

# *DBA EXCEL Operating Manual*

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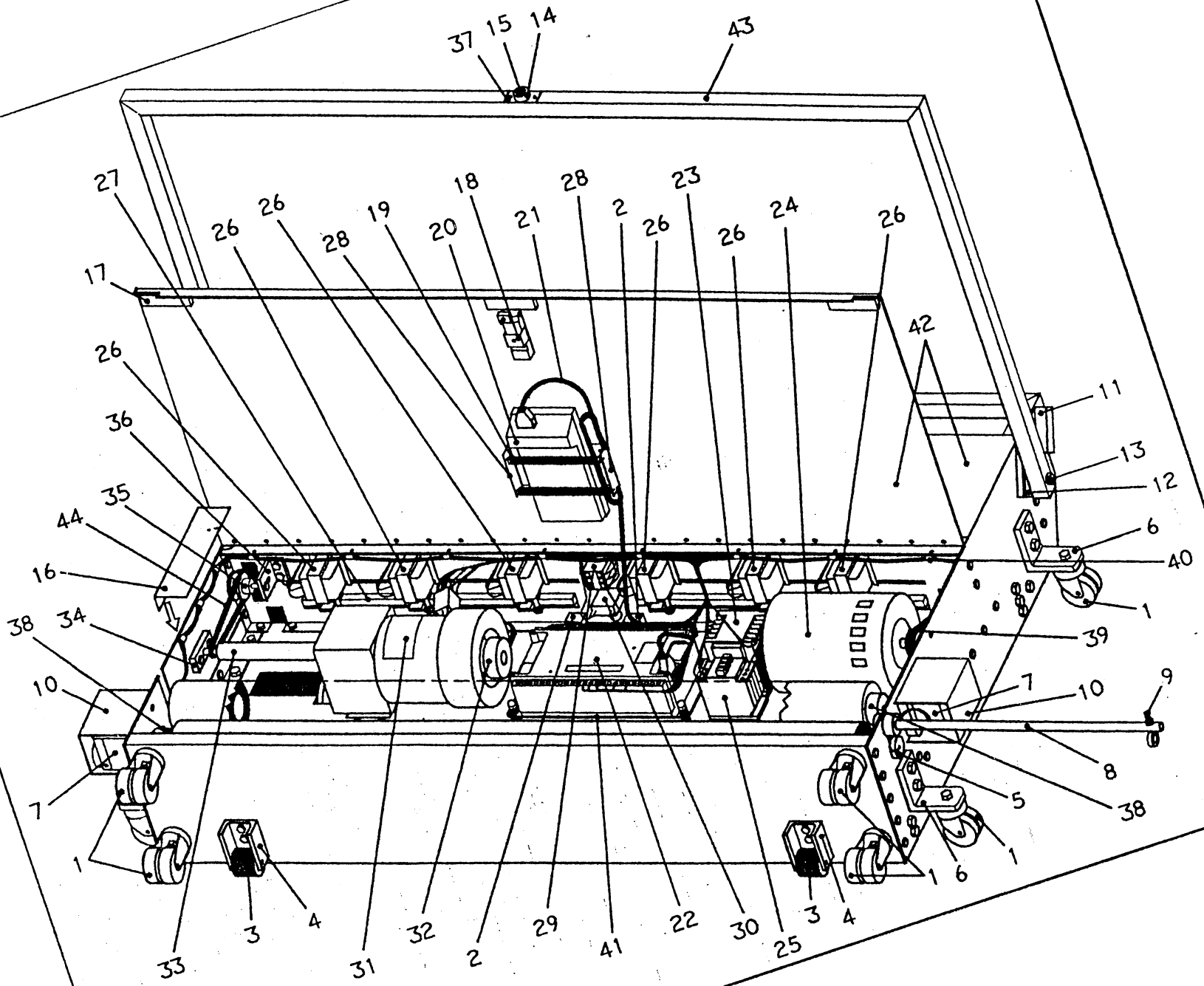
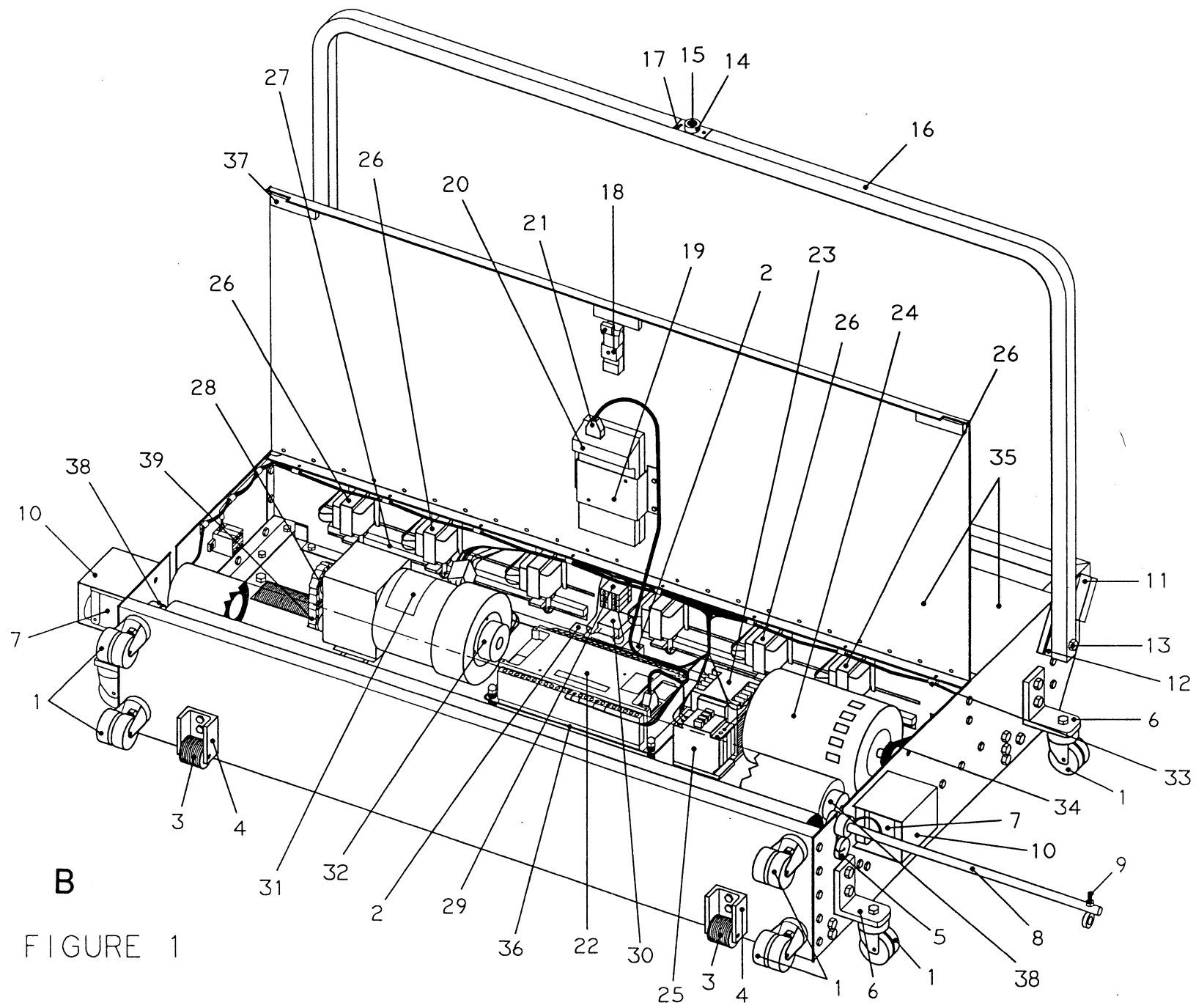


FIGURE 1

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MECHANICAL DRAWINGS INDEX

FIGURE NUMBER	INDEX NUMBER	PART NUMBER	PART NAME & DESCRIPTION
<b>FIGURE 1 ATTACHING PARTS INDEX BEGINS ON Page 11</b>			
1	1	153-0402	TRANSPORT CASTER (2" - DUAL WHEEL)
1	2	153-1016	LY2 RELAY
1	3	153-8311	MOMENTARY WHEEL ASSEMBLY
1	4	153-6029	MOMENTARY LANE ROLLER HOUSING
1	5	153-6426	UHMW LINODUSTER CLOTH PLUG (EXCEL)
1	6	153-6421	LANE TO LANE CASTER MOUNTING ANGLE
1	7	153-8403	LINODUSTER MOTOR ASSEMBLY (7-RPM)
1	8	153-8414	CORD HOLDER ASSEMBLY
1	9	153-2230	CORD HOLDER EYEBOLT (1/4 X 2-1/2)
1	10	153-6412	LINODUSTER MOTOR SHIELD
1	11	153-6430	EXTENSION HANDLE SUPPORT ANGLE - LEFT SIDE
1	12	153-0430	UHMW EXTENSION HANDLE CLUTCH SHIM
1	13	153-2070	HANDLE PIVOT BOLT (HHCS - 3/8-16 X 2-1/2)
1	14	153-1209	BUTTON GUARD
1	15	153-8424	PUSH BUTTON REPLACEMENT ASSEMBLY
1	16	153-6432	TRANSFER CHAIN GUARD
1	17	153-0036	LID VIBRATION STRIP (SOLD BY INCH)
1	18	153-2232	FLUSH MOUNT LID LATCH
1	19	153-2096	SPRING - KEYBOARD MOUNT
1	20	153-1002	PRO27 KEYBOARD (C200H)
1	21	153-1005	KEYBOARD CABLE (C200H)
1	22	153-1001	C28H MICROPROCESSOR (PC)
1	23	153-1003	POWER SUPPLY 24V DC
1	24	153-8016A	BUFFER MOTOR ASSEMBLY (50/60)
1	25	153-1004	BUFFER MOTOR CONTACTOR
1	26	153-1027	SOLENOID
1	27	153-0407	UHMW SOLENOID CABLE GUIDE (EXCEL)
1	28	153-6250	KEYBOARD MOUNTING ANGLE
1	29	153-1021	TERMINAL BLOCK ASSEMBLY
1	30	153-1030	CIRCUIT BREAKER (10 AMP)
1	31	153-8413	DRIVE MOTOR ASSEMBLY - MAXI-TORQ
1	32	153-8406	DRIVE MOTOR BRAKE ASSEMBLY
1	33	153-8418	DRIVE MOTOR EXTENSION SHAFT ASSEMBLY
1	34	153-8417	DRIVE MOTOR EXTENSION SHAFT BLOCK ASSEMBLY
1	35	153-8411	TRANSFER IDLER SPROCKET ASSEMBLY (EXCEL)
1	36	153-6411	TRANSFER IDLER SPROCKET MOUNTING ANGLE
1	37	153-6437	PUSH BUTTON MOUNTING PLATE
1	38	153-8201	DMR LINODUSTER HUB ASSEMBLY
1	39	153-9015	T-BELT 322LO50
1	40	153-1049B	WIRE HARNESS CLAMP - 1/2
1	41	153-6219	SMALL PROCESSOR PLATE
1	42	153-8401	COMPLETE LID ASSEMBLY (EXCEL)
1	43	153-8416	EXTENSION HANDLE ASSEMBLY
1	44	153-9442	TRANSFER ROLLER PRIMARY CHAIN (25P53)

FIGURE 1



**B**

FIGURE 1

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FIGURE NUMBER	INDEX NUMBER	PART NUMBER	PART NAME & DESCRIPTION
<b>FIGURE 1 PARTS</b>			
1	1	153-0402	TRANSPORT CASTER (2" - DUAL WHEEL)
1	2	153-1016	LY2 RELAY - 110 VOLT
1	3	153-8311	MOMENTARY WHEEL ASSEMBLY
1	4	153-6029	MOMENTARY LANE ROLLER HOUSING
1	5	153-6426	UHMW LINODUSTER CLOTH PLUG (EXCEL)
1	6	153-6421	LANE TO LANE CASTER MOUNTING ANGLE
1	7	153-8403	CONE-BRAKE MOTOR ASSEMBLY (7 RPM-110 VOLT)
1	8	153-8414	CORD HOLDER ASSEMBLY
1	9	153-2230	EYEBOLT - 1/4-20 X 2-1/2
1	10	153-6412	LINODUSTER MOTOR SHIELD
1	11	153-6430	EXTENSION HANDLE SUPPORT ANGLE - LEFT SIDE
1	12	153-0430L	UHMW HANDLE CLUTCH SHIM - LEFT SIDE
1	13	153-2070	HHCS - 3/8-16 X 2-1/2
1	14	153-1209	BUTTON GUARD
1	15	153-8424A	PUSH BUTTON REPLACEMENT ASSEMBLY (SHIELDED WIRE)
1	16	153-8416	EXTENSION HANDLE ASSEMBLY (EXCEL)
1	17	153-6437	PUSH BUTTON MOUNTING PLATE
1	18	153-2232A	LID LATCH - FLUSH MOUNT DUAL BUTTON
1	19	153-6250C	KEYBOARD MOUNTING BRACKET
1	20	153-1002XL	PRO27 KEYBOARD (WITH EXCEL DECAL)
1	21	153-1005	KEYBOARD CABLE (C200H)
1	22	153-1001	C28H MICROPROCESSOR (PC)
1	23	153-1003	POWER SUPPLY - 24V DC
1	24	153-8016A	BUFFER MOTOR ASSEMBLY - 60 Hz (10LO50)
1	25	153-1004	BUFFER MOTOR CONTACTOR - 110 VOLT
1	26	153-1027	SOLENOID - 110 VOLT
1	27	153-0407	UHMW SOLENOID CABLE GUIDE (3/8 x 17)
1	28	153-9405	SPROCKET - 40B11 (DRIVE MOTOR)
1	29	153-1021	TERMINAL BLOCK
1	30	153-1030	CIRCUIT BREAKER (10 AMP)
1	31	153-8413	DRIVE MOTOR ASSEMBLY (MAXI-TORQ - 60 Hz AC)
1	32	153-8406	DRIVE MOTOR BRAKE ASSEMBLY (24 VDC)
1	33	153-1049B	WIRE HARNESS CLAMP - 1/2
1	34	153-9015	T-BELT 322LO50 (BUFFER MOTOR)
1	35	153-8401	COMPLETE LID ASSEMBLY (EXCEL = 46-3/8")
1	36	153-6219	SMALL PROCESSOR PLATE
1	37	153-0036	LID VIBRATION STRIP (SOLD BY INCH)
1	38	153-8201	DMR LINODUSTER HUB ASSEMBLY
1	39	153-9444	DRIVE MOTOR CHAIN (40P31)

B

FIGURE 1

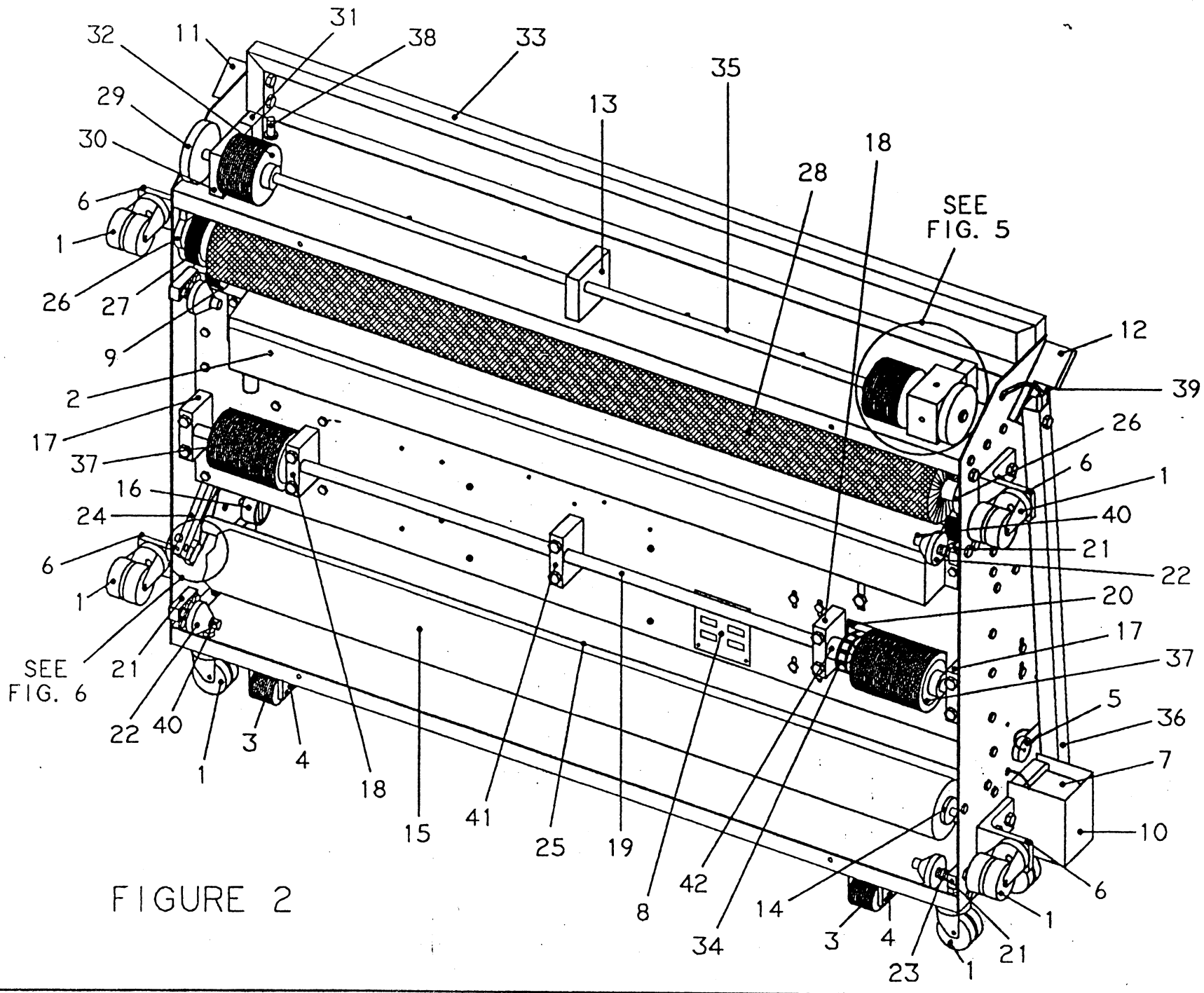
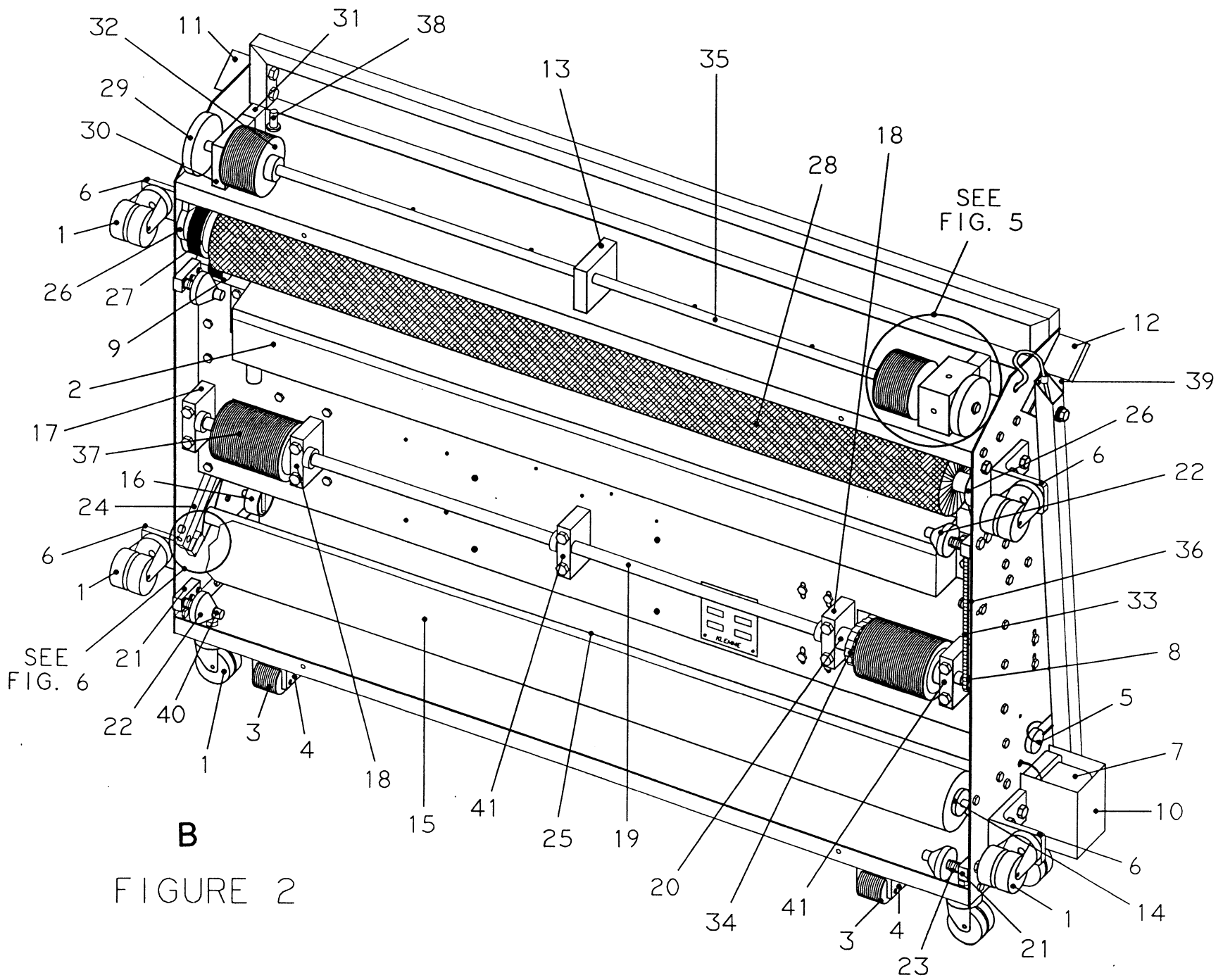


FIGURE 2

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FIGURE NUMBER	INDEX NUMBER	PART NUMBER	PART NAME & DESCRIPTION
<b>FIGURE 2 ATTACHING PARTS INDEX BEGINS ON Page 16</b>			
2	1	153-0402	TRANSPORT CASTER (2" - DUAL WHEEL)
2	2	153-8019	OIL TANK ASSEMBLY
2	3	153-8311	MOMENTARY WHEEL ASSEMBLY
2	4	153-6029	MOMENTARY LANE ROLLER HOUSING
2	5	153-6426	UHMW LINODUSTER CLOTH PLUG (EXCEL)
2	6	153-6421	LANE TO LANE CASTER MOUNTING ANGLE
2	7	153-8403	LINODUSTER MOTOR ASSEMBLY (7-RPM)
2	8	153-0442	SERIAL NUMBER & ID PLATE
2	9	153-8039	BUFFER BELT IDLER ASSEMBLY
2	10	153-6412	LINODUSTER MOTOR SHIELD
2	11	153-6430	EXTENSION HANDLE SUPPORT ANGLE - LEFT SIDE
2	12	153-6429	EXTENSION HANDLE SUPPORT ANGLE - RIGHT SIDE
2	13	153-8421	LANE DISTANCE COUNTER PILLOWBLOCK - EXCEL CENTER
2	14	153-9050	CUSHION ROLLER PLUG
2	15	153-8238	CUSHION ROLLER ASSEMBLY (44-1/4")
2	16	153-8201	DMR LINODUSTER HUB ASSEMBLY
2	17	153-8404	LANE DRIVE PILLOWBLOCK - PLAIN BUSHING
2	18	153-8405	LANE DRIVE PILLOWBLOCK - FLANGED BUSHING
2	19	153-6423	MAIN DRIVE SHAFT
2	20	153-8425	UHMW DRIVE MOTOR CHAIN TENSIONER (1-1/2 X 4)
2	21	153-6417	GUIDE ROLLER MOUNTING BAR
2	22	153-8410	LANE EDGE GUIDE ROLLER W/BUSHING ASSEMBLY (1/2")
2	23	153-2401	GUIDE ROLLER SPRING
2	24	153-8420	CUSHION ROLLER PIVOT ARM ASSEMBLY
2	25	153-6425	LINODUSTER CLOTH ROUTING ROD
2	26	153-9016	3/4" FLANGED BEARING
2	27	153-9015	T-BELT 322LO50 (BUFFER MOTOR)
2	28	153-8407	BUFFER BRUSH ASSEMBLY (3-3/4")
2	29	153-7401	UHMW KICK-UP WHEEL
2	30	153-8033	LANE DISTANCE COUNTER PILLOWBLOCK (LEFT)
2	31	153-6027	LANE DISTANCE ADJUSTMENT BLOCK
2	32	153-7002A	LANE DISTANCE COUNTER WHEEL (2 INCH)
2	33	153-8415	OPTIONAL HANDLE FOR OVER-LANE BALL RETURNS
2	34	153-9444	EXCEL DRIVE CHAIN (40P31)
2	35	153-6435	LANE DISTANCE COUNTER SHAFT
2	36	153-8416	EXTENSION HANDLE ASSEMBLY
2	37	153-7013	LANE DRIVE WHEEL (FOUR-INCH TREADED)
2	38	153-1055	TUBE HOSE STEM / GRAY PLASTIC
2	39	153-0430	UHMW EXTENSION HANDLE CLUTCH SHIM
2	40	153-2407	GUIDE ROLLER SHOULDER BOLT (3/8 X 1-3/4)
2	41	153-8404	LANE DRIVE PILLOWBLOCK - PLAIN BUSHING
2	42	153-9003	SPROCKET (MAIN DRIVE SHAFT) 40B10

FIGURE 2



**B**

FIGURE 2

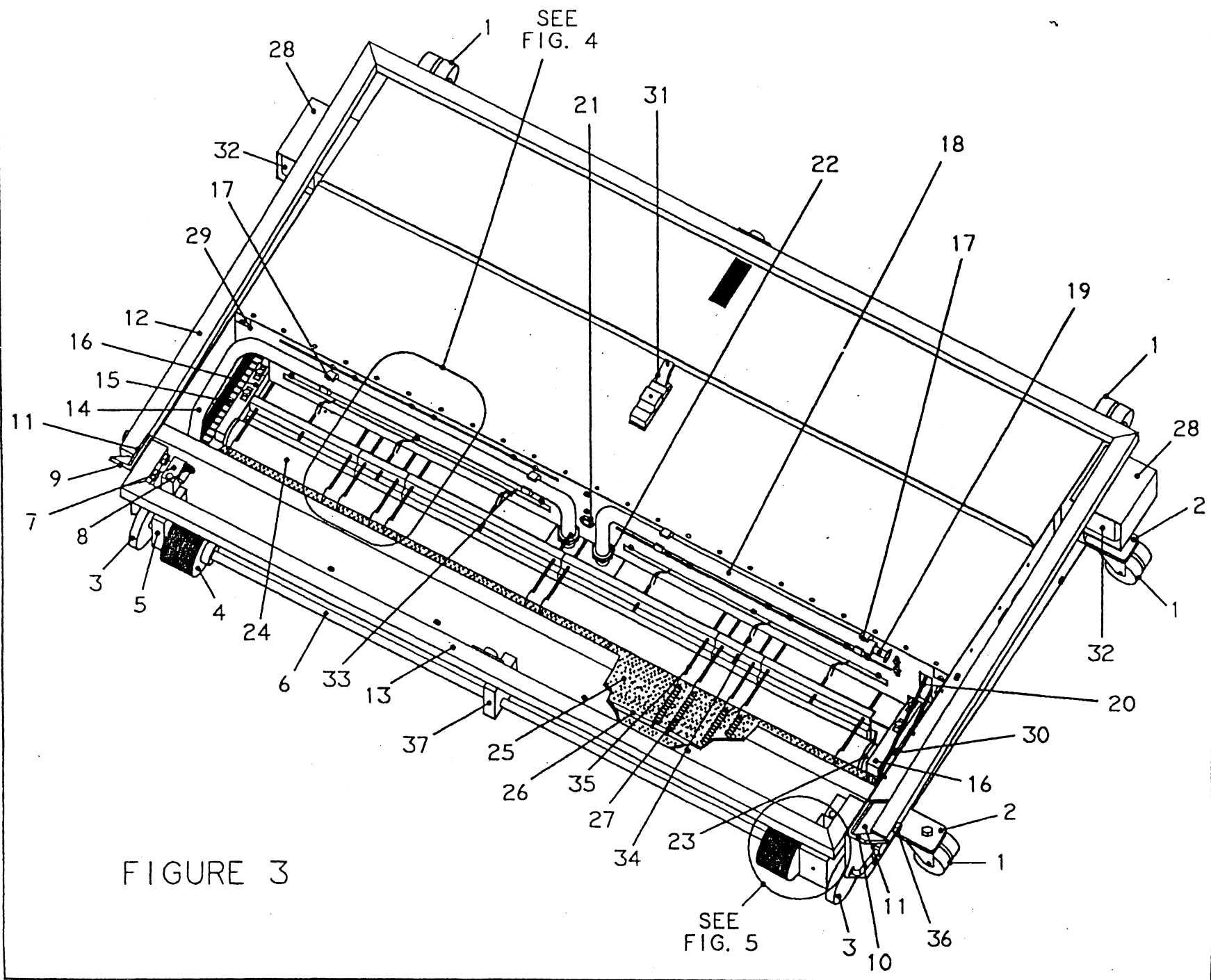


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FIGURE NUMBER	INDEX NUMBER	PART NUMBER	PART NAME & DESCRIPTION
<b>FIGURE 2 PARTS</b>			
2	1	153-0402	TRANSPORT CASTER (2" - DUAL WHEEL)
2	2	153-8019	OIL TANK ASSEMBLY
2	3	153-8311	MOMENTARY WHEEL ASSEMBLY
2	4	153-6029	MOMENTARY LANE ROLLER HOUSING
2	5	153-6426	UHMW LINODUSTER CLOTH PLUG (EXCEL)
2	6	153-6421	LANE TO LANE CASTER MOUNTING ANGLE
2	7	153-8403	CONE-BRAKE MOTOR ASSEMBLY (7 RPM-110 VOLT)
2	8	153-9407	SPROCKET - 25B10 (TRANSFER PRIMARY DRIVE)
2	9	153-8039	BUFFER BELT IDLER ASSEMBLY
2	10	153-6412	LINODUSTER MOTOR SHIELD
2	11	153-6430	EXTENSION HANDLE SUPPORT ANGLE - LEFT SIDE
2	12	153-6429	EXTENSION HANDLE SUPPORT ANGLE - RIGHT SIDE
2	13	153-8421	LANE DISTANCE COUNTER PILLOWBLOCK - CENTER
2	14	153-9050	CUSHION ROLLER PLUG
2	15	153-8238	CUSHION ROLLER ASSEMBLY (DMR LINODUSTER = 44")
2	16	153-8201	DMR LINODUSTER HUB ASSEMBLY
2	17	153-8404	LANE DRIVE PILLOWBLOCK - PLAIN BUSHING
2	18	153-8405	LANE DRIVE PILLOWBLOCK - FLANGED BUSHING
2	19	153-6619	MAIN DRIVE SHAFT (45-1/2")
2	20	153-9003	SPROCKET - 40B10 (MAIN DRIVE SHAFT)
2	21	153-6417	GUIDE ROLLER MOUNTING BAR (ALUMINUM)
2	22	153-8410	LANE EDGE GUIDE ROLLER ASSEMBLY (1/2")
2	23	153-2401	SPRING - 0.54 OD X 0.75 (GUIDE ROLLER)
2	24	153-8420	CUSHION ROLLER PIVOT ARM ASSEMBLY
2	25	153-6825A	LINODUSTER CLOTH ROUTING BAR (STEEL)
2	26	153-9016	3/4" FLANGED BEARING
2	27	153-9015	T-BELT 322LO50 (BUFFER MOTOR)
2	28	153-8407	BUFFER BRUSH ASSEMBLY (3-3/4")
2	29	153-7401	UHMW KICK-UP WHEEL
2	30	153-8033	LANE DISTANCE COUNTER PILLOWBLOCK (LEFT)
2	31	153-6027	LANE DISTANCE ADJUSTMENT BLOCK
2	32	153-7002AA	LANE DISTANCE COUNTER WHEEL-TREADED (2 INCH)
2	33	153-9642	TRANSFER ROLLER DRIVE CHAIN (25P101)
2	34	153-9444	DRIVE MOTOR CHAIN (40P31)
2	35	153-6435	LANE DISTANCE COUNTER SHAFT
2	36	153-6618	UHMW TENSION IDLER FOR TRANSFER CHAIN
2	37	153-7013	LANE DRIVE WHEEL (FOUR-INCH TREADED)
2	38	153-1055	TUBE HOSE STEM (GRAY PLASTIC)
2	39	153-0430R	UHMW HANDLE CLUTCH SHIM - RIGHT SIDE
2	40	153-2407	SHOULDER BOLT - 3/8 X 1-3/4 (5/16-18) GUIDE ROLLER
2	41	153-8404	LANE DRIVE PILLOWBLOCK - PLAIN BUSHING

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FIGURE 2



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FIGURE NUMBER	INDEX NUMBER	PART NUMBER	PART NAME & DESCRIPTION
<b>FIGURE 3 ATTACHING PARTS INDEX BEGINS ON Page 22</b>			
3	1	153-0402	TRANSPORT CASTER (2" - DUAL WHEEL)
3	2	153-6421	LANE TO LANE CASTER MOUNTING ANGLE
3	3	153-7401	UHMW KICK-UP WHEEL
3	4	153-7002A	LANE DISTANCE COUNTER WHEEL (2 INCH)
3	5	153-8033	LANE DISTANCE COUNTER PILLOWBLOCK (LEFT)
3	6	153-6435	LANE DISTANCE COUNTER SHAFT
3	7	153-6027	LANE DISTANCE ADJUSTMENT BLOCK
3	8	153-1055	TUBE HOSE STEM / GRAY PLASTIC
3	9	153-6430	EXTENSION HANDLE SUPPORT ANGLE - LEFT SIDE
3	10	153-6429	EXTENSION HANDLE SUPPORT ANGLE - RIGHT SIDE
3	11	153-0430	UHMW EXTENSION HANDLE CLUTCH SHIM
3	12	153-8416	EXTENSION HANDLE ASSEMBLY
3	13	153-8415	OPTIONAL HANDLE FOR OVER-LANE BALL RETURNS
3	14	153-1052B	OIL REFILL TUBING (30")
3	15	153-9015	T-BELT 322LO50 (BUFFER MOTOR)
3	16	153-8426	TRANSFER ROLLER ARM MOUNT ASSEMBLY (EXCEL)
3	17	153-2046	SPRING CLIP (OIL HOSE CLIP)
3	18	153-1052A	OIL VENT TUBING (20")
3	19	153-1054	OIL VENT HOSE PLUG / GRAY PLASTIC
3	20	153-9442A	TRANSFER ROLLER SECONDARY CHAIN (25P75)
3	21	153-1030	CIRCUIT BREAKER (10 AMP)
3	22	153-1053	TANK VENT FITTING / BRASS
3	23	153-9049	TRANSFER ROLLER END PLUG
3	24	153-8408	TRANSFER ROLLER ASSEMBLY
3	25	153-8407	BUFFER BRUSH ASSEMBLY (3-3/4")
3	26	153-0444	WICK SPRING ROD (EXCEL = 45-1/2")
3	27	153-2095	SPRING (WICK)
3	28	153-6412	LINODUSTER MOTOR SHIELD
3	29	153-0033	LID HINGE BRACKET MOUNT (BLANK)
3	30	153-9008	SPROCKET (TRANSFER ROLLER) 25B25
3	31	153-2232	FLUSH MOUNT LID LATCH
3	32	153-8403	LINODUSTER MOTOR ASSEMBLY (7-RPM)
3	33	153-8412	SHORT SOLENOID CABLE & UHMW PLUG LEASH
3	34	153-2044	EYEBOLT - 10/24 X 2" OVERALL
3	35	153-2043	EYEBOLT - 10/24 X 4" OVERALL
3	36	153-2070	HANDLE PIVOT BOLT (HHCS - 3/8-16 X 2-1/2)
3	37	153-8421	LANE DISTANCE COUNTER PILLOWBLOCK - EXCEL CENTER

FIGURE 3

FIGURE 4

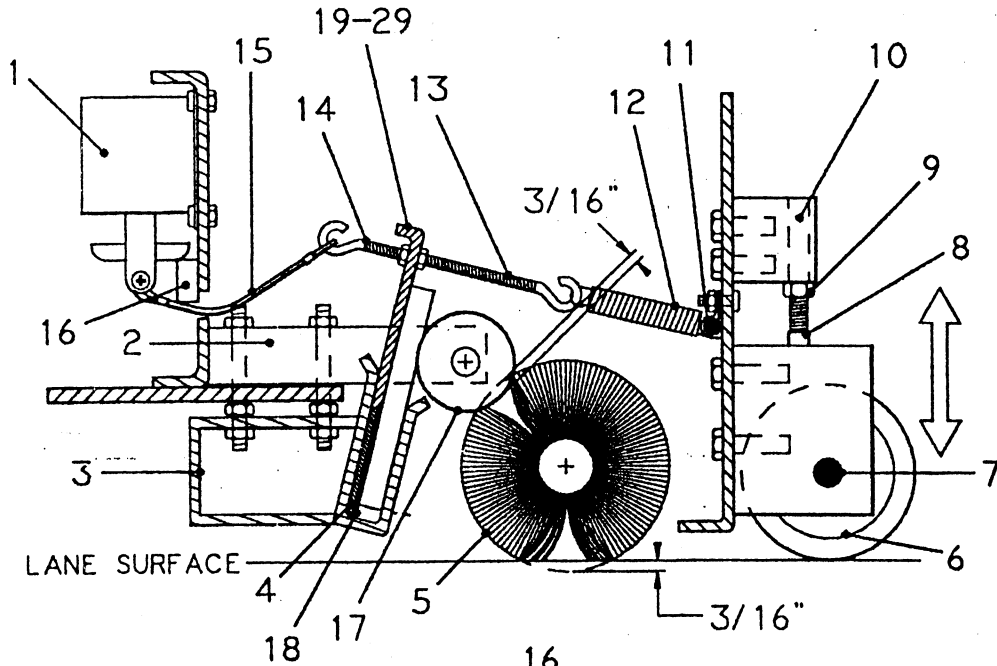


FIGURE 5

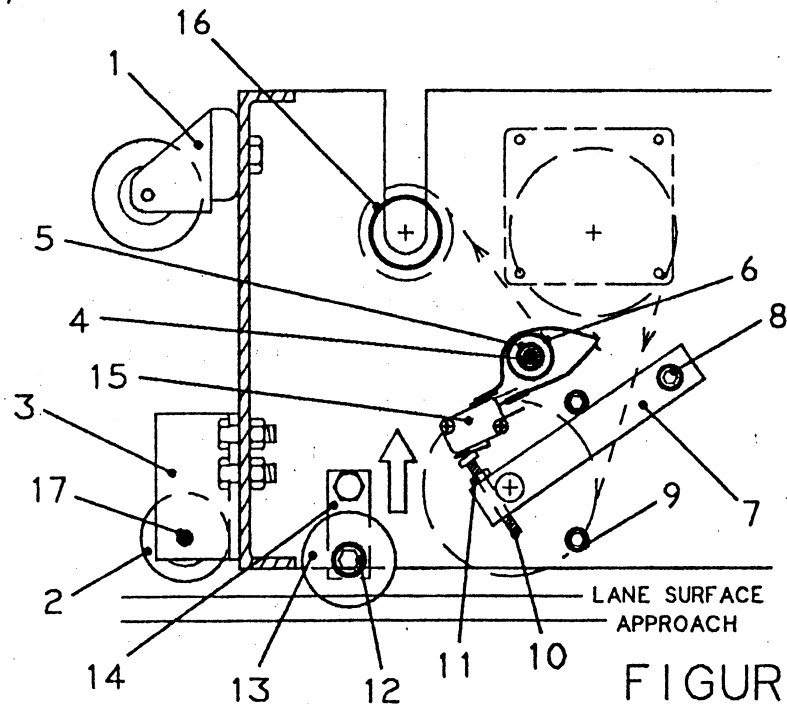
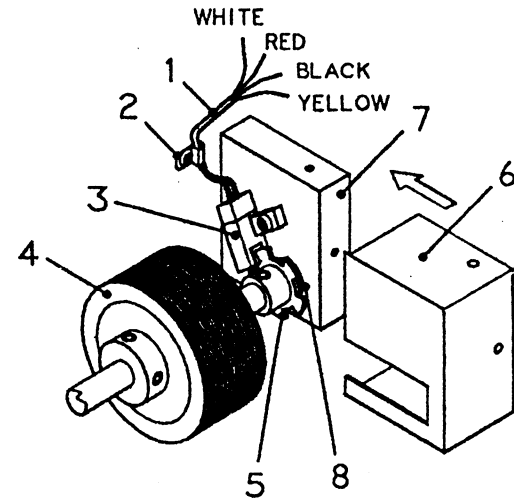


FIGURE 6

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FIGURE NUMBER	INDEX NUMBER	PART NUMBER	PART NAME & DESCRIPTION
<b>FIGURE 4 ATTACHING PARTS INDEX BEGINS ON Page 26</b>			
4	1	153-1027	SOLENOID
4	2	153-8426	TRANSFER ROLLER ARM MOUNT ASSEMBLY (EXCEL)
4	3	153-8019	OIL TANK ASSEMBLY
4	4	153-0011	TANK PIVOT POINT SHIM (1/8" ALUMINUM)
4	5	153-8407	BUFFER BRUSH ASSEMBLY (3-3/4")
4	6	153-7002A	LANE DISTANCE COUNTER WHEEL (2 INCH)
4	7	153-6435	LANE DISTANCE COUNTER SHAFT
4	8	153-2047	SQUARE HEAD SET SCREW - 3/8 X 2
4	9	153-2027	JAM NUT - 3/8
4	10	153-6027	LANE DISTANCE ADJUSTMENT BLOCK
4	11	153-0444	WICK SPRING ROD (EXCEL = 45-1/2")
4	12	153-2095	SPRING (WICK)
4	13	153-2043	EYEBOLT - 10/24 X 4" OVERALL
4	14	153-2044	EYEBOLT - 10/24 X 2" OVERALL
4	15	153-8412	SHORT SOLENOID CABLE & UHMW PLUG LEASH
4	16	153-0407	UHMW SOLENOID CABLE GUIDE (EXCEL)
4	17	153-8408	TRANSFER ROLLER ASSEMBLY
4	18	153-0074	TANK PIVOT POINT SHIM (0.090 ALUMINUM)
4	19	153-8102	2" COMPLETE WICK PLATE ASSEMBLY
4	20	153-8103	3" COMPLETE WICK PLATE ASSEMBLY
4	21	153-8104	4" COMPLETE WICK PLATE ASSEMBLY
4	22	153-8105	5" COMPLETE WICK PLATE ASSEMBLY
4	23	153-8106	6" COMPLETE WICK PLATE ASSEMBLY
4	24	153-8107	7" COMPLETE WICK PLATE ASSEMBLY
4	25	153-8108	8" COMPLETE WICK PLATE ASSEMBLY
4	26	153-8109	9" COMPLETE WICK PLATE ASSEMBLY
4	27	153-8110	10" COMPLETE WICK PLATE ASSEMBLY
4	28	153-8111	11" COMPLETE WICK PLATE ASSEMBLY
4	29	153-8112	12" COMPLETE WICK PLATE ASSEMBLY
<b>FIGURE 5 ATTACHING PARTS INDEX IS ON Page 29</b>			
5	1	153-1031B	SENSOR PLUG & CABLE
5	2	153-1049D	WIRE HARNESS CLAMP - 1/8
5	3	153-1031A	PASS-THROUGH SENSOR
5	4	153-7002A	LANE DISTANCE COUNTER WHEEL (2 INCH)
5	5	153-6039	LANE COUNTER SPROCKET
5	6	153-8049	LANE DISTANCE SENSOR GUARD ASSEMBLY
5	7	153-8031	LANE DISTANCE COUNTER PILLOWBLOCK (SENSOR)
5	8	153-2010	NYLON FLAT WASHER (1/2 - 0.030)
<b>INDEX FOR FIGURE 6 IS ON THE NEXT PAGE</b>			

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FIGURE NUMBER	INDEX NUMBER	PART NUMBER	PART NAME & DESCRIPTION
<b>FIGURE 6 ATTACHING PARTS INDEX BEGINS ON Page 30</b>			
6	1	153-0402	TRANSPORT CASTER (2" - DUAL WHEEL)
6	2	153-8311	MOMENTARY WHEEL ASSEMBLY
6	3	153-6029	MOMENTARY LANE ROLLER HOUSING
6	4	153-6425	LINODUSTER CLOTH ROUTING ROD
6	5	153-0030B	DMR LINODUSTER ROD VIBRATION DAMPENER (45")
6	6	153-0028A	DMR LINODUSTER 1/2" IDLER PIPE (45")
6	7	153-8420	CUSHION ROLLER PIVOT ARM ASSEMBLY
6	8	153-2408	SHOULDER BOLT - 5/16 X 1/2
6	9	153-2412	SHCS - 1/4-20 X 1/2 (CUSHION ROLLER STOP)
6	10	153-2090	MS PHILLIPS - 8-32 X 1-1/2
6	11	153-2414	HEX NUT - 8-32
6	12	153-2407	GUIDE ROLLER SHOULDER BOLT (3/8 X 1-3/4)
6	13	153-8410	LANE EDGE GUIDE ROLLER W/BUSHING ASSEMBLY (1/2")
6	14	153-6417	GUIDE ROLLER MOUNTING BAR
6	15	153-1202	DMR LINODUSTER MICROSWITCH
6	16	153-0429	DMR LINODUSTER TAKE-UP SUPPORT PIPE (40")
6	17	153-6006	MOMENTARY LANE ROLLER SHAFT

FIGURE 6

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ATTACHING PARTS INDEX FOR MECHANICAL DRAWINGS

FIGURE NUMBER	INDEX NUMBER	PART NUMBER	PART NAME & DESCRIPTION	QUANTITY NEEDED
1	1	153-0402	TRANSPORT CASTER (2" - DUAL WHEEL)	8
		ATTACHING PARTS		
		153-2006	FLAT WASHER - 3/8	2
		153-2016	LOCK WASHER - 3/8	1
		153-2025	HEX NUT - 3/8-16	1
		153-2067	HHCS - 3/8-16 X 1-1/4	1
1	2	153-1016	LY2 RELAY	2
		ATTACHING PARTS		
		153-1017	LY2 RELAY BASE	1
		153-1020	RELAY CLAMP	2
		153-2088	MS PHILLIPS - 8-32 X 3/4 (SELF)	2
1	3	153-8311	MOMENTARY WHEEL ASSEMBLY	2
		ATTACHING PARTS		
		153-2049	SET SCREW - 8-32 X 3/16	1
		153-6006	MOMENTARY LANE ROLLER SHAFT	1
1	4	153-6029	MOMENTARY LANE ROLLER HOUSING	2
		ATTACHING PARTS		
		153-2005	FLAT WASHER - 5/16	4
		153-2015	LOCK WASHER - 5/16	2
		153-2024	HEX NUT - 5/16-18	2
		153-2049	SET SCREW - 8-32 X 3/16	1
		153-2061	HHCS - 5/16-18 X 1	2
1	5	153-6426	UHMW LINODUSTER CLOTH PLUG (EXCEL)	2
		ATTACHING PARTS		
		153-2088	MS PHILLIPS - 8-32 X 3/4 (SELF)	1
		153-8412	SHORT SOLENOID CABLE & UHMW PLUG LEASH (EXCEL)	1
1	6	153-6421	LANE TO LANE CASTER MOUNTING ANGLE	4
		ATTACHING PARTS		
		153-2006	FLAT WASHER - 3/8	4
		153-2016	LOCK WASHER - 3/8	2
		153-2025	HEX NUT - 3/8-16	2
		153-2067	HHCS - 3/8-16 X 1-1/4	2
1	7	153-8403	LINODUSTER MOTOR ASSEMBLY (7-RPM)	2
		ATTACHING PARTS		
		153-2003	FLAT WASHER - 3/16	4
		153-2013	LOCK WASHER - 3/16	4
		153-2091	MS PHILLIPS - 10-32 X 3/4	4

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FIGURE NUMBER	INDEX NUMBER	PART NUMBER	PART NAME & DESCRIPTION	QUANTITY NEEDED
1	8	153-8414	CORD HOLDER ASSEMBLY	1
1	9	153-2230	CORD HOLDER EYEBOLT (1/4 X 2-1/2)	1
		NOTE: THIS EYEBOLT IS INCLUDED WITH 153-8423 (POWER CORD ASSEMBLY)		
		ATTACHING PARTS		
		153-2004	FLAT WASHER - 1/4	2
		153-2014	LOCK WASHER - 1/4	2
		153-2023	HEX NUT - 1/4-20	2
1	10	153-8412	LINODUSTER MOTOR SHIELD	2
1	11	153-8430	EXTENSION HANDLE SUPPORT ANGLE - LEFT SIDE	1
		ATTACHING PARTS		
		153-2006	FLAT WASHER - 3/8	4
		153-2016	LOCK WASHER - 3/8	2
		153-2025	HEX NUT - 3/8-16	2
		153-2070	HHCS - 3/8-16 X 2-1/2	1
		153-2415	FHSC - 3/8-16 X 1	1
1	12	153-0430	UHMW EXTENSION HANDLE CLUTCH SHIM	2
		ATTACHING PARTS		
		153-2204	ROLL PIN - 3/32 X 1/2	1
1	13	153-2070	HANDLE PIVOT BOLT (HHCS - 3/8-16 X 2-1/2)	2
		ATTACHING PARTS		
		153-2006	FLAT WASHER - 3/8	3
		153-2016	LOCK WASHER - 3/8	1
		153-2025	HEX NUT - 3/8-16	1
1	14	153-1209	BUTTON GUARD	1
1	15	153-8424	PUSH BUTTON REPLACEMENT ASSEMBLY	1
		ATTACHING PARTS		
		153-1209	BUTTON GUARD	1
1	16	153-8432	TRANSFER CHAIN GUARD	1
		ATTACHING PARTS		
		153-1049A	WIRE HARNESS CLAMP - 1/4	3
		153-2002	FLAT WASHER - 8-32	3
		153-2019	LOCKNUT - 8-32	3
		153-2087	MS PHILLIPS - 8-32 X 3/4	3
1	17	153-0036	LID VIBRATION STRIP (SOLD BY INCH)	-
1	18	153-2232	FLUSH MOUNT LID LATCH	2

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FIGURE NUMBER	INDEX NUMBER	PART NUMBER	PART NAME & DESCRIPTION	QUANTITY NEEDED
1	19	153-2096	SPRING - KEYBOARD MOUNT	2
1	20	153-1002	PRO27 KEYBOARD (C200H)	1
		ATTACHING PARTS		
		153-2019	LOCKNUT - 8-32	4
		153-2086	MS PHILLIPS - 8-32 X 5/8	4
		153-2096	SPRING - KEYBOARD MOUNT	2
		153-6250	KEYBOARD MOUNTING ANGLE	2
1	21	153-1005	KEYBOARD CABLE (C200H)	1
1	22	153-1001	C28H MICROPROCESSOR (PC)	1
1	23	153-1003	POWER SUPPLY 24V DC	1
		ATTACHING PARTS		
		153-2002	FLAT WASHER - 8-32	8
		153-2019	LOCKNUT - 8-32	4
		153-2089	MS PHILLIPS - 8-32 X 1	4
1	24	153-8016A	BUFFER MOTOR ASSEMBLY (50/60)	1
		ATTACHING PARTS		
		153-1038	WIRE JOINT (SMALL)	1
		153-2005	FLAT WASHER - 5/16	8
		153-2015	LOCK WASHER - 5/16	4
		153-2024	HEX NUT - 5/16-18	4
		153-2061	HHCS - 5/16-18 X 1	4
1	25	153-1004	BUFFER MOTOR CONTACTOR	1
		ATTACHING PARTS		
		153-2002	FLAT WASHER - 8-32	2
		153-2019	LOCKNUT - 8-32	2
		153-2089	MS PHILLIPS - 8-32 X 1	2
1	26	153-1027	SOLENOID	6
		ATTACHING PARTS		
		153-2002	FLAT WASHER - 8-32	8
		153-2019	LOCKNUT - 8-32	5
		153-2086	MS PHILLIPS - 8-32 X 5/8	4
		153-2089	MS PHILLIPS - 8-32 X 1	1
		153-2109	PLAIN PLASTIC SPACER - 3/8 OD X 5/8	1
		153-8412	SHORT SOLENOID CABLE & UHMW PLUG LEASH (EXCEL)	1
1	27	153-0407	UHMW SOLENOID CABLE GUIDE	2
		ATTACHING PARTS		
		153-2002	FLAT WASHER - 8-32	3
		153-2088	MS PHILLIPS - 8-32 X 3/4 (SELF)	3

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FIGURE NUMBER	INDEX NUMBER	PART NUMBER	PART NAME & DESCRIPTION	QUANTITY NEEDED
1	28	153-6250	KEYBOARD MOUNTING ANGLE	2
		ATTACHING PARTS		
		153-2019	LOCKNUT - 8-32	2
		153-2086	MS PHILLIPS - 8-32 X 5/8	2
1	29	153-1021	TERMINAL BLOCK ASSEMBLY	1
		ATTACHING PARTS		
		153-1022	TERMINAL BLOCK END FOOT	1
		153-1023	JUMPER (USED ON TERMINAL BLOCK)	1
		153-2002	FLAT WASHER - 8-32	2
		153-2019	LOCKNUT - 8-32	2
		153-2086	MS PHILLIPS - 8-32 X 5/8	2
1	30	153-1030	CIRCUIT BREAKER (10 AMP)	1
1	31	153-8413	DRIVE MOTOR ASSEMBLY - MAXI-TORQ	1
		ATTACHING PARTS		
		153-2004	FLAT WASHER - 1/4	8
		153-2014	LOCK WASHER - 1/4	4
		153-2023	HEX NUT - 1/4-20	4
		153-2053	HHCS - 1/4-20 X 1	4
		153-6438	DRIVE MOTOR 1/8" SHIM	2
1	32	153-8406	DRIVE MOTOR BRAKE ASSEMBLY	1
		ATTACHING PARTS		
		153-2013	LOCK WASHER - 3/16	4
		153-2086A	MS PHILLIPS - 8-32 X 3/8	4
1	33	153-8416	DRIVE MOTOR EXTENSION SHAFT ASSEMBLY	1
		ATTACHING PARTS		
		153-2051A	SET SCREW - 1/4-20 X 1/4 (INCLUDED)	1
1	34	153-8417	DRIVE MOTOR EXTENSION SHAFT BLOCK ASSEMBLY	1
		ATTACHING PARTS		
		153-2004	FLAT WASHER - 1/4	4
		153-2014	LOCK WASHER - 1/4	2
		153-2023	HEX NUT - 1/4-20	2
		153-2053	HHCS - 1/4-20 X 1	2
1	35	153-8411	TRANSFER IDLER SPROCKET ASSEMBLY (EXCEL)	1
		ATTACHING PARTS		
		153-2004	FLAT WASHER - 1/4	2
		153-2014	LOCK WASHER - 1/4	1
		153-2023	HEX NUT - 1/4-20	2
		153-2058	HHCS - 1/4-20 X 2-1/4	1



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FIGURE NUMBER	INDEX NUMBER	PART NUMBER	PART NAME & DESCRIPTION	QUANTITY NEEDED
1	36	153-6411	TRANSFER IDLER SPROCKET MOUNTING ANGLE	1
		ATTACHING PARTS		
		153-2004	FLAT WASHER - 1/4	4
		153-2014	LOCK WASHER - 1/4	2
		153-2023	HEX NUT - 1/4-20	2
		153-2053	HHCS - 1/4-20 X 1	2
1	37	153-8437	PUSH BUTTON MOUNTING PLATE	1
		ATTACHING PARTS		
		153-2002	FLAT WASHER - 8-32	2
		153-2088	MS PHILLIPS - 8-32 X 3/4 (SELF)	2
1	38	153-8201	DMR UNODUSTER HUB ASSEMBLY	2
		ATTACHING PARTS		
		153-2201	SET SCREW - 10-32 X 3/8 (INCLUDED)	1
1	39	153-9015	T-BELT 322L050 (BUFFER MOTOR)	1
1	40	153-1049B	WIRE HARNESS CLAMP - 1/2	8
		ATTACHING PARTS		
		153-2019	LOCKNUT - 8-32	1
		153-2086	MS PHILLIPS - 8-32 X 5/8	1
1	41	153-6219	SMALL PROCESSOR PLATE	1
		ATTACHING PARTS		
		153-2004	FLAT WASHER - 1/4	8
		153-2014	LOCK WASHER - 1/4	4
		153-2023	HEX NUT - 1/4-20	4
		153-2029	ACORN NUT - 1/4-20	4
		153-2075	CARRIAGE BOLT - 1/4-20 X 2-1/2	4
		153-2093	SPRING (PROCESSOR)	8
1	42	153-8401	COMPLETE LID ASSEMBLY (EXCEL)	1
		ATTACHING PARTS		
		153-2002	FLAT WASHER - 8-32	4
		153-2019	LOCKNUT - 8-32	2
		153-2086	MS PHILLIPS - 8-32 X 5/8	2
1	43	153-8416	EXTENSION HANDLE ASSEMBLY	1
		ATTACHING PARTS		
		153-2006	FLAT WASHER - 3/8	6
		153-2016	LOCK WASHER - 3/8	2
		153-2025	HEX NUT - 3/8-16	2
		153-2070	HHCS - 3/8-16 X 2-1/2	2
1	44	153-8442	TRANSFER ROLLER PRIMARY CHAIN (25P53)	1
		ATTACHING PARTS		
		153-9045	25 MASTER LINK	1

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FIGURE NUMBER	INDEX NUMBER	PART NUMBER	PART NAME & DESCRIPTION	QUANTITY NEEDED
2	1	153-0402	TRANSPORT CASTER (2" - DUAL WHEEL)	8
		ATTACHING PARTS		
		153-2006	FLAT WASHER - 3/8	2
		153-2016	LOCK WASHER - 3/8	1
		153-2025	HEX NUT - 3/8-16	1
		153-2067	HHCS - 3/8-16 X 1-1/4	1
2	2	153-8019	OIL TANK ASSEMBLY	1
		ATTACHING PARTS		
		153-2005	FLAT WASHER - 5/16	8
		153-2015	LOCK WASHER - 5/16	4
		153-2024	HEX NUT - 5/16-18	4
		153-2027A	JAM NUT - 5/16	4
		153-2065B	ALL THREAD - 5/16-18 X 3 (TANK MOUNT)	4
2	3	153-8311	MOMENTARY WHEEL ASSEMBLY	2
		ATTACHING PARTS		
		153-2049	SET SCREW - 8-32 X 3/16	1
		153-6006	MOMENTARY LANE ROLLER SHAFT	1
2	4	153-6029	MOMENTARY LANE ROLLER HOUSING	2
		ATTACHING PARTS		
		153-2005	FLAT WASHER - 5/16	4
		153-2015	LOCK WASHER - 5/16	2
		153-2024	HEX NUT - 5/16-18	2
		153-2049	SET SCREW - 8-32 X 3/16	1
		153-2061	HHCS - 5/16-18 X 1	2
2	5	153-8428	UHMW UNODUSTER CLOTH PLUG (EXCEL)	2
		ATTACHING PARTS		
		153-2088	MS PHILLIPS - 8-32 X 3/4 (SELF)	1
		153-8412	SHORT SOLENOID CABLE & UHMW PLUG LEASH (EXCEL)	1
2	6	153-6421	LANE TO LANE CASTER MOUNTING ANGLE	4
		ATTACHING PARTS		
		153-2006	FLAT WASHER - 3/8	4
		153-2016	LOCK WASHER - 3/8	2
		153-2025	HEX NUT - 3/8-16	2
		153-2067	HHCS - 3/8-16 X 1-1/4	2
2	7	153-8403	UNODUSTER MOTOR ASSEMBLY (7-RPM)	2
		ATTACHING PARTS		
		153-2003	FLAT WASHER - 3/16	4
		153-2013	LOCK WASHER - 3/16	4
		153-2091	MS PHILLIPS - 10-32 X 3/4	4

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FIGURE NUMBER	INDEX NUMBER	PART NUMBER	PART NAME & DESCRIPTION	QUANTITY NEEDED
2	8	153-0442	SERIAL NUMBER & ID PLATE	1
		ATTACHING PARTS		
		153-2108	DOVE RIVET - 1/8	4
2	9	153-8039	BUFFER BELT IDLER ASSEMBLY	1
		ATTACHING PARTS		
		153-2006	FLAT WASHER - 3/8	2
		153-2021	LOCKNUT - 3/8-16 (NYLOK)	1
		153-2027	JAM NUT - 3/8	1
		153-2405	HHCS - 3/8-16 X 2-3/4	1
2	10	153-6412	LIMDOUSTER MOTOR SHIELD	2
2	11	153-6430	EXTENSION HANDLE SUPPORT ANGLE - LEFT SIDE	1
		ATTACHING PARTS		
		153-2006	FLAT WASHER - 3/8	4
		153-2016	LOCK WASHER - 3/8	2
		153-2025	HEX NUT - 3/8-16	2
		153-2070	HHCS - 3/8-16 X 2-1/2	1
		153-2415	FHSC - 3/8-16 X 1	1
2	12	153-6429	EXTENSION HANDLE SUPPORT ANGLE - RIGHT SIDE	1
		ATTACHING PARTS		
		153-2006	FLAT WASHER - 3/8	4
		153-2016	LOCK WASHER - 3/8	2
		153-2025	HEX NUT - 3/8-16	2
		153-2070	HHCS - 3/8-16 X 2-1/2	1
		153-2415	FHSC - 3/8-16 X 1	1
2	13	153-8421	LANE DISTANCE COUNTER PILLOWBLOCK - EXCEL CENTER	1
		ATTACHING PARTS		
		153-2005	FLAT WASHER - 5/16	2
		153-2015	LOCK WASHER - 5/16	2
		153-2061	HHCS - 5/16-18 X 1	2
2	14	153-9050	CUSHION ROLLER PLUG	2
2	15	153-8238	CUSHION ROLLER ASSEMBLY (44-1/4")	1
		ATTACHING PARTS		
		153-0038B	HEAVY CUSHION WEIGHT - 42-3/4" (INSIDE ROLLER)	1
		153-2036	ROLL PIN - 1/8 X 1	2
		153-6422	CUSHION ROLLER SHAFT (EXCEL)	1
		153-9050	CUSHION ROLLER PLUG (1.660 X 0.140 X 0.375)	2
2	16	153-8201	DMR LIMDOUSTER HUB ASSEMBLY	2
		ATTACHING PARTS		
		153-2201	SET SCREW - 10-32 X 3/8 (INCLUDED)	1

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FIGURE NUMBER	INDEX NUMBER	PART NUMBER	PART NAME & DESCRIPTION	QUANTITY NEEDED
2	17	153-8404	LANE DRIVE PILLOWBLOCK - PLAIN BUSHING	2
		ATTACHING PARTS		
		153-2006	FLAT WASHER - 3/8	2
		153-2021	LOCKNUT - 3/8-16 (NYLOK)	2
		153-2071	HHCS - 3/8-16 X 3	2
2	18	153-8405	LANE DRIVE PILLOWBLOCK - FLANGED BUSHING	2
		ATTACHING PARTS		
		153-2006	FLAT WASHER - 3/8	2
		153-2016	LOCK WASHER - 3/8	2
		153-2025	HEX NUT - 3/8-16	2
		153-2404	FHMS - 3/8-16 X 3	2
2	19	153-6423	MAIN DRIVE SHAFT (EXCEL)	1
		ATTACHING PARTS		
		153-0043	THICK FELT WASHER	5
		153-2006	FLAT WASHER - 3/8	12
		153-2016	LOCK WASHER - 3/8	6
		153-2021	LOCKNUT - 3/8-16 (NYLOK)	4
		153-2025	HEX NUT - 3/8-16	6
		153-2036	SNAP RING - 5/8	5
		153-2050	SET SCREW - 1/4-28 X 3/8 (WHEEL)	4
		153-2071	HHCS - 3/8-16 X 3	4
		153-2100	KEYSTOCK - 3/16 X 3/4	1
		153-2404	FHMS - 3/8-16 X 3	4
		153-2405	HHCS - 3/8-16 X 2-3/4	2
		153-7013	LANE DRIVE WHEEL (FOUR-INCH TREADED)	2
		153-8404	LANE DRIVE PILLOWBLOCK - PLAIN BUSHING (EXCEL)	3
		153-8405	LANE DRIVE PILLOWBLOCK - FLANGED BUSHING (EXCEL)	2
		153-9003	SPROCKET (MAIN DRIVE SHAFT) 40810	1
2	20	153-8425	UHMW DRIVE MOTOR CHAIN TENSIONER (1-1/2 X 4)	1
		ATTACHING PARTS		
		153-2006	FLAT WASHER - 3/8	4
		153-2016	LOCK WASHER - 3/8	2
		153-2025	HEX NUT - 3/8-16	2
		153-2068	HHCS - 3/8-16 X 1-1/2	2
2	21	153-6417	GUIDE ROLLER MOUNTING BAR	4
		ATTACHING PARTS		
		153-2005	FLAT WASHER - 5/16	2
		153-2015	LOCK WASHER - 5/16	2
		153-2061	HHCS - 5/16-18 X 1	2

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FIGURE NUMBER	INDEX NUMBER	PART NUMBER	PART NAME & DESCRIPTION	QUANTITY NEEDED
2	22	153-8410	LANE EDGE GUIDE ROLLER ASSEMBLY (1/2")	4
			ATTACHING PARTS	
		153-2401	GUIDE ROLLER SPRING (EXCEL)	1
		153-2407	GUIDE ROLLER SHOULDER BOLT (3/8 X 1-3/4)	1
		153-9034	PLAIN BUSHING - GUIDE ROLLER (3/8 X 1/2 X 1/4)	1
2	23	153-2401	GUIDE ROLLER SPRING (EXCEL)	4
2	24	153-8420	CUSHION ROLLER PIVOT ARM ASSEMBLY	2
			NOTE: WASHER GOES BETWEEN THE ARM & THE SIDE PLATE	
			ATTACHING PARTS	
		153-2005	FLAT WASHER - 5/16	1
		153-2414	HEX NUT - 8-32	1
		153-2020	LOCKNUT - 1/4-20 (NYLOK)	1
		153-2090	MS PHILLIPS - 8-32 X 1-1/2	1
		153-2408	SHOULDER BOLT - 5/16 X 1/2 (CUSHION ROLLER PIVOT)	1
2	25	153-8425	LINODUSTER CLOTH ROUTING ROD	1
			ATTACHING PARTS	
		153-0028A	DMR LINODUSTER 1/2" IDLER PIPE (45°)	1
		153-0030B	DMR LINODUSTER ROD VIBRATION DAMPENERS (45°)	1
		153-2029	ACORN NUT - 1/4-20	2
2	26	153-9016	3/4" FLANGED BEARING	2
			ATTACHING PARTS	
		153-2006	FLAT WASHER - 3/8	2
		153-2016	LOCK WASHER - 3/8	2
		153-2025	HEX NUT - 3/8-16	2
		153-2067	HHCS - 3/8-16 X 1-1/4	2
2	27	153-9015	T-BELT 322L050 (BUFFER MOTOR)	1
2	28	153-8407	BUFFER BRUSH ASSEMBLY (3-3/4")	1
			ATTACHING PARTS	
		153-2006	FLAT WASHER - 3/8	4
		153-2016	LOCK WASHER - 3/8	4
		153-2025	HEX NUT - 3/8-16	4
		153-2067	HHCS - 3/8-16 X 1-1/4	4
		153-9016	3/4" FLANGED BEARING	2
2	29	153-7401	UHMW KICK-UP WHEEL	2
			ATTACHING PARTS	
		153-2413	SNAP RING - 1/2	2

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FIGURE NUMBER	INDEX NUMBER	PART NUMBER	PART NAME & DESCRIPTION	QUANTITY NEEDED
2	30	153-8033	LANE DISTANCE COUNTER PILLOWBLOCK (LEFT)	1
			ATTACHING PARTS	
		153-2005	FLAT WASHER - 5/16	2
		153-2015	LOCK WASHER - 5/16	2
		153-2061	HHCS - 5/16-18 X 1	2
2	31	153-8027	LANE DISTANCE ADJUSTMENT BLOCK	2
			ATTACHING PARTS	
		153-2005	FLAT WASHER - 5/16	2
		153-2015	LOCK WASHER - 5/16	2
		153-2027	JAM NUT - 3/8	1
		153-2047	SQUARE HEAD SET SCREW - 3/8 X 2	1
		153-2061	HHCS - 5/16-18 X 1	2
2	32	153-7002A	LANE DISTANCE COUNTER WHEEL (2 INCH)	2
			ATTACHING PARTS	
		153-2050	SET SCREW - 1/4-28 X 3/8	2
2	33	153-8415	OPTIONAL HANDLE FOR OVER-LANE BALL RETURNS	1
			ATTACHING PARTS	
		153-2006	FLAT WASHER - 3/8	8
		153-2016	LOCK WASHER - 3/8	4
		153-2025	HEX NUT - 3/8-16	4
		153-2066	HHCS - 3/8-16 X 1	2
		153-2069	HHCS - 3/8-16 X 2	2
2	34	153-9444	EXCEL DRIVE CHAIN (40P31)	1
			ATTACHING PARTS	
		153-9047	40 MASTER LINK	1
2	35	153-6435	LANE DISTANCE COUNTER SHAFT	1
			ATTACHING PARTS	
		153-2005	FLAT WASHER - 5/16	6
		153-2010	NYLON FLAT WASHER (1/2 - 0.030)	7
		153-2015	LOCK WASHER - 5/16	6
		153-2050	SET SCREW - 1/4-28 X 3/8 (WHEEL)	4
		153-2051A	SET SCREW - 1/4-20 X 1/4 (SPROCKET)	1
		153-2061	HHCS - 5/16-18 X 1	6
		153-2413	SNAP RING - 1/2	4
		153-7002A	LANE DISTANCE COUNTER WHEEL (2 INCH)	2
		153-7401	UHMW KICK-UP WHEEL	2
		153-8031	LANE DISTANCE COUNTER PILLOWBLOCK (SENSOR)	1
		153-8033	LANE DISTANCE COUNTER PILLOWBLOCK ASSEMBLY (LEFT)	1
		153-8421	LANE DISTANCE COUNTER PILLOWBLOCK - EXCEL CENTER	1
		153-9406	LANE DISTANCE COUNTER SPROCKET (5-TOOTH)	1

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FIGURE NUMBER	INDEX NUMBER	PART NUMBER	PART NAME & DESCRIPTION	QUANTITY NEEDED
2	36	153-8418	EXTENSION HANDLE ASSEMBLY	1
			ATTACHING PARTS	
		153-2006	FLAT WASHER - 3/8	8
		153-2018	LOCK WASHER - 3/8	2
		153-2025	HEX NUT - 3/8-16	2
		153-2070	HHCS - 3/8-16 X 2-1/2	2
2	37	153-7013	LANE DRIVE WHEEL (4-INCH)	2
			ATTACHING PARTS	
		153-2050	SET SCREW - 1/4-28 X 3/8	2
2	38	153-1055	TUBE HOSE STEM / GRAY PLASTIC	1
2	39	153-0430	UHMW EXTENSION HANDLE CLUTCH SHIM	2
			ATTACHING PARTS	
		153-2204	ROLL PIN - 3/32 X 1/2	1
2	40	153-2407	GUIDE ROLLER SHOULDER BOLT (3/8 X 1-3/4)	4
			ATTACHING PARTS	
		153-2401	GUIDE ROLLER SPRING (EXCEL)	1
		153-8410	LANE EDGE GUIDE ROLLER W/BUSHING ASSEMBLY	1
		153-9034	PLAIN BUSHING - GUIDE ROLLER (3/8 X 1/2 X 1/4)	1
2	41	153-8404	LANE DRIVE PILLOWBLOCK - PLAIN BUSHING	1
			ATTACHING PARTS	
		153-2006	FLAT WASHER - 3/8	4
		153-2016	LOCK WASHER - 3/8	2
		153-2025	HEX NUT - 3/8-16	2
		153-2405	HHCS - 3/8-16 X 2-3/4	2
2	42	153-9003	SPROCKET (MAIN DRIVE SHAFT) 40B10	1
			ATTACHING PARTS	
		153-2051A	SET SCREW - 1/4-20 X 1/4 (INCLUDED)	1
		153-2100	KEYSTOCK - 3/16 X 3/4	1

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FIGURE NUMBER	INDEX NUMBER	PART NUMBER	PART NAME & DESCRIPTION	QUANTITY NEEDED
3	1	153-0402	TRANSPORT CASTER (2" - DUAL WHEEL)	8
			ATTACHING PARTS	
		153-2006	FLAT WASHER - 3/8	2
		153-2016	LOCK WASHER - 3/8	1
		153-2025	HEX NUT - 3/8-16	1
		153-2067	HHCS - 3/8-16 X 1-1/4	1
3	2	153-8421	LANE TO LANE CASTER MOUNTING ANGLE (EXCEL)	4
			ATTACHING PARTS	
		153-2006	FLAT WASHER - 3/8	4
		153-2016	LOCK WASHER - 3/8	2
		153-2025	HEX NUT - 3/8-16	2
		153-2067	HHCS - 3/8-16 X 1-1/4	2
3	3	153-7401	UHMW KICK-UP WHEEL	2
			ATTACHING PARTS	
		153-2413	SNAP RING - 1/2	2
3	4	153-7002A	LANE DISTANCE COUNTER WHEEL (2 INCH)	2
			ATTACHING PARTS	
		153-2050	SET SCREW - 1/4-28 X 3/8	2
3	5	153-8033	LANE DISTANCE COUNTER PILLOWBLOCK (LEFT)	1
			ATTACHING PARTS	
		153-2005	FLAT WASHER - 5/16	2
		153-2015	LOCK WASHER - 5/16	2
		153-2061	HHCS - 5/16-18 X 1	2
3	6	153-6435	LANE DISTANCE COUNTER SHAFT	1
			ATTACHING PARTS	
		153-2005	FLAT WASHER - 5/16	5
		153-2010	NYLON FLAT WASHER (1/2 - 0.030)	7
		153-2015	LOCK WASHER - 5/16	5
		153-2050	SET SCREW - 1/4-28 X 3/8 (WHEEL)	4
		153-2051A	SET SCREW - 1/4-20 X 1/4 (SPROCKET)	1
		153-2061	HHCS - 5/16-18 X 1	6
		153-2413	SNAP RING - 1/2	4
		153-7002A	LANE DISTANCE COUNTER WHEEL (2 INCH)	2
		153-7401	UHMW KICK-UP WHEEL	2
		153-8031	LANE DISTANCE COUNTER PILLOWBLOCK (SENSOR)	1
		153-8033	LANE DISTANCE COUNTER PILLOWBLOCK ASSEMBLY (LEFT)	1
		153-8421	LANE DISTANCE COUNTER PILLOWBLOCK - EXCEL CENTER	1
		153-9406	LANE DISTANCE COUNTER SPROCKET (6-TOOTH)	1

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FIGURE NUMBER	INDEX NUMBER	PART NUMBER	PART NAME & DESCRIPTION	QUANTITY NEEDED
3	7	153-6027	LANE DISTANCE ADJUSTMENT BLOCK	2
			ATTACHING PARTS	
		153-2005	FLAT WASHER - 5/16	2
		153-2015	LOCK WASHER - 5/16	2
		153-2027	JAM NUT - 3/8	1
		153-2047	SQUARE HEAD SET SCREW - 3/8 X 2	1
		153-2061	HHCS - 5/16-18 X 1	2
3	8	153-1055	TUBE HOSE STEM / GRAY PLASTIC	1
3	9	153-6430	EXTENSION HANDLE SUPPORT ANGLE - LEFT SIDE	1
			ATTACHING PARTS	
		153-2006	FLAT WASHER - 3/8	4
		153-2016	LOCK WASHER - 3/8	2
		153-2025	HEX NUT - 3/8-16	2
		153-2070	HHCS - 3/8-16 X 2-1/2	1
		153-2415	FHSC - 3/8-16 X 1	1
3	10	153-6429	EXTENSION HANDLE SUPPORT ANGLE - RIGHT SIDE	1
			ATTACHING PARTS	
		153-2006	FLAT WASHER - 3/8	4
		153-2016	LOCK WASHER - 3/8	2
		153-2025	HEX NUT - 3/8-16	2
		153-2070	HHCS - 3/8-16 X 2-1/2	1
		153-2415	FHSC - 3/8-16 X 1	1
3	11	153-0430	UHMW EXTENSION HANDLE CLUTCH SHIM	2
			ATTACHING PARTS	
		153-2204	ROLL PIN - 3/32 X 1/2	1
3	12	153-8416	EXTENSION HANDLE ASSEMBLY	1
			ATTACHING PARTS	
		153-2006	FLAT WASHER - 3/8	6
		153-2016	LOCK WASHER - 3/8	2
		153-2025	HEX NUT - 3/8-16	2
		153-2070	HHCS - 3/8-16 X 2-1/2	2
3	13	153-8415	OPTIONAL HANDLE FOR OVER-LANE BALL RETURNS	1
			ATTACHING PARTS	
		153-2006	FLAT WASHER - 3/8	8
		153-2016	LOCK WASHER - 3/8	4
		153-2025	HEX NUT - 3/8-16	4
		153-2066	HHCS - 3/8-16 X 1	2
		153-2069	HHCS - 3/8-16 X 2	2
3	14	153-1052B	OIL REFILL TUBING (30")	1
3	15	153-9015	T-BELT 322L050 (BUFFER MOTOR)	1

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FIGURE NUMBER	INDEX NUMBER	PART NUMBER	PART NAME & DESCRIPTION	QUANTITY NEEDED
3	16	153-8426	TRANSFER ROLLER ARM MOUNT ASSEMBLY (EXCEL)	2
			ATTACHING PARTS	
		153-2005	FLAT WASHER - 5/16	2
		153-2015	LOCK WASHER - 5/16	2
		153-2024	HEX NUT - 5/16-18	2
		153-2065B	ALL THREAD - 5/16-18 X 3 (TANK MOUNT)	2
3	17	153-2046	SPRING CLIP (OIL HOSE CLIP)	4
			ATTACHING PARTS	
		153-2002	FLAT WASHER - 8-32	1
		153-2019	LOCKNUT - 8-32	1
		153-2086	MS PHILLIPS - 8-32 X 5/8	1
3	18	153-1052A	OIL VENT TUBING (20")	1
3	19	153-1054	OIL VENT HOSE PLUG / GRAY PLASTIC	1
3	20	153-9442A	TRANSFER ROLLER SECONDARY CHAIN (25P75)	1
			ATTACHING PARTS	
		153-9045	25 MASTER LINK	1
3	21	153-1030	CIRCUIT BREAKER (10 AMP)	1
3	22	153-1053	TANK VENT FITTING / BRASS	2
3	23	153-9049	TRANSFER ROLLER END PLUG	2
3	24	153-8408	TRANSFER ROLLER ASSEMBLY	1
			ATTACHING PARTS	
		153-9008	SPROCKET (TRANSFER ROLLER SECONDARY DRIVE) 25B25	1
3	25	153-8407	BUFFER BRUSH ASSEMBLY (3-3/4")	1
			ATTACHING PARTS	
		153-2006	FLAT WASHER - 3/8	4
		153-2016	LOCK WASHER - 3/8	4
		153-2025	HEX NUT - 3/8-16	4
		153-2067	HHCS - 3/8-16 X 1-1/4	4
		153-9016	3/4" FLANGED BEARING	2
3	26	153-0444	WICK SPRING ROD (EXCEL = 45-1/2")	1
			ATTACHING PARTS	
		153-1049A	WIRE HARNESS CLAMP - 1/4	6
		153-2002	FLAT WASHER - 8-32	12
		153-2019	LOCKNUT - 8-32	6
		153-2086	MS PHILLIPS - 8-32 X 5/8	6
		153-2095	SPRING (WICK)	12
3	27	153-2095	SPRING (WICK)	12

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FIGURE NUMBER	INDEX NUMBER	PART NUMBER	PART NAME & DESCRIPTION	QUANTITY NEEDED
3	28	153-6412	LINODUSTER MOTOR SHIELD	2
3	29	153-0033	LID HINGE BRACKET MOUNT (BLANK)	2
		ATTACHING PARTS		
		153-2002	FLAT WASHER - 8-32	2
		153-2019	LOCKNUT - 8-32	1
		153-2086	MS PHILLIPS - 8-32 X 5/8	1
3	30	153-9008	SPROCKET (TRANSFER ROLLER) 25B25	1
		ATTACHING PARTS		
		153-2051A	SET SCREW - 1/4-20 X 1/4 (INCLUDED)	1
3	31	153-2232	FLUSH MOUNT LID LATCH	2
3	32	153-8403	LINODUSTER MOTOR ASSEMBLY (7-RPM)	2
		ATTACHING PARTS		
		153-2003	FLAT WASHER - 3/16	4
		153-2013	LOCK WASHER - 3/16	4
		153-2091	MS PHILLIPS - 10-32 X 3/4	4
3	33	153-8412	SHORT SOLENOID CABLE & UHMW PLUG LEASH	8
3	34	153-2044	EYEBOLT - 10/24 X 2" OVERALL	8
		ATTACHING PARTS		
		153-2003	FLAT WASHER - 3/16	2
		153-2013	LOCK WASHER - 3/16	2
		153-2022	HEX NUT - 3/16 (10-24)	2
3	35	153-2043	EYEBOLT - 10/24 X 4" OVERALL	12
		ATTACHING PARTS		
		153-2003	FLAT WASHER - 3/16	2
		153-2013	LOCK WASHER - 3/16	2
		153-2022	HEX NUT - 3/16 (10-24)	2
3	36	153-2070	HANDLE PIVOT BOLT (HHCS - 3/8-16 X 2-1/2)	2
		ATTACHING PARTS		
		153-2006	FLAT WASHER - 3/8	3
		153-2016	LOCK WASHER - 3/8	1
		153-2025	HEX NUT - 3/8-16	1
3	37	153-8421	LANE DISTANCE COUNTER PILLOWBLOCK-EXCEL CENTER	1
		ATTACHING PARTS		
		153-2005	FLAT WASHER - 5/16	2
		153-2015	LOCK WASHER - 5/16	2
		153-2061	HHCS - 5/16-18 X 1	2

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FIGURE NUMBER	INDEX NUMBER	PART NUMBER	PART NAME & DESCRIPTION	QUANTITY NEEDED
4	1	153-1027	SOLENOID	1
		ATTACHING PARTS		
		153-2002	FLAT WASHER - 8-32	8
		153-2019	LOCKNUT - 8-32	5
		153-2086	MS PHILLIPS - 8-32 X 5/8	4
		153-2089	MS PHILLIPS - 8-32 X 1	1
		153-2109	PLAIN PLASTIC SPACER - 3/8 OD X 5/8	1
		153-8412	SHORT SOLENOID CABLE & UHMW PLUG LEASH (EXCEL)	1
4	2	153-8428	TRANSFER ROLLER ARM MOUNT ASSEMBLY (EXCEL)	1
		ATTACHING PARTS		
		153-2005	FLAT WASHER - 5/16	2
		153-2015	LOCK WASHER - 5/16	2
		153-2024	HEX NUT - 5/16-18	2
		153-2065B	ALL THREAD - 5/16-18 X 3 (TANK MOUNT)	2
4	3	153-8019	OIL TANK ASSEMBLY	1
		ATTACHING PARTS		
		153-2005	FLAT WASHER - 5/16	8
		153-2015	LOCK WASHER - 5/16	4
		153-2024	HEX NUT - 5/16-18	8
		153-2065B	ALL THREAD - 5/16-18 X 3 (TANK MOUNT)	4
4	4	153-0011	TANK PIVOT POINT SHIM (1/8" ALUMINUM)	1
		NOTE: BE SURE TO INSERT SHIM IN THE PROPER DIRECTION		
4	5	153-8407	BUFFER BRUSH ASSEMBLY (3-3/4")	1
		ATTACHING PARTS		
		153-2006	FLAT WASHER - 3/8	4
		153-2016	LOCK WASHER - 3/8	4
		153-2025	HEX NUT - 3/8-16	4
		153-2067	HHCS - 3/8-16 X 1-1/4	4
		153-9016	3/4" FLANGED BEARING	2
4	6	153-7002A	LANE DISTANCE COUNTER WHEEL (2 INCH)	1
		ATTACHING PARTS		
		153-2050	SET SCREW - 1/4-28 X 3/8	2

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FIGURE NUMBER	INDEX NUMBER	PART NUMBER	PART NAME & DESCRIPTION	QUANTITY NEEDED
4	7	153-6435	LANE DISTANCE COUNTER SHAFT	1
			ATTACHING PARTS	
		153-2005	FLAT WASHER - 5/16	6
		153-2010	NYLON FLAT WASHER (1/2 - 0.030)	7
		153-2015	LOCK WASHER - 5/16	6
		153-2050	SET SCREW - 1/4-28 X 3/8 (WHEEL)	4
		153-2051A	SET SCREW - 1/4-20 X 1/4 (SPROCKET)	1
		153-2061	HHCS - 5/16-18 X 1	6
		153-2413	SNAP RING - 1/2	4
		153-7002A	LANE DISTANCE COUNTER WHEEL (2 INCH)	2
		153-7401	UHMW KICK-UP WHEEL	2
		153-8031	LANE DISTANCE COUNTER PILLOWBLOCK (SENSOR)	1
		153-8033	LANE DISTANCE COUNTER PILLOWBLOCK ASSEMBLY (LEFT)	1
		153-8421	LANE DISTANCE COUNTER PILLOWBLOCK - EXCEL CENTER	1
		153-9406	LANE DISTANCE COUNTER SPROCKET (5-TOOTH)	1
4	8	153-2047	SQUARE HEAD SET SCREW - 3/8 X 2	1
4	9	153-2027	JAM NUT - 3/8	1
4	10	153-6027	LANE DISTANCE ADJUSTMENT BLOCK	1
			ATTACHING PARTS	
		153-2005	FLAT WASHER - 5/16	2
		153-2015	LOCK WASHER - 5/16	2
		153-2027	JAM NUT - 3/8	1
		153-2047	SQUARE HEAD SET SCREW - 3/8 X 2	1
		153-2061	HHCS - 5/16-18 X 1	2
4	11	153-0444	WICK SPRING ROD (EXCEL = 45-1/2")	1
			ATTACHING PARTS	
		153-1049A	WIRE HARNESS CLAMP - 1/4	6
		153-2002	FLAT WASHER - 8-32	12
		153-2019	LOCKNUT - 8-32	6
		153-2086	MS PHILLIPS - 8-32 X 5/8	6
4	12	153-2095	SPRING (WICK)	1
4	13	153-2043	EYEBOLT - 10/24 X 4" OVERALL	1
			ATTACHING PARTS	
		153-2003	FLAT WASHER - 3/16	2
		153-2013	LOCK WASHER - 3/16	2
		153-2022	HEX NUT - 3/16 (10-24)	2
4	14	153-2044	EYEBOLT - 10/24 X 2" OVERALL	1
			ATTACHING PARTS	
		153-2003	FLAT WASHER - 3/16	2
		153-2013	LOCK WASHER - 3/16	2
		153-2022	HEX NUT - 3/16 (10-24)	2

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FIGURE NUMBER	INDEX NUMBER	PART NUMBER	PART NAME & DESCRIPTION	QUANTITY NEEDED
4	15	153-8412	SHORT SOLENOID CABLE & UHMW PLUG LEASH	1
			ATTACHING PARTS	
		153-2003	FLAT WASHER - 3/16	2
		153-2013	LOCK WASHER - 3/16	2
		153-2019	LOCKNUT - 8-32	1
		153-2022	HEX NUT - 3/16 (10-24)	2
		153-2044	EYEBOLT - 10/24 X 2" OVERALL	1
		153-2089	MS PHILLIPS - 8-32 X 1	1
		153-2109	PLAIN PLASTIC SPACER - 3/8 OD X 5/8	1
4	16	153-0407	UHMW SOLENOID CABLE GUIDE	1
			ATTACHING PARTS	
		153-2002	FLAT WASHER - 8-32	3
		153-2088	MS PHILLIPS - 8-32 X 3/4 (SELF)	3
4	17	153-8408	TRANSFER ROLLER ASSEMBLY	1
			ATTACHING PARTS	
		153-9008	SPROCKET (TRANSFER ROLLER SECONDARY DRIVE) 25B25	1
4	18	153-0074	TANK PIVOT POINT SHIM (0.090 ALUMINUM)	1
			NOTE: THIS IS AN OPTIONAL SHIM IF WICKS ARE TOO NARROW IN TANK	
			NOTE: ANY SIX WICK PLATES CAN BE USED, BUT THEY MUST ADD UP TO 40 INCHES	
4	19	153-8102	2" COMPLETE WICK PLATE ASSEMBLY	•
4	20	153-8103	3" COMPLETE WICK PLATE ASSEMBLY	•
4	21	153-8104	4" COMPLETE WICK PLATE ASSEMBLY	•
4	22	153-8105	5" COMPLETE WICK PLATE ASSEMBLY	•
4	23	153-8106	6" COMPLETE WICK PLATE ASSEMBLY	•
4	24	153-8107	7" COMPLETE WICK PLATE ASSEMBLY	•
4	25	153-8108	8" COMPLETE WICK PLATE ASSEMBLY	•
4	26	153-8109	9" COMPLETE WICK PLATE ASSEMBLY	•
4	27	153-8110	10" COMPLETE WICK PLATE ASSEMBLY	•
4	28	153-8111	11" COMPLETE WICK PLATE ASSEMBLY	•
4	29	153-8112	12" COMPLETE WICK PLATE ASSEMBLY	•
			NOTE: THESE ATTACHING PARTS ARE INCLUDED WITH ALL WICKING PLATE ASSEMBLIES	
		153-2003	FLAT WASHER - 3/16	6
		153-2013	LOCK WASHER - 3/16	6
		153-2022	HEX NUT - 3/16 (10-24)	6
		153-2043	EYEBOLT - 10/24 X 4" OVERALL	2
		153-2044	EYEBOLT - 10/24 X 2" OVERALL	1

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FIGURE NUMBER	INDEX NUMBER	PART NUMBER	PART NAME & DESCRIPTION	QUANTITY NEEDED
5	1	153-1031B	SENSOR PLUG & CABLE	1
5	2	153-1049D	WIRE HARNESS CLAMP - 1/8	1
		ATTACHING PARTS		
		153-2113	MS PHILLIPS - 8-32 X 3/8 (SELF TAP)	1
5	3	153-1031A	PASS-THROUGH SENSOR	1
		ATTACHING PARTS		
		153-2001	FLAT WASHER - 6-32	2
		153-2081	MS PHILLIPS - 6-32 X 1/2	2
5	4	153-7002A	LANE DISTANCE COUNTER WHEEL (2 INCH)	1
		ATTACHING PARTS		
		153-2050	SET SCREW - 1/4-28 X 3/8	2
5	5	153-8039	LANE COUNTER SPROCKET	1
		ATTACHING PARTS		
		153-2051A	SET SCREW - 1/4-20 X 1/4	1
5	6	153-8049	LANE DISTANCE SENSOR GUARD ASSEMBLY	1
		ATTACHING PARTS		
		153-2086A	MS PHILLIPS - 8-32 X 3/8	3
5	7	153-8031	LANE DISTANCE COUNTER PILLOWBLOCK (SENSOR)	1
		ATTACHING PARTS		
		153-2005	FLAT WASHER - 5/16	2
		153-2015	LOCK WASHER - 5/16	2
		153-2081	HHCS - 5/16-18 X 1	2
5	8	153-2010	NYLON FLAT WASHER (1/2 - 0.030)	7

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FIGURE NUMBER	INDEX NUMBER	PART NUMBER	PART NAME & DESCRIPTION	QUANTITY NEEDED
6	1	153-0402	TRANSPORT CASTER (2" - DUAL WHEEL)	1
		ATTACHING PARTS		
		153-2006	FLAT WASHER - 3/8	2
		153-2016	LOCK WASHER - 3/8	1
		153-2025	HEX NUT - 3/8-16	1
		153-2067	HHCS - 3/8-16 X 1-1/4	1
6	2	153-8311	MOMENTARY WHEEL ASSEMBLY	1
		ATTACHING PARTS		
		153-2049	SET SCREW - 8-32 X 3/16	1
		153-6006	MOMENTARY LANE ROLLER SHAFT	1
6	3	153-6029	MOMENTARY LANE ROLLER HOUSING	1
		ATTACHING PARTS		
		153-2005	FLAT WASHER - 5/16	4
		153-2015	LOCK WASHER - 5/16	2
		153-2024	HEX NUT - 5/16-18	2
		153-2049	SET SCREW - 8-32 X 3/16	1
		153-2081	HHCS - 5/16-18 X 1	2
6	4	153-8425	LINODUSTER CLOTH ROUTING ROD	1
		ATTACHING PARTS		
		153-0028A	DMR LINODUSTER 1/2" IDLER PIPE (45°)	1
		153-0030B	DMR LINODUSTER ROD VIBRATION DAMPENER (45°)	1
		153-2029	ACORN NUT - 1/4-20	2
6	5	153-0030B	DMR LINODUSTER ROD VIBRATION DAMPENER (45°)	1
6	6	153-0028A	DMR LINODUSTER 1/2" IDLER PIPE (45°)	1
6	7	153-8420	CUSHION ROLLER PIVOT ARM ASSEMBLY	1
		NOTE: WASHER GOES BETWEEN THE ARM & THE SIDE PLATE		
		ATTACHING PARTS		
		153-2005	FLAT WASHER - 5/16	1
		153-2019	LOCKNUT - 8-32 (NYLOK)	1
		153-2020	LOCKNUT - 1/4-20 (NYLOK)	1
		153-2080	MS PHILLIPS - 8-32 X 1-1/2	1
		153-2408	SHOULDER BOLT - 5/16 X 1/2 (CUSHION ROLLER PIVOT)	1
6	8	153-2408	SHOULDER BOLT - 5/16 X 1/2	1
		NOTE: WASHER GOES BETWEEN THE ARM & THE SIDE PLATE		
		ATTACHING PARTS		
		153-2005	FLAT WASHER - 5/16	1
		153-2020	LOCKNUT - 1/4-20 (NYLOK)	1



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FIGURE NUMBER	INDEX NUMBER	PART NUMBER	PART NAME & DESCRIPTION	QUANTITY NEEDED
6	9	153-2412	SHCS 1/4-20 X 1/2 (CUSHION ROLLER STOP)	2
			ATTACHING PARTS	
		153-2004	FLAT WASHER - 1/4	1
		153-2014	LOCK WASHER - 1/4	1
		153-2023	HEX NUT - 1/4-20	1
6	10	153-2090	MS PHILLIPS - 8-32 X 1-1/2	1
6	11	153-2414	HEX NUT - 8-32	1
6	12	153-2407	GUIDE ROLLER SHOULDER BOLT (3/8 X 1-3/4)	1
			ATTACHING PARTS	
		153-2401	GUIDE ROLLER SPRING (EXCEL)	1
		153-8410	LANE EDGE GUIDE ROLLER W/BUSHING ASSEMBLY	1
		153-9034	PLAIN BUSHING - GUIDE ROLLER (3/8 X 1/2 X 1/4)	1
6	13	153-8410	LANE EDGE GUIDE ROLLER ASSEMBLY (1/2")	1
			ATTACHING PARTS	
		153-2401	GUIDE ROLLER SPRING (EXCEL)	1
		153-2407	GUIDE ROLLER SHOULDER BOLT (3/8 X 1-3/4)	1
		153-9034	PLAIN BUSHING - GUIDE ROLLER (3/8 X 1/2 X 1/4)	1
6	14	153-8417	GUIDE ROLLER MOUNTING BAR	1
			ATTACHING PARTS	
		153-2005	FLAT WASHER - 5/16	2
		153-2015	LOCK WASHER - 5/16	2
		153-2061	HHCS - 5/16-18 X 1	2
6	15	153-1202	DMR LINODUSTER MICROSWITCH	1
			NOTE: TWO WASHERS GO BETWEEN THE MICROSWITCH & THE SIDE PLATE	
			ATTACHING PARTS	
		153-2001	FLAT WASHER - 6-32	2
		153-2216A	MS PHILLIPS - 4-40 X 7/8	2
		153-2231	LOCKNUT 4-40	2
6	16	153-0429	DMR LINODUSTER TAKE-UP SUPPORT PIPE (40")	1
			NOTE: USED TO SUPPORT THE CARDBOARD CORE OF USED ROLL	
6	17	153-6006	MOMENTARY LANE ROLLER SHAFT	1
			ATTACHING PARTS	
		153-2049	SET SCREW - 8-32 X 3/16	1

DBA EXCEL Operating Manual  
 COMPLETE PARTS LIST

DBA PART #	PART NAME & DESCRIPTION
153-0005	WICK (45-INCH PIECE)
153-0010B	CONTINUOUS LID HINGE (EXCEL = 48-3/8")
153-0011	TANK PIVOT POINT SHIM (1/8" ALUMINUM)
153-0028A	DMR LINODUSTER 1/2" IDLER PIPE (45")
153-0030B	DMR LINODUSTER ROD VIBRATION DAMPENER (45")
153-0033	LID HINGE BRACKET MOUNT (BLANK)
153-0036	LID VIBRATION STRIP (SOLD BY INCH)
153-0037	DECAL (MADE IN USA)
153-0037A	TEAM USA DECAL
153-0038B	DMR LINODUSTER HEAVY CUSHION WEIGHT (42-3/4")
153-0038C	OPTIONAL - LIGHT CUSHION WEIGHT (42-3/4")
153-0041	1/4" SPACER (1/2" LONG - DRIVE CHAIN TENSIONER GUIDE)
153-0043	THICK FELT WASHER
153-0052	OIL FUNNEL
153-0074	TANK PIVOT POINT SHIM (0.090 ALUMINUM)
153-0075	STICKER - THIS END UP
153-0076	STICKER - TOP LOAD ONLY
153-0259	CLOTH ROUTING STICKER
153-0401	SHIPPING BOX (EXCEL)
153-0402	TRANSPORT CASTER (2" - DUAL WHEEL)
153-0407	UHMW SOLENOID CABLE GUIDE (EXCEL = 3/8 X 3/4 X 17)
153-0413	SHIPPING SKID (CRATE)
153-0424	EXCEL MACHINE DECAL
153-0425	EXCEL KEYBOARD DECAL
153-0429	DMR LINODUSTER TAKE-UP SUPPORT PIPE (EXCEL = 40")
153-0430	UHMW EXTENSION HANDLE CLUTCH SHIM
153-0442	SERIAL NUMBER & ID PLATE
153-0444	WICK SPRING ROD (EXCEL = 45-1/2")
153-1001	C28H MICROPROCESSOR (PC)
153-1001A	C28H TERMINAL STRIP
153-1001C	PC REPLACEMENT BATTERY (C200H-BAT09)
153-1002	PRO27 KEYBOARD (C200H)
153-1003	POWER SUPPLY 24VDC
153-1004	BUFFER MOTOR CONTACTOR
153-1005	KEYBOARD CABLE (C200H)
153-1006	PROCESSOR CHIP
153-1016	LY2 RELAY
153-1017	LY2 RELAY BASE
153-1020	RELAY CLAMP (NOTE: THIS IS NOT A SET--PURCHASE AS EACH)
153-1021	TERMINAL BLOCK
153-1022	TERMINAL BLOCK END FOOT
153-1023	JUMPER (USED ON TERMINAL BLOCK)
153-1024	FEMALE TWISTLOCK
153-1025	MALE PLUG
153-1026	FLANGED TWISTLOCK RECEPTACLE

DBA EXCEL Operating Manual  
COMPLETE PARTS LIST

DBA	PART NAME & DESCRIPTION
PART #	
153-1027	SOLENOID
153-1029	FUSE (4 AMP)
153-1030	CIRCUIT BREAKER (10 AMP)
153-1031A	PASS-THROUGH SENSOR
153-1031B	SENSOR PLUG & CABLE
153-1032	PC OUTPUT RELAY
153-1034	FEMALE QUICK DISCONNECT (0.187 NS 18AWG)
153-1034A	FEMALE QUICK DISCONNECT (0.187 NS 14AWG)
153-1035A	FEMALE QUICK DISCONNECT (0.250 NS 14 AWG)
153-1036B	RING TERMINAL - 18-14AWG (8-32 HOLE)
153-1037	WIRE JOINT - 18 AWG (LARGE)
153-1038	WIRE JOINT (SMALL)
153-1039	PIN & SOCKET CONNECTOR 9 CIRCUIT FEMALE
153-1040	PIN & SOCKET CONNECTOR 9 CIRCUIT MALE
153-1041	PIN & SOCKET CONNECTOR 2 CIRCUIT FEMALE
153-1042	PIN & SOCKET CONNECTOR 2 CIRCUIT MALE
153-1043	PIN & SOCKET CONNECTOR 3 CIRCUIT MALE
153-1044	PIN & SOCKET CONNECTOR 3 CIRCUIT FEMALE
153-1045	PIN FOR SOCKET FEMALE
153-1046	PIN FOR SOCKET MALE
153-1047	WIRE TIE (4")
153-1048A	WIRE TIE (15-1/2")
153-1049A	WIRE HARNESS CLAMP - 1/4
153-1049B	WIRE HARNESS CLAMP - 1/2
153-1049D	WIRE HARNESS CLAMP - 1/8
153-1052A	OIL REFILL TUBING (VENT = 20")
153-1052B	OIL REFILL TUBING (30")
153-1053	TANK VENT FITTING / BRASS
153-1054	OIL VENT HOSE PLUG / GRAY PLASTIC
153-1055	TUBE HOSE STEM / GRAY PLASTIC
153-1202	DMR LINODUSTER MICROSWITCH
153-1206	RIGHT ANGLE FEMALE QUICK DISCONNECT (16-12 AWG)
153-1209	BUTTON GUARD
153-1214	IN-LINE FUSE HOLDER
153-1404	DIODE (MOTOR BRAKE)
153-1405	DRIVE MOTOR CARACITOR
153-1408	PUSH BUTTON (RED = NORMALLY OPEN)
153-2001	FLAT WASHER - 6-32
153-2002	FLAT WASHER - 8-32
153-2003	FLAT WASHER - 3/16
153-2004	FLAT WASHER - 1/4
153-2005	FLAT WASHER - 5/16
153-2006	FLAT WASHER - 3/8
153-2010	NYLON FLAT WASHER (1/2 - 0.030)
153-2013	LOCK WASHER - 3/16

DBA EXCEL Operating Manual  
COMPLETE PARTS LIST

DBA	PART NAME & DESCRIPTION
PART #	
153-2014	LOCK WASHER - 1/4
153-2015	LOCK WASHER - 5/16
153-2016	LOCK WASHER - 3/8
153-2019	LOCKNUT - 8-32 (NYLOK)
153-2020	LOCKNUT - 1/4-20 (NYLOK)
153-2021	LOCKNUT - 3/8-16 (NYLOK)
153-2022	HEX NUT - 3/16 (10-24)
153-2023	HEX NUT - 1/4-20
153-2024	HEX NUT - 5/16-18
153-2025	HEX NUT - 3/8-16
153-2027	JAM NUT - 3/8
153-2027A	JAM NUT - 5/16
153-2029	ACORN NUT - 1/4-20
153-2032A	TANK PLUG - HEX SOCKET (1/4" PIPE THREAD)
153-2034	ALUMINUM RIVET - LID (3/16" X 0.450 X 0.375)
153-2035	BLIND RIVET WASHER
153-2036	SNAP RING - 5/8
153-2037	ROLL PIN - 1/8 X 1-3/4
153-2038	ROLL PIN - 1/8 X 1
153-2040	SPOOL GROMMET - 1/2
153-2043	EYEBOLT - 10/24 X 4" OVERALL
153-2044	EYEBOLT - 10/24 X 2" OVERALL
153-2046	SPRING CLIP (OIL HOSE CLIP)
153-2047	SQUARE HEAD SET SCREW - 3/8 X 2
153-2049	SET SCREW - 8-32 X 3/16
153-2050	SET SCREW - 1/4-28 X 3/8
153-2051A	SET SCREW - 1/4-20 X 1/4
153-2052	HHCS - 1/4-20 X 7/8
153-2053	HHCS - 1/4-20 X 1
153-2058	HHCS - 1/4-20 X 2-1/4
153-2061	HHCS - 5/16-18 X 1
153-2065B	ALL THREAD - 5/16-18 X 3 (TANK MOUNT)
153-2067	HHCS - 3/8-16 X 1-1/4
153-2068	HHCS - 3/8-16 X 1-1/2
153-2071	HHCS - 3/8-16 X 3
153-2075	CARRIAGE BOLT <sup>1</sup> - 1/4-20 X 2-1/2
153-2078	FHMS - 1/4-20 X 3/4
153-2081	MS PHILLIPS - 6-32 X 1/2
153-2086	MS PHILLIPS - 8-32 X 5/8
153-2086A	MS PHILLIPS - 8-32 X 3/8
153-2087	MS PHILLIPS - 8-32 X 3/4
153-2088	MS PHILLIPS - 8-32 X 3/4 (SELF)
153-2089	MS PHILLIPS - 8-32 X 1
153-2090	MS PHILLIPS - 8-32 X 1-1/2
153-2091	MS PHILLIPS - 10-32 X 3/4

DBA EXCEL Operating Manual  
COMPLETE PARTS LIST

DBA	PART NAME & DESCRIPTION
PART #	
153-2093	SPRING (PROCESSOR)
153-2095	SPRING (WICK)
153-2096	SPRING (KEYBOARD MOUNT)
153-2100	KEYSTOCK - 3/16 X 3/4
153-2108	DOME RIVET - 1/8
153-2109	PLAIN PLASTIC SPACER - 3/8 OD X 5/8
153-2113	MS PHILLIPS - 8-32 X 3/8 (SELF-TAP)
153-2201	SET SCREW - 10-32 X 3/8
153-2204	ROLL PIN - 3/32 X 1/2
153-2216	MS PHILLIPS - 4-40 X 5/8
153-2216A	MS PHILLIPS - 4-40 X 7/8
153-2230	CORD HOLDER EYEBOLT (1/4 X 2-1/2)
153-2231	LOCKNUT - 4-40
153-2232	FLUSH MOUNT LID LATCH
153-2401	GUIDE ROLLER SPRING (EXCEL)
153-2402	SPOOL GROMMET - 3/8
153-2404	FHMS - 3/8-16 X 3
153-2405	HHCS - 3/8-16 X 2-3/4
153-2407	GUIDE ROLLER SHOULDER BOLT (3/8 X 1-3/4)
153-2408	SHOULDER BOLT - 5/16 X 1/2 (CUSHION ROLLER PIVOT)
153-2412	SHCS - 1/4-20 X 1/2 (CUSHION ROLLER STOP)
153-2413	SNAP RING - 1/2
153-2414	HEX NUT - 8-32
153-2415	FHSC - 3/8-16 X 1
153-4002	PIN REMOVAL TOOL
153-4003	PIN CRIMPING TOOL
153-6006	MOMENTARY LANE ROLLER SHAFT
153-6027	LANE DISTANCE ADJUSTMENT BLOCK
153-6029	MOMENTARY LANE ROLLER HOUSE
153-6219	SMALL PROCESSOR PLATE
153-6250	KEYBOARD MOUNTING ANGLE
153-6411	TRANSFER CHAIN IDLER SPROCKET MOUNTING ANGLE (EXCEL)
153-6412	LINODUSTER MOTOR SHIELD (EXCEL)
153-6413	LEFT SIDE PLATE MOUNTING ANGLE (EXCEL)
153-6414	RIGHT SIDE PLATE MOUNTING ANGLE (EXCEL)
153-6415	RIGHT REAR SIDE MOUNTING ANGLE (EXCEL)
153-6417	GUIDE ROLLER MOUNTING BAR (EXCEL)
153-6421	LANE TO LANE CASTER MOUNTING ANGLE (EXCEL)
153-6422	CUSHION ROLLER SHAFT (EXCEL)
153-6423	MAIN DRIVE SHAFT (EXCEL)
153-6425	LINODUSTER CLOTH ROUTING ROD (EXCEL)
153-6426	UHMW LINODUSTER CLOTH PLUG (EXCEL)
153-6429	EXTENSION HANDLE SUPPORT ANGLE - RIGHT SIDE
153-6430	EXTENSION HANDLE SUPPORT ANGLE - LEFT SIDE
153-6432	TRANSFER CHAIN GUARD (EXCEL)

DBA EXCEL Operating Manual  
COMPLETE PARTS LIST

DBA	PART NAME & DESCRIPTION
PART #	
153-8435	LANE DISTANCE COUNTER SHAFT (FOR KICK-UP WHEEL)
153-6437	PUSH BUTTON MOUNTING PLATE
153-6438	DRIVE MOTOR 1/8" SHIM
153-7002A	LANE DISTANCE COUNTER WHEEL (2 INCH)
153-7013	LANE DRIVE WHEEL (4-INCH)
153-7401	UHMW KICK-UP WHEEL
153-8016A	BUFFER MOTOR ASSEMBLY (50/60)
153-8019	OIL TANK ASSEMBLY
153-8031	LANE DISTANCE COUNTER PILLOWBLOCK ASSEMBLY (SENSOR)
153-8033	LANE DISTANCE COUNTER PILLOWBLOCK ASSEMBLY (LEFT)
153-8039	BUFFER BELT IDLER ASSEMBLY
153-8049	LANE DISTANCE SENSOR GUARD ASSEMBLY
153-8102	2" COMPLETE WICK PLATE ASSEMBLY
153-8103	3" COMPLETE WICK PLATE ASSEMBLY
153-8104	4" COMPLETE WICK PLATE ASSEMBLY
153-8105	5" COMPLETE WICK PLATE ASSEMBLY
153-8106	6" COMPLETE WICK PLATE ASSEMBLY
153-8107	7" COMPLETE WICK PLATE ASSEMBLY
153-8108	8" COMPLETE WICK PLATE ASSEMBLY
153-8109	9" COMPLETE WICK PLATE ASSEMBLY
153-8110	10" COMPLETE WICK PLATE ASSEMBLY
153-8111	11" COMPLETE WICK PLATE ASSEMBLY
153-8112	12" COMPLETE WICK PLATE ASSEMBLY
153-8201	DMR LINODUSTER HUB ASSEMBLY
153-8238	DMR LINODUSTER CUSHION ROLLER ASSEMBLY (44-1/4")
153-8311	MOMENTARY WHEEL W/BUSHING ASSEMBLY (URETHANE)
153-8401	COMPLETE LID ASSEMBLY (EXCEL)
153-8402	WIRE HARNESS ASSEMBLY (EXCEL)
153-8403	LINODUSTER MOTOR ASSEMBLY (7-RPM)
153-8404	LANE DRIVE PILLOWBLOCK - PLAIN BUSHING (EXCEL)
153-8405	LANE DRIVE PILLOWBLOCK - FLANGED BUSHING (EXCEL)
153-8406	DRIVE MOTOR BRAKE ASSEMBLY
153-8407	BUFFER BRUSH ASSEMBLY (3-3/4" DIAMETER)
153-8408	TRANSFER ROLLER ASSEMBLY (EXCEL)
153-8410	LANE EDGE GUIDE ROLLER W/BUSHING ASSEMBLY (1/2-INCH BORE)
153-8411	TRANSFER IDLER SPROCKET ASSEMBLY (EXCEL)
153-8412	SHORT SOLENOID CABLE & UHMW PLUG LEASH (EXCEL)
153-8413	DRIVE MOTOR ASSEMBLY
153-8414	CORD HOLDER ASSEMBLY
153-8415	OPTIONAL HANDLE FOR OVER-LANE BALL RETURNS
153-8416	EXTENSION HANDLE ASSEMBLY
153-8417	DRIVE MOTOR EXTENSION SHAFT BLOCK ASSEMBLY
153-8418	DRIVE MOTOR EXTENSION SHAFT ASSEMBLY
153-8420	CUSHION ROLLER PIVOT ARM ASSEMBLY
153-8421	LANE DISTANCE COUNTER PILLOWBLOCK ASSEMBLY - EXCEL CENTER

DBA EXCEL Operating Manual  
COMPLETE PARTS LIST

DBA	PART NAME & DESCRIPTION
PART #	
153-8423	POWER CORD ASSEMBLY (125 FEET)
153-8424	PUSH BUTTON REPLACEMENT ASSEMBLY
153-8425	UHMW DRIVE MOTOR CHAIN TENSIONER (1-1/2 X 4)
153-8426	TRANSFER ROLLER ARM MOUNT ASSEMBLY (EXCEL)
153-9003	SPROCKET (MAIN DRIVE SHAFT) 40B10
153-9008	SPROCKET (TRANSFER ROLLER) 25B25
153-9013	BUFFER MOTOR PULLEY (10L050)
153-9015	T-BELT 322LO50 (BUFFER MOTOR)
153-9016	3/4" FLANGED BEARING (BUFFER BRUSH)
153-9034	PLAIN BUSHING - GUIDE ROLLER (3/8 X 1/2 X 1/4)
153-9045	25 MASTER LINK
153-9047	40 MASTER LINK
153-9049	TRANSFER ROLLER END PLUG (1.660 X 0.140 X 0.375)
153-9050	CUSHION ROLLER PLUG (1.660 X 0.140 X 0.375)
153-9404	EXTENSION HANDLE BUSHING (PLAIN - 3/8 X 1/2 X 1)
153-9405	DRIVE MOTOR SPROCKET (EXCEL - 40B11)
153-9406	LANE DISTANCE COUNTER SPROCKET (5-TOOTH)
153-9407	SPROCKET (TRANSFER ROLLER PRIMARY DRIVE) 25B10-5/16
153-9442	TRANSFER ROLLER PRIMARY CHAIN (25P53)
153-9442A	TRANSFER ROLLER SECONDARY CHAIN (25P75)
153-9444	EXCEL DRIVE CHAIN (40P31)

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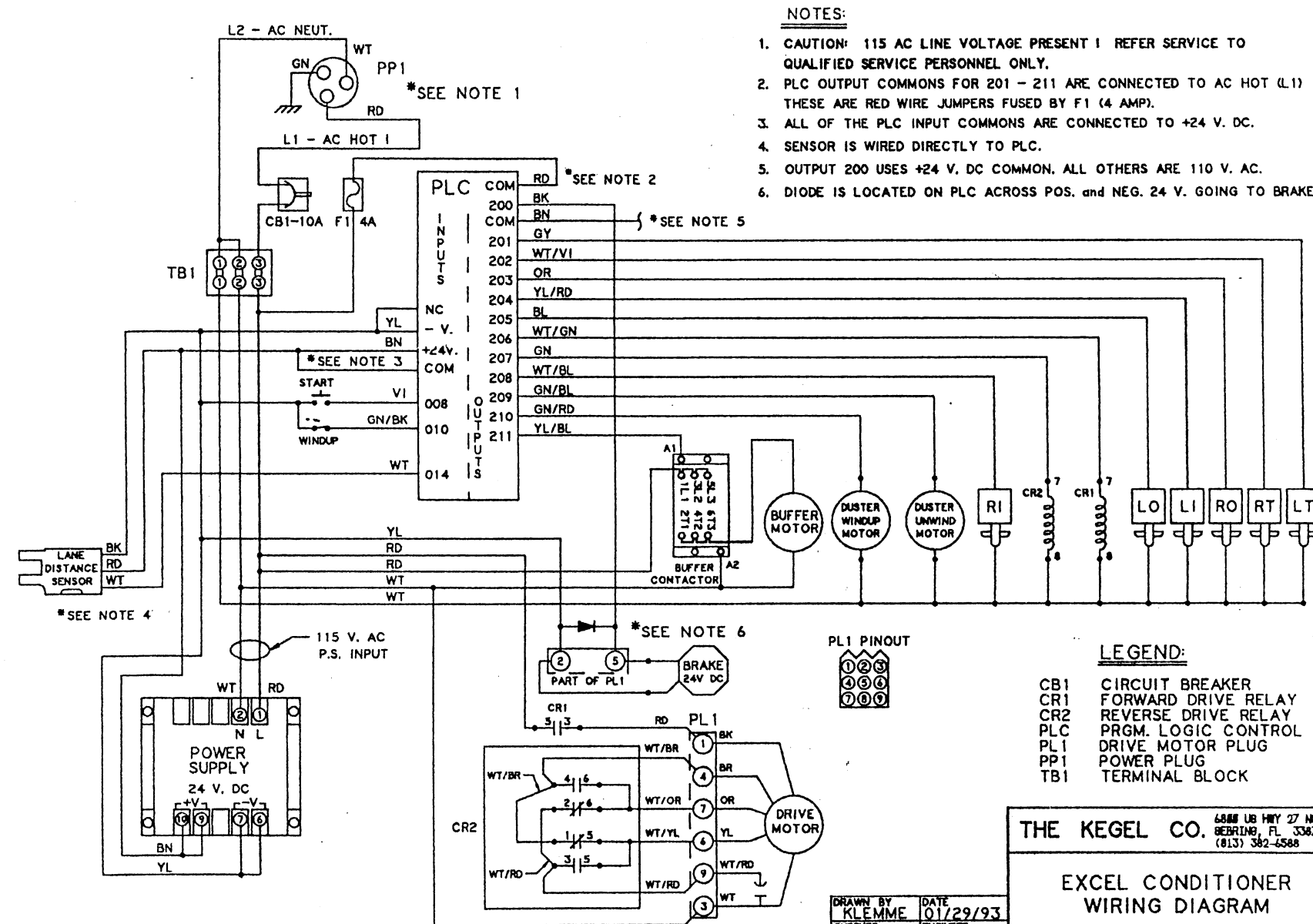
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**NOTES:**

1. CAUTION: 115 AC LINE VOLTAGE PRESENT I REFER SERVICE TO QUALIFIED SERVICE PERSONNEL ONLY.
2. PLC OUTPUT COMMONS FOR 201 - 211 ARE CONNECTED TO AC HOT (L1) THESE ARE RED WIRE JUMPERS FUSED BY F1 (4 AMP).
3. ALL OF THE PLC INPUT COMMONS ARE CONNECTED TO +24 V. DC.
4. SENSOR IS WIRED DIRECTLY TO PLC.
5. OUTPUT 200 USES +24 V. DC COMMON. ALL OTHERS ARE 110 V. AC.
6. DIODE IS LOCATED ON PLC ACROSS POS. and NEG. 24 V. GOING TO BRAKE

**CAUTION: 115 AC VOLTAGE PRESENT !!!**

**LEGEND:**

- CB1 CIRCUIT BREAKER
- CR1 FORWARD DRIVE RELAY
- CR2 REVERSE DRIVE RELAY
- PLC PRGM. LOGIC CONTROL
- PL1 DRIVE MOTOR PLUG
- PP1 POWER PLUG
- TB1 TERMINAL BLOCK

**THE KEGEL CO.** 6888 US HWY 27 NORTH  
 GEBBING, FL 33877  
 (813) 382-6588

**EXCEL CONDITIONER  
WIRING DIAGRAM**

DRAWN BY KLEMM  
 CHECKER M. DAVIS  
 ENGINEER J. DAVIS  
 DATE 01/29/93  
 DRAWING APPROVAL  
 DESIGN APPROVAL

SIZE C CAGE CODE 153-4401  
 SCALE UNLT WT SHEET Page 38

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