

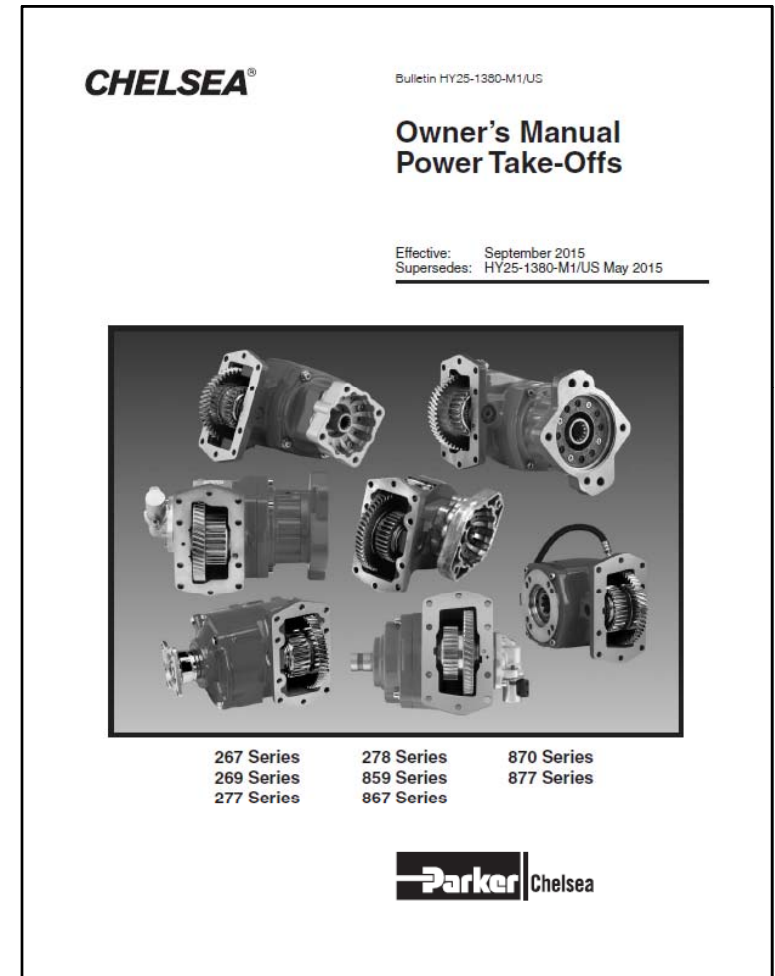
# Recommended Tools

## 10-Bolt PTO Installation



# Installation Instructions

- Always follow the Safety and Installation Instructions outlined in the Chelsea Owner's Manual during installation.
- A copy of the Owner's Manual can be obtained at [www.Chelseaproduct.com](http://www.Chelseaproduct.com)
- Use crossing pattern when torquing PTO bolts.
- When using torque adapters, ensure proper torque calculations are made to account for increased or decreased radius which can affect actual torque.



# Drivers

- Although not necessary, a compact drill/impact driver can help run in bolts to reduce muscle fatigue.

**\*\*\* CAUTION \*\*\*** – Be careful not to cross-thread or damage threads with this tool. It is recommended to start bolts by hand for a few threads before using cordless driver.



# Wrenches

- Standard 3/8" Torque Wrench – 35-50 ft-lbs



- Ratcheting Flex-Head 10mm, 12 point



# Extension

- 3/8" Extension, Knurled, Friction Ball, 6" Long



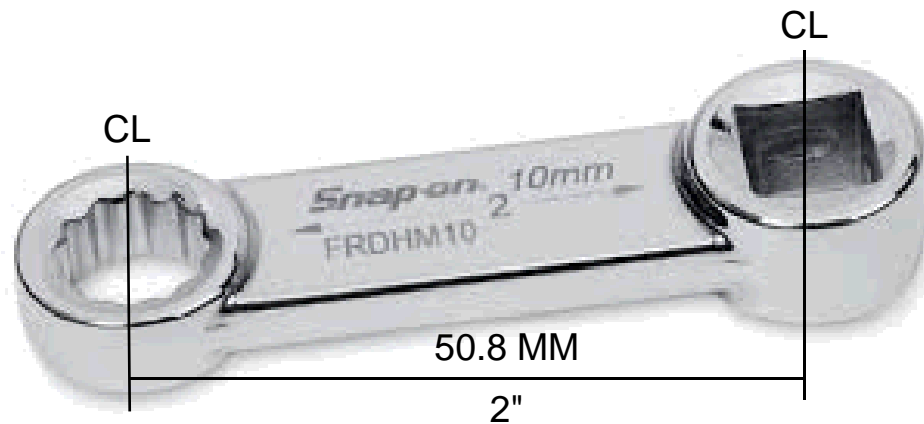
# Sockets

- Flank Drive Swivel 3/8" socket -12 PT
  - 10mm
  - 15mm



# Adapters

- Torque Adapter – 10MM, 12 Point
  - Extremely necessary for difficult to reach bolts.




# Corrected Torque with a Plus Dimension

- When using a torque wrench adapter, which changes the distance from the torque drive to the adapter drive, apply the following formula to obtain torque rating.

Example:

$$\frac{50 \text{ ft-lbs} \times 1}{1 + .167} = \boxed{42.84 \text{ ft-lbs}}$$


Torque Wrench Reads



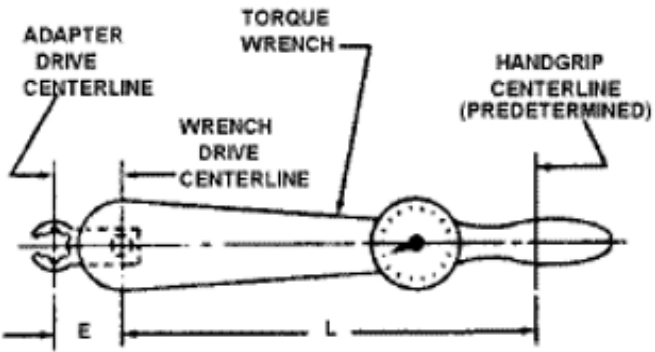
Short Open End Adapter

**NOTE**


WHEN USING A TORQUE WRENCH ADAPTER WHICH CHANGES THE DISTANCE FROM THE TORQUE WRENCH DRIVE TO THE ADAPTER DRIVE, APPLY THE FOLLOWING FORMULAS TO OBTAIN THE CORRECTED TORQUE READING:



Set Screw Adapter



FORMULA:  $\frac{T \times L}{L + E} = Y$



Hose Clamp Adapter

T = Actual (desired) Torque  
 Y = Apparent (indicated) Torque  
 L = Effective Length Lever  
 E = Effective Length of Extension



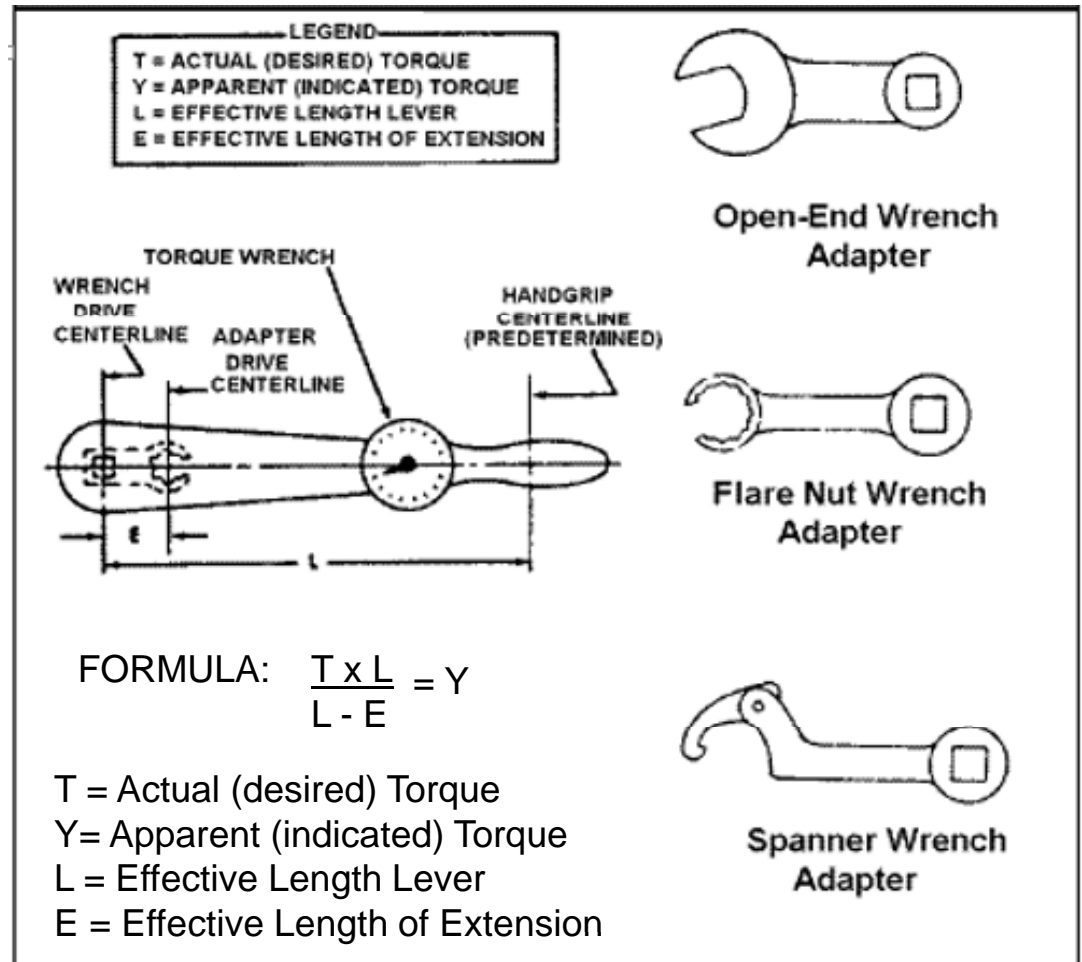
# Corrected Torque with a Minus Dimension

- When using a torque wrench adapter, which changes the distance from the torque drive to the adapter drive, apply the following formula to obtain torque rating.

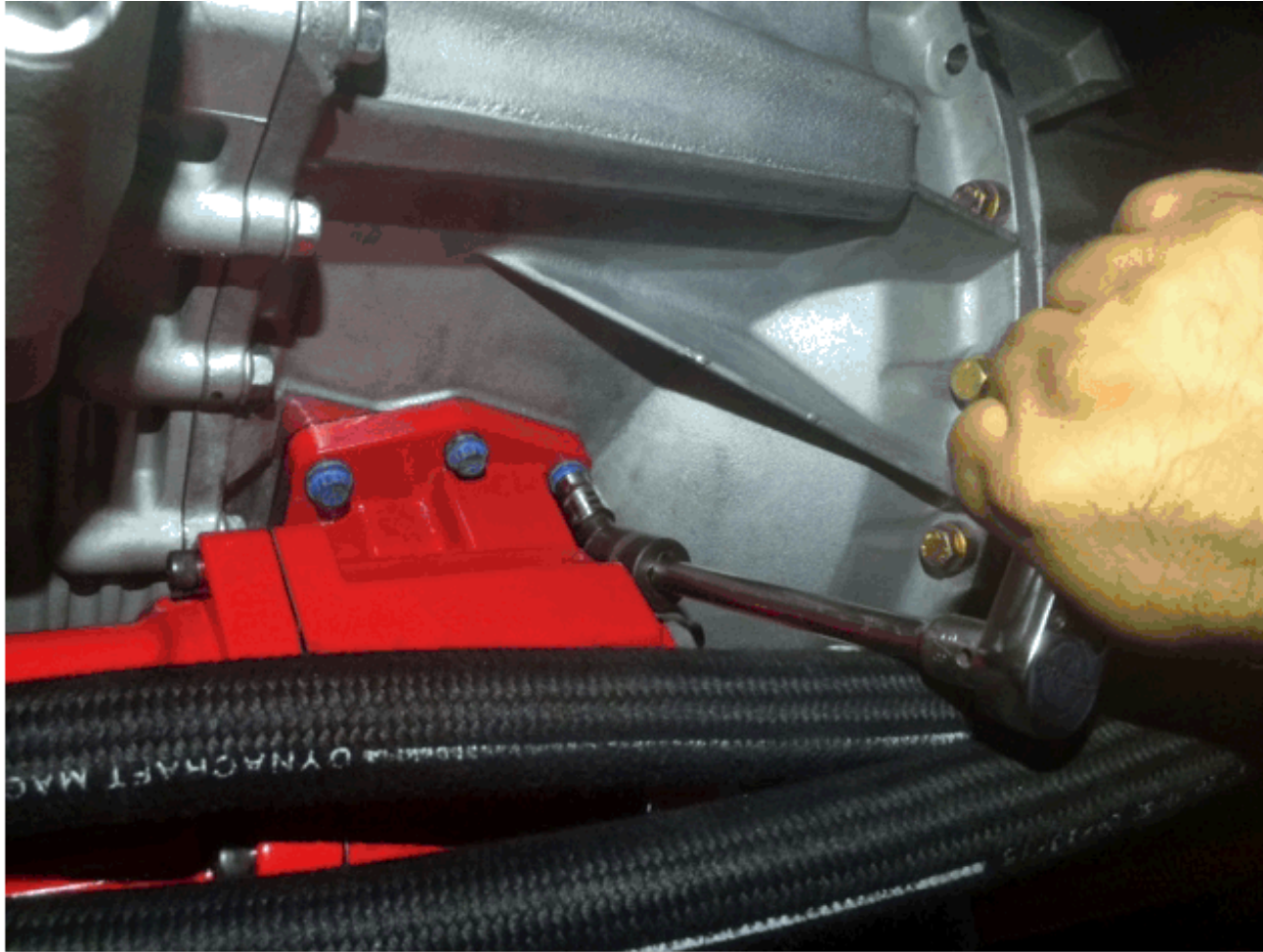
Example:

$$\frac{50 \text{ ft-lbs} \times 1}{1 - .167} = \boxed{60.02 \text{ ft-lbs}}$$

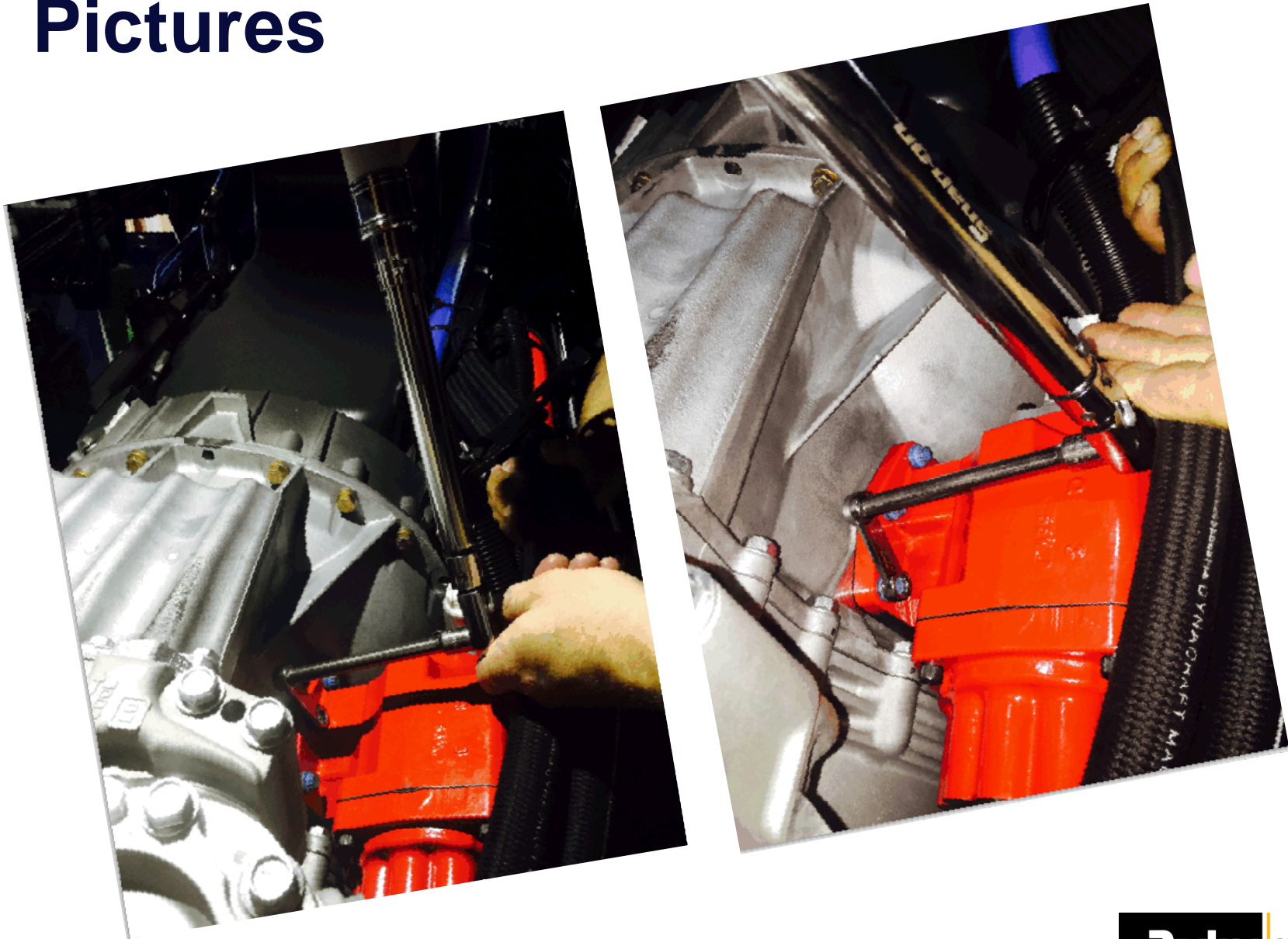
Torque Wrench Reads



# Pictures



# Pictures





# Pictures

