

LEAD-FREE CONCRETE & STRUCTURAL STEEL FASTENING

CATALOG 23.9



VERSATILITY

OVERHEAD



SIDEWALL



TRACK



ABOUT NITROSET	2
- APPLICATIONS	4
— KEY ADVANTAGES	5
NITROSET TOOLS	6
- NITROSET NTS805 TOOLS	6-7
NITROSET EXTENSION POLES & HAND GRIP	8
- NITROSET TOOL KITS	9
NITROSET FASTENERS	10
SIDEWALL & TRACK PINS	11
— CEILING FASTENERS	12-13
PRE-TIED CEILING WIRE/FASTENERS	14
— POWER-DRIVEN S.S. FASTENERS	15
— MECHANICAL & ELECTRICAL FASTENERS	16-17
SAFETY & REQUIRED PPE	18
NITROSET PARTS	19
- NITROSET PART KITS	19
- NITROSET PARTS LIST	20
- NITROSET PARTS DIAGRAM	21
COMPANY OVERVIEW	22
— ABOUT NITROSET / TECHNOLOGY	22
TRAINING & SUPPORT	23
— CONTACT	24



ONE TOOL DOES IT.

VERSATILITY

Our Nitroset NTS805 Series Tools (PG. 6-7) attach to either Nitroset Extension Poles (for overhead) or Nitroset Hand Grips & Extensions for Sidewall & Track (PG. 8). Utilizing the power of lead-free Nitroset Solid Propellant Fasteners (PG. 10 - 17), our solid propellant fastening system allows users to fasten into hard, high-psi concrete and structural steel in just one shot. No pre-drilling. No need for a separate power load, or setting penetration strength or depth. No overdriving. Simply push the tool against the concrete or structural steel substrate to actuate the fastener. We offer preconfigured Nitroset Tool Kits (PG. 9) to get you started, and Replacement Parts (FG.20) to keep you going. Our variety of Nitroset handles makes the system so versatile that only one Nitroset NTS805 Tool is needed for overhead, sidewall and track applications.

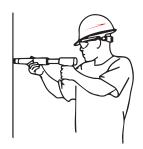


OVERHEAD

- Attach our wide selection of 2 & 3 Section Extension Poles, ranging from 4' to 18' in length, to fasten into concrete, structural steel and pan decking from the floor or a solid platform
- Nitroset is a dynamic solution for installing hanger wire or other components used in the acoustical ceiling, mechanical and electrical trades
- · Our tools are lightweight and nimble and easy to balance and fit into tight spaces
- Users can store multiple pre-tied wires inside the Extension Pole for efficient operation.
- · Lightweight design increases stamina and is easy on the user

SIDEWALL

- Attach our Hand Grip for accurate horizontal fastening into concrete and structural steel
- Ideal for fastening conduit straps, washered pins and other fasteners into sidewalls.
- The **New Composite Outer Sleeve** on the NTS805 provides the added hand protection and comfort when using horizontally





TRACK

- Attach our 14" Fiberglass Extension to the Hand Grip to achieve a comfortable working height suitable for reaching floors and fastening track
- Fasten into hard, high-psi concrete in one shot, rather than pre-drilling and installing anchors when facing touch concrete

POWER, NOT POWDER.

THE NITROSET ADVANTAGE



<u>птѕ805</u>

VS



POWER ACTUATED (NOT POWDER ACTUATED)	POWDER ACT	UATED
Uses Nitrocellulose fo	asteners that are lead-free	Uses .22 Caliber Loads t	hat contain lead
	ghter and more nimble - Able tightest of spaces	Bulky trigger pull design- Hec Cannot fit into as mar	
	se a piston to drive the fasten- I the tool. Easier on the user.	Hard impact- Piston driven sy More strenuous o	
	h-psi concrete. Less spalling fastening into hard concrete.	Poor stick rate in high-psi concrete. More spalling and fish hooking when fastening into hard concrete.	
Single shot	for all application	Collated options available fo	or some applications
Reduces Material	Less Labor	Added Materials	Added Labor
Higher Stick Rate	Higher Efficiency	Lower Stick Rate	Less Efficiency
Lower In	n-Place Cost	Higher In	-Place Cost

ADDED BENEFITS OF NITROSET

FEATURES	BENEFITS
100% Lead-Free	Approved for use on projects with lead restrictions (i.e. Government, Airports, Hospitals, Schools, etc.)
Primer Free	No fines for unspent shots/loads left on the jobsite
Low Hazard- Non-Explosive	Nitroset <u>is not</u> regulated as a class 1 explosive
Nitroset Fasteners <u>do not</u> contain brass	No clean up of spent brass shells and no risk of fines
Vented tool design	Protects overdrive of fasteners
Lightweight and nimble	Reduces user fatigue and is most versatile in areas with difficult access into tight spaces





WHAT'S NEW

The new 805 Tools builds on the success it's predecessor the 801, and includes new innovations:

- Now available in Standard and Short (S) models
- Newly designed nosepiece
- Composite Outer Sleeve Grip
- Weight reduction
- · Newly designed Spall Guards

■ HIGHLIGHTS

- Uses lead-free, gunpowder free, Nitroset Fasteners that are non-explosive and safe in restrictive areas
- Penetrates hard, high-psi concrete and structural steel in one shot. No need for different power loads. No overdriving. Excellent stick rate.
- Lightweight, low-profile tool design is easy to use and eases access in tight overhead areas
- Use with Nitroset Extension Poles to reach a multitude of heights without changing poles, and eliminate the need for lifts and ladders when overhead fastening



■ APPLICATIONS



Acoustical Ceilings



Mechanical & Electrical



Steel Stud Framing Track

■ DESCRIPTION

Nitroset NTS805 Series Solid Propellant Fastening Tools are designed to fasten lead-free Nitroset Fasteners into Concrete and Structural Steel. The 805 Tools are available in two models: Standard (NTS805 - for 7/8" to 1-1/2" pins and clips) and Short (NTS805-S - for 1/2" to 1-1/4" pins and clips). To use both 1/2" and 1-1/2" fasteners on one tool, we suggest purchasing one of our NTS805 Short Tool Kits (PG. 9) and also purchasing a Standard Reset Sleeve (PG. 21, Item Code NTS805-10). Simply swap between the Standard and Short reset sleeves to actuate the desired pin length.



TELESCOPING EXTENSION POLES

Our Extension Poles make quick work of adjusting to the height you need to reach. A must for overhead applications, these durable and lightweight time-savers come in four extendable pole options ranging from a minimum of 4' to a maximum of 18'. The internal wire storage compartment provides quick access to pre-tied wire for better efficiency. The extra-long ribbed grip makes holding the handle comfortable and secure at every extension.

Item Code	# of Sections	Min. & Max. Ex- tension	Item Weight	Pack
TOP8V	2	4 ft - 8 ft	5 lbs	1 Pole
TOP12V	2	6 ft - 12 ft	6 lbs	1 Pole
TOP123V	3	4 ft - 8 ft - 12 ft	6 lbs	1 Pole
TOP183V	3	6 ft - 12 ft - 18 ft	8 lbs	1 Pole

HAND GRIP AND EXTENSION

The Nitroset Hand Grip turns the NTS805 into our most compact fastening solution, and our best tool for sidewall applications. Add the 14" Fiberglass Extension to extend the length and reach floors more comfortably when doing steel stud track installation.



Item Code	de Description Item Weigh		Pack
NTS101-19	Hand Grip	7 oz	1 Grip
TOPF-MF14	14" Fiberglass Extension	6 oz	1 Extension

T00L KITS



Power up with Nitroset Tool Kits

The journey to lead-free fastening into concrete and structural steel begins with a Nitroset Tool Kit. Add some Nitroset Fasteners, and maybe an Extension Pole (if you need one for overhead work), and you're off.

When choosing between our Tool Kit options, you need to decide a couple of things:

- 1. Will you need to install 1-1/2" pins/clips? Our Standard Tool Kits are for use with 7/8" to 1-1/2" pins/clips, whereas our Short Tool Kits are designed for 1/2" to 1-1/4" pins/clips (and will not work with 1-1/2").
- 2. Will you ever want to use the tool horizontally (i.e. for sidewall applications), or for floor applications (like steel stud track)? If so, choose one of our kits that includes the Hand Grip & 14" Fiberglass Extension. These handles are ideal for sidewall and track applications. To do overhead work, like hanging Acoustical/ Suspended Ceiling Wire, you will need to purchase a Telescoping Extension Pole separately (PG. 8).

All Kits Include: (1) Nitroset Tool Case, (1) NTS805 Tool (Standard or Short), Cleaning Brushes and Cleaning Lubricant, Wrenches, Safety Glasses, and an Operations Manual (which you are required to read before using the tool).

Item Code	Description	For Use With	Pack	Case
NTS805-X	Nitroset NTS805 Standard Tool Kit*	7/8" to 1-1/2" pins/clips	1 Kit	4 Kits
NTS805-XTP	Nitroset NTS805 Standard Tool Kit* w/ Hand Grip & 14" Fiberglass Extension 7/8" to 1-1/2" pins/clips		1 Kit	4 Kits
NTS805-S-X Nitroset NTS805 Short Tool Kit*		1/2" to 1-1/4" pins/clips	1 Kit	4 Kits
NTS805-S-XTP Nitroset NTS805 Short Tool Kit* w/ Hand Grip & 14" Fiberglass Extension		1/2" to 1-1/4" pins/clips	1 Kit	4 Kits

^{*}Tool Kit <u>does not</u> include Telescoping Extension Pole. Pole(s) must be purchased separately.



FOR CONCRETE & STRUCTURAL STEEL

FASTENERS

Nitroset Solid Propellant Fasteners are engineered to fasten into hard, high-psi concrete and structural steel in one shot, without the use of gunpowder or other dangerous explosives. Our lead-free fasteners are preferred on jobsites with lead restrictions, but not just because of their safety and low hazards. Thanks to our innovative and patented solid propellant fastening technology, Nitroset fasteners stick strong when competitors fail to penetrate, spall or fishhook. Our fasteners are fully assembled, and consist of strong steel shank, nitrocellulose charge, and are available with a number of clip options. No need for different power loads. Nitroset Fasteners all utilize the same load strength, set flush, and do not overdrive.



- Lead-free, primer-free, non-explosive Nitroset fasteners are safe to use in high security and lead-free zones such as schools, hospitals, airports, military bases and government facilities.
- Nitroset fasteners are brass-free; eliminating fines and costs related to policing and storing other manufacturers' brass loads on the jobsite.



SIDEWALL & TRACK PINS

A variety of pins engineered to attach elements, such as track, metal lath and more, to concrete and/or structural steel.





TRACK PINS

Application: For attaching metal track to concrete.

Item Code	Description	Pack	Case
PIN219	3/4" X 0.125 Track Pin	1000 pc	10,000 pc
PIN319	3/4" X 0.145 Track Pin	1000 pc	10,000 pc
PIN219T	3/4" X 0.125 Track Pin w/ Top Hat	500 pc	5,000 pc
PIN222	7/8" X 0.125 Nitro Track Pin	500 pc	5,000 pc



WASHERED PINS

Application: For attaching elements, such as metal lath, to concrete.

Item Code	Description	Pack	Case
PIN222W	7/8" X 0.125 Nitro Track Pin w/ 9/16 Washer	500 pc	5,000 pc
PIN222SW	7/8" X 0.125 Nitro Track Pin w/ Square Washer	100 pc	1,000 pc
PIN532NW	1-1/4" Nitro Step Shank Pin w/ Nitro Washer	100 pc	1,000 pc

ALLOWABLE LOADS FOR NITROSET ASSEMBLIES INSTALLED INTO NORMAL-WEIGHT CONCRETE (1bf)							
	EMBEDMENT	CONCRETE COMPRESSIVE STRENGTH & LOAD DIRECTION					
ASSEMBLY	ASSEMBLY DEPTH		4,000 PSI			6,000 PSI	
	(INCHES)	Tension	Shear	45-Degree	Tension	Shear	45-Degree
PIN219	5/8	85	70	-	175	65	-
PIN222	3/4	100	200	-	205	100	-
PIN525	13/16	180	195	-	205	185	-
PIN532	1-1/16	250	355	_	200	215	-

For SI: 1 inch = 25.4 mm; 1 lbf = 4.4 N: 1psi = 6895 Pa.

KNURL PINS

Application: Knurled shank. For attaching elements to structural steel.



Item Code	Description	Pack	Case
PIK313	1/2" X 0.145 Knurl Pin*	500 pc	5,000 pc
PIK316	5/8" X 0.145 Knurl Pin*	500 pc	5,000 pc

NOTE: $^{1}/^{2}$ and $^{5}/^{8}$ pins require the Short NTS805-S Tool, which is equipped with the NTS805-10-S Short Reset Sleeve. These short Knurl Pins will not actuate properly in the Standard NTS805 Tool (or on a tool with the NTS805-10 Standard Reset Sleeve installed).

¹ Fasteners must not be driven until the concrete has reached the specified compressive strength.

² Concrete thickness at the point of penetration must be a minimum of three times the embedment depth.





CEILING FASTENERS

- Nitroset Fasteners are ideal for ceiling structures
- Our Heavy Duty Pins & Clips offer optimum consistency and holding value into tough concrete
- Ideally suited for high-volume applications due to our one step fastening actuation
- Pre-tied assemblies available for ceiling wire

Nitroset Fasteners have been specifically designed to support ceiling structures. Our Heavy-Duty Step Shank Pins & Clips (CLAS) offer optimum consistency and holding value into the toughest jobsite applications. The Heavy-Duty Pencil Rod Pins & Clips (CLS) have extended length clips to make quick work of pencil rods installation in one single fastening. Our Utility Clips (CLU) are ideal for electricians and high-volume ceiling applications.

From everyday scenarios to the toughest applications count on Nitroset to deliver the clip assembly for your next project.



CEILING PINS & CLIPS

A variety of pins engineered to attach elements, such as track, metal lath and more, to concrete and/or structural steel.



UTILITY CLIPS



Application: For vertical attachment of tire wire, chain, cable, or other fastening support to concrete or structural steel base materials.

Item Code	Description	Pack	Case
CLU222	7/8" X 0.125 Pin w/ Pre-Mounted 120° Clip	100 pc	1,000 pc



HEAVY DUTY STEP SHANK PINS & CLIPS



Application: For wire suspension hanging acoustical ceiling systems or other overhead fixtures and applications such as hanging lights.

Item Code	Description	Pack	Case
CLAS525	1" Step Shank Pin w/ Nitro Clip Assembly	100 pc	1,000 pc
CLAS532	1-1/4" Step Shank Pin w/ Nitro Clip Assembly	100 pc	1,000 pc



HEAVY DUTY PENCIL ROD PINS & CLIPS



Application: For pencil rod and wire suspension hanging acoustical ceiling systems or other overhead fixtures and applications such as hanging lights.

	Item Code	Description	Pack	Case
CLSUPL525 1" Step Shank Pin w/ Extended Clip As		1" Step Shank Pin w/ Extended Clip Assembly	100 pc	1,000 pc
	CLSUPL532	1-1/4" Step Shank Pin w/ Extended Clip Assembly	100 pc	1,000 pc

ALLOWABLE LOADS FOR NITROSET ASSEMBLIES INSTALLED INTO NORMAL-WEIGHT CONCRETE (lbf) 1,2								
	EMBEDMENT		CONCRETE (COMPRESSIVE S	TRENGTH & L	TH & LOAD DIRECTION		
ASSEMBLY	DEPTH	4,000 PSI		6,000 PSI				
	(INCHES)	Tension	Shear	45-Degree	Tension	Shear	45-Degree	
CLU222		120	165	120	115	276	209	
CLAS525	Controlled by clip thickness	158	242	151	163	184	168	
CLAS532		150	147	213	171	146	152	

For SI: 1 inch = 25.4 mm; 1 lbf = 4.4 N: 1psi = 6895 Pa.

¹ Fasteners must not be driven until the concrete has reached the specified compressive strength.

² Concrete thickness at the point of penetration must be a minimum of three times the embedment depth.



Nitroset stocks a wide selection of pre-tied wires. 12 gauge wire with 7/8", 1" and 1-1/4" size fastener assemblies in standard lengths are readily available for expedited shipping. Custom options are available upon request to meet specific jobsite needs (See below).

Our pre-tied wires come bundled in custom steel crates that are easy to handle and effectively protect the material during transit. Always store pre-tied wire indoors and keep them dry.





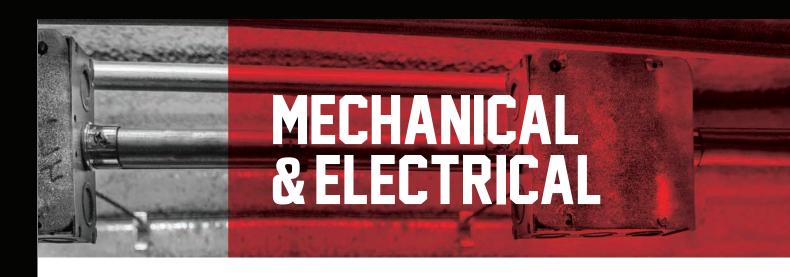
CUSTOM OPTIONS

Custom lengths, gauges and ties available:

- 8 or 9 gauge wire options (12 gauge standard)
- · Stainless Steel Wire
- · Double-Tie Wire

Need something else custom? Just ask.







THREADED ROD HANGERS



Application: For vertical attachment of threaded rod to concrete or structural steel base material.

Item Code	1/4"-20 Threaded Rod Hanger w/ 7/8" x 0.125 Pin 100 pc 1,0		
CLR14-222 1/4"-20 Threaded Rod Hanger w/ 7/8" x 0.125 Pin		100 pc	1,000 pc
CLR38-222	3/8"-16 Threaded Rod Hanger w/ 7/8" x 0.125 Pin	100 pc	1,000 pc



HEAVY DUTY THREADED ROD HANGERS



Application: For heavy-duty vertical attachment of threaded rod to concrete and structural base material.

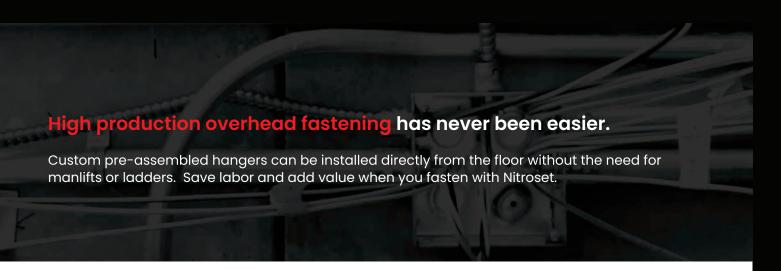
Item Code	e Description		Case
CLRHD14-525	1/4"-20 Heavy Duty Threaded Rod Hanger w/ 1" Step Shank Pin	100 pc	1,000 pc
CLRHD38-525	3/8"-16 Heavy Duty Threaded Rod Hanger w/ 1" Step Shank Pin	100 pc	1,000 pc



BRIDLE RING CLIP ASSEMBLIES

Application: For hanging low voltage cable.

Item Code	em Code Description		Case
CLR14222- BRT114	1/4"-20 Threaded Rod Clip & 7/8" Pin w/ 1-1/4" Bridle Ring Combo		1,000 pc
CLR14222- BRT2	2- 1/4"-20 Threaded Rod Clip & 7/8" Pin w/ 2" Bridle Ring Combo		1,000 pc





ONE-HOLE STRAP



Application: For multi-position (floor, wall or ceiling) attachment of electrical conduit or armored cable to concrete or structural steel base material.

Item Code	Description	Pack	Case
CLC38-222	3/8" One-Hole Strap w/ 7/8" X 0.125 Pin	100 pc	1,000 pc
CLC12-222 1/2" One-Hole Strap w/ 7/8" X 0.125 Pin		100 pc	1,000 pc
CLC34-222	3/4" One-Hole Strap w/ 7/8" X 0.125 Pin	100 pc	1,000 pc
CLC1E-222	1" One-Hole Strap w/ 7/8" X 0.125 Pin	50 pc	500 pc



CABLE TIE CLIP ASSEMBLY

Application: For installing or securing electrical fittings or cable to concrete. Uses a standard cable tie up to 3/8" width.

Item Code	Description	Pack	Case
CLT219	Cable Tie Clip w/ 3/4" X 0.125 Pin	100 pc	1,000 pc



THREADED STUDS

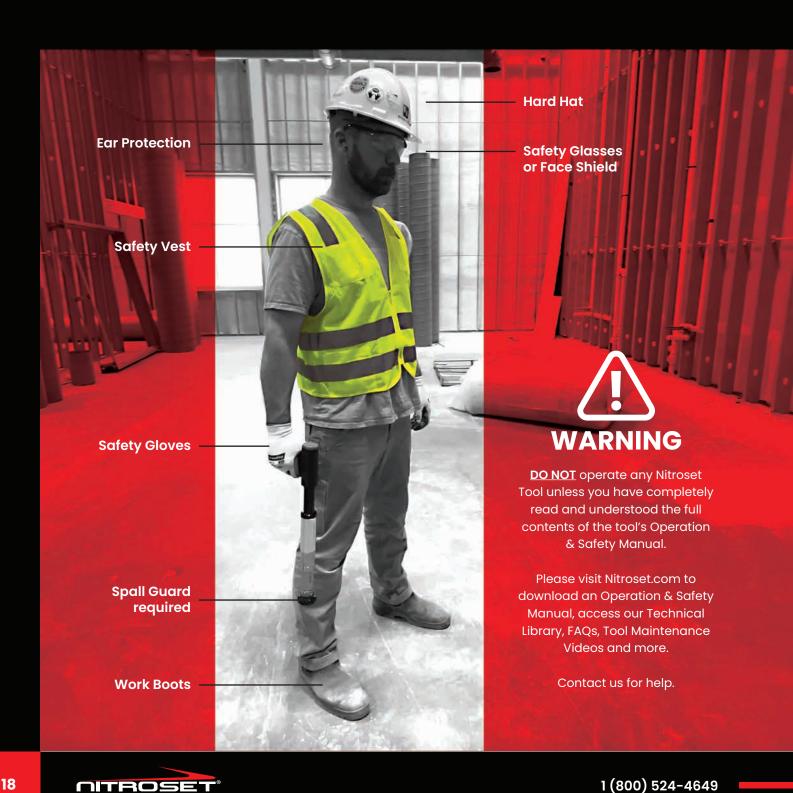
Application: For attaching electrical components to concrete where removability of the component is required.

Item Code	Description	Pack	Case
STT14	1/4" Threaded Stud - 1-1/4" Length*, 7/8" Shank	100 pc	1,000 pc

NOTE: *1-1/4" length fasteners require the Standard NTS805 Tool, which is equipped with the NTS805-10 Standard Reset Sleeve. 1-1/4" length fasters will not actuate properly in the Short NTS805-S Tool (or on a tool with the NTS805-10-S Short Reset Sleeve installed).

PPE REQUIRED.

Proper personal protective equipment is required before operating the Nitroset Solid Propellant Fastening System. A Hard Hat, Safety Glasses, Ear Protection, Safety Gloves and Work Boots are required. We recommend wearing a Safety Vest and following all other job site requirements.





CLEANING KIT

NTS101-20-KIT

NTS101-22	Wire brush
NTS101-23	Strike-Hold Degreaser
NTS101-24	Microfiber Cloth



SPRING KIT

NTS101-20-KIT2

NTS101-5	Trigger Ball Spring
NTS101-9	Firing Spring
NTS101-11	Reset Spring



REPAIR KIT

NTS101-20-KIT3

NTS101-4	Firing Pin
NTS101-5	Trigger Ball Spring
NTS101-8	Roll Pin
NTS101-9	Firing Spring
NTS101-11	Reset Spring



FIRING PIN ASSEMBLY & SPRING KIT

NTS101-20-KIT4

NTS101-4	Firing Pin	
NTS101-5	Trigger Ball Spring	
NTS101-6	Firing Pin Holder	
NTS101-8	Roll Pin	
NTS101-9	Firing Spring	
NTS101-11	Reset Spring	



COMPLETE REBUILD KIT

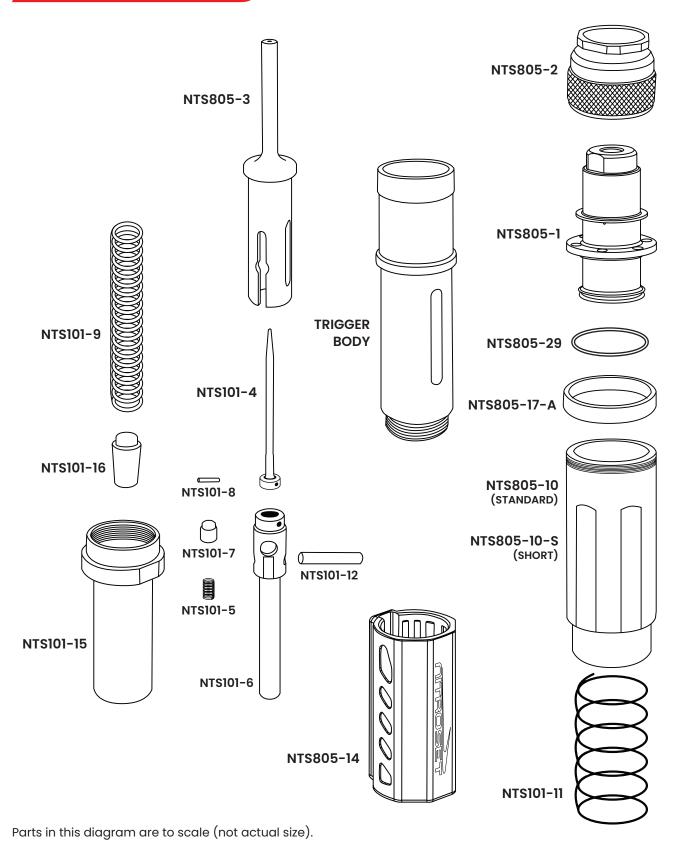
NTS101-20-KIT5

NTS101-4	Firing Pin
NTS101-5	Trigger Ball Spring
NTS101-6	Firing Pin Holder
NTS101-7	Trigger Ball Release
NTS101-8	Roll Pin
NTS101-9	Firing Spring
NTS101-11	Reset Spring
NTS101-12	Main Assembly Pin



^{*}These parts are included in the NTS805 Triple Play Tool Kits.

<u>nts805</u>



NITROSET

ABOUT NITROSET

Nitroset, LLC, headquartered in Houston, Texas, U.S.A., specializes in providing high-quality fastening solutions. The Nitroset solid propellant fastening system is an innovative fastening solution that offers superior performance into normal to hard aggregate concrete surfaces and structural steel.

TECHNOLOGY

The Nitroset system harnesses the energy of the Nitroset solid propellant to drive fasteners into concrete and structural steel rather than using traditional primer and gunpowder loads. The system is 100% lead-free in compliance with OSHA (CFR 1926.62) and no-lead worksite requirements. It is classified as non-explosive allowing for standard shipping and storage of the fasteners. The result is a system that stresses operations and environmental safety. Nitroset delivers a complete enhanced solution for the fastener industry.



TRAINING & SUPPORT

Nitroset offers a wealth of training and support, from Operations Manuals and Disassembly/Assembly Videos, to In-Person Demonstrations and Live Training. Our national team of sales and technical representatives, as well as, our many dealers and distributors, are here to help your team succeed and stay safe while experiencing the benefits of our innovative fastening technology. Please visit our website for more information and reach out at any time. Our contact information is on the back.



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CONNECT WITH US

We are here to help with anything you may need. Please don't hesitate to reach out. Thank you!

Hours of OperationMonday-Friday 8am-4:30pm CST

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