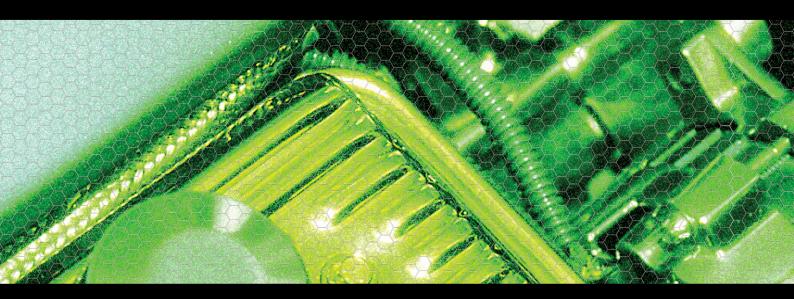
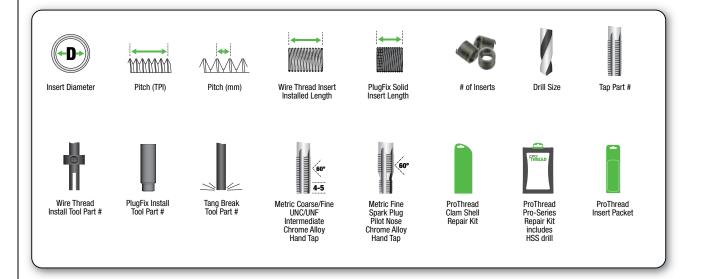
# PICO THREAD



# THREAD REPAIR SOLUTIONS FOR THE AUTOMOTIVE AFTERMARKET



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.

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





#### TERMS AND CONDITIONS Effective March 2015

- 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.
  FREIGHT TERMS: 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. Dropshipments incur freight charges.
  PAYMENT TERMS: Are set out in the customer's Account Agreement.
  DAMAGE, DEFECTS AND LOSS IN TRANSIT: Any complaints of damage,
- short delivery, loss in transit or defects must be made to the company within 10 working days of delivery to the customer. The company shall have the right at its discretion to repair or replace the goods in respect of which any complaint as aforesaid is made and proven or to refund or credit the portion of the purchase price applicable thereto thereby fully discharging all legal liabilities but the company will use its best endeavours to enforce any guarantee or warranty given by the
- manufacturer of goods supplied and sold by the company. WARRANTY: The company shall not be liable for any direct or consequential loss or damage attributable to defects in the goods nor in respect of conditions or warranties whether expressed or implied by Statute or at common law or otherwise which have not been confirmed by
- CREDIT INFORMATION:
  - 6.1. Agreement that Bordo International Pty Ltd may seek consumer credit information (section 18K(1)(b), Privacy Act 1988) If Bordo International Pty Ltd considers it relevant to assessing my/our application for commercial credit, I/we agree to Bordo International Pty Ltd obtaining from a credit reporting agency a credit report containing personal credit information about me/us in relation to commercial credit provided by Bordo International Pty Ltd.
    6.2. Exchanging information with other credit providers (Section 18N(1)
  - (b), Privacy Act 1988 I/we agree to Bordo International Pty Ltd obtaining personal information about me/us from other credit providers, whose names I/we may have provided for Bordo International Pty Ltd or that may be named in a credit report, for the purpose of assessing my/our application for commercial credit made to Bordo International Pty Ltd. 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) I/we agree that Bordo International Pty Ltd may obtain a consumer credit report about me/us from a credit reporting agency for the purpose of collecting overdue payments relating to commercial credit owed by me/us.
- RETENTION OF TITLE
  - 7.1 Goods delivered by Bordo International Pty Ltd ("the supplier") to the customer ("the goods") remain the sole and absolute property of the supplier as legal and equitable owner until all money due to the supplier from the customer on any account has been paid by the customer to the supplier but are at the customer's risk from the time of delivery of the
  - 7.2 The customer acknowledges that it is in possession of the goods as bailee for the supplier until they are sold by the customer to another party and property as between the customer and the other party is deemed to
  - 7.3 Until delivery to a purchaser from the customer, the customer undertakes to store the goods on its premises separately from its own goods or those of any other person in a manner which makes them readily identifiable as goods of the supplier.

- 7.4 The customer's right to possession of the goods ceases if it does anything or fails to do anything which would entitle a receiver to take possession of any assets of the customer or which would entitle any person to present a petition for the winding up of the customer.
  - 7.5 The applicant's purchaser's right to possession of the goods ceases if under the Corporations Act 2001 an administrator is appointed over the
  - 7.6 The supplier may for the purpose of examination or recovery of the goods enter upon the premises where they are stored or where they are reasonably thought to be stored.
  - 7.7 The entire proceeds of the sale of any of the goods by the customer must be held in trust for the supplier and must not be mingled with any other money paid into any overdrawn bank account and must at all times be identifiable as the money of the supplier.

    7.8 Until the goods have been paid for in full the purchaser is at liberty
  - to sell the goods in the ordinary course of its business as agent of the supplier and must account to the supplier for the proceeds of any such sales.
  - The customer warrants that it is not at the time of entering into this agreement 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.
  - 7.10 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.
- CREDITS/RETURNS: 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 10% restocking fee will be charged for any goods supplied correctly. For details on credit/return procedure please visit our web site www.bordo.com.au
- FAULTY GOODS: Will be replaced no charge freight paid. Please hold faulty goods pending our instruction to either hand to representative on next visit or return at our expense.
- 10. GOODS FORWARDED IN ERROR: Will be replaced no charge freight paid. Please again hold goods incorrectly sent pending our instruction to either
- hold for representative or return at our expense.

  11. Trading Terms and conditions: Are subject to change without notice, unless subject to a written contract. Trading terms and conditions appear on the Account Application Form, our web site, or are available on request.

#### FUTURE UPDATES

Bordo International Pty Ltd's trading terms and conditions can also be found on our website (www.bordo.com.au). Any amendments or additions will be published promptly on our website: http://www.bordo.com.au/

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.

© Copyright 2015 Bordo International Pty Ltd ABN 96 005 125 833. This publication is copyright. Other than for the purposes of, and under the conditions prescribed under, the copyright act no part of this publication may in any form or by any means be reproduced, stored in a retrieval system or transmitted without prior written permission of Bordo International Pty Ltd.

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







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.

THREAD	REPAIR	KITS – CL	AM SHELL						
(+D-)						46		60°	0
MM	MM	INSTALL	ED LENGTH	\$	PART #	#	MM	PART #	PART #
METRIC	COARSE	/ METRI	C FINE						
5.00	0.80	1.5D	7.50MM	21.84	3598-508K	3	5.2*	3597-5081	3500-HIT8-GB
6.00	1.00	1.5D	9.00MM	21.84	3598-61K	3	6.3*	3597-611	3500-HIT9-GB
8.00	1.25	1.5D	12.00MM	26.00	3598-8125K	3	8.3*	3597-81251	3500-HIT11-GB
10.00	1.25	1.5D	15.00MM	32.24	3598-10125K	3	10.3*	3597-101251	3500-HIT13-GB
10.00	1.50	1.5D	15.00MM	32.24	3598-1015K	3	10.4*	3597-10151	3500-HIT13-GB
12.00	1.50	1.5D	18.00MM	39.52	3598-1215K	3	12.4*	3597-12151	3500-HIT15-GB
12.00	1.75	1.5D	18.00MM	39.52	3598-12175K	3	12.5*	3597-121751	3500-HIT15-GB
		\$	PART #	<b>46</b>	MM	60°	PART#		
MM SPARK	MM	INSTALL	ED LENGTH	φ	FANI#	#	IVIIVI	PART #	FANT#
12.00	1.25	_	1/2"	52.00	3598-12125K	2	_	3597-12125PN	3500-HIT15-GB
12.00	1.20	_	3/4"	_	-	2	_	-	_
14.00	1.25	_	3/8"	53.04	3598-14125K	2	_	3597-14125PN	3500-HIT17-GB
100		_	1/2"	-	-	2	_	-	-
		_	3/4"	_	_	2	_	_	_
(-D-)					46		60° 4-5		
INCH	TPI	INSTALL	ED LENGTH	\$	PART #	#	MM	PART #	PART #
UNC									
No.6	32	1.5D	0.21"	29.12	3598-632K	3	3.7*	3597-6321	3500-HIT5-GB
No.8	32	1.5D	0.25"	29.12	3598-832K	3	4.4*	3597-8321	3500-HIT6-GB
No.10	24	1.5D	0.28"	23.92	3598-1024K	3	5.1*	3597-10241	3500-HIT7-GB
1/4	20	1.5D	0.38"	23.92	3598-1420K	3	6.7*	3597-14201	3500-HIT9-GB
5/16	18	1.5D	0.47"	23.92	3598-51618K	3	8.3*	3597-516181	3500-HIT10-GB
3/8	16	1.5D	0.56"	30.16	3598-3816K	3	9.9*	3597-38161	3500-HIT13-GB
7/16	14	1.5D	0.66"	35.36	3598-71614K	3	11.6*	3597-716141	3500-HIT14-GB
1/2	13	1.5D	0.75"	38.48	3598-1213K	3	13.0*	3597-12131	3500-HIT15-GB
UNF	20	1 ED	0.00"	22.02	2500 1020/	2	E 1*	2507 1020	SEAR LITE OF
No.10	32 28	1.5D 1.5D	0.28"	23.92	3598-1032K	3	5.1* 6.7*	3597-1032	3500-HIT8-GB
5/16	28	1.5D	0.38" 0.47"	23.92 23.92	3598-1428K 3598-51624K	3	8.3*	3597-1428I 3597-51624I	3500-HIT9-GB 3500-HIT11-GB
3/8	24	1.5D	0.47	30.16	3598-3824K	3	9.8*	3597-316241	3500-HIT13-GB
7/16	20	1.5D	0.56"	35.36	3598-71620K	3	11.5*	3597-36241	3500-HIT13-GB
1/10	20	1.5D	0.00	38.48	3598-71020K 3598-1220K	3	13.0*	3597-710201	3500-HIT14-GB
1/2	20	1.טט	0.70	30.40	3090-1220K	J	15.0	3391-12201	2200-ULL 12-RB



PACKAGING CLAM SHELL									
SPARK PLUG – PLUG FIX									
(-D-)						46		60°	
MM	MM	INSER <sup>*</sup>	T LENGTH	\$	PART #	#	MM	PART #	PART #
14.00	1.25	_	3/8"	53.04	3599-14125K	2	_	3599-14125PN	3599-14125SWG
		-	1/2"	_	_	2	-	_	_
		_	3/4"	_	_	2	_	_	_

**PROC** 

SOLID KNURLED



**PLUG FIX SOLID INSERT** 

**GROUP** 

INSERT TYPE

# Pro THREAD

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



<b>PROTH</b>	READ
THREAD	REPAIR

KITS

ВОХ

Standard Bolt						
500						
1/7///						

### 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.

3
3
3

* Tapping drill no
included in threa
repair kit.

TAUNAC										
THREAD	REPAIR I	KITS – KI	T B0X							
(+D-)	1 <del>44</del>	M			FiRead	46		60°		
MM	MM	INSTALL	ED LENGTH	\$ PART#		#	MM	PART #	PART #	PART #
METRI	C COARSE	/ METR	IC FINE							
3.00	0.50	1.5D	4.50MM	36.40	3597-305K	20	3.2	3597-3051	3500-HIT4-GB	3500-TB4-GB
4.00	0.70	1.5D	6.00MM	36.40	3597-407K	20	4.2	3597-4071	3500-HIT6-GB	3500-TB6-GB
5.00	0.80	1.5D	7.50MM	31.20	3597-508K	20	5.2	3597-5081	3500-HIT8-GB	3500-TB8-GB
6.00	1.00	1.5D	9.00MM	31.20	3597-61K	20	6.3	3597-611	3500-HIT9-GB	3500-TB9-GB
8.00	1.25	1.5D	12.00MM	36.40	3597-8125K	20	8.3	3597-81251	3500-HIT11-GB	3500-TB12-GB
10.00	1.25	1.5D	15.00MM	46.80	3597-10125K	15	10.3	3597-101251	3500-HIT13-GB	3500-TB13-GB
10.00	1.50	1.5D	15.00MM	46.80	3597-1015K	15	10.4	3597-10151	3500-HIT13-GB	3500-TB13-GB
12.00	1.50	1.5D	18.00MM	57.20	3597-1215K	10	12.4	3597-12151	3500-HIT15-GB	3500-TB15-GB
12.00	1.75	1.5D	18.00MM	57.20	3597-12175K	10	12.4	3597-12175	3500-HIT15-GB	3500-TB15-GB
14.00	1.50	1.5D	21.00MM	72.80	3597-1415K	10	14.4*	3597-14151	3500-HIT16-GB	_
14.00	2.00	1.5D	21.00MM	72.80	3597-142K	10	14.3*	3597-1421	3500-HIT16-GB	_
16.00	2.00	1.5D	24.00MM	83.20	3597-162K	10	16.5*	3597-1621	3500-HIT18-GB	-
(-D-)	144 1444 1444 1444 1444 1444 1444 1444	M			THREAD	46		600	©   	<u> </u>
MM	MM	INSTALL	ED LENGTH	\$	PART #	#	MM	PART #	PART #	PART #
SPARK	PLUG									
10.00	1.00	-	0.339"	62.40	3597-101K	5	_	3597-101PN	3500-HIT13-GB	3500-TB13-GB
		-	1/2"	-	_	5	_	_	_	-
12.00	1.25	_	1/2"	72.80	3597-12125K	5	_	3597-12125PN	3500-HIT15-GB	3500-TB15-GB
		_	3/4"	-	-	5	_	_	_	_
14.00	1.25	_	3/8"	74.88	3597-14125K	5	_	3597-14125PN	3500-HIT17-GB	_
			1/2"	-	_	5	_	_	_	_
		-	3/4"	-	-	5	-	_	— M	_
<b>D</b>		M			THREAD	46		60° 4-5	⊕   	<u> </u>
INCH	TPI	INSTALL	ED LENGTH	\$	PART #	#	MM	PART #	PART #	PART #
UNC										
No.6	32	1.5D	0.21"	41.60	3597-632K	20	3.8	3597-6321	3500-HIT5-GB	3500-TB5-GB
No.8	32	1.5D	0.25"	41.60	3597-832K	20	4.4	3597-8321	3500-HIT6-GB	3500-TB6-GB
No.10	24	1.5D	0.28"	33.28	3597-1024K	20	5.2	3597-10241	3500-HIT7-GB	3500-TB8-GB
1/4	20	1.5D	0.38"	33.28	3597-1420K	20	6.7	3597-14201	3500-HIT9-GB	3500-TB9-GB
5/16	18	1.5D	0.47"	38.48	3597-51618K	20	8.3	3597-516181	3500-HIT10-GB	3500-TB12-GB
3/8	16	1.5D	0.56"	48.88	3597-3816K	15	9.9	3597-38161	3500-HIT13-GB	3500-TB12-GB
7/16	14	1.5D	0.66"	50.96	3597-71614K	15	11.6	3597-716141	3500-HIT14-GB	3500-TB14-GB
1/2 9/16	13 12	1.5D 1.5D	0.75" 0.84"	59.28 72.80	3597-1213K 3597-91612K	10	13.0 15.0*	3597-1213I 3597-91612I	3500-HIT15-GB 3500-HIT16-GB	3500-TB15-GB
5/8		1.5D	0.04	83.20	3597-91012K 3597-5811K					_
3/4	11	1.5D	1.13"	93.60	3597-3611K 3597-3410K	10 5	16.5* 19.8*	3597-5811I 3597-3410I	3500-HIT18-GB 3500-HIT20-GB	_
UNF	10	1.00	1.10	33.00	3331-3410K	J	13.0	3397-34101	3300-11120-db	_
No.10	32	1.5D	0.28"	33.28	3597-1032K	20	5.1	3597-10321	3500-HIT8-GB	3500-TB8-GB
1/4	28	1.5D	0.38"	33.28	3597-1428K	20	6.7	3597-14281	3500-HIT9-GB	3500-TB9-GB
5/16	24	1.5D	0.47"	38.48	3597-51624K	20	8.3	3597-516241	3500-HIT11-GB	3500-TB12-GB
3/8	24	1.5D	0.56"	48.88	3597-3824K	15	9.8	3597-38241	3500-HIT13-GB	3500-TB13-GB
7/16	20	1.5D	0.66"	50.96	3597-71620K	15	11.5	3597-716201	3500-HIT14-GB	3500-TB14-GB
1/2	20	1.5D	0.75"	59.28	3597-1220K	10	13.0	3597-12201	3500-HIT15-GB	3500-TB15-GB
9/16	18	1.5D	0.84"	72.80	3597-91618K	10	14.7*	3597-916181	3500-HIT16-GB	_
5/8	18	1.5D	0.94"	83.20	3597-5818K	10	16.3*	3597-58181	3500-HIT18-GB	_
3/4	16	1.5D	1.13"	93.60	3597-3416K	5	19.5*	3597-34161	3500-HIT21-GB	_
-	•		•	-		-		•		

KITS

WORKSHOP



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



WORKS	HOP THR	EAD REP	AIR KITS – N	IETRIC COA	RSE					
<b>-D</b> -					THREAD	<b>\$</b>		80°		<i>V</i>
MM	MM	INSTALL	ED LENGTH	\$	PART #	#	MM	PART #	PART #	PART #
M5 – M12										
5.00	0.80	1.5D	7.50MM	202.80	3597-MET-WK1	25	5.2	3597-5081	3500-HIT8-GB	3500-TB8-GB
6.00	1.00	1.5D	9.00MM	-	_	25	6.3	3597-611	3500-HIT9-GB	3500-TB9-GB
8.00	1.25	1.5D	12.00MM	-	_	25	8.3	3597-81251	3500-HIT11-GB	3500-TB12-GB
10.00	1.50	1.5D	15.00MM	_	-	20	10.4	3597-10151	3500-HIT13-GB	3500-TB13-GB
12.00	1.75	1.5D	18.00MM	_	-	15	12.4	3597-121751	3500-HIT15-GB	3500-TB15-GB
12.00	1.70	1.00	10.00101101			10	14,7	0001 121101	0000 TITTO GD	0000 1010 00

	WORKSHOP THREAD REPAIR KITS – METRIC COARSE AND SPARK PLUG									
(-D-)					OTHREAD	<b>\$</b>		60°		<i>V</i>
MM	MM	INSTALL	ED LENGTH	\$	PART #	#	MM	PART #	PART #	PART #
M6 - M1	M6 – M10 + M12 & M14 SPARK PLUG									
6.00	1.00	1.5D	9.00MM	262.08	3597-SP-WK1	25	6.3	3597-611	3500-HIT9-GB	3500-TB9-GB
8.00	1.25	1.5D	12.00MM	-	_	25	8.3	3597-81251	3500-HIT11-GB	3500-TB12-GB
10.00	1.50	1.5D	15.00MM	-	_	20	10.4	3597-10151	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	1	16.40MM	-	-	5	_			_

WORKS	WORKSHOP THREAD REPAIR KITS – METRIC COARSE AND METRIC FINE									
<b>D</b>					FIREAD	49		6° 4-5	0	1
MM	MM	INSTALL	ED LENGTH	\$	PART #	#	MM	PART #	PART #	PART #
M6 & M	M6 & M8 METRIC COARSE AND M10 & M12 METRIC FINE									
6.00	1.00	1.5D	9.00MM	229.25	3597-MET-JAPAN	25	6.3	3597-611	3500-HIT9-GB	3500-TB9-GB
8.00	1.25	1.5D	12.00MM	_	_	25	8.3	3597-81251	3500-HIT11-GB	3500-TB12-GB
10.00	1.25	1.5D	15.00MM	_	_	15	10.3	3597-101251	3500-HIT13-GB	3500-TB13-GB
12.00	1.25	1.5D	18.00MM	_	_	10	12.3	3523-12.001	3500-HIT15-GB	3500-TB15-GB
			•	_	•				*	•

WORKS	WORKSHOP THREAD REPAIR KITS – METRIC COARSE, SPARK PLUG AND UNC									
(-D-)				Wilead		40		6° 4-5	0	1
MM / INCH	MM / TPI	INSTALL	ED LENGTH	\$	PART #	#	MM	PART #	PART #	PART #
M5 – M	8 METRIC	COARSE	E + M14 SP <i>F</i>	ARK PLUG <i>i</i>	AND 1/4" & 5/16"	UNC				
5.00	0.80	1.5D	7.50MM	245.44	3597-0PE-WK1	25	5.2*	3597-5081	3500-HIT8-GB	3500-TB8-GB
6.00	1.00	1.5D	9.00MM	-	_	25	6.3*	3597-611	3500-HIT9-GB	3500-TB9-GB
8.00	1.25	1.5D	12.00MM	-	_	25	8.3*	3597-81251	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*	3597-14201	3500-HIT9-GB	3500-TB9-GB
5/16	18	1.5D	0.47"	_	-	25	8.3*	3597-516181	3500-HIT10-GB	3500-TB12-GB

<sup>\*</sup> Tapping drill not included in thread repair kit.

# THREAD

**PROTHREAD** THREAD REPAIR

KITS

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



WORKS	WORKSHOP THREAD REPAIR KITS – UNF									
(+D+)	111111111111111111111111111111111111111				O'GREAD	40		60*		1
INCH	TPI	INSTALL	ED LENGTH	\$	PART #	#	MM	PART #	PART #	PART #
<b>UNF 1/4</b>	UNF 1/4" – UNF 1/2"									
1/4	28	1.5D	0.38"	230.88	3597-UNF-WK1	20	6.7	3597-14281	3500-HIT9-GB	3500-TB9-GB
5/16	24	1.5D	0.47"	-	_	20	8.3	3597-516241	3500-HIT11-GB	3500-TB12-GB
3/8	24	1.5D	0.56"	-	-	15	9.8	3597-38241	3500-HIT13-GB	3500-TB13-GB
7/16	20	1.5D	0.66"	-	-	10	11.5	3597-716201	3500-HIT14-GB	3500-TB14-GB
1/2	20	1.5D	0.75"	-	-	10	13.0	3597-12201	3500-HIT15-GB	3500-TB15-GB



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

STYLE					FF	REE RUNNING
PACKAGING					C	LAM SHELL
HANG SELL	REPLACEMEN	TINSERTS				
		+	<b>→</b>			_
(+D+)		W	MMM)	<b>46</b>		
	.    \( \frac{1}{2} \)    \( \f	IIII				
MM	MM		D LENGTH	#	\$	PART #
METRIC CO	ARSE / METRI	C FINE		1		
3.00	0.50	1.5D	4.00MM	10	6.97	3597-305X4.5P
4.00	0.70	1.5D	6.00MM	10	6.97	3597-407X6P
5.00	0.80	1.5D	7.50MM	10	6.97	3597-508X7.5P
6.00	1.00	1.5D	9.00MM	10	7.86	3597-61X9P
8.00	1.25	1.5D	12.00MM	10	8.59	3597-8125X12P
10.00	1.25	1.5D	15.00MM	10	13.76	3597-10125X15P
10.00	1.50	1.5D	15.00MM	10	12.07	3597-1015X15P
12.00	1.50	1.5D	18.00MM	10	16.85	3597-1215X18P
12.00	1.75	1.5D	18.00MM	10	16.85	3597-12175X18P
14.00	1.50	1.5D	21.00MM	5	13.31	3597-1415X21P
14.00	2.00	1.5D	21.00MM	5	13.31	3597-142X21P
16.00	2.00	1.5D	24.00MM	5	16.40	3597-162X24P
		-	<b>→</b>			
(+D+)	<b>→</b>	· · · · · · · · · · · · · · · · · · ·	MMM	46		
		III III	MANAN	- 6		
MM	MM	INSTALLE	D LENGTH	#	\$	PART #
SPARK PLU	G					
10.00	1.00	_	0.339"	10	10.90	3597-101X.339P
10.00	1.00	-	1/2"	10	12.30	3597-101X1/2P
12.00	1.25	_	1/2"	10	15.89	3597-12125X1/2P
12.00	1.25	-	3/4"	10	16.85	3597-12125X3/4P
14.00	1.25	-	3/8"	10	9.27	3597-14125X3/8P
14.00	1.25	-	1/2"	10	14.15	3597-14125X1/2P
14.00	1.25	_	3/4"	10	18.58	3597-14125X3/4P
(+D+)	<b>→</b>	m	AMMMi	48		
	11111111111111		WWW	40		
INCH	TPI	INSTALLE	D LENGTH	#	\$	PART #
UNC						
No.6	32	1.5D	0.21"	10	6.85	3597-632X207P
No.8	32	1.5D	0.25"	10	6.85	3597-832X246P
No.10	24	1.5D	0.28"	10	6.85	3597-1024X285P
1/4	20	1.5D	0.38"	10	7.70	3597-1420X375P
5/16	18	1.5D	0.47"	10	8.54	3597-51618X469P
3/8	16	1.5D	0.56"	10	12.07	3597-3816X562P
7/16	14	1.5D	0.66"	10	14.32	3597-71614X656P
1/2	13	1.5D	0.75"	10	16.40	3597-1213X750P
9/16	12	1.5D	0.84"	5	11.23	3597-91612X844P
5/8	11	1.5D	0.94"	5	16.12	3597-5811X937P
3/4	10	1.5D	1.13"	5	22.35	3597-3410X1.125P
UNF	1	1				
No.10	32	1.5D	0.28"	10	6.85	3597-1032X285P
1/4	28	1.5D	0.38"	10	7.70	3597-1428X375P
5/16	24	1.5D	0.47"	10	8.54	3597-51624X469P
3/8	24	1.5D	0.56"	10	12.07	3597-3824X562P
7/16	20	1.5D	0.66"	10	14.32	3597-71620X656P
1/2	20	1.5D	0.75"	10	16.40	3597-1220X750P
9/16	18	1.5D	0.84"	5	11.23	3597-91618X844P
5/8	18	1.5D	0.94"	5	16.12	3597-5818X937P
3/4	16	1.5D	1.13"	5	22.35	3597-3416X1.125P





YLUGFIX SULID MERCHANDISERS





### **PLUG FIX SOLID INSERT**

GROUP	PRWI
INSERT TYPE	SOLID KNURLED
PACKAGING	CLAM SHELL

	HANG SELL	REPLACEMEN	TINSERTS			
	<b>D</b>		<b></b>	40		
	MM	MM	INSERT LENGTH	#	\$	PART #
3	SPARK PLUC	G – PLUG FIX				
	14.00	1.25	2 EACH: 3/8", 1/2", 3/4"	6	21.05	3599-14125CP
	14.00	1.25	3/8"	5	14.91	3599-14125X3/8P
	14.00	1.25	1/2"	5	17.62	3599-14125X1/2P
	14.00	1.25	3/4"	5	20.45	3599-14125X3/4P

## **MERCHANDISERS**



GROUP -				\$	PART #			
<b>8 KIT BENCH</b>	TOP MERCH	ANDISER		530.94		3597-D1		
(-D-)	1 <del>4</del> 1			THREAD				
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		

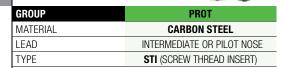
THREAD	THE REAL PROPERTY OF THE PROPE
THE OWN	
	THREAD THE SECOND
OR C. W.	aga a
į	

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

GROUP PROC		\$		PART #		
10 KIT BENC	H TOP MERCH	IANDISER	<b>523.71</b> 3598-D1		3598-D1	
<b>—D-</b>						
MM / INCH	MM / TPI	DESCRIPTION	QTY	PART #	QTY	PART #
METRIC CO	ARSE / METRI	C 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	3598-71614	1	3597-71614X656P
-			•		-	

STI TAPS



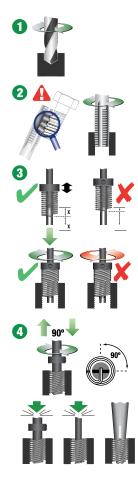


STI TAPS				
l l				
(+D+	<b>+</b>	60°		
MM	MM	\$	PART #	
	ARSE / METRI	C FINE		
3.00	0.50	11.75	3597-3051	
4.00	0.70	11.75	3597-4071	
5.00	0.80	9.10	3597-5081	
6.00	1.00	9.10	3597-611	
7.00	1.00	9.36	3597-711	
8.00	1.25	9.36	3597-81251	
10.00	1.25	11.96	3597-101251	
10.00	1.50	11.96	3597-1015	
12.00	1.50	15.55	3597-12151	
12.00	1.75	15.55	3597-121751	
14.00	1.50	22.31	3597-14151	
14.00	2.00	22.31	3597-1421	
16.00	2.00	29.12	3597-1621	
		14	A	
(+D+)	<b>+</b>		60°	
MM	MM	\$	PART #	
SPARK PLU	G			
10.00	1.00	13.00	3597-101PN	
12.00	1.25	16.59	3597-12125PN	
14.00	1.25	22.31	3597-14125PN	
			(1	
(+D+)	<b>├</b>		60°	
	MMMM			
INCH	TPI	\$	PART #	
UNC				
No.6	32	11.75	3597-6321	
No.8	32	11.75	3597-8321	
No.10	24	11.75	3597-10241	
1/4	20	9.10	3597-14201	
5/16	18	9.36	3597-516181	
3/8	16	11.96	3597-38161	
7/16	14	11.96	3597-716141	
1/2	13	15.55	3597-12131	
9/16	12	22.31	3597-916121	
5/8	11	29.12	3597-58111	
3/4	10	31.56	3597-34101	
UNF	0.0	44.00	0507.4000	
No.10	32	11.75	3597-1032l	
1/4	28	9.10	3597-14281	
5/16	24	9.36	3597-516241	
3/8	24	11.96	3597-38241	
7/16	20	11.96	3597-716201	
1/2	20	15.55	3597-1220l	
9/16 5/8	18 18	22.31	3597-91618I 3597-5818I	
3/4	16	29.12 31.56	3597-5818I 3597-3416I	
3/4	10	31.30	3597-3416I	



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

PLUG FIX – HEX END PILOT NOSE TAP				
<b>(-D-)</b>				
MM	MM		PART #	
SPARK PLUG – PLUG FIX				
14.00	1.25	22.31	3599-14125PN	





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

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.



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.



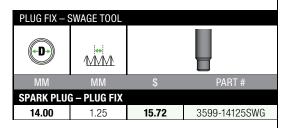
Lift installation tool, rotate 90° and tap down sharply to break off wire thread insert tang. Use the tang break off tool to perform this function where supplied. NOTE For spark plug and large inserts use long nose pilers to remove the tang.

You have succesfully 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



HAND INSTA	LLATION TOC	LS	
			Ţ
(+D+)			
			Ш
MM	MM	\$	PART #
	ARSE / METR		0500 1874 00
3.00	0.50	17.97	3500-HIT4-GB
4.00	0.70	12.36	3500-HIT6-GB
5.00	0.80	12.36	3500-HIT8-GB
6.00	1.00	12.36	3500-HIT9-GB
7.00	1.00	12.36	3500-HIT10-GB
8.00	1.25	12.36	3500-HIT11-GB
10.00	1.25	12.36	3500-HIT13-GB
10.00	1.50	12.36	3500-HIT13-GB
12.00	1.50	14.60	3500-HIT15-GB
12.00	1.75	14.60	3500-HIT15-GB
14.00	1.50	15.72	3500-HIT16-GB
14.00	2.00	15.72	3500-HIT16-GB
16.00	2.00	15.72	3500-HIT18-GB
<b>(←D→)</b>	<b>∧</b> ∧ ∧ ∧		
MM	MM	\$	PART #
SPARK PLU	G		i
10.00	1.00	12.36	3500-HIT13-GB
12.00	1.25	14.60	3500-HIT15-GB
14.00	1.25	15.72	3500-HIT17-GB
(+D+)	111111111111111111111111111111111111111		
	MINIMAN		
INCH	TPI	\$	PART #
UNC			
No.6	32	17.97	3500-HIT5-GB
No.8	32	12.36	3500-HIT6-GB
No.10	24	12.36	3500-HIT7-GB
1/4	20	12.36	3500-HIT9-GB
5/16	18	12.36	3500-HIT10-GB
3/8	16	12.36	3500-HIT13-GB
7/16	14	13.48	3500-HIT14-GB
1/2	13	14.60	3500-HIT15-GB
9/16	12	15.72	3500-HIT16-GB
5/8	11	15.72	3500-HIT18-GB
3/4	10	15.72	3500-HIT20-GB
UNF			
No.10	32	12.36	3500-HIT8-GB
No.10 1/4	28	12.36	3500-HIT9-GB
No.10 1/4 5/16	28 24	12.36 12.36	3500-HIT9-GB 3500-HIT11-GB
No.10 1/4 5/16 3/8	28 24 24	12.36 12.36 12.36	3500-HIT9-GB 3500-HIT11-GB 3500-HIT13-GB
No.10 1/4 5/16 3/8 7/16	28 24 24 20	12.36 12.36 12.36 13.48	3500-HIT9-GB 3500-HIT11-GB 3500-HIT13-GB 3500-HIT14-GB
No.10 1/4 5/16 3/8 7/16 1/2	28 24 24 20 20	12.36 12.36 12.36 13.48 14.60	3500-HIT9-GB 3500-HIT11-GB 3500-HIT13-GB 3500-HIT14-GB 3500-HIT15-GB
No.10 1/4 5/16 3/8 7/16 1/2 9/16	28 24 24 20 20 18	12.36 12.36 12.36 13.48 14.60 15.72	3500-HIT9-GB 3500-HIT11-GB 3500-HIT13-GB 3500-HIT14-GB 3500-HIT15-GB 3500-HIT16-GB
No.10 1/4 5/16 3/8 7/16 1/2	28 24 24 20 20	12.36 12.36 12.36 13.48 14.60	3500-HIT9-GB 3500-HIT11-GB 3500-HIT13-GB 3500-HIT14-GB 3500-HIT15-GB



- Features and benefits

  No drill required

  Solid inserts in 3 lengths to suit most common spark
- suit most common spark
  plug reaches
  Suitable for aluminium and
  cast iron
  Simple, easy to use permanent
  repair

Applications

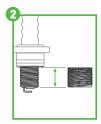
Taper and gasket seat spark plug ports

#### A 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).



INDUSTRIAL TOOLS

Bordo International Pty Ltd ABN 96 005 125 833 3 Kingston Park Court Scoresby Victoria 3179 Australia Telephone +61 3 9212 7000 Facsimile +61 3 9212 7070 Email info@bordo.com.au Web www.bordo.com.au



Part No. 9910-CATPROTHREAD0315

