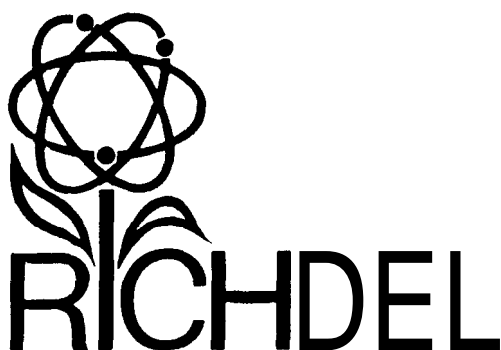


INSTALLATION AND OPERATING INSTRUCTIONS

RICHDEL MODEL R406DLG



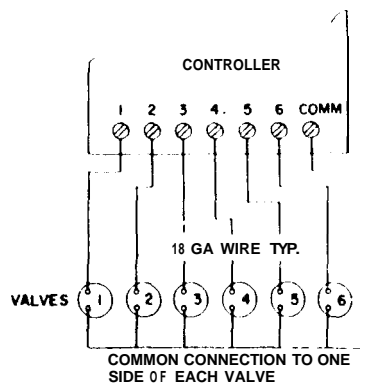
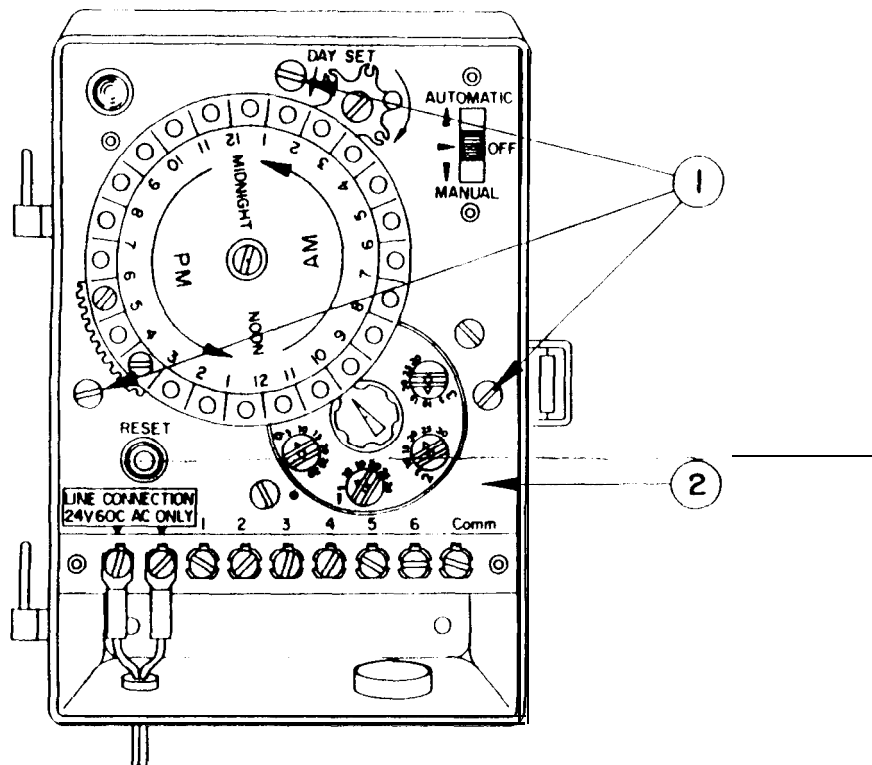
6 STATION  
LAWN SPRINKLER  
CONTROL





## INSTALLATION INSTRUCTIONS

The R406DLG is a 6 station controller that can be programmed to water from six times a day to once a week. The watering time can be adjusted from approximately 5 to 30 minutes for each circuit

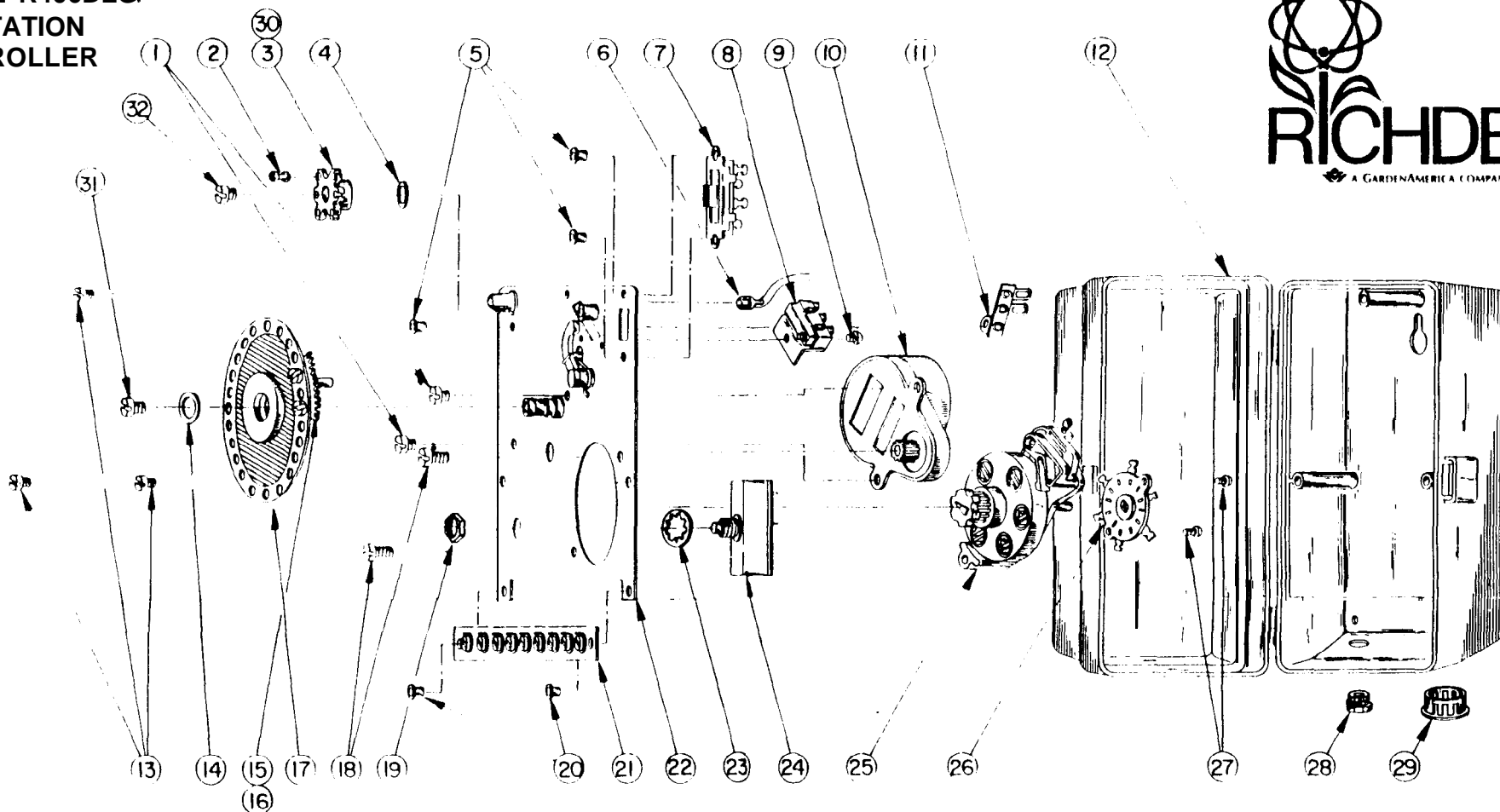


- Step 1. Select location for controller in a protected area near a 110 Volt duplex receptacle. Longer distances (up to several hundred feet) between the controller and the 110 Volt duplex receptacle are permissible by replacing the supplied power cord with similar 18 gauge cord available at hardware and electrical supply houses. **NOTE:** Avoid using a receptacle that is on a switched circuit.
- Step 2. Install one No 8 screw at eye level at selected location leaving head of screw extended 1/8". Hang controller on screw by inserting head of screw into keyhole opening on back of control box **NOTE:** Installing on plaster or masonry walls should be done with plastic or lead shields to secure screws. Open control box, straighten into desired position and install two screws through holes in wiring compartment.
- Step 3. Wiring to the valves can be placed underground alongside the pipes. Run one common wire to each location to serve all the valves at that location. Use 18 gauge solid wire plastic jacketed thermostat control wire for runs not over 800 feet and 16 gauge over 800 feet. Be sure all splices are soldered or joined with wire nuts and sealed with vinyl cement or other suitable water-proofing cement. This wire is available from your dealer in 2,3,4,5,6, 7 and 8 color coded wires. **IMPORTANT:** The power transformer is protected by a circuit breaker. Do not connect more than 2 valves to one circuit or use a valve that requires more than 1 AMP at 24 VAC.
- Step 4. Bring valve wires up through insulated bushing at right side of box. Connect the wire from valve #1 wire, to the terminal on control chassis marked 1, connect valve #2 to terminal 2, etc. Connect the common wires to the terminal on chassis marked Comm.
- Step 5. Connect power leads to "plug-in" transformer, one lead to each terminal being certain that terminals on cord are not touching. Remove center screw from cover plate of wall outlet, plug transformer into bottom socket of duplex outlet. Replace screw through transformer bracket thus securing transformer and cover plate in position.

**TO REMOVE CONTROL CHASSIS:** Remove screws (1) that retain controller chassis (2) in control box

**NOTE:** Due to varying regulations, check your local codes.

**RICHDEL INC.**  
**MODEL R406DLG.**  
**SIX STATION**  
**CONTROLLER**

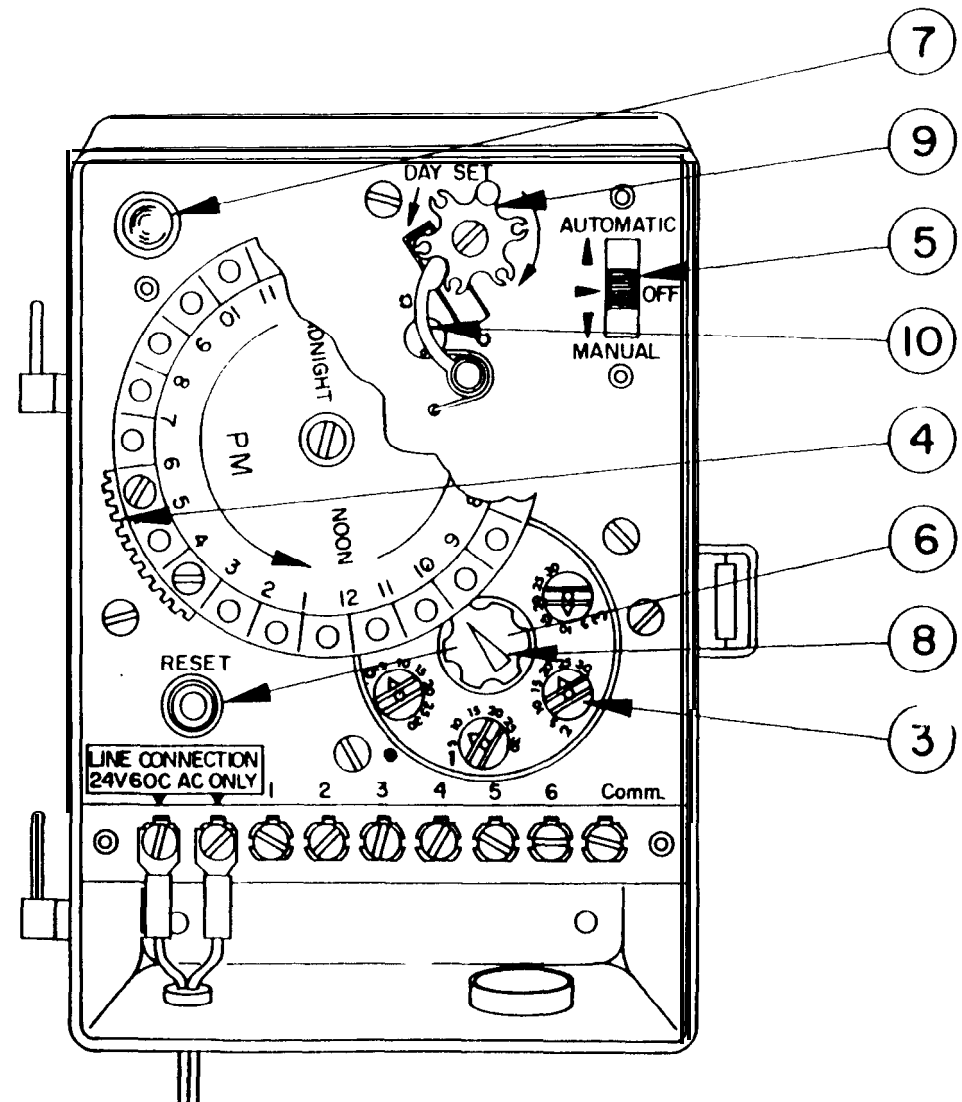


ITEM	PART NO.	DESCRIPTION
1	RS120P08-F-P04	SCREW
2	402-96	SKIP-A-DAY PIN
3	402-94	SIX DAY SKIP WHEEL
4	402-91	THRUST WASHER
5	SE-45	EYELET
6	406-5	PILOT LAMP
7	406-2	SLIDE SWITCH
8	406-81	MICROSWITCH ASSY. (WIRED)
9	RS 122R04-40P02	SCREW
10	406-3	MOTOR 24V.A.C.
11	402-70	TIE POINT
12	406-60	CASE ASSY.
13	RS122P02-56P06	SCREW
14	402-61	DIAL WASHER
15	402-59	TRIPPER GEAR WITH POST
16	402-92	TRIPPER GEAR (REPEAT CYCLE)
17	406-85G	TIME DIAL ASSY

ITEM	PART NO.	DESCRIPTION
18	RS120P08-ABP06	SCREW
19	RSI30-36-27FC	HEX NUT
20	SE-47	EYELET
21	406-72	TERMINAL BOARD (WIRED)
22	406-69	CHASSIS ASSY.
23	RS11O138-035FZ	INT. TOOTH LOCK WASHER
24	406-9	CIRCUIT BREAKER
25	406-70	SELECTOR ASSY.
26	402-93	WATER SWITCH
27	RS122P04-40P04	SCREW
28	1077	STRAIN RELIEF
29	2116	WIRE BUSHING
30	402-95	SEVEN DAY SKIP WHEEL
31	RS 122P08-32P04	SCREW
32	RS122P06-32P03	SCREW
NOT ILLUSTRATED		
406-7		TRANSFORMER
406-30		POWER CORD ASSY

## OPERATING INSTRUCTIONS

- Step 1. **TO SET TIME OF DAY:** Rotate the time dial (4) counterclockwise until the proper time of day coincides with the arrow on the circuit selector knob, (8). **CAUTION:** The time dial is made to rotate in one direction only **DO NOT FORCE THE DIAL IN THE REVERSE DIRECTION.** Then gently rotate the time dial in a clockwise direction until a positive stop is felt to remove the backlash in the clutch and gears (failure to do so may result in up to an hour delay in initial rotation of the time dial).
- Step 2. **TO USE SKIP-A-DAY DIAL:** Each spoke of the skip-a-day (9) represents a day of the week. To eliminate watering on certain days, insert a skip-a-day pin in the spoke for that day. For example, to water every other day, place pin in every other spoke of a six day dial. Use the seven day dial for a watering program which follows the actual days of the week. After inserting pins, turn the dial until that spoke which represents the day is opposite the index arrow on the chassis **CAUTION:** Be sure pawl arm (10) is in full detent position, as shown, when setting
- Step 3. **AUTOMATIC-OFF-MANUAL (RAIN) SWITCH:** For programmed watering, move switch (5) to automatic position. For shutdown of system (rain), move switch to off. This position turns off power to valves but permits clock to maintain operation. For manual operation, turn switch to off position, rotate circuit selector knob (8), until desired circuit number aligns with dot on chassis, then move switch to manual. The circuit indicator light (7) will remain on when switch is in manual position. **NOTE:** Always return circuit selector knob to index position with arrow pointing directly to time dial and move switch to off or automatic position after manual operation
- Step 4. **WATERING PERIOD:** Locate tripper gear (4) on time dial to cover the period for which watering is to occur. An additional tripper gear, 402-92, may be added if more than one watering period a day is desired. A minimum of one hour is required between watering periods.
- Step 5. **TO ADJUST WATERING TIME:** Each of the six circuits can be individually adjusted for watering time. To change time simply move switch (5) to off position, rotate circuit selector knob (8) until timing cam (3) is visible, insert a dime or screw driver into slot and rotate until arrow on timing cam aligns with minute designation required. Indicated time settings are approximate. After circuit timing adjustment is completed, rotate circuit selector knob to index position with arrow pointing directly to time dial and move switch (5) to automatic position.
- Step 6. **CIRCUIT BREAKER:** A tripped circuit breaker (6) indicates an electrical problem in the wiring to the valves or in the valve. If the circuit breaker trips, the controller will stop on the circuit causing the problem. To reset the circuit breaker, push the reset button





## **LIMITED 1 YEAR WARRANTY**

Richdel warrants to the purchaser of its products for a period of one (1) year from the date of original purchase for use that any defective product proved to be caused by faulty workmanship or faulty material, when installed per instructions and used in a normal manner, will be repaired or replaced at Richdel's option at no charge, providing the product is sent to the Richdel factory, or authorized factory service center, with all transportation charges prepaid. This warranty does not apply to the damages or malfunctions resulting from accidents, misuse, or neglect. No allowances will be made for labor, for removal or reinstallation of any so-claimed defective products.