SOUCY TRACK USER GUIDE

OEM GRAIN CART

Rev. 1

JULY 2023

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SECTION 1 TRACK SYSTEM LOAD AND SPEED RATING

HARVESTING CONDITIONS, 30C, 86F									
									
Speed (kph)	10	15	20	24	30	32	35	37	40
Speed (mph)	6.3	9.4	12.5	15	18.8	20	21.9	23.1	25
Front axle weight kg (lb)	**Time (h)**								
30 000	**4**	**4**	**4**	**4**	**4**	**4**	**4**	**4**	**4**
40 000	**4**	**4**	**4**	**4**	4	**4**	**4**	**4**	**4**
50 000	**4**	**4**	**4**	**4**	4	**4**	**4**	**4**	**4**
60 000	**4**	**4**	**4**	**4**	4	**4**	**4**	**4**	**0.5**
70 000	**4**	**4**	**4**	**4**	4	**4**	**0.6**	**0.4**	**0.2**
80 000	**4**	**4**	**4**	**4**	4	**0.6**	**0.4**	**0.3**	**0.2**
90 000	**4**	**4**	**4**	**4**	0.6	0.4	0.3	0.3	0.2
100 000	**4**	**4**	**4**	**4**	0.5	0.4	0.3	0.2	0.2

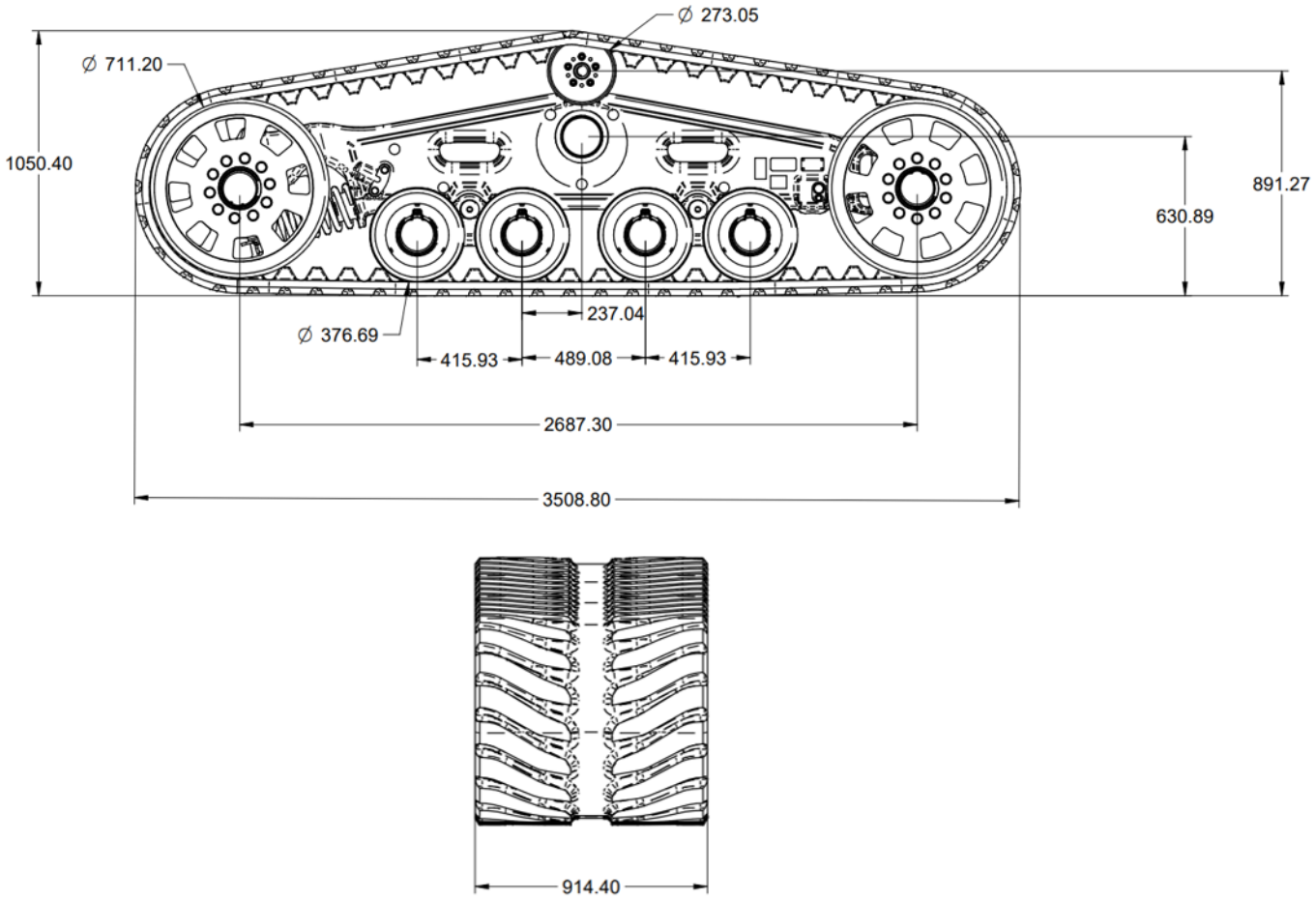
Table 1.1 TRACK SYSTEM SPECIFICATIONS

		Weight	Footprint
OEM GRAIN CART	Right module	4980 lbs 2260 kg	3708 in2 2.39 m2
	Left module	4980 lbs 2260 kg	2708 in2 2.39m2

NOTICE

- WHEN DRIVING ON THE ROAD OVER LONG DISTANCE OR IN HIGH AMBIENT TEMPERATURE, SPRINKLE A CUP OF TALC POWDER, SANDS OR DUSTS IN EACH TRACK SYSTEM TO LUBRICATE THE TRACK AND WHEELS.
- REDUCE SPEED AND LOAD ON CROWNED ROADS TO PREVENT UNEVEN TRACK WEAR.
- CLEAN UP MUD AND RESIDUE BUILD-UPS ON THE CHASSIS ON A REGULAR BASIS. INCREASE FREQUENCY IN STICKY WET SOILS.
- THIS TABLE IS INTENDED TO SERVE AS A GUIDE ONLY; ALWAYS REFER TO AGRICULTURAL EQUIPMENT MANUFACTURER'S SPECIFICATIONS AND NEVER EXCEED MAXIMUM AXLE LOADS SPECIFIED BY AGRICULTURAL EQUIPMENT MANUFACTURER AND NEVER EXCEED THE AGRICULTURAL EQUIPMENT MAXIMUM OPERATING ANGLE WHILE ON DOWNHILL OR SIDEHILL.

Figure 1.1 OEM Grain cart Specifications



NOTICE

- DRIVING ON THE ROAD WITH TRACKS CAN INCREASE TREAD WEAR UP TO 15 TIMES FASTER THAN FIELD WEAR RATES. IN ORDER TO MAXIMIZE TRACK LIFE, KEEP ROAD TRAVEL TO A MINIMUM AND FOLLOW THE LOAD AND SPEED GUIDELINES AS SHOWN ABOVE.
- DRIVING ON THE ROAD WITH TRACKS WITH A FULLY LOADED TRAILER WILL RESULT IN PREMATURE TRACK WEAR AND FAILURE. IT IS POSSIBLE TO TRAVEL WITH A SMALL PARTIAL LOAD, AS LONG AS THE INDICATED LOAD AND SPEED RESTRICTIONS ARE MET.
- ALWAYS RESPECT LOCAL REGULATIONS REGARDING MAXIMUM AXLE LOAD, BRAKING, ETC.
- TO MAXIMIZE TRACK SYSTEM LIFE, AVOID:
  > FULLY-LADEN TRAVEL OVER LONG DISTANCES.
  > HIGH SPEED ROAD TRAVEL OVER LONG DISTANCE.
  > DRIVING ON THE ROAD UNDER HIGH AMBIENT TEMPERATURE (85 F / 30 C) OVER LONG DISTANCE

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SECTION 2 INTRODUCTION

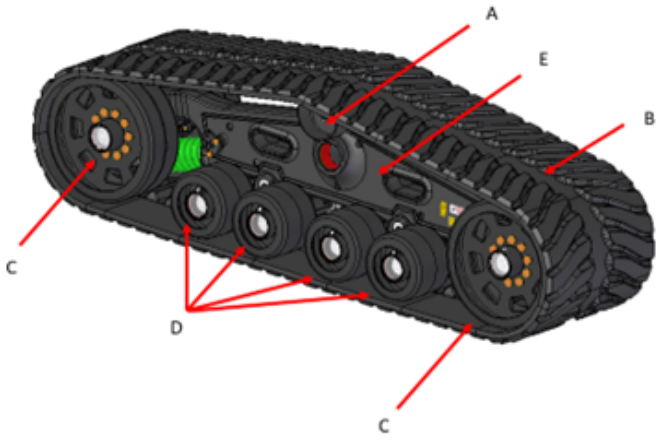
2.1 PRESENTATION

This guide provides instructions for the safe installation, operation and maintenance of the Soucy grain carts.

The system replaces the wheels on a grain cart. Its main elements are:

- A main frame with six axles; five lower axles and one upper axles.
- A rubber track

Figure 2.1 Main Sub-assemblies, OEM GRAIN CART



ITEM	DESCRIPTION
A	TOP AXLES
B	TRACK
C	IDLERS
D	MID ROLLERS
E	MAIN FRAME

NOTICE

THIS GUIDE REFLECTS THE SYSTEM CONFIGURATION AT TIME OF PRINT.
PHOTOS AND FIGURES ARE TYPICAL.
SOUCY RESERVES THE RIGHT TO MODIFY THE SYSTEM AT ANY TIME WITHOUT PRIOR NOTICE. YOUR SYSTEM MAY SLIGHTLY DIFFER FROM THE EQUIPMENT SHOWN.

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SECTION 3 SAFETY

3.1 GENERAL

- This chapter provides information necessary to safely install, operate and maintain the Soucy System.
- Only qualified personnel are allowed to install, use and maintain the track system.

Figure 3.1 Safety Alert Symbol

- The symbol above draws your attention to important instructions concerning your personal safety. Read the accompanying message carefully to avoid personal injury or death.
- Keep this manual in the cab while using the Soucy System.

3.2 SAFETY SIGNS USED IN THIS GUIDE

The following signal words are used throughout this guide as per **ANSI Z535.4-2007** (Product Safety Signs and Labels):

DANGER

DANGER INDICATES A HAZARDOUS SITUATION WHICH, IF NOT AVOIDED, WILL RESULT IN DEATH OR SERIOUS INJURY;

WARNING

WARNING INDICATES A HAZARDOUS SITUATION WHICH, IF NOT AVOIDED, COULD RESULT IN DEATH OR SERIOUS INJURY;

CAUTION

CAUTION INDICATES A HAZARDOUS SITUATION WHICH, IF NOT AVOIDED, COULD RESULT IN MINOR OR MODERATE INJURY;

NOTICE

NOTICE INDICATES INFORMATION CONSIDERED IMPORTANT, BUT NOT HAZARD-RELATED (E.G., MESSAGES RELATING TO PROPERTY DAMAGE);

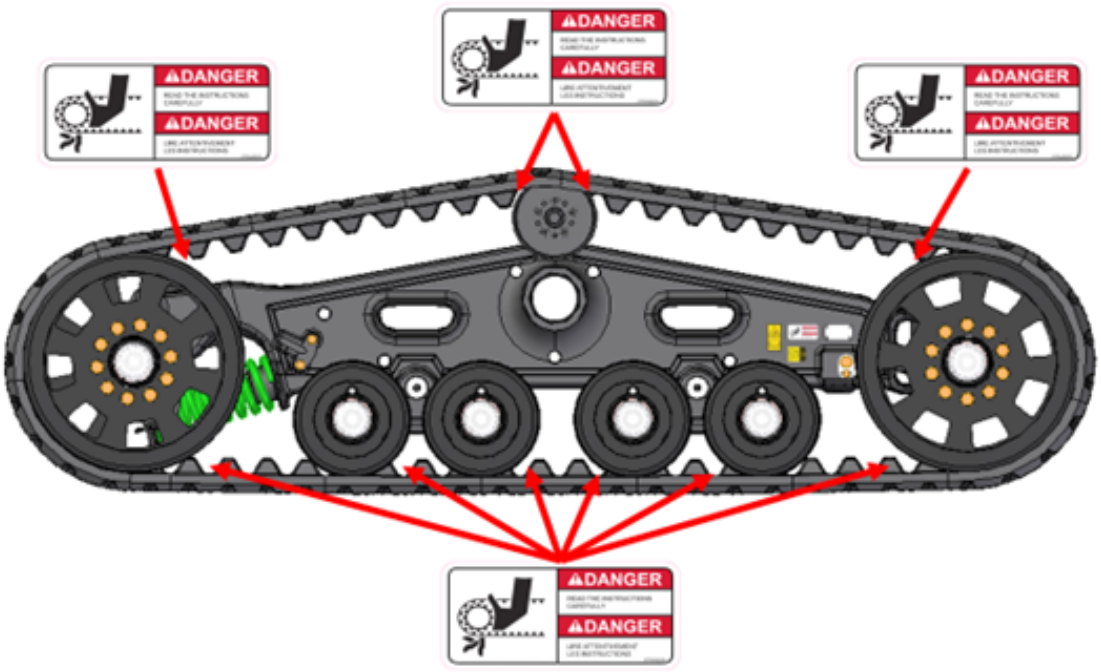
3.3 SAFETY INSTRUCTIONS

- Read your vehicle owner's manual before you use it with Soucy Track systems.
- Check that safety labels are intact and visible. Replace damaged or illegible labels.
- Empty the contents of the cart prior to installation of the tracks.
- Read the installation, operation and maintenance guide of your Soucy Track system before installing and operating your system.
- Make sure the lifting equipment has the capacity to keep the vehicle stable during installation of the system. Inadequate lifting equipment can lead to unstable vehicle that can cause severe injuries or death.
- Ensure that no one is in the danger zone when the cart is in motion.
- Check bolts and nuts tightening after the first two hours of use. Loosened hardware can lead to damage to components, detracking and severe injuries or death.
- Test drive the cart without load before using it.

3.3.1 SAFETY INSTRUCTIONS

- Make sure no one is in the danger zone of the vehicle while the engine is running or the vehicle is moving.
- Read your vehicle owner's manual before you use it with Soucy Track systems.
- Check that safety labels are intact and visible. Replace damaged or illegible labels.
- Read the installation, operation and maintenance guide of your Soucy Track system before installing and operating your system.
- Make sure the lifting equipment has the capacity to keep the vehicle stable during installation of the system. Inadequate lifting equipment can lead to unstable vehicle that can cause severe injuries or death.
- Check tightening of bolts and nuts after the first two hours of use. Loosened hardware can lead to damaged components, detracking, severe injuries, or death

Figure 3.2 CRUSHING RISK ZONES



⚠ WARNING ⚠

- **HEAVY PARTS CAN CAUSE INJURIES. TWO PEOPLE ARE REQUIRED FOR ASSEMBLY AND REMOVAL OF THE SOUCY TRACK SYSTEM. USE A JACK, A FORKLIFT OR A HOIST TO HANDLE THE SYSTEM AND SUB-ASSEMBLIES.**
- **DO NOT INSTALL OR OPERATE THE TRACK SYSTEM WITH DAMAGED COMPONENTS OR BROKEN OR MISSING HARDWARE. THAT MAY LEAD TO SEVERE INJURIES.**

DANGER

ALWAYS RELEASE THE PRESSURE WHEN DISASSEMBLING ANY SPRING TENSIONER. NOT RELEASING THE PRESSURE MAY LEAD THE SPRING TENSIONER TO EJECT WITH GREAT FORCE AND CAUSE MAJOR INJURIES OR DEATH.

3.4 SAFETY LABELS

- Replace any missing, damaged or illegible labels.
- Soucy Track recommends placing the different labels on the cart where appropriate:

Figure 3.3 SAMPLE

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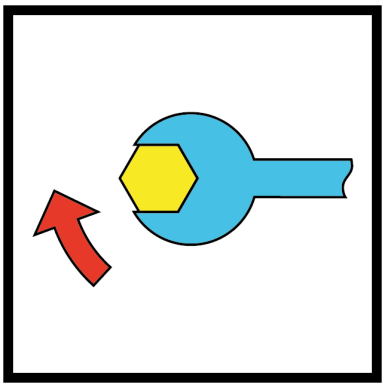
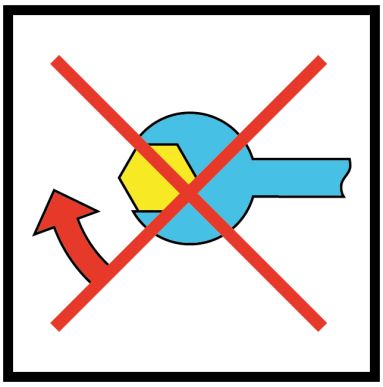
SECTION 4 PREPARATION AND INSTALLATION

4.1 TOOLING

The following tools are required to install the track system :

- Standard tools box
- Impact wrench
- C Clamp
- Fork lift and/or crane
- Torque wrench
- Bottle jack
- Jack stands
- Welding Equipment
- Grease gun with flexible hose and rigid coupling

Table 4.1 PICTOGRAM GLOSSARY

	**REMOVE THE PAINT**
	**GREASING**
	**TORQUE THE BOLTS OR NUTS**
	**HAND TIGHT THE BOLTS OR NUTS**

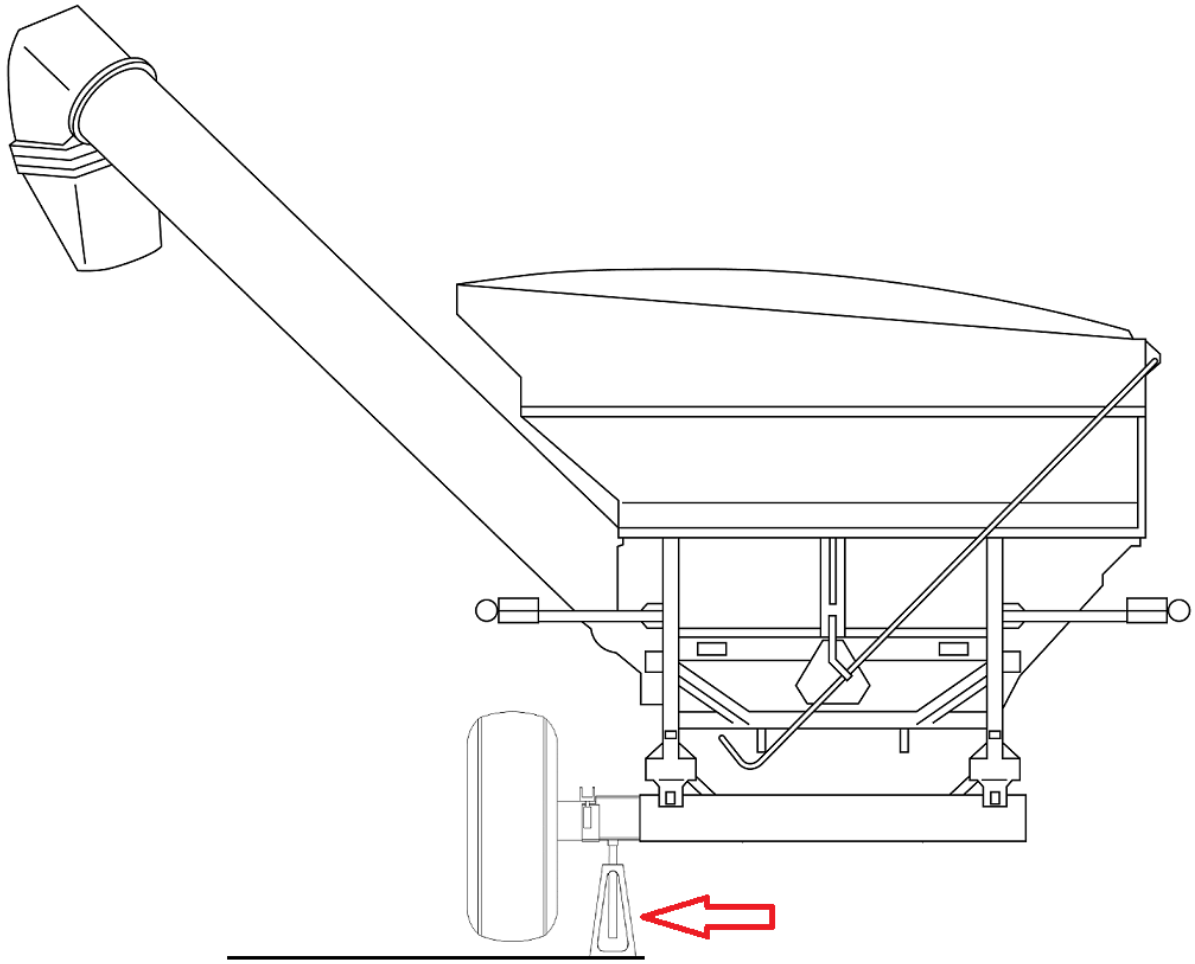
4.2 TRACK SYSTEM INSTALLATION PROCEDURE

⚠ CAUTION ⚠

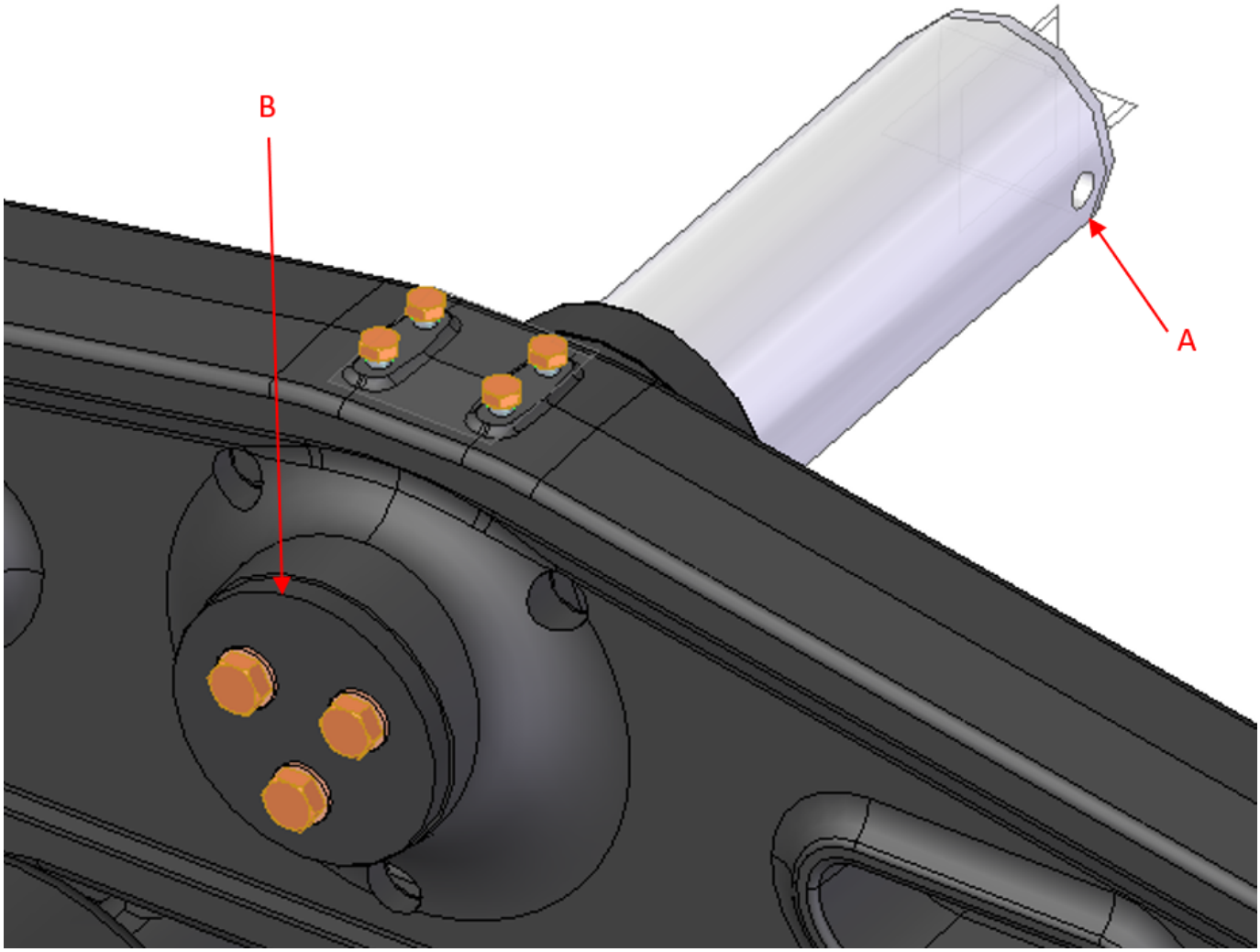
- **INSTALL THE TRACK SYSTEM ON ONE SIDE AT THE TIME**
- **INSTALL SAFETY BLOCKS ON BOTH WHEELS**

4.2.1 INSTALLATION PROCEDURE

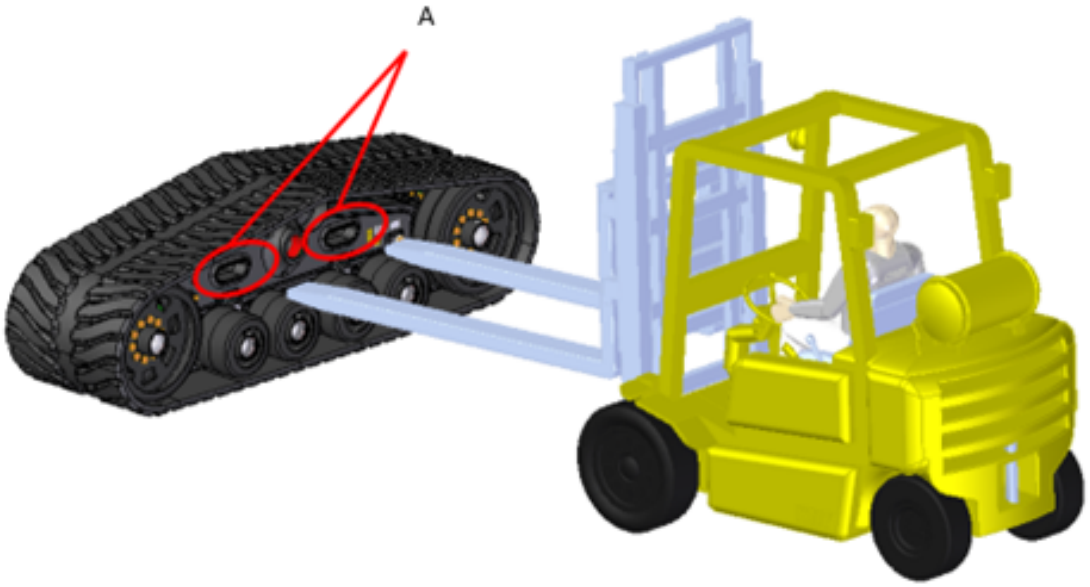
1. Raise the grain cart until the wheels leave the ground and stabilize it with jacks. Refer to the grain cart owner's manual to install the jacks safely.
2. Remove grain cart shaft as indicated in grain cart owner's manual.



3. With a lifting device, insert graincart main pivot into frame. Orientate main pivot so hole A is in the same orientation as the locking pin of the graincart axle. Lock the axle pivot with cap and bolt B



4. Slide the grain cart pivot into the axle lifting it with the lifting hole. Lock the pivot with axle pin.



SECTION 5 MAINTENANCE

5.1 REGULAR MAINTENANCE TABLE

⚠ WARNING ⚠

> INSPECT TENSION ON ALL BOLTS AFTER THE FIRST TWO HOURS OF USE. OPERATING WITH LOOSE BOLTS CAN LEAD TO DAMAGE TO COMPONENTS, LOSS OF TRACK SYSTEM SUB-ASSEMBLIES, AND SEVERE INJURY OR DEATH.

Operation	Frequency (hours)						
	First	Every					
	8	10	25	50	100	200	ONCE PER SEASON OR 500 HOURS
Greasing of tensioner pivot							X
Visual inspection of tracks				X			
Visual inspection of wheels				X			
Visual inspection of frame, attachment and main axle (ie, and bolts)							X
Alignment of tracks (see note)	X						X
Oil level check of the main and wheel axle		X					
Oil change of the wheel axle						X	X
Cleaning				X			

NOTE

- **Every time you change the track.**
- **Every time you change the vehicle**
- Always use Soucy approved spare parts and lubricants when you maintain your Track System.

5.2 WHEELS OIL VERIFICATION

NOTICE

- CHECK OIL LEVEL OF THE WHEELS ACCORDING TO THE REGULAR MAINTENANCE SCHEDULE
- A LACK OF OIL CAN CAUSE DAMAGES TO BEARINGS AND SEALS

1. If after a few check the lack of oil is always present. The seal should be inspected and replaced as necessary.
2. Use JDM J20C grade oil with the following properties:
   a. Soucy uses Hy-Gard Hydraulic / Transmission oil
   b. Kinematic Viscosity of 9.1cSt @100ºC
   c. Pour point of -36ºC
   d. Flash point of 200ºC

ITEM

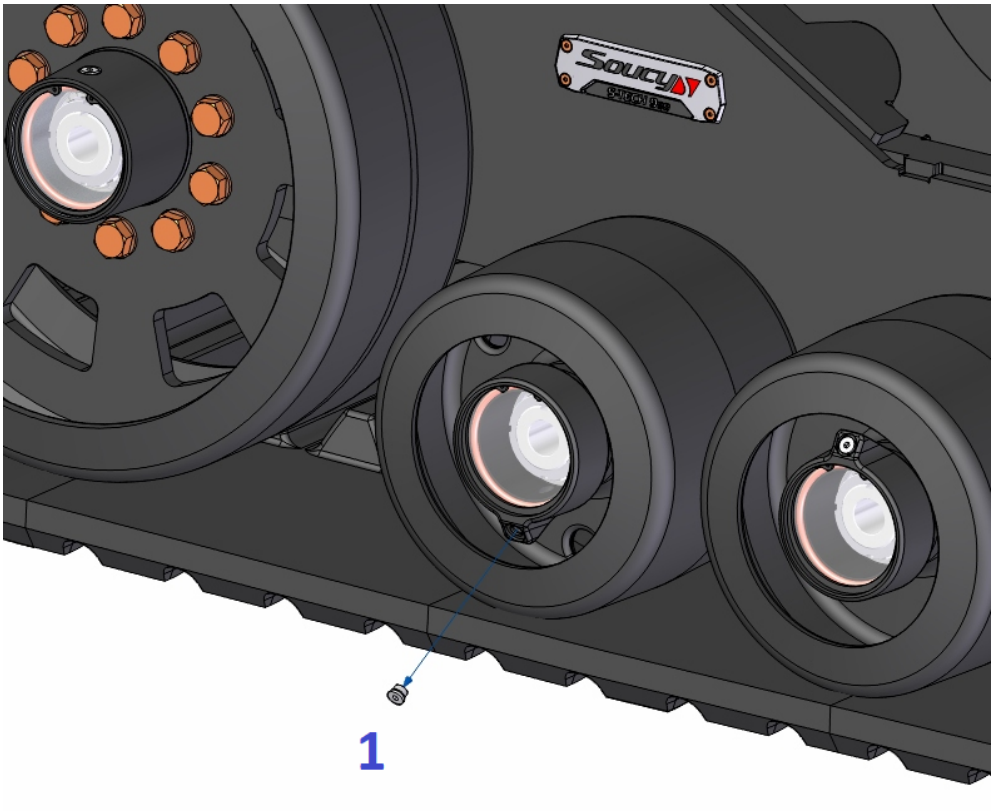
DESCRIPTION

5.3 WHEELS OIL CHANGE

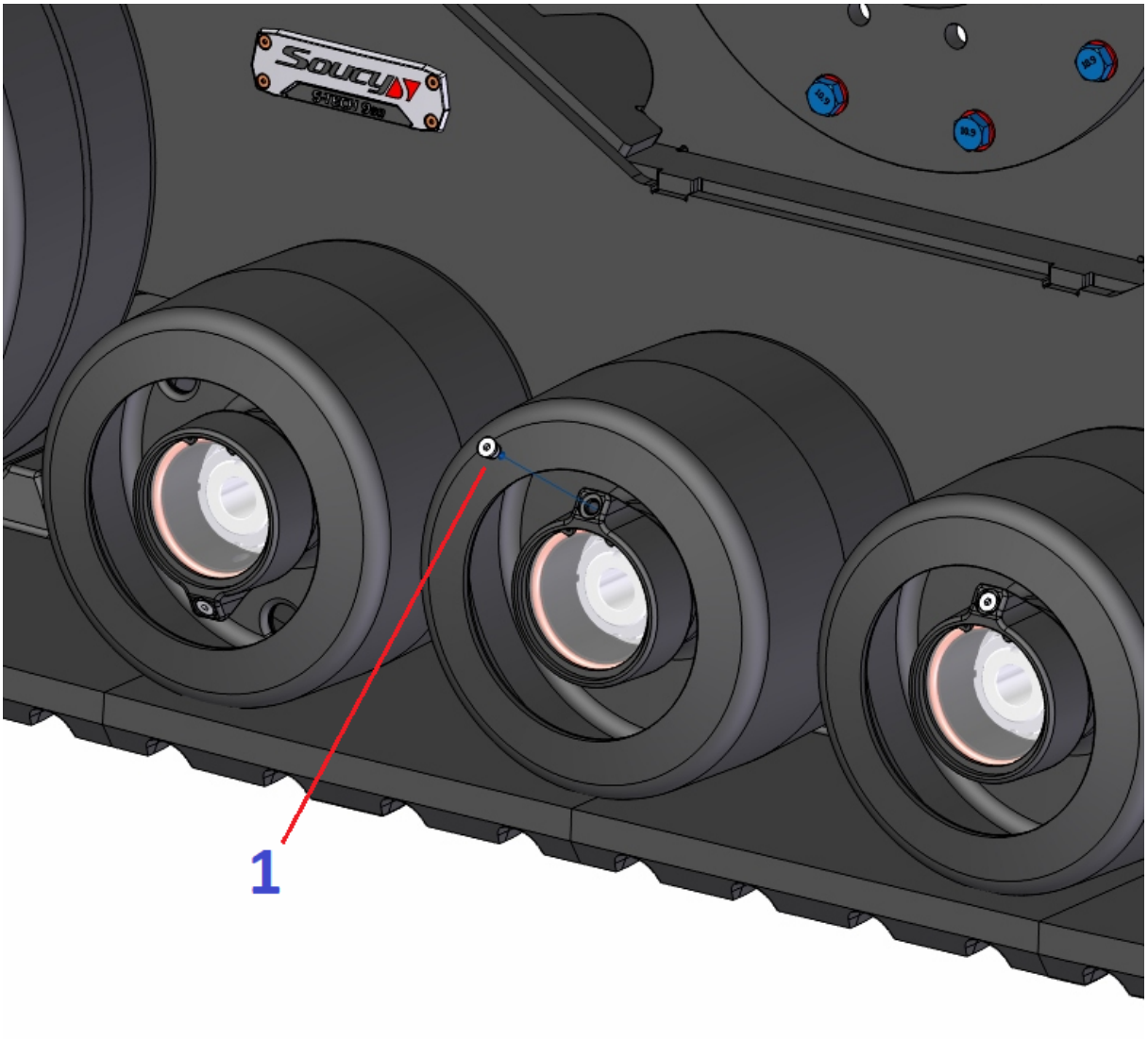
NOTICE

- REPLACE OIL ACCORDING TO THE REGULAR MAINTENANCE TABLE
- DO NOT SUBSTITUTE OIL WITH ANOTHER OIL WHICH MAY LEAD TO DAMAGE THE SEALS
- DURING THE MANIPULATION, PROTECT THE TRACK FROM OIL
- DO NOT ALLOW ANY DIRT OR DEBRIS TO ENTER INTO THE WHEEL HUB DURING THE DRAINING AND FILLING PROCEDURE
- IF YOU HAVE TO REMOVE THE AXLE HUB CAP, CHANGE THE X SEAL BEFORE REINSTALLING THE CAP.

1. Raise the AGRICULTURAL EQUIPMENT slightly to help aligning the wheels.
2. Align the drain plug downwards.
3. Remove the drain plug (1) with an allen key.
4. Drain oil in the proper bucket.
5. Repeat previous steps for all wheels.


1

6. Align the drain plug upwards and remove them.
7. Fill the wheel with oil.
8. Put back the plug (1) with an allen key.
9. Repeat previous steps for all wheels.



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5.4 CLEANING AND STORAGE

- Clean the Track System daily or more frequently (according to type of operation) to prevent accumulation or packing of debris. This is especially important when the AGRICULTURAL EQUIPMENT harvester is used in muddy conditions or in claylike soil, you should never let muds getting dry. Also avoid ice accumulation.
- Operating the vehicle while debris are caught in the Track System can damage components.
- Use of a high-pressure washer is acceptable but do not direct the water jet towards seals and main axle oil level (sight glass).
- Avoid contact with oil, diesel or solvents. Wipe the track or rubber if it comes into contact with these substances.
- Store in a dry place, away from UV rays.
- Do not store next to a heat source.

5.5 LONG-TERM STORAGE CONDITIONS

- Store the Track System indoors in a cool dry area 4 °C to 25 °C (40 °F to 75 °F). Avoid exposure to UV rays. Cover system if stored outside.
- Avoid storing at temperatures greater than 35 °C (95 °F) for extended periods.
- If possible, release tension of tracks.
- Do not store the Track System in closed areas with electric devices that generate ozone (such as motors), or with petrol chemicals or petrol chemical vapors.
- The Track System is flammable. Proper fire suppression equipment is required.

SECTION 6 OPERATION

6.1 BREAK-IN PERIOD, NEW TRACK

⚠ CAUTION ⚠

STAY AWAY FROM A RUNNING VEHICLE.

NOTICE

CLOSELY MONITOR THE TRACK CONDITIONING PROCESS FOR THE FIRST 150 HOURS OF OPERATION.

- An adequate break-in period is required to condition a new track. Use talc to condition a new track. If you do not have talc handy, water, mud, snow, soft ground, and dust are lubricating agents able to accomplish such conditioning.
- A new track generates more heat in the wheel path and tread profiles than a conditioned track. This is one more reason to condition a new track, thus preventing track failure or overheat.
- An inadequate break-in period can generate smoke and the smell of burnt rubber and rubber deposits on the track and the frame. It may also cause damage to the inner side of the lugs, such as scuffing.
- To prevent scuffing, a new rubber track must be preconditioned BEFORE using it in the fields or on the road. A new track should be preconditioned with dirt or some other non-caustic material. This is done by scattering a thin layer of the material over the surface of the track and driving the system slowly for a short period. The dirt acts as a lubricant and enhances the track conditioning process. Conditioning may need to be done more than once if the system is used on the road for long distance dispatch.
- After initial conditioning, the system should be operated in the field to further condition the track. The track conditioning process should be checked often for the first 150 hours of operation. After using the system in field conditions for a while, the drive lugs will harden and better resist heat and scuffing.
- If accelerated scuffing should occur with high heat on the drive lugs, see the adjustment and alignment procedures or contact your Soucy Track dealer.

6.2 USE OF TALC

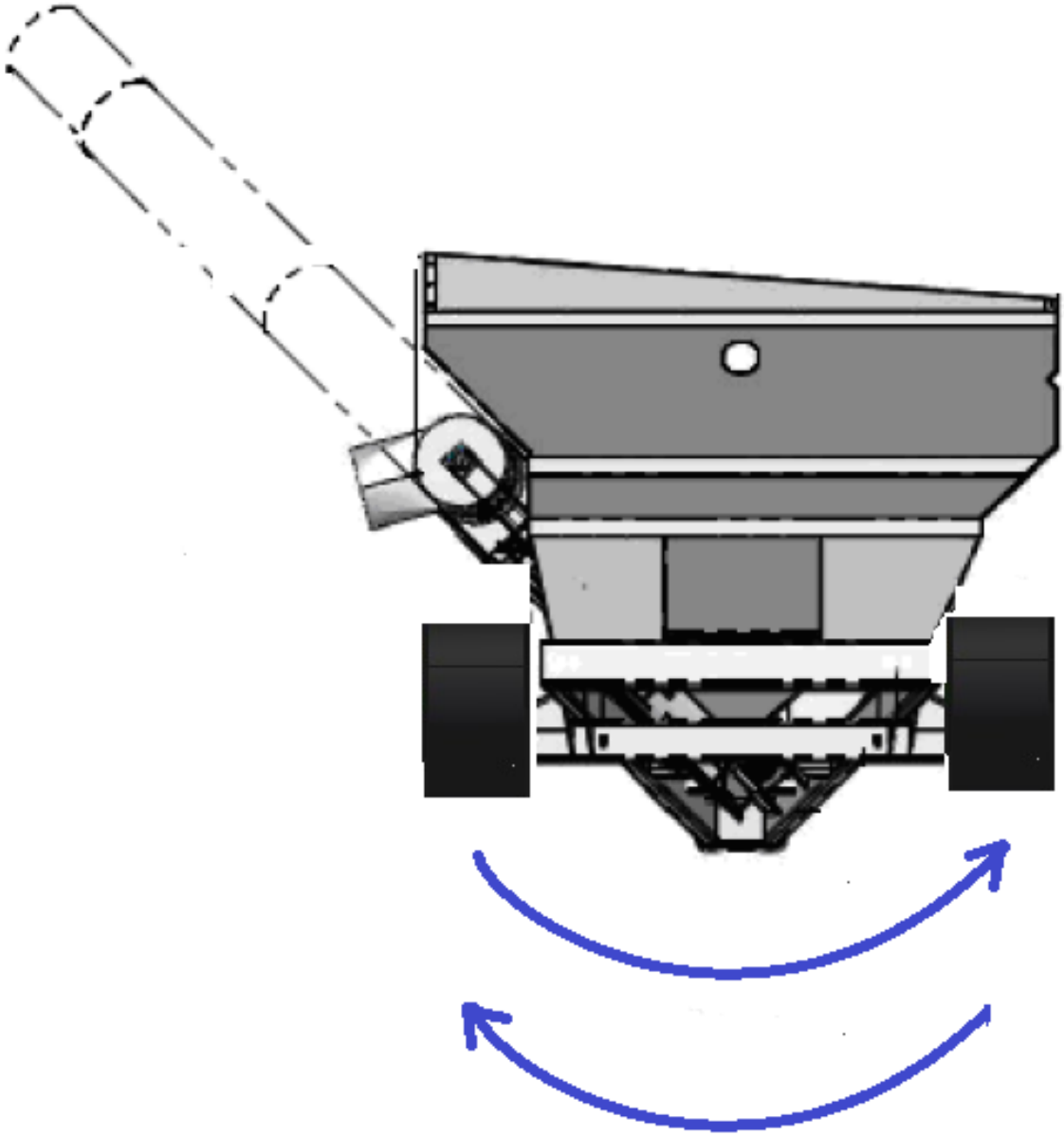
- During the break-in phase, coat the track with talc. Talc acts as a dry lubricant. It prevents overheating and reduces friction between wheel and track. You can procure talc from your vehicle dealer (typical use is for treated seed planting with pneumatic planter). Apply talc as follows:
- Sprinkle one cup of talc per track (in order to lubricate the contact surface between the side of the wheel and the drive lugs) and drive the vehicle for 2.5 km (1.5 mile).
- When traveling long distance, apply talc every 30 minutes of travel.

6.3 SAFE OPERATION

- Comply with the following information for longer service life of your track system:
- Before you operate the track system, make sure the tracks are correctly adjusted and aligned.
- Check tensioner cylinder pressure before using equipment.
- There is a slight loss of speed when using a track system. This is due to a smaller sprocket diameter compared to the wheels, to additional weight of the system, and to the increased traction of the track system. Therefore, the driving characteristics of your vehicle will change with the installation of the track system. Take the time to familiarize yourself with operating the system before you use it in the fields.
- The system is designed to run on agricultural land surfaces. Do not drive on hard surfaces (paved roads) at high speed for extended periods.
- Track tread wears faster with intensive roading. Tread wear rates can be minimized by staying off pavement, reducing transport weight and speed, and adjusting ballast for even transport weight distribution front to back.
- **A TRACKED MACHINE BALLASTED FOR PROPER FIELD OPERATION IS USUALLY NOT BALLASTED CORRECTLY FOR ROADING.**
- The greatest rate of tread wear occurs on a hot day with a poorly-balanced, heavy machine. Always travel during cooler parts of the day and at reduced travel speed and weight, as this will lower temperatures of the treads, guide lugs, and rolling components.
- Using a front loader applies additional load on the front axle and could lead to components failures. Never exceed the maximum load specified in following tables when using the front loader.
- Slowly start working when operating in cold weather.
- Contact your **Soucy Track dealer** if you have questions about operating your track system.

6.4 TRACK ROTATION

- Rotate track from side to side after 1,000 hours of normal use or 500 hours of intensive use (heavy load and road travel).
  This will even the wear on the tracks.
  Failure to comply could result in premature wear of tracks.



6.5 ROAD TRAVEL GUIDELINES

NOTICE

ALWAYS COMPLY WITH THE LOCAL ROAD SAFETY RULES AND REGULATIONS SPECIFIC TO FARM VEHICLES WHEN TRAVELING ON PUBLIC ROADS WITH YOUR TRACK SYSTEM.

- Using rubber tracks on roads requires a minimum of precaution. Following are information about track behavior under certain conditions and what you can do to maximize the longevity of your system:
- Like a tire, the worst enemy of a rubber track is heat.
- The combination of high speeds and heavy loads, as well as uneven road conditions, may lead to track overheating and premature damage to rubber tracks, wheels and other components.
- To avoid this kind of inconvenience, Soucy Track recommends adjusting your speed on long distance trips, hot pavement or uneven road surfaces.
- To find out if a rubber track is overheating, the rule of thumb is to hand feel the internal wheel path of the track as well as the rubber surface of the wheels. If your hand can stand the heat, the track is not overheating. Please ensure verifying the inside wheels and corresponding wheel path (wheel point toward the vehicle) as they may be affected by concave road.
- If overheating occurs, simply try slowing down or, if possible, unload the vehicle.

SECTION 7 OEM TRACK PARTS CATALOG

7.1 EXPLODED VIEW OF THE TRACK SYSTEM

7.1.1 MAIN FRAME/ <8302002–1000–P3>

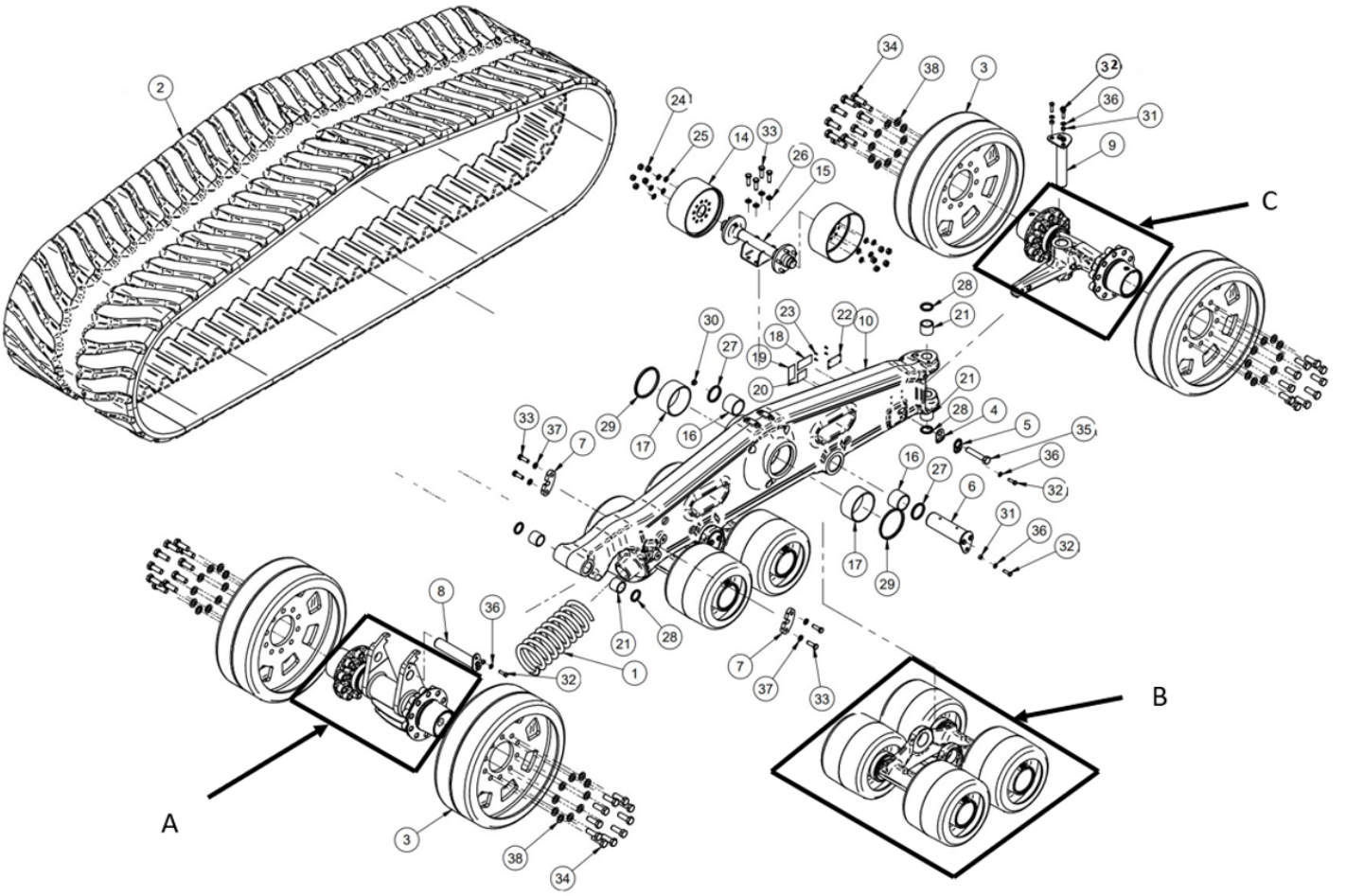


Table 7.1 MAIN FRAME/ <8302002–1000–P3>

ITEM	PART #	QTY	DESCRIPTION
1	11100314	1	SPRING
2	1SI0548-1	1	TRACK 36X62PX4.9
3	8034031_0010_1	4	"28"" SPINNED WHEEL - PAINTED"
4	8182001_1150_1	2	WEAR PLATE TRACKING
5	8182001_1330_1	2	TRACKING ANTI-LOOSENING PLATE
6	8302002_0009_1	2	ASSEMBLY PIVOT TANDEM
7	8302002_0010_1	2	LOOSENESS CYLINDER ATTACHMENT
8	8302002_0021_1	1	ASSEMBLY PIVOT AXLE
9	8302002_0022_1	1	ASSEMBLY PIVOT AXLE
10	8302002_0230_1	1	MAIN FRAME - MACHINED
11	8302002_2050_1	1	TRACKING ASSEMBLY
12	8302002_2060_1	1	TENSIONER ASS'Y
13	8302002_2200_1	2	ASSEMBLY TANDEM
14	8304002_3010_1	2	TOP IDLER WHEEL - BOLTED
15	8304002_3100_1	1	TRAILER UPPER IDLER AXLE
16	CB4856_042_GM	4	GAR-MAX BUSHING 3.0 X 3.5 X 2.625
17	CB6212_GM	2	GAR-MAX BUSHING 6.0 X 6.5 X 3
18	ETPO-00220	1	DANGER WARNING LABEL
19	ETSI-00171	1	HEAVY LOAD STICKER
20	ETSI_00130	1	FRAME STICKER
21	GM3240_032	4	GAR-MAX BUSHING 2.0 I.D. X 2.5 O.D. X 2.0
22	PLAQUE_SIGNAL_CE	1	CE NAMEPLATE
23	S351D_10F04_100	4	"STAINLESS STEEL DRIVE SCREW 10 GA X 1/2"" LG"
24	S4186_M140Q_051	10	HEX. NYLON NUT CL8 ZINC PLATED M14-2.0
25	S4612_M1400_071	10	FLAT WASHER ZP 14mm ID X 28mm OD
26	S4612_M1600_0B1	4	FLAT WASHER ZINC PLATED M16 (DIN 125 A)
27	S6711_00008_000	4	RADIAL SEAL(R.WIPER AU/STEEL)3.0X3.5X.312
28	S6711_00009_000	4	" RADIAL SHAFT SEAL Ø2"" X Ø2 1/2"" X 1/4"""
29	S6711_00019_000	2	RADIAL LIP SEAL 6 X 6.625 X .375
30	S8111_00025_500	2	POLY. ROUND PLUG HOLE 0.61-0.70 IN
31	S9631_00001_000	5	SPACER 19MM OD X 10MM LG (M12)
32	SM120-040-101F01-0016	7	FUL. TH. HEX.B. 10.9 M12-1.75X40
33	SM160-050-101F01-0016	8	FUL. TH. HEX.B. 10.9 M16-2.00X50
34	SM240-070-101F01-0015	40	FUL. TH. HEX.B. 10.9 M24-3.00X70
35	SM240-130-101F01-0015	2	FUL. TH. HEX.B. 10.9 M24-3.00X130
36	SMR12-132425-50501-0021	7	FUL. TH. HEX.B. 10.9 M24-3.00X130
37	SMR16-173030-50401-0014	4	FLAT WASHER M16 17X30X3
38	SMR24-254440-50401-0014	40	FLAT WASHER M16 17X30X3

7.1.2 TENSIONNER / <8032022–2000–2>

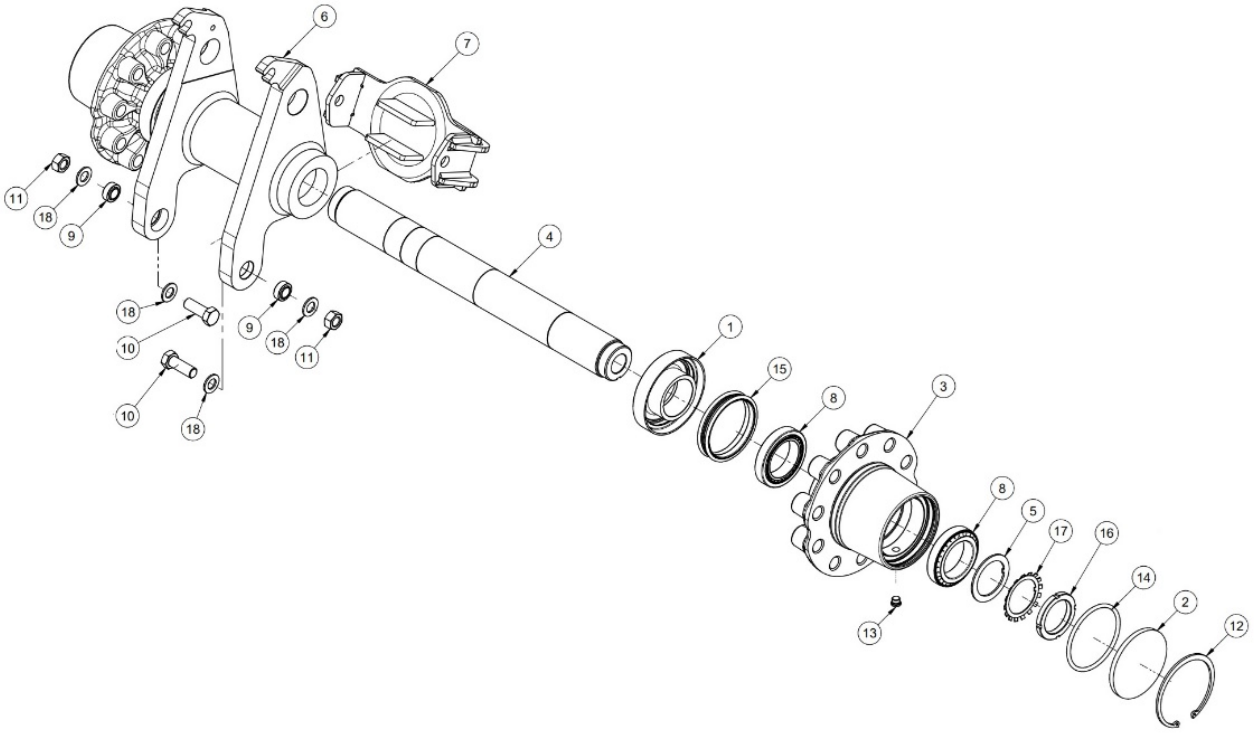
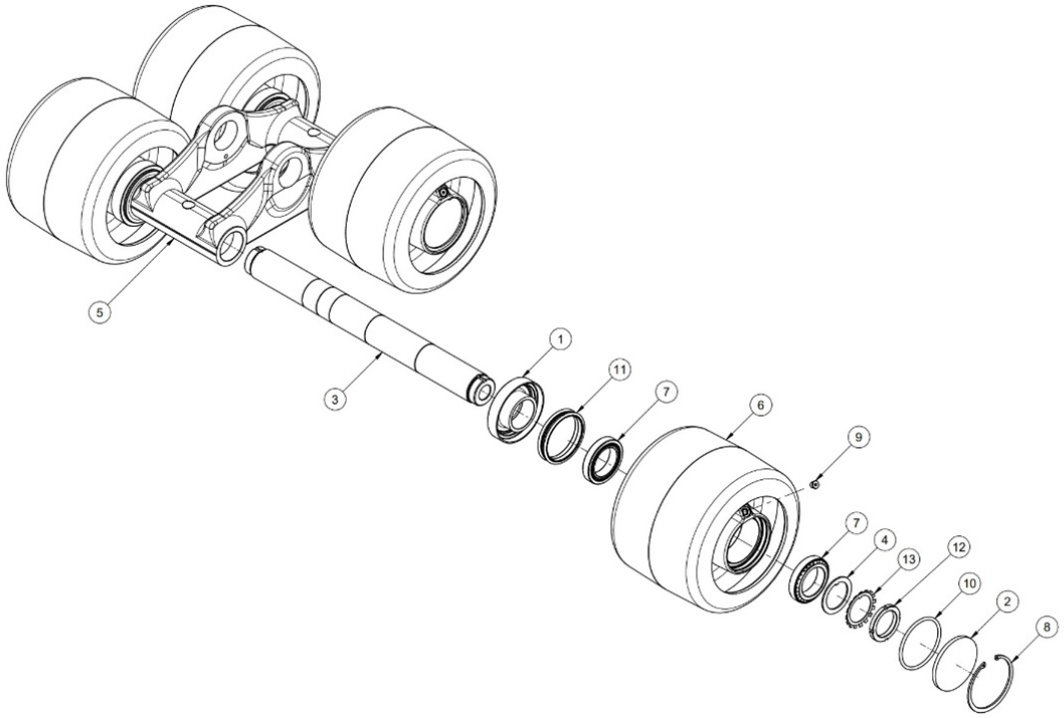


Table 7.2 TENSIONNER / <8302002–2060–1>

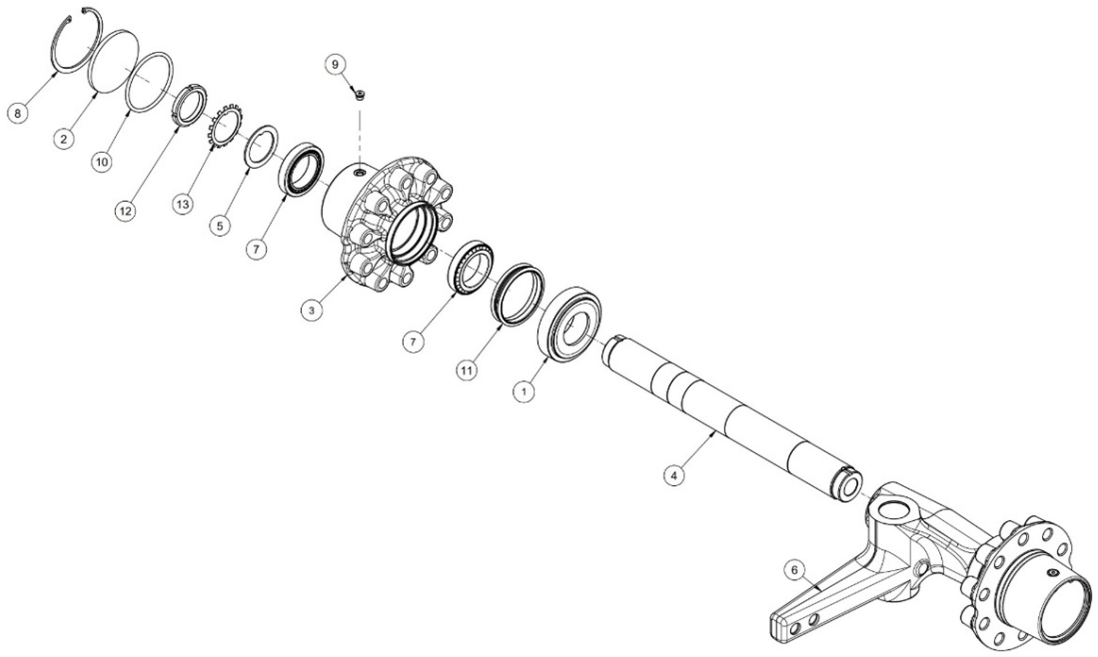
ITEM	PART #	QTY	DESCRIPTION
1	8034021_0030_1	2	SEAL CUP
2	8034021_0050_1	2	AXLE HUB CAP
3	8034021_1051_1	2	WHEEL HUB
4	8034026_0003_1	1	REAR IDLER WHEEL AXLE
5	8184001_0540_1	2	HARDENED WASHER Ø70 MM
6	8302002_0130_1	1	TENSIONER MACHINED
7	8302002_2100_1	1	SPRING SUPPORT
8	B32015_X	4	TAPERED ROLLER BEARING 32015 X
9	GE20-UK-2RS	2	SPHERICAL BEARING
10	S4186_M200R_097	2	HEX. NUT ZnNi A/B NYLON CL10.9 M20-2.5
11	S5212_10027_004	2	INT. RETAINING RING 140MM B.OXY. (D1300-1400)
12	S6483_00004_000	2	SAE ORB-6 HEX SOCKET PLUG
13	S6483_00004_000	2	DURO 40 SILICONE O-RING
14	S6483_00004_000	2	M.F SEAL LTNBR 111MM X 128MM X 22MM
15	SM200-060-101F01-0022	2	FUL. TH. HEX.B. 10.9 M20-2.50X60
16	SM700-000-410Z01-0001	2	AXIAL SHAFT NUT KM14 (M70X2)
17	SM700-708515-50601-0001	2	EXT.TOOTH LK WASH. MB14 (M70 70X85X1.5)
18	SMR20-213730-50701-0021	4	FLAT WASHER M20 21X37X3

7.1.3 MID ROLLER/ <8302002-2200-1>



ITEM	PART #	QTY	DESCRIPTION
1	8034021_0030_1	4	SEAL CUP
2	8034021_0050_1	4	AXLE HUB CAP
3	8034021_2020_2	2	MID-ROLLER WHEEL AXLE
4	8184001_0540_1	4	HARDENED WASHER Ø70 MM
5	8302002_1720_1	1	MACHINED CASTED TANDEM
6	8304002_2221_1	4	14.5 IN WHEEL
7	B32015_X	8	TAPERED ROLLER BEARING 32015 X
8	S5212_10027_004	4	INT. RETAINING RING 140MM B.OXY. (D1300-1400)
9	S6483_00004_000	4	SAE ORB-6 HEX SOCKET PLUG
10	S6701_00071_000	4	DURO 40 SILICONE O-RING
11	S6731_95001_000		M.F SEAL LTNBR 111MM X 128MM X 22MM
12	SM700-000-410Z01-0001	4	AXIAL SHAFT NUT KM14 (M70X2)
13	SM700-708515-50601-0001	4	EXT.TOOTH LK WASH. MB14 (M70 70X85X1.5)

7.1.4 TRACKING ASSEMBLY / <8302002-2050-1>



ITEM	PART #	QTY	DESCRIPTION
1	8034021_0030_1	2	SEAL CUP
2	8034021_0050_1	2	SEAL CUP
3	8034021_0050_1	2	WHEEL HUB
4	8034021_2080_1	1	FRONT IDLER WHEEL AXLE
5	8184001_0540_1	2	FRONT IDLER WHEEL AXLE
6	8302002_0460_1	1	TRACKING MACHINED PART
7	B32015_X	4	TAPERED ROLLER BEARING 32015 X
8	GM3240_032	2	GAR-MAX BUSHING 2.0 I.D. X 2.5 O.D. X 2.0
9	S5212_10027_004	2	INT. RETAINING RING 140MM B.OXY. (D1300-1400)
10	S6483_00004_000	2	SAE ORB-6 HEX SOCKET PLUG
11	S6701_00071_000	2	DURO 40 SILICONE O-RING
12	S6711_00009_000	2	RADIAL SHAFT SEAL Ø2"" X Ø2 1/2"" X 1/4"""
13	S6731_95001_000	2	M.F SEAL LTNBR 111MM X 128MM X 22MM
14	SM700-000-410Z01-0001	2	AXIAL SHAFT NUT KM14 (M70X2)
15	SM700-708515-50601-0001	2	EXT.TOOTH LK WASH. MB14 (M70 70X85X1.5)

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SECTION 8 APPENDIX

APPENDIX A: STANDARD TORQUE TABLE

Table 8.1 STANDARD TORQUE TABLE

Bolt Ø (mm)	**6**		**8**		**10**		**12**		**14**	
Thread	Coarse	Fine	Coarse	Fine	Coarse	Fine	Coarse	Fine	Coarse	Fine
Ptich (mm)	1,00	0,75	1,25	1,00	1,50	1,00	1,75	1,25	2,00	1,50
Class	**Tightening Torque Nm**									
8,8	9,3	10	22	24	45	50	78	85	124	134
10,9	14	15	33	35	65	73	114	125	182	197
12,9	16	17	39	41	77	85	133	146	213	230
Bolt Ø (mm)	**16**		**18**		**20**		**22**		**24**	
Thread	Coarse	Fine	Coarse	Fine	Coarse	Fine	Coarse	Fine	Coarse	Fine
Pitch (mm)	2,00	1,50	2,50	1,50	2,50	1,50	2,50	1,50	3,00	1,50
Class	**Tightening Torque Nm**									
8,8	193	206	266	299	376	417	513	563	650	739
10,9	283	302	391	439	552	613	753	827	954	1085
12,9	331	353	457	514	646	717	881	967	1117	1270

Bolt Ø (mm)	**6**		**8**		**10**		**12**		**14**	
Thread	Coarse	Fine	Coarse	Fine	Coarse	Fine	Coarse	Fine	Coarse	Fine
Ptich (mm)	1,00	0,75	1,25	1,00	1,50	1,00	1,75	1,25	2,00	1,50
Class	**Tightening Torque (ft-lb)**									
8,8	6,8	7,5	17	18	33	37	57	63	92	99
10,9	10	11	24	26	48	54	84	92	134	145
12,9	12	13	29	31	56	63	98	108	157	170
Bolt Ø (mm)	**16**		**18**		**20**		**22**		**24**	
Thread	Coarse	Fine	Coarse	Fine	Coarse	Fine	Coarse	Fine	Coarse	Fine
Ptich (mm)	2,00	1,50	2,50	1,50	2,50	1,50	2,50	1,50	3,00	1,50
Class	Tightening Torque (ft-lb)									
8,8	142	152	196	220	277	308	378	415	479	545
10,9	209	223	288	324	407	452	555	610	704	801
12,9	244	261	337	379	447	529	650	713	824	937

Table 8.2 COUNTERSUNK BOLTS

Bolt Ø (mm)	**12**	**14**	**16**	**18**	**20**
Class	**Tightening Torque Nm**				
10,9	81	108	154	213	301
Bolt Ø (mm)	**12**	**14**	**16**	**18**	**20**
Class	**Tightening Torque (ft-lb)**				
10,9	60	80	114	157	222

NOTE

- Applicable to new lubricated, new unlubricated and used lubricated bolts.
- Torque indicated on drawing is always prevailing. Torque Tolerance ± 5%