



**WHIRLPOOL AUSTRALASIA**  
**CONSUMER SERVICES**

**SERVICE MANUAL**  
**TOP LOAD WASHING MACHINE**  
**Model 6ALBR5233JQ0**

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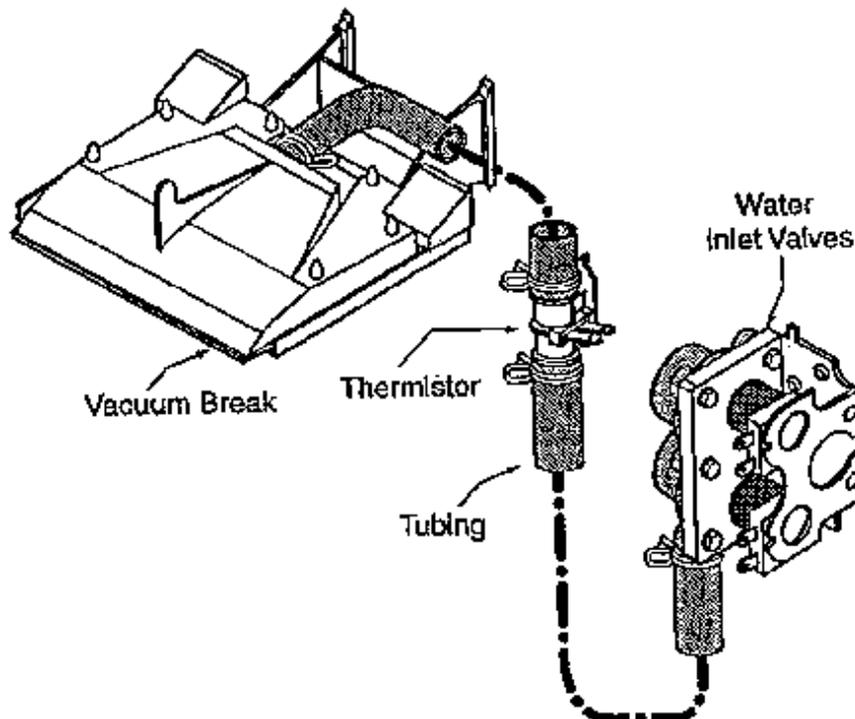
This documentation is intended only for qualified technicians who possess the required qualifications and are aware of the regulatory requirements applicable to servicing electrical appliances.

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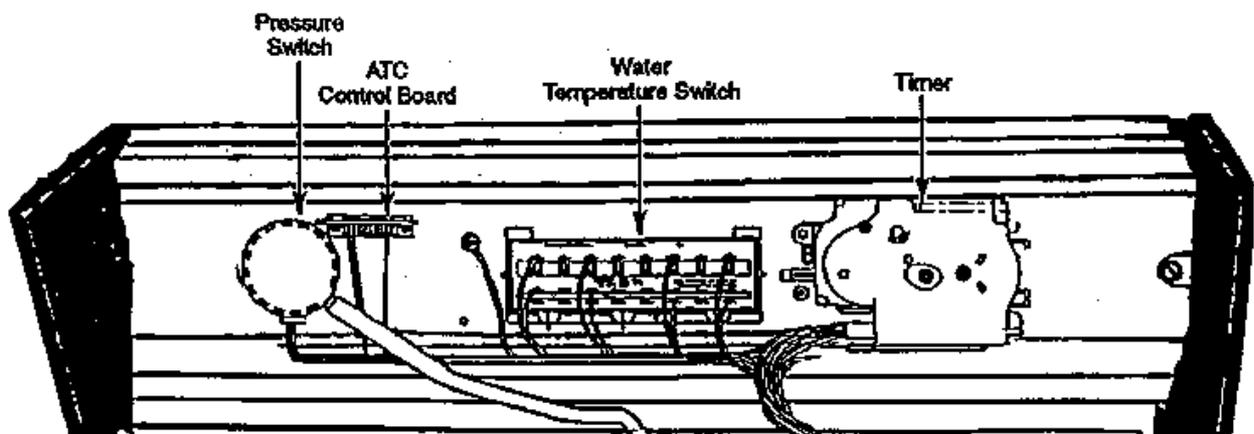
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**AUTOMATIC (ELECTRONIC) TEMPERATURE CONTROL - ATC (ETC)**

The ATC system controls the incoming water supply to provide an accurate setting for the water temperature in the washing machine tub. The ATC system uses a thermistor located in the water supply tubing between the water inlet valves and the vacuum break (See Figure 1). The thermistor senses the incoming water temperature and provides input to the ATC control board.

**Figure 1**

The ATC control board uses the input from the thermistor to cycle the hot and cold water solenoids on the water inlet valves to achieve the desired water temperature. A triac located on the control board, cycles the hot and cold water solenoids through the water temperature switch (See Figure 2).

**Figure 2**

The ATC system will provide  $24^{\circ}\text{C} \pm 3^{\circ}\text{C}$  For the *COLD* setting and  $38^{\circ}\text{C} \pm 5^{\circ}\text{C}$  For the *WARM* setting.

With the temperature selector switch set to *COLD*, the cold water solenoid energised for 100% of the time and the hot water solenoid is cycled on and off (See Figure 3).

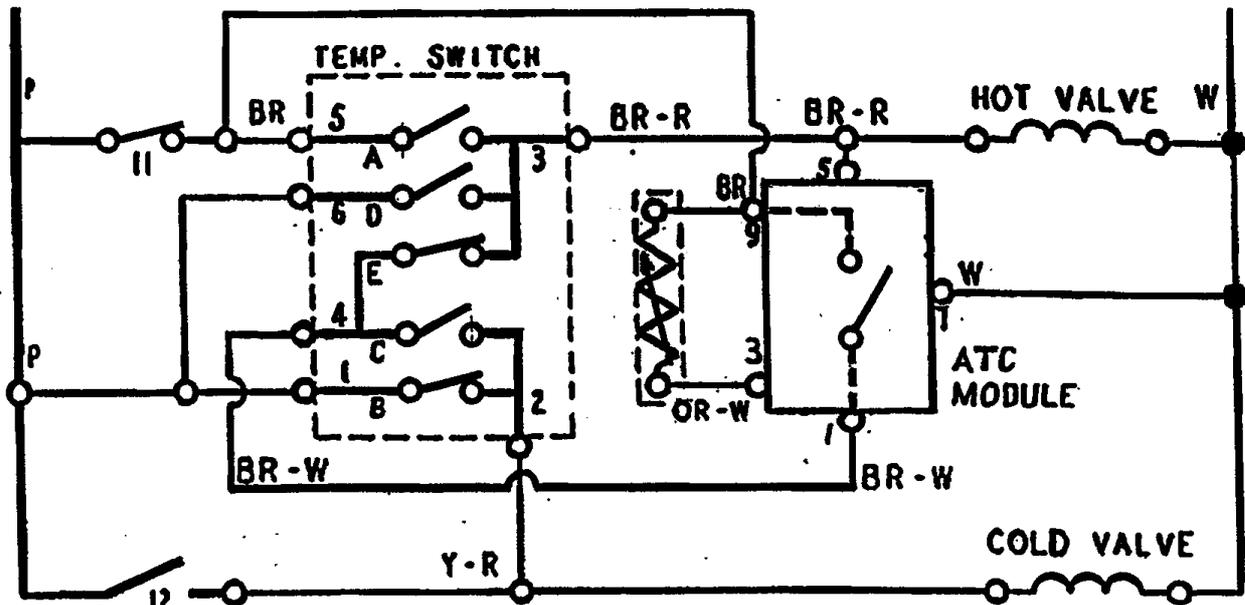


Figure 3

With the temperature selector switch set to *WARM*, the hot water solenoid energised for 100% of the time and the cold water solenoid is cycled on and off (See Figure 4).

**Note :** During the warm water fill, both solenoids are energised for 55 seconds. After 55 seconds, the hot water inlet valve stays on and the cold water inlet valve cycles.

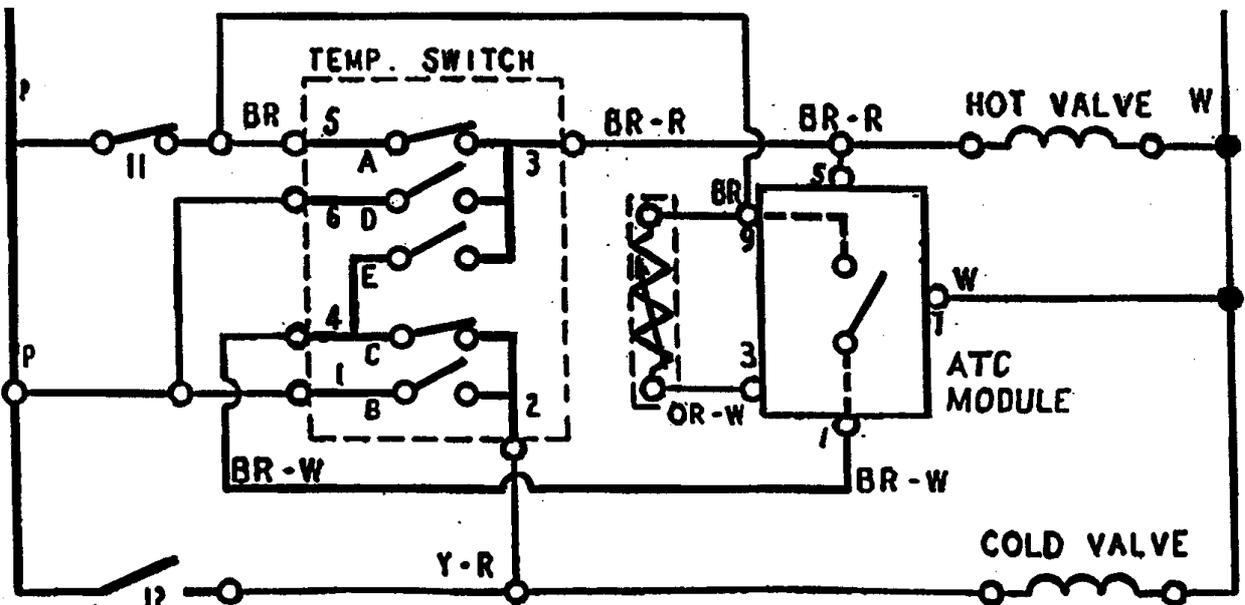
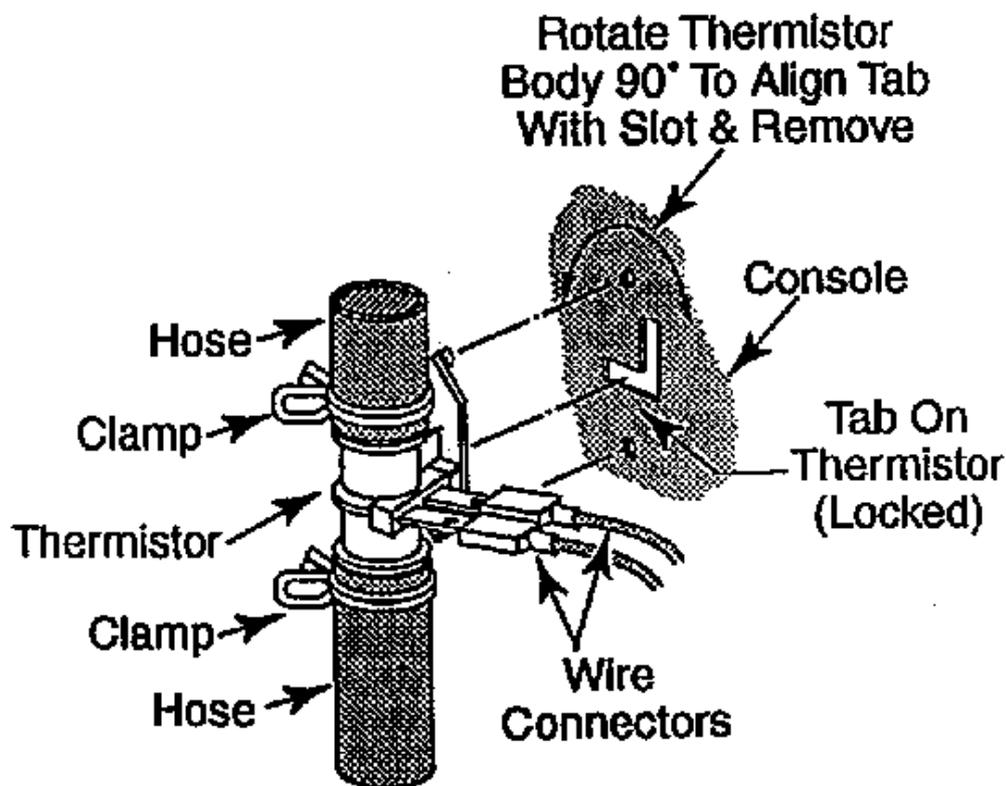


Figure 4

The ATC is only active during the wash fill, it has no effect on the rinse water temperature.

## SERVICING THE ATC COMPONENTS

1. To remove the ATC Control Board (See Figure 2 on Page 4), grip the sides of the board and pull it straight out of its connector.
2. To remove the thermistor (See Figure 5) :
  - I. Disconnect the two wire connectors from the thermistor terminals.
  - II. Remove the two clamps from the hoses and pull the hoses off the connectors.
  - III. Pry the pins at the top and bottom of the thermistor out of their console holes and twist the body 90° in either direction. Pull the tab out of the console slot and remove the thermistor.



**Figure 5**

## TESTING AND CHECKING ATC SYSTEM

The following steps test the ATC portion of the system.

### Notes :

1. A properly operating ATC system will provide the following water temperatures in the washer after the machine has filled with water ready for the wash operation :  
Cold Wash :  $24^{\circ}\text{C} \pm 3^{\circ}\text{C}$   
Warm Wash :  $38^{\circ}\text{C} \pm 5^{\circ}\text{C}$
2. The hot wash and all rinse water fills are not controlled by the ATC.
3. On cold wash setting Using gravity feed hot water systems may not allow the wash water to achieve  $24^{\circ}\text{C} \pm 3^{\circ}\text{C}$ .

## TEST PROCEDURE

1. Set the water temperature selector switch to Warm wash / Cold rinse.
2. Set the timer to the start of a wash cycle, start the machine and the tub will begin filling with water.
3. Both the hot and cold inlet valves will operate continuously for approximately 55 seconds. After the 55 seconds the hot water inlet valve should remain energised while the cold water inlet valve will cycle on and off.
4. If the cold water inlet valve is not working properly :
  - Disconnect the machine from the electrical supply.
  - Check the ATC Control Board for proper installation in its connector.
  - Make sure that the harness wires are in their proper location in the connector.
  - Remove the ATC Control Board from its connector.
  - Using an ohmmeter, measure the resistance of the thermistor at connector harness wires 3 (OR-W) and 9 (BR). Compare the reading with the values in the "Thermistor Resistance Chart" (See Page 8).

If the ohmmeter readings are incorrect Remove and replace the thermistor and repeat the test.

### Notes :

- I. **If the hot water temperature is less than 49°C, the cold water inlet valve may turn off and stay off.**
  - II. **If the cold water temperature is above 21°C, the cold water inlet valve will stay on continuously.**
  - III. **If the thermistor is open-circuit, the cold water inlet valve will stay off. If the thermistor is shorted, the cold water inlet valve will stay on continuously.**
5. Set the water temperature selector switch to Cold wash / Cold rinse.
  6. Set the timer to the start of a wash cycle, start the machine and the tub will begin filling with water.
  7. The cold water inlet valve should remain energised while the hot water inlet valve will cycle on and off. **If the cold water temperature is above 18°C, the hot water inlet valve may not operate.**

If the hot water inlet valve is not working properly disconnect the machine from the electrical supply, replace the ATC Control Board and repeat steps 6. & 7.

## Thermistor Resistance Chart

Temperature °C	Resistance kOhms
5	123.1 - 131.7
10	97.0 - 102.0
15	77.0 - 80.4
20	61.4 - 64.4
25	49.6 - 51.2
30	40.0 - 41.0
35	32.0 - 33.5
40	26.0 - 27.6
45	21.5 - 22.5
50	17.4 - 18.4
55	14.7 - 15.7
60	12.0 - 13.0
65	10.2 - 11.2

## WATER LEVEL SWITCH

All new models are being fitted with a new water level switch constructed with a plastic body.

To remove the water level switch :

1. Pull the knob off the switch shaft.
2. Unplug the wiring harness connector from the switch assembly terminals and remove the pressure switch tubing.
3. Depress the tab and rotate the switch 90° and pull it from the console mounting plate.

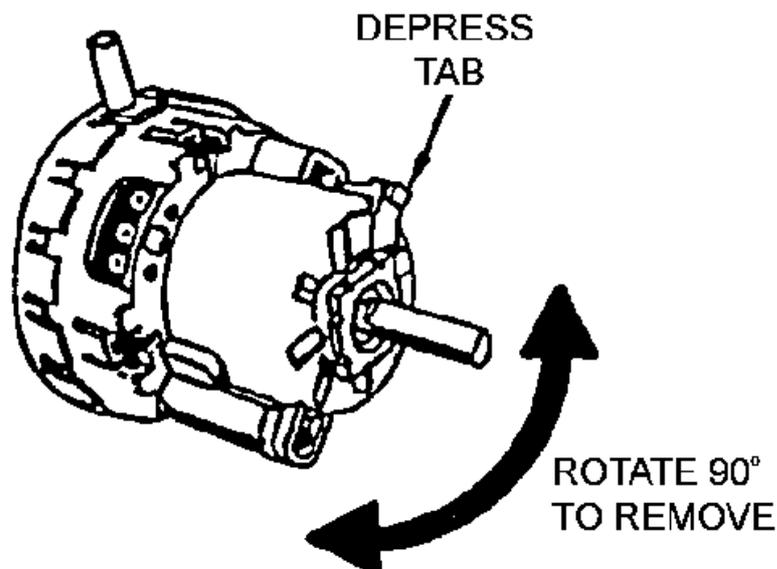
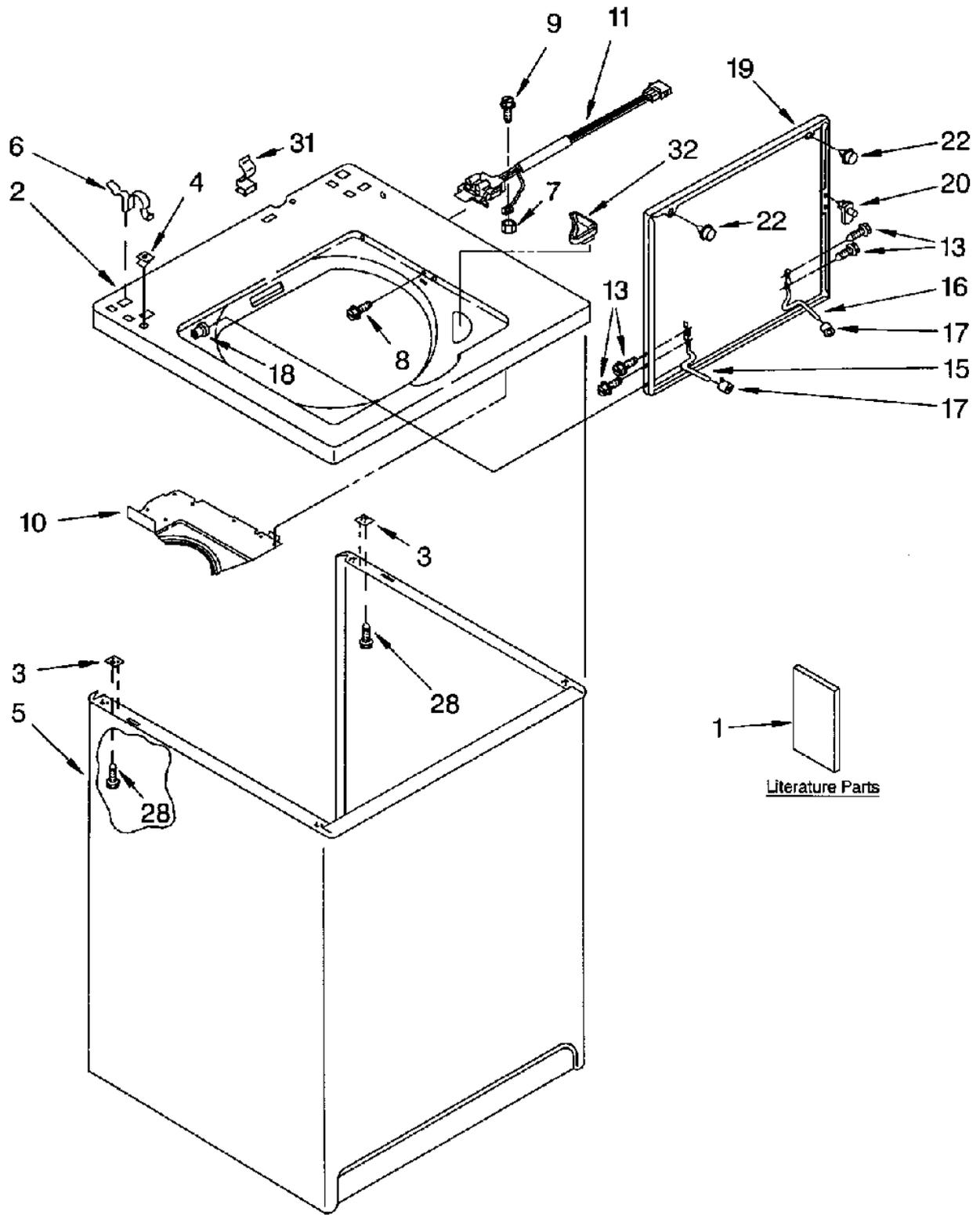


Figure 6

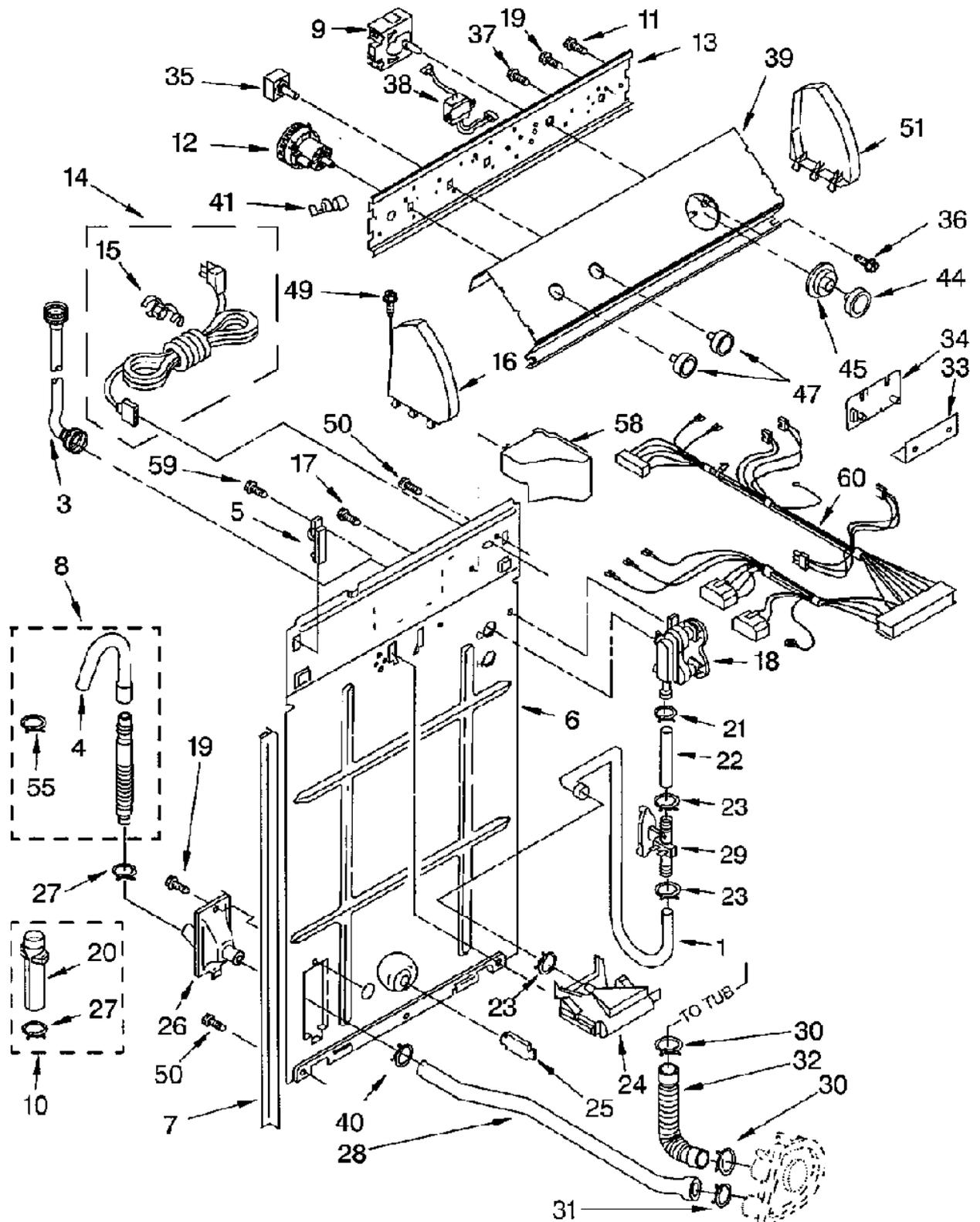
### TOP AND CABINET PARTS



**TOP AND CABINET PARTS**

Item	Part No	Description
1	LIT3948875	Installation Instructions
1	LIT3951076	Use & Care Guide
1	LIT3954088	Wiring Diagram
2	8271408	Top
3	62750	Spacer, Cabinet To Top (4)
4	357213	Nut, Push-In
5	3951171	Cabinet
6	62780	Clip, Top & Cabinet & Rear Panel (2)
7	680762	Nut, Hex
8	3356311	Screw & Washer, Lid Switch (2)
9	3351614	Screw, 10-24 x 3/8
10	3950995	Shield, Lid Switch
11	3950299	Switch, Lid
13	3351355	Screw, Lid Hinge Mounting (4)
15	54584	Hinge, Lid (L.H.)
16	54583	Hinge, Lid (R.H.)
17	19119	Bumper, Lid Hinge
18	21258	Bearing, Lid Hinge (2)
19	3361400	Lid
20	358684	Strike, Lid Switch
22	9724509	Bumper, Lid (2)
28	3390631	Screw, 10-16 x 3/8 (4)
31	90016	Clip, Harness
32	3362952	Dispenser, Bleach

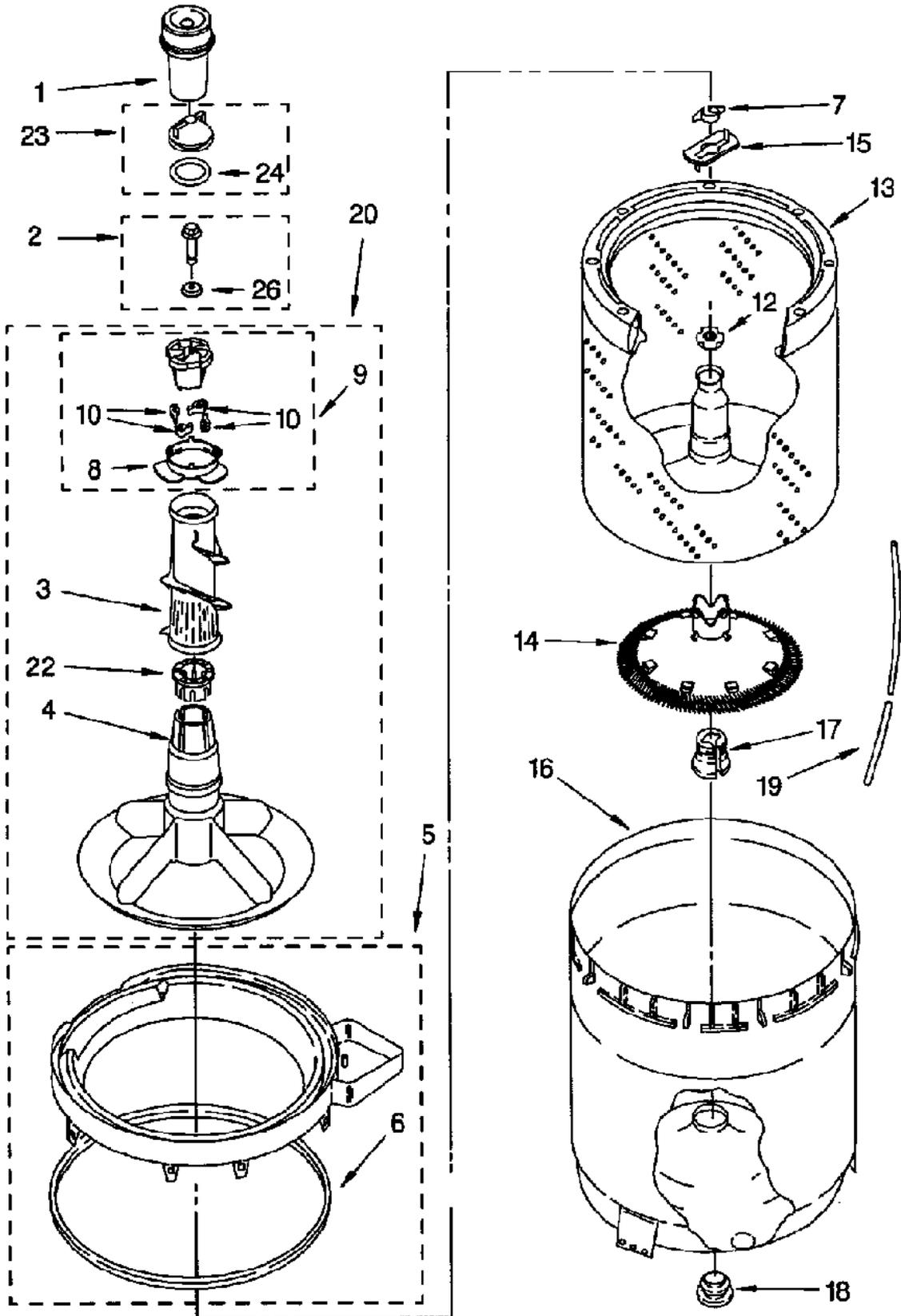
CONTROL AND REAR PANEL PARTS



**CONTROL AND REAR PANEL PARTS**

Item	Part No	Description
1	3363509	Hose, Sensor (Lower)
3	3366916	Hose, Water Inlet (2)
4	3357027	Nozzle-Drain Hose
5	387402	Hinge, Console (2)
6	3357976	Panel, Rear
7	62747	Pad, Rear Panel
8	3951609	Hose, Drain (4 ft.)
8	661577	Hose, Drain (9 ft.) (Not Included)
8	3357090	Extension, Drain Hose (21 Inches.) (Not Included.)
9	3954087	Timer, Control (50 Hz.) (Motor Not A Service Part)
10	285750	Kit - Adaptor (Includes Item 20 and 27)
11	90767	Screw, 8A x 3/8
12	3366848	Switch, Water Level
13	3948814	Bracket, Control
14	8316026	Cord, Power
15	3952821	Strain Relief, Power Cord
16	8271369	Cap, End (L.H.)
17	3351614	Screw
18	3360397	Valve, Water Mixing
19	90864	Screw, 10-24 x 3/8
20	3363920	Adapter - Drain Hose
21	370451	Clamp, Hose
22	3363516	Hose, Sensor (Upper)
23	596669	Clamp, Hose
24	3347034	Break, Vacuum
25	63290	Support, Rear Panel
26	3361809	Connector, Drain Hose
27	3366912	Clamp, Hose
28	3359816	Hose, Pump To Drain Connector
29	3352282	Sensor, Inline
30	616099	Clamp, Hose
31	371507	Clamp, Hose
32	3951449	Hose, Pump To Tub
33	3954595	Shield, ATC
34	3407159	Control, ATC
35	3950351	Switch, Water Temperature
36	3400808	Screw, Timer Mounting
37	3400064	Screw
38	3407160	Transformer
39	8314872	Panel, Console
40	356138	Clamp, Hose
41	357572	Clip, Grounding
44	8271345	Knob, Timer
45	8271351	Dial, Timer
47	8271339	Knob, Control
49	388326	Screw, 8-18 x 1.25 (Panel to Top)
50	62863	Screw, 10-16 x 3/8
51	8271363	Cap, End (R.H.)
55	3366913	Clamp, Drain Hose
58	3950571	Shield, Inlet
59	3390647	Screw, 8-18 X 1/2
60	3954390	Harness, Wiring (For Detail See Pages 9 & 10)

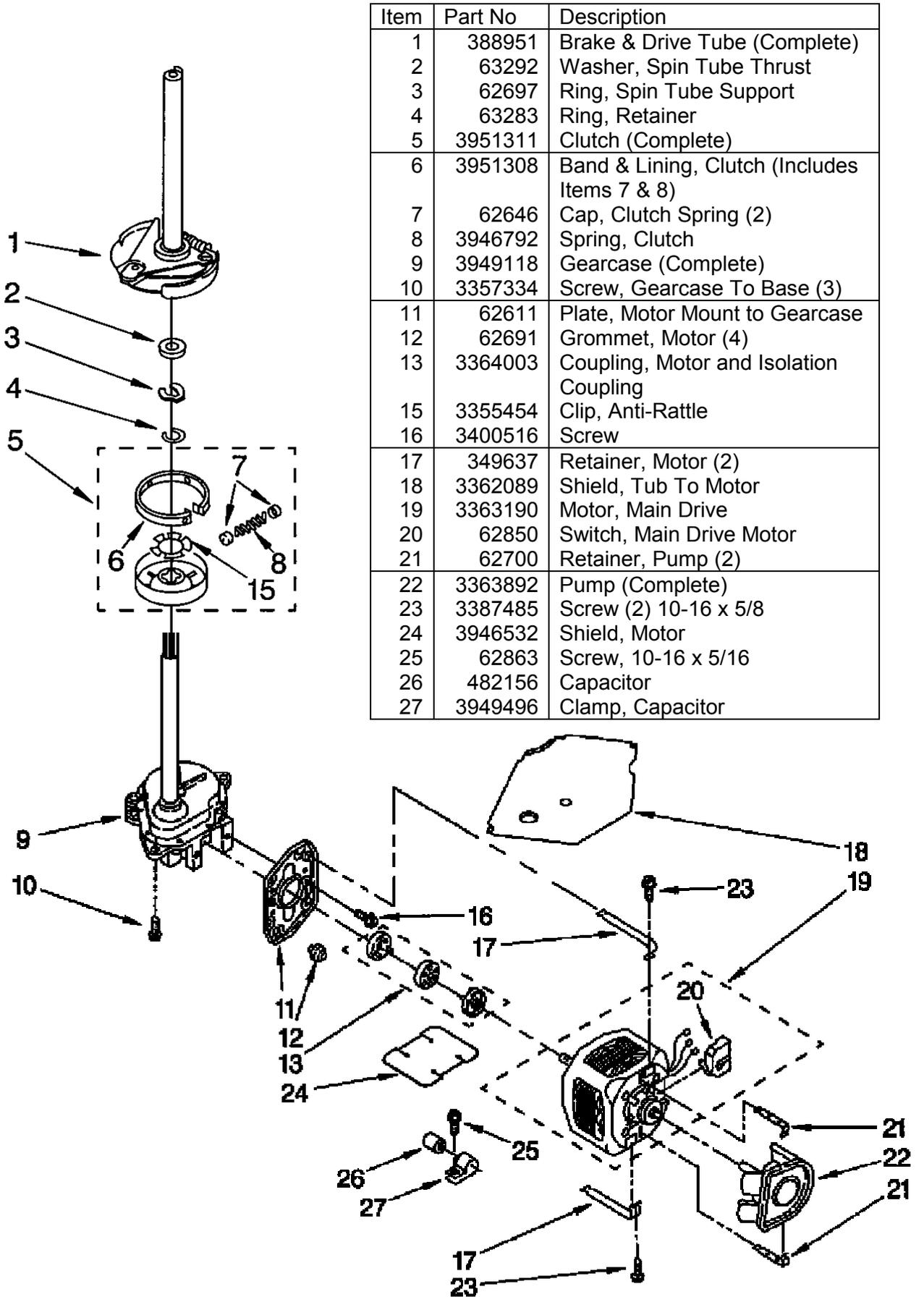
**AGITATOR, BASKET AND TUB PARTS**



**AGITATOR, BASKET AND TUB PARTS**

Item	Part No	Description
1	63580	Dispenser
2	358237	Screw & Washer (5/16-24 x 1)
3	3354845	Clip, Agitator
4	3350830	Agitator
5	3950568	Tub Ring
6	3359586	Gasket, Tub Ring
7	387867	Clip, Balance Ring (8)
8	387868	Balance Ring
9	3952746	Plate - Filter
10	3355921	Washer, Agitator
11	3363661	Bearing-Driven Cam
12	21366	Nut, Spanner
13	8312681	Basket
14	63125	Tub
15	389140	Block, Basket Drive
16	383727	Gasket, Centre post
17	353244	Hose, Pressure Switch
19	3363663	Cam Driven
20	3366877	Dog, Agitator Clutch
22	3350389	Spacer, Thrust
23	3354733	Cap, Barrier
24	3348855	Seal, Inner Cap
26	3949550	Washer
27	3350829	Agitator (Complete)
28	3349019	Clothes Mover

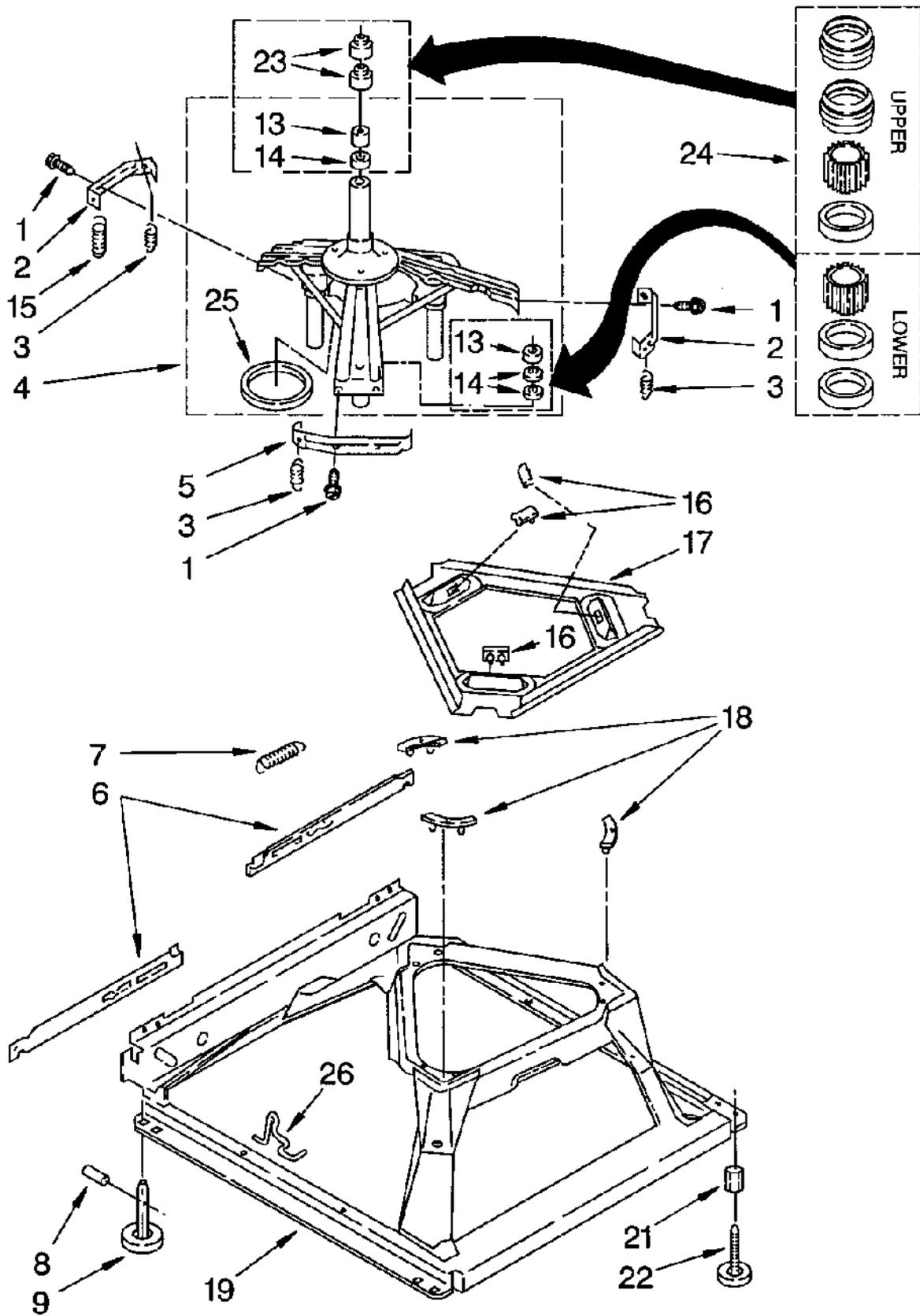
**BRAKE, CLUTCH, GEARCASE, MOTOR AND PUMP PARTS**



Item	Part No	Description
1	388951	Brake & Drive Tube (Complete)
2	63292	Washer, Spin Tube Thrust
3	62697	Ring, Spin Tube Support
4	63283	Ring, Retainer
5	3951311	Clutch (Complete)
6	3951308	Band & Lining, Clutch (Includes Items 7 & 8)
7	62646	Cap, Clutch Spring (2)
8	3946792	Spring, Clutch
9	3949118	Gearcase (Complete)
10	3357334	Screw, Gearcase To Base (3)
11	62611	Plate, Motor Mount to Gearcase
12	62691	Grommet, Motor (4)
13	3364003	Coupling, Motor and Isolation Coupling
15	3355454	Clip, Anti-Rattle
16	3400516	Screw
17	349637	Retainer, Motor (2)
18	3362089	Shield, Tub To Motor
19	3363190	Motor, Main Drive
20	62850	Switch, Main Drive Motor
21	62700	Retainer, Pump (2)
22	3363892	Pump (Complete)
23	3387485	Screw (2) 10-16 x 5/8
24	3946532	Shield, Motor
25	62863	Screw, 10-16 x 5/16
26	482156	Capacitor
27	3949496	Clamp, Capacitor

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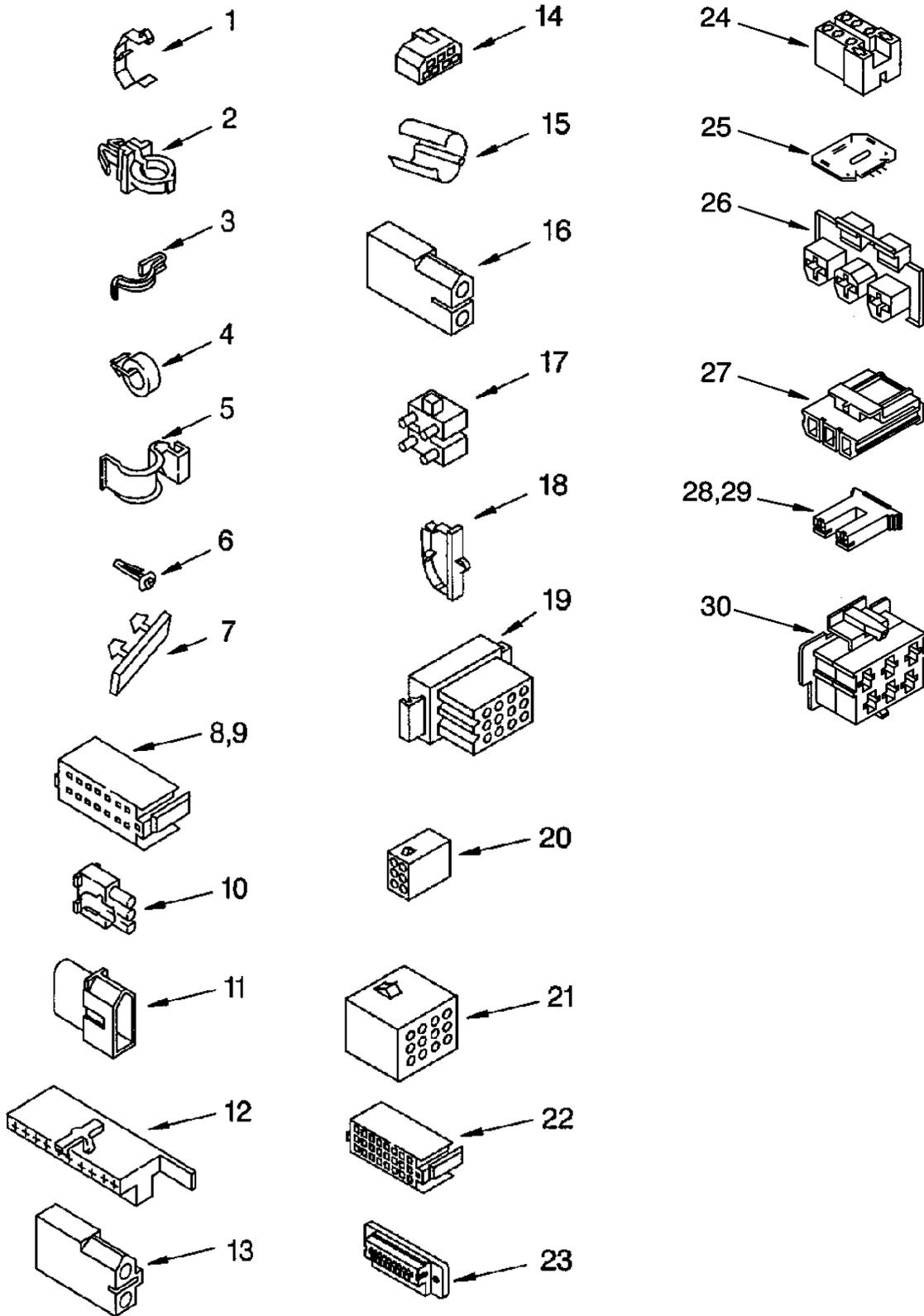
MACHINE BASE PARTS



**MACHINE BASE PARTS**

Item	Part No	Description
1	3387485	Screw, Bracket Mounting (10-16 x 5/8)
2	64067	Bracket, Spring Outer (2)
3	63907	Spring (3)
4	3362087	Support & Brake, Tub
5	64065	Bracket, Spring Outer (L.F.)
6	63138	Link, Levelling Mechanism (2)
7	62597	Spring, Levelling Mechanism
8	62837	Pin, Knurled
9	62596	Foot, Rear (2)
13	3347047	Bearing, Centre post (2)
14	357409	Seal, Centre post (3)
15	388492	Spring, Counterweight
16	62568	Pad, Plate
17	3946509	Plate, Suspension (Includes Item. 16)
18	3363660	Pad, Base
19	3349337	Base Assembly (Incl Items 6, 7, 8, 9, 16, 17, 18 & 26)
21	62739	Nut, Lock (3/8-16) (2)
22	389102	Foot, Front (2)
23	356934	Seal, Centre post (2)
24	285203	Centre post Bearing Kit (Includes Items 13, 14 & 23)
25	63134	Ring, Sound Deadening
26	63806	Retainer, Suspension Spring

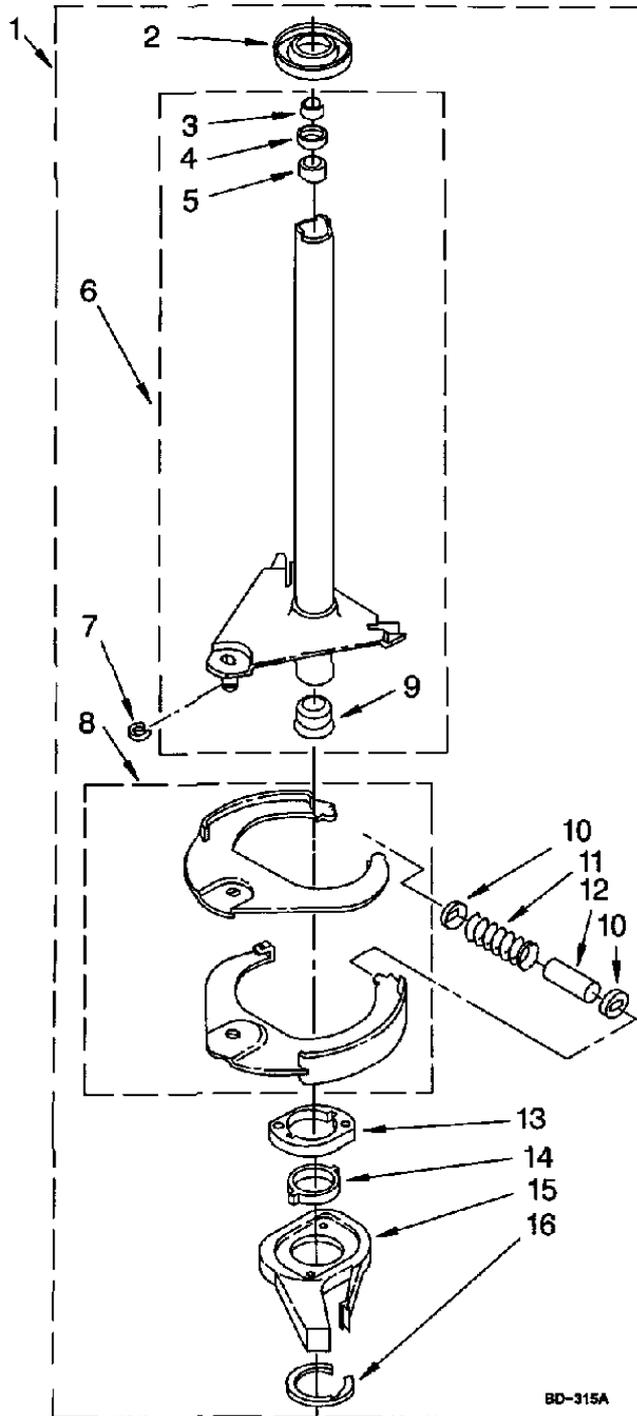
WIRING HARNESS PARTS



**WIRING HARNESS PARTS**

Item	Part No	Description
1	3349557	Clip, Harness
2	388498	Clip, Harness
3	3347812	Clip, Harness
4	3352501	Clip, Harness
5	90016	Clip, Harness
6	3390496	Clip, Harness
7	389379	Retainer, (Suds Models)
8	352090	Timer, Block Disconnect (White)
9	352089	Timer, Block Disconnect (Black)
10	62889	Receptacle, Terminal (3-Way) (Lid Switch) (Use 94613 or 94614.)
11	353424	Plug, Terminal (3-Way) (Power Cord) (Use 94613)
12	62505	Block, Disconnect (Motor 2 Speed) (Use 352088)
13	3348075	Block, Disconnect (Motor 3 Speed) (Use 94613 or 94614.)
14	3347243	Block, Disconnect (Use Term. 352088)
15	63523	Protector
16	717252	Connector (2-Way) (Use 94614)
17	387566	Plug, Terminal (4-Way) (Power Cord) (Use M3 Screws)
18	3352944	Clip, Harness
19	3390423	Block, Disconnect (12-Way) (Timer) (Use 94613)
20	3347730	Receptacle (6-Way) (Use 94613)
21	388818	Plug, Terminal (12-Way) (Use 94613 or 94614.)
22	3369366	Timer, Block Disconnect (Black) (Amp) (Use 3369365)
23	3349494	Connector, ETC
24	60687	Connector, Relay (Use 308569)
25	3407125	E.T.C. Control
26	3948617	Connector (3-Circuit) (Lid Switch) (Use 3948619 or 3948620.)
27	3360056	Connector (3-Circuit) (Pressure Switch) (Use 3948619 or 3948620.)
28	3354925	Block, Connector (Cold Valve) (Use 693217)
29	3354926	Block, Connector (Hot Valve) (Use 693217)
30	3948615	Connector (6-Circuit) (Temp. Switch) (Use 3948619 or 3948620.)

**BRAKE AND DRIVE TUBE PARTS**



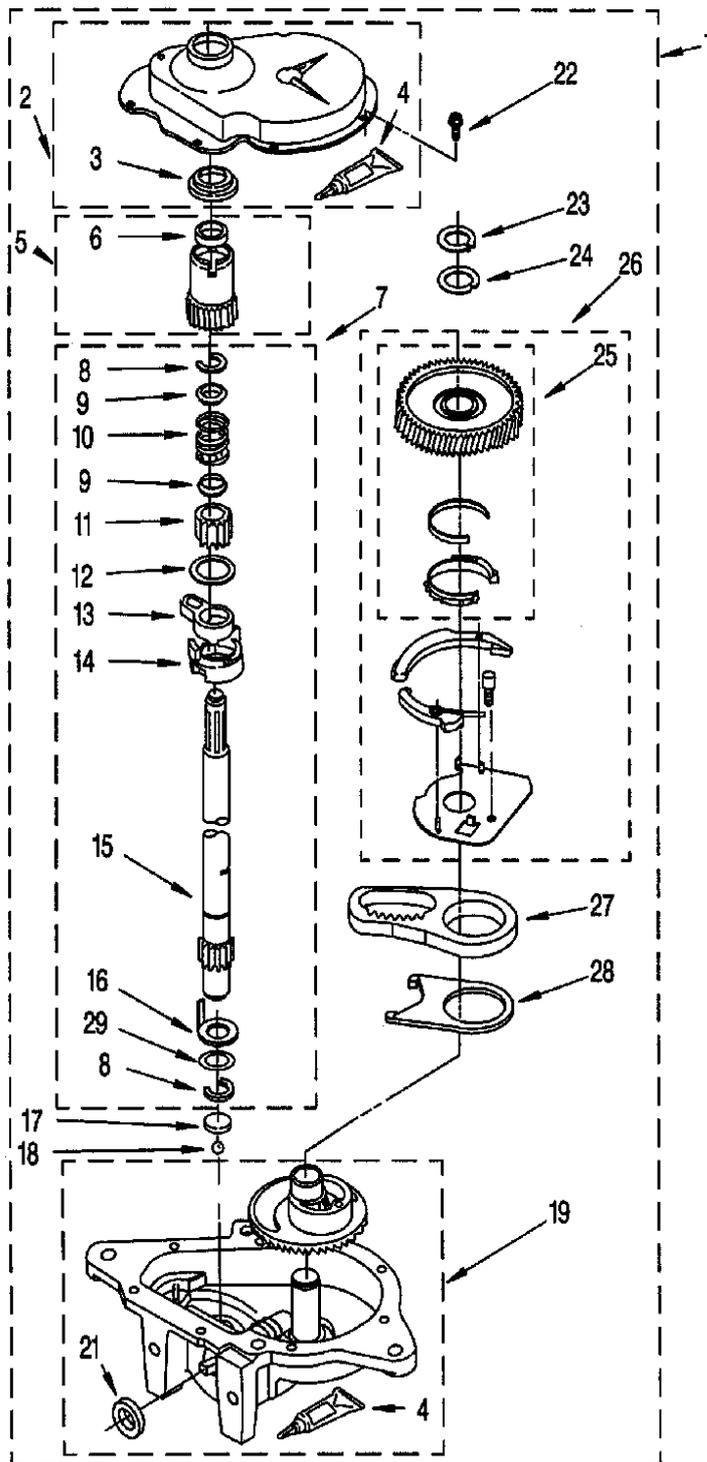
Item	Part No	Description
1	388951	Brake And Drive Tube (Complete)
2	62658	Ring, Thrust
3	91939	Seal, Oil
4	365427	Seal, Drive Tube
5	356937	Spacer, Drive Tube
6	64027	Tube, Basket Drive (Includes Items 3, 4, 5 & 9)
7	64035	Ring, Retaining
8	64232	Shoe, Brake
9	62703	"T" Bearing, Spin Tube
10	62648	Cap, Brake Spring (2)
11	62647	Spring, Brake
12	62909	Sleeve, Brake Spring
13	63023	Cam, Brake Release
14	63022	Sleeve, Cam
15	64194	Driver, Brake Cam
16	90368	Ring, Retaining

**FOLLOWING PARTS NOT ILLUSTRATED**

-	285208	Lubricant (Use Only In Brake Shoe Assembly On Roller & Pin)
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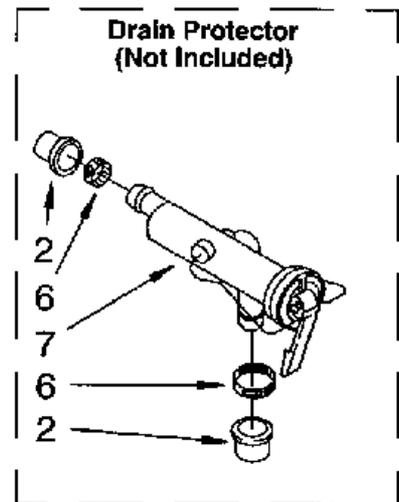
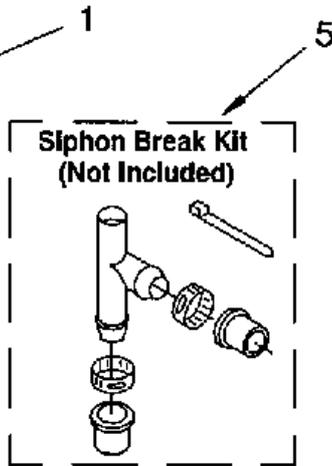
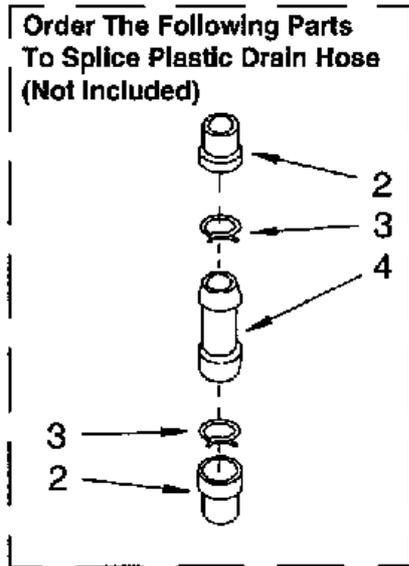
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GEARCASE PARTS



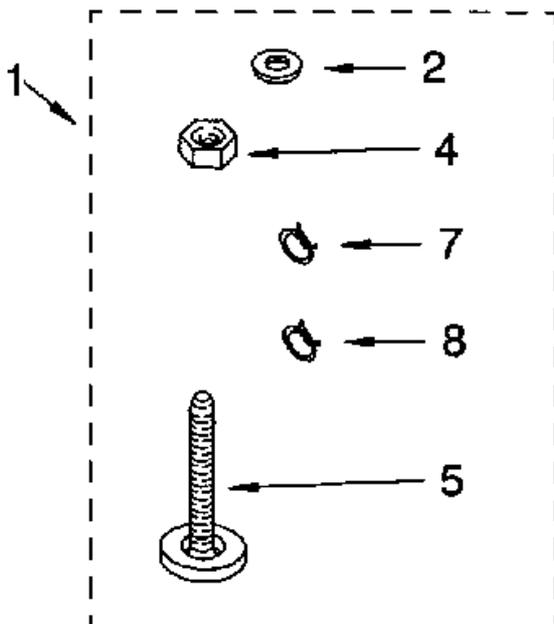
Item	Part No	Description
1	3360629	Gearcase (Complete)
2	285202	Cover, Gearcase
3	3349985	Seal, Gearcase Cover
4	285195	Sealer, Gasket 625ml (.20 Fl. Oz)
5	63320	Pinion, Spin (Incl. Item 25)
6	356427	Seal, Spin Pinion
7	389387	Shaft, Agitator (Compl)
8	90369	Ring, Retaining (2)
9	62677	Retainer, Spring
10	62676	Spring, Agitate
11	63273	Gear, Agitate (Incl Items 15 and 29)
12	62619	Washer, Agitate Gear
13	62580	Cam Follower (Incl Item 14)
14	62581	Cam, Agitate (Incl Item 13)
15	285509	Shaft, Agitator (Incl Items 11 and 29)
16	62618	Washer, Cam Thrust
17	16018	Bearing, Thrust
18	85529	Ball, Bearing
19	285515	Bottom and Pinion, Gearcase
21	285352	Seal, Thrust Plug
22	3351614	Screw, Gearcase Cover, Mounting (8) (10-24 x 3/8)
23	3362552	Ring, Retaining
24	285735	Washer Kit, Thrust
25	3348567	Gear, Spin
26	285595	Neutral Assembly
27	3349296	Rack, Connecting
28	62621	Actuator, Shift
29	388815	Washer, Intermediate

**WATER SYSTEM PARTS**



Item	Part No	Description
1	285442	Connector Kit, Plastic Drain Hose
2	285321	Sleeve Kit, (Contains 2 Sleeves)
3	370447	Clamp, Hose
4	16272	Connector, Straight
5	285320	Siphon Break Kit (Not Included)
6	65349	Clamp, Hose
7	367031	Drain Protector (Not Included)

**MISCELLANEOUS PARTS**



Item	Part No	Description
1	3976256	Miscellaneous Parts Bag
2	3357450	Washer, Adapter
4	3359452	Nut, Lock (3/8-16)
5	389102	Foot, Front (2)
7	3366912	Clamp, Hose
8	3366913	Clamp, hose

**OPTIONAL PARTS (NOT INCLUDED)****PAINT, PRESSURIZED SPRAY (12 oz.) (470 ml)**

350938 Primer, Gray  
350930 White

**PAINT, BULK (1 qt.)**

799344 White (Uncut)

**OIL**

350572 Oil, Gearcase (16 Oz.) (625 ml)

**LUBRICANT**

285208 Lubricant (Use Only in Brake Shoe Assembly On Roller and Pin)

**SEALER**

285195 Sealer, Gasket (.20 Fl. Oz.) (6 ml)

**SHIPPING KIT**

3348675 Shipping Kit

**ACCESSORY PARTS**

367031 Drain Protector  
285320 Siphon Break Kit