



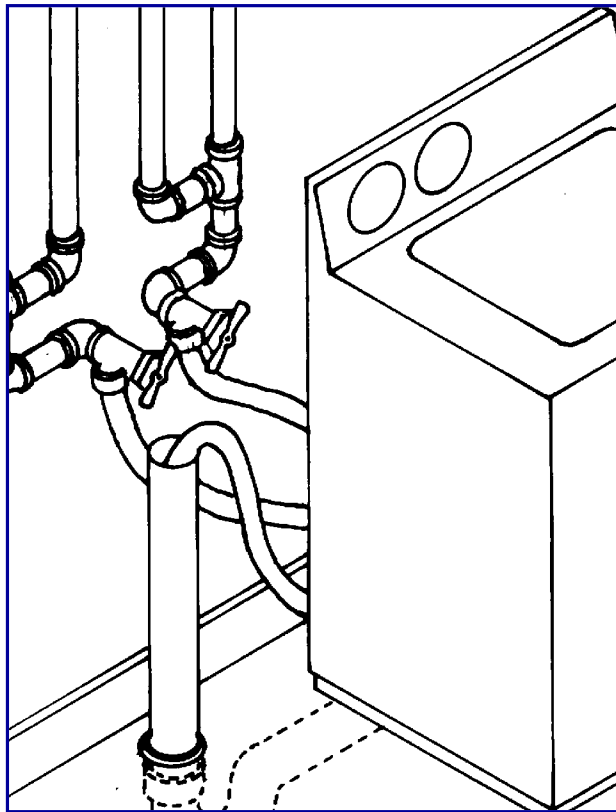
## HOW-TO BOOKLET #3020 CLOTHES WASHERS



### TOOL & MATERIAL CHECKLIST

- Screwdriver Assortment
- Adjustable Wrench
- Pliers
- Socket Wrench Set

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



Where there's water, there are leaks and corrosion. And most problems with clothes washers are water problems. Many of them you can solve with little more than a screwdriver or wrench and a length of new hose or a new drive belt. This How-To Booklet addresses several of the more common washer breakdowns and what you may be able to do to take care of them. Major problems are best left to a professional repair person. The pro has specific tools (and know-how) for specialized repairs; this equipment usually is too expensive to buy for a 1-time (or 2-time) repair project.

It's a good idea to check washer hoses every month or so to make sure that they are not cracked or leaking—especially around connections and where hoses are bent to fit against a laundry room wall. Also, periodically turn off the water at the faucets, unscrew the hoses, and check the screens in the hoses for sediment from lime deposits in the water.

Sediment from the water supply can cause all kinds of trouble, mostly blockage of supply lines. You can clean the screens with a stiff brush, or replace the screens if they are broken, badly worn, or bent.

A washing machine is a big investment. The following is advice on handling common problems yourself, but also on when to call for professional help.

### WASHER WON'T FILL WITH WATER

The trouble can be one or a series of malfunctions. The procedures you should follow, in order, are these:

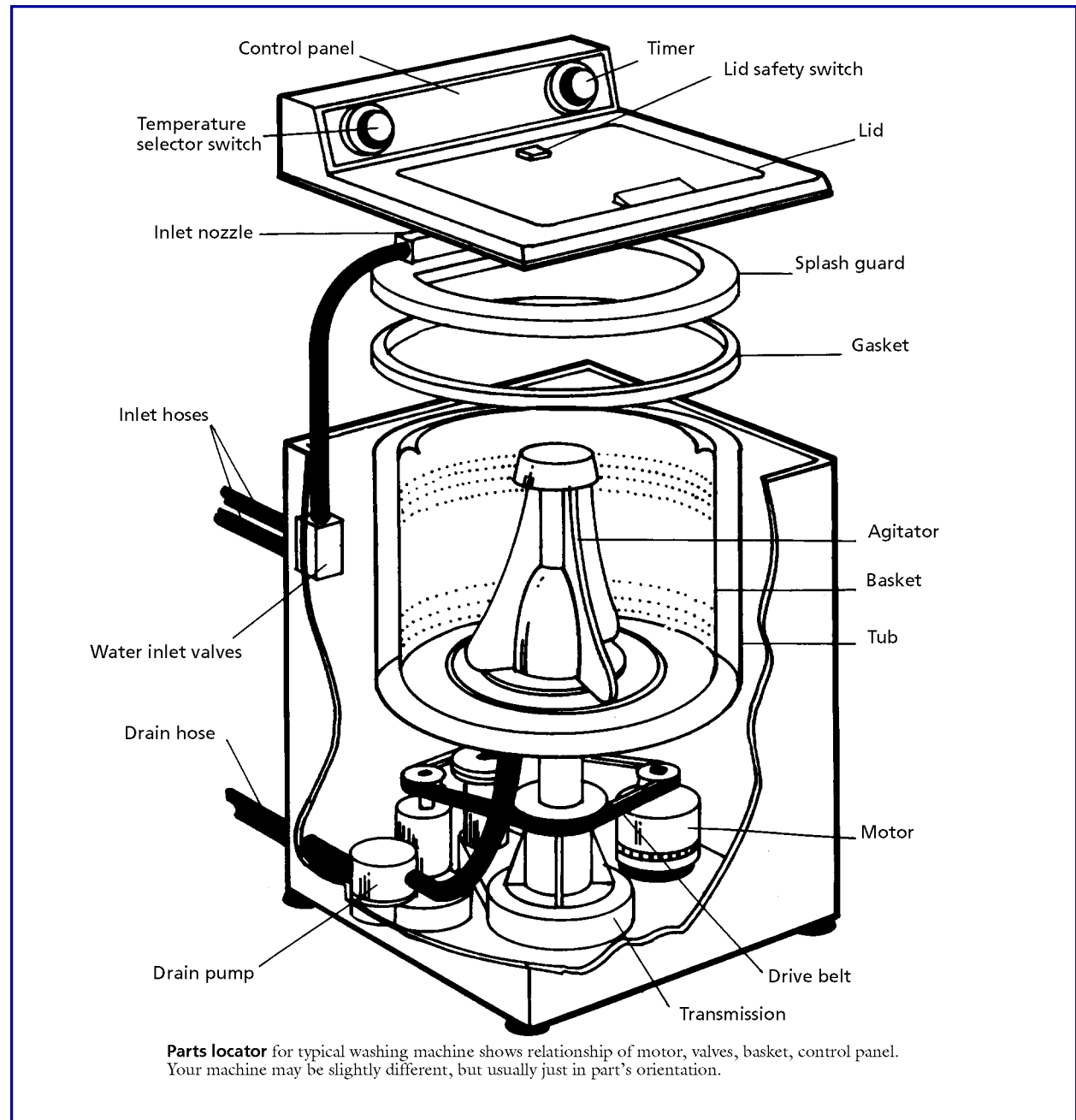
- 1 Open the water valves fully.
- 2 Turn off the valves. Then remove the hoses from the valves. You may need pliers to break the metal connections at the valves (faucets). Clean any sediment from the water supply screens with a stiff brush.
- 3 Remove the back from the washer. It is held by four, six, or more screws. Now check the inlet hoses to make sure they are not kinked, broken, or fouled in some way.
- 4 If the washer is getting water as far as the inlet hose connections, the problem probably is in the water valve or water valve solenoid. Repairing or changing these parts is a job for a service person.

### WATER WON'T DISCHARGE FROM THE WASHER

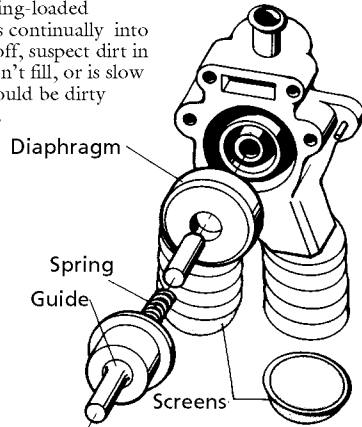
First, make sure the timer on the control panel is properly set and that the timer has gone through the complete cycle. If only partly through the cycle or improperly set, the machine will not discharge water from the tub.

Inspect the discharge hose for any blockage within the hose and for kinks or severe bends in the hose. If this is not the problem, read on.

Turn off the power and the water. Remove the back panel of the washer by turning out the screws that hold it in position. Check the wires that lead to the impeller and the water pump motor. These wires could have vibrated loose from their connections, or the wires could be burned out. You can replace these easily.



**Water inlet valve** has screens, a diaphragm, and a spring-loaded plunger. If water runs continually into the tub, with power off, suspect dirt in this valve. If tub doesn't fill, or is slow to fill, the problem could be dirty screens or hose kinks.



The trouble also could be a worn impeller, stuck wash and spin timers, or a malfunctioning motor—all problems for a pro.

### WATER LEAKS

The leak probably will be in a hose connection, around the tub seal, at the drain valve, pump assembly, or water supply valves.

With pliers, tighten all clamps to stop leaks. If a leaking gasket is the problem, try tightening the connection with a screwdriver or pliers to stop the leak. If you can't do this, you will have to replace the gasket.

Tub seals may be replaced by removing a retaining ring held by screws. Or, the seals may be held with adhesive. Leaking parts, such as impellers, pumps, and drains, should be replaced—not repaired—as a general rule.

### AGITATOR DOESN'T AGITATE

The trouble here is probably a defective timer or water level pressure switch. Replacement is a job for a service person.

But, before you make the phone call for help, check these points:

- 1 Turn off the electric power and the water.
- 2 Remove the back from the washer.
- 3 Check the drive belt from the motor to the agitator to see if the belt is loose and slipping. You may be able to tighten the belt by loosening the mounting brackets on the motor, moving the motor backward until the belt is tight, and retightening the bolts in the brackets. If the drive belt is broken, you will have to replace it. To replace the belt, loosen the motor's mounting brackets, moving the motor forward until the broken belt is free and you can slip the new belt over the pulleys. Then, move the motor backward until the belt is tight and tighten the bolts. Deflection in the belt should be about 1/2- to 3/4-inch when you press down on it at the center between two pulleys.

If this is not the problem, check the transmission of the machine. First, set the washer in the "wash" cycle or mode on the control panel. Then remove the drive belt from the motor. By hand, turn the agitator pulley clockwise. If the agitator is not moved by this action, the transmission probably is the trouble and the transmission will have to be replaced.

### WASHER DRAINS BETWEEN CYCLES

Reposition the drainage hose from the washer so the hose is higher than the water level in the washer. See the illustration on the next page.

If your washer set-up does not provide a drain standpipe about 36 ins. or higher (1-1/2-inch pipe), expect all sorts of drainage problems; see the illustration on the next page.

### NO-SPIN PROBLEMS

A defective timer probably is to blame if the washer doesn't spin properly. But check out these possibilities, too, before you call a pro.

- Are you using too much detergent? The buildup of detergent can cause the machine to balk so it won't spin or it won't spin properly.

- Are the controls set to "spin"?
- Is the lid of the machine tightly closed?
- Turn off the power and water. Remove the back panel of the washer.

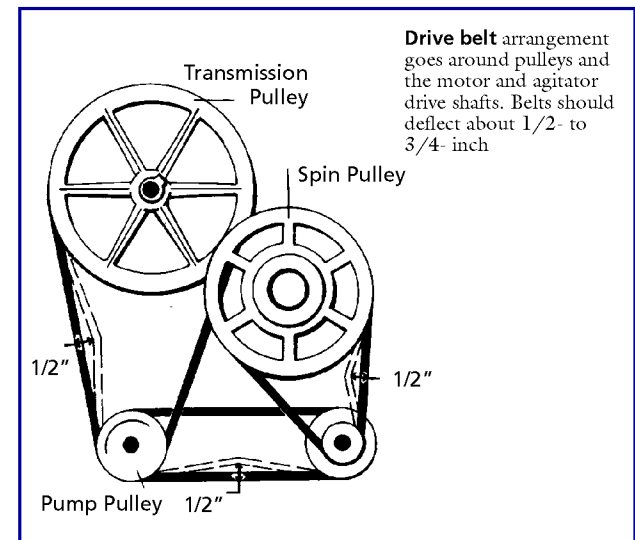
Check the drive belt for wear or slippage. If worn, replace the belt. If slipping, tighten the belt. Procedures for both are given.

The machine may have a worn clutch. Set the control knob in the "spin" cycle or mode. Now remove the drive belt and turn the clutch by hand. The unit should turn fairly freely. If not, the clutch may have to be replaced by a pro.

Some clutches (disc type) can be adjusted if loose. Try turning a nut located on the clutch plate or a nut on the clutch shaft, after you determine from a dealer or service manual whether the clutch is adjustable.

### MOTOR WON'T RUN

The machine probably has a reset button on the control panel. If the motor won't run, try pushing this button. If the machine has been running okay and suddenly stops, wait 10 minutes or so and push the reset button.



If the machine doesn't have a reset button, try turning the set knob to the off position. Wait 10 minutes, and then turn on the machine.

Also be sure to check if the power plug is connected in the outlet. And, if the machine has been operating and suddenly stops, check the main electrical service panel to the house. It could be the circuit has blown as fuse or tripped a circuit breaker to the off position.

### MOTOR JUST HUMS

Try tightening the terminals/wires on the motor. Loose connections at this point can cause the motor to "hum," but not start. The wires sometimes vibrate loose from the terminals.

If this is not the problem, suspect a burned out motor. You can replace the motor with a new one by simply turning off the power, disconnecting the wires, and removing the mounting bolts.

### MOTOR RUNS, AGITATOR DOESN'T

Most likely, this is a broken drive belt problem. Or the belt could be slipping on the pulleys, or the pulley could be slipping on the shaft of the motor.

If a slipping pulley is the problem, try tightening the pulley by turning a set screw that holds it to the drive shaft of the motor. The screw may be in the hub of the pulley under the drive belt or at the hub of the pulley on the motor. (See other solutions detailed above.)

### WASHER FILLS SLOWLY

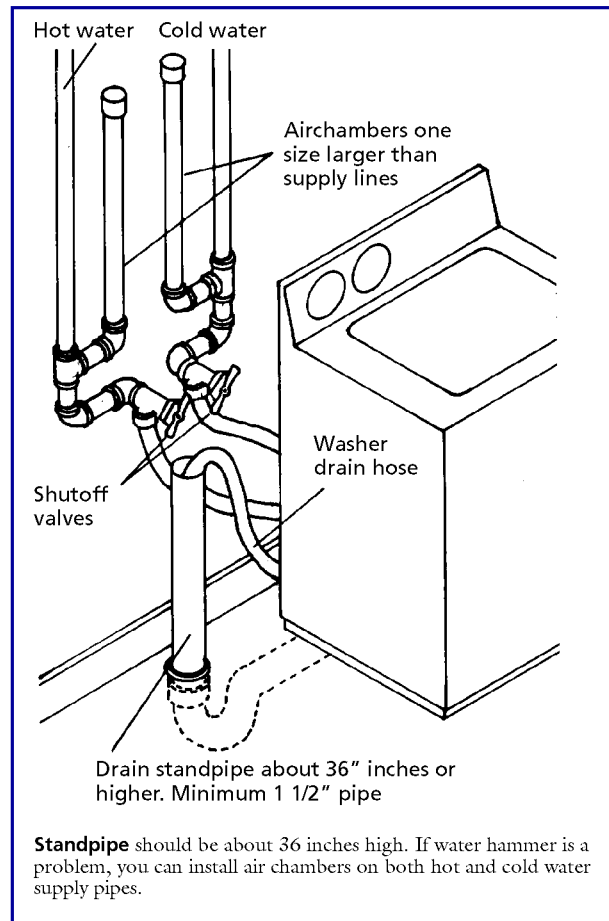
This could be one of two problems:

- 🏠 The water faucets to which the machine is connected are not turned fully on. Or, it could be the water pressure in your area is not up to par. Check the water utility company if you suspect that this could be the problem.
- 🏠 The inlet screens in the hoses connecting the machine to the water faucets are blocked with sediment. Some machines have two sets of screens: at the faucets and at the inlet valves.

### WRONG WATER TEMPERATURE

First, make sure that the water is turned on fully at the faucet connections. Then, make sure the water is hot (or cold) coming from a kitchen or lavatory tap (just in case the water heater is not working properly).

If the water supply to the machine is okay, flip the water selector to "hot." If there is no water coming into the machine, flip the selector to "warm." If the machine receives only cold water, the hot water valve probably is defective. This is a job for a pro to check and replace.



### Continuing Water Flow

Chances are the plunger in the water valve is stuck open. First, turn off the electricity to the washer. If the water stops, the problem is an electrical one. If the water keeps running, the plunger is definitely stuck open.

Try turning off both hot and cold water to the machine. Then turn both back on quickly. A small jolt may unstick the valve. If not, the valve will have to be removed, (see illustration) and the screens, diaphragm, and plungers cleaned and/or replaced. This is a job that you can do. Turn off the power to the machine and turn off the water at the faucets. Then remove the inlet hoses at the water inlet valves and remove the water inlet valve. The component parts on most washers are simple to clean and replace.

### Washer Snags Clothing

Try reducing the size of the wash. A heavy load can cause tearing.

Check the smoothness of the agitator and make sure a "fin" hasn't cracked or broken off the unit. The basket surface could be rough, which can cause tearing. Replace the part in either case.

#### Also:

- 🏠 Reduce the amount of bleach used in the wash. Sometimes bleach "eats" holes in clothes—especially white clothes.
- 🏠 Make sure garment hooks and zippers are fully closed.
- 🏠 Make sure the water level in the basket is at the right height. A low water level can cause tearing—especially the rinse cycle.