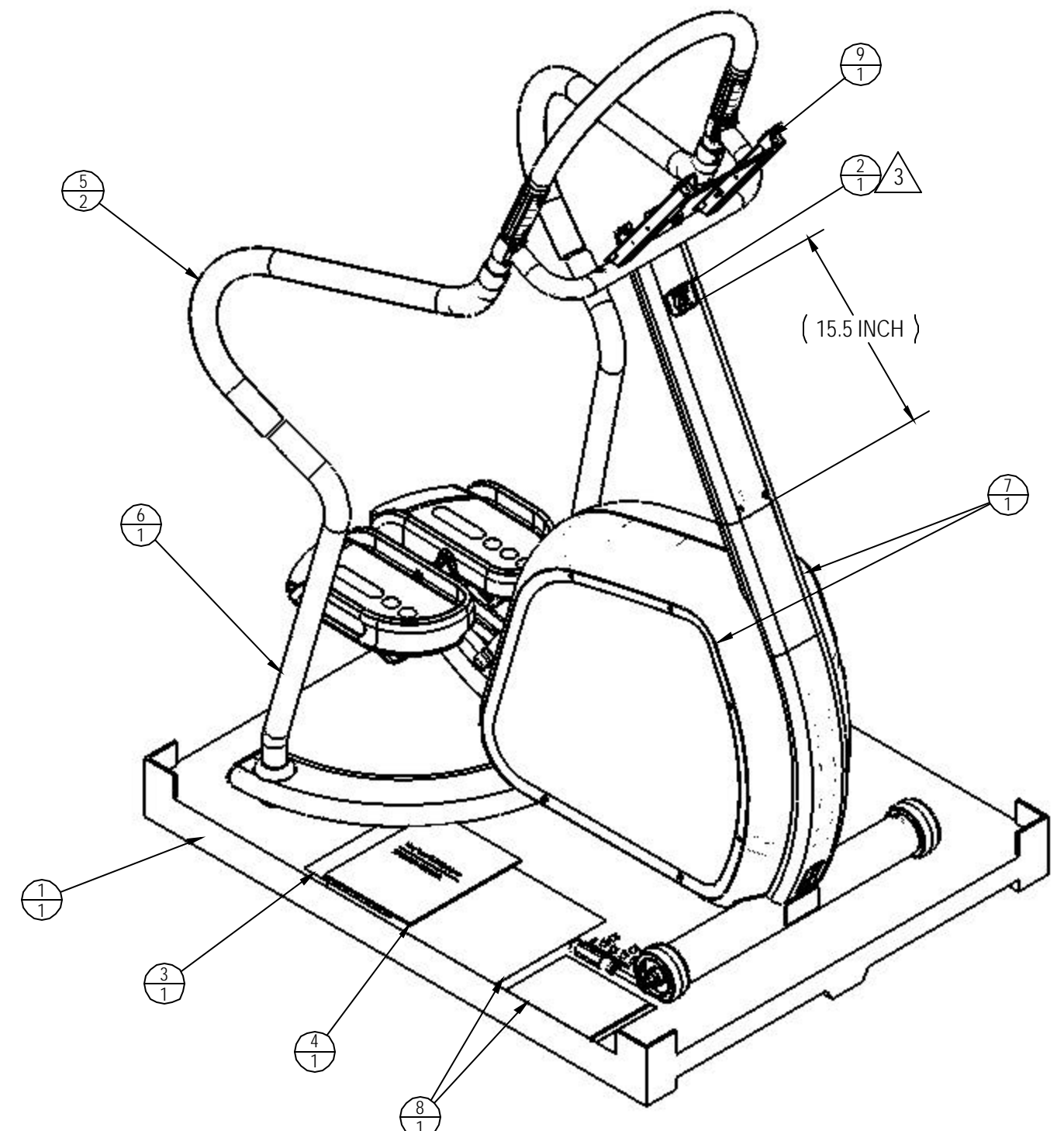


REVISION HISTORY				
REV	DATE	DESCRIPTION	ECO	BY
A	02-04-09	PRODUCTION RELEASE	11996	AK

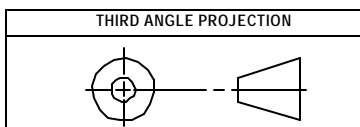


ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	050-2046	ASSY, PACKAGING, E-ST	1
2	050-2093	BADGE, PRODUCT, E-STE	1
3	620-7135	DOC., WARRANTY, COMMERCIAL	1
4	620-7690	MANUAL, OWNERS, E-ST	1
5	710-1072	ASSY, SIDE TUBE, DIPPED	2
6	711-3192	ASSY, STEP, BASE, DRIVE	1
7	711-3203	KIT, SHROUD, E-ST	1
8	711-3218	KIT, HARDWARE, E-ST	1
9	711-3219	ASSY, DISPLAY & FRONT RAIL, E-Ste	1

- NOTES:
- SERIAL LABEL INFORMATION:
    - VOLTS: 12 VDC
    - AMPS: 1.0 A
    - CYCLES: N/A
    - WATTS: 12 W
    - PHASE: N/A
    - IPX #: IPX 1
  - CERTIFICATION LOGOS: CSA / CE / FCC
  - CLEAN AREA WITH ISOPROPYL ALCOHOL PRIOR TO PLACING BADGE.
  - PACKAGE DIM: 46"L x 37.3"W x 63.3"H.
  - GROSS WEIGHT: 255 LB (115 KG).

**DOCUMENT STATUS:**

NOTICE OF PROPRIETARY INFORMATION  
THIS DOCUMENT SHALL NOT BE REPRODUCED NOR SHALL THE INFORMATION CONTAINED HEREIN BE USED BY OR DISCLOSED TO OTHER EXCEPT AS EXPRESSLY AUTHORIZED BY UNISEN INC, D.B.A. STAR TRAC.



**MATERIAL**  
SEE BOM

**FINISH**

VENDOR: P/N:

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES ARE:  
DECIMALS ANGLES  
X. = ±.13  
X.X = ±.05  
X.XX = ±.03  
X.XXX = ±.010

DRAWN: FJM  
CHECKED:  
APPROVED:

INITIAL: DATE: 04-17-08  
U.O.M.: INCH

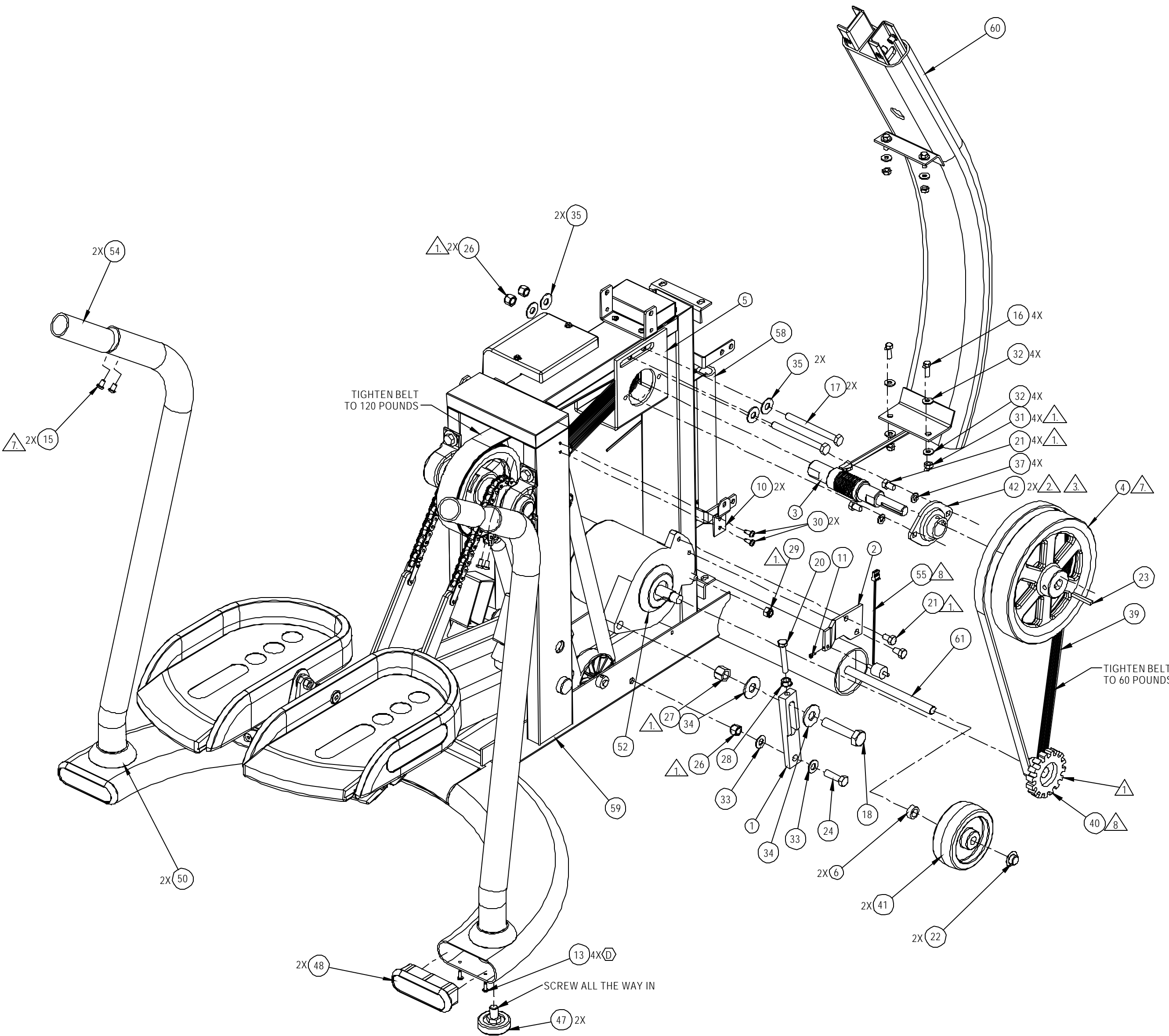
**UNISEN, INC. DBA**  
**STAR TRAC**  
14410 Myford Road  
Irvine CA 92606

STARTRAC PART NO: **9-5080-MINTPO** REV: **A**

TITLE: **E-ST5080, BASE, NO DISPLAY**

SCALE: 1:10 SHEET 1 OF 1 SHEET SIZE: B

REVISIONS				
REV.	DATE	DESCRIPTION	ECO	BY
A	3/13/07	PRODUCTION RELEASE	11539	DN
B	5/16/07	REPLACED 140-3347 FOR 140-3347-05 (NEW PAINT)	11619	DN
C	3/5/08	ADD P/N: 140-0200, CHANGE P/N: 140-0210 QTY IS 4, WAS: 2 ADD WIRING TIE STRAP DETAIL SHEET 2 OF 2	11811	RKL
D	04-29-09	UPDATE PRINT AND NOTES TO CURRENT INFORMATION: CHG BOM QTY FOR P/N: 140-0490 & 140-0492 TO LINEAR FEET; ADD 110-0285 QTY 4	12089	SCN

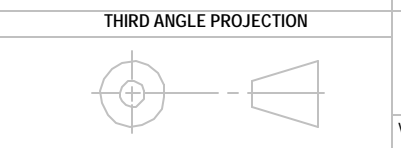


ITEM NO.	PART NUMBER	DESCRIPTION	Default/ QTY.
1	020-0021	BRACKET, ALTERNATOR ADJUST	1
2	020-0023	BRACKET, RPM SENSOR/ALTERNATOR	1
3	020-0141	SHAFT/PULLEY, 1.6130 STP	1
4	020-0681	FLYWHEEL, 8.0" OD X .625" ID	1
5	020-0690	BRACKET, ADJUSTABLE	1
6	020-4604	SPACER, 1/2 ID X 3/4 OD X .31 L	2
7	020-6748	COVER, LCB GUARD, STEPPER	1
8	020-6831	BRACKET, SHROUD MOUNT, STEP	1
9	020-6858	BRACKET, SHROUD, STEP-2	2
10	020-6859	BRACKET, SHROUD, STEP-3	2
11	110-0132	SCREW, #6-32x1/4, SHC, HK, AS, NP	1
12	110-0280	SCREW, #6-32x7/8, PHM, SL, CS, ZI	2
13	110-0285	SCREW, #8-18x1/2, PHT-AB, PH, SS	4
14	110-0501	SCREW, 1/4-20x3.25, HHC, CS, ZP	1
15	110-0506	SCREW, 1/4-28x3/8, BHC, HK, SS, BO	4
16	110-0570	SCREW, 1/4-20x3/4, HHC, HE, CS, ZP	4
17	110-0601	SCREW, 3/8-16x4.0, SHC, HE, CS, ZP	2
18	110-0610	BOLT, 1/2-13x2.5, HHC, HE, CS, ZI	1
19	110-0652	BOLT, 5/16-18x4.0, HHC, HE, CS, ZP	1
20	110-0686	BOLT, 5/16-18 X 2.0" HHCS FULLTHREAD	1
21	110-0687	SCREW, 5/16-18x1/2, HHC, HE, CS, Z	6
22	110-1415	CAP, 1/2 PUSH ON	2
23	110-1442	KEY, MACHINE 3/16X3/16X1.5"	1
24	110-1530	SCREW, 3/8-16x1.25, HHC, HE, CS, Z	1
25	110-1740	NUT, 6-32, KEP	2
26	110-1830	NUT, 3/8-16, NYLOK HEX	3
27	110-1833	NUT, 1/2-13, NYLOK HEX	1
28	110-1870	NUT, 5/16-18 KEPS	1
29	110-1871	NUT, NYLON INSERT	1
30	110-3026	SCREW, 10-24X.50" PPHCS	16
31	110-3098	NUT, 1/4-20, HEX, NYLOC	4
32	120-0410	WASHER, 1/4, SAE FLAT	9
33	120-0460	WASHER, 3/8, SAE FLAT	2
34	120-0462	WASHER, 1/2" FLAT 9/16ID 1-3/8OD	2
35	120-0463	WASHER, 3/8 X 1 OD	4
36	120-0480	WASHER, 5/16 ID, 7/8 OD, .087 THK	1
37	120-0495	WASHER, 5/16, SPLIT LOCK	4
38	120-0800	SPACER, #6, 1/4" OD x 1/2" L, NY	2
39	130-0123	BELT, 450J7 POLY VEE	1
40	130-1302	DRIVE PULLEY, 7J130 STEPPER	1
41	130-1694	WHEEL, 4.0" OD X 0.5" BORE	2
42	130-7008	FLANGE BEARING ASSY, 1"	2
43	140-0200	TIE STRAP, 5"	2
44	140-0210	TIE STRAP, 3.5"	4
45	140-0490	TAPE, VELCRO HOOKS	5-FT
46	140-0492	TAPE, VELCRO LOOPS	5-FT
47	140-3247	LEVELER, FEET ADJUSTMENT	2
48	140-3310	END CAP, STEP, BASE	2
49	140-3325	TIE MT, 2-WAY EXT, .18" TIE	2
50	140-3347-05	BOOT, HANDRAIL, STEPPER	2
51	170-0688	BRACKET, RESISTOR	4
52	260-0182	ALTERNATOR, MONDO	1
53	580-0275	BATTERY, 6V NP	1
54	710-0521	INSERT, SIDERAIL, UNIVERSAL	2
55	711-0225	RPM SENSOR COIL ASSY, STEPPER	1
56	711-3162	ASSY, LCB, STEPPER	1
57	711-3166	CABLE, ALT AND LCB, VLAD, STEP, 5100	1
58	711-3167	CABLE, RESISTOR, STEPPER	1
59	711-3193	KIT, STEP, FRAME, 5100	1
60	711-3199	ASSY, BASE NECK, STEPPER	1
61	715-3430	AXLE, ELEVATION, PRO TR	1

- NOTES: (D)
- TORQUE TO 120 IN-LB/ 10 FT-LB/ 13.6 Nm
  - ON THE FLYWHEEL SIDE, MOUNT BEARING ON INSIDE OF BRACKET. THE SET SCREW SIDE OF THE BEARING SHOULD BE DIRECTED TOWARDS THE FLYWHEEL
  - APPLY LOCTITE 222 (PURPLE), AND TORQUE TO BEARING MANUFACTURER SPECIFICATIONS
  - CUT P/N: 140-0490 & 140-492 INTO 3" STRIPS
  - BEFORE COVER IS ATTACHED TO LCB BOARD, THE RPM, MAIN I/O, RESISTOR, AND ALTERNATOR HARNESS MUST BE ATTACHED.
  - CABLE HARNESS CONNECTS TO: LCB, BATTERY, ALTERNATOR, AND TO THE PLATE ON THE BASE OF THE NEXK ASSEMBLY
  - TORQUE TO 75 IN-LB. 6.3 FT-LB/ 8.5 Nm
  - ADJUST A GAP OF 0.020" IN BETWEEN 711-0225 PIN TO 130-1302 TOOTH

**DOCUMENT STATUS:  
RELEASE**

NOTICE OF PROPRIETARY INFORMATION  
THIS DOCUMENT SHALL NOT BE REPRODUCED NOR SHALL THE INFORMATION CONTAINED HEREIN BE USED BY OR DISCLOSED TO OTHER EXCEPT AS EXPRESSLY AUTHORIZED BY UNISEN INC. D.B.A. STAR TRAC.



**MATERIAL**  
SEE BOM

**FINISH**  
SEE NOTE

VENDOR: \_\_\_\_\_ PIN: \_\_\_\_\_

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES ARE:

DECIMALS: X = ±.13, XX = ±.05, XXX = ±.03, X.XXX = ±.010

ANGLES: 12°

DRAWN: DNGO INITIAL: \_\_\_\_\_ DATE: 05-11-07

CHECKED: \_\_\_\_\_

APPROVED: \_\_\_\_\_

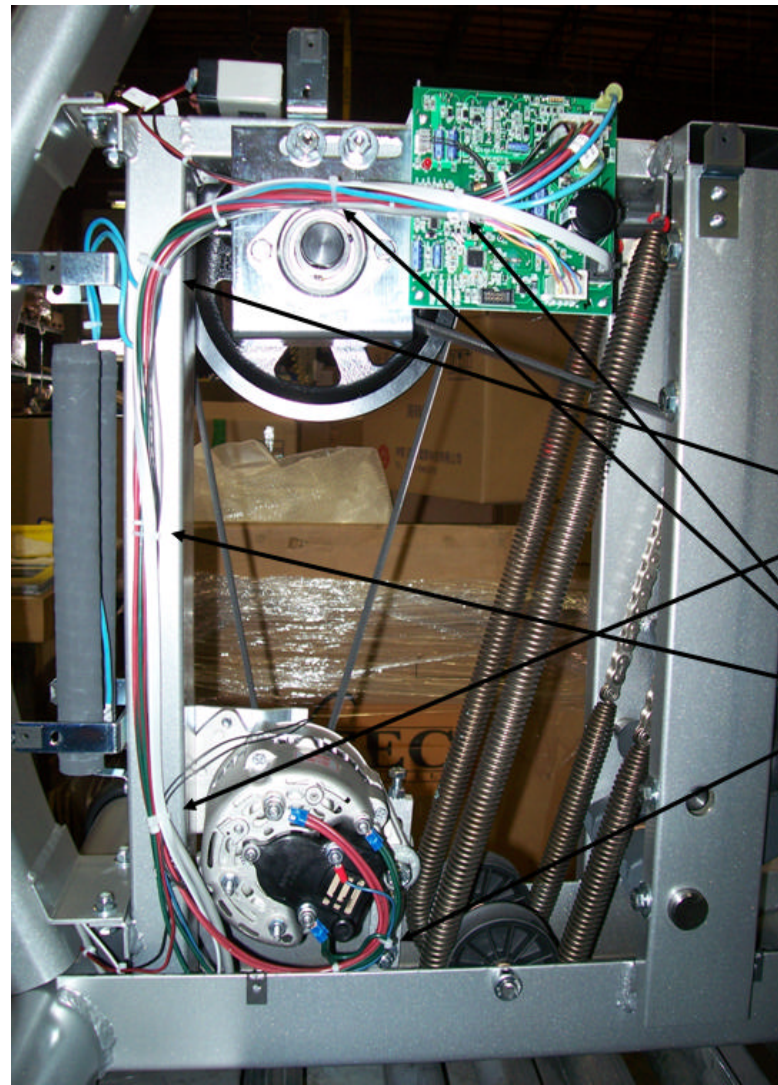
**UNISEN, INC. DBA STAR TRAC** 14410 Myford Road Irvine CA 92606

STARTRAC PART NO: **711-3192** REV: **D**

TITLE: **ASSY, STEP, BASE, DRIVE**

SCALE: 1:5 SHEET 1 OF 2 SHEET SIZE: C

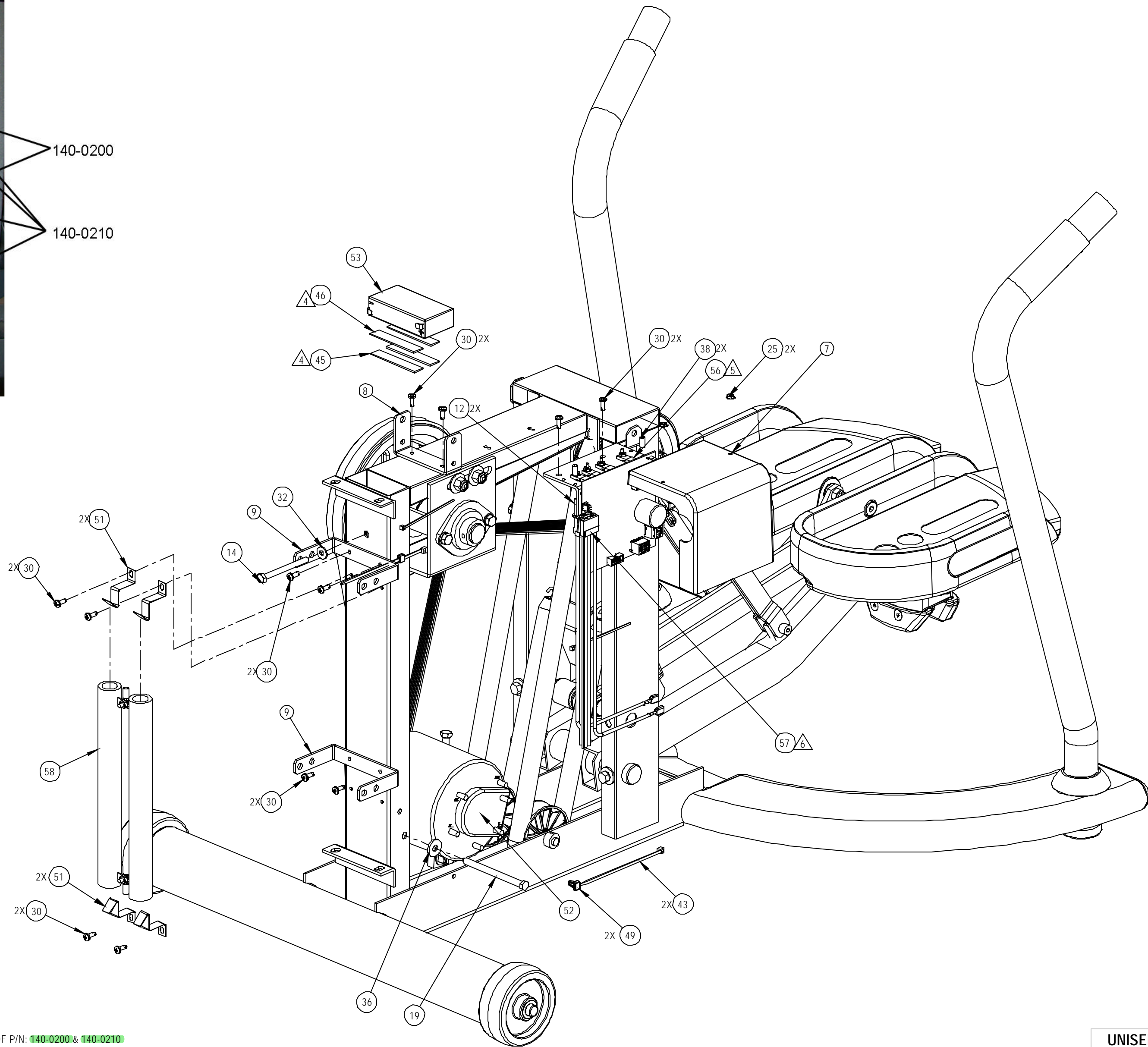




140-0200

140-0210

43 44 9. DIAGRAM 1



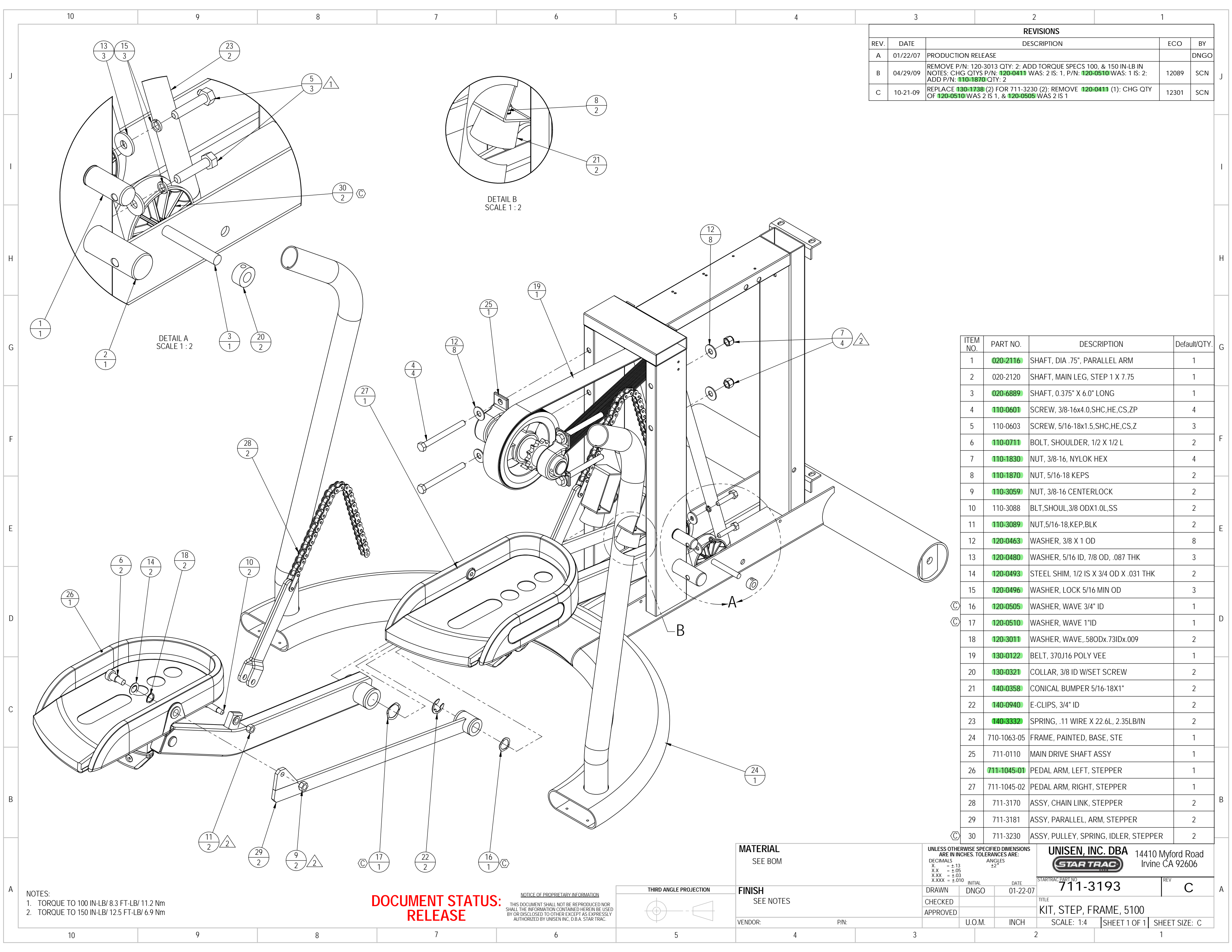
NOTES:

9. DIAGRAM 1 SHOWS THE LOCATION OF THE TIE STRAP INSTALLATION OF P/N: 140-0200 & 140-0210

UNISEN, INC. DBA 14410 Myford Road Irvine CA 92606	
STARTRAC PART NO <b>711-3192</b>	REV <b>D</b>
TITLE <b>ASSY, STEP, BASE, DRIVE</b>	
SCALE: 1:4	SHEET 2 OF 2   SHEET SIZE: C



REVISIONS				
REV.	DATE	DESCRIPTION	ECO	BY
A	01/22/07	PRODUCTION RELEASE		DNGO
B	04/29/09	REMOVE P/N: 120-3013 QTY: 2; ADD TORQUE SPECS 100, & 150 IN-LB IN NOTES; CHG QTY'S P/N: 120-0411 WAS: 2 IS: 1, P/N: 120-0510 WAS: 1 IS: 2; ADD P/N: 110-1870 QTY: 2	12089	SCN
C	10-21-09	REPLACE 130-1738 (2) FOR 711-3230 (2); REMOVE 120-0411 (1); CHG QTY OF 120-0510 WAS 2 IS 1, & 120-0505 WAS 2 IS 1	12301	SCN

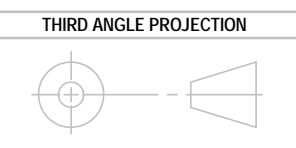


ITEM NO.	PART NO.	DESCRIPTION	Default/QTY.
1	020-2116	SHAFT, DIA .75", PARALLEL ARM	1
2	020-2120	SHAFT, MAIN LEG, STEP 1 X 7.75	1
3	020-6889	SHAFT, 0.375" X 6.0" LONG	1
4	110-0601	SCREW, 3/8-16x4.0,SHC,HE,CS,ZP	4
5	110-0603	SCREW, 5/16-18x1.5,SHC,HE,CS,Z	3
6	110-0711	BOLT, SHOULDER, 1/2 X 1/2 L	2
7	110-1830	NUT, 3/8-16, NYLOK HEX	4
8	110-1870	NUT, 5/16-18 KEPS	2
9	110-3059	NUT, 3/8-16 CENTERLOCK	2
10	110-3088	BLT,SHOUL,3/8 ODX1.0L,SS	2
11	110-3089	NUT,5/16-18,KEP,BLK	2
12	120-0463	WASHER, 3/8 X 1 OD	8
13	120-0480	WASHER, 5/16 ID, 7/8 OD, .087 THK	3
14	120-0493	STEEL SHIM, 1/2 IS X 3/4 OD X .031 THK	2
15	120-0496	WASHER, LOCK 5/16 MIN OD	3
16	120-0505	WASHER, WAVE 3/4" ID	1
17	120-0510	WASHER, WAVE 1"ID	1
18	120-3011	WASHER, WAVE, .58ODx.73IDx.009	2
19	130-0122	BELT, 370J16 POLY VEE	1
20	130-0321	COLLAR, 3/8 ID W/SET SCREW	2
21	140-0358	CONICAL BUMPER 5/16-18X1"	2
22	140-0940	E-CLIPS, 3/4" ID	2
23	140-3332	SPRING, .11 WIRE X 22.6L, 2.35LB/IN	2
24	710-1063-05	FRAME, PAINTED, BASE, STE	1
25	711-0110	MAIN DRIVE SHAFT ASSY	1
26	711-1045-01	PEDAL ARM, LEFT, STEPPER	1
27	711-1045-02	PEDAL ARM, RIGHT, STEPPER	1
28	711-3170	ASSY, CHAIN LINK, STEPPER	2
29	711-3181	ASSY, PARALLEL, ARM, STEPPER	2
30	711-3230	ASSY, PULLEY, SPRING, IDLER, STEPPER	2

NOTES:  
 1. TORQUE TO 100 IN-LB/ 8.3 FT-LB/ 11.2 Nm  
 2. TORQUE TO 150 IN-LB/ 12.5 FT-LB/ 6.9 Nm

**DOCUMENT STATUS:  
RELEASE**

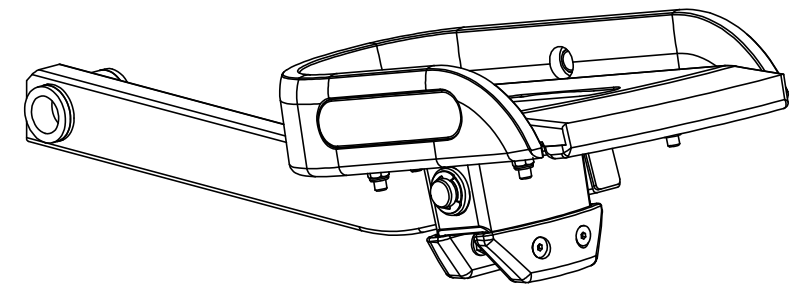
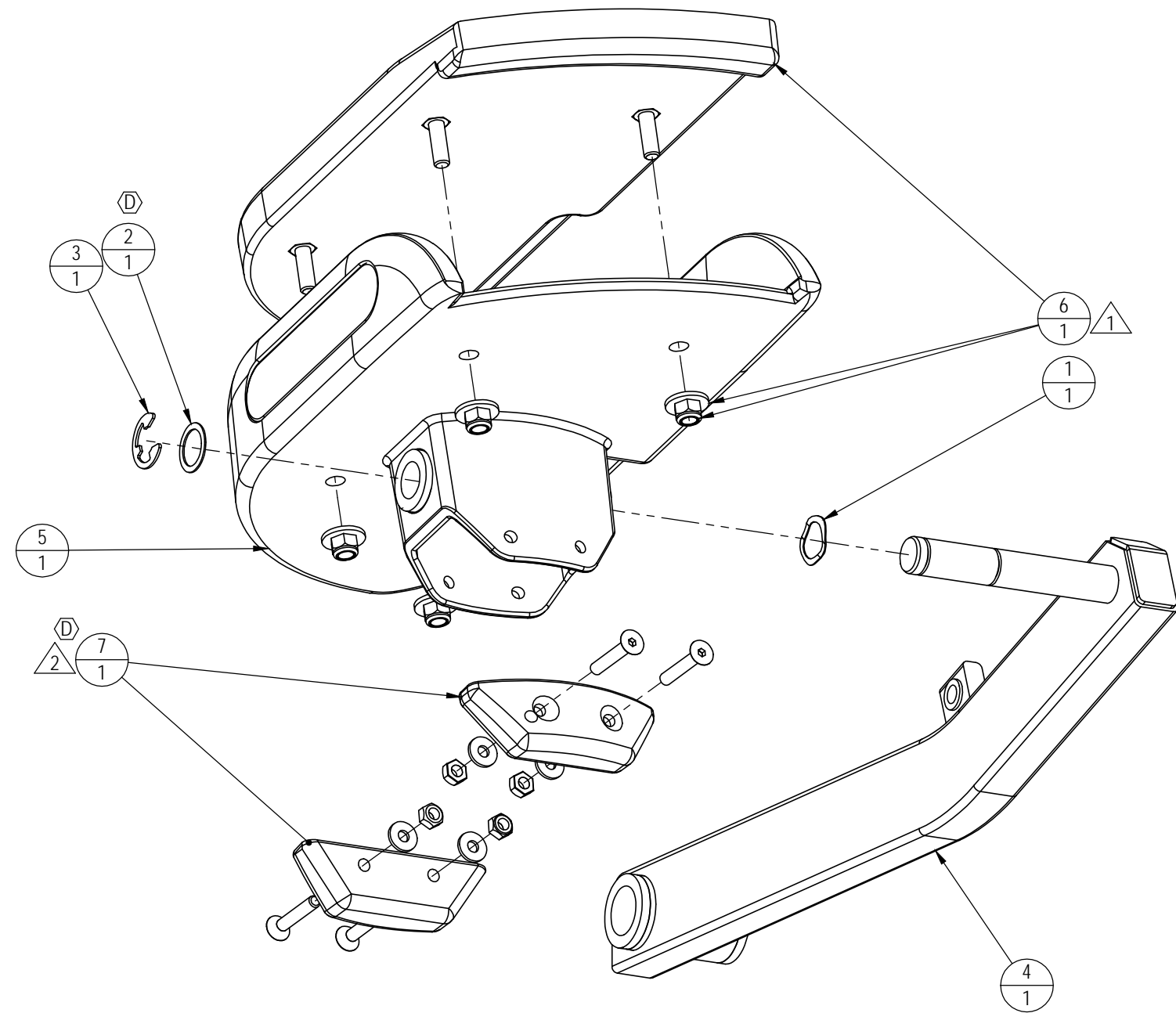
NOTICE OF PROPRIETARY INFORMATION  
 THIS DOCUMENT SHALL NOT BE REPRODUCED NOR SHALL THE INFORMATION CONTAINED HEREIN BE USED BY OR DISCLOSED TO OTHER EXCEPT AS EXPRESSLY AUTHORIZED BY UNISEN, INC. D.B.A. STAR TRAC.



<b>MATERIAL</b> SEE BOM		UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES ARE: DECIMALS X = ±.13 XX = ±.05 XXX = ±.03 X.XXX = ±.010		<b>UNISEN, INC. DBA</b>  14410 Myford Road Irvine CA 92606	
<b>FINISH</b> SEE NOTES		DRAWN	DNGO	DATE	01-22-07
VENDOR:		P/N:		STARTRAC PART NO <b>711-3193</b> TITLE <b>KIT, STEP, FRAME, 5100</b> SCALE: 1:4   SHEET 1 OF 1   SHEET SIZE: C	



REVISIONS				
REV.	DATE	DESCRIPTION	ECO	BY
A	9/27/05	PRODUCTION RELEASE	11349	FP
B	8/16/06	ADD P/N: <b>120-0505</b> , <b>120-3015</b> , <b>140-0940</b> ; DELETE P/N: 711-3175	11476	FJM
C	04-29-09	ADD TORQUE SPEC OF 120 IN-LB TO NOTE 1.	12089	SCN
D	10-21-09	CHG QTY OF <b>120-3015</b> WAS 2 IS 1; ADD NOTE #2	12301	SCN

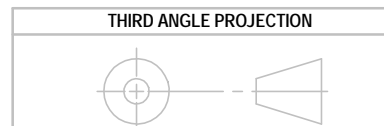


ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	<b>120-0505</b>	WASHER, WAVE 3/4" ID	1
2	<b>120-3015</b>	STEEL SHIM, .75ID X 1.125 OD	1
3	<b>140-0940</b>	E-CLIPS, 3/4" ID	1
4	711-3173-01	ASSY, PEDAL ARM, W/BUSHING, LEFT	1
5	711-3174-01	ASSY, PEDAL, W/BUSHING, LEFT	1
6	711-3176-01	KIT, PEDAL PAD, LEFT	1
7	711-3177	KIT, PEDAL STOPS, 5100 STEPPER	1

**DOCUMENT STATUS:  
RELEASE**

- NOTES: (D)
- TORQUE TO 120 IN-LB/ 10 FT-LB/ 13.6 Nm
  - TIGHTEN HARDWARE SNUGLY TO RUBBER PADS WITHOUT DEFORMING RUBBER

NOTICE OF PROPRIETARY INFORMATION  
THIS DOCUMENT SHALL NOT BE REPRODUCED NOR SHALL THE INFORMATION CONTAINED HEREIN BE USED BY OR DISCLOSED TO OTHER EXCEPT AS EXPRESSLY AUTHORIZED BY UNISEN INC, D.B.A. STAR TRAC.



MATERIAL  
SEE BOM

FINISH  
N/A

VENDOR: P/N:

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES ARE:  
DECIMALS X. = ±.13  
X.X = ±.05  
X.XX = ±.03  
X.XXX = ±.010

INITIAL DATE  
DRAWN FP 09-15-05  
CHECKED  
APPROVED

U.O.M. INCH

UNISEN, INC. DBA  
14410 Myford Road  
Irvine CA 92606

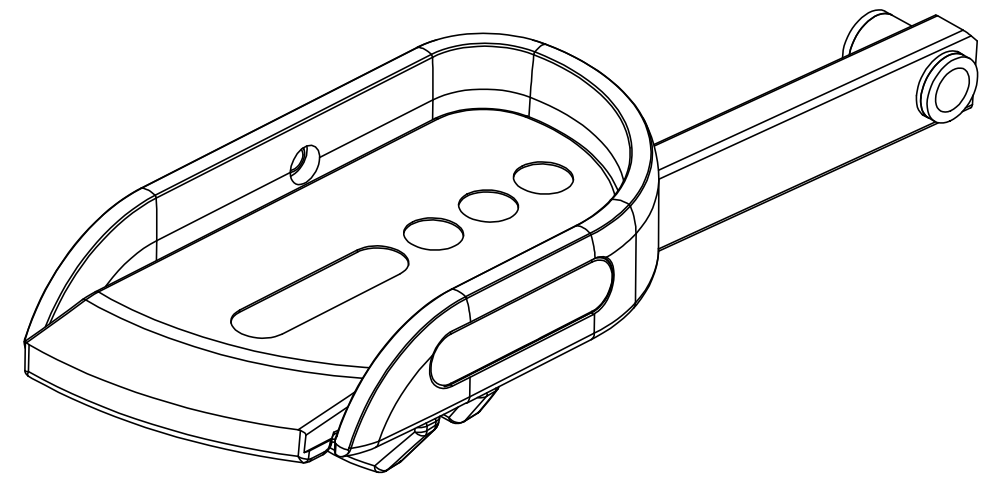
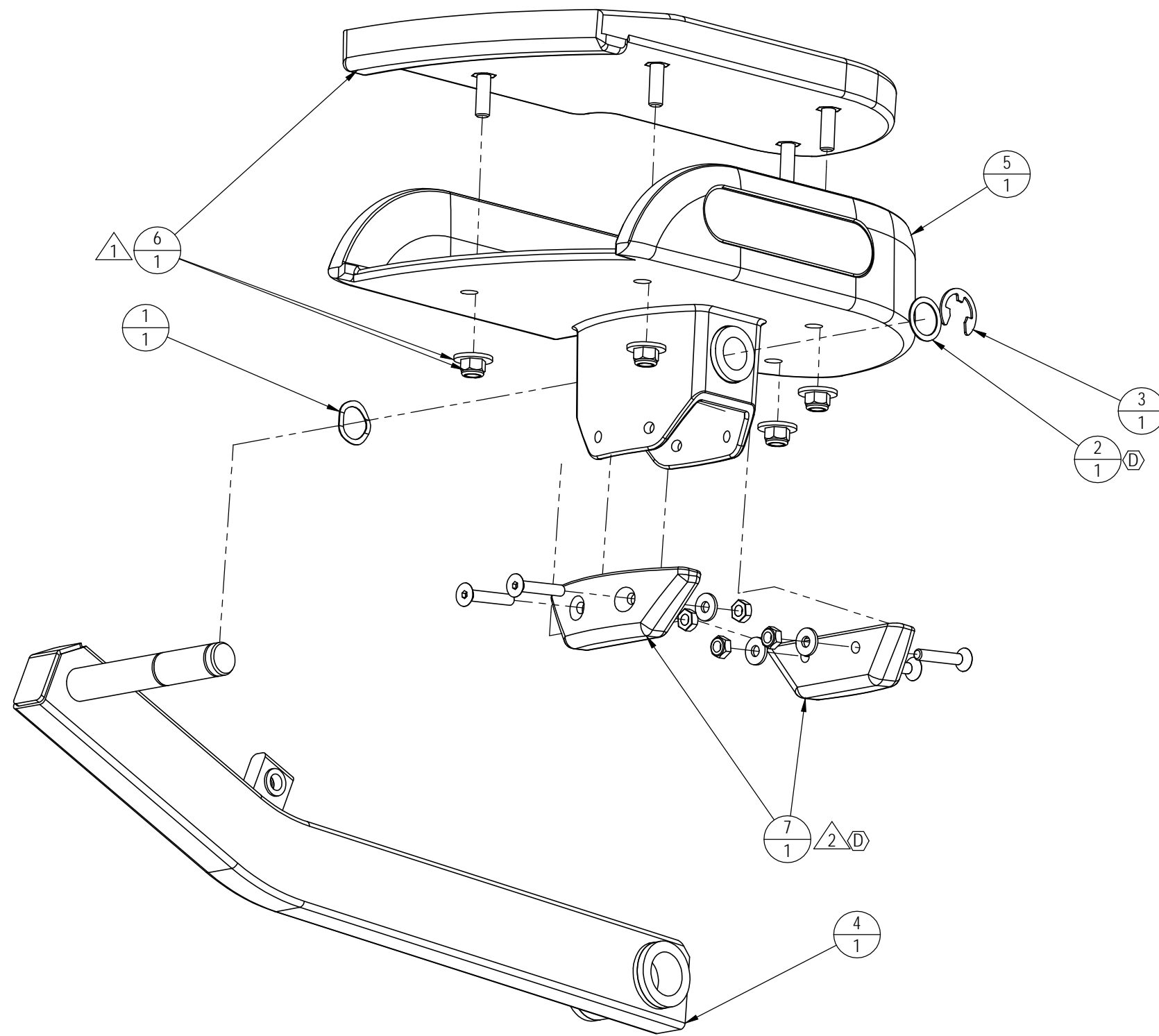


STARTRAC PART NO. **711-1045-01** REV **D**

TITLE  
**PEDAL ARM, LEFT, STEPPER**

SCALE: 1:3 | SHEET 1 OF 1 | SHEET SIZE: B

		REVISIONS		1	
REV.	DATE	DESCRIPTION		ECO	BY
A	9/27/05	PRODUCTION RELEASE		11349	FP
B	8/16/06	ADD P/N: 120-0505, 120-3015, 140-0940; DELETE P/N: 711-3175		11476	FJM
C	04-29-09	ADD TORQUE SPEC OF 120 IN-LB TO NOTE 1		12089	SCN
D	10-21-09	CHG QTY OF 120-3015 WAS 2 IS 1; ADD NOTE #2		12301	SCN



ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	120-0505	WASHER, WAVE 3/4" ID	1
2	120-3015	STEEL SHIM, .75ID X 1.125 OD	1
3	140-0940	E-CLIPS, 3/4" ID	1
4	711-3173-02	ASSY, PEDAL ARM, W/BUSHING, RIGHT	1
5	711-3174-02	ASSY, PEDAL, W/BUSHING, RIGHT	1
6	711-3176-02	KIT, PEDAL PAD, RIGHT	1
7	711-3177	KIT, PEDAL STOPS, 5100 STEPPER	1

**DOCUMENT STATUS:  
RELEASE**

- NOTES: <sup>D</sup>
- TORQUE TO 120 IN-LB/ 10 FT-LB/ 13.6 Nm
  - TIGHTEN HARDWARE SNUGLY TO RUBBER PADS WITHOUT DEFORMING RUBBER

NOTICE OF PROPRIETARY INFORMATION  
THIS DOCUMENT SHALL NOT BE REPRODUCED NOR SHALL THE INFORMATION CONTAINED HEREIN BE USED BY OR DISCLOSED TO OTHER EXCEPT AS EXPRESSLY AUTHORIZED BY UNISEN INC, D.B.A. STAR TRAC.

THIRD ANGLE PROJECTION



**MATERIAL**  
SEE BOM

**FINISH**  
N/A

VENDOR:

P/N:

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES ARE:  
DECIMALS ANGLES  
X. = ±.13  
X.X = ±.05  
X.XX = ±.03  
X.XXX = ±.010

DRAWN	FP	DATE	09-15-05
CHECKED			
APPROVED			

U.O.M. INCH

**UNISEN, INC. DBA**  
14410 Myford Road  
Irvine CA 92606

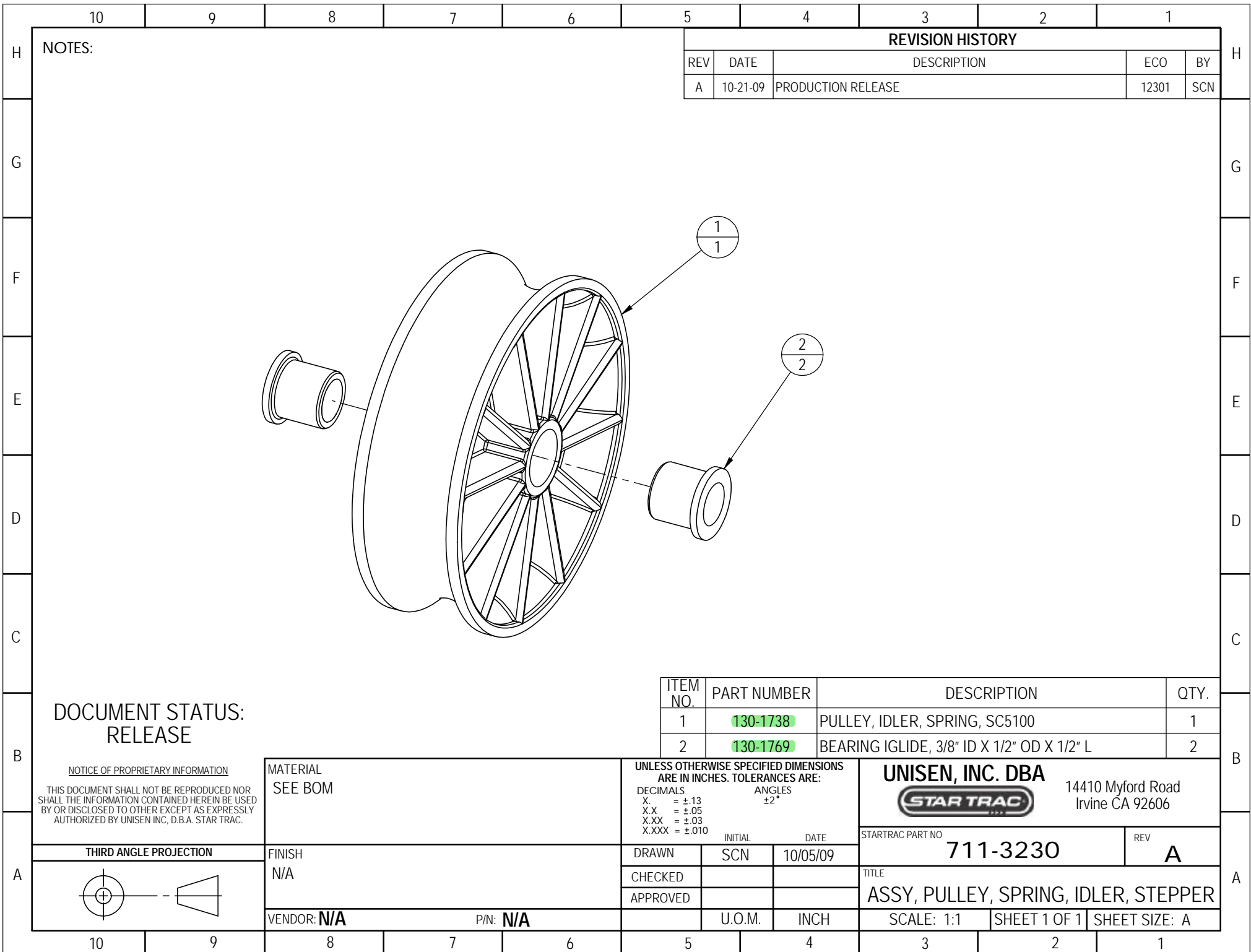


STARTRAC PART NO. **711-1045-02** REV **D**

TITLE **PEDAL ARM, RIGHT, STEPPER**

SCALE: 1:3 | SHEET 1 OF 1 | SHEET SIZE: B





NOTES:

**REVISION HISTORY**

REV	DATE	DESCRIPTION	ECO	BY
A	10-21-09	PRODUCTION RELEASE	12301	SCN

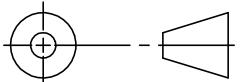
**DOCUMENT STATUS:  
RELEASE**

NOTICE OF PROPRIETARY INFORMATION  
THIS DOCUMENT SHALL NOT BE REPRODUCED NOR SHALL THE INFORMATION CONTAINED HEREIN BE USED BY OR DISCLOSED TO OTHER EXCEPT AS EXPRESSLY AUTHORIZED BY UNISEN INC, D.B.A. STAR TRAC.

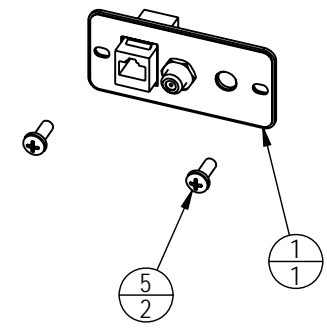
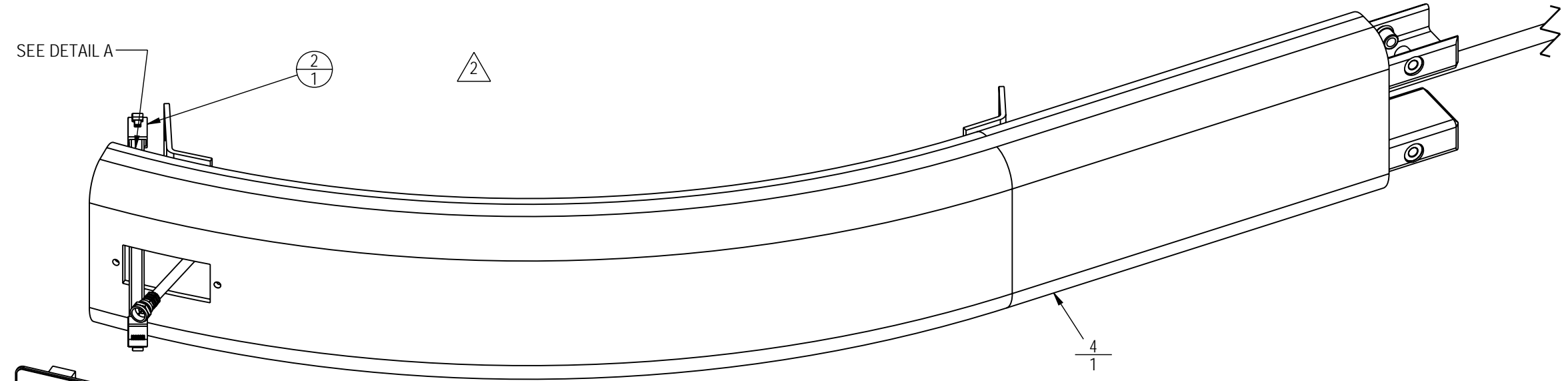
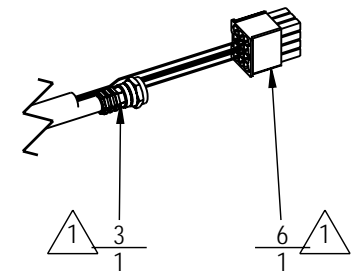
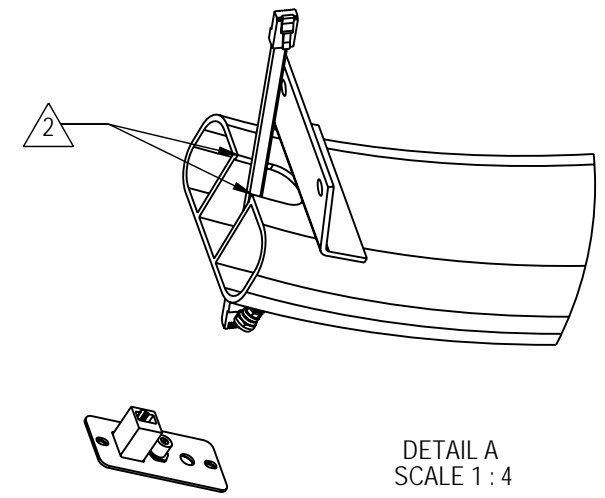
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	130-1738	PULLEY, IDLER, SPRING, SC5100	1
2	130-1769	BEARING IGLIDE, 3/8" ID X 1/2" OD X 1/2" L	2

MATERIAL SEE BOM		UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES ARE: DECIMALS                      ANGLES X.                      = ±.13 X.X                      = ±.05 X.XX                      = ±.03 X.XXX                      = ±.010		UNISEN, INC. DBA <b>STAR TRAC</b> 14410 Myford Road Irvine CA 92606	
FINISH N/A		DRAWN	SCN	DATE	STARTRAC PART NO
VENDOR: <b>N/A</b>		CHECKED			<b>711-3230</b>
P/N: <b>N/A</b>		APPROVED			REV <b>A</b>
			U.O.M.	INCH	TITLE <b>ASSY, PULLEY, SPRING, IDLER, STEPPER</b>
					SCALE: 1:1    SHEET 1 OF 1    SHEET SIZE: A

THIRD ANGLE PROJECTION



REVISIONS				
REV.	DATE	DESCRIPTION	ECO	BY
A	02-12-2007	RELEASE FOR PRODUCTION	11539	DN




ITEM	PART NUMBER	DESCRIPTION	QTY.
1	721-1134	ASSY,CONNECTOR,VLAD	1
2	711-3161	ASSY, HARNESS, CSAFE EXT,STEP	1
3	718-5126	CABLE,ANTENNA,M-M, ST/TBT	1
4	711-3200	ASSY, FRONT NECK, LOWER, STEP	1
5	110-3026	SCREW, 10-24X.50" PPHTCS	2
6	711-3185	ASSY, CABLE, INTERFACE, SC5100	1

DOCUMENT STATUS:  
REVIEW

NOTICE OF PROPRIETARY INFORMATION  
THIS DOCUMENT SHALL NOT BE REPRODUCED NOR SHALL THE INFORMATION CONTAINED HEREIN BE USED BY OR DISCLOSED TO OTHER EXCEPT AS EXPRESSLY AUTHORIZED BY UNISEN

- NOTES:
- 1 INSTALL CABLE ASSEMBLIES IN CENTER OF TUBE, EXISTING TOP END.
  - 2 CABLE ASSEMBLY EXITS THROUGH BOTTOM OF NECK.

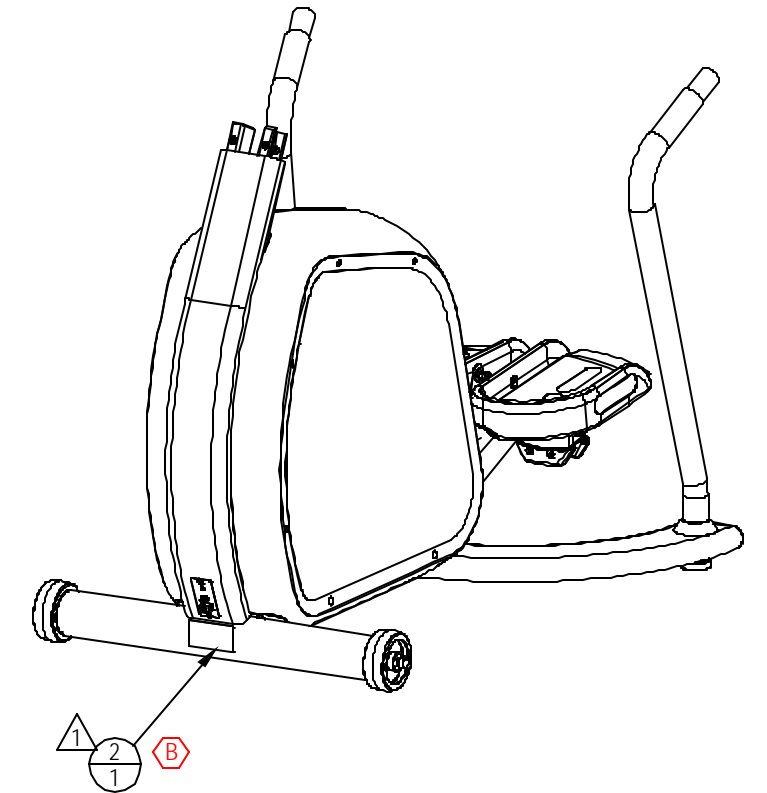
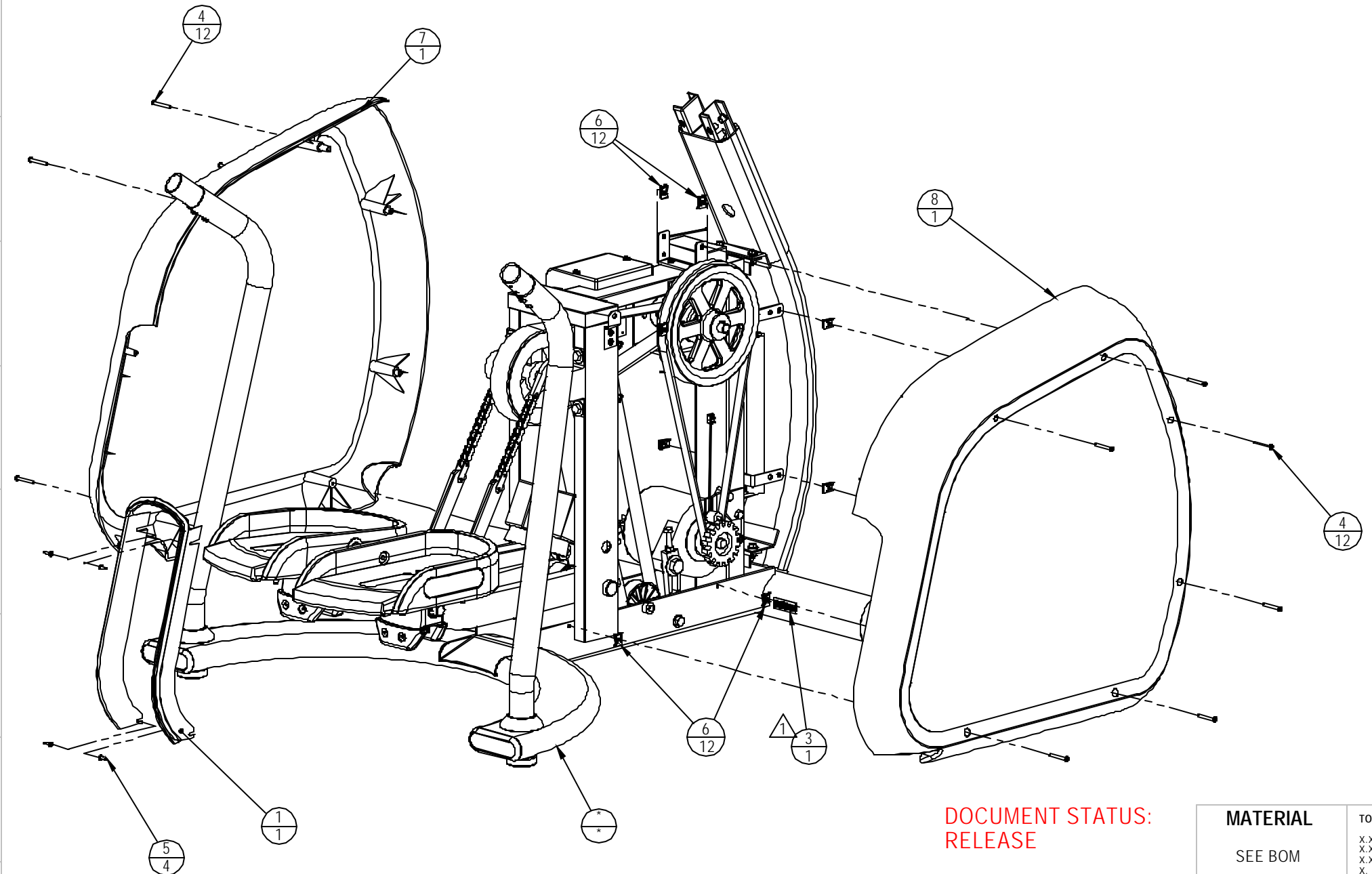
MATERIAL SEE BOM	TOLERANCES UNLESS OTHERWISE SPECIFIED			UNISEN, INC. DBA 14410 Myford Road Irvine CA 92606		
	X.XXX = ± .010	ANGLES = ± 2°				PART NO <b>711-3199</b>
X.XX = ± .030	FRACTIONS = ± 1/32					
FINISH N/A	DRAWN	DNGO	01-22-07	REV <b>A</b>		TITLE <b>ASSY, BASE NECK, STEPPER</b>
	CHECKED			SCALE: 1:3		
	APPROVED			SHEET 1 OF 1		
	U.O.M.	INCH		SHEET SIZE: B		



NOTES:

1 CLEAN AREA WITH ISOPROPYL ALCOLHOL PRIOR PLACING LABEL(S).

REVISION HISTORY				
REV	DATE	DESCRIPTION	ECO	BY
A	03-13-08	PRODUCTION RELEASE	11539	DN
B	04-30-08	ADEED P/N 050-2070; REMOVED P/N 050-1816	11888	FJM



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	020-6749	SHROUD, OPENING, STEPPER, 5100	1
2	050-2070	LABEL, SERIAL, PVS KIT	1
3	050-2079	LABEL, PATENTS, 5100	1
4	110-0286	SCREW, #8-18x1-1/2,PHT-AB,PH,CS	12
5	110-3165	SCREW, M4x0.7x14L,PHT,PH,CS,ZI	4
6	140-3323	U-NUT, #8, PANEL .025-.125	12
7	711-3204-01	ASSY, SHROUD W/ LABEL, STEP,LF	1
8	711-3204-02	ASSY, SHROUD W/LABEL, STEP, RT	1

DOCUMENT STATUS:  
RELEASE

NOTICE OF PROPRIETARY INFORMATION  
THIS DOCUMENT SHALL NOT BE REPRODUCED NOR SHALL THE INFORMATION CONTAINED HEREIN BE USED BY OR DISCLOSED TO OTHER EXCEPT AS EXPRESSLY AUTHORIZED BY UNISEN

MATERIAL SEE BOM	TOLERANCES UNLESS OTHERWISE SPECIFIED		UNISEN, INC. DBA	
	X.XXX = ± .010	ANGLES = ± 2°	14410 Myford Road Irvine CA 92606	
FINISH N/A	DRAWN	DNGO	01-23-07	REV B
	CHECKED			
	APPROVED			
	U.O.M.	INCH	SCALE: 1:8   SHEET 1 OF 1   SHEET SIZE: B	



PART NO 711-3203

TITLE  
KIT, SHROUD, E-ST

REVISIONS				
REV.	DATE	DESCRIPTION	ECO	BY
A	06-14-07	PRODUCTION RELEASE	11649	DN
B	03-19-09	P/N <b>110-0506</b> QTY WAS:8 IS:10 AND P/N <b>110-3172</b> QTY WAS:4 IS:5	12078	AK

**STAR TRAC** 14410 MYFORD ROAD  
IRVINE, CA 92606 USA  
www.startrac.com

**E-ST**

**ATTENTION EQUIPMENT INSTALLERS**  
Star Trac recommends the STEPPER be spaced a minimum of 20.0" (0.5 M) apart to allow safe and easy ingress and egress. Even more important, there must be at least 46" (1.25 M) of free space behind the STEPPER.  
As with any motorized equipment, the area where the STEPPER are located must be free from obstructions and fixtures with sharp edges to prevent injury in the event that a user loses balance and falls.

**ASSEMBLY INSTRUCTIONS**  
To assemble your STAR TRAC STEPPER, just follow these steps.  
**Tools needed for assembly:**  
1. 5/32" Hex (Allen) Key  
2. #2 Phillips Screwdriver

**Note**  
If you have any questions regarding the assembly of your Star Trac STEPPER, review the Owner's Manual or contact Star Trac Customer Support at (714) 669-1660 or (800) 503-1221.

**STEP 1.** Open the top of the Stepper Box, remove the handrail box (long, thin box at outside edge) place aside. Remove Display assembly and place aside. Remove remaining packing material, and carefully remove from pallet base.

**STEP 2.** Remove (2) M4 x 0.7 screws from back of display (retain for later use) with a #2 Phillips screwdriver and separate the back of the display from the front.

**STEP 3.** Take upper display to the front of the Stepper. Feed cables through the neck. Take care not to damage the display or handlebar on the ground.

**STEP 4.** Keep hold of the cables and rotate the neck up. Slide neck over mounts, take special care not to pinch the cables.

**STEP 5.** Thread in (4) M6 x 16 Flat Head Screws in the front and back of the neck. Use a 5/32 hex key to tighten the screws to 60 lb-in (6.7 N-m) of torque.

**STEP 6.** 1st Slide handrail on to upper display mount. Rotate until bottom of handrail is near lower frame. 2nd With some force lift handrail until opening at the bottom of the handrail is able to slide over lower frame. Use a 5/32" Hex Key and thread into the handrail (4) 1/4-28 x 3/8" Button Head Screws. Then tighten each screw to 110 lb-in (12.4 N-m) of torque. Repeat for other side.

**STEP 7.** Plug in the 12 pin display cable from the neck into the front display circuit board at J4. Next plug in the Heart Rate cable from the handlebars into the HR board, then plug the HR ground into the quick disconnect tab on the display frame.

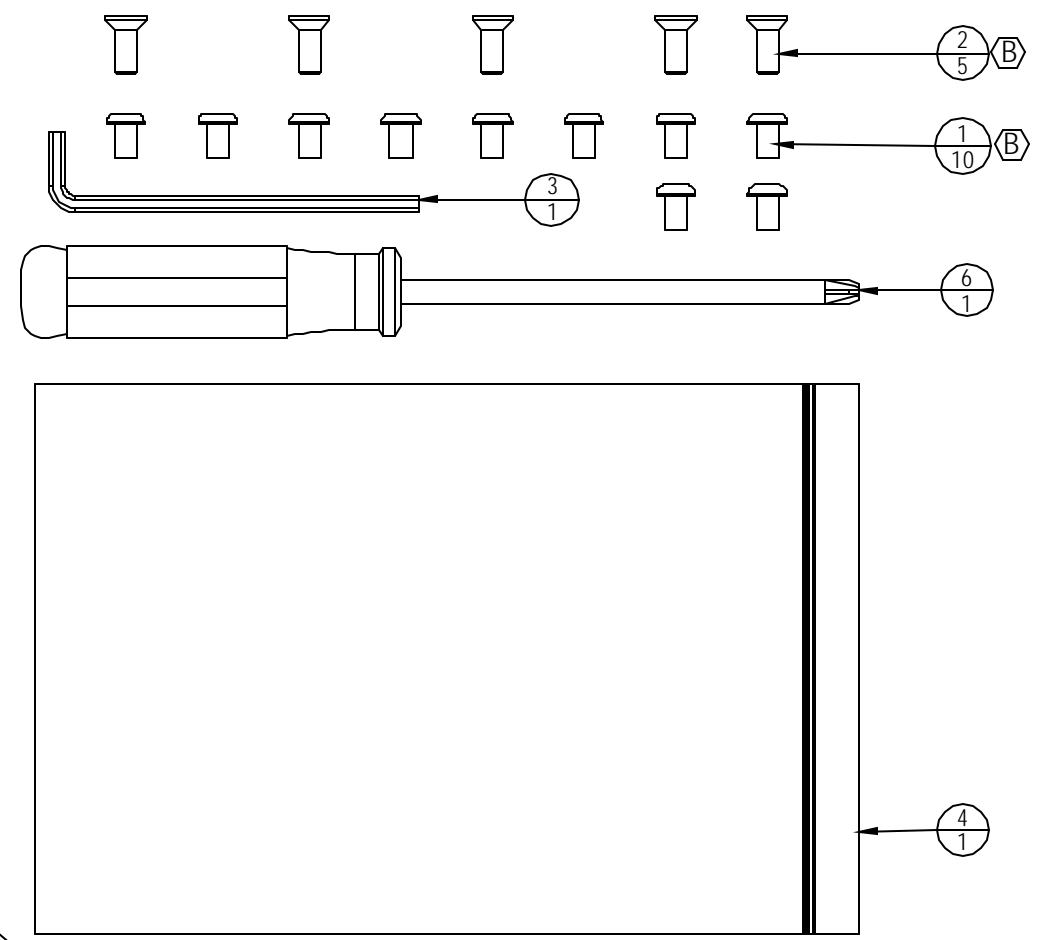
**\* If you are installing Entertainment, Refer to the PVS install guide before you perform this step.**

**STEP 8.** 1st Slide the bottom of the front display under the 2 tabs at the base of the mount. 2nd Press display against the round bar and rotate it to the back. Careful not to pinch any wires.

**STEP 9.** Secure the Front display to the back with (8) M4 x 0.7 x 19mm long Phillips Head Screws.

**STEP 10.** Adjust leveling feet to assure that the Stepper is level to the floor and does not rock back and forth. Pedal unit to check for proper operation. Check to see that all screws are tight.

PN: 620-7713 REV. A



ITEM	PART NUMBER	DESCRIPTION	QTY.	NOTE
1	<b>110-0506</b>	SCREW, 1/4-28x3/8, BHC, HK, SS, BO	10	
2	<b>110-3172</b>	SCREW, ISO10642, M6x16	5	
3	290-0040	HEX L-KEY, 5/32 "	1	
4	050-1874	BAG, PLASTIC, ZIP-LOCK, 6X9, 4 MIL	1	
5	620-7713	INSTALLATION, QUICK, E-ST	1	
6	290-0010	SCREWDRIVER, PHILLIPS #2 X 5.0	1	

**DOCUMENT STATUS:  
RELEASE**

<b>MATERIAL</b> SEE BOM	<b>TOLERANCES UNLESS OTHERWISE SPECIFIED</b> X.XXX = ± .010" (0.25MM) ANGLES = ± 2° X.XX = ± .030" (0.76MM) FRACTIONS = ± 1/32 X.X = ± .050" (1.27MM) X = ± .125" (3.20)
<b>FINISH</b> N/A	<b>UNISEN, INC. DBA</b> 14410 Myford Road Irvine CA 92606
<b>VENDOR:</b> N/A	<b>P/N:</b> N/A

<b>UNISEN, INC. DBA</b> <b>STAR TRAC</b>	<b>14410 Myford Road Irvine CA 92606</b>
<b>PART NO</b> 711-3218	<b>REV</b> B
<b>TITLE</b> KIT, HARDWARE, E-ST	<b>SCALE: 1:2</b>   <b>SHEET 1 OF 1</b>   <b>SHEET SIZE: B</b>

**NOTES:**  
1. ALL TOOLS TO BE PACKAGED IN PLASTIC BAGS ALONG WITH ALL OF THE SCREWS NEEDED FOR INSTALLATION (**110-0506** QTY 8 AND **110-3172** QTY 4)

**NOTICE OF PROPRIETARY INFORMATION**  
THIS DOCUMENT SHALL NOT BE REPRODUCED NOR SHALL THE INFORMATION CONTAINED HEREIN BE USED BY OR DISCLOSED TO OTHER EXCEPT AS EXPRESSLY AUTHORIZED BY UNISEN