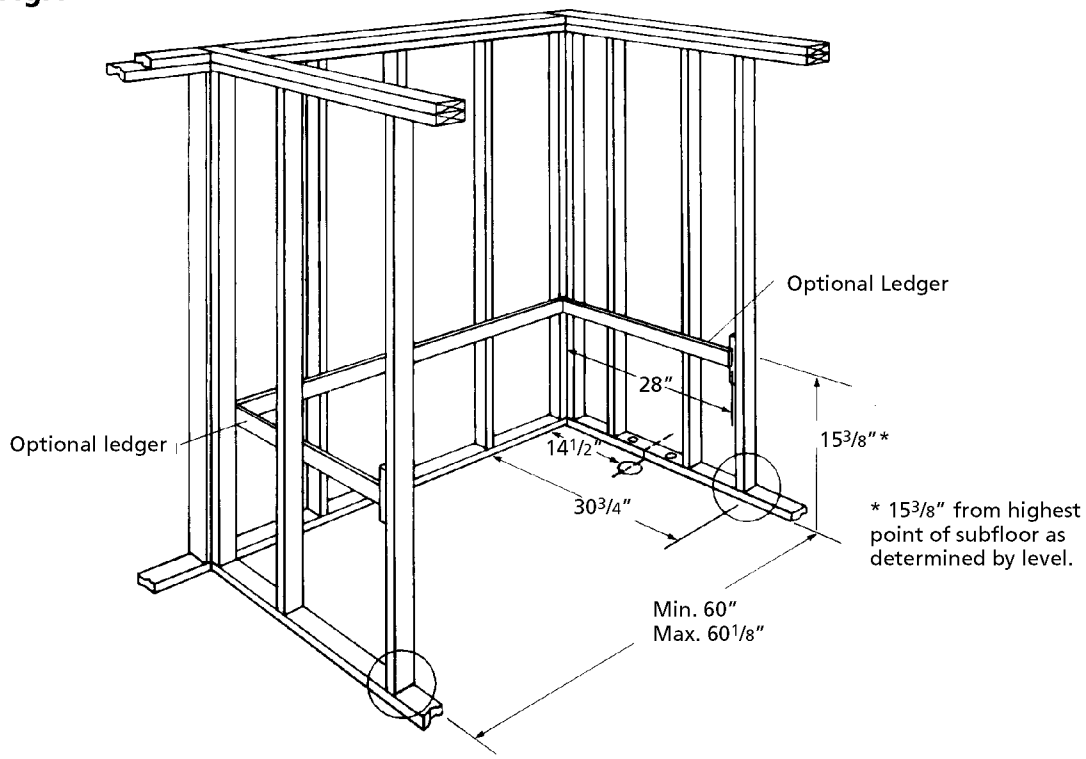
HOW-TO BOOKLET #3024

INSTALL BATHTUB

Fig.1



Framing Detail. The walls surrounding your bathtub will be framed something like this, illustrated here to help you if you must remove the tub from a side wall instead of straight out. If the wall(s) is load-bearing, i.e., it helps support the house structure, you will have to shore the studs not cut to remove the tub from a side wall. Do not cut the studs until the wall is properly supported. The ledger may be optional in your home and the tub may be supported by clips attached to the studs instead of the ledger. Before you buy the replacement bathtub, make sure the new tub will fit into the space, and make sure you can move it through doorways.

TOOL & MATERIAL CHECKLIST

- ❑ New Bathtub
- ❑ Prybar
- ❑ Pipe Wrenches
- ❑ Adjustable Wrench
- ❑ Putty Knife
- ❑ Shingle Shims
- ❑ Tape Measure
- ❑ Safety Glasses
- ❑ Hammer
- ❑ Screwdriver
- ❑ Pliers
- ❑ Pencil
- ❑ Brick Chisel
- ❑ Level
- ❑ Pipe Caps

Read This Entire How-To Booklet for Specific Tools and Materials Not Noted in The Basics Listed Above.

Replacing an old bathtub with a new bathtub is an easy-to-difficult project: easy if the old tub is readily accessible; difficult if you have to open a wall to remove the old tub and position the new tub. Either way, the project is within a home handyman's skills. You will need a helper to move out the old tub and set in the new one. And, you may need a professional plumber to make tub connections. Pro hook-ups are not costly. In this How-To Booklet you will find the basics of replacing an old bathtub with a new one—or a "change-out," as the professionals call it.

REMOVING THE OLD TUB

Your present bathtub probably is sandwiched between two walls, the faucets and shower head on one of these walls. Or, the bathtub is free-standing, i.e., you have open access to the pipes and fittings. If between walls, you may have the option of disconnecting the piping and pulling the tub straight out or removing the back wall and pulling the tub out. Or, you may have to disconnect the piping and remove the tub through this wall area. If the tub is free-standing, removal is simply a matter of disconnecting the piping and lifting the tub out. You may have to remove the toilet, flush tank, and lavatory to remove the tub; or lift the tub over these fixtures.

In this How-To Booklet, we show how the piping and fixtures are disconnected/connected and the tub is removed/replaced when the tub is between two walls. If you tub is free-standing, the disconnections/connections will be similar. Here are the steps:

1. There will be an access panel on the backside of the fixture wall of the bathtub. If not, this wall will be finished with gypsum wallboard. Remove the access panel or the wall so the piping is exposed. Try to remove the panel/wall so you have to replace only one sheet of wallboard. Find the wallboard joint and work from this point. The framing illustration should be helpful in locating the framing and piping (**Fig. 1**).
2. Disconnect the tub drain using a large adjustable wrench or Channel-lock pliers. Then loosen the slip nut connection the overflow pipe that runs from the bathtub drain pipe. If necessary, remove the tub drain strainer, which will release the drain pipe below it (**Fig. 2**).

   If the fixtures (hot and cold water supply) are inside the bathtub (not above it), remove these fixtures back to supply connections. Then, turn off the water.
3. Remove the wall covering (such as tile) from around the tub (**Fig.3**). One course of tile is plenty. Use a baby sledge hammer and brick or cold chisel for this and wear safety glasses to protect you eyes from flying debris. If the wall is not finished, i.e., painted gypsumboard, plaster, ore whatever, remove about 4-inches of material to expose the clips holding the tub in position. These fasteners will be attached to a ledger strip around the tub (**see Fig. 1**). Now, remove or disengage the fasteners (**Fig. 4**).
4. With a prybar and a piece of scrap wood to protect the wall (if needed), gently pry the tub away from the wall. Go completely around the tub.

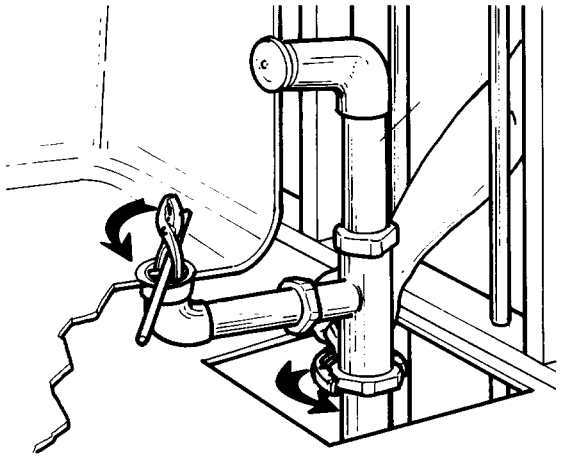


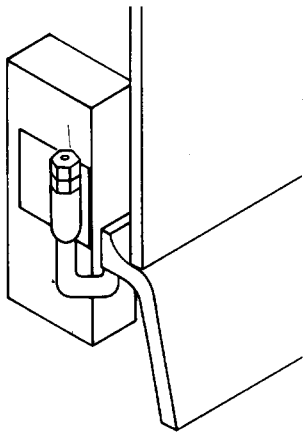
Fig. 2

Disconnect drains and water supply pipes, if necessary. Adjustable wrench or Channel-lock pliers work best; or use pipe wrench, padding jaws. Tub strainer screws out.

Fig. 3

Remove wall covering. Or, cut back wallboard so you can release tub support clips. Wear safety glasses while removing wall tiles.

Fig. 4



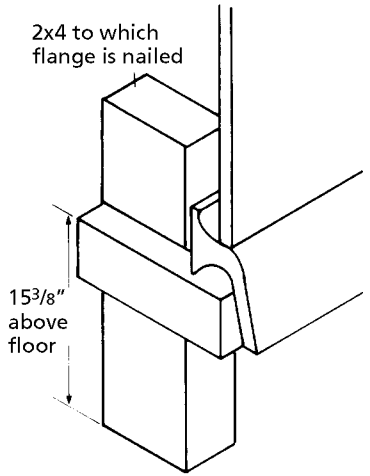
Tub may be held with a hanger clip, which has to be loosened or removed before the tub can be taken out.

With a helper, try moving the tub out a tad more. Easy does it. If you meet any resistance, chances are that the tub is not completely disconnected from the water supply and/or drainage system. Go back and check this. If you find a hang-up, disconnect it or reposition it. Then try moving the tub again.

5 Hopefully, you will be able to move the tub straight out from the wall. If so, put down two or three 1x4 skids or a piece of plywood so the tub won't damage the floor as it is moved out and so the tub is easier to slide. You will need a helper this; bathtubs weigh plenty; don't try to move the tub alone.

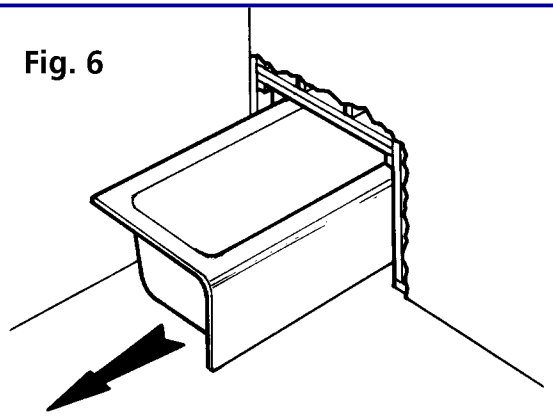
If the tub can't be removed by sliding it straight out, you will have to remove the back wall and exit here, as illustrated in **Fig.6**. This will involve cutting framing members, which you can replace later. However, the wall may be load-bearing, so you should shore up the framing you don't have to remove—before you make cuts—with two or three lengths of 2x4 or 2x6.

Fig. 5



Tub may rest on ledger strip, as shown here. If so, you simply lift it off the strip when you remove the old tub.

Fig. 6



You may have to remove tub from side wall. If so, remove the wallboard and framing members, shoring up the wall with 2x4s before making cuts. Remove pipes, if needed.

If you can't get the tub out of the back wall, it will have to go through the fixture/piping wall. The pipes will have to be cut accordingly and capped. If the pipes are plastic or copper, you can remove them with a hacksaw just above the opening for the tub. If the pipes are galvanized steel, you may be able to disconnect them at a coupling. Use pipe wrenches for this: one wrench goes on the fitting and the other one on the pipe.

Put down skids for the tub, as suggested above, and have a helper assist you in the tub removal. When the tub is out, you can lift and carry it with aid of helpers.

INSTALLING THE NEW TUB

The procedure for installing the new bathtub is almost the reverse of taking out the old one. We will assume that the new tub is approximately the same size as the old one, therefore, the piping and fixtures will align properly. If not, the piping will have to be modified to match the new tub before the new tub is moved in. Also check the wall surfaces. You may have to install new wallboard or patch the old so it is either partly below the rim of the new tub or goes all the way to the floor. It may be easier to prepare the wall before the tub goes in than after it is in. You'll have to be the judge of this.

1 With skids in position and a helper to assist you, move the new tub into the tub space. Align the water and drainage supply pipes accordingly.

Level the tub when it is in its final position. Lay the level along the rim of the tub and add shingle shims along the bottom of the tub to level it. If the tub on the shims tends to rock slightly, add more shims until the tub is on solid footing. Then connect the tub to the hangers, adding hangers for support, if necessary (**Fig.7**).

2 Connect the drain and water supply pipes (if necessary), after you remove the overflow escutcheon plate so you can reach the parts, fitting and adjusting the drain linkage in the bathtub (**Fig.8**).

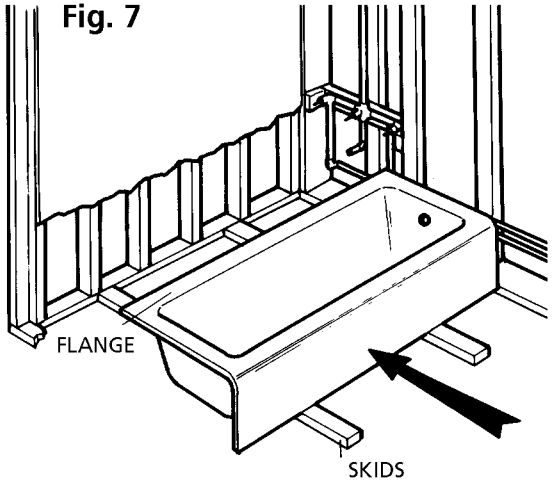
The slip connection is simply pulled down (or up) on the drain pipe and the slip nuts tightened.

The drain in the tub is seated in plumber's putty before it is pressed into place and the strainer cap is tightened.

The lift rod on the drain has a turnbuckle type arrangement. You turn the "turnbuckle" to adjust the linkage so the drain stopper seats properly into the drain strainer in the bottom of the tub (**Fig.9**).

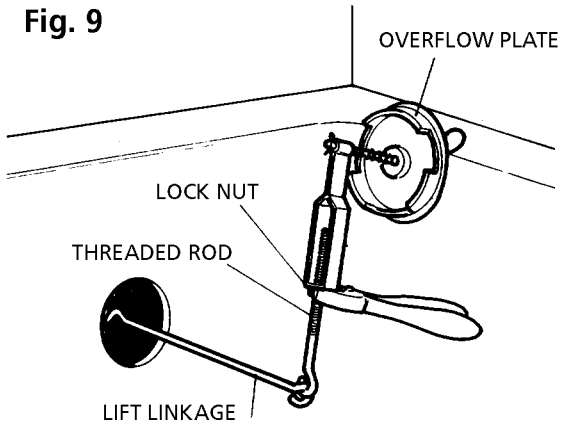
The new fixtures, hot and cold, are screwed into the fittings on the supply pipes; use joint compound on the male threads only to seal the threads as the fixtures are tightened. An escutcheon usually fits over the fixtures and the escutcheon is fastened with a set screw. Screw on the hot/cold faucet handles (**Fig.10**).

Fig. 7



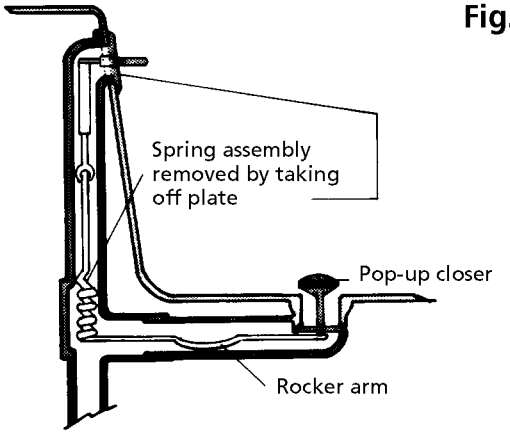
Move in new tubs on skids and with a helper. Tub rests on flange or hanger clips. Level the tub when it is in its final floor position.

Fig. 9



To adjust the rocker arm, turn the "turnbuckle" type fitting with pliers and reseat in overflow and drain pipe. Adjust rod until stopper fits perfectly.

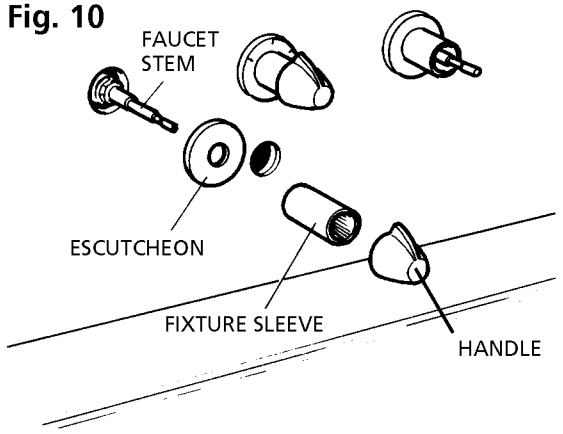
Fig. 8



Spring-type Bathtub Drain

Spring-type bathtub drain has rocker arm that works off lever in overflow plate. This rod can be adjusted so closer seats tightly in the tub strainer. Remove the plate.

Fig. 10



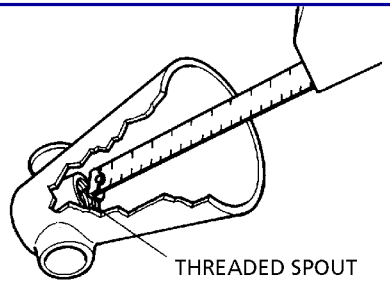
Thread faucets into housings on supply pipes. This works about the same way as a lavatory faucet hook-up. Put on escutcheons and the handles.

Measure for the tub spout from the face of the drain nipple in the wall to the face of the wall. Then measure from the threaded coupling inside the spout to the edge of the spout, plus about 1/2- to 5/8 inch. If the spout is too long or deep to accept the threads, you will have to increase the length of the nipple. Use a brass nipple for this and seal the threads with joint compound (**Fig.11**).

If you had to cut the pipes to remove the tub, replace the pipes, going back to the first connection you can find and working toward the tub from this point. Replace other fixtures, and turn on the water supply and check the lines for leaks. Make adjustments as needed.

3 Finish the wall around the tub. If you have to replace the wallboard around the tub, we recommend that you use water-resistant gypsumboard, often called "greenboard" because it has a green-tinted covering. Regular gypsumboard may be used on the other side of the framing. Add new framing where the old was cut to make room for the tub removal (if necessary), apply the gypsumboard, tape and sand it, and then finish the wall. You may want to mark the panels next to the baseboard in case you have to remove the panel again for repairs. Tile or paint the wall to complete the project.

Fig. 11



Spout in tub connects to drain pipe nipple in wall. Measure for fit and replace old nipple with brass one, if needed, for perfect fit. Shower works off diverter on top of the spout.