ELECTRIC THROUGH FRAME SLIDE-OUT

OWNER'S MANUAL

LIPPERT COMPONENTS®

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Warning, Safety, and System Requirement Information

Description

The Lippert Electric Through Frame Slide-out System is a rack and pinion guide system, utilizing an electric ball screw actuator to move the room assembly. The motor drives the ball screw in a forward and backward motion to move the slide room in and out. The actuator comes equipped with an automatic clutching system. The slide-out system is designed to operate as a negative ground system.

⚠WARNING

Failure to act in accordance with the following may result in death or serious personal injury.

The slide-out system is intended for the sole purpose of extending and retracting the slide-out room. Its function should not be used for any other purpose or reason than to actuate the slide-out room. To use the system for any reason other than what it is designed for may result in death, serious injury or damage to the coach.

Before actuating the system, please keep these things in mind:

1. Parking locations should be clear of obstructions that may cause damage when the slide-out room is actuated.
2. Be sure all persons are clear of the coach prior to the slide-out room actuation.
3. Keep hands and other body parts away from slide-out mechanisms during actuation. Severe injury or death may result.
4. To optimize slide-out actuation, park coach on solid and level ground.

Prior to Operation

Prior to operating the Lippert Through Frame Slide-out System, follow these guidelines:

1. Coach should be parked on the most level surface available.
2. Leveling or stabilizing system should be actuated to ensure coach will not move during operation of slide-out system.
3. Be sure battery is fully charged.
4. Be sure to keep all persons and pets clear of slide-out system during operation.

⚠ CAUTION

Always make sure that the slide-out room path is clear of people and objects before and during operation of the slide-out room. Always keep away from the slide rails when the room is being operated. The gear assembly may pinch or catch on loose clothing causing personal injury.

NOTE: Install transit bars (if so equipped) on the slide-out room during storage and transportation.

Operation

Extending Slide-out Room

5. Level Unit
6. Verify the battery is fully charged and hooked up to the electrical system.
7. Remove transit bars (if so equipped).
8. Press and hold the IN/OUT switch in the OUT position (Fig. 1B) until room is fully extended and stops moving.
9. Release switch, which will lock the room into position.

NOTE: Only hold OUT switch until room stops.

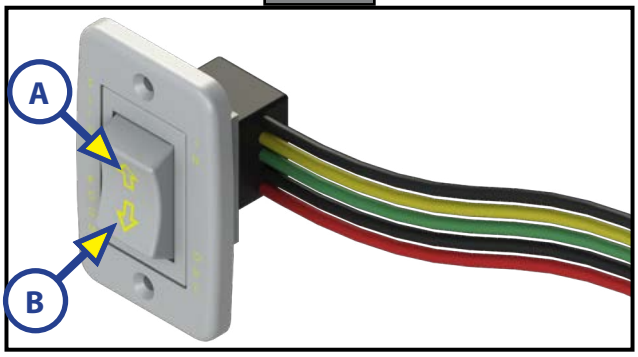
Retracting Slide-out Room

1. Verify the battery is fully charged and hooked up to the electrical system.
2. Press and hold the IN/OUT switch in the IN position (Fig. 1A) until the room is fully retracted and stops moving.
3. Release the switch. This will lock the room into position.

NOTE: Only hold IN switch until room stops.

4. Install the transit bars (if so equipped).

Fig. 1



Maintenance

Inspection

After servicing the slide-out system in any way, be sure to check the following:

1. Slide-out stops are installed and adjusted properly.
2. Head assemblies are installed and adjusted properly.
3. System is mounted properly.
4. Cross shafts are mounted properly and clear all other components.
5. Gear packs function properly.
6. Manual override is accessible.
7. Outside seals compress when slide-out is retracted.
8. Inside seals compress when slide-out is extended.
9. Slide-out extends and retracts smoothly.
10. Both sides of slide-out are synchronized.
11. Any dirt or debris is cleaned from the interior or exterior of the coach.

The Lippert Slide-out System has been static tested to over 4,000 continuous cycles without any noticeable wear to rotating or sliding parts. It is recommended that when operating in harsh environments (road salt, ice build up, etc.) the moving parts be kept clean. They can be washed with mild soap and water. No grease or lubrication is necessary and in some situations may be detrimental to the environment and long term dependability of the system.

Electrical System Maintenance

For optimum performance, the slide-out system requires full battery current and voltage. The battery must be maintained at full capacity. Other than good battery maintenance, check the terminals and other connections at the battery, the control switch, and the system for corrosion, and loose or damaged terminals. Check motor leads under the trailer chassis. Since these connections are subject to damage from road debris, be sure they are in good condition.

NOTE: The Lippert Slide-out System is designed to operate as a negative ground system. A negative ground system utilizes the chassis frame as a ground and an independent ground wire back to battery is necessary. It is important that the electrical components have good wire to chassis contact. To ensure the best possible ground, a star washer should be used. Over 90% of unit electrical problems are due to bad ground connections.

Mechanical Maintenance

Although the system is designed to be almost maintenance free, actuate the room once or twice a month to keep the seals and internal moving parts lubricated. Check for any visible signs of external damage after and before movement of the travel trailer.

NOTE: For long-term storage: It is recommended that the room be closed (retracted).

Troubleshooting

Troubleshooting Introduction

This troubleshooting chart outlines some common problems, their causes and possible corrective actions. If any part or serial number information is available, provide it to the service technician when asking for assistance.

The Lippert Slide-out System is only one of four interrelated slide-out room system components. These four components are: chassis, room, coach, and Lippert Slide-out System. Each one needs to function correctly with the others or misalignment problems will occur.

Every travel trailer has its own personality and what may work to fix one trailer may not work on another even if the symptoms appear to be the same.

When something restricts room travel, system performance will be unpredictable. It is very important that slide tubes be free of contamination and allowed to travel full distance (Stroke). Ice or mud buildup during travel is an example of a type of contamination that can occur.

When you begin to troubleshoot the system, make sure the battery is fully charged, there are no visible signs of external damage to the system and that all connections are secure.

During troubleshooting, remember that if you change something, that change may affect something else. Be sure any changes you make will not create a new problem.

You can obtain additional information on the Lippert Slide-out System by visiting www.lci1.com/customerservice or by calling 574-537-8900.

What Is Happening?	Why?	What Should Be Done?
Room doesn't move when switch is pressed.	Restriction or obstruction inside or outside of unit.	Check for and clear obstruction.
	Low battery voltage, blown fuse, defective wiring.	Check battery voltage and charge if needed. Find and check fuse, replace if blown. Check battery terminals and wiring. Look for loose, disconnected or corroded connectors.
Actuator motor runs but room does not move.	Actuator not attached to front mounting drive bracket.	Check jam nuts/nylock nuts. Be sure that they are properly tightened and adjusted.
	Bad motor or gear housing.	Replace motor.
Motor runs but room moves slowly.	Low battery voltage, poor ground, extremely low outdoor temperature.	Charge battery and check ground wire.
	Room is in a bind.	Check to see that room is properly adjusted.
Room stalls in mid-travel.	Actuator in a bind.	Crank manual override and move room short distance then retry electric switch to move room.
	Bad actuator.	Replace actuator if above instructions do not work.

Manual Override

NOTE: Always disconnect battery from system prior to manually operating system. Failure to disconnect battery can cause electricity to backfeed through the motor and cause serious damage to the system as well as void the warranty.

The Lippert Electric Through Frame Slide-out comes with a Manual Override system. There are two different methods for manually extending and retracting the slide-out room. A crank handle extension can be used outside the chassis main rail at the crank extension with pin (Figs. 2-3). A socket and ratchet can be used inside the main frame on the hex head crank extension (Figs. 4-5).

Manual Override - Outside Frame

Locate the crank extension with pin outside of the chassis main rail (Fig. 2). This is where the crank handle (standard fifth wheel landing gear crank handle or ¾" socket and ratchet) fits on (Fig. 3) to allow the manual extension/ retraction of the room. Rotate the crank handle clockwise to retract and counterclockwise to extend slide-out. It is important to note that you DO NOT need to attempt to disengage the motor as the actuator is "manual ready." Just hook up and crank.

NOTE: Use EXTREME CAUTION when extending and/or retracting room using the manual override feature. It is possible to operate the slide-out beyond the maximum extension and/or retraction and damage the slide components, slide room structure or trim components.

NOTE: The gears can be stripped out if the room is manually retracted/extended to its fullest extent and the operator continues to rotate the manual override. Any damage due to misuse of the Manual Override feature will disqualify any and all claims to the Limited Warranty.

Fig. 2

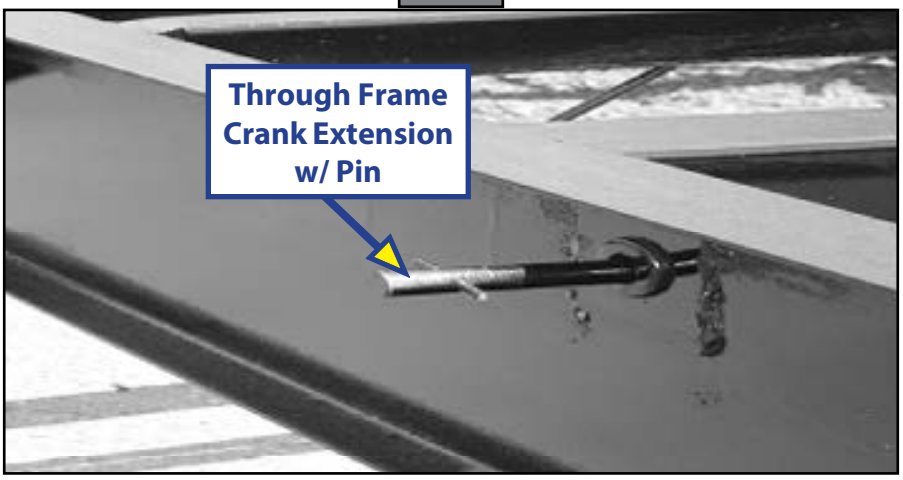
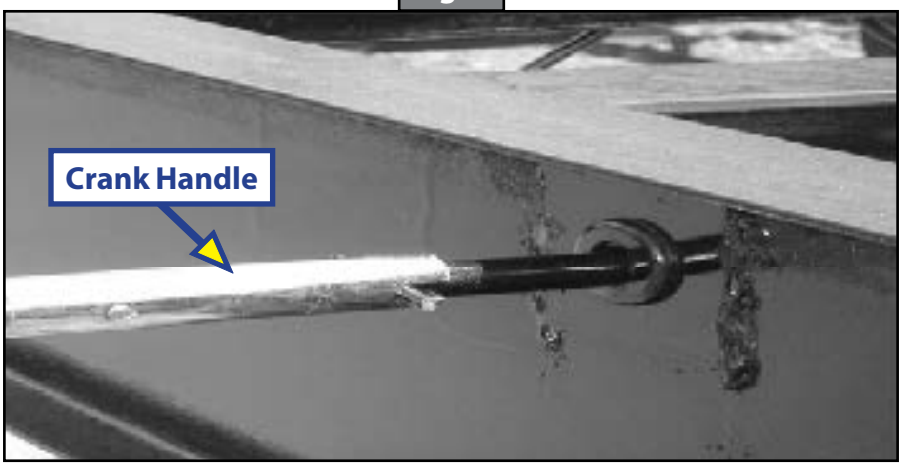


Fig. 3



Manual Override - Inside Frame

Locate the hex head crank extension at the top of the actuator inside the chassis main frame (Fig. 4). Using a ¾ socket and ratchet (Fig. 5), rotate the extension clockwise to retract the slide-out and counter clockwise to extend the slide-out. It is important to note that you DO NOT need to attempt to disengage the motor as the actuator is "manual ready."

NOTE: Use EXTREME CAUTION when extending and/or retracting room using the manual override feature. It is possible to operate the slide-out beyond the maximum extension and/or retraction and damage the slide components, slide room structure or trim components.

NOTE: The gears can be stripped out if the room is manually retracted/extended to its fullest extent and the operator continues to rotate the manual override. Any damage due to misuse of the Manual Override feature will disqualify any and all claims to the Limited Warranty.

Fig. 4

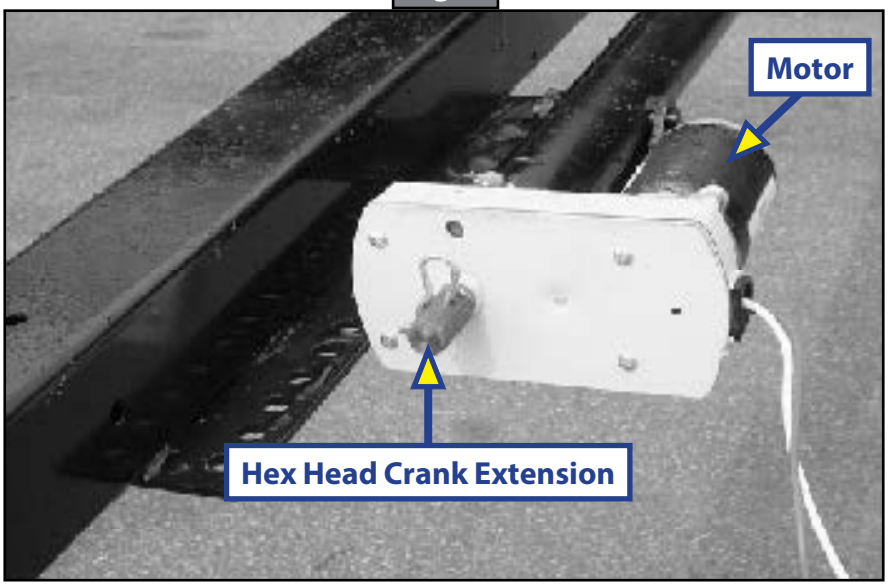
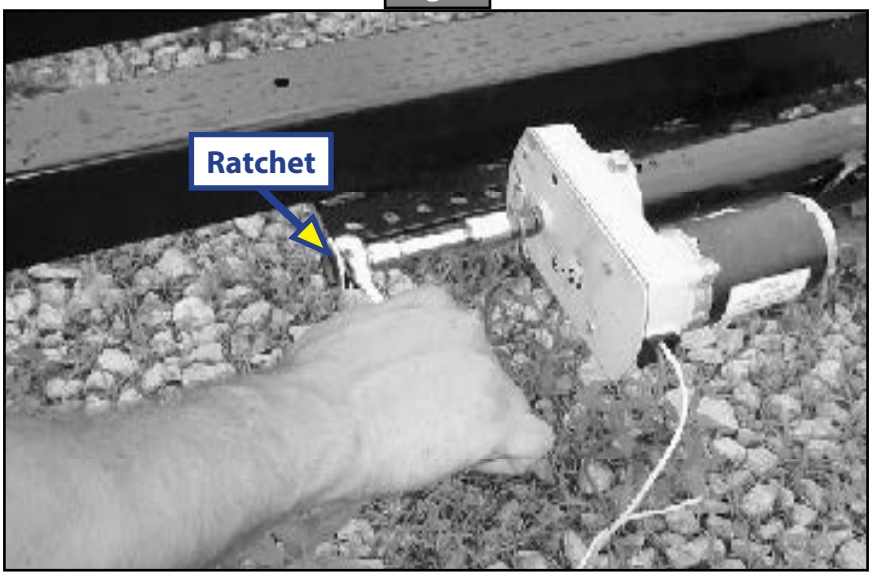
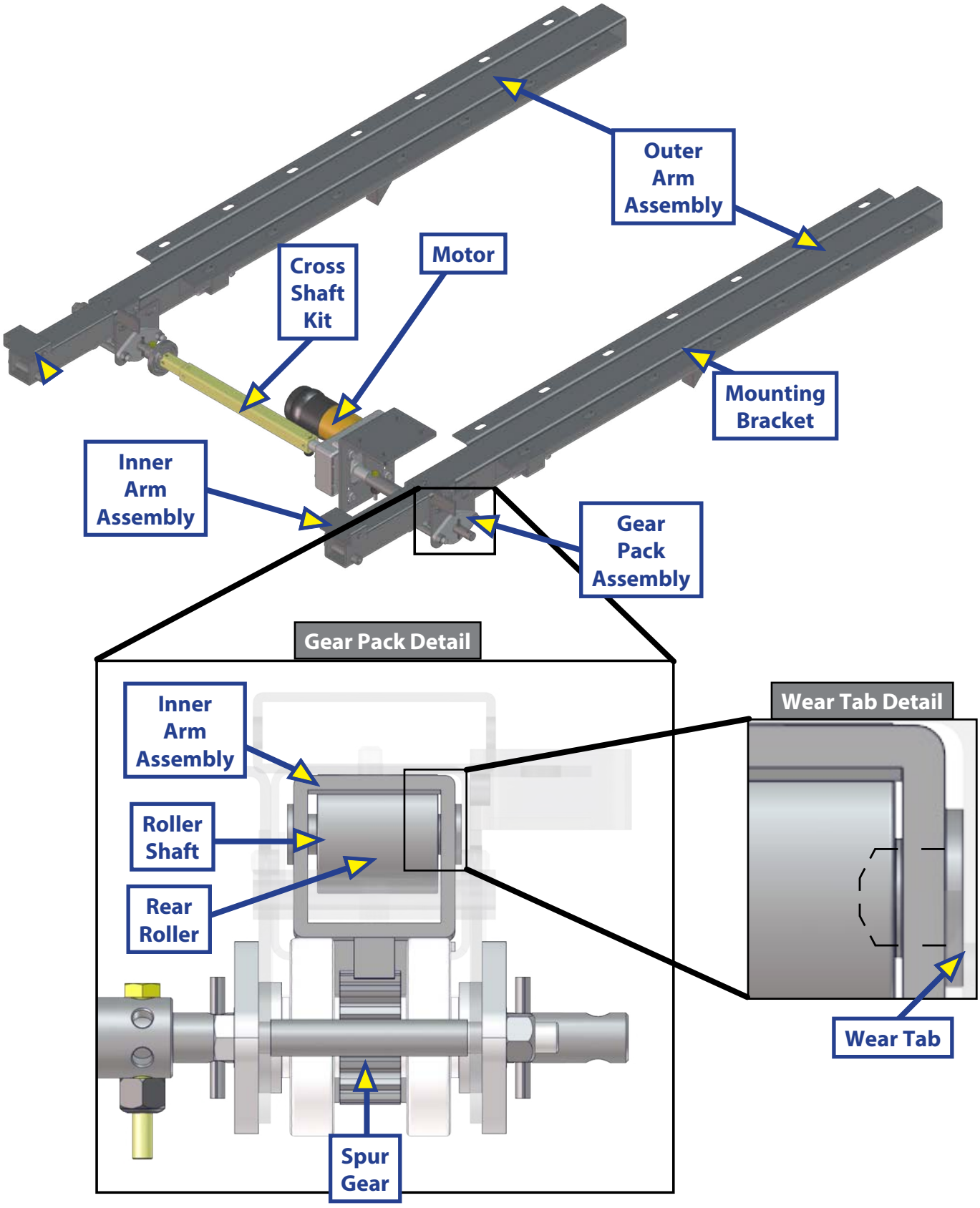
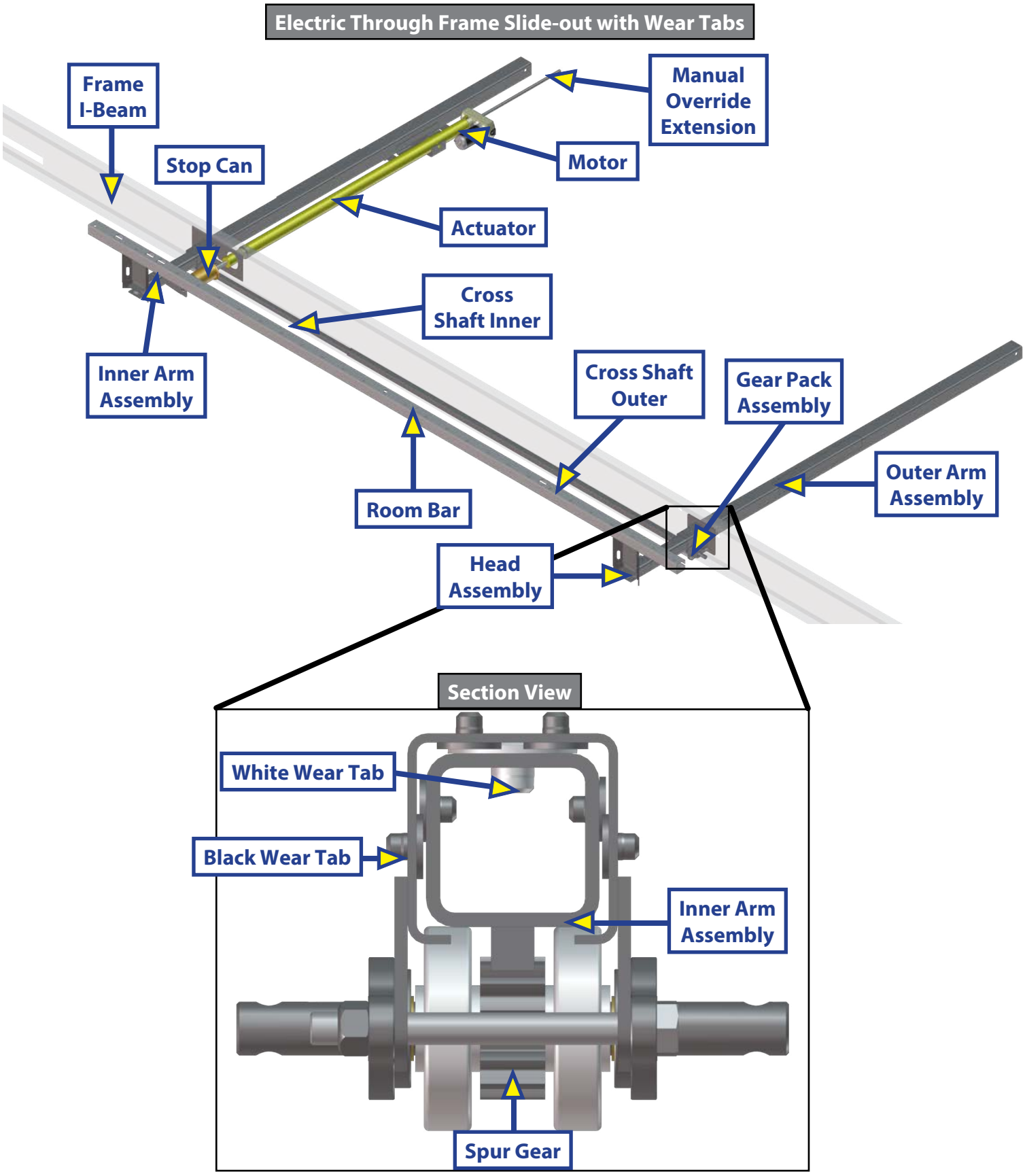


Fig. 5



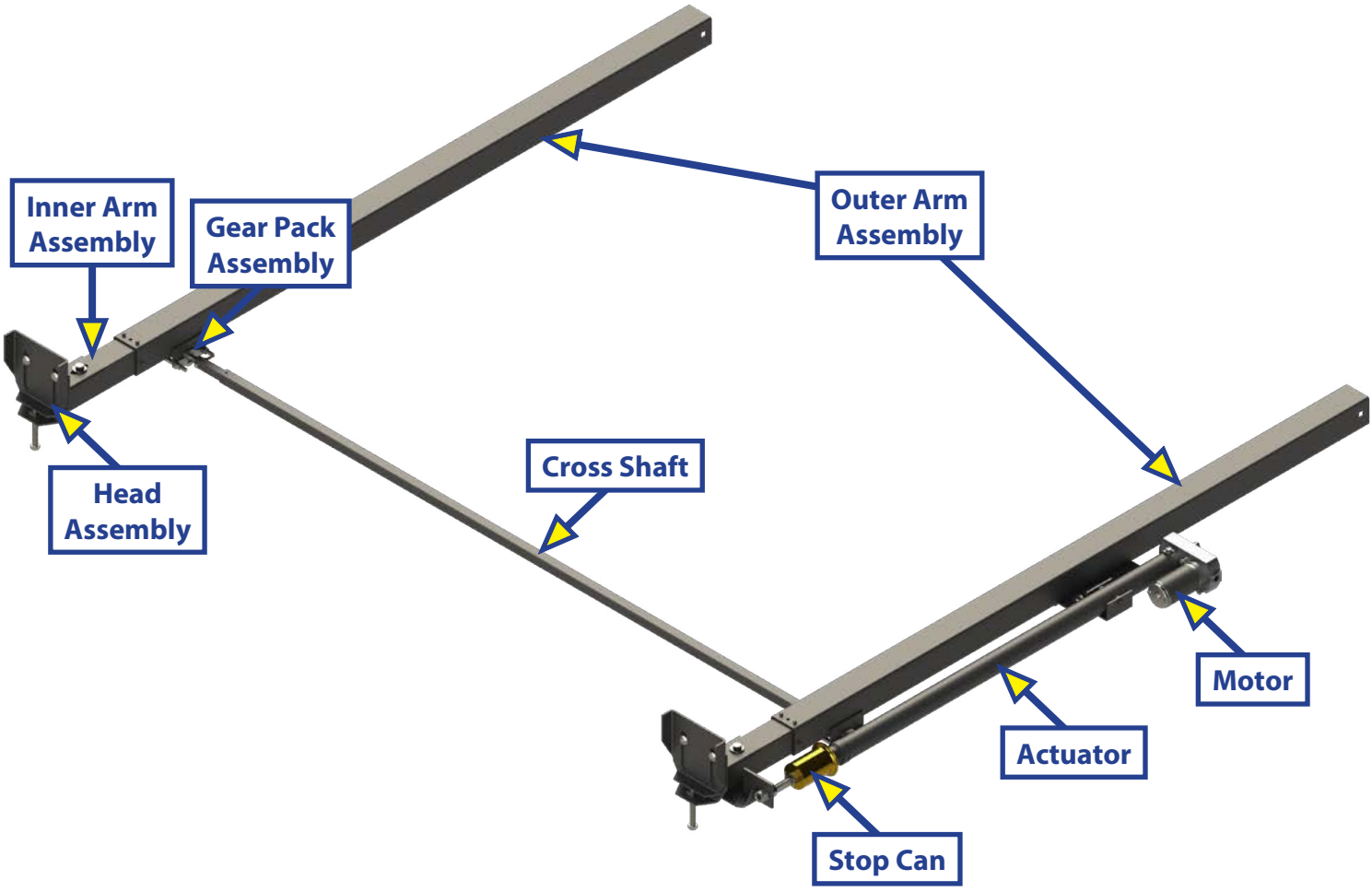
Bolt-on Electric Through Frame Slide-out




Electric Through Frame Slide-out with Wear Tabs
Frame I-Beam
Stop Can
Manual Override Extension
Motor
Actuator
Cross Shaft Inner
Inner Arm Assembly
Cross Shaft Outer
Gear Pack Assembly
Outer Arm Assembly
Room Bar
Head Assembly
Section View
White Wear Tab
Black Wear Tab
Inner Arm Assembly
Spur Gear

2 X 2 ELECTRIC THROUGH FRAME SLIDE-OUT ASSEMBLY

Electric Through Frame Slide-out with Rear Roller



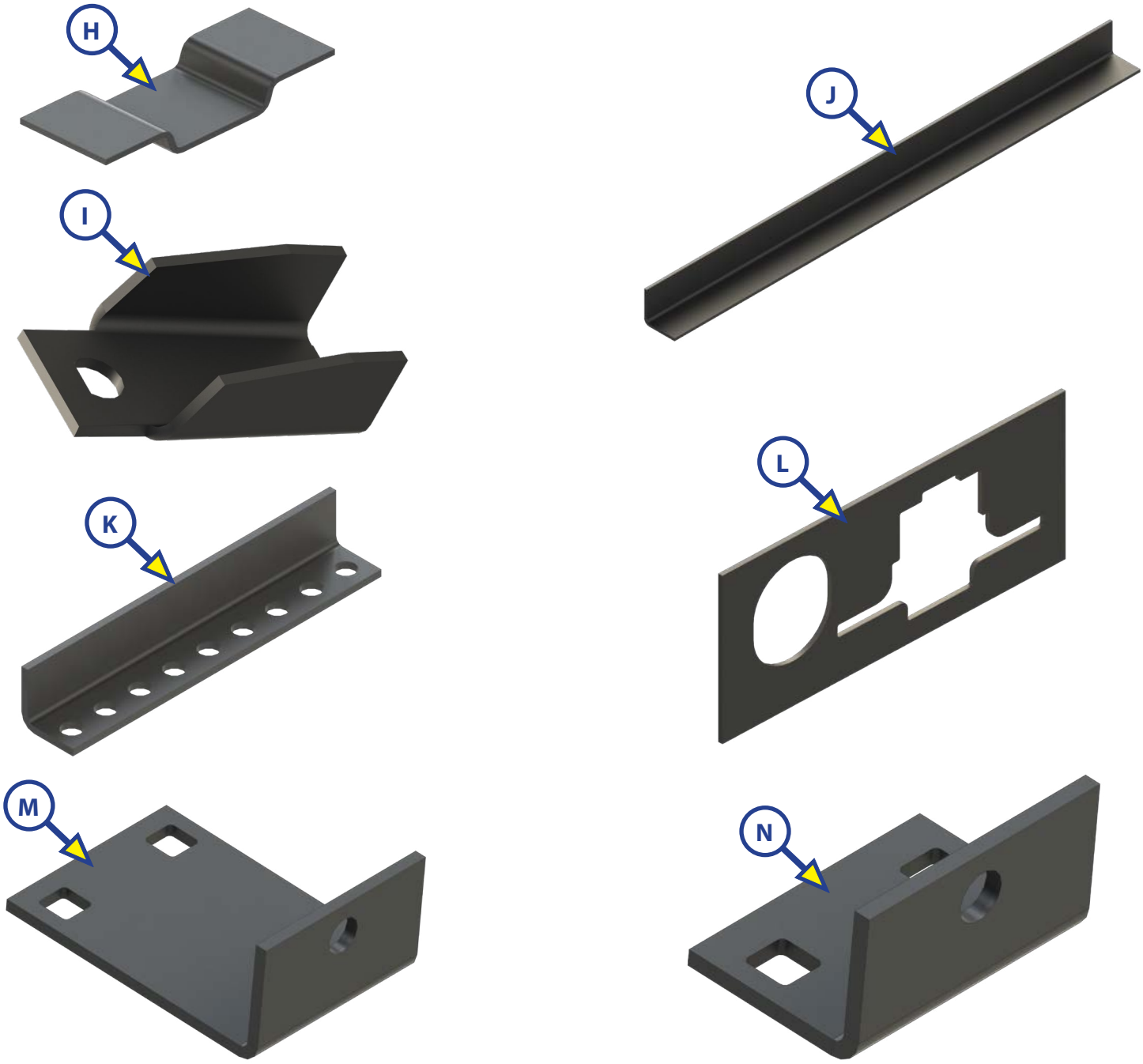
2 X 2 ELECTRIC THROUGH FRAME SLIDE-OUT COMPONENTS

SLIDE-OUTS

Callout	Part #	Description
A	281331	Gear Pack
B	101941	Spur Gear (15 Tooth)
C	122739	Spur Gear (18 Tooth)
D	105893	Roller Shaft
E	122840	Stop Can
F	103480	Black Wear Tab (Original)
		Black Wear Tab (Current)
G	104475	Rear Roller

2 X 2 ELECTRIC THROUGH FRAME SLIDE-OUT COMPONENTS

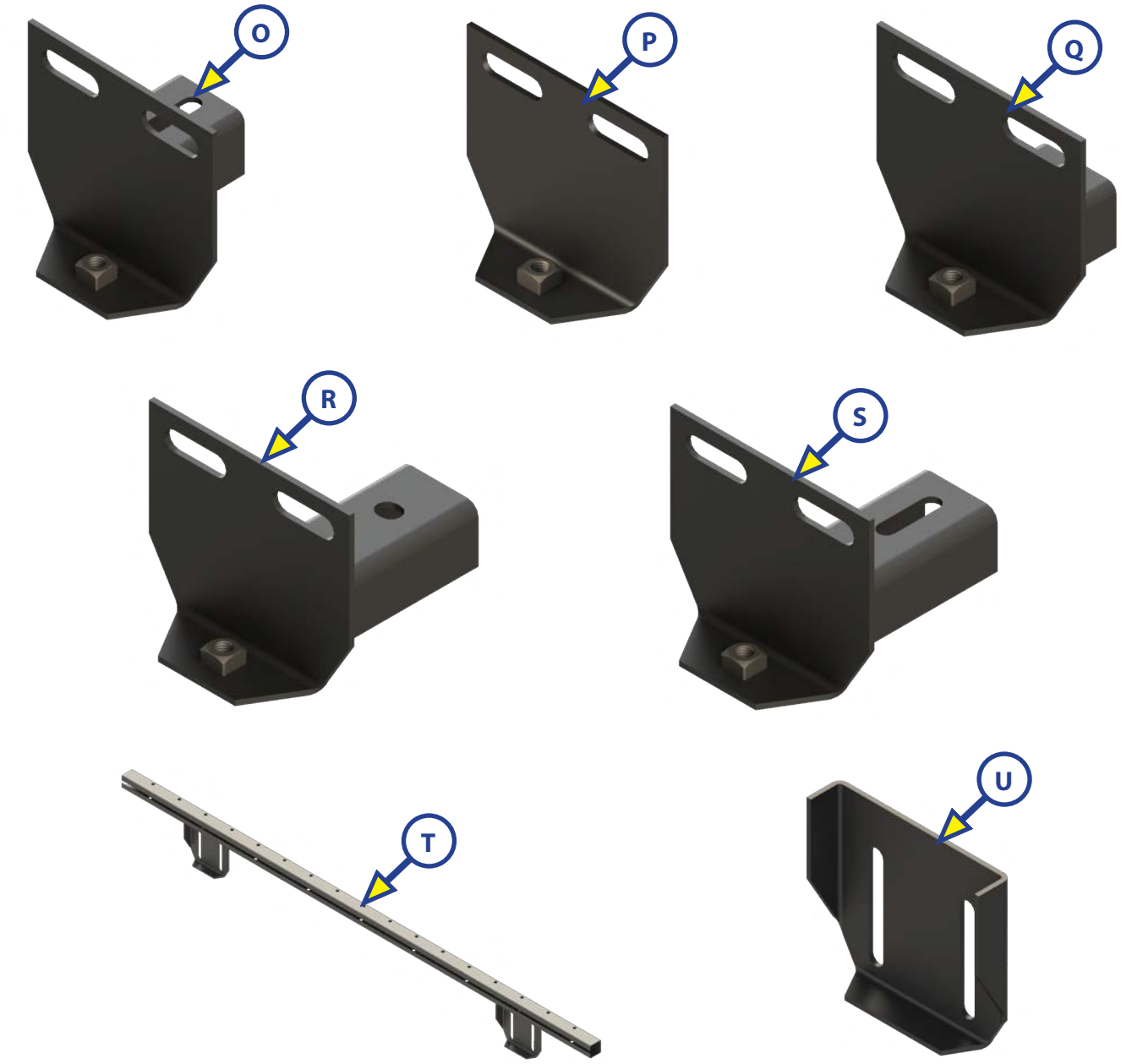
SLIDE-OUTS



Callout	Part #	Description
H	106059	Hat
I	134707	Front Actuator Mounting Bracket
J	102357	Stiffener
K	158814	Mounting Bracket
L	131317	Trim Plate
M	105961	Left Mounting Bracket
N	105962	Right Mounting Bracket

2 X 2 ELECTRIC THROUGH FRAME SLIDE-OUT COMPONENTS

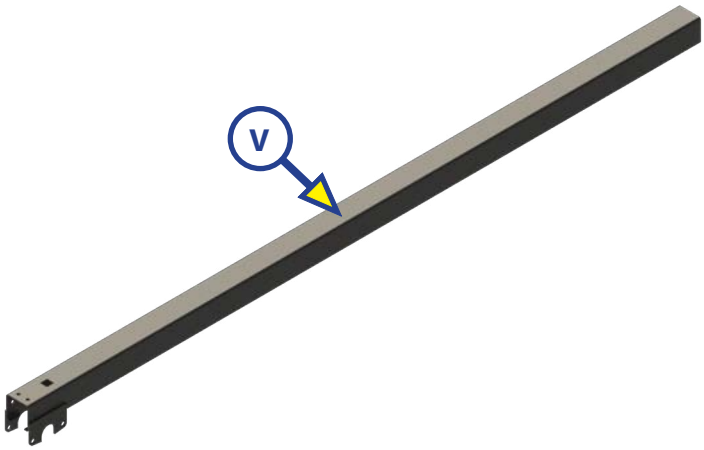
SLIDE-OUTS

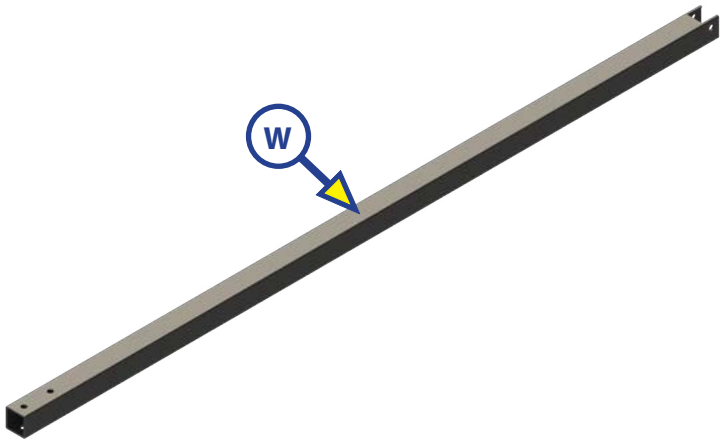


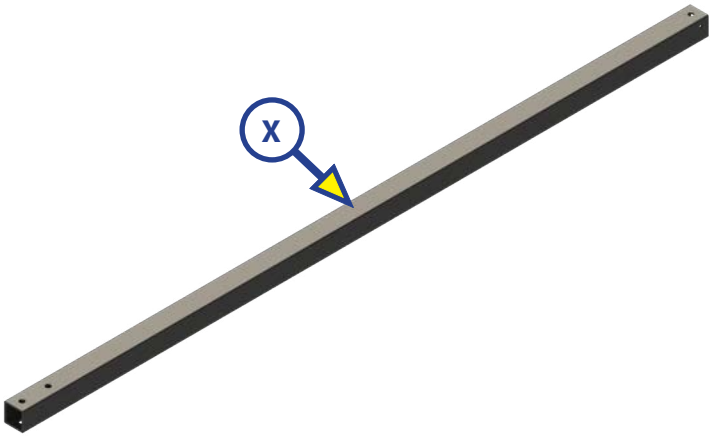
Callout	Part #	Description
O	141792	1 ⅜" Adjustable Head Assembly
P	159624	Standard Weld-On Head Assembly
Q	163049	Flush Adjustable Head Assembly
R	173593	Standard Flush Fixed Head Assembly
S	173594	Standard Flush Adjustable Head Assembly
T	183949	Room Bar (Use for up to 80")
	183950	Room Bar (Use for 81" to 154")
U	104851	Slide-out Mounting Bracket
NOTE: Brackets can be shipped loose.		

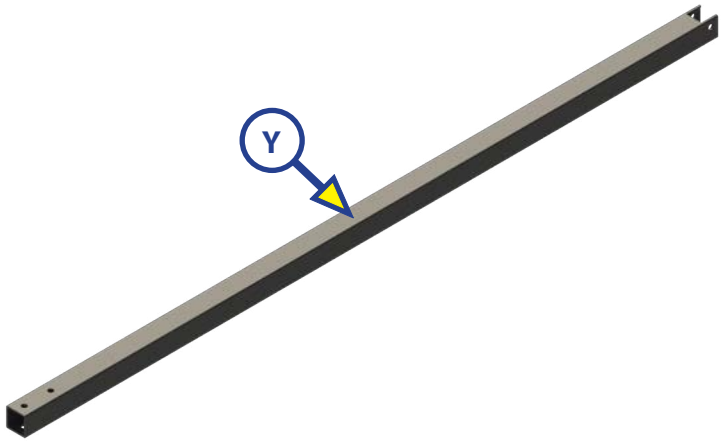
2 X 2 ELECTRIC THROUGH FRAME SLIDE-OUT COMPONENTS

SLIDE-OUTS





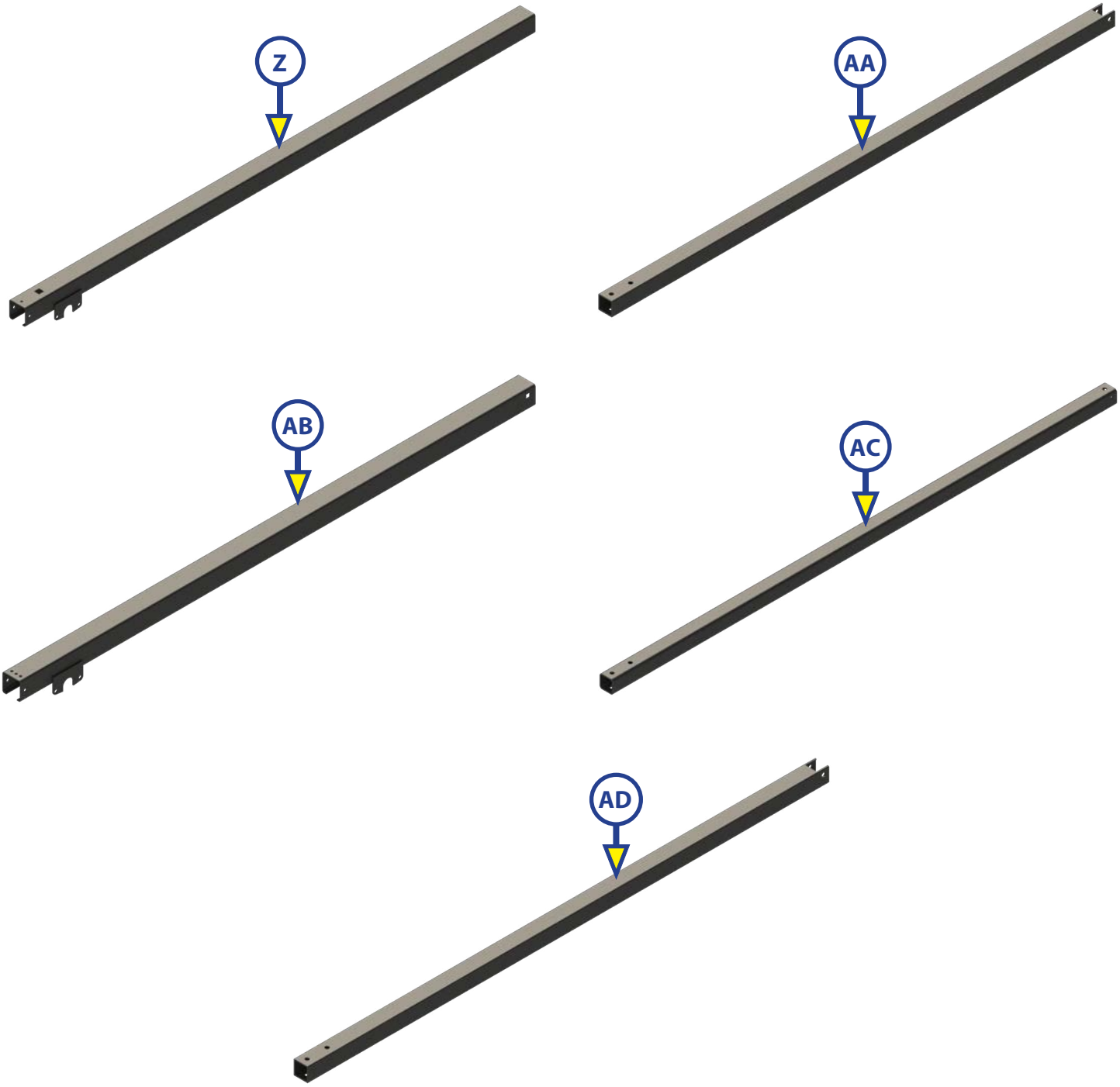




Callout	Part #	Description
V	145734	Outboard Outer Tube (Idler and Drive)
W	145736	Outboard Inner Tube (15 Tooth w/ Rear Roller)
X	296090	Outboard Inner Tube (15 Tooth w/ Wear Tab)
Y	334649	Outboard Inner Tube (18 Tooth)

2 X 2 ELECTRIC THROUGH FRAME SLIDE-OUT COMPONENTS

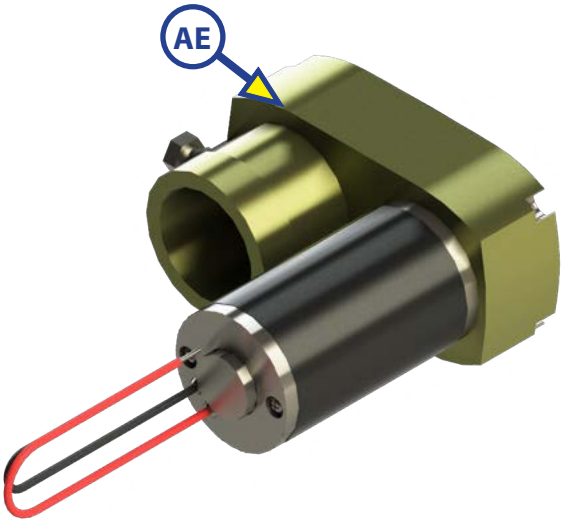
SLIDE-OUTS

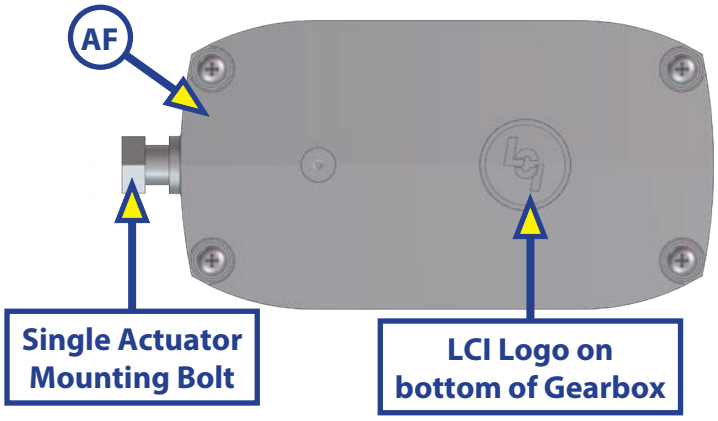


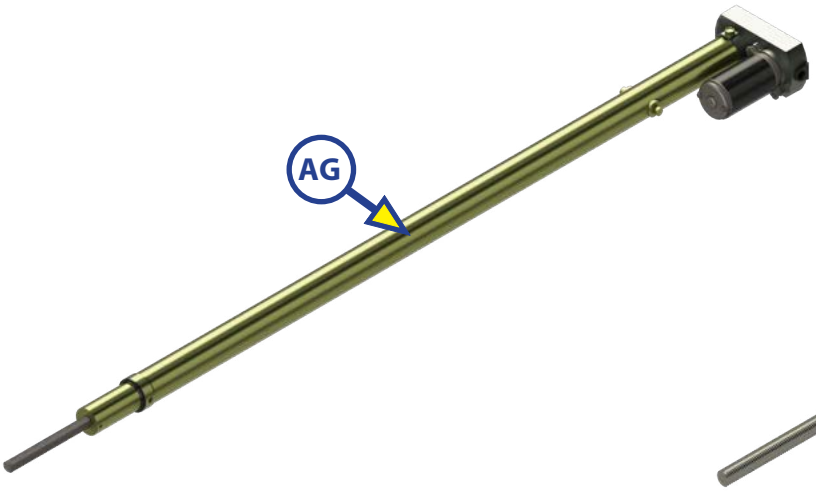
Callout	Part #	Description
Z	173204	Inboard Outer Tube 76" (Idler and Drive)
AA	163778	Inboard Inner Tube (15 Tooth)
AB	161014	Inboard Outer Tube 69" (Idler and Drive)
	159389	Inboard Outer Tube 70" (Idler and Drive)
AC	301393	Inboard Inner Tube (18 Tooth w/ Wear Tab)
AD	334650	Inboard Inner Tube (18 Tooth w/ Rear Roller)

2 X 2 ELECTRIC THROUGH FRAME SLIDE-OUT
TUSON DRIVE COMPONENTS

SLIDE-OUTS



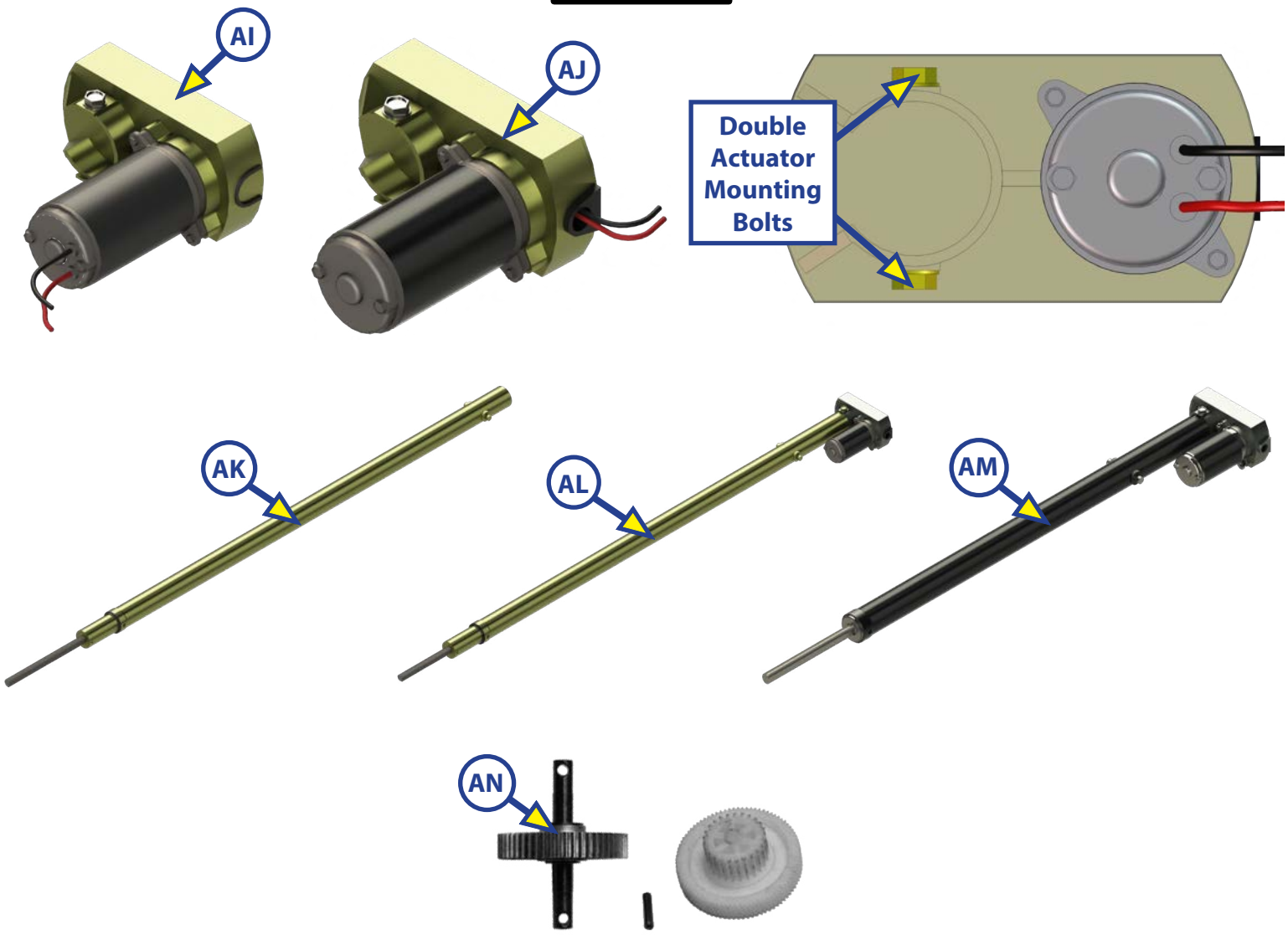




Callout	Part #	Description
AE	125802	Tuson 18:1 Motor Only
AF	145596	Tuson 18:1 Actuator Only (40")
AG	131903	Tuson 18:1 Actuator and Motor (40")
AH	145185	Tuson 18:1 Actuator and Motor (24") **NOTE:** Obsolete - Replace with 119128

2 X 2 ELECTRIC THROUGH FRAME
SLIDE-OUT VENTURE DRIVE COMPONENTS

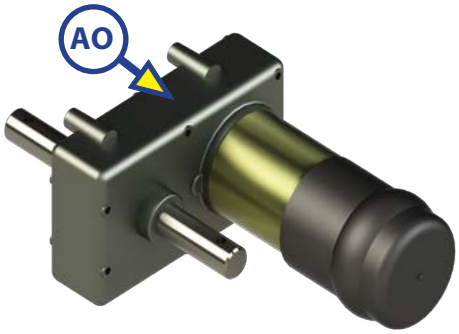
SLIDE-OUTS

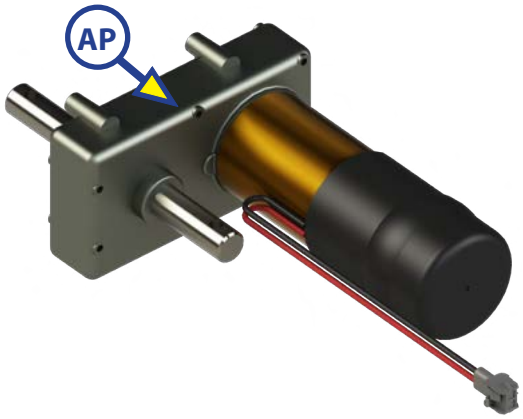


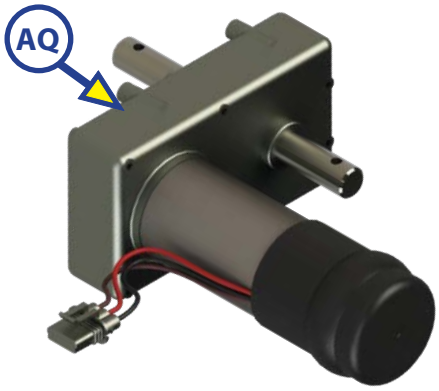
Callout	Part #	Description
AI	132682	Venture 18:1 Motor Only
AJ	136373	Venture 28:1 Motor Only
AK	145595	Venture 18:1 Actuator Only
AL	168956	Venture Actuator and 18:1 Motor (40") High Speed
	255676	Venture Actuator and 18:1 Motor (40")
	158457	Venture Actuator and 28:1 Motor (40")
AM	119128	Venture Actuator and 18:1 Motor (24")
	122747	Venture Actuator and 18:1 Motor (32")
	119129	Venture Actuator and 18:1 Motor (40")
AN	191072	Venture Replacement Gear Set 18:1
	191073	Venture Replacement Gear Set 28:1
NOTE: Toula actuators and motors can be replaced by Venture.		

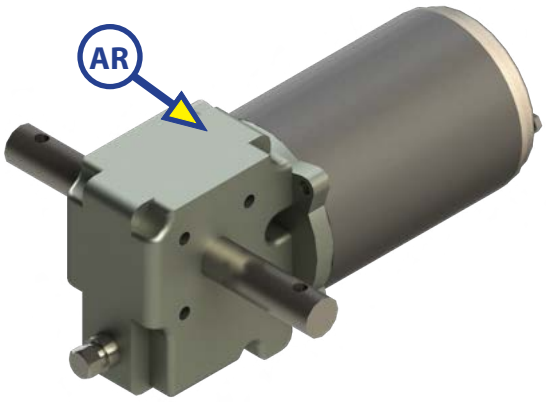
2 X 2 ELECTRIC THROUGH FRAME SLIDE-OUT DRIVE COMPONENTS

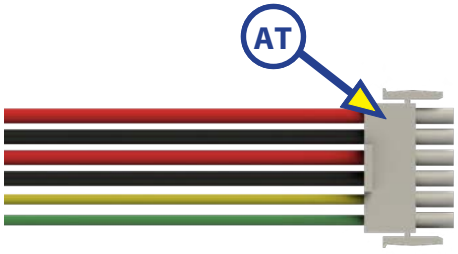
SLIDE-OUTS







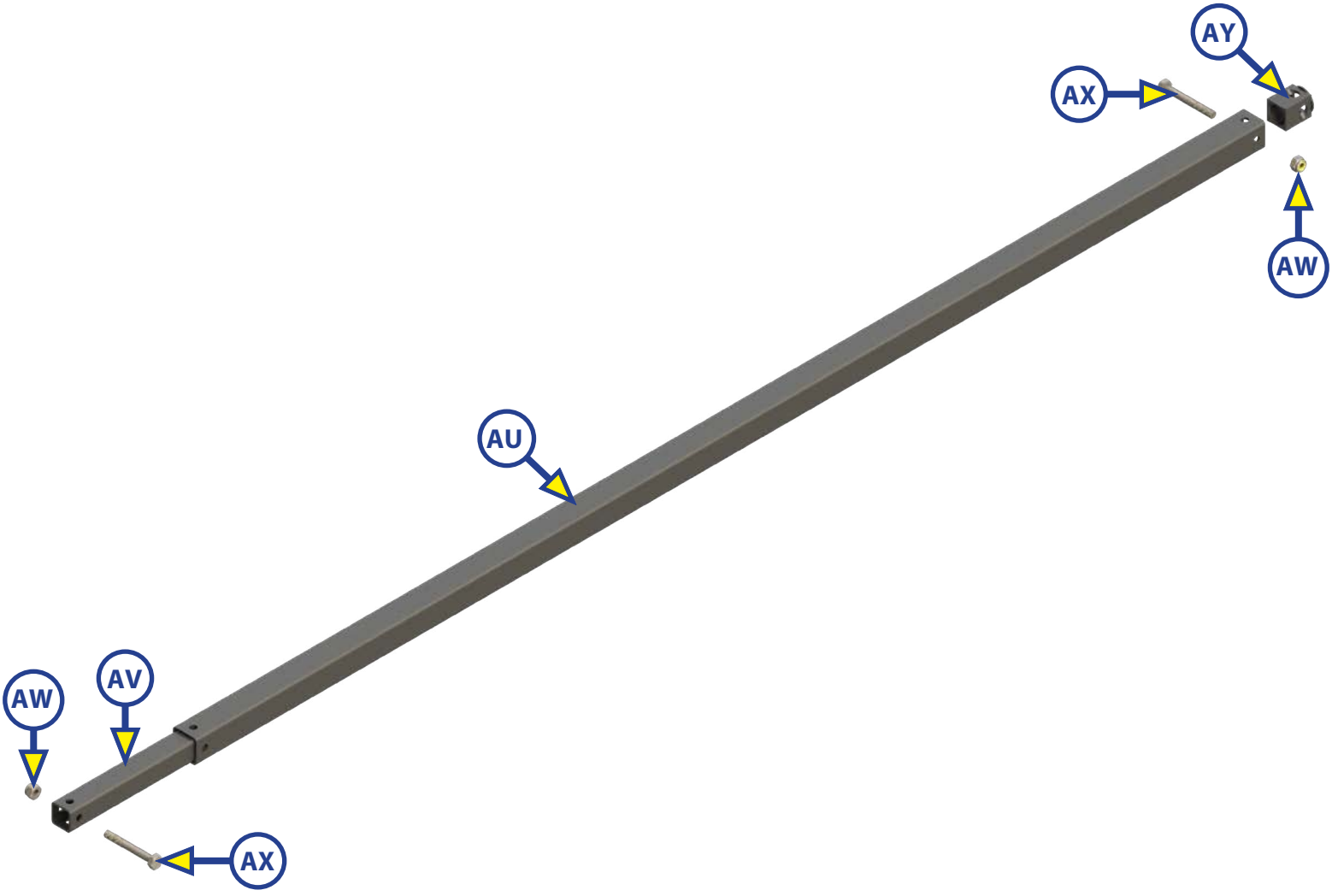




Callout	Part #	Description
AO	138449	Klauber D-300 Motor
	140201	Klauber E-300 Motor
	143701	F-350 Motor
AP	321395	Klauber F-300
AQ	325502	H-350 Motor
AR	138448	M-150N Motor
AS	135666	Slide-Out Controller
AT	135696	Wire Harness

2 X 2 ELECTRIC THROUGH FRAME SLIDE-OUT DRIVE COMPONENTS

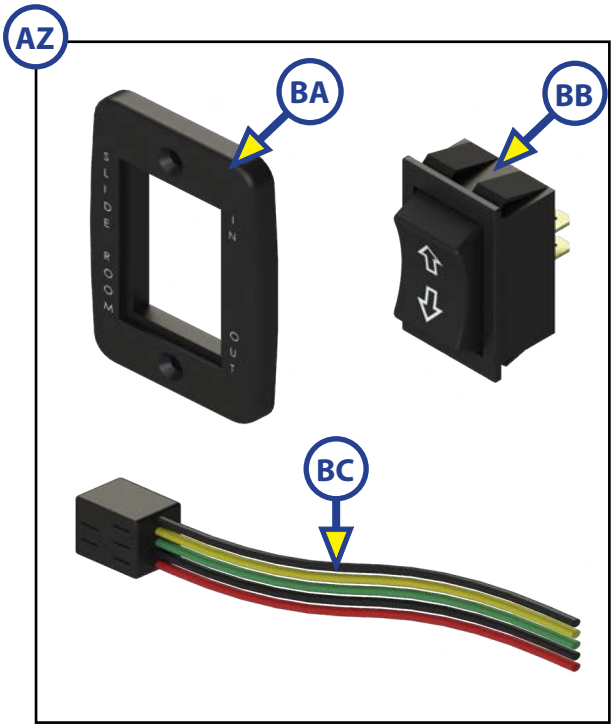
SLIDE-OUTS

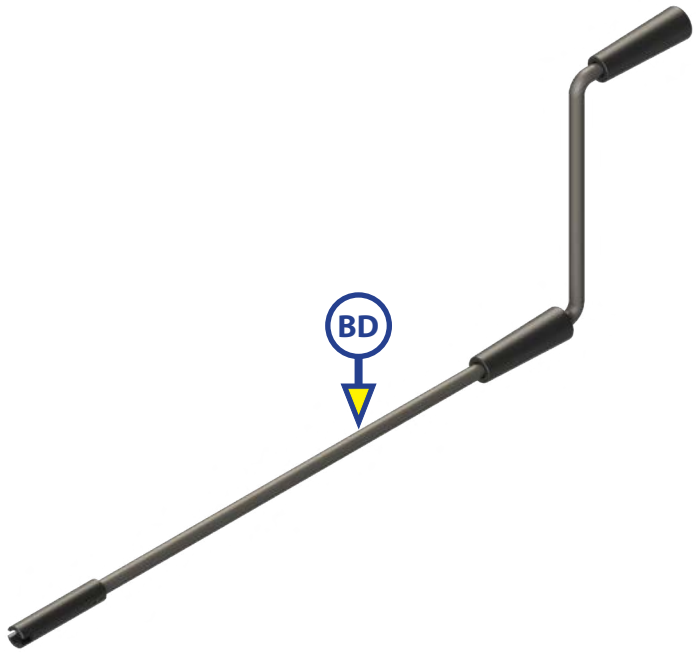


Callout	Part #	Description
AU	157523	Cross Shaft Kit
AV	117630	Outer Cross Shaft
	117606	Inner Cross Shaft
AW	118092	Nut ¼" - 20
AX	119066	Bolt
AY	123365	Cross Shaft Insert

2 X 2 ELECTRIC THROUGH FRAME SLIDE-OUT COMPONENTS

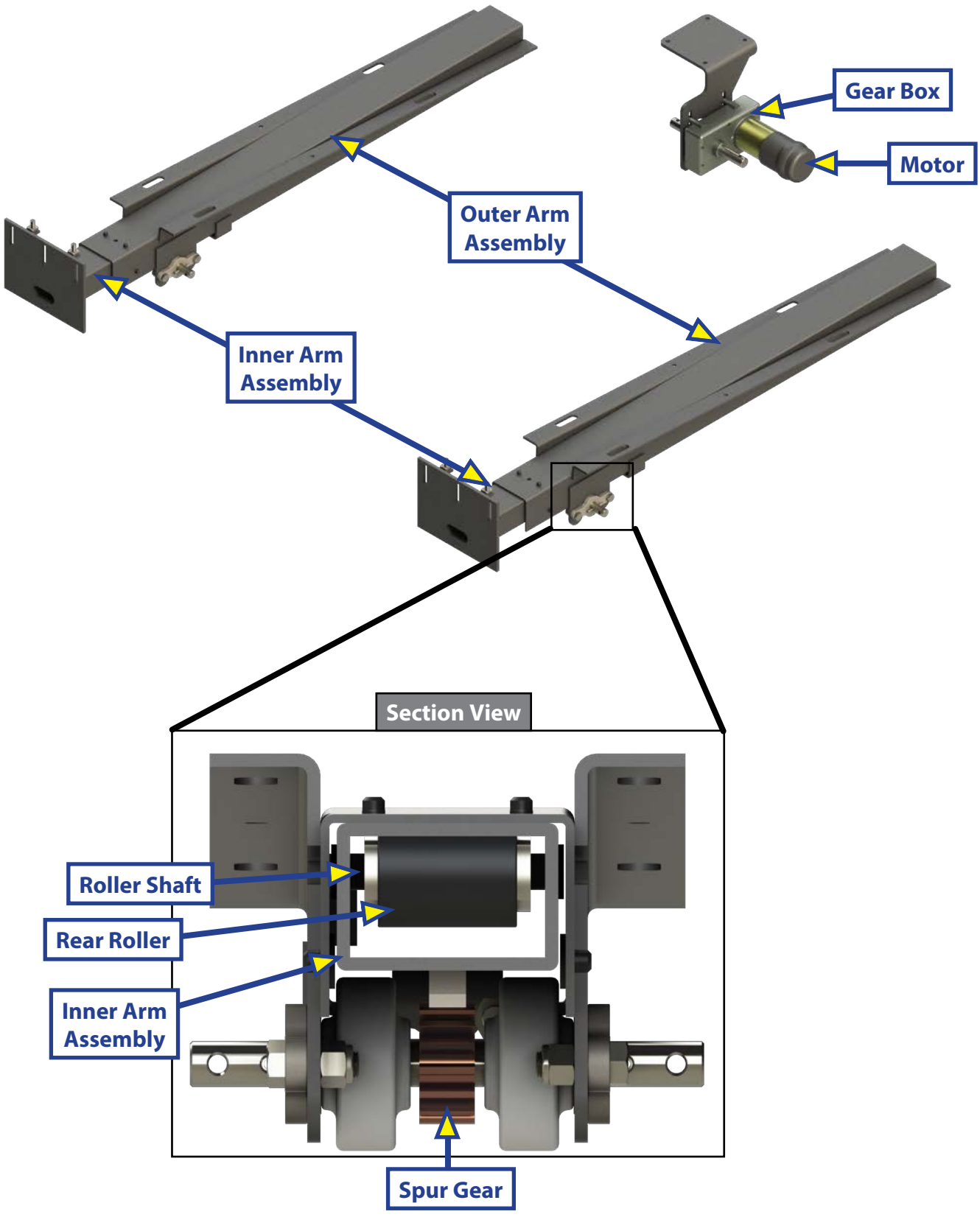
SLIDE-OUTS



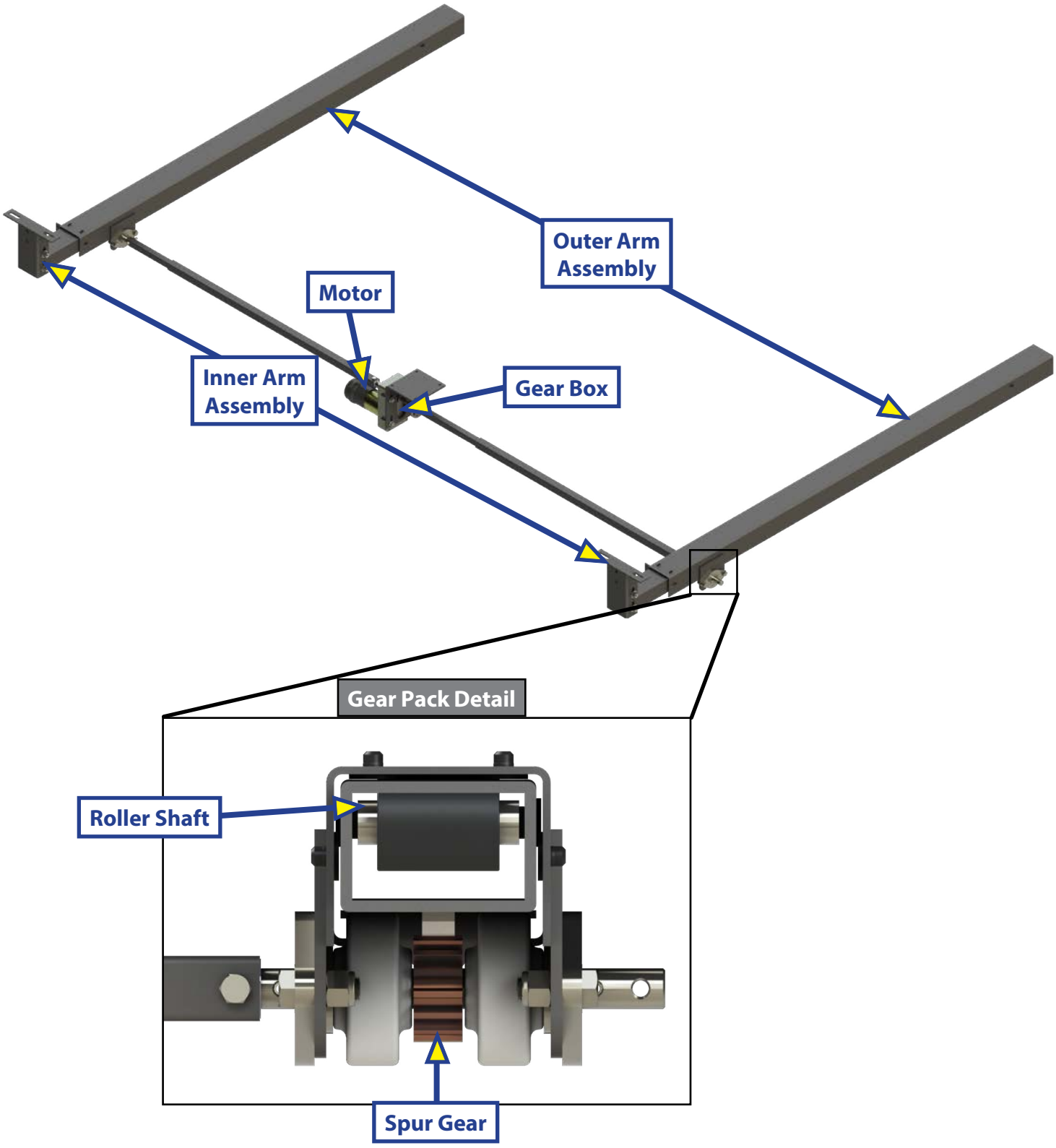


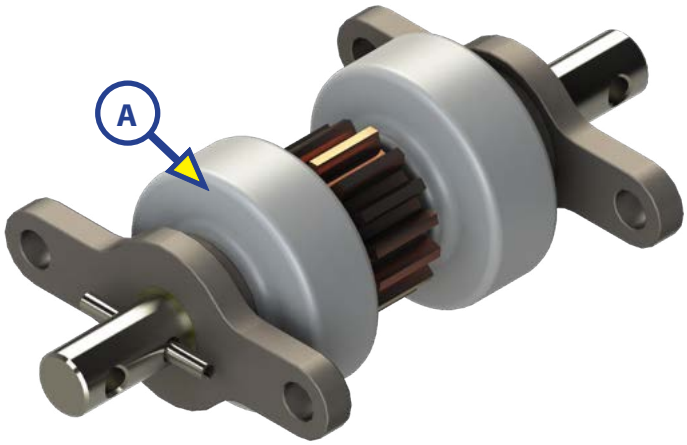
Callout	Part #	Description
AZ	117460	New Slide-out Switch Kit (Black)
	117461	New Slide-out Switch Kit (White)
BA	117420	Switch Plate (White)
	117419	Switch Plate (Black)
BB	129003	Switch (White)
	117426	Switch (Black)
BC	178436	Switch Wire Harness
BD	119226	Crank Handle

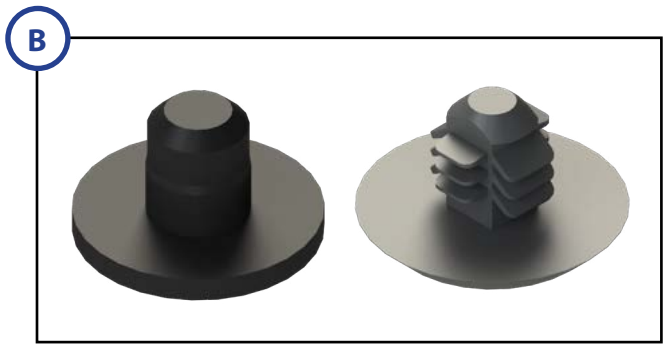
2 X 3 ELECTRIC THROUGH FRAME SLIDE-OUT ASSEMBLY

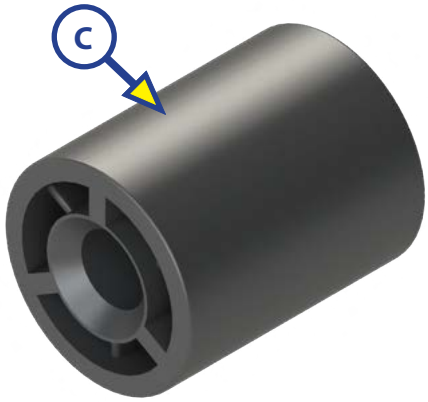


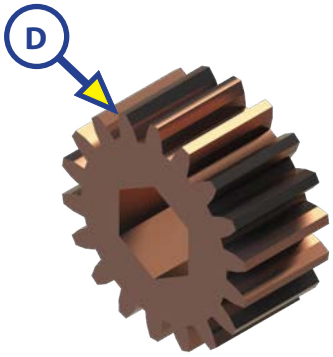
2 X 3 ELECTRIC THROUGH FRAME SLIDE-OUT ASSEMBLY

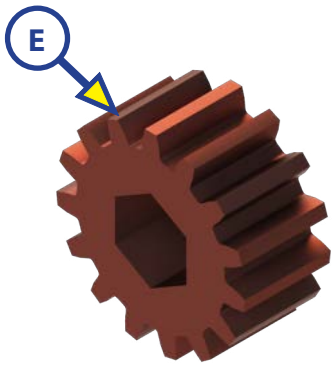




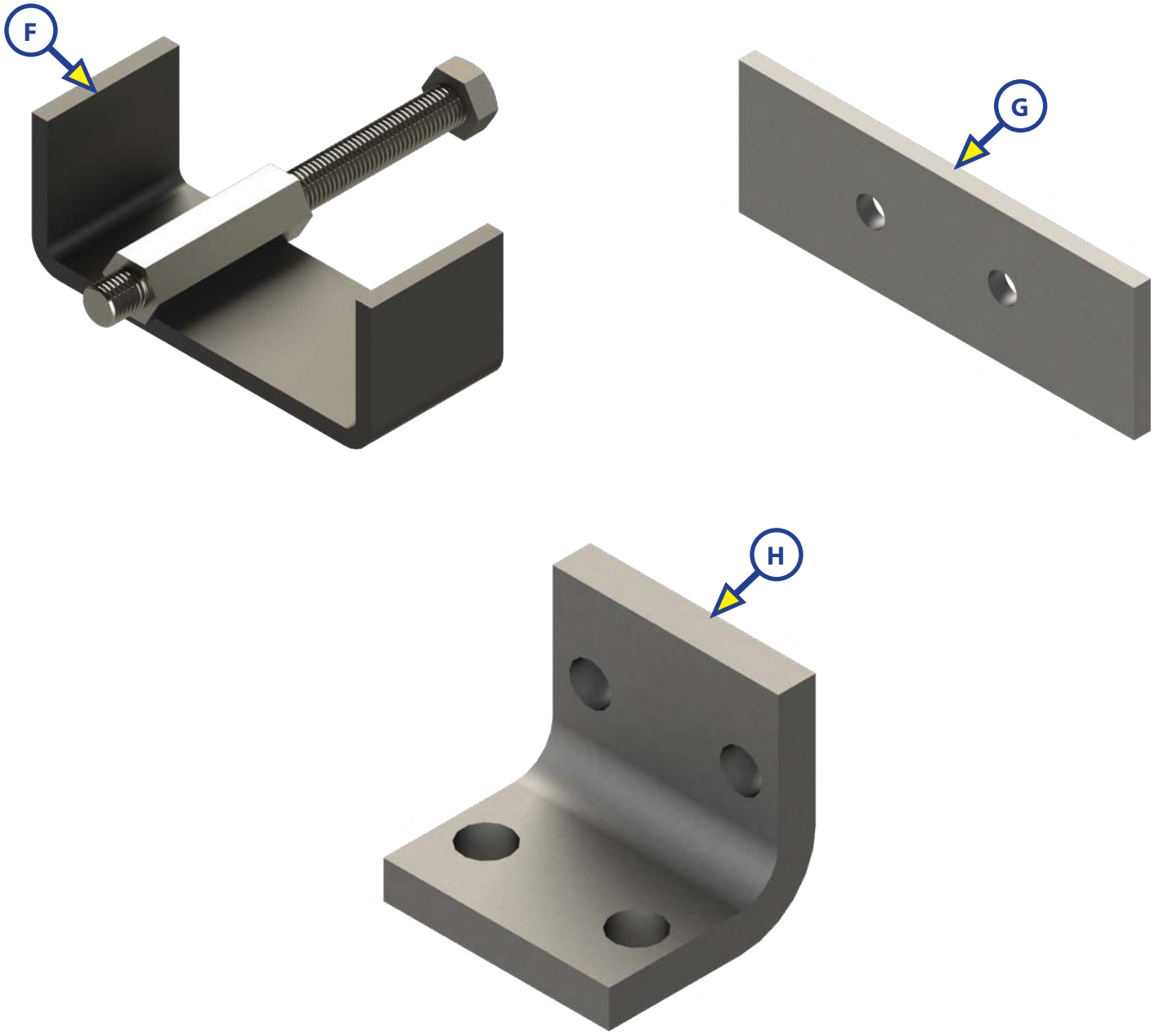








Callout	Part #	Description
A	140409	Gear Pack
B	103480	Wear Pad (Original)
		Wear Pad (Current)
C	104474	Rear Roller
D	122739	Spur Gear (14.5 Degree Pressure Angle, 18 Tooth)
E	101941	Spur Gear (20 Degree PA, 15 Tooth)

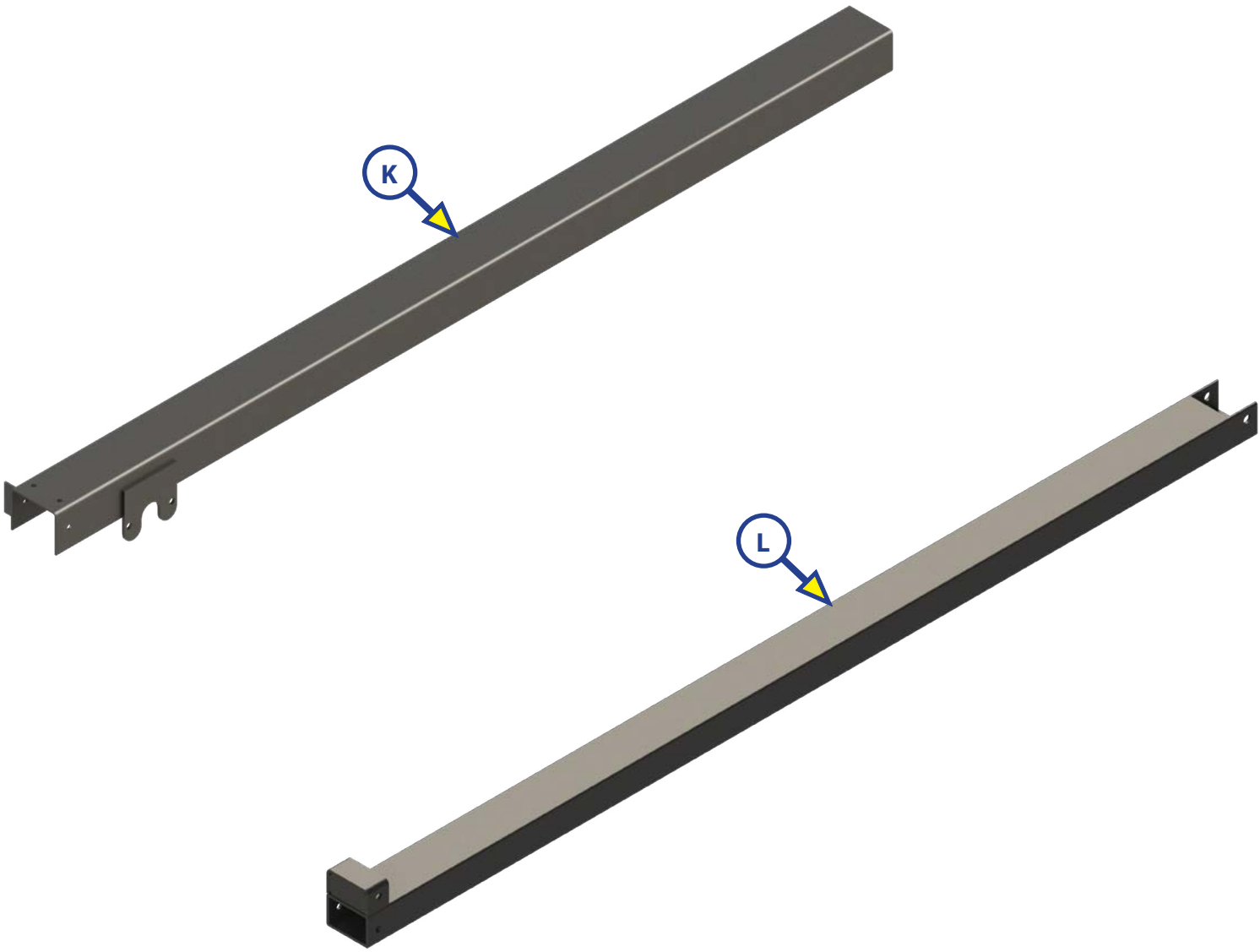


Callout	Part #	Description
F	125699	Front Stop Bracket
G	115375	Wear Bar Plate (3" x 1")
H	105790	Rear Stop Bracket

2 X 3 ELECTRIC THROUGH FRAME SLIDE-OUT COMPONENTS

Callout	Part #	Description
I	115251	Main Room Heads with Head Hardware Kit
J	116045	Kitchen Heads with Head Hardware Kit

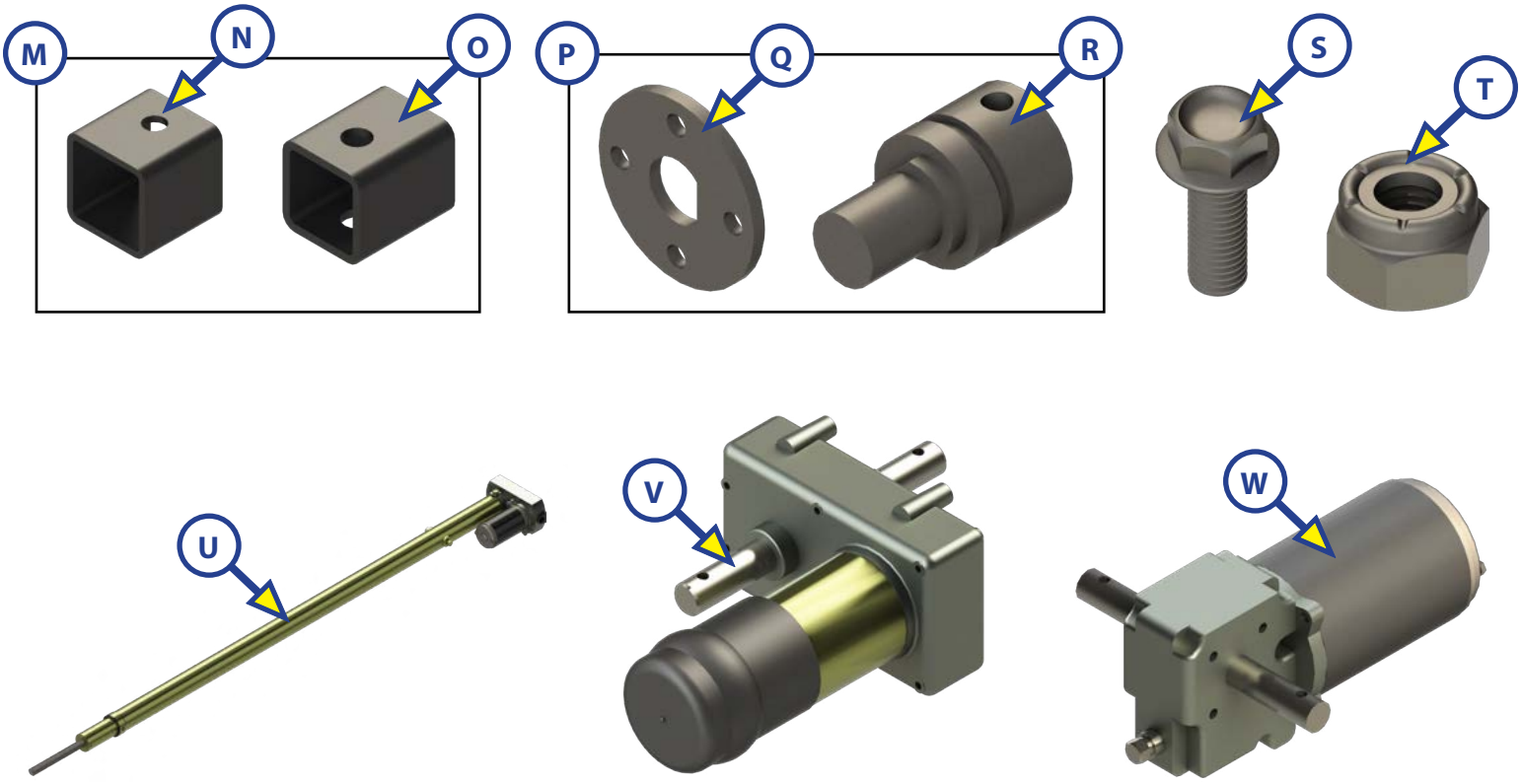
2 X 3 ELECTRIC THROUGH FRAME SLIDE-OUT COMPONENTS



Callout	Part #	Description
K	157654	Outer Arm Assembly
L	157653	Inner Arm Assembly

2 X 3 ELECTRIC THROUGH FRAME SLIDE-OUT COMPONENTS

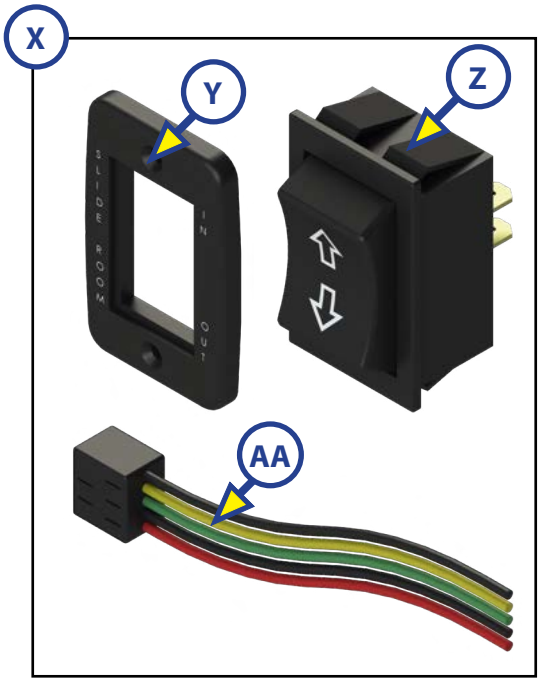
SLIDE-OUTS

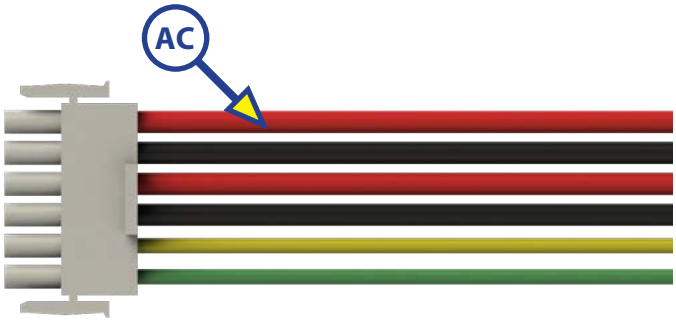


Callout	Part #	Description
M	166045	Cross Shaft Kit 35⁄32
	166046	Cross Shaft Kit 40⁄38
N	180637	Outer Tube
O	180638	Inner Tube
P	115512	Timing Disk Assembly
Q	105482	Timing Plate
R	102674	Cross Shaft Adapter
S	117916	¼ - 20 x ¾" Hex Flange Bolt
T	118042	¼ - 20 Nylon Insert Lock Nut
U	168956	Venture Actuator and 18:1 Motor (40") High Speed
	255676	Venture Actuator and 18:1 Motor (43")
	158457	Venture Actuator and 28:1 Motor (43")
	336937	Venture Actuator and 58:1 Motor (43")
V	140201	Klauber E-300 Motor (¾" Drive)
	138449	Klauber D-300 Motor (¾" Drive)
	143701	F-350 Motor (¾" Drive)
W	138448	Klauber M150N Motor

2 X 3 ELECTRIC THROUGH FRAME SLIDE-OUT COMPONENTS

SLIDE-OUTS

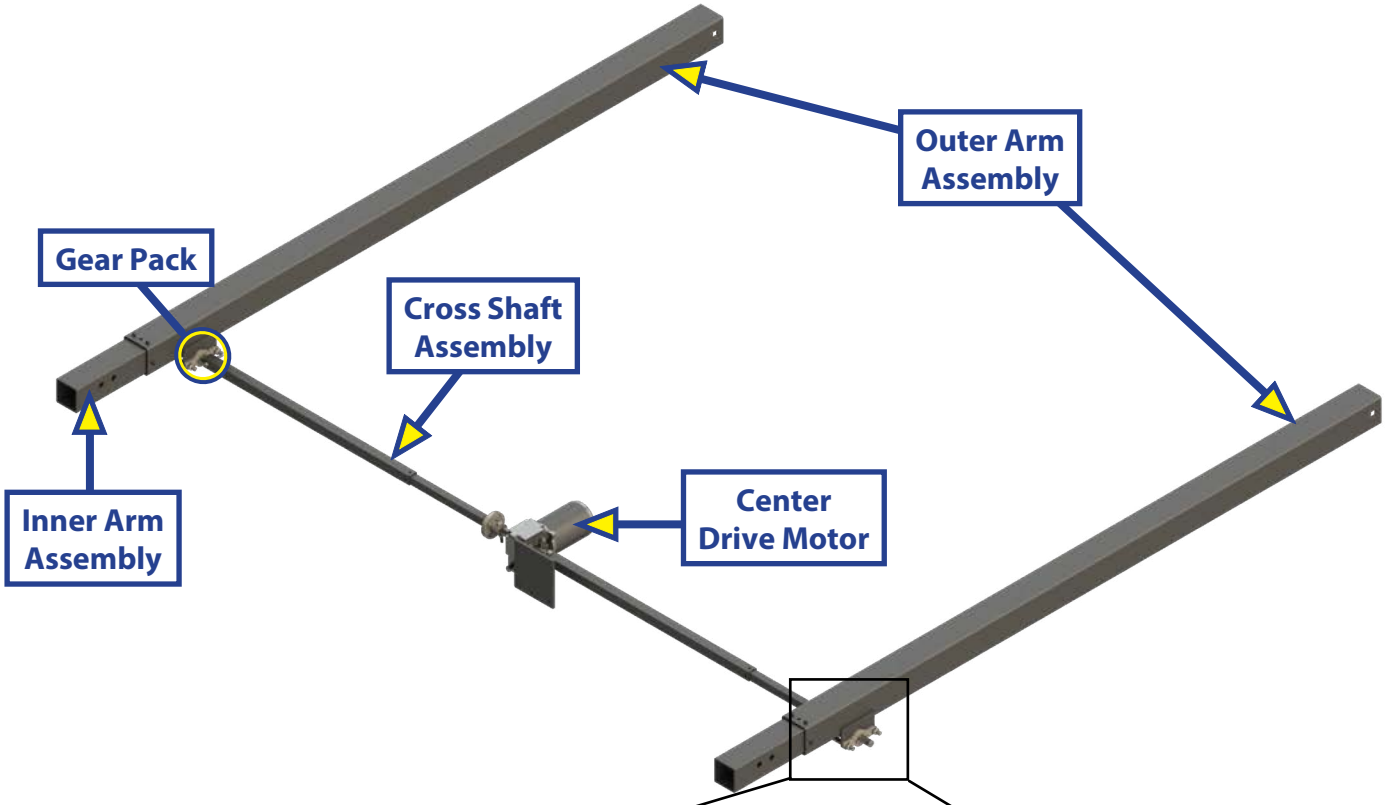


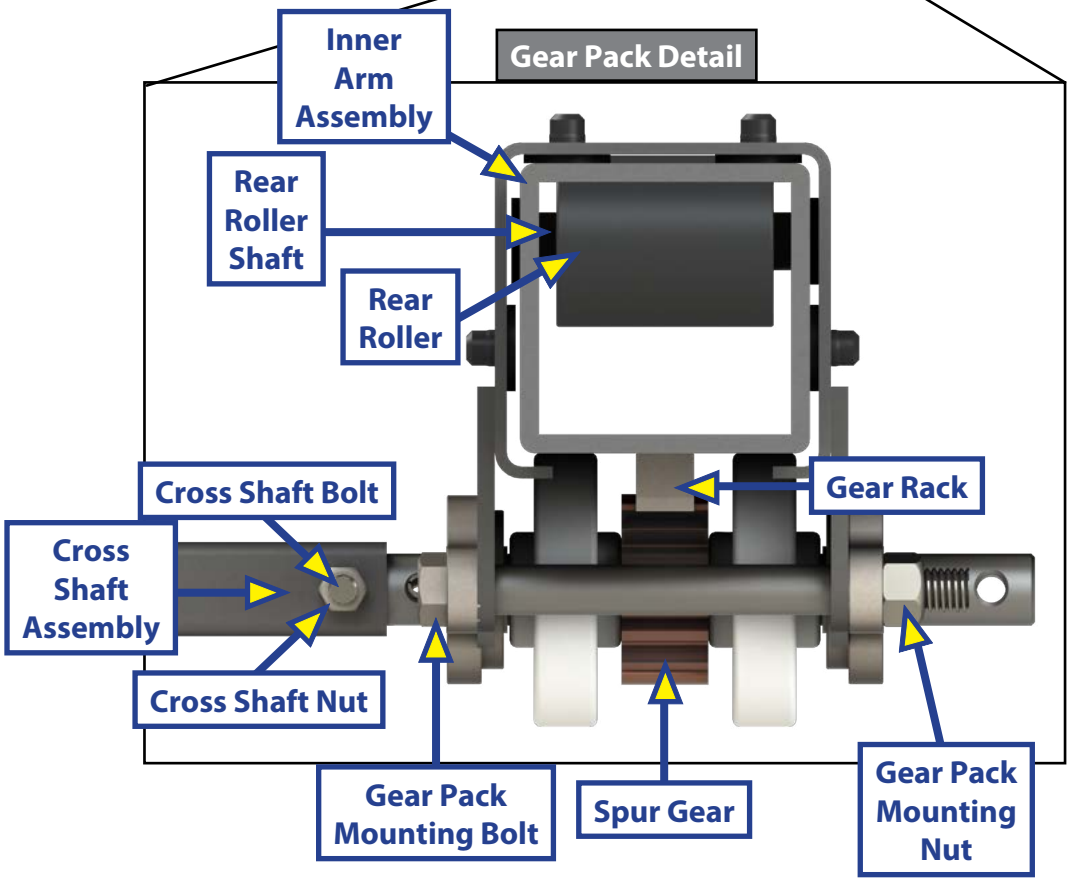


Callout	Part #	Description
X	117460	Slideout Switch Kit (Black)
	117461	Slideout Switch Kit (White)
Y	117420	Switch Plate (White)
	117419	Switch Plate (Black)
Z	129003	Switch (White)
	117426	Switch (Black)
AA	178436	Switch Wire Harness
AB	135666	Slide-Out Controller
AC	135696	Wire Harness

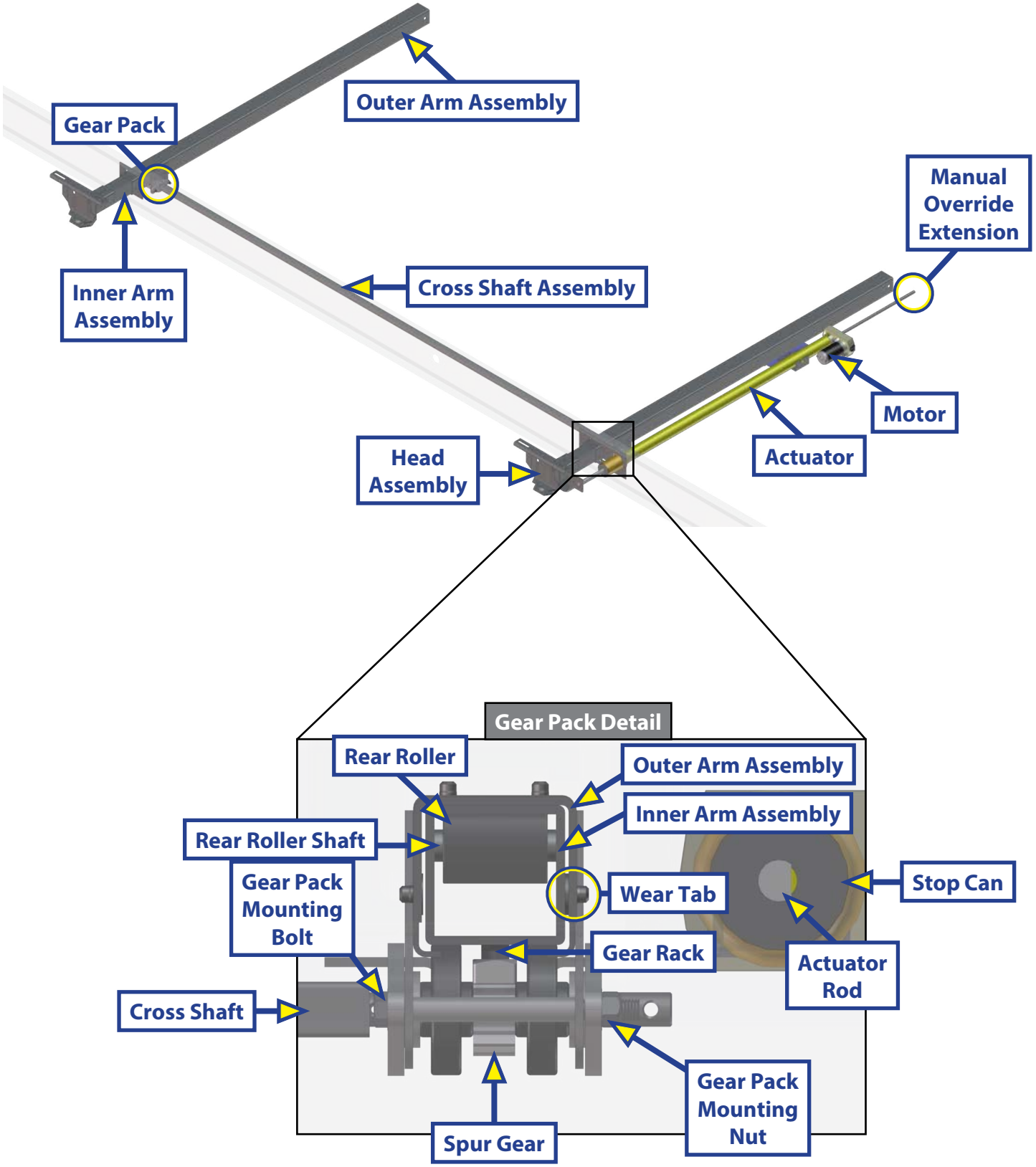
2.5 X 2.5 ELECTRIC THROUGH FRAME SLIDE-OUT ASSEMBLY (CENTER DRIVE)

SLIDE-OUTS



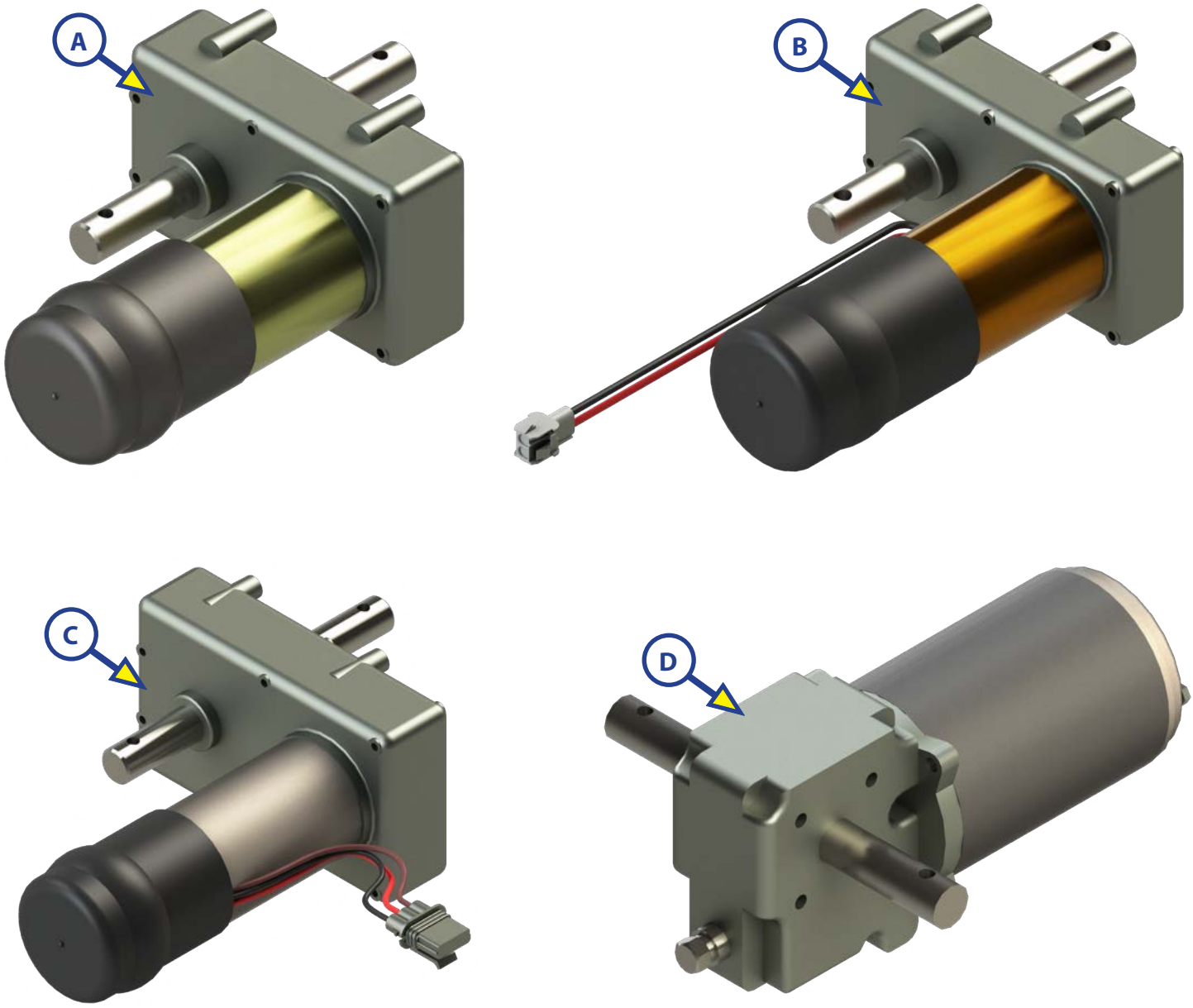


2.5 X 2.5 ELECTRIC THROUGH FRAME SLIDE-OUT ASSEMBLY (WITH ACTUATOR)



2.5 X 2.5 ELECTRIC THROUGH FRAME SLIDE-OUT COMPONENTS

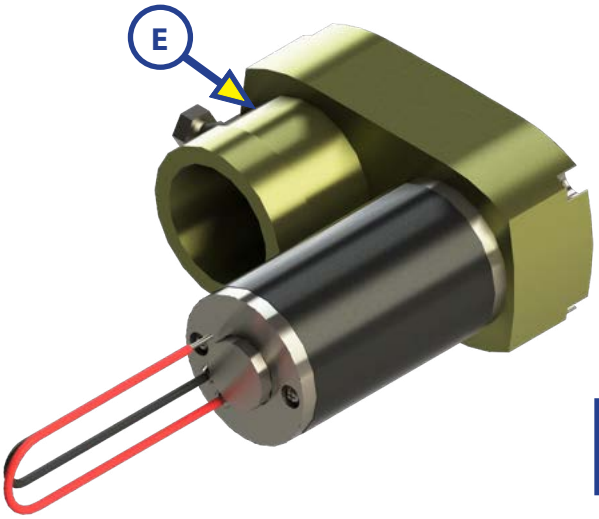
SLIDE-OUTS

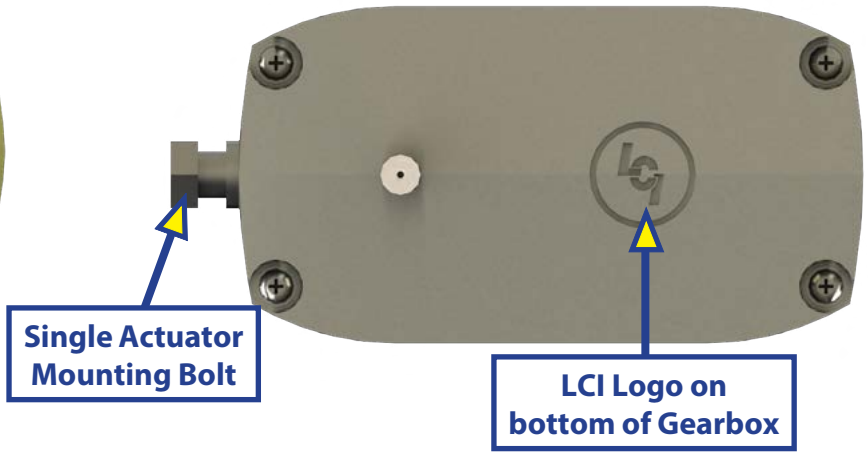


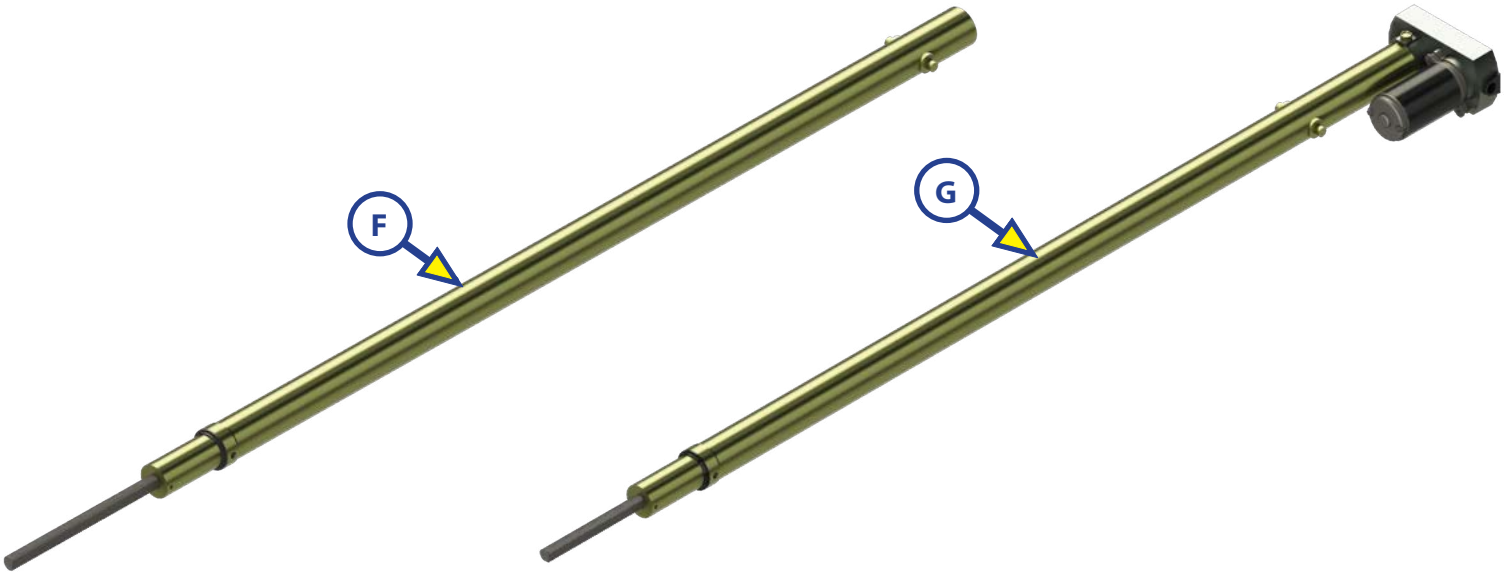
Callout	Part #	Description
A	138449	Klauber D-300 Motor
	140201	Klauber E-300 Motor
	143701	F-350 Motor
B	321395	Klauber F-300
C	325502	H-350 Motor
D	138448	M-150N Center Drive Motor

2.5 X 2.5 ELECTRIC THROUGH FRAME SLIDE-OUT COMPONENTS

SLIDE-OUTS



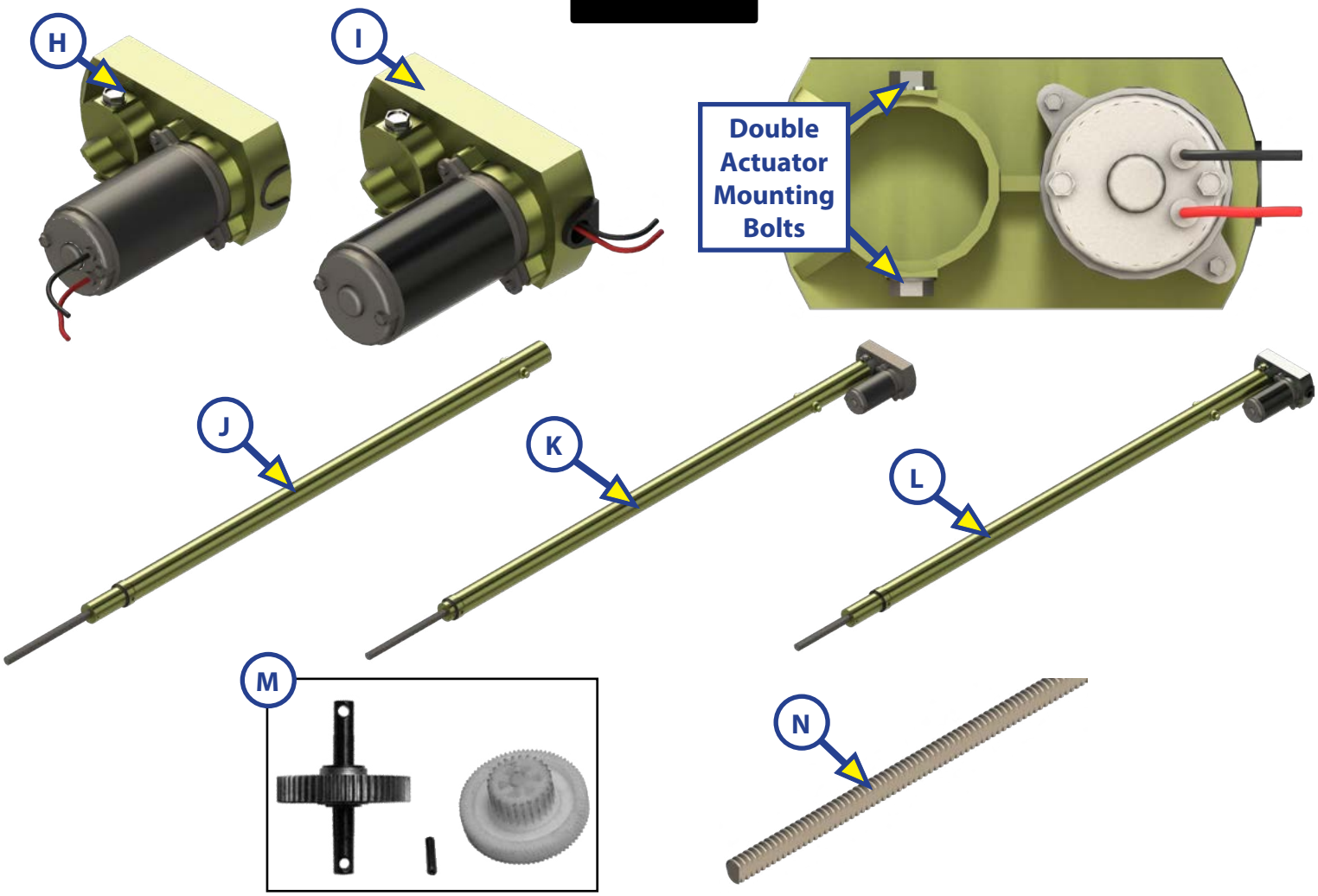




Callout	Part #	Description
E	125802	Tuson 18:1 Motor Only
F	145596	Tuson 18:1 Actuator Only (40")
G	131903	Tuson 18:1 Actuator and Motor (40")

2.5 X 2.5 ELECTRIC THROUGH FRAME SLIDE-OUT COMPONENTS

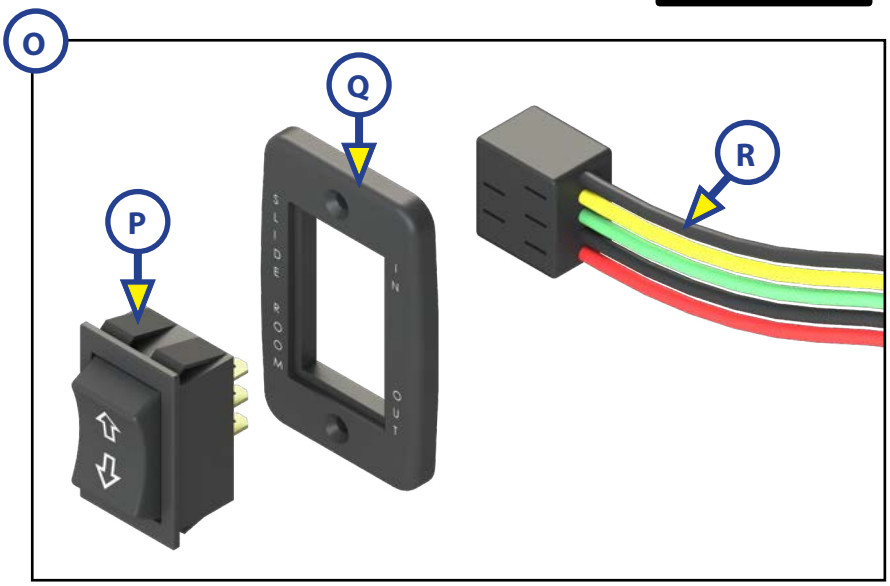
SLIDE-OUTS

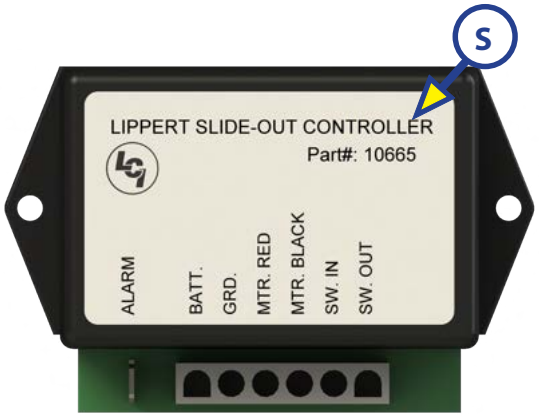


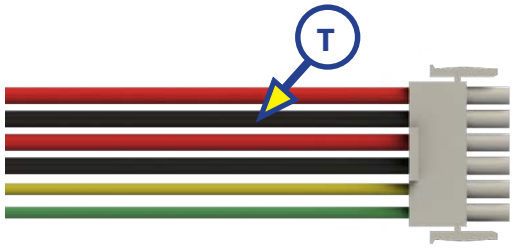
Callout	Part #	Description
H	132682	Venture 18:1 Motor Only
I	136373	Venture 28:1 Motor Only
J	145595	Venture 18:1 Actuator Only
K	255676	Venture Actuator and 18:1 Motor (40")
	158457	Venture Actuator and 28:1 Motor (40")
L	119128	Venture Actuator and 18:1 Motor (24")
	145185	Tuson 18:1 Actuator and Motor (24") **NOTE:** Obsolete - Replace with 119128
	122747	Venture Actuator and 18:1 Motor (32")
	119129	Venture Actuator and 18:1 Motor (40")
	168956	Venture Actuator and 18:1 Motor (40") High speed
M	191072	Venture Replacement Gear Set 18:1
	191073	Venture Replacement Gear Set 28:1
	191074	Venture Replacement Gear Set 58:1
N	157488	Actuator Replacement Rod
NOTE: Toula actuators and motors can be replaced by Venture.		

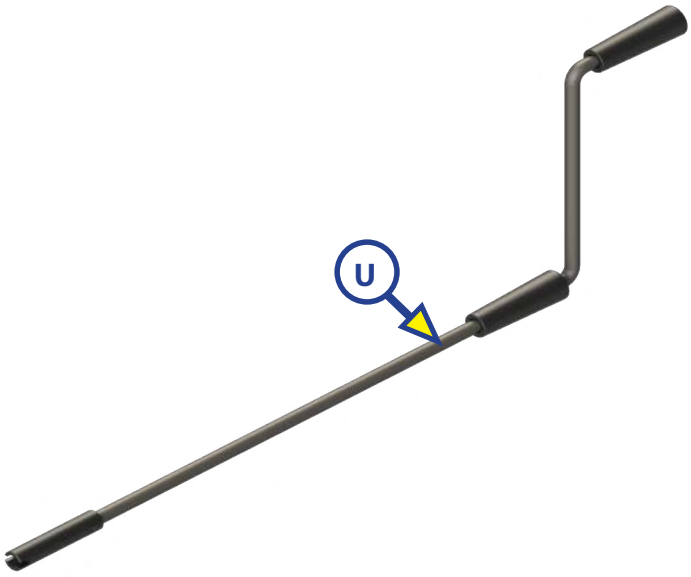
2.5 X 2.5 ELECTRIC THROUGH FRAME SLIDE-OUT COMPONENTS

SLIDE-OUTS





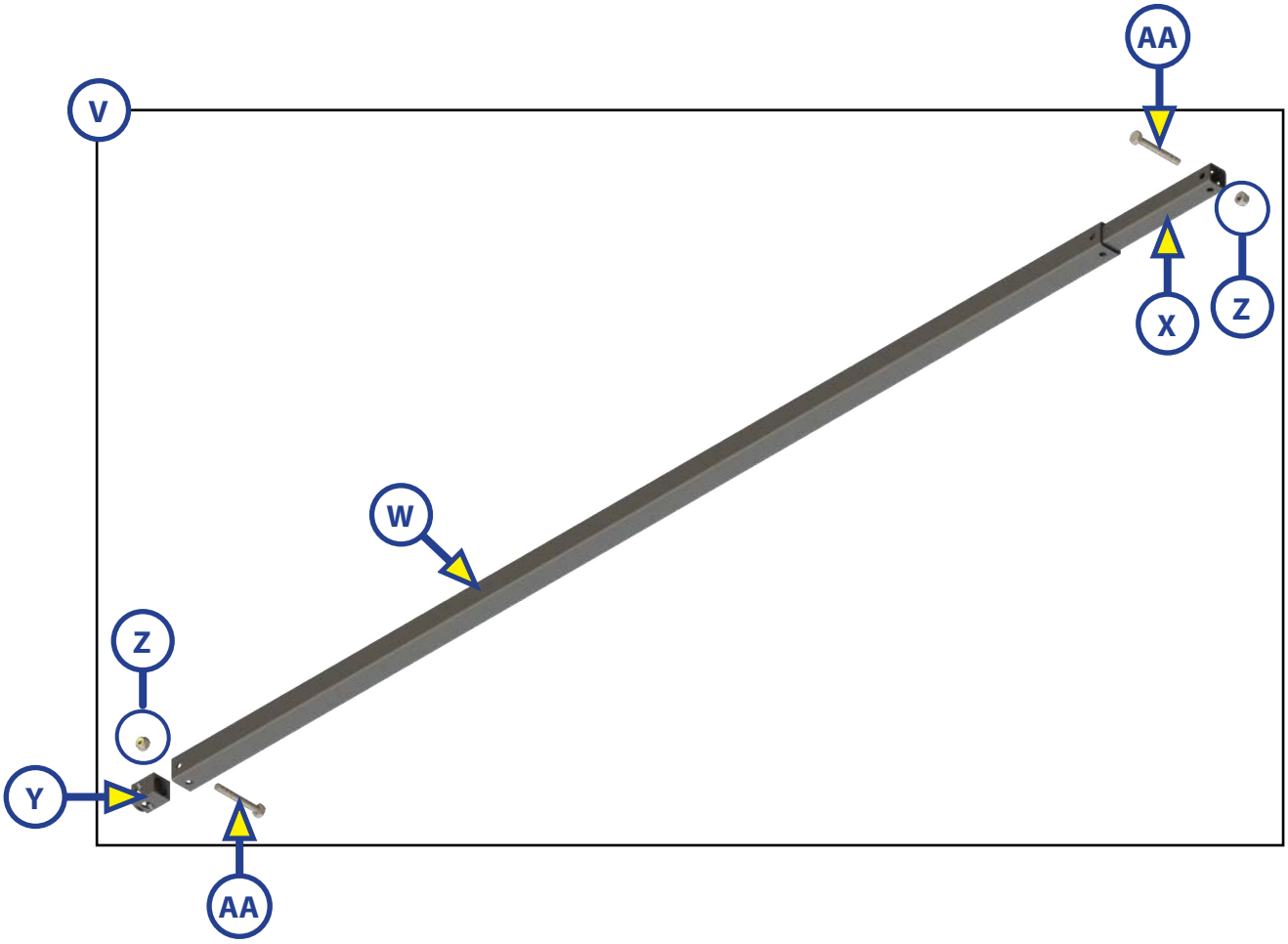




Callout	Part #	Description
O	117460	Slide-Out Switch Kit (Black)
	117461	Slide-Out Switch Kit (White)
P	129003	Switch (White)
	117426	Switch (Black)
Q	117420	Switch Plate (White)
	117419	Switch Plate (Black)
R	178436	Switch Wire Harness
S	135666	Slide-Out Controller
T	135696	Wire Harness
U	119226	Manual Crank Handle

2.5 X 2.5 ELECTRIC THROUGH FRAME SLIDE-OUT COMPONENTS

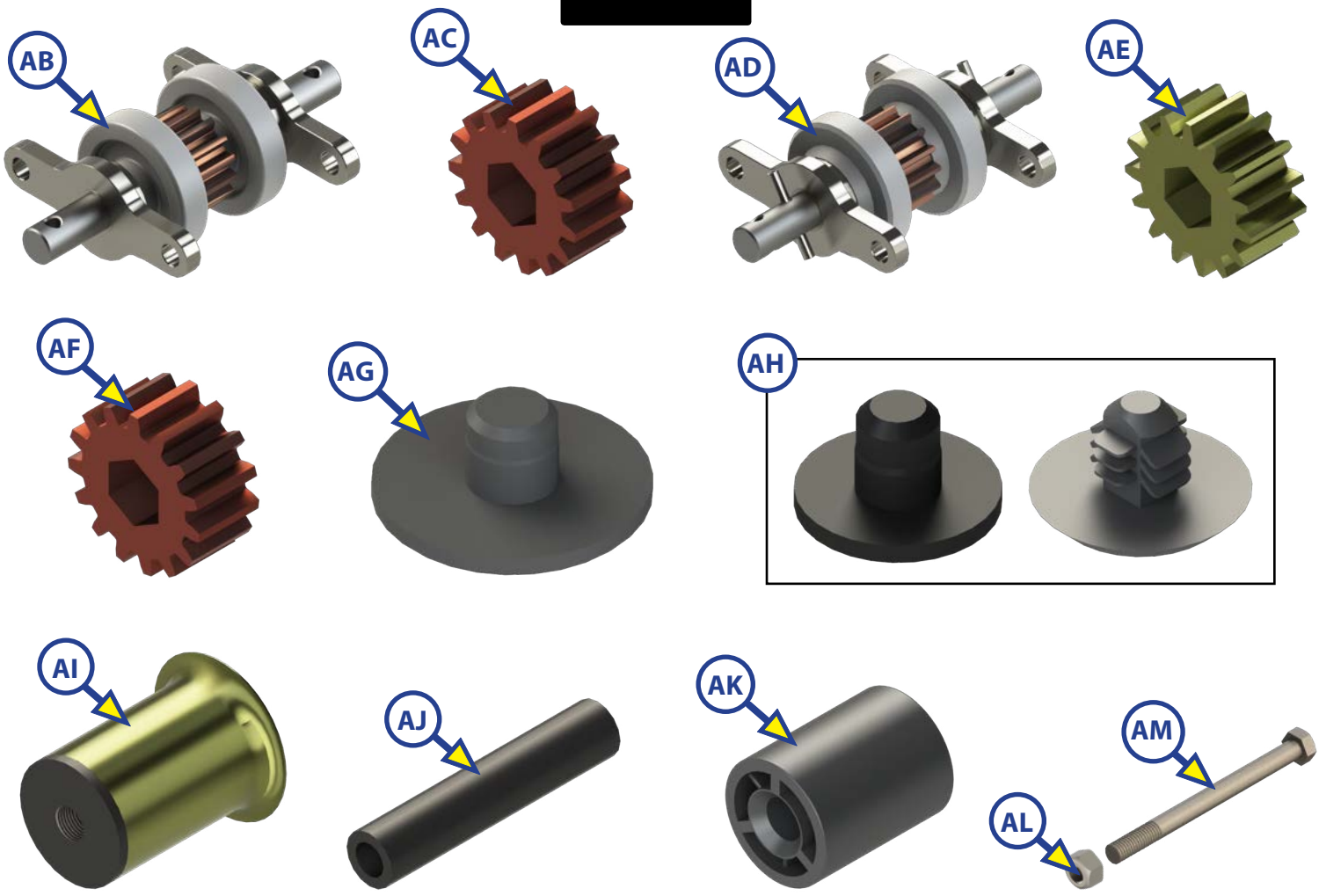
SLIDE-OUTS



Callout	Part #	Description
V	173630	Cross Shaft Kit
W	117630	Outer Cross Shaft
X	117606	Inner Cross Shaft
Y	123365	Cross Shaft Insert
Z	118092	Nut ¼" - 20
AA	119066	Bolt ¼" - 20 x 2"

2.5 X 2.5 ELECTRIC THROUGH FRAME SLIDE-OUT COMPONENTS

SLIDE-OUTS

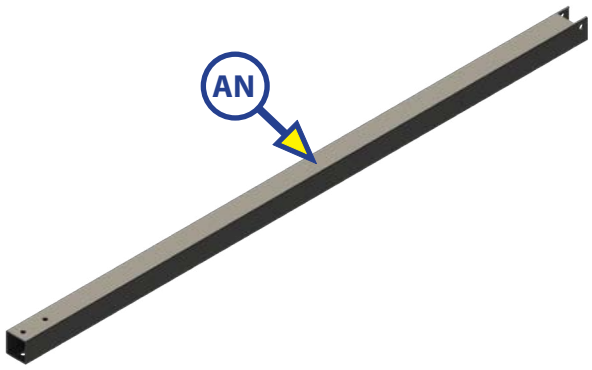


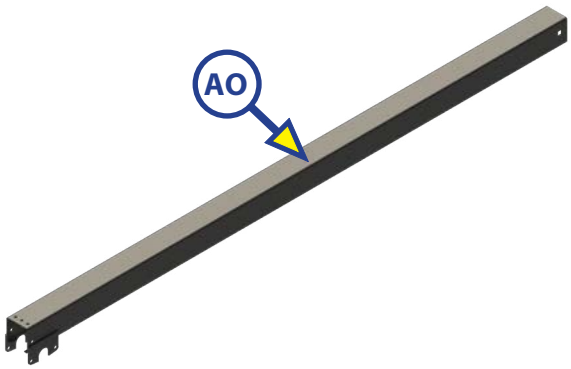
Callout	Part #	Description
AB	324869	Gear Pack (Standard)
AC	101941	Spur Gear (Standard) 15 Teeth - 10 DP/20° PA
AD	123356	Gear Pack (Heavy Duty)
AE	328044	Spur Gear (Heavy Duty) 15 Teeth - 10 DP/20° PA
AF	122739	Spur Gear 18 Teeth - 12 DP/14.5° PA
AG	277882	Wear Tab for Assembly with no Rear Roller
AH	103480	Wear Tab (Original)
		Wear Tab (Current)
AI	122840	Stop Can
AJ	105892	Rear Roller Shaft
AK	104474	Rear Roller
AL	119073	Gear Pack Mounting Nut ⅜" - 16
AM	132695	Gear Pack Mounting Bolt ⅜" - 16 x 4 ½"

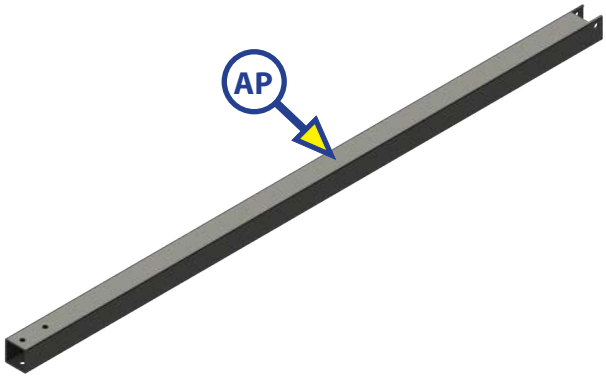
NOTE: 122739 spur gear is available for replacement only. When replacing a gear pack that includes 122739 or a spur gear with 18 teeth, order gear pack 324869 and 122739 and reassemble with 122739 in the gear pack.

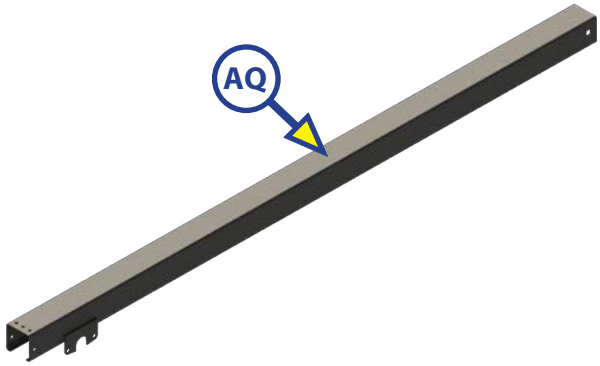
2.5 X 2.5 ELECTRIC THROUGH FRAME SLIDE-OUT COMPONENTS

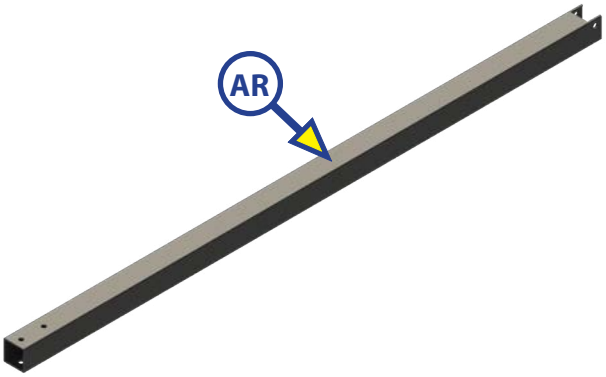
SLIDE-OUTS

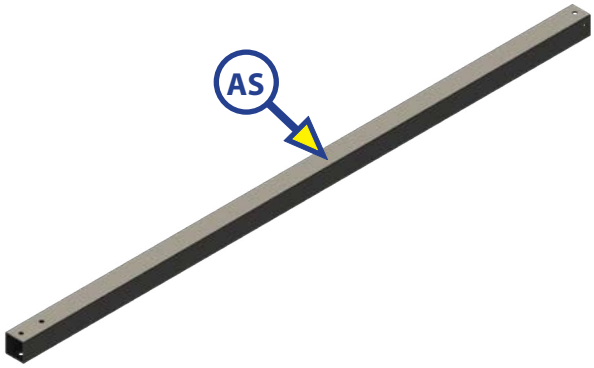












Callout	Part #	Description
AN	334647	2 ½ x 2 ½" Outboard Innertube (18 tooth)
	334648	2 ½ x 2 ½" Inboard Innertube (18 tooth)
AO	143674	Outboard Outer Arm
AP	143707	Outboard Inner Arm (15 tooth, use with Spur Gear HD 328044)
AQ	143676	Inboard Outer Arm (Idler)
	143677	Inboard Outer Arm (Drive)
AR	143710	Inboard Inner Arm - 10 DP/20° PA (15 tooth)
AS	296121	Inboard Inner Arm - 10 DP/20° PA (15 tooth)
NOTE: Standard slide-out arms are 10 DP/20° PA and require a spur gear with 15 teeth.		

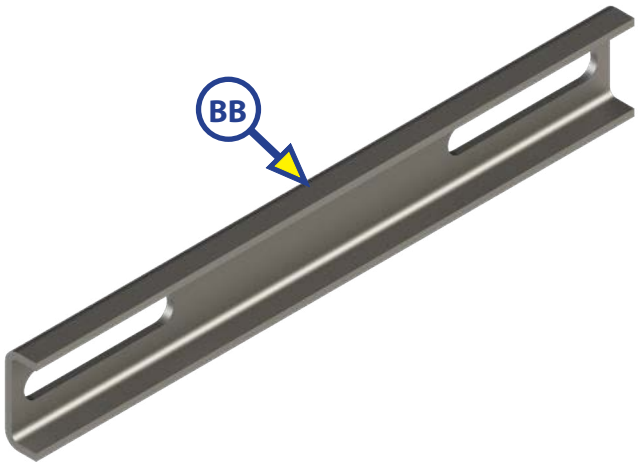
2.5 X 2.5 ELECTRIC THROUGH FRAME SLIDE-OUT COMPONENTS

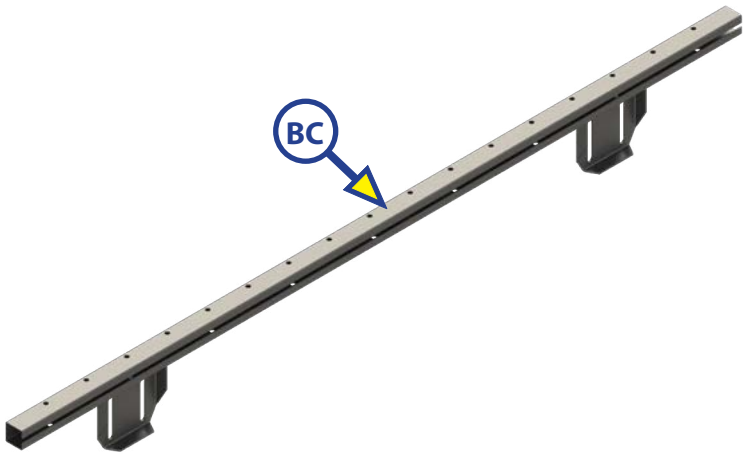
SLIDE-OUTS

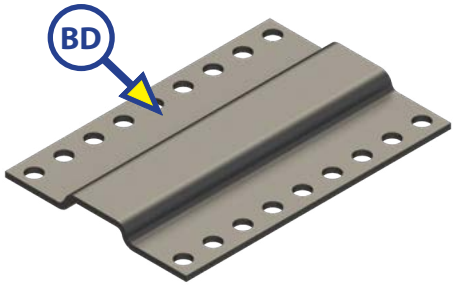
Callout	Part #	Description
AT	119047	Flush Adjustable Head Assembly
AU	119048	Flush Fixed Head Assembly
AV	122854	Adjustable Head Assembly (1 ⅜")
AW	122855	Fixed Head Assembly (1 ⅜")
AX	104851	Slide-Out Mounting Bracket
AY	226347	Room Bar Slide Head Assembly (12")
AZ	158744	Flush Floor Head Assembly
BA	166536	Flush Floor End Condition

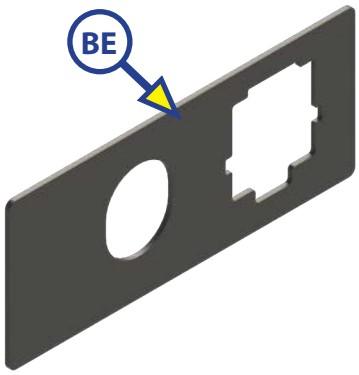
2.5 X 2.5 ELECTRIC THROUGH FRAME SLIDE-OUT COMPONENTS

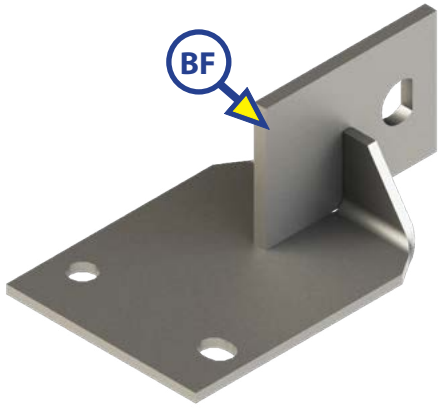
SLIDE-OUTS

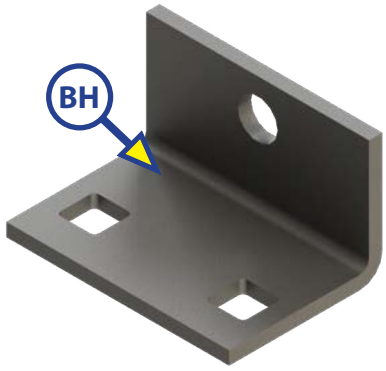






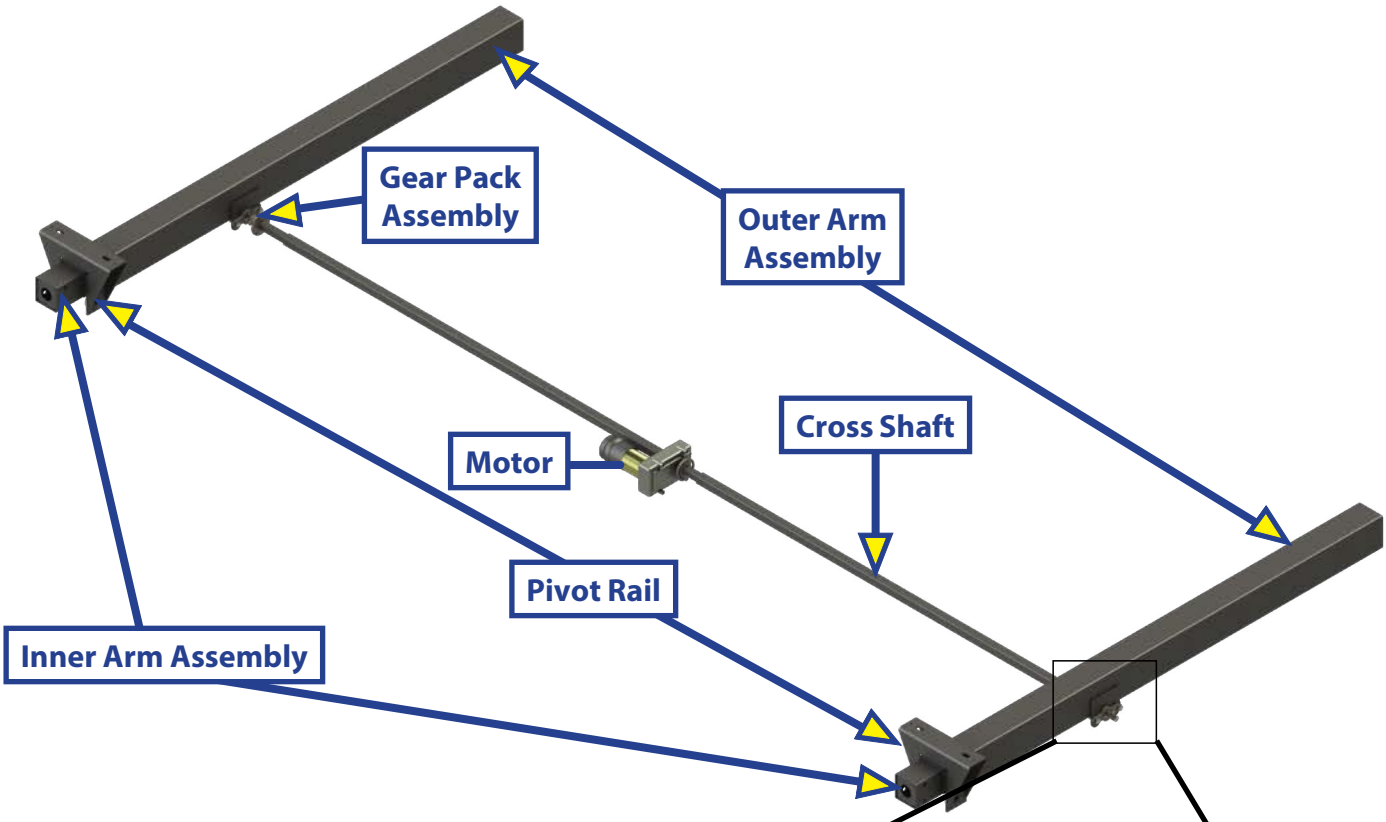


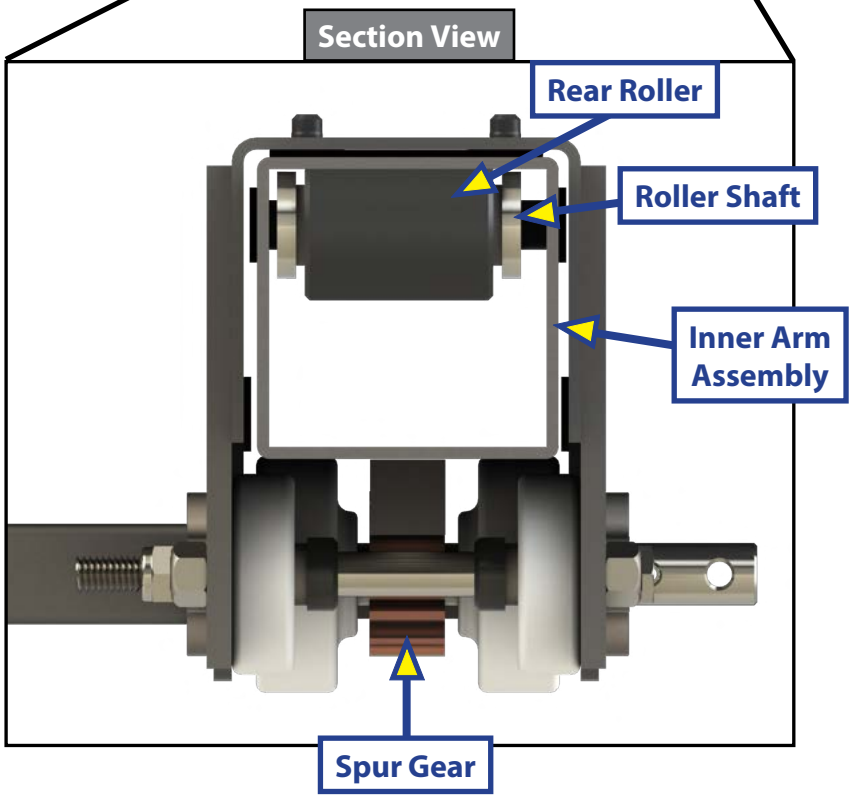




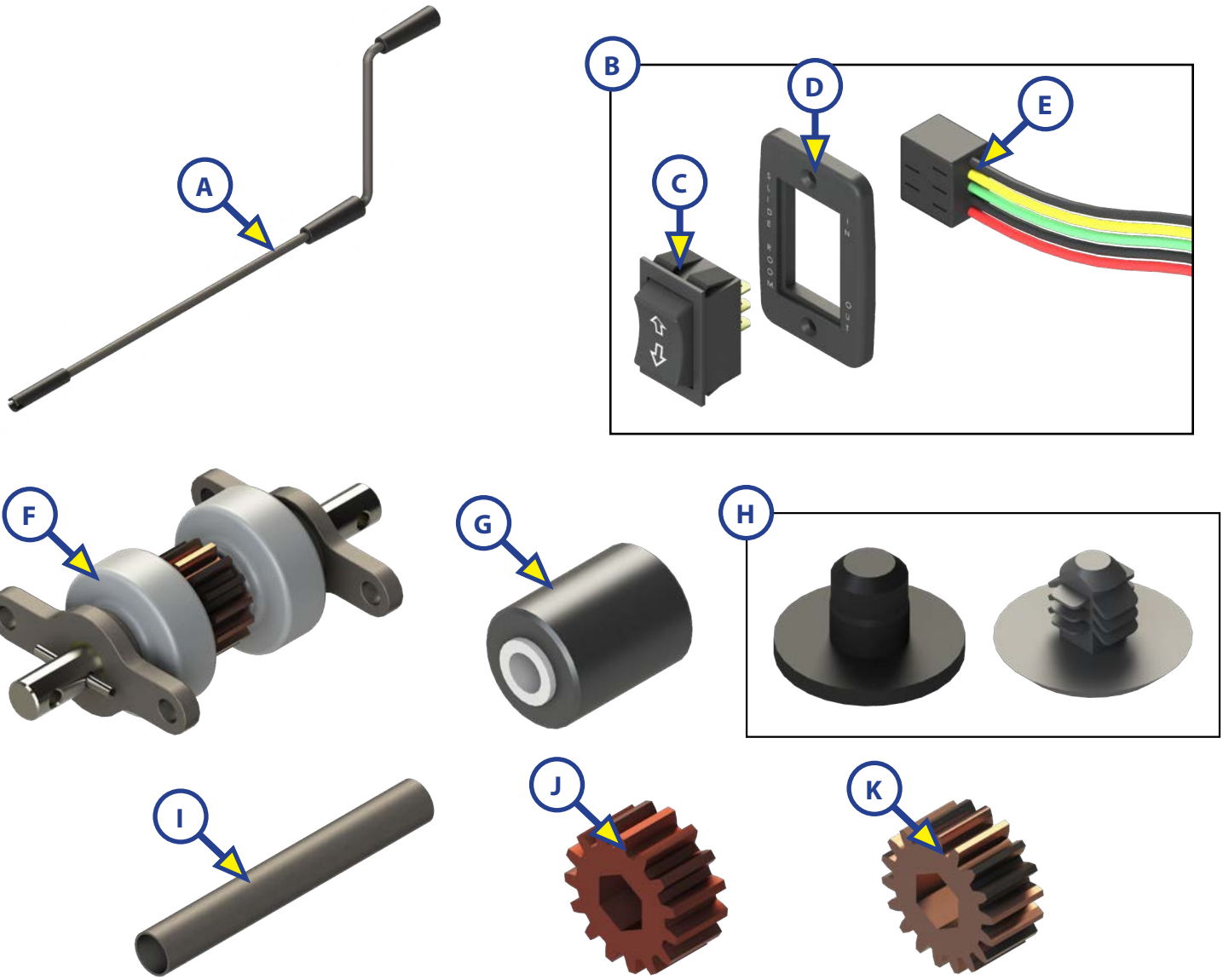
Callout	Part #	Description
BB	105966	Room Bar Bracket
BC	183949	Room Bar (Use for up to 80")
	183950	Room Bar (Use for 81" to 154")
BD	105965	Hat
BE	116401	Trim Plate
BF	122852	Front Actuator Mounting Bracket
BG	105961	Left Mounting Bracket
BH	105962	Right Mounting Bracket

3 X 3 PIVOT RAIL ELECTRIC THROUGH FRAME SLIDE-OUT ASSEMBLY





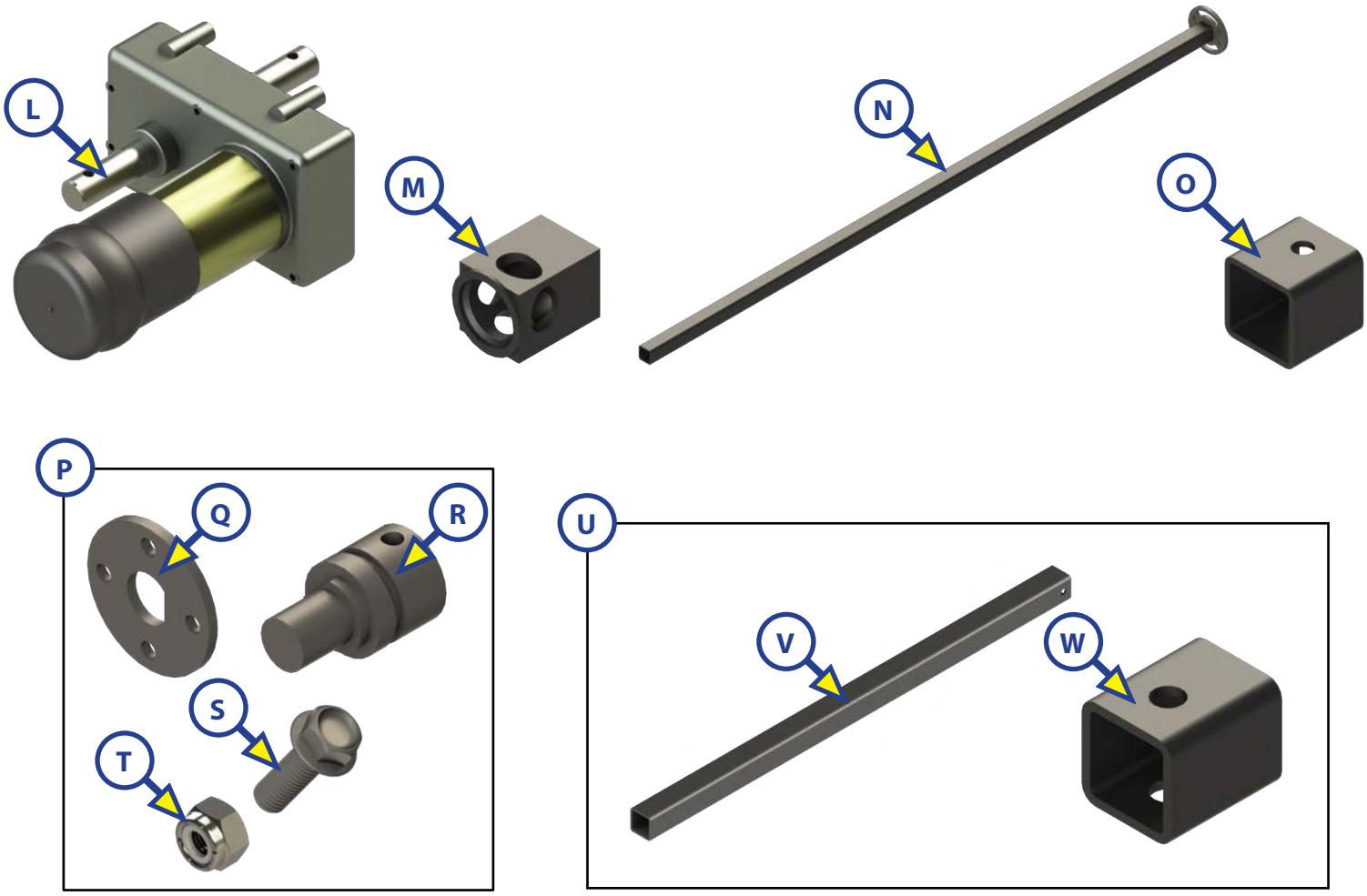
3 X 3 PIVOT RAIL ELECTRIC THROUGH FRAME SLIDE-OUT COMPONENTS



Callout	Part #	Description
A	119226	Crank Handle
B	117460	Slide-Out Switch Kit (Black)
C	117426	Switch (Black)
D	117419	Switch Plate (Black)
E	178436	Switch Wire Harness
F	140409	Gear Pack
G	101255	Roller
H	103480	Wear Tab (Original)
		Wear Tab (Current)
I	115962	RD Tube
J	101941	15 Tooth Spur Gear
K	122739	18 Tooth Spur Gear

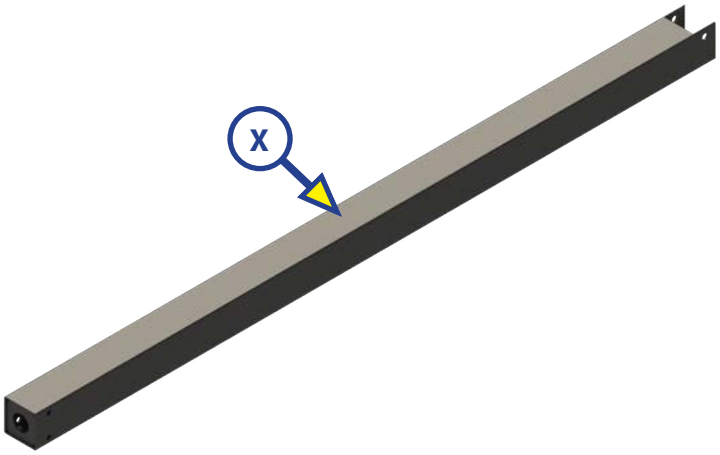
3 X 3 PIVOT RAIL ELECTRIC THROUGH FRAME SLIDE-OUT COMPONENTS

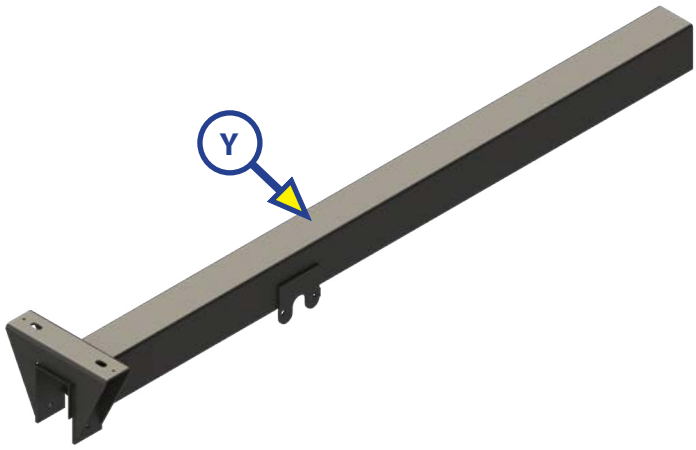
SLIDE-OUTS

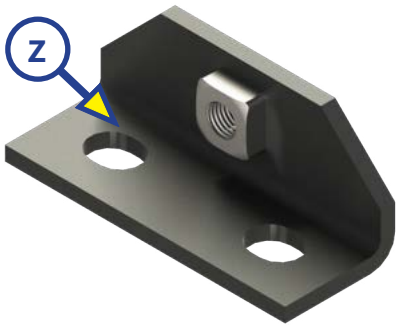


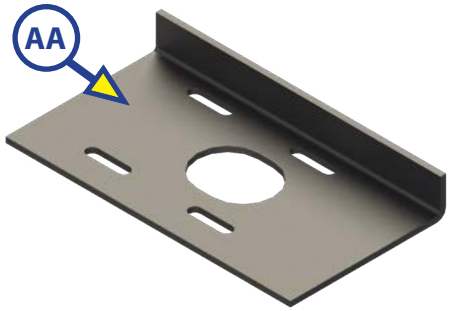
Callout	Part #	Description
L	138449	Klauber D-300 (¾" Drive)
M	123365	Drive Tube Insert
N	229347	Timing Disk, Inner Cross Shaft
O	180637	Outer Cross Shaft
P	115512	Timing Disk Assembly
Q	105482	Timing Plate
R	102674	Cross Shaft Adapter
S	117916	¼ - 20 x ¾" Hex Flange Bolt
T	118042	¼ - 20 Nylon Insert Lock Nut
U	166045	Cross Shaft Kit - 35/32
	166046	Cross Shaft Kit - 40/38
V	180637	Outer Tube
W	180638	Inner Tube

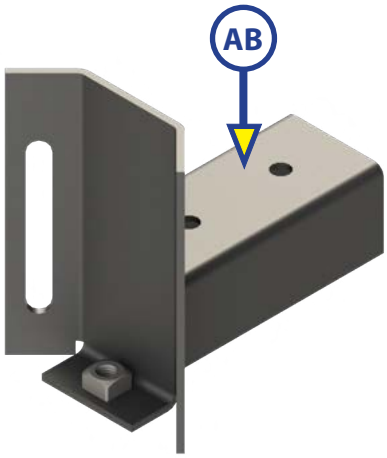
3 X 3 PIVOT RAIL ELECTRIC THROUGH FRAME SLIDE-OUT COMPONENTS

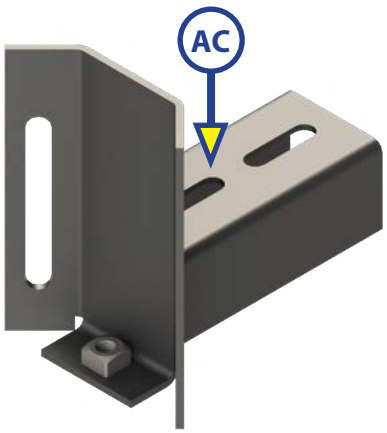


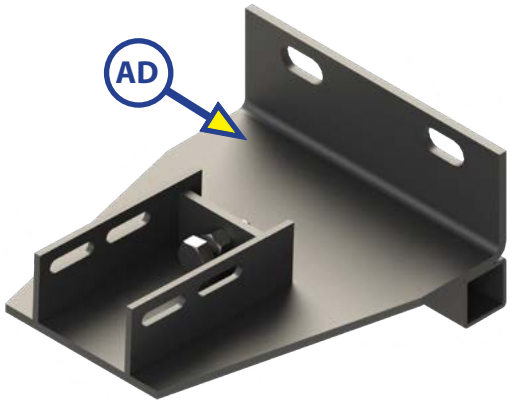












Callout	Part #	Description
X	153935	Pivot/Full Wall Inner Arm
Y	177837	Pivot/Full Wall Outer Arm
Z	122010	Stop Angle Assembly
AA	141583	Motor Bracket
AB	301874	1" Drop Fixed Head Assembly Tall and Extended
AC	301865	1" Drop Adjustable Head Assembly Tall and Extended
AD	142510	Full Wall Head Assembly

Notes

LIPPERT
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Please recycle all obsolete materials.

For all concerns or questions, please contact
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