

**ESCALERA INC.**

Dated: 8-2015

## **STEP EDGE DETECTION KIT with Replacement Toe Plate (PART# 1434) STEP EDGE DETECTION SYSTEM (PART# 1443)**

### **ASSEMBLY INSTRUCTIONS**

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#### **A: Removal of Standard Toe Plate**

Refer to schematic drawing Installation Instructions #001-10

1. Remove JAM NUT [ITEM 1], AXLE BOLT [ITEM 2], 6" WHEEL [ITEM 3], and (3) NYLON SPACERS [ITEM 4] from each side of the TOE PLATE [ITEM 8].

**NOTE: ( Skip to part C if your hand truck is already equipped with the new-style toe plate with the SED mounting holes )**

2. Remove the (4) NUTS [ITEM 5], WASHERS [ITEM 6], and MACHINE SCREWS [ITEM 7] which fasten the TOE PLATE [ITEM 8] to the aluminum side frame on each side.
3. The TOE PLATE [ITEM 8] should now be free to remove from the hand truck. Remove TOE PLATE.

#### **B: Installation of Replacement Toe Plate**

Refer to schematic drawing Installation Instructions #1434-20

1. Align REPLACEMENT TOE PLATE [ITEM 1] in correct position for installation as shown in the illustration.
2. Fasten the REPLACEMENT TOE PLATE [ITEM 1] to the aluminum side frames as shown, using the (4) MACHINE SCREWS [ITEM 2], WASHERS [ITEM 3] and NUTS [ITEM 4] on each side and tighten.
3. Once the TOE PLATE is installed, double check that all MACHINE SCREWS are tight and proceed to the installation of the CAM BRAKE ASSEMBLIES.

#### **C: Install Cam Brake Assemblies and 6" Wheels on to Replacement Toe Plate**

Refer to schematic drawing Installation Instructions #1434-20

1. Position the CAM BRAKE ASSEMBLY [ITEM 7] as shown on the schematic drawing.
2. Insert the REPLACEMENT AXLE BOLT [ITEM 5] through the CAM BRAKE ASSEMBLY [ITEM 7] with (2) 1/8" THICK NYLON WASHER [ITEM 6] to the outside of the CAM BRAKE ASSEMBLY and (1) 1/16" THICK NYLON WASHER [ITEM 8] to the inside of the CAM BRAKE ASSEMBLY as shown in the illustration.
3. Attach the CAM BRAKE ASSEMBLY [ITEM 7] to the REPLACEMENT TOE PLATE [ITEM 1] by inserting the AXLE BOLT [ITEM 5] through the outside toe plate bracket, then through the 6" WHEEL [ITEM 9], followed by (3) 1/8" NYLON SPACERS [ITEM 10] and continuing through the middle toe plate bracket and aluminum side frame as shown in the illustration.

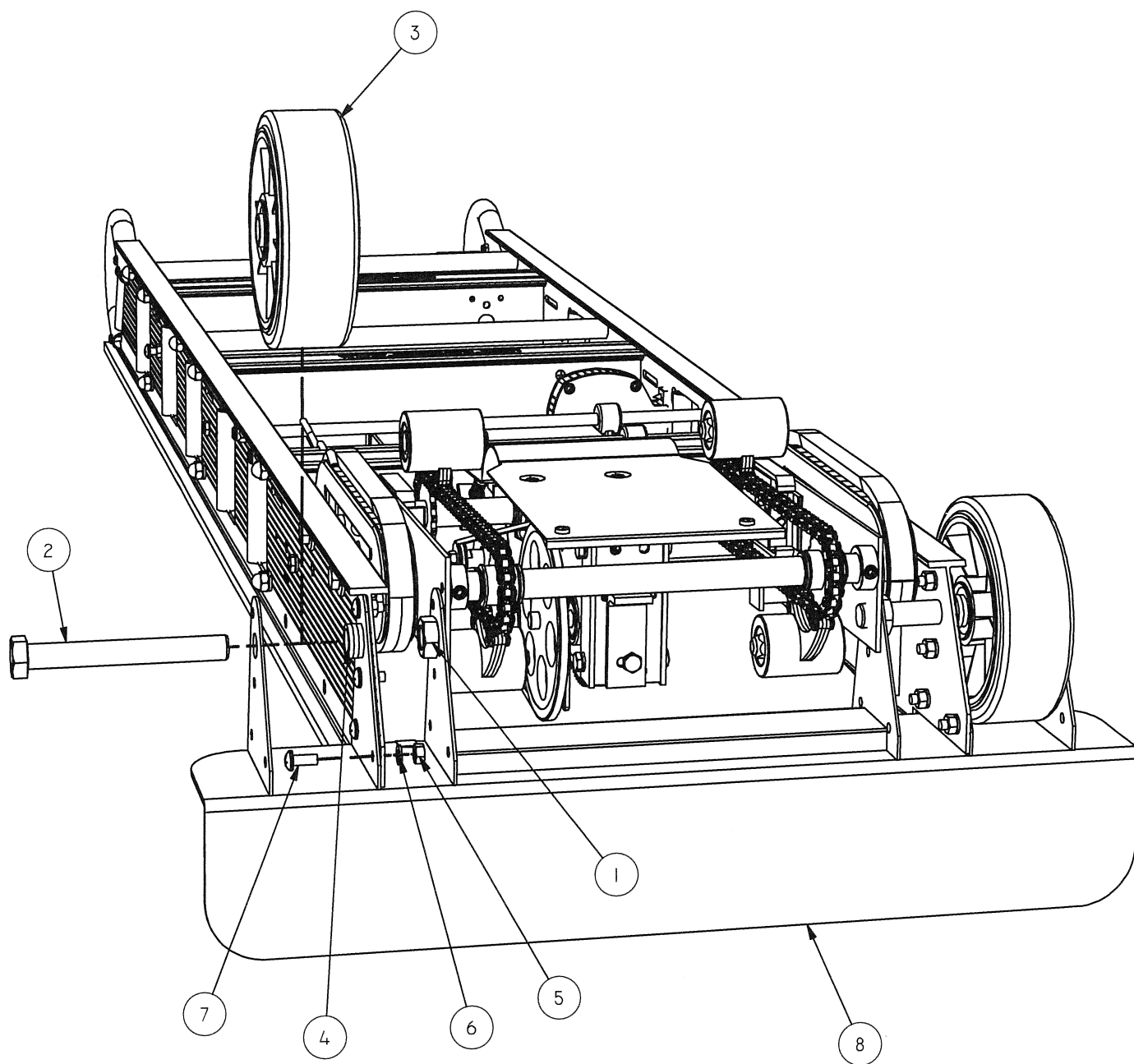
4. Replace the JAM NUT [ITEM 11] on the REPLACEMENT AXLE BOLT [ITEM 5]. Run the JAM NUT far enough onto the REPLACEMENT AXLE BOLT to allow for the REPLACEMENT AXLE BOLT to thread into the gear box side plate. Thread the REPLACEMENT AXLE BOLT into the gear box side plate.  
*Note: Do not over-tighten the REPLACEMENT AXLE BOLT as this can cause a restriction in the function of the CAM BRAKE ASSEMBLY.*
5. Repeat these steps for both sides of the REPLACEMENT TOE PLATE.
6. Tighten the JAM NUT [ITEM 11] against the outside of the inner toe plate bracket on both the left and right side of the toe plate as illustrated, to secure the REPLACEMENT AXLE BOLT [ITEM 5].

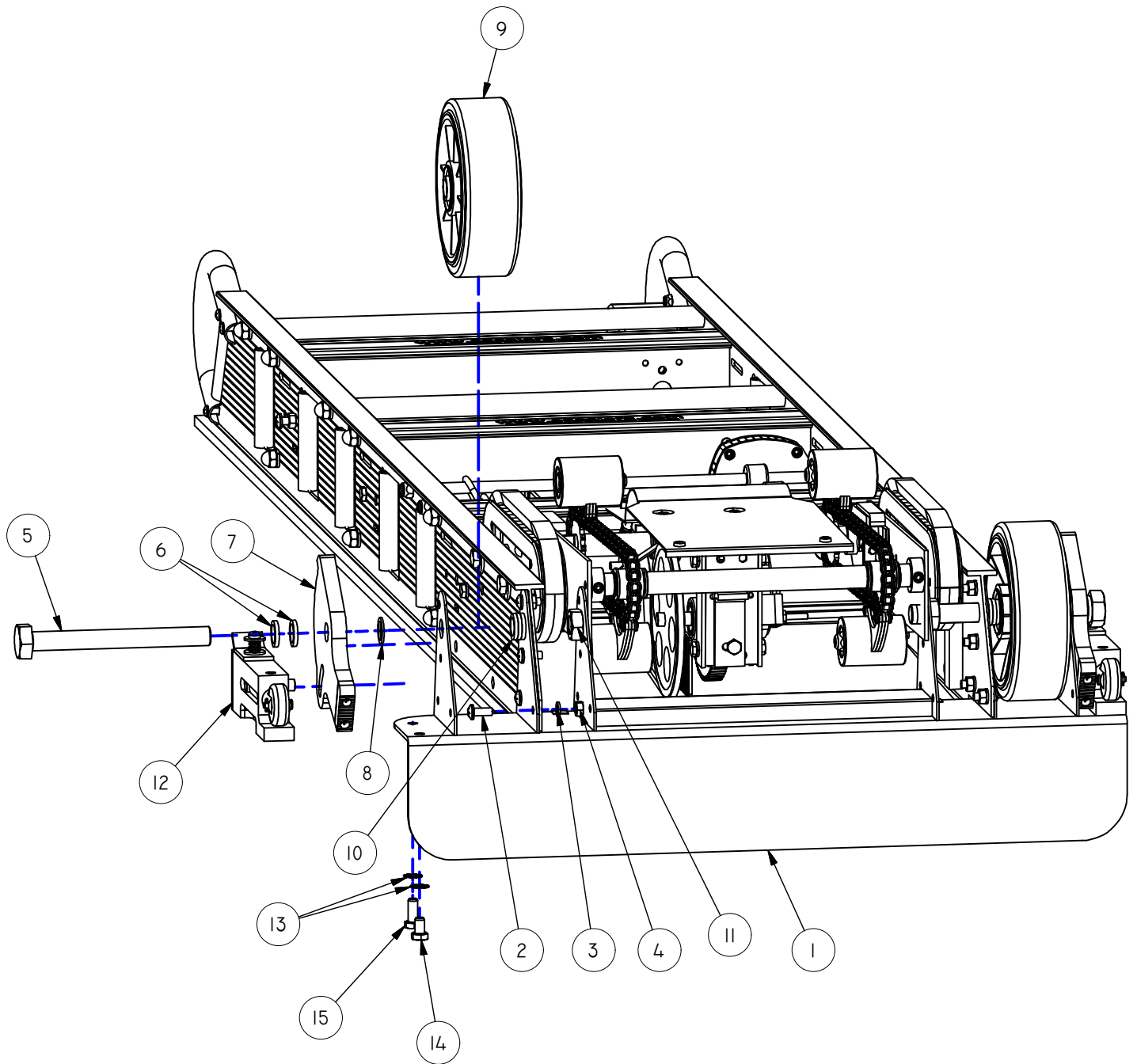
#### **D: Install Push Rod Housing Assemblies**

Refer to schematic drawing Installation Instructions #1434-20

1. Install PUSH ROD HOUSING ASSEMBLIES [ITEM 12] on to the REPLACEMENT TOE PLATE [ITEM 1] using the supplied 3/4" LONG HEX BOLTS [ITEM 15], 1/2" LONG HEX BOLTS [ITEM 14] and LOCK WASHERS [ITEM 13]. Take care to install the 3/4" LONG HEX BOLT [ITEM 15] above the 1/2" LONG HEX BOLT [ITEM 14] as shown in the illustration.
2. Be certain to align the guide pin on the PUSH ROD HOUSING ASSEMBLY [ITEM 12] in the slot on the CAM BRAKE ASSEMBLY [ITEM 7].
3. Repeat these steps for each PUSH ROD HOUSING ASSEMBLY [ITEM 12].

**IMPORTANT:** Check to verify all fasteners are tight and test the operation of the STEP EDGE DETECTORS on steps before first use with a load.





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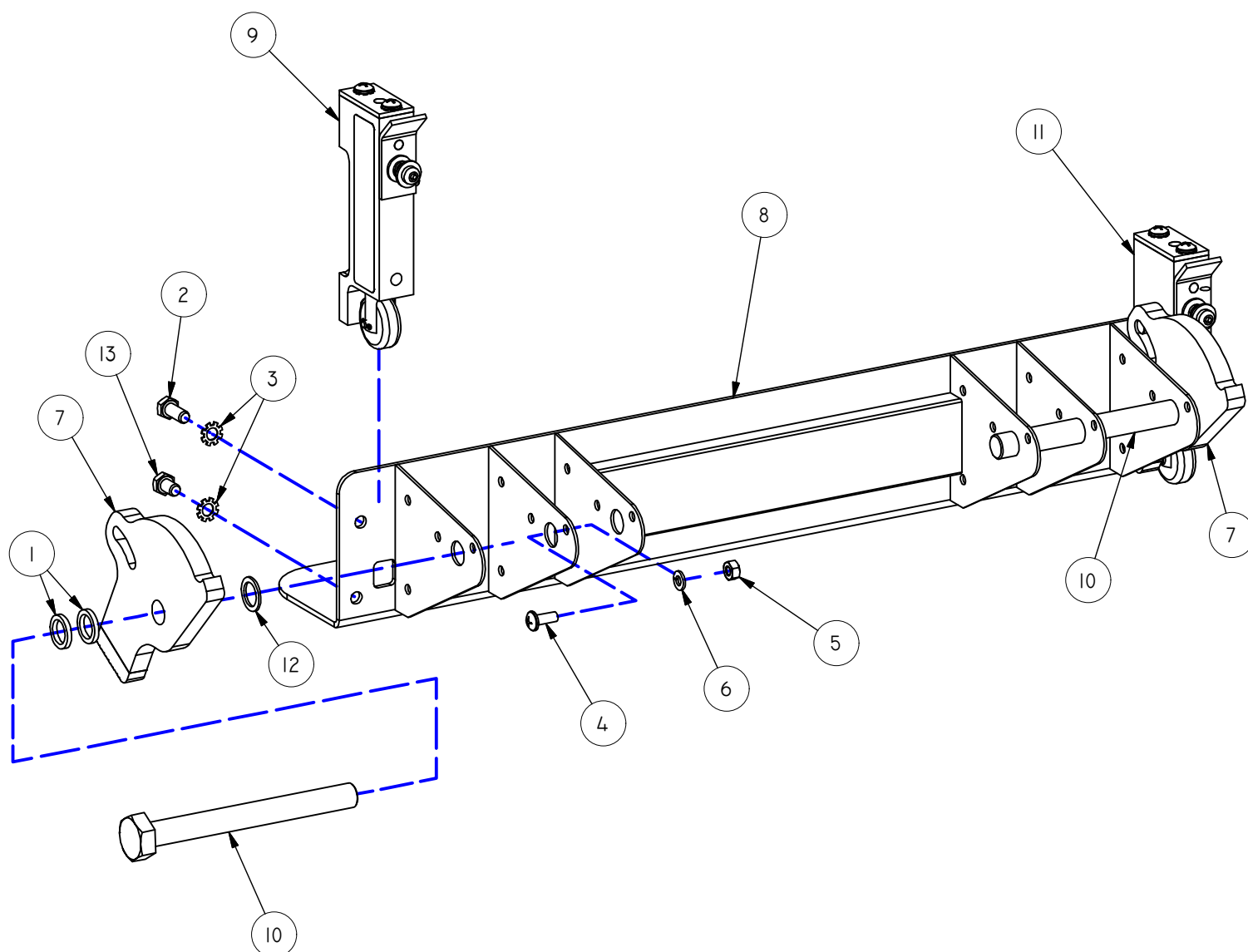
SED-I Kit INSTALLATION INSTRUCTIONS

6/12/2013

MODELS:

PN

1434-20



PARTS LIST

ITEM	P/N	TITLE	QTY
1	010	NYLON WASHER, 5/8"ID x 7/8"OD x 1/8"	4
2	0235	HEX BOLT, 5/16"-18UNC 3/4"	2
3	0333	EXTERNAL TOOTH LOCK WASHER, 5/16"	4
4	0570	MACHINE SCREW, 1/4-20UNC 5/8"	8
5	0582	HEX NUT, 1/4 - 20UNC	8
6	0584	SPLIT LOCK WASHER, 1/4"	8
7	1413	CAM, BRAKE ASSEMBLY	2
8	1435	TOE PLATE	1
9	1436	PUSH ROD HOUSING ASSEMBLY LH	1
10	1437	AXEL BOLT 6IN	2
11	1438	ASSEMBLY, PUSH ROD HOUSING RH	1
12	230	NYLON WASHER, 5/8"ID x 7/8"OD x 1/16"	2
13	237	HEX BOLT, 5/16"-18UNC 1/2"	2

NOTE: APPLIES TO MODELS LISTED  
PRIOR TO SN 14-49658



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800 622 1359  
WWW.ESCALERA.COM

11/19/2014

MODELS:

MS (ALL) RLA-HC, EW

PN

1434-10

STEP EDGE DETECTOR RETRO KIT