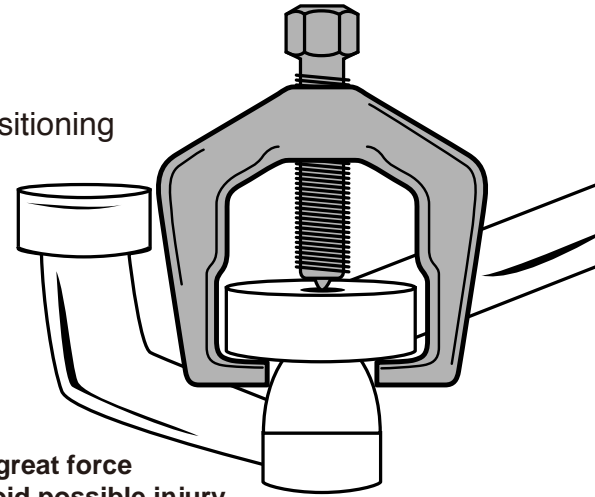


# 5 Piece Front End Service Set

This versatile set allows for easy removal of the most popular types of pitman arms, tie rods and ball joints. Press type ball joint separator allows for ball joint removal without damage to boots and other parts that fork type removers may cause.

## Pitman Arm Removal-

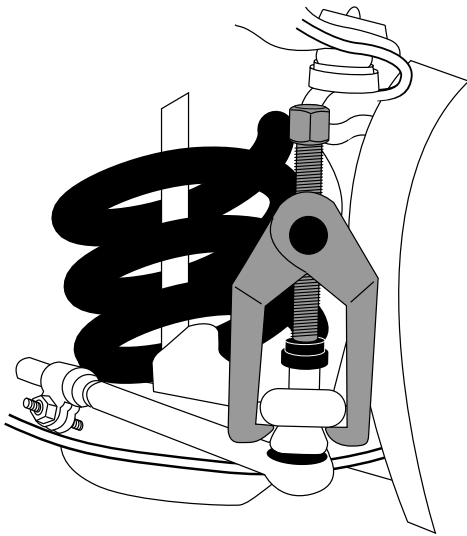
1. Remove the cotter pin and nut retaining the pitman arm.
2. If the pitman arm to shaft position is not already marked, mark the positioning with a center punch or suitable paint for proper re-assembly position.
3. Select the appropriate size pitman arm puller and slide the jaws behind the pitman arm.
4. Tighten the center screw while aligning the screw tip with the center of the shaft.
5. Continue to tighten the center screw with a suitable wrench or socket until the pitman arm is free of the shaft.



**CAUTION: The pitman arm may pop off the shaft suddenly. The puller will exert great force in the removal of the pitman arm. Position your head away from the puller to avoid possible injury.**

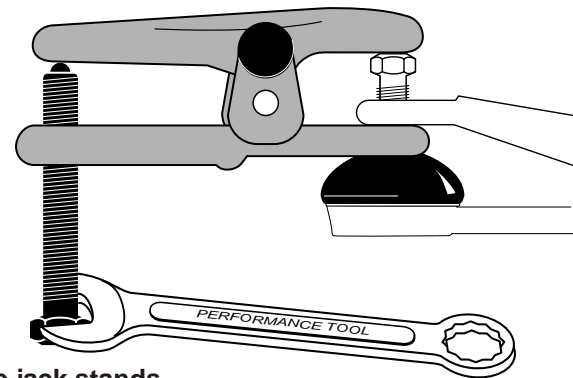
Note: It may be necessary to strike the center screw with a hammer to break the pitman arm loose.

**CAUTION: Wear eye protection at all times using this tool.**



## Tie Rod Removal-

1. Remove the cotter pin and then the tie rod retaining nut.
2. Select the most suitable removal tool for the job, fixed size or expandable jaw type.
3. Insert the tie rod removal tool jaws between the spindle arm and the tie rod or the drag link and steering arm so that the screw will force itself against the stud.
4. Tighten the screw with a suitable wrench or socket until the tie rod is pressed free.



## Ball Joint Separation-

1. Raise the vehicle and support it securely on jackstands.
2. With wheels removed, place a jack under the lower control arm and raise it just enough to support the control arm.
- CAUTION: Be careful not to lift so much that the vehicle weight comes off the jack stands.**
3. Clean the area around the ball joint with a wire brush.
4. Remove the cotter pin and loosen the ball joint retaining nut a couple of turns.
5. Insert the ball joint separator tool in between the steering knuckle and the control arm.
6. Tighten the forcing screw while maintaining alignment of the press arm with the ball joint stud.
7. Continue to tighten the forcing screw with a suitable wrench or socket until the ball joint stud is pressed free of the steering knuckle.

**Note: Lubricate the threads of pullers/separators for ease of use and extended life.**

### Replacement Parts:

- Pitman arm center screw  
(fits both large and small body puller)
- Pitman arm puller body, large
- Pitman arm puller body, small
- Tie rod puller body 2 3/4" length
- Tie rod screw 2 1/4" length
- Tie rod puller body  
with expandable jaws
- Center screw for tie rod puller body  
with expandable jaws
- Ball joint separator jaw, threaded
- Ball joint separator jaw, non threaded
- Ball joint separator pin with detent
- Ball joint separator forcing screw