Jackson

An Enodis Company

TEMPSTAR GPX
TEMPSTAR HH GPX

DUAL TEMPERATURE, GAS HEATED DOOR-TYPE DISHMACHINES

SERVICE MANUAL

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August 5, 2003

P/N 7610-002-57-32 (Rev. B)

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SPECIFICATIONS OF THE TEMPSTAR GPX

PERFORMANCE/CAPABILITIES

OPERATING CAPACITY (RACKS/HOUR)

RACKS PER HOUR	57
DISHES PER HOUR	1425
GLASSES PER HOUR	1425

OPERATING CYCLE (SECONDS)

WASH TIME	45
RINSE TIME	11
DWELL TIME	2
TOTAL CYCLE TIME	60

TANK CAPACITY (GALLONS)

WASH TANK (MINIMUM)	8.0

WASH PUMP CAPACITY

GALLONS PER MINUTE	150

ELECTRICAL REQUIREMENTS

WASH PUMP MOTOR HP	3/4
RECIRCULATOR PUMP MOTOR HP	1/8

NOTE: Typical Electrical Circuit is based upon (1) 125% of the full amperage load of the machine and (2) typical fixed-trip circuit breaker sizes as listed in the NEC 2002 Edition. Local codes may require more stringent protection than what is displayed here. Always verify with your electrical service contractor that your circuit protection is adequate and meets all applicable national and local codes. These numbers are provided in this manual simply for reference and may change without notice at any given time.

VOLTS	PH	HZ	RINSE HEATER RATINGS	TOTAL AMPS	TYPICAL ELECTRICAL CIRCUIT
110 - 120	1	60	N/A	14	20 AMP
208 - 240	1	60	N/A	7	15 AMP
208 - 240	3	60	N/A	7	15 AMP

WATER REQUIREMENTS

INLET TEMPERATURE	BOOSTER OUTPUT (BTU)
60 -110°F	100,000
110 -140°F	60,000

WASH TEMPERATURE (MINIMUM)	150°F
RINSE TEMPERATURE (MINIMUM)	180°F
GALLONS PER HOUR	52.2
WATER LINE SIZE I.P.S. (Minimum)	1/2”
DRAIN LINE SIZE I.P.S. (Minimum)	1-1/2”
FLOW PRESSURE P.S.I.	20 ± 5

NOTE: Always refer to the machine data plate for specific electrical and water requirements. The material provided on this page is for reference only and may be subject to change without notice.

SPECIFICATIONS OF THE TEMPSTAR HH GPX

PERFORMANCE/CAPABILITIES

OPERATING CAPACITY (RACKS/HOUR)

RACKS PER HOUR	53
DISHES PER HOUR	1325
GLASSES PER HOUR	1325

OPERATING CYCLE (SECONDS)

SELECTION (A)

WASH TIME	45
RINSE TIME	15
TOTAL CYCLE TIME	60

SELECTION (B)

WASH TIME	103
RINSE TIME	15
DWELL TIME	2
TOTAL CYCLE TIME	120

SELECTION (C)

WASH TIME	163
RINSE TIME	15
DWELL TIME	2
TOTAL CYCLE TIME	180

SELECTION (D)

WASH TIME	283
RINSE TIME	15
DWELL TIME	2
TOTAL CYCLE TIME	300

TANK CAPACITY (GALLONS)

WASH TANK (MINIMUM)	8.0

WASH PUMP CAPACITY

GALLONS PER MINUTE	150

ELECTRICAL REQUIREMENTS

WASH PUMP MOTOR HP	2.0
RECIRCULATOR PUMP MOTOR HP	1/8

NOTE: Typical Electrical Circuit is based upon (1) 125% of the full amperage load of the machine and (2) typical fixed-trip circuit breaker sizes as listed in the NEC 2002 Edition. Local codes may require more stringent protection than what is displayed here. Always verify with your electrical service contractor that your circuit protection is adequate and meets all applicable national and local codes. These numbers are provided in this manual simply for reference and may change without notice at any given time.

VOLTS	PH	HZ	RINSE HEATER RATINGS	TOTAL AMPS	TYPICAL ELECTRICAL CIRCUIT
110 - 120	1	60	N/A	14	20 AMP
208 - 240	1	60	N/A	7	15 AMP
208 - 240	3	60	N/A	7	15 AMP

WATER REQUIREMENTS

INLET TEMPERATURE	BOOSTER OUTPUT (BTU)
LESS THAN 60°F	200,000
60 -110°F	100,000
140°F	60,000

WASH TEMPERATURE (MINIMUM)	150°F
RINSE TEMPERATURE (MINIMUM)	180°F
GALLONS PER HOUR	72.0
WATER LINE SIZE I.P.S. (MINIMUM)	1/2”
DRAIN LINE SIZE I.P.S. (MINIMUM)	1-1/2”
FLOW PRESSURE P.S.I.	20±5

NOTE: Always refer to the machine data plate for specific electrical and water requirements. The material provided on this page is for reference only and may be subject to change without notice.

INSTALLATION INSTRUCTIONS

Jackson MSC Inc. provides technical support for all of the dishmachines detailed in this manual. We strongly recommend that you refer to this manual before making a call to our technical support staff. Please have this manual with you when you call so that our staff can refer you, if necessary, to the proper page. Technical support is available from 8:00 a.m. to 5:00 p.m. (EST), Monday through Friday. Technical support is not available on holidays. Contact technical support toll free at 1-888-800-5672. Please remember that technical support is available for service personnel only.

VISUAL INSPECTION: Before installing the unit, check the container and machine for damage. A damaged container is an indicator that there may be some damage to the machine. If there is damage to both the container and machine, do not throw away the container. The dishmachine has been inspected and packed at the factory and is expected to arrive to you in new, undamaged condition. However, rough handling by carriers or others may result in there being damage to the unit while in transit. If such a situation occurs, do not return the unit to Jackson; instead, contact the carrier and ask them to send a representative to the site to inspect the damage to the unit and to complete an inspection report. You must contact the carrier within 48 hours of receiving the machine. Also, contact the dealer through which you purchased the unit.

UNPACKING THE DISHMACHINE: Once the machine has been removed from the container, ensure that there are no missing parts from the machine. This may not be obvious at first. If it is discovered that an item is missing, contact Jackson immediately to have the missing item shipped to you.

LEVEL THE DISHMACHINE: The dishmachine is designed to operate while being level. This is important to prevent any damage to the machine during operation and to ensure the best results when washing ware. The unit comes with adjustable bullet feet, which can be turned using a pair of channel locks or by hand if the unit can be raised safely. Ensure that the unit is level from side to side and from front to back before making any connections.

PLUMBING THE DISHMACHINE: All plumbing connections must comply with all applicable local, state, and national plumbing codes. The plumber is responsible for ensuring that the incoming water line is thoroughly flushed prior to connecting it to any component of the dishmachine. It is necessary to remove all foreign debris from the water line that may potentially get trapped in the valves or cause an obstruction. Any valves that are fouled as a result of foreign matter left in the water line, and any expenses resulting from this fouling, are not the responsibility of the manufacturer.

CONNECTING THE DRAIN LINE: The drain for the Tempstar models covered in this manual are gravity discharge drains. All piping from the 1-1/2" FNPT connection on the wash tank must be pitched (1/4" per foot) to the floor or sink drain. All piping from the machine to the drain must be a minimum 1-1/2" I.P.S. and shall not be reduced. There must also be an air gap between the machine drain line and the floor sink or drain. If a grease trap is required by code, it should have a flow capacity of 5 gallons per minute.

NOTE: This equipment is not recommend for use with deionized water or other aggressive fluids. Use of deionized water or other aggressive fluids will result in corrosion and failure of materials and components. Use of deionized water or other aggressive fluids will void the manufacturer's warranty.

WATER SUPPLY CONNECTION: Ensure that you have read the section entitled "PLUMBING THE DISHMACHINE" above before proceeding. Install the water supply line (1/2" pipe size minimum) to the dishmachine line strainer using copper pipe. It is recommended that a water shut-off valve be installed in the water line between the main supply and the machine to allow access for service. The water supply line is to be capable of 25 PSI "flow" pressure at the recommended temperature indicated on the data plate. For the Tempstar GPX, the line should also have the capacity to supply 52.2 GPH @ 25 PSI "flow" pressure.

For the Tempstar HH GPX, the line should also have the capacity to supply 72 GPH @ 25 PSI "flow" pressure.

In areas where the water pressure fluctuates or is greater than the recommended pressure, it is suggested that a water pressure regulator be installed. The Tempstar models covered in this manual come with water pressure regulators as standard equipment. Please notify Jackson immediately if this component is not present on your machine.

Do not confuse static pressure with flow pressure. Static pressure is the line pressure in a "no flow" condition (all valves and services are closed). Flow pressure is the pressure in the fill line when the fill valve is opened during the cycle.

It is also recommended that a shock absorber (not supplied with the Tempstar models) be installed in the incoming water line. This prevents line hammer (hydraulic shock), induced by the solenoid valve as it operates, from causing damage to the equipment.

WATER CONNECTION TO THE GAS BOOSTER HEATER: Refer to page entitled "GAS BOOSTER HEATER CONNECTIONS".

GAS BOOSTER HEATER ELECTRICAL INSTALLATION: The gas booster heater must have a separate electric hookup than that supplied to the dishmachine. Please refer to the manual supplied with your gas booster heater.

GAS CONNECTION TO THE BOOSTER HEATER: Please refer to the manual supplied with your gas booster heater.

VENTILATION OF THE GAS BOOSTER HEATER: Please refer to the manual supplied with your gas booster heater.

PLUMBING CHECK: Slowly turn on the water supply to the machine after the incoming fill line and the drain line have been installed. Check for any leaks and repair as required. All leaks must be repaired prior to placing the machine in operation.

ELECTRICAL POWER CONNECTION: Electrical and grounding connections must comply with the applicable portions of the National Electrical Code ANSI/NFPA 70 (latest edition) and/or other electrical codes.

Disconnect electrical power supply and place a tag at the disconnect switch to indicate that you are working on the circuit.

The dishmachine data plate is located on the right side and to the front of the machine. Refer to the data plate for machine operating requirements, machine voltage, total amperage load and serial number.

To install the incoming power lines, remove the control box cover. Install 3/4" conduit into the pre-punched holes in the back of the control box. Route power wires and connect to power block and grounding lug. Install the service wires (L1, L2, and L3 (3 phase only)) to the appropriate terminals as they are marked on the terminal block. Install the grounding wire into the lug provided. and tighten the connections. It is recommended that "DE-OX" or another similar anti-oxidation agent be used on all power connections.

VOLTAGE CHECK: Ensure that the power switch is in the OFF position and apply power to the dishmachine. Check the incoming power at the terminal block and ensure it corresponds to the voltage listed on the data plate. If not, contact a qualified service agency to examine the problem. Do not run the dishmachine if the voltage is too high or too low. Shut off the service breaker and mark it as being for the dishmachine. Advise all proper personnel of any problems and of the location of the service breaker. Replace the control box cover and tighten down the screws.

GAS BOOSTER HEATER CONNECTIONS

⚠ WARNING ⚠

ENSURE THAT THERE IS NO ELECTRICAL POWER APPLIED TO THE MACHINE WHEN MAKING GAS CONNECTION.

CHECK ALL GAS CONNECTIONS FOR LEAKS PRIOR TO APPLYING POWER.

THE GASES USED FOR COMBUSTION IN THIS DISH MACHINE ARE HIGHLY FLAMMABLE.
DO NOT SMOKE AROUND THIS MACHINE.

ENSURE THAT THE AREA WHERE THIS MACHINE IS TO BE INSTALLED IS WELL-VENTILATED TO PREVENT THE BUILD-UP OF COMBUSTIBLE GASES.

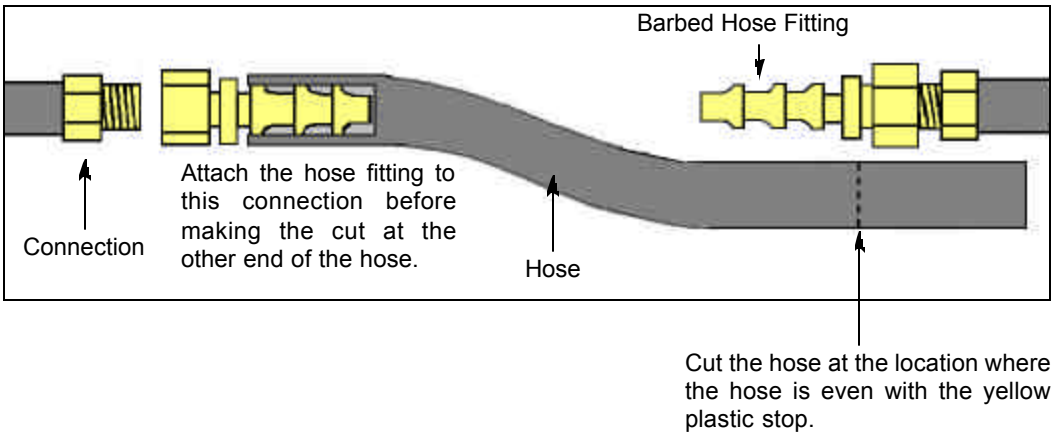
ENSURE THAT ALL LOCAL HEALTH, FIRE, AND BUILDING CODES ARE BEING ADHERED TO WHEN INSTALLING THIS MACHINE. VERIFY WITH LOCAL OFFICIALS IF THERE ARE ANY QUESTIONS.

INSTALL A SHUT-OFF VALVE AT THE GAS SOURCE.

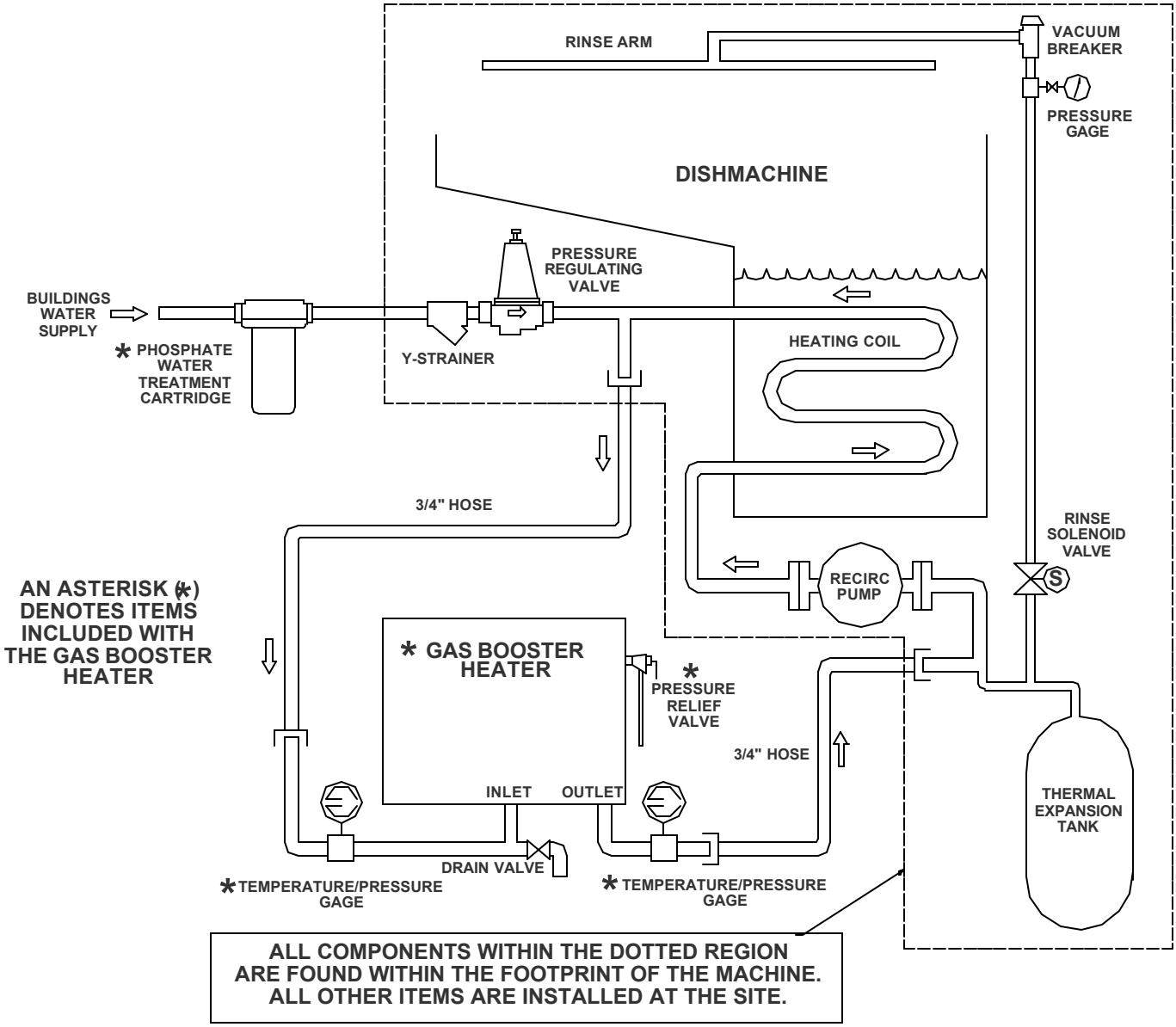
Due to the fact that each customer may have different requirements for the orientation of the gas booster heater relative to the main dishmachine, the hose lengths that connect the two units must be customized during each installation.

To prevent incorrect measurements of the hose, it is recommended to place one barbed hose fitting into the end of the uncut length of hose coil and attach that fitting to an appropriate connection. Run the hose to the corresponding connection on the other unit before cutting the hose. Use a barbed hose fitting that is screwed into the second connection on the other unit before cutting the hose. Use a barbed hose fitting that is screwed onto the second connection to gauge the correct distance. Ensure a smooth “flow” of hose without any sharp turns or kinks.

To aid in pushing the barbed hose fitting into the hose, place the fitting on a hard surface (i.e. the floor) with the barbed end of the fitting pointing upward and push the hose down onto the fitting. A small amount of lubricant (i.e. petroleum jelly) may aid in this process.



GAS BOOSTER HEATER CONNECTIONS (CONTINUED)



OPERATION INSTRUCTIONS

PREPARATION: Before proceeding with the start-up of the unit, verify the following:

1. The pan strainer and pump suction strainer are in place and are clean.

2. The overflow tube and o-ring are installed.

3. That the wash and rinse arms are screwed securely into place and that their endcaps are tight. The wash and rinse arms should rotate freely.

GAS BOOSTER HEATER OPERATION: For all start up and operation information, please refer to the manual supplied with your gas booster heater.

POWER UP: To energize the unit, turn on the power at the service breaker. The voltage should have been previously verified as being correct. If not, the voltage will have to be verified.

FILLING THE WASH TUB (TEMPSTAR GPX): Ensure that the delime switch is in the NORMAL position, and place the power switch into the ON position. The Tempstar model should fill automatically and shut off when the appropriate level is reached (just below the pan strainer). Verify that the drain stopper is preventing the wash tub water from leaking excessively. There may be some slight leakage from the drain hole. Verify that there are no other leaks on the unit before proceeding any further. The wash tub must be completely filled before operating the wash pump to prevent damage to the component. Once the wash tub is filled, the unit is ready for operation.

FILLING THE WASH TUB (TEMPSTAR HH GPX): For the initial fill, ensure that the cycle selection switch is in the "AUTO" (automatic) position, and place the power switch in the "ON" position. The unit will fill automatically and run through a rinse cycle. Open the doors and verify that the water level is correct. Hereafter, the water level is controlled by the overflow tube. Verify that the drain stopper is preventing the wash tub water from draining excessively. There may be some slight leakage from the drain hole. Verify that there are no other leaks on the unit before proceeding any further. The wash tub must be completely filled before operating the wash pump to prevent damage to the component. Once the wash tub is filled, the unit is ready for operation.

WARE PREPARATION: Proper preparation of ware will help ensure good results and less re-washes. If not done properly, ware may not come out clean and the efficiency of the dishmachine will be reduced. It is important to remember that a dishmachine is not a garbage disposal and that simply throwing unscraped dishes into the machine simply defeats the purpose altogether of washing the ware. Scraps should be removed from ware prior to being loaded into a rack. Prerinsing and pre-soaking are good ideas, especially for silverware and casserole dishes. Place cups and glasses upside down in racks so that they do not hold water during the cycle. The dishmachine is meant not only to clean, but to sanitize as well, to destroy all of the bacteria that could be harmful to human beings. In order to do this, ware must be properly prepared prior to being placed in the machine.

DAILY MACHINE PREPARATION: Refer to the section entitled "PREPARATION" at the top of this page and follow the instructions there. Afterwards, check that all of the chemical levels are correct and/or that there is plenty of detergent available for the expected workload.

WARM-UP CYCLES: For a typical daily start-up, it may be necessary to run the machine through 3 cycles to ensure that all of the cold water is out of the system and to verify that the unit is operating correctly. To cycle the machine, ensure that the power is on and that the tub has filled to the correct level. Lift the doors and the cycle light will illuminate. When the light goes out, close the doors, the unit will start, run through the cycle, and shut off automatically. Repeat this two more times. The unit should now be ready to proceed with the washing of ware.

WASHING A RACK OF WARE: To wash a rack, open the doors completely (being careful for hot water that may drip from the doors) and slide the rack into the unit. Close the doors and the unit will start automatically. Once the cycle is completed, open the door (again watching for the dripping hot water) and remove the rack of clean ware. Replace with a rack of soiled ware and close the doors. The process will then repeat itself.

OPERATIONAL INSPECTION: Based upon usage, the pan strainer may become clogged with soil and debris as the workday progresses. Operators should regularly inspect the pan strainer to ensure it has not become clogged. If the strainer does, it will reduce the washing capability of the machine. Instruct operators to clean out the pan strainer at regular intervals or as required by work load.

SHUTDOWN AND CLEANING: At the end of the workday, close the doors. When the unit completes the cycle, turn the power switch to the OFF position and open the doors. Remove and clean the pan strainer. Remove the drain stopper from the tub and allow the tub to drain (NOTE: the wash tank water will be hot so caution is advised). Once the wash tub is drained, remove the pump suction strainer. Remove soil and debris from the strainer and set to the side. Unscrew the wash and rinse arms from their manifolds. Remove the endcaps and flush the arms with water. Use a brush to clean out the inside of the arms. If the nozzles appear to be clogged, use a toothpick to remove the obstruction. Wipe the inside of the unit out, removing all soil and scraps. Reassemble the wash and rinse arms and replace them in the unit. The arms only need to be hand tight, do not use tools to tighten them down. Reinstall the drain stopper
and strainers and close the doors.

WATER CONSUMPTION ISSUES AND EFFICIENCY: The Tempstar HH GPX provides you, the customer, with the ability to control the hourly rack capacity of the machine. Extending the wash cycle to wash severely soiled ware, such as mixing bowls, does not increase the machine's water consumption. However, selecting a longer time cycle does lower the amount of dishes the machine will be able to wash per hour. It is important for operators to select the correct wash cycle depending on the amount of washing required. Not every rack of dishes requires the machine to be set on the longest wash cycle!

Using good prescrapping procedures and observing the results of individual racks of ware, operators will soon gain the experience and knowledge required to ensure that the Tempstar HH GPX operates at peak efficiency for your needs.

Water hardness and detergent usage will also effect the results of the Tempstar HH GPX. This manual provides a page on Detergent Control. It is recommended that owners and operators take the time to carefully review this section in order to ensure that everything is done to make sure the Tempstar HH GPX operates at peak performance!

TROUBLESHOOTING SECTION

WARNING: Inspection, testing and repair of electrical equipment should be performed only by qualified service personnel. Certain procedures in this section require electrical tests or measurements while power is applied to the machine. **Exercise extreme caution at all times.** If test points are not easily accessible, disconnect power, attach test equipment and reapply power to test. When replacing electrical parts, disconnect power at source circuit breaker.

Problem: Dishmachine will not fill after the door is close. Power "ON" light is illuminated.

1. Faulty rinse solenoid valve. Repair or replace valve as required.
2. Faulty door switch. Verify the wiring of the switch; if correct, replace the switch.
3. Fouled/faulty high level probe. Clean probe if fouled. If clean, and still not working, replace.

Problem: Dishmachine will not fill after the door is closed. Power "ON" light is not illuminated.

1. Service breaker tripped. Reset. If the breaker trips again, contact an electrician to verify the amp draw of the machine.
2. Machine not connected to power source. Verify that the machine has been properly connected to the power source.
3. Faulty power source. Verify the wiring of the switch; if correct, replace switch.

Problem: Dishmachine will not run after the door is closed. Power "ON" light is illuminated and the unit is filling.

1. Timer motor is faulty. Verify that the timer is rotating. If not, check to see that the motor is receiving power. If so, replace the motor and/or timer assembly.
2. Wash motor faulty/damaged. Verify that the wash motor is getting power. If so, replace the motor.
3. Wash motor contactor faulty. Check for continuity; if contacts are open, replace the contactor.

Problem: (TEMPSTAR GPX) Dishmachine runs continuously in the wash cycle.

1. Machine is in Delime mode. Flip NORMAL/DELIME switch to NORMAL mode.
2. Timer motor is faulty. Verify that the timer is rotating. If not, check to see that the motor is receiving power. If so, replace the motor and/or timer assembly.
3. Cam timer jammed by obstruction. Remove obstruction.

Problem: (TEMPSTAR HH GPX) Dishmachine runs continuously in the wash cycle.

1. Machine is in delime mode. Change Operation Mode from DELIME to NORMAL position.
2. Wash cycle delay timer is faulty. During the wash cycle, the cam timer will move for the first 30 seconds of the wash cycle. The cycle delay timer will then cause the cam timer to stop, in order to increase the length of the wash cycle. The red light on the delay timer is in control of the cam timer. If the red light is not turning on (only during cycles B, C or D), replace the cycle timer.
3. Wash cycle delay timer settings not correctly adjusted. If the wash cycle delay timer and rotating cam timer are working correctly, the time cycles on the delay timer may be incorrectly adjusted. Adjust the delay potentiometer corresponding to the B, C or D cycle. Rerun the appropriate cycle and see if the adjustment has made any change in the length of the cycle. If not, replace the cycle delay timer.
4. Cam timer is faulty. Confirm that the wash cycle delay timer is functioning correctly (see above). Confirm that the timer motor is receiving power. If it is, replace the motor and/or timer assembly. Make sure there are no obstructions which limit the rotation of the cam timer.

Problem: Wash or rinse heater does not work.

1. Faulty heater element. Check element for continuity; if open, replace the heater.
2. Faulty heater contactor. Replace the contactor.
3. Misadjusted/faulty thermostat(s). Verify operation and setting of thermostats, replace if necessary.

Problem: Dishmachine fill slowly and/or the rinse is weak.

1. Clogged or obstructed rinse arms. Remove and clean the rinse arms.
2. Low incoming water pressure. Adjust the water pressure regulator to ensure that there is 20 $\pm$ 5 PSI flow.
3. Y-strainer is clogged. Clean out the Y-strainer.

Problem: Rinse water not reaching required temperature.

1. Faulty rinse heater. Check element for continuity; if open, replace heater.
2. Misadjusted/faulty thermostat(s). Verify operation and setting of thermostats, replace if necessary.
3. Rinse thermometer is defective. Replace thermometer.

TROUBLESHOOTING SECTION (CONTINUED)

Problem: Wash water is not reaching required temperature.

1. Faulty wash heater. Check element for continuity; if open, relace the heater.
2. Misadjusted/faulty thermostat(s). Verify operation and setting of thermostats, replace if necessary.
3. Wash thermometer is defective. Replace thermometer.

Problem: Doors will not close completely.

1. Improper spring tension. Adjust spring tension as required by loosening (not removing) spring bolt nuts and adjusting the tension. Tighten nuts back when done.
2. Obstruction in door channel. Remove the obstruction.
3. Doors are not square with frame. Adjust the frame to accommodate the doors.

Problem: Doors are hard to open.

1. Improper tension on door springs. Adjust tension.
2. Door guides worn or obstructed. Replace if worn or cracked. Clean the door guides.
3. Doors not positioned correctly. Adjust the door positioning.
4. Dish table may be pinching the door runners. Adjust the table position.

Problem: Water leaks at the wash pump.

1. Wash pump seal defective. Replace the seal.
2. Petcock or pump drain (if equipped) not shut/tight. Close or tighten.
3. Loose hoses (hose clamps) on the wash pump. Tighten the hose clamps.

Problem: Will not rinse during autocycle.

1. Defective rinse solenoid. Repair or replace the rinse solenoid as required.
2. Faulty fill microswitch. Replace microswitch.
3. No water to the machine. Verify that there is water a 20 ± 5 PSI connected to the machine.

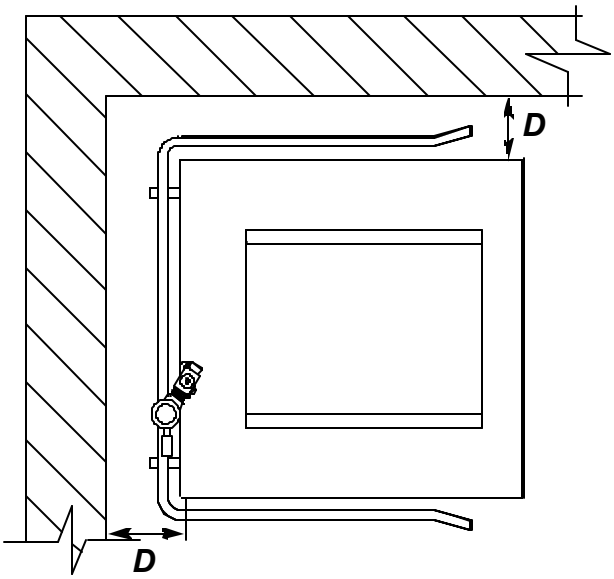
Problem: Dishes are not coming clean.

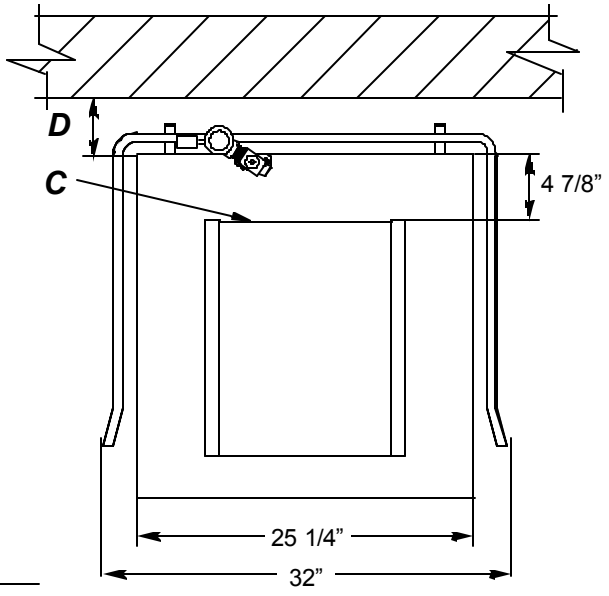
1. Machine temperatures are not up to the minimum requirements. Verify that incoming water, rinse water, and wash water match the required temperatures as listed on the machine data plate.
2. No detergent/too much detergent. Adjust detergent concentration as required for the amount of water held by the machine.
3. Solid dispenser canister is empty. Replace the canister.

DIMENSIONS FOR TEMPSTAR GPX

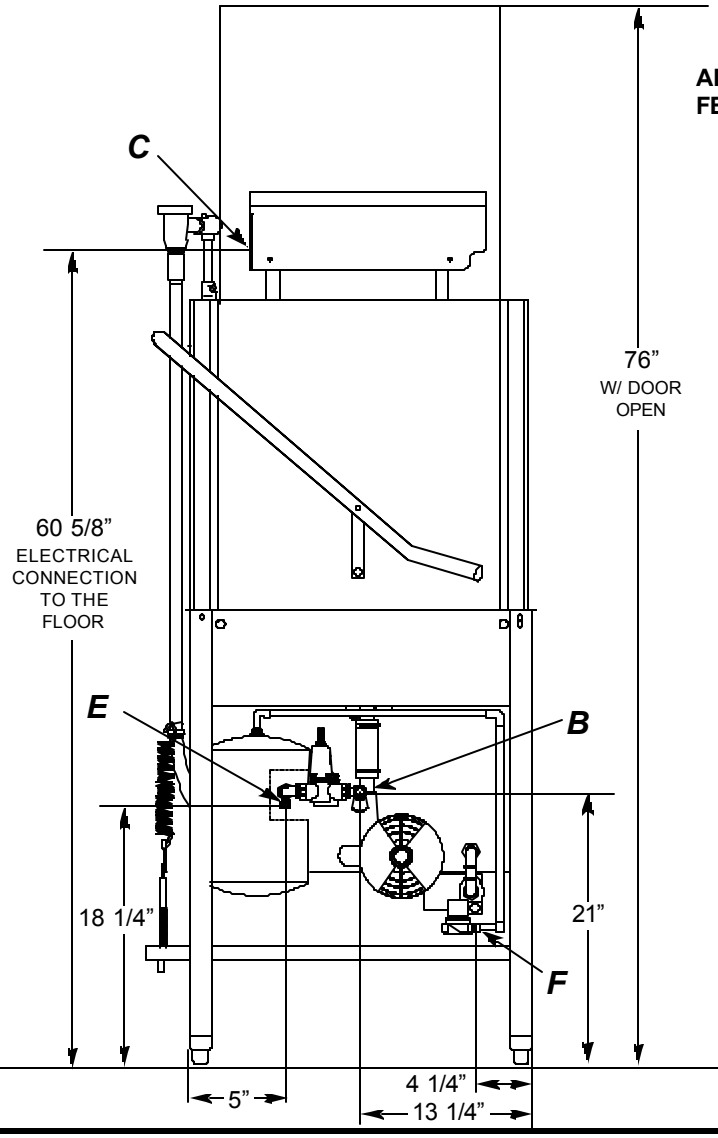
LEGEND

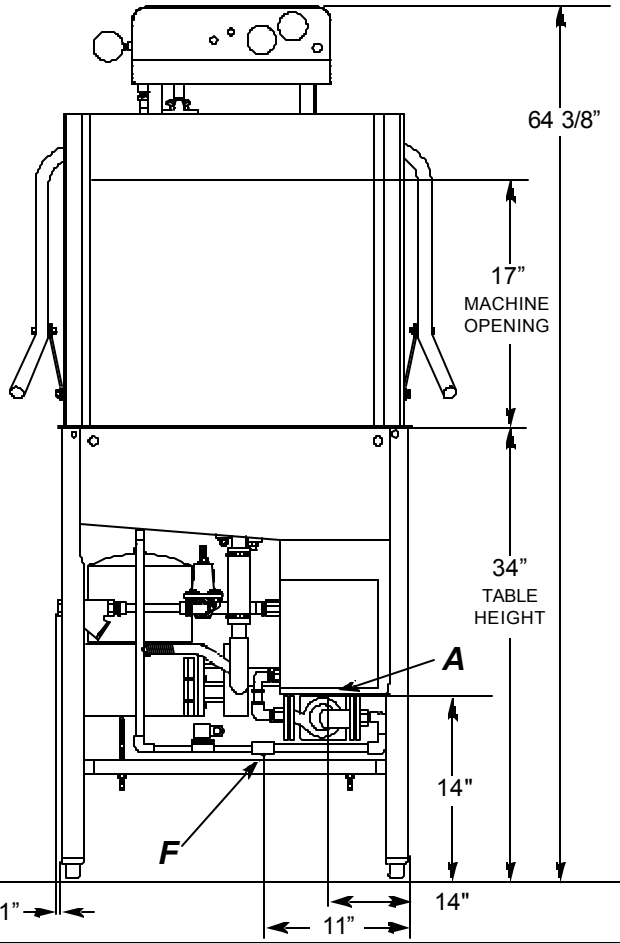
A **- DRAIN 1 1/2" I.P.S.**
B **- WATER INLET 1/2" N.P.T.**
C **- ELECTRICAL CONNECTION**
D **- STANDARD WALL CLEARANCE WITH DISHTABLE 4"**
E **- OUTLET TO BOOSTER HEATER 3/4" N.P.T.**
F **- INLET FROM BOOSTER HEATER 3/4" N.P.T.**





ALL DIMENSIONS ARE +/- 1/2" DUE TO ADJUSTABLE FEET.





DIMENSIONS FOR TEMPSTAR HH GPX

LEGEND:

A **- DRAIN 1 1/2" I.P.S.**
B **- WATER INLET 1/2" N.P.T.**
C **- ELECTRICAL CONNECTION**
D **- STANDARD WALL CLEARANCE WITH DISHTABLE 4"**
E **- OUTLET TO BOOSTER HEATER 3/4" N.P.T.**
F **- INLET FROM BOOSTER HEATER 3/4" N.P.T.**

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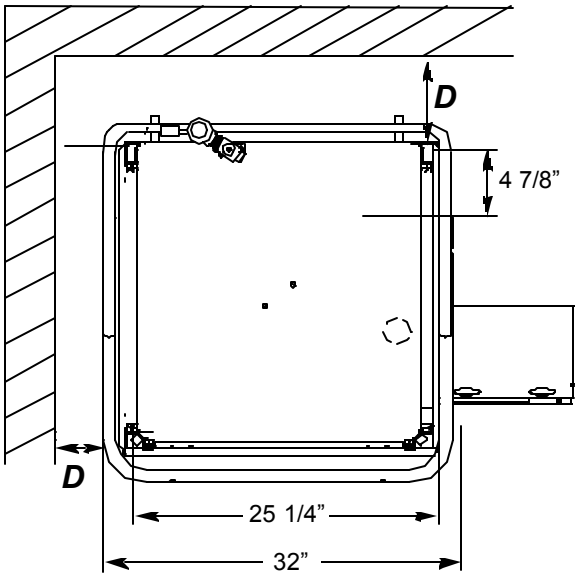


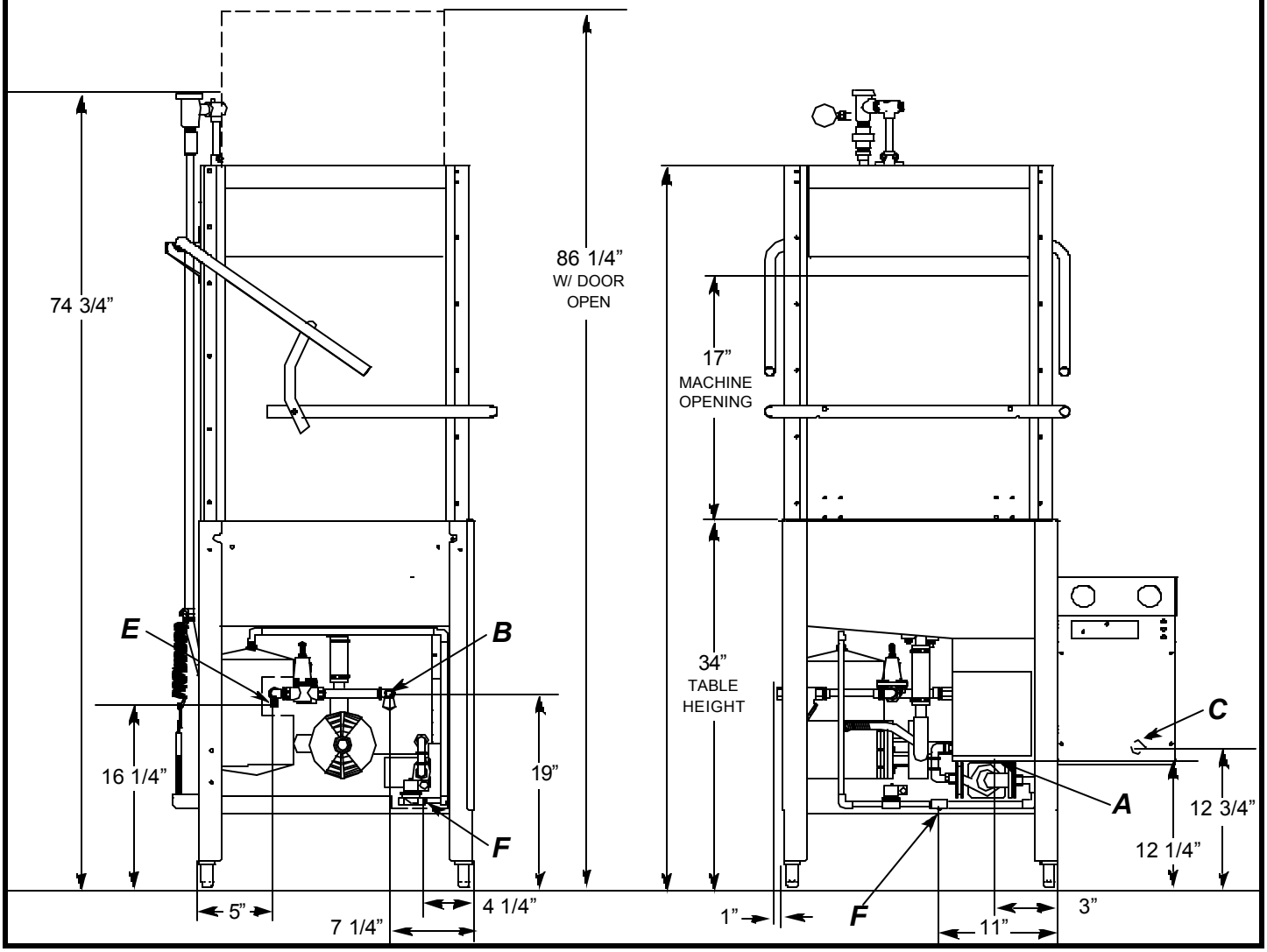


TABLE DIMENSIONS

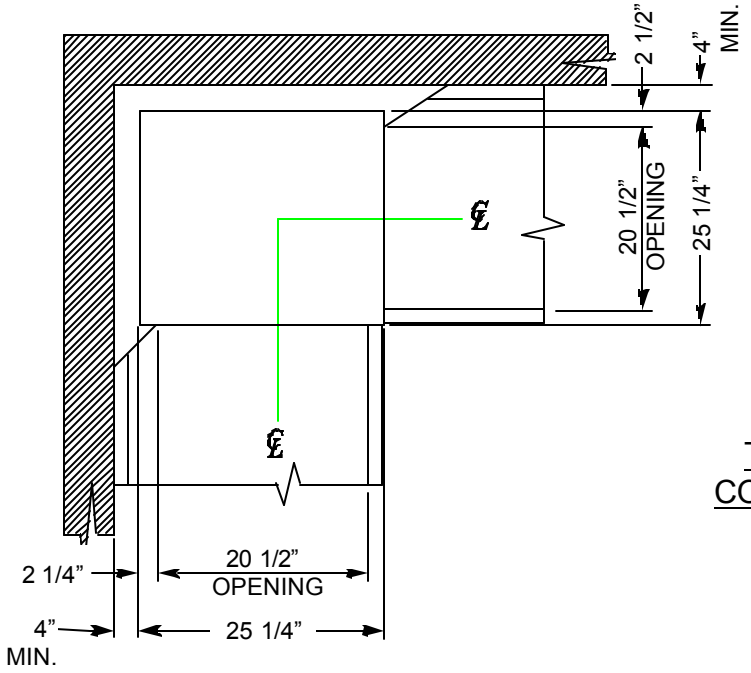


TABLE DIMENSIONS
CORNER INSTALLATION

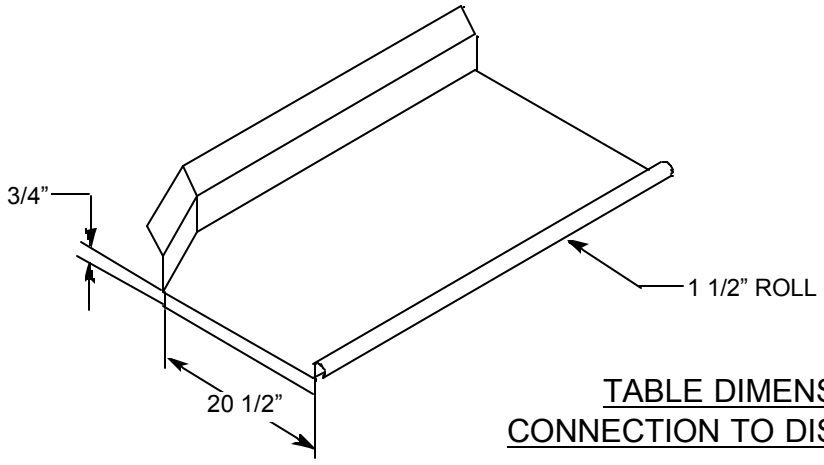


TABLE DIMENSIONS
CONNECTION TO DISHMACHINE

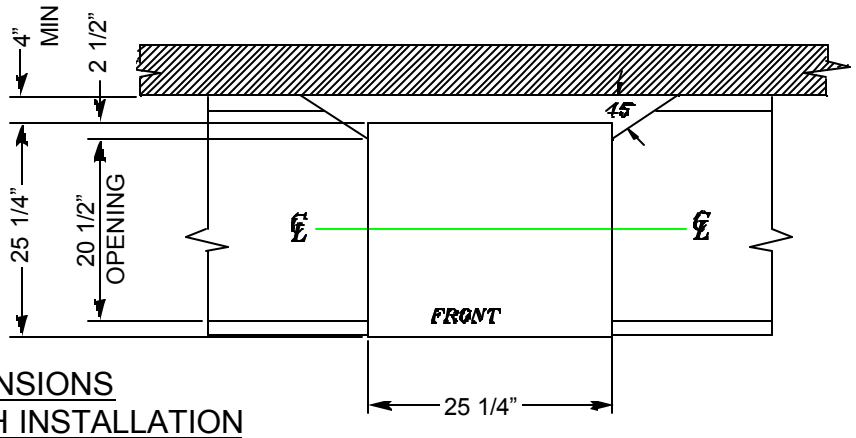
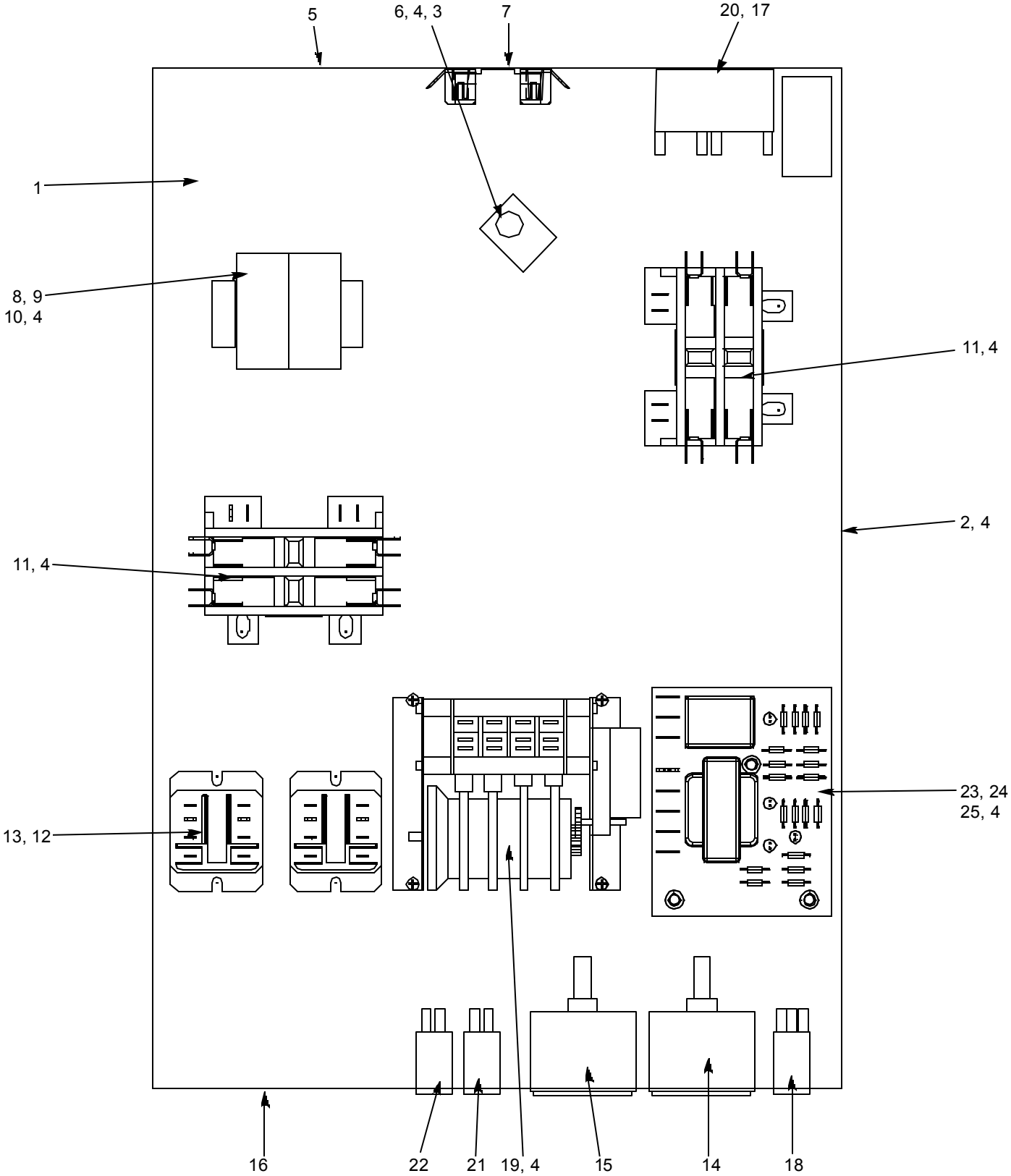


TABLE DIMENSIONS
STRAIGHT THROUGH INSTALLATION

TEMPSTAR GPX CONTROL BOX ASSEMBLY

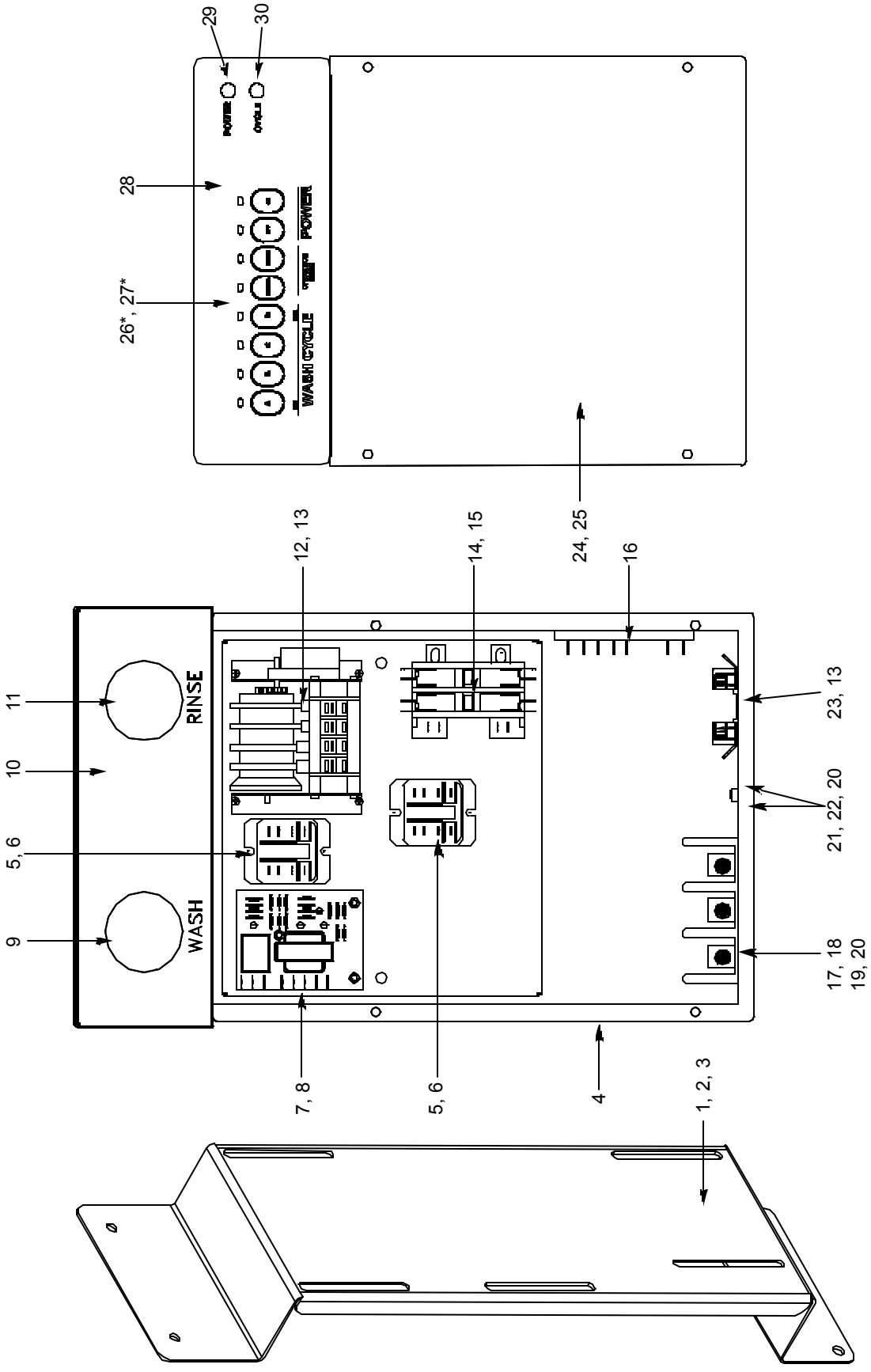


TEMPSTAR GPX CONTROL BOX ASSEMBLY (CONTINUED)

ITEM	QTY	DESCRIPTION	Mfg. No.
1	1	Control Box Weldment	5700-002-57-08
2	1	Terminal Board, Dispenser	5940-001-97-91
3	1	Decal, Ground	9905-011-86-86
4	6	Locknut, 10-24 S/S Hex with Nylon Insert	5310-373-01-00
5	4	Plug, Heyco	5975-011-47-81
6	1	Wire Lug	5940-200-76-00
7	1	Decal, Use Copper Conductors	9905-011-47-35
8	1	Decal, L1, L2, L3	9905-101-12-66
9	2	Curtis Block	5940-500-02-19
10	1	Terminal Track	5700-000-43-60
11	2	Contactor	5945-109-03-69
12	8	Locknut, 6-32 S/S Hex with Nylon Insert	5310-373-03-00
13	2	Relay	5945-111-47-51
14	1	Rinse Thermometer	6685-111-68-48
15	1	Wash Thermometer	6685-111-68-49
16	1	Decal, Tempstar GPX	9905-002-31-84
17	1	Decal, Delime/Normal	9905-011-34-96
18	1	Switch	5930-002-43-44
19	1	Timer, 4 CKT 60Hz	5945-303-31-00
20	1	Switch, Wash	5930-301-21-18
21	1	Light, Red	5945-111-44-45
22	1	Light, Green	5945-111-44-43
23	1	Liquid Level Control Board	6680-200-08-21
24	4	Screw, 6-32 x 5/8" S/S	5305-011-39-85
25	1	Bracket, LLC Board Mounting	5700-002-13-22
26*	1	Cover, Control Box	5700-002-23-03
27*	1	Decal, Warning - Disconnect Power	9905-100-75-93
28*	1	Bolt, 10-32 x 1/2" Slotted Truss Head	5305-173-12-00
29*	4	Leg, Control Box Support	5700-002-33-05
30*	4	Screw, 1/4"-20 x 2 3/4" S/S Hex Head Cap	5305-274-13-00
31*	4	Washer, 1/4”-20 I.D.	5311-174-01-00
32*	4	Locknut, 1/4"-20 S/S Hex with Nylon Insert	5310-374-01-00

* Represents an item not shown.

TEMPSTAR HH GPX CONTROL BOX ASSEMBLY



TEMPSTAR HH GPX CONTROL BOX ASSEMBLY (CONTINUED)

ITEM	QTY	DESCRIPTION	Mfg. No.
1	1	Bracket, Electrical Box Mounting	5700-002-18-48
2	9	Locknut, 1/4"-20 S/S Hex with Nylon Insert	5310-374-01-00
3	9	Washer, 1/4"-20 I.D. S/S	5311-174-01-00
4	1	Control Box Weldment	5700-002-06-48
5	2	Relay	5945-111-47-51
6	4	Screw, 10-32 x 1/2" Phillips Pan Head with Washer	5305-002-32-37
7	1	Liquid Level Control	6680-200-08-21
8	3	Screw, 6-32 x 5/8"	5305-011-39-85
*	1	Bracket, LLC Board	5700-002-13-22
9	1	Thermometer, 48 Lead	6685-111-68-48
10	1	Decal, Control Box Gauge	9905-002-00-45
11	1	Thermometer, 96 Lead	6685-111-68-49
12	1	Timer, 4CKT 208-230V Single REV	5945-303-31-00
13	8	Screw, 6-32 x 3/8" SEMS with External Tooth Washer	5305-002-25-91
14	2	Contactor, 2 Pole 220V 20AMP	5945-109-03-69
15	3	Screw, 10-32 x 3/8" Phillips Pan Head	5305-173-26-00
16	1	Timer, Cycle Delay	5945-002-13-78
17	1	Curtis Block	5940-500-02-19
18	1	Decal, L1, L2, L3	9905-101-12-66
19	1	Decal, Copper Conductors	9905-011-47-35
20	4	Locknut, 10-24 S/S Hex with Nylon Insert	5310-373-01-00
21	1	Wire Lug	5940-200-76-00
22	1	Terminal Board, Dispenser	5940-001-97-91
22	1	Terminal Track	5700-000-43-60
23	1	Decal, Ground	9905-011-86-86
24	1	Cover, Control Box Weldment	5700-002-06-52
25	4	Bolt, 10-32 x 1/2"	5305-173-26-00
26*	1	Switch, 8 Button Tap Touch	5930-001-99-51
27*	1	Spacer, Switch Panel	5700-002-50-02
28	1	Decal, Control Box Cover	9905-002-31-84
29	1	Light, Red	5945-504-07-18
30	1	Light, Green	5945-504-08-18
*	1	Cover, Dielectric Control Panel	5700-021-50-89

* Represents an item not shown.

ORDERING REPLACEMENT WIRE

ORDERING REPLACEMENT WIRE FOR YOUR DISHMACHINE

Jackson dishmachines have several color and gauges of wire used in them and it may become necessary to replace these wires. Wire may be ordered from Jackson MSC Inc., but please note that it is only available in feet. Ensure that you order the correct color and gauge.

BLACK WIRE:

6 Gauge	6145-002-15-91
8 Gauge	6145-104-43-00
10 Gauge	6145-104-16-00
12 Gauge	6145-112-01-00
14 Gauge	6145-104-09-00
18 Gauge	6145-104-01-97
18 Gauge with Orange Stripes	6145-011-35-66
18 Gauge with White Stripes	6145-011-35-65
18 Gauge with Yellow Stripes	6145-011-35-64

BLUE WIRE:

6 Gauge	6145-002-15-93
8 Gauge	6145-104-44-00
10 Gauge	6145-104-42-00
14 Gauge	6145-104-04-00
18 Gauge	6145-104-35-00
18 Gauge with Black Stripes	6145-011-46-35
18 Gauge with Red Stripes	6145-011-46-37
18 Gauge with White Stripes	6145-011-46-36
18 Gauge with Yellow Stripes	6145-011-46-38
20 Gauge	6145-104-06-97
20 Gauge with Black Stripes	6145-104-17-97
20 Gauge with White Stripes	6145-104-13-97

GREEN WIRE:

8 Gauge	6145-002-15-94
14 Gauge	6145-104-03-00
18 Gauge	6145-104-32-00
18 Gauge with Yellow Stripes	6145-001-44-96
20 Gauge	6145-104-05-97
20 Gauge with Black Stripes	6145-011-59-57
20 Gauge with Yellow Stripes	6145-104-11-97

GREY WIRE:

18 Gauge	6145-104-36-00
18 Gauge with Black Stripes	6145-011-81-71
18 Gauge with Blue Stripes	6145-011-81-72
18 Gauge with Red Stripes	6145-011-46-41
18 Gauge with White Stripes	6145-011-35-60
18 Gauge with Yellow Stripes	6145-011-46-42
20 Gauge	6145-104-03-97

RED WIRE:

6 Gauge	6145-002-15-92
8 Gauge	6145-104-45-00
10 Gauge	6145-104-08-00
14 Gauge	6145-104-05-00
18 Gauge	6145-104-37-00
18 Gauge with Black Stripes	6145-011-59-56
18 Gauge with Blue Stripes	6145-011-81-74
18 Gauge with White Stripes	6145-011-81-73
18 Gauge with Yellow Stripes	6145-011-81-75
20 Gauge	6145-104-02-97

WHITE WIRE:

10 Gauge	6145-104-19-00
14 Gauge	6145-104-10-00
18 Gauge	6145-104-39-00
18 Gauge with Black Stripes	6145-011-35-70
18 Gauge with Blue Stripes	6145-011-46-40
18 Gauge with Green Stripes	6145-011-35-69
18 Gauge with Grey Stripes	6145-002-20-18
18 Gauge with Red Stripes	6145-011-35-67
18 Gauge with Yellow Stripes	6145-011-35-68
20 Gauge	6145-104-04-97
20 Gauge with Orange & Yellow Stripes	6145-104-16-97
20 Gauge with Yellow Stripes	6145-104-15-97

YELLOW WIRE:

18 Gauge	6145-104-33-00
18 Gauge with Black Stripes	6145-011-81-68
18 Gauge with Blue Stripes	6145-011-81-70
18 Gauge with Red Stripes	6145-011-81-69
20 Gauge	6145-104-07-97

MISCELLANEOUS WIRE:

Brown (18 Gauge)	6145-104-20-00
Brown (20 Gauge)	6145-104-08-97
Orange (18 Gauge)	6145-104-34-00
Orange with Black Stripes (18 Gauge)	6145-011-35-62
Orange with Blue Stripes (18 Gauge)	6145-011-46-39
Orange with White Stripes (18 Gauge)	6145-011-35-63
Orange with Yellow Stripes (18 Gauge)	6145-011-35-61
Orange (20 Gauge)	6145-104-10-97
Pink (18 Gauge)	6145-011-82-69
Purple (18 Gauge)	6145-104-31-00
Violet (20 Gauge)	6145-104-09-97
Plug, GFI	6145-001-97-90
Cable, 16 Gauge, 3 Wire Romex	6145-001-98-29
Cord, Hubble Plug MC	6145-011-47-23
Cord, S-J	6145-011-49-02
Cord, Power	6145-011-70-28
Cord, 115V Power	6145-309-02-00
Cord, 125V Power, 96 “ Long	6145-309-04-00

ORDERING CONDUIT & FITTINGS/HOSE & TUBING

Jackson dishmachines come with a wide variety of conduit and fittings for use in routing the wires of the machine. The list below provides for most of stock of such items. When ordering, remember that Jackson does not offer pre-cut sections of conduit for your machine, instead it is sold by the foot. Please take into account the slack that will be necessary once installing the new conduit to ensure that it fits correctly. It is recommended that you order at least 6" more conduit than you require to ensure that you have enough for trimming.

CONDUIT:

Conduit, 1/2", Liquidtite	5975-101-25-00
Conduit, 1/2", Non-Metallic	5975-111-46-57
Conduit, 1/2", PVC	5975-105-04-00
Conduit, 1/2", Sealtite	5975-105-01-00
Conduit, 1/2", Xtraflex	5975-105-06-44
Conduit, 3/8", Liquidtite	5975-105-02-00
Conduit, 3/4", Cole-Flex	5975-105-05-00
Conduit, 3/4", Liquidtite	5975-105-03-00
Conduit, 3/4", Non-Metallic	5975-011-47-71
Conduit, 3/4" Xtraflex	5975-105-07-44
Conduit, 1", Carlon	5975-011-68-42

CONDUIT FITTINGS:

Elbow, Cole-Flex, 1/2", 90 Degree	5975-205-40-00
Elbow, Xtraflex, 1/2", 90 Degree	5975-205-44-44
Elbow, Xtraflex, 3/4", 90 Degree	5975-205-45-44
Fitting, 1/2" Straight	5975-011-45-13
Fitting, 1/2", Straight, Zinc Plated	5975-111-89-89
Fitting, 1/2", 45 Degree	5975-011-45-23
Fitting, 1/2", 45 Degree, Zinc Plated	5975-111-89-86
Fitting, 1/2", 90 Degree	5975-011-45-14
Fitting, 1/2", 90 Degree, Zinc Plated	5975-111-89-88
Fitting, 3/4", Straight	5975-011-47-72
Fitting, 3/4", 45 Degree	5975-011-47-74
Fitting, 3/4", 90 Degree	5975-011-47-73
Fitting, 1", Straight	5975-011-70-75
Fitting, 1", 90 Degree	5975-011-68-43
Fitting, Cole-Flex, 1/2" Straight	5975-205-03-00
Fitting, Cole-Flex, 3/4" Straight	5975-205-41-00
Fitting, Cole-Flex, 3/4", 90 Degree	5975-204-42-00
Fitting, Liquidtite, .231 ID/.394 OD	5975-011-49-03
Fitting, Liquidtite, .25 ID/.546 OD	5975-011-65-51
Fitting, Liquidtite, .27 ID/.48 OD	5975-011-59-50
Fitting, Liquidtite, 1/2", 90 Degree	5975-111-01-00
Fitting, Liquidtite, 3/8", Straight	5975-205-03-82
Fitting, Liquidtite, 3/8", 90 Degree	5975-205-02-82
Fitting, Liquidtite, 3/4", Straight	5975-205-15-02
Fitting, Liquidtite, 3/4", 45 Degree	5975-205-01-82
Fitting, Liquidtite, 3/4", 90 Degree	5975-205-07-82
Fitting, Xtraflex, 1/2", Straight	5975-205-47-44
Fitting, Xtraflex, 3/4", Straight	5975-205-46-44
Nut, 1-1/4"	5975-011-42-54

Tubing and hose are ordered by the foot. Jackson MSC Inc. reserves the right to require minimum ordering quantities for the items below.

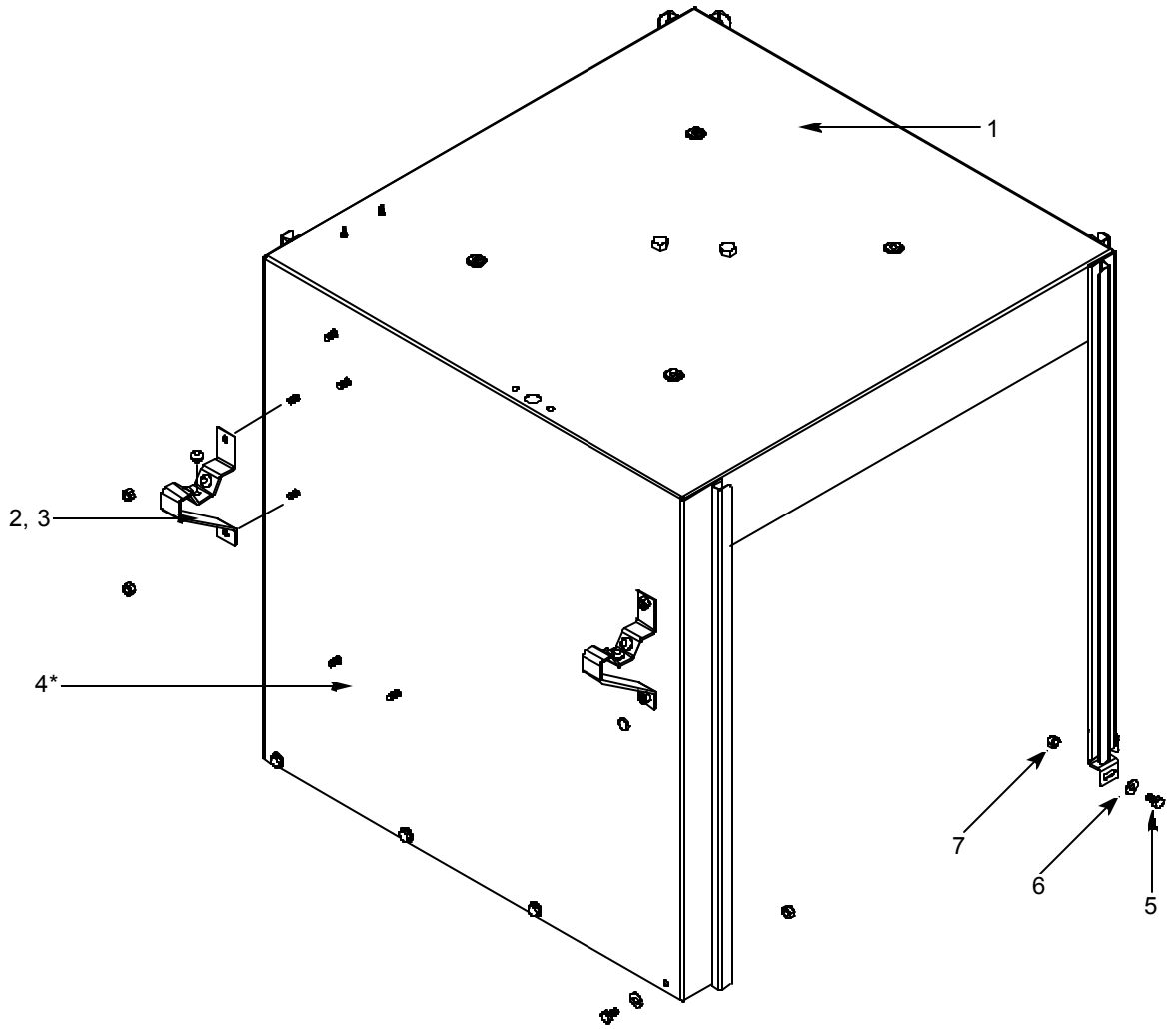
HOSE:

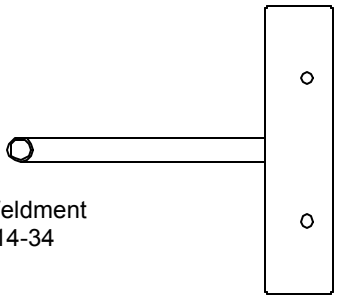
Hose, 3/16" ID x 5/16" OD	4720-601-40-00
Hose, 1/4" ID x .062" Wall, Excelon	4720-111-59-46
Hose, 1/4" ID x 1/2" OD, 300-350 PSI	4720-011-95-43
Hose, 3/8" ID x 5/8" OD, 300 PSI	4720-002-31-63
Hose, 3/8" ID x 5/8" OD, PVC	4720-011-35-41
Hose, 3/8" ID x 3/4" OD, PVC	4720-111-35-41
Hose, 1/2" ID x 3/4" OD	4720-011-94-01
Hose, 1/2" ID, Reinforced	4720-011-63-06
Hose, 5/8" ID x 7/8" OD, PVC	4720-601-14-00
Hose, 3/4" ID x 1" OD	4720-011-94-10
Hose, 3/4" ID, Nylon Reinforced	4720-011-63-02
Hose, 1" ID x 1-1/4" OD, EPDM	4720-111-39-73
Hose, 1-1/4" ID x 1-1/2" OD, Reinforced	4720-601-42-00
Hose, 1-1/4" ID, Reinforced	4720-011-44-47
Hose, 1-1/2" ID, Clear Wire Reinforced	4720-111-34-60
Hose, 2" ID, Nylon Reinforced	4720-011-63-25
Hose, 2" ID, Reinforced Flex Drain	4720-011-63-04
Hose 2" ID x 3" OD, EPDM	4720-011-88-02

TUBING:

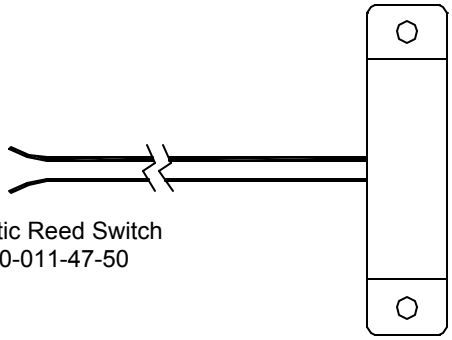
Tubing, 1/8" OD, Paraflex	4720-111-58-09
Tubing, 3/16" ID x .54" OD, CPVC	4720-111-35-31
Tubing, 1/4" OD	4720-111-51-65
Tubing, 1/4" OD, Blue	4720-601-11-00
Tubing, 1/4" OD, Red	4720-601-12-00
Tubing, 1/4" OD, White	4720-601-13-00
Tubing, 1/4" OD, Paraflex	4720-111-51-70
Tubing, 1/4" ID x 3/8" OD, Tygon	4720-001-97-65
Tubing, 1/2" ID x 13/16" OD, Polypropylene	4720-601-24-00
Tubing, 5/16" x 7/16" OD, Clear	4720-111-35-34
Tubing, 5/16" ID x 1/2" OD, Flexible	4720-011-35-21
Tubing, 3/8" ID x 1/16" Wall, Clear	4720-601-22-00
Tubing, 3/8" OD, White Polypropylene	4720-011-50-49
Tubing, 5/8" ID with .125" Wall	4720-002-12-20
Tubing, 3/4" ID x 1/8" Wall, Polypropylene	4720-601-25-00
Tubing, 3/4" ID x 1-1/8" OD, Nylon	4720-001-84-01
Tubing, 1" Polybrade	4720-011-69-16
Tubing, 1" ID x 1-3/8" OD, Polypropylene	4720-601-23-00
Tubing, 1-1/2" Polybrade	4720-011-69-17

TEMPSTAR GPX HOOD ASSEMBLY





Switch Box Weldment
5700-002-14-34

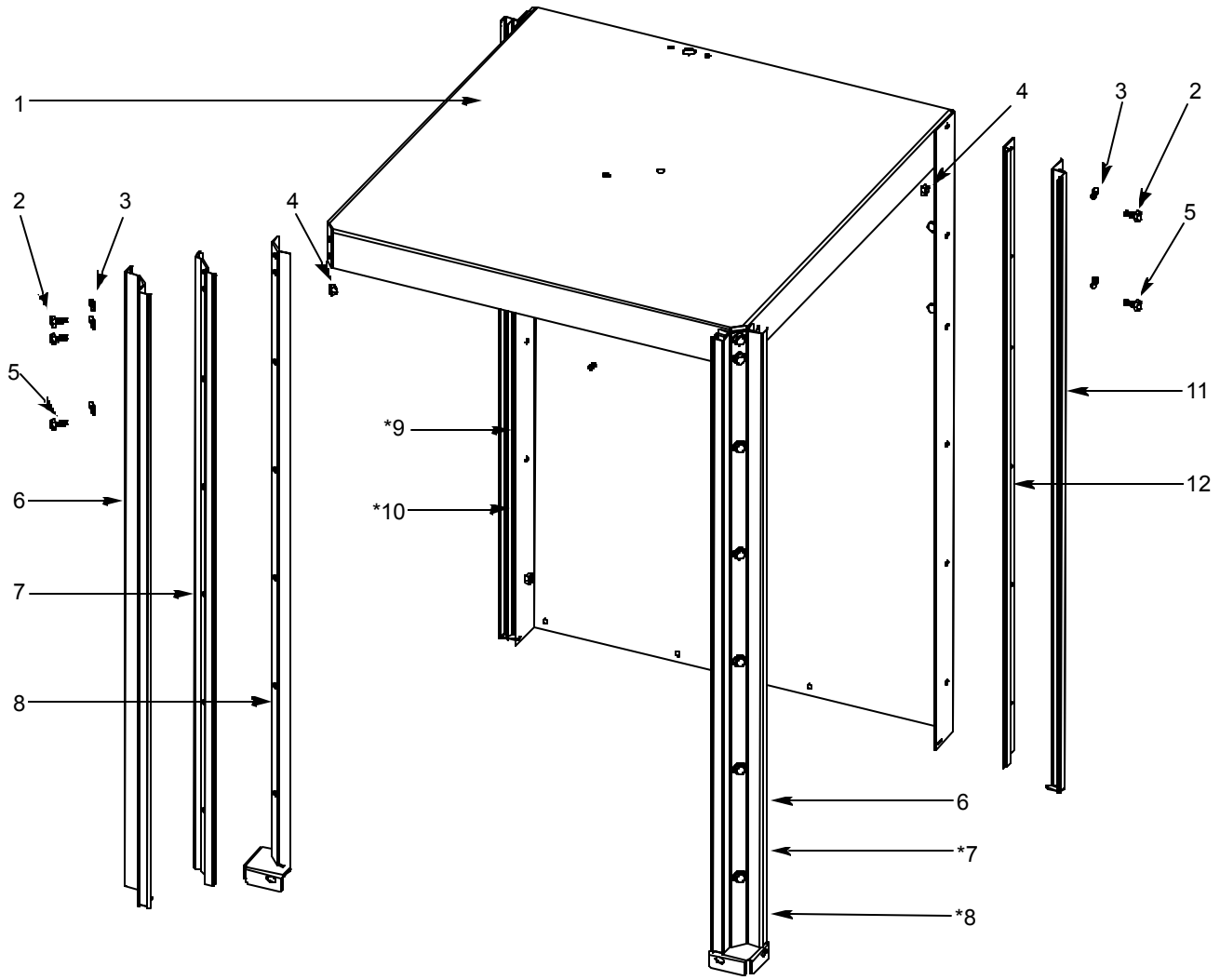


Magnetic Reed Switch
5930-011-47-50

ITEM	QTY	DESCRIPTION	Mfg. No.
1	1	Hood, Single Piece Weldment	5700-002-57-02
2	2	Bracket, Cantilever Support	5700-031-88-00
3	6	Wear Button .50 Dia.	5700-011-88-01
4*	1	Conduit Bracket (not shown)	5700-021-70-88
5	8	Bolt, 1/4”-20 x 1/2” S/S Hex Head	5305-274-02-00
6	8	Washer, 1/4” I.D. S/S	5311-174-01-00
7	14	Locknut, 1/4”-20 S/S Hex with Nylon Insert	5310-374-01-00

TEMPSTAR HH GPX HOOD ASSEMBLY

* Represents an item not shown.



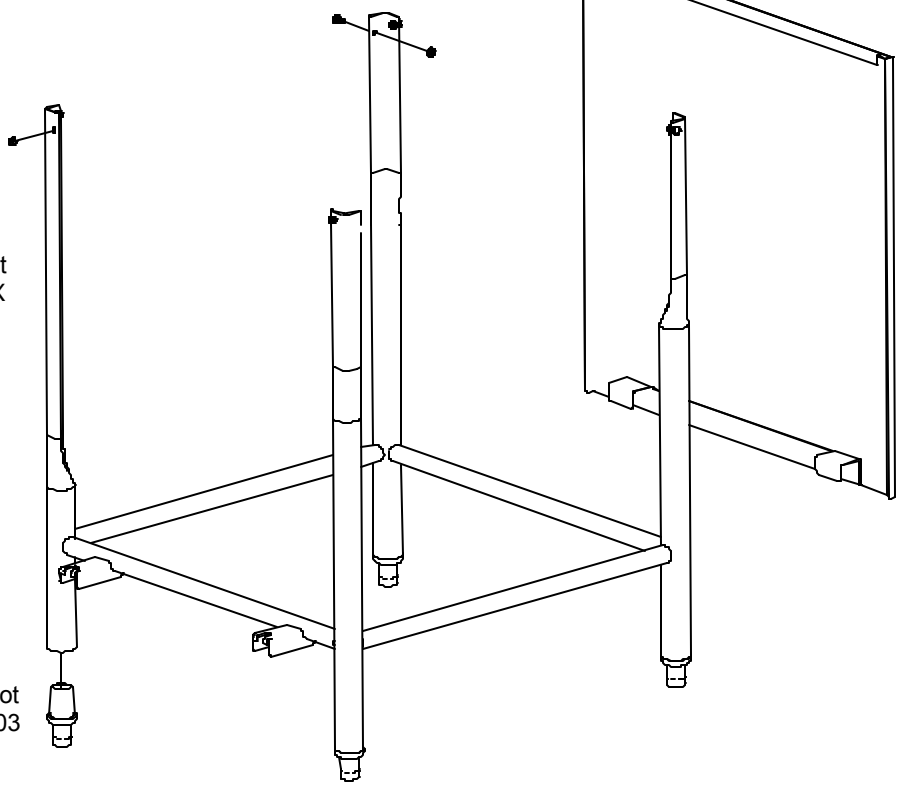
ITEM	QTY	DESCRIPTION	Mfg. No.
1	1	Hood Weldment	5700-002-01-23
2	6	Bolt, 1/4"-20 X 5/8" Long Hex	5305-274-24-00
3	26	Washer, 1/4" ID S/S	5311-174-01-00
4	26	Locknut, 1/4"-20 S/S Hex with Nylon Inserts	5310-374-01-00
5	26	Bolt, 1/4"-20 X 1/2" Long Hex	5305-274-02-00
6	2	Right/Left Front Outer Door Guide	5700-031-76-85
7	2	Right/Left Front Inner Door Guide	5700-031-76-82
8	2	Right/Left Front Hood Support Weldment	5700-002-17-68
9	1	Left Rear Outer Door Guide	5700-031-76-34
10	1	Left Rear Inner Door Guide	5700-031-76-33
11	1	Right Rear Outer Door Guide	5700-031-76-35
12	1	Right Rear Inner Door Guide	5700-031-76-32

FRAME ASSEMBLIES

Locknut, 1/4”-20 S/S Hex with Nylon Insert
5310-374-02-00

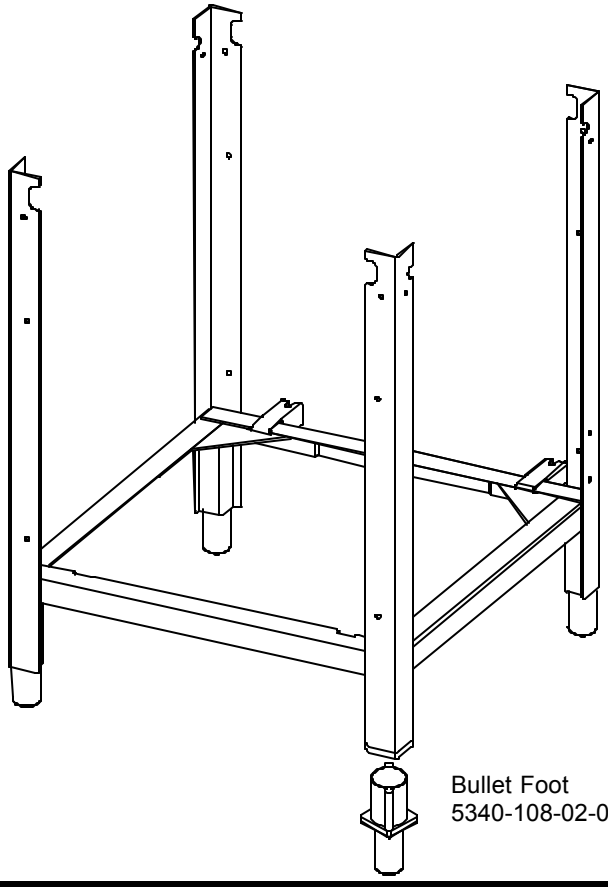
Bolt, 1/4”-20 x 1/2”
5305-274-02-00

Front Panel
Tempstar GPX
5700-002-36-65



Frame Weldment
Tempstar GPX
5700-031-48-01

Bullet Foot
5340-108-01-03

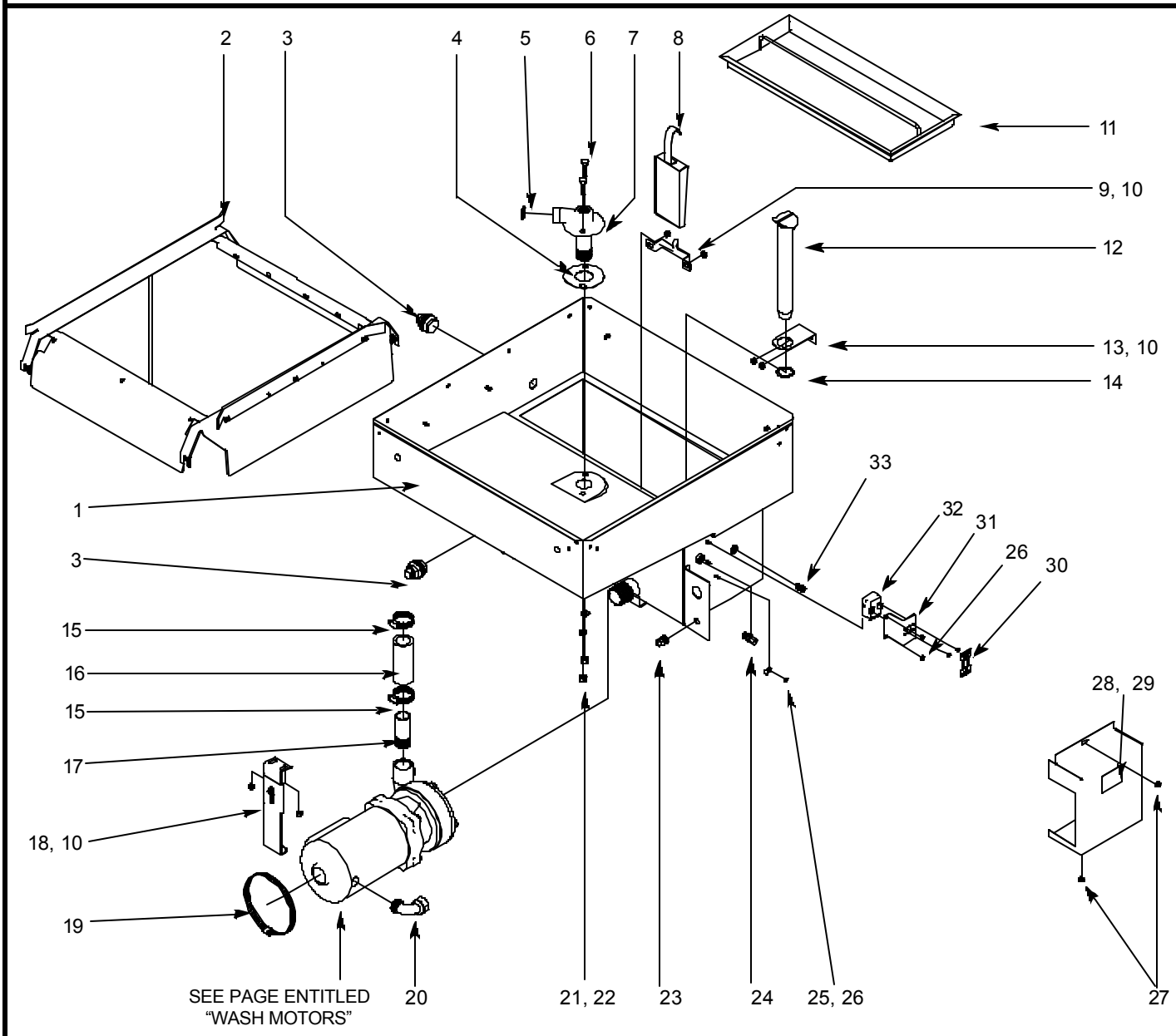


Frame Weldment
Tempstar HH GPX
5700-002-03-49

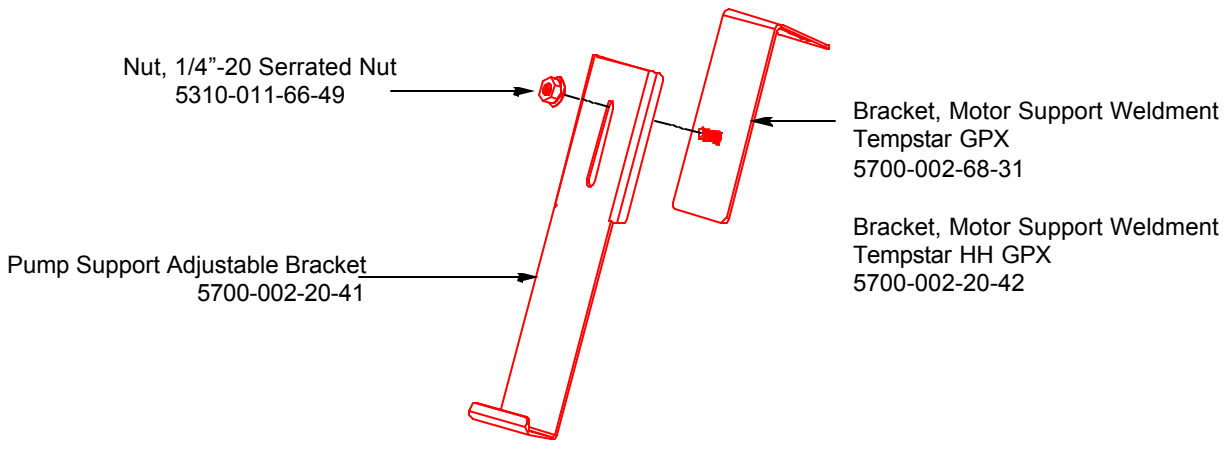
Panel, Front
Tempstar HH GPX
5700-002-01-42

Bullet Foot
5340-108-02-06

TUB ASSEMBLY



* Represents an item not shown.



TUB ASSEMBLY (CONTINUED)

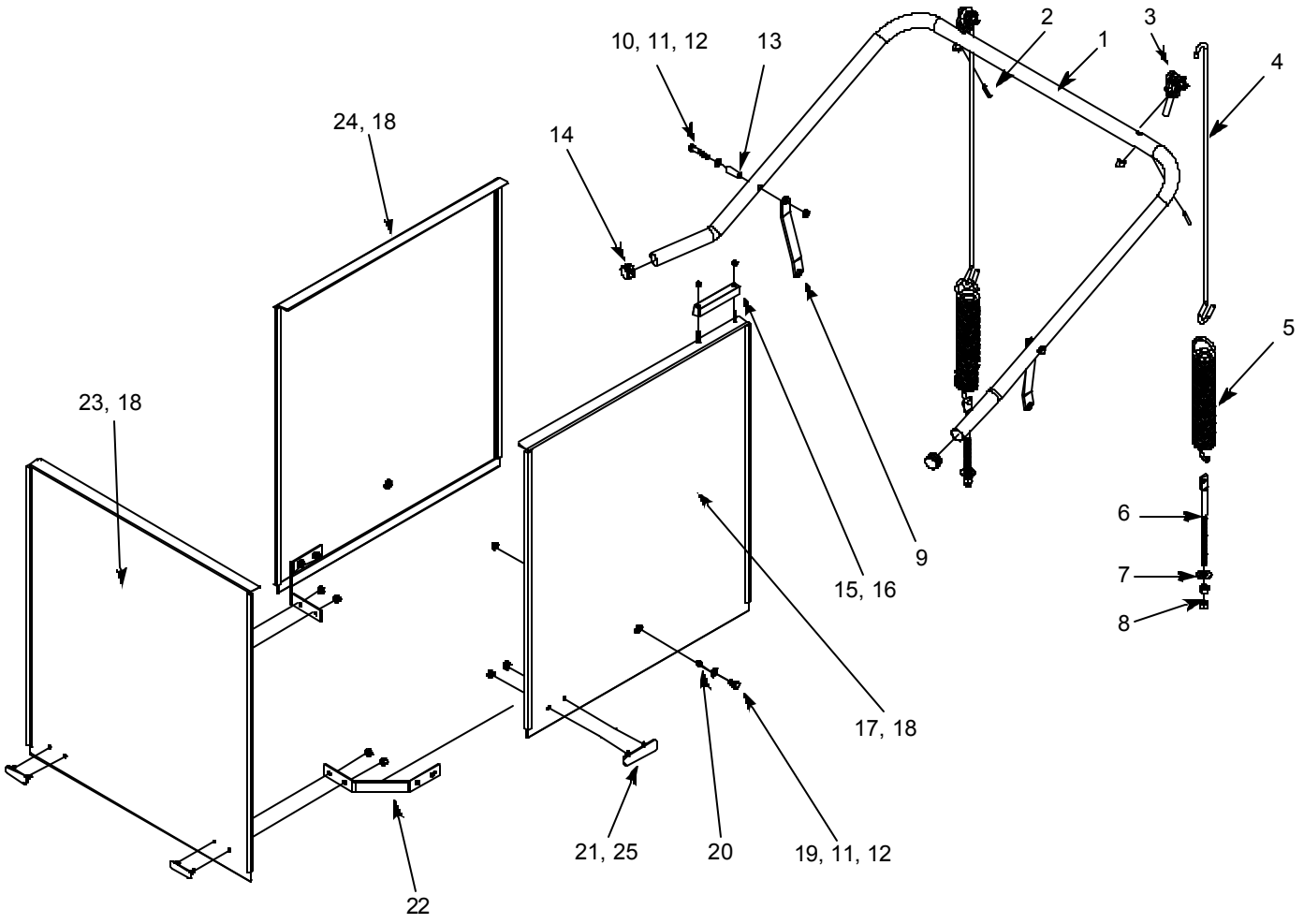
ITEM	QTY	DESCRIPTION	Mfg. No.
1	1	Tub Weldment, Tempstar GPX	5700-002-57-03
1	1	Tub Weldment, Tempstar HH GPX	5700-002-63-13
2	1	Rack Assembly	5700-002-01-00
3	2	Bulk Head Plug	4730-609-05-00
4	1	Gasket	5700-111-35-03
5	1	O-ring	5330-400-05-00
6	4	Bolt, Hex 3/8”-16 x 1 1/4" Long	5305-276-10-00
7	1	Lower Wash Manifold Weldment, Tempstar GPX	5700-031-46-00
7	1	Lower Wash Manifold Weldment, Tempstar HH GPX	5700-002-21-70
8	1	Suction Strainer Weldment, Tempstar GPX	5700-001-22-23
8	1	Suction Strainer Weldment, Tempstar HH GPX	5700-002-16-13
9	1	Suction Strainer Bracket, Tempstar GPX	5700-001-22-24
9	1	Suction Strainer Bracket, Tempstar HH GPX	5700-002-18-28
10	8	Locknut, 1/4"-20 with Nylon Insert	5310-374-02-00
11	1	Strainer Weldment	5700-021-50-07
12	1	Wash Overflow Weldment	5700-001-25-69
13	1	Overflow Support Bracket	5700-001-27-55
14	1	O-Ring	5330-400-05-00
15	2	Clamp, Hose 1 5/16” to 2 1/4”	4730-719-01-37
16	1	Discharge Hose	5700-011-88-24
17	1	Nipple	5700-021-34-84
18	1	Pump Support Bracket Assembly, Tempstar GPX	5700-002-00-46
18	1	Pump Support Bracket Assembly, Tempstar HH GPX	5700-002-22-73
19	1	Clamp, Hose 5 5/8" to 6"	4730-011-34-90
20	1	Connector, 1/2” 90°	5975-111-01-00
21	4	Nut, 3/8"-16 S/S Hex	5310-276-01-00
22	4	Lockwasher 3/8”	5311-276-01-00
23	1	Fitting, Olflex	5975-205-43-00
24	1	Union, 1/4”	5700-001-16-52
25	1	Clamp, 1/8" Nylon	5975-601-10-15
26	5	Locknut, 6-32 with Nylon Insert	5310-373-03-00
27	4	Locknut, 10-24 with Nylon Insert	5310-373-01-00
28	1	Cover, Wash	5700-031-47-57
29	1	Decal, Warning-Disconnect Power	9905-100-75-93
30	1	Decal, Thermostat Regulating	9905-011-84-31
31	1	Thermostat Bracket	5700-011-73-72
32	1	Thermostat, Regulating	5930-121-67-72
33	1	Fitting, 1/4" Imperial Brass	5310-924-02-05

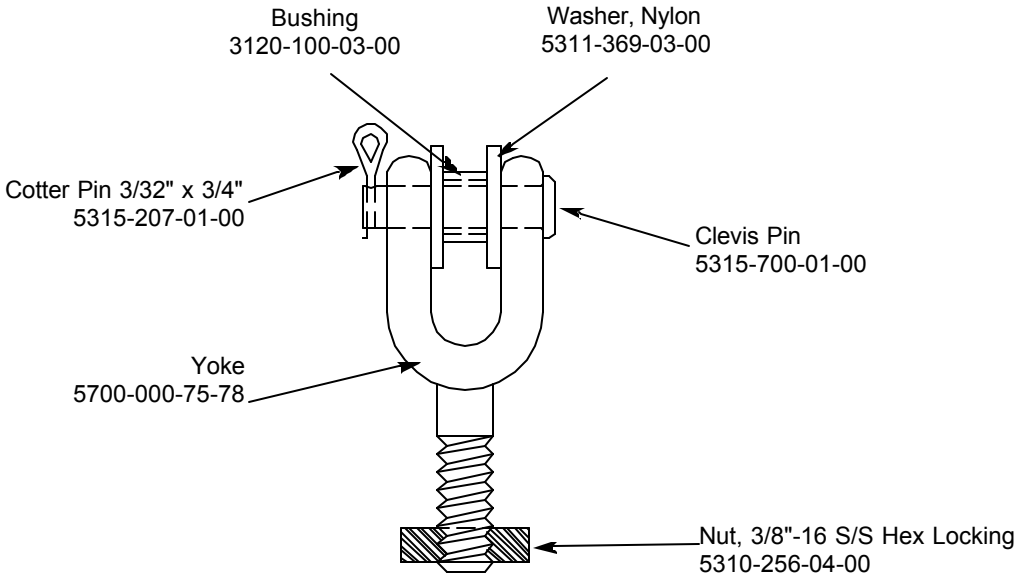
The Tempstar models covered in this manual come supplied with various wash motor assemblies (a wash motor assembly includes the wash motor and the pump end), depending on the characteristics of the machine. To ensure that you order the correct wash motor assembly for the model you are servicing, please refer to the following table:

Model	Volts	Hz	Phase	Wash Motor Assembly
Tempstar GPX	208	60	1	6105-121-35-18
Tempstar GPX	230	60	1	6105-121-35-18
Tempstar GPX	208	60	3	6105-121-35-18
Tempstar GPX	230	60	3	6105-121-35-18
Tempstar HH GPX	208	60	1	6105-002-01-29
Tempstar HH GPX	230	60	1	6105-002-01-29
Tempstar HH GPX	208	60	3	6105-002-01-29
Tempstar HH GPX	230	60	3	6105-002-01-29

Important note: When servicing a wash motor, it is important to refer to the wiring schematic found on the motor, to ensure that the motor is wired correctly. Different manufacturers of motors may not use the same wire color codes and therefore, your new motor, which may have been built by someone different than who built your original motor, may not connect using the same wires. Always refer to the wiring diagrams on the motor you are installing. If the motor you are installing has had the schematic removed, contact Jackson MSC immediately for technical support.

CANTILEVER ARM/DOOR ASSEMBLIES TEMPSTAR GPX

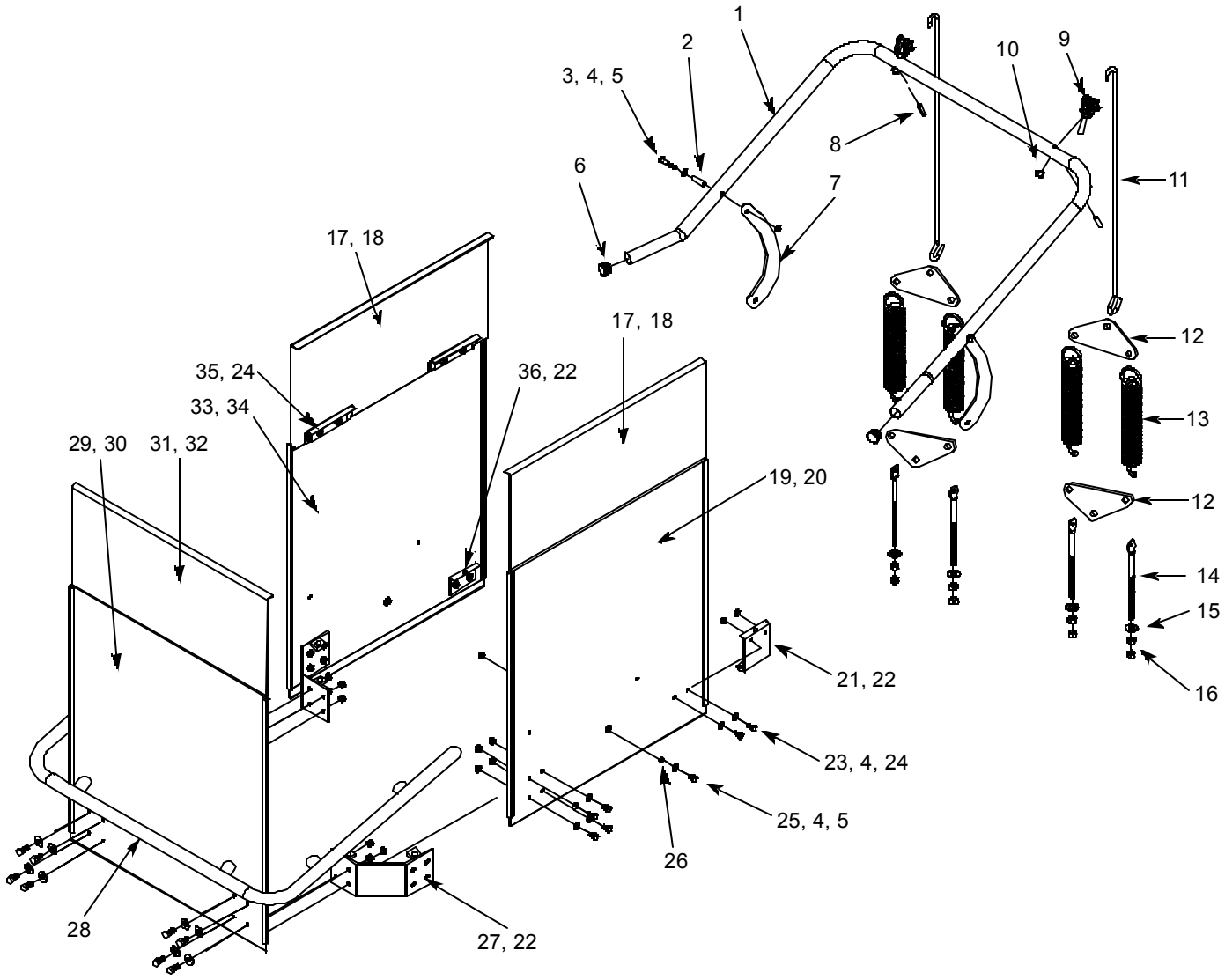




CANTILEVER ARM/DOOR ASSEMBLIES TEMPSTAR GPX (CONTINUED)

ITEM	QTY	DESCRIPTION	Mfg. No.
1	1	Cantilever Arm	5700-031-50-67
2	2	Spring Pin, 1/4" x 1 1/8"	5315-407-06-00
3	2	Yoke Assembly	5700-000-75-77
4	2	Rod, Spring	5700-002-29-38
5	2	Spring	5340-109-02-00
6	2	Bolt, Cantilever Hanger Eye 3/8"-16	5306-956-05-00
7	2	Washer, 3/8" ID x 7/8" OD S/S	5311-176-02-00
8	4	Nut, 3/8"-16 S/S Hex	5310-276-01-00
9	2	Connector, Cantilever Arm	5700-011-90-99
10	2	Screw 1/4"-20 x 1 1/2" Long S/S	5305-274-23-00
11	4	Washer, 1/4" S/S	5311-174-01-00
12	4	Locknut, 1/4"-20 S/S Hex with Nylon Insert Low Profile	5310-374-02-00
13	2	Sleeve, Cantilever Arm	5700-000-85-69
14	2	Plug, Cantilever Arm	5340-011-35-00
15	1	Magnet, Reed Switch	5930-111-51-68
16	2	Locknut, 8-32 S/S Hex with Nylon Insert	5310-272-02-00
17	1	Door, Right Side (Complete Assembly)	5700-002-30-88
17A	1	Right Door Weldment with Studs	5700-002-29-85
18	6	Door, Guides	5700-111-33-59
19	2	Screw, 1/4"-20 x 1/2" Long S/S	5305-274-02-00
20	2	Spacer, PB Bolt	5700-000-29-40
21	4	Door Plate	5700-002-20-78
22	2	Door Connector Bracket	5700-021-33-39
23	1	Door, Front (Complete Assembly)	5700-002-30-89
23A	1	Door Only, Front	5700-002-29-83
24	1	Door, Left Side (Complete Assembly)	5700-002-30-87
24A	1	Door Only, Left Side	5700-002-29-86
25	8	Locknut, 1/4"-20 with Nylon Insert	5310-374-02-00

CANTILEVER ARM/DOOR ASSEMBLIES TEMPSTAR HH GPX

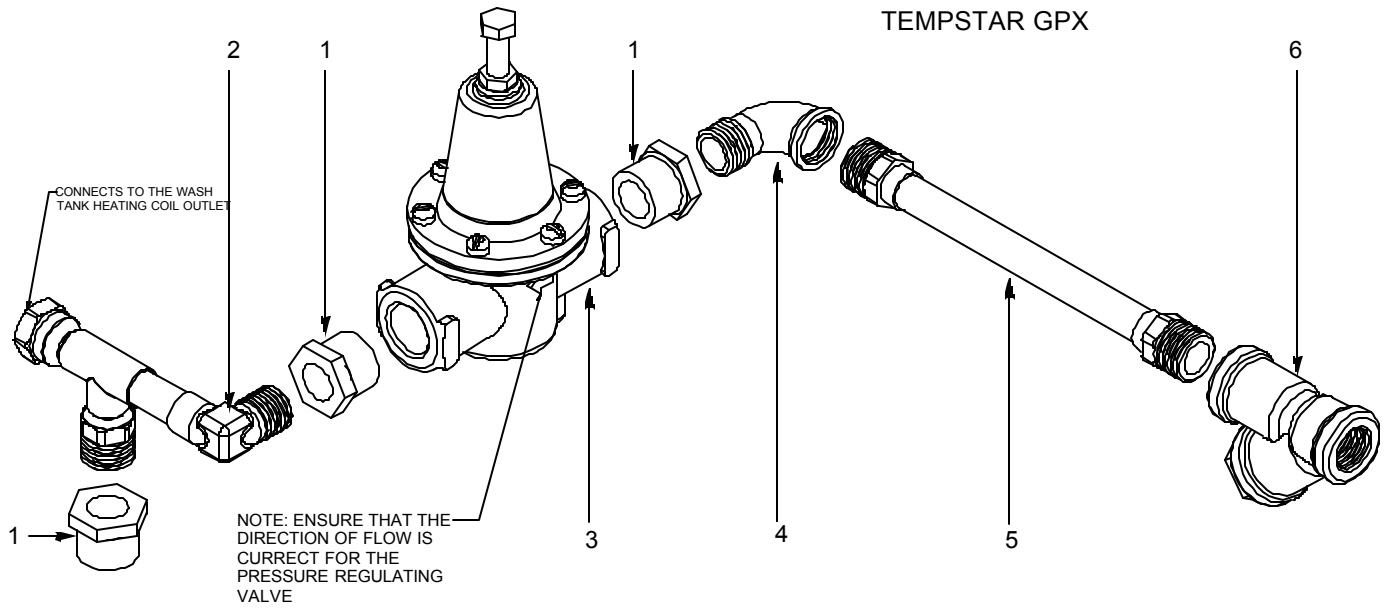


CANTILEVER ARM/DOOR ASSEMBLIES TEMPSTAR HH GPX (CONTINUED)

ITEM	QTY	DESCRIPTION	Mfg. No.
1	1	Cantilever Arm	5700-031-92-44
2	2	Sleeve, Cantilever Arm	5700-000-85-69
3	2	Screw, 1/4"-20 x 1 1/2" Long Hex Head	5305-274-23-00
4	4	Washer, 1/4" ID S/S	5311-174-01-00
5	4	Locknut, 1/4"-20 S/S Low Profile with Nylon Insert	5310-374-02-00
6	4	Plug, Cantilever	5340-011-35-00
7	2	Connecting Link	5700-021-92-45
8	2	Spring Pin, 1/4" Dia. x 1 1/8" Long	5315-407-06-00
9	2	Yoke Assembly	5700-000-75-77
10	2	Nut, 3/8"-16 S/S Hex Locking	5310-256-04-00
11	2	Rod, Spring Connecting	5700-002-00-91
12	4	Plate, Spring Multiplier	5700-002-00-88
13	4	Spring, Cantilever Door	5340-111-35-22
14	4	Bolt, Cantilever Hanger Eye 3/8"-16	5306-956-05-00
15	4	Washer, Impeller	5311-176-02-00
16	8	Nut, 3/8"-16 S/S Hex	5310-276-01-00
*	2	Door, Upper, Left and Right Assemblies	5700-002-01-30
17	2	Door, Upper, Left and Right Weldment	5700-002-29-59
18	4	Glide, Upper Door	5700-002-00-83
*	1	Door, Lower, Right Assembly	5700-002-01-33
19	1	Door, Lower, Right	5700-031-76-80
20	2	Glide, Lower Door	5700-002-23-64
21	1	Door Stop Magnet Assembly	5700-002-25-08
*	1	Door Stop Magnet Weldment	5700-002-01-27
*	1	Magnet	5930-111-69-25
*	2	End Cap	5700-011-60-92
22	6	Wear Button	5700-011-88-01
23	20	Screw, 1/4"-20 x 5/8"	5305-274-24-00
24	20	Locknut, 1/4"-20 S/S Hex with Nylon Insert	5310-374-01-00
25	2	Screw, 1/4"-20 x 1/2" Long Hex Head	5305-274-02-00
26	2	Spacer, PB Bolt	5700-000-29-40
27	2	Bracket, Door Connector	5700-001-99-39
28	1	Handle, Front Door Weldment	5700-002-00-90
*	1	Door, Lower, Front Assembly	5700-002-01-31
29	1	Door, Lower, Front	5700-031-76-77
30	2	Glide, Lower Door	5700-002-23-64
*	1	Door, Upper Front Assembly	5700-002-24-92
31	1	Door, Upper, Front Weldment	5700-002-29-57
32	2	Glide, Upper Door	5700-002-00-83
*	1	Door, Lower, Left Assembly	5700-002-01-32
33	1	Door, Lower, Left	5700-031-76-79
34	2	Glide, Lower Door	5700-002-23-64
35	6	Door Stop Weldment	5700-002-29-60
36	1	Door Stop	5700-002-00-84

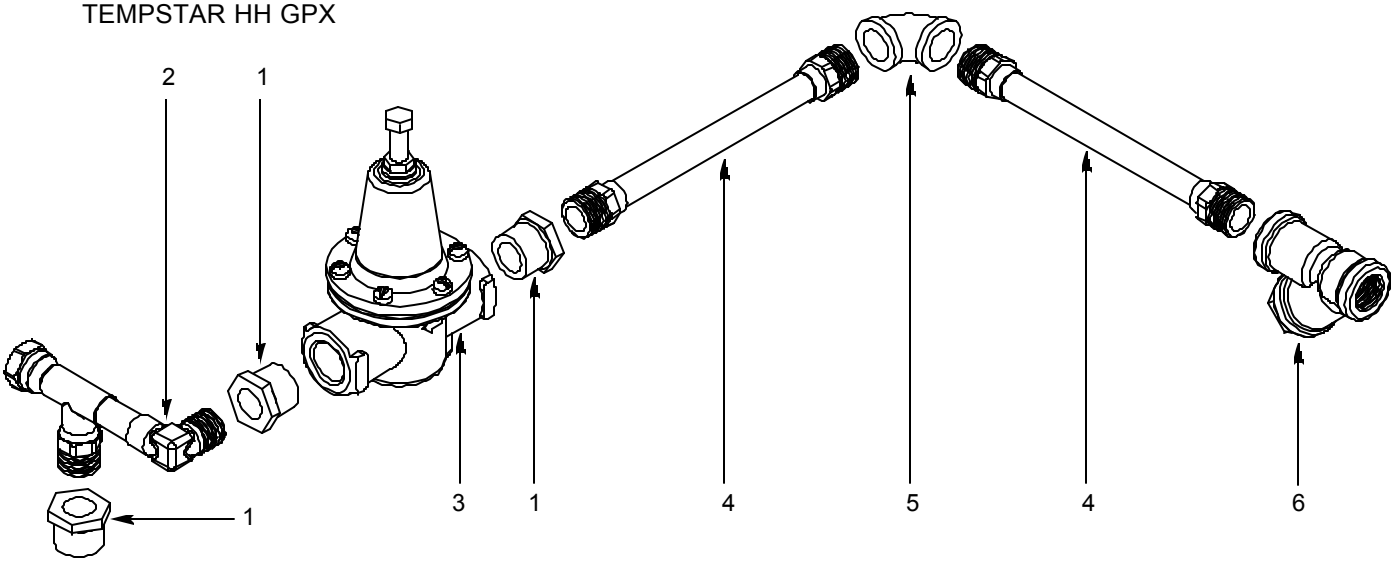
INLET PLUMBING ASSEMBLIES

TEMPSTAR GPX



ITEM	QTY	DESCRIPTION	Mfg. No.
*	1	Plumbing, Inlet, Tempstar GPX	5700-002-56-69
1	3	Bushing, Hex 3/4" M to 1/2" F, Brass	4730-002-56-27
2	1	Outlet, Heating Coil Assembly	5700-002-56-70
3	1	Valve, Pressure Reducing, 3/4"	4820-002-51-53
4	1	Elbow, 90° 1/2" Street Brass	4730-206-08-00
5	1	Tubing, Inlet Plumbing Assembly	5700-002-56-71
6	1	Y-Strainer, 1/2"	4730-217-01-10

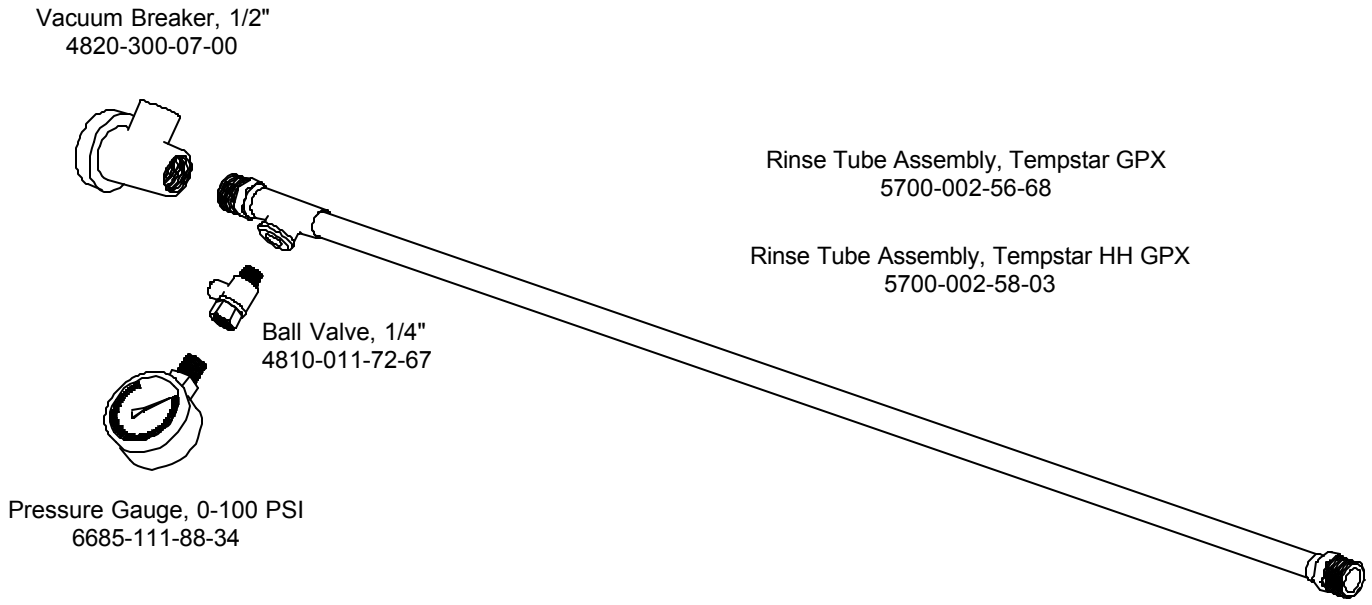
TEMPSTAR HH GPX



ITEM	QTY	DESCRIPTION	Mfg. No.
*	1	Plumbing, Inlet, Tempstar HH GPX	5700-002-63-16
1	3	Bushing, Hex 3/4" M to 1/2" F, Brass	4730-002-56-27
2	1	Outlet, Heating Coil Assembly	5700-002-56-70
3	1	Valve, Pressure Reducing, 3/4"	4820-002-51-53
4	2	Tubing, Inlet Plumbing Assembly	5700-002-56-71
5	1	Elbow, 90° 1/2"	4730-406-32-01
6	1	Y-Strainer, 1/2"	4730-217-01-10

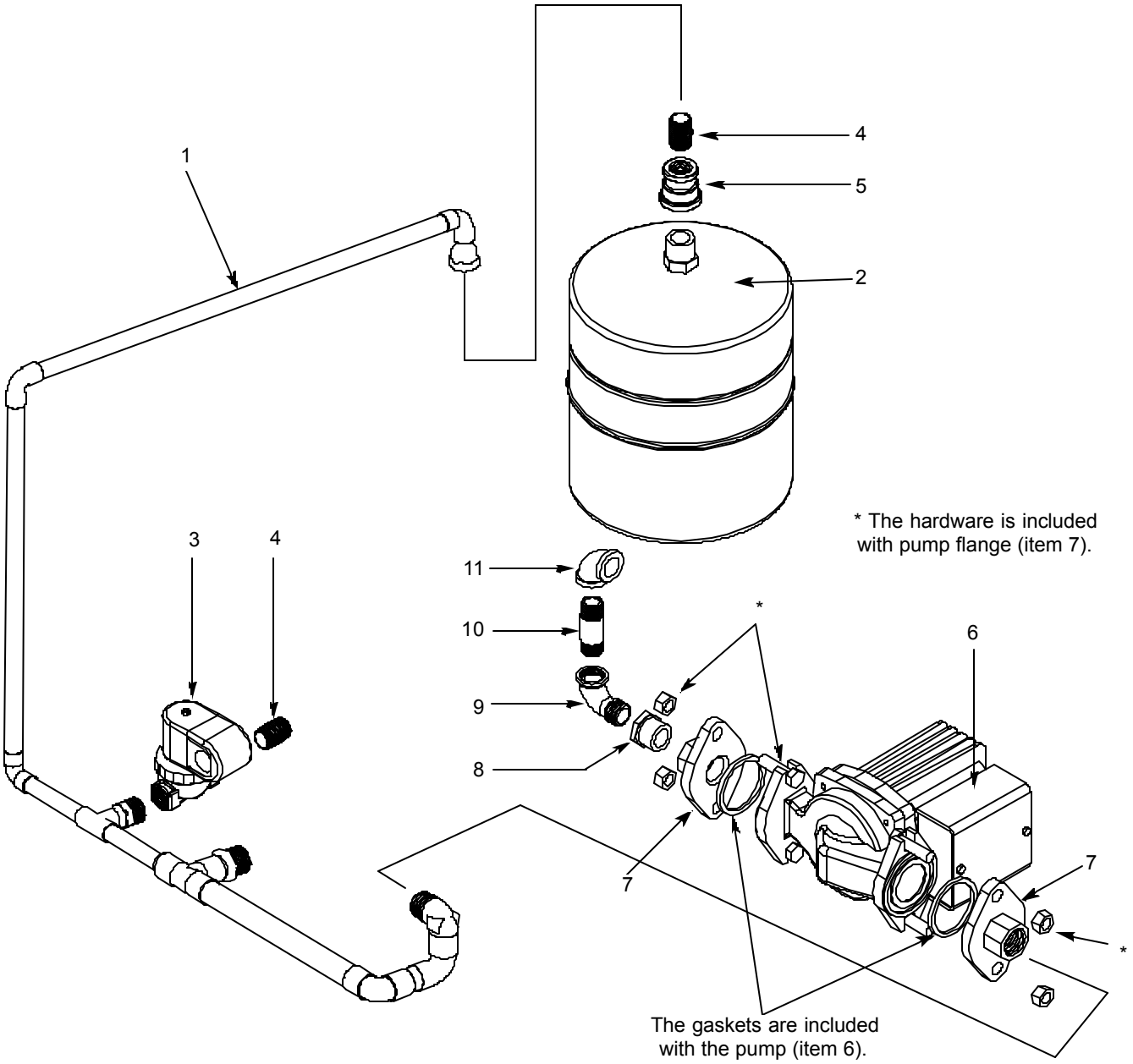
RINSE HEADER PLUMBING ASSEMBLY

Rinse Header Plumbing Assembly, Tempstar GPX	5700-002-56-67
Rinse Header Plumbing Assembly, Tempstar HH GPX	5700-002-58-02



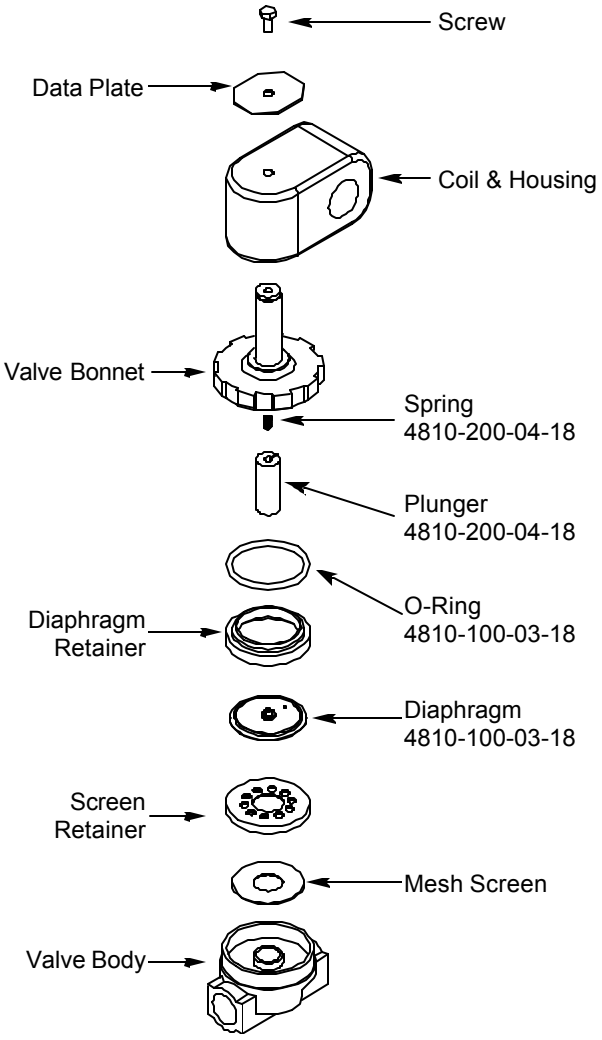
ITEM	QTY	DESCRIPTION	Mfg. No.
*	1	Rinse Hose Assembly	5700-002-57-05
	1	Hose, 1/2" x 27"	5700-002-57-04
	1	Fitting, 1/2"	4730-011-93-99

RECIRCULATING PLUMBING ASSEMBLY



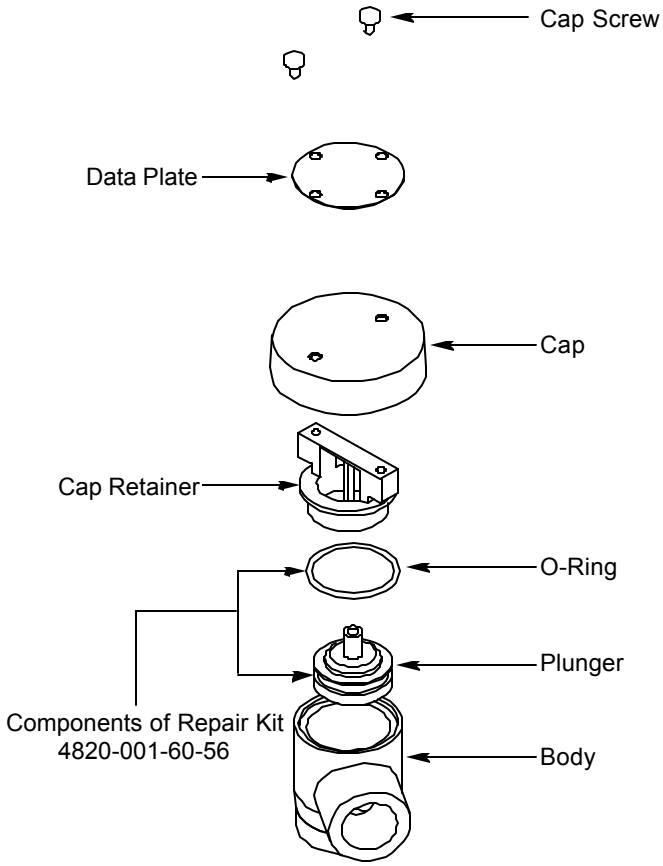
ITEM	QTY	DESCRIPTION	Mfg. No.
*	1	Plumbing, 110V Recirculating System Assembly	5700-002-56-64
*	1	Plumbing, 208-230V Recirculating System Assembly	5700-002-56-65
1	1	Tubing Assembly	5700-002-56-66
2	1	Tank, Thermal Expansion	5700-002-65-77
3	1	Valve, Solenoid 1/2” 110 Volt	4810-100-12-18
3	1	Valve, Solenoid 1/2” 208-230 Volt	4810-100-09-18
4	2	Nipple, 1/2” Close Brass	4730-207-15-00
5	1	Coupling, 1/2” x 3/4” Brass	4730-204-07-00
6	1	Pump, 110V Recirculating	6105-002-56-25
6	1	Pump, 208-230V Recirculating	6105-002-56-26
7	1	Pump, Flange	4320-002-38-17
8	1	Bushing, Hex 3/4” M to 1/2” F Brass	4730-002-56-27
9	1	Elbow, 90° 1/2” Street Brass	4730-206-08-00
10	1	Nipple, 1/2” x 2” Brass	4730-207-19-00
11	1	Elbow, 1/2” NPT, 90° Brass	4730-011-42-96

1/2” SOLENOID VALVE & 1/2” NPT VACUUM BREAKER REPAIR PARTS KITS



Complete 110 Volt Solenoid Valve Assembly
4810-100-12-18
Coil & Housing only
4810-200-01-18

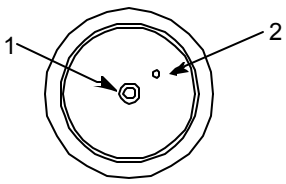
Complete 220 Volt Solenoid Valve Assembly
4810-100-09-18
Coil & Housing only
4810-200-02-18



Complete Vacuum Breaker Assembly
4820-300-07-00

Possible Problems:

1. Pilot port extension #1 clogged. Clean hole.
2. Hole #2 Clogged. Pass heated straight pin through hole.

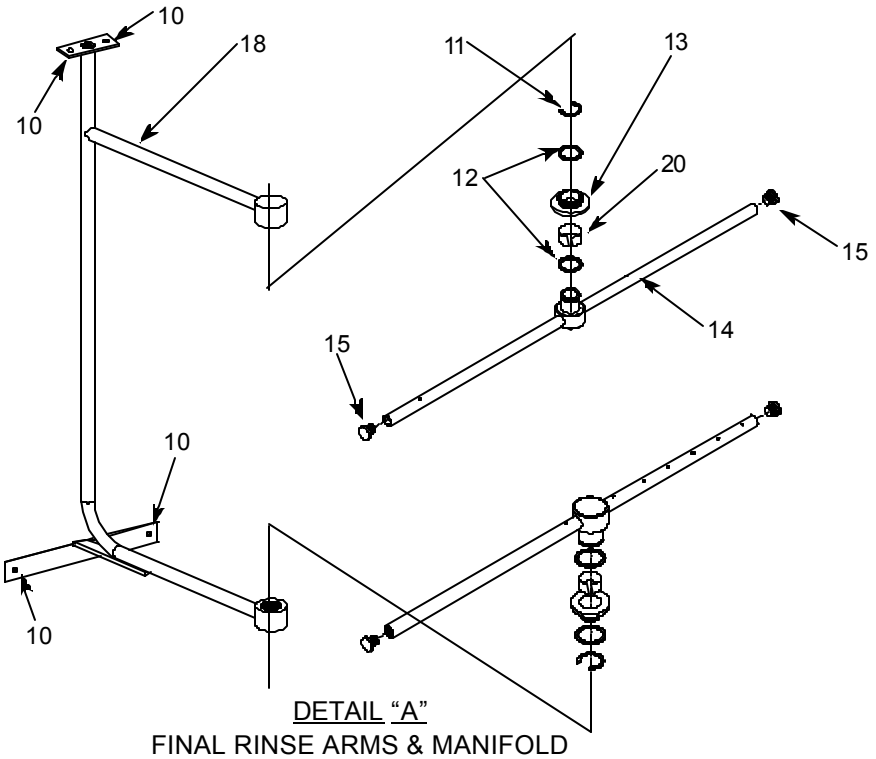


TO TAKE THE SOLENOID VALVE APART

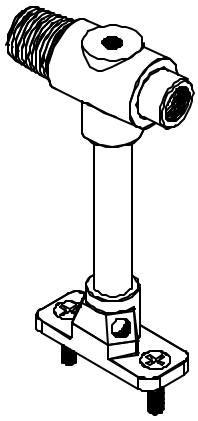
DISASSEMBLY - These valves may be taken apart by unscrewing the bonnet and the enclosing tube assembly from the valve body assembly. After unscrewing, carefully lift off the bonnet and enclosing tube assembly. Don’t drop the plunger. The o-ring seal and diaphragm cartridge can now be lifted out. Be careful not to damage the machined faces while the valve is apart.

TO REASSEMBLE - Place the diaphragm cartridge in the body with the pilot port extension UP. Hold the plunger with the synthetic seat against the pilot port. Make sure the o-ring is in place, then lower the bonnet and enclosing tube assembly over the plunger. Screw the bonnet assembly snugly down on the body assembly.

TEMPSTAR GPX WASH & RINSE ASSEMBLIES

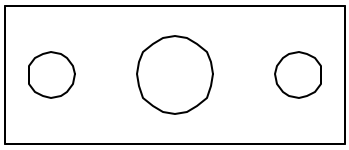


DETAIL "A"
FINAL RINSE ARMS & MANIFOLD

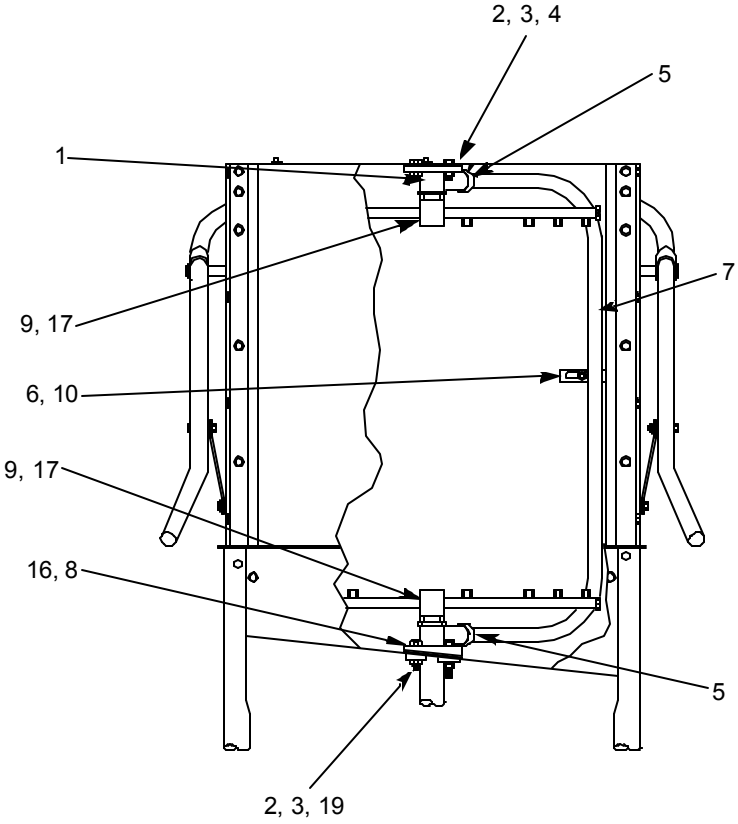


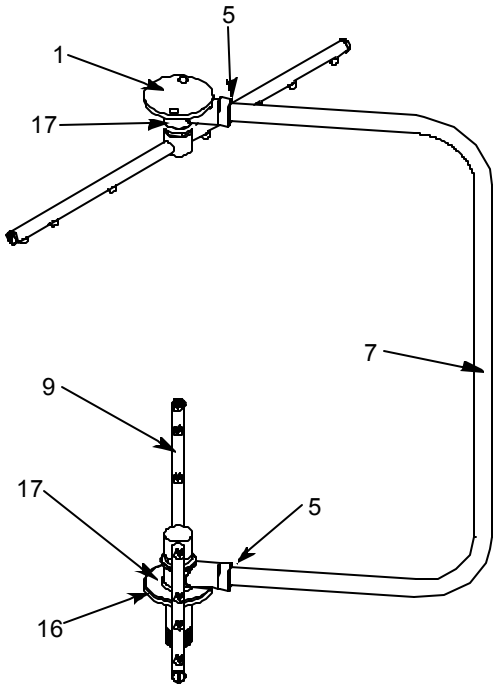
Rinse Injector Weldment
1 per machine
5700-002-56-75

Plug, 1/8" NPT, Brass
3 per Rinse Injector
4730-209-07-37



Rinse Injector Gasket
2 per machine
5330-111-42-81

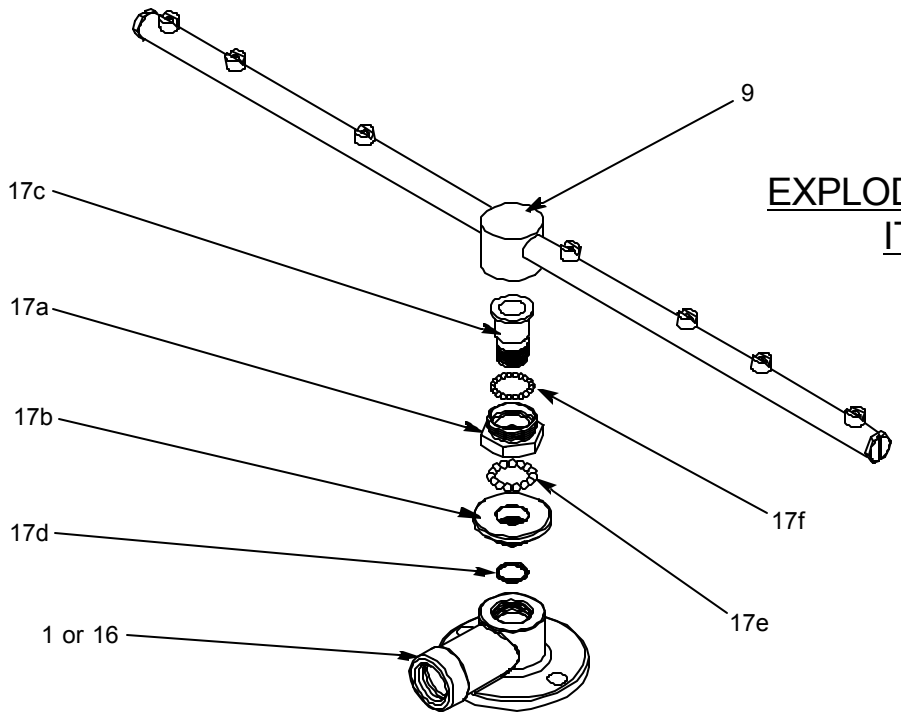




DETAIL "B"
WASH ARMS & MANIFOLD

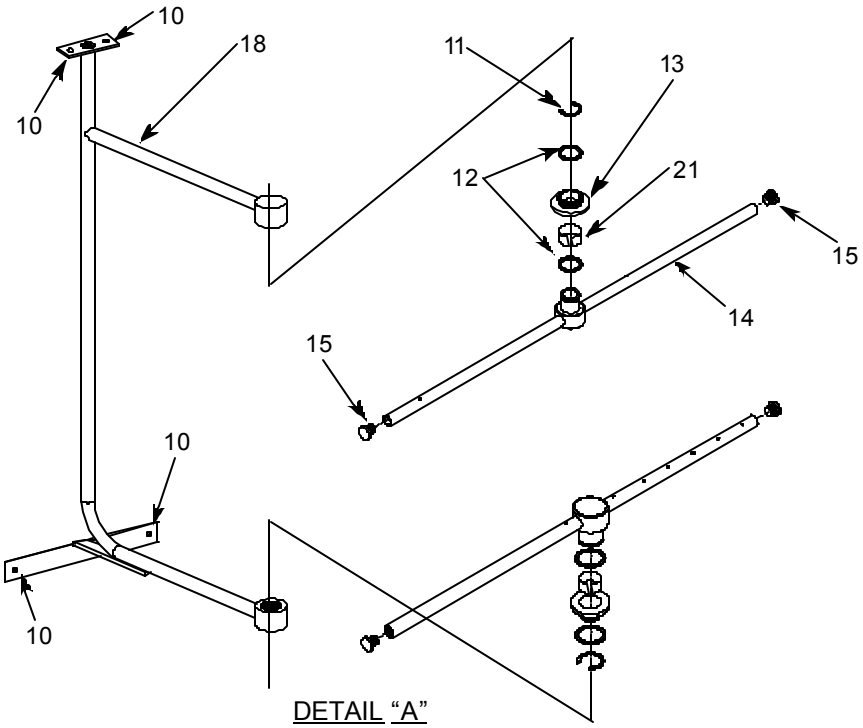
TEMPSTAR GPX WASH & RINSE ASSEMBLIES (CONTINUED)

ITEM	QTY	DESCRIPTION	Mfg. No.
1	1	Upper Manifold	5700-031-34-82
2	4	Nut, 3/8"-16 S/S Hex	5310-276-01-00
3	4	Lockwasher, 3/8 S/S	5311-276-01-00
4	2	Bolt, Hex 3/8”-16 x 7/8" Long	5306-011-36-95
5	2	O Ring	5330-111-35-15
6	1	Bracket, Manifold Tube Positioning	5700-011-34-63
7	1	Tube, Wash Manifold	5700-131-15-07
8	2	Gasket, Manifold	5700-111-35-03
9	2	Wash Arm	5700-021-35-93
10	5	Locknut, 1/4"-20 S/S Hex with Nylon Insert	5310-374-01-00
11	2	Clip, Retaining, Rinse Head Bushing	5340-112-01-11
12	4	Rinse Arm Washer	5330-011-42-10
13	2	Bushing, Rinse Head	5700-021-33-84
14	2	Rinse Arm	5700-031-88-86
15	4	Plug, Rinse Arm, Stainless Steel	4730-111-60-41
16	1	Lower Wash Manifold	5700-031-46-00
17	2	Bearing Assembly	5700-021-35-97
17a	1	Hub Nut	5700-011-35-94
17b	1	Hub Bushing	5700-011-35-96
17c	1	Hub Spindle	5700-011-35-95
17d	1	Ring, Retainer	5340-011-37-81
17e	15	3/16" Stainless Steel Ball	3120-100-02-00
17f	20	1/8" Stainless Steel Ball	3120-011-37-82
18	1	Rinse Manifold Assembly	5700-021-47-61
19	2	Bolt, Hex 3/8”-16 x 1 1/4" Long	5305-276-10-00
20	2	Bearing, Rinse Head	3120-002-72-24
21*	4	O-ring	5330-002-60-69

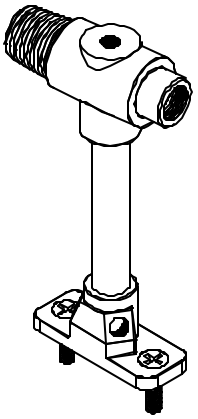


EXPLODED VIEW OF ITEM 17

TEMPSTAR HH GPX WASH & RINSE ASSEMBLIES

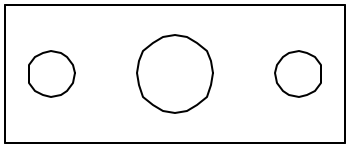


DETAIL "A"
FINAL RINSE ARMS & MANIFOLD

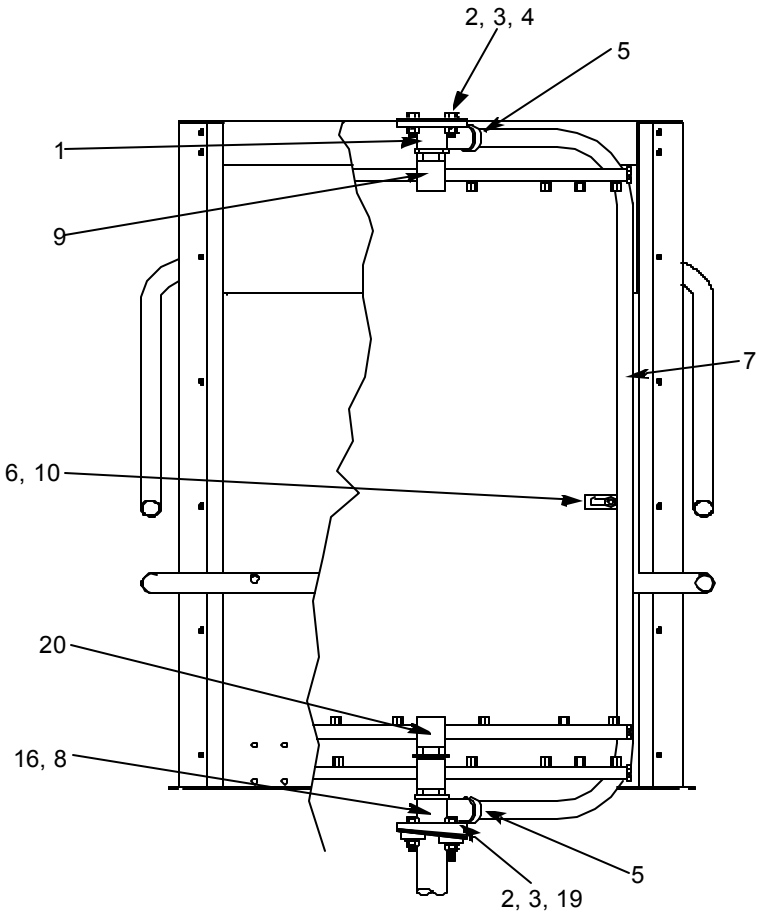


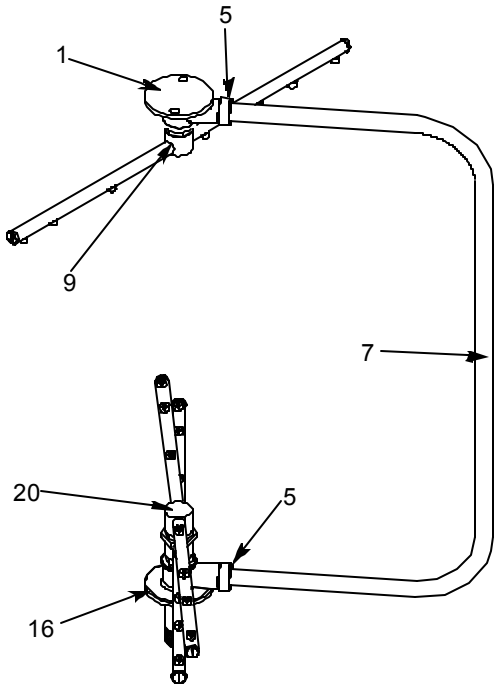
Rinse Injector Weldment
1 per machine
5700-002-56-75

Plug, 1/8" NPT, Brass
3 per Rinse Injector
4730-209-07-37



Rinse Injector Gasket
2 per machine
5330-111-42-81



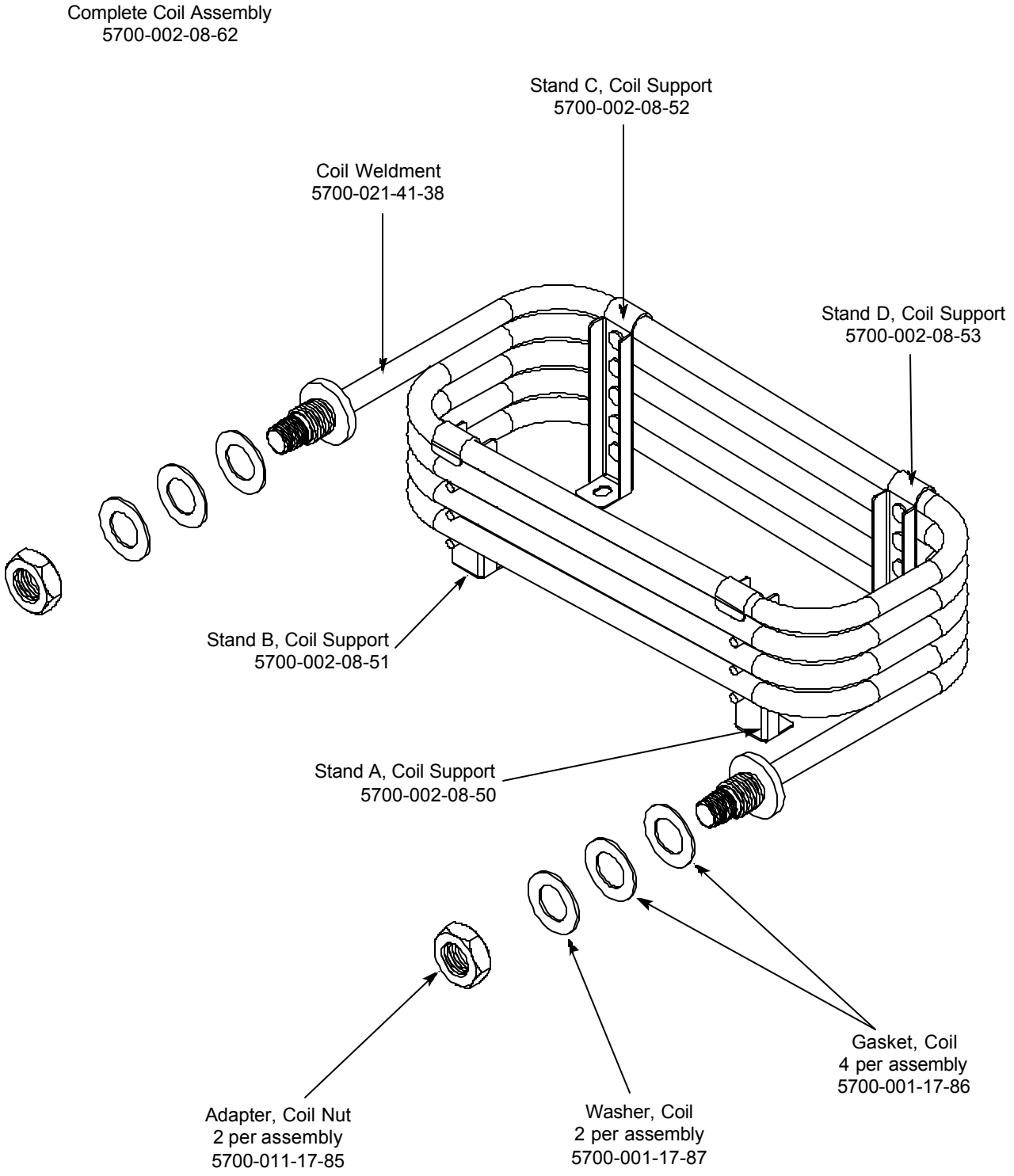


DETAIL "B"
WASH ARMS & MANIFOLD

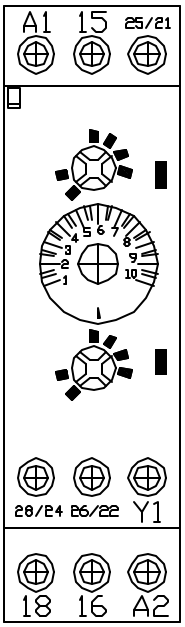
TEMPSTAR HH GPX WASH & RINSE ASSEMBLIES (CONTINUED)

ITEM	QTY	DESCRIPTION	Mfg. No.
1	1	Upper Manifold	5700-031-34-82
2	4	Nut, 3/8"-16 S/S Hex	5310-276-01-00
3	4	Lockwasher, 3/8 S/S	5311-276-01-00
4	2	Bolt, Hex 3/8”-16 x 7/8" Long	5306-011-36-95
5	2	O-Ring	5330-111-35-15
6	1	Positioning Bracket, Manifold Tube	5700-011-34-63
7	1	Tube, Wash Manifold	5700-031-92-58
8	2	Gasket, Manifold	5700-111-35-03
9	1	Wash Arm Assembly	5700-021-35-39
*	1	Wash Arm Weldment	5700-021-35-93
*	1	Bearing Assembly	5700-021-35-97
10	5	Locknut, 1/4"-20 S/S Hex with Nylon Insert	5310-374-01-00
*	2	Rinse Arm Assembly	5700-002-58-09
11	2	Clip, Retaining, Rinse Head Bushing	5340-112-01-11
12	4	Rinse Arm Washer	5330-011-42-10
13	2	Bushing, Rinse Head	5700-021-33-84
14	2	Rinse Arm	5700-031-88-86
15	4	Plug, Rinse Arm	4730-609-04-00
16	1	Lower Wash Manifold Weldment	5700-002-21-70
18	1	Rinse Manifold Weldment	5700-002-01-19
19	2	Bolt, Hex 3/8”-16 x 1 1/4" Long	5305-276-10-00
20	1	Wash Arm, Double Assembly	5700-031-92-49
21	2	Bearing, Rinse Head	3120-002-72-24
22*	4	O-ring	5330-002-60-69

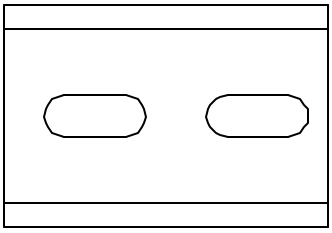
COIL ASSEMBLY



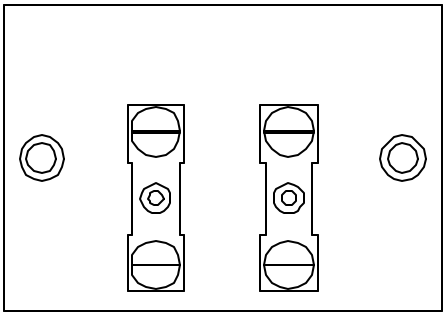
EXHAUST FAN CONTROL OPTION



Delay Timer
5945-011-65-44



2" Din Rail
5700-002-36-09

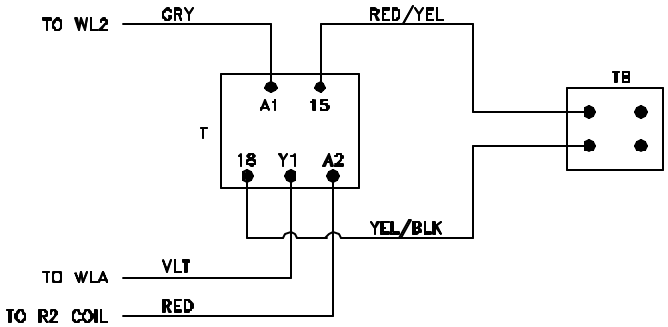


Terminal Board
5940-011-84-41

TEMPSTAR EXHAUST FAN HOOKUP

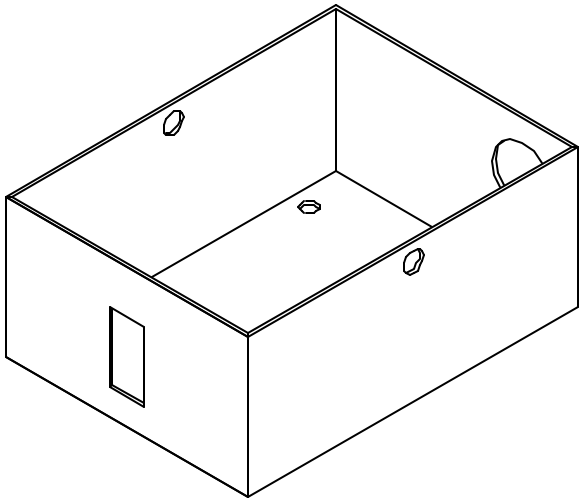
LEGEND

T TIMER
TB TERMINAL BOARD

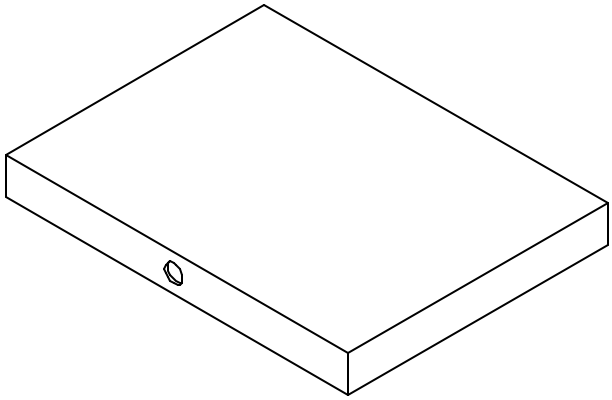


9905-002-54-41

SAFETY DOOR INTERLOCK (SDI) OPTION

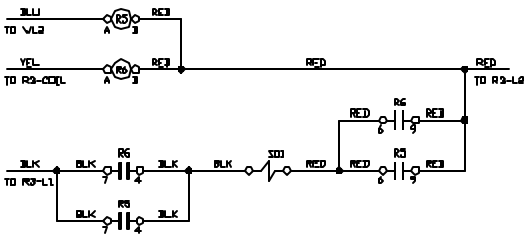


Safety Door Interlock Box Bottom
5700-001-21-26



Safety Door Interlock Box Cover
5700-001-21-27

TEMPSTAR SDI OPTION



LEGEND

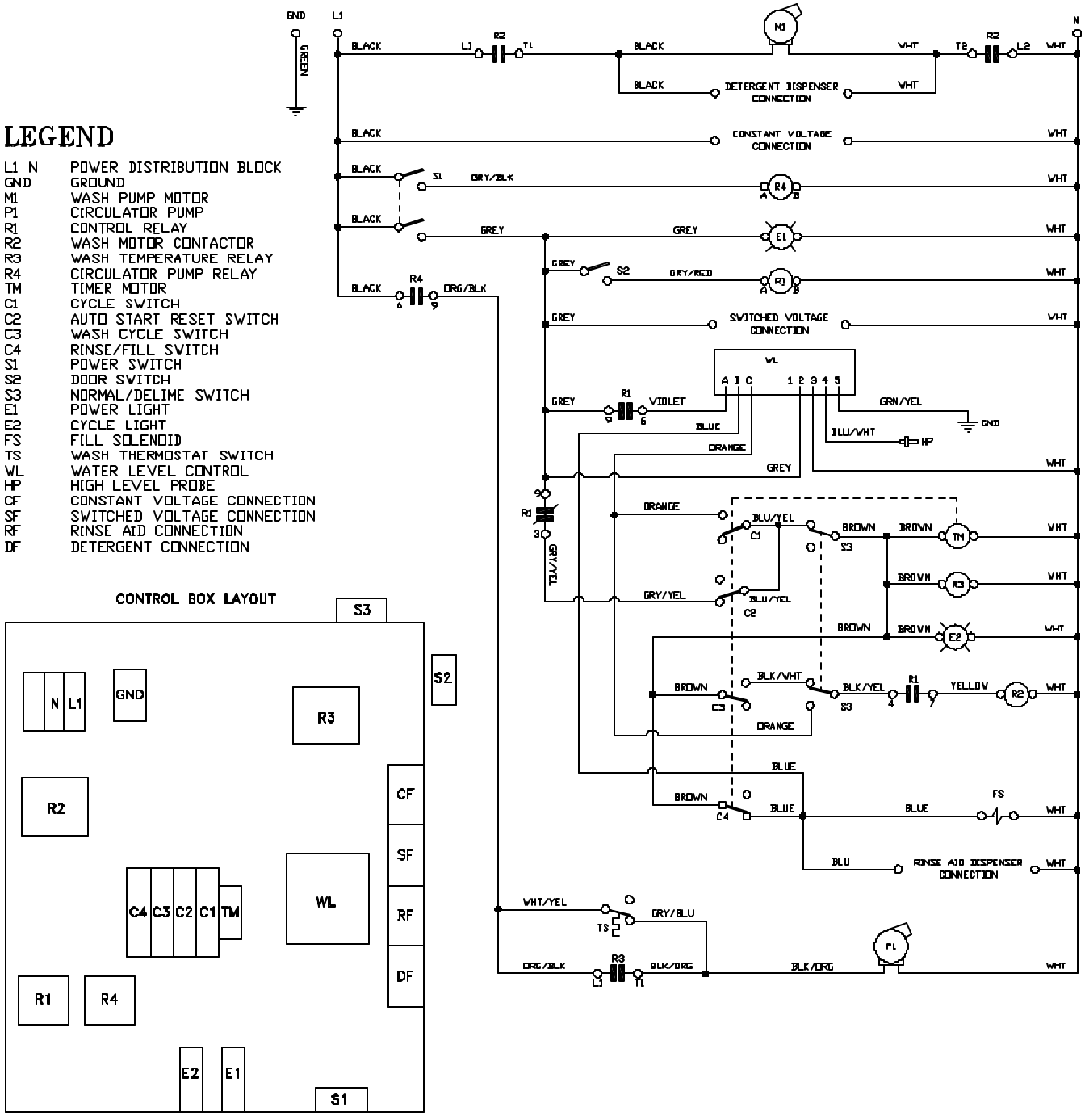
R5 RINSE RELAY
R6 WASH RELAY
SDI SAFETY DOOR INTERLOCK SOLENOID

D9905-002-35-85a

Other Safety Door Interlock (SDI) components (not shown):

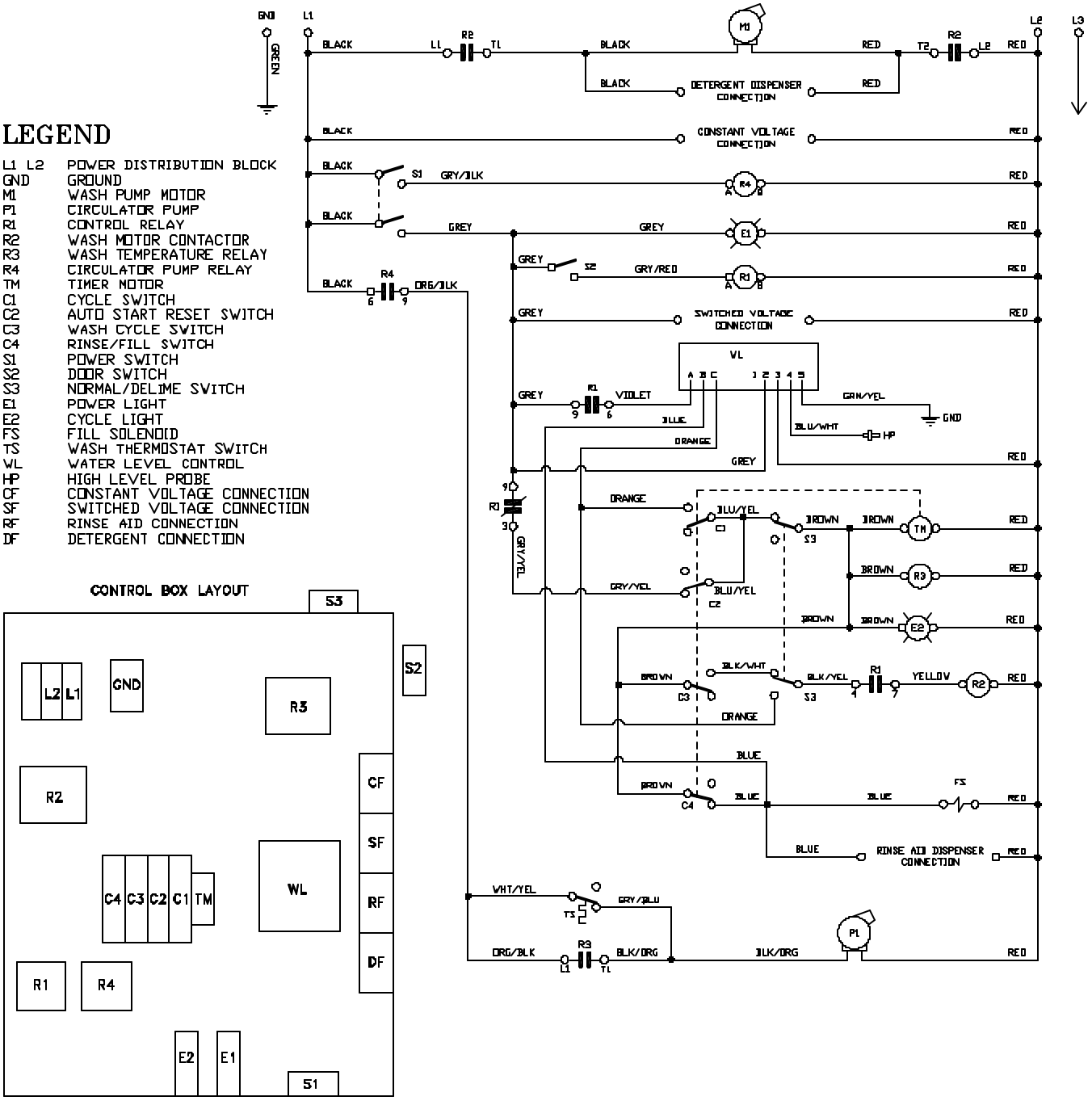
Pipe Clamp (found on the side of the machine)	5700-000-35-05
Solenoid, Electrical Interlock Option	4810-100-61-33
Relay	5945-111-47-51

Tempstar GPX
ELECTRICAL DIAGRAM
115 volt - 50/60 hertz - single phase



9903-002-56-89a

Tempstar GPX
ELECTRICAL DIAGRAM
208-230volt - 50/60 hertz - single & three phase



LEGEND

L1 L2	POWER DISTRIBUTION BLOCK
GND	GROUND
M1	WASH PUMP MOTOR
P1	CIRCULATOR PUMP
R1	CONTROL RELAY
R2	WASH MOTOR CONTACTOR
R3	WASH TEMPERATURE RELAY
R4	CIRCULATOR PUMP RELAY
TM	TIMER MOTOR
C1	CYCLE SWITCH
C2	AUTO START RESET SWITCH
C3	WASH CYCLE SWITCH
C4	RINSE/FILL SWITCH
S1	POWER SWITCH
S2	DOOR SWITCH
S3	NORMAL/DELIME SWITCH
E1	POWER LIGHT
E2	CYCLE LIGHT
FS	FILL SOLENOID
TS	WASH THERMOSTAT SWITCH
WL	WATER LEVEL CONTROL
HP	HIGH LEVEL PROBE
CF	CONSTANT VOLTAGE CONNECTION
SF	SWITCHED VOLTAGE CONNECTION
RF	RINSE AID CONNECTION
DF	DETERGENT CONNECTION

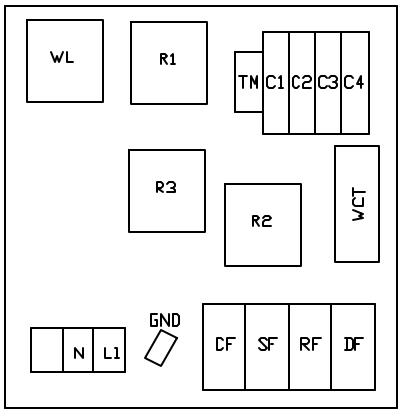
9905-002-56-90a

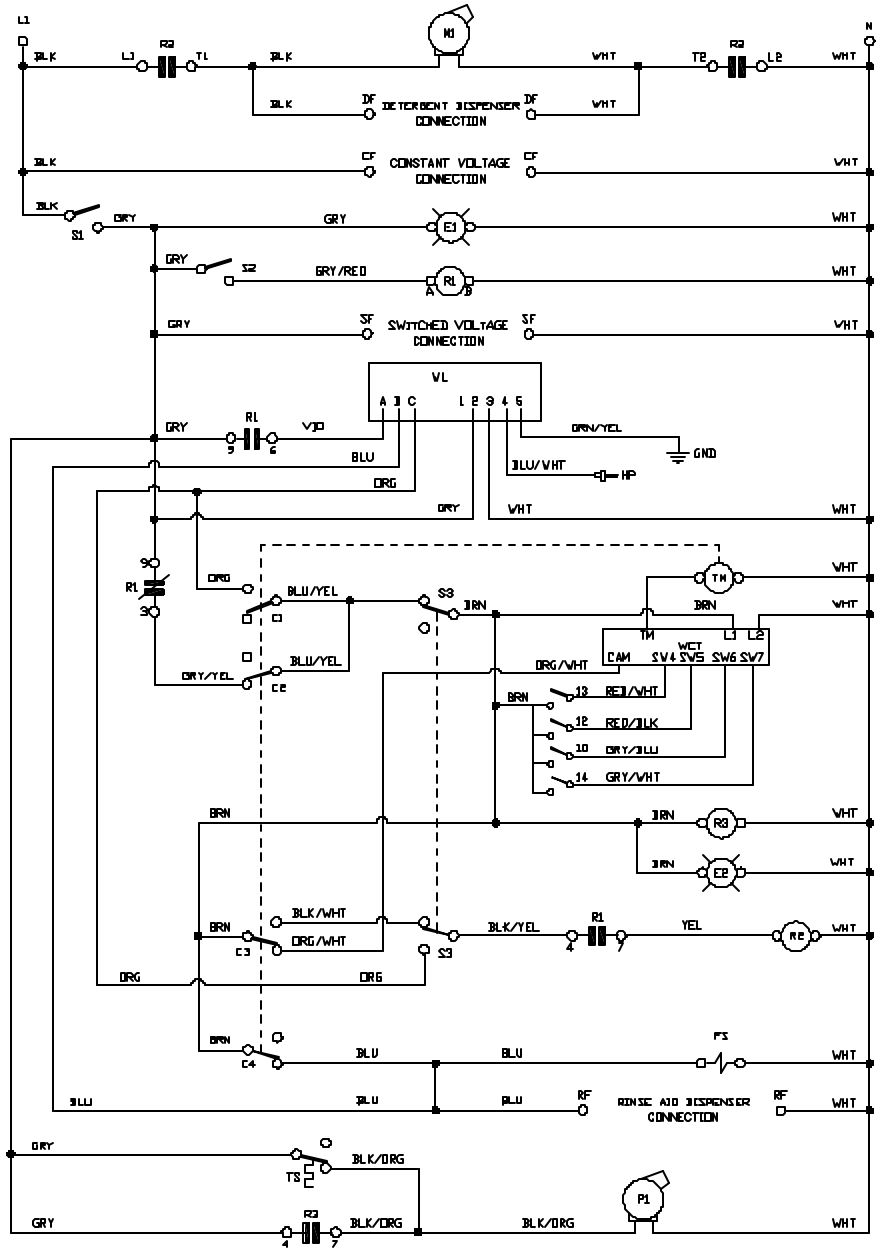
Tempstar HH GPX
ELECTRICAL DIAGRAM
115 volt - 50/60 hertz - single phase

LEGEND

L1 N	POWER DISTRIBUTION BLOCK
GND	CHASSIS GROUND
M1	WASH PUMP MOTOR
P1	CIRCULATOR PUMP
R1	CONTROL RELAY
R2	WASH MOTOR CONTACTOR
R3	WASH TEMPERATURE RELAY
S1	POWER SWITCH
S2	DOOR SWITCH
S3	NORMAL/DELIME SWITCH
S4	CYCLE SELECTOR SWITCH 1
S5	CYCLE SELECTOR SWITCH 2
S6	CYCLE SELECTOR SWITCH 3
S7	CYCLE SELECTOR SWITCH 4
C1	CYCLE SWITCH
C2	AUTO START RESET SWITCH
C3	WASH CYCLE SWITCH
C4	RINSE/FILL SWITCH
E1	POWER LIGHT
E2	CYCLE LIGHT
FS	FILL SOLENOID
HP	HIGH LEVEL PROBE
TS	WASH THERMOSTAT SWITCH
TM	TIMER MOTOR
WL	WATER LEVEL CONTROL
WCT	WASH CYCLE TIMER
CF	CONSTANT VOLTAGE CONNECTION
SF	SWITCHED VOLTAGE CONNECTION
RF	RINSE AID CONNECTION
DF	DETERGENT CONNECTION

COMPONENT LAYOUT





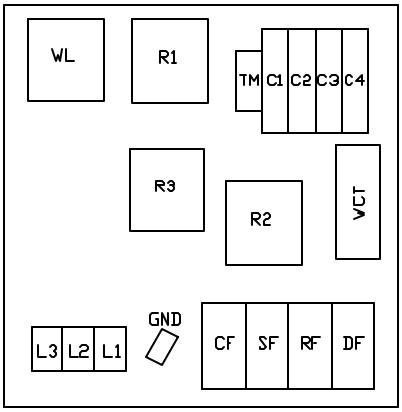
9905-002-57-61a

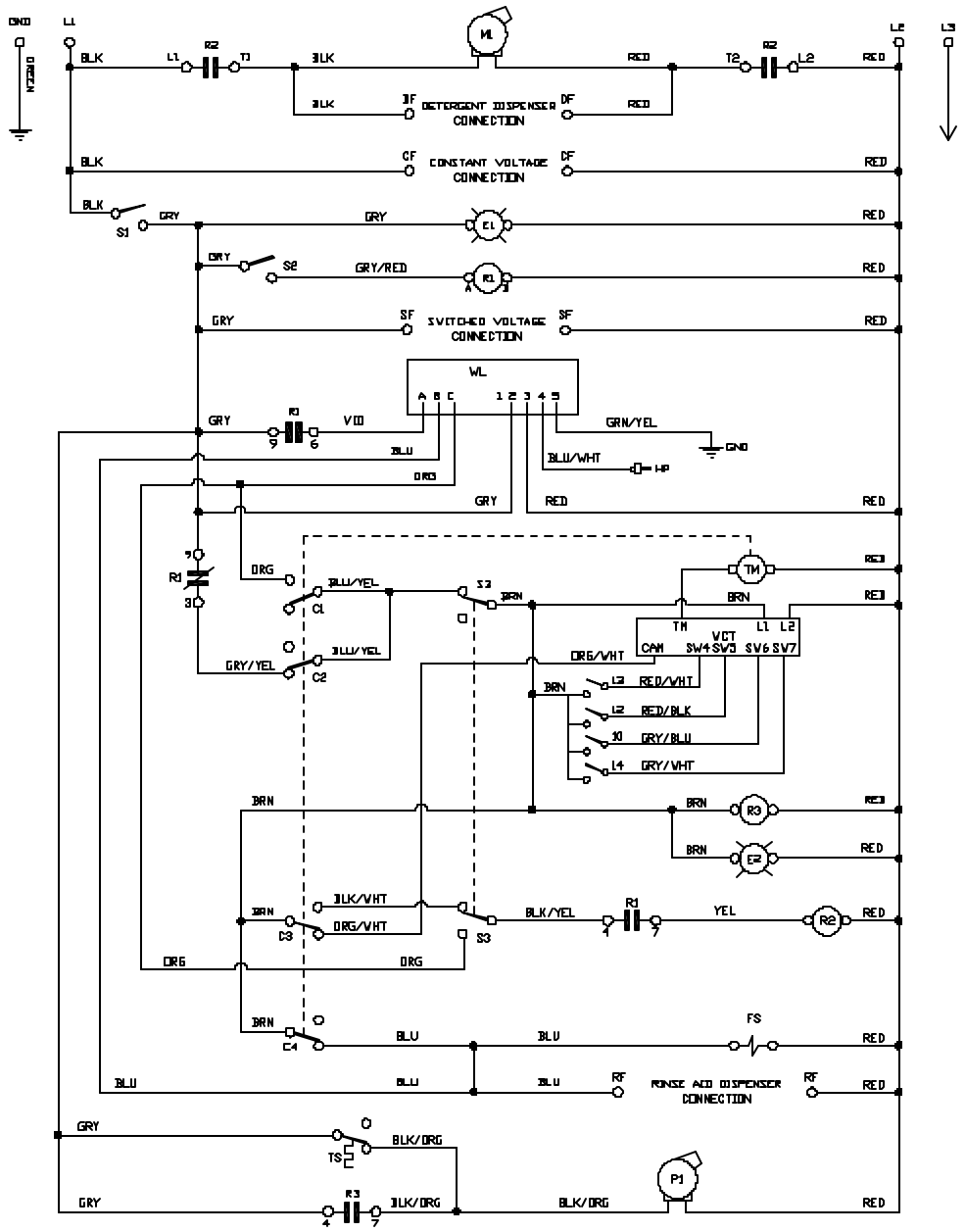
Tempstar HH GPX
ELECTRICAL DIAGRAM
208-230 volt - 50/60 hertz - single & three phase

LEGEND

L1 L2 L3	POWER DISTRIBUTION BLOCK
GND	CHASSIS GROUND
M1	WASH PUMP MOTOR
P1	CIRCULATOR PUMP
R1	CONTROL RELAY
R2	WASH MOTOR CONTACTOR
R3	WASH TEMPERATURE RELAY
S1	POWER SWITCH
S2	DOOR SWITCH
S3	NORMAL/DELIME SWITCH
S4	CYCLE SELECTOR SWITCH 1
S5	CYCLE SELECTOR SWITCH 2
S6	CYCLE SELECTOR SWITCH 3
S7	CYCLE SELECTOR SWITCH 4
C1	CYCLE SWITCH
C2	AUTO START RESET SWITCH
C3	WASH CYCLE SWITCH
C4	RINSE/FILL SWITCH
E1	POWER LIGHT
E2	CYCLE LIGHT
FS	FILL SOLENOID
HP	HIGH LEVEL PROBE
TS	WASH THERMOSTAT SWITCH
TM	TIMER MOTOR
WL	WATER LEVEL CONTROL
WCT	WASH CYCLE TIMER
CF	CONSTANT VOLTAGE CONNECTION
SF	SWITCHED VOLTAGE CONNECTION
RF	RINSE AID CONNECTION
DF	DETERGENT CONNECTION

COMPONENT LAYOUT





9905-002-57-60a