

ZABEL EQUIPMENT, INC.

MODEL ZF2400 BELT FEEDER

BEFORE YOU START- PLAN THE INSTALLATION

1. **READ THIS ENTIRE MANUAL** thoroughly and familiarize yourself with the parts of the equipment before you begin.
2. Decide how this feeder is to be supported and fastened into position. Supports must be securely fastened to a solid structure.
3. This feeder has the capacity to handle 1 to 1-1/2 ton per minute . some discretion may be needed. Do not overload the feeder.
4. Determine where the Idle end will be positioned as it is critical. Position feeder accordingly
5. Tools needed to assemble the feeder used are:
 1. 3/4", 5/8", 9/16" and 7/16" wrenches.
 2. Ratchet with 3/4", 9/16", and 7/16" sockets.
 3. Vise grip and crescent wrench.
 4. Grease gun and lube spray.
 5. Pliers.
 6. String and level.

ZABEL EQUIPMENT, INC. MODEL ZF2400 BELT FEEDER

SPECIFICATIONS

LENGTH- 50 TO 330' MAXIMUM LENGTH

BELTING- 24" PVC, easy flex, low temperature, silage acid and moisture resistant

CAPACITY- 1 to 1-1/2 ton per minute.

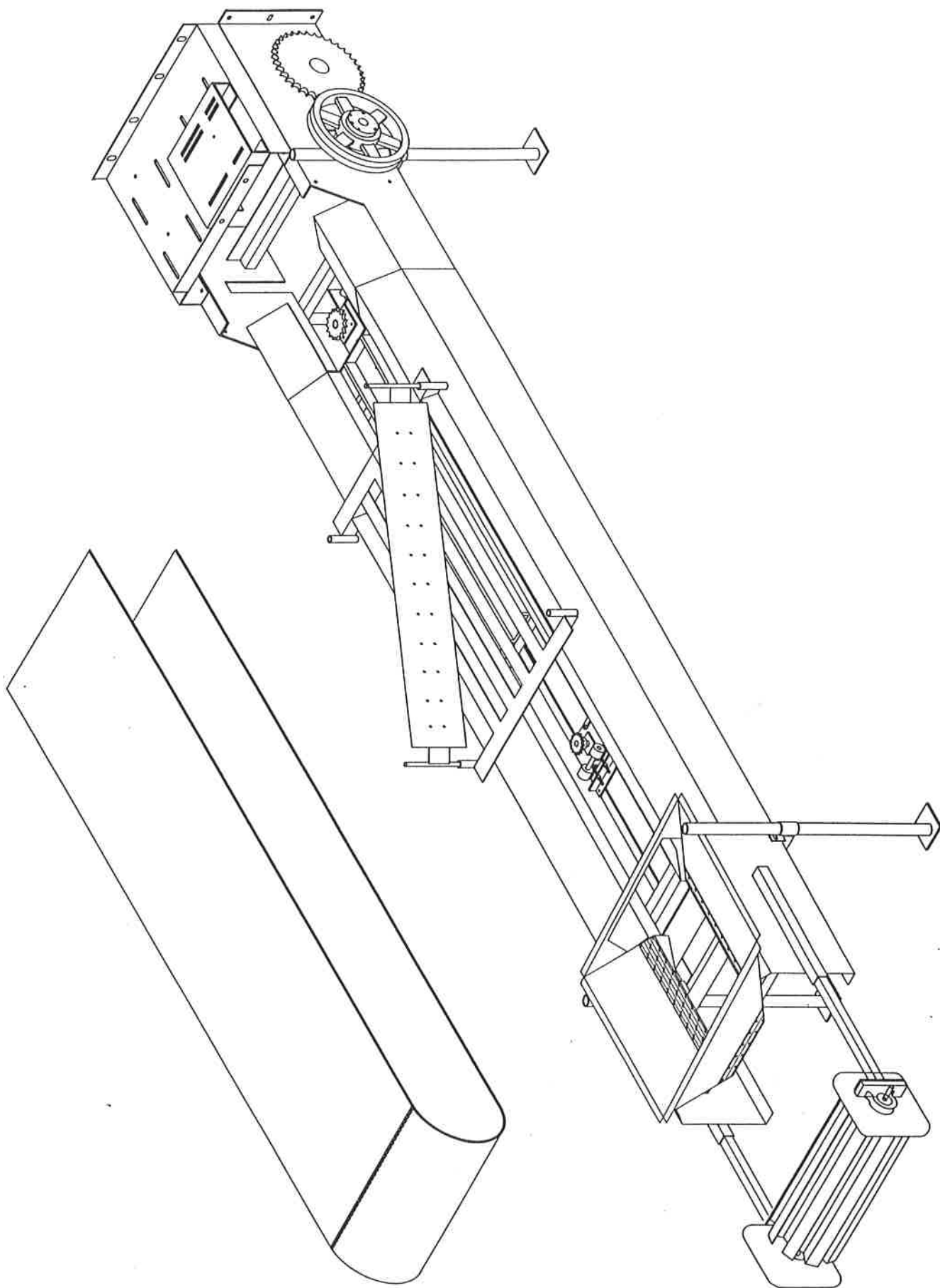
FLOW- Chain driven—single lot.

FRAME- 14 gauge steel, double dipped paint

OPTIONS AVAILABLE- 4 and 8' sections only.

HOW TO ORDER PARTS

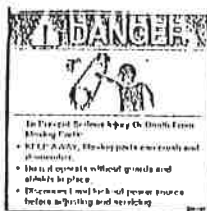
1. Refer to illustration which shows the part to be order.
2. Find the part on the illustration.
3. Note the number at the end of the arrow pointing to the part.
4. Refer to the parts list and find that number under item column.
5. Follow across the page to the column headed Part #. Use this number and the name of the part when placing your order.





ZEW

- A) THIS DECAL IS LOCATED ON THE FRONT OF THE MAIN SHIELD.



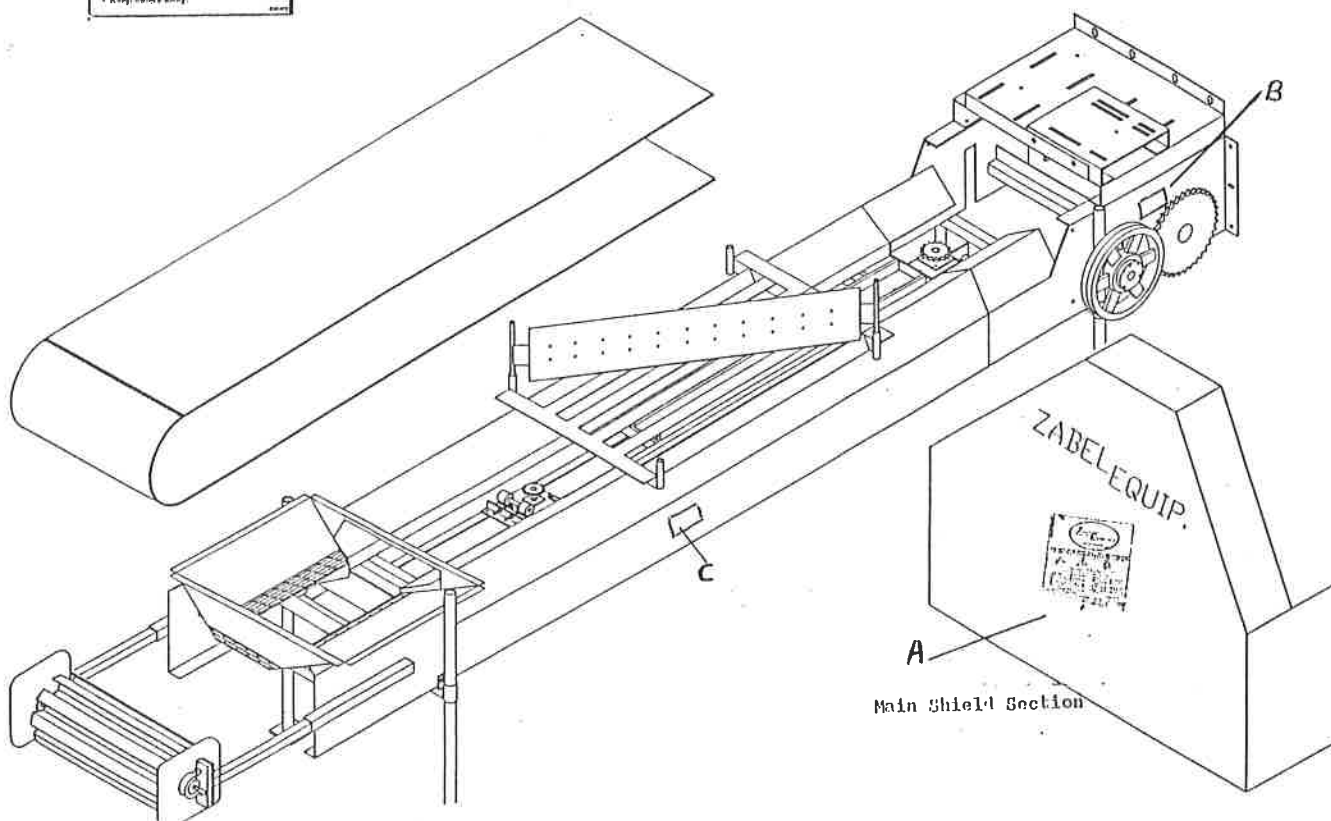
SW108

- B) THIS DECAL IS LOCATED UNDER THE MAIN SHIELD NEAR CHAIN, SPROCKETS, BELT AND PULLEYS. **THIS DECAL MEANS YOU ARE IN IMMEDIATE DANGER OF SERIOUS INJURY OR DEATH. DISCONNECT POWER SOURCE AND REPLACE SHIELDS.**



SW402

- C) THIS DECAL IS LOCATED ON THE SIDE OF THE UNIT NEAR THE CENTER. THIS DECAL COMES IN THE MAIN PARTS BOX AND SHOULD BE APPLIED BY THE PERSON DOING THE INSTALLATION.



IMPORTANT: ALL SAFETY DECALS SHOULD BE KEPT CLEAN AND READABLE. CLEAN SAFE DECALS USING WARM WATER AND SOAP. IF A DECAL IS DESTROYED, PAINTED OVER, WORN, MISSING, OR NO LONGER READABLE, IT MUST BE REPLACED. A SAFETY DECAL BE ORDERED BY SPECIFYING THE MACHINE SIZE, NAME, PART NUMBER, AND THE NUMBER OF DECALS NEEDED.

ZABEL EQUIPMENT, INC.

ZF2400 BELT FEEDER

Before operation, thoroughly read and understand this entire ASSEMBLY AND OPERATING INSTRUCTIONS MANUAL. Pay particular attention to the safety information on the inside front cover. Completely familiarize yourself with all control mechanisms for this unit.

-----OPERATION-----

GENERAL

Read the safety and operation sections of this manual before starting the machine.

Always shut off the power, and if possible lock it in the **OFF** position or remove the fuses before attempting any maintenance or repairs. When you must observe the operation to check any adjustments made, always do so from a safe distance.

WARNING *Never operate the machine with any of the guards or shields removed. Failure to observe the Proper safety precautions may result in personal injury or death.*

WARNING *Keep hands, feet, and loose clothing away from moving parts. NEVER STAND, SIT, OR LEAN ON THE UNIT WHILE IT IS IN OPERATION. Failure to follow these and all normal Safety precautions may result in personal injury or death.*

STEP 1: Clear the area of feed, animals, etc. before starting up the feeder.

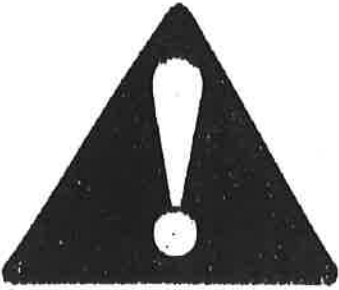
STEP 2: Start up the machine (feeder) and check it for proper operation.

STEP 3: Startup the filling equipment and check the placement of the material going into feeder.

STEP 4: When the desired amount of material has been conveyed, shut off the filling equipment.

STEP 5: Continue running the unit until all material has been dumped. When the unit is empty, shut off Feeder.

DATE THIS BOOK March 10, 1999



This symbol is used to point out important safety information. It means "BE ALERT, YOUR SAFETY IS INVOLVED." This symbol will be used with one of three signal words, CAUTION, WARNING, or DANGER, to indicate the degree of hazard. The signal word CAUTION is used to indicate hazards or unsafe practices which could result in minor personal injury. The word WARNING is used to indicate hazards or unsafe practices which could result in personal injury, dismemberment or death. The word DANGER is used to indicate immediate hazards which will result in severe personal injury, death or Dismemberment if these hazards are not avoided.

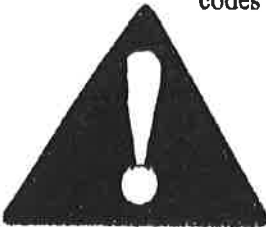
ZABEL EQUIPMENT, INC.

MODEL ZF2400 BELT FEEDER

ASSEMBLY AND OPERATING INSTRUCTIONS MANUAL

SAFETY

1. Keep all guards and shields in place. Moving parts can crush and dismember. Failure to do so may result in personal injury or death.
2. Clear the area before equipment startup.
3. Keep hands, feet, and loose clothing away from moving parts.
4. Never stand, sit, or lean on the conveyor while it is in operation.
5. Be certain all movement has stopped and the main power source is shut off and locked out before servicing the machine, since moving parts can crush and dismember. Failure to do so may result in personal injury or death.
6. Disconnect the power source before resetting the motor overload.
7. Only properly instructed persons should operate this unit.
8. All electrical work should be done by a qualified electrician and accordance with all state and local codes requirements.



Negligent operation may result in personal injury or death; obey all safety precautions. Pay Strict attention wherever this safety symbol appears; failure to do so may result in personal Injury. All operators must use their best judgment and follow good general safety practices In the safe operation of this and all other machinery. All photos in this manual are for only Illustrative purposes. In many photos, the shields may be off to illustrate a particular detail. NEVER operate this unit without all guards and shields in place.

PART 1: ASSEMBLY OF FEEDER SECTIONS

STEP 1: Take the Idle end and lay it in the end of the bunk where it is to be installed.

STEP 2: Attach the 8' section with rails to the Idle end, (unless you are using the feeder as a conveyor. If this is the case, determine where you want feed to begin plowing off and place the plow section at that point.)

Attach two (2) splice brackets to the eight (8) foot section. If you are using legs, this would be a good time to put them on these sections; see figure 1. The Idle end can now be positioned where it will be permanently stationed. Idle end positioning is critical so that the silage falls into the hopper. Offset the feeder so that the feed falls near the center of the bunk, (center of feed pile will be approximately 10" from edge of feeder). **DO NOT** permanently fasten the Idle end down at this time.

STEP 3: Take the next section and fasten a splice bracket, (two leg brackets, and two legs; if using legs on this feeder installation) to one end of the next section.

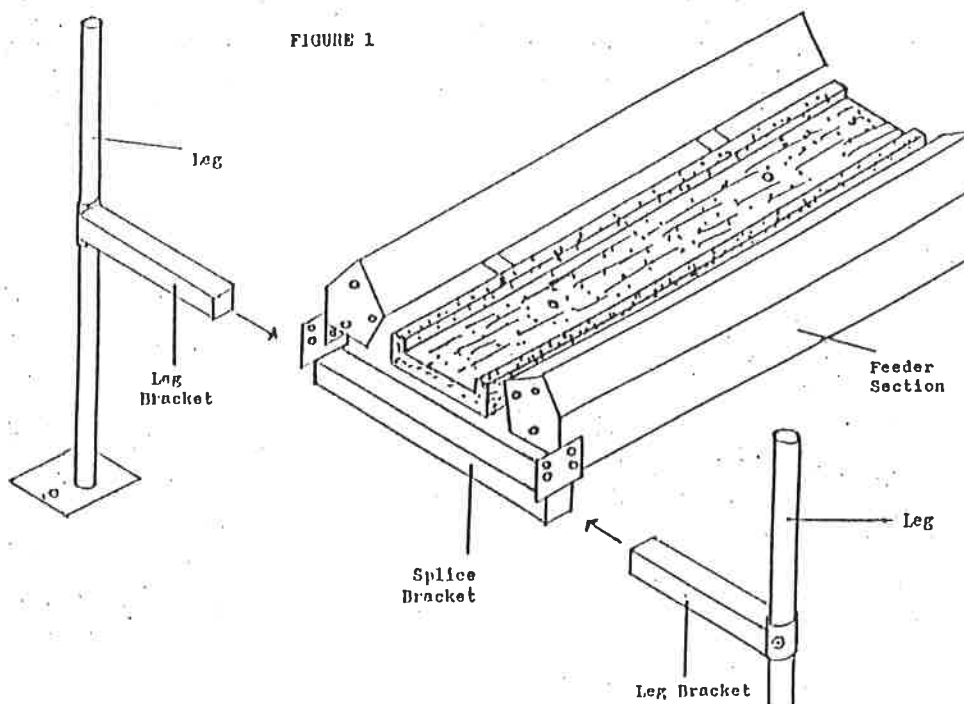
Step 4: Set this section up and attach it to the end of the eight (8) foot section. First put four $3/8 \times 3/4$ " bolts from the feeder section out through the splice bracket, using $3/8$ " flange nuts. Tighten only finger tight. Then, put eight $3/8 \times 1$ " bolts from the end of the first feeder section into the end of the second section using standard $3/8$ " nuts. These bolts should also be tightened only finger tight. You should now have two sections together and standing on their own.

STEP 5: Repeat **Steps 3 and 4** until the entire feeder is together and standing on its own. The last section to be attached should be the Drive end.

STEP 6: Straighten the feeder by tying a string from the Idle end to the Drive end. The feeder may also require some re-leveling and alignment.

STEP 7: When the feeder is straight and level, you can go back and tighten all the bolts. Make **SURE** the feeder is straight and level. Make sure the feeder is securely fastened to where it will be permanently stationed and all joints are smooth. If the feeder joints are not smooth, tighten the end section bolts snug and use a hammer to position the section. Now finish tightening the bolts tight.

STEP 8: You can now fasten the feeder down to the bunk. Each leg has a hole in it for this purpose. A cement drill and anchors work best for this. Make sure your anchors are long enough so they won't pull out



PART2: ASSEMBLY OF PLOW AND PLOW DRIVE

STEP 1: Determine where you wish to begin feeding on the Idle End of the feeder. This is where you will locate the idler sprocket assembly. (**NOTE:** In most cases, the idler sprocket assembly will be located in the first eight (8) foot section on the end **CLOSEST** to the Idle section.)

STEP 2: Set the idler sprocket base plate on the idler sprocket support angles. Bolt through the base plate into the idler sprocket tightener plates using $3/8 \times 1$ " bolts, and flat washers. Tighten only finger tight. Base plate and tightener plates should now slide easily along support angles.

STEP 3: Unroll the # 2050 roller chain and put it around the idler sprocket and the drive sprocket. Make sure the $3/8$ " pin which is welded to the chain is **UP**. (**NOTE:** Make sure chain is not twisted.) Put connector links in the chain.

STEP 4: Set tightener angle with two tightener bolts behind Idle sprocket assembly and drill two $3/8$ " holes into rails to secure angle. Bolt to the rails, then tighten to desired chain tension, followed by tightening the 4 bolts in the Idle sprocket assembly.

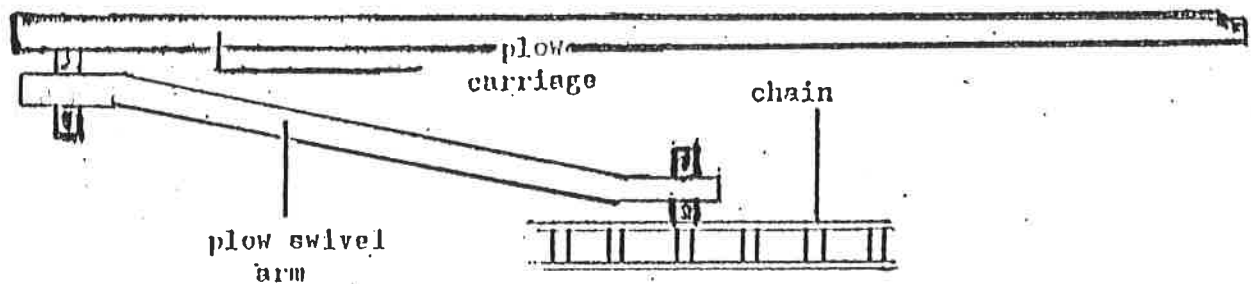
STEP 5: Set the plow carriage on the feeder with the plow swivel arm **NEAREST** to the Drive head. Install the swivel arm to the chain as shown in Figure 2. Slip in the $3/16 \times 1$ " cotter key through the hole in the pin and crimp.

STEP 6: Place the plow on the carriage angling in correct direction to direct feed to center of bunk.

←-----DRIVE END

IDLE END-----→

FIGURE 2



PART 3: ELECTRICAL INSTALLATION

STEP 1: The electric motor should be mounted at this time. It can be single or three phase and should be a foot mounted motor. A 3.6" double groove drive pulley is recommended and one is supplied with the feeder. The motor is to be furnished by the purchaser. Please refer to the table chart below to check the required horsepower for the length of feeder you will be installing. (NOTE: if using a three phase motor you may have to jump up one motor size to achieve required starting torque).

HORSEPOWER REQUIREMENTS

LENGTH	50 TO 78'	82 TO 130'	134 TO 194'	198 TO 258'	262 TO 320'
HORSEPOWER	3 HP	5 HP	7.5 HP	10 HP	15 HP

STEP 2: Set the motor on the top surface of the motor mount plates. Bolt the motor to the plates, making sure the shaft extends far enough that the supplied 3.6" pulley aligns with the 12" pulley mounted on the Drive head.

STEP 3: Align and lock the 3.6" double groove pulley on the motor shaft. Now install all shields in their proper place.



WARNING

NEVER operate the feeder without all shields in place. FAILURE to follow the proper safety precautions may result in injury or death.



CAUTION

STEP 4: The electrical wiring for this unit is the responsibility of the purchaser. All wiring should be done by a qualified electrician in accordance with all safety codes. Make sure an appropriate ON/OFF control switch is used and that all wiring and switches are kept out of reach of livestock.

PART 4: BELT INSTALLATION AND FINAL ASSEMBLY

STEP 1: Install return roller assembly into all 8' sections. Loosen the belt tightened bolt on either side of the Idle end to get as much slack as possible.

NOTE: You are now ready to install the belt. Inspect the feeder and make sure there are **NO** sharp edges to cut or snag the belt.

STEP 2: Unroll the belt so that the PVC coated (black shiny) side is up. Pull the belt over the Idle roller and through the underside of the feeder. Be sure to go **OVER** the splice brackets and return rollers. Mesh the loops of the metal belt splice together and thread the connector cable through the splice. Once the cables in place, crimp the retaining washers on both ends of the cable with a pliers.

STEP 3: Tighten the belt tightened bolts on either side of the Idle end until the belt is tight. Tightened bolts should be tightened the same amount on each side to help keep the belt straight.

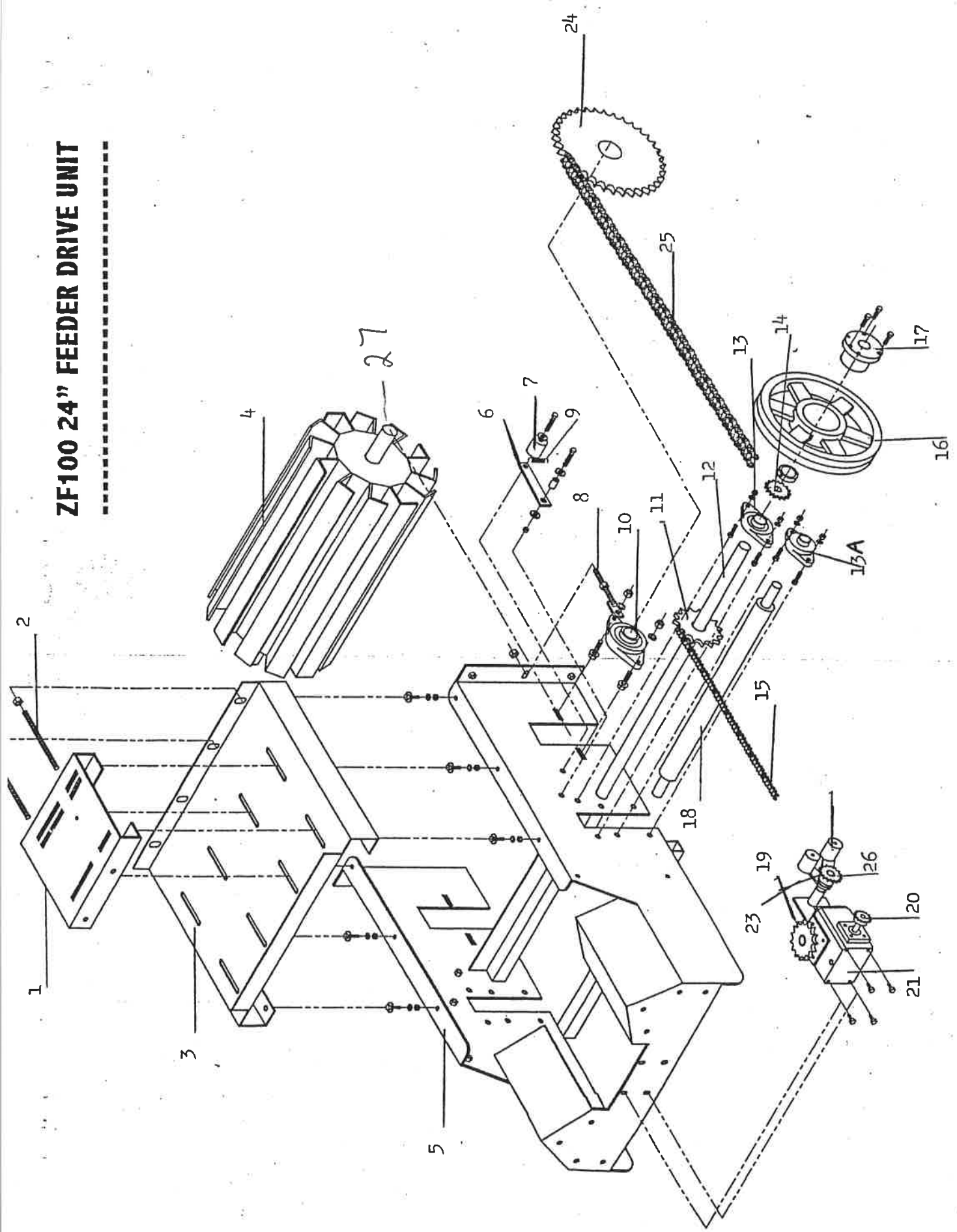
STEP 4: Now adjust the belt so that it is in the center of the rollers at either end. Start the unit up in short bursts, doing all the initial adjustments in the Idle end. If the belt is too near one side of the feeder and not centered, loosen the bolt on the side it is **FARTHEST** from. When belt is about centered on Idle end, move to Drive end. If belt is centered on Drive end, no further adjustment is necessary.

STEP 5: If the belt must be adjusted on Drive end, locate the roller alignment adjustment rod. (The Adjustment rod is located on the opposite side of the motor pulley.) Loosen the two bolts holding the bearings, now center belt on the roller by screwing the roller alignment adjustment rod in or out. When The belt is centered, retighten the two bolts holding the bearing. (**NOTE:** The belt may wander as much as 1/2" when properly adjusted, this is very normal.)

STEP 6: The hopper can now be placed on the feeder. Determine where you want the hopper to be placed. (**IMPORTANT:**) Hopper must be **AT LEAST** 40" from the chain Idler sprocket to ensure clearance for the plow.) Bottom steel edge of the hopper should be at least 1" from belt surface, to keep belt from being cut. (Rubber sealing strips will seal up any gap you may have.) Use four 1/4 x 3/4" truss head bolts to fasten hopper to idler section.

STEP 7: Before operating unit, place the **WARNING** decal (found in the main parts box) on the feeder. The decal should be placed in a clearly visible place on a section near the center of the unit.

ZF100 24" FEEDER DRIVE UNIT

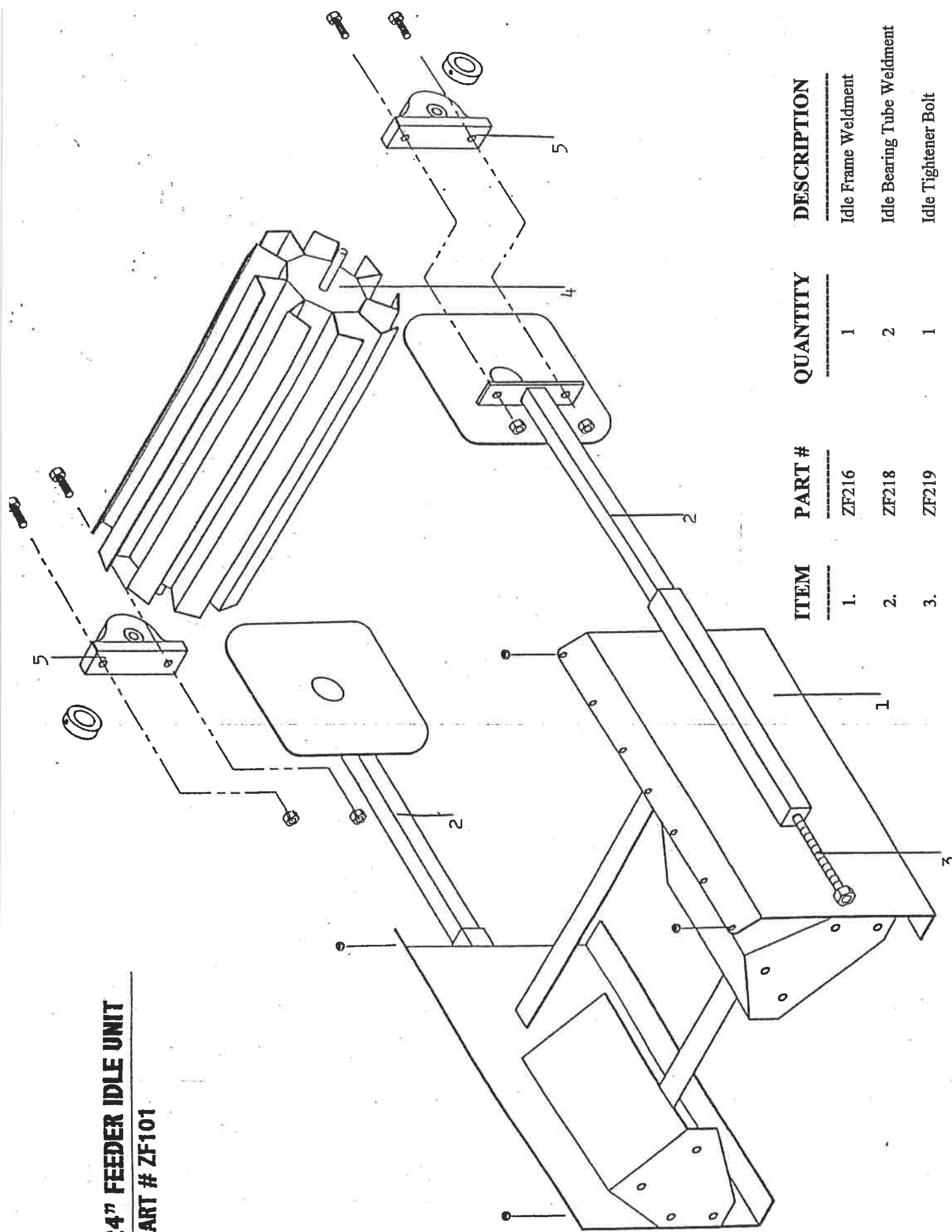


ZF100- 24" FEEDER DRIVE UNIT

ITEM #	PART #	DESCRIPTION	QUANTITY
1.	ZF208	MOTOR MOUNT PLATE	1
2.	ZF221	TIGHTENER BOLT	2
3.	ZF207	MOTOR MOUNT BASE	1
4.	ZF210	DRIVE ROLLER	1
5.	ZF206	DRIVE FRAME WELDMENT	1
6.	ZC214	PIVOT ARM	1
7.	ZCF166-A	NYLON ROLLER	3
8.	ZF222	TRACKING BOLT	1
9.	ZC216	TIGHTENER SPRING	1
10.	ZC-FC225112	1-1/2" FLANGE BLOCK BRG.	2
11.	ZF232	40B32 1-1/4" B SPROCKET	1
12.	ZC214	JACK SHAFT	1
13.	ZC-FC225114S	1-1/4" FLANGE BLOCK BRG.	2
13-A	ZC-FC2251	1" FLANGE BLOCK BRG.	2
14.	ZF201	60BS11 1-1/4" B SPROCKET	1
15.	ZCF407	# 40 ROLLER CHAIN (100 PITCHES)	1
16.	ZF202	2TB124 PULLEY	1
17.	PHQ114	1-1/4" B Q HUB	1
18.	ZF215	FEEDER PINCH ROLLER	1
19.	ZF200-A	60B 13T 1" B SPROCKET	1
20.	ZC205	40BS15 3/4" SPROCKET	1
21.	ZF229	WORM GEAR REDUCER, U60 10:1	1
23.	ZCF421	SHORT PIVOT ARM	1
24.	ZF201-A	60BS50 1-1/2" SPROCKET	1
25.	ZF240	#60 ROLLER CHAIN , 66 PITCH	1
26.	ZCF422	# 40 IDLE SPROCKET	1
27.	ZF210S	DRIVE ROLLER SHAFT ONLY	1
	BBB66	B66 BELT	1

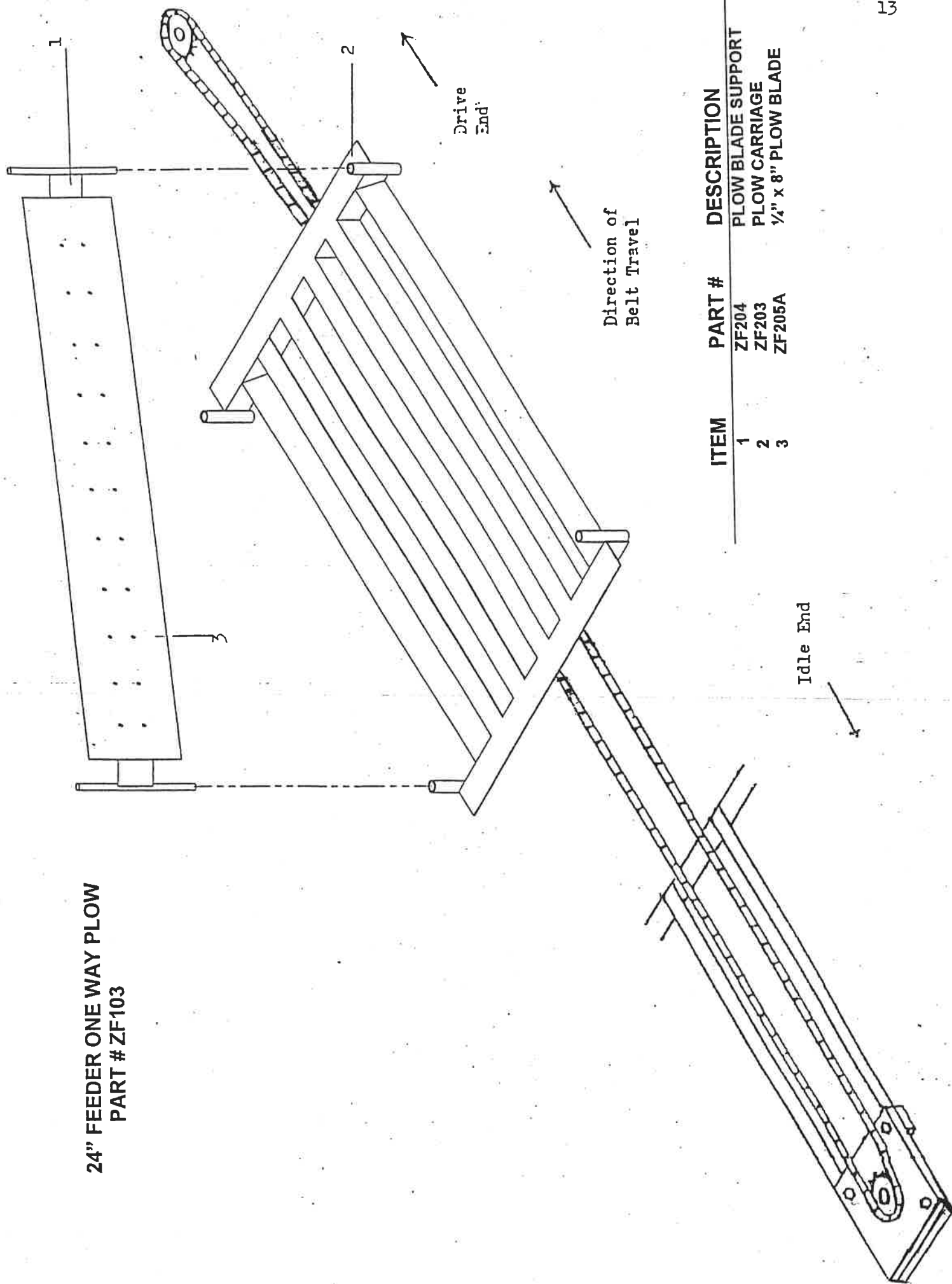
24" FEEDER IDLE UNIT

PART # ZF101



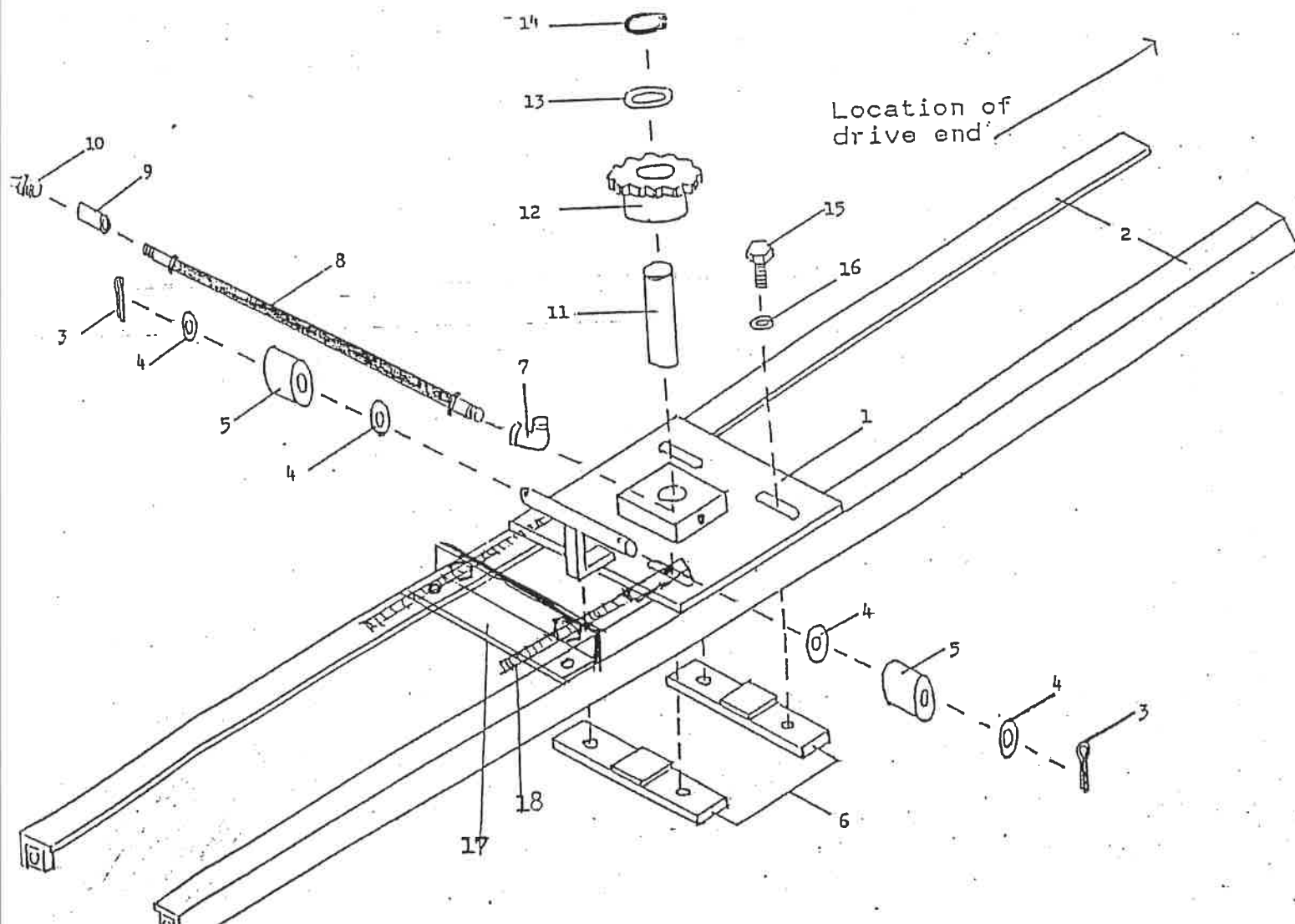
ITEM	PART #	QUANTITY	DESCRIPTION
1.	ZF216	1	Idle Frame Weldment
2.	ZF218	2	Idle Bearing Tube Weldment
3.	ZF219	1	Idle Tightener Bolt
4.	ZF217	1	Idle Roller
5.	ZF220-A	2	1-3/8" Pillow Blk. Bearing

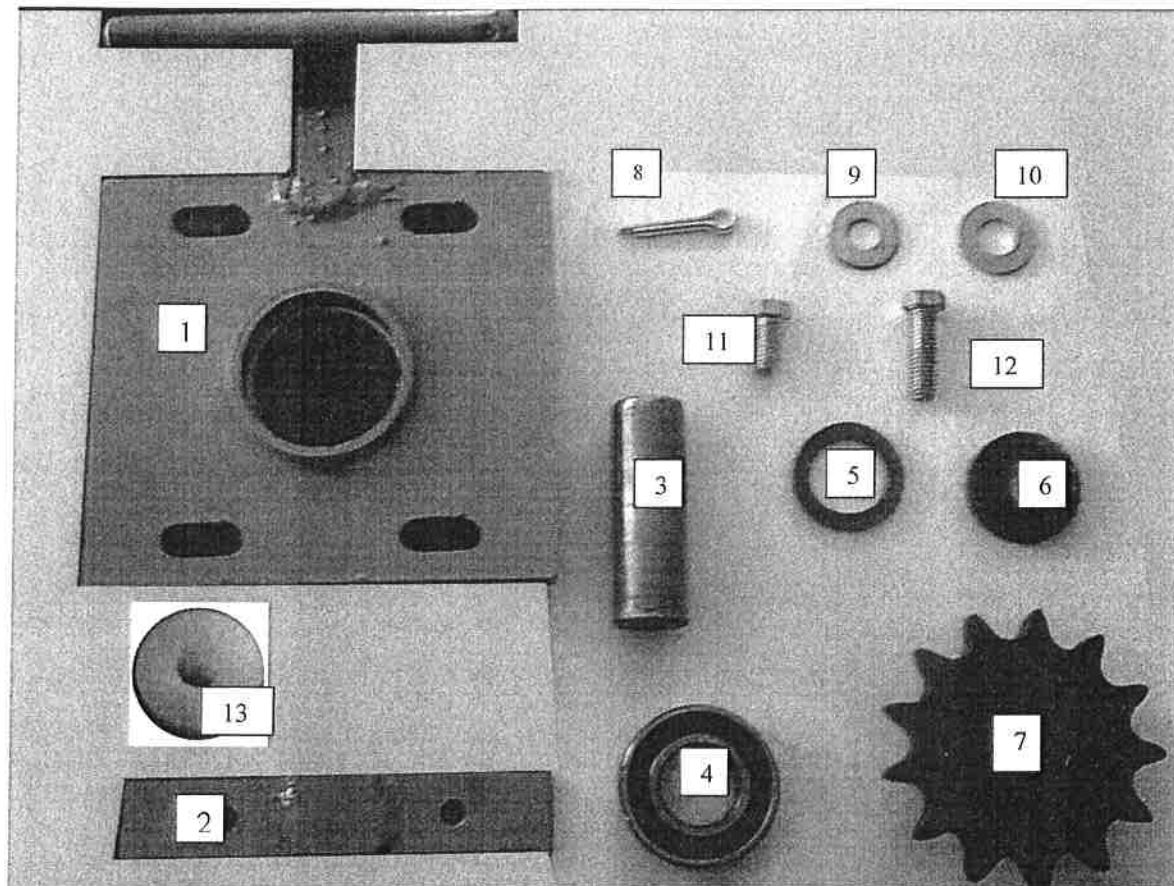
**24" FEEDER ONE WAY PLOW
PART # ZF103**



ZF131: 24" FEEDER IDLER SPROCKET ASSEMBLY

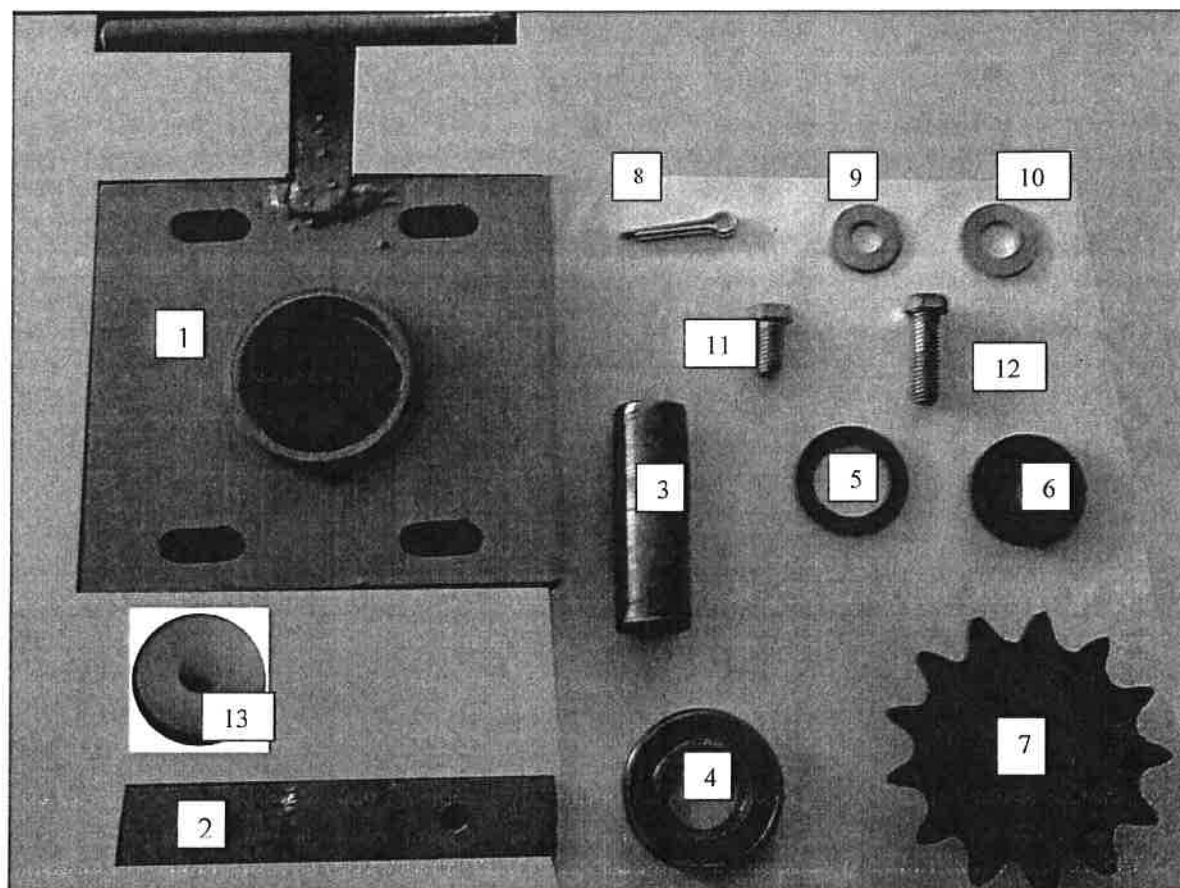
ITEM #	PART #	QNTY	DESCRIPTION
1	ZCF132	1	Idler Sprocket Base Plate
2	ZCF133	2	Idler Sprocket Support Angles
3	X04-A	2	3/16"x1" Cotter Key
4	1BFW12	4	1/2" Flat Washer
5	ZC162527	2	1-1/2" Nylon Roller
6	ZCF134	2	Idler Sprocket Snub Plate, Thrd
7	ZCF103	1	1/8" Street Ell
8	ZCF118-A	1	1/8" x 18" Grease Hose
9	ZCF119	1	1/8" Blk Coupling
10	X32	1	1/8" Grease Zerk
11	ZCF135	1	Idler Sprocket Shaft
12	ZF200-I	1	60C-13T- 1" B Sprocket w/ Bshg
13	X22	1	1" x 10 Ga. Steel Shim
14	X41	1	1" Snap Ring
15	1BHS381	4	3/8"x1" Hex Head Bolt
16	1BFW38	4	3/8" Flat Washer
17	ZF233	1	Idler Sprckt Take-Up Angle
18	ZF234	2	Idler Sprckt Take-Up Bolt





ZF131-B NEW STYLE IDLER SPROCKET ASSEMBLY (9-15)

ITEM #	PART #	DESCRIPTION	QUNTY
1	ZCF132-B	IDLER SPROCKET BASE PLATE N/S	1
2	ZCF134	IDLER SPROCKET SNUB PLT, THRD	2
3	ZCF135-B	IDLER SPROCKET SHAFT, N/S	1
4	EMR103-1	1" CYLINDRICAL BEARING	2
5	X07-D	1"x10ga. MACHINERY BUSHING	AR
6	ZCF135-BW	3/8" HEAVY FLAT WASHER	1
7	ZF200-A	60BS13x1" SPROCKET	1
8	X04-A	3/16"x1" COTTER KEY	2
9	1BFW38	3/8" FLAT WASHER	4
10	1BFW12SAE	1/2" SAE FLAT WASHER	4
11	1BHS3834	3/8"x3/4" HEX HEAD BOLT	1
12	1BHS38114	3/8"x1-1/4" HEX HEAD BOLT	4
13	ZC162527	RETURN ROLLER, 1-1/2"x1"x17/32" B	2

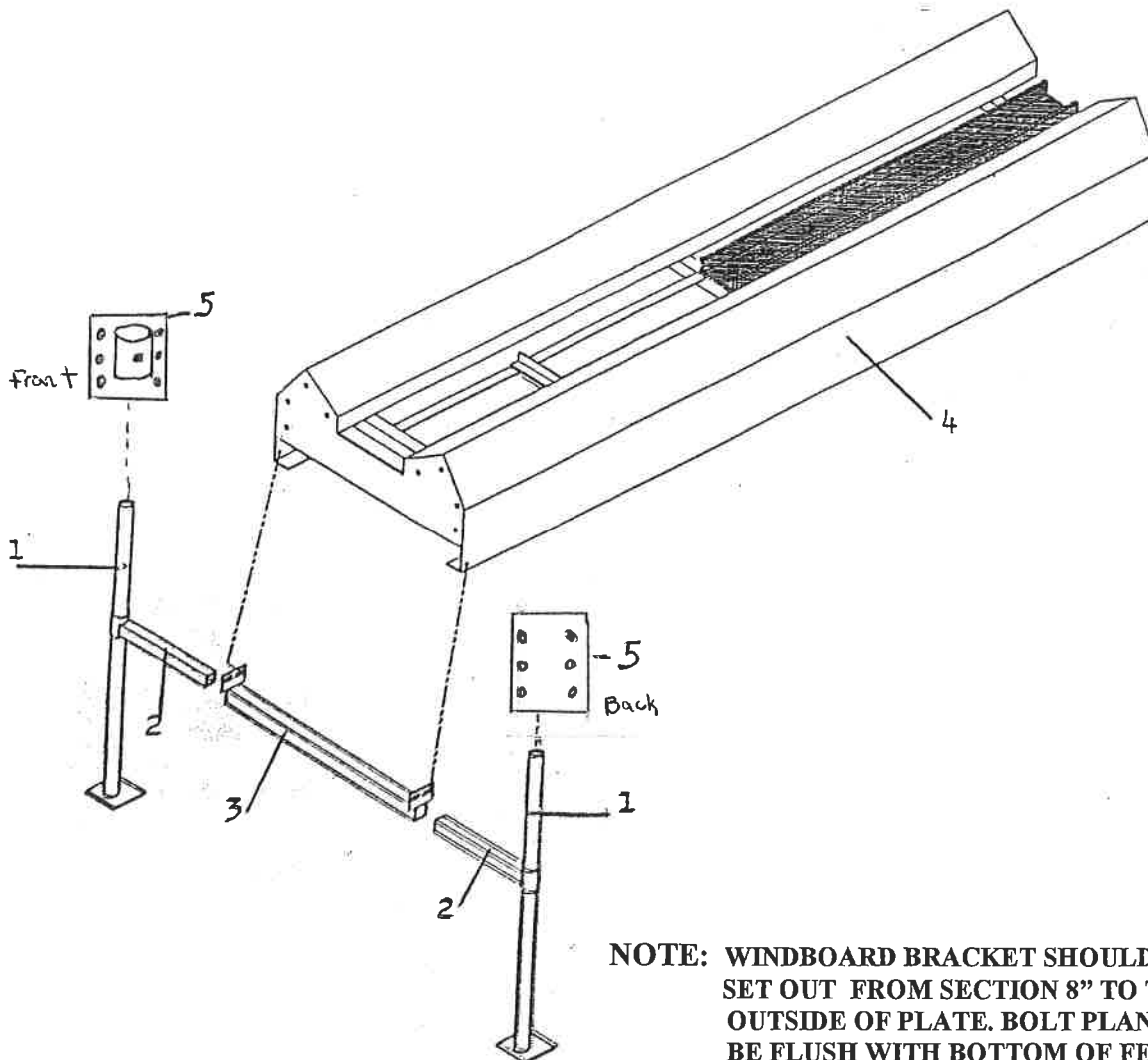


ZF131-B2016 NEW STYLE IDLER SPROCKET ASSEMBLY (7-16)

ITEM #	PART #	DESCRIPTION	QUNTY
1	ZCF132-B2016	IDLER SPROCKET BASE PLATE N/S2016	1
2	ZCF134	IDLER SPROCKET SNUB PLT, THRD	2
3	ZCF135-B	IDLER SPROCKET SHAFT, N/S	1
4	EMR103-1DLG	7516DLG 1" CYLINDRICAL BEARING	2
5	X07-D	1"x10ga. MACHINERY BUSHING	AR
6	ZCF135-BW	3/8" HEAVY FLAT WASHER	1
7	ZF200-A	60BS13x1" SPROCKET	1
8	X04-A	3/16"x1" COTTER KEY	2
9	1BFW38	3/8" FLAT WASHER	4
10	1BFW12SAE	1/2" SAE FLAT WASHER	4
11	1BHS3834	3/8"x3/4" HEX HEAD BOLT	1
12	1BHS38114	3/8"x1-1/4" HEX HEAD BOLT	4
13	ZC162527	RETURN ROLLER, 1-1/2"x1"x17/32" B	2

LEG SUPPORT & SPLICE ASSEMBLY BUNDLE F/24" FEEDER BUNDLE PART # ZF109

ITEM#	PART #	QUANTITY	DESCRIPTION
1	ZCF138	2	FEEDER LEGS
2	ZCF139	2	FEEDER LEG BRACKETS
3	ZF224	1	SPLICE TUBE F/LEGS
4	ZF106	1	8' x 24" FEEDER SECTION
5	ZCF364	2	WINDBOARD BRACKET



NOTE: WINDBOARD BRACKET SHOULD BE SET OUT FROM SECTION 8" TO THE OUTSIDE OF PLATE. BOLT PLANK TO BE FLUSH WITH BOTTOM OF FEEDER SECTION.

LUBRICATION AND GEAR BOX VENTING INFORMATION

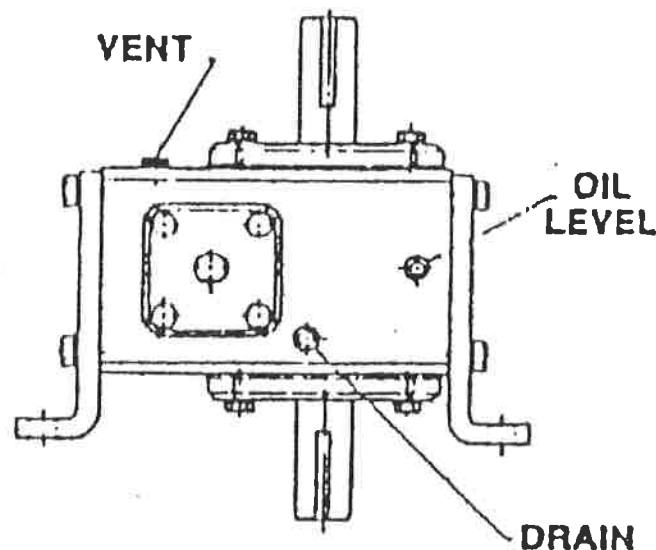
LUBRICATION

BALL BEARINGS SHOULD BE LUBRICATED WITH 1 SHOT OF GREASE ONCE PER YEAR OR EVERY 800 HOURS, WHICH EVER COMES FIRST (DO NOT OVER LUBRICATE, BEARING SEAL FAILURE WILL OCCUR). PLOW IDLER SPROCKET(S) SHOULD BE LUBRICATED WITH 1-3 SHOTS OF GREASE ONCE A MONTH OR EVERY 200 HOURS, WICH EVER COMES FIRST. ALL ROLLER CHAINS SHOULD BE LUBRICATED WITH A SPRAY ON CHAIN LUBE EVERY 6 MONTHS OR 500 HOURS, WHICH EVER COMES FIRST.

GEAR BOX VENTING

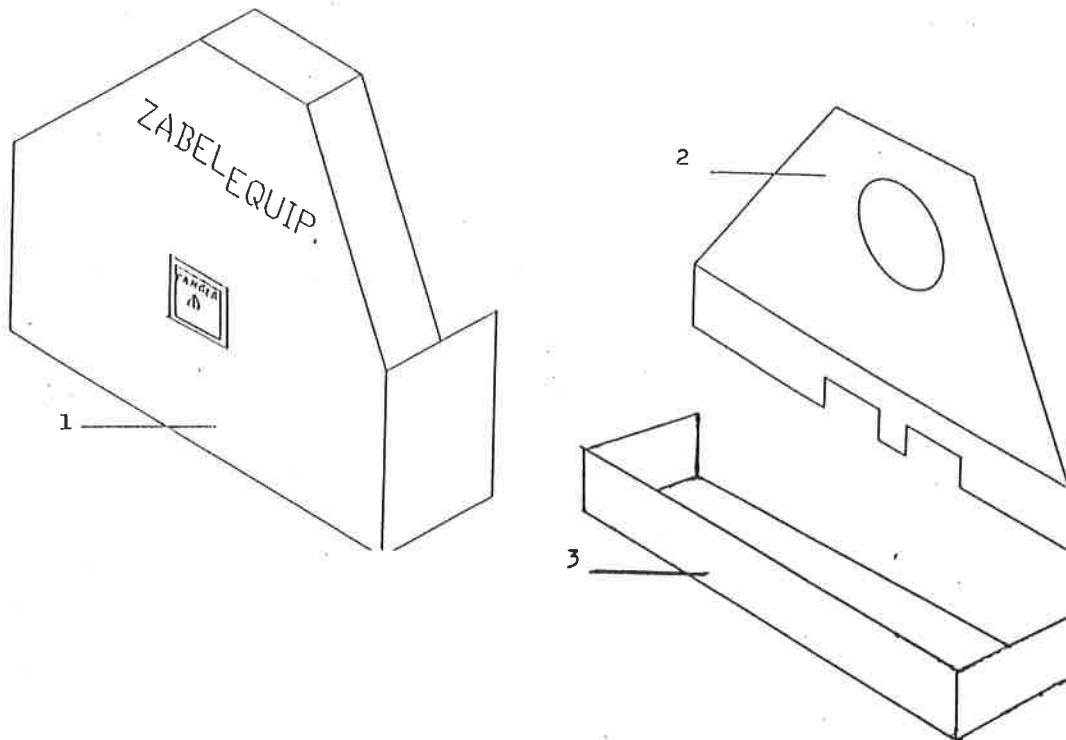
WORM GEAR REDUCERS ARE FILLED WITH LUBRICANT, TO THE PROPER LEVEL, FROM THE FACTORY. BEFORE PUTTING THE REDUCER INTO OPERATION, THE FURNISHED VENT PLUG MUST BE SUBSTITUTED FOR THE SOLID PLUG, AT THE POSITION INDICATED BELOW (ON GEAR DRIVE UNITS, IN THE HIGHEST HOLE POSSIBLE). MAKE SURE TO CHECK OIL LEVEL PERIODICALLY, IF LOW, REFILL TO PROPER OIL LEVEL WITH 75W90 SYNTHETIC GEAR OIL OR EQUIVELANT.

NOTE: IN TEMPRATURES BELOW 0 DEGREES FERINHET, A LOWER VISCOSITY GEAR LUBE MAYBE NEEDED.



INSTRUCTIONS FOR ASSEMBLY OF 24" FEEDER SHIELD

PART # ZF102



ITEM	PART #	QUANTITY	DECSRIPTION
1.	ZF211	1	Main Shield Section
2.	ZF213	1	Inner Closure
3.	ZF212	1	Bottom Closure

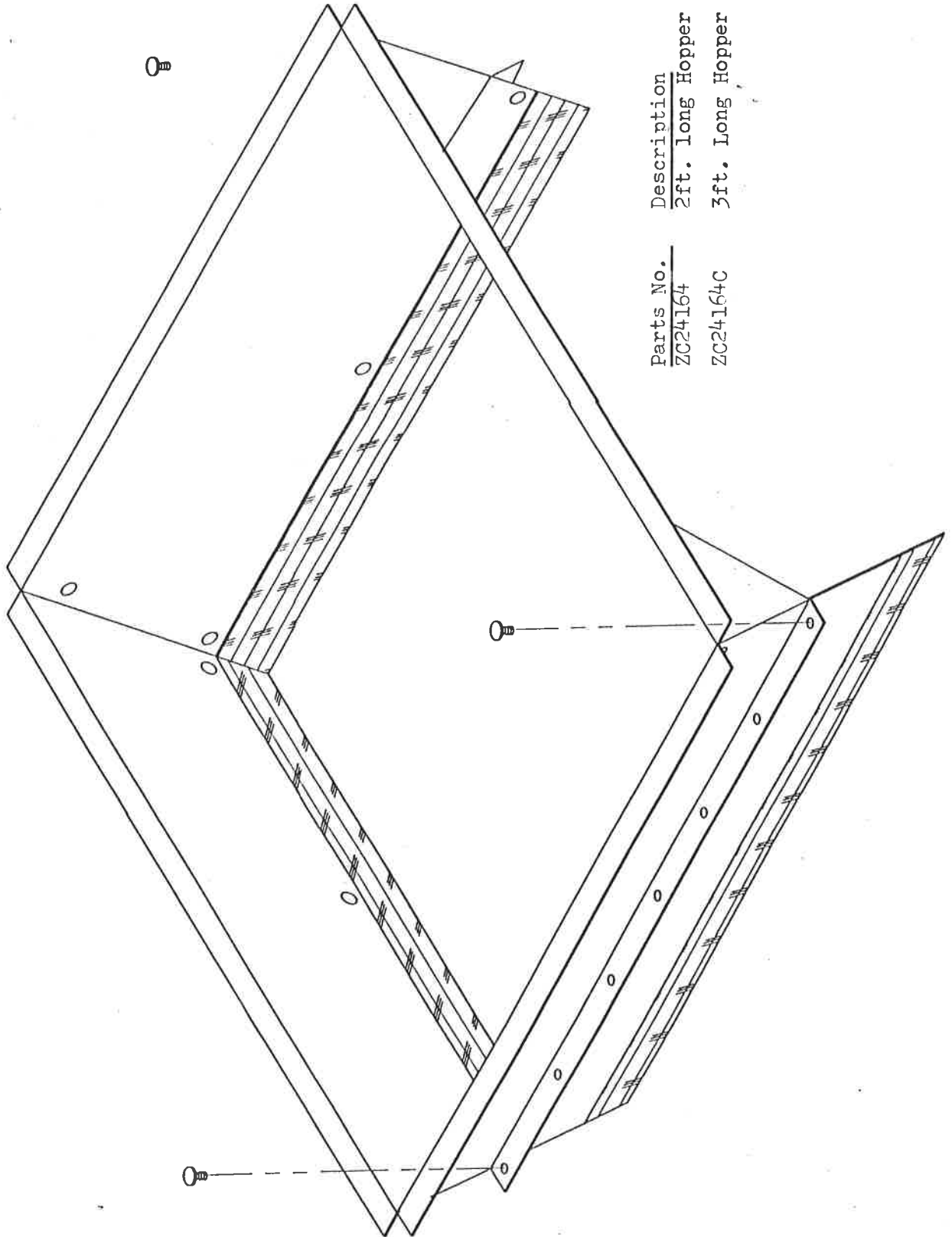
STEP 1: Place shield back section over the motor pulley so that it looks as shown. You may now put the drive belt on both pulleys and tighten up the belt. The belt is tightened by adjusting the ½" Belt tightened bolt until the belt has the proper tension.

STEP 2: Place the main shield section over the belt and drive chain, fasten it to the main conveyor frame Using four ¼" wing nuts.

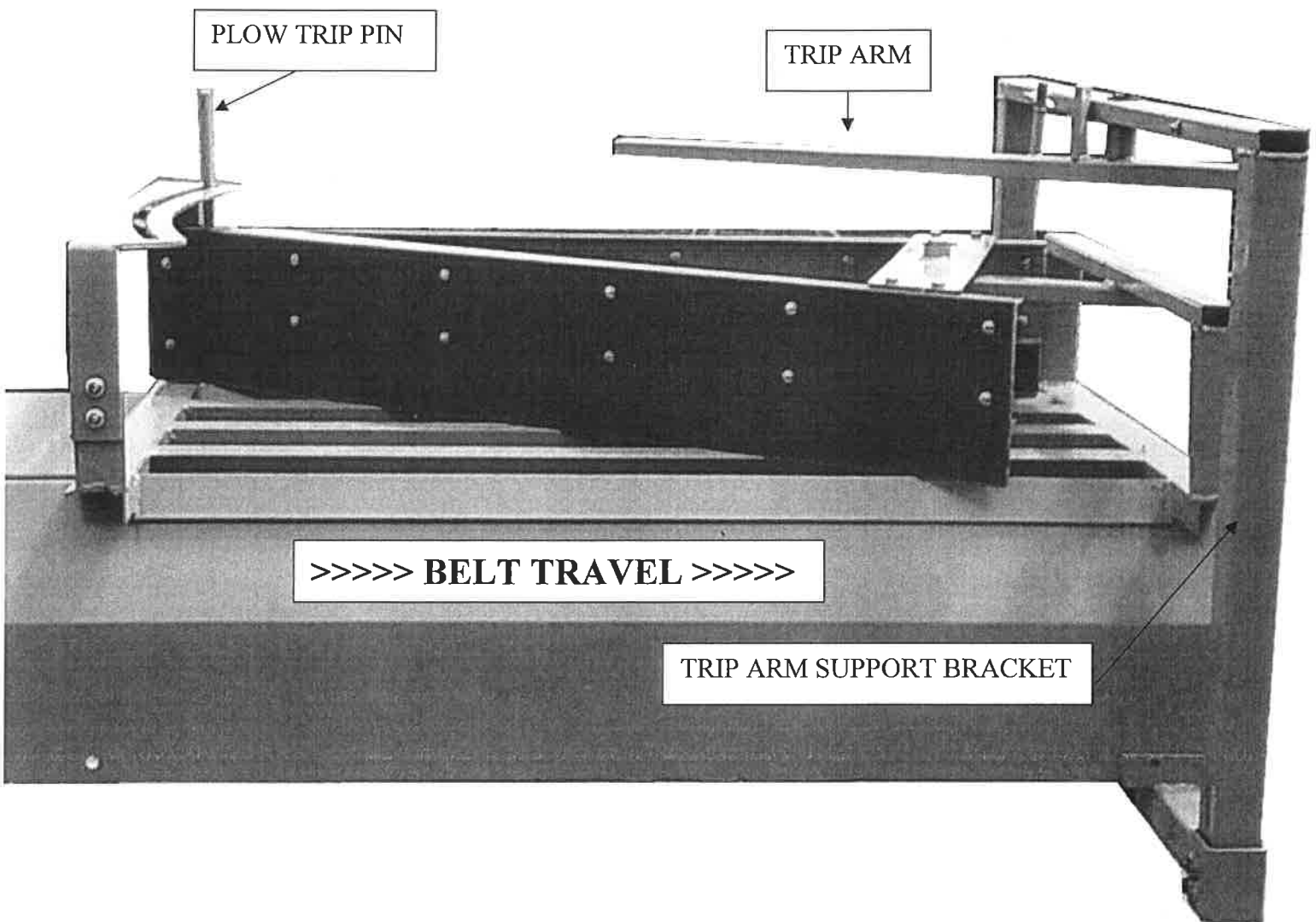
STEP 3: Bolt shield back section to the back of the main shield section using four ¼" speed nuts and Four ¼ x ½" thumb screws.

STEP 4: Place all stickers on main shield section as shown.

HOPPER ASSEMBLY 24" FEEDER

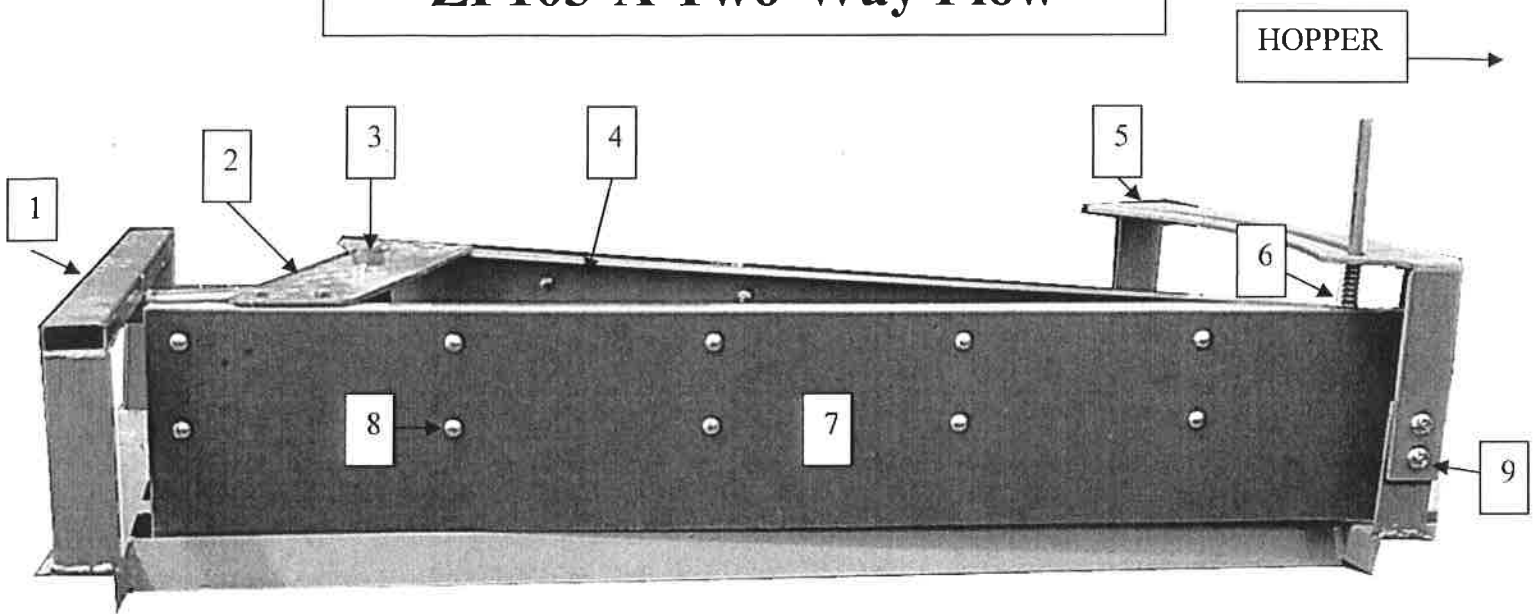


Parts No.	Description
ZC24164	2ft. long Hopper
ZC24164C	3ft. long Hopper



MOUNT PLOW TRIP BRACKET ASSEMBLY SO THAT PLOW TRIP PIN CAN GO PAST TRIP ARM BY AT LEAST 4" IN EITHER DIRECTION. NARROW END (POINT) OF PLOW AND LONG PART OF TRIP ARM IS TOWARD HOPPER; (IDLER END ON END FILLED), OR (CENTER OF FEEDER ON CENTER FILLED). ADJUST TRIP ARM SUPPORT BRACKET SO IT CLEARS FRONT OF PLOW FRAME BY 1" TO 1-1/2".

ZF103-A Two-Way Plow



Item #	Part #	Description	Required
1	ZF250	Two-Way Plow Carriage	1
2	ZF257	Two-Way Plow Pivot Plate	1
3	ZF256	Pivot Pin	1
4	ZF251	Two-Way Plow Blade Support	1
5	ZF253-F	Two-Way Plow Front Bracket	1
6	ZF204-A	Spring, Plow Blade	1
	1BFW12SAE	½" SAE Flat Washer	1
7	ZF252	Two-Way Plow Blade, ¼"x8"x46"	2
8	1BCB1434	¼"x3/4" Carriage Bolt	22
	1BFN14	¼" Flange Nut	22
9	1BHS381	3/8"x1" Hex Head Bolt	8
	1BFN38	3/8" Flange Nut	8
	1BFW38	3/8" Flat Washer	5
	ZF126	Plow Swivel Arm, 24" Feeder	1
	ZCF333	Plow Carriage Slide Pad	8
	1BPR1812	1/8"x1/2" Steel Pop Rivet	16
	X04-A	3/16"x1" Cotter Pin	1
	X04-B	3/16"x1-1/2" Cotter Pin	2

INSTRUCTIONS FOR INSTALLING CENTER-FILL KIT ZF112-NS

NOTE: "Center filled feeders" can have feed drop onto the belt anywhere between the drive and idle sections, not necessarily in the "center".

STEP 1: Remove plastic board from under where the feed will be dropping onto the belting, on "center filled feeders"; or where the bunk will be divided on a double plow end fill. (You may have to remove two boards and cut them in half.)

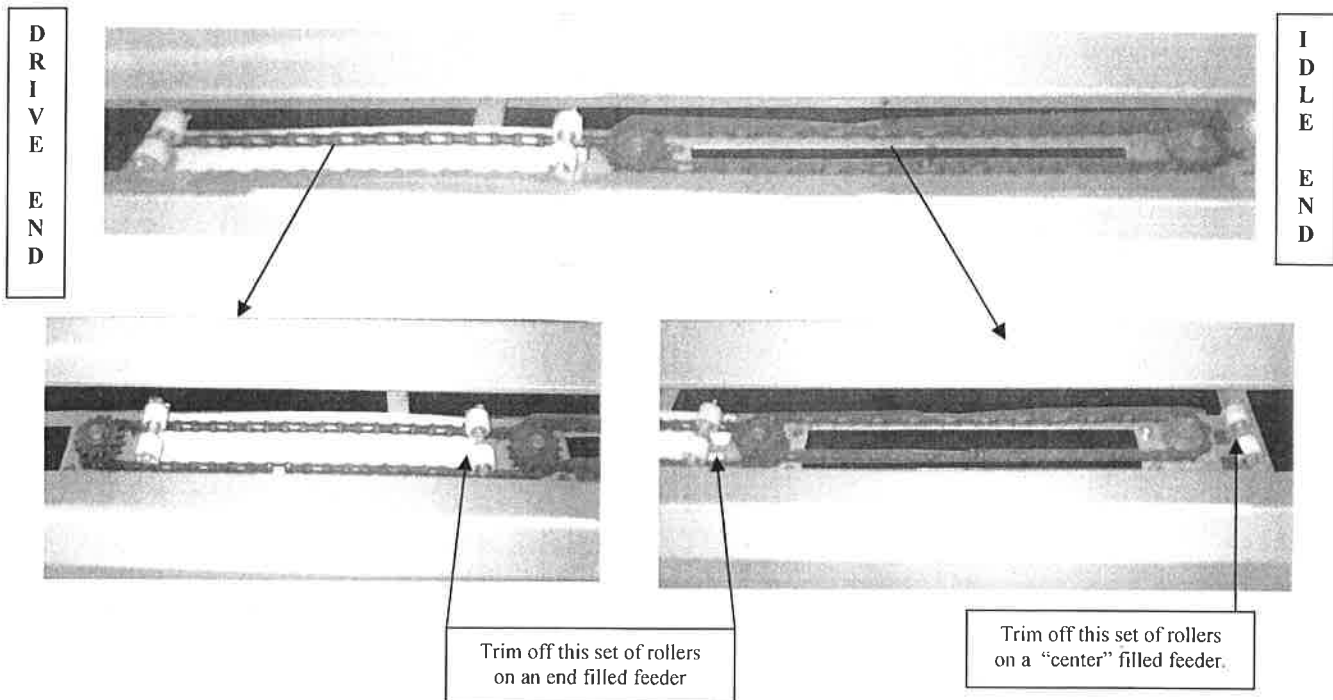
STEP 2: Install idle sprocket support angles in place where the plastic boards were removed. You may use 2 or 4 angles, depending on the situation. If 4 angles are used and have to be back to back to each other, thread the two 1-1/4" long bolts, from the inside out. Then attach through the first set of angles, and thread the second set of angles onto the reaming bolt

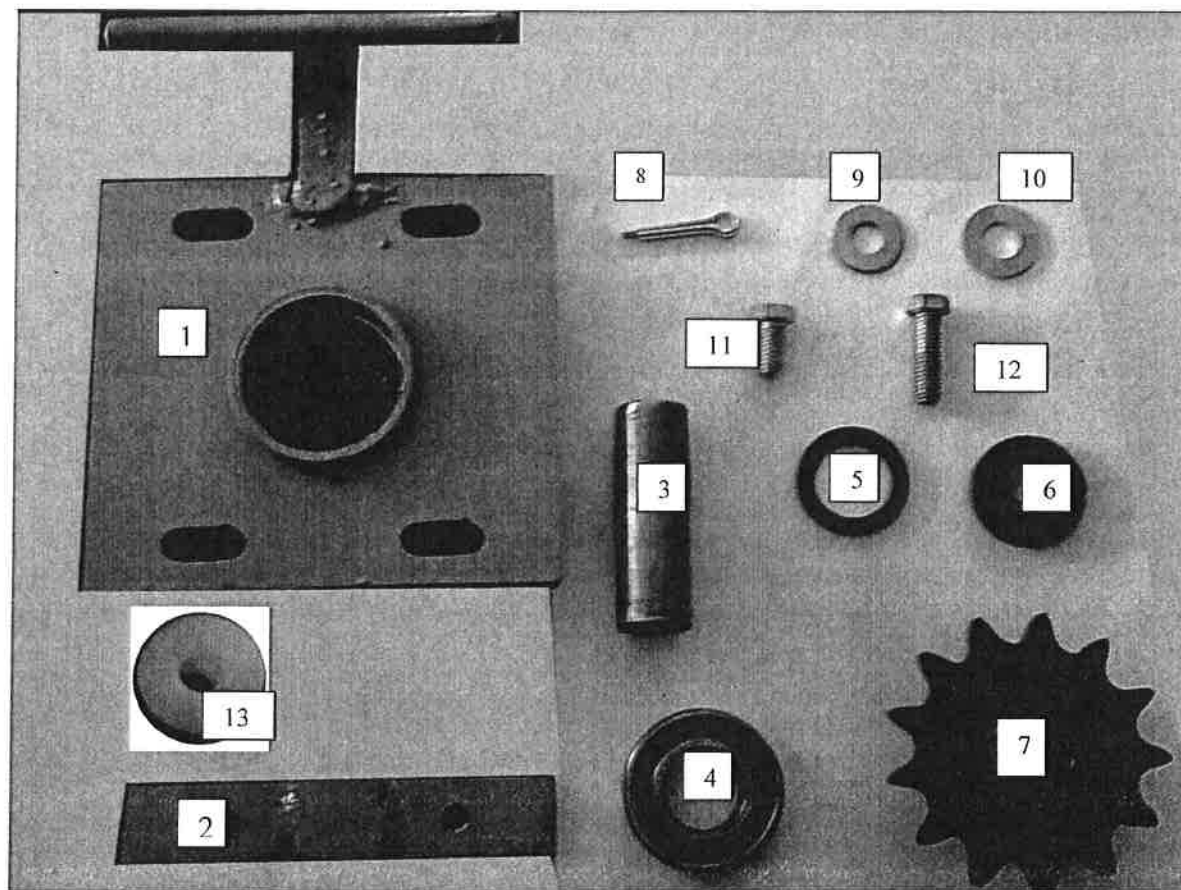
STEP 3: Place the plow that will be running between the Drive and the first double sprocket at the desired end of travel. Install the first double sprocket under the plow swivel arm, then install the plow chain from drive to the top sprocket and tighten.

STEP 4: Place the plow that will be running between the Idle and the second double idle sprocket at the desired end of travel. Install second double sprocket under the plow swivel arm. (Make sure to install the plows far enough apart, so that they don't hit one another.) Install the 2060 roller chain onto the bottom sprockets of the double sprockets and tighten. Install the plow chain from idle sprocket to the top sprocket of the second double idle sprocket & then tighten.

STEP 5: Bolt a piece of manger liner or belting under the lower chain. (Not supplied in kit)

NOTE: On "center filled feeders" the belt lift rollers attached to the single idler sprocket plate will need to be cut off in order to clear plow carriage. On double plow end fill feeders the belt lift rollers will need to be cut off the double idler sprocket plate nearest the idle instead of the single idler sprocket plate.





NEW STYLE 24" CENTERFILL SPROCKET ASSEMBLY (7-16)

ITEM #	PART #	DESCRIPTION	QUNTY
1	ZCF132-B2016	IDLER SPROCKET BASE PLATE N/S2016	1
2	ZCF134	IDLER SPROCKET SNUB PLT, THRD	1
	ZCF134-A	IDLER SPROCKET SNUB PLT, N/THRD	1
3	ZCF135-B	IDLER SPROCKET SHAFT, N/S	1
4	EMR103-1DLG	7516DLG 1" CYLINDRICAL BEARING	2
5	X07-D	1"x10ga. MACHINERY BUSHING	AR
6	ZCF135-BW	3/8" HEAVY FLAT WASHER	1
7	ZF200-NS	DOUBLE 60BS13x1" SPROCKET	1
8	X04-A	3/16"x1" COTTER KEY	2
9	1BFW38	3/8" FLAT WASHER	2
10	1BFW12SAE	1/2" SAE FLAT WASHER	4
11	1BHS3834	3/8"x3/4" HEX HEAD BOLT	1
12	1BHS38114	3/8"x1-1/4" HEX HEAD BOLT	2
	1BCB38114	3/8"x1-1/4" CARRIAGE BOLT	2
	1BHN38	3/8" HEX NUT	2
13	ZC162527	RETURN ROLLER, 1-1/2"x1"x17/32" B	2