FAIRWINDS MANUFACTURING

TRENCHING CHAINS

Click on an item to navigate to the corresponding page.

FairWinds Manufacturing, Inc.

Contact Us:

724-662-5210

https://fairwindsmfg.com/trenching-chains/

All about the 4501 Single Roller & 4502 Double Roller

K-Bracket Style

HOME

FairWinds Manufacturing specializes in the production of 4-1/2″ pitch trenching chains compatible with Vermeer, Trencor, or Tesmec trenching machines. Crafted from Alloy steel with heat-treated components, our chains are engineered to minimize journal wear and extend their lifespan. Fairwinds Manufacturing trenching chains have the following features that are not found in other 4-1/2 inch pitch trenching chains:

Distinguishing features of FairWinds Manufacturing trenching chains include:

- Each connecting link assembly functions as a master link, eliminating the need for unique master links. Our design features machined journal holes and ground journal pins held to precise tolerances for reliable press fits. Stainless steel retaining rings secure the connecting links, facilitating easy disassembly and assembly using hand tools.
- Roller link assemblies match the height of connecting links, eliminating the requirement for special wear strips to support top plate/bit holder assemblies. This streamlines the cost associated with top plate assemblies.
- Traditional bushings and rollers in roller links are replaced by a one-piece step bushing, enhancing chain performance.
- Outer connecting link side plates, or "K" brackets, feature machined top surfaces to ensure proper fit-up with top plate/bit holder assemblies. The distance between top plate attachment holes in the K brackets is maintained within a close tolerance of + 0.025 inches to ensure precise fit-up with top plate assemblies.
- Bottom surfaces of roller link and connecting link side plates are machined to align within the same plane, minimizing initial wear as they contact wear strips in boom assemblies.
- Journal pins and holes are machined with precision tolerances and assembled with break-in lubricant to minimize initial wear and extend journal life over the chain's lifespan.
- Chain components are constructed from high-strength alloy steels, heat-treated to optimize wear resistance and strength. All side plates are 5/8 of an inch thick, and journal pins are 1-5/16 inches in diameter.

These features collectively result in a trenching chain that is easier and safer to maintain, offering extended lifespan and superior overall performance.

All about the Rock Ripper

HOME

Instead of having the sprocket directly drive the chain, opt for a system where the sprocket drives the top plate. This is precisely what the Rock Ripper trenching chain accomplishes. By doing so, it creates a lower profile and a shorter lever arm to the pick point, providing sturdier support for the cut and greater impact to the rock. This innovation enables your machine to achieve cutting capabilities like never before.

The Rock Ripper trenching chain is comprised of multiple identical sections, each featuring one alloy link, one or two journal pins, and two retaining pins. Bit holding blocks are welded directly onto each link, eliminating the need for time-consuming replacement of nuts and bolts as required by competitor chains. The outcome is enhanced strength, increased durability, reduced maintenance, and a lower cost per length of trench formed.

Specifications:

- Simplified and safer maintenance procedures
- Cost-saving benefits, helping to maintain low overheads
- Improved design with 29 pieces consolidated into just 4
- Produces a stronger and more durable product
- Provides superior cutting performance and rigidity compared to other models
- Competitively priced to ensure affordability

If you would like to learn more about the Rock Ripper please call Mike Latchaw at 724-662-5210 or email at mike.latchaw@fairwindsmfg.com

TRENCOR AND VERMEER
4501 and 4502

HOME

Choose which style and whether you need high or low.
This will take you to the page you need

4501 SINGLE ROLLER

- *4.125 High*
- *3.5 Low*

4502 DOUBLE ROLLER

- *4.125 High*
- *3.5 Low*

Information we will need when you call to place an order

MACHINE: _____

HIGH OR LOW ROLLER: _____

HOW MANY TOP PLATES: _____

You can order as many top plates as you need

4501 Single Roller - High
K-Bracket Style

Trencor and Vermeer

HOME

4.125 Inch High Roller and Connecting Assemblies

One section = one top plate and two pins

50000-05002	Sales Sample; one chain section
50000-05026	13 section chain, 26 pitches
50000-05068	34 section chain, 68 pitches
50000-05074	37 section chain, 74 pitches
50000-05080	40 section chain, 84 pitches
50000-05084	42 section chain, 84 pitches
50000-05092	46 section chain, 92 pitches
50000-05102	51 section chain, 102 pitches
50000-05110	55 section chain, 110 pitches

You can order as many top plates as you need

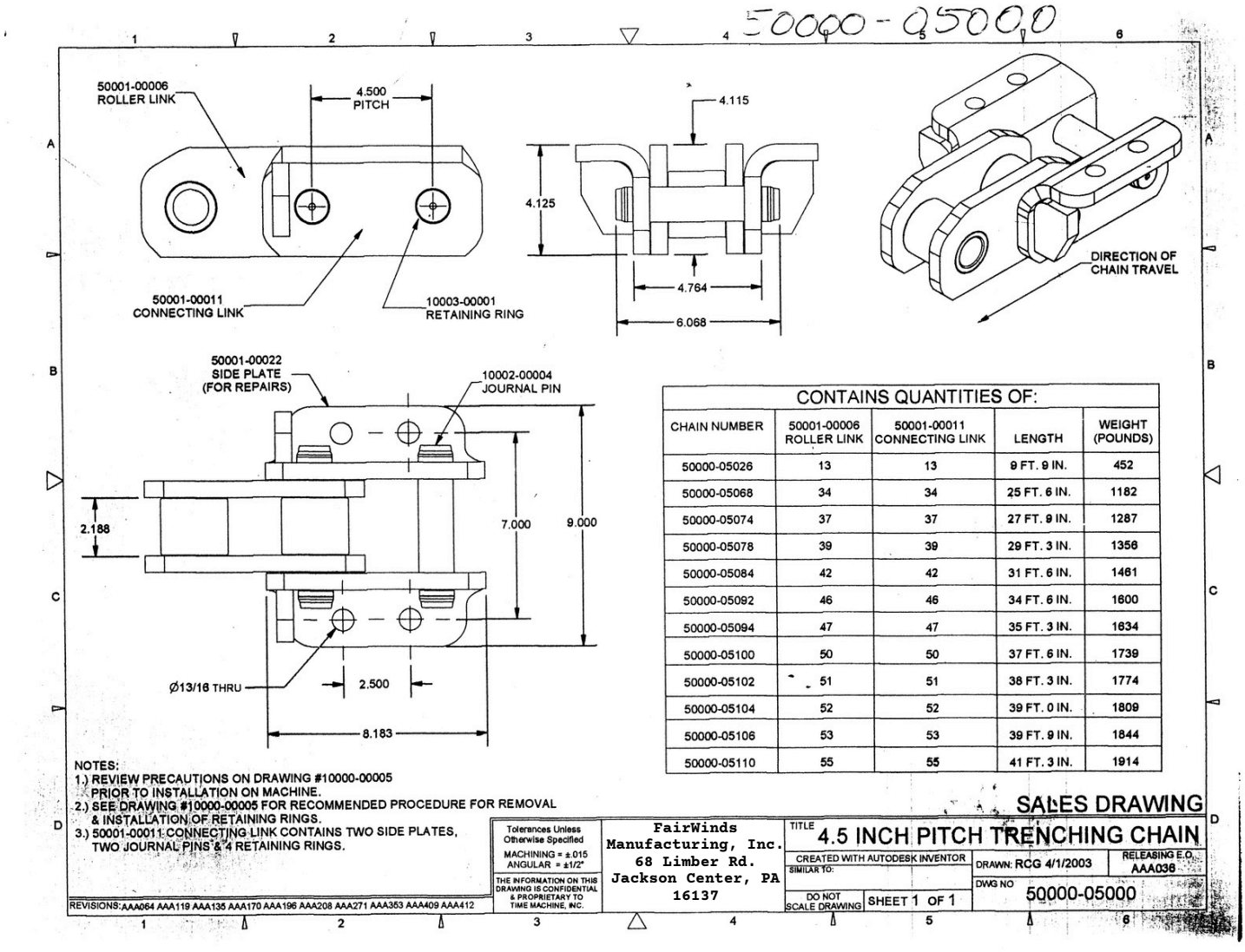
4501 Single Roller - High
K-Bracket Style

Trencor and Vermeer

HOME

4.125 Inch High Roller and Connecting Assemblies

One section = one top plate and two pins



CONTAINS QUANTITIES OF:				
CHAIN NUMBER	50001-00006 ROLLER LINK	50001-00011 CONNECTING LINK	LENGTH	WEIGHT (POUNDS)
50000-05026	13	13	9 FT. 9 IN.	452
50000-05068	34	34	25 FT. 6 IN.	1182
50000-05074	37	37	27 FT. 9 IN.	1287
50000-05078	39	39	29 FT. 3 IN.	1356
50000-05084	42	42	31 FT. 6 IN.	1461
50000-05092	46	46	34 FT. 6 IN.	1600
50000-05094	47	47	35 FT. 3 IN.	1634
50000-05100	50	50	37 FT. 6 IN.	1739
50000-05102	51	51	38 FT. 3 IN.	1774
50000-05104	52	52	39 FT. 0 IN.	1809
50000-05106	53	53	39 FT. 9 IN.	1844
50000-05110	55	55	41 FT. 3 IN.	1914

You can order as many top plates as you need

4501 Single Roller - Low
K-Bracket Style

Trencor and Vermeer

HOME

3.5 Inch High Roller Link Assembly,
4.125 Inch High Connecting Link Assembly

One section = one top plate and two pins

50000-11002	Sales Sample; one chain section
50000-11068	34 section chain, 68 pitches
50000-11074	37section chain, 74 pitches
50000-11086	43 section chain, 86 pitches
50000-11092	46 section chain, 92 pitches

You can order as many top plates as you need

4501 Single Roller - Low
K-Bracket Style

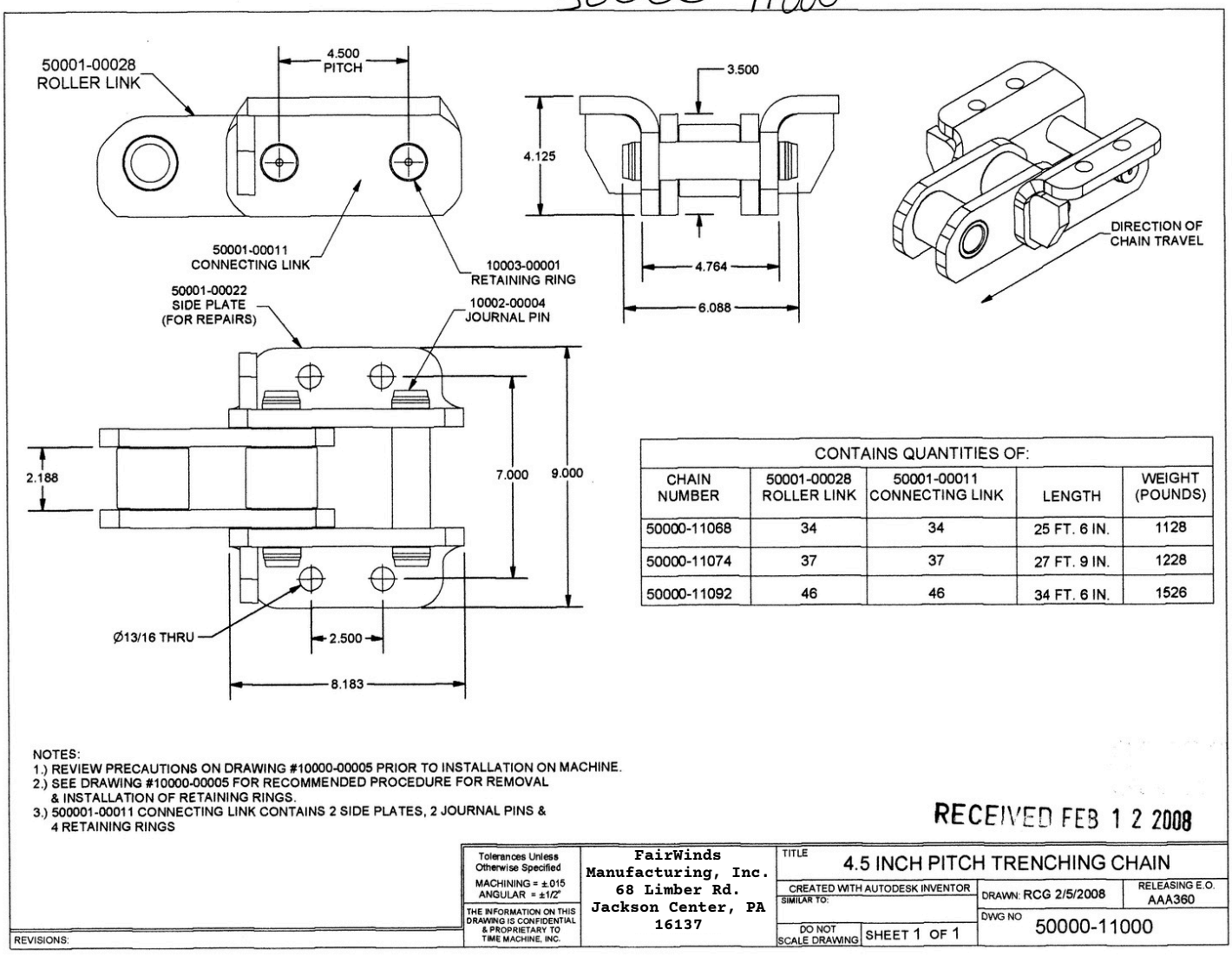
Trencor and Vermeer Machines

HOME

3.5 Inch High Roller Link Assembly,
4.125 Inch High Connecting Link Assembly

One section = one top plate and two pins

50000-11000



CONTAINS QUANTITIES OF:				
CHAIN NUMBER	50001-00028 ROLLER LINK	50001-00011 CONNECTING LINK	LENGTH	WEIGHT (POUNDS)
50000-11068	34	34	25 FT. 6 IN.	1128
50000-11074	37	37	27 FT. 9 IN.	1228
50000-11092	46	46	34 FT. 6 IN.	1526

NOTES:
1.) REVIEW PRECAUTIONS ON DRAWING #10000-00005 PRIOR TO INSTALLATION ON MACHINE.
2.) SEE DRAWING #10000-00005 FOR RECOMMENDED PROCEDURE FOR REMOVAL & INSTALLATION OF RETAINING RINGS.
3.) 500001-00011 CONNECTING LINK CONTAINS 2 SIDE PLATES, 2 JOURNAL PINS & 4 RETAINING RINGS

RECEIVED FEB 1 2 2008

Tolerances Unless Otherwise Specified MACHINING = ±.015 ANGULAR = ±1/2°	FairWinds Manufacturing, Inc. 68 Limber Rd. Jackson Center, PA 16137	TITLE: 4.5 INCH PITCH TRENCHING CHAIN	
THE INFORMATION ON THIS DRAWING IS CONFIDENTIAL & PROPRIETARY TO TIME MACHINE, INC.		CREATED WITH AUTODESK INVENTOR SIMILAR TO:	DRAWN: RCG 2/5/2008 RELEASING E.O. AAA360
REVISIONS:		DO NOT SCALE DRAWING SHEET 1 OF 1	DWG NO 50000-11000

You can order as many top plates as you need

4502 Double Roller - High
K-Bracket Style

Trencor and Vermeer

HOME

4.125 Inch High Roller and Connecting Link Assemblies

One section = one top plate and two pins

50000-06002	Sales Sample; one chain section
50000-06080	40 section chain, 80 pitches
50000-06086	43 section chain, 86 pitches
50000-06098	49 section chain, 98 pitches

You can order as many top plates as you need

4502 Double Roller - High

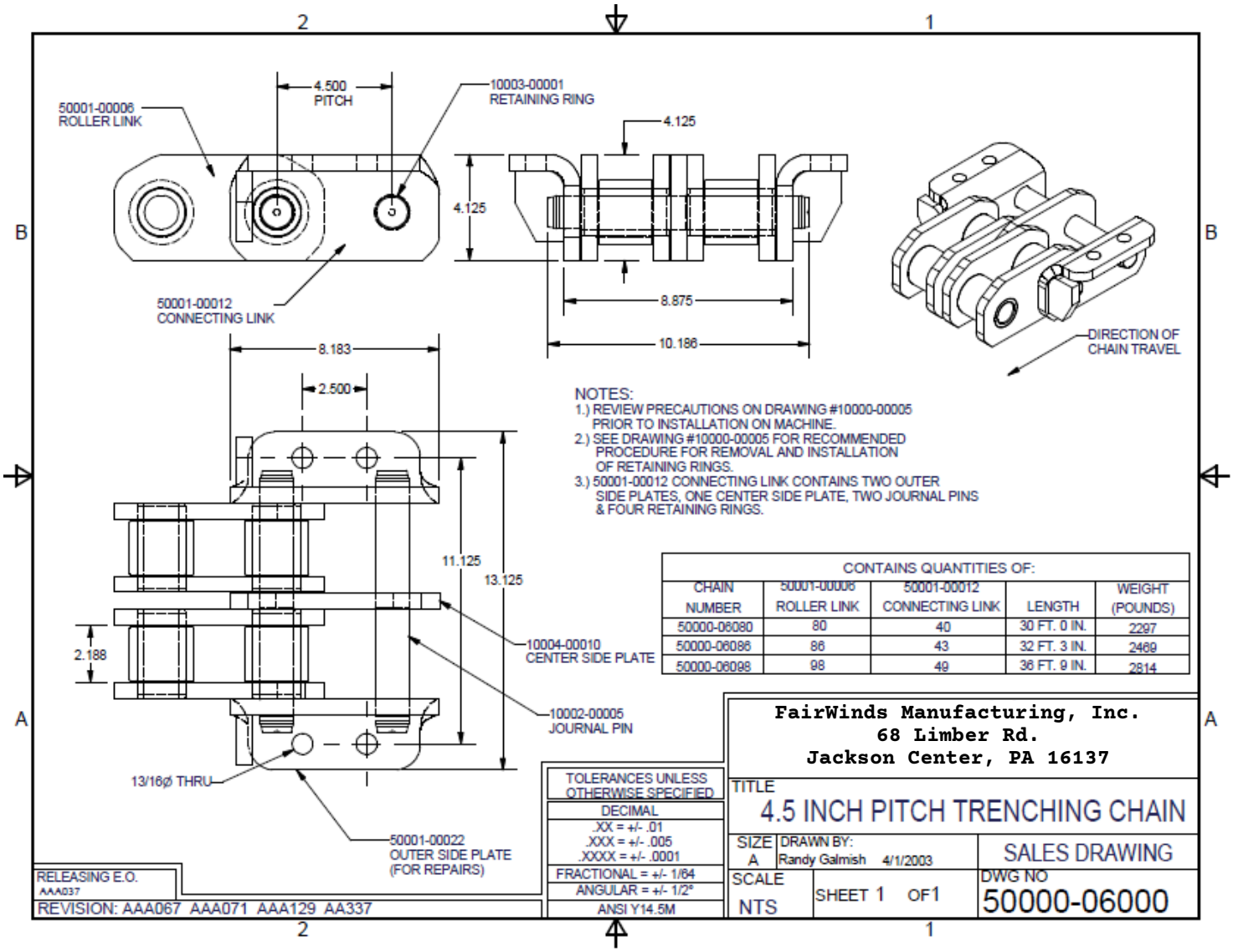
K-Bracket Style

Trencor and Vermeer

HOME

4.125 Inch High Roller and Connecting Link Assemblies

One section = one top plate and two pins



You can order as many top plates as you need

4502 Double Roller - Low
K-Bracket Style

Trencor and Vermeer

HOME

3.5 Inch High Roller Link Assembly, 4.125 Inch High Connecting Link Assembly

One section = one top plate and two pins

50000-13002	Sales Sample; one chain section
50000-13086	43 section chain, 86 pitches

You can order as many top plates as you need

4502 Double Roller - Low

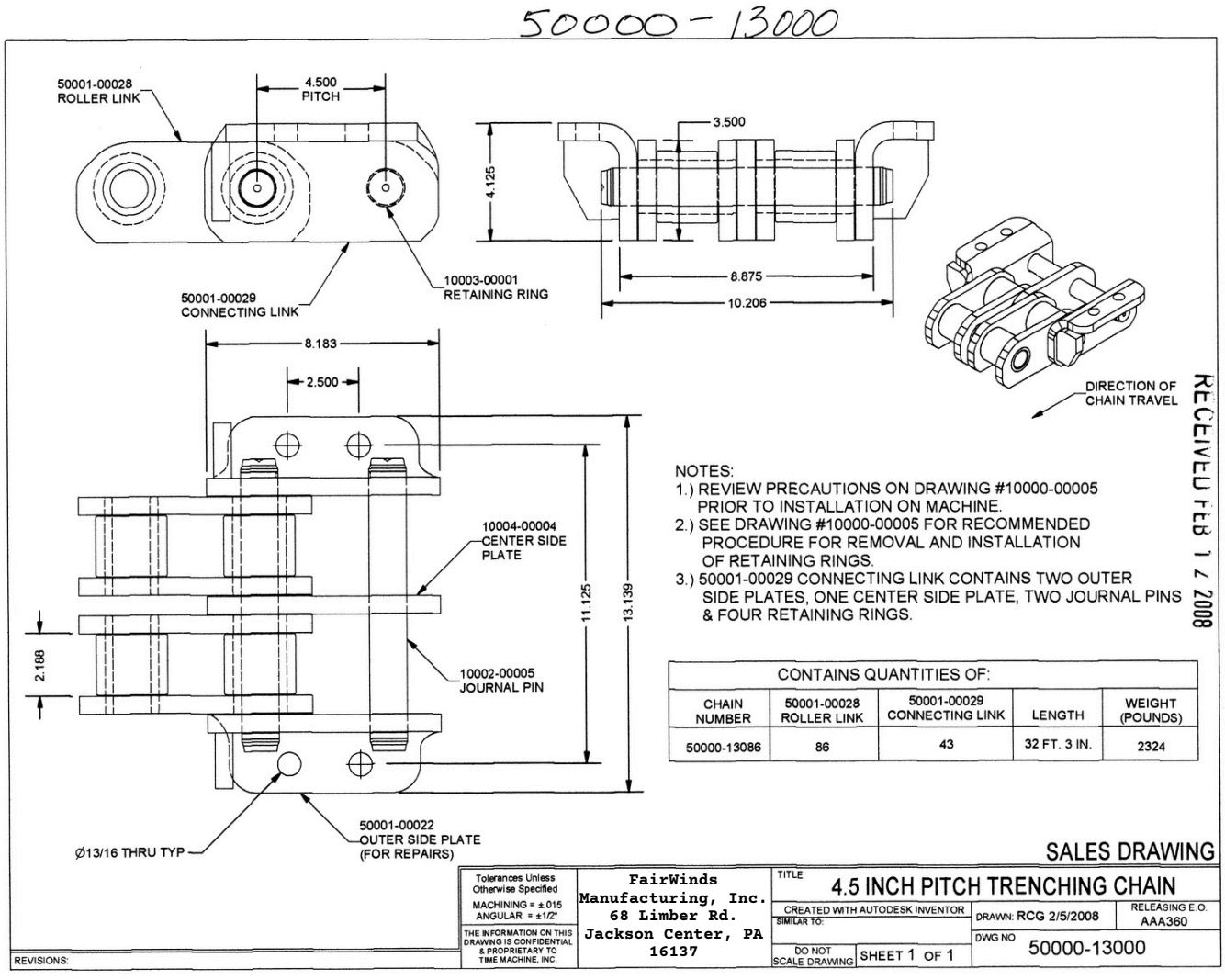
K-Bracket Style

Trencor and Vermeer

HOME

3.5 Inch High Roller Link Assembly,
4.125 Inch High Connecting Link Assembly

One section = one top plate and two pins



You can order as many top plates as you need

TESMEC MACHINES
4501 and 4502

HOME

Choose which style and whether you need high or low.
This will take you to the page you need

4501 SINGLE ROLLER

- *4.125 High*
- *3.5 Low*

4502 DOUBLE ROLLER

- *4.125 High*
- *3.5 Low*

Information we will need when you call to place an order

MACHINE: _____

HIGH OR LOW ROLLER: _____

HOW MANY TOP PLATES: _____

You can order as many top plates as you need

4501 Single Roller – High
K-Bracket Style

Tesmec

HOME

4.125 Inch High Roller and Connecting Assemblies

One section = one top plate and two pins

50000-09002	Sales Sample; one chain section
50000-09062	31 section chain, 62 pitches
50000-09066	33 section chain, 66 pitches
50000-09068	34 section chain, 68 pitches
50000-09074	37 section chain, 74 pitches
50000-09076	38 section chain, 76 pitches
50000-09078	39 section chain, 78 pitches
50000-09082	41 section chain, 82 pitches
50000-09090	45 section chain, 90 pitches
50000-09092	46 section chain, 92 pitches
50000-09098	49 section chain, 98 pitches
50000-09102	51 section chain, 102 pitches
50000-09120	60 section chain, 120 pitches

You can order as many top plates as you need

4501 Single Roller - High

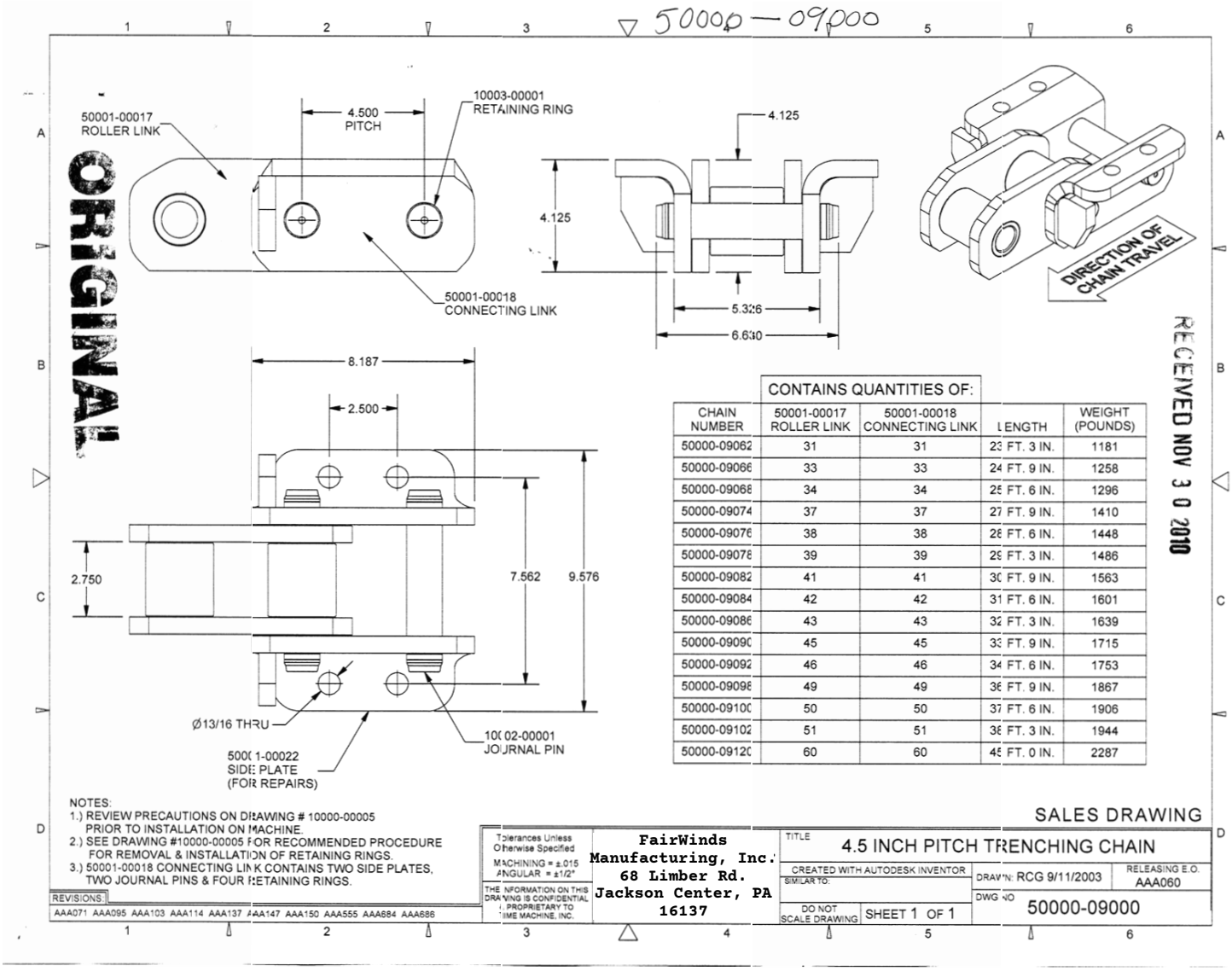
K-Bracket Style

Tesmec

HOME

4.125 Inch High Roller and Connecting Assemblies

One section = one top plate and two pins



CHAIN NUMBER	CONTAINS QUANTITIES OF: 50001-00017 ROLLER LINK	50001-00018 CONNECTING LINK	LENGTH	WEIGHT (POUNDS)
50000-09062	31	31	23 FT. 3 IN.	1181
50000-09066	33	33	24 FT. 9 IN.	1258
50000-09068	34	34	25 FT. 6 IN.	1296
50000-09074	37	37	27 FT. 9 IN.	1410
50000-09076	38	38	28 FT. 6 IN.	1448
50000-09078	39	39	29 FT. 3 IN.	1486
50000-09082	41	41	30 FT. 9 IN.	1563
50000-09084	42	42	31 FT. 6 IN.	1601
50000-09086	43	43	32 FT. 3 IN.	1639
50000-09090	45	45	33 FT. 9 IN.	1715
50000-09092	46	46	34 FT. 6 IN.	1753
50000-09098	49	49	36 FT. 9 IN.	1867
50000-09100	50	50	37 FT. 6 IN.	1906
50000-09102	51	51	38 FT. 3 IN.	1944
50000-09120	60	60	45 FT. 0 IN.	2287

NOTES:
1.) REVIEW PRECAUTIONS ON DRAWING # 10000-00005 PRIOR TO INSTALLATION ON MACHINE.
2.) SEE DRAWING #10000-00005 FOR RECOMMENDED PROCEDURE FOR REMOVAL & INSTALLATION OF RETAINING RINGS.
3.) 50001-00018 CONNECTING LINK CONTAINS TWO SIDE PLATES, TWO JOURNAL PINS & FOUR RETAINING RINGS.

SALES DRAWING

Tolerances Unless Otherwise Specified: MACHINING = ±.015, ANGULAR = ±1/2°

THE INFORMATION ON THIS DRAWING IS CONFIDENTIAL & PROPRIETARY TO FAIRWINDS MACHINE, INC.

FairWinds Manufacturing, Inc.
68 Limber Rd.
Jackson Center, PA
16137

TITLE: 4.5 INCH PITCH TRENCHING CHAIN
CREATED WITH AUTODESK INVENTOR
SIMILAR TO:
DRAWN: RCG 9/11/2003
RELEASING E.O. AAA060
DWG NO 50000-09000
DO NOT SCALE DRAWING
SHEET 1 OF 1

REVISIONS: AAA071 AAA095 AAA103 AAA114 AAA137 AAA147 AAA150 AAA555 AAA684 AAA686

You can order as many top plates as you need

4501 Single Roller - Low
K-Bracket Style

Tesmec

HOME

3.5 Inch High Roller Link Assembly,
4.125 Inch High Connecting Link Assembly

One section = one top plate and two pins

50000-12002	Sales Sample; one chain section
50000-12076	38 section chain, 76 pitches
50000-12090	45 section chain, 90pitches
50000-12108	54 section chain, 108 pitches

You can order as many top plates as you need

4501 Single Roller - Low
K-Bracket Style

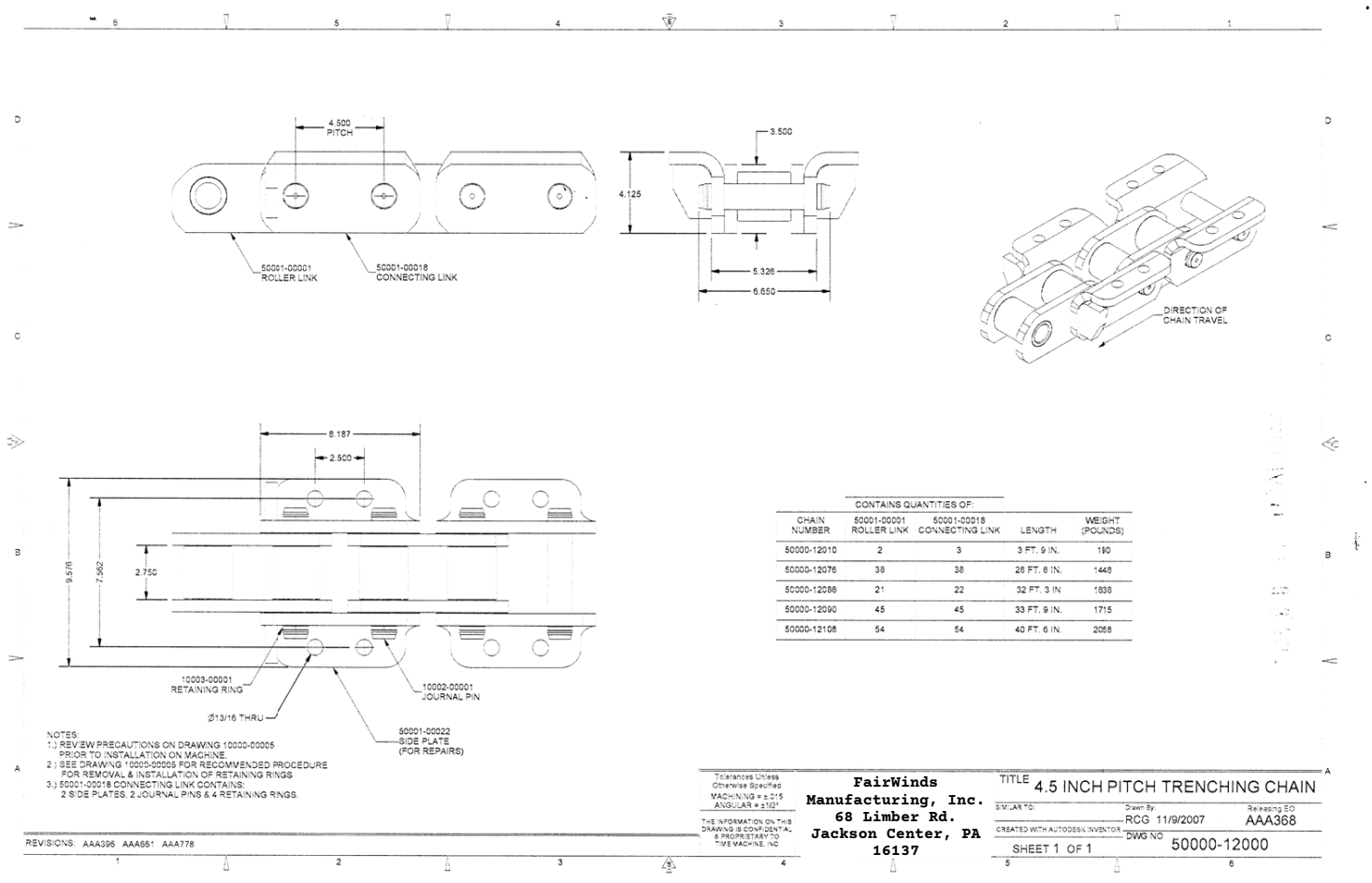
Tesmec

HOME

3.5 Inch High Roller Link Assembly,
4.125 Inch High Connecting Link Assembly

One section = one top plate and two pins

50000 - 12000



CONTAINS QUANTITIES OF:

CHAIN NUMBER	50001-00001 ROLLER LINK	50001-00018 CONNECTING LINK	LENGTH	WEIGHT (POUNDS)
50000-12010	2	3	3 FT. 9 IN.	190
50000-12076	38	38	26 FT. 6 IN.	1448
50000-12088	21	22	32 FT. 3 IN	1838
50000-12090	45	45	33 FT. 9 IN.	1715
50000-12108	54	54	40 FT. 6 IN.	2058

You can order as many top plates as you need

4502 Double Roller - High
K-Bracket Style

Tesmec

HOME

4.125 Inch High Roller and Connecting Link Assemblies

One section = one top plate and two pins

50000-10002	Sales Sample; one chain section
50000-10076	38 section chain, 76 pitches
50000-10080	40 section chain, 80 pitches
50000-10092	46 section chain, 92 pitches
50000-10094	47 section chain, 94 pitches

You can order as many top plates as you need

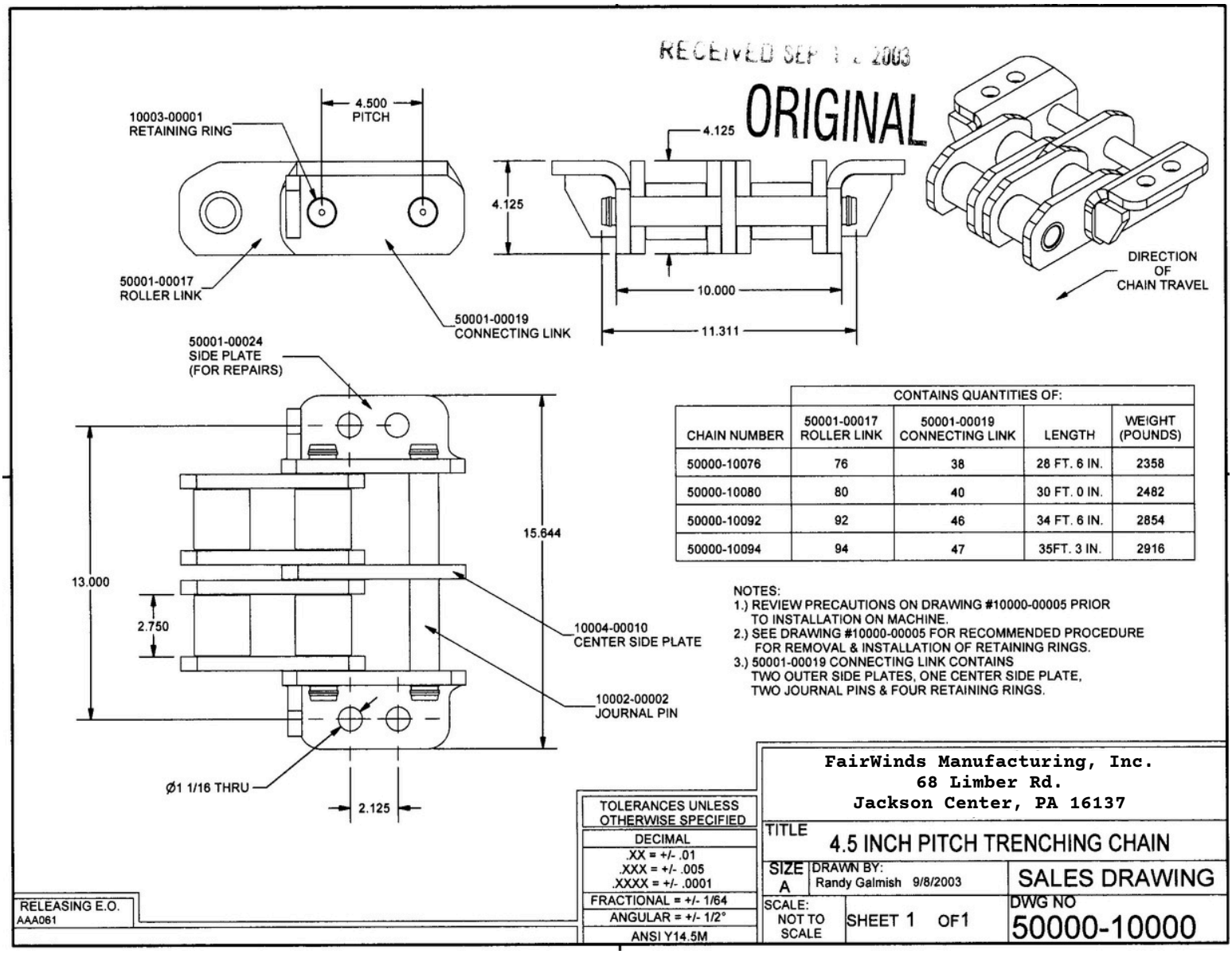
4502 Double Roller - High
K-Bracket Style

Tesmec

HOME

4.125 Inch High Roller and Connecting Link Assemblies

One section = one top plate and two pins



CHAIN NUMBER	CONTAINS QUANTITIES OF: 50001-00017 ROLLER LINK	50001-00019 CONNECTING LINK	LENGTH	WEIGHT (POUNDS)
50000-10076	76	38	28 FT. 6 IN.	2358
50000-10080	80	40	30 FT. 0 IN.	2482
50000-10092	92	46	34 FT. 6 IN.	2854
50000-10094	94	47	35FT. 3 IN.	2916

NOTES:
1.) REVIEW PRECAUTIONS ON DRAWING #10000-00005 PRIOR TO INSTALLATION ON MACHINE.
2.) SEE DRAWING #10000-00005 FOR RECOMMENDED PROCEDURE FOR REMOVAL & INSTALLATION OF RETAINING RINGS.
3.) 50001-00019 CONNECTING LINK CONTAINS TWO OUTER SIDE PLATES, ONE CENTER SIDE PLATE, TWO JOURNAL PINS & FOUR RETAINING RINGS.

RELEASING E.O. AAA061

TOLERANCES UNLESS OTHERWISE SPECIFIED
DECIMAL
.XX = +/- .01
.XXX = +/- .005
.XXXX = +/- .0001
FRACTIONAL = +/- 1/64
ANGULAR = +/- 1/2°
ANSI Y14.5M

FairWinds Manufacturing, Inc.
68 Limber Rd.
Jackson Center, PA 16137

TITLE: 4.5 INCH PITCH TRENCHING CHAIN

SIZE A | DRAWN BY: Randy Galmish 9/8/2003 | SALES DRAWING

SCALE: NOT TO SCALE | SHEET 1 OF1 | DWG NO 50000-10000

You can order as many top plates as you need

4502 Double Roller - Low
K-Bracket Style

Tesmec

HOME

3.5 Inch High Roller Link Assembly, 4.125 Inch High Connecting Link Assembly

One section = one top plate and two pins

50000-14002	Sales Sample; one chain section
50000-14080	40 section chain, 80 pitches
50000-14092	46 section chain, 92 pitches

You can order as many top plates as you need

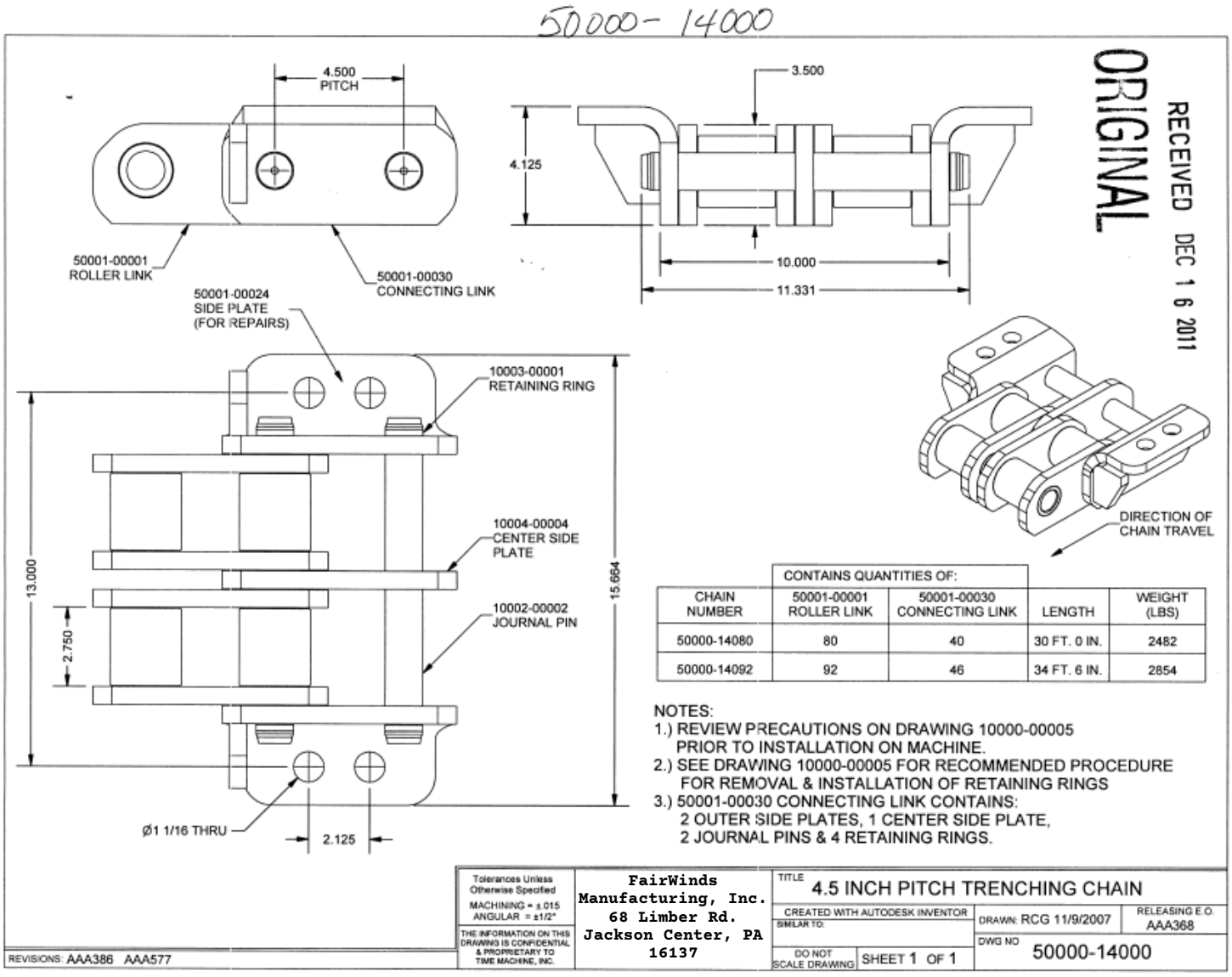
4502 Double Roller - Low
K-Bracket Style

Tesmec

HOME

3.5 Inch High Roller Link Assembly, 4.125 Inch High Connecting Link Assembly

One section = one top plate and two pins



CHAIN NUMBER	CONTAINS QUANTITIES OF: 50001-00001 ROLLER LINK	50001-00030 CONNECTING LINK	LENGTH	WEIGHT (LBS)
50000-14080	80	40	30 FT. 0 IN.	2482
50000-14092	92	46	34 FT. 6 IN.	2854

NOTES:
1.) REVIEW PRECAUTIONS ON DRAWING 10000-00005 PRIOR TO INSTALLATION ON MACHINE.
2.) SEE DRAWING 10000-00005 FOR RECOMMENDED PROCEDURE FOR REMOVAL & INSTALLATION OF RETAINING RINGS
3.) 50001-00030 CONNECTING LINK CONTAINS: 2 OUTER SIDE PLATES, 1 CENTER SIDE PLATE, 2 JOURNAL PINS & 4 RETAINING RINGS.

Tolerances Unless Otherwise Specified
MACHINING = ±.015
ANGULAR = ±1/2°
THE INFORMATION ON THIS DRAWING IS CONFIDENTIAL & PROPRIETARY TO TIME MACHINE, INC.

FairWinds Manufacturing, Inc.
68 Limber Rd.
Jackson Center, PA 16137

TITLE: 4.5 INCH PITCH TRENCHING CHAIN
CREATED WITH AUTODESK INVENTOR
SIMILAR TO:
DRAWN: RCG 11/9/2007
RELEASING E.O. AAA368
DWG NO 50000-14000
DO NOT SCALE DRAWING
SHEET 1 OF 1

REVISIONS: AAA386 AAA577

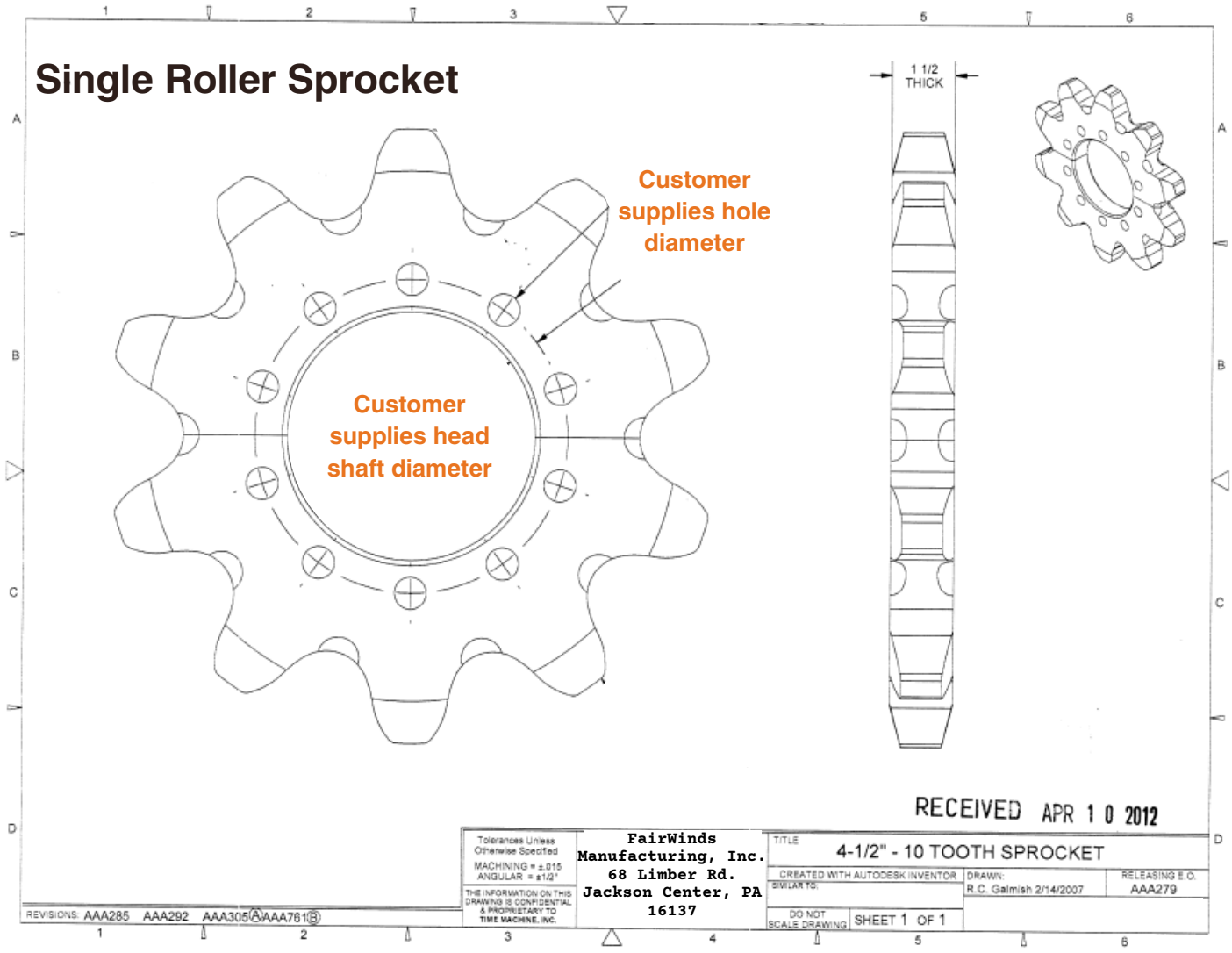
You can order as many top plates as you need

Sprockets

Single and Double

HOME

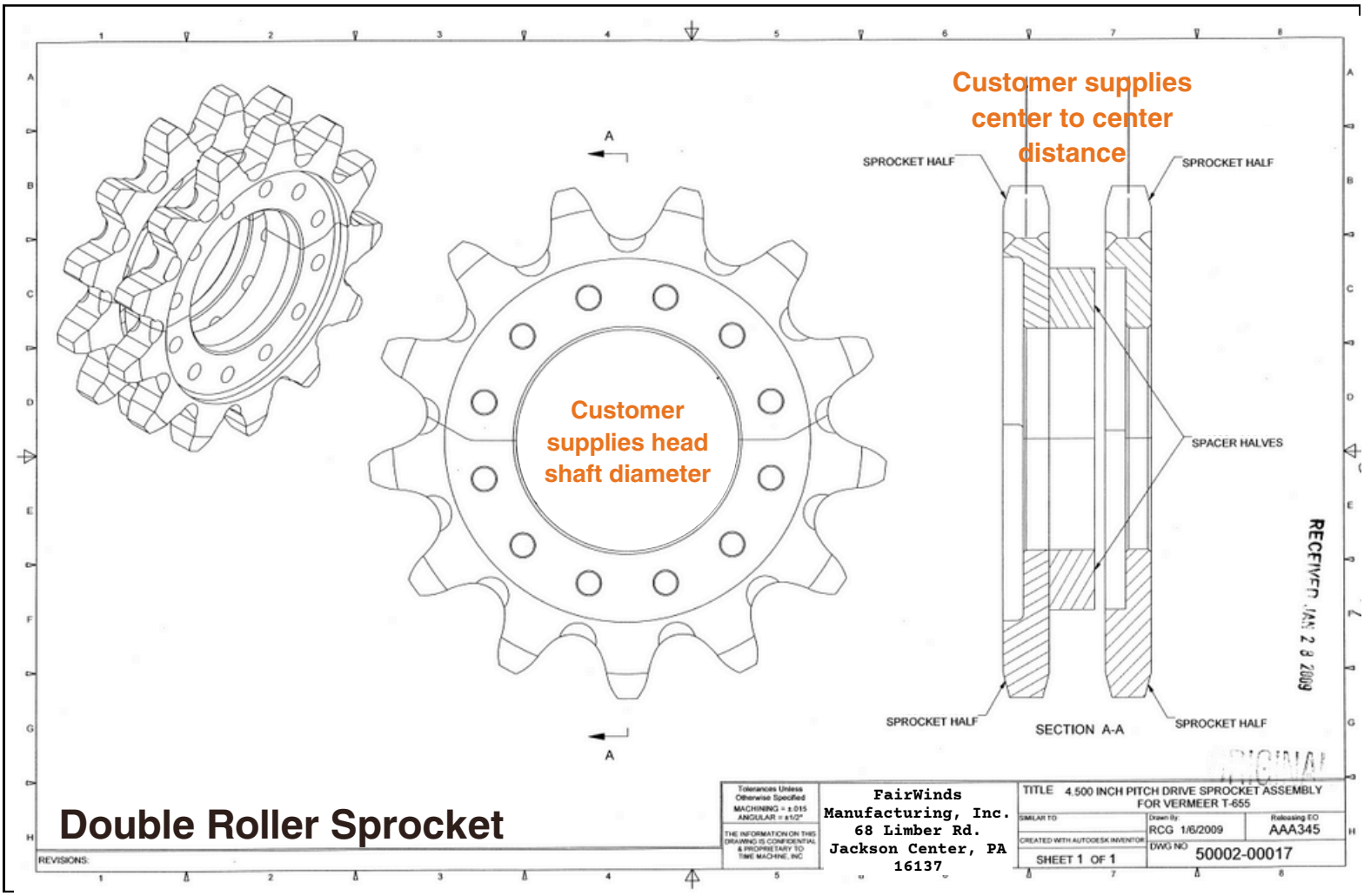
Our trenching chain sprockets are designed using solid modeling software for longer engagement for perfect mate between sprocket and chain. Fashioned from high-quality alloy steel and through-hardened, they promise extended longevity, enduring the rigors of demanding trenching operations with ease. Proudly manufactured in the USA at FairWinds, each sprocket embodies precision engineering and American craftsmanship. Designed with meticulous attention to detail, the pitch of the sprocket perfectly aligns with that of the chain, ensuring seamless compatibility and smooth operation, making them the reliable choice for your trenching needs.



Sprockets

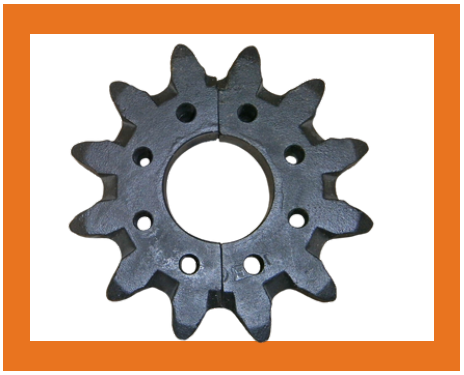
Single and Double

HOME



When calling, please have this information available:

- Machine Make
- Number of teeth
- Head shaft /sprocket bore diameter
- Hole diameter
- Mounting hole diameter
- Number of mounting holes
- Bolt circle (BC) diameter of mounting holes
- Center to Center distance for a double roller.



INFORMATION REQUIRED FOR INQUIRY

Scan and forward this completed worksheet and any relevant photos, questions, or remarks

Jordan: 724-893-4904 | Jordan.Latchaw@FairWindsMFG.com
Mike: 814-673-1578 | Mike.Latchaw@FairWindsMFG.com
Chuck: 724-992-2202 | Charles.Latchaw@FairWindsMFG.com

Company Name: _____

Contact Name: _____

Phone Number: _____

Location: _____

Bare Chain Questions:

1. What manufacturer's machine and model is the chain being used on? _____
2. What model is the chain being used on? _____
3. Is it a single roller (4501) or double roller (4502) Chain? _____
4. How many top plates (stations) will the chain use? _____
5. Are the top plates standard or modified? _____
   (Modified plates have wear strips or hardening on the bottom of the plate)
6. What style of side brackets ("K" brackets) cast or manufactured? _____
7. Are you buying a sprocket? If yes, answer sprocket questions below. _____
   We strongly recommend putting a new sprocket on the machine with the placement of a new chain.

Sprocket Questions:

1. OEM part number _____
2. Number of teeth _____
3. Head shaft diameter _____
4. Hole diameter _____
5. Mounting hole diameter _____
6. Number of mounting holes _____
7. BC diameter of mounting holes _____
   (Bolt Circle)
8. Center to Center distance _____
   (For DOUBLE ROLLER only)

Top Plate Questions:

1. How wide is your trench? _____
2. How thick are your top plates? _____

FairWinds Manufacturing, Inc.