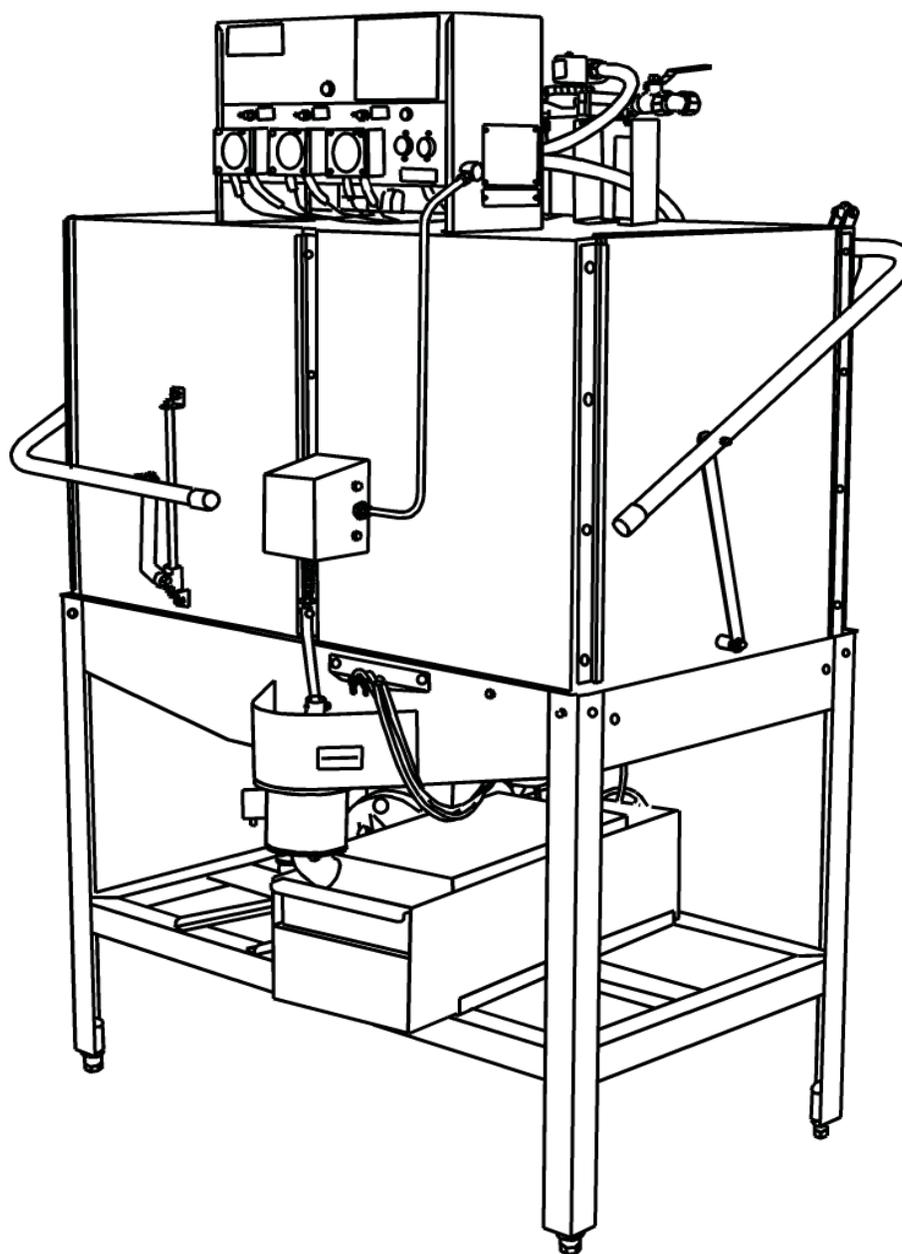


EFFECTIVE: January 2020

# *American Dish Service*

ADS LOW TEMPERATURE DISHWASHER

**MODEL: 5-CD LF/RF**



# **PARTS MANUAL**

900 Blake Street  
Edwardsville, Kansas 66111  
(913)422-3700

# American Dish Service

The **American Dish Service** part numbers contained in this publication are replacement parts for equipment listed with governmental and regulatory agencies and are specified to maintain the regulatory mark and certification. These parts must only be replaced by those who are trained in the operation and service of commercial dishmachines. Aftermarket parts or modified parts are not compliant or listed with the standards of governmental and regulatory agencies; aftermarket parts are not authorized by ADS for replacement repairs. ADS will not be responsible for any liability if parts are used in the repair of the machine that are not ADS-specified, by those installing non-certified replacement parts or attempts to change the machine's cycle or operation other than as designed and certified. **Read the warnings and cautions provided below before working on or replacing parts on any ADS equipment.**



**DANGER**

The installation of electrical parts contained in this publication require the following precautions:

**The electrical power supplied to this machine is an imminent hazard to life that could result in severe bodily injury or death if not properly installed or connected correctly.** When working in the control box or on electrical parts, always disconnect power and perform the appropriate lock-out/tag-out procedure before servicing. Replace the cover to the control box and other protective covers when finished with servicing this equipment before returning the machine to normal operation.

**LOOSE ELECTRICAL CONNECTIONS:** Damage to the equipment can occur if the following precautions are not observed. Before connecting power to the machine, check all electrical terminals in the control box. Screws can loosen in transit. Loose connections on high amp load terminals such as the pump motor and tank heaters will cause wire burning and component damage during operation and will not be covered under ADS warranty.

**"CLEAN CIRCUIT"** means the electrical circuit breaker for the dishmachine supplies no other outlets, machines, or lights. GFCI outlets are not recommended for commercial dishmachines; ADS recommends that a single-rack machine be installed with the wire connection (hard-wired) directly from the circuit breaker. All high temp and conveyor equipment must be hard wired. If a plug and socket are used to provide electrical power to a dishmachine in a commercial kitchen, then according to electrical code it must be a GFCI, but not all GFCIs are the same. They must be rated for the Amp draw for the designed circuit.

**For Reference: The NEC Article 210.8 regarding GFCI Protection (B) Other Than Dwelling Units (2) Commercial and Institutional Kitchens. All 15 and 20A, 125V receptacles installed in kitchens, even those that do not supply the countertop surface, must be GFCI protected.**



**WARNING**

The chemical feeders and controls contained in this publication require the following precautions:

**READ Manufacturer's Manual before Using this Product. For your safety read and observe all warnings in these instructions.** While performing installation of parts described in this booklet, wear approved Personal Protective Equipment, including chemically resistant gloves and Safety Eye-Wear.

**CHEMICALS:** There are potentially hazardous situations when working with industrial cleaning chemicals for dishmachines. See chemical manufacturer's safe practices and SDS or MSDS sheets for handling and installing chemicals and supply containers.

Chemicals can damage or corrode plumbing and stainless parts of the dishmachine. Do not run chemical lines over controls or plumbing. Always secure chemical lines and check regularly for leaks. **If not properly handled, chemicals can cause serious bodily injury. In the event of chemical contact to skin or eyes; wash immediately with fresh water and seek medical attention.**

**DE-LIMING THE MACHINE: Because of potential hazards resulting from the combination of chlorine with acid solution, only authorized trained individuals must be allowed to de-lime a commercial dishmachine.**

**CONTAINERS:** The ADS chemical delivery system is designed for 5 gallon pails of industrial low-energy chemical products.

**CONTAINERS:** The ADS chemical delivery system is designed for 5 gallon pails of industrial low-energy chemical products. Always use chemical resistant safety gloves and safety goggles (indirect-vented or non-vented) when changing chemical buckets. Immediately report spills and refer to your chemical suppliers SDS safety data sheet or MSDS material safety data sheet for information if chemical comes in contact with skin or eyes.

Any modifications to the chemical delivery system for smaller containers must include Closed Loop Chemical Containers (spill proof bottles) in a secured racking system. It is the responsibility of the user of the machine to purchase chemicals in spill proof containers. **FAILURE CAN RESULT IN SERIOUS INJURY.** Never place chemicals in open containers or containers that can be easily tipped over when moving or changing product. Failure to do so will void your ADS warranty.

Chemical supplies must be kept in closed delivery containers to avoid spills or contamination. Do not place chemical solutions in open containers or containers that can be easily tipped over in moving or changing.

Do not open the doors while the machine is in operation. Doing so could result in serious bodily injury from spraying hot water and chemicals.



## CAUTION

The door lever arm parts in this publication are installed under spring tension and caution is needed whenever parts are changed. Wear safety glasses when working on the doors and lever. Care should be taken when moving, installing, or replacing any door lever arm parts. Use the ADS lever arm tool to unload the door spring during replacement or adjustment. The spring tension suddenly released can result in pinch or blunt trauma, and puncture wounds. If a wound occurs from the release of spring tension, wash the wound area immediately because of the soils that can accumulate on the metal parts and seek medical attention.

## NOTICE

**BEFORE YOU BEGIN:** American Dish Service provides this information as a service to our customers. **Keep all instructions for future reference.** ADS reserves the right to alter or update this information at any time. Should you desire to make sure that you have the most up-to-date information, we would direct you to the appropriate document on our web site: [www.americandish.com](http://www.americandish.com). **It is your obligation as the customer to ensure that the replacement parts for the machine are installed safely and properly, and when completed, the machine is left in proper and safe working order.** Electrical, Plumbing, and Chemical hookup must be performed by a qualified professional who will ensure that the equipment is installed in accordance with all applicable Codes, Ordinances, and Safety requirements. Failure to follow the installation instructions will void the warranty. **ADS assumes no liability or control over the installation of the equipment or replacement parts. Product failure due to improper installation is not covered under the ADS Warranty.**

### Plumbing parts:

When working on the water inlet manifold, first relieve the water line pressure by turning off the water supply to the machine then energize the machine's fill valve. By doing this the manifold will empty of water. Turn off the electrical power and lock out/tag out the machine. It will then be safe to open the plumbing inlet manifold.

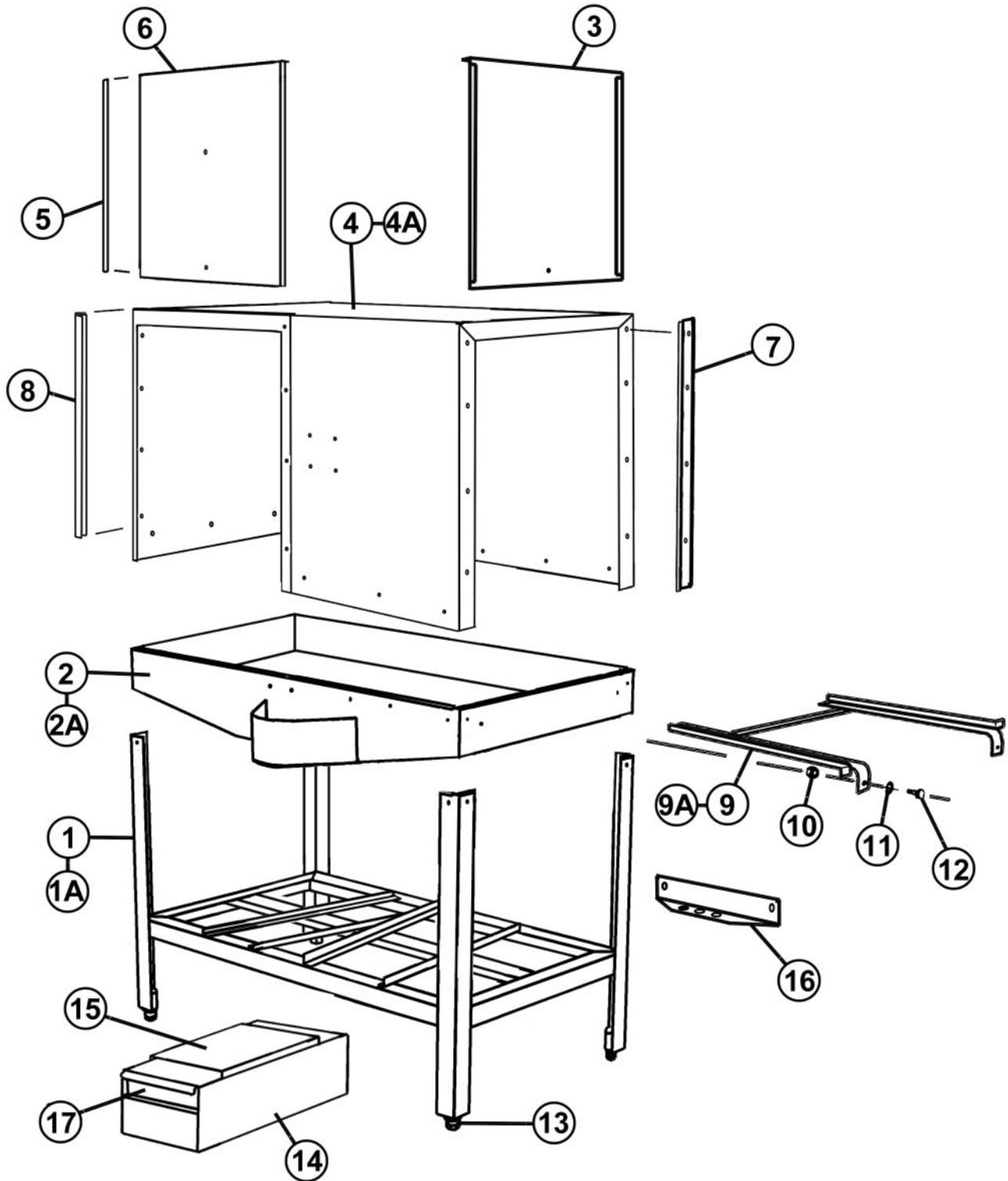
**TANKLESS WATER HEATERS** have shown to be problematic for commercial dishmachines. It has been the experience of ADS that tankless supply systems require multiple units plumbed in sequence with a recirculation loop to achieve proper pressure and temperature.

**Check with the tankless water heater manufacturer, they may recommend a storage tank to guarantee proper flow and line pressure to the machine. Failure to provide adequate water quantity, pressure and temperature to the machine will cause the machine to function improperly and is not the responsibility of ADS. Improperly installing ADS equipment or parts in this manner could void the warranty. All costs associated with providing an adequate water supply to the machine is the sole responsibility of the user.**

**Drain replacement parts should not be reduced in size, all drain lines should remain the same size as it exits the dishmachine or larger.** If you have questions, call 800-922-2178 or visit our website at [www.AmericanDish.com](http://www.AmericanDish.com)

061-2100/061-2200  
CABINET ASSEMBLY LF/RF  
5-CD

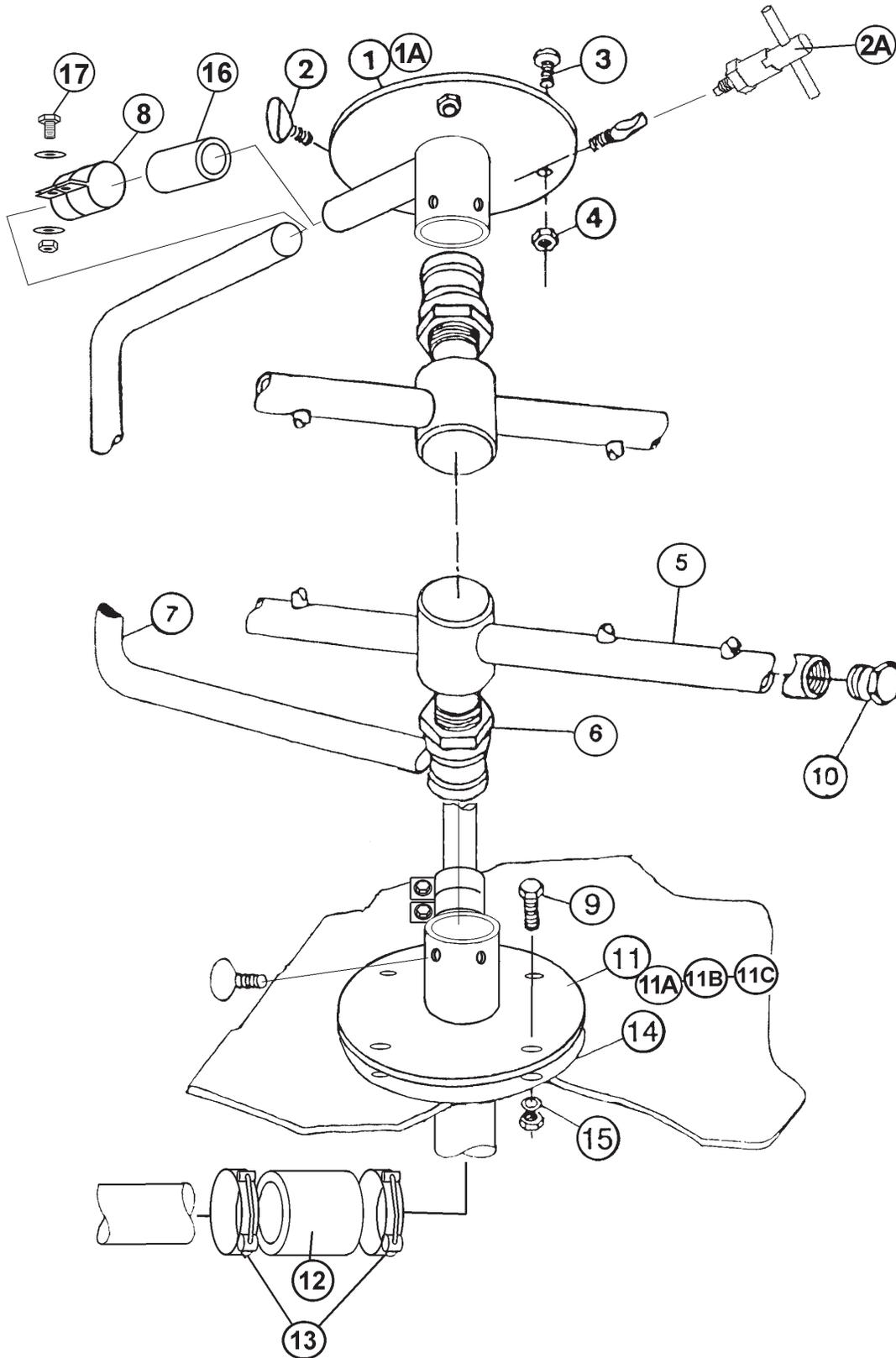
**American Dish Service**



061-2100/061-2200  
 Cabinet Assembly LF/RF  
 5-CD

**American Dish Service**

Ref. No.	Part No.	No. Req.	Description
1	085-6415	1	Frame, LF
	085-6416		Frame, RF
2	085-6417	1	Pan, LF
	085-6418		Pan, RF
3	087-6125	1	Door, Side, Non-Embossed
4	085-6419	1	Hood, LF
4A	085-6420		Hood, RF
5	083-6107	4	Door Strip, Nylatron
6	087-6124	1	Door, Front, Non-Embossed
7	087-6114	2	Door Guide
8	087-6118	1	Door Guide, Front Corner, Wide
9	085-6421	1	Tray Track Assembly, LF
9A	085-6422		Tray Track Assembly, RF
10	098-2507	40	Locknut, ¼-20, SS
11	098-2416	40	Washer, ¼", SS
12	098-1423	40	Bolt, ¼-20 x ½", HH, SS
13	099-1003	4	Bullet Foot
14	089-9055	1	Scrap Trap W/O Tray or Lid(Bottom Exit)
15	089-9100	1	Scrap Trap Lid
16	086-6119	Opt.	Chemical Bracket, Top Mount
17	089-9056	1	Scrap Trap Tray
N/S	086-6685	1	Bracket, 5CD Tray Track Support
N/S	087-6389	1	Front Guide, 5CD Tray Track
N/S	087-6122	1	Door Guide, Front, Narrow
N/S	087-6389	1	Guide, Tray Track, Front
N/S	086-6369	1	Bracket, Scrap Trap (Since 2/15/19)

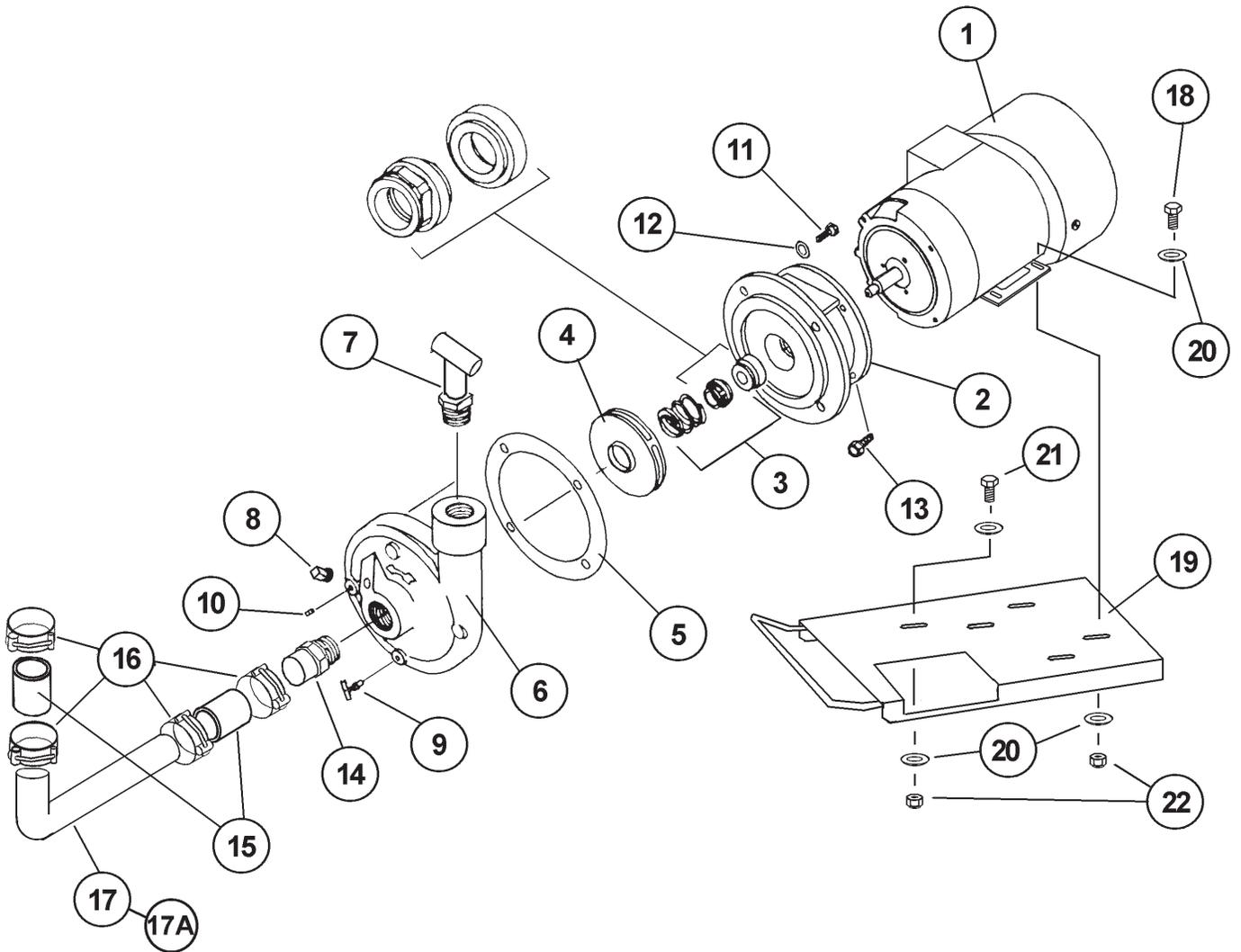


062-1800/062-1900

Spray System Assembly LF/RF  
5-CD

**American Dish Service**

Ref. No.	Part No.	No. Req.	Description
1	085-6626	2	Upper Spray Base, SS, Bayonet Type
1A	085-6628	Opt.	Upper Spray Base, SS, Thumbscrew Type
2	099-1028	8	Bayonet Fitting
2A	098-1583	Opt.	Thumb Screws 5/16-18 x 5/8" SS
3	098-1426	8	Bolt, 1/4-20 x 3/4" HH SS
4	098-2507	16	Locknut, 1/4-20 SS
5	081-6218	4	Spray Arm Assembly
6	081-6217	4	Spray Arm Bearing Assembly, Cleanable W/O'Ring
7	087-6233	1	Manifold, 5CD LF RH Side, RF LH Side
7A	087-6254	1	Manifold, 5CD, RF RH Side
7B	087-6255	1	Manifold, 5CD, LF LH Side
8	081-6501	4	Clamp Assembly, Inside Manifold (Incl. Bolts & Nuts)
9	098-1426	8	Bolt, 1/4-20 x 3/4" HH SS
10	084-6211	8	Spray Arm End Plug, SS
11	085-6633	Opt.	Lower Spray Base, SS, Thumbscrew Type, RH
11A	085-6632	Opt.	Lower Spray Base, SS, Thumbscrew Type, LH
11B	085-6631	1	Lower Spray Base, SS, Bayonet Type, RH
11C	085-6630	1	Lower Spray Base, SS, Bayonet Type, LH
12	093-1040	2	Kit, Discharge Tube Sleeve
13	098-9037	4	Clamp, Discharge Tube sleeve
14	089-6201	2	Gasket, Spray Base
15	098-2416	8	Washer, 1/4", SS
16	093-1047	4	Sleeve, Inside Manifold Tube
17	098-1445	8	Bolt, 1/4-20 x 1" HH SS
N/S	093-1041	Rep.	Kit, Inside Manifold Sleeve(Rubber Sleeve & 2 Hose Clamps)
N/S	093-1040	Rep.	Kit, Discharge Tube Sleeve(Rubber Sleeve & 2 Hose Clamps)
N/S	089-6310	Rep.	O' Ring. Spray Arm Bearing



063-2200/063-2300

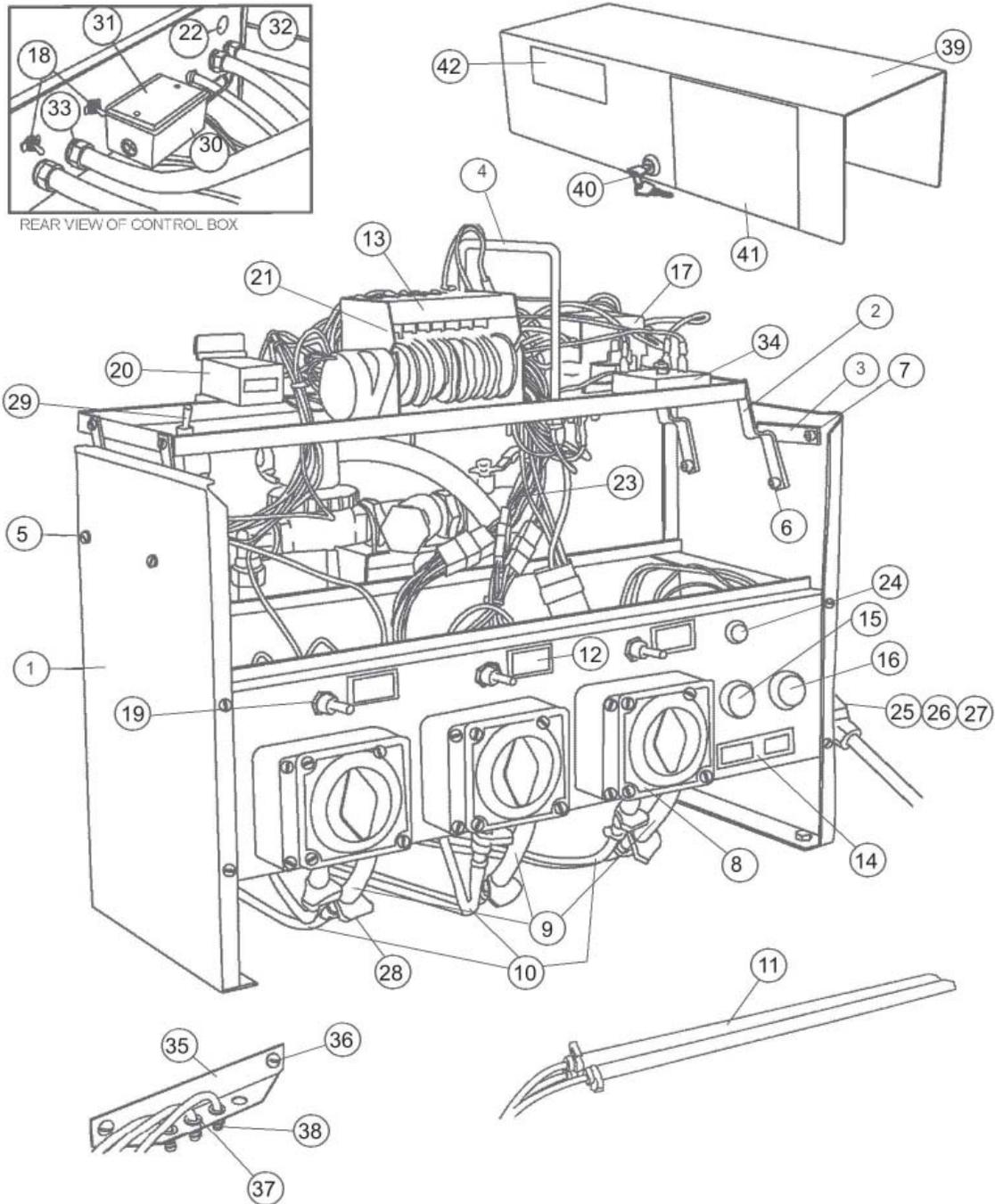
Recirculating Pump Assembly  
LF/RF 5-CD

**American Dish Service**

Ref. No.	Part No.	No. Req.	Description
1	091-1001	1	Motor
2	082-6301	1	Rear Housing
3	092-2001	1	Seal Assembly
4	082-6305	1	Impeller
5	089-6303	1	Gasket
6	082-6302	1	Front Housing (Pump Cover)
7	085-6325	1	Discharge Pipe 'T' Weldment
8	092-1144	1	Pipe Plug, 3/8", SS
9	092-1002	1	Petcock 1/8"
10	092-1145	1	Pipe Plug, 1/8", SS
11	098-1507	2	Bolt, HH, SS, 5/16-18 x 7/8
N/S	098-1510	2	Bolt, 5/16-18 x 1 1/4", HH, SS
12	098-2503	4	Washer, Copper 5/16
13	098-1607	4	Bolt, 3/8-16 x 7/8" HH SS
14	085-6321	1	Pump Pipe, Suction
15	093-1039	2	Kit, Suction Tube Sleeve(Rubber Sleeve & 2 Hose clamps)
16	098-9038	4	Clamp, Suction Tube Sleeve
17	085-6326	1	Suction Tube, LF
17A	085-6327		Suction Tube, RF
18	098-1426	2	Bolt, 1/4-20 x 3/4", HH, SS
19	085-6408	1	Motor Plate
20	098-2416	6	Washer, 1/4", SS
21	098-1434	1	Bolt, 1/4-20 x 2", HH, SS
22	098-2507	3	Locknut, 1/4-20, SS
Rep.	088-1063	0	Pump assembly Through Impeller (Needs Gasket 089-6303)

064-2800 LF  
064-3500 RF  
Control System Assembly  
5-CD

**American Dish Service**



064-2800 LF

064-3500 RF

Control System Assembly

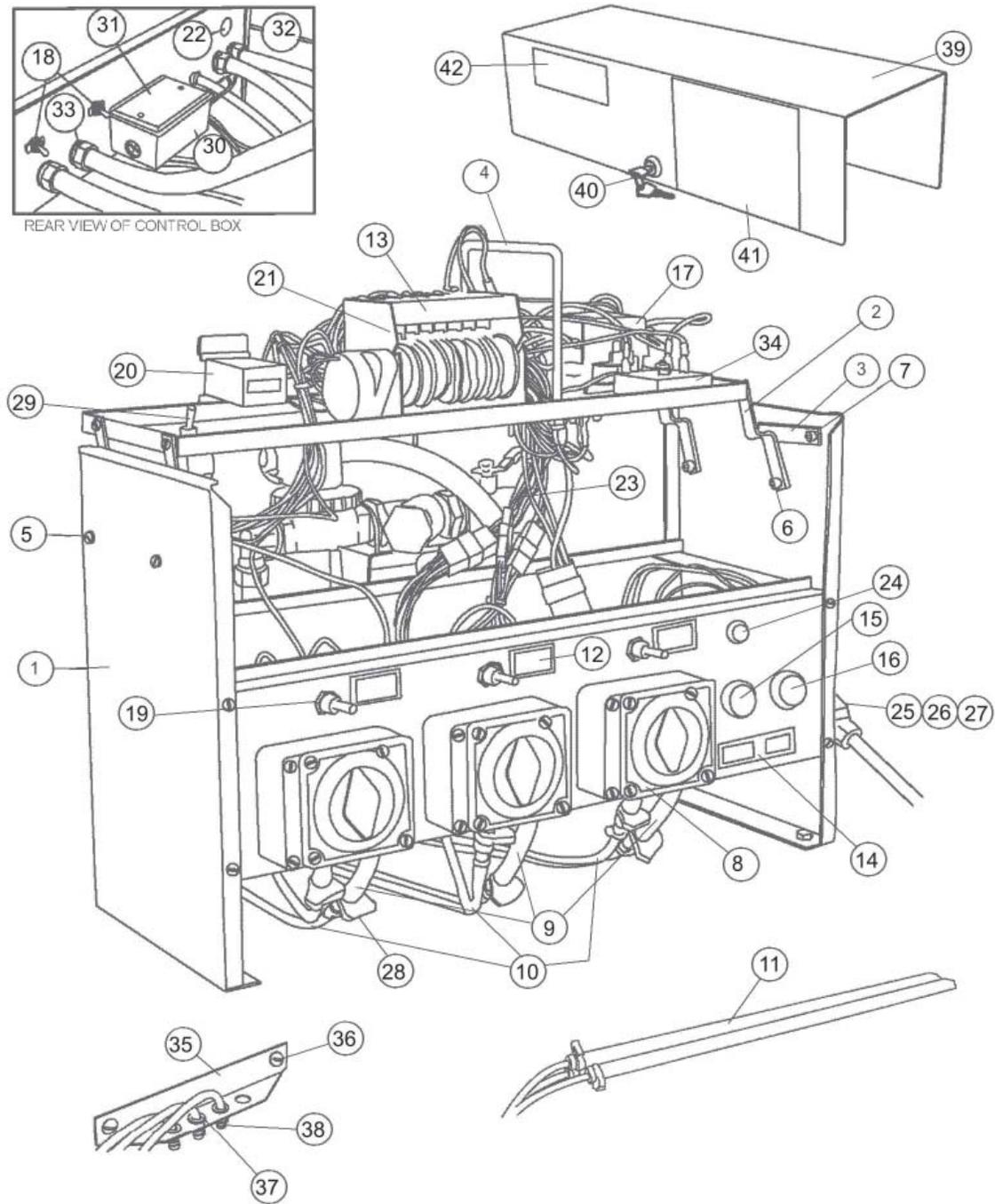
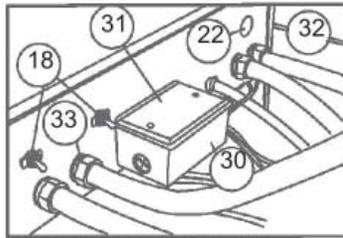
**American Dish Service**

5-CD

<b>Ref. No.</b>	<b>Part No.</b>	<b>No. Req.</b>	<b>Description</b>
1	081-6421	1	Control Box Weldment, LF
1	081-6424		Control Box Weldment, RF
2	086-6678	4	Control Box Hinge
3	086-6676	1	Safety Latch
4	086-6317	1	Shelf Handle
5	098-1204	13	Screw, 8-32 x ½" RH, Slotted
6	098-2201	9	Locknut, 8-32, Hex
7	098-2416	1	Washer, ¼", SS
8	064-0010	3	Chemical Pump Assembly, External
9A	093-1063	21'	Chemical Discharge Tube, Red
9B	093-1062	21'	Chemical Discharge Tube, Green
9C	093-1061	21'	Chemical Discharge Tube, Blue
10	093-1063		Chemical Suction Tube, Red
10	093-1062		Chemical Suction Tube, Green
10	093-1061		Chemical Suction Tube, Blue
11	083-6450	3	Tube Stiffener, Threaded
12	089-9321	1	Decal, Prime
13	089-9465	1	Decal, Timer Cam
14	089-9237	1	Decal, Start-Fill
15	091-3001	1	Switch, Black Fill
16	091-3002	1	Switch, Red Start
17	091-3083	1	Contactator
18	091-3008	1	Master Switch
19	091-3009	3	Prime Switch
20	091-3049	1	Counter, Electric
21	091-3051	1	Timer, 90 Sec. 7 Cam
22	098-9020	3	Plastic Plug
23	091-5030	1	Wiring Harness
24	091-7006	1	Red Light, Indicator

064-2800 LF  
064-3500 RF  
Control System Assembly  
5-CD

**American Dish Service**



064-2800 LF

064-3500 RF

Control System Assembly

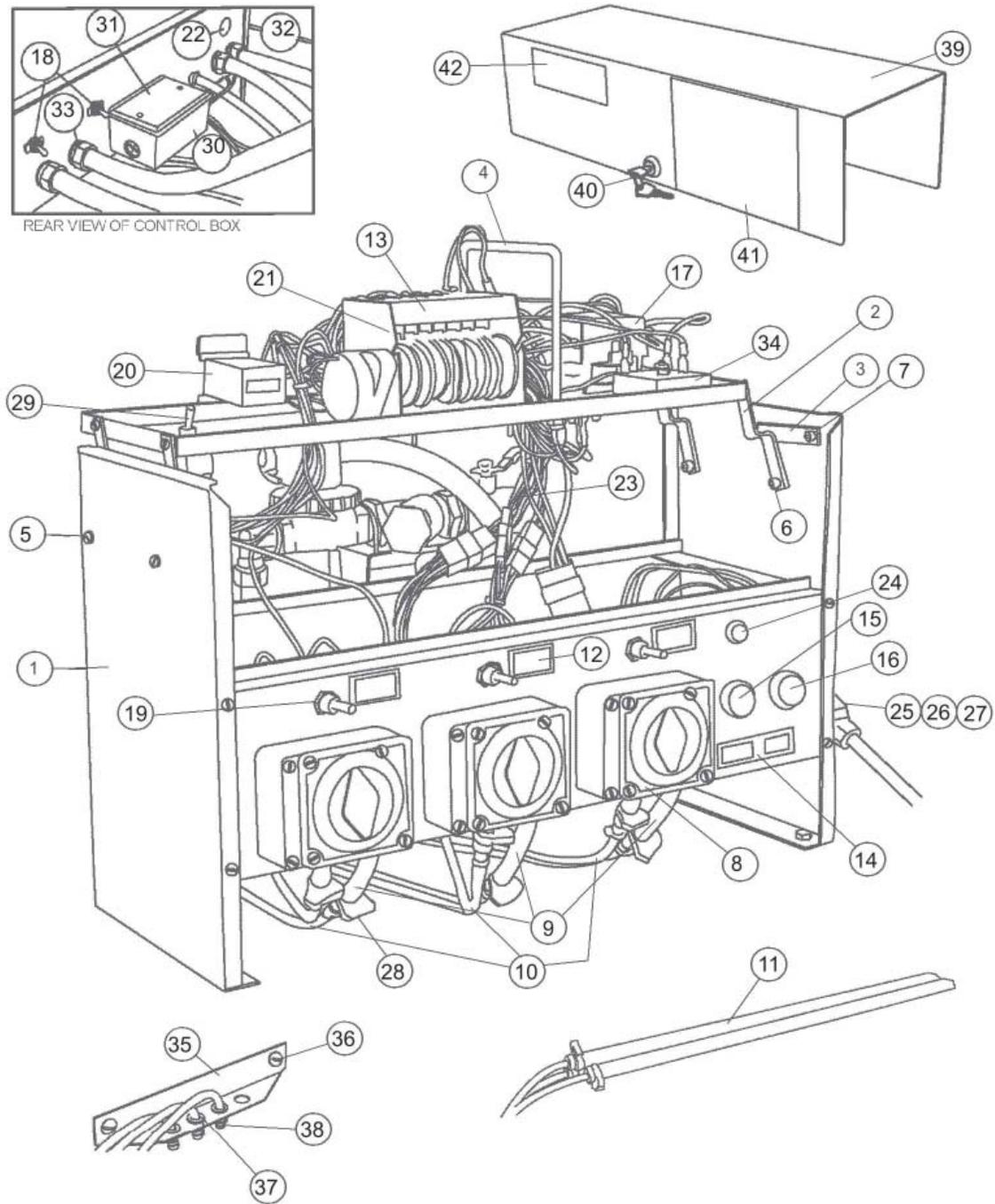
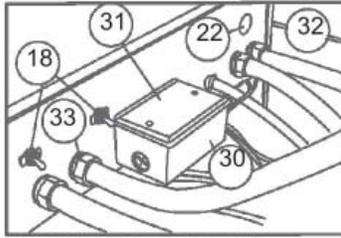
**American Dish Service**

5-CD

Ref. No.	Part No.	No. Req.	Description
25	091-4144	1	Conduit Locknut
26	092-1029	1	½" x 3/8" Reducer, Brass
27	092-1030	1	Fitting, 3/8" Comp x ½" FPT 90°
28	098-1606	6	Tube Clamp
29	091-3060	1	Toggle Switch, Delime
30	091-4016	1	Junction Box
31	091-4004	1	Cover, Junction Box
32	091-5156	1	Conduit, ½", 150"
33	091-4141	4	Conduit, Fitting ½" ST
34	091-3059	1	Relay, Auto Start
35	086-6419	1	Chemical Discharge Bracket, 5-CD
36	098-1414	2	Screw, ¼-20 x ½", TH, SS
37	091-4015	3	Grommet, Chemical Feeder Assembly
38	093-1043	3	Hose Barb 3/16"
39	087-6433	1	Control Box Cover
40	096-1002	1	Control Box Lock and Key
41	089-9204	1	Outside Sump Cleaning Instruction
42	089-9277	1	NSF Sticker
OPT.	091-3003	1	Relay, Instant Start
N/S	089-0001	1	Nameplate
N/S	089-0050	1	NSF UL Plate
N/S	098-9011	6	Pop Rivets
N/S	089-9201	1	Wiring Diagram
N/S	089-9209	1	Decal, Connect to Power Supply
N/S	089-9227	1	Adjust Cam Decal
N/S	089-9257	1	Decal, Delimiting, Caution
N/S	091-4142	2	Conduit, Elbow, ½" 90°
N/S	091-4017	1	Grommet, Large
N/S	091-5213	2	Red Butt Connector
N/S	091-5220	6	Cable Tie, Medium
N/S	091-5223	1	Molex Housing, Male
N/S	091-5224	1	Male Molex Pin
N/S	091-5226	8	Tabs, Master Switch

064-2800 LF  
064-3500 RF  
Control System Assembly  
5-CD

**American Dish Service**



064-2800 LF

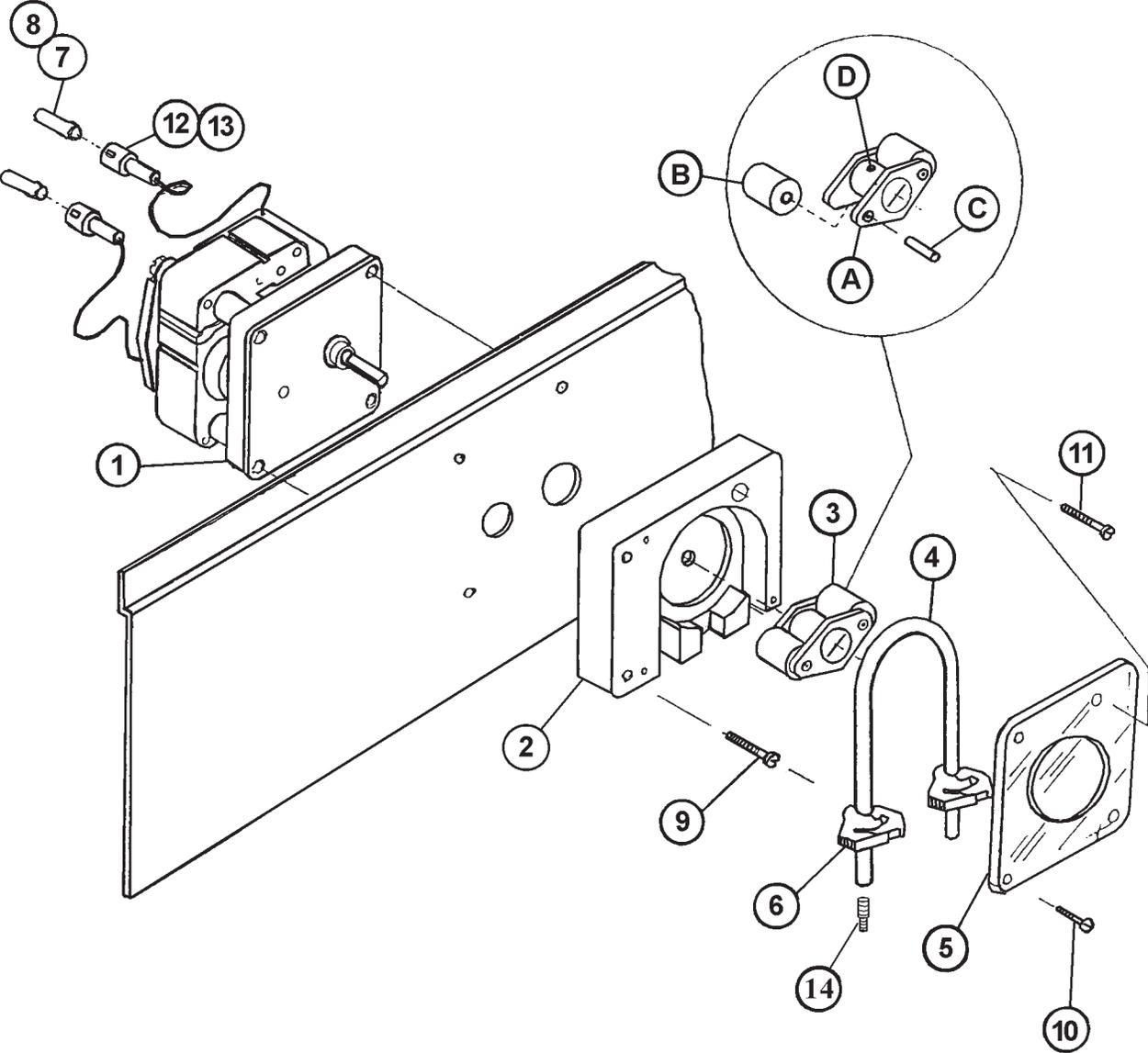
064-3500 RF

Control System Assembly

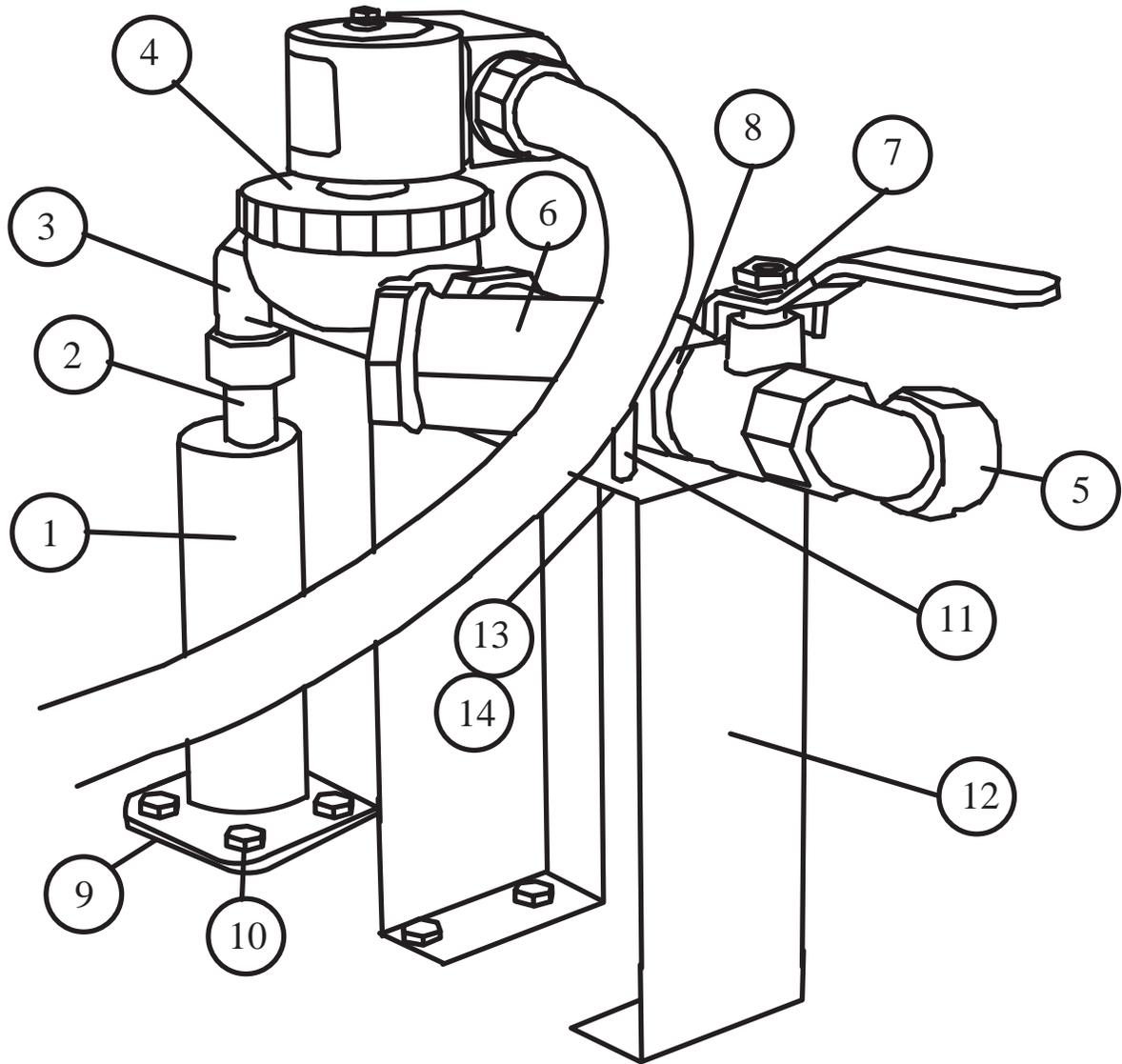
**American Dish Service**

5-CD

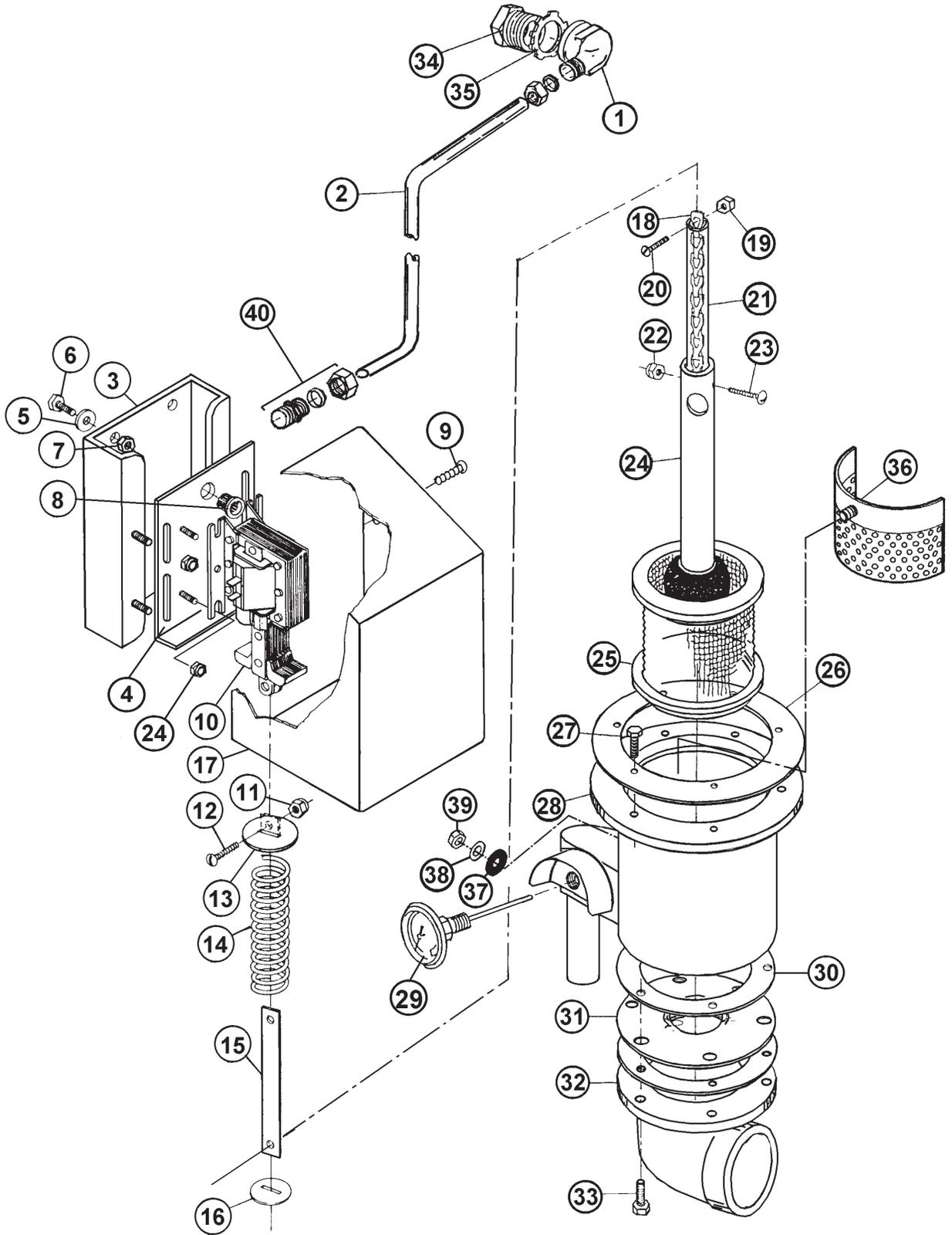
<b>Ref. No.</b>	<b>Part No.</b>	<b>No. Req.</b>	<b>Description</b>
N/S	091-5247	1	Spade Connector, Female
N/S	091-6157	8	Flag Connector and Cover
N/S	098-1102	4	Screw, 6-32 x ¼", RH, SS
N/S	098-1104	4	Screw, 6-32 x ½", RH, SS
N/S	098-1205	8	Screw, 8-32 x 5/8", RH, SS
N/S	098-1211	4	Screw, 4-40 x ¼", RH, SS
N/S	098-1418	1	Bolt, ¼-20 x 1", TH, SS
N/S	098-1420	1	Screw, ¼-20 x 1 ¼", TH
N/S	098-2001	4	Locknut, 4-40
N/S	098-2101	4	Nut, 6-32, SS, Hex
N/S	098-2202	8	Nut, 8-32, SS, Hex
N/S	098-2507	1	Locknut, ¼-20
N/S	098-9020	2	Plastic Plug, 7/8"
N/S	292-1006	2	Locknut, ½" FPT, Brass
N/S	098-2507	5	Locknut, ¼"
N/S	091-3011	1	Sock, Relay
N/S	091-4002	1	Grommet
Rep	087-6429		Control box bottom
Rep	087-6430		Control box RH Side
Rep	087-6431		Control box LH Side(Left Front)
Rep	087-9428		Control box LH Side(Right Front)
N/S	091-4157	1	Nut, Threaded Red, Tube Stiffener
N/S	091-4158	1	Nut, Threaded Blue, Tube Stiffener
N/S	091-4159	1	Nut, Threaded Green, Tube Stiffener
N/S	091-4019	2	Grommet, Switch Hole (Chemical Alarm)









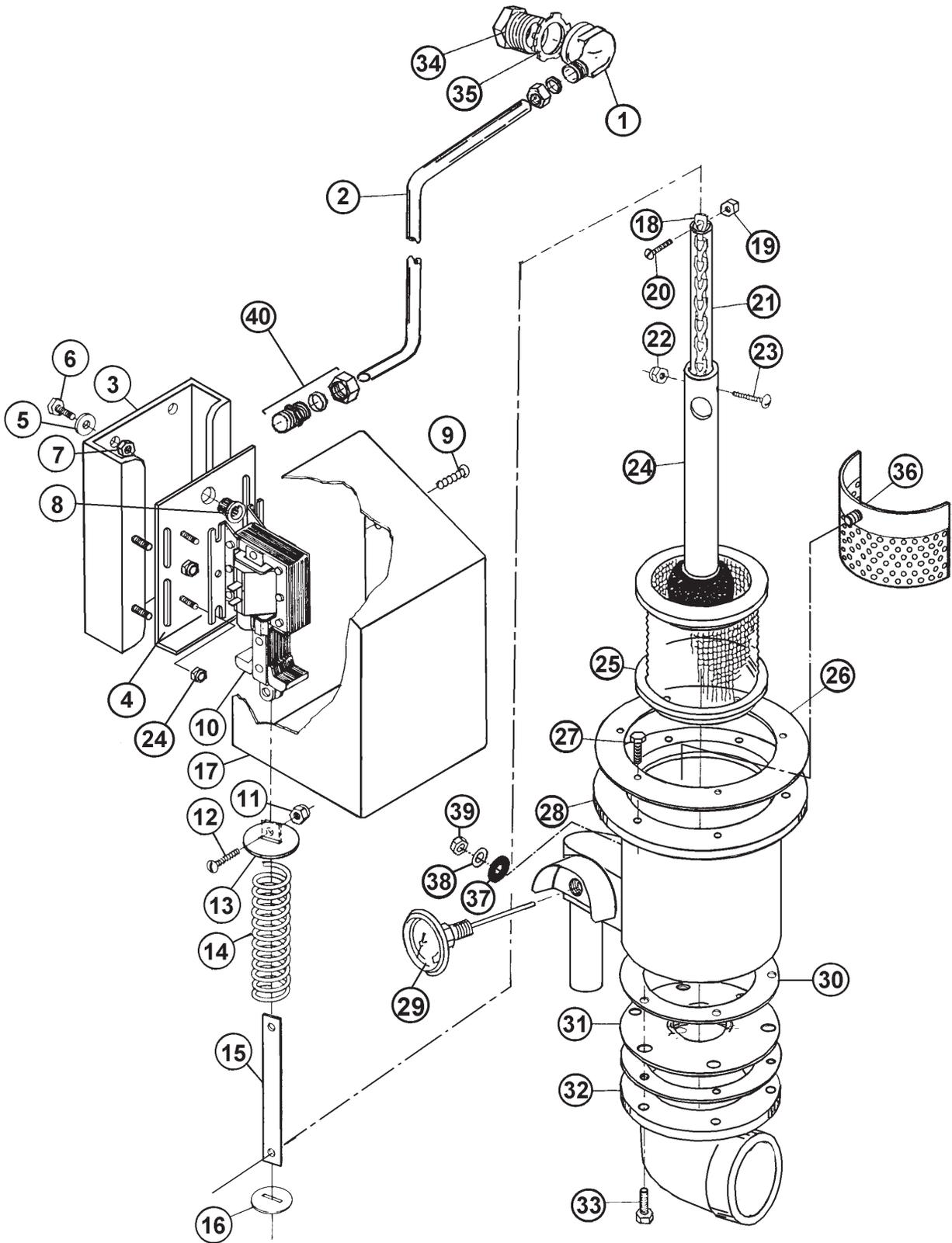


066-1700/066-1800

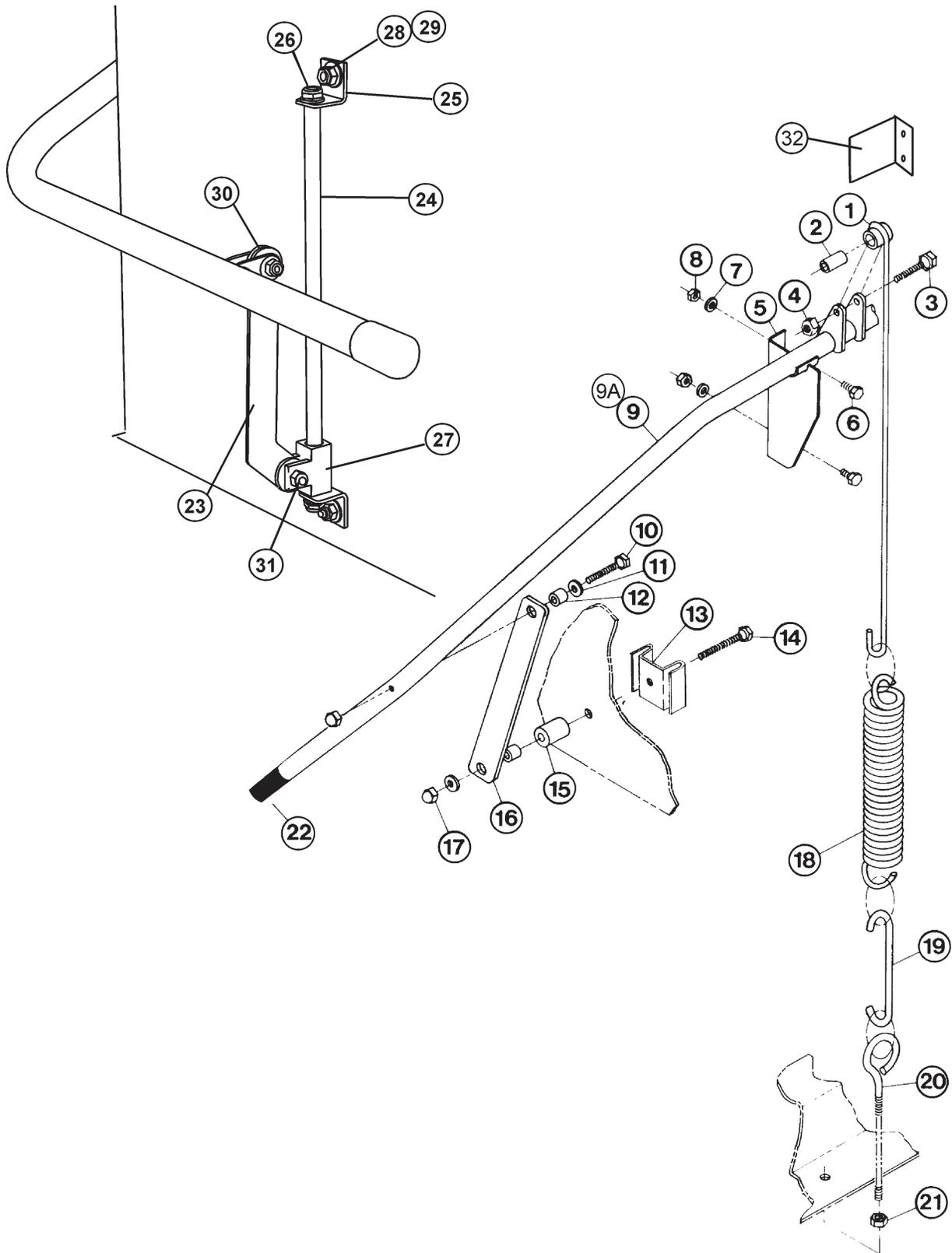
Drain System Assembly LF/RF  
5-CD

**American Dish Service**

Ref. No.	Part No.	No. Req.	Description
1	092-1030	1	Conduit Fitting, ¼", 90 Deg.
2	086-6734	1	Conduit, 3/8" O.D., LF
2A	086-6735		Conduit, 3/8" O.D., RF
3	086-6621	1	Solenoid Base Weldment, Outside Sump, LF
3A	085-6634		Solenoid Base Weldment, Outside Sump, RF
4	085-6622	1	Solenoid Base Plate
5	098-2416	10	Washer, ¼", SS
6	098-1423	4	Bolt, HH, SS, ¼-20 x ½"
7	098-2507	8	Locknut, SS, ¼-20
8	091-4005	1	Grommet, Plastic
9	098-1413	2	Bolt, ¼-20 x 3/8", TH, SS
10	091-2014	1	Solenoid
11	098-2201	1	Locknut, 8-32, SS
12	098-1205	1	Screw, RH, SS, 8-32 x 5/8"
13	086-6607	1	Slotted Washer (Large)
14	098-3001	1	Spring, Drain Solenoid, Outside Sump
15	086-6605	1	Link, Drain Solenoid, Outside Sump
16	086-6606	1	Slotted Washer (Small)
17	085-6618	1	Solenoid Cover, LF
17A	085-6635		Solenoid Cover, RF
18	089-6610	1	Chain, Make From 098-9001
19	098-2201	1	Locknut, 8-32, SS
20	098-1205	1	Screw, RH, SS, 8-32 x 5/8
21	084-6622	1	Chain Cover, Make From 093-1012
22	098-2301	5	Locknut, SS, 10-32
23	098-1311	1	Screw, RH, SS, 10-32 x 1 3/8
24	081-6601	1	Drain Plug Assembly
Rep	084-6608	0	Drain Tube (Replacement Part)
Rep	083-6601	0	Drain Ball (Replacement Part), 1 ½"
25	085-6636	1	Sump Screen
26	089-6601	1	Sump Gasket
27	098-1423	6	Bolt, HH, SS, ¼-20 x ½"
28	085-6212	1	Sump Assembly With Tail Piece
29	099-1001	1	Temperature Gauge, 6 Ft Capillary, Top mounted







067-1400/067-1500

Door Actuator Assembly LF/RF  
5-CD

**American Dish Service**

Ref. No.	Part No.	No. Req.	Description
1	085-6701	2	Spring Extension
2	098-4002	2	Bushing, Bronze
3	098-1514	2	Bolt, 5/16 x 1 1/2", HH, SS
4	098-2505	2	Cap Nut, 5/16-18, HH, SS
5	385-6119	2-LF, 1-RF	Arm Support Bracket, LH
N/S	085-6184	1-LF, 2-RF	Arm Support Bracket, RH
6	098-1423	4	Bolt, 1/4-20 x 1/2", HH, SS
7	098-2416	4	Washer, 1/4", SS
8	098-2407	4	Locknut, 1/4-20, SS
9	085-6729	1	Door Operating Arm 5-CD, RF (Lever Arm)
9A	085-6730		Door Operating Arm 5-CD, LF (Lever Arm)
10	098-1434	2	Bolt, 1/4-20 x 2", HH, SS
11	098-2404	6	Washer, 1/4", SS
12	084-6703	6	Bushing (Dowel 3/8")
13	086-6733	2	Door Stop, 5/16" Hole
14	098-1432	2	Bolt, 1/4-20 x 1 3/4", HH, SS
15	084-6702	2	Spacer
16	086-6728	1	Door Link, 14 3/4" Lg.
17	098-2405	4	Cap Locknut, 1/4-20, SS
18	098-3003	2	Door Spring
19	086-6731	2	Spring Extension, Secondary
20	098-1581	2	Eye Bolt, 5/16-18 x 6"
21	098-2502	2	Nut, 5/16-18, HH, SS
22	092-1086	2	Lever Arm End Cap
23	086-6729	1	Door Link, Angled, 7 3/8" Lg.
24	084-6241	1	Door Slide Rod
25	086-6732	2	Bracket, Door Slide Rod
26	098-2708	2	Locknut, 3/8-16 Nylon, SS
27	084-6242	1	Door Slide
28	098-2501	2	Locknut, 5/16-18, SS
29	098-1517	2	Bolt, 5/16-18 x 3/4" Lg. TH, SS
N/S	087-6704	2	Door Brace, 5-CD, 3 Hole
N/S	098-2511	1	Washer, 5/16" I.D. 1" O.D., SS
30	098-2705	4	Washer, 7/16" I.D. x 1" O.D., SS
31	098-1445	2	Bolt, 1/4-20 x 1", HH, SS
32	086-6730	1	Bracket, Door Cut-Off, 5-CD

# ***American Dish Service***

*Manufacturer of low and high temperature  
Commercial Dishwashers and Glasswashers*

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