



**The World's Leading
Manufacturer Of Trailer Sliders
For Over Three Decades.**

9802/9812



Slider Series

Featuring The Hutch P₃ - Pneumatic Pin Puller

Parts & Installation



Advancing the Practical Application of Suspension Technology

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9802/9812 Slider Series

Application

The 9802 and 9812 friction sliders are designed for van trailer and similar applications. Each slider utilizes Hutchens straddlemount hangers and is only supplied with the hangers and pipe braces attached.

Capacity

Consistent with Hutchens 9700 series suspensions, the gross axle weight rating (G.A.W.R.) for either the 9802 or 9812 is limited to a maximum of 25,000 lbs./axle.

Features

- The Hutch P₃ - Pneumatic Pin Puller is an air-operated lock pin retraction system which uses your trailer's own air supply for more efficient and effective retraction and release of the pins. This system offers split-second changing of the slider position while requiring minimal effort by the driver...simply pull the handle with one finger.
- 7 gauge side rails of high strength low-alloy steel.
- 4 symmetrical crossmembers for uniform stress distribution.

- Full-length slider pads made from UHMW material.
- "Slot welding" keeps edges of side rails and crossmembers weld-free.
- Heavy gauge, low-profile body rails with holes punched in 4" increments allowing precise variations in vehicle weight distribution while providing the wheel base best suited to your needs.
- Hutch's locator bar...the best compromise in weight and strength. Solid steel plugs welded at each end of a steel tube bar make repositioning fast and easy.

Options

Slider frames may be ordered in various widths to provide different spring centers. The 9802 has an overall height of 8 1/2" from the top of the body rail to the bottom of the sliding subframe. If a 10 1/2" deep slider better fits your needs, then this requirement is met with the 9812. Body rails for either the 9802 or 9812 are available in numerous lengths from 80" to 328", in 4" increments.

How To Order Your 9802/9812 Slider Assembly

1. Determine the frame width (FW) required by adding 4 inches to the spring centers (SC) you will be using. **See Fig. 1.**
2. Please specify the model hangers desired (e.g., H9700 or H9600). We provide the 9802 and 9812 with hangers installed at our factory only. The intense heat of welding the hangers may distort the slider frame - requiring straightening. Frame squaring and straightening is a routine part of slider construction.
3. Select the range of slide adjustment you need and what body rail length will provide that range. **See Chart B.**
4. A locator bar assembly is a standard component with every Hutchens slider. **See Chart C.** The locator bar should be used as directed when positioning the slider. **See "To Position The Sliding Suspension."**

5. Each slider must be ordered by a description of the slider.

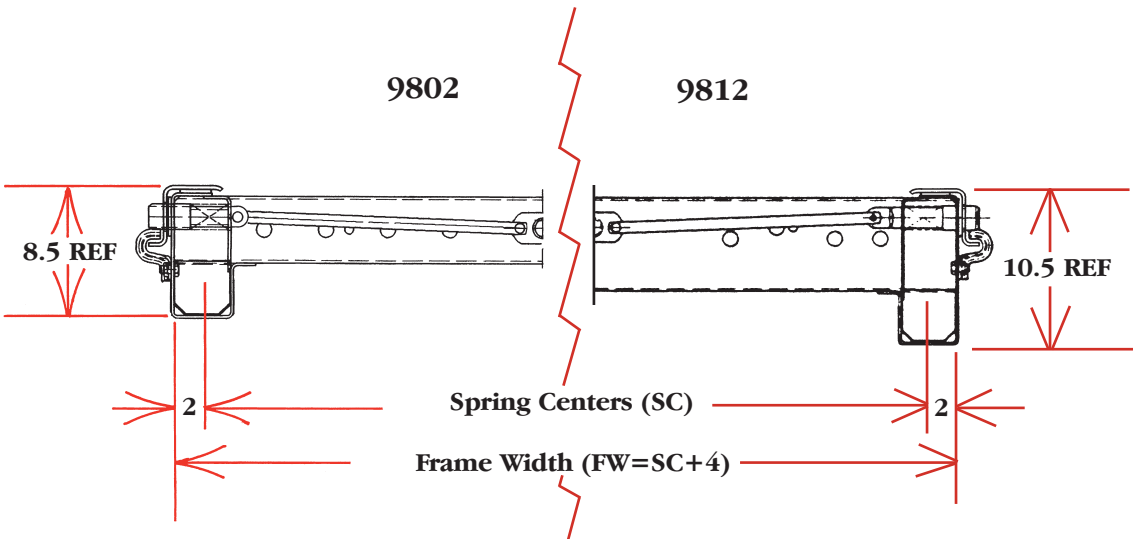
Example:

A 9802 slider with 44" spring centers and a frame width of 48", 9700T straddlemount hangers and pipe braces attached, 192" body rails, and a locator bar assembly would be ordered as follows:

Quantity	Model	Frame Width	Body Rail Length
1 ea.	9802	48"	192" w/ Locator Bar w/ 9700T straddlemount hangers attached*

* If you are ordering a complete suspension with the slider, a description of the unit must follow (i.e. 3/4" seats for 5" round axles, less standard 3 leaf springs with 7040-08 U-bolts).

Fig. 1



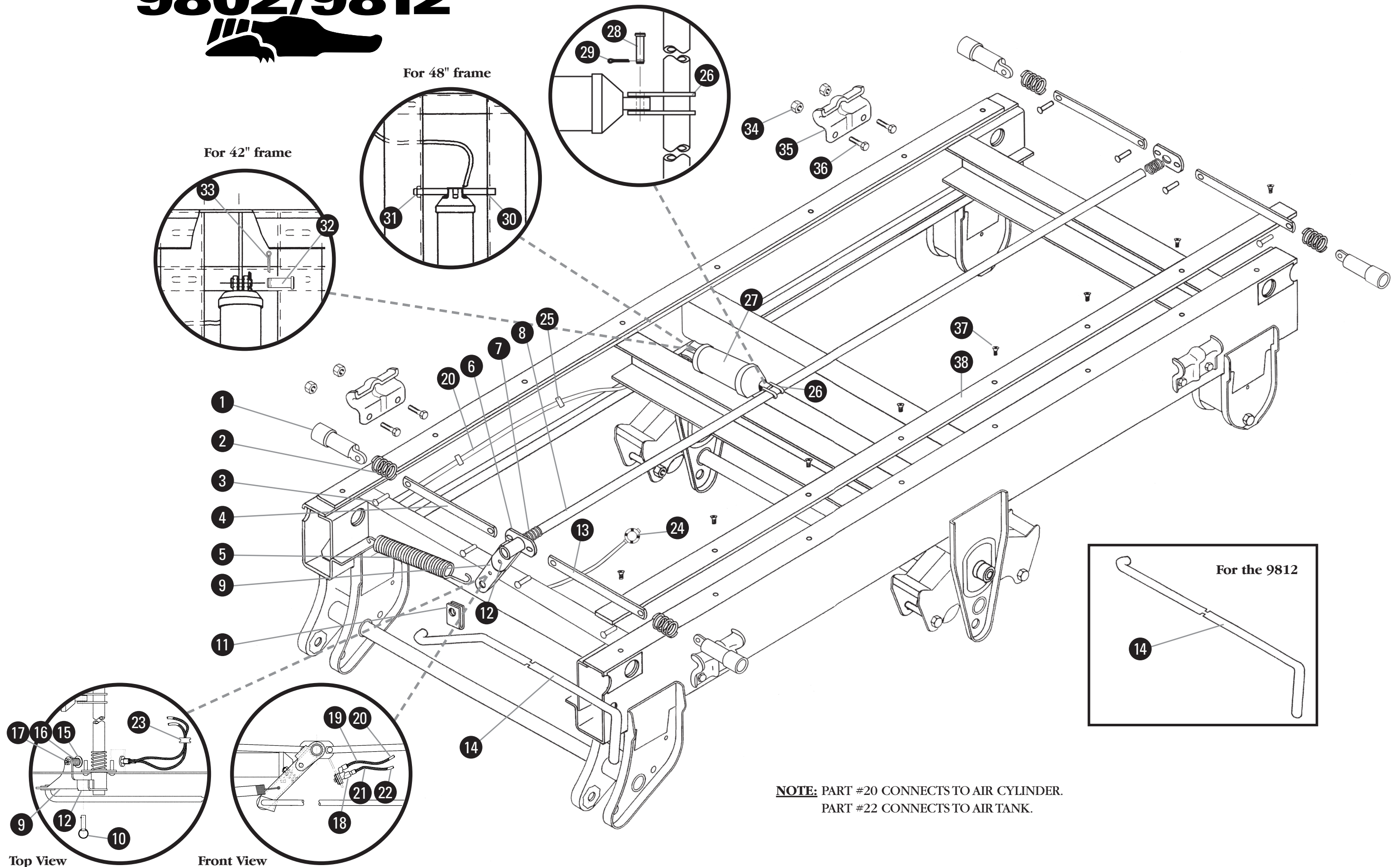


9802/9812



For 48" frame

For 42" frame



NOTE: PART #20 CONNECTS TO AIR CYLINDER.
PART #22 CONNECTS TO AIR TANK.

Bill of Materials

Item	Part No.	Quantity	Description
1	18426-01	4	Lock Pin - Cast
2	12779-01	4	Compression Spring - Lock Pin, PL
3	12780-01	8	Pan Head Rivet
4	See Chart A	2	Link (varies with frame width)
5	8018-02	1	Spring - Helix, 12 GA x 1 PD x 10 1/8"
6	8028-00	2	Cam - Puller Kit
7	18064-01	2	Compression Spring
8	8010-14	1	Pipe - 1" STD x 95"
9	17580-01	1	Crank Assembly
10	18699-01	1	Manual Override Pin
11	11409-01	1	Handle Clip
12	17567-01	1	Manual Pull Angle
13	11412-36	2	Link - 17.81" OAL
14	18010-01 (for 9802)	1	Pull Handle - 32" LG
	18797-01 (for 9812)	1	Pull Handle - 32.38" LG
15	17565-01	1	Elevator Bolt - 3/8" - 16 UNC x 2" LG
16	17725-01	1	Compression Spring - .72 OD x 2.25" LG
17	17587-01	1	Lock Nut - 3/8" - 16 UNC, GRB
18	17708-01	1	Air Valve
19	18598-03	1	Mesh Tubing - 1/4" x 85" LG
20	17572-07	1	Plastic Tubing - NT10004 - 1/4" x 85" LG
21	18598-02	1	Mesh Tubing - 1/4" x 55" LG
22	17572-06	1	Plastic Tubing - NT10004 - 1/4" x 55" LG
23	17579-01	2	Rubber Grommet
24	17916-01	1	Pressure Protection Valve Kit
25	17797-01	3	Wire Clip
26	17754-01	2	Air Cylinder Crank
27	19515-01	1	Air Cylinder Assembly
28	17693-01	1	Clevis Pin - 3/8" x 1 1/2"
29	17692-01	1	Cotter Pin - 7/64" x 3/4"
30	718-03	1	Hex Bolt - 1/2" - 20 UNF x 6" LG, GR5 (48" frame width only)
31	33-01	1	Hex Lock Nut - 1/2" - 20 UNF - 2B, GRB (48" frame width only)
32	19523-01	1	Clevis Pin - 1/2" x 2" (42" frame width only)
33	551-00	1	Cotter Pin - 1/8" x 1 1/4" (42" frame width only)
34	33-01	8	Hex Lock Nut - 1/2" - 20 UNF - 2B, GRB
35	20289-01	4	Hold Down Clip
36	8040-00	8	Hex Bolt - 1/2" - 20 UNF x 1 1/4", LG, GR5
37	9627-00	16	Threaded Form Screw - 5/16" -18 x 3/4", CSHD
38	11421-01	2	Slider Pad - UHMW, 1/4" x 2" x 96"

Chart A - Link (Item #4)

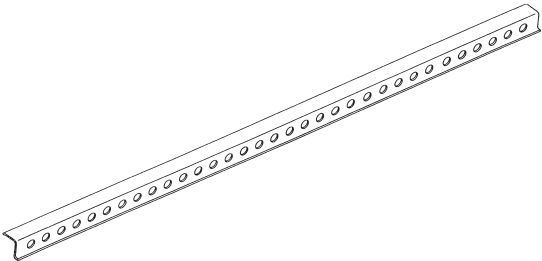
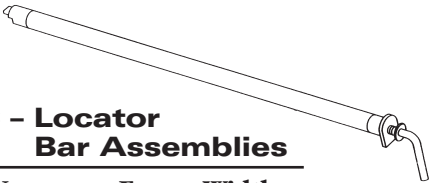
Part No.	Frame Width	Overall Length (OAL)
11412-35	42"	12.12"
11412-36	48"	17.81"

Chart B - Body Rail Assemblies

Part No.	Length Ranges	Material Thickness
12713-XX	80" - 328"	.232"
16816-XX	92" - 328"	.275"

Chart C - Locator Bar Assemblies

Part No.	Frame Width
11642-09	42"
11642-10	48"

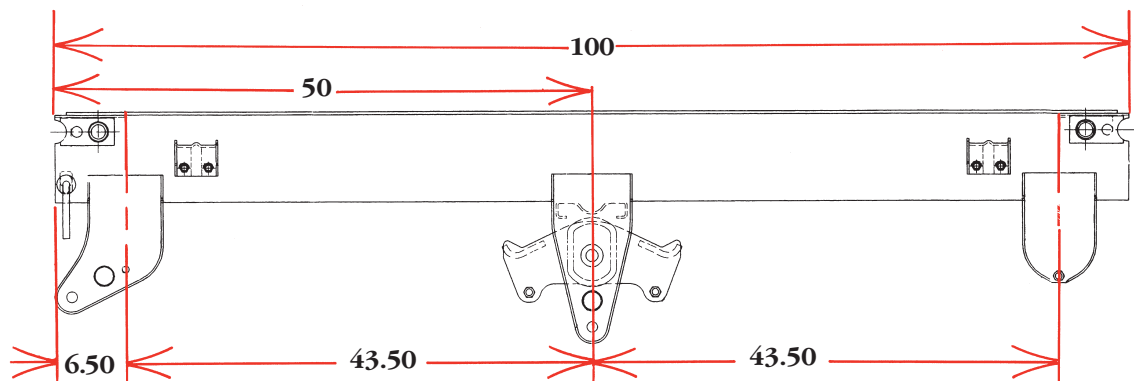


Hangers

Fabricated straddlemount hangers are installed by Hutchens as an integral part of both the 9802 and 9812 slider, and are located, as depicted for 49" axle centers only, in Fig. 2.

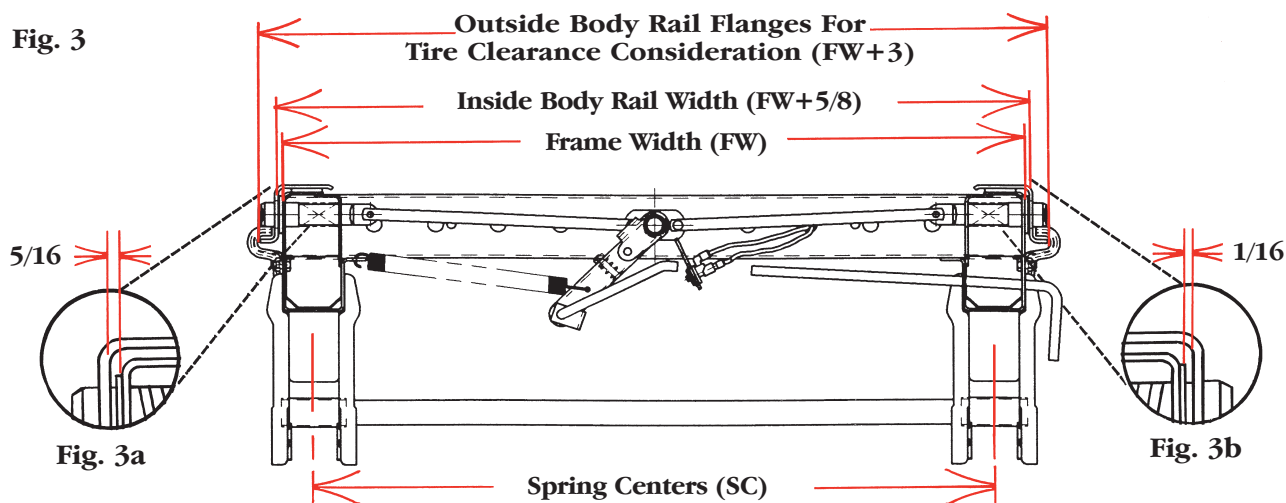
Note: The installer will be responsible for adequate tire clearance, both vertical and lateral.

Fig. 2



Body Rails

1. Determine the location of the body rails. This is done by measuring out from the centerline of the trailer one-half of the frame width and adding $5/16$ of an inch. This locates the **inside** of the body rail. This measurement should be performed at the front and rear of each body rail. See Fig. 3a.



2. Clamp the body rails in position under the trailer.

- a) When locating body rails on the trailer cross sills, it is helpful if the slider lock pins are centered in the body rail holes on both sides. The same clearance should be maintained around the complete lock pin circumference to ensure easy operation of the lock pins.
- b) Use one $1/16$ " shim **on each side** or one $1/8$ " shim **on one side** to get the proper lateral spacing between body rails and the bearing plate on the slider frame. See Fig. 3b. Check spacing to make sure the $1/8$ " space (overall) is constant along the full length of the rails.

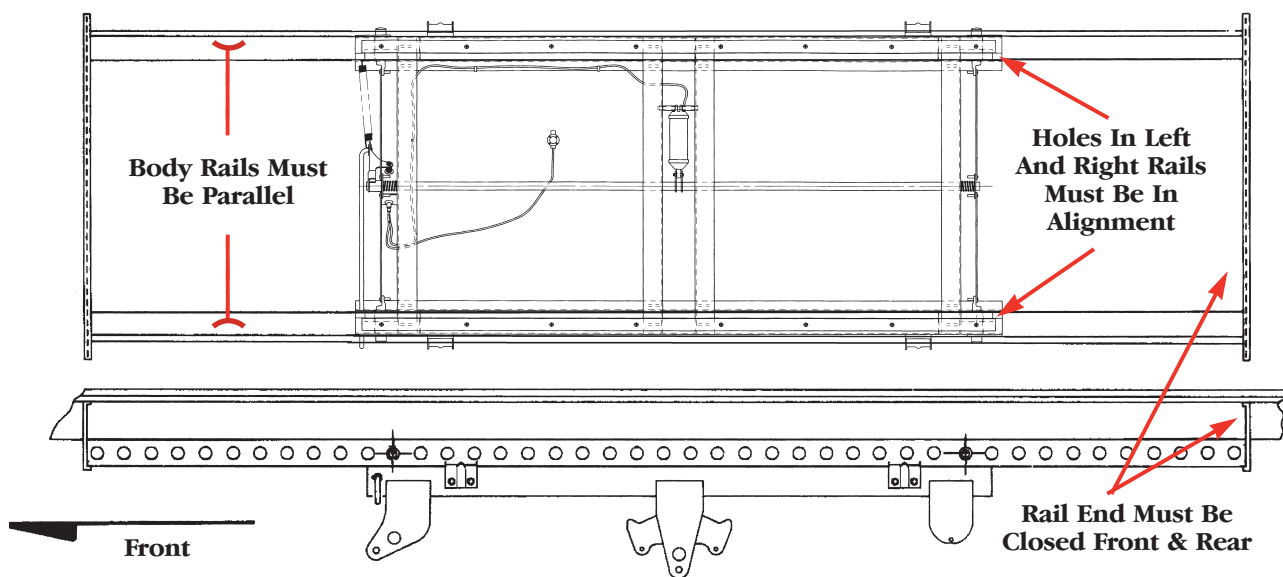
3. Weld the body rails securely to the underside of the trailer.

4. Remove shims and check unit for free operation along the entire length of the body rails.

Note: Each trailer manufacturer may have their own preferred method of effecting body rail alignment and attachment.

5. On all sliders the trailer structure must block the front and rear rail openings to prevent the slider frame from escape. See Fig. 4.

Fig. 4



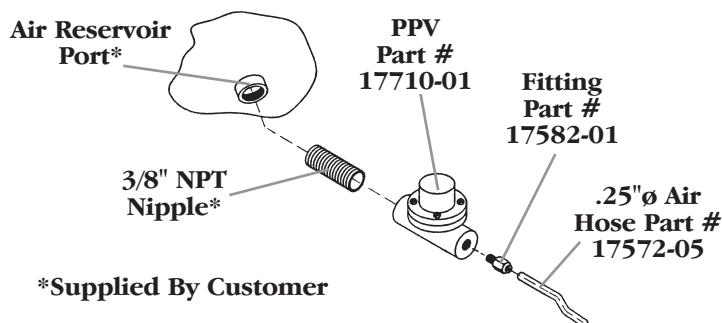
Hold Down Clips

6. Secure the hold down clips at each corner of the slider assembly. Each clip requires two 1/2" diameter bolts and lock nuts, which are furnished by Hutchens. Tighten the nuts and bolts to 65 lb-ft (oiled), 85 lb-ft (dry) torque.

Pressure Protection Valve For The P₃

Install the pressure protection valve at the air reservoir port. See Fig. 5 and Warning Tag.

Fig. 5



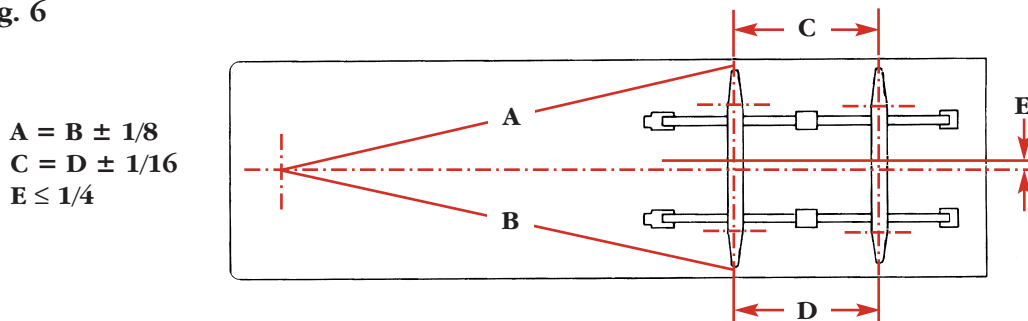
Suspension Alignment

ALIGNMENT CAN ONLY BE ACHIEVED IF THE LOCKPIN HOLES ARE EVENLY LOCATED FROM THE KINGPIN, LEFT AND RIGHT. ALIGNMENT SHOULD ALWAYS BE DONE WHILE THE TRAILER IS EMPTY.

To properly align the suspension attached to your 9802 or 9812 slider, the trailer should be pulled in a straight line for a sufficient distance to ensure there are no binds in the suspension. The trailer should then be pulled straight forward with the trailer brakes locked, so the locking pins rest against the rear of the holes in the body rails. This approximates the position of the pins when the trailer is being pulled on a highway, and ensures proper trailer tracking. Alignment can be achieved with an optical device designed especially for this purpose, or manually in the following manner.

- a) Measure the distance from the kingpin to the centerline of the spindles on the front axles. It is recommended that spindle extensions be utilized. As noted in Fig. 6, dimensions A and B must be equal within 1/8 of an inch. Alignment is accomplished by loosening the torque arm clamp bolts on both ends of the adjustable torque arm and turning the adjustment screw as required.

Fig. 6



- b) After the front axle is aligned, tighten the 5/8" torque arm clamp bolts to 130 lb-ft (oiled), 170 lb-ft (dry) torque in order to lock the position of this axle. Next, align any succeeding axles with the front axle by following the same procedure.
- Loosen the torque arm clamp bolts, turn the adjustment screw until dimensions C and D are equal within 1/16" of each other, then tighten the clamp bolts to the proper torque.
- Check dimension E, the lateral centerline relationship of the trailer body and axles. If E exceeds 1/4", contact the trailer manufacturer for recommendations.
- After alignment has been completed on all axles, all 5/8" torque arm clamp bolts should be rechecked to make certain that they are tightened to the necessary 130 lb-ft (oiled), 170 lb-ft (dry) torque.
- Relocate the slider to the forward position and recheck the kingpin alignment. Variance in A and B dimensions would indicate lock pin hole discrepancies.
- Refer to TTMA RP No. 71-10 (Trailer Axle Alignment) for more detail.

To Position The Sliding Suspension

1. Set both the tractor and trailer brakes.
2. Remove the locator bar from behind the slider and move to desired location.
3. To release the lock pins, pull the operating handle all the way out and lock in place.
4. Release the tractor brakes and carefully drive forward or backward until the sliding suspension is at the desired location.
5. Release the operating handle and visually check all lock pins for locking. The main body of each lock pin must extend through the holes in the rails.
6. Lock the locator bar in both rails immediately behind the slider.
7. With the trailer brakes applied, gently rock the trailer backward and forward to ensure the sliding suspension is properly locked, and follow the procedures set out above before pulling the trailer. The lock pins must be checked at each stop to ensure each is locked.

Important: Warning Decal Note

When the installation of your "Hutch" slider and P3 is complete and the trailer and/or subframe has been painted, the decals (shown here) must be installed in plain view on the road side of the trailer immediately above the suspension. The decals must be in plain view on each trailer equipped with a "Hutch" slider and P3, and must be read before using the sliding suspension or the Pneumatic Pin Puller. Decals are shipped with the slider units. If decals are not received, or if for any reason additional decals are wanted, contact our Customer Service Department at (417) 862-5012 or fax (417) 862-2317 and decals will be shipped promptly at no charge.

WARNING

FAILURE TO LOCK THE SLIDING SUSPENSION CAN CAUSE A LOSS OF VEHICLE CONTROL, DEATH, SERIOUS BODILY INJURY, AND PROPERTY DAMAGE.

Hutchens Slider Series (Decal Part Number 16088-01 Rev. D)

THIS TRAILER IS EQUIPPED WITH A SLIDING SUSPENSION THAT MUST BE SECURELY LOCKED PRIOR TO OPERATION. THE SLIDING SUSPENSION IS LOCKED WHEN THE MAIN BODY OF EACH LOCK PIN EXTENDS THROUGH THE HOLES IN THE RAILS. BEFORE PULLING THE TRAILER, THE SLIDING SUSPENSION MUST BE CAREFULLY INSPECTED TO ENSURE IT IS PROPERLY POSITIONED AND THE MAIN BODY OF EACH LOCK PIN DOES EXTEND THROUGH THE HOLES IN THE RAILS. BEFORE PULLING THE TRAILER, APPLY TRAILER BRAKES AND GENTLY ROCK TRAILER BACKWARDS AND FORWARDS TO ENSURE SLIDING SUSPENSION IS SECURE.

TO POSITION THE SLIDING SUSPENSION:

1. Set both tractor and trailer brakes.
2. Remove locator bar from behind slider and move to desired location.
3. To release the lock pins, pull operating handle all the way out and lock in place.
4. Release the tractor brakes and carefully drive forward or backward until the sliding suspension is at the desired location.
5. Release operating handle and visually check all lock pins for locking. The main body of each lock pin must extend through the holes in the rails.
6. Lock locator bar in both body rails immediately behind slider.
7. With the trailer brakes applied, gently rock trailer backward and forward to ensure sliding suspension is properly locked and follow procedures set out above before pulling the trailer. The lock pins must be checked at each stop to ensure each is locked.

HUTCHENS
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P3 Operational Decal Part Number 18281-01 Rev. A

PNEUMATIC PIN PULLER

OPERATING INSTRUCTIONS:

1. This sliding subframe is equipped with Hutchens' Pneumatic Pin Puller (P3) lock pin retraction mechanism.
2. To retract the lock pins, grasp the pull handle in the conventional manner and pull it all the way out until the locking notch in the rod engages the slot in the slider rail. Air pressure will retract the lock pins.
3. When the handle is released, the lock pins are permitted to re-engage in the body rails.
4. **MANUAL OVERRIDE CAPABILITY:** Should an inadequate air supply or other problem prevent the P3 system from retracting the pins, insert a pin or bolt in the 1/2" hole located on the crank of the pulser mechanism. Pull handle manually to retract the pins.

FOLLOW INSTRUCTIONS ON THE "SLIDER OPERATING DECAL"

U.S. Patent No. 5,864,725

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