# TABLE OF CONTENTS

**Van Applications (HK™ SERIES, VANTRAAX® and ULTRAA-K® Models)** ................................................................. 2
- Introduction ......................................................................................................................................................... 2
- Operating Instructions ..................................................................................................................................... 2
- Replacing Air Actuator ................................................................................................................................. 3
- Replacing QUIK-DRAW Control Valve .......................................................................................................... 4
- QUIK-DRAW Retrofit Installation — Van Applications (HK™ SERIES and VANTRAAX® Models) Only .......... 5

**Platform Applications (INTRAAX®-SP Models)** .......................................................................................... 8
- Introduction ...................................................................................................................................................... 8
- INTRAAX®-SP Operating Instructions ........................................................................................................ 9
- Manually Operating the Locking Pins ............................................................................................................ 10
- Replacing Air Chamber Actuator ............................................................................................................... 12
- Replace QUIK-DRAW Control Valve ........................................................................................................ 13
- QUIK-DRAW Plumbing — Platform Applications (INTRAAX®-SP Models) Only ........................................ 13
INTRODUCTION
QUIK-DRAW® is a pneumatic locking pin release system designed to make slider repositioning fast and convenient. It is controlled by a single push/pull control valve, located on a control panel at the front driver’s side of the slider assembly.

IMPORTANT: QUIK-DRAW is designed to operate only when the trailer parking brakes are engaged. If the trailer parking brakes are not engaged, the QUIK-DRAW control valve will not stay in the pulled out position and the actuators will not inflate.

NOTE: The QUIK-DRAW valve should self reset when parking brakes are released.

The QUIK-DRAW system will create up to 900 pounds of force (if required) to retract bound locking pins. If necessary, rocking of the trailer as defined in the OPERATING INSTRUCTIONS may be required to free bound locking pins.

For general safety and precautionary statements, refer to Hendrickson literature number T12007, available at www.Hendrickson-intl.com/TrailerLit.

For assistance in the United States and Canada, call Hendrickson Trailer Technical Services at 866-RIDEAIR (743-3247) or email HTTS@Hendrickson-intl.com.

OPERATING INSTRUCTIONS
This procedure defines how to pneumatically retract the locking pins using QUIK-DRAW and trailer air supply. DO NOT manually retract locking pins. If QUIK-DRAW is not functioning, seek service for repairs.

1. Clear and keep all bystanders away from the tractor and trailer during QUIK-DRAW operation.

2. On a level surface, apply the trailer parking brakes.

3. Remove the manual stop bar (if applicable) and move it to the desired position.

4. Pull the QUIK-DRAW control valve knob (Figure 1) out to its fully extended position to pneumatically retract the locking pins.

   NOTICE: Do not force or use tools on the control valve knob.

5. Visually ensure each pin is fully retracted. If necessary, gently rock trailer forward and backward to fully retract bound locking pins.

6. Move trailer until slider is in desired position. Trailer parking brakes must remain applied.

7. Push QUIK-DRAW valve knob all the way in to engage locking pins. This deflates the actuators, causing the locking pin springs to force the locking pins outward into the slider box and body rail holes. When aligned, the locking pins will slip into the body rail holes, securing the slider box to the body rails.

8. Visually ensure each pin has extended through the slider box and body rail holes.

   NOTICE: Chamfered ends of locking pins must project through body rail at all four locations.

9. Install manual stop bar directly behind slider system.

10. Gently rock trailer forward and backward to completely engage misaligned locking pins.

   WARNING: Do not drive the trailer without pushing the QUIK-DRAW control valve in and verifying that all four locking pins have extended through the slider box and body rail holes.
REPLACING AIR ACTUATOR

Follow these procedures for replacing a QUIK-DRAW air actuator:

PREPARATION

For more details on preparing a trailer and suspension for service, refer to T12007.

1. Apply the trailer parking brakes and chock the trailer wheels.

2. Completely depressurize trailer air system by opening air tank drain valve.

REMOVING AIR ACTUATOR

**NOTE:** Leave at least one locking pin assembled as a reference for later reassembly.

1. Disconnect air supply line(s) from fitting(s) on end of actuator.

2. Remove cotter pin and washer (Figure 2).

   **NOTE:** The locking pin spring should remain in place when replacing an air actuator.

3. Push clevis pin (Figure 2) through locking pin and air actuator end. Reach under the frame crossmember and pull clevis pin completely out through access hole in frame crossmember.

4. Repeat Step 2 and Step 3 at other end of actuator.

5. Remove the actuator.

INSTALLING AIR ACTUATOR

**NOTE:** The applicable image in Figure 3 shows changes that have been made to actuators and locking pins. Replacement parts and assembly may differ from the original.

1. **Select** the proper actuator for the location (front or rear, as shown in Figure 4).

2. The plumbing diagram, Figure 12 on page 7, shows the actuator fittings located on the same side of the slider box as the QUIK-DRAW control valve. **Position** the actuator, with fitting, as shown in the figure.

3. Referencing the applicable image in Figure 3, **position** each end of the actuator with the locking pin.

4. **Align** holes (Figure 2 and Figure 3) and **insert** the clevis pins.

5. **Install** washer and cotter pin (Figure 2) at each end of the actuator.
6. Connect air supply line(s) to fitting on end of actuator.

7. Repeat above for any additional actuators.

8. Close drain valve on trailer air tank.

9. Fill the air tank and trailer air system.

10. Verify proper QUIK-DRAW operation by pulling the QUIK-DRAW control valve knob (Figure 1 on page 2) out to its fully extended position.

11. Check air connections for leaks; tighten as necessary.

REPLACING QUIK-DRAW CONTROL VALVE

Follow these procedures for replacing the QUIK-DRAW control valve for all applications:

NOTE: Although the QUIK-DRAW valve is the same for all applications, the mounting brackets and hardware (Figure 5) will vary between Hendrickson slider suspension types (HKANT, HKAT, HKAL, UTKNT, AAZ, etc.). Capturing photos of the original mounting may prove helpful when installing the replacement valve.

PREPARATION

For more details on preparing a trailer and suspension for service, refer to T12007.

1. Apply the trailer parking brakes and chock the trailer wheels.

2. Completely depressurize the trailer air system by opening air tank drain valve.

REMOTING CONTROL VALVE

1. Mark, label or otherwise identify air lines (Figure 6, Figure 13 on page 8 or Figure 14) with corresponding fittings on QUIK-DRAW control valve before disconnecting.

2. Disconnect air lines from fittings on QUIK-DRAW control valve.

3. Remove the two control valve mounting bolts and locknuts.

4. Remove control valve.

INSTALLING CONTROL VALVE

NOTE: Aftermarket QUIK-DRAW valves are available with or without fittings. If without fittings and original fittings are in good condition, install the original fittings onto the valve and tighten to 7±1 ft. lbs. (10 Nm) of torque.

1. Remove any shipping plugs or hardware from the new control valve.

2. Orient the QUIK-DRAW control valve so the exhaust hose is facing downward and place the control valve, with spacer (if equipped, Figure 5), on the valve mounting bracket.

3. Using the two 1/4 - 20 x 1.5 inch hex head bolts, provided in the retrofit kit, insert the bolts through the QUIK-DRAW valve, spacer (if equipped) and mounting bracket holes (Figure 5).

4. Thread the two torque prevailing flange nuts onto the bolts.

5. Tighten to 7±1 ft. lbs. (10 Nm) of torque.

6. Connect air supply lines to control valve fittings as shown in Figure 6.

7. Close drain valve on trailer air tank.

8. Fill the air tank and trailer air system.
9. Verify proper QUIK-DRAW® operation by pulling the QUIK-DRAW control valve knob (Figure 1 on page 2) out to its fully extended position.

10. Check air connections for leaks; tighten as necessary.

11. Remove trailer wheel chocks and release trailer parking brakes.

**NOTE:** The QUIK-DRAW valve should self reset when parking brakes are released.

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**QUIK-DRAW RETROFIT INSTALLATION — VAN APPLICATIONS (HK™ SERIES AND VANTRAAX® MODELS) ONLY**

The van application for QUIK-DRAW can be installed on any Hendrickson K-2® Slider subframe. Use the following procedure to remove the existing pin release mechanism and replace it with QUIK-DRAW:

Figure 7 shows a manual release mechanism. Procedures for removing other mechanical release mechanisms are similar.

**PREPARATION**

For more details on preparing a trailer and suspension for service, refer to T12007.

1. Apply the trailer parking brakes and chock the trailer wheels.

2. Completely depressurize the trailer air system by opening air tank drain valve.

**REMOVING HANDLE MECHANISM AND LINKS**

1. Remove the two handle nuts and handle bolts from the handle assembly (Figure 7).

2. Remove handle by pulling through handle guide.

3. Remove the front locking pin link (Figure 7) by removing the cotter pin, washer and clevis pin from each end of the locking pin link.

4. Unfasten front crank arm weldment (Figure 7) by removing cotter pin, washer and clevis pin from locking pin.

5. Repeat steps 3 and 4 with the rear locking pin link.
REMOVING PIPE WELDMENT

1. Cut the pipe weldment in half directly in front of the rear crank arm weldment (Figure 8).

2. Remove the long front section of pipe weldment by pulling it out from the front of the slider assembly (Figure 8).

3. Cut the pipe weldment in half again, this time between the rear crank arm weldment and the rear crossmember (Figure 8).

4. Remove the short section of pipe weldment by pulling it out from the rear of the slider assembly (Figure 8).

5. Remove any remaining pieces of pipe weldment.

INSTALLING NEW QUIK-DRAW® VALVE

A new QUIK-DRAW control valve mounting bracket, provided with the retrofit kit, must be fastened over the existing handle guide bracket to mount the QUIK-DRAW valve.

1. Place the new bracket on the existing bracket (Figure 9) as shown in Figure 10.

2. Assemble two hex head bolts, torque prevailing flange nuts and two of the 3/8 inch washers provided in the retrofit kit.

3. Install the two bolt assemblies (Figure 10, B) into the handle guide cutout so the hex heads are on the outside of the bracket and the torque prevailing flange nuts and washers are on the inside.

4. Tighten to 30 ft. lbs. (41 Nm) of torque.
5. **Remove** any shipping plugs or hardware from the new QUIK-DRAW control valve.

6. **Orient** the QUIK-DRAW control valve so the exhaust hose is facing downward and **place** the control valve, with spacer (if equipped, Figure 11), on the valve mounting bracket.

7. Using the two 1/4 - 20 x 1.5 inch hex head bolts, provided in the retrofit kit, **insert** the bolts through the QUIK-DRAW valve, spacer (if equipped) and mounting bracket holes (Figure 11).

8. **Thread** the two torque prevailing flange nuts onto the bolts.

9. **Tighten** to 7±1 ft. lbs. (10±0 Nm) of torque.

**INSTALLING AIR ACTUATORS**

1. **Install** front and rear actuators as instructed in the INSTALLING AIR ACTUATOR on page 3.

2. **Check** for proper actuator orientation (Figure 12, rear actuator has a straight fitting, front actuator has a tee fitting).

3. **Install** air lines (Figure 12), beam clip assembly, air line looms and grommets as shown in Figure 13.

**NOTE:** When installing the longer (rear actuator) air line, **start** at the rear actuator and work forward. This will provide the small slack loop desirable at the front actuator.

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**Figure 11:** Installing the QUIK-DRAW® control valve

**Figure 12:** QUIK-DRAW plumbing diagram for van applications (HK™ Series and VANTRAAX® models)
VERIFYING QUIK-DRAW OPERATION

1. Close drain valve on trailer air tank.

2. Fill the air tank and trailer air system.

3. Verify proper QUIK-DRAW operation by pulling the QUIK-DRAW control valve knob (Figure 1 on page 2) out to its fully extended position.

4. Check air connections for leaks; tighten as necessary.

5. Ensure the air chamber actuator functions to rotate the pipe weldment, which pulls on the linkages and extracts all locking pins.

6. Test slider operation according to OPERATING INSTRUCTIONS on page 2. Remove wheel chocks, if necessary.

7. After final painting, apply the supplied L712 Slider System Operating Instructions decal near the QUIK-DRAW control valve (Figure 11).

PLATFORM APPLICATIONS (INTRAAX®-SP MODELS)

INTRODUCTION

QUIK-DRAW® is a pneumatic locking pin release system designed to make slider repositioning fast and convenient. It is controlled by a single push/pull control valve, located on a control panel at the front driver’s side of the platform slider assembly.

IMPORTANT: QUIK-DRAW is designed to operate only when the trailer parking brakes are engaged. If the trailer parking brakes are not engaged, the QUIK-DRAW control valve will not stay in the pulled out position and the actuator will not operate.

The QUIK-DRAW system will apply up to 400 pounds of force to all four pins simultaneously, or up to 1600 pounds of force to a single pin (if required) to retract bound locking pins. If necessary, rocking of the trailer as defined in the INTRAAX®-SP OPERATING INSTRUCTIONS may be required to free bound locking pins.
INTRAAX®-SP OPERATING INSTRUCTIONS

Operating procedures are included for INTRAAX-SP (AAZ) single axle slider suspension, as well as tandem and tridem axle slider suspensions.

INTRAAX-SP SINGLE AXLE SLIDER SUSPENSIONS

This procedure is for a Hendrickson INTRAAX-SP single axle slider with Hendrickson’s recommended AKSS0001 plumbing kit. This kit allows for brakes being applied and air springs exhausted while sliding.

1. **Clear and keep** all bystanders away from the tractor and trailer during QUIK-DRAW® operation.

2. **On a level surface**, apply the trailer parking brakes.

**At Trailer**

3. **Proceed** to the trailer axle that will be repositioned.

4. **Remove** the optional manual stop bar (if installed):
   
   A. If repositioning the slider forward, place the stop bar in the body rails just in front of the desired slider location.
   
   B. If repositioning the slider rearward, place the stop bar just behind the desired slider location.

5. **Pull** the QUIK-DRAW control valve knob (Figure 14) out to its fully extended position. This pneumatically retracts the locking pins. **NOTICE:** Do **not** force or use tools on the knob.

6. **Turn** the Brake Lock & Deflate valve (Figure 14, included with kit AKSS0001) to the DUMP position.
   
   A. Air should exhaust from the axle air springs.
   
   B. Brakes on the axle are applied and isolated from the rest of the braking system. This prevents the brakes from being released in the next step.

**At Tractor**

7. **Release** the trailer parking brakes. This releases the brakes on all trailer axles except the axle being repositioned, allowing the tractor/trailer to be moved independently of the isolated axle.

8. **Slowly move** the trailer forward or backward while the isolated axle remains stationary, allowing it to be repositioned on the trailer.

**NOTE:** It may be necessary to gently rock trailer forward and backward to fully retract misaligned locking pins.

9. **Apply** trailer parking brakes.

**At Trailer**

10. **Check** the position of the slider and ensure locking pins are aligned with the desired positioning holes in the web of the trailer I-beams.

11. **Repeat** Step 7 through Step 10, if necessary.

12. **When locking pins are aligned** with the holes in the web of the trailer I-beams, push the QUIK-DRAW control valve knob all the way in.

13. **Ensure** each pin has extended through the positioning holes in the web of the trailer I-beams.

**NOTICE:** Chamfered ends of all four locking pins must extend through the I-beams). **If necessary**, repeat Step 7 through Step 10 to gently move the trailer so misaligned locking pins can fully extend.

**WARNING:** Do **not** drive the trailer without verifying that all four locking pins have extended through the positioning holes in the web of the trailer I-beams.

14. **Turn** the Brake Lock & Deflate valve to the NORMAL position.

   A. The axle air springs re-inflate.

   B. Brakes on the isolated axle are reintegrated with the rest of the braking system, allowing them to be released in the next step.
At Tractor

⚠️ CAUTION: Do not operate the trailer without reinflating the suspension and releasing the trailer parking brakes.

15. Release the trailer parking brakes.

**IMPORTANT:** Testing to ensure brakes are properly applied to all axles on the trailer is highly recommended after sliding.

16. Move the tractor/trailer forward or backward and ensure the repositioned axle moves with the tractor/trailer.

17. Apply the vehicle service brakes and ensure the repositioned axle stops with the tractor/trailer.

**TANDEM AND TRIDEM AXLE SLIDER SUSPENSIONS**

1. Clear and keep all bystanders away from the tractor and trailer during QUIK-DRAW® operation.

2. On a level surface, apply the trailer parking brakes and chock trailer wheels.

3. Remove the optional manual stop bar (if installed):
   A. If repositioning the slider forward, place the stop bar in the body rails just in front of the desired slider location.
   B. If repositioning the slider rearward, place the stop bar just behind the desired slider location.

4. Pull the QUIK-DRAW control valve knob (Figure 14) out to its fully extended position. This pneumatically retracts the locking pins.

   **NOTICE:** Do not force or use tools on the knob.

5. Ensure each pin is fully retracted. If necessary, gently rock trailer forward and backward to fully retract misaligned locking pins.

6. Reposition the slider by slowly moving the trailer forward or backward to the desired position.

7. Push the QUIK-DRAW control valve knob all the way in. This causes the locking pin springs to force the locking pins outward into the positioning holes in the web of the trailer I-beams. When aligned, the locking pins will slip into the positioning holes, securing the platform slider to the trailer I-beams.

8. Ensure each pin has extended through the positioning holes in the web of the trailer I-beams.

**NOTICE:** Chamfered ends of all four locking pins must extend through the I-beams. If necessary, gently rock trailer forward and backward to completely engage misaligned locking pins.

⚠️ WARNING: Do not drive the trailer without pushing the QUIK-DRAW control valve knob in and verifying that all four locking pins have extended through the positioning holes in the web of the trailer I-beams.

**MANUALLY OPERATING THE LOCKING PINS**

Just as QUIK-DRAW uses an air actuator to retract locking pins, it uses coil springs to extend them. These coil springs (Figure 16) apply a constant outward force on the locking pins, causing them to stay fully extended and in position through the positioning holes in the web of the trailer I-beams. The coil springs force the locking pins to remain engaged, even if an air actuator malfunction occurs.

In the unlikely event of a QUIK-DRAW system malfunction, the locking pins can still be manually operated. To manually operate the locking pins, use the following procedure:

1. Begin with slider operation as described in the INTRAAX-SP SINGLE AXLE SLIDER SUSPENSIONS or TANDEM AND TRIDEM AXLE SLIDER SUSPENSIONS, but stop when the “pull the QUIK-DRAW control valve knob out” step is reached.

2. Look under the trailer at the front of the platform slider frame and locate the hexagonal bolt head on the end of the pipe weldment (Figure 15).

![Hexagonal bolt head](image-url)
3. Using a 1½ inch wrench on the hexagonal bolt head, **rotate and hold** the pipe weldment counterclockwise approximately 1/8 turn, or until the hole in a locking pin (Figure 16) is visible on the inboard side of the locking pin cage assembly. If the locking pins are free to move, it will require approximately 60 ft. lbs. (81 Nm) of torque to rotate the pipe weldment.

4. **Insert** a Phillips head screwdriver or 1/4 x 3 inch bolt in the exposed hole in one of the retracted locking pins (Figure 16). This will hold all of the locking pins in the retracted position because they are all interconnected by the locking pin linkages and pipe weldment.

**NOTE:** Only one locking pin needs to be held extracted for this procedure.

5. **Continue** with slider operation as described in the INTRAAX-SP SINGLE AXLE SLIDER SUSPENSIONS or TANDEM AND TRIDEM AXLE SLIDER SUSPENSIONS sections, but stop when the “push the QUIK-DRAW® control valve in” step is reached. Instead of pneumatically extending the locking pins, use the following step to manually extend them.

6. **Carefully Remove** the screwdriver or other device used to retract the locking pins. Keep clear of all moving parts.

**NOTE:** If necessary, repeat Step 3 to relieve tension on the locking pin while removing the screwdriver.

7. **Finish** slider operation as described in the INTRAAX-SP SINGLE AXLE SLIDER SUSPENSIONS or TANDEM AND TRIDEM AXLE SLIDER SUSPENSIONS sections.
REPLACING AIR CHAMBER ACTUATOR

PREPARATION
For more details on preparing a trailer and suspension for service, refer to T12007.

1. Apply the trailer parking brakes and chock the trailer wheels.

2. Completely depressurize the trailer air system by opening air tank drain valve.

REMOVING AIR CHAMBER ACTUATOR
To remove the QUIK-DRAW air chamber actuator:

1. Disconnect the air supply line from the fitting on the bottom of the actuator (Figure 17).

2. Remove cotter pin and washer from clevis pin attaching curbside front locking pin to actuator linkage.

3. Push clevis pin through holes in locking pin and actuator link.

4. Reach under frame crossmember and pull clevis pin completely out through access hole in frame crossmember.

5. Remove cotter pin and clevis pin attaching actuator yoke to crank arm on actuator linkage (Figure 17).

6. Using an 11/16 inch wrench, remove the two nuts attaching the actuator to the mounting bracket inside the frame crossmember.

7. Remove actuator through opening in top of frame crossmember.

INSTALLING AIR CHAMBER ACTUATOR

1. Inspect the new actuator to ensure the distance from the center of the clevis pin to the mounting surface of the actuator is 5.93±0.03 inches (Figure 18). If not:
   A. Loosen the jam nut attaching the yoke to the push rod of the actuator.
   B. Adjust yoke to the proper length.
   C. Tighten the jam nut to 25±5 ft. lbs. (34±6 Nm) of torque.

2. Remove the air fitting from old actuator and install into new one. Connection must be air tight.

NOTE: The connection should be checked during testing and tightened as needed.

3. Remove the cotter pin and clevis pin from the yoke on the push rod of the new actuator.

4. Remove the 11/16 inch nuts from the threaded studs on the actuator.

5. Install the actuator through the opening in the top of the front frame crossmember, and onto the mounting bracket inside the crossmember. The threaded studs on the mounting surface of the actuator must pass through the holes in the mounting bracket. The crank arm on the actuator linkage (Figure 17) must fit between the tangs of the actuator yoke, and the holes in the yoke must line up with the hole in the crank arm.

6. Reinstall the clevis pin in the actuator yoke, ensuring it passes through the hole in the crank arm.

7. Reinstall the cotter pin to secure the clevis pin.

8. Reinstall the 11/16 inch nuts onto the threaded studs of the actuator, and tighten to 35±3 ft. lbs. (48±3 Nm) of torque.

9. Swing the previously-disconnected actuator link upward, until the clevis pin hole lines up with the holes in the curbside locking pin (Figure 17). The end of the actuator link must fit into the slot in the locking pin.

10. Reinstall the clevis pin, washer, and cotter pin previously removed.

11. Connect air supply line to fitting on bottom of actuator.

12. Close drain valve on trailer air tank.
13. Fill the air tank and trailer air system.

14. Verify proper QUIK-DRAW® operation by pulling the QUIK-DRAW control valve knob (Figure 1 on page 2) out to its fully extended position.

15. Check air connections for leaks and tighten as necessary.

REPLACE QUIK-DRAW CONTROL VALVE

Refer to Figure 19 and Figure 20 for information relative to INTRAAX®-SP slider plumbing. For procedures to replace the QUIK-DRAW control valve, go to REPLACING QUIK-DRAW CONTROL VALVE on page 4:

QUIK-DRAW PLUMBING — PLATFORM APPLICATIONS (INTRAAX®-SP MODELS) ONLY

Install air lines and beam clip assemblies with reference to Figure 19 and Figure 20.

Figure 19: Air line installation details for platform applications (INTRAAX-SP models)
Figure 20: QUIK-DRAW plumbing diagram for platform applications (INTRAAX®-SP models)