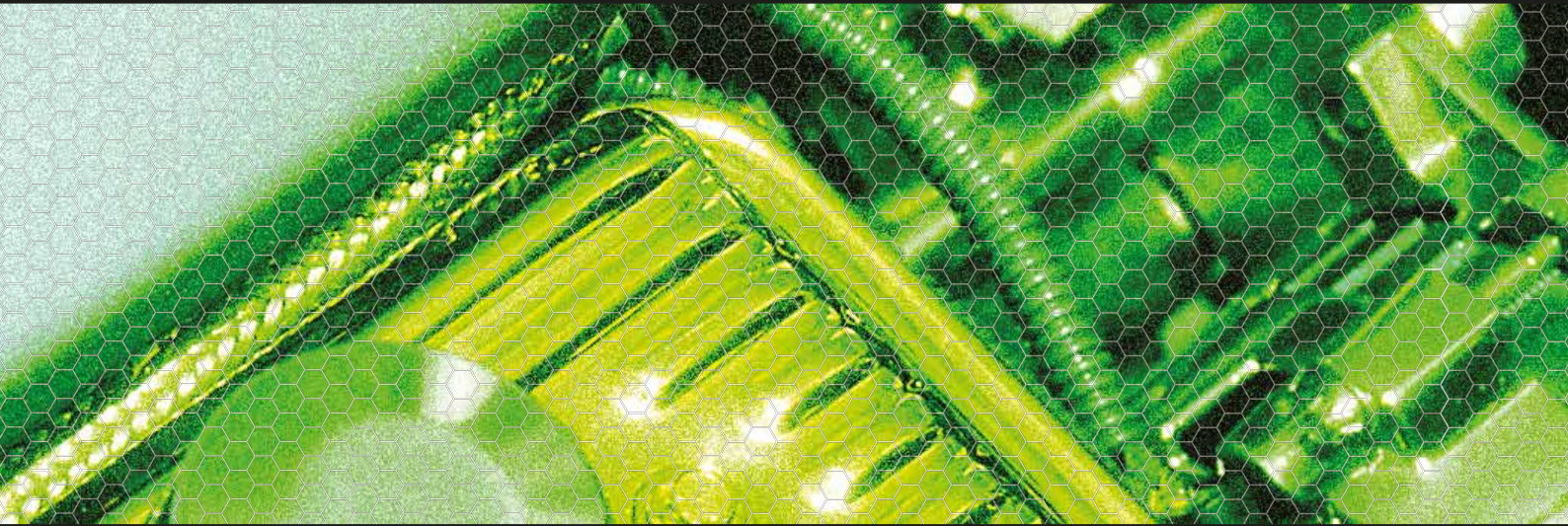


pro
THREAD



THREAD REPAIR SOLUTIONS
FOR THE AUTOMOTIVE AFTERMARKET

BUYER'S GUIDE 03/2019

CONDITIONS OF SALE

1. **PRICES:** All prices quoted exclude GST and are subject to change without notice. Export shipments are not subject to GST. All prices quoted in Australian Dollars unless otherwise stated.
2. **FREIGHT TERMS:** Bordo International Pty Ltd ("Bordo") has no minimum invoice value. All orders over \$250 nett exclusive of GST are freight-free — prices are ex-warehouse. Bordo reserves the right to despatch freight-free orders by a carrier and method of its choosing. Freight-free orders are calculated on a \$250 nett exclusive of GST basis per order for each warehouse dispatch. Drop-shipments incur freight charges. Where the order is under \$250 nett exclusive of GST the customer is responsible for all costs associated with delivery. Any period for delivery of goods stated by Bordo is an estimate only and not a contractual commitment. Bordo will use its reasonable endeavours to meet any estimated dates for delivery of the goods but will not be liable for any loss or damage suffered by the customer or any third party for failure to meet an estimated date. The customer indemnifies Bordo against any loss or damage suffered by Bordo, its subcontractors or employees as a result of delivery, except where the customer is a "consumer" as defined in the Australian Consumer Schedule of the Competition and Consumer Act 2010 (Cth) as amended ("ACL") and Bordo has not used due care and skill.
3. **PAYMENT TERMS:** Unless otherwise agreed in writing payment for the goods or services must be made in full within 30 days from the end of the month of the date of Bordo's invoice. Bordo reserves the right to require payment in full on delivery of the goods. Payment by cheque is not deemed made until the proceeds of the cheque have cleared. Payment terms may be revoked or amended at Bordo's sole discretion immediately upon giving the customer written or verbal notice. The time for payment is of the essence.
4. **DAMAGE, DEFECTS AND LOSS IN TRANSIT:** Bordo will not be liable for any shortages or non compliance with the specifications in these Terms and Conditions unless the customer notifies Bordo with full details and description within 10 working days of delivery to the customer. Where any shortages, claim for damaged goods or non compliance with the agreement specifications is accepted by Bordo, Bordo may, at its option, repair or replace the goods or refund or credit the portion of the purchase price. Bordo will not under any circumstances accept goods for return that have been specifically produced, imported or acquired to fulfil the agreement, that are discontinued goods or no longer stocked by Bordo, that have been altered in any way, that have been used, or that are not in their original condition and packaging. If the customer is a consumer, nothing in this clause limits any remedy available for a failure of the statutory guarantees in the ACL.
5. **CREDIT INFORMATION:**
 - 5.1. Bordo may seek consumer credit information (section 18K(1)(b), Privacy Act 1988). If Bordo considers it relevant to assessing the customer's application for commercial credit the customer agrees to Bordo obtaining from a credit reporting agency a credit report containing personal credit information about the customer and to conducting a search of the Personal Property Securities Register for the purpose of assessing the customer's application for commercial credit.
 - 5.2. Exchanging information with other credit providers (Section 18N(1)(b), Privacy Act 1988). The customer agrees to Bordo obtaining personal information about the customer from other credit providers whose names the customer may have provided for Bordo or that may be named in a credit report, and from the Personal Property Securities Register, for the purpose of assessing the customer's application for commercial credit.
 - 5.3. Agreement to a credit provider being given a consumer credit report to collect overdue payments on commercial credit (Section 18K(1)(h) Privacy Act 1988). The customer agrees that Bordo may obtain a consumer credit report about the customer from a credit reporting agency for the purpose of collecting overdue payments relating to commercial credit owed by the customer.
6. **RETENTION OF TITLE:**
 - 6.1. Until Bordo receives full payment in cleared funds for all goods supplied by it to the customer, as well as all other amounts owing to Bordo by the customer:
 - (a) title and property in all goods remains vested in Bordo and does not pass to the customer;
 - (b) the customer must hold the goods as fiduciary bailee and agent for Bordo;
 - (c) the customer must keep the goods separate from its own goods and maintain Bordo's labelling and packaging;
 - (d) the customer must hold the proceeds of sale of the goods on trust for Bordo in a separate account with a bank to whom the customer has not given security however failure to do so will not affect the customer's obligation as trustee;
 - (e) in addition to its rights under the Personal Property Securities Act 2009 (Cth) ("PPSA"), Bordo may without notice, enter any premises where it suspects the goods are and remove them, notwithstanding that they may have been attached to other goods not the property of Bordo, and for this purpose the customer irrevocably licences Bordo to enter such premises and also indemnifies Bordo from and against all costs, claims, demands or actions by any party arising from such action.
 - 6.2. The customer warrants that it is not at the time of placing an order for goods or services insolvent and knows of no circumstances which would entitle any creditor to appoint a receiver or to petition for winding up or to exercise any other rights over or against its assets.
 - 6.3. If any of these retention of title provisions are construed to be invalid or not enforceable in accordance with their terms all other provisions which are self-sustaining and capable of separate enforcement without regard to the invalid provisions shall be and continue to be valid and enforceable in accordance with their terms.
7. **PERSONAL PROPERTY SECURITIES ACT:**
 - 7.1. Notwithstanding anything to the contrary contained in these Terms and Conditions, the PPSA applies to these Terms and Conditions.
 - 7.2. For the purposes of the PPSA:
 - (a) terms used in this clause 7 that are defined in the PPSA have the same meaning as in the PPSA;
 - (b) these Terms and Conditions are a security agreement and Bordo has a Purchase Money Security Interest in all present and future goods supplied by Bordo to the customer and the proceeds of the goods;
 - (c) the security interest is a continuing interest irrespective of whether there are monies or obligation owing by the customer at any particular time; and
 - (d) the customer must do whatever is necessary in order to give a valid security interest over the goods and their proceeds which is able to be registered by Bordo on the Personal Property Securities Register.
 - 7.3. The security interest arising under this clause 7 attaches to the goods when the goods are collected or dispatched from Bordo's premises and not at any later time.
 - 7.4. Where permitted by the PPSA, the customer waives any rights to receive the notifications, verifications, disclosures or other documentation specified under sections 95, 118, 121(4), 130, 132(3)(d), 132(4), 135 and 157 of the PPSA.
 - 7.5. Bordo and the customer agree to contract out of and nothing in the provisions of sections 96, 125, 129, 142 and 143 of the PPSA will apply to these Terms and Conditions.
 - 7.6. To the extent permitted by the PPSA, the customer agrees that:
 - (a) the provisions of Chapter 4 of the PPSA which are for the benefit of the customer or which place obligations on Bordo will apply only to the extent that they are mandatory or Bordo agrees to their application in writing; and
 - (b) where Bordo has rights in addition to those in Chapter 4 of the PPSA, those rights will continue and apply.
 - 7.7. The customer must immediately upon Bordo's request:
 - (a) do all things and execute all documents necessary to give effect to the security interest created under these Terms and Conditions; and
 - (b) procure from any person considered by Bordo to be relevant to its security position such agreements and waivers (including as equivalent to those above) as Bordo may at any time require.
 - 7.8. Bordo may allocate amounts received from the customer in any manner Bordo determines, including in any manner required to preserve any Purchase Money Security Interest it has in goods supplied by Bordo.
8. **CREDITS/RETURNS:** Except to the extent of any liability imposed by the ACL, authorisation must be obtained before returning goods for credit. No goods will be accepted for credit that are correctly supplied and invoiced if not returned freight paid within 14 days and delivery freight will be charged. Also a 15% restocking fee will be charged for any goods supplied correctly. Goods forwarded in error will be replaced no charge freight paid. Goods incorrectly sent must be held by the customer pending our further instruction.
9. **LIABILITY:**
 - 9.1. Except as these Terms and Conditions specifically state, these Terms and Conditions do not include by implication any other term, condition or warranty in respect of the quality, merchantability, acceptability, fitness for purpose, condition, description, assembly, manufacture, design or performance of the goods or services or any contractual remedy for their failure.
 - 9.2. If the customer is a consumer nothing in these Terms and Conditions restricts, limits or modifies the customer's rights or remedies against Bordo for failure of a statutory guarantee under the ACL.
 - 9.3. If the customer on-supplies the goods to a consumer:
 - (a) if the goods or services are not of a kind ordinarily acquired for personal, domestic or household use or consumption, then the amount specified in section 276A(1) of the ACL is the absolute limit of Bordo's liability to the customer;
 - (b) if the goods are of a kind ordinarily acquired for personal, domestic or household use or consumption, then payment of any amount required under section 274 of the ACL is the absolute limit of Bordo's liability to the customer howsoever arising under or in connection with the sale, installation, use of, storage or any other dealings with the goods by the customer or any third party.
 - 9.4. If clause 9.2 or 9.3 does not apply, then other than as stated in these Terms and Conditions Bordo is not liable to the customer in any way howsoever arising under or in connection with the sale, installation, use of, storage or any other dealings with the goods or services by the customer or any third party.
 - 9.5. Bordo is not liable for any indirect or consequential losses or expenses suffered by the customer or any third party, howsoever caused, including but not limited to loss of turnover, profits, business or goodwill or any liability to any other party, except to the extent of any liability imposed by the ACL.
 - 9.6. The customer acknowledges that:
 - (a) it has not relied on any service involving skill and judgement, or on any advice, recommendation, information or assistance provided by Bordo in relation to the goods or their use or application;
 - (b) it has not made known, either expressly or by implication, to Bordo any purpose for which it requires the goods and it has the sole responsibility of satisfying itself that the goods are suitable for the use of the customer.
 - 9.7. Nothing in these Terms and Conditions is to be interpreted as excluding, restricting or modifying the application of any State or Federal legislation applicable to the sale of goods which cannot be so excluded, restricted or modified.
10. **TRADING TERMS AND CONDITIONS:** Are subject to change without notice. Trading terms and conditions appear on the Account Application Form, our web site (www.bordo.com.au), or are available on request.

DISCLAIMER Whilst every effort has been made to ensure the accuracy of the information contained herein, Bordo International Pty Ltd accepts no liability for any loss or damage either direct or consequential arising out of, or in relation to, the use or application of the said information or products referred to herein. All information is believed to be correct at time of printing. E.&O.E.

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ProThread	Repair Kits – Clam Shell	2
ProThread	Repair Kits – Kit Box	3
ProThread	Repair Kits – Workshop Range Kits	4
ProThread	Replacement Inserts – Clam Shell	6
ProThread	Merchandisers – Bench Top	7
ProThread	STI Taps	8
ProThread	Installation Tools	9



ProThread	PlugFix Solid Insert Repair Kit	2
ProThread	PlugFix Solid Replacement Inserts	7
ProThread	PlugFix Solid Insert Installation Tool	9



Insert Diameter	Pitch (TPI)	Pitch (mm)	Wire Thread Insert Installed Length	PlugFix Solid Insert Length	# of Inserts	Drill Size	Tap Part #
Wire Thread Install Tool Part #	PlugFix Install Tool Part #	Tang Break Tool Part #	Metric Coarse/Fine UNC/UNF Intermediate Chrome Alloy Hand Tap	Metric Fine Spark Plug Pilot Nose Chrome Alloy Hand Tap	ProThread Clam Shell Repair Kit	ProThread Pro-Series Repair Kit includes HSS drill	ProThread Insert Packet

Manufactured from high quality chromium nickel stainless steel, ProThread Wire Thread Inserts provide high strength internal threads that resist the effects of temperature and corrosion. Their unique design ensures superior threads whose compound performance cannot be reproduced by any other single fastening method. Wire Thread inserts are much lighter and less expensive than any other equivalent type of thread insert and because of their compact size they can generally be incorporated into existing designs where no previous provision has been made.

Features & Benefits

For many years, helically coiled wire thread inserts have been vastly underestimated. The popular misconception that they were only designed for the repair of damaged threads has given this unique fastener a false image.

They are much lighter and less expensive than any other equivalent type of thread insert and, because of their compact size, can generally be introduced into existing designs where no previous provision has been made. Unlike many other economic measures, their introduction increases quality and performance whilst reducing overall product cost. Their introduction may result in the use of thinner sections or lighter parent materials without sacrificing thread strength.

They protect tapped threads against failures due to stripping, seizing, corrosion and wear. ProThread wire thread inserts are produced from austenitic stainless steel wire which is work hardened to a tensile strength above 200,000psi and a hardness of Rc43-50. The inserts have an exceedingly smooth surface finish which virtually eliminates friction-induced thread erosion.

The continuous helically coiled design negates the need for thick wall structures to support the internal and external threads - the diamond profile wire coil is the thread. ProThread wire thread inserts can be installed in reduced size bosses or flanges and within constricted areas - saving space and weight while providing high strength. A boss radius equal to the nominal bolt diameter is usually sufficient. A complete range of installation tools are available to suit specific production techniques.

Strength

Due to their flexibility, wire thread inserts create internal threads which have a much improved distribution of residual stress loading when compared with conventional tapped holes, where 75% of the shearing forces are carried by the first three threads in the tapped hole. The flexibility of wire thread inserts helps to compensate for pitch and flank angle errors, inherent in normal tapped holes, and significantly enhances the load bearing capacity by deflecting the residual forces into a helical hoop stress which is dispersed into the wall of the tapped hole. This enables the design to be confidently based on the bolt strength utilising smaller and shorter threads even when used in low strength materials. The high tensile coils of a wire thread insert undergo a diameter reduction during installation. The outward spring-like force of the coils "locks" the insert into place. Each coil can flex independently to contact the greatest amount of parent material thread surface. Both static and dynamic load bearing capabilities are improved.

Eliminate Stress

Virtually no stress is introduced into the parent material because there is no staking, locking, swaging or keying in place. The outward "spring action" of the insert holds it in place.

Wear Resistance

The combination of material hardness and the brilliant surface finish of wire thread inserts creates internal threads in which wear due to thread friction is virtually eliminated. This is of particular value in applications requiring repeated assembly & disassembly. The low frictional coefficient ensures that virtually all of the applied assembly torque is converted into clamping load, thus providing threads that stay tight.



KITS
CLAM

GROUP	PROC
INSERT TYPE	WIRE THREAD
INSERT MATERIAL	304 STAINLESS STEEL
STYLE	FREE RUNNING
PACKAGING	CLAM SHELL

THREAD REPAIR KITS – CLAM SHELL

MM	MM	INSTALLED LENGTH	\$	PART #	#	MM	PART #	PART #

METRIC COARSE / METRIC FINE

5.00	0.80	1.5D	7.50MM	22.67	3598-508K	3	5.2*	3597-508I	3500-HIT8-GB
6.00	1.00	1.5D	9.00MM	22.67	3598-61K	3	6.3*	3597-61I	3500-HIT9-GB
7.00	1.00	1.5D	10.50MM	22.67	3598-71K	3	7.3*	3597-71I	3500-HIT10-GB
8.00	1.25	1.5D	12.00MM	26.99	3598-8125K	3	8.3*	3597-8125I	3500-HIT11-GB
10.00	1.25	1.5D	15.00MM	33.47	3598-10125K	3	10.3*	3597-10125I	3500-HIT13-GB
10.00	1.50	1.5D	15.00MM	33.47	3598-1015K	3	10.4*	3597-1015I	3500-HIT13-GB
12.00	1.50	1.5D	18.00MM	41.02	3598-1215K	3	12.4*	3597-1215I	3500-HIT15-GB
12.00	1.75	1.5D	18.00MM	41.02	3598-12175K	3	12.5*	3597-12175I	3500-HIT15-GB

MM	MM	INSTALLED LENGTH	\$	PART #	#	MM	PART #	PART #

SPARK PLUG

12.00	1.25	–	1/2"	53.98	3598-12125K	2	–	3597-12125PN	3500-HIT15-GB
		–	3/4"		–	2	–	–	–
14.00	1.25	–	3/8"	55.06	3598-14125K	2	–	3597-14125PN	3500-HIT17-GB
		–	1/2"	–	–	2	–	–	–
		–	3/4"	–	–	2	–	–	–

INCH	TPI	INSTALLED LENGTH	\$	PART #	#	MM	PART #	PART #

UNC

No.6	32	1.5D	0.21"	30.23	3598-632K	3	3.7*	3597-632I	3500-HIT5-GB
No.8	32	1.5D	0.25"	30.23	3598-832K	3	4.4*	3597-832I	3500-HIT6-GB
No.10	24	1.5D	0.28"	24.83	3598-1024K	3	5.1*	3597-1024I	3500-HIT7-GB
1/4	20	1.5D	0.38"	24.83	3598-1420K	3	6.7*	3597-1420I	3500-HIT9-GB
5/16	18	1.5D	0.47"	24.83	3598-51618K	3	8.3*	3597-51618I	3500-HIT10-GB
3/8	16	1.5D	0.56"	31.31	3598-3816K	3	9.9*	3597-3816I	3500-HIT13-GB
7/16	14	1.5D	0.66"	36.70	3598-71614K	3	11.6*	3597-71614I	3500-HIT14-GB
1/2	13	1.5D	0.75"	39.94	3598-1213K	3	13.0*	3597-1213I	3500-HIT15-GB

UNF

No.10	32	1.5D	0.28"	24.83	3598-1032K	3	5.1*	3597-1032I	3500-HIT8-GB
1/4	28	1.5D	0.38"	24.83	3598-1428K	3	6.7*	3597-1428I	3500-HIT9-GB
5/16	24	1.5D	0.47"	24.83	3598-51624K	3	8.3*	3597-51624I	3500-HIT11-GB
3/8	24	1.5D	0.56"	31.31	3598-3824K	3	9.8*	3597-3824I	3500-HIT13-GB
7/16	20	1.5D	0.66"	36.70	3598-71620K	3	11.5*	3597-71620I	3500-HIT14-GB
1/2	20	1.5D	0.75"	39.94	3598-1220K	3	13.0*	3597-1220I	3500-HIT15-GB

PLUG FIX SOLID INSERT

GROUP	PROC
INSERT TYPE	SOLID KNURLED
PACKAGING	CLAM SHELL



SPARK PLUG – PLUG FIX

MM	MM	INSERT LENGTH	\$	PART #	#	MM	PART #	PART #	
14.00	1.25	–	3/8"	55.06	3599-14125K	2	–	3599-14125PN	3599-14125SWG
		–	1/2"	–	–	2	–	–	–
		–	3/4"	–	–	2	–	–	–



IMPORTANT

It is recommended that when repairing the thread on spark plug ports that you remove the head.

If you do not remove the head it is essential that you protect the engine from the ingress of chips and swarf generated by the tapping process.



STI Pilot Nose Taps are used to repair damaged threads and do not require the drilling of a pilot hole.

These taps use the existing thread as a guide in tapping a straight hole. STI Pilot Nose Taps are most commonly used to tap holes for the repair of spark plug threads.

* Tapping drill not included in thread repair kit.



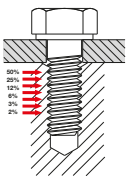
GROUP	PROC
INSERT TYPE	WIRE THREAD
INSERT MATERIAL	304 STAINLESS STEEL
STYLE	FREE RUNNING
PACKAGING	KIT BOX

THREAD REPAIR KITS – KIT BOX

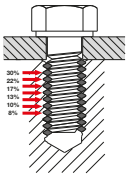
MM	MM	INSTALLED LENGTH	\$	PART #	#	MM	PART #	PART #	PART #	
METRIC COARSE / METRIC FINE										
3.00	0.50	1.5D	4.50MM	37.78	3597-305K	20	3.2	3597-305I	3500-HIT4-GB	3500-TB4-GB
4.00	0.70	1.5D	6.00MM	37.78	3597-407K	20	4.2	3597-407I	3500-HIT6-GB	3500-TB6-GB
5.00	0.80	1.5D	7.50MM	32.39	3597-508K	20	5.2	3597-508I	3500-HIT8-GB	3500-TB8-GB
6.00	1.00	1.5D	9.00MM	32.39	3597-61K	20	6.3	3597-61I	3500-HIT9-GB	3500-TB9-GB
7.00	1.00	1.5D	10.50MM	37.78	3597-71K	20	7.3	3597-71I	3500-HIT10-GB	3500-TB11-GB
8.00	1.25	1.5D	12.00MM	37.78	3597-8125K	20	8.3	3597-8125I	3500-HIT11-GB	3500-TB12-GB
10.00	1.25	1.5D	15.00MM	48.58	3597-10125K	15	10.3	3597-10125I	3500-HIT13-GB	3500-TB13-GB
10.00	1.50	1.5D	15.00MM	48.58	3597-1015K	15	10.4	3597-1015I	3500-HIT13-GB	3500-TB13-GB
12.00	1.50	1.5D	18.00MM	59.37	3597-1215K	10	12.4	3597-1215I	3500-HIT15-GB	3500-TB15-GB
12.00	1.75	1.5D	18.00MM	59.37	3597-12175K	10	12.4	3597-12175I	3500-HIT15-GB	3500-TB15-GB
14.00	1.50	1.5D	21.00MM	75.57	3597-1415K	10	14.4*	3597-1415I	3500-HIT16-GB	–
14.00	2.00	1.5D	21.00MM	75.57	3597-142K	10	14.3*	3597-142I	3500-HIT16-GB	–
16.00	2.00	1.5D	24.00MM	86.36	3597-162K	10	16.5*	3597-162I	3500-HIT18-GB	–
SPARK PLUG										
10.00	1.00	–	0.339"	64.77	3597-101K	5	–	3597-101PN	3500-HIT13-GB	3500-TB13-GB
			1/2"	–	–	5	–	–	–	–
12.00	1.25	–	1/2"	75.57	3597-12125K	5	–	3597-12125PN	3500-HIT15-GB	3500-TB15-GB
			3/4"	–	–	5	–	–	–	–
14.00	1.25	–	3/8"	77.73	3597-14125K	5	–	3597-14125PN	3500-HIT17-GB	–
			1/2"	–	–	5	–	–	–	–
			3/4"	–	–	5	–	–	–	–
UNC										
No.6	32	1.5D	0.21"	43.18	3597-632K	20	3.8	3597-632I	3500-HIT5-GB	3500-TB5-GB
No.8	32	1.5D	0.25"	43.18	3597-832K	20	4.4	3597-832I	3500-HIT6-GB	3500-TB6-GB
No.10	24	1.5D	0.28"	34.54	3597-1024K	20	5.2	3597-1024I	3500-HIT7-GB	3500-TB8-GB
1/4	20	1.5D	0.38"	34.54	3597-1420K	20	6.7	3597-1420I	3500-HIT9-GB	3500-TB9-GB
5/16	18	1.5D	0.47"	39.94	3597-51618K	20	8.3	3597-51618I	3500-HIT10-GB	3500-TB12-GB
3/8	16	1.5D	0.56"	50.74	3597-3816K	15	9.9	3597-3816I	3500-HIT13-GB	3500-TB12-GB
7/16	14	1.5D	0.66"	52.90	3597-71614K	15	11.6	3597-71614I	3500-HIT14-GB	3500-TB14-GB
1/2	13	1.5D	0.75"	61.53	3597-1213K	10	13.0	3597-1213I	3500-HIT15-GB	3500-TB15-GB
9/16	12	1.5D	0.84"	75.57	3597-91612K	10	15.0*	3597-91612I	3500-HIT16-GB	–
5/8	11	1.5D	0.94"	86.36	3597-5811K	10	16.5*	3597-5811I	3500-HIT18-GB	–
3/4	10	1.5D	1.13"	97.16	3597-3410K	5	19.8*	3597-3410I	3500-HIT20-GB	–
UNF										
No.10	32	1.5D	0.28"	34.54	3597-1032K	20	5.1	3597-1032I	3500-HIT8-GB	3500-TB8-GB
1/4	28	1.5D	0.38"	34.54	3597-1428K	20	6.7	3597-1428I	3500-HIT9-GB	3500-TB9-GB
5/16	24	1.5D	0.47"	39.94	3597-51624K	20	8.3	3597-51624I	3500-HIT11-GB	3500-TB12-GB
3/8	24	1.5D	0.56"	50.74	3597-3824K	15	9.8	3597-3824I	3500-HIT13-GB	3500-TB13-GB
7/16	20	1.5D	0.66"	52.90	3597-71620K	15	11.5	3597-71620I	3500-HIT14-GB	3500-TB14-GB
1/2	20	1.5D	0.75"	61.53	3597-1220K	10	13.0	3597-1220I	3500-HIT15-GB	3500-TB15-GB
9/16	18	1.5D	0.84"	75.57	3597-91618K	10	14.7*	3597-91618I	3500-HIT16-GB	–
5/8	18	1.5D	0.94"	86.36	3597-5818K	10	16.3*	3597-5818I	3500-HIT18-GB	–
3/4	16	1.5D	1.13"	97.16	3597-3416K	5	19.5*	3597-3416I	3500-HIT21-GB	–



Standard Bolt



Bolt with ProThread Wire Insert



In a conventional threaded joint 75% of the load is placed on the first three threads.

The helical coil design of the ProThread Wire Thread Insert allows the shear loading to be transformed into a more desirable radial loading (hoop stress) over the entire length of the insert.

Use of a ProThread Wire Thread Insert results in a far stronger thread than can be obtained by using conventional drilling or tapping. Improved strength allows designers to select fasteners based on minimum bolt strength and allows the use of smaller diameters and thread lengths - even in magnesium and aluminium alloys.

* Tapping drill not included in thread repair kit.













GROUP	PROC
INSERT TYPE	WIRE THREAD
INSERT MATERIAL	304 STAINLESS STEEL
STYLE	FREE RUNNING
PACKAGING	KIT BOX











WORKSHOP THREAD REPAIR KITS – METRIC COARSE

										
MM	MM	INSTALLED LENGTH	\$	PART #	#	MM	PART #	PART #	PART #	
M5 – M12										
5.00	0.80	1.5D	7.50MM	210.51	3597-MET-WK1	25	5.2	3597-508I	3500-HIT8-GB	3500-TB8-GB
6.00	1.00	1.5D	9.00MM	–	–	25	6.3	3597-61I	3500-HIT9-GB	3500-TB9-GB
8.00	1.25	1.5D	12.00MM	–	–	25	8.3	3597-8125I	3500-HIT11-GB	3500-TB12-GB
10.00	1.50	1.5D	15.00MM	–	–	20	10.4	3597-1015I	3500-HIT13-GB	3500-TB13-GB
12.00	1.75	1.5D	18.00MM	–	–	15	12.4	3597-12175I	3500-HIT15-GB	3500-TB15-GB











WORKSHOP THREAD REPAIR KITS – METRIC COARSE AND SPARK PLUG

										
MM	MM	INSTALLED LENGTH	\$	PART #	#	MM	PART #	PART #	PART #	
M6 – M10 + M12 & M14 SPARK PLUG										
6.00	1.00	1.5D	9.00MM	272.04	3597-SP-WK1	25	6.3	3597-61I	3500-HIT9-GB	3500-TB9-GB
8.00	1.25	1.5D	12.00MM	–	–	25	8.3	3597-8125I	3500-HIT11-GB	3500-TB12-GB
10.00	1.50	1.5D	15.00MM	–	–	20	10.4	3597-1015I	3500-HIT13-GB	3500-TB13-GB
12.00	1.25	–	1/2"	–	–	5	–	3597-12125PN	3500-HIT15-GB	3500-TB15-GB
12.00	1.25	–	3/4"	–	–	5	–	–	–	–
14.00	1.25	–	8.40MM	–	–	5	–	3597-14125PN	3500-HIT17-GB	–
14.00	1.25	–	12.40MM	–	–	5	–	–	–	–
14.00	1.25	–	16.40MM	–	–	5	–	–	–	–

WORKSHOP THREAD REPAIR KITS – METRIC COARSE AND METRIC FINE

										
MM	MM	INSTALLED LENGTH	\$	PART #	#	MM	PART #	PART #	PART #	
M6 & M8 METRIC COARSE AND M10 & M12 METRIC FINE										
6.00	1.00	1.5D	9.00MM	237.96	3597-MET-JAPAN	25	6.3	3597-61I	3500-HIT9-GB	3500-TB9-GB
8.00	1.25	1.5D	12.00MM	–	–	25	8.3	3597-8125I	3500-HIT11-GB	3500-TB12-GB
10.00	1.25	1.5D	15.00MM	–	–	15	10.3	3597-10125I	3500-HIT13-GB	3500-TB13-GB
12.00	1.25	1.5D	18.00MM	–	–	10	12.3	3523-12.00I	3500-HIT15-GB	3500-TB15-GB

WORKSHOP THREAD REPAIR KITS – METRIC COARSE, SPARK PLUG AND UNC

										
MM / INCH	MM / TPI	INSTALLED LENGTH	\$	PART #	#	MM	PART #	PART #	PART #	
M5 – M8 METRIC COARSE + M14 SPARK PLUG AND 1/4" & 5/16" UNC										
5.00	0.80	1.5D	7.50MM	254.77	3597-OPE-WK1	25	5.2*	3597-508I	3500-HIT8-GB	3500-TB8-GB
6.00	1.00	1.5D	9.00MM	–	–	25	6.3*	3597-61I	3500-HIT9-GB	3500-TB9-GB
8.00	1.25	1.5D	12.00MM	–	–	25	8.3*	3597-8125I	3500-HIT11-GB	3500-TB12-GB
14.00	1.25	–	3/8"	–	–	3	–	3597-14125PN	3500-HIT17-GB	–
14.00	1.25	–	1/2"	–	–	3	–	–	–	–
14.00	1.25	–	3/4"	–	–	3	–	–	–	–
1/4	20	1.5D	0.38"	–	–	25	6.7*	3597-1420I	3500-HIT9-GB	3500-TB9-GB
5/16	18	1.5D	0.47"	–	–	25	8.3*	3597-51618I	3500-HIT10-GB	3500-TB12-GB

* Tapping drill not included in thread repair kit.



GROUP	PROC
INSERT TYPE	WIRE THREAD
INSERT MATERIAL	304 STAINLESS STEEL
STYLE	FREE RUNNING
PACKAGING	KIT BOX

WORKSHOP THREAD REPAIR KITS – UNC

INCH	TPI	INSTALLED LENGTH	\$	PART #	#	MM	PART #	PART #	PART #	
UNC 1/4" – UNC 1/2"										
1/4	20	1.5D	0.38"	239.65	3597-UNC-WK1	25	6.7	3597-1420I	3500-HIT9-GB	3500-TB9-GB
5/16	18	1.5D	0.47"	-	-	25	8.3	3597-51618I	3500-HIT10-GB	3500-TB12-GB
3/8	16	1.5D	0.56"	-	-	20	9.9	3597-3816I	3500-HIT13-GB	3500-TB12-GB
7/16	14	1.5D	0.66"	-	-	20	11.6	3597-71614I	3500-HIT14-GB	3500-TB14-GB
1/2	13	1.5D	0.75"	-	-	15	13.0	3597-1213I	3500-HIT15-GB	3500-TB15-GB


WORKSHOP THREAD REPAIR KITS – UNF

INCH	TPI	INSTALLED LENGTH	\$	PART #	#	MM	PART #	PART #	PART #	
UNF 1/4" – UNF 1/2"										
1/4	28	1.5D	0.38"	239.65	3597-UNF-WK1	20	6.7	3597-1428I	3500-HIT9-GB	3500-TB9-GB
5/16	24	1.5D	0.47"	-	-	20	8.3	3597-51624I	3500-HIT11-GB	3500-TB12-GB
3/8	24	1.5D	0.56"	-	-	15	9.8	3597-3824I	3500-HIT13-GB	3500-TB13-GB
7/16	20	1.5D	0.66"	-	-	10	11.5	3597-71620I	3500-HIT14-GB	3500-TB14-GB
1/2	20	1.5D	0.75"	-	-	10	13.0	3597-1220I	3500-HIT15-GB	3500-TB15-GB



GROUP	PRWI
INSERT TYPE	WIRE THREAD
MATERIAL	304 STAINLESS STEEL
STYLE	FREE RUNNING
PACKAGING	CLAM SHELL

HANG SELL REPLACEMENT INSERTS

				
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MM	MM	INSTALLED LENGTH	#	\$	PART #
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METRIC COARSE / METRIC FINE




3.00	0.50	1.5D	4.00MM	10	7.23	3597-305X4.5P
4.00	0.70	1.5D	6.00MM	10	7.23	3597-407X6P
5.00	0.80	1.5D	7.50MM	10	7.23	3597-508X7.5P
6.00	1.00	1.5D	9.00MM	10	8.16	3597-61X9P
7.00	1.00	1.5D	10.50MM	10	8.92	3597-71X10.5P
8.00	1.25	1.5D	12.00MM	10	8.92	3597-8125X12P
10.00	1.25	1.5D	15.00MM	10	12.53	3597-10125X15P
10.00	1.50	1.5D	15.00MM	10	12.53	3597-1015X15P
12.00	1.50	1.5D	18.00MM	10	17.49	3597-1215X18P
12.00	1.75	1.5D	18.00MM	10	17.49	3597-12175X18P
14.00	1.50	1.5D	21.00MM	5	13.82	3597-1415X21P
14.00	2.00	1.5D	21.00MM	5	13.82	3597-142X21P
16.00	2.00	1.5D	24.00MM	5	17.02	3597-162X24P

				
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MM	MM	INSTALLED LENGTH	#	\$	PART #
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SPARK PLUG

10.00	1.00	-	0.339"	10	11.31	3597-101X.339P
10.00	1.00	-	1/2"	10	12.77	3597-101X1/2P
12.00	1.25	-	1/2"	10	16.49	3597-12125X1/2P
12.00	1.25	-	3/4"	10	17.49	3597-12125X3/4P
14.00	1.25	-	3/8"	10	9.62	3597-14125X3/8P
14.00	1.25	-	1/2"	10	14.69	3597-14125X1/2P
14.00	1.25	-	3/4"	10	19.29	3597-14125X3/4P

				
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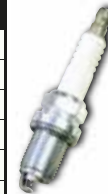
INCH	TPI	INSTALLED LENGTH	#	\$	PART #
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UNC

No.6	32	1.5D	0.21"	10	7.11	3597-632X207P
No.8	32	1.5D	0.25"	10	7.11	3597-832X246P
No.10	24	1.5D	0.28"	10	7.11	3597-1024X285P
1/4	20	1.5D	0.38"	10	7.99	3597-1420X375P
5/16	18	1.5D	0.47"	10	8.86	3597-51618X469P
3/8	16	1.5D	0.56"	10	12.53	3597-3816X562P
7/16	14	1.5D	0.66"	10	14.86	3597-71614X656P
1/2	13	1.5D	0.75"	10	17.02	3597-1213X750P
9/16	12	1.5D	0.84"	5	11.66	3597-91612X844P
5/8	11	1.5D	0.94"	5	16.73	3597-5811X937P
3/4	10	1.5D	1.13"	5	23.20	3597-3410X1.125P

UNF

No.10	32	1.5D	0.28"	10	7.11	3597-1032X285P
1/4	28	1.5D	0.38"	10	7.99	3597-1428X375P
5/16	24	1.5D	0.47"	10	8.86	3597-51624X469P
3/8	24	1.5D	0.56"	10	12.53	3597-3824X562P
7/16	20	1.5D	0.66"	10	14.86	3597-71620X656P
1/2	20	1.5D	0.75"	10	17.02	3597-1220X750P
9/16	18	1.5D	0.84"	5	11.66	3597-91618X844P
5/8	18	1.5D	0.94"	5	16.73	3597-5818X937P
3/4	16	1.5D	1.13"	5	23.20	3597-3416X1.125P





PLUG FIX SOLID INSERT

GROUP	PRWI
INSERT TYPE	SOLID KNURLED
PACKAGING	CLAM SHELL

HANG SELL REPLACEMENT INSERTS

MM	MM	INSERT LENGTH	#	\$	PART #
SPARK PLUG – PLUG FIX					
14.00	1.25	2 EACH: 3/8", 1/2", 3/4"	6	21.85	3599-14125CP
14.00	1.25	3/8"	5	15.48	3599-14125X3/8P
14.00	1.25	1/2"	5	18.29	3599-14125X1/2P
14.00	1.25	3/4"	5	21.23	3599-14125X3/4P

MERCHANDISERS



GROUP –	\$	PART #				
8 KIT BENCH TOP MERCHANDISER	549.39	3597-D1				
MM / INCH	MM	DESCRIPTION	QTY	PART #	QTY	PART #
METRIC COARSE / METRIC FINE						
5.00	0.80	WIRE INSERTS	1	3597-508K	1	3597-508X7.5P
6.00	1.00	WIRE INSERTS	1	3597-61K	1	3597-61X9P
8.00	1.25	WIRE INSERTS	1	3597-8125K	1	3597-8125X12P
10.00	1.50	WIRE INSERTS	1	3597-1015K	1	3597-1015X15P
12.00	1.75	WIRE INSERTS	1	3597-12175K	1	3597-12175X18P
12.00	1.25	WIRE INSERTS	1	3598-12125K	–	–
14.00	1.25	WIRE INSERTS	1	3598-14125K	1	3597-14125X3/8P
14.00	1.25	WIRE INSERTS	–	–	1	3597-14125X1/2P
14.00	1.25	WIRE INSERTS	–	–	1	3597-14125X3/4P
14.00	1.25	PLUG FIX SOLID	1	3599-14125K	1	3599-14125X3/8P
14.00	1.25	PLUG FIX SOLID	–	–	1	3599-14125X1/2P
14.00	1.25	PLUG FIX SOLID	–	–	1	3599-14125X3/4P
14.00	1.25	PLUG FIX SOLID	–	–	1	3599-14125CP



GROUP PROC	\$	PART #				
10 KIT BENCH TOP MERCHANDISER	541.88	3598-D1				
MM / INCH	MM / TPI	DESCRIPTION	QTY	PART #	QTY	PART #
METRIC COARSE / METRIC FINE						
6.00	1.00	WIRE INSERTS	1	3598-61K	1	3597-61X9P
8.00	1.25	WIRE INSERTS	1	3598-8125K	1	3597-8125X12P
10.00	1.50	WIRE INSERTS	1	3598-1015K	1	3597-1015X15P
12.00	1.75	WIRE INSERTS	1	3598-12175K	1	3597-12175X18P
14.00	1.25	WIRE INSERTS	1	3598-14125K	1	3597-14125X3/8P
14.00	1.25	WIRE INSERTS	–	–	1	3597-14125X1/2P
14.00	1.25	WIRE INSERTS	–	–	1	3597-14125X3/4P
14.00	1.25	PLUG FIX SOLID	1	3599-14125K	1	3599-14125X3/8P
14.00	1.25	PLUG FIX SOLID	–	–	1	3599-14125X1/2P
14.00	1.25	PLUG FIX SOLID	–	–	1	3599-14125X3/4P
UNC						
1/4	20	WIRE INSERTS	1	3598-1420K	1	3597-1420X375P
5/16	18	WIRE INSERTS	1	3598-51618K	1	3597-51618X469P
3/8	16	WIRE INSERTS	1	3598-3816K	1	3597-3816X562P
7/16	14	WIRE INSERTS	1	3598-71614K	1	3597-71614X656P




The ProThread bench merchandisers are double sided units that display thread repair kits on one side and replacement insert packets on the other.



GROUP	PROT
MATERIAL	CARBON STEEL
LEAD	INTERMEDIATE OR PILOT NOSE
TYPE	STI (SCREW THREAD INSERT)




GROUP	PROT
MATERIAL	CARBON STEEL
LEAD	PILOT NOSE
TYPE	STI (SCREW THREAD INSERT)

STI TAPS

		
MM	MM	\$
		PART #

METRIC COARSE / METRIC FINE

3.00	0.50	12.20	3597-305I
4.00	0.70	12.20	3597-407I
5.00	0.80	9.45	3597-508I
6.00	1.00	9.45	3597-61I
7.00	1.00	9.72	3597-71I
8.00	1.25	9.72	3597-8125I
10.00	1.25	12.41	3597-10125I
10.00	1.50	12.41	3597-1015I
12.00	1.50	16.14	3597-1215I
12.00	1.75	16.14	3597-12175I
14.00	1.50	23.16	3597-1415I
14.00	2.00	23.16	3597-142I
16.00	2.00	30.23	3597-162I

		
MM	MM	\$
		PART #

SPARK PLUG

10.00	1.00	13.49	3597-101PN
12.00	1.25	17.22	3597-12125PN
14.00	1.25	23.16	3597-14125PN

		
INCH	TPI	\$
		PART #




UNC

No.6	32	12.20	3597-632I
No.8	32	12.20	3597-832I
No.10	24	12.20	3597-1024I
1/4	20	9.45	3597-1420I
5/16	18	9.72	3597-51618I
3/8	16	12.41	3597-3816I
7/16	14	12.41	3597-71614I
1/2	13	16.14	3597-1213I
9/16	12	23.16	3597-91612I
5/8	11	30.23	3597-5811I
3/4	10	32.76	3597-3410I

UNF

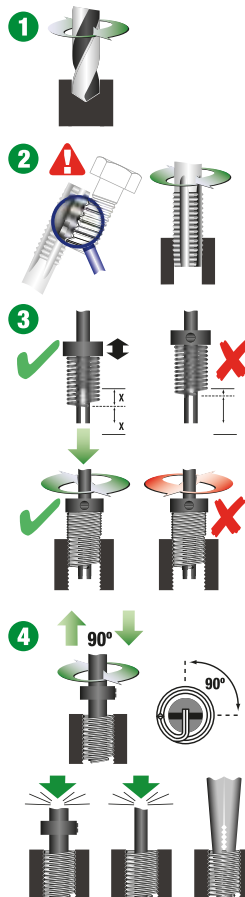
No.10	32	12.20	3597-1032I
1/4	28	9.45	3597-1428I
5/16	24	9.72	3597-51624I
3/8	24	12.41	3597-3824I
7/16	20	12.41	3597-71620I
1/2	20	16.14	3597-1220I
9/16	18	23.16	3597-91618I
5/8	18	30.23	3597-5818I
3/4	16	32.76	3597-3416I

PLUG FIX – HEX END PILOT NOSE TAP

		
MM	MM	\$
		PART #

SPARK PLUG – PLUG FIX

14.00	1.25	23.16	3599-14125PN
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1 Drill to clear the damaged thread with a standard twist drill. The required tapping drill size is shown on the front of each pack.
NOTE Spark Plug inserts utilise a pilot nose tap which does not require pre-drilling.

2 Use the specified tap to cut the holding thread into the cleared hole. When tapping a hole, it is recommended to use a suitable cutting lubricant.
NOTE Wire Thread inserts require the use of STI taps which are slightly oversize to provide the correct hole diameter. Always check that the thread and pitch of the tap are the same as the bolt or spark plug you wish to insert into the finished hole.

3 Loosen the grub screw and slide the collar along the insert tool shaft so that the tang on the insert is positioned half way up the insert tool slot.
NOTE Do not position tang at the very top or bottom of the insert tool slot.
Use the installation tool to wind the insert into the threaded hole using light downward pressure until half a turn below the surface.
NOTE Do not work against the thread direction as the tang may break off.

4 Lift installation tool, rotate 90° and tap down sharply to break off wire thread insert tang. Use the tang break off tool to perform this function where supplied.
NOTE For spark plug and large inserts use long nose pliers to remove the tang.

You have successfully repaired your damaged thread. The new thread is normally stronger than the original.



GROUP	PROI
USE WITH	ALL WIRE THREAD INSERTS
TOOL TYPE	HAND INSTALLATION

GROUP	PROI
USE WITH	PLUG FIX SOLID INSERTS
TOOL TYPE	HAND INSTALLATION

HAND INSTALLATION TOOLS			
MM	MM	\$	PART #
METRIC COARSE / METRIC FINE			
3.00	0.50	18.65	3500-HIT4-GB
4.00	0.70	12.83	3500-HIT6-GB
5.00	0.80	12.83	3500-HIT8-GB
6.00	1.00	12.83	3500-HIT9-GB
7.00	1.00	12.83	3500-HIT10-GB
8.00	1.25	12.83	3500-HIT11-GB
10.00	1.25	12.83	3500-HIT13-GB
10.00	1.50	12.83	3500-HIT13-GB
12.00	1.50	15.15	3500-HIT15-GB
12.00	1.75	15.15	3500-HIT15-GB
14.00	1.50	16.32	3500-HIT16-GB
14.00	2.00	16.32	3500-HIT16-GB
16.00	2.00	16.32	3500-HIT18-GB
MM	MM	\$	PART #
SPARK PLUG			
10.00	1.00	12.83	3500-HIT13-GB
12.00	1.25	15.15	3500-HIT15-GB
14.00	1.25	16.32	3500-HIT17-GB
INCH	TPI	\$	PART #
UNC			
No.6	32	18.65	3500-HIT5-GB
No.8	32	12.83	3500-HIT6-GB
No.10	24	12.83	3500-HIT7-GB
1/4	20	12.83	3500-HIT9-GB
5/16	18	12.83	3500-HIT10-GB
3/8	16	12.83	3500-HIT13-GB
7/16	14	13.99	3500-HIT14-GB
1/2	13	15.15	3500-HIT15-GB
9/16	12	16.32	3500-HIT16-GB
5/8	11	16.32	3500-HIT18-GB
3/4	10	16.32	3500-HIT20-GB
UNF			
No.10	32	12.83	3500-HIT8-GB
1/4	28	12.83	3500-HIT9-GB
5/16	24	12.83	3500-HIT11-GB
3/8	24	12.83	3500-HIT13-GB
7/16	20	13.99	3500-HIT14-GB
1/2	20	15.15	3500-HIT15-GB
9/16	18	16.32	3500-HIT16-GB
5/8	18	16.32	3500-HIT18-GB
3/4	16	20.99	3500-HIT21-GB

PLUG FIX – SWAGE TOOL			
MM	MM	\$	PART #
SPARK PLUG – PLUG FIX			
14.00	1.25	16.32	3599-14125SWG

Features and benefits

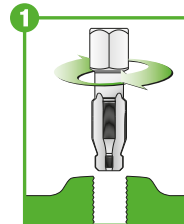
- No drill required
- Solid inserts in 3 lengths to suit most common spark plug reaches
- Suitable for aluminium and cast iron
- Simple, easy to use permanent repair

Applications

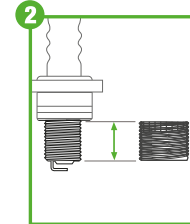
- Taper and gasket seat spark plug ports

IMPORTANT NOTE

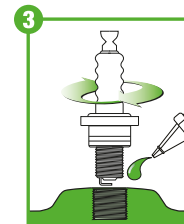
It is important that no foreign material enters the combustion chamber. We recommend the head be removed from the engine prior to repair.



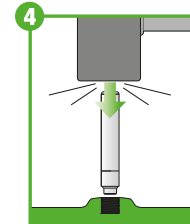
Tap: Pilot nose taps require no pre-drilling. Lubricate the tap with a suitable lubricant. Hand start tap and then turn with 19mm or 3/4" socket wrench. Tap entire length of port.



Select insert: Ensure selected insert is the same length as the thread on the spark plug. The knurled end of the insert should be at the top of the spark plug port.



Install insert: Wind the correct insert on to the spark plug. Coat outside threads with hi-temp silicone. Wind assembly into spark plug port until fully seated. Wind spark plug out.



Complete installation: Place swage tool into insert and hit several times to expand knurl. Install spark plug to recommended torque. Do not run engine until sealant has cured (refer to manufacturer's instructions).

pro THREAD



INDUSTRIAL TOOLS

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Part No. 9910-CATPROTHREAD0319



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