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# HOME MAINTENANCE & REPAIR

## METAL GUTTERS AND DOWNSPOUTS

Peggy Owens\*

### Major Problems

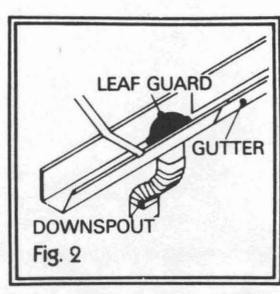
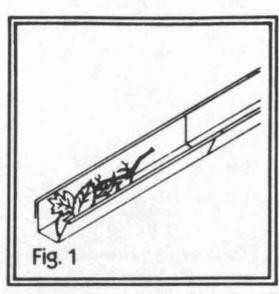
1. Water stands in the gutter.
2. Water overflows or spills over the edge of the gutter.
3. Water leaks from the gutter or downspout.

### Equipment and Supplies

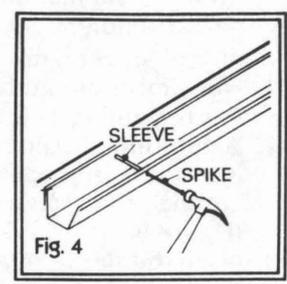
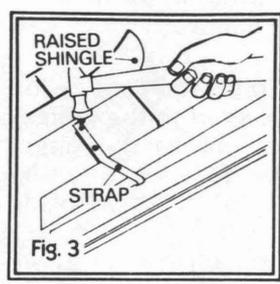
- Ladder
- Metal gutter straps. (Straps must be the same type of metal as your existing gutters and straps.)
- Galvanized or aluminum spikes (if required, rather than straps)
- Galvanized or aluminum screws and nails
- Asphalt roofing cement
- Hammer and screwdriver
- Plumber's snake (or flexible metal cable, approximately 1/4 inch in diameter)
- Wire brush
- Putty knife (or flat piece of scrap wood)
- Canvas patch

### Cleaning and Adjusting

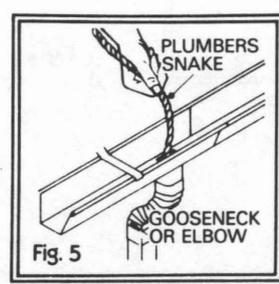
1. Inspect and clean gutters and downspouts at least twice yearly.
2. Remove all leaves and other debris from the gutters and check for loose joints (Figure 1).
3. Check the gutter outlet opening where the water flows into the downspout. The outlet should have either a leaf guard or leaf strainer. Clean debris from the leaf guard or strainer and replace in position (Figure 2).



4. Check all gutter hangers for tightness. If the hanger is a *strap type* and is loose, re nail it with a galvanized nail or tighten it with a galvanized screw. Broken or damaged straps should be replaced (Figure 3). If the hanger is a *sleeve and spike type* and is loose, re nail it with a galvanized or aluminum spike (Figure 4).

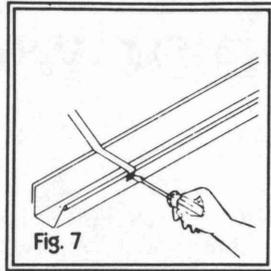
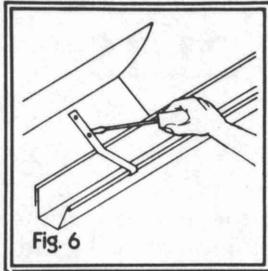


5. Pour water into each gutter, using hose or pail of water. As the water flows, check each gutter for proper pitch, for water drainage and for leaks.
6. Check each downspout for water flow and leaks.
7. Should water stop in the downspout, clean it at the gutter outlet using a plumber's snake or a piece of flexible metal cable (Figure 5).

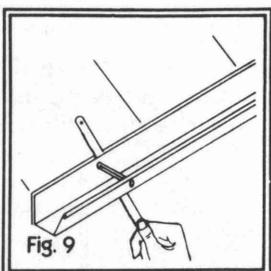
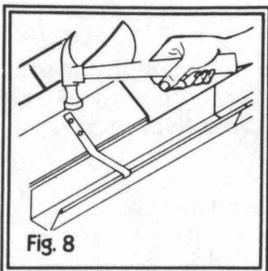


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8. If the water does not drain completely from the gutter, adjust the gutter hangers for proper slope.
9. If the hanger is a *strap type*, lift the edge of the shingle or other roofing material to expose the strap. Remove the end of the strap from the roof (Figure 6). Then, unscrew or unsnap the attached end of the strap from the gutter (Figure 7).

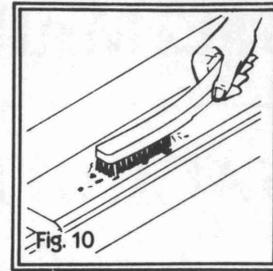


10. Raise the strap to a higher position on the roof and re nail it to the roof with galvanized nails (Figure 8). Locate the new nail at least 3/4 inch from the old nail hole to avoid weakening the new nail hole. Cover the nailheads with a dab of asphalt cement.
11. Now, raise the gutter into position and fasten the remaining end of the strap to the gutter.
12. A different procedure is required if the hanger is a sleeve and spike type. Free the gutter by cutting the spike with a hacksaw blade (Figure 9).
13. Place the sleeve in another, adjacent location, at least 3/4 inch from the old location. Raise the gutter and refasten it to the roof board by nailing a new galvanized spike through the sleeve and into the board (Figure 4).

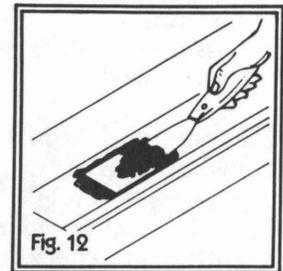
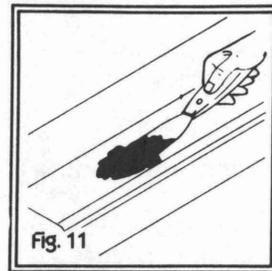


## Repairing Small Leaks

1. Once you locate the leak, use the wire brush to clean the area of the leak free of loose metal and rust (Figure 10). Then, wipe clean with a cloth.



2. Using the putty knife, apply asphalt roofing cement over the leak area and spread it with the knife (Figure 11).
3. If the crack or hole is greater than 1/4 inch, use the technique described in the following two steps.
4. Cut a small piece of canvas 1/2 inch to 3/4 inch larger than the hole.
5. Apply a thin layer of roofing cement over the leak area. Place the canvas patch over the cement and press it firmly. Now, apply a second heavy coat of cement, fully covering the patch (Figure 12).
6. Clean the putty knife with solvent or a similar cleaning fluid.



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