



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



Parts & Installation



® U.S. and Canada

Advancing the Practical Application of Suspension Technology

Springfield, MO ■ (800) 654-8824 ■ (417) 862-5012
Fax (417) 862-2317 ■ www.hutch-susp.com

8400 Slider Series

Application

The 8400 roller slider is designed for van trailers and similar applications where the fastest and easiest slide repositioning available is required. This slider utilizes Hutchens straddlemount hangers but may be purchased with or without hangers and pipe braces attached.

Capacity

Consistent with Hutchens suspensions, the 8400's gross axle weight rating (G.A.W.R.) is limited to a maximum of 24,000 lbs./axle.

Features

- ▶ A spring loaded, positive locking-pin mechanism utilizing forged lock pins.
- ▶ Eight load-bearing rollers spaced four on each side along the outside of the lower frame assembly.

- ▶ Specially adapted structural "bulb angle" body rails provide high strength and a wide bearing surface for the rollers.
- ▶ The ultimate in repositioning ease and reduced tractor drive train wear.
- ▶ Adjustable in 4 inch increments allowing precise variations in vehicle weight distribution while providing the wheel base best suited to your needs.

Options

Slider frames may be ordered in various widths to provide different spring centers. Body rails of various lengths ranging from 176" to 240" are also available.

How to order your 8400 Slider Assembly

1. Determine the frame width (FW) required by adding 4" to the spring centers (SC) you expect to use. See Fig. 1.
2. If hangers are to be installed by Hutchens, please specify the model hangers desired (e.g., H9700 or CH9700). We prefer to provide the 8400 with hangers installed at our factory. 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 determine 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. Since the Hutchens product line is not based on an alphanumeric numbering system, each slider must be ordered by a description of the slider.

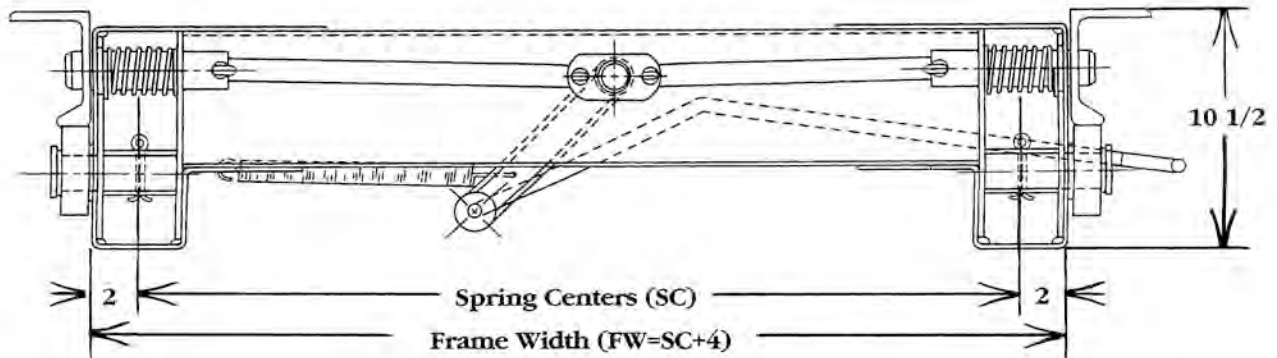
Example:

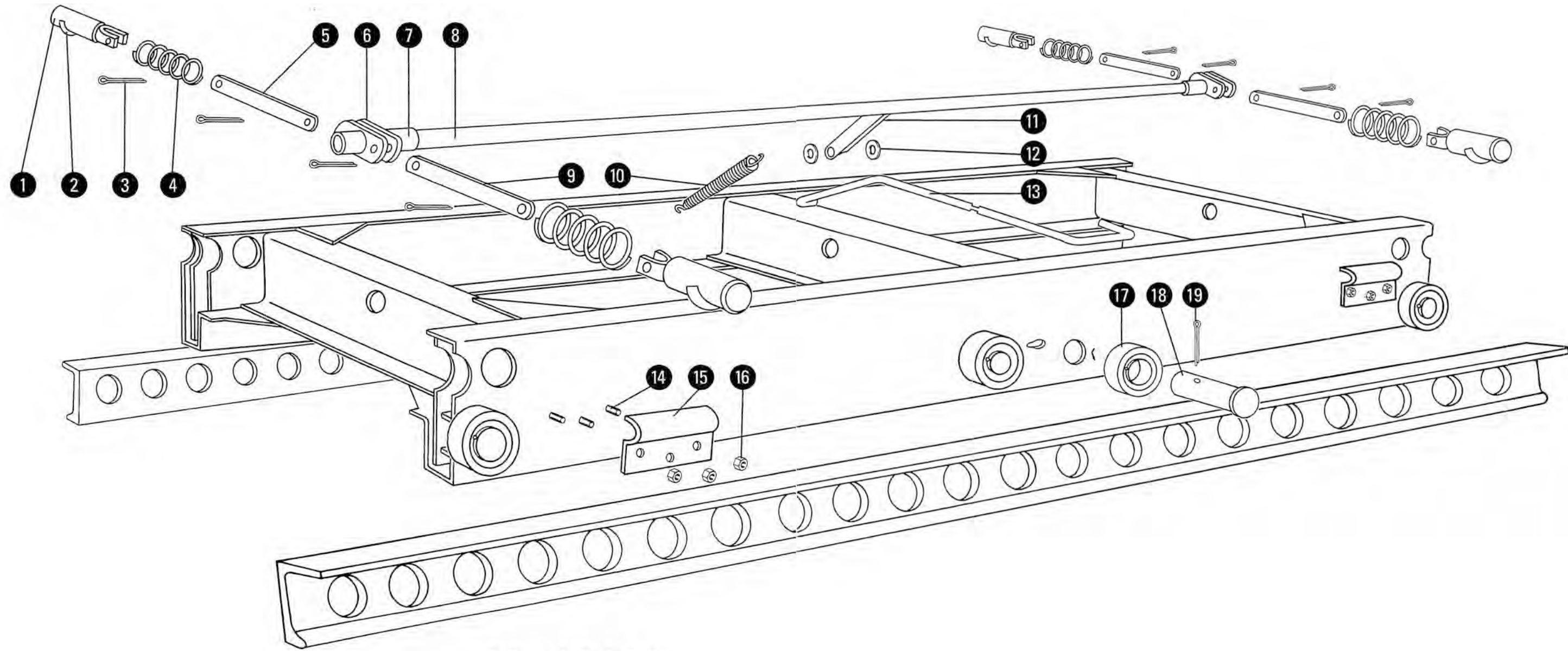
An 8400 slider with 38" spring centers and a frame width of 42", 9700T straddlemount hangers and pipe braces attached, 176" body rails, and a locator bar assembly would be ordered as follows:

Quantity	Model	FW/SC	Body Rail Length
1 ea.	8400	42"	176" 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





Bulb Angle Body Rail

Bill of Materials

Item	Part No.	Quantity	Description
1	11410-04	4	Lock Pin Assembly - 6.56 LG
2	11414-00	4	Special Half Washer
3	8016-00	8	Cotter Pin - .38" x 1.25"
4	8098-01	4	Compression Spring - Lock Pin
5	See Chart A	2	Link (varies with frame width)
6	8028-00	4	Cam - Puller Kit
7	405-01	2	Pipe - 1 1/4" STD x .75 LG
8	8010-38	1	Pipe - 1" x 97"
9	11412-03	2	Link - 12.62 LG
10	8018-02	1	Spring - 1 PD x 10.12"
11	8026-00	1	Crank - Puller Kit
12	8054-00	2	Washer - Plain 5/8"
13	8014-00	1	Handle - Pin Release
14	8040-00	12	Hex Bolt - 1/2" - 20 UNF x 1 1/4"
15	8406-00	4	Hold Down Clip
16	33-01	12	Hex Lock Nut - 1/2" - 20 UNF
17	8426-01	8	Roller Assembly
18	9249-00	8	Roller Shaft Assembly
19	8041-00	8	Cotter Pin - .375" x 2.5"

Chart A - Link (Item #5)

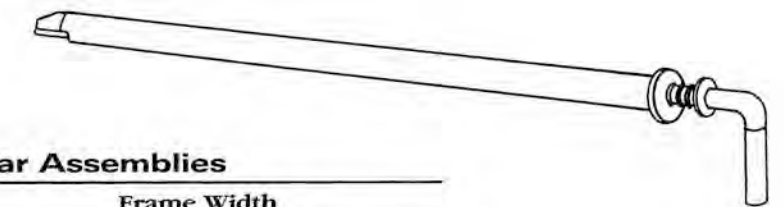
Part No.	Frame Width	Length
11412-02	38"	11.62"
11412-04	40"	13.62"
11412-17	41"	14.62"
11412-13	42"	15.62"
11412-18	48"	21.62"

Chart B - Bulb Angle Body Rail Assemblies

Part No.	Length	Nominal Adj.
8407-02	176"	68"
8407-07	192"	84"
8407-11	240"	132"

Chart C - Locator Bar Assemblies

Part No.	Frame Width
11642-01	38"
11642-03	40"
11642-04	41"
11642-05	42"
11642-07	48"





Hangers:

Hangers must be installed before the slider is mounted under the trailer. A large majority of “Hutch” sliders leave the factory with hangers attached. However, when installing the hangers yourself the following points should be noted.

Caution: When welding spring hangers to the slider side rails avoid the concentration of excessive heat in any one place. Weld only part of the spring hangers to the side rail at one time, allowing the welds to cool before returning to finish the installation. Improper welding procedures can cause frame distortion, thereby preventing the main body of one or more of the four lock pins from extending through the holes in the body rails. For this reason we suggest having the hangers installed at our facilities where careful welding and accurate straightening is part of every 8400 slider we build.

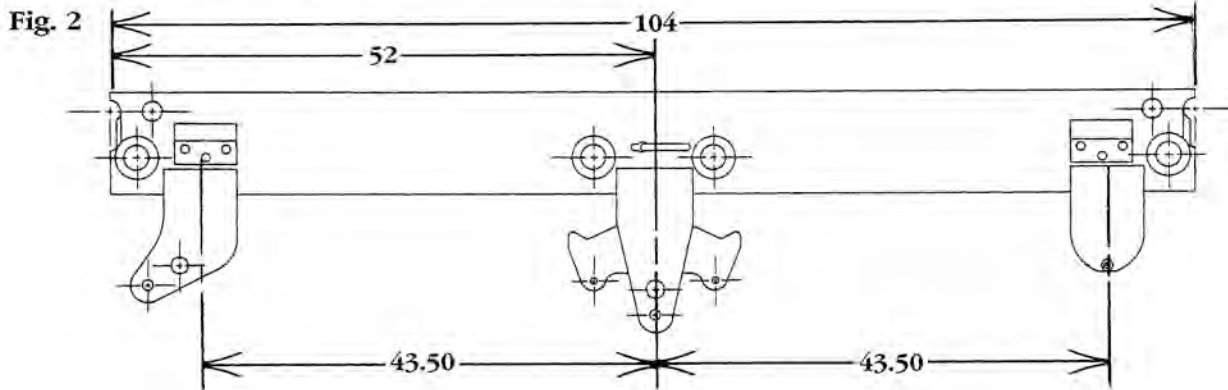
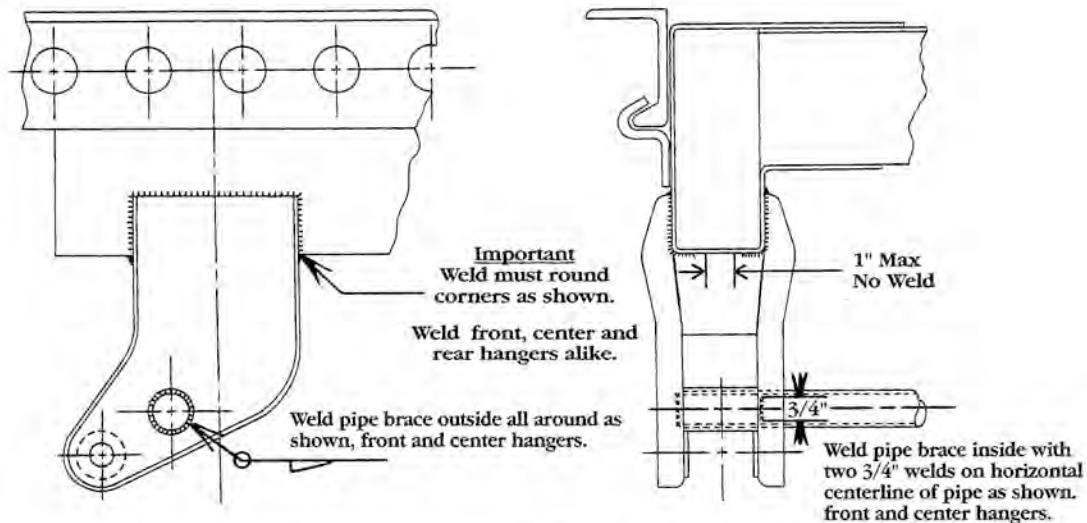


Fig. 3



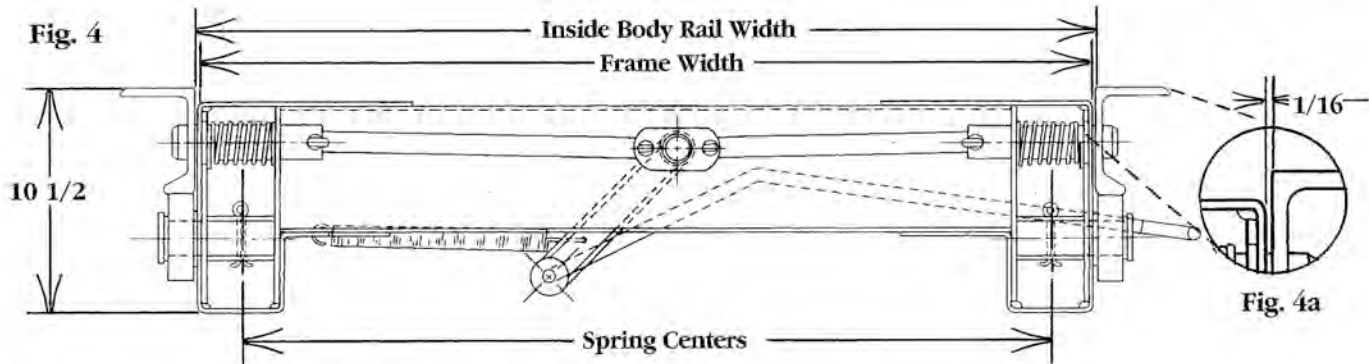
1. Weld the straddlemount hangers to the slider frame as indicated in **Figs. 2 and 3** as well as in the recommended installation instructions. It is imperative that the hangers are parallel with each other. This allows proper bracing between pairs of hangers on opposite sides of the slider frame. These braces (refer to installation instructions for specifications) and any gussets are to be furnished by the installer. The installer will also be responsible for adequate tire clearance, both vertical and lateral. If the vehicle may be subjected to severe operating conditions, contact our Engineering Department for bracing recommendations.

Body Rails:

2. 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 1/16 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. 4a.**

3. 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 in order 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. 4a.** Check spacing to make sure the 1/8" space (overall) is constant along the full length of the rails.

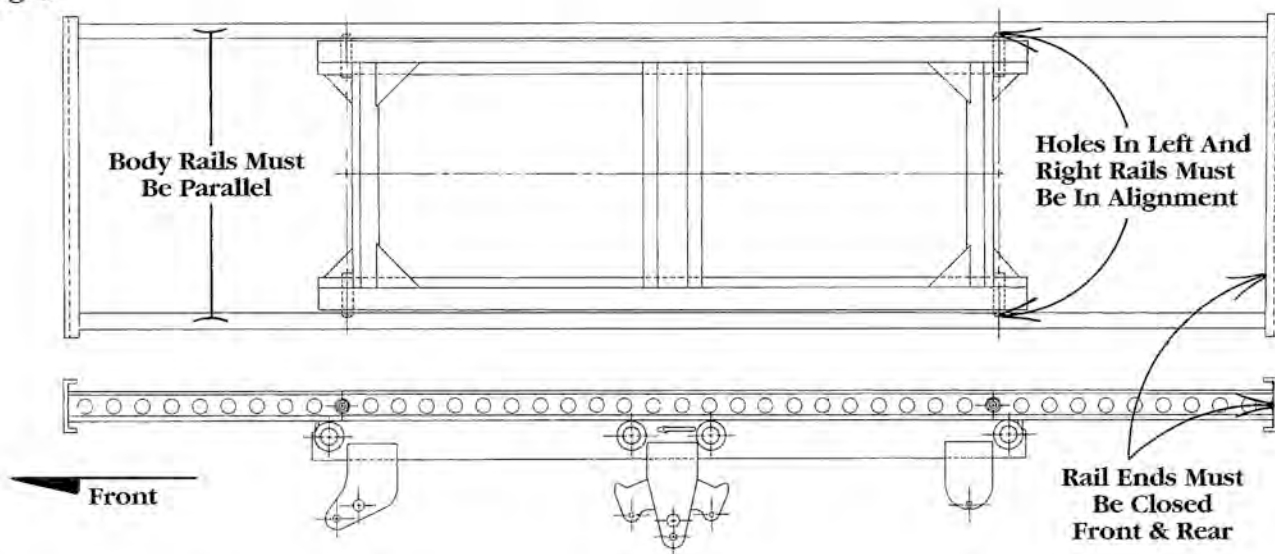


4. Weld the body rails securely to the underside of the trailer.
5. Remove shims and check unit for free operation along the entire length of the body rails.
 NOTE: Each trailer manufacturer may have their own preferred method of effecting body rail alignment and attachment.
6. On all sliders the trailer structure must block the front and rear rail openings to prevent the slider frame from escape. See Fig. 5.

Hold Down Clips:

7. 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.

Fig. 5



Suspension Alignment:

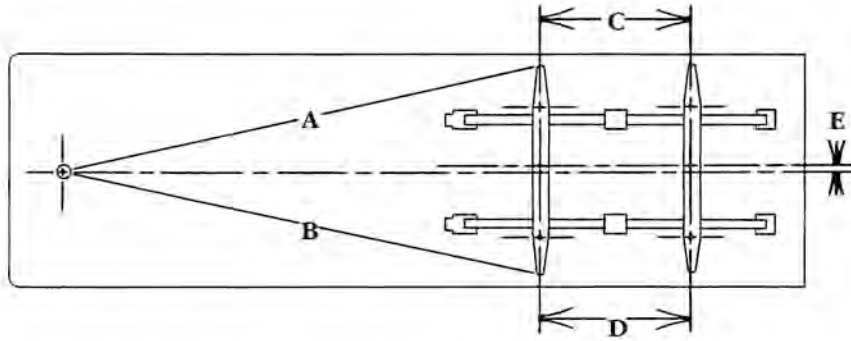
ALIGNMENT CAN ONLY BE ACHIEVED IF THE LOCKPIN HOLES ARE EVENLY LOCATED FROM THE KINGPIN, LEFT AND RIGHT. ALIGNMENT SHOULD ALWAYS BE DONE WHILE THE TRAILER IS EMPTY.

To properly align the suspension attached to your 8400 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 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

$$A = B \pm 1/8$$
$$C = D \pm 1/16$$
$$E \leq 1/4$$



- 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 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.
 - ▶ Refer to TTMA RP No. 71-90 (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. Lock the trailer brakes and slowly move the trailer body forward to reduce weight on the tandem, or backwards to increase weight on the tandem. Caution must be used here as "Hutch" roller sliders are extremely easy to reposition, and require only a fraction of the power normally used to reposition friction type sliders. Carelessness in this step could result in damage to trailer and/or slider.
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 is complete and the trailer and/or subframe has been painted, the decal (shown here) should be installed in plain view on the road side of the trailer immediately above the suspension. The decal should be in plain view on each trailer equipped with a "Hutch" slider, and should be read before using the sliding suspension. 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.

