

**LOCTITE**<sup>®</sup>

# Maintenance Solutions Guide for Cat Dealers

2013



Excellence is our Passion

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# ANTI-SEIZE LUBRICANTS

- Protect against rust, corrosion, seizing and galling
- Provide lubrication in extreme environments



## ANTI-SEIZE LUBRICANTS

LOCTITE PRODUCT	CAT PART NUMBER	DESCRIPTION	TEMPERATURE RESISTANCE	COLOR	K-VALUE*
LOCTITE C5-A COPPER ANTI-SEIZE LUBRICANT	222-3114	Protects metal parts against high temperature seizing and galling. Versatile application base as it can be used on copper, brass, cast iron, steel and alloys, including stainless steel.	982°C (1800°F)	Copper	0.16
	4C-5598				
	4C-5599				
	5P-3931				
LOCTITE GRAPHITE-50 ANTI-SEIZE	4C-5592	Non-metallic anti-seize lubricant with good electrical conductivity between metal-to-metal joints. Ideal for threaded joints that require electrical conductivity and also for press fit and slip joints.	482°C (900°F)	Black	0.13
	4C-5593				
	6V-4876, 186-1531				
LOCTITE MOLY PASTE, METAL-FREE	—	High molybdenum disulfide content of 65% gives it unsurpassed lubricity and low frictional coefficient of 0.06. It is ideal for threaded fasteners that require high clamping force for same torsional load to create reliable assemblies.	400°C (750°F)	Black	0.11
LOCTITE NICKEL ANTI-SEIZE	337-7965	Ideal for protection against seizing and galling of slow moving parts under high pressure. Also easy disassembly of parts exposed to corrosive or hot environments.	1315°C (2400°F)	Silver	0.13
LOCTITE C5-A COPPER ANTI-SEIZE STICK	—	Semisolid stick offers the same performance characteristic as C5-A paste in convenient semisolid stick form. Stick offers more portability and less mess.	982°C (1800°F)	Copper	0.16
LOCTITE SILVER GRADE ANTI-SEIZE STICK	—	Semisolid stick offers the same performance characteristic as Silver Anti-seize paste in convenient semisolid stick form. Stick offers more portability and less mess.	871°C (1600°F)	Silver	0.18

\* See K-value below.



### Torque Guide

Proper clamp load is an essential part of any bolted assembly for trouble-free operations. Torquing either nut or bolt creates the clamp load. An anti-seize lubricant used on a bolt helps to develop greater clamp load for the same torque compared to a non-lubricated bolt. An additional benefit is greater uniformity in clamp load among a series of bolts. The relationship between torque and clamp load is expressed in the following equation:  $T = KFD$ .

**Where:**

**T** = Torque (in.-lb., ft.-lb., N-m)

**F** = Clamp load (lb., N)

**D** = Nominal diameter of bolt (in., ft., m)

**K** = Torque coefficient or nut factor, determined experimentally

**K Factors:** K factors are obtained on grade 8, ½ in. steel bolts and grade 5 nuts by a test procedure that measures torque tension properties. Lubricant was applied to the bolt threads and both faces of the washer.

See the properties chart (above) for the torque coefficient or K-value for the anti-seize compounds.

Henkel Corporation believes that this data fairly represents expected performance. However, Henkel makes no guarantee of specific performance on any individual fastener. In critical applications, it is necessary to determine K-values independently.

Note: There are two "coefficients" used to express the relationship between torque and tension. Torque coefficient (also called "nut factor") is the most commonly used. A different concept is the "friction coefficient," which has a value of 2/3 (or 67%) of the torque coefficient.

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# BONDING & REPAIR PRODUCTS

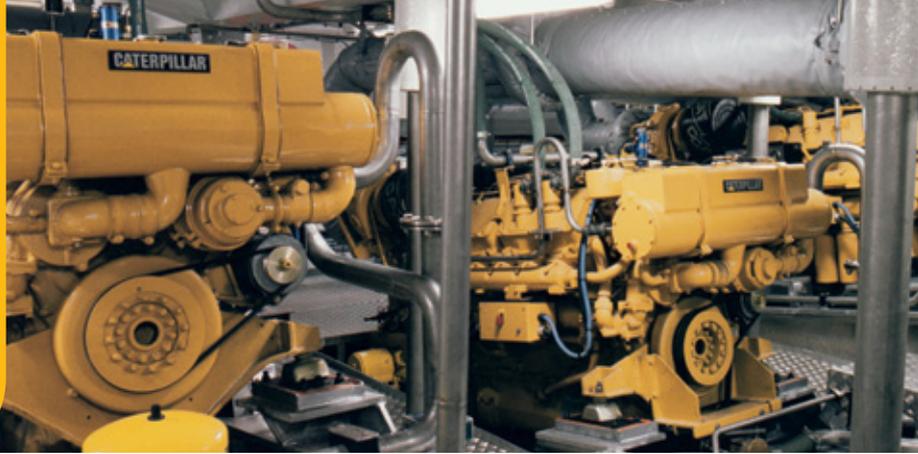
- Bond a variety of substrates
- Assemble parts quickly and easily
- Repair broken parts
- Bond dissimilar parts



## INSTANT ADHESIVES

LOCTITE PRODUCT	CAT PART NUMBER	DESCRIPTION	TYPICAL USE	COLOR	VISCOSITY (cP)	TEMPERATURE RANGE	FIXTURE SPEED
<b>LOCTITE 380 BLACK MAX INSTANT ADHESIVE</b>	152-9155	Rubber-toughened instant adhesive with increased flexibility and enhanced resistance to shock. Bonds variety of substrates like metal, rubber and plastics with excellent peel and shear strength.	Close-fitting parts	Black	300	-54°C to 107°C (-65°F to 225°F)	90 seconds
<b>LOCTITE 401 INSTANT ADHESIVE, SURFACE INSENSITIVE</b>	—	Designed for the assembly of difficult-to-bond materials, which require uniform stress distribution and strong tension and/or shear strength. The product provides rapid bonding of a wide range of materials like metals, plastics and elastomers. Also suited for bonding porous materials such as wood, paper, leather and fabric.	General-purpose	Clear	110	-54°C to 120°C (-65°F to 248°F)	15 seconds
<b>LOCTITE 406 INSTANT ADHESIVE</b>	—	Designed for bonding of plastics and elastomeric materials where very fast fixturing is required. Quick setting feature makes it ideal for temporary 'O' rings making.	Wicking grade	Clear	20	-54°C to 120°C (-65°F to 248°F)	15 seconds
<b>LOCTITE 410 INSTANT ADHESIVE, TOUGHENED</b>	—	Rubber-toughened instant adhesive for higher gap filling with increased flexibility and peel strength along with enhanced resistance to shock.	Gap filling	Black	3,500	-54°C to 107°C (-65°F to 225°F)	90 seconds
<b>LOCTITE 414 INSTANT ADHESIVE</b>	157-7228	General-purpose instant adhesive for bonding plastics, rubber and metal.	Plastic bonder	Clear	110	-54°C to 82°C (-65°F to 180°F)	20 seconds
<b>LOCTITE 454 INSTANT ADHESIVE</b>	—	Designed for the assembly of difficult-to-bond materials which require uniform stress distribution and strong tension and/or shear strength. Particularly suited for bonding porous and absorbent materials. Exhibits faster cure speed on dry and acidic surfaces.	Porous surfaces	Clear	Gel	-54°C to 120°C (-65°F to 248°F)	15 seconds
<b>LOCTITE 480 INSTANT ADHESIVE, BLACK, TOUGHENED</b>	—	Low viscosity, elastomer-modified instant adhesive. Bonds metal and rubber. Excellent peel, impact and shear strength with enhanced resistance to shock.	General filling	Black	200	-54°C to 82°C (-65°F to 180°F)	90 seconds

# CLEANERS, DEGREASERS & RUST TREATMENTS



## CLEANERS

LOCTITE PRODUCT	CAT PART NUMBER	DESCRIPTION	FUNCTION	APPLICATION
<b>LOCTITE ODC-FREE CLEANER &amp; DEGREASER</b>	—	Non-aqueous, hydrocarbon based, non-CFC solvent for cleaning and degreasing of surfaces to be bonded with LOCTITE adhesives. Removes most greases, oils, lubrication fluids, metal cuttings and fines from all surfaces. It can be used as a spray or in immersion cleaning processes at room temperature or heated. (Formerly referenced as 7070.)	Removes grease, oil, lubrication fluids, metal cuttings and filings from parts, equipment and machinery.	Use as a spray or in immersion cleaning processes, at room temperature or heated. Recommended as a final pre-assembly cleaning treatment for all surfaces bonded with adhesives.
<b>LOCTITE CHISEL PAINT STRIPPER, METHYLENE CHLORIDE</b>	—	Removes gasket from any type of assembly in 10 to 15 minutes. Prepares metal parts for new gaskets, eliminating, scraping and sanding. Works on wood; noncorrosive on aluminum.	Removes pre-cut conventional gasket cements as well as formed-in-place chemical gaskets.	Removes silicones, baked-on gaskets, gaskets from aluminum, small difficult-to-reach components, weather-stripping adhesive, dried oil, grease, paint and varnish.
<b>LOCTITE NATURAL BLUE BIODEGRADABLE CLEANER &amp; DEGREASER, ALL-PURPOSE</b>	—	It can be economically diluted with water in different ratios based upon cleaning requirements. Formulated for wipe down, pressure spraying and immersion cleaning processes. Contains no ozone-depleting chemicals.	Removes grease, grime, oil, soot, cutting fluids, mildew, stains, light carbon, animal fat, polishing compounds and ink.	Cleans engine parts, ovens, exhaust hoods and drilling rigs. Can be diluted for general wipe-down cleaning. Formulated for pressure spraying and immersion cleaning processes, at room temperature or heated.
<b>LOCTITE NON-CHLORINATED PARTS CLEANER</b>	222-3117	Penetrates, dissolve and removes dirt and oxidized oil (gum) and asphalt from metal parts. Leaves no residue. It penetrates through dirt and corrosion and flushes them away; eliminates the need for disassembly. Ideal for aluminum surfaces.	Cleaner for removing oil, grease and asphalt with no chlorinated solvent runoff.	All-purpose metal parts cleaner. Ideal for aluminum surfaces.
	222-3118			
<b>LOCTITE ELECTRICAL CONTACT CLEANER, NONFLAMMABLE</b>	222-3124, 222-3119	Removes grease, oil, and other contaminants from electrical parts to prevent contact failure. Dries residue-free in seconds. Nonconductive, noncorrosive, nonflammable. Contains no CFC or class 1 ozone-depleting chemicals.	Removes grease, dirt, oil, flux and surface contaminants from sensitive electrical/electronic devices. Also used for equipment requiring nonconductive, low residue degreasing agents. Contains HCFC-141b. Nonflammable.	Switches, relays, motor controls, pc boards, connectors, tape heads, sensors, control panels and electrically driven equipment.
<b>LOCTITE INDUSTRIAL HAND WIPES</b>	—	Hand cleaners that remove tough grease and grime while premium skin conditioners and antiseptic agents keep sensitive hands protected and conditioned.	Remove grease, grime, inks, soil, paint, gasket cements, epoxies and glues.	Available in various formats in various countries; wipes, smooth liquid, and liquid with pumice. <i>Contact your local Henkel representative for availability in your region.</i>
<b>LOCTITE HANDCLEANER WITH PUMICE</b>	—			
<b>TURCO WHITE SOLVE 'EC' ELECTRICAL CONTACT CLEANER</b>	—	Removes grease, oil, and other contaminants from electrical parts to prevent contact failure. Dries residue free in seconds.		
<b>YUK-OFF BRAKE AND PARTS CLEANER</b>	—	This non-chlorinated cleaner instantly removes fluids, grease and dirt, leaving no contaminant-attracting residue.		

## SURFACE TREATMENT PRODUCTS

LOCTITE PRODUCT	CAT PART NUMBER	DESCRIPTION	DRY TIME	APPLICATION METHOD
<b>LOCTITE EXTEND RUST TREATMENT</b>	—	Converts existing rust into stable base (rust required). Cured product acts as primer with oil- or solvent-based paints. Protects from further corrosion.	Re-coat in 20 minutes	Brush or commercial sprayer
<b>LOCTITE MAXI-COAT, RUST INHIBITOR</b>	222-3121	Heavy duty waxy coating provides long term corrosion protection for metal parts, equipment and machinery. Great for protecting parts in storage.	3 to 6 hours	Brush on

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# GASKETING PRODUCTS

## SEALING OF FLANGES

- Provide precise, reliable sealing
- No shimming effect – controlled tolerances, no need for re-torquing
- Fill all voids – reduce the need for a fine surface finish of flanges
- Parts can be disassembled easily even after extended service
- Resist high pressure when fully cured



## SILICONE GASKETING PRODUCTS

LOCTITE PRODUCT	CAT PART NUMBER	DESCRIPTION	COLOR	TEMPERATURE RANGE (Intermittent)	SEALING TIME
LOCTITE 5699 GREY HIGH PERFORMANCE RTV SILICONE GASKET MAKER	—	For rigid flange assemblies. Provides excellent sealing and oil resistance on flanges of transmissions and cast iron housings.	Grey	-59°C to 329°C (-75°F to 625°F)	Tack-free – 30 minutes Full Strength – 24 hours
LOCTITE 587 BLUE HIGH PERFORMANCE RTV SILICONE GASKET MAKER	141-5831	Forms tough, flexible gaskets directly on the flange. Offers excellent adhesion on oily surfaces. Low odor, nonvolatile and noncorrosive. Resistant to most chemicals and solvents.	Blue	-59°C to 260°C (-75°F to 500°F)	Tack-free – 30 minutes Full Strength – 24 hours
LOCTITE 598 BLACK HIGH PERFORMANCE RTV SILICONE GASKET MAKER	4C-9612	Retains high flexibility and oil resistance for longer gasket life. Low odor, noncorrosive, low volatility. Resistant to most chemicals and solvents.	Black	-59°C to 329°C (-75°F to 625°F)	Tack-free – 30 minutes Full Strength – 24 hours
LOCTITE 5900 FLANGE SEALANT	165-2601	Superior flexibility and adhesion. Provides excellent seal and fluid resistance. Noncorrosive, low odor, low volatility.	Black	-54°C to 260°C (-65°F to 500°F)	—
	8T-0065, 186-1527				
LOCTITE INSTANT GASKET	—	Makes high performance, leak-proof gaskets in one minute. Equipment can be returned to service immediately. Blow-off resistant. Outperforms solid gaskets.	Black	-59°C to 260°C (-75°F to 500°F)	Operating strength 15 psi – 1 minute
LOCTITE SUPERFLEX 593 RTV SILICONE SEALER, BLACK	3S-6252, 185-3986	Superior bonding and sealing properties to most surfaces (not recommended for concrete). This product resists aging, weathering and thermal cycling without hardening or shrinking.	Black	-54°C to 232°C (-65°F to 450°F)	
LOCTITE SUPERFLEX 595 RTV SILICONE ADHESIVE, CLEAR	119-0781	Superior bonding and sealing properties to most surfaces. This product resists aging, weathering and thermal cycling without hardening or shrinking. Resistance to UV light and ozone makes it suitable for open or exposed conditions.	Clear	-54°C to 232°C (-65°F to 450°F)	
LOCTITE SUPERFLEX 596 HIGH TEMP RTV SILICONE ADHESIVE, RED	4C-9614	Withstands high temperature and has excellent solvent and chemical resistance. Fills gaps up to 0.010 in. (0.254 mm). Maintains clamping loads for strong, leak proof assemblies. Makes or dresses gaskets in rigid assemblies.	Red	-59°C to 316°C (-75°F to 600°F)	
	8T-9013, 205-8857				
LOCTITE SUPERFLEX RTV SILICONE ADHESIVE SEALANT, BLACK	141-5830	Black in color, general-purpose silicone adhesive sealant. Will not slump in overhead or vertical applications. Resistance to extreme thermal cycling, UV light and ozone makes it suitable for open or exposed applications.	Black	-54°C to 232°C (-65°F to 450°F)	
LOCTITE SUPERFLEX RTV SILICONE ADHESIVE SEALANT, BLUE	8T-9022, 185-3987	Blue in color, general-purpose silicone adhesive sealant. Will not slump in overhead or vertical applications. Resistance to extreme thermal cycling, UV light and ozone makes it suitable for open or exposed applications.	Blue	-54°C to 260°C (-65°F to 500°F)	
LOCTITE SUPERFLEX NONCORROSIVE RTV SILICONE ADHESIVE, CLEAR	8T-9014, 205-8858	General-purpose clear silicone adhesive sealant. Will not slump in overhead or vertical applications. Resistance to extreme thermal cycling, UV light and ozone makes it suitable for open or exposed applications.	Clear	-54°C to 232°C (-65°F to 450°F)	

# GASKETING PRODUCTS

CONTINUED



## ANAEROBIC GASKETING PRODUCTS

LOCTITE PRODUCT	CAT PART NUMBER	DESCRIPTION	TEMPERATURE RANGE	FIXTURE / CURE TIME
<b>LOCTITE 5127 FLEXIBLE ANAEROBIC GASKET FLANGE SEALANT</b>	4C-5300, 185-3984	Flexible anaerobic gasketing compound that exhibits high elongation properties. Flexes with flange movement caused by vibration, pressurization, or thermal change.	-54°C to 150°C (-65°F to 300°F)	Primed – 1 to 24 hours Unprimed – 4 to 24 hours
<b>LOCTITE 515 FLANGE SEALANT</b>	—	Makes flexible gaskets for rigid machine flanges with less than 0.050" (1.27 mm) gap. Provides resistance to low pressures immediately after assembly of flanges. Flexes with flange movement caused by vibration, pressurization, or thermal change.	-54°C to 150°C (-65°F to 300°F)	Unprimed – 1 to 12 hours Primed – 15 minutes to 2 hours
<b>LOCTITE HIGH FLEX FORM-IN-PLACE GASKET</b>	1U-8846, 185-3983	Flexible form-in-place gasket that provides high temperature resistance and more flexibility. Fills gaps to 0.020" (0.5 mm) and cures to a tough solvent resistant gasket that flexes with flange movement caused by vibration, pressurization, or thermal change.	-54°C to 260°C (-65°F to 500°F)	Sets in 5 minutes
<b>LOCTITE HI-TEMPERATURE FLANGE SEALANT</b>	6V-6640, 185-3985	Withstands high temperature and has excellent solvent and chemical resistance. Fills gaps up to 0.010" (0.254 mm). Maintains clamping loads for strong, leak-proof assemblies. Makes or dresses gaskets in rigid assemblies.	-54°C to 149°C (-65°F to 350°F)	Full Strength – 24 hours

## SOLVENT GASKETING PRODUCTS

LOCTITE PRODUCT	CAT PART NUMBER	DESCRIPTION	TEMPERATURE RANGE	CURE TIME
<b>LOCTITE 5923 AVIATION GASKET SEALANT</b>	4C-9505	Reliable, liquid gasket sealant, dressing and coating. Thin brushable dressing and sealant for close-fitting parts. Resistant to gasoline and other solvents.	-54°C to 204°C (-65°F to 400°F)	Full Strength – 12 hours
<b>LOCTITE GASKET SEALANT #1</b>	4C-9501	Reliable paste-like gasket sealant, dressing and coating. Extends gasket life and prevents leakage when used for gasket dressing.	-54°C to 204°C (-65°F to 400°F)	Full Strength – 12 hours
<b>LOCTITE GASKET SEALANT #2</b>	4C-9502	Reliable paste-like gasket sealant, dressing and coating. Sets slowly to pliable film. Best for nonrigid vibrating assemblies. Increases reliability of gasket seals.	-54°C to 204°C (-65°F to 400°F)	Remains tacky
<b>LOCTITE HI-TACK GASKET SEALANT</b>	138-8436, 185-4590	Solvent-based gasket dressing liquid that also holds gasket in place during assembly. Sets quickly to very tacky film and enhances life of solid gaskets. Contains no ozone-depleting compounds.	-54°C to 260°C (-65°F to 500°F) [aerosol to 316°C/600°F]	

TYPE OF FLANGE SEALING	SOLUTIONS	BENEFITS
<b>MACHINED / RIGID FLANGES</b>	Anaerobic Gasket	<ul style="list-style-type: none"> <li>Allows for metal-to-metal contact</li> <li>Eliminates gasket "compression set"</li> <li>Fills surface imperfections that leads to leaks</li> </ul>
<b>STAMPED / FLEXIBLE FLANGES</b>	Silicone Gaskets	<ul style="list-style-type: none"> <li>Highly resistant up to 205°C (400°F)</li> <li>Fills gaps up to 0.500"</li> <li>Can be used to tack cut gaskets</li> </ul>
<b>FLANGES WITH CUT GASKETS</b>	Solvent Gaskets	<ul style="list-style-type: none"> <li>Flexible sealant</li> <li>Resists temperature up to 370°C (700°F)</li> <li>Fills large gaps up to 0.250"</li> <li>Tack gasket in place</li> <li>Gasket shellac</li> <li>Fast setting</li> </ul>

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# KITS / SPECIAL PRODUCTS / DISPENSING EQUIPMENT



## SPECIALTY ADHESIVES

LOCTITE PRODUCT	CAT PART NUMBER	DESCRIPTION	TEMPERATURE RANGE	FIXTURE/BOND TIME	FULL CURE
LOCTITE 330 DEPEND ADHESIVE	308-3506, 185-4003	One-component, high viscosity acrylic adhesive for bonding wide range of materials including wood, metal, ferrite, ceramic and plastics.	121°C (250°F)	5 minutes	24 hours
LOCTITE BLACK CONTACT ADHESIVE	5H-2471, 185-4591	Solvent-based adhesive with neoprene. Withstands temperatures and resistant to gasoline, kerosene, and other solvents. Fast drying and waterproof. Allows repositioning of parts after initial contact.	Up to 82°C (180°F)	Let breathe 2-3 minutes; sets in 5-15 minutes.	24 hours
LOCTITE CONTACT ADHESIVE	—	Solvent-based, general-purpose contact cement with neoprene rubber. Used for all types of weather stripping, porous and nonporous surfaces. Repositionable after initial assembly.	Up to 82°C (180°F)	Let breathe 2-3 minutes; sets in 5-15 minutes.	24 hours
LOCTITE MAXIMUM STRENGTH HEADLINER ADHESIVE	—	A high strength aerosol product designed for bonding foam, carpet, fabric, plastic, rubber, etc. Resistant to extreme seasonal temperature, is water resistant and sprays on clear.	Up to 77°C (170°F)	Let dry 15-20 minutes before assembly. Spray both sides to be bonded for maximum strength.	24 hours
LOCTITE ALL-PURPOSE SPRAY ADHESIVE	222-3113	Solvent-based, general-purpose contact cement with neoprene rubber. Used for all types of weather stripping, porous and nonporous surfaces. Repositionable after initial assembly.	Up to 77°C (170°F)	Let dry 15-20 minutes before assembly. Spray both sides to be bonded for maximum strength.	24 hours

## LAPPING / MACHINING COMPOUNDS

LOCTITE PRODUCT	CAT PART NUMBER	DESCRIPTION	GRADE	GRIT
LOCTITE CLOVER SILICON CARBIDE GREASE MIX, 80 GRIT	226-6624	Standard abrasive paste for fast metal removal. Produces a smooth, flat surface but not a polished one. Leaves a rust-preventing film on lapped surfaces.	G	80

## SEALANTS

LOCTITE PRODUCT	CAT PART NUMBER	DESCRIPTION
LOCTITE INSULATING & SEALING WRAP, RED, 1" x 10'	—	Non-sticky, self-fusing, multipurpose wrap. Insulates electrical, seals leaks, improves grip. It can withstand extreme conditions, such as salt water, fuel and acid fluid exposure and wide temperature range.

## CONCRETE REPAIR PRODUCTS

LOCTITE PRODUCT	CAT PART NUMBER	DESCRIPTION	MAXIMUM TEMPERATURE	COMPRESSIVE STRENGTH (psi)	WORKING TIME
LOCTITE FIXMASTER MAGNA-CRETE	—	A two-component, rapid setting concrete repair and grouting system. Functional cure in just 1 hour and attains compressive strength much higher than concrete when fully cured. It bonds to old and new concrete and most other construction materials.	2,000	13,000	5 to 20 minutes

# LUBRICANTS

- Protect against rust, corrosion, seizing and galling
- Provide lubrication in extreme environments



## LUBRICANTS

LOCTITE PRODUCT	CAT PART NUMBER	DESCRIPTION	TEMPERATURE RESISTANCE
LOCTITE FREEZE & RELEASE	—	Light mineral oil-based penetrant with freezing effect. Shock freezing effect will instantly cool parts down to -43°C and cause microscopic cracks in the layer of rust, allowing the penetrating oil to wick into the rust.	N/A
LOCTITE GEAR, CHAIN & CABLE LUBRICANT	222-3110	Foaming action permits fast, deep penetration. Formulated to reduce “throw off” from centrifugal force. Repels dirt, sand and dust. Clear color. Does not contain CFC.	121°C (250°F)
LOCTITE MOLY DRY FILM LUBRICANT	242-6990	Withstands high temperatures and high static loads. Will not attract dirt or dust. Heavy duty lubricant, ideal for continuous sliding friction applications.	400°C (750°F)
LOCTITE PENETRATING OIL	222-3123	Brown liquid aerosol penetrating oil. Protects tools against rust. Dries wet metal parts in minutes.	
LOCTITE SILICONE LUBRICANT	—	Translucent silicone grease. A non-curing silicone paste that seals, lubricates, protects and waterproofs metal, rubber and plastic parts. Water and steam resistant. High and low temperature stability.	204°C (400°F)
LOCTITE SOLVO-RUST SUPER PENETRATING OIL	222-3115	Clear liquid aerosol penetrating oil. Will not affect painted surfaces. Low surface tension. Does not contain CFC.	121°C (250°F)



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# METAL REBUILDING & WEAR PREVENTION PRODUCTS



## METAL-FILLED REPAIR EPOXIES

LOCTITE PRODUCT	CAT PART NUMBER	DESCRIPTION	MAXIMUM TEMPERATURE	COMPRESSIVE STRENGTH (psi)	HARDNESS (SHORE D)	WORKING TIME	FUNCTIONAL CURE
LOCTITE FIXMASTER FAST SET STEEL PUTTY	1U-6140, 207-7532	Steel reinforced epoxy. Hardens in 10 minutes. Cures to a metal-like finish. Non sagging.	93°C (200°F)	10,800	80	3 minutes	10 minutes
LOCTITE FIXMASTER METAL MAGIC STEEL	8T-9018	Epoxy stick that applies like a putty and cures to a steel-like finish. No measuring or mixing tools required. Cures in 10 minutes. Knead by hand and apply.	121°C (250°F)	12,000	80	3 minutes	10 minutes
	8T-9019						
LOCTITE FIXMASTER SUPERIOR METAL	1U-6136, 207-7530	An epoxy filled with ferro-silicon, a noncorrosive ferroalloy. Resists corrosion, abrasion, and chemical attack. High adhesion and can be machined once cured.	107°C (225°F)	13,500	86	25 minutes	6 hours

## WEAR-RESISTANT COATINGS

LOCTITE PRODUCT	CAT PART NUMBER	DESCRIPTION	MAXIMUM TEMPERATURE	WORK LIFE	FULL CURE
LOCTITE FIXMASTER WEAR RESISTANT PUTTY	1U-6132, 207-7531	An epoxy filled with ceramic fibers to provide excellent wear and abrasion resistance. Will not sag or shrink.	93°C (200°F)	3 minutes	7 hours
LOCTITE FIXMASTER FLEX 80 PUTTY	144-7779	Thick black liquid. Flexible coating that resists abrasion, impact, and corrosion. Unaffected by oil, grease or water. Ideal for repairing and protecting metal, rubber and urethane parts that are subject to impact abrasion.	82°C (180°F)	10 minutes	8 hours



# RETAINING COMPOUNDS

## SECURING CYLINDRICAL ASSEMBLIES

- Bond non-threaded cylindrical metal assemblies
- High and moderate strength products – can carry high loads and eliminate fretting
- Fill all voids – prevent corrosion
- Reduce the need for close tolerances
- 100% contact – load and stress are distributed evenly over the joint



## RETAINING COMPOUNDS

LOCTITE PRODUCT	CAT PART NUMBER	DESCRIPTION	MAX. GAP FILL (DIAMETER)	VISCOSITY (cP)	TEMPERATURE RANGE	CURE SPEED
LOCTITE 232 RETAINING COMPOUND, WHEEL MOUNT, HIGH LUBRICITY, LOW STRENGTH	—	Medium strength retaining compound designed with lubricating properties to facilitate assembly when heavy interference or high torque values are utilized. Prevents galling and pick-up during disassembly.	0.004"	3600 - 8800	-54°C to 150°C (-65°F to 300°F)	Fixture – 4 - 6 minutes Full – 72 hours
LOCTITE 609 RETAINING COMPOUND, PRESS FIT, GENERAL-PURPOSE	4C-4032	Medium strength for press fitted parts	0.005"	125	-54°C to 150°C (-65°F to 300°F)	Fixture – 10 minutes Full – 24 hours
	7M-7456, 185-3994					
LOCTITE 620 RETAINING COMPOUND, SLIP FIT, HIGH TEMPERATURE	4C-9506	High strength, high temperature resistance, for slip fitted parts	0.015"	8,500	-54°C to 232°C (-65°F to 450°F)	Fixture – 30 minutes Full – 24 hours
	4C-9507, 185-3988					
LOCTITE 638 RETAINING COMPOUND, SLIP FIT, MAXIMUM STRENGTH	—	High strength retaining compound for slip fitted parts.	0.015"	2,500	-54°C to 150°C (-65°F to 300°F)	Fixture – 5 minutes Full – 24 hours
LOCTITE 640 RETAINING COMPOUND	—	High strength, high temperature retaining compound.	0.007"	600	-54°C to 204°C (-65°F to 400°F)	Fixture – 30 minutes Full – 24 hours
LOCTITE 648 RETAINING COMPOUND, PRESS FIT, HIGH STRENGTH, RAPID CURE	—	High strength, rapid curing, higher temperature resistance retaining compound for press fitted cylindrical parts.	0.006"	500	-54°C to 150°C (-65°F to 300°F)	Fixture – 5 minutes Full – 24 hours
LOCTITE 660 RETAINING COMPOUND, PRESS FIT	269-1943	Designed for the bonding of cylindrical parts, particularly where bond gaps can approach 0.50 mm (0.02").	0.020"	250,000/ 1,500,000 Thixotropic	-54°C to 150°C (-65°F to 300°F)	Fixture – 20 minutes Full – 24 hours



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# THREADLOCKERS



## THREADLOCKERS

LOCTITE PRODUCT	CAT PART NUMBER	DESCRIPTION	COLOR	VISCOSITY (cP)	TORQUE IN.-LBS. (BREAK/PREVAL)	TEMP. RANGE	CURE SPEED (STEEL @ 25°C)
<b>LOCTITE 222 THREADLOCKER, LOW STRENGTH, SMALL SCREW</b>	—	Low strength purple threadlocker designed for fasteners smaller than 1/4" in diameter.	Purple	1,200 / 5,000 Thixotropic	53 / 30	-53°C to 148°C (-65°F to 300°F)	Fixture – 20 minutes Full – 24 hours
<b>LOCTITE 242 THREADLOCKER, MEDIUM STRENGTH</b>	4C-4030	Medium strength blue threadlocker, ideal for fasteners 1/4" to 3/4".	Blue	1,200 / 5,000 Thixotropic	110 / 43	-53°C to 148°C (-65°F to 300°F)	Fixture – 5 minutes Full – 24 hours
	9S-3263, 185-3996						
<b>LOCTITE 243 THREADLOCKER, MEDIUM STRENGTH, SURFACE INSENSITIVE</b>	—	Medium strength blue threadlocker, primerless, high temperature resistance and will cut through light oils on fasteners. Ideal for fasteners 1/4" to 3/4".	Blue	1,300 / 3,000 Thixotropic	230 / 40	-53°C to 148°C (-65°F to 300°F)	Fixture – 10 minutes Full – 24 hours
<b>LOCTITE 263 THREADLOCKER, HIGH STRENGTH</b>	—	High strength threadlocker, primerless, high temperature resistance and will cut through light oils on fasteners. Ideal for fasteners up to 3/4".	Red	400 / 600	290 / 290	-53°C to 182°C (-65°F to 360°F)	Fixture – 5 minutes Full – 24 hours
<b>LOCTITE 271 THREADLOCKER, HIGH STRENGTH</b>	154-9731	High strength for fasteners up to 1" in diameter (25 mm).	Red	500	250 / 275	-53°C to 148°C (-65°F to 300°F)	Fixture – 10 minutes Full – 24 hours
	155-0695, 185-3998						
<b>LOCTITE 272 THREADLOCKER, HIGH TEMPERATURE</b>	—	High strength, high temperature threadlocker. Ideal for fasteners greater than 7/8".	Red	9,500	200 / 220	-53°C to 232°C (-65°F to 450°F)	Fixture – 1 hour Full – 24 hours
<b>LOCTITE 277 THREADLOCKER, LARGE HEAVY DUTY BOLTS</b>	—	High strength threadlocker for fasteners greater than 7/8" in diameter.	Red	7,000	275 / 275	-53°C to 148°C (-65°F to 300°F)	Fixture – 60 minutes Full – 24 hours
<b>LOCTITE 290 THREADLOCKER, HIGH STRENGTH, WICKING GRADE</b>	4C-9509	Medium/high strength penetrating threadlocker. Designed to be applied to fasteners that have already been torqued.	Green	25	90 / 260	-53°C to 148°C (-65°F to 300°F)	Fixture – 20 minutes Full – 24 hours
<b>LOCTITE 248 THREADLOCKER STICK, MEDIUM STRENGTH</b>	—	Medium strength blue threadlocker in a wax-like form contained in a self-feeding stick applicator.	Blue	Semisolid	110 / 43	-53°C to 148°C (-65°F to 300°F)	Fixture – 5 minutes Full – 24 hours
<b>LOCTITE 268 THREADLOCKER STICK, HIGH STRENGTH</b>	—	High strength red threadlocker in a wax-like form contained in a self-feeding stick applicator.	Red	Semisolid	220 / 34	-53°C to 148°C (-65°F to 300°F)	Fixture – 5 minutes Full – 24 hours



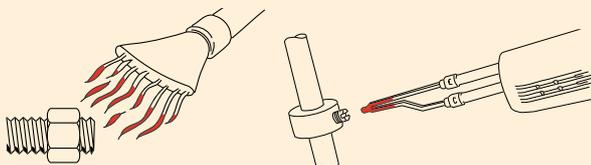
### THREADLOCKING, THREAD SEALING & RETAINING DISASSEMBLY

#### LOW AND MEDIUM STRENGTH PRODUCTS

- Disassemble with hand tools.

#### HIGH STRENGTH PRODUCTS

- Apply localized heat (260°C [500°F] or higher) to assembly for 5 minutes.
- Disassemble with hand tools while hot.



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# THREAD SEALANTS



## THREAD SEALANTS

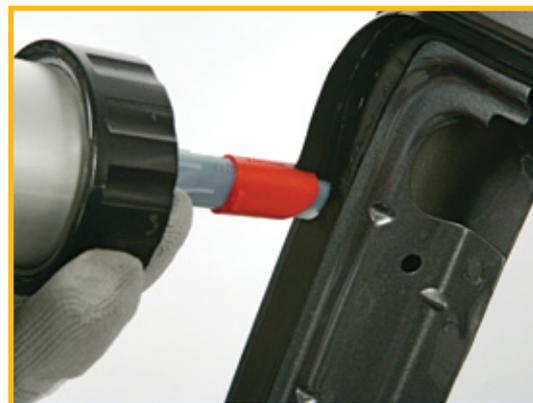
LOCTITE PRODUCT	CAT PART NUMBER	DESCRIPTION	VISCOSITY	TEMPERATURE RANGE	PRESSURE RESISTANCE (psi)
LOCTITE 536 LOW BREAKLOOSE PIPE SEALANT	5P-3413, 185-3992	High temperature resistant thread sealant that is designed to provide low breakaway torque even when the threads are exposed to continuous heat.	Paste	-53°C to 148°C (-65°F to 300°F)	10,000
LOCTITE 542 THREAD SEALANT	—	Medium strength, fine thread, excellent chemical resistance.	Liquid	-55°C to 150°C (-67°F to 302°F)	10,000
LOCTITE 561 PIPE SEALANT WITH PTFE STICK	—	General-purpose, wax-like thread sealant in a self-feeding stick applicator.	Semisolid	-53°C to 148°C (-65°F to 300°F)	10,000
LOCTITE 567 THREAD SEALANT	—	Low strength, excellent chemical resistance.	Paste	—	10,000
LOCTITE 577 THREAD SEALANT	—	Medium strength, coarse threads, particularly suitable for use on stainless steel without the need for surface activation.	Paste	-53°C to 148°C (-65°F to 300°F)	10,000

# WINDOW GLAZING PRODUCTS



## WINDOW GLAZING PRODUCTS

LOCTITE PRODUCT	CAT PART NUMBER	DESCRIPTION
TEROSON TEROSTAT 8519 P GLASS PRIMER	—	An all-in-one glass primer/activator to promote adhesion of direct glazing adhesives/sealants. Use on the metal frame, the windscreen and the remaining cut bead.
TEROSON TEROSTAT 8597 PL HMLC DIRECT GLAZING ADHESIVE	—	A direct glazing adhesive/sealant that is cold applied and is extremely sag-resistant, has high elasticity, has excellent adhesion to glass, glass with a ceramic coating, and to painted surfaces, and also adheres to any remaining glazing material.



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# PRIMERS

- Adhesion promoter
- Nonflammable and noncombustible formulas
- Brush and wipe application options



## ANAEROBIC PRIMERS

LOCTITE PRODUCT	CAT PART NUMBER	DESCRIPTION	COLOR	VISCOSITY (cP)	BASE	ON-PART LIFE	APPLICATION
LOCTITE 7088 PRIMER STICK	—	A paste primer contained in a self-feeding stick package. Designed to promote the cure speed of LOCTITE anaerobic products. Particularly useful in applications with passive metals or inert surfaces and cold parts.	Teal	Semisolid	No solvent	30 days	Anaerobics
LOCTITE 7649 PRIMER N	169-5464, 185-4004	Primer/activator for anaerobic products. Solvent based. Can be sprayed or brushed on. Speeds the anaerobic cure, increases cure through depth, allows for curing on inert metal surfaces, and particularly useful on cold parts.	Clear/ Green	2	Acetone	30 days	Anaerobics

## SURFACE PRIMERS

LOCTITE Surface Primers are used with LOCTITE Instant Adhesives to increase adhesion strengths to difficult-to-bond substrates, which include polyethylene, polypropylene, PTFE and thermoplastic rubber materials. To obtain the highest performance, assemblies should be bonded shortly after surface primer base flashes off.

## CYANOACRYLATE PRIMER

LOCTITE PRODUCT	CAT PART NUMBER	DESCRIPTION	COLOR	VISCOSITY (cP)	BASE	ON-PART LIFE	DRY TIME	APPLICATION
LOCTITE 770 PRIMER (FOR CYANOACRYLATES)	—	Primer for LOCTITE cyanoacrylate adhesives (instant adhesives). Designed to make polyolefin and other low energy surfaces suitable for bonding with LOCTITE cyanoacrylate adhesives.	Colorless	1.25	Heptane	8 hours	30 seconds	All Cyanoacrylates



### WHEN SHOULD I USE A LOCTITE PRIMER FOR ANAEROBICS (THREADLOCKERS, THREAD SEALANTS, GASKETING AND RETAINING)?

**Speed up cure** – Significantly speed up the cure time of LOCTITE threadlockers when assembling metal parts that are cold, have large gaps or deep threads.

**Inactive metal assemblies** – When assembling metal parts with inactive surfaces, LOCTITE primers are recommended to ensure proper performance of LOCTITE threadlockers.

INACTIVE METALS* (PRIMERS RECOMMENDED)		ACTIVE METALS (PRIMERS OPTIONAL)
Plated Parts	Silver	Iron
Anodized Aluminum (Alodine, Irridite)	Gold	Plain Steel
	Zinc	Copper
Titanium	Pure Aluminum	Brass
Stainless Steel	Cadmium	Bronze
Galvanized Steel	Magnesium	Nickel
Magnetite Steel	Natural or Chemical Black Oxide	Manganese
Inconel™		Monel™
		Kovar™

\* Please note: LOCTITE Anaerobic Machinery Adhesives cure in the absence of air and presence of metal ions. When assembling inactive metal parts, which are low in metal ions, the use of LOCTITE Primers are recommended to ensure proper performance of LOCTITE Anaerobic Machinery Adhesives.

# APPLICATION Q&As

GENERAL, GASKETING, THREADLOCKING  
& BONDING



## GENERAL APPLICATIONS

**Q: How can LOCTITE brand Adhesive/Sealants improve the quality of service repairs for my customers?**

A: Quality service repairs with Loctite brand products do the following:

1. Prevent fasteners from loosening. Use LOCTITE 243 Threadlocker – Medium Strength liquid or LOCTITE 248 Threadlocker Stick.
2. Seal leaky threaded fittings. Use LOCTITE Thread Sealant.
3. Keep bearings from spinning out. Use LOCTITE 609 Retaining Compound.
4. Restore fit between worn bearings, sleeves, gears, pulleys. Use LOCTITE 660 Retaining Compound – Press Fit Repair.
5. Seal flanged assemblies. Use LOCTITE Flexible or High Temperature Flange Sealant.

Improve customer satisfaction with all of the above! Don't put your CSAs at risk with inferior performing products.

**Q: How do these adhesive/sealants work?**

A: Applied as a liquid or a paste, they automatically harden into a tough resin between metal threads or close-fitting parts. They lock and seal after assembly.

**Q: Can I get the parts apart?**

A: Yes. Use a little extra elbow grease and ordinary tools on fasteners. Use a bearing puller or a press for bearings or sleeves. Heating at 288°C (550°F) will help loosen parts. Take apart while hot.

**Q: Can I re-use the parts?**

A: Yes. Knock or blow off the loose particles and re-apply the adhesive/sealant. Material can be removed by wire brush, if necessary.

**Q: How do I know which product to use?**

A: Bottles or tubes are named to indicate usage. For example: Threadlocker indicates use on threaded fasteners.

**Q: How do I clean the parts?**

A: Clean with LOCTITE 7649 Primer N.

**Q: What happens if I apply adhesive sealant and it doesn't work?**

A: Four things that could have happened:

1. Sufficient material was not applied to fill the joint.
2. Insufficient time was allowed for cure.
3. Parts were excessively oily, dirty or greasy, which may prevent the adhesive/sealant from curing.
4. The surfaces required a primer before the adhesive/sealant was applied.

**Q: What should I do then?**

A: Clean all parts thoroughly, using a wire wheel or a putty knife and a solvent. When all parts are clean and dry, apply LOCTITE 7649 Primer N. Let it dry, then apply the adhesive/sealant. Allow sufficient time to cure.

**Q: Will hydraulic oil, motor oil, fuel or water dissolve the adhesive/sealant?**

A: No. These adhesive/sealants are solvent-resistant to all ordinary liquids and gases.

**Q: How do I apply adhesive/sealant?**

A: Simply apply from bottle nozzle or tube to one part. Apply sufficient amount to fill the gap between parts. An adhesive/sealant will not harden while in contact with air – it hardens only in the joint after assembly.

**Q: What happens if I leave the cap off a bottle or tube of anaerobics (threadlocking, thread sealant, gasketing, retaining)?**

A: Nothing. It won't harden in the tube or bottle or evaporate.



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# APPLICATION

## Q&As

GENERAL, GASKETING, THREADLOCKING  
& BONDING



### GASKETING APPLICATIONS

**Q: How does LOCTITE High Temperature Flange Sealant work?**

A: LOCTITE High Temperature Flange Sealant forms the gasket “in place.” When confined between the assembled flanges, the gel-like material automatically converts into a tough sealing gasket. It resists heat to 177°C (350°F). It also resists water, oil and solvents. One tube makes many sizes and shapes of gaskets.

**Q: How do I apply LOCTITE High Temperature Flange Sealant?**

A: Apply directly from the nozzle applicator on the tube. No mixing. No heat cure. For most joints, apply a 1.59 mm (1/16") diameter bead around the bolt holes and between the bolt holes centered on the flanges. Material does not cure until flanges are mated together. Be sure that the material will be in contact with both flanges when parts are assembled.

**Q: Can I get the flanges apart?**

A: Yes. Tap on flanges to loosen.

**Q: How do I clean off the cured material?**

A: For most flanged joints, it is not necessary to remove the cured material. Wipe off surface with a clean shop towel and apply a new bead, or if it is a very critical dimension joint, remove all residue by scraping with a putty knife or with a wire wheel. Then clean up with LOCTITE 7649 Primer N before reassembly.

**Q: Where can I use LOCTITE High Temperature Flange Sealant?**

A: Rigid flanges such as hydrostatic transmission flanges, flywheel housings and other rigid covers or plates. Use only where the change in joint thickness will not affect internal clearances.

**Q: Where do I use LOCTITE Flexible Anaerobic Gasket Flange Sealant?**

A: It's specified for sealing flywheel housings to the block on series 3114, 3116 and 3200 engines. It is also specified on differential steering systems on the D-6, 7, 8, 9 and 10 tractors.

**Q: What do I use to seal track pins to track link bores which may be scratched, scored or rusted on sealed and lubricated track?**

A: LOCTITE High Flex Form-In-Place Gasket has been successfully used in service to seal these worn parts. Coat both the pin and bore, then press together.

**Q: Where can I use LOCTITE brand RTV Silicone Gasketing/Sealants?**

A: Use for applications where a highly flexible compound is needed for bonding, sealing, weatherproofing or gasketing. Typical applications are form-in-place gasketing at low pressures, caulking of sheet metal duct work, sealing of electrical boxes, insulating and sealing of electrical wires and terminals, and potting (except around electronic circuits). Use to insulate or seal metal, glass, ceramic, painted and enameled surfaces, and most plastics and rubber, including silicone rubber. Cured sealant will not accept standard paint.

**Q: Where do I use LOCTITE 587 Blue, High Performance RTV Silicone Gasket Maker?**

A: Use as a general-purpose silicone adhesive sealant. It is the best silicone for oil resistance, low odor, non-corrosiveness and low volatility. Suggested for salvage operation sealing on minor damaged flange surfaces at low pressures. Seals gear covers, oil pans, valve covers, transmission and PTO covers. Withstands temperatures to 204°C (400°F) continuous.

**Q: What temperature will LOCTITE Superflex Red High Temp RTV withstand?**

A: LOCTITE Superflex High Temp Red RTV bonds, seals, gaskets, caulks, pots and insulates on applications to 316°C (600°F). Use on applications that require maximum heat resistance. Suggested for engines, heat exchangers, air side of turbochargers and aftercoolers. Also bonds insulation for hard-wrap.

# APPLICATION Q&As

GENERAL, GASKETING, THREADLOCKING &  
BONDING

## GASKETING APPLICATIONS (CONTINUED)

**Q: Where do I use LOCTITE Gasket Sealants 1 and 2, and LOCTITE Aviation Gasket Sealant?**

A: Use to repair damaged flange surfaces that require gasket dressing. Suggested for oil pans, transmission covers, water pump flanges, heater valve and similar flanges. Fill uneven surfaces. Withstand pressures to 5,000 psi (34,450 KPA) and temperatures to 204°C (400°F). Resist leaks of gasoline, kerosene, fuel and diesel oils, engine lubricants, hot and cold water, antifreeze and water mixtures, grease, mild acids, alkalis, and steam.

**Q: How do I know which LOCTITE brand Gasket Sealant to use?**

- A:
1. LOCTITE Gasket Sealant 1 – Hardening formula (recommended for rigid assemblies). Fills uneven surfaces and seals damaged flanges. Dries quickly to hard set.
  2. LOCTITE Gasket Sealant 2 – Non-hardening formula (best suited for non-rigid assemblies). Dries slowly. Sets to a pliable film for easy disassembly. Suggested for sealing gasket T-joints on flexible flanges.
  3. LOCTITE Aviation Gasket Sealant – Thin, brushable formula; seals close fitting, finely machined surfaces. Dries slowly to a pliable film. Seals most gaskets, machined surfaces and screw thread connections on engines. Excellent solvent resistance. Meets MIL-S-45180C (Ord.) Type III.

## THREADLOCKING APPLICATIONS

**Q: How can I prevent “rusting in” between linkage pins and cartridge pins and the mating bores?**

A: Use LOCTITE 242 or LOCTITE 248 Threadlocker Stick to coat the pin and bore prior to assembly for a rust-free barrier. Applying LOCTITE 242 or LOCTITE 248 Threadlocker Stick eliminates the need for burning out pins on loader linkage arms, excavator sticks, and booms or similar assemblies.

**Q: Are there any performance differences between the new LOCTITE brand Thread Treatment Sticks (LOCTITE 248 and LOCTITE 268) and the traditional LOCTITE brand Threadlocker liquids (LOCTITE 242 and LOCTITE 271)?**

A: No. Both of the new LOCTITE brand Thread Treatment Sticks were designed to maintain the exact performance characteristics of the liquid alternatives.

**Q: Is a primer, like LOCTITE 7649 Primer N, necessary when using threadlockers?**

A: If the parts are contaminated with dirt and grease, they should be cleaned with a primer in order to ensure optimal performance. Other alternatives are to utilize new threadlocking technology such as LOCTITE 243 Threadlocker – Oil Resistant. When the metals are inactive, a primer should be used.

**Q: Which LOCTITE Threadlocker product is best suited for a high shock or vibration application?**

A: LOCTITE 271 Threadlocker – High Strength is best suited for heavy equipment applications where shock or vibration are common, such as suspension bolts, motor, and pump mounts.

**Q: How do I disassemble parts? What is the procedure?**

A: Use standard hand tools for disassembly of low and medium strength threadlockers. For high strength threadlockers, apply localized heat to nut or stud for 5 minutes at 232°C (450°F). Disassemble while hot.

**Q: What about preassembled fasteners? Is there a LOCTITE brand Threadlocker I can use to post-apply to the assembly?**

A: Yes. LOCTITE 290 Threadlocker – Medium Strength is a wicking grade. This means that the Threadlocker can be applied to preassembled fasteners and the liquid will seep into the assembly to strengthen the fastener.



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# APPLICATION

## Q&As

GENERAL, GASKETING, THREADLOCKING & BONDING



### BONDING APPLICATIONS

**Q: On what bonding applications can I use the LOCTITE FIXMASTER Fast Cure Epoxy?**

A: Use for bonding broken parts, patching holes and resurfacing corroded areas (can be sanded or painted after cure). Bonds metal, glass, wood, concrete and some plastics. Bonds identification, name and information plates. Fills large gaps.

**Q: How do I use LOCTITE 330 DEPEND Adhesive?**

A: Unlike epoxies, LOCTITE 330 Depend Adhesive does not require mixing, measuring or heating. Make sure all parts are cleaned and dry. Spray activator, then apply adhesive to parts that are to be assembled. Please see the kit box for complete directions. Handling strength in two minutes. Cures to tough powerful bond. Works on all metals, wood, cork, ceramic, glass and most plastics. May eliminate drilling, tapping, riveting or welding. Easy syringe application. Oil resistant. Heat resistant to 121°C (250°F).

**Q: What are some key applications for LOCTITE 330 DEPEND Adhesive?**

A: Use to bond name plates and serial plates on equipment. Bonds control knobs that loosen under vibration. Bonds dissimilar materials such as metal, wood, plastic and concrete. Bonds porous surfaces. Bonds glass to steel. Use to bond rear view mirror brackets to windshields.

### RETAINING APPLICATIONS

**Q: Can I use LOCTITE 609 Retaining Compound to fill the clearance between a bearing and worn housing or shaft?**

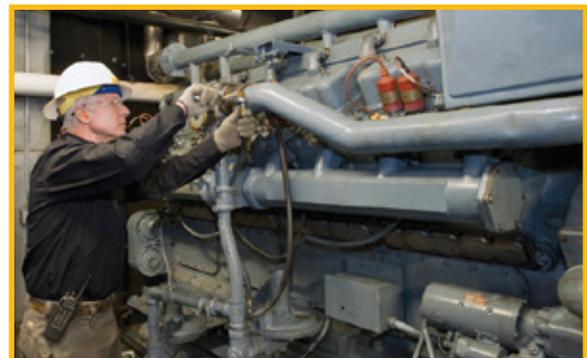
A: Yes. It will fill a clearance up to 0.13 mm (0.005"). Holding power is equal to a press fit.

**Q: How do I use LOCTITE 609 Retaining Compound to mount bearings?**

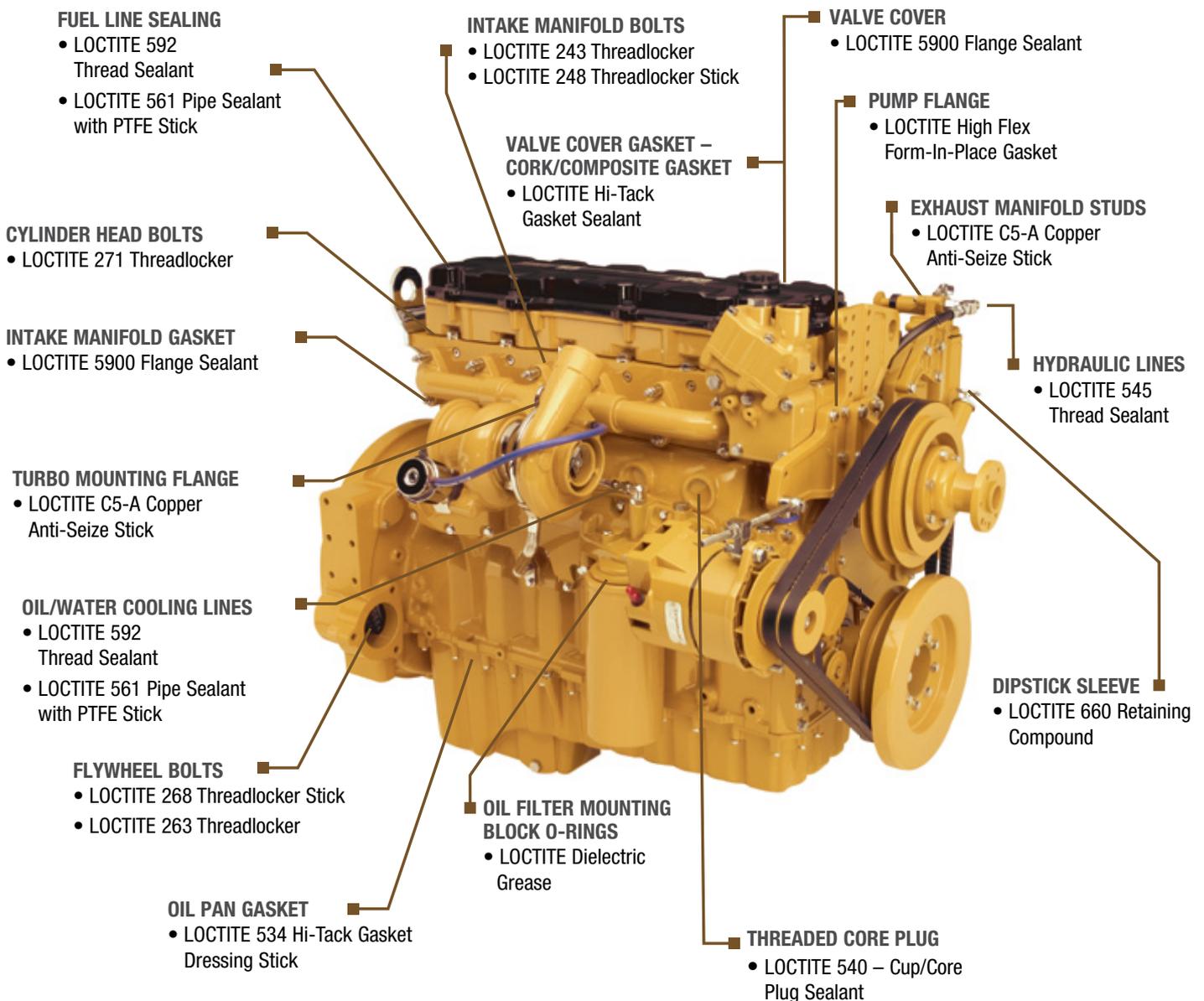
- A:
1. Spray parts with LOCTITE 7649 Primer N. Let dry 2 or 3 minutes.
  2. Apply LOCTITE 609 Retaining Compound.
  3. Assemble in normal way.
  4. Cure 2 hours at room temperature.

**Q: How do I install parts with LOCTITE 620 Retaining Compound, High Strength?**

- A:
1. Spray parts with LOCTITE 7649 Primer N. Let dry 2 or 3 minutes.
  2. Spread parts with LOCTITE 620 Retaining Compound – Slip Fit.
  3. Install gear.
  4. Press fits can be used at once. On slip fits, allow 2 hours.

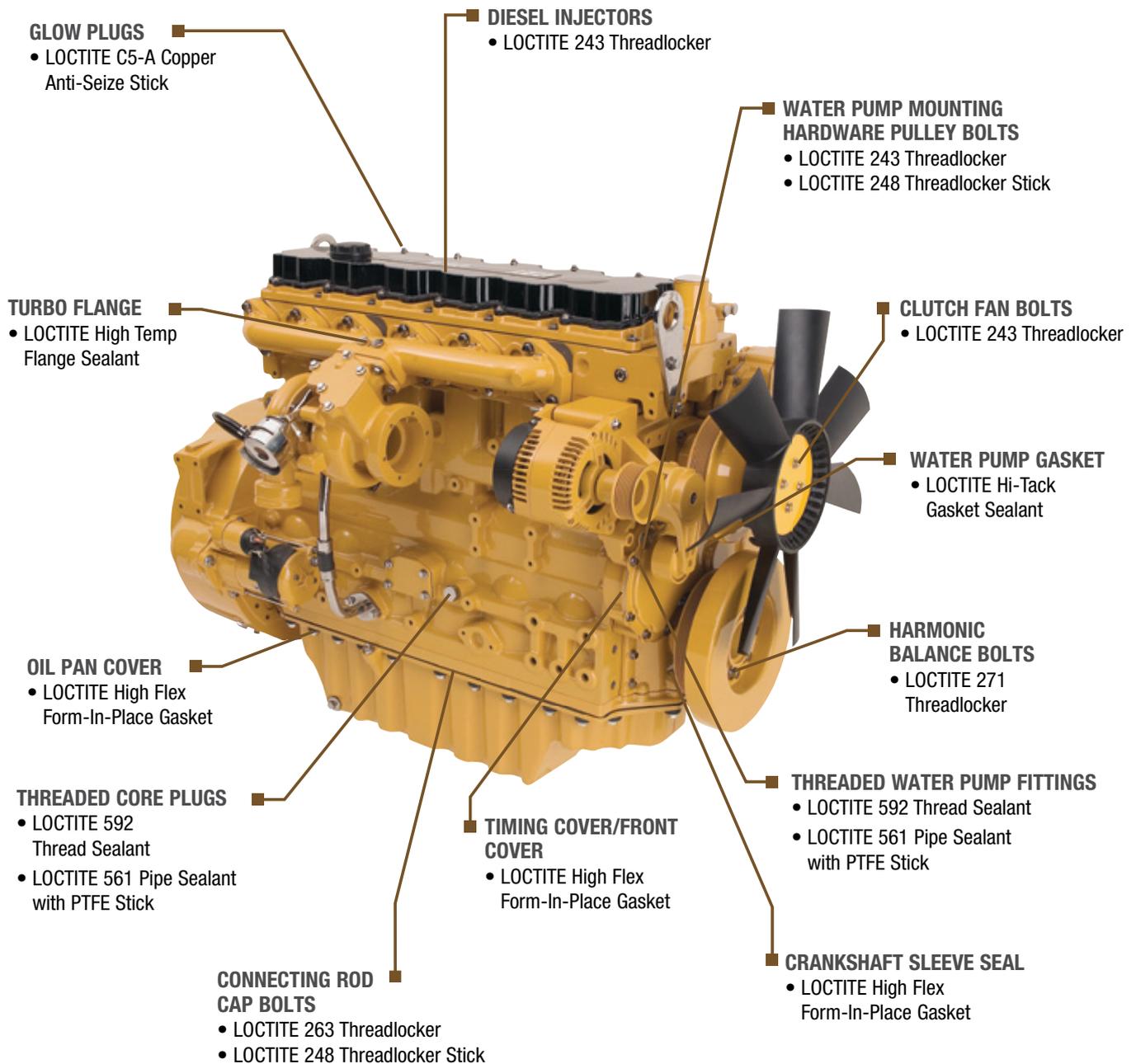


# ENGINE APPLICATIONS



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# ENGINE APPLICATIONS



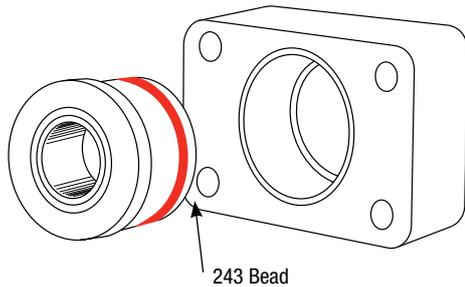
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# ADDITIONAL TECH TIPS



## HOUSED COMPONENTS

### SEALING/RETAINING — METALLIC SEAL



1. Clean the housing I.D. and seal O.D. with parts cleaner.
2. Spray both the housing and seal with Loctite 7649 Primer N.
3. Apply a bead of LOCTITE 243 or Loctite 248 Threadlocker Stick to the leading edge of metallic seal O.D.

**Note:** Virtually any LOCTITE Threadlocking product will work here. Medium strength liquid is recommended due to normal gap and strength requirement.

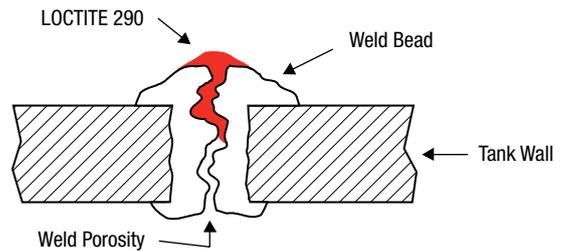
4. Install as usual.
5. Wipe off excess.
6. Allow to cure 30 minutes.

**Note:**

- LOCTITE 243 or LOCTITE 248 Threadlocker Stick is normally used with worn seal housings to prevent leakage or slippage.
- It is not generally necessary to remove pre-applied sealant from seal O.D.

## POROSITY SEALING

### EXISTING WELD POROSITIES AND CASTINGS



1. **IMPORTANT! TAKE PROPER SAFETY PRECAUTIONS IF WORKING WITH FLAMMABLE LIQUID TANKS. AVOID USE WITH COMPRESSIBLE GASSES.**
2. Wire brush to remove paint, rust, etc. from repair area.
3. Clean repair area with parts cleaner.
4. Apply localized heat to bring repair area to approximately 250°F.
5. Allow repair area to cool to approximately 185°F.
6. Brush or spray sealant on repair area.

**Note:**

- Steel – Use LOCTITE 290 Threadlocker at 185°F.
- Aluminum/Stainless Steel – Use LOCTITE 290 Threadlocker at 120°F.

**Note:**

- Not recommended for “blowholes.”
- Maximum porosity sealed – 0.005”.

7. Allow to cure for 30 minutes (High Pressure, above 150 psi - 1 hour).
8. Clean with parts cleaner to remove excess sealant. Do not grind.
9. Paint as required.

**Note:** Casting repair uses same procedure.

### SEALING NEW WELDS — PREVENTIVE MAINTENANCE

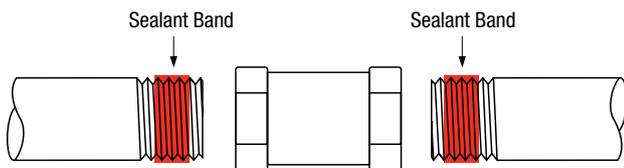
1. Remove all slag and scale while hot.
2. Apply sealant when weld is 185°F and falling.
3. Follow information above.

# ADDITIONAL TECH TIPS



## THREAD SEALING

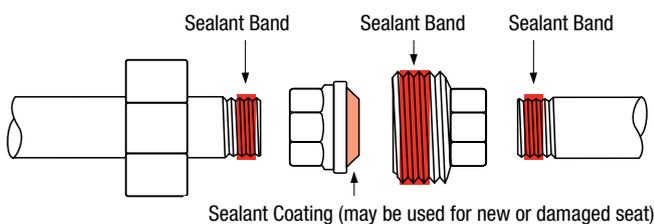
### STANDARD FITTINGS – PIPES, HYDRAULIC, OR AIR



1. Clean parts of contamination. If necessary, spray LOCTITE 7649 Primer N onto threaded parts (male and female). Allow to dry.  
**Note:** Primer is not required for brass parts.
2. Apply a band of LOCTITE Thread Sealant to male threads starting one to two threads from end of pipe.
3. Assemble parts snugly. Do not overtighten.
4. If initial pressure exceeds 1000 psi\*, wait 30 minutes before pressurizing.  
**Note:**
  - For stainless steel components, use LOCTITE 561 Pipe Sealant Stick.
  - For general-purpose thread sealing, use LOCTITE 561 Pipe Sealant Stick.
  - For fine filtration systems requiring zero contamination, use LOCTITE 545 Thread Sealant for hydraulic/pneumatic fittings.
  - Do not use with systems containing oxygen or strong oxidizers (chlorine).

\* Depending on conditions

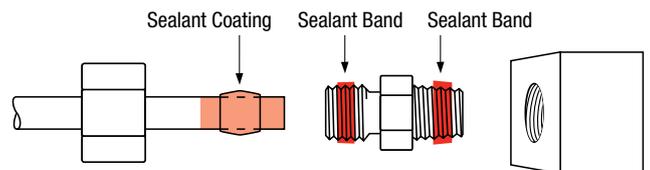
### PIPE UNIONS



1. Disassemble and, if necessary, spray all components with LOCTITE 7649 Primer N. Allow to dry.
2. Apply a thin coating of LOCTITE Thread Sealant to union face.
3. Apply a band of LOCTITE Thread Sealant to male threads.
4. Assemble parts snugly.

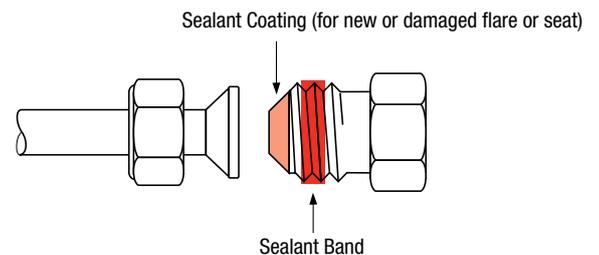
## THREAD SEALING

### COMPRESSION FITTINGS



1. Slide fitting nut and ferrule back approximately 3/4" from end of tubing.
2. If necessary, spray the entire assembly with LOCTITE 7649 Primer N. Allow to dry.  
**Note:** Primer is not required for brass parts.
3. Apply a thin coating of LOCTITE Thread Sealant to tubing where ferrule will be located.
4. Slide ferrule forward over LOCTITE Thread Sealant coated tubing, then apply a thin bead of LOCTITE Thread Sealant coating to ferrule.
5. Slide ferrule forward over LOCTITE Thread Sealant coated tubing.
6. Apply a small band of LOCTITE Thread Sealant to male threads.
7. Assemble and tighten normally.  
**Note:** Do not use on plastic fittings or tubing.

### FLARED/SWAGED FITTINGS



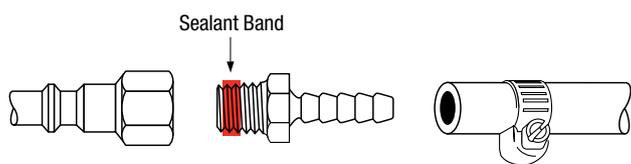
1. Disassemble and, if necessary, spray all components with LOCTITE 7649 Primer N. Allow to dry.
2. Apply a thin coating of LOCTITE Thread Sealant to fitting face.
3. Apply a band of LOCTITE Thread Sealant to male threads.
4. Assemble parts snugly.

# ADDITIONAL TECH TIPS



## THREAD SEALING

### HOSE ENDS – AIR & HYDRAULIC

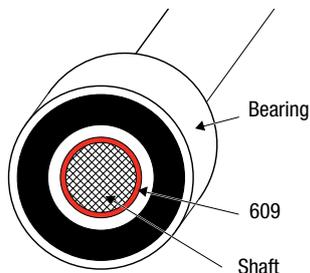


1. If necessary, spray adapter threads with LOCTITE 7649 Primer N. Allow to dry.
2. Insert barbed hose stem into hose I.D. with slight twisting motion.
3. Install appropriate hose clamp.
4. Apply a band of LOCTITE Thread Sealant to male hose stem threads upon installation or adding accessory device. Tighten snugly.

**Note:** Loctite Thread Sealant may attack synthetic rubber tubing.

## SHAFT MOUNTED ASSEMBLIES

### PRESS FIT



#### STANDARD

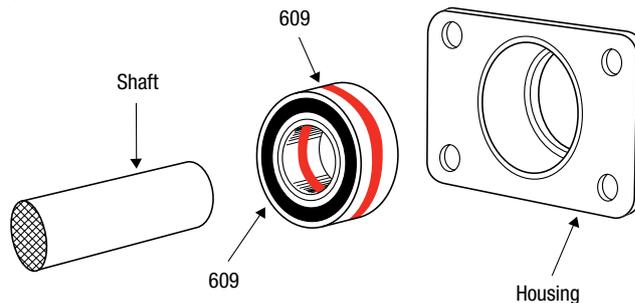
1. Clean shaft O.D. and component I.D.
2. Apply a bead of LOCTITE 609 Retaining Compound to circumference of shaft at leading edge of insertion or leading area of engagement.
  - Note:**
    - Retaining compound will always be squeezed to the outside when applied to shaft.
    - Do NOT use with LOCTITE Anti-Seizes or similar product.
3. Press as usual. Wipe off excess.
4. No cure time required.
  - Note:** LOCTITE 609 Retaining Compound is used due to low viscosity and wetting properties.

#### TANDEM MOUNT

1. Apply retaining compound to bore of inside component.
2. Continue assembly as above.

## HOUSED COMPONENTS

### SLIP FIT



#### ORIGINAL

1. Select component to fit shaft.
2. Machine to reduce component O.D. or increase housing I.D. to permit approximate 0.002"-0.004" diametral slip fit.
3. Clean all parts and spray with LOCTITE 7649 Primer N.
4. Apply LOCTITE 609 Retaining Compound to component O.D.
5. Install component. Do not rotate.
6. Wipe off excess.
7. Allow 5 minutes prior to service.

#### WORN

Procedures identical to original slip fit, except:

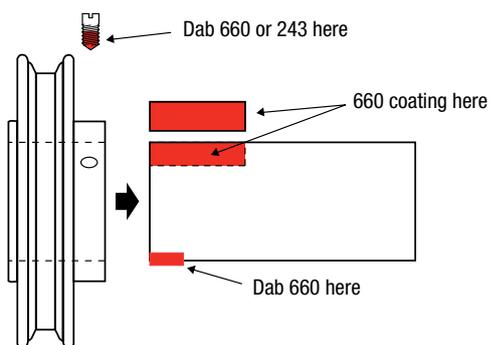
1. Determine the maximum radial gap.
2. If the maximum gap exceeds 0.005", LOCTITE 7649 Primer N must be used.
3. Take steps to maintain concentricity on large gaps.
4. Large gaps require longer cure times (30-60 minutes).
5. LOCTITE 660 Retaining Compound is NOT recommended for radial gaps exceeding 0.010".
6. See procedure for BADLY WORN HOUSING, page 28.

# ADDITIONAL TECH TIPS



## STRENGTHEN KEYED ASSEMBLIES

### STANDARD DUTY



#### ASSEMBLY

1. Clean all parts.
2. If necessary, spray all parts (I.D. and O.D.) with LOCTITE 7649 Primer N.
3. Apply LOCTITE 660 Retaining Compound coating into keyway and on key.
4. Apply dab(s) of LOCTITE 660 Retaining Compound onto shaft opposite keyway or evenly spaced around shaft.
5. Assemble parts. Wipe off excess.
6. Apply a dab of LOCTITE 660 Retaining Compound to set screw.
7. Tighten set screw.
8. Allow 5-10 minutes prior to service.

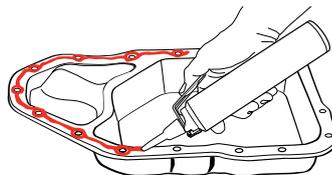
**Note:** • LOCTITE 660 Retaining Compound is NOT recommended for radial gaps exceeding 0.010" on shaft or keyway.

#### DISASSEMBLY

1. Tap component and key with hammer.
2. Pull as usual.

## FORM-IN-PLACE SILICONES

### STAMPED OR SHEET METAL FLANGES



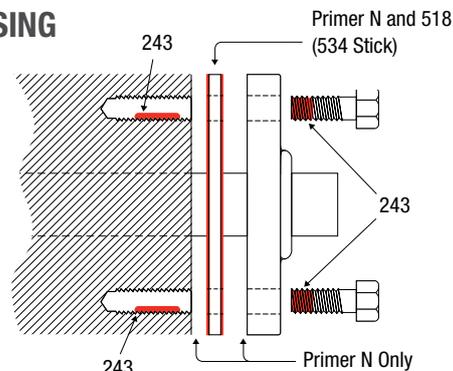
1. Remove old gasketing material and other heavy contaminants with LOCTITE CHISEL Paint Stripper.
2. Clean both flanges with parts cleaner.
3. Apply a continuous bead of LOCTITE high performance silicones (587 Blue) to sealing surface. Circle all bolt holes.

**Note:** • Use proper bead diameter to seal flange width and depth.  
• Minimize excessive material "squeeze-out."

4. Assemble within 10 minutes by pressing together. Tighten as required.
5. Clean up any excess or squeeze-out.
6. Cure times will vary with temperature, humidity, and gap. Typical full cure time is 24 hours.

## GASKET DRESSING

### SEALED FLANGES



1. Remove old gasketing material and other heavy contaminants with LOCTITE CHISEL Paint Stripper. Use mechanical removal technique if required.

**Note:** Avoid grinding.

2. Clean both flanges with parts cleaner.
3. Spray LOCTITE 7649 Primer N on both flange faces and both sides of the precut gasket. Allow 1-2 minutes to dry.
4. Smear LOCTITE Flange Sealant to both sides of precut gasket with a clean applicator.
5. Place coated gasket on flange surface and assemble parts immediately.

**Note:** • If cover bolts into blind holes (as above), apply LOCTITE 243 Threadlocker into hole and on threads. Tighten normally.  
• If it is a thru hole bolt assembly, apply LOCTITE 243 or LOCTITE 248 Threadlocker Stick to bolt threads.

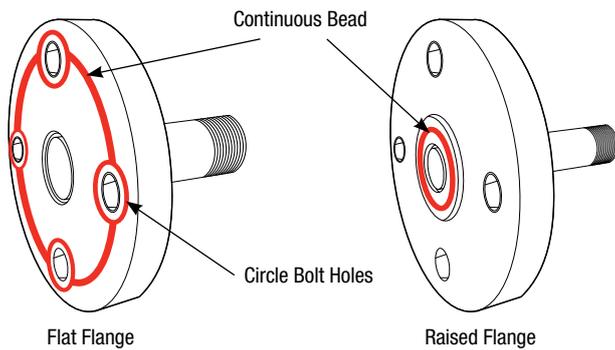
6. Tighten normally.

# ADDITIONAL TECH TIPS



## FORM-IN-PLACE GASKETING

### SEALING CAST RIGID FLANGES



1. Remove old gasketing material and other heavy contaminants with LOCTITE CHISEL Paint Stripper. Use mechanical removal technique if required.  
**Note:** Avoid grinding.
2. Clean both flanges with parts cleaner.
3. Spray LOCTITE 7649 Primer N on only one surface. Allow 1-2 minutes to dry.
4. Apply a continuous bead of LOCTITE Flange Sealant to the other surface.  
**Note:** Circle all bolt holes with sealant, if appropriate.
5. Mate parts. Assemble and tighten as required.  
**Note:** Immediate assembly not required; however, avoid delays over 45 minutes.
6. Allow to cure:
  - a. No pressure – immediate service
  - b. Low pressure (up to 500 psi) – 30 to 45 minutes
  - c. High pressure (500 to 2500 psi) – 4 hours
  - d. Extreme high pressure (2500 to 5000 psi) – 24 hours

### LOCTITE BRAND GASKETING QUICK SELECTOR

Use	Product	Gap Fill	Temp. Range
General	<b>518 Flange Sealant</b>	0.050"	-54°C to 150°C (-65°F to 300°F)
General	<b>515 Flange Sealant</b>	0.050"	-54°C to 150°C (-65°F to 300°F)
General/Overhead	<b>548 Flange Sealant Stick</b>	0.010"	-54°C to 150°C (-65°F to 300°F)

## RUSTPROOFING

### Loctite EXTEND RUST TREATMENT

#### SURFACE PREPARATION — OLD STEEL:

Loose or “flaky” rust must be removed. Only conversion of firmly bonded rust will result in durable protection. Oil, grease, old paint, mill scale, form oil, fingerprints, water soluble surfaces and chlorides must be removed to allow LOCTITE Extend Rust Treatment to react with rust. Ideal surfaces will show light rust as well as bare metal surfaces.

#### RUST CONVERSION TIME AND APPEARANCE:

Two coats of LOCTITE EXTEND Rust Treatment are recommended. The first coat should develop a purple-black color within seconds. The second coat should dry to a black color. The second coat should be applied within 15-30 minutes of the first coat.

#### APPLICATION CONDITIONS:

LOCTITE EXTEND Rust Treatment may be applied when surface and air are between 10°C and 32°C (50°F and 90°F). Reaction is slower at lower temperatures. If temperature is too hot, film may surface dry and bubble. High humidity is beneficial; it slows drying but assists rust conversion. LOCTITE EXTEND Rust Treatment should not be applied in conditions of condensing humidity (e.g., fog, dew), on ice, in rain or in heavy sea (salt) spray atmospheres. Steel surface may be damp but not wet (i.e., continuous visible film of water). **DO NOT APPLY LOCTITE EXTEND RUST TREATMENT TO SURFACES IN DIRECT SUNLIGHT.**

#### APPLICATION EQUIPMENT METHODS:

LOCTITE EXTEND Rust Treatment may be applied by brush, roller, or spray. Brush or roller is suitable for small areas. Avoid sags and ridges and keep edges wet by coating about a square yard at a time. Roll away from previously coated area and then roll back. Do not pour unused material back into the original container. **NEVER** add solvents to LOCTITE EXTEND Rust Treatment.

Spray application is recommended for larger areas. Airless spray equipment is faster, and provides more effective conversion due to improved surface penetration. Conventional air-spray equipment may be used, but LOCTITE EXTEND Rust Treatment may require thinning up to 10% with water for proper spraying.



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# ADDITIONAL TECH TIPS



## BONDING

### INTRODUCTION TO BONDING ADHESIVES

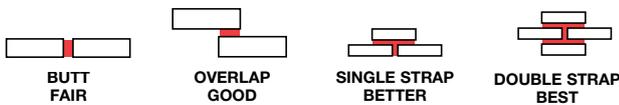
Within the broad range of LOCTITE brand adhesives you will always find the solution to your bonding challenge. It is, however, extremely important to have at least basic knowledge of adhesive methodology in order to successfully bond two substrates together. The three major causes of bonding failures are attributed to:

- Poor evaluation of the bonding assembly
- Inadequate substrate preparation
- Improper adhesive selection

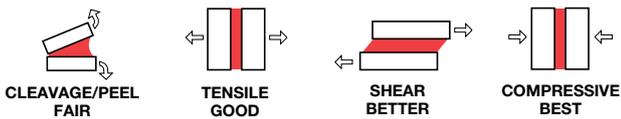
### BONDING ASSEMBLY

Bonding assembly has a direct impact in the adhesive performance. Choose a combination of types of joints or joint stress distribution that maximizes bonding strength. Below are different types of joints and stress distribution:

#### TYPES OF JOINTS

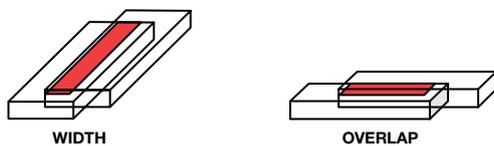


#### TYPES OF JOINT STRESS DISTRIBUTION



#### JOINT WIDTH VS. OVERLAP

A wider bond line (Width) will be stronger than a lengthier one (Overlap):



## BONDING

### SURFACE PREPARATION

#### Abrasive Methods

Rubbing or striking a surface with hard, coarse material. Abrasive examples:

- Sanding: Rubbing with abrasive paper or cloth (for small area/superficial wear-down)
- Blasting: Striking with steel grit, sand, or other abrasive material (for large areas/deep wear-down)

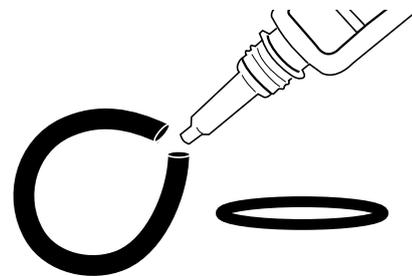
#### Chemical Methods

Cleaning process that uses solvents to dissolve contaminants.

Chemical examples:

- Solvent Dip: Immersing in solvent
- Solvent Wipe: Rubbing with solvent-soaked wipe
- Vapor Degreasing: Solvent in vapor form
- Ultrasonic Cleaning: Solvent dip method with high-frequency sound waves that vibrate the dirt away

### O-RING MAKING



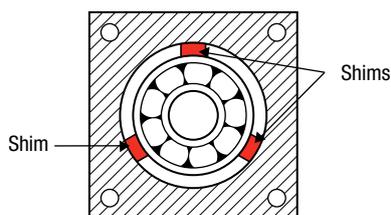
1. Cut the starting end of the cord stock with a clean razor blade. Ensure the cut is clean and square. Do not touch the clean cut end.
2. Measure cord stock to appropriate length. For precise measurement, use LOCTITE O-Ring Tool or the ruler provided in the LOCTITE O-Ring Making Kit.
3. Cut the measured end of the cord stock with a clean razor blade. Ensure the cut is clean and square to optimize bond area.
4. Apply one drop of LOCTITE 404 QUICK SET Instant Adhesive and mate the two ends of the cord stock.

# ADDITIONAL TECH TIPS



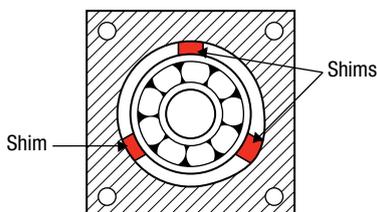
## HOUSED COMPONENTS

### COMPONENT CENTERING



#### EXCESSIVE/EVEN WEAR

1. Position the component in bore.
2. Select three equilateral mounting points.
3. Determine the radial gap at those points.
4. Select appropriate shim stock.
5. Cut three pieces approximately 1/8" wide to fit bore depth.
6. Bond the shims to bore at mounting points using LOCTITE EXTEND 480 Instant Adhesive.
7. Assemble per instructions on page 25.



#### EXCESSIVE/UNEVEN WEAR

1. Position the component in bore.
2. Select three equilateral mounting points.
3. Determine the radial gap at those points.
4. Select and cut appropriate shim stock for each point.
5. Bond the shims to bore at mounting points using LOCTITE 380 Prism Instant Adhesive.
6. Assemble per instructions above.

## TROUBLESHOOTING

### CHECKLIST

1. What type of failure is occurring? Has the application worked before?
2. Was proper and adequate adhesive/sealant used?
3. Was proper and adequate primer/activator used?
4. Do service conditions exceed the capability of the adhesive sealant?
  - (a) operating temperature
  - (b) excessive pressure too soon
  - (c) fluid compatibility
  - (d) impact on environment
5. Were parts adequately cleaned prior to applying adhesive?

**Note:** If adhesive failure, is cured residue on one or both parts? If one part is bare, check that part for contamination.
6. Were proper assembly techniques utilized?
7. Was adhesive/sealant allowed adequate cure time prior to service?
8. Do assembly/part conditions exceed capability of the adhesive/sealant?
  - (a) excessive gaps
  - (b) component materials
  - (c) improper joint design
  - (d) inadequate clamping/fixtures
9. If additional assistance is required, please call our HENKEL TECHNICAL INFORMATION LINE. See back cover for the Henkel Technical Information number in your area.

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## CATERPILLAR PRODUCT NUMBER INDEX

CAT NR	P/N	IDH	DESCRIPTION	PACKAGE SIZE	PAGE NO.
119-0781	59530	160809	Loctite 595 Superflex® Clear RTV Silicone Sealant 80ml	80ml	
138-8436	30525	1436019	Loctite Hi-Tack Gasket Sealant	413g	
141-5831	34848	332651	Loctite 587 Blue Maxx® Silicone - Oxime Cure & Low-Volatile Sensor Safe up to 260°C	95g	
141-5831	34888	333949	Loctite 587 Blue Maxx® Silicone - Oxime Cure & Low-Volatile Sensor Safe up to 260°C	300ml	
144-7779	97423	209821	Fixmaster® Flex 80 Putty	453g	
152-9155	38050	1455413	Loctite 380 Black Maxx Instant Adhesive	1oz	
154-9731	27121	1456307	Loctite® 271 Threadlocker 10ml (High Strength)	10ml	
155-0695, 185-3998	27131	1571118	Loctite® 271 Threadlocker 50ml (High Strength)	50ml	
157-7228	41404	1450142	Loctite 414 Instant Adhesive	3g	
165-2601	20166	212184	Loctite 5900 Heavy Bodied Silicone - Outstanding Oil Resistance 300ml	300ml	
169-5464,185-4004	21348	1646890	Loctite 7649 Primer 133ml Aerosol	133ml	
1U-6132, 207-7531	98743	661992	Fixmaster® Wear Resistant Putty 1.35kg	1.35kg	
1U-6136, 207-7530	97473	209822	Fixmaster® Superior Metal 408g	408g	
1U-6140, 207-7532	39917	219293	Fixmaster® Fast Set Steel Putty 453g	453g	
1U-8846, 185-3983	38657	1436023	Loctite Hi-Flex Gasket Maker	50ml	
222-3110	81251	1806242	Loctite Gear, Chain and Cable Lubricant	340g	
222-3113	30544	473138	Loctite Spray Adhesive 297g	297g	
222-3114	51007	160796	Loctite C5A Copper Base Anti-Seize Brush Top Tub 435g	453g	
222-3115	81252	473164	Loctite Solvo Rust Super Penetrating Oil Aerosol 368g	368g	
222-3117, 222-3118	30545	1506652	Loctite Non Chlorinated Parts Cleaner	420g	
222-3121	51211	661980	Maxi Coat - Aerosol	454g	
222-3123	51221	1805450	Loctite Penetrating Oil	340g	
226-6624	39473	233017	Loctite® Clover Silicone Carbide Grade G-80 Grit	1lb	
242-6990	39895	473134	Loctite® Moly Dry Film Aerosol 340g	340g	
269-1943	66040	473166	Loctite 660 Quickmetal® Press Fit High Strength Retaining Compound 50ml (blister carded)	50ml	
308-3506, 185-4003	20251	882799	Loctite® 330 Depend Kit (ODC-Free including Loctite 7387 Activator 25g)	50ml	
337-7965	39163	641488	Loctite® 771 Nickel Anti Seize Tub 500g	500g	
3S-6252, 185-3986	59330	193996	Loctite 593 Superflex® Black RTV Silicone Sealant 85g	85g	
4C-4030	33508	1436428	Loctite® 242 Threadlocker 10ml (Medium Strength Nut Lock)	10ml	
4C-4032	30013	471311	Loctite® 609 Medium/High Strength Retaining Compound 10ml	10ml	
4C-5300, 185-3984	36911	1436018	Loctite® 5127 Flexible Anaerobic Gasket Eliminator	300ml	
4C-5592, 4C-5593	51084	234244	Loctite Graphite-50 Anti-Seize	1lb	

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CAT NR	P/N	IDH	DESCRIPTION	PACKAGE SIZE	PAGE NO.
4C-5598	51144	234259	Loctite C5A Copper Base Anti-Seize 4oz	4oz	
4C-5599	51147	234263	Loctite C5A Copper Base Anti-Seize 8oz	8oz	
4C-9501	LS-30511	473150	Loctite Gasket Sealant # 1	85g	
4C-9502	LS-30514	473139	Loctite Gasket Sealant # 2 - Carded	85g	
4C-9505	LS-30516	661977	Loctite Aviation Gasket Sealant #3 473ml	473ml	
4C-9506	62015	1440275	Loctite 620 High Temperature High Strength Retaining Compound 10ml	10ml	
4C-9507, 185-3988	62050	234776	Loctite 620 High Temperature High Strength Retaining Compound 50ml	50ml	
4C-9509	45076	1496855	Loctite 290 Wick In Medium Strength Threadlocker - Very Low Viscosity - 50ml	50ml	
4C-9612	39145	640172	Loctite 598 Black Maxx® Silicone (Automotive) Outstanding oil resistance 95g	95g	
4C-9614	59630	135507	Loctite 596 Superflex® Red RTV High Temperature Silicone Sealant 80ml	80ml	
5H-2471, 185-4591	30540A	488144	Loctite Black Contact Adhesive 147ml	147ml	
5P-3413, 185-3992	38363	1436427	Loctite Thread Sealant (Low Break Loose)	50ml	
5P-3931, 185-3990	51008	234204	Loctite C5A Copper Base Anti-Seize 2.5lb	2.5lb	
6V-4876, 186-1531	51084	234244	Loctite Graphite-50 Anti-Seize	1lb	
6V-6640, 185-3985	38364	1436426	Loctite Hi -Temp Flange Sealant	50ml	
7M-7456, 185-3994	30015	234551	Loctite 609 Medium/High Strength Retaining Compound 50ml	50ml	
8T-0065, 186-1527	20166	212184	Loctite 5900 Heavy Bodied Silicone - Outstanding Oil Resistance 300ml	300ml	
8T-9013, 205-8857	59675	198817	Loctite 596 Superflex® Red RTV High Temperature Silicone Sealant 300ml	300ml	
8T-9014, 205-8858	25748	1436280	Loctite 595 Superflex® Clear RTV Silicone Sealant 300ml	300ml	
8T-9018, 8T-9019	98853	645440	Fixmaster® Metal Magic Steel Stick 113g	113g	
8T-9022, 185-3987	30533	1436022	Loctite Superflex RTV Silicone Adhesive Sealant (Blue)	300ml	
9S-3263, 185-3996	24231	135355	Loctite® 242 Threadlocker 50ml (Medium Strength Nut Lock)	50ml	
CAT APPROVED	1548592	1548592	Terostat 8597 HMLC Body Repair - Direct Glazing, 1K PU	310ml	
CAT APPROVED	1547937	1547937	Terostat 8597 HMLC Body Repair - Direct Glazing, 1K PU	570ml	
CAT APPROVED	1520836	1520836	Terostat 8519 P Primer/Activator	100ml	
CAT APPROVED	22220	471660	Loctite 222 Screw Lock Low Strength Threadlocker 10ml	10ml	
CAT APPROVED	22250	231499	Loctite 222 Screw Lock Low Strength Threadlocker 50ml	50ml	
CAT APPROVED	45083	1496888	Loctite 222 Screw Lock Low Strength Threadlocker 250ml	250ml	
CAT APPROVED	44089	1311375	Loctite 243 Nut Lock Medium Strength Threadlocker 10ml	10ml	
CAT APPROVED	44092	1311321	Loctite 243 Nut Lock Medium Strength Threadlocker 50ml	50ml	
CAT APPROVED	44094	1311323	Loctite 243 Nut Lock Medium Strength Threadlocker 250ml	250ml	
CAT APPROVED	933728	933728	Loctite 248 Medium Strength Threadlocker Stick 19g (blister carded)	19g	
CAT APPROVED	44279	1374241	Loctite 263 Stud Lock High Strength Threadlocker 10ml	10ml	

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CAT NR	P/N	IDH	DESCRIPTION	PACKAGE SIZE	PAGE NO.
CAT APPROVED	44130	1331618	Loctite 263 Stud Lock High Strength Threadlocker 50ml	50ml	
CAT APPROVED	44131	1331536	Loctite 263 Stud Lock High Strength Threadlocker 250ml	250ml	
CAT APPROVED	37775B	933730	Loctite 268 High Strength Threadlocker Stick 19g (blister carded)	19g	
CAT APPROVED	27240	88442	Loctite 272 High Temperature High Strength Threadlocker 50ml	50ml	
CAT APPROVED	27750	232658	Loctite 277 High Chemical Resistance High Strength Threadlocker 50ml	50ml	
CAT APPROVED	45080	1496860	Loctite 277 High Chemical Resistance High Strength Threadlocker 250ml	250ml	
CAT APPROVED	29020A	1175229	Loctite 290 Wick In Medium Strength Threadlocker - Very Low Viscosity - 10ml	10ml	
CAT APPROVED	30937	1225613	Loctite 290 Wick In Medium Strength Threadlocker - Very Low Viscosity - 250ml	250ml	
CAT APPROVED	25344	470771	Loctite 542 Medium Strength Fast Cure Hydraulic Thread Sealant 10ml (blister carded)	10ml	
CAT APPROVED	54294	1560050	Loctite 542 Medium Strength Fast Cure Hydraulic Thread Sealant 50ml	50ml	
CAT APPROVED	943428	943428	Loctite 561 PST Controlled Strength Thread Sealant Stick 19g (blister carded)	19g	
CAT APPROVED	56747A	473168	Loctite 567 High Temperature Controlled Strength Master Pipe Thread Sealant 50ml	50ml	
CAT APPROVED	56741	234453	Loctite 567 High Temperature Controlled Strength Master Pipe Thread Sealant 250ml	250ml	
CAT APPROVED	19259	229930	Loctite 577 High Pressure Medium Strength Fast Cure Pipe Thread Sealant 50ml	50ml	
CAT APPROVED	34112	281823	Loctite 577 High Pressure Medium Strength Fast Cure Pipe Thread Sealant 250ml	250ml	
CAT APPROVED	51517	209756	Loctite 515 Flexible Master Gasket® Sealant 6ml	6ml	
CAT APPROVED	51531A	473169	Loctite 515 Flexible Master Gasket® Sealant 50ml	50ml	
CAT APPROVED	33530	265605	Loctite 515 Flexible Master Gasket® Sealant 300ml	300ml	
CAT APPROVED	63830	1559812	Loctite 638 High Strength Fast Cure Retaining Compound 50ml	50ml	
CAT APPROVED	64041	135521	Loctite 640 High Temperature High Strength Retaining Compound 250ml	250ml	
CAT APPROVED	21444	231105	Loctite 648 High Strength Fast Cure Retaining Compound 50ml	50ml	
CAT APPROVED	44324	1381765	Loctite 232 Wheelmount Retaining Compound	250ml	
CAT APPROVED	34238	287301	Loctite 5699 Grey Maxx® Silicone (Automotive) Non-corrosive Low Odour 95g	95g	
CAT APPROVED	18581A	473152	Loctite 5699 Grey Maxx® Silicone (Automotive) Non-corrosive Low Odour 300ml	300ml	
CAT APPROVED	40479	899129	Loctite Instant Gasket Black Silicone - Pressurised Can 190ml	190ml	
CAT APPROVED	16704	547691	Loctite 401 Medium Viscosity Fast Curing Instant Adhesive 3g (blister carded)	3g	
CAT APPROVED	40124-25	265607	Loctite 401 Medium Viscosity Fast Curing Instant Adhesive 25ml	25ml	
CAT APPROVED	40633-25	265606	Loctite 406 Low Viscosity Instant Adhesive for Rubbers & Plastics 25ml	25ml	
CAT APPROVED	41045	135444	Loctite 410 Rubber Toughened Instant Adhesive 20g	20g	
CAT APPROVED	25635	1454405	Loctite 414 Instant Adhesive	20g	
CAT APPROVED	45404	233998	Loctite 454 Non-Drip Instant Adhesive Gel 3g	3g	
CAT APPROVED	A045416	466862	Loctite 454 Non-Drip Instant Adhesive Gel 20g	20g	
CAT APPROVED	16819-25	229394	Loctite 480 Rubber Toughened Instant Adhesive with High Impact Resistance & Peel Strength	25ml	

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CAT NR	P/N	IDH	DESCRIPTION	PACKAGE SIZE	PAGE NO.
CAT APPROVED	1571120	1571120	Loctite 3038 Polyolefin Bonder 50ml	50ml	
CAT APPROVED	37312	642668	Loctite Maximum Strength Headliner Aerosol Adhesive 510g	510g	
CAT APPROVED	944870	944870	Loctite Silver Grade Anti Seize 20g (blister carded)	20g	
CAT APPROVED	51360	234317	Loctite Silicone Lubricant 150g	150g	
CAT APPROVED	FAR	1024403	Loctite Freeze and Release Aerosol 310g	310g	
CAT APPROVED	95555	235573	Fixmaster® Magna Crete	18.9L	
CAT APPROVED	20162	661976	Loctite 7070 ODC Free Cleaner Degreaser for Anaerobics & Cyanoacrylates	473ml	
CAT APPROVED	31908	366943	Yuk Off Orange Hand - Cleaner with Pumice	400ml	
CAT APPROVED	31909	367218	Yuk Off Orange Hand - Cleaner with Pumice	4L	
CAT APPROVED	31910	367217	Yuk Off Orange Hand - Cleaner with Pumice	15L	
CAT APPROVED	82249	235502	Natural Blue Cleaner and Degreaser	709ml	
CAT APPROVED	82251	209804	Natural Blue Cleaner and Degreaser	3.78L	
CAT APPROVED	82253	235503	Natural Blue Cleaner and Degreaser	18.9L	
CAT APPROVED	24441	230824	Yuk Off Brake and Parts Cleaner - Aerosol	417g	
CAT APPROVED	29520A	990067	Loctite 770 PP Primer - Use with 406 Difficult to bond Rubber/Plastic	100ml	
CAT APPROVED	24377A	990068	Loctite 770 PP Primer - Use with 406 Difficult to bond Rubber/Plastic	946ml	
CAT APPROVED	1069258	1339293	Loctite 7088 Quickstix Primer Stick	17g	
CAT APPROVED	75430	234981	Loctite 754 Extend Rust Treatment	946ml	
CAT APPROVED	75448	160802	Loctite 754 Extend Rust Treatment	3.78L	
CAT APPROVED	79040	642664	Loctite 790 Chisel Gasket Remover 510g	510g	
CAT APPROVED	378352	378352	Turco White Solve "EC" Electrical Contact Cleaner	500g	
CAT APPROVED	10361	473154	Inch O Ring Splicing Kit - Includes 406 Adhesive		
CAT APPROVED	16224	473153	Metric O Ring Splicing Kit - Includes 406 Adhesive		
CAT APPROVED	1540599	1540599	LOCTITE INSULWRAP BK 1"X10" EN		

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