



Service Manual Forage Compactors

MK I & II Serial No. 0002 to present



FC3205

FC3206

FC3207

FC3209

FC3211



Agromatic[®] **INC**



Crush Hazard - Heavy components and rotating assemblies

ALWAYS immobilize/secure compactor and remove ballast blocks before service/adjustment.

In this manual:

Compactor Lifting Reference

Hitch Configurations

Journal Bearing and Lubrication Assembly Removal

Journal Bearing and Lubrication Assembly Parts

End Assembly and Stand Adjustment

Ballast Block Placement and Retaining

Main Assembly Reference

Specifications and approved grease types

BigFOOT compactors employ HD split-sleeve bearings with an automatic lubrication system.

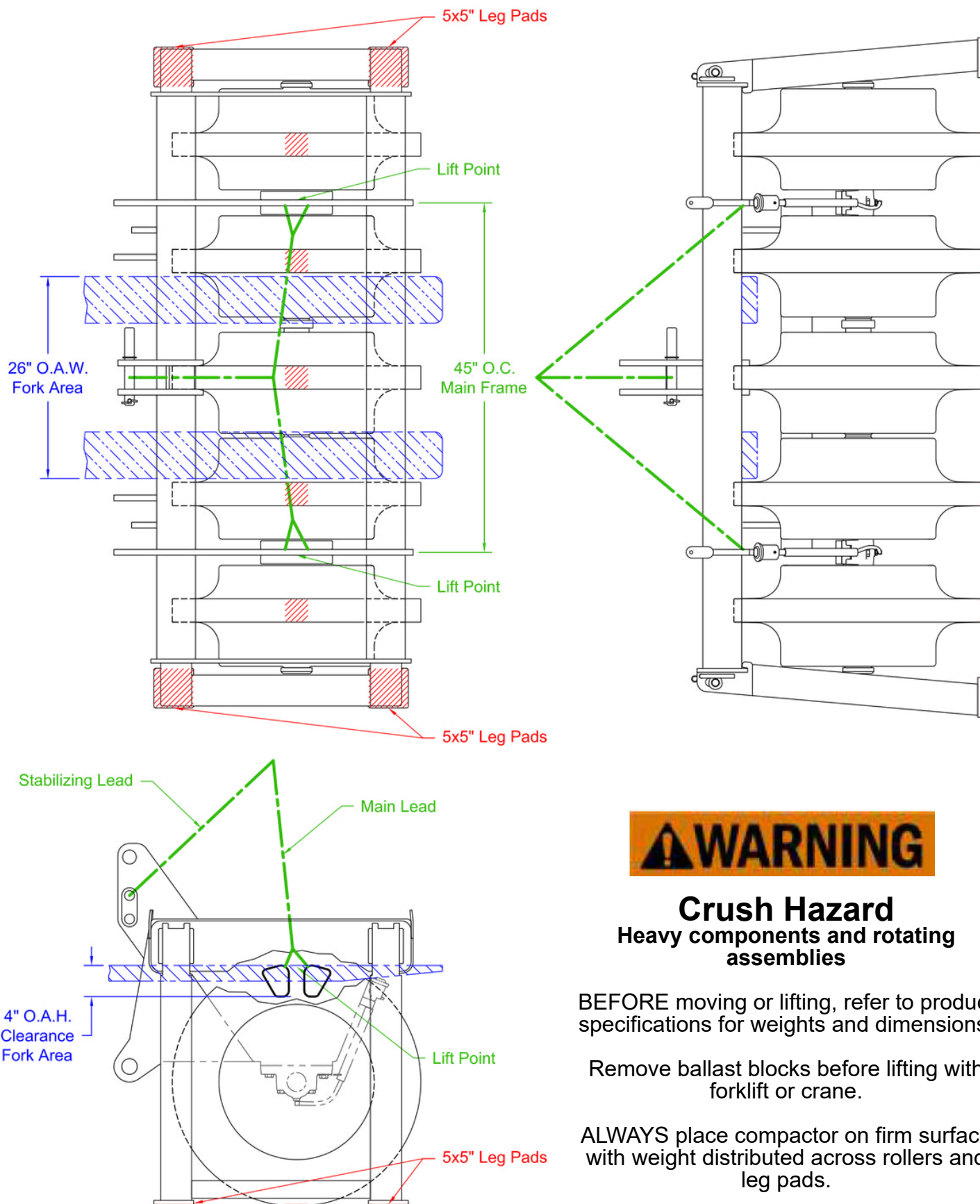
Constant lubrication of the correct type is critical, especially during run-in period, to properly seat axle shaft in bearing. Compactors are shipped from the factory with an automatic lubrication system and **NLGI No.1 grade Shell Gadus S3 V220C 1** (Z12115) grease. A constant discharge from ends of bearings prevents contamination, ensures entire bearing surface is lubricated and renews the grease's characteristics in this journal area. Lubrication is the key to long life of your compactor.

Force lubricate system before putting into service and at the beginning of season.

See TB007-6000-8P Purging and force lubrication of system (attached to this manual).

Model: _____ **Serial Number:** _____

Compactor Lifting Reference



Crush Hazard

Heavy components and rotating assemblies

BEFORE moving or lifting, refer to product specifications for weights and dimensions.

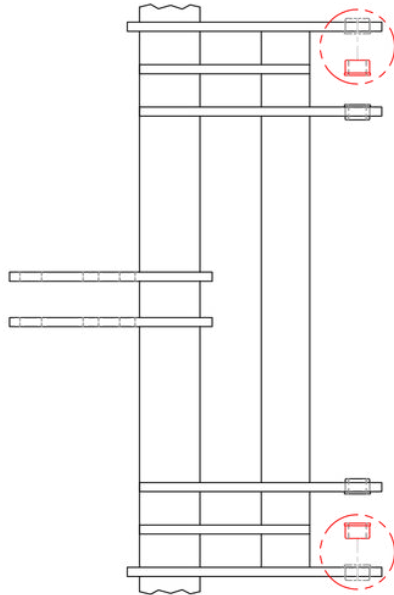
Remove ballast blocks before lifting with forklift or crane.

ALWAYS place compactor on firm surface with weight distributed across rollers and leg pads.

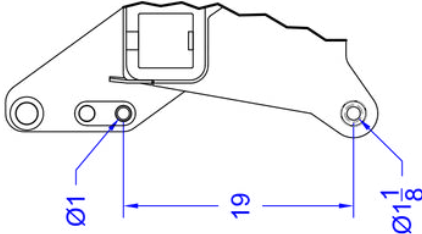
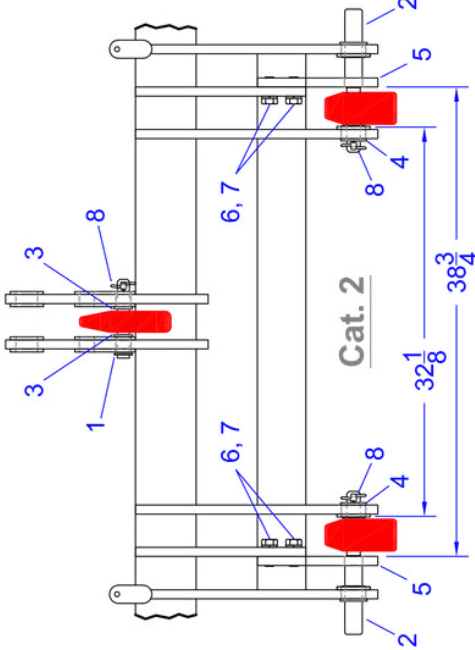
FC3200-2 Hitch Configuration (Opt.) Cat. 2

U-Frame Quick Couplers (shown shaded for reference)

Loc	Part Number	Qty	Loc	Part Number	Qty
1	F30120 Toplink Pin, C2	1	5	F32033 Adapter Plate	2
2	F30221 Hitch Pin, C2	2	6	X19719 Cap Screw, 3/4-10 x 2	6
3	F30332 Upper Bushing, C3/2	2	7	X20270 Lock Washer, 3/4	6
4	F30442 Lower Bushing, C4/2	2	8	X25150 Lynch Pin	3



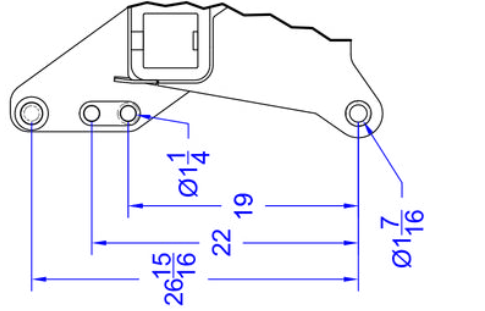
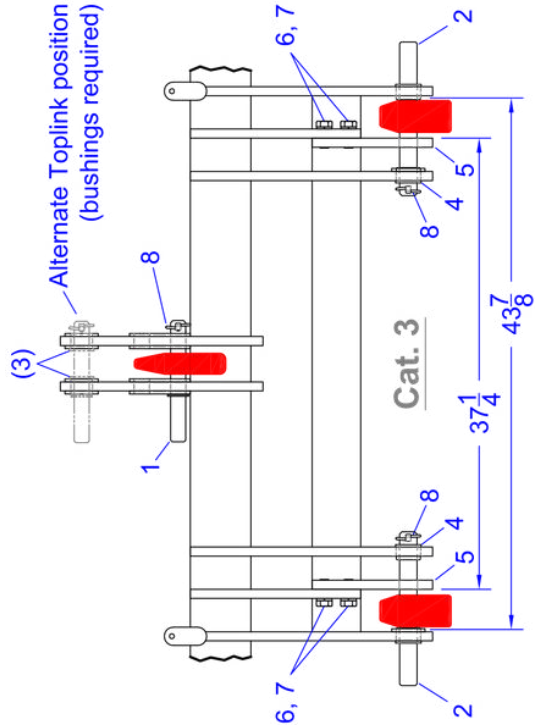
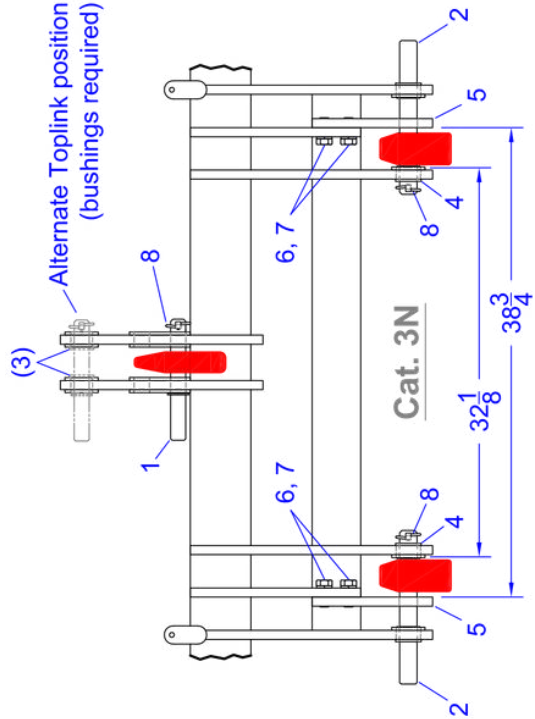
*Remove outer lower bushing on Series I frames
when using Series II hitch pins (all configurations)



FC3200-3 Hitch Configuration (STANDARD) Cat. 3N, 3

U-Frame Quick Couplers (shown shaded for reference)

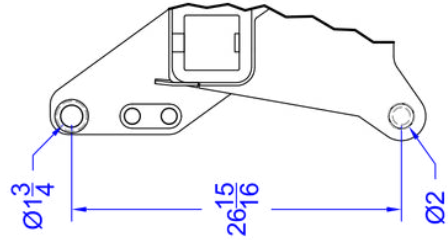
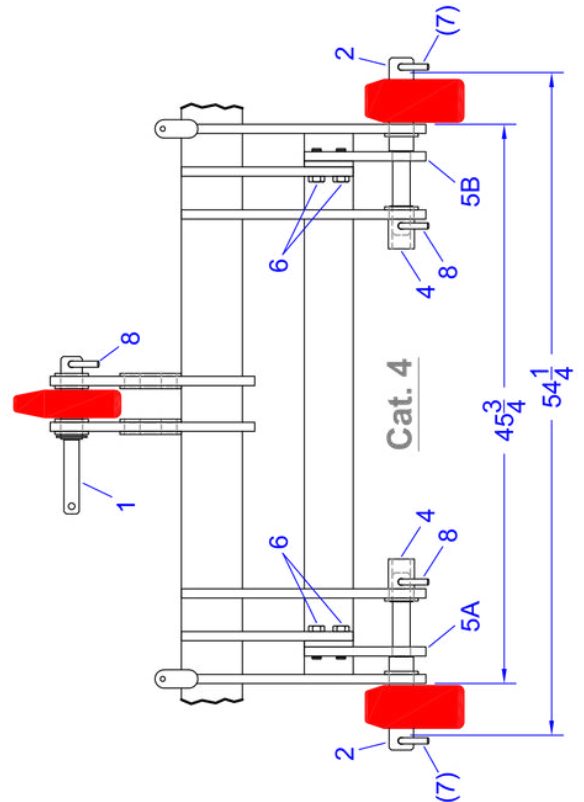
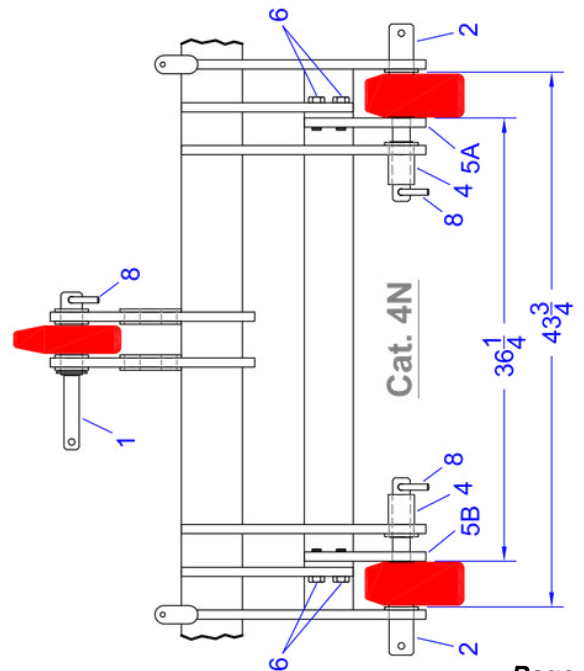
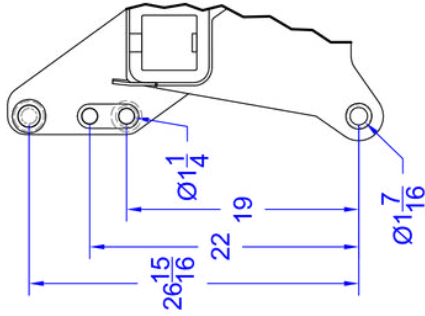
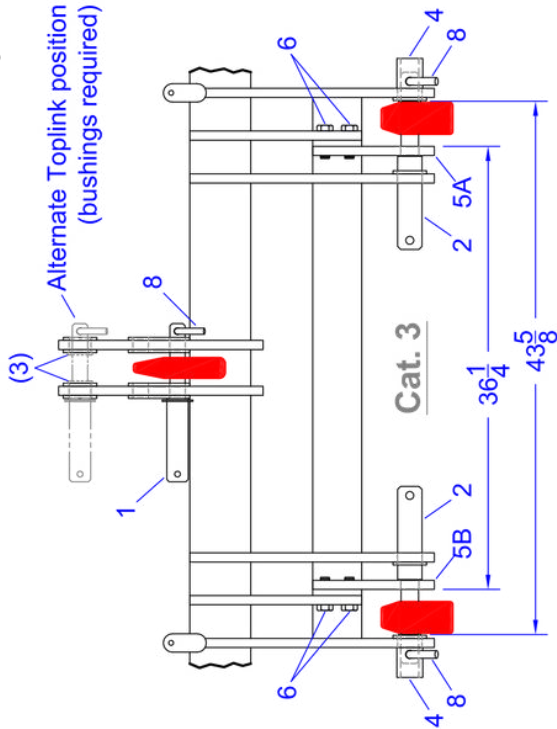
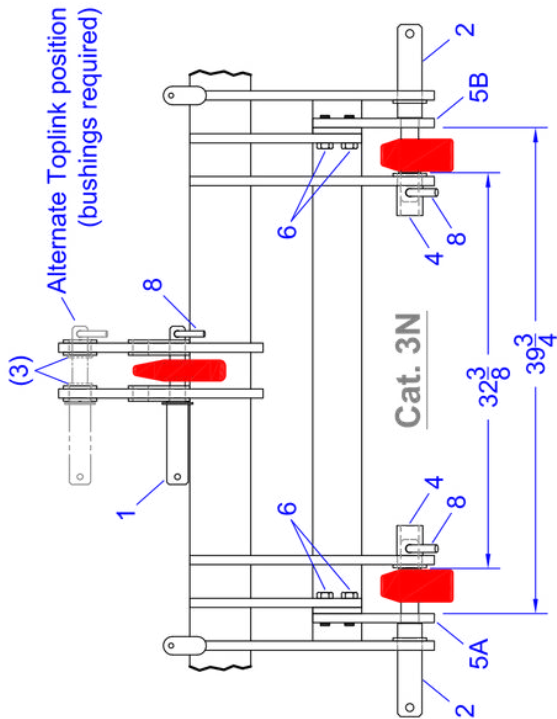
Loc	Part Number	Qty	Loc	Part Number	Qty
1	F30130 Toplink Pin, C3	1	5	F32033 Adapter Plate	2
2	F30231 Hitch Pin (series II), C3	2	6	X19719 Cap Screw, 3/4-10 x 2	6
3	F30343 Upper Bushing, C4/3	(2)	7	X20270 Lock Washer, 3/4	6
4	F30443 Lower Bushing, C4/3	2	8	X25150 Lynch Pin	3



FC3200-3/4 Hitch Configuration (Opt.) Cat. 3N thru 4

U-Frame Quick Couplers (shown shaded for reference)

Loc	Part Number	Qty	Loc	Part Number	Qty
1	F30143 Toplink Pin, Stepped	1	5A	F32033-50L Adapter Plate, LH	1
2	F30243 Hitch Pin, Stepped	2	5B	F32033-50R Adapter Plate, RH	1
3	F30343 Upper Bushing, C4/3	(2)	6	X19719 Cap Screw 3/4-10 x 2	6
4	F30444 Lower Reducing Sleeve	2	7	X20270 Lock Washer, 3/4	6
			8	X25115 BentArm Pin	3

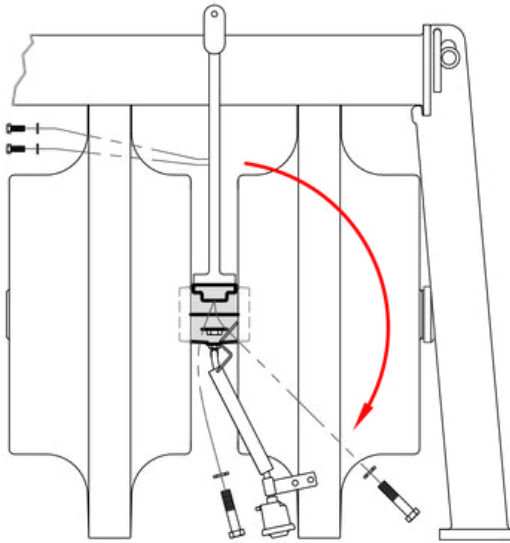


Journal Bearing and Lubrication Assy Removal

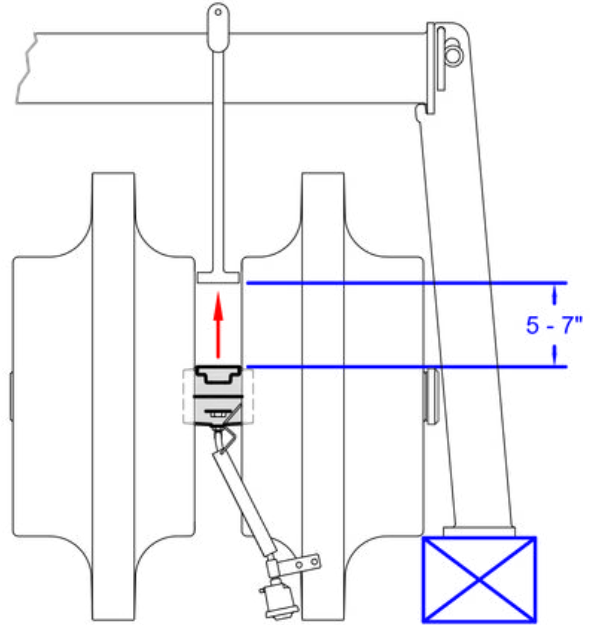


Crush Hazard - Heavy components and rotating assemblies

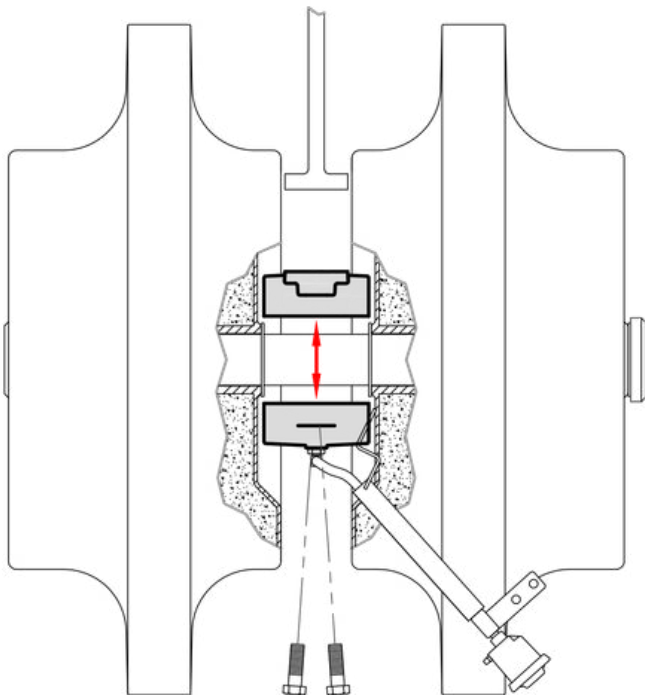
With stands deployed, place unit on firm, level ground so weight is distributed between all rollers and pads. Chock wheels and remove ballast/weight blocks before proceeding.



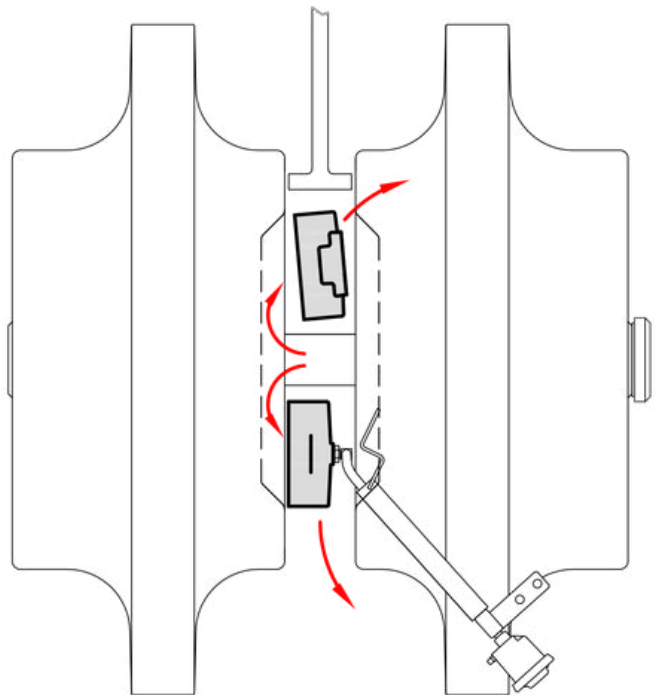
1.) Remove bearing retaining bolts and coupling bracket bolts; swing lubricator, coupling bracket and tube guard out of way. Repeat for each journal.



2.) Slowly raise main frame 5-7" from journals; block up stands. To prevent excess grease loss: Clean debris from lubricator, remove cap and spring. Replace cap and keep spring clean.



3.) Clean debris and excess grease from area. Support journal while carefully removing bearing cap bolts. Separate bearing cap and body.



3.) Rotate halves 90° then carefully remove from wheel recess. Clean/inspect axle shaft, bushings and journals for wear; replace as necessary. Grease axle and journal surfaces before assembly.

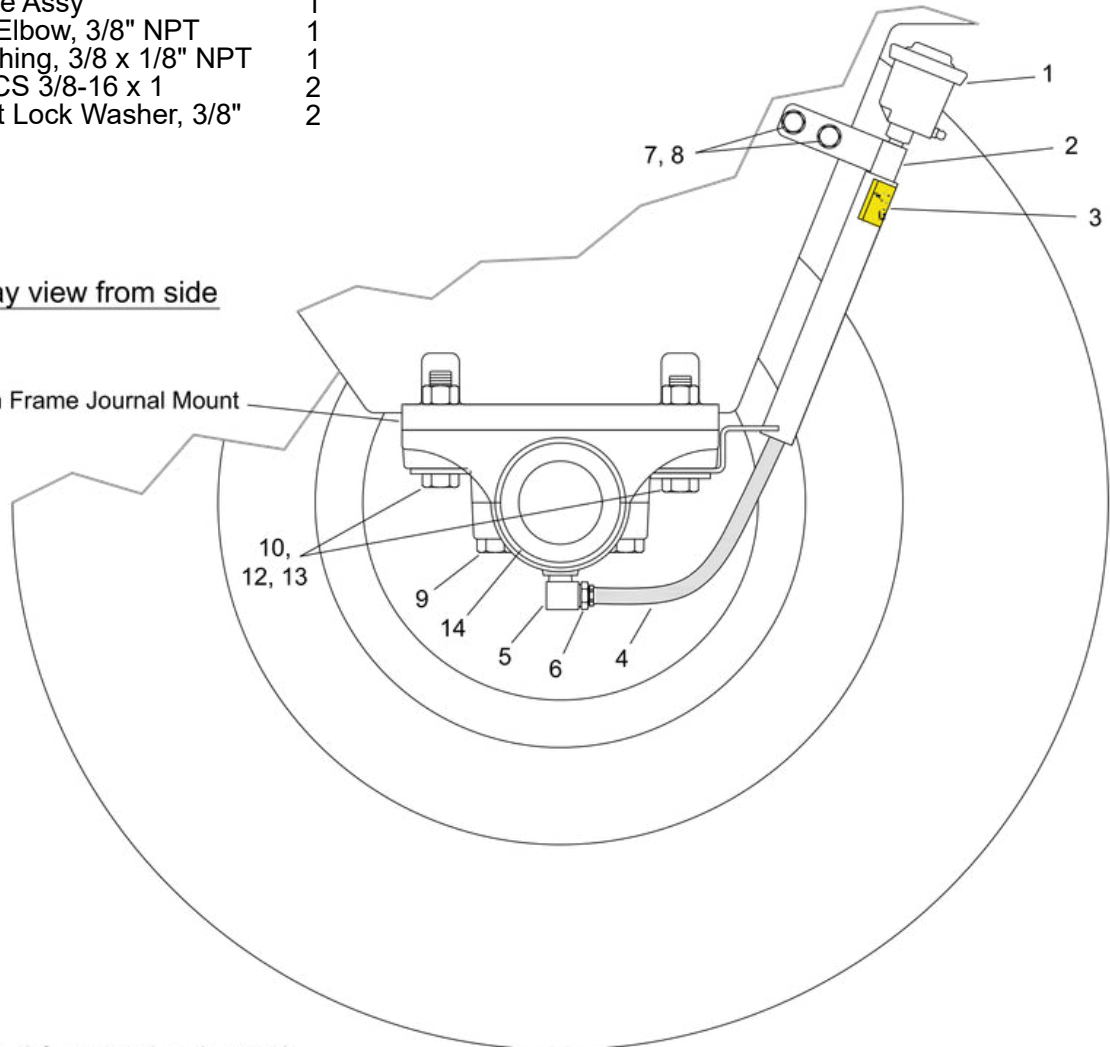
Journal Bearing and Lubrication Assembly Parts (per)

Loc	Part Number	Qty
1	X25522 Lubricator w/BLACK spring	1
	X25522-1 Lt Spring (ORANGE)	(1)
	X25522-2 Med Spring (GREEN)	(1)
	X25522-3 Hvy Spring (BLACK)	(1)
2	F32004 Coupling Bracket	1
3	F32006 Tube Guard	1
	X23218 Decal, 6hr Lubrication	(1)
4	X25515 Hose Assy	1
5	X26017 Str Elbow, 3/8" NPT	1
6	X26009 Bushing, 3/8 x 1/8" NPT	1
7	X19360 HHCS 3/8-16 x 1	2
8	X20230 Split Lock Washer, 3/8"	2

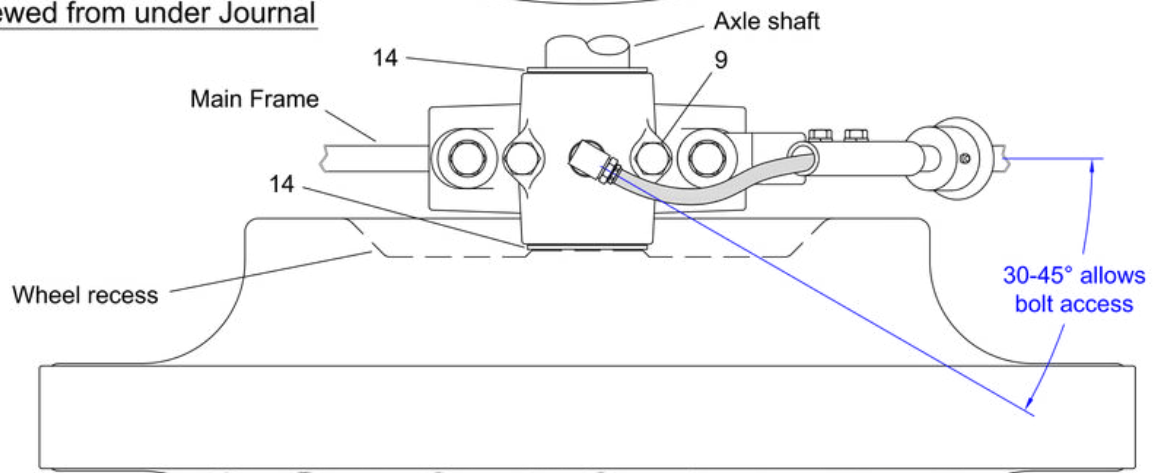
Loc	Part Number	Qty
9	F32020 Bearing, Split - base & cap	1
	X19625 HHCS 5/8-11 x 2 Gr.5	(2)
10	X19665 HHCS 5/8-11 x 3 Gr.8	2
11		
12	X20196 Flat Washer, 5/8" Hvy	2
13	Threadlocker (#271 RED)	req'd
14	F32022 Bushing, 1/8"	2

Cut-away view from side

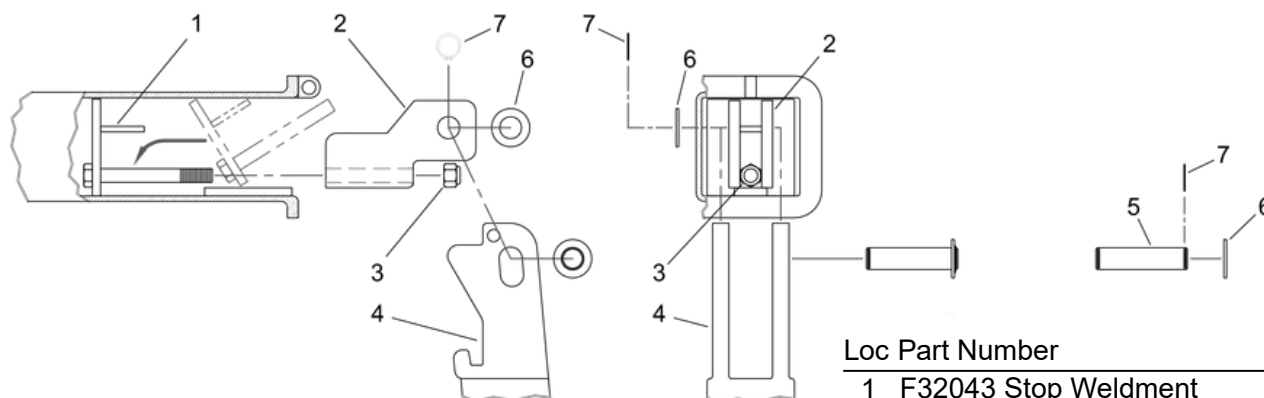
Main Frame Journal Mount



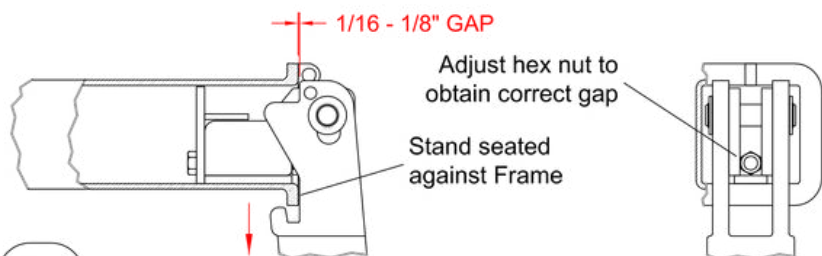
As viewed from under Journal



End Assembly and Stand Adjustment



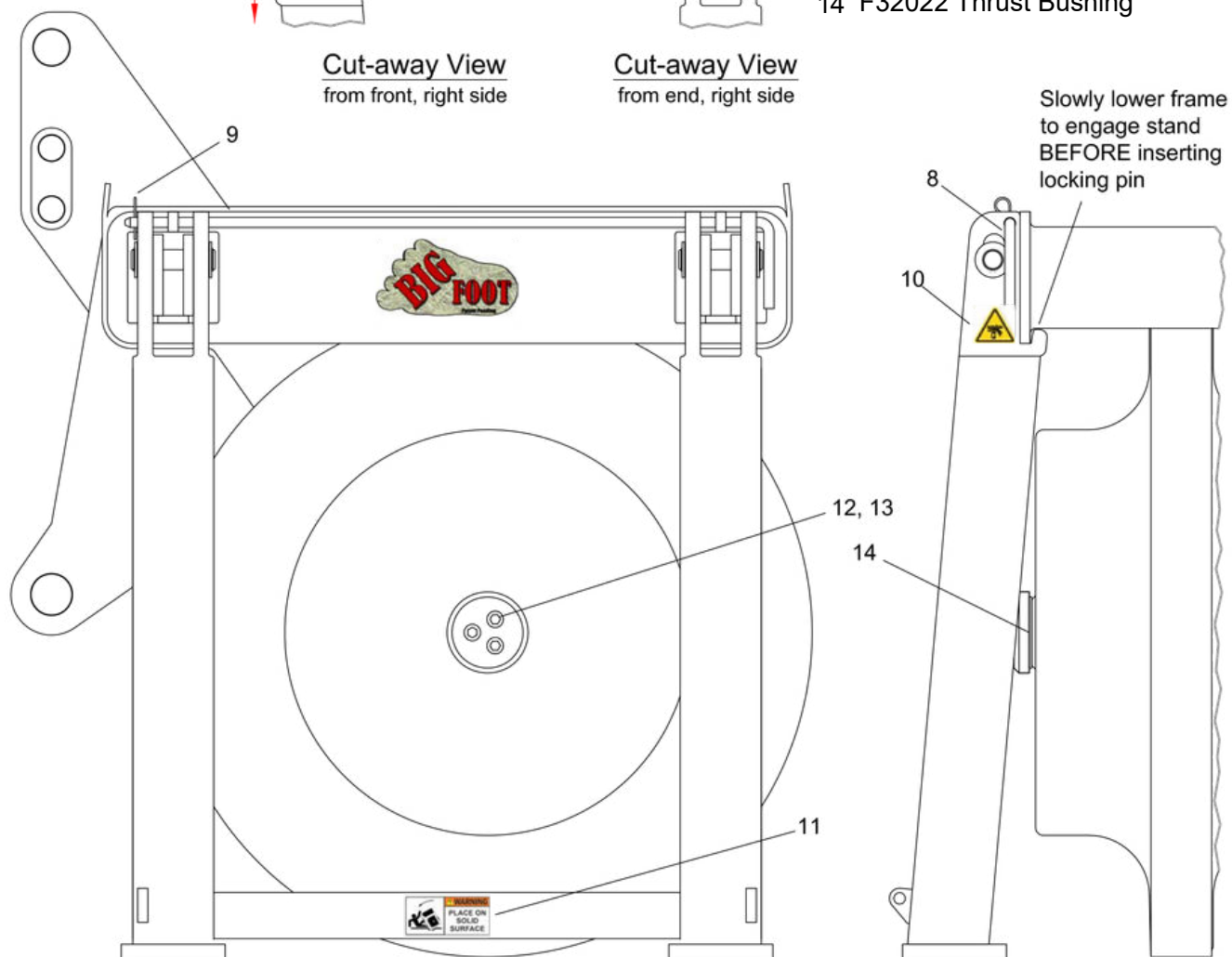
Lift compactor to remove weight from stands before adjusting.



Loc	Part Number	Qty
1	F32043 Stop Weldment	2
2	F32044 Slide Weldment	2
3	X20091 Hex Nut, 5/8-11 Top Lock	4
4	F32040 Leg Weldment	2
5	F32042 Pivot Pin	4
6	X20541 Bushing, 1"	8
7	X21919 Snap Ring, 1"	8
8	F32045 Lock Pin, Stand	2
9	X30737 Hairpin	2
10	X23225 Decal, ISO Warning 'Pinch'	2
11	X23245 Decal, 'Place on solid ground'	2
12	F32008 Axle Cap	2
13	X19481 Socket Head, 1/2-13 x 1"	3
14	F32022 Thrust Bushing	1

Cut-away View
from front, right side

Cut-away View
from end, right side



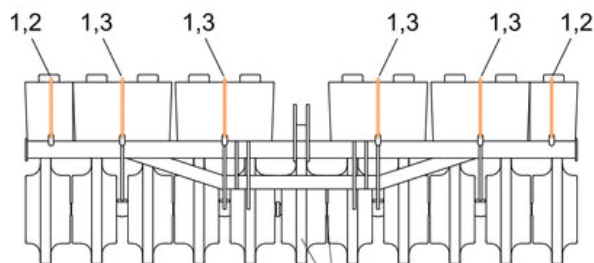
Ballast Block Placement and Retaining



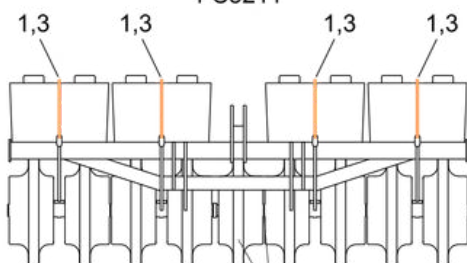
Crush Hazard - Heavy Components

With stands deployed, place unit on firm, level ground so weight is distributed between all rollers and pads. Verify ballast blocks are correctly positioned and retaining chains in place before moving compactor.

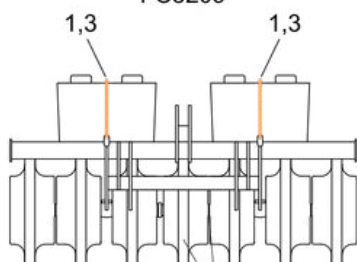
Loc	Part Number	Description	FC3205	FC3206	FC3207	FC3209	FC3211
1	FC2806	Retaining Chain Kit (one per block)	2	2	2	4	6
2	FC2814	14" Ballast Block, 720lbs [326kg]	-	-	-	-	2
3	FC2828	28" Ballast Block, 1,410lbs [640kg]	2	2	2	4	4



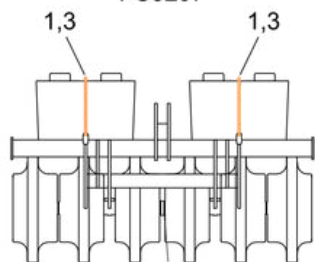
FC3211



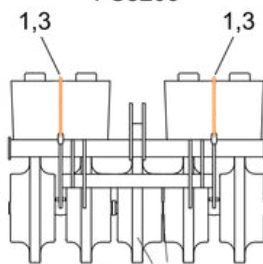
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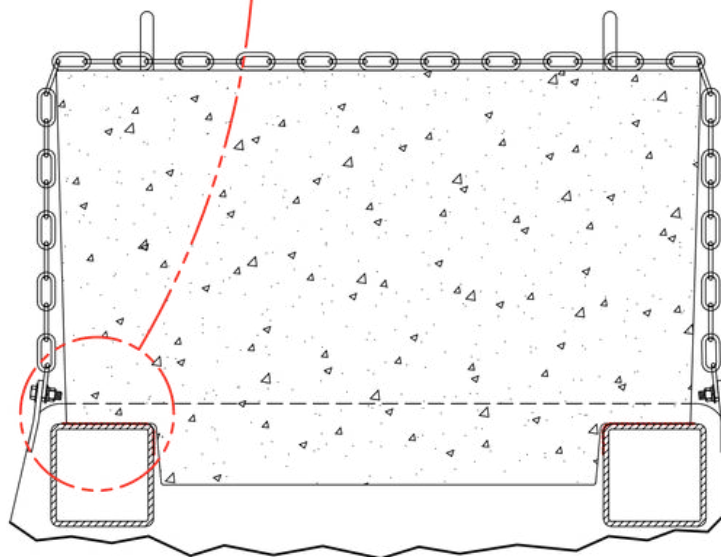
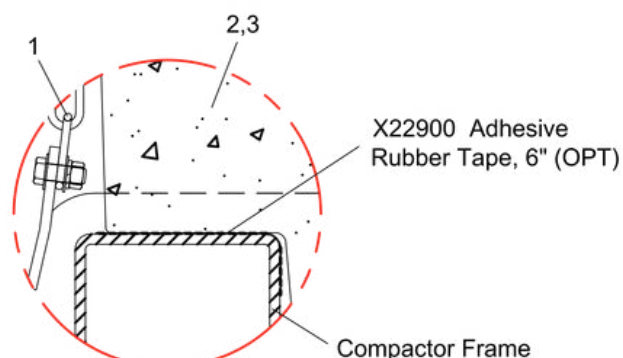
FC3207



FC3206

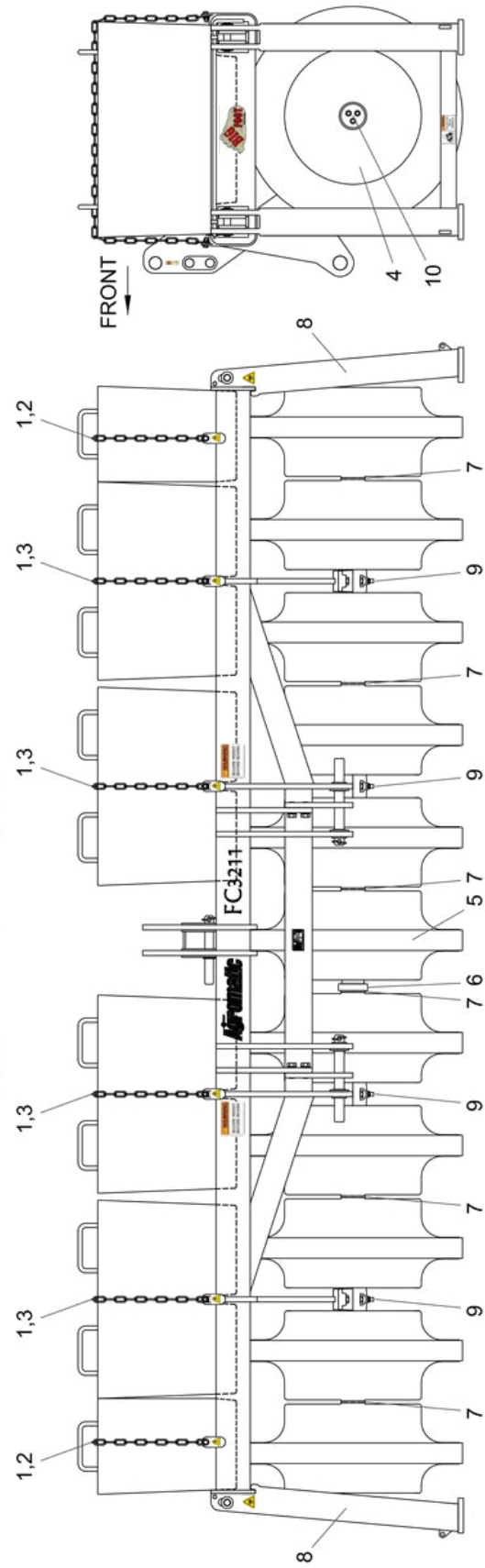
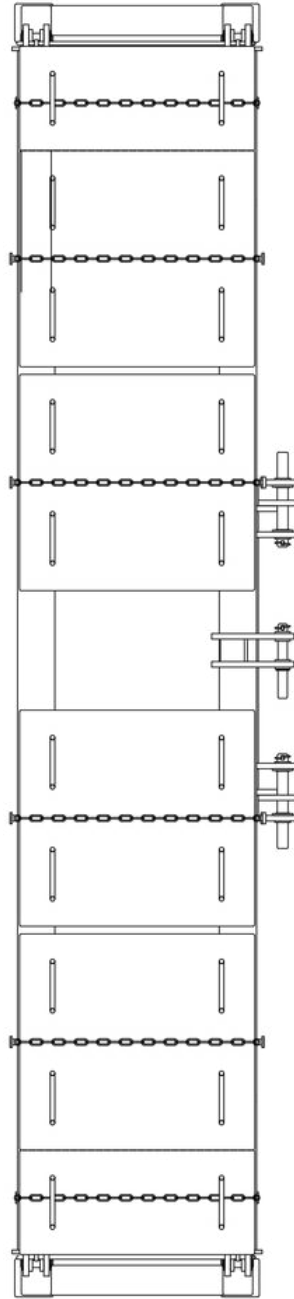


FC3205



Main Assembly Reference

Loc	Part Number	Description	FC3205	FC3206	FC3207	FC3209	FC3211
1	FC2806	Retaining Chain Kit (one per block)	2	2	2	4	6
2	FC2814	14" Ballast Block, 720lbs [326kg]	-	-	-	-	2
3	FC2828	28" Ballast Block, 1,410lbs [640kg]	2	2	2	4	4
4	F32010	Standard Wheel, 525lbs [238kg]	4	-	6	8	10
5	F32012	Keyed Wheel, 525lbs [238kg]	1	-	1	1	1
6	F32014	Shaft Clamp	1	1	1	1	1
7	F32022	Thrust Bushing (total qty per axle)*	8	7	10	14	16
8	see detail	End Assembly and Stand Adjustment	2	2	2	2	2
9	see detail	Journal Bearing/Lubrication Assembly	2	2	2	4	4
10	see detail	Replacement Axle Shaft (part number)	F32052	F32062	F32072	F32092	F32112



* Additional bushings should be added to eliminate gaps as needed

Specifications

	FC3205	FC3206	FC3207	FC3209	FC3211
Wheels, qty.	5	6	7	9	11
Weight, lbs.	3680 [1670kg]	4260 [1930kg]	4830 [2190kg]	6280 [2850kg]	7430 [3370kg]
Total weight with suggested ballast blocks	6500 [2950kg]	7080 [3210kg]	7650 [3470kg]	11920 [5410kg]	14510 [6580kg]
Width (stands in stowed position)	83" [210cm]	96" [243cm]	109" [276cm]	142" [359cm]	169" [429cm]
Height, to top link framework	46 3/4" [119cm]				
Height, to top of ballast block	53 1/2" [136cm]				
Lubrication (approved types)	Shell® Gadus S3 V220C Phillips66 Dynalife®, Multiplex® Red, Megaplex® XD3				

Grease Characteristics

Mixing incompatible grease types can accelerate breakdown and oil separation. Superior quality EP Lithium-complex grease with the following characteristics is required:

- For use in centralized lubrication systems; good pumpability at low temperatures
- Protection against corrosion and stable in storage
- Excellent load-carrying capacity and protection against shock loading
- Resistance against separation and oil bleeding

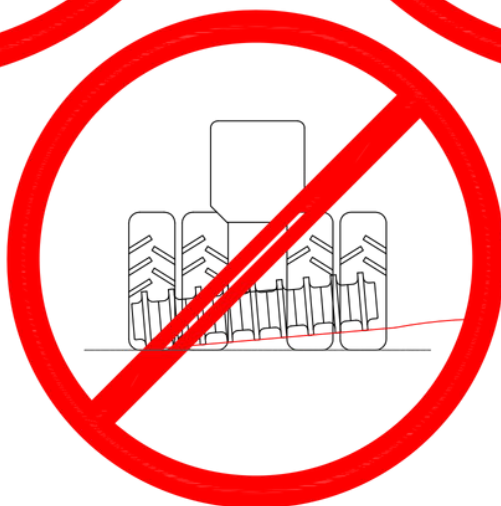
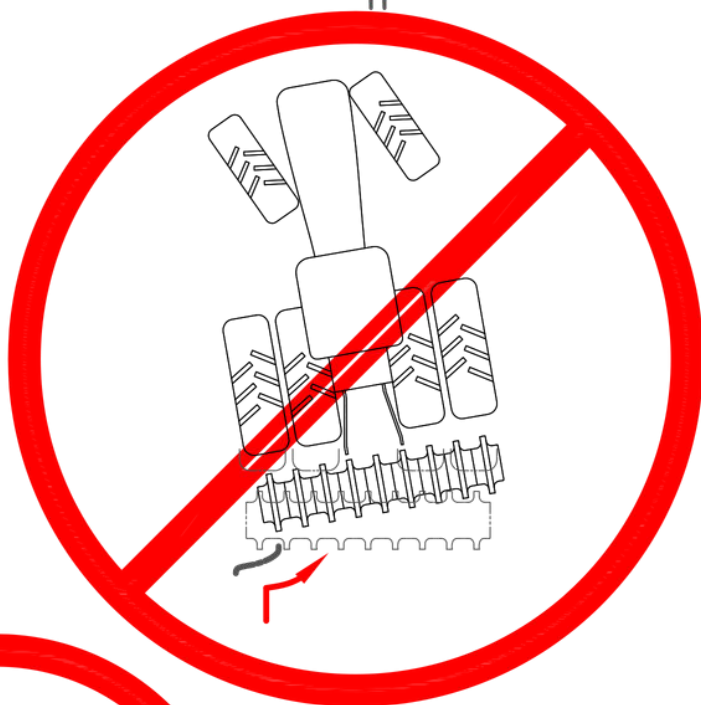
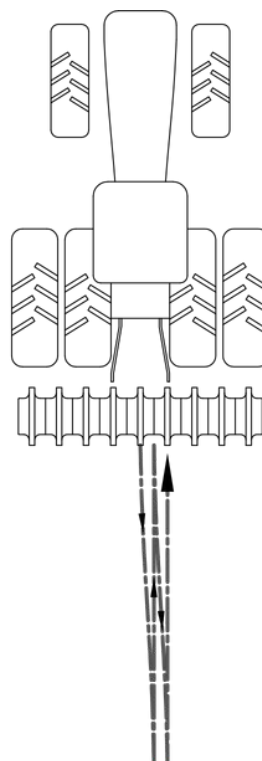
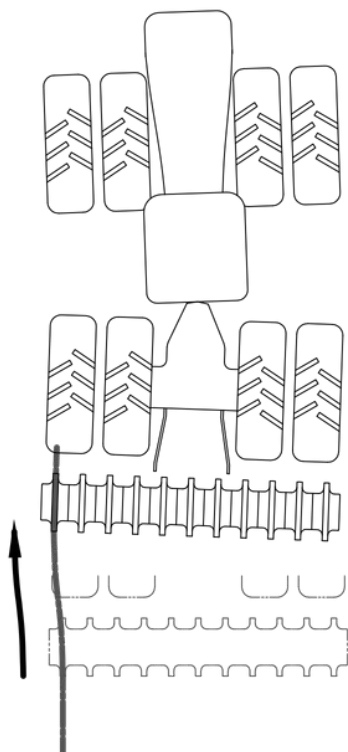
Viscosity reference: 170-220 cSt @ 104°F [40°C]
Dropping point: 238°C [460°F] minimum
Operating range: 10 to 280°F [50 to 138°C] minimum
Timken OK load: 40 lb [18.1kg] minimum

Torque Specifications

F30072 – Clevis Plate	¾-10	175 ft.lb. [237 Nm]	Loctite® 271 (red)
F32004 – Coupling Bracket	¾-16	15 ft.lb. [20 Nm]	
F32008 – Axle Cap	½-13	55 ft.lb. [75 Nm]	Loctite® 243 (blue)
F32014 – Shaft Clamp	½-20	65 ft.lb. [88 Nm]	
F32016 – Shaft End Clamp	½-20	65 ft.lb. [88 Nm]	
F32020 – Bearing Mounting bolts	¾-11	150 ft.lb. [203 Nm]	Loctite® 271 (red)
Cap bolts	¾-11	75 ft.lb. [102 Nm]	
F32033 – Adapter Plate	¾-10	175 ft.lb. [237 Nm]	Loctite® 271 (red)



Fond du Lac, Wisconsin
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TECHNICAL BULLETIN 007-6000-8P

Product: FC3200 BigFoot Forage Compactors, series I & II

Subject: Purging and force lubrication of system.

BigFoot compactors employ HD split-sleeve bearings, which require constant lubrication of the correct type. All compactors are shipped from the factory with **NLGI No.1 grade Shell Gadus S3 V220C 1** (Z12115) EP Lithium-complex grease.

See Technical Bulletin 007-6000-7 for approved grease types.

Improper lubrication can cause passageways to clog with solidified grease and contaminants, eventually causing bearing failure. Example below:



NLGI No.1 EP Lithium-complex
Smooth, wet - **GOOD** condition after 3yrs use



NLGI No.2 Multi-Purpose Polyurea
caked, almost dry - **FAILED** after 1 season use



Purge lubrication system of incorrect or failed grease (Figs.1 through 9)

Entire lubrication system should be cleaned and journals inspected if improper grease has been used, or grease consumption has stopped for any period of time.

Grease can break-down and separate during storage or periods of inactivity.

Force Lubricate System (Figs.1, 2, 7 through 9)

Renew grease in lubrication system by forcing out old grease before putting compactor into service and at start of the season.

Always clean debris from around work area before and during disassembly.



Fig.1

Remove cap and spring from lubricator body and then unscrew body from coupling bracket.



Fig. 2

Insert a lube fitting into coupling bracket then add grease until all old grease is purged (approx. 30 pumps of standard gun, 1oz. or until new grease flows from both ends of bearing).

Proceed to Fig.3 if purging system. Skip to Fig.7 if force lubricating system

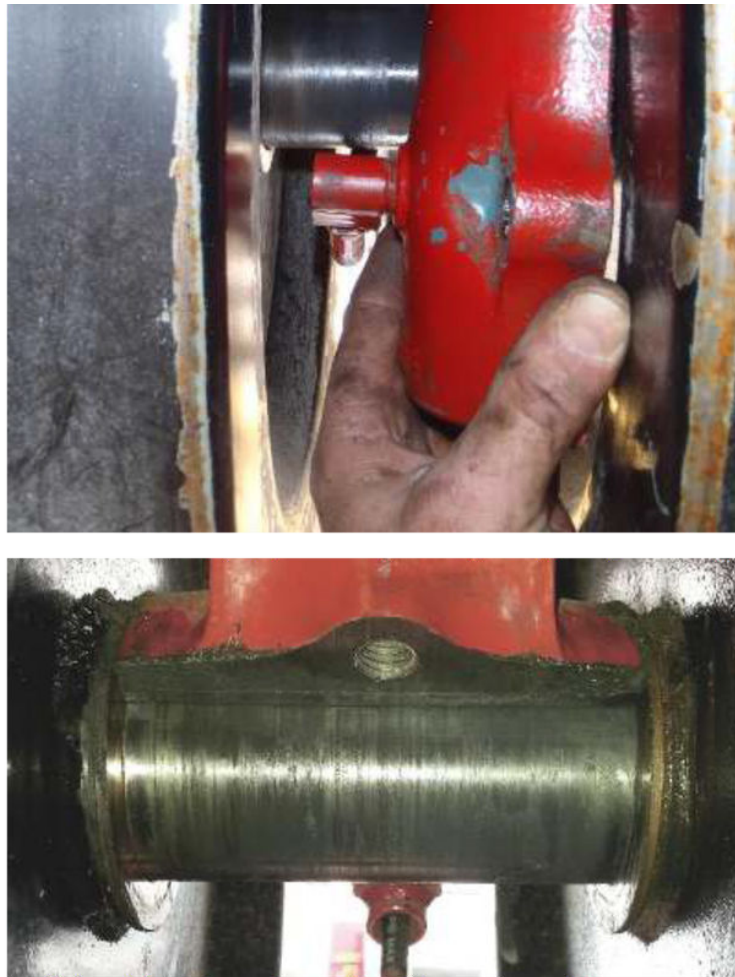


Fig. 3

Remove bearing cap.



Fig. 4

Clean grease groove and journal surfaces. Inspect for damage (replace bearing if necessary).



Fig. 5

Fill grease groove and lubricate journal surfaces with approved grease.
Assemble bearing cap onto body, torqueing bolts to 75 ft.lb.



Fig. 6

Carefully remove plunger from inside of lubricator reservoir (injecting a small amount of air in through the bottom with a blow gun works well. REMEMBER to cover open end with a towel or shop rag!) then wipe all parts clean. Refit plunger.



Fig. 7

Remove lube fitting. Refit lubricator body, install black spring then cap onto body.



Fig. 8

Fill lubricator (approx. 1.2 oz.) with grease.
Plunger will be flush with cap and/or red indicator will show through cap when full.