Recommended Tools

10-Bolt PTO Installation

Parker Chelsea

ENGINEERING YOUR SUCCESS.

October 30, 2015
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

• 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:

\[
\text{Torque Wrench Reads} \quad \frac{50 \text{ ft-lbs} \times 1}{1 + 0.167} = 42.84 \text{ ft-lbs}
\]

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

- \( T \) = 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.

**FORMULA:** \[ \frac{T \times L}{L - E} = Y \]

**Example:**
Torque Wrench Reads

\[
\frac{50 \text{ ft-lbs} \times 1}{1 - .167} = 60.02 \text{ ft-lbs}
\]

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