



**For Low Bed And Machinery
Trailers Where Toughness And
Durability Come First.**

11455



Tri-Axle Suspension

Parts & Installation



Advancing the Practical Application of Suspension Technology

Springfield, MO ■ (800) 654-8824 ■ (417) 862-5012
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11455 Tri-Axle Suspension

Application

All 11455 tri-axle suspensions are designed for rough service lowboy, flatbed and drop frame trailers where maximum axle articulation and wheel displacement are required. The 11455 model suspensions can be used in either on or off-road situations. This makes them ideal for military use.

Capacity

The 11455 tri-axle suspension is available in maximum weight ratings of 60,000 and 75,000 lbs. per unit.

Features

- Rubber bushings at all axle, trunnion tube and torque arm connections.
- Axle spacings of 50" for 5" round axles.
- Galvanized fasteners on the 75,000 lb. unit.

Options

With 37" as standard, special beam or spring centers may be ordered.

How To Order Your 11455 Tri-Axle Suspension

1. Specify model number 11455.
2. Determine which suspension weight rating your particular application requires.
3. Specify beam or spring centers. 37" is standard, however optional centers are available.

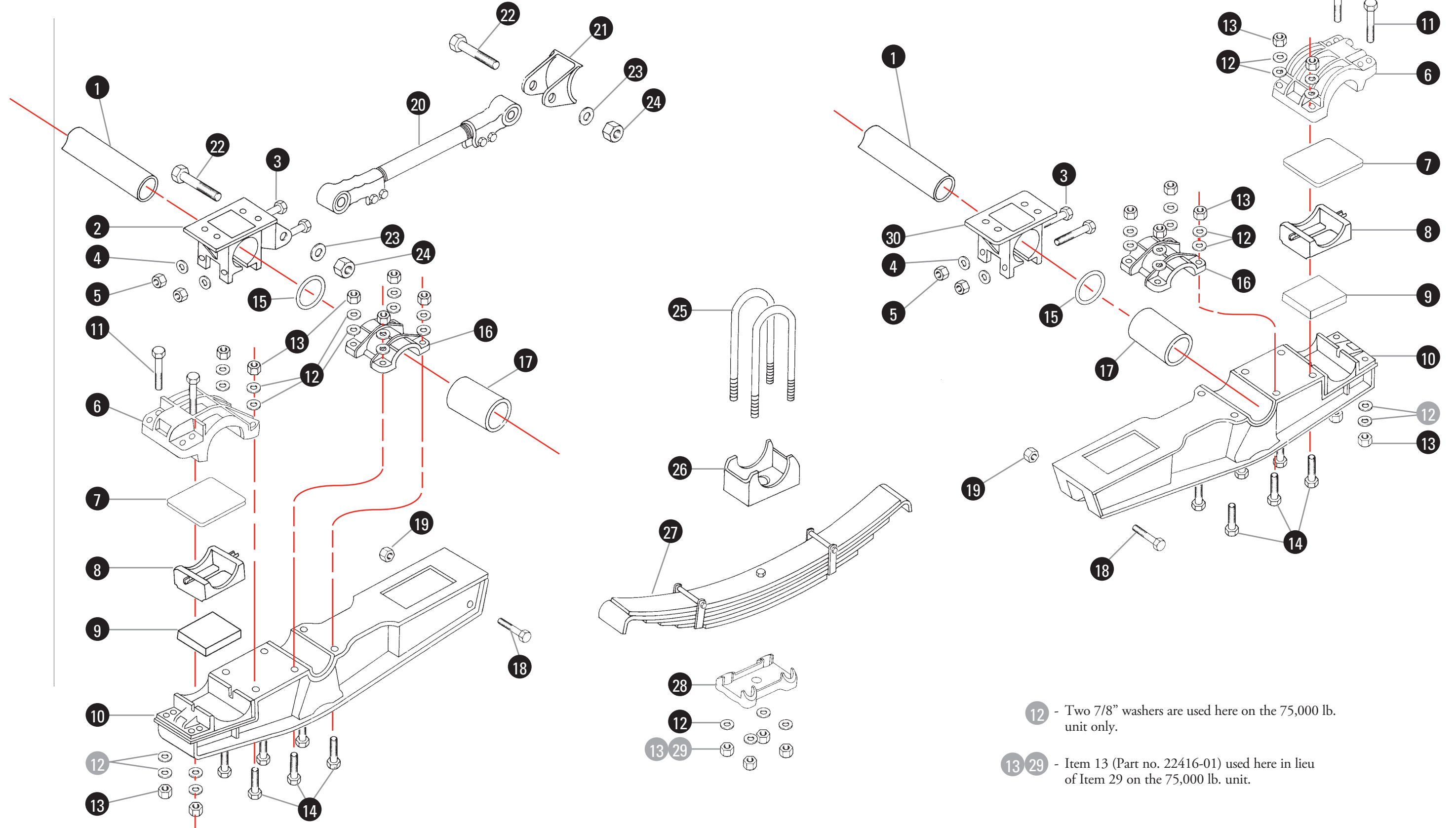
Bill of Materials

Item	Part No. Unit Capacity (lbs.)		Quantity	Description
	60,000	75,000		
1	11446-00	--	2	Trunnion Tube – 3 1/2 OD x 1/2 Wall x 44 1/4 LG
	--	22405-01	2	Trunnion Tube – 3 1/2 OD x 3/4 Wall x 44 1/4 LG
2	11447-01	11447-01	2	Trunnion Torque Bracket
3	11456-00	--	8	Hex Bolt – 3/4 - 16 UNF x 5 1/2 LG, GR 5
	--	22422-01	8	Hex Cap Screw – 3/4 - 16 UNF - 2A x 5 1/2 LG, GR 5
4	817-00	--	8	Washer – 1/8 x 13/16 ID x 1 1/2 OD
	--	22410-01	8	Flat Washer – 3/4 Hardened, Zinc Pl
5	841-00	--	8	Hex Nut – Self Locking, 3/4 - 16 UNF
	--	22414-01	8	Hex Lock Nut – 3/4 - 16 UNF, GR C, Zinc Pl
6	11444-00	11444-00	4	Axle Clamp – Upper, 5 Round
7	11445-00	11445-00	4	Rubber Pad – Upper, 1/2 x 5 7/8 x 7
8	11432-00	11432-00	4	Axle Adaptor – 5 Round
9	11433-00	11433-00	4	Rubber Pad – Lower, 1 x 4 9/16 x 5 5/16
10	11441-00	11441-00	4	Fabricated Beam Assembly
11	22420-01	22420-01	8	Hex Cap Screw – 7/8 - 14 UNF x 7 3/4, GR 8, Zinc Pl
12	35-00	--	56	Washer – PL, 15/16 ID x 1 3/4 OD
	--	22408-01	72	Flat Washer – 7/8 Hardened, Zinc Pl
13	22416-01	--	32	Flange Locknut – 7/8 - 14 UNF, GRG, Zinc Pl
	--	22416-01	40	Flange Locknut – 7/8 - 14 UNF, GRG, Zinc Pl
14	11435-00	--	24	Hex Bolt – 7/8 - 14 UNF x 2 1/2, GR 5
	--	22418-01	24	Hex Cap Screw – 7/8 - 14 UNF x 2 1/2, GR 8, Zinc Pl
15	11452-00	11452-00	4	Trunnion Washer – 7 GA, 3 17/32 ID x 5 1/4 OD
16	11434-00	11434-00	4	Trunnion Cap – 3 1/2 OD Tube
17	11442-00	11442-00	4	Trunnion Bushing – Rubber
18	22419-01	22419-01	4	Hex Cap Screw – 5/8 - 18 UNF x 6, GR 5, Zinc Pl
19	37-03	--	4	Hex Locknut – 5/8 - 18 UNF, GR B
	--	22412-01	4	Hex Locknut – 5/8 - 18 UNF, GR B, Zinc Pl
20	11451-00	--	2	Adj. Torque Arm with Bushing – 25 LG
	--	22424-01	2	Adj. Torque Arm with Bushing and Zinc Fasteners – 25 LG
21	11437-01	11437-01	2	Radius Rod Axle Bracket
22	22421-01	22421-01	4	Hex Cap Screw – 1 1/4 - 7 UNC x 5 1/4, GR 5, Zinc Pl
23	837-00	--	4	Washer – 1/8 x 1 1/4 ID x 2 1/4 OD
	--	22411-01	4	Flat Washer – 1 1/4 Hardened, Zinc Pl
24	22415-01	22415-01	4	Hex Locknut – 1 1/4 - 7 UNC - GR B, Zinc Pl
25	7816-08	--	4	U-Bolt – 7/8 Dia. x 5 Round x 10 3/4 LG
	--	22404-01	4	U-Bolt – 7/8 Dia. x 5 Round x 11 3/4 LG, Coated
26	11497-00	11497-00	2	Fabricated Axle Seat - 5 Round
27	11436-00	--	2	Spring – 20,000 # Axle Capacity
	--	22429-01	2	Spring – 25,000 # Axle Capacity
28	11438-00	11438-00	2	Cast – Spring Bottom Plate
29	34-04	See Item 13	8	Hex Nut – 7/8 - 14 UNF - 2B, GR5
30	11453-00	11453-00	2	Trunnion Hanger – 2 1/2 HI For 3 1/2 OD Tube

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12 - Two 7/8" washers are used here on the 75,000 lb. unit only.

13 29 - Item 13 (Part no. 22416-01) used here in lieu of Item 29 on the 75,000 lb. unit.

Installation



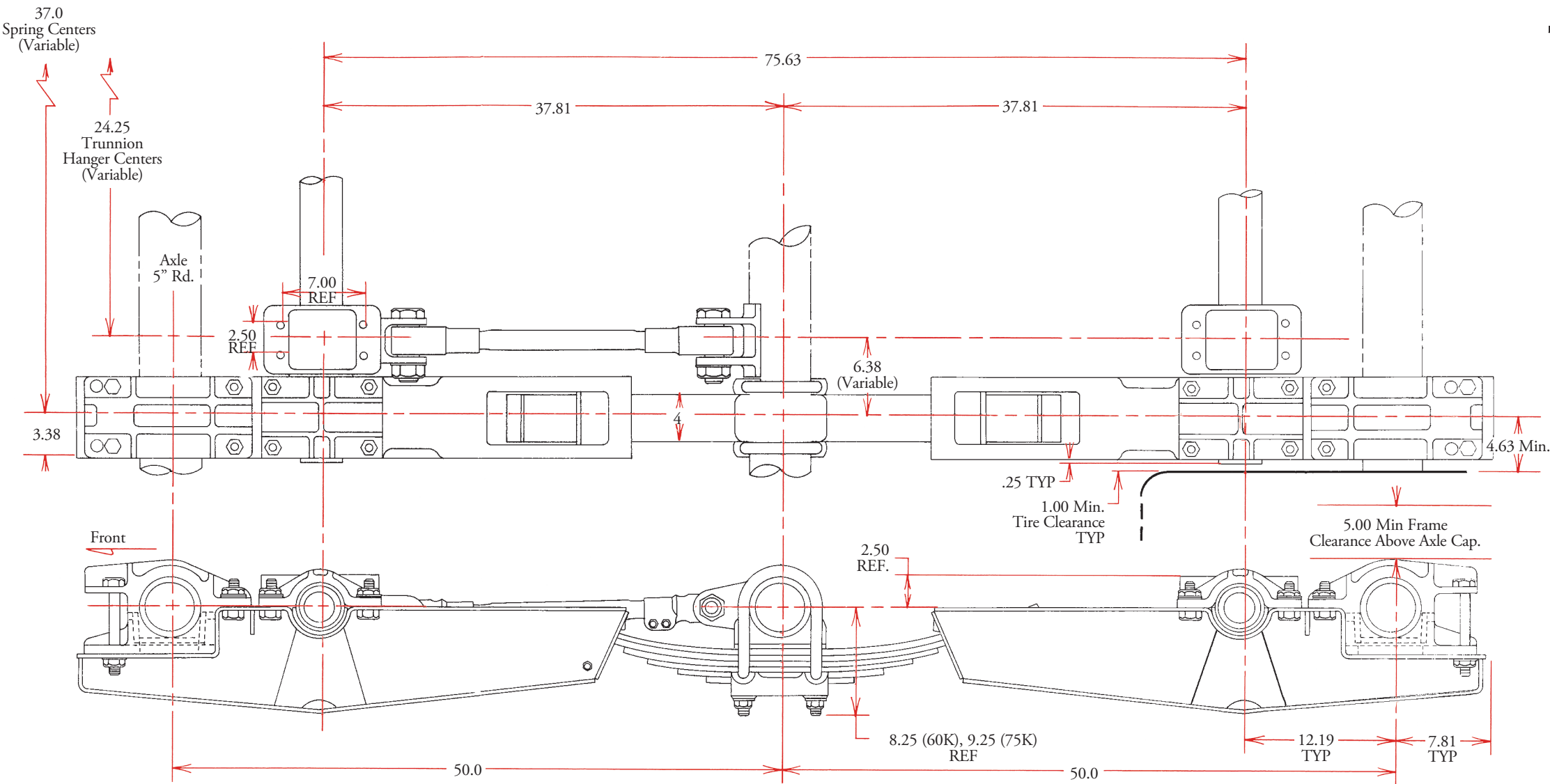
Refer to the following notes and drawings for positioning and welding requirements. For a detailed description of installation procedures refer to Hutchens drawing number 22406.

Notes

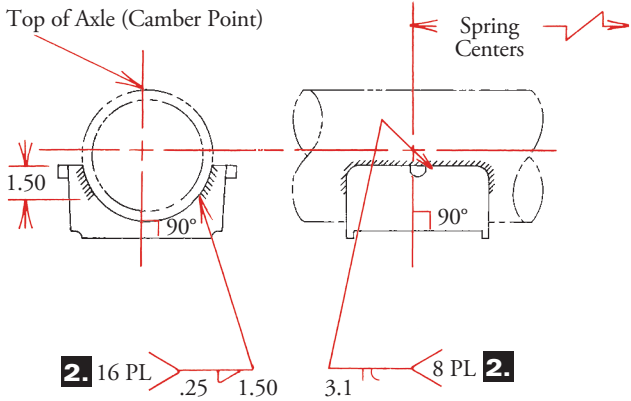
1. All components to be welded utilizing ER70S-3 or ER70S-6 welding wire. Welding shall be performed using AWS D1.1 guidelines.
2. Check axle manufacturer's specifications for further welding recommendations.
3. Front and rear axle brake cam shafts must be located on horizontal centerline – on front axle cam is to be forward, on rear axle cam is to the rear. Center axle cam shaft location is subject to customer requirements.
4. Prior to welding trunnion brackets to frame:
 - a) Align front axle to kingpin
 - b) Align center axle to front axle
 - c) Align rear axle to center axle
5. Trunnion hanger must be welded to frame before tightening 3/4-16 bolts.
6. Upon assembly, all fasteners should be tightened to the following specifications.

Size	Torque (lb.-ft.) Oiled Threads
1/2-20 GR5	62-68
5/8-18 GR2 or GR5	73-97
3/4-16 GR5	210-230
3/4-16 GR8	310-330
7/8-14 x 2 1/2 & U-Bolt GR5	332-360
7/8-14 x 2 1/2, 7 1/2 & 7 3/4 GR8	475-525
1 1/4 - 7 GR5	600-660

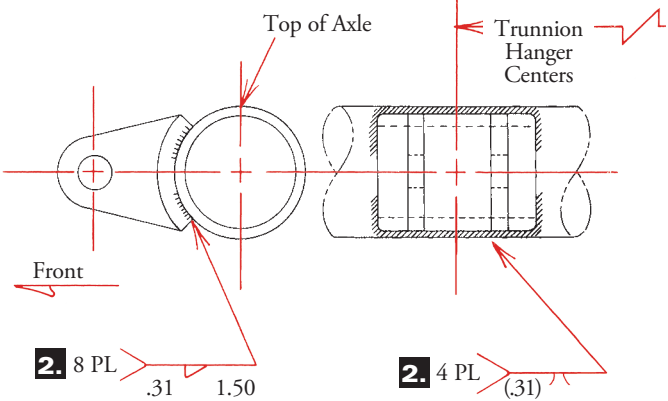
Torque levels should be checked after initial break-in and periodically during service.



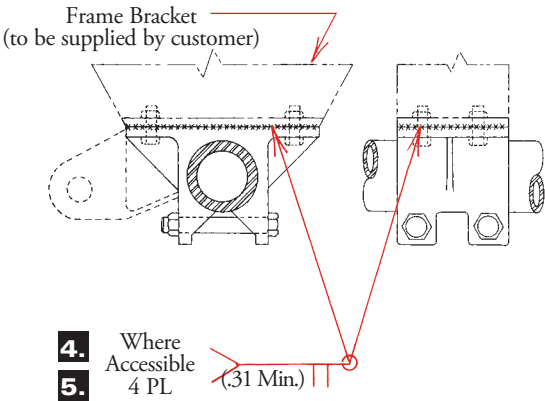
Weld Detail
11432-00 Axle Adaptor To Front & Rear Axles



Weld Detail
11437-00 Radius Rod Bracket To Center Axle



Weld Detail
11447-00 and 11453-00 Trunnion Hangers To Frame Brackets



Weld Detail
11497-00 Spring Seat To Center Axle

