

Columbus McKinnon Entertainment Division

Operating, Maintenance & Parts Manual

Follow all instructions and warnings for inspecting, maintaining and operating this hoist.

The use of any hoist presents some risk of personal injury or property damage. That risk is greatly increased if proper instructions and warnings are not followed. Before using this hoist, each operator should become thoroughly familiar with all warnings, instructions, and recommendations in this manual. Retain this manual for future reference and use.

Forward this manual to the hoist operator. Failure to operate the equipment as directed in the manual may cause injury.



Before using the hoist, fill in the information below:

Capacity _____

Serial No. _____

Voltage _____

Purchase Date _____

Capacities

250 lb (113 Kg)

300 lb (136 Kg)

500 lb (226 Kg)

550 lb (250 Kg)

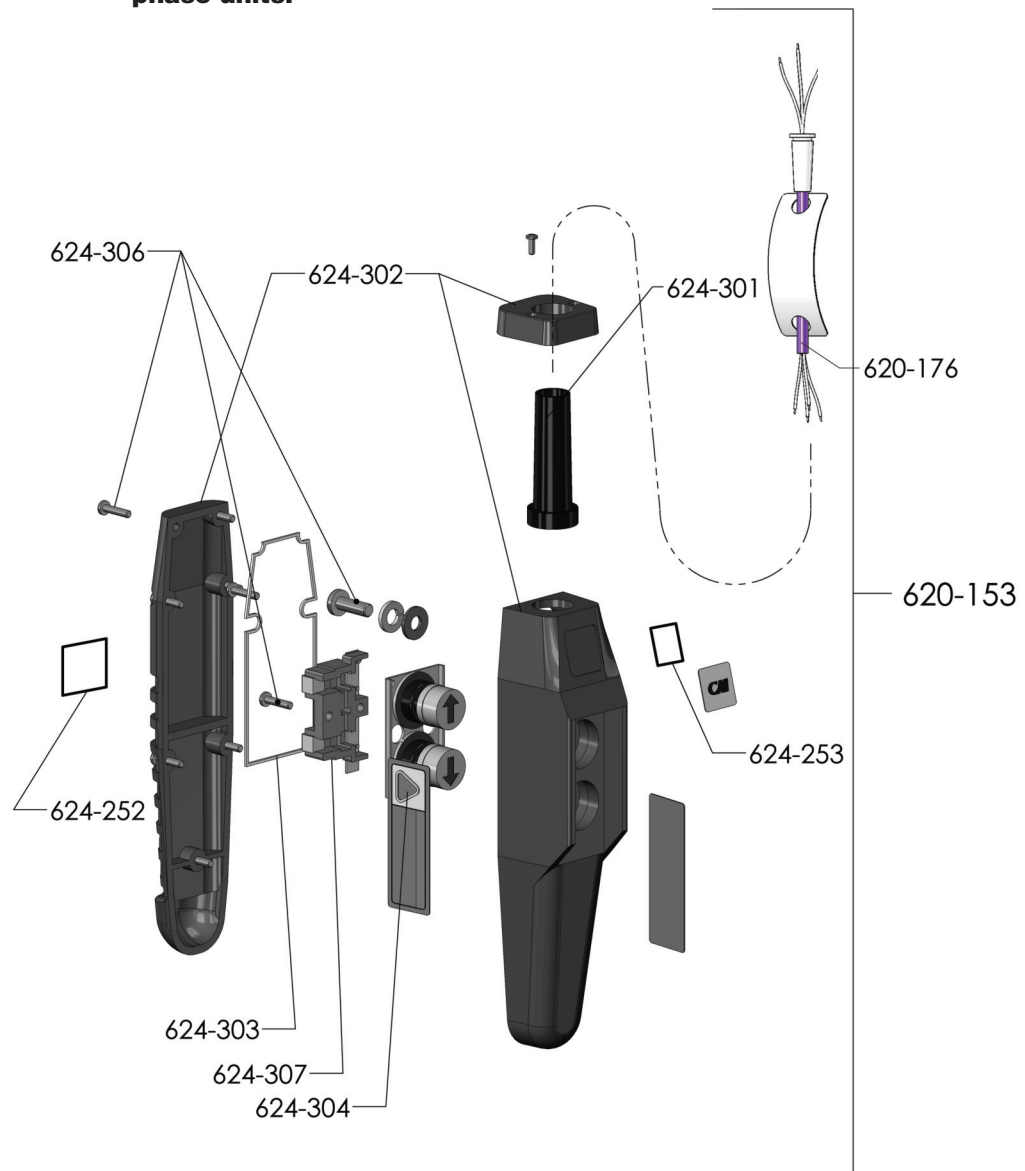
600 lb (272 Kg)

1,000 lb (453 Kg)

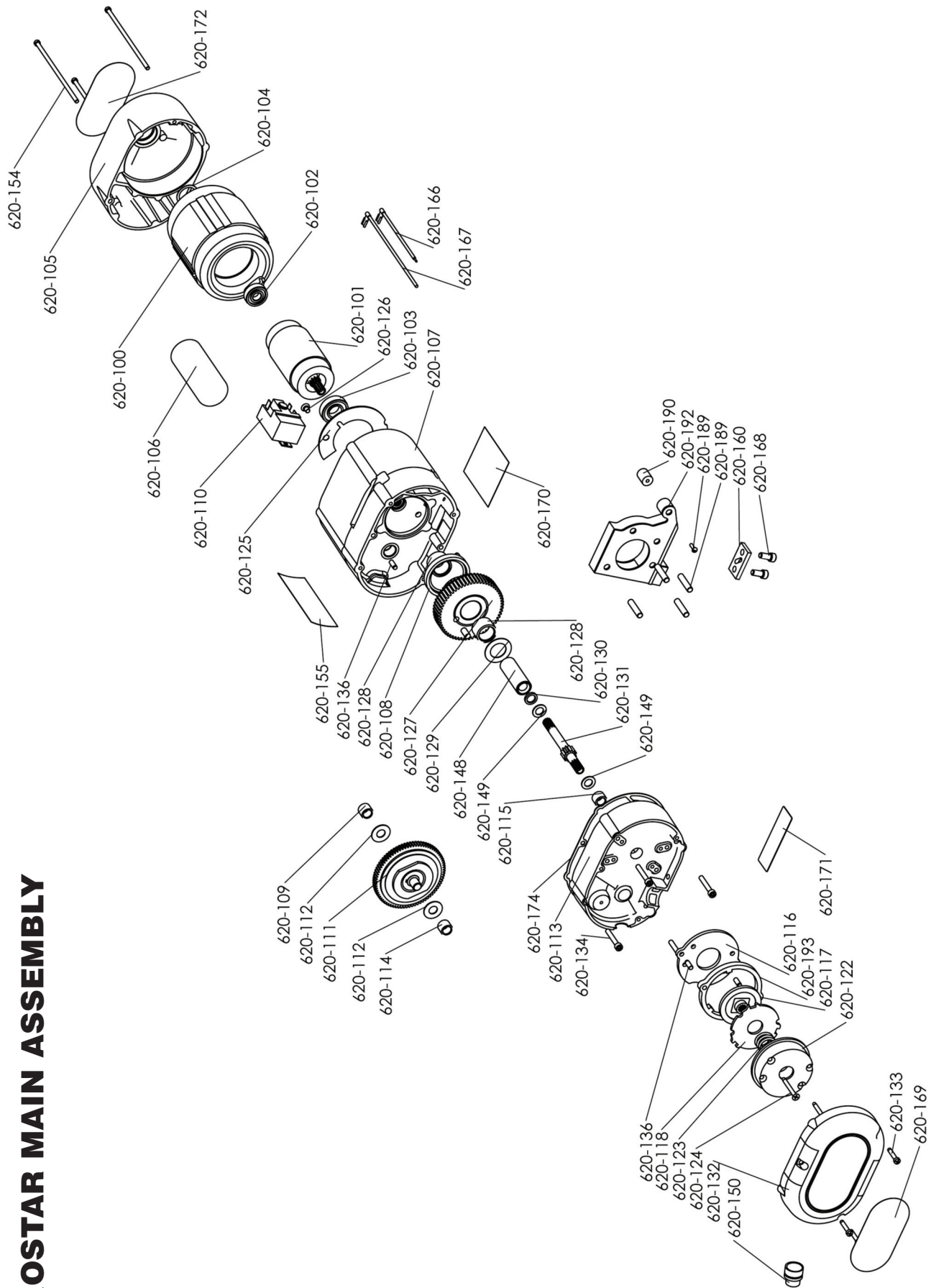
1,100 lb (500 Kg)

CONTROL STATION			
Key No.	Part Name	No. Req'd	Part No.
624-232	Control Station (Includes 624-301 thru 624-307)	1	36900B
624-252	Warning Label (Electrical)	1	24842
624-253	Manufacturer Label	1	28470
624-301	Control Station Grommet	1	36989
624-302	Control Station Housing	1	36998B
624-303	Gasket	1	36986
624-304	Control Station Button Assembly	1	36988
624-306	Control Station Parts Kit	1	36939
624-307	Contact Assembly (Includes 624-304)	1	36987
624-308	Warning Label	1	24845

Control Station (Black) for use on 115-1-50/60 hoists with contactor, 220-1-50 and three phase units.

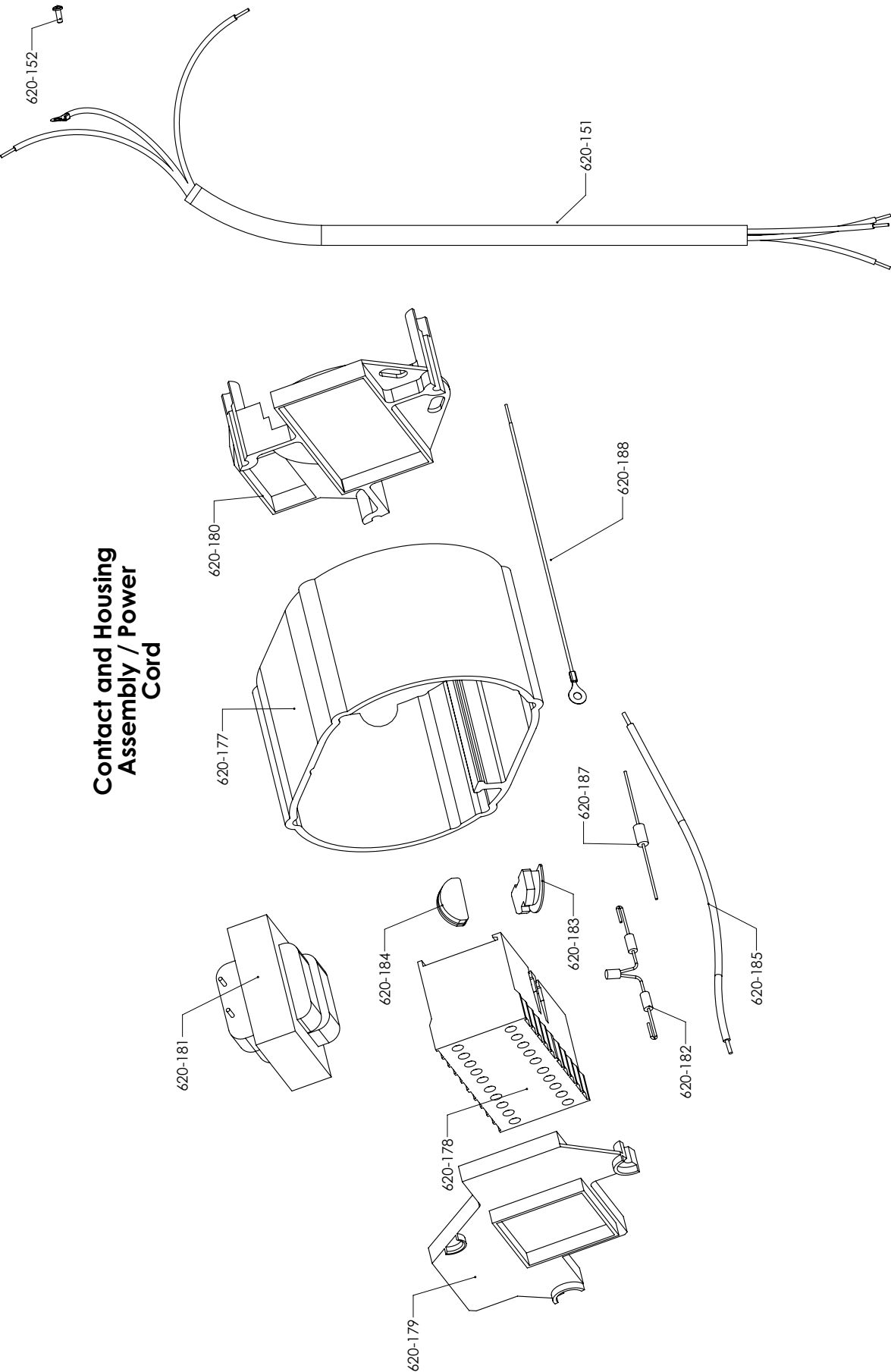


PROSTAR MAIN ASSEMBLY



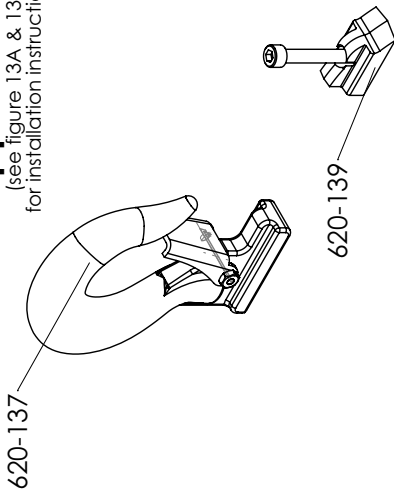
CONTACT AND HOUSING ASSEMBLY-POWERCORD

**Contact and Housing
Assembly / Power
Cord**

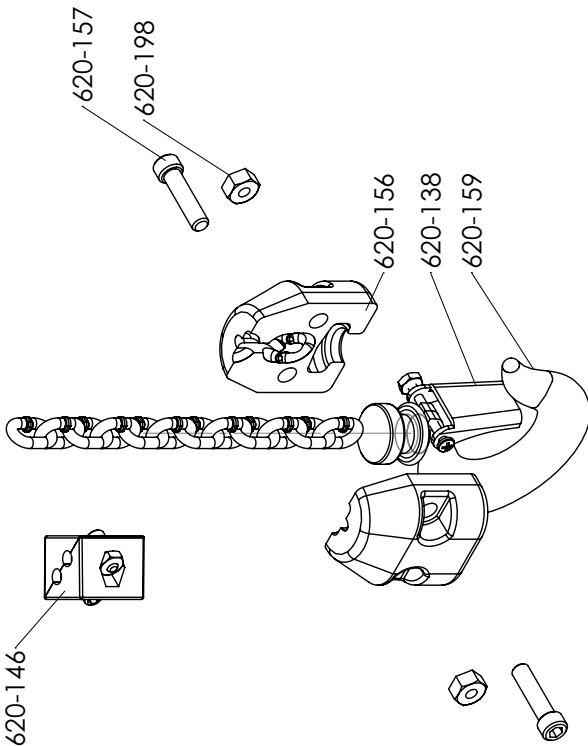


HOOK ASSEMBLY (SINGLE AND DOUBLE REEVE AND UPPER)

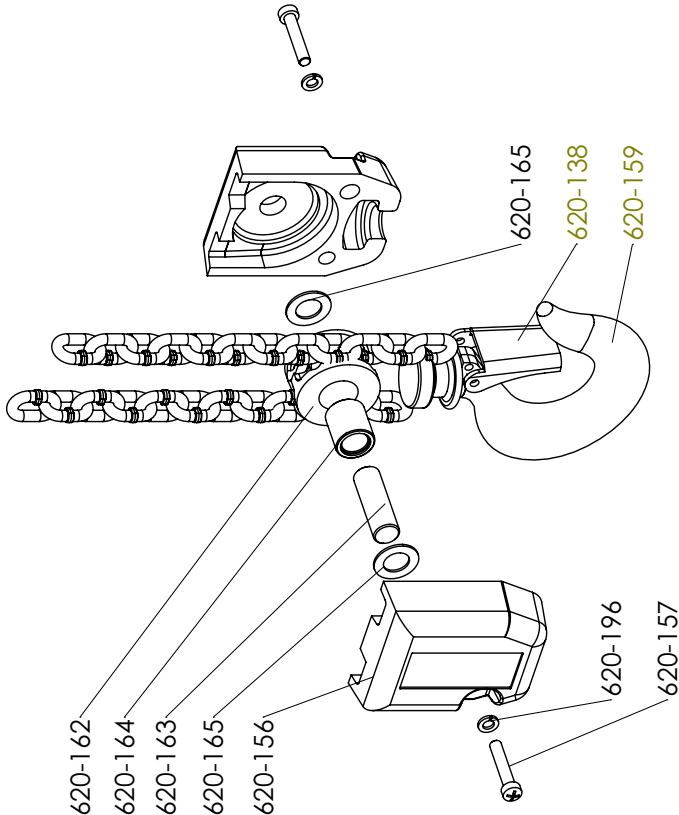
Upper Hook
(see figure 13A & 13B
for installation instructions)



**Single-Chained Units
Lower Hook Block**



**Double-Chained Units
Lower Hook Block**



PROSTAR ELECTRIC HOIST PARTS LIST

KEY NUMBER	PART NAME	NO. REQ'D	PART NUMBER
620-100	Stator		
	115-1-50/60 Hoists	1	20707
	220-1-50 Hoists	1	20328
	220-3-50/60 Hoists	1	20329
	380-3-50, 415-3-50 and 460-3-60 Hoists	1	20330
	575-3-60 Hoists	1	20344
620-101	Rotor Assembly (Includes 620-102 and 620-103)	1	20651
620-102	Rotor Bearing, Outboard	1	88487
620-103	Rotor Bearing, Inboard	1	88486
620-104	Rotor Thrust Washer	1	20727
620-105	Motor End Cover	1	20321
620-106	Capacitor		
	115-1-50/60 Hoists	1	20708
	220-1-50 Hoist	1	20785
620-107	Main Frame (Includes 620-108 and 620-109)	1	20353
620-108	Liftwheel Seal	1	20705
620-109	Protector Bearing, Main Frame Side	1	88636
620-110	Cut-Out Device		
	115-1-50/60 Hoists	1	20709
620-111	Protector Assembly		
	6 fpm (1.8mpm), 1,000 lbs. (453Kg)	1	20665
	8 fpm (2.4mpm), 500(226Km) & 600 lbs.(272Km)	1	20645
	8 fpm (2.4mpm), 1000 lbs. (453Kg)	1	20660
	12 fpm (3.7mpm), 500 lbs.(226Kg)	1	20665
	12 fpm(3.7mpm), 600 lbs.(272Kg)	1	20638
	12 fpm(3.7mpm), 1000 lbs.(453Kg)	1	20662
	13.4 fpm(4.0mpm), 550 lbs.(250Kg)	1	20660
	16 fpm(4.9mpm), 250(113Kg) & 300 lbs.(136Kg)	1	20645
	16 fpm(4.9mpm), 500 lbs.(226Kg)	1	20660
	20 fpm(6.1mpm), 500 lbs.(226Kg)	1	20648
	20 fpm(6.1mpm), 600 lbs.(272Kg)	1	20661
	24 fpm(7.3mpm), 250(113Kg) & 300 lbs.(136Kg)	1	20638
	24 fpm(7.3mpm), 500 lbs.(226Kg)	1	20662
	40 fpm(12.2mpm), 250 lbs.(113Kg)	1	20648
	40 fpm(12.2mpm), 300 lbs.(136Kg)	1	20661
620-112	Protector Thrust Washer	2	88640
620-113	Gear Housing (Includes 620-114 and 620-115)	1	20351
620-114	Protector Bearing - Gear Housing Side	1	88636
620-115	First Pinion Bearing	1	88635
620-116	Brake Base Plate	1	20724
620-117	Brake Disc	1	20698
620-118	Brake Armature	1	20420
620-122	Brake Field (Includes Brake Coil)		
	115-1-50/60 Hoists	1	20659
	220-1-50, 220-3-50/60, 380-3-50, 415-3-50 and 460-3-60 Hoists	1	20658
	575-3-60 Hoists	1	20629
620-123	Brake Spring	1	20887
620-124	Brake Screw	4	920740
620-125	Pin Retainer Plate	1	20700
620-126	Pin Retainer Plate Screw	2	20743
620-127	Liftwheel and Gear Assembly		
	6 fpm(1.8mpm), 1,000 lbs. (453Kg)	1	20666
	8 fpm (2.4mpm), 500(226Km) & 600 lbs.(272Km)	1	20664
	12 fpm (3.7mpm), 500 lbs.(226Kg)	1	20666
	12 fpm(3.7mpm), 600(272Kg) & 1000lbs.(453Kg)	1	20647
	13.4 fpm(4.0mpm), 550 lbs.(250Kg)	1	20664
	16 fpm(4.9mpm), 250(113Kg), 300 lbs.(136Kg) & 500 lbs.(226Kg)	1	20664
	20 fpm, 500 & 600(272Kg) lbs.	1	20657
	24 fpm, 250, 300 & 500 lbs.	1	20647
	40 fpm, 250 & 300 lbs.	1	20657

KEY NUMBER	PART NAME	NO. REQ'D	PART NUMBER
620-128	Liftwheel Bearing	2	88637
620-129	Liftwheel Thrust Washer	2	88638
620-130	Liftwheel Shaft Seal	1	20704
620-131	First Pinion and Shaft		
	10 Tooth	1	Contact
	12 Tooth	1	Factory
620-132	Brake End Cover	1	20345
620-133	Brake End Cover Screw		
	Hoists without contactor	3	920715
	Hoists with contactor	3	20808
620-134	Gear Housing Screw	4	920718
620-136	Frame Pin	4	920720
620-137	Hook (Includes 620-138)	1	20650B
620-138	Hook Latch Kit	1	595522
620-139	Hook Retainer Kit	1	20712K
620-142	Chain Guide/Stripper Pin	4	20729
620-144	Load Chain (Specify Lift or Length Required)	-	85988
620-145	Loose End Ring	1	20744
620-146	Chain Stop-Sure Stop Kit	1	20428K
620-148	Liftwheel Shaft	1	20313
620-149	First Pinion Thrust Washer	2	88639
620-150	Power Cord Grommet	1	20779
620-151	Power Cord		
	115-1-50/60 Hoists with contactor	1	20516
	220-1-50 Hoists	1	20501
	220-3-50/60, 380-3-50, 415-3-50, 460-3-60 and 575-3-60 Hoists		
620-152	Power Cord Ground Screw	1	982877
620-153	Control Station and Cord Assembly (Includes control station, cord, warning tag and upper grommet)		
	Black Control Station for:	1	20642
	10 ft. lift	1	20643
	15 ft. lift	1	20644
	20 ft lift		-
	For other lifts contact CM		
620-154	Motor Cover Screw	1	920719
620-155	Caution Label	1	20758
620-156	Hook Block (Single Chained)	2	20995
	Hook Block (Double Chained)	2	20739
620-157	Hook Block Screw (Single Chained)	2	82554--
	Hook Block Screw (Double Chained)	2	920724
620-159	Hook (Includes 620-138)	1	23030
	Latchlok Hook	1	40618
620-160	Dead End Plate, (Double chained)	1	20714
620-161	Dead End Pin, (Double chained)	1	920720
620-162	Sheave Wheel w/620-164, (Double chained)	1	20652
620-163	Sheave Wheel Shaft, (Double chained)	1	20318
620-164	Sheave Wheel Bearing, (Double chained)	1	88641
620-165	Sheave Wheel Thrust Washer, (Double chained)	2	88639
620-166	Jumper (#2)	1	20610
620-167	Jumper (Cap)	1	20609
620-168	Dead End Plate Screw, (Double chained)	2	73715

PROSTAR ELECTRIC HOIST PARTS LIST

Key Number	Part Name	No. Req'd	Part Number
620-168	Dead End Plate Screw, (Double chained)	2	73715
620-169	Capacity Warning Label		
	250 lbs.(113Kg)	1	20762
	300 lbs.(136Kg)	1	20737
	500 lbs.(226Kg)	1	20763
	550 lbs.(250Kg)	1	20509
	600 lbs.(272Kg)	1	20738
	1,000 lbs. (453Kg)	1	20884
	1,100 lbs.	1	20514
620-170	I.D. Label	1	Contact Factory
620-171	Warning Label	2	24842
620-172	Prostar Label	1	20764
620-173	Wire Nut (not shown, specify No. Req'd)	-	920756
620-174	Gasket	1	20755
620-176	Control Cord Assembly (includes cord, strain relief and warning tag) For Black Control Station and		
	10 ft. lift	1	20675
	15 ft. lift	1	20676
	20 ft. lift	1	20677
	For other lifts, contact factory	-	-
650-177	Frame Spacer	1	20333B
620-178	Contactor (includes power jumpers)		
	115 VAC Coils	1	20814
	48 VAC Coils	1	20787

Key Number	Part Name	No. Req'd	Part Number
620-179	Components Board - Outboard	1	20777
620-180	Components Board - Inboard	1	20778
620-181	Transformer		
	48 Volt Secondary (220/380 primary)	1	20851
	48 Volt Secondary (change to 460/60 Hz or 380/50Hz primary)	1	20834
	115 Volt Secondary (230/460 primary)	1	20831
	115 Volt Secondary (575 primary)	1	20876
	48 Volt Secondary (575 primary)	1	20866
620-182	Diode Assembly	1	20789
	Diode/TVS Assembly	1	20383
620-183	Control Cord Plug	1	20780
620-184	Power Cord Plug	1	20781
620-185	Contactor Jumper (Specify No. Req'd)	-	20332
620-187	Voltage Suppressor		
	230-3-50/60, 380-3-50 and 460-3-60 Hoists	1	20861
	575-3-60 Hoists	1	20869
620-188	Ground Jumper	1	20641
620-189	Chain Guide Screw	1	987859
620-190	Chain Guide Spacer	1	20812
620-191	Warning Label	1	20765
620-192	Chain Guide Stripper	1	20622
620-193	Brake Spacer	1	20723
620-196	Hook Block Screw Lockwasher (Double Chained)	2	940802
	Hook Block Screw Lockwasher (Single Chained)	2	983544
620-197	Warning Label	1	24884
620-198	Hook Block Screw Nut (Single Chained)	2	82638

Part Number for Packaged Lubricants Used in the Prostar Hoist

(Refer to Page 8 for Lubrication Instructions)

Lubricant Usage	Type Lubricant	Part Numbers and Packaged Quantity of Lubricants
Hoist Gears	Grease Century Lubricants HB-11, #3	28605 for 1/2 lb. Can 28616 for 1 lb. Can 28617 for 4 lb. Can
Spline on end First Pinion and Shaft	Oil-Graphite Mixture Hercules Packing Co. Moly-Duolube 67	40628 for 1 Pint Can
Load Chain	Oil Fiske Bros. Lubriplate® Bar and Chain Oil #10R	28608 for 1 Pint Can 28619 for 1 Gal. Can
Grease Lower Hook Knob	28606 for 1/2 lb. Can Dow Corning Molykote BR-2-S	28618 for 1 lb. Can

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

Touch-up Paints for Prostar Hoist:

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

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

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

LIFETIME WARRANTY

Every Columbus McKinnon Corporation hoist is thoroughly inspected and performance tested prior to shipment from the factory. If any properly installed, maintained and operated hoist as outlined in the applicable accompanying Columbus McKinnon hoist manual develops a performance problem due to defective materials or workmanship as verified by Columbus McKinnon Corporation, repair or replacement of the hoist will be made to the original purchaser without charge and the hoist will be returned, transportation prepaid.

This warranty does not apply where deterioration is caused by normal wear, abuse, improper or inadequate power supply, improper or inadequate maintenance, eccentric or side loading, overloading, chemical or abrasive actions, excessive heat, unauthorized modifications or repairs, or use of non-Columbus McKinnon Corporation repair parts. **EXCEPT AS STATED HEREIN, COLUMBUS MCKINNON CORPORATION MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.**

WARNING

Alterations or modifications of equipment and use of non-factory repair parts can lead to dangerous operation and injury.

TO AVOID INJURY:

- **Do not alter or modify equipment**
- **Do not use equipment to lift, support or otherwise transport people**
- **Do not suspend unattended loads over people**

COFFING[®]

HOISTS

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