

LODESTAR®

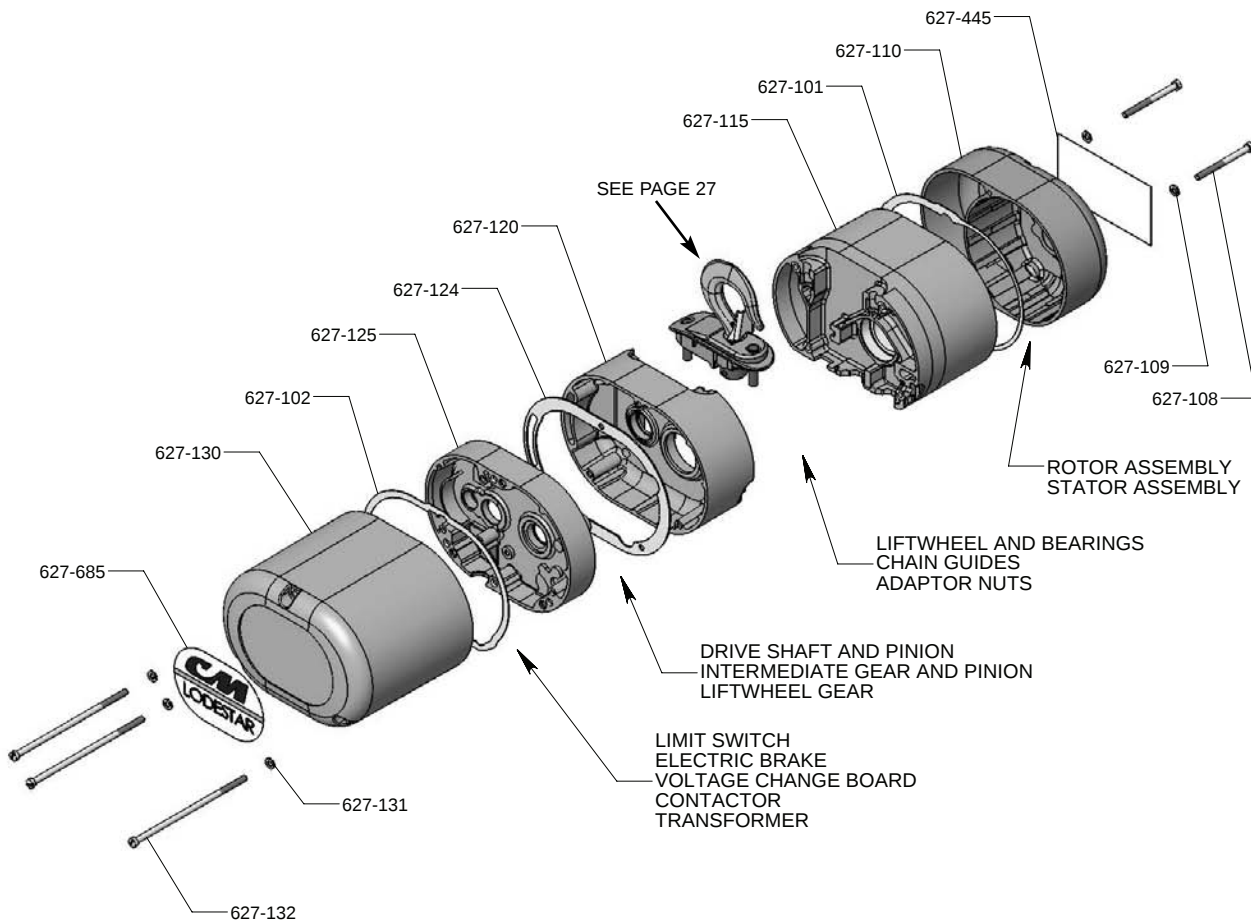
Operating, Maintenance & Parts Manual
1/4 To 2 Ton
250 Kg. To 2000 Kg.

ENTERTAINMENT

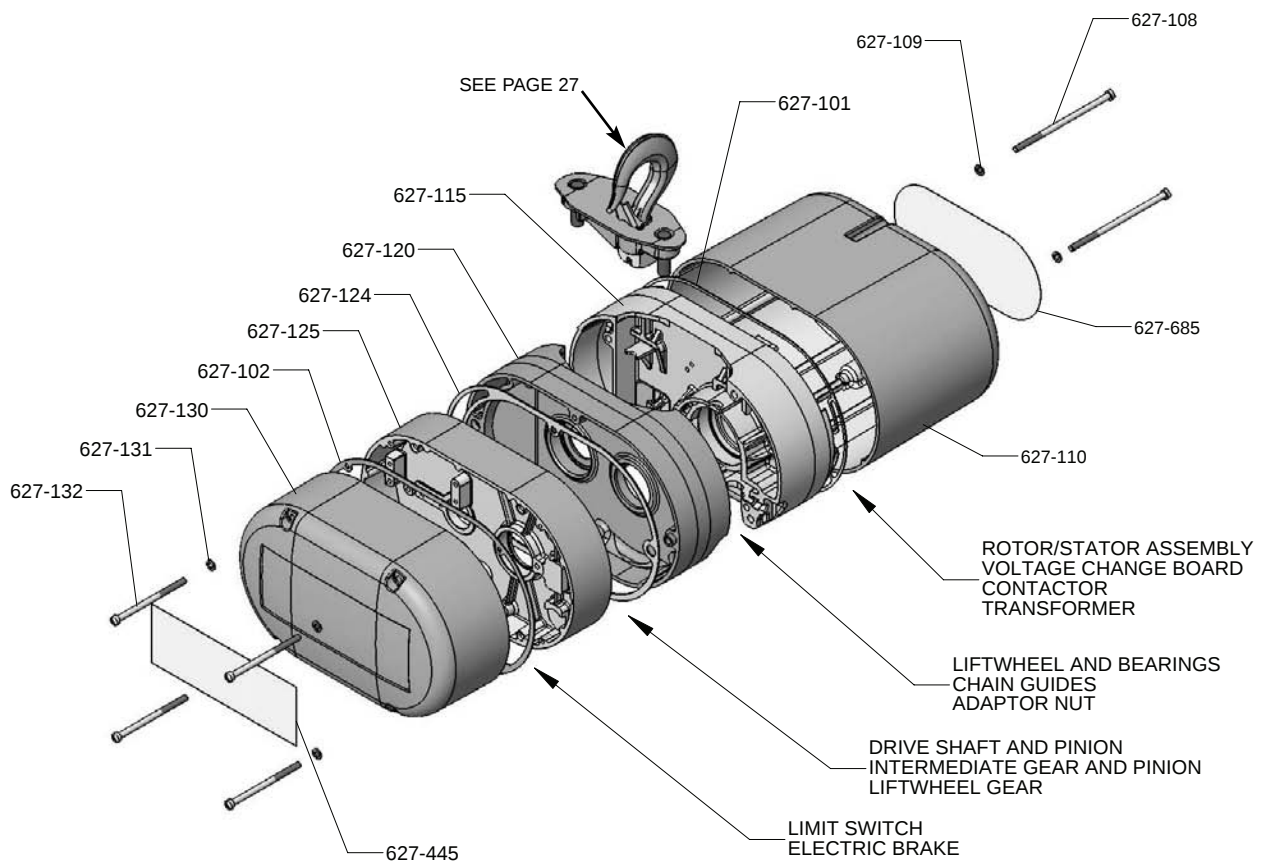


Columbus McKinnon Corporation
CM Entertainment Division
140 John James Audubon Parkway
Amherst, New York 14228-1197
1-800-888-0985
1-716-689-5400
cmrigging.com

ENTERTAINMENT/DIRECT CONTROL LODESTAR-HOIST FRAME			
Key No.	Part Name	Models B, C & F (Qty.)	Models J, L R, LL & RR (Qty.)
627-101	Motor Housing Cover Gasket	27847 (1) Weatherproof Units Only	35841 (1) Weatherproof Units Only
627-102	Back Frame Cover Gasket	27848 (1) Weatherproof Units Only	35840 (1) Weatherproof Units Only
627-108	Motor Housing Cover Screw	987397 (2)	987553 (2)
627-109	Motor Housing Cover Screw Lockwasher	982226 (2) 982251 (2) Weatherproof Units Only	982226 (2) 982251 (2) Weatherproof Units Only
627-110	Motor Housing Cover	27597 (1)	36009 (1)
627-115	Motor Housing	27063 (1)	35073 (1)
627-120	Gear Housing	27038 (1)	35627 (1)
627-124	Gear Housing Gasket	27747 (1)	35707 (1)
627-125	Back Frame	27618 (1)	35031 (1)
627-130	Back Frame Cover	28009 (1)	36008 (1)
627-131	Back Frame Cover Screw Lockwasher	982226 (3) 982251 (3) Weatherproof Units Only	982226 (4) 982251 (4) Weatherproof Units Only
627-132	Back Frame Cover Screw	87325 (3)	968752 (4)
627-445	Capacity Label	27277 (¾ Ton), 27227 (½ Ton)	35200 (½ Ton), 35201 (1 Ton), 35202 (2 Ton)
627-685	Series Label	27238 (1)	36840 (1)



MODELS B, C & F



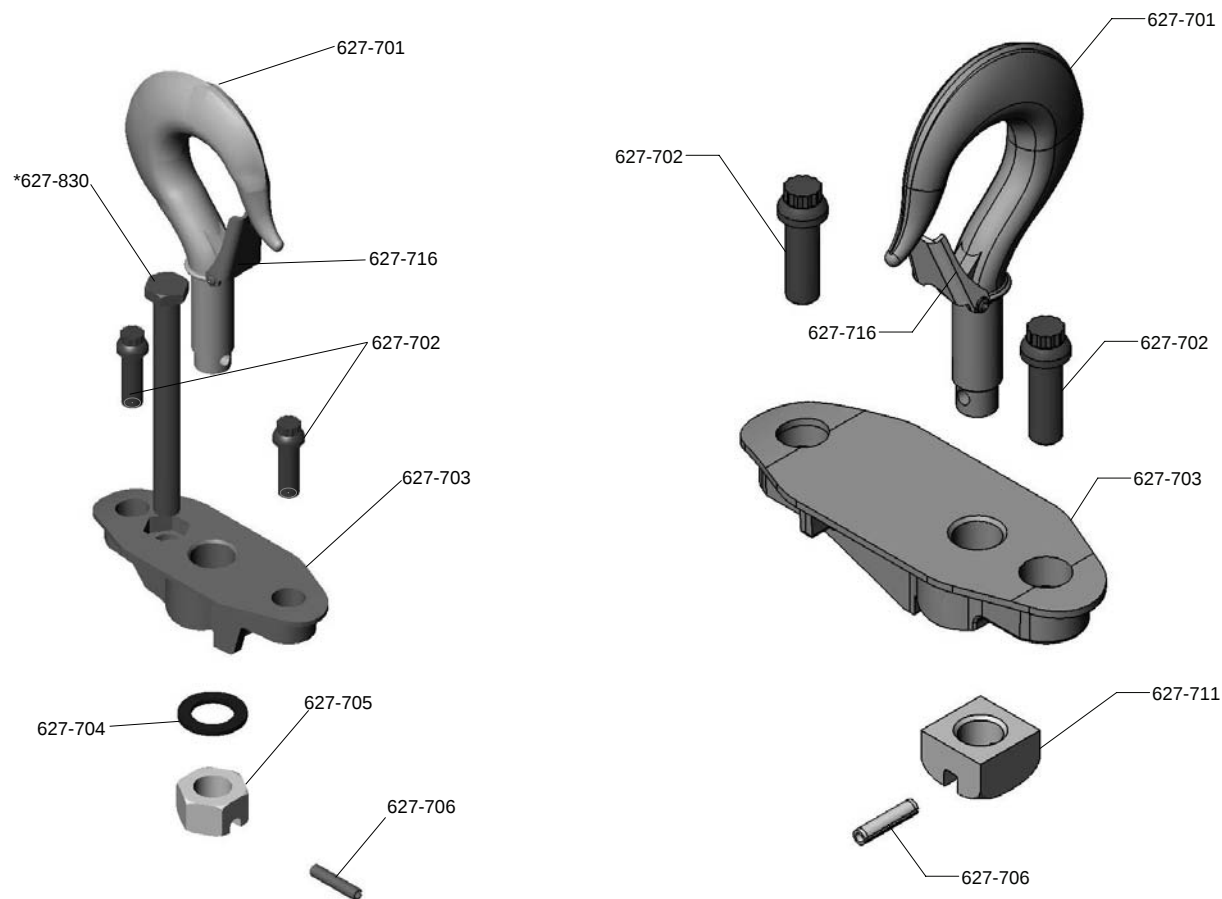
MODELS J, L, R, LL & RR

ENTERTAINMENT/DIRECT CONTROL LODESTAR ELECTRIC CHAIN HOIST PARTS LIST-MECHANICAL					
627-700 Swivel Hook Suspension; 627-710 Rigid Hook Suspension					
Key Number	Part Name	No. Req'd.	Models		
			B, C & F	J, L & LL	R & RR
			Part Number		
627-700	Swivel Hook Suspension (includes items 627-701 thru 627-706 for B, C & F; J, L & LL. Includes items 627-701 thru 627-706, 627-830 & 627-833 thru 627-836 for model RR).	1	*2792 (latch type hook)	*3661 (latch type hook)	*3660 (latch type hook)
627-701	Upper Hook with Latch Latch Type	1	28689	35617	35616
	Upper Hook-Latchlok Type		28643	36678	36680
627-702	Suspension Adapter Screw (Special Alloy Steel)	2	27529	35588	
627-703	Suspension Adapter	1	27703	35740	35741
627-704	Upper Hook Washer for Swivel Hook Suspension	1	27786	45930	45918
627-705	Upper Hook Collar/Nut for Swivel Hook Suspension	1	27350	35042	35041
627-706	Upper Hook or Suspension Lug Pin-Special Alloy Steel-Specify whether for Swivel or Rigid Type Suspension	1	27805	983763 for Rigid Susp. 983764 for Swivel Susp.	983761 Rigid Susp. 983762 Swivel Susp.
627-710	Rigid Hook Suspension (includes items 627-701, 627-702, 627-703, 627-706 & 627-711 for models B, C & F; J, L & LL. Includes items 627-701, 627-702, 627-703, 627-706, 627-711, 627-830 and 627-833 thr 627-836 for model RR.	1	*2788 (latch type hook)	*3651 (latch type hook)	*3658 (latch type hook)
627-711	Upper Hook or Suspension Lug Collar (for Rigid Hook or Lug Suspension)	1	27361	35459	35479
627-716	Latch Kit (specify no req'd)	-	45661	45662	45663

*Latch Type Hook contact CM for part number of Lower Hook Assembly with Latchlok Type Hook.

**With Latch Type Hook. If lower hook block assembly with Latchlok Type Hook is required. Contact CM.

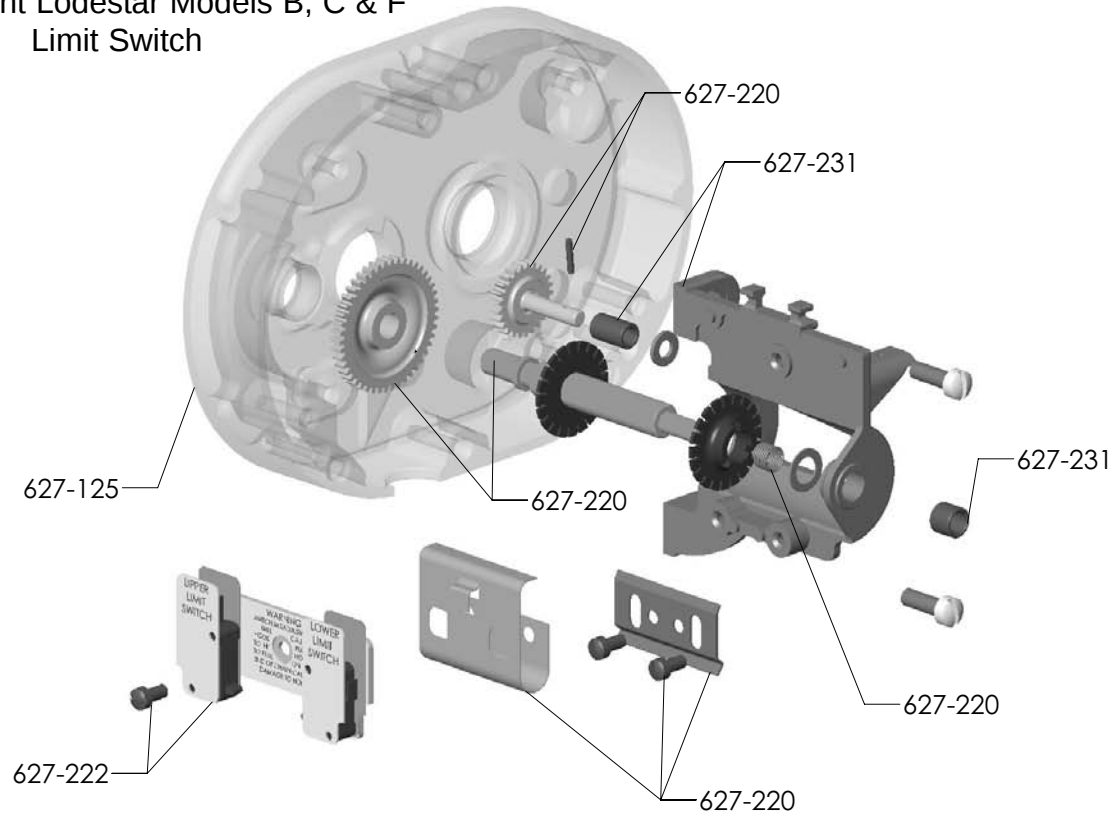
***Contact CM for Part Number of Latchlok Type Hook.



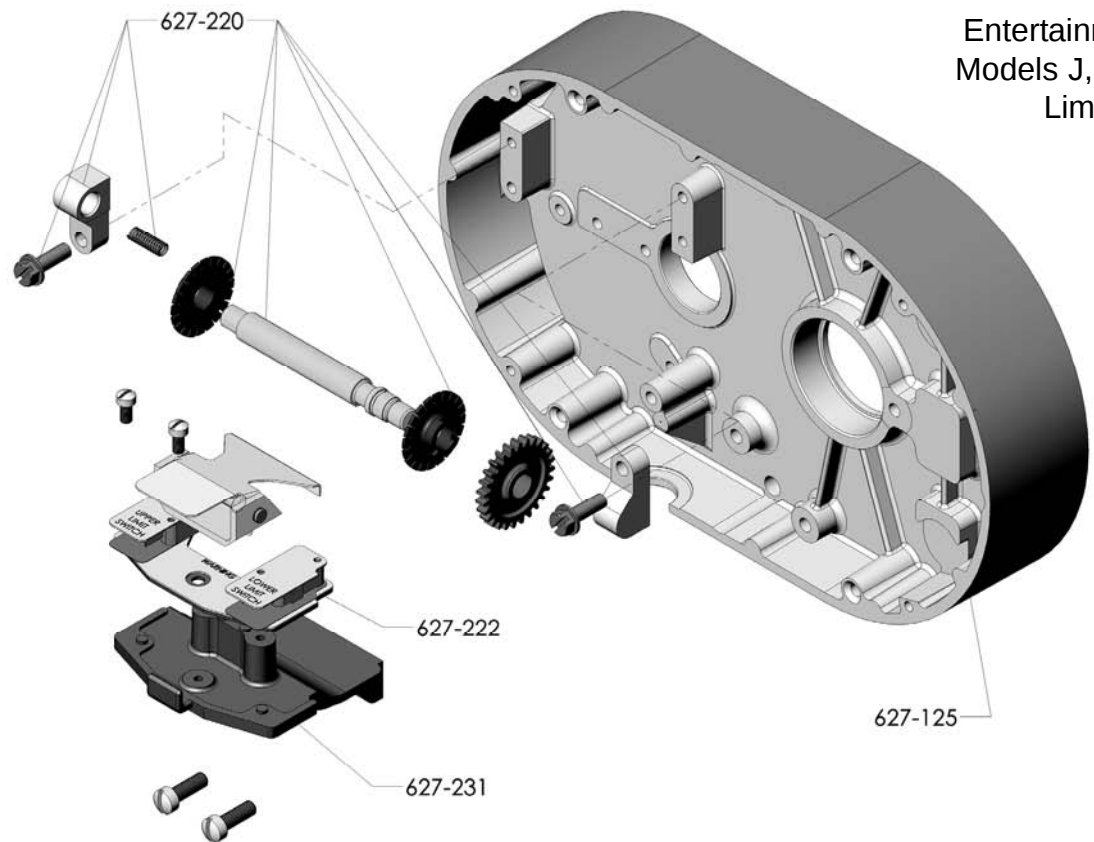
627-700-Complete Swivel Hook Suspension

627-710 Complete Rigid Hook Suspensions

Entertainment Lodestar Models B, C & F
Limit Switch



ENTERTAINMENT LODESTAR ELECTRIC CHAIN HOIST PARTS LIST-CONTROL END				
Key Number	Part Name	No. Req'd.	Models	
			B, C & F	J, L, LL, R & RR
			Part Number	
627-220	Limit Switch Shaft & Gear Kit	1	27749	36656
627-222	Limit Switch Kit	1	31631	31636
627-231	Limit Switch Bracket Sub-Assembly	1	27502	36644



Entertainment Lodestar
Models J, L, LL, R & RR
Limit Switch

ENTERTAINMENT/DIRECT CONTROL LODESTAR ELECTRIC CHAIN HOIST PARTS LIST-CONTROL END				
			Models	
Key Number	Part Name	No. Req'd.	B, C & F	J, L, LL, R & RR
			Part Number	
627-125	Back Frame	1	27618 (Includes 627-123 & 627 211)	35031
627-127	Back Frame Attaching Screw	3	982699	-
627-127A	BackFrame Attaching Screw L.W.	3	982226	-
627-128	Back Frame Attaching Screw	2	-	982698 (1 $\frac{3}{8}$ " Lg., 44.5mm)
627-128A	BackFrame Attaching Screw L.W.	2	-	940830
627-129	Back Frame Attaching Screw	2	-	987322 (2" Lg., 50.8mm)
627-129A	BackFrame Attaching Screw L.W.	2	-	940830
627-245	Back Frame Seal Screw	1	-	982623
627-251	Brake Base Plate And Studs	1	28668	35643
627-252	Brake Attaching Screw L.W.	-	982226, 2 req'd.	945851, 1 red'd.
627-253	Brake Attaching Screw	-	982708, 2 req'd.	982709, 1 req'd.
627-254	Brake Intermediate Plate	1	27090	35069
627-255	Brake Spring	2	27751 (color coded blue)	35716 (color coded yellow) for Models J, L & R 35717 (color coded green) for Models LL & RR
627-256	Brake Field Sub-Assembly	1	28677 (Includes 627-262)	35629
627-257	Brake Stud Nut	2	945840	945840
627-258	Brake Coil Retainer Strap	1	57753	35704
627-259	Brake Coil	1	51518	51511 for Models J,L & R 51512 for Models LL & RR
627-260	Brake Armature Assembly	1	28678	35600 (Includes 627-262)
627-261	Brake Friction Disc	1 or 2	27677	35632
627-262	Brake Shading Coil	2	54831	35826

Part Number for Packaged Lubricants Used in the Lodestar Electric Chain Hoists (Refer to page 11 for Lubrication Instructions)		
Lubricant Usage	Type of Lubricant	Part Numbers and Packaged Quantity of Lubricants
Hoist Gears	Grease (Special)	28605 for 1/2 # Can 28616 for 1# Can 28617 for 4# Can
Spline on end of Drive Shaft	Oil-Graphite Mixture	40628 for 1 pint Can
Load Chain	Oil	28608 for 1 Pint Can 28619 for 1 Gal Can
Limit Switch Shaft Threads	*Oil	"3 in 1" or Light Machine Oil-obtain locally
Lower Hook Thrust Bearing	*Oil	Heavy Machine Oil-obtain locally

*These oils are not furnished by CM in Packaged Quantities.

When ordering lubricants, specify the type of lubricant, part number and packages quantity required.

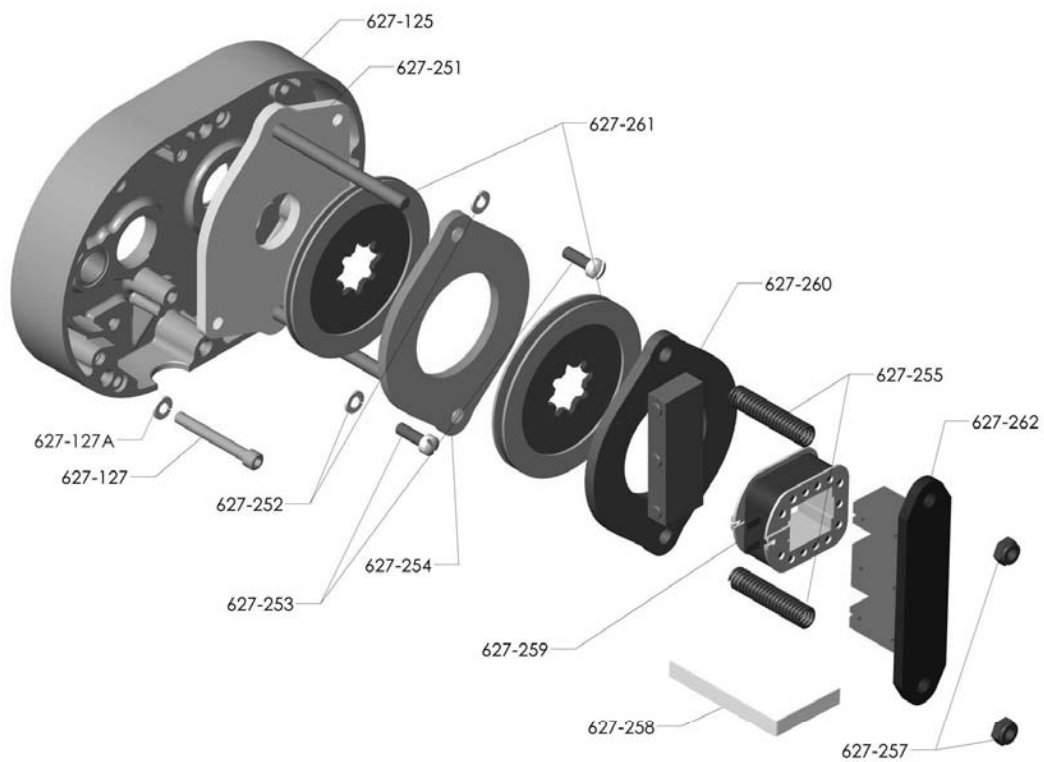
Touch-up Paints for Lodestar Electric Chain Hoists:

Hoist Order *(1) case (12-12 oz. Aerosol Cans) of Black Touch-up paints Part Number 84189.

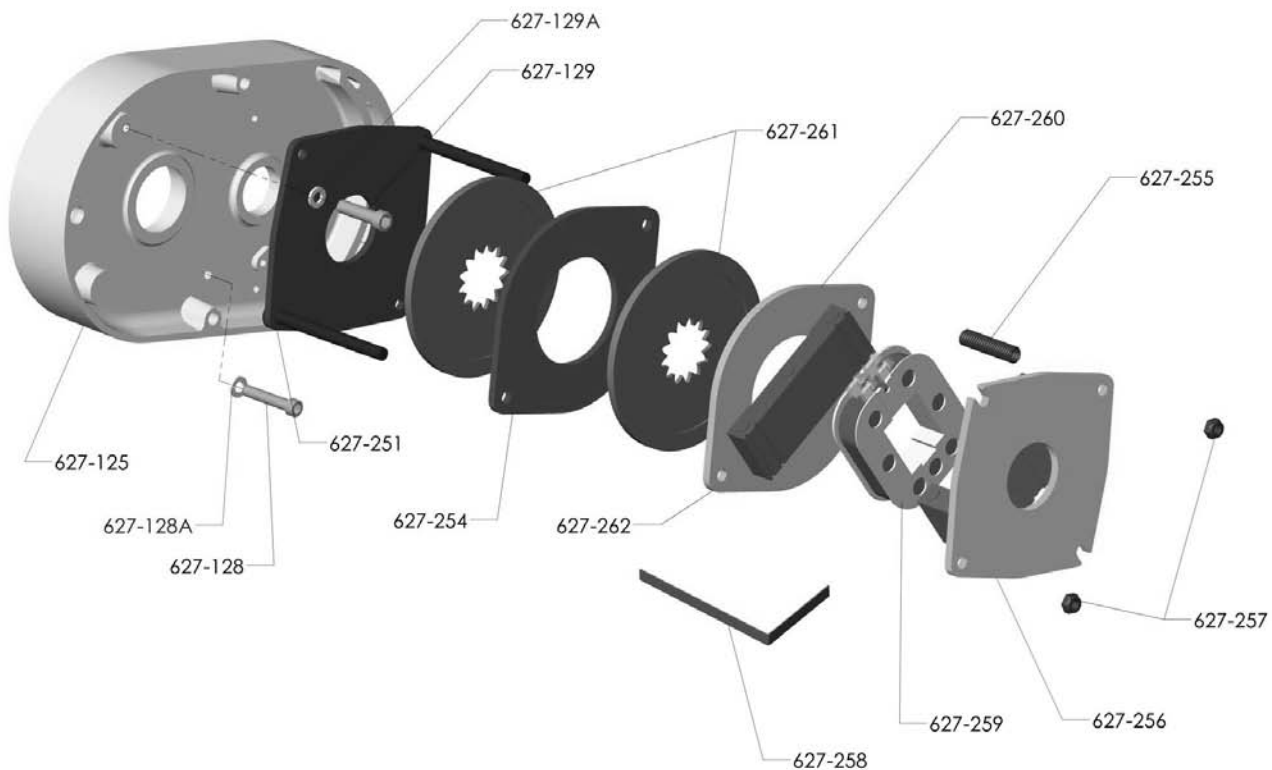
*Touch-up paints are only available in case quantities.

NOTE: When painting Hoists, also order warning labels, identification labels, etc. that may be coated during painting.

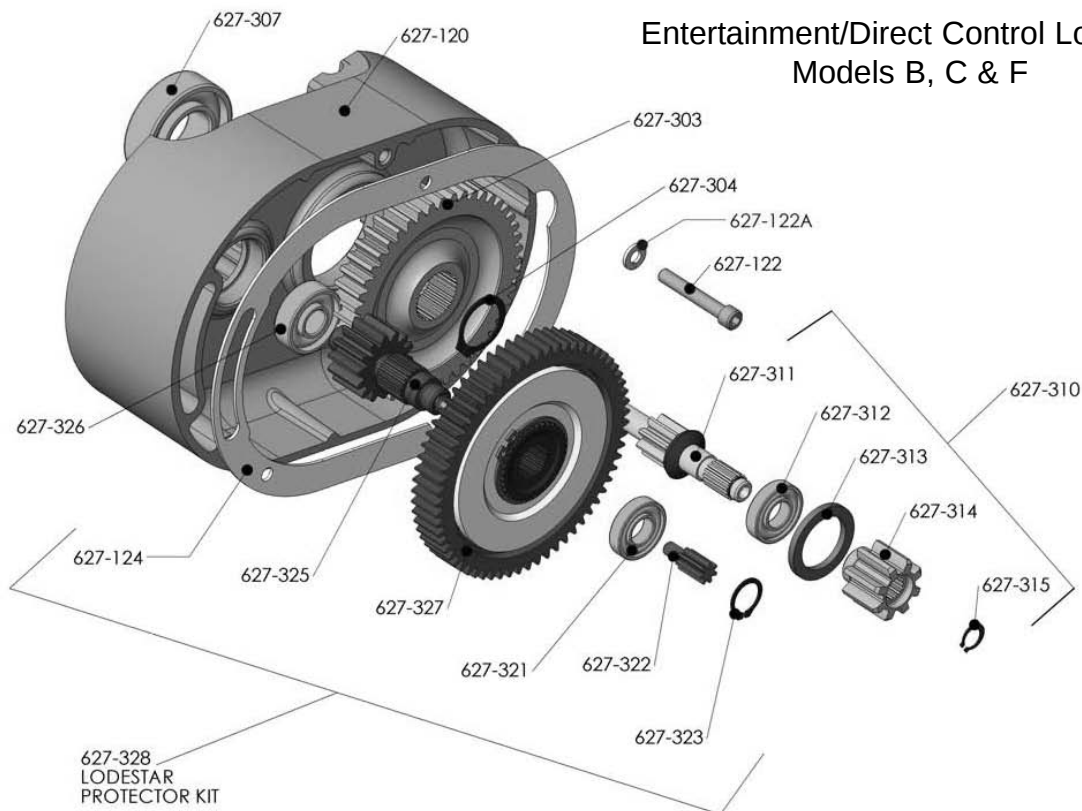
Entertainment/Direct Control Lodestar Models B, C & F Brake



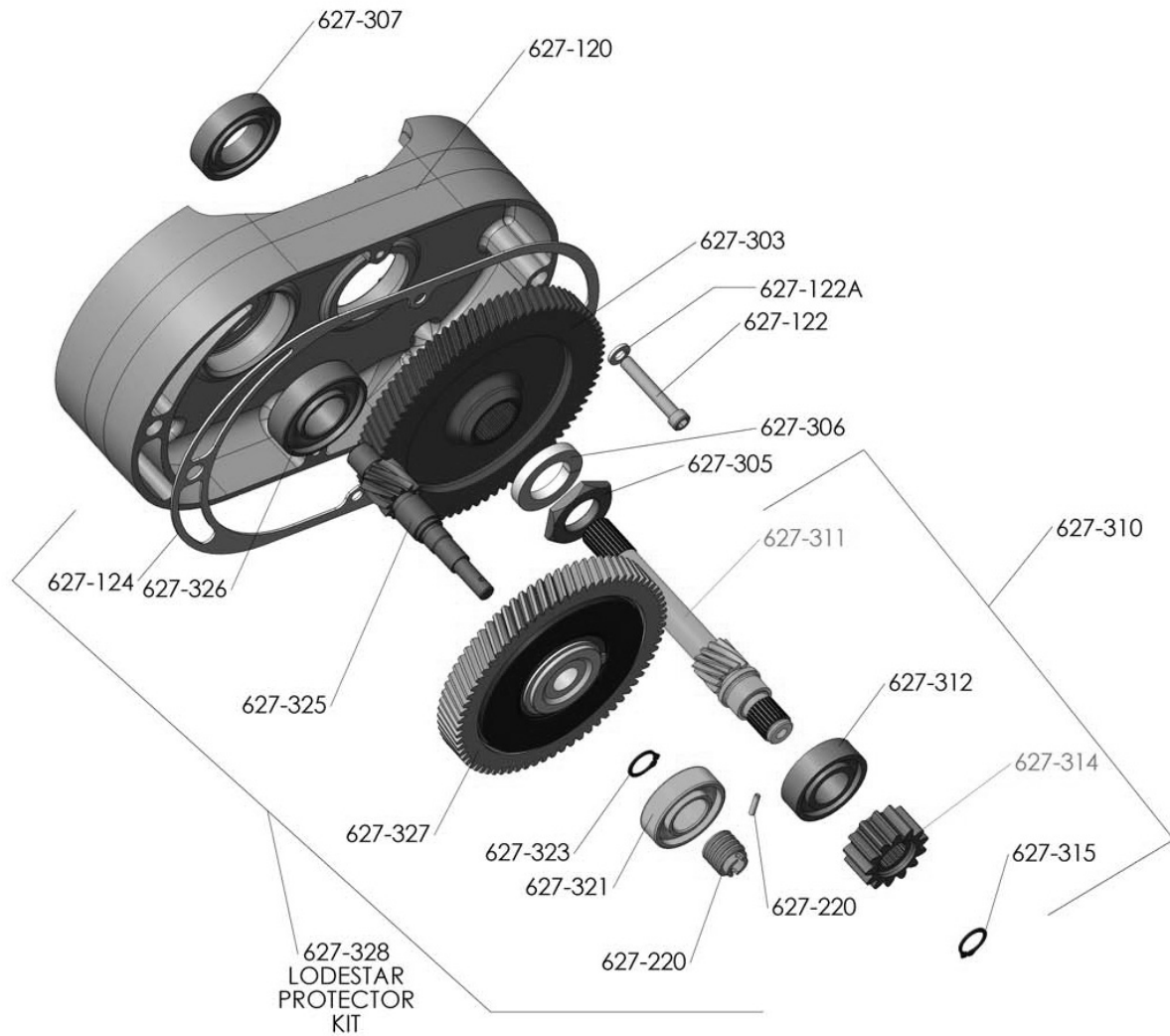
Entertainment/Direct Control Lodestar Models J, L, LL, R & RR Brake



ENTERTAINMENT/DIRECT CONTROL-LODESTAR ELECTRIC CHAIN HOIST-PROTECTOR KIT				
Key Number	Part Name	No. Req'd.	Models	
			B,C & F	J, L, LL, R & RR
627-120	Gear Housing	1	27038	35627 (Includes 627-119)
627-122	Gear Housing Attaching Screw	4	28830	35733
627-122A	Gear Housing Attaching Screw L.W.	4	940802	940830
627-124	Gear Housing Gasket	1	27747	35707
627-303	Liftwheel Gear	1	27009 (53 Teeth) for Model B & F 27010 (47 Teeth) for Model C	35009 (79 Teeth) for Models J, L & R, 35639 (60 Teeth) for Models LL & RR
627-304	Liftwheel Gear Snap Ring	1	27767	-
627-305	Liftwheel Geat Nut	1	-	35773
627-306	Liftwheel Gear Nut Washer	1	-	986276
627-307	Liftwheel Bearing-Gear End	1	88429	82002
627-310	Drive Shaft and Pinion S.A. (Items 627-311 Thru 627-315, as applicable)	1	27653 for Model B 27654 for Models C & F	35688 for Model J 35687 for Models L, LL, R & RR
627-311	Drive Shaft and Pinion	1	24641 for Model B 24642 for Models C & F	35357 (18 teeth) for Model J 35356 (12 teeth) for Models L, LL, R & RR
627-312	Drive Shaft Pinion Bearing	1	82009	83691
627-313	Drive Shaft Bearing Spacer	1	27710	-
627-314	Brake Hub	1	27851 (21/32 Lg.) for Model B 27852 (1-1/8 Lg.) for Models C & F	35744
627-315	Brake Hub Snap Ring	1	27766	35766
627-321	Intermediate Gear & Pinion Bearing-Outboard	1	82009	88437
627-322	Limit Switch Drive Pinion	1	27712	-
627-323	Intermediate Gear Snap Ring	1	27765	35763
627-325	Intermediate Pinion (includes Item 627-322 (If applicable)	1	28623 (8 teeth) for Models B & F 28624 (14 teeth) for Model C	35351 (10 teeth) for Models J, L & R 35420 (15 teeth) for Models LL & RR
627-326	Intermediate Gear and Pinion Bearing-Inboard	1	88440	Order (1) Bearing 83670 and (1) Shaft Adapter 24350
627-327	Lodestar Protector	1	28694 for Model B, 28695 for Models C & F	36668 for Model J, 36670 for Models L & R 36671 for Models LL & RR
627-328	Lodestar Protector Kit (Includes items 627-124, 627-321, 627-322, 627-323, 627-325 & 627-327)	1	2878 for Model B, 2880 for Models C & F	3602 for Model J, 3603 for Models L & R 3604 for Models LL & RR

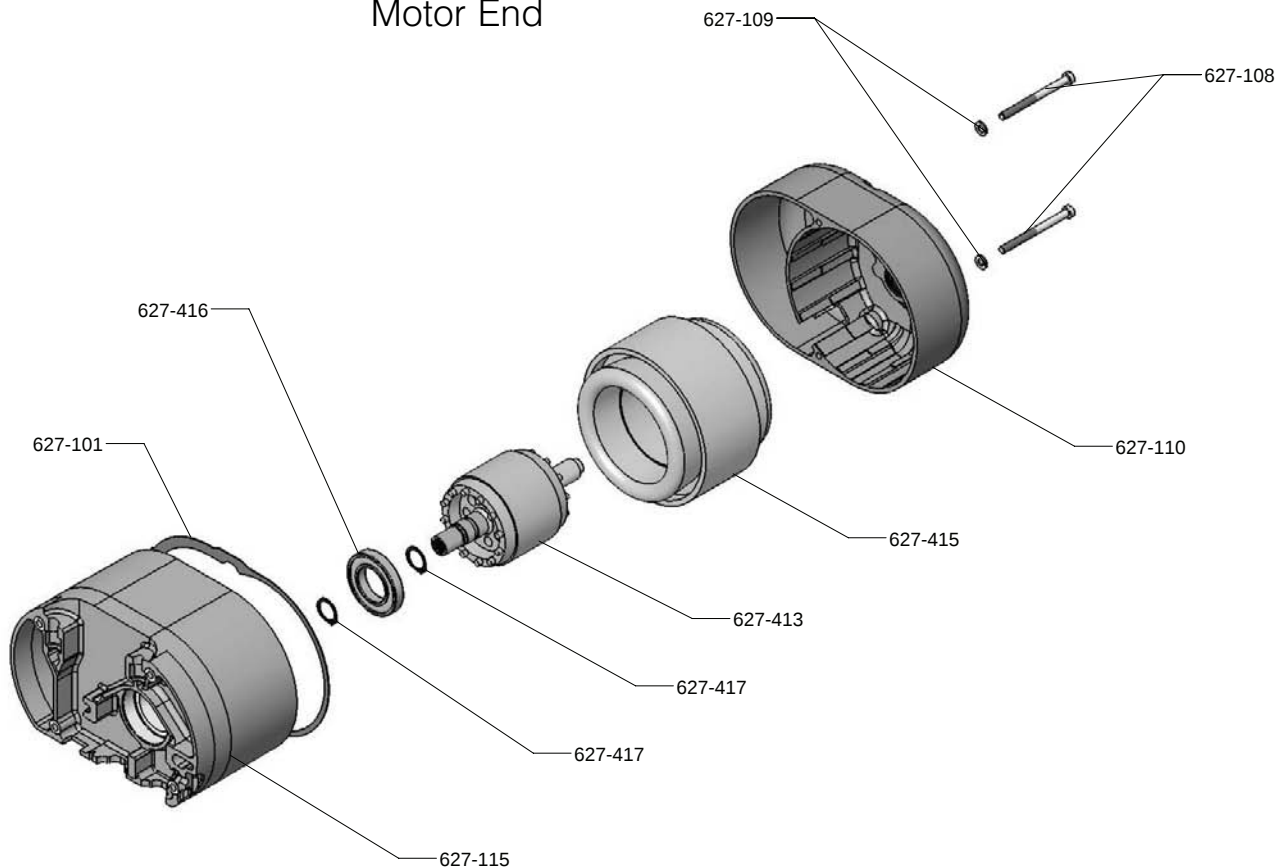


Entertainment/Direct Control Lodestar Models J, L, LL, R & RR
Protector Kit

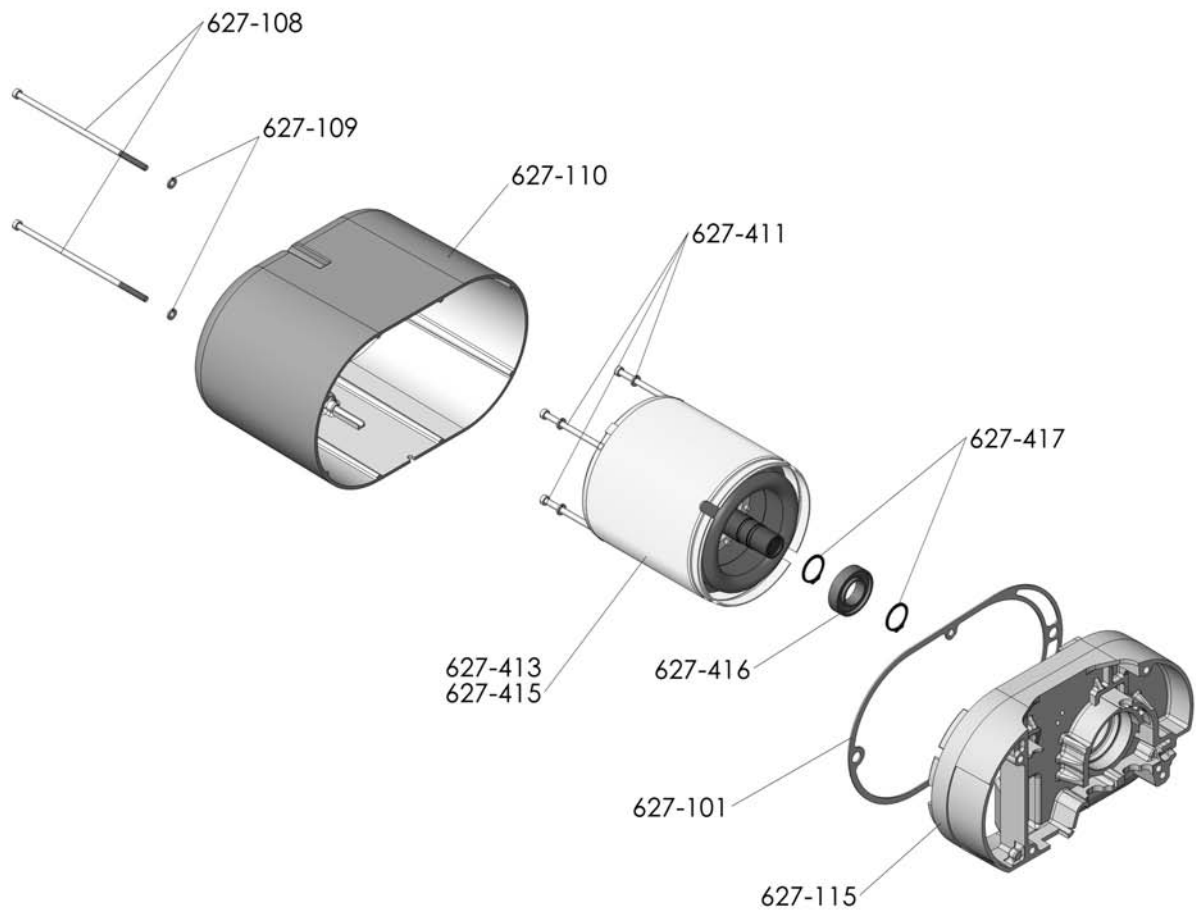


ENTERTAINMENT/DIRECT CONTROL-LODESTAR ELECTRIC CHAIN HOIST-MOTOR END				
Key Number	Part Name	No.	Models	
		Req'd.	B,C & F	J, L, LL, R & RR
			Part Number	
627-101	Gear Housing Gasket	1	27847 Weatherproof Units Only	35841 Weatherproof Units Only
627-108	Motor Housing Cover Screw	-	987397 (2 Req'd.)	987553 (2 Req'd.)
627-109	Motor Housing Cover Screw Lock Washer	-	982226 (2 Req'd.) 982251 (2 Req'd.) Weatherproof Units only	982226 (4 Req'd.) 982251 (4 Req'd.)Weatherproof Units only
627-110	Motor Housing Cover	1	27059	36076
627-115	Motor Housing	1	27063	35073
627-124	Gear Housing Gasket	1	27747	35707
627-411	Motor Thru Bolts	4	—	87377 for Models J, L & R 87336 for Models LL & RR
627-413	Rotor & Shaft Assembly	1	286004 For Model B 286000 For Models C & F	***367002 for Models J, L & R *** 367008 for Models LL & RR
627-415	Stator	1	287006 For Model B 287001 For Models C & F	
627-416	Motor Shaft Bearing (Inboard)	1	82003	82004
627-417	Motor Shaft Inboard Bearing Snapping	2	27790	35764
*** 3/4 Motor Includes Stator, Rotor & Shaft Assembly, End Bell & Attaching Screws assembled complete. Individual Rotor and Shaft Assembly & Stators for Repairs not yet available.				

Models B, C & F
Motor End



Models J, L, LL, R & RR
Motor End

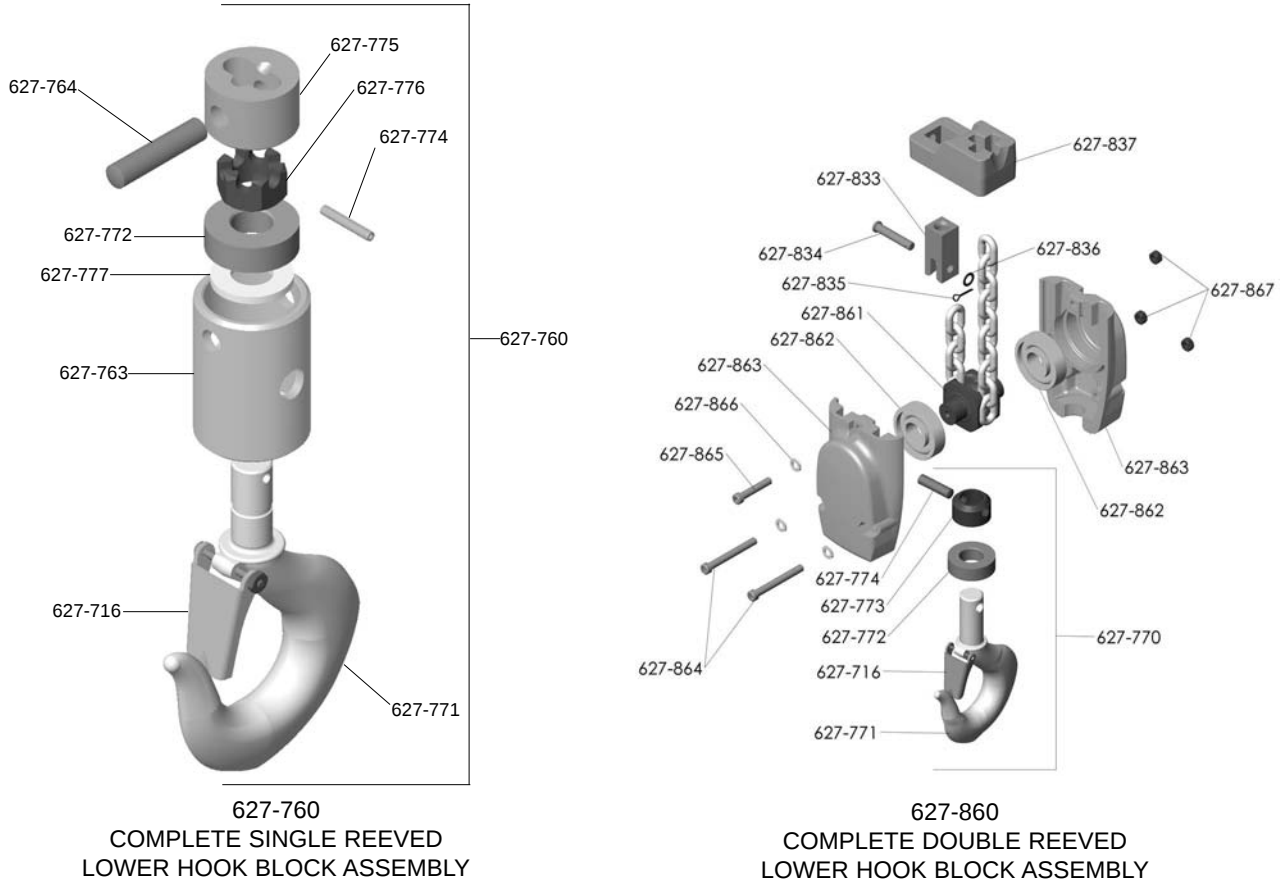


ENTERTAINMENT/DIRECT CONTROL LODESTAR ELECTRIC CHAIN HOIST PARTS LIST-MECHANICAL					
627-760 Single Reeved Complete Lower Hook Block Assembly					
627-860 Double Reeved Complete Lower Hook Block Assembly					
Key Number	Part Name	No. Req'd.	Models		
			B, C & F	J, L & LL	R & RR
			Part Number		
627-716	Latch Kit (specify no. req'd)	-	45661	45662	45663
627-760	Lower Hook Block Assembly	1	**28683	**35651	35621
627-763	Lower Hook Body	1	45401	35370	-
627-764	Lower Hook Chain Block Pin	1	45943	35790	-
627-770	Lower Hook Block Assembly	1	-	-	*35645
627-771	Lower Hook with Latch: Latch Type Hook	1	28686	35611	35612
	Latchlok Type Hook	1	28604	28604	36681
627-772	Lower Hook Thrust Bearing	1	88485	88485	88505
627-773	Lower Hook Collar	1	-	-	35369
627-774	Lower Hook Pin	1	983772	983772	45946
627-775	Lower Hook Chain Block	1	28007	35026	-
627-776	Lower Hook Nut	1	982526	982526	-
627-777	Lower Hook Block Washer	1	945921	945921	-
627-833	Dead End Block	1	-	-	35418
627-834	Dead End Pin	1	-	-	82314
627-835	Dead End Pin Cotter Pin	1	-	-	988330
627-836	Dead End Pin Washer	1	-	-	987877
627-837	Contact Block	1	-	-	36764
627-860	Lower Hook Block Assembly-Complete	1	-	-	**35621
627-861	Hook Block Sheave	1	-	-	35010
627-862	Hook Block Sheave Bearing	2	-	-	83674
627-863	Hook Block (Order in Pairs)	2	-	-	35034
627-864	Hook Block Screw-Long	2	-	-	982374
627-865	Hook Block Screw-Short	1	-	-	982370
627-866	Hook Block Screw L.W.	3	-	-	940830
627-867	Hook Block Screw Nut	3	-	-	982445

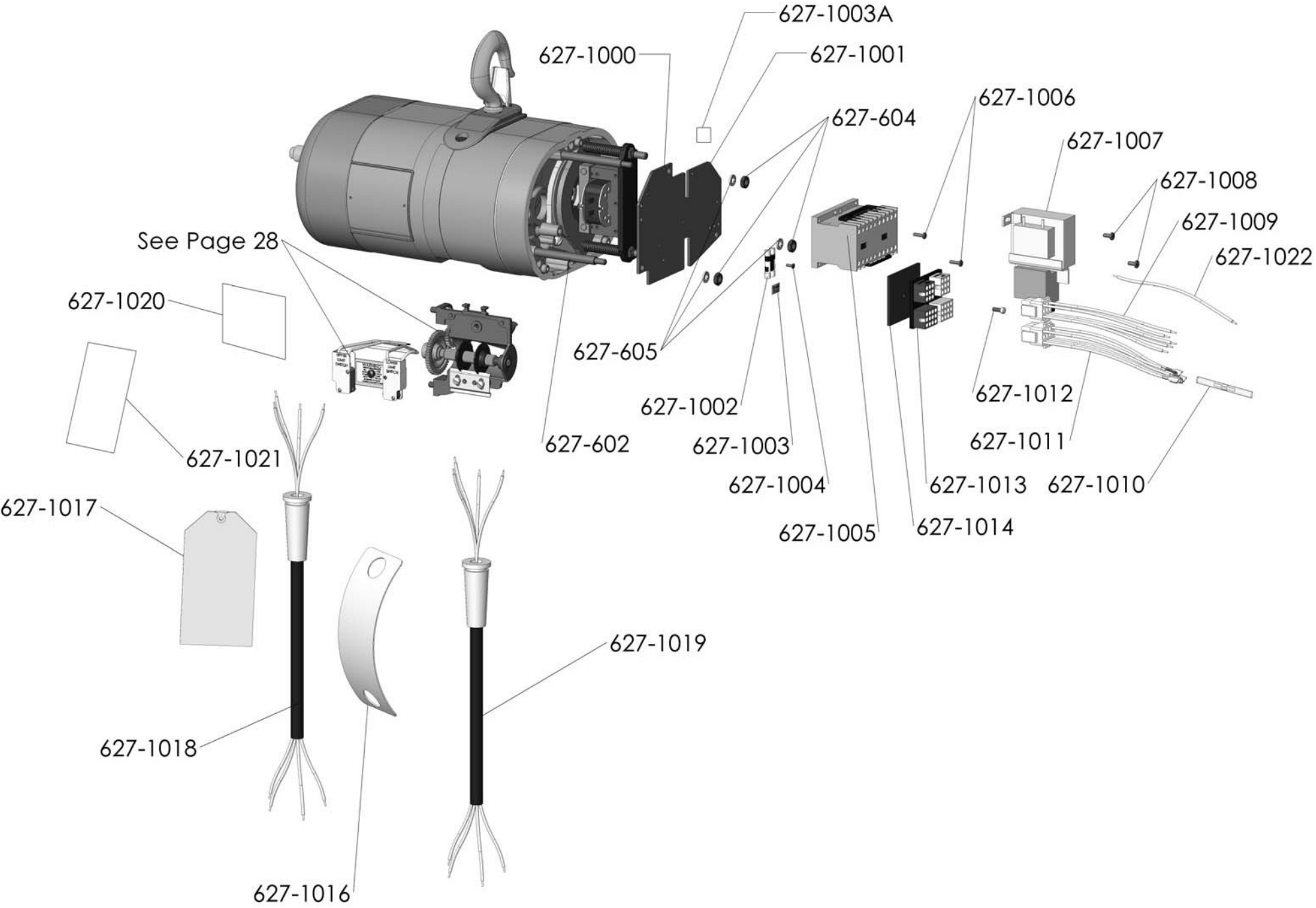
*Latch Type Hook contact CM for part number of Lower Hook Assembly with Latchlok Type Hook.

**With Latch Type Hook. If lower hook block assembly with Latchlok Type Hook is required. Contact CM.

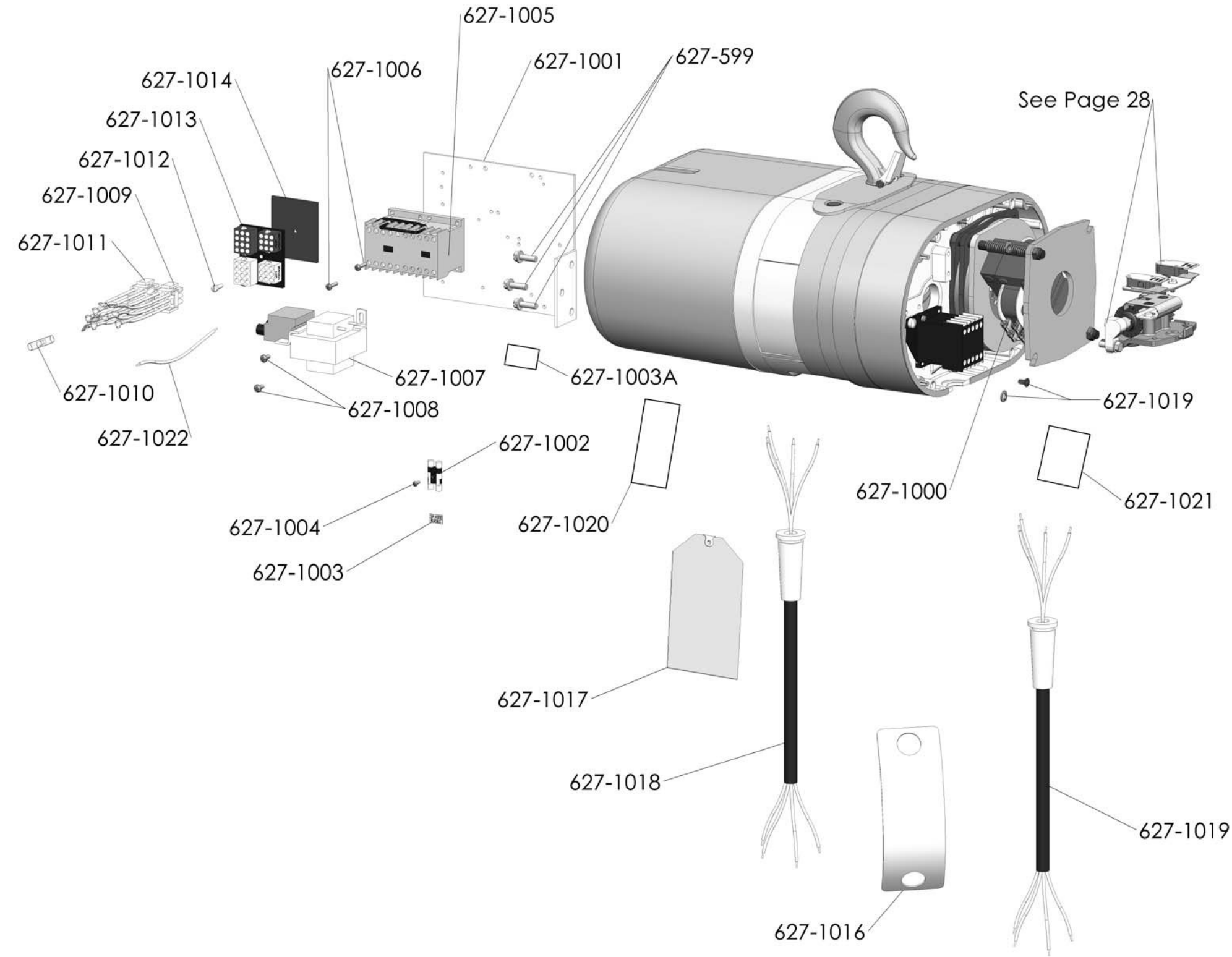
***Contact CM for Part Number of Latchlok Type Hook.



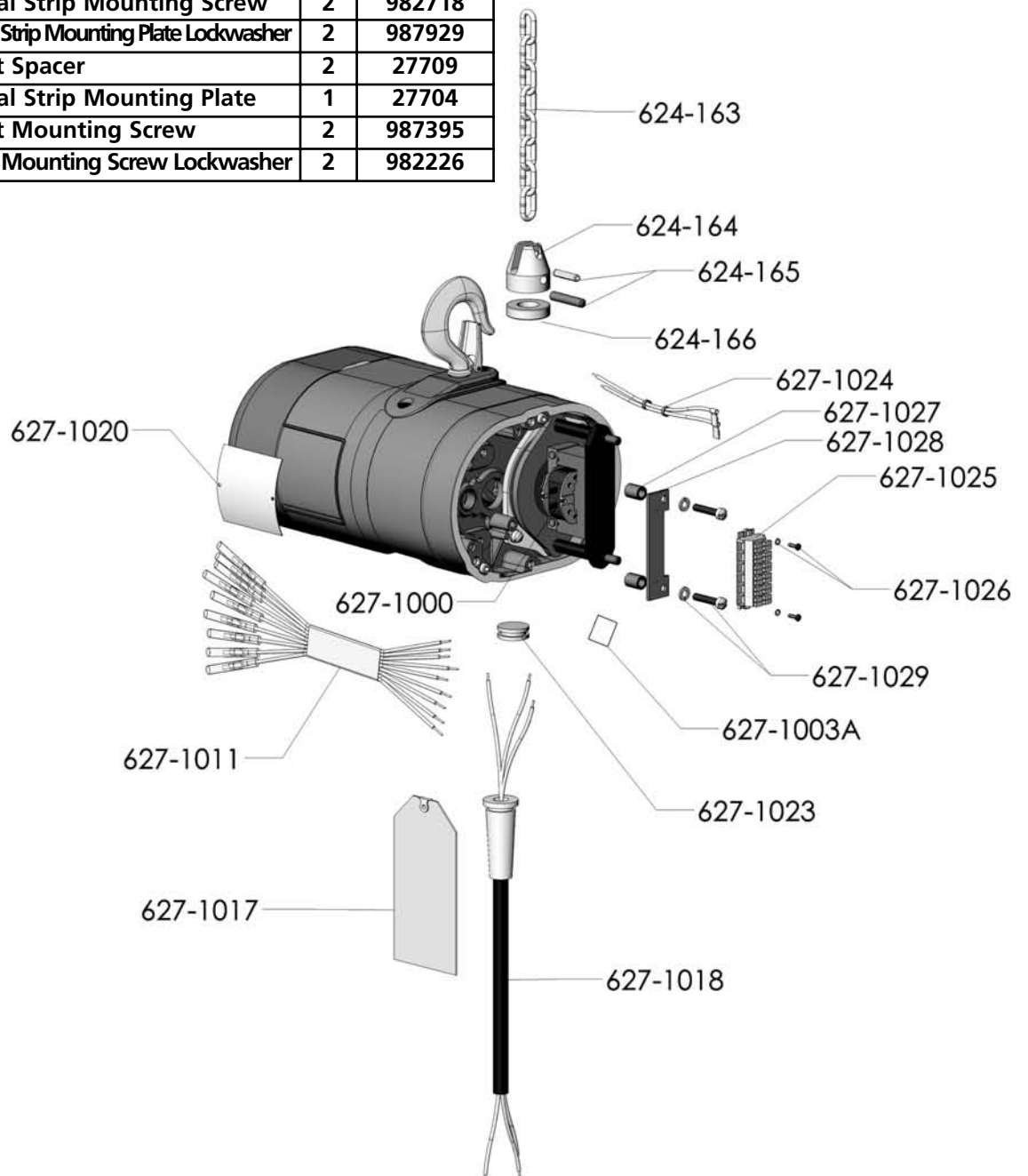
V1 ENTERTAINMENT-MODELS B, C & F			
KeyNo.	Description	Qty.	Part No.
627-602	Contactor Bracket Plate Stud	3	27836
627-604	Contactor Bracket Plate Stud Lockwasher	3	982226
627-605	Contactor Bracket Plate Stud Nut	3	982514
627-1000	Insulated Brake Coil Terminal	2	983197
627-1001	Contactor Bracket	1	31633
627-1002	Spare Fuse Clamp	1	951951
	Fuse (160mA)-Specify Quantity	-	27675
627-1003	Spare Fuse Label	1	27674
627-1003A	Ground Symbol Label	1	20940
627-1004	Fuse Clamp Attaching Screw	1	982574
	Fuse Clamp Attaching Screw Lockwasher	1	987844
627-1005	Reversing Conatactor (115v Coil)	1	24799
	(48 v Coil)	1	24797
	(24v Coil)	1	28860
627-1006	Contactor Attaching Screw	2	982718
627-1007	Transformer w/fusing (115v sec)	1	28294
	(Fuses not included) (48v sec)	1	28295
	(24v sec)	1	28296
627-1008	Transformer Mounting Screw	2	982683
627-1009	Contactor/Transformer Wiring Harness	1	27602
627-1010	Line Connector-Specify Qty.	-	982158
627-1011	Motor Wiring Harness (1 Speed)	1	27603
627-1012	Board Attaching Screw	1	987862
627-1013	Voltage Change Board (1 Speed)	1	27672
627-1014	Voltage Change Board Insulator	1	27685
627-1016	Warning Tag	1	81704
627-1017	Instruction Tag	1	28271
627-1018	Power Cord	1	31701
627-1019	Control Cord Assembly-Entertainment	1	31703
627-1020	Hoist I.D. Plate	1	Contact Factory
627-1021	Voltage Label-Model B	1	27698
	Model C	1	27699
	Model F	1	27696
627-1022	Jumpers:		
	W1 "UP" Limit Switch Jumper	1	27613
	W2 "Down" Limit Switch Jumper	1	27614
	R10 Transformer Jumper	1	27609
	R13 Transformer Jumper	1	27610
	G-Y Ground Jumper	1	27686
	Contactor Coil Jumper	1	27627



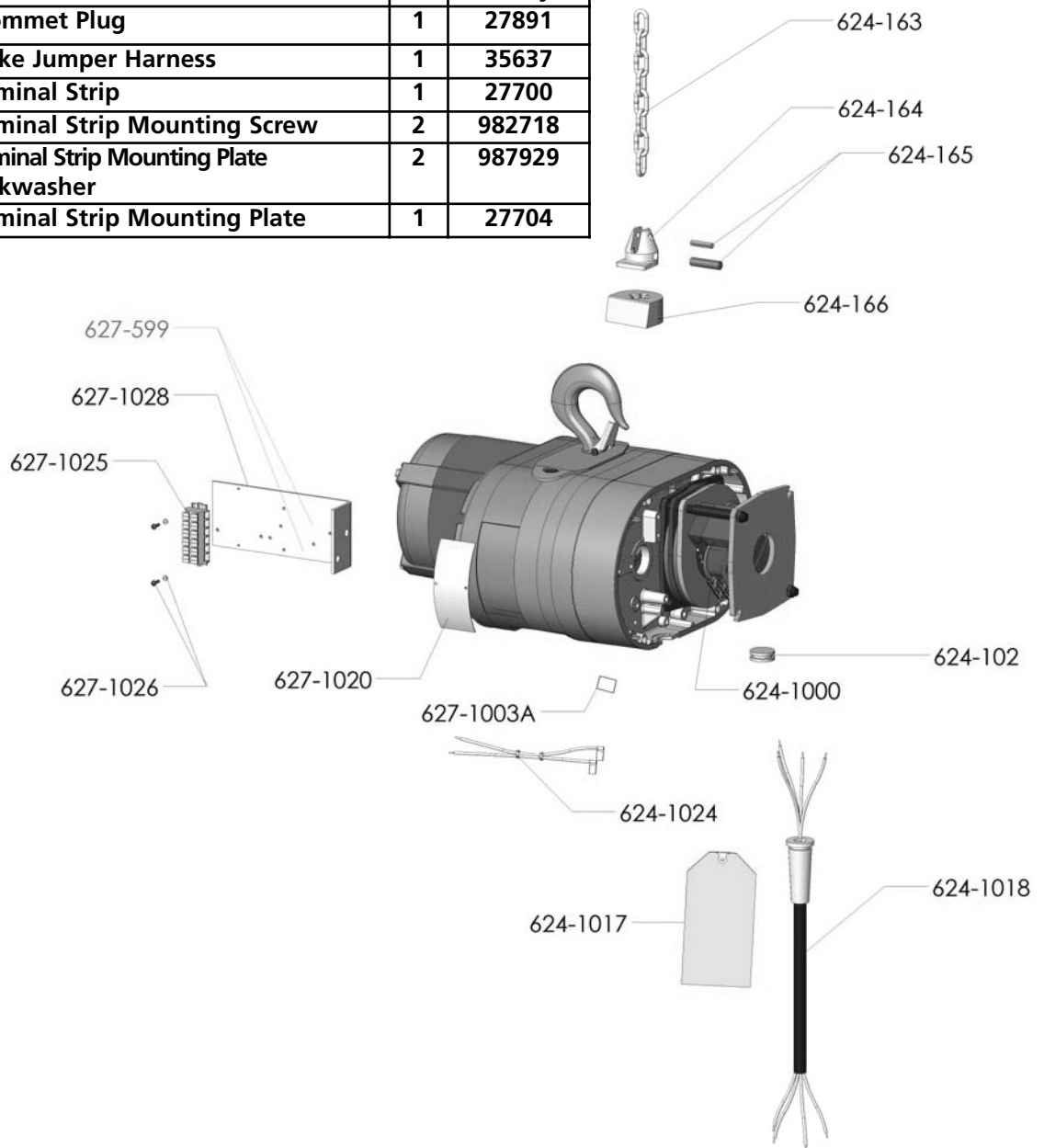
V2 ENTERTAINMENT-MODELS J, L, R, LL & RR			
KeyNo	Description	Qty.	Part No.
627-599	Contactora Bracket Mtg. Screw	3	983643
627-1000	Insulated Brake Coil Terminal	2	983197
627-1001	Contactora Bracket	1	31635
627-1002	Spare Fuse Clamp	1	951951
	Fuse (160mA)-Specify Quantity	-	27675
627-1003	Spare Fuse Label	1	27674
627-1003A	Ground Symbol Label	1	20940
627-1004	Fuse Clamp Attaching Screw	1	982574
	Fuse Clamp Attaching Screw Lockwasher	1	987844
627-1005	Reversing Conatactor (115v Coil)	1	24799
	(48 v Coil)	1	24797
	(24v Coil)	1	28860
627-1006	Contactora Attaching Screw	1	982718
627-1007	Transformer w/fusing (115v sec)	1	28294
	(Fuses not included) (48v sec)	1	28295
	(24v sec)	1	28296
627-1008	Transformer Mounting Screw	2	982683
627-1009	Contactora/Transformer Wiring Harness	1	35613
627-1010	Line Connector-Specify Qty.	-	982158
627-1011	Motor Wiring Harness (1 Speed)	1	35615
627-1012	Board Attaching Screw	1	987862
627-1013	Voltage Change Board (1 Speed)	1	27672
627-1014	Voltage Change Board Insulator	1	27685
627-1016	Warning Tag	1	81704
627-1017	Instruction Tag	1	28271
627-1018	Power Cord	1	31701
627-1019	Control Cord Assembly-Entertainment	1	31704
627-1020	Hoist I.D. Plate	1	Contact Factory
627-1021	Voltage Label-Model J	1	27690
	Model L	1	27687
	Model R	1	27691
	Model LL	1	27692
	Model RR	1	27693
627-1022	Jumpers:		
	W1 "UP" Limit Switch Jumper	1	35661
	W2 "Down" Limit Switch Jumper	1	35662
	R10 Transformer Jumper	1	35638
	R13 Transformer Jumper	1	35641
	G-Y Ground Jumper	1	27686
	Contactora Coil Jumper	1	27627



V1 DIRECT CONTROL - MODELS B, C & F			
Key No.	Description	Qty.	Part No.
624-163	Loose End Chain (8-Links)	1	85832
624-164	Loose End Block	1	24015
624-165	Loose End Chain Pin & Load Chain Pin	1	C328
624-166	Stop Block	1	24785
627-1000	Insulated Brake Coil Terminal	2	983197
627-1003A	Ground Symbol Label	1	20940
627-1017	Instruction Tag	1	28271
627-1018	Power Cord Assembly	1	27637
627-1020	Hoist I.D. Plate	1	Contact Factory
627-1023	Grommet Plug	1	27891
627-1024	Brake Jumper Harness	1	27715
627-1025	Terminal Strip	1	27700
627-1026	Terminal Strip Mounting Screw	2	982718
	Terminal Strip Mounting Plate Lockwasher	2	987929
627-1027	Bracket Spacer	2	27709
627-1028	Terminal Strip Mounting Plate	1	27704
627-1029	Bracket Mounting Screw	2	987395
	Bracket Mounting Screw Lockwasher	2	982226

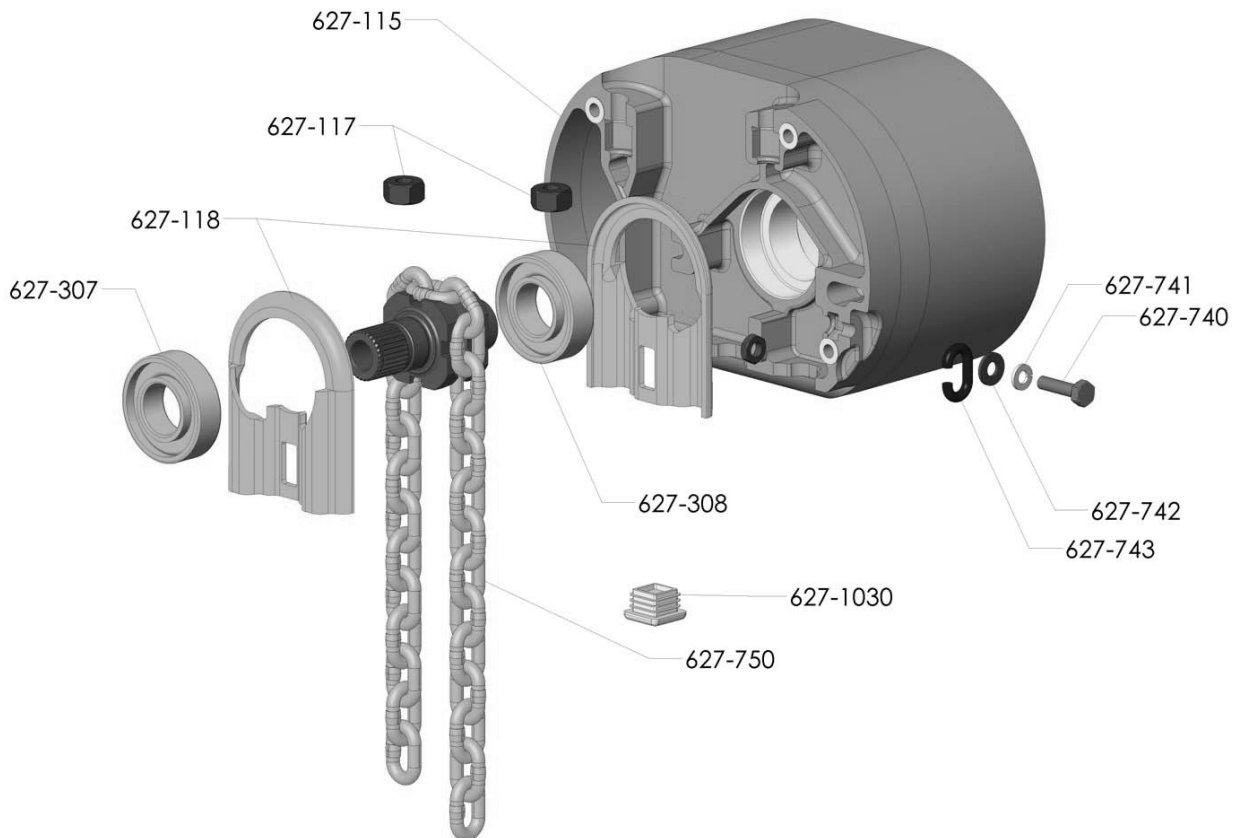


V2 DIRECT CONTROL - MODELS J, L, R, LL & RR			
Key No.	Description	Qty.	Part No.
624-163	Loose End Chain (8-Links)	1	85832
624-164	Loose End Block	1	24016
624-165	Loose End Chain Pin & Load Chain Pin	1	C348
624-166	Stop Block	1	24786
627-599	Mounting Plate Screws	2	983643
627-1000	Insulated Brake Coil Terminal	2	983197
627-1003A	Ground Symbol Label	1	20940
627-1017	Instruction Tag	1	28271
627-1018	Power Cord Assembly	1	31711
627-1020	Hoist I.D. Plate	1	Contact Factory
627-1023	Grommet Plug	1	27891
627-1024	Brake Jumper Harness	1	35637
627-1025	Terminal Strip	1	27700
627-1026	Terminal Strip Mounting Screw	2	982718
	Terminal Strip Mounting Plate Lockwasher	2	987929
627-1028	Terminal Strip Mounting Plate	1	27704



**V1 ENTERTAINMENT/DIRECT CONTROL
MODELS B, C & F**

GEARING			
Key No.	Description	Qty.	Part No.
627-115	Motor Housing	1	27063
627-117	Suspension Adapter Nut	2	927755
627-118	Chain Guide	2	27008
627-302	LiftWheel	1	27360
627-307	Lift Wheel Bearing (Gear End)	1	88429
627-308	Lift Wheel Bearing (Motor End)	1	88429
627-740	Loose End Screw	1	927764
627-741	Loose End Screw Lockwasher	1	982226
627-742	Loose End Screw Washer	1	954802
627-743	Loose End Link	1	27351
627-750	Load Chain	-	85994
627-1030	Dead End Block Hole Plug	1	27223



**V2 ENTERTAINMENT/DIRECT CONTROL
MODELS J, L, R, LL & RR**

GEARING			
Key No.	Description	Qty.	Part No.
627-112	Suspension Adapter	2	35066
627-115	Motor Housing	1	35073
627-117	Suspension Adapter Nut	2	935791
627-118	Chain Guide	2	35018
627-302	LiftWheel	1	35421
627-307	Lift Wheel Bearing (Gear End)	1	82002
627-308	Lift Wheel Bearing (Motor End)	1	83669
627-740	Loose End Screw	1	987210
627-741	Loose End Screw Lockwasher	1	945851
627-742	Loose End Screw Washer	1	954807
627-743	Loose End Link	1	35367
627-750	Load Chain	-	85949
627-833	Dead End Block	1	35418
627-834	Dead End Pin (Models R & RR)	1	82314
627-835	Dead End Pin Cotter Pin (Models R & RR)	1	988330
627-836	Dead End Pin Washer (Models R & RR)	1	987877
627-837	Contact Block (Models R & RR)	1	36764
627-1030	Dead End Block Hole Plug (Models J, L & LL)	1	35291

