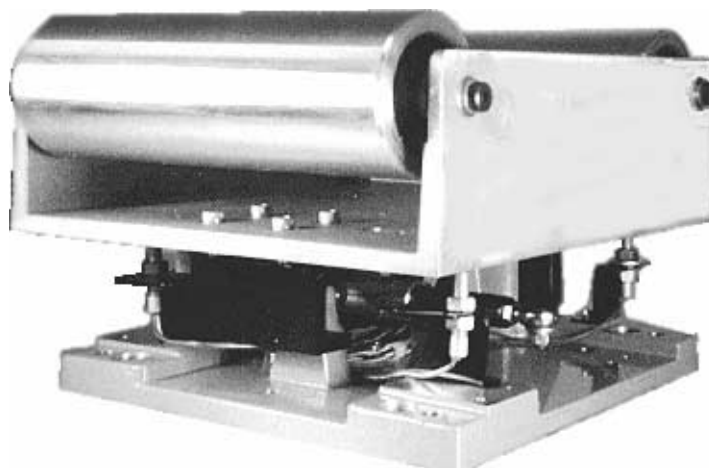




formerly Horton Industrial Products

“Web Controls”

**9", 12", AND 15" SMALL WEB GUIDES  
MODELS 964183, 964184, 964188, 964189, 964193, 964194, 964197 AND 964201  
INSTALLATION, OPERATION, AND MAINTENANCE INSTRUCTIONS**



Read this manual carefully, making full use of its explanations and instructions. The “Know How” of safe, continuous, trouble-free operation depends on the degree of your understanding of the system and your willingness to keep all components in proper operating condition. Pay particular attention to all **NOTES, CAUTIONS, and WARNINGS** to avoid the risk of personal injury or property damage. It is important to understand that these **NOTES, CAUTIONS, and WARNINGS** are not exhaustive. Nexen cannot possibly know or evaluate all conceivable methods in which service may be performed, or of the possible hazardous consequences of each method. Accordingly, anyone who uses a procedure that is not recommended by Nexen must first satisfy themselves that neither their safety or the safety of the product will be jeopardized by the service method selected.

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INSTALLATION

GUIDE ROLL MECHANISM

- 1. Position the Web Guide as close as possible to the critical area to which the web is being guided. Any roll between the lead out roll **D** and the critical area will detract from guiding accuracy (See Figure 1).
- 2. Find the web path to be used (See Figure 1).
  - a. Lead in roll **B** and lead out roll **D** are customer provided.
  - b. The web must travel through the Web Guide in the direction of the arrow on the Roll Base of the Web Guide.
  - c. Web lead in distance (**B** to **A**) and lead out distance (**C** to **D**) must be at least equal to the web width.

NOTE

1 1/4 times the web width is the recommended distance between web lead in and lead out.

- d. Ensure that the Web Guide roll **A** and **C** are parallel to the web lead in roll **B** and the lead out roll **D** when the Web Guide is in its mid-travel or centered position.

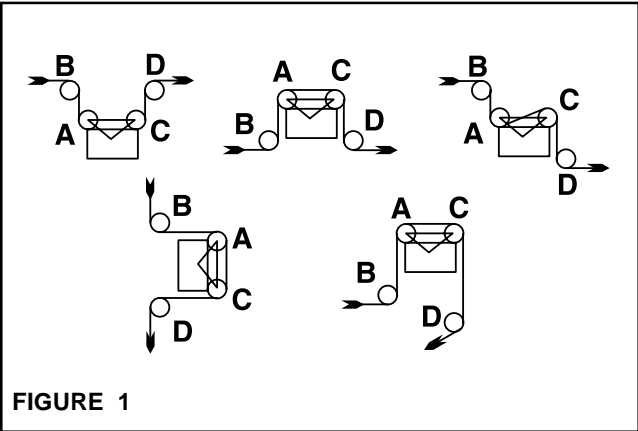


FIGURE 1

MOUNTING THE WEB GUIDE

Mount the Web Guide to the machine using the four M10 x 1.5 tapped mounting holes located on the underside of the Base (See Figure 2 and Table 1 for mounting dimensions).

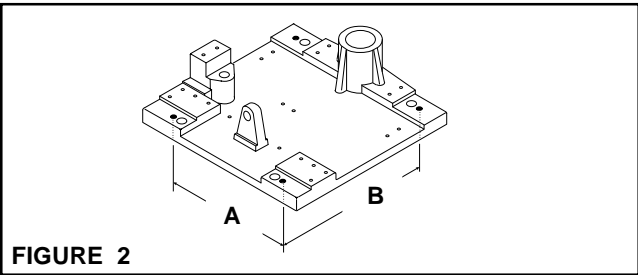


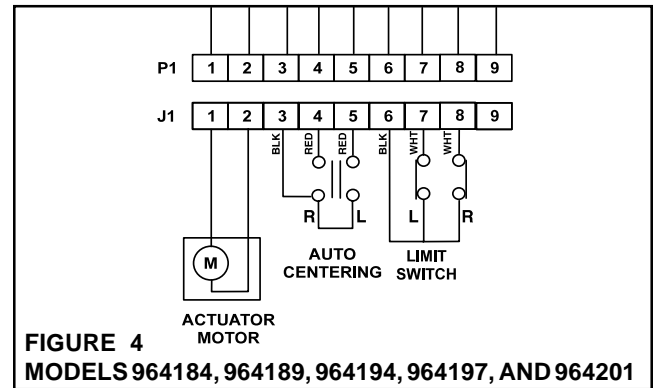
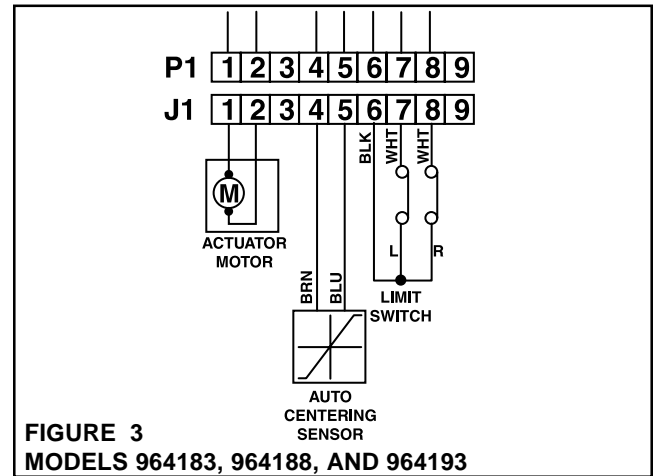
FIGURE 2

PRODUCT NO.	A	B
964183	8.465 In. [215 mm]	8.465 In. [215 mm]
964184	8.465 In. [215 mm]	8.465 In. [215 mm]
964188	11.465 In. [291 mm]	11.465 In. [291 mm]
964189	11.465 In. [291 mm]	11.465 In. [291 mm]
964193	11.465 In. [291 mm]	11.465 In. [291 mm]
964194	11.465 In. [291 mm]	11.465 In. [291 mm]
964197	11.465 In. [291 mm]	11.465 In. [291 mm]
964201	11.465 In. [291 mm]	11.465 In. [291 mm]

TABLE 1

## ELECTRICAL CONNECTIONS

Nexen makes an optional Cable which is compatible with the Small Web Guide. This cable may be used to make connections between the customer supplied controller and the Linear Actuator, Centering Switches, and Limit Switches. **P1** mates with connector **J1** mounted on the Web Guide (See Figures 3 and 4).



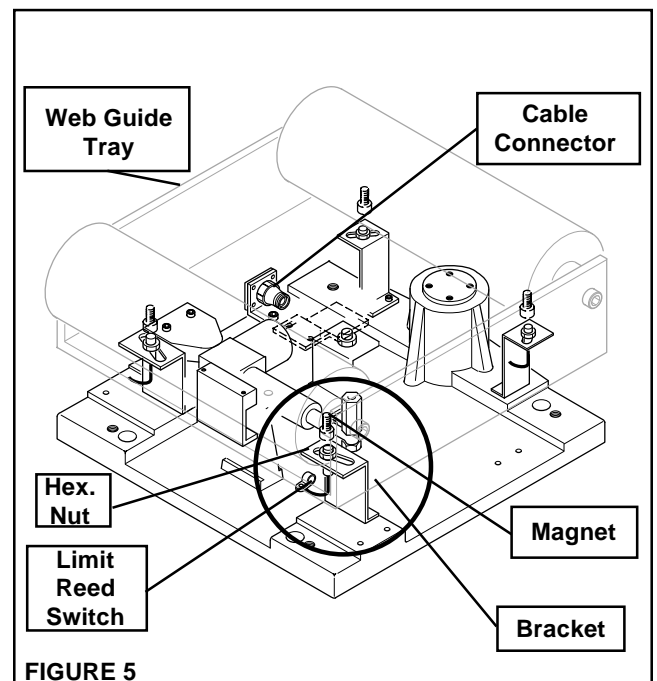
## MAINTENANCE

### LIMIT REED SWITCH ADJUSTMENT

#### CAUTION

The Limit Reed Switches have been set by Nexen for maximum travel. Limit Reed Switches must be adjusted to interrupt movement before contact is made with a physical obstruction or stop. If there is no obstruction, the Limit Reed Switches should remain in their factory set positions for maximum travel.

1. Loosen the Hex. Nuts holding the Limit Reed Switches to the Brackets (See Figure 5).
2. Adjust the height of the Limit Reed Switches until there is approximately 0.050 In. [1.27 mm] gap between the Limit Reed Switches and the Magnets (See Figure 5).
3. Slide the Limit Reed Switches along the slots in the Brackets to their fully extended positions (toward the outside of the Web Guide) (See Figure 5).



4. Turn the controller to **ON** and set it to the Manual Control Mode.
5. Using the controller switches, move the Web Guide Tray in one direction (right or left) until the desired end of travel is reached.
6. Turn the controller **OFF** and remove the Cable from the Connector (See Figure 5).
7. Connect an ohmmeter to pins **6** and **7** (left Limit Reed Switch) or pins **6** and **8** (right Limit Reed Switch) of the Cable Connector; then, set the ohmmeter to the lowest scale of resistance (See Figure 5).
8. The Limit Reed Switch is normally closed and will give a zero resistance reading when no magnet is present. Slowly slide the Limit Reed Switch toward the Magnet until an infinite resistance (open circuit) reading is seen. The change in reading corresponds to the activation of the Limit Reed Switch.
9. Tighten the Hex. Nuts holding the Limit Reed Switch to the Bracket.
10. Install the Cable.
11. Repeat Steps **4** through **10** for the other Limit Reed Switch.

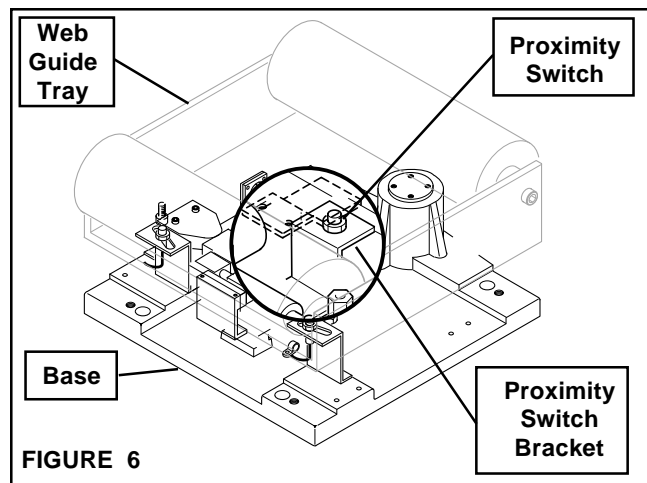
## AUTO CENTERING SWITCH ADJUSTMENT

### NOTE

The Auto Centering Switches have been set at the factory to the centered position and should not require adjustment.

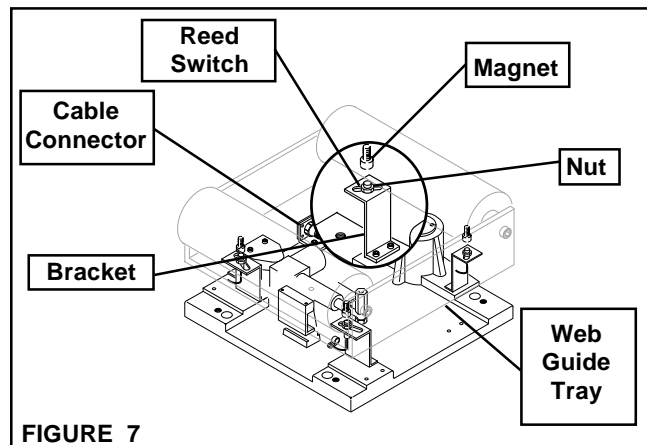
### Web Guide with Proximity Switch Auto Centering

1. Connect a voltmeter across the Proximity Switch terminals on the controller (See Figure 6).
2. Center the Web Guide Tray and verify the edges of the Web Guide Tray and Base are parallel to each other (See Figure 6).
3. Loosen the Socket Head Cap Screws and adjust the Proximity Switch Bracket as necessary to obtain a 7.0 volt reading on the voltmeter (See Figure 6); then, tighten the Socket Head Cap Screws when the adjustment is complete.
4. Disconnect the voltmeter from the terminals.



### Web Guide with Reed Switch Auto Centering

1. Loosen the Hex. Nuts holding the Reed Switches to the Brackets (See Figure 7).
2. Adjust the height of the Reed Switches until there is approximately 0.050 In. [1.27 mm] gap between the Reed Switch and Magnet (See Figure 7).
3. Slide the Reed Switches along the slots in the Brackets to their fully extended positions (toward the rear of the Web Guide) (See Figure 7).
4. Turn the controller to **ON** and set it to the Manual Control Mode.
5. Using the controller switches, center the Web Guide Tray (See Figure 7).



6. Turn the controller to **OFF** and remove the Cable from the Cable Connector.
7. Connect an ohmmeter to pins **3** and **4** (left Reed Switch) or pins **3** and **5** (right Reed Switch) of the Cable Connector; then, set the ohmmeter to the lowest scale of resistance (See Figure 7).
8. The Reed Switches are normally open and will give an infinite resistance reading when no Magnet is present. Slowly slide the Reed Switch toward the Magnet until a zero resistance reading is seen; then, slowly back off the Reed Switch until an infinite resistance reading is seen.

This change in reading corresponds to the actuation of the Reed Switch. Adjust the Reed Switches to be set just before an infinite resistance is seen as they back away from the magnets. Both Reed Switches should be closed when adjustment is complete.

9. Tighten the Hex. Nuts holding the Reed Switch to the Bracket (See Figure 7).
10. Repeat Steps **7** through **9** for the other Reed Switch.
11. Reinstall the Cable.

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## REPLACEMENT PARTS

The item or balloon number for all Nexen products is used for part identification on all product parts lists, product price lists, unit assembly drawings, bills of materials, and instruction manuals.

When ordering replacement parts, specify model designation, item number, part description, and quantity. Purchase replacement parts through your local Nexen Distributor.

PARTS LIST

MODELS 964184, 964189, 964194, 964197, AND 964201

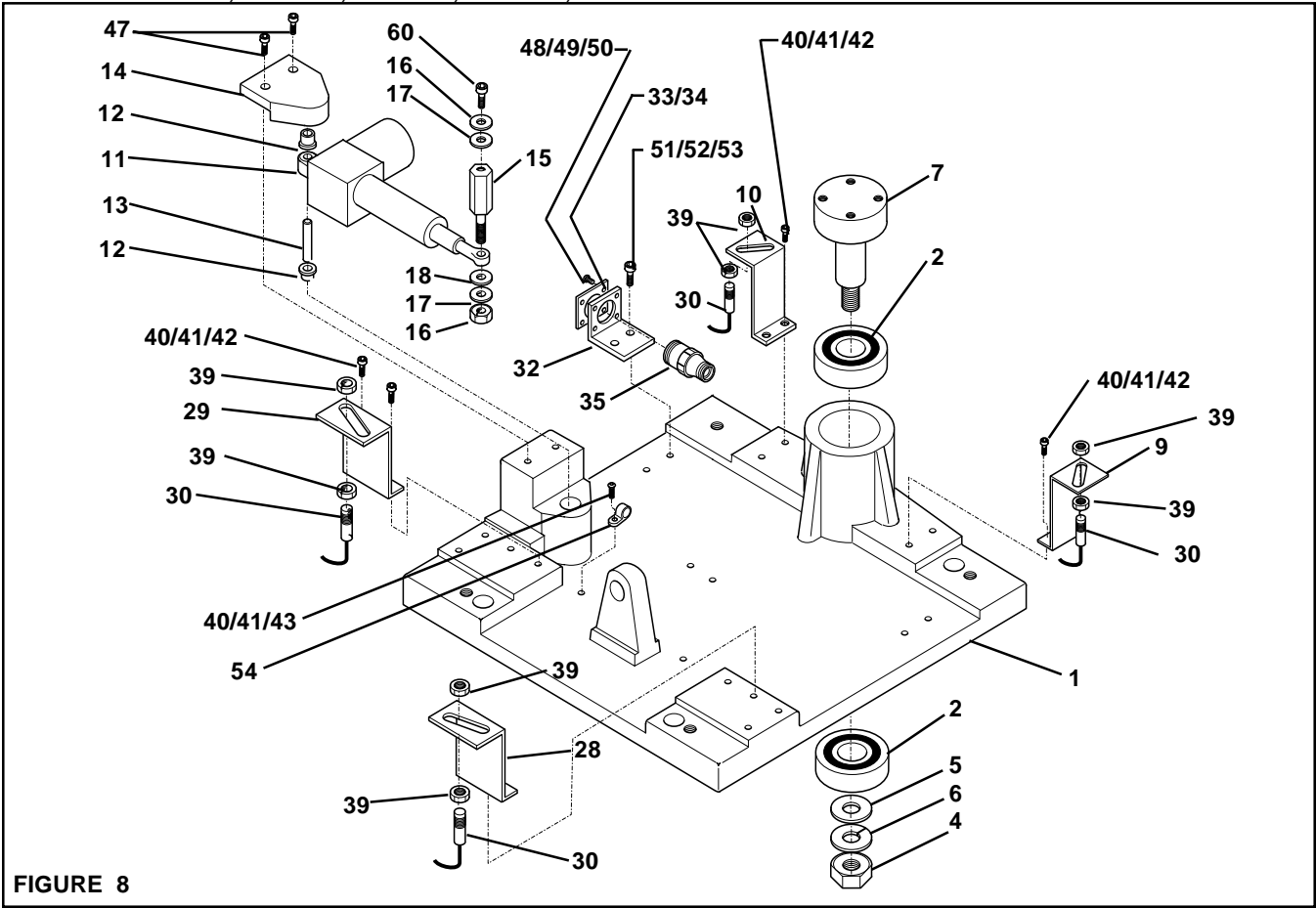


FIGURE 8

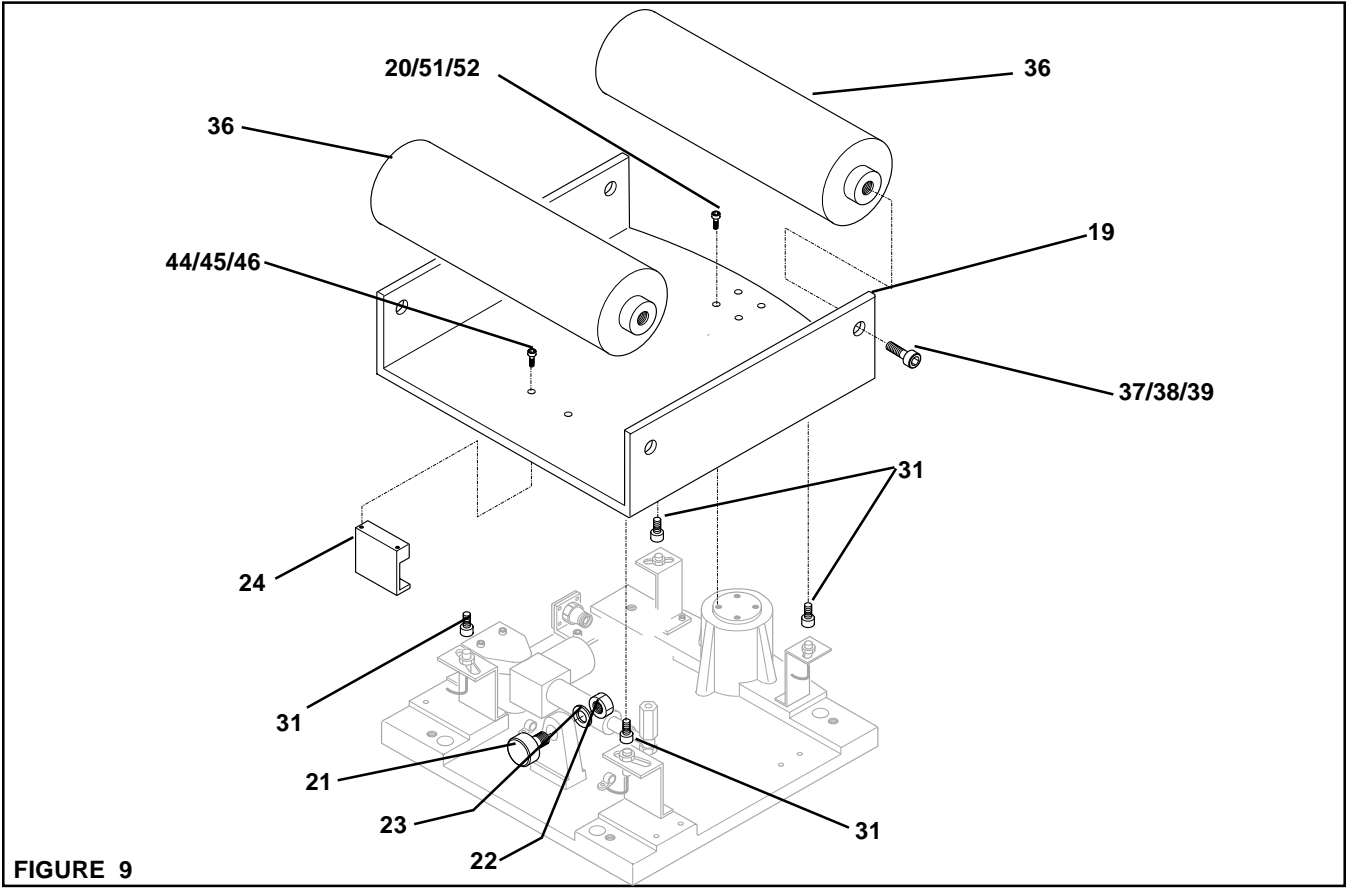


FIGURE 9

ITEM	DESCRIPTION	QTY
1	Base	1
2	Bearing	2
4	Hex. Nut	1
5	Flat Washer	1
6	Lock Washer	1
7	Center Pivot Pin	1
9	Left Centering Bracket	1
10	Right Centering Bracket	1
11	Ball Drive Actuator	1
12	Flange Bearing	2
13	Dowel Pin	1
14	Actuator Bracket	1
15	Actuator Pivot Shaft	1
16	Hex. Nut	1
17	Lock Washer	2
18	Flat Washer	2
19	Roll Tray	1
20	Socket Head Cap Screw	4
21	Cam Follower Bearing	1
22	Hex. Nut	1
23	Lock Washer	1
24	Bearing Guide Rail	1
28	Left Limit Switch Bracket	1
29	Right Limit Switch Bracket	1
30	Reed Switch	4
31	Magnet	4

ITEM	DESCRIPTION	QTY
32	Web Guide Connector Bracket	1
33	Pin Contact	8
34	Square Flange Receptacle	1
35	Cable Clamp	1
36	Idler Roller	2
37	Socket Head Cap Screw	4
38	Lock Washer	4
39	Flat Washer	12
40	Flat Washer	10
41	Lock Washer	10
42	Socket Head Cap Screw	8
43	Pan Head Screw	2
44	Socket Head Cap Screw	4
45	Flat Washer	2
46	Lock Washer	2
47	Socket Head Cap Screw	2
48	Flat Washer	4
49	Lock Washer	4
50	Pan Head Screw	4
51	Flat Washer	6
52	Lock Washer	6
53	Socket Head Cap Screw	2
54	Nylon Cable Clamp	2
55	Arrow Sticker (Not Shown)	2
57 <sup>1</sup>	Cable (Not Shown)	1
60	Socket Head Cap Screw	1

<sup>1</sup> Product No. 964197 only.

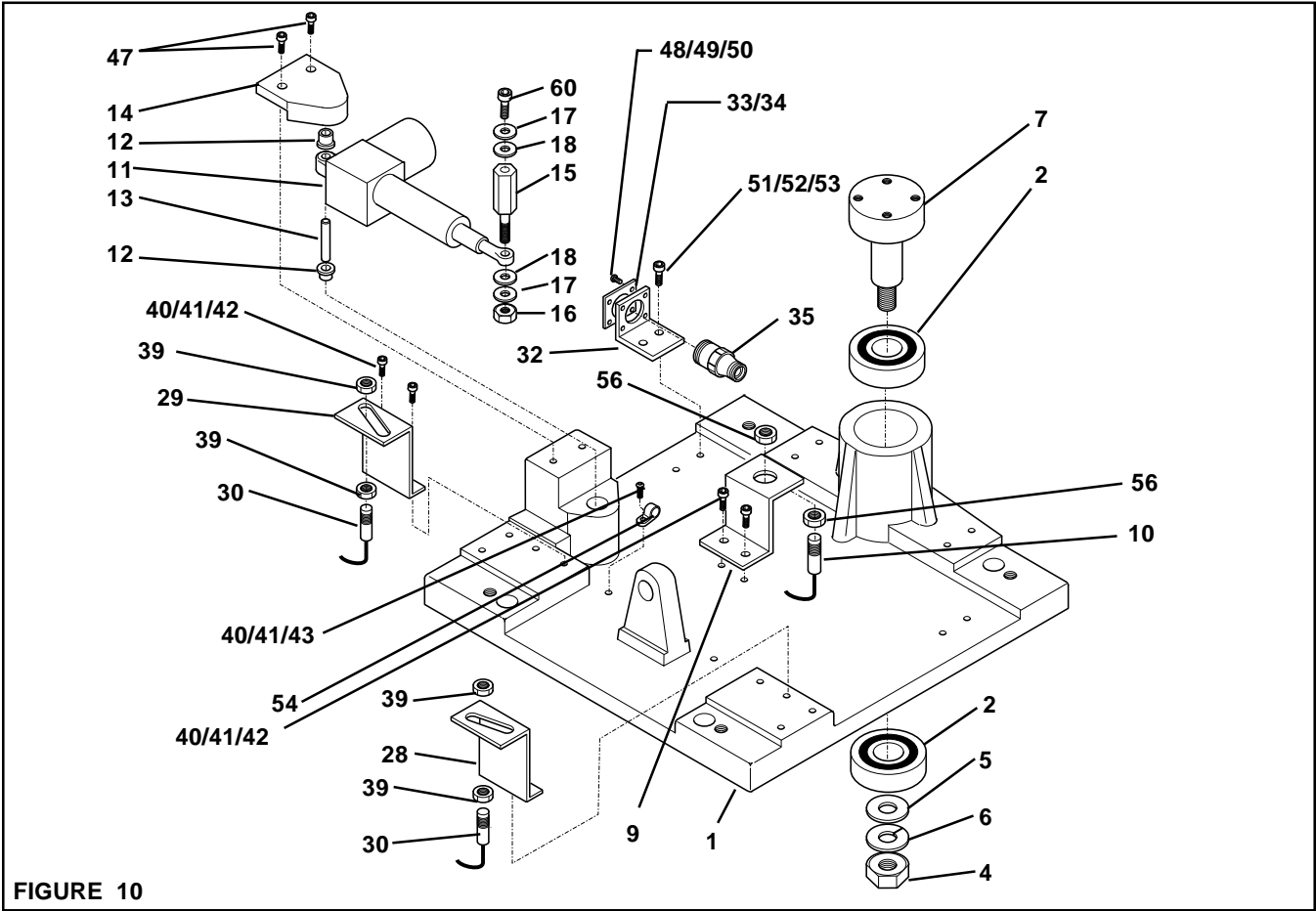


FIGURE 10

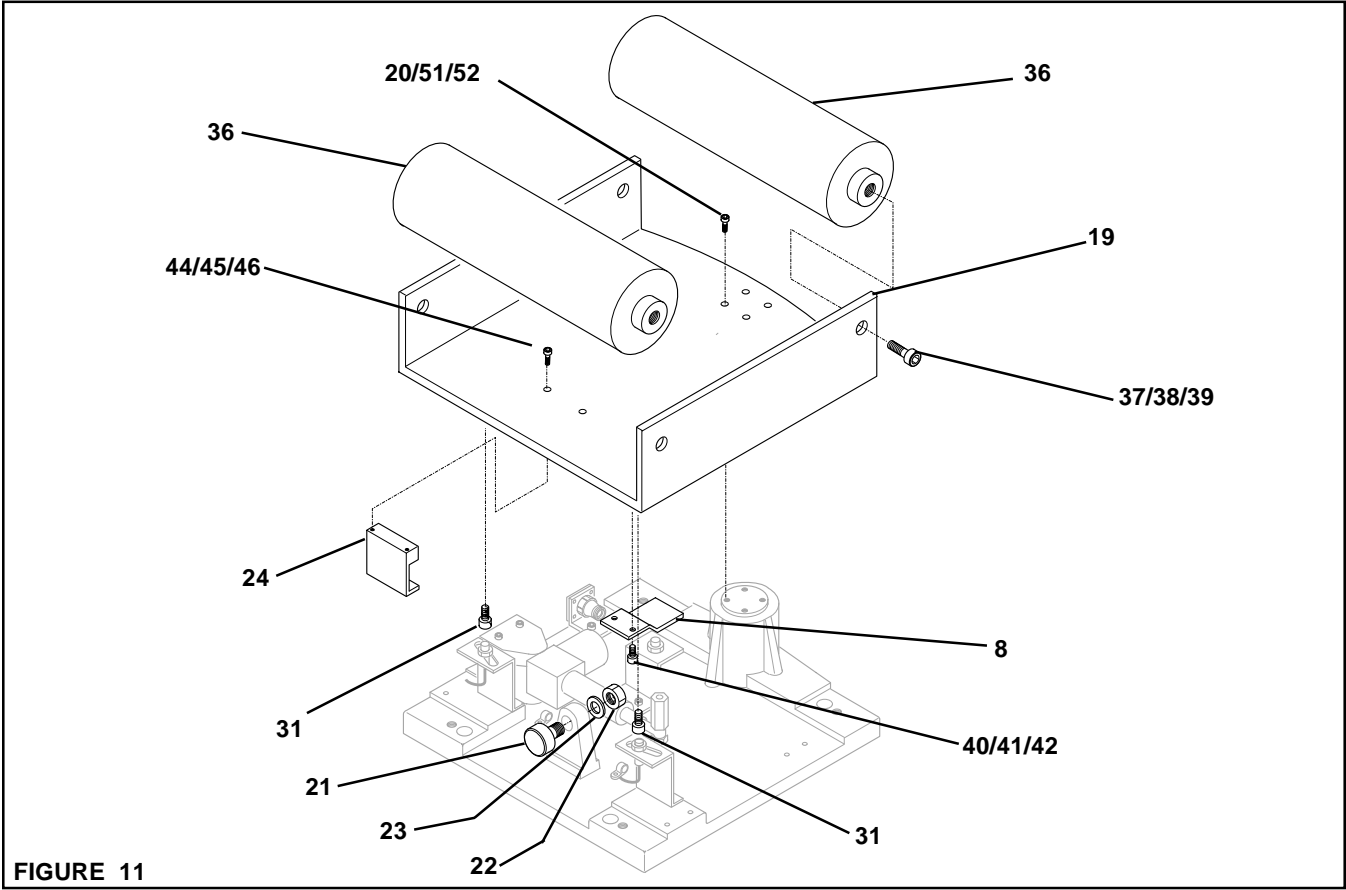


FIGURE 11



ITEM	DESCRIPTION	QTY
1	Base	1
2	Bearing	2
4	Hex. Nut	1
5	Flat Washer	1
6	Lock Washer	1
7	Center Pivot Pin	1
8	Proximity Switch Bracket	1
9	Proximity Switch Base	1
10	Auto Centering Sensor	1
11	Ball Drive Actuator	1
12	Flange Bearing	2
13	Dowel Pin	1
14	Actuator Bracket	1
15	Actuator Pivot Shaft	1
16	Hex. Nut	1
17	Lock Washer	2
18	Flat Washer	2
19	Roll Tray	1
20	Socket Head Cap Screw	4
21	Cam Follower Bearing	1
22	Hex. Nut	1
23	Lock Washer	1
24	Bearing Guide Rail	1
28	Left Limit Switch Bracket	1
29	Right Limit Switch Bracket	1
30	Reed Switch	2
31	Magnet	2

ITEM	DESCRIPTION	QTY
32	Web Guide Connector Bracket	1
33	Pin Contact	8
34	Square Flange Receptacle	1
35	Cable Clamp	1
36	Idler Roller	2
37	Socket Head Cap Screw	4
38	Lock Washer	4
39	Flat Washer	12
40	Flat Washer	10
41	Lock Washer	10
42	Socket Head Cap Screw	8
43	Pan Head Screw	2
44	Socket Head Cap Screw	4
45	Flat Washer	5
46	Lock Washer	5
47	Socket Head Cap Screw	2
48	Flat Washer	4
49	Lock Washer	4
50	Pan Head Screw	4
51	Flat Washer	6
52	Lock Washer	6
53	Socket Head Cap Screw	2
54	Nylon Cable Clamp	2
55	Arrow Sticker (Not Shown)	2
56	Flat Washer	2
60	Socket Head Cap Screw	1

## **WARRANTY**

Nexen Group, Inc. (Nexen) warrants its product(s) [the Product(s)] will be free from defects in materials and workmanship under normal use and service conditions for a period of 12 months from the date of shipment. NO OTHER WARRANTIES, WHETHER EXPRESS, IMPLIED, OR STATUTORY, INCLUDING WITHOUT LIMITATION WARRANTIES OF MERCHANTABILITY, OR OF FITNESS FOR A PARTICULAR PURPOSE, ARE GIVEN, AND ALL SUCH OTHER WARRANTIES ARE HEREBY EXPRESSLY DISCLAIMED.

### **Conditions**

This warranty applies only if: (a) the Product has been installed, used, and maintained in accordance with any applicable Nexen installation or maintenance manual for the Product; (b) the alleged defect is not attributable to normal wear and tear; (c) the Product has not been altered, misused, or used for purposes other than those for which it was intended; and (d) the claimant has complied with the warranty claim procedures set out below in Warranty Claim Procedures.

### **Exclusive Remedy**

The sole and exclusive remedy for a breach of this warrant shall be, at Nexen's sole election, repair or replacement with new, serviceably used or reconditioned Product, or issuance of a credit in the amount of the current Nexen discounted price for the Product.

### **Limitation of Damages**

In no event shall Nexen be liable for any consequential, indirect, incidental, or special damages of any nature whatsoever, including without limitation, lost profits arising from the sale or use of the Products.

### **Warranty Claim Procedures**

To make a claim under this warranty, the claimant must give written notice of the alleged defect to Nexen and deliver the Product to Nexen within one year of the date on which the alleged defect first became apparent.

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