

RETAINING

Accepted as a standard method for assembling press and slip parts, LOCTITE® anaerobic retaining compounds fill the 'inner space' between components and cure to form a strong precision assembly. Formulated in a wide variety of viscosities, gap fills, flexibility and strength characteristics, LOCTITE® anaerobic retaining compounds are suitable for a broad range of industrial maintenance applications.



FEATURES & BENEFITS

Increased Assembly & Product Reliability – Prevents damage caused by press or shrink fits such as wallowing, backlash and fretting corrosion.

Fills all Voids & Ensures 100% Contact – Fills infinite microscopic imperfections that exists on even the most precisely machined surfaces, thereby providing 100% contact between mating parts, ensuring load and stress is distributed evenly over the joint.

Creates Stronger Industrial Assemblies – Increases shear strength of mechanical assemblies and is suitable for a wider range of industrial applications from securing a metal locating pin to large diameter shaft bearings.

Seals Against Corrosion – Seals the assembly preventing ingress of moisture and other corrosive gases, chemicals and fluids.

Replaces or Augments Mechanical Assemblies – Reduces need for close tolerances, additional securing components and elaborate assembly methods, therefore reducing maintenance cost.

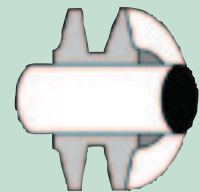
Controlled Strengths – Available in high & moderate strengths formulations to suit all applications. Parts can be disassembled using regular processes.

DID YOU KNOW?

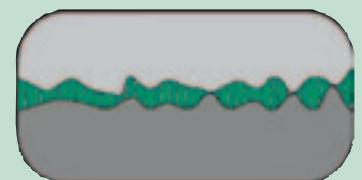
Interference fits typically have only 20-40% effective contact area!

Typically the contact area is limited to the peaks left behind by machining processes. Micro-movement during dynamic loading can shear these away, allowing the joint to fail. Tightening the machining tolerances to avoid this is a very expensive solution.

A LOCTITE® anaerobic retaining compound assures 100% contact, as well as eliminating "fretting corrosion" within the joint.



LOCTITE® brand Retaining Compounds fill the microscopic peaks and valleys, ensuring maximum adhesion between mating surfaces





RETAINING

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

▶ WHAT SIZE IS THE GAP?

	Yes (Gaps to 0.25mm)	
WHAT STRENGTH DO YOU REQUIRE?	Medium	Medium/High
MAXIMUM TEMPERATURE	150°C	
UNIQUE FEATURES	Easy Disassembly	General Purpose

▶ HENKEL SOLUTIONS

	LOCTITE® 641	LOCTITE® 609
Colour	Yellow	Green
Strength	Medium	Medium
Fixture Time*	30 min	25 min
Full Strength*	24 hrs	24 hrs
Gap Fill* / Max Gap Fill	0.05mm* / 0.25mm	0.15mm* / 0.25mm
Compressive Shear Strength* N/mm ² (psi)	6.5 (940)	15.8 (2,290)
Temperature Range	-54°C to +150°C	-54°C to +150°C
Recommended Primer	7471/7649	7649/7471
Disassembly Method	Pulley or Press	Press
Package Size & IDH (Part No.)	10 ml bottle - 469090 (235928) 50 ml bottle - 1496859 (45079) 250 ml bottle - 1496874 (45081)	10 ml bottle - 471311 (30013) 50 ml bottle - 234551 (30015) 250 ml bottle - 234549 (30014)

Steel pin @ collar, cured for 24 hours @ 22°C.

* Steel pin @ collar cured for 2 hours @ 121°C.

For further information refer to product Technical data Sheet.

A controlled strength retaining compound, ideal for cylindrical parts that require disassembly; e.g. retention of bearings onto shafts and into housings.

Recommended as a general purpose, low viscosity retaining compound. Use to bond rotors to shafts, secure bushings and sleeves, and augment press fits. Compliant to Mil-R-46082B ASTM D5363.

No (Gaps to 0.25mm)			Yes (Gaps to 0.5mm)	
High			Medium	High
150°C		232°C	150°C	
Slow Cure	Quick Cure	Very High Temperature	High Lubricity	Repairs Worn Parts
LOCTITE® 635	LOCTITE® 680	LOCTITE® 620	LOCTITE® 232	LOCTITE® 660
Green	Green	Green	Opaque Brown	Metallic Grey
High	High	High	Medium	Medium/High
30 min	30 min	60 min	4–6 hrs	10 min
72 hrs	24 hrs	24 hrs	72 hrs	24 hrs
0.05mm / 0.2mm	0.05mm* / 0.2mm	0.05mm* / 0.25mm	0.05mm	0.5mm (clearance)
>20 (2,900)	19.3 (2,800)	17.2 (2,495)	7.0 (1,015)	17.2 (2,490)
-54°C to +150°C	-54°C to +180°C	-54°C to +232°C	-54°C to +150°C	-54°C to +150°C
7471	7471	7649	7471/7649	7471
Press	Press	Press	Press	Press
50 ml bottle - 135516 (63531) 250 ml bottle - 135517 (63541)	50 ml bottle - 1878433 (1878433) 250 ml bottle - 1878498 (1878498)	10 ml bottle - 1440275 (234772) 50 ml bottle - 234776 (62050) 250 ml bottle - 135515 (62070)	250 ml bottle - 1381765 (44324)	6 ml bottle - 473167 (66010) 50 ml bottle - 473166 (66040)
Recommended for high strength retaining of parts with a clearance or interference fit, e.g. retaining bushes, bearings, seals, fans and liners. Compliant to Mil-R-46082B ASTM D5363.	Gives best resistance to dynamic, axial and radial loads. Recommended for retaining shafts, gears, pulleys, and similar cylindrical parts. Approvals • Plumbing Safety License 4020:2002 Cert No. 8687 (Potable Water)	Recommended for high temperature retaining of parts with a clearance or interference fit, e.g. retaining bushes, bearings, seals, fans and liners.	Has lubricating properties to facilitate smooth assembly of heavy interference or high torque fits. Prevents galling and metal pick-up during assembly.	Used for repairing worn coaxial parts without re-machining. Enables reuse of worn bearing seats, keys, splines, tapers, or for retaining shims.