

TECHNICAL FLASH

Department 731A Toronto

T.F. 26-22 October 28, 1981

SERVICE INFORMATION

KENMORE WASHER SPIN DRYER



MODEL C260-21501

SERVICE INSTRUCTIONS

TWIN TUB WASHERS MODEL C260 21501

I. GENERAL

This is a twin tub, spin drying washer with a one-piece polypropolene tub, and a one-piece outer shell.

It features an electric brake on the spin motor automatically controlled by the spin lid and a "pinch" valve to control the drain water from the wash tub only.

Servicing is made through the rear access panel or open bottom.

Capacity in wash tub - 10 gallons.

Rating - 120 volts A.C., 60 cycles, 13 amperes.

This machine is provided with a three-prong plug for grounding purposes. The machine <u>must</u> be grounded.

A static ground wire is connected between the spin tub bearing and ground terminal to discharge the static off the spin can.

II. OPERATION

The timer controls the wash time and is the on-off switch for the machine. With the timer control knob in the "wash" area, the pulsator will operate, and the spinner will operate with the spin lid closed. The open and close of the spin lid is the on-off for the spinner. With the timer control knob in the "drain" area, the pulsator will not operate but the spinner will operate with the spin lid closed.

With the timer control knob in the "off" position, neither the pulsator or spinner will operate.

When the spinner is in operation, the pump is also operating. The pump control knob opens and closes the "pinch" valve on the pump to the wash tub only. The spin tub is drained by the pump whenever the spin motor is running.

III. TIMER

A. Testing

The timer can be tested in the machine.

- 1. Disconnect all wires from the timer terminals. Refer to the wiring diagram.
- 2. With the timer control knob in the "wash" area, test between terminals A & B (wash motor circuit) and A & C (spin motor circuit). Circuit should be complete.
- 3. With the timer control knob in the "drain" area, test between terminals A & C. Circuit should be complete.
- 4. The timer motor can be tested with an ohm meter to the clock terminals.
 - a. A resistance reading would indicate a good timer.
 - b. A complete circuit or no circuit would indicate a defective timer motor.

B. Replacement

- 1. Remove all wiring from timer.
- 2. Remove retainer from control shaft and slide control shaft off.
- 3. Remove four screws securing timer bracket to outer shell and remove timer and bracket.
- 4. Remove two screws securing timer bracket and skirt to timer.

IV. SPINNER LID SWITCH

A. General

The lid switch is secured to the upper left hand corner of the shell and is operated by a rod connected to the spin lid hinge. The rod actuates the lid switch when the spin lid is closed. This switch also controls the circuit for the electric brake.

- 1. The spin lid switch controls the electric brake circuit. If the electric brake of the spin motor does not operate, yet the spin motor runs, the probable cause is due to a defective lid switch.
- 2. The spin lid switch should always be tested for correct operation when a spinner motor is overheating.

B. Replacement

- 1. Open the spin lid which will move the actuator rod out of the way.
- 2. Remove the three screws which secure the switch bracket to the shell and lift out the switch, bracket, spring and washers.
- 3. After the new switch is installed, adjust the bracket to close the switch when the spin lid is approximately l" to close.

V. PULSATOR AND HOUSING (REFER TO FIG. 1)

A. General

The housing contains a bearing for the pulsator shaft and a rubber lip seal to prevent water leakage. A water leak in the area of the pulsator will indicate a worn bearing in the housing. Always replace both the housing and pulsator if the bearing is worn as then the shaft of the pulsator is also worn. A scored or worn pulsator shaft will not hold a new bearing.

The pulsator shaft is threaded (L.H.) on the end for installation in the pulley. The washer between the pulley and housing prevents end play. The pulsator must be snug against the housing. Excessive end play will allow clothing to tangle behind the pulsator.

B. Replacement

- 1. Remove the rear access panel.
- 2. Remove pulsator belt.
- 3. Grasp the pulsator and pulley and turn clockwise to remove pulley.

- 4. Remove the nut from the housing. If the housing turns, grasp the housing with vise grips or channel lock pliers.
- 5. Pull the cone off the housing.
- 6. Push the housing out into the tub.
- 7. Check the grommet and replace if worn or deteriorated.
- 8. Do not overtighten nut on housing.
- 9. Check the disc for wear from the pulsator and if worn, replace.
- 10. When installing the pulsator, apply a small amount of grease to the pulsator shaft so as to prevent damage to the lip seal in the housing.

VI. SPIN PULLEY

The spin pulley rests on a rubber mount fastened to the frame. A bearing is located inside the pulley and on the rubber mount.

Spinner alignment is adjusted by moving the rubber mount on the frame.

- A. Replacement Refer to Fig. 2.
 - 1. Remove the rim over spin tub.
 - 2. Remove spin belt from pulley. The rubber mount will flex to allow slack in the belt.
 - 3. Remove the bolt in the spin pulley which holds the spin can shaft.
 - 4. Slide the spin can out and catch the washer between resilient bearing and spin pulley.
 - a. The resilient bearing is a rubber mount with a bearing for the spin can shaft. This bearing should not be lubricated. The resilient bearing is secured in place by a wire ring lock under the spin tub.

A noisy spinner can be caused by a bearing in the spin pulley or the resilient bearing.

- b. A face seal is mounted in the resilient bearing and the counterface is mounted on the spin can shaft. This seal is to prevent water leakage. If the face seal is replaced, the counterface must be replaced also.
- 5. Remove the two bolts which secure the rubber mount to the frame and remove the spin pulley assembly.
- 6. To replace the rubber mount assembly, remove the three screws from the retaining ring and the rubber mount with bearing can be removed from the pulley.
- 7. In replacement, the bolt in the spin pulley which secures the spin can shaft must be tight. If not, the spin can shaft will revolve in the spin pulley causing noise and wear.

VII. SPINNER ALIGNMENT ADJUSTMENT

- 1. Block machine up off the floor, yet still level.
- 2. Remove the spin belt.
- 3. Loosen the bolts securing the rubber mount to the frame so the rubber mount can be moved yet snug enough so that it will stay in the position placed.
- 4. Move the rubber mount so that the top of the spin can is $\frac{1}{4}$ " off center toward the rear of the machine.
- 5. Tighten the bolts to the frame and install the spin belt. The proper belt tension will draw the spin can back to center.

If the spin can does not go back to center, the belt is too loose.

If the spin can goes too far out of center, the belt is too tight.

Adjust spin motor for proper belt tension - Paragraph VIII.

VIII. SPIN MOTOR (REFER TO FIG. 3)

A. General

The spin motor drives the spinner and pump. It also is the electric brake for the spin can and operated through the lid switch.

The motor is mounted in slotted holes in the frame. In replacement, slide the motor away from the spin pulley until spin belt is only snug. Do not overtighten the spin belt or the spin can may be thrown out of alignment. Refer to Paragraph VII on alignment adjustment.

B. Testing

- 1. A resistance test through the motor should read 6+ ohms.
- 2. A wattage reading of 300 watts with no load in the spin can will indicate a good motor.

C. Disassembly

- 1. Remove the motor from the frame.
- 2. Remove hood.
- 3. Remove carbon brushes and check.
- 4. To remove the armature, remove the four screws which secure the support and end plate to the casing and lift off the casing.
- 5. Grasp the armature and turn the pulley counterclockwise off the armature shaft.
- 6. Check the fan and lower bearing. The lower bearing is part of the end plate and must be lubricated with grease.
- 7. The field coil is secured in the motor casing by two screws.
- 8. Check the upper bearing for wear. The bearing is secured to the casing with rivets. A new bearing can be secured with blind rivets.

IX. WASH MOTOR

A. General

The wash motor is bolted to the frame on rubber mounts.

The motor is replaced as a unit, although the rubber mounts and pulley with fan are available separately.

B. Testing

- 1. The motor can be hot tested by connecting a jumper test cord to terminals B and common on the timer.
- 2. A resistance reading of 1+ will indicate a good motor.
- 3. A wattage reading of 300 with no load will indicate a good motor.

X. PUMP

A. General

The lower body of the pump consists of an impeller mounted in a back plate, driven by a pulley.

The upper body of the pump is secured to the lower body by clips and is sealed with a rubber O-ring. The upper body also has a bracket on which is mounted the pinch valve.

The pinch valve controls the water from the wash tub. The pump control knob must be turned so as to snap the pinch valve closed in a lock position.

B. Servicing the Pump

- 1. Remove the pump control shaft.
- 2. Remove the drain hose and spin tub hose from the pump. Fig. 5.
- 3. Remove the wash tub hose from the hose coupling of the pinch valve. When reassembling, use a hose cement on this connection.
- 4. Remove the pump belt.

- 5. Remove the two screws which secure the pump bracket to the shell and the bolt securing the pump bracket to the frame. Lift out the pump assembly.
- 6. A view through the spin tub hose connection of the pump will show any clothing in the pump from the spin tub.
- 7. Remove the three spring clips to separate the upper body from the back plate.
- 8. Check for free movement of the impeller. If the bearing is worn, remove the pulley from the impeller shaft and replace both the back plate and impeller. When replacing the pulley, push the impeller down to reduce end play to a minimum.
- 9. If leakage occurs through the pinch valve, replace the pinch valve (Fig. 6) and check for wear and alignment of the toggle crank and valve spring.

XIII. TROUBLE SHOOTING

- A. Machine Won't Run
 - 1. Timer
 - 2. Loose Connection
- B. Pulsator Won't Turn
 - 1. Timer
 - 2. Wash Motor
 - 3. Belt
 - 4. Frozen pulsator bearing
- C. Spinner Won't Turn
 - 1. Timer
 - 2. Spin Motor
 - 3. Belt

- 4. Spin lid switch test and adjust
- 5. Loose bolt on spin pulley
- D. Noisy Spinner
 - 1. Spin pulley bearing
 - 2. Resilient bearing
 - 3. Loose bolt on spin pulley
 - 4. Spinner out of balance
 - 5. Spin motor bearing
- E. Water Won't Pump Out
 - 1. Belt
 - 2. Loose pump pulley
 - 3. Clogged drain
 - 4. Clogged pump
 - 5. Broken impeller
 - 6. Pump control shaft disconnected
- F. Water Leaks From Tub to Tub
 - 1. Pinch valve not closing on pump
 - 2. Pump control shaft not operating to lock position
- G. Leaking Water
 - 1. Loose hose connections
 - 2. Worn pulsator bearing
 - 3. Faulty pump assembly
- H. Machine Won't Shut Off
 - 1. Timer
 - 2. Motor grounded into frame

- I. No Electric Brake
 - 1. Defective spin lid switch
 - 2. Loose wiring connections
- J. Motor Over Heats or Burning
 - 1. Defective motor part
 - 2. Defective lid switch

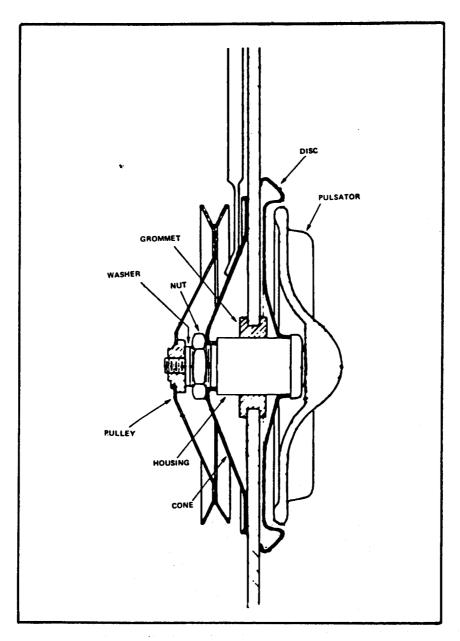


FIGURE 1

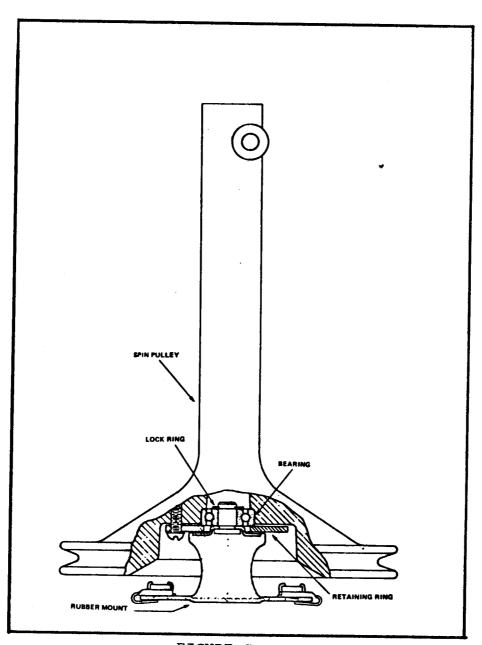


FIGURE 2

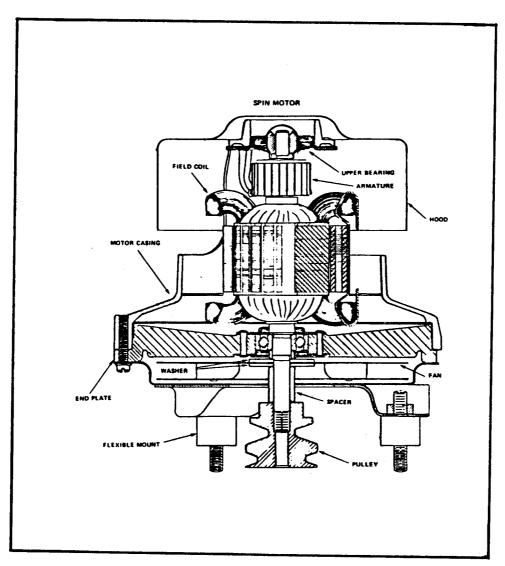


FIGURE 3

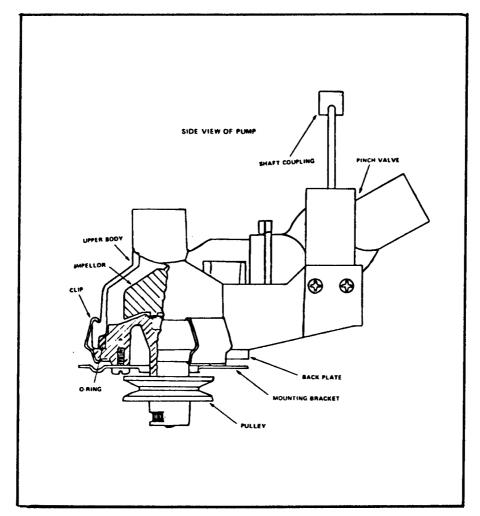


FIGURE 4

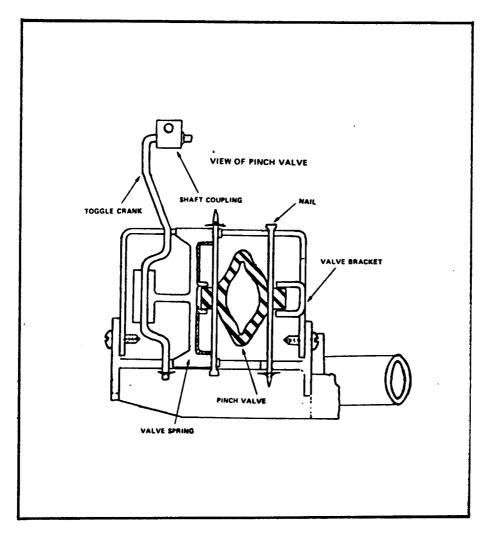


FIGURE 5

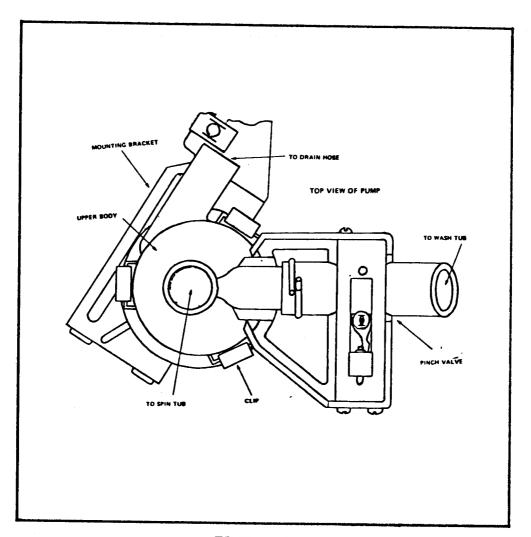
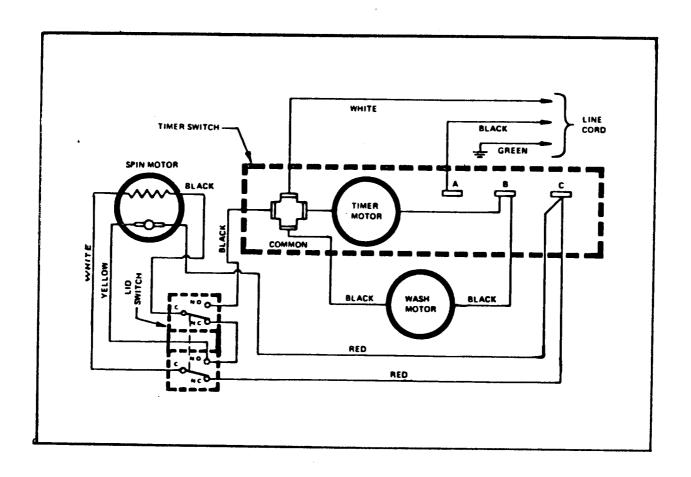


FIGURE 6

WIRING DIAGRAM



ENGINEERING PROFILE

CSA RATING

120 Volt, 60 Hz, 12.0

DIMENSIONS AND WEIGHTS

- * Overall Dimension 29 x 16 x 31 in. (74 x 41 x 79 cm)
- * Model Weight 90 lb (198 kg)
- * Shipping Weight 100 lb (220 kg)

FEATURES

- * 4 Wash Settings
 - heavy soil
 - regular
 - permanent press
- * 4 min. wash time
- * 8 foot power cord 18 gauge
- * 3 foot drain hose
- * 3 foot fill hose
- * spin lid safety switch
- * 4 casters
- * 650 RPM pulsator speed
- * 2300 RPM spin can
- * wash & spin or wash only or spin only

Kenmore FULL ONE YEAR WARRANTY ON WASHER/SPIN DRYER

This warranty covers Kenmore Washer/Spin Dryers sold and operated in Canada only and shall not apply if the Washer/Spin Dryer is used for other than domestic purposes.

For one year we will repair free of charge defects in material or workmanship which appear in this Washer/Spin Dryer.

Normal Responsibility of the User

The following items since they are not manufacturing defects are not included in the warranty but are the responsibility of the user.

- 1. Damage resulting from accidental or commercial usage.
- Service required because of defective or inadequate fusing or house wiring.
- 3. Service required as a result of fire, flood, or acts of God.

If you require any service under this warranty contact your nearest Sears Store or Catalogue Sales Office.

SIMPSONS-SEARS LIMITED, TORONTO

SERIAL NUMBER

The serial numbers of all models C260-21501 produced will be five (5) digit numbers, commencing with 00001 for the first production model.

DATE OF MANUFACTURE CODE

The Date Code, indicating the day of manufacture, will be a five (5) digit number, shown as an extension to the serial number.

The code will indicate;

FIRST DIGIT = Last Digit of Year

SECOND & THRID = Month

FOURTH & FIFTH = Day

Example

Serial Number 0000111104

The first production model of C260-21501, manufactured in 1981, in the month of November on the fourth day.

PARTS

Refer to current microfiche card for the latest parts list.

Order parts from your Regional Parts Distribution Centre.

Ref. No.	Part No.	Description	(1)-1	1_(1)
1 2 3 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29	43576007 168608 160785 47318002 37193017 15856 44765021 45312010 34737 36616 42932001 18756 12017 34511 31732003 160817 160783	Spin Motor Complete Screw Lock Washer Motor Hood Motor Brush Motor Casing Bearing (Use Blind Rivet! Armature Field Coil Baffle Screw End Plate Spacer Washer Fan Spacer Motor Pulley Support Wire Holdel Screw Flexible Mount Lock Washer Nut Hex Nut Terminal Insulating Pod		
Ref.	WAS	SH MOTOR ASSEMBLY Description		
1 2 3 NOT 1 2 3 4 5	716818 719016 14154	Flexible Mount (4 Req.) Fan Pulley Set Screw (Fan Pulley) olt (Stretch) 718848 Flexible Mount (2 Req.) Fan Pulley Set Screw (Fan Pulley) Baffle Plate Screw (Baffle Plata - 4 Req.)	(2) (1)	
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PROCEDURE FOR REMOVING CONTROL KNOBS

- 1. Remove rear inspection panel.
- 2. Disconnect control shaft.
- 3. Remove retaining ring and washer.
- 4. Lift out control knob.

