



**PROTERRA**



# TECHNICAL SERVICE BULLETIN

<b>7ISSUE DATE:</b>	7/2/2020
<b>SERVICE BULLETIN SUBJECT:</b>	Duopower Koni Shock Absorber Torque Retrofit
<b>VINs or MODELS AFFECTED:</b>	Service Specified Buses
<b>COMPLETE BY:</b>	Next Service Opportunity
<b>SERVICE BULLETIN #:</b>	SB-20-89

## **DUOPOWER KONI SHOCK ABSORBER TORQUE RETROFIT**

**NOTICE! It is expected that this process will require 2 hours per bus. Please schedule appropriately to minimize vehicle downtime.**

### **Retrofit Description:**

This retrofit ensures that the Koni Shock Absorbers are torqued to the correct value as established by the shock manufacturer.

## Tools/Parts Required

### Tools and Supplies Required:

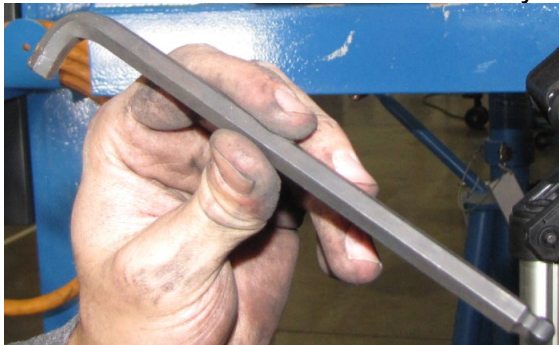
- Wheel Jacks 4 EA
- Jack Stands 4 EA
- Ratchet
- Calibrated Torque Wrench
- 22mm Crow Foot Socket
- Cut 8mm Allen Wrench (See text)
- Orange Torque Stripe Paint

### Kit Parts Required:

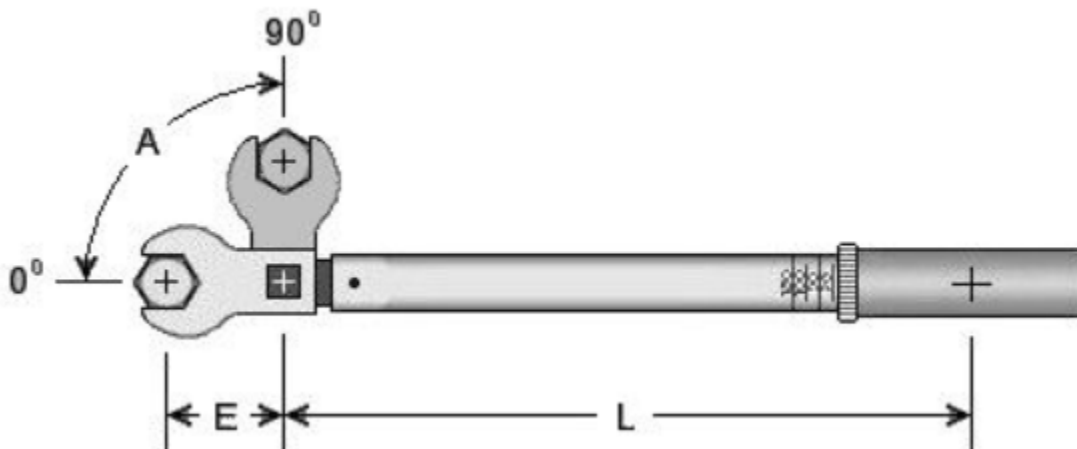
- None

## Procedure:

1. An 8mm Allen Wrench will be used to hold the shock shaft while torquing the nut. The Allen Wrench will have to be modified as shown in the following photograph to torque the top nuts on the shocks. Use a Hacksaw to modify the wrench as shown below before beginning the work.



2. Torquing the shock nuts will require a Torque Wrench with a Crow Foot Socket. For proper torque values to be achieved the Crow Foot Socket should be installed on the Torque Wrench at a 90-degree angle as shown below when torquing nuts.



3. Perform the Proterra approved Lockout/Tagout procedure to make the bus safe for work.
4. Using four Approved Wheel Lifts and four Approved Jack Stands, safely raise and support the bus for working underneath it. At least 8 points of support are required for safety.



5. Working underneath the bus remove the protective cap from the rearmost Streetside shock.



6. Place the Cut 8mm Allen Wrench into the shock shaft to hold it for torquing.
7. Place the Torque Wrench with the 22mm Crow Foot Socket on the bottom shock nut.
8. While holding the shaft with the cut Allen Wrench, **torque the nut to 74 Foot Pounds.**



9. Mark the properly torqued nut with Orange Torque Stripe Paint.
10. Replace the protective cap.
11. Repeat the process to torque and mark the top nut on the shock.
12. Continue working on the shocks until all four rear shocks and both front shocks are properly torqued and marked.
13. Remove the Jack Stands and lower the bus using the Wheel Lifts.
14. Remove the Lockout/Tagout devices and return the bus to service.