

PERCY'S SPLIT-LOCK FASTENERS

TECHNICAL INFORMATION

GENERAL INFORMATION

The Split Lock TM Friction Lock Fastener design uses a locking set pin built in to the bolt, when tightened the set pin expands the bolt threads against the thread wall providing an unmatched lock. The Split Lock TM Friction Lock Fastener is the only fastener that provides a locking system without using any additional wires, locking compounds, lock washers or complicated interrupters.

Here are some features that combine to make Split Lock TM fasteners the best locking fastener on the market:

1. EASY INSTALLATION

Install the Split Lock TM as you would any other standard bolt, the only additional step needed is to simply use a high quality hex key Allen wrench to tighten the set pin to lock the fastener in place. This action locks the bolt and the set pin in place so you can rest assured that the bolt will not loosen due to Vibration heat or torque dependence.

1. EASY REMOVAL

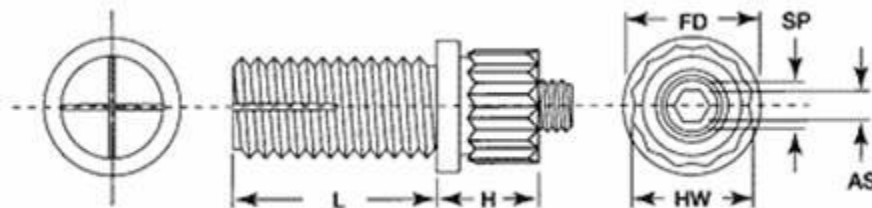
The Split Lock TM can be removed simply by loosening the set pin and backing out the fastener.

1. DEPENDABLE RE-USE TIME AND TIME AGAIN

These fasteners are made of only the finest alloys allowing the same fastener to be used over and over while providing the same locking ability time and time again.

PERCY'S SPLIT-LOCK FASTENERS

GENERAL INFORMATION *Cont.*



Wrench Size

H

L

FD

SP

AS

| Fastener Size | 12 Point | Height | Length | Flange Dia. (In.) | Set Pin Size | Socket Size |
|---------------|----------|--------|--------|-------------------|--------------|-------------|
| 5/16"-18 | 3/8" | 1/2" | 3/4" | 9/16" | 1/4"-28 | 1/8" |
| 5/16"-18 | 3/8" | 1/2" | 1" | 9/16" | 1/4"-28 | 1/8" |
| 3/8"-16 | 3/8" | 1/2" | 3/4" | 9/16" | 1/4"-28 | 1/8" |
| 3/8"-16 | 3/8" | 1/2" | 1" | 9/16" | 1/4"-28 | 1/8" |
| 8mm-1.25 | 3/8" | 1/2" | 25mm | 9/16" | 1/4"-28 | 1/8" |

**PERCY’S SPLIT-LOCK FASTENERS
INSTALLATION INSTRUCTIONS
(Header Collectors)**

1. Prep fastener for installation by making sure that the set pin is threaded into the bolt until the first sign of resistance is present. This resistance indicates that the set pin is firmly seated in fastener*.
2. Insert the bolts through the collector flange and install quality gasket as required. Tighten bolts finger tight.
3. Bolt should not protrude more than 1-1/2 threads pass the flange nut. Use hardened washer under bolt head if adjustment is needed.
4. After all bolts and nuts are installed and hand tight, torque each bolt to 10 ft. lbs. then torque each to 25 ft. lbs.
5. Using a 1/8" hex key, torque set pins to 6 ft. lbs. or 72 in. lbs. (dry) to “Lock Fastener”.

***WARNING: Applying torque to the threaded set pin before the fastener is threaded into the nut or threaded component will ruin the fastener. Only apply torque to the set pin after the fastener is fully seated. Unlock bolt by loosening set pin before trying to remove the bolt. Failure to loosen the set pin could result in damage to your fastened item or locking bolts or nuts.**

**INSTALLATION INSTRUCTIONS
(Header Collectors)**

1. Make sure that all threads are clean and free of any debris or damage. Clean or repair as necessary.

2. Prep fastener for installation by making sure that the set pin is threaded into the bolt until the first sign of resistance is present. This resistance indicates that the set pin is firmly seated in fastener*.
3. The split lock set pin is intended to be installed dry; but when installing the Split-Lock fastener into components that have aluminum threads, we recommend that you apply a small amount of quality anti-seize paste onto the bolt threads. The purpose of the anti-seize is to ease the removal of the bolt, prevent galvanic corrosion between dissimilar metals, and protect the aluminum threads. Anti-Seize can be purchased at any auto parts supply store and is commonly used on spark plug threads.
4. Insert the bolts through your components sealing flanges and install quality gasket as required. Tighten bolts finger tight.
5. Make sure that bolt does not bottom out or protrude more than 1-1/2 threads pass the flange in through hole installations. Use hardened washer under bolt head as a shim adjustment if the bolt is too long to clamp flange or in areas that require a washer.
6. After all bolts and nuts are installed and hand tight, torque each bolt to 10 ft. lbs. then torque each to 25 ft. lbs or to the component manufacturer's specification.
7. Using a 1/8" hex key, torque set pins to 6 ft. lbs. or 72 in. lbs. (dry) to "Lock Fastener".**

***WARNING: Applying torque to the threaded set pin before the fastener is threaded into the nut or threaded component will ruin the fastener. Only apply torque to the set pin after the fastener is fully seated. Unlock bolt by loosening set pin before trying to remove the bolt. Failure to loosen the set pin could result in damage to your fastened item or locking bolts or nuts.**

**** In areas where a 1/8" hex key interferes with the surrounding tubing or other obstructions, use a high speed cut-off wheel to cut down the wrench to gain clearance.**

PERCY'S SPLIT-LOCK FASTENERS COMMON PROBLEMS AND SOLUTIONS

Problem: "I can't get my allen wrench to fit the lock pin"

Cause #1: Due to packaging constraints versus component function, many vehicles have fasteners that are often located in tight confines. Sometimes this makes it extremely difficult to reach the lock pin with a standard allen wrench. Performance header installations are a classic example where this issue can be found. If you can not access the lock pin with your allen wrench due to physical interference with the header or other components, you can often times modify your allen wrench to allow for more clearance. Details of this modification are shown in the Split-Lock instructions.

Problem: “I ran down the set pin to see how far my fastener would expand. Now the fastener will not contract”

Cause #2: If for some reason you missed the warning that told you not to do this until after the bolt is installed, you now know why the warning exists. If this happens you must discard the damaged fastener and replace with a new one.

SPLIT-LOCK FASTENERS COMMONLY ASKED QUESTIONS

Q: “Can I use split lock fasteners with aluminum heads?”

A: Absolutely!, Just be sure and apply anti-seize to the threads to prevent any galling or galvanic corrosion.

Q: “Should I use Black oxide or Stainless Steel Split-Lock fasteners on my application?”

A: This is a choice of aesthetics more than function. Both fasteners are made of the highest quality materials and should serve many years of trouble free use. Stainless steel should be used for marine applications due to its superior resistance to environmental degradation