

## BBCV Steering System Maintenance & Lubrication

The key factors in keeping the steering system operating properly are inspection and maintenance.

Daily inspect the steering system, especially the drag link, and note any missing or damaged components such as bolts, nuts, cotter pins, or sealing boots. A more thorough inspection of the drag link ball sockets should be performed every 3 months or 25,000 miles (40,234 km) and requires two individuals. With the steering wheels on the ground, the engine running and the transmission in park or neutral with parking brake set, the inspector instructs the second individual in the driver's seat to rock the steering wheel between the 10 o'clock and 2 o'clock positions. If the inspector observes any axial movement in the drag link ball sockets, the bus should be immediately pulled from service.

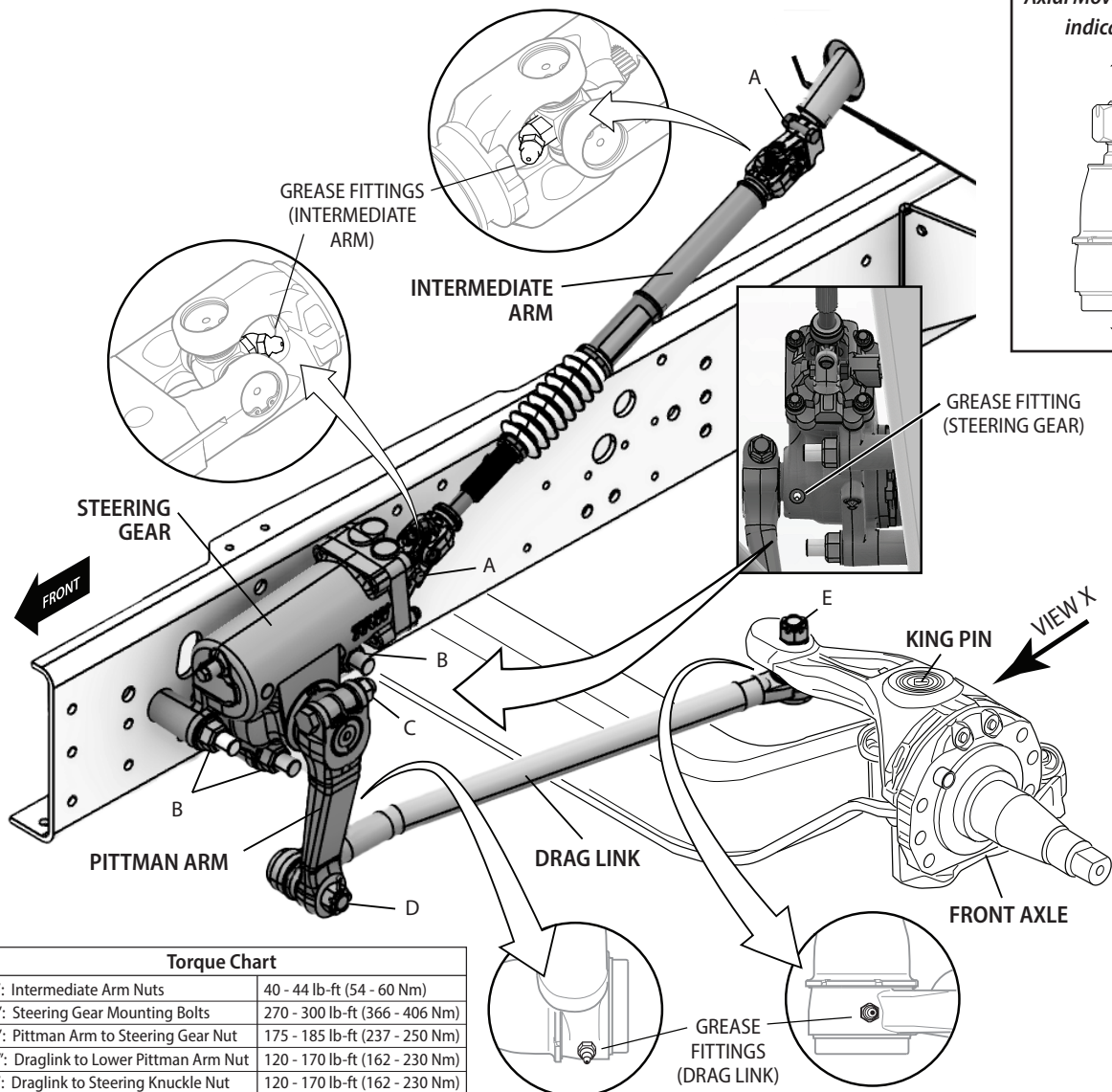
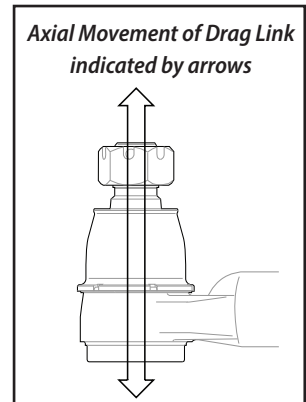
### Lubrication Points - Steering Components

There are (5) locations for lubricating the steering system:

- Both ends of Intermediate Arm
- Steering Gear body
- Both Ends of Drag Link

COMPONENT	RECOMMENDED LUBE SCHEDULE
DRAG LINK	Every 3 months or 5,000 miles (8,000 km)
KING PINS	
TIE ROD	
STEERING GEAR	Every 6 months or 6,000 miles (9,600 km)

DO NOT USE AN AIR GREASE GUN as excess pressure could damage seals. Use a hand operated grease gun only and add grease until it begins to purge out around the sector shaft. Use Exxon Polyrex EP2 or NLGI grade 2 or 3 multipurpose chassis lube.

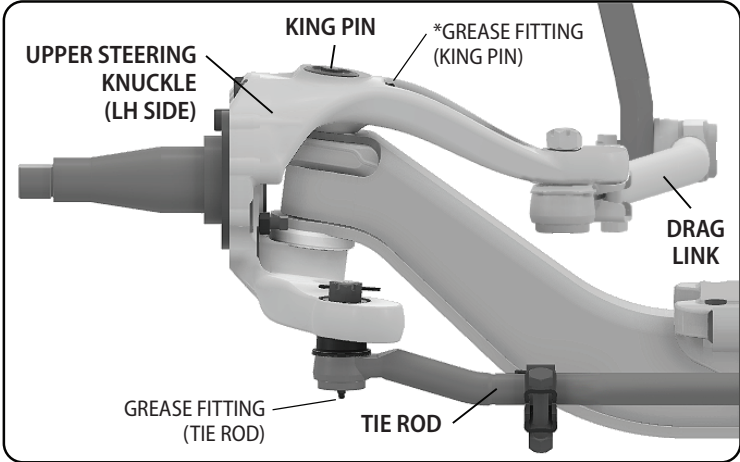


Torque Chart	
"A": Intermediate Arm Nuts	40 - 44 lb-ft (54 - 60 Nm)
"B": Steering Gear Mounting Bolts	270 - 300 lb-ft (366 - 406 Nm)
"C": Pittman Arm to Steering Gear Nut	175 - 185 lb-ft (237 - 250 Nm)
"D": Draglink to Lower Pittman Arm Nut	120 - 170 lb-ft (162 - 230 Nm)
"E": Draglink to Steering Knuckle Nut	120 - 170 lb-ft (162 - 230 Nm)

Check torque on fasteners annually or every 100,000 miles. For vehicles operating in severe conditions or off road: every 6 months or 50,000 miles.

**Front Axle and Suspension Assembly**

There are grease zerks on each end of the tie rod where it connects to the steering knuckle on the axle.  
\*Depending on the front axle being used on your bus there may be kingpin grease zerks located on the inboard side of the steering knuckle and upper kingpin connection. Some axles utilize a grease zerk on the bottom of the lower steering knuckle on the inboard side. Others use kingpin grease zerks located on the top and bottom of the kingpin grease caps.



VIEW X: LOOKING FORWARD  
NOTE: SOME ITEMS ARE OMITTED FROM VIEW FOR CLARITY