Water Efficiency in the Laundry/Utility Room

THE CORPORATION OF THE CITY OF

ST. THOMAS

Clothes washing, at 20% of your total water use, accounts for the third highest use of water inside your home.

Environmental Services Department
545 Talbot Street
St. Thomas, Ontario
N5P 3V7

Phone: 631-1680 (Ext. 221)
Fax: 631-2130
Email: engineer@city.st-thomas.on.ca

Water saving Tips for Washing Clothes

1. Wash only full loads of laundry, but avoid overloading the machine;
2. If your machine has a "suds-saver" feature be sure to use it (this feature reuses the clean rinse water for washing the next load)'
3. If you don't have a "suds-saver" feature but want to reuse the rinse water, consider trying to collect the rinse water and using it to water your garden;
4. If your machine has an adjustable water-level indicator, set the dial to use only as much water as is really necessary;
5. Always choose cold water for the rinse cycle and only use hot or warm water for very dirty loads or whites.

Water Saving Washing Machines

When buying a new washing machine, water conservation features such as water level controls are standard fare on most models, but you may also want to consider buying a machine with a "suds-saver" option. To maximize your water savings you may want to purchase one of the new front load washing machines which uses up to 45% less water per load and are purported to be gentler on your clothes. Although these new machines are more expensive to purchase than top load models, the water and energy savings they offer will recoup the cost difference in several years.

Watching What Goes Down the Drain

The careless disposal of solvents, paints, chemical household cleaners, motor oils and even cooking fat can harm your piping system, is very difficult to deal with at the sewage treatment facilities and, most importantly, proves harmful to the aquatic environment. Why are these chemicals so dangerous? Many of them kill the bacteria which breaks down the organic matter in sewage. Without these bacteria the treatment process is severely impaired. As well, many chemicals if dumped down our drains are resistant to any treatment and remain in the water when it is returned to the lake. Despite the cleansing effect of the natural water cycle and the municipal water treatment process, many of these chemicals remain in the water. By simply switching to more environmentally friendly cleaning products such as baking soda, vinegar, borax and lemon juice, we can reduce the chemical burden to our waterways. Other chemical contaminants such as turpentine, motor oil and paint must be delivered to a household hazardous waste depot for proper disposal.

For more information about hazardous product alternatives and for household hazardous waste disposal information, contact:
Environmental Services Department
Water Pollution Control Plant
John F. Mansell
Wastewater Inspector
(519) 631-1680 (Ext. 169)

How to Repair Leaking Faucets

A couple of times a year it is a good idea to take a walk around your home and check all faucets for leaks. Leaks occur when washers, O-rings, or seals inside the faucet are dirty or worn. Repairing leaking taps can be simple to do, though there are some variation in tap designs that may provide a challenge. Before beginning work, you must first identify your faucet design and try to determine what replacement parts may be needed.

Remember the first step in doing any plumbing repair is to turn off the water before beginning work. To turn off the water either close the shutoff valve underneath the faucet you are about to work on or close the main service valve found near the water meter. After you turn off the shutoff valve, open the faucet you are about to work on until the water stops. If you shutoff the main service valve, turn on the lowest tap in the house (e.g. laundry tub) to clear water from all the lines before beginning work.

Note: The following instructions for repairing leaking faucets are neither comprehensive nor intended to include all situations you may encounter in your home. For safety, you should use caution, care and good judgment when following the procedures described in this Guide. If in doubt, visit a plumbing supply store, consult a home plumbing guide, or call a licensed plumber. Easy and inexpensive plumbing jobs can quickly become an expensive nightmare if you have old plumbing or fixtures, improper tools and materials, or insufficient knowledge and skill.

Some General Tips When Repairing Leaking Faucets:

1. If faucets are difficult to remove you may need to apply a little penetrating oil, wait a few minutes and then try again.
2. To ensure the correct selection, take the worn parts with you to the store for comparison.
3. To avoid scratching the shiny surfaces of the faucets, cover the gripping parts of the tool with masking tape or a cloth.
4. When working on basement taps be sure that the hot water tap shuts off completely to avoid siphoning the hot water tank.

COMPRESSION FAUCET

Description:

- A compression style faucet has washers or seals that must be regularly replaced
- Two handles for separate control of hot and cold water
- A threaded stem assembly inside the faucet body
- When shutting off faucet, can usually feel the rubber washer being squeezed inside the faucet

Tools and materials required:

- Screwdriver, channel-lock pliers, utility knife
- Universal washer kit (includes a variety of washers and O-rings) and faucet grease

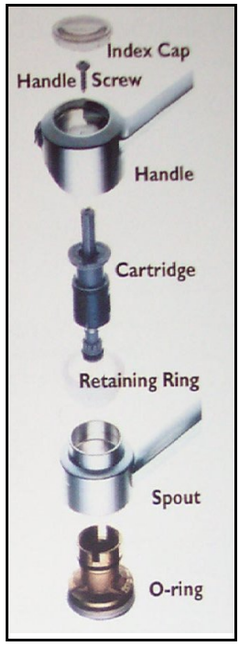
Techniques for Repairing Leaks

To stop dripping from the spout replace worn washers:

1. Remove cap from top of faucet handle.
2. Remove handle screw.
3. Remove handle by pulling straight up (if handle is corroded and difficult to remove use a handle puller (TIP: handle pullers are available from rental centres or can be purchased for about $20.00).
4. Unscrew stem assembly from the faucet with channel-lock pliers or wrench (replace faucet if stem assembly is badly worn).
5. Remove brass stem screw from the stem assembly to release the stem washer.
6. Rub your finger on the seat under the washer to ensure there is no pitting or notches that can allow water to leak.
7. If the surface is not smooth you will need a faucet seat wrench to remove the seat, refer to a plumbing guide or call a plumber to assist with this job.
8. Install new washer and reassemble the faucet.

To stop leaks around the handle replace worn O-ring

1. Follow steps 1-5 above to remove the stem assembly from the faucet body.
2. Disassemble the stem by unscrewing the threaded spindle from the retaining nut to expose the O-ring.
3. Cut off the O-ring and replace with an exact duplicate.
4. Coat the threaded spindle with faucet grease, then reassemble the faucet.



CARTRIDGE FAUCET

Description:

- Cartridge faucets are known as "washerless" faucets and require little maintenance
- Identified by the narrow metal or plastic cartridge inside the faucet body
- The hollow cartridge insert lifts and rotates to control the flow and temperature of water.

Tools and materials required:

- Screwdriver, channel-lock pliers, utility knife
- Replacement cartridge, O-rings, faucet grease

Techniques for Repairing Leaks

To stop dripping from the spout replace worn cartridge:

1. Pry off the index cap on top of faucet.
2. Remove the handle screw underneath the cap.
3. Remove faucet handle by lifting it up and tilting it backwards.
4. Remove the threaded retaining ring with channel-lock pliers (remove retaining clip, if present, that holds the cartridge in place).
5. Attach channel-lock pliers to top of cartridge and pull straight up to remove cartridge.
6. Install new cartridge.
7. Reassemble faucet.

To stop leak from base of faucet replace worn O-rings:

1. Follow steps 1-6 above and continue to disassemble the faucet by removing the spout to expose the O-rings.
2. Cut off worn O-rings with a utility knife.
3. Coat new O-rings with faucet grease and install.

DISC FAUCET

Description:

- Disc faucets are known as "washerless" faucets and require little maintenance
- Has a single handle and a wide, sealed cylinder inside the faucet body
- Cylinder contains two closely fitting ceramic discs that are slid into alignment by the faucet handle to allow water to flow
- Installation of a new cylinder only required if leaking continues after cleaning

Tools and materials required:

- Screwdriver
- Plastic / nylon pot scrubber, replacement cylinder (if needed)

Techniques for Repairing Leaks

To stop dripping from the spout clean or replace cylinder:

1. Most leaks can be stopped by cleaning the neoprene seals and cylinder openings, install a new cylinder only if faucet continues to leak after cleaning.
2. To remove setscrew, rotate the faucet spout to the side and raise the handle, lift off the handle.
3. Lift off the escutcheon cap.
4. Remove the screws that hold the cylinder in place.
5. Lift out the cylinder and remove the neoprene seals from the cylinder openings.
6. Clean the cylinder openings and the neoprene seals with a plastic/nylon pot scrubber then rinse with clear water.
7. Reassemble faucet.
8. Move handle to ON position, then slowly open shutoff valves. When water runs steadily, close faucet. (This action avoids the possibility of cracking the ceramic discs with the sudden release of air from the faucet)
9. If the faucet continues to leak from the spout, repeat steps 1-6 and install new cylinder.

BALL-TYPE FAUCET

Description:

- Ball-type faucets are known as "washerless" faucets and require little maintenance
- Single handle over a dome shaped cap
- A hollow metal or plastic ball inside the faucet body controls the temperature and flow of water
- Most have a round cap with knurled edges located under the handle

Tools and materials required:

- Channel-lock pliers, Allen key wrench, screwdriver, utility knife
- Ball-type faucet repair kit, new rotating ball (if required), O-rings, faucet grease, masking tape

Techniques for Repairing Leaks

To stop dripping from the spout replace worn valve seat, springs and/or damaged ball:

1. First try tightening the cap with channel-lock pliers gripping the area with the knurled edges. (TIP: to prevent scratches to the shiny chromed finish, wrap masking tape around the jaws of the pliers). If tightening does not work, then disassemble and install replacement parts, following the steps below.
2. Loosen handle setscrew with an Allen key wrench and remove handle to expose faucet cap.
3. Remove the rounded cap with the channel-lock pliers by gripping the knurled edges of the cap and turning counter clockwise. (TIP: keep the masking tape on the jaws of the pliers to avoid scratching)
4. Lift out the faucet cam, cam washer, and the rotating ball. Inspect the ball for signs of wear, replace if necessary. (TIP: Though metal replacement balls are more expensive than plastic, they are more durable)
5. Using a screwdriver, pry out the old springs and valve seats from inside the faucet and replace with new ones.
6. Reassemble faucet and replace the cam washer and cam, if required.

To stop leak from base of faucet replace worn O-rings:

1. Follow steps 1-5 above and continue to disassemble the faucet by removing the spout to expose the O-rings. Remove spout by twisting it upward.
2. Cut off the old O-rings, coat new ones with faucet grease and then install.
3. Reassemble faucet.