

Inch

Adjustable Distance Screw Sets / Insertion Tool & Parts

Pouce

Ensembles de vis de distance réglable / outil d'insertion et pièces



No More Shimming!

The adjustable screw and its ease of use.

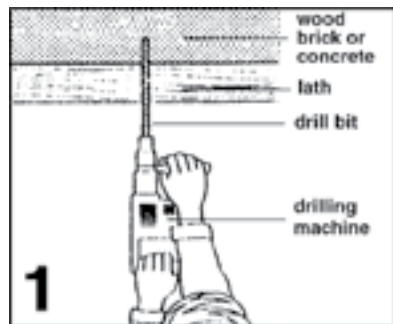


Easy Installation of:

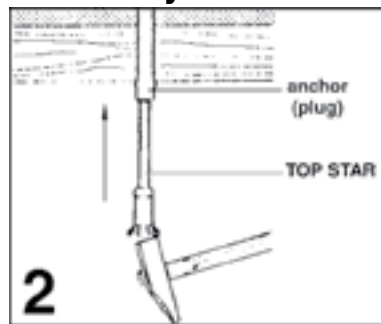
- WINDOW AND DOOR FRAMES
- INSULATION AND PANELLING
- BUILT IN WALL UNITS/CABINETS

This product is perfectly suited to meet professional as well as do-it-yourself needs. Fine adjustments are possible since TOP STAR may be shifted in both directions. TOP STAR reduces pre-work to a minimum and the job can be done easily by one person.

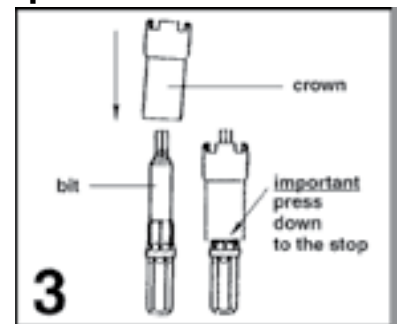
TOP STAR Easy Installation Tips:



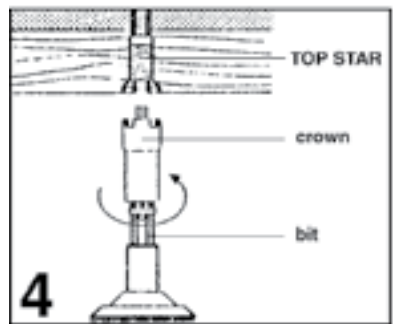
1 pre-drill



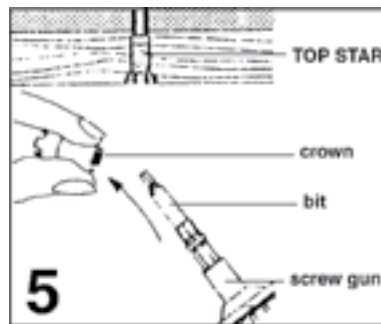
2 install anchor



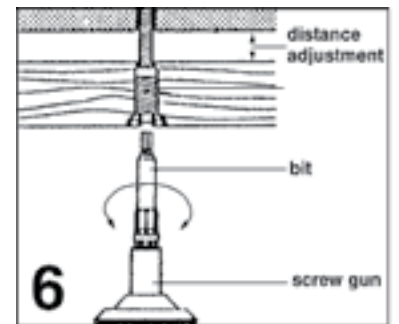
3 tool handling



4 install TOP STAR



5 remove crown



6 adjust for perfect fit

TOP STAR ADJUSTABLE DISTANCE SCREW



STEEL
Zinc-Plated
and lubricated,
with T-Star recess drive.

SPAENAUR No.	Dimensions		PKG QTY.
	U.S. Standard	Metric	
038-200	1/4 x 3/8 x 2-1/2"	6.0 x 60	100
038-203	1/4 x 3/8 x 4-3/4"	6.0 x 120	50

Each PKG QTY. contains complete Fastening System
- Adjusting Screws with insertion tool.

Replacement Parts for Insertion Tool



PKG QTY. 1

CATALOG 14 SPAENAUR

Wood Screws - Slot Drive

Vis à bois – tête fendue



Inch

Pouce



Flat and Oval head have 90° countersunk.

B

Inch Sizes PKG QTY. 100		STEEL			BRASS		
DIA.	L.	FLAT ZINC PLATED	ROUND ZINC PLATED	OVAL ZINC PLATED	FLAT PLAIN FINISH	ROUND PLAIN FINISH	OVAL NICKEL PLATED
1	1/2					WS-668	
2	3/8				576-011	576-E05-1A	
	1/2	577-221	WS-189		WS-635	576-E07-1Y	
	5/8				576-012		
	3/4				576-009		
3	3/8		WS-199		576-E01-1K		
	1/2		WS-31	B-346	576-013	576-E17-1A	
	5/8				576-014		
	3/4				576-015		
	1				WS-671		
4	3/8	577-223				576-E15-1M	WS-641
	1/2	WS-22			WS-525	WS-531	
	5/8	WS-23				WS-670	576-064 Plain Finish
	3/4	WS-24			WS-636	576-E06-1P	
	1	WS-25			576-008	WS-664	
	1-1/4					576-058	
5	3/8				576-016		
	1/2				576-017	576-E13-1K	
	5/8			WS-122	576-018		
	3/4	WS-188			576-019		
	7/8				576-020		
	1			WS-114	576-021		
	1-1/4				576-022		
6	1/2	WS-26	WS-101		WS-660	576-E11-1N	WS-503
	5/8	WS-27	WS-78		576-E18-1P	576-005	
	3/4	WS-28	577-D01-1A		576-E16-1X	576-E08-1C	981-S
	7/8				576-024	WS-653	
	1		WS-175		576-E14-1W	WS-654	576-E02-1W
	1-1/4	WS-112	577-217		576-E19-1Y	WS-665	984-S
	1-1/2	WS-5	WS-9		WS-656	WS-666	
	1-3/4	WS-82					
7	3/4					WS-506	
	1					WS-507	
8	1/2	577-D04-1C	WS-111		WS-643		
	5/8				576-025		
	3/4	942	WS-177	577-226	WS-500	WS-639	987-S
	7/8	943			WS-508		
	1	944	WS-109		WS-501	WS-659	
	1-1/4	577-D03-1Y	577-D02-1P	WS-107	WS-509		
	1-1/2	WS-29	WS-33		WS-624	WS-532	991-S
	1-3/4	WS-137	577-218		WS-526	WS-674	
	2	577-227	577-219		576-026	576-054	
	2-1/2	WS-3			576-027	576-001	

Continued on the next page...

B64

Inch

Pouce



Wood Screws - Slot Drive

Vis à bois – tête fendue

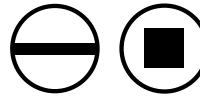
Inch Sizes		STEEL			BRASS		
Continued from Previous Page		Head/Body & Slot Dimensions to ASME B18.6.1					
DIA.	L.	FLAT ZINC PLATED	ROUND ZINC PLATED	OVAL ZINC PLATED	FLAT PLAIN FINISH	ROUND PLAIN FINISH	OVAL NICKEL PLATED
9	3/4	WS-88					
	7/8				576-030		
	1	WS-113		WS-7	576-031		
	1-1/4	WS-89			576-032	WS-675	
	1-1/2	WS-90			576-033		
	1-3/4				576-034		
	2	577-222			WS-527		
10	3/4	947	WS-186	577-225	576-035	576-004	
	7/8				576-036		
	1	948	WS-108		WS-629	575-055	
	1-1/4	949	WS-10		576-E03-1M		994-S
	1-1/2	950	WS-174		WS-534		
	1-3/4	951			WS-535		
	2	952	WS-187		576-038		
	2-1/4	WS-118		WS-149			
	2-1/2	WS-119	WS-105	WS-148	576-E09-1N		
	2-3/4	WS-21					
	3	WS-115			576-040		
12	3/4	WS-15			WS-513		
	1	953-S	WS-147		WS-513A		
	1-1/4	954			576-044	576-061	
	1-1/2	955			576-E10-1C		
	1-3/4	956				WS-640	576-065 (Plain Finish)
	2	957	577-220		576-047		
	2-1/4				WS-642	576-062	
	2-1/2	958	WS-183			WS-649	
	3	WS-16	WS-182		WS-514		
	3-1/2				WS-529		
14	3/4				576-048		
	1				576-049		
	1-1/4	960	WS-97		576-050		
	1-1/2	961	WS-11	WS-8	576-051	WS-651	
	1-3/4	WS-92			WS-554		
	2	WS-18	WS-6		576-052		
	2-1/2	WS-32TF (TF = Twin Fast Twin Thread)			WS-633		
	3				576-006		
	3-1/2				576-007		
16	2-1/4		1307		576-002		
					576-003	576-060	
					576-053		

PKG QTY. 100

CATALOG 14 SPAENAUR

Wood Screws - Slot Drive

Vis à bois – tête fendue



Inch
Pouce



SLOT DRIVE

PKG QTY. 100 ALL ITEMS ON THIS PAGE

ALUMINUM

Inch
Sizes
SLOT DRIVE



DIAMETER	L.	FLAT
4	1/2	575-017
6	1	575-015
8	1-1/4	575-025
10	3/4	575-027
	1	575-029

STAINLESS STEEL

Head/Body & Slot Dimensions to ASME B18.6.1

Inch
Sizes
SLOT DRIVE
TYPE 18-8



DIAMETER	L.	FLAT	ROUND
4	1/2	578-A01-1N	578-011
6	1/2		578-012
	3/4	578-006	578-013
8	1/2	578-030	578-015
	3/4	578-016	
	1	578-A03-1K	578-008
	1-1/4	578-002	
	1-1/2	578-A02-1T	
	2	578-000	
10	3/4	578-019	578-020
	1		578-021
	1-1/4	578-005	
	1-1/2		578-022
	1-3/4		578-023
	2		578-024
12	2-1/2		578-025
	1	578-026	
	1-1/4		578-027
	1-1/2	578-028	578-029
2	578-003	578-007	

B

ASSORTMENT
ASSORTIMENT **805-661-A**

**STEEL
Wood
Screws**
Zinc Plated

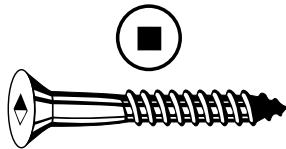
**SQUARE SOCKET
DRIVE**

**24 SIZES
1150 PIECES**

Furnished in Large Size grey enamel drawer with scooped bins for easy access.

Drawers will fit into Slide Racks shown on page A3

Shipping Weight:
7.71 kg (17 lbs)



Head Type	Spaenaur No.	Dia. X Lgth.	Qty.	Page	
Flat	WS-56	6 x 3/4"	50	B68	
	593-K02-1Y	6 x 1"			
	593-005	6 x 1-1/2"			
	WS-94	6 x 2"			
	WS-63	8 x 3/4"			
	WS-20	8 x 1"			
	WS-65	8 x 1-1/4"			
	593-K05-1T	8 x 1-1/2"			
	WS-80	8 x 2"			
	WS-81	8 x 2-1/2"			
	Round	WS-40	10 x 1"	25	B69
		WS-41	10 x 1-1/4"		
		WS-42	10 x 1-1/2"		
		593-K23-1X	10 x 2"		
		WS-136	10 x 2-1/2"		
		WS-96	10 x 3"		
	Round	WS-139	10 x 3-1/2"	50	B68
		WS-46	12 x 1-1/2"		
WS-48		12 x 2"			
WS-50		12 x 2-1/2"			
Round	593-K01-1P	6 x 3/8"	50	B68	
	WS-126	8 x 1-1/4"			
	WS-157	8 x 2"			
	WS-128	10 x 3/4"			

CATALOG 14

SPAENAUR

B66

Inch

Pouce



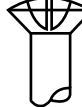




Wood Screws - Phillips Drive

Vis à bois – tête cruciforme

PKG QTY. 100
ALL ITEMS ON THIS PAGE



Inch Sizes		STEEL			BRASS		Head & Drive Dimensions to ASME B18.6.1
							
DIA.	L.	FLAT ZINC PLATED	ROUND ZINC PLATED	OVAL NICKEL PLATED	FLAT PLAIN FINISH	ROUND PLAIN FINISH	
3	1/2			B-388			
4	1/4				584-A05-1M		
	3/8				584-001		
	1/2	B-349			584-002	584-015	
	3/4				584-003		
	1	B-391					
6	1/2	B-351			584-A03-1K	584-017	
	5/8				WS-631P	584-A02-1T	
	3/4	585-004	585-014	585-010 (Zinc Plated)	584-004	584-019	
	1	B-353	585-015				
	1-1/4				584-033		
8	1/2	B-354			584-005	584-020	
	3/4	585-P01-1M	585-003 (Brass Plated)		584-A01-1N	584-A06-1X	
	1	B-356	585-016	585-011	WS-630P		
	1-1/4	WS-191	585-P03-1A		WS-517P	584-022	
	1-1/2	585-P02-1X	WS-196		WS-518P	584-023	
	1-3/4	WS-192			584-A04-1W		
	2	WS-195	WS-194				
10	3/4				584-031		
	1	585-P05-1Y			584-006	584-A08-1P	
	1		585-P04-1P				
	1-1/4	WS-72		585-013 (Zinc Plated)	584-A07-1A		
	1-1/2		585-019		584-008		
	1-3/4	WS-75			584-009		
	2	WS-76			584-010		
	3	585-020					
12	1				584-032		
	1-1/2	WS-35			584-011	584-029	
	1-3/4				584-012		
	2	585-002			584-013	584-030	
	3	585-P07-1N					
	3-1/2	585-006					
14	1-1/2	585-007					
	1-3/4	585-008					
	2	585-009					

B

For Deck, Fence and Construction Screws see Pages B303-B304

Wood Screws - Square Drive

Vis à bois – tête carrée



Inch

Pouce

PKG QTY. 100



B

Inch Sizes		STEEL			BRASS		
ASME B18.6.1		ZINC PLATED			PLAIN FINISH		
DIA.	L.	FLAT	▲ROUND	OVAL	FLAT	□ROUND	OVAL
4	3/8	WS-51					
	1/2	WS-52	WS-200		WS-555	WS-569	
	5/8	593-001					
	3/4	WS-53	WS-178		WS-556		
	1	WS-201					
5	1/2	WS-54			592-A05-1K		
	3/4	WS-55	WS-134		WS-558		
	1	WS-202					
6	3/8		593-K01-1P				
	1/2		WS-120		592-A04-1T	592-A01-1Y	
	5/8	WS-180	WS-2		WS-559		
	3/4	WS-56	WS-132		WS-538	592-A03-1N	
	1	593-K02-1Y	WS-133	WS-207	592-A06-1W	592-003	
	1-1/4	WS-58	593-K24-1A		WS-560	WS-577	
	1-1/2	593-005	WS-123		WS-646		
	1-3/4	593-006					
7	2	WS-94					
	1/2		593-K19-1W				
	3/4	WS-59					
	1	WS-60	WS-143				
	1-1/4		WS-154				
8	1-1/2	WS-203					
	5/8	WS-62	WS-124				
	3/4	WS-63	593-K20-1K		WS-543	WS-583	
	3/4	593-002 (No. 6 Head)					
	7/8	WS-64	593-K07-1W				
	1	WS-20	WS-150		WS-545	592-A02-1C	WS-616
	1-1/4	WS-65	WS-126		WS-546	WS-586	WS-617
	1-1/2	593-K05-1T	WS-156	593-K09-1X	WS-547	592-A07-1M	
	1-3/4	WS-179	WS-127		WS-652		
	2	WS-80	WS-157		WS-627		
9	2-1/2	WS-81	WS-158			592-001	
	3/4	593-K12-1A					
	1-1/4	593-K11-1X					
10	3/4	WS-69	WS-128		WS-564	WS-590	
	7/8	WS-146	WS-144				
	1	WS-40	WS-129		WS-548	WS-591	
	1-1/4	WS-41	WS-159		WS-549		
	1-1/2	WS-42	WS-130		WS-550	WS-593	WS-621
	1-3/4	WS-43	WS-160		WS-565		

▲ Slight Flattening of Head Crown may occur due to formation of square socket recess.

Continues on Next Page

Inch

Pouce



Wood Screws - Square Drive

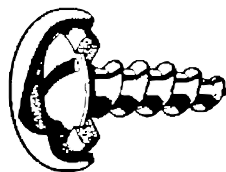
Vis à bois – tête carrée

PKG QTY. 100



Inch Sizes		STEEL			BRASS
					Head Dimensions to ASME B18.6.1
Continued from Previous Page		ZINC PLATED			PLAIN FINISH
DIA.	L.	FLAT	▲ROUND	OVAL	FLAT
10	2	593-K23-1X	WS-131		WS-566
	2-1/4	WS-95	WS-161	WS-103	
	2-1/2	WS-136	WS-145	593-K08-1M	
	3	WS-96	593-K03-1C	WS-173	
	3-1/2	WS-139			
12	1	WS-141			
	1-1/4	WS-45	WS-163		
	1-1/2	WS-46	593-K13-1P		
	1-3/4	WS-47	593-K10-1M		WS-567
	2	WS-48	WS-166		WS-553
	2-1/4	WS-49	WS-167		
	2-1/2	WS-50	WS-168		592-004
14	1-1/4	593-004			
	1-1/2		593-K25-1P		
	1-3/4	WS-91	593-K21-1W		
	2	WS-70	WS-172		
	2-1/2	593-K06-1K			
	3-1/2	593-K22-1M			
	4	593-003			

▲Slight Flattening of Head Crown may occur due to formation of square socket recess.



See page J42 for...

Snapcaps

Decorative Plastic Caps

Made in colours, to match leather, vinyl, wood, and metals.

For Countersunk and Finishing Washers see Page D68

Wood Screws - Square Drive Assortments

Assortiments de vis à bois – tête carrée



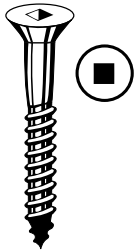
Inch and Metric
Pouce et Métrique

ASSORTMENT
ASSORTIMENT **805-661-A**

STEEL
Wood Screws
Zinc Plated

SQUARE
SOCKET
DRIVE

24 SIZES
1150 PIECES



Furnished in Large Size grey enamel drawer with scooped bins for easy access.
Drawers will fit into Slide Racks shown on page A3

Shipping Weight: **7.71 kg** (17 lbs)

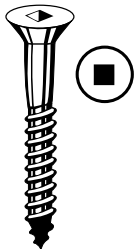
Head Type	Spaenaur No.	Dia. X Lgth.	Qty.	Page
Flat	WS-56	6 x 3/4"	50	B68
	593-K02-1Y	6 x 1"		
	593-005	6 x 1-1/2"		
	WS-94	6 x 2"		
	WS-63	8 x 3/4"		
	WS-20	8 x 1"		
	WS-65	8 x 1-1/4"		
	593-K05-1T	8 x 1-1/2"		
	WS-80	8 x 2"		
	WS-81	8 x 2-1/2"		
	WS-40	10 x 1"	25	B69
	WS-41	10 x 1-1/4"		
	WS-42	10 x 1-1/2"		
	593-K23-1X	10 x 2"		
	WS-136	10 x 2-1/2"		
WS-96	10 x 3"	50	B68	
WS-139	10 x 3-1/2"			
WS-46	12 x 1-1/2"			
WS-48	12 x 2"			
Round	WS-50	12 x 2-1/2"		
	593-K01-1P	6 x 3/8"		
	WS-126	8 x 1-1/4"		
	WS-157	8 x 2"		
	WS-128	10 x 3/4"		

ASSORTMENT
ASSORTIMENT **805-541A**

BRASS
Wood Screws

SQUARE
SOCKET
DRIVE

24
SIZES
1125
PIECES



Furnished in Regular Size grey enamel drawer with scooped bins for easy access.
Drawers will fit into Slide Racks shown on page A2

Shipping Weight: **5.18 kg** (11.42 lbs)

Head Type	Spaenaur No.	Thread Diameter	Screw Length	Qty.	Page
Flat	WS-555	#4	1/2"	50	B68
	WS-558	#5	3/4"		
	WS-538	#6	1"		
	592-A06-1W		1-1/2"		
	WS-646	#8	3/4"		
	WS-543	#8	1-1/4"		
	WS-546		1-1/2"		
	WS-547		1-3/4"		
	WS-652	#10	2"	40	
	WS-627	#10	1-1/4"	50	B69
	WS-549		1-1/2"		
	WS-550	#12	1-3/4"	30	
WS-567	#12	2"	35		
WS-553		M6	40mm	40	
Round	592-A03-1N	#6	3/4"	50	B68
	WS-577		1-1/4"		
	WS-583	#8	3/4"		
	WS-586	1-1/4"			
	592-001	2-1/2"			
WS-590	#10	3/4"			
Oval	WS-616	#8	1"	30	B69
	WS-617		1-1/4"		
	WS-621	#10	1-1/2"		

Inch and Metric

Pouce et Métrique



Wood Screws - Robertson® / Square Socket Drive

Vis à bois - Robertson® / Prise à douilles carrées

STEEL Round Washer Head
Wood Screw
Robertson® Drive



#8 Robertson® 2/3 Thread
Minor Dia. .103"/.108"

SPAENAUR No.	Dia. x Length	Finish	PKG QTY.
593-K16-1N	8 x 1-1/8"	Zinc	100
593-K04-1N	8 x 1-3/4"	Lubricized	100
593-K15-1C	8 x 1-3/4"	Zinc	100
593-034	8 x 3"	Zinc	50

Note:
Robertson® is a square recess drive - also known as Scrulox®
Lubricize is a dry wax finish over plain heat treated parts.

Particleboard/Wood Screws

HARDENED STEEL - Yellow Zinc Plated and Wax Coated

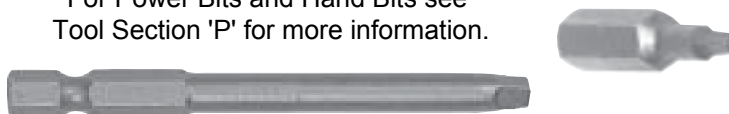
FLAT HEAD (90° countersunk) Square Socket Drive



SPAENAUR No.	Metric Size (mm)	Approx. Inch Equivalent	Qty. per Box
701-018	4.0 x 30	8 x 1-1/4"	100

Use Square Socket Bit	With Metric Diameter	With Inch Diameter
#1	M3 - M3.5	#4 - #6
#2	M4 - M5	#8 - #10
#3	M6	#12- #14

For Power Bits and Hand Bits see Tool Section 'P' for more information.



CATALOG 14 SPAENAUR

Particle Board Screws - Torx® Drive

Vis pour panneaux de particules – prise Torx^{MD}



Inch and Metric

Pouce et Métrique

Particleboard/Wood Screws

HARDENED STEEL - Yellow Zinc Plated and Wax Coated

FLAT HEAD (90° countersunk) Torx Drive

B

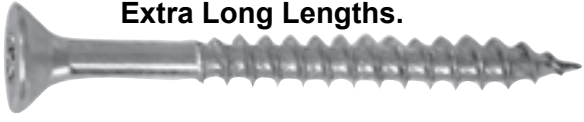
Torx® drive provides a superior positive drive eliminating drive breakout found in other types of drives. Its design requires less force to keep the tool tip engaged.



Sharp, knife-edge threads and sharp point bite instantly. Rough drilling is not necessary.

Secondary shoulder provides additional strength and eliminates the single stress point thus minimizing head "pop-off".

Case hardened material, Zinc di-chromate finish for higher corrosion resistance, and a wax coating for lubrication to enhance performance during insertion.

SPAENAUR No.	Metric Size (mm)	Approx. Inch Equivalent	PKG QTY.	SPAENAUR No.	Metric Size (mm)	Approx. Inch Equivalent	PKG QTY.
701-065	3.0 x 16	4 x 5/8"	100	701-082	5.0 x 20	10 x 3/4"	100
701-066	3.0 x 20	4 x 3/4"	100	701-083	5.0 x 25	10 x 1"	100
701-067	3.0 x 25	4 x 1"	100	701-085	5.0 x 40	10 x 1-1/2"	100
701-235	3.0 x 30	4 x 1-1/4"	100	701-086	5.0 x 45	10 x 1-3/4"	100
701-068	3.5 x 12	6 x 1/2"	100	701-087	5.0 x 50	10 x 2"	100
701-069	3.5 x 16	6 x 5/8"	100	701-088	5.0 x 60	10 x 2-1/2"	100
701-070	3.5 x 20	6 x 3/4"	100	701-089	5.0 x 70	10 x 2-3/4"	50
701-072	3.5 x 30	6 x 1-1/4"	100	701-051	5.0 x 80	10 x 3-1/8"	50
701-073	3.5 x 40	6 x 1-1/2"	100	701-054	5.0 x 90	10 x 3-1/2"	50
701-055	3.5 x 45	6 x 1-3/4"	100	701-090	5.0 x 100	10 x 4"	50
701-074	4.0 x 16	8 x 5/8"	100	701-091	6.0 x 50	12/14 x 2"	100
701-075	4.0 x 20	8 x 3/4"	100	701-092	6.0 x 60	12/14 x 2-1/2"	100
701-076	4.0 x 25	8 x 1"	100	701-093	6.0 x 70	12/14 x 2-3/4"	50
701-077	4.0 x 30	8 x 1-1/4"	100	701-094	6.0 x 80	12/14 x 3-1/8"	50
701-078	4.0 x 40	8 x 1-1/2"	100	701-095	6.0 x 90	12/14 x 3-1/2"	50
701-079	4.0 x 45	8 x 1-3/4"	100	701-096	6.0 x 100	12/14 x 4"	50
701-057	4.0 x 50	8 x 2"	100	 <p>Extra Long Lengths.</p>			
701-236	4.0 x 60	8 x 2-1/2"	100				
701-058	4.0 x 70	8 x 2-3/4"	50	701-097	6.0 x 120	12/14 x 4-3/4"	50
701-080	4.5 x 20	9 x 3/4"	100	701-098	6.0 x 140	12/14 x 5-5/8"	50
701-081	4.5 x 25	9 x 1"	100	701-A01-1T	6.0 x 160	12/14 x 6-3/8"	25
701-052	4.5 x 30	9 x 1-1/4"	100	701-228	6.0 x 180	12/14 x 7-1/4"	25
701-060	4.5 x 40	9 x 1-1/2"	100	701-229	6.0 x 200	12/14 x 8"	25
701-061	4.5 x 45	9 x 1-3/4"	100	701-234	6.0 x 300	12/14 x 12"	25
701-062	4.5 x 50	9 x 2"	100	<p>For Power Bits and Hand Bits see Tool Section 'P' for more information.</p>			
701-053	4.5 x 60	9 x 2-1/2"	100				
701-059	4.5 x 70	9 x 2-3/4"	50				
701-063	4.5 x 80	9 x 3-1/8"	50				

CATALOG 14

SPAENAUR

Inch and Metric

Pouce et Métrique



Lag Screws - Torx® Drive

Tire-fonds – tête Torx^{MD}



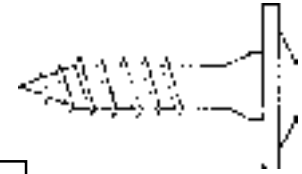
RSS Lagscrew

Torx Drive

Low Carbon Steel - Case Hardened

Yellow Zinc Plated

T-Star Recess



Torx
Washer Head

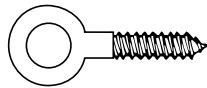
SPAENAUR No.	Dimensions		PKG QTY.
	Metric	U.S. Standard	
038-250	7.93 x 60 mm	5/16 x 2-1/2"	50
038-251	7.93 x 80 mm	5/16 x 3-1/8"	50
038-252	7.93 x 100 mm	5/16 x 4"	50
038-253	7.93 x 130 mm	5/16 x 5-1/8"	50
038-254	7.93 x 150 mm	5/16 x 6"	50
038-255	9.52 x 180 mm	3/8 x 7-1/4"	10
038-256	9.52 x 200 mm	3/8 x 8"	10



T30
Recess Drive

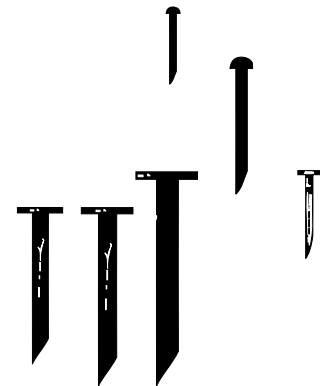


For Hex Head Lag Screws in plain and hot galvanized steel and stainless steel see pages B256 and B257.



For Lag Screw Eye Bolts see page B273.

For Screw Eyes, Screw Hooks, Shoulder Hooks and Cup Hooks see pages B273-B275.



For
Stainless Steel Common Nails
Nails for Marine Service
Decking Nails for Pressure Treated Lumber
Finishing Nails
Roofing Nails (Slating Nails)
Gimp Tacks
Blued Sanitary Upholsterers' Tacks

See pages M44 and M45

