

GUSMER[®] CORPORATION

"Success through Unity"



H-20/35 Series Proportioning Unit

Parts Identification Manual 42942-ID

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GUSMER CORPORATION[®]

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NOTICE: *The equipment described in this technical manual must only be operated or serviced by properly trained individuals, thoroughly familiar with the operating instructions and limitations of the equipment. For technical service, call your local distributor. Call: 1-800-FOR-GSMR (1-800-367-4767) for the name and telephone number of your local distributor.*

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WARRANTY

Gusmer Corporation (Gusmer) provides a limited warranty to the original purchaser (Customer) of Gusmer manufactured parts and equipment (Product) against any defects in material or workmanship for a period of one year from the date of shipment from Gusmer facilities.

In the event Product is suspected to be defective in material or workmanship, it must be returned to Gusmer, freight prepaid. If Product is found to be defective in material or workmanship, as determined solely by Gusmer, Gusmer will issue full credit to Customer for the freight charges incurred in returning the defective Product, and either credit will be issued for the replacement cost of the Product or a replacement part will be forwarded no-charge, freight prepaid to Customer.

This warranty shall not apply to Product Gusmer finds to be defective resulting from: installation, use, maintenance, or procedures not accomplished in accordance with our instructions; normal wear; accident; negligence; alterations not authorized in writing by Gusmer; use of "look alike" parts not manufactured or supplied by Gusmer; or Product used in conjunction with any other manufacturer's pumping or proportioning equipment. For such Product, a written estimate will be submitted to the Customer at a nominal service charge, itemizing the cost for repair. Disposition of Product will be done in accordance with the terms stated on the written estimate.

The warranty provisions applied to product that are not manufactured by Gusmer will be solely in accordance with the warranty provided by the original manufacturer of the product.

GUSMER MAKES NO WARRANTY WHATSOEVER AS TO THE MERCHANTABILITY OF, OR SUITABILITY FOR, ITS PRODUCT TO PERFORM ANY PARTICULAR PURPOSE. CREDIT FOR, OR REPLACEMENT OF, PRODUCT DEFECTIVE IN MATERIAL OR WORKMANSHIP SHALL CONSTITUTE COMPLETE FULFILLMENT OF GUSMER OBLIGATIONS TO CUSTOMER. NO OTHER WARRANTY, EXPRESS OR IMPLIED ON ANY PRODUCT IT MANUFACTURES AND/OR SELLS, WILL BE RECOGNIZED BY GUSMER UNLESS SAID WARRANTY IS IN WRITING AND APPROVED BY AN OFFICER OF GUSMER.

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Gusmer through the sale, lease, or rental of Product in no way expresses or implies a license for the use of, nor encourages the infringement of any patents or licenses.

To ensure proper validation of your warranty, please complete the warranty card and return it to Gusmer within two weeks of receipt of equipment.

Revised 09/02

H-20/35 SERIES PROPORTIONING UNIT ASSEMBLIES

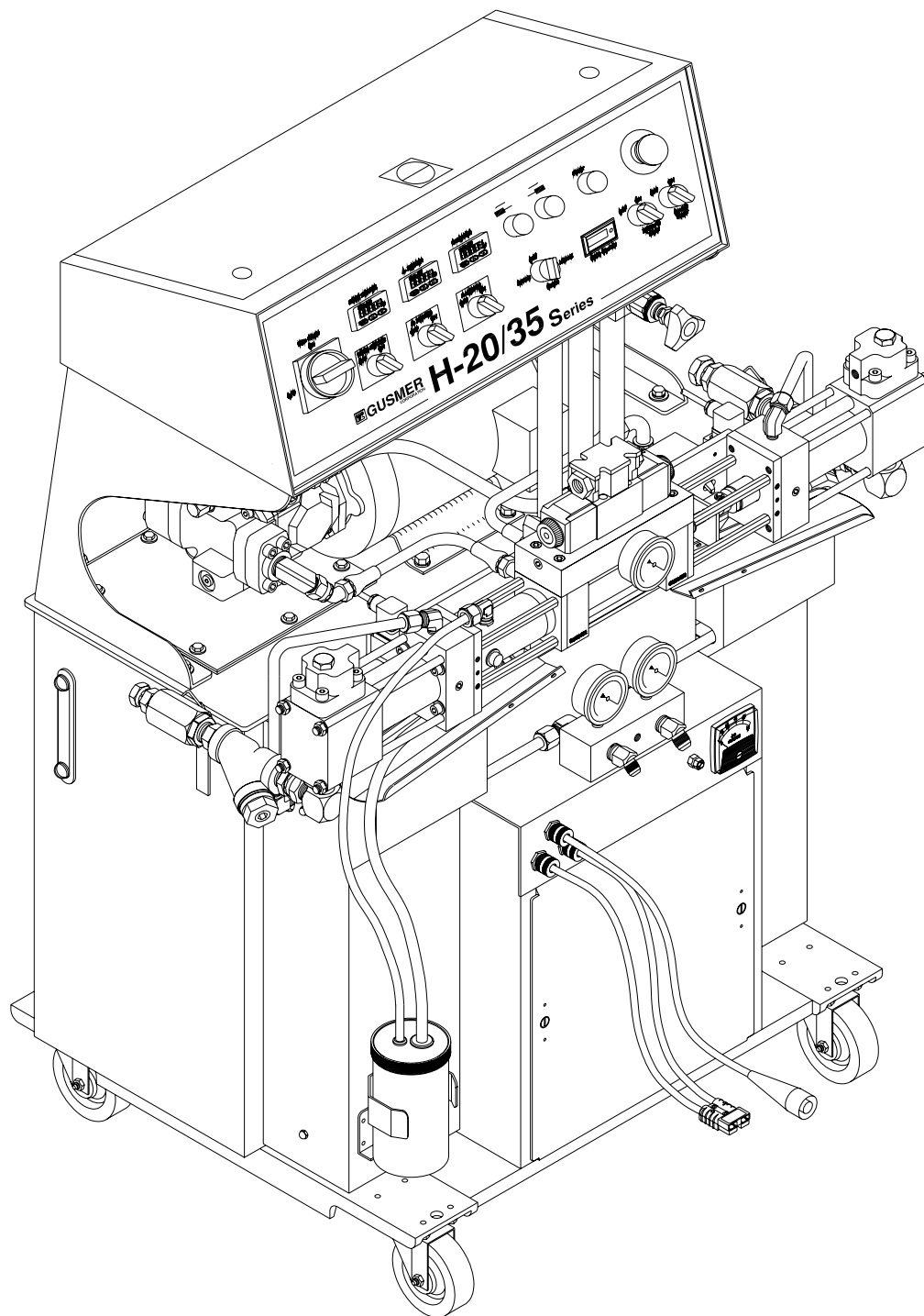


Figure 1. H-20/35 Proportioning Unit

FINAL ASSEMBLY

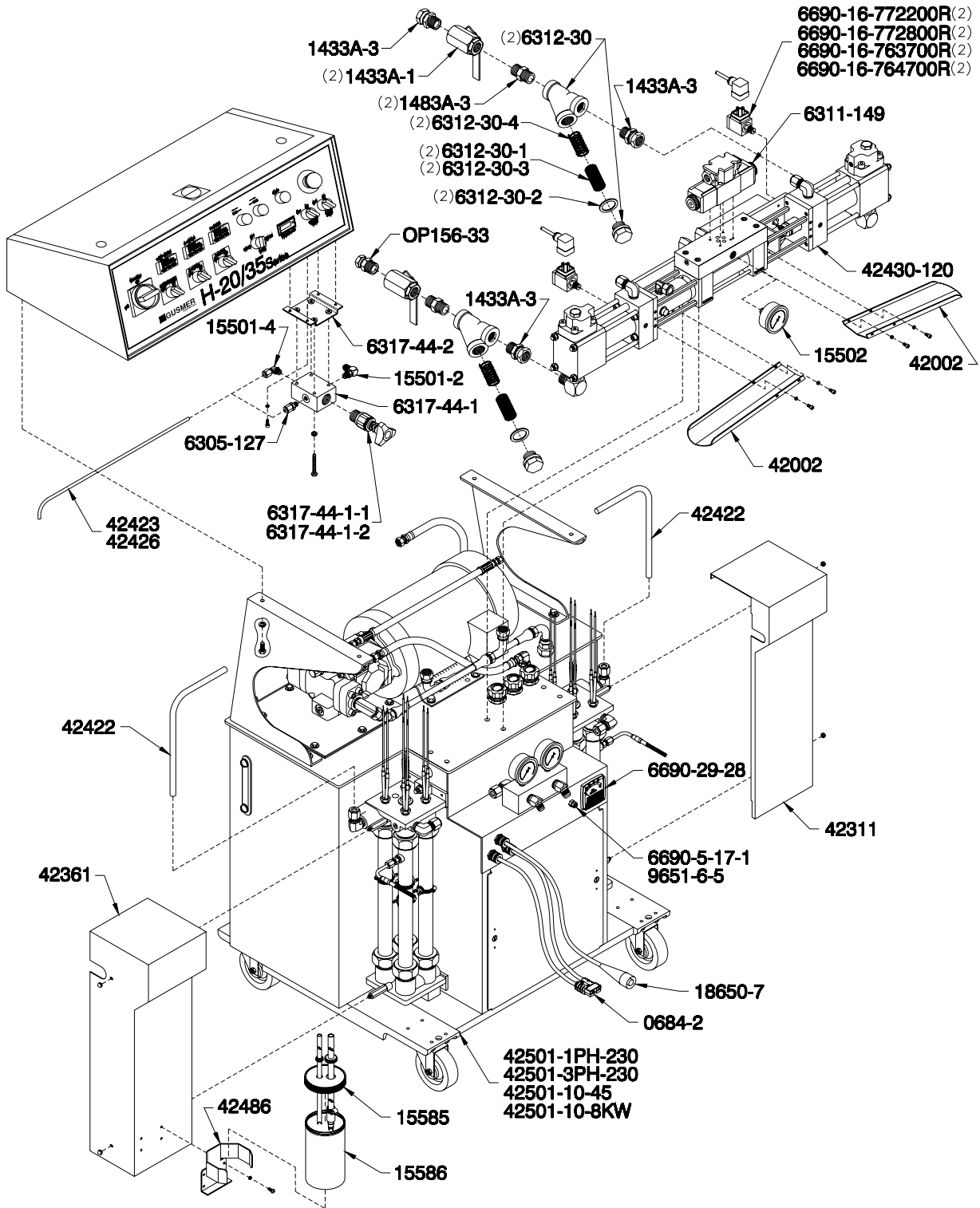


Figure 2. Final Assembly (Part No. 42000-SIZE), Exploded View

NOTE: See page 22 of this Manual for Electrical Components not called out in this Assembly.

TABLE 1. FINAL ASSEMBLIES (PART NO. 42000-SIZE), PARTS

Part Number	Description	Quantity
0684-2	Power-Lock™ Connector Housing	1
1433A-1	Ball Valve	2
1433A-3	Swivel Union	3
1483A-3	Hex Nipple	2
6305-127	O-Ring Fitting (<i>1 Phase Units Only</i>)	1
6311-149	Directional Valve	1
6312-30	Strainer	2
6312-30-1	Strainer Screen (30 Mesh) (<i>Includes 6312-30-4</i>)	2
6312-30-3	Strainer Screen (80 Mesh) (<i>Optional</i>)(<i>Includes 6312-30-4</i>)	2
6312-30-2	Gasket	2
6312-30-4	Spring	2
6317-44-1	Remote Compensator	1
6317-44-1-1	Relief Valve 0-725 PSI	1
6317-44-1-2	Relief Valve 0-1450 PSI	1
6317-44-2	Remote Compensator Bracket	1
6690-5-17-1	Potentiometer	1
6690-16-772200R	Pressure Switch (<i>42000-SIZE Units Only</i>)	1
6690-16-772800R	Pressure Switch (<i>42000-SIZE-25 Units Only</i>)	1
6690-16-763700R	Pressure Switch (<i>42000-SIZE-35 Units Only</i>)	1
6690-16-764700R	Pressure Switch (<i>42000-10-45 Unit Only</i>)	1
9651-6-5	Shaft Lock	1
15501-2	O-Ring Elbow	1
15501-4	O-Ring Tube Elbow (<i>3 Phase Units Only</i>)	1
15502	0-2000 PSI Liquid Fill Gauge	1
15585	Lube Reservoir Hose Assembly	1
15586	Lube Bottle	1
18650-7	TSU Wire Assembly	1
42002	Drip Pan	2
42422	A/R Pump/Heater Tube Assembly	2
42423	Compensator Tube Assembly (<i>3 Phase Units Only</i>)	1
42426	Compensator Tube Assembly (<i>1 Phase Units Only</i>)	1
42311	R- Preheater Cover	1
42361	A- Preheater Cover	1
42430-SIZE	Pumpline Assembly	1
42486	Lube Reservoir Bracket	1
42501-1PH-230	Base Assembly (<i>1 Phase Units Only</i>)	1
42501-3PH-230	Base Assembly (<i>3 Phase Units Only</i>)	1
42501-10-45	Base Assembly (<i>42000-10-45 Only</i>)	1
43501-10-8KW	Base Assembly (<i>42000-10-8KW Only</i>)	1
OP156-33	Swivel Union	1

BASE ASSEMBLY

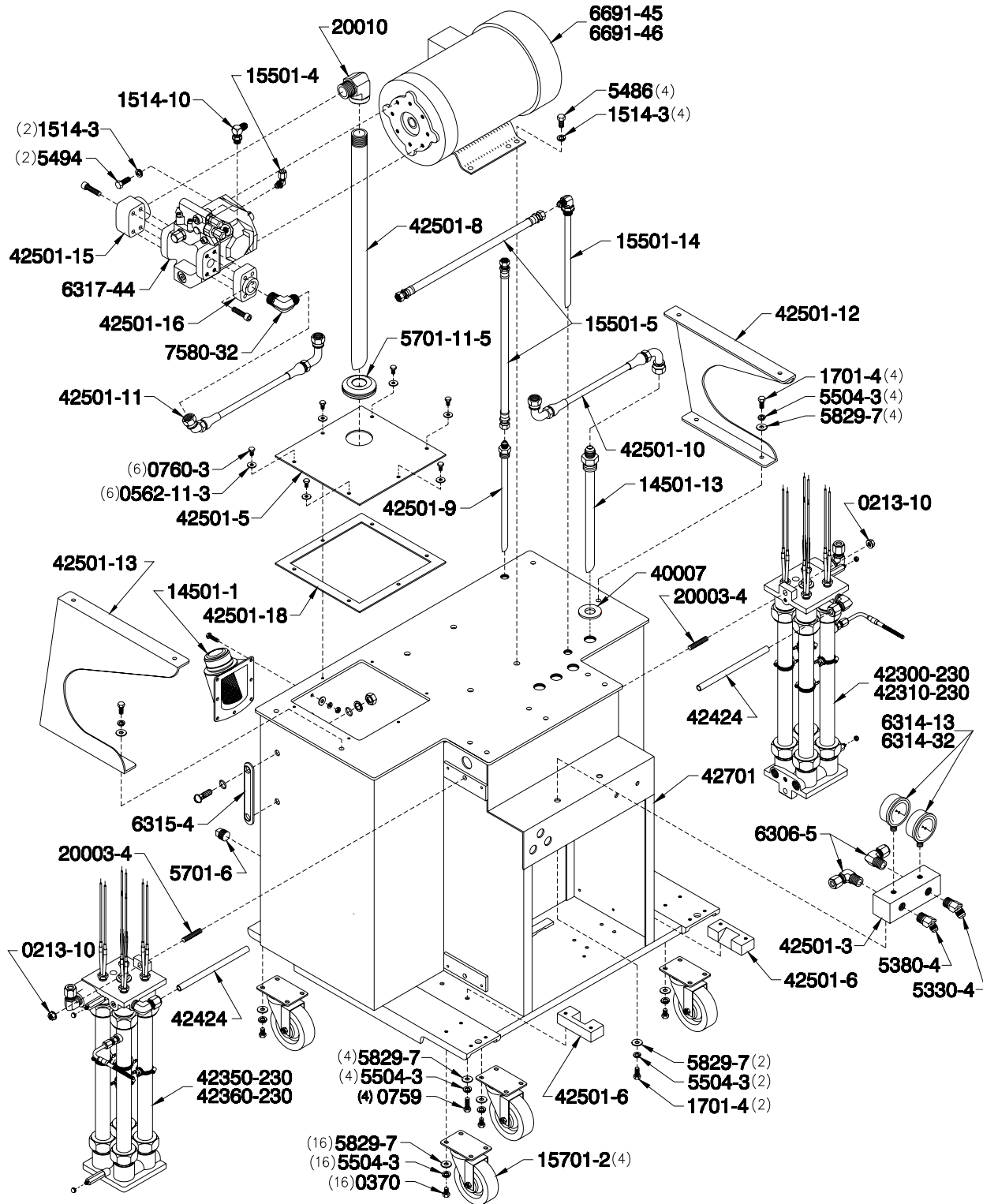


Figure 3. Base Assembly (Part No. 42501-SIZE-SIZE), Exploded View

TABLE 2. BASE ASSEMBLIES (PART NO. 42501-SIZE-SIZE), PARTS

Part Number	Description	Quantity
0213-10	Flange Nut	2
0370	Hex Head Cap Screw	16
0562-11-3	Flat Washer	6
0759	Hex Head Cap Screw	4
0760-3	Hex Head Cap Screw	6
1514-3	Helical Lockwasher	6
1514-10	Hose Elbow	1
1701-4	Hex Head Cap Screw	6
5330-4	Hose Elbow	1
5380-4	Hose Elbow	1
5486	Hex Head Cap Screw	4
5494	Hex Head Cap Screw	2
5504-3	Helical Lockwasher	26
5701-6	Reservoir Drain Plug	1
5701-11-5	Grommet	1
5829-7	Flat Washer	26
6306-5	Tube Elbow	2
6314-13	0-5000 PSI Liquid Fill Gauge	2
6314-32	0-6000 PSI Liquid Fill Gauge (42501-10-45 Only)	2
6315-4	Fluid Level Gauge	1
6317-44	Hydraulic Pump	1
6691-45	5 HP Motor (3-Phase Units)	1
6691-46	5 HP Motor (1-Phase Units)	1
7580-32	Elbow	1
14501-1	Hydraulic Oil Filler	1
14501-13	Hydraulic Reservoir Return	1
15501-4	O-Ring Tube Elbow	1
15501-5	Bleed Hose Assembly	2
15501-14	Hydraulic Reservoir Return	1
15701-2	Swivel Castor	4
20003-4	Threaded Rod	2
20010	Street Elbow	1
40007	Flat Washer	1
42300-230	R- Primary Heater 6000W	1
42310-230	R- Primary Heater 8000W (43501-10-8KW Only)	1
42350-230	A- Primary Heater 6000W	1
42360-230	A- Primary Heater 8000W (43501-10-8KW Only)	1
42424	Outlet Tube Assembly	2
42501-3	Chemical Manifold	1
42501-5	Tank Cover Plate	1
42501-6	Preheater Mounting Blocks	2
42501-8	Suction Tube	1
42501-9	Dip Tube	1
42501-10	T-Port Hose	1
42501-11	P-Port Hose	1
42501-12	Console Bracket (Right)	1
42501-13	Console Bracket (Left)	1
42501-15	Suction Flange	1
42501-16	Outlet Flange	1
42501-18	Access Cover Plate Gasket	1
42701	Hydraulic Tank	1

PUMPLINE ASSEMBLY

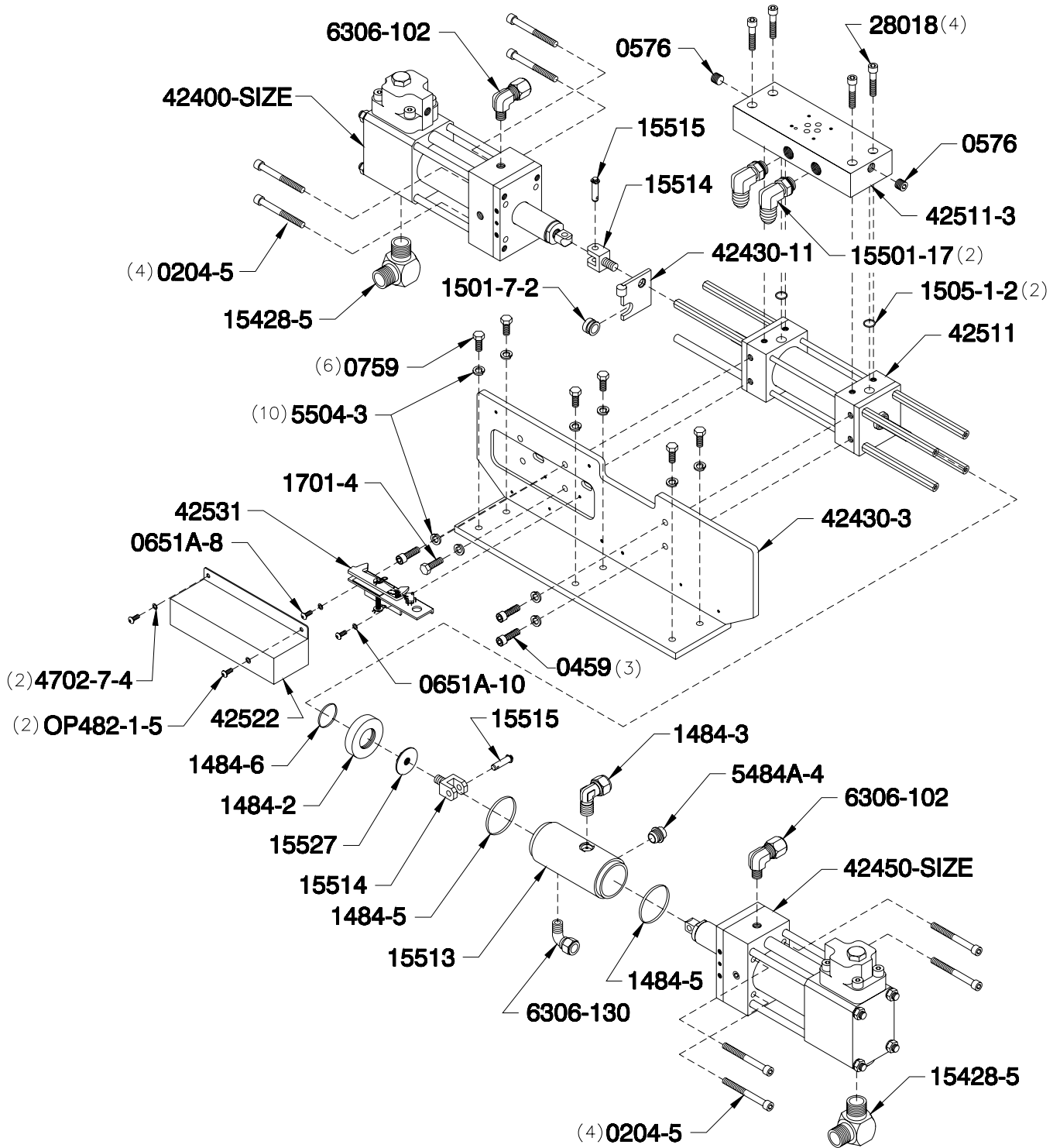


Figure 4. Pumpline Assembly (Part No. 42430-SIZE), Exploded View

TABLE 3. PUMPLINE ASSEMBLY (PART NO. 42430-SIZE), PARTS

Part Number	Description	Quantity
0204-5	Socket Head Cap Screw	8
0459	Socket Head Cap Screw	3
0576	Flush Seal Pipe Plug	2
0651A-8	Pan Head Machine Screw	2
0651A-10	Lockwasher	2
0759	Hex Head Cap Screw	6
1484-2	Lube Cylinder Adapter Plate	1
1484-3	Male Elbow	1
1484-5	O-Ring	2
1484-6	O-Ring	1
1501-7-2	Bronze Bushing	1
1505-1-2	O-Ring	2
1701-4	Hex Head Cap Screw	1
4702-7-4	Lockwasher	2
5484A-4	Polyethylene Pipe Plug	1
5504-3	Helical Lockwasher	10
6306-102	Tube Elbow	2
6306-130	Tube Fitting	1
15428-5	Male Elbow	2
15501-17	O-Ring Elbow	2
15513	Iso Lube Cylinder	1
15514	Hydraulic Cylinder Clevis	2
15515	Clevis Pin	2
15527	Jam Nut/Baffle	1
28018	Socket Head Cap Screw	4
42400-SIZE	Resin Proportioning Pump Assembly	1
42430-3	Pump Mounting L-Bracket	1
42430-11	Activator Plate	1
42450-SIZE	Iso Proportioning Pump Assembly	1
42511	Hydraulic Cylinder with Spacers	1
42511-3	Hydraulic Manifold	1
42522	Reversing Switch Cover	1
42531	Reversing Switch Assembly	1
OP482-1-5	Button Head Cap Screw	2

HYDRAULIC CYLINDER WITH SPACERS

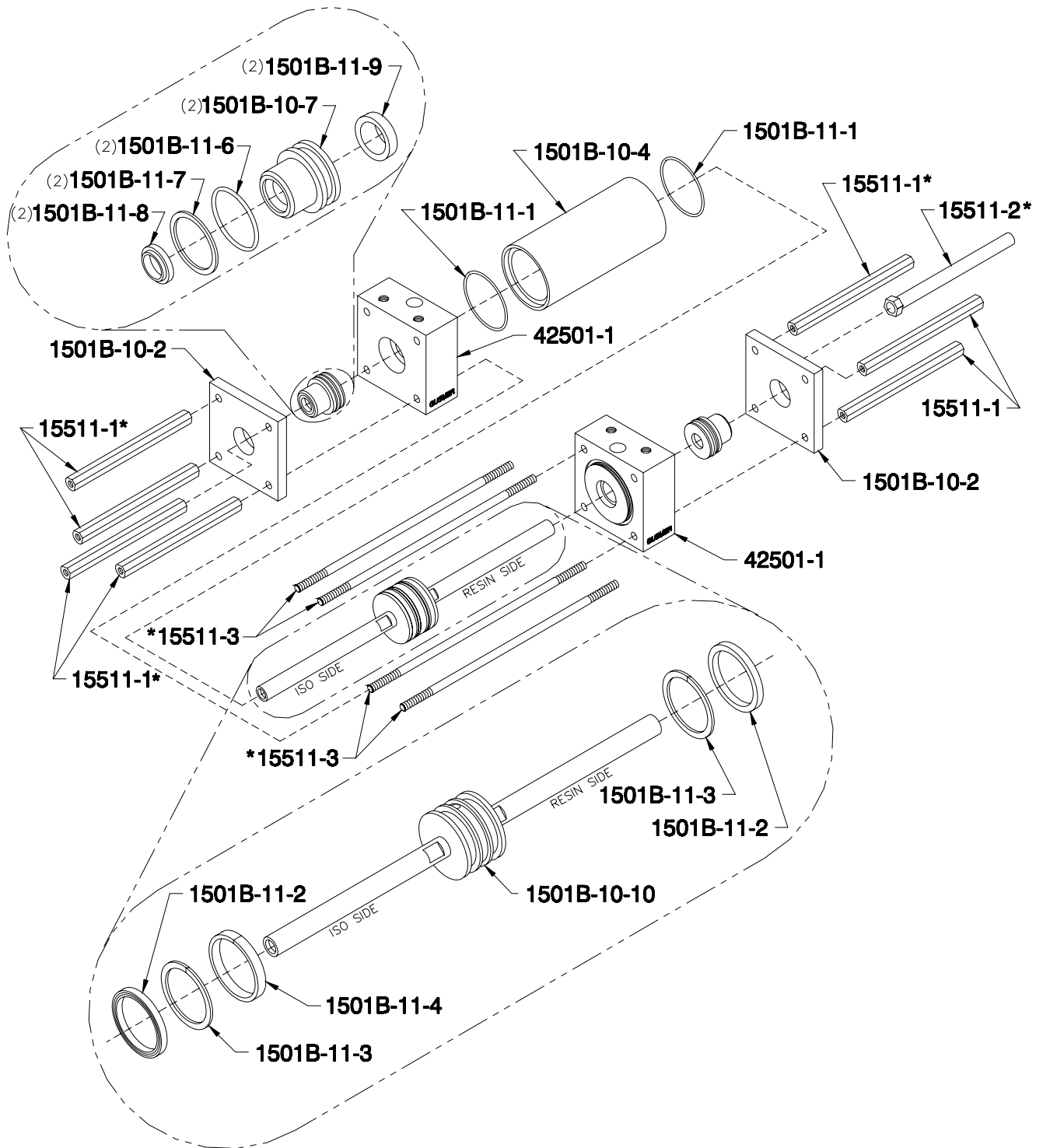


Figure 5. Hydraulic Cylinder with Spacers (Part No. 42511), Exploded View

** Torque to 200 Inch-Pounds*

TABLE 4. HYDRAULIC CYLINDER WITH SPACERS (PART NO. 42511), PARTS

Part Number	Description	Quantity
1501B-10-2	Retainer Plate	2
1501B-10-4	Cylinder Body	1
• ♦ 1501B-10-7	Rod Bushing	2
1501B-10-10	Piston Assembly	1
♦ 1501B-11-1	O-Ring	2
♦ 1501B-11-2	U-Cup	2
♦ 1501B-11-3	Back Up Ring	2
♦ 1501B-11-4	Teflon Glass Wear Ring	1
• ♦ 1501B-11-6	O-Ring	2
• ♦ 1501B-11-7	Back Up Ring	2
• ♦ 1501B-11-8	Rod Wiper	2
• ♦ 1501B-11-9	Shaft Seal	2
15511-1	Proportioning Pump Spacer (<i>Torque to 200 Inch-Pounds</i>)	7
15511-2	Reversing Switch Pump Spacer (<i>Torque to 200 Inch-Pounds</i>)	1
15511-3	Hydraulic Cylinder Tie Rod (<i>Torque to 200 Inch-Pounds</i>)	4
42501-1	Port Block	2

♦ *Hydraulic Cylinder Rebuild Kit (Part No. MK42511)*

• *Hydraulic Cylinder Bushing Kit (Part No. MK42511-1)*

PROPORTIONING PUMP ASSEMBLY

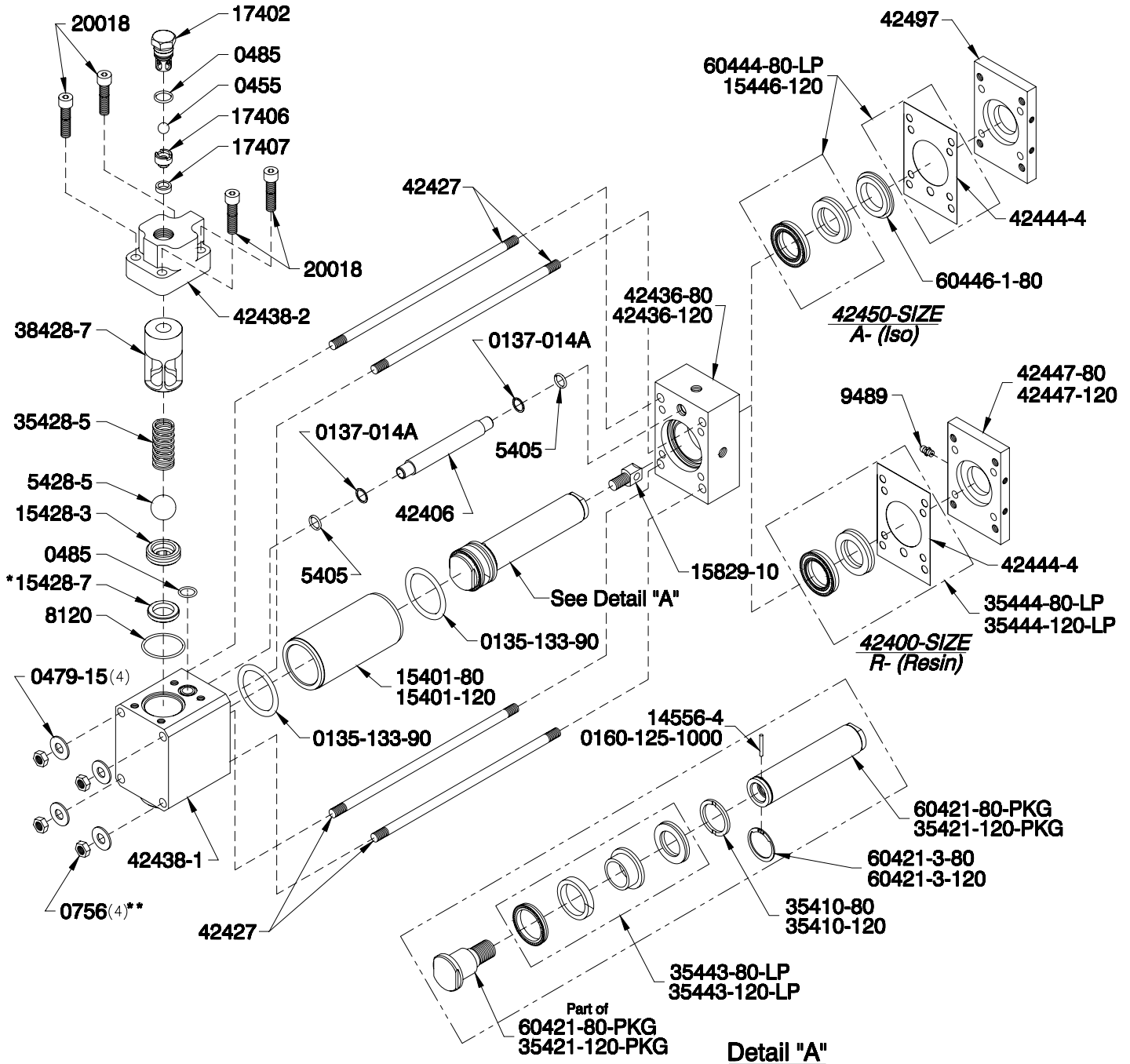


Figure 6. Proportioning Pump Assembly (Part No. 42400/42450-80 and 120), Exploded View

* Torque to 50 FT-LBS

** Torque to 30 FT-LBS

NOTE: Consult your distributor for information concerning the availability of non-standard pump sizes.

TABLE 5. PROPORTIONING PUMP ASSEMBLY (PART NO. 42400/42450-80 AND 120), PARTS

Part Number	Description	Quantity
0135-133-90	O-Ring	2
0137-014A	Back Up Ring	2
0160-125-1000	Dowel Pin (120 Size Pump)	1
0455	Valve Ball	1
0479-15	Packing Support Washer	4
0485	O-Ring	2
0756	Hex Nut (<i>Torque to 30 FT-LBS</i>)	4
5405	O-Ring	2
5428-5	Valve Ball	1
8120	O-Ring	1
9489	Grease Fitting	1
14556-4	Dowel Pin (80 Size Pump)	1
15401-80	Pump Cylinder (80 Size Pump)	1
15401-120	Pump Cylinder (120 Size Pump)	1
15446-120	A-Cylinder Seal Set (120 Size Pump)	1
15428-7	Seat Seal	1
15428-3	Valve Ball Seat (<i>Torque to 50 FT-LBS</i>)	1
15829-10	Pump Clevis	1
17402	Check Valve Retainer	1
17406	Check Valve Seat	1
17407	Check Valve Seal	1
20018	Socket Head Cap Screw	4
35410-80	Piston Support Washer (80 Size Pump)	1
35410-120	Piston Support Washer (120 Size Pump)	1
35421-120-PKG	Piston Rod with Head (120 Size Pump)	1
35428-5	Spring	1
35443-80-LP	Piston Lip Seal Set	1
35443-120-LP	Piston Lip Seal Set	1
35444-80-LP	Cylinder Lip Seal Set (80 Size Pump)	1
35444-120-LP	Cylinder Lip Seal Set (120 Size Pump)	1
38428-7	Inlet Ball Sleeve & Stop	1
42406	Crossover Tube	1
42427	Pump Tie Rod	4
42436-80	Outlet Pump Flange (80 Size Pump)	1
42436-120	Outlet Pump Flange (120 Size Pump)	1
42438-1	Lower Pump Base	1
42438-2	Upper Pump Base	1
42444-4	Gasket	1
42447-80	R-Retainer Flange (80 Size Pump)	1
42447-120	R-Retainer Flange (120 Size Pump)	1
42497	A-Packing Retainer Flange	1
60421-3-80	Retainer Ring(80 Size Pump)	1
60421-3-120	Retainer Ring (120 Size Pump)	1
60444-80-LP	Cylinder Lip Seal Set (80 Size Pump)	1
60421-80-PKG	Piston Rod with Head (80 Size Pump)	1
60446-1-80	Flange Adaptor Ring (42450-80 Only)	1

PRIMARY HEATER ASSEMBLY

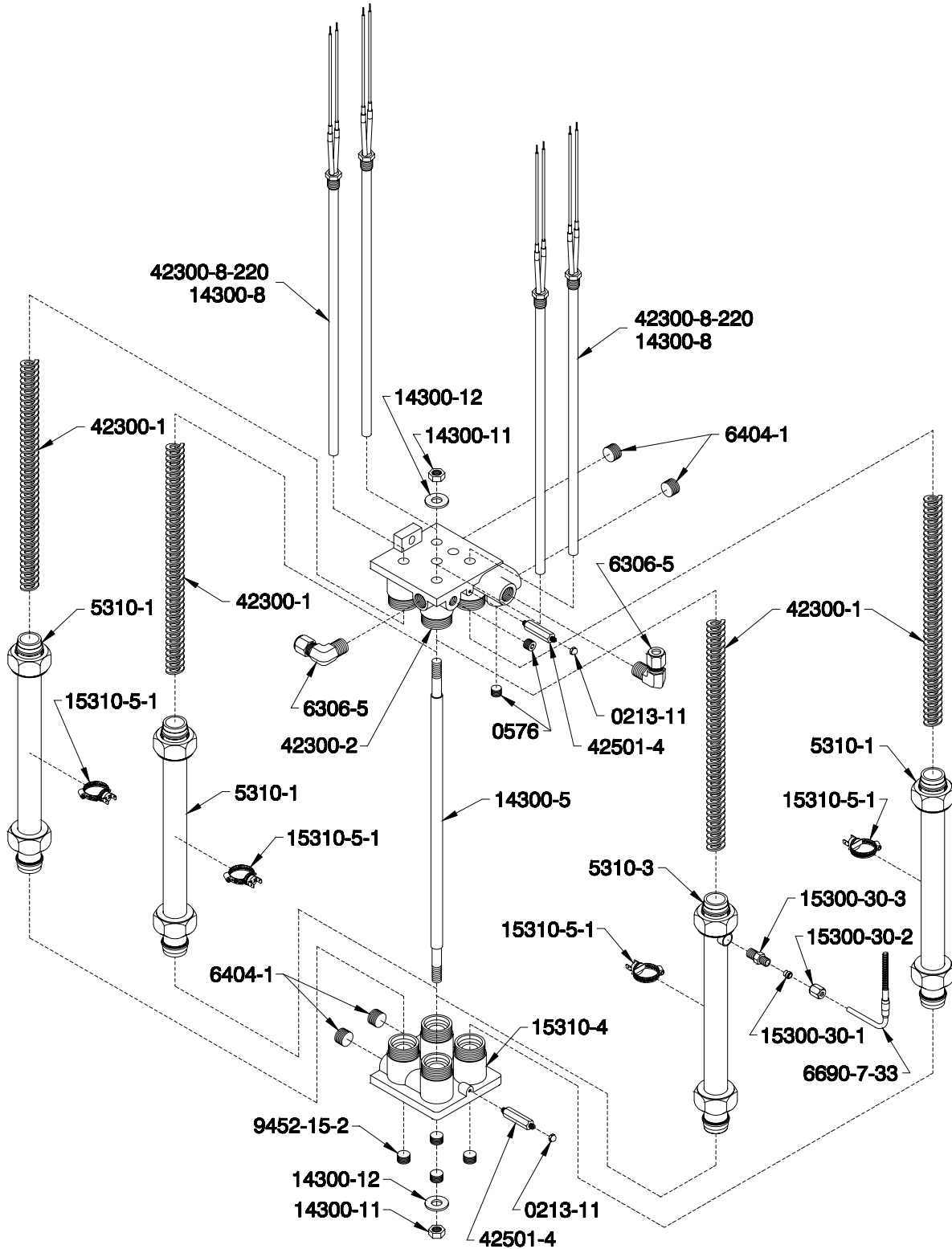


Figure 7. Primary Heater Assembly (Part No. 42300/42350-230 and 42310/42360-230), Exploded View

TABLE 6. PRIMARY HEATER ASSEMBLY (PART NO. 42300/42350-230 AND 42310/42360-230), PARTS

Part Number	Description	Quantity
0213-11	Acorn Nut	2
0576	Flush Seal Pipe Plug	2
5310-1	Heat Exchanger	3
5310-3	Heat Exchanger	1
6306-5	Tube Elbow	2
6404-1	Flush Seal Pipe Plug	4
6690-7-33	Thermocouple	1
9452-15-2	Flush Seal Pipe Plug	4
14300-11	Hex Nut	2
14300-12	Flat Washer	2
14300-5	Tie Rod	1
15300-30-1	Ferrule	1
15300-30-2	Nut	1
15300-30-3	1/4 Tube Body	1
15310-4	Preheater Flange	1
15310-5-1	Thermostat	4
42300-1	Spring	5
42300-2	R - Preheater Flange	1
42300-8-220	Heating Element 1500W	4
14300-8	Heating Element 2000W (42310/42360-230 Only)	4
42311	Preheater Cover (Not Shown)	1
42501-4	Preheater Cover Standoff	2

REVERSING SWITCH ASSEMBLY

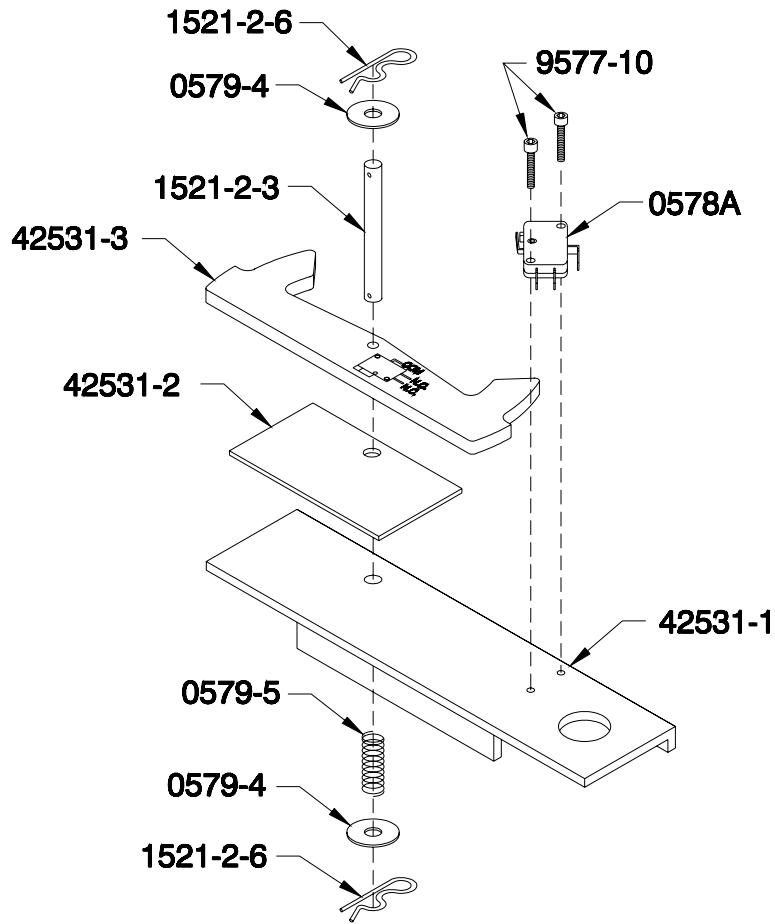


Figure 8. Reversing Switch Assembly (Part No. 42531), Exploded View

TABLE 7. REVERSING SWITCH ASSEMBLY (PART NO. 42531), PARTS LIST

Part Number	Description	Quantity
0578A	Reversing Switch	1
0579-4	Flat Washer	2
0579-5	Spring	1
42531-3	Reversing Switch Rocker Arm	1
42531-2	Rocker Arm Slide Pad	1
1521-2-3	Rocker Arm Pin	1
1521-2-6	Hitch Pin Clip	2
9577-10	Socket Head Cap Screw	2
42531-1	Reversing Switch Bracket	1

LUBE RESERVOIR HOSE ASSEMBLY

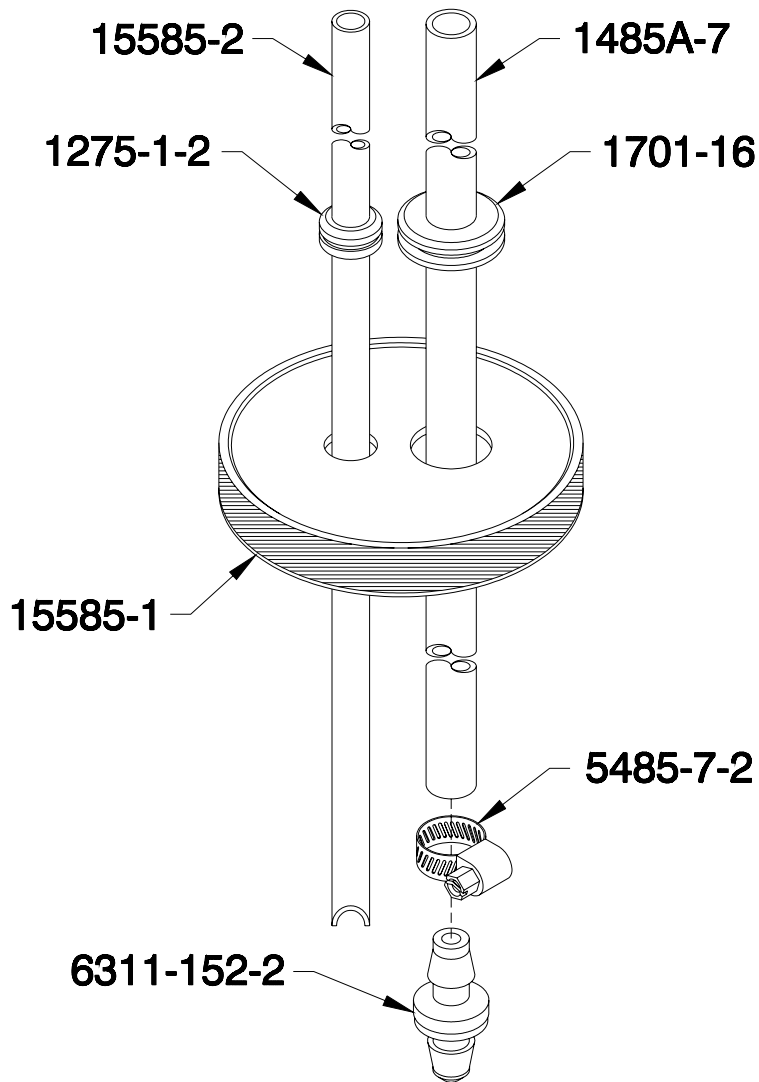


Figure 9. Lube Reservoir Hose Assembly (Part No. 15585), Exploded View

TABLE 8. LUBE RESERVOIR HOSE ASSEMBLY (PART NO. 15585), PARTS LIST

Part Number	Description	Quantity
1275-1-2	Rubber Grommet	1
1485A-7	Supply Line	1
1701-16	13/16 OD Grommet	1
6311-152-2	Lube Reservoir Check Valve	1
5485-7-2	Hose Clamp	1
15585-1	Lube Bottle Cap	1
15585-2	Return Line	1

ELECTRICAL COMPONENTS

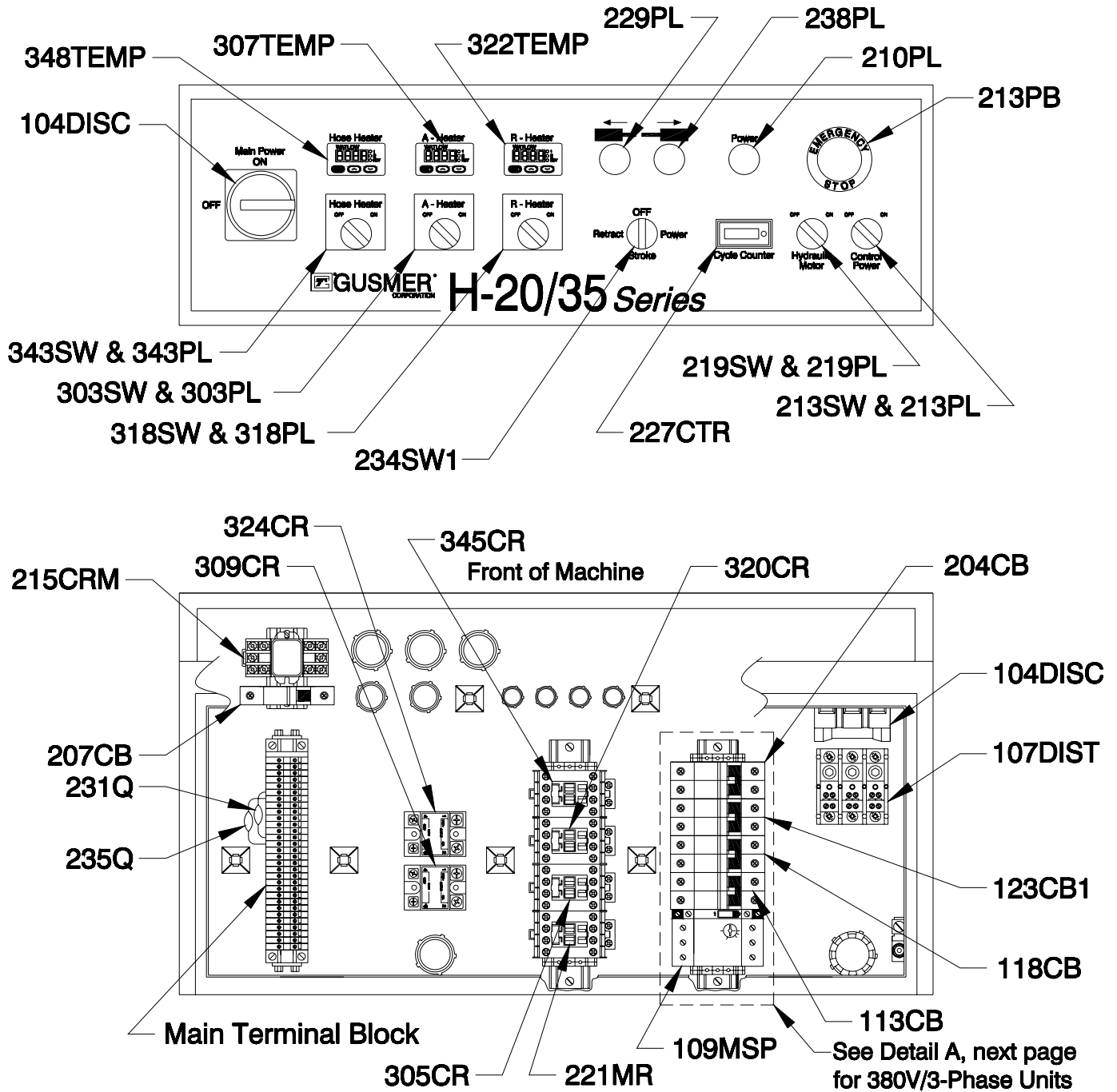


Figure 10. Electrical Components (Sheet 1 of 2)

For schematic symbol part numbers and descriptions see page 54.

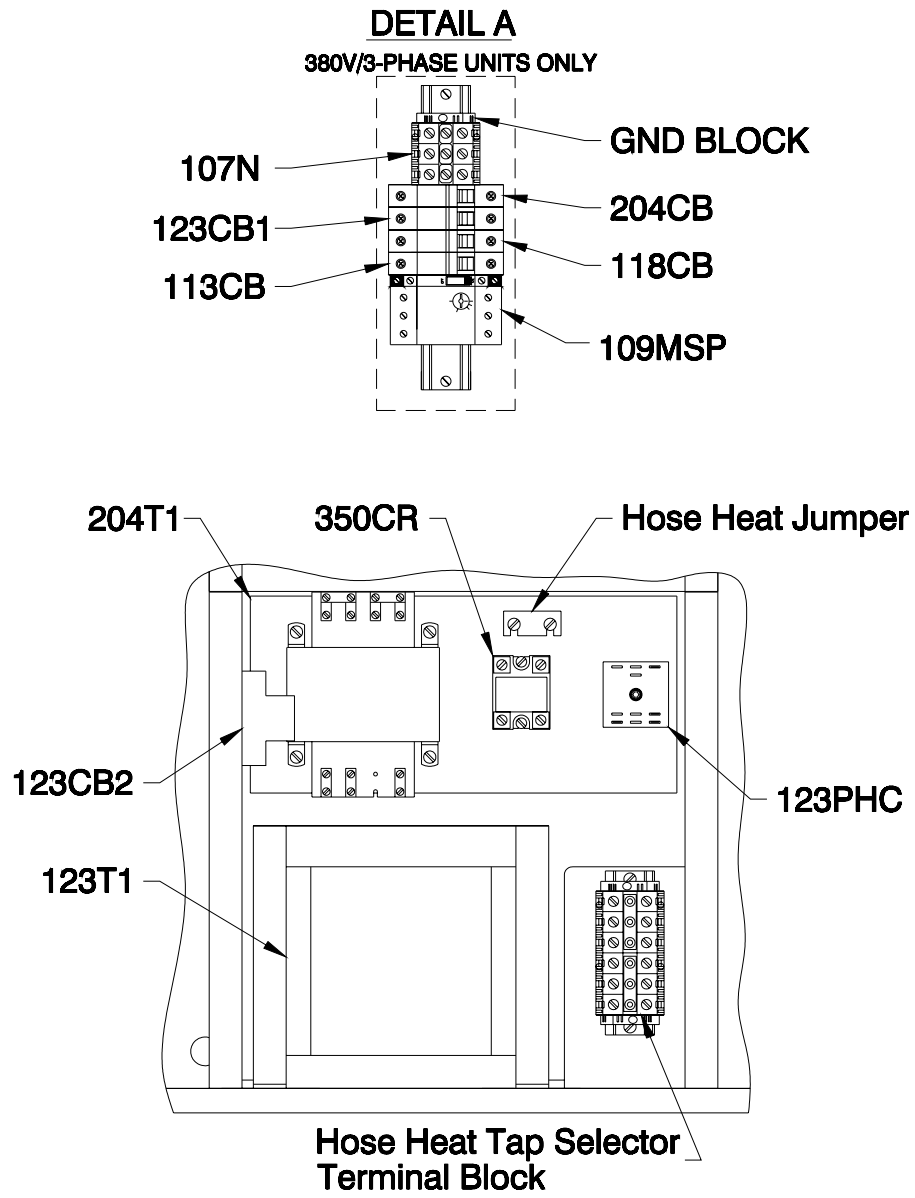


Figure 11. Electrical Components (Sheet 2 of 2)

ELECTRICAL SCHEMATICS

230 Volt, 1-Phase

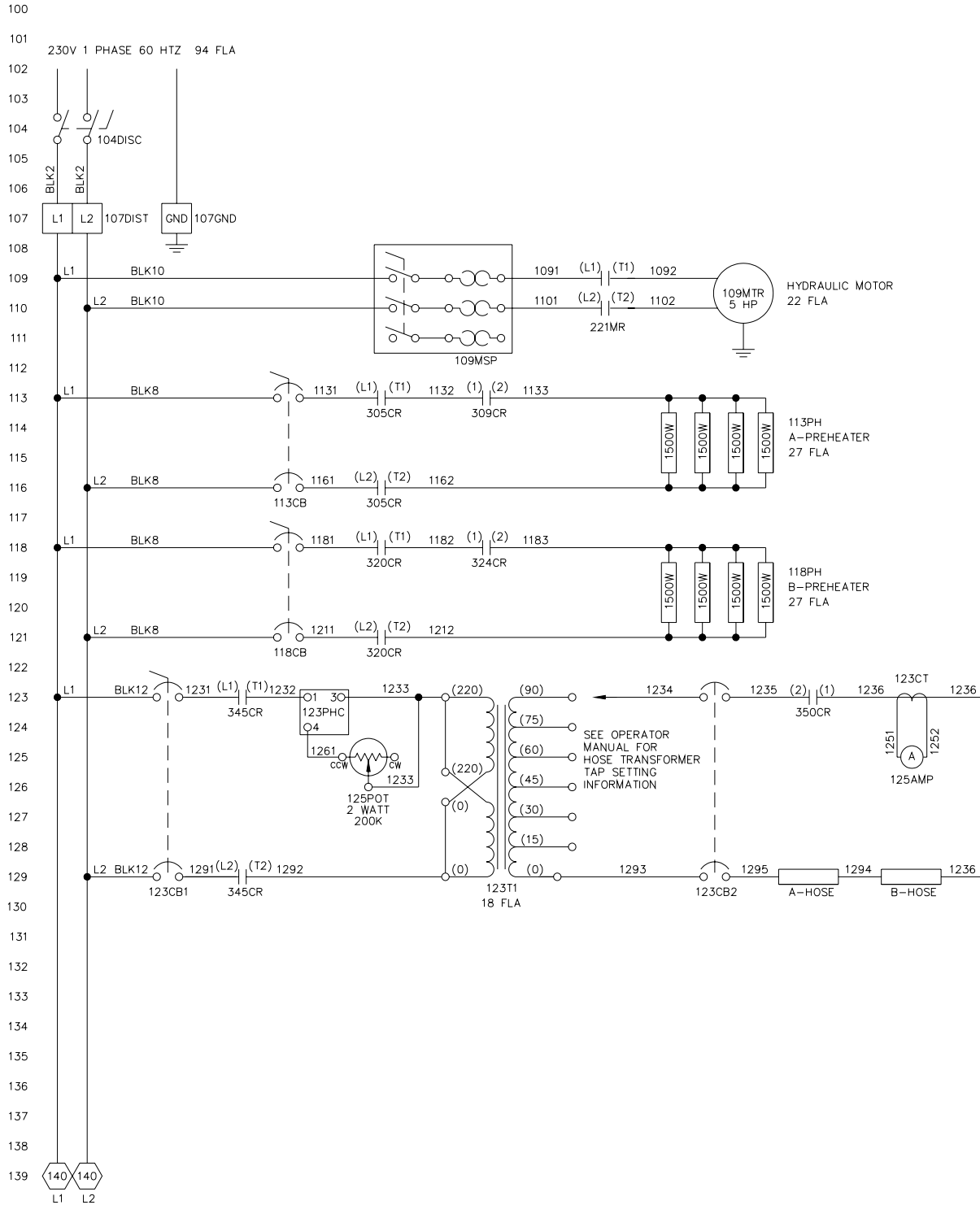


Figure 12. Electrical Schematic, 230 Volt, 1-Phase, (Sheet 1 of 6)

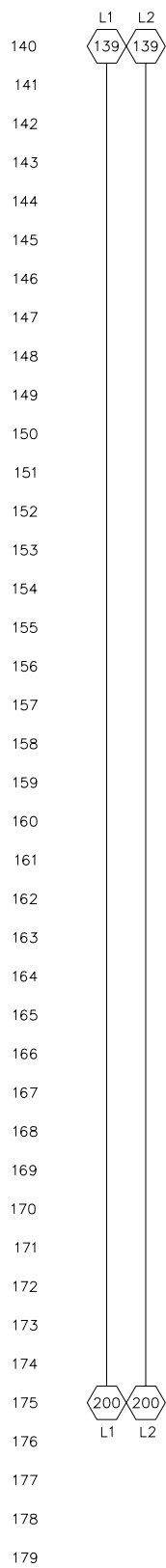


Figure 13. Electrical Schematic, 230 Volt, 1-Phase, (Sheet 2 of 6)

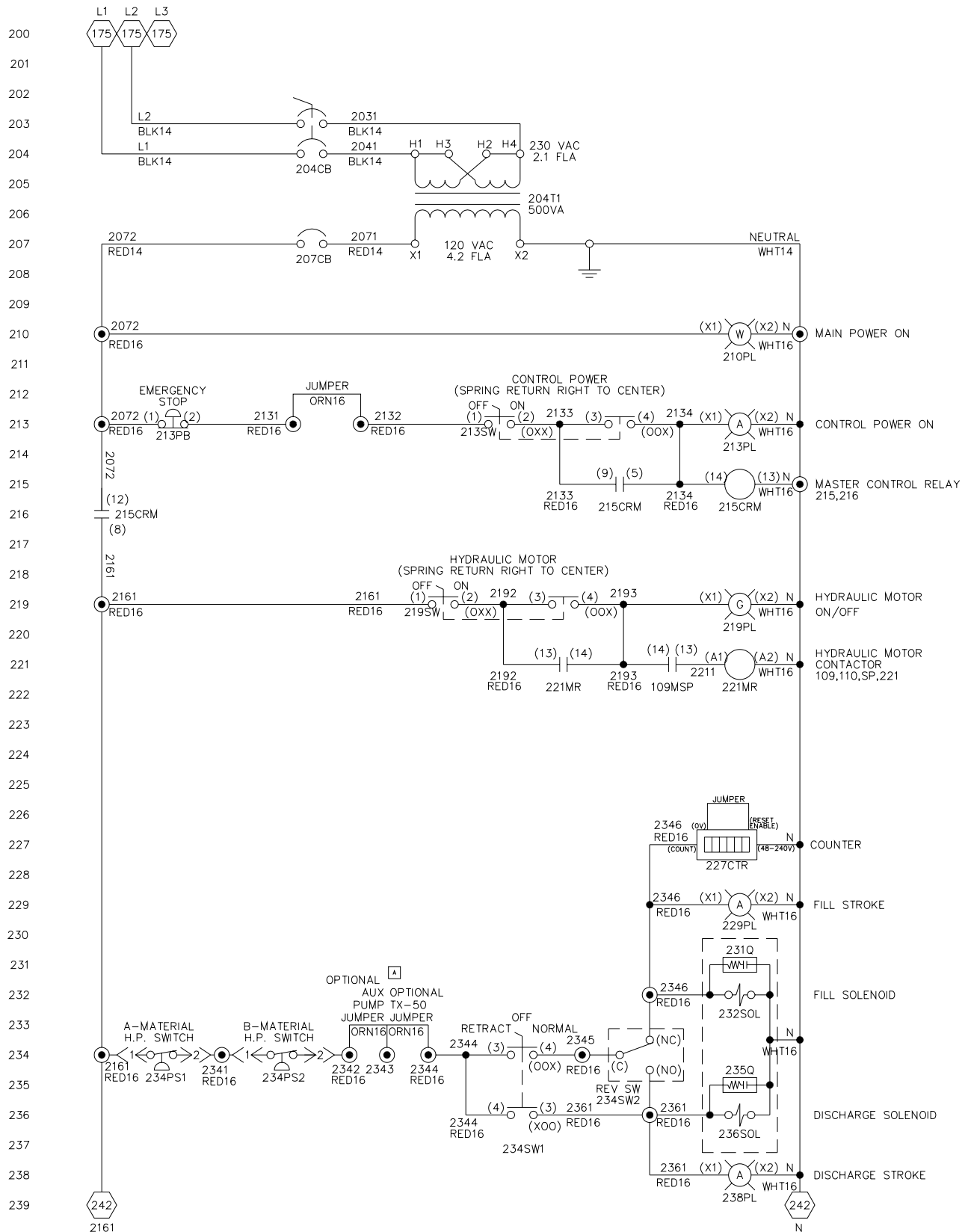


Figure 14. Electrical Schematic, 230 Volt, 1-Phase, (Sheet 3 of 6)

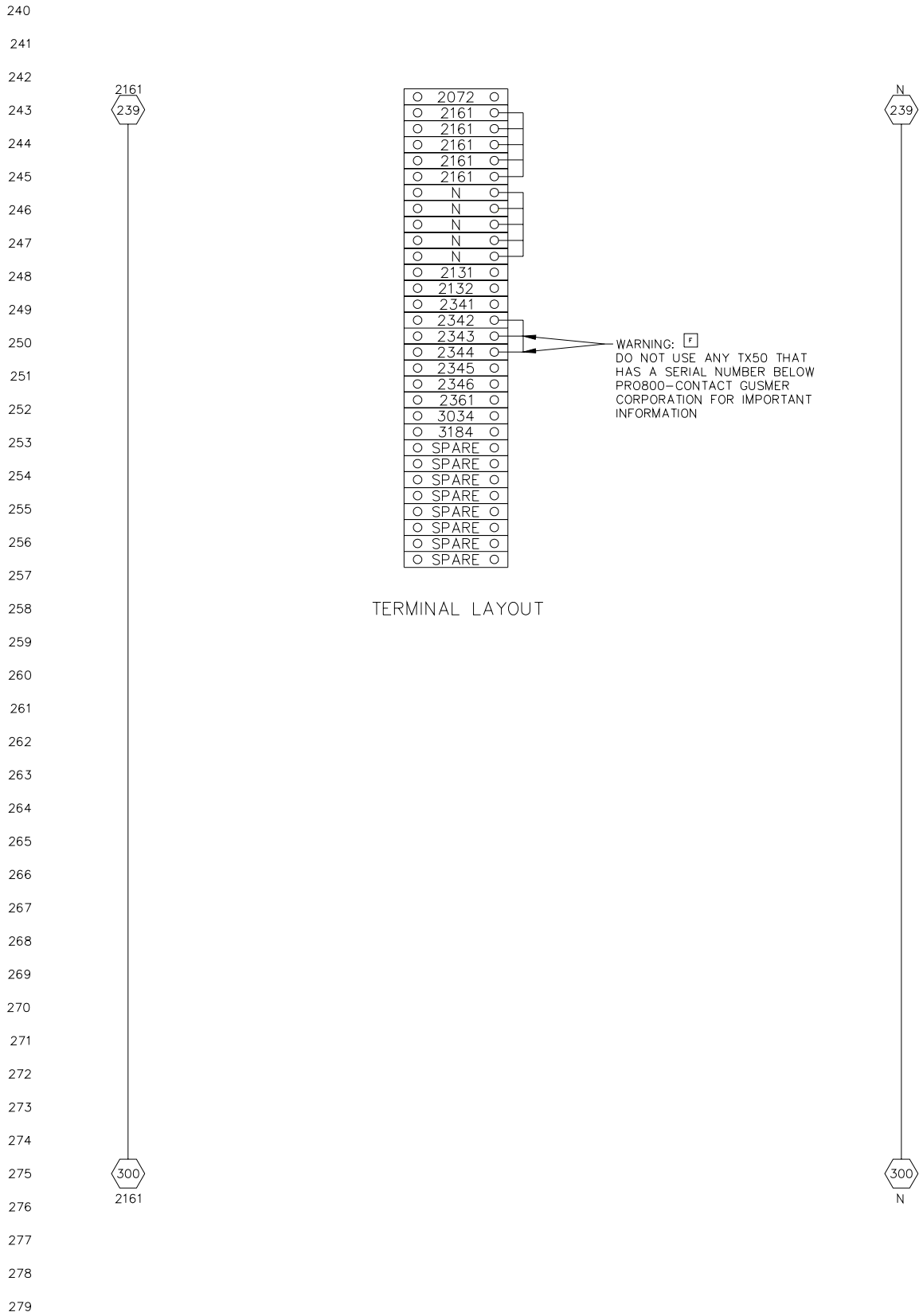


Figure 15. Electrical Schematic, 230 Volt, 1-Phase, (Sheet 4 of 6)

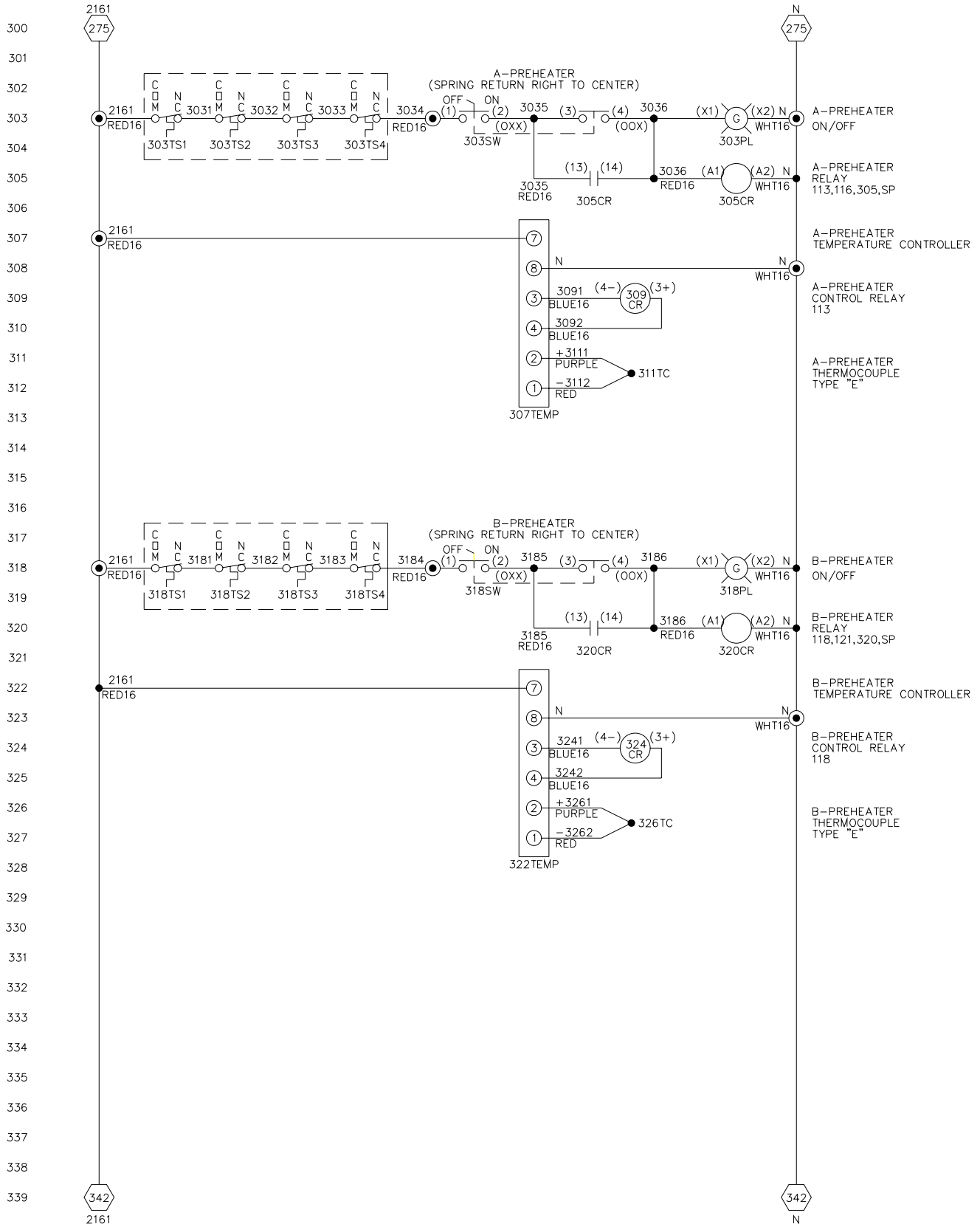


Figure 16. Electrical Schematic, 230 Volt, 1-Phase, (Sheet 5 of 6)

230 Volt, 3-Phase

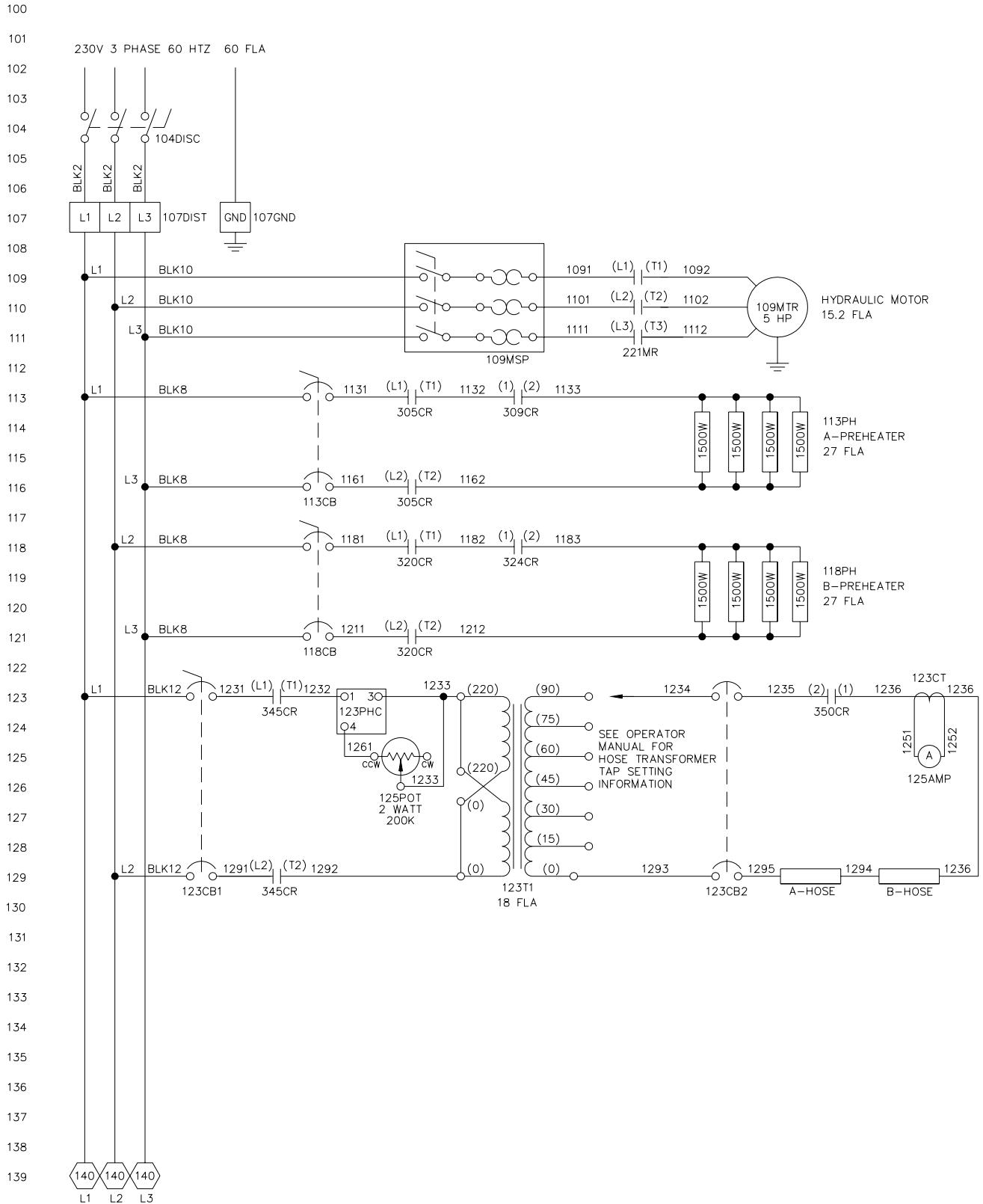


Figure 18. Electrical Schematic, 230 Volt, 3-Phase, (Sheet 1 of 6)

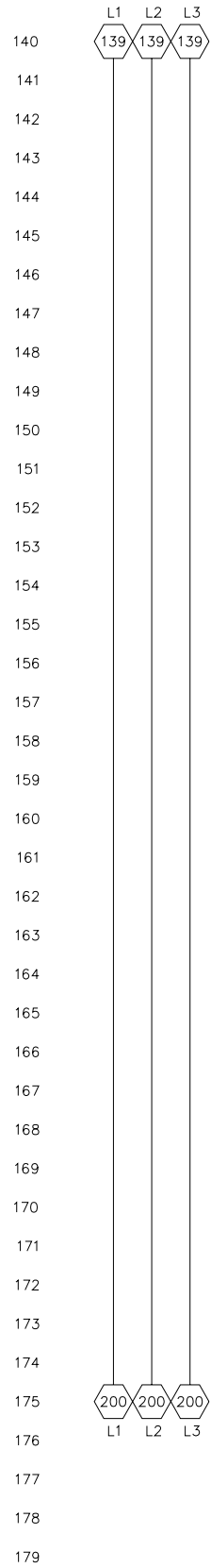


Figure 19. Electrical Schematic, 230 Volt, 3-Phase, (Sheet 2 of 6)

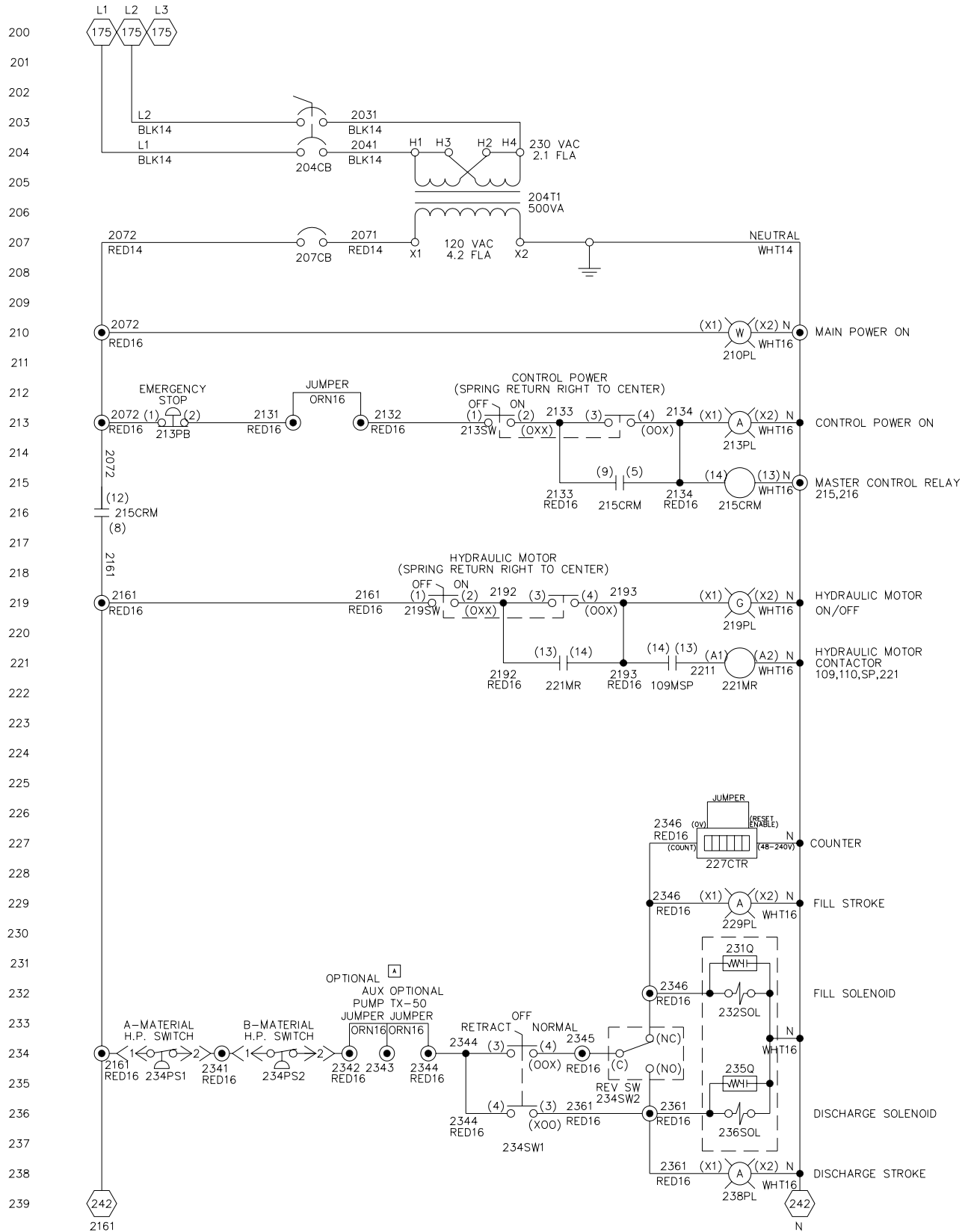


Figure 20. Electrical Schematic, 230 Volt, 3-Phase, (Sheet 3 of 6)

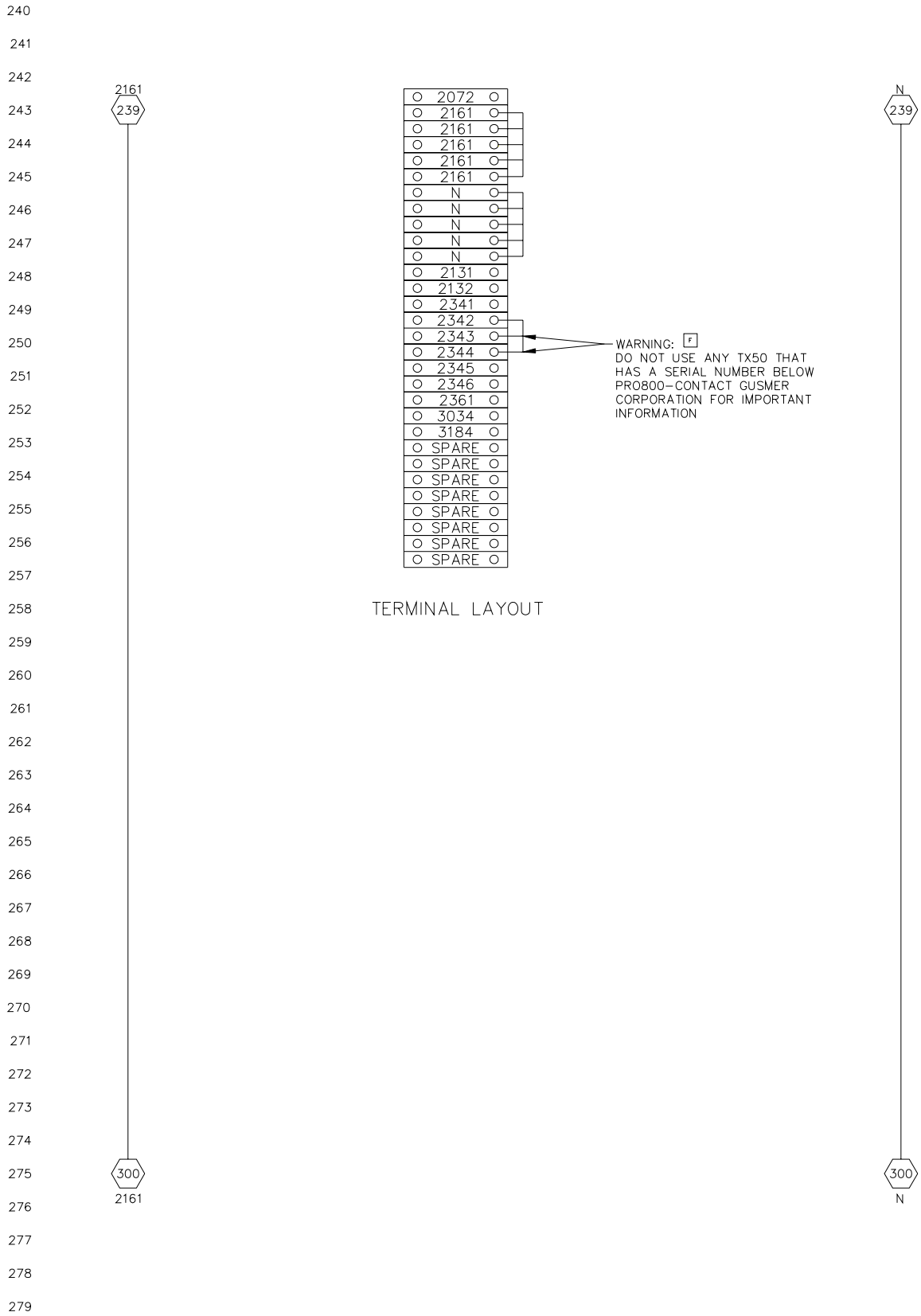


Figure 21. Electrical Schematic, 230 Volt, 3-Phase, (Sheet 4 of 6)

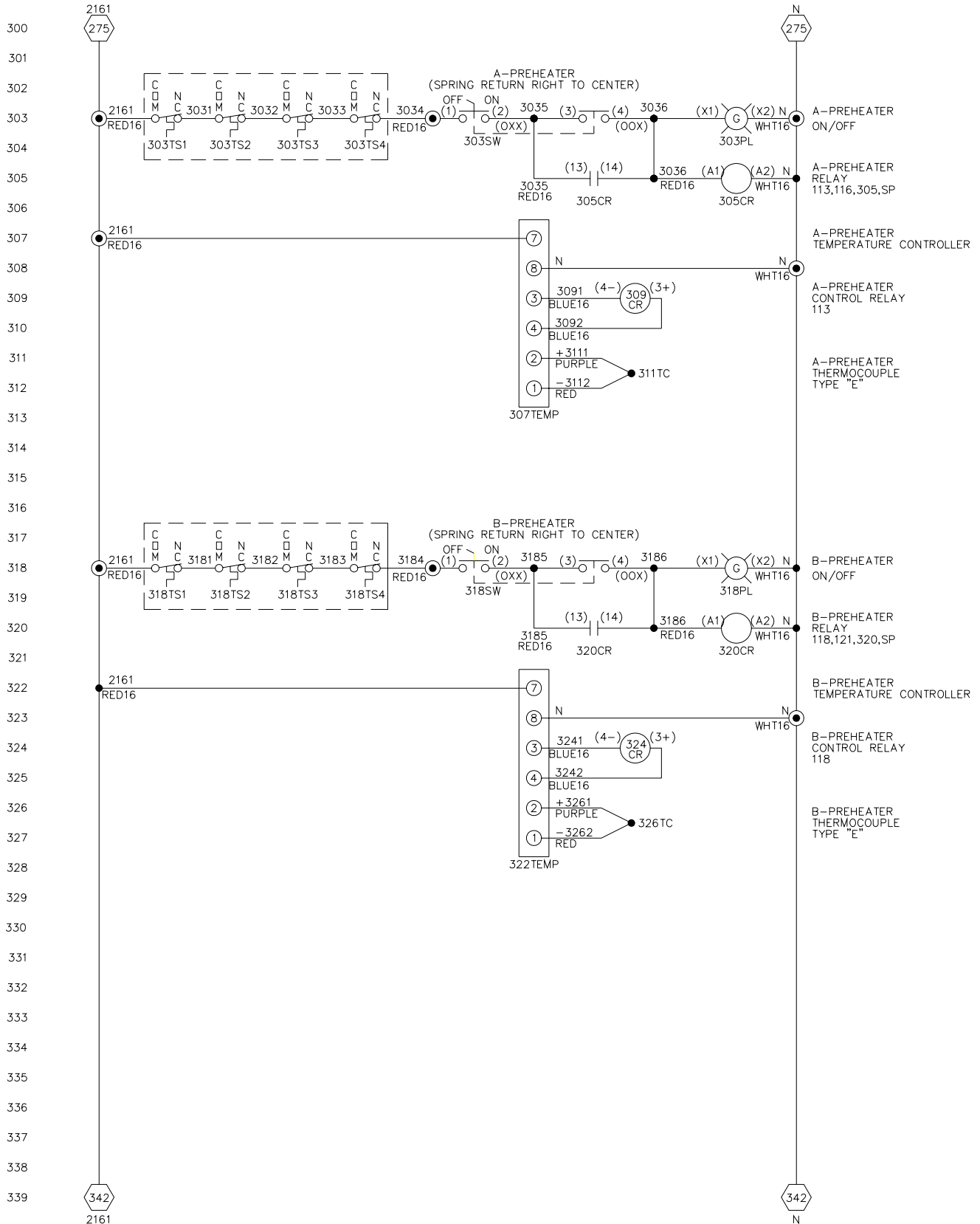


Figure 22. Electrical Schematic, 230 Volt, 3-Phase, (Sheet 5 of 6)

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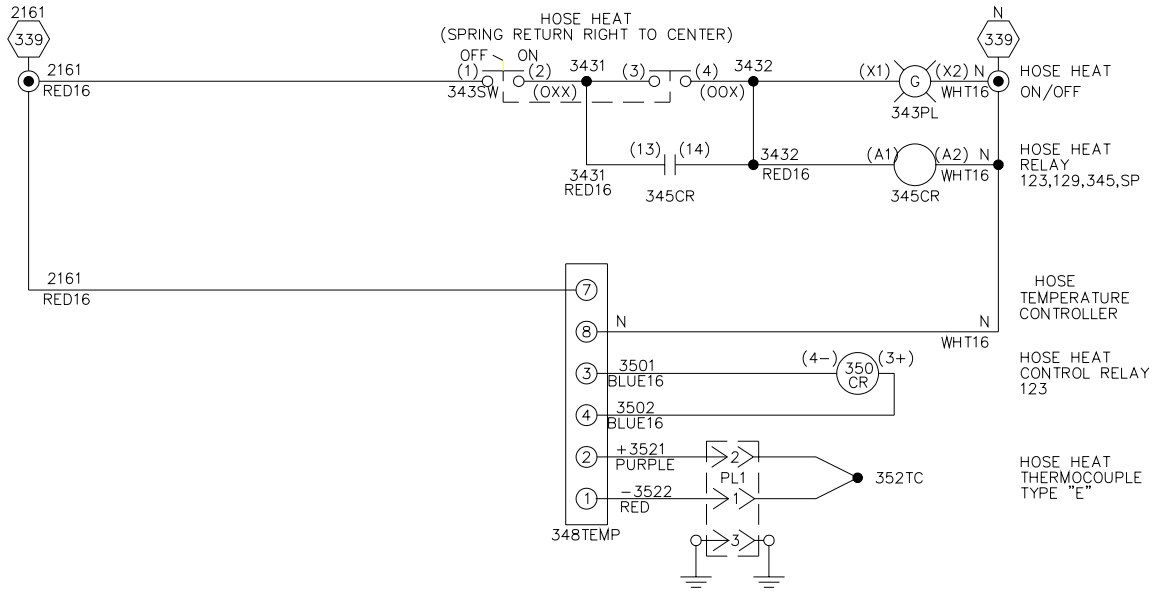


Figure 23. Electrical Schematic, 230 Volt, 3-Phase, (Sheet 6 of 6)

230 Volt, 3-Phase with 8KW Heaters

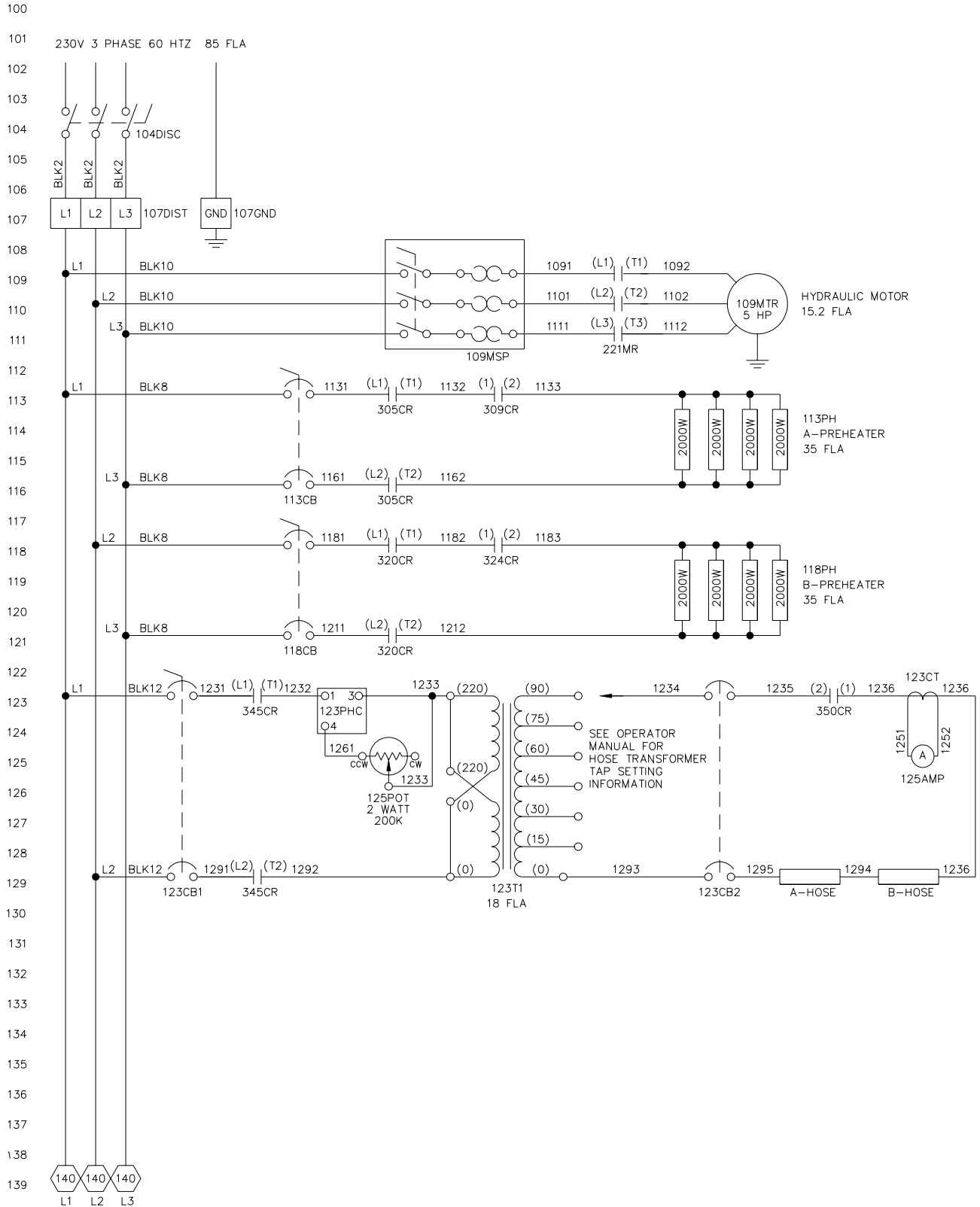


Figure 24. Electrical Schematic, 230 Volt, 3-Phase with 8KW Heaters, (Sheet 1 of 6)

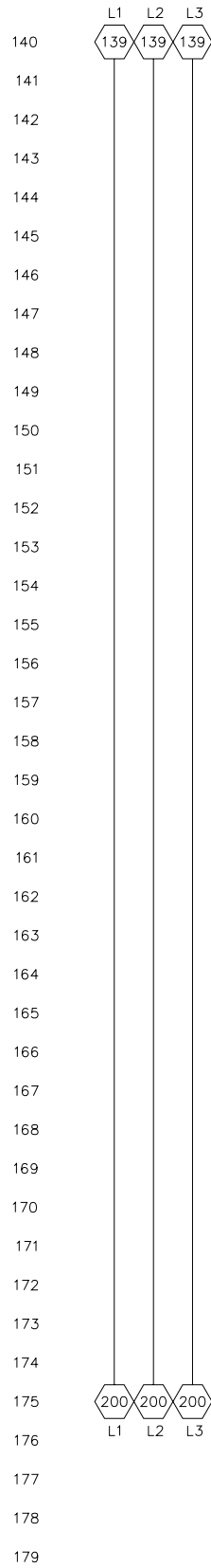


Figure 25. Electrical Schematic, 230 Volt, 3-Phase with 8KW Heaters, (Sheet 2 of 6)

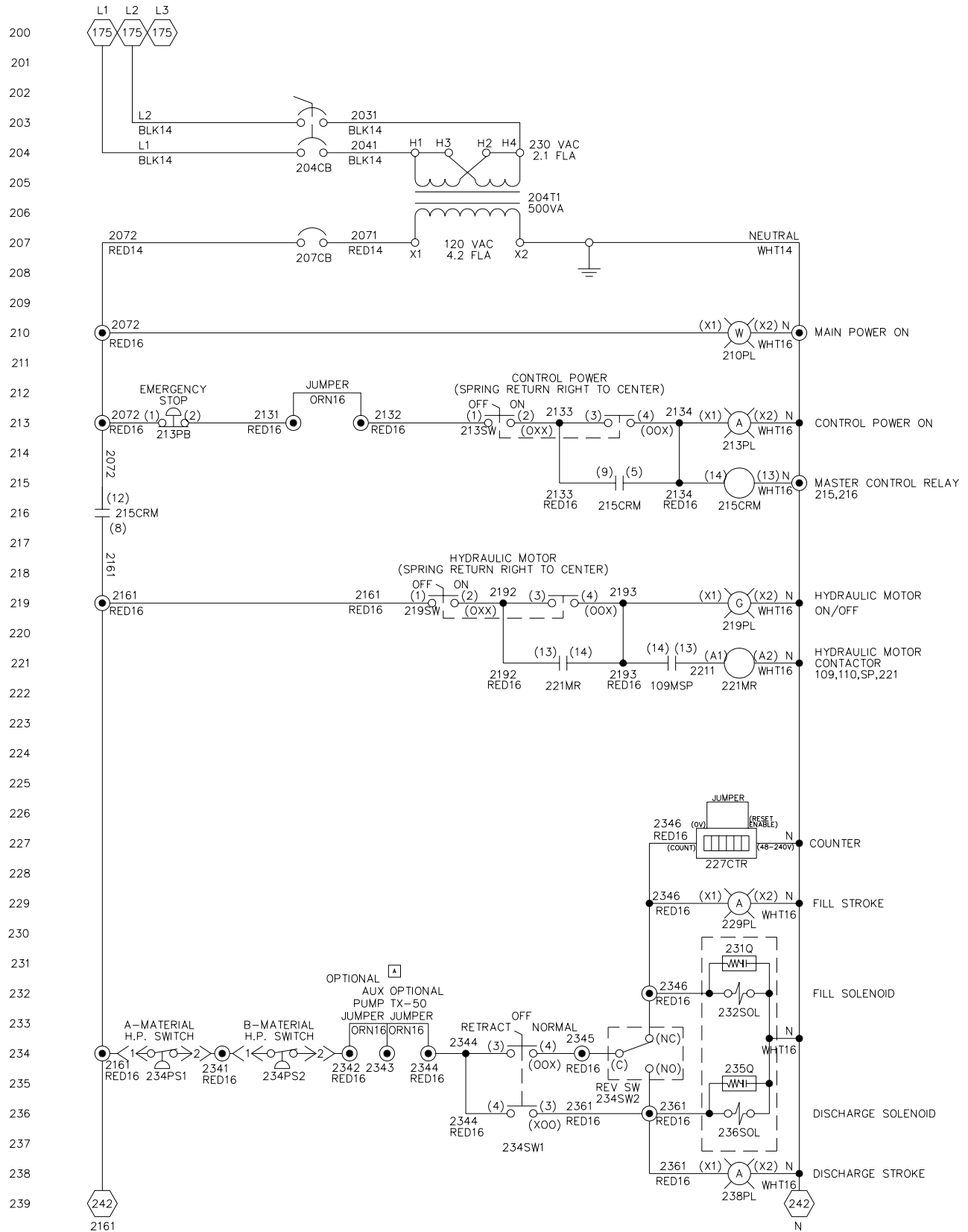


Figure 26 Electrical Schematic, 230 Volt, 3-Phase with 8KW Heaters, (Sheet 3 of 6)

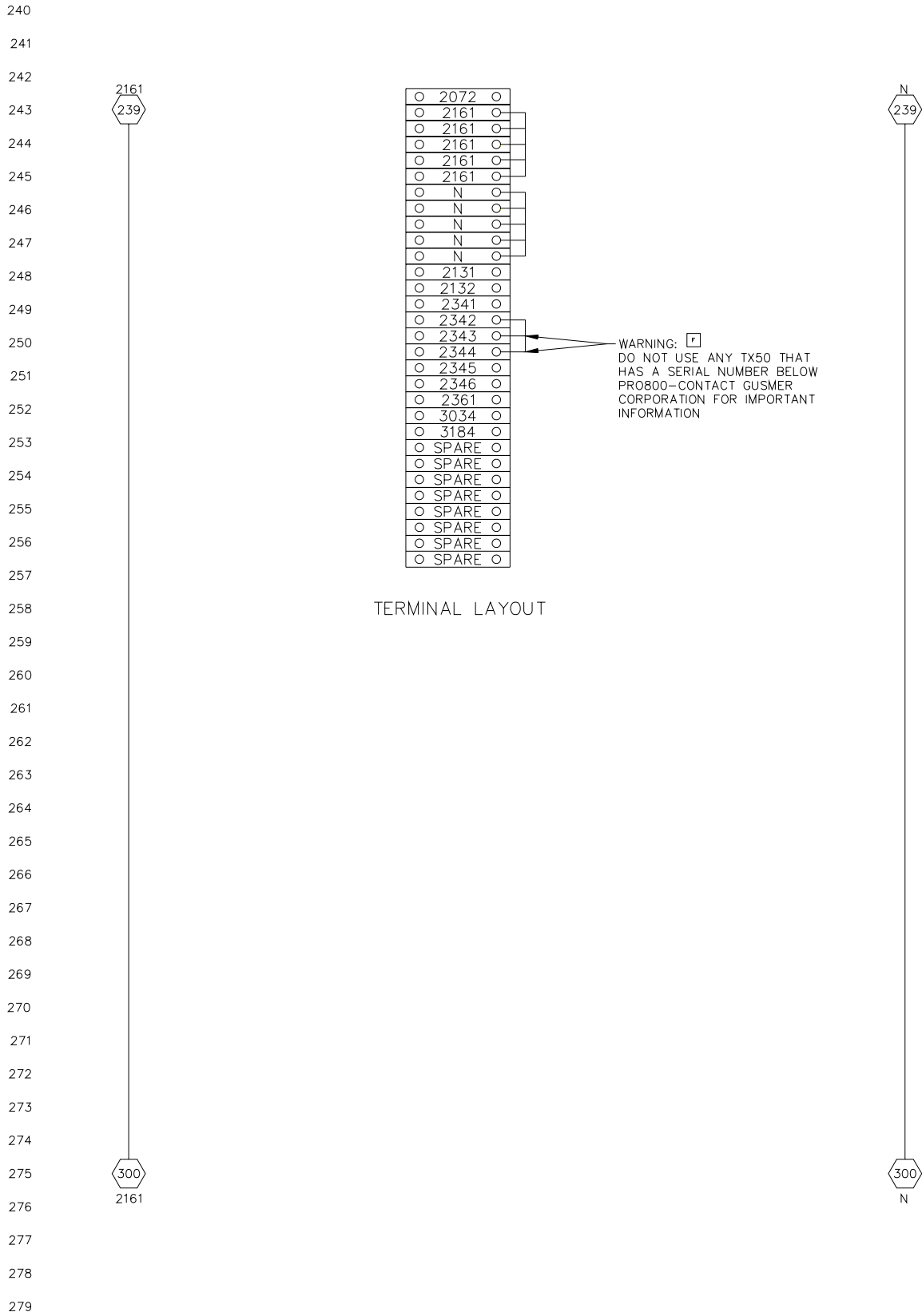


Figure 27. Electrical Schematic, 230 Volt, 3-Phase with 8KW Heaters, (Sheet 4 of 6)

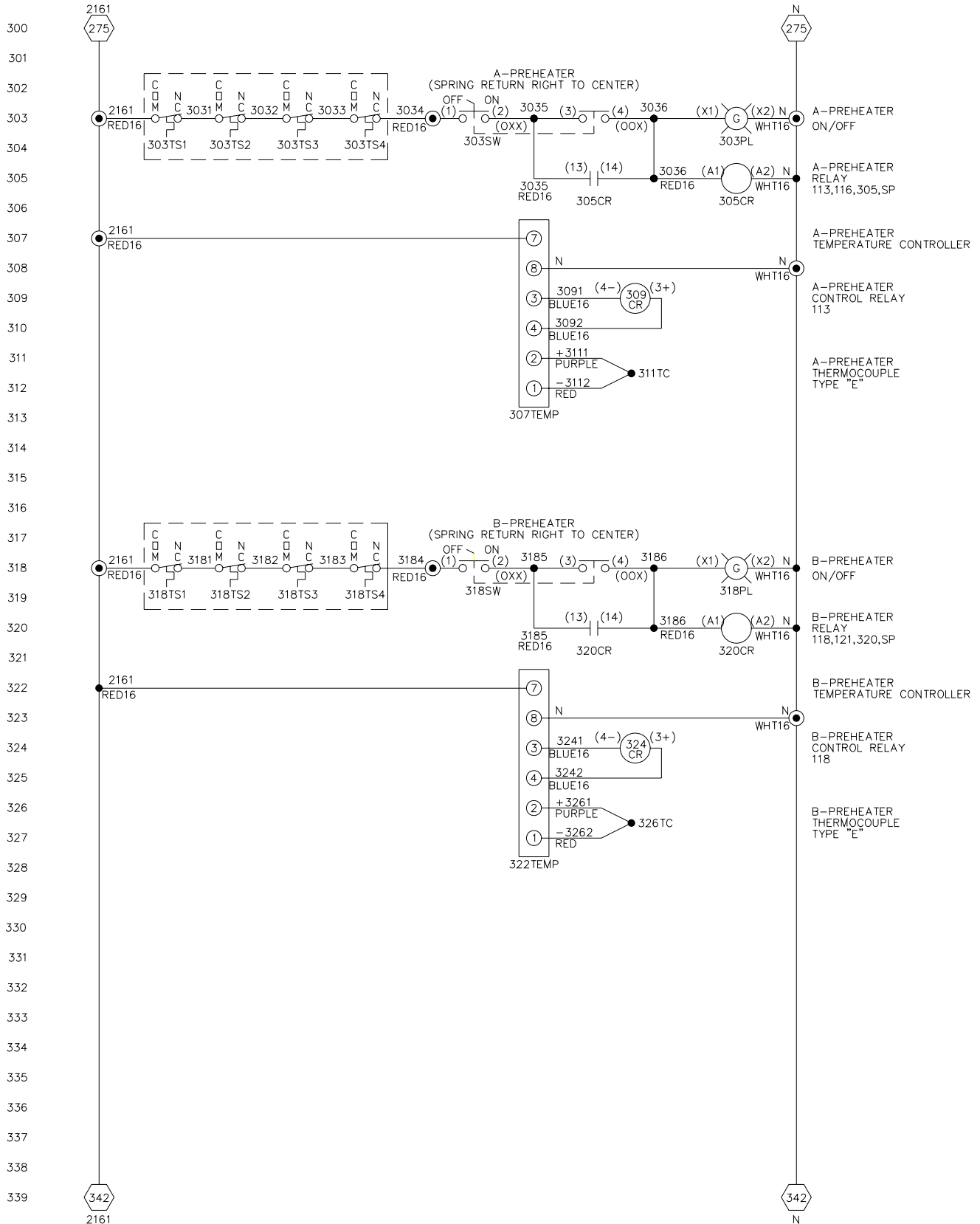


Figure 28. Electrical Schematic, 230 Volt, 3-Phase with 8KW Heaters, (Sheet 5 of 6)

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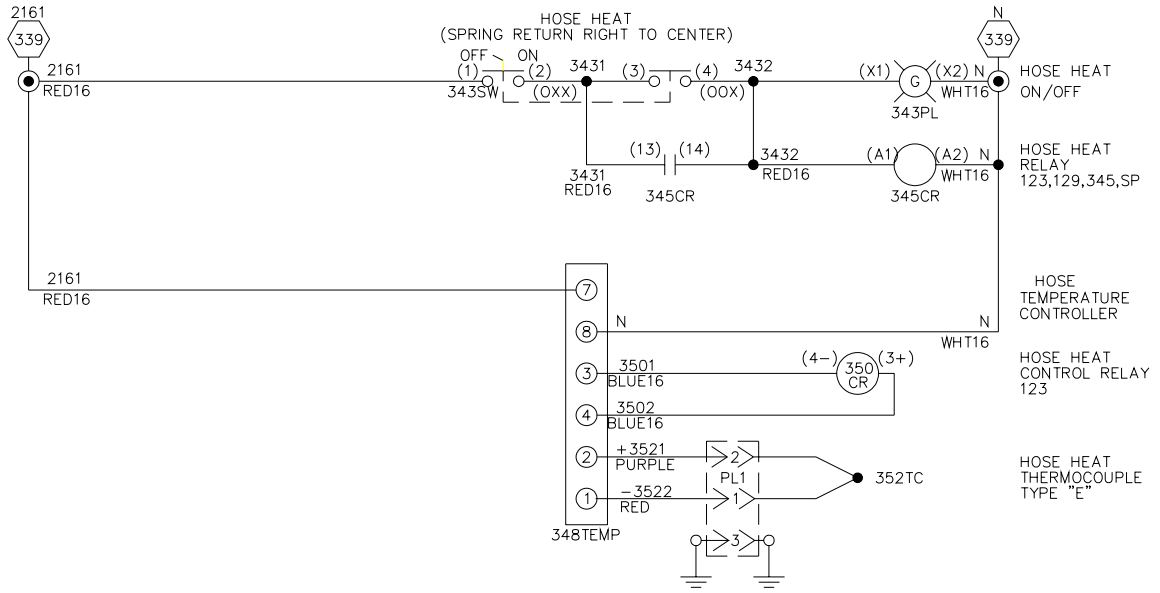


Figure 29. Electrical Schematic, 230 Volt, 3-Phase with 8KW Heaters, (Sheet 6 of 6)

380 Volt, 3-Phase

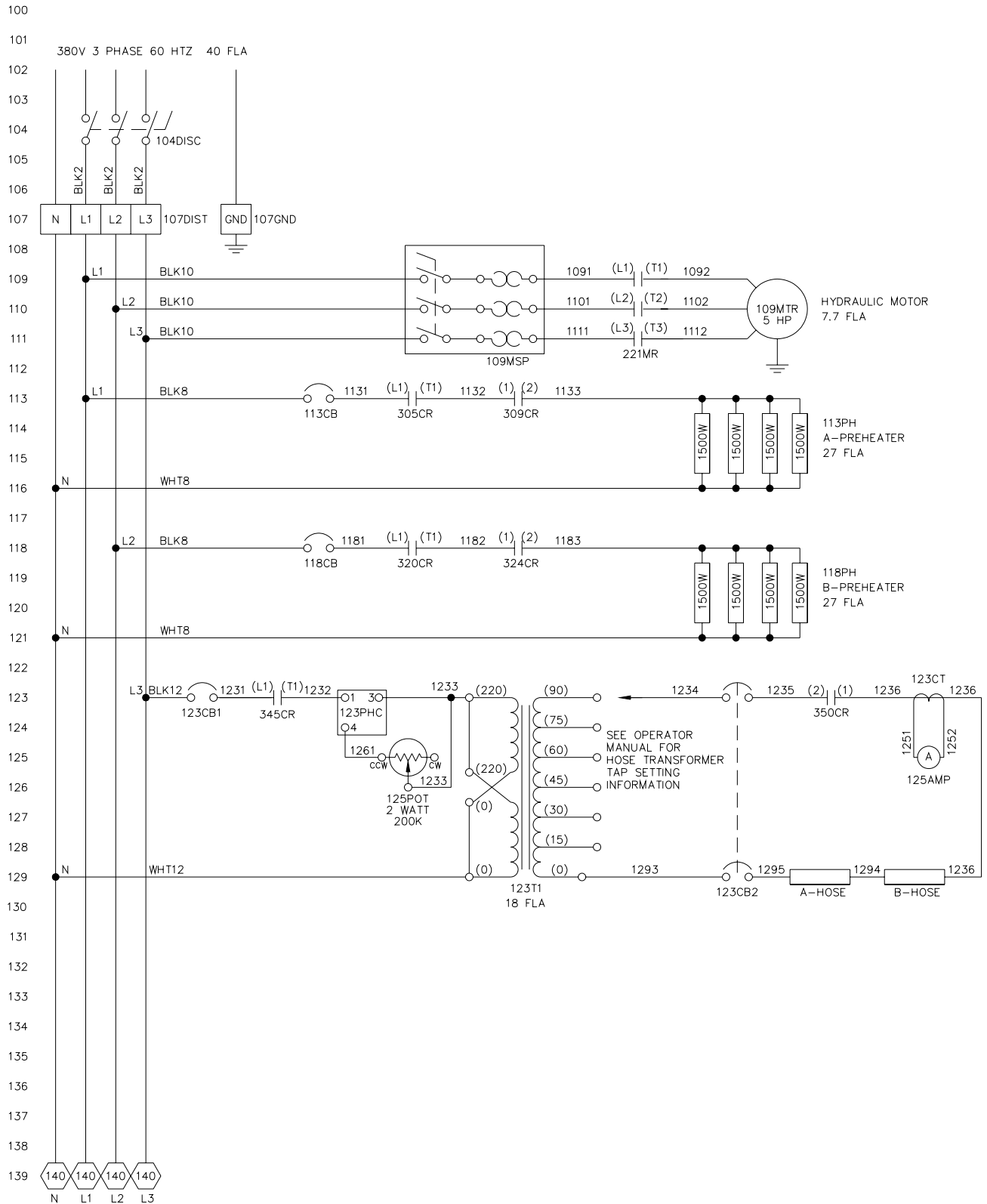


Figure 30. Electrical Schematic, 380 Volt, 3-Phase, (Sheet 1 of 6)

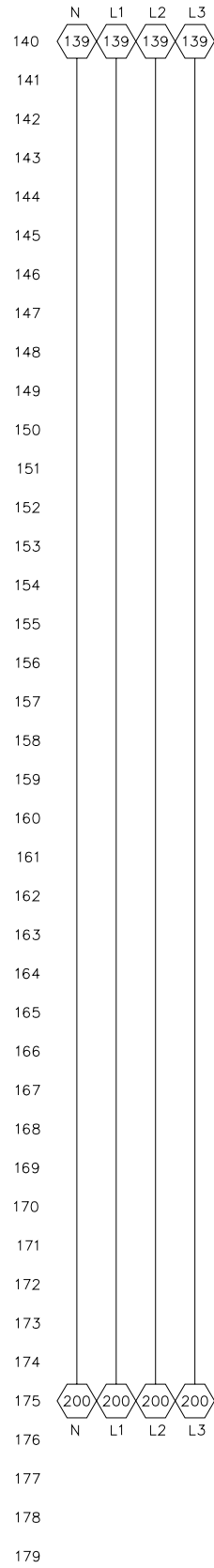


Figure 31. Electrical Schematic, 380 Volt, 3-Phase, (Sheet 2 of 6)

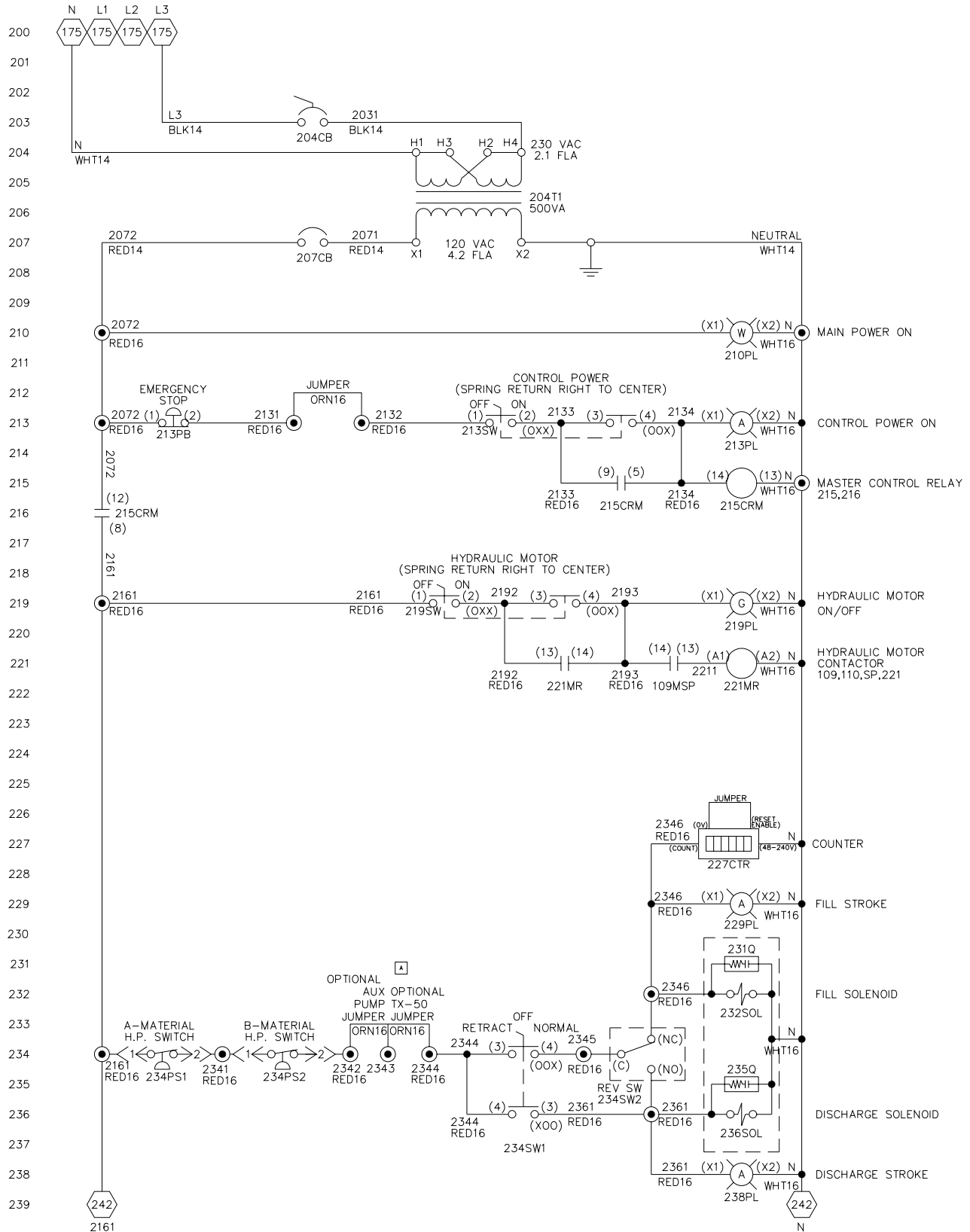


Figure 32. Electrical Schematic, 380 Volt, 3-Phase, (Sheet 3 of 6)

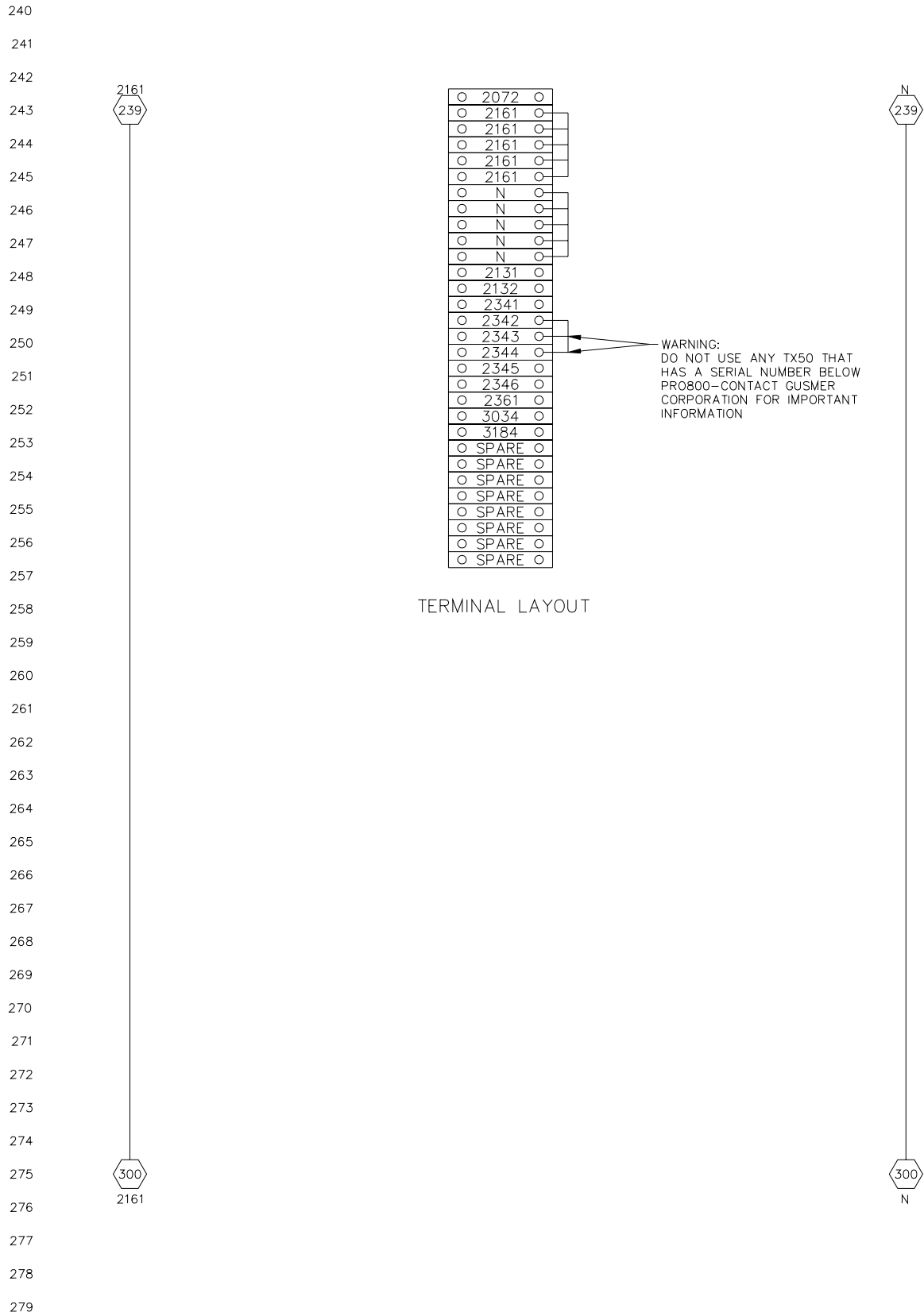


Figure 33. Electrical Schematic, 380 Volt, 3-Phase, (Sheet 4 of 6)

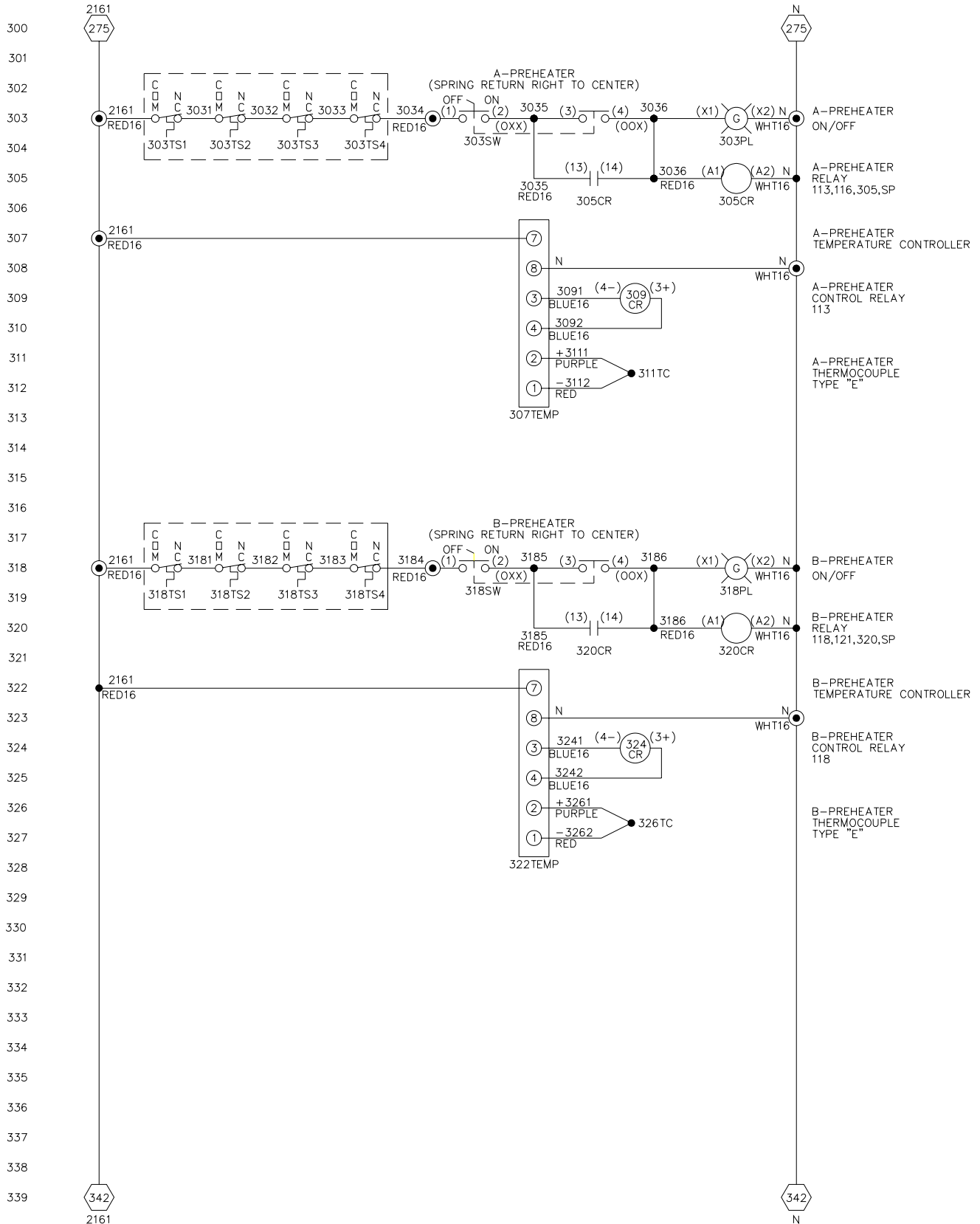


Figure 34. Electrical Schematic, 380 Volt, 3-Phase, (Sheet 5 of 6)

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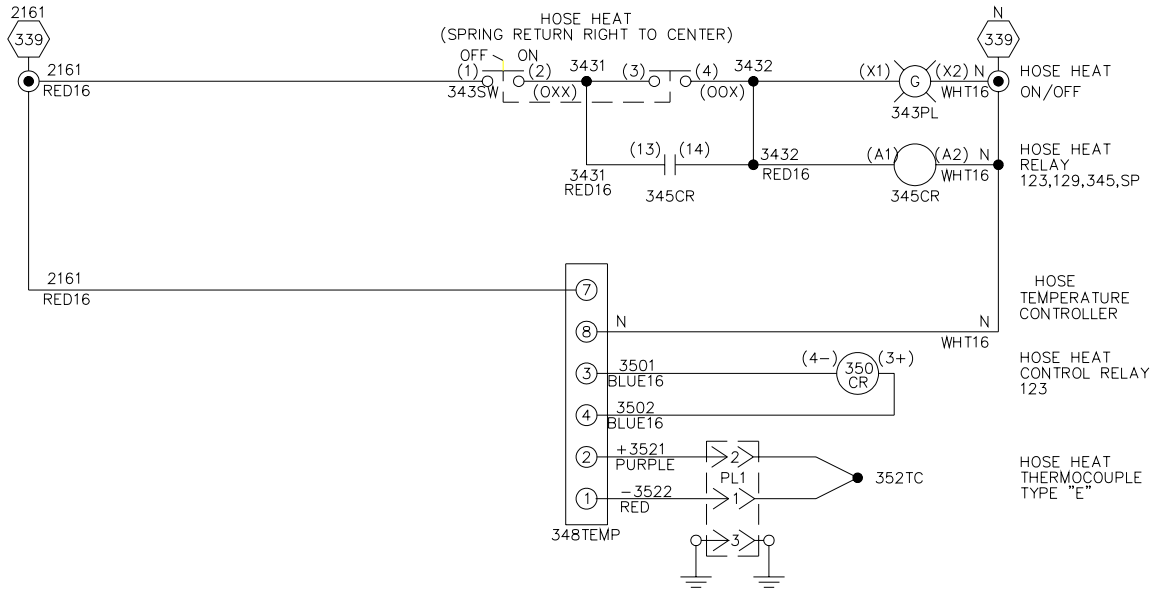


Figure 35. Electrical Schematic, 380 Volt, 3-Phase, (Sheet 6 of 6)

460 Volt, 3-Phase

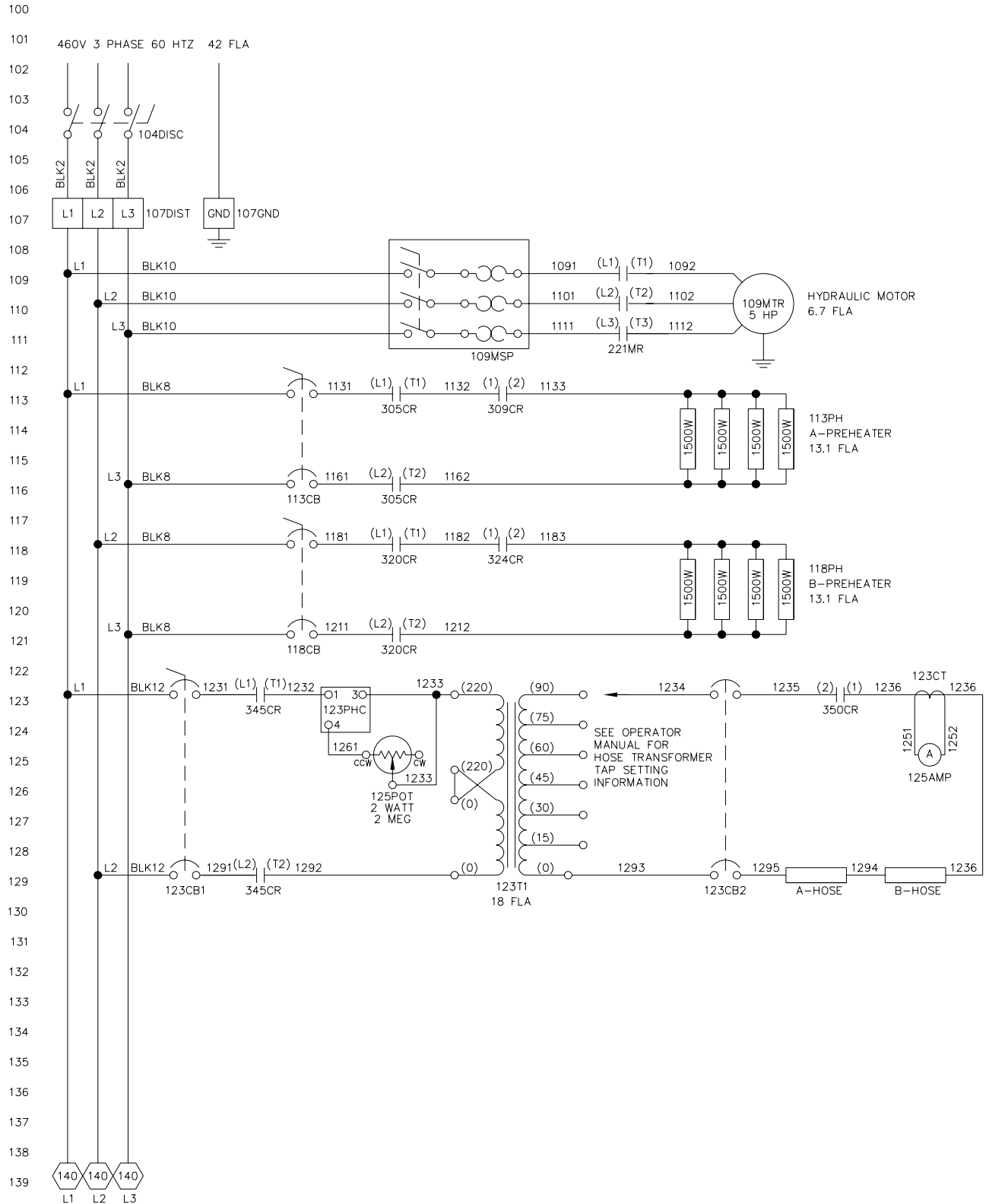


Figure 36. Electrical Schematic, 460 Volt, 3-Phase, (Sheet 1 of 6)

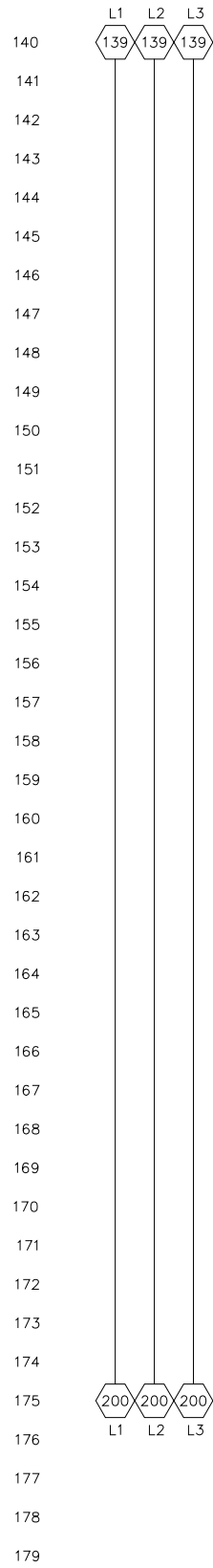


Figure 37. Electrical Schematic, 460 Volt, 3-Phase, (Sheet 2 of 6)

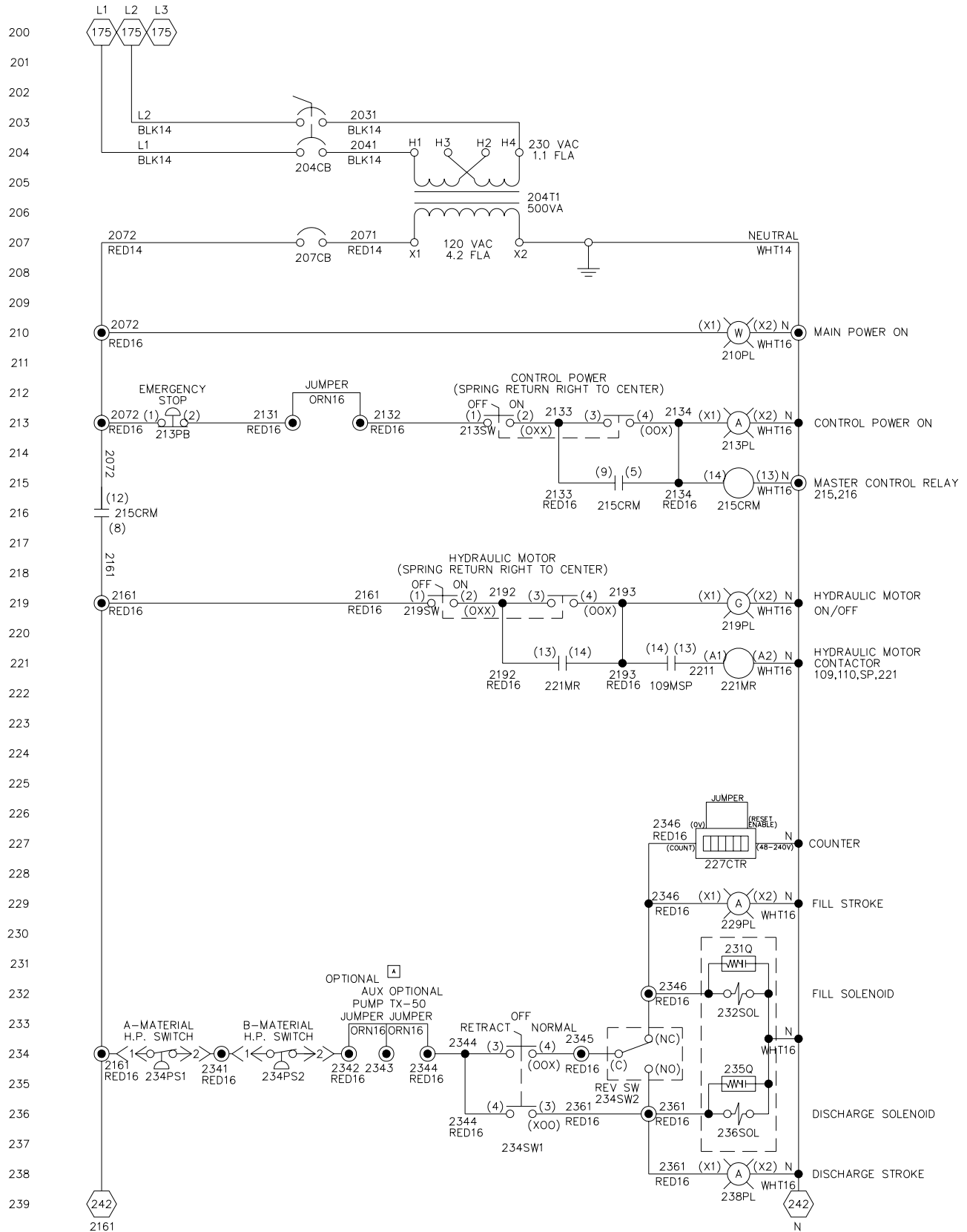


Figure 38. Electrical Schematic, 460 Volt, 3-Phase, (Sheet 3 of 6)

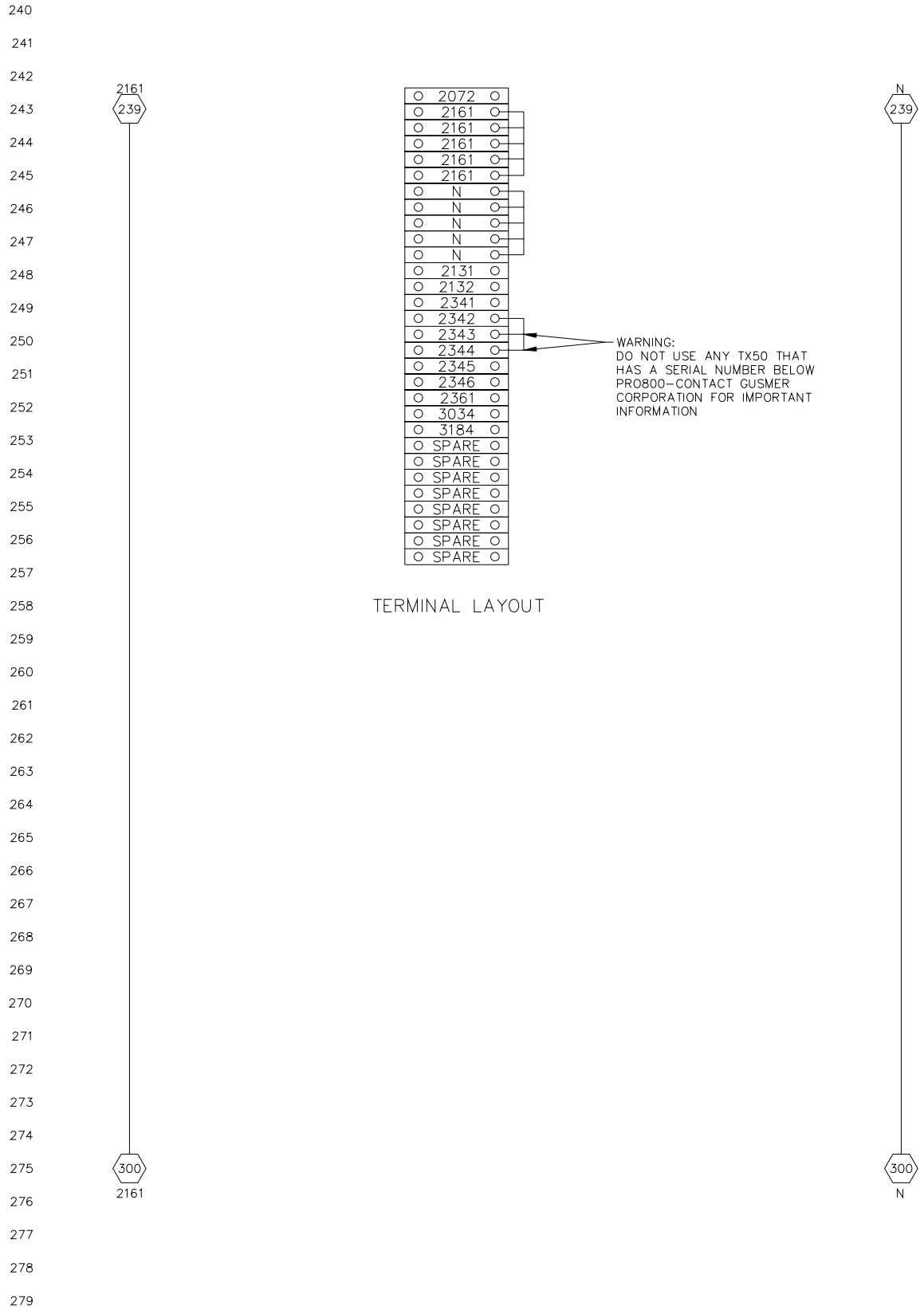


Figure 39. Electrical Schematic, 460 Volt, 3-Phase, (Sheet 4 of 6)

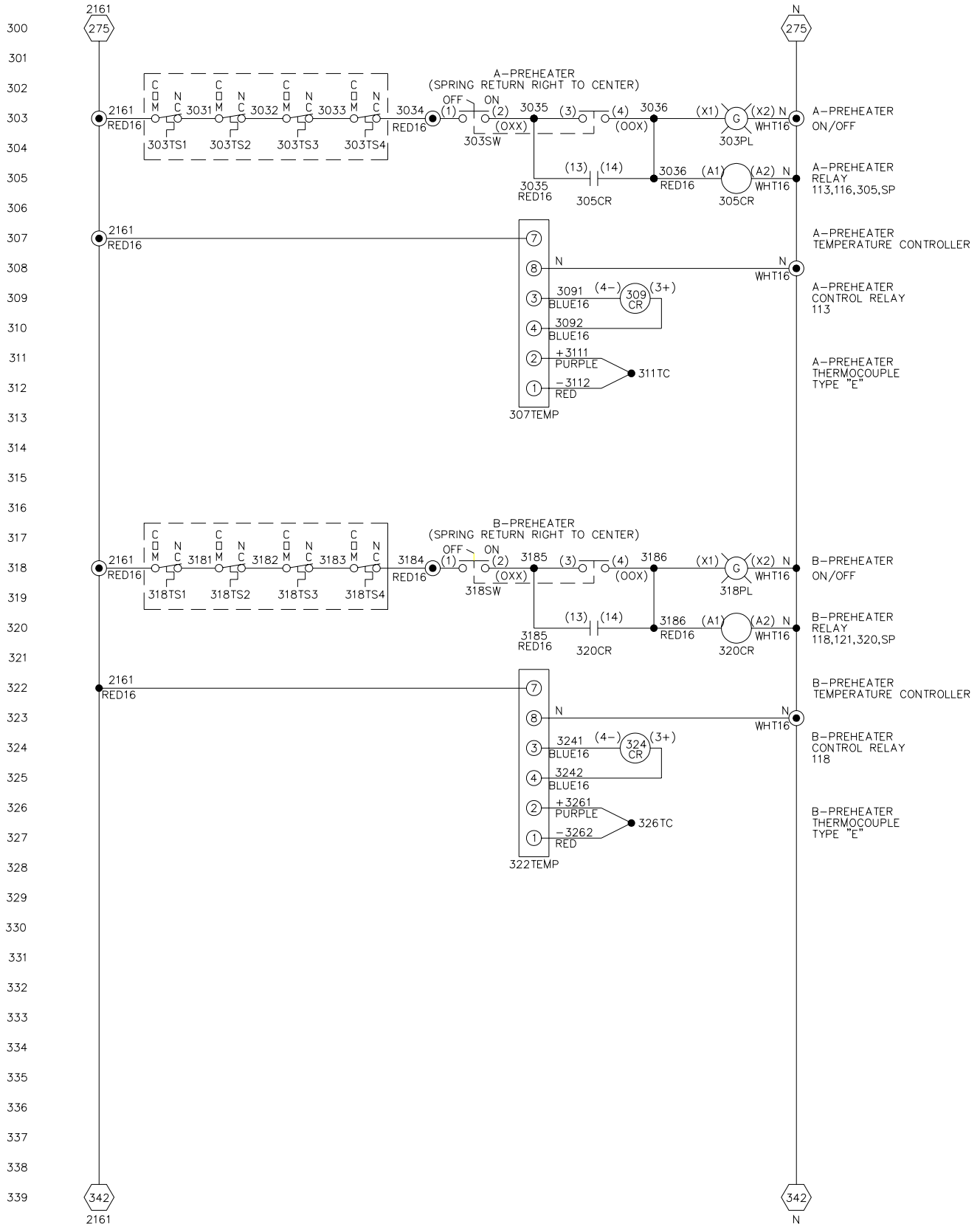


Figure 40. Electrical Schematic, 460 Volt, 3-Phase, (Sheet 5 of 6)

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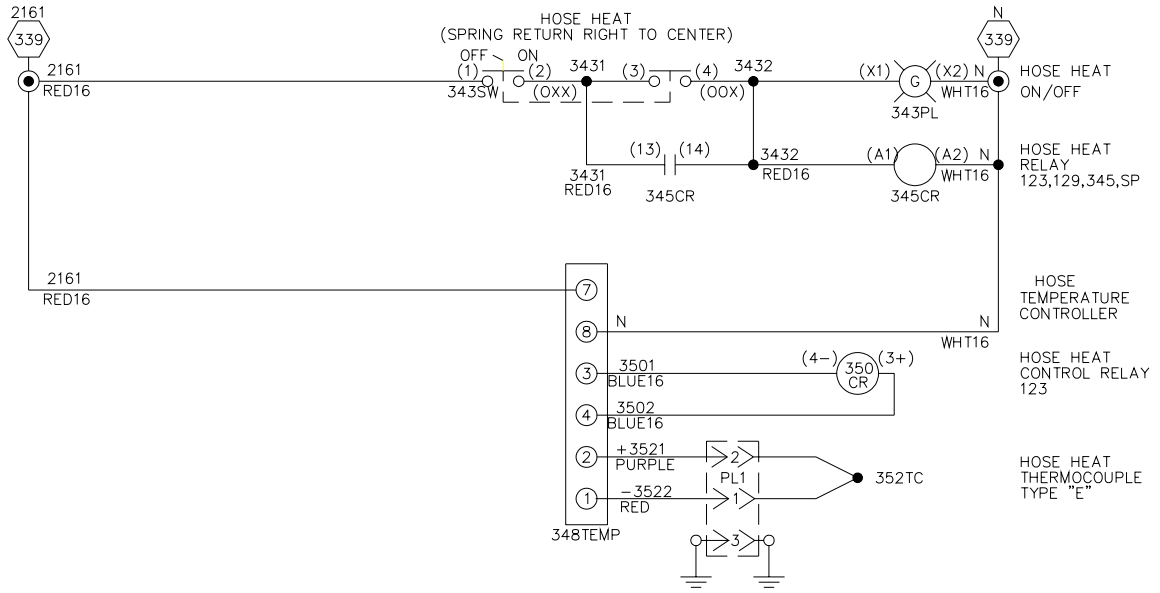


Figure 41. Electrical Schematic, 460 Volt, 3-Phase, (Sheet 6 of 6)

TABLE 9. ELECTRICAL SCHEMATIC, PARTS LIST

Reference Letter	Part Number	Description	Quantity
104DISC	6690-16-143	Disconnect	1
	6690-16-144	Disconnect Handle	1
107DIST	6690-20-10-3	3 Pole Terminal Block	1
107GND	1645-1-1	Ground Terminal Block	1
107N	6690-20-28-13	Neutral Terminal Block	3
109MSP			
	6690-27-89	Motor Circuit Protector (<i>1x230 60HZ</i>)	1
	6690-27-88	Motor Circuit Protector (<i>3x230V</i>)	1
	6690-27-82	Motor Circuit Protector (<i>3x380V; 3x460V</i>)	1
109MTR			
	6691-46	5HP 1 Phase 60Hz Motor (<i>1x220 60Hz</i>)	1
	6691-45	5HP Three Phase 50/60 Hz Motor (<i>3x230V; 3x380V; 3x460V</i>)	1
113CB			
	6690-25-22	Circuit Breaker for 6000Watt Heater (<i>1x220 60Hz</i>)	1
	6690-25-22	Circuit Breaker for 6000Watt Heater (<i>3x230V</i>)	1
	6690-25-21	Circuit Breaker for 6000Watt Heater (<i>3x380V</i>)	1
	6690-25-40	Circuit Breaker for 8000Watt Heater (<i>3 x 230V</i>)	1
	6690-25-59	Circuit Breaker for 6000W Heater (<i>3x460V</i>)	1
113PH			
	42300-8-220	1500 Watt Cartridge Heater (<i>1x220 60Hz</i>)	4
	42300-8-220	1500 Watt Cartridge Heater (<i>3x230V</i>)	4
	42300-8-220	1500 Watt Cartridge Heater (<i>3x380V</i>)	4
	14300-8	2000 Watt Cartridge Heater (<i>3x230V</i>)	4
	42300-8-460	1500 Watt Cartridge Heater (<i>3x460V</i>)	4
118CB			
	6690-25-22	Circuit Breaker for 6000W Heater (<i>1x220 60Hz</i>)	1
	6690-25-22	Circuit Breaker for 6000W Heater (<i>3x230V</i>)	1
	6690-25-21	Circuit Breaker for 6000W Heater (<i>3x380V</i>)	1
	6690-25-40	Circuit Breaker for 8000W Heater (<i>3x230V</i>)	1
	6690-25-59	Circuit Breaker for 6000W Heater (<i>3x460V</i>)	1
118PH			
	42300-8-220	1500 Watt Cartridge Heater (<i>1x220 60Hz</i>)	4
	42300-8-220	1500 Watt Cartridge Heater (<i>3x230V</i>)	4
	42300-8-220	1500 Watt Cartridge Heater (<i>3x380V</i>)	4
	14300-8	2000 Watt Cartridge Heater (<i>3x230V</i>)	4
	42300-8-460	1500 Watt Cartridge Heater (<i>3x460V</i>)	4
123CB1			
	6690-25-24	Circuit Breaker (<i>1x220 60Hz</i>)	1
	6690-25-24	Circuit Breaker (<i>3x230V</i>)	1
	6690-25-23	Circuit Breaker (<i>3x380V</i>)	1
	6690-25-60	Circuit Breaker (<i>3x460V</i>)	1
123CB2	6690-25-48	Circuit Breaker	1
123PHC			
	6690-26-18	Phase Controller (<i>1x220 60Hz</i>)	1
	6690-26-18	Phase Controller (<i>3x230V</i>)	1
	6690-26-18	Phase Controller (<i>3x380V</i>)	1
	6690-26-20	Phase Controller (<i>3x460V</i>)	1
123T1	6690-15-28	Multi-Tap Hose Transformer	1
123CT	6690-29-28-1	Ammeter Current Transformer	1

Reference Letter	Part Number	Description	Quantity
125POT			
	6690-5-17	Potentiometer (<i>1x220 60Hz</i>)	1
	6690-5-17	Potentiometer (<i>3x230V</i>)	1
	6690-5-17	Potentiometer (<i>3x380V</i>)	1
	6690-5-19	Potentiometer (<i>3x460V</i>)	1
125AMP	6690-29-28	Ammeter	1
204CB			
	6690-25-43	Circuit Breaker (<i>1x220 60Hz</i>)	1
	6690-25-43	Circuit Breaker (<i>3x230V</i>)	1
	6690-25-37	Circuit Breaker (<i>3x380V</i>)	1
	6690-25-61	Circuit Breaker (<i>3x460V</i>)	1
204T1	6690-15-27	120VAC Control Transformer	1
207CB	6690-25-36	Circuit Breaker	1
210PL	6690-19-15-17	Light Base	1
	6690-19-15-19	Pilot Light	1
	6690-19-15-11	Mounting Latch	1
	6690-19-15-20	130V Incandescent Bulb	1
	6690-19-15-14	Clear Lens	1
213PB	6690-16-67	Red Mushroom Head Switch	1
	6690-19-15-11	Mounting Latch	1
	6690-16-59-1	Switch Block	1
	6690-16-60-1	Switch Block	1
213SW	6690-16-145	Amber Switch	1
	6690-19-15-11	Mounting Latch	1
	6690-16-59-1	Switch Block	1
	6690-16-60-1	Switch Block	1
213PL	6690-19-15-17	Light Base	1
	6690-19-15-20	130V Incandescent Bulb	1
215CRM	6690-1-57	Relay	1
	6690-1-58	Relay Base	1
219SW	6690-16-146	Green Lens	1
	6690-19-15-11	Mounting Latch	1
	6690-16-59-1	Switch Block	1
	6690-16-60-1	Switch Block	1
219PL	6690-19-15-17	Light Base	1
	6690-19-15-20	130V Incandescent Bulb	1
221MR	6690-27-38	Contactactor (<i>1x220 60Hz</i>)	1
	6690-27-68	Contactactor (<i>3x230V; 3x380V; 3x460V</i>)	1
227CTR	6690-29-27	Digital Counter	1
229PL	6690-19-15-17	Light Base	1
	6690-19-15-19	Pilot Light	1
	6690-19-15-11	Mounting Latch	1
	6690-19-15-20	130V Incandescent Bulb	1
	6690-19-15-15	Amber Lens	1
231Q	6690-21-1	Quencharc	1
232SOL	6311-116-110-1	120VAC Coil	1
234PS1	6690-16-107	Pressure Switch	1
	6690-16-764700R	Pressure Switch	1
	6690-16-76-1	Din Connector	1
234PS2	6690-16-107	Pressure Switch	1
	6690-16-764700R	Pressure Switch	1

Reference Letter	Part Number	Description	Quantity
	6690-16-76-1	Din Connector	1
234SW1	6690-16-109	3 Position Switch	1
	6690-19-15-11	Mounting Latch	1
	6690-16-59-1	Switch Block	1
234SW2	0578A	Replacement Micro-Switch	1
235Q	6690-21-1	Quencharc	1
236SOL	6311-116-110-1	120VAC Coil	1
238PL	6690-19-15-17	Light Base	1
	6690-19-15-19	Pilot Light with out Lens	1
	6690-19-15-11	Mounting Latch	1
	6690-19-15-20	130V Incandescent Bulb	1
	6690-19-15-15	Amber Lens	1
303TS1	6690-7-26	Over Temperature Safety Switch	1
303TS2	6690-7-26	Over Temperature Safety Switch	1
303TS3	6690-7-26	Over Temperature Safety Switch	1
303TS4	6690-7-26	Over Temperature Safety Switch	1
303SW	6690-16-146	Green Switch	1
	6690-19-15-11	Mounting Latch	1
	6690-16-59-1	Switch Block	1
	6690-16-60-1	Switch Block	1
303PL	6690-19-15-17	Light Base	1
	6690-19-15-20	130V Incandescent Bulb	1
305CR	6690-27-68	Contactora	1
307TEMP	6690-26-22-3	Temperature Controller	1
309CR	6690-1-55	Solid State Relay	1
311TC		Thermocouple	1
318TS1	6690-7-26	Over Temperature Safety Switch	1
318TS2	6690-7-26	Over Temperature Safety Switch	1
318TS3	6690-7-26	Over Temperature Safety Switch	1
318TS4	6690-7-26	Over Temperature Safety Switch	1
318SW	6690-16-146	Green Lens	1
	6690-19-15-11	Mounting Latch	1
	6690-16-59-1	Switch Block	1
	6690-16-60-1	Switch Block	1
318PL	6690-19-15-17	Light Base	1
	6690-19-15-20	130V Incandescent Bulb	1
320CR	6690-27-68	Contactora	1
322TEMP	6690-26-22-3	Temperature Controller	1
324CR	6690-1-55	Solid State Relay	1
326TC		Thermocouple	1
343SW	6690-16-146	Green Lens	1
	6690-19-15-11	Mounting Latch	1
	6690-16-59-1	Switch Block	1
	6690-16-60-1	Switch Block	1
343PL	6690-19-15-17	Light Base	1
	6690-19-15-20	130V Incandescent Bulb	1
345CR	6690-27-68	Contactora	1
348TEMP	6690-26-22-3	Temperature Controller	1
350CR	6690-1-46	Solid State Relay	1
352TC		TSU	1
	18650-7	TSU Replacement Plug Assembly	1

Field Number	Field Title	Description
1	Date	Enter date report is submitted.
2	Name	Enter name of person making report.
3	IM Number	Enter the Part Number of the Instruction Manual from the title page.
4	Issue Number	Enter the Issue number of the Instruction Manual from the title page. If there is no issue number, enter NONE .
5	Date of Issue	Enter the date of Issue of the Instruction Manual from the title page. If there is no issue date, enter NONE .
6	Page Number	Enter the page number containing the discrepancy.
7	Discrepancy	Provide a brief description of discrepancy.

NOTE: You may send a marked copy of the page as an attachment to your submittal.

PUMPLINE ASSEMBLY

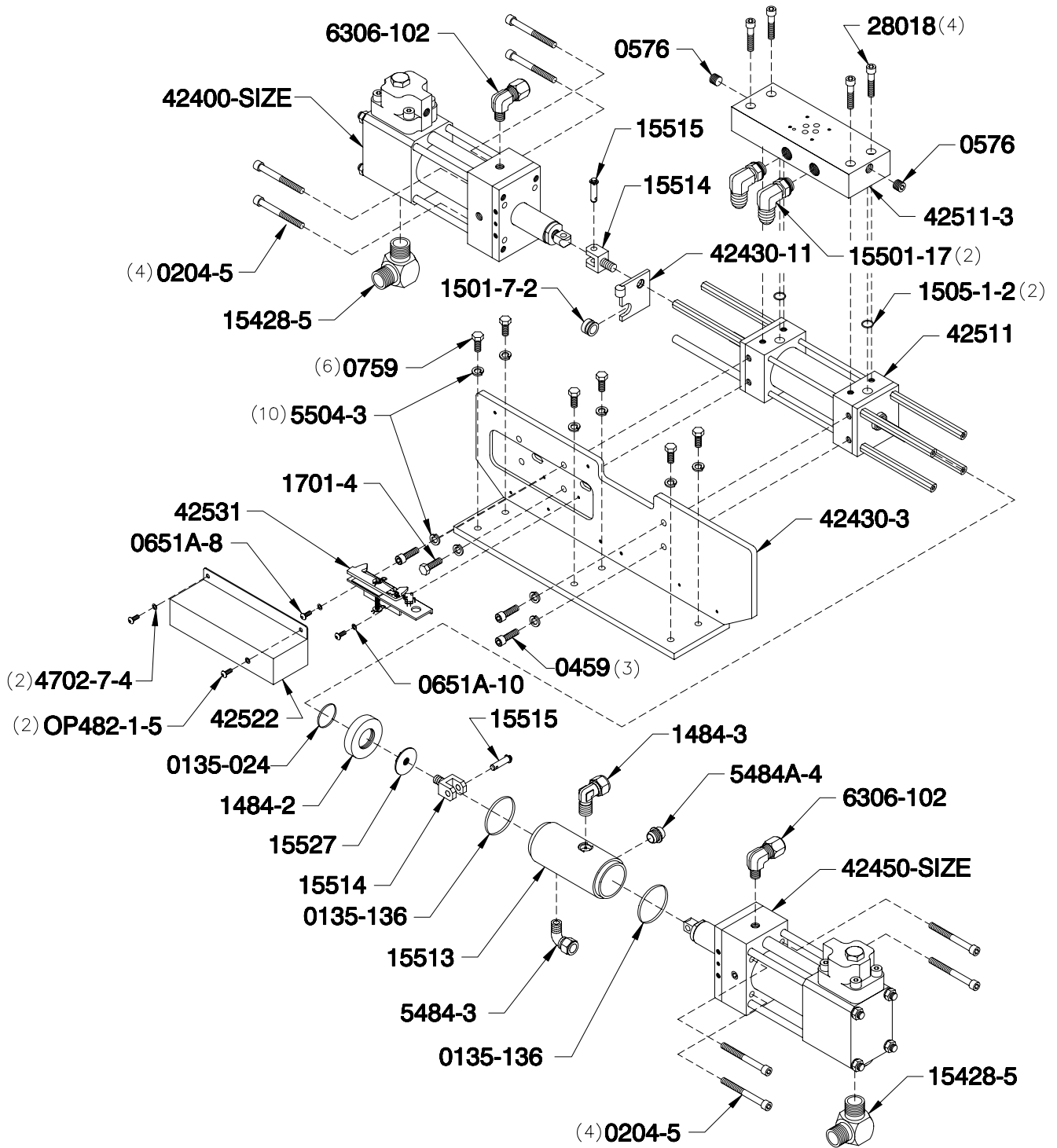


Figure 4. Pumpline Assembly (Part No. 42430-SIZE), Exploded View

TABLE 3. PUMPLINE ASSEMBLY (PART NO. 42430-SIZE), PARTS

Part Number	Description	Quantity
0135-024	O-Ring	1
0135-136	O-Ring	2
0204-5	Socket Head Cap Screw	8
0459	Socket Head Cap Screw	3
0576	Flush Seal Pipe Plug	2
0651A-8	Pan Head Machine Screw	2
0651A-10	Lockwasher	2
0759	Hex Head Cap Screw	6
1484-2	Lube Cylinder Adapter Plate	1
1484-3	Male Elbow	1
1501-7-2	Bronze Bushing	1
1505-1-2	O-Ring	2
1701-4	Hex Head Cap Screw	1
4702-7-4	Lockwasher	2
5484-3	Lube Hose Fitting	1
5484A-4	Polyethylene Pipe Plug	1
5504-3	Helical Lockwasher	10
6306-102	Tube Elbow	2
15428-5	Male Elbow	2
15501-17	O-Ring Elbow	2
15513	Iso Lube Cylinder	1
15514	Hydraulic Cylinder Clevis	2
15515	Clevis Pin	2
15527	Jam Nut/Baffle	1
28018	Socket Head Cap Screw	4
42400-SIZE	Resin Proportioning Pump Assembly (See page 16)	1
42430-3	Pump Mounting L-Bracket	1
42430-11	Activator Plate	1
42450-SIZE	Iso Proportioning Pump Assembly (See page 16)	1
42511	Hydraulic Cylinder with Spacers	1
42511-3	Hydraulic Manifold	1
42522	Reversing Switch Cover	1
42531	Reversing Switch Assembly	1
OP482-1-5	Button Head Cap Screw	2