CLS NextGen Series

Cargo Lift Scale

Service Manual

RICE LAKE®
WEIGHING SYSTEMS

July 29, 2026

PN 233026 Rev A

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www.ricelake.com

Revision History

This section tracks and describes manual revisions for awareness of major updates.

Revision	Date	Description
A	July 29, 2026	Initial release

Table i. Revision Letter History

Contents

1.0 Introduction

The Cargo Lift Scale (CLS) NextGen Series is a rugged, dependable scale that can withstand many years of repeated use. When mounted on a forklift, the CLS weighs loads immediately instead of transporting the load to a floor scale and then to its final destination.

This manual provides instructions for servicing the CLS scale and is intended for use by qualified technicians. It includes the following topics:

A. Scale removal and top cover removal (Section 1.5 and Section 1.6 on page 8)
B. Centering pin replacement (Section 2.0 on page 9)
C. Centering notch replacement (Section 3.0 on page 11)
D. Safety bolt (Section 4.0 on page 13)
E. Junction box replacement (Section 5.0 on page 15)
F. Overload stop adjustment (Section 6.0 on page 17)
G. Load cell replacement (Section 7.0 on page 19)
H. Flexure replacement (Section 8.0 on page 26)

Manuals are available from Rice Lake Weighing Systems at **www.ricelake.com/manuals**

Warranty information is available at **www.ricelake.com/warranties**

1.1 Required Tools

The following tools are necessary for servicing the CLS NextGen Series Scale. Ensure all required tools are present before beginning a repair procedure.

Required Tools	A	B	C	D	E	F	G	H	Checklist
3/4 in modified box wrench (PN 96196)							X	X	
Adjustable wrench	X	X	X	X	X	X	X	X	
3/4 in socket wrench, with extensions							X	X	
7/16 in socket wrench, with extensions							X	X	
1-1/8 in socket wrench for overload stop						X	X	X	
5/32 in hex wrench					X			X	
1/4 in hex wrench		X	X						
5/16 in hex wrench								X	
3/8 in hex wrench						X		X	
1/2 in hex wrench	X								
5/8 in hex wrench				X				X	
6 mm hex wrench								X	
Feeler gauges						X		X	
Torque wrench		X	X	X	X	X	X	X	
VIRTUI3® PC-based Program for CLS Series Forklift Scale					X		X	X	
Digital multimeter (capable of reading millivolts) or CLS junction box with VIRTUI3®							X	X	
Pry bar							X	X	
Rubber mallet or dead-blow hammer								X	
Two 4 x 4 x 24 wood blocks								X	

Table 1-1. Required Tools

1.2 Safety

Safety Definitions:

DANGER: Indicates an imminently hazardous situation that, if not avoided, will result in death or serious injury. Includes hazards that are exposed when guards are removed.

WARNING: Indicates a potentially hazardous situation that, if not avoided, could result in serious injury or death. Includes hazards that are exposed when guards are removed.

CAUTION: Indicates a potentially hazardous situation that, if not avoided, could result in minor or moderate injury.

IMPORTANT: Indicates information about procedures that, if not observed, could result in damage to equipment or corruption to and loss of data.

General Safety

Do not operate or work on this equipment unless this manual has been read and all instructions are understood. Failure to follow the instructions or heed the warnings could result in injury or death. Contact any Rice Lake Weighing Systems dealer for replacement manuals.

WARNING

Failure to heed could result in serious injury or death.

Take all necessary safety precautions when servicing the scale carriage including wearing safety shoes, protective eye wear and using the proper tools.

Ensure feet, legs and other body parts are not under the scale when lowering.

Ensure there is adequate lighting when servicing the scale.

Do not allow minors (children) or inexperienced persons to operate this unit.

Do not operate without all shields and guards in place.

Do not jump on the scale.

Do not use for purposes other then weight taking.

Do not place fingers into slots or possible pinch points.

Do not use any load bearing component that is worn beyond 5% of the original dimension.

Do not use this product if any of the components are damaged.

Do not exceed the rated load limit of the unit.

Do not make alterations or modifications to the unit.

Do not remove or obscure warning labels.

Keep hands, feet and loose clothing away from moving parts.

Do not use bleach, solvents or aggressive substances to clean the product.

Do not submerge.

Product maintenance and repair must be performed by qualified service personnel.

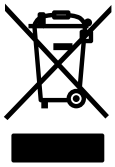
Use a grounding wrist strap to protect components from electrostatic discharge (ESD) damage when working inside the product enclosure.

Do not intentionally drop objects on the scale.

Do not use for purposes other than weight taking.

Adhere to all forklift manufacturer safety instructions and warnings.

1.3 Disposal



Product Disposal

The product must be brought to appropriate separate waste collection centers at the end of its life cycle.

Proper separate collection to recycle the product helps prevent possible negative effects on the environment and to health, and promotes the recycling of the materials. Users who dispose of the product illegally shall face administrative sanctions as provided by law.

Battery Disposal

Dispose of batteries at appropriate waste collection centers at the end of their life cycle in accordance with local laws and regulations. Batteries and rechargeable batteries may contain harmful substances that should not be disposed of in household waste. Batteries may contain harmful substances including but not limited to: cadmium (Cd), lithium (Li), mercury (Hg) or lead (Pb). Users who dispose of batteries illegally shall face administrative sanctions as provided by law.

WARNING: Risk of fire and explosion. Do not burn, crush, disassemble or short-circuit batteries. Do not replace battery with incorrect type.

1.4 FCC Compliance

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Cet appareil est conforme à la partie 15 du règlement de la FCC. Son utilisation est soumise aux deux conditions suivantes : (1) cet appareil ne doit pas provoquer d'interférences nuisibles, et (2) cet appareil doit accepter toute interférence reçue, y compris les interférences susceptibles de provoquer un fonctionnement indésirable.

1.5 Scale Removal

The CLS scale may require removal from the forklift before servicing. Perform the following to remove the scale.

1. Remove forks from the scale assembly (see Section 7.1 on page 19).
2. Remove top cover (see Section 1.6).

NOTE: A 5/8-11 eyebolt may be necessary to remove the top cover.

3. Disconnect the coiled cable from the forklift.
4. Use 1/2 in socket head wrench to remove lower cleats.
5. Use a lift to remove the scale from the forklift.

1.6 Top Cover Removal

Many service procedures require removal of the CLS scale's top cover to access components. Perform the following to remove the top cover of the scale.

1. Use a 3/4 in wrench to remove the four hex head cap screws securing the top cover (see Figure 1-1).
2. Remove and set aside the top cover.

NOTE: When reinstalling the cover, torque cap screws to 40 lb-ft.

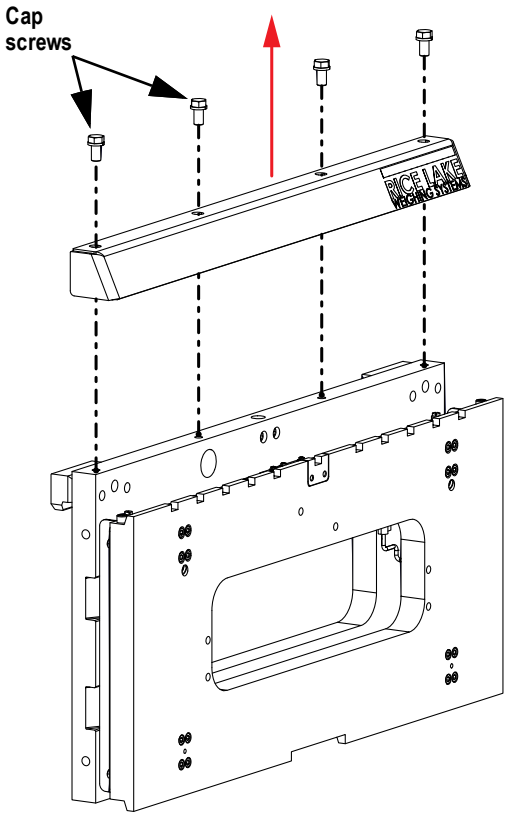


Figure 1-1. Top Cover Removal

2.0 Centering Pin Replacement

The CLS NextGen Series provides a removable centering pin for ease of service and replacement. This section describes how to remove and replace the centering pin. See column A of Table 1-1 on page 5 for required tools.

NOTE: Scale may require removal from the forklift before replacing the centering pin.

1. Remove the top cover of the scale (see Section 1.5 on page 8).
2. Locate the removable centering pin.

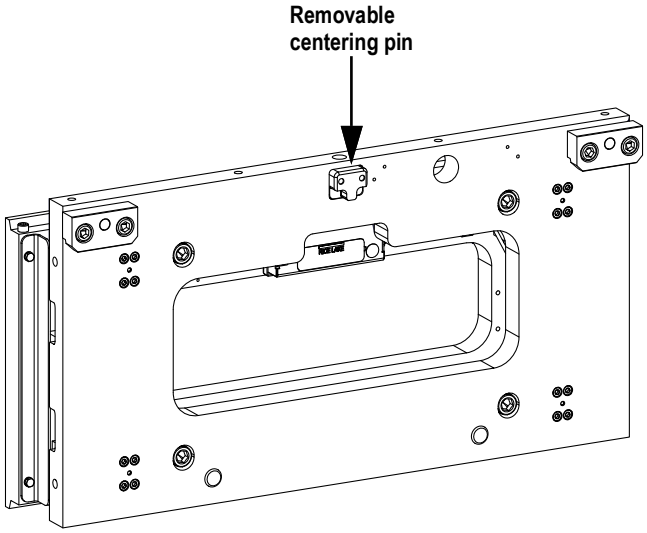


Figure 2-1. Centering Pin Location

3. Use 1/4 in hex wrench to remove the two hex socket cap bolts securing the centering pin to the back plate.

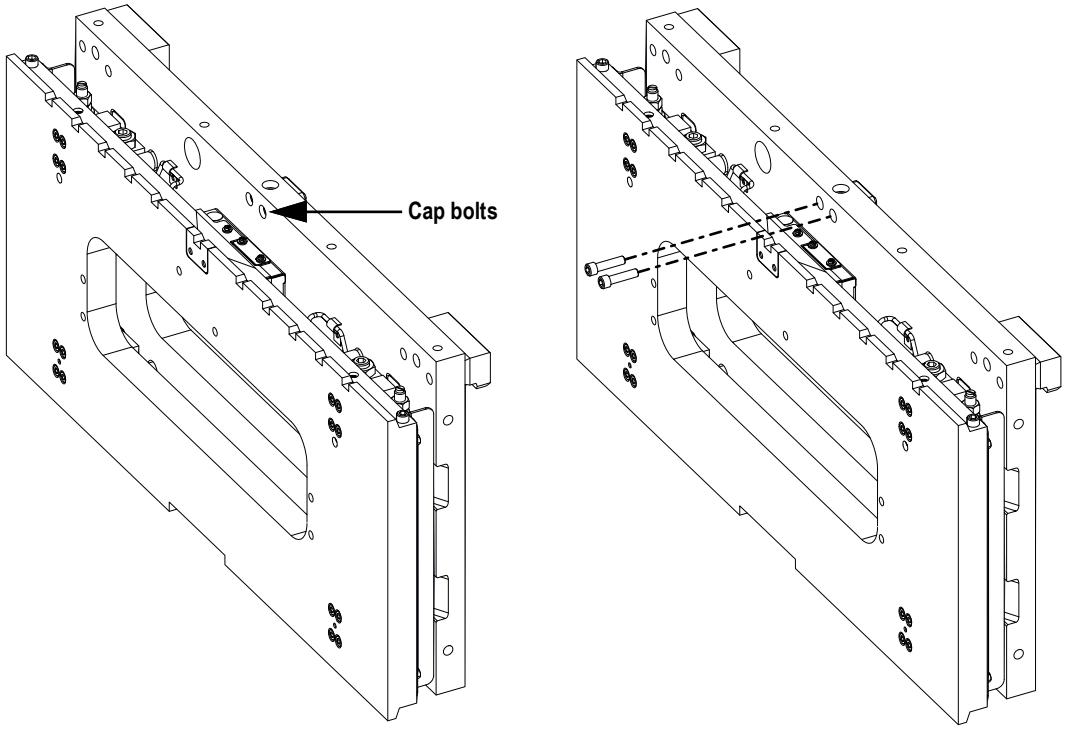


Figure 2-2. Centering Pin Cap Bolt Locations

4. Remove the centering pin from the back plate.

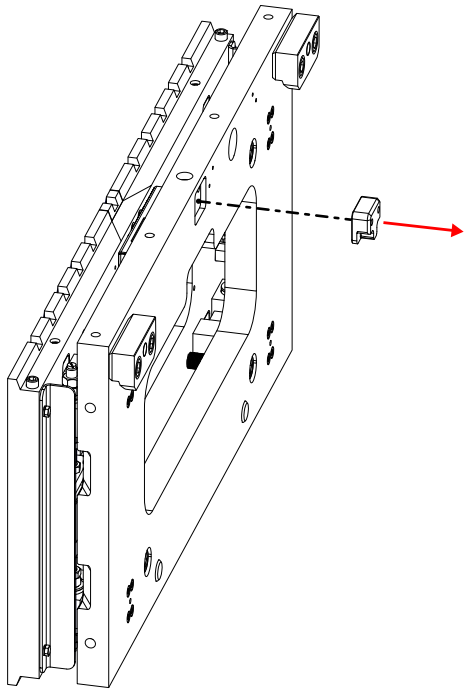


Figure 2-3. Centering Pin Removal

5. Install the new centering pin onto the back plate using the two cap bolts removed in Step 3.
6. Torque the cap bolts to 30 lb-ft.

3.0 Centering Notch Replacement

The CLS NextGen Series provides a removable centering notch for ease of service and replacement. This section describes how to remove and replace the centering notch. See column B of Table 1-1 on page 5 for required tools.

1. Remove the top cover of the scale (see Section 1.5 on page 8).
2. Locate the removable centering notch.

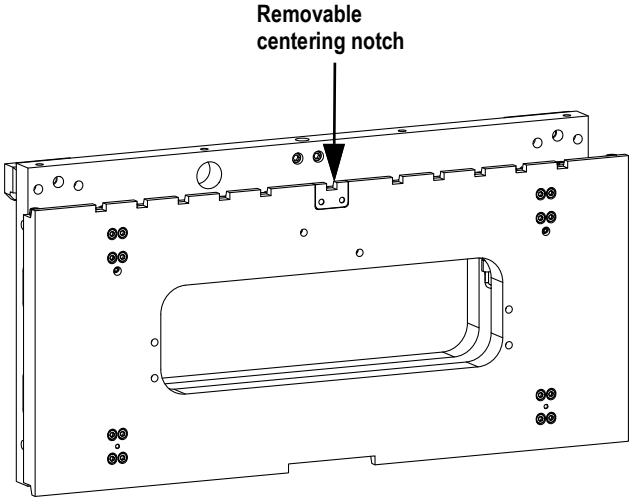


Figure 3-1. Centering Notch Location

3. Use 1/4 in hex wrench to remove the two hex socket head cap bolts securing the removable centering notch to the front plate.

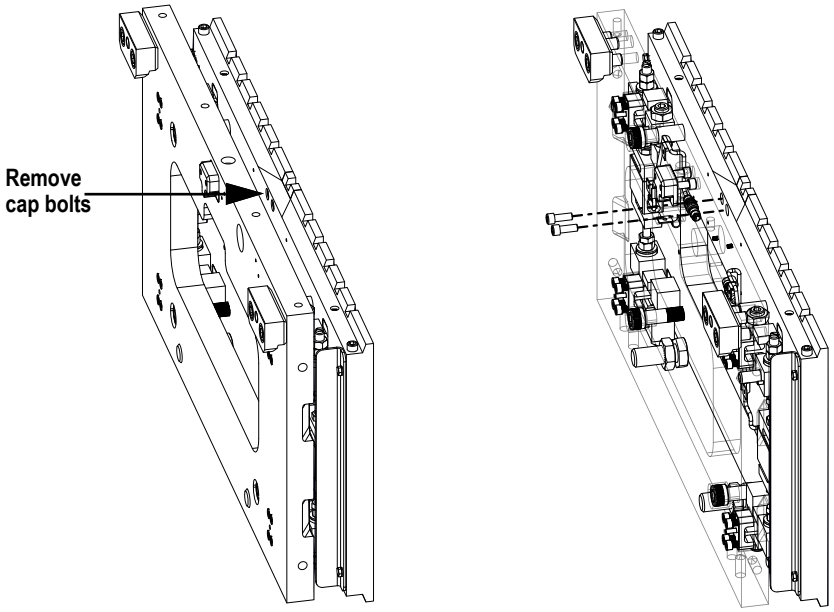


Figure 3-2. Centering Notch Cap Bolts

4. Remove the centering notch from the front plate.

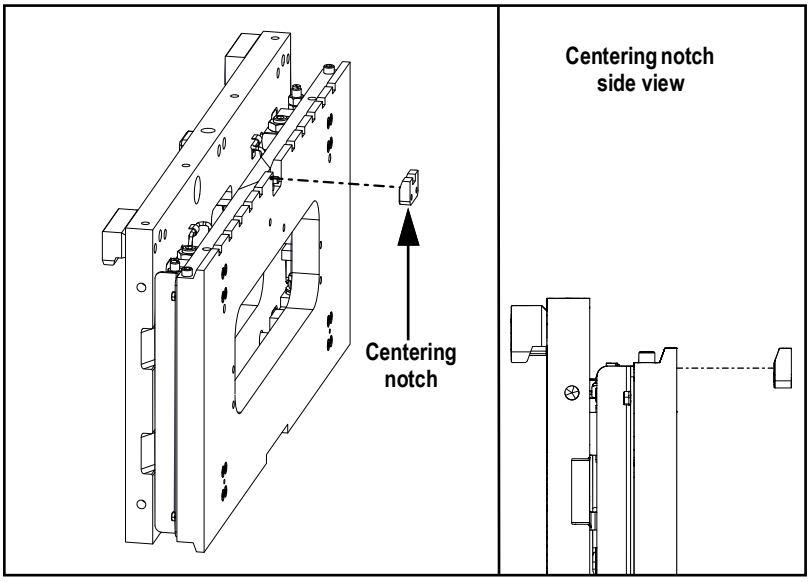


Figure 3-3. Centering Notch Removal

5. Install the new centering notch onto the front plate using the cap bolts removed in Step 3.

NOTE: Ensure the centering notch is installed in the orientation shown in Figure 3-3. The beveled end of the centering notch must be flush with the inside beveled edge of the front plate.

6. Torque the cap bolts to 30 lb-ft.

4.0 Safety Bolt

The safety bolts ensure the front plate remains secured to the rear plate of the scale if the flexures loosen or fail. This section describes how to inspect and adjust the safety bolts to ensure they function optimally. For safety bolt replacement parts, see Section 9.1.4 on page 37. See column C of Table 1-1 on page 5 for required tools.

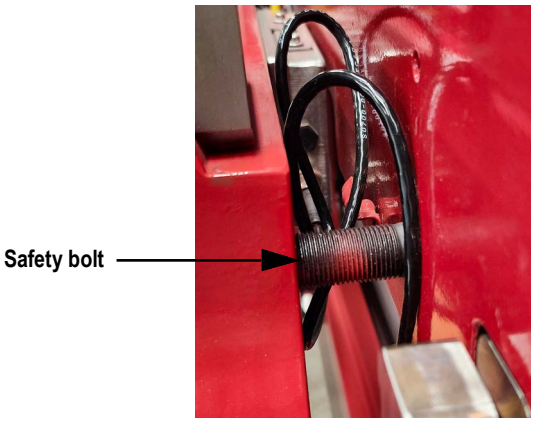


Figure 4-1. Safety Bolt

1. Remove scale from the forklift.
2. Locate the four hex socket head cap safety bolts inserted through the back plate of the scale.

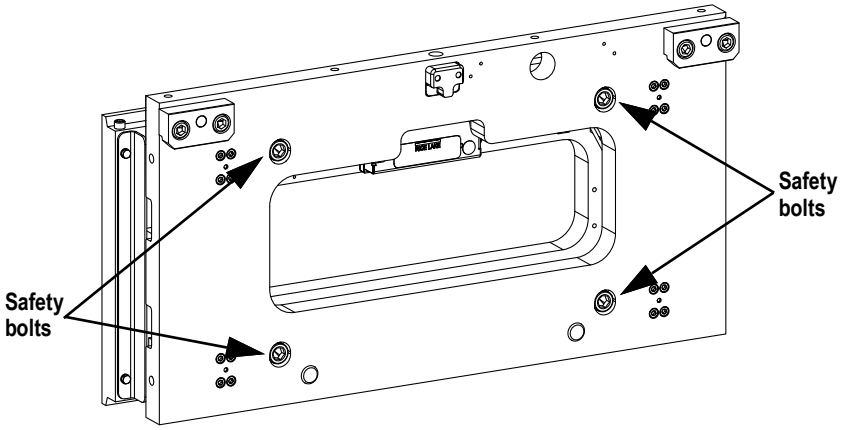


Figure 4-2. Safety Bolt Locations

3. Check for debris and any binding that may prevent the scale from functioning properly.

NOTE: Remove safety bolts to inspect if necessary.

NOTE: The circumference and depth of each counterbore should have full clearance from the safety bolt. The bolts thread into the front plate with no part of the bolt contacting the back plate (see Figure 4-3 on page 14).

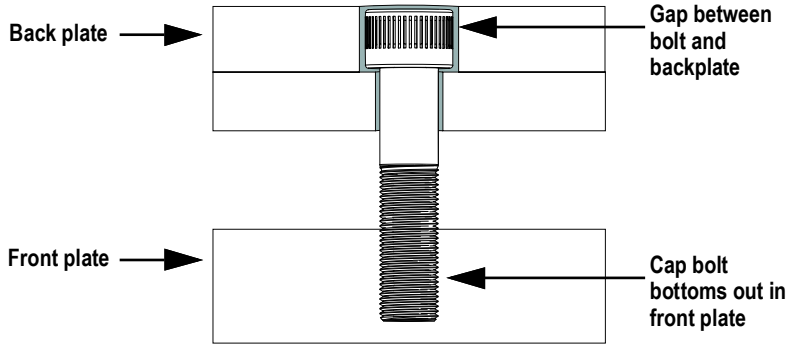


Figure 4-3. Safety Bolt Clearance

4. Ensure safety bolts are torqued to 100 lb-ft.

5.0 Junction Box Replacement

This section describes how to remove and replace the CLS NextGen Series Junction Box. See column D of Table 1-1 on page 5 for required tools.

1. Remove the top cover plate of the scale (see Section 1.5 on page 8).
2. Use 5/32 in hex wrench to remove the two hex socket head cap screws securing the junction box to the front plate of the scale.

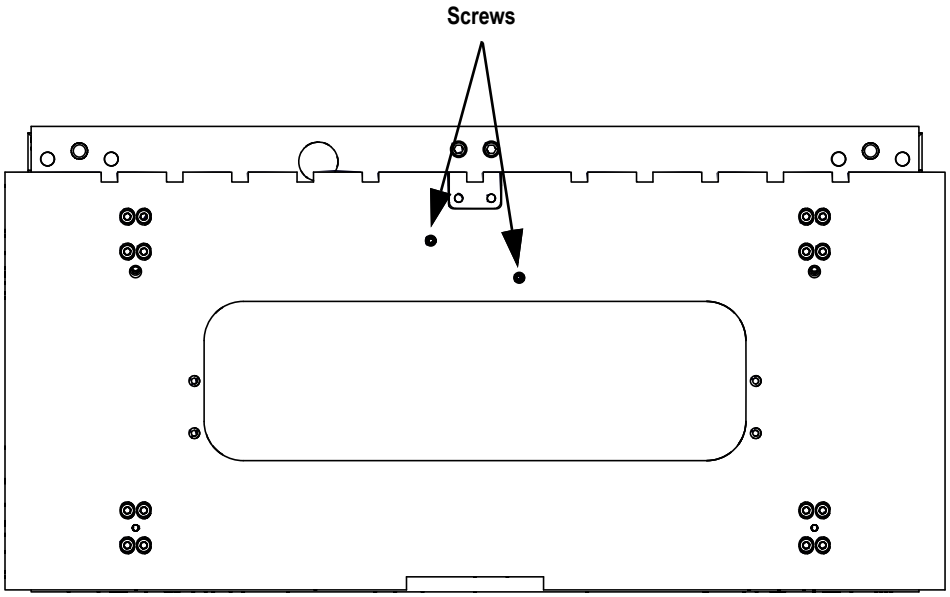


Figure 5-1. Junction Box Screw Location

3. Slide out the junction box from between the front and back plates of the scale.
4. Disconnect the coiled cable from the junction box.
5. Disconnect the two load cell cables.

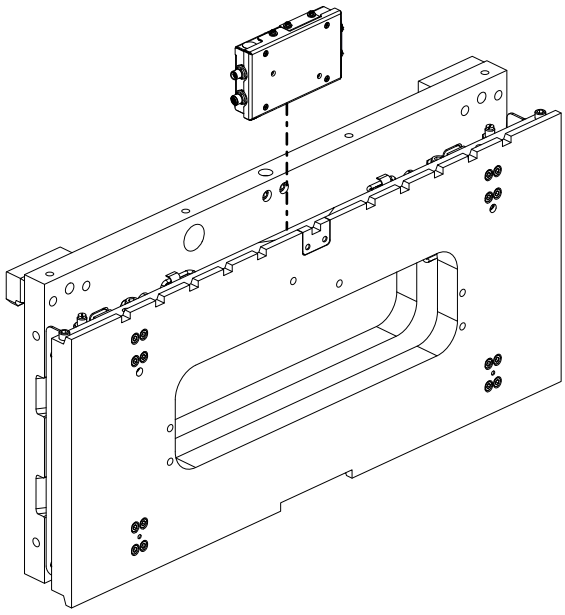


Figure 5-2. Junction Box Removal

6. Connect the two load cell cables and the coiled cable to the replacement junction box.

7. Position replacement junction box between the front and back plates of the scale.
8. Secure the junction box to the scale with the two hex screws removed in Step 2.
9. Torque hex screws to 50 lb-in.

5.1 Load Cell 5 Pin Connector Wiring

Pin	Wire Color	Function
1	Green	+SIG
2	White	-SIG
3	Red	+EXC
4	Black	-EXC
5	Yellow	Ground

Table 5-1. Load Cell Pin Connector Wiring (PN 166756)

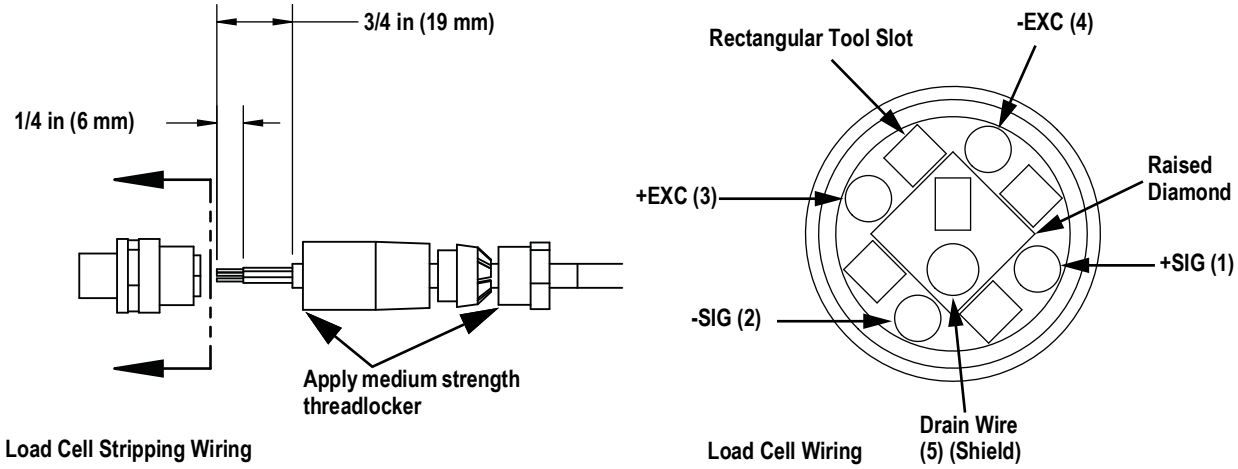


Figure 5-3. Load Cell Pin Connector Wiring

6.0 Overload Stops

This section describes how to adjust overload stops. See column E of Table 1-1 on page 5 for required tools.

NOTE: Overload stop adjustment should be performed after the load cell has been installed and tensioned. Debris in the overload stops can sometimes cause the appearance of a malfunctioning load cell. If troubleshooting, thoroughly clean the overload stops to help isolate the cause.

6.1 Overload Stops Setup

1. Locate the four overload stops (two upper and two lower) on the scale.

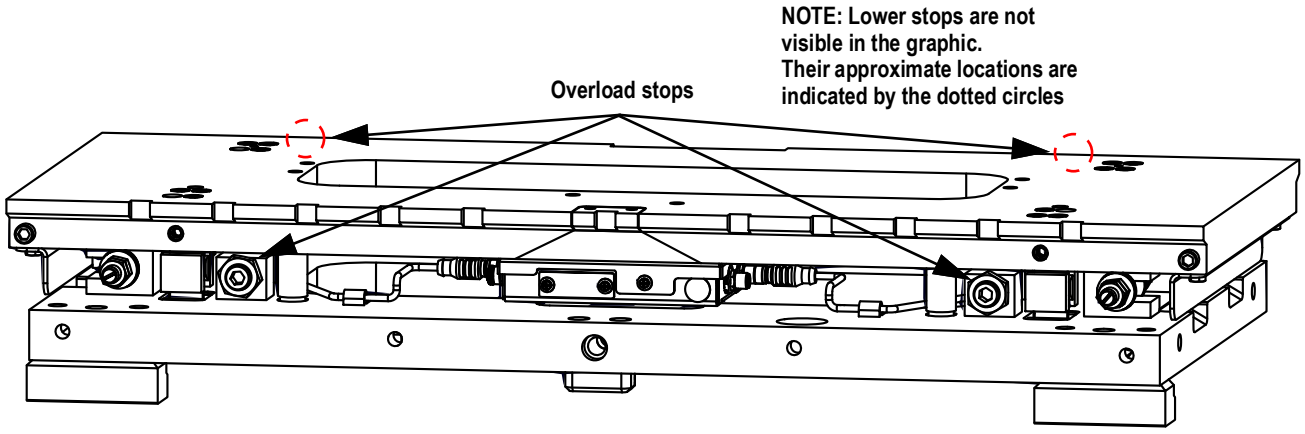


Figure 6-1. Overload Stop Locations

2. Remove the top cover of the scale.

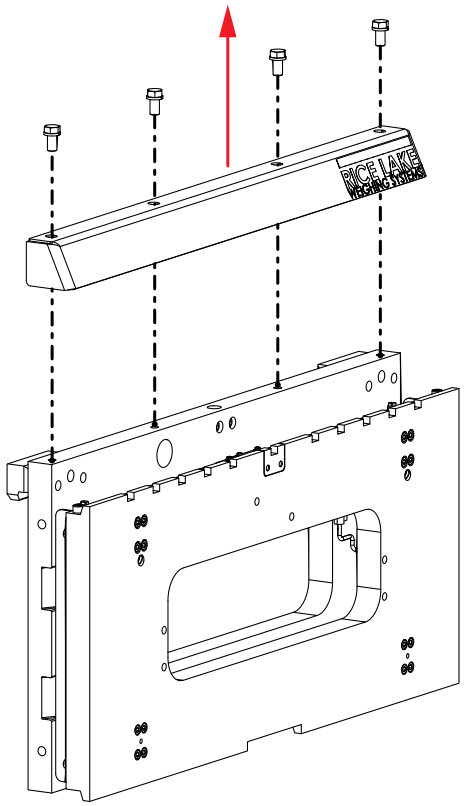


Figure 6-2. Top Cover Plate Removal

3. Remove the two hex screws securing the protective side cover with a 7/16 in socket wrench (see Figure 6-3).

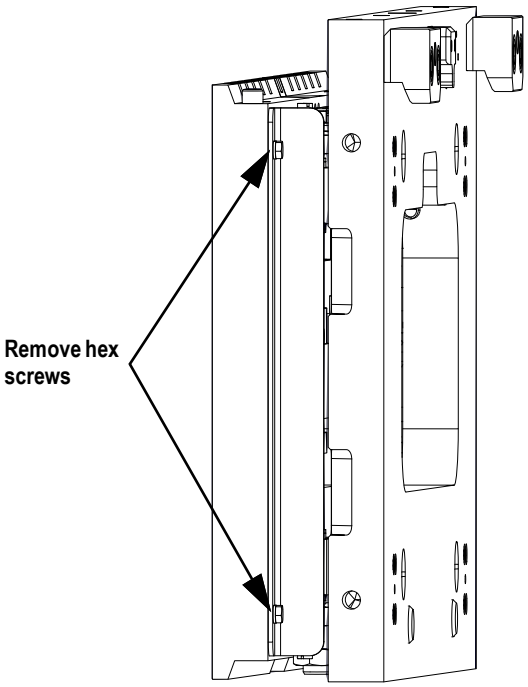


Figure 6-3. CLS Scale Side Cover

4. Remove and set aside the side cover.
5. Ensure there is a 0.025 in gap between each upper screw and block (see Figure 6-4). If necessary, loosen the jam nuts and adjust the upper screws to meet this clearance.

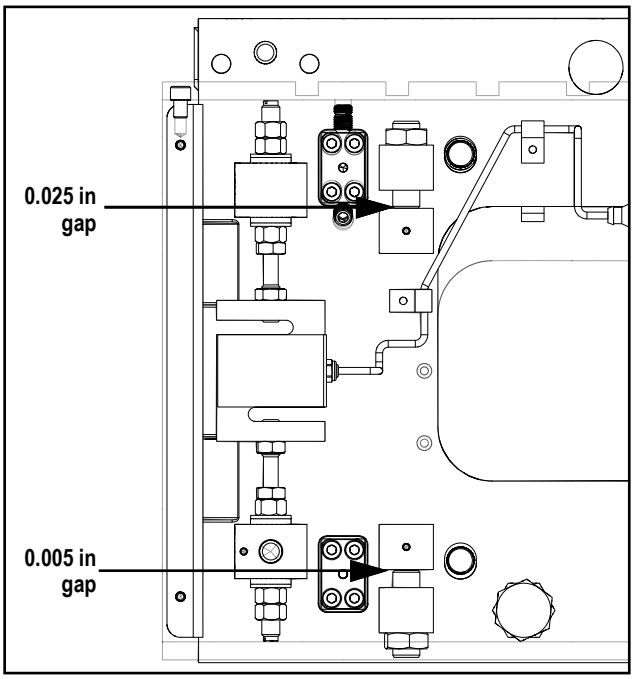


Figure 6-4. Overload Stop Clearance

6. Torque jam nuts to 30 lb-ft.
7. Ensure there is a 0.005 in gap between each lower screw and block (see Figure 6-4). If necessary, loosen the jam nuts and adjust the lower screws to meet this clearance.
8. Torque jam nuts to 30 lb-ft.

7.0 Load Cell Removal and Replacement

This section describes how to remove and replace the load cell. For load cell replacement parts, see Section 9.1.1 on page 34. See column F of Table 1-1 on page 5 for required tools.

NOTE: Before replacing the load cell, ensure overload stops are properly set up (see Section 6.0 on page 17). Incorrectly positioned overload stops can cause the appearance of a malfunctioning load cell even when it is functioning as intended.

7.1 Load Cell Removal

Perform the following steps to remove a load cell.

NOTE: Removal of the forklift tines is not necessary, but may assist with ease of load cell removal. Proceed to Step 3 if not removing the tines.

1. Slightly raise the forklift carriage for forklift tine removal.
2. Slide the forklift tines to the middle of the carriage to allow for removal and set aside.

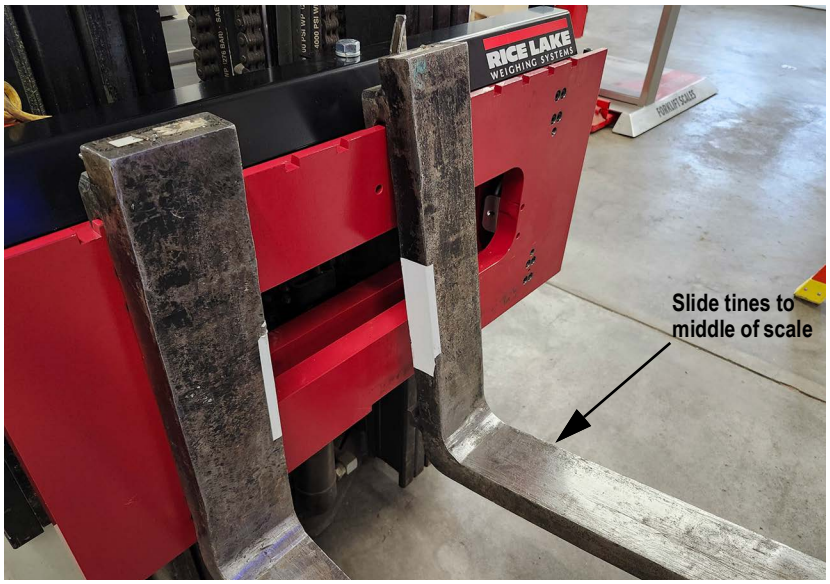


Figure 7-1. Forklift Tine Removal

3. Raise the forklift carriage to a comfortable working height for the load cell replacement.

4. Remove the two hex screws securing the protective side cover (see Figure 7-2) with a 7/16 in socket wrench.
5. Remove the side cover to access the load cell.

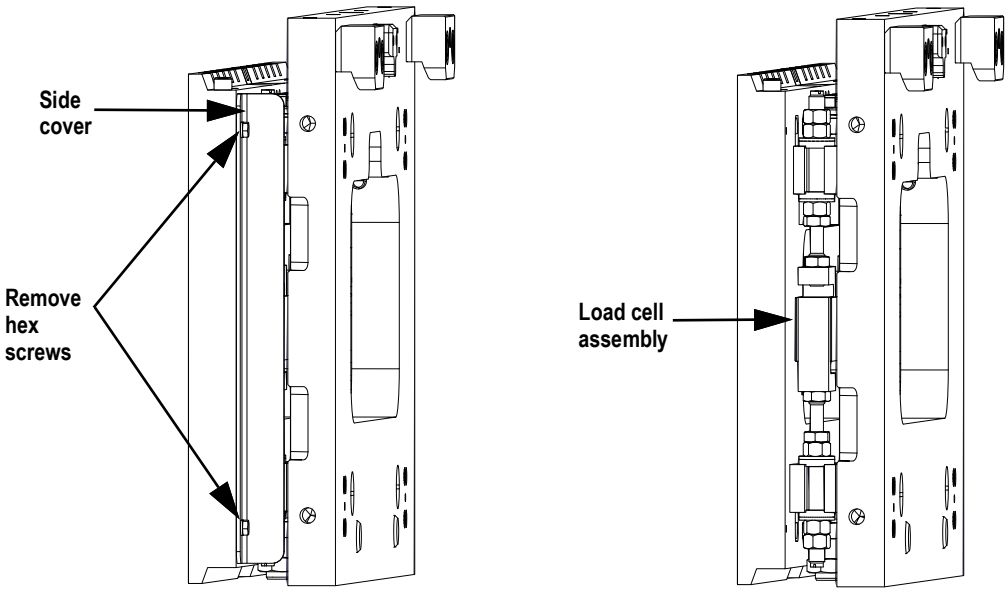


Figure 7-2. Load Cell Assembly Location

6. Remove the four hex bolts securing the top cover with a 3/4 in hex wrench.
7. Remove and set aside the cover.
8. Disconnect the load cell cable from the junction box.
9. See Figure 7-3 on page 21 for remaining steps and proceed to Step 10.

NOTE: The load blocks are welded into the scale assembly and are shown detached in the following images for visual clarity.

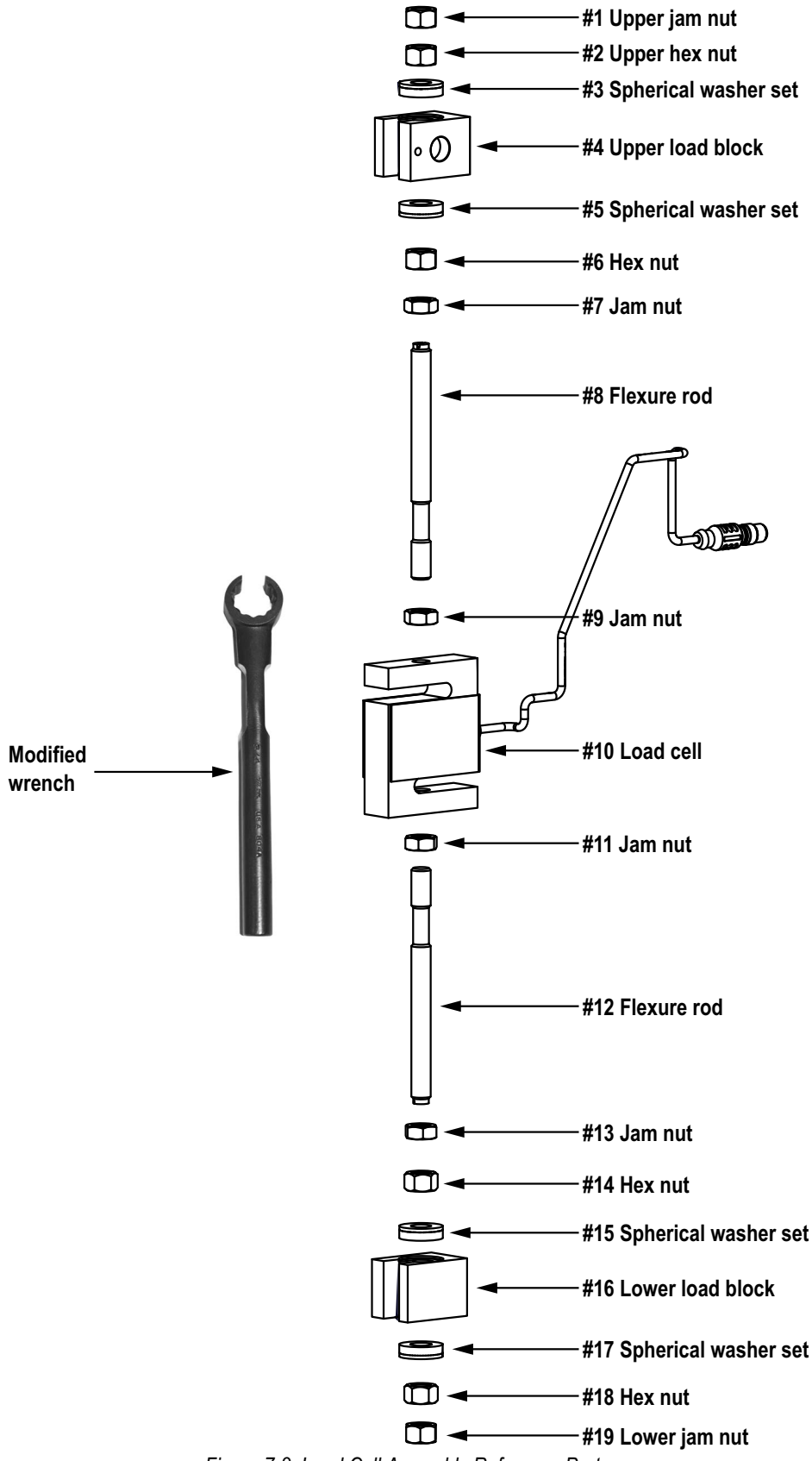


Figure 7-3. Load Cell Assembly Reference Parts

10. Loosen jam nuts (#1 and 7).
11. Loosen hex nuts (#2 and 6).
12. Loosen jam nuts (#13 and 19).
13. Loosen hex nuts (#14 and 18).

NOTE: The hex nuts should be loosened so that the spherical washer set can be lifted from the counterbore.

14. Remove load cell assembly, pulling the load cell cable out between the upper and lower load blocks.

7.2 Load Cell Replacement

1. Assemble the replacement load cell kit as shown in Figure 7-3.

NOTE: Ensure the following when assembling the load cell kit:

- ***Washer sets are fit together with concave and convex sides facing each other (see Figure 7-4)***
- ***Washer sets should be oriented with the back of the concave washer facing the load block (see Figure 7-4)***
- ***The flexure rod (#8) is threaded into the load cell with about two threads showing (see Figure 7-5)***
- ***Before installation into the scale, jam nuts (#9 and 11) are tightened to 60 lb-ft against the load cell***

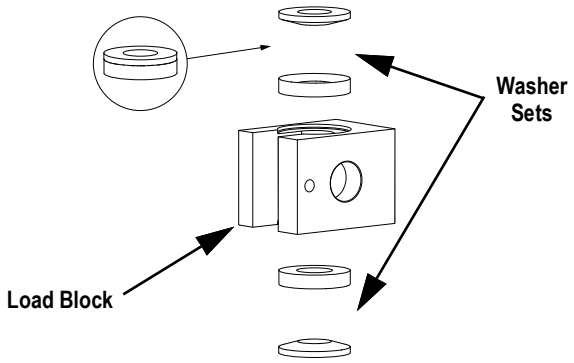


Figure 7-4. Load Block and Spherical Washer Sets

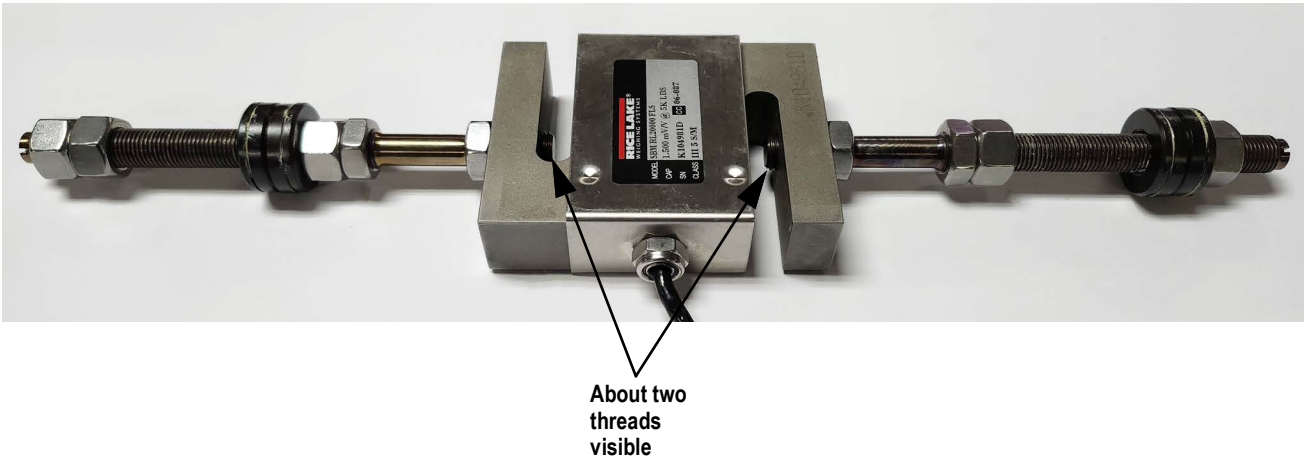


Figure 7-5. Rod Threaded into Load Cell

2. Ensure the assembly is oriented with the load cell label right-side-up.
3. Route the load cell cable between the upper and lower load blocks.

4. Place the new load cell assembly between the front and back plates and position it between the load blocks.

NOTE: Use fingers to separate each pair of washer sets when fitting the load cell assembly rod into the upper and lower load blocks. Ensure that each upper set rests on the counterbore of each block (see Figure 7-6 and Figure 7-7).

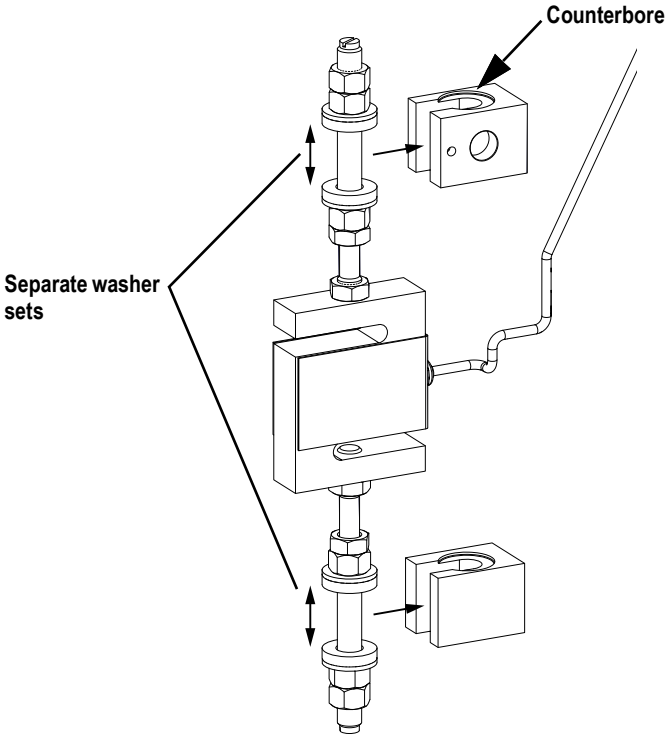


Figure 7-6. Fitting Load Cell Assembly into Blocks (Before)

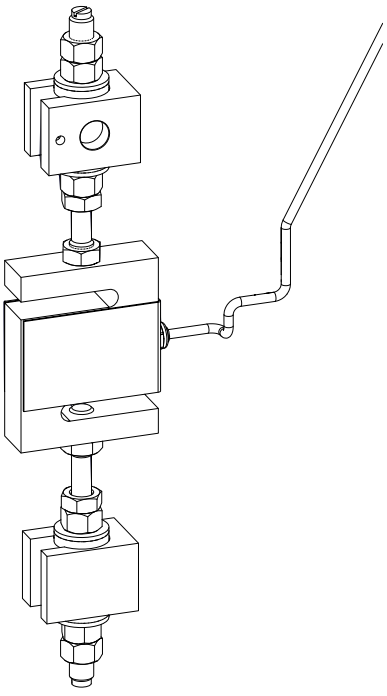


Figure 7-7. Fitting Load Cell Assembly into Blocks (After)

5. Adjust the hex nuts (#14 and 18) around the lower load block to center the load cell.

NOTE: The load cell is centered when there is approximately a 2 1/4 in gap between the top of the load cell and the bottom of the upper load block (see Figure 7-8).

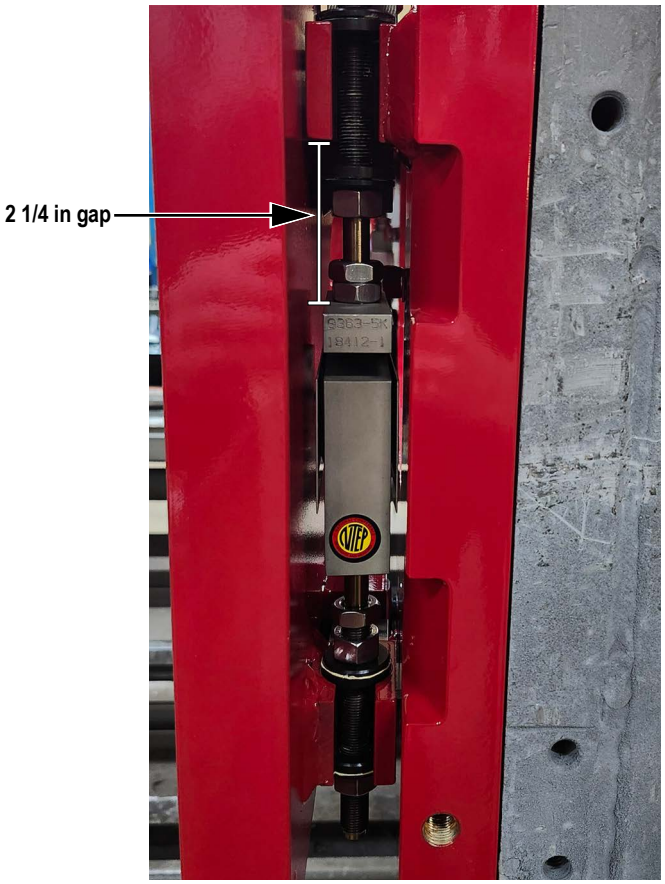


Figure 7-8. Centering Load Cell

6. While holding the hex nut (#14) in place with a modified box wrench, tighten the bottom (#18) hex nut to 110 lb-ft using a torque wrench (see Figure 7-9).

NOTE: If necessary, use a pry bar to hold the load cell in place and prevent rotation.

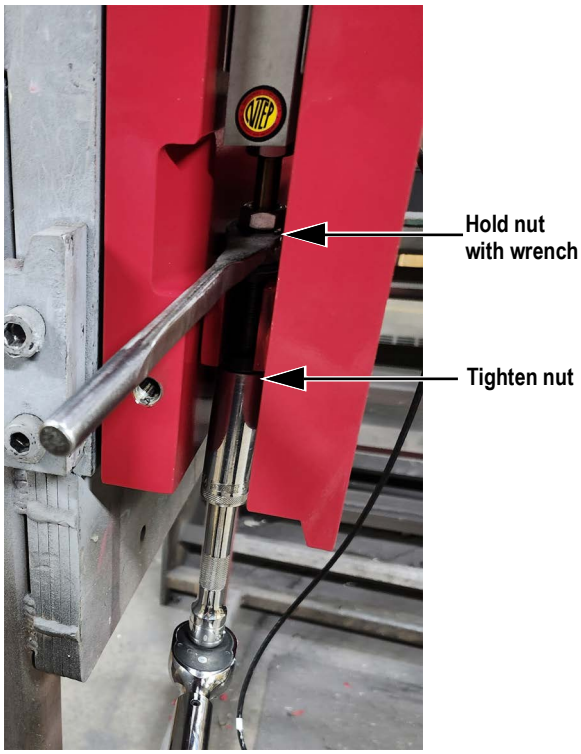


Figure 7-9. Tighten Bottom Hex Nut

7. Thread the load cell cable into the junction box.

NOTE: VIRTUi3 offers various diagnostic, calibration and configuration capabilities for CLS scales. For the following step, ensure the scale is connected to a Windows® PC with VIRTUi3 installed. For instructions on installing and configuring VIRTUi3, see the VIRTUi3 for Windows Forklift Scale PC Program Technical Manual (PN 192745).

8. Preload load cell assembly using #2 hex nut (between 0.5 to 1 mV in VIRTUi3).

NOTE: Ensure clearance for overload stops before adding preload.

9. While holding the hex nut (#6) in place with a modified box wrench, torque the upper hex nut (#2) to 110 lb-ft.
10. Torque jam nuts (#1 and 7) to 60 lb-ft.
11. Torque jam nuts (#13 and 19) to 60 lb-ft.

NOTE: Millivolt output may be affected after tightening the jam nuts. Check VIRTUi3 to ensure the reading remains in the 0.5 to 1 mV range.

12. Proceed to Section 6.0 on page 17 to set up overload stops.
13. Reinstall side and top cover of the scale.

8.0 Flexure Removal and Replacement

This section describes how to remove and replace flexures for the CLS NextGen Series. For flexure replacement parts, see Section 9.1.3 on page 36. See column G of Table 1-1 on page 5 for required tools.

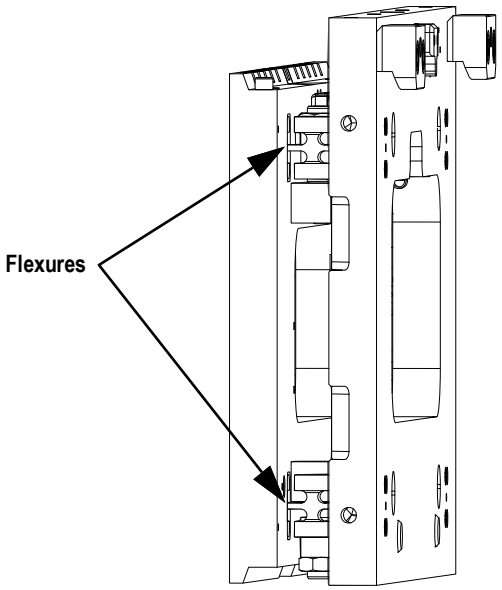


Figure 8-1. Flexure Location

8.1 Flexure Removal

This section describes how to remove flexures from the scale assembly.

1. Remove forklift tines for scale removal (see Step 2 in Section 7.1 on page 19).
2. Remove both load cells (see Section 7.0 on page 19).
3. Remove the junction box (see Section 5.0 on page 15).
4. Remove scale from the forklift.
5. Set the scale down with the back plate facing up.
6. Use 3/4 in hex wrench to remove the four safety hex bolts.

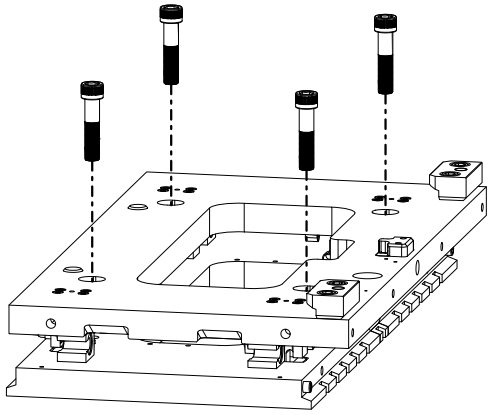


Figure 8-2. Safety Bolt Removal

7. Use 6 mm hex wrench to remove the sixteen hex screws securing the back plate to the flexures (four screws per flexure; see Figure 8-3).

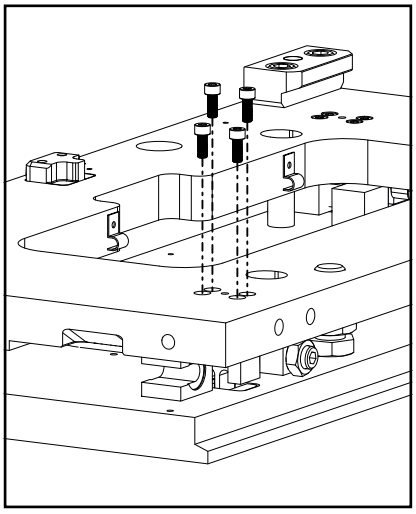


Figure 8-3. Remove Screws from Back Plate

8. Separate plate from flexures.

NOTE: If necessary, use pry bars to assist with plate separation.

9. Remove back plate from the scale assembly and set aside.

CAUTION: Use a crane or assistance from two or more persons when removing the back plate from the assembly.

10. Place 4 x 4 x 24 wood blocks on the work area for the front plate assembly to rest on.

NOTE: Ensure that the flexures have full clearance from the wooden blocks.

11. Turn over the front plate assembly so that the plate faces up (see Figure 8-4).

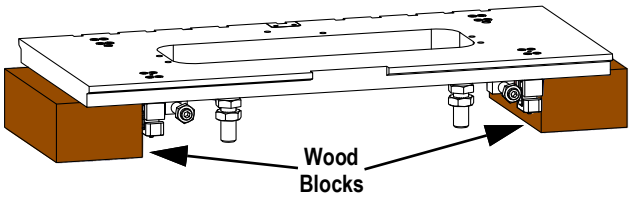


Figure 8-4. Wood Blocks

12. Remove the screws securing each flexure being replaced (see Figure 8-5 on page 28).

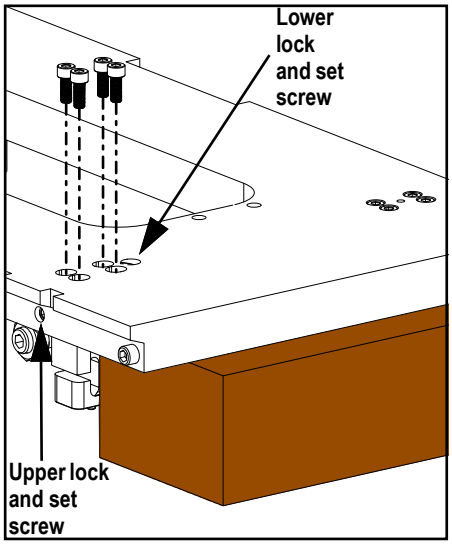


Figure 8-5. Remove Screws from Front Plate

13. Loosen the lock below the lower set screw (see Figure 8-6).
14. Loosen set screws to provide movement of upper flexures.

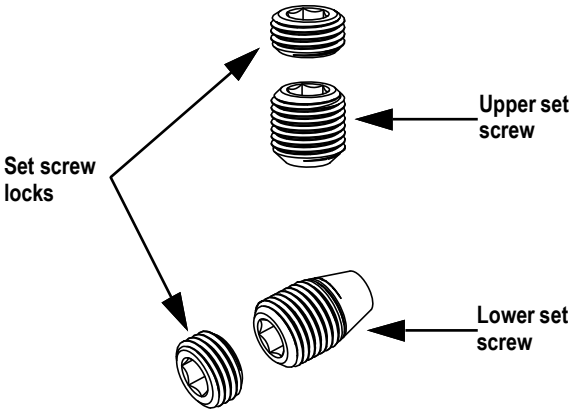


Figure 8-6. Set Screw and Lock Close-Up

15. Remove flexures from the front plate (see Figure 8-7).

NOTE: Ensure dowel pins are removed with the flexures and set aside for reuse (see Figure 8-8 on page 29).

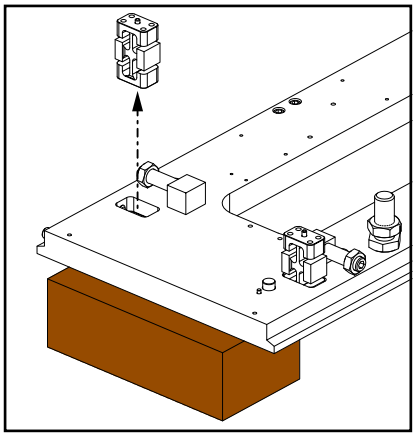


Figure 8-7. Flexure Removal

8.2 Flexure Replacement

IMPORTANT: Ensure the flexure pockets are free of debris and other obstructions.

1. Insert dowel pins into the replacement flexures.

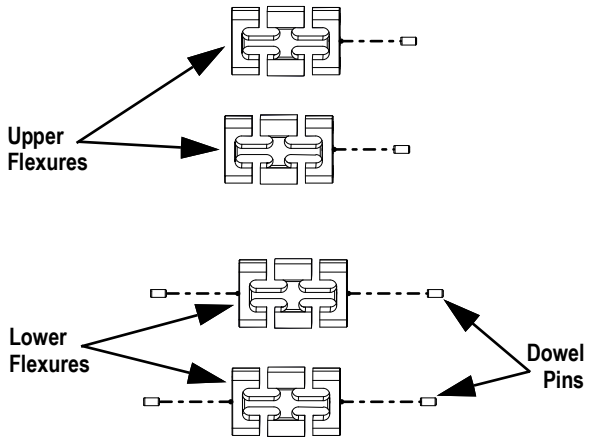


Figure 8-8. Dowel Pin Installation

2. Insert replacement flexures into front plate.
3. Thread hex screws securely into replacement flexures without fully tightening (see Figure 8-9).

NOTE: Ensure dowel pins are in place (two in front plate, four in rear plate, see Figure 8-10).

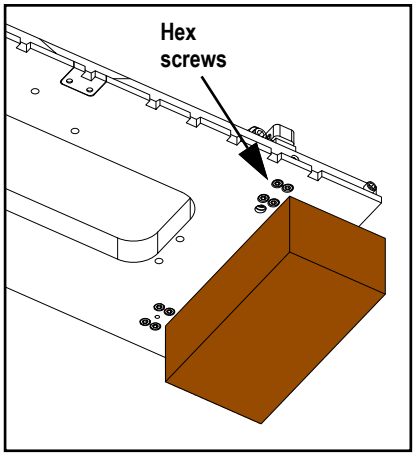


Figure 8-9. Thread Hex Screws

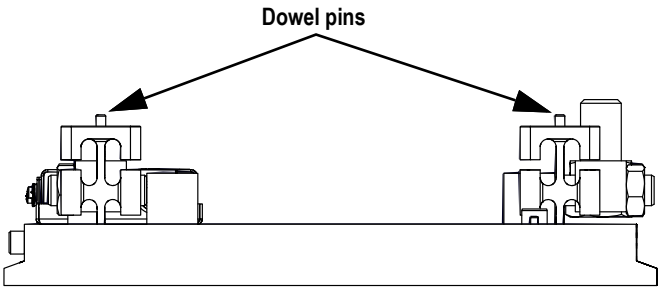


Figure 8-10. Dowel Pins

4. Lift and place the back plate onto the front plate assembly.

NOTE: If necessary, use rubber mallet or dead-blow hammer to fully seat back plate.

5. Thread the sixteen hex socket head cap screws into the back plate.

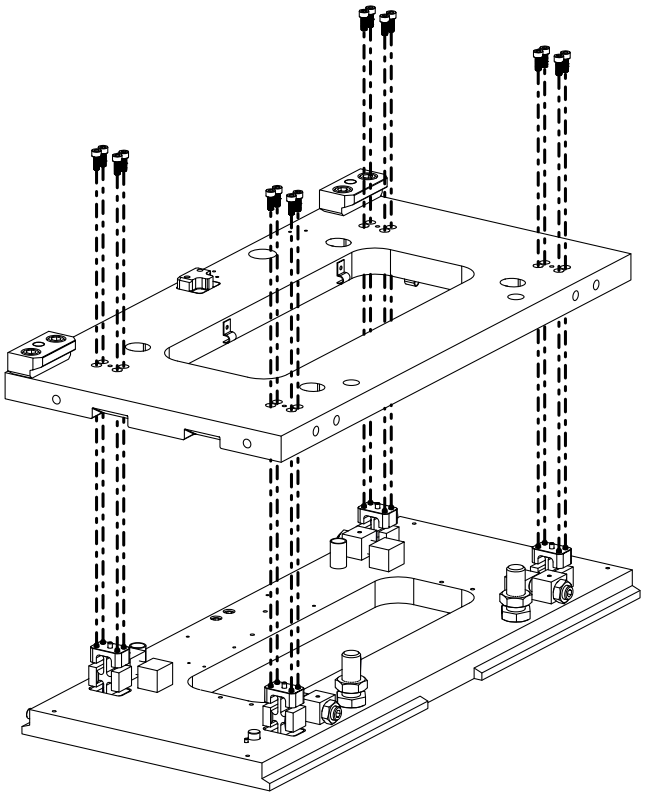


Figure 8-11. Back Plate Installation

6. Use 6 mm hex wrench to torque cap screws on the back plate to 30 lb-ft.
7. Install the safety bolts (see Section 4.0 on page 13).
8. Turn over the scale.
9. Use 6 mm hex wrench to torque cap screws on the front plate to 30 lb-ft.
10. Reinstall the scale onto the forklift.
11. Reinstall load cells (see Section 7.2 on page 22).
12. Adjust and tune the flexures (see Section 8.3).

8.3 Adjusting and Tuning Flexures

NOTE: It is recommended to use Virtui3 for tuning and adjusting diagnostics.

1. Reinstall forklift tines.
2. Calibrate the scale.
3. Place test weight on the heel of one of the fork tines.
4. Record the weight displayed.
5. Place test weight on the toe of the fork tine.
6. Record the weight displayed.
7. Repeat Step 3 to Step 6 for the other tine.

NOTE: The flexure requires adjustment if any of the weight differences displayed exceed allowable tolerances.

8. Slide the forklift tine to access the upper screws of the flexure that requires adjusting.
9. Loosen the four upper hex socket head cap screws about one turn (see Figure 8-12).

NOTE: Only upper flexures are adjustable. Do not loosen the cap screws on the lower flexures.

10. Loosen the upper set screw lock (see Figure 8-12).

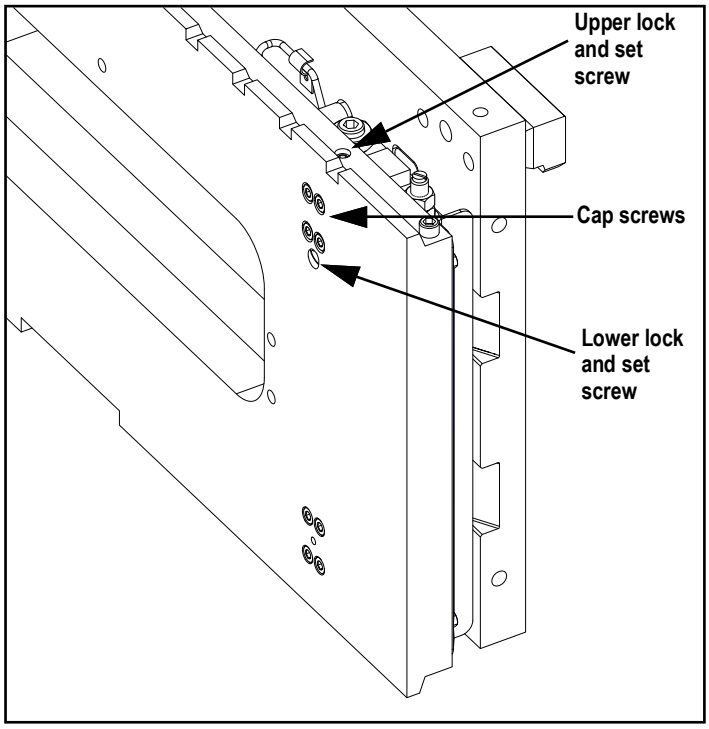


Figure 8-12. Loosen Upper Set Screw Lock

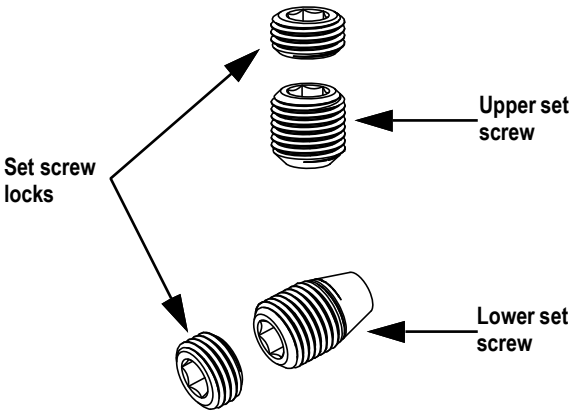


Figure 8-13. Set Screw and Lock Close-Up

11. Loosen the lower set screw lock (see Figure 8-14).

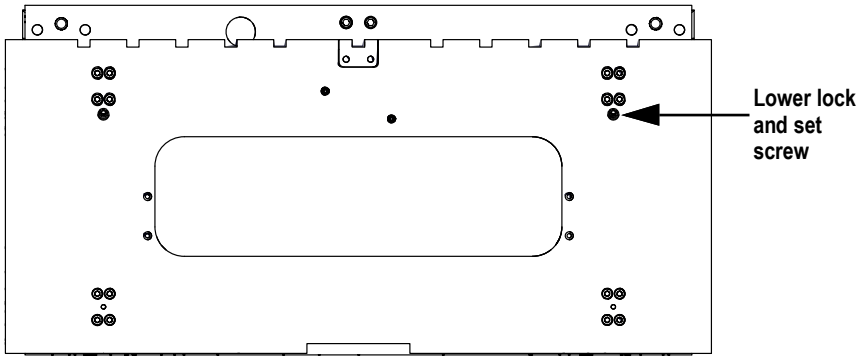


Figure 8-14. Flexure Adjustment

12. Adjust the set screw (see Figure 8-12):
    A. If the toe weight is greater than the heel weight, loosen the lower set screw about two turns to clear the screw from the flexure. Tighten the upper set screw to move the flexure down.
    B. If the toe weight is less than the heel weight, loosen the upper set screw to clear the screw from the flexure. Tighten the lower set screw to move the flexure up.

NOTE: When tightening the set screw or upper set screw lock, tighten in increments of a quarter turn. Use smaller increments upon approaching tolerance.

13. Tighten the four upper cap screws to 30 lb-ft.
14. Tighten both set screws.
15. Tighten the locks for both set screws to secure both upper flexures in place.
16. Repeat Step 3 to Step 13 until each recorded weight is within the desired level of accuracy.

IMPORTANT: After each adjustment and before placement of the test weights, slide the forklift tines to their original positions.

9.0 Replacement Parts

9.1 CLS Assembly

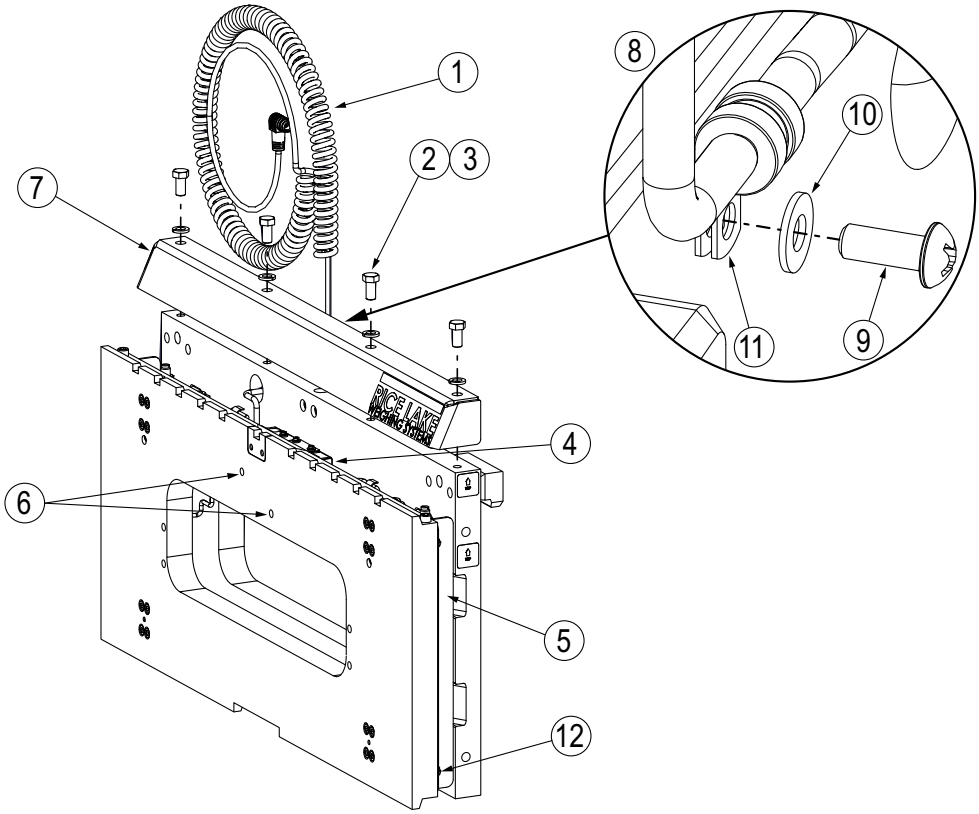


Figure 9-1. CLS Assembly Parts Illustration (PN 226802)

Item No.	Part No.	Sub No.	Description	Qty.
1	125395		Cable Assembly, Coiled 5x18 AWG	1
2	114012		Screw, Cap 1/2-13NC x 1 Hex Head Grade 8 Steel Zinc Plated	4
3	15167		Washer, Split Lock 1/2 Steel Zinc Plated	4
4	191642		J-Box Assembly, CLS Series	1
5	230967		Side Cover	2
6	200165		Screw, Cap 10-32 x 1 Hex Socket SST	2
7	230731		Angle, Protective, 34 in	1
8	167250	Kit, Loop Clamp, Coiled Cable Assembly (Inc 9-11)		1
9	—	206569	Screw, Machine 10-32 x 5/8	1
10	—	15141	Washer, Plain STD No 10	1
11	—	150719	Clamp, Loop One Hole 1/4 in	1
12	197117		Side Cover Bolts	4
—	226803		Lower Cleat, CLS-NX Bottom Mounted	2
	92829		Screw, Cap (Lower Cleat)	4

Table 9-1. CLS Assembly Parts (PN 226802)

9.1.1 Load Cell Assembly

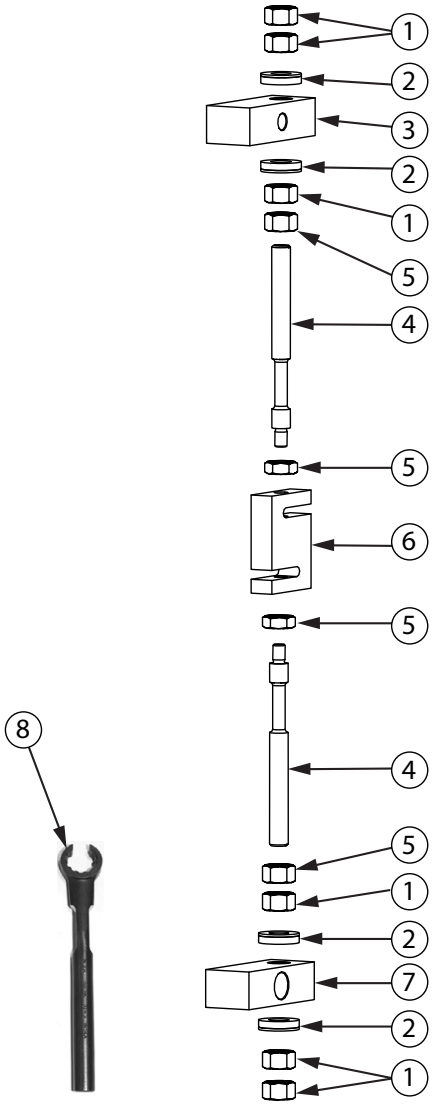


Figure 9-2. Load Cell Replacement Kit Parts Illustration

Item No.	Part No.	Sub No.	Description	Qty.
	203139	Load Cell Replacement Kit (inc. items 1, 2, 4, 5, and 6)		Ref
1		109958	Hex Nut, 1/2-20	6
2		15198	Spherical Washer Set	4
3		—	Upper Block (welded)	Ref
4		92827	Flexure Rod	2
5		14665	Jam Nut, 1/2-20	4
6		215390	Load Cell with w/M12 Connection	1
7		—	Lower Block (welded)	Ref
8	96196	3/4 in Modified Box Wrench		1

Table 9-2. Load Cell Replacement Kit Parts

9.1.2 CLS-IM Junction Box Assembly

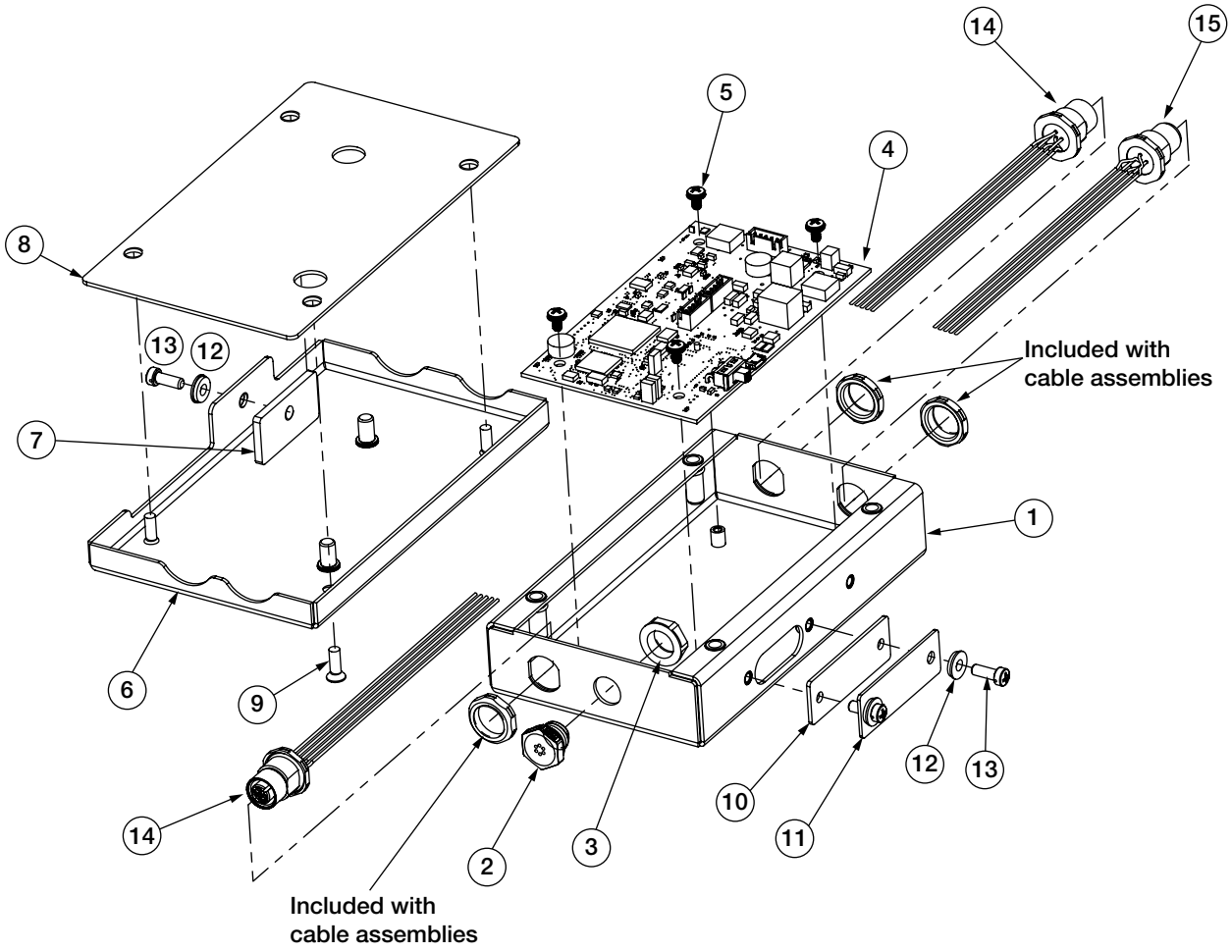


Figure 9-3. CLS-IM Junction Box Assembly Illustration (PN 191642)

Item No.	Part No.	Description	Qty.
1	197711	Enclosure, CLS	1
2	164598	Breather Vent	1
3	88734	Nut, Breather Vent Thread	1
4	191673	Junction Box PCB Assembly	1
5	14839	Screw, 6-32NC x 1/4 Phillips Pan Head Internal Tooth Lock Washer	4
6	197713	Cover Assembly	1
7	163764	Gasket, Assembly Cover	1
8	164070	Gasket, Access Cover	1
9	100968	Screw, 8-32NC x 1/2, Countersunk	4
10	163765	Gasket, Access Cover	1
11	162384	Cover Plate, Access Hole	1
12	75062	Sealing Washer, #8	3
13	30623	Screw, 8-32NC x 7/16 Phillips Drive Drilled Fillister Head	3
14	163766	M12 Cable Assembly, Female, Load Cell	2
15	163767	M12 Cable Assembly, Male, Power/Comm	1
NS	52342	Label	1

Table 9-3. CLS-IM Junction Box Assembly Parts (PN 191642)

NOTE: M12 Cable Assemblies require field wiring and must be spliced into the j-box.

9.1.3 Flexures

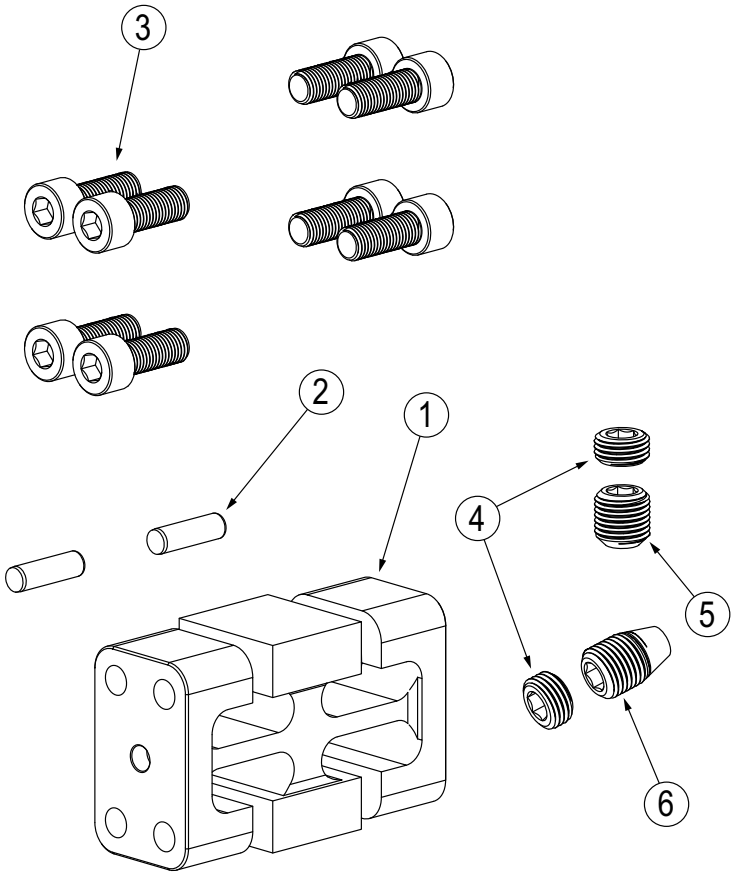


Figure 9-1. Flexure Parts Illustration

Item No.	Part No.	Description	Qty.
1	226798	Flexure, CLS-NXG, 8 mm Bolted	4
2	233113	Pin Dowel	6
3	221890	Screw, Cap M8-1 mm x 20 mm Socket Head	32
4	226586	Screw, Set 1/2-20 NF x 1/4 Hex Hollow-Lock Black Oxide Alloy Steel	4
5	226585	Screw, Set 1/2-20 NF x 1/2 Hex Socket Flat-Tip Black Oxide Alloy Steel	2
6	226799	Screw, Set 1/2-20 30 Degree Tapered Tip Alloy Steel	2

Table 9-4. Flexure Parts

9.1.4 Safety Bolts

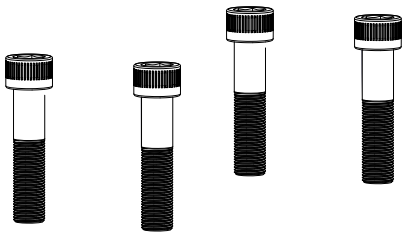


Figure 9-2. Safety Bolts Illustration

Part No.	Description	Qty.
226928	Screw, Cap 3/4-16 x 3-1/4 Hex Socket Head Black Oxide Alloy Steel	4
230957	Tubing, Clear Polyurethane 3/4 in ID 7/8 in OD	2

Table 9-5. Safety Bolts

9.2 Overload Stops Kit

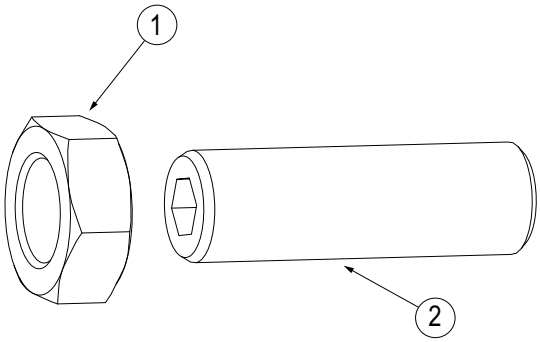


Figure 9-3. Overload Stops Kit

Item No.	Part No.	Item Description	Qty
1	14688	Nut, Jam 3/4-16NF HEX SST	4
2	92814	Screw, Set 3/4-16NF x 2.406 Hex Socket Machine	4

Table 9-6. Overload Stops Kit Parts List

9.3 Centering Notch and Centering Pin

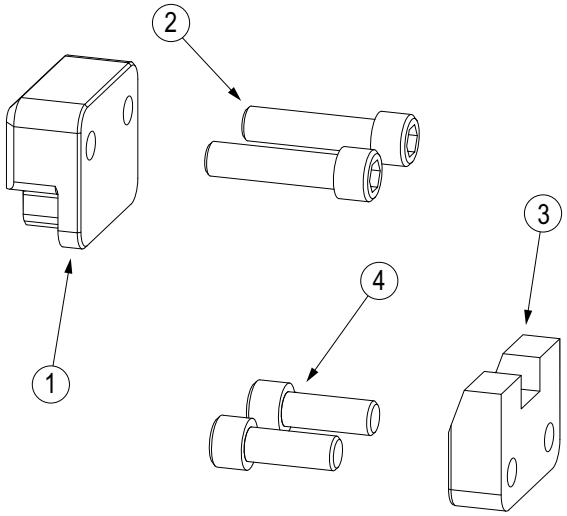


Figure 9-4. Centering Notch and Centering Pin

Item No.	Part No.	Item Description	Qty
1	226800	Index Pin, Replaceable	1
2	15028	Screw, Cap 3/8-16NC x 1-1/2 Hex Socket Head	2
3	230471	Centering Notch, Replaceable	1
4	15024	Screw, Cap 3/8-16NC x 1 Hex Socket Head	2

Table 9-7. Centering Notch and Centering Pin Parts List

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