1. General repair will require the repair or replacement of the cartridge unit.
2. Shut off water supply to the faucet.
3. Remove handle with 3/32" hex socket key.
4. **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).

5. **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).

6. **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-11).

S-61 Series: Control cartridge (LL-1A) can be either replaced or repaired at this point.

7. **S-60 Series:** Ordinary service requires only the replacement of the piston/o-ring assembly (LT-4A) and spring (LL-32). Complete rebuilding of the cartridge can be accomplished with repair KIT-LL.

S-61 Series: Ordinary service requires only the replacement of the piston/o-ring assembly (LT-4A) and spring (LL-32). Complete rebuilding of the cartridge can be accomplished with repair KIT-LL.

8. **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.

9. 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-4A). Unscrew LL-4 and clean seat washer (LL-37). 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-4A) and spring (LL-32). Check for burr on pin (LL-24) and check spring. Both LT-4A and LL-32 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 washers using KIT-LL.
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.

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ZV-384 3-Hole

ZV-385 Folded

