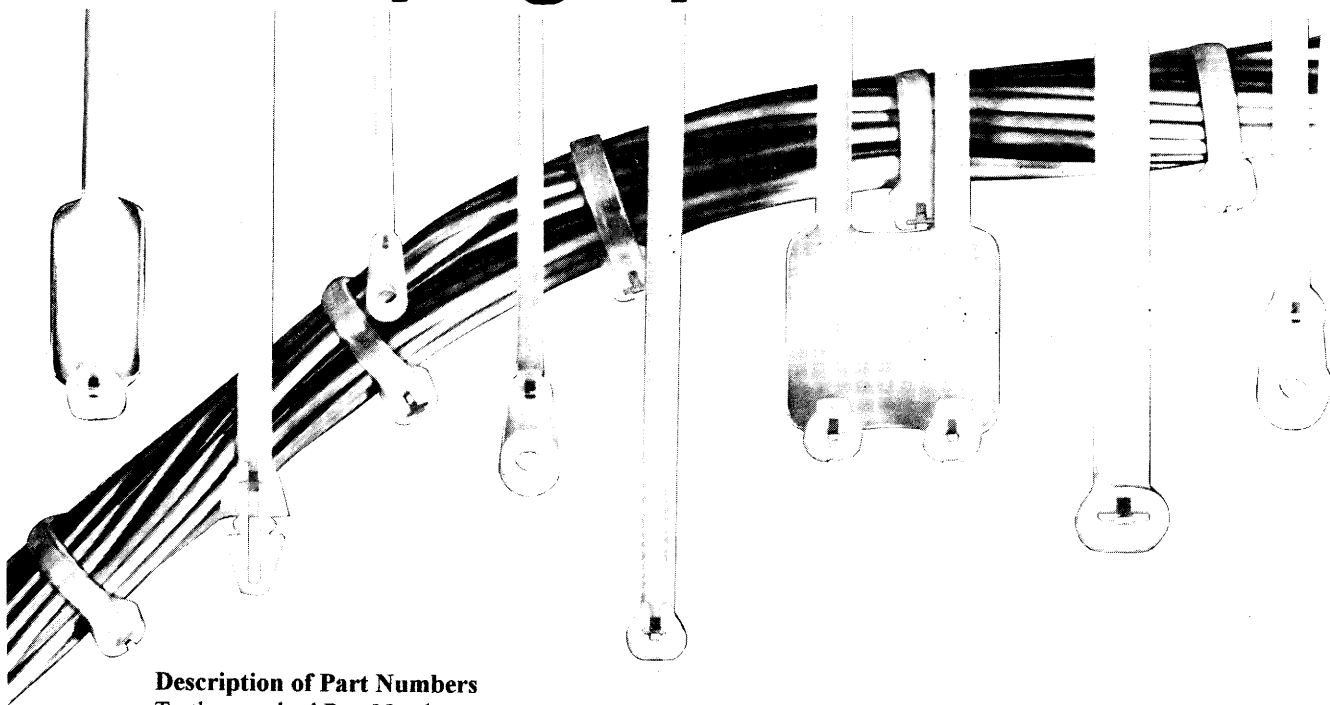


The TY-RAP® Cable Tying System



Description of Part Numbers

To the standard Part Number, you can add special codes for material properties and colours. Example:

TY **C** 5

25M **X**

Colour

(Material)	
Standard Polyamide 6.6.	
H – Temperature resistant +105°	
C – Nylon 12	△
P – Polypropylene	△
Z – Tefzel	□

(Material Properties)	
X – UV resistant	■
FR – fire resistant	▲
According to UL 94-VO	

● RAL(TY23, TY24 & TY25 only)	
= uncoloured	
0 = black	9017
1 = brown	8004
2 = red	3027
3 = orange	2003
4 = yellow	1018
5 = green	6017
6 = blue	5012
7 = purple	4005
8 = grey	7032
9 = white	9001

Note: When ordering types conforming to MIL 3367, colour “9” corresponds to “uncoloured”.

- △ Available types; TY 25M, TY 27M, TY 28M and TY 29M
- Available in 1000/500 packs only
- Available types; TY 23M, TY 27M, TY 28M and TY 409: aquamarine blue
- UV-resistant material, colour: black
- ▲ Flame resistant material, colour: milky white (approx. RAL 1013)

American Military Specification MIL-S-23190

(a) MS3367 CABLE TIES.

Cat. No.	MS3367-X	Cat. No.	MS3367-X
TY25M	—1	TY24M	—5
TY28M	—2	TY29M	—6
TY27M	—3	TY253M	—7
TY23M	—4		

(b) MS3368 IDENTIFYING SERIES

Cat. No.	MS3368-X	Cat. No.	MS3368-X
TY46M	1-A	TY46MT	4-D
TY48M	2-A	TY51M	5-E
TY46MD	3-C		

(c) MS90387 TOOLING

Cat. No.	
WT197	MS90387-2
WT199	MS90387-1

MILITARY SPECIFICATIONS

TY-RAP® ties meet MIL-S-23190 which specifically covers nylon cable ties. Applicable Military Standards drawing numbers are shown next to dimensional drawings.

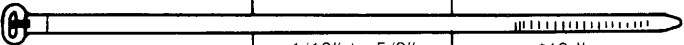
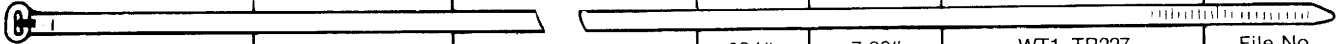
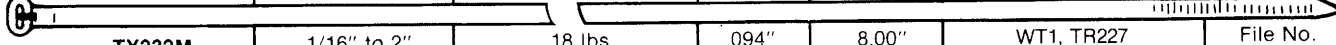
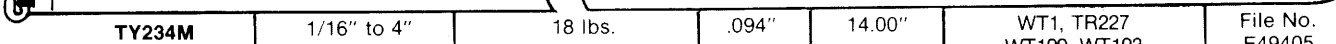

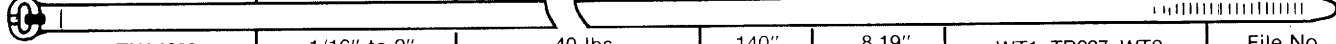
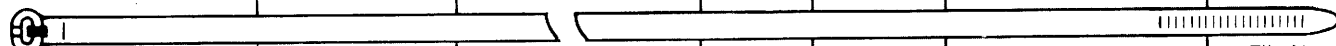




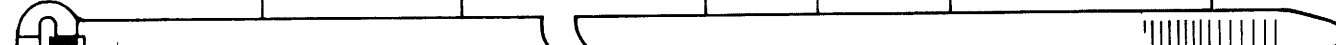




tel. 01959 576129

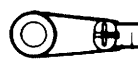


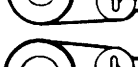


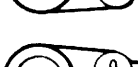








British Aerospace

CERTIFICATE NO. KIN 79/82

Self-Locking TY-RAP® Cable Ties

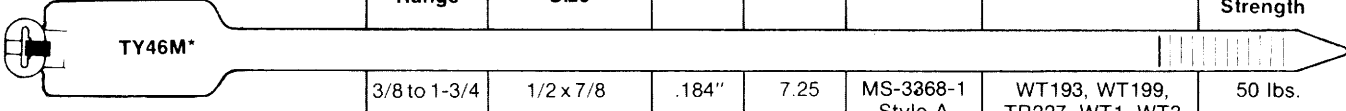
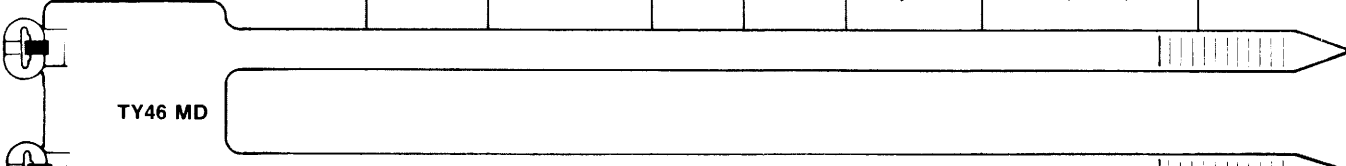
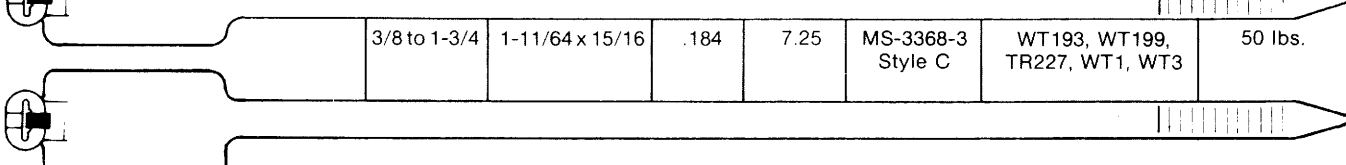
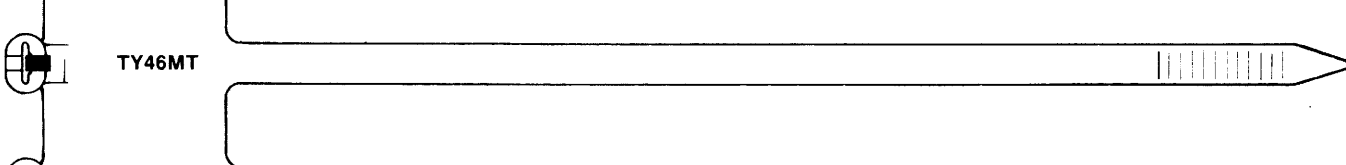
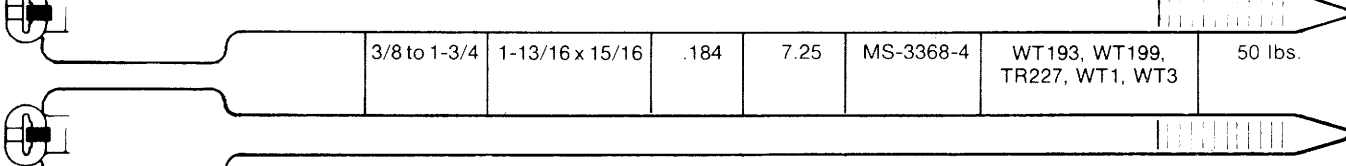
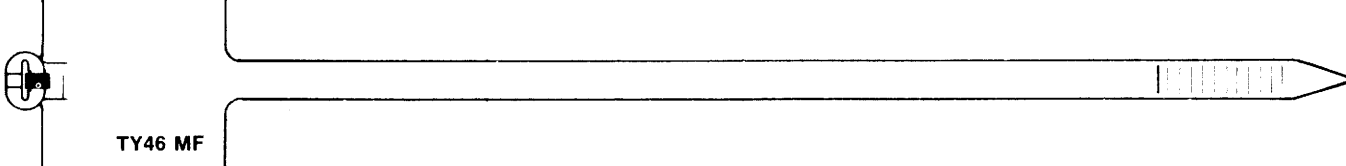
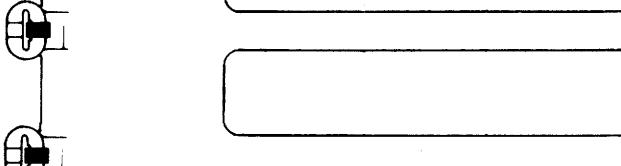
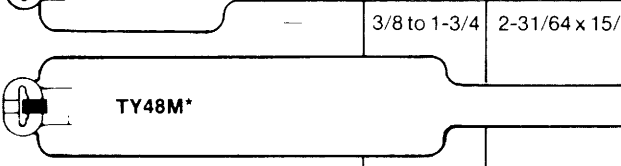
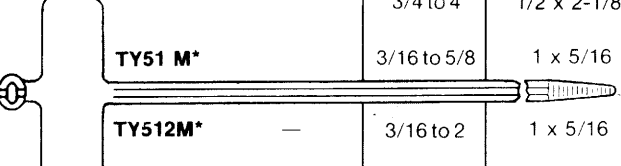
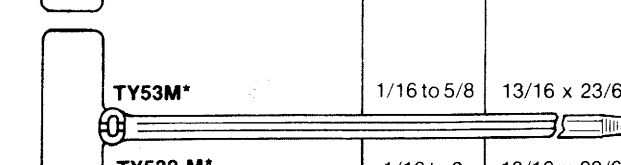
Cat. No.	Wire Bundle Range	Minimum Tensile Unlocking Strength MIL-S-23190 (Type I Class 1)*	Width	Length	Installing Tool	UL Listing
 TY23M MS3367-4	1/16" to 5/8"	*18 lbs.	.094"	3.62"	WT1, TR227 WT199, WT193	File No. E49405
 TYB2315M	1/16" to 1-1/2"	18 lbs.	.094"	7.00"	WT1, TR227 WT199, WT193	File No. E49405
 TY232M	1/16" to 2"	18 lbs.	.094"	8.00"	WT1, TR227 WT199, WT193	File No. E49405
 TY234M	1/16" to 4"	18 lbs.	.094"	14.00"	WT1, TR227 WT199, WT193	File No. E49405
 TY24M MS3367-5	1/16" to 1-1/4"	*30 lbs.	.140"	5.50"	WT1, TR227, WT2 WT199, WT193	File No. E49405
 TY242M	1/16" to 2"	40 lbs.	.140"	8.19"	WT1, TR227, WT2 WT199, WT193	File No. E49405
 TY26M	1/16" to 3"	40 lbs.	.140"	11.08"	WT1, TR227, WT2 WT199, WT193	File No. E49405
 TY244M	1/16" to 4"	40 lbs.	.140"	14.50"	WT1, TR227, WT2 WT199, WT193	File No. E49405
 TY25M MS3367-1	1/16" to 1-3/4"	*50 lbs.	.184"	7.31"	WT1, TR227, WT2, WT3 WT199, WT193	File No. E49405
 TY253M MS3367-7	1/16" to 3"	*50 lbs.	.184"	11.41"	WT1, TR227, WT2, WT3 WT199, WT193	File No. E49405
 TY28M MS3367-2	1/16" to 4"	*50 lbs.	.184"	14.19"	WT1, TR227, WT2, WT3 WT199, WT193	File No. E49405
 TY272M	3/16" to 2"	120 lbs.	.301"	8.00"	WT197, WT2, WT3	
 TY27M MS3367-3	3/16" to 3-1/2"	*120 lbs.	.301"	13.38"	WT197, WT2, WT3	File No. E49405
 TY29M MS3367-6	1-1/2" to 9"	*120 lbs.	.301"	30"	WT197, WT2, WT3	File No. E49405

TY-RAP® Cable Straps and Clamps

Cat. No.	Wire Bundle Range	Minimum Tensile Unlocking Strength	Mounting Hole Size	Width	Length	Installing Tool
 TY33M	1/16"-5/8"	18 lbs.	#4	.091	4"	WT1, WT3, TR227 WT193, WT199
 TY34M	1/16"-1-1/8"	40 lbs.	#8	.140	6"	WT1, WT3, TR227 WT193, WT199
 TY635M	1/16"-1-3/4"	50 lbs.	#6	.184	7.81"	WT1, WT3, TR227 WT193, WT199
 TY35M	1/16"-1-3/4"	50 lbs.	#10	.184	7.81"	WT1, WT3, TR227 WT193, WT199
 TY354M	1/16" to 4"	50 lbs.	#10	.184	14.6"	WT1, WT3, TR227 WT193, WT199
 TY1435M	1/16"-1-3/4"	50 lbs.	1/4"	.184	7.81"	WT1, WT3, TR227 WT193, WT199
 TY37M	3/16"-3-1/2"	120 lbs.	1/4"	.301	13.93"	WT2, WT3, WT197
 TYT635M	1/16"-1-3/4"	50 lbs.	6-32	.184	7.81"	WT193, WT199
 TYT837M	3/16"-3-1/2"	120 lbs.	8-32	.301	13.93"	WT2, WT3, WT197
 TYK1035M	1/16"-1-3/4"	50 lbs.	#10	.184	7.97"	WT1, WT3, TR227 WT193, WT199
 TY40M	3/16"-1-1/2"	50 lbs.	#10	.184	8.5"	WT1, WT3, TR227 WT193, WT199
 TYF35M	3/8"-1"	50 lbs.	#6	.184	7.25"	WT1, WT3, TR227 WT193, WT199
 TY54M	1/16"-1-1/4"	40 lbs.	3/16"	.140	5.96"	WT1, TR227 WT193, WT199
 TY38M	1/16"-1-3/4"	50 lbs.	1/4"	.184	7.78"	WT1, WT3, TR227 WT193, WT199
 TYG34M	1/16"-1-1/4"	40 lbs.	1/4"	.140	6.3"	WT1, TR227, WT193, WT199

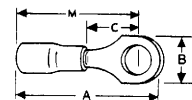


Nylon Identifying Ties

Cat. No.	Wire Bundle Range	Marking Pad Size	Width	Length	Mil. No.	Installing Tools	Min. Tensile Holding Strength
 TY46M*	3/8 to 1-3/4	1/2 x 7/8	.184"	7.25	MS-3368-1 Style A	WT193, WT199, TR227, WT1, WT3	50 lbs.
 TY46 MD							
 TY46MT	3/8 to 1-3/4	1-11/64 x 15/16	.184	7.25	MS-3368-3 Style C	WT193, WT199, TR227, WT1, WT3	50 lbs.
 TY46 MF							
 TY48M*	3/8 to 1-3/4	1-13/16 x 15/16	.184	7.25	MS-3368-4	WT193, WT199, TR227, WT1, WT3	50 lbs.
 TY51 M*	3/8 to 1-3/4	2-31/64 x 15/16	.184	7.25	—	WT193, WT199, TR227, WT1, WT3	50 lbs.
 TY512M*	3/4 to 4	1/2 x 2-1/8	.184	14.18	MS-3368-2 Style A	WT193, WT199, TR227, WT1, WT3	50 lbs.
 TY53M*	3/16 to 5/8	1 x 5/16	.091	3.62	MS-3368-5 Style E	WT193, WT199, TR227, WT1, WT3	50 lbs.
 TY532 M*	—	1 x 5/16	.091	8.30	—	WT193, WT199, TR227, WT1	18 lbs.
 TY53A	Adhesive Pad	13/16 x 23/64	.091	4.00	—	WT193, WT199, TR227, WT1	18 lbs.
	1/16 to 2	13/16 x 23/64	.091	8.37	—	WT193, WT199, TR227, WT1	18 lbs.
	1/16 to 2	13/16 x 23/64	.091	8.37	—	WT193, WT199, TR227, WT1	18 lbs.

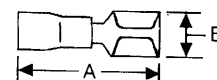
STA-KON

SELF INSULATED RING TERMINALS



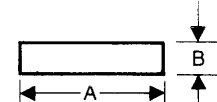
Stock Thickness: .03

WIRE RANGE 22-18	ONCE SOLD UNDER	CAT. NO.	STUD SIZE	MAX. INS. DIA.	A	B	C	M	MS-25036 Dash No.
<p>NYLON INSULATED RING SERIES RA</p>	RA18-4	RA323	4	.136	.70	.23	.14	.59	-148
		RA333	6	.136	.70	.23	.14	.59	-101
	RA18-6	RA853	6	.136	.83	.26	.25	.71	-102
		RA833	8	.136	.83	.26	.25	.71	----
	RA18-8	RA863	8	.136	.86	.31	.25	.71	-149
	RA18-10	RA873	10	.136	.86	.31	.25	.71	-103
	RA18-14	RA713	1/4	.136	1.07	.46	.31	.84	-150
	RA18-516	RA723	5/16	.136	1.07	.46	.31	.84	-104
	RA18-38	RA733	3/8	.136	1.17	.53	.35	.87	-105
RA18-12	RA753	1/2	.136	1.27	.72	.50	.92	-151	



Series 250 FEMALE	ONCE SOLD UNDER	CAT. NO.	WIRE RANGE	A	B	MAX. INS.	TAB SIZE
<p>NYLON INSULATED</p>	RA18-250F	RA250	22-18	.91	.29	.150	.250 x .032
	RB14-250F	RB250	16-14	.91	.29	.170	.250 x .032

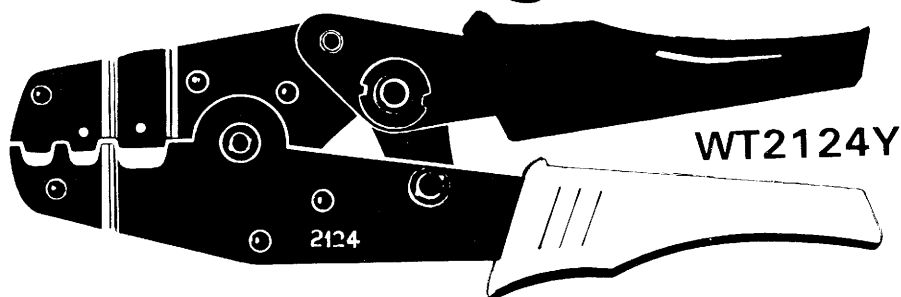
Series 250 MALE	ONCE SOLD UNDER	CAT. NO.	WIRE RANGE	A	B	MAX. INS.	TAB SIZE
<p>VINYL INSULATED</p>	18RA-250T	RA2517	22-18	.95	----	.150	.250 x .032
	14RB-250T	RB2517	16-14	.95	----	.170	.250 x .032



Splices	ONCE SOLD UNDER	CAT. NO.	WIRE RANGE	A	B	MAX. INS. DIA.
<p>NYLON INSULATED BUTT SPLICE</p>	2RA-18	RAA21	22-18	1.19	.18	.115
	2RB-14	RBB21	16-14	1.19	.21	.148
	2RC-10	RCC21	12-10	1.26	.28	.210
	2RD-8	RDD27	8	1.69	----	.340
	2RE-6	REE28	6	1.85	----	.420
	2RF-4	RFF29	4	1.85	----	.510

Wristlock Disconnect	ONCE SOLD UNDER	MS27429-1	WIRE RANGE	MAX. INS. DIA.	A	A1
<p>WRISTLOCK DISCONNECT NYLON INSULATED</p>	RA18-D	RA-23	22-18	.136	.99	1.70
	RB14-D	RB-23	16-14	.162	.99	1.70

STA-KON[®]



INSTALLING TOOL

WT2124Y

Ratchet type with emergency release
Crimps insulated terminals only
Accepts Red, Blue, Yellow terminals
Double ident die crimps wire and insulation simultaneously

Replacement dies available.

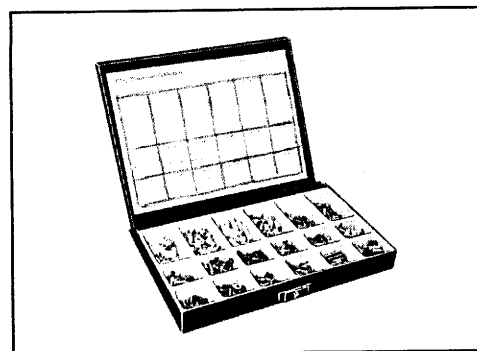
ADAMS-1 STA-KON ELECTRICAL TERMINAL KIT

A MECHANIC'S ORGANISED INVENTORY

INSIDE COVER INDEX LISTS AND SHOWS CONTENTS IN COLOUR.
AN ASSORTMENT OF THE MOST POPULAR TYPES.

KIT: ADAMS-1

A plastic box containing 450 carefully selected terminals, splices and wristlocks, in moulded compartments including Terminals – Sizes 6, 8 and 10.



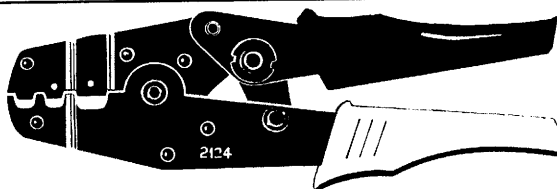
Kit Contains:

25: RA23, RA250, RA2517, RA713, RA250, RA23

50: RA18-10, RAA21, RBB21, RA863, RA853

KIT: ADAMS-2

As above, but including the WT2124Y installing tool.



RAA21



RA23/RB23



RA2517



RA250



RA323/833/853/863/RA18-10



KNIFE DISCONNECTS, VINYL INSULATED

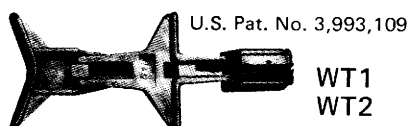


32446
AWG SIZE 22-16
RED



32448
AWG SIZE 16-14
BLUE

TY-RAP® Installing Tools



Hand Operated Tools

Compact hand tool made of high impact plastic.
Pre-set tension. Cuts off flush. Low cost.

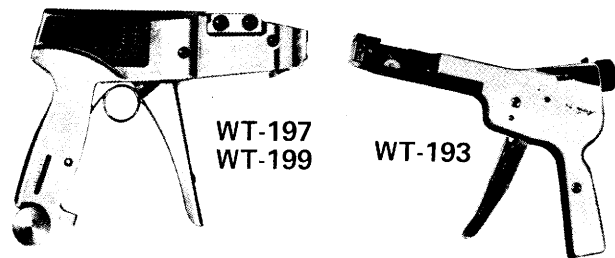
Cat. No.	Remarks
WT1	Installs TY-RAPS from 2.3mm to 4.7mm wide
WT2	Installs TY-RAPS up to 7.7mm wide

TY-RAP® Marking Pens



Use on
Identification Ties

Catalog No.	Color Ink
WT163M-1	Black
WT163M-3	Red



Pistol Type, MIL SPEC Approved easy tension adjustment. Cuts tails off flush with head.

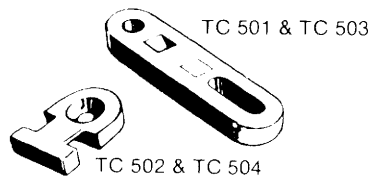
Cat. No.	Remarks
WT197	Installs TY-RAPS from 2.3mm to 4.7mm wide. MIL SPEC Ref MS90387-2
WT199	Installs TY-RAPS 7.64mm wide. MIL SPEC Ref MS90387-1

Pistol Type, easy tension adjustment. Cuts tails off flush with head.

Cat. No.	Remarks
WT193	General purpose. Installs TY-RAPS from 2.3mm to 4.7mm wide

Mounting Mechanically Installed Mounting Bases

TY-RAP* mounting bases



Cat. No.	Mounting Hole Size	For Use With
TC-501	2-#10 screws	TY525M
TC-503	1-#8 screw	TY527M
TC-502	2-#1/4" screws	TY525M
TC-504	1-#5 screw	TY525M

IN-LINE BASE

A standard two-hole base that installs in-line with the wire bundle which conceals it.

Cat. No.	Max. Tie Width Accommodated	Fastener	Width	Length
TC815	310"	2 10 screws	3/4"	1 1/4"

