1. **SUSPENSION:** Refer to Suspension Drawing. Read all notes.

2. **AXLES:** See figure 1 below, for recommended brake camshaft and air chamber locations.

3. **SUSPENSION ALIGNMENT:** Measure distance from kingpin to centerline on suspension. Draw a vertical reference line up to both frame rails (on outboard side) and equal distance from kingpin. Then on each frame rail, locate and draw a centerline 37-13/16", forward and rearward of the suspension centerline to designate frame bracket location.

4. **FRAME BRACKET:** Select and install appropriate bracket. Bracket must allow for a bolted & welded connection a trunnion clamp to facilitate alignment.

5. **BEAM GUIDE:** Install beam guides and bracing as illustrated.

6. **RADIUS ROD AXLE BRACKET:** Assemble to center axle; weld as shown.

7. **SPRING ASSEMBLY:** Clamp Spring Seats together at the bottom centerline an equal distance from midpoint of the center axle maintaining parallel alignment on 35.50" spring centers. Weld as shown. Assemble springs and torque u-bolts properly.

8. **AXLE SEATS, (FRONT AND REAR AXLES):** Clamp seats on bottom centerline of front and rear axles PARALLEL to each other and on 35.50" beam centers (standard) equal distance from midpoint of axles. Follow axle manufacturers welding recommendations/procedures.

9. **EQUALIZING BEAM ASSEMBLY:** Assemble front and rear axles to Equalizing Beams and Trunnion Tube Assembly as shown. Tighten nuts uniformly to proper torque. (Refer to Torque charts.) **CAUTION:** Be sure Wrappers, bushings, and pads do not become pinched between castings.

10. **SUSPENSION INSTALLATION:** Place axles laterally and square to trailer frame. Position front and rear suspension assemblies with frame brackets, but leave clamp bolts loose. Locate center axle and install Radius Rods. Install spring rebound bolts.

11. **AXLE ALIGNMENT:** Place axles cross-wise and square with trailer frame. Align front axle with kingpin and rear axle to front axle. Tighten Clamp Casting and Frame Brackets. Recheck alignment, weld Trunnion Clamp Casting securely to frame brackets as shown. Align center axle with front axle with Adjustable Radius Rod. Properly torque Radius Rod clamps (Refer to Torque chart).

12. **INSPECTION:** Examine all welded connections. Check that all nuts and bolts are properly torqued. Move each axle through approximately 7" of travel to insure proper clearances.

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**FIGURE 1**

BRAKE CHAMBERS & CAM FOR 12¼ Ø BRAKES.

BRAKE CHAMBERS & CAM FOR 16½ Ø BRAKES.

CAMSHAFT LENGTH

CENTER AXLE ONLY

FRONT AND REAR CAN USE STANDARD LENGTH CAM SHAFTS

SPRING & BEAM

11.25-12.75 WITH 35.50 SPRING & BEAM CENTERS

SPRING & SUSPENSION

8.50-10.00 WITH 33.50 SPRING & BEAM CENTERS

DIMENSIONS VARY AS SPRING CENTERS VARY