# 131D1190P40

# FLOAT SWITCH

The flood control system consist of a switch in series with the water valve. The weight of the float holds the switch contacts closed. If the water level exceeds a normal fill, the float rises and opens switch to cut off power to water valve.

NOTE: Dishwasher will not fill if float is not in place. This system offers protection against electrical failures, such as timer stalls, solenoid malfunction, etc.

# SERVICING WATER VALVE

- 1. Shut off water and disconnect plumbing from water valve inlet and rubber hose from valve outlet.
- Remove water valve from dishwasher.
  Remove screen and clean.
  - Remove screen and clean. NOTE: Remainder of valve may be disassembled and cleaned if necessary. If flow washer is removed, the three pads must face "down stream" (direction water flows into dishwasher).

The screen and gasket are the only parts available as replacements.

### **SUMP**

Rust in sump area may be repaired by using Sump Repari Kit WD35X170. If the rust has progressed more than 1/8 inch along tub bottom, epoxy patch repair is required in addition to kit. Instructions are included with kit.

The screen and gasket are the only parts available as replacements.

## **DETERGENT CUP**

The cup must open and close freely. If cup opens sluggishly, make sure the shaft is properly seated in housing. If cup appears to bind, use a pen knife and shave that area to relieve interference.



## MOTOR PUMP MECHANISM

The motor is a shaded pole type. It is protected against heat and high current by a thermal overload protector nestled in the coil winding. The overload is not replaceable as a separate part.

MOTOR STALLED - HUMS: Attempt to turn motor shaft by turning fan blade. If motor can not be turned, something may be blocking spring cutter. To retrieve this item, remove sump cover from inside dishwasher. Reach down inside sump to locate and remove this item. Be very careful-there may be broken glass or sharp objects lodged in this area. If motor shaft cannot relieved, remove mechanism. MOTOR DOES NOT RUN - NO HUM: The motor may be direct tested. Disconnect at plug - check with ohmmeter, the resistance reading should be 2 ohms, or check with a 115 volt external source. If motor checks "good", the trouble is probably in wire harness or timer control. See Schematic page for diagnostic procedure.



## SERVICING PUMP SOLENOID

2.

3

1. Check continuity of solenoid coil. Resistance is 40 ohms.

Check armature for binding. The armature should "bottom" before gate is completely closed. Mounting plate must not be bent. When replacing solenoid coil be sure both springs are in place.

## UNICOUPLE (Convertible Models)

Leaks around unicouple to faucet connection can usually be corrected by installing WD35X141 Repair Kit.



IMPORTANT SAF THIS INFORMATION IS IN INDIVIDUALS POSSESSIN GROUNDS OF ELECTRICA MECHANICAL EXPERIENC REPAIR A MAJOR APPLIA PERSONAL INJURY AND THE MANUFACTURER OR RESPONSIBLE FOR THE I THIS INFORMATION, NOR LIABILITY IN CONNECT

DISCONNECT POWER B IMPORTANT - RECONNE( DEVICES

ALL PARTS OF THIS APPLIA DUCTING ELECTRICAL CURR GROUNDING WIRES, SCREWS OR WASHERS USED TO C GROUND ARE REMOVED FO BE RETURNED TO THEIR O PROPERLY FASTENED.

# **REPLACEMENT PARTS**

## ELECTRICAL PARTS

Timer					
Pushbutton Switch					
Extender Switch					
Heater					
Interlock Switch					
Float Switch & Brad	ck	e	t		

### **MOTOR - PUMP MECHANIS**

## WASH SYSTEM

Spray Arm..... Power Tower Kit..... Water Seal & Nut Kit.....

### DOOR ASSEMBLY

Latch												
Door	Ga	as	k	et								
Deterg	ge	nt	: (	Cı	11	)	A	SI	n			14 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

### WATER SYSTEM

Water Valve (SD Built - In) . Water Valve (SC Mobile)... Complete Unicouple & Hose Unicouple Repair Kit (Mobil

## **HEATING ELEMENT**

When complaint is "no

- 1. The energy saver switc
- ON" to have a heated c 2. Remove wire leads fro
- tinuity of heater. Re

# RINSE INJECTOR BI-META

DO NOT DIRECT TES
 Remove wire leads and

Pub. No. 31-3635

### ETY NOTICE TENDED FOR USE BY G ADEQUATE BACK-L, ELECTRONIC AND E. ANY ATTEMPT TO NCE MAY RESULT IN PROPERTY DAMAGE. SELLER CANNOT BE NTERPRETATION OF CAN IT ASSUME ANY ION WITH ITS USE.

FORE SERVICING

NCE CAPABLE OF CON-INT ARE GROUNDED. IF , STRAPS, CLIPS, NUTS DMPLETE A PATH TO & SERVICE, THEY MUST RIGINAL POSITION AND

# SPRAY ARM – WASH SYSTEM

The spray arm must rotate freely. If it binds, remove power tower (left hand threads) and lift off spray arm. Remove screw and textoilite washer holding hub and bearings. Lift off hub and inspect bearings to insure they are seated in keyed slots. Careful, DO NOT drop lower bearing in pump.

Inspect teflon seal, it should extend inside circumference of hub. If it is cut, torn, shows signs of abrasion, or damaged in any way, replace it.

Inspect spray arm for seeds, bits of china, etc. that may be clogging the holes – also for slits or cracks along sides of arm.

Reassemble and test operation.

The spray arm speed should be between 10 and 32 RPM.



### LATCH MECHANISM

.... WD13X6

....WD8X202

heat" check following: In must be set to "HEAT ry. In heater and check con-

istance should be 20

#### L T.

test for continuity only.



The latch strike may be adjusted by loosening two

mounting screws and sliding strike toward rear of

tub to increase latching force and reduce the

possiblity of leaks around door gasket. If latch

closes too hard - slide strike "out" slightly. Keep

## WASHABILITY

When washability is a complaint, check the following:

HOT WATER – The water temperature must be between  $140^{\circ}$  F -  $150^{\circ}$  F. To help insure an ample supply of hot water, dishwasher should not be used while other hot water needs are heavy – such as clothes washing and bath time. See Schematic for fill quantities.

**PROPER LOADING** — Place items so soiled surfaces face the spray of water and so water will drain off for best drying. Becareful not to block spray arm, wash tower, or detergent cup operation. Consult Use & Care booklet for details.

**DETERGENTS** — Use fresh dry DISHWASHER DETERGENT only. Old detergent that is caked or lumpy may have lost its strength.

Use the proper amount of detergent for the particular water harness and soil conditions. Follow instructions in Use and Care book and markings in detergent cup. Some moisture in the cup is normal. Detergent must not be soaking wet and oozing out and down inner door panel. See section on Detergent Cup if cup is leaking.

HOUSE DRAIN PLUMBING – Check for blocked or partially blocked drain line and air gap. All water should be evacuated and pump-out diverter valve released well before the next fill begins, otherwise this water will be pumped out also.

The drain line should be free of kinks and sharp turns. The dishwasher should not installed more than 10 feet from sink for proper drainage.

WATER SPOTS – Water spots can usually be controlled by use of a rinse agent solution. If the dishwasher is equipped with a rinse agent dispenser, makesure it is full. If dishwasher has no dispenser, solid rinse agent, available at most supermarkets, may be used.

SPOTS AND FILMS – (CALCIUM DEPOSITS) Calcium tripolyphosphate films are normally caused by (1) Not using enough detergent for customer's particular water condition. (2) A leaking detergent cup. See section on Detergent Cups if cup is leaking. To remove the calcium build-up on glasses and dishes, use a citric acid wash. Citric acid crystals WD35X151 are stocked for this purpose. IMPORTANT – Remove all metal items – utensils, etc. from dishwasher and follow instructions included with kit.

ETCHING — Etching is the removal of metal ions from soft glass. Once the ions are removed they cannot be replaced or original appearance restored. When the customer has a water softener or a naturally soft water supply, the amount of detergent should be greatly reduced.

TEFON SEAL – The teflon seal under the spray arm hub must be in place and free of cracks, tears, etc. Careful, DO NOT drop lower bearing in pump as hub is removed.

FLOAT SWITCH – If faulty, water valve cannot receive power. See section on float system.

WATER VALVE – Check valve for intermittent operation. It may be direct tested. Allow valve coil to heat normally if it opens prematurely, replace valve.

**PRESSURE TEST** — Pressure of the water distribution system may be checked by using a test gauge — Robinair No. 14611. Instructions for use and trouble guide are included with gauge.

## ELECTRICAL COMPONENT CHECKS

CAUTION: POWER MUST BE DISCONNECTED BEFORE ATTEMPTING TO MEASURE ELEC-TRICAL RESISTANCE. Actual measurement may show  $\pm$  10% variation from the resistance values given below.

# MOTOR CHECK

Turn dishwasher on and attempt to run motor. If motor does not run - No hum Check:

- 1. House fuse or circuit breaker.
- 2. Door switch.
- 3. Timer plug and harness connections at timer, be sure they are fully seatedespecially BLACK to 10M and Blue to 6M.
- 4. Remove Power check motor winding resistance should be  $2\Omega$ .

If motor does not run - hums Check:

- 1. Mechanical lock-up or frozen bearings.
- 2. Pump seal stuck.
- 3. Items in sump blocking impeller or cutter.

# TIMER CONTROL CHECK

PRESS NORMAL SOIL button a pushbutton switch.

- 1. Close door and start dishwasher. Turn control dial slowly through cycle. Listen for operation of water valve, pump solonoid, pump motor.
- 2. If a component fails to operate, RE-MOVE POWER from dishwasher and check continuity of component, if OK, restore power and check to see if voltage is being delivered to component from timer control.
- 3. Start dishwasher. Check control dial to see if it rotates. If it doesn't, REMOVE POWER and check continuity of timer drive motor.

### PUSHBUTTON SWITCH CHECK

REMOVE POWER from dishwasher. Remove all wire leads from switch terminals before making check. Use ohmeter, check continuity between terminals.

	TERMINALS	SWITCH
PRESS NORMAL SOIL	YRD 3-4 PUR	CLOSED

# PRESS NORMAL SOIL YRD 3-4 PUR OPEN ENERGY SAVER

### HEATER CHECK

1. REMOVE POWER from dishwasher. Remove wire leads from heater terminals and check continuity. Resistance reading should be  $20 \Omega$ . CIRCUIT DIAGRAM MODE IS SHOWN AT ONE (1) MINUTE WITH NORMAL WASH CYCLE SELECTED.

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WIRING DIAGRAM SYMBOLS INTERNAL CONNECTION 13 NUMBERS ONLY 14 -0 INDICATE PUSHBUTTON SWITCH 2M 2T NUMBERS AND LETTERS INDICATE TIMER SWITCH MAXIMUM CURRENT LEAKAGE 0.75 MA MAX. GROUND PATH RESISTANCE OI OHM PUSHBUTTON SWITCH 3-4 O= OPEN X= CLOSED NORMAL SOIL X



CIRCUIT DIAGRAM MODE \_ \_ VENT CLOSE

NORMAL SO

0

SOIL

DETERGENT TRIP









## COLOR CODE ABBREVIATION

COLOR	ABBREVIATION	COLOR	ABBREVIATION
BLACK	вх	L BL/A	AX
BROWN	СХ	VT/PR	VX
RED	RX	GY/SR	SX
ORANGE	ОХ	WHITE	WX
YELLOW	YX	TAN	ТХ
GRN	GX	PINK	PX
DKBL	NX.		

THE "X" INDICATES ONE SOLID COLOR - NO TRACER. WIRES WITH TRACER SHOW BOTH COLORS. EXAMPLE - WR IS WHITE WITH RED TRACER.