A-3305-M Installation Instructions

- 1. Slightly loosen the wheel lugs on the front wheels. This will aid you in removing the front wheels when the front end is jacked up.
- 2. Jack up the front end of the car by using a jack under the center of the front axle. Place stable jack stands under the axle on each side of the jacket contact point and allow the car to settle onto these jack stands.
- 3. Remove the two front wheels to gain better access into the work area.
- 4. If the ends of the drag link and tie rod are dirty and have not been disassembled for a long period of time, it is recommend that you now clean these areas carefully and then spray then with penetrating oil to make these assemblies easier to dismantle during this process. This also aids in keeping dirt out of the lubricant that you will adding later in the assembly process. If you spray the drag link and tie rod with penetrating oil, it would be best to wait for a few hours to allow the oil to penetrate into the link ends.
- 5. Turn the steering wheel clockwise as far as possible to bring the front of the drag link as far forward as possible.
- 6. Working from the front of the car, under the left front fender, remove the cotter pin from the face of the drag link, and remove the plug using a large screwdriver or a plug tool available at most model A parts houses. Part number T-3305-T.
- 7. Check to see if you have:
 - a. <u>new design drag link</u> in which the spring is located in the rear of the link housing and the steering ball joint is at the front of the link end, or
 - b. <u>old design drag link</u> in which the spring is located at the front of the link housing and the steering ball joint is at the rear end of the link end.
- 8. If you have:
 - a. the <u>new</u> design link, you are now ready to remove the link from the steering arm, see items 9 and 10 below.
 - b. the <u>old</u> design link, you will need to remove the spring and contact cup that is located just behind the cap that you just removed.
- 9. Turn the steering wheel counterclockwise until the front wheels are pointing approximately straight ahead. Then, very slightly turn the steering wheel clockwise to take the pressure off of the steering arm ball. This will make is easier to free the drag link from the steering arm.
- 10. With a plastic it rubber mallet, tap the bottom of the drag link housing to free the link from the steering ball. It may be possible just to push up on the link with the heel of your hand to free the link. If this doesn't separate the link from the steering arm, try repositioning the steering wheel to another location and trying again. The Link should detach from the steering arm without a great deal of pressure.
- 11. When the link is detached from the ball on the steering arm, remove all of the

loose parts from the drag link housing.

- a. If the drag link is of the new design, this will be only a metal disk that presses against the steering arm ball or it will be the inside concave of the end cap that has just been removed.
- b. if the drag link is of the old design, this will be the metal concave surface disk and the spring that forces the disk against the steering arm ball.
- 12. Now move to the left side of the car and remove the rear end of the drag link from the pitman arm ball. This is done by removing the cotter pin from the rear of that housing; removing the cap with the screw driver tool; then removing the rear spring and pressure disk. Since the drag link is already loose at the front, you can position the rear link housing so that it will easily lift of the pitman arm ball. After the drag link is free, remove all loose hardware left in the housing and note how that hardware was assembled into the housing.
- 13. Place the drag link in a clean and safe place in preparation for removing the tie rod.
- 14. By grasping one of the front brake drums, turn the front wheels as far as possible to the left to maximize the access to the right tie rod end.
- 15. Remove the cotter pin from the end of the right tie rod end, using the screwdriver tool, remove the cap from the right tie rod and remove the spring and pressure disk from the housing. (You will note the design if both tie rod ends is the same as the rear or pitman arm coupling of the drag link. Only the front of the drag link is different) by turning the wheels slightly to remove any pressure on the tie rod, it should now be possible to remove the tie rod housing from the steering arm ball. If you experience difficulty, try repositioning the wheels and then trying again. Under some circumstances, it may be necessary to lightly tap the tie rod housing with a plastic or rubber mallet to free the assembly from the ball. When the tie rod end has been detached from the steering ball, remove all of the spring and cup hardware from the inside of that coupling end.
- 16. After the right end of the tie rod is free, again grasp one of the brake drums and turn the wheel to the right as far as possible to maximize the access to the left tie rod end. Remove this tie rod end and its internal hardware, using the process listed in step 15.
- 17. Now check the condition of the steering arm balls and the pitman arm ball to ensure that they are round and undamaged. If they are badly worn or scored, this will reduce the life of the bronze impregnated teflon contact disks that you are about to install. If you detect ball wear or damage, this needs to be corrected before the instillation procedes. This ball wear or damage may be

one of the reasons that you have been experiencing difficulty in steering the car.

- 18. You may now proceed to install the new springs, bronze impregnated teflon contact cups and link ends onto the tie rods and drag link, following the instructions the came with the kit. As you install all the new parts, place a dab of white lithium grease in each cup and liberally coat the steering and pitman arm balls with this grease during the installation to ensure adequate joint lubrication during the period before you re-lubricate the joints as a last step.
- 19. Perform the rebuilding and reinstallation in reverse order of the way that you dismantled the system, starting with the left end of the tie rod; then the right end of the tie rod; followed by the pitman arm end of the drag link' and finally, the front end of the drag link.
- 20. Before you attach the rear drag link housing to the pitman arm ball, position the front end of the drag link above the steering arm ball. If you allow the front end of the drag link to hang down or to rest on the ground while you make this rear end attachment, you will not be able to get the front end into place due to interference with the axle and the steering and brake linkages.
- 21. Grease all 4 tie rod/drag link ends with a good grade of grease.