

BILL OF MATERIAL (CURRENT LEVEL)

ITEM	PT/ASSY	DESCRIPTION	TYPE	QTY.
1	01244	LONG SIDE COVER STANDOFF	ASSEMBLY	18
2	05463	T1X2 COVER ASSEMBLY	ASSEMBLY	1
3	09028	T1X3 LOGO PLATE W STUDS	ASSEMBLY	1
4	09538	LED LIGHT	ASSEMBLY	2
5	09562	T1X2 RAIL ASSEMBLY	ASSEMBLY	1
6	09817	TUG SPARE PARTS BAG	PART	1
7	09835	T1X2 PC BOARD	ASSEMBLY	1
8	09844	T1X2 TRACK ASSEMBLY	ASSEMBLY	2
9	09860	T1 LIGHT COMPONENTS KIT	ASSEMBLY	1
10	09885	T1X3 DUAL LIFTER LATCH ASM RIGHT	ASSEMBLY	1
11	09920	T1X MODEL 2 GEARBOX-MOTOR ASM	ASSEMBLY	2
12	09965	T2V2/T1.5 V2 RADIO W LIGHTS 2017	ASSEMBLY	1
13	09979	T1X3 LAZY SUSAN ASSEMBLY	ASSEMBLY	1
14	09999	ON-BOARD PARTS BOX	ASSEMBLY	1
15	22596	T2 SERVO CAM	PART	1
16	22996	DRIVE SPROCKET	PART	4
17	23348	T1X SIDECOVER LEFT	PART	1
18	23349	T1X SIDECOVER RIGHT	PART	1
19	23351	T1X LOWER COVER	PART	1
20	23354	T1X OUTSIDE TRACK COVERS	PART	2
21	23375	T1X MAIN BOARD RAIL	PART	2
22	23377	T1X SIDE RAIL	PART	2
23	23410	T1X2 HINGE BLOCK	PART	2
24	23427	WIRE HOLDER	PART	2
25	23436	T1X2 WIRE BRACKET LEFT	PART	1
26	23500	TUG MAGNET HOLDER	PART	2
27	23532	T1V2 / T1X2 BATTERY BRACKET	PART	1
28	23555	MOTOR SPACER	PART	2
29	23888	T1X3 MAIN PLATE	PART	1
30	23889	T1X3 INSIDE TRACK COVER	PART	2
31	24446	TUG CHARGING SUPPORT MALE	PART	1
32	24447	TUG CHARGING SUPPORT FEMALE	PART	1
33	91000	2.5" CABLE ROUTER W/ FINGERS	PART	1
34	91285	10-32 X 5/8" L SS FLAT HEAD	PART	4
35	92213	1/4"-20 X 7/16" L SS CAP SCREW	PART	4

36	92214	1/4"-20 X 5/16"L SS CAP SCREW	PART	1
37	92222	1/4"-20 X 1/2" FLAT HEAD	PART	4
38	92524	8-32"X.1" SET SCREW	PART	6
39	95003	1/4"-20 X 3/4" FLAT HEAD	PART	6
40	95016	1/4"-20 X 5/8" SOCKET CAP	PART	6
41	95017	1/4"-20 X 1/2" SOCKET CAP	PART	2
42	95021	10-32 X 7/16" PAN HEAD	PART	4
43	95025	1/2" BALL BEARING	PART	4
44	95026	1/8" SQ. X .400"L KEY STOCK	PART	4
45	95049	6-32 X 5/16"L SS FT HD PHIL	PART	6
46	95090	10-32 X 1/4"L PAN HEAD	PART	4
47	95119	10-32 X 5/16" FLAT HEAD	PART	4
48	95158	1/4" X .125" NYLON SPACER	PART	6
49	95196	TUG CHARGER	PART	1
50	95200	1/4"-20 X 1"L SOCKET CAP	PART	12
51	95359	6-32 X 3/8" FLAT HEAD	PART	4
52	95366	WIRE EXTENSION CLIP	BULK ITEM	1
53	95371	1/4"-20 X 1/2"L PAN HEAD	PART	6
54	95400	T1X2 SHIPPING BRACKET	PART	1
55	95412	8-32 PAN HEAD PHILIPS SCREW	PART	4
56	95451	SHAFT CAP	PART	2
57	95490	T1X3 TUG OWNERS MANUAL	PART	1
58	95503	24V 20AH BATTERY	PART	1
59	95511	T1X2 WIRE BRACKET RIGHT	PART	1
60	95624	10-32 X 3/8" L PAN HEAD W THR	PART	18
61	96348	TIM2-T1X2 FOAM PACKAGING 5PC	BULK ITEM	1
62	96357	5 FOLD STANDARD TUG BOX	BULK ITEM	1
63	92420A	MAGNETIC CATCH W STRIKE	PART	2

A Touch of Brass
A TOUCH OF BRASS INC

13832 MAGNOLIA AVE.
CHINO, CA 91710-7027
909-464-1000

T1X3 TUG W LIGHTS

DWG. NO. **09980**

REV
G

UNLESS OTHERWISE
SPECIFIED, DIMENSIONS
ARE IN INCHES.

SCALE 0.034

APPR.

SHEET 1 OF 9

▲ BLUE REMOVABLE LOCTITE

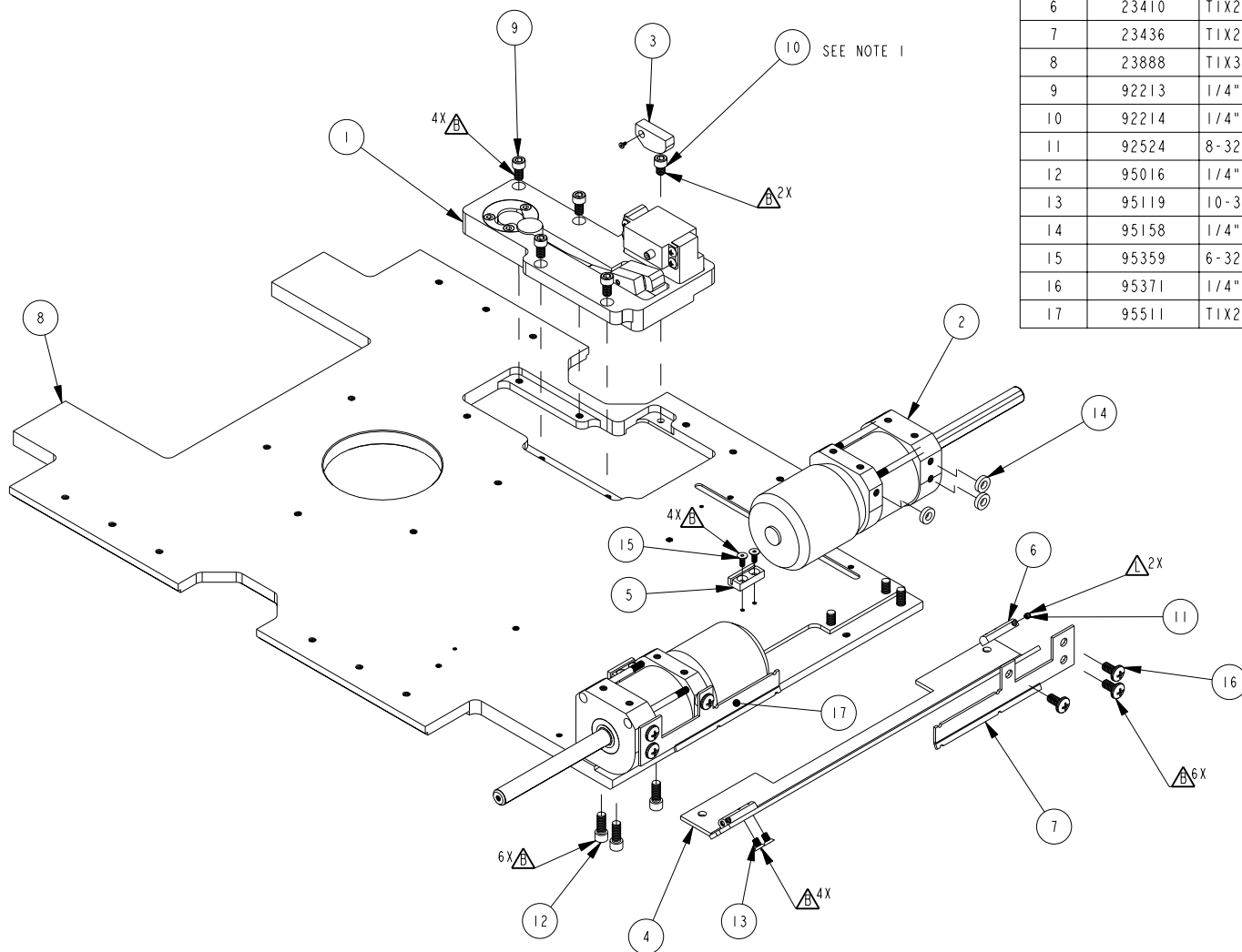
▲ LOCTITE JOINT (GREEN)

NOTES:

1. DO NOT OVERTIGHTEN THE SCREW.

BILL OF MATERIAL (CURRENT LEVEL)

ITEM	PT/ASSY	DESCRIPTION	TYPE	QTY.
1	09885	TIX3 DUAL LIFTER LATCH ASM RIGHT	ASSEMBLY	1
2	09920	TIX MODEL 2 GEARBOX-MOTOR ASM	ASSEMBLY	2
3	22596	T2 SERVO CAM	PART	1
4	23351	TIX LOWER COVER	PART	1
5	23377	TIX SIDE RAIL	PART	2
6	23410	TIX2 HINGE BLOCK	PART	2
7	23436	TIX2 WIRE BRACKET LEFT	PART	1
8	23888	TIX3 MAIN PLATE	PART	1
9	92213	1/4"-20 X 7/16" L SS CAP SCREW	PART	4
10	92214	1/4"-20 X 5/16" L SS CAP SCREW	PART	1
11	92524	8-32"X.1" SET SCREW	PART	2
12	95016	1/4"-20 X 5/8" SOCKET CAP	PART	6
13	95119	10-32 X 5/16" FLAT HEAD	PART	4
14	95158	1/4" X .125" NYLON SPACER	PART	6
15	95359	6-32 X 3/8" FLAT HEAD	PART	4
16	95371	1/4"-20 X 1/2" L PAN HEAD	PART	6
17	95511	TIX2 WIRE BRACKET RIGHT	PART	1



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TIX3 TUG W LIGHTS

DWG. NO. 09980

REV G

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES.

SCALE 0.195

APPR.

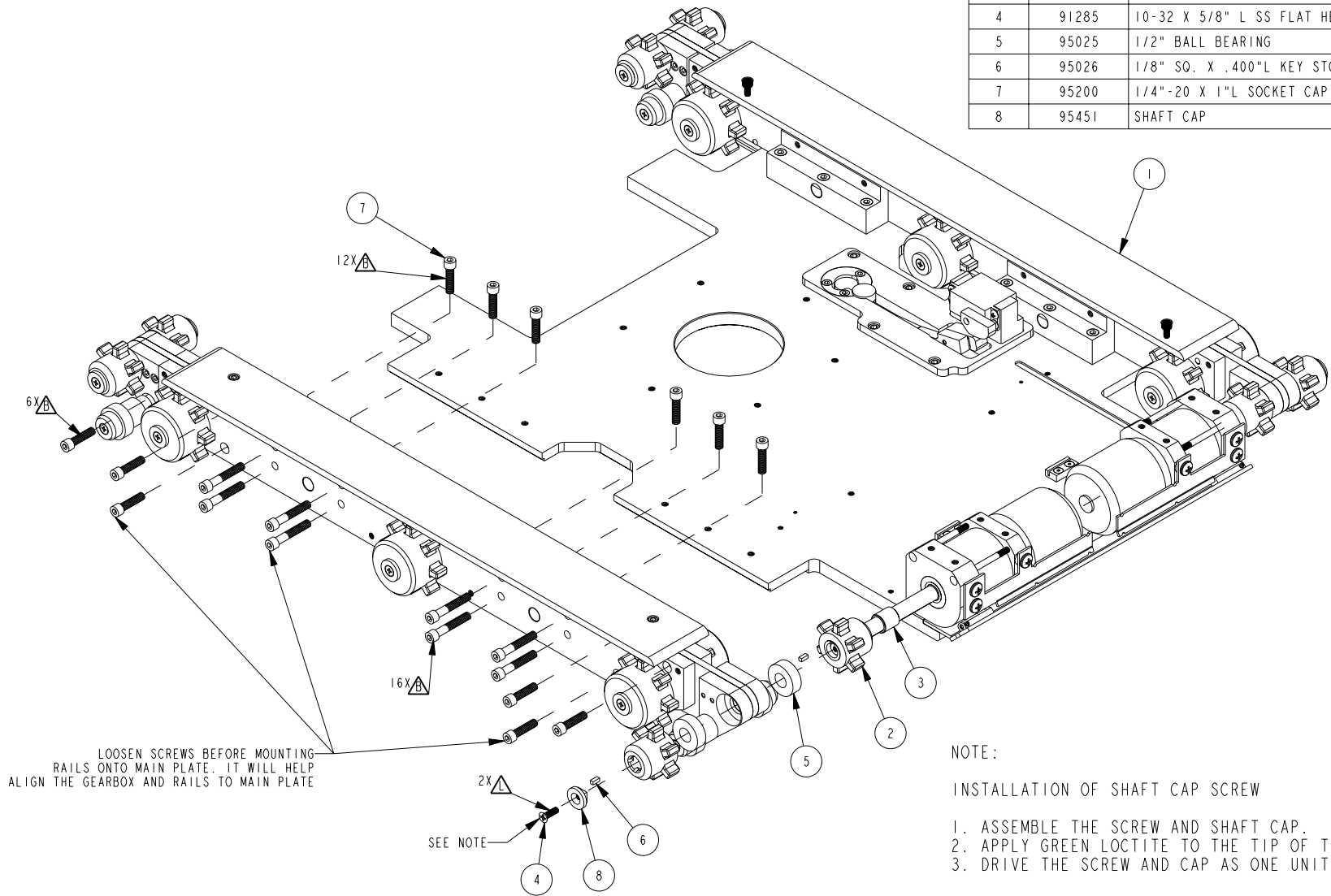
SHEET 2 OF 9

△ BLUE REMOVABLE LOCTITE

△ LOCTITE JOINT (GREEN)

BILL OF MATERIAL (CURRENT LEVEL)

ITEM	PT/ASSY	DESCRIPTION	TYPE	QTY.
1	09562	TIX2 RAIL ASSEMBLY	ASSEMBLY	1
2	22996	DRIVE SPROCKET	PART	4
3	23555	MOTOR SPACER	PART	2
4	91285	10-32 X 5/8" L SS FLAT HEAD	PART	2
5	95025	1/2" BALL BEARING	PART	4
6	95026	1/8" SQ. X .400"L KEY STOCK	PART	4
7	95200	1/4"-20 X 1" L SOCKET CAP	PART	12
8	95451	SHAFT CAP	PART	2



LOOSEN SCREWS BEFORE MOUNTING RAILS ONTO MAIN PLATE. IT WILL HELP ALIGN THE GEARBOX AND RAILS TO MAIN PLATE

SEE NOTE

NOTE:

INSTALLATION OF SHAFT CAP SCREW

1. ASSEMBLE THE SCREW AND SHAFT CAP.
2. APPLY GREEN LOCTITE TO THE TIP OF THE SCREW.
3. DRIVE THE SCREW AND CAP AS ONE UNIT ONTO THE SHAFT

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TIX3 TUG W LIGHTS

DWG. NO. 09980

REV G

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES.

SCALE 0.200

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SHEET 3 OF 9

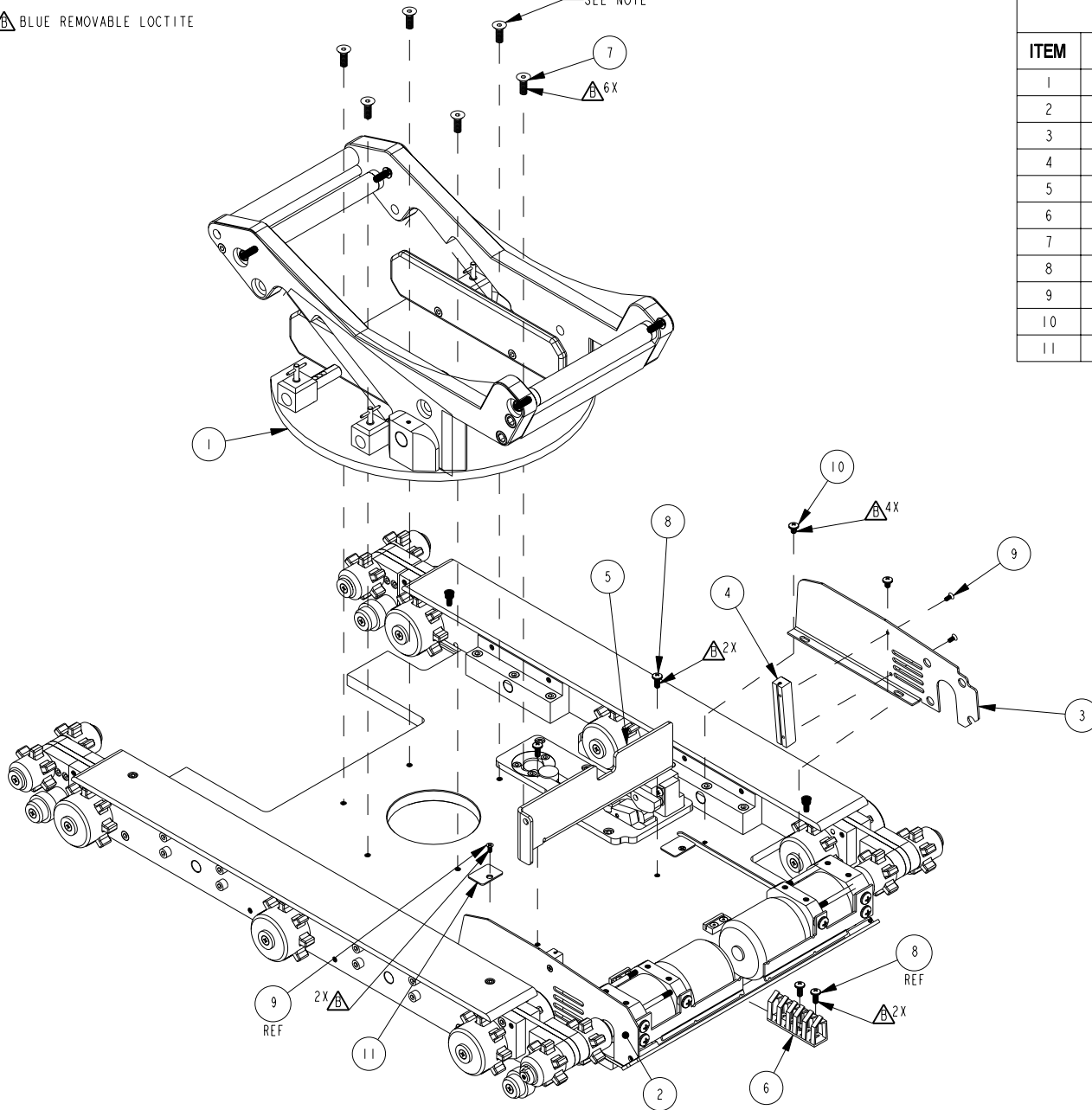
▲ BLUE REMOVABLE LOCTITE

SEE NOTE

▲ 6X

BILL OF MATERIAL (CURRENT LEVEL)

ITEM	PT/ASSY	DESCRIPTION	TYPE	QTY.
1	09979	TIX3 LAZY SUSAN ASSEMBLY	ASSEMBLY	1
2	23348	TIX SIDECOVER LEFT	PART	1
3	23349	TIX SIDECOVER RIGHT	PART	1
4	23375	TIX MAIN BOARD RAIL	PART	2
5	23532	TIV2 / TIX2 BATTERY BRACKET	PART	1
6	91000	2.5" CABLE ROUTER W/ FINGERS	PART	1
7	95003	1/4"-20 X 3/4" FLAT HEAD	PART	6
8	95021	10-32 X 7/16" PAN HEAD	PART	4
9	95049	6-32 X 5/16"L SS FT HD PHIL	PART	6
10	95090	10-32 X 1/4"L PAN HEAD	PART	4
11	92420B	MAGNETIC CATCH W STRIKE	PART	2



NOTE:

INSTALL FLAT HEAD SCREWS ONTO MAIN PLATE THROUGH THE LAZY SUSAN ACCESS HOLE

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TIX3 TUG W LIGHTS

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UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES.

SCALE 0.160

APPR.

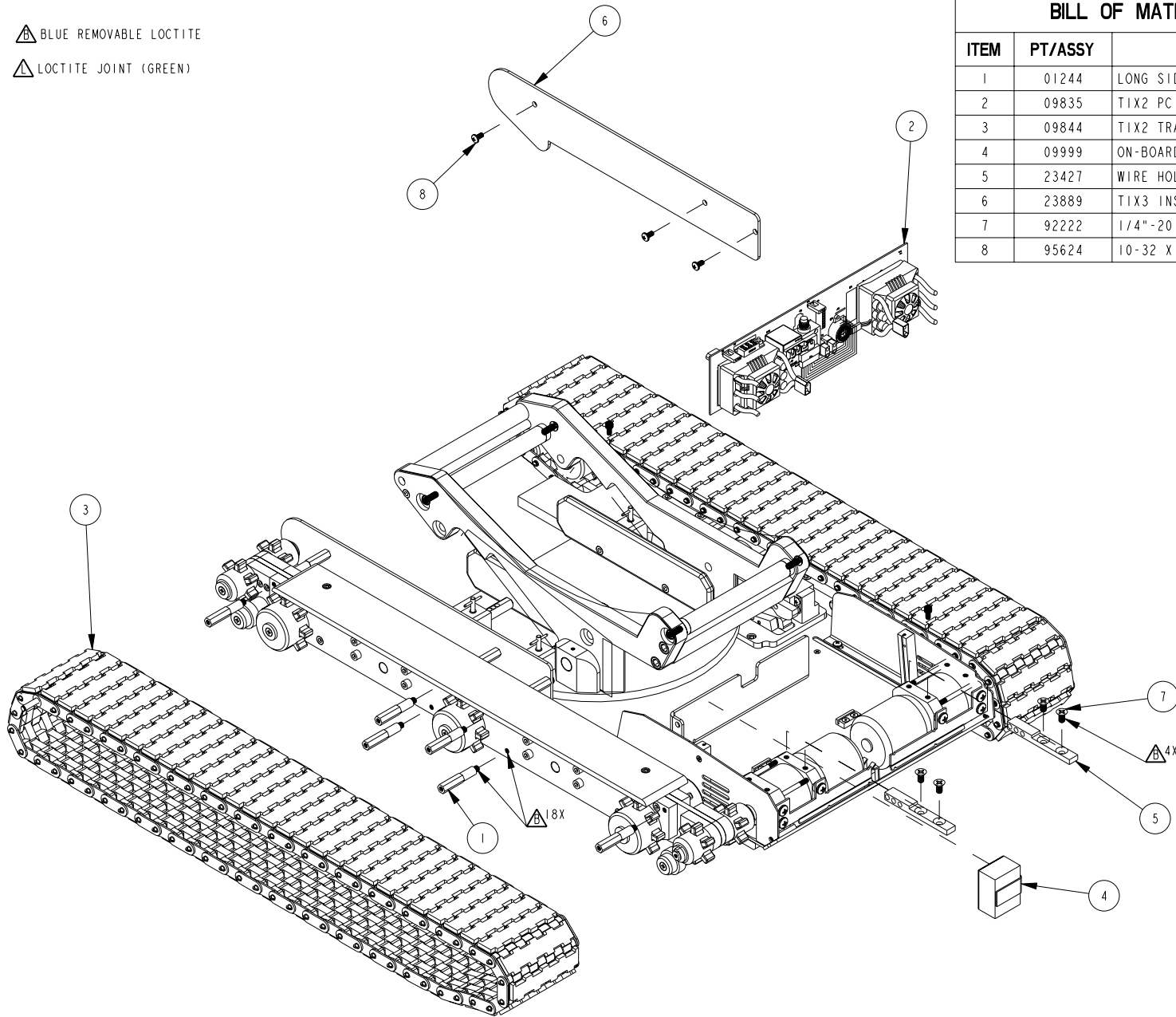
SHEET 4 OF 9

▲ BLUE REMOVABLE LOCTITE

▲ LOCTITE JOINT (GREEN)

BILL OF MATERIAL (CURRENT LEVEL)

ITEM	PT/ASSY	DESCRIPTION	TYPE	QTY.
1	01244	LONG SIDE COVER STANDOFF	ASSEMBLY	18
2	09835	TIX2 PC BOARD	ASSEMBLY	1
3	09844	TIX2 TRACK ASSEMBLY	ASSEMBLY	2
4	09999	ON-BOARD PARTS BOX	ASSEMBLY	1
5	23427	WIRE HOLDER	PART	2
6	23889	TIX3 INSIDE TRACK COVER	PART	2
7	92222	1/4"-20 X 1/2" FLAT HEAD	PART	4
8	95624	10-32 X 3/8" L PAN HEAD W THR	PART	6



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TIX3 TUG W LIGHTS

DWG. NO. **09980**

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UNLESS OTHERWISE
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SCALE 0.155

APPR.

SHEET 5 OF 9

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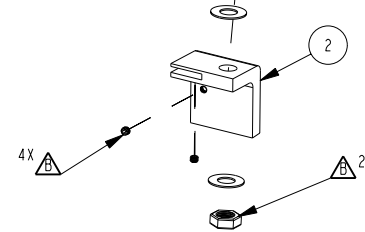
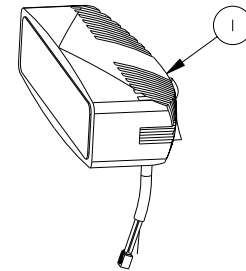
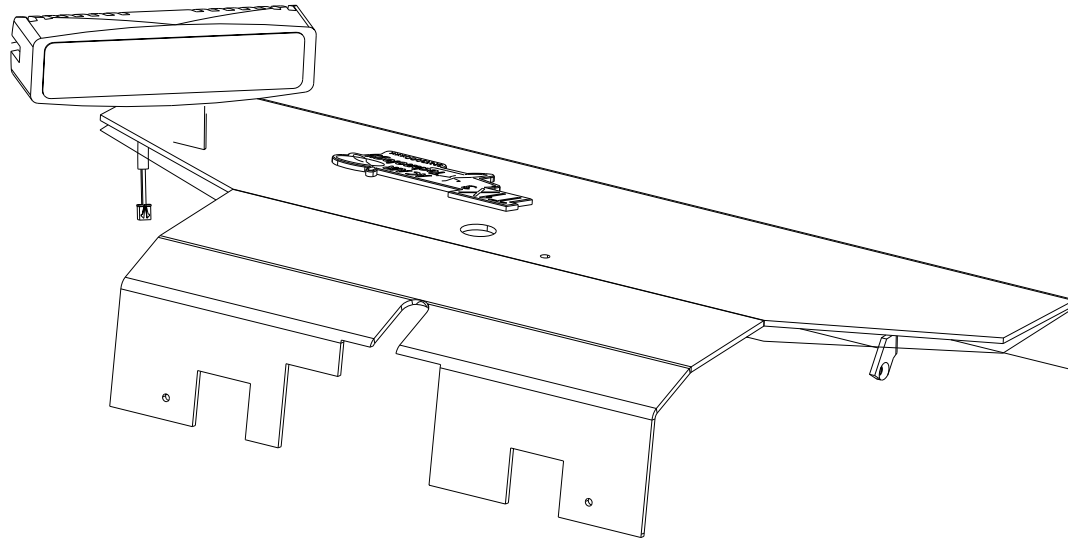
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▲ BLUE REMOVABLE LOCTITE

BILL OF MATERIAL (CURRENT LEVEL)

ITEM	PT/ASSY	DESCRIPTION	TYPE	QTY.
1	09538	LED LIGHT	ASSEMBLY	2
2	09860	TI LIGHT COMPONENTS KIT	ASSEMBLY	1



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TIX3 TUG W LIGHTS

DWG. NO. 09980

REV G

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES.

SCALE 0.250

APPR.

SHEET 6 OF 9

4

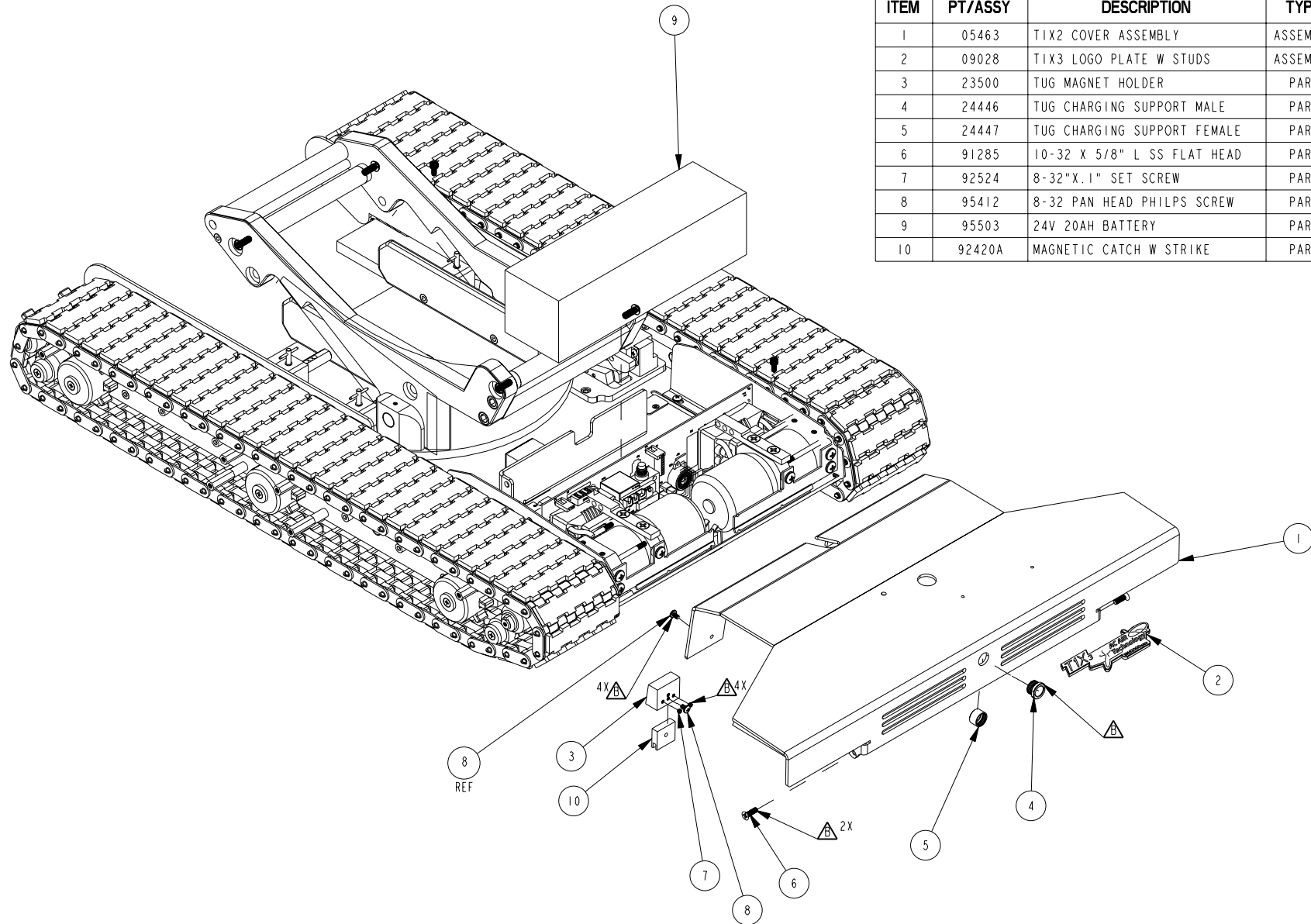
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2

▲ BLUE REMOVABLE LOCTITE

BILL OF MATERIAL (CURRENT LEVEL)

ITEM	PT/ASSY	DESCRIPTION	TYPE	QTY.
1	05463	TIX2 COVER ASSEMBLY	ASSEMBLY	1
2	09028	TIX3 LOGO PLATE W STUDS	ASSEMBLY	1
3	23500	TUG MAGNET HOLDER	PART	2
4	24446	TUG CHARGING SUPPORT MALE	PART	1
5	24447	TUG CHARGING SUPPORT FEMALE	PART	1
6	91285	10-32 X 5/8" L SS FLAT HEAD	PART	2
7	92524	8-32"x.1" SET SCREW	PART	6
8	95412	8-32 PAN HEAD PHILPS SCREW	PART	4
9	95503	24V 20AH BATTERY	PART	1
10	92420A	MAGNETIC CATCH W STRIKE	PART	2



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TIX3 TUG W LIGHTS

DWG. NO. **09980**

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SCALE 0.170

APPR.

SHEET 7 OF 9

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2

BILL OF MATERIAL (CURRENT LEVEL)

ITEM	PT/ASSY	DESCRIPTION	TYPE	QTY.
1	95017	1/4"-20 X 1/2" SOCKET CAP	PART	2
2	95366	WIRE EXTENSION CLIP	BULK ITEM	1
3	95400	TIX2 SHIPPING BRACKET	PART	1
4	96357	5 FOLD STANDARD TUG BOX	BULK ITEM	1

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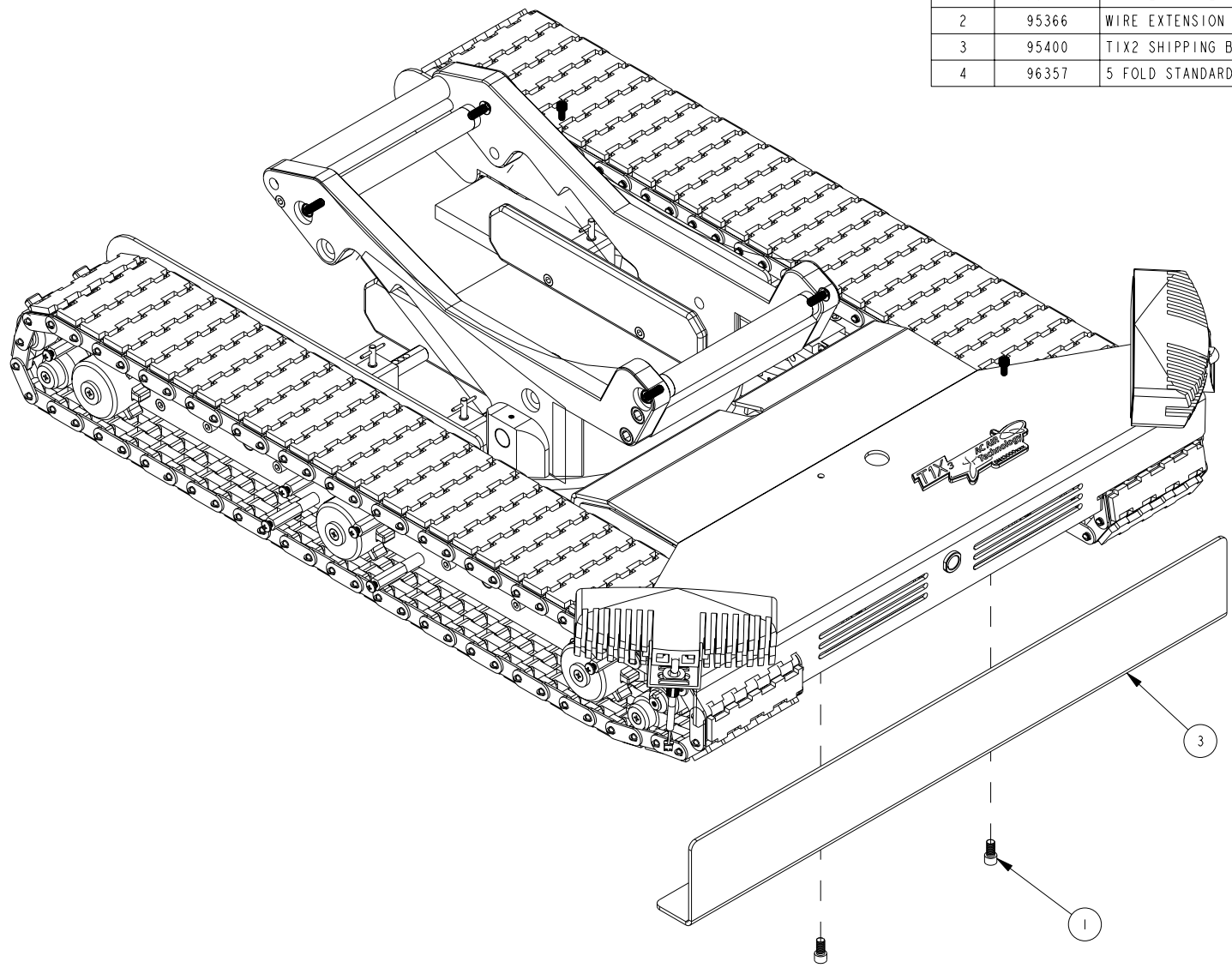
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TIX3 TUG W LIGHTS

DWG. NO. **09980**

REV
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SCALE 0.200

APPR.

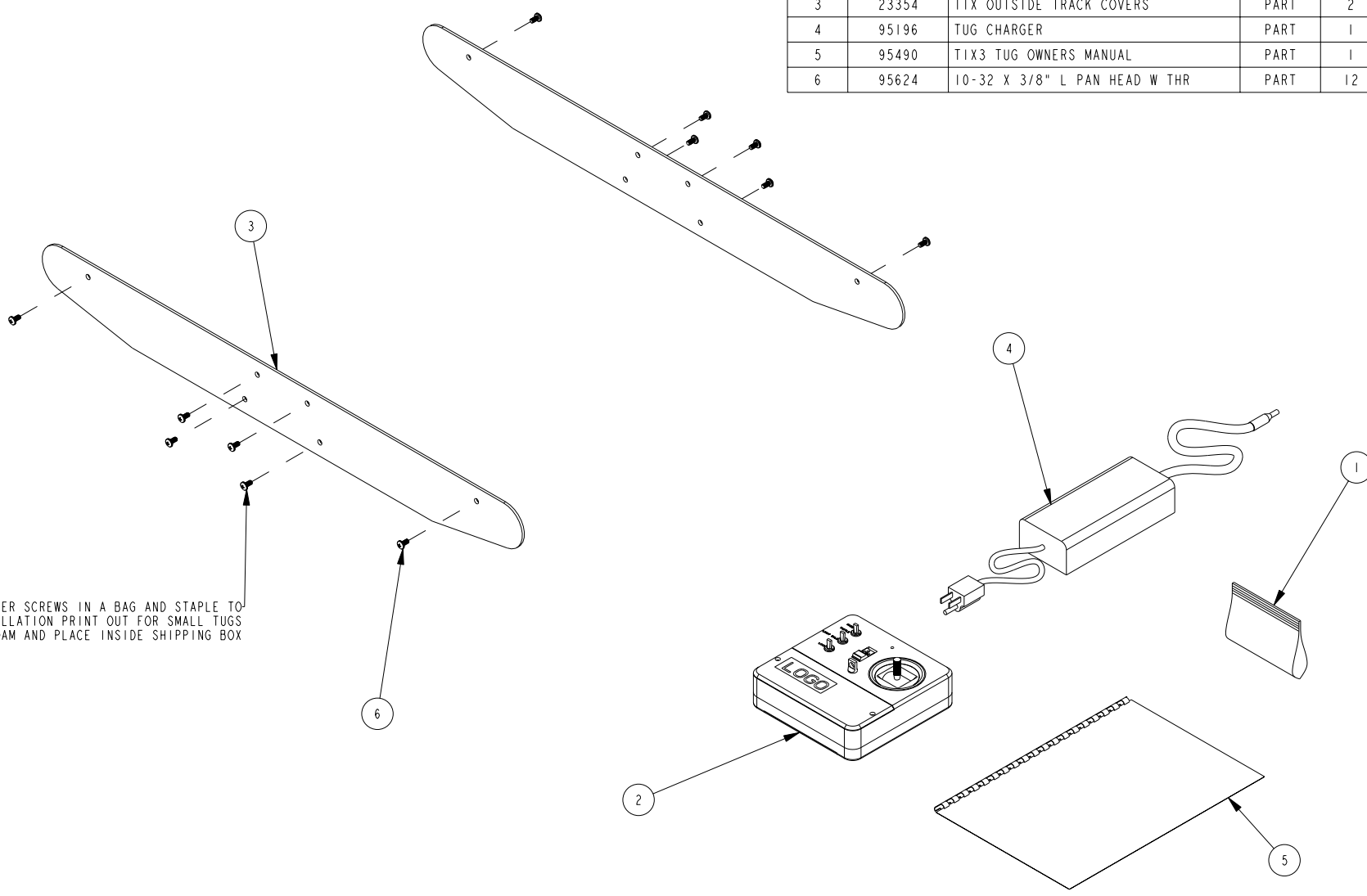
SHEET 8 OF 9

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BILL OF MATERIAL (CURRENT LEVEL)				
ITEM	PT/ASSY	DESCRIPTION	TYPE	QTY.
1	09817	TUG SPARE PARTS BAG	PART	1
2	09965	T2V2/T1.5 V2 RADIO W LIGHTS 2017	ASSEMBLY	1
3	23354	TIX OUTSIDE TRACK COVERS	PART	2
4	95196	TUG CHARGER	PART	1
5	95490	TIX3 TUG OWNERS MANUAL	PART	1
6	95624	10-32 X 3/8" L PAN HEAD W THR	PART	12



PLACE COVER SCREWS IN A BAG AND STAPLE TO COVER INSTALLATION PRINT OUT FOR SMALL TUGS
WRAP THE COVERS IN FOAM AND PLACE INSIDE SHIPPING BOX

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TIX3 TUG W LIGHTS

DWG. NO. 09980		REV G	UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES.
SCALE 0.150	APPR.	SHEET 9 OF 9	