Front End Rebuild

- Axle
  - Verify not bent
  - Verify four holes which determine camber and spring pin perch location are at proper angles (A Bear axle gage; or 4 rods and 4 cones which fit the axle holes [such as the ones K R Wilson sold] would help with visual angle determination)

- Radius Rods
  - Verify not bent
  - Radius ball - verify is properly round at 1-1/2”
    - Weld up and reshape

    - or -
    - Weld on replacement ball (verify length before and after)
  - Radius ball cups should fit with about 1/8” gap when castle nuts are properly tightened to cotter pin holes.
    - For 1-1/2” ball as original, needs original style pressed steel cups
    - To use rubber ball cover, need to use cast cups
      - The pressed & cast cups are not interchangeable

- Pitman Arm
  - Verify ball is properly round at 1”
    - Weld up and reshape

    - or -
    - Weld on replacement ball
  - Verify tight on shaft

- Steering Box
  - Verify tight on frame
  - Verify filled with 600W lube (not grease)
  - Verify adjustments per service bulletins
    - Rebuild if not able to satisfactorily make adjustments
  - Verify there are no tight spots throughout full travel from left to right
  - Visual inspection of steering box shaft – with wheels on the ground; look for any looseness when steering wheel is moved

- Drag Link
  - Verify properly tightened
  - Consider rebuilding with Teflon (or brass infused Teflon) bushings

- Steering Spindle Arms
  - Verify ball is properly round at 1”
    - Weld up and reshape

    - or -
    - Weld on replacement ball
      - 1 ball on right arm
      - 2 balls on left arm

- King Pins
  - Verify case hardened
  - Verify smooth with no burrs
  - Verify the proper .8125 diameter.
  - Verify properly tightened
  - Verify locking bolts are on the rear side
  - Front spindles, which supplement the King pin inclination angle need also be checked

- Tie rod
  - Verify not bent
  - Ends – verify proper fit
  - Consider rebuilding with Teflon (or brass infused Teflon) bushings

- Front Springs
  - Verify proper bow height
  - Verify shackles are properly tight
  - Verify cross member alignment hole and spring bolt head are properly square and mating correctly

- Shocks
  - Verify properly tightened and maintained
    - Stock vs Modern obviously have differing requirements

- Alignment
  - Toe-in adjustment @1/16” +/- 1/32”
  - Other adjustments as required