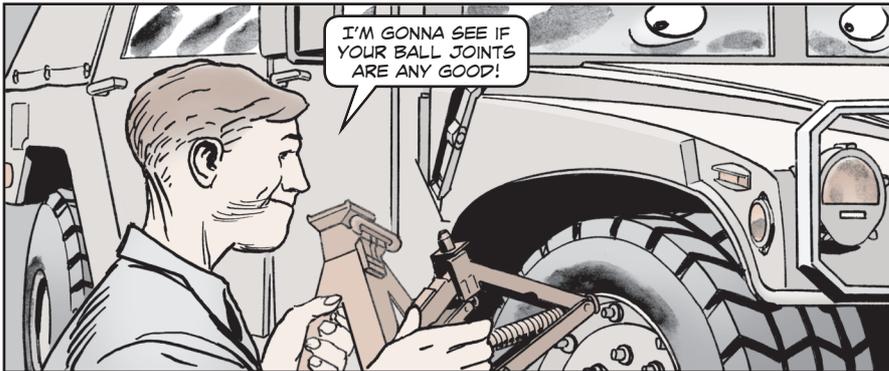
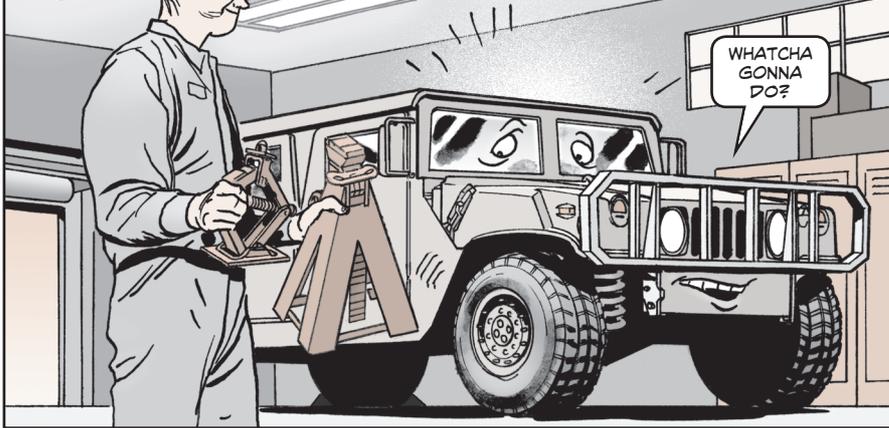


# HOW TO INSPECT BALL JOINTS!



Dear Half-Mast,

A mechanic recently came to me and said he needed to replace his HMMWV's ball joints. I asked him, "Why are you replacing them? What makes you think they are bad?" To my surprise, he answered, "Someone told me if I could move the halfshaft with my hand it was no good."

Now, you and I both know that's not the right answer! Can PS please clarify the correct way to inspect HMMWV upper and lower ball joints? I'm concerned that money is wasted when good parts are mistakenly replaced.

Mr. J.H.

Dear Mr. J.H.,

Glad to help you with that.

To get the guidance you need for maintaining your HMMWV's ball joints correctly, take a look at your HMMWV's operator and maintenance manuals.

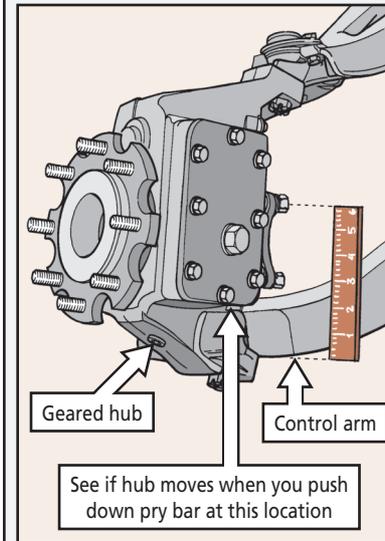
The -10 tells you to visually check halfshaft CV boots and ball joint boots for presence, rips, tears or cuts.

And the -20 tells you to check for proper operation of ball joints using these steps:

1. Chock rear wheels front and back.
2. Raise front wheels about two inches off the ground and support on a jack stand.

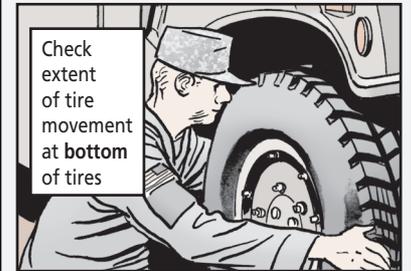
**For lower ball joints:**

- a. Mark a line across the head of the top bolt holding the steering arm cover. Make sure the mark is parallel to the lower control arm.
- b. Put a pry bar between the cover control arm and geared hub.



- c. Set a 6-in ruler upright between the lower control arm and the marked screw.
- d. Push down the pry bar to try to move the hub.
- e. Measure movement in the hub assembly. If movement is more than 1/8 inch, replace the lower ball joint.

You can also check for looseness in the lower ball joints by grasping the bottom of tires and attempting to move tires in and out. If tire movement at the bottom outer edge of tires is 1/2 inch or more, replace the lower ball joints.



**For upper ball joints:**

- a. Check for looseness of upper ball joints by grasping the top of tires and attempting to move tires in and out.



- b. Measure any movement at the top outer edge of tire. Replace upper ball joints if tire movement is 3/8 inch or more.

Half-Mast