

TOUGHNUTZ™

A Simple Solution to a Major Problem

Major Problem

- **The combination of dissimilar metals causes excessive corrosion. The nuts have decayed and the studs are frozen in the head. Nuts and studs cannot be removed.**

The combination of aluminum cylinder heads, steel studs and cast iron manifolds causes excessive corrosion. Stud and nuts are often so corroded they cannot be removed. The traditional solution was to try and remove the fastener, which often resulted in breaking the stud, drilling out and re-taping the cylinder head, and using new studs. This can be a very long and expensive process, often taking longer than planned and sometimes results in replacing the cylinder head.

Simple Solution

- **Torch or cut off the nuts, flush with the manifold, and replace with TOUGHNUTZ™.**

With TOUGHNUTZ™ the same job can be done quickly and predictably. Torch or cut off the studs flush with the manifolds surface, with TOUGHNUTZ™ you can now use the existing studs without having to drill or re-tap the holes. Only the tops of the studs were corroded, the part of the stud in the manifold (not exposed to air) remains clean and strong. TOUGHNUTZ™ allows you to attach to the existing "Healthy" stud, making a quality affordable repair.

TOUGHNUTZ™

A truly innovative and yet simple solution to a major problem. Using TOUGHNUTZ™ will change these repairs into faster, more profitable work, and has many other benefits.

- ★ **Saves hours and hours of unneeded work**
- ★ **Using the TOUGHNUTZ™ method protects the cylinder head from possible damage**
- ★ **Makes repair work safer, with less chance of damage to other areas of motor or vehicle**
- ★ **Turns profit draining rust-job into predictable, profitable and safe repair**
- ★ **Three kits available to fit most repair applications**
- ★ **Works for industrial applications too**



Traditional method to remove old manifold and replace takes as long as ten hours.



Same repair with TOUGHNUTZ™ takes as little as one hour!

Three Kits to Choose From

Master Kit

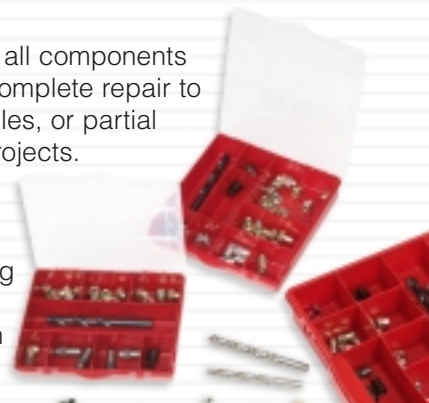
Be prepared for any size repair with the TOUGHNUTZ™ Master Kit containing everything needed to do several repairs to any type vehicle.

Combo Kit

Combo Kit includes all components needed to do one complete repair to many types of vehicles, or partial repair on multiple projects.

Ford Truck Kit

This kit specifically for Ford Trucks, containing all components need to do all studs on both exhaust manifolds.





Made in U.S.A.

MST = Master Kit **PMITNZMSTKIT** **CMB = Combo Kit** **PMITNZCMBKIT** **FRD = Ford Truck Kit** **PMITNZFRDKIT**

Part #	Description	Quantity Per Kit			Applications
		MST	CMB	FRD	
PMITNZ1	1/4" 20 shoulder nut	1			Air filter element rods, 60's to 80's American made models.
PMITNZ2	3/8" 16 shoulder nut	2			1950's to 1980's American and Canadian made vehicles.
PMITNZ3	8mm 1.25 small head shoulder nut	4	2	2	Ford manifold studs, pass. side by the motor mounts of 4.6 liter, other engines and very tight areas.
PMITNZ4	8mm 1.25 large head shoulder nut	16	14	14	Ford 4.6 liter manifolds, many Ford and other car starter mounting bolts. 1999 Escort manifold bolts. Many bolts and studs on Toyotas etc.
PMITNZ5	10mm 1.5 shoulder nut	3	3		Chrysler 3.0 & 3.3 liter starter bolts.
PMITNZ6	10mm 1.25 shoulder nut	3	3		Toyota 22R & 22RE manifolds, Y-pipes, and starter bolts.
PMITNZ7	12mm 1.25 shoulder nut	1			Toyota Camry exhaust mounting bolts.
PMITNZ8	8mm 1.25 extended barrel shoulder nut	2	2		1999 Ford Escort station wagon starter bolts, Chrysler 2.2 liter, 2.5 liter starter bolts.
PMITNZ9	3/8" 16 sleeve stud extender	4	4	4	1970's 1980's GM, Ford, and Chrysler Products.
PMITNZ10	1/4" 20 stud extender	2			Starter solenoids.
PMITNZ11	5/16" 18 stud extender	1			Some gas tank threaded rods and many other threaded rod applications.
PMITNZ12	3/8" 16 stud extender	2			Chevrolet 454, 305, 350 starters.
PMITNZ13	6mm 1 stud extender	1			Some 1960's, 70's and 80's GM, Ford, and Chrysler products, ground studs for Ford pickups and some hood height adjustment bolts.
PMITNZ14	8mm 1 stud extender	1			
PMITNZ15	8mm 1.25 stud extender	2			Ford Focus, Mitsubishi Mirage, Toyota, 1990 to 1992 Chevrolet 3.1.
PMITNZ16	10mm 1.5 stud extender	1			2002 Power stroke Ford diesel starter solenoid, Ford master cylinder mounting bolts.
PMITNZ17	10mm 1.25 stud extender	1			Toyota Y pipes and manifolds.
PMITNZ18	8mm 1.25 light duty shoulder nut	2			TNZ4 applications where thin barrel is acceptable.
PMITNZ19	12mm 1.25 stud extender	1			Needed on many foreign truck procedures.
PMITNZ20	Ford Coil Pack	5	1		
PMITNZ22	Toyota Coil Pack	5	1		
PMITNZ50	7/16" drill for cast iron	1	1	1	
PMITNZCGJT	hole chamfering tool	1	1		
PMITNZ221	small stud chamfering tool	1	1	1	
PMITNZCASE	Master Kit Case with extra compartments	1			
PMITNZCC	Combo Case with Lid		1		
PMITNZFC	Ford Truck Kit Case with Lid			1	