

# INSTALLATION INSTRUCTIONS **PRO-LOCK<sup>™</sup> AXLE FASTENER**

Procedure to set bearing within 0.001" to 0.005" end play as specificed by TMC procedure RP618A



# **STEP I:** REMOVE KEEPER FROM AXLE FASTENER

Carefully remove each side of the keeper from the groove on the axle fastener. DO NOT deform the keeper any further than necessary to remove it from the axle fastener.

**WARNING:** Failure to follow the instructions could result in the wheel coming off, causing bodily injury. The Amsted Pro-Lock<sup>TM</sup> is supplied as an assembly with the keeper in place. Do not attempt to install or adjust the spindle axle fastener with the keeper in the axle fastener. Doing so may deform the keeper, resulting in the unthreading of the axle fastener during operation. Always follow the manufacturer's torque procedures for unitized hubs or spacer systems. It is not recommended to use a screwdriver to remove the keeper since this may damage the keeper.



# **STEP 2:** SEATING THE BEARING

## WITH HUB/DRUM ONLY

Using a Torque Wrench:

- A. (1) Torque the fastener to 200 ft-lbs. Spin the wheel at least one full rotation.
  - (2) Torque the axle fastener to 200 ft-lbs. and spin the wheel at least one full rotation.
- (3) Re-torque the axle fastener to 200 ft-lbs.
- B. Back the axle fastener off until it is loose.

#### WITH HUB/DRUM/WHEELS:

- A. Torque the axle fastener to 200 ft-lbs. (3 times) while the wheel is rotating.
- B. Back the axle fastener off until it is loose.

PART NUMBER	3/4" DRIVE SOCKET	otc Ref. Part #
PL-TN-10	3-3/4" - 8 Point	1925
PL-TP-10	4-13/16" - 8 Point	1941



# **STEP 3:** ADJUST THE BEARING

# WITH HUB/DRUM ONLY

Using a Torque Wrench:

- A. (1) Torque the fastener to 100 ft-lbs. Spin the wheel at least one full rotation.
  - (2) Torque the axle fastener to 100 ft-lbs. and spin the wheel at least one full rotation.(3) Re-torque the axle fastener to 100 ft-lbs.

B. Refer to the chart below. Back the axle fastener off to one white indicator mark.

### WITH HUB/DRUM/WHEELS:

- A. Torque the axle fastener to 100 ft-lbs. while the wheel is rotating.
- B. Refer to the chart below. Back the axle fastener off to one white indicator mark.

PART NUMBER	BACKOFF
PL-TN-10	I/4" Turn
PL-TP-10	I/8" Turn

**WARNING:** Failure to follow this instruction could result in the wheel coming off, causing bodily injury. Failure to back off the axle fastener will cause the bearing to run hot and be damaged.



C



- A. (1) With the white side facing out, insert the keeper tab into both the undercut groove of the axle fastener and the axle's keyway.
  - (2) Engage the mating teeth on the keeper and axle fastener.
- **B.** Using your fingers, press the keeper paddles one at a time until each side of the keeper snaps into the axle fastener's under cut groove.

**WARNING:** Failure to follow this instruction could result in the wheel coming off, causing bodily injury. DO NOT bend or manipulate the keeper tab (tang) in any way since this may cause the tab to break off in service. Recommended practice is to replace the keeper each time the Amsted axle fastener is removed for service. The required keeper part numbers are shown in the table below.

PRO-LOCK PART #	KEEPER PART #
PL-TN-10	PL-TN-02
PL-TP-10	PL-TP-02



# **STEP 5: INSPECT THE INSTALLATION**

#### VISUALLY INSPECT THE FOLLOWING:

- A. The keeper key is fully seated in the undercut groove.
- B. The keeper tabs do not seat into the axle fastener's undercut grooves.
- C. The keeper key does not contact the bottom of the axle's keyway.



# **STEP 6:** ACCEPTABLE END PLAY PER TMC PROCEDURE RP618A

A dial indicator should be attached to the brake drum or hub using a magnetic base. The dial indicator should be adjusted so that the plunger is against the spindle end with its line of action parallel to the axis of the spindle. If it is not possible to mount the dial indicator on the spindle, it should be attached to the hub and aligned to indicate on the spindle.

Grasp the hub or wheel at the 3 o'clock and 9 o'clock positions, and push and pull the wheelend assembly in and out while oscillating the wheel about 45 degrees. Stop oscillating the hub so that the indicator is in the same position as it started. Read the total indicated inward and outward movement. Acceptable end-play is .001"-.005"

For single axle fastener self-locking systems, consult the manufacture's recommendations. Amsted Seals assumes no responsibility for bearing warranty.

DIAL INDICATOR TOOL PART #		
Digital: DBADG-TS	Analog: ABADG-TS	

**WARNING:** Product warranty will be voided if using a non-Amsted Seals keeper with the Pro Lock Axle Fastener and/or utilizing an impact wrench for Pro Lock Axle Fastener installation.

#### www.amstedseals.com