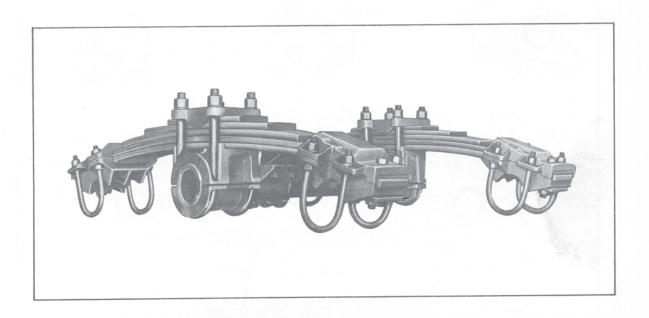
## 'HUTCH' H-800A MODEL SINGLE POINT TRAILER SUSPENSION



## FEATURES OF THIS MODEL

A heavy duty suspension specially designed for off road operations, such as logging or dump. 1.

Available in a broad range of variations to suit almost any mounting requirement. The standard trunnion mounting 2. is shown, with optional (spring underslung) trunnion mounting available.

A broad range of load capacities are available. H-800A-36 for up to 36,000 pound capacity, H-800A-42 for 42,000 3. pound capacity, H-800A-50 for 50,000 pound capacity and H-800A-60 for up to 60,000 pound loads.

The industry's first single point suspension with adjustable alignment of axles. When alignment is completed, the 4. adjustment plate is simply welded in place, to prevent future misalignment.

The trunnion rubber bushing is 100% rubber and is pre-loaded at assembly to insure live action of the rubber. Greater 5. flexibility, easier ride and reduced wear are the results of this feature.

Maintenance and replacement of the trunnion bushing is performed by the use of a split trunnion casting. 6.

The unit is completely rubber bushed, with the use of rubber pads, above and below the spring leaves in the "spring end boxes." A bonded bushing is utilized where the 1" diameter retainer bolt is used in the spring and spring end box connection. This feature reduces wear, noise, and prolongs the life of all components.

Heavy duty components are used throughout, from the use of heavy 5" wide springs to the 1-1/8" diameter U-bolts for 8. the trunnion hub. Other components are heavy duty cast steel, that have been "shot peened" to relieve casting stresses. This unit is prime painted ready for installation.

Springs are kept in alignment by the use of spring guides both in the trunnion casting and the top plate. 9.

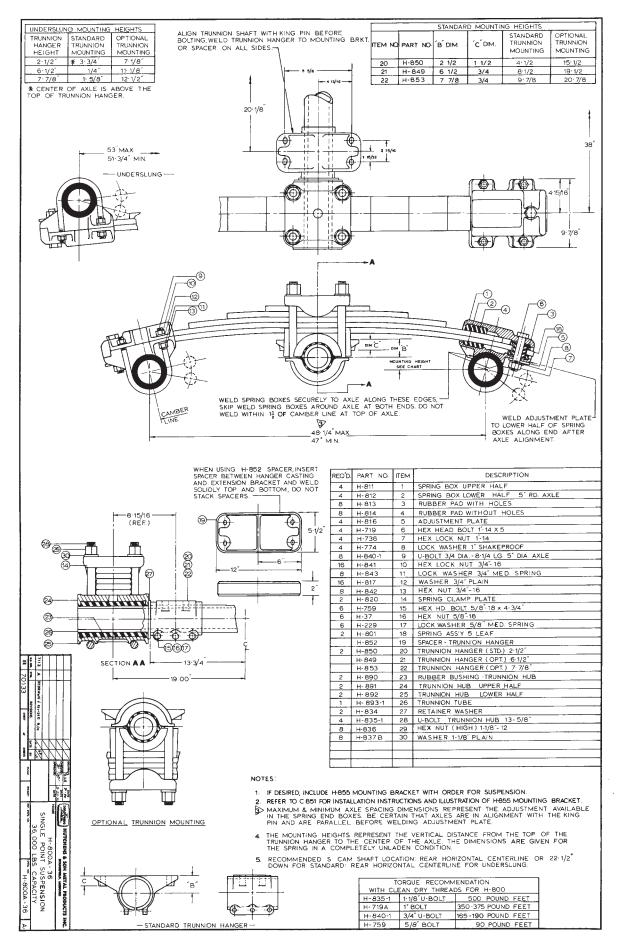
Optional 2" thick spacers, trunnion hangers in three heights, and heavy duty mounting brackets are available. 10.

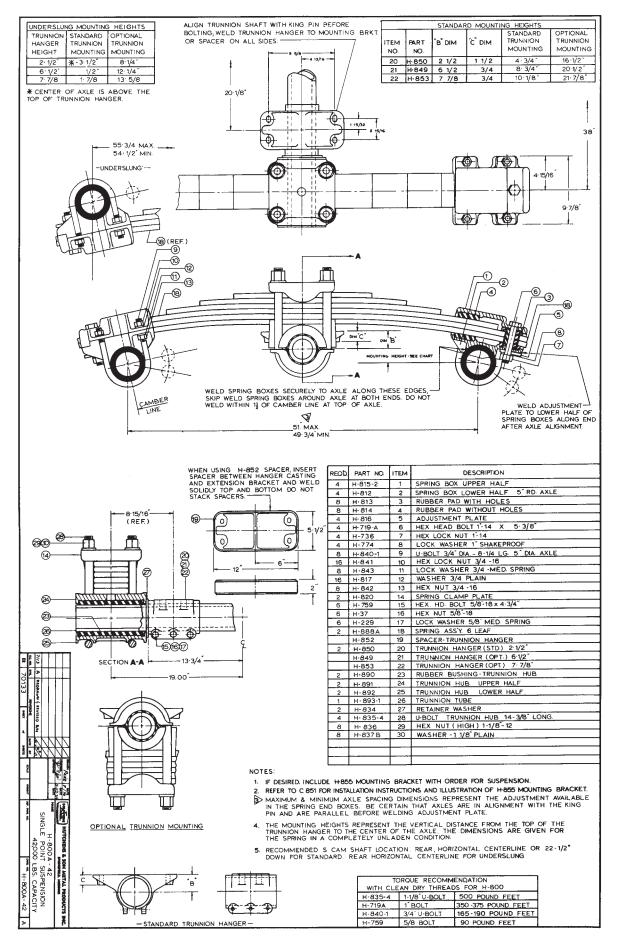
Spring end boxes have a built-in bump out area for maximum oscillation protection. 11.

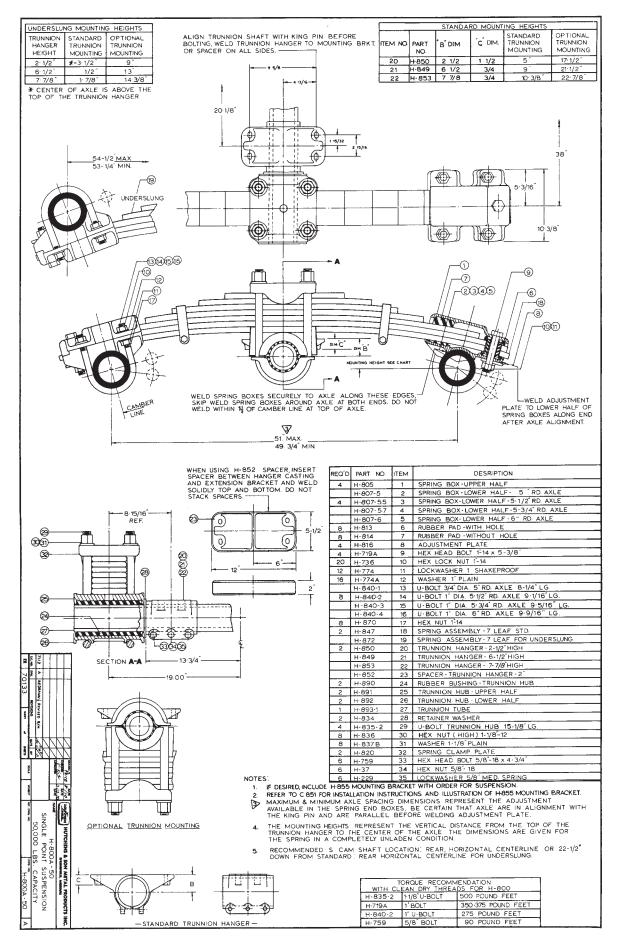
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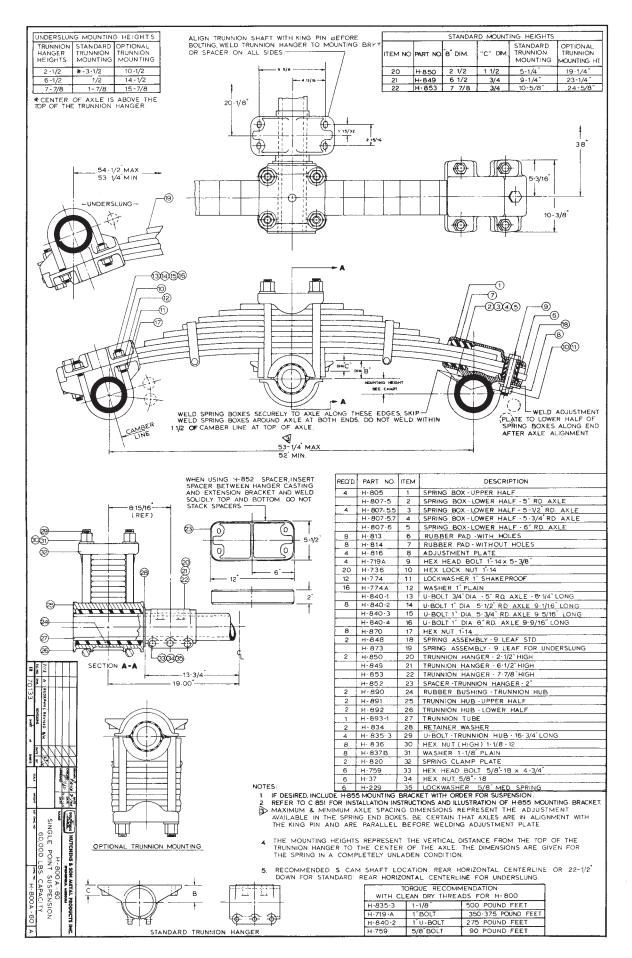
- 1. MODEL FEATURES AND PHOTO OF UNIT
- 2. H-800A-36 SINGLE POINT
- 3. H-800A-42 SINGLE POINT 4. H-800A-50 SINGLE POINT
- 5. H-800A-60 SINGLE POINT
- 6. INSTALLATION INSTRUCTIONS ALL MODELS
- 7. UNIT PRICES AND WEIGHTS

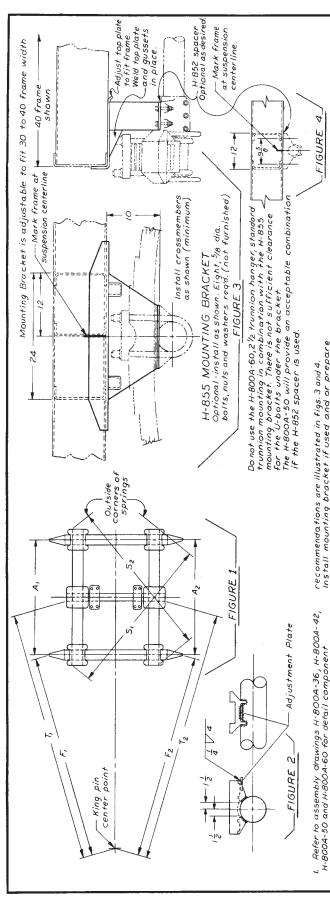












Heter to assembly Grawings H-800A-36, H-800A-42, rec. H-800A-50 and H-800A-60 for detail component Institute from formation, unit capacity, mounting height, and framounting dimensions.

Before ordering suspension, it should be determined that there will be no interference between the desired H-8004 suspension components and axle or brake components. See the proper assembly drawing for recommended camshaft location. Unless otherwise specified springs will be pre-assembled on the trunnion tube at 38 "spring centers.

2. Inspect suspension assembly to be certain that the spring alignment has not been destroyed during spring thipment.

Disassemble the spring end boxes and measure the distance between the full leayle leaves at each end lobe certain that the springs are perpendicular to the trunnion tube, dimensions S, and S<sub>2</sub> (Fig. 1) must be equal. (F spring alignment must be corrected, loosen trunnion hub bestion by backing off the nuts on the trunnion hub U-bolts approximately 2 revolutions. It may be necessary to use a hydraulic jack to reposition springs. With springs properly aligned, to que the trunnion hub U-bolts to 500 pound feet. 3 Locate at the trunnion hub U-bolts to 500 pound feet. Camber is up. The center of the axle may be located by measuring between the brake flanges and marking the center mid-way be tween. Place spring and boxes (lower half) on axle equi-distant from boxes (lower half) on axle equi-distant from centerpoint, with the same spacing as the suspension springs. To check this spacing bases in place on axles and check with level to insure that boxes are parallel. Weld spring boxes to axlest and check with level to insure that boxes are

that boxes are parallel. Weld spring boxes to axle using procedure outlined in figure 2.

4. Determine suspension location on trailer frame and measure from king pin to outside of frame on each side for proper alignment and mark frame for suspension centerline. Minimum frame reinforcement

recommendations are illustrated in figs. 3 and 4.
Install mounting bracket if used and or prepare
frame for builting trunnion hanger. Refer to
assembly drawing for bolting pattern. Frame
mounting boits are to be furnished by installer
Bolt trunnion hanger to mounting bracket or
trailer frame. Do not tighten bolts. Align trunnion
trobe with king pin, see fig. I dimension T and T
must be equal. Tighten bolts tand T
must be equal. Tighten bolts to bolts
of pound feet and and re-check trunnion tube

tube with king pin, see fig. I dimension T, and Ts must be equal. Tighten \$96 Trunnon hanger boilts to 90 pound feet and re-check frunnion tube alignment. Weld frunnion hanger securely to mounting bracket or frailer frame. When using H-85 spacer weld solid both to trunnion hanger and frame member. DO NOT STACK SPACERS.

5. Assemble spring end boxes to springs and axles, tightening fasteness anly enough to hold components in place. If specific axle spacing is desirred, positrion front axle so that its distance from the centerline

J. Assemble spring and assets to springs and axies, tightening fasteners only enough to hold components in place. If specific axle spacing is desired, position front axle so that its distance from the centerline of the trunnion tube is one half the desired axle spacing. Align the front axle with the king pin so that file is, see fig. I. fthe spring box fastners are either end to accomplish alignment. Tighten the l'diameter bolt and U-bolts sufficienty to prevent accidental misalignment. Align the rear axle with the front axle so that A, = A, see fig. I. Re-check alignment of both axle sand if the axle may be and a safe with the stront axle so that A, = A, see fig. I. Re-check alignment of both axles and if the axle may be chart on assembly drawing. Weld adjustment

plate to the spring end box, see Fig. 2.

6. Maximum allowable oscillation at trunnion hub should not exceed 15° above or below horizonta.

5pring boxes are designed to accept bump-outs or stops which the installer should provide to assure tire clearance or to limit oscillation whichever becomes critical first.

whichever becomes critical first.
Check all fasteners to be certain that they are
torqued to the recommended level as shown on the
assembly drawing. Fastener torque should be
checked after initial service and periodically
thereafter.

For applications or situations not covered in this section, contact HUTCHENS & SON METAL PRODUCTS INC., ENGINEERING DEPARTMENT.

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