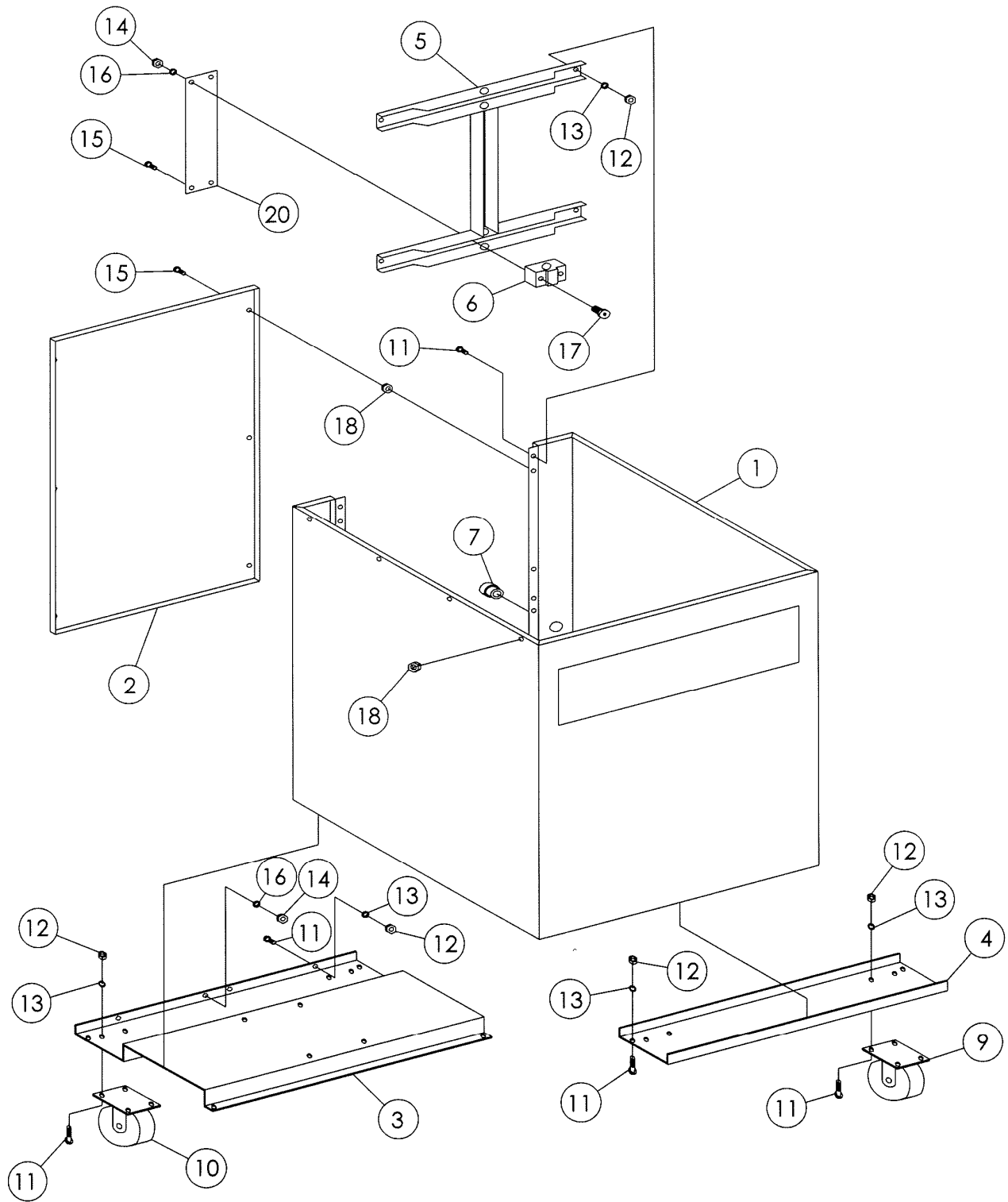


LST20 FRAME PARTS ASSEMBLY

REF NO	PART NO	DESCRIPTION	QTY
1	LST20-1	WRAP	1
2	LST20-7	BACK PANEL	1
3	LST20-9	REAR CASTER MOUNT	1
4	LST20-10	FRONT CASTER MOUNT	1
5	LST20-A	GUIDE BRACKET ASSEMBLY	1
6	LST20-A3	GUIDE BLOCK	2
7	CR3223	CORD RESTRAINT	1
8	CS4W887	SWIVEL CASTERS	2
9	CS4W890	RIGID CASTERS	2
10	CB4W932	BRAKE	2
11	BOS0AA240075	3/8-16 X 3/4" LG. HHCS SS	35
12	NUS0EA24	3/8-16 HEX NUT SS	35
13	WASGIO38	3/8" STD. LOCKWASHER SS	35
14	NUS0EA20	1/4-20 HEX NUTS SS	6
15	BOS0AA200100	1/4-20 X 1" LG. SCREW	8
16	WGSGI020	1/4" STD. LOCKWASHER SS	6
17	BOS0AA200175	1/4-20 X 1-3/4" LG. HHCS SS	4
18	RNAHA1-420-165	1/4-20 ALUM. RIVNUT HEX	26
19			
20	LST20-20	SHAFT COVER	1

* NOT SHOWN

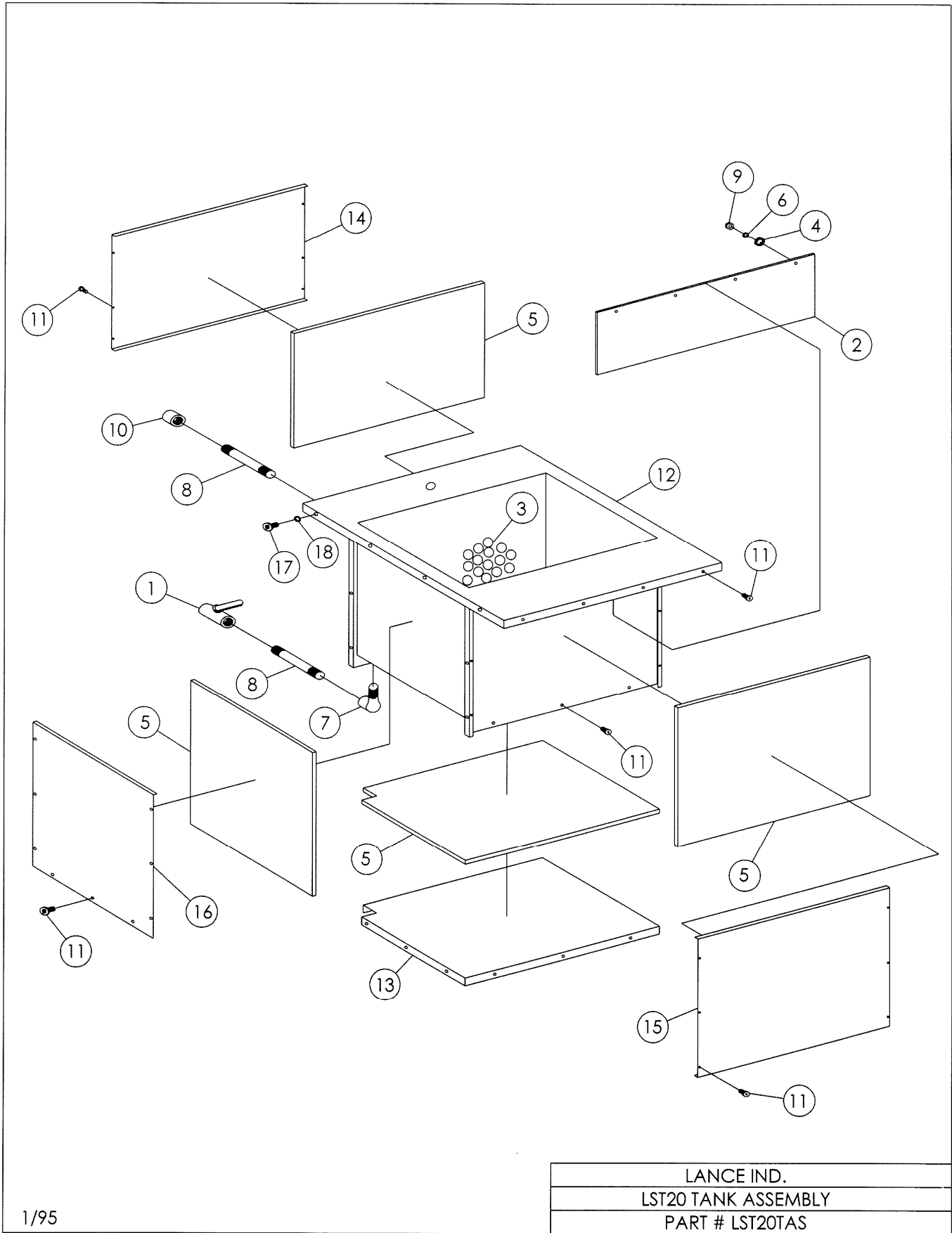


LANCE IND
LST20 FRAME ASSEMBLY
PART # LST20FAS

LST20 TANK PARTS ASSEMBLY

<u>REF NO</u>	<u>PART NO</u>	<u>DESCRIPTION</u>	<u>QTY</u>
1	BV4726K23	BALL VALVE	1
2	LST20-22	PLASTIC CURTAIN	1
3	HB-02103	HEAT LOSS BALLS	200
4	WASGA020	#10 STD. FLAT WASHER SS	4
5	IS51050482	FOAM INSULATION	24sq'
6	WASGJ016	#10 INT. TOOTH LOCKWASHER SS	4
7	EL4464K38	1/2"-90° STREET ELBOW	1
8	PN4548K179	8" PIPE NIPPLE	2
9	NUS0EG16	10-24 HEX NUT SS	4
10	PC4464K87	1/2" NPT CAP	1
11	BOS0AU160050	10-24 X 1/2" LG. PH RHMS SS	20
12	LST20-2W	TANK	1
13	LST20-5	BOTTOM COVER	1
14	LST20-6	BACK TANK COVER	1
15	LST20-8	FRONT TANK COVER	1
16	LST20-19	SIDE COVER	2
17	BOS0AA200075	1/4-20 X 3/4" LG. PH RHMS SS	10
18	WGSIGI020	1/4-20 STD. LOCKWASHER SS	10

* NOT SHOWN

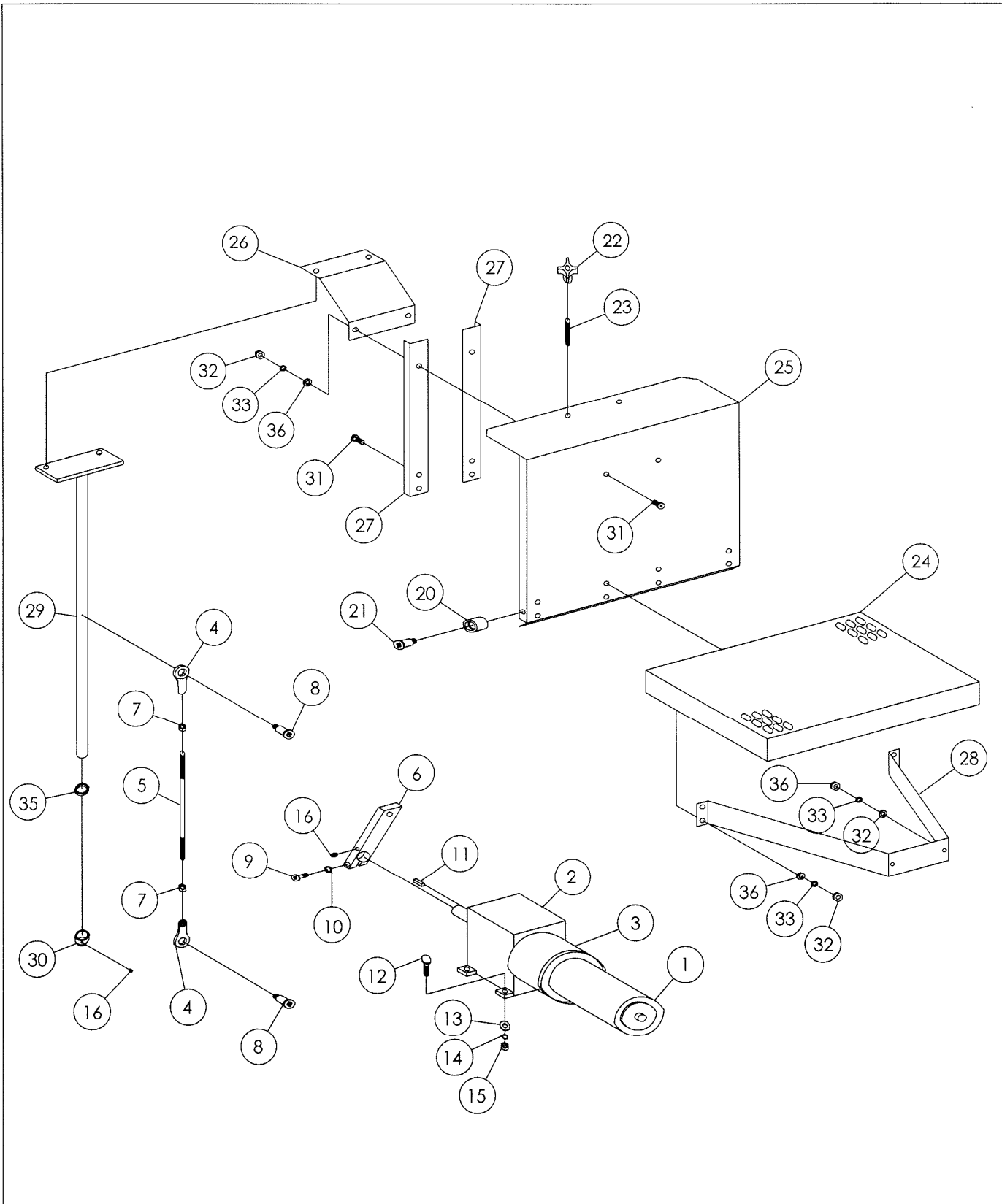


LANCE IND.
LST20 TANK ASSEMBLY
PART # LST20TAS

LST20 DRIVE-TRAIN & PLATFORM PARTS ASSEMBLY

REF NO	PART NO	DESCRIPTION	QTY
1	MO098008	DRIVE MOTOR	1
2	RD2Z933	REDUCER	1
3	BK6K233	BRAKE	1
4	RD59915K86	ROD END	2
5	LST20-C4	ROD	1
6	LST20-D1	ARM	1
7	NU91847A433	JAM NUT	2
8	BO90298A709	SHOULDER SCREW	2
9	BOS0AA200125	1/4-20 X 1-1/4" HHCS SS	1
10	WASGI025	1/4" STD. LOCKWASHER SS	1
11	KESQ2500100	1/4 X 1" LG. KEY	1
12	BOS0AA240100	3/8-16 X 1" LG. HHCS SS	4
13	WASGA037	3/8" STD. FLAT WASHER SS	4
14	WASGI038	3/8" STD. LOCKWASHER SS	4
15	NUS0EA24	3/8-16 HEX NUT SS	4
16	BOS0AM20025	1/4-20 X 1/4" LG. SETSCREW SS	2
17			
18			
19			
20	LST20-D	NYLON BUSHING	2
21	BO90298A619	SHOULDER SCREW	2
22	PK5993K36	KNOBS	2
23	BO92311A628	3/8-16 X 1.5" LG. SETSCREW SS	2
24	LST20-11	PLATFORM	1
25	LST20-13	LIFT BACK	1
26	LST20-14	GUSSET	1
27	LST20-16	ANGLE	2
28	LST20-18	PLATFORM SUPPORT	1
29	LST20-B	LIFT ROD ASSEMBLY	1
30	LST20-B3	STOP COLLAR	1
31	BOS0AA200050	1/4-20 X 1/2" LG. HHCS SS	10
32	NUS0EA20	1/4-20 HEX NUT SS	12
33	WASGI025	1/4" STD. LOCKWASHER SS	12
34			
35	UC9691K29	U-CUP	1
36	WASGA020	1/4" STD. FLAT WASHER SS	12
*37	BRBP900163.11	MOTOR BRUSHES	2

* NOT SHOWN

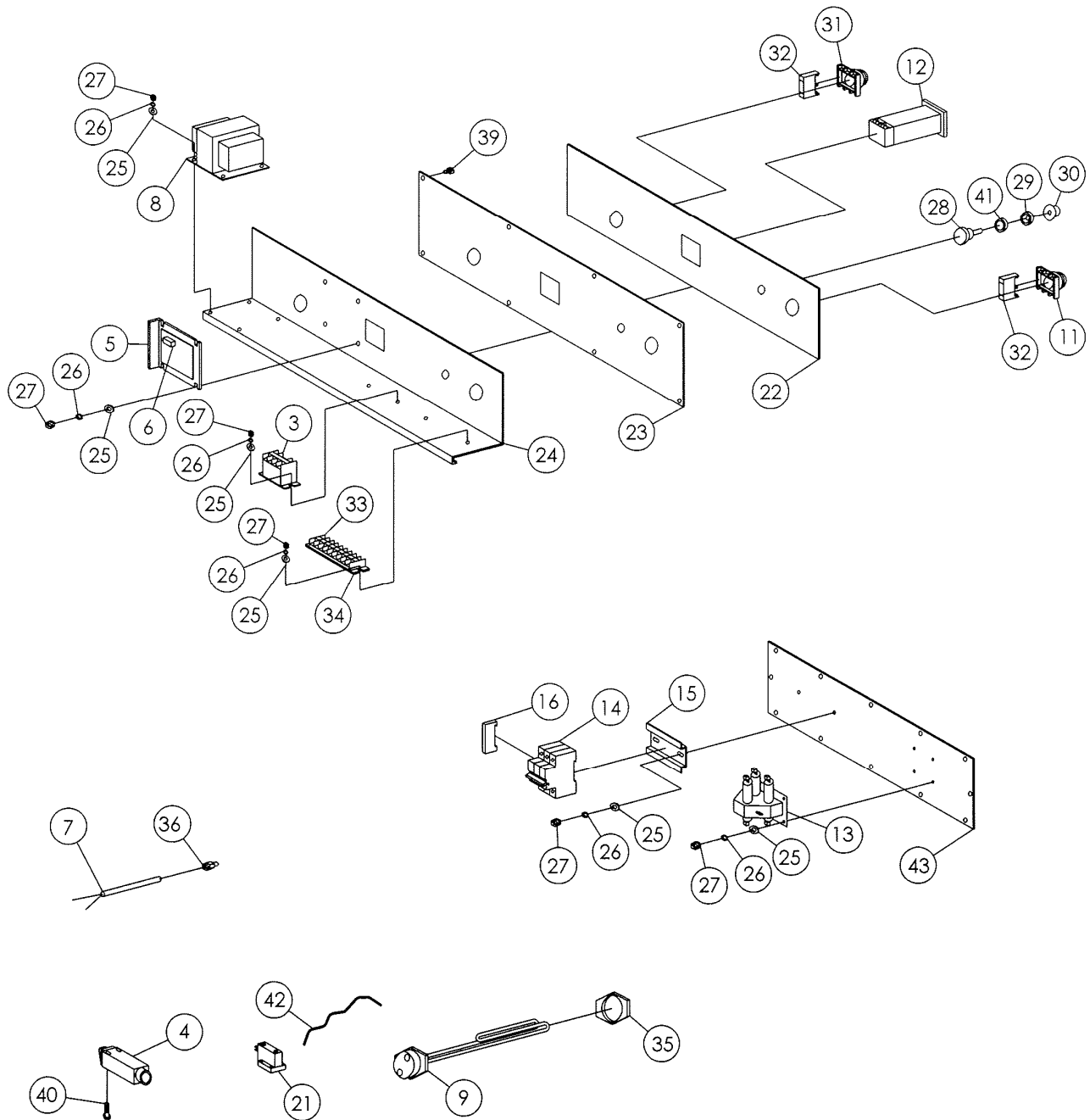


LANCE IND.
LST20 DRIVE-TRAIN & PLATFORM ASSEMBLY
PART # LST20DTA

LST20 ELECTRICAL PARTS ASSEMBLY

REF NO	PART NO	DESCRIPTION	QTY
1			
2			
3	RL2XC20	RELAY	1
4	SW1MDZ3	LIMIT SWITCH	1
5	BCBC142	CONTROLLER	1
6	BCBR0050	HP RESISTOR	1
7	TS6A843	TEMPERATURE SENSOR	1
8	TR4R874	TRANSFORMER	1
9	HE2E303	HEATER ELEMENTS	3
10			
11	SWP9CSMDON	SELECT SWITCH	1
12	HCP11601000	HEAT CONTROL	1
13	RL360N0-120A	RELAY(3 PHASE)	1
	RL260NO-120A	RELAY(1 PHASE)	
14	CI501-0118	CIRCUIT BREAKER(3 PHASE)	1
	CI2G60	CIRCUIT BREAKER(1 PHASE)	
15	DR502-2020	DIN RAIL	1
16	ES502-2040	END STOP	2
*17	WI7422K29	POWER CORD 10/4(3 PHASE) POWER CORD 6/3(1 PHASE)	8'
*18	FH7641K36	FUSE HOLDER	4
*19	FP741K49	END PLATE	4
*20	FS7641K35	END STOP	2
21	PS2131	PRESSURE SWITCH	1
22	LST20-PA	FACE PANEL	1
23	LST20-12	FRONT CONTROL PANEL	1
24	LST20-15	CONTROL BRACKET	1
25	WASGA014	#8 STD. FLAT WASHER SS	16
26	WASGI014	#8 STD. LOCKWASHER SS	16
27	NUSEA014	8-32 HEX NUT SS	16
28	SPBC-148	5K SPEED POTENTIOMETER	1
29	NU70205K21	SEALING NUT	1
30	SK753-2352	SPEED KNOB	1
31	PBP9CPNVG	PUSH BUTTON	1
32	CBP9B10VN	NO CONTACT BLOCK	2
33	TE2A691	TERMINAL SECTION	6
34	TE2A696	END SECTION	1
35	LN5530K46	HEATER LOCKNUT	3
36	FI50915K312	COMPRESSION FITTING	1
*37	FU6F042	ABC-4 4 AMP FUSE	1
*38	FU1BX44	ABC-12 12 AMP FUSE	2
39	BOS0AA200075	¼-20 X ¾" LG. PH RHMS SS	8
40	BOS0AH160150	10-24 X 1.5" LG. SHCS SS	2
41	WA93650A160	SEALING WASHER	1
42	HS51845K18	HOSE	6"
43	LST20-21	ELECTRICAL SUB-PANEL	1
*44	HB5116K78	NYLON HOSE BARB	1
*45	FU1CL90	MDA-1/2, ½ AMP FUSE	2

* NOT SHOWN



LANCE IND.
LST20 ELECTRICAL ASSEMBLY
PART # LST20EA1

Please read and save these instructions. Read carefully before attempting to assemble, install, operate or maintain the product described. Protect yourself and others by observing all safety information. Failure to comply with instructions could result in personal injury and/or property damage! Retain instructions for future reference.

Dayton® Magnetic Disc Brakes

Description

Dayton magnetic disc brakes, models 6K233D & 1L388A are used on 56C Face Motors and speed reducers. Models 3M366C & 1L389A are used on 56C, 143TC, and 145TC Face Motors and speed reducers. These brakes are not rated for more than three stops per minute.

Models 6K233D & 3M366C are standard enclosures and may or may not be mounted between a motor and speed reducer coupling them.

Models 1L388A & 1L389A are washdown enclosures and must be mounted between a speed reducer and motor (using gaskets furnished) to complete the waterproof seal.

NOTE: These brakes are not intended for accurate positioning applications. They are designed for applications that require rapid stopping and holding power such as conveyors, door openers, etc.

▲ WARNING Do not install or use these brakes in an explosive atmosphere.

Dimensions & Specifications

Duty cycle Continuous
Maximum ambient 40°C
Maximum input speed 3600 RPM
Parts in brake (wk²)
(1L388A & 6K233D)0061 lb-ft²
Parts in brake (wk²)
(1L389A & 3M366C)0100 lb-ft²

Thermal capacity 6 HPS/min.
Enclosure construction:
Models 6K233D & 3M366C ... Standard
Models 1L388A & 1L389A ... Washdown
Electrical Data: Rated for operation on
single phase 115/208-230V, 60 Hz and
on 110/280-220V, 50 Hz.
Electrical lead length 15"

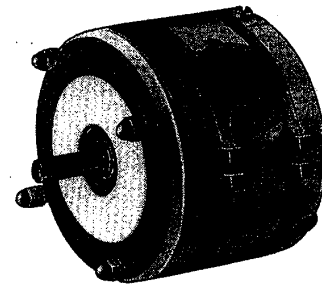


Figure 1 - Washdown

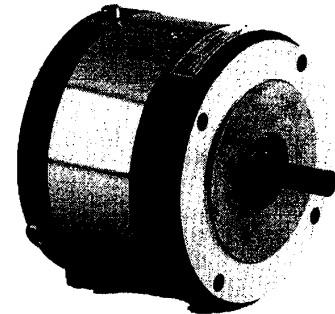


Figure 1A - Standard

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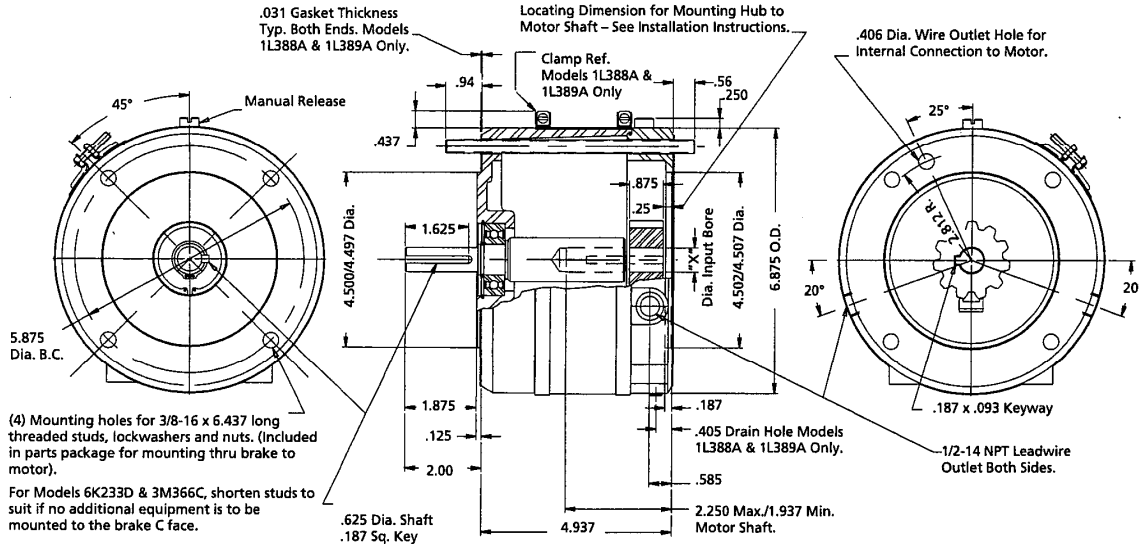
Model		Brake Hub Bore "X"	Nominal Static Torque Rating	Use on Motor Frames:
1L388A	Figure 1	5/8"	3 ft.-lbs.	56C-Face Motors & Speed Reducers
6K233D	Figure 1A			
1L389A	Figure 1	*7/8"	6 ft.-lbs.	56C, 143TC & 145TC-Face Motors & Speed Reducers
3M366C	Figure 1A			

(*) Includes 7/8" O.D. x 5/8" ID bushing.

Dayton[®] Magnetic Disc Brakes

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Dimensions & Specifications (Continued)



Voltage	Hz	Allowable Voltage Range	Amps Holding	Amps Inrush
110	50	79-121	0.34	3.2
115	60	94-145	0.25	2.8
208	50	158-242	0.15	1.5
208	60	188-290	0.10	1.3
220	50	158-242	0.17	1.6
230	60	188-290	0.12	1.4

Unpacking

When unpacking the brake, inspect it carefully for damage that may have occurred during transit.

General Safety Information

1. For applications with high inertia-type loads or rapid cycling, the thermal capacity of the brake must be considered.

2. Observe all local electrical and safety codes, as well as the United States National Electrical Code (NEC) and the Occupational Safety and Health Act (OSHA).
3. Brake motors and brake gearmotors must be securely and adequately grounded. This can be accomplished by wiring with a grounded metal-clad raceway system, by using a separate

ground wire connected to the bare metal of the motor frame or other suitable means. Refer to NEC Article 250 (Grounding) for additional information. All wiring should be done by a qualified electrician.

4. Always disconnect power before working on or near a brake motor, a brake gearmotor, or its connected load. If the power disconnect point is out of sight, lock it in the open position and tag it to prevent unexpected application of power.
5. When working on brake, be sure load is completely removed, secured or blocked to prevent injury or property damage.
6. Provide guarding for all moving parts.

Dayton Operating Instructions and Parts Manual

1L388A, 1L389A, 6K233D and 3M366C

For Replacement Parts, call 1-800-323-0620

24 hours a day - 365 days a year

Please provide following information:

- Model number
- Serial number (if any)
- Part descriptions and number as shown in parts list

Address parts correspondence to:

Grainger Parts Operations
 P. O. Box 3074
 1657 Shermer Road
 Northbrook, IL 60065-3074 U.S.A.

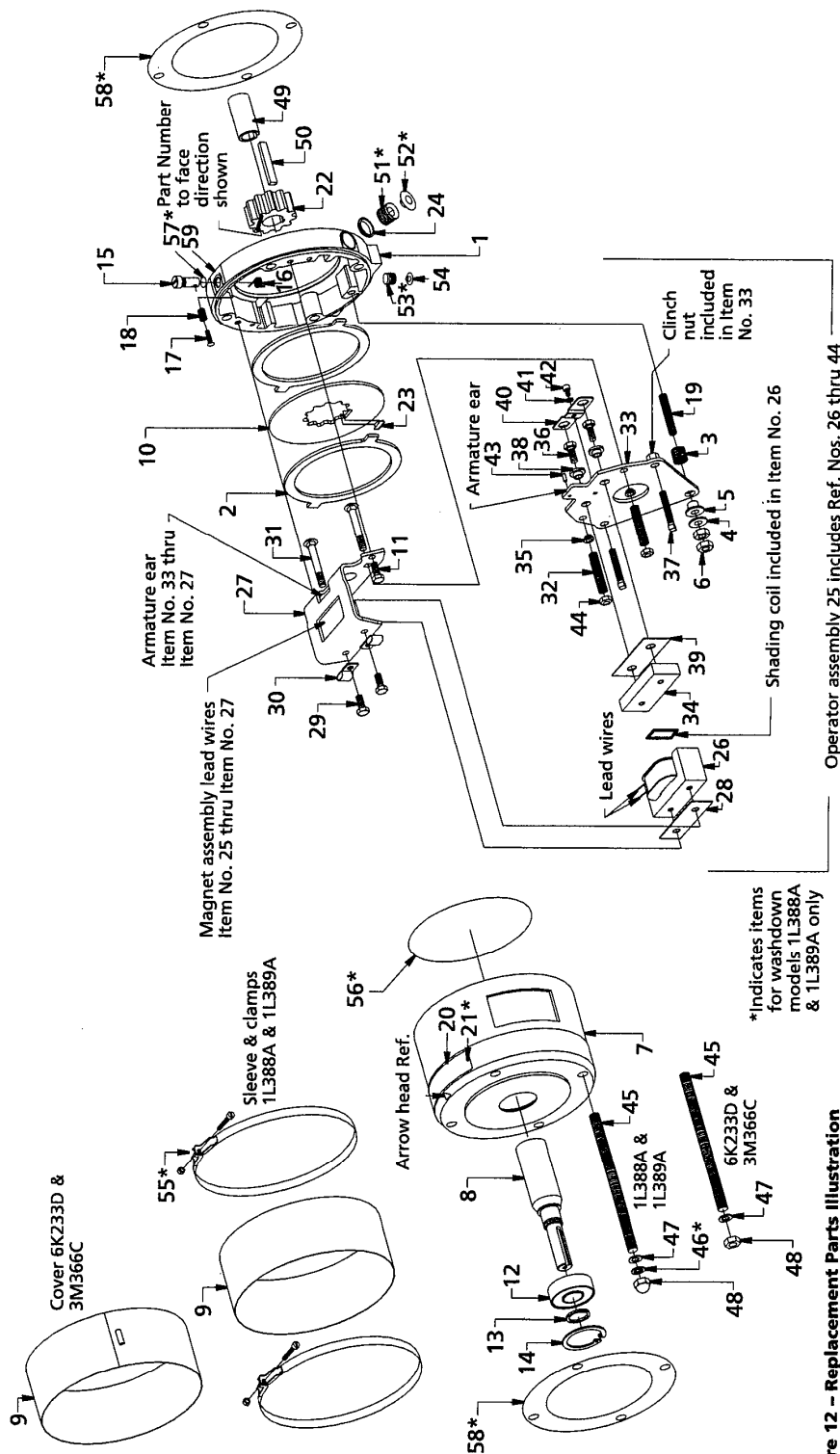


Figure 12 - Replacement Parts Illustration

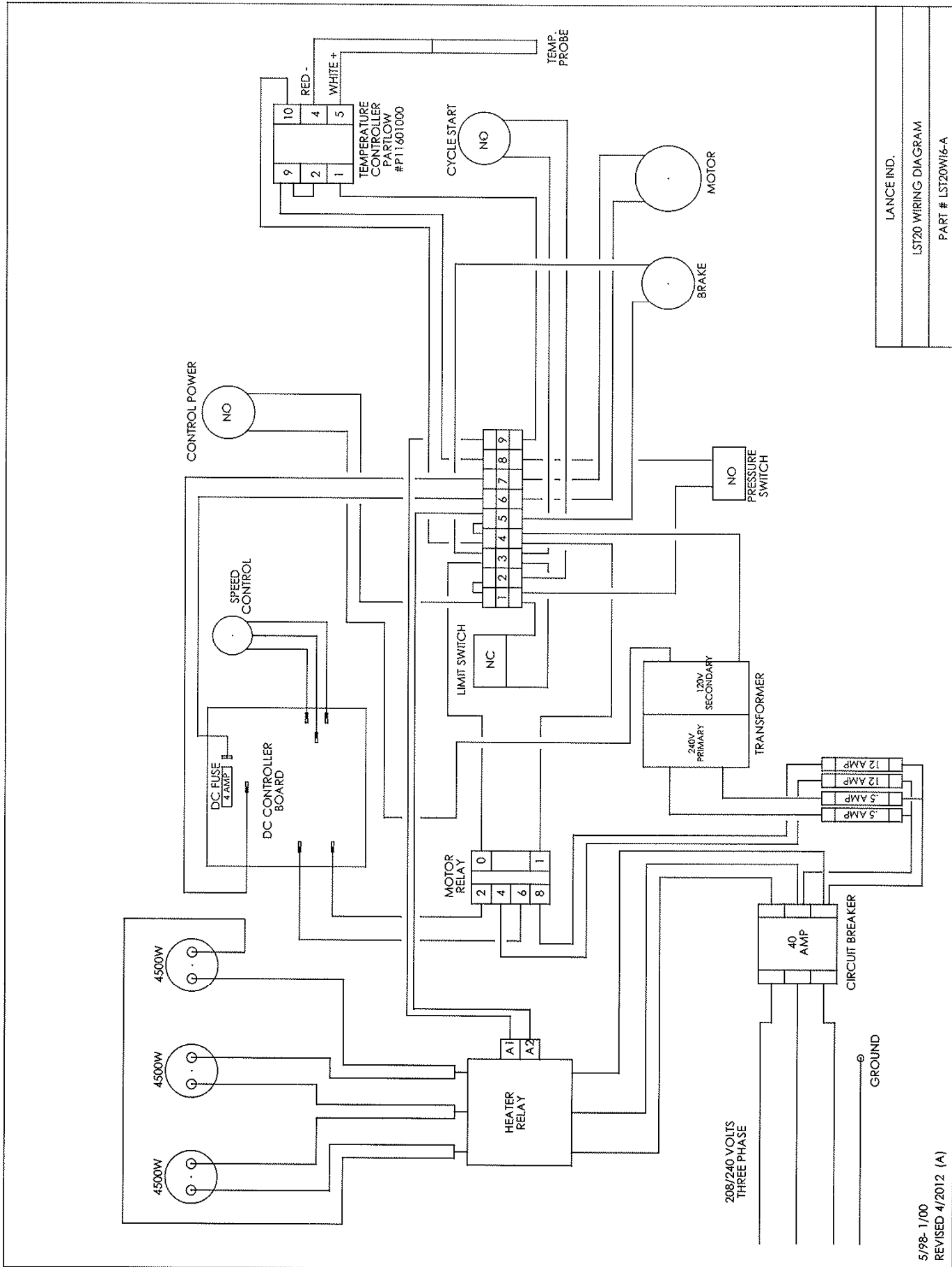
Replacement Parts List

Ref. No.	Description	Models 1L388A & 1L389A Part Number	Models 6K233D & 3M366C Part Number	Qty.
1	Bracket	L060256-011	L060252-002	1
2	Stationary Disc	H060147-001	H060147-001	*
3	Compression Tail Spring	G060821-001	G060821-001	1
4	Plain Brass Washer	W004003-024	W004003-024	1
5	Nylon Bushing	G060820-001	G060820-001	1
6	5/16-18 Hex Nut	W003002-002E	W003002-002E	2
7	Adaptor Housing	L060284-001	L060251-001	1
8	Shaft Models 1L388A, 6K233D Models 1L389A, 3M366C	K060366-001	K060366-001	1
		K060379-001	K060379-001	1
9	Cover, or Sleeve	G060851-001	K060462-001	1
10	Splined Rotating Friction Disc	H060157-003	H060157-003	**
11	1/4-20 x 1/2" Lg. Hex. Hd. Capscrew	W001008-001E	W001008-001E	2
12	Ball Bearing	W009001-001	W009001-001	1
13	Retaining Ring	W006007-001	W006007-001	1
14	Retaining Ring	W006002-001	W006002-001	1
15	Release Knob	G060848-001	G060785-001	1
16	Release Return Spring	G060881-001	G060797-001	1
17	Release Adjustment Screw	W001002-056C	W001002-056C	1
18	Release Adjustment Lockspring	G060795-001	G060795-001	1
19	Pivot Stud	W002005-303A	W002005-303A	1
20	Nameplate Model 1L388A, 6K233D Model 1L389A, 3M366C	K060502-†	K060494-†	2
		K060502-†	K060494-†	2
21	Nameplate Drive Screw	W001012-048A	—	4
22	Hub Models 1L388A, 6K233D Models 1L389A, 3M366C	K060107-032	K060107-032	1
		K060107-228	K060107-228	1
23	Stabilizer Clip, Rotation Friction Disc	H060466-001	H060466-001	***
24	Wire Outlet Cap Plug	W008003-001	W008003-001	1
25	Operator Assy.: (Includes Ref. Nos. 26-44) (Not Shown as an Assembly)	—	—	1
		K060463-002P	K060463-002	1
		K060463-003P	K060463-003	1
26	Magnet Assembly	H060548-068P	H060548-068	1
27	Magnet Mounting Bracket	H060544-001	H060544-001	1
28	Magnet Shock Mount	G060813-001	G060813-001	2
29	1/4-20 x 5/8 Lg. Hex. Hd. Capscrew	W001007-002E	W001007-002E	2
30	Cable Clamp	W021003-001	W021003-001	2
31	1/4-20 Carriage Bolt	G060803-001	G060803-001	2
32	Torque Spring	G060792-001	G060792-001	1
33	Armature Plate w/Clinch Nut	H060545-003	H060545-003	2
34	Armature Lamination Assembly	G060788-001P	G060788-001	2
35	Nylon Bushing	W013005-001	W013005-001	2

Ref. No.	Description	Models 1L388A & 1L389A Part Number	Models 6K233D & 3M366C Part Number	Qty.
36	1/4-20 x 5/8" Lg. Cap Screw	W001007-002E	W001007-002E	2
37	1/4-20 x 1 1/2" Lg. Screw Sq. Hd.	W002003-001	W002003-001	1
38	Armature Spacer	G060798-002	G060798-002	1
39	Armature Shock Mount	G060808-003	G060808-003	1
40	Locking Plate	G060812-001	G060812-001	1
41	#8 Split Spring Lockwasher	W004006-003	W004006-003	1
42	#8-32 x 1/4" Lg. Soc. Hd. Capscrew	W001013-201	W001013-201	2
43	5/32" Dia. x 3/8" Lg. Roll Pin	W005003-098	W005003-098	4
44	1/4-20 Locknut	W003013-001	W003013-001	4
45	3/8-16 x 6/16" Lg. Stud	W012001-001E	W012001-001E	4
46	3/8 Plain Washer	W004004-003D	—	4
47	3/8 Washer or 3/8 Lockwasher	W011007-002	W004006-008	1
48	3/8 - 16 Acorn Nut or 3/8 - 16 Hex Nut	W003005-002A	W003005-002	1
49	Sleeve Adaptor 1L389A & 3M366C Only	H060456-001	H060456-001	1
50	Key Rectangular (1L389A & 3M366C Only)	W007003-022	W007003-022	1
51	1/2" Hex. Soc. Pipe Plug	W010002-004A	—	1
52	Socket Screw Cap Plug	W008006-004	—	1
53	1/8" Hex Soc. Pipe Plug	W010002-001A	—	2
54	Cap Plug	W008006-001	—	1
55	Clamp Assembly	G060733-001	—	1
56	O-Ring Bracket	W006001-019	—	2
57	O-Ring Release	W006001-025	—	1
58	Gasket Mounting Face	H060344-003	—	1
59	Release Instruction Label	G060859-001	G060859-001	1
Δ	Hardware Bag Models 1L388A & 6K233D (Includes Ref. Nos. 45-48) and O.I.P.M.	H060237-073	H060237-068	1
Δ	Hardware Bag Models 1L389A & 3M366C (Includes Ref. Nos. 45-50) and O.I.P.M.	H060237-074	H060237-069	1
Δ	3/16" Square Key	W007001-017	W007001-017	1
Δ	Foot Mounting Bracket Optional (6K233D & 3M366C Only)	—	H060237-072	1
Δ	Armature Plate Assembly: (Includes Ref. Nos. 33-44) (Not Shown as an Assembly)	H060541-001P	H060541-001	1
Δ	Models 1L388A, 6K233D (1 Disc) Models 1L389A, 3M366C (2 Disc)	H060541-002P	H060541-002	1
Δ	OIPM (Dayton) Washdown	G060940-001	G060940-001	1

(**) Models 1L388A & 6K233D Have 1 Rotating Friction Disc (H060157-003).
 Models 1L389A & 3M366C Have 2 Rotating Friction Discs (H060157-003).
 (***) Same Quantity as Rotating Friction Discs.
 O.I.P.M. Operating Instructions & Parts Manual.





LANCE IND.
 LST20 WIRING DIAGRAM
 PART # LST20W16-A

5/98- 1/00
 REVISED 4/2012 (A)