

REPAIR PART LISTING
for
MODEL TMAD121 CONTROL CABINETS
for
DC ELECTRIC TORQUE MANAGEMENT SYSTEMS



This symbol is to alert the user and service personnel to the presence of uninsulated dangerous voltage that will cause a risk of electric shock.



This symbol is to alert the user and service personnel to the presence of important operating instructions that must be read and understood to prevent personal injury, electrical shock or damage to the equipment.

NOTICE

SAVE THESE INSTRUCTIONS. DO NOT DESTROY.

WARNING

READ ALL INSTRUCTIONS BEFORE OPERATING THIS UNIT.

Electrical repairs should be attempted only by authorized trained repair person. Consult your service center listing for your nearest Ingersoll-Rand authorized service center.

For safe operation, the following procedure must be followed:

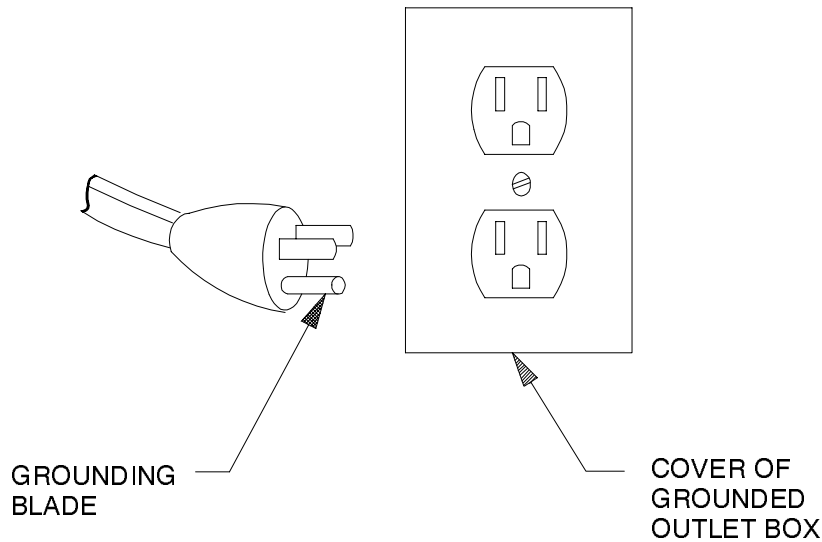
1. **Keep work area clean.**
Cluttered areas and benches invite injuries.
2. **Consider work area environment.**
Don't expose the Controller to water.
Keep the work area well lighted.
3. **Guard against electric shock.**
Prevent body contact with grounded surfaces, such as pipes, metal structures or other electrical products.
4. **Keep bystanders away.**
Do not permit unauthorized personnel to operate this Controller.
5. **Store idle tools.**
When not in use, the Controller should be stored in a dry and secured area.
6. **Don't abuse the cord.**
Never carry a Controller by its cord or yank the cord of the Controller to disconnect it from a receptacle. Keep the cord away from heat, oil, solvent and sharp edges.
7. **Maintain Controller with care.**
Inspect Controller cord periodically and if damaged, have it repaired by an authorized service facility.



GROUNDING INSTRUCTIONS

The Controller should be grounded to protect the operator from electric shock. The Controller is equipped with a three-conductor cord and three-prong grounding type plug to fit the proper grounding-type receptacle. The green (or green and yellow) conductor in the cord is the grounding wire. Never connect the green (or green and yellow) wire to a live terminal. Your unit is to be used on a 115 VAC, 60Hz, three prong outlet as shown. **DO NOT** use with a two prong plug outlet and an adapter. Always have a qualified electrician check that the outlet ground is operating properly before using the unit.

GROUNDING RECEPTACLE FOR TMAD CONTROLLER BOXES

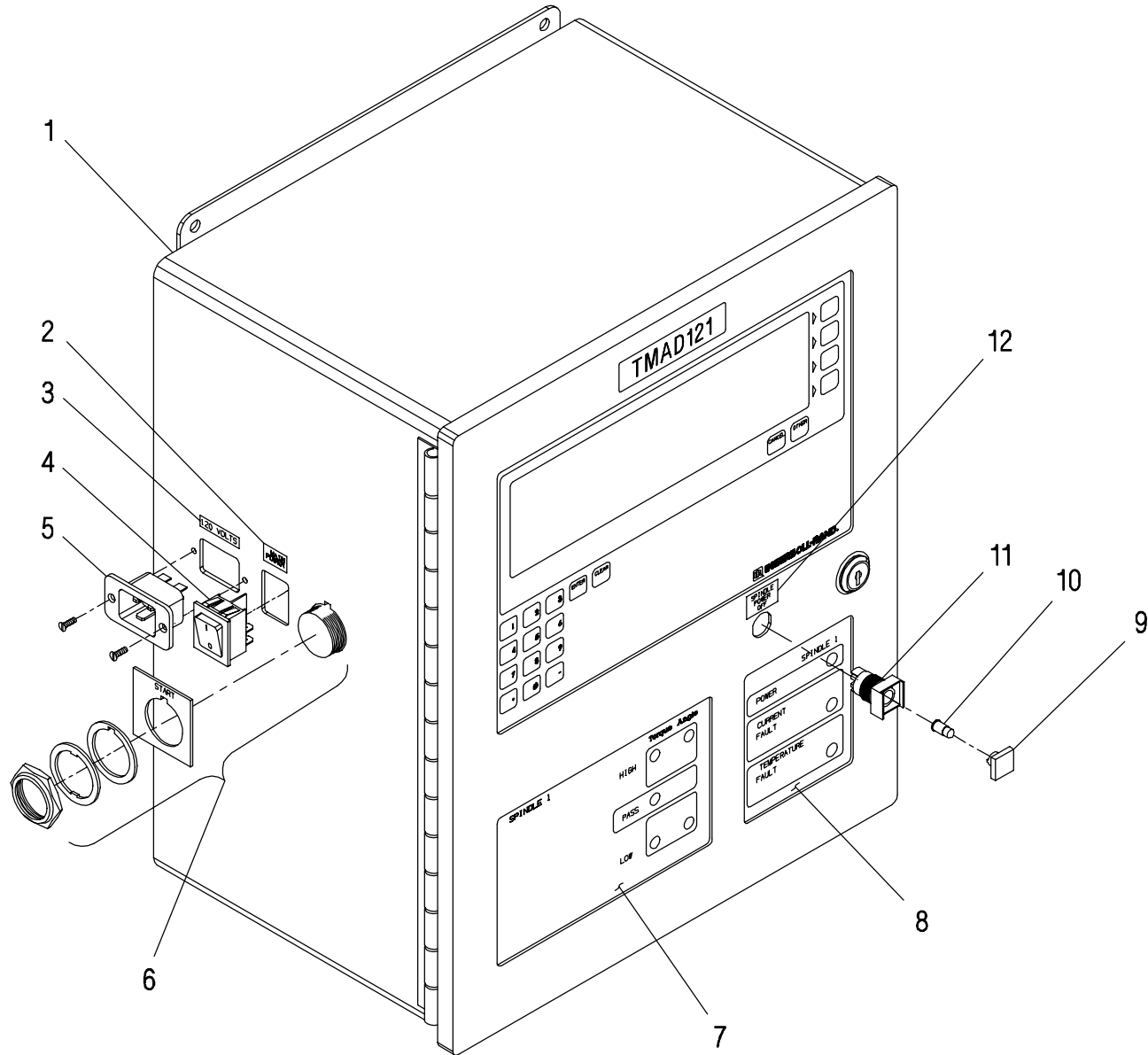


(Dwg. TPD1501)

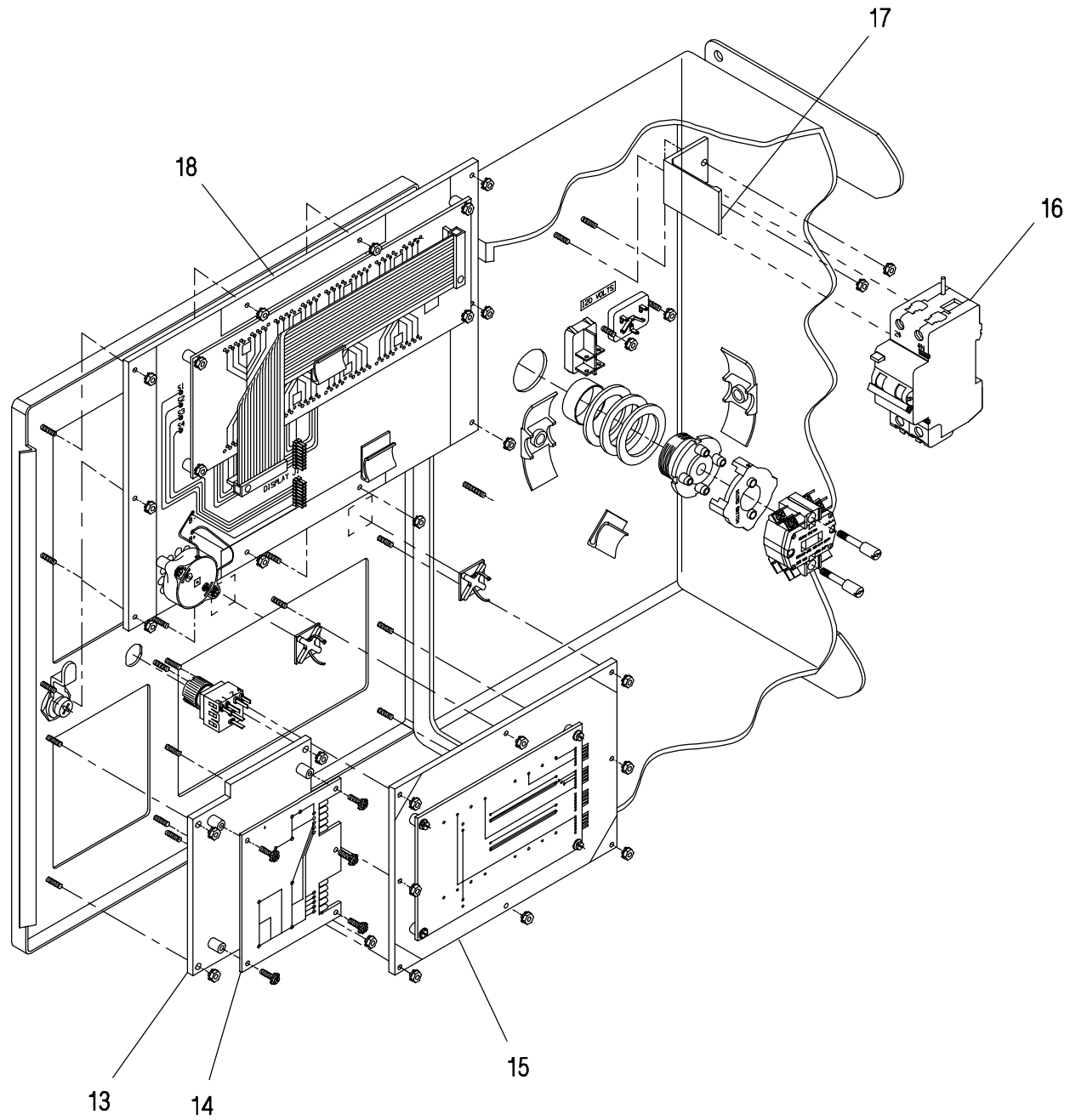
WARNING

Use only three-wire extension cords that have three-prong grounding-type plugs and three-pole receptacles that accept the Controller's plug. Replace or repair damaged cords. The use of other than genuine Ingersoll-Rand replacement parts may result in decreased tool performance and increased maintenance, and may invalidate all warranties. It is the responsibility of the employer to place the information in this manual into the hands of the operator.

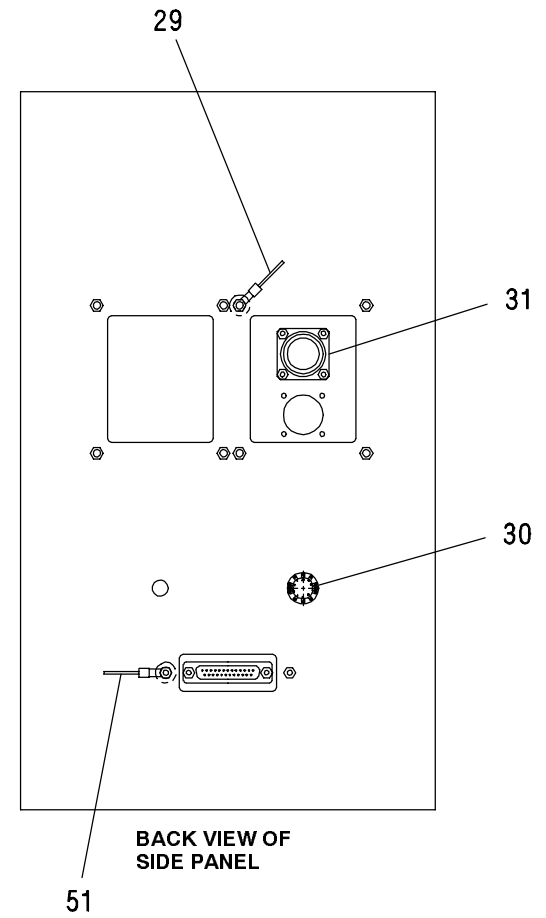
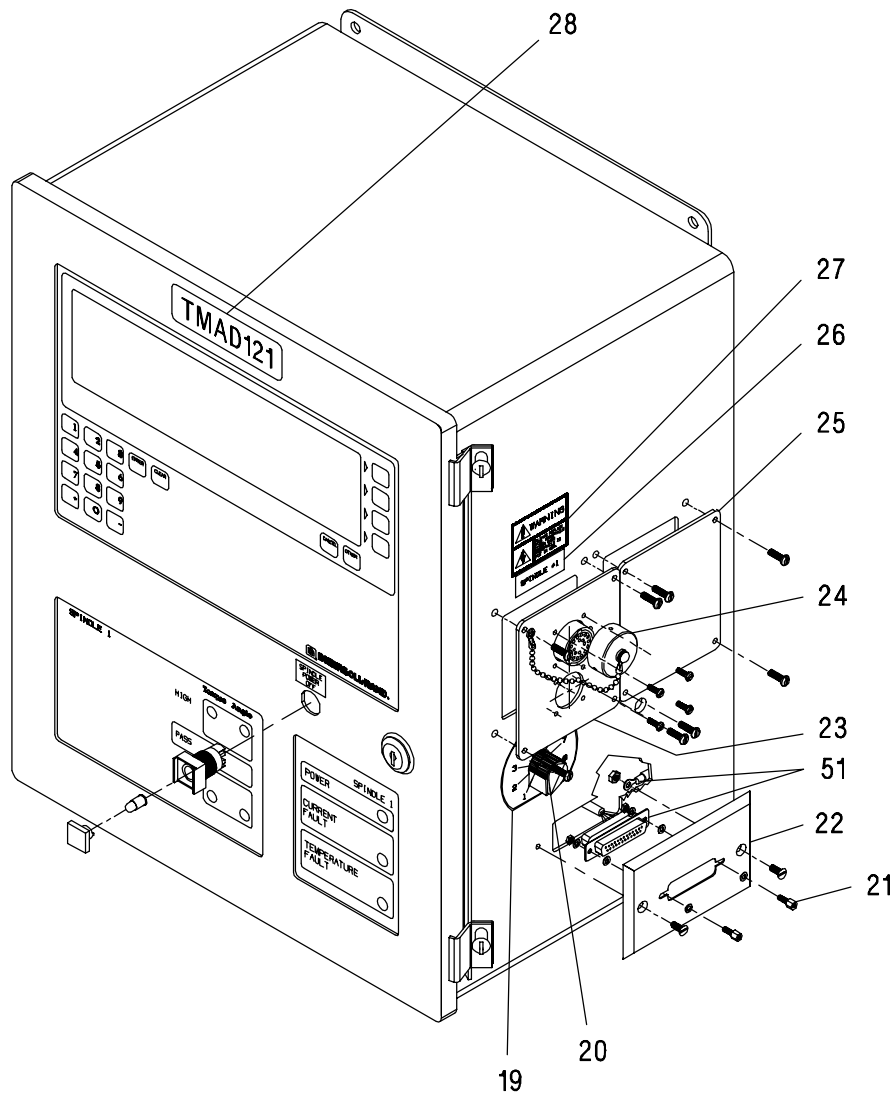
TMAD121 SINGLE WRENCH CABINET ASSEMBLY



TMAD121 SINGLE WRENCH CABINET ASSEMBLY

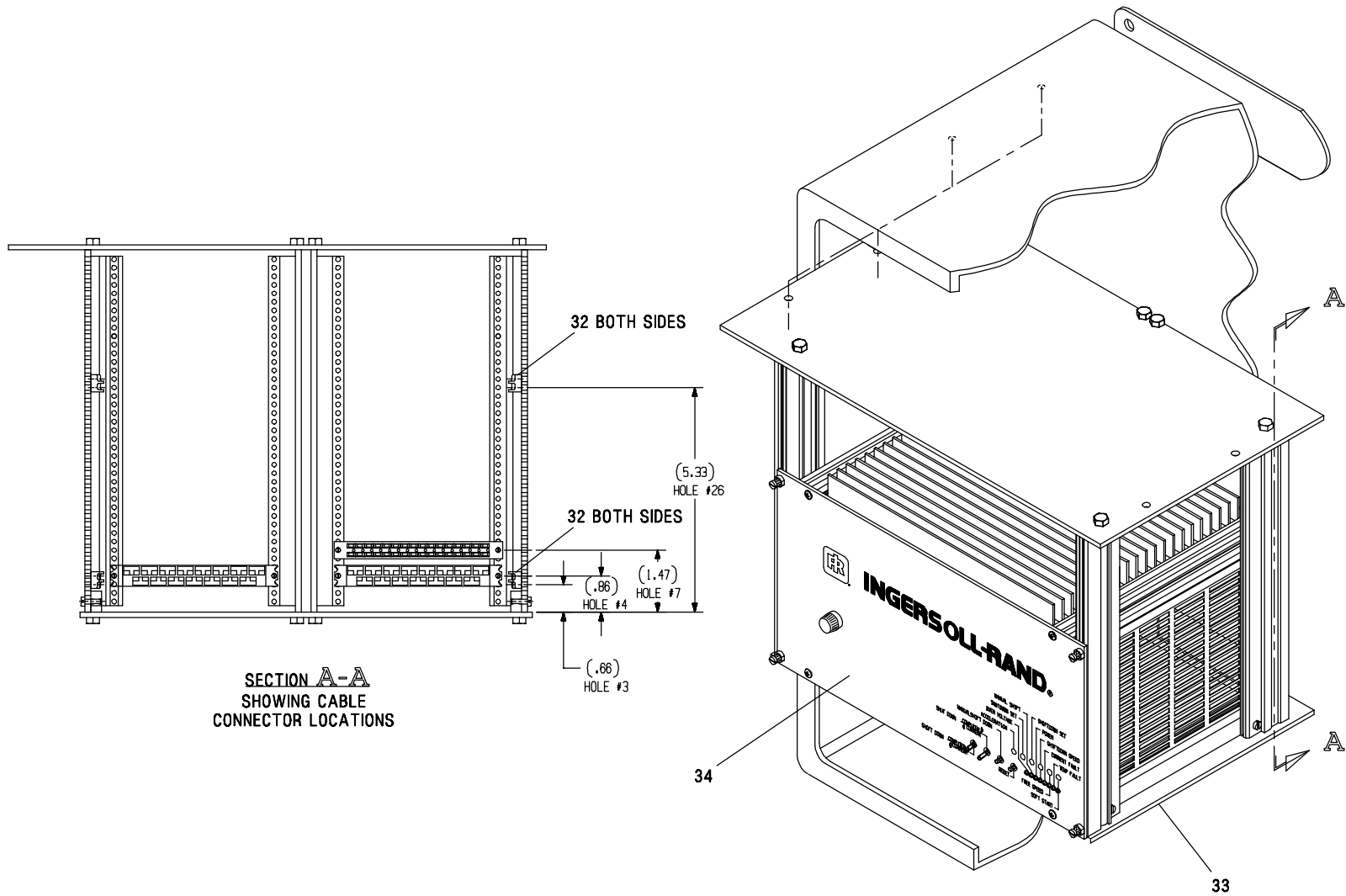


TMAD121 SINGLE WRENCH CABINET ASSEMBLY



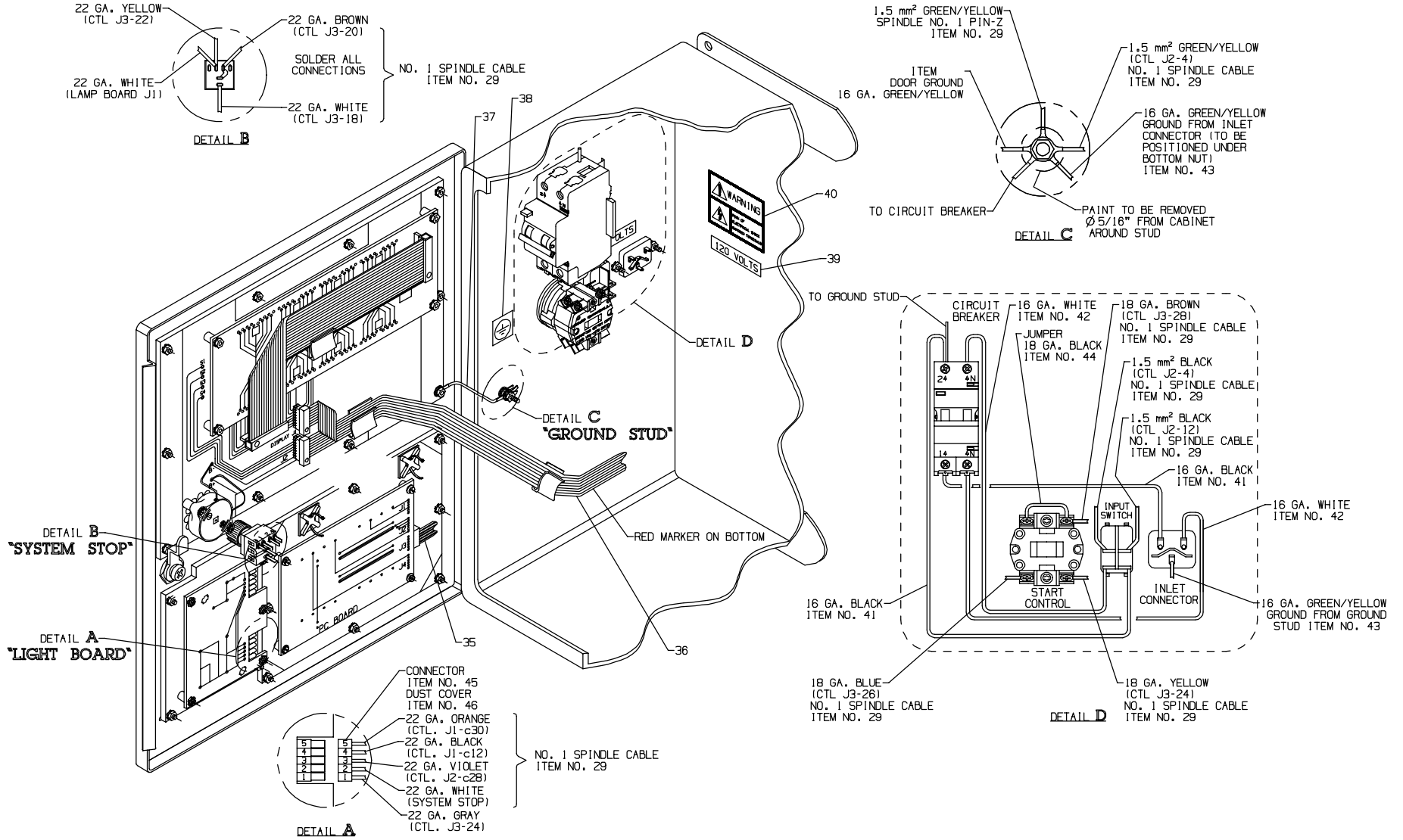
(Dwg. TPB1012)

TMAD121 SINGLE WRENCH CABINET ASSEMBLY



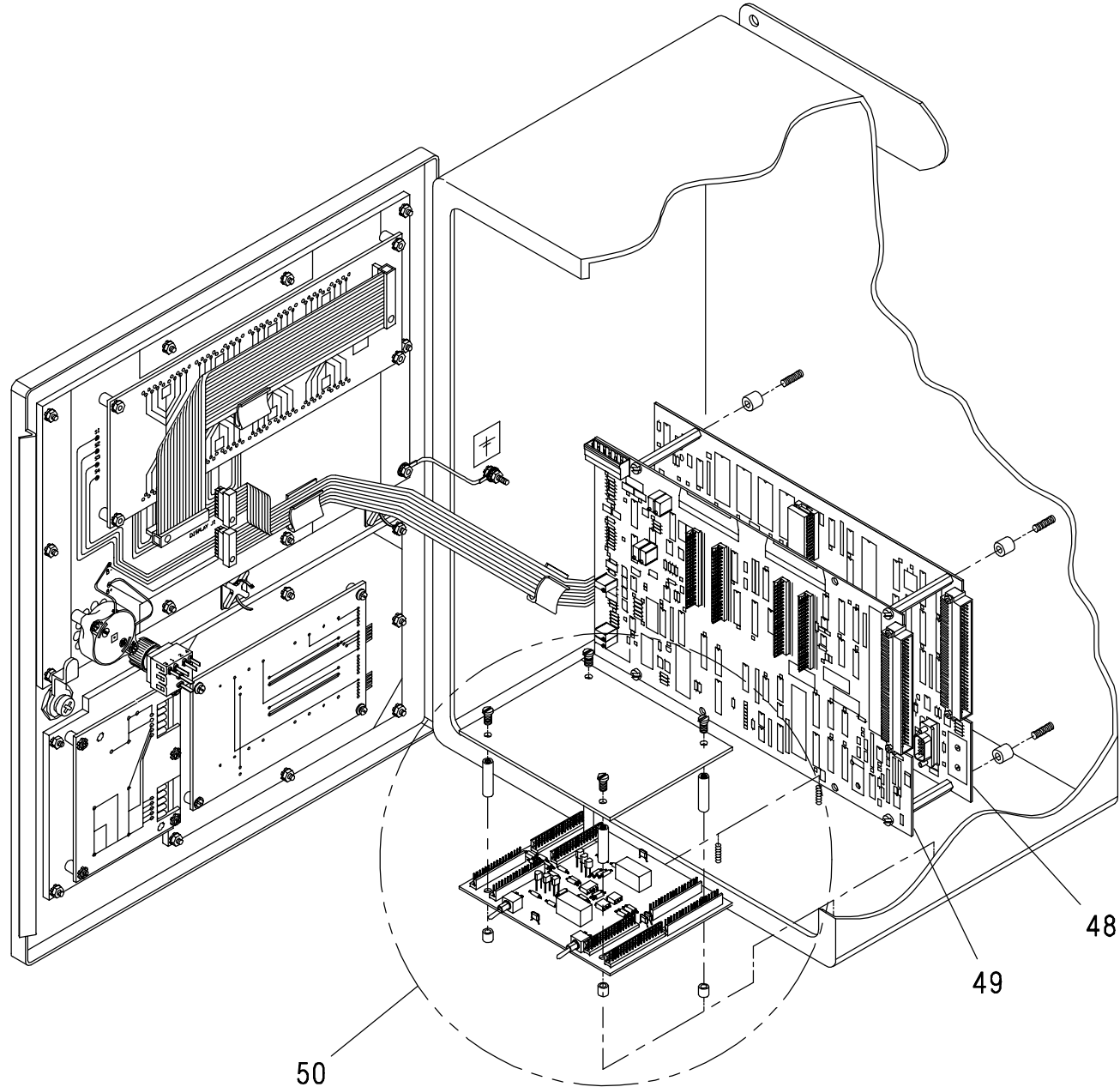
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TMAD121 SINGLE WRENCH CABINET ASSEMBLY

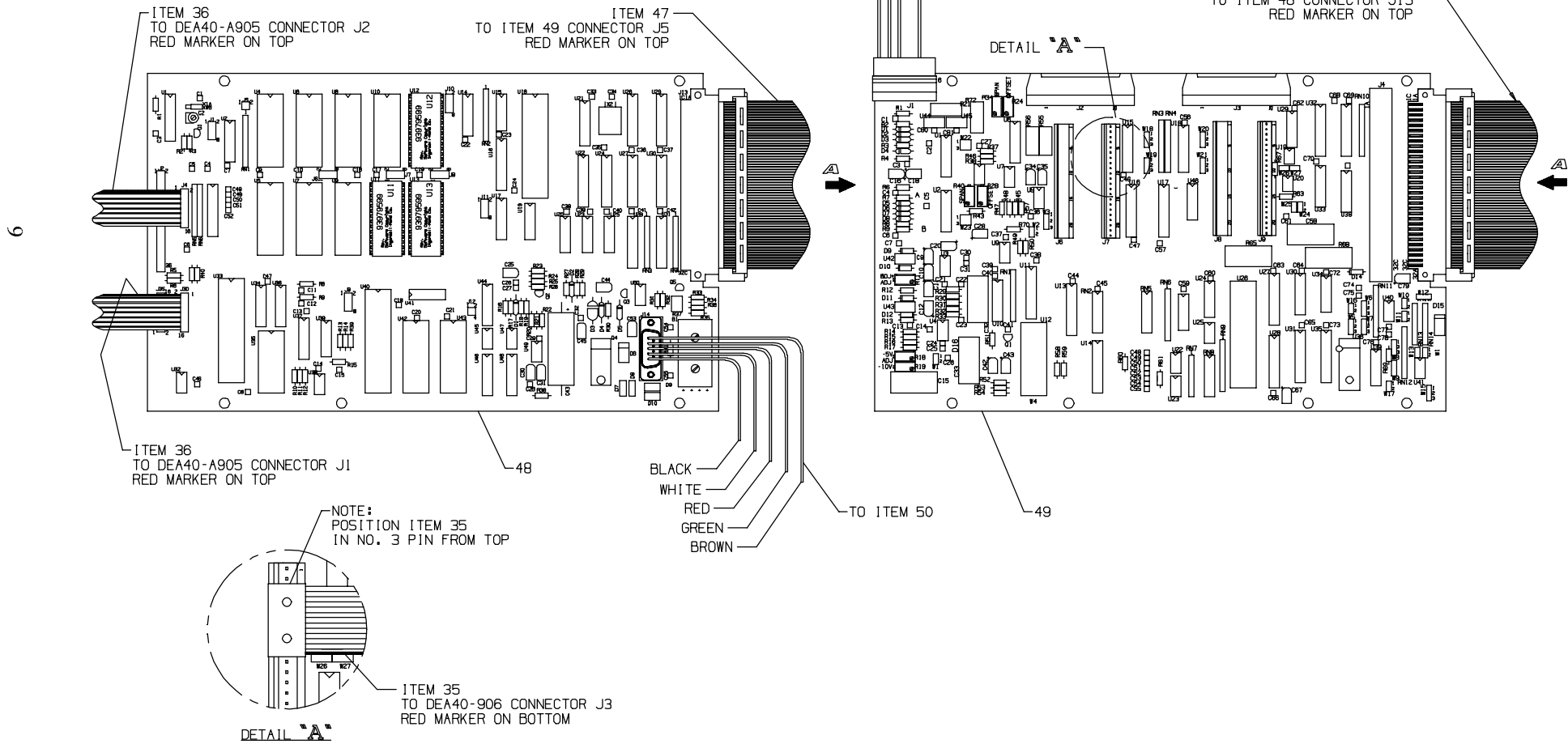


(Dwg. TPB1014)

TMAD121 SINGLE WRENCH CABINET ASSEMBLY



TMAD121 SINGLE WRENCH CABINET ASSEMBLY



(Dwg. TPB1016)

PART NUMBER FOR ORDERING



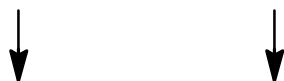
PART NUMBER FOR ORDERING



	Control Cabinet (complete) (for one wrench hook-up)	TMAD121-A	TMAD121-B	27	Label	DEA40-883	DEA40-883
1	Cabinet Assembly	DEA120-A850-1	DEA120-A850-1	28	Label	DEA120-893-1	DEA120-893-1
2	Label	DEA40-881	DEA40-881	29	Cable	DEA120-966	DEA120-996
3	Label	DEA40-875	DEA40-875	30	Switch	DEA40-884-10	DEA40-884-10
4	Input Switch	DEA40-862	DEA40-862	31	Receptacle	DEA40-967	DEA40-967
5	Connector	DEA40-861	DEA40-861	32	Guide Rail	DEA40-851	DEA40-851
6	Control Switch	DEA40-865	DEA40-865	33	Rack	DEA120-968	DEA120-968
7	Label	DAE40-912	DEA40-912	34	Controller	DEA120-700	DEA120-700
8	Label	DEA40-856	DEA40-856	35	Cable	DEA40-935	DEA40-935
9	Switch Lens	DEA40-868	DEA40-868	36	Cable	DEA40-914	DEA40-914
10	Lamp	DEA40-969	DEA40-969	37	Ground Strip	DEA40-939	DEA40-939
11	Switch	DEA40-867	DEA40-867	38	Ground Label	DEA40-871	DEA40-871
12	Label	DEA40-870	DEA40-870	39	Label	DEA40-875	DEA40-875
13	Panel	DEA40-855	DEA40-855	40	Warning Label	DEA40-879	DEA40-879
14	Control Board	DEA40-866	DEA40-866	41	Jumper	DEA120-962	DEA120-962
15	Alarm Board	DEA40-906	DEA40-906	42	Jumper	DEA120-963	DEA120-963
16	Circuit Breaker	DEA120-894	DEA120-894	43	Ground Lead	DEA40-940	DEA40-940
17	Angle Bracket	DEA120-895	DEA120-895	44	Wire	DEA40-154-10	DEA40-154-10
18	LCD Display Assembly	DEA40-A905	DEA40-905	45	Connector	DEA40-970-5	DEA40-970-5
19	Label	DEA40-890	DEA40-890	46	Dust Cover	DEA40-946-5	DEA40-946-5
20	Control Knob	DEA40-885	DEA40-855	47	Cable Assembly	DEA40-915	DEA40-915
21	Screw Lock	DEA40-919	DEA40-919	48	CPU Board Module	DEA120-M900	DEA120-M742
22	Plate	DEA40-917	DEA40-917	49	I/O Board Module	DEA120-M902	DEA120-M902
23	Receptacle Cover	DEA40-860	DEA40-860	50	Interface Board Module	DEA120-M950-1	DEA120-M950-1
24	Cap	DEA40-872	DEA40-872	51	CPU Cable	DEA40-M907	DEAA-M752
25	Receptacle Cover Blank	DEA40-859	DEA40-859	52	Accessory Cable Module	DEA40-M887	DEA40-M887
26	Label	DEA40-873	DEA40-873	53	Accessory Module	_____	_____

* Not illustrated.

PART NUMBER FOR ORDERING



PART NUMBER FOR ORDERING



	Control Cabinet (complete) (for one wrench hook-up)	TMAD121-AC	TMAD121-BC	27	Label	DEA40-883	DEA40-883
				28	Label	DEA120-893-1	DEA120-893-1
1	Cabinet Assembly	DEA120-A850-1	DEA120-A850-1	29	Cable	DEA120-966	DEA120-996
2	Label	DEA40-881	DEA40-881	30	Switch	DEA40-884-10	DEA40-884-10
3	Label	DEA40-875	DEA40-875	31	Receptacle	DEA40-967	DEA40-967
4	Input Switch	DEA40-862	DEA40-862	32	Guide Rail	DEA40-851	DEA40-851
5	Connector	DEA40-861	DEA40-861	33	Rack	DEA120-968	DEA120-968
6	Control Switch	DEA40-865	DEA40-865	34	Controller	DEA120-700	DEA120-700
7	Label	DAE40-912	DEA40-912	35	Cable	DEA40-935	DEA40-935
8	Label	DEA40-856	DEA40-856	36	Cable	DEA40-914	DEA40-914
9	Switch Lens	DEA40-868	DEA40-868	37	Ground Strip	DEA40-939	DEA40-939
10	Lamp	DEA40-969	DEA40-969	38	Ground Label	DEA40-871	DEA40-871
11	Switch	DEA40-867	DEA40-867	39	Label	DEA40-875	DEA40-875
12	Label	DEA40-870	DEA40-870	40	Warning Label	DEA40-879	DEA40-879
13	Panel	DEA40-855	DEA40-855	41	Jumper	DEA120-962	DEA120-962
14	Control Board	DEA40-866	DEA40-866	42	Jumper	DEA120-963	DEA120-963
15	Alarm Board	DEA40-906	DEA40-906	43	Ground Lead	DEA40-940	DEA40-940
16	Circuit Breaker	DEA120-894	DEA120-894	44	Wire	DEA40-154-10	DEA40-154-10
17	Angle Bracket	DEA120-895	DEA120-895	45	Connector	DEA40-970-5	DEA40-970-5
18	LCD Display Assembly	DEA40-A905	DEA40-905	46	Dust Cover	DEA40-946-5	DEA40-946-5
19	Label	DEA40-890	DEA40-890	47	Cable Assembly	DEA40-915	DEA40-915
20	Control Knob	DEA40-885	DEA40-855	48	CPU Board Module	DEA120-M900	DEA120-M742
21	Screw Lock	DEA40-919	DEA40-919	49	I/O Board Module	DEA120-M902	DEA120-M902
22	Plate	DEA40-917	DEA40-917	50	Interface Board Module	DEA120-M950-1	DEA120-M950-1
23	Receptacle Cover	DEA40-860	DEA40-860	51	CPU Cable	DEA40-M907	DEAA-M752
24	Cap	DEA40-872	DEA40-872	52	Accessory Cable Module	DEAA-M753	DEAA-M753
25	Receptacle Cover Blank	DEA40-859	DEA40-859	53	Accessory Module	DEAA-M760-1	DEAA-M760-1
26	Label	DEA40-873	DEA40-873				

* Not illustrated.

PART NUMBER FOR ORDERING



PART NUMBER FOR ORDERING



	Control Cabinet (complete) (for one wrench hook-up)	TMAD121-AD	TMAD121-BD	27	Label	DEA40-883	DEA40-883
1	Cabinet Assembly	DEA120-A850-1	DEA120-A850-1	28	Label	DEA120-893-1	DEA120-893-1
2	Label	DEA40-881	DEA40-881	29	Cable	DEA120-966	DEA120-996
3	Label	DEA40-875	DEA40-875	30	Switch	DEA40-884-10	DEA40-884-10
4	Input Switch	DEA40-862	DEA40-862	31	Receptacle	DEA40-967	DEA40-967
5	Connector	DEA40-861	DEA40-861	32	Guide Rail	DEA40-851	DEA40-851
6	Control Switch	DEA40-865	DEA40-865	33	Rack	DEA120-968	DEA120-968
7	Label	DAE40-912	DEA40-912	34	Controller	DEA120-700	DEA120-700
8	Label	DEA40-856	DEA40-856	35	Cable	DEA40-935	DEA40-935
9	Switch Lens	DEA40-868	DEA40-868	36	Cable	DEA40-914	DEA40-914
10	Lamp	DEA40-969	DEA40-969	37	Ground Strip	DEA40-939	DEA40-939
11	Switch	DEA40-867	DEA40-867	38	Ground Label	DEA40-871	DEA40-871
12	Label	DEA40-870	DEA40-870	39	Label	DEA40-875	DEA40-875
13	Panel	DEA40-855	DEA40-855	40	Warning Label	DEA40-879	DEA40-879
14	Control Board	DEA40-866	DEA40-866	41	Jumper	DEA120-962	DEA120-962
15	Alarm Board	DEA40-906	DEA40-906	42	Jumper	DEA120-963	DEA120-963
16	Circuit Breaker	DEA120-894	DEA120-894	43	Ground Lead	DEA40-940	DEA40-940
17	Angle Bracket	DEA120-895	DEA120-895	44	Wire	DEA40-154-10	DEA40-154-10
18	LCD Display Assembly	DEA40-A905	DEA40-905	45	Connector	DEA40-970-5	DEA40-970-5
19	Label	DEA40-890	DEA40-890	46	Dust Cover	DEA40-946-5	DEA40-946-5
20	Control Knob	DEA40-885	DEA40-855	47	Cable Assembly	DEA40-915	DEA40-915
21	Screw Lock	DEA40-919	DEA40-919	48	CPU Board Module	DEA120-M900	DEA120-M742
22	Plate	DEA40-917	DEA40-917	49	I/O Board Module	DEA120-M902	DEA120-M902
23	Receptacle Cover	DEA40-860	DEA40-860	50	Interface Board Module	DEA120-M950-1	DEA120-M950-1
24	Cap	DEA40-872	DEA40-872	51	CPU Cable	DEA40-M907	DEAA-M752
25	Receptacle Cover Blank	DEA40-859	DEA40-859	52	Accessory Cable Module	DEAA-M753	DEAA-M753
26	Label	DEA40-873	DEA40-873	53	Accessory Module	DEAA-M761-1	DEAA-M761-1

* Not illustrated.

PART NUMBER FOR ORDERING



PART NUMBER FOR ORDERING



	Control Cabinet (complete) (for one wrench hook-up)	TMAD121-AE	TMAD121-BE	27	Label	DEA40-883	DEA40-883
1	Cabinet Assembly	DEA120-A850-1	DEA120-A850-1	28	Label	DEA120-893-1	DEA120-893-1
2	Label	DEA40-881	DEA40-881	29	Cable	DEA120-966	DEA120-996
3	Label	DEA40-875	DEA40-875	30	Switch	DEA40-884-10	DEA40-884-10
4	Input Switch	DEA40-862	DEA40-862	31	Receptacle	DEA40-967	DEA40-967
5	Connector	DEA40-861	DEA40-861	32	Guide Rail	DEA40-851	DEA40-851
6	Control Switch	DEA40-865	DEA40-865	33	Rack	DEA120-968	DEA120-968
7	Label	DAE40-912	DEA40-912	34	Controller	DEA120-700	DEA120-700
8	Label	DEA40-856	DEA40-856	35	Cable	DEA40-935	DEA40-935
9	Switch Lens	DEA40-868	DEA40-868	36	Cable	DEA40-914	DEA40-914
10	Lamp	DEA40-969	DEA40-969	37	Ground Strip	DEA40-939	DEA40-939
11	Switch	DEA40-867	DEA40-867	38	Ground Label	DEA40-871	DEA40-871
12	Label	DEA40-870	DEA40-870	39	Label	DEA40-875	DEA40-875
13	Panel	DEA40-855	DEA40-855	40	Warning Label	DEA40-879	DEA40-879
14	Control Board	DEA40-866	DEA40-866	41	Jumper	DEA120-962	DEA120-962
15	Alarm Board	DEA40-906	DEA40-906	42	Jumper	DEA120-963	DEA120-963
16	Circuit Breaker	DEA120-894	DEA120-894	43	Ground Lead	DEA40-940	DEA40-940
17	Angle Bracket	DEA120-895	DEA120-895	44	Wire	DEA40-154-10	DEA40-154-10
18	LCD Display Assembly	DEA40-A905	DEA40-905	45	Connector	DEA40-970-5	DEA40-970-5
19	Label	DEA40-890	DEA40-890	46	Dust Cover	DEA40-946-5	DEA40-946-5
20	Control Knob	DEA40-885	DEA40-855	47	Cable Assembly	DEA40-915	DEA40-915
21	Screw Lock	DEA40-919	DEA40-919	48	CPU Board Module	DEA120-M900	DEA120-M742
22	Plate	DEA40-917	DEA40-917	49	I/O Board Module	DEA120-M902	DEA120-M902
23	Receptacle Cover	DEA40-860	DEA40-860	50	Interface Board Module	DEA120-M950-1	DEA120-M950-1
24	Cap	DEA40-872	DEA40-872	51	CPU Cable	DEA40-M907	DEAA-M752
25	Receptacle Cover Blank	DEA40-859	DEA40-859	52	Accessory Cable Module	DEA40-M887	DEA40-M887
26	Label	DEA40-873	DEA40-873	53	Accessory Module	DEAA-M764	DEAA-M764

* Not illustrated.

PART NUMBER FOR ORDERING



PART NUMBER FOR ORDERING



	Control Cabinet (complete) (for one wrench hook-up)	TMAD121-ACE	TMAD121-BCE	27	Label	DEA40-883	DEA40-883
1	Cabinet Assembly	DEA120-A850-1	DEA120-A850-1	28	Label	DEA120-893-1	DEA120-893-1
2	Label	DEA40-881	DEA40-881	29	Cable	DEA120-966	DEA120-996
3	Label	DEA40-875	DEA40-875	30	Switch	DEA40-884-10	DEA40-884-10
4	Input Switch	DEA40-862	DEA40-862	31	Receptacle	DEA40-967	DEA40-967
5	Connector	DEA40-861	DEA40-861	32	Guide Rail	DEA40-851	DEA40-851
6	Control Switch	DEA40-865	DEA40-865	33	Rack	DEA120-968	DEA120-968
7	Label	DAE40-912	DEA40-912	34	Controller	DEA120-700	DEA120-700
8	Label	DEA40-856	DEA40-856	35	Cable	DEA40-935	DEA40-935
9	Switch Lens	DEA40-868	DEA40-868	36	Cable	DEA40-914	DEA40-914
10	Lamp	DEA40-969	DEA40-969	37	Ground Strip	DEA40-939	DEA40-939
11	Switch	DEA40-867	DEA40-867	38	Ground Label	DEA40-871	DEA40-871
12	Label	DEA40-870	DEA40-870	39	Label	DEA40-875	DEA40-875
13	Panel	DEA40-855	DEA40-855	40	Warning Label	DEA40-879	DEA40-879
14	Control Board	DEA40-866	DEA40-866	41	Jumper	DEA120-962	DEA120-962
15	Alarm Board	DEA40-906	DEA40-906	42	Jumper	DEA120-963	DEA120-963
16	Circuit Breaker	DEA120-894	DEA120-894	43	Ground Lead	DEA40-940	DEA40-940
17	Angle Bracket	DEA120-895	DEA120-895	44	Wire	DEA40-154-10	DEA40-154-10
18	LCD Display Assembly	DEA40-A905	DEA40-905	45	Connector	DEA40-970-5	DEA40-970-5
19	Label	DEA40-890	DEA40-890	46	Dust Cover	DEA40-946-5	DEA40-946-5
20	Control Knob	DEA40-885	DEA40-855	47	Cable Assembly	DEA40-915	DEA40-915
21	Screw Lock	DEA40-919	DEA40-919	48	CPU Board Module	DEA120-M900	DEA120-M742
22	Plate	DEA40-917	DEA40-917	49	I/O Board Module	DEA120-M902	DEA120-M902
23	Receptacle Cover	DEA40-860	DEA40-860	50	Interface Board Module	DEA120-M950-1	DEA120-M950-1
24	Cap	DEA40-872	DEA40-872	51	CPU Cable	DEA40-M907	DEAA-M752
25	Receptacle Cover Blank	DEA40-859	DEA40-859	52	Accessory Cable Module	DEA40-M753	DEA40-M753
26	Label	DEA40-873	DEA40-873	53	Accessory Module	DEAA-M762-1	DEAA-M762-1

* Not illustrated.

PART NUMBER FOR ORDERING



PART NUMBER FOR ORDERING



	Control Cabinet (complete) (for one wrench hook-up)	TMAD121-ADE	TMAD121-BDE	27	Label	DEA40-883	DEA40-883
1	Cabinet Assembly	DEA120-A850-1	DEA120-A850-1	28	Label	DEA120-893-1	DEA120-893-1
2	Label	DEA40-881	DEA40-881	29	Cable	DEA120-966	DEA120-996
3	Label	DEA40-875	DEA40-875	30	Switch	DEA40-884-10	DEA40-884-10
4	Input Switch	DEA40-862	DEA40-862	31	Receptacle	DEA40-967	DEA40-967
5	Connector	DEA40-861	DEA40-861	32	Guide Rail	DEA40-851	DEA40-851
6	Control Switch	DEA40-865	DEA40-865	33	Rack	DEA120-968	DEA120-968
7	Label	DAE40-912	DEA40-912	34	Controller	DEA120-700	DEA120-700
8	Label	DEA40-856	DEA40-856	35	Cable	DEA40-935	DEA40-935
9	Switch Lens	DEA40-868	DEA40-868	36	Cable	DEA40-914	DEA40-914
10	Lamp	DEA40-969	DEA40-969	37	Ground Strip	DEA40-939	DEA40-939
11	Switch	DEA40-867	DEA40-867	38	Ground Label	DEA40-871	DEA40-871
12	Label	DEA40-870	DEA40-870	39	Label	DEA40-875	DEA40-875
13	Panel	DEA40-855	DEA40-855	40	Warning Label	DEA40-879	DEA40-879
14	Control Board	DEA40-866	DEA40-866	41	Jumper	DEA120-962	DEA120-962
15	Alarm Board	DEA40-906	DEA40-906	42	Jumper	DEA120-963	DEA120-963
16	Circuit Breaker	DEA120-894	DEA120-894	43	Ground Lead	DEA40-940	DEA40-940
17	Angle Bracket	DEA120-895	DEA120-895	44	Wire	DEA40-154-10	DEA40-154-10
18	LCD Display Assembly	DEA40-A905	DEA40-905	45	Connector	DEA40-970-5	DEA40-970-5
19	Label	DEA40-890	DEA40-890	46	Dust Cover	DEA40-946-5	DEA40-946-5
20	Control Knob	DEA40-885	DEA40-855	47	Cable Assembly	DEA40-915	DEA40-915
21	Screw Lock	DEA40-919	DEA40-919	48	CPU Board Module	DEA120-M900	DEA120-M742
22	Plate	DEA40-917	DEA40-917	49	I/O Board Module	DEA120-M902	DEA120-M902
23	Receptacle Cover	DEA40-860	DEA40-860	50	Interface Board Module	DEA120-M950-1	DEA120-M950-1
24	Cap	DEA40-872	DEA40-872	51	CPU Cable	DEA40-M907	DEAA-M752
25	Receptacle Cover Blank	DEA40-859	DEA40-859	52	Accessory Cable Module	DEA40-M753	DEA40-M753
26	Label	DEA40-873	DEA40-873	53	Accessory Module	DEAA-M763-1	DEAA-M763-1

* Not illustrated.

NOTICE

SAVE THESE INSTRUCTIONS. DO NOT DESTROY.