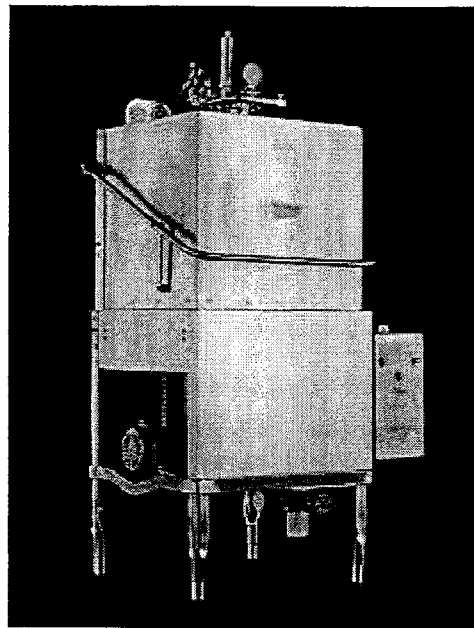


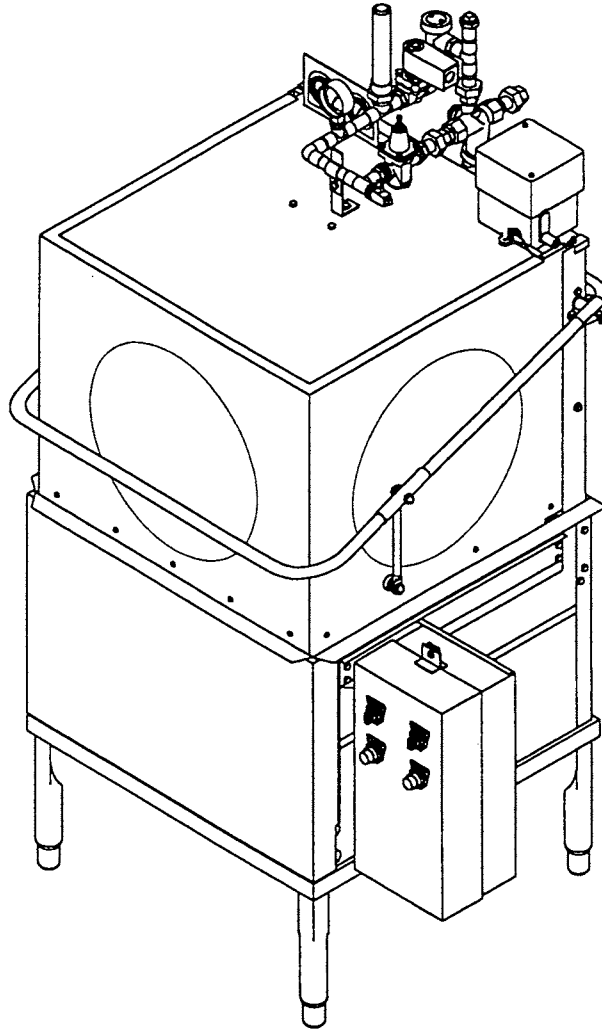
INSTRUCTION & PARTS MANUAL

DOOR



STERO
Dishwashing Machines

THE STERO COMPANY HI TEMP DOOR MODELS SD2RA, SDRA, SDRA-PKG



MODEL# _____
SERIAL# _____

THE STERO COMPANY
3200 LAKEVILLE HWY.
PETALUMA, CA. 94954
(707) 762-0071
(800) 762-7600
FAX# (707) 762-1954
RELEASE DATE 2/28/97

The Stero Company

WARRANTY POLICY

This warranty is in lieu of all other warranties, expressed or implied, including without limitation any implied warranty of merchantability, fitness for a particular purpose or non-infringement, and of any other obligation or liability on the part of Stero, whether in contract, strict liability, tort or otherwise.

The Stero Company warrants this equipment to be free from defects in material and workmanship, under normal use and operation, for a period of one (1) year from the date of initial start up or eighteen (18) months from the date of shipment from the factory, whichever comes first. This warranty is conditioned upon the customer's maintenance and care as outlined in the service manual and upon return of the warranty registration card. Repairs will be performed during Stero's authorized service agency's normal business hours. If the customer requires after hours service the customer will be responsible for the overtime premium.

Machine is warranted only for the initial place of installation. Removal of machine automatically terminates the warranty.

Stero shall have no liability under this warranty unless the customer promptly notifies Stero or it's factory authorized service agent of any alleged defects. All defective parts become the property of Stero and must be returned to Stero, or it's agent, at Stero's expense, within thirty (30) days from the date of the part's replacement. Parts replaced within the warranty carry only the unexpired portion of the machine's warranty. Not covered by this warranty are changes (parts and/or labor) necessitated by or damage resulting from: water conditions, accident, alteration, improper use, abuse, tampering, improper installation or failure to follow operating and maintenance procedures. Examples of the foregoing, but without limitations are: (1) Damage to the machine resulting from excessive concentrations of chlorine or delimiting acid solutions; (2) Use with utility service other than designated on the rating plates; (3) Improper connection to utility service; (4) Inadequate or excessive water and/or steam pressure; (5) Leaks caused by faulty installation; (6) Component failures caused by water leaks due to faulty installation; (7) Failure to comply to local building codes; (8) Failures due to deposits resulting from water or steam conditions, detergents, chemicals, or improper cleaning; (9) Resetting breakers, overloads, or safety thermostats; (10) Adjustments of thermostats after 90 days of operation; (11) Improper opening of utility supply valves; (12) Cleaning drain valves, line strainers, rinse nozzles, etc.; (13) Improper installation or malfunction of chemical dispensing equipment supplied by others; and (14) Failure to provide regular maintenance and daily cleaning as outlined in the service manual. In no event will Stero be liable for loss or damage to or loss of use of facilities or other property, additional labor costs, loss of revenue, loss of anticipated profits, or other damages of any kind what so ever, whether direct, indirect, incidental or consequential.

Stero's compact and flexible single tank, high temperature door type warewasher.

Powerful Cleaning Action

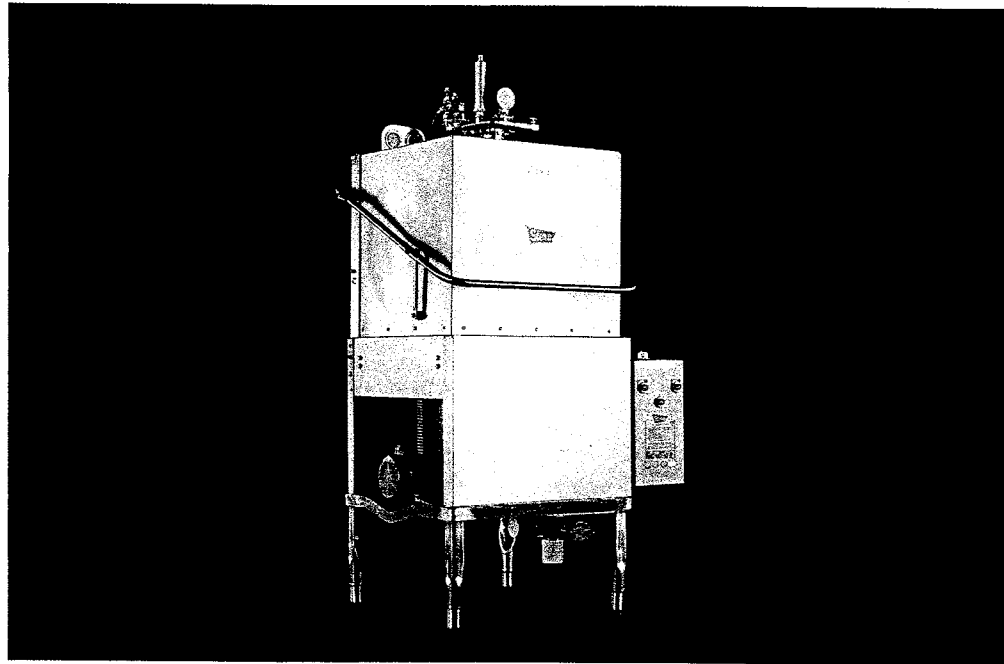
- Produces 53 racks of clean ware per hour.
- Revolving upper and lower wash arms direct 185 gallons of recirculated water over the ware per minute, providing for a thorough wash and rinse.
- High temperature 180 degree sanitizing rinse also enables the ware to dry quickly.
- Wash and rinse cycles can be by-passed with manual controls to handle hard to clean ware.

Compact and Flexible Design

- Fit in a 25 inch space.
- Racks can easily be loaded from any direction because Stero's exclusive cantilever door does not require front corner posts.
- The SD-2RA can be converted to a corner machine quickly and easily.
- Wrap-around handle is easily accessible from three sides.

Standard Safety Features

- Door safety switch will not allow the machine to run unless the door is fully closed.



Standard Equipment Engineered for the End User

- Type 304, 18-8, #4 stainless steel tank and hood.
- Stainless steel frame and legs.
- Enclosed adjustable stainless steel feet.
- Stainless steel strainer pans filter wash and rinse water.
- 1 HP. drip-proof motor has overload protection, extended stainless steel shaft, sealed ball bearings and manual reset buttons.
- Complete internal plumbing and wiring.

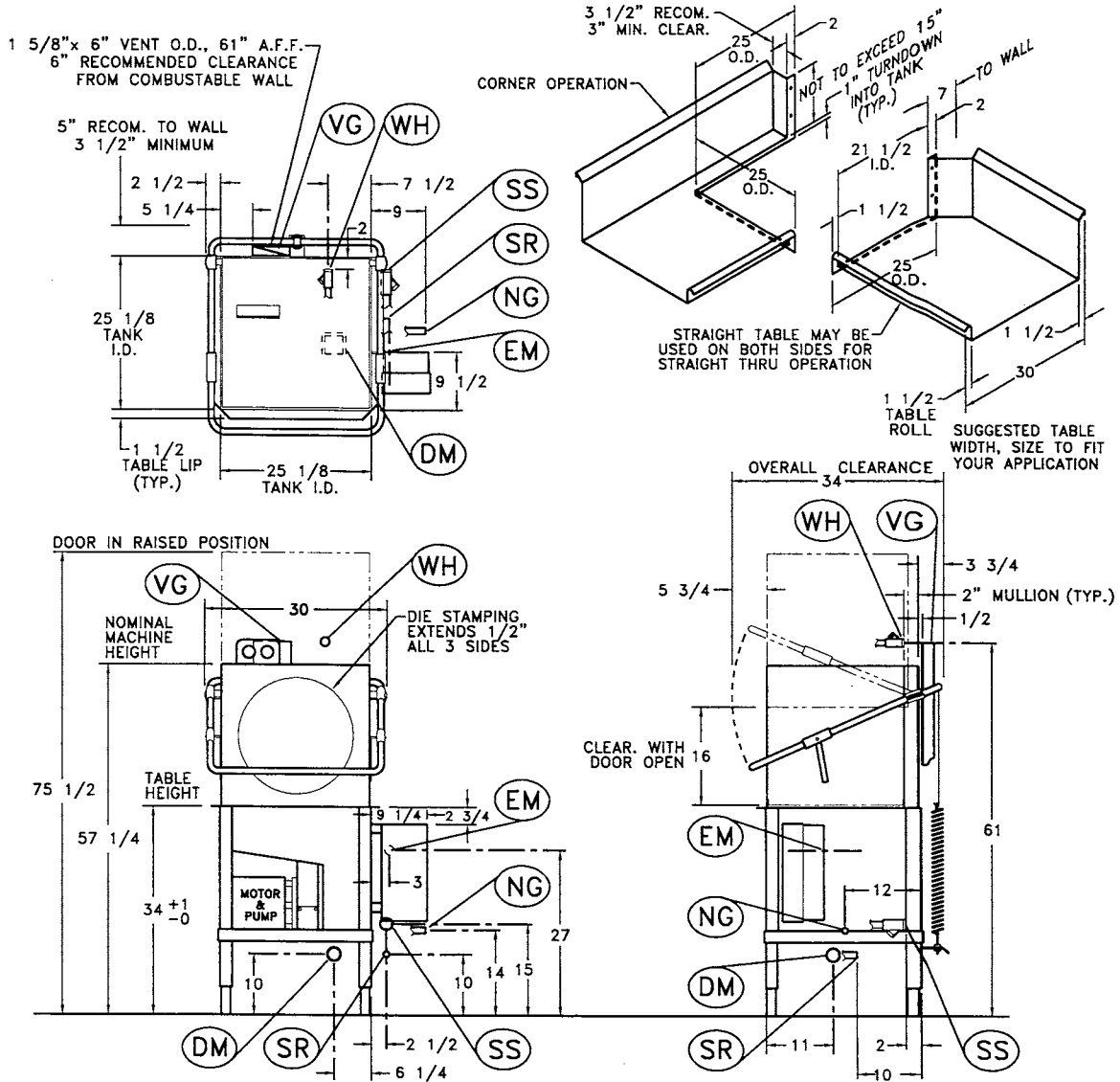
Miscellaneous Options

- Electric, gas, steam injector or steam coil tank heat.
- Automatic fill.

- Kit #55, a pre-plumbed and installed plumbing kit which includes a pressure regulating valve, pressure gauge and a shock arrester.
- Stainless steel front panel.
- Door cycle switch.
- Door interlock.
- Electro-lift door mechanism, which automatically opens the door without operator assistance at the end of each cycle to speed drying.



The Stero Company
3200 Lakeville Highway ■ Petaluma, CA 94954-5675
■ Toll Free 800-762-7600



SD2-RA		
DM	2" NPT (F)	DRAIN, MACHINE WASTE:
WH	3/4" NPT (F)	WATER SUPPLY: 180°F. • 20 PSI FLOW PRESSURE, TANK FILL & FINAL RINSE CONSUMPTION = 92 GPH.
EM	ELEC. REQ.	ONE (1) FEEDER SIZED FOR: 1. WASH PUMP MOTOR - - - - 1HP 2. WASH TANK HEAT - - - - 5KW
SS	3/4" NPT (F)	STEAM SUPPLY: 15-40 PSI CONSUMPTION • 20 PSI TANK HEAT = 15 LBS/HR.
SR	1/2" NPT (F)	STEAM RETURN:
NG	1/2" NPT (F)	NATURAL GAS SUPPLY: CONSUMPTION = 22,000 BTU
VG	NOTED	VENT, GAS FLUE: 1 5/8" x 6" VENT O.D. 61" A.F.F. VENT TO ATMOSPHERE

STANDARD 208V./230V./480V.-3PH. AVAILABLE



The Stero Company
3200 Lakeville Hwy., Petaluma, CA 94954-5675
TEL # (707) 762-0071 TELE-FAX # (707) 762-5036
TOLL FREE (800) 762-7600

Stero's single tank door type warewasher saves time and labor with a fully automatic cycle.

Fully Automatic Operation

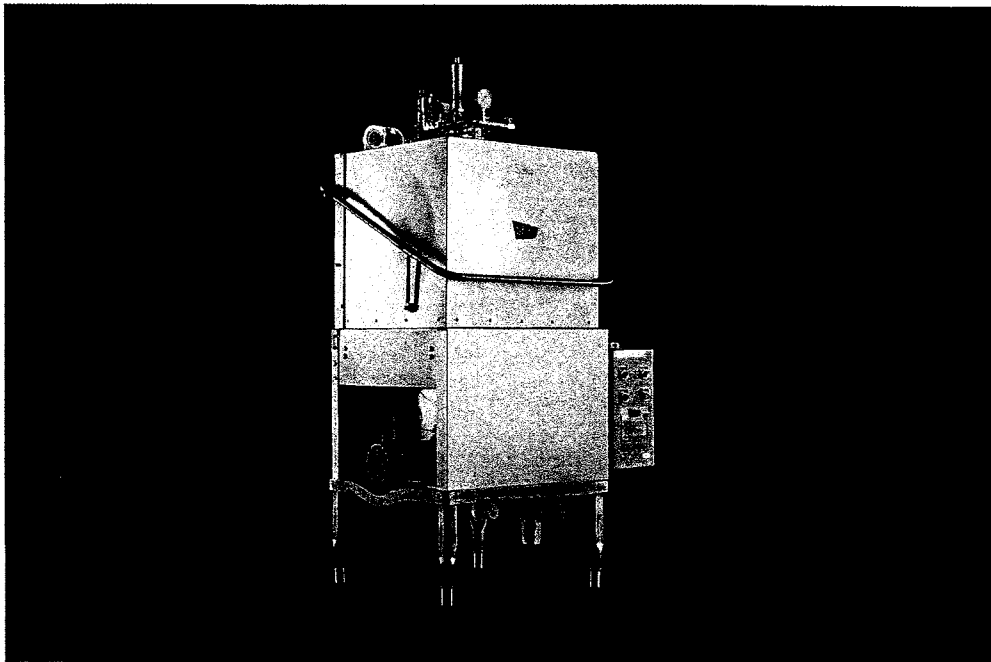
- The complete washing cycle begins when the door is closed.
- Unique pop-up door opens automatically when the rinse cycle ends allowing drying to begin immediately and without operator assistance.

Compact and Flexible Design

- Fits in a 25 inch space.
- Racks can easily be loaded from any direction because Stero's exclusive cantilever door does not require front corner posts.
- The SDR4 can be converted to a corner machine quickly and easily.
- Wrap around handle is easily accessible from three sides.

Powerful Cleaning Action

- Produces 53 racks of clean ware per hour.
- Revolving upper and lower wash arms direct 185 gallons of recirculated water over the ware per minute, providing for a thorough wash and rinse.
- High temperature 180 degree sanitizing rinse also enables the ware to dry quickly.
- Automatic wash and rinse cycles can be by-passed with manual controls to handle hard to clean ware.



Standard Safety Features

- Low water protection is thermostatically controlled to protect 5 KW heating elements.
- Door safety switch will prevent the machine from running unless the door is fully closed.

Standard Plumbing Features

- The SDR4 is completely inter-plumbed with Stero's Kit #55, which includes a pressure regulating valve, pressure gauge and a shock arrester

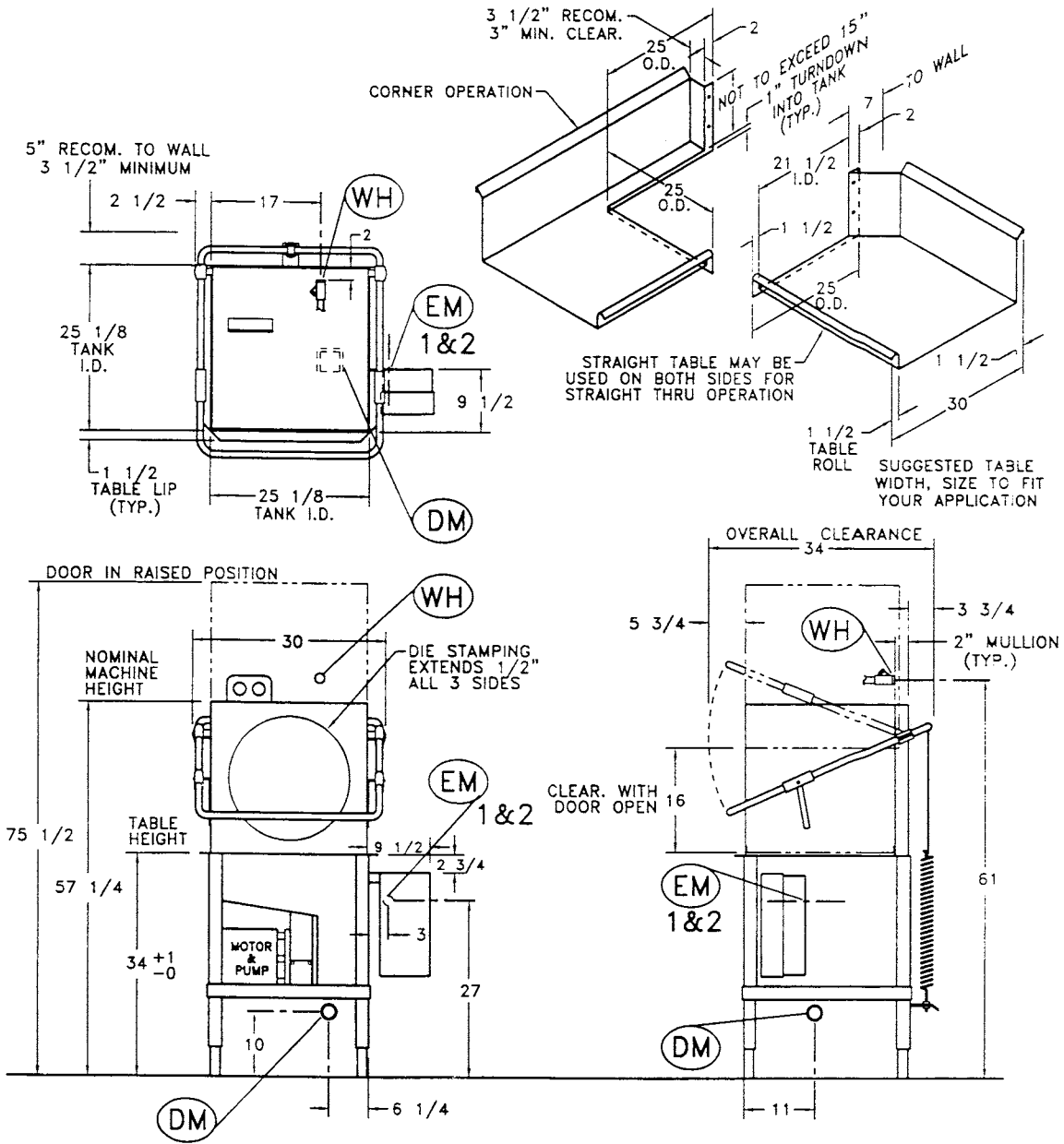
Standard Equipment Engineered for the End User

- Type 304, 18-8, #4 stainless steel tank and hood.
- Stainless steel frame and legs.
- Enclosed adjustable stainless steel feet.
- Stainless steel front enclosure panel.
- Centrifugal pump is self-draining.

- Stainless steel strainer pans efficiently filter wash and rinse water.
- 1 HP. drip-proof motor has overload protection, extended stainless steel shaft, sealed ball bearings and manual reset buttons.
- Complete internal plumbing and wiring.
- Electric tank heat.
- Automatic fill.
- Kit #55, a preplumbed and installed plumbing kit which includes a pressure regulating valve, pressure gauge and a shock arrester.
- Door cycle switch.
- Door interlock.
- Electro-lift door mechanism, which automatically opens the door at the end of each cycle.

Stero

The Stero Company
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SDRA		
DM	2" NPT (F)	DRAIN, MACHINE WASTE:
WH	3/4" NPT (F)	WATER SUPPLY: 180°F. • 20 PSI FLOW PRESSURE, TANK FILL & FINAL RINSE CONSUMPTION = 92 GALS/HR.
EM ₁	ELEC. REQ.	1 FEEDER SIZED FOR WASH PUMP MOTOR 1HP =
EM ₂	ELEC. REQ.	1 FEEDER SIZED FOR TANK HEAT - - - 5KW =

STANDARD 208V./230V./480V.-3PH. AVAILABLE



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 3200 Lakeville Hwy., Petaluma, CA 94954-5675
 TEL # (707) 762-0071 TELE-FAX # (707) 762-5036
 TOLL FREE (800) 762-7600

Stero's complete warewashing package in a single tank door machine is equipped with all of the equipment needed for high temperature operation.

Completely Equipped and Fully Automatic

- A mounted 15 KW. final rinse booster heater raises incoming water to 180 degrees.
- Mounted circuit breakers are internally wired to provide for a single point connection.

Fully Automatic Operation

- The complete washing cycle begins when the door is closed.
- Unique pop-up door opens automatically when the rinse cycle ends allowing drying to begin immediately and without operator assistance.

Compact and Flexible Design

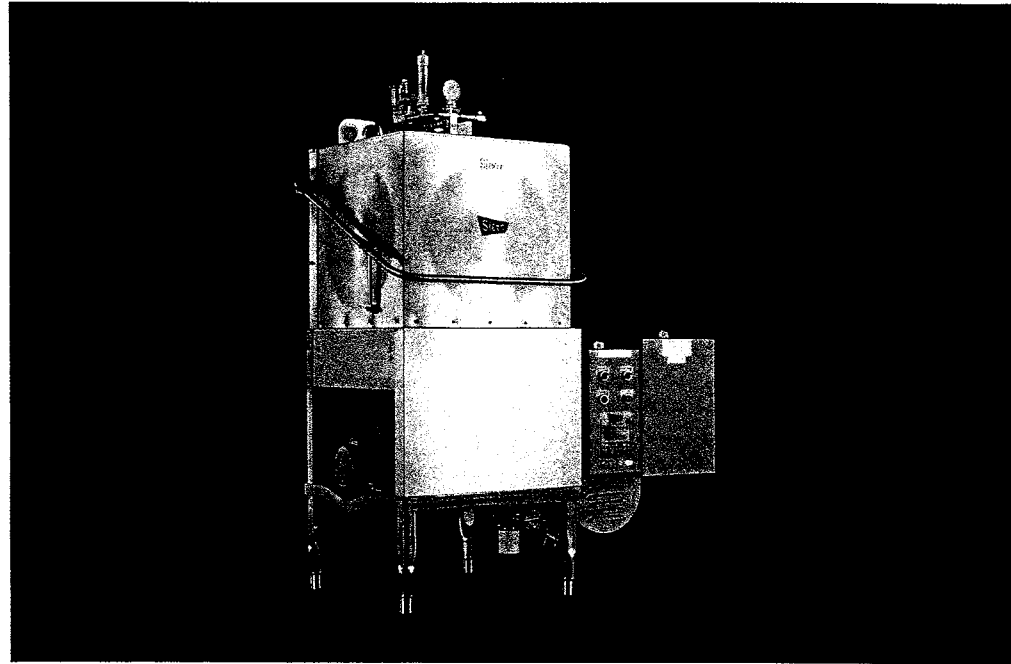
- Fits in a 25 inch space.
- Racks can easily be loaded from any direction because Stero's exclusive cantilever door does not require front corner posts.
- The SDRA-PKG can be converted to a corner machine quickly and easily.
- Wrap around handle is easily accessible from three sides.

Powerful Cleaning Action

- Produces 53 racks of clean ware per hour.
- Revolving upper and lower wash arms direct 185 gallons of recirculated water over the ware per minute, providing for a thorough wash and rinse.



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- High temperature 180 degree sanitizing rinse also enables the ware to dry quickly.
- Automatic wash and rinse cycles can be by-passed with manual controls to handle hard to clean ware.

Standard Safety Features

- Low water protection is thermostatically controlled to protect 5 KW heating elements.
- Door safety switch will prevent the machine from running unless the door is fully closed.

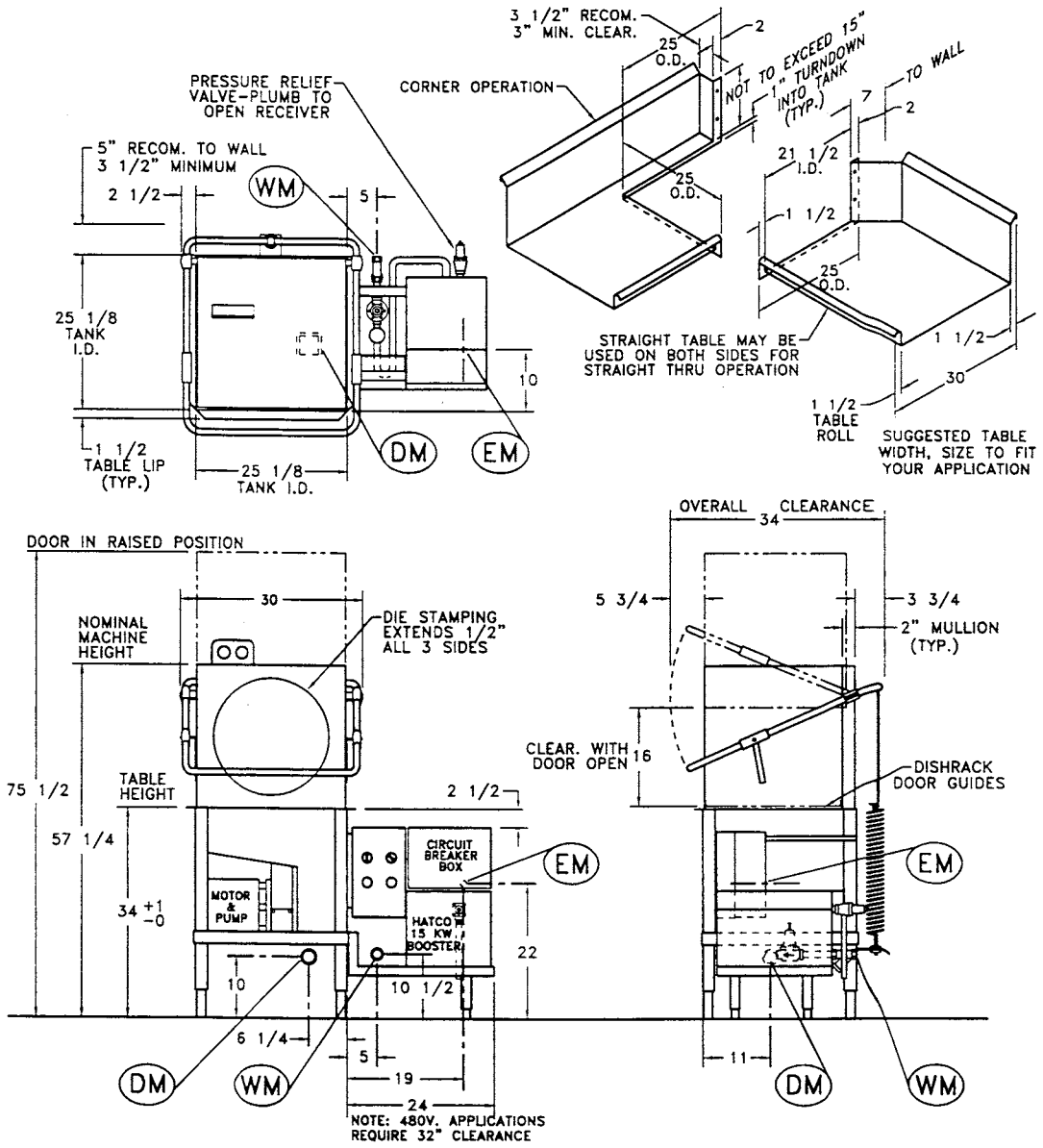
Standard Plumbing Features

- The SDRA-PKG. is completely inter-plumbed with Stero's Kit #55, which includes a pressure regulating valve, pressure gauge and a shock arrester.

Standard Equipment Engineered for the End User

- Type 304, 18-8, #4 stainless steel tank and hood.
- Stainless steel frame and legs.

- Enclosed adjustable stainless steel feet.
- Stainless steel front enclosure panel.
- Centrifugal pump is self-draining.
- Stainless steel strainer pans filter wash and rinse water.
- 1 HP. drip-proof motor has overload protection, extended stainless steel shaft, sealed ball bearings and manual reset buttons.
- Complete internal plumbing and wiring.
- Electric tank heat.
- Automatic fill.
- Kit #55, a preplumbed and installed plumbing kit which includes a pressure regulating valve, pressure gauge and a shock arrester.
- Door cycle switch.
- Door interlock.
- Electro-lift door mechanism, which automatically opens the door at the end of each cycle.



SDRA PACKAGE		
DM	2" NPT (F)	DRAIN, MACHINE WASTE:
WM	3/4" NPT (F)	WATER SUPPLY: 140°F. @ 20 PSI FLOW PRESSURE, TANK FILL & FINAL RINSE CONSUMPTION = 92 GALS/HR.
EM	ELEC. REQ.	(1) FEEDER SIZED FOR: 1. WASH PUMP MOTOR-----1 HP 2. WASH TANK HEAT-----5 KW 3. ELECTRIC BOOSTER-----15 KW

STANDARD 208V./230V./480V.-3PH. AVAILABLE



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INSTALLATION INSTRUCTIONS

- 1 — SET MACHINE IN PLACE.
- 2 — LEVEL THE MACHINE BY ADJUSTING THE FEET AS REQUIRED.
- 3 — MAKE ALL PLUMBING CONNECTIONS AS INDICATED ON THE TAGS FASTENED TO THE MACHINE.

(NOTE: MAKE AS MANY CLEANOUTS AS POSSIBLE IN THE DRAIN LINE, USING TEES WITH PIPE PLUGS IN EACH TEE INSTEAD OF ELBOWS, AS IT IS VERY IMPORTANT TO KEEP THE LINES CLEANED OUT.)

- 4 — MAKE ALL ELECTRICAL CONNECTIONS AS INDICATED ON THE TAGS FASTENED TO THE OUTLETS ON THE MACHINE. ALL ELECTRICAL INTER-CONNECTING IS DONE ON THE MACHINE AT THE FACTORY.

ADJUSTMENT AND TESTS

- 1 — WATER & STEAM LINES MUST BE BLED BEFORE FINAL CONNECTION TO THE MACHINE IN ORDER TO REMOVE ANY SOIL & DIRT WHICH HAS ACCUMULATED.
- 2 — WHEN STEAM HEAT EXCHANGER IS SUPPLIED THE TRAP ON THE SAME MUST BE BLED.
- 3 — CHECK INLET & OUTLET WATER TEMPERATURES TO CONFORM TO THE FOLLOWING REQUIREMENTS, IN ORDER TO ASSURE SATISFACTORY OPERATION.

140 F — INLET LINE TO HEAT EXCHANGER (WHEN SUPPLIED)
180 F — OUTLET FROM HEAT EXCHANGER (WHEN SUPPLIED)
180 F — INLET TO FINAL RINSE
- 4 — THE TANK HEATER, HEAT EXCHANGER, AND ALL OTHER ADJUSTABLE PARTS ARE CONNECTED & SET AT THE FACTORY & NEED NO FURTHER ADJUSTMENT.

OPERATING INSTRUCTIONS SD-2RA

- 1- OPEN THE DOOR AND CHECK TO SEE THAT THE PUMP INTAKE SCREEN AND THE STRAINER PANS ARE CLEAN AND IN PLACE.
- 2- TURN THE BOOSTER HEATER ON.
- 3- CLOSE THE 3 SIDED DOOR AND THE DRAIN VALVE.
- 4- TURN THE MANUAL FILL SELECTOR SWITCH ON AND HOLD IT UNTIL WATER DRAINS FROM THE MACHINE. (THIS INDICATES THAT THE MACHINE IS FILLED TO THE OVERFLOW LEVEL.)
- 5- PUSH THE TANK HEAT SWITCH. (THE RED BUTTON SHOULD LIGHT.)
- 6- OPEN THE DOOR AND PLACE A RACK OF PRE-SCRAPPED DISHWARE INTO THE MACHINE.
- 7- CLOSE THE DOOR AND PUSH THE STRAT SWITCH. (THE BUTTON WILL LIGHT AND THE MACHINE WILL BEGIN IT'S 60 SECOND WASH/RINSE CYCLE.)
- 8- AFTER THE CYCLE IS COMPLETED, OPEN THE DOOR AND REMOVE THE DISHRACK AND INSERT ANOTHER RACK OF DISHWARE INTO THE MACHINE. (REPEAT STEP #7.)
- 9- AT THE END OF THE MEAL PERIOD, TURN OFF THE BOOSTER AND TANK HEAT SWITCH, DRAIN AND THOROUGHLY CLEAN THE INSIDE OF THE DISHMACHINE. LEAVE THE DOORS OPEN TO AIR DRY AND LET THE NEXT SHIFT KNOW THE MACHINE IS CLEAN AND READY TO BE REFILLED.

OPERATING INSTRUCTIONS SDRA

- 1- OPEN THE DOOR AND CHECK TO SEE THAT THE PUMP INTAKE SCREEN AND THE STRAINER PANS ARE CLEAN AND IN PLACE. LEAVE THE DOOR OPEN.
- 2- TURN THE BOOSTER HEATER ON.
- 3- CLOSE THE DRAIN VALVE.
- 4- TURN THE HAND-AUTO SWITCH TO THE AUTO POSITION.
- 5- THE RINSE-OFF-WASH MANUAL SELECTOR SWITCH SHOULD BE OFF.
- 6- PLACE A RACK OF PRE-SCRAPPED WARE INTO THE MACHINE.
- 7- CLOSE THE DOOR. (THE MACHINE WILL FILL AUTOMATICALLY AND BEGIN IT'S 60 SECOND WASH/RINSE CYCLE.)
- 8- PUSH THE TANK HEAT SWITCH. (THE RED BUTTON WILL LIGHT AFTER THE MACHINE IS FILLED.)
- 9- AFTER THE WASH/RINSE CYCLE IS COMPLETE, THE DOOR WILL POP UP. OPEN THE DOOR AND REMOVE THE DISHRACK. INSERT ANOTHER RACK OF DISHWARE INTO THE MACHINE. (REAT STEPS 6,7 AND 8.)
- 10- AT THE END OF THE MEAL PERIOD, TURN OFF THE BOOSTER AND TANK HEAT SWITCH, DRAIN AND THOROUGHLY CLEAN THE INSIDE OF THE DISHMACHINE. LEAVE THE DOORS OPEN TO AIR DRY AND LET THE NEXT SHIFT KNOW THE MACHINE IS CLEAN AND READY TO BE USED.

DAILY MAINTENANCE

CLEANLINESS IS ONE OF THE MOST IMPORTANT THINGS IN ANY DISHROOM. CLEAN EQUIPMENT PREVENTS REPAIR PROBLEMS, AND MOST IMPORTANT OF ALL, GIVES YOU CLEAN, SANITARY WARE.

THIS IS BEST ACCOMPLISHED BY ESTABLISHING A DAILY PROCEDURE, AND BY SELECTING A SUPERVISOR, IF POSSIBLE, TO SEE THAT IT IS PROPERLY DONE.

AT THE END OF EACH SHIFT OR WASHING PERIOD, THE FOLLOWING STEPS WILL INSURE PROPER RESULTS.

- 1 — REMOVE RACK FROM MACHINE.
- 2 — SHUT OFF POWER TO THE MACHINE. IF MACHINE IS STEAM HEATED, TURN OFF STEAM SUPPLY.
- 3 — OPEN THE DOOR AND REMOVE THE LOWER RINSE ARM, BOTH WASH MANIFOLDS AND SCRAP SCREENS. THE LOWER RINSE ARM PLUGS SHOULD BE REMOVED AND THE LOWER RINSE ARM, WASH MANIFOLDS AND SCREENS SHOULD NOW BE CLEANED IN A SINK, OR FLUSHED OUT WITH A HOSE. IT IS NOT NECESSARY TO USE A BRUSH.
- 4 — WASH, SCRUB, AND RINSE DOWN THE INSIDE OF THE MACHINE. ALL REFUSE IN THE BOTTOM OF THE TANK SHOULD BE FLUSHED DOWN THE DRAIN VALVE. WHEN THE TANK IS CLEAN, INSPECT THE DRAIN VALVE. REMOVE ANY FOREIGN MATTER THAT MIGHT REMAIN BETWEEN THE POPPET AND THE SEAT OF THE VALVE.
- 5 — CLEAN THE EXTERIOR OF THE MACHINE WITH A GOOD ACCEPTABLE STAINLESS STEEL CLEANER. LEMON OIL MAY BE USED.
- 6 — THE FLOOR AROUND THE BASE OF THE MACHINE AND UNDER THE TABLE MAY ALSO BE CLEANED TO PREVENT SOIL ACCUMULATION.
- 7 — ALL INTERIOR COMPONENTS THAT WERE REMOVED FROM THE MACHINE SHOULD NOW BE REINSTALLED.
- 8 — LEAVE THE DOOR OPEN TO ALLOW THE INTERIOR OF THE MACHINE TO DRY.

ALWAYS REMEMBER—A CLEAN MACHINE IS A WELL MAINTAINED MACHINE & YOU CAN'T GET CLEAN WARE OUT OF A DIRTY MACHINE!

PUMP MAINTENANCE

UNDER THIS SECTION, WE ARE CONCERNED WITH THE CENTRIFUGAL PUMP. AFTER A CERTAIN LENGTH OF TIME, SOMETIMES MANY YEARS, IT MAY BE NECESSARY TO REPLACE A PUMP SEAL. THESE ARE CERAMIC SEALS. PROCEED AS FOLLOWS:

- 1 — THE PUMP UNIT IS HELD ON TO THE PUMP HOUSING BY FOUR HEX NUTS. REMOVE THE HEX NUTS. THE PUMP UNIT SHOULD NOW COME OFF.
- 2 — REMOVE THE CAP SCREW IN THE END OF THE IMPELLAR SHAFT. IF THE UNIT HAS BEEN IN USE FOR A LONG TIME, IT MAY BE NECESSARY TO USE A PULLER. THIS EXPOSES THE SEAL. IT IS NOT NECESSARY TO TAKE THE MOTOR APART TO REMOVE THE SEAL.
- 3 — WORK THE ENTIRE SEAL RING OUT WITH A SCREW DRIVER, AND CLEAN THE SEAL HOUSING THOROUGHLY.
- 4 — REINSTALL THE NEW SEAL IN THE SAME WAY AS THE OLD ONE WAS REMOVED. (IF NECESSARY, REFER TO EXPLODED VIEW IN THE MOTOR SECTION OF THIS MANUAL.)
- 5 — AFTER THE SEAL IS PROPERLY INSTALLED IN THE HOUSING;
 - A—REMOUNT IMPELLAR ON SHAFT.
 - B—CLEAN MOUNTING SURFACE OF THE PUMP HOUSING AND THE END BELL.
 - C—REMOVE THE OLD GASKET, IF DAMAGED.
 - D—INSTALL A NEW GASKET.
 - E—REMOUNT THE MOTOR AND PUMP HOUSING.
 - F—TIGHTEN ALL FOUR HEX NUTS EVENLY AND SECURELY.
- 6 — THE UNIT IS NOW READY TO BE USED.

FINAL RINSE BOOSTER

THE FINAL RINSE BOOSTER SUPPLIED WITH THE EQUIPMENT IS SIZED SO AS TO SUPPLY 180 F – 190 F WATER TO THE FINAL RINSE. TO DO THIS, IT SHOULD HAVE AN INCOMING WATER SUPPLY OF 140 F AND 20 TO 25 POUNDS OF FLOW PRESSURE. IF THE BOOSTER IS STEAM HEATED IT SHOULD ALSO HAVE AN ADEQUATE STEAM SUPPLY OF 15 TO 40 PSI. WATER AND STEAM LINES TO THE BOOSTER SHOULD BE SIZED AS CALLED FOR IN THE DRAWINGS OR SPECIFICATIONS. THE ELECTRICAL POWER SUPPLY TO THE BOOSTER SHOULD BE OF THE REQUIRED VOLTAGE AND PHASING AS CALLED FOR IN THE DRAWINGS OR SPECIFICATIONS.

THE TEMPERATURE IN THE FINAL RINSE IS CONTROLLED BY A FENWALL THERMOSWITCH UNIT. IF IT BECOMES NECESSARY TO ADJUST THE FINAL RINSE TEMPERATURE, REFER TO THE BOOSTER SECTION FOR THE THERMOSTATE LOCATION. THE TANK HEAT IN THE POWER WASH AND POWER RINSE TANK IS ALSO CONTROLLED BY A THERMOSWITCH. IF IT BECOMES NECESSARY TO ADJUST THESE TEMPERATURES, TURN THE ADJUSTMENT SCREW CLOCKWISE TO INCREASE TEMPERATURES, COUNTER CLOCKWISE TO DECREASE TEMPERATURES. TURN THE ADJUSTMENT SCREW 1/4 TURN AND RECHECK TEMPERATURES, OVER ADJUSTMENT MAY DAMAGE THE THERMOSTAT.

ELECTRICAL

THIS WAREWASHING UNIT HAS BEEN THOROUGHLY TESTED UNDER ACTUAL OPERATING CONDITIONS WITH HOT WATER, STEAM (WHEN USED), AND THE ELECTRICAL ALL WORKING PROPERLY. WHEN THE UNIT HAS BEEN REASSEMBLED PROPERLY AND ALL SYSTEMS CONNECTED, ONE OF THE MOST IMPORTANT THINGS TO REMEMBER IS THE FINAL ELECTRICAL CONNECTION TO THE MAIN POWER SUPPLY. WHEN CONNECTING IT TO A SINGLE OR THREE PHASE SYSTEM, AND THE ELECTRICIAN TURNS ON THE EQUIPMENT FOR THE FIRST TIME, HE SHOULD CHECK TO SEE THAT THE MOTOR IS RUNNING IN THE PROPER DIRECTION. IF NOT, THEN HE SHOULD SWITCH TWO OF THE LEADES, RE-CHECK ROTATION, SECURE CONNECTIONS MAKING SURE THEY ARE TIGHT AND INSULATED. THE VARIOUS PUMP UNITS, VALVE CIRCUITS, ETC., HAVE ALL BEEN PHASED OUT AND CHECKED OUT AT THE FACTORY AND NEED NO ATTENTION.

EACH SERVICE IS ALSO PROTECTED BY OVERLOAD DEVICES. THESE ARE ALSO LOCATED IN THE PANEL BOX AS ARE ALL THE CONTACTORS AND RELAYS. WHENEVER A PROBLEM ARISES WITH THE ELECTRICAL SYSTEM, THIS EXAMINATION SHOULD BE MADE BY A COMPETENT ELECTRICIAN.

ALWAYS REFER TO THE WIRING DIAGRAM BEFORE REMOVING OR INSTALLING, OR DOING ANY WORK ON THE ELECTRICAL SYSTEM.

SDRA/SD-2RA TROUBLE SHOOTING

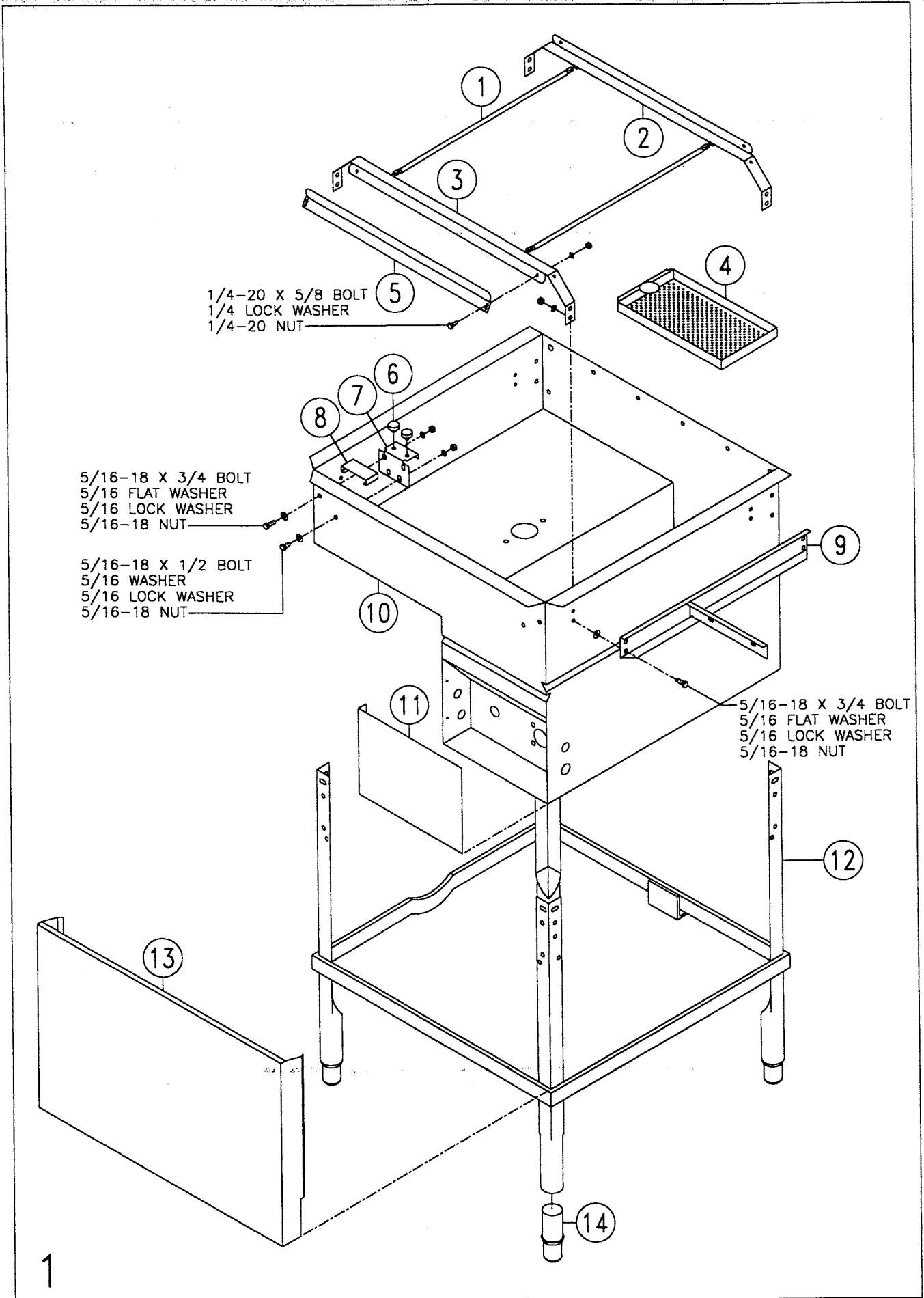
PROBLEM	LOOK FOR	CORRECTION
MACHINE WILL NOT FILL AUTOMATICALLY.	1-CLOSED WATER SUPPLY VALVE. 2-PLUGGED LINE STRAINER. 3-DEFECTIVE FILL VALVE. 4-DEFECTIVE DOOR SWITCH. 5-POSITION OF HAND-AUTO SWITCH. 6-DEFECTIVE FILL CONTROL RELAY.	1-OPEN SUPPLY VALVE. 2-REMOVE & CLEAN SCREEN. 3-CHECK OPERATION OF VALVE, REPLACE IF NECESSARY. 4-CHECK OPERATION OF SWITCH & LEVER. ADJUST IF NECESSARY. 5-TURN SWITCH TO AUTO POSITION. 6-REPLACE FILL CONTROL RELAY.
MACHINE WILL NOT HOLD WATER.	1-FOOD PARTICLES HOLDING DRAIN VALVE FROM SEATING. 2-DRAIN NOT CLOSING. 3-DEFECTIVE DRAIN O-RING.	1-CHECK DRAIN VALVE SEAT. 2-ADJUST DRAIN LINKAGE BETWEEN DRAIN VALVE BODY & DRAIN HANDLE. 3-REPLACE O-RING
MACHINE OVERFILLS.	1-DEFECTIVE FLOAT SWITCH. 2-DEFECTIVE FILL VALVE. 3-DEFECTIVE FILL CONTROL RELAY.	1-CHECK FOR PROPER OPERATION, ADJUST OR REPLACE IF NECESSARY. 2-CHECK OPERATION OF VALVE, REPLACE IF NECESSARY. 3-REPLACE RELAY.
MACHINE WILL NOT AUTOMATICALLY START.	1-DEFECTIVE FILL CONTROL RELAY. 2-POSITION OF HAND-AUTO SWITCH. 3-DEFECTIVE FLOAT SWITCH. 4-DEFECTIVE CONTROL RELAY. 5-DEFECTIVE MOTOR CONTACTOR. 6-DEFECTIVE 2 CAM TIMER OR MICRO SWITCH.	1-REPLACE RELAY. 2-TURN TO THE AUTO POSITION. 3-CHECK FOR PROPER OPERATION, ADJUST OR REPLACE IF NECESSARY. 4-REPLACE RELAY. 5-REPLACE CONTACTOR. 6-REPLACE TIMER OR SWITCH.
PUMP MOTOR KICKING OUT.	1-CHECK MOTOR ROTATION. 2-CHECK LINE VOLTAGE. 3-BROKEN GLASS, DISH, SILVER, ETC. IN PUMP HOUSING. 4-PLUGGED MANIFOLDS.	1-CHANGE MOTOR ROTATION. 2-CHECK WITH VOLTMETER. 3-REMOVE PUMP MOTOR & CLEAN PUMP HOUSING. CHECK INTAKE & DISCHARGE SIDE OF PUMP. 4-REMOVE & CLEAN UPPER & LOWER MANIFOLDS.
MACHINE IS NOT WASHING PROPERLY.	1-PLUGGED MANIFOLDS. 2-PUMP MOTOR KICKED OUT. 3-CHECK WASH TEMPERATURE. 4-EMPTY DETERGENT CONTAINER. 5-LOW WATER LEVEL IN TANK. 6-WASHARMS NOT REVOLVING. 7-DEFECTIVE TIMER OR MICRO SW. 8-CHECK MOTOR ROTATION.	1-REMOVE & CLEAN UPPER & LOWER MANIFOLDS. 2-RESET OVERLOAD ON MOTOR. 3-ADJUST TEMP. 150 TO 165F. 4-REPLACE CONTAINER. 5-ADJUST FILL FLOAT SWITCH. 6-REMOVE & CLEAN UPPER & LOWER MANIFOLDS. 7-REPLACE TIMER OR MICRO SW. 8-CHANGE MOTOR ROTATION.

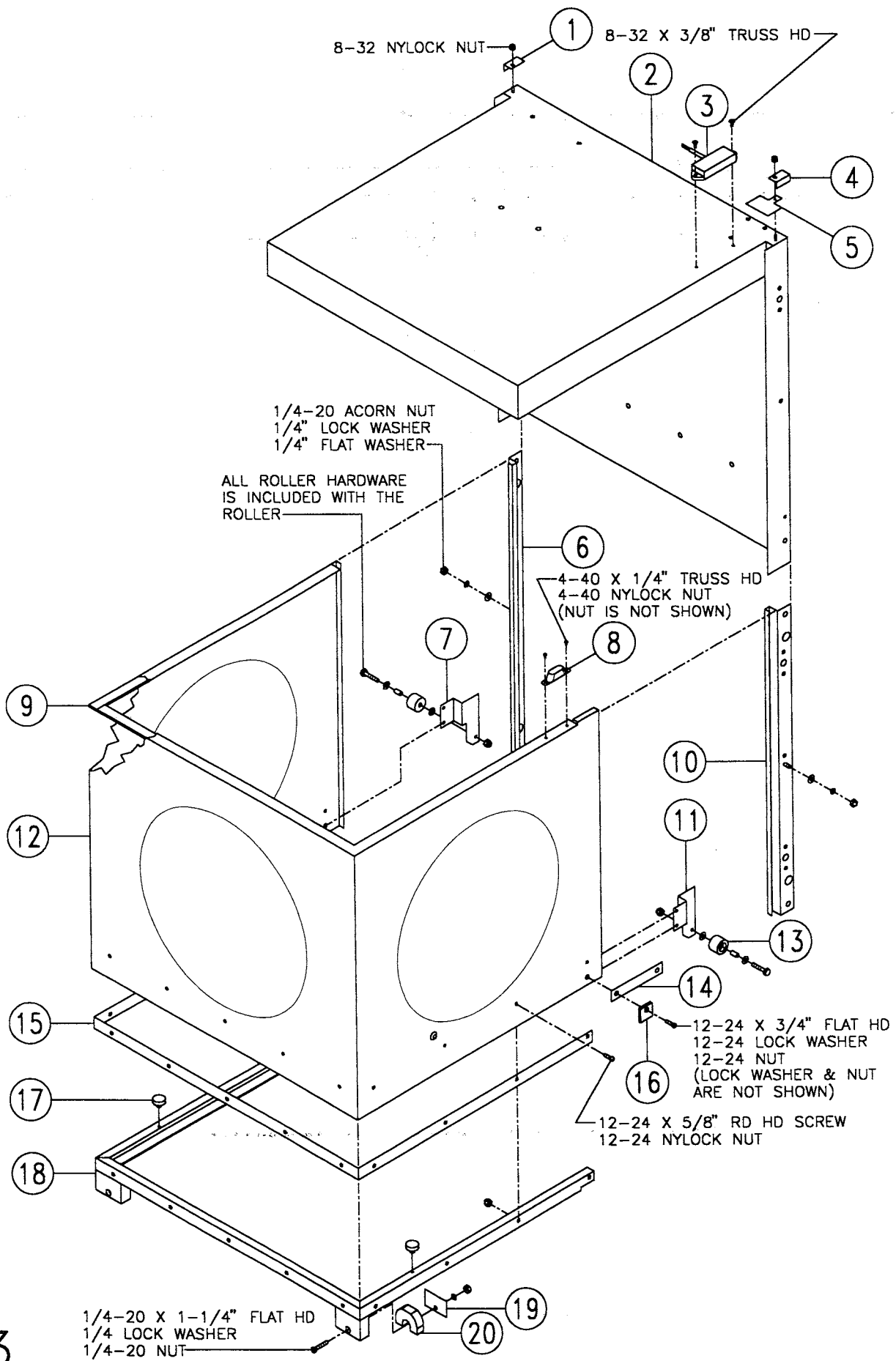
SDRA/SD-2RA TROUBLE SHOOTING

PROBLEM	LOOK FOR	CORRECTION
MACHINE IS NOT RINSING PROPERLY.	1-PLUGGED FINAL RINSE SPRAYERS. 2-LOWER FINAL RINSE ARMS OUT OF ALIGNMENT. 3-DEFECTIVE FINAL RINSE VALVE. 4-LOW FINAL RINSE PRESSURE. 5-CHECK FINAL RINSE TEMPERATURE. 6-LOWER FINAL RINSE ARM NOT REVOLVING. 7-EMPTY RINSE-DRY CONTAINER.	1-REMOVE & CLEAN. 2-ADJUST LOWER RINSE ARM. 3-CHECK & REPLACE IF NECESSARY. 4-ADJUST PRV VALVE. 5-ADJUST TEMPERATURE 180 TO 195F. 6-CHECK HUB REPLACE IF WORN. 7-REPLACE CONTAINER.
WATER COMING OUT BETWEEN DOOR & HOOD.	1-NO RACK IN MACHINE. 2-LOWER WASHARM NOT REVOLVING. 3-DOOR OUT OF ADJUSTMENT.	1-INSTALL RACK IN MACHINE. 2-REMOVE & CLEAN. 3-ADJUST DOOR USING A RUBBER MALLET. CALL FACTORY.
DOOR IS HARD TO OPEN.	1-CHECK UPPER & LOWER DOOR TEFLONS & ROLLERS. 2-CHECK SPRING TENSION. 3-CHECK THAT MACHINE IS LEVEL.	1-REPLACE IF WORN. 2-ADJUST SPRING TENSION. 3-LEVEL MACHINE.
MACHINE WILL NOT COME UP TO TEMPERATURE. (ELECTRIC TANK HEAT)	1-TRIPPED CIRCUIT BREAKER. 2-TANK HEAT SWITCH. 3-LIME BUILD UP ON ELEMENT. 4-TRIPPED HIGH LIMIT. 5-CHECK LINE VOLTAGE. 6-CHECK AMPERAGE. 7-CHECK TANK HEAT CONTACTOR. 8-THERMOSTAT OUT OF ADJUSTMENT.	1-RESET CIRCUIT BREAKER. 2-CHECK TO INSURE TANK HEAT SWITCH IS ON. 3-DELIME TANK. 4-RESET HIGH LIMIT. 5-CHECK LINE VOLTAGE WITH VOLTMETER. 6-CHECK ELEMENT FOR PROPER AMPERAGE DRAW. 7-REPLACE IF NECESSARY. 8-ADJUST THERMOSTAT, REPLACE IF NECESSARY.

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8-32 NYLOCK NUT (1)
 8-32 X 3/8" TRUSS HD (2)

1/4-20 ACORN NUT
 1/4" LOCK WASHER
 1/4" FLAT WASHER

ALL ROLLER HARDWARE
 IS INCLUDED WITH THE
 ROLLER

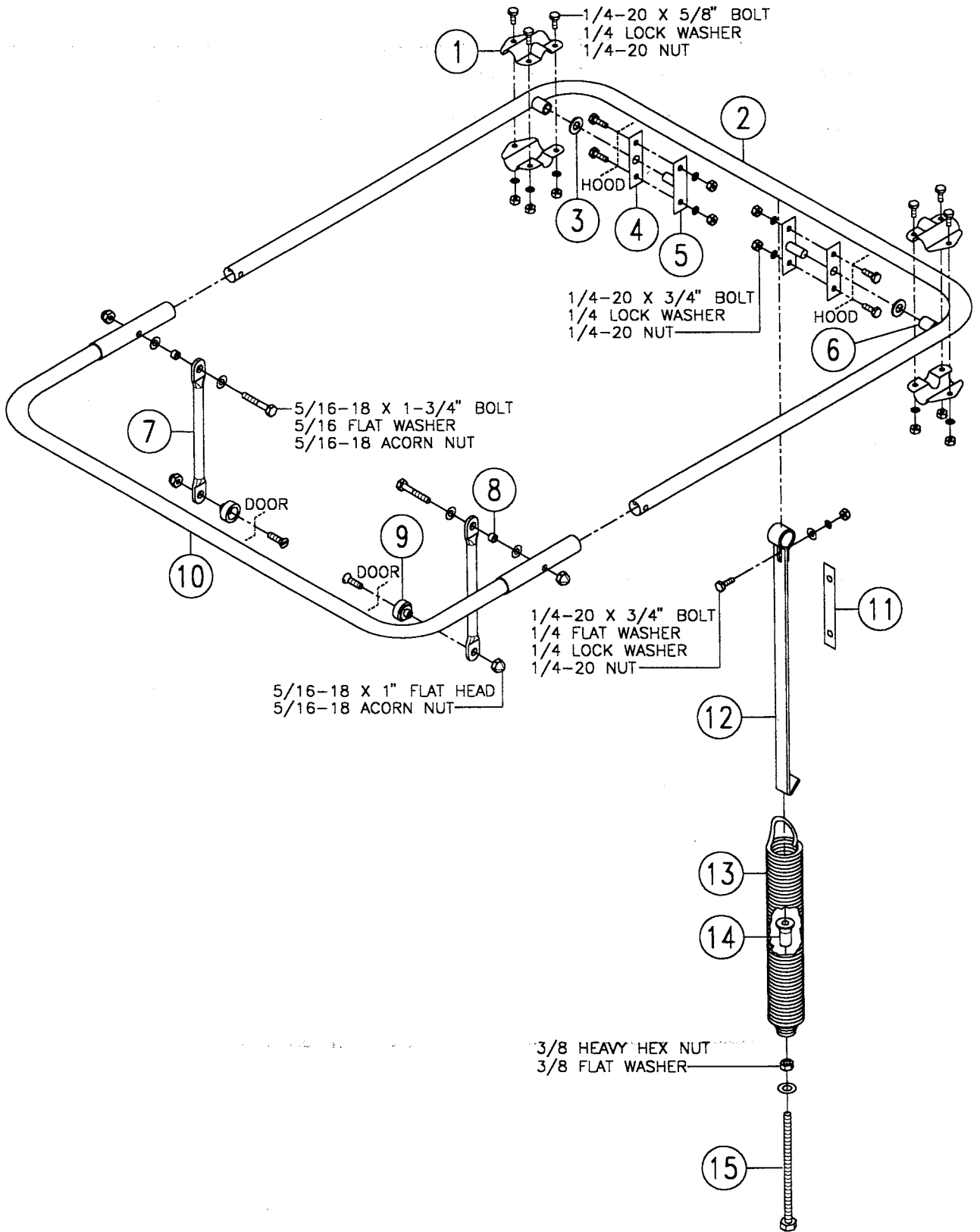
4-40 X 1/4" TRUSS HD (6)
 4-40 NYLOCK NUT
 (NUT IS NOT SHOWN) (8)

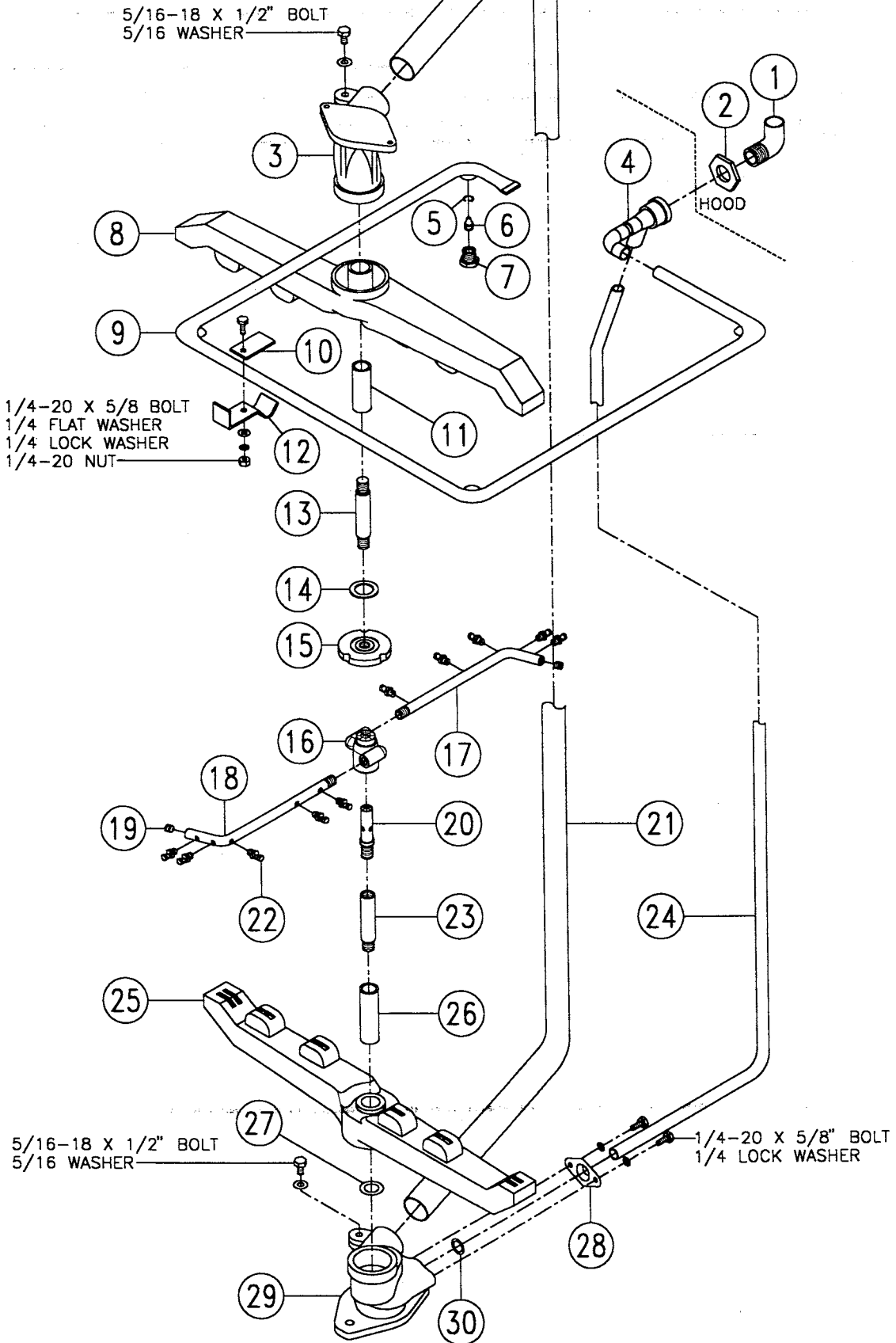
12-24 X 3/4" FLAT HD (16)
 12-24 LOCK WASHER
 12-24 NUT
 (LOCK WASHER & NUT
 ARE NOT SHOWN)

12-24 X 5/8" RD HD SCREW
 12-24 NYLOCK NUT

1/4-20 X 1-1/4" FLAT HD
 1/4 LOCK WASHER
 1/4-20 NUT

3

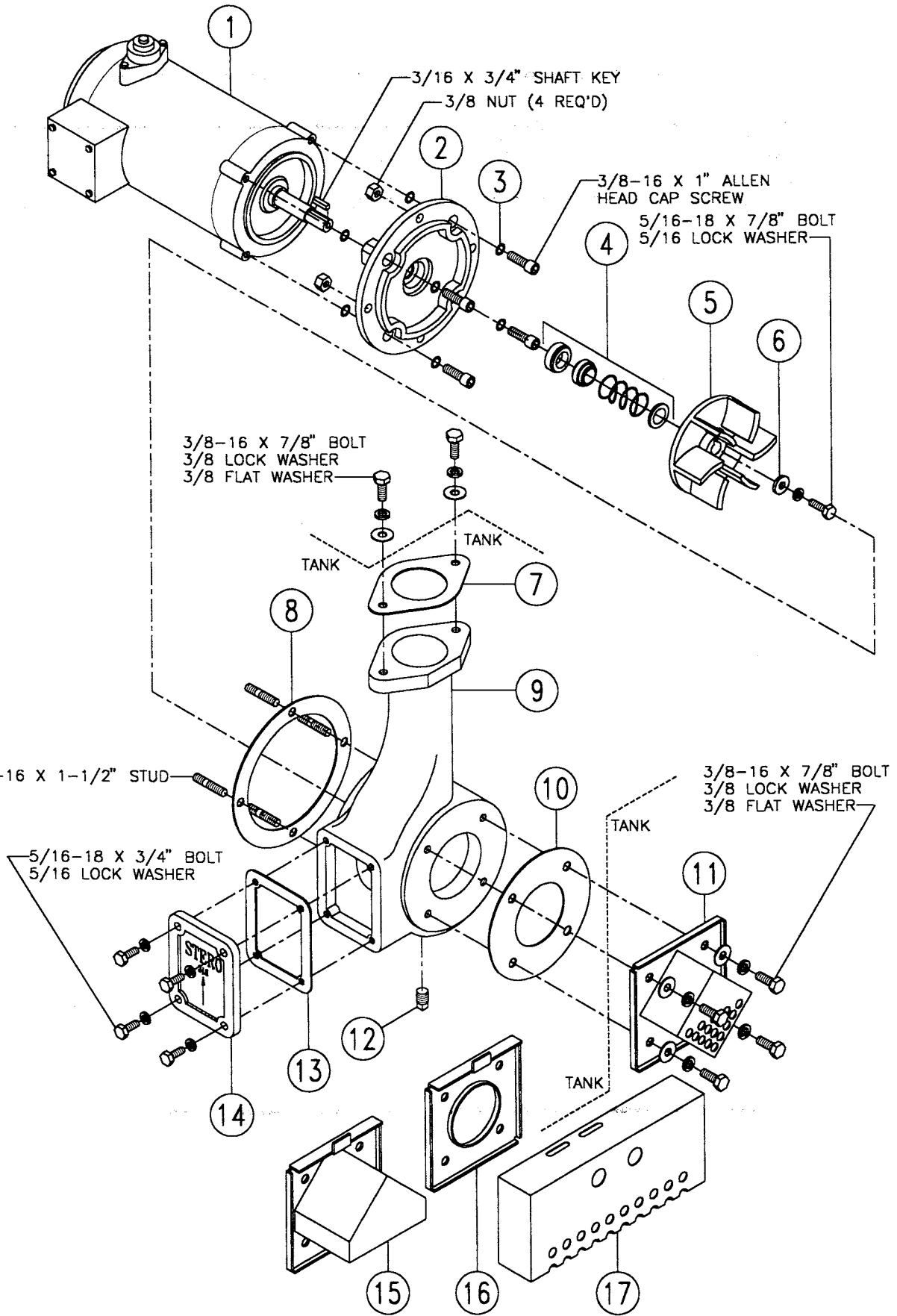


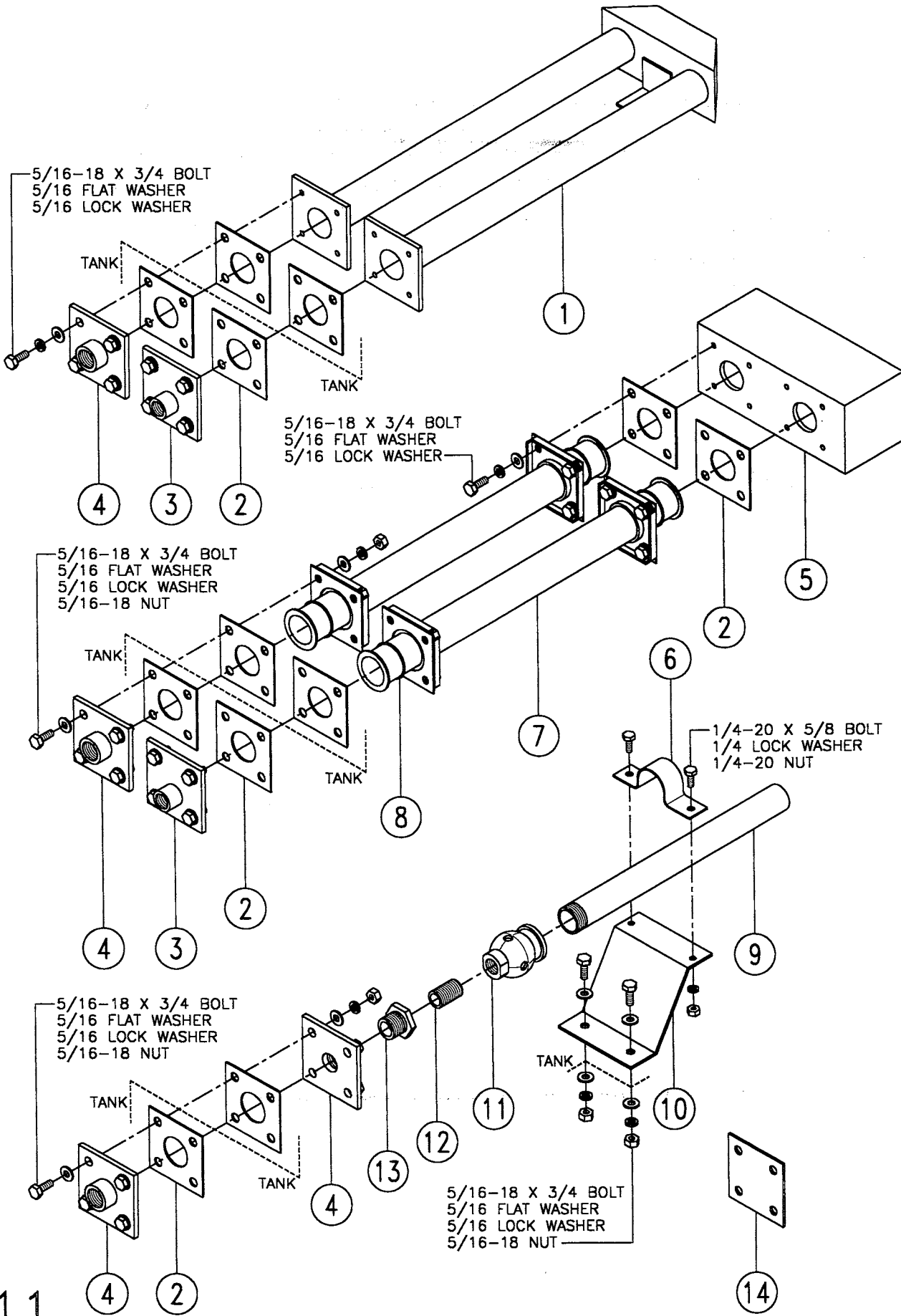


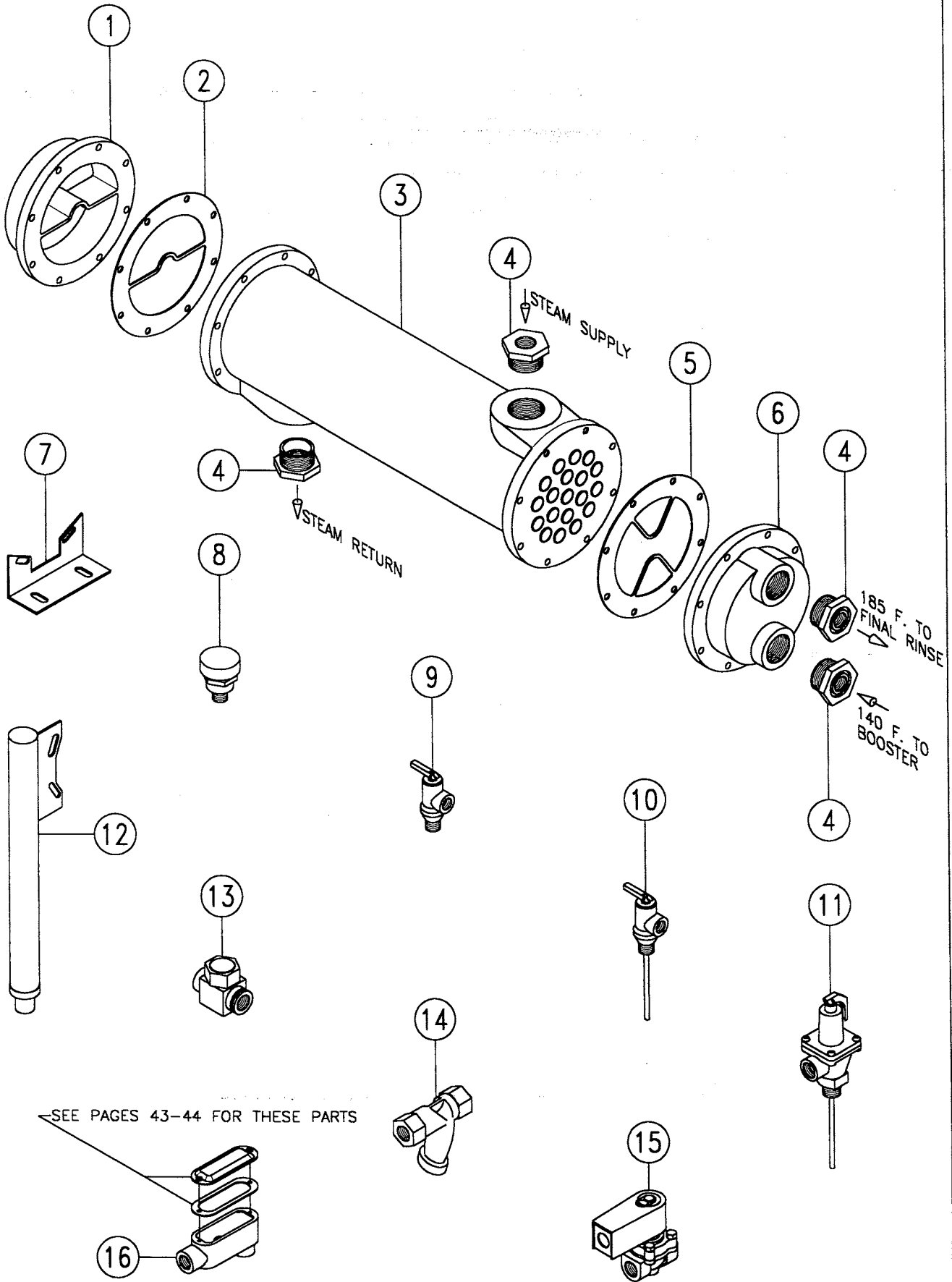
WASH/RINSE ARM ASSEMBLY

ITEM	DESCRIPTION	REMARKS	PART #
1	ELBOW 90 3/4 C X M		P68-1466
2	LOCKNUT 3/4		A10-1859
3	UPPER TEE		C10-2429
4	TEE ASSEMBLY UPPER RINSE MANIFOLD		A10-2397
5	RETAINER RING FOR UPPER RINSE SPRAYER	4 REQ'D	A60-1116
6	UPPER RINSE SPIRAL FERRULE	4 REQ'D	A50-1232
7	SPRAYER UPPER RINSE COMPLETE (ASSEMBLY INCLUDES ITEM 5 & 6)	4 REQ'D	A10-2481
8	WASH ARM ROTATING		C10-1764
9	UPPER RINSE MANIFOLD		C10-2430
10	BRACKET CLAMP RINSE RING		A10-2792
11	BUSHING UPPER WASH ARM		A10-2791
12	BRACKET RINSE RING (THIS PART IS WELDED TO THE INSIDE OF THE HOOD)		
13	PIN UPPER WASH ARM		A10-1265
14	WASHER PHENOLITE		A57-2474
15	NUT RETAINING UPPER WASH ARM (INCLUDES ITEM 14)		A10-2473
16	HUB REVOLVING RINSE		B10-2432
17	ARM RINSE LOWER #2		B10-2434
18	ARM RINSE LOWER #1		B10-2433
19	PLUG SLOTTED	2 REQ'D	A50-2435
20	PIN LOWER RINSE ARM		A10-1264
21	STANDPIPE		A10-1169
22	COMMON RINSE SPRAYERS .063 HOLE	10 REQ'D	B50-1173
23	PIN LOWER WASH ARM		A10-1263
24	FEED LINE LOWER RINSE		B10-2438
25	WASH ARM ROTATING		C10-1764
26	BUSHING LOWER WASH ARM		A10-2436
27	FIBER WASHER		A57-1177
28	FLANGE O RING		A10-2467
29	LOWER WASH TEE		C10-2437
30	O RING		P57-2031
	RINSE ARM COMPLETE ASSEMBLY (INCLUDES ITEMS 16,17,18,19, & 22)		B10-4175

SUPPLY MACHINE MODEL & SERIAL NUMBER



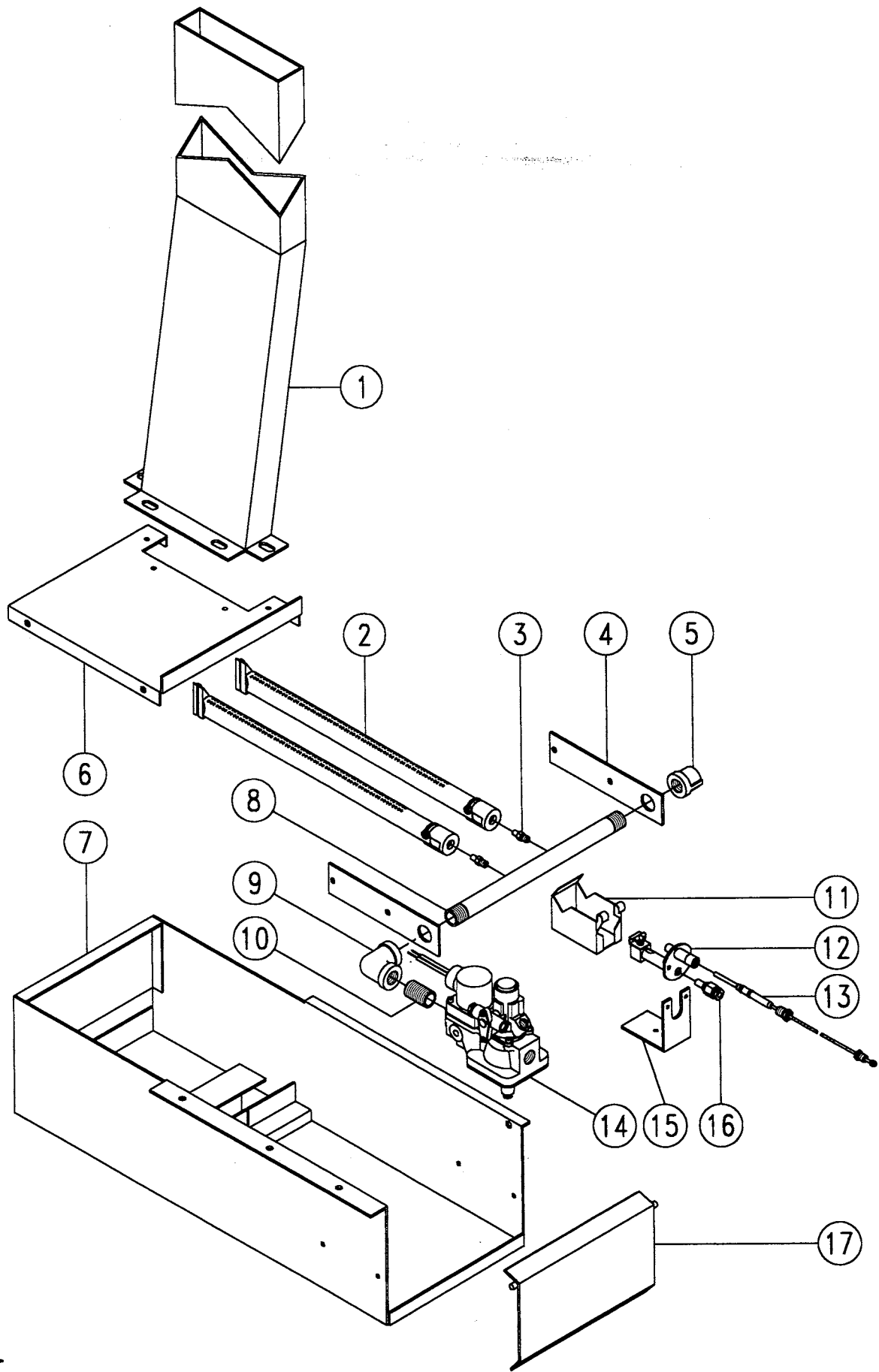


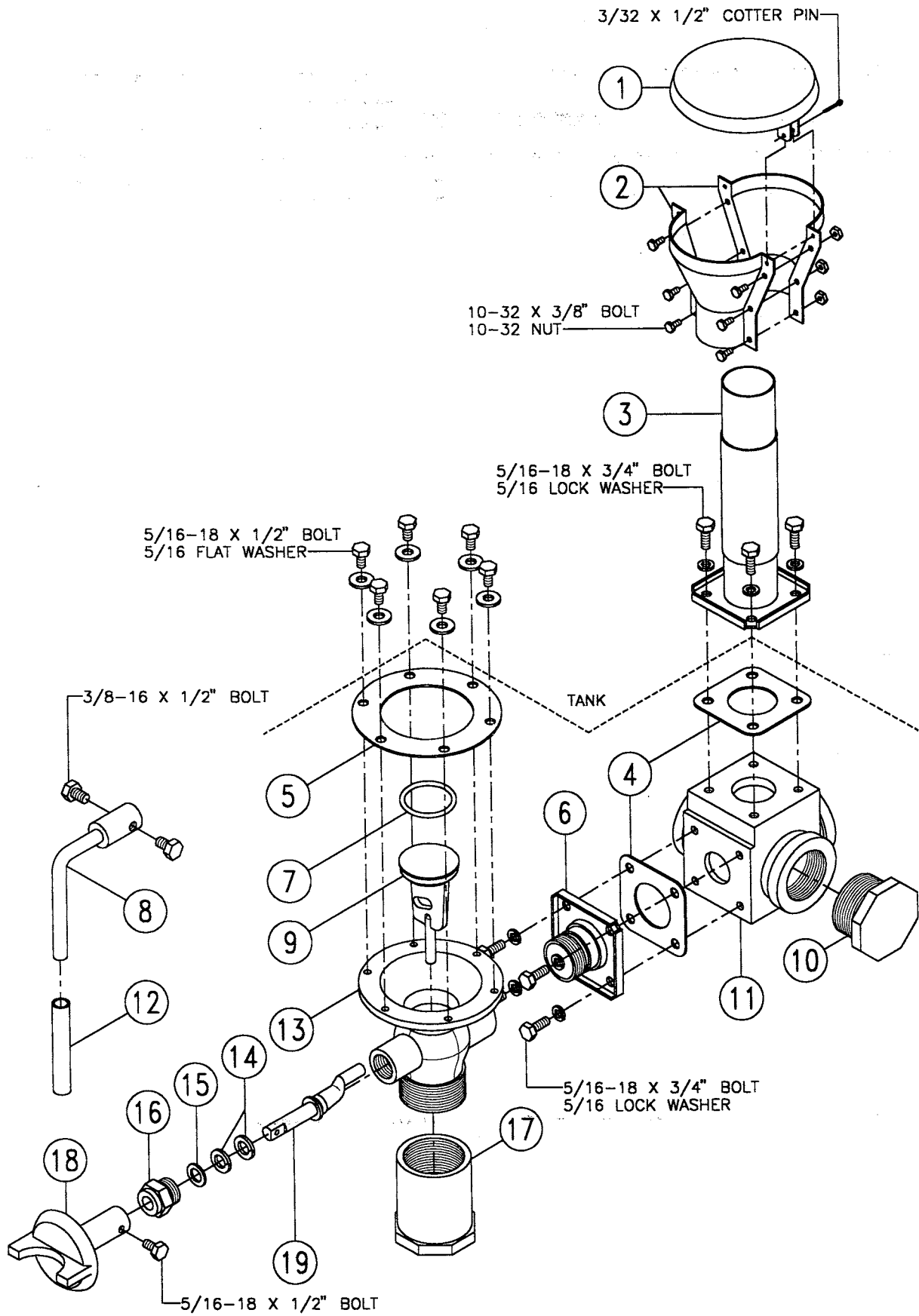


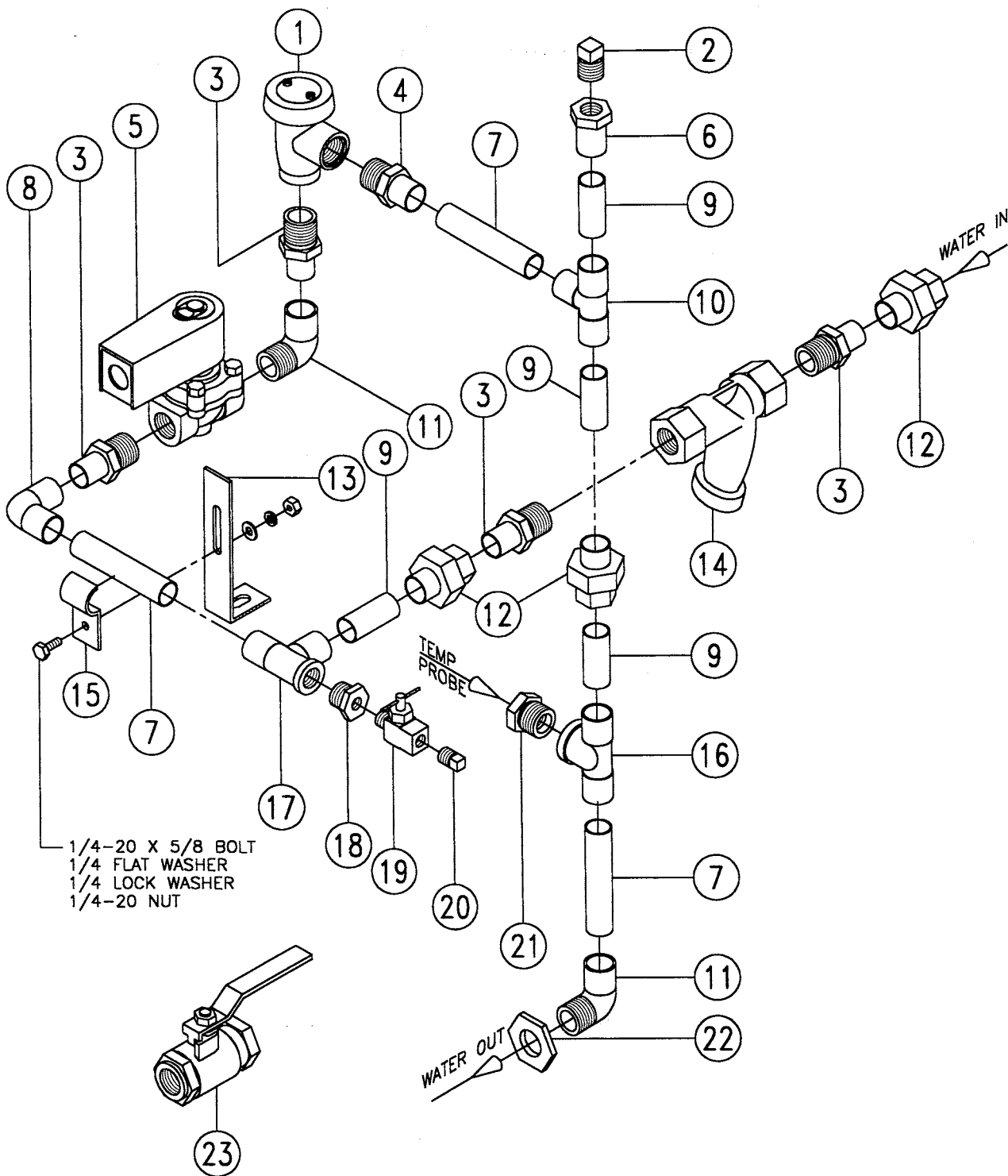
STEAM BOOSTER ASSEMBLY

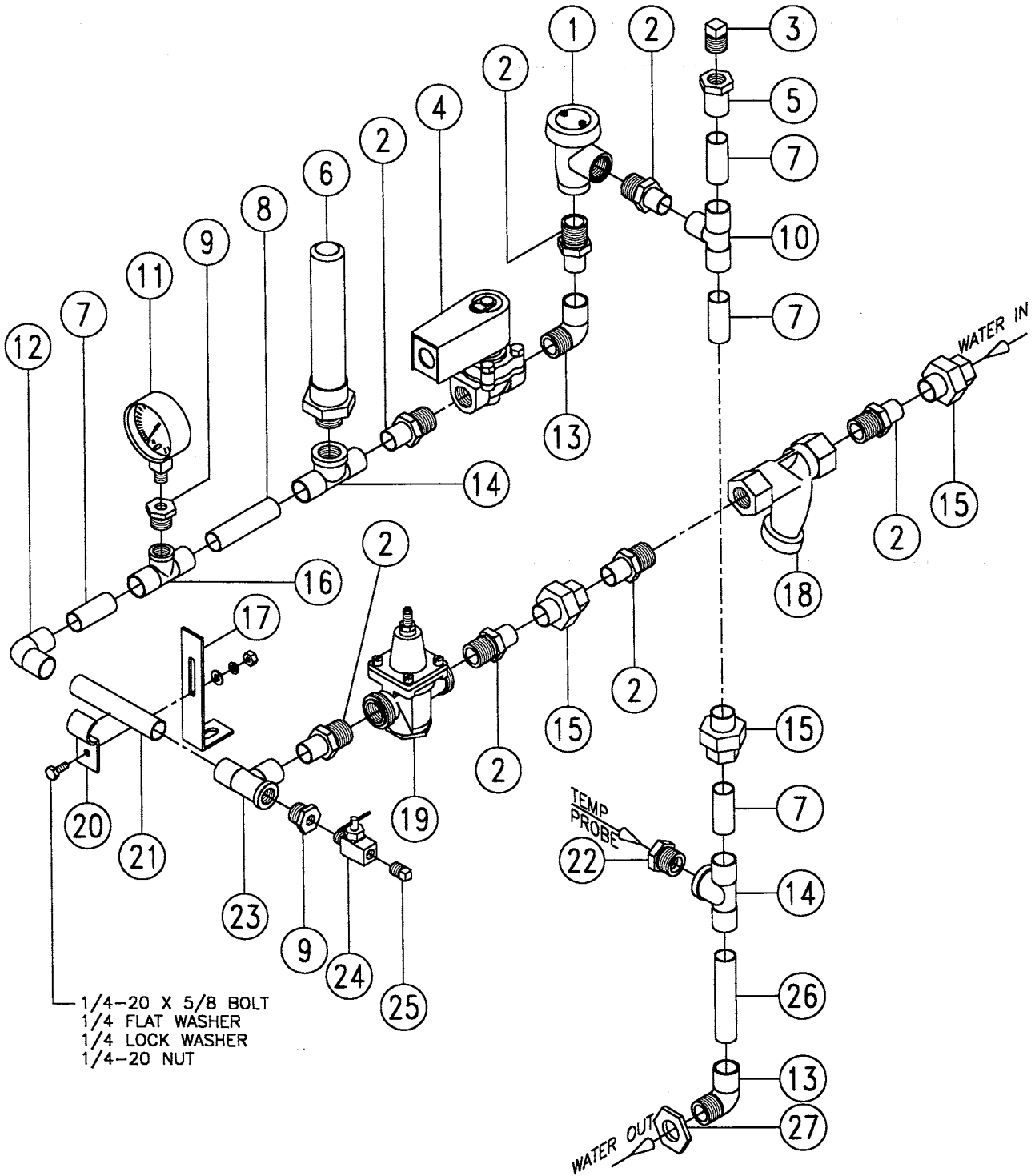
ITEM	DESCRIPTION	REMARKS	PART #
1	HEADER THERMOSTAT END	(180)	P64-1964
	HEADER THERMOSTAT END	(260-380)	C10-2238
2	GASKET RETURN END	(180)	B57-1278
	GASKET RETURN END	(260-380)	B57-2236
3	HEAT EXCHANGER #180 (INCLUDES ITEMS 1,2,5, & 6)		P64-1960
	HEAT EXCHANGER #260 (INCLUDES ITEMS 1,2,5, & 6)		P64-1961
	HEAT EXCHANGER #320 (INCLUDES ITEMS 1,2,5, & 6)		P64-1962
	HEAT EXCHANGER #380 (INCLUDES ITEMS 1,2,5, & 6)		P64-1963
4	BUSHING GALV. 1-1/2 X 3/4 MXF	(180)	P68-2661
	BUSHING BI 1-1/2 X 1 MXF	(180)	P68-2602
	BUSHING BI 2 X 1-1/4 MXF	(260-380)	P68-1607
	BUSHING BI 2 X 3/4 MXF	(260-380)	P68-1608
	BUSHING GALV 2 X 3/4 MXF	(260-380)	P68-1610
5	GASKET FLOW END	(180)	B57-2234
	GASKET FLOW END	(260-380)	B57-2235
6	HEADER FLOW END	(180)	P64-1965
	HEADER FLOW END	(260-380)	P64-1966
7	BRACKET MACHINE MOUNTING		A10-2332
8	VALVE VACUUM RELIEF 1/2	(N36)	P62-1170
9	VALVE PRESSURE RELIEF 1/2 125PSI	(53L)	P62-1919
	VALVE PRESSURE RELIEF 3/4 125PSI	(3L)	P62-1171
10	VALVE PRESSURE & TEMP RELIEF 3/4	(100XL)	P62-1174
11	VALVE PRESSURE & TEMP RELIEF 3/4	(40XL-5)	P62-1173
12	LEG STEAM BOOSTER SWB180-380		A10-3350
13	STEAM TRAP 3/4 SPIRAX/SARCO		P61-1168
	STEAM TRAP 1/2 SPIRAX/SARCO		P61-1169
14	LINE STRAINER 1 BI		P63-1158
	REPLACEMENT SCREEN 1		P63-1161
	LINE STRAINER 1-1/4 BI		P63-1159
	REPLACEMENT SCREEN 1-1/4		P63-1162
	LINE STRAINER 2 BI		P63-1160
	REPLACEMENT SCREEN 2		P63-1163
15	SOL. VALVE 1-1/4 115V SKINNER		P54-1068
	SOL. VALVE 1-1/4 208-240V SKINNER		P54-1069
	REPAIR KIT 1-1/4 SKINNER		P54-1070
	SOL. VALVE 1-1/4 120V ASCO		P54-2819
	SOL. VALVE 1-1/4 208V ASCO		P54-2830
	SOL. VALVE 1-1/4 240V ASCO		P54-5529
	REPAIR KIT 1-1/4 ASCO		P54-2829
16	UNILET BODY (USE WITH THERMOSTAT)		P52-2014

SUPPLY MACHINE MODEL & SERIAL NUMBER







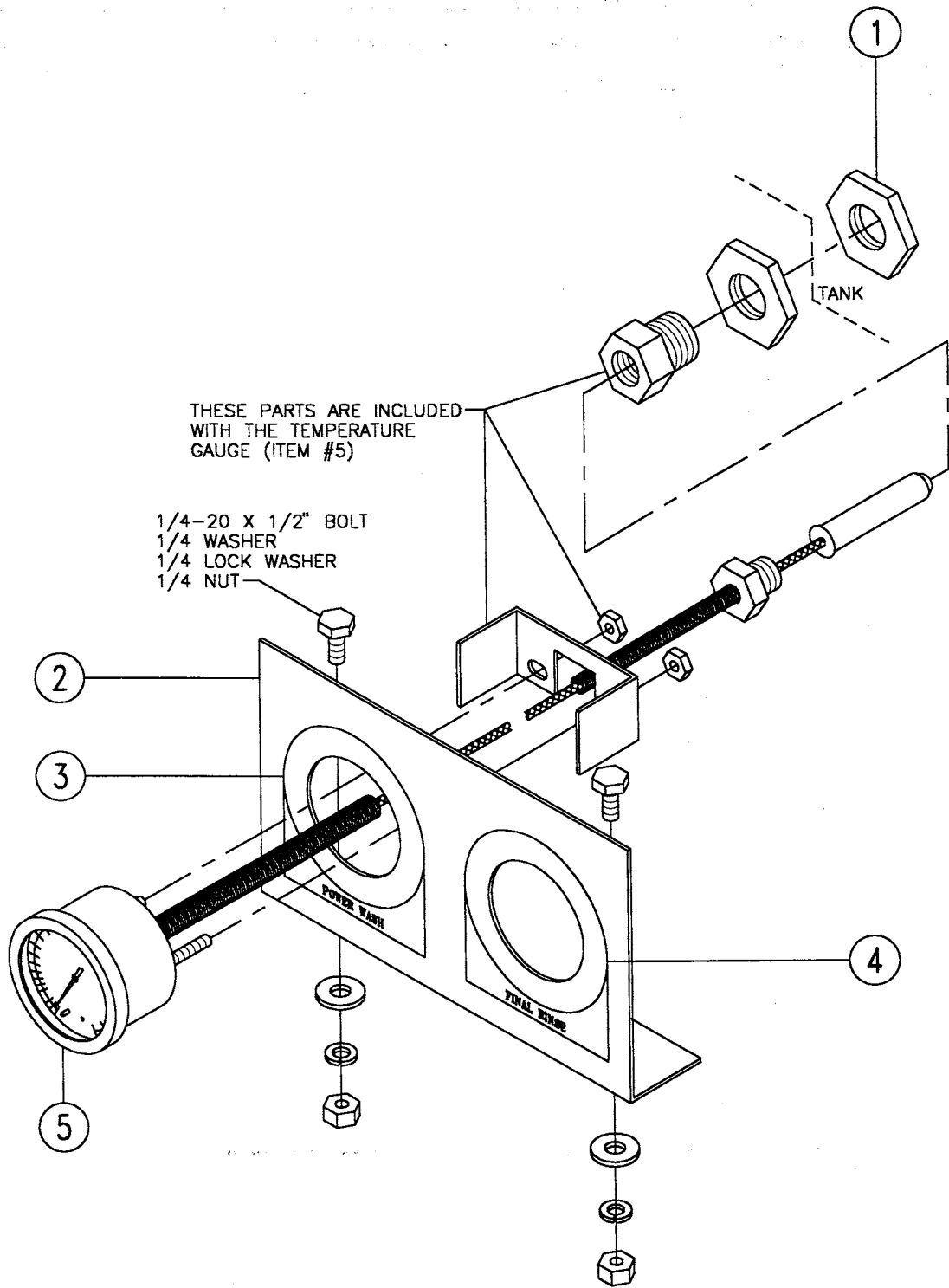


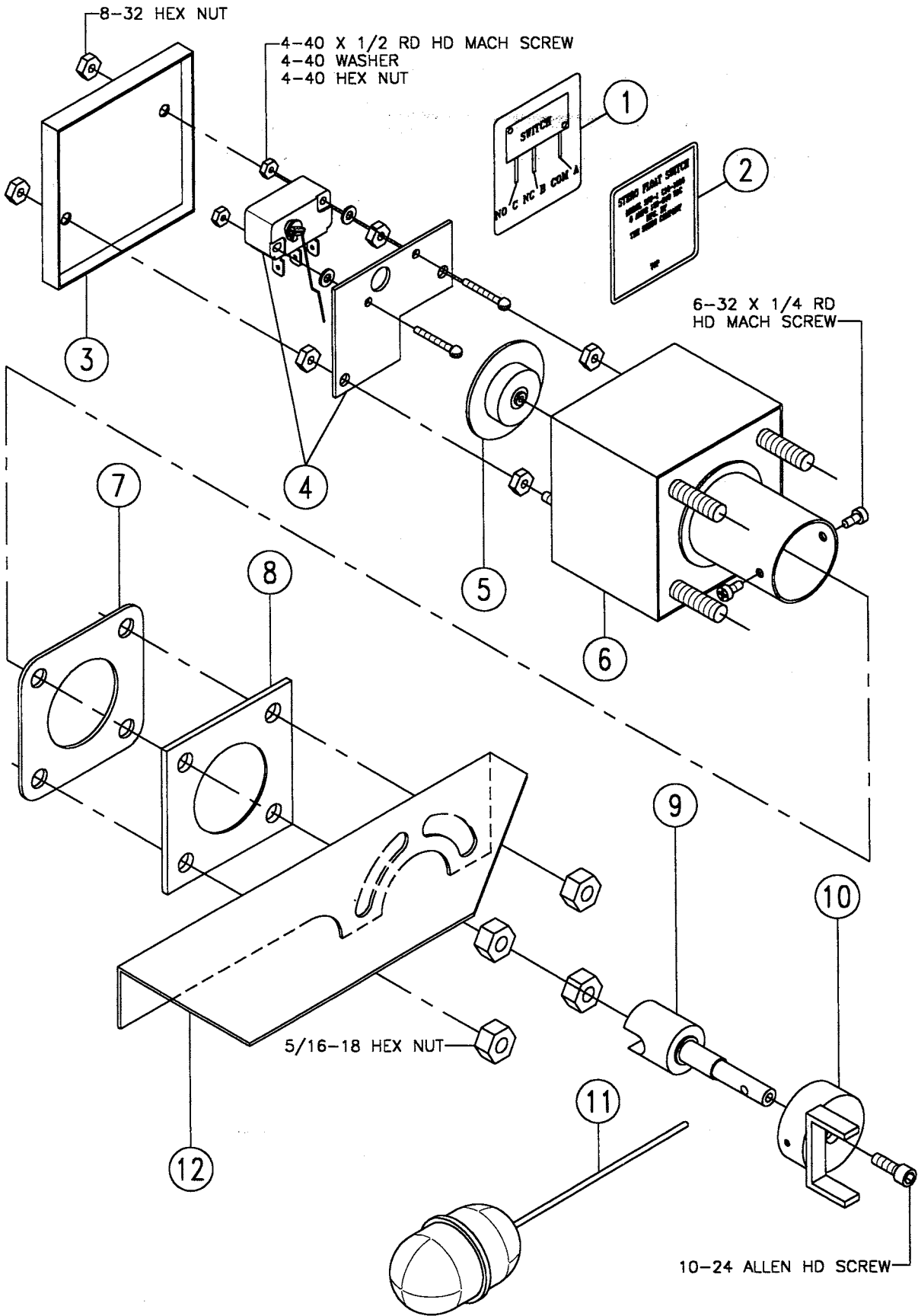
PLUMBING ASSM. WITH KIT 55

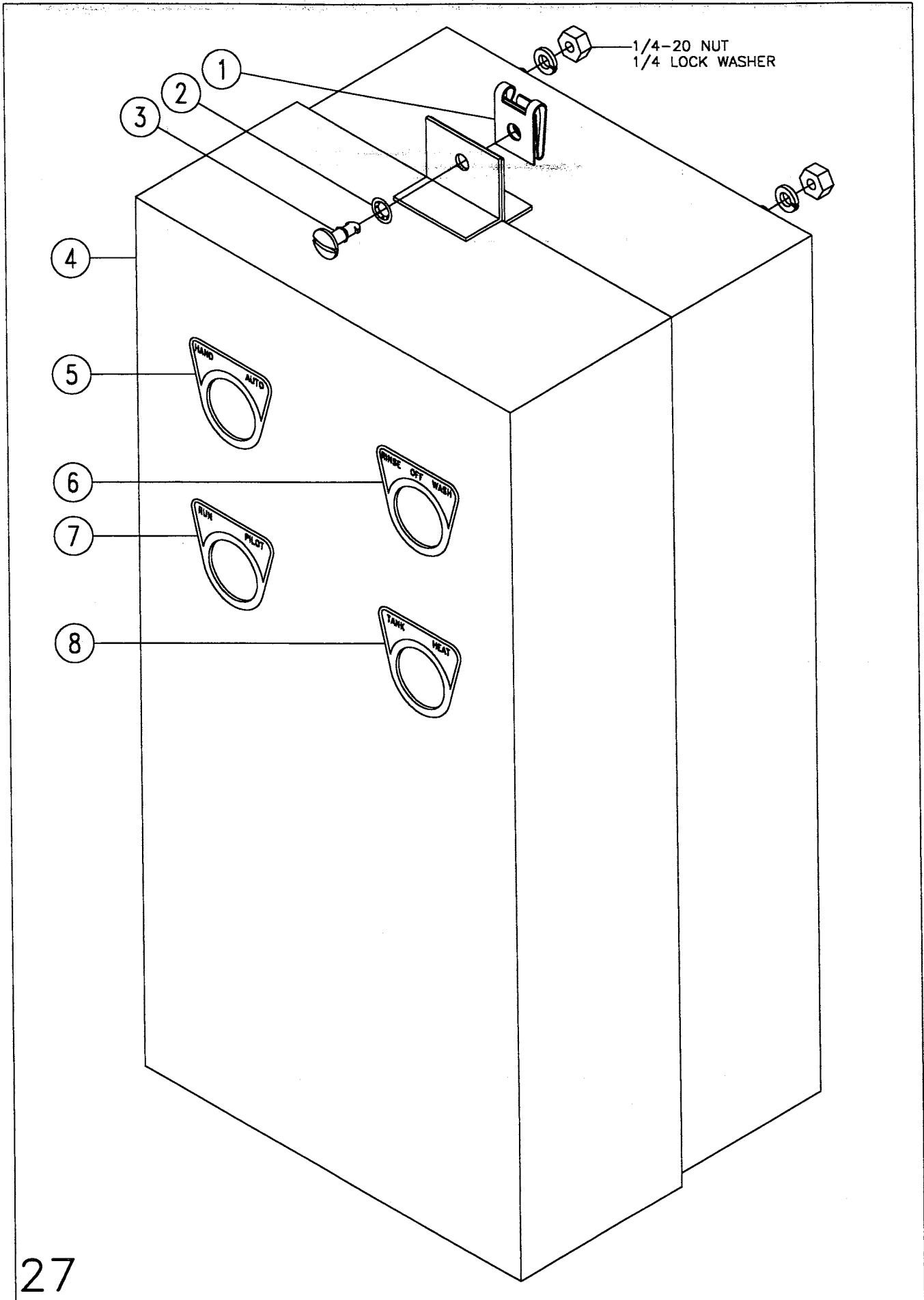
ITEM	DESCRIPTION	REMARKS	PART #
1	VACUUM BREAKER 3/4" COMPLETE		P62-1149
	REPAIR KIT 3/4" VACUUM BREAKER		P62-1164
2	ADAPTOR 3/4 FTGXM		P68-1431
3	PLUG 1/2 BRASS MIP		P68-1487
4	COMPLETE SOL. VALVE 3/4 120 V.		P54-2815
	STEAM/HOT WATER PISTON (HV2360181)		
	COMPLETE SOL. VALVE 3/4 208/240 V.		P54-2816
	STEAM/HOT WATER PISTON (HV2360182)		
	REPLACEMENT HEAD SOL. VALVE 3/4		P54-2814
	120 V. (EVERYTHING MINUS BASE)		
	REPLACEMENT HEAD SOL. VALVE 240 V.		P54-2812
	208/240 V. (EVERYTHING MINUS BASE)		
	REPAIR KIT 3/4 PISTON SOL. VALVE		P54-2821
	(314052)		
	COIL 3/4 120 V. (2361701)		P54-2808
	COIL 3/4 208/240 V. (2361703)		P54-2825
5	ADAPTOR 3/4 X 1/2 CXF		P68-1436
6	SHOCKSTOP 3/4		P62-2250
7	NIPPLE COPPER 3/4 X 1-3/4		A10-3345
8	NIPPLE COPPER 3/4 X 3		NO #
9	BUSHING 1/2 X 1/4 BRASS MXF		P68-1534
10	TEE 3/4 CXCXC		P68-1447
11	GAUGE PRESSURE 2-1/2 DIA.		P65-1136
12	ELBOW 90 3/4 CXC SHORT		P68-1440
13	ELBOW 90 3/4 CXM		P68-1466
14	TEE 3/4 CXCXF		P68-1448
15	UNION 3/4 CXC		P68-1446
16	TEE 3/4 X 3/4 X 1/2 CXCXF		P68-1449
17	BRACKET PIPE SUPPORT LONG		A10-2022
18	LINE STRAINER 3/4 BRASS		P63-1115
	REPLACEMENT SCREEN 3/4		P63-1117
19	VALVE PRESSURE REDUCING 3/4 LPZ13		P62-1166
	REPAIR KIT PRV 3/4 OLD STYLE		P62-1167
	REPAIR KIT PRV 3/4 NEW STYLE LPZ13		P62-5518
20	CLAMP PIPE BRACKET 3/4		A10-2021
21	NIPPLE COPPER 3/4 X 4		NO #
22	BUSHING 3/4 X 1/2 BRASS MXF		P68-1496
23	TEE 3/4 X 1/2 X 3/4 CXFXC		P68-1429
24	VALVE NEEDLE STR 1/4 X 1/4 MIPXFIP		P68-1511
25	PLUG 1/4 BRASS MIP		P68-1489
26	NIPPLE COPPER 3/4 X 3-1/2		A10-3347
27	LOCKNUT 3/4		A10-1859

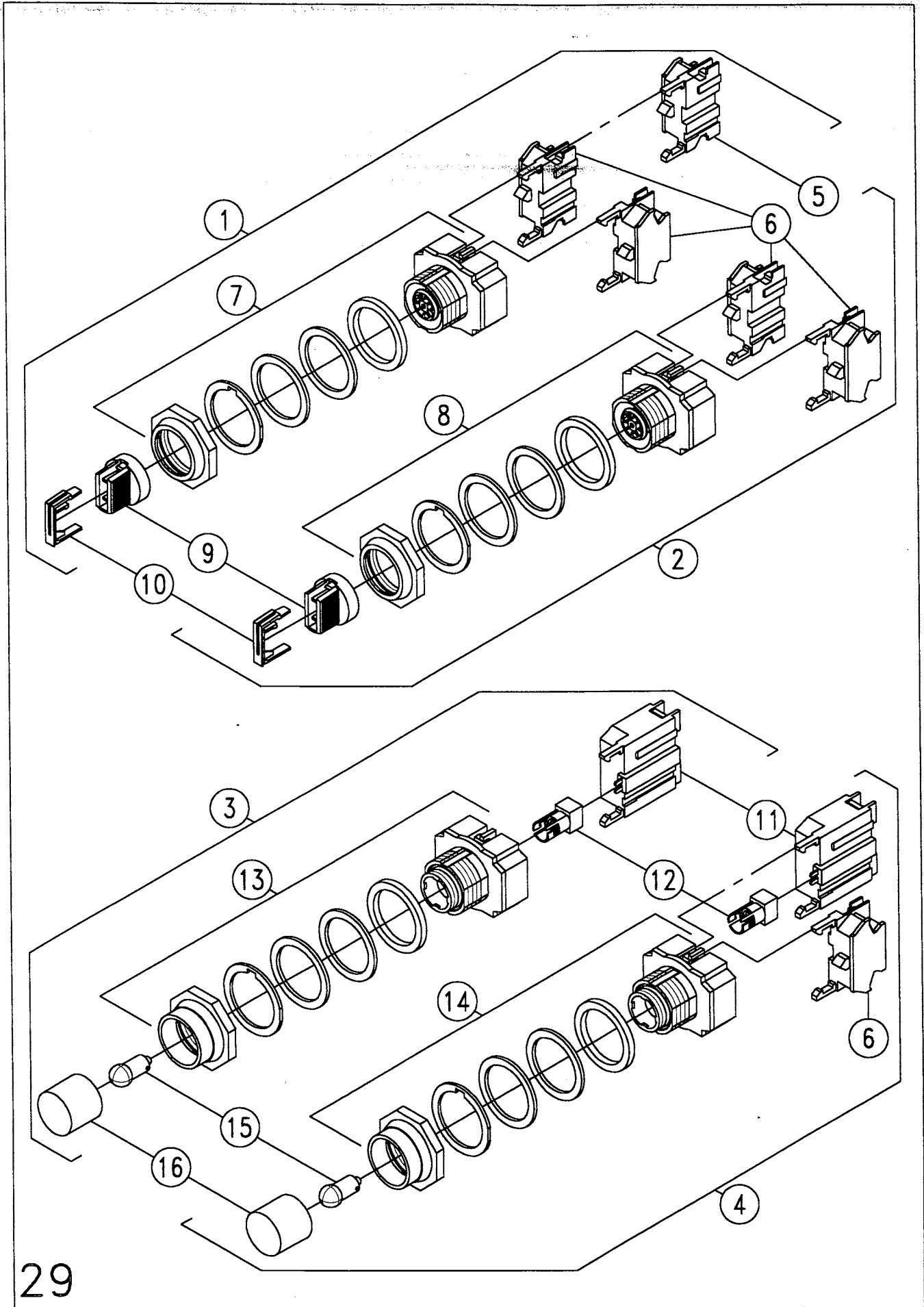
SUPPLY MACHINE MODEL & SERIAL NUMBER

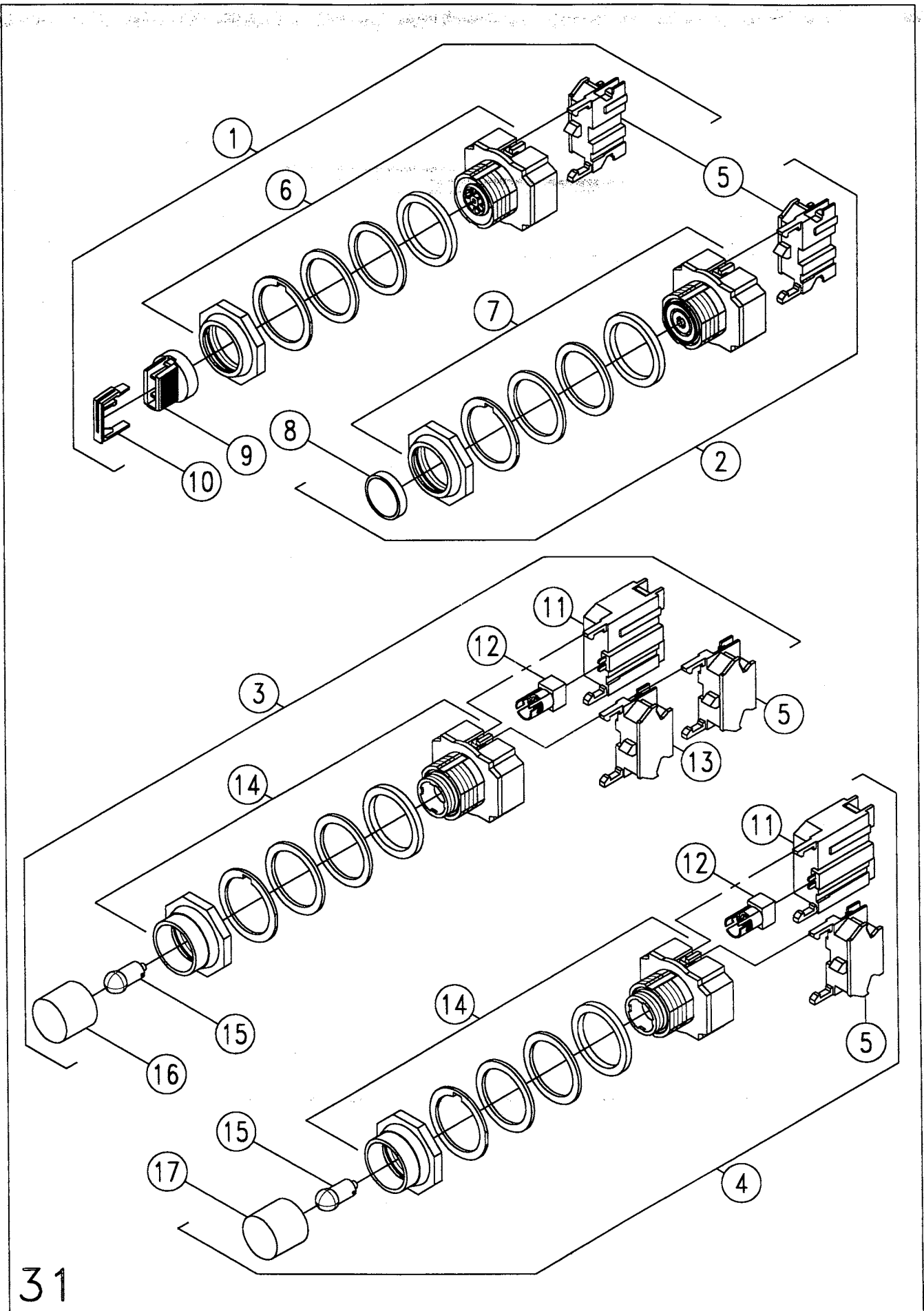
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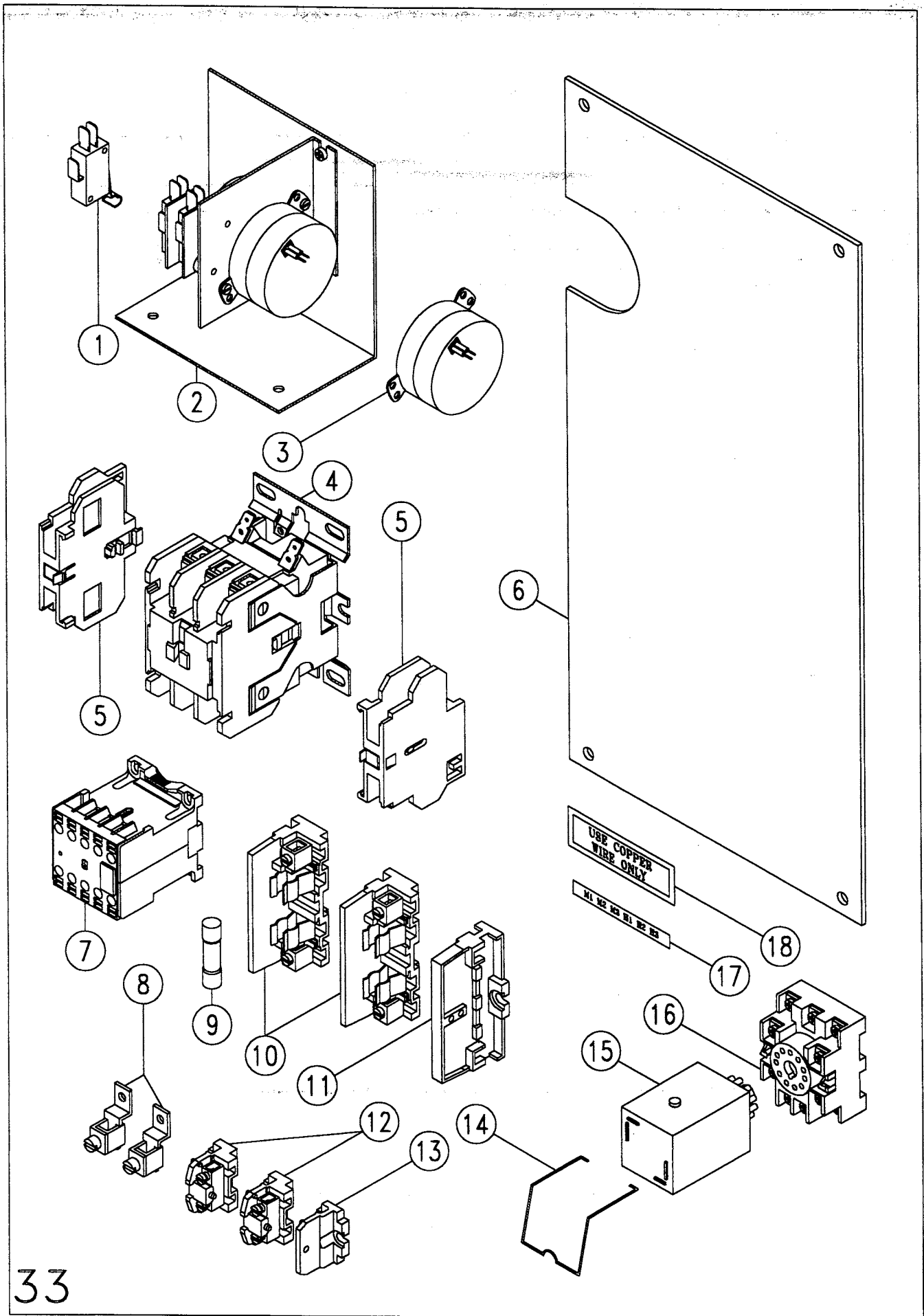






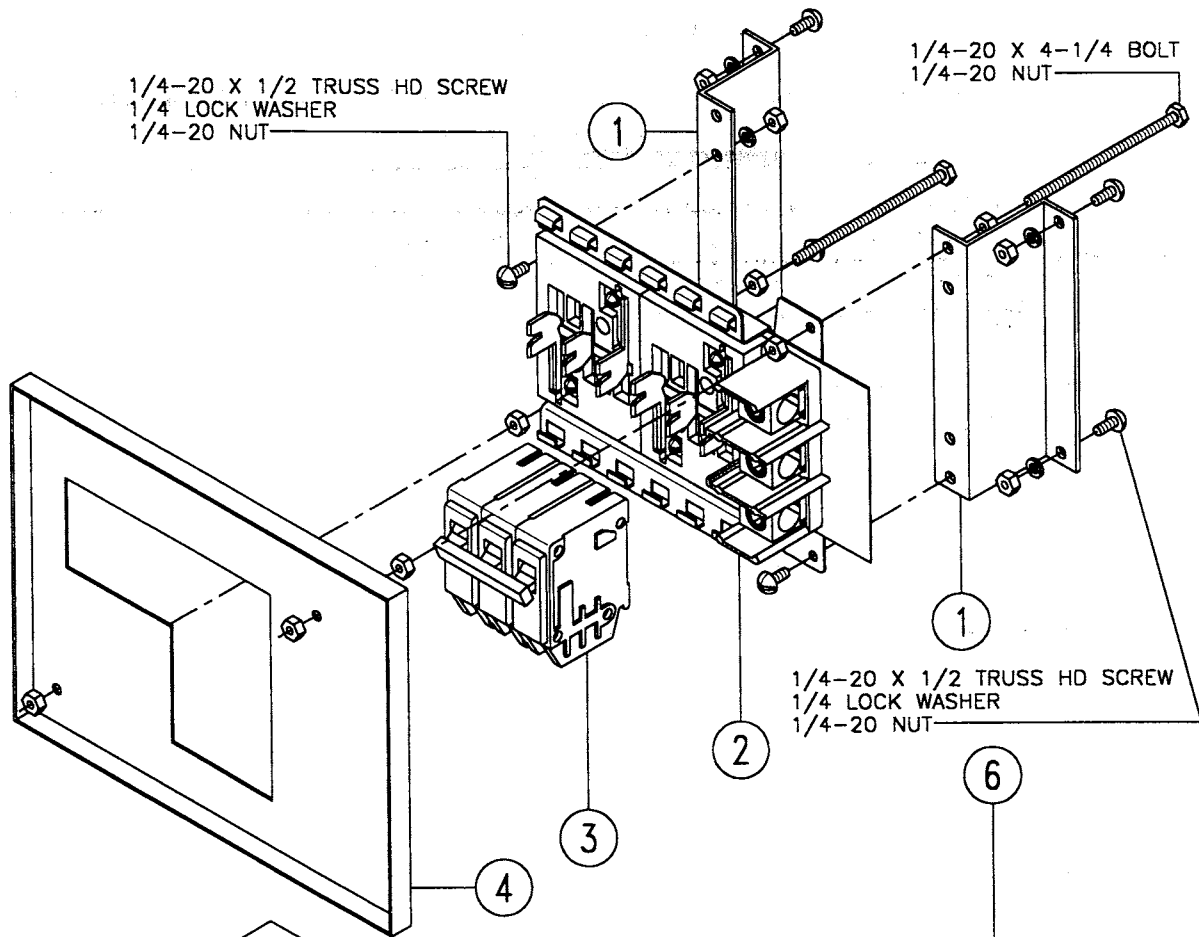




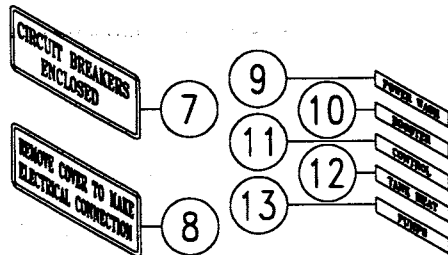
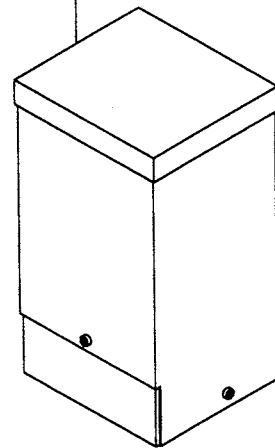
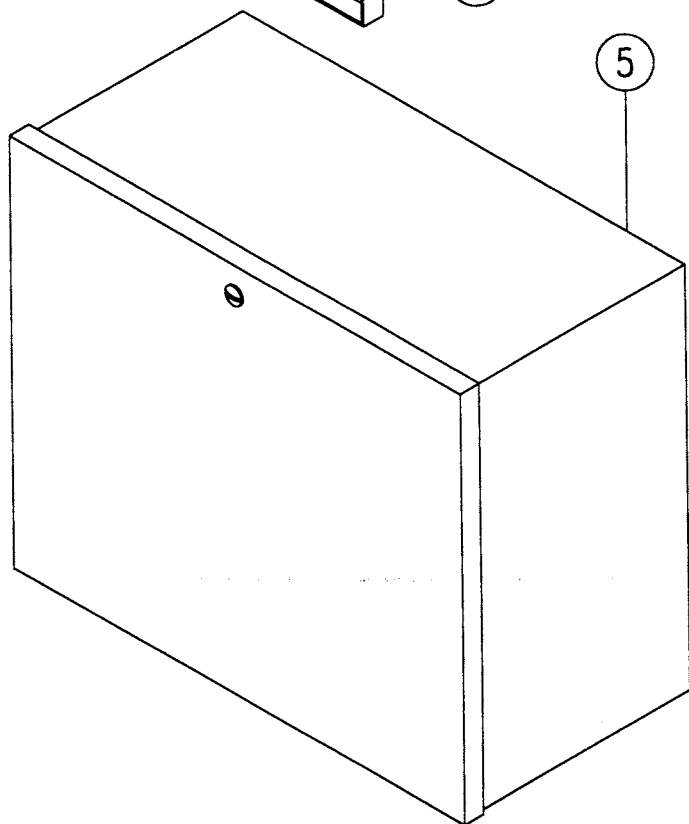


1/4-20 X 1/2 TRUSS HD SCREW
 1/4 LOCK WASHER
 1/4-20 NUT

1/4-20 X 4-1/4 BOLT
 1/4-20 NUT



1/4-20 X 1/2 TRUSS HD SCREW
 1/4 LOCK WASHER
 1/4-20 NUT

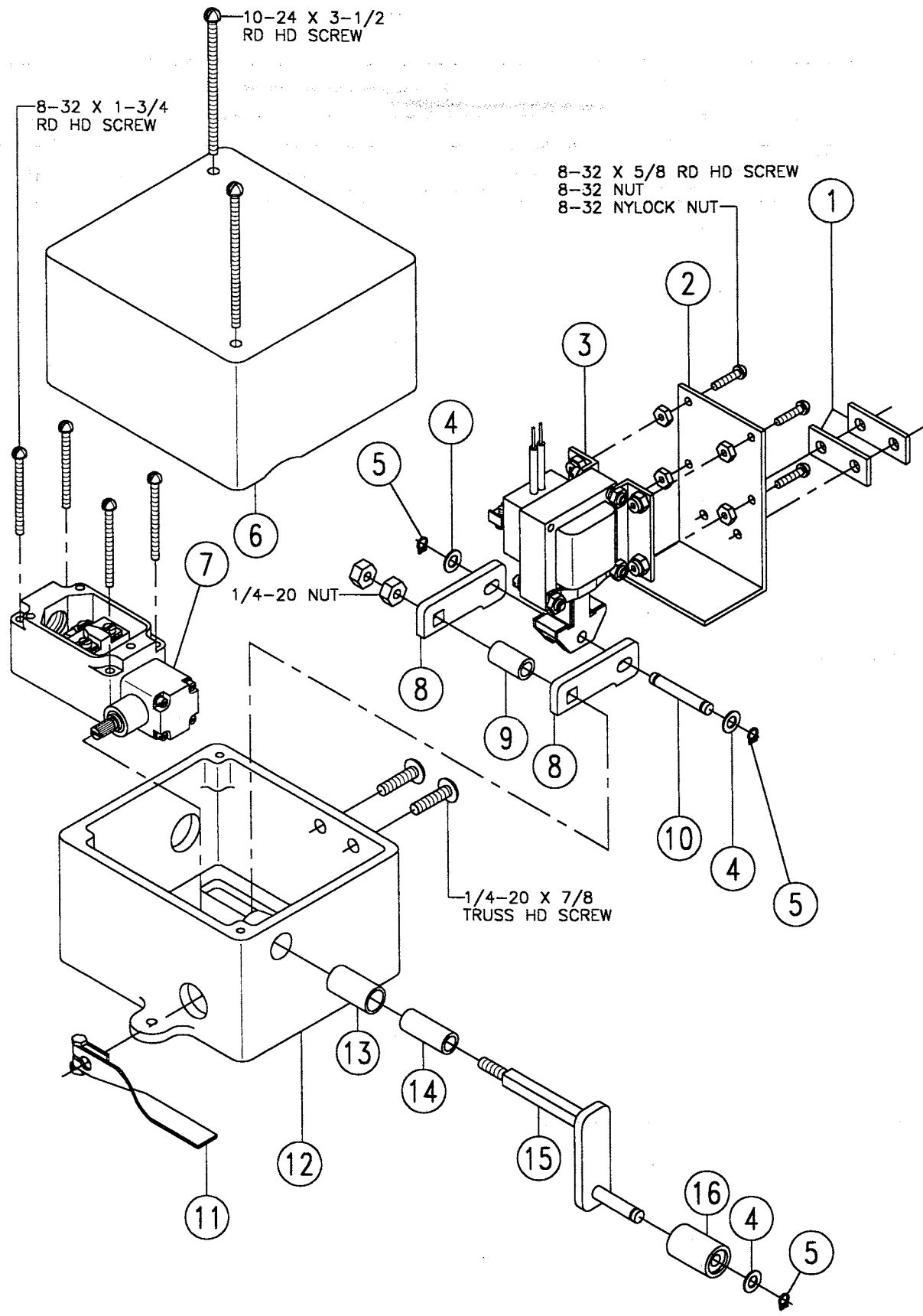


CIRCUIT BREAKER ASSEMBLY

ITEM	DESCRIPTION	REMARKS	PART #
1	BRACKET MOUNTING CONTROL BOX/ CIRCUIT BREAKER SADDLE		A10-4787
2	WHEN ORDERING FACTORY MUST HAVE BRAND OF EXISTING BREAKERS		
	SADDLE 3 PH 200 AMP 12 CIRCUIT		P48-1763
	SADDLE 1 PH 125 AMP 8 CIRCUIT	NOT SHOWN	P48-1760
	480 V BREAKER MOUNTING PLATE	NOT SHOWN	B10-3038
3	WHEN ORDERING FACTORY MUST HAVE BRAND OF EXISTING BREAKERS		
	BREAKER 15 AMP 3 POLE 115/240 V		P48-1778
	BREAKER 20 AMP 3 POLE 115/240 V		P48-1779
	BREAKER 60 AMP 3 POLE 115/240 V		P48-1783
	BREAKER 20 AMP 3 POLE 480 V		P48-1793
	BREAKER 40 AMP 3 POLE 480 V		P48-1795
	BREAKER 60 AMP 3 POLE 480 V		P48-1797
	BREAKER 15 AMP 2 POLE 115/230 V	NOT SHOWN	P48-1771
	BREAKER 20 AMP 2 POLE 115/230 V	NOT SHOWN	P48-1772
	BREAKER 60 AMP 2 POLE 115/230 V	NOT SHOWN	P48-1775
	BREAKER 90 AMP 2 POLE 115/230 V	NOT SHOWN	P48-1777
4	BREAKER PANEL COVER		NO #
5	CIRCUIT BREAKER BOX 208 V (12-3/4 X 10-3/4 X 6-3/4)		C10-5325
	DOOR CIRCUIT BREAKER BOX 208 V		C10-5326
	CIRCUIT BREAKER BOX 480 V (22-1/8 X 10-3/4 X 6-3/4)	NOT SHOWN	C10-5714
	DOOR CIRCUIT BREAKER BOX 480 V		C10-5715
6	STEP DOWN TRANSFORMER 240/480 V PRIMARY 120/240 V		P53-1732
7	DECAL CIRCUIT BREAKER ENCLOSED		A69-1951
8	DECAL REMOVE COVER TO MAKE ELECTRICAL CONNECTION		A69-1465
9	DECAL POWER WASH		A69-4083
10	DECAL BOOSTER		A69-4135
11	DECAL CONTROL		A69-4097
12	DECAL TANK HEAT		A69-4089
13	DECAL PUMPS		A69-4093

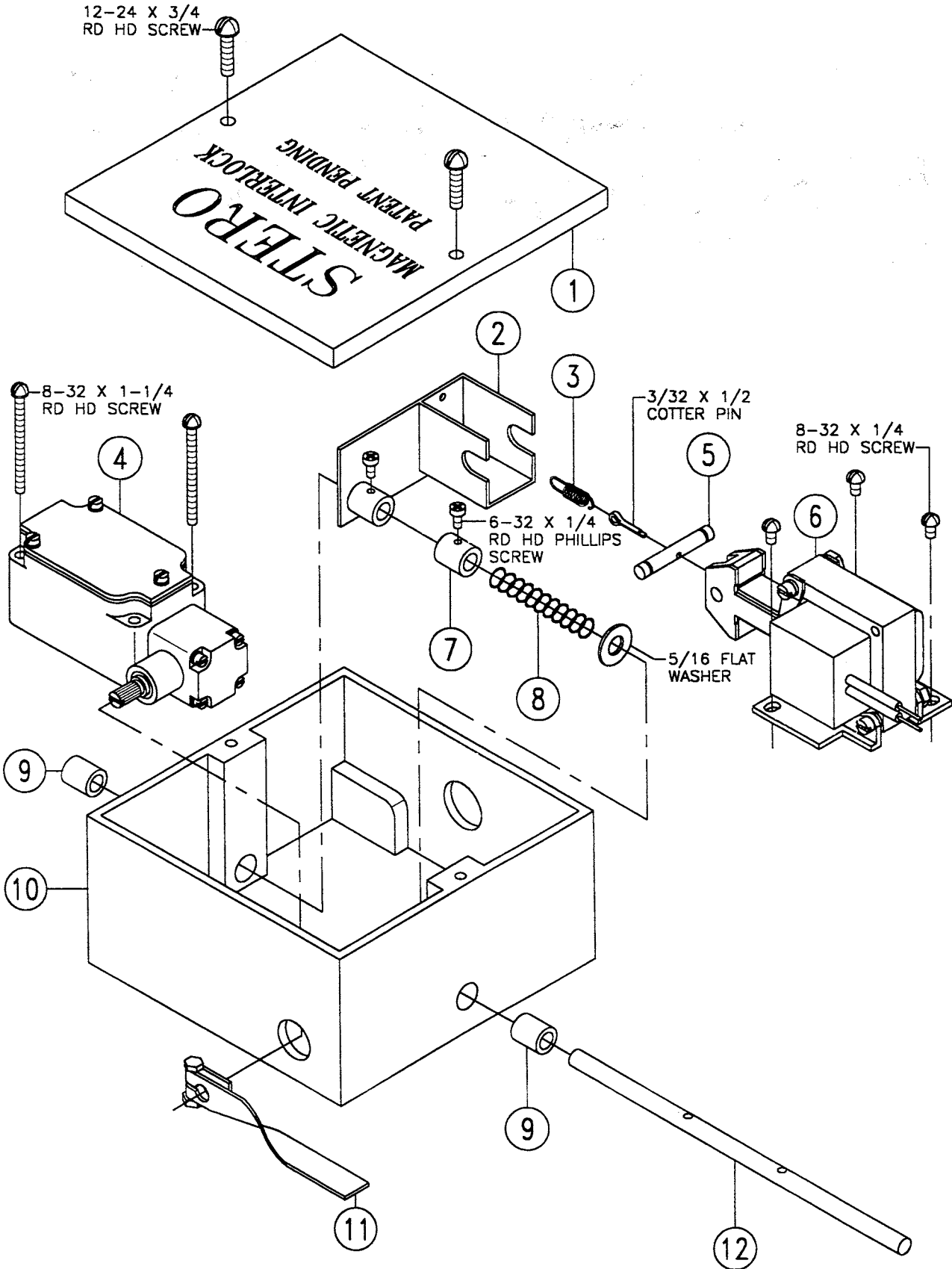
SUPPLY MACHINE MODEL & SERIAL NUMBER

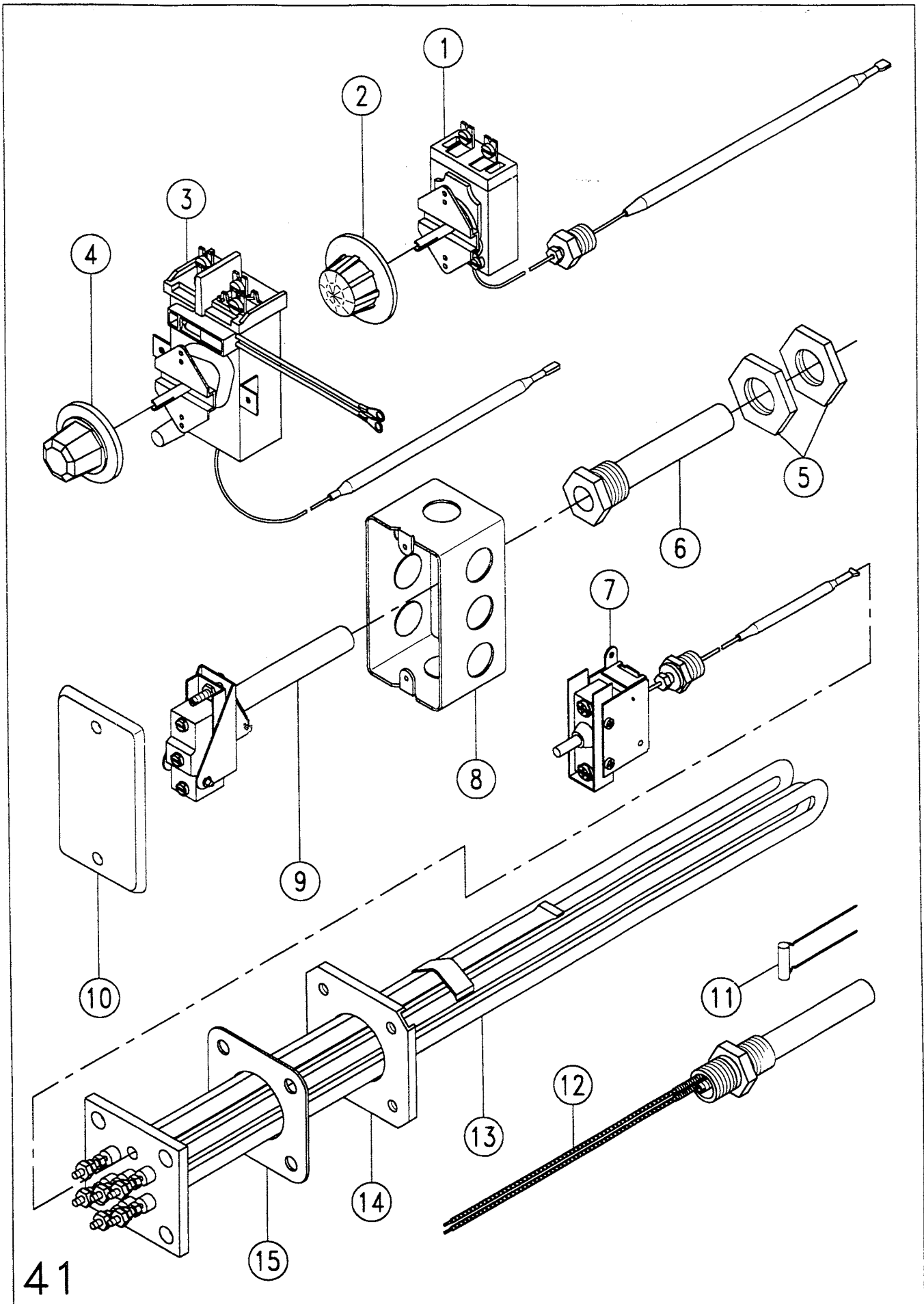
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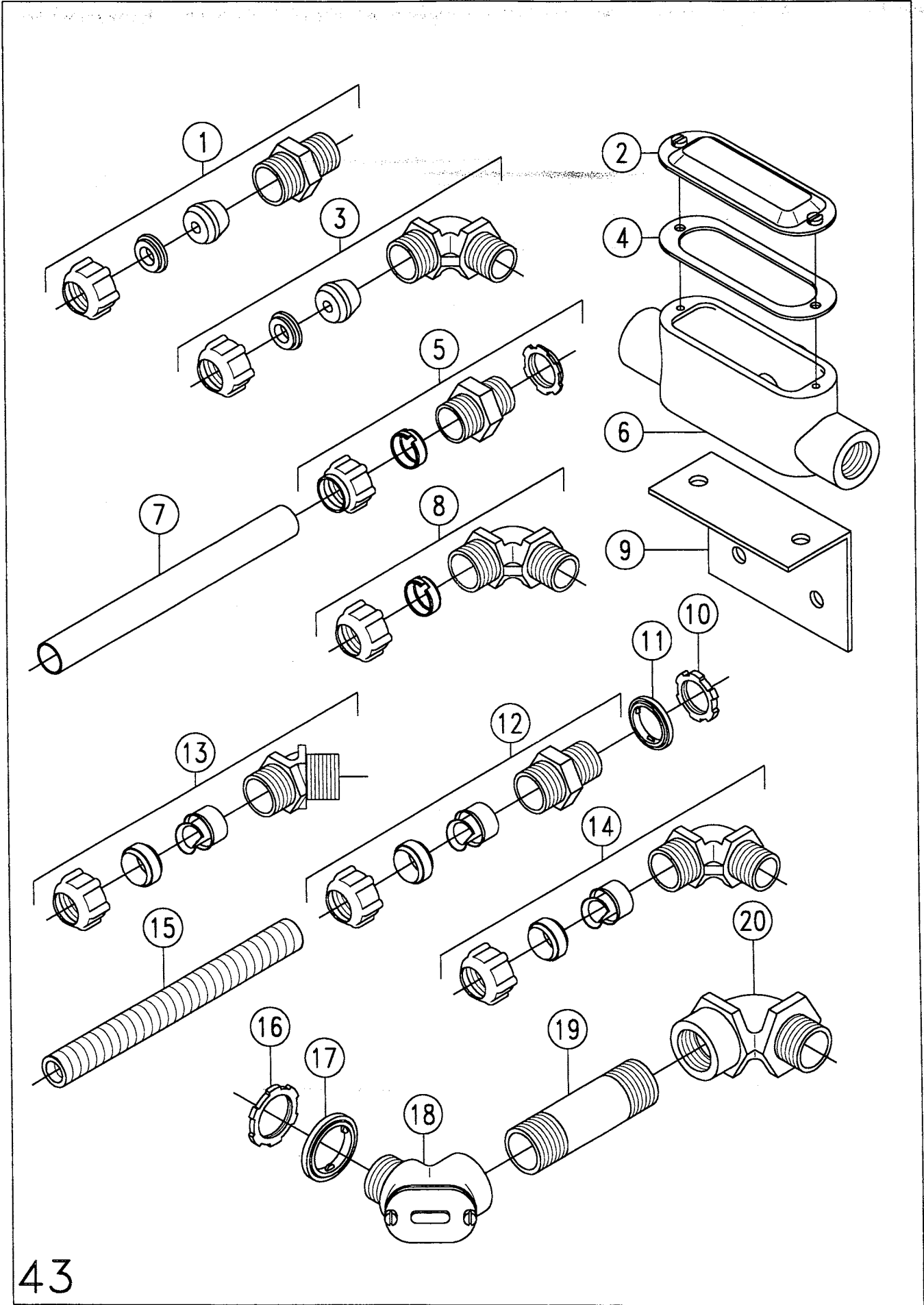


12-24 X 3/4
RD HD SCREW

STEREO
MAGNETIC INTERLOCK
PATENT PENDING









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